

CABINET-REAR VIEW

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Remove seven screws and release latches holding cabinet back and remove back. Disconnect speaker and antenna connectors. Channel readout may be removed at this point of disassembly. Release two latches holding readout to cabinet front and remove assembly from cabinet. Disconnect HV anode, CRT socket, deflection yoke connectors, degaussing coil connector and ground leads. Remove one screw holding remote receiver tuning selector panel assembly to cabinet front and remove assembly

from cabinet. Remove six screws holding main board assembly to cabinet bottom and slide assembly out of cabinet.

CRT REMOVAL

Follow "Chassis Removal" procedure and lay set facedown on a soft protective surface. Loosen and remove CRT neck assemblies. Remove four screws holding CRT to cabinet front and lift CRT out of cabinet. Do not lift CRT by the neck.

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

VHF/UHF TUNER

Ten numbered buttons are provided for two digit entry channel selection with CH (channel up) and CH (channel down) buttons provided for channel scanning. Fine tuning is automatic. No pretuning.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horizontal frequency.

FOCUS

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

AGC

The AGC may be varied by AGC Delay control.

CENTERING

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

Vertical centering is accomplished by proper adjustment of the vertical centering control.

SET 2656 FOLDER 2

SAMS

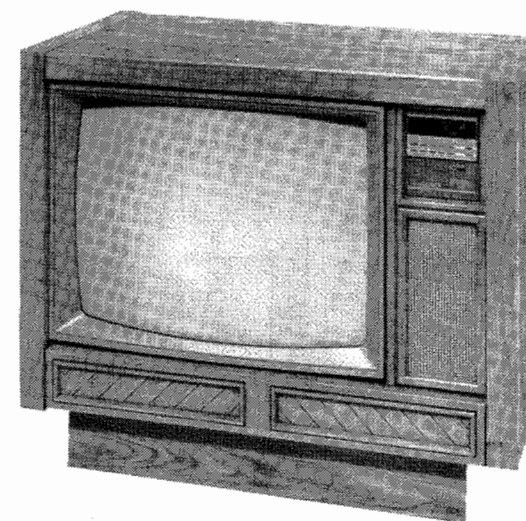
PHOTOFACT®

For Supplier Address See PHOTOFACT Index

SYLVANIA CHASSIS
25C502/05/12/29/38/58

MODEL

CL8122AK01
CL8124HP01
CL8126AK01
CL8129PE01
CLD206WA01
CLD251AK01
CLD253AK01
CLD255PE01
CLD257PE01, PE02
CLE822AK01
CLE824HP01
CLE826AK01
CLS251AK01, AK02, AK03, AK04
CLS253AK01, AK02, AK03, AK04
CLS255PE01, PE02, PE03, PE04
CLS262AK01, AD02, AK03, AK04
CLS268PE01, PE02, PE03, PE04



Representative Model

SAFETY PRECAUTIONS

See Page 4

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SAMS

Howard W. Sams & Co.

4300 West 62nd Street, P.O. Box 7092, Indianapolis, Indiana 46206 U.S.A.

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co. 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. by the manufacturers of the particular type of replacement part listed.

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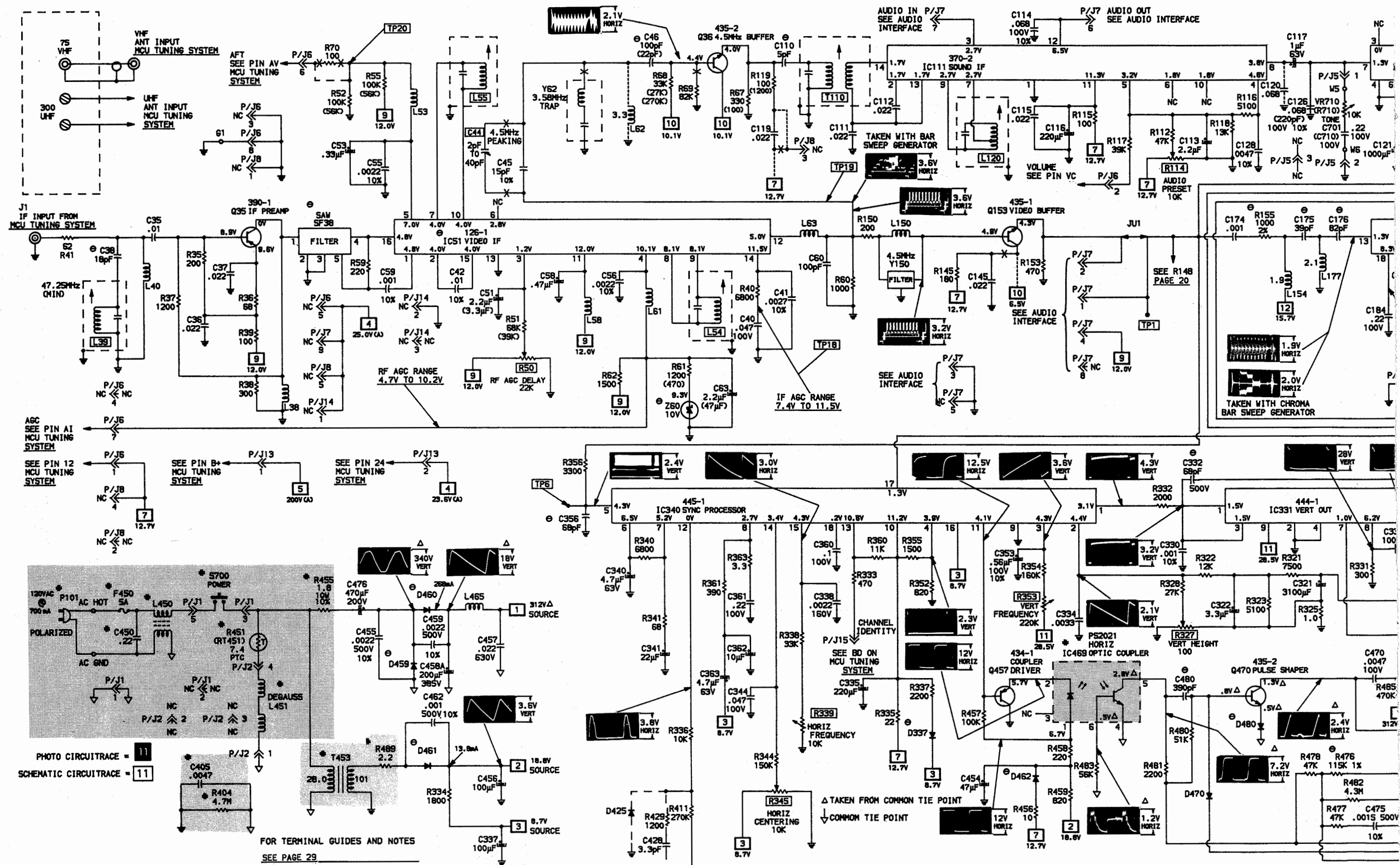
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DATE 5-89

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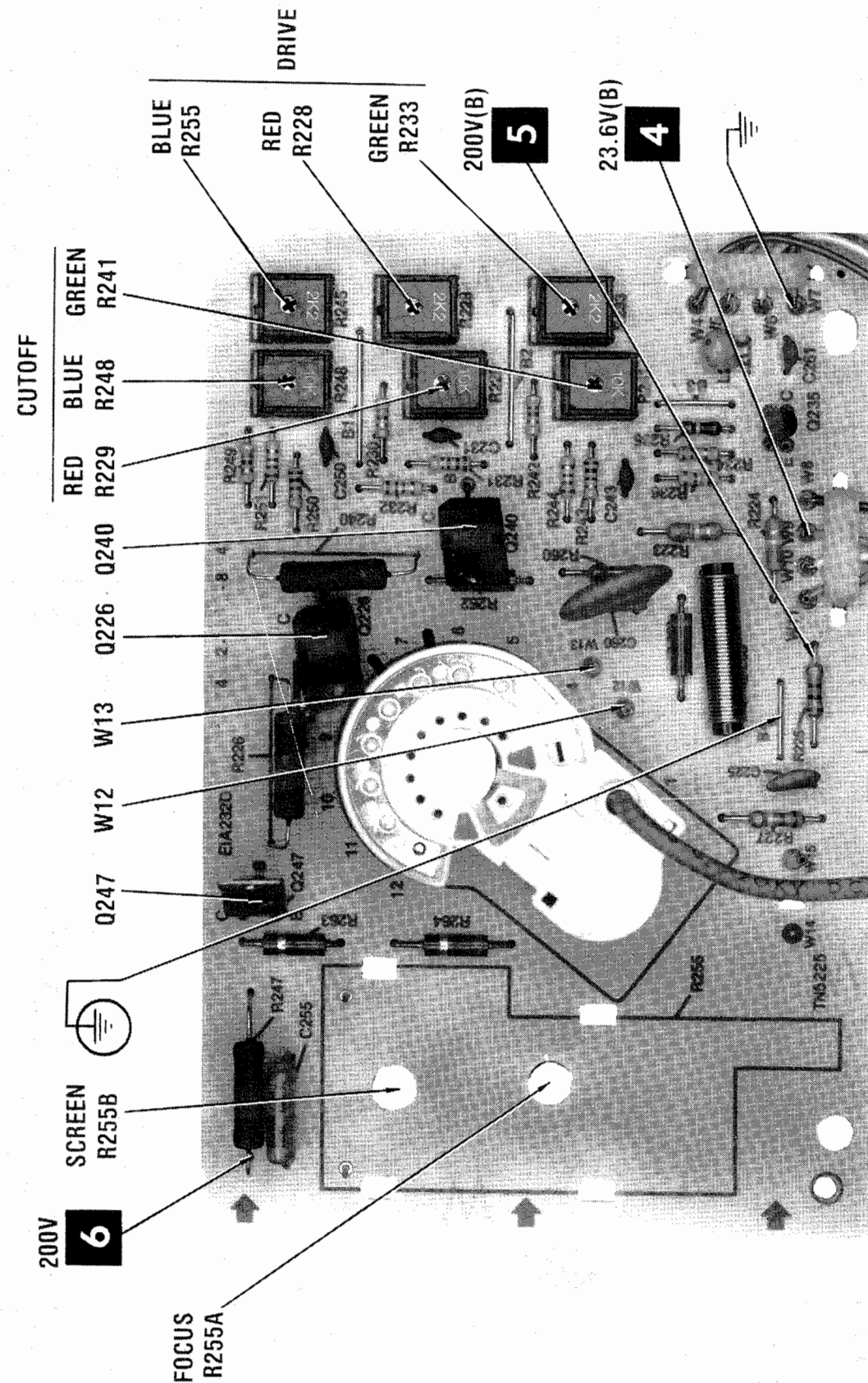
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SET 2656 FOLDER 2



A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITRACE™

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CHASSIS BREAK-DOWN

25C502 CHASSIS

BOARD/MODULE NUMBER	
Main Board	A10089
CRT Board	A10090
Tuner Cluster	ATC205
MCU Tuning Control (E.P.)	A10095
MCU Tuning Control (L.P.)	A10235
Secondary Control Module	ASC118
UHF-VHF Tuner Module	340262

25C505 CHASSIS

BOARD/MODULE NUMBER	
Main Board	A10089
CRT Board	A10090
Tuner Cluster	ATC218
MCU Tuning Control (E.P.)	A10097
MCU Tuning Control (L.P.)	A10237
Secondary Control Module	ASC103
UHF-VHF Tuner Module	340262

25C512 CHASSIS

BOARD/MODULE NUMBER	
Main Board	EMC505
CRT Board	A10090
Secondary Control Module	ASC130
1.5 Watt Stereo Amp Panel	AMP004
Audio Interface (CLD Models)	A10160
Audio Interface (CLS Models)	A10253
Stereo Decoder Assembly (CLS Models)	A10240
Stereo Decoder Panel	A10190
DIN Port Assembly (CLD Models)	7050610002
DIN Port Module	A10198
Tuner Control	ATC225
Stereo/SAP Indicator Module	ALD006
Volume Control Module	A10199
Tuning System Assembly	ATS007
MCU Tuning Control Assembly	MCU067
MCU Control Panel (E.P.)	A10163
MCU Control Panel (L.P.)	A10233
UHF/VHF Tuner Module	340262
Transformer Assembly	7057000001

25C529 CHASSIS

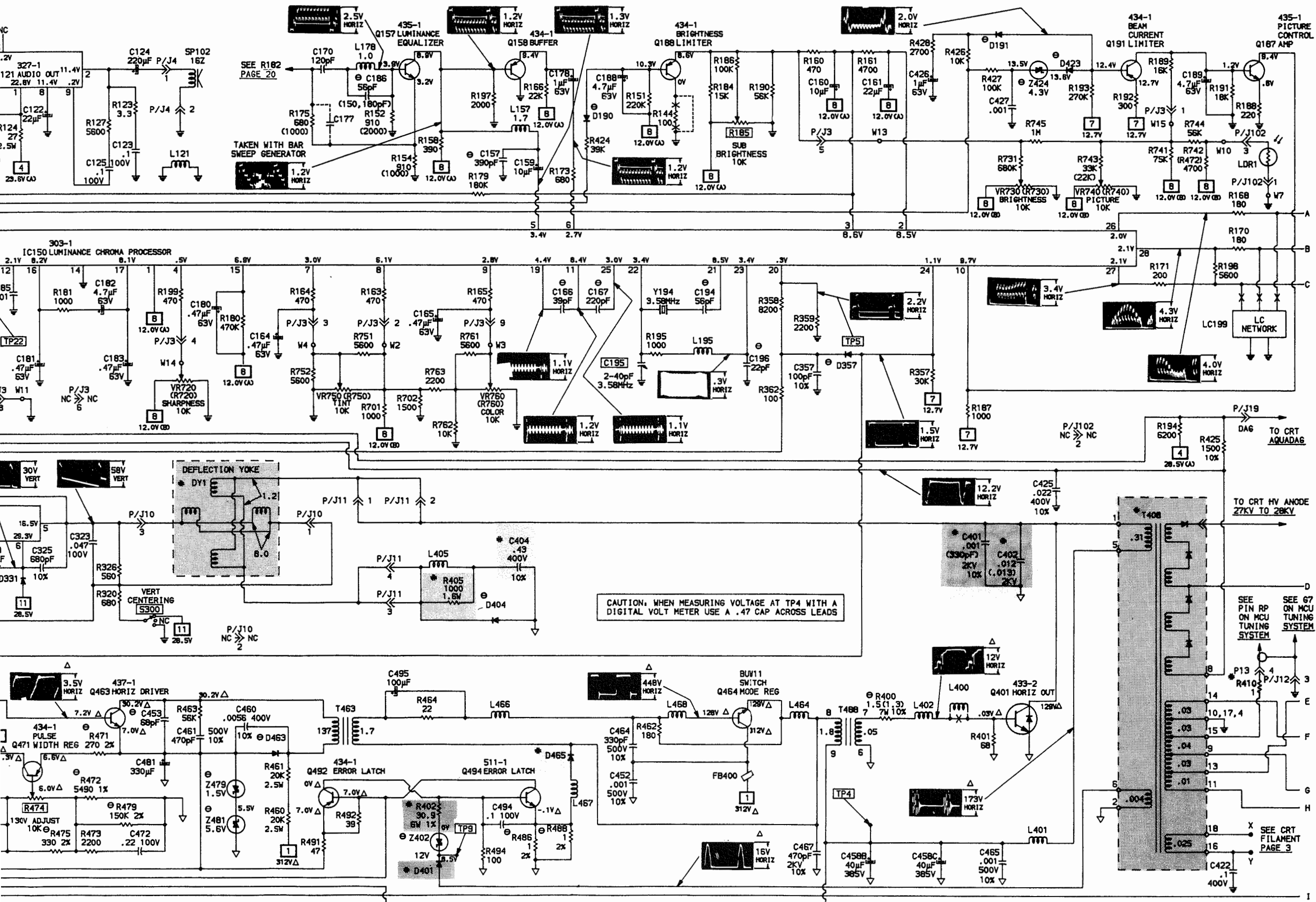
BOARD/MODULE NUMBER	
Main Board	A10089
CRT Board	A10090
Tuner Cluster	ATC254
MCU Tuning Control (E.P.)	A10097
MCU Tuning Control (L.P.)	A10237
Secondary Control Module	ASC137
UHF-VHF Tuner Module	340262

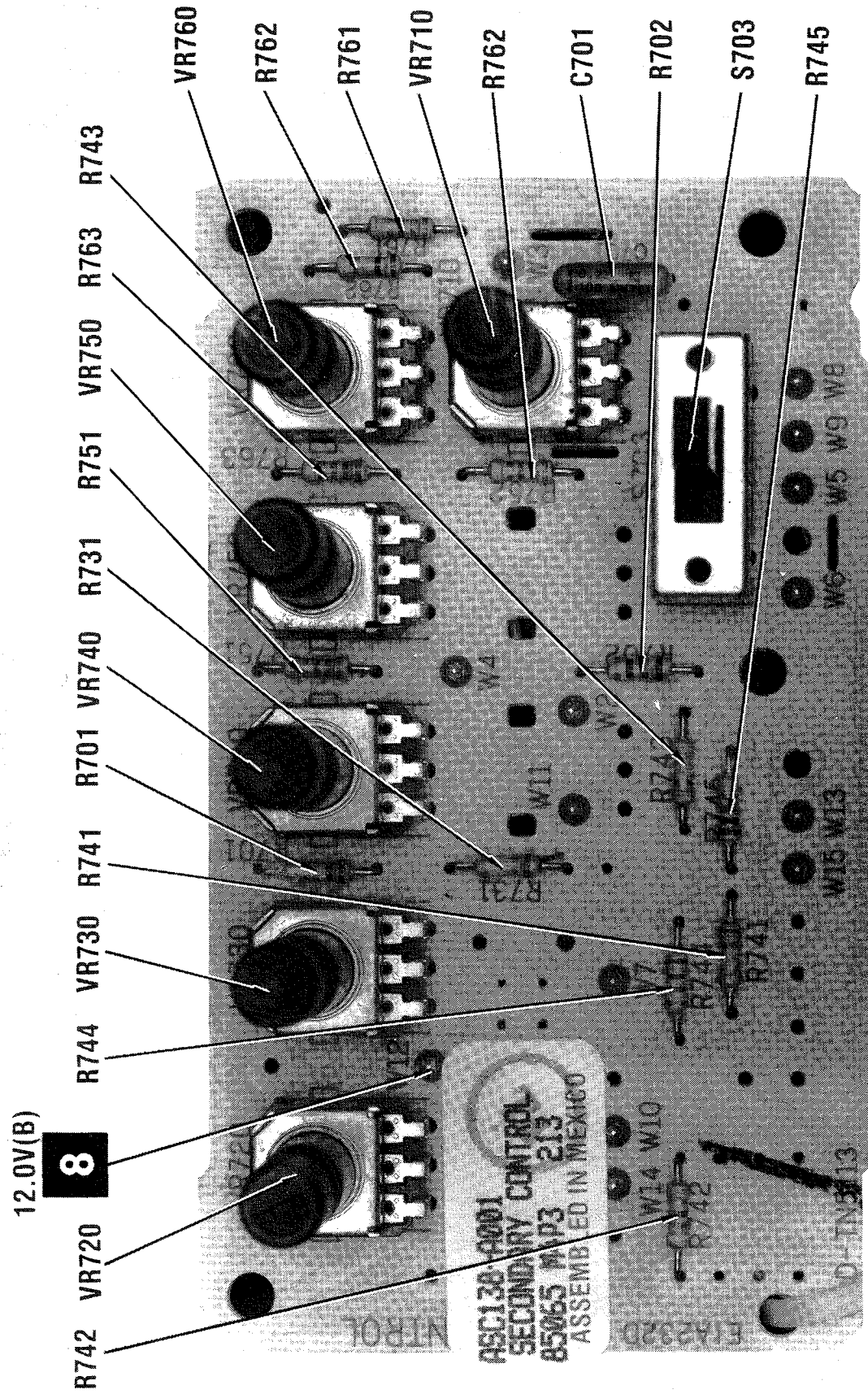
25C538 CHASSIS

BOARD/MODULE NUMBER	
Main Board (E.P.)	A10089
Main Board (L.P.)	EMC505
CRT Board	A10090
1.5 Watt Stereo Amp Panel	AMP004
Audio Interface Module	A10253
Stereo Decoder Assembly	A10240
Stereo Decoder Panel	A10190
Tuner Control Unit	ATC301
Stereo/SAP Indicator Module	ALD015
Five Function Scan Module	ASW024
Secondary Control Module	ASC150
Tuning System Assembly	ATS006
MCU Tuning Control Assembly	MCU070
MCU Control Panel (E.P.)	A10164
MCU Control Panel (L.P.)	A10234
UHF/VHF Tuner Module	340262
Transformer Assembly	7057000001

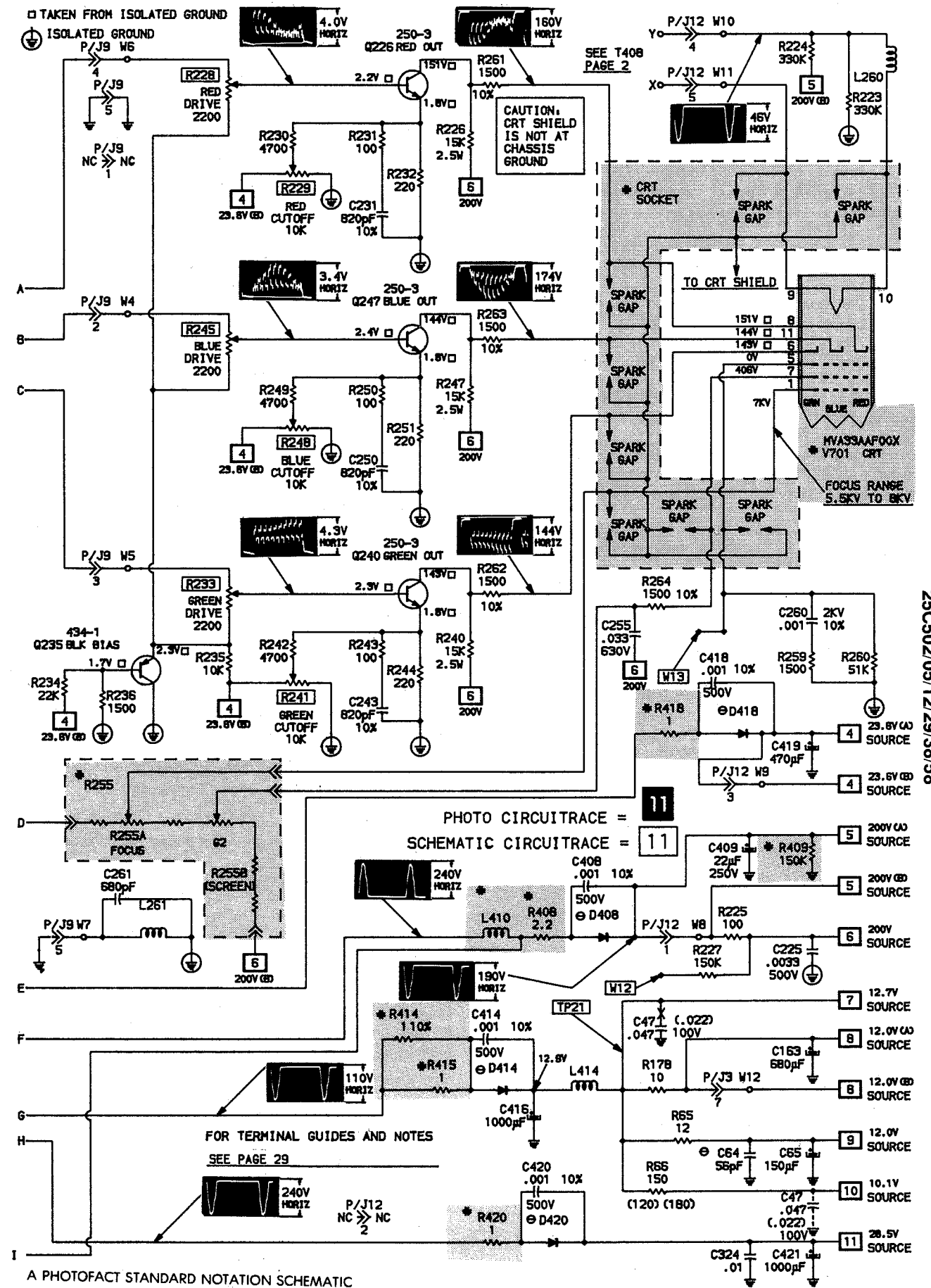
25C558 CHASSIS

BOARD/MODULE NUMBER	
Main Board (E.P.)	A10089
Main Board (L.P.)	EMC511
CRT Board (E.P.)	A10090
CRT Board (L.P.)	APT038
Tuner Control Unit Assembly	ATC355
Secondary Control Module	ASC156
Interconnect Board Assembly	A10283
TS-9 Tuner Control Module	A10201
UHF/VHF Tuner Module	340291





SECONDARY CONTROL BOARD A Howard W. Sams CIRCUITRACE[®] Photo



SAFETY PRECAUTIONS

SERVICE WARNING

Service work should be performed only by qualified service technicians who are familiar with safety checks and guide lines.

- 1. For continued safety, no modification of any circuit should be attempted unless recommended by manufacturer.
- 2. Disconnect power source before replacing parts as some parts may be electrostatic sensitive.
- 3. Use an isolation transformer between the line cord and power receptacle, when servicing chassis.

SERVICING HIGH VOLTAGE AND PICTURE TUBE

When servicing the High Voltage circuits, extreme caution should be used.

- 1. Discharge static High Voltage by connecting a 10 kohms resistor in series with a test lead between chassis and anode lead of picture tube.
- 2. Wear shatter-proof eye protection (goggles) when handling the picture tube in case of implosion.
- 3. DO NOT lift picture tube by the neck.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Service personnel should be aware of the procedures and instructions covering x-ray radiation. The only potential source of x-ray in present day solid state receivers and monitors is the picture tube.

- 1. It is only when High Voltage is excessive that x-ray radiation is capable of being emitted from shell of picture tube. Be sure the High Voltage is set at specified level.
- 2. An accurate High Voltage meter should be available at all times. Meter calibration should be checked periodically.
- 3. High Voltage should be kept at rated value - NO HIGHER. Higher voltages may cause x-ray radiation or failure of other associated components. DO NOT depend on protection circuit to keep voltages at rated value.
- 4. Every time a chassis is serviced, High Voltage should be checked at various brightness levels to be sure it is regulating properly.
- 5. While troubleshooting a set with excessive High Voltage, avoid being close to picture tube. DO NOT operate longer than it is necessary to locate the cause of excessive High Voltage. Use a variable AC transformer to regulate voltage.
- 6. Many components, electrical and mechanical, in present chassis have safety related characteristics which are not evident with visual inspection. When these components are known, they are identified with a # on the schematic and in the parts list. When replacing these components, for SAFETY, use only an equivalent replacement part.

SAFETY CHECKS-FIRE AND SHOCK HAZARD

Cold Leakage Checks (Sets with isolated ground.)

- 1. Unplug the AC cord and connect a jumper across the two prongs on the plug.
- 2. Turn on power switch.
- 3. Measure the resistance, with an Ohm meter, between the jumpered AC plug and any exposed metal cabinet parts on the set such as: antenna screw heads, control shafts, handle brackets. Exposed metal parts that have a return path should measure between 200 kohms and 5 megohm. Parts without a return path must measure infinity.

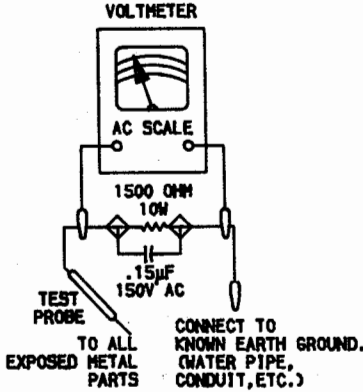
Leakage Current Hot Check

- 1. Plug the AC cord directly into AC outlet. DO NOT use an isolation transformer.
- 2. Connect a 1500 Ohm 10 watt resistor, in parallel with a .15μF 150V AC capacitor, between any exposed metal parts on the set and a good earth ground such as a water pipe. (See Figure below.)
- 3. Using an AC volt meter, with 1000 Ohms per volt or more sensitivity, measure the voltage across the resistor. Check each exposed part and measure voltage at each point.
- 4. Reverse the AC plug and repeat voltage measurement at each point.
- 5. The voltage at any point should not exceed .75 volts RMS. This corresponds to .5 milliamps AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected.

GENERAL GUIDE LINES

A final SAFETY check before returning the set to customer.

- 1. Check area repaired for poorly soldered or de-soldered connections. Check entire circuit board surface for solder splashes.
- 2. Check interboard wiring for pinched wires or wires contacting any high-wattage resistors.
- 3. Check that all control knobs, shields, covers, grounds and mounting hardware have been replaced. Be sure to replace all insulators.

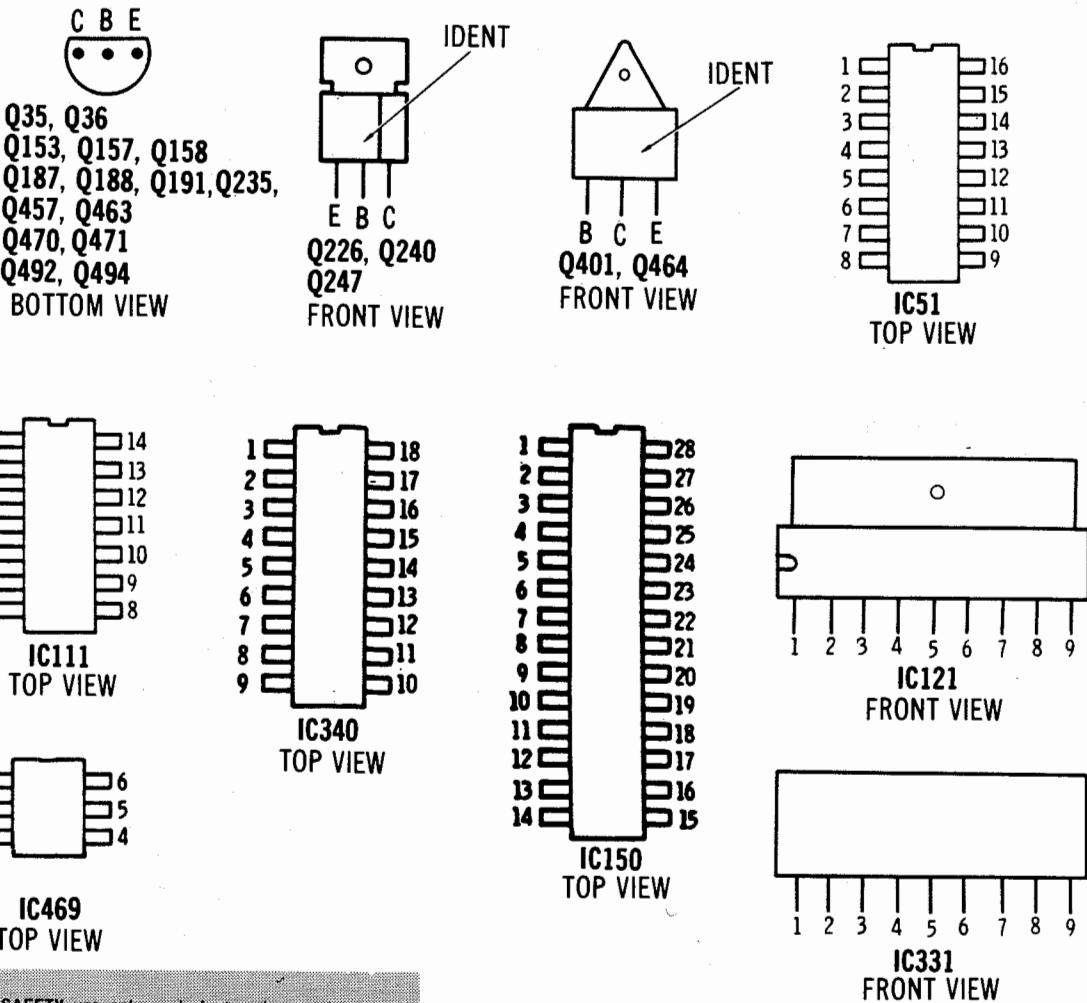


TROUBLESHOOTING (Continued)

3.58MHz oscillator to be sure it is operating at the proper frequency. If there is no color sync, check the voltages, waveforms and components associated with pins 20, 21, 22, 23 of IC150. If there is incorrect hue (Tint), check the voltage and components associated with pin 7 of IC150. If there is no green, check the voltage and components associated

with pin 27 of IC150 and Green Output Transistor (Q240) and pin 6 of the CRT. If there is no blue, check the voltage and components associated with pin 28 of IC150 and Blue Output Transistor (Q247) and pin 11 of the CRT. If there is no red, check the voltage and components associated with pin 26 of IC150 and Red Output Transistor (Q226) and pin 8 of the CRT.

TERMINAL GUIDES



For SAFETY use only equivalent replacement part, see parts list.
-x- Circuitry not used in some versions
- - - Circuitry used in some versions
o See parts list
* Nominal value
⊕ Ground
Chassis
Common tie point
Waveforms and voltages are taken from ground, unless noted otherwise.
Waveforms: triggered scope, keyed rainbow generator.
Item numbers in rectangles appear in the alignment/adjustment instructions.
Supply voltages maintained as shown at input.
Voltages measured with digital meter, no signal.
Controls adjusted for normal operation.
Terminal identification may not be found on unit.
Capacitors are 50 volts or less, 5% unless noted.
Electrolytic capacitors are 50 volts or less, 20% unless noted.
Resistors are 1/2W or less, 5% unless noted.
Value in () used in some versions.
10% unless noted.
Measurements with switching as shown, unless noted.

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FOLDER 2

TROUBLESHOOTING (Continued)

HIGH VOLTAGE SHUTDOWN

The High Voltage Is monitored by Diode D401, rectifying pulses from High Voltage Transformer (T408). Should the High Voltage Increase, the rectified voltage at the cathode of Diode D401 will also increase and at a certain level will trigger Zener Diode (Z402) into conduction. This changes the bias on Error Latch Transistors (Q492, Q494) causing them to conduct which shuts down the set. To troubleshoot a set that has been shutdown, remove Resistor R402 from circuit, use a variac for AC power and troubleshoot until defect is located and corrected. Return Resistor R402 to circuit.

NOTE: Care should be taken in defeating the High Voltage Shutdown circuit as this may cause x-ray radiation and damage to the CRT, High Voltage Transformer T408 and associated components. Monitor the High Voltage and troubleshoot.

IF-AGC

If there is no picture or sound, inject a video IF signal at the IF Input and check for a picture on the CRT. If a picture is present, check the Tuner, Tuner Control Board, AGC and AFT circuits. If there is no picture on the CRT, check for a video waveform at TP1. If a waveform is present, refer to the "Video" section of this Troubleshooting guide. If there is no video at TP1, apply AGC bias to pin 14 of Video IF IC (IC51). If video is now present at TP1, check components associated with pin 14 of IC51. If the video is still absent, check voltages, waveforms and components associated with pins 1 thru 5, 7 thru 12, 14, 15 and 16 of IC51. A defective AGC circuit can cause an overloaded picture, excessive snow or loss of picture and sound. See AGC Voltage Chart for voltages that change with signal.

AGC VOLTAGE CHART

Table with 3 columns: Pin, IC, Voltage. Row 1: Pin 4, IC51, 4.3V. Row 2: Pin 14, IC51, 6.3V.

AUDIO

If there is no audio, inject a modulated audio IF signal at the emitter of 4.5MHz Buffer Transistor (Q36) and with volume at Maximum, check for sound at the speaker. If there is sound at the speaker, check the voltages and components associated with Transistor Q36. If there is still no sound, inject an audio signal at pin 7 of Audio Output IC (IC121). If sound is now present, check the voltages and components associated with Sound IF IC (IC111). If sound is still absent with a signal injected at pin 7 of IC121, check voltages and components associated with IC121. Check the voltage at pin 5 of IC111, it should measure 3.3V at MINIMUM volume and 3.6V at Maximum volume. If sound is being muted, pin 5 will measure 3.3V.

VIDEO

If there is no video, inject a video signal at TP1 and check for video on the CRT. If video is present, refer to the "IF-AGC" section of this Troubleshooting guide. If video is not

present on the CRT, check for a video waveform at pins 5 and 6 of Luminance Chroma Processor IC (IC150). If the waveform is absent, check the voltages, waveforms and components associated with TP1, Luminance Equalizer Transistor (Q157), Buffer Transistor (Q158) and pins 5 and 6 of IC150. If a video waveform is present at pins 5 and 6 of IC150, check the voltages, waveforms and components associated with pins 1, 2, 3, 4, 10 and 15 of IC150. If there is insufficient or too much brightness, check the voltages and components associated with Picture Control Amp. Transistor (Q187), Brightness Limiter Transistor (Q188) and Beam Current Limiter Transistor (Q191).

VERTICAL

If there is no vertical sweep, inject a vertical signal at pin 1 of Sync Processor IC (IC340). If the vertical deflection returns, check the voltages, waveforms and components associated with pins 1, 2 and 3 of IC340. If vertical deflection does not return. Check the voltages, waveforms and components associated with Vertical Output IC (IC331) and the Deflection Yoke (DY1). If the vertical oscillator is off frequency, check the voltages and components associated with pins 1, 2 and 3 of IC340. Vertical linearity or foldover problems may be caused by Electrolytics C321, C322 and C331 being defective.

SYNC

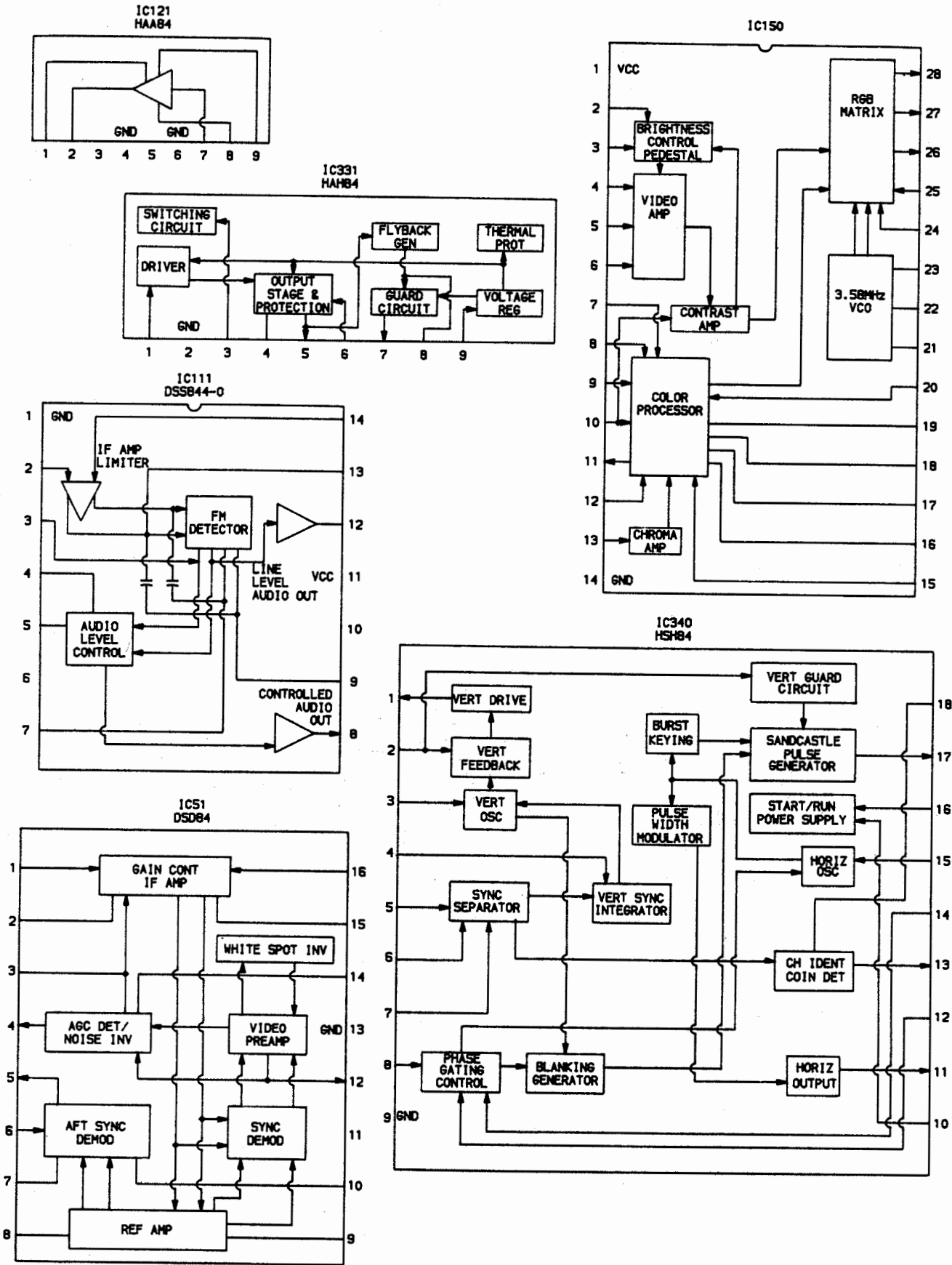
If there is no vertical or horizontal sync, check for a video waveform at TP6. If the waveform is absent, check voltages and components associated with TP6. If there is no vertical sync, check the voltages, waveforms and components associated with pins 2, 3, 6 and 7 of Sync Processor IC (IC340). If there is no horizontal sync, check the voltages and components associated with pins 6, 7 and 15 of IC340.

RASTER

Check the CRT and CRT voltages. If there is no green, check the voltages, waveforms and components associated with pin 27 of Luminance Chroma Processor IC (IC150) and Green Output Transistor (Q240). If there is no blue, check voltages, waveforms and components associated with pin 28 of IC150 and Blue Output Transistor (Q247). If there is no red, check the voltages, waveforms and components associated with pin 26 of IC150 and Red Output Transistor (Q226). If the raster has a keystone shape, check the deflection yoke. If the raster has height or width problems, refer to the "Power Supply", "Vertical" and "Horizontal" sections of this Troubleshooting guide.

CHROMA

If there is no color, check for a color waveform at pin 13 of Luminance Chroma IC (IC150). If the waveform is absent, check components associated with pin 13 of IC150. If a waveform is present, check for the proper color waveforms at pins 26, 27 and 28 of IC150. If the waveforms are absent, check the voltages, waveforms and components associated with pins 7 thru 12 and 16 thru 28 of IC150. Check the



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FOLDER 2

IC FUNCTIONS

TEST EQUIPMENT

Test Equipment listed by Manufacturer illustrates typical or equivalent equipment used by SAMS' Engineers to obtain measurements and is compatible with most types used by field service technicians.

Equipment Name	B & K Precision Equipment No.	Sencore Equipment No.	Notes
OSCILLOSCOPE	1560, 1564, 1541	SC-61	
GENERATORS			
RGB	1249,1260		
MULTIBURST SIGNAL	1251,1260	VA62	
COLOR BAR	1211A,1249,1251,1260	VA62,CG25	
ANALOG VOM	277, 111, 116		
DIGITAL VOM	2830, 2806	DVM37,DVM56,SC61	
FREQUENCY METER	1803,1805	FC71,SC61	
HI-VOLTAGE PROBE VOM/DMM Accessory probes	HV-44 PR-28 (HV)	HP-200	
ISOLATION TRANSFORMER	TR110,1604,1653,1655	PR57	
CAPACITANCE ANALYZER	820,810,830	LC53	
CRT ANALYZER	467,470	CR70	
TEMPERATURE PROBE	TP-28, TP-30		
AC LEAKAGE TESTER	1655	PR57	
LOGIC PROBE	DP51,DP21		
LOGIC PULSER	DP101,DP31		
INDUCTANCE ANALYZER	875	LC53	
FLYBACK YOKE TESTER	875	LC53,VA62	
TV STEREO GENERATOR	2009		

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-THORSEN

C44, C195.....5000
R50, R114, R185, R327, R339, R345, R353, R474.....8606, 8606L, 8869

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.

Connect a +7.4V Bias to TP18. (Junction R40 and C40).
Disconnect Plug J1. Use IF shield for ground.

VIDEO IF ALIGNMENT (SWEEP MARKER GENERATOR)

DIRECT PROBE FROM SWEEP/MARKER GENERATOR	SWEEP GENERATOR OUTPUT	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
To TP19 (Junction R60 and C60)	To J1	44MHz (10MHz Sweep)	47.25MHz	Adjust L39 for MINIMUM. See Figure 1.
"	"	"	41.25MHz 42.17MHz 44.00MHz 45.75MHz 47.25MHz	Adjust L54 to position the 45.75MHz marker as high as possible on the response curve without lowering the amplitude of the response curve. See Figure 2. NOTE: Reconnect J1 Plug.

TEST JIG HOOKUP

FUNCTION	Chek-A-Color ADAPTER NO.
CRT YOKE YOKE SETTING	B239 D4153(1) YPI, Focus Tap

(1) If vertical or horizontal sweep is reversed, rotate respective connector 180 degrees.

TROUBLESHOOTING

POWER SUPPLY CIRCUIT DESCRIPTION

When set is turned On, Start-up Diode (D461) develops approximately 19.0V which is applied to Horizontal Optic Coupler IC (IC469), Coupler Driver Transistor (Q457) and Sync Processor IC (IC340). The horizontal signal developed by IC340 is fed to the base of Pulse Shaper Transistor (Q470) by Transistor Q457 and IC469. Simultaneously with the above described events approximately 312V (With respect to isolated ground) is developed at the cathode of Diode D460 as a result of a voltage doubler circuit. The 312V is applied to Horizontal Driver Transistor (Q463), Switch Mode Regulator Transistor (Q464), Pulse Shaper Transistor (Q470) and Pulse Width Regulator Transistor (Q471). As a result these transistors are pulsed into conduction along with Horizontal Output Transistor (Q401) and their operation is sustained by the horizontal signal developed by IC340 being applied to the base of Transistor Q470. When Transistor Q401 is pulsed On, the B+ sources developed from Horizontal Output Transformer (T408) are pulsed into operation and continue to operate provided that the Horizontal Oscillator of IC340, Transistors Q401, Q457, Q463, Q464, Q470, Q471, Error Latch Transistors (Q492, Q494), Transformer T408, Horizontal Driver Transformer (T463), Switch Mode Transformer (T488) and associated circuitry are not defective.

POWER SUPPLY

If there is no raster or sound, check AC Fuse (F450). If Fuse is open, check Diodes D459, D460, Capacitors C450, C455, C457 and Electrolytic C458. If F450 is good, apply 120V AC and check for 120V AC between (Plug P1) pin 3 and isolated ground. If 120V AC is absent, check Line Filter (L450), Power Switch (S700) and associated components. If 120V AC is present at pin 3 of Plug P1, check for 312V at the cathode of Diode D460 and 18.8V at the cathode of Diode D461. If these voltages are absent, check Resistors R455, R489, Start-up Transformer (T453) and Electrolytic C476. If there is 312V at the cathode of Diode D460 and 18.8V at the cathode of Diode D461, refer to the "Horizontal" section of this Troubleshooting guide.

HORIZONTAL

If there is no horizontal sweep, check for 312V at the cathode of Diode D460 and 18.8V at the cathode of Diode D461. If these voltages are absent, refer to the "Power Supply" section of this Troubleshooting guide. If these voltages are present, inject a horizontal signal at pin 5 of Optic Coupler IC (IC469). If horizontal sweep returns, check voltages, waveforms and components associated with pins 8, 10 thru 16 of Sync Processor IC (IC340), Coupler Driver Transistor (Q457) and IC469. If horizontal sweep does not return, check voltages, waveforms and components associated with Horizontal Output Transistor (Q401), Horizontal Driver Transistor (Q463), Switch Mode Regulator Transistor (Q464), Pulse Shaper Transistor (Q470), Pulse Width Regulator Transistor (Q471), Error Latch Transistors (Q492, Q494), Horizontal Driver Transformer (T463), Switch Mode Transformer (T488), Horizontal Output Transformer (T408) and the Deflection Yoke (DY1). Check for 11.9V at TP9, 200V at the cathode of Diode D408, 12.8V at the cathode of Diode D414, 24.4V at the cathode of Diode D418 and 28.5V at the cathode of Diode D420. Horizontal linearity or foldover problems may be caused by Capacitors C401, C402, C404 and Horizontal Linearity Coil (L405) being defective. If the horizontal oscillator is off frequency, check the voltages, waveforms and components associated with pins 8, 12, 14 and 15 of IC340.

NOTE: If the TV is shutdown the following voltages will be present.

	E	B	C
Q463	1.2V	1.8V	1.2V
Q464	0V	0V	358V
Q470	0V	.3V	1.0V
Q471	1.0V	.4V	1.0V
Q492	.6V	0V	.8V
Q494	0V	.8V	0V

Refer to the High Voltage Shutdown section of this Troubleshooting guide.

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FOLDER 2

TROUBLESHOOTING AID

Note: Waveforms taken with triggered scope, Keyed-Rainbow generator. Schematic voltages measured with digital meter, no signal. Controls adjusted for normal operation.

PICTURE or SOUND

NO PIC, NO SOUND, NO RASTER: Check AC power supply and sources generated from Horizontal Output Transformer (T408). Refer to "Troubleshooting" Power Supply and Horizontal circuits.

NO PIC, NO SOUND, HAS RASTER: Check IF-AGC and source voltages from Horizontal Output Transformer (T408). Refer to "Troubleshooting" IF-AGC and Horizontal circuits.

NO PIC, HAS SOUND, NO RASTER: Check Horizontal Output Transformer (T408) sources and Video circuit. Refer to "Troubleshooting" Horizontal and Video circuits.

NO PIC, HAS SOUND, HAS RASTER: Refer to "Troubleshooting" Video circuit.

HAS PIC, NO SOUND: Refer to "Troubleshooting" Audio circuit.

OVERLOADED PICTURE: Refer to "Troubleshooting" IF-AGC circuit.

LOW OR EXCESSIVE BRIGHTNESS: Check Video and Luminance circuits. Refer to "Troubleshooting" Video circuit.

SWEEP

NO RASTER, HAS SOUND: Check HV rectifier, Part of Horizontal Output Transformer (T408). Refer to "Troubleshooting" Horizontal circuit.

NO RASTER, NO SOUND: Refer to "Troubleshooting" Horizontal circuit.

NO VERT DEFLECTION: Refer to "Troubleshooting" Vertical circuit.

POOR VERT LIN OR FOLDOVER: Refer to "Troubleshooting" Vertical circuit.

POOR HORIZ LIN OR FOLDOVER: Refer to "Troubleshooting" Horizontal circuit.

NARROW PICTURE: Refer to "Troubleshooting" Horizontal circuit.

VERT OFF FREQUENCY: Refer to "Troubleshooting" Vertical circuit.

HORIZ OFF FREQUENCY: Refer to "Troubleshooting" Horizontal circuit.

SYNC

NO VERT/HORIZ SYNC: Refer to "Troubleshooting" Sync circuit.

RASTER

YELLOW (NO BLUE): Check Chroma and Blue Output circuits. Refer to "Troubleshooting" Raster circuit.

CYAN (NO RED): Check Chroma and Red Output circuits. Refer to "Troubleshooting" Raster circuit.

MAGENTA (NO GREEN): Check Chroma and Green Output circuits. Refer to "Troubleshooting" Raster circuit.

COLOR (B/W operating normally)

NO COLOR: Refer to "Troubleshooting" Chroma circuit.

WEAK COLOR: Refer to "Troubleshooting" Chroma circuit.

NO COLOR SYNC: Refer to "Troubleshooting" Chroma circuit.

NO GREEN: Check Chroma and Green Output circuits. Refer to "Troubleshooting" Raster circuit.

NO BLUE: Check Chroma and Blue Output circuits. Refer to "Troubleshooting" Raster circuit.

NO RED: Check Chroma and Red Output circuits. Refer to "Troubleshooting" Raster circuit.

INCORRECT HUE (TINT): Refer to "Troubleshooting" Chroma circuit.

TV ALIGNMENT INSTRUCTIONS (Continued)

VIDEO IF ALIGNMENT (BAR SWEEP GENERATOR)

BAR SWEEP GENERATOR	SCOPE INPUT	REMARKS
To Antenna Terminal	To TP19 (Junction R60 and C60)	Perform Video IF Adjustments per SWEEP/MARKER GENERATOR Instructions. See Figure 3.

SOUND IF ALIGNMENT

Tune in a station and adjust L120 and T110 for Maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting T110.

AUTOMATIC FINE TUNING ALIGNMENT

Connect as explained in preliminary instructions unless specified otherwise.				
DIRECT PROBE FROM SWEEP/MARKER GENERATOR	SWEEP GENERATOR OUTPUT	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
To TP20 (Pin 6 of P6 Plug)	To J1	44.00MHz	45.75MHz	Adjust L55 for Maximum gain and symmetry of response. See Figure 4.

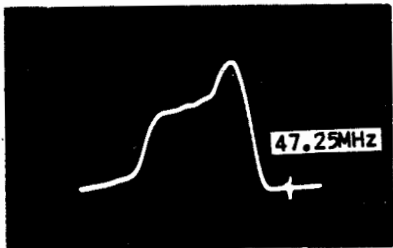


Figure 1

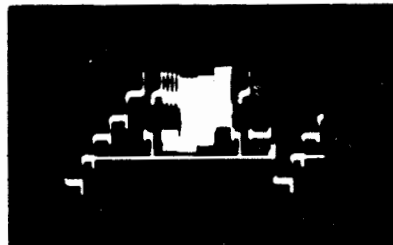


Figure 3

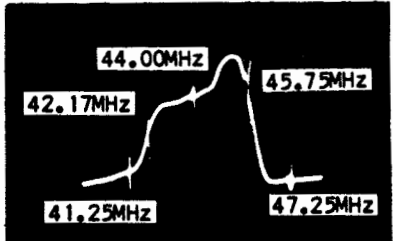


Figure 2

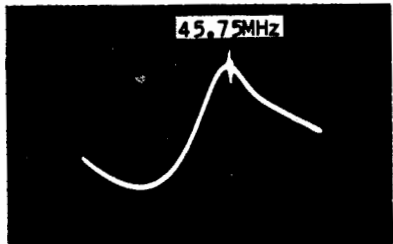
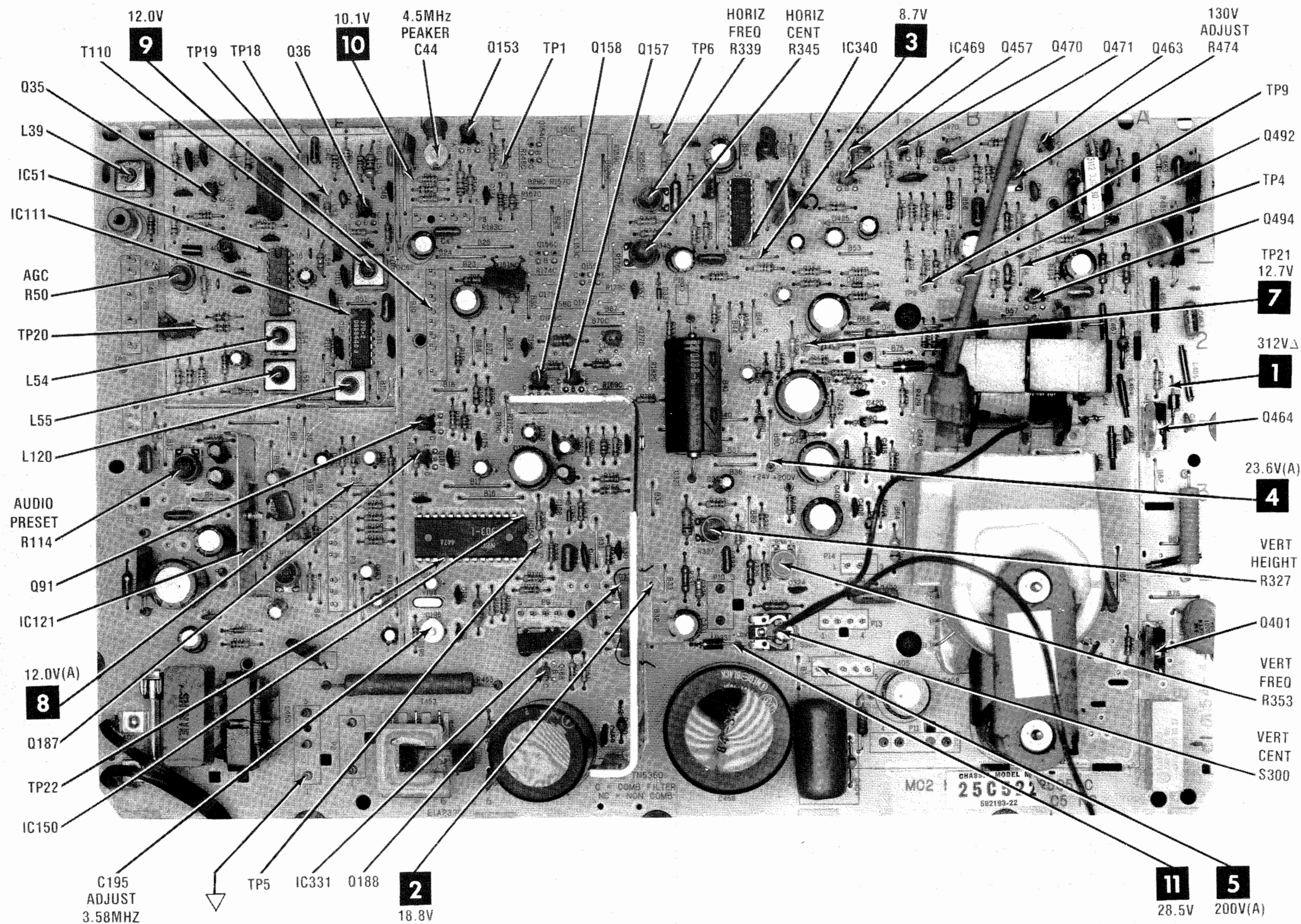


Figure 4

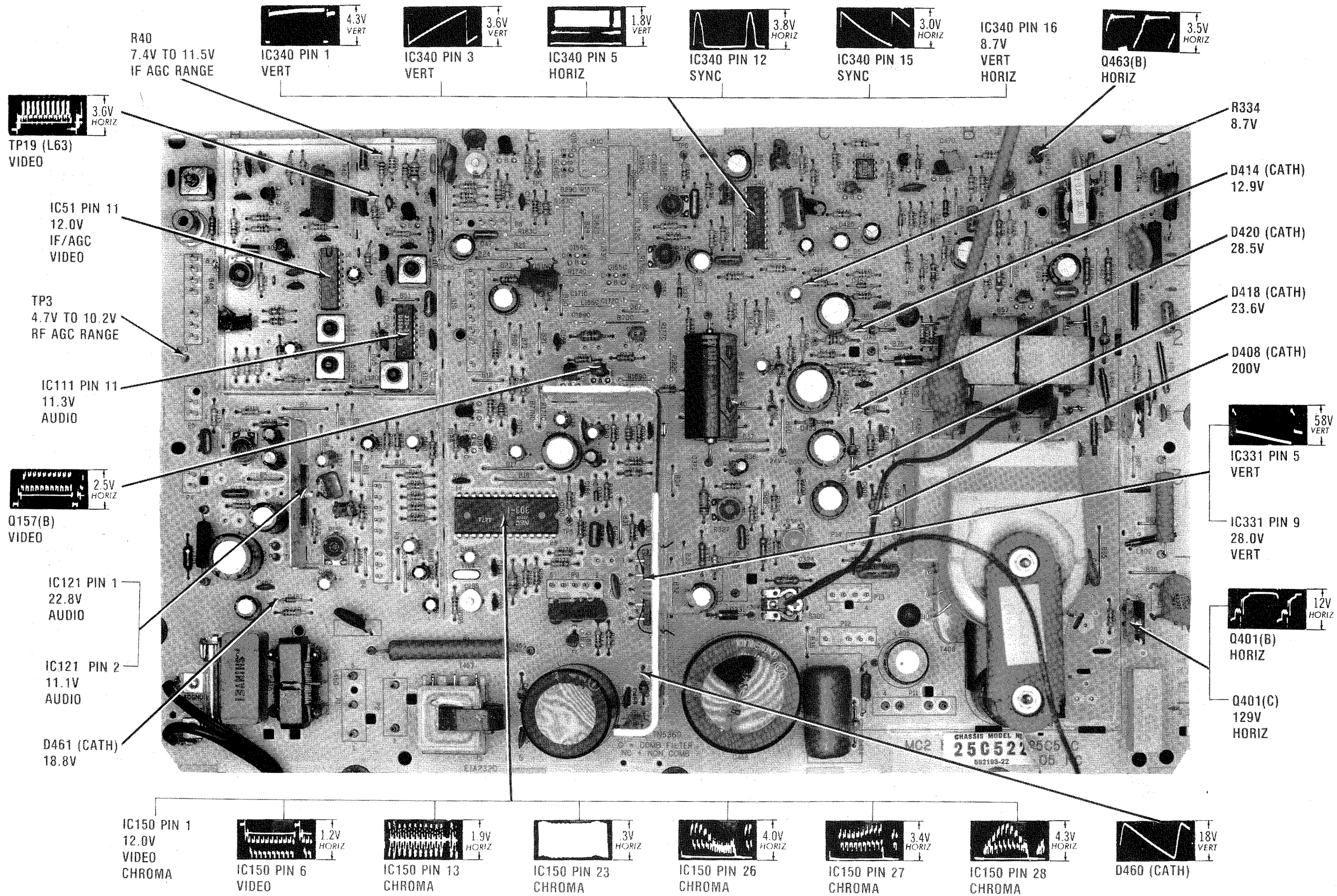
SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2



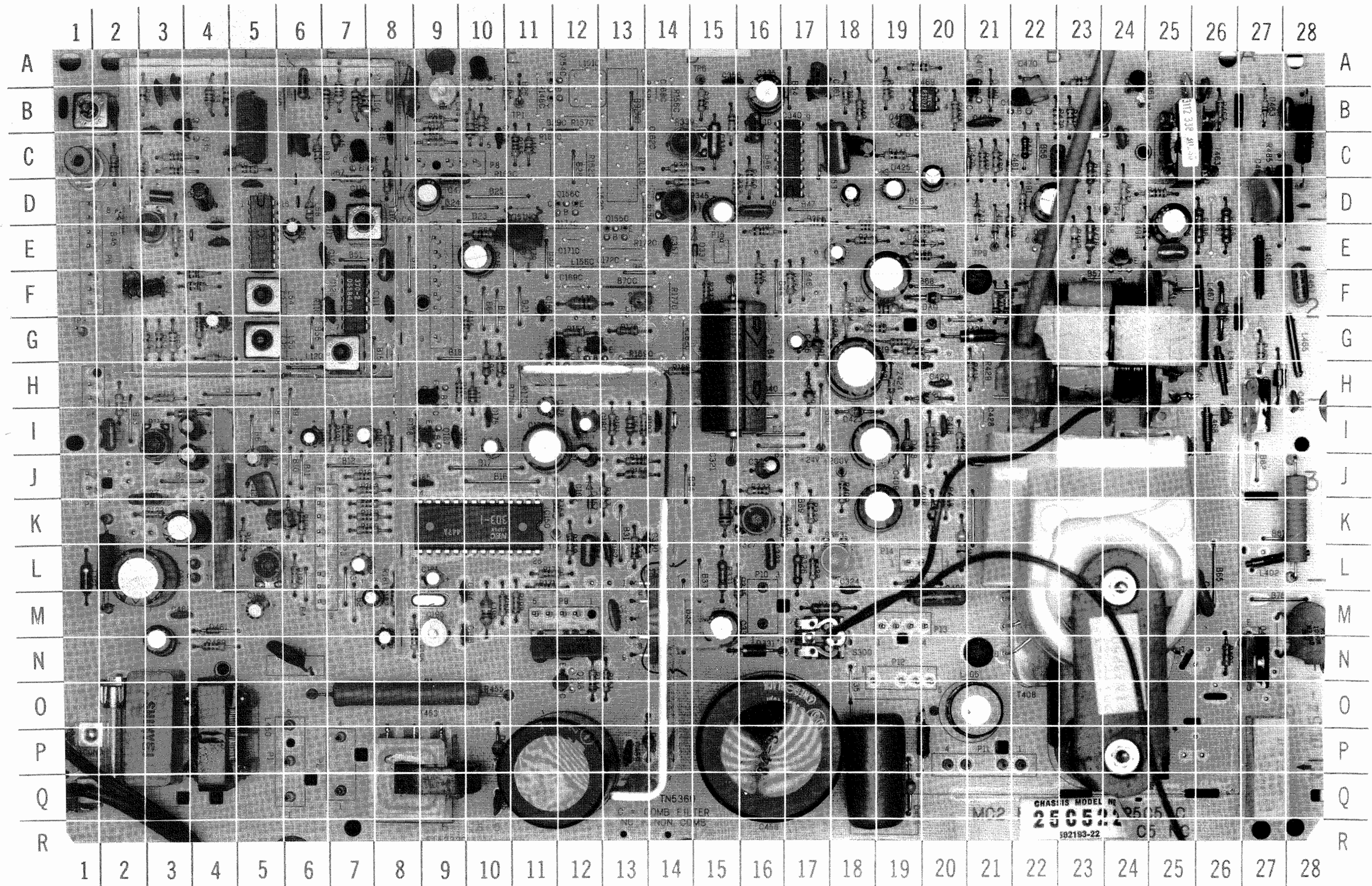
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FOLDER 2



SYLVANIA CHASSIS
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FOLDER 2

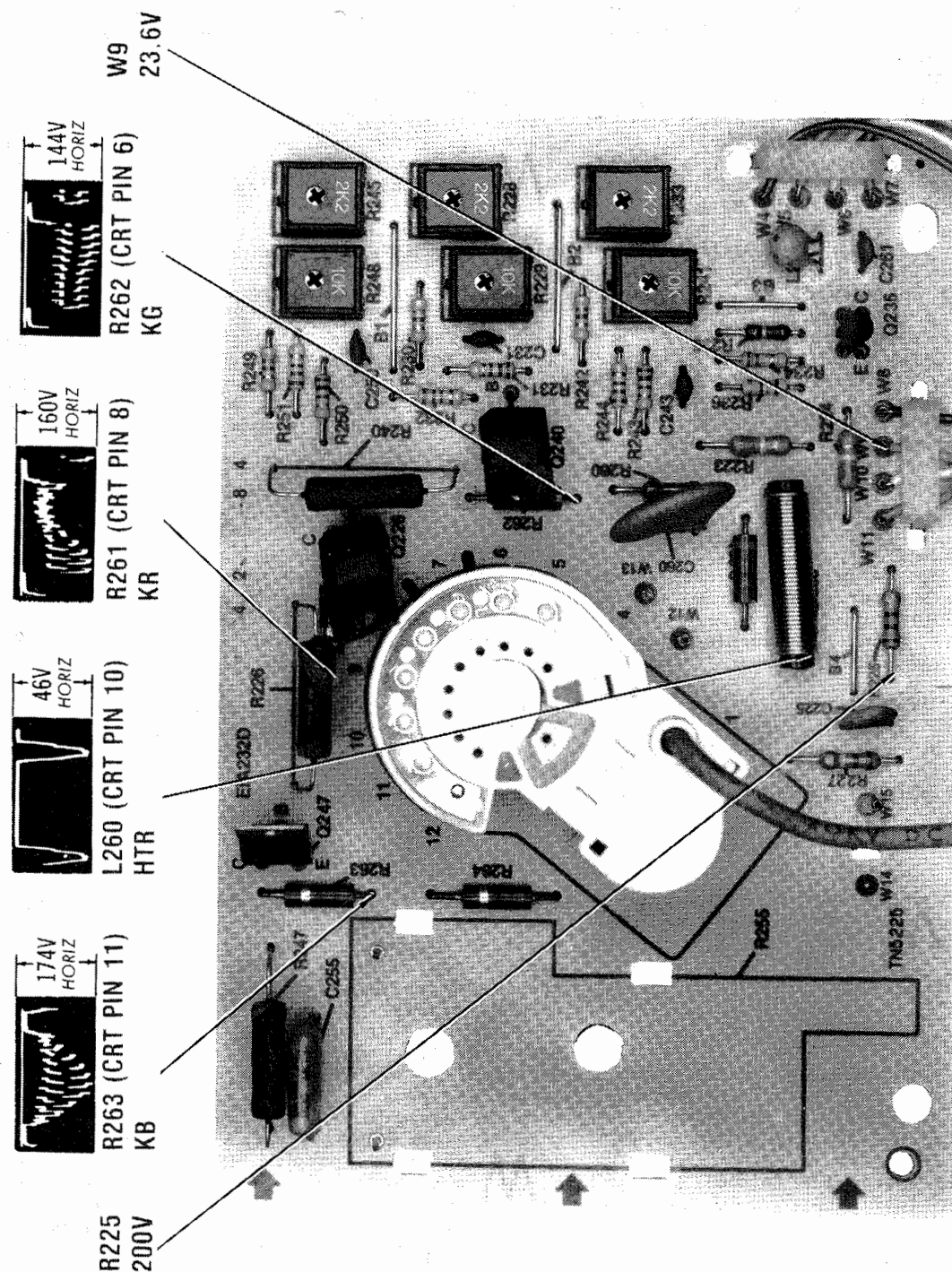


MAIN BOARD

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2

MAIN BOARD

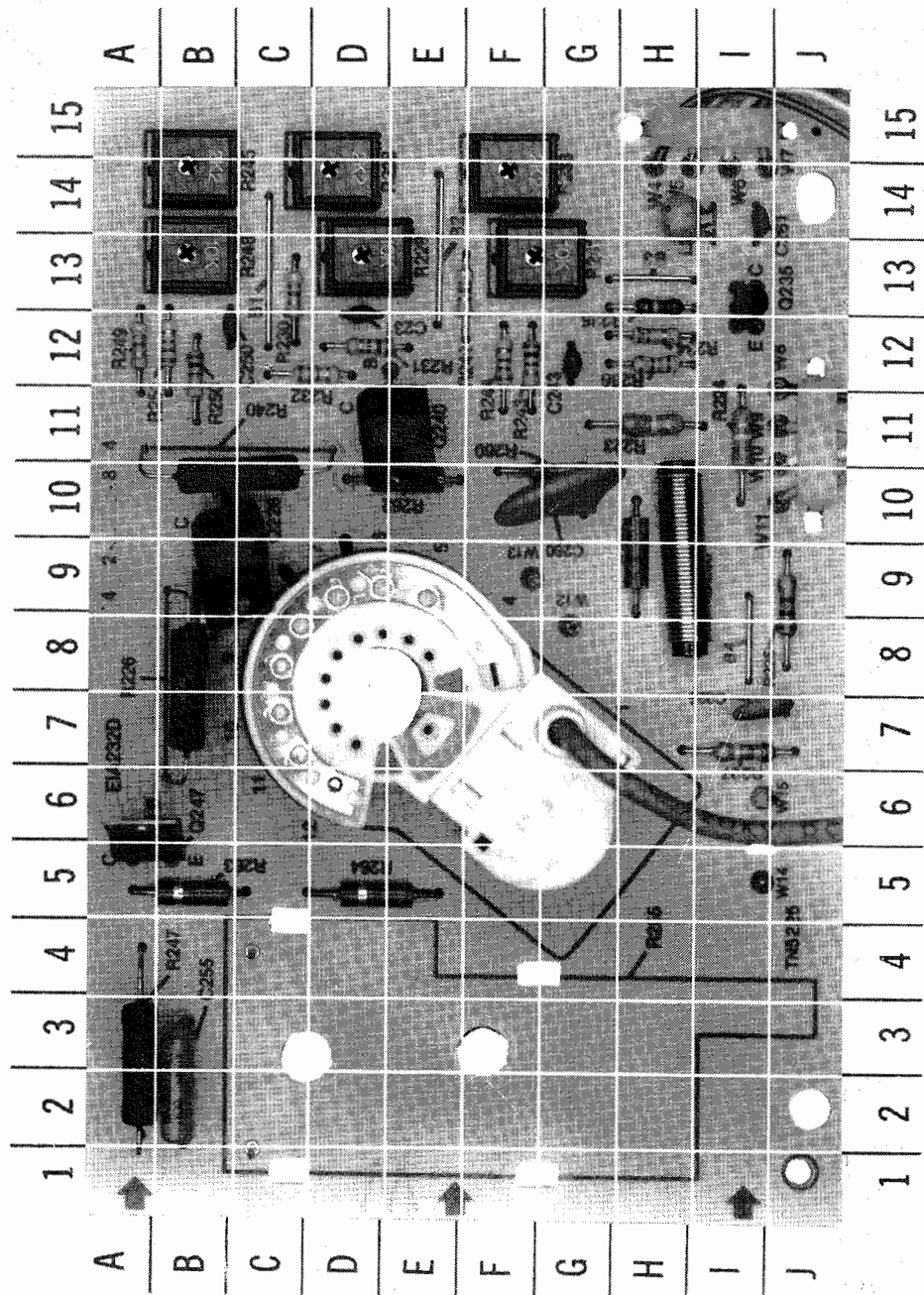


MAIN BOARD-GridTrace LOCATION GUIDE

C35	B-3	C337	D-15	IC111	F-7	R40	B-6	R333	D-15	T453	Q-8
C36	B-3	C338	Q-15	IC121	J-4	R41	Q-2	R334	E-18	T463	Q-25
C37	A-3	C340	Q-18	IC150	K-10	R50	E-3	R335	F-16	T488	Q-24
C38	B-2	C341	Q-19	IC331	M-13	R51	E-3	R336	B-15	TP1	B-1
C40	A-6	C344	Q-16	IC340	Q-17	R52	Q-3	R337	F-15	TP4	E-24
C41	Q-6	C353	Q-18	IC469	Q-20	R55	Q-3	R338	Q-14	TP5	K-11
C42	D-5	C356	A-15	J1	Q-1	R59	Q-5	R339	Q-14	TP6	A-15
C44	B-9	C357	E-14	L38	Q-4	R60	B-7	R340	B-18	TP9	E-21
C45	Q-7	C360	D-16	L39	Q-1	R61	Q-4	R341	Q-19	TP18	Q-6
C46	B-8	C361	A-17	L40	Q-3	R62	Q-3	R344	D-14	TP19	Q-6
C47	D-9	C362	E-18	L53	F-4	R65	E-10	R345	D-14	TP20	F-3
C51	Q-4	C363	D-18	L54	F-5	R66	Q-9	R352	E-18	TP21	F-18
C53	Q-4	C401	M-28	L55	Q-5	R67	Q-7	R353	L-18	TP22	L-9
C55	E-4	C402	P-27	L58	D-6	R68	Q-9	R354	F-17	Y62	Q-8
C56	E-4	C404	P-18	L61	F-4	R69	D-8	R355	D-17	Y150	Q-8
C58	E-6	C405	M-26	L63	Q-6	R70	F-2	R356	B-15	Y151	F-11
C59	Q-5	C408	J-19	L120	Q-7	R112	H-3	R357	J-13	Y194	F-9
O60	B-7	C409	K-19	L121	L-1	R114	I-3	R358	K-12	Z60	Q-4
O63	F-3	C414	E-20	L150	Q-7	R115	Q-10	R359	L-12	Z402	E-21
O64	D-7	C416	F-19	L154	Q-11	R116	F-6	R360	D-16	Z424	F-19
O65	Q-9	C418	I-20	L157	I-13	R117	F-2	R361	C-18	Z479	D-21
C110	D-7	C419	I-18	L170	F-13	R118	I-3	R362	E-16	Z481	Q-21
C111	E-7	C420	F-20	L177	F-10	R119	Q-9	R363	B-18		
C112	F-7	C421	F-18	L178	F-12	R123	K-3	R400	K-28		
C113	I-4	C422	M-20	L195	M-10	R124	L-2	R401	N-26		
C114	F-8	C425	J-23	L401	P-25	R127	K-5	R402	E-21		
C115	F-8	C426	Q-17	L402	L-27	R144	M-12	R404	I-23		
C116	E-10	C427	H-20	L405	Q-21	R145	Q-10	R405	P-20		
C117	J-5	C450	P-3	L410	L-20	R150	Q-7	R408	K-20		
C119	B-10	C452	H-28	L414	F-19	R151	F-13	R409	J-18		
C121	L-2	C453	B-25	L450	P-4	R152	F-13	R410	L-20		
C122	J-4	C454	D-20	L464	H-26	R153	B-11	R411	H-21		
C123	J-3	C455	Q-10	L465	Q-28	R154	Q-12	R414	F-21		
C124	K-3	C456	M-3	L466	E-27	R155	Q-11	R415	F-2		
C125	J-5	C457	F-28	L467	F-26	R158	J-13	R418	I-20		
C126	I-2	C458	P-16	L468	I-26	R160	K-7	R420	I-20		
C128	F-7	C459	P-13	LC199	L-12	R161	I-13	R424	F-18		
C145	A-9	C460	B-28	P1	P-5	R163	J-7	R425	Q-21		
C157	I-12	C461	B-26	P2	Q-7	R164	K-7	R426	Q-19		
C158	I-14	C462	M-3	P3	K-6	R165	J-7	R427	Q-19		
C159	I-10	C464	I-26	P4	J-1	R166	F-14	R428	Q-18		
C160	I-12	C465	I-25	P5	H-1	R168	F-10	R451	N-6		
C161	J-12	C467	D-27	P6	E-1	R170	L-11	R455	Q-8		
C163	I-11	C470	B-22	P7	E-9	R171	L-11	R456	E-20		
C164	K-5	C472	Q-23	P8	Q-9	R175	Q-13	R457	A-19		
C165	M-5	C475	Q-24	P9	M-12	R178	J-13	R458	B-19		
C166	J-12	C476	P-12	P10	M-16	R179	F-11	R459	E-20		
C167	L-13	C480	B-21	P11	P-21	R180	F-8	R460	D-28		
C174	Q-10	C481	D-22	P12	M-19	R181	M-8	R461	B-28		
C175	I-10	C494	E-25	P13	M-19	R184	L-6	R462	G-27		
C176	I-9	C495	D-25	P14	L-19	R185	L-5	R463	B-26		
C178	I-11	D190	Q-17	P15	E-15	R186	K-6	R464	D-25		
C180	I-7	D191	H-17	P19	Q-20	R187	F-9	R471	C-22		
C181	L-9	D331	N-16	Q35	B-3	R188	I-8	R472	Q-23		
C182	F-8	D337	E-15	Q36	Q-7	R189	I-7	R473	B-23		
C183	L-7	D357	K-12	Q153	A-10	R190	K-6	R474	B-23		
C184	L-12	D401	J-24	Q157	G-12	R191	I-7	R475	A-23		
C185	J-9	D404	Q-19	Q158	Q-12	R192	F-10	R476	Q-23		
C186	F-11	D408	K-20	Q187	I-9	R193	F-10	R477	D-24		
C188	F-8	D414	F-20	Q188	Q-12	R194	Q-19	R478	E-23		
C189	I-6	D418	I-19	Q191	H-9	R195	M-8	R479	B-22		
C194	M-9	D420	H-20	Q401	N-27	R197	I-13	R480	Q-21		
C195	M-9	D423	I-18	Q457	B-19	R198	M-11	R481	C-21		
C196	M-9	D459	P-10	Q463	A-24	R199	K-7	R482	C-24		
C321	Q-15	D460	P-13	Q464	H-27	R320	M-17	R483	B-20		
C322	J-16	D461	M-4	Q470	B-21	R321	K-16	R488	E-26		
C323	L-16	D462	E-20	Q471	B-22	R322	K-17	R489	N-4		
C324	M-18	D463	B-27	Q492	E-22	R323	J-16	R491	D-22		
C325	L-15	D465	F-26	Q494	E-24	R325	K-15	R492	B-23		
C330	K-13	D470	C-21	R35	C-3	R326	L-17	R494	E-24		
C331	M-15	D480	B-21	R36	B-3	R327	K-16	S300	N-17		
C332	M-13	F450	P-2	R37	C-3	R328	L-17	SF38	B-5		
C334	Q-17	FB400	G-27	R38	B-4	R331	L-15	T110	D-7		
C335	Q-16	IC51	E-5	R39	C-3	R332	L-13	T408	L-24		

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C225	I-7
C231	D-13
C243	G-12
C250	B-12
C255	B-2
C260	G-10
C261	I-14
L260	H-9
L261	H-14
Q226	B-10
Q235	I-13
Q240	E-11
Q247	A-6
R223	H-11
R224	I-11
R225	J-9
R226	B-8
R227	I-7
R228	D-14
R229	D-13
R230	C-13
R231	D-12
R232	D-12
R233	F-14
R234	H-12
R235	H-13
R236	H-12
R240	B-10
R241	F-13
R242	E-13
R243	F-12
R244	F-12
R245	B-14
R247	A-3
R248	B-13
R249	A-12
R250	B-12
R251	B-12
R255A	F-3
R255B	D-3
R259	H-9
R260	G-10
R261	B-9
R262	E-10
R263	B-5
R264	D-5
W12	G-8
W13	F-9



MISCELLANEOUS ADJUSTMENTS

COLOR TEMPERATURE ADJUSTMENT

Disconnect IF Input Cable from J1 to obtain a blank raster. Set Brightness, Picture and Color Controls to MINIMUM. Set Tint and Sharpness Controls to midrange and Sub Brightness to Maximum. Set G2 Screen (R255), Blue Cutoff (R248), Red Cutoff (R229), Green Cutoff (R241), Blue Drive (R245), Red Drive (R228) and Green Drive (R233) Controls fully counterclockwise. Short pins 1 and 7 of Vertical Output IC (IC331) to ground. Connect a Jumper from W12 to W13 on CRT Socket Board. Adjust G2 Screen Control until a dim line of one color just appears. Disconnect jumper from W12 to W13. Turn Sub Brightness Control clockwise until a dim line of one color appears. Adjust the cutoff controls of the two missing colors to produce a low level white line. Disconnect short from pins 1 and 7 of IC331. Reconnect IF Input Cable to J1 and tune in a picture. Adjust Sub Brightness Control (R185) if necessary for a low level picture. Set Picture Control (VR740) to Maximum and Brightness Control (VR730) to midrange. Adjust Drive Controls for best white in highlights of the picture.

RF AGC DELAY

Tune in a weak station or loosely couple the antenna to obtain a snowy picture. Set RF AGC Delay Control (R50) fully clockwise. Slowly turn RF AGC Delay Control counterclockwise to a point slightly beyond MINIMUM snow.

AUDIO PRESET ADJUSTMENT

Set Volume Control and Audio Preset Control (R114) to MINIMUM. Adjust Audio Preset Control clockwise to a point where sound or noise can just be heard.

130V ADJUSTMENT

Use an isolation transformer for this adjustment. Adjust isolation transformer for 120V AC. Connect DC meter to TP4, low side to pin 1 of Plug (P1). Adjust 130V Adjust Control (R474) for +130V DC $\pm 1V$ DC.

3.58MHz OSCILLATOR 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 Jumper from TP22 (Pin 18 IC150) to TP21 (+12.7V source). Connect a Jumper from TP5 (Pin 20 IC150) to ground (IF Shield). Adjust 3.58MHz Oscillator (C195) until color stops or slowly drifts.

3.58MHz TRAP ADJUSTMENT

Tune in color bar pattern, connect scope to TP19. Adjust C44 for MINIMUM on scope trace.

HORIZONTAL OSCILLATOR ADJUSTMENT

Tune in a picture and connect a Jumper from TP6 to ground. Adjust Horizontal Frequency Control (R339) until picture stops or slowly drifts across the screen. Remove Jumper from TP6 and check lock-in on all channels.

HORIZONTAL AND VERTICAL CENTERING

Connect a color bar generator to the antenna terminals and tune in a crosshatch pattern. Adjust Horizontal Centering Control (R345) for proper horizontal centering. Adjust Vertical Centering Switch (S300) to center the crosshatch pattern on the screen.

VERTICAL FREQUENCY ADJUSTMENT

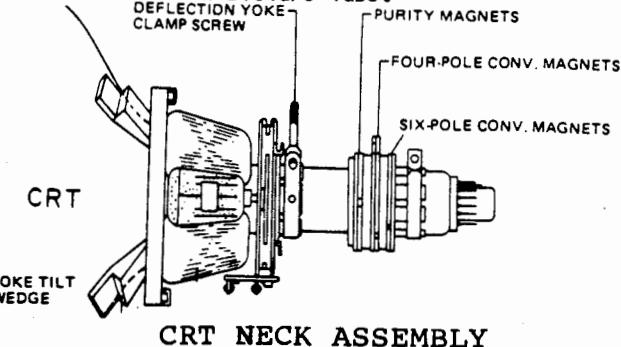
Tune in a station and adjust for a normal picture. Adjust Vertical Frequency Control (R353) until picture locks-in. Check lock-in by switching from channel to channel. If necessary readjust until proper lock-in is obtained.

PURITY ADJUSTMENT

NOTE: Allow 15 minute warm-up. Degauss the picture tube and mounting brackets. Set Picture Control to MINIMUM and adjust Brightness Control for normal brightness. Disconnect Plug from J1 (IF/Input) for a blank raster. Set Green (R241) and Blue (R248) Cutoff Controls fully counterclockwise to obtain a red raster. Loosen the yoke clamp and slide yoke back as close to purity magnet as possible. Rotate and spread the purity magnet tabs until the red band is centered on the screen. Move the yoke slowly forward until a uniform red raster is obtained. Tighten yoke clamp and reconnect Plug at J1 (IF/Input).

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting convergence adjustments the receiver should be operated for at least 15 minutes. Connect a color bar generator to the antenna terminals and tune in a crosshatch pattern. Spread the tabs of the 4-pole magnets to converge the red and blue vertical lines in the center of the screen, rotate the tabs to converge the red and blue horizontal lines at the center of the screen. Spread and rotate the tabs of the 6-pole magnets to converge the red and blue with the green line(s) (horizontal and vertical) at the center of the screen. Remove the rubber wedges from the picture tube. Tilt the yoke vertically and horizontally to converge edges of screen. Apply adhesive to wedges and carefully replace on picture tube.



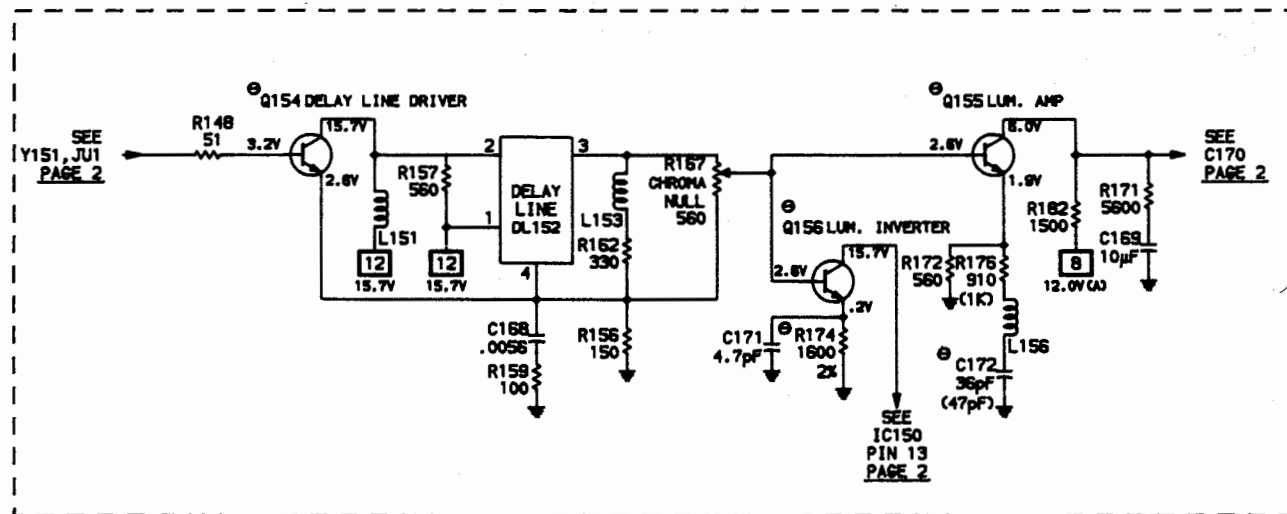
SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2

When ordering parts, state Model, Part Number, and Description

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

ITEM	PART No.	PART No.	PART No.	PART No.
Models	CLS251AK01/2/3/4	CLS253AK01/2/3/4	CLS255PE01/2/3/4	CLS262AK01/2/3/4
AC Cord	6414070001			4614070001
Balun	3658050001			3618050001
Cabinet, Back	6455730002			6455060002
Cap-Pushbutton-Favorite Station	1452980001			
Cup-CRT	1453100001			1453100001
Door w/Overlay-Secondary Control	7050680001			
Door-Secondary Control				7050270006
Grille Cloth Assembly				4011580004
Inlay-Secondary Control	1520020005			
Knob-Decorative (2 used)				1219530001
LDR	2303160002			
LED-Channel Display	5302650001			5302651001
LED-SAP	5301890002			5302970002
LED-Stereo	5301890001			5302970003
Pull-Decorative (2 used)	1219190001			
Pushbutton-Channel (12 used)				1456220001
Pushbutton-(1-9)	1455510001			
Pushbutton-(0)	1455520001			
Pushbutton-Channel (2 used)	1455500003			
Pushbutton-Channel (12 used)				1456220001
Pushbutton-Power	1455500001			1456240001
Pushbutton-Slide Volume	1455560003			
Pushbutton-Volume				1456560001
Model	CLS268PE01/2/3/4			
Cabinet, Back	6455170002			
Grille Cloth Assembly	7050230003			
Knob-Decorative (2 used)	1219530001			



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COMB FILTER BOARD

PARTS LIST AND DESCRIPTION

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFG. PART No./ TYPE No.					NOTES
		NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	
D190,1	5302600002	NTE580	ECG580	SK5036/580	212-Z9000	
D331	5301710001	NTE552	ECG552	SK9000/552	103-287	
D337	5301810001	NTE177	ECG177	SK9091/177	103-131	
D357	5301810001	NTE177	ECG177	SK9091/177	103-131	
D401	5302660001	NTE177	ECG177	SK9091/177	103-131	#
D404,8	5302600002	NTE580	ECG580	SK5036/580	212-Z9000	
D414	5303050002	NTE552	ECG552	SK9000/552	103-287	
D418	5303050003	NTE552	ECG552	SK9000/552	103-287	
D420,3	5302600002	NTE580	ECG580	SK5036/580	212-Z9000	
D425	5301810001	NTE177	ECG177	SK9091/177	103-131	
D459,60	5302620001	NTE506	ECG506	SK3175A	212-Z9007	
D461,62	5301810001	NTE177	ECG177	SK9091/177	103-131	
D463	5302610001	NTE552	ECG552	SK9000/552	103-287	
D465	5303050003	NTE552	ECG552	SK9000/552	103-287	
D470	5301810001	NTE177	ECG177	SK9091/177	103-131	#
D480	5301810001	NTE177	ECG177	SK9091/177	103-131	
IC51	6121260001	NTE1413	ECG1413	SK7635/1413		
IC111	6123940002	NTE1413	ECG1413	SK7635/1413		
IC121	6123700002	NTE1580	ECG1580	SK7743/1580		
IC150	6123270001	NTE1566	ECG1566	SK7726/1566		
	6123030001	NTE1416	ECG1416	SK9016/1410		
IC331	6124440001	NTE1567	ECG1567	SK7805/1567		
IC340	6124450001	NTE1632	ECG1632			
IC469	PS2021	NTE3041	ECG3041	SK2041/3041		
	5303000001	NTE3041	ECG3041	SK2041/3041		#
Q35	6103900001	NTE395	ECG395	SK9434	*	
Q36	6104350002	NTE123AP	ECG123AP	SK3854/123AP	*	121-Z9000A
Q153	6104350001	NTE123AP	ECG123AP	SK3854/123AP	*	121-Z9000A
Q154	6104990001	NTE123A	ECG123A	SK3444/123A	*	121-Z9000A
Q155,6,7	6104350001	NTE123AP	ECG123AP	SK3854/123AP	*	121-Z9000A
Q158	6104340001	NTE159	ECG159	SK3466/159	*	121-Z9003

SYLVANIA CHASSIS
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FOLDER 2

4 PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
Q187	6104350001	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	
Q188	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	*
Q191	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	*
Q401	6104350002	NTE2302	ECG2302	SK9422	121-Z9003	*
Q457	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	*
Q463	6104370001	NTE399	ECG399	SK9352/399	121-Z9045	*
Q464	BUW11	NTE2310	ECG2310			
	6105170001	NTE2310	ECG2310			
Q470	6104350002	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	*
Q471	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	*
Q492	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	*
Q494	6105110001	NTE47	ECG47	SK9459/47	121-Z9003	*
Z60	5301571100	NTE5019A	ECG5019A	SK10A/5019A	103-Z9010	#
Z402	5303020003	NTE5021T1	ECG5021T1			
Z424	53015711439	NTE5008A	ECG5008A	SK4A3/5008A	103-279-08	
Z479	5303010002					
Z481	5303020002	NTE5011A	ECG5011A	SK5A6/5011A	103-Z9007	
CRT BOARD A10090						
Q226	6102500003	NTE171	ECG171	SK3201/171	121-822	*
Q235	6104340001	NTE159	ECG159	SK3466/159	121-Z9003	
Q240,7	6102500003	NTE171	ECG171	SK3201/171	121-822	

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

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

ITEM	PART No.	PART No.	PART No.	PART No.
Models	QLD206	QLD251	QLD253	QLD255
AC Cord	4614070001	4614070001	4614070001	4614070001
Balun Assembly	3618050001	3618050001	3618050001	3618050001
Baffle-(L.H.)		1453410004	1453410004	1453410004
Cup-CRT		1453100001	1453100001	1453100001
Cabinet, Back	1450230004	6454960001	6454960001	6454960001
Cabinet, Front	1449610010			
Door Assembly		7050680001	7050680001	7050680001
Door-Secondary Control	1447420001			
Grille-Speaker		7344590001		
Grille-Speaker		7344590002		
Inlay-Door	1518280008			
Inlay-Secondary Control	1518290012	1520020005	1520020005	1520020005
Inlay-Top	1517900001			
Knob-On/Off/Volume	1449540004			
LED-Display	5302650001			
Pushbutton (12 used)	1459630007			
Pull-Decorative (2 used)		1219190001	1219230001	1219170001
Models	QLD257PE01/2	CLE822	CLE824	CLE826
AC Cord	4614070001	4614070001	4614070001	4614070001
Baffle-Speaker (L.H.)	1452830002			
Balun	3618050001	3618050001		
Button, Channel (12 used)	1449630007			
Button, Decorative (4 used)	1416240001			
Cabinet, Back	6455040001			
Cup-CRT		6454440002	6454860002	6454860002
Door-Secondary Control	1448730001	1453100001	1453100001	1453100001
Grille Cloth (R.H.)	4011100007	1448730001	1448730001	1448730001
Grille Cloth (L.H.)	4011100008			
Grille Cloth Assembly		4011100009	4011100001	4011100004
Inlay-Secondary Control	1518290012	1518290011		
Inlay-Secondary Control	1517910056	1517910064		
Door				
Knob-Decorative (2 used)	1219530001			
Knob-On/Off/Volume	1449540003	1449540004		
LDR		2303160002		
LED-Display		5303200001		
LED-Display Module	5302650001			
LDR, 20K, 100V, 175mW	2303160002			
Tube Cup	1453100001			

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PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

MISCELLANEOUS

ITEM No.	PART NAME	MFGR. PART No.	NOTES
DL152	Delay Line	3615790005	Early Production Comb Filter Chassis Late Production Comb Filter Chassis AC Fuse 5A @ 250V Fast Acting
F450	Delay Line	3615790006	
FB400	Fuse	1815101500	
L451	Ferrite Bead	3640460001	
LC199	Degaussing Coil	3619570009	
P101	Network	3619980001	Vertical Centering Power, Part of Volume Control R700 SAW (1) (2) (3) 3.58MHz, Late Production only 4.5MHz 3.58MHz, Non Comb Filter Versions only 3.58MHz Oscillator UHF, RUSSELL Replacement BOW-4H VHF, RUSSELL Replacement Assembly BEA-1H RUSSELL Replacement REC206, (10 used)
S300	AC Power Cord	4614070001	
S700	Switch	1606720001	
SF38	Switch	3618020001	
SF38	Filter	3618020001	
V701	CRT	A63AM01XP	Convergence and Purity Assembly Yoke Positioning (3 used)
Y62	Trap	3302720006	
Y150	Filter	CBA63AM01	
Y151	Trap	3616910003	
Y194	Crystal	3617560001	
	Antenna	3616910002	
	Antenna	56040005	
	Glide, Plastic	1209760006	
	Balun	3618050001	
	Magnet	3615730008	
	Wedge	6448670001	

For SAFETY use only equivalent replacement part.

- (1) Used In models: CLS251AK01,AK02,AK03,AK04
CLS253AK01,AK02,AK03,AK04
CLS255PE01,PE02,PE03,PE04
CLS262AK01,AK02,AK03,AK04
CLD251AK01
CLD253AK01
CLD255PE01
CLD257PE01,PE02
CLE822AK01
CLE824HP01
CLE826AK01
(2) Used In model: CLD206WA01
(3) Used In models: CL8122AK01
CL8124HP01
CL8126AK01
CL8129PE01

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

ITEM	PART No.	PART No.	PART No.	PART No.
Models	CL8122	CL8124	CL8126	CL8129
AC Cord	4614070001	4614070001	4614070001	4614070001
Baffle-Speaker (L.H.)				1452830002
Balun Assembly	3618050001	3618050001	3618050001	3618050001
Cup-CRT	1453100001	1453100001	1453100001	1453100001
Cabinet, Back	6454440001	6454860001	6454860001	6454780001
Door-Secondary Control	1448730001	1448730001	1448730001	1448730001
Front Control Panel (R.H.)	1452430002	1452430002	1452430002	1452430002
Grille	1452810006		1452810009	
Grille Cloth	4011100009	4011100001	4011100004	4011100005
	4011720001			4011100006
Pull-Decorative (2-used)		1219430001	1219120001	1219140001

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	MFGR. PART No.	ITEM No.	RATING	MFGR. PART No.
C458A	200 385V	2701710001			
B	40 385V				
C	40 385V				

For SAFETY use only equivalent replacement part.
Items Not Listed Are Normally Available At Local Distributors.

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	ITEM No.	RATING	MFGR. PART No.
C38	18 NPO 50V 5%	2508411805	C171	4.7 NPO 50V ±25	2508415097
C44	2-40 Trimmer	2602290001	C172	36 NPO 50V 5%	2508413605
C45	15 N220 50V 5%			47 NPO 50V 5%	2508414705
	15 NPO 50V 5%	2508411505	C175	39 NPO 50V 5%	2508413905
	10 NPO 50V 10%	2508411008	C176	82 NPO 50V 5%	2508418205
C46	100 NPO 50V 5%	2508411015			
	22 NPO 50V 5%	2508412205	C186	180 N220 50V 5%	2508421815
C64	56 NPO 50V 5%	2508415605		150 NPO 50V 5%	2508411515
C110	5 NPO 50V ±.25pF		C194	56 NPO 50V 5%	2508415605
	4.7 NPO 50V ±.25pF	2508415097	C195	2-40 Trimmer	2602290001
	33 NPO 50V 5%	2508413305	C196	22 N750 50V 5%	2508412205
C157	390 N750 50V 5%	2508433915	C332	68 N750 50V 5%	2508686805
	220 NPO 50V 5%	2508422215	C356	68 NPO 50V 5%	2508416805
C158	47 NPO 50V 5%	2508414705	# C401	.001 2KV 10%	2508850009
C166	39 NPO 50V 5%	2508413905	# C402	.012 2KV 5%	2508181235
C167	220 N220 50V 5%	2508422215	# C404	.43 400V 5%	2508050004
C170	82 NPO 50V 5%	2508418205	# C405	.0047 125VAC	2506260014
	120 NPO 50V 5%	2508411215	# C450	.22 120VAC	2509842240
			C453	68 N750 50V 5%	2508686805
			C480	390 N750 50V 5%	2508433915

For SAFETY use only equivalent replacement part.
Items Not Listed Are Normally Available At Local Distributors.

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

ITEM NO.	FUNCTION	RESISTANCE	MFGR. PART NO.	NOTES
	MAIN CHASSIS			
R50	RF Delay Adjust	22K	2204162232	
R114	Audio Preset	10K	2204161032	
R167	Chroma Null	560	2204165612	
R185	Sub-Brite	10K	2204161032	
R327	Vertical Height	100	2204161012	
R339	Horizontal Frequency	10K	2204161032	
R345	Horizontal Center	10K	2204161032	
R353	Vertical Frequency	220K	2204162242	
R474	+120V DC Adjust	10K	2204161032	
	CRT MODULE			
R228	Red Drive	2200	2204202222	
R229	Red Cutoff	10K	2204201032	
R233	Green Drive	2200	2204202222	
R241	Green Cutoff	10K	2204201032	
R245	Blue Drive	2200	2204202222	
R248	Blue Cutoff	10K	2204201032	
# R255A	Focus	100M	2204620001	
# B	Screen	100M		
	SECONDARY CONTROL			

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

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

ITEM NO.	FUNCTION	RESISTANCE	MFGR. PART NO.	NOTES
R710	Tone	10K	2204600006	
		10K	2204590015	
R720	Sharpness	10K	2204600007	
		Detent @ 50%	2204590016	
R730	Brightness	10K	2204600006	
			2204590001	
R740	Picture	10K	2204600004	
			2204590001	
R750	Tint	10K	2204600004	
			2204590001	
R760	Color	10K	2204600004	
			2204590001	
VR770	Balance	50K	2204590011	
VR780	Bass	50K	2204590011	
VR790	Treble	50K	2204590011	

For SAFETY use only equivalent replacement part.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		MFGR. PART No.	NTE PART No.
	MAIN CHASSIS		
R155	1000 2% 1/4W Carbon Film	2302811022	QW210
R174	1600 2% 1/4W Carbon Film	2302811622	QW216
R400	1.5 10% 7W WW	2401221589	
	1.3 10% 7W WW	2401090004	
# R402	30.9 1% .4W Metal Film	2302753099	
# R404	4.7M 5% 1/2W Metal Film	2302674755	
# R405	1000 5% 1.6W Metal Film	2303091025	
# R408	2.2 5% 1/3W Metal Film	2302682285	
# R410	1 5% 1/3W Metal Film	2302681085	
# R414	1 5% 1/3W Metal Film	2302681085	
# R415	1 5% 1/3W Metal Film	2302681085	
# R418	1 5% 1/2W Metal Film	2302271085	HW1D0
# R420	1 5% 1/3W Metal Film	2302681085	
# R451	7.4 Cold PTC	2302070008	
# R455	1.8 10% 10W Metal Film		
	1.8 5% 10W Metal Film	2400820008	
R471	270 2% 1/4W Carbon Film	2302812712	QW127
R472	5490 1% .4W Metal Film	2302755492	
R475	330 2% 1/4W Carbon Film	2302813312	QW133
R476	115K 1% .4W Metal Film	2302751154	
R479	150K 2% 1/4W Carbon Film	2302811542	QW415
R486	1 2% 1/2W Metal Film	2302761008	HW1D0
R488	1 2% 1/2W Metal Film	2302761008	HW1D0
# R489	2.2 5% 1/3W Carbon Film	2302682285	
	TUNER CONTROL UNIT		
LDR1	Light Dependent Resistor	2303160002	

For SAFETY use only equivalent replacement part.

WIRING DATA

High Voltage Lead	Use BELDEN No. 9867 (30 KV)
Shielded Hook-up Wire	Use BELDEN No. 8401 or 8421 (Single-Conductor)
	8208 (Two-Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8529 (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	Use BELDEN No. 8275 (Foam Core) or 8285 (Foam Jacketed)
Antenna Rotor Cable	Use BELDEN No. 8464 (Flat) or 8484 (Round) 4-Conductor
	8485 (Round) 5-Conductor
	8488 (Round) 8-Conductor

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

COILS (RF-IF)

ITEM No.	FUNCTION	MFGR. PART No.	ITEM No.	FUNCTION	MFGR. PART No.
L38	Choke (1.2uH)	3618131290	L178	Peaking (68uH)	3618356805
L39	Video IF	3617990005		Peaking (10uH)	3618351005 (1)
L40	RF Choke		L195	Peaking (39uH)	3618353905
L53	Peaking (2.2uH)	3618132290	L260	RF Choke (27uH)	3618000009
L54	Video IF	3617990003	L261	RF Choke (.68uH)	3619550680
L55	AFT	3617990004	L400	Peaking (3.5uH)	3618000013 (2)
L58	RF Choke (.33uH)	3618130330	L401	RF Choke (42uH)	3618000014
L61	Peaking (2.2uH)	3618132290	L402	RF Choke (5.3uH)	3618000012
L62	RF Choke (56uH)	3618135609	# L405	Horizontal	3620280001
L63	Peaking (2.2uH)	3618132290		Linearity	
L120	Sound Discriminator	3619680002	# L410	RF Choke (5.6uH)	3618355699
L121	RF Choke (22uH)	3618352209	L414	RF Choke (12uH)	3618351209
L150	Peaking (10uH)	3618351009	# L450	Line Filter	3619840001
L151	Chroma Phase Null	3619660001 (1)	L464	RF Choke (.5uH)	3618000010
L153	RF Choke (18uH)	3618351805 (1)	L465	RF Choke (12uH)	3618000008
L154	RF Choke (18uH)	3618131805	L466	RF Choke (5.3uH)	3618000012
L156	RF Choke (120uH)	3618351215 (1)	L467	RF Choke (12uH)	3618000008
L157	Peaking (27uH)	3618132705	L468	RF Choke (.5uH)	3618000010
L170	Peaking (10uH)	3619551005	T110	Sound IF	3619650001
L177	RF Choke (22uH)	3618132205			

For SAFETY use only equivalent replacement part.

(1) Comb Filter Chassis only.

(2) Early Production only.

COILS & TRANSFORMERS

ITEM No.	FUNCTION	MFGR. PART No.	OTHER IDENTIFICATION	NOTES
# DY1	Yoke Horiz 1.40mH 100° Vert 18.4mH	3619670002	361967-2	
# T408	Horizontal Output	3619690001	361969-1	
# T453	Start-up	3004030001	38601	
# T463	Horizontal Driver	3204030002	311233830280	
T488	Switch Mode	3619700001	361970-1	

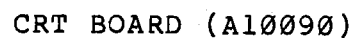
For SAFETY use only equivalent replacement part.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP102	3" x 5" PM 16 Ohms	5835091001	35A05Z16	Used In Models: CLD251AK01, CLD253AK01, CLD255PE01, CLS251AK01, AK02, AK03, AK04, CLS253AK01, AK02, AK03, AK04, CLS255PE01, PE02, PE03, PE04, CLS262AK01, AK02, AK03, AK04, CLS268PE01, PE02, PE03, PE04.
	4" x 6" PM 16 Ohms	5846120001	46A05Z16	Used In Models: CL8122AK01, CLE822AK01, CL8124HP01, CLE824HP01, CL8126AK01, CLE826AK01.
	4" x 6" PM 32 Ohms	5846121004 5846120002	46A1Z32	Used In Model: CLD206WA01. Used In Models: CL8129PE01, CLD257PE01, PE02.

SYLVANIA CHASSIS
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FOLDER 2



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SET 2656 FOLDER 2-A

For Supplier Address See PHOTOFACT Index

SYLVANIA CHASSIS
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SYLVANIA CHASSIS
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SET 2656 FOLDER 2-A

Howard W. Sams & Co.

SAFARI™ 4300 West 62nd Street, P.O. Box 7092, Indianapolis, Indiana 46206 U.S.A.
The listing of any available replacement part having a

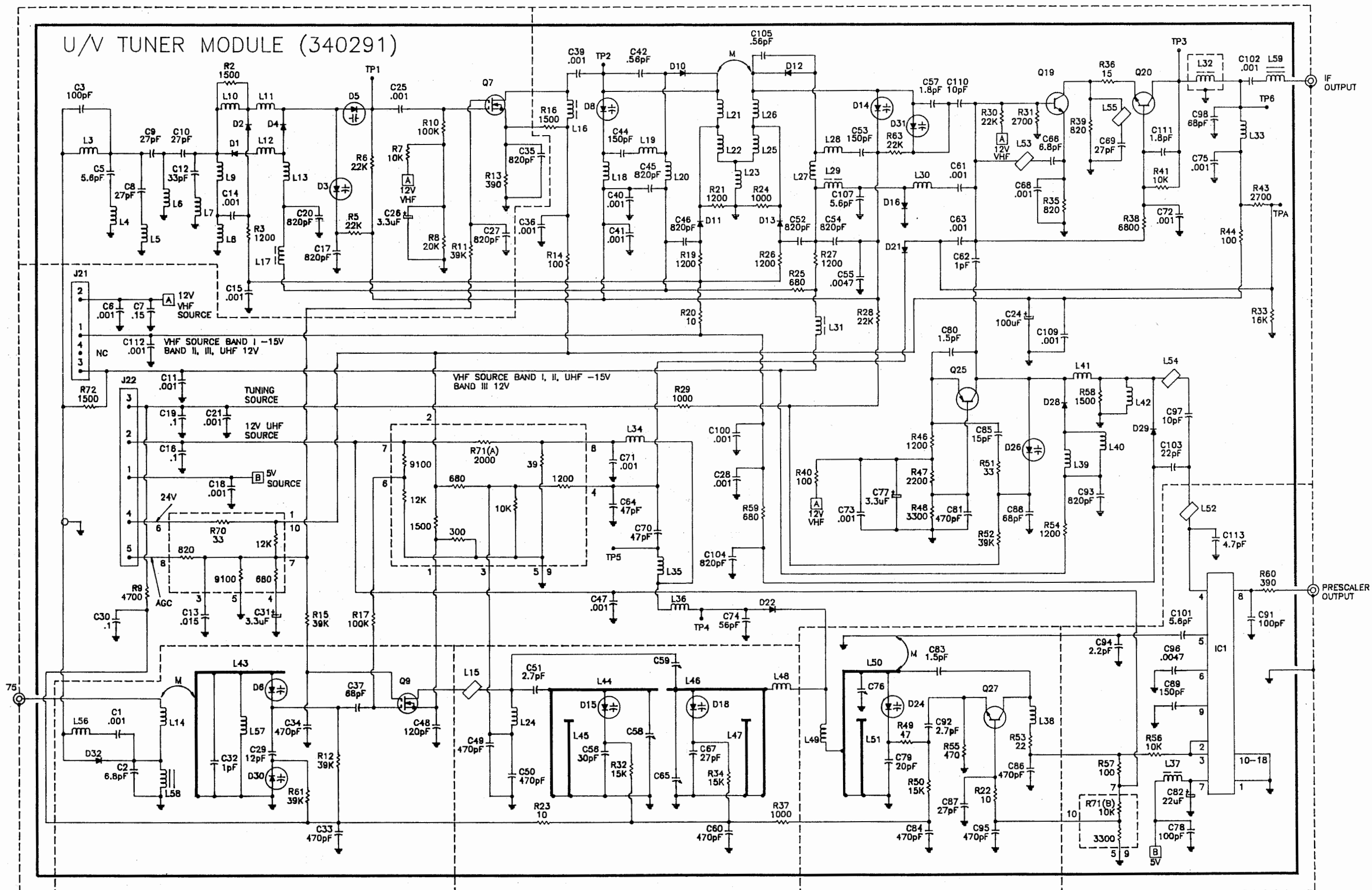
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such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co. by the manufacturers of the particular type of replacement part listed.

DATE 5-89

SET 2656 FOLDER 2-A

U/V TUNER MODULE (340291)



SYLVANIA CHASSIS
25C502/05/12/29/38/58

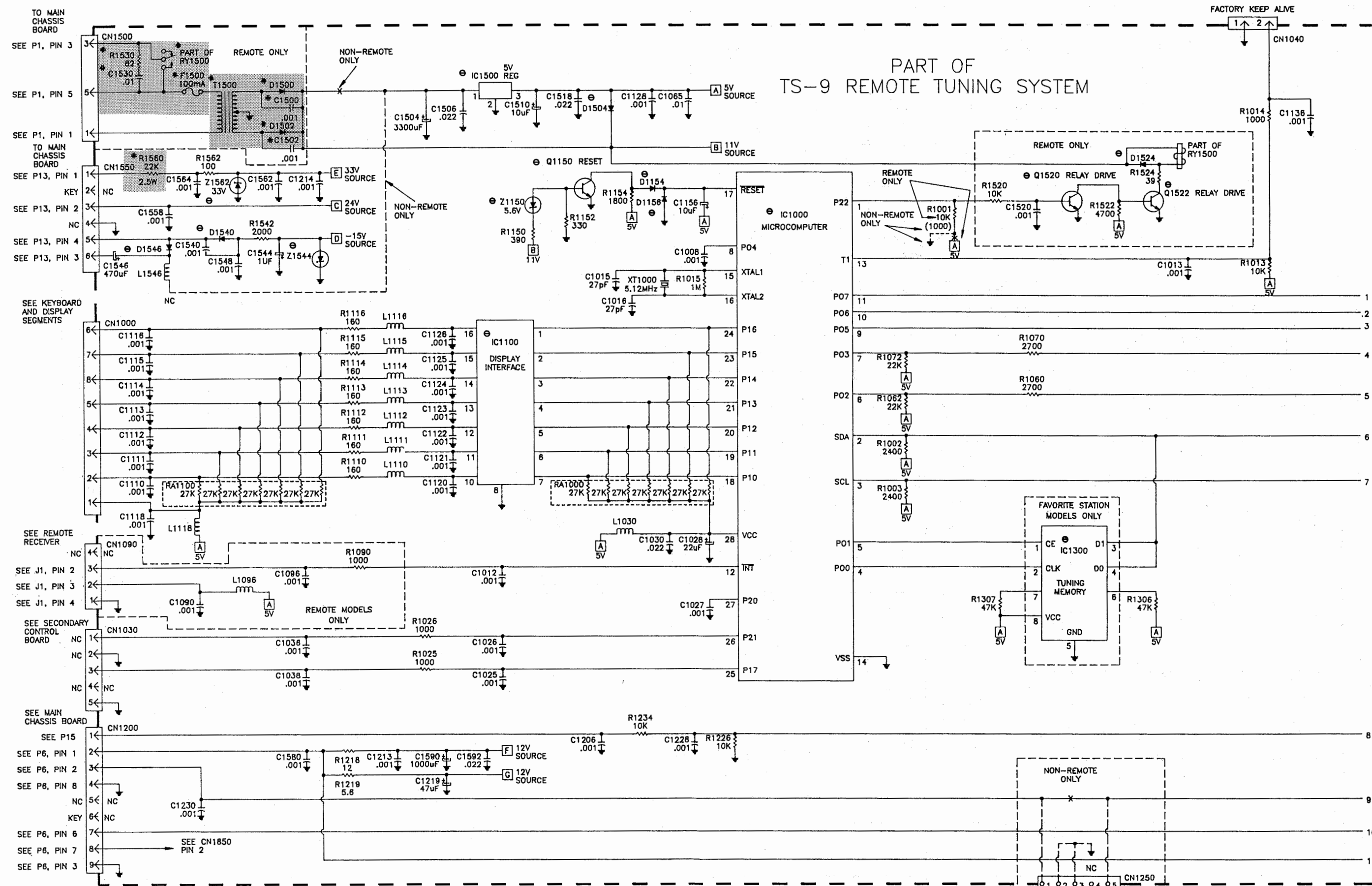
FOLDER 2-A

UHF/VHF TUNER (340291)

A PHOTOFAC STANDARD NOTATION SCHEMATIC
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UHF/VHF TUNER (340291)

SET 2656 FOLDER 2-A



PART OF TS-9 REMOTE TUNING SYSTEM

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

TS-9 TUNING SYSTEM (A10201)

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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TS-9 TUNING SYSTEM (A10201)

PART OF
TS-9 REMOTE TUNING SYSTEM

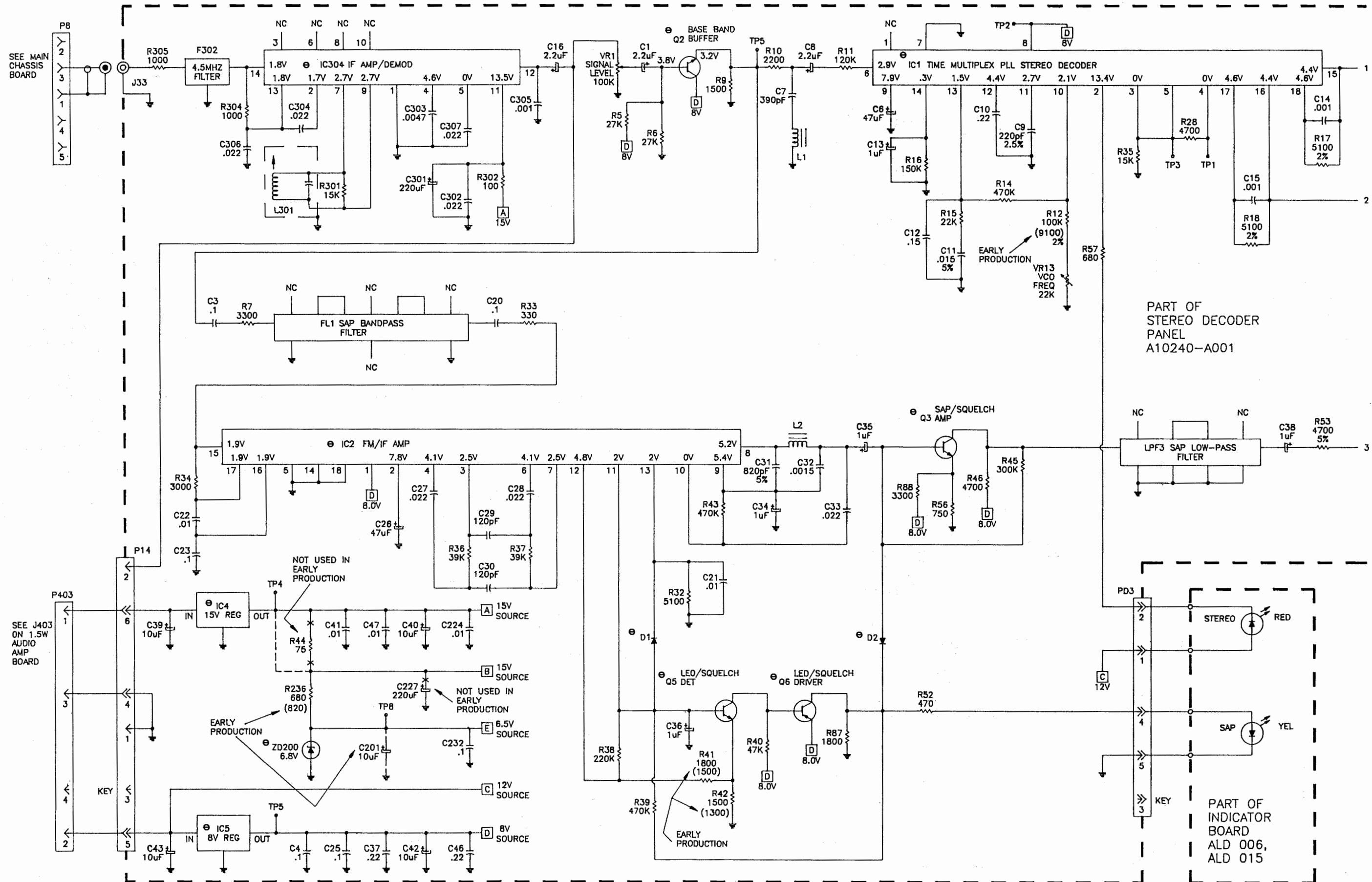
The schematic diagram illustrates the internal circuitry of the TS-9 Remote Tuning System. It features several key components and their interconnections:

- Transistors:** Q1070 (TENS DIGIT DRIVE), Q1080 (UNITS DIGIT DRIVE), Q1250 (AFC LATCH), Q1252 (AFC LATCH), Q1322 (SUPERBAND SW), Q1320 (HI/LO SW), Q1344 INV, Q1342 INV, and Q1340 INV.
- Resistors:** R1011, R1010, R1009, R1041, R1040, R1039, R1207, R1210, R1214, R1217, R1322, R1324, R1216, R1320, R1328, R1224, R1344, R1342, R1222, R1340, R1252, R1256, R1258, R1260, R1262, R1270, R1276, R1274, R1230, R1352, R1348, R1358, R1354, R1350, R1346, R1356, R1352, C1220, C1221, C1222, C1223, C1224, C1225, C1226, C1227, C1228, C1229, C1230, C1231, C1232, C1233, C1234, C1235, C1236, C1237, C1238, C1239, C1240, C1241, C1242, C1243, C1244, C1245, C1246, C1247, C1248, C1249, C1250, C1251, C1252, C1253, C1254, C1255, C1256, C1257, C1258, C1259, C1260, C1261, C1262, C1263, C1264, C1265, C1266, C1267, C1268, C1269, C1270, C1271, C1272, C1273, C1274, C1275, C1276, C1277, C1278, C1279, C1280, C1281, C1282, C1283, C1284, C1285, C1286, C1287, C1288, C1289, C1290, C1291, C1292, C1293, C1294, C1295, C1296, C1297, C1298, C1299, C1300, C1301, C1302, C1303, C1304, C1305, C1306, C1307, C1308, C1309, C1310, C1311, C1312, C1313, C1314, C1315, C1316, C1317, C1318, C1319, C1320, C1321, C1322, C1323, C1324, C1325, C1326, C1327, C1328, C1329, C1330, C1331, C1332, C1333, C1334, C1335, C1336, C1337, C1338, C1339, C1340, C1341, C1342, C1343, C1344, C1345, C1346, C1347, C1348, C1349, C1350, C1351, C1352, C1353, C1354, C1355, C1356, C1357, C1358, C1359, C1360, C1361, C1362, C1363, C1364, C1365, C1366, C1367, C1368, C1369, C1370, C1371, C1372, C1373, C1374, C1375, C1376, C1377, C1378, C1379, C1380, C1381, C1382, C1383, C1384, C1385, C1386, C1387, C1388, C1389, C1390, C1391, C1392, C1393, C1394, C1395, C1396, C1397, C1398, C1399, C1400, C1401, C1402, C1403, C1404, C1405, C1406, C1407, C1408, C1409, C1410, C1411, C1412, C1413, C1414, C1415, C1416, C1417, C1418, C1419, C1420, C1421, C1422, C1423, C1424, C1425, C1426, C1427, C1428, C1429, C1430, C1431, C1432, C1433, C1434, C1435, C1436, C1437, C1438, C1439, C1440, C1441, C1442, C1443, C1444, C1445, C1446, C1447, C1448, C1449, C1450, C1451, C1452, C1453, C1454, C1455, C1456, C1457, C1458, C1459, C1460, C1461, C1462, C1463, C1464, C1465, C1466, C1467, C1468, C1469, C1470, C1471, C1472, C1473, C1474, C1475, C1476, C1477, C1478, C1479, C1480, C1481, C1482, C1483, C1484, C1485, C1486, C1487, C1488, C1489, C1490, C1491, C1492, C1493, C1494, C1495, C1496, C1497, C1498, C1499, C1500, C1501, C1502, C1503, C1504, C1505, C1506, C1507, C1508, C1509, C1510, C1511, C1512, C1513, C1514, C1515, C1516, C1517, C1518, C1519, C1520, C1521, C1522, C1523, C1524, C1525, C1526, C1527, C1528, C1529, C1530, C1531, C1532, C1533, C1534, C1535, C1536, C1537, C1538, C1539, C1540, C1541, C1542, C1543, C1544, C1545, C1546, C1547, C1548, C1549, C1550, C1551, C1552, C1553, C1554, C1555, C1556, C1557, C1558, C1559, C1560, C1561, C1562, C1563, C1564, C1565, C1566, C1567, C1568, C1569, C1570, C1571, C1572, C1573, C1574, C1575, C1576, C1577, C1578, C1579, C1580, C1581, C1582, C1583, C1584, C1585, C1586, C1587, C1588, C1589, C1590, C1591, C1592, C1593, C1594, C1595, C1596, C1597, C1598, C1599, C1600, C1601, C1602, C1603, C1604, C1605, C1606, C1607, C1608, C1609, C1610, C1611, C1612, C1613, C1614, C1615, C1616, C1617, C1618, C1619, C1620, C1621, C1622, C1623, C1624, C1625, C1626, C1627, C1628, C1629, C1630, C1631, C1632, C1633, C1634, C1635, C1636, C1637, C1638, C1639, C1640, C1641, C1642, C1643, C1644, C1645, C1646, C1647, C1648, C1649, C1650, C1651, C1652, C1653, C1654, C1655, C1656, C1657, C1658, C1659, C1660, C1661, C1662, C1663, C1664, C1665, C1666, C1667, C1668, C1669, C1670, C1671, C1672, C1673, C1674, C1675, C1676, C1677, C1678, C1679, C1680, C1681, C1682, C1683, C1684, C1685, C1686, C1687, C1688, C1689, C1690, C1691, C1692, C1693, C1694, C1695, C1696, C1697, C1698, C1699, C1700, C1701, C1702, C1703, C1704, C1705, C1706, C1707, C1708, C1709, C1710, C1711, C1712, C1713, C1714, C1715, C1716, C1717, C1718, C1719, C1720, C1721, C1722, C1723, C1724, C1725, C1726, C1727, C1728, C1729, C1730, C1731, C1732, C1733, C1734, C1735, C1736, C1737, C1738, C1739, C1740, C1741, C1742, C1743, C1744, C1745, C1746, C1747, C1748, C1749, C1750, C1751, C1752, C1753, C1754, C1755, C1756, C1757, C1758, C1759, C1760, C1761, C1762, C1763, C1764, C1765, C1766, C1767, C1768, C1769, C1770, C1771, C1772, C1773, C1774, C1775, C1776, C1777, C1778, C1779, C1780, C1781, C1782, C1783, C1784, C1785, C1786, C1787, C1788, C1789, C1790, C1791, C1792, C1793, C1794, C1795, C1796, C1797, C1798, C1799, C1800, C1801, C1802, C1803, C1804, C1805, C1806, C1807, C1808, C1809, C1810, C1811, C1812, C1813, C1814, C1815, C1816, C1817, C1818, C1819, C1820, C1821, C1822, C1823, C1824, C1825, C1826, C1827, C1828, C1829, C1830

	TO U/V TUNER
1	SEE J21, PIN 3
2	KEY
3	SEE J21, PIN 2
4	SEE J21, PIN 1

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A



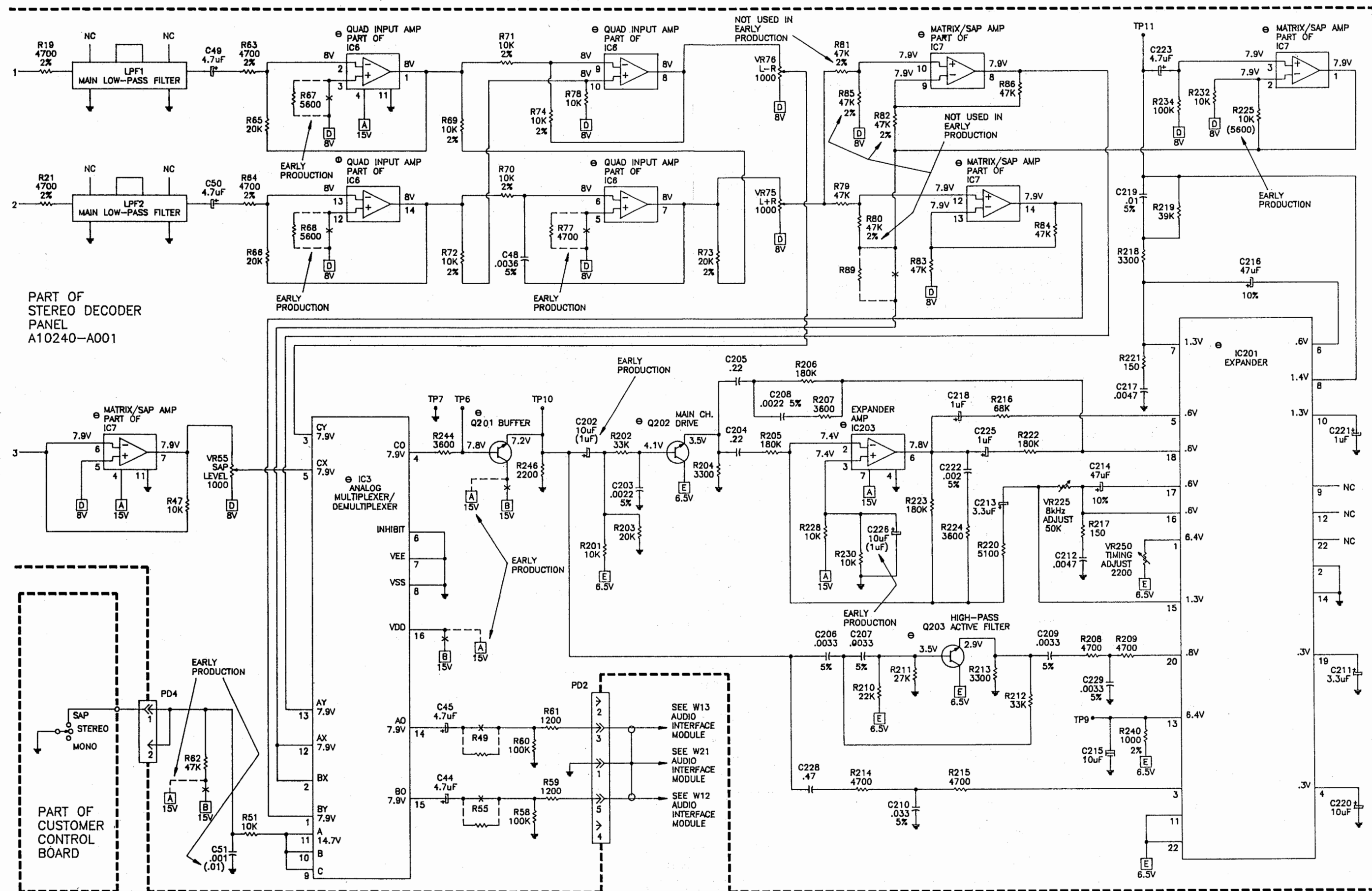
STEREO DECODER BOARD (A10240)

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STEREO DECODER BOARD (A10240)

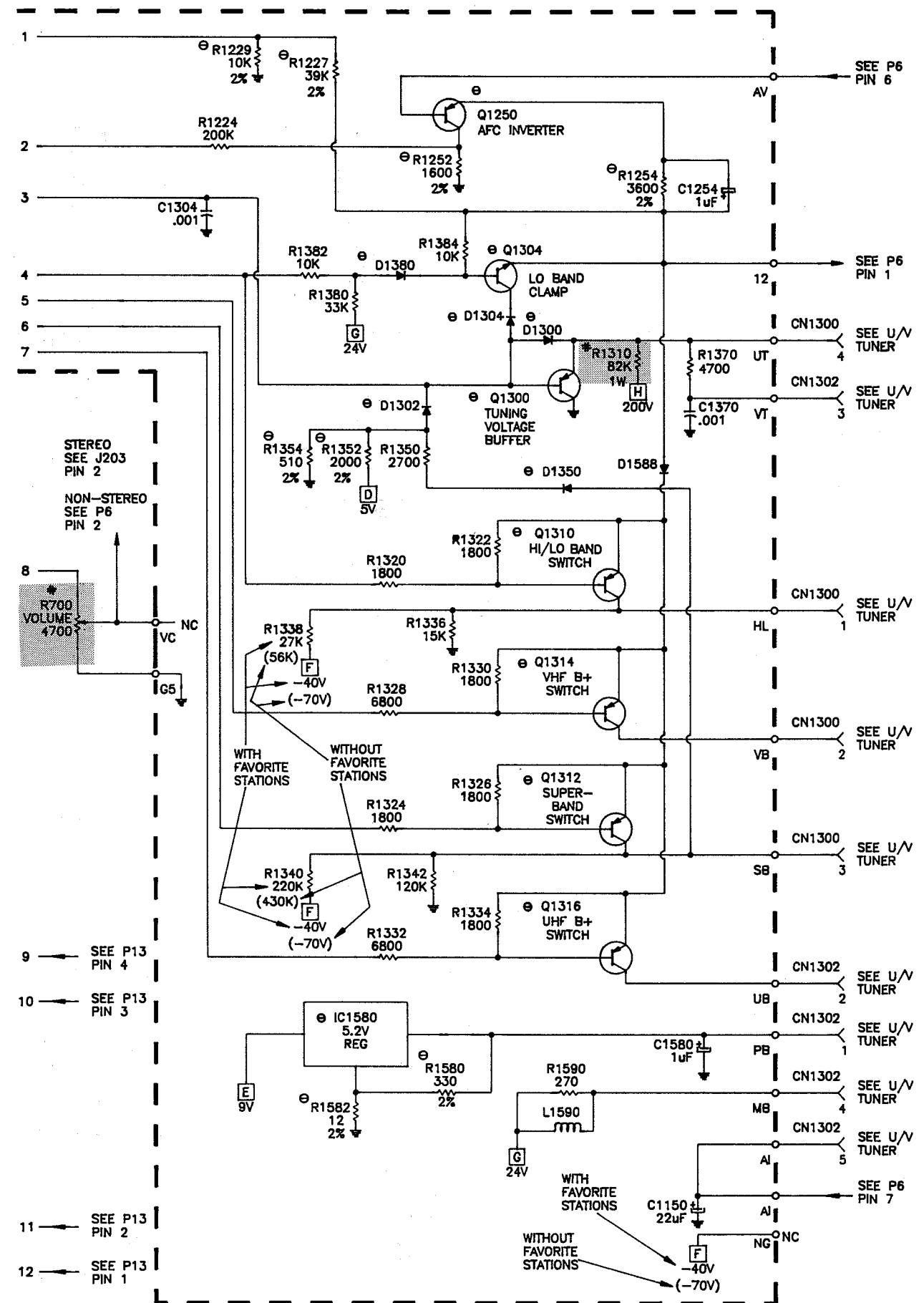
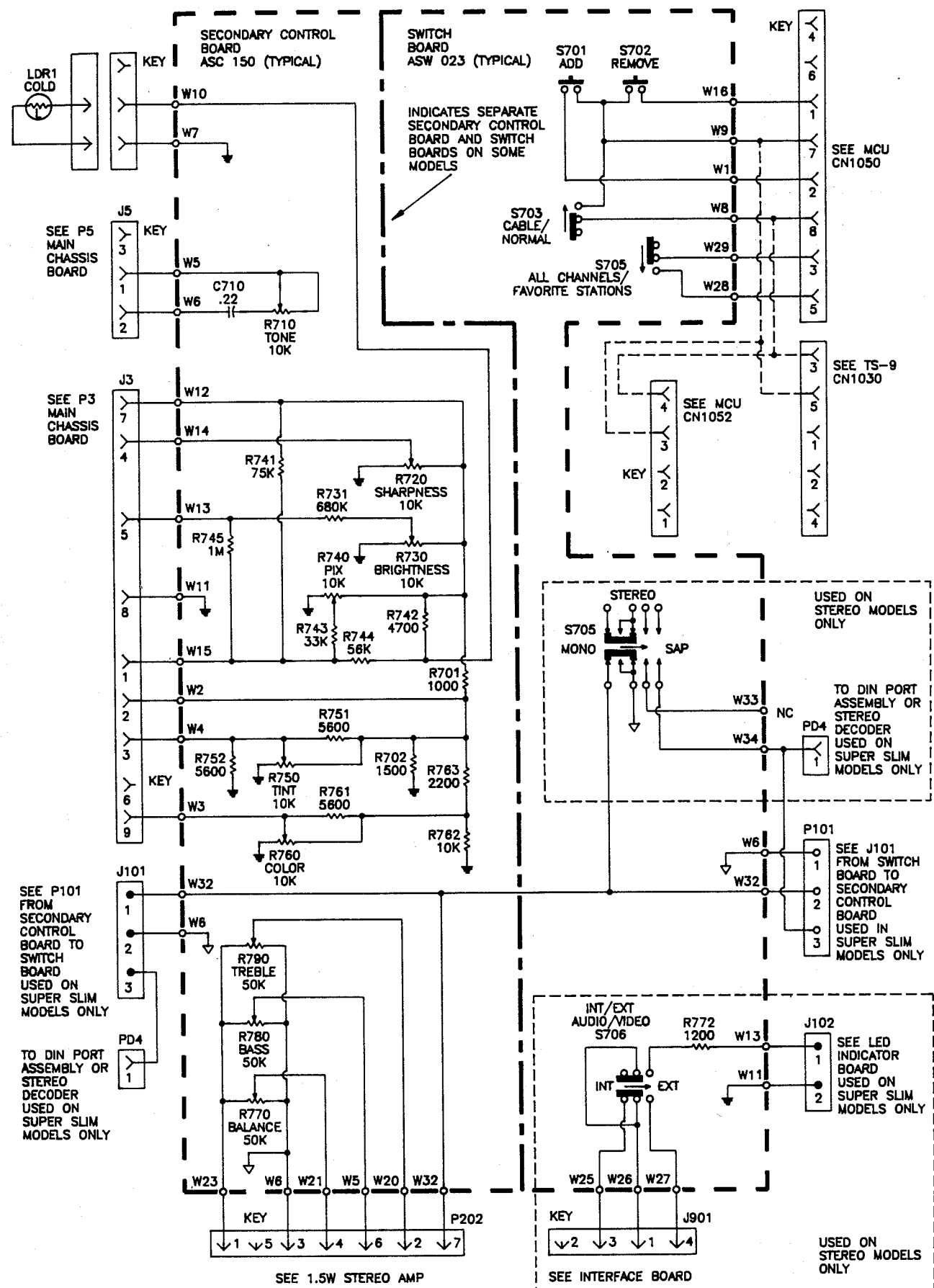
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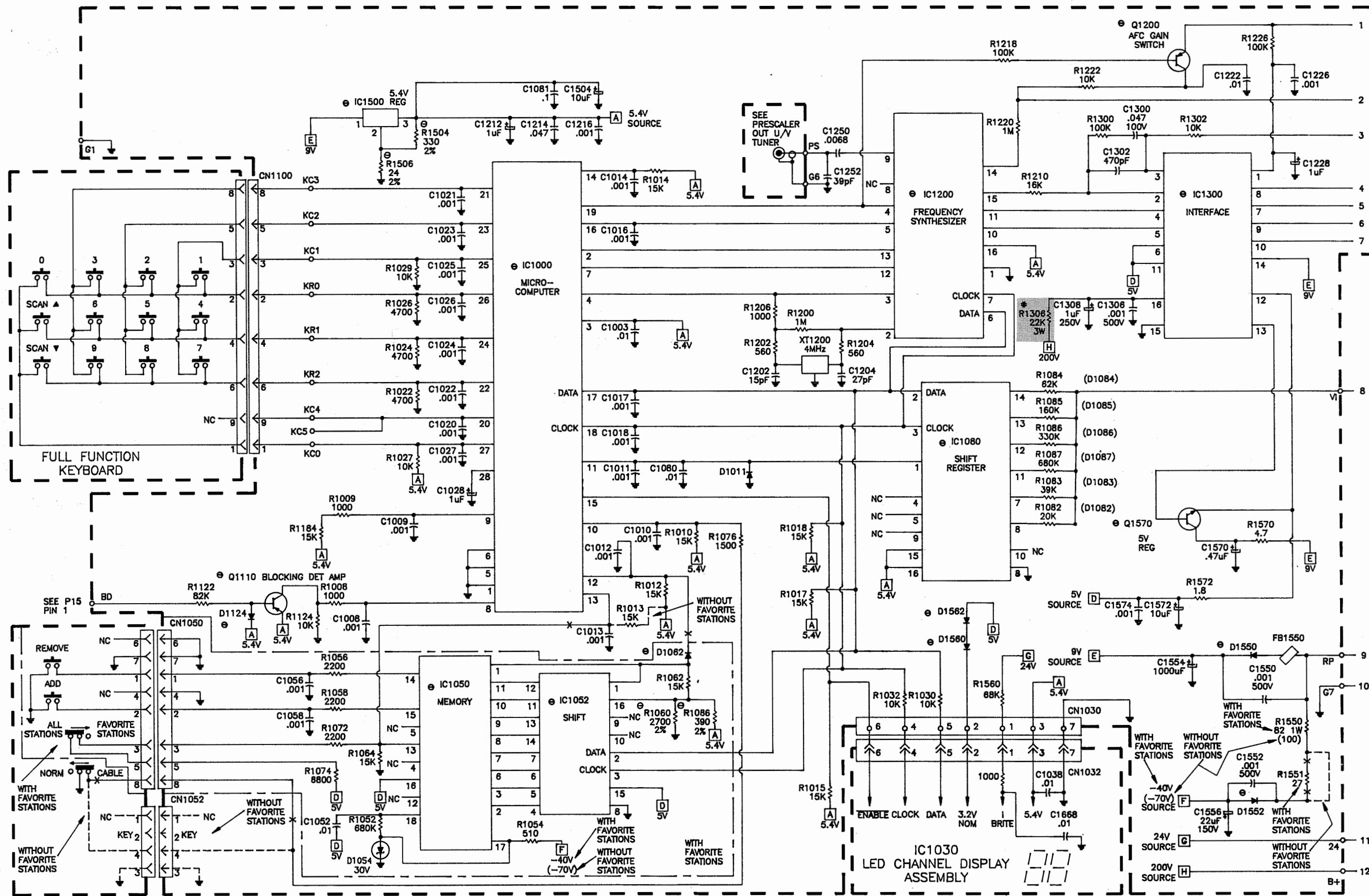


FOLDER 2-A

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MCU TUNING (A10235, A10237)





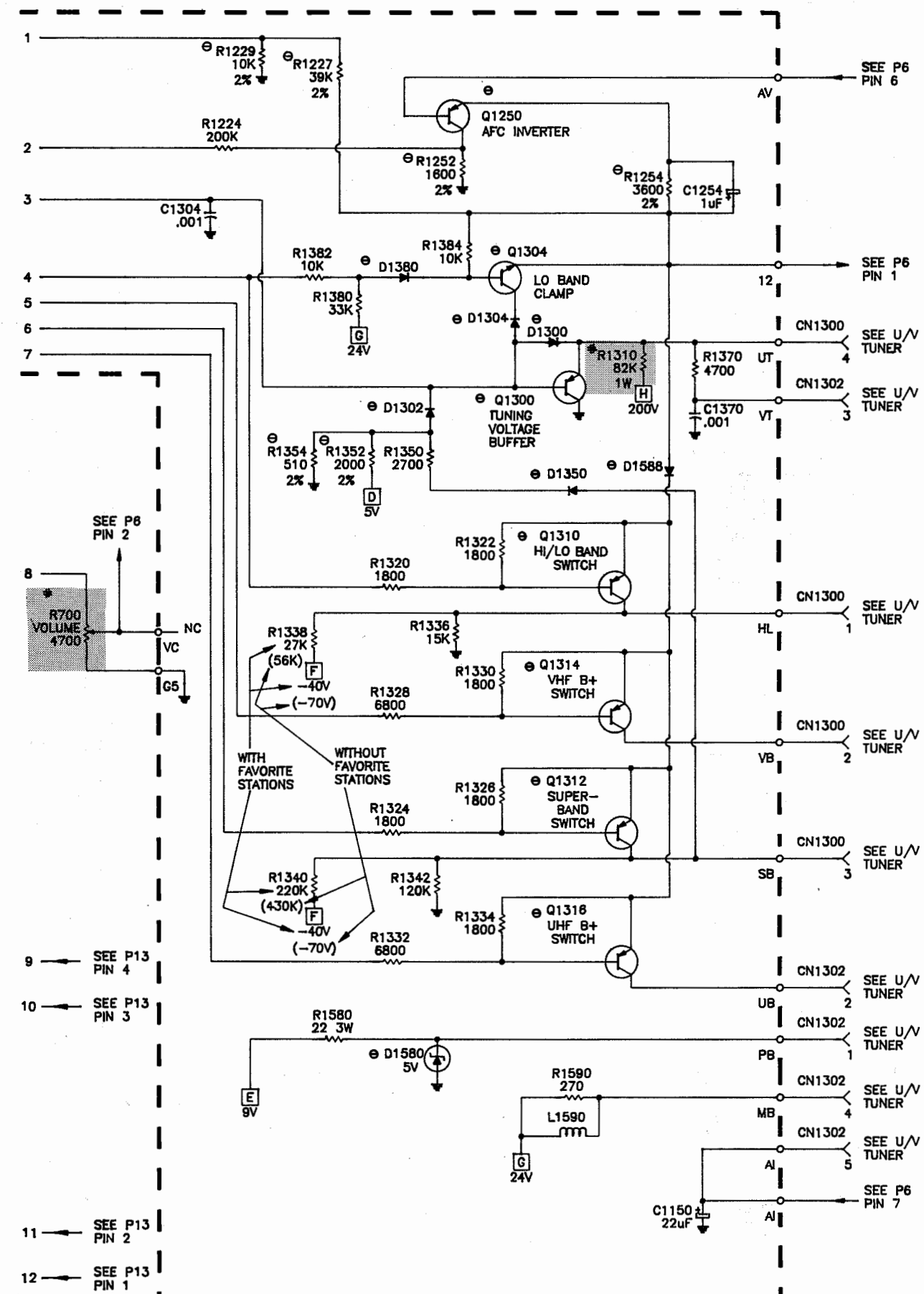
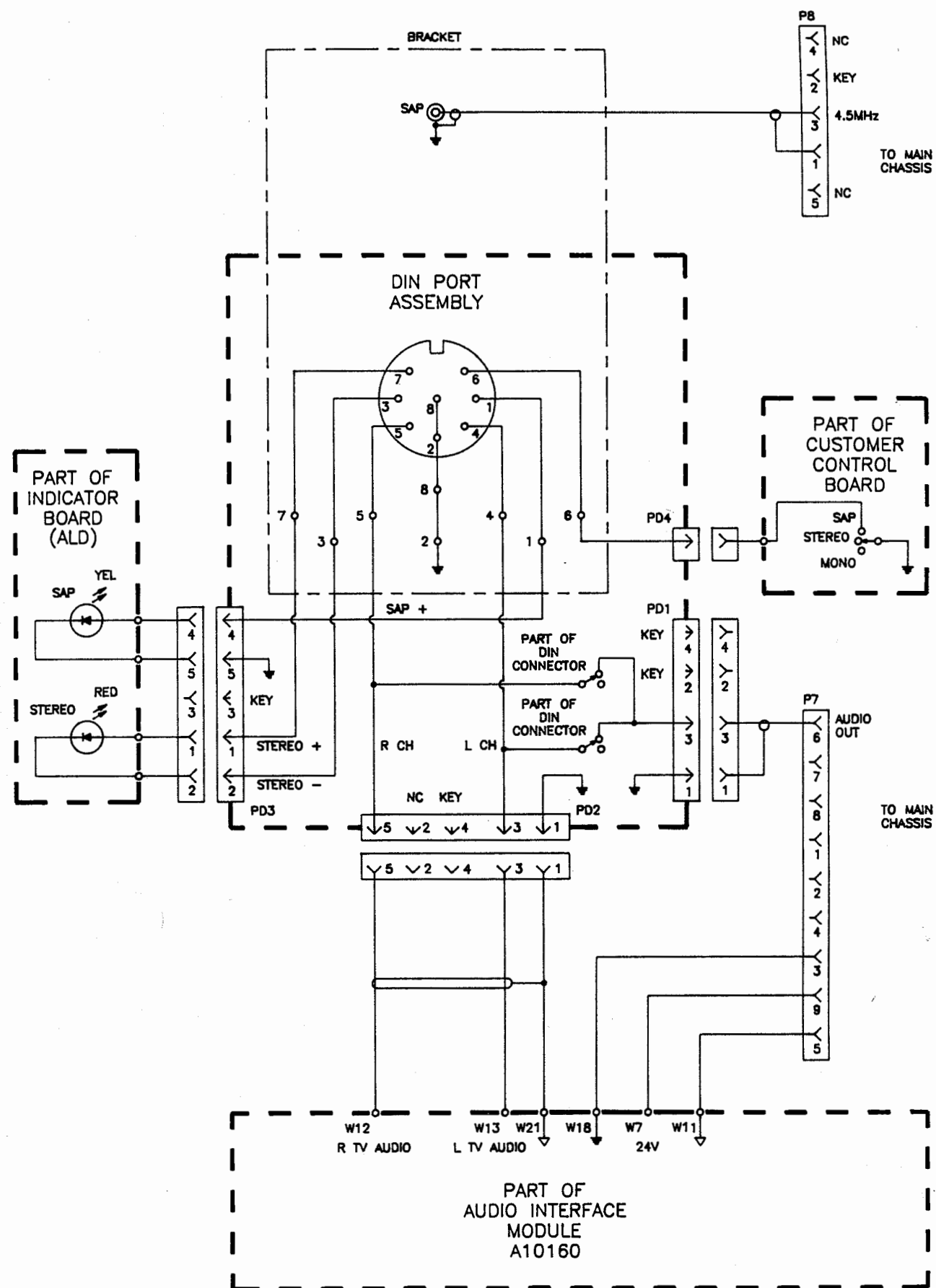
SYLVANIA CHASSIS
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FOLDER 2-A

MCU TUNING (A10095, A10097, A10163)

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MCU TUNING (A10095, A10097, A10163)



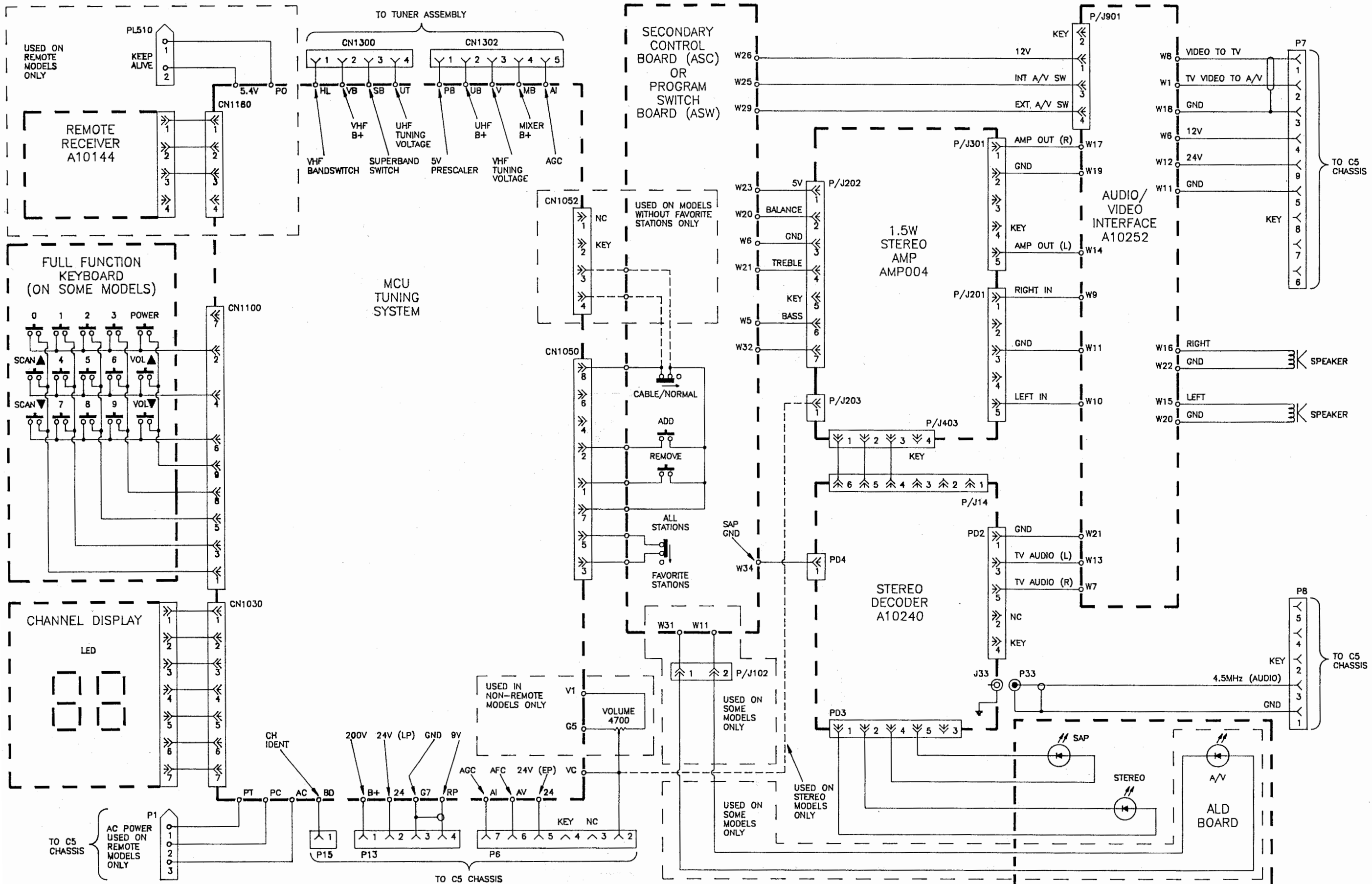
SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

DINPORT (A10198)

MCU TUNING (A10095, A10097, A10163)

SET 2656 FOLDER 2-A

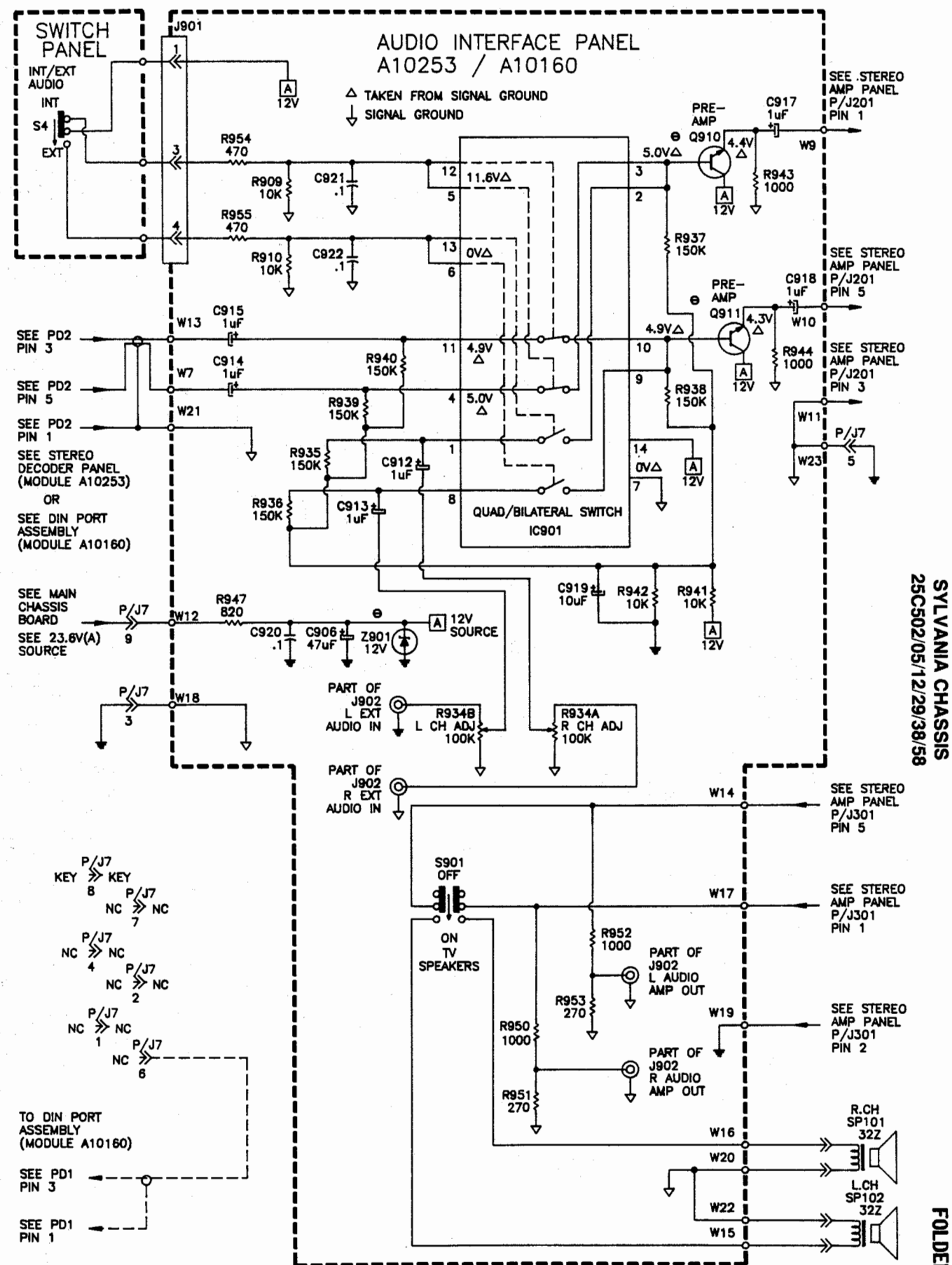
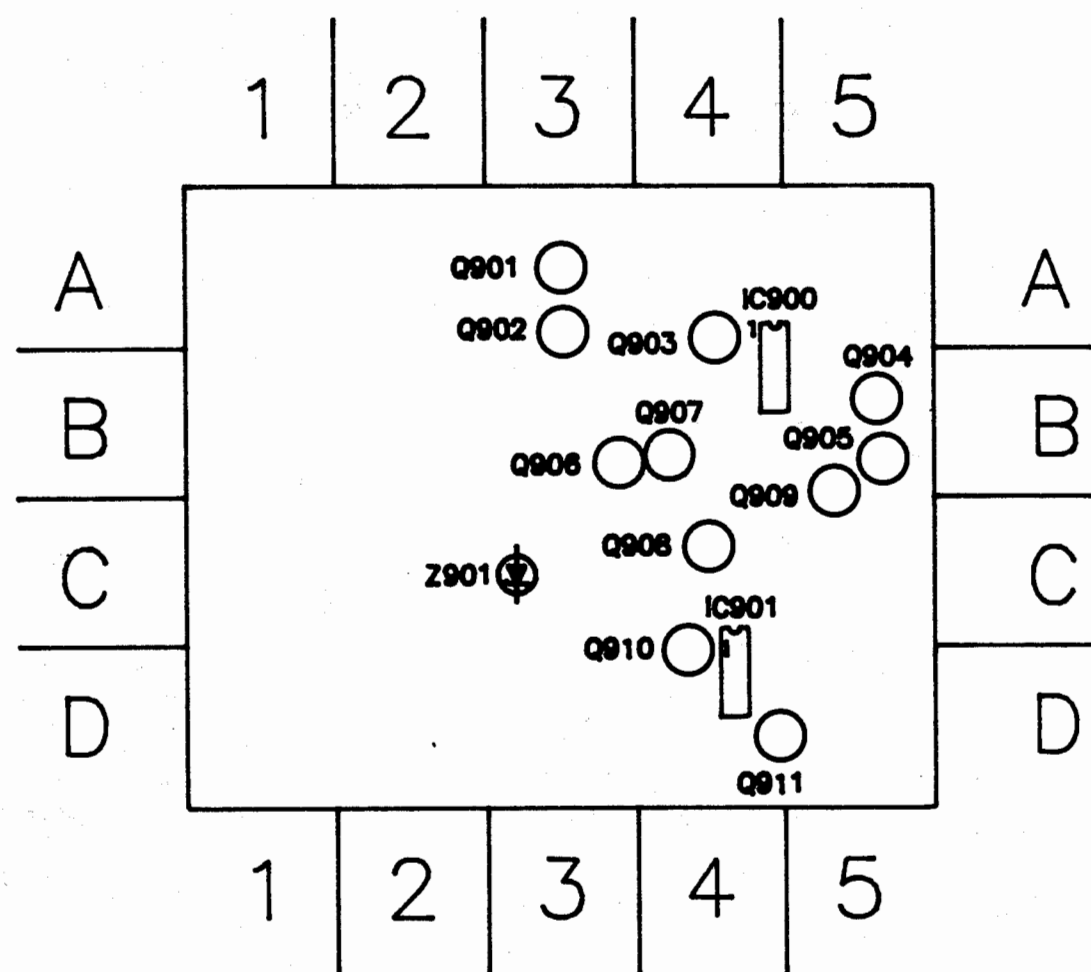


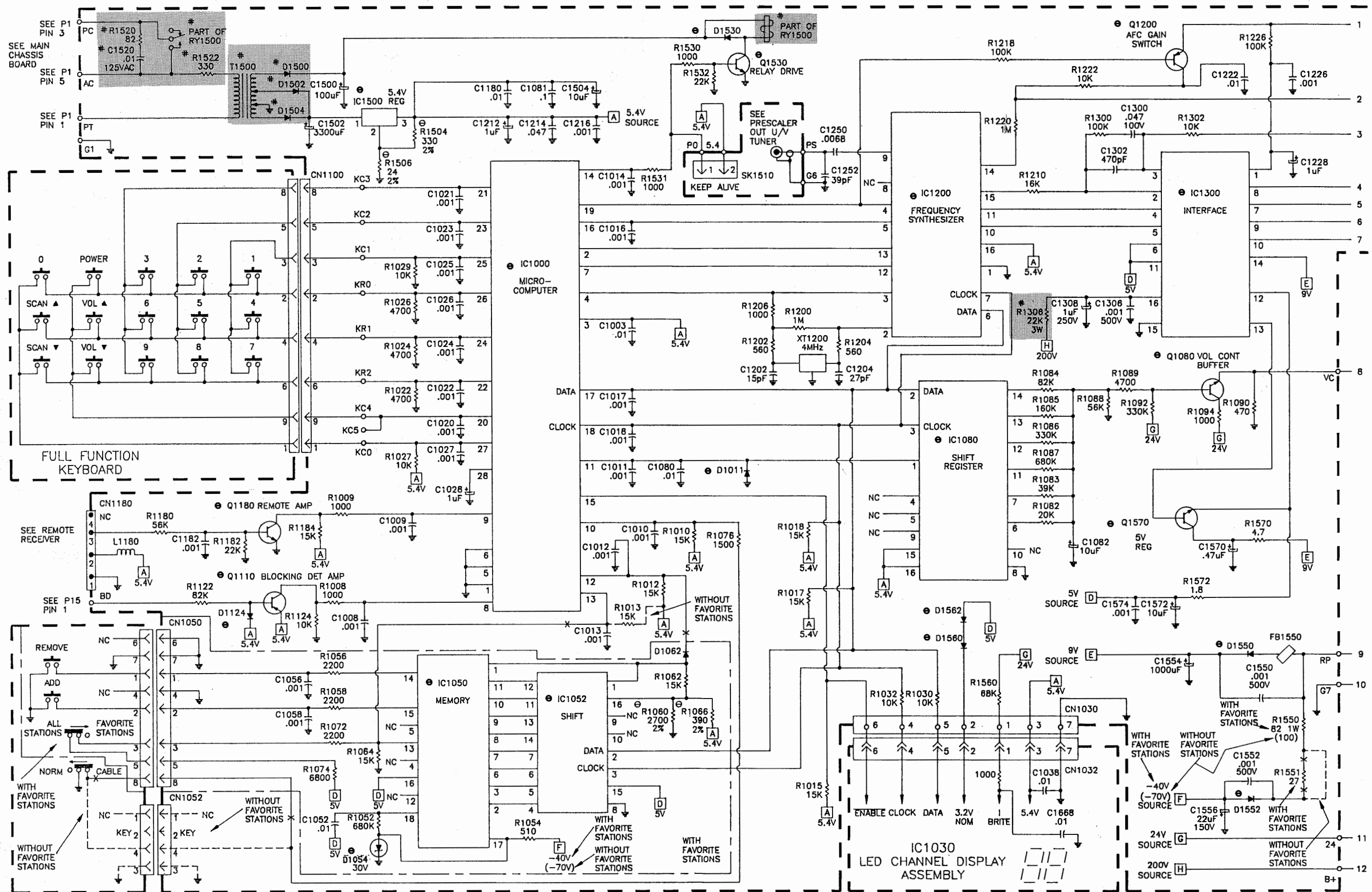
SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

AUDIO INTERFACE PANEL-GridTrace LOCATION GUIDE

C901	A-4	J901	C-5	R909	A-5	R935	C-4
C902	A-4	J902	B-1	R910	B-5	R936	D-4
C903	A-2	L901	A-4	R911	A-5	R937	C-4
C904	A-5	L902	A-3	R912	B-4	R938	D-5
C905	B-5	L903	B-3	R913	B-5	R939	C-4
C906	C-3	L904	B-3	R914	B-5	R940	D-5
C907	B-3	Q901	A-3	R915	B-5	R941	D-5
C908	B-3	Q902	A-3	R916	B-5	R942	D-4
C909	B-4	Q903	B-4	R917	A-3	R943	C-3
C910	C-4	Q904	B-5	R918	B-3	R944	C-3
C911	C-5	Q905	B-5	R919	A-2	R945	C-3
C912	C-4	Q906	B-3	R920	B-3	R946	C-3
C913	D-3	Q907	B-4	R921	B-3	R947	A-3
C914	C-3	Q908	C-4	R922	B-3	R948	A-4
C915	D-3	Q909	B-5	R923	B-3	R949	C-2
C916	B-3	Q910	C-4	R924	B-4	R950	C-2
C917	D-3	Q911	D-5	R925	B-4	R951	C-2
C918	B-3	R901	A-5	R926	B-4	R952	C-5
C919	D-5	R902	A-4	R927	C-4	R953	C-5
C920	C-3	R903	A-4	R928	C-4	R954	A-1
C921	D-5	R904	A-5	R929	C-5	R955	C-3
C922	D-4	R905	A-3	R930	B-4	S901	B-2
D901	A-5	R906	A-3	R931	C-5	VR934	C-3
IC900	B-4	R907	A-3	R932	C-4	Z901	
IC901	D-4	R908	A-1	R933			





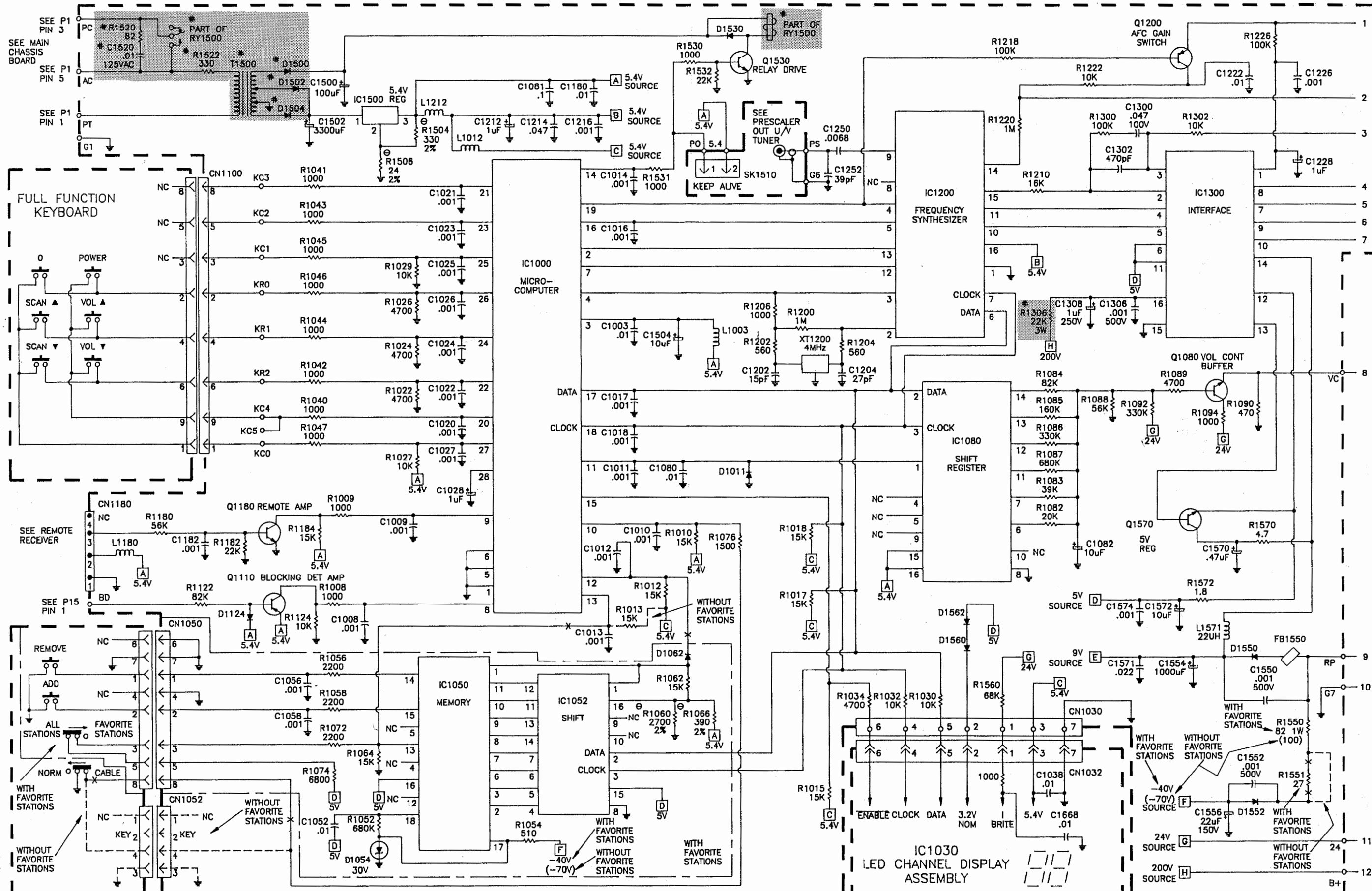
SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

MCU TUNING (A10164)

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MCU TUNING (A10164)



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25C502/05/12/29/38/58

FOLDER 2-A

MCU TUNING (A10234)

MCU TUNING (A10234)

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SET 2656 FOLDER 2-A

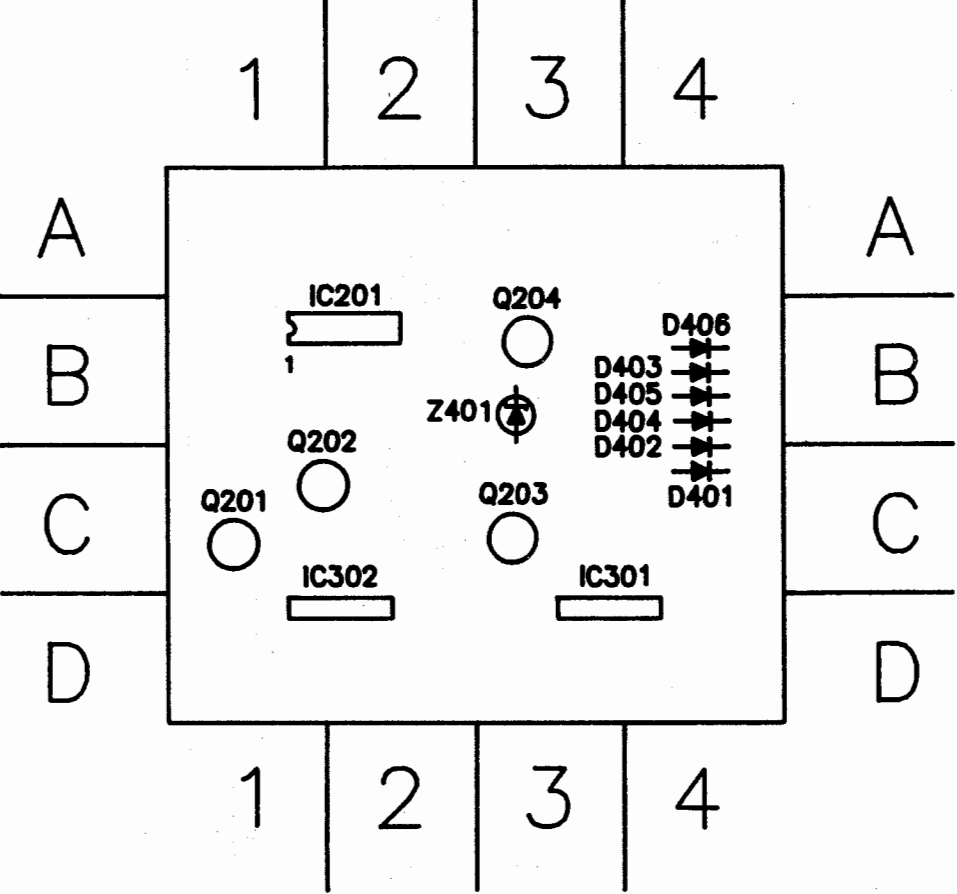
MCU TUNING-GridTrace LOCATION GUIDE

C1003	E-3	D1054(1)	F-6	R1031	F-2	R1324	C-3
C1004	E-1	D1062	E-4	R1032	G-2	R1326	C-5
C1005	E-1	D1082(3)	D-5	R1034(3)	F-1	R1328	C-3
C1008	E-2	D1102	F-4	R1040(3)	G-2	R1330	C-5
C1009	E-2	D1104	F-5	R1041(3)	G-2	R1332	C-3
C1010	E-2	D1124	G-3	R1042(3)	G-2	R1334	B-5
C1011	E-2	D1244	B-1	R1043(3)	G-2	R1336	E-6
C1013	E-2	D1300	D-1	R1044(3)	G-2	R1338	E-6
C1013	E-2	D1302	D-2	R1045(3)	G-2	R1340	E-6
C1014	E-2	D1304	D-2	R1046(3)	G-2	R1342	A-6
C1016	F-2	D1350	A-6	R1047	G-3	R1350	A-5
C1017	F-2	D1358	D-5	R1052	F-6	R1352	C-1
C1018	G-2	D1380	C-4	R1054	F-6	R1354	D-1
C1020	G-1	D1500	B-1	R1056	G-5	R1356	A-5
C1021	G-2	D1502	A-2	R1058	G-5	R1358	D-6
C1022	F-2	D1504	A-3	R1060	E-4	R1370	B-4
C1023	G-2	D1530	B-1	R1062	E-4	R1380	C-4
C1024	F-2	D1552	F-6	R1064	G-5	R1382	C-4
C1025	F-2	D1560	E-1	R1066	E-4	R1384	B-5
C1026	G-3	D1562	E-1	R1072	G-5	R1504	A-4
C1027	G-3	D1564	E-1	R1074	F-5	R1506	A-4
C1028	F-3	D1586	A-6	R1076	F-6	R1520	A-1
C1052	G-6	D1588(2)	C-5	R1080	D-4	R1522	B-2
C1056	G-6	F1550	D-6	R1082	D-5	R1530	B-1
C1058	G-6	IC1000	F-2	R1083	D-5	R1351	C-1
C1080	E-4	IC1050	F-5	R1084	D-4	R1532	B-1
C1081	C-4	IC1052	E-5	R1085	D-4	R1550	E-6
C1082	E-5	IC1080	D-4	R1086	D-4	R1551	F-6
C1104	G-4	IC1090	E-5	R1087	D-4	R1560	E-1
C1120	F-3	IC1200	E-3	R1088	E-5	R1570	C-3
C1150	D-1	IC1300	D-3	R1089	D-5	R1572	C-3
C1180(1)	F-4	IC1500	A-4	R1092	D-5	R1580	D-6
C1182(1)	F-4	IC1580	D-6	R1094	D-4	R1586	B-6
C1202	E-2	L1003(4)	E-3	R1102	G-5	R1590	C-5
C1204	D-2	L1012(4)	D-1	R1104	G-5	RY1500	B-1
C1212	D-2	L1180	F-4	R1106	G-4	XT1200	E-2
C1214	D-2	L1212(4)	D-3	R1108	G-4		
C1216	D-2	L1590	C-5	R1116	G-4		
C1222	A-5	Q1080	D-5	R1118	G-3		
C1226	B-4	Q1102	F-4	R1120	G-3		
C1228	B-3	Q1106	G-4	R1124	F-3		
C1240	C-1	Q1108	F-3	R1150	D-1		
C1250	D-4	Q1110	G-4	R1152	D-1		
C1252	D-4	Q1150	D-1	R1154	E-1		
C1254	B-6	Q1180	F-4	R1180	F-4		
C1302	D-2	Q1200	C-5	R1182	F-4		
C1303	D-2	Q1250	B-6	R1184	F-4		
C1304	C-2	Q1300	D-1	R1200	E-2		
C1306	C-2	Q1304	B-5	R1202	E-2		
C1308	B-5	Q1308	A-5	R1204	E-2		
C1370(2)	A-5	Q1310	D-5	R1206	E-2		
C1500	A-3	Q1312	B-5	R1210	D-2		
C1502	A-3	Q1314	C-5	R1218	C-4		
C1503	A-4	Q1316	B-5	R1220	B-5		
C1504	E-3	Q1530	C-1	R1222	B-5		
C1520	A-1	Q1570	C-3	R1224	B-6		
C1550	D-6	R1008	F-3	R1226	C-6		
C1552	F-6	R1009	F-4	R1227	C-6		
C1554	F-6	R1010	E-3	R1228	C-2		
C1556	F-6	R1012	F-1	R1229	C-6		
C1570	C-2	R1013	E-1	R1231	C-6		
C1571	C-4	R1014	E-1	R1234	B-3		
C1572	C-4	R1015	F-1	R1242	C-2		
C1574	C-4	R1017	G-2	R1244	B-1		
C1580	C-6	R1018	G-2	R1252	B-6		
C1582	C-6	R1022	F-2	R1254	C-6		
QN1030	F-1	R1024	G-2	R1300	D-2		
QN1050	G-6	R1035	F-3	R1302	D-2		
QN1052	F-6	R1026	G-3	R1306	B-4		
QN1090	E-5	R1027	G-3	R1308	A-5		
QN1100	G-2	R1028	G-3	R1310	A-4		
QN1180	F-4	R1029	G-3	R1320	C-4		
D1011	E-1	R1030	F-2	R1322	C-4		

(1) Used In Models
A10164, A10234.
(2) Used In Models
A10063, A10095, A10097,
A10235, A10237.
(3) Used In Models
A10235, A10237.
(4) Used In Models
A10234, A10235, A10237.

1.5 WATT STEREO AMP (AMP004) -GridTrace LOCATION GUIDE

C201	B-2	C305	C-3	D403	B-4	R206	A-2
C202	B-1	C306	C-2	D404	B-4	R207	C-2
C203	B-1	C307	D-3	D405	B-4	R209	B-1
C204	A-2	C308	D-2	D406	B-4	R210	B-2
C205	A-2	C309	D-3	IC201	B-2	R211	C-1
C206	B-1	C310	D-2	IC301	D-3	R212	C-2
C207	B-2	C401	C-3	IC302	D-2	R213	C-2
C208	A-1	C402	C-3	J201	A-3	R214	C-1
C209	B-1	C403	B-3	J202	A-2	R215	C-2
C210	B-2	C404	B-3	J203	A-1	R217	B-2
C211	C-2	C405	B-3	J301	D-2	R218	C-2
C212	A-1	C406	B-3	J401	B-4	R219	C-2
C213	B-2	C407	A-3	J402	C-4	R220	C-1
C214	B-2	C408	A-4	J403	A-4	R221	A-3
C215	C-1	C409	C-4	Q201	C-1	R222	A-3
C216	C-2	C410	C-3	Q203	C-3	R223	A-3
C217	C-1	C411	D-4	Q204	B-3	R301	D-3
C218	A-2	C412	D-1	R201	B-2	R302	D-2
C224	A-3	C413	D-4	R202	B-2	R401	B-3
C301	C-3	C414	D-1	R203	B-1	R402	A-3
C302	C-2	D401	C-4	R204	B-1	R403	C-4
C303	C-3	D402	C-4	R205	B-1	Z401	B-3
C304	C-1						



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1.5 WATT STEREO AMP (AMP004-A001 & -B002)

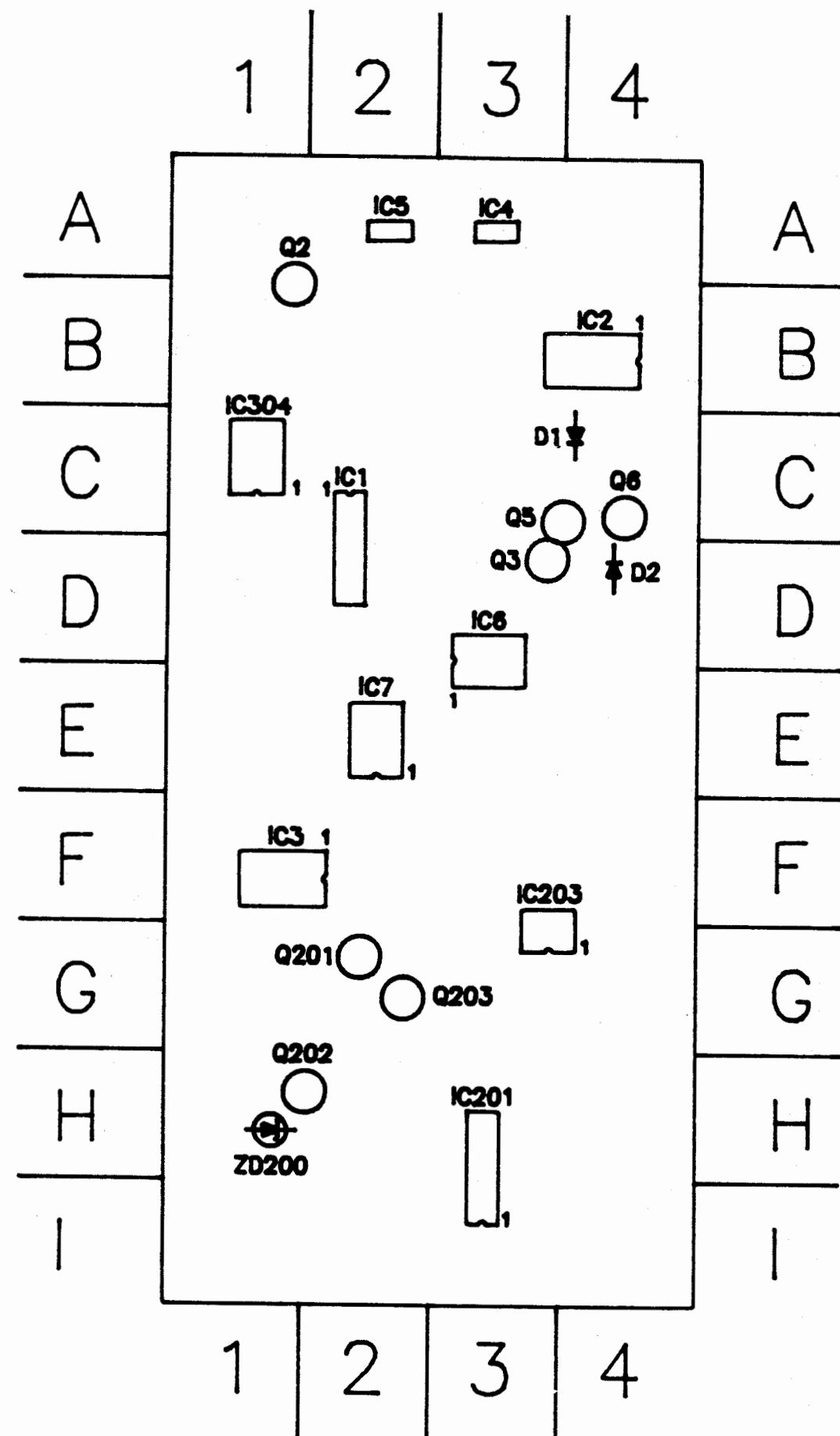
SET 2656 FOLDER 2-A

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

TS-9 TUNING SYSTEM (A10201)-GridTrace LOCATION GUIDE

C1008	F-4	C1508	A-1	OB1037	B-1	R1326	E-1
C1009	F-4	C1510	A-1	Q1027	D-5	R1340	E-3
C1010	F-4	C1518	B-3	Q1060	F-3	R1346	F-4
C1011	E-4	C1520	C-3	Q1070	F-4	R1348	F-3
C1012	E-4	C1530	B-4	Q1150	C-3	R1350	F-3
C1013	E-4	C1540	G-4	Q1250	B-3	R1352	F-3
C1015	D-4	C1544	G-3	Q1253	B-2	R1354	F-3
C1016	D-4	C1546	G-3	Q1320	E-2	R1356	F-3
C1025	C-5	C1548	F-5	Q1322	E-2	R1520	D-3
C1026	C-5	C1550	F-5	Q1340	F-3	R1522	C-3
C1027	C-5	C1552	F-5	Q1342	F-3	R1524	B-3
C1028	D-3	C1554	G-5	Q1344	F-3	R1530	B-5
C1030	D-3	C1558	G-3	Q1520	C-3	R1542	F-4
C1034	D-5	C1562	F-4	Q1522	C-3	R1554	G-5
C1036	C-5	C1564	F-5	R1001	F-3	R1556	G-5
C1039	E-5	C1580	F-2	R1002	F-3	R1558	G-5
C1040	E-5	C1582	G-2	R1003	F-3	R1560	G-4
C1041	E-5	C1588	F-2	R1008	F-4	R1562	F-4
C1042	F-5	C1590	F-2	R1009	F-4	T1500	A-3
C1064	F-3	C1592	E-2	R1010	F-4	RA1100	C-5
C1065	E-4	CN1000	C-5	R1011	F-4	RY1500	A-4
C1074	F-4	CN1020	F-5	R1013	F-4	XT1000	D-4
C1110	B-5	CN1030	D-5	R1014	F-4	XT1200	E-2
C1111	C-5	CN1040	E-5	R1025	D-5	Z1150	B-3
C1112	C-5	CN1050	G-3	R1026	D-5	Z1562	F-4
C1113	C-5	CN1090	E-5	R1027	D-5	Z1544	F-4
C1114	C-5	CN1200	F-1	R1060	F-3		
C1115	C-5	CN1250	B-1	R1062	F-3		
C1116	C-5	CN1300	F-3	R1070	F-4		
C1118	B-5	CN1500	A-5	R1072	F-4		
C1120	B-3	CN1550	G-4	R1090	F-4		
C1121	C-3	CN1560	F-5	R1110	C-4		
C1122	C-3	CN1600	F-1	R1111	C-4		
C1123	C-3	CN1650	G-2	R1112	C-4		
C1124	C-3	CN1660	D-1	R1113	C-4		
C1125	C-3	CN1700	D-3	R1114	C-4		
C1126	C-3	CN1800	B-5	R1115	C-4		
C1128	B-4	D1154	C-3	R1118	B-4		
C1132	E-5	D1156	C-3	R1150	B-3		
C1156	C-3	D1212	A-1	R1152	C-3		
C1206	F-2	D1214	B-1	R1154	C-3		
C1210	C-2	D1500	A-2	R1207	C-2		
C1211	A-1	D1502	A-2	R1210	B-1		
C1212	C-1	D1504	B-2	R1211	B-1		
C1213	D-1	D1524	B-4	R1212	A-1		
C1214	E-2	D1540	G-4	R1213	C-1		
C1215	E-1	D1546	F-4	R1214	G-1		
C1218	F-2	D1550	G-4	R1216	E-2		
C1219	F-2	D1552	G-5	R1217	E-2		
C1220	D-2	F1500	A-5	R1218	F-2		
C1221	D-1	IC100	D-4	R1219	F-2		
C1222	D-2	IC1100	D-4	R1222	E-2		
C1226	C-2	IC1200	D-2	R1223	E-2		
C1230	E-1	IC1300	F-3	R1224	E-2		
C1232	G-1	IC1500	B-2	R1226	C-2		
C1236	G-2	IC1550	G-5	R1230	C-2		
C1250	B-1	L1030	C-3	R1232	B-2		
C1270	C-1	L1038	E-5	R1234	C-1		
C1310	G-1	L1060	F-3	R1250	B-1		
C1324	E-1	L1070	F-4	R1254	B-2		
C1326	E-1	L1096	E-5	R1256	C-2		
C1342	F-3	L1110	C-4	R1258	C-2		
C1344	F-3	L1111	C-4	R1260	C-2		
C1346	G-3	L1112	C-4	R1262	B-2		
C1348	G-3	L1113	C-4	R1270	C-1		
C1350	G-3	L1114	C-4	R1272	C-2		
C1352	G-3	L1115	C-4	R1274	B-2		
C1354	G-2	L1118	B-4	R1276	C-1		
C1356	G-3	L1236	G-2	R1306	E-3		
C1500	A-2	L1546	G-4	R1307	E-3		
C1502	A-2	OB1034	C-5	R1320	E-2		
C1504	A-2	OB1035	B-4	R1322	E-2		
C1506	A-2	OB1036	C-5	R1324	E-1		



SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

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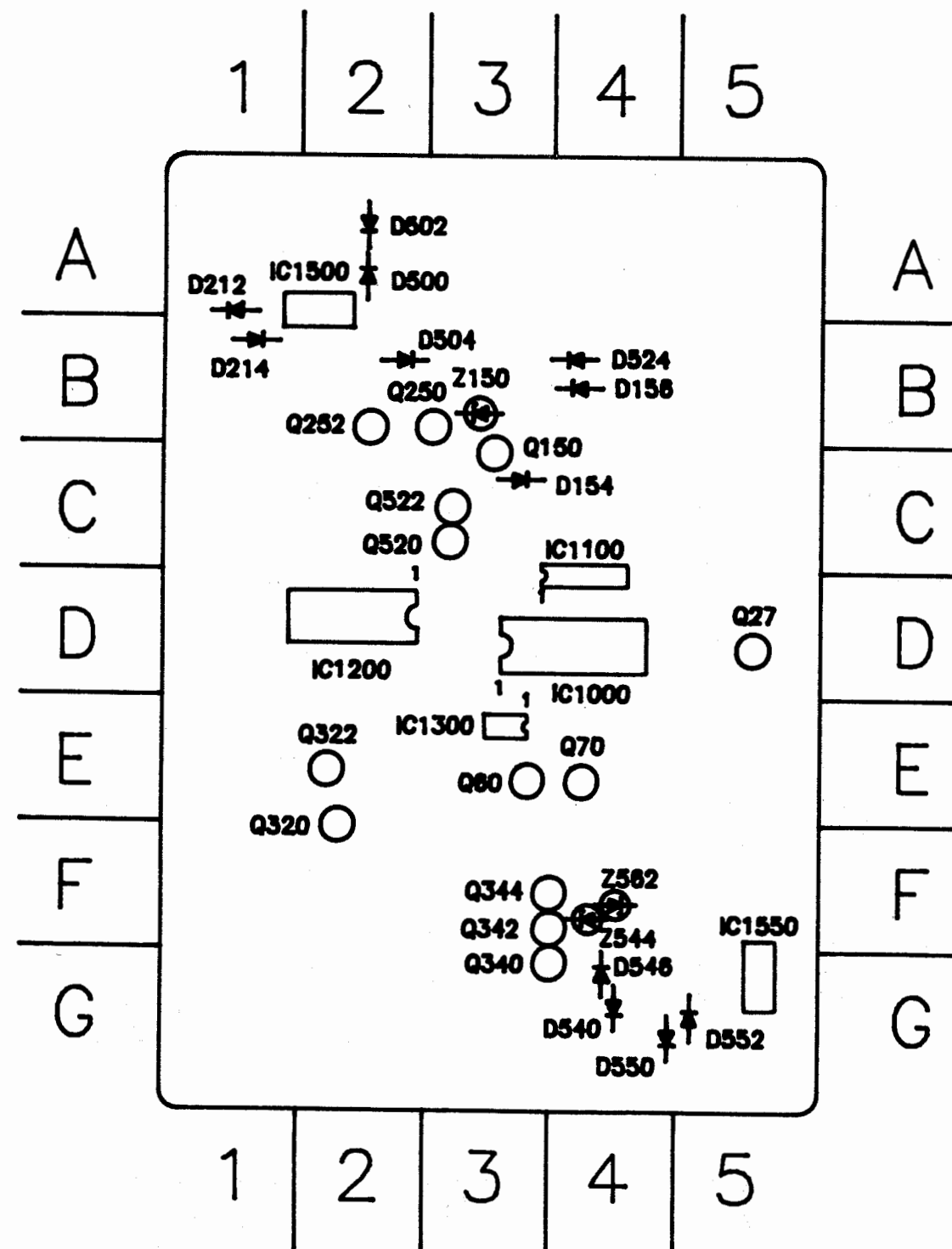
STEREO DECODER BOARD (A10240)

SET 2656 FOLDER 2-A

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STEREO DECODER BOARD (A10240)-GridTrace LOCATION GUIDE

C1	B-1	C301	C-1	R58	F-1	VR225	TT1
C3	B-2	C302	C-1	R59	G-2	VR250	TT1
C4	D-2	C303	C-2	R60	F-1	ZD200	
C6	D-2	C304	C-1	R61	G-1		
C7	C-2	C305	C-1	R62	G-2		
C8	C-2	C306	C-1	R63	D-3		
C9	D-2	C307	C-2	R64	D-3		
C10	D-2	D1	C-4	R65	F-3		
C11	C-3	D2	D-4	R66	D-3		
C12	D-3	F302	D-1	R69	F-3		
C13	D-2	FL1	B-2	R70	F-3		
C14	C-2	IC1	C-2	R71	D-4		
C15	C-2	IC2	B-4	R72	D-4		
C16	B-1	IC3	F-2	R73	E-3		
C20	B-3	IC4	A-3	R74	D-4		
C21	C-4	IC5	A-2	R78	D-3		
C22	B-4	IC6	D-3	R79	F-2		
C23	C-4	IC7	E-2	R80	E-1		
C25	A-4	IC201	H-3	R81	E-2		
C26	B-4	IC203	G-3	R82	F-2		
C27	B-4	IC304	C-1	R83	F-1		
C28	B-4	J33	D-1	R84	F-1		
C29	B-4	JD2	G-1	R85	E-2		
C30	A-3	JD3	E-1	R86	F-1		
C31	B-3	JD4	G-1	R87	D-2		
C32	B-3	JD14	A-1	R88	D-4		
C33	B-3	L1	B-2	R201	G-2		
C34	B-3	L2	B-3	R202	G-2		
C35	C-3	L301	B-1	R203	H-2		
C36	C-3	LP2	C-2	R204	F-1		
C37	C-4	LPF1	C-3	R205	G-3		
C38	E-4	LPF3	E-4	R206	H-2		
C39	A-2	Q2	A-1	R207	I-2		
C40	A-4	Q3	D-3	R208	I-2		
C41	D-4	Q4	C-4	R209	I-2		
C42	B-3	Q5	C-3	R210	G-2		
C43	A-1	Q201	G-2	R211	G-2		
C44	G-2	Q202	H-2	R212	G-2		
C45	G-2	Q203	G-2	R213	G-3		
C46	F-4	R5	A-3	R214	I-2		
C47	F-4	R6	A-1	R216	G-3		
C48	F-4	R7	B-2	R217	H-2		
C49	C-3	R10	B-2	R218	H-4		
C50	C-3	R11	D-1	R219	H-3		
C51	F-1	R12	E-2	R220	H-2		
C202	G-2	R14	D-2	R221	I-4		
C203	H-2	R15	D-3	R222	H-3		
C204	G-3	R16	D-2	R223	H-4		
C205	H-2	R17	C-2	R224	H-4		
C206	F-2	R18	C-2	R225	H-3		
C207	F-2	R19	C-3	R228	G-4		
C208	I-2	R21	C-2	R230	G-4		
C209	H-1	R28	D-2	R232	F-3		
C210	G-3	R32	C-4	R236	I-1		
C211	I-2	R33	B-3	R240	H-3		
C212	H-2	R34	B-3	R244	F-2		
C213	H-2	R35	D-2	R246	G-2		
C214	G-3	R36	A-4	R302	B-1		
C215	G-3	R37	B-3	R304	C-1		
C317	I-4	R39	C-4	R305	D-1		
C218	H-4	R40	C-4	TP1	C-2		
C219	H-4	R41	C-4	TP2	F-3		
C220	I-3	R42	C-3	TP3	D-2		
C221	H-3	R43	C-3	TP4	G-1		
C222	G-4	R44	F-4	TP5	A-2		
C223	G-3	R45	D-4	TP6	G-2		
C224	G-4	R46	D-4	TP7	A-1		
C225	H-3	R47	D-2	TP8	H-2		
C226	F-4	R51	G-1	TP9	H-3		
C227	F-3	R52	E-2	TP10	F-3		
C228	F-3	R53	E-2	VR1	B-1		
C229	I-2	R56	C-3	VR75	F-3		
C232	I-1	R57	D-1	VR76	F-4		



SYLVANIA CHASSIS
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FOLDER 2-A

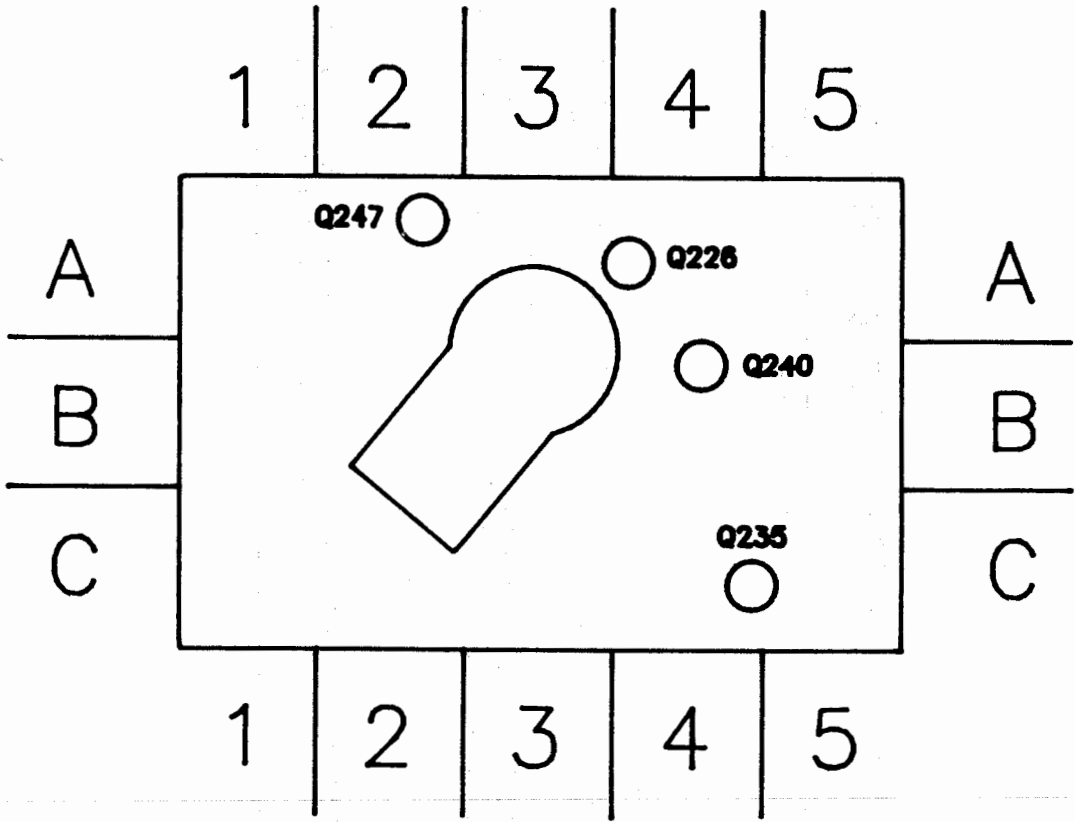
When ordering parts, state Model, Part Number, and Description

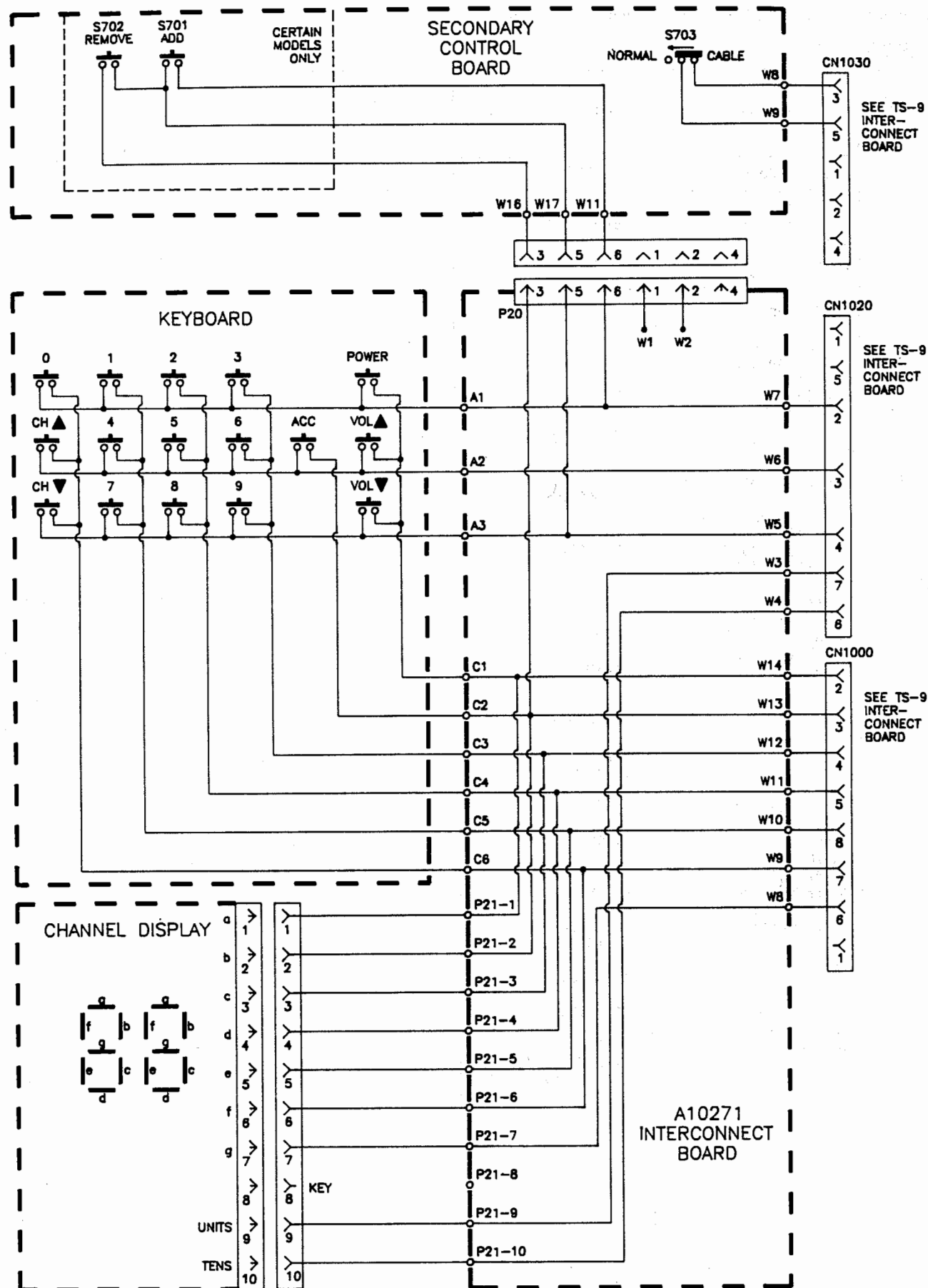
SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
A10160 AUDIO INTERFACE						
IC901	6121860001	NTE4016B	ECG4016B	SK4016B	HE-442-99	
Q910,11	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A *	
Z901	5301921120	NTE142A	ECG142A	SK12V/142A	103-Z9003	
A10240 STEREO DECODER						
D1,2	5301811001	NTE177	ECG177	SK9091/177	103-131	
IC1	6124690001					
IC2	6124680001	NTE228A	ECG228A	SK9462/228A	121-Z9049 *	
IC3	6124930001	NTE4053B	ECG4053B	SK4053B	905-354	
IC4	6124790005	NTE968	ECG968	SK3593/968	HE-442-63	
IC5	6124790003	NTE964	ECG964	SK3630/964	HE-442-691	
IC6,7	6124800001	NTE859	ECG859		221-303	
IC201	6124890001	NTE1744	ECG1744			
IC203	6123590001	NTE857M	ECG857M			
IC304	6123700001	NTE1580	ECG1580	SK7743/1580		
Q2,3,5	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A *	
Q6	6100830001	NTE159	ECG159	SK3466/159	121-Z9003 *	
Q201,2,3	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A *	
ZD200	5301571689	NTE5014A	ECG5014A	SK6A8/5014A	103-Z9009	
AMP004 STEREO AMP						
D401 THRU D406	5301711001	NTE552	ECG552	SK9000/552	103-287	#
IC201	6124120002					
IC301,2	6123270001	NTE1566	ECG1566	SK7726/1566		
Q201,2,3	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A *	
Q204	6102340001					
Z401	5301571120	NTE5021A	ECG5021A	SK12A/5021A	103-279-21	

CRT BOARD (A10090)-GridTrace LOCATION GUIDE

C226	A-3	Q240	B-4	R234	C-4	R248	A-5
C231	B-4	Q247	A-2	R235	C-5	R249	A-4
C243	B-4	R223	C-4	R236	C-4	R250	A-4
C250	A-4	R224	C-4	R240	A-4	R251	A-4
C255	A-1	R228	A-5	R241	B-5	R255	B-1
C261	C-5	R229	B-5	R242	B-5	R260	B-4
L260	C-3	R230	A-5	R243	B-4	R261	A-3
L261	C-5	R231	B-4	R244	B-4	R262	B-4
Q226	A-4	R232	A-4	R245	A-5	R264	B-2
Q235	C-5	R233	B-5	R247	A-1		





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PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
TS-9 TUNER CONTROL						
D1154	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1156	5302471001	NTE112	ECG112	SK3089/112	103-61	
D1212, 4	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1500, 2	5301711002	NTE116	ECG116	SK3311	212-76-02	
D1504	5301711002	NTE116	ECG116	SK3311	212-76-02	
D1524	5301711002	NTE116	ECG116	SK3311	212-76-02	
D1540	5301511003	NTE552	ECG552	SK9000/552	103-287	
D1546	5301511003	NTE552	ECG552	SK9000/552	103-287	
IC1000	6124980001					
IC1100	6124920001					
IC1200	6124240001					
IC1300	6124850001					
IC1500	6124790001					
Q1050	6102230001	NTE960	ECG960	SK3591/960	221-29043	
Q1070	6102230001	NTE159	ECG159	SK3466/159	121-29003	
Q1150	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-29000A	
Q1250	6100830001	NTE159	ECG159	SK3466/159	121-29003	
Q1252	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-29000A	
Q1320, 2	6102230001	NTE159	ECG159	SK3466/159	121-29003	
Q1340, 2, 4						USED SOME VERSIONS
Q1520	6102320002	NTE123AP	ECG123AP	SK3854/123AP	121-29000A	
Q1522	6102240001	NTE123AP	ECG123AP	SK3854/123AP	121-29000A	
Z1150	5301571569	NTE5011A	ECG5011A	SK5A6/5011A	103-29007	
Z1544	5301571150	NTE5024A	ECG5024A	SK15A/5024A	103-29013	
Z1562	5301921330	NTE147A	ECG147A	SK33V/147A	103-29004	

SYLVANIA CHASSIS
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FOLDER 2-A

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NTE PART No.	ECG PART No.	TCE PART No.	ZENITH PART No.	NOTES
REMOTE TUNING SYSTEM						
D1011	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1035	5302521002	NTE177	ECG177	SK9091/177	103-131	
D1054	5301921300	NTE5084A	ECG5084A	SK30V/5084A	103-Z9024	
D1062	5302471001	NTE112	ECG112	SK3089/112	103-61	
D1082 THRU D1087						
D1124	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1300, 2, 4	5302511001	NTE177	ECG177	SK9091/177	103-131	
D1300, 2, 4	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1350	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1380	5301811001	NTE177	ECG177	SK9091/177	103-131	
D1500, 2, 4	5302671002	NTE552	ECG552	SK9000/552	103-287	
D1530	5301711002	NTE116	ECG116	SK3311	212-76-02	
D1550, 2	5302671002	NTE552	ECG552	SK9000/552	103-287	
D1560, 2	5301711002	NTE116	ECG116	SK3311	212-76-02	
D1580	5302781008	NTE5010A	ECG5010A	SK5A1/5010A	103-279-10	
D1588	5302521002	NTE177	ECG177	SK9091/177	103-131	
D1662	5302671002	NTE552	ECG552	SK9000/552	103-287	
IC1000	6124420001					
IC1050	6123180001					
IC1052	6123350001	NTE4094B	ECG4094B	SK4094B		
IC1080	6123350001	NTE4094B	ECG4094B	SK4094B		
IC1200	6123370005					
IC1300	6123360001					
IC1500	6124480001	NTE960	ECG960	SK3591/960	221-Z9043	
IC1580	6124480001	NTE960	ECG960	SK3591/960	221-Z9043	
Q1080	6104500001	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	
Q1110	6104600001	NTE159	ECG159	SK3466/159	121-Z9003	
Q1180	6104500001	NTE123AP	ECG123AP	SK3854/123AP	121-Z9000A	
Q1200	6104750001	NTE159	ECG159	SK3466/159	121-Z9003	

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

PARTS LIST

ITEM No.	DESCRIPTION	MFGR. PART No.	NOTES
P15	Housing Connector f/Channel Identification	1812100001	
	Terminal Crimp f/P15 (1 used)	1810110001	
	Phono Plug from Point PS to Prescaler Output	1814050006	
P203	4 Pin Connector w/ contracts (present on models Incorporating the 1.5W Stereo Amp Panel)	1817140004	
	Negative Polarizing Key f/P203	1813510001	
	7 Pin Board Wafer	1814920007	
	7 Pin CN1030 to Display Connector	1815120007	
CN1052	4 Pin PC Board Wafer	1814920024	
	5 Pin CN1302 Molex MCU to P22 (U/V Varactor Tuner)	1813802005	
	4 Pin CN1300 Molex MCU + P21 (U/V Varactor)	1813802004	
PL510	2 Pin Housing from Points P0 & 5.4 (Keep Alive)	1814200001	
	Female Contacts f/PL510 (2 used)	1809300002	
	Phono Plug from Point PS to prescaler Output	1814050006	
	IC Socket (16 Pin) (3 used)	1815220016	
	IC Socket (18 Pin)	1815220018	
	IC Socket (28 Pin)	1815220028	
	Ferrite Bead	3640050003	
	Heatsink-Clip On f/IC1500 (E.P.)	1037110001	
	Heatsinks f/IC1500 & IC1502 (2 used L.P. Only)	7316650002	
	Resistor Mounting Pins (4 used)	1808820003	
XT1200	4MHz Crystal	5604420003	
	Shield Wrap f/IC1000 (L.P.)	7344090002	
	Shield Wrap f/IC1000 (E.P.)	7344090001	
	Shield Covers (2 used E.P.)	7344430001	
	Shield Bottom (L.P.)	7347760001	
# RY1500	Keyboard	7043700001	
	Relay On-Off	1606750002	

For SAFETY use only equivalent replacement part.

SYLVANIA CHASSIS
25C502/05/12/29/38/58

FOLDER 2-A

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

PARTS LIST

ITEM No.	DESCRIPTION	MFGR. PART No.
RESISTORS		
STEREO DECODER (A10240-A001)		
R12	100k 2% (L.P.)	2302811042
R53	4.7k 2%	2302814722
R63	4.7k 2%	2302814722
R64	4.7k 2%	2302814722
R69	10k 2%	2302811032
R70	10k 2%	2302811032
R71	10k 2%	2302811032
R72	10k 2%	2032811032
R73	20k 2%	2302812032
R74	10k 2%	2302811032
R80	47k 2% (L.P.)	2302814732
R81	47k 2% (L.P.)	2302814732
R82	47k 2% (L.P.)	2302814732
R85	47k 2% (L.P.)	2302814732
R240	1K 2%	2302811022
MCU REMOTE TUNING SYSTEM		
R1066	390 ohm, 2% (Favorite Station Models only)	2302813912
R1227	39k 2%	2302813932
R1229	10k 2%	2302811032
R1252	1.6k 2%	2302811622
R1254	3.6k 2%	2302813622
R1306	22k 5% 3W Metal Oxide	2301932235
R1310	82k 5% 1W Metal Film	2032818235
R1352	2k 2%	2302812022
R1354	470 ohm 2%	2302814712
R1504	330 ohm 2%	2302813312
R1506	24 ohm 2%	2302812402
R1520	82 ohm 1/2W	2302828205
R1522	330 ohm 1/2W	1202823315
R1582	12 ohm 2% (L.P.)	2302811202
MISCELLANEOUS		
STEREO DECODER (10240-A001)		
LPF1	Main Low Pass Filter	3620150001
LPF2	Main Low Pass Filter	3620150001
LPF3	SAP Low Pass Filter	3620140001
FL1	SAP Band Pass Filter	3620180001
FL302	4.5MHz Filter	3617960002
J33	Phono Jack	1813420001
ZD200	Zener Diode, 6.8V	5301571689
CRT SOCKET MODULE (A10090-A001)		
	CRT Socket	1813710104
1.5 WATT STEREO AMP PANEL (AMP004-A001 & B002)		
F401	Fuse, 1/4 Amp 125V	1810215025
	Fuse Block	2006100001
	Fuse Insulator	6455410001
Z401	Zener Diode 12V	5301571120

For SAFETY use only equivalent replacement part.

ITEM No.	DESCRIPTION	MFGR. PART No.
AUDIO INTERFACE MODULE A10160-A001, A10253-A001		
J902	Phono Jack Assembly	1814780012
S901	Slide Switch (On-Off Internal Speakers)	1605460010
Z901	Zener Diode, 12V	5301921120
TUNER CLUSTER ASSEMBLY (ATC218)		
S700	Volume, On-Off Control	2203610019
IC1030	LED Channel Display	5302650001
TUNER CONTROL UNIT ASSEMBLY (ATC225)		
IC1030	LED Channel Display	5302650002
LDR1	Light Dependent Resistor	2303160002
S700	AC Switch	1606650004
TUNER CLUSTER ASSEMBLY (ATC254)		
IC1030	LED Channel Display	5302650001
LDR1	Light Dependent Resistor	2303160002
S700	On-Off/Volume Control	2203610002
TUNER CONTROL UNIT ASSEMBLY (ATC301)		
IC1030	LED Channel Display	5302650001
TUNER CLUSTER ASSEMBLY (ATC355)		
D451	Channel Display	5303200001
LDR1	Light Dependent Resistor	2303160002
S700	On/Off, Volume	2203610026
SWITCH ASSEMBLY ASW024		
S701	Momentary Add Switch	1606680002
S702	Momentary Delete Switch	1606680002
S703	Cable/Normal Switch	1607100002
S705	Mono/SAP Stereo Switch	1607110003
S706	External Audio/Video Switch	1607100002
MCU REMOTE TUNING SYSTEM		
D1580	Zener 5.25V 5W (E.P.)	5302781008
P6	8 Pin Connector (ATC to P6)	1817140008
	Negative Polarizing Key f/P6	1813510001
P13	Housing Connector	1812101004
P13	Locking Type MCU Terminal Crimp (4 used)	1810110001

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

SEMICONDUCTORS (Select replacement for best results)

ITEM No.	MFGR. PART No./ TYPE No.	NOTES
Q1250	6104600001	
Q1300	6100830005	
Q1304	6104500001	
Q1310, 2, 4, 6,	6104600001	
Q1500	6124480001	
Q1530	6104800001	
Q1570	6104620001	
		ZENITH PART No. 121-Z9003 121-Z9000A 121-Z9003 221-Z9043 121-881 *
		TCE PART No. SK3466/159 SK3854/123AP SK3466/159 SK3591/960 SK3275/194
		ECG PART No. ECG159 ECG123AP ECG159 ECG960 ECG194
		NTE PART No. NTE159 NTE123AP NTE159 NTE960 NTE194

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

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PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

PARTS LIST

ITEM No.	DESCRIPTION	MFGR. PART No.	NOTES
CAPACITORS			
STEREO DECODER (A10240-A001)			
C7	390pF 5% N750	2508393915	(2 used)
C29,C30	120pF 10% NPO	2508371219	
C31	820pF 5% NPO	2508408215	
1.5 WATT	STEREO AMP PANEL (AMP004-A001,B002)		
# C401	.01uF 10% 50V	2508281029	
# C402	.01uF 10% 50V	2508281029	
# C403	.01uF 10% 50V (B002 only)	2508281029	
# C404	.01uF 10% 50V (B002 only)	2508281029	
# C405	.01uF 10% 50V (B002 only)	2508281029	
# C406	.01uF 10% 50V (B002 only)	2508281029	
# C407	1000uF 50V (B002 only)	2701681350	
# C408	1000uF 50V (B002 only)	2701681325	
# C409	1000uF 35V	2701681335	
MCU REMOTE TUNING SYSTEM			
C1202	15pF 5% N220	2508421505	
C1204	27pF 5% N220	2508422705	
C1252	39pF 5% NPO	2508413905	
C1520	.01uF +80-20%	2506260017	
COILS			
STEREO DECODER (A10240-A001)			
L1	S.A.P. Trap,10mH	3619870004	
L2	22mH, Coll, (E.P.)	3620252235	
L2	22mH, Coll, (L.P.)	3620252239	
L301	Sound Discriminator	3619680002	
MCU REMOTE TUNING SYSTEM			
L1003	33uH, Peaking Coll (L.P. only)	361833309	
L1012	4.7uH, Peaking Coll (L.P. only)	3618134799	
L1212	5.6uH, Peaking Coll (L.P. only)	3618355699	
L1571	22uH, Peaking Coll (L.P. only)	3618352209	
L1590	100uH, Peaking Coll	3617351015	

For SAFETY use only equivalent replacement part.

PARTS LIST AND DESCRIPTION (Continued)

When ordering parts, state Model, Part Number, and Description

PARTS LIST

ITEM No.	DESCRIPTION	MFGR. PART No.	NOTES
CONTROLS			
STEREO DECODER (A10240-A001)			
VR1	100k, Signal Level Adj	2203021042	
VR13	22k, VOO Frequency Level Adj	2203022232	
VR55	1k SAP Level Adj	2203021022	
VR75	1k L & R Adj	2203021022	
VR76	2k L - R Adj	2203021022	
VR225	50k 8kHz Adj	2203025032	
VR250	2.2k, Timing Adj	2220302222	
CRT BOARD (A10090-A001)			
R228	2.2k Red Drive Control	2204202222	
R229	10k Red Cut-Off Control	2204201032	
R233	2.2k Green Drive Control	2204202222	
R241	10k Green Cut-off Control	2204201032	
R245	2.2k Blue Drive Control	2204202222	
R248	10k Blue Cut-Off Control	2204201032	
# R255	Focus/G2 Control Asm	2204620001	
AUDIO INTERFACE MODULE (A10160-A001 & A10253-A001)			
R934A & B	Audio Input Level Adjust, 100K	2204220008	
TUNER CLUSTER ASSEMBLY (ATC218)			
R700	Volume/On-Off Control 4.7k	2203610019	
TUNER CONTROL UNITS ASSEMBLY (ATC225)			
R700	Volume Slide Control 5k	2204320006	
TUNER CLUSTER ASSEMBLY (ATC254)			
# R700	Volume Control	2203610002	
TUNER CLUSTER ASSEMBLY (ATC355)			
# R700	Volume/On-Off Control 50k	2203610026	
VOLUME CONTROL MODULE (A10199-A001)			
R700	Slide Volume Control 5k ohm	2204320006	

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