SANYO

	Chassis	Supp.
95	A3--90400	335
95	A6K-150U0 = AVM150U	315
95	A6Y-740U0 = 12C740U	332
95	A8F-500UO = 31C500U	328
96	A8F-510U0 = 31C510U	330
96	MR4141	174
96	SA Series	181
96	SF60000/61000– *See* Simpsons Sears	
96	SF70V00	189
96	WS	159
96	WTA = 62CA	

	Model	Supp.
96	9TP100U	92
94	10-T12OU	167
94	12-T203U	167
94	12-P80	96
95	12C740U	332
95	16-P15,U	87
95	19C18	165
106	19CT61OU	83
108	19C650U	319
108	21T42	165
108	21V73	170
96	31C500U	328
94	31C510U	330
96	51C11U15"	163
96	51C51U = WS	
94	61C01,U	152
94	61V74DU	153
96	62C904	335
94	62CA	162
96	62CS53	183
103	62CS63R	183
103	62CS73	183
103	Also *See* 62CS63R	
60	62CS73R *See* 62CS63R	83
64	81C13U	148
63	81C13U	161
64	90V71U	152
64	91C12U = 81C13U	153
	91C53U/B = SA	181
70	91C60,61 = SF60000	
70	*See* Simpsons-Sears	
70	91C70V	189
60	91C82	250
97	91C16U19"	160
108	91C17U19"	160
263	91V71,D	159
266	AVM150U	315
266	CT3300C,U	95
266	CT3400C,U	95
266	CT3402CU	142
276	E10976	109
151	CT3426CU = CT3402	125
	[illegible]	125

RCC TELEVISION RADIO HI-FI SERVICE MANUAL

1972 NUMBER 142

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INDEX

ADMIRAL

TV

AUTOMATIC

CAR RADIO

Model

XEM-1156 see Simpsons-Sears

CGE

RADIO

DUMONT

RADIO

Model

2116 see Fleetwood

ELECTROHOME

TV

EMERSON

RADIO

Model

2116 see Fleetwood

FLEETWOOD

RADIO

G M

CAR RADIO

CHEVROLET 21BFM1
PONTIAC 22BFM1
OLDSMOBILE & TORONADO 23BFM1
BUICK & RIVIERA 24BFM1

MONTE CARLO, CHEVELLE, CAMARO
NOVA & VENTURA II 21AFM1
TEMPEST 22AFM1
FIREBIRD 22FFM1
GRAND PRIX 22GFM1
F-85 23AFM1

PANASONIC

TV

Models

AN109N = N-93
AN309D = N-93
AN409T = N-93

AN-76C = AN-76
AN-86D = AN-76
AN-86DC = AN-76

AN-112TC = AN-112T

PHILCO

TV

A200 run 8 = A100 run 8

Model list

19CH21WA	A100	26C25BWA/A4	A400
19CH22WA	A100	26C242WA/A4	A400
19CH24WA	A200	26C244WA/A4	A400
19CH25WA	A100/AM Radio		
20CH22WA	A200		
20CH25WA	A200		
20CH24WA	A200		

PHILIPS

CAR RADIO Chrysler

Imperial 3501167 = CG16703

RCA

TV

RADIO

Model

SFC1024Q = CRS6041
SFC1025F = CRS6041
SFC1026W = CRS6041

SANYO

TV

Model

CT3402CU see Simpsons-Sears

SIMPSONS-SEARS

TV

CT3426CU = CT3402CU

CAR RADIO

Model

WESTINGHOUSE

RADIO

Model

RPA5075 = X3202CO1
RPA5075A = X3202CO2
RLF4090 = X3204CO1

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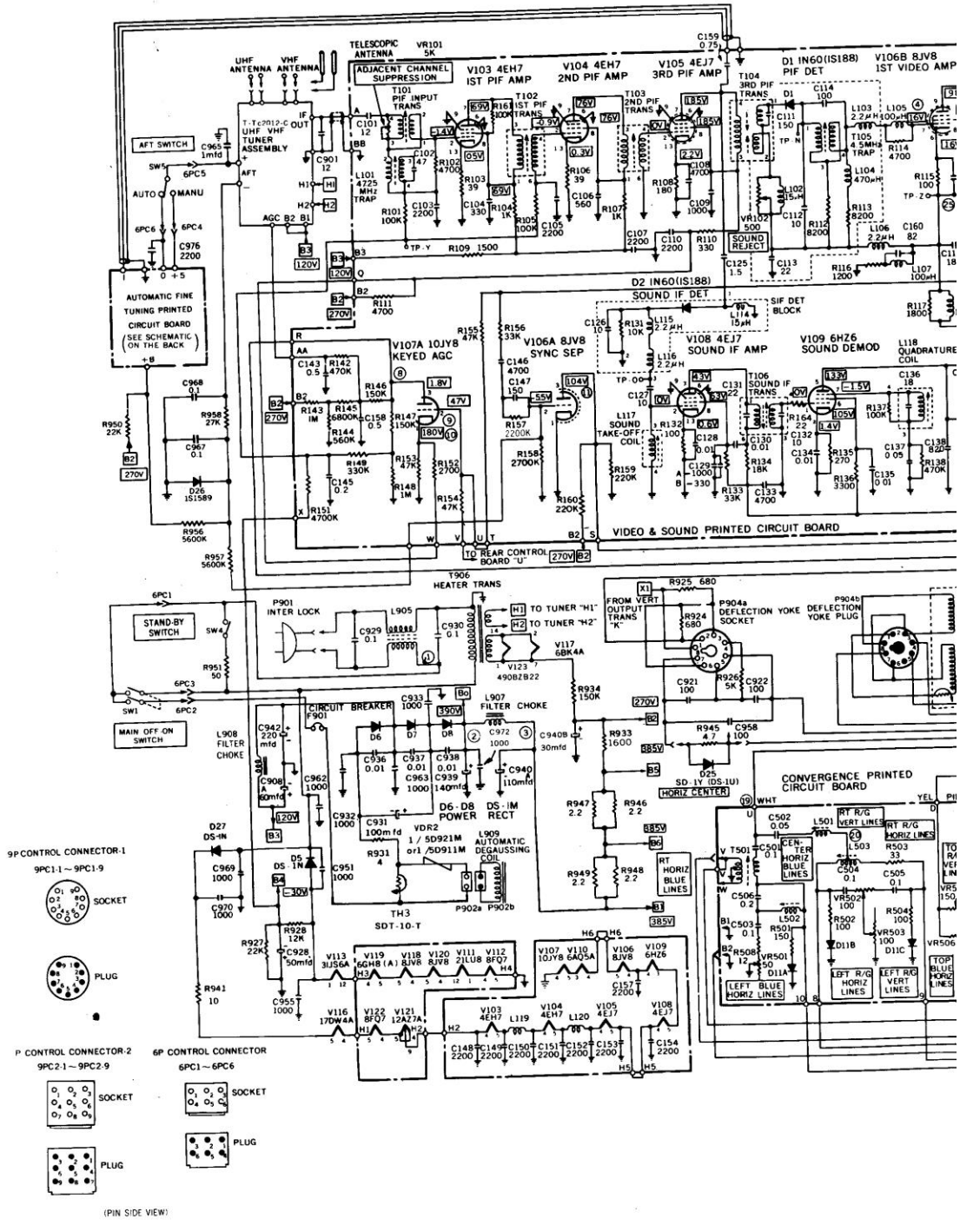
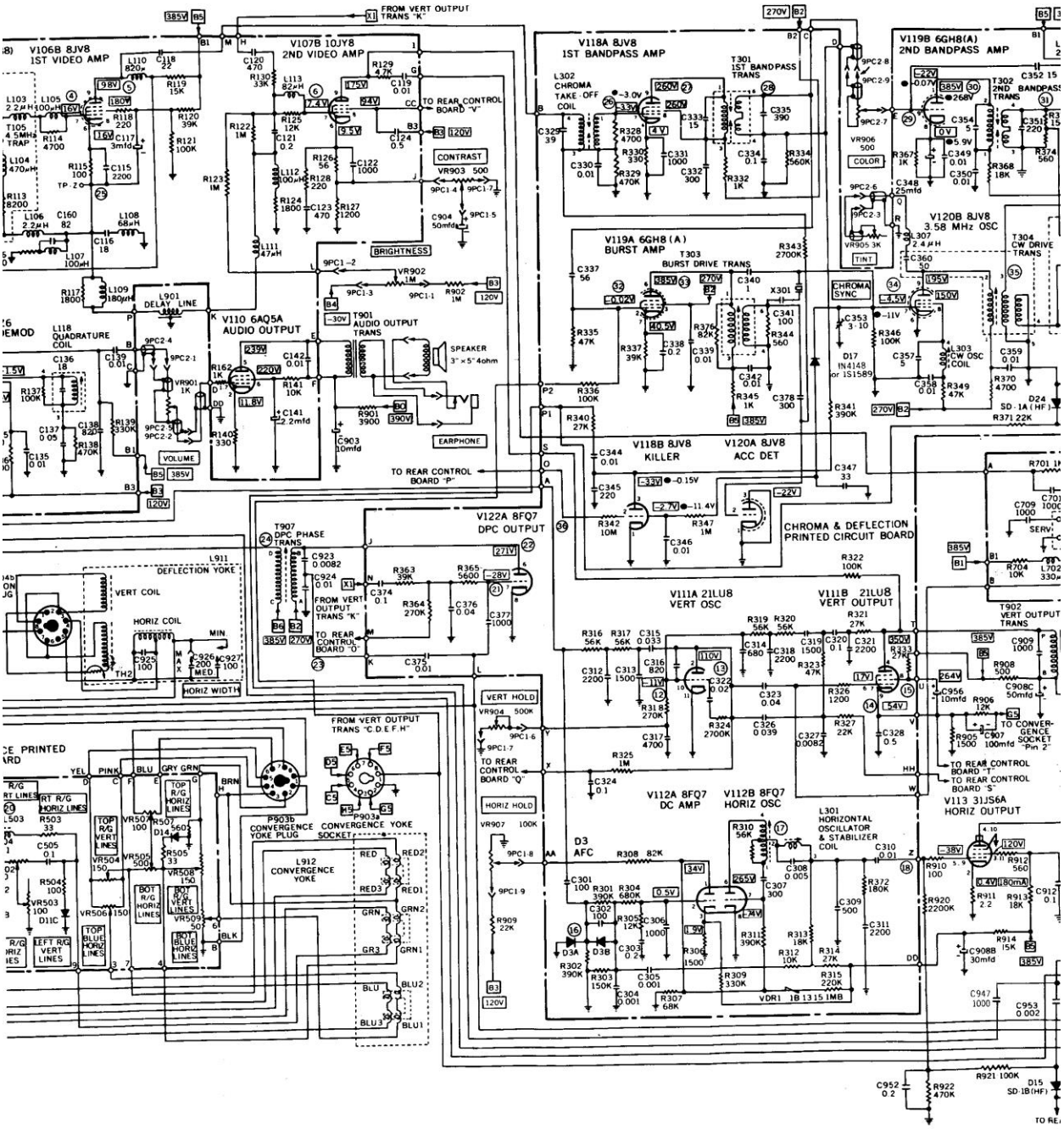
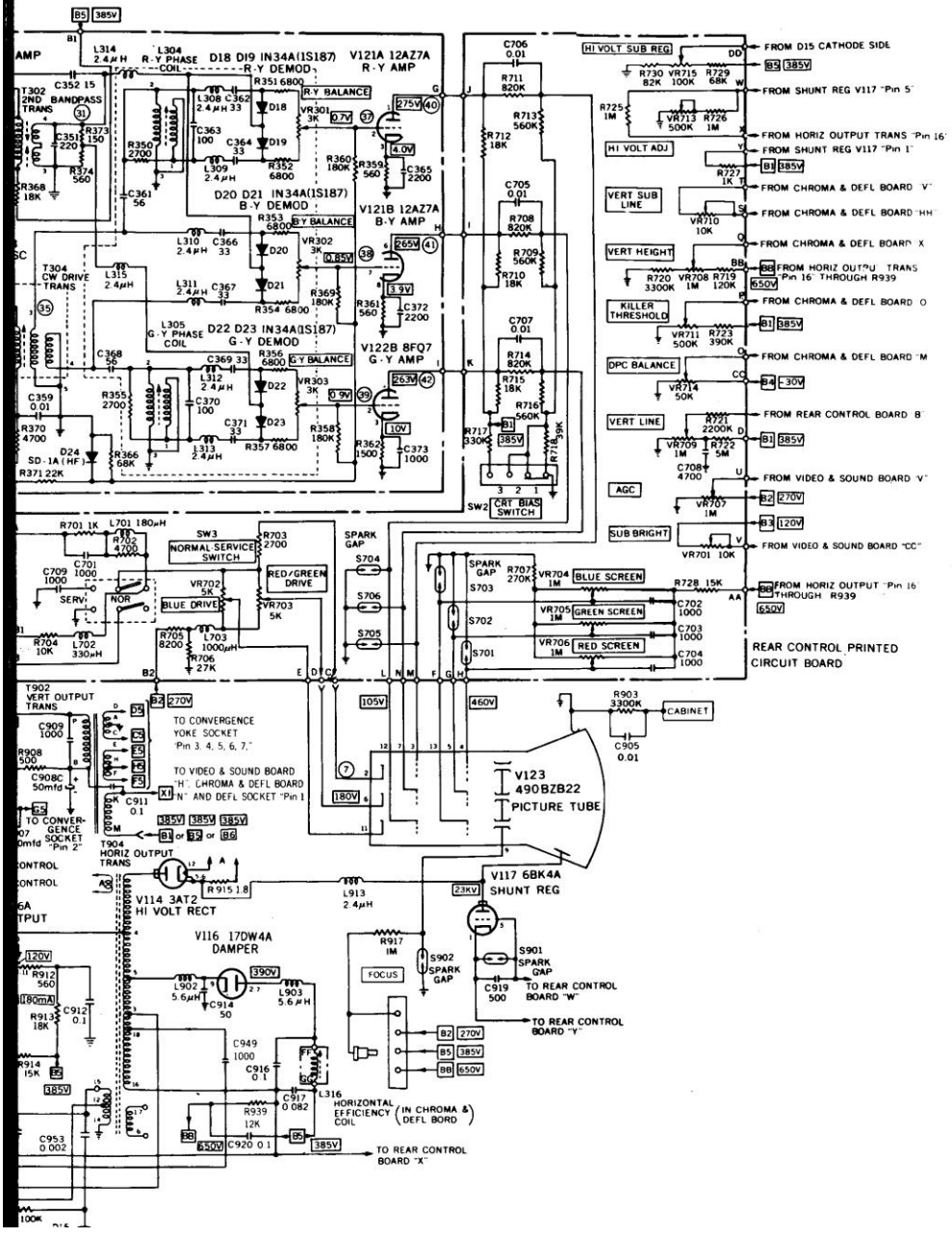
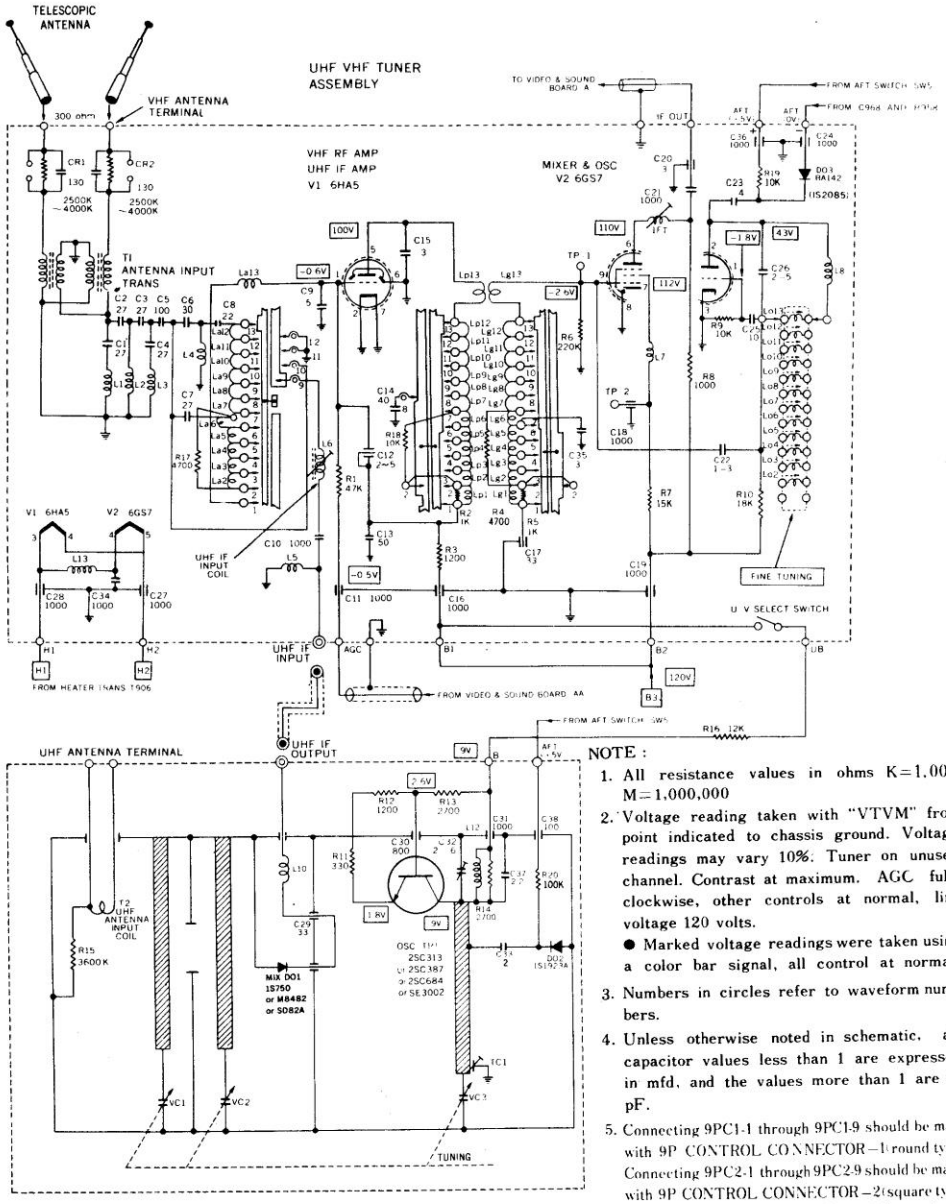

UHF ANTENNA
VHF ANTENNA
TELESCOPIC ANTENNA
VR101 5K
ADJACENT CHANNEL SUPPRESSION
V103 4EH7 IST PIF AMP
V104 4EH7 2ND PIF AMP
V105 4EJ7 3RD PIF AMP
D1 IN60(IS188) PIF DET
V106B 8JV8 1ST VIDEO AMP
T101 PIF INPUT TRANS
T102 1ST PIF TRANS
T103 2ND PIF TRANS
T104 3RD PIF TRANS
T-Tc2012-C UHF-VHF TUNER ASSEMBLY
AFT SWITCH
AUTO MANU
AUTOMATIC FINE TUNING PRINTED CIRCUIT BOARD (SEE SCHEMATIC ON THE BACK)
L101 4725 MHz TRAP
V107A 10JY8 KEYED AGC
V106A 8JV8 SYNC SEP
V108 4EJ7 SOUND IF AMP
V109 6HZ6 SOUND DEMOD
D2 IN60(IS188) SOUND IF DET
SIF DET BLOCK
L118 QUADRATURE COIL
L117 SOUND TAKE-OFF COIL
T106 SOUND IF TRANS
SOUND REJECT
VIDEO & SOUND PRINTED CIRCUIT BOARD
TO REAR CONTROL BOARD "U"
T906 HEATER TRANS
STAND-BY SWITCH
MAIN OFF-ON SWITCH
P901 INTER LOCK
TO TUNER "H1"
TO TUNER "H2"
V117 6BK4A
V123 490BZB22
FROM VERT OUTPUT TRANS "K"
P904a DEFLECTION YOKE SOCKET
P904b DEFLECTION YOKE PLUG
CIRCUIT BREAKER F901
L907 FILTER CHOKE
L908 FILTER CHOKE
D6-D8 POWER DS-IM RECT
VDR2 1/5D921M or1/5D911M
L909 AUTOMATIC DEGAUSSING COIL
TH3 SDT-10-T
D25 SD-1Y (DS-1U) HORIZ CENTER
CONVERGENCE PRINTED CIRCUIT BOARD
RT HORIZ BLUE LINES
RT R/G VERT LINES
RT R/G HORIZ LINES
LEFT BLUE HORIZ LINES
LEFT R/G HORIZ LINES
LEFT R/G VERT LINES
9P CONTROL CONNECTOR-1
9PC1-1 ~ 9PC1-9
SOCKET
PLUG
P CONTROL CONNECTOR-2
9PC2-1 ~ 9PC2-9
6P CONTROL CONNECTOR
6PC1 ~ 6PC6
(PIN SIDE VIEW)


V106B 8JV8
1ST VIDEO AMP
V107B 10JY8
2ND VIDEO AMP
V110 6AQ5A
AUDIO OUTPUT
V118A 8JV8
1ST BANDPASS AMP
V119A 6GH8(A)
BURST AMP
V118B 8JV8
KILLER
V120A 8JV8
ACC DET
V119B 6GH8(A)
2ND BANDPASS AMP
V120B 8JV8
3.58 MHz OSC
V122A 8FQ7
DPC OUTPUT
V111A 21LU8
VERT OSC
V111B 21LU8
VERT OUTPUT
V112A 8FQ7
DC AMP
V112B 8FQ7
HORIZ OSC
V113 31JS6A
HORIZ OUTPUT
CHROMA & DEFLECTION
PRINTED CIRCUIT BOARD
T301 1ST BANDPASS TRANS
T302 2ND BANDPASS TRANS
T303 BURST DRIVE TRANS
T304 CW DRIVE TRANS
T901 AUDIO OUTPUT TRANS
T902 VERT OUTPUT TRANS
T907 DPC PHASE TRANS
L301 HORIZONTAL OSCILLATOR & STABILIZER COIL
L302 CHROMA TAKE OFF COIL
L303 CW OSC COIL
L901 DELAY LINE
L911 DEFLECTION YOKE
L912 CONVERGENCE YOKE
P903a CONVERGENCE YOKE SOCKET
P903b CONVERGENCE YOKE PLUG
D3 AFC
D17 IN4148 or 1S1589
D24 SD-1A (HF)
D15 SD-1B (HF)
FROM VERT OUTPUT TRANS "K"
FROM VERT OUTPUT TRANS "C,D,E,F,H"
TO REAR CONTROL BOARD "V"
TO REAR CONTROL BOARD "P"
TO REAR CONTROL BOARD "Q"
TO REAR CONTROL BOARD "O"
TO REAR CONTROL BOARD "T"
TO REAR CONTROL BOARD "S"
TO CONVERGENCE SOCKET "Pin 2"
CONTRAST
BRIGHTNESS
VOLUME
EARPHONE
SPEAKER 3" x 5" 4ohm
VERT HOLD
HORIZ HOLD
HORIZ WIDTH
VERT COIL
HORIZ COIL
COLOR
TINT
CHROMA SYNC
VDR1 1B13 15 1MB

SIMPSONS-SEARS
CT3402CU,U



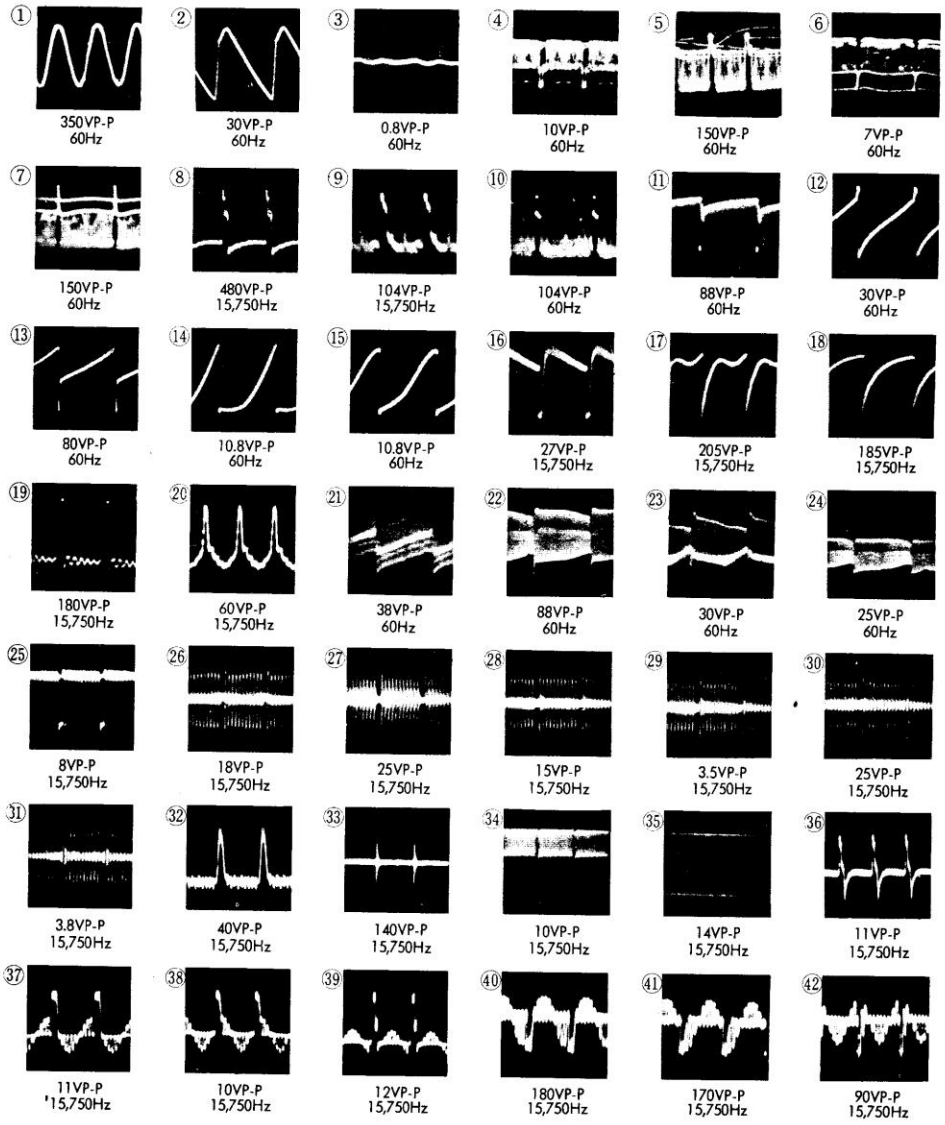


NOTE :

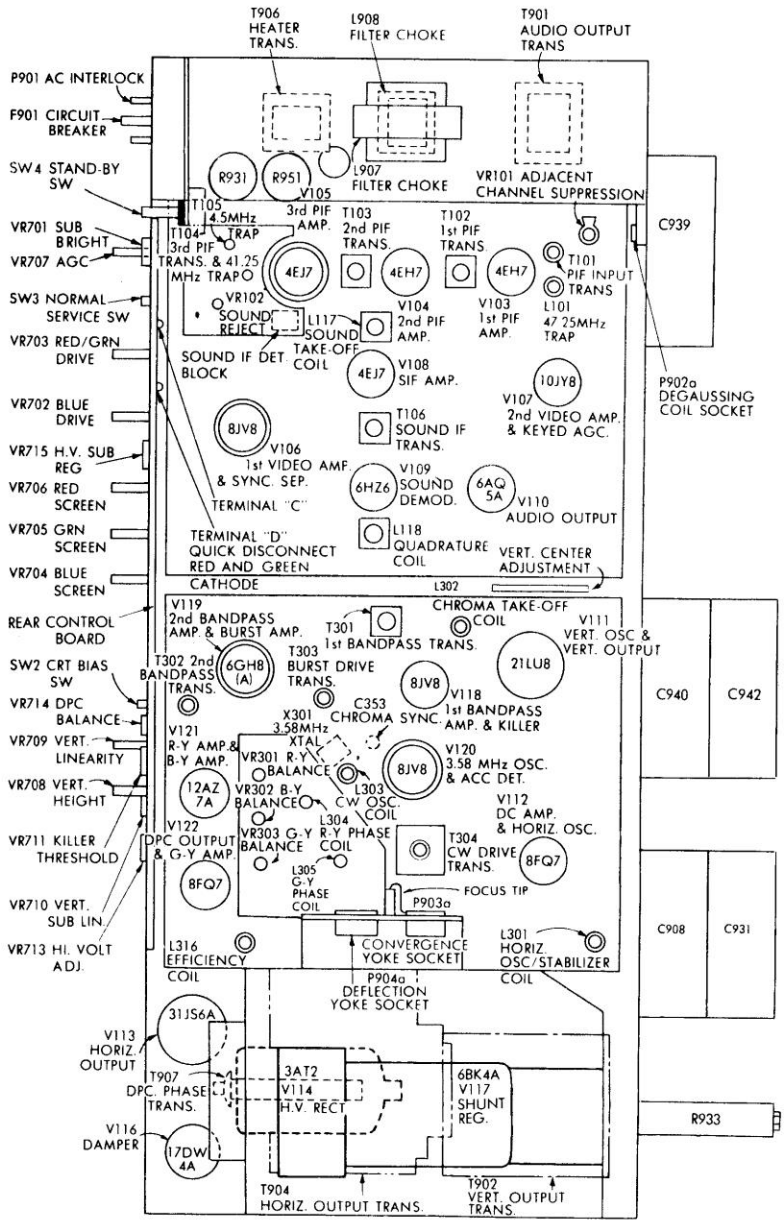
1. All resistance values in ohms K=1,000 M=1,000,000
2. Voltage reading taken with "VTVM" from point indicated to chassis ground. Voltage readings may vary 10%. Tuner on unused channel. Contrast at maximum. AGC fully clockwise, other controls at normal, line voltage 120 volts.
   - Marked voltage readings were taken using a color bar signal, all control at normal.
3. Numbers in circles refer to waveform numbers.
4. Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in mfd, and the values more than 1 are in pF.
5. Connecting 9PC1-1 through 9PC1-9 should be made with 9P CONTROL CONNECTOR-1(round type) Connecting 9PC2-1 through 9PC2-9 should be made with 9P CONTROL CONNECTOR-2(square type) Connecting 6PC1 through 6PC6 should be made with 6P CONTROL CONNECTOR.
   -< mark indicates plug, >- mark indicates socket. Connector pins location are as shown in the following diagram.

WAVEFORM NOTES

1. All waveforms were taken using a wide band oscilloscope and low capacity probe.
2. Waveforms 1 through 24 were taken using an air signal.
3. Waveforms 25 through 42 were taken using a color bar generator signal.
4. All waveforms measured with strong signal input. Contrast and AGC set to give normal picture. Line voltage 120 volts.

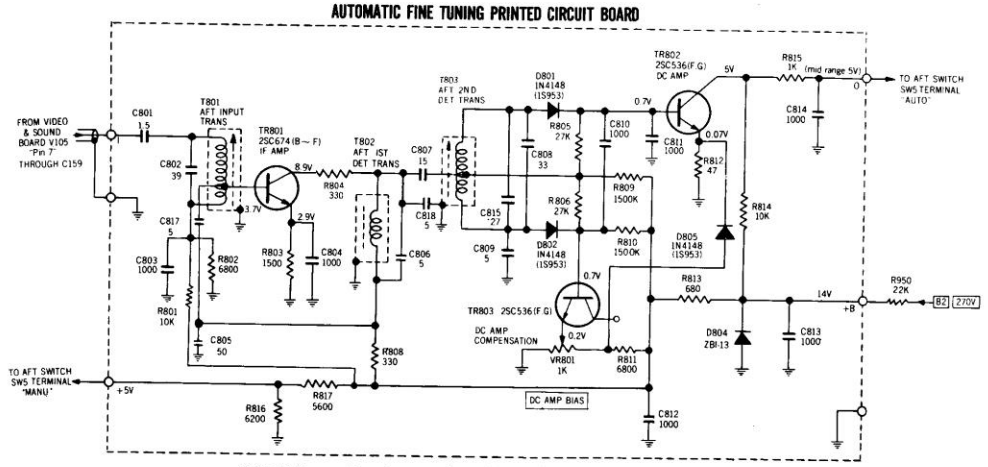


PARTS LOCATION



CHASSIS TOP VIEW

AUTOMATIC FINE TUNING PRINTED CIRCUIT BOARD



NOTE: Voltage readings shown are taken with AFT switch in MANUAL and when voltage of AFT printed circuit board terminal "O" reads 5V by rotating FINE TUNING.

Schematic Location	Part Number	Description
	TRANSFORMERS AND COILS	
T101	T-S1822A	Transformer, PIF Input
T102	T-S1056A	Transformer, 1st PIF
T103	T-S1077	Transformer, 2nd PIF
T104	T-S1055A	Transformer, 3rd PIF & 41.25MHz Trap
T105	T-S2028A	Transformer, 4.5MHz Trap
T106	T-S2026A	Transformer, Sound IF
T301	T-S3019	Transformer, 1st Bandpass
T302	T-S3018	Transformer, 2nd Bandpass
T303	T-S3503	Transformer, Burst Drive
T304	T-S3302	Transformer, CW Drive
T501	T-A38	Transformer, Right Horiz. Blue Lines
T801	T-S1085	Transformer, AFT Input
T802	T-S1086	Transformer, AFT 1st Det.
T803	T-S1087	Transformer, AFT 2nd Det.
T901	T-V111	Transformer, Audio Output
T902	T-W39	Transformer, Vert. Output
T904	T-F122a-N (CT3402U)	Transformer, Horiz. Output
	T-F122a-C-N (CT3402CU)	Transformer, Horiz. Output
T906	T-P67-UC	Transformer, Heater
T907	T-A47	Transformer, DPC Phase
L101	T-S1534A	Coil, 47.25MHz Trap
L102	T-L156	Coil, Peaking, 15μH
L103, L106	T-L7100	Coil, Filter, fo =83MHz, 2.2μH (Included in SIF Det. Block)
L104	T-HLF470	Coil, Peaking, 470μH
L105, L107, L112	T-HLF100	Coil, Peaking, 100μH
L108	T-HLF68	Coil, Peaking, 68μH
L109, L701	T-HLF180	Coil, Peaking, 180μH
L110	T-HLF820	Coil, Peaking, 820μH
L111	T-HLF47	Coil, Peaking, 47μH
L113	T-HLF82	Coil, Peaking, 82μH
L114	T-L156	Coil, Peaking, 15μH (Included in SIF Det. Block)
L115, L116	T-L7100	Coil, Filter, fo =83MHz, 2.2μH (Included in SIF Det. Block)
L117	T-S2025A	Coil, Sound Take-Off
L118	T-S2027A	Coil, Quadrature
L119, L120	T-L3001	Coil, Choke
L301	T-A41	Coil, Horizontal Oscillator/Stabilizer
L302	T-S3020	Coil, Chroma Take-Off
L303	T-S3819	Coil, CW Oscillator
L304, L305	T-S3802	Coil, R-Y & G-Y Phase
L307, L308, L309, L310, L311, L312, L313, L314, L315, L913	T-L7096	Coil, Filter, fo =70MHz, 2.4μH
L316	T-A99	Coil, Horizontal Efficiency
L501	T-A36	Coil, Right R/G Vert. Lines
L502	T-A40	Coil, Center Horiz. Blue Lines
L503	T-A37	Coil, Right R/G Horiz. Lines
L702	T-HLF330	Coil, Peaking, 330μH
L703	T-HLF1000	Coil, Peaking, 1000μH
L901	T-L7101	Coil, Delay Line
L902, L903	T-L7103	Coil, Filter, fo =68MHz, 5.6μH
L905	T-L14	Coil, Filter
L907	T-B25A	Choke, Filter
L908	T-B30	Choke, Filter
L909	T-L7086	Coil, Automatic Degauss
L911	T-D81A-UC-25N	Deflection Yoke
L912	T-D89AS-UC-46	Convergence Yoke
	TRANSISTORS AND DIODES	
D1	T-E1031 or T-E1014	Diode, 1S188, PIF Det. or Diode, IN60, PIF Det.
D2	T-E1031 or T-E1014	Diode, 1S188, Sound Det. (Included in SIF Det. Block) or Diode, IN60, Sound Det.
D3	T-E1086	Diode, AFC
D5, D27	T-E1122	Diode, DS-1N, Voltage Dropper, Heater
D6, D7, D8	T-E1089	Diode, DS-1M, Power Rectifier
D9, D10	T-E1024D or T-E1024A	Diode, 1S315, Rectifier, Degausser or Diode, FRIMD, Rectifier, Degausser
D11	T-E1088	Rectifier, Selenium, Convergence
D14	T-E1011	Rectifier, Selenium, Convergence
D15	T-E1064	Diode, SD-1B (HF), High Volt Sub Regulator
D17	T-E1098 or T-E1118	Diode, 1S1589, Killer or Diode, 1N4148, Killer
D18, D19	T-E1105 or T-E1116	Diode, 1N34A, R-Y Balance or Diode, 1S187, R-Y Balance
D20, D21	T-E1105 or T-E1116	Diode, 1N34A, B-Y Balance or Diode, 1S187, B-Y Balance
D22, D23	T-E1105 or T-E1116	Diode, 1N34A, G-Y Balance or Diode, 1S187, G-Y Balance
D24	T-E1029	Diode, SD-1A (HF), Blanker
D25	T-E1102 or T-E1108	Diode, SD-1Y, Horizontal Center or Diode, DS-1U, Horizontal Center
D26	T-E1098	Diode, 1S1589, AFT Diode Bias
D801, D802	T-E1118 or T-E1119	Diode, 1N4148, AFT FM Detector or Diode, 1S953, AFT FM Detector
D804	T-E1106	Diode, ZB1-13, Voltage Regulation
D805	T-E1118 or T-E1119	Diode, 1N4148, DC Amp. Compensation or Diode, 1S953, DC Amp. Compensation
TR801	T-G5055	Transistor, 2SC674 (B-F), AFT IF Amp.
TR802	T-Q5053	Transistor, 2SC536 (F-G), AFT DC Amp.
TR803	T-G5053	Transistor, 2SC536 (F-G), DC Amp. Compensation
	SWITCHES	
SW1	T-E2735	Switch, Main Off-On
SW2	T-E2306-N	Switch, CRT Bias
SW3	T-E0201d-N	Switch, Normal-Service
SW4	T-E2606	Switch, Stand-By
SW5	T-E2608	Switch, AFT

PRELIMINARY I.F. AND TRAP ADJUSTMENT

GENERAL ..... Set channel selector to channel 13 or highest unused channel. Picture I.F. shields and I.F. tube shields must be in place. Disable the horizontal sweep section of the receiver. (See General Alignment Instructions)

BIAS SUPPLY ..... Apply –5V I.F. bias to TP-Y on Video and Sound Board.
Apply –10V R.F. bias to terminal "AA" on Video and Sound Board.

MARKER GENERATOR ..... Connect in series with input matching pad (SELECT SWITCH in "B" position) shown in Figure 15 to TP-1 on tuner. (Use marker output only, marker function in external position. Marker Modulation On.)

OSCILLOSCOPE ..... Connect in series with a 10K ohm resistor to TP-Z on Video and Sound Board. Use direct probe.

See "General Alignment Instructions" Before Attempting Alignment

	STEP	MARKER GENERATOR	ADJUST	REMARKS
1.	Adjust adjacent sound trap	47.25 MHz	L101 VR101	Alternately adjust L101 and VR101 for minimum response. Start with VR101 at about 60° clockwise from fully counter-clockwise position. Keep core at bottom end of coil.
2.	Adjust sound trap	41.25 MHz	T104 (top) VR102	Alternately adjust T104 (top) and VR102 for minimum response. Start with VR102 at about 150° clockwise from fully counterclockwise position. Keep core at top end of coil.
3.	Peak align mixer plate coil, PIF input and 3rd PIF transformer	44 MHz	IFT T101 T104 (bottom)	Reduce signal input and scope gain. Adjust for maximum response. Keep cores at bottom end of coil. Reduce signal input further to insure against overload. Signal reduction must result in reduced scope deflection.
4.	Peak align 1st PIF transformer	45 MHz	T102	
5.	Peak align 2nd PIF transformer	42 MHz	T103	

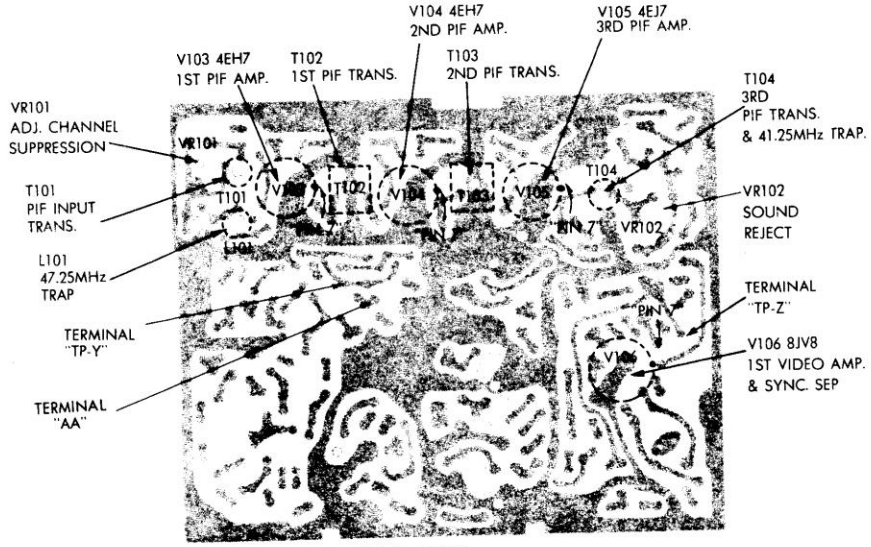


Figure 16 - I.F ADJUSTMENT TEST POINTS