

CABINET-REAR VIEW

SERVICING IN THE FIELD

CRT IMPLSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

FUSE DEVICES

A 1-amp fuse is used for low-voltage power-supply protection. (See photo, Cabinet-Rear View.)

A 4-amp fuse is used for AC line protection. (See photo, Cabinet-Rear View.)

A 2-amp fuse is used for horizontal sweep circuit protection. (See Placement Chart.)

CHANNEL INDICATOR LAMP ACCESSIBILITY

Lamps are accessible after removing panel opposite channel pre-tuning controls in pop-out panel.

VHF/UHF TUNER

Two buttons are provided for electronic channel selection with twelve tuning knobs and twelve band switches for channel pre-tuning. Fine tuning is adjusted by rotating tuning knobs.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the Horiz Hold Control. (See Placement Chart.)

WIDTH

The width may be varied by adjusting the width coil. (See Placement Chart.)

FOCUS

The focus may be varied by a focus control. (See photo, Cabinet-Rear View.)

AGC

The AGC may be varied by an RF AGC control. (See Placement Chart.)

CENTERING

Horizontal centering is accomplished by proper adjustment of the horizontal centering control and placement of jumper.

Vertical centering is accomplished by proper placement of the vertical centering jumper. (See Placement Chart.)

SET 1997 FOLDER 1

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

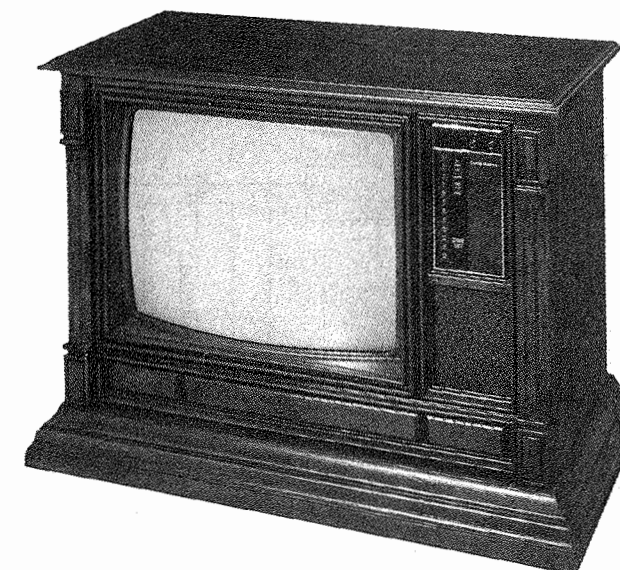
PHOTOFACT® Folder

with CIRCUITRACE®

For Supplier Address See PHOTOFACT Index

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

COLOR TV



Model E587

SAFETY PRECAUTIONS

See page 3

SERVICE INFORMATION

See page 5

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HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. 81PD2733

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10 9 8 7 6 5 4 3 2 1 0

DATE 6-81

SET 1997 FOLDER 1

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

SET 1997 FOLDER 1

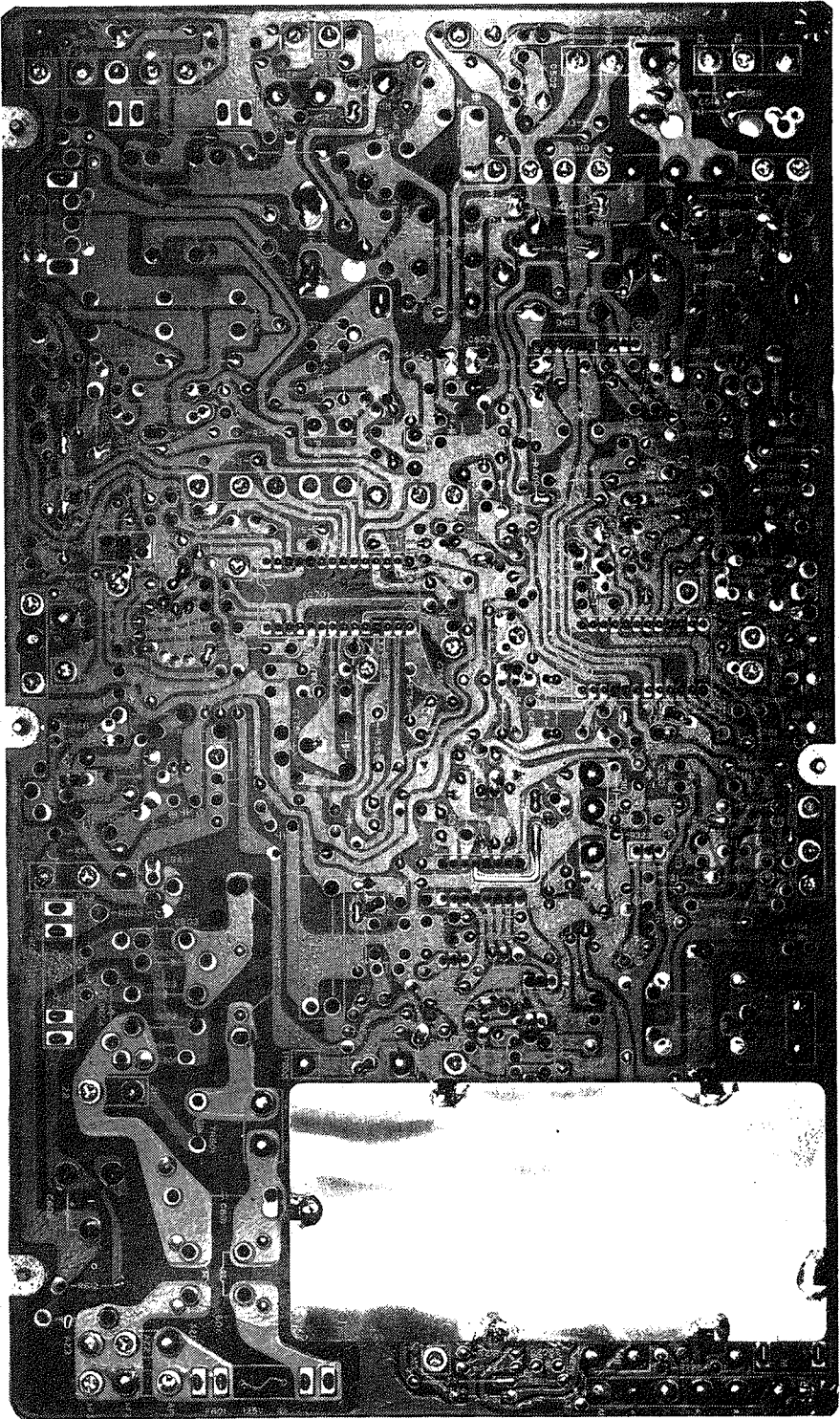
DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Remove Picture and Volume knobs from cabinet front, remove twelve screws holding cabinet back and remove back. Disconnect HV anode, CRT socket, deflection yoke connector, degaussing coil connector, speaker connectors and ground leads. Remove five screws holding secondary control assembly to cabinet front, and remove assembly from cabinet. Disconnect TH, TA, TF, from tuning control assembly, release channel selector panel latch to allow assembly to slide out to pre-tuning position, release rear latch and remove assembly from cabinet. Release latches holding main chassis to cabinet bottom and remove chassis from cabinet.

CRT REMOVAL

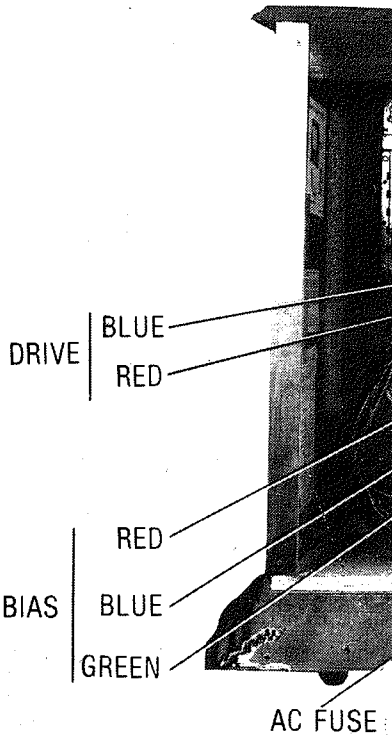
Follow "Chassis Removal" procedures and lay set face down on a soft protective surface. Loosen and remove CRT neck assemblies, remove four screws holding degaussing coil and shield to cabinet front, lift shield out of cabinet. Remove four screws holding CRT to cabinet front and lift CRT out of cabinet. Do not lift CRT by the neck.



MAIN BOARD-SHIELD LOCATION

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

FOLDER 1



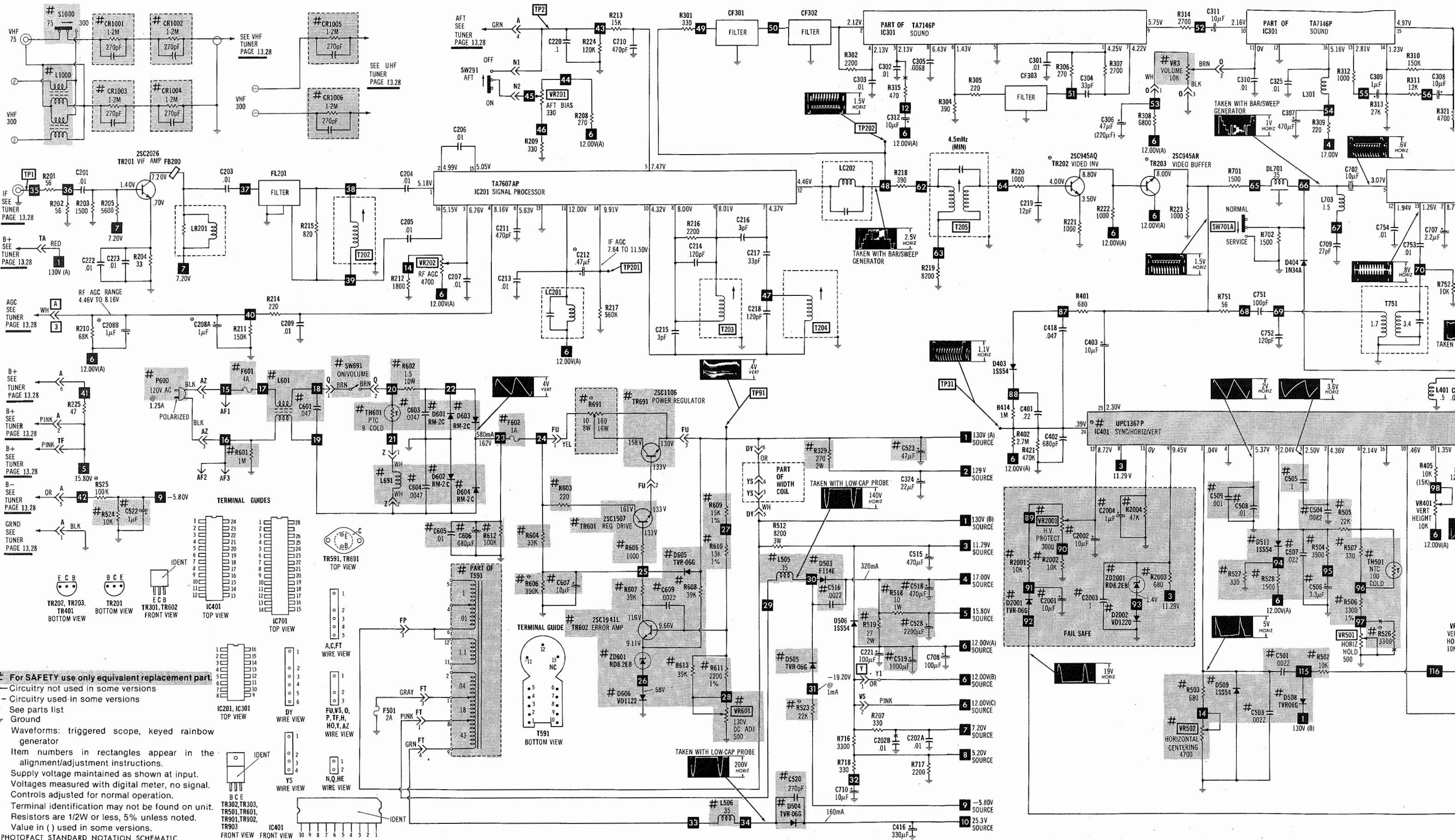
SERVICING IN THE FIELD

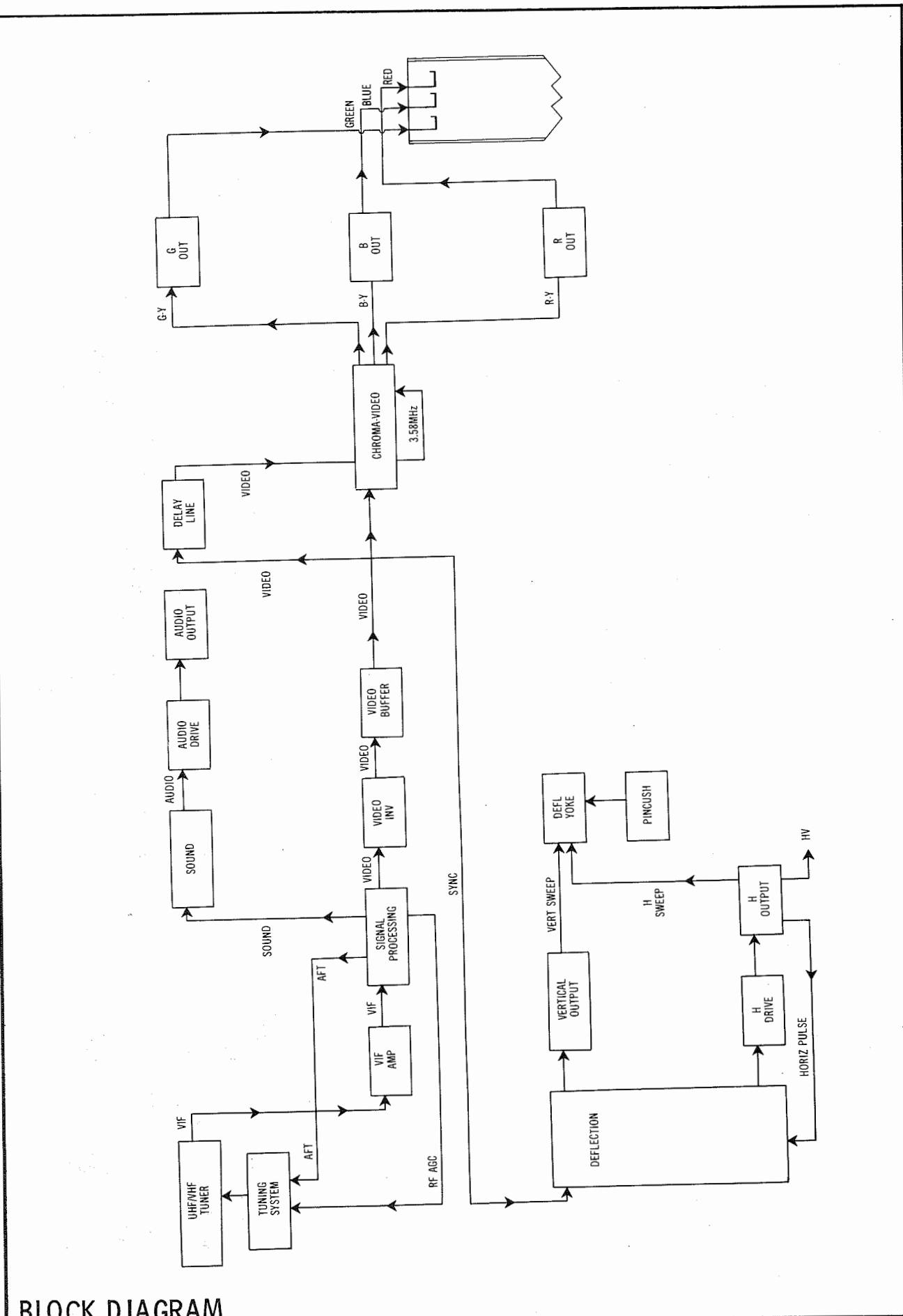
CRT IMPLOSION PROTECTION AND
Implosion protection is an in picture tube, cleaning accomp removal.

FUSE DEVICES
A 1-amp fuse is used for low-supply protection. (See photo View.)
A 4-amp fuse is used for AC (See photo, Cabinet-Rear View.)
A 2-amp fuse is used for horizontal circuit protection. (See Photo)

CHANNEL INDICATOR LAMP ACCESS
Lamps are accessible after rear opposite channel pre-tuning control pop-out panel.

VHF/UHF TUNER
Two buttons are provided for channel selection with twelve tuning twelve band switches for channel Fine tuning is adjusted by rotary knobs.





BLOCK DIAGRAM

SAFETY PRECAUTIONS

Before servicing the chassis, it is important that the service technician read and follow the safety precautions outlined below.

CRITICAL COMPONENT REPLACEMENT

- Replacement parts which have special safety characteristics are identified by red shading on the schematics.
- Replace these critical components with genuine Curtis Mathes replacement parts.
- Do not degrade the safety of the set through improper servicing.

SAFETY PRECAUTIONS

- Comply with all caution and safety related notes on or inside the receiver cabinet, on the receiver chassis, and on the picture tube.
- When service is required, maintain correct lead dress and part placement. Extra precaution should be taken to ensure proper lead dress in the high voltage area.
- When a malfunction has occurred, those components or circuits that indicate evidence of abnormality should be replaced or corrected. Always use the manufacturer's safety specified replacement components.
- When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as: non metallic control knobs, insulating fishpapers, adjustment and component covers/shields, isolation resistor capacitor networks, etc.
- Before returning the receiver to the customer, be sure that no protective device built into the set by the manufacturer has become defective, or inadvertently defeated during servicing. Therefore, the following checks are recommended for the continued protection of the customer and service technician.

ANTENNA COLD CHECK

With AC plug removed from the 120V AC source, place a jumper across two plug prongs. Turn the set AC power switch ON, and connect one lead of an ohmmeter to the jumpered AC plug and touch the other lead to each exposed antenna terminal screw, coaxial connector, metal cabinet, and exposed metal cabinet screws (when applicable). The resistance measured should not be less than 1.0 megohm or greater than 5.2 megohms. Any resistance value below or above this range indicates an abnormality which requires corrective action. Repeat the test with the AC power switch in the OFF position.

LEAKAGE CURRENT HOT CHECK

Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer in this check). Use a leakage current tester which complies with American National Standards Institute (ANSI C101.1-1971 "Leakage Current for Appliances"), and Underwriters Laboratories (UL) 1410. Measure for leakage current from all exposed metal parts of the cabinet (antenna, handle, bracket, metal cabinet, screwheads, metal overlays, control shafts, etc.) to a known earth ground. The test should be conducted with the AC power switch ON, and then repeated with the AC power switch OFF. Any leakage current measured must not exceed 0.5mA with the AC line cord inserted in the AC supply circuit receptacle. Any measurement not within the limits outlined above are indicative of a potential shock hazard and corrective action must be taken before returning the set to the customer.

X-RADIATION PRECAUTION

This product contains critical electrical and mechanical parts essential for X-RADIATION protection. The normal anode voltage is 26KV on CMC81 (28KV on CMC82) with 120V AC line voltage, and must not exceed 33.0KV under any operating conditions. To measure anode voltage, turn the brightness control fully counterclockwise, and connect a high impedance meter between the anode lead and the chassis. If the high voltage exceeds the specified limits, corrective action must be taken.

Courtesy of the Manufacturer

TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain line voltage at 120VAC. Allow a 20-minute warm-up period for receiver and test equipment.
Suggested Alignment Tools: GC ELECTRONICS
T202, T203, T204, T205 9296, 9297, 9300

PRELIMINARY INSTRUCTIONS

Set the channel selector to the highest unused channel. Set scope sweep to external. Connect scope vertical input to scope vertical input on sweep/marker generator. Connect scope external horizontal input to scope horizontal input on sweep/marker generator. Ground test equipment to TV chassis unless specified otherwise. Use only enough generator output to provide a usable indication.
Note: Response may vary slightly from that shown.
Disconnect IF Input Cable on Main P.C. Board (TP1).
Connect a +7.5 Volt Bias to TP201.

VIDEO IF ALIGNMENT (SWEEP MARKER GENERATOR)

VERTICAL INPUT OF OSCILLOSCOPE	VFO GENERATOR OUTPUT	GENERATOR FREQUENCY	REMARKS
To TP202	To TP1	45.75MHz (Modulated at 1000Hz)	NOTE: Use a VFO (Variable Frequency Generator with a modulated output for this adjustment. Adjust T202 and T203 for maximum gain of response. See Figure 1.

VIDEO IF ALIGNMENT (BAR SWEEP GENERATOR)

BAR SWEEP GENERATOR	SCOPE INPUT	REMARKS
To TP1	To TP202	Perform Video IF Adjustments per SWEEP/MARKER GENERATOR instructions above. See Figure 2.

4.5MHz TRAP ALIGNMENT

Tune in a strong TV signal and set the contrast at maximum. Adjust the fine tuning until a beat pattern is visible on the screen. Adjust T205 for MINIMUM beat interference.

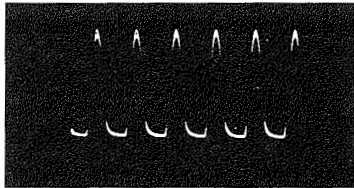


Figure 1

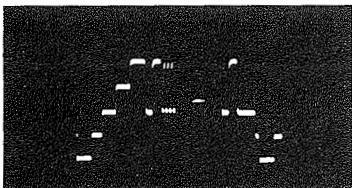


Figure 2

MISCELLANEOUS ADJUSTMENTS

130 VOLT DC ADJUSTMENT

130 Volt DC Adjust (VR601) is factory adjusted and sealed. If (VR601) is replaced, connect a DC meter to TP91, low side to ground and adjust (VR601) for 130 Volts DC.

HIGH VOLTAGE PROTECT CONTROL ADJUSTMENT

High Voltage Protect Adjust Control (VR2001) is factory set and sealed.

RF AGC ADJUSTMENT

Connect a color bar generator to the antenna terminals and tune in a color bar pattern. Connect a DC meter to terminal (A3) on the main PC Board, low side to ground. Set AFT Switch to On and adjust RF AGC Control (VR-202) for 7 volts DC. Tune in a strong local TV station and check for proper AGC action if overload (picture pulling, jitter, etc.) adjust (VR202) to eliminate.

HORIZONTAL HOLD CONTROL ADJUSTMENT

Tune in a local TV station. Connect a .1uF capacitor between TP31 and ground. Adjust Horizontal Hold Control (VR501) until picture slowly floats or stops on the screen.

VERTICAL AND HORIZONTAL CENTERING ADJUSTMENT

For coarse horizontal centering adjustment, change the Horizontal Center jumper to N or R. For fine adjustment, adjust Horizontal Centering Control (VR502).

For vertical centering adjustment use the Vertical Centering jumper, set at up, down or N for desired results.

APC ADJUSTMENT

Connect a color bar generator to the antenna terminals and tune in a color bar pattern. Set color and tint controls to midrange. Connect a 100K ohm resistor between TP751 and terminal Y1 on main PC Board, connect a .1uF capacitor between TP752 and ground. Adjust APC Trimmer (CT751) until the color bars stop or slowly float across the screen. Remove the resistor and capacitor.

COLOR TEMPERATURE AND SUB BRIGHTNESS ADJUSTMENTS

Tune in a strong TV station. Set Brightness and Picture Controls to maximum, Color Control to MINIMUM. Turn Sub Brightness Control (VR-701) fully counterclockwise, Red (VR901), Green (VR902), and Blue (VR903) Bias Controls fully counterclockwise. Set the Red (VR904) and Blue (VR905) Drive Controls to midrange, Screen Control (VR591B) to MINIMUM. Place Service Switch (SW701) to service position. Disconnect tuner IF cable from main P.C. Board. Connect a DC meter to the collector of Green Output (TR902), low side to ground. Adjust Sub Brightness Control to obtain a reading of 200 volts DC. Adjust Screen Control (VR591B) to produce a dim line on the screen. Adjust the Bias Controls for the two missing colors to produce a dim white line.

Reset the Service Switch to Normal, reconnect the IF cable. Turn the Brightness Control to maximum, the Picture Control to MINIMUM. Connect a DC meter to the limiter check terminals, positive lead to (+) test point, negative to (-) test point. Adjust Sub Brightness Control VR701) to obtain .89 volts DC. Turn the Picture Control to maximum, voltage should read +1.8 volts DC. Remove meter.

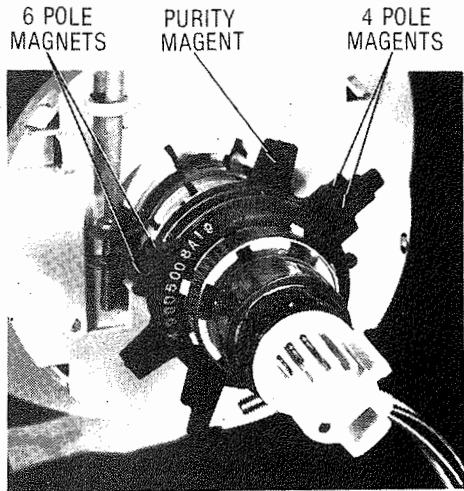
PURITY ADJUSTMENTS

If the picture tube appears to be magnetized, use a degaussing coil to demagnetize the tube and mounting brackets.

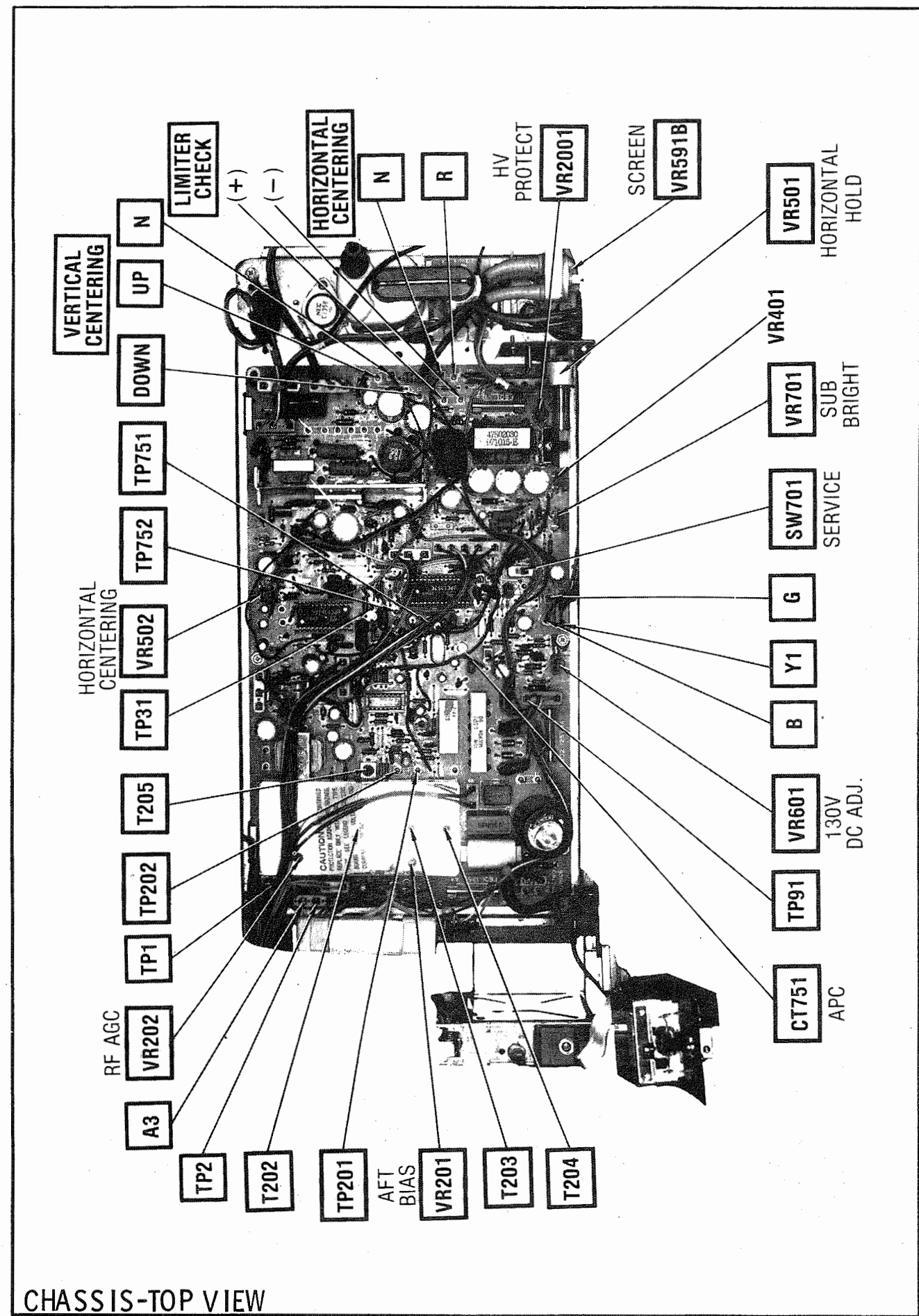
Disconnect tuner IF cable B and G connectors. Loosen deflection yoke and slide it back until a red vertical bar appears near the center of the screen. Adjust purity tabs to center red vertical bar horizontally and vertically. Slide the yoke forward until a pure red raster is obtained over the entire screen. Reconnect tuner IF cable, B and G connectors.

CONVERGENCE ADJUSTMENTS

Connect a color bar generator to the antenna terminals and tune in a dot pattern. Adjust 4-Pole magnets to converge the red and blue dots at the center of the screen. Adjust 6-Pole magnets to converge the red/blue dots over the green dots at the center of the screen. Tune in a crosshatch pattern. Remove the rubber wedges between the deflection yoke and picture tube. Tilt the deflection yoke up or down to converge the vertical lines at the top and bottom of the screen and the horizontal lines at the right and left sides of the screen. Tilt the deflection yoke to the right or left to converge the horizontal lines at the top and bottom of the screen and the vertical lines at the right and left sides of the screen. Repeat convergence procedure if necessary to obtain the best overall convergence. Replace the rubber wedges.



CRT NECK ASSEMBLY



CHASSIS-TOP VIEW

TV ALIGNMENT INSTRUCTIONS (Continued)

AUTOMATIC FINE TUNING ALIGNMENT

Connect as explained in preliminary instructions unless specified otherwise.
Set AFT Switch to On.

DIRECT PROBE FROM SWEEP/MARKER GENERATOR	SWEEP GENERATOR OUTPUT	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
To TP2	To TP1	44MHz (10MHz Sweep)	45.75MHz	Adjust T204 to place 45.75MHz marker as shown. See Figure 3.

AFT Bias (VR201) Adjustment.

Connect a DC meter to TP2, low side to ground.
Set AFT Switch to On, note voltage measured.

Reconnect IF Input Cable to main P.C. Board, set AFT Switch to Off.
Adjust AFT Bias Control (VR201) to obtain the voltage measured above.
Remove meter.

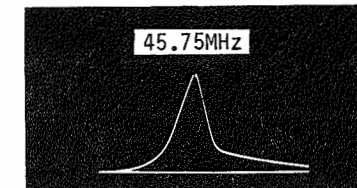


Figure 3

SERVICE INFORMATION

FAIL SAFE

If B+ or high voltage rises to an unsafe level the high voltage protect circuit will be activated and shut down high voltage and sound.

WARNING TO SERVICE PERSONNEL

Do not remove, install, or handle the picture tube in any manner unless shatter-proof goggles are worn. People not so equipped should be kept away while picture tubes are being handled. Keep the picture tube away from the body while handling.

CAUTION

THE CHASSIS OF THIS RECEIVER IS CONNECTED TO THE AC POWER LINE. Operation of the chassis outside the cabinet or with covers removed should not be attempted by anyone not thoroughly familiar with the precautions necessary when working with this type of equipment.

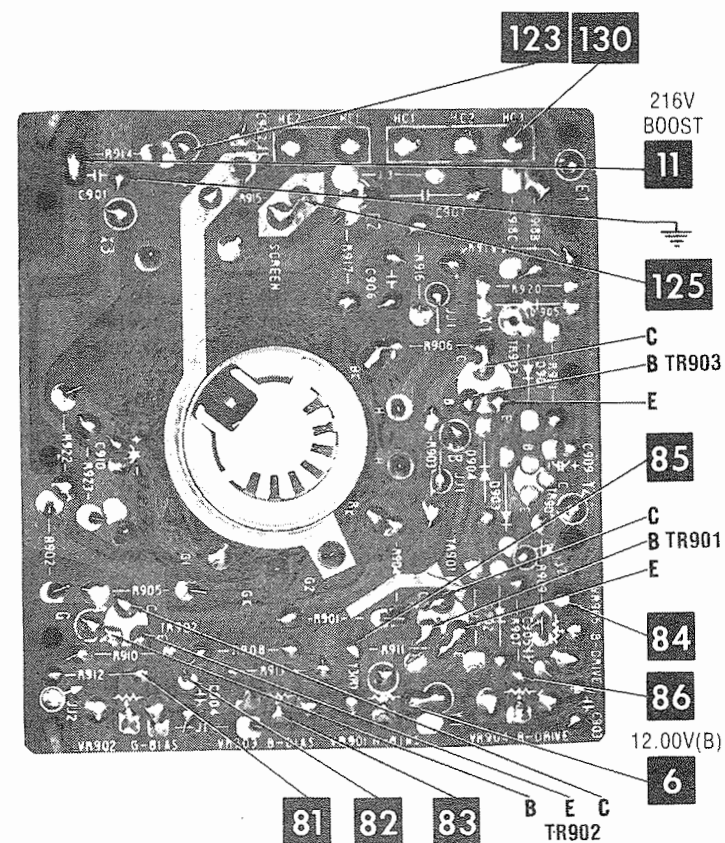
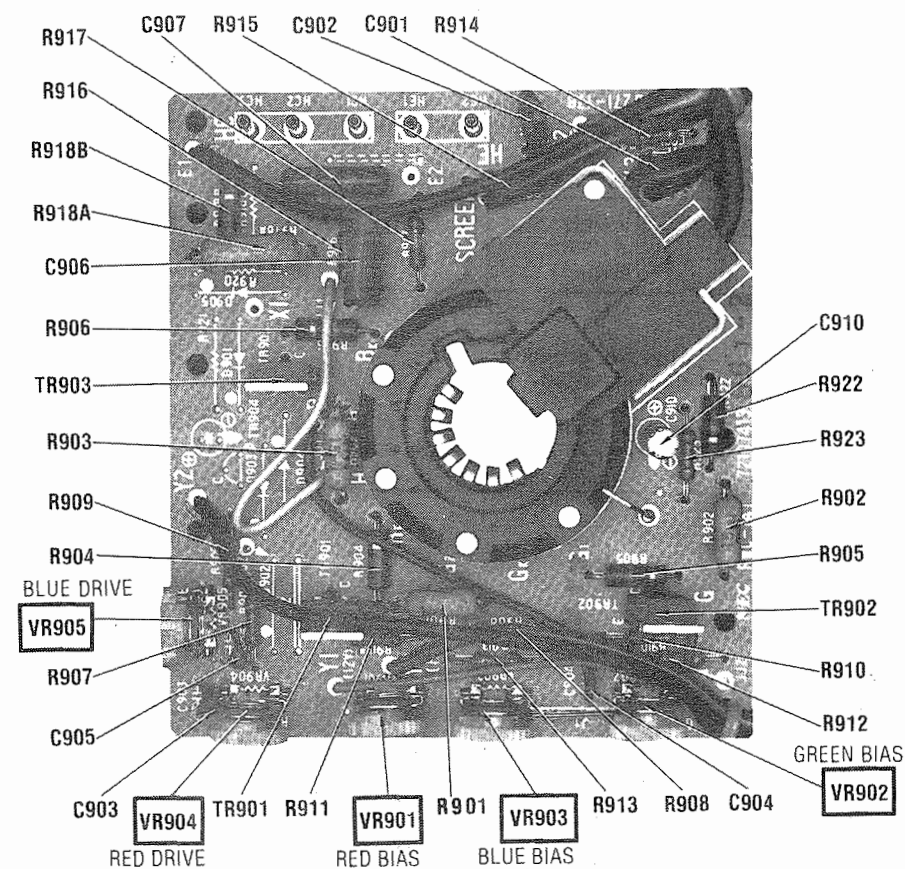
SHOCK HAZARD

120V AC RMS CHASSIS TO EARTH GROUND POTENTIAL. USE ISOLATION TRANSFORMER DURING SERVICING.

CAUTION

The Primary Power Supply and High Voltage protect circuits are critical in regard to the safe operation of the receiver. To ensure protection against possible X-RADIATION and to ensure continued SAFETY in respect to fire and shock hazard, do not attempt to repair these circuits. These circuits are factory adjusted and sealed. If a malfunction develops in the Primary Power Supply circuit (other than TR691 and R691) or the High Voltage Protect circuit, the Main Module must be sent to the factory for replacement.

Courtesy of the Manufacturer



CRT/DRIVE BOARD A Howard W. Sams **CIRCUITRACE** Photo

TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptom.

PICTURE or SOUND

NO PIC, NO SOUND, NO RASTER: Fuses, Power Reg, Reg Drive, Error Amp, D601 Thru D606, ZD601.

NO PIC, NO SOUND, HAS RASTER: Tuner, VIF Amp, Signal Processor (IC201).

NO PIC, NO SOUND, HAS SNOW: Tuner, IF Amp Signal Processor (IC201).

NO PIC, HAS SOUND, NO RASTER: Video (IC701), CRT, D703, D704, D705.

NO PIC, HAS SOUND, HAS RASTER: Video Inv/ Buffer, Video (IC701).

HAS PIC, NO SOUND: Sound (IC301), Audio Drive/ Outputs.

OVERLOADED PICTURE: Signal Processor (IC201).
LOW OR EXCESSIVE BRIGHTNESS: Video (IC701).

SWEEP

NO RASTER, HAS SOUND: HV Rect (T591), CRT.
NO RASTER, NO SOUND: Horiz (IC401), Driver/ Output.

NO VERT DEFLECTION: Vert (IC401)/Output (IC402).
POOR VERT LIN OR FOLDOVER: Vert Output (IC402).
POOR HORZ LIN OR FOLDOVER: Horiz Driver/Output.
NARROW PICTURE: Horiz Driver/Output.
VERT OFF FREQUENCY: Vert (IC401).
HORIZ OFF FREQUENCY: Horiz (IC401).

SYNC

NO VERT SYNC: Vert (IC401).
NO HORIZ SYNC: Horiz (IC401).
NO VERT/HORIZ SYNC: Sync (IC401).

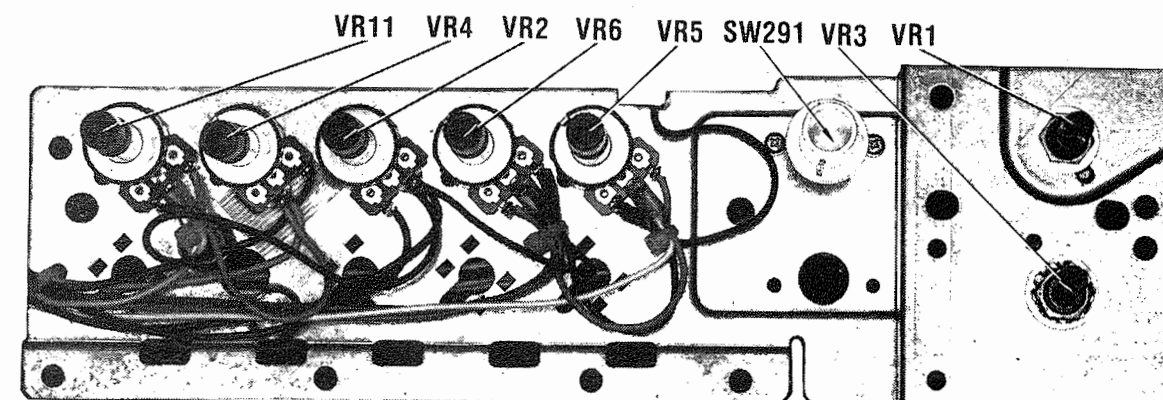
RASTER

YELLOW (NO BLUE): Chroma (IC701), B Out, CRT.

CYAN (NO RED): Chroma (IC701), R Out, CRT.
MAGENTA (NO GREEN): Chroma (IC701), G Out, CRT.

COLOR (B/W operating normally)

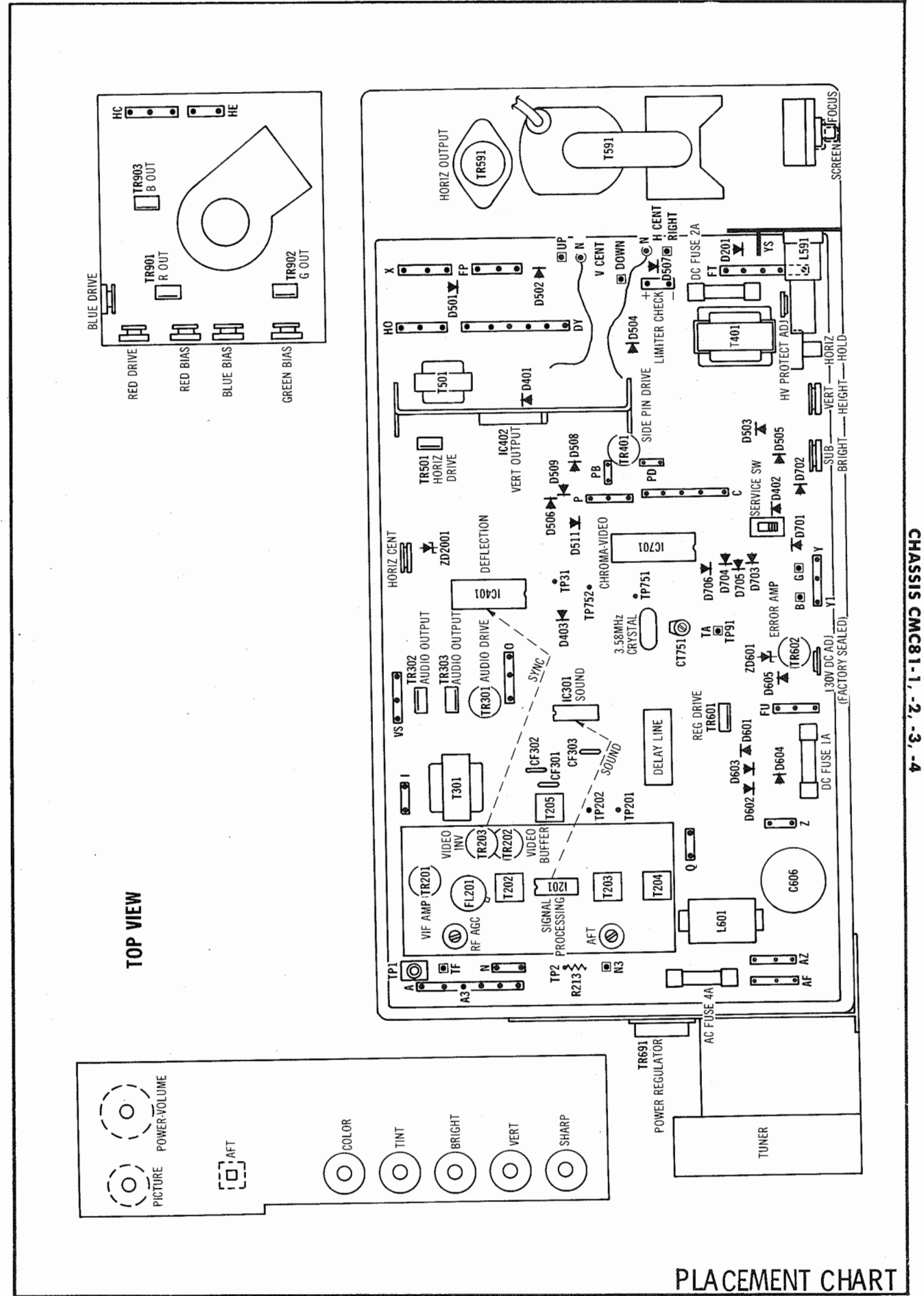
NO COLOR: Chroma (IC701).
WEAK COLOR: Chroma (IC701).
NO COLOR SYNC: Chroma (IC701).
NO GREEN: Chroma (IC701), G Out.
NO BLUE: Chroma (IC701), B Out.
NO RED: Chroma (IC701), R Out.
INCORRECT HUE (TINT): Chroma (IC701).

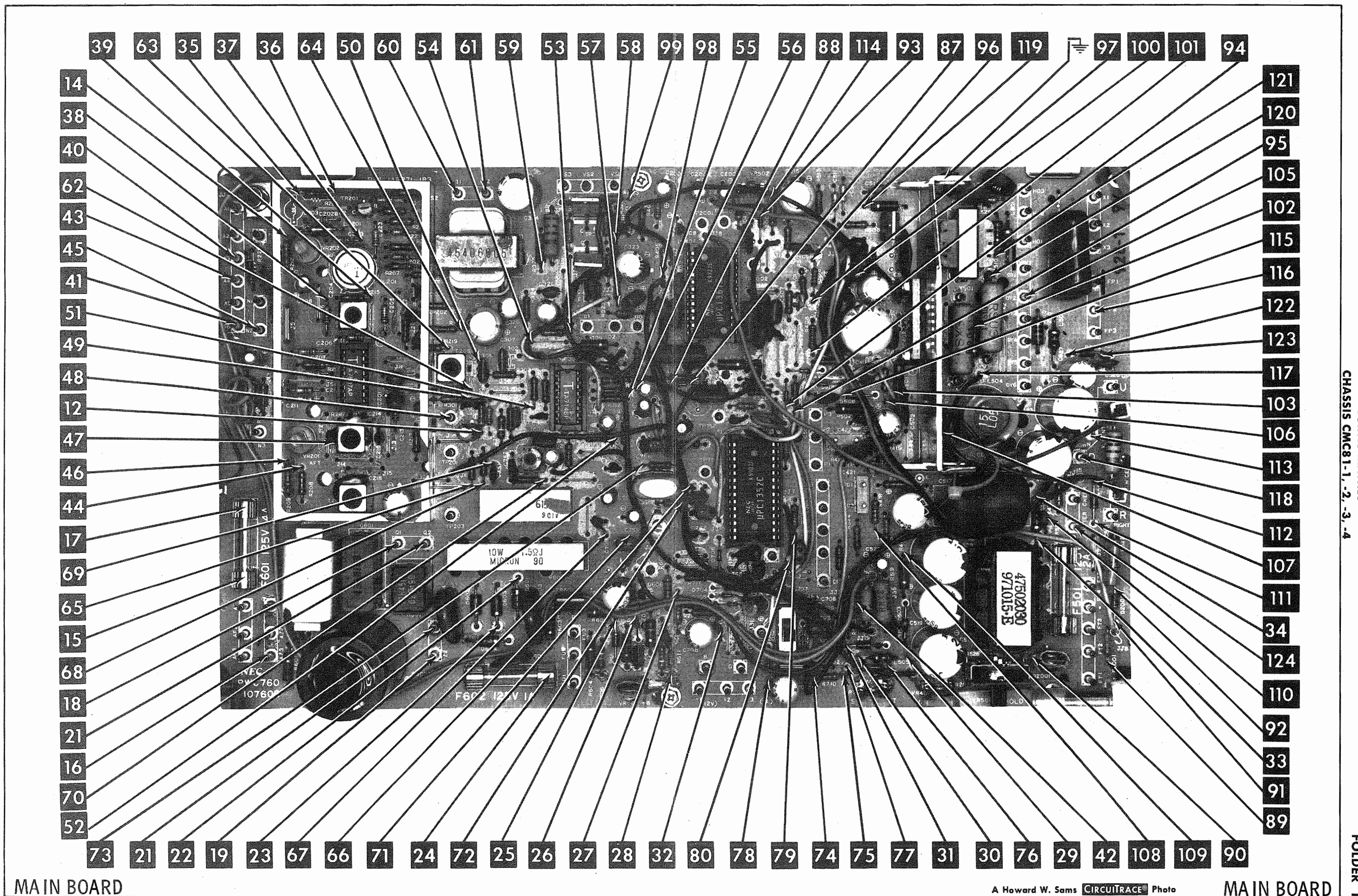


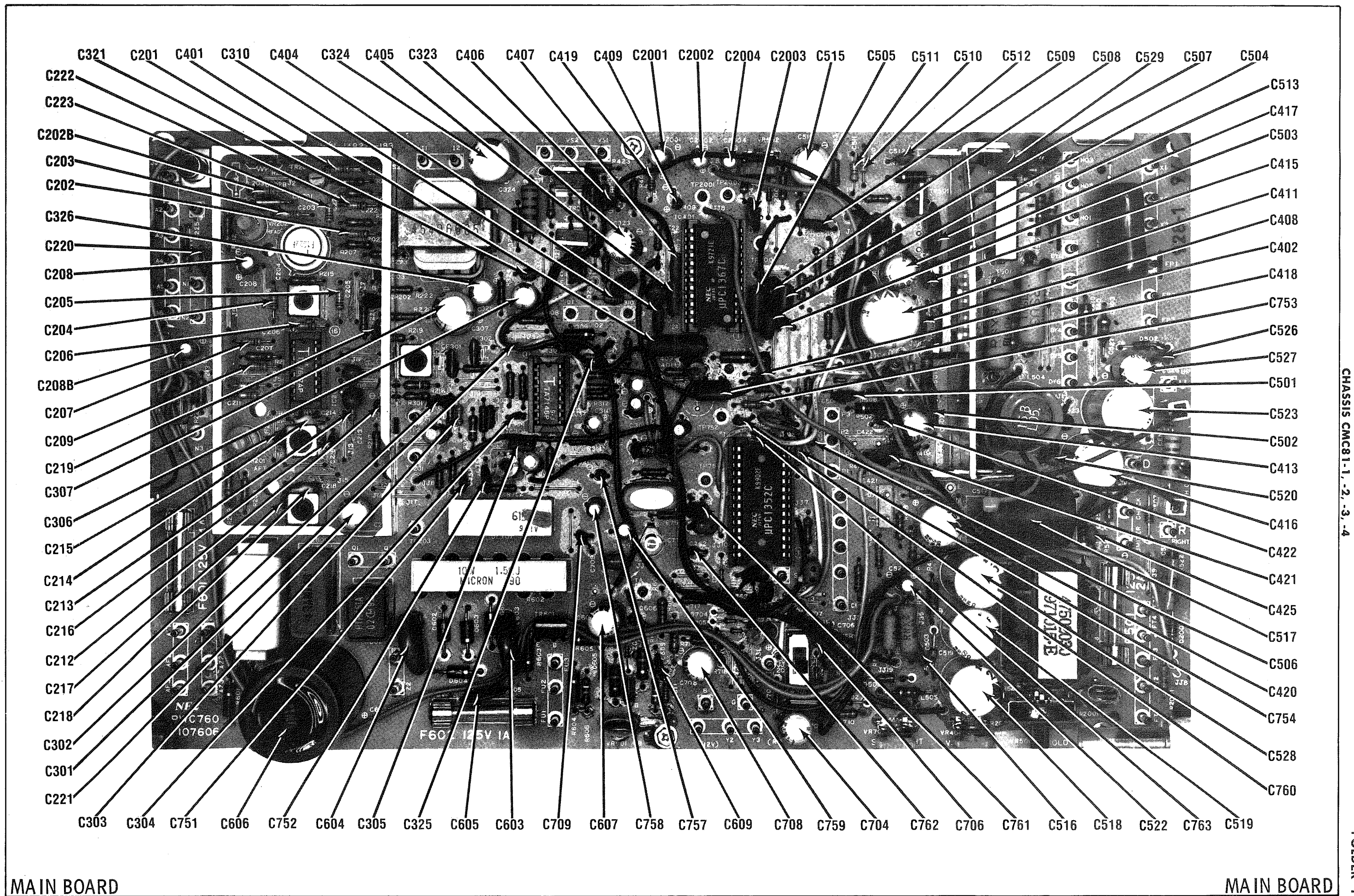
CONTROL ASSEMBLY

MEASUREMENTS BELOW TAKEN WITH METER HAVING .08V MAX BETWEEN PROBE TIPS

ITEM	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9	PIN 10	PIN 11	PIN 12	PIN 13	PIN 14
IC201	12.8K	9980	1300	47.4K	9540	10.2K	16.9K	2700	2700	16.9K	117	8550	0	560K
													PIN 15	PIN 16
													9840	12.7K
IC301	3420	3630	7330	1410	0	392	6170	10.1K	7740	20.8K	0	0	INF	23.1K
													PIN 15	PIN 16
													4640	352
IC401	1583	12.3K	18.5K	0	25.6K	3620	INF	30K	28K	32K	47K	11.8K	INF	2800
					PIN 15	PIN 16	PIN 17	PIN 18	PIN 19	PIN 20	PIN 21	PIN 22	PIN 23	PIN 24
					16.5K	0	10.4K	3430	10.2K	114	3800	3870	20.3K	35.7K
IC402	INF	500K	1.5Meg	3430	10.4K	INF	INF	30K	18K	0				
IC701	117	INF	51.2K	0	12.2K	INF	3230	2510	2930	118	5360	INF	4800	0
	PIN 15	PIN 16	PIN 17	PIN 18	PIN 19	PIN 20	PIN 21	PIN 22	PIN 23	PIN 24	PIN 25	PIN 26	PIN 27	PIN 28
	330K	INF	INF	INF	INF	.5	INF	INF	INF	500K	INF	2190	2180	2190
V1	80Meg	NC	NC	NC	31.4K	165K	10Meg	165K	71.7K	71.7K	165K			
ITEM	E	B	C		ITEM	E	B	C		ITEM	E	B	C	
TR201	33	1204	419		TR303	110K	34K	0		TR602	54K	2000	89K	
TR202	1000	9210	1116		TR401	150	2100	357		TR691	250K	INF	89K	
TR203	728	1116	118		TR501	0	32K	17K		TR901	342	2190	INF	
TR301	1000	8200	34K		TR591	.10	.50	17K		TR902	322	2180	INF	
TR302	110K	34.3K	17K		TR601	INF	45K	15K		TR903	328	2190	INF	

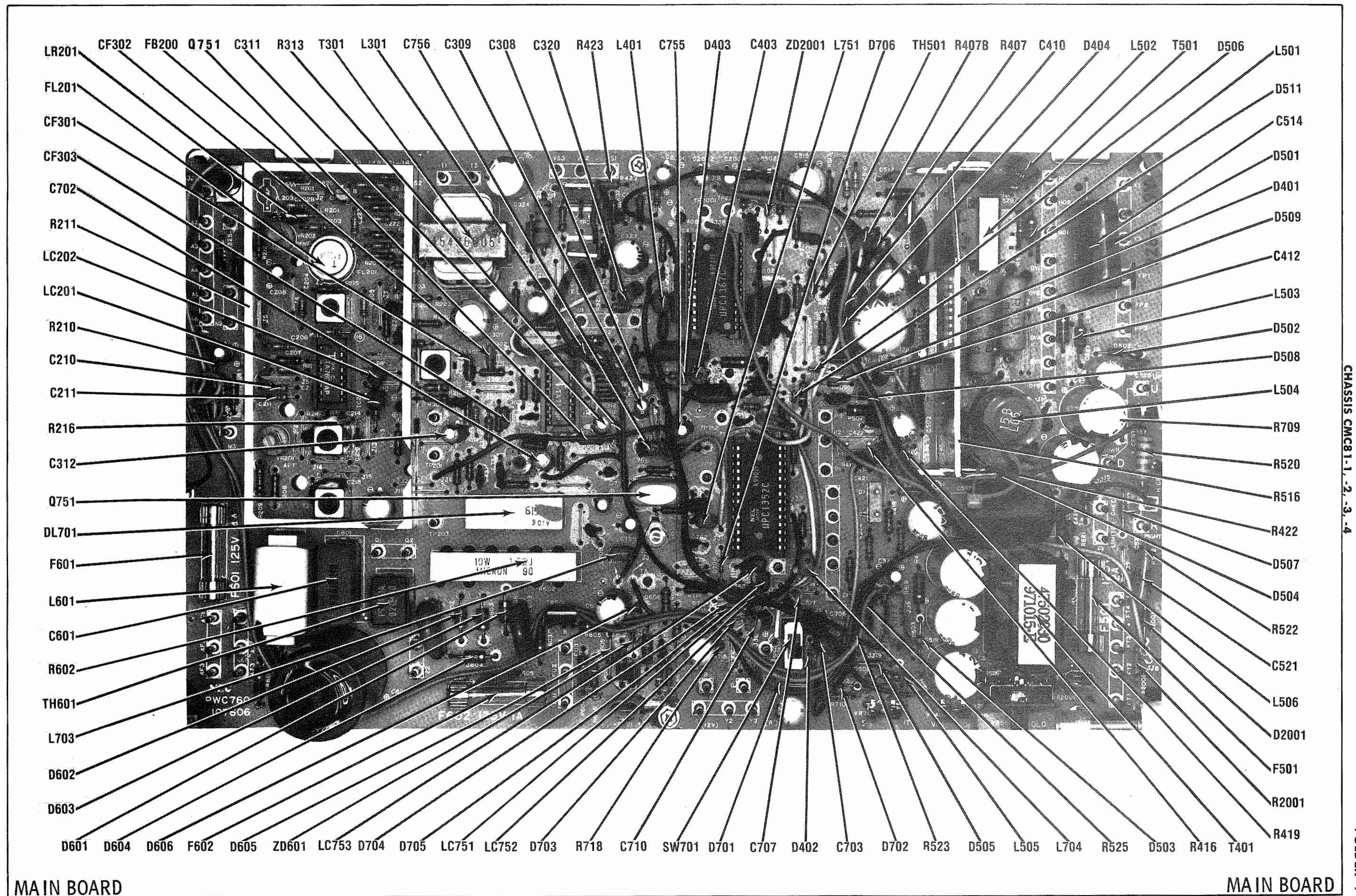


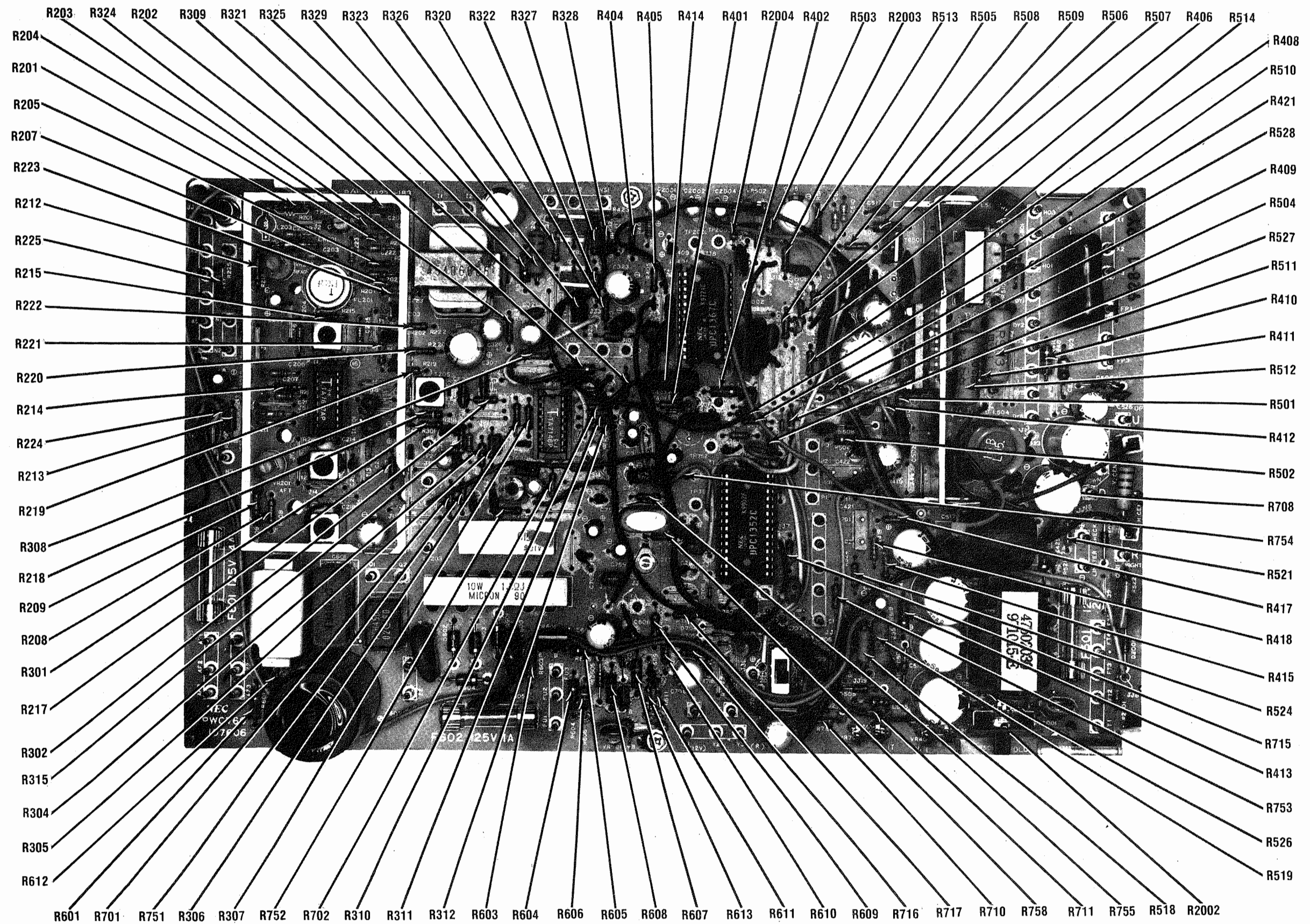




CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

FOLDER 1





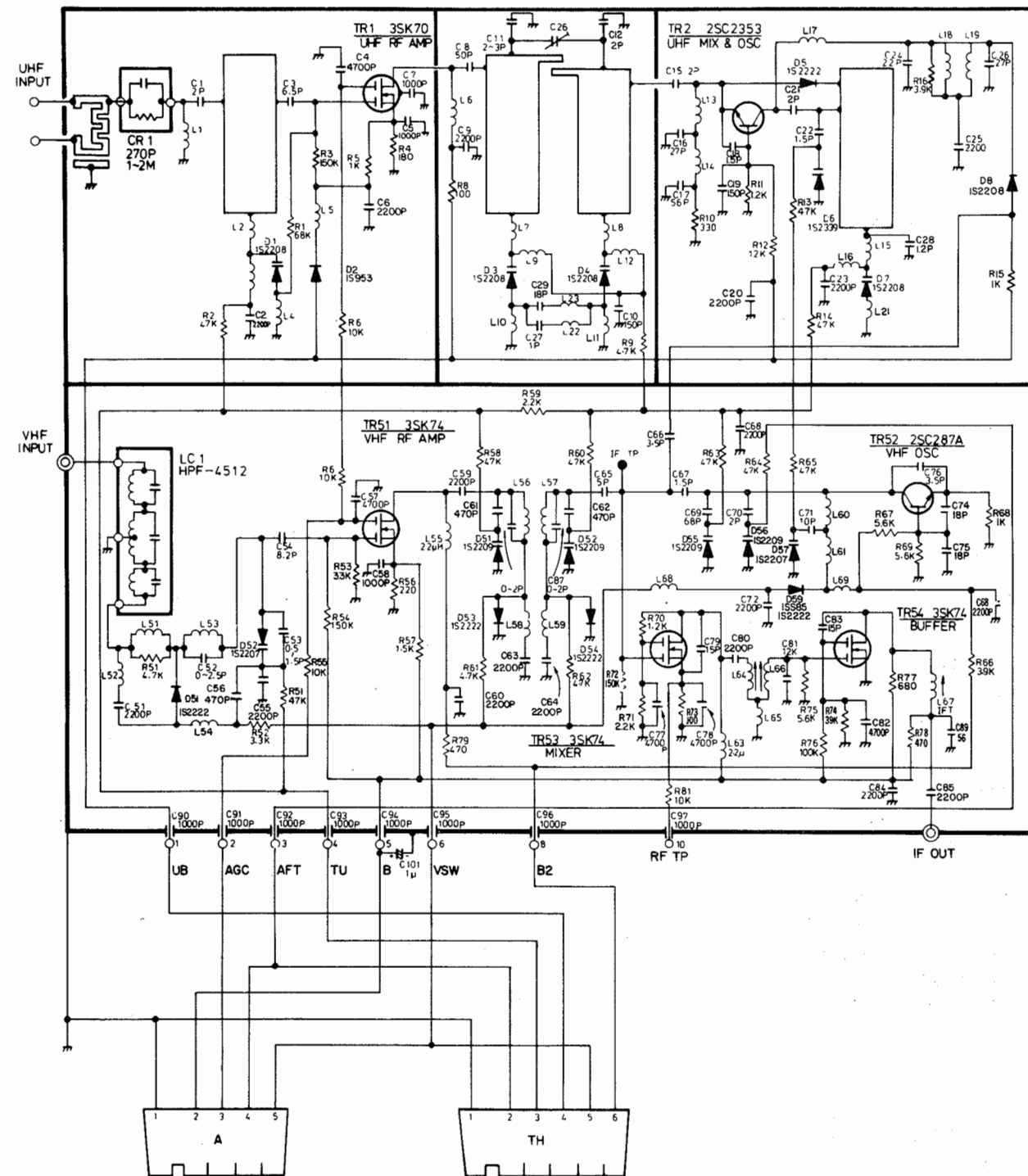
MAIN BOARD

MAIN BOARD

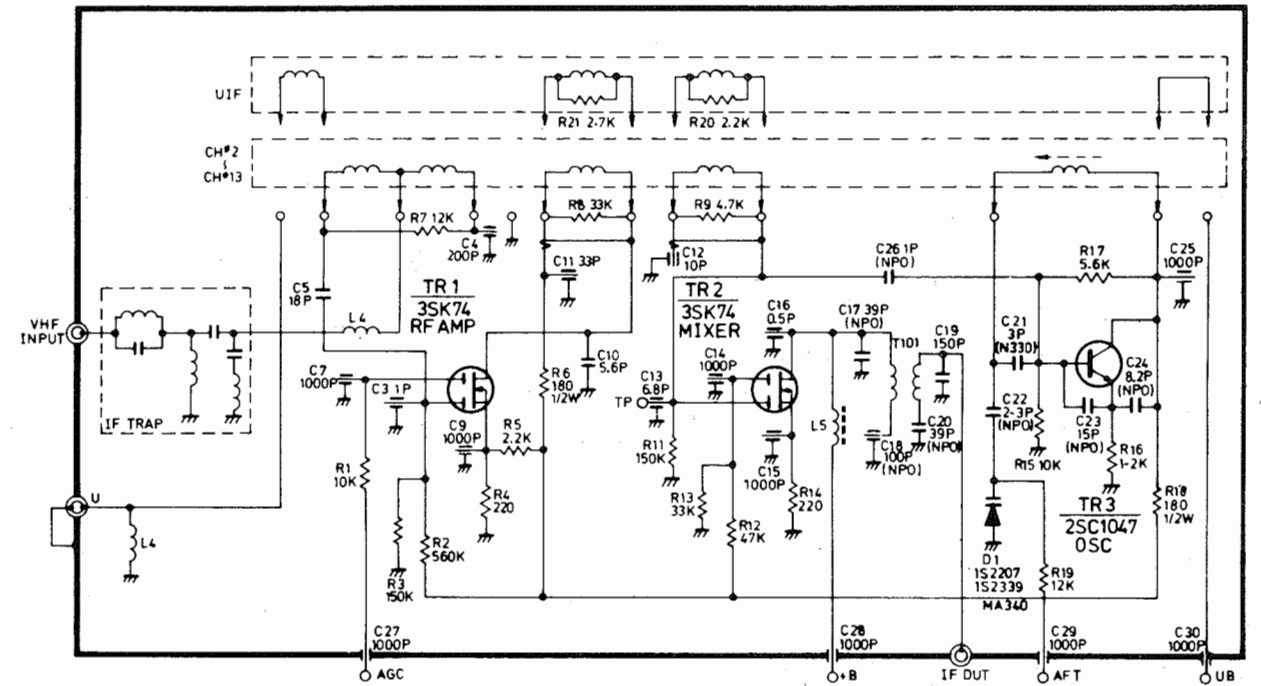
CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

FOLDER 1

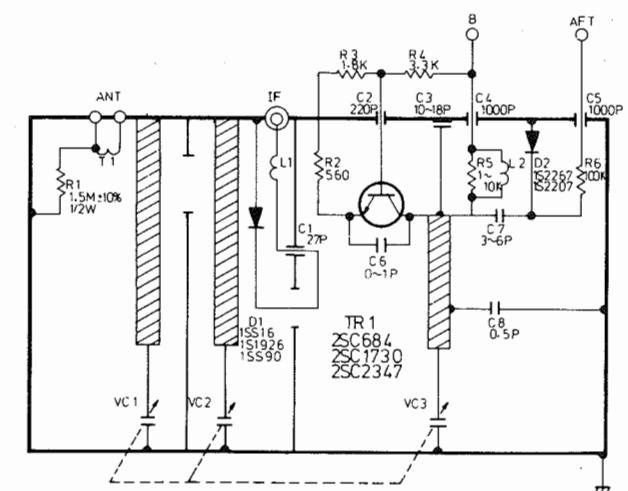
UHF/VHF COMBO TUNER SCHEMATIC DIAGRAM



VHF MECHANICAL TUNER SCHEMATIC DIAGRAM



UHF MECHANICAL TUNER SCHEMATIC DIAGRAM



UHF/VHF COMBINATION TUNER

VHF/UHF MECHANICAL TUNERS

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

FOLDER 1

Courtesy of the Manufacturer

SEQUENTIAL TUNING UNIT REPLACEMENT PARTS LIST (CMC81-3, 4, CMC82-1, 2)



REF. NO.	PART NO.	DESCRIPTION
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TR164 21A120-020 2SC945

TR165	21A120-020	2SC945
TR166	21A118-031	2SD471
TR167	21A118-096	2SC1941
TR168	21A112-046	2SA733
TR169	21A120-020	2SC945
TR170	21A118-002	2SC828
TR171	21A118-002	2SC828
TR172	21A112-046	2SA733
TR173	21A118-121	2SA916
TR174	21A118-121	2SA916
TR175	21A112-046	2SA733

MISCELLANEOUS

VRa1-12	02A178-271	30K Variable Resistor w/Band Switch
NLa-12	03D030-065	NF68X8 Pilot Lamps (Neon)

PART NO.	DESCRIPTION
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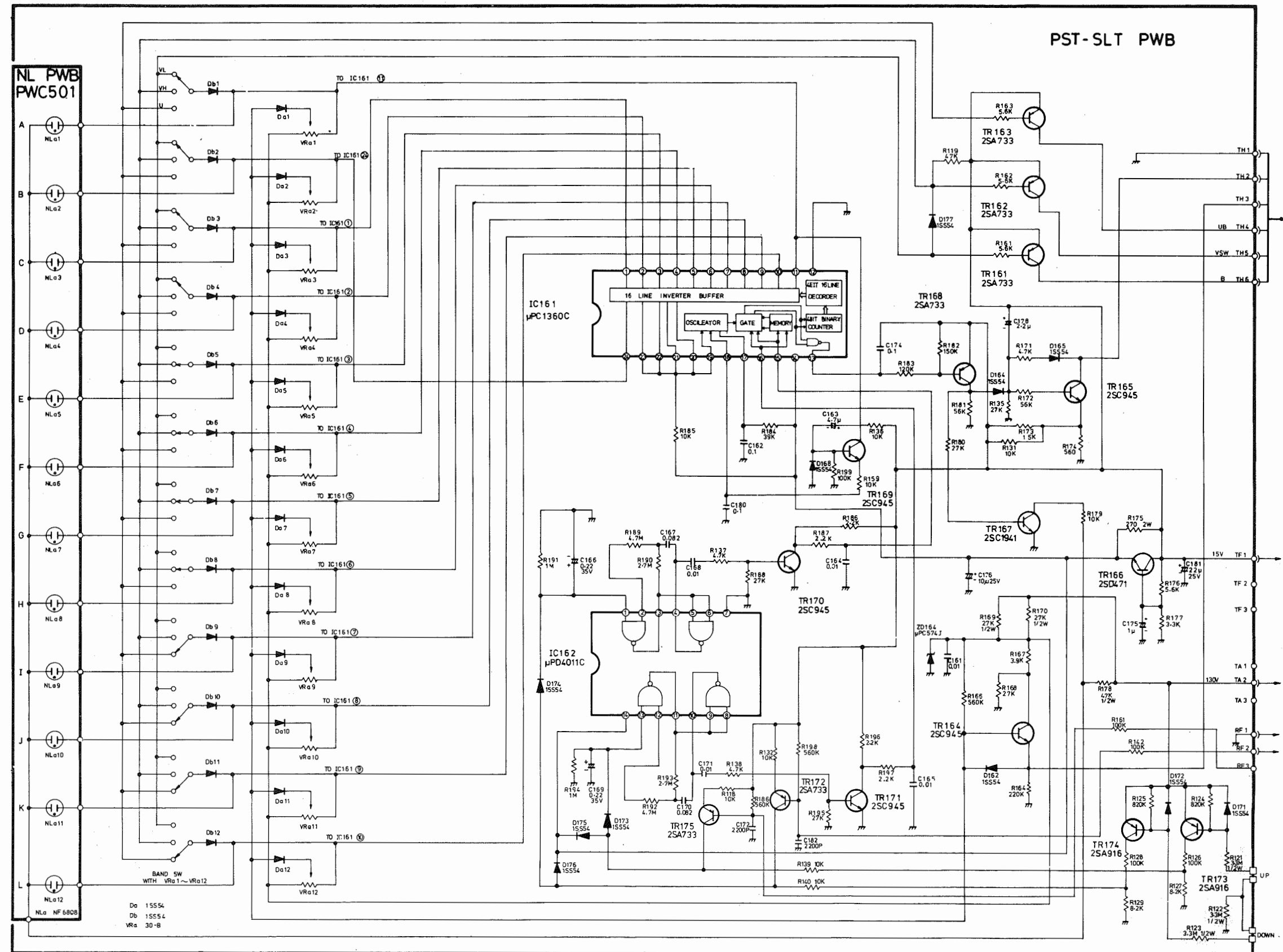
MECHANICAL PARTS

30B190-142	Sensor Panel Case Less Channel Indicator Strip & Tabs
30B190-151	Channel Indicator Less Tabs
05B570-004	Channel Number Tabs (VHF)
05B570-003	Channel Number Tabs (UHF)
05B564-020	Front Panel For Sensor Unit
30B190-174	Sensor Case Cover
30B190-188	Individual Sensor Bar (2 used)
30B190-189	Common Sensor Bar (1 used)
04B148-151	IC Socket 24 pin
04B148-132	Connector 3 pin
04B148-157	Connector 6 pin

Courtesy of the Manufacturer

CURTIS MATHES

FOLDER 1



SEQUENTIAL TUNING BOARD

Courtesy of the Manufacturer

Parts which are CRITICAL with respect to SAFETY are shaded in red. Replace these CRITICAL COMPONENTS with genuine Curtis Mathes replacement parts for continued safe operation of the television receiver.

SEQUENTIAL TUNING BOARD

CURTIS MATHES
CHASSIS CMC81.1 -2 -3 -4

FOLDER 1

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)
Replacement parts shown may be superseded by the availability of newly introduced replacements.
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WIRING DATA

High voltage Lead	Use BELDEN No. 9867 (30 KV)
Shielded Hook-up Wire	Use BELDEN No. 8401 or 8421 (Single-Conductor)
General-use Unshielded Hook-up Wire	8208 (Two-Conductor)
	8528 (Solid) Available in 13 Colors
	8522 (Stranded) Available in 13 Colors
300-Ohm Tuner Input Lead	Use BELDEN No. 8225
75-Ohm Tuner Input Lead	Use BELDEN No. 8241
300-Ohm Antenna Lead-In	8275 (Foam Core) or 8285 (Foam Jacketed)
Antenna Rotor Cable	8464 (Flat) or 8484 (Round) 4-Conductor
	8485 (Round) 5-Conductor
	8488 (Round) 8-Conductor

SEMICONDUCTORS (Select replacement transistor for best results)

REPLACEMENT DATA										
ITEM No.	TYPE No.	MFGR. PART No.	GENERAL ELECTRIC PART No.	NEW-TONE PART No.	RCA PART No.	ECG PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.	MOTOROLA PART No.
D401	F14A	21A119-075	GE-504A	TCG116	SK3311	ECG116	TM116	WEP156	212-76-02	1N4005
D402	S1F14A-P	21A119-075	GE-504A	TCG116	SK3311	ECG116	TM116	WEP156	212-76-02	1N4005
D402	1SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D403	S11SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D403	1SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D403	S11SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D404	1N34A	21A119-123	1N34AS	TCG109	SK3090/109	ECG109	TM109	WEP134/109	103-Z9001	1N34A
D501	CGJ-1	21A110-014	GE-530	TCG525	SK3925/525	ECG525	TM109	WEP177/525	212-Z9010	1N4005
D501	S1CGJ-1	21A110-014	GE-530	TCG525	SK3925/525	ECG525	TM116	WEP177/525	212-Z9010	1N4005
D502	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D502	S1TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D503	F114E	21A119-068	GE-511	TCG506	SK3998/506	ECG506	TM506	WEP172/506	103-287	MR1-1400
D503	S1F114E	21A119-068	GE-511	TCG506	SK3998/506	ECG506	TM506	WEP172/506	103-287	MR1-1400
D504	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D504	S1TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D505	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D505	S1TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005
D505	1SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D505	S11SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D506	1SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935
D506	S11SS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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MISCELLANEOUS

ITEM No.	PART NAME	MFGR. PART No.	NOTES
CF301	Filter	09A024-013	SFE4.5MB
CF302	Filter	09A024-013	SFE4.5MB
CF303	Filter	09A024-014	CDA4.5MC15
CR1001	Component Combination		
CR1002	Component Combination		
CR1003	Component Combination		
CR1004	Component Combination		
CR1005	Component Combination		
CR1006	Component Combination		
L691	Degaussing Coil	01A249-016	(Used in Chassis CMC81-1,-4)
P600	Degaussing Coil	01A249-015	(Used in Chassis CMC81-1,-3)
Q751	AC Power Cord	13A166-365	Polarized
SW291	Crystal	09A021-001	3.58MHz
SW691	Switch	06A119-001	AFT
SW701	Switch	02A178-297	On/Off (Includes Volume Control VR3)
V1	Switch	06A106-115	Service
	CRT	25VFEP22	(Used in Chassis CMC81-2,-4)
	CRT	19VKFP22	(Used in Chassis CMC81-1,-3)
	Antenna Terminal	14B370-146	Board (Used in Chassis CMC81-1,-2)
	Antenna Terminal	14B370-143	Board (Used in Chassis CMC81-3,-4)
	Beam Bender	16A164-001	Purity and Convergence Assembly
	Control Assembly	14B370-144	Front (Used in Chassis CMC81-4)
	Control Assembly	14B370-164	Front (Used in Chassis CMC81-3)
	Control Assembly	14B370-163	Rear (Used in Chassis CMC81-1,-3)
	Control Barrier	01B694-367	Horiz Hold
	On/Off Volume	14B386-034	Control w/Cables
	P.C. Board	14B271-178	CRT/Drive
	P.C. Board	14B386-021	Main (Original)
	P.C. Board	14B386-023	Main (Revised)
	P.C. Board	14B370-145	Sequential Tuning Unit (Used in Chassis CMC81-3,-4)
	Socket	04B148-160	IC, 10 Pin
	Socket	04B148-171	IC, 16 Pin
	Socket	04B148-151	IC, 24 Pin
	Socket	04B148-159	IC, 28 Pin
	Socket	14B386-028	Power Resistor and Regulator Assembly
	Socket	04B168-001	Transistor (TR591, TR691)
	UHF Tuner	07A104-027	Mechanical (Used in Chassis CMC81-1,-2)
	VHF Tuner	07A104-026	Mechanical (Used in Chassis CMC81-1,-2)
	UHF/VHF Tuner	14B370-142	Combination (Used in Chassis CMC81-3,-4)

For SAFETY use only equivalent replacement part.

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Button-AFT (Chassis CMC81-1,-2,-4)	11B233-001	Knob-UHF Selector (Chassis CMC81-2)	11B262-001
Button-AFT (Chassis CMC81-3)	11B253-001	Knob-VHF Fine Tuning (Chassis CMC81-1)	11B265-001
Extension-Focus, Horiz Hold	30B311-023	Knob-VHF Fine Tuning (Chassis CMC81-2)	11B264-001
Knob-On/Off Volume (Chassis CMC81-3)	11B183-147	Knob-VHF Selector (Chassis CMC81-1)	11B256-001
Knob-On/off Volume (Chassis CMC81-4)	11B244-001	Knob-VHF Selector (Chassis CMC81-2)	11B260-001
Knob-Sharpness, Vert Hold, Tint, Color, Brightness (Chassis CMC81-1,-3)	11B255-001	UHF Dial Scale (Chassis CMC81-1)	11B259-001
Knob-UHF Fine Tuning (Chassis CMC81-1)	11B265-001	UHF Dial Scale (Chassis CMC81-2)	11B263-001
Knob-UHF Fine Tuning (Chassis CMC81-2)	11B264-001	VHF Dial Scale (Chassis CMC81-1)	05B598-001
Knob-UHF Selector (Chassis CMC81-1)	11B258-001	VHF Dial Scale (Chassis CMC81-2)	05B590-001

For SAFETY use only equivalent replacement part.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
# T301	460	3.2	10A119-016 45406605(1)			# For SAFETY use only equivalent replacement part. (1) Number on unit.

SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA		NOTES
			MFGR. PART No.	QUAM PART No.	
SP1	5" PM	3.2 Ohm	29B006-001		

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA				
		MFGR. PART No.		BUSS PART No.		NOTES
		DEVICE	HOLDER	DEVICE	HOLDER	
# F501	2A @ 125V Slow-Blow	08T001-013		MDL-2	1A1907-02	
# F601	4A @ 125V Slow-Blow	08T001-010		MDX-4	1A1907-02	
# F602	1A @ 125V Quick-Acting	08T001-009		AGC-1	1A1907-02	

For SAFETY use only equivalent replacement part.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)
Replacement parts shown may be superseded by the availability of newly introduced replacements.
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SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							ZENITH PART No.	MOTOROLA PART No.
			GENERAL ELECTRIC PART No.	NEW-TONE PART No.	RCA PART No.	ECG PART No.	THORDARSON PART No.	WORKMAN PART No.			
D507	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005	
	S1TVR-06G		TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D508	TVR-06G	21A119-080	GE-514	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005	
	S1TVR-06G		TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D509	ISS54	21A119-079	GE-504A	TCG519	SK3100/519	ECG519	TM519	WEP158/116	212-76-02	1N4005	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D601	RM-2C	21A119-080	GE-510	TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007	
	S1RM-2C		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	S1ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
D602	RM-2C	21A119-077	GE-510	TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007	
	S1RM-2C		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	S1ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
D603	RM-2C	21A119-077	GE-510	TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007	
	S1RM-2C		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	S1ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
D604	RM-2C	21A119-077	GE-510	TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007	
	S1RM-2C		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
	S1ISS54		TCG125	SK3081/125	ECG125	TM125	WEP170/125	903-334	1N4007		
D605	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005	
	S1TVR-06G		TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005		
	VD1122		TCG601	SK3463/601	ECG601	TM519	WEP925/519	103-Z9039	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D702	ISS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D703	ISS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D704	ISS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D705	ISS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D706	ISS54	21A119-080	GE-514	TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935	
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
	S1ISS54		TCG519	SK3100/519	ECG519	TM519	WEP925/519	103-131	1N4935		
D2001	TVR-06G	21A119-079	GE-504A	TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005	
	S1TVR-06G		TCG116	SK3313/116	ECG116	TM116	WEP158/116	212-76-02	1N4005		

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)
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SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA						ZENITH PART No.	MOTOROLA PART No.
			GENERAL ELECTRIC PART No.	NEW-TONE PART No.	RCA PART No.	ECG PART No.	THORDARSON PART No.	WORKMAN PART No.		
D2002	VD1220	21A119-040	GE 10-107	TCG605	SK3864/505	ECG605	TM1133	WEP2102/1133		
IC201	TA7607AP	21A120-051		TCG1133	SK3490/1133	ECG1133				
IC301	TA7146P	21A120-071								
IC401	UPC1367C	21A120-052								
	PMC1367P									
IC402	AN5510	21A120-050								
IC701	UPC1358H	21A120-049								
	UPC1352C									
TR201	AN5310	21A118-131	GE-61	TCG107*	SK3132*	ECG107*	TM107*	WEP535/107*	121-722*	MPSH34
	2SC2026									
TR202	2SC945AQ	21A112-062	GE-212	TCG85	SK3124/289	ECG85	TM289	WEP1945	121-972*	MPSA18*
TR203	2SC828	21A112-062	GE-61*	TCG85	SK3866	ECG85	TM199	WEP828	121-972*	MPSA18*
	2SC945AR									
TR301	2SC828	21A112-062	GE-61*	TCG85	SK3124/289	ECG85	TM289	WEP1945	121-972*	MPSA18*
	2SC1941L	21A112-120	GE-222*	TCG287*	SK3866	ECG287*	TM287*	WEP68/287*	121-Z9045*	MPSA42*
TR302	2SD401A	21A118-063		TCG375	SK3929	ECG375	TM375	WEP780/291	121-Z9106	MJE15030
TR303	2SD401	21A118-063		TCG375	SK3929	ECG375	TM375	WEP780/291	121-Z9106	MJE15030
	2SB346A	21A118-122	GE-212	TCG292	SK3930	ECG292	TM292	WEP781/292	121-Z9048	MJE15031
TR401	2SB346	21A118-140		TCG292	SK3124/289	ECG292	TM289	WEP781/292	121-Z9048	MJE15031
	2SC945AR			TCG85		ECG85		WEP1945	121-972*	MPSA18*
TR501	2SC1507	21A118-100	GE-251	TCG198	SK3219	ECG198	TM198	WEP779/198	121-Z9028	TIP50
TR591	2SC1358	21A112-036	GE-38	TCG238	SK3710/238	ECG165	TM238	WEP764/238	121-Z9001	BU208
TR601	2SC1507	21A112-098	GE-251	TCG198	SK3219	ECG198	TM198	WEP779/198	121-Z9028	TIP50
TR602	2SC1507	21A118-120	GE-222*	TCG287*	SK3866	ECG287*	TM287*	WEP68/287*	121-Z9045*	MPSA42*
TR691	2SC1106	21A118-114	GE-75	TCG162	SK3559/162	ECG94	TM162	WEP707/162	121-Z9018	MJ423
TR901	2SC1507	21A112-098	GE-251	TCG198	SK3219	ECG198	TM198	WEP779/198	121-Z9028	TIP50
TR902	2SC1507	21A112-098	GE-251	TCG198	SK3219	ECG198	TM198	WEP779/198	121-Z9028	TIP50
TR903	2SC1507	21A112-098	GE-251	TCG198	SK3219	ECG198	TM198	WEP779/198	121-Z9028	TIP50
ZD601	RD8-2EB	21A037-012	GEZD-8.2	TCG5016A	SK3782/5016A	ECG5016A	TM5016A	WEP1417/5016	103-Z9019	1N5237A
ZD2001	RD8-2EB	21A037-012	GEZD-8.2	TCG5016A	SK3782/5016A	ECG5016A	TM5016A	WEP1417/5016	103-Z9019	1N5237A

For SAFETY use only equivalent replacement part.
* Lead configuration may vary from original.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		MFR. PART No.	OTHER IDENTIFICATION	MILLER PART No.	
DL701	Delay Line				
L301	RF Choke (5.6uH)	01A405-587			
L401	Peaking	01A405-475			
L601	Line Filter (68uH)	01A405-367			
L703	Peaking				
L704	Peaking	01A495-586			
L751	Peaking (33uH)	01A405-613			
L1000	Balun				
LC201	Filter (177MHz)	01A405-564			
LC202	7.16MHz Trap	01A405-564			
LC751	7.16MHz Trap	01A405-573			
LC752	7.16MHz Trap	01A405-573			
LC753	7.16MHz Trap	01A405-573			
LR201	Video IF	01A405-620			
T202	Video IF	01A405-612			
T203	Video IF	01A405-579			
T204	Video IF	01A405-579			
T205	4.5MHz Trap	01A405-581			
T751	Chroma Bandpass	01A405-484			

For SAFETY use only equivalent replacement part.

COILS & TRANSFORMERS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA				
		MFR. PART No.	OTHER IDENTIFICATION	MILLER PART No.	THORDARSON PART No.	TRIAD PART No.
L500	Yoke Horiz 1.39mH 90° Vert 31.6mH	01A556-002(1) 01A556-001(2) 01A555-002(3) 01A555-001(4)	48007054 48007052			
L501	RF Choke 5.6uH	01A405-587	P5R6KA			
L502	RF Choke	01A405-611				
L503	RF Choke 5.6uH	01A405-587	P5R6KA			
L504	Horiz Linearity	01A405-471				
L505	RF Choke 5.6uH	01A405-587	P5R6KA			
L506	RF Choke 5.6uH	01A405-587	P5R6KA			
L591	Width	14B370-233	60908009-E			
T401	Side Pincushion	10A119-017	47502030			
T501	Horiz Driver	10A108-001				
T591	Horiz Output	01A559-001	47105082			

For SAFETY use only equivalent replacement part.

- (1) 25" Original.
- (2) 25" Revised.
- (3) 19" Original.
- (4) 19" Revised.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		MFGR. PART No.	SPRAGUE/ Q-LINE PART No.	WORKMAN PART No.
# R329	270 5% 2W Metal Oxide	08A158-300		22-4082
# R413	150 10% 1/2W Carbon		RB-1515	22-2076
# R502	10K 10% 1/2W Carbon	05R310-810	RB-1035	22-2120
# R503	680 5% 1/4W Carbon Film	25R168-405	RA-6815	22-1092
# R504	3900 5% 1/4W Carbon Film	25R239-405	RA-3925	22-1110
# R505	22K 5% 1/4W Carbon Film	25R322-405	RA-2235	22-1128
# R506	3300 1% 1/4W Metal Oxide	08A158-302		
# R507	330 5% 1/4W Carbon Film	25R133-405	RA-3315	22-1084
R511	1800 5% 3W Metal Oxide			
R512	8200 5% 3W Metal Oxide			
# R513	2200 5% 1/2W Carbon Film		RB-2225	22-2104
	680 10% 1/2W Carbon	05R168-810	RB-6815	22-2092
# R516	680 10% 1/2W Carbon	05R168-810	RB-6815	22-2092
# R518	10 5% 1W Metal Oxide	08A158-319		22-3048
# R519	27 5% 2W Metal Oxide	08A158-338		22-4058
# R520	220 5% 2W Metal Oxide	08A158-326		22-4080
# R523	22K 5% 1/4W Carbon Film		RA-2235	22-1128
	10K 5% 1/4W Carbon Film	25R310-405	RA-1035	22-1120
# R524	10K 5% 1/4W Carbon Film	25R310-405	RA-1035	22-1120
# R525	100K 5% 1/4W Carbon Film		RA-1045	22-1144
	10K 5% 1/4W Carbon Film	25R310-405	RA-1035	22-1120
# R526	3300 5% 1/4W Carbon Film	25R233-405	RA-3325	22-1108
# R527	330 5% 1/4W Carbon Film		RA-3315	22-1084
# R528	1500 5% 1/4W Carbon Film		RA-1525	22-1100
# R601	1M 10% 1/2W Carbon	08A158-179	RB-1055	22-2168
# R602	1.5 5% 10W WW	08A158-315	247E1R55	
# R603	220 10% 1/2W Carbon	05R122-810	RB-2215	22-2080
# R604	33K 10% 1/2W Carbon	05R333-810	RB-3335	22-2132
# R605	1000 10% 1/2W Carbon	05R210-810	RB-1025	22-2096
# R606	390K 5% 1/4W Carbon Film	25R439-405	RA-3945	22-1158
# R607	39K 10% 1/2W Carbon	05R339-810	RB-3935	22-2134
# R608	39K 10% 1/2W Carbon	05R339-810	RB-3935	22-2134
# R609	15K 1% 1/2W Metal Oxide	08A158-339		
# R610	13K 1% 1/2W Metal Oxide	08A158-304		
# R611	2200 1% 1/4W Metal Oxide	08A158-301		
# R612	100K 10% 1/2W Carbon		RB-1045	22-2144
# R613	39K 5% 1/4W Carbon Film		RA-3935	22-1134
# R691	160 Tap @ 10 16W 8W WW			
	150 Tap @ 10 16W 8W WW	08A158-318		
# R914	82 5% 1/4W Carbon Film	25R082-005	RA-8205	22-1070
# R918A	3.3 5% 2W Metal Oxide	08A158-340		
# R918B	18 10% 1/2W Carbon		RB-1805	22-2054
# R2001	10K 5% 1/4W Carbon Film	25R310-405	RA-1035	22-1120
# R2002	10K 5% 1/4W Carbon Film	25R310-405	RA-1035	22-1120
# R2003	680 5% 1/4W Carbon Film	25R168-405	RA-6815	22-1092
# R2004	47K 5% 1/4W Carbon Film	25R347-405	RA-4735	22-1136
# TH501	100 Cold NTC	08A158-287		FR1022
# TH601	9 Cold PTC	08A158-271		FR605

For SAFETY use only equivalent replacement part.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA			
		MFGR. PART No.	MALLORY PART No.	SPRAGUE Q-LINE	PART No. GENERAL LINE
C208A	1 50V		VTT 1A50	QCP-3107-01	EV-1615
	4.7 50V		VTT 4R7B50	QCP-3122-01	EV-1619.1
C208B	1 50V		VTT 1A50	QCP-3107-01	EV-1615
	2.2 50V		VTT 2R2A50	QCP-3114-01	EV-1617.1
C212	.47 35V		TDC474M050EL		SD50-R479
	1 150V		VTT 1A50	QCP-3107-01	EV-1615
C221	100 16V		VTT 100E 16	QCP-3168-01	EV-1231
C306	47 16V		VTT 47D 16	QCP-3154-01	EV-1226
C307	470 16V		VTT 470K 16	QCP-3184-01	EV-1251
C308	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C309	1 50V		VTT 1A50	QCP-3107-01	EV-1615
C311	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C312	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C320	1 50V		VTT 1A50	QCP-3107-01	EV-1615
C323	10 160V		TC52A*		TVA-1504*
C324	22 160V				
C326	47 16V		VTT 47D 16	QCP-3154-01	EV-1226
C403	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C406	3.3 16V		TDC335M035FL	QCP-2117-01	SD35-3R39
C409	2.2 16V		TDC225M035FL	QCP-2115-01	SD35-2R29
C410	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C411	2200 16V		TC1520C*		TVA-1175.3*
C412	.22 50V		TDC224M050EL	QCP-2105-01	SD50-R229
C413	100 16V		VTT 100E 16	QCP-3168-01	EV-1231
C416	330 35V		VTT 330M35	QCP-3181-01	EV-1445
C417	100 25V		VTT 100G25	QCP-3168-01	EV-1331
C420	470 10V		VTT 470K 16	QCP-3184-01	EV-1251
C422	10 16V		TDC106M025FL	QCP-2130-01	SD25-109
# C506	3.3 16V	04A111-111			
C513	3.3 160V				
C515	470 16V		VTT 470K 16	QCP-3184-01	EV-1251
# C518	470 25V	04A111-012	VTT 470M25	QCP-3187-01	EV-1451
# C519	1000 16V	04A111-112	VTT 1000M16	QCP-3195-01	EV-1261
# C522	1 50V	04A111-098	VTT 1A50	QCP-3107-01	EV-1615
# C523	47 160V	04A111-102			
# C527	10 160V	04A030-090			
# C528	2200 25V	04A111-099			EV-1380
# C606	680 200V	04A111-088			
C702	10 16V NP		TCN5010A	QCP-4148-01	TVAN-1304.1
C703	1 50V		VTT 1A50	QCP-3107-01	EV-1615
C704	47 25V		VTT 47E25	QCP-3154-01	EV-1426.1
C707	2.2 50V		VTT 2R2A50	QCP-3114-01	EV-1617.1
C708	100 16V		VTT 100E 16	QCP-3168-01	EV-1231
C710	10 25V		VTT 10B25	QCP-3132-01	EV-1422
C755	.22 50V		TDC224M050EL	QCP-2105-01	SD50-R229
C756	.22 50V		TDC224M050EL	QCP-2105-01	SD50-R229
C757	4.7 16V		TDC224M050EL	QCP-2105-01	SD35-4R79
C758	.22 50V		TDC224M050EL	QCP-2105-01	SD50-R229
C759	.22 50V		TDC224M050EL	QCP-2105-01	SD50-R229
C910	1 50V		VTT 1A50	QCP-3107-01	EV-1615
# C2001	10 25V	04A111-113	VTT 10B25	QCP-3132-01	EV-1422
# C2002	10 25V	04A111-113	VTT 10B25	QCP-3132-01	EV-1422
# C2004	1 50V	04A111-098	VTT 1A50	QCP-3107-01	EV-1615

#For SAFETY use only equivalent replacement part.

*Axial replacement for radial device.

CURTIS MATHES
CHASSIS CMC81-1, -2, -3, -4

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PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA		
			MALLORY PART No.	SPRAGUE PART No.	
				Q-LINE	GENERAL LINE
C201	.01 25V		MAG2511	QCP-5192-01	HY-520
C202A	.01 25V		MAG2511	QCP-5192-01	HY-520
C202B	.01 25V		MAG2511	QCP-5192-01	HY-520
C203	.01 25V		MAG2511	QCP-5192-01	HY-520
C204	.01 25V		MAG2511	QCP-5192-01	HY-520
C205	.01 25V		MAG2511	QCP-5192-01	HY-520
C206	.01 25V		MAG2511	QCP-5192-01	HY-520
C207	.01 25V		MAG2511	QCP-5192-01	HY-520
C209	.01 25V		MAG2511	QCP-5192-01	HY-520
C210	470 50V		GP347		10TS-T47
C211	470 50V		GP347		10TS-T47
C213	.01 25V		MAG2511	QCP-5192-01	HY-520
C214	120 N075		*		10TCN-T12
C215	3pF NPO 50V				10TCC-V30
C216	3pF NPO 50V				10TCC-V30
C217	33 NPO 33V 5%		CNO433		10TCC-Q33
C218	120 N330		*		
C219	12 50V		CNO412		10TCC-Q12
C220	.1 50V		MAG5001		
C222	.01 25V		MAG2511	QCP-5192-01	HY-520
C223	.01 25V		MAG2511	QCP-5192-01	HY-520
C301	.01 25V		MAG2511	QCP-5192-01	HY-520
C302	.01 50V		MAG5011		
C303	.01 25V		MAG2511	QCP-5192-01	HY-520
C304	33 NPO 5%		CNO433		10TCC-Q33
C305	.0068 50V		EWf1A268		1PB-D68
C310	.01 25V		MAG2511	QCP-5192-01	HY-520
C321	100 10%		GP310		10TS-T10
C325	.01 25V		MAG2511	QCP-5192-01	HY-520
C401	.22		EWf05022		431P2249R5
C402	680		GP368		10TS-T68
C404	.0027 50V		M192P2729R8		192P2729R8
C405	.027 50V		M192P2739R8		192P2739R8
C407	.022 50V		M192P2239R8		192P2239R8
C408	220		GP322		10TS-T22
C415	.01		MAG5011		
C418	.047 50V		EWf1A147		1PB-S47
C419	.01 25V		MAG2511	QCP-5192-01	HY-520
C421	.0033		GP233	QCP-5176-01	5GA-D33
C425	.001 10%		GP210		10TS-D10
# C501	.0022 500V 10%	05A155-256			
C502	.01		MAG5011		
# C503	.0022 50V	05A155-200			
# C504	.0082 50V	05A148-012			
# C505	.1 50V	05A155-034	EWf05010		431P1049R5
# C507	.022 50V	05A155-251			
# C508	.01 50V	05A155-252	EWf05010		431P1049R5
# C509	.001 50V	05A155-028			
# C510	470 50V	05A155-257			
# C511	470 50V	05A155-257			
C512	560		GP356		10TS-T56
C513	.01		MAG5011		
# C514	.0145 1.5KV	05A155-242			
# C516	.0022 500V 10%	05A155-256			
# C517	.39 400V 5%	05A155-243			
# C520	270 500V	05A051-231			10TCC-T27
C521	.1 250V				
# C526	.0022 500V 10%	05A155-256			
C529	.0033		GP233	QCP-5176-01	5GA-D33
# C601	.047 125V	05A155-254			
# C603	.0047 125V AC	05A155-128			
# C604	.0047 125V AC	05A155-128			
# C605	.01 500V	05A155-255			5GAS-S10
# C609	.0022 500V	05A155-007			
C706	100 NPO 50V 5%		CNO310		10TCC-T10
C709	27 NPO		CNO427		10TCC-Q27
C751	100 N150 5%				

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA		
			MALLORY PART No.	SPRAGUE PART No.	
				Q-LINE	GENERAL LINE
C752	120 NPO 5%				
C753	.01 25V		MAG2511	QCP-5192-01	HY-520
C754	.01		MAG5011		
C760	390		GP339		10TS-T39
C761	68		GP468		10TS-Q68
C762	22 NPO		CNO422		10TCC-Q22
C763	100 N150 5%		CNO310		10TCC-T10
C901	.01		MAG5011		
C902	.001 1KV		GP210		10TS-D10
C903	680 50V		GP368		10TS-T68
C904	680 50V		GP368		10TS-T68
C905	820 50V		GP382		10TS-T82
C906	.1 50V		EWf05010		431P1049R5
C907	.01		EWf1A110		1PB-S10
# C2003	.1 50V	05A155-138	MAG5001		
CT751	30 Trimmer	03A046-024			

#For SAFETY use only equivalent replacement part.
*Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA		
			MFR. PART No.	MALLORY PART No.	TRW PART No.
VR1	Picture	10K	02A178-287		
VR2	Brightness	10K	20A178-297		
# VR3	Volume/Switch	10K	02A178-287		
VR4	Vert Hold	10K	02A178-287		
VR5	Color	10K	02A178-287		
VR6	Tint	10K	02A178-287		
VR11	Sharpness	10K	02A178-287		
VR201	AFT Bias	330	02A178-240		
VR202	RF AGC	4700	02A178-239	RVA0911H501	U260R501B
VR401	Vert Height	10K	02A178-279	RVA0911H502	U260R502B
# VR501	Horiz Hold	500		MTC14L1	X201R103B
# VR502	Horiz Centering	4700	02A178-243		
# VR591	Focus & Screen		02A178-286		
			3960310(5)		
# VR601	130V DC Adjust	500			
VR701	Sub Brightness	10K	02A178-279		
VR901	Red Bias	3300	02A178-278	MTC14L1	X201R103B
VR902	Green Bias	3300	02A178-278	MTC53L1	X201R502B
VR903	Blue Bias	3300	02A178-278	MTC53L1	X201R502B
VR904	Red Drive	220	02A178-233	MTC53L1	X201R502B
# VR-2001	HV Protect Adjust	3000		MTC251L1	X201R251B

For SAFETY use only equivalent replacement part.
(5) Number on unit.