

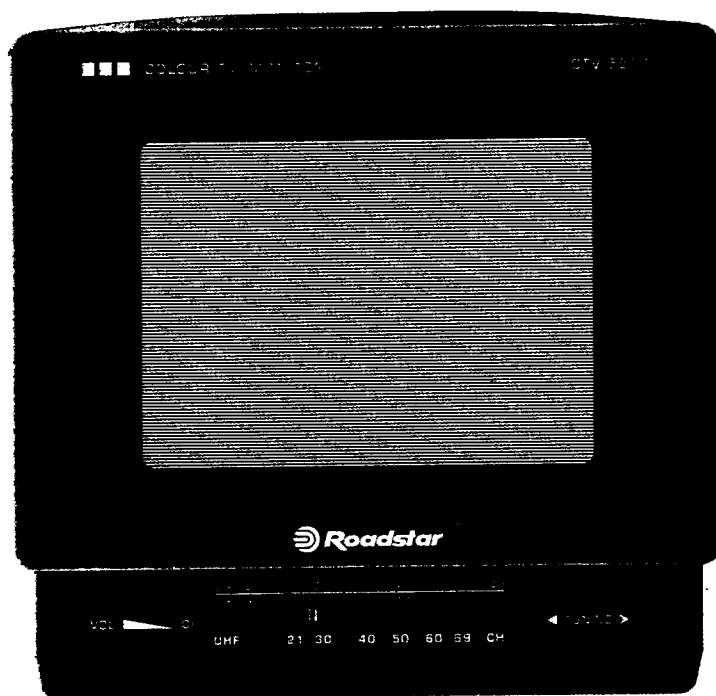


ServiceManual

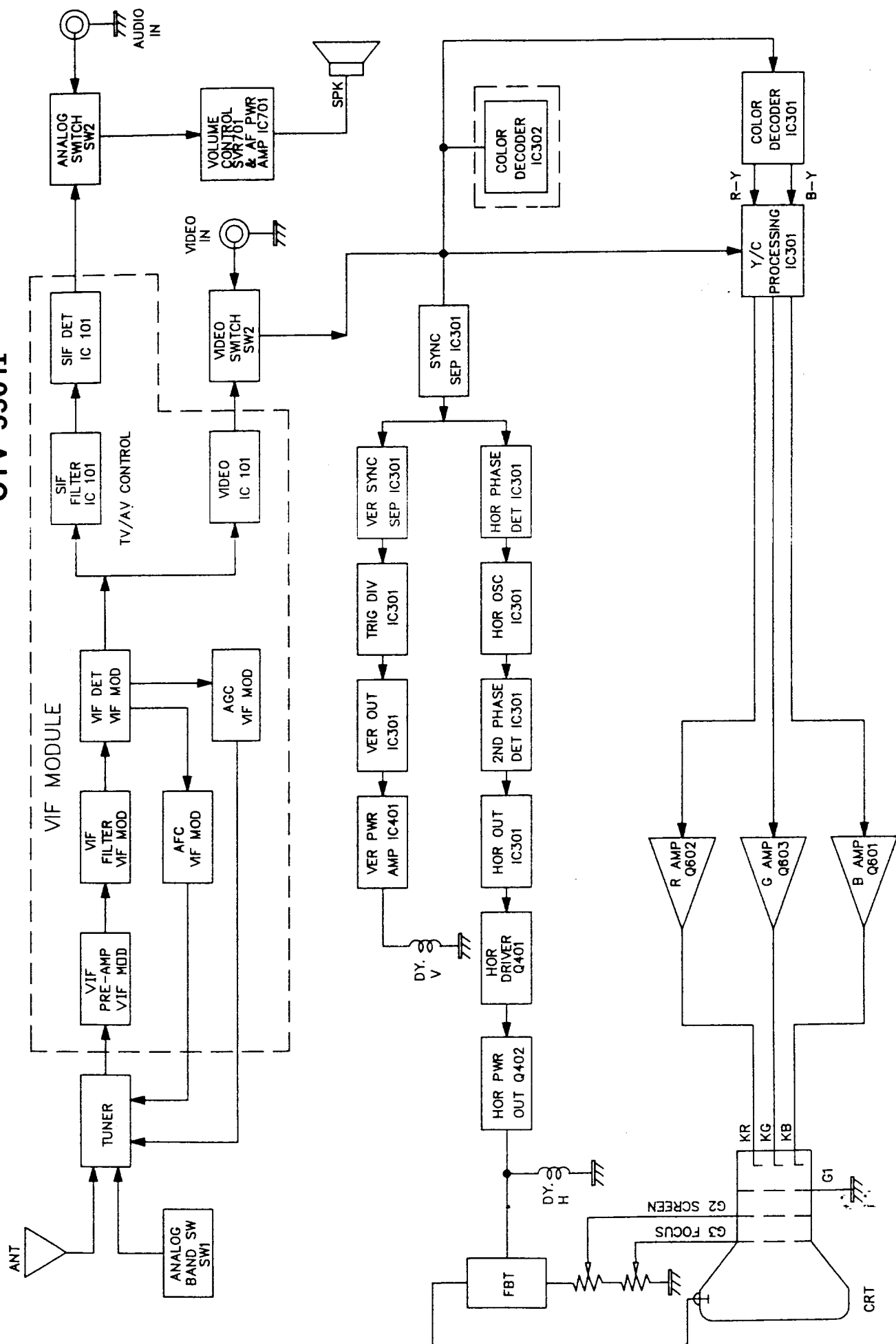
6 INCH COLOUR TV+MONITOR

CTV 5501

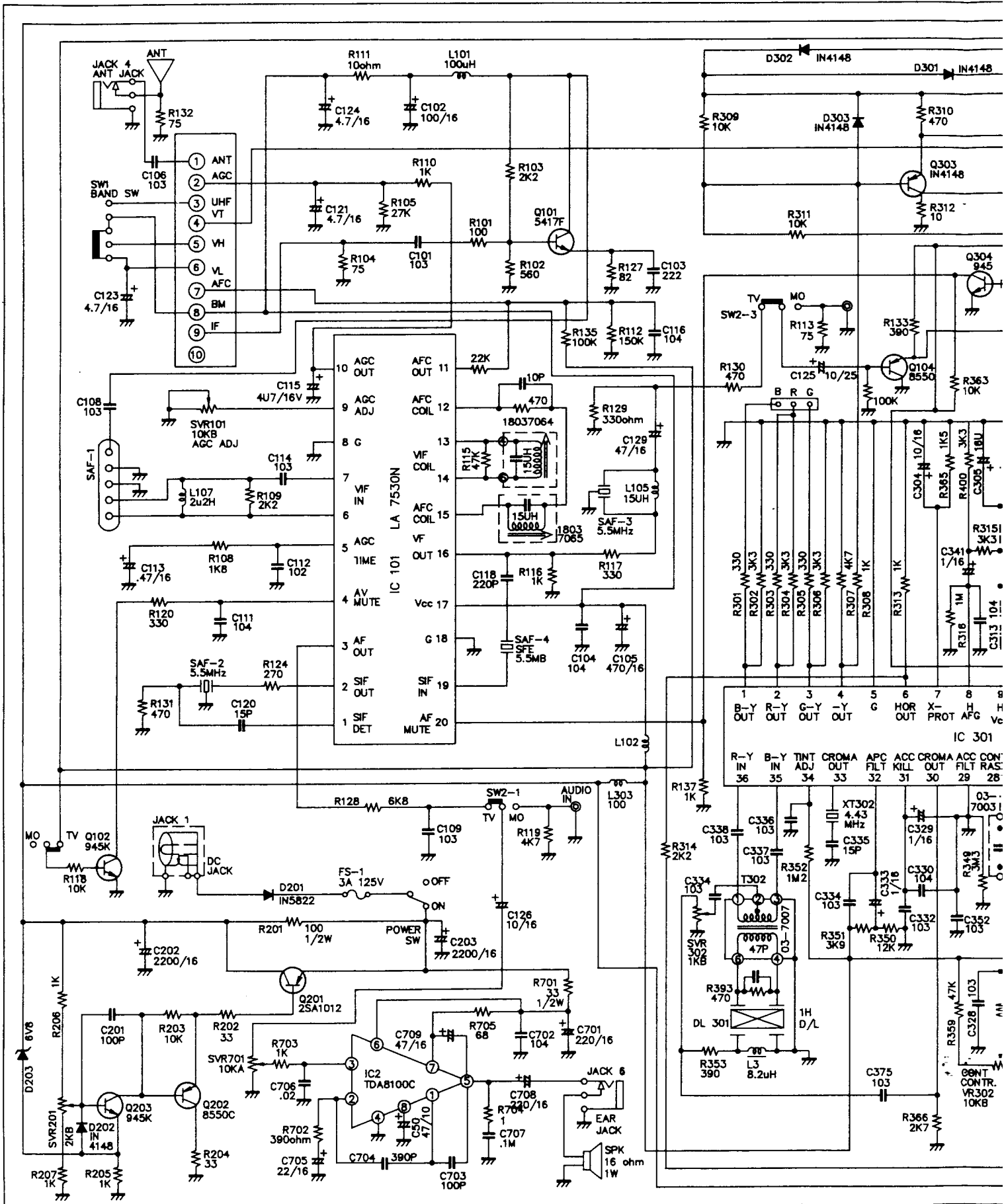
CTV 5501I



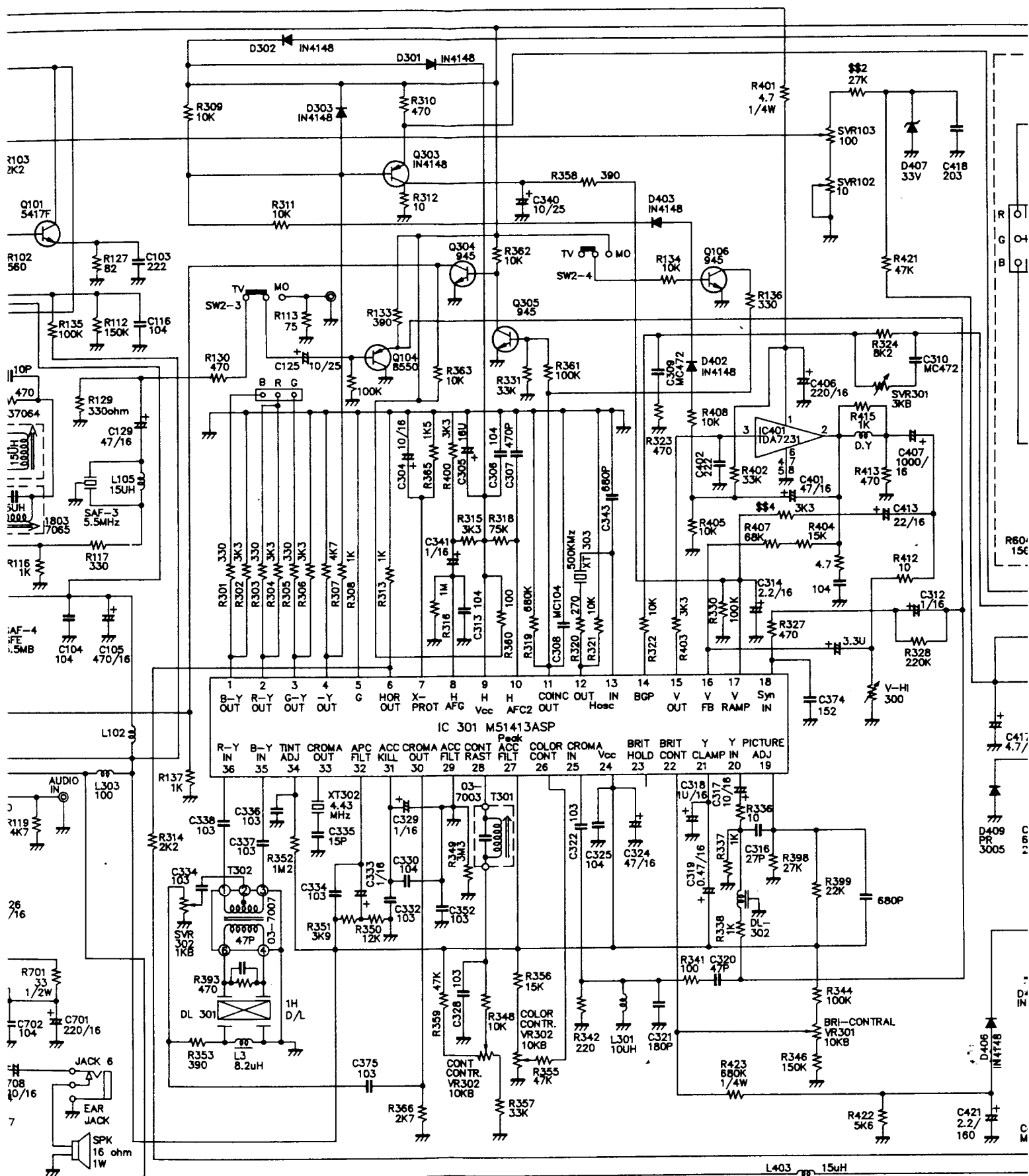
BLOCK DIAGRAM OF CTV 5501 CTV 5501I



TV SCHEMATIC DIAGRAM



TV SCHEMATIC DIAGRAM OF CTV 5501 CTV 5501I



The schematic diagram illustrates the internal circuitry of a television set, organized into several functional blocks:

- Control Section:** Features the 51413ASP integrated circuit, which manages various control functions. It includes pins for H AFC2 OUT, COINC OUT, HOSC, BGP, V OUT, FB, RAMP, and Syn IN. Control knobs for COLOR CONTR. (VR302), CROMA (VR301), and Y PICTURE ADJ. are connected to the circuit.
- Video Section:** Utilizes the TDA7231 integrated circuit for video processing. It includes pins for Y CLAMP IN, Y PICTURE ADJ., and various other video-related inputs and outputs.
- Power Section:** Includes a power transformer with multiple secondary windings (labeled 1, 2, 6, 8, 9) for different voltage requirements. A full-wave bridge rectifier (D408) and a filter capacitor (C410) are used to convert AC to DC. The power supply is regulated by a 3.3V Zener diode (D401) and a 15V Zener diode (D402).
- Picture Tube Section:** A 14-inch picture tube is shown, with its internal structure and various pins (R, G, B, FBT, H.V., SCREEN VR, FOCUS VR) connected to the external circuitry.
- Other Components:** The diagram includes numerous resistors (R1 through R420), capacitors (C1 through C420), and diodes (D1 through D408). A 15uH line coil (L403) is also present.

ELECTRICAL SPECIFICATION OF CTV 5501

SUPPLY VOLTAGE : DC 12V OUTPUT: 50 mW
 LOAD : 16 ohm
 GENERAL INFORMATION : TV 75 OHM INPUT ANT. SIFE VOLTAGE 0 dB =1uV

DESCRIPTION		UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
VL BAND										
TUNING RANGE	HIGH	MHZ	62.25	65.0						
	LOW	MHZ	48.25	45.0						
MAX/USABLE SENS	CH - 2	dB	32/46	26 /40	/	/	/	/	/	/
	CH - 3	dB	32/46	26 /40	/	/	/	/	/	/
	CH - 4	dB	32/46	26 /40	/	/	/	/	/	/
IF REJ.	CH - 3	dB	40	50						
IMAGE REJ.	CH - 3	dB	40	50						
DIAL CALIB.	CH - 2	MHZ	± 7							
	CH - 3	MHZ	± 7							
	CH - 4	MHZ	± 7							
VH BAND										
TUNING RANGE	HIGH	MHZ	224.25	226.0						
	LOW	MHZ	175.25	170.0						
MAX/USABLE SENS	CH - 5	dB	32/46	26 /40	/	/	/	/	/	/
	CH - 9	dB	32/46	26 /40	/	/	/	/	/	/
	CH - 12	dB	32/46	26 /40	/	/	/	/	/	/
IF REJ.	CH - 9	dB	50	60						
IMAGE REJ.	CH - 9	dB	40	50						
DIAL CALIB.	CH - 5	MHZ	± 7							
	CH - 9	MHZ	± 7							
	CH - 12	MHZ	± 7							

ELECTRICAL SPECIFICATION OF CTV 5501

DESCRIPTION		UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
UHF BAND										
TUNING RANGE	HIGH	MHZ	855.25	857.0						
	LOW	MHZ	471.25	468.0						
MAX/USABLE SENS	CH - 21	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 30	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 40	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 50	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 60	dB	36/52	30 / 46	/	/	/	/	/	/
IF REJ.	CH - 40	dB	40	50						
IMAGE REJ.	CH - 40	dB	40	50						
DIAL CALIB.	CH - 14	CH	± 4							
	CH - 30	CH	± 4							
	CH - 40	CH	± 4							
	CH - 50	CH	± 4							
	CH - 60	CH	± 4							
ADJ. PIX. ATT.		dB	20	30						
ADJ. SND. ATT.		dB	20	30						
SELF. SND. ATT.		dB	20±6							
CONTRAST RANGE		dB	4	6						
SOUND										
MAX. OUTPUT		mW	500	600						
THD. OUTPUT 10 %		mW	500	600						
REF. THD		%	5	3						
S / N		dB	30	35						
AM SUPP.		dB	25	30						
MIN. HUM		mV	30	15						
RESPONSE FH 6 KHZ		dB	-3±10	-3±3						
	FL 125 HZ	dB	-3±6	-3±3						
SIF. FREQ. ERROR		KHZ	±100							
LIMIT SENS.		dB	80	70						

ELECTRICAL SPECIFICATION OF CTV 5501

DESCRIPTION		UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
PICTURE										
HOR . FREQ .		HZ	± 500	0						
HOR. PULL-IN	+	HZ	300	600						
	-	HZ	300	600						
VERT. RANGE	+	HZ								
	-	HZ								
LINEARITY	VERT.	%	20	15						
	HOR.	%	25	15						
PINCUSHION	DIST.	%	2	1						
BARREL	DIST.	%	2	1						
KEYSTANE	DIST.	%	2	1						
V /H	RATIO	%	100 ± 5	100						
LUMINANCE	MAX	lux	80	100						
	MIN	lux	50	30						
VA TEST										
H. V.	MAX	KV	13 ± 1	13						
H. V.	MIN	KV	12 ± 1	12						
BEAM CURRENT	MAX	μA	60	50						
BEAM CURRENT	MIN	μA	15	0						
REG. VOLTAGE		V	$11 \pm .2$	11						
DELAY AGC. VOLTAGE		V	$6 \pm .5$	6						
REG. RIPPLE VOLTAGE		mV	30	15						
DC CONSUMPTION		W	20	17						
AC CONSUMPTION		W	35	30						

ELECTRICAL SPECIFICATION OF CTV 5501I

OUTPUT: 50 mW
 LOAD : 16 ohm
 SUPPLY VOLTAGE : DC 1.2V
 GENERAL INFORMATION : TV 75 OHM INPUT ANT. S.I.F.E VOLTAGE 0 dB =1uV

DESCRIPTION	UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
VL BAND									
TUNING RANGE	HIGH	MHZ	82.25	85.0					
	LOW	MHZ	53.25	50.0					
MAX/USABLE SENS	CH - A	dB	32/46	26 /40	/	/	/	/	/
	CH - B	dB	32/46	26 /40	/	/	/	/	/
	CH - C	dB	32/46	26 /40	/	/	/	/	/
IF REJ.	CH - B	dB	40	50					
IMAGE REJ.	CH - B	dB	40	50					
DIAL CALIB.	CH - A	MHZ	± 7						
	CH - B	MHZ	± 7						
	CH - C	MHZ	± 7						
VH BAND									
TUNING RANGE	HIGH	MHZ	224.25	226.0					
	LOW	MHZ	175.25	170.0					
MAX/USABLE SENS	CH - D	dB	32/46	26 /40	/	/	/	/	/
	CH - H	dB	32/46	26 /40	/	/	/	/	/
	CH - H2	dB	32/46	26 /40	/	/	/	/	/
IF REJ.	CH - H	dB	50	60					
IMAGE REJ.	CH - H	dB	40	50					
DIAL CALIB.	CH - D	MHZ	± 7						
	CH - H	MHZ	± 7						
	CH - H2	MHZ	± 7						

ELECTRICAL SPECIFICATION OF CTV 5501I

DESCRIPTION		UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
UHF BAND										
TUNING RANGE	HIGH	MHZ	855.25	857.0						
	LOW	MHZ	471.25	468.0						
MAX./USABLE SENS	CH - 21	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 30	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 40	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 50	dB	36/52	30 / 46	/	/	/	/	/	/
	CH - 60	dB	36/52	30 / 46	/	/	/	/	/	/
IF REJ.	CH - 40	dB	40	50						
IMAGE REJ.	CH - 40	dB	40	50						
DIAL CALIB.	CH - 14	CH	± 4							
	CH - 30	CH	± 4							
	CH - 40	CH	± 4							
	CH - 50	CH	± 4							
	CH - 60	CH	± 4							
ADJ. PIX. ATT.		dB	20	30						
ADJ. SND. ATT.		dB	20	30						
SELF. SND. ATT.		dB	20±6							
CONTRAST RANGE		dB	4	6						
SOUND										
MAX. OUTPUT		mW	500	600						
THD. OUTPUT 10 %		mW	500	600						
REF. THD		%	5	3						
S / N		dB	30	35						
AM SUPP.		dB	25	30						
MIN. HUM		mV	30	15						
RESPONSE FH 6 KHZ FL 125 HZ		dB	-3±10	-3±3						
		dB	-3±6	-3±3						
SIF. FREQ. ERROR		KHZ	±100							
LIMIT SENS.		dB	80	70						

ELECTRICAL SPECIFICATION OF CTV 5501I

DESCRIPTION		UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
PICTURE										
HOR . FREQ .		HZ	± 500	0						
HOR. PULL-IN	+	HZ	300	600						
	-	HZ	300	600						
VERT. RANGE	+	HZ								
	-	HZ								
LINEARITY	VERT.	%	20	15						
	HOR.	%	25	15						
PINCUSHION	DIST.	%	2	1						
BARREL	DIST.	%	2	1						
KEYSTANE	DIST.	%	2	1						
V / H	RATIO	%	100 ± 5	100						
LUMINANCE	MAX	lux	80	100						
	MIN	lux	50	30						
VA TEST										
H. V.	MAX	KV	13 ± 1	13						
H. V.	MIN	KV	12 ± 1	12						
BEAM CURRENT	MAX	μA	60	50						
BEAM CURRENT	MIN	μA	15	0						
REG. VOLTAGE		V	$11 \pm .2$	11						
DELAY AGC. VOLTAGE		V	$6 \pm .5$	6						
REG. RIPPLE VOLTAGE		mV	30	15						
DC CONSUMPTION		W	20	17						
AC CONSUMPTION		W	35	30						

ALIGNMENT PROCEDURE

CTV 5501
CTV 5501I

REGULATOR ADJUSTMENT

1. CONNECT TV TO AC 220V. (AC ONLY)
2. ADJUST VERTICAL AND HORIZONTAL OSCILLATOR CONTROLS UNTIL DISPLAY IS SYCHRO.
3. CONNECT A DC DIGITAL VOLTMENTER OR OTHER PRECISION ACCURACY VOLTMETER TO THE COLLECTOR OF THE REGULATOR OUTPUT TRANSISTOR Q205.

HORIZONTAL OSCILLATOR ADJUSTMENT

ADJUSTMENT

1. POWER ADJUSTMENT
ADJUST THE AC SWITCHING MODE POWER REGUIATOR, ENABLE VOLTMETER TO DC 12V.
2. VERTICAL HIGHTNESS ALIGNMENT
ADJUST THE VERTICAL HIGHTNESS SVR401 & SVR403, ENABLE THE CIRCLE OF PICTURE APPROACH TO CIRCLE.
3. HORIZONTAL POSITION ALIGNMENT
ADJUST HORIZONTAL POSITION SVR301, LET THE SQUARE SIGNAL IN THE CENTER OF THE SCREEN.
4. RF AGC ALIGNMENT
ADJUST RF AGC SVR201 AT INPUT SIGNAL INTENSITY 50dB, THE SCREEN COULD LOOKING CLEAR AND 80dB THE SCREEN DON'T INFLECT.
5. WHITE BALANCE ALIGNMENT
ADJUST THE SVR601, SVR603, AT CENTER POSITION. ADJUST SCREEN VR LET THE SCREEN WILL BE LITTLE BRIGHTNESS. ADJUST SVR603 LET THE SCREEN TO BE YELLOW, AND THEN ADJUST SVR601 LET THE SCREEN APPROACH TO WHITE.
6. FOCUS ADJUSTMENT
ADJUST FOCUS VR LET THE STRIP IN THE SCREEN TO BE CLEAR.
7. SCREEN ADJUSTMENT
ADJUST SCREEN VR LET THE BRIGHTNESS SUIT AS DESIRED.

CANCEL VENETIAN BLIND ALIGNMENT

- *SET TV/VIDEO SWITCH AT VIDEO.
- *THE VIDEO SIGNAL OF DEMODULATION PATTERN SEND TO VIDEO IN JACK.
- *THE DEMONDULATION PATTERN ON SCREEN IS FROM LEFT SIDE TO RIGHT SIDE.

GENERAL ALIGNMENT INSTRUCTIONS

CTV 5501
CTV 5501I

1. VIDEO IF ALIGNMENT

TEST EQUIPMENT CONNECTION (SEE FIGURE)

OSCILLOSCOPE: CONNECT TO THE BASE OF IC201 PIN16.

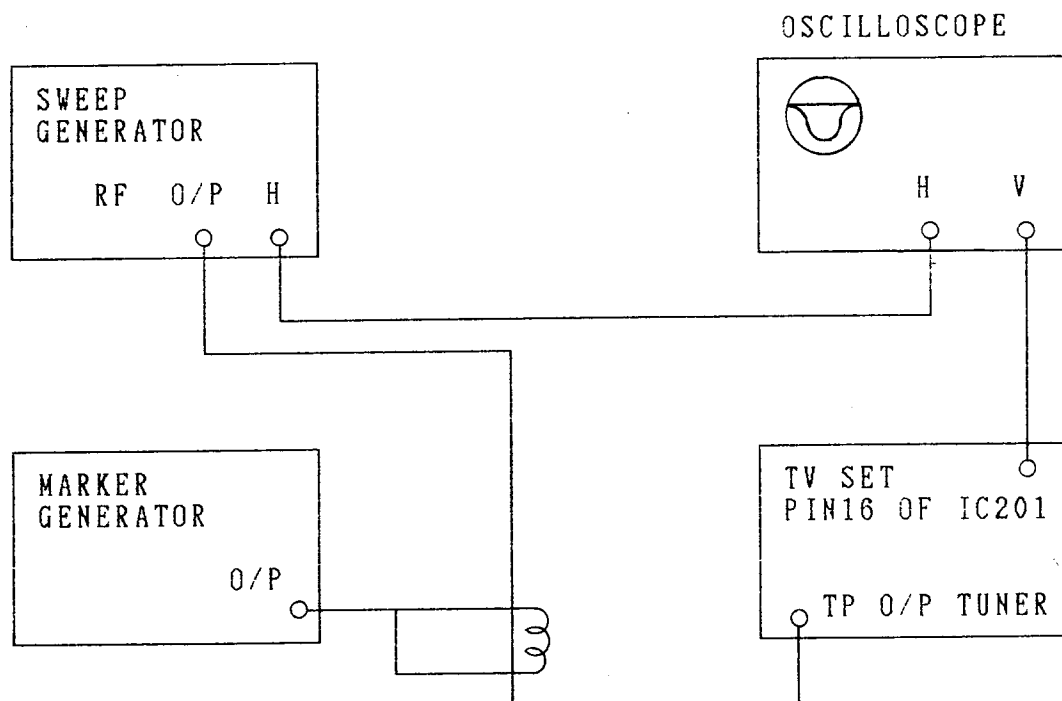
SWEEP GENERATOR: CONNECT THROUGH A MATCHING PAD TO THE TEST POINT (T.P) OF THE TUNER.

MARKER GENERATOR: COUPLE LOOSELY TO THE OUTPUT CABLE OF SWEEP GENERATOR.

DC SUPPLIES: CONNECT A SVR 1M OHM BETWEEN IC201 PIN17 AND GROUND.
ADD DC +12V AT DC JACK.

ADJUST SWEEP GENERATOR TO LOWEST SIGNAL LEVEL CONSISTENT WITH USABLE

STEP	SWEEP FREQUENCY	MARKER FREQUENCY	REMARK
1.) ADJUST VIF DETECTOR T104 FOR MARKER POINT MAXIMUM.	25-45 MHZ (45-65MHZ FOR JAPAN). 30-50MHZ FOR CCIR.	SYSTEM B,C,G,H 38.9MHZ SYSTEM I 36.9 MHZ, SYSTEM M,N 44MHZ (58.75MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	IN THE PARENTHESIS FOR EXCEPTION.
2.) ADJUST VIF DETECTOR T103 FOR MARKER POINT MAXIMUM.	25-45 MHZ (45-65 MHZ FOR JAPAN). 30-50MHz FOR CCIR.	SYSTEM B,C,G,H 38.9MHZ SYSTEM I 36.9 MHZ, SYSTEM M,N 44MHZ (58.75MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	IN THE PARENTHESIS FOR AFC CORRECTION.



VIDEO IF ALIGNMENT CONNECTING FIGURE

2. SOUND IF ALIGNMENT

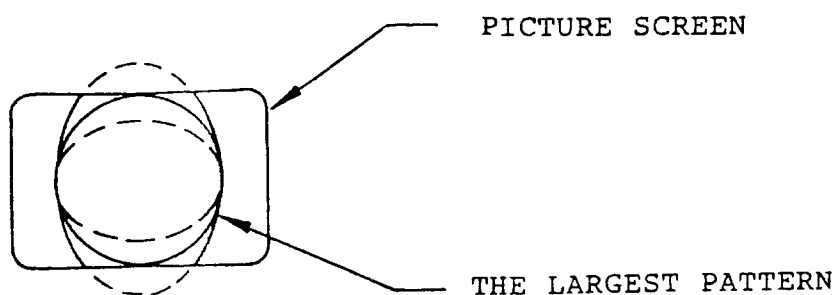
TEST EQUIPMENT CONNECTION

SIGNAL GENERATOR: CONNECT TO THE TEST POINT(T.P) OF TUNER THROUGH A MATCHING PAD.

2. VERTICAL DEFLECTION ALIGNMENT

- (1) TUNE THE RECEIVER IN A TEST PATTERN.
- (2) ADJUST V-SIZE CONTROL SVR401.

WHEN THE INSIDE OF THE LARGEST CIRCLE OF TEST PATTERN REACHES THE EDGE OF THE PICTURE SCREEN. (SEE THE FIGURE)



SECAM ALIGNMENT

A. CROMA SIGNAL FILTER ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH SECAM COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC302 PIN9.
3. ADJUST T303, MAKE WAVE FROM FLATNESS.

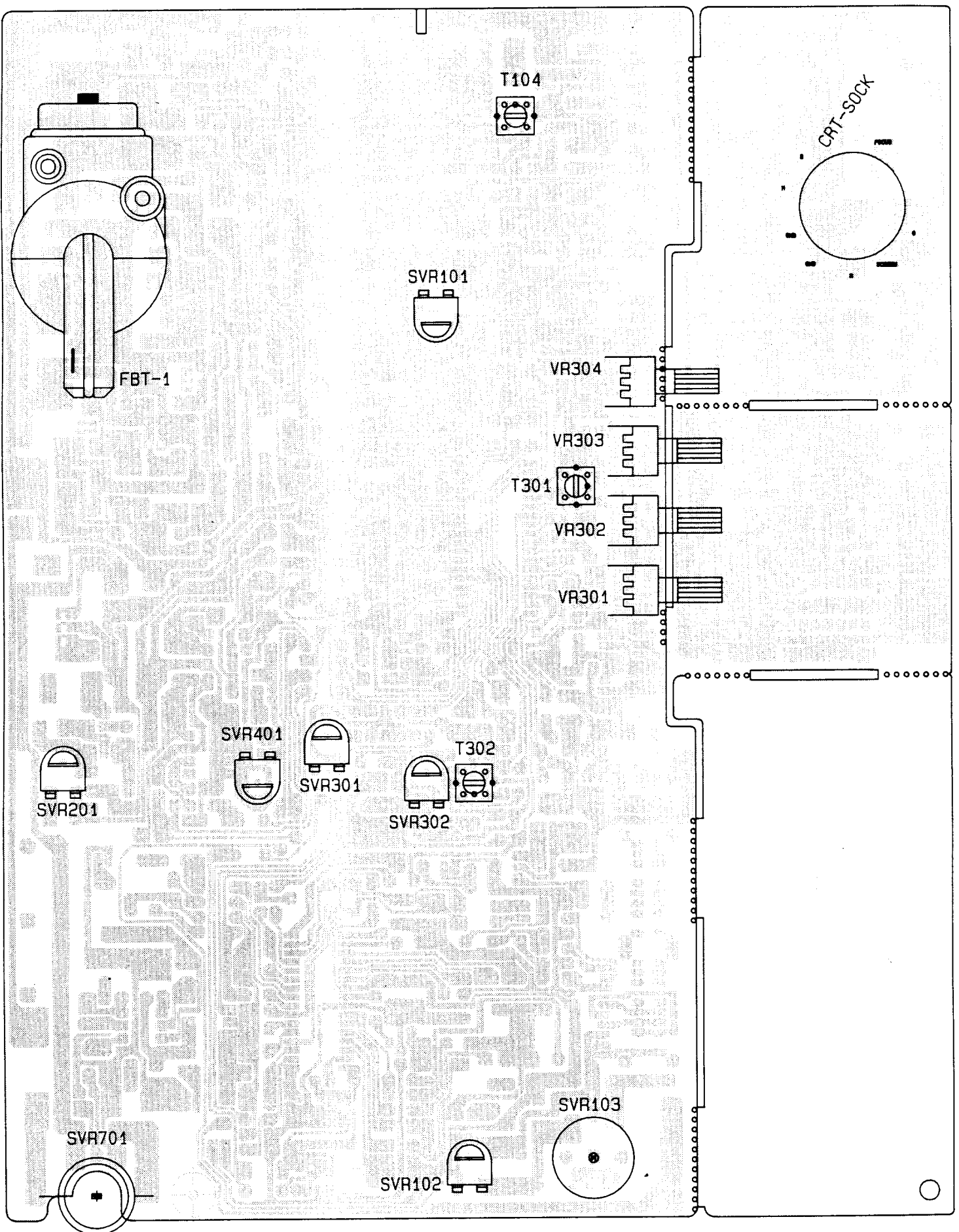
B. SECAM DEMODULATION ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH SECAM COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC302 PIN12.
3. ADJUST T304, SVR306, MAKE WAVE FROM FLATNESS.

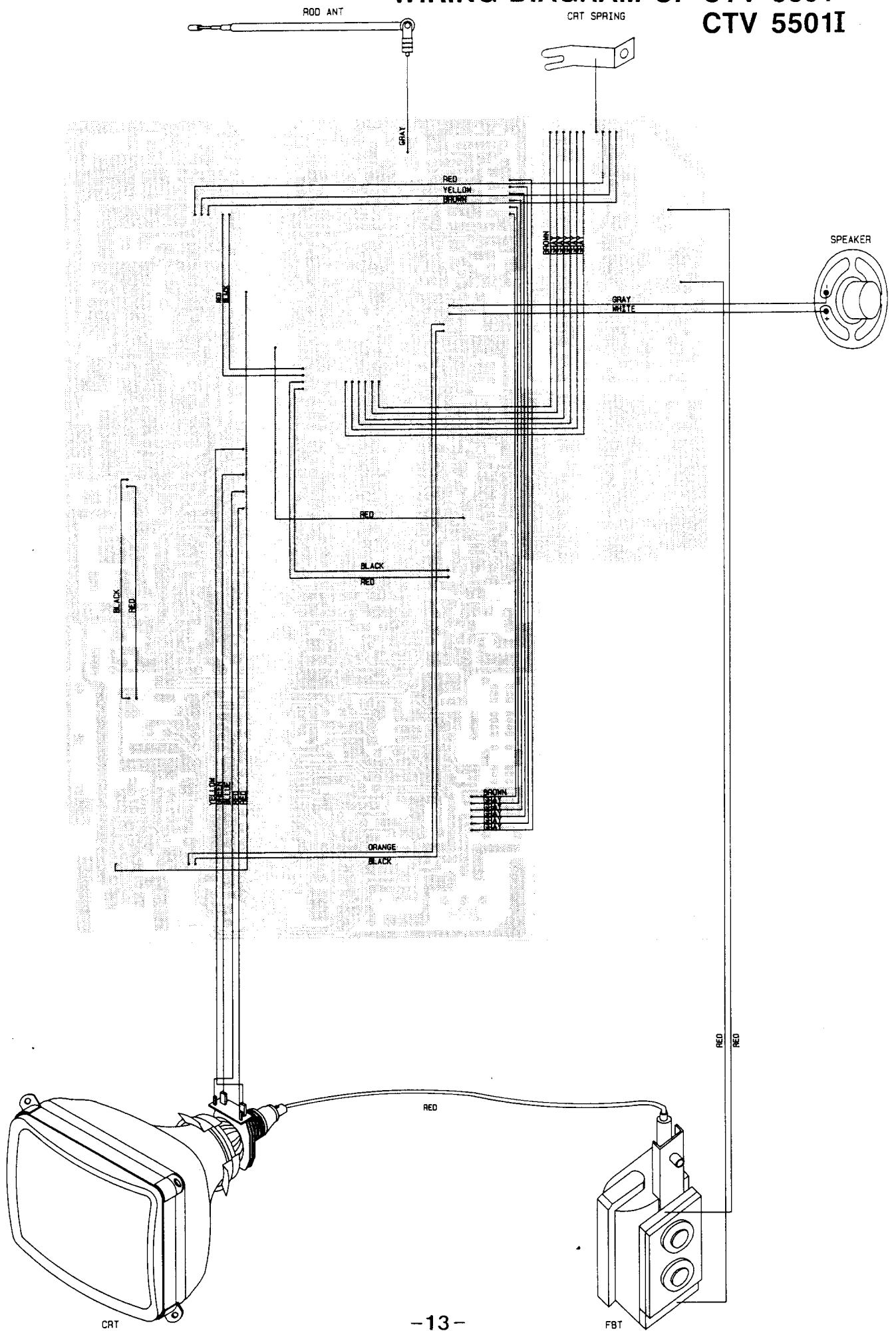
C. PAL MODULATION ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH PAL COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC301 PIN1.
3. ADJUST SVR302, T302, T301, MAKE WAVE FROM FLATNESS.

CHASSIS ALIGNMENT POINTS OF CTV 5501 CTV 5501I



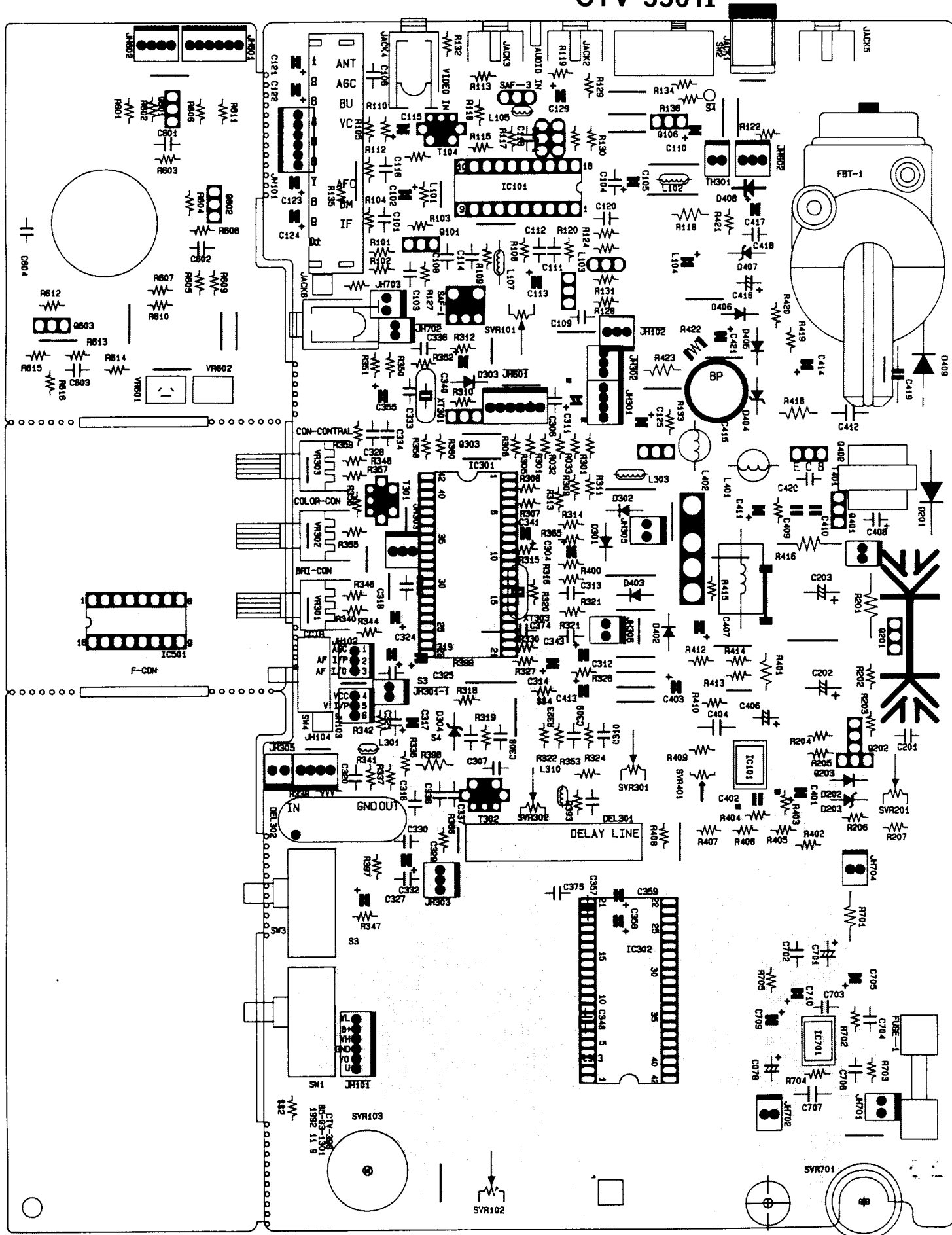
WIRING DIAGRAM OF CTV 5501 CTV 5501I



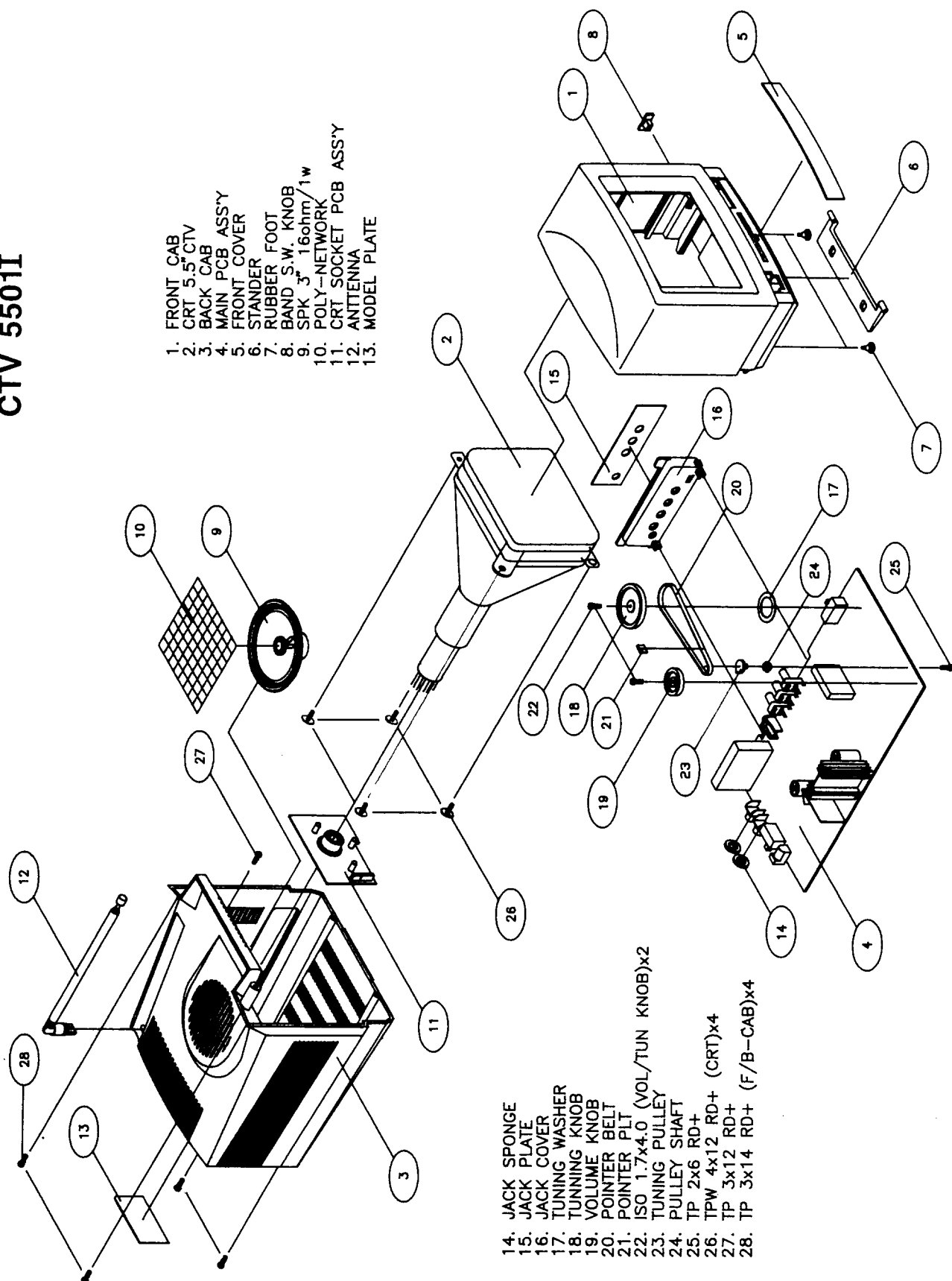
CTV 5501I



MAIN P.C.B BOTTOM VIEW OF CTV 5501 CTV 5501I



EXPLODE VIEW OF CTV 5501 CTV 5501I



PARTS LIST
FINAL ASSEMBLY

CTV 5501
CTV 5501I

MFR'S PART NO.	DESCRIPTION	Q'TY
MISCELLANEOUS		
11-47-5501	CRT	1
24-10-0203	ANTENNA ADAPTOR	1
24-20-2002B	WIRE HOUSING, 2P	1
24-50-1023	WIRE HOUSING, 1P	1
26-94-0001	ROD ANTENNA	1
37-35-1091	SPEAKER 3" 16 OHM, 1W	1
38-93-0103	CAR CORD 3A	1
39-57-9302	ADAPTOR 230V	1
58-03-0003	TUNER WASHER	1
59-02-1034	JACK SPONGE	2
64-01-5006	ANTENNA DAPTOR RUBBER	1
64-38-1087	BELT 6201	1
METAL PARTS		
69-01-1704	SCREW M 1.7x4 RD+, VOLUME/TUN KNOB	2
69-21-3012	SCREW TAPPING 3x12 RD+, ROD ANT	1
69-21-3014	SCREW TAPPING 3x14 RD+, F/B-CAB	4
69-31-2006	SCREW TAPPING 2x6 RD+, PULLEY SHAFT	1
69-70-4012	SCREW TPW 4x12 RD+, CRT	4
87-08-0501	CRT SPRING	1
PLASTIC PARTS		
88-76-1101	PULLEY SHAFT	1
88-76-1201	TUN PULLEY	1
88-97-0502	STANDER, BLACK	1
88-G3-0401	FUNCTION CASE	1
88-G3-0101	FRONT CABINET, ROADSTAR	1
88-G3-0201	BACK CABINET, ROADSTAR	1
88-G3-0331	DIAL PLT, FOR CTV-5501	1
88-G3-0332	DIAL PLT, FOR CTV-5501I	1
88-G3-0501	TUNING KNOB	1
88-G3-0601	BAND SW KNOB	1
88-G3-0701	VOLUME KNOB	1
APPEARANCES		
50-76-0101	POINTER 6201	1
50-G3-0301	MODEL PLATE, ROADSTAR, FOR CTV-5501	1
50-G3-0302	MODEL PLATE, ROADSTAR, FOR CTV-5501I	1
50-G3-2301	ADAPTOR PLATE	1
51-G3-0101	RIGHT JACK PLATE	1
90-78-4734	PACKING TAPE	1
90-E9-1341	SEARIAL LABEL	2
90-G3-0301	SEV LABEL, FOR CTV-5501	1
90-G3-1301	ELECTROSTATIC LABEL	1
90-G3-2301	VERSION LABEL, FOR CTV-5501	1
90-G3-2302	VERSION LABEL, FOR CTV-5501I	1
91-78-2735	WARRANTY CARD	1
91-G3-0301	INSTRUCTION BOOK	1
91-G3-1301	CIRCUIT DIAGRAM, FOR CTV-5501I	1
93-G3-0301	GIFT BOX	1
94-G3-0301	CARTON	1/4
96-G3-0101E	POLYFOAM	1
97-04-4047	PE BAG 40x47	1
97-44-1024	PE BAG 10x24	1

PARTS LIST
MAIN PCB ASSEMBLY

CTV 5501
CTV 5501I

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
PCB			
85-G3-1302	MAIN PCB (BLANK)		1
SEMICONDUCTORS			
10-04-1001	IC TBA820M 8PIN	IC701	1
10-04-1009	IC TDA7231 8PIN	IC401	1
10-20-0202	IC SANYO 7530 20PIN	IC101	1
10-20-0701	IC M51413ASP	IC301	1
12-01-1003	TANSITOR 5417G (NPN)	Q101	1
12-02-1003H	TANSITOR 2SC945 (NPN)	Q102,103,203	3
12-03-1041	TANSITOR JE8050 (NPN)	Q401	1
12-03-1047	TANSITOR C2310/2229 (NPN)	Q601,602,603	3
12-03-2031	TANSITOR 8550C (PNP)	Q104,202,203	3
12-03-2033	TANSITOR 2SA1012 (PNP)	Q201	1
12-04-1013	TANSITOR BU407 (NPN)	Q402	1
12-05-5006	TANSITOR X'TAL 4.43MHz	X'TAL 301	1
12-05-5109		X'TAL 303	1
13-03-1000	DIODE IN4148	D202,301,302,303,402 403,405,406	8
13-05-1008	DIODE PR1005 3A	D408	1
13-05-1011	DIODE PR3005 3A	D409	1
13-05-1026	DIODE PX5822	D201	1
13-06-1150	DIODE ZENER 15V	D404	1
13-06-1330H	DIODE ZENER 33V	D407	1
13-06-1689	DIODE ZENER 6.8V	D203,304	2
CAPACITORS			
17-05-2100W	ELECTROLYTIC 10uF 50V $\pm 10\%$	C415	1
17-15-1100	CERAMIC 10pF 50V $\pm 5\%$		1
17-15-1101	CERAMIC 100pF 50V $\pm 5\%$		1
17-15-1681	CERAMIC 680pF 50V $\pm 10\%$	C399/343	2
17-15-4103	CERAMIC .01uF 50V +80%-20%	C322,R317	2
17-15-4104	CERAMIC .1uF 50V +80%-20%	C104	1
17-18-4152	CERAMIC .0015uF 500V +80%-20%	C604	1
17-22-3101	ELECTROLYTIC 100uF 16V $\pm 20\%$	C324	1
17-22-3102	ELECTROLYTIC 1000uF 16V $\pm 20\%$	C407,416	2
17-22-3221	ELECTROLYTIC 220uF 16V $\pm 20\%$	C406,701,708	3
17-22-3222	ELECTROLYTIC 2200uF 16V $\pm 20\%$	C202,203	2
17-23-3100	ELECTROLYTIC 10uF 25V $\pm 20\%$	C304	1
17-23-3220	ELECTROLYTIC 22uF 25V $\pm 20\%$	C705	1
17-26-3229	ELECTROLYTIC 2.2uF 160V $\pm 20\%$	C414,421	2
17-25-3479	ELECTROLYTIC 4.7uF 160V $\pm 20\%$	C121	1
17-26-3479	ELECTROLYTIC 4.7uF 160V $\pm 20\%$	C417	1
17-35-2104	MYLAR .1uF 50V $\pm 10\%$	C308,404,412,707	4
17-35-2273	MYLAR .027uF 50V $\pm 10\%$	C409	1
17-52-2229	MYLAR 2.2uF 16V $\pm 10\%$	C408	1
17-67-2683	MYLAR .068uF 250V $\pm 10\%$	C218	1

PARTS LIST
MAIN PCB ASSEMBLY

CTV 5501
CTV 5501I

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
CAPACITORS			
27-15-1101	CERAMIC 100pF 50V $\pm 5\%$	C201	1
27-15-1150	CERAMIC 15pF 50V $\pm 5\%$	C335,120	2
27-15-1181	CERAMIC 180pF 50V $\pm 5\%$	C321	1
27-15-1221	CERAMIC 220pF 50V $\pm 10\%$	C118	1
27-15-1270	CERAMIC 27pF 50V $\pm 10\%$	C316	1
27-15-1391	CERAMIC 390pF 50V $\pm 10\%$	C704	1
27-15-1470	CERAMIC 47pF 50V $\pm 10\%$	C320,CX/R393	2
27-15-1471	CERAMIC 470pF 50V $\pm 10\%$	C307	1
27-15-1561	CERAMIC 560pF 50V $\pm 10\%$	C601,602,603	3
27-15-4102	CERAMIC .001uF 50V +80%-20%	C112	1
27-15-4103	CERAMIC .01uF 50V +80%-20%	C101,106,114,307,337 336,108,338,109,334, 328,375,332,	13
27-15-4104	CERAMIC .1uF 50V +80%-20%	C116,111,313,330, 325,702,306	7
27-15-4203	CERAMIC .02uF 50V +80%-20%	C418,706	2
27-18-4152	CERAMIC .0015uF 50V +80%-20%	C420	1
27-22-3101	ELECTROLYTIC 100uF 16V $\pm 20\%$	C102,105,411,311	4
27-22-3470	ELECTROLYTIC 47uF 16V $\pm 20\%$	C710,129,401,709	4
27-23-3100	ELECTROLYTIC 10uF 25V $\pm 20\%$	C340,317,126,125	4
27-23-3220	ELECTROLYTIC 22uF 25V $\pm 20\%$	C413	1
27-23-3109	ELECTROLYTIC 1uF 50V $\pm 20\%$	C312,318,335,341, 327,329	6
27-25-3229	ELECTROLYTIC 2.2uF 50V $\pm 20\%$	C314	1
27-25-3339	ELECTROLYTIC 3.3uF 25V $\pm 20\%$	C403	1
27-25-3478	ELECTROLYTIC .47uF 25V $\pm 20\%$	C113,319	2
27-25-3479	ELECTROLYTIC 4.7uF 25V $\pm 20\%$	C122,123,124,115	4
27-35-2152	MYLAR .0015uF 50V $\pm 10\%$	C374	1
27-35-2222	MYLAR .0022uF 50V $\pm 10\%$	C103,402	2
27-35-2273	MYLAR .027uF 50V $\pm 10\%$	C410	1
27-35-2472	MYLAR .0047uF 50V $\pm 10\%$	C309,310	2
COILS & IFTS			
18-03-3001	CERAMIC FILTER SIF 5.5MHz	SAF	1
18-03-3002	CF SIF TRAP 5.5MHz	SAF3	1
18-03-5001	CF VIF 38.9MHz	SAF1	1
18-03-5051	CF SIF 5.5 MHz	SAF4	1
18-03-7003	IFT CCTV 4.43MHz	T301	1
18-03-7007	IFT CTV 1uH	T302	1
18-03-7064	IFT VIF 38.9MHz	T104	1
18-03-7065	IFT VIF 38.9MHz		1

PARTS LIST
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CTV 5501I

MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
COILS & IFTS			
19-40-2100	CHOKE 10uH	L301	1
19-40-2150	CHOKE 15uH	L105	1
19-40-2151	CHOKE 150uH	L403	1
19-40-2229	CHOKE 2.2uH	L107	1
19-40-2828	CHOKE .82uH	L101	1
19-40-2829	CHOKE 8.2uH	L310	1
19-40-3101	CHOKE 100uH	L102,303	2
19-43-1150	CHOKE 15uH	L401	1
19-43-2150	CHOKE 15uH LINE	L402	1
19-45-3391	DELAY LINE 330uS	DEL302	1
19-45-6401	DELAY LINE 64uS	DEL301	1
JACKS			
23-01-0004	FUSE CLIP	FUSE1	2
23-03-3502	MIC JACK, 3.5D	JACK4,6	2
23-05-4501	DC JACK, 4.5D	JACK1	1
23-06-0031	RCA JACK, VIDEO (YELLOW)	JACK3	1
23-06-0032	RCA JACK, VIDEO (WHITE)	JACK2	1
23-08-0909	CRT SOCKET	CRT SOCKET	1
SWITCHES			
22-12-0416	SWITCH, SLIDE, 2T4P, MODE	SW2	1
22-13-0224	SWITCH, SLIDE, 3T2P, BAND	SW1	1
VARIABLE RESISTORS			
21-12-1035	VR 10kB ✓	VR301,302,303	3
21-12-1043	VR 100kB ✓	VR103	1
21-24-1033	VR 10KD ✓	VR701	1
21-72-1020	SVR 1kB 8DH, 3P ✓	SVR302	1
21-72-1031	SVR 10kB 8DH, 3P ✓	SVR101,102	2
21-72-2021	SVR 2kB 8DH, 3P ✓	SVR201	1
21-72-3013	SVR 300B 8DH, 3P ✓	SVR401	1
21-72-3020	SVR 3kB 8DH, 3P ✓	SVR301	1
21-72-5023	SVR 5kB 8DH, 3P ✓	SVR601,602	2
RESISTORS			
16-01-1101	CARBON FILM 100 OHM 1/2W	R201	1
16-01-1153	CARBON FILM 15k OHM 1/2W	R601,606,611	3
16-01-1330	CARBON FILM 33 OHM 1/2W	R701	1
16-01-1470	CARBON FILM 47 OHM 1/2W	R416	1

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MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-12-1103	CARBON FILM 10k OHM 1/4W	R118,419	2
16-12-1125	CARBON FILM 1.2 OHM 1/4W	R352	1
16-12-1173	CARBON FILM 27k OHM 1/4W	R398	1
16-12-1335	CARBON FILM 3.3 OHM 1/4W	R397	1
16-12-1339	CARBON FILM 3E3 OHM 1/4W	R409	1
16-12-1393	CARBON FILM 39K OHM 1/4W	R358	1
16-12-1471	CARBON FILM 470 OHM 1/4W		1
16-12-1473	CARBON FILM 47K OHM 1/4W	R418	1
16-12-1479	CARBON FILM 4.7 OHM 1/4W	R401	1
16-12-1562	CARBON FILM 5.6K OHM 1/4W	R422	1
16-12-1284	CARBON FILM 680K OHM 1/4W	R423	1
16-12-1753	CARBON FILM 75K OHM 1/4W	R318	1
16-12-1820	CARBON FILM 82 OHM 1/4W	R127	1
16-25-1104	CARBON FILM 100K OHM 1/8W	Q104(B->GND)	1
16-25-1223	CARBON FILM 22K OHM 1/8W	R399, IC101->TUNER)	2
16-23-1100	CARBON FILM 10 OHM 1/8W	R111,312,336,412	4
16-23-1101	CARBON FILM 100 OHM 1/8W	R101,341,360,702	4
16-23-1102	CARBON FILM 1k OHM 1/8W	R110,205,206,207,703 313,308,337,338,415, 605,609,116	13
16-23-1103	CARBON FILM 10k OHM 1/8W	R134,203,309,311,321, 322,405,408,348	9
16-23-1104	CARBON FILM 100k OHM 1/8W	R135,330,344	3
16-23-1105	CARBON FILM 1M OHM 1/8W	R316	1
16-23-1109	CARBON FILM 1 OHM 1/8W	R704	1
16-23-1123	CARBON FILM 12k OHM 1/8W	R350	1
16-23-1151	CARBON FILM 150 OHM 1/8W	R604,610,614	3
16-23-1152	CARBON FILM 1.5k OHM 1/8W	R365	1
16-23-1153	CARBON FILM 15k OHM 1/8W	R404	1
16-23-1154	CARBON FILM 150k OHM 1/8W	R112,346	2
16-23-1182	CARBON FILM 1.8k OHM 1/8W	R108	1
16-23-1221	CARBON FILM 220 OHM 1/8W	R342,327	2
16-23-1222	CARBON FILM 2.2k OHM 1/8W	R103,109,314,602, 607,612	6
16-23-1223	CARBON FILM 22k OHM 1/8W	R128	1
16-23-1224	CARBON FILM 220k OHM 1/8W	R347,328	2
16-23-1271	CARBON FILM 270 OHM 1/8W	R131,320	2
16-23-1272	CARBON FILM 2K7 OHM 1/8W	R366	1
16-23-1273	CARBON FILM 27k OHM 1/8W	R105,\$\$2	2
16-23-1330	CARBON FILM 33 OHM 1/8W	R202,204	2
16-23-1331	CARBON FILM 330 OHM 1/8W	R117,120,136,301,303 305,129	7
16-23-1332	CARBON FILM 3.3k OHM 1/8W	R302,304,306,315,403, 400,\$\$4	7
16-23-1333	CARBON FILM 33k OHM 1/8W	R357,402	2

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MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-12-1102	CARBON FILM 1k OHM 1/4W	R137, IC101 P20->B+	2
16-12-1103	CARBON FILM 10k OHM 1/4W	R118, 419	2
16-12-1125	CARBON FILM 1.2 OHM 1/4W	R352	1
16-12-1173	CARBON FILM 27k OHM 1/4W	R398	1
16-12-1333	CARBON FILM 33k OHM 1/4W	R298	1
16-12-1335	CARBON FILM 3.3 OHM 1/4W	R397	1
16-12-1339	CARBON FILM 3E3 OHM 1/4W	R409	1
16-12-1393	CARBON FILM 39K OHM 1/4W	R358	1
16-12-1471	CARBON FILM 470 OHM 1/4W		1
16-12-1473	CARBON FILM 47K OHM 1/4W	R418	1
16-12-1479	CARBON FILM 4.7 OHM 1/4W	R401	1
16-12-1562	CARBON FILM 5.6K OHM 1/4W	R422	1
16-12-1284	CARBON FILM 680K OHM 1/4W	R423	1
16-12-1753	CARBON FILM 75K OHM 1/4W	R318	1
16-12-1820	CARBON FILM 82 OHM 1/4W	R127	1
16-25-1104	CARBON FILM 100K OHM 1/8W	Q104 (B->GND)	1
16-25-1223	CARBON FILM 22K OHM 1/8W	R399, IC101->TUNER)	2
16-23-1100	CARBON FILM 10 OHM 1/8W	R111, 312, 336, 412	4
16-23-1101	CARBON FILM 100 OHM 1/8W	R101, 341, 360, 702	4
16-23-1102	CARBON FILM 1k OHM 1/8W	R110, 205, 206, 207, 703 313, 308, 337, 338, 415, 605, 609, 116	13
16-23-1103	CARBON FILM 10k OHM 1/8W	R134, 203, 309, 311, 321, 322, 405, 408, 348	9
16-23-1104	CARBON FILM 100k OHM 1/8W	R135, 330, 344	3
16-23-1105	CARBON FILM 1M OHM 1/8W	R316	1
16-23-1109	CARBON FILM 1 OHM 1/8W	R704	1
16-23-1123	CARBON FILM 12k OHM 1/8W	R350	1
16-23-1151	CARBON FILM 150 OHM 1/8W	R604, 610, 614	3
16-23-1152	CARBON FILM 1.5k OHM 1/8W	R365	1
16-23-1153	CARBON FILM 15k OHM 1/8W	R404	1
16-23-1154	CARBON FILM 150k OHM 1/8W	R112, 346	2
16-23-1182	CARBON FILM 1.8k OHM 1/8W	R108	1
16-23-1221	CARBON FILM 220 OHM 1/8W	R342, 327	2
16-23-1222	CARBON FILM 2.2k OHM 1/8W	R103, 109, 314, 602, 607, 612	6
16-23-1223	CARBON FILM 22k OHM 1/8W	R128	1
16-23-1224	CARBON FILM 220k OHM 1/8W	R347, 328	2
16-23-1271	CARBON FILM 270 OHM 1/8W	R131, 320	2
16-23-1272	CARBON FILM 2K7 OHM 1/8W	R366	1
16-23-1273	CARBON FILM 27k OHM 1/8W	R105, \$\$2	2
16-23-1330	CARBON FILM 33 OHM 1/8W	R202, 204	2
16-23-1331	CARBON FILM 330 OHM 1/8W	R117, 120, 136, 301, 303 305, 129	7
16-23-1332	CARBON FILM 3.3k OHM 1/8W	R302, 304, 306, 315, 403, 400, \$\$4	7
16-23-1333	CARBON FILM 33k OHM 1/8W	R357, 402	2

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MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-23-1334	CARBON FILM 330k OHM 1/8W	R420	1
16-23-1391	CARBON FILM 390 OHM 1/8W	R133,353	2
16-23-1392	CARBON FILM 3.9k OHM 1/8W	R351	1
16-23-1471	CARBON FILM 470 OHM 1/8W	R603,613,608,413,130 124,310,323,393	9
16-23-1472	CARBON FILM 4.7k OHM 1/8W	R307,119,356	3
16-23-1473	CARBON FILM 47k OHM 1/8W	R115,355,359,421	4
16-23-1479	CARBON FILM 4.7 OHM 1/8W	R410	1
16-23-1561	CARBON FILM 560 OHM 1/8W	R102	1
16-23-1562	CARBON FILM 5.6k OHM 1/8W	R616	1
16-23-1680	CARBON FILM 68 OHM 1/8W	R705	1
16-23-1683	CARBON FILM 68k OHM 1/8W	R407	1
16-23-1684	CARBON FILM 680k OHM 1/8W	R319	1
16-23-1750	CARBON FILM 75 OHM 1/8W	R104,113,132	3
16-23-1822	CARBON FILM 8.2k OHM 1/8W	R324,615	2
MISCELLANEOUS			
15-03-0250M	TUNER TUMUF3C-291		1
24-21-2001B	WIRE WAFER 2P		1
24-41-4001	WIRE WAFER 4P		1
24-51-1002	WIRE WAFER 1P 1.5D, STRAIGHT		1
24-G3-2044	WIRE WAFER 2P		1
24-G3-2045	WIRE WAFER 2P		1
24-G3-3025	WIRE WAFER 3P		1
24-G3-4021	WIRE WAFER 4P		1
24-G3-4022	WIRE WAFER 4P		1
24-G3-6015	WIRE WAFER 6P		1
24-G3-6016	WIRE WAFER 6P		1
25-03-3021	FUSE 3A/250V		1
30-01-1230	UL #26 23/10 BN		1
30-01-2230	UL #26 23/10 RD		1
30-01-3130	UL #26 13/10 OR		1
30-01-3200	UL #26 20/10 OR		1
30-01-6100	UL #26 10/10 BU		1
30-01-8180	UL #26 18/10 GY		1
39-16-0001	H-DRIVE TRANSFORMER		1
43-71-5502L	FLYBACK TRANSFORMER		1
59-62-1007	SPONGE ADH 9000		1
64-04-6003	RUBBER COVER		1
69-01-3006	SCREW M3x6 RD+		2
69-21-2405	SCREW MTP 2.4x5 RD+		2
70-01-3056	NUT ISO M3		1
87-18-0401	HEAT SINK, HORIZONTAL		1
87-78-0334	HEAT SINK		1

PARTS LIST
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MFR'S PART NO.	DESCRIPTION	SYMBOL NO.	Q'TY
RESISTORS			
16-23-1334	CARBON FILM 330k OHM 1/8W	R420	1
16-23-1391	CARBON FILM 390 OHM 1/8W	R133,353	2
16-23-1392	CARBON FILM 3.9k OHM 1/8W	R351	1
16-23-1471	CARBON FILM 470 OHM 1/8W	R603,613,608,413,130 124,310,323,393	9
16-23-1472	CARBON FILM 4.7k OHM 1/8W	R307,119,356	3
16-23-1473	CARBON FILM 47k OHM 1/8W	R115,355,359,421	4
16-23-1479	CARBON FILM 4.7 OHM 1/8W	R410	1
16-23-1561	CARBON FILM 560 OHM 1/8W	R102	1
16-23-1562	CARBON FILM 5.6k OHM 1/8W	R616	1
16-23-1680	CARBON FILM 68 OHM 1/8W	R705	1
16-23-1683	CARBON FILM 68k OHM 1/8W	R407	1
16-23-1684	CARBON FILM 680k OHM 1/8W	R319	1
16-23-1750	CARBON FILM 75 OHM 1/8W	R104,113,132	3
16-23-1822	CARBON FILM 8.2k OHM 1/8W	R324,615	2
MISCELLANEOUS			
15-03-0250M	TUNER TUMUF3C-291		1
24-21-2001B	WIRE WAFER 2P		1
24-41-4001	WIRE WAFER 4P		1
24-51-1002	WIRE WAFER 1P 1.5D, STRAIGHT		1
24-G3-2044	WIRE WAFER 2P		1
24-G3-2045	WIRE WAFER 2P		1
24-G3-3025	WIRE WAFER 3P		1
24-G3-4021	WIRE WAFER 4P		1
24-G3-4022	WIRE WAFER 4P		1
24-G3-6015	WIRE WAFER 6P		1
24-G3-6016	WIRE WAFER 6P		1
25-03-3021	FUSE 3A/250V		1
30-01-0080	UL #26 8/10 BK		1
30-01-1170	UL #26 17/10 BN		1
30-01-1230	UL #26 23/10 BN		1
30-01-2230	UL #26 23/10 RD		1
30-01-3130	UL #26 13/10 OR		1
30-01-3200	UL #26 20/10 OR		1
30-01-6100	UL #26 10/10 BU		1
30-01-8180	UL #26 18/10 GY		1
39-16-0001	H-DRIVE TRANSFORMER		1
43-71-5502L	FLYBACK TRANSFORMER		1
59-62-1007	SPONGE ADH 9000		1
64-04-6003	RUBBER COVER		1
69-01-3006	SCREW M3x6 RD+		2
69-21-2405	SCREW MTP 2.4x5 RD+		2
70-01-3056	NUT ISO M3		1
87-18-0401	HEAT SINK, HORIZONTAL		1
87-78-0334	HEAT SINK		1