

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 ground 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 board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC to the receiver. Press the power button. Momentarily place a 24.7K ± 125 ohms 1/4W resistor across pin 1 and pin 3 of connector S1. 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 resistor across pins 1 and 3 of connector S1. Remove AC power and 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 SAMS Technical Publishing, LLC as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to SAMS Technical Publishing, LLC by the manufacturers of the specific type of replacement part listed.

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9850 E. 30th St.  
Indianapolis IN 46229  
www.samswebsite.com

Printed in the United States of America 5 4 3 2 1

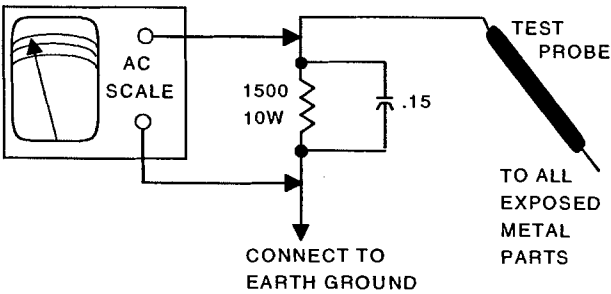
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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.



UPC  
HERE

PHOTOFACT<sup>®</sup> Technical Service Data  
SILVER

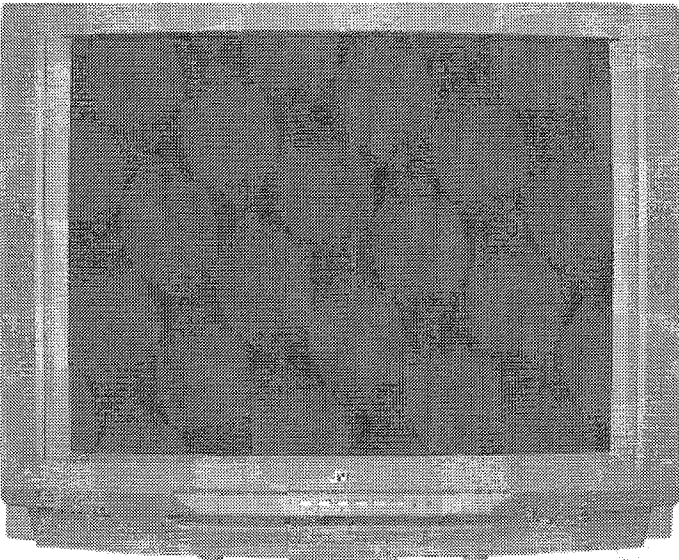
SET 4829

MODEL AV-36360/M

JVC

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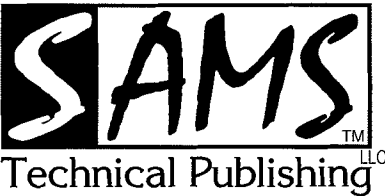
Representative Model

Essential coverage  
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

Coverage includes these additional models:

Models	Models
AV-36S33/M	AV-36320/R
AV-36S33/R	AV-36330/M
AV-36S36/M	AV-36330/R
AV-36S36/R	AV-36360/R
AV-36320/M	



JANUARY 2004 SET 4829

TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	3.0V	4.0V	4.0V
(2) NC	0V	0V	0V
(3) ADRS	4.8V	4.8V	4.8V
(4) SCL	4.3V	4.3V	4.3V
(5) SDA	4.4V	4.4V	4.4V
(6) MB	4.8V	4.8V	4.8V
(7) BP	4.8V	4.8V	4.8V
(8) NC	0V	0V	0V
(9) BT	32.0V	32.0V	32.0V
(10) NC	0V	0V	0V
(11) IF	0V	0V	0V

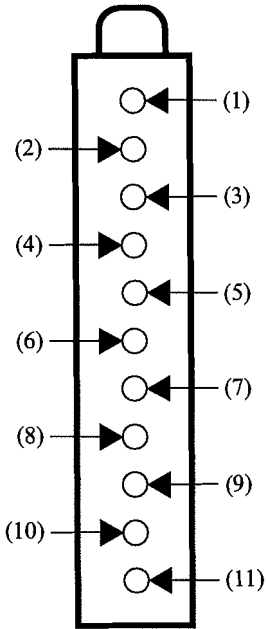
NOTE: VHF Low Band voltages taken on channel 2.  
VHF High Band voltages taken on channel 7.  
UHF Band voltages taken on channel 14.

PIP TUNER VOLTAGE CHART

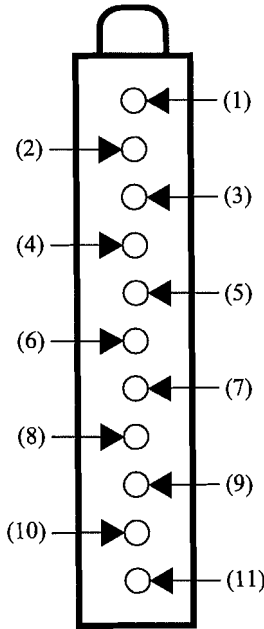
Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.2V	2.1V	1.9V
(2) BT	0V	0V	0V
(3) ADRS	2.4V	2.4V	2.4V
(4) SCL	4.3V	4.3V	4.3V
(5) SDA	4.4V	4.4V	4.4V
(6) MB	4.8V	4.8V	4.8V
(7) BP	4.8V	4.8V	4.8V
(8) LOCK	0V	0V	0V
(9) 30V	32.0V	32.0V	32.0V
(10) NC	0V	0V	0V
(11) IF	0V	0V	0V

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

MAIN TUNER TERMINAL GUIDE



PIP TUNER TERMINAL GUIDE



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 cathode of D931 and ground. With AC line set to 120VAC, voltage should read 134V± 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 29kV to 32kV.

PURITY & CONVERGENCE

Purity and convergence are factory set and the yoke is bonded to CRT.

SERVICE MENU

To enter the service menu, press the sleep timer key, and while the message “Sleep Timer 0 Min” is displayed on the screen, press the display and video status buttons together. The service menu is displayed as shown below. While in the service menu, use the channel up and down buttons to select and use the volume left and right buttons to adjust the data value. To return to the previous screen press the exit button. To exit the service menu, press the exit button.

Service Menu Chart

- |                          |                  |
|--------------------------|------------------|
| 1. V / C (S)             | 2. DEF (D)       |
| 3. SOUND (A)             | 4. OTHERS (F)    |
| 5. PIP (PIP)             | 6. 3L Y/C (LYC)  |
| 7. LOW LIGHT             | 8. HIGH LIGHT    |
| 9. RF AFC                | 10. VCO          |
| 11. I <sup>2</sup> C BUS | 12. SYSTEM (SYS) |

NOTE: If the data value on the screen is “- - -”, it is not to be adjusted.

SYSTEM (SYS) MODE

Select System (SYS) Mode from the service menu.

System (SYS) Mode Menu Chart (Do Not Adjust)

No.	Adjustment	Range	Initial Value	On set Value
SYS01	VIDEO IN	000 ~ 004	003	003
SYS02	PIP	000 / 001	001	001
SYS03	3D Y/C	000 / 001	000	000
SYS04	Y CV	000 / 001	000	000
SYS05	CCD P CHK	000 / 001	001	001
SYS06	PURITY	000 / 001	000	000
SYS07	VM	000 / 001	000	000
SYS08	NOISE CR	000 / 001	000	000
SYS09	CLR TEMP	000 / 001	001	001
SYS10	THEATER	000 / 001	001	001
SYS11	THEATER PRO	000 / 001	001	001
SYS12	BBE	000 / 001	000	000
SYS13	HYP SURR	000 / 001	001	001
SYS14	16:9 MD	000 / 001	000	000
SYS15	HYP SCAN	000 / 001	001	001
SYS16	EZ SURF	000 / 001	001	001
SYS17	ID DISP	000 / 001	001	001
SYS18	COMPULINK	000 / 001	000	000
SYS19	CCD	000 / 001	001	001
SYS20	VCHIP	000 / 001	001	001
SYS21	VCHIP CA	000 / 001	001	001
SYS22	JVC LOGO	000 / 001	001	001
SYS23	CMP IN	000 / 001	001	001
SYS24	CXA1875	000 / 001	000	000

V / C (S) MODE

Select V / C (S) Mode from the service menu.

V / C (S) Mode Menu Chart

No.	Adjustment	Range	Initial Value	On set Value
S01	BRIGHT	000 ~ 127	064	064
S02	PICTURE	000 ~ 127	055	090
S03	COLOR	000 ~ 127	055	053
S04	TINT	000 ~ 127	064	074
S05	DETAIL	000 ~ 063	037	040
S06	BRIGHT + -	-128 ~ +127	---	---
S07	PICTURE + -	-128 ~ +127	---	---
S08	COLOR + -	-128 ~ +127	---	---
S09	TINT + -	-128 ~ +127	---	---
S10	DETAIL + -	-128 ~ +127	---	---
S11	R CUTOFF	000 ~ 255	030	040
S12	G CUTOFF	000 ~ 255	030	085
S13	B CUTOFF	000 ~ 255	030	099
S14	R DRIVE	000 ~ 127	064	070
S15	B DRIVE	000 ~ 127	064	068
S16	R CUT + -	-128 ~ +127	---	---
S17	G CUT + -	-128 ~ +127	---	---
S18	B CUT + -	-128 ~ +127	---	---
S19	R DRV + -	-128 ~ +127	---	---
S20	B DRV + -	-128 ~ +127	---	---
S21	NTSC MAT	000 ~ 003	003	003
S22	BLACK ST	000 ~ 003	001	003
S23	DC REST	000 / 001	001	001
S24	DC RSW	000 / 001	001	001
S25	ASY SHRP	000 ~ 007	005	004
S26	BPF F0	000 / 001	000	000
S27	KILR OFF	000 / 001	000	000
S28	KILR SEN	000 / 001	001	001
S29	RGB MUTE	000 / 001	000	000
S30	BLUE B	000 / 001	000	000
S31	VIDEO SW	000 ~ 003	003	003
S32	CMP ABCL	000 / 001	000	000
S33	OSD ABL	000 / 001	000	000
S34	OSD CONT	000 ~ 063	010	009
S35	SUB CONT	000 ~ 015	008	008
S36	ABL GAIN	000 ~ 003	000	000
S37	ABL PNT	000 ~ 003	003	003
S38	Y GAMMA	000 ~ 003	001	001
S39	Y MUTE	000 / 001	000	000
S40	SVM GAIN	000 ~ 003	000	000
S41	SVM PH	000 ~ 003	000	000
S42	WPL	000 / 001	000	000
S43	COL GMM	000 / 001	000	000
S44	V1 GAIN	000 ~ 007	004	004
S45	AGC ADJ	000 ~ 127	063	080
S46	VM OFF	-128 ~ +127	±000	±000
S47	APC CLK	000 / 001	001	001

RF AGC

Tune in a picture. Decrease the value of AGC ADJ (S45) until snow appears in the picture. Increase the value of AGC ADJ (S45) until snow disappears from the picture. Check all channels for proper picture and readjust if necessary.

MISCELLANEOUS ADJUSTMENTS continued

DEF (D) MODE

Select DEF (D) Mode from the service menu.

DEF (D) Mode Menu Chart

No.	Adjustment	Range	Initial Value	On set Value
D01	V FREQ	000 ~ 003	000	000
D02	AFC GAIN	000 ~ 003	000	000
D03	H POSI	000 ~ 031	016	010
D04	H POSI + -	-128 ~ +127	---	---
D05	V PHASE	000 ~ 007	000	000
D06	V PH + -	-128 ~ +127	---	---
D07	V SIZE	000 ~ 127	082	044
D08	V SIZE + -	-128 ~ +127	---	---
D09	V CENTER	000 ~ 063	032	032
D10	V CENT + -	-128 ~ +127	---	---
D11	V S CORR	000 ~ 015	005	003
D12	V S CO + -	-128 ~ +127	---	---
D13	V LIN	000 ~ 015	013	011
D14	V LIN + -	-128 ~ +127	---	---
D15	H SIZE	000 ~ 063	027	032
D16	H SIZE + -	-128 ~ +127	---	---
D17	WVMT TOP	000 ~ 003	000	000
D18	WVMT BTM	000 ~ 003	000	000
D19	EWCR TOP	000 ~ 031	013	016
D20	EWCR T + -	-128 ~ +127	---	---
D21	EWCR BTM	000 ~ 031	014	016
D22	EWCR B + -	-128 ~ +127	---	---
D23	EW PARA	000 ~ 063	031	026
D24	EW PARA + -	-128 ~ +127	---	---
D25	V EHT	000 ~ 007	000	000
D26	V EHT + -	-128 ~ +127	---	---
D27	H EHT	000 ~ 007	000	000
D28	H EHT + -	-128 ~ +127	---	---
D29	TRAPEZ	000 ~ 063	035	034
D30	TRAPEZ + -	-128 ~ +127	---	---
D31	V AGC	000 / 001	000	000
D32	BLANK SW	000 / 001	000	000
D33	VRMP BI	000 / 001	000	000

Vertical Phase / Vertical Size / Vertical Center

Tune in a crosshatch pattern. Select V PHASE (D05) set value to 0. Adjust V SIZE (D07) for a slightly under-scanned picture. Adjust V CENTER (D09) and SW401 to center the picture. Adjust V SIZE + - (D07) for a 92% of vertical screen size.

Horizontal Position

Tune in a crosshatch pattern. Adjust the H POSI (D03) to center the picture.

SOUND (A) MODE

Select Sound (A) Mode from the service menu. Receive a RF signal.

Sound (A) Mode Menu Chart

No.	Adjustment	Range	Initial Value	On set Value
A01	IN LEVEL	000 ~ 015	010	010
A02	LOW SEP	000 ~ 063	032	050
A03	HI SEP	000 ~ 063	032	021
A04	SAPC	000 / 001	000	000
A05	BBE BASS	-128 ~ +127	±000	±000
A06	BBE TRE	-128 ~ +127	-004	±000

MTS Input Level

Select IN LEVEL (A01) and verify is set at the initial setting value.

MTS Separation

Connect an MTS TV stereo generator to the antenna input. Select pilot, 300Hz audio frequency, and left modulating signal on the generator. Connect an oscilloscope to pin 1 of connector MPX and adjust to display one cycle of the 300Hz signal. Connect oscilloscope to pin 2 of connector MPX. Adjust LOW SEP (A02) for minimum amplitude of the waveform. Select 8kHz audio frequency on the generator. Adjust HI SEP (A03) for minimum amplitude of the waveform.

PIP (PIP) MODE

Select PIP (PIP) Mode from the service menu.

PIP Mode (PIP) Menu Chart (Do Not Adjust)

No.	Adjustment	Range	Initial Value	On set Value
PIP01	BRIGHT	000 ~ 015	000	000
PIP02	PICTURE	000 ~ 075	030	030
PIP03	TINT	000 ~ 063	042	042
PIP04	COLOR	000 ~ 015	006	006
PIP05	R CUTOFF	000 ~ 015	000	000
PIP06	G CUTOFF	000 ~ 015	000	000
PIP07	B CUTOFF	000 ~ 015	000	000
PIP08	R DRIVE	000 ~ 255	063	063
PIP09	G DRIVE	000 ~ 255	065	065
PIP10	B DRIVE	000 ~ 255	065	065
PIP11	L POSI	000 ~ 255	022	022
PIP12	R POSI	000 ~ 255	015	015
PIP13	UPR POSI	000 ~ 127	012	012
PIP14	LWR POSI	000 ~ 127	011	011
PIP15	PICT LCK	000 / 001	001	001
PIP16	SELDEL	000 ~ 015	000	000
PIP17	AGCFIX	000 / 001	001	001
PIP18	AGCADST	000 / 001	000	000
PIP19	AGC	000 ~ 015	007	007
PIP20	BLKINVB	000 / 001	000	000
PIP21	BLKINVR	000 / 001	000	000
PIP22	VSPDEL	000 ~ 031	000	000
PIP23	VSPISQ	000 / 001	001	001
PIP24	RGBIN	000 / 001	000	000
PIP25	FRSEL	000 / 001	001	001
PIP26	OUTFOR	000 / 001	000	000
PIP27	UVPOLAR	000 / 001	000	000
PIP28	MAT	000 / 001	001	001
PIP29	YCOR	000 / 001	001	001
PIP30	XFREQF	000 / 001	001	001
PIP31	WTCHDG	000 / 001	001	001
PIP32	COLON	000 / 001	000	000
PIP33	ACQNEW	000 / 001	000	000
PIP34	DSTDET	000 / 001	001	001
PIP35	CRIBEOK	000 / 001	000	000
PIP36	FCBEOK	000 / 001	000	000
PIP37	NOCRID	000 / 001	000	000
PIP38	NONSED	000 / 001	000	000
PIP39	PIP ADJ	000 ~ 015	005	005
PIP40	BRI EXT	-128 ~ +127	±000	±000
PIP41	PCT EXT	-128 ~ +127	±000	±000
PIP42	TNT EXT	-128 ~ +127	±000	±000
PIP43	COR EXT	-128 ~ +127	±000	±000
PIP44	R-D EXT	-128 ~ +127	±000	±000
PIP45	G-D EXT	-128 ~ +127	±000	±000
PIP46	B-D EXT	-128 ~ +127	±000	±000
PIP47	BRT COMP	-128 ~ +127	±000	±000
PIP48	PCT COMP	-128 ~ +127	±000	±000
PIP49	TNT COMP	000 ~ 063	040	040
PIP50	COR COMP	000 ~ 015	005	005
PIP51	R-D COMP	-128 ~ +127	±000	±000
PIP52	G-D COMP	-128 ~ +127	±000	±000
PIP53	B-D COMP	-128 ~ +127	±000	±000

3L Y / C (LYC) MODE

Select 3L Y / C (LYC) Mode from the service menu.

3L Y / C (LYC) Mode Menu Chart (Do Not Adjust)

No.	Adjustment	Range	Initial Value	On set Value
LYC01	MODE	000 ~ 007	004	004
LYC02	VENH	000 ~ 007	001	001
LYC03	PDSOFF	000 / 001	000	000
LYC04	CB	000 / 001	000	000
LYC05	VNUR	000 ~ 015	002	002
LYC06	GSEL0	000 / 001	000	000
LYC07	GSEL1	000 / 001	001	001
LYC08	COR	000 ~ 003	000	000
LYC09	TRAP	000 / 001	001	001
LYC10	CHTRAP	000 / 001	000	000
LYC11	CBPF	000 / 001	000	000
LYC12	ENHOFF	000 / 001	000	000

LOW LIGHT MODE

Select Low Light from service menu.

Low Light Mode Menu Chart

Adjustment	Range	Initial Value	On set Value
BRIGHT	0 ~ 127	064	064
R CUTOFF	0 ~ 255	030	040
G CUTOFF	0 ~ 255	030	085
B CUTOFF	0 ~ 255	030	099

NOTE: While in the Low Light Mode, adjustments are performed using the following buttons on the remote transmitter:

- 1 - Horizontal line.

2 - Restores full picture.

3 – Exit.
- 4 - Increase red cutoff.

5 - Increase green cutoff.

6 - Increase blue cutoff.
- 7 - Decrease red cutoff.

8 - Decrease green cutoff.

9 - Decrease blue cutoff.

White Balance (Low Light Mode Adjustment)

Tune in a monoscope signal and set Bright, R Cutoff, G Cutoff, and B Cutoff to initial value. Set screen to minimum and display horizontal line. Increase screen until line of one color becomes visible. Adjust the other two cutoffs for a white line. Restore full picture.

HIGH LIGHT MODE

Select High Light from service menu.

High Light Menu Chart

Adjustment	Range	Initial Value	On set Value
R DRIVE	0 ~ 127	064	070
B DRIVE	0 ~ 127	064	068

NOTE: While in the High Light Mode, adjustments are performed using the following buttons on the remote transmitter:

- 1 - Horizontal line.

2 - Restores full picture.

3 – Exit.
- 4 - Increase red drive.

6 - Increase blue drive.
- 7 - Decrease red drive.

9 - Decrease blue drive.

White Balance (High Light Mode Adjustment)

Tune in a monoscope signal. Set G Drive and B Drive to initial value. Adjust G Drive and B Drive for best white screen.

OTHERS (F) MODE

Select Others (F) Mode from the service menu.

Others (F) Mode Menu Chart (Do Not Adjust)

No.	Adjustment	Range	Initial Value	On set Value
F01	OSD POSI	000 ~ 063	050	050
F02	OSD FREQ	000 ~ 127	090	090
F03	CCD POSI	000 ~ 063	040	040
F04	CCD FREQ	000 ~ 127	090	090
F05	OSD CONT	000 ~ 063	008	008
F06	PUR WBCK	000 / 001	000	000
F07	PUR CONT	000 ~ 063	008	008
F08	SN TYPE.	000 ~ 002	000	000
F09	YCSN TM	000 ~ 255	005	005
F10	YCSN E	000 ~ 255	005	005
F11	YCSN F	000 ~ 255	016	016
F12	YCSN G	000 ~ 063	032	032
F13	VNR CHK	000 ~ 255	003	003
F14	VCSN TM	000 ~ 255	005	005
F15	VCSN 1	000 ~ 063	000	000
F16	VCSN 2	000 ~ 063	010	010
F17	VCSN 3	000 ~ 063	020	020
F18	VCSN STP	000 ~ 255	002	002
F19	VN DAT A	-128 ~ +127	+008	+008
F20	VM DAT B	-128 ~ +127	-004	-004
F21	VM DAT C	-128 ~ +127	-010	-010
F22	VM DAT D	-128 ~ +127	-016	-016
F23	VM DAT E	000 / 001	000	000
F24	VMOFFTY	000 ~ 002	000	000
F25	YC VMOFF	000 ~ 255	255	255
F26	EZSF TM	000 ~ 255	040	040
F27	XDSID TM	000 ~ 255	015	015
F28	FM TRAP	000 / 001	001	001

RF AFC MODE

Select RF AFC from the service menu.

RF AFC Mode Menu Chart

Adjustment	Range	Initial Value	On-set Value
RF AFC	On / Off	On	On, Do not adjust.
Fine	-77 ~ +77	±00	±00, Do not adjust.

I<sup>2</sup>C BUS MODE

Select I<sup>2</sup>C Bus from the service menu.

I<sup>2</sup>C Bus Mode Menu Chart

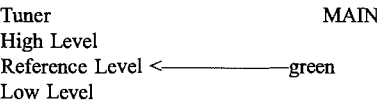
Adjustment	Range	Initial Value	On-set Value
I <sup>2</sup> C BUS	On / Off	On	On, Fixed On. Do not adjust.

MISCELLANEOUS ADJUSTMENTS continued

MAIN VCO MODE

Select VCO from service menu.

Main VCO Mode Menu Chart



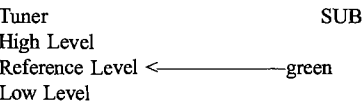
SYNC: YES

Tune in an NTSC signal without offset frequency. Push Menu button, and select the VCO mode. Adjust T111 and confirm that High Level and Low Level turns green. Adjust T111 until Reference Level turns green and "SYNC: YES" appears on screen.

SUB VCO MODE

Select VCO from service menu.

Sub VCO Mode Menu Chart



SYNC: YES

Tune in an NTSC signal without offset frequency. Push menu button, and select the VCO mode. Adjust T4111 and confirm that High Level and Low Level turns green. Adjust T4111 until Reference Level turns green and "SYNC: YES" appears on the screen.

Important Parts Information

- Parts not listed in the parts list are commonly available at your local electronics parts retailer.
- 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

Participating Vendors

Information on test equipment and replacement parts is listed in these pages for the following participating vendors.

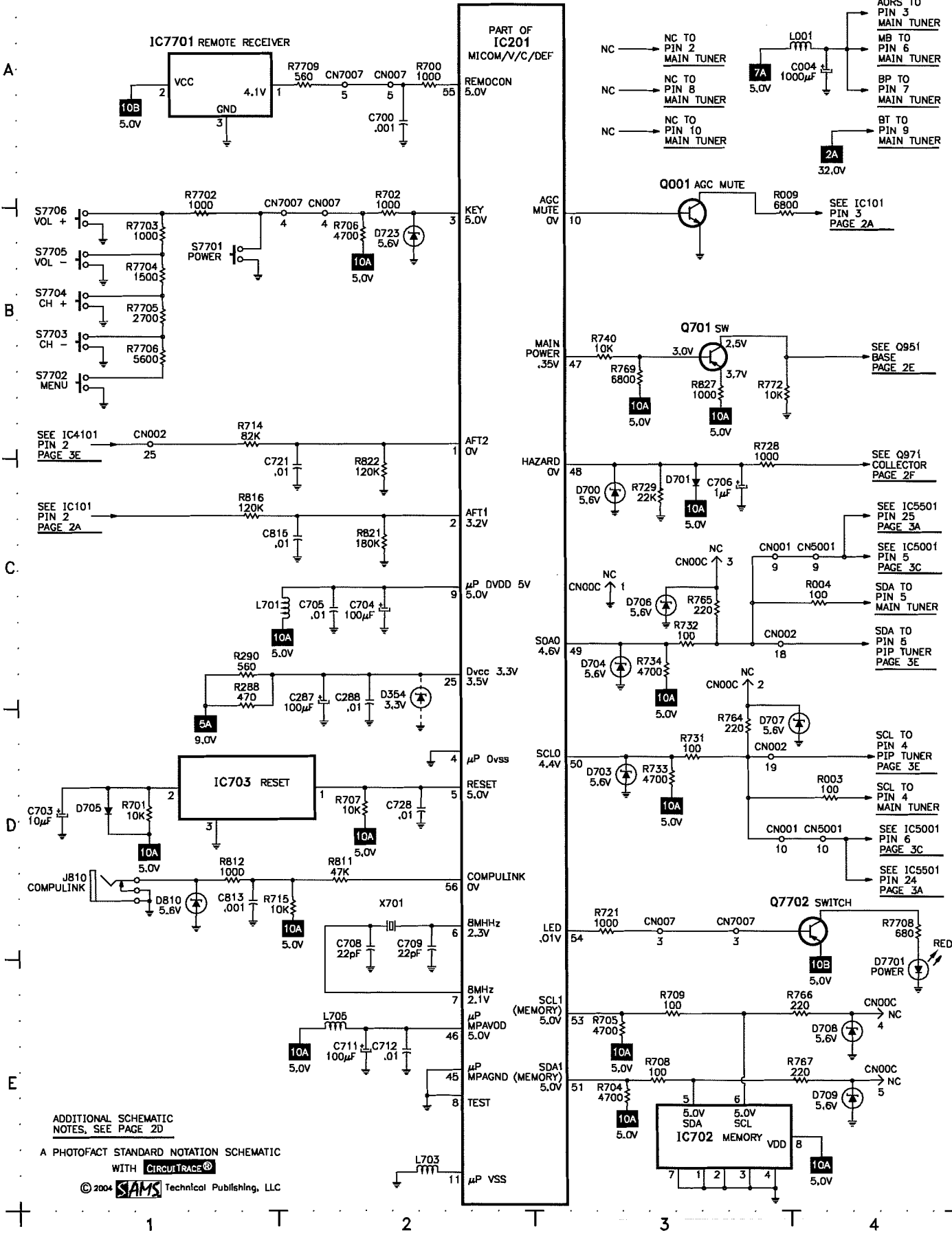
- NTE Electronics, Inc. (NTE)
- Sencore, Inc.

TEST EQUIPMENT

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

H SYSTEM CONTROL SCHEMATIC

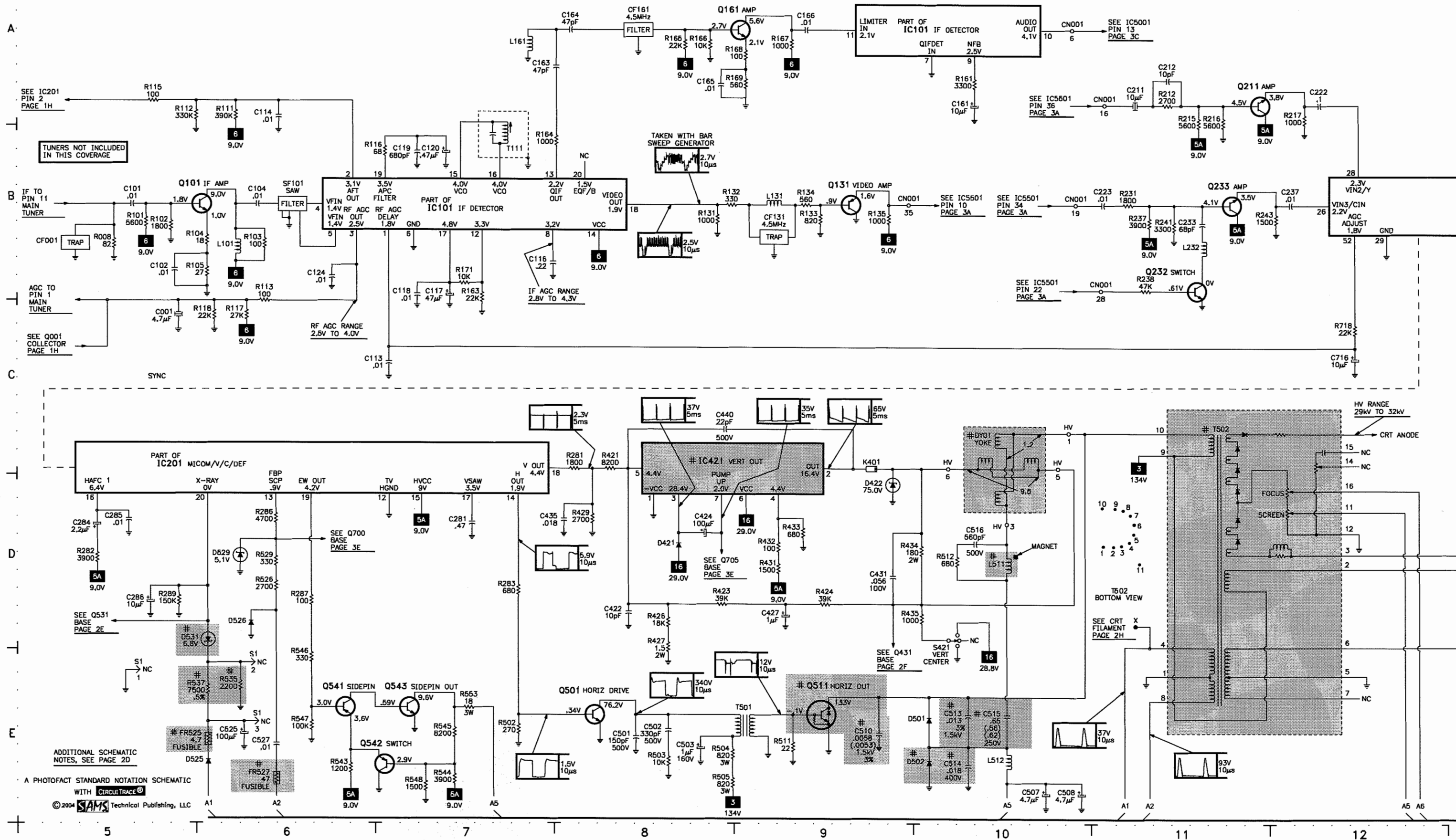


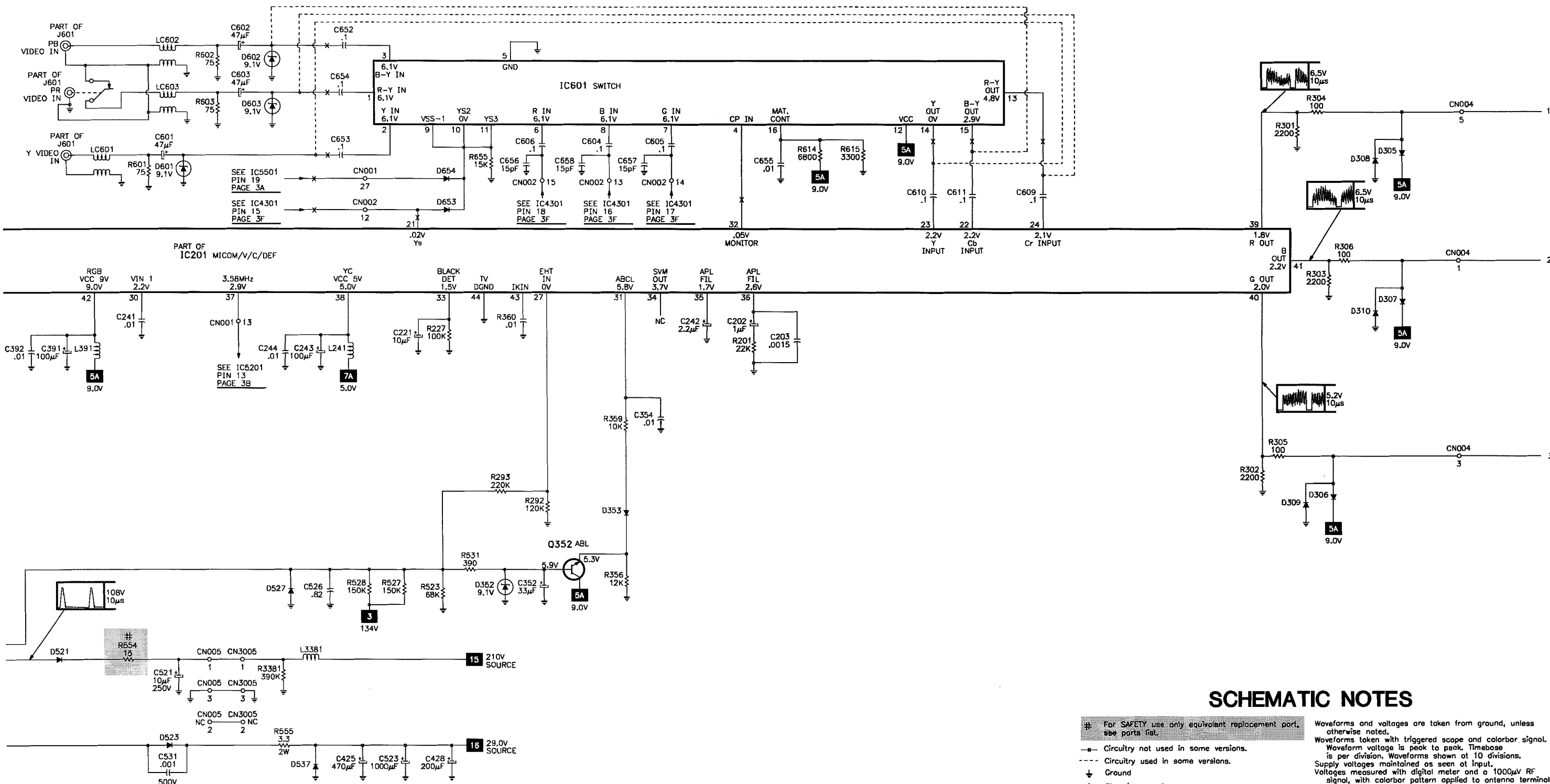
JVC MODEL AV-36360/M

A

B

TELEVISION 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 CircuitTrace® Voltage source tie point.
- A Cabling: Heavy lines reduce use of multiple lines.

Waveforms and voltages are taken from ground, unless otherwise noted.

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 1000 $\mu$ V 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 less than 1W, 5% or greater unless noted. Value in ( ) used in some versions. Measurements with switching as shown unless noted. Rated voltage shown on zener diodes.

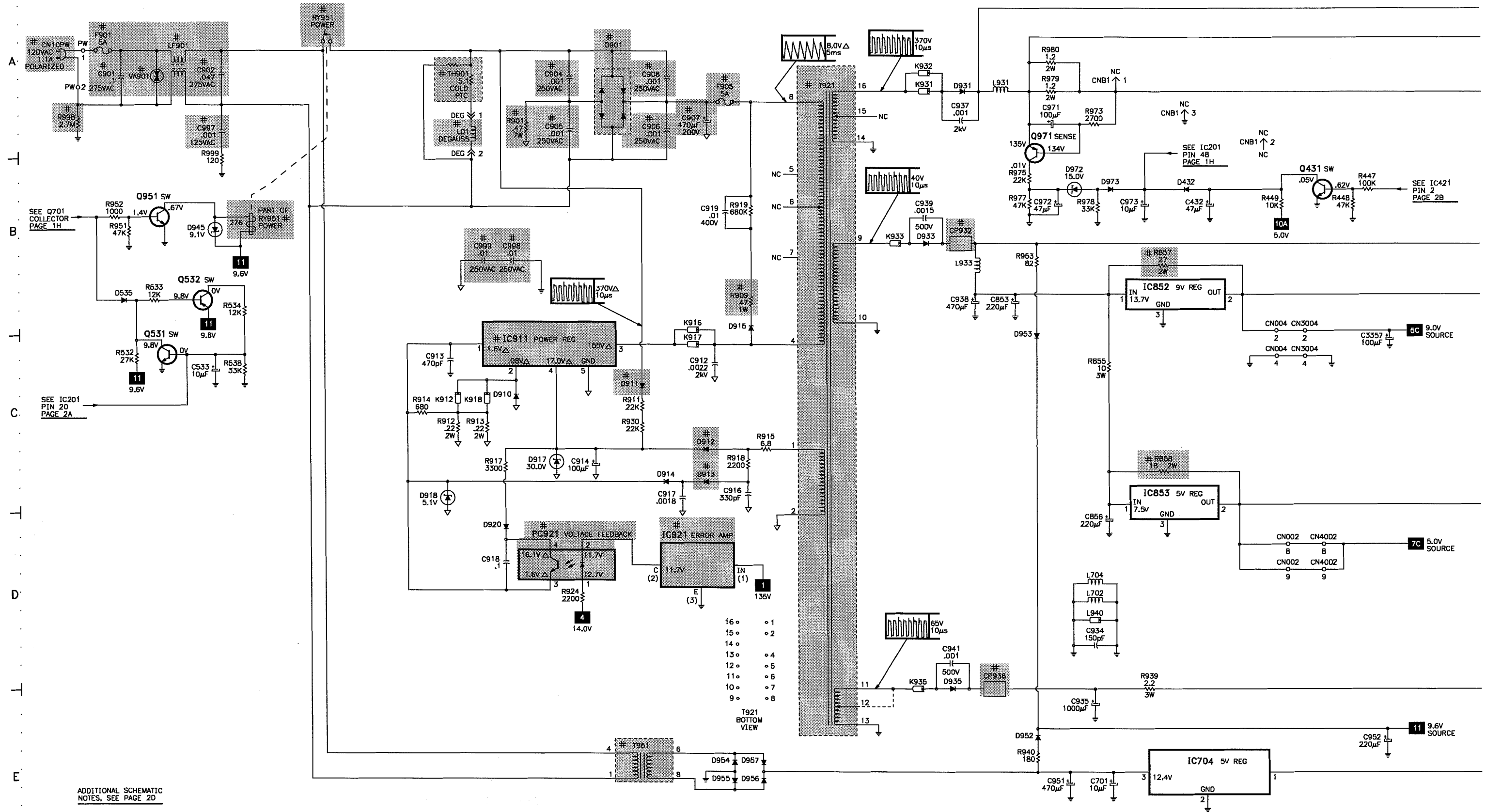


E

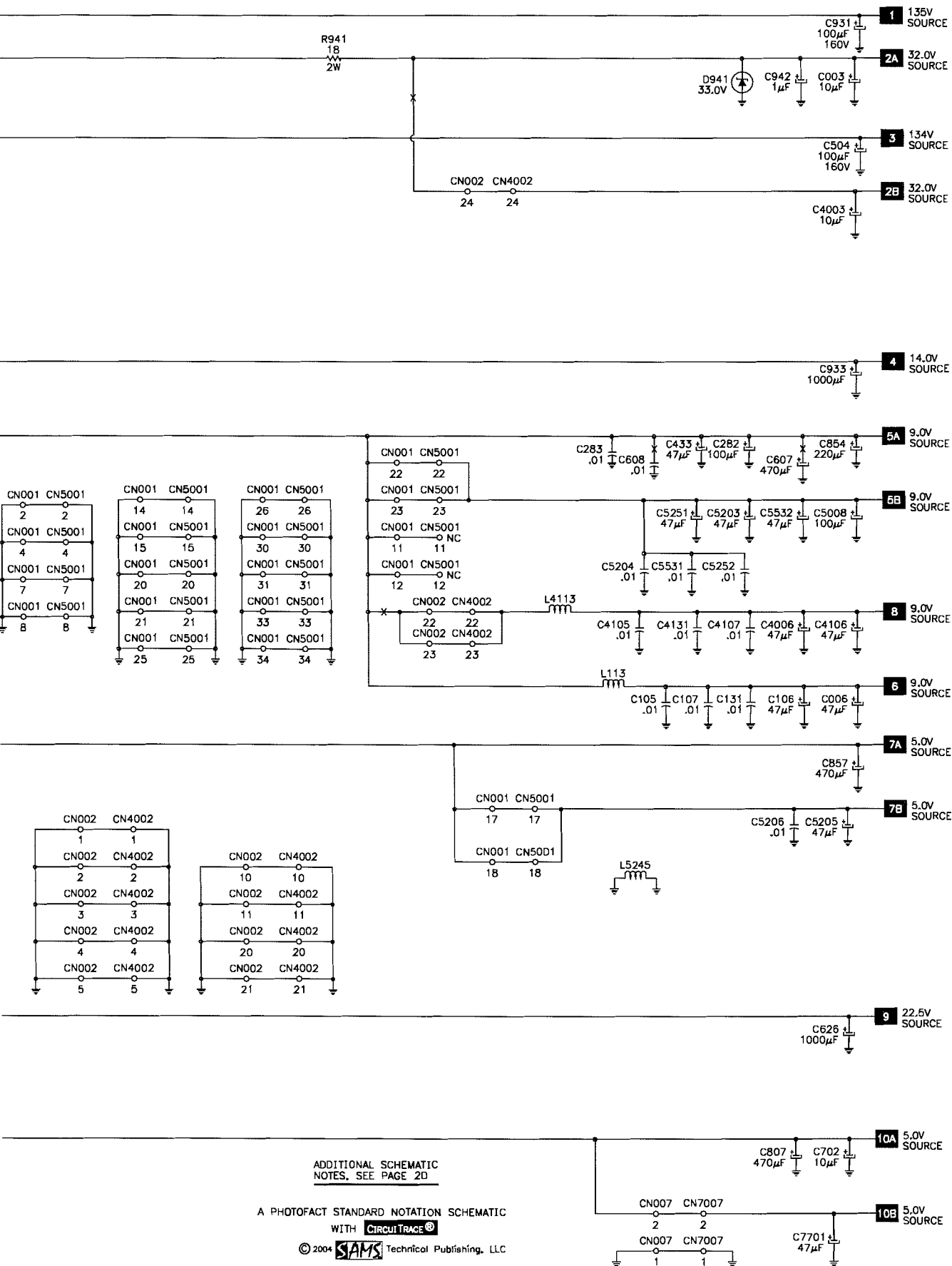
△ TAKEN FROM COMMON TIE POINT ↓

## POWER SUPPLY SCHEMATIC

F



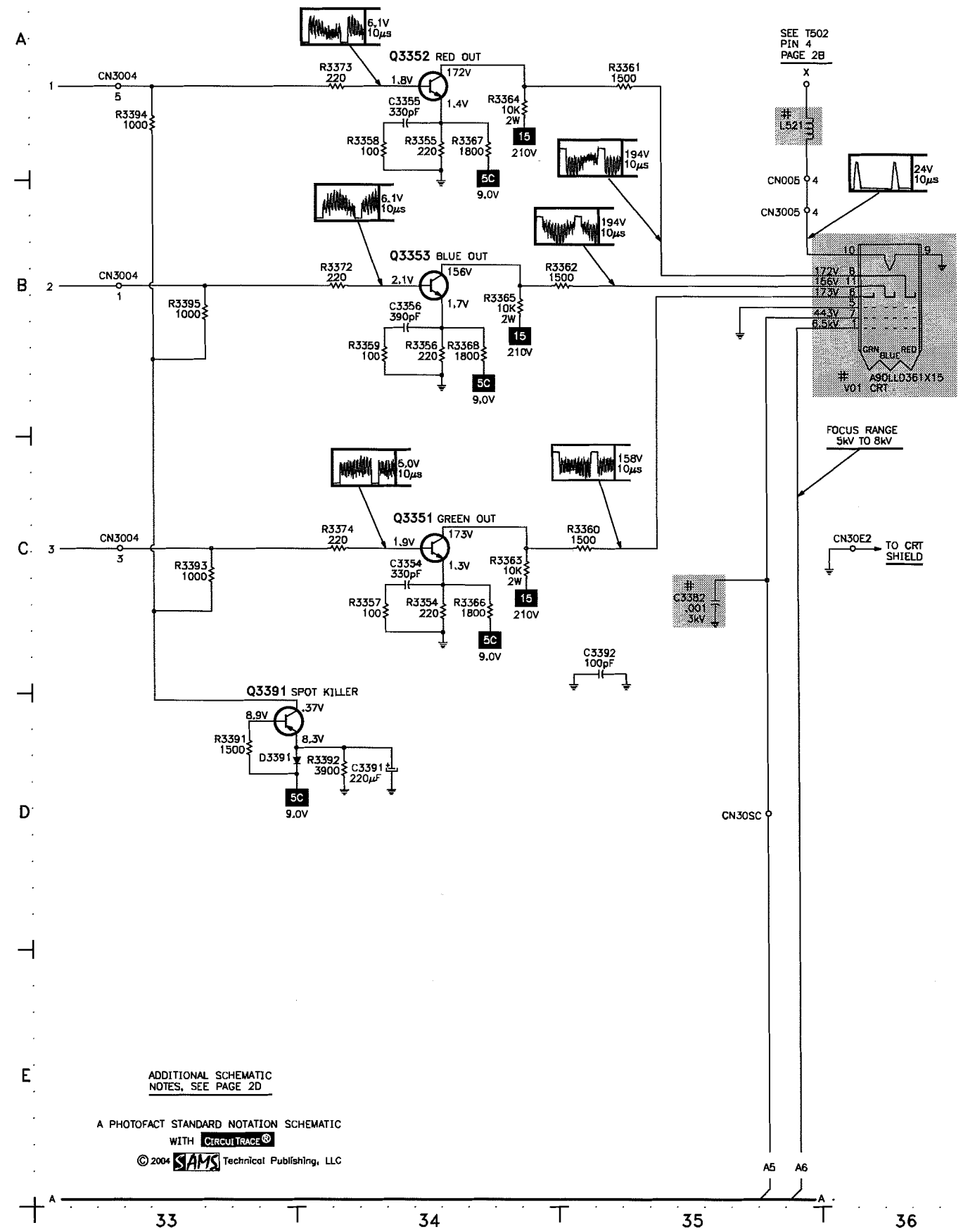
# G POWER SUPPLY SCHEMATIC continued



ADDITIONAL SCHEMATIC  
NOTES, SEE PAGE 2D

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITRACE**  
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# H CRT SCHEMATIC



ADDITIONAL SCHEMATIC  
NOTES, SEE PAGE 2D

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITRACE**  
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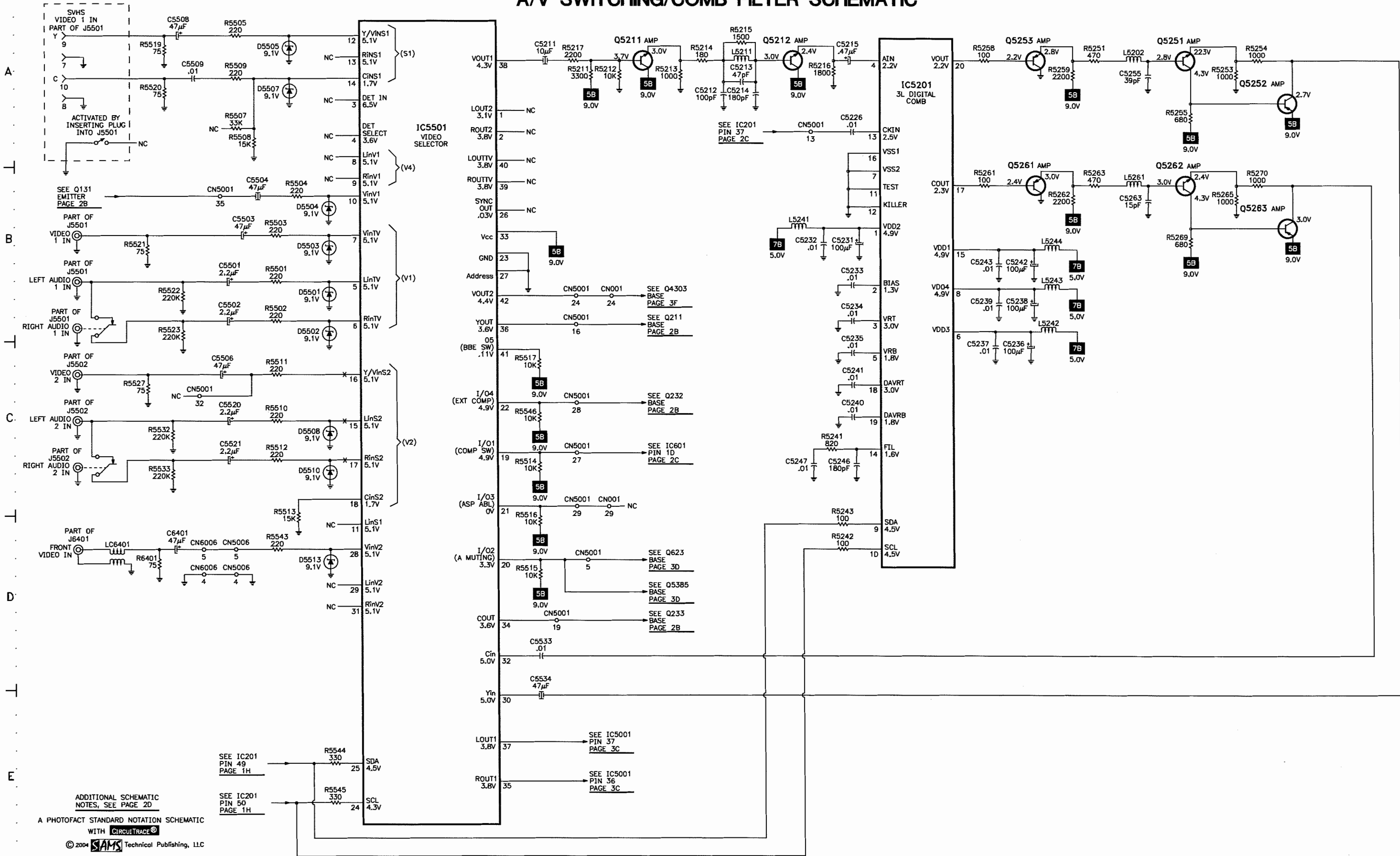
JVC  
MODEL AV-36360/M



A

B

A/V SWITCHING/COMB FILTER SCHEMATIC



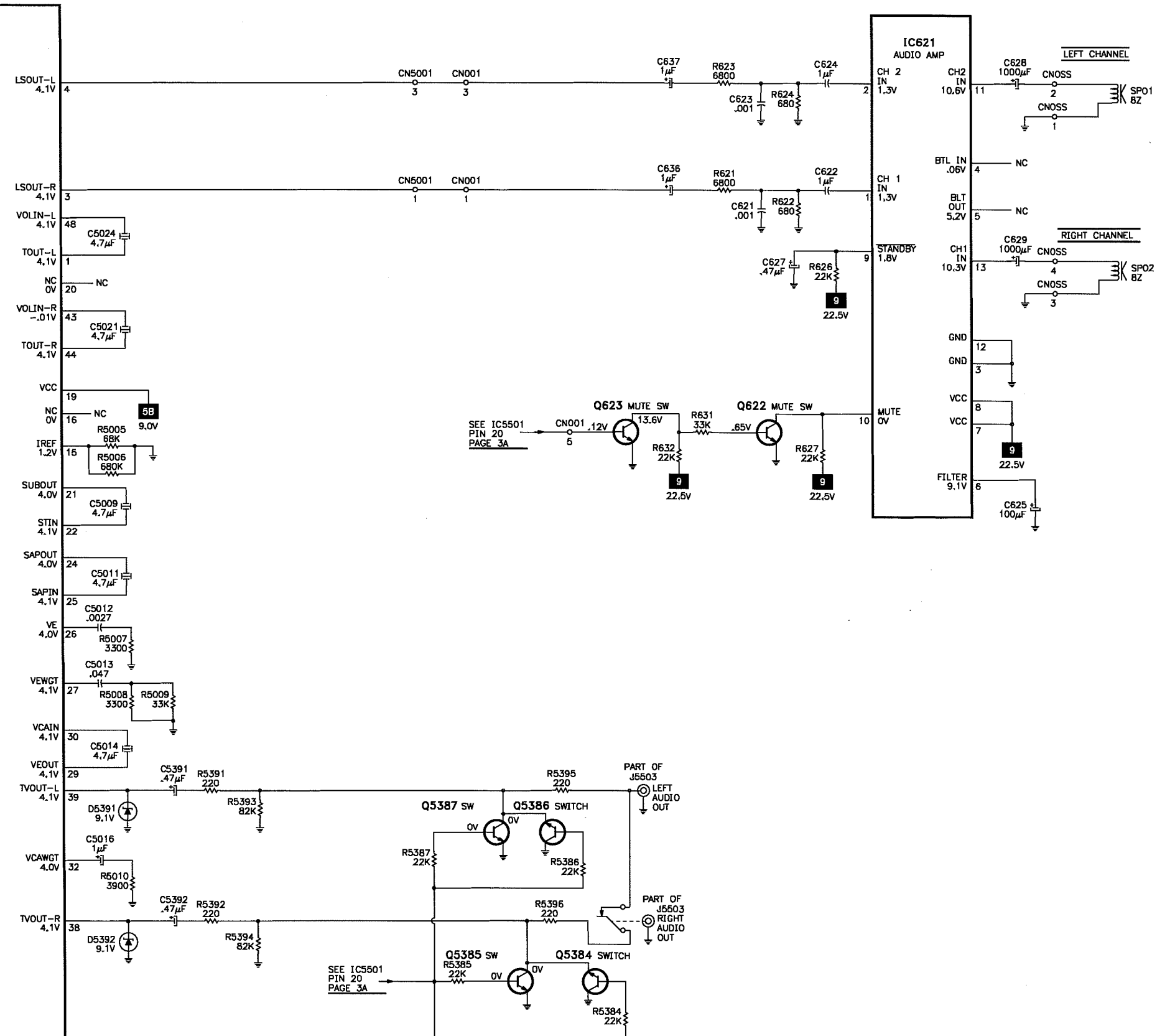
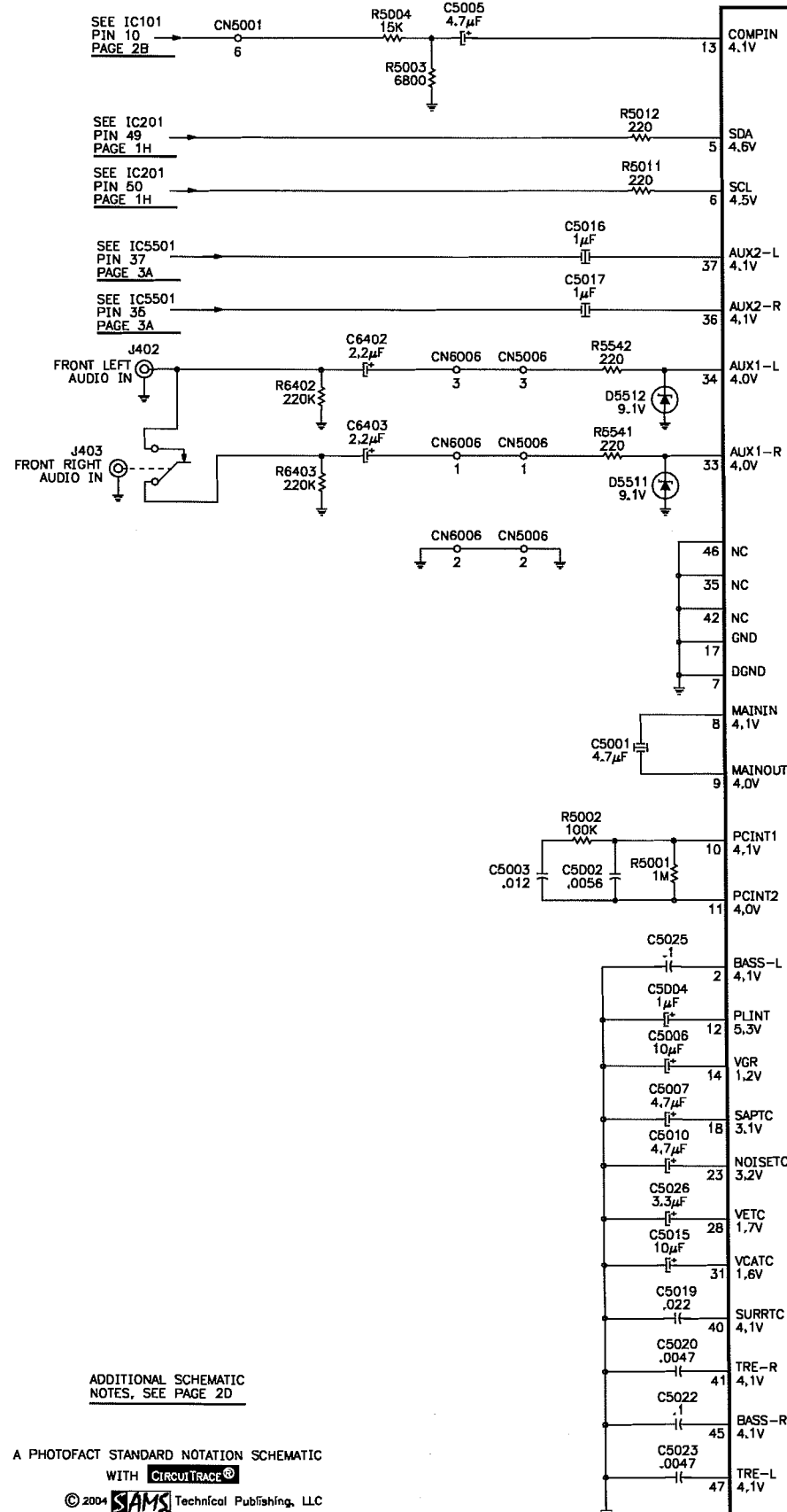
ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2D

A PHOTOFAC STANDARD NOTATION SCHEMATIC

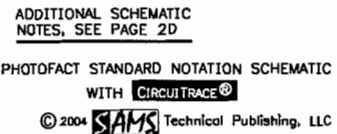
WITH CIRCUITRADE

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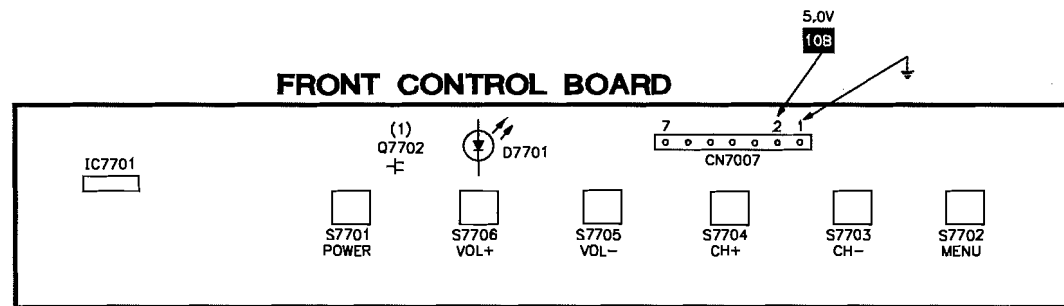
# AUDIO SCHEMATIC



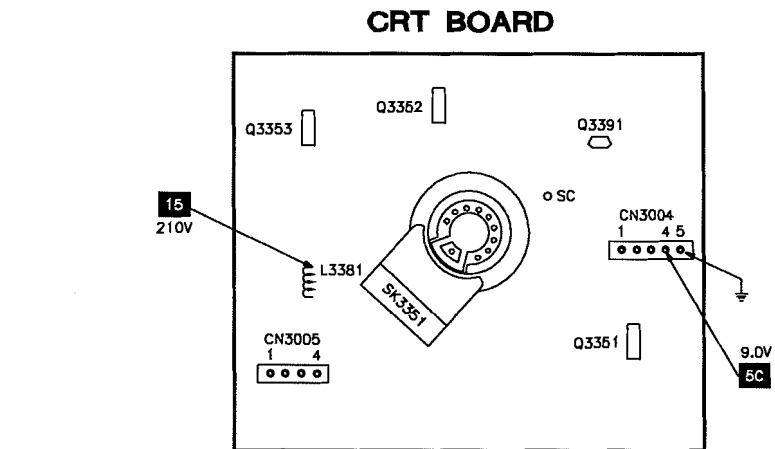
## F



**MODEL AV-36360/M**

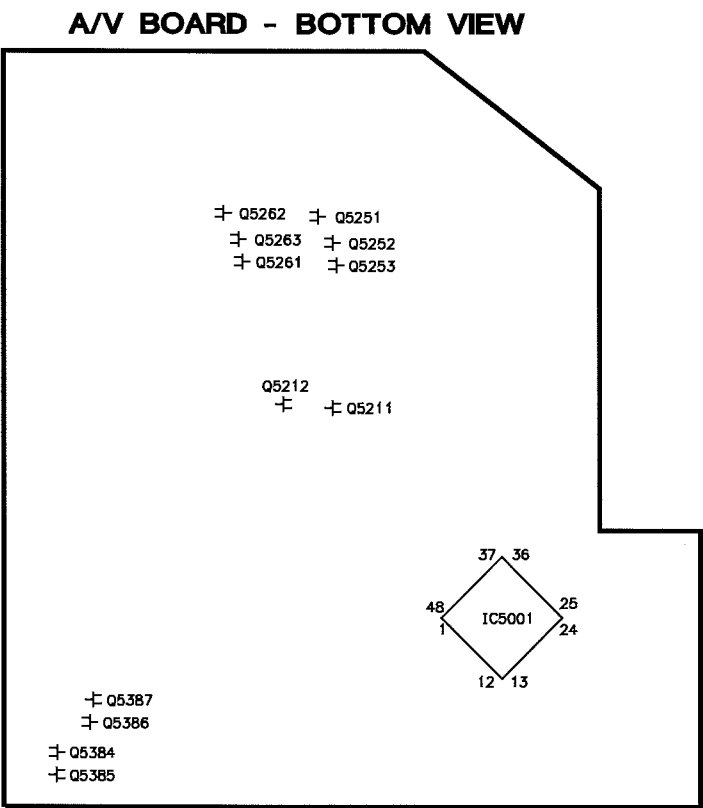
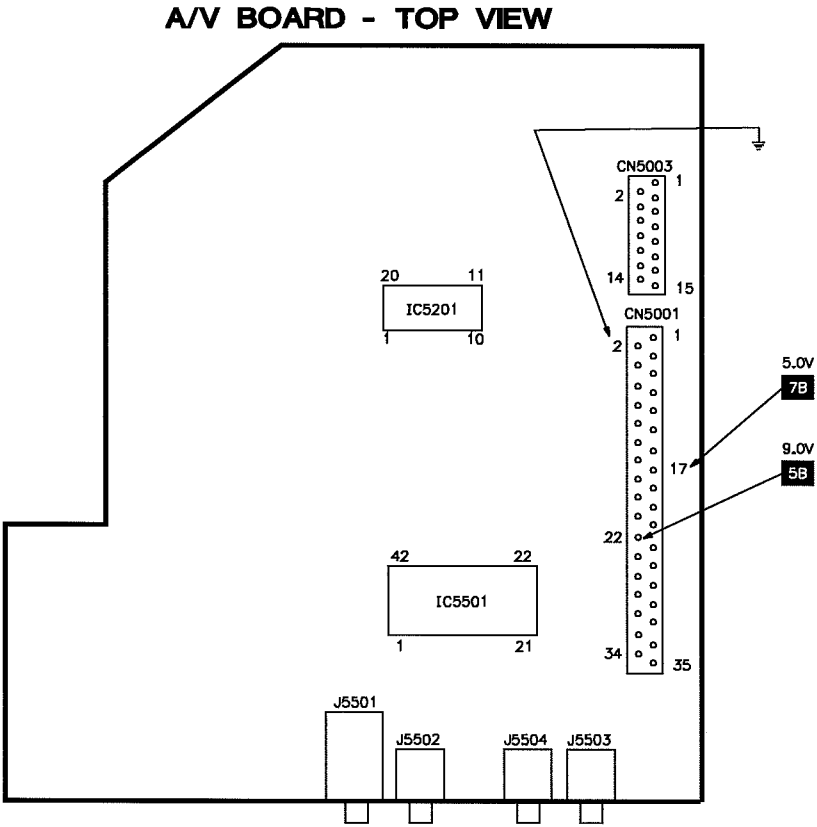


## MAIN BOARD



The schematic diagram illustrates the internal components of the TU4001 PIP Tuner. The main block is the TU4001 PIP Tuner, which is connected to a ground symbol. A Q4101 component is shown near the top left. To its right is IC4101, a 10-pin DIP package with pins 1, 10, 11, and 20 labeled. A T4111 component is located between IC4101 and IC4301. IC4301 is a 14-pin DIP package with pins 1, 14, 15, and 28 labeled. A Q4301 component is positioned above IC4301. A Q4303 component is located below IC4301. A Q4302 component is shown at the top right. A CN4002 connector is located on the right side, with pins 1, 8, 24, and 25 labeled. An L4113 component is located near the bottom left. The circuit is powered by three voltage sources: 5.0V (7C), 32.0V (2B), and 9.0V (8).

PLACEMENT CHART continued

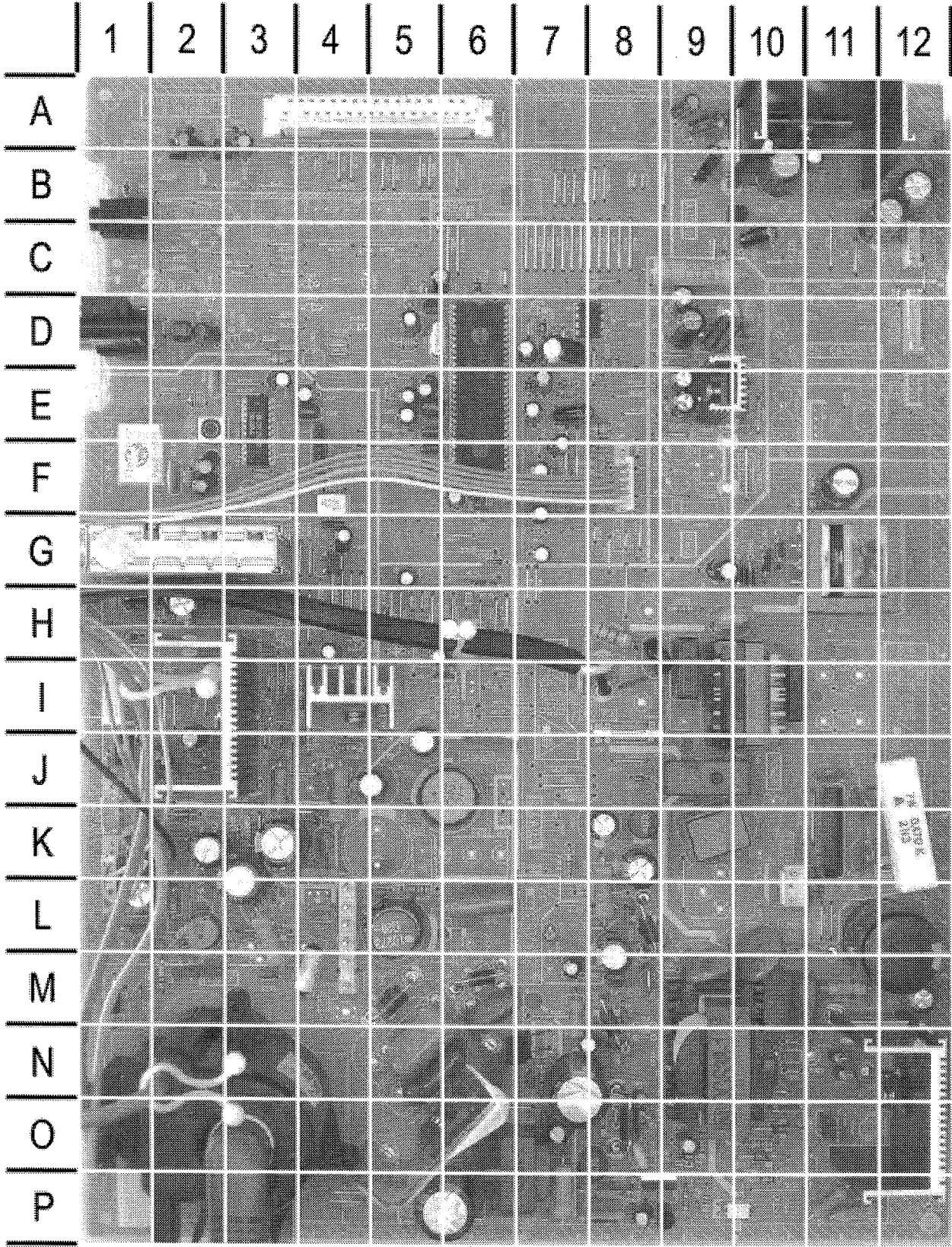


(1) LOCATED ON BOTTOM OF BOARD

SCHEMATIC COMPONENT LOCATION GUIDE

C001	C5	C611	B17	C4104	A55	C5251	C31	D953	C26	L704	D26	R118	C6	R602	A14	R3361	A35	R5384	E50
C003	A32	C621	B51	C4105	C31	C5252	C31	D954	E24	L705	E2	R131	B8	R603	A14	R3362	B34	R5385	E49
C004	A4	C622	B51	C4106	C32	C5255	A43	D955	E24	L931	A26	R132	B8	R614	B17	R3363	C34	R5386	E50
C006	C32	C623	A51	C4107	C31	C5263	B43	D956	E25	L933	B26	R133	B9	R615	B17	R3364	A34	R5387	E49
C101	B5	C624	A51	C4113	B55	C5391	D48	D957	E25	L940	D26	R134	B9	R621	B50	R3365	B34	R5391	D48
C102	B5	C625	C52	C4114	A57	C5392	E48	D972	B26	L3381	D14	R135	B9	R622	B51	R3366	C34	R5392	E48
C104	B6	C626	E32	C4116	B57	C5501	B38	D973	B26	L4001	A53	R161	A10	R623	A50	R3367	A34	R5393	D48
C105	C31	C627	B51	C4117	C57	C5502	C38	D3391	D33	L4101	A55	R163	C7	R624	A51	R3368	B34	R5394	E48
C106	C32	C628	A52	C4118	C57	C5503	B38	D4301	D57	L4113	C31	R164	B7	R626	B51	R3372	B34	R5395	D50
C107	C31	C629	B52	C4119	C57	C5504	B38	D5391	D48	L4131	B57	R165	A8	R627	C51	R3373	A34	R5396	E50
C113	C7	C636	B50	C4120	C56	C5506	C38	D5392	E48	L4302	C59	R166	A8	R631	C50	R3374	C34	R5501	B38
C114	B6	C637	A50	C4124	B56	C5508	A37	D5501	B38	L4303	D59	R167	A9	R632	C50	R3381	D14	R5502	C38
C116	B7	C652	A14	C4131	C31	C5509	A37	D5502	C38	L4304	D59	R168	A9	R655	B15	R3391	D33	R5503	B38
C117	C7	C653	B14	C4132	B57	C5520	C38	D5503	B38	L5202	A43	R169	A9	R700	A2	R3392	D34	R5504	B38
C118	C7	C654	A14	C4161	B56	C5521	C38	D5504	B38	L5211	A40	R171	C7	R701	D1	R3393	C33	R5505	A38
C119	B7	C655	B16	C4168	B55	C5531	C31	D5505	A38	L5241	B41	R201	B16	R702	B2	R3394	A33	R5507	A38
C120	B7	C656	B15	C4312	C58	C5532	C32	D5507	A38	L5242	C42	R212	B11	R704	E3	R3395	B33	R5508	A38
C124	B6	C657	B16	C4313	C58	C5533	D39	D5508	C38	L5243	B42	R215	B11	R705	E3	R4001	B54	R5509	A38
C131	C31	C658	B15	C4314	C59	C5534	E39	D5510	C38	L5244	B42	R216	B11	R706	B2	R4002	A54	R5510	C38
C161	A10	C700	A2	C4315	C59	C6401	D37	D5511	B47	L5245	D31	R217	B12	R707	D2	R4003	B53	R5511	C38
C163	A7	C701	E26	C4316	A58	C6402	B46	D5512	B47	L5261	B43	R227	B15	R708	E3	R4004	B53	R5512	C38
C164	A8	C702	E32	C4317	A58	C6403	B46	D5513	D38	LC601	B13	R231	B11	R709	E3	R4008	B54	R5513	D38
C165	A8	C703	D1	C4318	A58	C7701	E32	D7701	E4	LC602	A13	R237	B11	R714	C1	R4101	A55	R5514	C39
C166	A9	C704	C2	C4319	D59	CF001	B5	F901	A21	LC603	A13	R238	C11	R715	D2	R4102	A54	R5515	D39
C202	B16	C705	C2	C4320	D59	CF131	B9	F905	A24	LC6401	D37	R241	B11	R718	C12	R4103	A55	R5516	D39
C203	B16	C706	C3	C4321	D59	CF161	A8	FR525	E6	LF901	A21	R243	B11	R721	D3	R4104	B55	R5517	C39
C211	B11	C708	D2	C4322	D59	CF4131	B57	FR527	E6	PC921	D23	R281	D8	R728	C3	R4105	B55	R5519	A37
C212	A11	C709	D2	C4323	D59	CN10PW	A21	IC101	A10	Q001	B3	R282	D5	R729	C3	R4111	A56	R5520	A37
C221	B15	C711	E2	C4324	D59	CP932	B26	IC101	B7	Q101	B5	R283	D7	R731	D3	R4113	B55	R5521	B37
C222	B12	C712	E2	C4325	C59	CP936	E26	IC201	A2	Q131	B9	R286	D6	R732	C3	R4114	B56	R5522	B37
C223	B10	C716	C12	C4326	B58	D305	B20	IC201	B14	Q161	A8	R287	D6	R733	D3	R4115	A57	R5523	C37
C233	B11	C721	C2	C4327	C59	D306	C19	IC201	D5	Q211	B11	R288	D1	R734	C3	R4116	C56	R5527	C37
C237	B12	C726	E55	C4328	C59	D307	B20	IC421	C8	Q232	C11	R289	D5	R737	E56	R4117	B55	R5532	C37
C241	B13	C728	D2	C4329	C59	D308	B19	IC601	A15	Q233	B11	R290	C1	R740	B3	R4118	B54	R5533	C37
C242	B16	C807	E31	C4330	C59	D309	C19	IC621	A51	Q352	D15	R292	C15	R754	D56	R4120	B55	R5541	B46
C243	C14	C813	D1	C4331	D58	D310	B19	IC702	E3	Q431	B28	R293	C15	R755	D55	R4121	B56	R5542	B46
C244	C14	C815	C2	C5001	C46	D352	D15	IC703	D1	Q501	E8	R301	A19	R756	D55	R4131	B57	R5543	D38
C281	D7	C853	B26	C5002	C46	D353	C16	IC704	E27	Q511	E9	R302	C19	R764	D3	R4132	B57	R5544	E38
C282	B31	C854	B32	C5003	C46	D354	D2	IC852	B27	Q531	C21	R303	B19	R765	C3	R4133	B57	R5545	E38
C283	B31	C856	D26	C5004	D47	D421	D8	IC853	C27	Q532	B21	R304	A19	R766	E3	R4134	B57	R5546	C39
C284	D5	C857	D32	C5005	A46	D422	D9	IC911	C23	Q541	E6	R305	C19	R767	E3	R4135	B58	R6401	D37
C285	D5	C901	A21	C5006	D47	D432	B27	IC921	D24	Q542	E7	R306	B19	R769	B3	R4161	B56	R6402	B46
C286	D5	C902	A22	C5007	D47	D501	E10	IC4101	A56	Q543	E7	R356	D16	R772	B3	R4163	C55	R6403	B46
C287	D2	C904	A23	C5008	C32	D502	E10	IC4301	A58	Q622	C51	R359	C16	R775	E55	R4171	C56	R7702	B1
C288	D2	C905	A23	C5009	C48	D521	D13	IC5001	A47	Q623	C50	R360	B15	R776	E55	R4301	D57	R7703	B1
C352	D15	C906	A24	C5010	D47	D523	E13	IC5201	A41	Q700	D55	R421	D8	R811	D2	R4303	D58	R7704	B1
C354	C16	C907	A24	C5011	C48	D525	E6	IC5501	A39	Q701	B3	R423	D8	R812	D1	R4304	E57	R7705	B1
C391	C13	C908	A24	C5012	D48	D526	D6	IC7701	A1	Q705	E56	R424	D9	R816	C1	R4306	E58	R7706	B1
C392	C13	C912	C24	C5013	D48	D527	D14	J402	B45	Q951	B21	R426	D8	R821	C2	R4307	D56	R7708	D4
C422	D8	C913	C23	C5014	D48	D529	D6	J403	B45	Q971	B26	R427	E8	R822	C2	R4309	D57	R7709	A2
C424	D8	C914	C24	C5015	E47	D531	D6	J601	A13	Q3351	C34	R429	D8	R827	B3	R4311	C58	RY951	A22
C425	E14	C916	C24	C5016	B46	D535	B21	J601	A13	Q3352	A34	R431	D9	R855	C26	R4313	D58	RY951	B22
C427	D9	C917	C24	C5016	E48	D537	E14	J601	B13	Q3353	B34	R432	D9	R857	B27	R4316	B59	S421	E10
C428	E15	C918	D23	C5017	B46	D601	B13	J810	D1	Q3391	D33	R433	D9	R858	C27	R5001	C47	S7701	B1
C431	D9	C919	B24	C5019	E47	D602	A14	J5501	B37	Q4101	A55	R434	D9	R901	A23	R5002	C46	S7702	B1
C432	B27	C931	A32	C5020	E47	D603	A14	J5501	B37	Q4131	B57	R435	D9	R909	B24	R5003	A46	S7703	B1
C433	B31	C933	B32	C5021	B48	D653	B15	J5501	C37	Q4301	D57	R447	B28	R911	C24	R5004	A46	S7704	B1
C435	D8	C934	D26	C5022	E47	D654	B15	J5502	C37	Q4302	E57	R448	B28	R912	C23	R5005	C48	S7705	B1
C440	C8	C935	E26	C5023	E47	D700	C3	J5502	C37	Q4303	D57	R449	B27	R913	C23	R5006	C48	S7706	B1
C501	E8	C937	A26	C5024	B48	D701	C3	J5502	C37	Q5211	A40	R502	E7	R914	C23	R5007	D48	SF101	B6
C502	E8	C938	B26	C5025	D47	D703	D3	J5503	D50	Q5212	A41	R503	E8	R915	C25	R5008	D48	SF4101	A55
C503	E8	C939	B25	C5026	E47	D704	C3	J5503	E50	Q5251	A43	R504	E8	R917	C23	R5009	D48	SP01	A52
C504	A32	C941	D26	C5203	C31	D705	D1	J6401	D37	Q5252	A44	R505	E8	R918	C24	R5010	E48	SP02	B52
C507	E10	C942	A32	C5204	C31	D706	C3	K401	D9	Q5253	A42	R511	E9	R919	B24	R5011	B46	T111	B7

MAIN BOARD - TOP VIEW

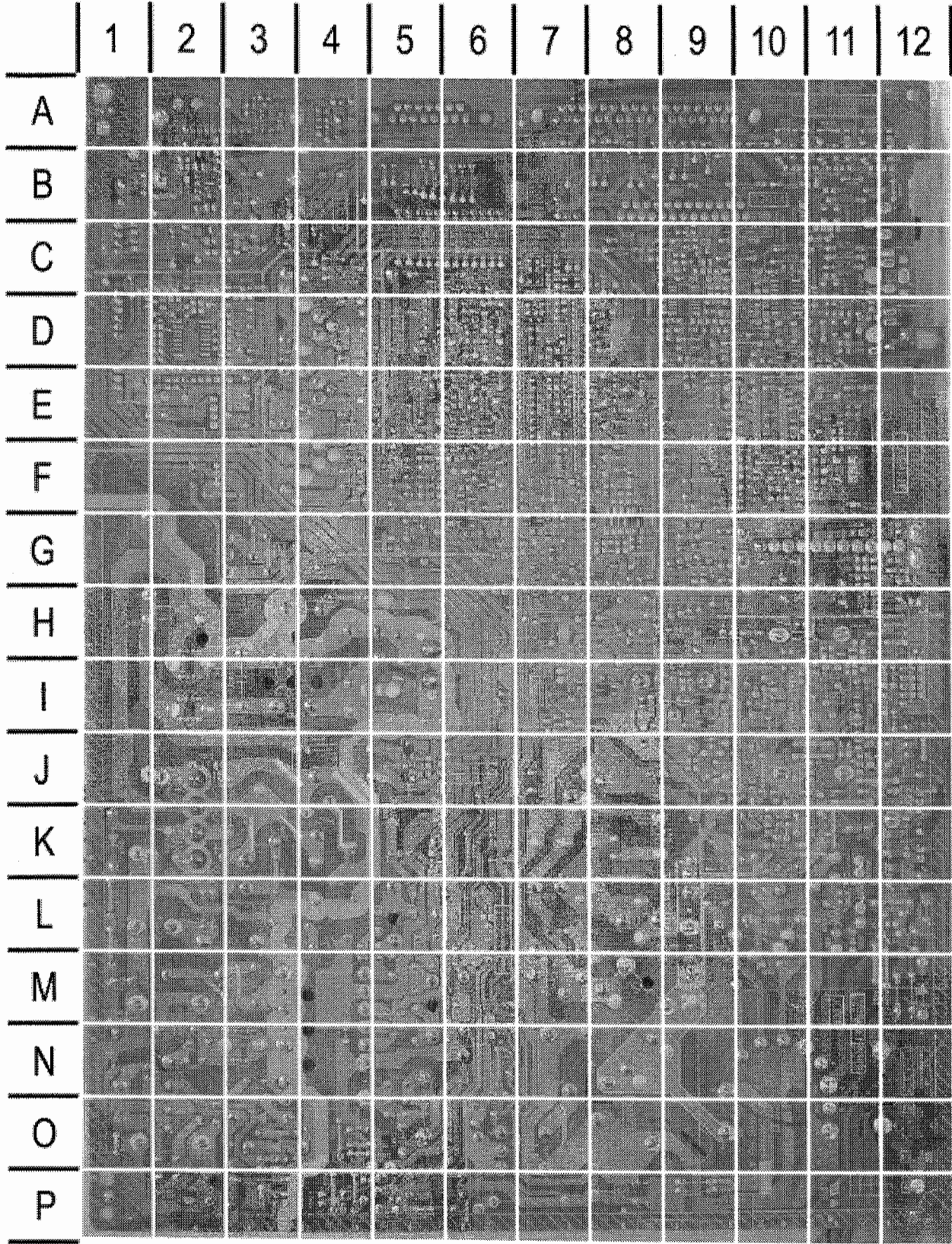


MAIN BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C	II	C515	L6	C919	M10	D521	M1	D956	G10	L521	L2	R857	E10
C001	H1	C516	L5	C931	N7	D523	L3	D957	G10	L701	C5	R858	D10
C003	H3	C521	L1	C933	K8	D525	L2	D972	O9	L702	D5	R901	K12
C004	H2	C523	L3	C935	M8	D526	L3	D973	O9	L704	D8	R909	M11
C006	G4	C525	K1	C937	O8	D527	L1	DEG	K10	L705	E7	R911	L12
C105	G9	C526	L1	C938	K8	D529	K3	F901	I8	L931	O8	R912	P11
C106	E3	C527	L4	C939	L9	D531	J1	F905	L11	L933	K8	R913	P11
C116	E4	C531	M3	C941	M8	D535	I6	FR525	L2	L940	L7	R914	O11
C117	F2	C533	H5	C942	M7	D537	K2	FR527	M4	LC601	D2	R915	O10
C120	F2	C601	D2	C951	F11	D601	D2	HV	M4	LC602	A2	R917	O11
C161	E4	C602	A3	C952	G9	D602	A3	IC101	F3	LC603	A2	R918	O10
C202	F7	C603	A2	C971	P8	D603	A2	IC201	D6	LF901	I10	R919	M11
C211	G5	C609	F5	C972	O9	D700	E7	IC421	I3	PC921	P10	R924	P9
C221	F7	C610	E5	C973	N8	D701	E7	IC621	A10	PW	I8	R930	M12
C222	F5	C611	E5	C997	H9	D703	D7	IC702	D8	Q101	G4	R939	L8
C242	E7	C625	A10	C998	M9	D704	D7	IC703	D5	Q501	N7	R940	F11
C243	F7	C626	B10	C999	M10	D705	C5	IC704	B10	Q511	O5	R941	M7
C281	E5	C627	B11	CF001	G4	D706	II	IC852	E9	Q531	I6	R953	K7
C282	E5	C628	B12	CF131	F2	D707	II	IC853	D9	Q543	I4	R973	P8
C284	E5	C629	B12	CF161	E2	D708	J1	IC911	N12	Q971	P9	R975	P9
C286	E5	C701	B9	CN001	A6	D709	H1	IC921	P8	R103	F4	R977	O9
C287	F6	C702	C10	CN004	F8	D723	C6	J601	D1	R427	J3	R979	P8
C352	G7	C703	C5	CN005	K1	D810	B1	J810	B1	R434	K4	R980	P8
C391	E7	C704	D5	CN007	D12	D901	K11	K401	K4	R435	J1	R998	H8
C422	J3	C706	E7	CNB1	P5	D910	O12	K912	P12	R503	N7	R999	H9
C424	J2	C711	E7	CNOSS	C12	D911	K12	K916	N11	R504	P6	RY951	J9
C425	K2	C716	D7	CP932	L8	D912	O10	K917	N11	R505	P7	S421	J1
C427	J1	C807	D7	CP936	L8	D913	O10	K918	P12	R511	O6	SF101	F4
C428	K3	C853	E9	D305	F8	D914	O10	K931	N8	R512	L5	T111	E2
C431	K4	C854	E9	D306	F8	D915	M11	K932	O8	R523	L1	T501	O7
C432	J2	C856	D9	D307	F8	D917	N12	K933	M8	R526	K3	T502	O3
C433	H4	C857	D9	D308	F8	D918	P10	K935	N8	R527	M2	T921	N9
C440	I2	C901	I9	D309	F8	D920	P10	L001	H2	R528	M2	T951	G11
C501	O7	C902	I10	D310	F8	D931	O8	L101	F4	R531	G6	TH901	K9
C502	N7	C904	J11	D352	G6	D933	L8	L113	D3	R543	I4	TU001	G2
C503	O7	C905	J11	D353	G7	D935	M8	L131	F2	R544	I4	VA901	H8
C504	P6	C906	K11	D354	F6	D941	M7	L161	E2	R545	J4	X701	D5
C507	J5	C907	L12	D421	I2	D945	J8	L232	F6	R548	J4		
C508	J5	C908	K11	D422	K4	D952	F11	L241	E8	R553	J4		
C510	N5	C912	N11	D432	H4	D953	K7	L391	F8	R554	L1		
C513	N5	C913	O11	D501	M5	D954	G10	L511	L5	R555	L3		
C514	M6	C914	M12	D502	M6	D955	G10	L512	J6	R855	C9		



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C101	G9	C435	E7	Q532	I8	R135	E11	R289	E8	R534	I7	R715	C7
C102	F9	C621	A4	Q541	I9	R161	E10	R290	E7	R535	K12	R718	C6
C104	F9	C622	A3	Q542	I9	R163	E10	R292	F7	R537	J12	R721	C7
C107	E10	C623	A3	Q622	B2	R164	E10	R293	F7	R538	H7	R728	D6
C113	F10	C624	A3	Q623	B2	R165	D10	R301	E7	R546	I9	R729	D7
C114	F10	C700	D7	Q701	E5	R166	D10	R302	E7	R547	I9	R731	D5
C118	E10	C705	D8	Q951	J5	R167	D10	R303	E7	R601	D11	R732	D5
C119	F10	C708	D8	R003	G11	R168	D11	R304	F6	R602	B10	R733	D6
C124	E10	C709	D8	R004	G11	R169	D11	R305	F6	R603	B11	R734	D6
C131	E11	C712	D7	R008	G9	R171	E10	R306	F6	R621	A4	R740	E6
C163	E10	C728	D8	R009	G12	R201	F6	R356	G6	R622	A4	R764	I12
C164	E11	C813	D7	R101	G9	R212	G8	R359	F7	R623	A4	R765	I12
C165	D11	C815	D7	R102	G9	R215	G8	R421	H10	R624	A3	R766	I12
C166	D10	C916	O4	R104	F9	R216	G7	R423	I11	R626	A2	R767	I12
C203	E7	C917	O3	R105	F9	R217	G8	R424	L11	R627	B2	R769	E6
C212	G8	C918	P3	R111	F10	R227	F7	R426	J10	R631	B2	R772	E5
C223	G6	C934	K5	R112	F10	R231	G6	R429	E7	R632	B2	R811	D7
C233	G7	L703	D8	R113	F10	R237	F7	R431	I10	R700	D7	R812	C7
C237	F8	Q001	H12	R115	F10	R238	G7	R432	I10	R701	C7	R816	C7
C241	F7	Q131	E11	R116	F10	R241	G6	R433	I10	R702	C7	R821	D7
C244	E7	Q161	D10	R117	F10	R281	E7	R447	J11	R704	D6	R827	E6
C283	E8	Q211	G8	R118	F10	R282	E8	R449	H8	R705	C6	R951	J5
C285	E8	Q232	G7	R131	F11	R283	D7	R502	M6	R706	C7	R952	J5
C288	F7	Q233	F8	R132	F11	R286	E7	R529	K10	R707	C8	R978	O4
C354	F7	Q352	G6	R133	E11	R287	E7	R532	I7	R708	D6		
C392	E7	Q431	J11	R134	F11	R288	E7	R533	I8	R709	C6		

## PARTS LIST

[illegible]