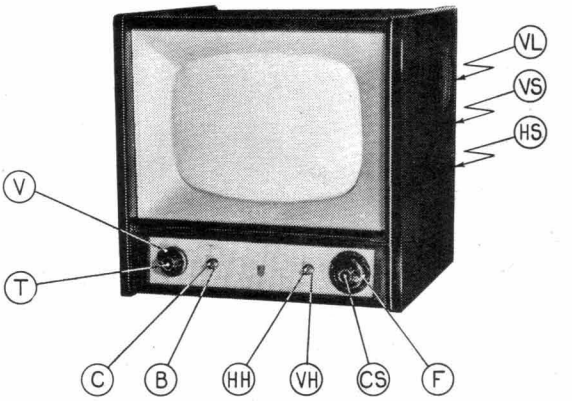
PHILIPS

Television Receiver

MODEL 17 TT 101



SPECIFICATION

Channel Selector

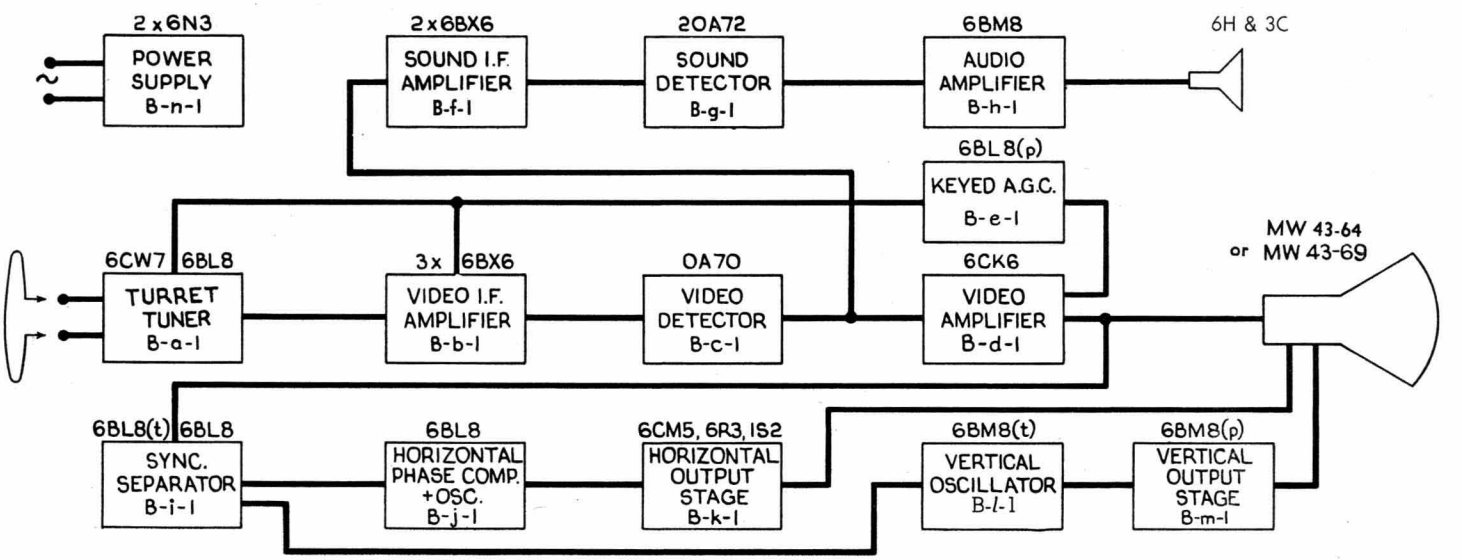
Channel 1	49 - 56 Mc/s
" 2	63 - 70 Mc/s
" 3	85 - 92 Mc/s
" 4	132 - 139 Mc/s
" 5	139 - 146 Mc/s
" 6	174 - 181 Mc/s
" 7	181 - 188 Mc/s
" 8	188 - 195 Mc/s
" 9	195 - 202 Mc/s
" 10	209 - 216 Mc/s
" 11	Reserved
" 12	Reserved

Aerial input impedance	300 ohm
Turret tuner	Type AT7580
Video I.F.	36 Mc/s
Sound I.F.	30.5 Mc/s
Supply voltage	190, 215, 240V AC
Power consumption	150 watts, approx.
Picture tube (17")	Type MW43-69 or MW43-64
" " focus/deflection	Magnetic
Deflection and focussing unit	Type AT1005
Horizontal output transformer	Type AT2010
Loudspeaker (6")	Rola type 6H
" (3")	Rola type 3C
Fuse	1 amp
Dimensions (cabinet)	20½"w. x 19½"h. x 19"d.
Weight, packed/unpacked	112 lbs./85 lbs.

IDENTIFICATION

V - Sound Volume
T - Tone plus On/Off Switch
C - Contrast
B - Brightness
HH - Horizontal Hold
VH - Vertical Hold
CS - Channel Selector
F - Fine Tuning
HS - Horizontal Size
VS - Vertical Size
VL - Vertical Linearity

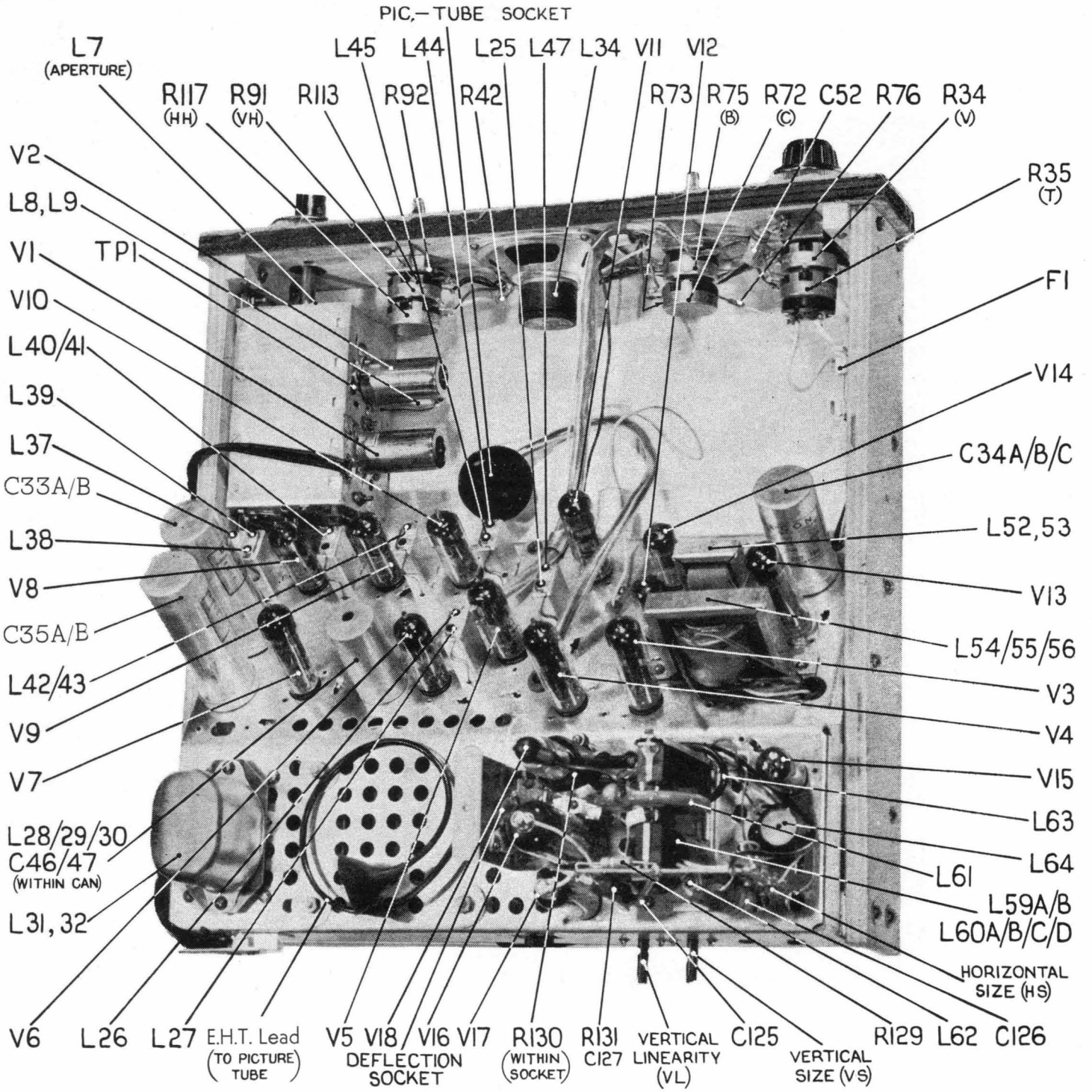
BLOCK DIAGRAM



For details of Blocks refer "Service Handbook"

17 TT 101

ABOVE CHASSIS VIEW



CHASSIS, PICTURE TUBE, MASK, SAFETY GLASS and KNOB REMOVAL

TO REMOVE CHASSIS FROM CABINET

Remove cabinet back panel and extract the two ¼" bolts securing chassis cradle to cabinet base.

Disconnect loud-speaker plug, deflection yoke plug, picture tube socket, E.H.T. lead, and earthing lead to yoke assembly. Do not remove knobs to withdraw chassis.

TO REMOVE PICTURE TUBE

Extract chassis in manner described above and carefully place cabinet face downwards on a suitable soft surface.

Remove the ion trap magnet, then wing nuts, stays, etc., and with care the cast metal bracket complete with deflection and focussing unit. Finally remove the two wooden wedges fitted beneath the picture tube support shelf.

The picture tube may now be withdrawn, but care should be taken to avoid contact with cabinet. While handling picture tube, its weight should be supported at the screen. In no circumstances must the neck be subjected to undue stress.

Procedure is reversed when refitting.

NOTE—Safety goggles must be worn when removing or fitting picture tube.

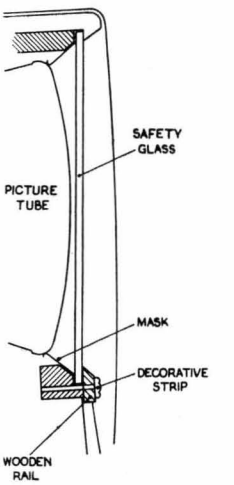
TO REMOVE MASK AND SAFETY GLASS PLATE

Remove horizontal decorative metal strip by carefully pulling from cabinet face and extract the four screws holding the wooden rail to cabinet. The glass plate, together with mask (attached to glass top edge), may now be withdrawn at the lower edge. Note that mask surface is easily scratched.

Procedure is reversed when refitting, i.e., upper edge of glass plate and mask must be inserted first.

KNOB REMOVAL

All front knobs are push fitted, and when necessary may be removed by carefully pulling from spindle in the conventional manner. The location moulding inside channel selection knob is, however, fixed to spindle by means of a 3 mm. grub screw, which must be completely withdrawn. Note relative grub screw/knob pointer position for correct channel indication.



ALIGNMENT PROCEDURE

RATIO DETECTOR

Connect V.T.V.M. (10V DC range) to TP3 and chassis.

Apply an unmodulated 5.5 Mc/s signal to TP2.

Unscrew core of L30 (under chassis) until flush with former.

Proceed as follows:

Align	V.T.V.M. Deflection	V.T.V.M. Connected to Test Point
L28/29 (top)	Peak and adjust input to obtain 10V reading	TP3
L30	With input setting as above adjust for 2V reading	TP4
—	Re-adjust input signal to obtain 6V reading	TP3
L30	With input setting unaltered adjust for 3V reading	TP4

Repeat last two steps until DC potential at TP4 is half that at TP3.

SOUND I.F.

Switch channel selector to position 11 or 12.

Connect V.T.V.M. (10V DC range) to TP3.

Apply an unmodulated 5.5 Mc/s signal to TP.7.

Connect damping network (470 ohms + 1,500 pF in series) across L26 and peak L27.

Transfer damping network to position across L27 and peak L26.

Remove damping network and peak L25.

To check overall sound response curve:

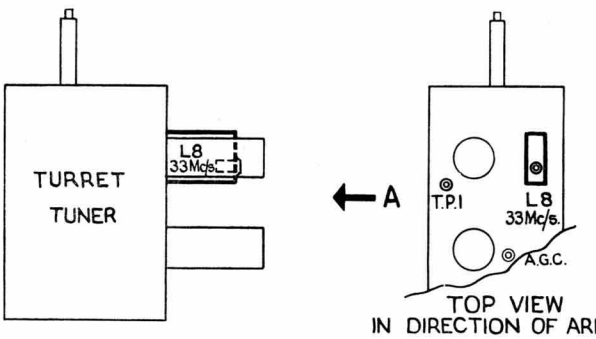
Connect CRO to TP4 and apply sweep signal (5.5 Mc/s FM ± 2 Mc/s deviation) to TP7.

Check that "S" curve is straight each side of 5.5 Mc/s marker.

5.5 Mc/s SOUND TRAP

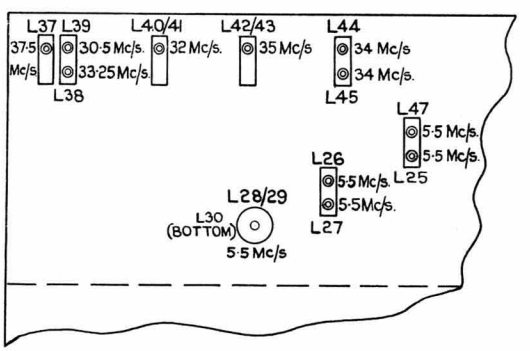
Connect TP8 to TP2 via 1,500 pF condenser and connect a V.T.V.M. (3V DC range) to TP3 and chassis.

Apply a 5.5 Mc/s unmodulated signal to TP7 and adjust L47 for minimum V.T.V.M. deflection.



TOP VIEW
IN DIRECTION OF ARROW A

DO NOT ATTEMPT ANY ALIGNMENT ADJUSTMENT ON TURRET TUNER OTHER THAN TO L7 & L8.



Location Diagram—Above Chassis Alignment

VIDEO I.F.

Switch channel selector to position 11 or 12.

Apply 2 volts negative to TP5 and TP6 (positive to chassis).

Connect filter network of 10,000 ohms and 1,500 pF in series from TP8 to chassis (condenser to chassis) and connect V.T.V.M. (3V AC range) to filter condenser.

Set "Contrast" to maximum and "Brightness" to minimum.

Unscrew L8 core (on tuner) until flush to former and apply a 30% AM signal to TPI (on tuner) as follows:

Set Signal Freq. to:	Connect Damping Network (470 ohms + 1,500 pF in series) Across:	Adjust Core of:	For V.T.V.M. Deflection:
34.0 Mc/s	L45	L44	Peak
"	L44	L45	"
35.0 Mc/s	—	L42/43	"
32.0 Mc/s	—	L40/41	"
33.25 Mc/s	—	L38	"
33.0 Mc/s	L38	L8	"
30.5 Mc/s	—	L39	Minimum
37.5 Mc/s	—	L37	"

Note—In order to avoid overloading, keep signal voltage at minimum consistent with adequate V.T.V.M. deflection.

Check video I.F. response curve by connecting CRO to filter condenser in place of V.T.V.M. and applying a sweep signal (33 Mc/s FM ± 5 Mc/s deviation) to TPI.

Adjust input signal to obtain a peak to peak output of 45 volts. Wave-form should closely resemble the typical response curve shown below. Where necessary modify curve shape by re-adjusting L8, L38, L40/41 and L42/43 cores. If spot alignment is correct re-adjustment of L44 and L45 cores will not be necessary. Initial setting of cores L37 and L39 must not be altered.

HORIZONTAL OSCILLATOR AND FLYWHEEL COIL

Connect CRO via 15,000 ohms resistor to TP9 and set sweep control (time base) to half the line frequency.

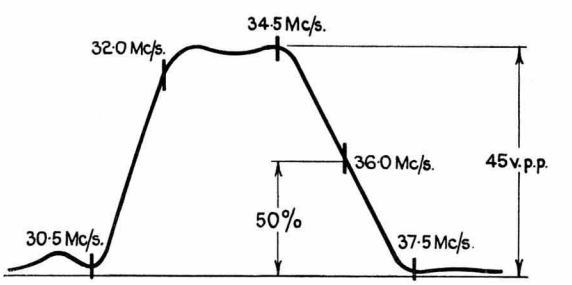
Apply picture signal to receiver aerial terminal and set horizontal hold control to the central position.

Unscrew core of L57 until flush with former and synchronise picture by adjusting core of L58.

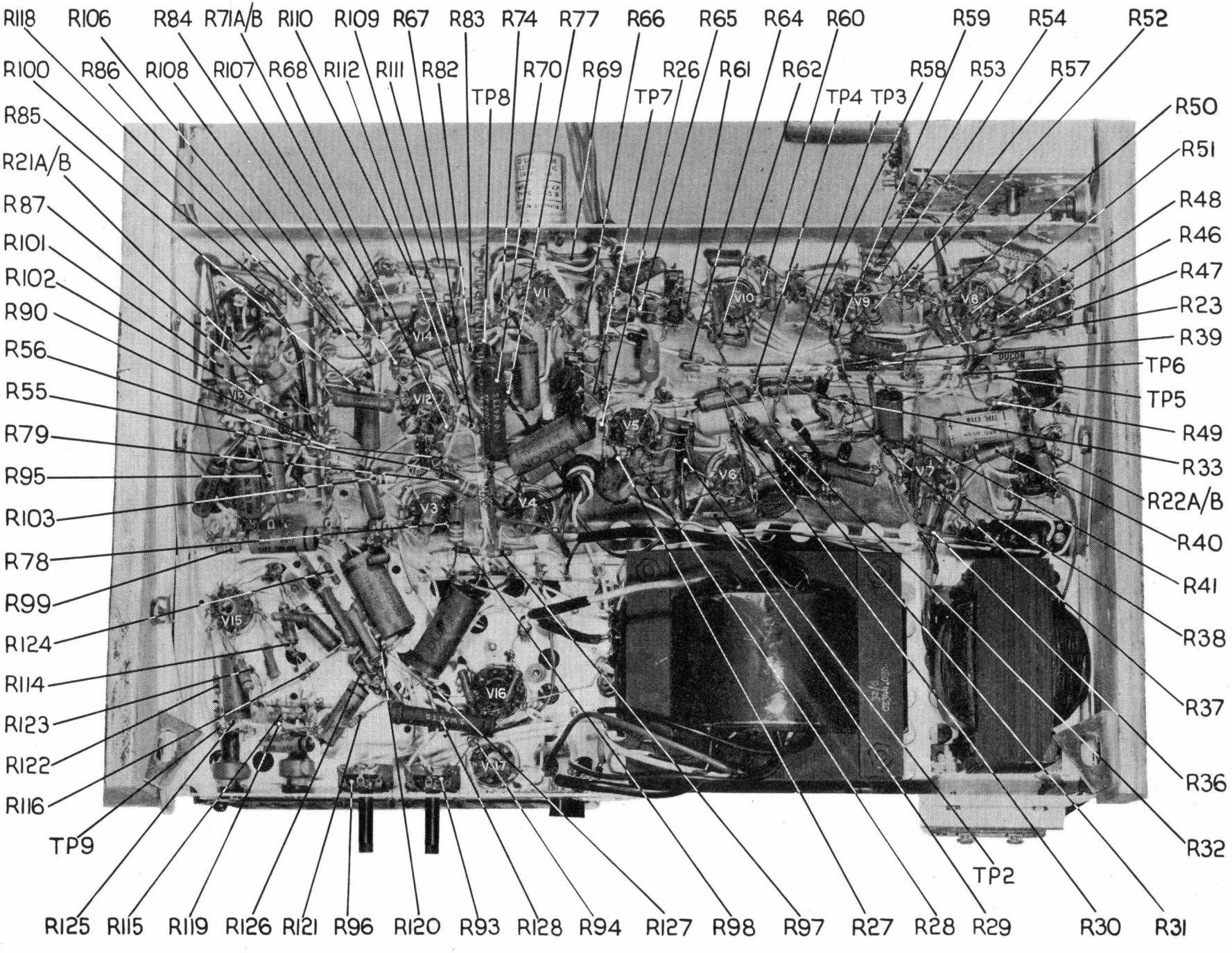
Adjust core of L57 to obtain CRO wave-shape shown on circuit diagram while keeping picture in synchronism by re-adjusting core of L58.

Repeat L57, L58 core adjustment until CRO wave-shape is correct while picture is synchronised.

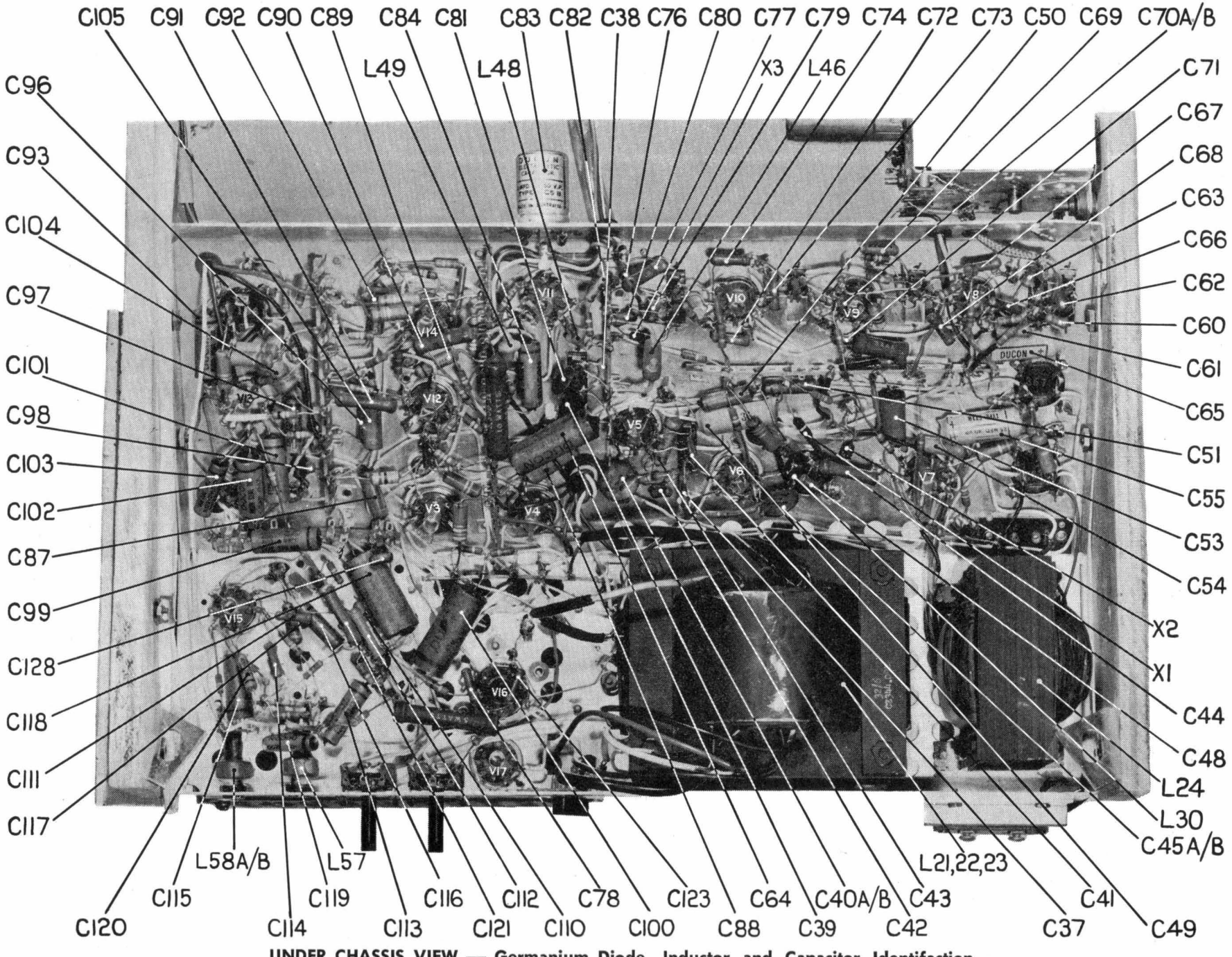
Remove CRO and, if necessary, re-synchronise picture by re-adjusting core of L58 only.



Typical I.F. Response Curve



UNDER CHASSIS VIEW—Resistor and Test Point Identification.



UNDER CHASSIS VIEW — Germanium Diode, Inductor and Capacitor Identifaction.

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PARTS LIST

RESISTORS

Item No.	Description	Type or Code No.
R1	3,300 ohms ½W	I.R.C. Type BTS
R3	1 megohm ½W	" " "
R5	820,000 ohms ½W	" " "
R6	680 ohms ½W	" " "
R7	220,000 ohms ½W	" " "
R8	47,000 ohms ½W	" " "
R9	47 ohms ½W	ERIE Type 9
R10	22,000 ohms ½W	I.R.C. Type BTS
R11	10,000 ohms 2W	I.R.C. Type BTB
R12	1,000 ohms ½W	I.R.C. Type BTS
R14	6,800 ohms ½W	" " "
R21A,B	2,200 ohms 1W (x2)	I.R.C. Type BTA
R22A,B	1,000 ohms 1W (x2)	" " "
R23A,B	2,200 ohms 1W (x2)	" " "
R26	10,000 ohms ½W	I.R.C. Type BTS
R27	270 ohms ½W	" " "
R28	100,000 ohms ½W	" " "
R29	33,000 ohms ½W	" " "
R30	100,000 ohms 1W	I.R.C. Type BTA
R31	68,000 ohms 1W	" " "
R32	33,000 ohms ½W	I.R.C. Type BTS
R33	33,000 ohms ½W	" " "
R34	1 megohm pot. (V)	CZ.032.017
R35	5,000 ohms pot. (T) + D.P. s.w.	CZ.032.017
R36	2,200 ohms ½W	I.R.C. Type BTS
R37	100,000 ohms ½W	" " "
R38	470,000 ohms ½W	" " "
R39	6,800 ohms ½W	" " "
R40	270 ohms 1W	I.R.C. Type BTA
R41	560 ohms ½W	I.R.C. Type BTS
R42	3.9 ohms ½W (ww)	I.R.C. Type BW
R46	3,300 ohms ½W	I.R.C. Type BTS
R47	180 ohms ½W	" " "
R48	47 ohms ½W	" " "
R49	150,000 ohms ½W	" " "
R50	4,700 ohms ½W	" " "
R51	8.2 megohms ½W	" " "
R52	2.2 megohms ½W	" " "
R53	100,000 ohms ½W	" " "
R54	2.2 megohms ½W	" " "
R55	470,000 ohms ½W	" " "
R56	470,000 ohms ½W	" " "
R57	47 ohms ½W	" " "
R58	4,700 ohms ½W	" " "
R59	180 ohms ½W	" " "
R60	150 ohms ½W	" " "
R61	10,000 ohms ½W	" " "
R62	180 ohms ½W	" " "
R64	2.2 megohms ½W	" " "
R65	8,200 ohms ½W	" " "
R66	2,700 ohms ½W	" " "
R67	120,000 ohms ½W	" " "
R68	33,000 ohms ½W	" " "
R69	330 ohms 1W	I.R.C. Type BTA
R70	3,300 ohms 5% 5W (ww)	I.R.C. Type AB coat B
R71A,B	15,000 ohms 1W (x2)	I.R.C. Type BTA
R72	10,000 ohms (ww) pot. (C)	CZ.029.054
R75	250,000 ohms pot. (B)	CZ.029.054
R73	2,700 ohms ½W	I.R.C. Type BTS
R74	33,000 ohms ½W	" " "
R76	100,000 ohms ½W	" " "
R77	1 megohm ½W	" " "
R78	470,000 ohms 1W	I.R.C. Type BTA
R79	820,000 ohms 1W	" " "
R82	390,000 ohms ½W	I.R.C. Type BTS
R83	10,000 ohms ½W	" " "
R84	3.3 megohms ½W	" " "
R85	8.2 megohms ½W	" " "
R86	390,000 ohms ½W	" " "
R87	10,000 ohms ½W	" " "
R90	560,000 ohms ½W	" " "
R91	0.5 megohms pot. (VH)	CZ.029.055
R117	50,000 ohms pot. (HH)	CZ.029.055
R92	10,000 ohms ½W	I.R.C. Type BTS
R93	1 megohm pot. (VL)	CZ.029.315
R94	68,000 ohms ½W	I.R.C. Type BTS
R95	220,000 ohms ½W	" " "
R96	2 megohms pot. (VS)	CZ.029.316
R97	2.2 megohms ½W	I.R.C. Type BTS
R98	1.5 megohms ½W	" " "
R99	180,000 ohms ½W	" " "
R100	330 ohms ½W	" " "
R101	15,000 ohms 1W	I.R.C. Type BTA
R102	100,000 ohms ½W	I.R.C. Type BTS
R103	47 ohms ½W	" " "
R106	2.2 megohms ½W	" " "
R107	15,000 ohms ½W	" " "
R108	150,000 ohms ½W	" " "
R109	220,000 ohms ½W	" " "
R110	100,000 ohms ½W	" " "
R111	22,000 ohms ½W	" " "
R112	10,000 ohms ½W	" " "
R113	15,000 ohms ½W	" " "
R114	330,000 ohms ½W	" " "
R115	820,000 ohms ½W	" " "
R116	100,000 ohms ½W	" " "
R118	120,000 ohms ½W	" " "
R119	220,000 ohms ½W	" " "
R120	3,900 ohms ½W	" " "
R121	47,000 ohms ½W	" " "
R122	5,600 ohms ½W	" " "
R123	150,000 ohms ½W	" " "
R124	120,000 ohms ½W	" " "
R125	330,000 ohms ½W	" " "
R126	2.2 megohms ½W	" " "
R127	1,000 ohms ½W	" " "
R128	5,000 ohms 5% 5W (ww)	I.R.C. Type AB coat A
R129	3,300 ohms 1W	I.R.C. Type BTA
R130	1 ohm (ww) (part of E.H.T. socket)	
R131	47,000 ohms ½W	I.R.C. Type BTS

CAPACITORS

Item No.	Description	Type or Code No.
C1	820 pF GMV ceramic	Ducon DS Style A, Hi-K5000
C2	3.9 pF ceramic	48.200.20/3E9
C3	5 pF ceramic, trimmer	49.627.50
C4	2.5 pF ceramic, trimmer	49.005.62
C5	2.5 pF ceramic, trimmer	"
C6	2.7 pF ceramic	Ducon Style BEA, P100
C7	1.8 pF ceramic	" " " "
C8, 9, 11, 13	820 pF +100% −20% ceramic, feed thru	B1.664.13
C14	820 pF GMV ceramic	Ducon DS Style A, Hi-K5000
C15	820 pF GMV ceramic	" " " " "
C16	47 pF ceramic	Ducon DS Style B, N750
C19	15 pF ceramic	Ducon Style A, N750
C20	68 pF ± 2% ceramic	B1.664.30
C21	68 pF ± 2% ceramic	"
C23	820 pF GMV ceramic	Ducon DS Style A, Hi-K5000
C33A,B	50 μF 300V elec. (x2)	Ducon Type ECD 367
C34A	50 μF 250V elec.	Ducon Type ECT196
C34B	100 μF 25V elec.	Ducon Type ECT196
C34C	24 μF 250V elec.	Ducon Type ECT196
C35A,B	50 μF 300V elec. (x2)	Ducon Type ECD367
C37	0.01 μF 400V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C38	2.7 pF ± 1 pF ceramic	Ducon Style A, N750
C39	47 pF ± 10% ceramic	Ducon DS Style C, P100
C40A,B	4,000 pF GMV ceramic (x2)	Ducon DP Style D, Hi-K
C41	47 pF ± 10% ceramic	Ducon DS Style C, P100
C42	47 pF ceramic	Ducon Style A, N750
C43	47 pF ± 10% ceramic	Ducon DS Style C, P100
C44	330 pF ceramic	Ducon Style C, N750
C45A,B	4,000 pF GMV ceramic (x2)	Ducon DP Style D, Hi-K
C46	5 pF mica	Simplex Type IF
C47	100 pF ± 2% mica	" " "
C48	27 pF ± 10% ceramic	Ducon Style A, N750
C49	8 μF 100V elec.	Ducon Type ET1B
C50	0.0022 μF 400 V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C51	0.01 μF 200V paper	" " " " " " " " "
C52	0.1 μF 100V paper	" " " " " " " " "
C53	0.1 μF 100V paper	" " " " " " " " "
C54	0.01 μF 400V paper	" " " " " " " " "
C55	25 μF 25V elec.	Ducon Type ET1B
C60	10 pF ± 1 pF ceramic	Ducon Style A, N750
C61	100 pF ceramic	Ducon Style B, N750
C62	6.8 pF ± 1 pF ceramic	Ducon Style A, N750
C63	22 pF ceramic	" " " "
C64	0.47 μF 100V paper	Ducon Type Mini-seal "70"
C65	2 μF 25V elec.	Ducon Type ET1B
C66, 7, 8, 9	1,500 pF ceramic	Ducon Style B, Hi-K
C70A,B	1,500 pF GMV ceramic (x2)	Ducon DS Style B, Hi-K
C71, 2, 3, 4	1,500 pF ceramic	Ducon Style B, Hi-K
C76	100 pF ceramic	Ducon Style B, N750
C77	4,700 pF ceramic	Ducon Style C, Hi-K
C78	1,500 pF ceramic	Ducon Style B, Hi-K
C79	6.8 pF ± 1 pF ceramic	Ducon Style A, N750
C80	6.8 pF ± 1 pF ceramic	" " " "
C81	47 pF ± 10% ceramic	Ducon DS Style C, P100
C82	1,500 pF ceramic	Ducon Style B, Hi-K
C83	8 μF 300V elec.	Ducon Type EC5B
C84	0.047 μF 200V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C87	0.0033 μF 400V paper	" " " " " " " " "
C88	0.01 μF 600V paper	" " " " " " " " "
C89	0.001 μF 400V paper	" " " " " " " " "
C90	220 pF ceramic	Ducon Style C, N750
C91	220 pF ceramic	" " " "
C92	0.0047 μF 400V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C93	0.047 μF 200V paper	" " " " " " " " "
C96	0.0047 μF 400V paper	" " " " " " " " "
C97	0.01 μF ± 10% 200V paper	" " " " " " " " "
C98	470 pF ceramic	Ducon Style A, Hi-K
C99	0.047 μF 400V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C100	0.1 μF 600V paper	" " " " " " " " "
C101	0.047 μF ± 10% 400V paper	" " " " " " " " "
C102	0.047 μF ± 10% 400V paper	" " " " " " " " "
C103	0.018 μF ± 10% 400V paper	" " " " " " " " "
C104	0.0047 μF 2,000V paper	" " " " " " " " "
C105	0.022 μF 200V paper	" " " " " " " " "
C110	39 pF ceramic	Ducon Style A, N750
C111	82 pF ceramic	Ducon Style B, N750
C112	220 pF ceramic	Ducon Style C, N750
C113	0.047 μF 200V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C114	82 pF ceramic	Ducon Style B, N750
C115	0.1 μF 200V	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C116	0.022 μF 200V paper	" " " " " " " " "
C117	0.001 μF ± 10% 400V paper	" " " " " " " " "
C118	0.47 μF 100V paper	Ducon Type Mini-Seal "70"
C119	0.01 μF ± 10% 200V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C120	330 pF ceramic	Ducon Style C, N750
C121	4,700 pF ceramic	Ducon Style C, Hi-K
C122	47 pF ceramic	Ducon Style A, N750
C123	1,500 pF ceramic	Ducon Style B, Hi-K
C124	120 pF ± 10% ceramic	43.223.10/120E
C125	100 pF ± 10% 3,500V ceramic	U.C.C. Type CC140H0
C126	0.047 μF ± 10% 1,000V paper	Ducon Type TPB, I060
C127	0.0047 μF 600V paper	Ducon Type TPB, Hi-Seal "85" or U.C.C. Type PPS
C128	470 pF ceramic	Ducon Style A, Hi-K

INDUCTORS

Item No.	Description	DC Resistance (ohms)	Type or Code No.
	TURRET TUNER		A3.767.32
L2, L3, L4	Aerial Coils:—		
	Channel 1		A3.747.07
	Channel 2		A3.747.08
	Channel 3		A3.747.09
	Channel 4		A3.747.10
	Channel 5		A3.747.11
	Channel 6		A3.746.75
	Channel 7		A3.746.76
	Channel 8		A3.746.77
	Channel 9		A3.746.78
	Channel 10		A3.746.79
L5, L6 & L7	R.F. Band Pass & Osc. Coils:—		
	Channel 1		A3.747.02
	Channel 2		A3.747.03
	Channel 3		A3.747.04
	Channel 4		A3.747.05
	Channel 5		A3.747.06
	Channel 6		A3.746.70
	Channel 7		A3.746.71
	Channel 8		A3.746.72
	Channel 9		A3.746.73
	Channel 10		A3.746.74
L8	1st. Video I.F.T. (Prim.)		A3.126.70
L9	1st. Video I.F.T. (link)		A3.126.70
L10	Coupling Coil		A3.117.72
L11	36 Mc/s Aerial Trap		A3.119.95
L12	36 Mc/s Aerial Trap		A3.119.95
L14	30.5 Mc/s Aerial Trap		A3.119.95
L13	Heater Choke		A3.117.71
	POWER TRANSFORMER		CZ.344.092
L21A	Primary, mains	1.05	
L21B	Primary, mains	0.8	
L21C	Primary, mains	7.1	
L22A	Secondary, H.T.	25	
L22B	Secondary, H.T.	25	
L23	Secondary, heaters		
L24	FILTER CHOKE	86	CZ.341.008
L25	1ST. SOUND I.F. COIL	1.5-2.0	CZ.320.439
L47	VIDEO SOUND TRAP	1.5-2.0	
	2ND. SOUND I.F.T.		CZ.320.440
L26	Primary	1.5-2.0	
L27	Secondary	1.5-2.0	
	RATIO DETECTOR TRANS.		CZ.324.037
L28	Tertiary		
L29	Primary	3.0-3.5	
L30	Secondary	0.5	
	LOUDSPEAKER TRANS.		Rola CCG55
L31	Primary	366	
L32	Secondary		
L33	LOUDSPEAKER (6")		Rola 6H
L34	LOUDSPEAKER (3")		Rola 3C
L37	ADJ. CHANNEL SOUND TRAP		CZ.320.442
L38	1ST. VIDEO I.F.T., SEC.		CZ.320.435
L39	I.F. SOUND TRAP		
	2ND. VIDEO I.F.T.		CZ.320.436
L40	Primary		
L41	Secondary		
	3RD. VIDEO I.F.T.		CZ.320.437
L42	Primary		
L43	Secondary		
L44	4TH. VIDEO I.F.T.		CZ.320.438
	Primary		
L45	Secondary		
L46	TWEET COIL	7.0-8.0	CZ.321.298
L48	PEAKING COIL	12-13	CZ.321.297
L49	PEAKING COIL	12-13	CZ.321.306
	VERT. BL. OSC. TRANS		CZ.346.016
L52	Primary	300	
L53	Secondary	115	
	VERT. OUTPUT TRANS.		CZ.344.810
L54	Primary	705	
L55	Secondary	0.62	
L56	Feedback	810	
L57	FLYWHEEL COIL	75	CZ.330.617
	HORIZ. BL. OSC. TRANS.		CZ.323.410
L58A	Primary	70-75	
L58B	Secondary	200	
	HORIZ. OUTPUT TRANS.		A3.767.41
L59A	Primary	5.0-7.0	
L59B	Secondary	10.5-14.5	
L60A, B, C, D	Secondary		
L61	Secondary E.H.T.	160-220	
L62	Horiz. size		
L63	E.H.T. HEATER LOOP		CZ.358.081
L64	HORIZ. LINEARITY COIL		A3.802.05
	DEFLEC. & FOCUS UNIT		A3.696.46
L65A, B, C, D	Deflec. coils, vertical	3.9 (total)	
L66A, B	Deflec. coils, horiz.	1.46 (total)	

MISCELLANEOUS COMPONENTS

Description	Type or Code No.
DISC, channel selector	CS.414.001
KNOB, fine tuning (F)	CR.523.718
KNOB, channel selector (CS)	CR.523.719
KNOB, dummy	CS.432.671
SCREW, grub (3mm)	CS.261.806
KNOB, volume (V)	CR.523.720
KNOB, tone, on/off (T)	CR.523.721
KNOB, vertical hold (VH)	CR.523.717
KNOB, horiz. hold (HH)	CS.432.666
KNOB, brightness (B)	CR.523.717
KNOB, contrast (C)	CS.432.666
MASK, picture tube	CS.050.422
GLASS, p. tube protective	CS.420.613
INSIGNIA, Philips	CS.436.439
BADGE, Philips	CR.531.422
STRIP, decorative	CS.430.908
SPRING, strip fixing (x4)	CS.212.018
BACK, cabinet	CS.462.653
CLIP, back mounting (x6)	CS.282.467
CAP, p. tube neck, protective	CS.462.649
COVER, cabinet bottom	CS.463.032
CASTING, p. tube holding	CS.232.076
PAD, p. tube to casting (x6)	CS.424.147
STAY, p. tube holding (x2)	CS.243.028
BUSH, rubber (x2)	CS.422.480
SPRING, compression (x2)	CS.211.025
COIL ASSY., deflection unit	A3.118.59
CLIP, spring, holding	A3.651.77
HOUSING ASSY., def. & focus unit	CR.571.820
BRACKET, supporting	CR.340.050
RING, picture pos. adjustment	A3.685.72
SCREW, knurled	A3.713.59
PLATE, square, threaded	A3.526.05
SPINDLE, focus adjustment	CS.381.668
WORM, focus adjustment	A3.684.11
BRACKET, focus adjustment	A3.745.42
MOULDING, P.V.C. protective	PS.340.40
MAGNET, ion trap	VZ205.OC
STRIP, spring, p. tube earthing	CR.262.449
PANEL ASSY. h. output trans.	A3.764.60
MOULDING, switch, h. size	P4.381.34
WASHER, switch, h. size	A3.577.42
SPRING, switch, h. size	A3.645.09
SELECTOR, switch, h. size	A3.823.23
CIRCLIP, switch, h. size	BO48AF/5
SOCKET, E.H.T. rectifier	P5.170.00
SHIELD, corona, E.H.T. socket	CS.077.003
SHIELD, heat, E.H.T. socket	CR.059.006
LEAD, p. tube E.H.T.	A3.582.05
LOOP, heater, E.H.T. rectifier	CZ.358.081
SOCKET, valve t. tuner	B8.700.22
SHIELD, valve t. tuner	B3.700.11
GROMMET, t. tuner mounting (x3)	CS.422.458
SPACER, t. tuner mounting (x3)	CS.284.202
PLUG, aerial	A3.407.35
SOCKET ASSY., aerial	CR.280.616
SPRING, I.F.T., retaining (x7)	A3.652.58
SOCKET, ceramic, (V13)	B1.506.59
HOLDER, fuse	CZ.371.109
FUSE, 1 amp. (F1)	CZ.280.901
PLUG, speaker	CZ.365.118
SOCKET, speaker	CZ.370.116
PLUG, v. selector	CZ.365.122
SOCKET, v. selector	CZ.370.509

NOTES:—

RESISTORS

Tolerance ± 10% unless otherwise specified. Wire wound resistors shown (ww), remainder carbon.

CAPACITORS

Tolerance ± 20% unless otherwise specified. Tolerance GMV (guaranteed minimum value) over temperature range — 10° to + 60°C.

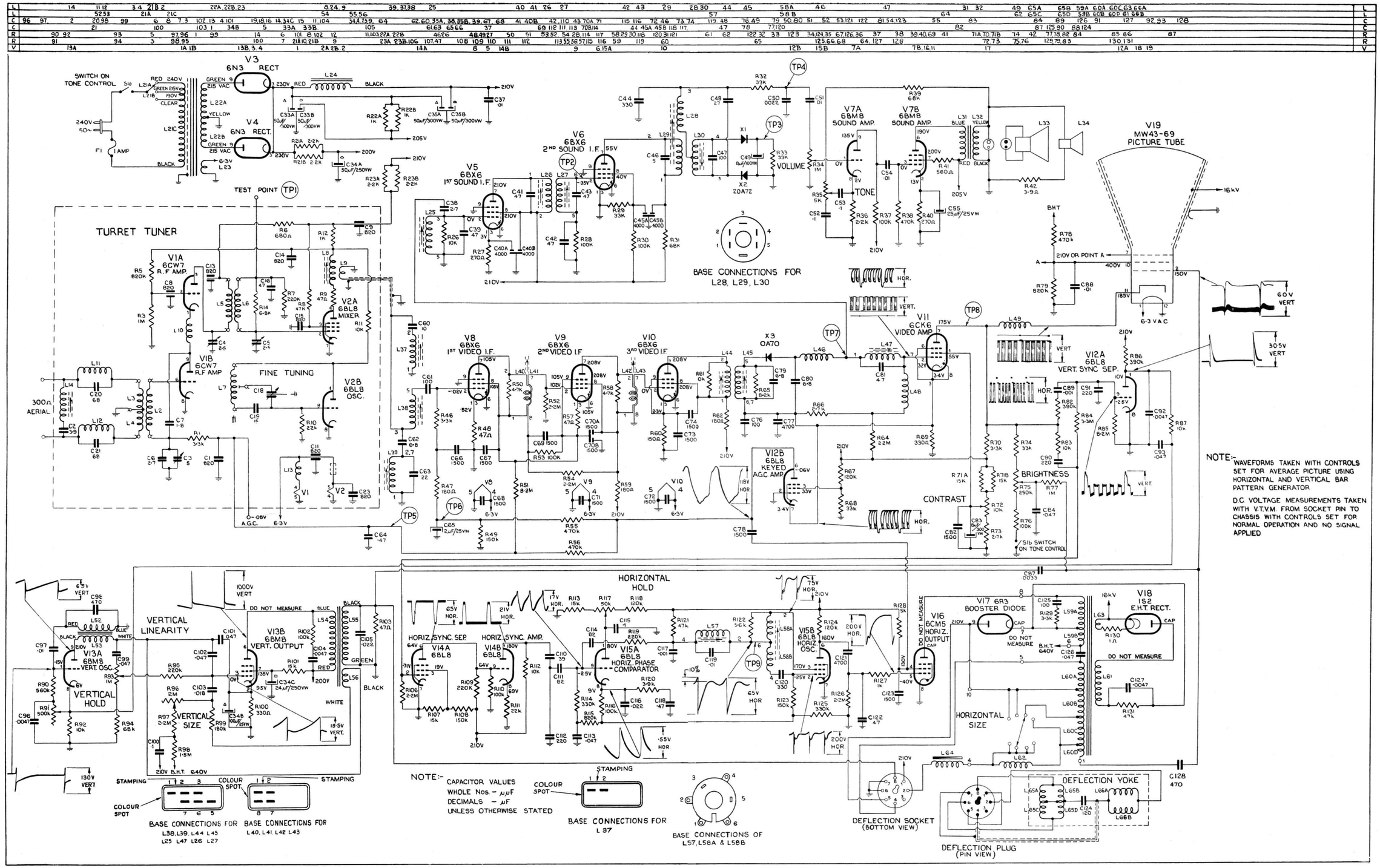
INDUCTORS

DC resistance tolerance ± 10% unless otherwise specified. Values less than 0.5 ohms have been omitted.

MISCELLANEOUS COMPONENTS

For comprehensive turret tuner, and horizontal output transformer parts list refer "Service Handbook."

IMPORTANT! In ordering spare parts, quote CODE NUMBER of part and MODEL NUMBER of Receiver. In claiming free replacement under GUARANTEE, return defective part PROMPTLY and quote MODEL and SERIAL NUMBER of Receiver and DATE OF PURCHASE.


SWITCH ON TONE CONTROL
V3 6N3 RECT
V4 6N3 RECT
TEST POINT (TP1)
TURRET TUNER
V1A 6CW7 R.F AMP.
V1B 6CW7 R.F AMP
V2A 6BL8 MIXER
V2B 6BL8 OSC.
FINE TUNING
300Ω AERIAL
V5 6BX6 1ST SOUND I.F.
V6 6BX6 2ND SOUND I.F.
V7A 6BM8 SOUND AMP.
V7B 6BM8 SOUND AMP.
VOLUME
TONE
BASE CONNECTIONS FOR L28, L29, L30
V19 MW43-69 PICTURE TUBE
V8 6BX6 1ST VIDEO I.F.
V9 6BX6 2ND VIDEO I.F.
V10 6BX6 3RD VIDEO I.F.
V11 6CK6 VIDEO AMP.
V12A 6BL8 VERT. SYNC SEP.
V12B 6BL8 KEYED A.G.C. AMP.
CONTRAST
BRIGHTNESS
S1b SWITCH ON TONE CONTROL
NOTE:- WAVEFORMS TAKEN WITH CONTROLS SET FOR AVERAGE PICTURE USING HORIZONTAL AND VERTICAL BAR PATTERN GENERATOR
D.C. VOLTAGE MEASUREMENTS TAKEN WITH V.T.V.M. FROM SOCKET PIN TO CHASSIS WITH CONTROLS SET FOR NORMAL OPERATION AND NO SIGNAL APPLIED
VERTICAL LINEARITY
VERTICAL HOLD
VERTICAL SIZE
V13A 6BM8 VERT. OSC.
V13B 6BM8 VERT. OUTPUT
HORIZONTAL HOLD
V14A 6BL8 HORIZ. SYNC. SEP.
V14B 6BL8 HORIZ. SYNC. AMP.
V15A 6BL8 HORIZ. PHASE COMPARATOR
V15B 6BL8 HORIZ. OSC.
V16 6CM5 HORIZ. OUTPUT
V17 6R3 BOOSTER DIODE
V18 1S2 E.H.T. RECT.
HORIZONTAL SIZE
DEFLECTION YOKE
BASE CONNECTIONS FOR L38, L39, L44 L45 L25 L47 L26 L27
BASE CONNECTIONS FOR L40, L41 L42 L43
NOTE:- CAPACITOR VALUES WHOLE Nos. - μμF DECIMALS - μF UNLESS OTHERWISE STATED
BASE CONNECTIONS FOR L97
BASE CONNECTIONS OF L57, L58A & L58B
DEFLECTION SOCKET (BOTTOM VIEW)
DEFLECTION PLUG (PIN VIEW)