

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.

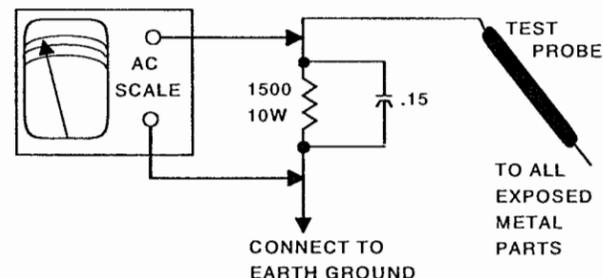
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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.



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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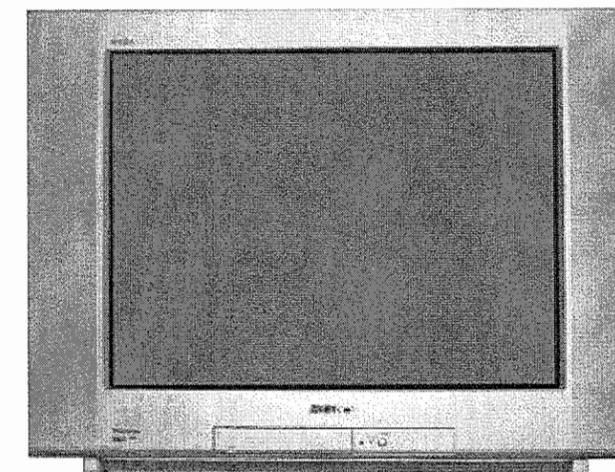
PHOTOFACT[®] Technical Service Data

SILVER

4996

SONY

Model KV-27FS120 (Chassis SCC-S61N-A)



SET 4996

4996

MODEL KV-27FS120 (CHASSIS SCC-S61N-A)

4996

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Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

Coverage includes this additional model and chassis:

Model	Chassis
KV-27FS120	SCC-S59J-A

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MARCH 2005 SET 4996

SONY

PLACEMENT CHART continued

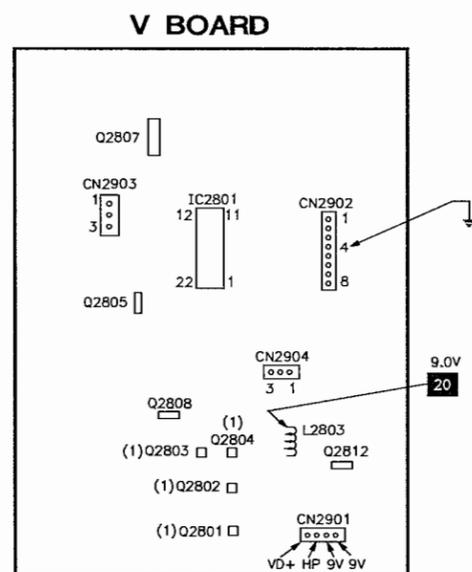
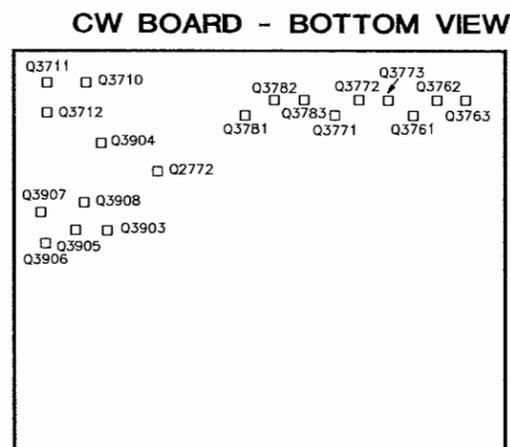
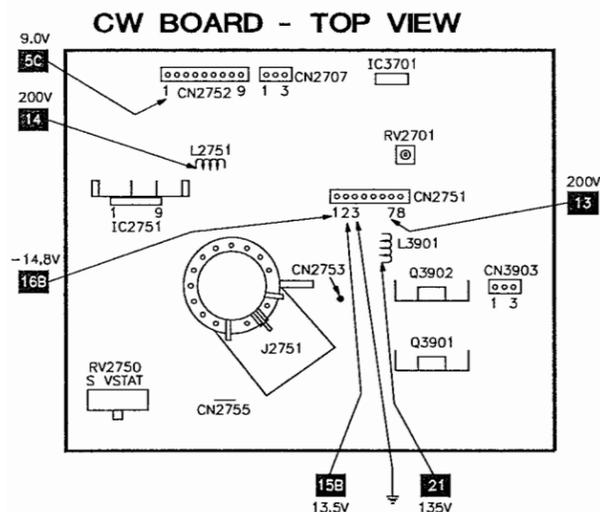
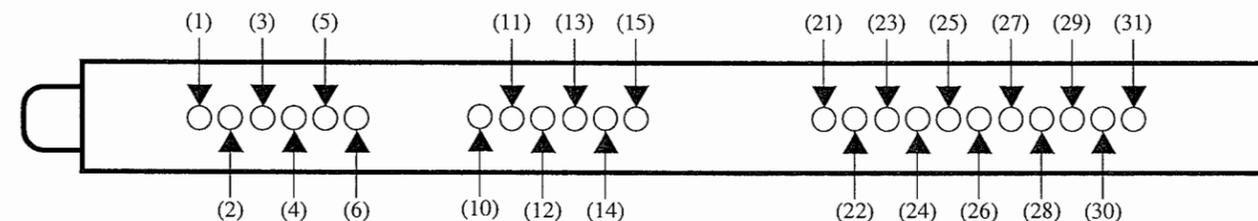
TUNER INFORMATION

TUNER/IF MODULE VOLTAGE CHART

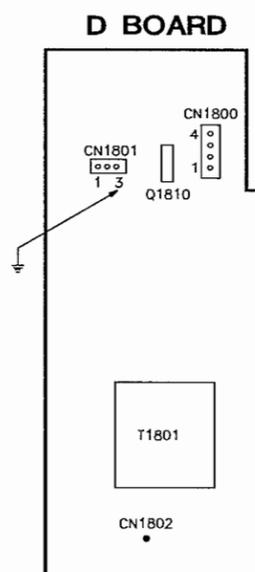
Pin	Pin Name	Voltage	Pin	Pin Name	Voltage	Pin	Pin Name	Voltage
(1)	9V	9.0V	(12)	VIF	0V	(25)	MODE	.02V
(2)	30V	30.0V	(13)	9V	9.0V	(26)	F MONO	.01V
(3)	5V	5.0V	(14)	AFT OUT	4.3V	(27)	NC	0V
(4)	SCL	4.5V	(15)	GND	0V	(28)	MUTE	.24V
(5)	SDA	4.6V	(21)	DET OUT2	4.7V	(29)	NC	0V
(6)	AS	0V	(22)	DET OUT1	4.4V	(30)	R OUT	4.1V
(10)	GND	0V	(23)	ST IND	.94V	(31)	L OUT	4.1V
(11)	RF AGC	4.5V	(24)	SAP IND	.95V			

NOTE: Voltages do not change on different bands.

TUNER/IF MODULE VOLTAGE CHART



(1) LOCATED ON BOTTOM OF BOARD



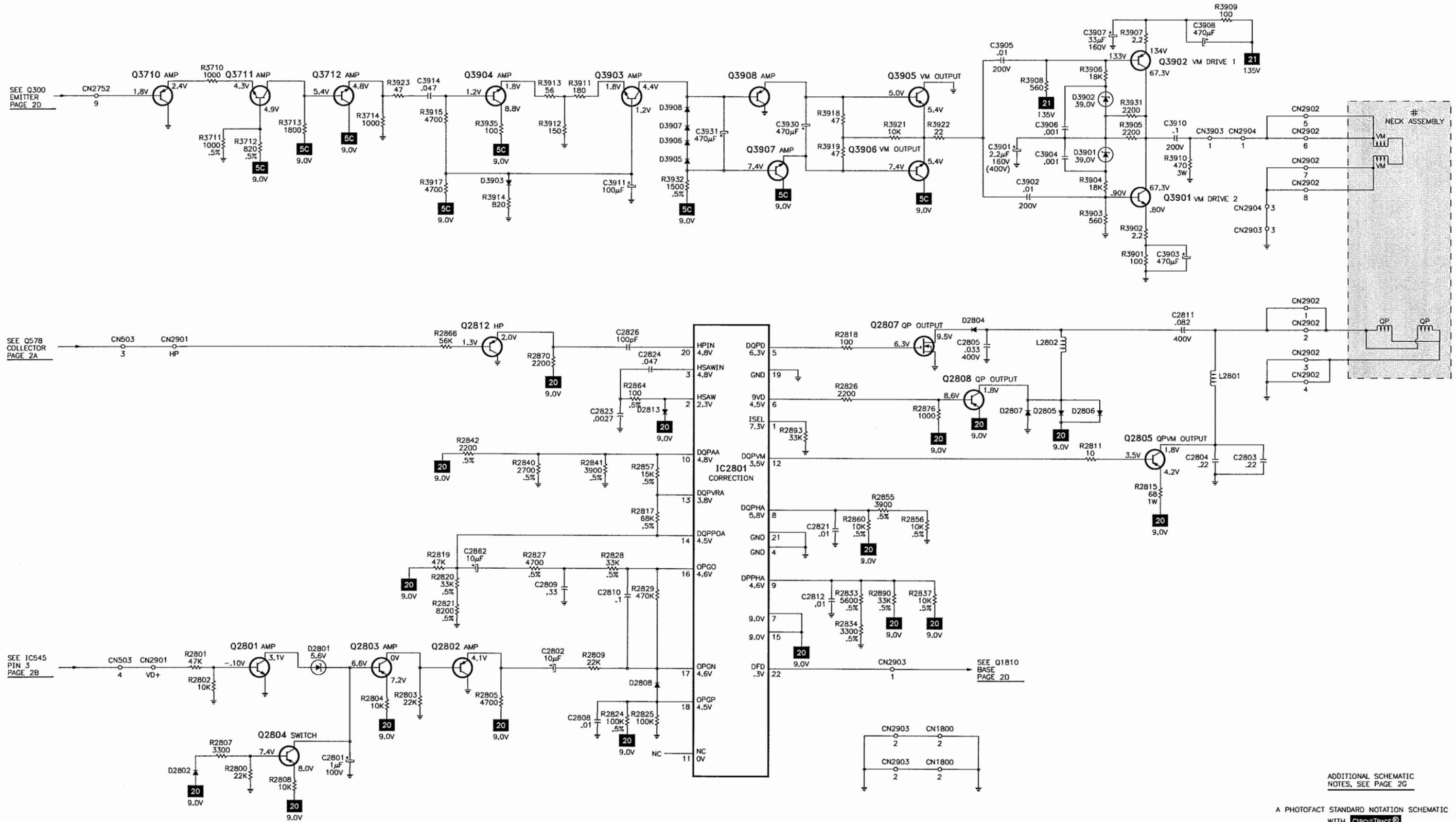
SCHEMATIC COMPONENT LOCATION GUIDE

C003	D46	C301	B10	C470	D53	C600	C34	C2753	E44	D050	D42	D604	B36	D3907	B20	J203	D49	Q391	C12	R004	D1	R101	B1	R363	A7	R537	D5	R606	C34	R1203	C45	R2840	C19	R3903	B22
C004	D46	C302	B10	C501	E2	C602	A34	C2754	C29	D051	D42	D606	B36	D3908	A20	J203	D49	Q400	D55	R006	D46	R102	B1	R364	A6	R540	D7	R607	C34	R1234	A11	R2841	C20	R3904	B22
C005	C8	C303	B11	C502	E2	C603	A34	C2755	B31	D052	E39	D611	A39	F601	A33	J205	D55	Q401	D55	R015	D46	R103	A1	R370	C10	R542	D8	R608	C2	R1235	D50	R2842	C19	R3905	B23
C006	C8	C304	A12	C503	E3	C605	A34	C2774	C25	D200	C50	D612	A36	FB301	C43	J205	D55	Q404	B54	R027	C12	R107	B2	R371	C10	R543	D9	R609	C41	R1236	D49	R2855	D21	R3906	A22
C007	B11	C305	B13	C504	E3	C609	E38	C2775	C44	D201	C50	D613	A36	FB401	B56	J1231	A11	Q411	B53	R028	B47	R108	B3	R372	C10	R544	D8	R611	B36	R1237	D50	R2856	D21	R3907	A23
C008	C11	C306	B7	C505	E3	C610	A39	C2777	D27	D202	D51	D614	A40	FB402	A56	J1231	D49	Q412	D54	R029	C2	R109	C2	R382	B7	R545	D8	R613	A36	R1238	D49	R2857	C20	R3908	A22
C009	D2	C307	A7	C506	E4	C611	C35	C2778	D26	D203	D51	D615	B39	FB403	B55	J1231	D49	Q501	B34	R030	B7	R110	D47	R391	C11	R546	D8	R614	C33	R1845	E14	R2860	D21	R3909	A23
C010	E1	C313	B6	C507	E4	C612	C34	C2801	E18	D204	B50	D618	B37	FB404	A55	L002	C8	Q502	E3	R031	B8	R111	C7	R392	C12	R547	D7	R615	A37	R1846	E14	R2864	C20	R3910	B23
C011	D3	C317	C4	C508	E4	C613	B36	C2802	E19	D205	B50	D620	C35	FB462	B56	L003	D47	Q503	E33	R032	B3	R112	B46	R393	C11	R548	D6	R616	D37	R1847	E14	R2866	C19	R3911	A20
C012	D46	C318	B4	C509	C12	C615	B36	C2803	C23	D206	D54	D621	C39	FB467	A56	L004	C6	Q504	E34	R033	B33	R115	C9	R394	C11	R549	C6	R617	D37	R1848	D14	R2870	C19	R3912	B20
C014	B8	C319	C4	C510	E5	C616	C39	C2804	C23	D207	D51	D624	A39	FB505	E4	L005	C10	Q505	E4	R035	C47	R116	C9	R400	D52	R550	D3	R619	C37	R1849	E14	R2876	C22	R3913	A19
C015	C6	C325	C10	C511	E7	C617	B39	C2805	C22	D208	D54	D628	C34	FB506	E4	L006	D43	Q521	D7	R037	C13	R200	C3	R401	C51	R551	D12	R620	C39	R1850	D14	R2890	D21	R3914	B19
C019	B9	C326	C10	C512	E7	C618	B39	C2808	E20	D209	D51	D629	C34	FB522	D8	L007	D43	Q522	D7	R038	D14	R202	C49	R403	C51	R553	D2	R625	C36	R1851	E15	R2893	C21	R3915	B19
C021	B9	C328	B10	C513	E8	C620	B36	C2809	D20	D230	B11	D631	C37	FB601	A39	L008	C43	Q531	E34	R039	D13	R203	C50	R404	B54	R554	C12	R626	B36	R1852	E15	R3700	C27	R3917	B19
C022	D46	C330	B11	C514	E8	C621	A36	C2810	D20	D231	A10	D641	C41	FB602	A39	L009	B43	Q533	C12	R040	B47	R210	B49	R405	B54	R555	C13	R627	B36	R2756	A30	R3701	D28	R3918	B21
C023	E40	C337	C9	C515	E8	C624	A39	C2811	C23	D232	C4	D642	E38	FB603	A39	L010	C43	Q572	C33	R041	A47	R211	B50	R406	D54	R556	C12	R629	B36	R2757	B30	R3702	D28	R3919	B21
C033	D2	C351	C13	C516	E8	C625	C39	C2812	D21	D234	A6	D644	C41	FB604	A39	L101	C1	Q573	C33	R042	B47	R212	B50	R407	D54	R557	D5	R630	A36	R2758	B30	R3704	D29	R3921	B21
C041	E40	C370	D3	C520	C44	C629	A36	C2813	B44	D235	A12	D645	E39	FB605	C39	L501	A35	Q578	E1	R043	B47	R213	B49	R410	B53	R560	E1	R631	C36	R2760	B31	R3705	C27	R3922	B21
C047	D13	C390	C11	C521	D7	C631	D38	C2821	D21	D236	A7	D650	B43	FB616	A38	L513	E9	Q590	B39	R044	B47	R215	D55	R411	B54	R561	D5	R632	C37	R2761	A31	R3706	D30	R3923	A19
C048	D14	C400	D53	C522	D7	C632	C40	C2823	C20	D237	A10	D1001	A45	FB617	A37	L515	E8	Q600	B37	R045	B47	R216	D55	R422	B54	R562	D5	R634	D42	R2762	A31	R3707	D29	R3931	B23
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C051	A2	C402	D52	C525	D8	C634	B36	C2826	C20	D321	C44	D1003	B45	FB3701	D30	L525	D8	Q604	C34	R048	D47	R218	D54	R429	B53	R564	E6	R641	A35	R2764	B30	R3711	B18	R3935	B19
C052	E45	C403	B51	C526	D8	C635	B36	C2862	D19	D351	C13	D1004	B46	FB3702	C30	L527	E8	Q608	C34	R049	D47	R220	C3	R430	D49	R565	E6	R647	C37	R2765	B30	R3712	B18	RV2701	D27
C053	E45	C404	B51	C527	E8	C636	C37	C3701	E44	D390	C12	D1005	C45	FB3703	C30	L588	D10	Q650	B43	R050	B46	R221	C50	R431	D49	R566	E6	R650	B43	R2766	B28	R3713	B18	RV2750	C32
C054	E46	C405	C52	C529	E5	C637	C37	C3702	C29	D401	B53	D1233	A11	FL001	D43	L606	B39	Q1810	E13	R051	A46	R222	C50	R433	D50	R567	E6	R651	C36	R2767	B28	R3714	B19	RY501	B34
C056	A46	C406	E51	C534	D4	C638	C42	C3703	E44	D405	B55	D1235	D50	IC001	A46	L607	C39	Q2772	D26	R052	B8	R227	A10	R442	D50	R568	E7	R652	C36	R2768	A28	R3719	D30	RY501	B35
C057	B46	C407	C52	C536	D5	C640	A39	C3708	D28	D414	D53	D1236	D50	IC001	B7	L608	A39	Q2801	E18	R053	B46	R229	A10	R450	C40	R569	E5	R658	B37	R2770	B31	R3760	B25	RY600	A35
C064	E46	C408	B51	C537	E2	C642	C37	C3780	A26	D430	D50	D1809	E13	IC001	B9	L609	C42	Q2802	E19	R054	D46	R230	C4	R477	D53	R570	E5	R659	C37	R2785	C29	R3762	B26	RY600	C35
C074	B1	C409	C52	C539	C43	C643	B37	C3781	C26	D431	D50	D1810	E14	IC001	D2	L1805	E14	Q2803	E19	R055	D46	R250	A53	R478	D53	R572	C33	R660	B37	R2788	D26	R3763	B27	S1001	B45
C075	C44	C410	B52	C542	D4	C645	C37	C3782	B26	D500	D34	D1811	E14	IC002	B48	L2751	E43	Q2804	E18	R056	D45	R251	B53	R479	D54	R573	C33	R667	D37	R2789	D26	R3764	B26	S1002	B45
C076	B44	C411	B52	C544	E43	C647	B37	C3901	B22	D501	B34	D1812	E14	IC003	D45	L2801	C23	Q2805	C23	R057	B46	R303	B6	R499	B53	R574	E5	R668	D38	R2800	E18	R3765	B26	S1003	B45
C077	C44	C412	B52	C545	D8	C648	B38	C3902	B22	D505	E5	D2701	E43	IC321	B5	L2802	C22	Q2807	C21	R058	B7	R305	B13	R501	E2	R575	D6	R670	C37	R2801	E18	R3766	B27	S1004	B45
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C090	D47	C416	C52	C551	D2	C655	C38	C3906	B22	D510	E5	D2758	B31	IC561	D5	L3712	A26	Q3711	A18	R062	D47	R311	C14	R507	B33	R584	D12	R802	E33	R2805	E19	R3770	B25	S1008	C45
C091	D47	C418	C52	C552	D2	C660	C43	C3907	A22	D513	E2	D2801	E18	IC565	D4	L3901	B40	Q3712	A18	R063	E46	R312	C14	R510	E8	R585	D12	R803	E33	R2807	E18	R3771	B26	SP1	A56
C092	C6	C419	D53	C553	D1	C661	B44	C3908	A23	D514	E9	D2802	E18	IC600	B37	N/S COIL	C30	Q3761	B26	R070	B47	R314	C14	R513	E9	R586	D12	R812	E33	R2808	E18	R3772	B26	SP2	B56
C094	C11	C420	C52	C554	D1	C665	D44	C3909	B40	D515	E9	D2804	C22	IC603	C41	P600	A33	Q3762	B27	R072	C46	R315	B14	R514	E9	R587	D42	R813	E33	R2809	E20	R3773	B27	SW515	E9
C095	C10	C421	B55	C555	E42	C672	C38	C3910	B23	D525	E5	D2805	C22	IC604	D37	PH602	D36	Q3763	B28	R076	C33	R316	B15	R515	E8	R588	D10	R814	E34	R2811	C22	R3774	C26	T505	E3
C096	D44	C422	C44	C558	D42	C673	C2	C3911	B20	D526	D8	D2806	C22	IC608	E39	PS401	B40	Q3771	B26	R080	E46	R317	C14	R517	D12	R589	B39	R815	E35	R2815	D23	R3775	C26	T510	E7
C097	D44	C423	C55	C561	E6	C680	A34	C3912	C43	D528	E5	D2807	C22	IC633	D42	Q002	D13	Q3772	B27	R081	E46	R318	C15	R520	D6	R590	B39	R850	E12	R2817	D20	R3776	B27	T511	E7
C098	D44	C424	D53	C562	D6	C690	C41	C3913	C44	D545	D8	D2808	E20	IC1001	A45	Q004	A2	Q3773	B28	R082	E45	R319	B14	R521	E7	R591	A39	R851	D12	R2818	C21	R3777	B27	T585	C11
C099	D44	C430	D49	C563	D34	C901	D6	C3914	A19	D558	C14	D2813	C20	IC2751	B29	Q005	E45	Q3781	A26	R083	E45	R320	A15	R522	D7	R592	B39	R852	D4	R2819	D19	R3778	B28	T585	E41
C100	B10	C431	D49	C566																															

E

VM SCHEMATIC

F



SEE Q300
EMITTER
PAGE 2D

SEE Q578
COLLECTOR
PAGE 2A

SEE IC545
PIN 3
PAGE 2B

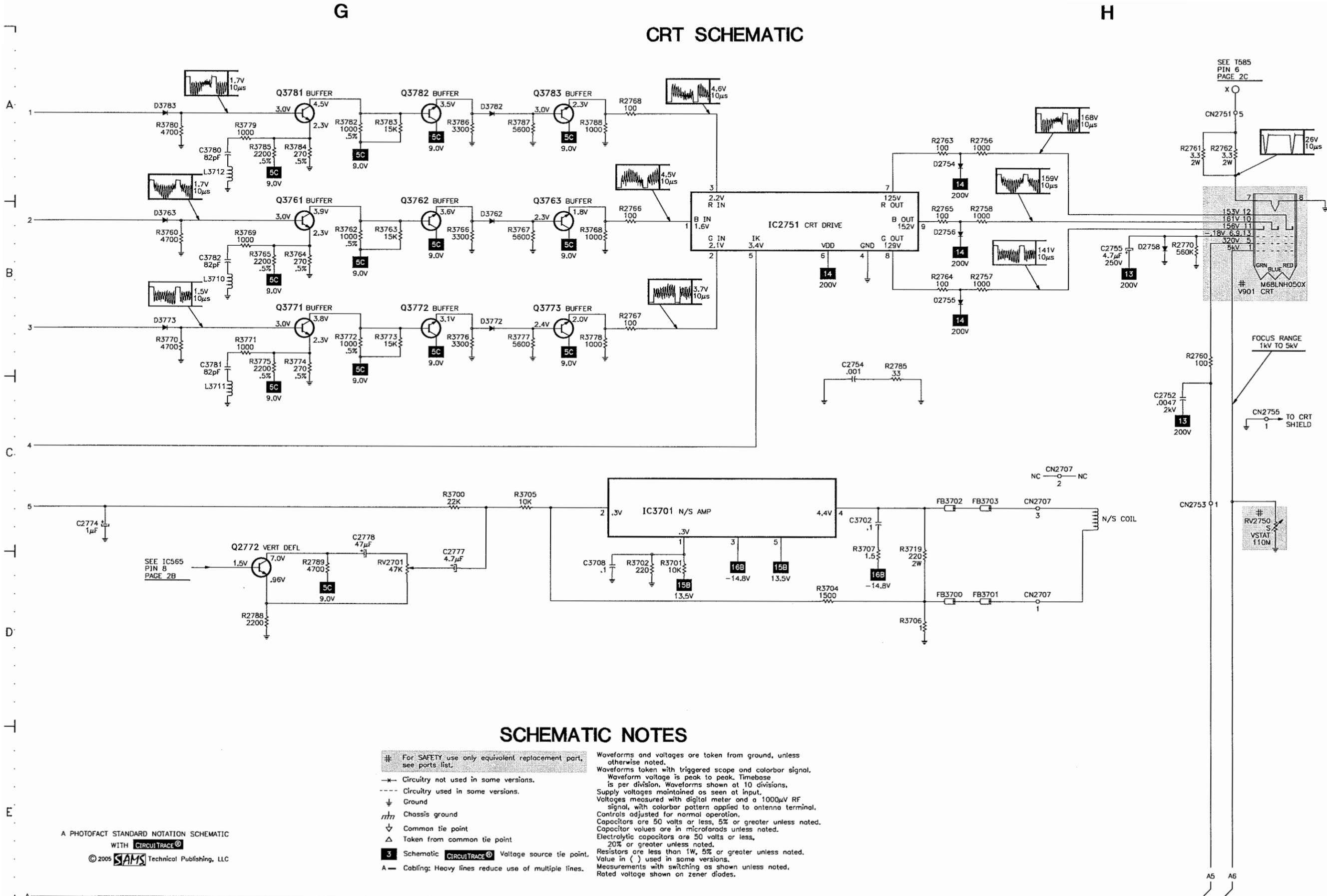
SEE Q1810
BASE
PAGE 2D

ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2G

A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH **CircuitTrace**

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CRT SCHEMATIC



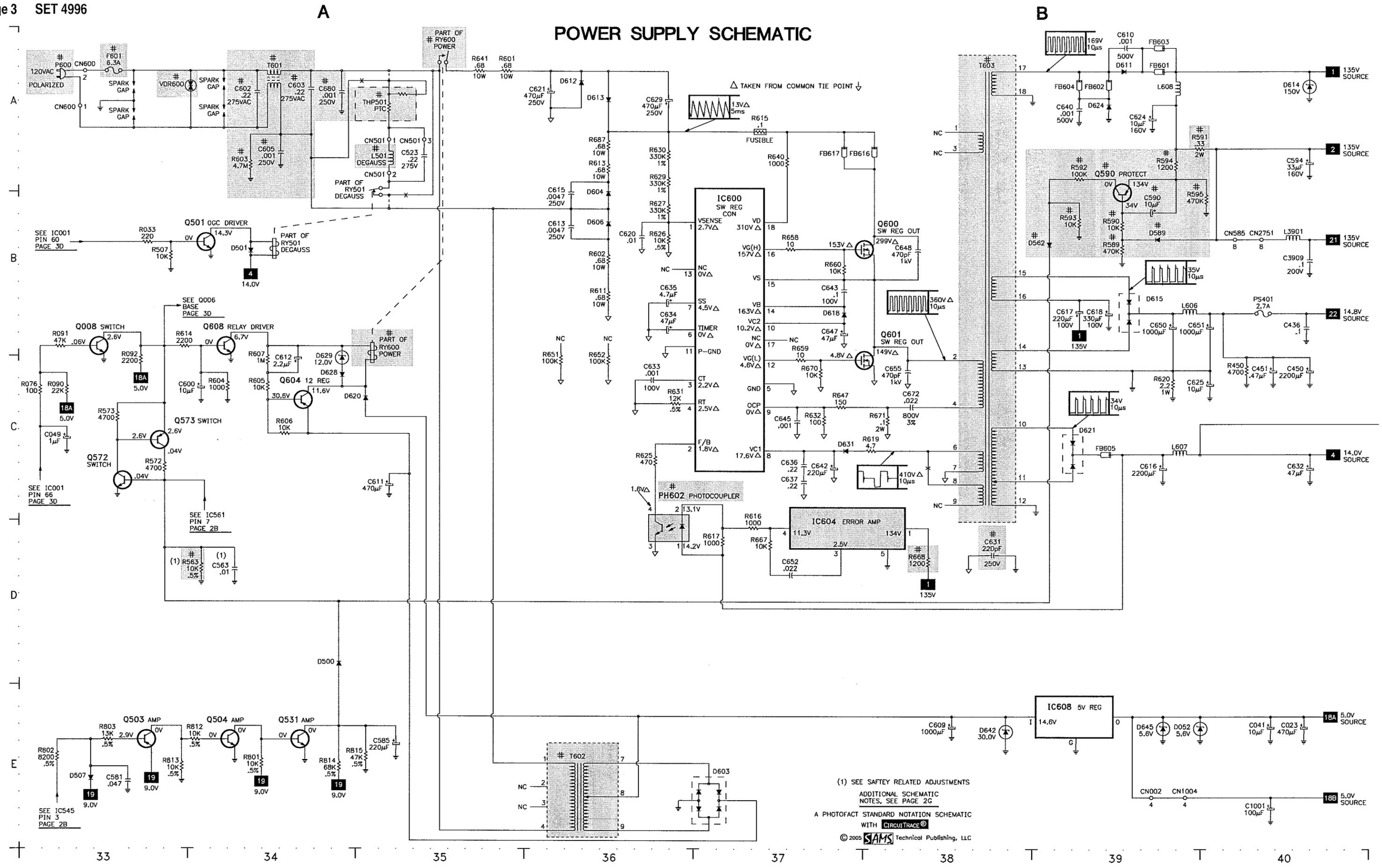
SCHEMATIC NOTES

- # 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 Voltage source tie point.
 - 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 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. Capacitor values are in microfarads 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.

A PHOTOFACIT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®
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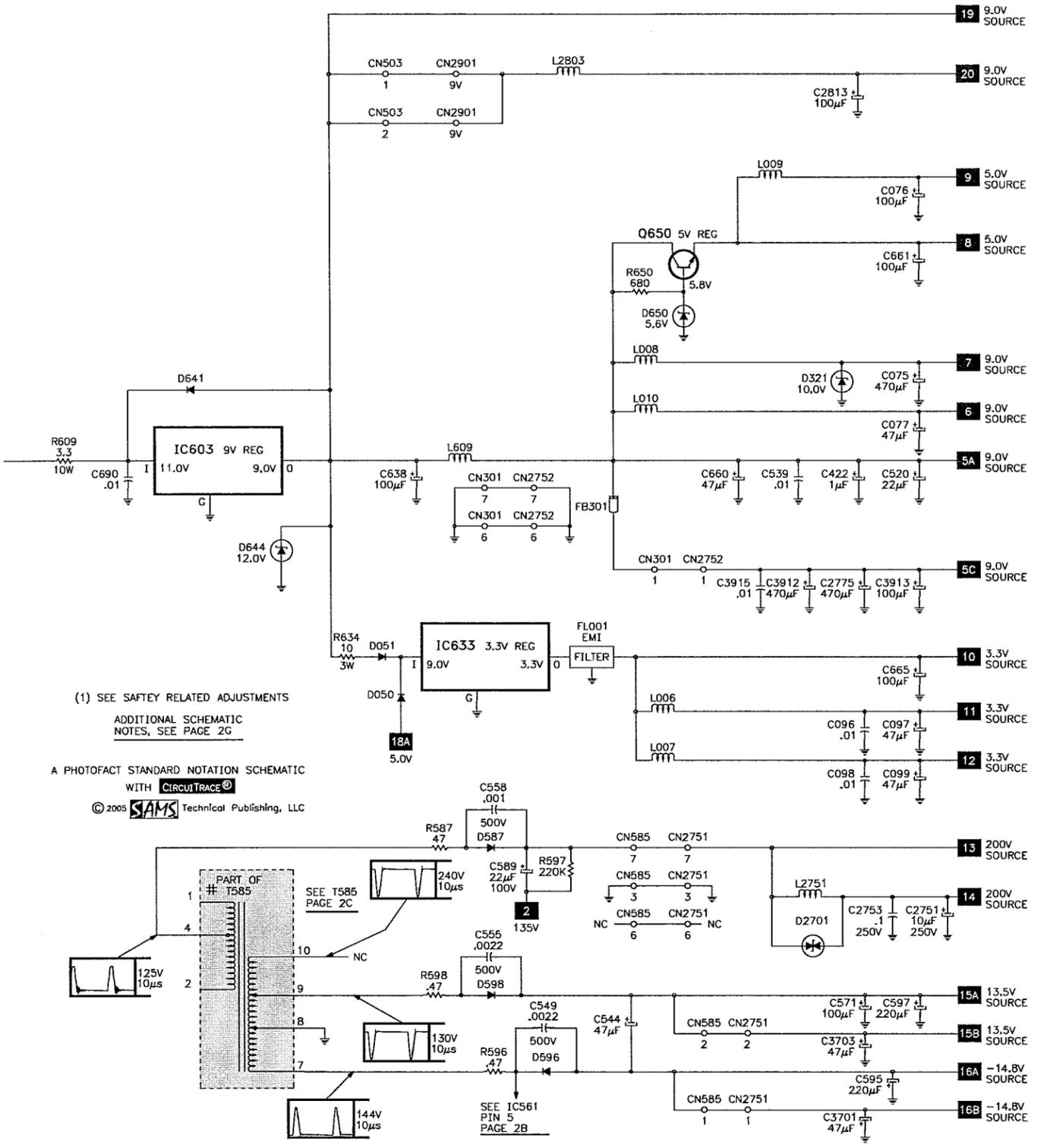
SONY MODEL KV-27FS120 (CHASSIS SCC-S61N-A)

POWER SUPPLY SCHEMATIC



(1) SEE SAFETY RELATED ADJUSTMENTS
 ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2G
 A PHOTOFAC STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®
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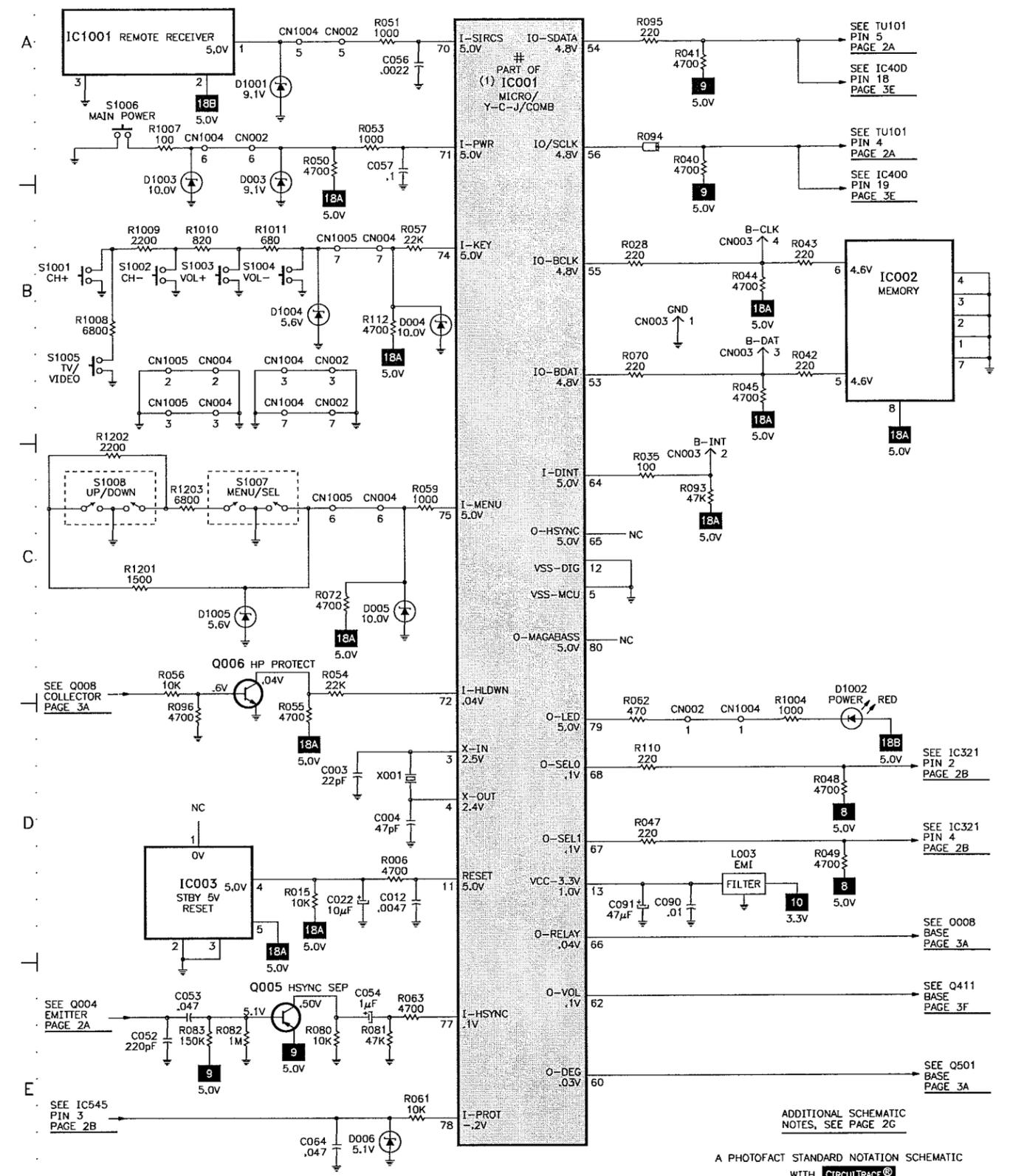
C
POWER SUPPLY SCHEMATIC continued



(1) SEE SAFETY RELATED ADJUSTMENTS
ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2C

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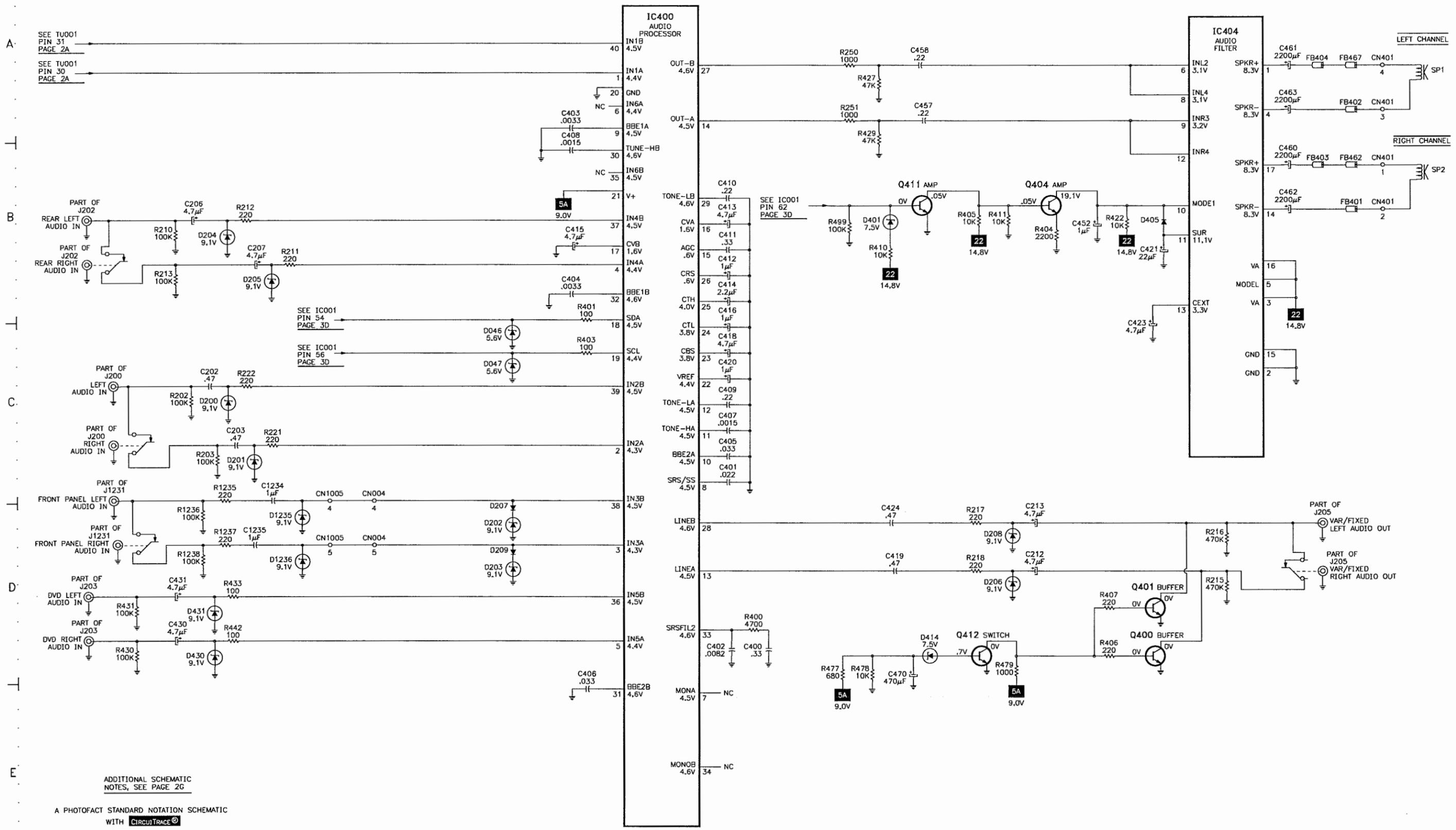
D
SYSTEM CONTROL SCHEMATIC



TUNER/IF MODULE NOT INCLUDED IN THIS COVERAGE

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2C
A PHOTOFAC STANDARD NOTATION SCHEMATIC WITH CIRCUITTRACE®
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AUDIO SCHEMATIC

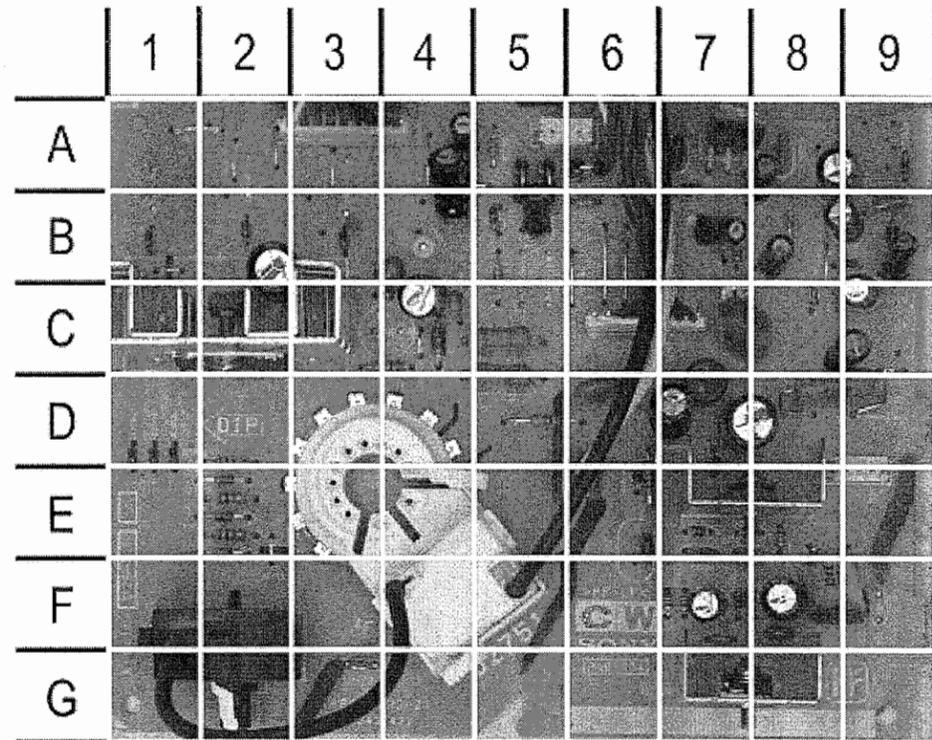


ADDITIONAL SCHEMATIC NOTES, SEE PAGE 26

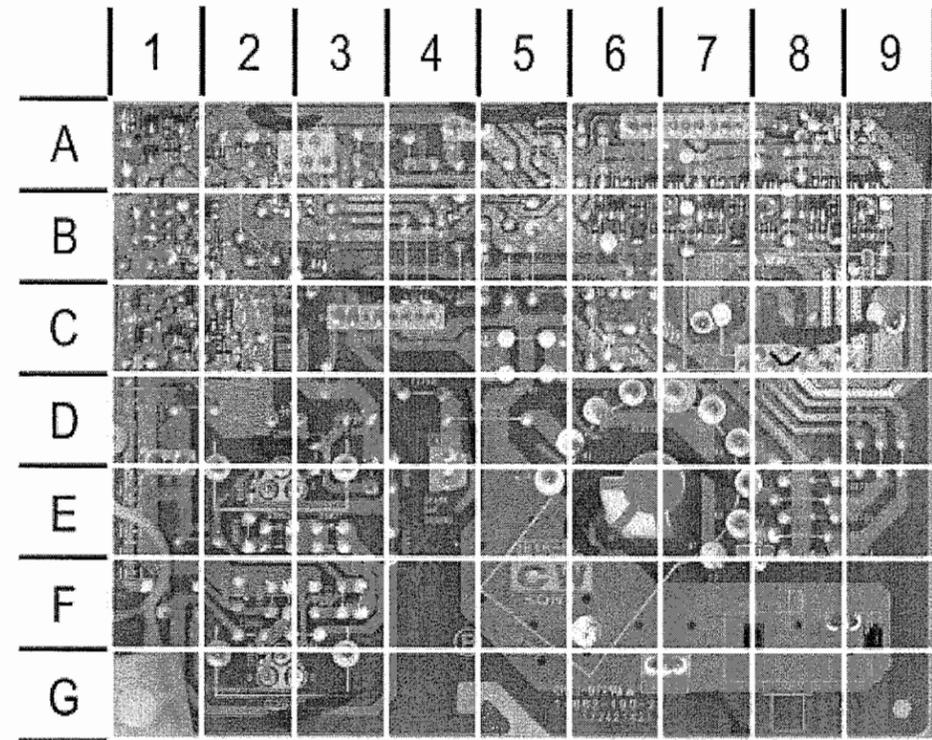
A PHOTOFACIT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

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CW BOARD



A SAMS Technical Publishing, LLC GRIDTRACE™ PHOTO



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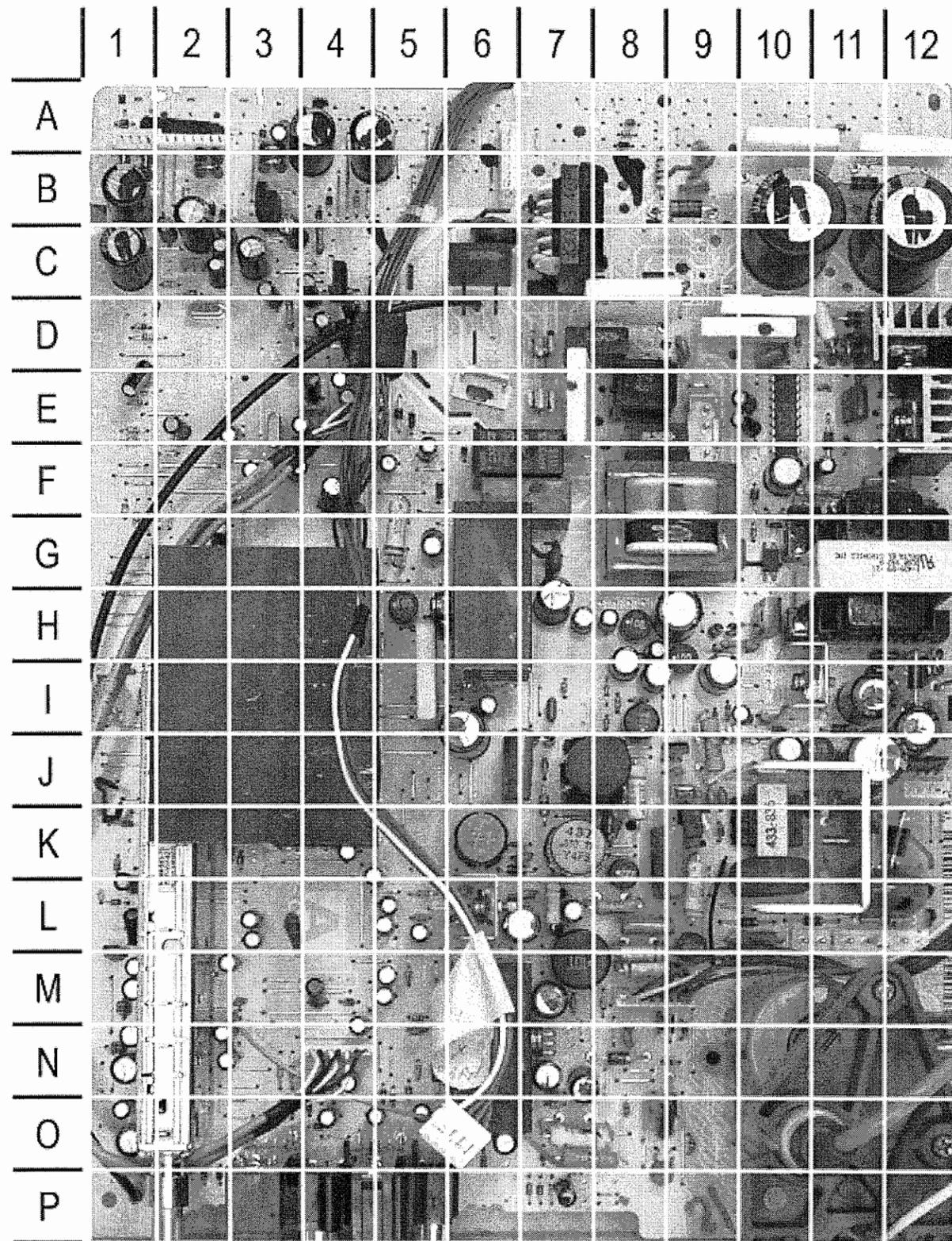
CW BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C2751	B2	C3902	F8	C3931	B8	D3903	C8	R2757	E2	R2789	B8	R3908	E6
C2752	D6	C3903	F8	CN2707	A5	D3905	B9	R2758	D2	R3700	A5	R3909	E6
C2753	C2	C3904	E7	CN2751	C6	FB3700	A5	R2760	D5	R3704	B6	R3910	D8
C2754	C4	C3905	E6	CN2752	A3	FB3701	A5	R2761	C5	R3706	B5	R3922	F9
C2755	C4	C3906	E8	CN2753	E6	FB3702	A6	R2762	C5	R3707	A7	R3923	A9
C2774	A4	C3907	D8	CN2755	G3	FB3703	A6	R2763	D1	R3719	A6	R3931	F7
C2775	A4	C3908	D7	CN3903	E9	IC2751	C1	R2764	D1	R3775	A7	R3935	B9
C2777	B5	C3909	C7	D2701	C4	IC3701	A7	R2765	D1	R3901	F8	RV2701	C7
C2778	B8	C3910	F8	D2754	E2	J2751	F4	R2766	B1	R3902	F9	RV2750	G2
C3701	B7	C3911	C9	D2755	E2	L2751	B4	R2767	B2	R3903	F7		
C3702	A7	C3912	A8	D2756	E2	L3901	D7	R2768	B3	R3904	F7		
C3703	A8	C3913	B9	D2758	C4	Q3901	G7	R2770	C4	R3905	F7		
C3708	A8	C3914	B9	D3901	E7	Q3902	E7	R2785	B5	R3906	E8		
C3901	F7	C3930	C9	D3902	E7	R2756	E2	R2788	B7	R3907	D7		

CW BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C3780	B7	D3908	B1	Q3772	A7	R3702	A2	R3766	B9	R3779	B6	R3914	C2
C3781	B7	L3710	B8	Q3773	A8	R3705	B4	R3767	B9	R3780	B6	R3915	B2
C3782	B8	L3711	B7	Q3781	B6	R3710	A1	R3768	B9	R3782	A6	R3917	B1
C3915	A2	L3712	B6	Q3782	A7	R3711	A1	R3769	B8	R3783	A6	R3918	C1
D3762	B9	Q2772	B3	Q3783	A8	R3712	A1	R3770	B7	R3784	B6	R3919	C1
D3763	B8	Q3710	A1	Q3903	C2	R3713	A1	R3771	B7	R3785	A6	R3921	C1
D3772	B8	Q3711	A1	Q3904	B2	R3714	A1	R3772	A7	R3786	B6	R3932	B1
D3773	B7	Q3712	A1	Q3905	C1	R3760	B8	R3773	A7	R3787	B6		
D3782	B7	Q3761	B8	Q3906	C1	R3762	A8	R3774	B7	R3788	B7		
D3783	B6	Q3762	A9	Q3907	C1	R3763	A8	R3776	B8	R3911	C2		
D3906	B1	Q3763	A9	Q3908	B1	R3764	B8	R3777	B8	R3912	C2		
D3907	B1	Q3771	B7	R3701	A2	R3765	A8	R3778	B8	R3913	C2		

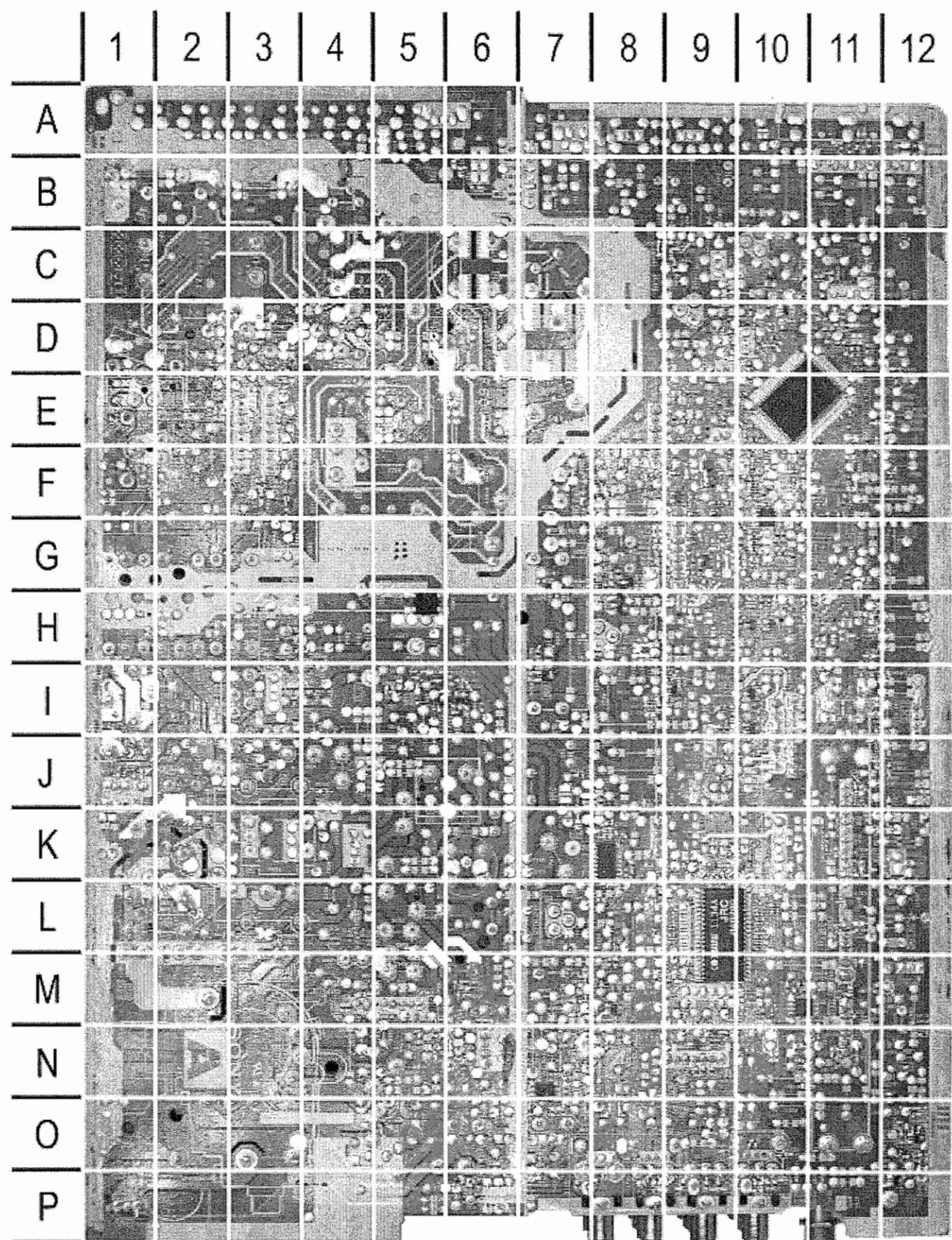
A BOARD - TOP VIEW



A BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C006	B2	C504	J9	C625	H8	D237	O3	FB522	L6	R057	E1	R596	N9
C008	C2	C505	J9	C629	B10	D317	N2	FB601	I11	R058	E1	R598	O9
C010	C2	C506	K11	C631	G10	D321	N2	FB602	I12	R059	D1	R601	C8
C014	C4	C507	L11	C632	H7	D351	G4	FB603	H12	R060	E1	R602	A10
C019	D4	C508	K10	C633	D10	D401	I3	FB604	I12	R061	D1	R603	B8
C022	C2	C509	G2	C634	E10	D405	H2	FB605	H9	R062	C2	R609	I5
C023	C3	C510	K12	C635	E10	D414	P1	FB616	D11	R070	G2	R611	A12
C041	F3	C511	J6	C640	I12	D430	M4	FB617	D11	R072	B2	R613	D10
C048	F4	C512	J7	C642	F10	D431	N5	FL001	C4	R076	B4	R615	D11
C049	E2	C513	K8	C643	E11	D505	L12	IC404	H2	R087	K1	R619	G10
C051	O1	C514	K8	C647	F11	D506	K12	IC545	N7	R110	F1	R620	H9
C054	E1	C515	L7	C648	D12	D507	I7	IC600	E10	R112	A8	R625	G10
C074	M1	C516	L8	C650	I9	D510	L12	IC603	H5	R211	O4	R627	D10
C075	N1	C520	I3	C651	I6	D514	L10	IC604	J12	R212	N3	R629	D10
C076	N1	C521	L5	C655	F12	D515	L10	IC608	B3	R217	N5	R630	C10
C077	L1	C522	L6	C660	L1	D525	M5	IC633	C4	R221	O3	R634	G5
C091	C3	C523	E8	C661	M1	D526	K6	J200	P3	R222	N3	R640	D11
C092	D4	C525	L7	C665	C3	D528	N6	J202	P4	R321	L1	R641	E7
C095	E4	C526	K7	C672	F11	D545	N6	J203	P4	R323	K1	R650	L1
C097	E3	C527	L7	C680	G7	D562	I8	J205	P5	R450	I3	R651	E12
C099	F3	C544	N6	CN002	B6	D566	N5	L002	C2	R501	I5	R652	D12
C100	E4	C545	M6	CN003	I1	D567	O7	L003	D3	R502	J9	R658	E11
C206	N4	C546	M6	CN004	A2	D568	O7	L004	D4	R503	J9	R659	E11
C207	O4	C549	N8	CN200	E5	D569	P7	L005	E4	R504	K9	R668	I11
C212	M4	C550	I8	CN201	N4	D587	N9	L008	N1	R510	J7	R671	F11
C213	O5	C551	F3	CN301	F4	D589	I8	L009	M1	R513	J8	R687	D10
C301	E4	C552	E3	CN401	A1	D596	N8	L513	I8	R514	L9	R850	O7
C302	F5	C555	O8	CN501	F9	D598	O9	L515	K8	R515	L8	RY501	F6
C303	D4	C558	M8	CN503	K4	D603	H5	L516	M7	R522	L5	RY600	F6
C304	A3	C561	M6	CN506	J12	D604	C8	L525	K6	R525	L7	SW515	K9
C313	B2	C562	N6	CN515	L12	D606	B9	L527	J7	R540	L5	T505	K10
C317	N2	C566	N6	CN585	M8	D611	I12	L588	L9	R542	M8	T510	K7
C318	M2	C571	O6	CN600	E6	D612	B11	L606	G9	R543	M8	T511	J8
C319	N2	C581	I7	D002	C2	D613	D11	L607	H8	R544	K6	T585	O11
C412	L5	C582	O8	D003	A8	D614	I11	L608	J11	R545	M8	T601	B7
C413	L3	C585	I8	D004	A11	D615	I11	L609	H5	R546	M6	T602	G8
C414	M5	C588	M9	D005	D2	D618	E11	PH602	G10	R547	M7	T603	G11
C415	L3	C589	M9	D006	G2	D620	G6	PS401	I4	R562	O6	THP501	E8
C416	M5	C590	I10	D007	N2	D621	H10	Q501	F5	R566	N5	TU101	M2
C418	K4	C594	J11	D046	K3	D624	I12	Q502	J9	R567	O7	VDR600	C6
C420	L5	C595	N7	D047	K3	D629	F6	Q505	K11	R568	P7	X001	D2
C421	H2	C597	N7	D050	B2	D631	F10	Q521	O6	R569	P7	X301	E3
C422	K4	C600	F5	D051	E5	D641	H5	Q522	L6	R575	O6		
C423	H2	C602	C6	D052	B2	D642	B4	Q590	I10	R578	M5		
C430	N4	C603	D7	D200	O3	D644	H5	Q600	D12	R581	O12		
C431	O5	C605	B9	D201	P2	D645	B4	Q601	E12	R583	O8		
C450	J4	C609	H6	D202	A1	D650	L1	Q608	E5	R584	O7		
C451	H8	C610	I12	D203	A1	F601	E7	Q650	M1	R585	N7		
C452	J3	C611	H7	D204	O3	FB301	G4	R028	G2	R587	N9		
C460	A4	C612	G6	D205	O4	FB401	B1	R029	K1	R588	L10		
C461	A4	C613	B9	D208	N5	FB402	B1	R030	I1	R589	I8		
C462	B1	C615	D9	D230	A3	FB403	B3	R033	B2	R590	I8		
C463	C1	C616	H9	D231	P2	FB404	A3	R047	G1	R591	I10		
C470	O1	C617	I11	D232	P2	FB462	B2	R050	A8	R592	I9		
C501	I6	C618	I12	D234	E4	FB467	B2	R051	E1	R593	I9		
C502	J9	C621	B12	D235	N5	FB505	J11	R053	E1	R594	I11		
C503	J9	C624	J10	D236	E4	FB506	J11	R054	G1	R595	I10		

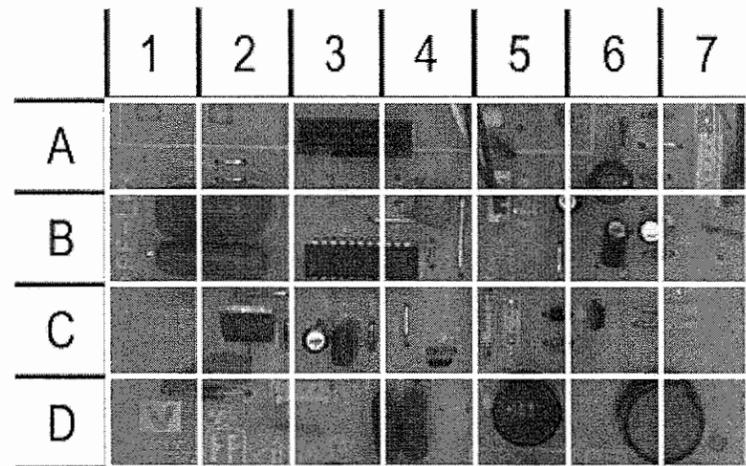
A BOARD - BOTTOM VIEW



A BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C003	D11	C403	L10	IC002	F10	R031	F11	R202	O9	R392	I8	R553	H10
C004	D11	C404	K9	IC003	D10	R032	J12	R203	P10	R393	H9	R554	H10
C005	D11	C405	L10	IC321	M10	R035	E11	R210	P9	R394	H9	R555	G11
C007	D11	C406	L9	IC400	M9	R037	G11	R213	P9	R400	K9	R556	H10
C009	C11	C407	L10	IC561	N7	R038	G8	R215	M9	R401	L10	R557	L8
C011	C10	C408	L9	IC565	K8	R039	G8	R216	P8	R403	L10	R560	H9
C012	D10	C409	L10	L006	F9	R040	N12	R218	N9	R404	I9	R561	O7
C015	E10	C410	L9	L007	F9	R041	N12	R220	J11	R405	I9	R563	G8
C021	E9	C411	L10	L010	L11	R042	G10	R227	O10	R406	N9	R564	M7
C033	F10	C419	M10	L101	N11	R043	G10	R229	O10	R407	N9	R565	M7
C047	G11	C424	M9	Q002	H11	R044	G10	R230	P10	R410	J9	R570	P6
C052	O12	C436	I10	Q004	N12	R045	G10	R250	K9	R411	I9	R572	G8
C053	O12	C457	K10	Q005	O12	R048	M10	R251	K9	R422	I10	R573	G8
C056	F12	C458	K10	Q006	H8	R049	M10	R303	E9	R427	J9	R574	P6
C057	F12	C529	N7	Q008	C9	R052	F11	R305	F8	R429	J9	R586	M6
C064	D12	C534	O7	Q009	M11	R055	H10	R308	E9	R430	P9	R597	M4
C079	L11	C536	M8	Q300	F9	R056	G8	R309	F9	R431	P9	R604	F8
C080	J11	C537	H10	Q301	G9	R063	D11	R310	F9	R433	N9	R605	H7
C081	J11	C539	K8	Q303	G9	R080	O12	R311	G9	R442	M10	R606	I7
C090	D10	C542	K8	Q304	G9	R081	D11	R312	G9	R477	O12	R607	G7
C094	E10	C553	H10	Q305	F9	R082	O12	R314	G9	R478	O12	R614	F7
C096	F9	C554	H10	Q306	K11	R083	O12	R315	F9	R479	O12	R616	H3
C098	F10	C563	G8	Q316	C10	R084	O12	R316	G8	R499	G11	R617	H3
C115	D10	C620	E3	Q390	I9	R086	O12	R317	G10	R507	F7	R626	E3
C116	D10	C636	F3	Q391	H10	R090	C9	R318	G8	R517	G10	R631	E3
C200	K11	C637	F3	Q400	N9	R091	C9	R319	E9	R520	P7	R632	F3
C202	O9	C645	F3	Q401	N9	R092	C9	R320	F9	R521	P7	R647	F3
C203	P10	C652	J1	Q404	I10	R093	G10	R322	K11	R524	G10	R660	E2
C220	J11	C690	H7	Q411	I10	R094	F11	R324	F10	R526	P6	R667	J1
C305	E9	C901	N5	Q412	P12	R095	F11	R328	F10	R527	H10	R670	F2
C306	E9	D206	N9	Q503	I6	R096	G8	R330	P9	R528	N8	R801	I6
C307	F9	D207	A12	Q504	I5	R098	M11	R335	N10	R529	N7	R802	L8
C325	F10	D209	A12	Q531	I6	R101	M11	R337	F10	R530	K8	R803	I6
C326	F10	D390	I8	Q533	H10	R102	L11	R339	N10	R533	K8	R812	I6
C328	F10	D500	I5	Q572	H8	R103	J12	R351	G9	R534	K8	R813	I6
C330	F10	D501	G7	Q573	G8	R107	M11	R352	G9	R535	K8	R814	I6
C337	F10	D508	M8	Q578	M8	R108	N12	R363	F8	R536	M8	R815	I5
C351	G9	D513	I5	Q604	I7	R109	J12	R364	G9	R537	M7	R851	I9
C390	I8	D558	G8	R003	D11	R111	J12	R370	F10	R548	M6	R852	K8
C400	K9	D559	H9	R004	C11	R115	D10	R371	F10	R549	M6	R862	H10
C401	L10	D628	F7	R006	C10	R116	D10	R382	E9	R550	E11	R890	I5
C402	K9	IC001	E10	R027	I9	R200	K11	R391	I9	R551	G10	R901	N5

V BOARD



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V BOARD, GRIDTRACE LOCATION GUIDE

C2801	B6	C2823	B4	D2806	C6	Q2805	C4	R2809*	B6	R2828*	C3	R2864*	B4
C2802	B6	C2824*	B4	D2807	C5	Q2807	C2	R2811	C2	R2829*	C3	R2866	A6
C2803	D4	C2826*	B4	D2808	C3	Q2808	C6	R2815	C5	R2833*	B3	R2870*	A6
C2804	D4	C2862	C3	D2813	B3	Q2812	A6	R2817*	C3	R2834*	B3	R2876*	C5
C2805	B2	CN2901	A7	IC2801	B3	R2800*	A7	R2818*	C2	R2837*	B3	R2890*	B3
C2808*	C4	CN2902	A3	L2801	D5	R2801*	B7	R2819*	C3	R2840*	B3	R2893*	B4
C2809*	C3	CN2903	D3	L2802	D7	R2802*	B7	R2820*	B3	R2841*	B3		
C2810	C3	CN2904	A5	L2803	A6	R2803*	B6	R2821*	C3	R2842*	B3		
C2811	B2	D2801	B7	Q2801*	B7	R2804*	B6	R2824*	B4	R2855*	B3		
C2812*	B3	D2802	A6	Q2802*	B6	R2805*	B6	R2825*	C4	R2856*	B3		
C2813	B6	D2804	D2	Q2803*	B6	R2807*	A7	R2826	C5	R2857*	B3		
C2821*	B3	D2805	C6	Q2804*	B6	R2808*	A6	R2827*	C3	R2860*	B3		

* Located on bottom of board.

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

MISCELLANEOUS ADJUSTMENTS

B+ CHECK

Connect a digital DC voltmeter to the cathode of D611. Set brightness and picture to minimum. With AC line voltage set to 120VAC, B+ should read 135V \pm 1.0V.

HIGH VOLTAGE CHECK

Tune in a picture. Set brightness, picture, and screen control to minimum. Connect a high voltage probe to CRT anode. High voltage should measure 27kV to 30kV.

DIGITAL ADJUSTMENT PROCEDURES

Enter/Exit Service Adjustment Mode

Tune in a picture and turn receiver off. Press the display button, the 5 button, the volume + button, and the power button in sequence. Press each button within a second. Turn receiver off and then back on to exit Service Adjustment Mode.

Making Adjustments

Enter Service Adjustment Mode. Select an item to adjust by pressing the 1 and 4 buttons. Select a group device item adjustment by pressing the 2 and 5 buttons. Make changes on selected adjustment by pressing the 3 and 6 buttons. To recover the latest values press the 0 then enter buttons.

Saving Adjustments to Memory

Adjustments must be saved to memory. To save adjustment, press the mute button and then the enter button. To save to memory.

Memory Write Confirmation

Disconnect AC plug from outlet. Plug receiver in and enter Service Adjustment Mode. Select adjustment and confirm that setting was saved to memory.

IF AGC

Tune in an active channel. Adjust AGC control, located on top of TU101, counterclockwise until snow appears and then clockwise until snow just disappears.

HORIZONTAL SIZE (HSIZ)

Tune in a crosshatch pattern. Enter the Service Adjustment Mode, select HSIZ 1 and adjust for slight horizontal overscan. Save adjustment to memory.

HORIZONTAL FREQUENCY (FREE RUNNING)

Tune in TV mode (RF) with no signal applied and connect a frequency counter to the base of Q502. Check the horizontal frequency for a reading of 15735Hz \pm 200Hz.

HORIZONTAL POSITION (HPOS)

Perform Horizontal Frequency (Free Running) Adjustment. Tune in a crosshatch pattern. Enter the Service Adjustment Mode. Select DEF group, select HPOS (2) and adjust for best horizontal centering. Save adjustment to memory.

PINCUSHION (PAMP, UPIN, LPIN, VBOW, VANG)

Tune in a crosshatch pattern. Enter the Service Adjustment Mode. Select DEF group, select PAMP (10) and adjust for straight vertical lines at left and right of screen. Select UPIN (11) and adjust for straight vertical lines at top of screen. Select LPIN (12) and adjust for straight vertical lines at bottom of screen. Select VANG (8) and adjust so that vertical lines are perpendicular at corners. Select VBOW (7) and adjust so that vertical lines are parallel at both sides. Save adjustment to memory.

VERTICAL SIZE (VSIZ)

Tune in a crosshatch pattern. Enter the Service Adjustment Mode. Select DEF group, select VSIZ (3) and adjust for slight vertical overscan. Save adjustment to memory.

VERTICAL FREQUENCY (FREE RUNNING)

Select video1 input without signal, with standard setting conditions, connect a frequency counter to pin 6 of connector CNS15 on A board. Check for a vertical frequency of 60Hz \pm 4Hz.

VERTICAL POSITION (VPOS)

Tune in a crosshatch pattern. Enter the Service Adjustment Mode. Select DEF group, select VPOS (4) and adjust to center picture vertically. Save adjustment to memory.

VERTICAL LINEARITY (VLIN)

Tune in a crosshatch pattern. Enter the Service Adjustment Mode. Select DEF group, select VLIN (5) and adjust for equal vertical spacing of pattern. Save adjustment to memory.

VERTICAL CORRECTION (SCOR)

Enter the Service Adjustment Mode. Select DEF group, select SCOR (6) and adjust for best picture. Save adjustment to memory.

OSD POSITION (DISP)

Tune in a color bar pattern. Enter the Service Adjustment Mode. Select MICRO group, select DISP (1) and adjust to center the OSD. Save adjustment to memory.

SUB BRIGHTNESS (SBRT)

Tune in a crosshatch pattern. Set picture to minimum and brightness to reset. Enter the Service Adjustment Mode. Select VP1 group, select SBRT (10) and adjust for visible highlights. Save adjustment to memory.

SUB CONTRAST

Connect an oscilloscope to pin 3 of IC2751. Tune in a colorbar pattern. Set picture to maximum, color to minimum, and brightness to center. Enter the Service Adjustment Mode. Select VP1 group, select RON (11) and set to 1. Select GON (12) and BON (13) and set each to 0. Select RDRV (1) and adjust so that the signal portion of the waveform would measure 1.9Vp-p \pm .1Vp-p. Set brightness to center. Select GON (12) and BON (13) and set each to 1. Save adjustment to memory.

SUB HUE (SHUE) AND SUB COLOR (SCOL)

Tune in a color-bar pattern at 75%. Enter the Service Adjustment Mode. Set picture to maximum and color to 50% connect an oscilloscope to pin 1 of IC2751. Select VIP group, select SHUE (8) and SCOL (9) with the 1 and 4 buttons. While showing SHUE (8) item, adjust the waveform using the 3 and 6 buttons until the second and third bars are at the same level. While showing the SCOL (9) item, adjust the waveform using the 3 and 6 button until the first and forth bars show the same level. Save adjustment to memory.

SUB BALANCE (SBAL)

Input a stereo signal. Enter the Service Adjustment Mode. Select AUDIO group, select SBAL (1) and adjust for the best sound balance. Save adjustment to memory.

COLOR TEMPERATURE (RCUT, GCUT, BCUT, RDRV, GDRV, BDRV)

Tune in a crosshatch pattern. Adjust screen control so the retrace lines just disappear. Enter Service Adjustment Mode. Set picture and brightness to minimum. Select VIP group, select SBRT (10) and adjust for minimum. Select RCUT (4), GCUT (5), BCUT (6) and adjust for best white balance. Set picture to maximum. Select RDRV (1), GDRV (2), BDRV (3) and adjust for best white balance. Save adjustment to memory. Perform Sub Brightness (SBRT) Adjustment.

CONVERGENCE

Adjust vertical static magnets to converge red, green, and blue in the center of the screen. Slide BMC magnets in and out to correct for insufficient horizontal static convergence and rotate the vertical static magnets to correct for insufficient vertical static convergence. Tune in a crosshatch pattern and loosen deflection yoke screw. Remove rubber wedges between deflection yoke and CRT. Tilt deflection yoke up or down to converge the vertical lines at top and bottom of screen, adjust TLV control, and converge the horizontal lines at the right and left sides of screen. Tilt deflection yoke right or left to converge vertical lines at the right and left sides of screen and horizontal lines at top and bottom of screen. Adjust XCV core to balance X axis and adjust YCH control to balance Y axis. Repeat convergence procedure if necessary to obtain best overall convergence. Apply adhesive to wedges and carefully replace on CRT. Apply a permalloy magnet assembly, corresponding to the misconverged corner areas.

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.

SERVICE MODE ADJUSTMENT CHART

NOTE: Before making any changes to the On-Set Value, make a record of the On-Set Values. After making any repair or changes to the On-Set Values, press the mute button and then the enter button on the remote to save the changes to memory.

No.	Display	Item	Initial Data	On-Set Data	No.	Display	Item	Initial Data	On-Set Data
DEF									
1	HSIZ	HORIZONTAL SIZE	47	44	24	AKBS	AKB SWITCH H/W AKB ON	1	1
2	HPOS	HORIZONTAL POSITION YUV OFFSET	36	34	25	REFP	AKB REFPLS TIMING	1	0
3	VSIZ	VERTICAL RAMP SIZE YUV OFFSET	28	34	26	YNRC	YNR LIMITER LEVEL	15	15
4	VPOS	VERTICAL POSITION (RAMP DC) NOT USEFUL YUV OFFSET	37	36	27	BKON	BLACK STRETCH ON	1	1
5	VLIN	VERTICAL LINEARITY	32	34	28	BKAT	BLACK STRETCH DETECT TIME CONSTANT 1	15	15
6	SCOR	S CORRECTION	49	49	29	BKRC	BLACK STRETCH DETECT TIME CONSTANT 2	4	4
7	VBOW	VERTICAL BOW	31	34	30	BKDP	BLACK STRETCH DEPTH	-	3
8	VANG	VERTICAL ANGLE	37	43	31	BKSP	BLKSTPNT BLACK STRETCH START POINT	2	2
9	TRAP	EW TRAPEZIUM	24	22	VP2				
10	PAMP	PARABOLA EW PIN	49	52	1	VMOF	VM GAIN OFF SETTING	2	2
11	UPIN	UPPER CORNER PIN DISTORTION ADJ	31	29	2	VMLO	VM GAIN AT LOW SETTING	4	4
12	LPIN	LOWER CORNER PIN DISTORTION ADJ	30	30	3	VMHI	VM GAIN AT HIGH SETTING	7	7
13	TROT	TILT CORRECTION	109	109	4	VMDL	VM DELAY	6	6
14	HBLK	FBPBLK (H BLANKING MODE SELECT)	0	0	5	VMPL	VM POLARITY	0	0
15	RBLK	RIGHT POSITION HBLK CONTROL	15	14	6	VMWD	VM WIDTH	0	0
16	LBLK	LEFT POSITION HBLK CONTROL	41	41	7	VMCL	VM CORING LEVEL	0	0
17	VBLK	VERTICAL BLANKING WIDTH	0	0	8	VMMX	VM LIMITER LEVEL	15	15
18	HMSK	MACROVISION	0	0	9	CKLV	COLOR KILLER VTH (YUV SET TO 0, 16:9 N/A)	1	1
19	HDW	HORIZONTAL DRIVE PULSE WIDTH	1	1	10	CKON	FORCE KILLER	0	0
20	AFC	H AFC GAIN	0	0	11	ALFA	ADAPTIVE DET SENSITIVITY	2	2
21	AFC1	H CHARGE PUMP (AFC1 TIME CONSTANT)	3	3	12	YCMD	YC SEPARATION FORCE SELECT	0	0
22	AFCW	AFC1 PULL IN WIDE	0	0	13	VACL	V APERTURE CORING LEVEL	0	0
23	CDMD	VERT DET WINDOW SW TIMING	1	1	14	VAGA	V APERTURE GAIN LEVEL	-	5
24	HSS	HORIZONTAL SYNC SLICE LEVEL	0	0	15	VAMX	V APERTURE LIMITER LEVEL	5	5
25	VSS	VERTICAL SYNC SLICE LEVEL	3	3	16	GAMM	GAMMA	-	3
26	SLDN	AUTO SLICE LEVEL DOWN	0	0	17	YDLY	Y DELAY TIME (YUV SET TO 3, 16:9 N/A)	1	1
27	SLUP	AUTO SLICE LEVEL UP	0	0	18	CDLY	C DELAY	0	0
28	JPSW	JUMP SWITCH	0	0	19	YOFF	Y OUTPUT MUTE	0	0
29	HOSC	HORIZONTAL VCO OSC FREQ	7	7	20	CBPF	SAW FILTER (CHROMA BPF FOR HI)	0	0
30	EHT	ETH	4	4	21	BGPP	BGP (FOR C DECODER) TIMING (YUV SET TO 28, 16:9 N/A)	9	9
31	EHTG	EHT GAIN (EHT MODE)	1	1	22	GDOF	G DRIVE	9	9
VP1									
1	RDRV	RED DRIVE (16:9 N/A)	64	64	23	BDOF	B DRIVE	14	14
2	GDRV	GREEN DRIVE (YUV SET TO 48, 16:9 N/A)	45	61	24	GCOF	G CUTOFF	11	11
3	BDRV	BLUE DRIVE (YUV SET TO 44, 16:9 N/A)	45	65	25	BCOF	B CUTOFF	28	28
4	RCUT	RED CUTOFF (16:9 N/A)	120	120	26	DCTV	DC TRANSFER VTH	30	30
5	GCUT	GREEN CUTOFF (YUV SET TO 90, 16:9 N/A)	91	95	27	DCTG	DC TRANSFER GAIN	-	23
6	BCUT	BLUE CUTOFF (YUV SET TO 105, 16:9 N/A)	87	88	PALLET				
7	SCON	SUB CONTRAST (16:9 N/A)	19	20	1	VPIC	PICTURE	63	50
8	SHUE	SUB HUE (RF) (16:9 N/A)	7	9	2	VBRI	BRIGHTNESS	27	30
9	SCOL	SUB COLOR (RF) (YUV SET TO 24, 16:9 N/A)	14	14	3	VCOL	COLOR	37	32
10	SBRT	SUB BRIGHTNESS (YUV SET TO 15, 16:9 N/A)	15	15	4	VHUE	HUE	31	31
11	RON	RED OUTPUT ON/OFF	1	1	5	VSHA	SHARPNESS	31	32
12	GON	GREEN OUTPUT ON/OFF	1	1	6	VVM	VM 0: OFF, 1: LOW, 2: HIGH	2	1
13	BON	BLUE OUTPUT ON/OFF	1	1	7	VTRI	COLOR TEMP 0:COOL, 1:NEUTRAL, 2:WARM	0	1
14	BLLV	BLUE STRETCH	1	1	8	VAPA	APERTURE G	5	5
15	MTRX	MATRIX RATIO SELECT	0	0	9	VGMA	GAMMA 0: OFF, 1: LOW, 2: MID, 3: MAX	3	1
16	AXIS	R - Y PHASE SELECT	52	52	10	VDCT	DCT LEVEL	23	15
17	SSHO	SHARPNESS GAIN (OVER) RF/VIDEO (VIDEO AND YUV SET TO 25, 16:9 N/A)	10	10	11	VBKP	BLACK STRETCH DEPTH (VIDEO)	3	3
18	SSHP	SHARPNESS GAIN (PRE) RF/VIDEO (VIDEO AND YUV SET TO 30, 16:9 N/A)	15	15	12	TBKD	BLACK STRETCH DEPTH (TUNER)	3	3
19	SHPF	SHARPNESS FOR (00:2-11:5CLK) (VIDEO AND YUV SET TO 0, 16:9 N/A)	1	1	Y				
20	SHCL	SHARPNESS CORING LEVEL	0	0	1	YNRS	YNR ON	0	0
21	SHMX	SHARPNESS LIMITER LEVEL	15	15	2	YTHR	Y SIGNAL THROUGH 2DYCS	0	0
22	ACLV	ACL GAIN	0	0	3	Y2D	Y SIGNAL GENERATE FROM 2DYCS	0	0
23	AKBD	AKB SELF DIAGNOSTIC COUNTER	2	2	4	2DFX	C SIGNAL GENERATE FROM H/V BPF ONLY	1	1
					5	CLPS	Y CLAMP TIME CONSTANT	1	1
					6	VLPF	Y_LPF (ANALOG) FOR ADJUST	3	3
					7	CLPF	C_LPF (ANALOG) FOR ADJUST	3	3

SERVICE MODE ADJUSTMENT CHART continued

No.	Display	Item	Initial Data	On-Set Data	No.	Display	Item	Initial Data	On-Set Data
8	BPFB	YCS HBBPF SELECT (BACK)	1	1	6	BGST	BG START (BGP FOR PLL TIMING) (YUV SET TO 1, 16:9 N/A)	16	16
9	BFFF	YCS HBBPF SELECT (FRONT)	1	1	7	XPHA	VCXO CTL (VXCO PHASE ADJUST)	10	10
10	BKTS	BS BLACK STRETCH TIME OUT	0	0	8	HRMP	RAMP SLEW RATE (AFC2 TIME CONSTANT)	3	3
11	VMG2	VMGAIN2 GAIN CONTROL	3	3	9	RPLU	REFERENCE CHARGE PUMP (REF PLL TIME CONSTANT)	3	3
12	CLPT	CLAMP KEEP TIMER	15	15	10	RPLB	REFERENCE VCO (REF PLL TIME CONSTANT)	1	1
	RGB				11	XF0B	VCXO FREE RUN (VXCO ADJUST)	0	0
1	AMUT	RGB POWER ON MUTE	0	0	12	RPLS	REF FB SW (REF VCO FB LOOP SELECT)	0	0
2	PMUT	RGB MUTE (EXCEPT OSD)	1	1	13	SSM	SYNC SEPARATION MASK (SYNC SEPARATION CONTROL)	0	0
3	CORL	RED CUTOFF LOWER	212	212	14	VSAG	V-SAG (V-SAG PREVENT ON)	0	0
4	CORH	RED CUTOFF UPPER	0	0	15	AFC2	AFC2 GAIN CONTROL	3	3
5	COGL	GREEN CUTOFF LOWER	197	197	16	VRFL	V RAMP FILTER SWITCHING OFF	1	1
6	COGH	GREEN CUTOFF UPPER	0	0	17	SSLP	LPY SYNC (LFP PRE SYNC SEPARATION ON/OFF)	1	1
7	COBL	BLUE CUTOFF LOWER	176	176	18	XPLU	BPLL CHARGE PUMP (ACP TIME CONSTANT)	1	1
8	COBH	BLUE CUTOFF UPPER	0	0	19	8FSC	8FSC SELECT (8FS CLK SKEW OFF) (YUV SET TO 0, 16:9 N/A)	1	1
9	ABLS	ABL SELECT (ON: 0, OFF: 1)	0	0	20	4FS2	4FSC SELECT2 (4FCLK SKEW OFF) (YUV SET TO 0, 16:9 N/A)	1	1
10	ALSP	ACL SPEED	0	0	21	CDM2	V_CD_MODE2 (V_LOGIC SW)	1	1
11	ALRS	ACL RECOVER SPEED	2	2	22	BGPC	ADD FTN BGP C (BGP C)	0	0
12	ALAS	ACL ATTACK SPEED	9	9	23	MHDL	ADD FTN BGP SELECT (BBP SELECT)	1	1
13	ABLG	ABL GAIN	5	5	24	BFRE	V FREE (FORCE V FREE RUN)	0	0
14	ALS2	ACL ATTACK SPEED 2	2	2	25	HRPP	AFC2 RAMP POS (FRAMP RRAMP H OUT CONTROL RANGE)	8	8
15	AKBS	AKB MODE	0	0	26	DSCK	CLOCK SELECT (DS DAC CLK SW 2) (16:9 N/A)	1	1
16	AKBP	AKB PULSE HEIGHT	16	16	27	VBHK	VBLK HALFKIL (V BLK HALF KILL)	0	0
17	OSDL	OSD LIMIT SELECT	0	0	28	VPW	V PLS WIDTH (V PULSE WIDE)	1	1
18	UVIN	Y/U/V UVINV (U/INVERT)	0	0	29	DTH	D THRESHOLD LEVEL (DITHER THRESHOLD LEVEL CONTROL AT IIC AUTOD = ON)	0	0
19	UVG	U/V GAIN (OFFSET CANCEL ON)	0	0	30	SLON	LPF SYNC ON (LPF SYNC ON)	1	1
20	UOFS	U IN OFFSET (U IN OFFSET)	15	13	31	VSSW	SYNC SLICE LVL(V)_W (SYNC SLICE LEVEL V WIDE WINDOW)	0	0
21	VOFS	U IN OFFSET (V IN OFFSET)	12	10	32	AF2S	AFC2_SEL (ADC2 TIMING SW)	0	0
22	AALG	ANA ACL GAIN (ANALOG ACL GAIN CONTROL)	0	0	33	VSL2	V_SYNC LFP_2 (DIGITAL V_SYNC_LPF) (FALL)	0	0
23	AALS	ANA ACL ON (ANALOG ACL ON/OFF CONTROL)	1	1	34	VSL1	V_SYNC LFP_1 (DIGITAL V_SYNC_LPF) (RISE)	1	1
24	UVDE	UV_DITHER_EN (UVIN DITHER ENABLE) (YUV SET TO 1, 16:9 N/A)	0	0	35	VYUV	YUV VSIZE OFFSET (YUV V-SIZE OFFSET)	8	8
25	UVDT	UV_DITHER_TEST (UVIN DITHER TEST) (YUV SET TO 6, 16:9 N/A)	0	0	36	VYVP	YUV VPOS OFFSET (YUV V-POSITION OFFSET)	8	8
	H/W AKB				37	VYHS	YUV HSIZE OFFSET (YUV H-SIZE OFFSET)	8	8
1	HRIL	H/W AKB RED OUTPUT LOWER	-	188	38	VYHP	YUV HPOS OFFSET (YUV H-POSITION OFFSET)	7	7
2	HRIH	H/W AKB RED OUTPUT UPPER	-	0	39	VSHE	V-SHRINK MODE (V-SHRINK MODE FOR AV)	0	0
3	HGIL	H/W AKB GREEN OUTPUT LOWER	-	175	40	VYRB	YUV RBLK (YUV RBLK OFFSET)	7	7
4	HGIL	H/W AKB GREEN OUTPUT UPPER	-	0	41	VYLB	YUV LBLK (YUV LBLK OFFSET)	7	7
5	HBIL	H/W AKB BLUE OUTPUT LOWER	-	137		OTHER			
6	HBIH	H/W AKB BLUE OUTPUT UPPER	-	0	1	PCLP	SYNC TIP / PEDESTAL CLAMP SELECT	0	0
7	HLM1	H/W AKB LIM1	6	6	2	VRT	ADC REFERENCE (00:1.15VPP 01:1.25VPP) 10:1.35VPP:1.45VPP	1	1
8	HLM2	H/W AKB LIM2	12	12	3	14HI	4FSC (SKEW) CLK POLARITY (16:9 N/A)		
9	HLM3	H/W AKB LIM3	21	21	4	14HD	4FSC (SKEW) CLK DELAY ADJUST (16:9 N/A)	0	0
10	HAD1	H/W AKB SPEED1	2	2	5	DSI	8FSC CLK POLARITY (16:9 N/A)	0	0
11	HAD2	H/W AKB SPEED2	6	6	6	DSD	8FSC CLK DELAY ADJUST (16:9 N/A)	0	0
12	HAKE	H/W AKB MANUAL (MPU) HARD	1	1	7	ADCD	ADC CLK DELAY ADJUST (YUV SET TO 1, 16:9 N/A)	0	0
13	HASP	AKB SPEED	3	3	8	4FSC	AD / LOGIC CLK SWAP	0	0
14	HERL	AKB SWERR 7:0 (H/W AKB ERROR DETECTOR THRESH)	40	40	9	WSTH	WEAK SIGNAL VTH	0	0
15	HLMC	AKB ERRC 7:0 ERROR DETECTOR TIME	20	20	10	WSVA	WEAK_SIGNAL VIDEO ATT (16:9 N/A)	0	0
16	HPWL	AKBSWPON 7:0 (H/W AKB POWER ON TRESH)	4	4	11	WSCA	WEAK_SIGNAL CHROMA ATT (16:9 N/A)	0	0
17	HPWC	AKB_PWERRC (H/W AKB POWER ON TIME)	90	90	12	VREF	VREF_SEL (AD REFERENCE SELECT) (VZ)	0	0
18	HFMT	H/W AKB2 HOLD TIMER (H/W AKB2 HOLD TIMER 100 MSEC) (0: NO HOLD)	20	20		AP2			
19	SPMT	AKB POWER ON MUTE EXIT TIMER	120	120	1	BBEL	SUB AUDIO PROC PROLOGIC BBE LOW	0	0
	DEFD				2	BBEH	SUB AUDIO PROC PROLOGIC BBE HIGH	0	0
1	HFFR	AFC FREE RUN (AFC1 FORCE FREE RUN)	0	0	3	BBOL	SURROUND OFF-BBE LOW	0	0
2	HFUP	H FREE UP (H FREE RUN FREQUENCY UP (700HZ))	0	0	4	BBSL	SIMULATE BBE LOW	0	0
3	JSWW	VJP WIDTH (JUMP PULSE WIDTH)	0	0	5	BBGL	WOW GAME BBE LOW	0	0
4	EWCL	V/EW DAC CLOCK CONTROL (EW/VRAMP DA CLOCK SELECT) (16:9 N/A)	0	0	6	AGCL	SUB AUDIO PROC AGC LEVEL	0	0
5	XF0A	FREE RUN OFFSET (VCXO FREE RUN ADJUST)	0	0	7	DDOF	DOLBY OFFSET DATA	0	0

SERVICE MODE ADJUSTMENT CHART continued

No.	Display	Item	Initial Data	On-Set Data	No.	Display	Item	Initial Data	On-Set Data
OSD					NR				
1	HT	HALF TONE LEVEL	0	0	1	SCOL	SUB COLOR LEVEL	14	14
2	OSLR	R OSD LEVEL	25	25	2	SHCL	SHARPNESS CORING LEVEL	15	15
3	OSLG	G OSD LEVEL	25	25	3	SHMX	SHARPNESS LIMITER LEVEL	7	7
4	OSDC	OSD COMP	0	0	4	YNRC	YNR LIMITER LEVEL	7	7
5	OSDB	B OSD LEVEL	25	25	5	VMHI	VM LEVEL AT HIGH SETTING	10	10
AUDIO					6	VMCL	VM CORING LEVEL	0	0
1	SBAL	SUB BALANCE	4	4	7	VMMX	VM LIMITER LEVEL	7	7
2	SBAS	SUB BASS	0	0	8	VAMX	V APERATURE LIMITER LEVEL	0	0
3	STRE	SUB TREBLE	0	0	9	GAMM	GAMM (00:NO<<->11:DEEP)	0	0
4	SRL	SURROUND LEVEL	0	0	10	YNRS	YNR ON	1	1
5	BBOL	SURROUND OFF - BBE LOW	6	6	11	WSTH	WEAK SIGNAL VTH	7	7
6	BBOH	SURROUND OFF - BBE HIGH	5	5	12	WSVA	WEAK SIGNAL VIDEO ATT	0	0
7	BBSL	SIMULATED - BBE LOW	4	4	13	WSCA	WEAK SIGNAL CHROMA	5	5
8	BBSH	SIMULATED - BBE HIGH	4	4	14	NRCH	THRNV1 (NOISE DET TIME CONSTANT)	0	0
9	BBGL	WOW - GAME BBE LOW	0	0	15	NRCL	THRNV2 (NOISE DET TIME CONSTANT)	16	16
10	BBGH	WOW - GAME BBE HIGH	0	0	16	NRVL	THRNVH1 (NOISE DET VTH)	2	2
11	BBTL	SRS BBE LOW	6	6	17	NRVH	THRNVH2 (NOISE DET VTH)	0	0
12	BBTH	SRS BBE HIGH	4	4	18	IPNC	DETNZ STATUS COUNTER	2	2
13	BBDL	AUDIO PROC PROLOGIC BBE LOW FOR DOLBY	0	0	19	IPNV	DETECTION PERIOD	10	10
14	BBDH	AUDIO PROC PROLOGIC BBE HIGH FOR DOLBY	0	0	C				
15	VFIX	AUDIO OUTPUT FIX DATA	243	243	1	A1FL	AMP OFF1 LEVEL ACC HYSTERESIS	90	90
16	AGCL	AGCL LEVEL (ACG LEVEL)	2	2	2	AION	AMP ON (ANALOG ACC AMP ON LEVEL)	4	4
17	VCOF	RF OFFSET DATA	9	9	3	ACCS	ACC SW (ACC ON/OFF) (YUV SET TO 1, 16:9 N/A)	0	0
MICRO					4	AASL	AVE SELECT (C DECODER TIME CONSTANT (32, 16, 8, 1H))	2	2
1	DISP	OSD HORIZONTAL OFFSET	55	55	5	BASL	B2AVE SELECT (ACC TIME CONSTANT)	0	0
2	CCHP	FOR TILT DATA CALCULATION	80	80	6	XFFR	FREE RUN (VCXO FORCE FREERUN) (YUV SET TO 1, 16:9 N/A)	0	0
3	HRLW	LOW LIMIT OF H-PULSE COUNTING WINDOW RF	16	16	7	A2ON	AMP2 ON THRESH (ABL VTH)	4	4
4	HRHG	HIGH LIMIT OF H-PULSE COUNTING WINDOW RF	64	64	8	A3ON	AMP3 ON THRESH (ACL VTH)	4	4
5	HSDT	HSDTCT (H-PULSE DETECTION S-VIDEO)	8	8	9	A2FL	AMP2 OFF THRESH L (AMP2 OFF LEVEL LOWER)	64	64
6	STPI	CONTRAST INCREASE STARTING LEVEL	40	40	10	A3FL	AMP3 OFF THRESH L (AMP3 OFF LEVEL LOWER)	64	64
7	RAPI	CONTRAST INCREASE VSYNC COUNTER	10	10	11	AXTH	AXIS HYS	30	30
ID					12	ACTH	ROM HYS	10	10
0	ID0	LANGUAGE RELATED	81	89	13	AVAV	AVE SEL AV	3	3
1	ID1	VIDEO RELATED	31	31	14	B2TH	B2COMP	0	0
2	ID2	AUDIO RELATED	113	21	15	ACCP	ACC COMP	0	0
3	ID3	MISCELLANEOUS	130	34					
4	ID4	MISCELLANEOUS	32	0					
5	ID5	MISCELLANEOUS	24	24					
6	ID6	MISCELLANEOUS	48	0					
7	ID7	MISCELLANEOUS	69	5					
16:9									
1	VSIZ	V RAMP SIZE	48	53					
2	VPOS	V POSITION	40	35					
3	VLIN	V LINEARITY	26	32					
4	SCOR	S CORRECTION	24	28					
5	TRAP	EW TRAPEZIUM	22	26					
6	PAMP	PARABOLA	24	24					
7	UPIN	UPPER CORNER	31	30					
8	LPIN	LOWER CORNER	31	31					
9	ABLG	ABL GAIN	15	15					
10	SCON	SUB CONTRAST LEVEL	13	14					
11	VPW	JUMP PULSE WIDTH	1	1					

PARTS LIST

Item No.	Type No.	Mfr. Part No.	NTE Part No.
D002	RD5.6ESB2	8-719-109-89	NTE5011A
D003, 04, 05	RD10ESB2	8-719-110-17	NTE5019A
D006	MTZJ-5.1C	8-719-921-44	-
D007	MTZJ-30D	8-719-982-22	-
D046, 47	RD5.6ESB2	8-719-109-89	NTE5011A
D050	D1NS4	8-719-510-02	NTE585
D051	1E3-TB	6-500-175-01	-
D052	RD5.6ESB2	8-719-109-89	NTE5011A
D200 Thru			
D205	HZS9.1NB2	8-719-929-15	-
D206	PDZ9.1B-115	8-719-070-62	-
D207	MA111-TX	8-719-404-50	-
D208	HZS9.1NB2	8-719-929-15	-
D209	MA111-TX	8-719-404-50	-
D230, 31, 32	RD9.1EW	8-719-108-12	NTE5018A
D234 Thru			
D237	RD9.1EW	8-719-108-12	NTE5018A
D317	RD9.1EW	8-719-108-12	NTE5018A
D321	RD10ESB2	8-719-110-17	NTE5019A
D351	RD3.3ESB2	8-719-109-66	-
D390	MA111-TX	8-719-404-50	-
D401	MTZJ-7.5B	9-719-921-63	-
D405	1SS133T-77	8-719-991-33	NTE519
D414	MTZJ-7.5B	8-719-921-63	-
D430, 31	HZS9.1NB2	8-719-929-15	-
D500, 01	MA111-TX	8-719-404-50	-
D505	BY228/A52A/	8-719-081-00	-
D506	RU4AM-T3	8-719-312-10	NTE580
D507	1SS133T-77	8-719-991-33	NTE519
D508	MA111-TX	8-719-404-50	-
D510	BY228/A52A/	8-719-081-00	-
D513	MA111-TX	8-719-404-50	-
D514, 15	GP08D	8-719-908-03	NTE116
D525	1SS133T-77	8-719-991-33	NTE519
D526	PG104R	8-719-074-25	NTE574
D528	1SS133T-77	8-719-991-33	NTE519
D545	GP08D	8-719-908-03	NTE116
D558, 59	MA111-TX	8-719-404-50	-
# D562	1SS133T-77	8-719-991-33	NTE519
# D566	EGP20DPKG23	8-719-979-84	-
# D567	1SS133T-77	8-719-991-33	NTE519
# D568	MTZJ-7.5B	8-719-921-63	-
# D569	MTZJ-5.1C	8-719-921-44	-
D587	PG104R	8-719-074-25	NTE574
# D589	1SS133T-77	8-719-991-33	NTE519
D596, 98	EGP20G	8-719-979-85	NTE576
D603	S1NB60-4062	8-719-064-12	-
D604, 06	1N5406G-EB	6-500-890-01	-

Item No.	Type No.	Mfr. Part No.	NTE Part No.
D611	S3L20UF4	8-719-510-73	-
D612, 13	ERC04-06SE	8-719-068-00	-
D614	EZ0150AV1	8-719-057-52	-
D615	MA7D50	6-500-177-01	-
D618	UF4005PKG23	8-719-979-64	-
D620	1SS119-25	8-719-911-19	NTE519
D621	D5LC20U	8-719-510-37	-
D624	S3L20UF4	8-719-510-73	-
D628	MA111-TX	8-719-404-50	-
D629	RD12ESB2	8-719-110-31	NTE5021T1
D631	1E3-TB	6-500-175-01	-
D641	1SS133T-77	8-719-991-33	NTE519
D642	MTZJ-30D	8-719-982-22	-
D644	RD12ESB2	8-719-110-31	NTE5021T1
D645, 50	RD5.6ESB2	8-719-109-89	NTE5011A
D1001	HZS9.1NB2	8-719-929-15	-
D1002	LNK0120022G	8-719-070-80	-
D1003	HZS9.1NB2	8-719-929-15	-
D1004, 05	RD5.6ESB2	8-719-109-89	NTE5011A
D1233, 35, 36	RD9.1EW	8-719-108-12	NTE5018A
D1809	RD15ESB2	8-719-110-41	NTE5024A
D1810, 11	ERA38-06	8-719-970-87	NTE575
D1812	1N4937/23	8-719-081-93	-
D2701	RD9.1EW	8-719-108-12	NTE5018A
D2754, 55, 56	1SS83	8-719-901-83	NTE177
D2758	PG104R	8-719-074-25	NTE574
D2801	RD5.6ESB2	8-719-109-89	NTE5011A
D2802	1SS133T-77	8-719-991-33	NTE519
D2804	ELIZ	8-719-302-43	NTE587
D2805, 06	1SS133T-77	8-719-991-33	NTE519
D2807	11EQS04	8-719-210-21	NTE585
D2808, 13	1SS133T-77	8-719-991-33	NTE519
D3762, 63	MA111-TX	8-719-404-50	-
D3772, 73	MA111-TX	8-719-404-50	-
D3782, 83	MA111-TX	8-719-404-50	-
D3901, 02	RD39ESB	8-719-110-86	-
D3903	1SS133T-77	8-719-991-33	NTE519
D3905	D1NS4	8-719-510-02	NTE585
D3906, 07, 08	MA111-TX	8-719-404-50	-
# IC001	M65582AMF-102FP	-	-
	M65582AUF-XXXXFP	6-804-178-01	-
IC002	BR24L16F-WE2	6-704-004-01	-
IC003	PST9143NL	8-759-352-91	-
IC321	NJM2534M(Te2)	8-759-353-00	-
IC400	NJW1134AGK1-TE2	6-703-190-01	-
IC404	TDA8947J	6-705-054-01	-
IC545	STV9379A	8-759-696-71	-
# IC561	NJM2903M	8-759-700-07	NTE943SM

SONY MODEL KV-27FS120 (CHASSIS SCC-S61N-A)

PARTS LIST continued

Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Type No.	Mfr. Part No.	NTE Part No.
IC565	NJM2902M	8-759-700-44	NTE987SM	Q3761, 62, 63	2SD601A-Q	8-729-422-27	NTE2408
IC600	MCZ3001DB	6-705-810-01	-	Q3771, 72, 73	2SD601A-Q	8-729-422-27	NTE2408
IC603	MC7809CF	6-705-818-01	-	Q3781, 82, 83	2SD601A-Q	8-729-422-27	NTE2408
IC604	DM-58	8-749-012-13	-	Q3901	KTC4370A	8-729-053-87	-
IC608	BA05T	8-759-450-47	-	Q3902	KTA1659A	6-550-247-01	NTE398
IC633	LF33CV	6-703-080-01	NTE1904	Q3903, 04	2SD601A-Q	8-729-422-27	NTE2408
IC2751	TDA6108JF/N1B	8-759-562-43	-	Q3905	2SB709A-QRS-TX	8-729-424-02	NTE2409
IC2801	UPC5023CS-184	6-701-598-01	-	Q3906, 07	2SC1623-L5L6	8-729-120-28	NTE2408
IC3701	LA6500-FA	8-759-803-42	-	Q3908	2SB709A-QRS-TX	8-729-424-02	NTE2409
# PH602	PC123F2	8-749-010-64	-				
Q002, 04	2SD601A-Q	8-729-422-27	NTE2408	Item No.	Function/Rating	Mfr. Part No.	Notes
Q005	2SB709A-QRS-TX	8-729-424-02	NTE2409	# C506	.001 10% 2kV	1-117-214-11	-
Q006, 08, 09	2SD601A-Q	8-729-422-27	NTE2408	# C507	.019 3% 1.2kV	1-127-717-21	-
Q300	2SD601A-Q	8-729-422-27	NTE2408	# C508	.047 5% 630V	1-129-722-00	-
Q301	2SB709A-QRS-TX	8-729-424-02	NTE2409	# C510	680pF 10% 2kV	1-162-116-00	-
Q303 Thru				# C513	.047 10% 200V	1-106-383-00	-
Q306	2SB709A-QRS-TX	8-729-424-02	NTE2409	# C561	4.7µF 20% 50V	1-126-963-11	-
Q316	2SD601A-Q	8-729-422-27	NTE2408	# C562	220µF 20% 25V	1-104-666-11	-
Q390, 91	2SD601A-Q	8-729-422-27	NTE2408	# C566	4.7µF 20% 160V	1-107-635-11	-
Q400, 01, 04	2SD601A-Q	8-729-422-27	NTE2408	# C590	10µF 20% 50V	1-126-964-11	-
Q411, 12	2SD601A-Q	8-729-422-27	NTE2408	# C602, 03	.22 10% 275VAC	1-165-529-11	-
Q501	2SC3311A-QRSTA	8-729-423-33	NTE2361	# C605	.001 20% 250V	1-117-699-11	-
Q502	2SC3209LK	8-729-140-50	NTE399	# C631	220pF 10% 250V	1-113-896-11	-
Q503	2SB709A-QRS-TX	8-729-424-02	NTE2409	C648, 55	470pF 10% 1kV	1-104-390-91	-
Q504	2SD601A-Q	8-729-422-27	NTE2408	C672	.022 3% 800V	1-137-756-22	-
# Q505	2SD2645-YB	6-550-107-01	-	# C680	.001 20% 250V	1-117-699-11	-
Q521	2SC3311A-QRSTA	8-729-423-33	NTE2361	C901	6800 .5% 1/10W	1-218-712-11	-
Q522	KTC4370A	8-729-053-87	-	C2752	.0047 2kV	1-162-114-00	-
Q531	2SD601A-Q	8-729-422-27	NTE2408	# DY1	Yoke	8-451-494-41	Horiz .892mH, Vert 7.82mH
Q533	2SB709A-QRS-TX	8-729-424-02	NTE2409	# F601	Fuse	1-576-193-11	6.3Amp, 125V
Q572	2SD601A-Q	8-729-422-27	NTE2408	FB301	Ferrite Bead	1-410-397-21	-
Q573	2SB709A-QRS-TX	8-729-424-02	NTE2409	FB401	Ferrite Bead	-	-
Q578	2SD601A-Q	8-729-422-27	NTE2408	FB402	Ferrite Bead	-	-
# Q590	KTA1279	6-550-362-01	-	FB403	Ferrite Bead	-	-
Q600, 01	2SK2640-01MR-F122	8-729-053-36	-	FB404	Ferrite Bead	-	-
Q604	2SB709A-QRS-TX	8-729-424-02	NTE2409	FB462	Ferrite Bead	-	-
Q608	2SD2144S-UVM	8-729-922-37	-	FB467	Ferrite Bead	-	-
Q650	KSC2383-O	6-550-409-01	-	FB505, 06, 22	Ferrite Bead	1-410-397-21	-
Q1810	2SC3840(3)	8-729-043-95	-	FB601 Thru			
Q2772	2SD601A-Q	8-729-422-27	NTE2408	FB605	Ferrite Bead	1-410-397-21	-
Q2801	2SD601A-Q	8-729-422-27	NTE2408	FB616, 17	Ferrite Bead	1-469-578-11	-
Q2802, 03, 04	2SB709A-QRS-TX	8-729-424-02	NTE2409	FB3700 Thru			
Q2805	KTB764	6-550-106-01	-	FB3703	Ferrite Bead	1-410-397-21	-
Q2807	IRF614	8-729-931-45	-	FL001	Filter	1-239-803-11	EMI
Q2808	KTB764	6-550-106-01	-	IC1001	Receiver	8-742-212-20	Remote, SBX3081-71
Q2812	2SA933AS-QT	8-729-026-39	NTE290A	J200	Jack	1-794-119-11	Assembly
Q3710	2SB709A-QRS-TX	8-729-424-02	NTE2409	J202	Jack	1-794-118-11	Assembly
Q3711, 12	2SD601A-Q	8-729-422-27	NTE2408	J203	Jack	1-817-461-11	Assembly

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
J205	Jack	1-794-116-11	Assembly	R535	5600 .5% 1/16W	1-218-865-11	-
J1231	Jack	1-794-048-11	Assembly	R542, 47	10K 1% 1/4W	1-215-445-00	-
# J2751	Socket	1-451-544-11	CRT	R548	15K .5% 1/10W	1-218-720-11	-
L002 Thru				# R561	10K 5% 1/10W	1-216-833-11	-
L005	EMI Filter	1-239-803-11	-	# R562	10K 5% 1/4W	1-249-429-11	-
L006, 07	100µH	1-414-273-11	-	# R563	10K .5% 1/10W	1-218-871-11	-
L008, 09	100µH	1-414-857-11	-	# R564	39K .5% 1/10W	1-218-730-11	-
L010	10µH	1-414-267-21	-	# R565	10K .5% 1/10W	1-218-716-11	-
L011	-	1-239-803-11	-	# R566	100K 1% 1/4W	1-215-469-00	-
L101	Ferrite Bead	1-414-229-11	-	# R567	47K 5% 3W	1-215-927-00	-
# L501	Degaussing	1-419-156-21	-	# R568	120 1% 1/4W	1-215-399-00	-
L513	10mH	1-406-677-11	-	R570	10K .5% 1/10W	1-218-716-11	-
L515	2.2mH	1-412-552-11	-	R584	18K 1% 1/4W	1-215-451-00	-
L516	100µH	1-419-714-11	-	R585	12K 1% 1/4W	1-215-447-00	-
L525	8mH	1-409-955-31	-	R586	2200 .5% 1/10W	1-218-855-11	-
L527	Ferrite Bead	1-410-397-21	-	# R589	470K 5% 1/4W	1-247-895-91	-
# L588	6.8µH	1-412-523-41	-	# R590	10K 5% 1/4W	1-249-429-11	-
L606, 07	10µH	1-412-525-31	-	# R591	.33 5% 2W	1-216-363-00	-
L608	47µH	1-412-533-21	-	# R592	100K 5% 1/4W	1-249-441-11	-
L609	10µH	1-412-525-31	-	# R593	10K 5% 1/4W	1-249-429-11	-
L1805	10µH	1-406-677-11	-	# R594	1200 5% 1/4W	1-249-418-11	-
L2751	68µH	1-408-613-31	-	# R595	470K 5% 1/4W	1-247-895-91	-
L2801	10µH	1-406-989-21	-	R601, 02	.68 5% 10W	1-240-262-11	-
L2802	10µH	1-419-633-11	-	# R603	4.7M 5% 1/2W	1-219-513-11	-
L2803	22µH	1-412-529-11	-	R608	15K 5% 3W	1-215-924-00	-
L3710, 11, 12	33µH	1-410-387-11	-	R609	3.3 5% 10W	1-202-962-11	-
L3901	18µH	1-412-528-11	-	R611, 13	.68 5% 10W	1-240-262-11	-
N/S COIL	-	1-452-896-11	-	R615	.1 10% 1/2W Fusible	1-202-933-61	-
# P600	Line Cord	1-824-069-11	AC, Polarized	R626	10K .5% 1/10W	1-218-716-11	-
PS401	IC Fuse Link	1-576-337-21	2.7Amp, 50V	R627, 29, 30	330K 1% 1/4W	1-215-481-00	-
R005, 07	Ferrite Bead	1-400-427-21	-	R631	12K .5% 1/10W	1-218-718-11	-
R027	47K .5% 1/10W	1-218-732-11	-	R634	10 5% 3W	1-215-905-11	-
R094	Ferrite Bead	1-414-229-11	-	R641	.68 5% 10W	1-240-262-11	-
R107, 08	Ferrite Bead	1-414-229-11	-	# R668	1200 5% 1/4W	1-249-418-11	-
R312	6800 .5% 1/10W	1-218-867-11	-	R687	.68 5% 10W	1-240-262-11	-
R322	470 .5% 1/10W	1-218-684-11	-	R801	10K .5% 1/10W	1-218-716-11	-
R323	560 1% 1/4W	1-215-415-00	-	R802	8200 .5% 1/10W	1-218-714-11	-
R326, 28	Ferrite Bead	1-400-427-21	-	R803	13K .5% 1/10W	1-218-719-11	-
R503	2200 5% 3W	1-215-919-11	-	R812, 13	10K .5% 1/10W	1-218-716-11	-
R513	33 5% 3W	1-215-908-00	-	R814	68K .5% 1/10W	1-218-736-11	-
R514	68 5% 3W	1-215-910-00	-	R815	47K .5% 1/10W	1-218-732-11	-
R524	6800 .5% 1/10W	1-218-867-11	-	R850	22K 1% 1/4W	1-215-453-00	-
R526	22K .5% 1/10W	1-218-724-11	-	# R851	1000 5% 1/10W	1-216-821-11	-
# R528	390 5% 1/10W	1-216-816-11	-	R852	56K .5% 1/10W	1-218-889-11	-
R529	15K .5% 1/16W	1-218-720-11	-	R901	8200 .5% 1/10W	1-218-714-11	-
R530	5600 .5% 1/16W	1-218-865-11	-	R1849, 50	10K 5% 3W	1-215-923-00	-
R533	6800 .5% 1/16W	1-218-712-11	-	R1851, 52	6800 5% 3W	1-215-922-11	-
R534	15K .5% 1/16W	1-218-720-11	-	R2817	68K .5% 1/10W	1-218-736-11	-

PARTS LIST continued

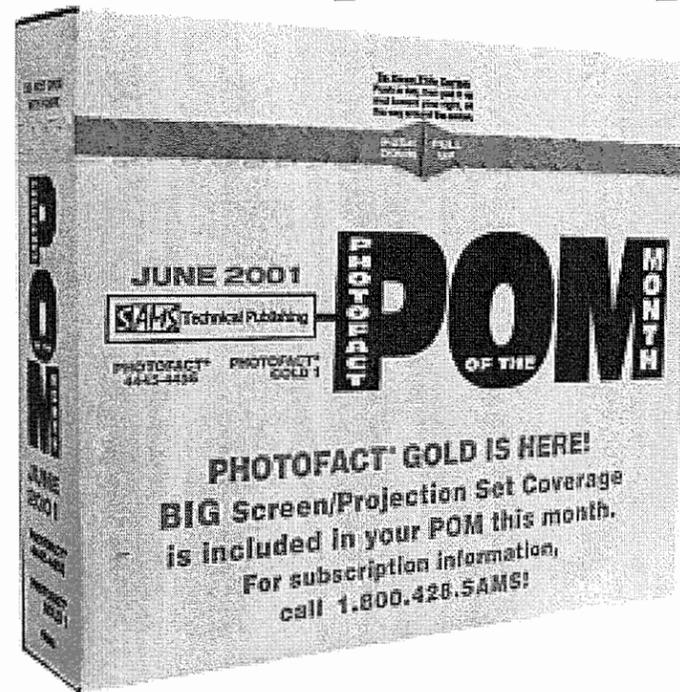
Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
R2820	33K .5% 1/10W	1-218-883-11	-	# T601	Line Filter	1-435-617-11	-
R2821	8200 .5% 1/10W	1-218-714-11	-	# T602	Standby	1-435-675-11	-
R2824	100K .5% 1/10W	1-218-740-11	-	# T603	Converter	1-439-898-21	-
R2827	4700 .5% 1/10W	1-218-708-11	-	T1801	DFT	1-433-533-12	-
R2828	33K .5% 1/10W	1-218-728-11	-	# THP501	PTC	1-804-313-11	-
R2833	5600 .5% 1/10W	1-218-710-11	-	# TU101	Module	8-598-593-50	Tuner/IF, BTF-WA421
R2834	3300 .5% 1/10W	1-218-704-11	-	# V901	CRT	-	M68LNH050X
R2837	10K .5% 1/10W	1-218-871-11	-		CRT	8-735-082-05	29RSN(SDP)
R2840	2700 .5% 1/10W	1-218-702-11	-	# VDR600	Varistor	1-810-974-21	-
R2841	3900 .5% 1/10W	1-218-706-11	-	X001	Crystal	1-795-006-21	-
R2842	2200 .5% 1/10W	1-218-700-11	-	X301	Crystal	1-781-377-21	-
R2855	3900 .5% 1/10W	1-218-706-11	-	#	Fuse Holder	1-533-223-11	For F601 (2 Used)
R2856	10K .5% 1/10W	1-218-871-11	-		Magnet	4-083-414-01	Convergence Correction
R2857	15K .5% 1/10W	1-218-875-11	-		Magnet	1-452-885-11	Landing
R2860	10K .5% 1/10W	1-218-716-11	-	# NECK ASSEMBLY	-	8-453-011-11	-
R2864	100 .5% 1/10W	1-218-668-11	-		PC Board	A-1302-967-A	A
R2890	33K .5% 1/10W	1-218-728-11	-		PC Board	A-1410-925-A	CW
R3711	1000 .5% 1/10W	1-216-692-11	-		PC Board	A-1415-635-A	D
R3712	820 .5% 1/10W	1-218-690-11	-		PC Board	A-1415-674-A	HS
R3762	1000 .5% 1/10W	1-218-692-11	-		PC Board	A-1410-924-A	V
R3764	270 .5% 1/10W	1-218-678-11	-		Transmitter	1-478-707-11	Remote, RMY-195
R3765	2200 .5% 1/10W	1-218-700-11	-		Wedge	4-053-005-01	Yoke Positioning (3 Used)
R3772	1000 .5% 1/10W	1-218-692-11	-				
R3774	270 .5% 1/10W	1-218-678-11	-				
R3775	2200 .5% 1/10W	1-218-700-11	-				
R3782	1000 .5% 1/10W	1-218-629-11	-				
R3784	270 .5% 1/10W	1-218-678-11	-				
R3785	2200 .5% 1/10W	1-218-700-11	-				
R3910	470 5% 3W	1-215-915-11	-				
R3932	1500 .5% 1/10W	1-218-696-11	-				
RV2701	47K	1-238-019-11	-				
# RV2750	110M S VSTAT	1-241-656-11	-				
RY501	Relay	1-755-198-11	Degaussing				
# RY600	Relay	1-755-395-11	Power				
S1001	Switch	1-692-431-21	Channel +				
S1002	Switch	1-692-431-21	Channel -				
S1003	Switch	1-692-431-21	Volume +				
S1004	Switch	1-692-431-21	Volume -				
S1005	Switch	1-692-431-21	TV/Video				
S1006	Switch	1-692-431-21	Main Power				
S1007	Switch	1-762-816-11	Menu/Select				
S1008	Switch	1-762-816-11	Up/Down				
SP1, 2	Speaker	1-825-206-11	6cm X 12cm				
SW515	Switch	1-572-707-11	Horizontal Centering				
# T505	Horizontal Drive	1-433-836-11	-				
# T510	PMT	1-437-610-11	-				
# T511	Horizontal Linearity	1-433-850-11	-				
# T585 (1)	Horizontal Output	1-453-310-21	-				

For SAFETY use only equivalent replacement part.

(1) Screen and focus controls are part of T585.

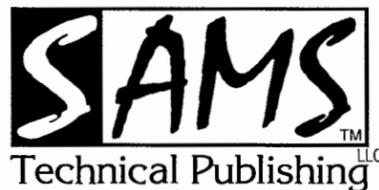
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