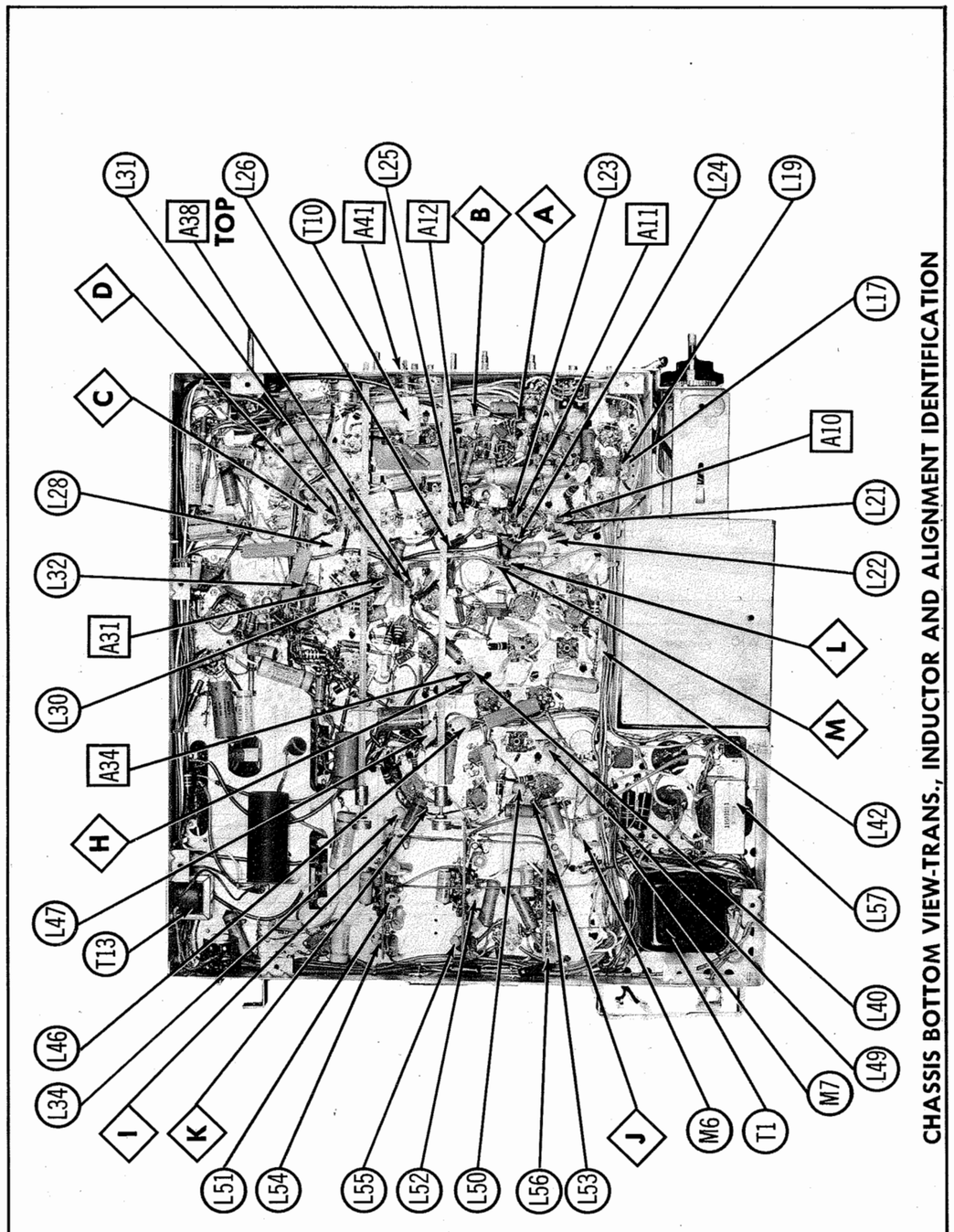
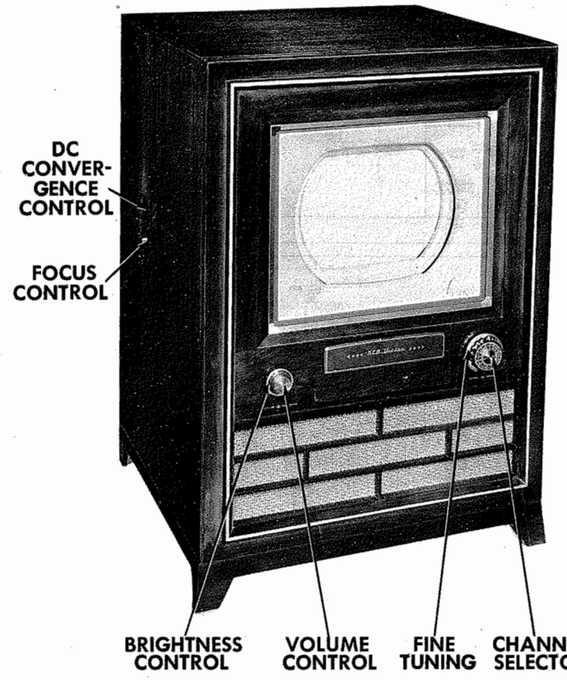


CHASSIS BOTTOM VIEW-TRANS., INDUCTOR AND ALIGNMENT IDENTIFICATION

PHOTOFACT* Folder
*TRADE MARK

RCA VICTOR
MODEL CT-100 (Ch. CTC2)



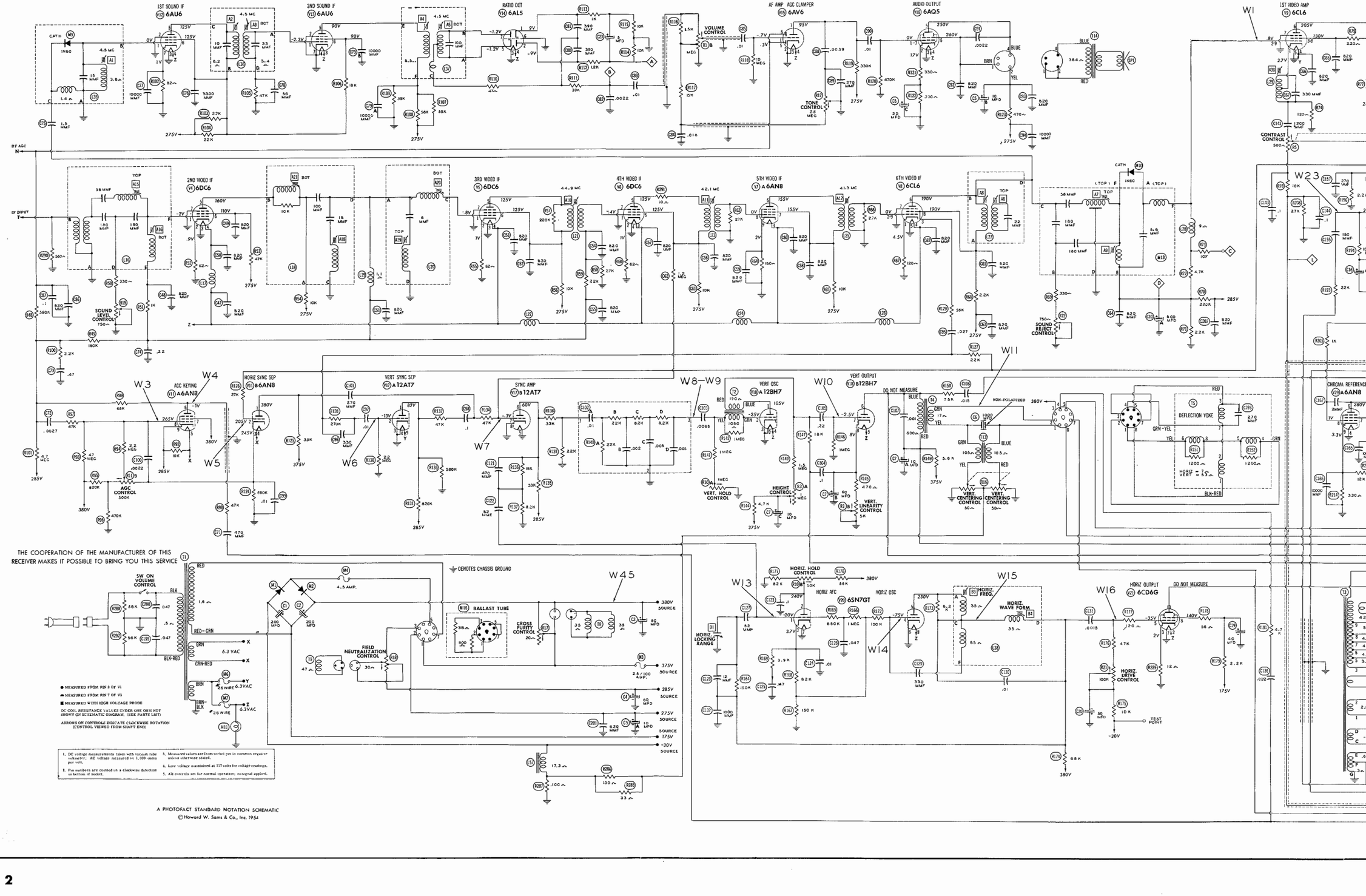
TRADE NAME	RCA Victor Model CT-100 (Ch. CTC2)
MANUFACTURER	RCA Victor Div., Radio Corp. of America, Camden, N, J.
TYPE SET	Television Receiver
TUBES	Thirty-seven
POWER SUPPLY	110-120 Volts AC-60 Cycle RATING 4.44 Amp. @ 117 Volts AC
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)

INDEX

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

DATE 9-54 SET 252 FOLDER 11

RCA VICTOR
MODEL CT-100 (Ch. CTC2)



THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

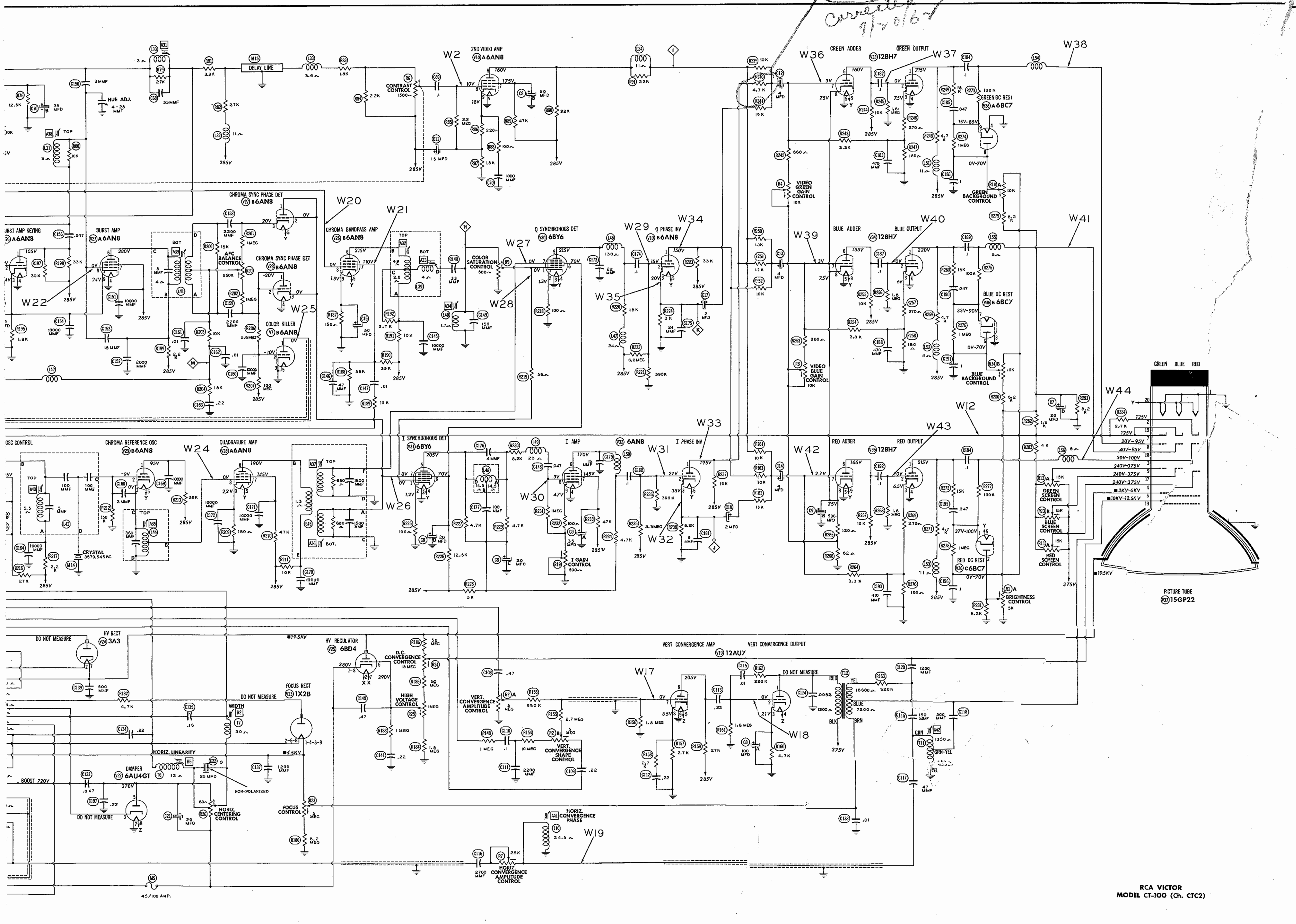
- ● MEASURED FROM PIN 3 OF V1
- ➡ MEASURED FROM PIN 7 OF V2
- ■ MEASURED WITH HIGH VOLTAGE PROBE

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM. (SEE PARTS LIST)

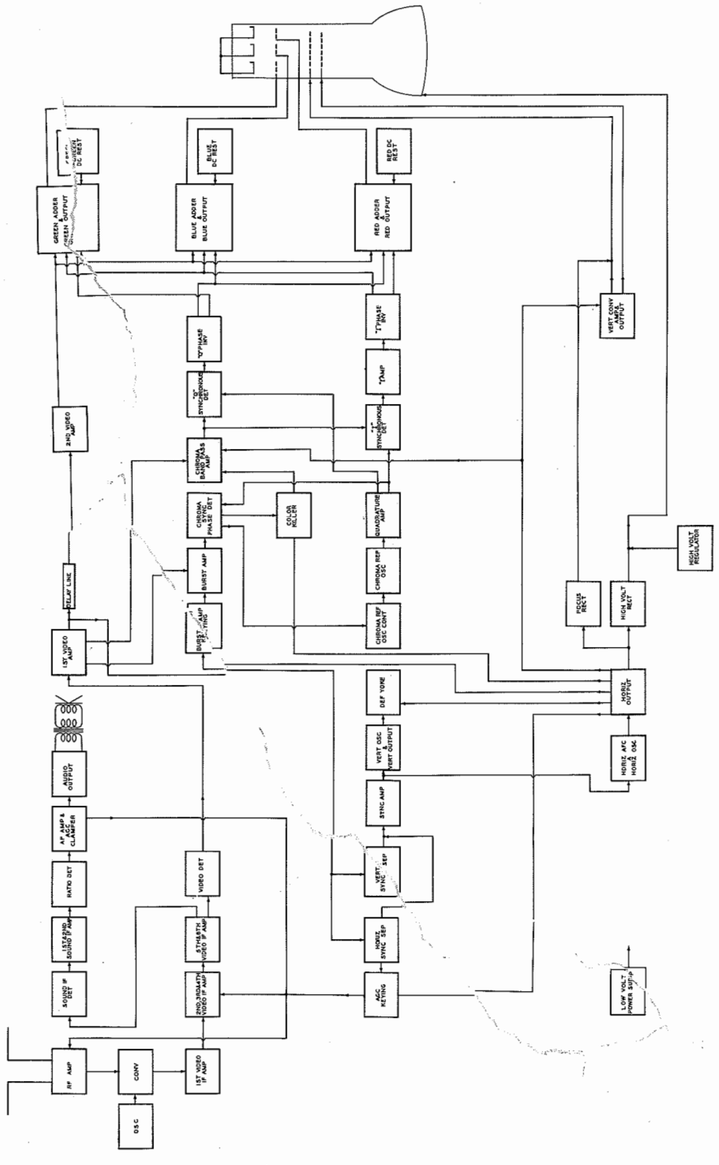
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

1. DC voltage measurements taken with vacuum tube voltmeter. AC voltage measured on 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction as bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. All controls set for normal operation; no signal applied.

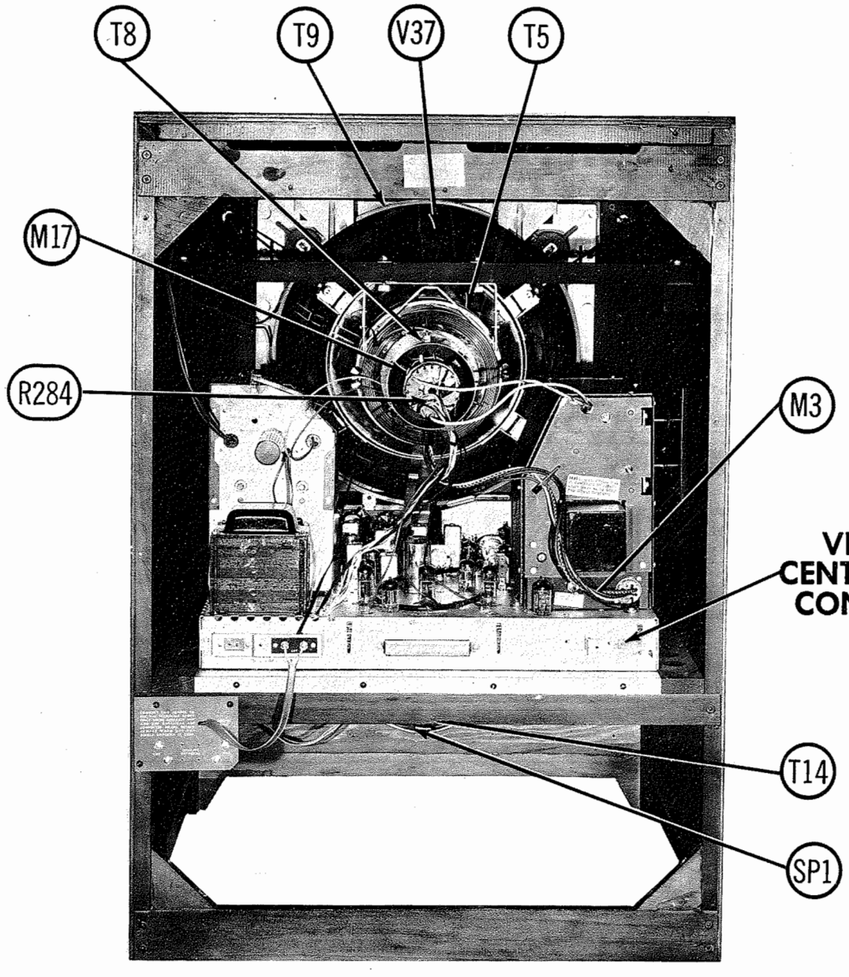
A PHOTOFACT STANDARD NOTATION SCHEMATIC



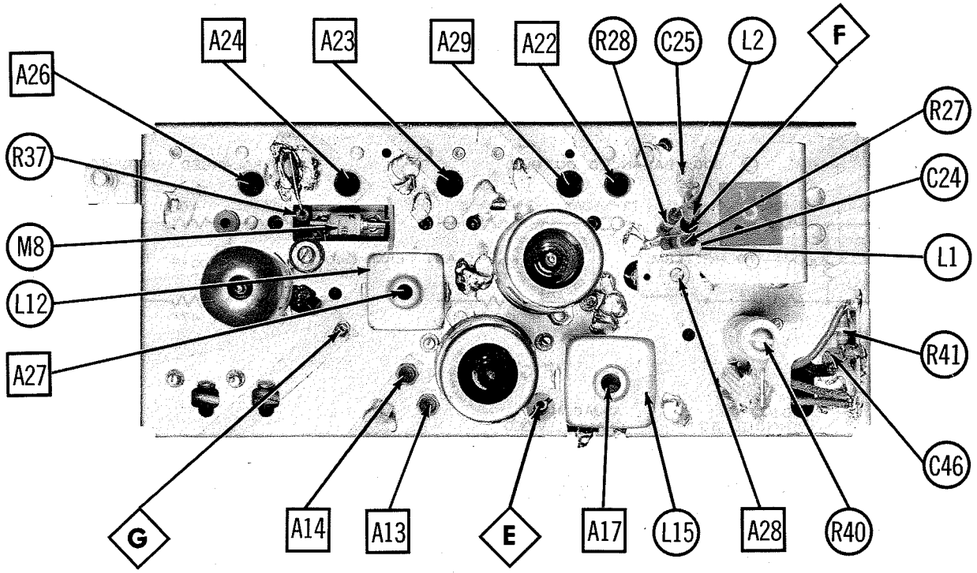
RCA VICTOR
MODEL CT-100 (Ch. CTC2)



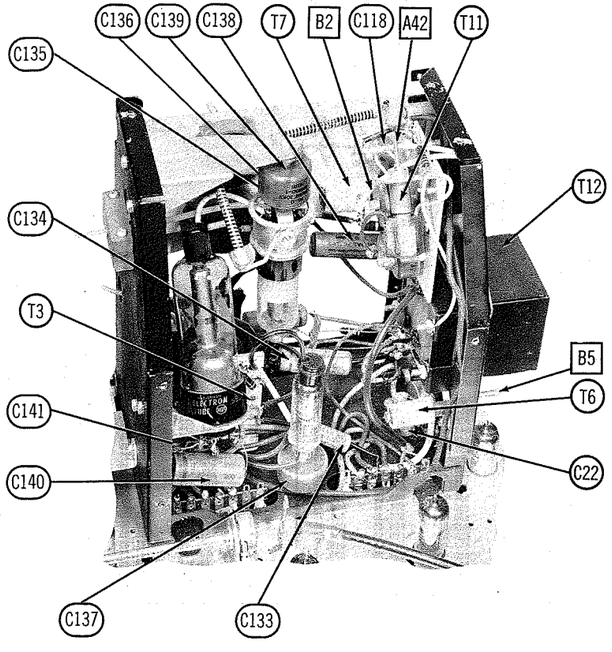
BLOCK DIAGRAM



CABINET-REAR VIEW

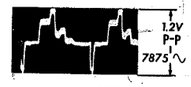


RF TUNER-TOP VIEW



HIGH VOLTAGE COMPARTMENT

ALL WAVEFORMS TAKEN WITH NTSC COLOR-BAR GENERATOR SET TO PRODUCE FIVE SATURATED COLOR BARS — GREEN, YELLOW, RED, MAGENTA, & BLUE — UNLESS OTHERWISE NOTED.



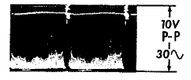
W1

W2

W3 — NOTE 1

W4 — NOTE 1

W5 — NOTE 1



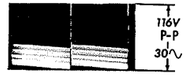
W6 — NOTE 1

W7 — NOTE 1

W8 — NOTES 1 & 2

W9 — NOTE 1

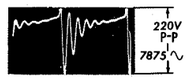
W10 — NOTE 1



W11 — NOTE 1

W12 — NOTE 1

W13 — NOTE 1



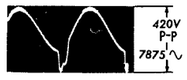
W14 — NOTE 1

W15 — NOTE 1

W16 — NOTE 1

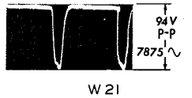
W17 — NOTE 1

W18 — NOTE 1

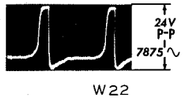


W19 — NOTE 1

W20

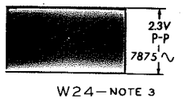


W21

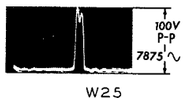


W22

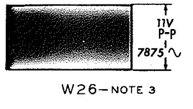
W23



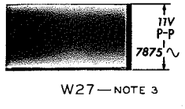
W24 — NOTE 3



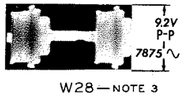
W25



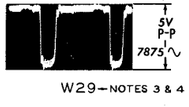
W26 — NOTE 3



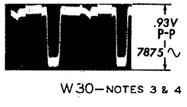
W27 — NOTE 3



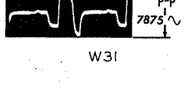
W28 — NOTE 3



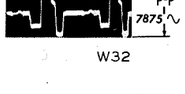
W29 — NOTES 3 & 4



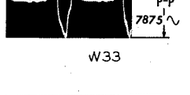
W30 — NOTES 3 & 4



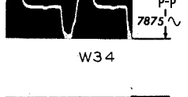
W31



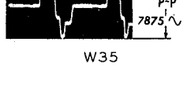
W32



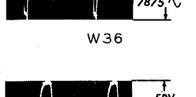
W33



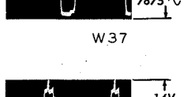
W34



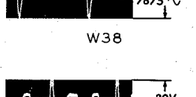
W35



W36



W37



W38

W39

W40

W41

W42

W43

W44

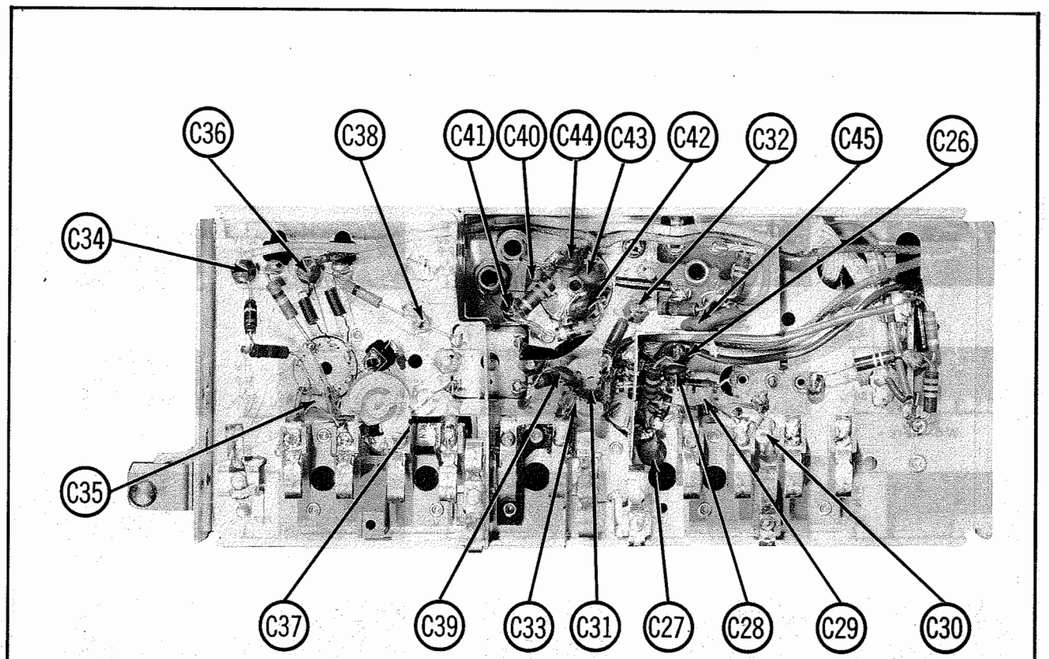
W45 — NOTE 1

NOTE 1. TAKEN WITH BLACK AND WHITE TEST PATTERN.

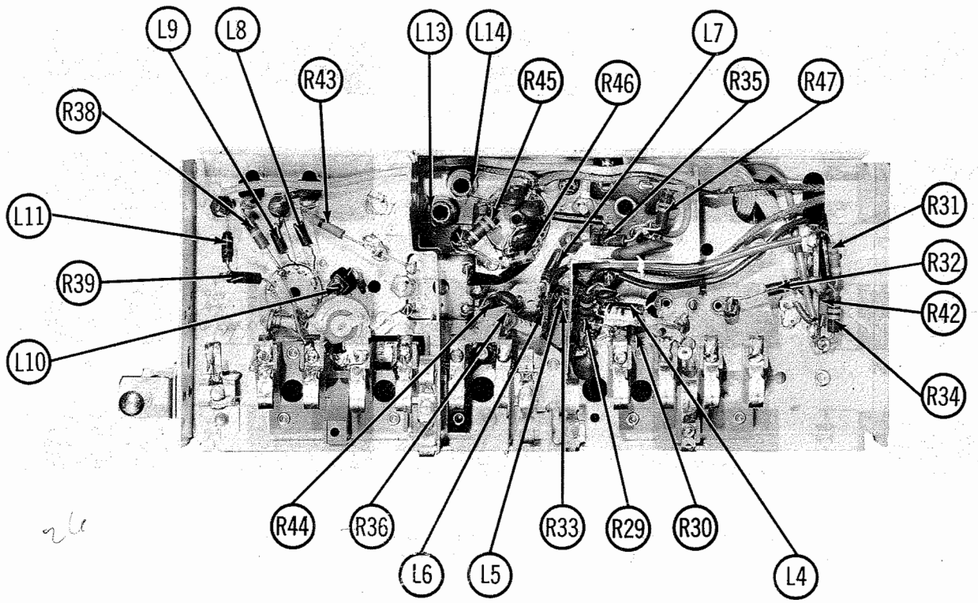
NOTE 2. TAKEN WITH V18 REMOVED FROM SOCKET.

NOTE 3. TAKEN WITH LOW CAPACITY PROBE.

NOTE 4. TAKEN WITH GENERATOR SET TO PRODUCE VERTICAL "T" & "Q" BARS.



RF TUNER-BOTTOM VIEW-CAPACITOR IDENTIFICATION



RF TUNER-BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

ALIGNMENT INSTRUCTIONS (cont)

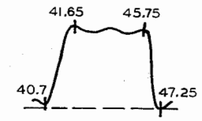


FIG.8

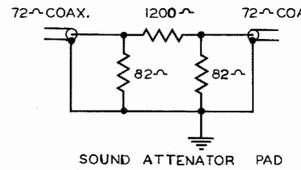


FIG.9

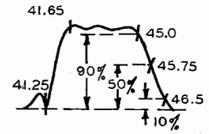


FIG.10

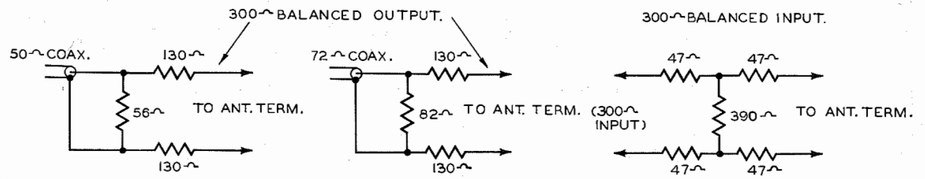


FIG.11

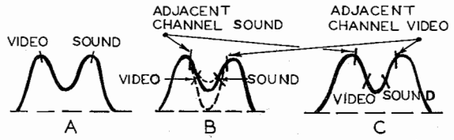


FIG.12

FIG.13

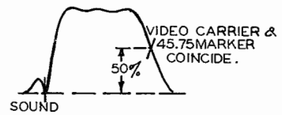


FIG.14

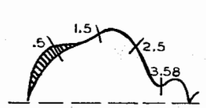


FIG.15

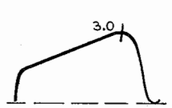
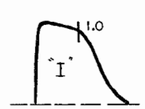
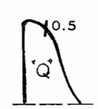


FIG.16



A



B

FIG.17

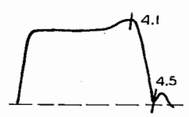


FIG.18

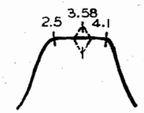


FIG.19

TELEVISION CHANNEL FREQUENCIES

Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier
2	54-60	55.25	59.75	23	524-530	525.25	529.75	44	650-656	651.25	655.75	64	770-776	771.25	775.75
3	60-66	61.25	65.75	24	530-536	531.25	535.75	45	656-662	657.25	661.75	65	776-782	777.25	781.75
4	66-72	67.25	71.75	25	536-542	537.25	541.75	46	662-668	663.25	667.75	66	782-788	783.25	787.75
5	76-82	77.25	81.75	26	542-548	543.25	547.75	47	668-674	669.25	673.75	67	788-794	789.25	793.75
6	82-88	83.25	87.75	27	548-554	549.25	553.75	48	674-680	675.25	679.75	68	794-800	795.25	799.75
7	174-180	175.25	179.75	28	554-560	555.25	559.75	49	680-686	681.25	685.75	69	800-806	801.25	805.75
8	180-186	181.25	185.75	29	560-566	561.25	565.75	50	686-692	687.25	691.75	70	806-812	807.25	811.75
9	186-192	187.25	191.75	30	566-572	567.25	571.75	51	692-698	693.25	697.75	71	812-818	813.25	817.75
10	192-198	193.25	197.75	31	572-578	573.25	577.75	52	698-704	699.25	703.75	72	818-824	819.25	823.75
11	198-204	199.25	203.75	32	578-584	579.25	583.75	53	704-710	705.25	709.75	73	824-830	825.25	829.75
12	204-210	205.25	209.75	33	584-590	585.25	589.75	54	710-716	711.25	715.75	74	830-836	831.25	835.75
13	210-216	211.25	215.75	34	590-596	591.25	595.75	55	716-722	717.25	721.75	75	836-842	837.25	841.75
14	470-476	471.25	475.75	35	596-602	597.25	601.75	56	722-728	723.25	727.75	76	842-848	843.25	847.75
15	476-482	477.25	481.75	36	602-608	603.25	607.75	57	728-734	729.25	733.75	77	848-854	849.25	853.75
16	482-488	483.25	487.75	37	608-614	609.25	613.75	58	734-740	735.25	739.75	78	854-860	855.25	859.75
17	488-494	489.25	493.75	38	614-620	615.25	619.75	59	740-746	741.25	745.75	79	860-866	861.25	865.75
18	494-500	495.25	499.75	39	620-626	621.25	625.75	60	746-752	747.25	751.75	80	866-872	867.25	871.75
19	500-506	501.25	505.75	40	626-632	627.25	631.75	61	752-758	753.25	757.75	81	872-878	873.25	877.75
20	506-512	507.25	511.75	41	632-638	633.25	637.75	62	758-764	759.25	763.75	82	878-884	879.25	883.75
21	512-518	513.25	517.75	42	638-644	639.25	643.75	63	764-770	765.25	769.75	83	884-890	885.25	889.75
22	518-524	519.25	523.75	43	644-650	645.25	649.75								

ALIGNMENT INSTRUCTIONS (cont)

FIRST VIDEO AMPLIFIER AND BAND PASS AMPLIFIER ALIGNMENT

Remove 6CL6 (V8) from socket (or short pin 2 of V8 to chassis).
Turn contrast control and color saturation control fully clockwise.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
31.	.1MFD	High side to pin 2 (grid) of 6CL6 (V9). Low side to chassis.	3MC (3MC Swp)	2.5MC 3.58MC 4.1MC	Any	Vert. Amp. thru detector (Fig.5) to pin 1 (grid) of 6BY6 (V30). Low side to chassis.	A32, A33, A34	Adjust for maximum gain and response similar to Fig. 19. Remove test equipment and replace V8 (or remove short from pin 2 of V8) in its socket. Switch off receiver power and replace fuse (M5).

ALTERNATE FIRST VIDEO AMPLIFIER AND BAND PASS AMPLIFIER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Connect the potentiometer arm of the 7.5 volt biass supply to pin 5 (diode plates) of 6AV6 (V15). Connect the positive side to chassis. Adjust the potentiometer arm for - 2 volts at pin 5 of V15. Connect the potentiometer arm of the 15 volt bias supply to the ungrounded side of C55. Connect the positive side to chassis. Adjust the potentiometer arm for - 9 volts at C55.
Connect a jumper across the terminals of the 4.5MC trap (L29).

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
32.	Direct	Connect signal generator and video sweep modulator across antenna terminals (See remarks)	3MC (3MC Swp)	67.25MC	4	Vert. Amp. thru detector (Fig.5) to pin 1 (cathode) of 6CL6 (V9). Low side to chassis.		Signal generator should provide channel 4 video carrier frequency (67.25MC) with crystal accuracy. Connect DC probe of VTVM to point Ⓒ. Common to point Ⓓ. With zero video sweep modulation adjust signal generator output (67.25MC for 3 volts on VTVM. Remove VTVM and apply video sweep modulation, being careful not to overload. Couple VHF signal generator loosely to pin 1 (grid) of 6DC6 (V4) to provide 45.75MC marker. To set the local oscillator exactly on frequency adjust fine tuning until a beat pattern is obtained on scope. Remove VHF generator from pin 1 of V4. Response on scope should be similar to Fig. 18.
33.	"	"	"	"	"	Vert. Amp. thru detector (Fig.5) to pin 2 (cathode) of 6BY6 (V3). Low side to chassis.	A32, A33, A34	Remove jumper across terminals of L29. Connect short jumper from point Ⓛ to chassis. Turn contrast control fully clockwise. Adjust A32, A33 and A34 for maximum gain and response similar to Fig. 19. Remove test equipment. Switch off receiver power and replace fuse (M5). Remove jumper from point Ⓛ to chassis.

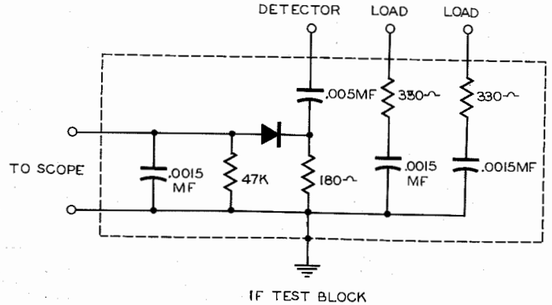


FIG.5

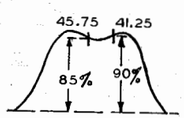


FIG.6

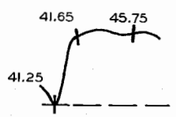


FIG.7

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS--READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage should be disabled by removing the fuse (M5) in series with pin 7 of the deflection yoke socket.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Ground pin 2 (grid) of 6CL6 (V8).

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1.	.01MFD	High side to terminal "C" of L35. Low side to chassis.	4.5MC (Unmod)	Any	DC probe to point Ⓐ. Common to chassis.	A1, A2, A3, A4	Adjust for maximum deflection. Attenuate generator output for -12 volts on VTVM for final peaking of A1 thru A4.
2.	"	"	"	"	DC probe to point Ⓑ. Common to chassis.	A5	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. Move VTVM to point Ⓐ and retouch A4 for maximum deflection and then repeat step 2.
3.	"	"	"	"	DC probe to point Ⓐ. Common to chassis.		Connect a 1500Ω resistor across terminals "B" and "C" (primary) of L36. Readjust A3 for maximum deflection. Disconnect the 1500Ω resistor and reconnect it across terminals "A" and "D" of L36 and adjust A2 for maximum deflection. Remove the 1500Ω resistor and the jumper from pin 2 of V8 to ground.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.
Ground pin 2 (grid) 6CL6 (V8).

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	.01MFD	High side to terminal "C" of L35. Low side to chassis.	4.5MC (450KC Swp)	4.5MC	Any	Vert. Amp. to point Ⓐ. Low side to chassis.	A1, A2, A3, A4	Disconnect stabilizing capacitor C23. Adjust for curve of maximum amplitude and symmetry similar to Fig. 1.
2.	"	"	"	"	"	Vert. Amp. to point Ⓑ. Low side to chassis.	A5	Reconnect stabilizing capacitor C23. Adjust so that 4.5MC occurs at center of crossover lines as in Fig. 2. SLIGHTLY retouch A4 for maximum amplitude and straightness of crossover lines. Remove jumper from pin 2 of V8 to ground. Continue alignment with step 4.

VIDEO IF ALIGNMENT

If the scope to be used does not have a sensitivity of 1 millivolt per inch a suitable preamplifier may be necessary. A VHF signal generator of crystal accuracy should be used to provide markers.
Beginning with step 7 the sweep or signal generators will be connected to the front terminal of the K3E crystal mixer. Since extremely short leads must be employed in making these connections it is recommended that the KRK12C input head shown in Fig. 4 should be constructed and used in order to obtain reliable response curves.
Three 7.5 volt batteries capable of withstanding considerable current drain are required.
Connect two 7.5 volt batteries in series with a 1000 potentiometer across the 15 volt combination. Also, connect a 1000Ω potentiometer across the third 7.5 volt battery. Connect the positive side of the 7.5 volt battery to chassis and the potentiometer arm to the ungrounded side of C55 and adjust for -6 volts. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4.	.01MFD	High side to pin 2 (grid) of 6CL6 (V8). Low side to chassis.	Not used	47.25MC (400%Mod)	Any	Vert. Amp. (thru pre-amplifier if necessary) to point Ⓒ. Low side to chassis.	A6	Connect pin 8 (grid) of 6AN8 (V7) to chassis using a short jumper. Adjust A6 for MINIMUM 400% indication on scope.
5.	"	"	"	41.25MC	"	"	A7	"
6.	Direct	High side to pin 2 (grid) of 6CL6 (V8). Low side to chassis. Use very short leads.	44MC (10MC Swp)	41.25MC 41.65MC 45.75MC 47.25MC	"	Vert. Amp. to point Ⓒ. Low side to chassis.	A8, A9	Adjust sweep generator output for 6 volts peak to peak on scope. Couple marker generator loosely to pin 2 of V8. Adjust A8 and A9 for maximum gain with response similar to Fig. 3. While observing response on scope, adjust the sound rejection control (R22) for maximum rejection at 41.25MC. Remove short from pin 8 of V7 to chassis.
7.	Fig.4	Thru input head (Fig.4) to front terminal of K3E crystal and chassis.	Not used	44.9MC (Unmod)	Any non-interfering channel	Use VTVM. DC probe to point Ⓒ. Common to point Ⓓ.	A10	Connect the junction of R100 and R101 to chassis with short jumper. Adjust for maximum deflection. Attenuate generator output to maintain -6 volts on VTVM.
8.	"	"	"	42.1MC	"	"	A11	"
9.	"	"	"	41.3MC	"	"	A12	Adjust for maximum deflection. Attenuate generator output for -6 volts on VTVM. Remove test equipment and 7.5 volt bias supply.
10.	"	"	43MC (20MC Swp)	41.25MC 45.75MC	"	Vert. Amp. thru detector (detector lead of Fig.5) to point Ⓔ. Low side to tuner chassis.	A13, A14	Connect a 56Ω carbon resistor between terminals "C" and "D" of L15 (on tuner) Couple marker generator loosely to pin 3 (grid) of 6U8 (V3). Attenuate sweep generator output for .3 volts peak to peak on scope. Adjust A13 and A14 for maximum gain with response similar to Fig.6. Remove 56Ω resistor from L15.
11.	"	"	Not used	41.25MC (400%Mod)	"	Vert. Amp. thru detector (detector lead of Fig.5) to pin 5 (plate) of 6CB6 (V4). Low side to chassis (Use scope pre-amp. if necessary).	A15	Connect the load leads of IF test block (Fig.5) to pin 5 (plate) of V5 (6CB6) and V6 (6CB6). Connect the ungrounded side of C55 to chassis. Adjust A15 for MINIMUM 400% indication on scope. Remove jumper from ungrounded side of C55 to chassis.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12.	Fig. 4	Thru input head (Fig.4) to front terminal of K3E crystal and chassis.	44MC (10MC Swp)	41.25MC 41.65MC 45.75MC	Any non-interfering channel	Vert. Amp. thru detector (detector lead of Fig. 5) to pin 5 (plate) of 6CB6 (V4). Low side to chassis. (Do not use scope pre-amp.)	A16, A17	Couple marker generator loosely to pin 1 (grid) of 6CB6 (V4). Connect the load leads of IF test block (Fig. 5) to pin 5 (plate) of V5 (6CB6) and V6 (6CB6). Attenuate generator output for .3 volt peak to peak on scope. Adjust A16 and A17 for maximum gain with response similar to Fig. 7. While observing response on scope, adjust the sound level control (R15) for maximum rejection at 41.25MC.
13.	"	"	Not used	40.7MC (400%Mod)	"	Vert. Amp. thru detector (detector lead of Fig. 5) to pin 5 (plate) of 6CB6 (V5). Low side chassis. (Use pre-amp. if necessary)	A18	Connect the load leads of the IF test block (Fig. 5) to pin 5 (plate) of 6CB6 (V6) and pin 6 (plate) of 6AN8 (V7). Connect the ungrounded side of C55 to chassis. Adjust for MINIMUM 400% response on scope.
14.	"	"	"	47.25MC (400%Mod)	"	"	A19	Adjust for MINIMUM 400% response on scope. Remove jumper from ungrounded side of C55 to chassis.
15.	"	"	44MC (10MC Swp)	40.7MC 41.65MC 45.75MC 47.25MC	"	Vert. Amp. thru detector (detector lead of Fig. 5) to pin 5 (plate) of 6CB6 (V5). Low side to chassis. (Do not use pre-amp.)	A20, A21	Connect the potentiometer arm of the 15 volt bias supply to the ungrounded side of C55. Connect the positive side of chassis. Adjust the potentiometer arm for -6 volts at C55. Connect a jumper from the junction of R100 and R101 to chassis. Couple the signal generator loosely to pin 1 (grid) of 6CB6 (V4). Adjust for response similar to Fig. 8.
16.	Fig. 9 & Fig. 4	Signal generator in series with sound attenuator pad thru input head (Fig. 4) to front terminal of K3E crystal and chassis.	Not used	43.0MC (400%Mod)	"	Vert. Amp. thru detector (detector lead of Fig. 5) to pin 5 (plate) of 6CB6 (V5). Low side to chassis. (Use pre-amp. if necessary).		Note and mark output level of response on scope. This output level is to be used as reference in step 18.
17.	Fig. 4	Thru input head (Fig. 4) to front terminal of K3E crystal and chassis.	Not used	41.25MC (400%Mod)	"	"	A15	Readjust A15 for MINIMUM response.
18.	Fig. 4	Thru input head (Fig. 4) to front terminal of K3E crystal and chassis.	Not used	43.0MC (400%Mod)	Any non-interfering channel	Vert. Amp. thru detector (detector lead of Fig. 5) to pin 5 (plate) of 6CB6 (V5). Low side to chassis. (Use pre-amp. if necessary)		Turn sound level control (R15) counter clockwise (from position set in step 12) until output level indication on scope is same as obtained in step 16. Remove IF test block (Fig. 5) and scope.

OVERALL VIDEO IF RESPONSE CHECK

Connect the potentiometer arm of the 15 volt bias supply to the ungrounded side of C55. Connect the positive side to chassis. Adjust for -9 volts at C55.
Couple the marker generator loosely to the grid of the first video IF amplifier tube (V4).
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
19.	Fig. 4.	Thru input head (Fig. 4) to front terminal of K3E crystal and chassis.	43MC (10MC Swp)	41.25MC 41.65MC 45.0MC 45.75MC 46.5MC	Any non-interfering channel	Vert. Amp. to point Ⓒ. Common to chassis.		Attenuate sweep generator output for 6 volt peak to peak on scope. Check for response curve similar to Fig. 10. If necessary, retouch A10, A11 and A12 to obtain desired response. Exercise care to obtain marker response exactly as shown in Fig. 10.

KRK12C VHF TUNER ALIGNMENT

In step 20 choose the proper pad (see Fig. 11) to match the output impedance of the sweep generator to be used. If the sweep generator does not have built in markers couple a VHF signal generator loosely to antenna terminals to provide markers.
Connect the negative lead of the 7.5 volt bias supply to the tuner AGC terminal. Connect the positive side to chassis. Adjust the potentiometer arm for - 2 volts at tuner AGC terminal.
To minimize RF-IF interaction remove the RF oscillator tube (V2/6AF4) from its socket.
Tuner alignment as outlined below requires the use of a heterodyne frequency meter.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
20.	Fig. 11	Thru attenuator pad (Fig. 11) to VHF ahtenna terminals.	57MC (20MC Swp)	55.25MC 59.75MC	2	Vert. Amp. to point Ⓒ. Low side to chassis. (Use pre-amp. if necessary)	A22 A23 A24 A25 (See Remarks)	Adjust for symmetrical response with maximum gain of center of band pass as in Fig. 12. The curves will have a deep valley due to crystal loading and nonlinear detector characteristics). Do not exceed limits shown in Figs. 12A and 12C. Each channel strip adjustment for an individual channel strip has a corresponding adjustment on all other channel strips. Since these adjustments are identical in position and function they are indicated by the same "A" number in the interests of simplification. Adjustments A22, A23 and A24 are accessible thru holes in the top of the tuner as the channel switch is turned to each channel. Adjustment A25 refers to coupling capacitor whose positioning affects bandwidth of response curve. NOTE: The valley in the response curve (Fig.12B) may vary from 0-50% (lower dashed curve). If the valley rises above 50% (upper dashed curve) this is an indication of excessive sweep generator output and the sweep generator output should be attenuated. Oscillator injection voltage is adjusted on UHF channel inserts only. Remove test equipment and replace the oscillator tube (V2) in its socket.
			63MC (20MC Swp)	61.25MC 65.75MC	3			
			69MC (20MC Swp)	67.25MC 71.75MC	4			
			79MC (20MC Swp)	77.25MC 81.75MC	5			
			85MC (20MC Swp)	83.25MC 87.75MC	6			
			177MC (20MC Swp)	175.25MC 179.75MC	7			
			183MC (20MC Swp)	181.25MC 185.75MC	8			
			189MC (20MC Swp)	187.25MC 191.75MC	9			
			195MC (20MC Swp)	193.25MC 197.75MC	10			
			201MC (20MC Swp)	199.25MC 203.75MC	11			
			207MC (20MC Swp)	205.25MC 209.75MC	12			
			213MC (20MC Swp)	211.25MC 215.75MC	13			

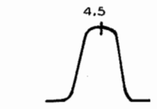


FIG. 1

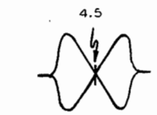


FIG. 2

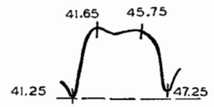


FIG. 3

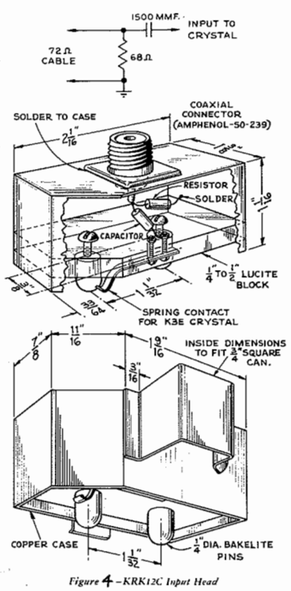


Figure 4 – KRK12C Input Head

21.	Connect the potentiometer arm of the 15 volt bias supply to the ungrounded side of C55. Connect the positive side to chassis. Adjust potentiometer arm for -9 volts at C55. Use only enough sweep generator output to provide useable response curve on scope. Set the fine tuning control to its mid-range position. Connection for the heterodyne frequency meter is made as follows: Insert the end of an insulated piece of wire into either of two holes next to the oscillator tube at the right top front corner of the tuner. Use care so that the wire does not touch any tuned circuits. Connect other end of wire to RF input of frequency meter.							
22.		Connect frequency meter as in step 21.	Not used	Freq. meter to 257MC	13	Not used	A26	Adjust for audible beat on freq. meter.
23.	Fig. 11	Thru attenuator pad (Fig. 11) to VHF antenna terminals.	213MC (10MC Swp)	211.25MC 215.75MC	13	Vert. Amp. to point Ⓒ. Common to chassis.	A27 A24	Adjust A27 for maximum gain on scope. Adjust A24 for maximum gain and flat-topped curve. Recheck A27 for maximum gain at center of band with flat-topped response.
24.		Connect freq. meter as in step 21.	Not used	Freq. meter to 251MC 245MC 239MC 233MC 227MC 221MC 129MC 123MC 113MC 107MC 101MC	12 11 10 9 8 7 6 5 4 3 2	Not used	A26 A24	Adjust A26 on each channel for audible beat. Connect sweep generator and scope as in step 23. Set sweep and marker to proper frequencies (see chart) for each channel and adjust A24 if necessary for maximum gain and proper response. Do not readjust A27.
25.	Direct	High side to point Ⓕ. Low side to chassis.	Not used	43.5MC (400%Mod)	Any	Vert. Amp. to point Ⓒ. Common to chassis.	A28	Adjust for MINIMUM 400% indication on scope. Remove test equipment.

KRK12C UHF TUNER ALIGNMENT

Alignment of the UHF portion of the tuner should not be attempted unless the following test equipment is available, in addition to the usual VHF test equipment: UHF sweep generator covering the frequency range of 470MC to 890MC. A marker generator, of crystal accuracy, covering the same frequency range.
Remove the RF oscillator tube (V2/6AF4) from its socket.
Connect the potentiometer arm of the 15 volt bias supply to the ungrounded side of C55. Connect the positive lead to chassis. Adjust the potentiometer arm for- 9 volts at C55.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Set the fine tuning control to the mid-position of its range.
If strong interference is encountered from an FM station adjust the FM trap to minimize this interference. This trap is fastened to the transmission line inside the receiver cabinet.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
26.	10DB Attenuator Pad	Thru attenuator pad to UHF antenna terminals. Connect UHF marker generator loosely to UHF antenna terminals.	Set sweep to cover channel being aligned (See chart) Use 20MC sweep width	Set to video and sound frequency of channel being aligned (See chart).	14 thru 83	Vert. Amp. to point Ⓒ. Low side to tuner chassis. (Use pre-amp. if necessary).	A29 A23 A24	Adjust A29, A23 and A24 for response similar to Fig. 13 for all UHF channel strip inserts. Remove test equipment and replace the 6AF4 (V2) in its socket.
27.	"	"	"	Set to video carrier freq. of channel being aligned.	14 thru 83	Vert. Amp. to point Ⓒ. Low side to chassis.	A26	Attenuate sweep generator for 6 volts peak to peak on scope. Set fine tuning control to its mid-range position. Connect VHF signal generator to point Ⓔ using very short leads. Set generator frequency to 45.75MC. Adjust A26 for channel strip being aligned until 45.75MC and video carrier marker coincide on response curve as in Fig. 14. Adjust A24 of channel strip being aligned for maximum gain with proper waveshape. Connect the DC probe of VTVM to point Ⓒ. Common to chassis. Set the oscillator injection adjustment for reading on VTVM between 0.1 volt and 0.3 volt on all UHF channels. Remove all test equipment.

VIDEO TRAP ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.

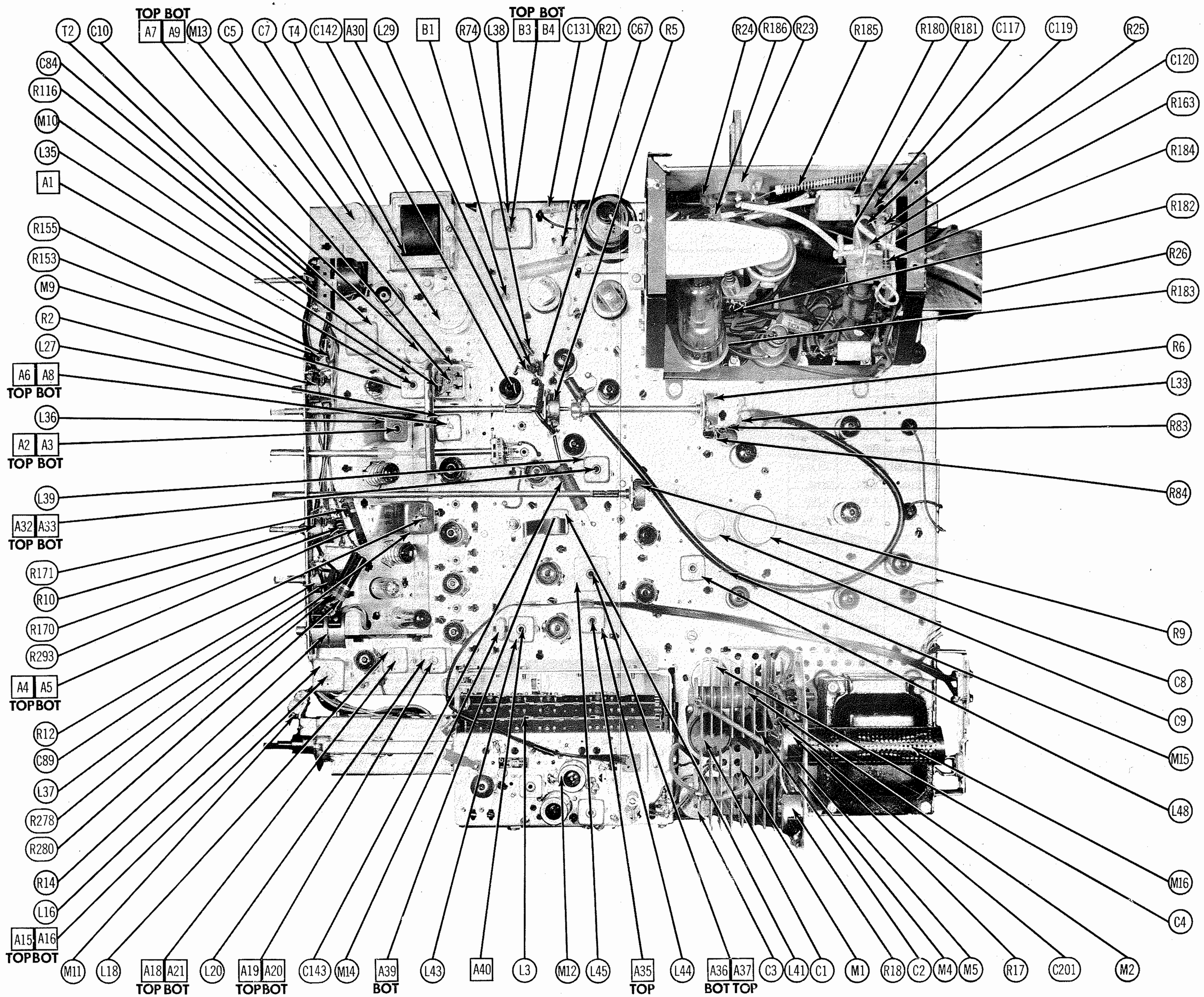
	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
28.	.01MFD	High side to pin 2 (grid) of 6CL6 (V9). Low side to chassis.	Not used	4.5MC (400%Mod)	Any	Vert. Amp. thru detector (detector lead of Fig. 5) to point Ⓗ. Low side to chassis.	A30	Ground pin 2 (grid) of 6CL6 (V8). Short the ungrounded side of C144 (in plate circuit of V7B) to chassis. Turn contrast control fully clockwise. Adjust A30 for MINIMUM 400% response on scope. Remove jumpers from pin 2 of V8 and C144.
29.	This step requires the use of a 100% saturated color bar generator (If this equipment is not available use the alternate method given in step 30.) Connect the vert. amp. of a wide band oscilloscope to red grid (pin 3) of the picture tube. Connect the high side of the color bar generator to pin 2 (grid) of 6CL6 (V9). Low side to chassis. Adjust A31 for MINIMUM color sub-carrier indication in the video signal.							
30.	.1MFD	High side to pin 2 (grid) of 6CL6 (V9). Low side to chassis.	2.5MC (3MC Swp)	.5MC 1.5MC 2.5MC 3.58MC	Any	Vert. Amp. thru detector (detector lead of Fig. 5) to point Ⓘ. Low side to chassis. (Use wide band scope).	A31	To prevent noise from second detector appearing on scope connect pin 2 (grid) of 6CL6 (V8) to chassis. Turn contrast control maximum clockwise. Check for response similar to Fig. 15. Increase sweep output so that the 3.58MC portion of trace is raised above the scope base line. Adjust A31 for MINIMUM marker amplitude.

RESPONSE CHECK OF VIDEO CIRCUITS

These circuits are not adjustable. The response check is made to determine if the circuits are operating properly.
Leave the sweep generator connected as in step 30.
Remove the 3.58MC crystal (M14). Turn the color saturation control (R9A) to its maximum counter clockwise position. Connect the scope through the detector (Fig. 5) to each picture tube grid (pins 3, 18 and 8). Check for response similar to Fig. 16 at each picture tube grid. Attenuate sweep generator output to prevent overload.

PONSE CHECK OF "I" AND "Q" CHANNELS

These circuits are not adjustable. The response check is made to determine if the circuits are operating satisfactorily. Connect the vertical amplifier of scope through the detector (Fig. 5) to point Ⓙ. Low side to chassis. Connect high side of sweep generator thru .1MFD capacitor to pin 1 (grid) of 6BY6 (V31). Low side to chassis. Turn the color saturation control (R9A) maximum clockwise. Check for response similar to Fig. 17A. Move sweep generator to pin 1 (grid) of 6BY6 (V30). Connect the vertical amplifier of scope through detector (Fig. 5) to point Ⓚ. Check for response similar to Fig. 17B.
Remove test equipment and replace the 3.58MC crystal (M14). Remove short from pen 2 (grid) of V8.



CHASSIS TOP VIEW

RESISTANCE MEASUREMENTS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BQ7A	† 1. 4KΩ	8. 3Meg	8. 8Meg	0Ω	. 1Ω	8. 8Meg	800KΩ	120Ω	0Ω
V 2	6 AF4	† 11. 4KΩ	10KΩ	. 1Ω	0Ω	0Ω	10KΩ	† 11. 4KΩ		
V 3	6U8	INF.	INF.	† 12. 4KΩ	0Ω	. 1Ω	† 415Ω	INF.	56Ω	0Ω
V 4	6 CB6	50KΩ	62Ω	0Ω	. 1Ω	† 10. 8KΩ	† 48KΩ	0Ω		
V 5	6 CB6	49KΩ	62Ω	0Ω	. 1Ω	†10. 8KΩ	†10. 8KΩ	0Ω		
V 6	6 CB6	27KΩ	62Ω	. 1Ω	0Ω	†10. 8KΩ	†10. 8KΩ	0Ω		
V 7	6 AN8	27KΩ	† 100Meg	0Ω	. 1Ω	0Ω	† 10. 8KΩ	† 10. 8KΩ	. 1Ω	180Ω
V 8	6 CL6	120Ω	. 1Ω	† 3KΩ	. 1Ω	0Ω	† 3KΩ	0Ω	† 3KΩ	. 1Ω
V 9	6 CL6	120Ω	6. 9KΩ	† 7. 5KΩ	. 1Ω	0Ω	† 5. 5KΩ	0Ω	† 7. 5KΩ	6. 9KΩ
V 10	6AN8	† 13KΩ	390KΩ	3KΩ	0Ω	. 1Ω	† 22KΩ	† 47KΩ	2. 2Meg	1. 7KΩ
V 11	6 AN8	† 3. 9KΩ	† 33KΩ	380KΩ	† 10. 3KΩ	† 10. 3KΩ	300KΩ	† 0Ω	† 1. 7Meg	† 330Ω
V 12	6 AU6	3. 8Ω	0Ω	0Ω	. 1Ω	† 11. 8KΩ	† 11. 8KΩ	82Ω		
V 13	6 AU6	47KΩ	0Ω	. 1Ω	0Ω	† 19KΩ	† 30KΩ	0Ω		
V 14	6 AL5	11KΩ	11. 2KΩ	0Ω	. 1Ω	INF.	0Ω	INF.		
V 15	6AV6	10 Meg	0Ω	0Ω	. 1Ω	800KΩ	800KΩ	† 330KΩ		
V 16	6 AQ5	470KΩ	660Ω	0Ω	. 1Ω	† 1. 6KΩ	† 1. 2KΩ	470KΩ		
V 17	12AT7	† 350KΩ	2. 2Meg	0Ω	0Ω	0Ω	† 15KΩ	† 1. 2Meg	0Ω	. 1Ω
V 18	12BH7	† 2. 2Meg	1. 5Meg	0Ω	. 1Ω	. 1Ω	† 6. 2KΩ	1Meg	1. 5KΩ	0Ω
V 19	12AU7	† 1. 2KΩ	1. 8Meg	4. 7KΩ	. 1Ω	. 1Ω	† 28KΩ	550KΩ	2. 7KΩ	0Ω
V 20	6SN7GT	1. 8Meg	† 45KΩ	230KΩ	250KΩ	† 68KΩ	0Ω	0Ω	. 1Ω	
V 21	6CD6G	60KΩ	. 1Ω	12Ω	10KΩ	60KΩ	¶ 2. 2KΩ	0Ω	¶ 2. 2KΩ	TOP CAP ▲ 12. 5Ω
V 22	6 AU4GT	INF.	INF.	INF.	INF.	† 80Ω	INF.	0Ω	. 1Ω	
V 23	1X2B	13 Meg	INF.	INF.	INF	13 Meg	INF.	INF	INF.	TOP CAP ▲ 4. 7KΩ
V 24	3A3	INF.	118Meg	INF.	INF.	INF.	INF.	118Meg	INF	TOP CAP ▲ 430Ω
V 25	6 BD4GT	† 6Ω	† 10. 3KΩ	INF.	INF.	2. 8Meg	INF.	† 10. 3KΩ	INF	TOP CAP 118 Meg
V 26	6AN8	† 20KΩ	100KΩ	1. 8KΩ	0Ω	. 1Ω	† 10. 1KΩ	† 27KΩ	37KΩ	150Ω
V 27	6AN8	. 3Ω	. 3Ω	† 108Meg	0Ω	. 1Ω	† 2. 5KΩ	† 340Ω	2. 2KΩ	1. 8KΩ
V 28	6 AN8	†106Meg	† 106Meg	. 3Ω	0Ω	. 1Ω	†10. 3KΩ	†47KΩ	. 4Ω	180Ω
V 29	6 AN8	† 39KΩ	150KΩ	. 7Ω	0Ω	. 1Ω	† 2. 5KΩ	† 11. 5KΩ	† 107Meg	330Ω
V 30	6 BY6	150Ω	100Ω	0Ω	. 1Ω	† 18KΩ	† 13KΩ	. 3Ω		
V 31	6BY6	200Ω	100Ω	0Ω	. 1Ω	† 8. 5KΩ	† 13KΩ	. 3Ω		
V 32	6 AN8	† 8 KΩ	390KΩ	6. 2KΩ	0Ω	. 1Ω	† 10KΩ	† 47KΩ	1 Meg	600Ω
V 33	12BH7	† 5KΩ	1. 8Meg	450Ω	0Ω	0Ω	† 10. 3KΩ	1. 8KΩ	200Ω	. 1Ω
V 34	12BH7	† 5KΩ	1. 8Meg	450Ω	0Ω	0Ω	† 10. 3KΩ	1. 8KΩ	200Ω	. 1Ω
V 35	12BH7	† 5KΩ	1. 8Meg	450Ω	0Ω	0Ω	† 10. 3KΩ	3. 5KΩ	200Ω	. 1Ω
V 36	6 BC7	1 Meg	2KΩ	0Ω	0Ω	. 1Ω	7KΩ	1 Meg	7KΩ	1 Meg
V 37	15GP22	PIN 1 0Ω	PIN 2 6KΩ	PIN 3 1. 1Meg	PIN 4 † 5KΩ	PIN 6 13. 2Meg	PIN 7 3. 3KΩ	PIN 8 1. 1Meg	PIN 9 † 5KΩ	PIN 13 68Meg
		PIN 17 † 5KΩ	PIN 18 1. 1Meg	PIN 19 3. 3KΩ	PIN 20 . 1Ω					

† MEASURED FROM OUTPUT OF M2-C2.
¶ MEASURED FROM JUNCTION OF C1 & C2.
▲ MEASURED FROM PIN 3 OF V22.

DISASSEMBLY INSTRUCTIONS

1. Remove 8 push on type control knobs from front panel.
2. Disconnect 2 push-on type control knobs from side panel of cabinet.
3. Remove 8 wood screws and 2 metal screws. Remove rear cover.
4. Disconnect speaker plug, CRT-socket, yoke plug, field neutr. plug and purity coil plug.
5. Remove 8 chassis bolts. Remove chassis.
6. Remove 4 speaker nuts. Remove speaker.

MISCELLANEOUS ADJUSTMENTS CONT'D

CENTERING ADJUSTMENT
Adjust the vertical and horizontal centering controls (rear panel) until the picture is centered within the picture tube mask. If the picture does not cover the masked area adjust the positioning for equal blank areas at top and bottom and each side of picture.

WIDTH AND HORIZONTAL DRIVE ADJUSTMENTS
Adjust the horizontal drive control (R21A) until the vertical white fold-over line just disappears.
Adjust the width coil slug (B2) for an overscan of approximately 1/4 inch on each side.
Turn the horizontal drive control (R21A) clockwise as far as possible without the presence of a vertical white fold-over line appearing in the picture.
If the picture mask cannot be filled by the above adjustments refer to the procedure outlined under "High Voltage Adjustment". If set has horizontal linearity coil, adjust its slug (B5) for maximum inductance (core all way in).

HEIGHT AND VERTICAL LINEARITY ADJUSTMENTS
Adjust the height and vertical linearity controls (front panel) for a picture that is symmetrical from top to bottom. Final adjustment should overscan the picture mask by 1/4 inch at top and bottom. Recheck horizontal and vertical centering of the picture.

DC CONVERGENCE ADJUSTMENTS
Connect the RF output of a white dot generator across the antenna terminals.
Adjust the DC convergence control until the three dots are positioned in a triangular pattern in the center of the raster. (It is possible to invert the dot triangle by turning the DC convergence control, from one extreme to the other).
If necessary the focus control should be readjusted.
If the dot group cannot be made to form an equilateral triangle similar to Fig. 26, adjust the beam positioning magnets on the neck of the picture tube.
Note which of the three dots requires positioning then adjust positioning magnet (small threaded screw with knurled nut) corresponding to that color to correct the position of that dot.
In Fig. 26 the dashed lines indicate the direction of dot movement due to DC convergence control adjustment. All three dots move simultaneously when the control is adjusted.
The solid lines indicate the direction of dot movement when the associated beam positioning magnet is adjusted. Each magnet has a slight effect on the two beams other than the one it is intended to control. For this reason minimum adjustment of the magnet is essential. Also minimum adjustment causes the least amount of de-focusing. Minimum adjustment is that point nearest the extreme counter clockwise. position where correct beam positioning is obtained.
If the indications are that only one dot is out of line and the associated magnet has insufficient range of adjustment remove the magnet from the neck shield and re-insert the opposite end of the magnet in the neck shield. Each magnet is slotted on both ends but only one end of each magnet is color coded in red. If reversal of a magnet cannot correct a single dot position return the magnet to its original position. Then the position of the opposite two dots may be corrected with respect to the first dot by adjusting the magnet associated with those dots.
After-obtaining the equilateral triangle, satisfactory convergence will be possible by adjustment of the DC convergence control.
Complete convergence should be obtained at the center of the raster. Complete convergence is indicated when a single white dot with no color frenging around its edge is obtained.

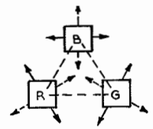


FIG. 26

DYNAMIC CONVERGENCE ADJUSTMENTS
Leave the white dot generator connected as under "DC Convergence Adjustments".
During adjustment of dynamic convergence, it may be helpful to frequently vary the DC convergence control to obtain best convergence on various parts of the screen.
Adjust the vertical convergence amplitude control so that the dots along a vertical center line show equal dot displacement from top to bottom of center line. Readjust focus control. If equal dot displacement does not occur on the vertical center line adjust the vertical convergence shape control to obtain the most uniform dot displacement.
If necessary, readjust the vertical convergence amplitude control. Readjust the DC convergence control so that the dots in the vertical lines converge. The dots should be kept in focus.
If necessary, slightly readjust the vertical amplitude and shaping controls to obtain the best top-to-bottom convergence .
The horizontal dynamic convergence adjustments should be performed next.
Adjust the horizontal convergence amplitude control so that the dots along a horizontal center line show equal dot displacement from left to right on the center line.
If equal dot displacement does not occur on the horizontal center line adjust the horizontal convergence phase coil slug (A41) to obtain the most uniform dot displacement. If necessary, slightly readjust the horizontal amplitude control. Readjust the DC convergence control so that the dots in the horizontal line converge. The dots should be kept in focus.
If necessary, slightly readjust the horizontal amplitude control and the phase coil slug (A41) to obtain the best side to side convergence.
The entire picture area should now be properly converged. Misconvergence of any particular area that can be corrected by re-adjusting the DC convergence control indicates that the dynamic convergence adjustments are not at optimum setting.
The necessary touch-up adjustments should be made after determining what correction is needed. Color purity and convergence adjustments should be completed before proceeding with the following adjustments

LOWLIGHT, MID-RANGE, AND HIGHLIGHT ADJUSTMENTS
Connect the antenna to the receiver and tune in a black and white program or test pattern.
(A) Turn the color saturation and contrast controls fully counter clockwise. Turn the brightness control to its near maximum clockwise position. Alternately adjust the red, blue, and green screen controls for a light grey or low brightness white picture.
(B) Turn the contrast control to its approximate mid-range position. Adjust the green and blue video gain controls for a satisfactory white picture. Turn the brightness control counter clockwise until the picture becomes just visible. Adjust the green and blue background controls for a grey picture.
Repeat steps (A) and (B) until satisfactory grey to white pictures are seen through all positions of the brightness controls.

MISCELLANEOUS ADJUSTMENTS CONT'D

VERTICAL DYNAMIC CONVERGENCE ALIGNMENT
Connect the vertical amplifier of oscilloscope to pin 1 (plate) of 12AU7 (V19). Low side to chassis. Adjust the vertical convergence amplitude control and the vertical convergence shape control for waveform similar to Fig. 24.
Connect the scope probe through a high voltage capacitor (500MMF/20KV) to pin 6 (focus anode) of picture tube. Check for waveform similar to Fig. 25.
Turn the vertical convergence amplitude control fully counter clockwise. Remove scope probe and high voltage capacitor from pin 6 of picture tube.
Remove short from picture tube grids. Remove color bar generator.

FIG.24

FIG.25

ALTERNATE ON THE AIR MATRIX ALIGNMENT USING 100% SATURATED COLOR BAR SIGNAL
Connect a 100% saturated color bar gen. to antenna terminals or tune in a station broadcasting an NTSC color bar sig.
Adjust contrast and color saturation controls to their mid-range positions.
Connect the vertical amplifier of scope to point (J). Low side to chassis.
Observe the + "I" signal on the scope.
Adjust the hue control to place the "Q" bar on the zero axis. Move the high side of scope to point (K) and observe the - "Q" signal on scope.
Adjust A37 to place the "I" bar on the zero axis.
Connect vertical amplifier of scope to blue grid of picture tube. Low side to chassis.
Adjust color saturation control for maximum cancellation of green and yellow bars (zero base line).
Adjust "I" gain control (R19A) for maximum cancellation of red.
Repeat procedure for green, yellow and red to obtain best cancellation.
Move high side of scope to green grid of picture tube and check cancellation of red, magenta and blue bars.
Move high side of scope to red grid of picture tube and check cancellation of green, blue and cyan bars.
If necessary repeat matrix adjustments until best overall cancellation is obtained.

COMPLETE SET-UP PROCEDURE

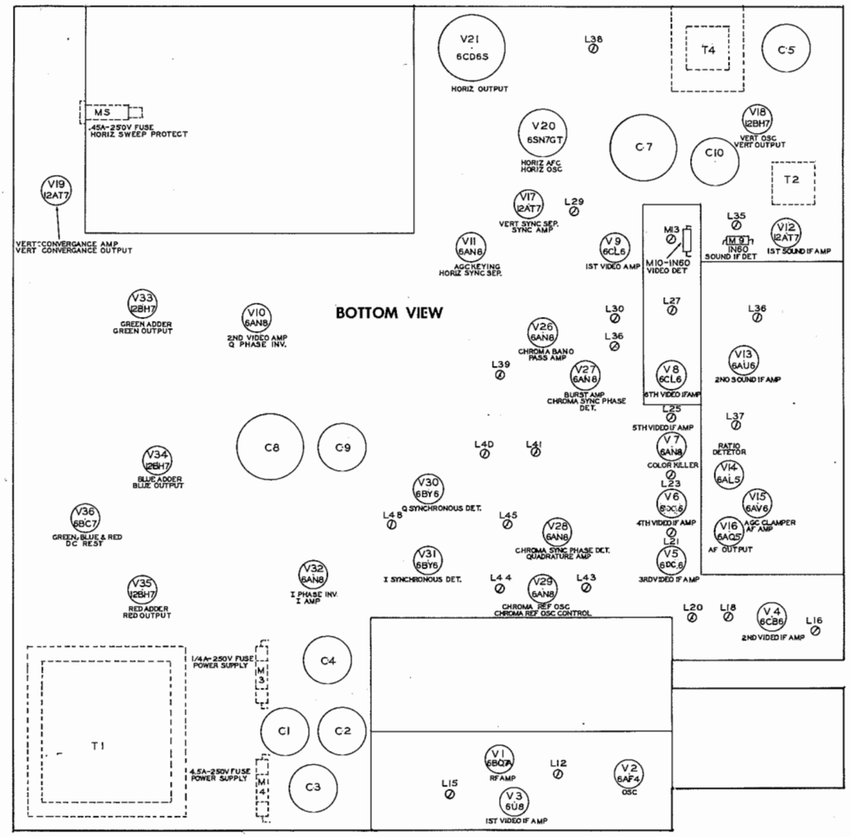
Before making any picture tube adjustments the "High Voltage Adjustments" under "Horizontal Sweep Circuit Alignment" should be made.

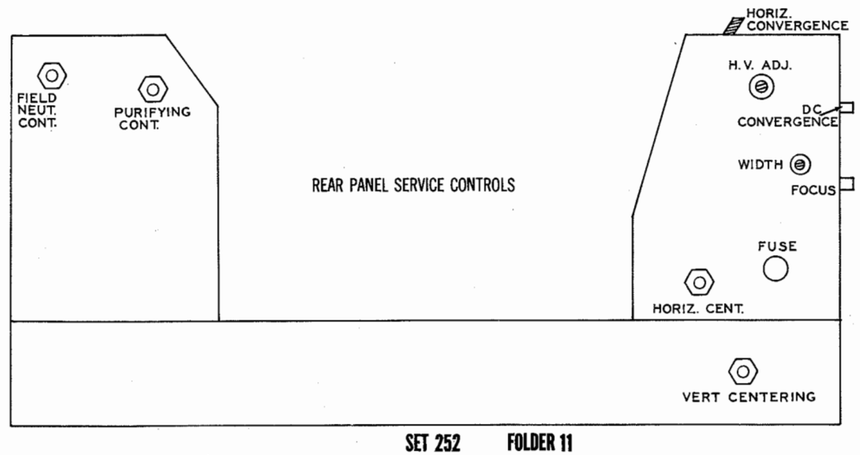
COLOR PURITY ADJUSTMENTS
Turn contrast control to its maximum counter clockwise position. Adjust the brightness control for average brightness.
Set the red screen control fully clockwise and the blue screen and green screen controls fully counter clockwise.
Remove the field neutralizing coil (T9) plug from its socket or set the field neutralizing control (R18) to its mid-range position.
Purity adjustments can best be observed by producing a small central area on the raster. To produce this area loosen the four screws at the top of the yoke cradle and slide the yoke and cradle approximately one inch toward the rear of the picture tube until a multi-color raster is seen. The red area will be in the center of the raster and appear to cover about 1/3 of the raster area.
This arrangement permits minimum purity coil correction.
Alternately adjust the purity coil (T8) and the purifying control (R17A) to give best red rendition at the central portion of the raster.
T8 is adjusted by grasping the edge at the front of the neck shield and turning it about the neck of the picture tube. Final adjustment position of R17A should be as near as possible to its maximum counter clockwise position. This final adjustment position of R17A permits a minimum of current through the coil resulting in a weaker magnetic field. This weaker magnetic field is desirable since it will have less interaction with other magnetic field about the picture tube. Slide the yoke in a forward direction until an all red raster is obtained. Check to see that the grounding springs on the yoke bracket are contacting the picture tube shield. Replace the field neutralizing coil (T9) plug in its socket. Adjust the field neutralizing control (R18) for best raster edge purity. If adjustment of deflection yoke affected the purity, slightly readjust T8 and R17A. Since purifying coil adjustments will affect centering, it may be necessary to re-set the centering controls.
Generally, the green and blue field will be satisfactory if good red field purity is obtained.
Turn the red screen control fully counter clockwise and the green screen control fully clockwise. Check the green field purity. Turn the green screen control fully counter clockwise and the blue screen control fully clockwise. Check the blue field purity .
If either field or both fields are not satisfactory a compromise setting of T8 and R17A must be reached for all three fields. If necessary, make slight readjustments to give best simultaneous red, green and blue fields.
Turn the brightness control fully clockwise. Turn red, blue and green screen controls clockwise to give the best low level grey raster.
S hould color shading occur in one or more hues, either the screen controls for those hues must be turned down or those which do not give shading must be turned up.

INITIAL ADJUSTMENTS
Tune in a TV station, preferably a test pattern. It should be possible to sync the picture if the horizontal oscillator and AGC system are operating normally. If the picture will not sync or if the picture is overloading due to misadjusted AGC control it will be necessary to readjust the AGC control.
Remove the metal control cover box and snap-in cabinet panel below-cover box. Remove the 4 knobs under the control cover and the two round head screws holding the cover box in place.
Carefully remove the cover box by sliding the assembly outward. Remove the cabinet panel by pulling the panel free from its snap mounts.
The AGC control adjustment is not accessible. Do not attempt adjustment of the other accessible controls at this time.
Turn AGC control counter clockwise until normal receiver operation is obtained and the picture can be synchronized.
Adjust the convergence control for minimum color fringing around objects in the center of the picture.
Adjust the focus control for best definition.

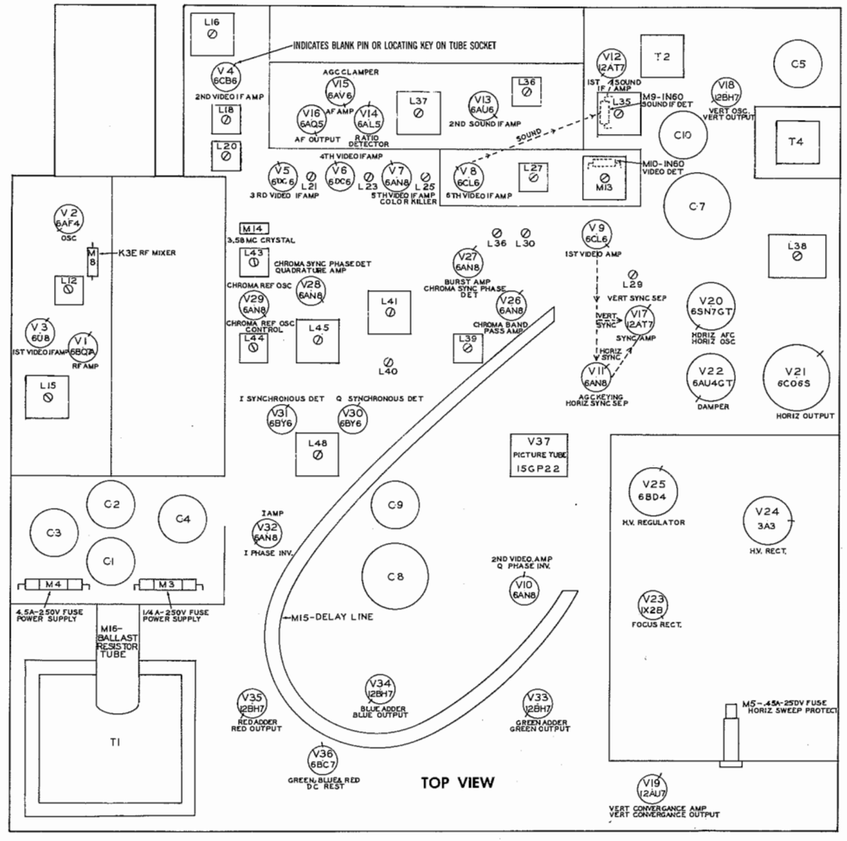
CHECK OF HORIZONTAL OSCILLATOR ALIGNMENT
Turn the horizontal hold control fully counter clockwise. The picture should not lose sync.
Momentarily remove signal by switching off channel and back again. Normally the picture will lose sync. Slowly turn the horizontal hold in a clockwise direction. The picture should pull into sync before the horizontal hold control has been turned 70 degrees and should remain in sync throughout the balance of additional clockwise rotation of the control.
If the receiver passes the above checks and the picture remains normal and steady, the horizontal oscillator is properly aligned. If the receiver does not pass the above checks see "Horizontal Oscillator Alignment" under "Horizontal Sweep Circuit Adjustments".

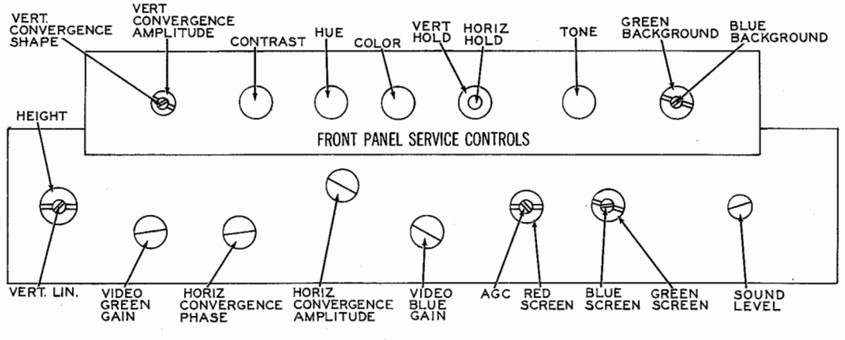
TUBE PLACEMENT CHART





TUBE PLACEMENT CHART





MISCELLANEOUS ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL OSCILLATOR ALIGNMENT – Turn the set on and tune in a TV station, preferably a test pattern. If necessary, synchronize the picture with the horizontal hold control (R10B).

(1) Preset the horizontal drive control (R21A) until the white foldover just disappears from the raster.
(2) Adjust the horizontal locking range trimmer (B1) one fourth turn from maximum clockwise position. Adjust the width coil slug (B2) until the adjusting screw is approximately 2/3 of the way out.
(3) Set the horizontal hold control to the center of its range.
(4) If necessary, adjust the horizontal frequency slug (B3) until the picture synchronizes horizontally.
(5) Connect the vertical amplifier of the oscilloscope to terminal "C" of L38. Adjust the horizontal waveform slug (B4) for response similar to Fig. 20. While adjusting B4 keep the picture in sync by readjusting the horizontal hold control. Remove the oscilloscope.
(6) Set the horizontal hold control to its maximum counter clockwise position.
Momentarily remove signal by switching off channel and back again. If picture remains in sync adjust B3 slightly and again switch off channel and back. If necessary, repeat this process until picture falls out of sync with diagonal bars sloping down to the left. Turn the horizontal hold control clockwise noting the least number of diagonal bars obtained just before the picture falls into sync. Adjust B1 slightly clockwise if more than three diagonal bars were present before picture pulled into sync. If less than two bars were present adjust B1 slightly counter clockwise.
(7) Turn the horizontal hold control fully counter clockwise and switch off channel and back again and recheck the number of bars present at the pull-in point (70 degrees clockwise rotation). Repeat the above procedure until 2 or 3 bars are present at the pull-in point.

HIGH VOLTAGE ADJUSTMENT
Turn the contrast control and brightness control to their maximum counter clockwise positions.
Connect the probe end of high voltage probe through a short length of high voltage anode lead to the corona cup on the base of the 3A3 (V24).
Set the meter for a 20KV reading. Set the high voltage control (R25A on rear of H. V. cage) for 19. 5KV on VTVM.
Turn contrast and brightness controls clockwise until picture appears on picture tube.
Adjust the focus control for best focus. Adjust convergence control for best convergence in the center portion of the picture tube.
Adjust the width coil slug (B2) for ½ inch horizontal over scan of the viewing area. Turn the horizontal drive control clockwise as far as possible without the presence of white foldover lines in the raster. Recheck the operation of horizontal hold control for proper pull in action as outlined under "Horizontal oscillator alignment" (Steps 6 and 7)

HIGH VOLTAGE PERFORMANCE CHECK
Connect a 0-1MA DC milliammeter in the cathode circuit (Pins 1 & 8) of the 6BD4 (V25). A reading of . 6 MA should be obtained when the high voltage is 19. 5KV. Remove milliammeter and high voltage probe.
Adjust the vertical height and vertical linearity controls so that after final adjustment a vertical overscan of 1/4 inch at top and bottom of viewing area is obtained.

COLOR AFC ALIGNMENT
Connect a 100% saturated color bar generator across the antenna terminals (a TV color signal may be used if available).

COLOR AFC ALIGNMENT

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
34.	Direct	Use color bar generator. Across antenna terminals.			Thru calibrated RF probe (wide band scope may be used in place of VTVM) to terminal "B" of L44. Common to chassis.	A35	Adjust for 5 volts peak to peak on VTVM (or scope).
35.	"	"			DC probe to pins 1 and 2 (plate and grid) of phase det. (6AN8 (V28). Common to chassis.	A36, A37.	Connect pin 8 (grid) of burst amp. (6AN8/V27) to chassis with short jumper. Adjust A36 for maximum deflection, then adjust A37 for MINIMUM deflection. Remove short from pin 8 of V27.
36.	"	"			"	A38, A39	Set the hue control to its mid-range position. Adjust for maximum deflection. A39 will tune very broadly. Adjust A39 near the approximate center of the range at which maximum deflection occurs.
	NOTE: The burst signal should be check at this point. Connect the vertical amplifier of the wide band scope to pins 1 and 2 (plate and grid) of 6AN8 (V28). Check for burst signal waveform similar to Fig. 21. Rotation of horizontal hold control throughout its holding range should not alter waveform shape.						
37.	Direct	Couple color bar generator across antenna terminals.			DC probe to pins 1 and 2 (plate and grid) of 6AN8 (V28). Common to chassis.	A40	Connect point Ⓜ to chassis, with short jumper. Adjust A40 for zero beat (indicated by slow swing of VTVM pointer. Zero beat may also be observed on scope or picture tube screen). Remove short from point Ⓜ .
38.	"	"			DC probe to point Ⓜ . Common to chassis.		Shunt 3.58MC crystal (M14) with 15MMF capacitor. Adjust AFC balance control (R20A)for zero reading on VTVM. Remove 15MMF capacitor across M14.

HORIZONTAL DYNAMIC CONVERGENCE CIRCUIT ALIGNMENT
Clip the scope probe on the insulated lead to pin 13 (convergence anode) of the picture tube socket.
Turn the vertical convergence amplitude control to its maximum counter clockwise position. Set the vertical convergence shape control to its midrange position. Turn the horizontal convergence amplitude control to its maximum clockwise position.
Adjust the horizontal convergence phase control slug, A41, for maximum sine wave amplitude similar to Fig. 22. Turn the horizontal convergence amplitude control to its maximum counter clockwise position. Adjust the horizontal dynamic convergence slug, A42, for correct phasing of minimum waveform with horizontal pulse on top of sinc wave as in Fig. 23.
Turn horizontal convergence amplitude control fully clockwise and adjust A41 for waveform similar to Fig. 23. Return horizontal convergence amplitude control to its maximum counter clockwise position.

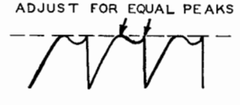


FIG. 20

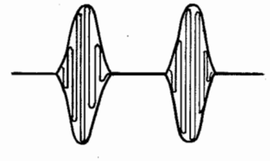
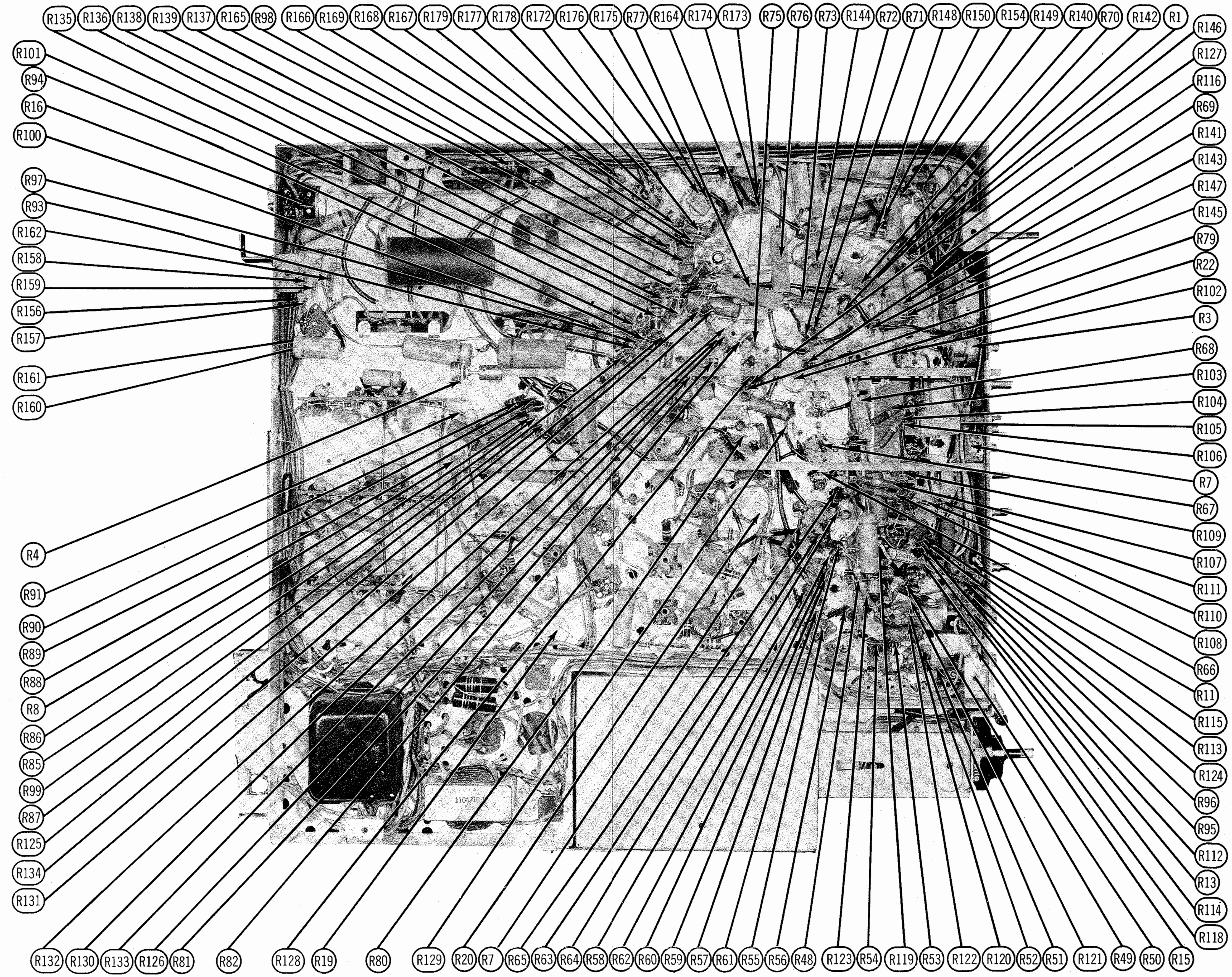


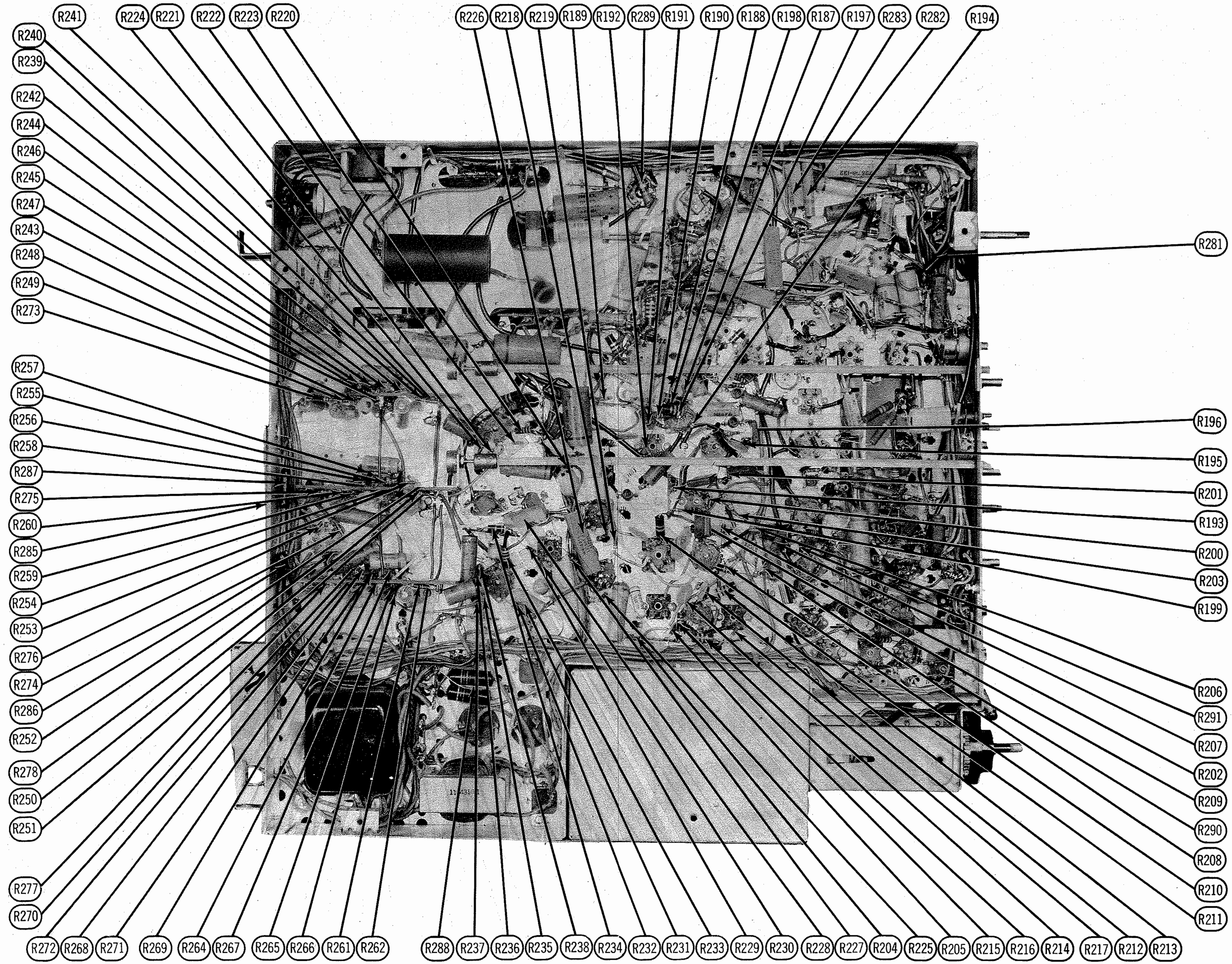
FIG. 21

FIG. 22

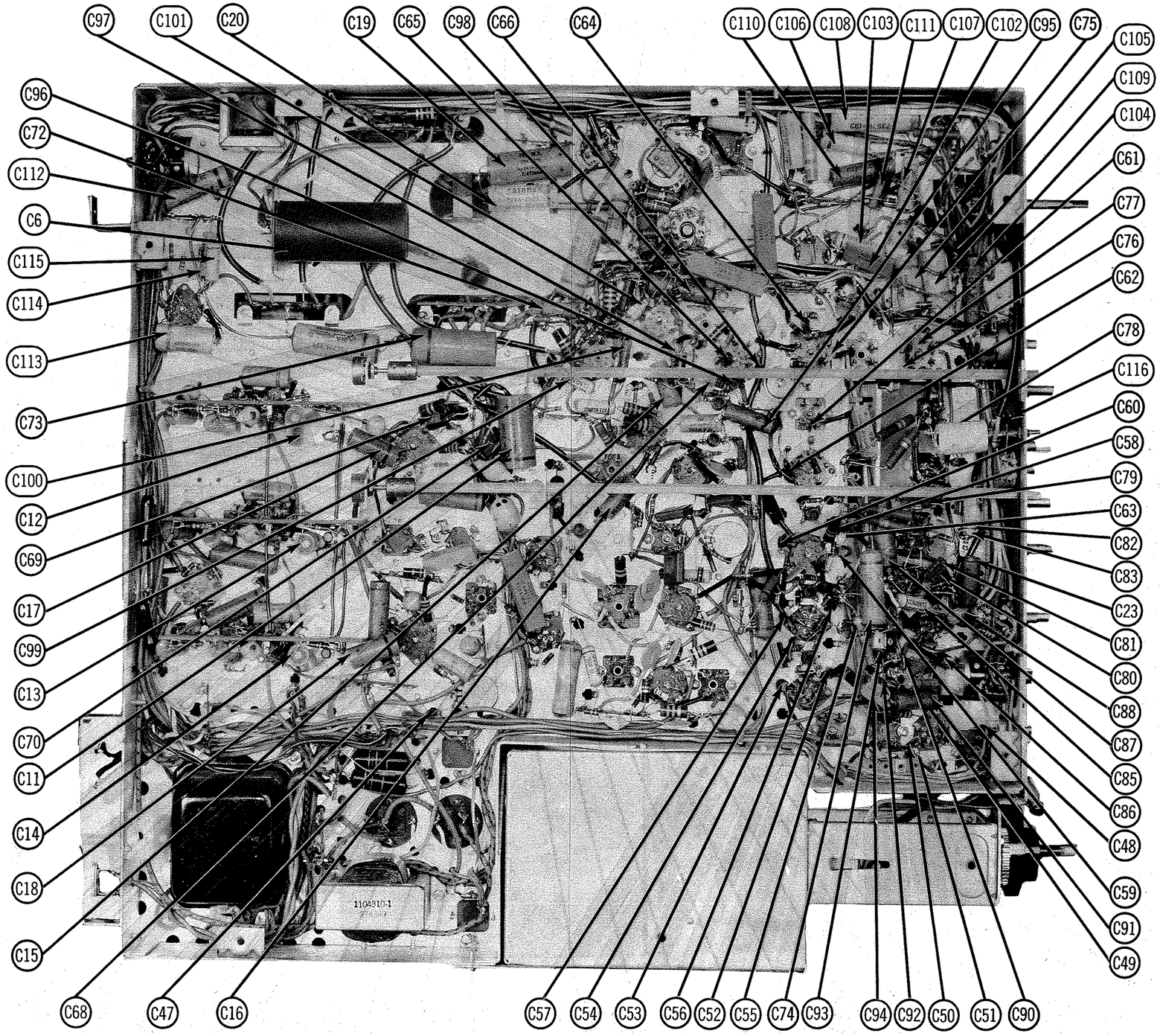
FIG. 23



CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION (1-179)

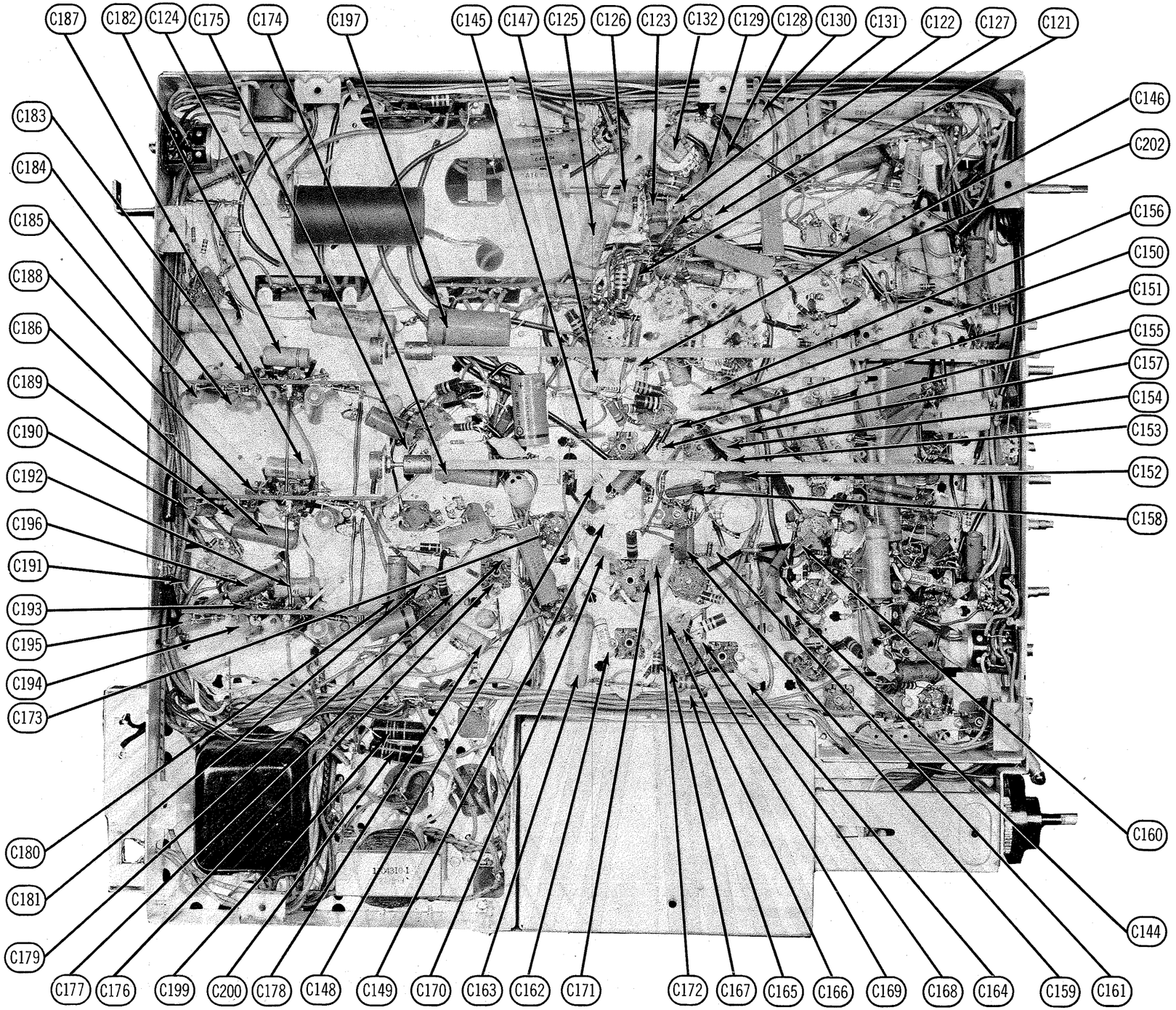


CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION (182-290)

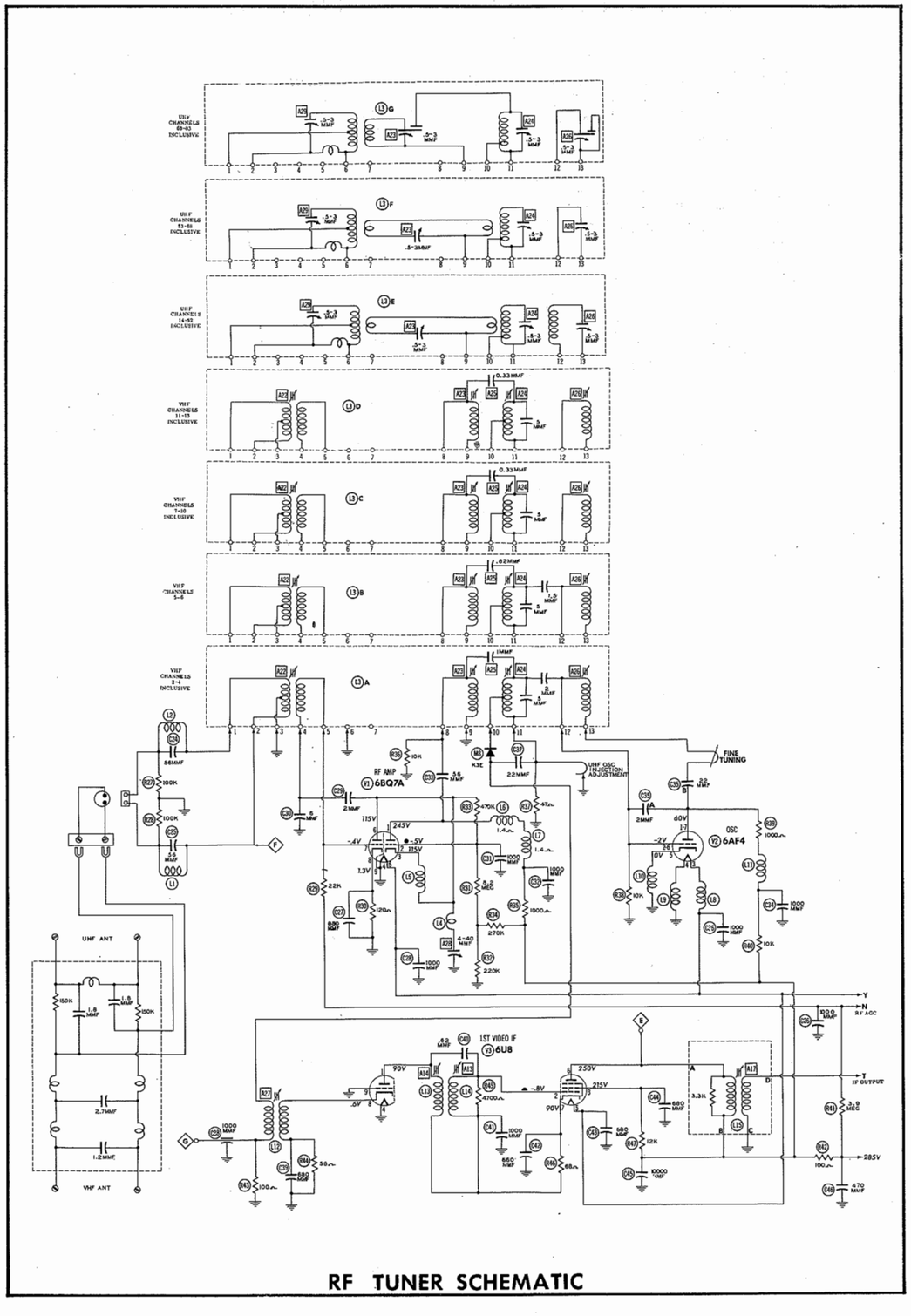


CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION (6-116)

SET 252 FOLDER 11



CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION (121-202)



RF TUNER SCHEMATIC

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA, GENERAL ELECTRIC, WESTINGHOUSE)

ITEM No.	USE	REPLACEMENT DATA: RCA Victor PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RETMA BASE TYPE	NOTES
V1	RF Amplifier	6BQ7A	6BQ7A	9AJ	
V2	Oscillator	6AF4	6AF4	7DK	
V3	1st Video IF Amp.	6U8	6U8		
V4	2nd Video IF Amp.	6CB6	6CB6	7CM	
V5	3rd Video IF Amp.	6DC6	6DC6	7CM	
V6	4th Video IF Amp.	6DC6	6DC6	7CM	
V7	5th Video IF Amp. - Color Killer	6AN8	6AN8	9DA	
V8	6th Video IF Amp.	6CL6	6CL6	6CL6	
V9	1st Video Amp.	6CL6	6CL6	6CL6	
V10	2nd Video Amp. - "Q" Phase Inv.	6AN8	6AN8	9DA	
V11	AGC Keying - Horiz. Sync Sep.	6AN8	6AN8	9DA	
V12	1st Sound IF Amp.	6AU6	6AU6	7BK	
V13	2nd Sound IF Amp.	6AU6	6AU6	7BK	
V14	Ratio Detector	6AL5	6AL5	6BT	
V15	AF Amp. - AGC Clamper	6AV6	6AV6	7BT	
V16	AF Output	6AQ5	6AQ5	7BZ	
V17	Vert. Sync Sep. - Sync Amp.	12AT7	12AT7	9A	
V18	Vert. Osc. - Vert. Output	12BH7	12BH7	9A	
V19	Vert. Convergence Amp. - Vert. Convergence Output	12AU7	12AU7	9A	
V20	Horiz. AFC - Horiz. Osc.	6SN7GT	6SN7GT	8BD	
V21	Horiz. Output	6CD6G	6CD6G	5BT	
V22	Damper	6AU4GT	6AU4GT	4CG	
V23	Focus Rectifier	1X2B	1X2B	9Y	
V24	H. V. Rectifier	3A3	3A3		
V25	H. V. Regulator	6BD4	6BD4		
V26	Chroma Band-Pass Amplifier - Burst Amplifier Keying	6AN8	6AN8	9DA	
V27	Burst Amplifier - Chroma Sync Phase Detector	6AN8	6AN8	9DA	
V28	Chroma Sync Phase Detector - Quadrature Amplifier	6AN8	6AN8	9DA	
V29	Chroma Ref. Osc. Chroma Ref. Osc. Control	6AN8	6AN8	9DA	
V30	"Q" Synchronous Detector	6BY6	6BY6		
V31	"I" Synchronous Detector	6BY6	6BY6		
V32	"I" Amplifier - "I" Phase Inverter	6AN8	6AN8	9DA	
V33	Green Adder - Green Output	12BH7	12BH7	9A	
V34	Blue Adder - Blue Output	12BH7	12BH7	9A	
V35	Red Adder - Red Output	12BH7	12BH7	9A	
V36	Green, Blue & Red DC Restorer	6BC7	6BC7		

CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA: RCA Victor PART No.	CBS-HYTRON PART No.	GENERAL ELECTRIC PART No.	SYLVANIA PART No.	WESTINGHOUSE PART No.	RETMA BASE TYPE	NOTES
V37	15GP22	15HP22	15GP22	15GP22			

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT DATA: RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C1	200	250	78957					FP331.3	TVL-1542	
C2	200	250	78957					FP331.3	TVL-1542	
C3	80	450	18950	AFH1-55		A051		FP149	TVL-1735	
C4	80	450	18950	AFH1-55		A051		FP149	TVL-1735	
C5A	▲10	450	78929	AFH3-125		C091		FP345.2	TVL-3731	
B	■10	450								
C	20	25								
C6	1000	3	72611			B002			TVL-1040	Note 1
C7A	■10	450	78931			D051		FP433	TVL-4717	
B	60	25								
C	▲10	450								
D	▲20	150								
C8A	100	50	78946			D053		FP437	TVL-4740	
B	▲20	450								
C	■20	450								
D	▲20	450								
C9A	■35	300	78930			A038		WP057	TVL-2552	
B	▲500	6				BRH605		TC78		
C10A	▲600	6	78930			A038		WP057	TVL-2552	
B	■35	300				BRH605		TC78		
C11	15	450	78917	PRS450/16		BR1645		TC74	TVA-1708	
C12	4	350	78919	PRS350/4		BR435		TC60	TVA-1601	
C13	4	350	78919	PRS350/4		BR435		TC60	TVA-1601	
C14	4	350	78919	PRS350/4		BR435		TC60	TVA-1601	
C15	50	6	78573	PRS25/50		BBR50-6T		TC29	TVA-1100	

PARTS LIST AND DESCRIPTIONS (Continued)

CAPACITORS (cont)

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C16	2	50	79181	PRS150/4		BBR2-50T		TC302	TVA-1301	
C17	2	350	78920	PRS350/4		BR245		TC60	TVA-1701	
C18	2	350	78920	PRS350/4		BR245		TC60	TVA-1701	
C19	40	200	79040	PRS250/40		BR4025		TC58	TVA-1511	
C20	50	50	91392	PRS50/50		BR505		TC39	TVA-1308	
C21	20	50	78927	PRS50/20		BR205		TC36	TVA-1306	
C22	25	10	78924					TC36 TC36 *	TVA-1120	Note 1
C23	5	50	78943	PRS150/4		BR550		TC30	TVA-1303	
C24	56				TCN-56	TN16	N750L-560		5TCU-Q56	
C25	56				TCN-56	TN16	N750L-560		5TCU-Q56	
C26	1000		77615							
C27	680		77624	BPD-00068	D6-681	K065	801-681	UC-5368	5GA-T56	
C28	1000		77252							
C29	2		77210							
C30	6		74182							
C31	1000		77252	BPD-001	DD-102	K069	801-001	DC-521	5HK-D1	
C32	1000		77615							
C33	56		71924		TCN-56	TN16	N750L-560		5TCU-Q56	
C34	1000		77615							
C35A	2	}	77667							
B	22									
C36	1000		77615							
C37	22		77621							
C38	1000		77084	EF-001	MFT-1000				503C-D1	
C39	680		77624	BPD-00068	D6-681	K065	801-681	UC-5368	5GA-T68	
C40	.62		79166							
C41	1000		77615							
C42	680		77624	BPD-00068	D6-681	K065	801-681	UC-5368	5GA-T68	
C43	680		77624	BPD-00068	D6-681	K065	801-681	UC-5368	5GA-T68	
C44	680		77624	BPD-00068	D6-681	K065	801-681	UC-5368	5GA-T68	
C45	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C46	470		77293	BPD-00047	D6-471	K060	821-471	UC-5347	5GA-T47	
C47	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C48	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C49	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C50	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C51	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C52	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C53	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C54	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C55	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C56	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C57	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C58	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C59	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C60	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C61	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C62	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C63	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C64	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C65	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C66	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C67	330	500	79191	1469-00035		5R5T33				
C68	33		70596	SI33NP0	TCZ-33	TZ18	NP0K-330	ZT-5433	5TCC-Q33	
C69	.1	400	78922							
C70	1000	500	39652	1464-001		1R5D1		MCB255	MS-21	
C71	470	1500	77673							
C72	0027	600	73599			PM6D27				
C73	.47	400	78977	P488-47		CUB4P47		PT4047	4TM-P47	
C74	.22	200	78905	P288-22		CUB2P22		PT4022	2TM-P22	
C75	1.5		78928	SI1.5NP0	TCZ-1.5	TZ04	NP0K-1R5	ZT-5515	5TCCB-V15	
C76	3300	500	39664			1R5D33				
C77	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C78	56		71924	SI56NP0	TCZ-56	TZ24	NP0L-560		5TCC-Q56	
C79A	10000	}	75877	BPD-2X01	DD3-103	DK082	{811-01	DC-511	}	5HK-2S1
B	10000	}					{811-01	DC-511	}	
C80	390	500	98414	1469-0004		5R5T39		MCB243	MS-34	
C81	390	500	98414	1469-0004		5R5T39		MCB243	MS-34	
C82	0022	600	73595	P688-0022	D6-222	CUB6D22	GP2-333-222	PT6222	6TM-D22	
C83	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C84	018	400	58476			PM4S18				
C85	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C86	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C87	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C88	0039	400	78221	1464-004		1R5D39		MCB463	MS-24	
C89	270	500	39638	1469-0003		22R5T27		MCB241	MS-33	
C90	01	400	73594	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C91	0022	1600	73817	P1688-0022	DD30-222	CUB16D22		PT16222	MB-D22	
C92	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C93	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C94	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C95	027	400	73554			PM4S27				
C96	330	500	79191	1469-00035		5R5T33				
C97	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C98	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C99	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C100	0022	400	73595	P688-0022	D6-222	CUB6D22	GP2-333-222	PT6222	6TM-D22	
C101	270		78916	SI270N750	TCN-270	TN32	N750-333-271			
C102A	01	}				{CUB6S1	GP2-333-103	PT611	}	
B	002	}	♦79246	♦PA-111	♦PC-101	{CUB6D2	GP2-333-202	PT622	}	♦V-2
C	005	}				{CUB6D5	GP2-333-502	PT625	}	
D	005	}				CUB6D5	GP2-333-502	PT625	}	
C103	0068	600	73807	P688-0068		CUB6D68		PT6268	6TM-D68	
C104	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C105	.22	400	78923	P488-22		CUB4P22		PT4022	4TM-P22	
C106	015	600	78978	P688-015		CUB6S15		PT6115	6TM-S15	
C107	001	1600	78980							
C108	.47	200	78977	P288-47		CUB2P47		PT4047	2TM-P47	
C109	.22	400	78923	P488-22		CUB4P22		PT4022	2TM-P22	
C110	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C111	2200	500	39660			1R5D22				
C112	.22	200	78905	P288-22		CUB2P22		PT4022	2TM-P22	
C113	.22	400	78923	P488-22		CUB4P22		PT4022	4TM-P22	
C114	0082	600	78979							
C115	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	

PARTS LIST AND DESCRIPTIONS (Continued)

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA RCA Victor PART No.	SYLVANIA PART No.	FEDERAL PART No.	NOTES
M8	K3E	78972	1N82 or A		RF Mixer
M9	1N60		1N60, 1N132	1N64A	Sound IF Detector
M10	1N60		1N60, 1N132	1N64A	Video Detector

MISCELLANEOUS

ITEM No.	PART NAME	RCA Victor PART No.	NOTES
M11	Dial Light	11765	#51 Bayonet
M12	Tuner		KRK12C
M13	Pix Detector Assy.	78994	Includes all parts within dotted line
M14	Crystal	78896	3,579.545KC
M15	Delay Line	79177	
M16	Ballast Tube		
M17	Beam Positioning Magnet		3 Used
M18	Neck Shield	79125	For Purity Coil
A28	Trimmer Cap.	77616	43.5MC IF Trap (4-40MMF) Top Of Tuner
B1	Trimmer Cap.	74923	Horiz. Locking Range (4-70MMF)
	Trimmer Cap.	78962	Hue Adjust (4-25MMF)
	Knob	77709	Brightness
	Knob	78833	Channel Selector
	Knob	77547	Convergence & Focus Controls
	Knob	77699	Contrast, Hue, Color & Tone Controls
	Knob	78539	Fine Tuning
	Knob	77710	Off-On-Volume
	Safety Glass	79099	

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (cont)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA: RCA Victor PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	NOTES
L26	Fil. Choke	0Ω		73477	19-3001	TV-189	4604	1 microhenry
L27	7th Video IF	.1Ω		78993	17-4504		6218	Includes Trap
L28	Shunt Peak. Coil	9Ω		74214	19-3180	TV-184	6180	180 microhenries
L29	4.5MC Trap	.2ΩCT		78897	17-3402		1469	
L30	3.58MC Trap	3Ω		78892			1469	
L31	3.58MC Take-off	3Ω		78892			1470	
L32	Shunt Peak. Coil	11Ω		71526	19-3250	TV-185	6181	250 microhenries
L33	Series Peak. Coil	3.6Ω		71793	19-3036	TV-180	6176	36 microhenries
L34	Series Peak. Coil	11Ω		71526	19-3250	TV-185	6181	250 microhenries
L35	Sound Take-off	3.8Ω		78995				Includes 1N60 Crystal detector & 3.3 micro-henries RF Choke
L36	Sound IF	6.2Ω	3.4Ω	78996	17-1021 *	TV-108 *	1466 *	
L37	Ratio Det.	8.5Ω	.4ΩCT	78997	17-1033	TV-110	1468	Tertiary Winding - .1Ω
L38	Horiz. Osc.	120Ω		75213	20-1402 †	TV-162 †	6183 †	Pri. Tapped@85Ω; Horiz. Wave From Winding - 35Ω
L39	Band Pass Primary Coil	7.5Ω		78887				Pri. Tapped@2.6Ω; Tertiary Winding - 4Ω
L40	Band Pass Secondary Coil	1.7Ω		78888				
L41	Burst Amp. Trans.	4Ω	1.5ΩCT	78886				
L42	RF Choke	2.5Ω		72168	19-6022		6152	20 microhenries
L43	Reactance Coil	5.5Ω		78891				Includes Capacitors
L44	3.58MC Output Trans.	.7ΩCT		78889				
L45	Quadrature Trans.	1.3Ω		78895				Includes Capacitors & Resistors "Q" winding - .3Ω "T" winding - .3Ω
L46	Series Peak. Coil	130Ω		78902			4670	6.7 millihenries
L47	Shunt Peak. Coil	24Ω		78903			4664	1.9 millihenries
L48	Delay Filter	29ΩCT		78890				
L49	Series Peak. Coil	26Ω		79185			4652	1 millihenry
L50	Series Peak. Coil	26Ω		79185			4652	1 millihenry
L51	Shunt Peak. Coil	11Ω		98482	19-3250	TV-185	6181	250 microhenries
L52	Shunt Peak. Coil	11Ω		98482	19-3250	TV-185	6181	250 microhenries
L53	Shunt Peak. Coil	11Ω		98482	19-3250	TV-185	6181	250 microhenries
L54	Series Peak. Coil	5Ω		75253	19-3125		6153	120 microhenries
L55	Series Peak. Coil	5Ω		75253	19-3125		6153	120 microhenries
L56	Series Peak. Coil	5Ω		75253	19-3125		6153	120 microhenries

† Reverse Coil Mounting In Can.
* Drill 1 New Mounting Hole.

FILTER CHOKE

ITEM No.	RATINGS: TOTAL DIRECT CURRENT	RATINGS: D.C. RESISTANCE	RATINGS: INDUCTANCE (0 CURRENT 1000 ∿)	REPLACEMENT DATA: RCA Victor PART No.	Stancor PART No.	Merit PART No.	Triad PART No.	Halldorson PART No.	Thordarson PART No.
L57	.630ADC	17.3Ω	.6HY	78961			C-40X		

SELENIUM RECTIFIER

ITEM No.	RATING: CURRENT	REPLACEMENT DATA: RCA Victor PART No.	FEDERAL PART No.	INTERNATIONAL PART No.	MALLORY PART No.	SARKES TARZIAN PART No.	SELETRON PART No.	NOTES
M1	.630A	78894	1267A	9RS700SL		759S		
M2	.630A	78894	1267A	9RS700SL		759S		

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA: RCA Victor PART No. FUSE	RCA Victor PART No. HOLDER	LITTELFUSE PART No. FUSE	LITTELFUSE PART No. HOLDER	BUSS PART No. FUSE	BUSS PART No. HOLDER
M3	3AG P/T	.25A 250V	73600		318.250 (3AG P/T 1/4A)		GJV1/4	
M4	3AG P/T	4.5A 250V	79357		31804.5 (3AG P/T 4.5A)			
M5	3AG	.45A 250V	78798	48894		342001		HKP
M6	#26AWG Wire		79358					
M7	#26AWG Wire		79358					

PARTS LIST AND DESCRIPTIONS (Continued)

CAPACITORS (cont)

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT DATA: RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C116	2700	500	39662							
C117	47	10000	79025							
C118	500	10000	79027							
C119	150	10000	79026							
C120	1200	15000	79024							
C121	470	500	39644	1469-0005		5R5T47			MS-35	
C122	82	1000	76474							
C123	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C124	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C125	.47	200	73787	P288-47		CUB2P47		PT4047	2TM-P47	
C126	047	400	73553	P488-047	DF-503	CUB4S47		PT4147	4TM-S47	
C127	82		71514							
C128	12		33380							
C129	330	1000	76476							
C130	01	600	73594							
C131	0015	1000	73802	P1088-0015						
C132	1000	500	39652	1464-001		1R5D1			MS-21	
C133	047	400	73553							
C134	.22	400	73794	P488-22		CUB4P22		PT4022	4TM-P22	
C135	.18	400	79041			PM4P18				
C136	022	600	73798	P688-022						
C137	1200	15000	79024							
C138	01	6000	78918	6089-01						
C139	500	30000	79008							
C140	.47	200	73787	P288-47		CUB2P47		PT4047	2TM-P47	
C141	.22	400	73794	P488-22		CUB4P22		PT4022	4TM-P22	
C142	1200	500	39654			1R5D12				
C143	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C144	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C145	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C146	47		78913	SI47NP0	TCZ-47	TZ22	NP0K-470	ZT-5447	5TCC-Q47	
C147	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C148	33		70596	SI33NP0	TCZ-33	TZ18	NP0K-330	ZT-5433	5TCC-Q33	
C149	150		44704	SI150NP0	TCZ-150	TZ34	NP0-333-151	ZT-5315	5TCC-T15	
C150	3		78911	SI3NP0	TCZ-3	TZ06	NP0K-030	ZT-5533	5TCCB-V33	
C151	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C152	2000	500	39659	1464-002		1R5D2		MCB457	MS-22	
C153	15		45465	SI15NP0	TCZ-15	TZ11	NP0K-150	ZT-5415	5TCC-Q15	
C154	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C155	150		39652	SI150NP0	TCZ-151	TZ34	NP0-333-151	ZT-5315	5TCC-T15	
C156	047	400	78921							
C157	270	500	39638	1469-0003		22R5T27		MCB241	MS-33	
C158	2200	500	78901			1R5D22				
C159	2200	500	78901			1R5D22				
C160	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C161	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C162	01	400	73561	P488-01	D6-103	CUB4S1	GP2-333-103	PT411	4TM-S1	
C163	.22	200	78905	P288-22		CUB2P22		PT4022	4TM-P22	
C164	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C165	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C166	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C167	2		99132	SI2NP0	TCZ-2	TZ05	NP0K-020		5TCCB-V22	
C168	2		99132	SI2NP0	TCZ-2	TZ05	NP0K-020		5TCCB-V22	
C169	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C170	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C171	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C172	10000		73960	BPD-01	DD-103	K082	811-01	DC-511	5HK-S1	
C173	22		33101	SI22NP0	TCZ-22	TZ14	NP0K-220	ZT-5422	5TCC-Q22	
C174	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C175	24		78915							
C176	4		78912	SI4NP0	TCZ-4		NP0K-040			
C177	100		39396	SI100N750	TCN-100	TN22	N7506-101	NT-531	5TCU-Q1	
C178	047	400	78921							
C179	18		39041							
C180	.1	400	73551	P488-1	DF-104	CUB4P1		PT401	4TM-P1	
C181	9		78914							
C182	.1	400	78922							
C183	470	500	76992	1469-0005		5R5T47			MS-35	
C184	.1	400	78922							
C185	047	400	78921							
C186	.1	400	73551							
C187	.1	400	78922							
C188	470	500	76992	1469-0005		5R5T47			MS-35	
C189	.1	400	78922							
C190	047	400	78921							
C191	.1	400	73551							
C192	.1	400	78922							
C193	470	500	76992	1469-0005		5R5T47			MS-35	
C194	.1	400	78922							
C195	047	400	78921							
C196	.1	400	73551							
C197	.22	400	74957	P488-22		CUB4P22		PT4022	4TM-P22	
C198	270									
C199	047	600	73592	689ZX-05		CUB6S47		PT6147	6TM-S47	
C200	047	600	73592	689ZX-05		CUB6S47		PT6147	6TM-S47	
C201	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	
C202	820		78944	BPD-001	DD-102	K067	801-001	DC-521	5HK-D1	

Note 1 Non-Polarized Unit.
* Connect Negative Leads Of TC36 Together. Connect Positive Leads to Original Circuit Points.
♦ Items C102A, C102B, C102C, C102D, R140A, R140B, R140C, R140D Are Combined In One Unit.

CONTROLS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: RCA Victor PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	INSTALLATION NOTES
R1A	5000Ω	2	78940	*QJ-555			WF53	Brightness (Panel) Wire Wound
B	1 Meg	½					UR16-T25	Volume Tapped at 180KΩ(Rear)
C	Switch						DS-26	Attach to R1B
R2A	5 Meg	½	78937	**QJ-554				Vert. Convergence Amplitude (Panel)
B	5 Meg	½						Vert. Convergence Shape (Rear)

PARTS LIST AND DESCRIPTIONS (Continued)

CONTROLS (cont)

ITEM No.	RATING RESIST-ANCE	RATING WATTS	REPLACEMENT DATA RCA Victor PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	INSTALLATION NOTES
R3A	1 Meg	½	78936	♦QJ-553			UF16L	Height (Panel)
B	5000Ω	½					UR53L	Vert. Linearity (Rear)
R4A	10KΩ	½	78949		A47-10K-S	AB-14		Video Green Gain
B	Shaft		Not Req.		RS-2	AK-9		Attach to R4A
R5	500Ω	½	78948					Contrast See Note
R6A	1500Ω	½	78956	Q11-109		B-5		Contrast See Note
B	Shaft			C3		AK-16		Attach to R6A
R7	2500Ω	½	78942*	Q17-111			U-7	Horiz. Convergence Amplitude
R8A	10KΩ	½	78949		A47-10K-S	AB-14		Video Blue Gain
B	Shaft		Not Req.		RS-2	AK-9		Attach to R8A
R9A	500Ω	½	78951	Q11-103	A47-500-S	B-4		Color Saturation
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.		Attach to R9A
R10A	1 Meg	½	78934	♦QJ-552			UF16L	Vert. Hold (Panel)
B	50KΩ	½					UR54L	Horiz. Hold (Rear)
R11A	15KΩ	2	78938					Red Screen Wire Wound (Panel)
B	500KΩ							AGC (Rear)
R12A	2.5Meg	½	78941	Q11-239	A47-2.5Meg-S	B-83	U255	Tone
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R12A
R13A	15KΩ	2	78939					Green Screen Wire Wound (Panel).
B	15KΩ	2						Blue Screen Wire Wound (Rear)
R14A	10KΩ	2	78935					Green Background Wire Wound (Panel)
B	10KΩ	2						Blue Background Wire Wound (Rear)
R15A	750Ω	½	78933			AB-5		Sound Level
B	Shaft		Not Req.			AK-1		Attach to R15A
R16A	50Ω	2	78953					Vert. Centering Wire Wound
B	50Ω	2						Vert. Centering Wire Wound
R17A	20Ω	2	78955	W-20	A43-20		R20L	Cross Purity Wire Wound
B	Shaft		Not Req.	Not Req.	FKS-1/4		Not Req.	Attach to R17A
R18	30Ω	2	78954	W30X15	RTV-15	SVT-902	R30CT	Field Neutralization Wire Wound Tapped at 15Ω
R19A	500Ω	½	78951	Q11-103	A47-500-S	B-4		I-Gain
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.		Attach to R19A
R20A	250KΩ	½	78952	Q11-130	A47-250K-S	AB-40	U-56	AFC Balance
B	Shaft		Not Req.	Not Req.	KSS-3	AK-4	Not Req.	Attach to R20A
R21A	100KΩ	½	78950	Q11-128	A47-100K-S	AB-40	U-41	Horiz. Drive
B	Shaft		Not Req.	Not Req.	KSS-3	AK-4	Not Req.	Attach to R21A
R22	750Ω	½	78933					Sound Reject
R23A	5 Meg	½	79028		A47-5Meg-S		U-67	Focus
B	Shaft		Not Req.		FS-3		Not Req.	Attach to R23A
R24	15 Meg	½	79029					DC Convergence
R25A	1 Meg	½	79030	Q11-137	A47-1Meg-S	AB-69	SU-54	High Voltage
B	Shaft		Not Req.	SQ	FKS-1/4	AK-1	Not Req.	Attach to R25A
R26	80Ω	2	79031		RTV-339			Horiz. Centering Tapped at 40Ω (Wire Wound)

Note: R5 and R6A are ganged with one shaft.
* CONCENTRIKIT EQUIVALENT KIT K-3, BASE ELEMENTS & SHAFTS, W11-114 & P3-118 (Panel), B13-137X & R1-207 (Rear) and SWITCH 76-1.
** CONCENTRIKIT EQUIVALENT KIT K-5, BASE ELEMENTS & SHAFTS, B11-141 & P11-018 (Panel), B11-141 & R15-014 (Rear).
♦ CONCENTRIKIT EQUIVALENT KIT K-5, BASE ELEMENTS & SHAFTS, B11-137 & P11-018 (Panel), B11-114 & R15-014 (Rear).
▲ CONCENTRIKIT EQUIVALENT KIT K-2, BASE ELEMENTS & SHAFTS, B11-137 & P9-104 (Panel), B11-123 & R11-112 (Rear)

RESISTORS

ITEM No.	RATING OHMS	RATING WATT	REPLACEMENT DATA RCA Victor PART No.	IRC PART No.	NOTES
R27	100KΩ	½		BTS-100K	
R28	100KΩ	½		BTS-100K	
R29	22KΩ	½		BTS-22K	
R30	120Ω	½		BTS-120	
R31	8.2Meg	½			
R32	220KΩ	½		BTS-220K	
R33	470KΩ	½		BTS-470K	
R34	270KΩ	½		BTS-270K	
R35	1000Ω	½		BTS-1000	
R36	10KΩ	½		BTS-10K	
R37	47Ω	½		BTS-47	
R38	10KΩ	½		BTS-10K	
R39	1000Ω	½		BTS-1000	
R40	10KΩ	10		13/4A-10K	
R41	3.9Meg	½			
R42	100Ω	½		BTS-100	
R43	100Ω	½		BTS-100	
R44	56Ω	½		BTS-56	
R45	4700Ω	½		BTS-4700	
R46	68Ω	½		BTS-68	
R47	12KΩ	½		BTS-12K	
R48	560KΩ	½		BTS-560K	
R49	180KΩ 5%	½		BTS-180K 5%	
R50	330Ω 5%	½	502133	BTS-330 5%	
R51	1000Ω	½	503210	BTS-1000	
R52	62Ω 5%	½	3579		
R53	47KΩ	1	513347	BTA-47K	
R54	10KΩ	2	523310	BTB-10K	
R55	62Ω 5%	½	3579		
R56	10KΩ	2	523310	BTB-10K	
R57	220KΩ 5%	½	502422	BTS-220K 5%	
R58	27KΩ 5%	½	502327	BTS-27K 5%	
R59	22KΩ 5%	½	502322	BTS-22K 5%	
R60	62Ω 5%	½	3579		
R61	10KΩ	2	523310	BTB-10K	
R62	1.2Meg	½	503512	BTS-1.2Meg	
R63	27KΩ 5%	½	502327	BTS-27K 5%	
R64	180Ω 5%	½		BTS-180 5%	
R65	10KΩ	2	523310	BTB-10K	
R66	2700Ω	½	502227	BTS-2700	
R67	120Ω 5%	½	502112	BTS-120 5%	
R68	2200Ω	7	78908		
R69	330Ω 5%	½	502133	BTS-330 5%	
R70	220KΩ 5%	½	502422	BTS-220K 5%	
R71	2200Ω 5%	½	502222	BTS-2200 5%	
R72	4700Ω 5%	½	502247	BTS-4700 5%	
R73	10KΩ	½	503310	BTS-10K	
R74	120Ω 5%	½	512112	BTA-120 5%	
R75	220Ω	½	503122	BTS-220	
R76	12.5KΩ	10	79184		
R77	10KΩ	10	79182		
R78	10KΩ	½	503310	BTS-10K	
R79	27KΩ	½	503327	BTS-27K	
R80	10KΩ	½	503310	BTS-10K	
R81	3300Ω	2	523233	BTB-3300	
R82	2700Ω 5%	1	502227	BTA-2700 5%	
R83	1800Ω 5%	½	502218	BTS-1800 5%	
R84	2200Ω 5%	½	502222	BTS-2200 5%	
R85	2.2Meg	½	503552	BTS-2.2Meg	
R86	220Ω	½	503122	BTS-220	
R87	1500Ω	½	503215	BTS-1500	
R88	100Ω	½	503110	BTS-100	
R89	47KΩ	1	513347	BTA-47K	
R90	22KΩ	2	523322		
R91	22KΩ	½	503322	BTS-22K	
R92	10KΩ	1		BTA-10K	
R93	4.7Meg	½	503547	BTS-4.7Meg	
R94	2.2Meg	½	503552	BTS-2.2Meg	
R95	820KΩ 5%	½		BTS-820K 5%	
R96	470KΩ 5%	½		BTS-470K 5%	
R97	47KΩ	½	503347	BTS-47K	
R98	47KΩ	2	523347	BTB-47K	
R99	68KΩ	2	523368	BTB-68K	
R100	2200Ω	½	503222	BTS-2200	
R101	4.7Meg	½	503547	BTS-4.7Meg	
R102	82Ω 5%	½	502082	BTS-82 5%	
R103	22KΩ	2	523322	BTB-22K	
R104	22KΩ	2		BTB-22K	
R105	47KΩ	½	503347	BTS-47K	
R106	18KΩ	½	503318	BTS-18K	
R107	56KΩ	2	523356	BTB-56K	
R108	56KΩ	2	523356	BTB-56K	
R109	39KΩ	1		BTA-39K	
R110	47Ω 5%	½	502047	BTS-47 5%	
R111	39KΩ	½	503339	BTS-39K	
R112	1200Ω 5%	½	502212	BTS-1200 5%	
R113	1000Ω 5%	½	502210	BTS-1000 5%	
R114	10KΩ 5%	½	502310	BTS-10K 5%	
R115	10KΩ 5%	½	502310	BTS-10K 5%	
R116	1.5Meg	½	503515	BTS-1.5Meg	
R117	15KΩ	½	503515	BTS-15K	
R118	10Meg	½	503610	BTS-10Meg	

RESISTORS (cont)

ITEM No.	RATING OHMS	RATING WATT	REPLACEMENT DATA RCA Victor PART No.	IRC PART No.	NOTES
R119	330KΩ	½	503433	BTS-330K	
R120	470KΩ	½	503447	BTS-470K	
R121	330Ω	2		BTB-330	
R122	330Ω	2		BTB-330	
R123	4700	2	523147	BTB-470	
R124	680KΩ	½	503468	BTS-680K	
R125	3900Ω	½	503239	BTS-3900	
R126	27KΩ	½	503327	BTS-27K	
R127	22KΩ	½	503322	BTS-22K	
R128	270KΩ	½	503427	BTS-270K	
R129	56KΩ	½	503356	BTS-56K	
R130	2.2Meg	½	503552	BTS-2.2Meg	
R131	820KΩ	½	503482	BTS-820K	
R132	47KΩ	½	503347	BTS-47K	
R133	560KΩ	½	503456	BTS-560K	
R134	47KΩ	½	503347	BTS-47K	
R135	33KΩ	2	523333	BTB-33K	
R136	18KΩ	½	503318	BTS-18K	
R137	8200Ω	½	503282	BTS-8200	
R138	33KΩ	½	503333	BTS-33K	
R139	22KΩ	½	503322	BTS-22K	
R140A	22KΩ	½		BTS-22K	
B	22KΩ	½		BTS-22K	
C	8200Ω	½	♦79246	BTS-8200	
D	8200Ω	½		BTS-8200	
R141	1Meg	½	503510	BTS-1Meg	
R142	1Meg	½	503510	BTS-1Meg	
R143	1.5Meg	½	503515	BTS-1.5Meg	
R144	4700Ω	½	503247	BTS-4700	
R145	470Ω	½	503147	BTS-470	
R146	1Meg	½	503510	BTS-1Meg	
R147	16KΩ	½	3219	BTS-18K	
R148	1Meg	½	503510	BTS-1Meg	
R149	5600Ω	2		BTB-5600	
R150	75KΩ 5%	½		BTS-75K 5%	
R151	1200Ω	1		BTA-1200 5%	
R152	1200Ω	1		BTA-1200 5%	
R153	680KΩ	½	503468	BTS-680K	
R154	10Meg	½	503610	BTS-10Meg	
R155	2.7Meg	½	503527	BTS-2.7Meg	
R156	1.8Meg	½	503518	BTS-1.8Meg	
R157	2700Ω	½	503227	BTS-2700	
R158	2700Ω	½	503227	BTS-2700	
R159	27KΩ	½		BTS-27K	
R160	4700Ω	½	503247	BTS-4700	
R161	1.8Meg	½	503518	BTS-1.8Meg	
R162	220KΩ	½	503422	BTS-220K	
R163	820KΩ	½	503482	BTS-820K	
R164	150KΩ	½	503415	BTS-150K	
R165	680KΩ	1	513468	BTA-680K	
R166	1Meg	½	503510	BTS-1Meg	
R167	150KΩ 5%	1	512415	BTA-150K 5%	
R168	82KΩ	1	513382	BTA-82K	
R169	3900Ω 5%	½	502239	BTS-3900 5%	
R170	56KΩ	1		BTA-56K	
R171	82KΩ	1		BTA-82K	
R172	100KΩ 5%	1	512410	BTA-100K 5%	
R173	8200Ω 5%	½	502382	BTS-8200 5%	
R174	68KΩ	1	503368	BTS-68K	
R175	10KΩ	½	503310	BTS-10K	
R176	47KΩ	1		BTA-47K	
R177	120Ω	½	503112	BTS-120	
R178	56Ω	½	503056	BTS-56	
R179	2200Ω	2	523222	BTB-2200	
R180	8.2Meg	2	522582	BTB-8.2Meg	
R181	4700Ω	1	513247	BTA-4700	
R182	4700Ω	1	513247	BTA-4700	
R183	1Meg	½	503510	BTS-1Meg	
R184	1.8Meg	1	513518	BTA-1.8Meg	
R185	50Meg 5%	3	78925		
R186	50Meg 5%	3	78926		
R187	150Ω	½	503115	BTS-150	
R188	56KΩ	½	503356	BTS-56K	
R189	10KΩ	½	503310	BTS-10K	
R190	39KΩ	1	513339	BTA-39K	
R191	10KΩ	1	513310	BTA-10K	
R192	2700Ω	½		BTS-2700	
R193	22KΩ	½	503322	BTS-22K	
R194	100KΩ	½	503410	BTS-100K	
R195	1800Ω 5%	1	512218	BTA-1800 5%	
R196	2200Ω 5%	½	502222	BTS-2200 5%	
R197	39KΩ 5%	2	522339	BTB-39K 5%	
R198	33KΩ 5%	2	28744	BTB-33K 5%	
R199	2200Ω	½	503222	BTS-2200	
R200	15KΩ	½	503315	BTS-15K	
R201	1Meg	½	503510	BTS-1Meg	
R202	1Meg	½	503510	BTS-1Meg	
R203	10KΩ	½	503310	BTS-10K	
R204	15KΩ	½	503315	BTS-15K	

♦ Items R140A, R140B, R140C, R140D, C102A, C102B, C102C, C102D are combined in one unit.

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	RATING SEC. 3	RATING SEC. 4	RATING SEC. 5	REPLACEMENT DATA RCA Victor PART No.	Stancor PART No.	Merit PART No.	Triad PART No.	RCA TYPE No.	Halldorson PART No.	Thordarson PART No.
T1	117VAC	174VAC @2.5VAC	6.3VAC @1.0A	6.3VAC @17.6A			78893						
	@4.44A												

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA RCA Victor PART No.	Stancor PART No.	Merit PART No.	Triad PART No.	RCA TYPE No.	Halldorson PART No.	Thordarson PART No.
T2	Vert. Osc. Trans.	74144	A-8122	A-4003	A-97Y		B6701	24A88①
T3	Horiz. Output Trans.	79012 ⑤						FLY-100
T4	Vert. Output Trans.	77823	A-8145	A-3038 ②	A-107X②		Z1802②	26S53②
T5A	Yoke - Horiz. (13MH)	79116 ⑤						
B	Vert. (100MH)							
T6	Horiz. Linearity (2.7-18MH)	76441			WC-12 ③			WC-18
T7	Width (16-77MH)	79010		MWC-3				WC-19④
T8	Purity Coil	79126						
T9	Field Neutralizing Coil	79119						
T10	Horiz. Dynamic Convergence Phase Coil (10-48MH)	78998						
T11	Horiz. Dynamic Convergence Output Transformer	79009						
T12	Vert. Dynamic Convergence Output Transformer	79006						
T13	Vert. Centering Coil	78900						

① Drill New Mounting holes.
② Drill One New Mounting Hole.
③ Connect To Coded Red And Blue Terminals.
④ Drill New Mounting Hole.
⑤ Includes Male Plug And C198, R150, R151.
⑥ Includes R181.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE PRI.	IMPEDANCE SEC.	REPLACEMENT DATA RCA Victor PART No.	Stancor PART No.	Merit PART No.	Triad PART No.	Halldorson PART No.	Thordarson PART No.	NOTES
T14	5.2KΩ	4Ω	Part of Speaker	A-3823	A-3019	S-5Z	Z1002	26S49	

SPEAKER

ITEM No.	RATINGS SIZE	RATINGS FIELD	RATINGS V. C. IMP.	REPLACEMENT DATA RCA Victor PART No.	JENSEN PART No.	QUAM PART No.	NOTES
SP-1	8"	PM	4Ω	77129	ST-115 Mod. P8-V	8A21	

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA RCA Victor PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	NOTES
L1	IF Trap	0Ω		77626				
L2	IF Trap	0Ω		77626				
L3A	VHF Ant., RF, Mixer & Osc. Coils	0Ω		77602				Channels 2-4; Includes Capacitors
B	VHF Ant., RF, Mixer & Osc. Coils	0Ω		77603				Channels 5-6; Includes Capacitors
C	VHF Ant., RF, Mixer & Osc. Coils	0Ω		77604				Channels 7-10; Includes Capacitors
D	VHF Ant., RF, Mixer & Osc. Coils	0Ω		77605				Channels 11-13; Includes Capacitors
E	UHF Ant., RF, Mixer & Osc. Coils	0Ω						Channels 14-52; Includes Capacitors
F	UHF Ant., RF, Mixer & Osc. Coils	0Ω						Channels 53-68; Includes Capacitors
G	UHF Ant., RF, Mixer & Osc. Coils	0Ω						Channels 69-83; Includes Capacitors
L4	IF Trap	.2Ω		77628				
L5	Neutr. Coil	0Ω		77627				Wound on 470KΩ Resistor
L6	RF Choke	1.4Ω		77695				11 microhenries
L7	RF Choke	1.4Ω		77695				11 microhenries
L8	Fil. Choke	0Ω		77631				
L9	Fil. Choke	0Ω		77631				
L10	Cathode Choke	0Ω		77629				
L11	RF Choke	.1Ω		78224				
L12	IF Input Trans.	.1Ω	.1Ω					
L13	IF Coupling Trans. Pri.	0Ω						
L14	IF Coupling Trans. Sec.	0Ω						
L15	Conv. Plate	.2Ω	.2Ω					Includes 3300Ω Resistor
L16	2nd Video IF Grid	0Ω		78987				Includes Coupling Coil & Trap
L17	Fil. Choke	0Ω		73477	19-3001	TV-189	4604	1 microhenry
L18	2nd Video IF Plate	.1Ω		78988			6217	Includes Trap, 10KΩ Resistor, & 100MMF Cap.
L19	RF Choke	1.1Ω		78945				
L20	3rd Video IF Grid	.1Ω		78989			6218	Includes Trap
L21	4th Video IF	.1Ω	.1Ω	78990	17-4523		6219	
L22	Fil. Choke	0Ω		73477	19-3001	TV-189	4604	1 microhenry
L23	5th Video IF	.1Ω	.1Ω	78991	17-4522		6219	
L24	Fil. Choke	0Ω		73477	19-3001	TV-189	4604	1 microhenry
L25	6th Video IF	.1Ω	.1Ω	78992	17-4522		6219	