

SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver and CRT anode lead. DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check inner board wiring for pinched wires or wires contacting any high wattage resistors. Check that all knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

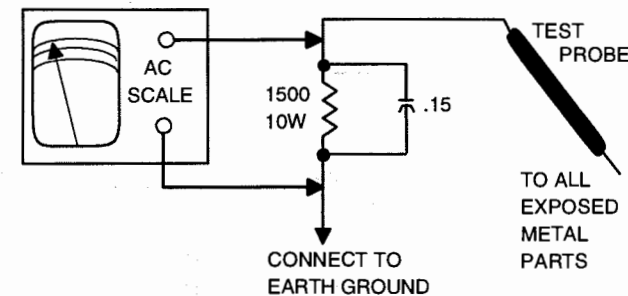
SAFETY CHECKS -- FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15μF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500μA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



CRT PROTECTOR TEST

Remove AC power from the receiver. Disconnect one side of jumper wire W163. Restore AC power and press the power button. The receiver should power-up, picture will last about 30ms. Then the receiver will shut down and the on timer LED on the receiver front panel will blink once each second. If the receiver does not shut down, the CRT protector circuit should be repaired. To resume normal operation, remove AC power and reconnect jumper wire W163.

HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC to the receiver. Press the power button. Momentarily place a 10K ohms resistor across pin 1 and pin 3 of plug X. The receiver should lose raster and sound and remain in that state. If the receiver does not lose raster and sound, the high voltage shutdown circuit requires repair. To resume normal operation, remove AC power, wait 15 seconds, and test the receiver for normal operation.

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by Howard W. Sams & Company as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to Howard W. Sams & Company by the manufacturers of the specific type of replacement part listed.

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PHOTOFACT® Technical Service Data

SET 4010

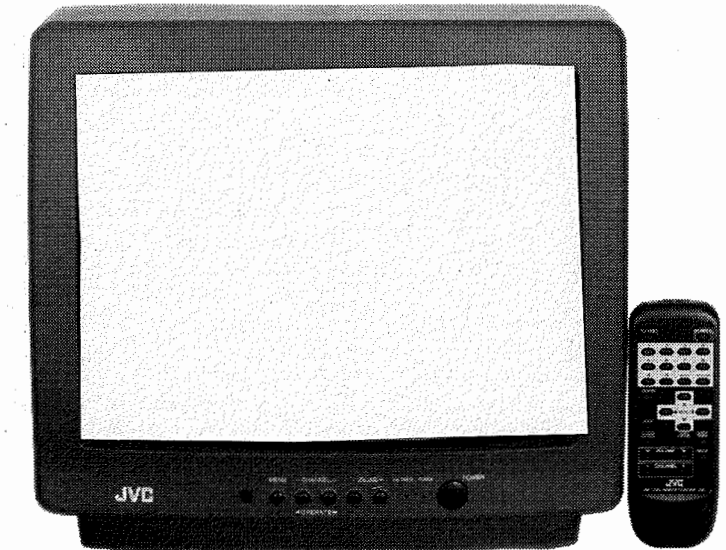
MODELS C-13810, C-13811

JVC

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JVC
Models C-13810, C-13811



Model C-13810

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list



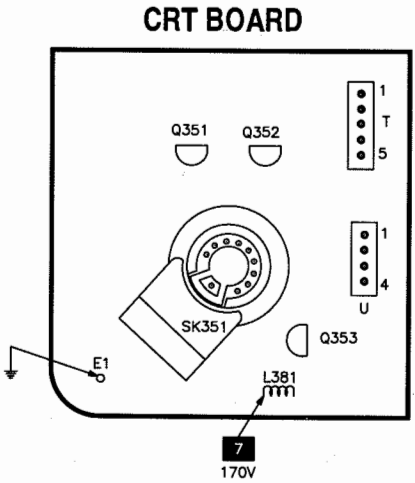
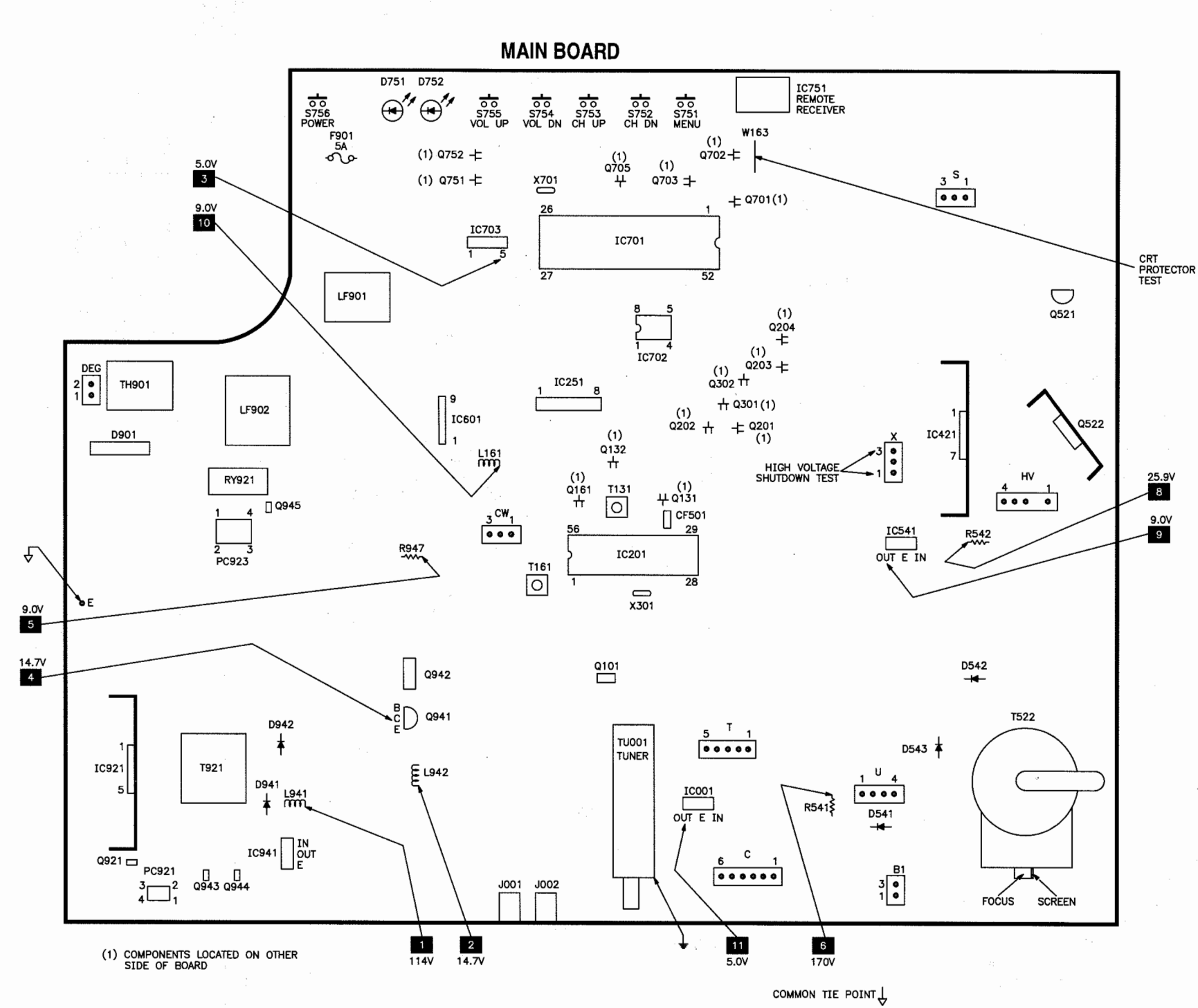
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JULY 1998 SET 4010

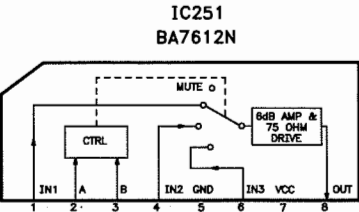
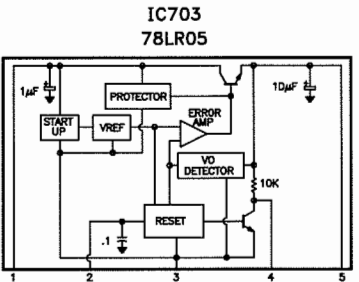
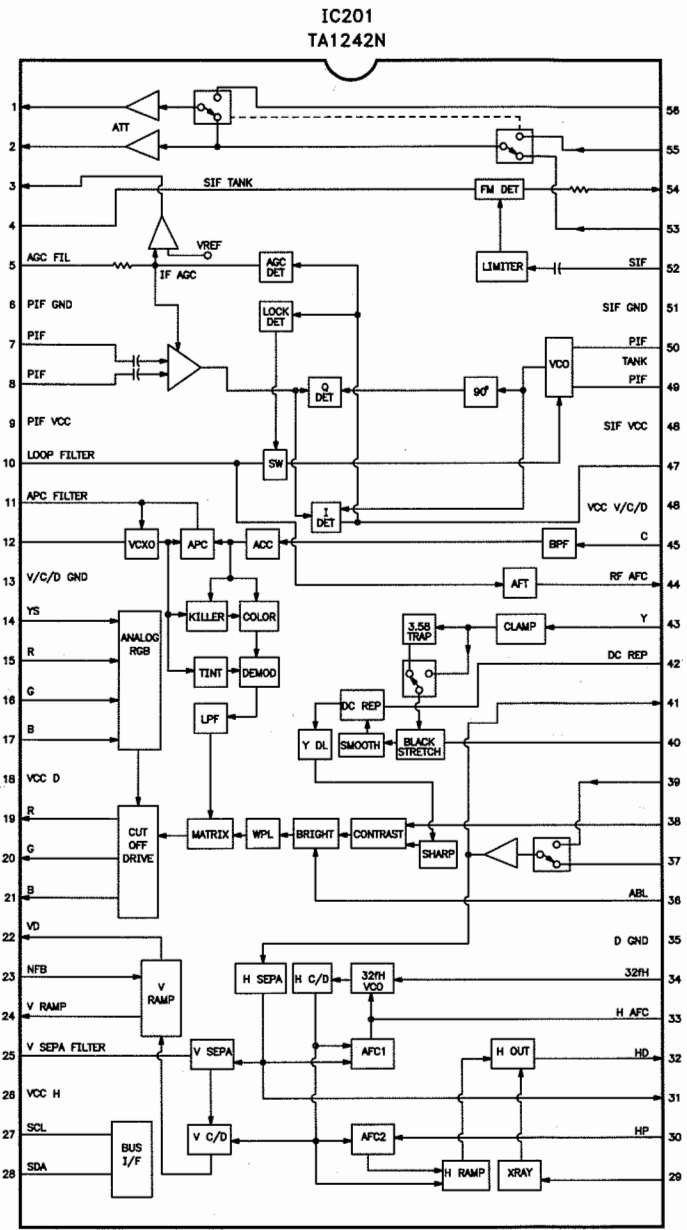
For Supplier Address,
See PHOTOFACT Annual Index

4010

PLACEMENT CHART



IC FUNCTIONS



MISCELLANEOUS ADJUSTMENTS

NOTE: This receiver employs digital customer controls. Unless otherwise indicated all adjustments were performed with the customer controls at center.

B+ CHECK

Tune in a picture. Connect a digital DC voltmeter to L941. With AC line set to 120VAC, voltage should read 114V ± 2.0V.

HIGH VOLTAGE CHECK

Tune in a picture. Connect a high voltage probe to the CRT anode, low side to ground. High voltage should read 22kV to 22.5kV.

COLOR PURITY

Operate the receiver for 15 minutes. Use a degaussing coil to demagnetize the CRT and mounting hardware. Tune in a green raster. Loosen the locking ring and slide the deflection yoke backward to obtain a vertical green band. Rotate and spread the tabs of the purity magnets until the green band is centered on the screen. Move the deflection yoke forward until a uniform green screen is obtained. Check red and blue purity.

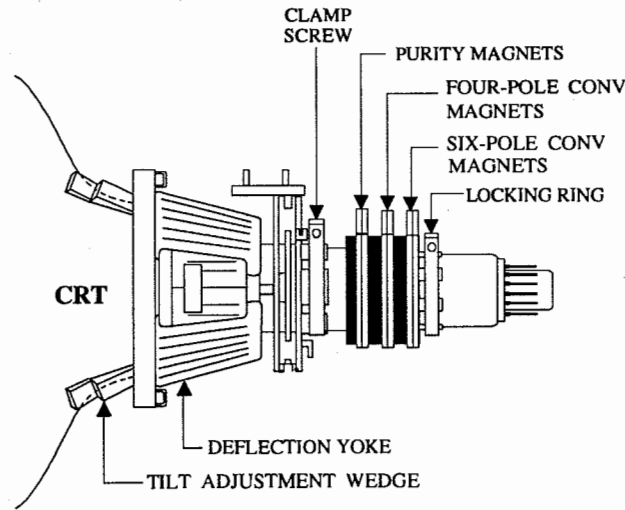
CONVERGENCE

Operate the receiver for 15 minutes. Connect a color bar generator to antenna terminals and tune in a dot pattern. Loosen locking ring. Adjust 4-pole magnets to converge the red and blue dots at the center of the screen. Adjust the 6-pole magnets to converge the red/blue dots over the green dots at the center of the screen.

NOTE: Rotate the two tabs of each set of magnets equally and opposite to converge vertically and rotate both tabs in the same direction to converge horizontally. The 4-pole and 6-pole magnets interact, repeat adjustment until center convergence is correct. Tighten locking ring.

Tune in a crosshatch pattern. Loosen clamp screw and remove rubber wedges between the deflection yoke and the CRT. Tilt 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 right and 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 and tighten clamp screw.

CRT NECK ASSEMBLY



SERVICE MENU

To enter the service menu, press the display and video status buttons together. The service menu is displayed as shown below. While in the service menu, use the menu up and down buttons to select and use the menu left and right buttons to adjust. To exit the service menu, press the exit button.

SERVICE MENU	
PICTURE	GAME
SOUND	
LOW LIGHT	HIGH LIGHT
RF AFC CHECK	I²C BUS CTRL

Picture Menu Chart

Adjustment	Range	Initial Value	On-set Value
BRIGHT	000 ~ 127	064	066
PICTURE	000 ~ 127	064	065
WPS (1)	000 ~ 001	000	000
TV DTL (1)	000 ~ 063	021	021
TV BPF (1)	000, 001	000	000
TINT	000 ~ 127	064	059
COLOR	000 ~ 127	064	058
EXT BRI (1)	000, 001	000	000
EXT PIC (1)	000, 001	000	000
EXT DTL (1)	000 ~ 063	025	025
EXT BPF (1)	000, 001	000	000
EXT TINT(1)	000, 001	000	000
EXT COL (1)	000, 001	000	000
V SIZE	000 ~ 063	040	018
V CENTER	000 ~ 007	004	002
H POS	000 ~ 031	020	025
OSD POS	000 ~ 031	008	009
H AFC (1)	000, 001	000	000
BLANKING (1)	000, 001	000	000
VIDEO SW (1)	000, 001	000	000
Y TRAP (1)	000, 001	000	000
RF AGC	000 ~ 063	040	040
PIF VCO (1)	000 ~ 127	064	064
(1) Do not adjust.			

RF AGC

Tune in a picture. Decrease the value of RF AGC until snow appears in the picture. Increase the value of RF AGC until snow disappears from the picture. Check all channels for proper picture and readjust if necessary.

V SIZE / V CENTER

Tune in a picture. Adjust vertical size for a slightly underscanned picture. Adjust vertical center to center the picture. Adjust vertical size for a slightly overscanned picture.

H POS

Tune in a window circle pattern. Adjust horizontal position to center the picture.

BRIGHT / PICTURE / COLOR / TINT

Tune in a picture. Set the customer controls to the center. Adjust bright for best brightness. Adjust picture for best contrast. Adjust color for best color. Adjust tint for best tint.

OSD POS

Adjust OSD position to center the display.

Sound Menu Chart

Adjustment	Range	Initial Value	On-set Value
ATT (1)	000 ~ 063	050	050
BALANCE (1)	000 ~ 063	032	032
(1) Do not adjust.			

Low Light Menu Chart

Adjustment	Range	Initial Value	On-set Value
BRIGHT	000 ~ 127	064	066
RED CUTOFF	000 ~ 255	020	042
GREEN CUTOFF	000 ~ 255	020	023
BLUE CUTOFF	000 ~ 255	020	018

High Light Menu Chart

Adjustment	Range	Initial Value	On-set Value
GREEN DRIVE	000 ~ 255	128	127
BLUE DRIVE	000 ~ 255	128	115

NOTE: While in the Low Light Menu or the High Light Menu, adjustments are performed using the following buttons on the remote:

- 1 - Vertically collapses the picture.
- 2 - Restores full picture.
- 4 - Increases red value.
- 5 - Increases green value.
- 6 - Increases blue value.
- 7 - Decreases red value.
- 8 - Decreases green value.
- 9 - Decreases blue value.

White Balance

Disconnect the antenna. Set picture, bright, red, blue, and green cutoffs to minimum. Set green and blue drives to midrange. Press 1 to collapse the picture. Adjust the screen control for a dim line of one dominant color. Adjust the other two cutoffs for a dim white line. Press 2 for a full picture. Adjust green and blue drives for best white balance. Exit service menu and check white balance at high and low brightness. Repeat above steps if necessary.

RF AFC Check Menu Chart

Adjustment	Range	Initial Value	On-set Value
RF AFC	On, Off	On	On
Fine	-77 ~ +77	+0	+1

IF VCO

Tune in a color bar signal. Connect a DC voltmeter to pin 3 of connector CW. Set RF AFC to off. Set fine to +0. Adjust T131 for 2.5V ± .2V. Set RF AFC to on. Exit service menu and check the picture quality. If the picture is bad, repeat above steps.

I²C Bus Control Menu Chart

Adjustment	Range	Initial Value	On-set Value
I²C BUS (1)	On, Off	On	On
(1) Do not adjust.			

Game Menu Chart

Adjustment	Range	Initial Value	On-set Value
TINT	±20	0	0
COLOR	±20	0	0
PICTURE	±20	-10	-10
BRIGHT	±20	-2	-2
DETAIL	±15	+10	+10
GREEN DRIVE	-80 ~ +50	0	0
BLUE DRIVE	-80 ~ +50	0	0

TEST EQUIPMENT

SCHEMATIC COMPONENT LOCATION GUIDE

C001	C-2	C428	E-4	C908	A-19	D944	E-21	Q353	B-15	R351	C-14	R651	B-6	R944	E-22
C003	B-28	C429	D-3	C909	A-19	D945	B-18	Q521	E-4	R352	A-14	R701	D-25	R945	E-22
C004	A-28	C501	D-24	C921	C-20	D946	B-17	Q522	E-5	R353	B-14	R702	D-25	R946	E-22
C005	A-28	C502	E-2	C922	D-18	F901	A-17	Q701	D-25	R354	C-14	R703	D-25	R947	D-23
C006	E-14	C503	D-2	C923	C-19	FR720	C-22	Q702	C-25	R355	B-15	R704	D-26	R948	E-20
C007	E-14	C505	D-1	C924	E-18	IC001	E-14	Q703	C-25	R356	B-14	R705	C-25	R949	E-22
C101	E-14	C511	B-12	C925	D-20	IC201	A-5	Q705	B-19	R357	C-15	R706	C-25	R950	E-22
C102	B-1	C521	E-4	C926	D-19	IC201	A-6	Q751	E-27	R358	B-15	R708	C-26	R951	D-21
C103	B-1	C522	E-4	C931	C-20	IC201	B-11	Q752	E-27	R359	B-15	R709	C-26	R952	E-21
C104	B-2	C523	E-4	C941	A-21	IC201	B-3	Q921	D-19	R360	C-15	R710	A-2	R953	B-19
C105	C-3	C524	E-5	C942	A-23	IC201	D-2	Q941	D-22	R361	A-15	R712	E-26	R955	B-17
C106	B-3	C525	D-6	C943	C-21	IC251	B-6	Q942	E-22	R362	B-15	R713	B-26	R956	B-17
C108	B-2	C526	A-24	C944	C-21	IC421	D-4	Q943	E-22	R363	C-15	R714	D-25	R981	A-17
C131	B-3	C541	D-14	C945	C-24	IC541	E-13	Q944	E-20	R364	A-15	R715	D-25	RY921	A-19
C132	B-3	C543	D-14	C946	D-23	IC601	A-7	Q945	B-17	R365	B-15	R716	B-20	RY921	B-18
C133	B-3	C546	E-12	C947	E-22	IC701	B-26	R001	B-27	R366	C-14	R722	E-25	S751	B-26
C134	C-2	C547	E-14	C949	E-20	IC702	E-27	R002	A-27	R367	A-14	R723	E-25	S752	B-25
C135	A-2	C561	E-1	C950	B-17	IC703	C-22	R003	A-27	R368	B-14	R724	E-27	S753	B-25
C138	B-4	C581	D-10	C981	A-20	IC751	A-25	R004	A-27	R421	D-3	R725	D-27	S754	B-25
C161	E-14	C583	D-10	C982	C-17	IC921	C-19	R101	B-1	R422	D-5	R726	D-27	S755	B-25
C162	E-14	C584	E-2	C983	C-17	IC941	E-21	R102	B-1	R423	E-4	R727	D-27	S756	B-26
C163	A-4	C601	B-7	CF001	B-1	J001	B-5	R103	B-1	R425	D-5	R728	D-27	SF101	B-2
C164	A-4	C602	A-7	CF131	B-4	J002	B-5	R104	B-2	R427	D-4	R730	C-27	SK351	A-16
C166	B-5	C603	A-7	CF161	A-4	K921	C-20	R105	B-2	R428	D-3	R732	C-27	SK351	B-16
C167	A-5	C604	A-7	CF501	D-2	K922	C-20	R106	B-2	R429	E-3	R733	C-9	SK351	C-16
C202	A-9	C605	A-8	CRT	B-16	K923	C-18	R131	B-3	R431	D-4	R734	B-27	SK351	C-16
C207	A-11	C606	A-8	D001	A-28	K941	A-21	R133	B-4	R441	D-3	R735	B-27	SK351	C-16
C208	D-10	C607	A-8	D201	D-10	K942	C-21	R134	B-4	R501	D-2	R736	C-27	SK351	D-16
C209	C-11	C608	A-7	D202	C-11	L001	B-28	R135	B-4	R502	D-2	R737	B-27	SP01	A-8
C210	B-11	C609	A-8	D203	C-11	L003	A-28	R136	B-5	R505	D-2	R738	B-27	T131	A-3
C211	D-1	C651	B-6	D204	D-9	L01	A-19	R137	B-5	R506	D-2	R739	B-27	T161	A-5
C212	D-1	C654	A-6	D251	B-6	L102	B-2	R138	B-5	R507	D-1	R740	B-27	T521	E-4
C214	B-10	C701	D-25	D421	D-4	L104	C-3	R142	B-4	R511	C-12	R741	B-27	T522	C-8
C215	B-11	C702	C-25	D501	D-23	L131	B-4	R161	B-4	R521	E-4	R742	B-27	T921	A-20
C216	D-9	C703	C-26	D511	C-12	L161	E-13	R162	A-4	R522	E-3	R751	B-26	TH901	B-19
C217	D-10	C704	A-2	D541	D-13	L162	A-4	R163	A-5	R523	E-3	R752	B-25	V01	B-16
C251	B-5	C706	A-26	D542	D-13	L301	B-9	R164	A-6	R524	E-4	R753	B-25	VA901	A-17
C255	B-5	C707	E-26	D543	E-12	L381	D-14	R201	A-9	R526	D-6	R754	B-25	X	E-2
C256	E-14	C708	E-26	D561	E-1	L581	A-16	R202	A-9	R541	D-13	R755	B-25	X301	B-12
C301	B-9	C709	D-26	D562	E-1	L701	D-26	R203	A-10	R542	D-13	R756	B-25	X701	E-26
C302	B-9	C710	D-25	D563	D-1	L703	E-26	R204	A-10	R543	E-12	R757	E-28		
C303	B-10	C711	D-25	D581	D-9	L709	A-26	R205	A-11	R544	A-27	R758	E-27		
C304	E-14	C716	C-22	D582	D-2	L941	A-23	R208	D-11	R545	E-13	R770	B-26		
C305	B-12	C717	C-22	D601	B-7	L942	C-21	R209	D-11	R561	E-1	R771	C-25		
C306	B-13	C718	D-25	D602	A-7	LF901	A-17	R210	C-11	R562	E-1	R804	A-14		
C307	B-13	C719	C-23	D651	B-6	LF902	A-18	R211	C-11	R563	E-1	R805	C-13		
C308	B-9	C720	C-24	D717	D-27	P900	A-17	R212	B-11	R581	D-10	R806	B-14		
C354	C-15	C721	D-26	D718	D-27	PC921	D-20	R213	C-1	R582	D-10	R901	B-19		
C355	A-15	C722	E-26	D730	C-27	PC923	B-19	R215	B-11	R584	D-10	R902	C-19		
C356	B-15	C723	E-26	D751	E-28	Q101	B-2	R216	B-11	R586	E-2	R903	C-19		
C357	C-14	C724	C-23	D752	E-27	Q131	B-4	R217	D-9	R601	B-7	R904	A-18		
C382	E-16	C726	B-27	D901	A-19	Q132	B-5	R218	D-9	R602	A-7	R921	C-18		
C401	D-3	C751	C-23	D902	B-18	Q161	A-5	R219	D-10	R603	A-7	R922	C-18		
C402	E-3	C801	A-12	D921	C-19	Q201	A-9	R251	B-5	R604	B-7	R923	C-18		
C403	D-3	C802	A-12	D922	C-20	Q202	A-11	R301	B-9	R605	A-8	R924	D-20		
C421	D-3	C803	A-12	D923	D-19	Q203	D-11	R303	C-9	R606	A-8	R925	D-19		
C423	D-4	C902	A-18	D924	D-19	Q204	D-9	R304	C-9	R607	A-8	R926	D-19		
C424	D-4	C903	A-20	D928	C-18	Q301	C-9	R305	B-10	R608	A-8	R927	D-19		
C425	D-14	C904	A-20	D941	A-21	Q302	C-10	R306	B-13	R609	A-7	R929	E-19		
C426	D-5	C906	A-20	D942	C-21	Q351	C-15	R307	B-9	R612	B-7	R942	D-22		
C427	E-5	C907	A-18	D943	D-23	Q352	A-15	R308	B-10	R613	A-7	R943	D-22		

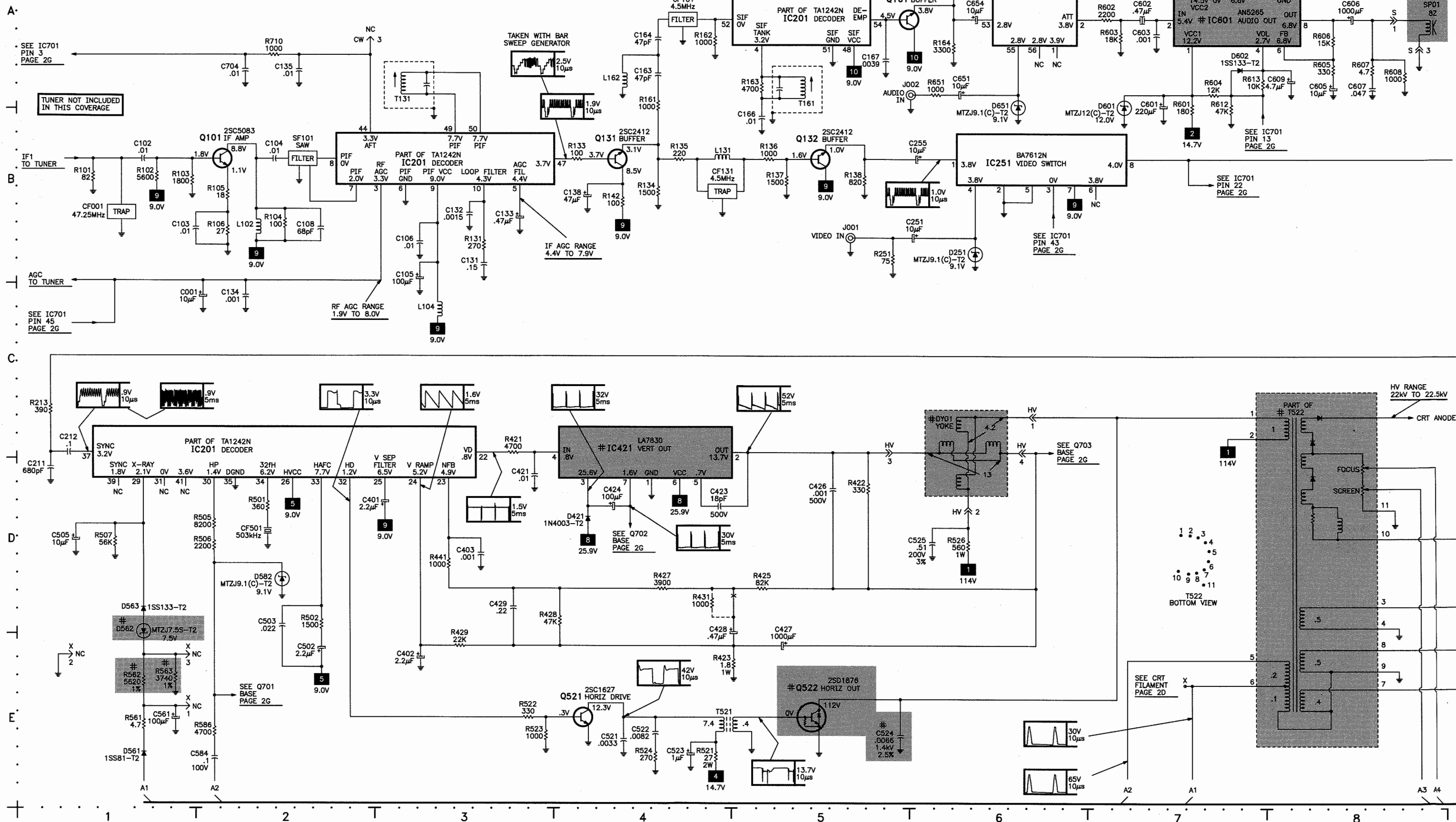
Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

Equipment Sencore No.

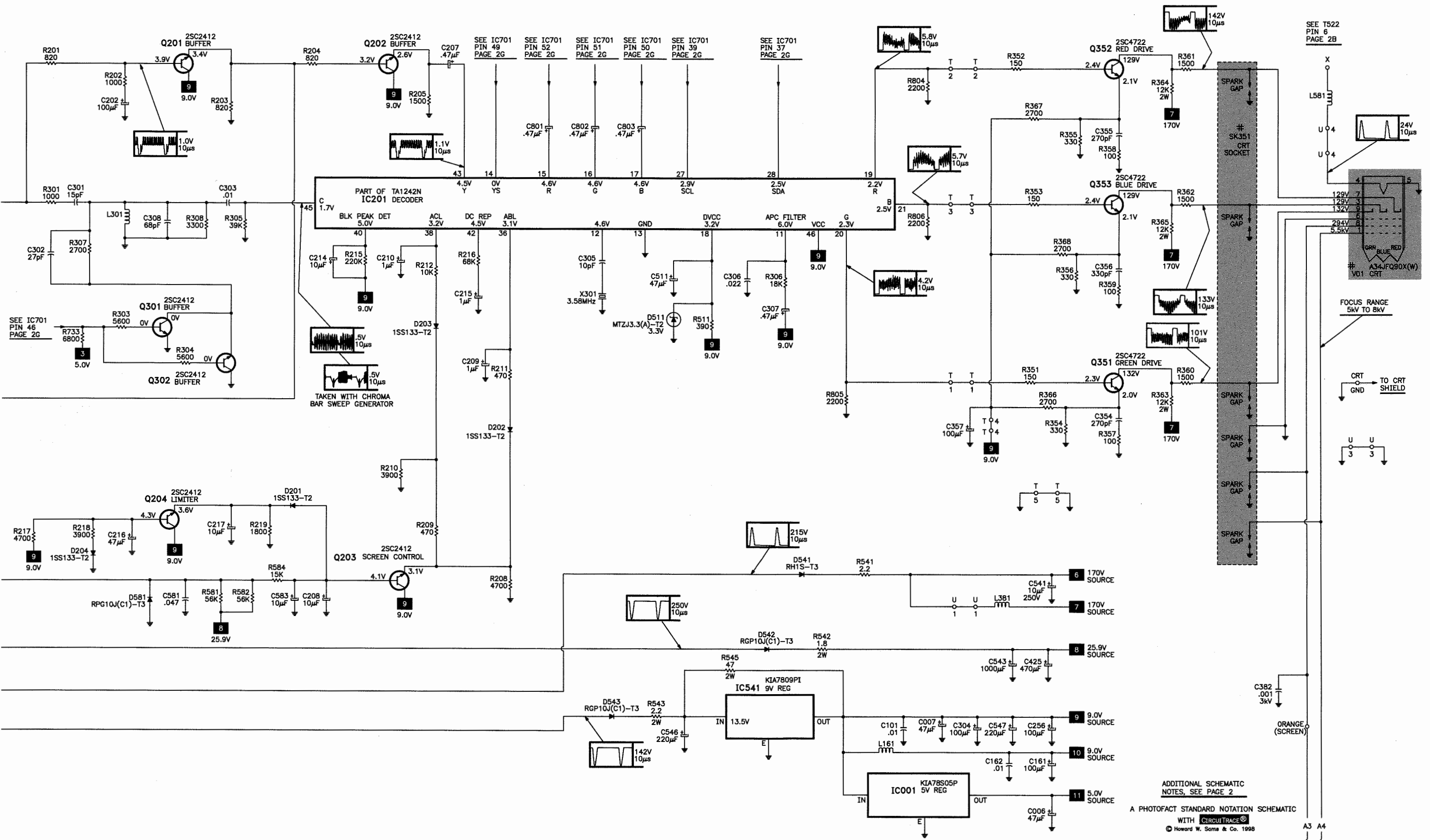
Oscilloscope	SC3100
Generators	
RGB	CM2125
Multiburst Signal	VG91
Color Bar	VG91
TV Stereo	VG91
Digital VOM	SC3100
Frequency Meter	SC3100
Hi-Voltage Probe	HP200
Accessory Probes	TP212
Isolation Transformer	PR570
Capacitance Analyzer	LC102
CRT Analyzer	CR7000
AC Leakage Tester	PR570
Inductance Analyzer	LC102
Flyback Yoke Tester	TVA92
Field Strength Meter	SL753
Transistor Tester	TF46
Horizontal Analyzer	HA-2500
Video Analyzer	VG91, TVA92

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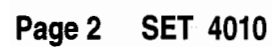
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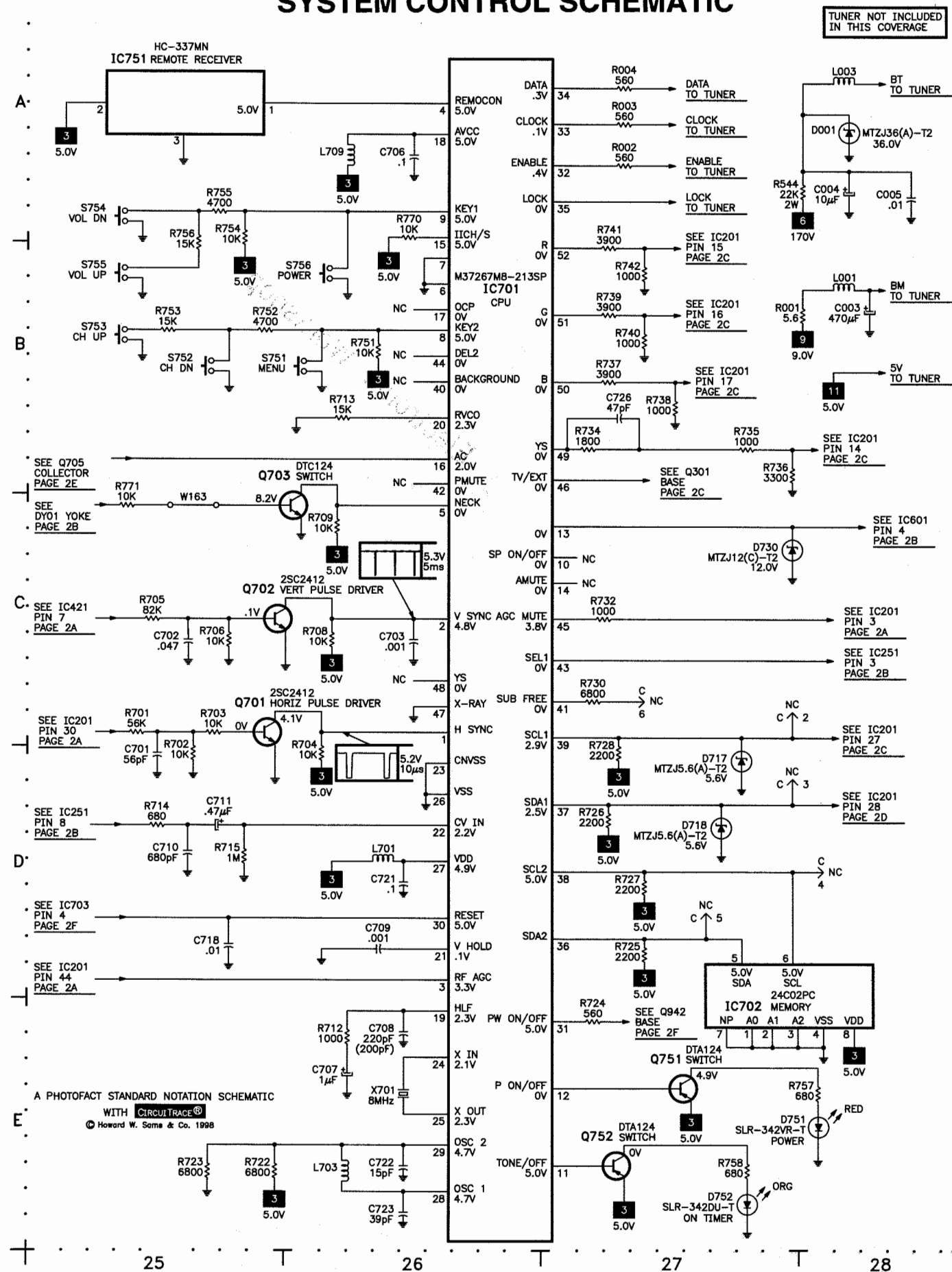
TELEVISION SCHEMATIC continued



ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2
A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITTRACE
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F

G SYSTEM CONTROL SCHEMATIC



SCHEMATIC NOTES

For SAFETY use only equivalent replacement part, see parts list.

✖ Circuitry not used in some versions.

--- Circuitry used in some versions.

⊥ Ground

⏏ Chassis ground

▽ Common tie point

△ Taken from common tie point

3 Schematic CIRCUITRACE®: Voltage source tie point.

A— Cabling: Heavy lines reduce use of multiple lines.

Waveforms and voltages are taken from ground, unless noted otherwise.
Waveforms taken with triggered scope and colorbar signal.
Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
Supply voltages maintained as seen at input.
Voltages measured with digital meter and a 1000μV RF signal, with colorbar pattern, applied to antenna terminal.
Controls adjusted for normal operation.
Capacitors are 50 volts or less, 5% or greater unless noted.
Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.
Resistors are 1/2W or less, 5% or greater unless noted.
Value in () used in some versions.
Measurements with switching as shown, unless noted.
Rated voltage shown on zener diodes.

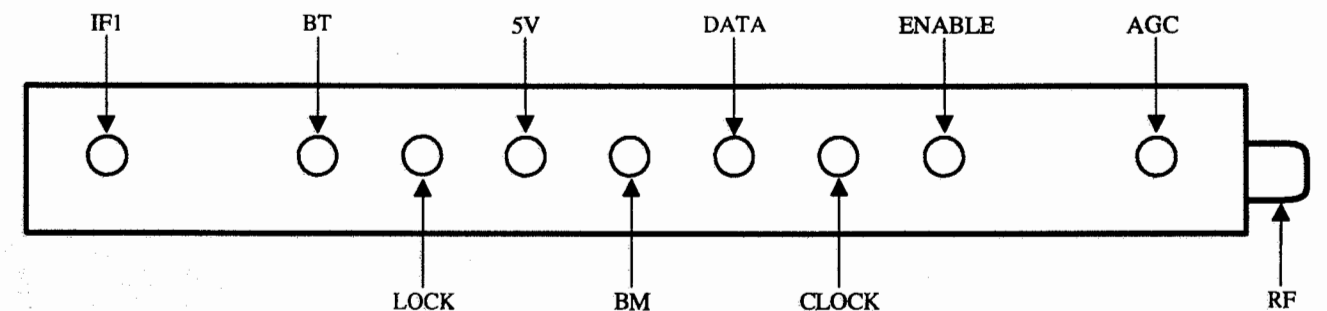
TUNER INFORMATION

TUNER VOLTAGE CHART

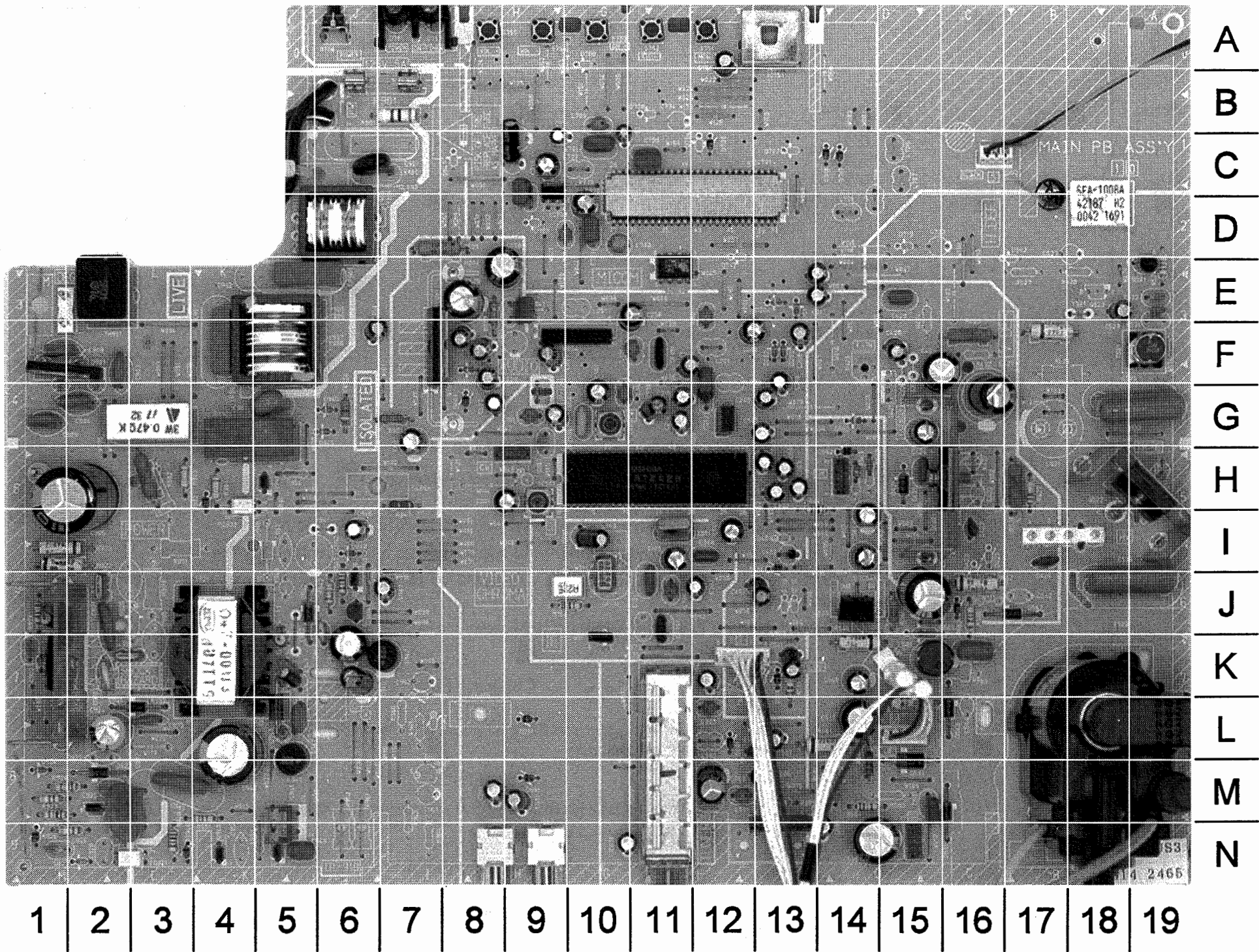
Pin	VHF Low Band	VHF High Band	UHF Band
AGC	3.4V	3.9V	1.9V
ENABLE	.4V	.4V	.4V
CLOCK	.1V	.1V	.1V
DATA	.1V	.2V	.1V
BM	8.6V	8.6V	8.6V
5V	5.0V	5.0V	5.0V
LOCK	0V	0V	0V
BT	34.4V	34.4V	34.4V
IF1	0V	0V	0V

NOTE: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14.

TUNER TERMINAL GUIDE



MAIN BOARD - TOP VIEW

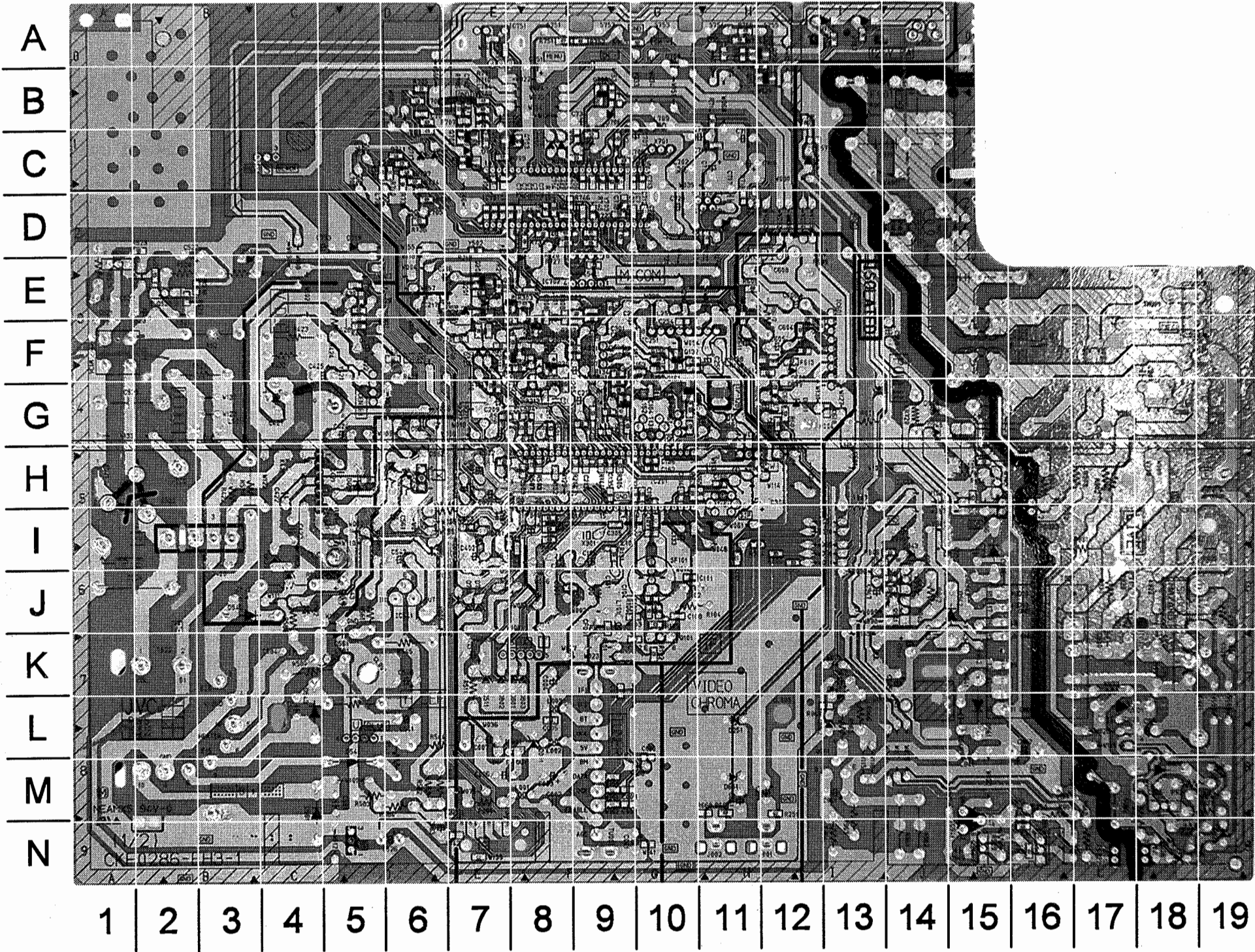


A HOWARD W. SAMS GridTrace™ PHOTO

MAIN BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

B1	N-15	C654	G-9	D751	A-7	R104	J-10
C	N-13	C706	C-11	D752	A-7	R422	H-17
C001	N-10	C707	C-10	D901	F-1	R423	F-16
C003	M-12	C711	C-9	D902	H-4	R441	I-13
C004	K-12	C716	C-9	D921	L-3	R511	K-13
C006	M-13	C717	C-9	D922	M-2	R521	F-17
C007	L-13	C719	C-9	D923	N-1	R524	E-19
C105	I-11	C720	D-10	D924	M-1	R526	H-17
C131	J-11	C721	D-10	D928	J-1	R541	M-14
C133	I-10	C751	A-12	D941	L-5	R542	J-16
C138	G-11	C801	H-13	D942	J-5	R543	L-15
C161	G-10	C802	H-13	D943	I-6	R544	L-14
C167	G-9	C803	H-13	D944	N-3	R545	K-14
C202	F-12	C902	E-5	D945	G-6	R561	J-15
C207	F-11	C903	F-2	D946	G-6	R562	H-14
C208	F-13	C904	G-2	DEG	E-1	R563	H-14
C209	G-13	C906	H-2	F901	B-6	R581	M-14
C210	G-13	C907	F-4	FR720	G-6	R582	M-14
C212	G-12	C908	F-1	HV	I-18	R584	M-14
C214	G-11	C909	G-1	IC001	L-12	R586	J-16
C215	G-11	C921	J-2	IC201	H-9	R601	G-7
C216	E-14	C922	K-1	IC251	F-9	R607	E-8
C217	E-14	C923	L-3	IC421	H-16	R609	D-7
C251	M-8	C924	L-2	IC541	J-14	R901	G-3
C255	F-9	C925	M-2	IC601	F-7	R902	H-3
C256	E-11	C926	N-1	IC701	C-13	R903	H-3
C304	H-9	C931	K-2	IC702	E-11	R904	H-4
C306	I-12	C941	L-5	IC703	D-9	R921	J-1
C307	J-12	C942	L-4	IC751	A-13	R922	I-1
C401	J-13	C943	J-6	IC921	K-1	R923	I-1
C402	I-13	C944	K-6	IC941	M-5	R924	M-1
C421	H-15	C945	K-6	J001	N-8	R925	M-1
C423	I-16	C946	I-6	J002	N-9	R926	N-1
C424	G-15	C947	J-7	K921	K-2	R927	M-1
C425	F-15	C949	N-5	K922	J-2	R929	N-2
C426	I-17	C950	F-6	K923	J-1	R942	J-6
C427	G-16	C981	G-5	K941	K-5	R943	J-6
C428	F-15	C982	M-3	K942	K-5	R947	H-7
C429	E-15	C983	M-3	L001	M-12	R948	N-3
C501	I-12	CF001	J-11	L003	L-12	R951	M-4
C502	H-13	CF131	F-11	L102	J-10	R981	B-7
C505	G-13	CF161	G-10	L104	J-11	RY921	G-4
C511	K-13	CF501	G-12	L131	F-11	S	C-16
C521	E-19	D001	L-12	L161	G-9	S751	A-12
C522	E-19	D201	E-13	L162	G-10	S752	A-11
C523	E-18	D202	F-13	L301	E-12	S753	A-10
C524	J-18	D203	F-13	L581	K-15	S754	A-9
C525	G-19	D204	E-13	L701	D-10	S755	A-8
C526	N-14	D251	L-9	L703	D-10	S756	A-6
C541	L-14	D421	H-15	L709	B-10	SF101	I-10
C543	J-15	D501	I-13	L941	L-5	T	K-13
C546	K-14	D511	K-13	L942	K-7	T131	G-10
C547	I-14	D541	M-15	LF901	D-6	T161	H-9
C561	I-14	D542	J-17	LF902	F-5	T521	F-19
C581	M-15	D543	L-16	PC921	N-3	T522	L-18
C583	N-14	D561	J-15	PC923	H-4	T921	J-3
C584	K-16	D562	H-14	Q101	K-10	TH901	E-2
C601	G-7	D563	G-14	Q521	E-19	TU001	L-11
C602	G-8	D581	M-16	Q522	H-19	U	L-15
C604	F-8	D582	J-16	Q921	M-2	VA901	C-6
C605	F-8	D601	G-8	Q941	J-6	W163	B-13
C606	E-8	D602	F-8	Q942	J-6	X	H-14
C607	E-9	D651	M-9	Q943	N-4	X301	I-11
C608	E-9	D717	C-14	Q944	N-5	X701	C-10
C609	F-8	D718	C-14	Q945	H-5		
C651	M-9	D730	C-12	R001	M-13		

MAIN BOARD - BOTTOM VIEW



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MAIN BOARD - BOTTOM VIEW, GRIDTRACE
LOCATION GUIDE

C005	L-8	R142	G-9	R723	D-9
C101	J-10	R161	G-9	R724	D-9
C102	K-10	R162	G-10	R725	D-9
C103	J-10	R163	H-11	R726	D-9
C104	J-10	R164	G-10	R727	D-8
C106	H-10	R201	F-9	R728	D-8
C108	J-10	R202	F-8	R730	D-8
C132	H-10	R203	F-7	R732	D-8
C134	H-10	R204	F-8	R733	D-8
C135	H-9	R205	G-8	R734	C-6
C162	H-10	R208	F-7	R735	D-6
C163	F-10	R209	F-7	R736	D-6
C164	G-10	R210	F-7	R737	C-6
C166	H-11	R211	G-7	R738	C-6
C211	G-8	R212	G-7	R739	C-6
C301	E-9	R213	G-8	R740	C-6
C302	F-9	R215	G-9	R741	C-6
C303	F-9	R216	G-9	R742	C-6
C305	I-9	R217	E-7	R751	A-8
C308	E-8	R218	E-7	R752	A-9
C403	I-7	R219	E-6	R753	A-10
C503	H-8	R251	M-12	R754	A-11
C603	G-12	R301	E-9	R755	A-11
C701	B-6	R303	E-8	R756	A-11
C702	B-7	R304	F-8	R757	A-13
C703	C-7	R305	H-9	R758	A-13
C704	B-7	R306	J-8	R770	C-9
C708	C-9	R307	E-9	R771	B-7
C709	C-9	R308	E-8	R804	I-8
C710	C-11	R421	H-5	R805	I-8
C718	D-9	R425	E-5	R806	I-8
C722	D-10	R427	E-5	R944	J-14
C723	D-10	R428	E-5	R945	J-14
C724	E-9	R429	F-5	R946	I-14
C726	C-6	R501	G-8	R949	N-16
Q131	G-9	R502	H-7	R950	N-16
Q132	F-10	R505	G-8	R952	N-16
Q161	G-10	R506	G-7	R953	H-15
Q201	F-8	R507	H-8	R955	H-15
Q202	F-8	R522	E-2	R956	B-12
Q203	E-7	R523	D-2		
Q204	E-7	R602	G-12		
Q301	F-8	R603	G-12		
Q302	E-8	R604	G-12		
Q701	C-7	R605	F-12		
Q702	C-7	R606	F-13		
Q703	C-8	R608	E-11		
Q705	B-9	R612	F-12		
Q751	B-12	R613	F-12		
Q752	A-12	R651	M-11		
R002	I-12	R701	B-6		
R003	I-12	R702	B-6		
R004	I-11	R703	C-6		
R101	J-9	R704	C-7		
R102	K-10	R705	B-6		
R103	J-9	R706	B-7		
R105	J-10	R708	B-7		
R106	J-10	R709	C-7		
R131	I-9	R710	B-7		
R133	G-9	R712	C-9		
R134	G-9	R713	C-9		
R135	F-9	R714	B-11		
R136	F-10	R715	C-9		
R137	F-10	R716	C-9		
R138	F-10	R722	D-11		

JVC

MODELS C-13810, C-13811

PARTS LIST

SEMICONDUCTORS

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
D001	-	MTZJ36(A)-T2	-	-	-
D201 Thru	-				
D204	-	1SS133-T2	NTE177	ECG177	SK9091
D251	-	MTZJ9.1(C)-T2	-	-	-
D421	-	1N4003-T2	NTE116	ECG116	SK3313
D501	-	MTZJ9.1(C)-T2	-	-	-
D511	-	MTZJ3.3(A)-T2	-	-	-
D541	-	RH1S-T3	NTE552	ECG552	SK9000
D542, 43	-	RGP10J(C1)-T3	NTE552	ECG552	SK9000
D561	-	1SS81-T2	NTE177	ECG177	SK9091
# D562	-	MTZJ7.5S-T2	-	-	-
D563	-	1SS133-T2	NTE177	ECG177	SK9091
D581	-	RPG10J(C1)-T3	-	-	-
D582	-	MTZJ9.1(C)-T2	-	-	-
D601	-	MTZJ12(C)-T2	-	-	-
D602	-	1SS133-T2	NTE177	ECG177	SK9091
D651	-	MTZJ9.1(C)-T2	-	-	-
D717, 18	-	MTZJ5.6(A)-T2	-	-	-
D730	-	MTZJ12(C)-T2	-	-	-
D751	-	SLR-342VR-T	-	-	-
D752	-	SLR-342DU-T	-	-	-
# D901	-	D2SBA60	-	ECG169	-
D902	-	MTZJ15(A)-T2	-	-	-
D921, 22	-	RGP10J(C1)-T3	NTE552	ECG552	SK9000
D923	-	MTZJ15(A)-T2	-	-	-
D924, 28	-	1SS133-T2	NTE177	ECG177	SK9091
D941	-	RU3AM-LFC4	NTE580	ECG580	SK3318A
D942	-	RGP10J(C1)-T3	NTE552	ECG552	SK9000
D943	-	1SS133-T2	NTE177	ECG177	SK9091
D944	-	MTZJ10(A)-T2	-	-	-
D945, 46	-	1SS133-T2	NTE177	ECG177	SK9091
IC001	KIA78S05P	-	-	-	-
		KIA78L05BP-Y	-	-	-
IC201	-	TA1242N	-	-	-
IC251	-	BA7612N	-	-	-
# IC421	-	LA7830	NTE1773	ECG1773	SK9752
IC541	-	KIA7809PI	NTE1966	ECG1966	-
# IC601	-	AN5265	NTE1789	ECG1789	SK9876
IC701	-	M37267M8-213SP	-	-	-
IC702	24C02PC	AT24C02-13810	-	-	-
IC703	78LR05	L78LR05E-MA	-	-	-
# IC921	-	STR-F6514	-	-	-
# IC941	-	S1854-C2	-	-	-
# PC921, 23	P621B	TLP621(B)	-	-	SK10178
Q101	-	2SC5083(L-P)-T	-	-	-
Q131, 32	-	2SC2412K(QR)-X	-	-	-
Q161	-	2SC2412K(QR)-X	-	-	-
Q201 Thru	-				
Q204	-	2SC2412K(QR)-X	-	-	-
Q301, 02	-	2SC2412K(QR)-X	-	-	-
Q351, 52, 53	-	2SC4722(NP)	-	-	-

For SAFETY use only equivalent replacement part.

SEMICONDUCTORS continued

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
Q521	-	2SC1627A(OY)-T	NTE289A	ECG289A	SK3449
# Q522	-	2SD1876-YD	NTE2331	ECG2331	SK10088
Q701, 02	-	2SC2412K(QR)-X	-	-	-
Q703, 05	-	DTC124EKA-X	NTE2357	ECG2357	SK10124
Q751, 52	-	DTA124EKA-X	-	-	SK9741
Q921	-	2SA933AS(QR)-T	NTE290A	ECG290A	SK9132
Q941	-	2SA966(OY)-T	NTE294	ECG294	SK3841
Q942 Thru	-				
Q945	-	2SC1740S(QR)-T	NTE85	ECG85	SK3122

For SAFETY use only equivalent replacement part.

Important Parts Information

- The parts listed here are those not usually available from a well-stocked supply cabinet or bin.
- Where items may be replaced with equivalent parts, several alternates are shown from participating vendors.
- On the parts lists, safety items are marked with a # to remind you that only exact replacements are recommended for these items.
- When ordering parts, state the model number, part number, and description.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

Or consult the Sams *Annual Index* for the address of the original equipment manufacturer.

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors. Consult the Sams *Annual Index* for their current address.

- Custom Components Corporation (Chek-A-Color)
- NTE Electronics, Inc. (NTE)
- Philips ECG Company (ECG)
- Terrell & Nobis (TNI Electronics)
- Sencore, Inc.
- Thomson Consumer Electronics, Inc. (SK, TCE)

PARTS LIST continued

COILS & TRANSFORMERS

Item No.	Function/Rating	Mfr. Part No.
# DY01	Yoke Horiz 3mH Vert 25mH	CJ28325-00A
K921, 22	Ferrite Bead	QQR0621-001Z
K923	Ferrite Bead	QQR0582-001Z
K941, 42	Ferrite Bead	QQR0582-001Z
L001	15µH	CELP059-150Z
L003	5.6µH	CELP059-5R6Z
# L01	Degaussing	CELD042-005J6
L102	.22µH	CELP041-R22
L104	68µH	CELP059-680Z
L131	27µH	CELP059-270Z
L161	68µH	CELP059-680Z
L162	22µH	CELP059-220Z
L301	15µH	CELP059-150Z
L381	39µH	CELP059-390Z
L581	-	CELC901-060J6
L701	4.7µH	CELP059-4R7Z
L703	8.2µH	CELP055-8R2Z
L709	10µH	CELP059-100Z
L941	-	CELC058-820Z
L942	-	-
# LF901	Line Filter	CELF013-001J5
# LF902	Line Filter	CELF011-001J6
T131	PIF	CELT001-209J3
T161	SIF	CELT003-109J3
T521	Horizontal Drive	CE40203-00CJ1
# T522 (1)	Horizontal Output	CJ28267-00AJ1
# T921	Switching	CETS047-001J3

For SAFETY use only equivalent replacement part.
(1) Focus and screen controls are part of T522.

CAPACITORS & ELECTROLYTICS

Item No.	Rating	Mfr. Part No.
C382	.001 +80% -20% 3kV	QCZ0121-102A
C402	2.2µF 10% 16V Tantalum	QEE61CK-225BZ
# C524	.0066 2.5% 1.4kV	QFZ0117-6601S
C525	.51 3% 200V	QFZ0119-514L
C602	.47µF 20% 50V NP	QEN61HM-474Z
# C902	.1 275VAC	-
	.1 250VAC	QFZ9040-104N
# C903, 04	.001 10% 250VAC	QCZ9031-102U
# C906	220µF 20% 200V	QETB2DM-227
# C907	.047 275VAC	-
	.047 250VAC	QFZ9040-473N
# C908, 09	.001 10% 250VAC	QCZ9031-102U
C921	.0022 10% 2kV	QCZ0122-222U
C931	.001 10% 2kV	QCZ0122-102U
C941	560pF 10% 2kV	QCZ0122-561A
# C942	100µF 10% 160V	QEZ0203-107
# C981	.001 10% 125VAC	QCZ9052-102A
# C982, 83	.01 20% 250VAC	-
	.01 20% 125VAC	QCZ9030-103U

For SAFETY use only equivalent replacement part.

MISCELLANEOUS

Item No.	Description	Mfr. Part No.	Notes
CF001	Trap	FTP47.25MF	47.25MHz
CF131	Trap	CE41505-001	4.5MHz
CF161	Filter	SFSH4.5MCB	4.5MHz
CF501	Resonator	CSB503F30-T2	503kHz
# F901	Fuse	QMF0007-5R0J1	5Amp, 125V, Fast Acting
IC751	Receiver	HC-337MN	Remote, HC-337MN
J001	Jack	CEMN065-001	Video Input
J002	Jack	CEMN065-002	Audio Input
# P900 (1)	Line Cord	QMPD070-200-JC	AC, Polarized
# P900 (2)	Line Cord	QMPD089-200-K2	AC, Polarized
# RY921	Relay	CESK028-001	Degaussing
S751	Switch	QSP1A11-C18Z	Menu
S752	Switch	QSP1A11-C18Z	Channel Down
S753	Switch	QSP1A11-C18Z	Channel Up
S754	Switch	QSP1A11-C18Z	Volume Down
S755	Switch	QSP1A11-C18Z	Volume Up
S756	Switch	QSP4H11-C16	Power
SF101	Filter	CE42589-201	SAW
# SK351	Socket	CE42554-001	CRT
# SP01	Speaker	CEBSS08P-01KJ2	3" Round, 8 Ohms, 2W
# TU001 (3)	Tuner	CEEK280-B02	UHF/VHF
# V01	CRT	A34JFQ90X(W)	-
	CRT	A34AGT13X	-
X301	Crystal	QAX0310-001Z	3.58MHz
X701	Resonator	CST8.00MTW	8MHz
	Magnet	CE42511-00A	Purity/Convergence
	PC Board	SFA-1008A-H2	Main
	Transmitter (1)	UR64EC1822A	Remote, RM-C540-1H
	Transmitter (2)	UR64EC1822B	Remote, RM-C540W-1H
	Wedge	CE42153-00AJ1	Yoke Positioning (3 Used)

For SAFETY use only equivalent replacement part.

(1) Used in model C-13810 only.

(2) Used in model C-13811 only.

(3) Contact TNI Electronics for replacement; order by part number on tuner.

CABINET PARTS

Item Mfr. Part No.

Model C-13810

# Cabinet Front	CM12478-A20-MH
# Cabinet Rear	CM12479-B03-MH
Knob Assembly	CM35832-001-H
Knob Assembly Holder	CM35834-B01-H
LED Lens	CM47861-A01-H
Power Knob	CM35831-003-H
Power Knob Spring	CM35235-003-H
Window Remote	CM47862-A01-H

Model C-13811

# Cabinet Front	CM12478-A21-MH
# Cabinet Rear	CM12479-B04-MH
Knob Assembly	CM35832-001-H
Knob Assembly Holder	CM35834-B01-H
LED Lens	CM47861-A01-H
Power Knob	CM35831-002-H
Power Knob Spring	CM35235-003-H
Window Remote	CM47862-A01-H

Remote Transmitter

Door (1)	UR64EC1822A
Door (2)	UR64EC1822B

For SAFETY use only equivalent replacement part.

(1) Used in model C-13810.

(2) Used in model C-13811.

CONTROLS & RESISTORS

Item No.	Function/Rating	Mfr. Part No.	NTE Part No.
# FR720	82 5% 1/4W Fusible	QRZ0054-820M	-
# R562	5620 1% 1/4W	QRV141F-5621AY	-
# R563	3740 1% 1/4W	QRV141F-3741AY	-
# R901	.47 10% 3W Wirewound	QRZ0122-R47	-
# R981	2.7M 1/2W	QRZ0111-275U	HW527
# TH901	5.1 Cold PTC	CEKP007-001	-
# VA901	Varistor	ERZV10V361CS	-

For SAFETY use only equivalent replacement part.



Created with pride by the employees
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J. Barker, N. Beck, B. Buchanan,
T. Clensy, G. Farrell, B. Fink,
M. Herkless, J. Kocha, F. Malek,
B. Medaris, R. Raus, B. Skinner