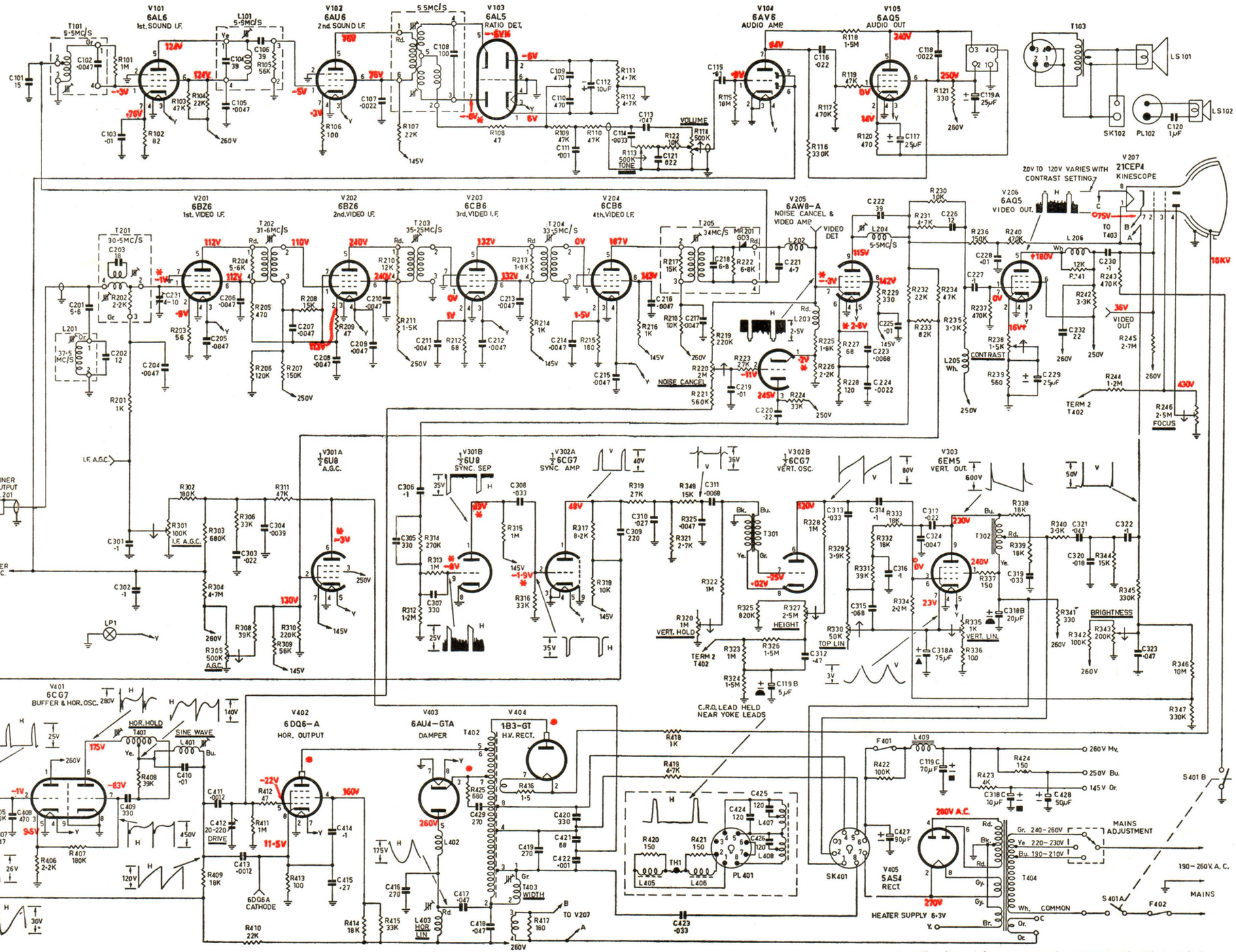
CIRCUIT A.W.A. TELEVISION RECEIVER MODEL 247

Circuit of Tuner 42298
on reverse side

Note: On some chasses R114 is a 250K ohms potentiometer, in which case R122 and C121 are deleted.

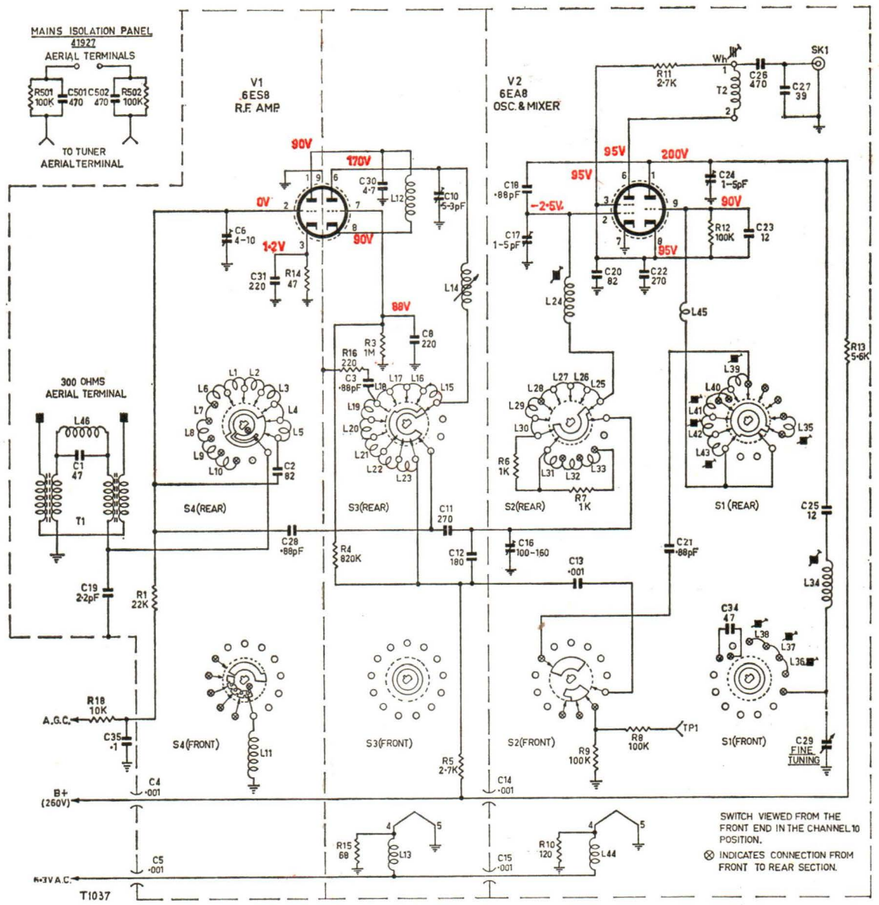
A decoupling network has been added in the H.T. line to the tuner. This takes the form of a 560 ohm (R426) resistor from the 260V point with a 5uF Electrolytic (unused section of C119) bypass.



All voltages shown on waveforms measured with a Voltohmyst

FIELD TEST SHEET

TUNER 42298



D.C. RESISTANCE OF WINDINGS

WINDING		D.C. RESISTANCE IN OHMS
Tuner	Windings	*
L101	Sound I.F.	*
L201	37.5 Mc/s Trap	*
L202	Detector Filter Choke	4
L203	Detector Peaking Coil Rd	6
L204	5.5 Mc/s Trap	1.5
L205	Video Amp. Shunt Peaking Wh	5
L206	Video Output Series Peaking Wh	5
L401	Horizontal Sine Wave Coil	55
L402	H.F. Choke	*
L403	Horizontal Linearity Coil	7.7
L405	Deflection Yoke	8.9
L406	Deflection Yoke	8.9
L407	Deflection Yoke	18
L408	Deflection Yoke	18
L409	H.T. Filter Choke	40
T101	Sound Take-off Coil 1-3	*
T102	Ratio Detector	
	Primary 1-6	9.5
	Secondary 3-4	1
T103	Audio Output	
	Primary	340-400
	Secondary	*
T201	Video I.F. Input 2-4	*
T202	1st Video I.F. Transformer	
	Primary 1-4	*
	Secondary 2-3	*
T203	2nd Video I.F. Transformer	
	Primary 1-4	*
	Secondary 2-3	*
T204	3rd Video I.F. Transformer	
	Primary 1-4	*
	Secondary 2-3	*
T205	4th Video I.F. Transformer	
	Primary 2-3	*
	Secondary	*
T301	Vertical Oscillator Transformer	
	Primary Bu-Gr	450
	Secondary Ye-Bk	130
T302	Vertical Output Transformer	
	Bu-Rd	400
	Rd-Ye	2.7
T401	Horizontal Blocking Oscillator	
	Ye-Anode	24
	Ye-C409	64
T402	Horizontal Output	
	2-3	3.5
	3-4	11
	4-8	13
	8-7	9
	7-6, 5	10
	6, 5-Anode	380
T403	Width Coil	
	Primary	*
	Secondary	5.5
T404	Power Transformer	
	Primary Gr-Wh	7
	H.T. Secondary	62
	L.T. Secondaries	

* Less than 1 ohm.

The above readings were taken on a standard chassis, but substitution of materials during manufacture may cause variation, and it should not be assumed that a component is faulty if a slightly reading is obtained.

COMPONENT REPLACEMENTS

	Item	Part No.
L101	Sound I.F.	40093
L201	37.5 Mc/s Trap	41405
L202	Detector Filter Choke	40323
L203	Detector Peaking Coil	40117
L204	5.5 Mc/s Trap	40905
L205	Video Amp. Shunt Peaking	41423
L206	Video Amp. Series Peaking	41423
L401	Sine Wave Coil	40050
L402	H.F. Filter Choke	214516
L403	Horizontal Linearity	41448
L405-L408	Yoke	41289
L409	H.T. Filter Choke	40113D
T1	Balun	41853
T2	Converter I.F.	41859
T101	Sound Take Off	40076
T102	Ratio Detector	40077
T103	Audio Output	21132C
T201	Video I.F. Input	41896
T202	1st Video I.F.	40071
T203	2nd Video I.F.	40071
T204	3rd Video I.F.	40071
T205	4th Video I.F.	41898
T301	Vertical Blocking Oscillator	40066C
T302	Vertical Output	41445A
T401	Horizontal Blocking Oscillator	41579
T402	Horizontal Output	41449
T403	Width	41925
T404	Power Transformer	41437
R113	500K ohms. Log. Carbon, Tone W/S	37240
R114	250K ohms. Log. Carbon, Volume	37239
R220	2 Megohms Linear Carbon, Noise Cancel	620772
R238	1.5K ohms W.W. Linear, Contrast	41717
R246	2.5 Megohms Linear Carbon, Focus	620781
R301	100K ohms Linear Carbon, I.F. A.G.C.	620322
R305	500K ohms Linear Carbon, A.G.C.	620569
R320	1 Megohm Linear Carbon, Vert. Hold	37209
R327	2.5 Megohms Linear Carbon, Height	620781
R330	50K ohms Linear Carbon, Top Linearity	620293
R335	1K ohms Linear W.W., Vert. Linearity	41468
R343	200K ohms Linear Carbon, Brightness	37238
C112	10uf 50 VW Electrolytic	228751
C117	25uf 25 VW Electrolytic	222914
C119	25uf, 5uf, 70uf Electrolytic	229720
C229	25uf 25 VW Electrolytic	222914
C231	4-10pf Trimmer	231123
C318	75uf, 20uf, 10uf Electrolytic	229680
C412	20-220pf Hor. Drive Trimmer	231127
C427	90uf 450 VW Electrolytic	229690
C428	50uf 350 VW Electrolytic	229586
F401	375mA Fuse	
F402	1.5A Fuse	

MISCELLANEOUS

	Part No.
Escutcheon Ass'y	42367
Knob Ass'y, Channel Selector	42283
Knob Ass'y, Fine Tuning	41518
Knob Ass'y, Front Control	41740
Knob Ass'y, Vertical Hold	41370
Panel, Front Moulded	42285
Speaker 12" Permanent Magnet	21542
Speaker 4" Permanent Magnet	21623