

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.

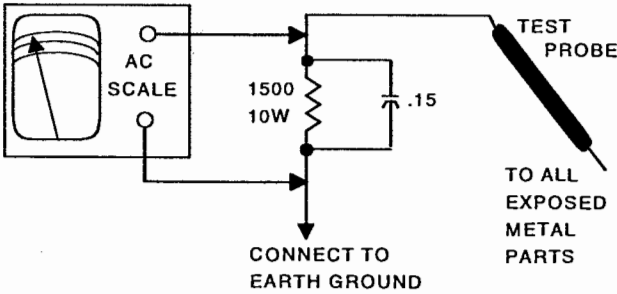
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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.



HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC and turn receiver on. Set all digital customer controls for normal operation. Momentarily short test point X to test point R. Receiver should lose raster and sound. If the receiver does not lose raster and sound, the shutdown circuit should be repaired. To resume normal operation, remove AC power and wait 30 seconds. After restoring AC power, the receiver should power up automatically.

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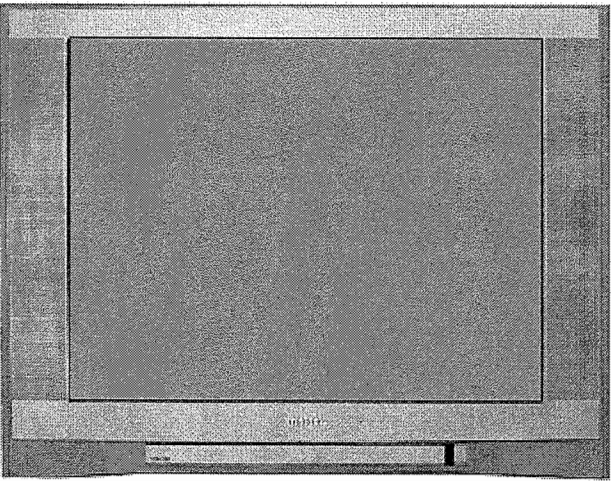
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UPC  
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PHOTOFACT<sup>®</sup> Technical Service Data  
SILVER

4915

TOSHIBA  
Model 36AF61 (Chassis TAC0125)



Representative Model

Essential coverage  
for servicing a television receiver...

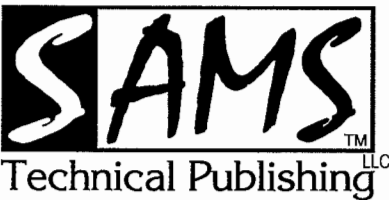
- Schematics
- Component locations
- Parts list

Coverage includes this additional model and chassis:

Model	Chassis
32AFX61	TAC0126

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For a Complete List of Manuals,  
Visit [www.samswebsite.com](http://www.samswebsite.com)



AUGUST 2004 SET 4915

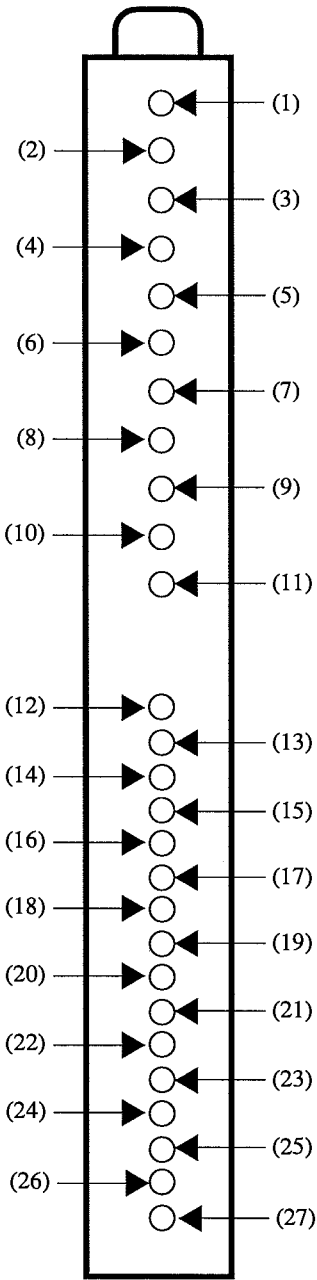
TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) RF AGC	1.5V	1.5V	1.5V
(2) VT	2.0V	4.4V	6.4V
(3) ADS	5.0V	5.0V	5.0V
(4) SCL	4.2V	4.2V	4.2V
(5) SDA	4.2V	4.2V	4.2V
(6) NC	0V	0V	0V
(7) +5V	5.0V	5.0V	5.0V
(8) NC	0V	0V	0V
(9) +32V	33.0V	33.0V	33.0V
(10) NC	0V	0V	0V
(11) IF	0V	0V	0V
(12) IF AGC	0V	0V	0V
(13) +9V	9.0V	9.0V	9.0V
(14) NC	0V	0V	0V
(15) GND	0V	0V	0V
(16) AFT	2.9V	2.9V	1.9V
(17) AGC OUT	1.5V	1.5V	1.5V
(18) VOUT	2.3V	2.3V	2.3V
(19) NC	0V	0V	0V
(20) GND	0V	0V	0V
(21) ST	9.2V	9.2V	9.2V
(22) BILI/SAP	9.2V	9.2V	9.2V
(23) MODE	.06V	.06V	.06V
(24) FMONO	.24V	.24V	.24V
(25) MUTE	0V	0V	0V
(26) TV ROUT	4.1V	4.1V	4.1V
(27) TV LOUT	4.1V	4.1V	4.1V

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

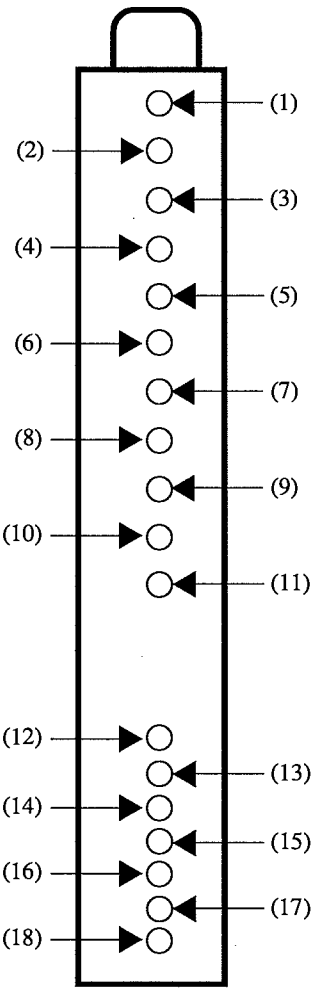


PIP TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) RF AGC	1.5V	1.5V	1.7V
(2) VT	2.0V	4.4V	6.0V
(3) ADRS	0V	0V	0V
(4) SCL	4.3V	4.3V	4.3V
(5) SDA	4.3V	4.3V	4.3V
(6) NC	0V	0V	0V
(7) +5V	5.0V	5.0V	5.0V
(8) NC	0V	0V	0V
(9) +32V	33.0V	33.0V	33.0V
(10) NC	0V	0V	0V
(11) IF	0V	0V	0V
(12) NC	0V	0V	0V
(13) +9V	9.0V	9.0V	9.0V
(14) AOUT	2.9V	2.9V	2.9V
(15) GND	0V	0V	0V
(16) AFT	2.3V	2.4V	2.4V
(17) RF AGC	1.5V	1.5V	1.7V
(18) V-OUT	2.5V	2.5V	2.5V

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 TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS

TEST EQUIPMENT

HIGH VOLTAGE CHECK

Tune in a picture. Set brightness, contrast, and color to minimum. Turn the set off. Remove one of the high voltage cables. Insert a High Voltage probe tip into the vacant hole. Turn the set on, high voltage should read 30kV to 33kV. Turn the power off, and insert the high voltage cable back into the vacant hole.

ENTERING THE SERVICE MODE

To enter the Service Mode, press the mute button on the remote. Press the mute button again and keep pressing while simultaneously pressing the menu button on the receiver. The letter S will appear on the screen indicating that the receiver is in the Service Mode.

When in the Service Mode, press the menu button on the receiver to display the adjustment menu. To select the item to be adjusted, press the channel up or down button. To adjust the reference value, press the volume up or down button. To exit from the Service Mode, press the power button to turn off the receiver.

SELF DIAGNOSTIC FUNCTION

Enter the Service Mode. Press the 9 button on the remote to check for proper execution of IC interfacing. The following is an explanation of what is displayed on screen:

Display	Explanation
[SELF CHECK]	Self diagnostic function.
No. 23009195	Part number of QA01.
POWER : 000	Operation number of protecting circuit.
BUS LINE : OK	000 display is normal.
	BUS line check. OK is normal.
	NG indicates a short to ground of the SCL or SDA signal or a short between SCL and SDA.
BUS CONT : OK	Bus line acknowledge check. OK is normal. A location number is NG.
	NG QA02 indicates QA02 is bad.
BLOCK : MAIN SUB	Green display is normal. Cyan display is no check. Red display is NG. UV is TV mode, V1 is Video 1 mode, and V2 is Video 2 mode.

OPT1: 4A OPT2: 05

ITEM BUTTONS

The following is a list of the buttons on the remote that will go to an item or perform a different function of the Service Mode:

1	RCUT	5	COLC
2	GCUT	6	TNTC
3	BCUT	8	Toggles audio test signal on and off.
4	SCNT	9	Self diagnostics.

Service Mode Adjustment Chart

Item	Adjustment Name	Reference Value	On Set Value
RCUT (1)	Red Cutoff	40H	69H
GCUT (1)	Green Cutoff	40H	3CH
BCUT (1)	Blue Cutoff	40H	56H
GDRV (1)	Green Drive	40H	46H
BDRV (1)	Blue Drive	40H	4CH
CNTX	Sub Contrast Max	7FH	7FH
BRTC (1)	Brightness Center	80H	78H
COLC (1)	Color Center	50H	50H
TNTC (1)	Tint Center	44H	44H
SCOL	Sub Color	05H	06H
SCNT	Sub Contrast	10H	02H
HPOS (1)	Horizontal Position	16H	16H
VPOS (1)	Vertical Position	03H	02H
HIT (1)	Height	47H	3BH
LIN	Vertical Linearity	13H	13H
VSC	V-S Correction	31H	33H
VPS	Vertical Shift	04H	04H
VCP	Vert Compensation	03H	02H
WID (1)	Width	21H	22H
PARA (1)	E-W Parabola	22H	1BH
CNR	E-W Corner	11H	15H
TRAP	Trapezium	3EH	2FH
HCP	Horiz Compensation	04H	02H
VFC	V-F Correction	07H	05H
PHUE	PIP Tint	46H	46H
PCNT	PIP Contrast	12H	12H
PCOL	PIP Color	19H	19H
PYOF	PIP Y Offset	04H	09H
PIOF	PIP I Offset	1DH	22H
PQOF	PIP Q Offset	1DH	21H
RGBB	RGB Bright	38H	38H
STRH	Start H	67H	67H
STRP	Start Ptn	8AH	8AH
VLD	VLD	41H	42H
OPT1 (1)	Option 1	4AH	4AH
OPT2 (1)	Option 2	05H	05H
TVOP (1)	TV Option	00H	00H

(1) May need adjustment when replacing QA02 or Q501.

Sub Color (COLC) & Sub Tint (TNTC)

Tune in a color bar pattern. Set contrast to maximum and brightness to midrange. Connect an oscilloscope to the red cathode. Enter the Service Mode. Select item COLC and adjust reference value to obtain 150Vp-p. Tune in an active channel. Select item TNTC and adjust reference value for proper flesh tones.

Sub Brightness (BRTC)

Tune in a picture. Set contrast to minimum. Enter the Service Mode. Select item BRTC, adjust reference value until vertical retrace line just disappears. Adjust contrast for normal picture. Perform Height (HIT) adjustment.

Horizontal Position (HPOS) & Vertical Position (VPOS)

Enter the Service Mode. Press the TV/video button on remote until a crossbar pattern is displayed. Select item HPOS or VPOS and adjust reference value for the horizontal and vertical position alternately until the pattern is centered on the screen. Check the position of the picture with off-air signal.

Height (HIT)

Enter the Service Mode. Press the TV/video button on remote until a crosshatch pattern is displayed. Select item HIT and adjust reference value for slight underscan. Advance the data value by 8 steps and check the vertical position of the picture.

Width (WID)

Enter the Service Mode. Press the TV/video button on remote until a crosshatch pattern is displayed. Select item WID, adjust reference value for slight underscan. Advance the reference value by 7 steps. Check for proper horizontal position of the picture.

E-W Parabola (DPC)

Enter the Service Mode. Press the TV/video button on remote until a crosshatch pattern is displayed. Select item DPC, adjust reference value for straight vertical lines on both sides of the pattern.

White Balance (RCUT, GCUT, BCUT, GDRV, BDRV)

Turn receiver on. Allow a 10 to 30 minute warm up time. Adjust contrast to center and brightness to maximum. Enter the Service Mode. Press the TV/video button on remote until the white screen pattern is displayed. Select items RCUT, GCUT, BCUT, GDRV, and BDRV and set the reference value for each to 40H. Press the video button on the remote to obtain a single horizontal line. Advance the screen control until a faint line of one predominant color appears on the screen. Adjust the other two cutoff items to obtain a dim white line. Press the video button on the remote to get full deflection. Select items GDRV and BDRV and adjust reference value of each for the best black and white picture on screen.

COLOR PURITY / CONVERGENCE

The yoke is bonded to the CRT. Color purity and convergence adjustments are not recommended.

INITIALIZATION OF QA02

NOTE: QA02 must be initialized after replacement.

Enter the Service Mode. Press and hold the recall button on the remote while simultaneously pressing the channel up button on the receiver. The initialization of QA02 is complete. Program channels into memory.

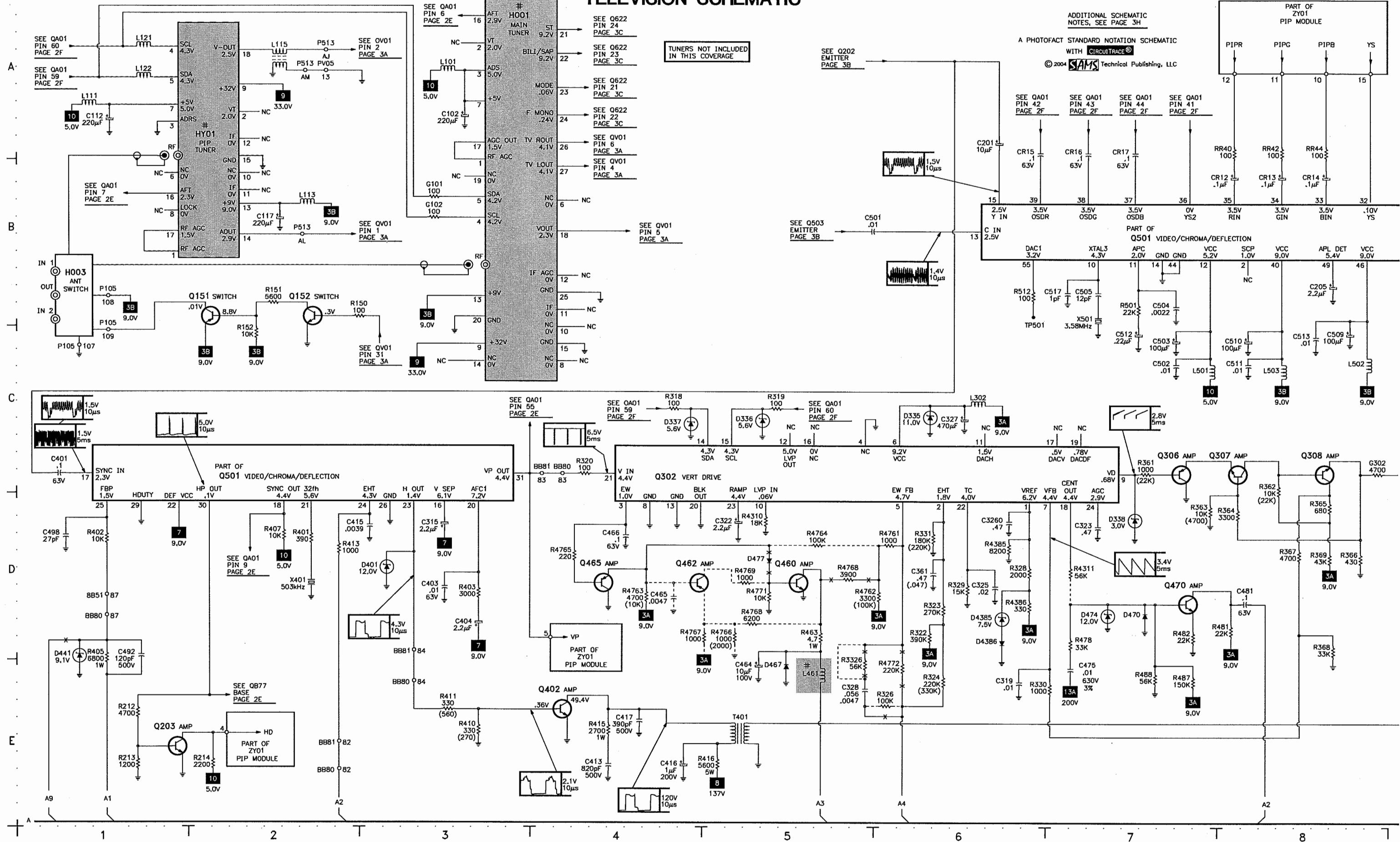
Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

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





## TELEVISION SCHEMATIC

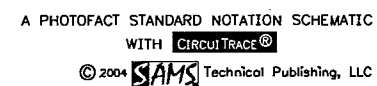


**TELEVISION SCHEMATIC continued**

ADDITIONAL SCHEMATIC  
NOTES, SEE PAGE 3H

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITRACE**  
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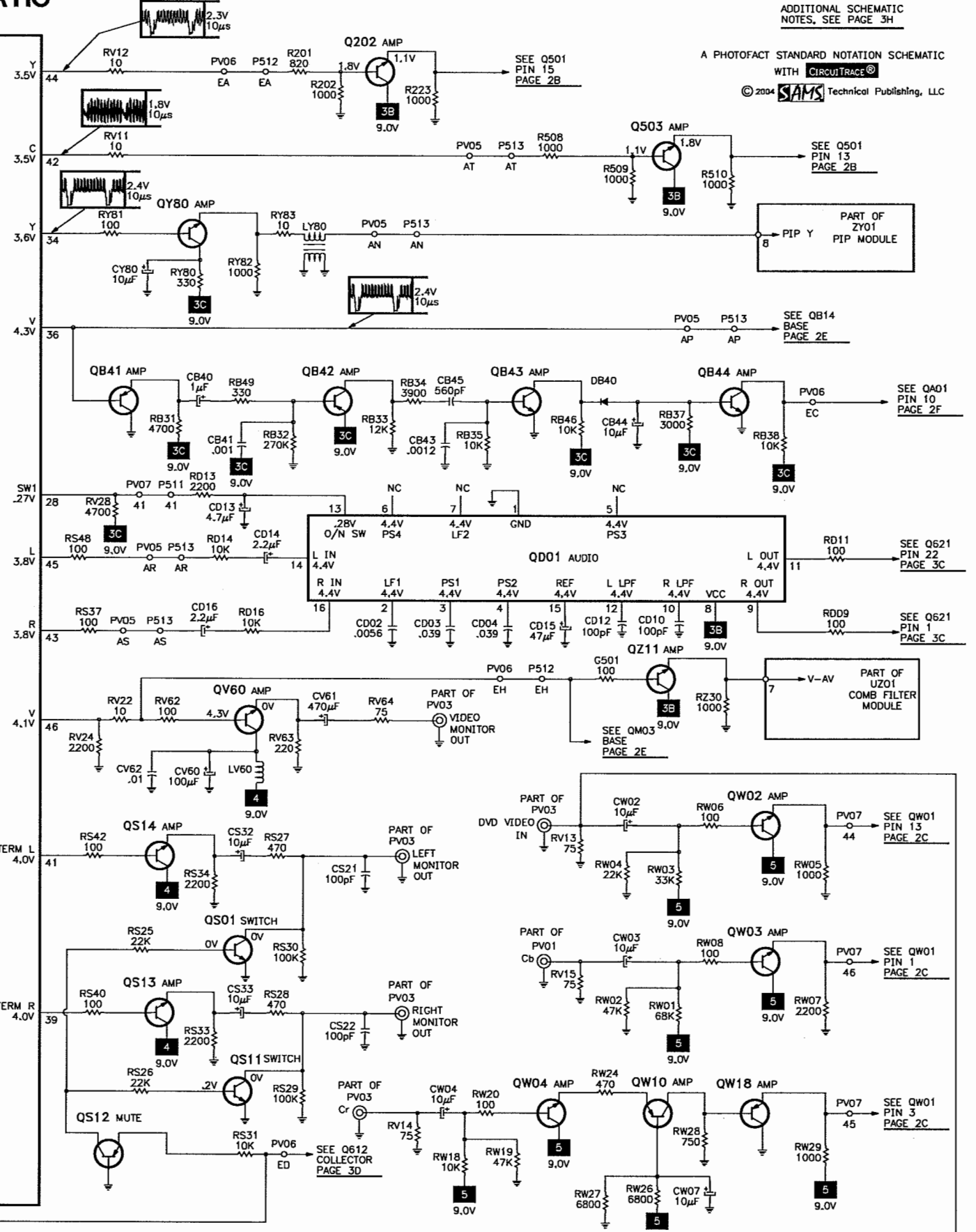
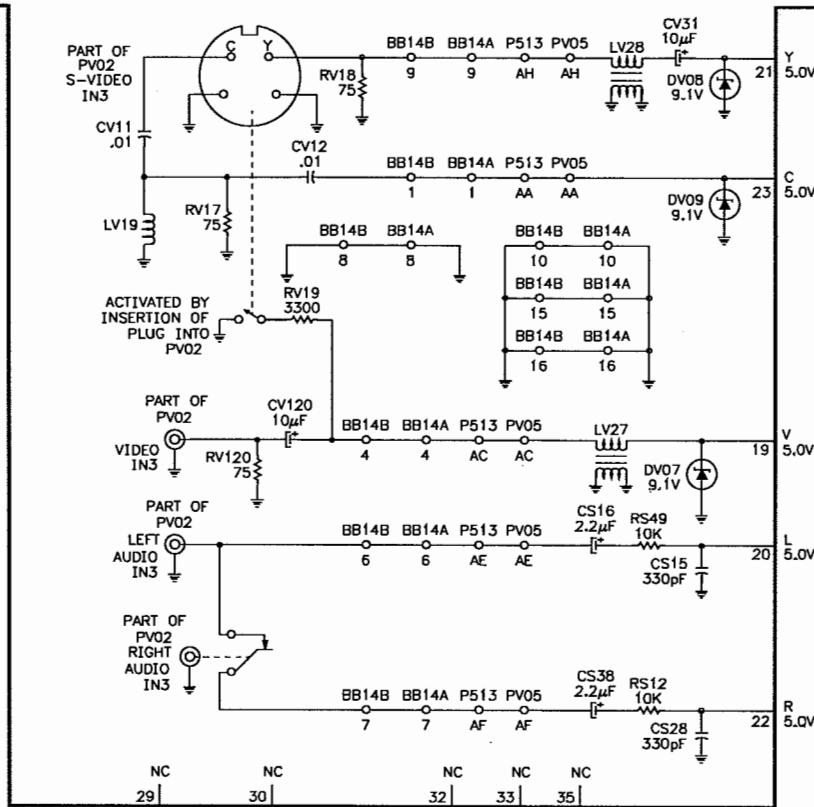
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ADDITIONAL SCHEMATIC  
NOTES, SEE PAGE 3H

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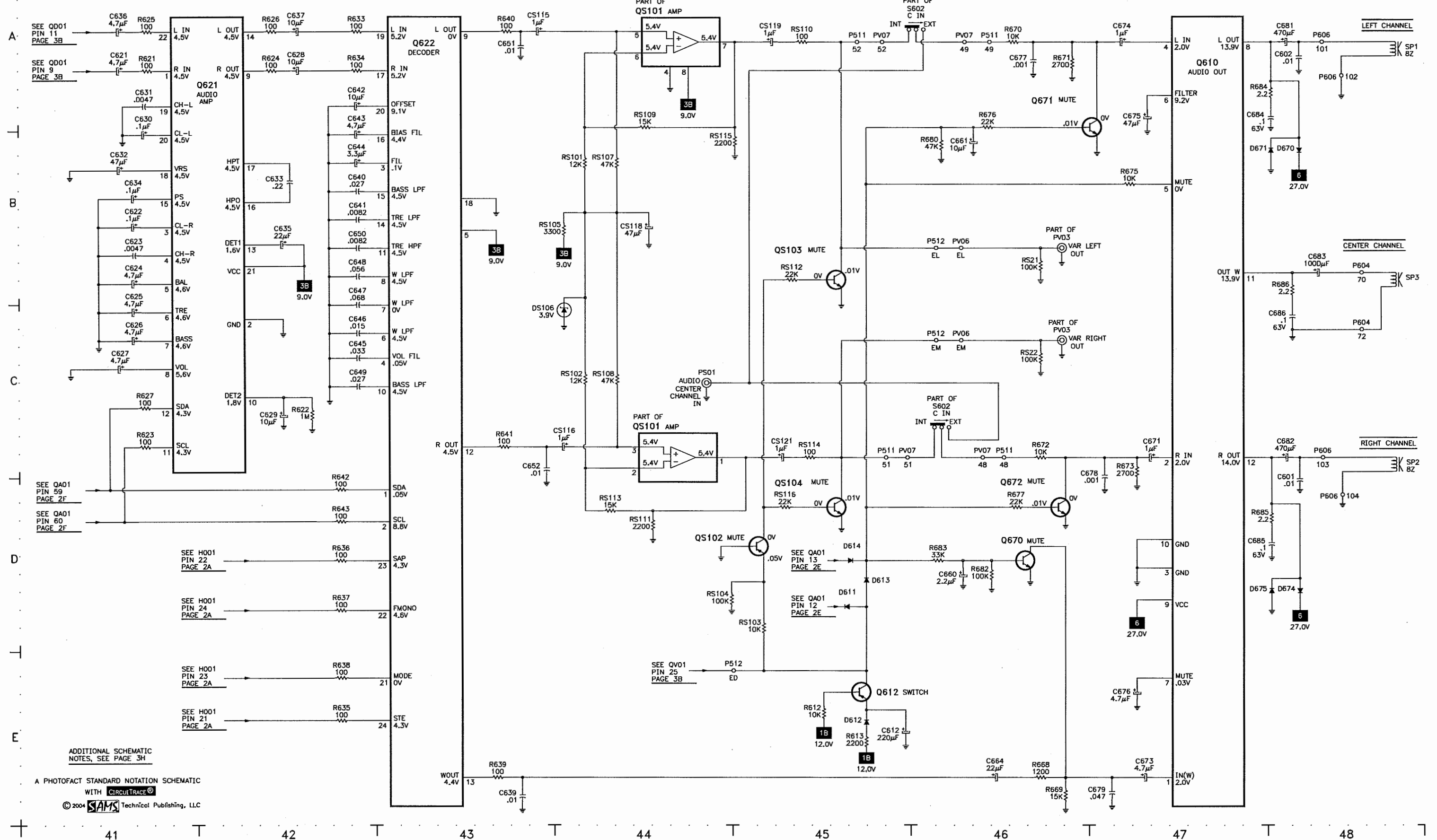
STANDARD NOTATION SCHEMATIC  
WITH **CIRCUITACE®**

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# AUDIO SCHEMATIC

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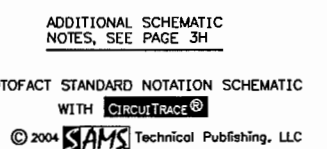
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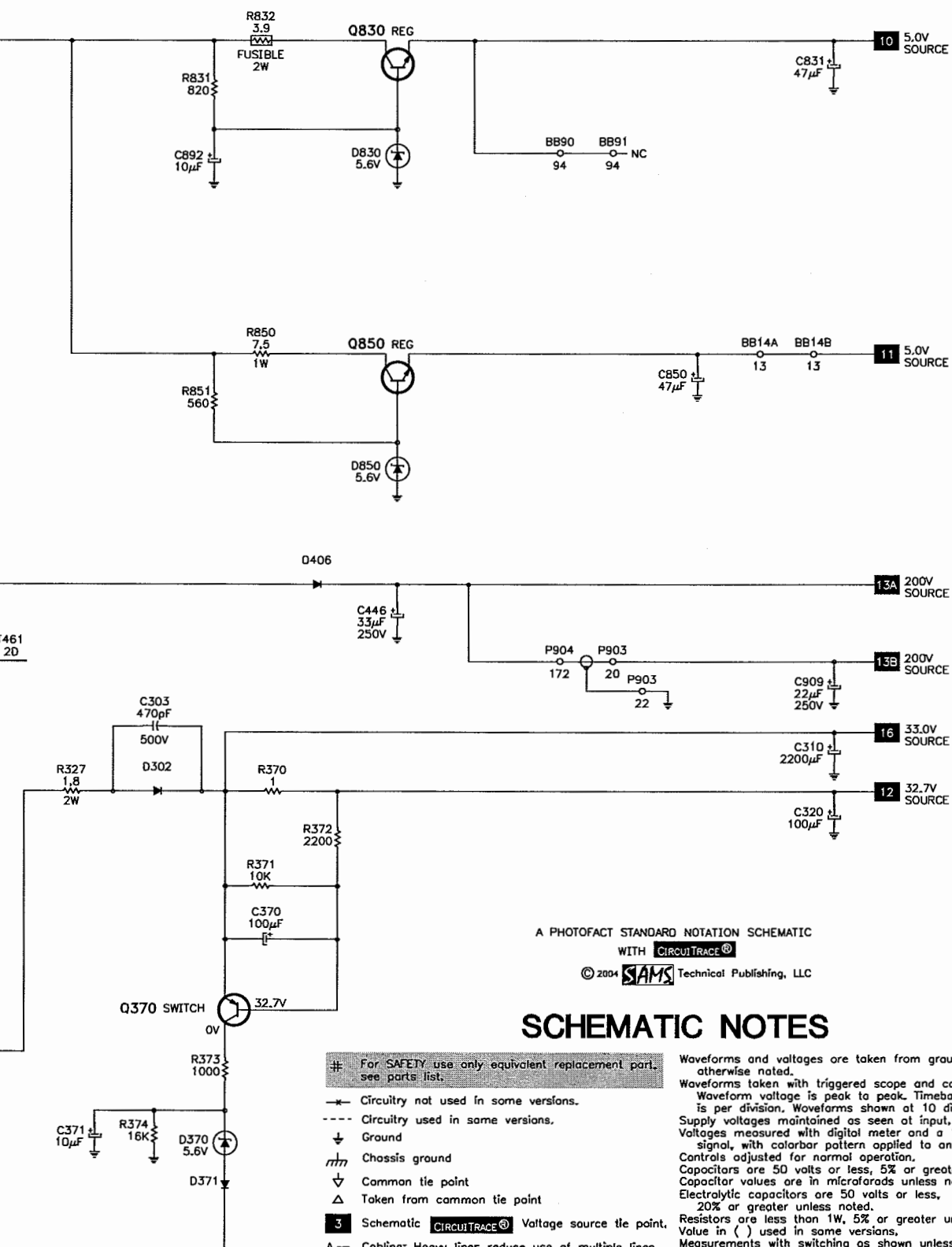
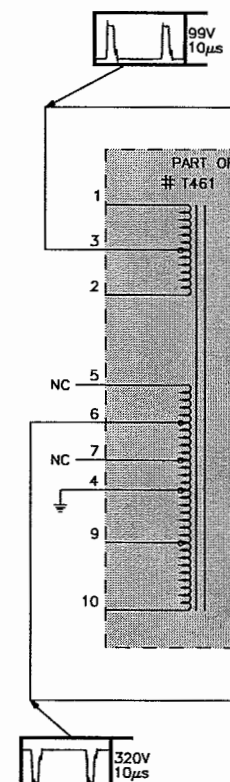
ADDITIONAL SCHEMATIC NOTES, SEE PAGE 3H

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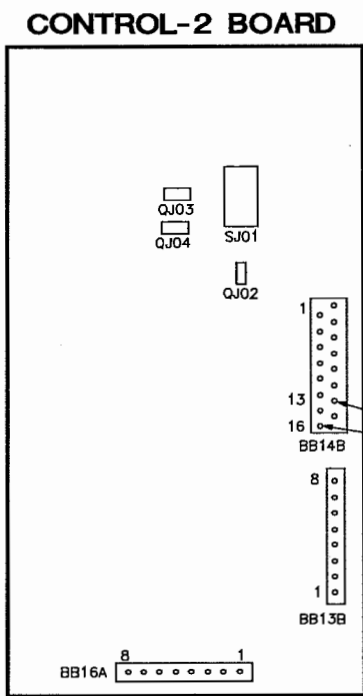
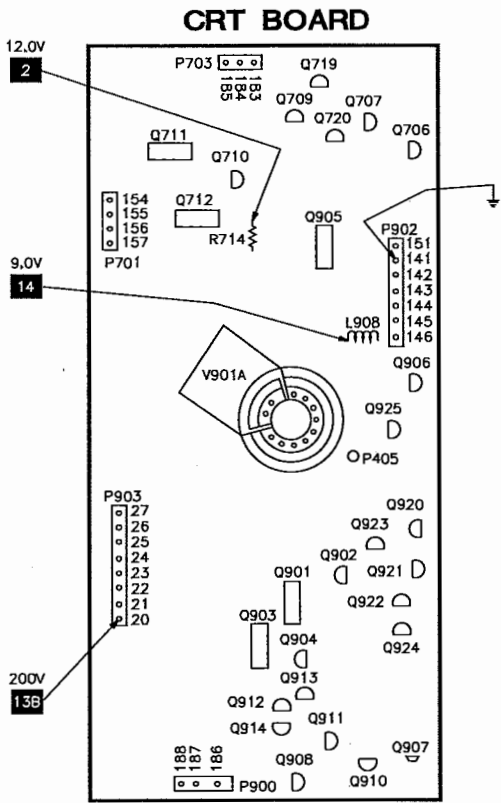
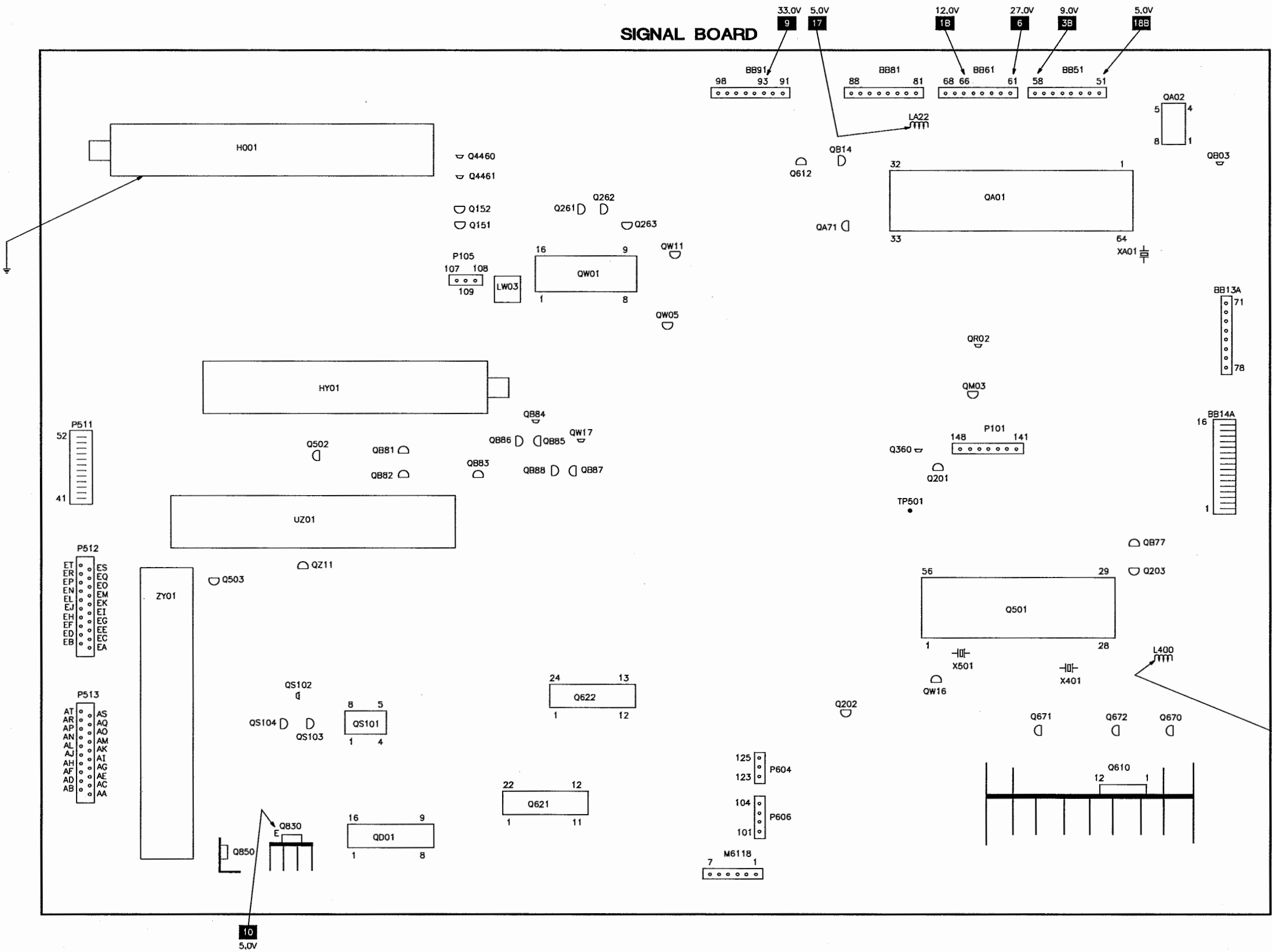
**MODEL 36AF61 (CHASSIS TAC0125)**



#	For SAFETY use only equivalent replacement part, see parts list.	Waveforms and voltages are taken from ground, unless otherwise noted.
—	Circuitry not used in some versions.	Waveforms taken with triggered scope and colorbar signal.
---	Circuitry used in some versions.	Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
⊕	Ground	Supply voltages maintained as seen at input.
⏏	Chassis ground	Voltages measured with digital meter and a 1000μV RF signal, with colorbar pattern applied to antenna terminal.
⏏	Common tie point	Controls adjusted for normal operation.
Δ	Taken from common tie point	Capacitors are 50 volts or less, 5% or greater unless noted.
3	Schematic	Capacitor values are in microfarads unless noted.
	CIRCUITRACE®	Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.
A	Cobling: Heavy lines reduce use of multiple lines.	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.

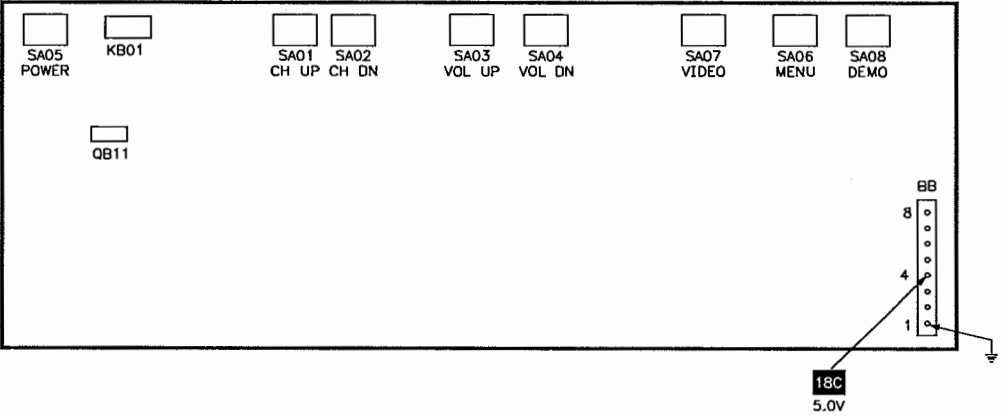


PLACEMENT CHART

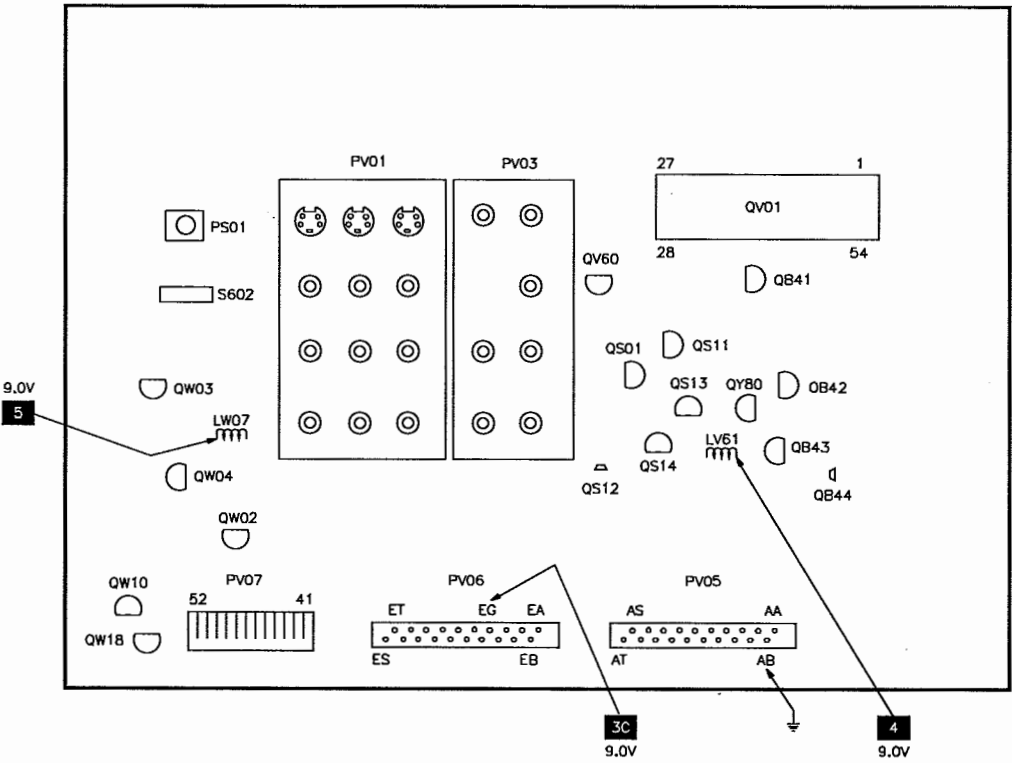


PLACEMENT CHART continued

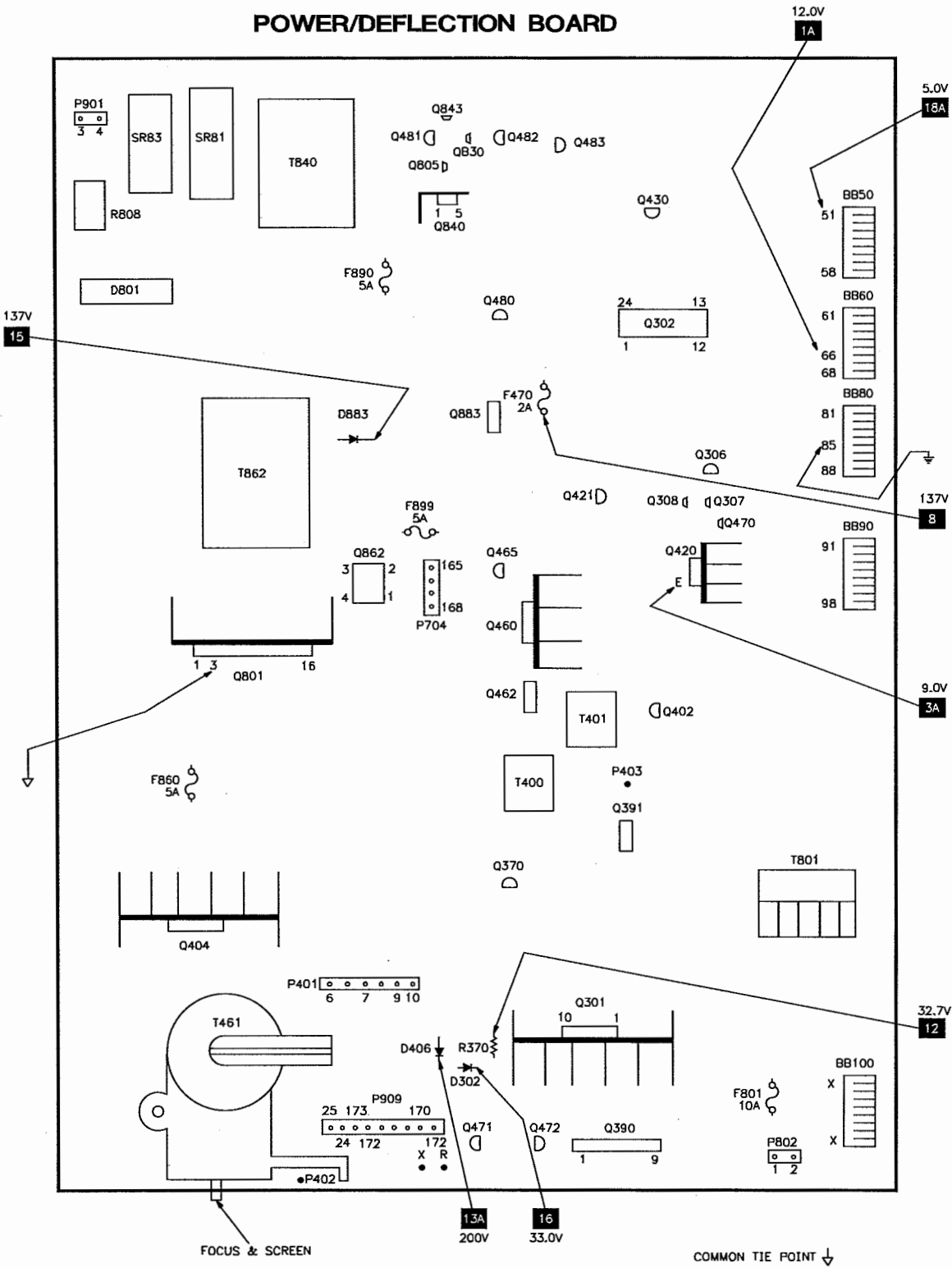
CONTROL-1 BOARD



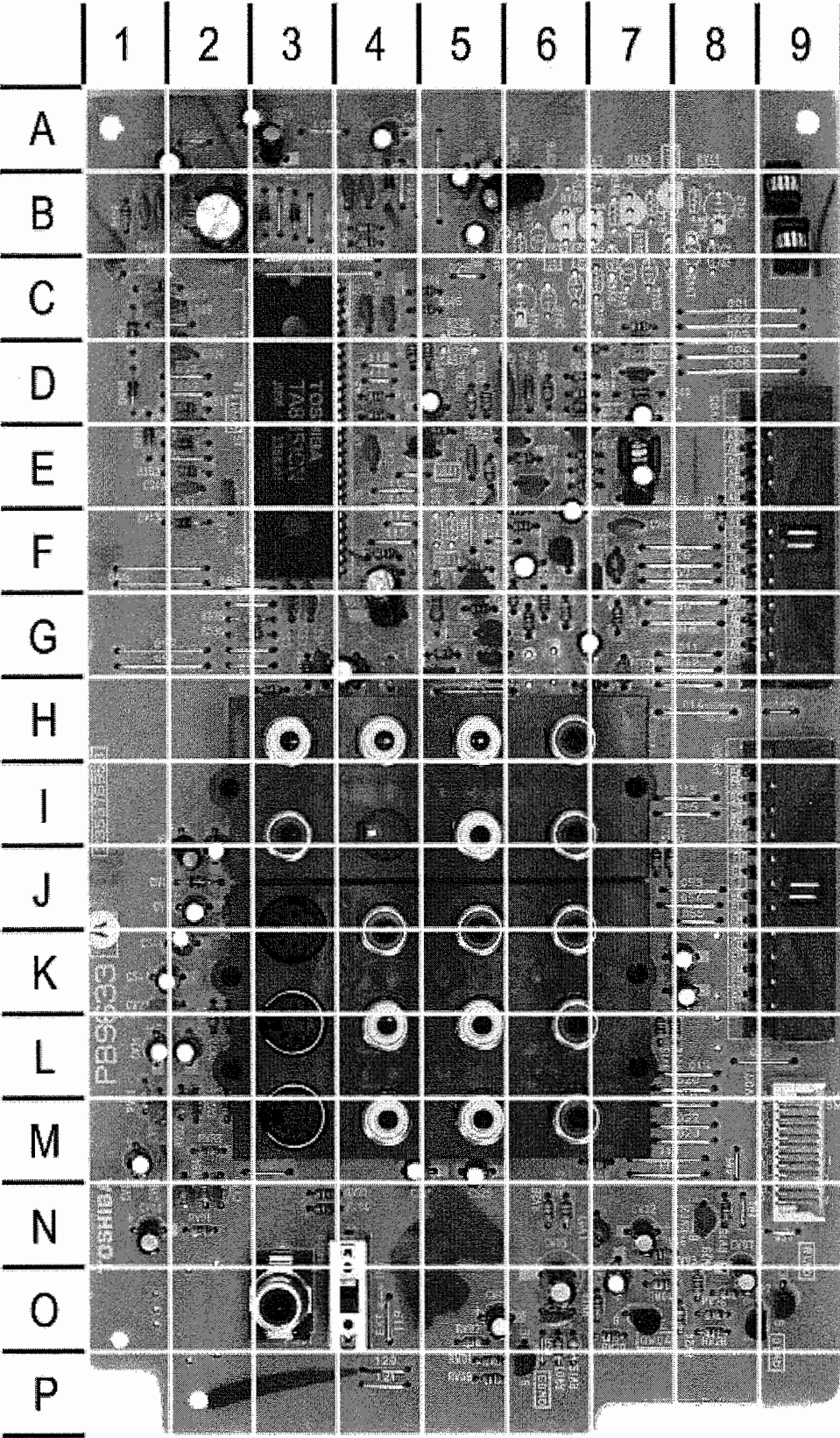
A/V SWITCHING BOARD



POWER/DEFLECTION BOARD



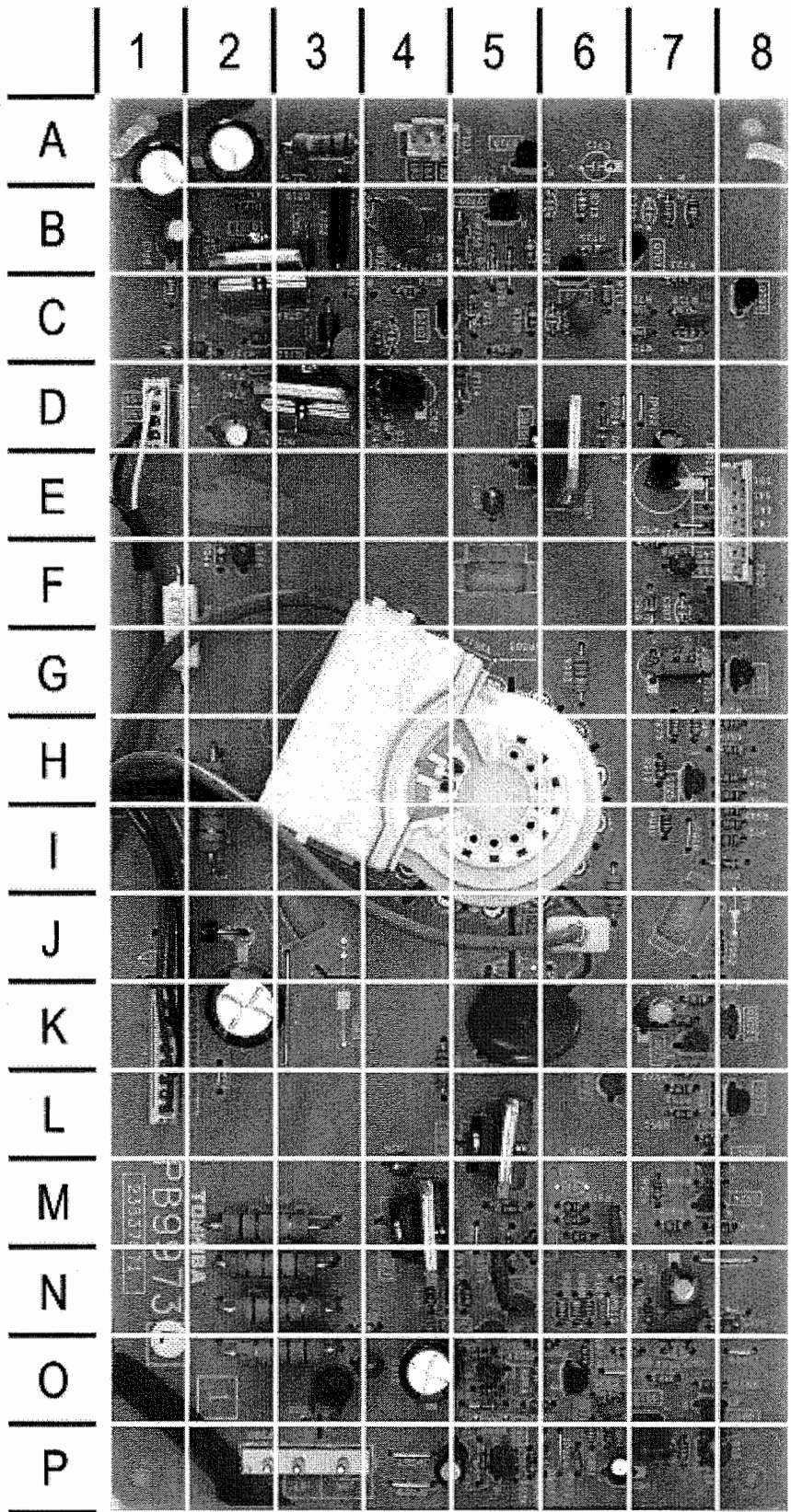
A/V SWITCHING BOARD



A/V SWITCHING BOARD, GRIDTRACE LOCATION GUIDE

CB40	D5	CV08	B2	LV60	F4	RB49	E5	RV14	L8
CB41	E5	CV16	B5	LV61	F7	RS02	H3	RV15	L7
CB43	D6	CV17	J2	LW07	N7	RS04	C5	RV20	N6
CB44	D7	CV19	E4	LY80	E7	RS06	C5	RV21	N3
CB45	D6	CV21	L1	P512	P8	RS07	C1	RV22	D4
CS03	C4	CV22	L2	P513	P11	RS08	C2	RV23	F8
CS04	K8	CV23	K1	PS01	O3	RS09	B2	RV24	D5
CS07	C4	CV24	M2	PV01	L5	RS10	B1	RV28	N6
CS08	K8	CV31	A4	PV03	I5	RS12	B4	RV31	M1
CS09	C2	CV39	N2	PV05	D9	RS21	J7	RV32	M2
CS10	M4	CV60	G4	PV06	I9	RS22	J7	RV62	G5
CS11	A3	CV61	F4	PV07	M9	RS25	G6	RV63	G5
CS12	B1	CV62	G3	QB41	E5	RS26	G6	RV64	G3
CS13	A3	CV63	E7	QB42	E6	RS27	G6	RV83	M2
CS14	B1	CV64	F7	QB43	E6	RS28	F5	RV84	N2
CS15	B4	CV65	M1	QB44	D7	RS29	G5	RW01	P5
CS16	B5	CW02	N7	QS01	G5	RS30	G5	RW02	O5
CS21	G5	CW03	O5	QS11	F5	RS31	H6	RW03	O7
CS22	G5	CW04	O7	QS12	G7	RS33	G6	RW04	O7
CS24	D2	CW05	O6	QS13	F6	RS34	G7	RW05	N8
CS25	M5	CW06	O6	QS14	F7	RS35	G2	RW06	N7
CS28	B4	CW07	O8	QV01	C3	RS36	G2	RW07	P6
CS29	G3	CY80	F6	QV60	G4	RS37	C7	RW08	P5
CS32	G6	DB40	D7	QW02	N8	RS40	F6	RW18	O7
CS33	F6	DV01	C1	QW03	P6	RS42	F6	RW19	P6
CS34	G3	DV02	C1	QW04	O7	RS48	C7	RW20	O7
CS35	J2	DV03	D1	QW10	O8	RS49	B4	RW24	O8
CS36	J2	DV07	B3	QW18	O9	RS51	D2	RW26	O8
CS38	B5	DV08	B3	QY80	E6	RS52	E2	RW27	O8
CS41	D2	DV09	B4	RB31	E5	RV01	N2	RW28	O8
CS42	K1	DV11	E1	RB32	E6	RV03	M2	RW29	O8
CS43	E2	DV12	E2	RB33	D5	RV04	N3	RY80	E6
CS44	K2	DV13	F2	RB34	D5	RV07	L2	RY81	F4
CV01	A2	DV17	J2	RB35	D6	RV09	L2	RY82	E6
CV02	E2	LV05	N2	RB37	D6	RV10	D7	RY83	E6
CV03	B5	LV06	M1	RB38	D6	RV11	D4	S602	O4
CV04	N1	LV27	B9	RB40	M7	RV12	D4		
CV05	M1	LV28	B9	RB46	D6	RV13	J2		

CRT BOARD

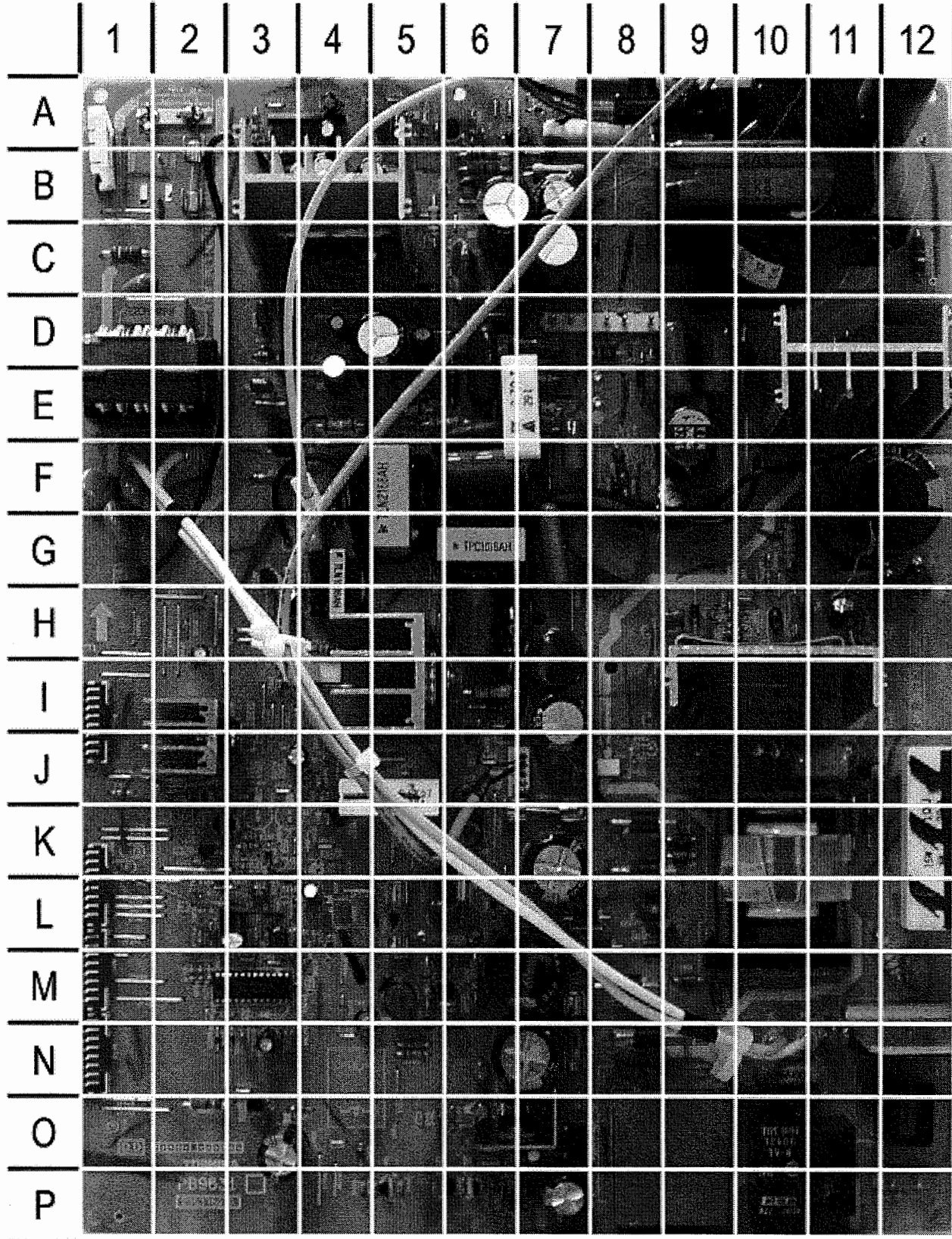


CRT BOARD, GRIDTRACE LOCATION GUIDE

C704	C7	D906	F7	Q911	O6	R745	D4	R950	L7
C705	C6	D907	M5	Q912	N5	R901	I6	R951	L7
C707	D4	D908	M5	Q913	N5	R902	K4	R952	J8
C713	A1	D909	D6	Q914	O5	R903	G6	R955	M7
C714	B4	D910	O5	Q920	K8	R904	P5	R957	J7
C715	B4	D911	J2	Q921	L8	R905	P7	R960	N2
C716	B4	L702	B3	Q922	M7	R912	H7	R961	O2
C717	C4	L704	B3	Q923	K7	R914	H8	R962	I2
C718	B1	L705	C3	Q924	M7	R915	M6	R963	M2
C719	A3	L902	K5	Q925	H7	R916	M7	R964	N2
C720	A2	L903	O4	R702	C5	R917	M6	R965	I1
C721	D2	L904	F2	R709	B6	R918	M6	R973	K7
C722	B7	L905	K5	R713	B6	R919	N6	R976	K7
C726	B6	L906	M4	R714	D5	R920	F1	R977	O7
C902	K5	L907	E5	R715	C7	R921	I8	R978	M8
C904	M6	L908	F7	R716	C7	R922	N7	R979	H7
C905	N7	L910	P7	R717	C6	R923	L7	R980	P6
C907	F7	P701	D1	R718	C7	R924	O6	R981	O7
C909	K2	P703	A4	R719	B5	R925	N7	R982	O5
C910	P4	P900	P3	R720	C5	R926	F7	R983	O6
C911	P6	P902	F8	R722	B7	R928	H8	R984	O5
C912	O4	P903	L1	R723	C7	R929	F8	R985	O6
C913	E7	Q706	C8	R724	B7	R930	F8	R986	O5
C914	N5	Q707	B7	R725	B6	R932	P6	R987	N6
C920	O6	Q709	B5	R730	B5	R933	N4	R988	N6
C921	P7	Q710	C4	R731	C2	R934	P5	R989	N6
C930	O3	Q711	B2	R732	B4	R935	N5	R990	O5
C970	K7	Q712	D3	R733	B4	R936	N4	R991	P6
C971	N7	Q719	A5	R734	C4	R937	F8	R992	J1
C972	G7	Q720	B6	R735	C4	R939	P7	R993	L7
D704	B2	Q901	L5	R736	B2	R940	I7	R994	M7
D705	D4	Q902	L6	R737	C2	R942	K5	R997	L7
D715	B5	Q903	M4	R738	C3	R943	N4	R998	M7
D720	B5	Q904	M5	R739	C4	R944	F2	R999	H8
D721	C5	Q905	D6	R740	C2	R945	H7	V901A	H5
D901	P5	Q906	G8	R741	C1	R946	N8		
D903	P6	Q907	O7	R742	D2	R947	I8		
D904	I8	Q908	P5	R743	A3	R948	I8		
D905	N8	Q910	P7	R744	B2	R949	H8		



POWER/DEFLECTION BOARD

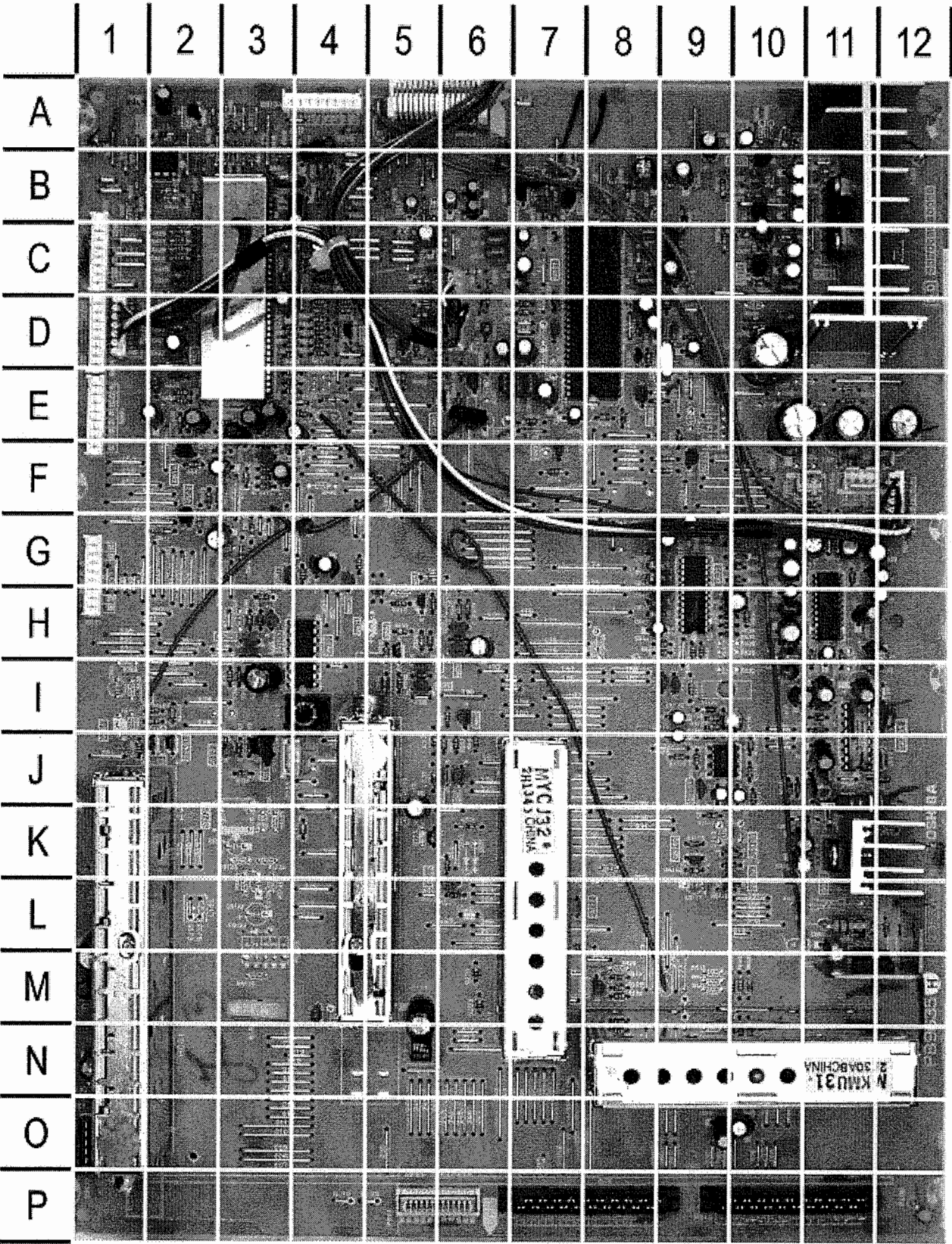


POWER/DEFLECTION BOARD, GRIDTRACE LOCATION GUIDE

BB50	N1	C475	A8	D311	J1	F899	K7	Q472	A5	R379	F4	R810	K12
BB60	M1	C480	M4	D335	L3	G302	D3	Q480	M6	R380	E6	R861	M12
BB80	L1	C481	K2	D336	N3	G306	C4	Q481	P7	R389	E3	R862	H10
BB90	J1	C482	P5	D337	N2	G312	E3	Q482	P6	R392	A3	R864	J8
BB100	B1	C491	F6	D338	L2	G403	C12	Q483	P5	R394	A3	R865	G10
C303	B6	C492	B6	D370	L4	G840	A8	Q801	H11	R396	A4	R867	H11
C304	D6	C801	D1	D371	M4	G897	N6	Q805	O6	R397	A4	R868	H9
C306	D5	C802	N10	D390	B3	L301	C5	Q840	O7	R398	A3	R870	H10
C308	B4	C805	M12	D395	A3	L302	L3	Q843	P6	R399	H2	R871	J11
C310	B6	C806	N11	D404	D10	L441	E9	Q862	J8	R400	F4	R872	G10
C312	D3	C810	F12	D406	C8	L442	F9	Q883	L6	R410	G3	R883	L6
C313	A3	C811	F2	D420	K4	L461	I7	QB30	P6	R411	H4	R884	J7
C314	B3	C812	F1	D430	O4	L463	H5	R	A6	R415	H4	R891	M6
C316	C4	C813	G2	D441	B6	L491	G6	R101	J5	R416	J5	R898	C1
C318	D4	C814	G1	D442	F8	L805	G12	R217	I3	R424	J2	R3326	H4
C319	M3	C840	P7	D444	H6	L806	H12	R218	E5	R425	J4	R3440	E8
C320	B4	C842	O6	D467	I6	L861	H10	R227	I3	R426	J4	R3442	E7
C322	N3	C843	O7	D470	L2	L862	H9	R303	B3	R427	J4	R3443	E6
C323	N3	C860	G11	D471	B7	L883	L8	R305	D3	R428	L3	R3444	E5
C325	N3	C861	H9	D472	A5	L884	L8	R306	D4	R429	E11	R3445	E4
C327	L3	C863	H9	D473	A4	L885	M5	R309	C4	R431	A5	R4310	L2
C328	I4	C864	I9	D474	A8	L886	K9	R310	C4	R432	O2	R4311	M2
C352	D4	C865	I9	D477	J6	L887	K9	R312	C5	R433	O3	R4385	L4
C361	L3	C866	H11	D480	O4	L888	K6	R313	E4	R434	A4	R4386	L4
C366	C6	C867	G10	D801	N12	L889	J6	R317	D3	R441	F8	R4761	I5
C370	D5	C868	J11	D840	O7	L893	M9	R318	M2	R442	E7	R4762	I5
C371	L4	C869	H11	D845	A10	L894	M9	R319	M2	R445	E7	R4763	I5
C391	A4	C870	J11	D855	P11	L4041	D11	R320	M3	R451	A6	R4765	J5
C393	A4	C871	I9	D862	H9	P401	D8	R322	L3	R452	A5	R4766	I5
C396	D6	C873	H10	D864	K11	P402	A9	R323	L3	R453	A5	R4768	H5
C399	H2	C874	J9	D873	I10	P403	F4	R324	L3	R458	N5	R4771	I6
C413	G3	C875	J9	D875	I9	P704	J7	R327	B7	R463	H6	R4772	I3
C416	H3	C876	H11	D876	I11	P802	A2	R328	M4	R470	M5	RB30	P6
C417	G3	C877	I9	D881	J7	P901	P12	R329	N3	R471	M5	RB41	O5
C420	J3	C884	M7	D882	L6	P904	A8	R330	M3	R472	B6	RB42	O5
C423	G8	C885	K8	D883	L7	Q301	C4	R331	L3	R475	A5	SL01*	M5
C440	D12	C886	K8	D884	P8	Q302	M3	R336	D6	R476	A6	SL02*	N6
C441	F7	C887	O3	D885	K8	Q306	K2	R353	D3	R477	A6	SL03*	J6
C442	G7	C889	K7	D886	K8	Q307	K2	R361	L2	R478	A8	SR81	P10
C443	D9	C891	L5	D891	N8	Q308	K3	R362	K3	R479	M6	SR83	P11
C444	D9	C893	L8	D892	M8	Q370	E5	R363	J3	R481	K2	T400	F5
C445	A9	C894	L8	D899	C1	Q390	A4	R364	J2	R482	J2	T401	G4
C446	B7	C896	M8	D3440	E8	Q391	E3	R365	K3	R487	J2	T461	B10
C447	E6	C897	N7	D3441	D8	Q402	G3	R366	J3	R488	K2	T801	E1
C448	C7	C898	L7	D4385	M3	Q404	D11	R367	L3	R489	N5	T840	O9
C463	E11	C899	N8	D4386	N3	Q420	J2	R368	L3	R490	P4	T862	K10
C464	I7	C3260	L3	DA11	O6	Q421	K4	R369	L3	R493	P5	X	A6
C466	L4	C3440	D7	DB30	P6	Q430	O3	R370	C5	R494	P6		
C467	H6	CB42	O6	F470	L5	Q460	I5	R371	D5	R495	P5		
C471	A7	D301	B4	F801	B2	Q465	J6	R372	C5	R498	E7		
C472	M6	D302	B6	F860	G11	Q470	J2	R373	K3	R802	P11		
C474	A5	D303	D6	F890	N7	Q471	A6	R374	L4	R808	O12		

\* Located on  
bottom of board.

SIGNAL BOARD



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BB13A	A4	C638	G11	CB15	F2	L400	B8	R205	D6	R677	B10	RB39*	C1
BB14A	A6	C639	G9	CB77	B7	L501	D9	R206	E6	R680	C10	RB75	B7
BB51	C1	C640	G10	CB90	I5	L502	D6	R207	D7	R682	B11	RB76	B7
BB61	D1	C641	G10	CB91	H6	L503	C7	R208	D7	R683	B11	RB77	B6
BB81	E1	C642	H10	CD02	J12	LA22	E2	R209	C7	R684	C10	RB78	B5
BB91	G1	C643	G9	CD03	J12	LA49	C4	R212	B7	R685	D10	RB81	J6
C102	N1	C644	H8	CD04	I12	LW03	I4	R213	B7	R686	D10	RB82	J6
C105	M1	C645	H8	CD08	I11	P101	C6	R214	B7	R831	K11	RB83	J6
C106	M1	C646	H8	CD10	I11	P105	J3	R216	A4	R832	J11	RB84	I6
C107	M1	C647	H8	CD12	I11	P511	P6	R223	E9	R850	L11	RB90	H5
C112	K5	C648	G8	CD13	J11	P604	F11	R260	I3	R851	L12	RB91	H5
C115	K4	C649	G8	CD14	O10	P606	F11	R261	I3	R4460	I2	RB92	H5
C117	N5	C650	G8	CD15	J11	Q151	J3	R266	I3	R4461	J1	RB93	H6
C151	J3	C651	I9	CD16	O9	Q152	J3	R267	I3	R4462	I2	RB94	I5
C201	D8	C652	I9	CR12	B6	Q201	E6	R268	H3	R4463	I2	RB95	H6
C203	E7	C653	G9	CR13	B6	Q202	F9	R269	H3	RA01	B2	RB96	H5
C204	D7	C654	G9	CR14	B6	Q203	B7	R270	H3	RA02	B1	RB97	H6
C205	E7	C660	A10	CR15	C6	Q261	H2	R360	D5	RA03	B1	RB98	I5
C206	C7	C661	C10	CR16	C6	Q262	H2	R361A	D5	RA04	B3	RD09	I11
C207	D5	C664	A9	CR17	C6	Q263	H2	R362A	E5	RA05	B3	RD11	I11
C208	C5	C671	B10	CS115	J9	Q360	E6	R363A	E6	RA06	C2	RD13	J11
C209	C5	C673	B10	CS116	I9	Q501	E8	RA01	C9	RA07	C2	RD14	J10
C212	E6	C674	B10	CS118	I10	Q502	L6	R402	B7	RA09	C2	RD16	J10
C213	B5	C675	C10	CS119	J9	Q503	M8	R403	C8	RA10	C2	RM16	E5
C214	C5	C676	C10	CS120	J9	Q610	B11	R405	B6	RA11	B3	RM18	D5
C260	I3	C677	C10	CS121	J10	Q612	F2	R407	E9	RA12	D2	RR08	D4
C315	C9	C678	B10	CW08	G4	Q621	H11	R413	B8	RA13	D2	RR09	D4
C401	C8	C679	A10	CW09	G4	Q622	H9	R501	D9	RA15	B2	RR10	D4
C403	C8	C680	D10	D101	M1	Q670	B10	R502	B8	RA16	B3	RR12	D3
C404	B9	C681	E12	D201	B5	Q671	C10	R503	B8	RA17	C2	RR13	D3
C415	C8	C682	E11	D215	D5	Q672	B10	R504	K6	RA18	B3	RR14	D3
C430	B9	C683	E10	D216	D5	Q830	K11	R505	L6	RA19	B3	RR15	D4
C431	B8	C684	C10	D217	C5	Q850	M11	R506	E8	RA26	F3	RR16	D4
C498	B8	C685	D10	D218	D6	Q4460	J2	R508	M8	RA27	F2	RR17	D4
C501	F7	C686	D10	D219	C6	Q4461	J2	R509	M8	RA28	C2	RR18	D4
C502	D8	C831	K11	D220	C6	QA01	B2	R510	M8	RA29	E2	RR40	M10
C503	D8	C850	M11	D401	B8	QA02	B2	R511	E8	RA30	D2	RR42	M10
C504	D9	C892	K11	D512	G5	QA71	F3	R512	E7	RA31	E4	RR44	M10
C505	D8	CA10	C2	D611	G2	QB03	A2	R514	F7	RA33	E3	RS101	J9
C508	E7	CA13	C2	D612	G2	QB14	F2	R515	H5	RA34	E3	RS102	J10
C509	D6	CA19	A4	D613	G3	QB77	B7	R612	F2	RA35	E3	RS103	K9
C510	C7	CA20	D2	D614	G3	QB81	J6	R613	F2	RA39	D3	RS104	K9
C511	D7	CA21	D2	D622*	H9	QB82	J6	R621	H11	RA46	D4	RS105	I9
C512	D9	CA22	D2	D670	D12	QB83	I6	R622	G11	RA47	D4	RS107	I9
C513	D7	CA23	E2	D671	C12	QB84	H5	R623	F11	RA48	D4	RS108	I9
C514	E7	CA24	E3	D674	E11	QB85	I5	R624	G11	RA49	C4	RS109	J9
C515	E6	CA25	E2	D675	E11	QB86	I5	R625	H11	RA50	C3	RS110	K9
C517	D8	CA26	E3	D830	K11	QB87	H6	R626	G10	RA51	C3	RS111	J10
C601	F11	CA27	E2	D850	L11	QB88	H6	R627	F11	RA52	C3	RS112	K10
C602	F12	CA29	E2	DA02	A2	QD01	J11	R633	G10	RA54	B4	RS113	J10
C612	G2	CA30	E2	DA34	E4	QM03	D5	R634	G10	RA55	B4	RS114	K10
C621	I11	CA34	E4	DA43	B2	QR02	D4	R635	H9	RA56	C3	RS115	J9
C622	H11	CA45	D3	DA44	B2	QS101	J9	R636	H9	RA59	B4	RS116	L9
C623	I11	CA49	C4	DA45	B2	QS102	K9	R637	H9	RA60	B4	RW10	G4
C624	H12	CA50	C4	DA46	B2	QS103	K10	R638	H9	RA74	F3	RW14	H5
C625	H11	CA52	C4	DR84	C5	QS104	K10	R639	G9	RA75	F3	RW16	H5
C626	H12	CA54	C4	DS106	I6	QW01	I4	R640	H9	RA79	A3	RW30	G4
C627	G12	CA59	B4	G101	O1	QW05	G4	R641	H9	RA80	A1	RW38	E9
C628	G11	CA60	B4	G102	N1	QW11	G3	R642	H9	RA82	F3	RW40	H5
C629	G12	CA61	B4	G501	K6	QW16	E8	R643	H9	RA83	F3	RZ30	L7
C630	I10	CA64	B4	H001	O1	QW17	H5	R668	A10	RA86	B1	TP501	E6
C631	H10	CA68	A2	HY01	J4	QZ11	L7	R669	A10	RA87	B1	X501	D9
C632	H10	CA69	A2	L101	N1	R150	J3	R670	C9	RA88	A3	XA01	B3
C633	H10	CA71	F3	L111	K5	R151	J3	R671	C10	RB03	A2	ZY01	N8
C634	H10	CA72	F3	L113	M4	R152	J3	R672	B9	RB14	E2		
C635	G10	CA73	E4	L115	N5	R201	F9	R673	B10	RB15	E2		
C636	I11	CB13	E3	L121	J5	R202	F9	R675	C10	RB16	E2		
C637	G10	CB14	F3	L122	J5	R204	C6	R676	C10	RB17	F2		

\* Located on bottom of board.



PARTS LIST

Item No.	Type No.	Mfr. Part No.	NTE Part No.
D101	MTZJ33D	23316756	-
D201	ISS133	23118859	NTE519
D215 Thru			
D220	ISS133	23118859	NTE519
D301	BYD33J	23118479	NTE580
D302	EU2A	23118094	NTE552
D303	SC570A	23316794	-
D311	ISS133	23118859	NTE519
D335	MTZJ11A	23316715	-
D336	MTZJ5.6B	23316672	NTE5011T1
D337	RD5.6ESB2	23118529	NTE5011A
D338	MTZJ3.0B	23316655	-
D370	MTZJ5.6B	23316672	NTE5011T1
D371	ISS133	23118859	NTE519
D390	MTZJ2.4B	23316651	-
D395	MTZJ15B	23316725	NTE5023A
D401	MTZJ12B	23316719	NTE5021T1
D404	ERC06-15	23316254	NTE506
D406	S5295G	23115910	NTE552
D420	MTZJ7.5A	23316680	-
D430	MTZJ10A	23316689	NTE5018A
D441	MTZJ9.1B	23316687	-
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D444	ERD29-06J	23316969	NTE580
D467	1S1887(FA)	23115296	NTE116
D470	ISS133	23118859	NTE519
D471	TVR-1B	23115820	NTE552
# D472	RD6.2E(4)	23115774	NTE5013A
D473	ISS133	23118859	NTE519
D474	MTZJ12B	23316719	NTE5021T1
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D911	IS1834	23115337	NTE552
D3440, 41	IS1832	23115999	NTE506
D4385	MTZJ7.5A	23316680	-
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DA02	MTZJ6.2A	23316674	-
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DA43 Thru			
DA46	ISS133	23118859	NTE519
DB01	SLR-56VC3FPQ	23358564	-

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DB03	SIR-56SB3F	23358522	-
DB05	MTZJ6.2B	23316675	NTE5013T1
DB30, 40	ISS133	23118859	NTE519
DJ01	ISS133	23118859	NTE519
DJ02	MTZJ15C	23316726	-
DR84	ISS133	23118859	NTE519
DS106	MTZJ3.9A	23316660	-
DV01	RD9.1ES	23118518	NTE5018A
DV02, 03	MTZJ9.1A	23316686	-
DV07, 08, 09	MTZJ9.1A	23316686	-
DV11, 12, 13, 17	MTZJ9.1A	23316686	-
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Q152	2SC1740S,Q	23114528	NTE85
Q201, 02	2SC1740S,Q	23114528	NTE85
Q203	2SC752GTM-Y	23114437	NTE85
Q261	2SC1740S,Q	23114528	NTE85
Q262, 63	2SA933S-Q	23114530	NTE290A
Q301	LA7846N	23905610	-
Q302	TA1241N	23905871	-
Q306	2SA933S-Q	23114530	NTE290A
Q307, 08, 60	2SC1740S,Q	23114528	NTE85
Q370	-	-	-
Q390	TA75558S	23318187	NTE1529
Q391	2SC4256	23314548	NTE2588
Q402	2SC2482(FA-1,C)	23114755	NTE2588
Q404	2SD2553(FA)	23314955	-
Q420	2SC3852	23314141	NTE56%
Q421	2SC1815-Y	23114433	NTE85
Q430	2SC4721,Q	23314445	-
Q460	2SD2493(P)	23314938	-
Q462, 65	2SA933S-Q	23114530	NTE290A
Q470	2SC1740S,Q	23114528	NTE85
Q471	2SA1015-Q(TEM)	23114426	NTE290A
Q472	2SC1815-Y	23114433	NTE85
Q480 (1)	2SA949-Y(C)	23114759	NTE383
Q480 (2)	2SA1015-Y(TEM)	23114425	NTE290A
Q481, 82	2SC1815-Y	23114433	NTE85
Q483	RN2201	23114469	NTE2368
Q501	TA1222BN	23905575	-
Q502, 03	2SC1740S,Q	23114528	NTE85
Q610	TA8256BH	23906523	-
Q612	KTA1266Y	23314962	NTE290A
Q621	CXA2021S	23000381	-
Q622	TA1304N	23000548	-
Q670, 71, 72	2SC2878-A(TEM)	23114623	NTE85
Q706, 07, 09	2SC1740S,Q	23114528	NTE85
Q710	2SA933S-Q	23114530	NTE290A
Q711	2SA1837	23314909	-
Q712	2SC4793	23314912	-
Q719, 20	2SC1740S,Q	23114528	NTE85
Q801	STR-Z4316	23135017	-
Q805	RN1205	23114459	-
Q830	2SC3852	23314141	NTE56%
Q840	L78MR05	23318299	-
Q843	RN1205	23114459	-
Q850	2SD1944,H	23314707	-
Q862	TLP421F(GR)	23000823	-
# Q883	SE130N	23319692	NTE950
Q901	2SC4544	23314780	NTE376%
Q902	2SC1815-Y	23114433	NTE85
Q903	2SC4544	23314780	NTE376%
Q904	2SC1815-Y	23114433	NTE85
Q905	2SC4544	23314780	NTE376%
Q906	2SC1815-Y	23114433	NTE85
Q907	2SA933S-Q	23114530	NTE290A
Q908	2SC2120-Y(TEM)	23114429	NTE289A
Q910, 11	2SC1740S,Q	23114528	NTE85
Q912, 13	2SA933S-Q	23114530	NTE290A

Item No.	Type No.	Mfr. Part No.	NTE Part No.
Q914	2SC1740S,Q	23114528	NTE85
Q920 Thru			
Q925	2SC1740S,Q	23114528	NTE85
Q4460, 61	2SC1740S,Q	23114528	NTE85
QA01	MN102L35GFG	23000566	-
QA02	24LC16B-I/P	23905321	-
QA71	2SA933S-Q	23114530	NTE290A
QB03	RN1205	23114459	-
QB11	2SC1740S,Q	23114528	NTE85
QB14	2SA933S-Q	23114530	NTE290A
QB30	2SC1740S,Q	23114528	NTE85
QB41, 42	2SA933S-Q	23114530	NTE290A
QB43	2SC1740S,Q	23114528	NTE85
QB44	RN1204	23114460	NTE2359
QB77	2SC1740S,Q	23114528	NTE85
QB81, 82	2SC2878-A(TEM)	23114623	NTE85
QB83	2SA933S-Q	23114530	NTE290A
QB84	2SC1740S,Q	23114528	NTE85
QB85 Thru			
QB88	2SA933S-Q	23114530	NTE290A
QD01	TA8173AP	23905002	-
QJ02	2SC1740S,Q	23114528	NTE85
QJ03	2SC4793	23314912	-
QJ04	2SC1740S,Q	23114528	NTE85
QM03	2SC1740S,Q	23114528	NTE85
QR02	2SC1740S,Q	23114528	NTE85
QS01	2SC2878-A(TEM)	23114623	NTE85
QS101	BA10358	23904303	NTE928M
QS102	RN2204	23114466	NTE2360
QS103, 04	2SC2878-A(TEM)	23114623	NTE85
QS11	2SC2878-A(TEM)	23114623	NTE85
QS12	RN2204	23114466	NTE2360
QS13, 14	KTC3198Y	23314965	NTE199
QV01	TA8851CN	23905539	-
QV60	2SC1740S,Q	23114528	NTE85
QW01	TC4053BP(N)	23000043	-
QW02 Thru			
QW05	2SC1740S,Q	23114528	NTE85
QW10	2SA933S-Q	23114530	NTE290A
QW11	2SC1740S,Q	23114528	NTE85
QW16	2SA933S-Q	23114530	NTE290A
QW17	RN1201	23114463	NTE2367
QW18	2SA933S-Q	23114530	NTE290A
QY80	2SC1740S,Q	23114528	NTE85
QZ11	2SC1740S,Q	23114528	NTE85
Item No.	Function/Rating	Mfr. Part No.	Notes
C260	47µF 20% 16V NP	24085967	-
C396	.0018 3% 1.8kV	24082825	-
C399	10µF 20% 16V NP	24085981	-
# C440	.001 3% 1.5kV	24082592	-
# C442	.62 315V	24082925	-
	.0012 3% 1.8kV	24082821	-
# C443	.0082 3% 1.5kV	24082961	-
	.0047 3% 1.8kV	24082608	-
# C444	.0075 3% 1.5kV	24082957	-
	.003 3% 1.8kV	24082616	-
# C467	.047 3% 630V	24082855	-
	.024 630V	24820243	-
C475	.01 3% 630V	24095887	-
# C491	.62 315V	24082925	-
	.51 315V	24082923	-
C801	.22 20% 125VAC	24095670	-
C802	.1 20% 125VAC	24095679	-
C805, 06	.01 250VAC	24092623	-
C811, 12	.0047 20% 250VAC	24092585	-
C813, 14	.01 20% 250VAC	24092586	-
C864, 65	.001 10% 2kV	24092345	-

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes
C871, 77	.001 10% 2kV	24092345	-
C893, 94	100pF 10% 2kV	24092333	-
C902	.0047 10% 2kV	24092353	-
C3440	.0011 3% 1.25kV	24082395	-
CA21, 24	.47µF 20% 50V NP	24085957	-
CA26, 27	1µF 20% 50V NP	24085958	-
CA72	10µF 20% 16V NP	24085970	-
CB13	10µF 20% 16V NP	24085970	-
CV01, 16	10µF 20% 16V NP	24085981	-
# F470	Fuse	23144897	2Amp, 125V
F801	Fuse	23144745	10Amp, 125V
# F860	Fuse	23144456	5Amp, 125V
# F890, 99	Fuse	23144735	5Amp, 125V
G897	-	23280016	-
# H001	Tuner	23321411	Main, EL967LW
H003	Switch	23344421	Antenna
# HY01	Tuner	23321412	PIP, EL963L
KB01	Receiver	23906805	Remote, PIC-TB17
L101, 11	-	23289680	-
L113	-	23289220	-
L115	-	23103824	-
L121, 22	-	23238562	-
L301	-	23103859	-
L302	-	23237975	-
L400	-	23289840	-
# L441	Horizontal Linearity	23233036	-
L442 (1)	-	23248121	-
L442 (2)	-	23248122	-
L447	-	23248286	-
# L461	-	23248179	-
L462 (4)	Yoke	-	Horiz 1mH, Vert 10mH
L463	Ferrite Bead	23103859	-
L491	-	23228785	-
L501, 02	-	23289844	-
L503	-	23289470	-
L702	-	23261974	-
L704, 05	Ferrite Bead	23103859	-
L805, 06	-	23248227	-
L861, 62	Ferrite Bead	23103880	-
L883, 84	Ferrite Bead	23103880	-
L885	-	23248073	-
L886, 87	Ferrite Bead	23103880	-
L888, 89	-	23248087	-
L893, 94	Ferrite Bead	23103880	-
L901 (1)	Degaussing	23200447	-
L901 (2)	Degaussing	23200454	-
L902, 03, 04	-	23289101	-
L905, 06, 07	-	23289390	-
L908	-	23289100	-
L910	-	23237991	-
L4041	Ferrite Bead	23103880	-
LA22, 49	-	23289840	-
LJ901	-	23200465	-
LV05, 06, 19	-	23289560	-
LV27, 28	-	23103824	-
LV60, 61	-	23289840	-
LW03	-	23103845	-
LW07	-	23289842	-
LY80	-	23103824	-
LZ20, 21	-	23238562	-
P801	Line Cord	23372113	AC, Polarized
PV01	Jack	-	Assembly
PV02	Jack	-	Assembly
PV03	Jack	-	Assembly
R218	10K 2%	24367103	-
R227	4700 2%	24367472	-
R416	5600 5% 5W	24510562	-
R424	.27 5% 1/4W Fusible	24545278	-
R432	56 5% 1/2W Fusible	24531560	-

Item No.	Function/Rating	Mfr. Part No.	Notes
R441	1000 5% 1W Fusible	24532102	-
# R451	13K 1% 1/4W	24327133	-
# R453	4700 1% 1/4W	24327472	-
R458	18K 1% 1/4W	24327183	-
# R470	.56 5% 1W	24338568	-
# R475	470	24366471	-
R489	18K 1% 1/4W	24327183	-
R498	2.7 5% 5W	24510279	-
R808	1.5 Cold PTC	24019477	-
R810	1 5% 15W	24007874	-
R832	3.9 5% 2W Fusible	24548399	-
R920	3.6 5% 1W Fusible	24000883	-
	4.7 5% 1W Fusible	24000568	-
R984	1500 2% 1/6W	24367152	-
R985	470 2% 1/6W	24367471	-
R986, 87	680 2% 1/6W	24367681	-
R988	4700 2% 1/6W	24367472	-
R989	3300 2% 1/6W	24367332	-
R991	680 2% 1/6W	24367681	-
# R3440	1.2 5% 1W	24338129	-
S602	Switch	23145412	C Input (External/Internal)
SA01	Switch	23145227	Channel Up
SA02	Switch	23145227	Channel Down
SA03	Switch	23145227	Volume Up
SA04	Switch	23145227	Volume Down
SA05	Switch	23145227	Power
SA06	Switch	23145227	Menu
SA07	Switch	23145227	Video
SA08	Switch	23145227	Demo
SJ01	Relay	23146958	12V DC
SP1, 2	Speaker	23351038	60 X 120mm, 8 Ohms
SP3	Speaker	23351133	100 X 100mm, 16 Ohms
# SR81	Relay	23146556	12V DC
SR83	Relay	23146570	12V DC
SVM	-	-	-
# T400	Focus	23224364	-
T401	Horizontal Driver	23224367	-
# T461 (1)(3)	Horizontal Output	23236672	TFB4172AD
# T461 (2)(3)	Horizontal Output	23236718	-
T801	Line Choke	23211759	-
# T840	Power	23217233	-
# T862	Converter	23217486	-
UZ01	Module	23148747	3D-YCS Comb
# V901 (1)	CRT	23312922	A90AJZ90X01
# V901 (2)	CRT	23312930	A80ERF031X13
V901A	Socket	23903145	CRT
X401	Resonator	23153721	503kHz
X501	Crystal	23153961	3.58MHz
XA01	Resonator	23153011	4MHz
ZY01	Module	23148736	Multi Picture
	PC Board	23785234	A/V, PB9633A
	PC Board (1)	23786348	Control 2, PB9571C2
	PC Board (2)	23785391	Control 2, PB9700
	PC Board (1)	23786258	CRT, PB9973E2
	PC Board (2)	23786691	CRT, PB9973G2
	PC Board (1)	23786256	Power/DEF, PB9631E
	PC Board (2)	23786690	Power/DEF, PB9631F
	PC Board (1)	23786698	PW, PB9570A
	PC Board (2)	23785396	PW, PB9699
	PC Board	23786257	Signal, PB9635E
	Transmitter	23306370	Remote, CT-90047

# For SAFETY use only equivalent replacement part.  
% Lead configuration may vary from original.  
(1) Used in model 36AFX61.  
(2) Used in model 32AFX61.  
(3) Screen and focus controls are part of T461.  
(4) Bonded part of CRT.

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.