

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.

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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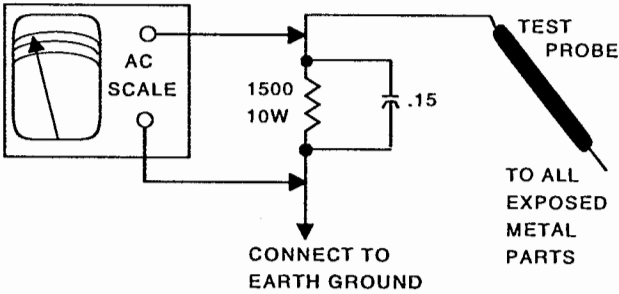
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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.

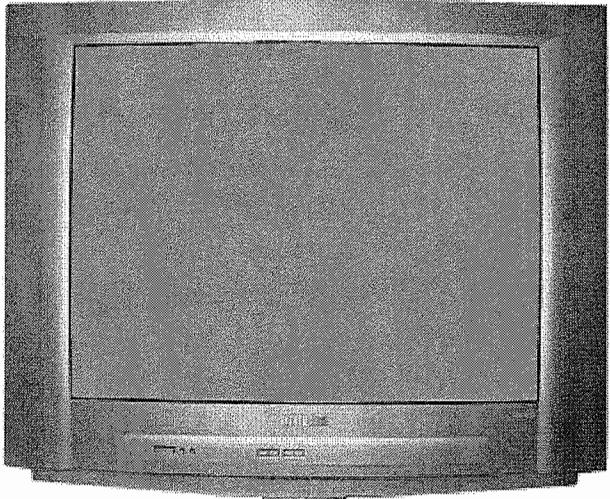


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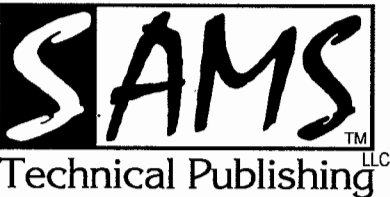
MAGNAVOX
Model 27MS3404/17



Representative Model

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list



NOVEMBER 2004 SET 4958

SET 4958

MODEL 27MS3404/17

MAGNAVOX

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For a Complete List of Manuals,
Visit www.samswebsite.com

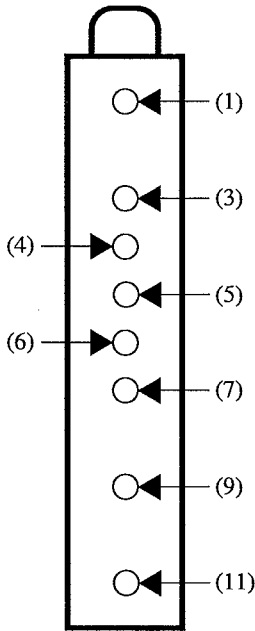
TUNER INFORMATION

TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.5V	2.3V	3.1V
(3) AS	2.9V	2.9V	2.9V
(4) SCL	3.9V	3.9V	3.9V
(5) SDA	3.9V	3.9V	3.9V
(6) +5V	5.0V	5.0V	5.0V
(7) +5V	5.0V	5.0V	5.0V
(9) +33V	33.6V	33.6V	33.6V
(11) IF	0V	0V	0V

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

TUNER TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS NOTE

SERVICE ALIGNMENT MODE INFORMATION

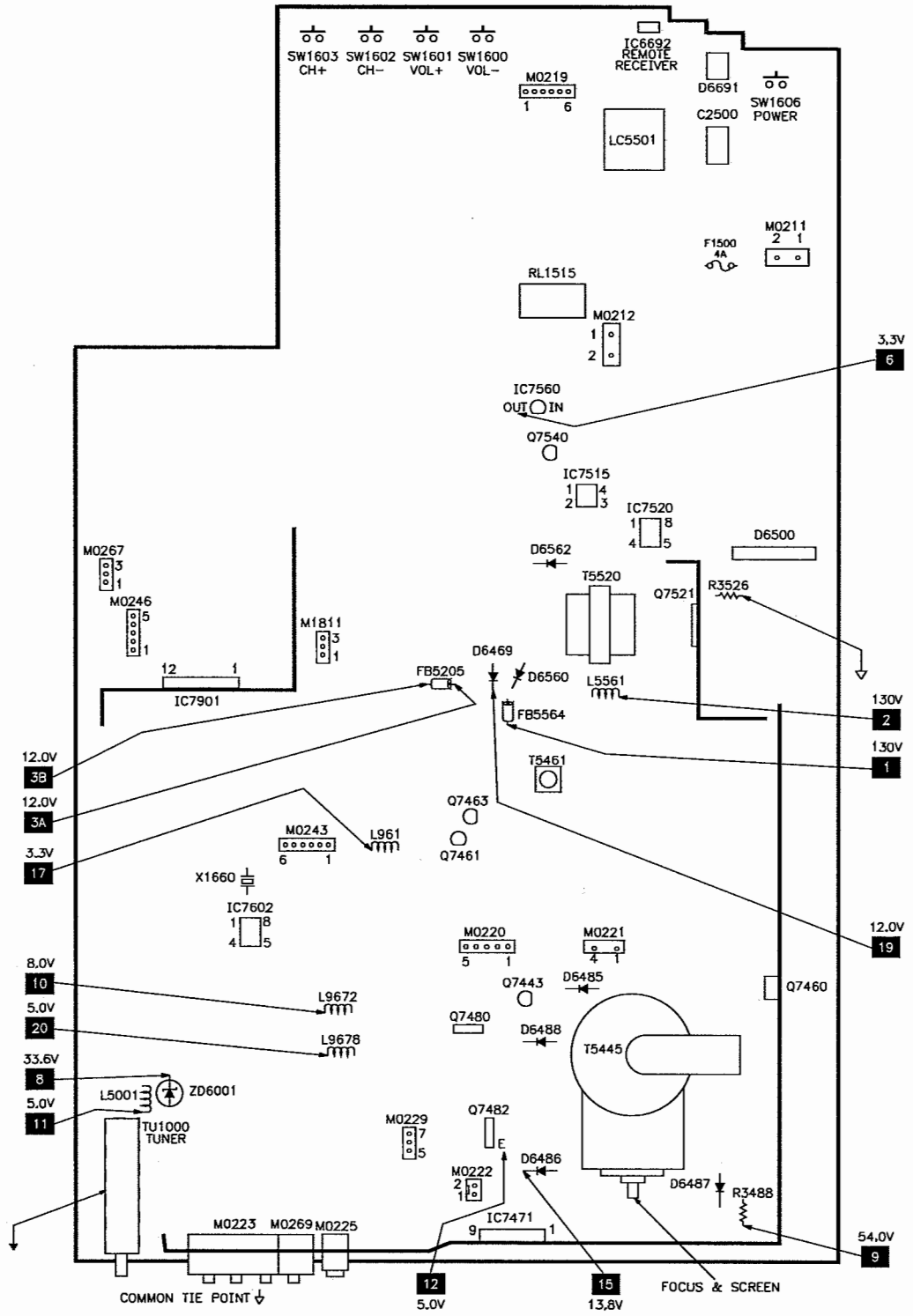
To enter service alignment mode, Factory Service Remote Control must be used. Philips
Part # 4835 3105 7511.

SCHEMATIC COMPONENT LOCATION GUIDE

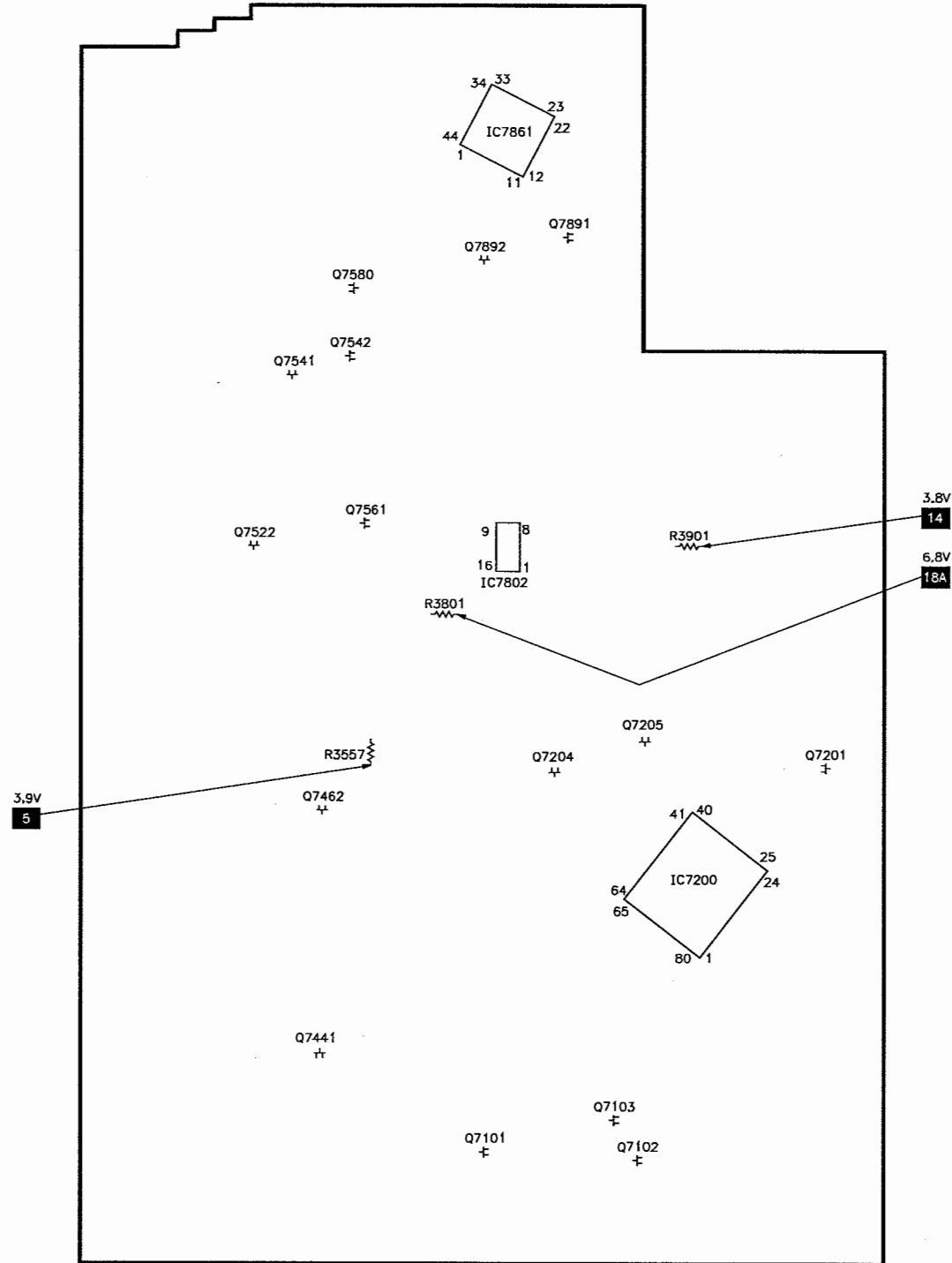
AC01	A25	C2252	D12	C2613	A37	D6565	C32	Q7205	A15	R3220	A15	R3498	D13	R3814A	D4
AC12	A26	C2253	D12	C2615	B38	D6566	D25	Q7441	D21	R3221	A15	R3499	E13	R3815	D6
AC21	D15	C2330	C31	C2618	C35	D6569	E25	Q7443	E20	R3222	A15	R3500	A25	R3815A	D4
C2004	D32	C2331	C32	C2619	D35	D6580	B25	Q7460	E14	R3226	B20	R3501	A25	R3816	D5
C2005	D32	C2340	C32	C2691	A33	D6691	A34	Q7461	E13	R3232	C10	R3506	A26	R3816A	D3
C2006	E32	C2341	C24	C2802	D32	F1500	A25	Q7462	E12	R3235	D22	R3508	A26	R3817	D5
C2007	E32	C2342	C22	C2802A	D32	FB5204	B30	Q7463	E12	R3241	D11	R3519	B25	R3817A	D2
C2008	C9	C2343	C23	C2803	B1	FB5205	B32	Q7480	D28	R3242	D9	R3520	B26	R3818	E7
C2009	C10	C2344	C22	C2810	D8	FB5206	C30	Q7482	E29	R3244	D12	R3521	C26	R3818A	E4
C2101	D32	C2345	D21	C2813	E8	FB5452	E15	Q7521	B28	R3245	D11	R3522	B27	R3819	E6
C2102	A16	C2405	E14	C2816	D30	FB5521	B28	Q7522	C27	R3246	D10	R3523	B27	R3819A	E3
C2103	B5	C2415	E13	C2862	A1	FB5560	A30	Q7540	D26	R3247	E9	R3524	B28	R3820	E5
C2104	C5	C2441	E21	C2864	B3	FB5562	B30	Q7541	D25	R3248	D10	R3525	B27	R3820A	E3
C2105	B5	C2443	D21	C2865	B3	FB5564	A30	Q7542	D25	R3249	D11	R3526	C28	R3821	E5
C2106	C5	C2444	D21	C2866	B4	IC6692	A33	Q7561	B32	R3251	E12	R3527	C28	R3821A	E2
C2111	A18	C2450	A32	C2867	A3	IC7200	B10	Q7580	B25	R3256	E12	R3529	C27	R3822	C15
C2112	A18	C2451	D17	C2868	B3	IC7200	B14	Q7891	C4	R3257	D9	R3530	B28	R3861	C3
C2113	B18	C2455	E13	C2869	A3	IC7200	B36	Q7892	B4	R3258	E9	R3531	C27	R3862	A1
C2121	C14	C2457	E16	C2870	B3	IC7200	D10	R3000	A39	R3259	E9	R3532	B28	R3863	A1
C2122	D2	C2458	E15	C2871	A3	IC7200	D10	R3001	A39	R3331	B22	R3541	D26	R3864	A1
C2123	D2	C2459	D15	C2872	A3	IC7330	B22	R3003	C9	R3332	B23	R3542	C26	R3865	B1
C2124	E2	C2460	E12	C2873	C4	IC7471	D13	R3004	C9	R3333	C22	R3543	D26	R3866	B1
C2125	E2	C2462	E15	C2874	C3	IC7515	C25	R3005	C10	R3334	C23	R3544	D26	R3867	C2
C2131	D6	C2463	E15	C2875	C3	IC7520	B26	R3101	A16	R3335	A22	R3545	D26	R3891	C4
C2132	D6	C2465	E15	C2876	B3	IC7560	C31	R3102	A16	R3336	A23	R3548	D26	R3893	C4
C2133	E6	C2471	E32	C2877	C3	IC7602	B38	R3103	B5	R3340	C31	R3552	D25	R3894	B4
C2134	E6	C2472	D15	C2878	C3	IC7802	C16	R3104	B5	R3341	C24	R3557	C30	R3896	C4
C2135	C14	C2473	D13	C2879	C3	IC7802	D7	R3105	C5	R3342	C24	R3561	B30	R3901	E30
C2136	C13	C2474	D12	C2880	A1	IC7802	E7	R3106	C5	R3343	C23	R3562	B30	R3902	E32
C2141	E35	C2475	D12	C2883	B1	IC7802A	D3	R3111	A18	R3344	D20	R3563	B32	R3903	A4
C2143	D33	C2476	E14	C2884	C2	IC7802A	D4	R3112	A18	R3345	D20	R3565	C32	R3904	A4
C2150	D35	C2480	E32	C2885	C2	IC7802A	E4	R3113	A18	R3346	D20	R3566	D25	R3905	B4
C2171	D2	C2481	E27	C2886	B1	IC7861	B2	R3114	A18	R3441	D22	R3569	D26	R3906	B4
C2172	E2	C2482	D18	C2892	C4	IC7901	B6	R3115	B18	R3443	D22	R3580	B25	R3907	B6
C2173	E2	C2485	C30	C2893	B4	L5001	E30	R3116	B18	R3445	D21	R3594	C26	RL1515	A26
C2174	D2	C2486	E32	C2902	B32	L5002	B9	R3123	D1	R3446	D21	R3595	A31	RL1515	B26
C2176	B7	C2487	D28	C2903	E32	L5201	B12	R3124	D2	R3447	D28	R3596	A31	SP3100	A8
C2177	B7	C2488	D27	C2904	A4	L5242	E12	R3125	E1	R3448	D28	R3601	E35	SP3101	B8
C2178	B7	C2489	E32	C2905	A5	L5342	C24	R3126	E2	R3449	D29	R3603	A38	SP3507	A26
C2179	B7	C2491	D27	C2906	B4	L5451	D17	R3131	D5	R3450	E29	R3604	A38	SW1600	C34
C2180	E2	C2500	A25	C2907	B5	L5457	D16	R3132	D6	R3451	E20	R3605	C36	SW1601	C34
C2181	D2	C2501	A27	C2908	B6	L5471	D15	R3133	E6	R3452	E20	R3606	A36	SW1602	C34
C2184	D5	C2502	A27	C2910	B4	L5472	D13	R3134	E6	R3453	E20	R3607	A36	SW1603	C33
C2187	E5	C2503	A28	C2911	A4	L5480	D24	R3135	C13	R3454	E20	R3608	A35	SW1606	C33
C2201	B15	C2505	A28	C2950	B7	L5561	A31	R3136	C13	R3455	E28	R3609	C37	T5445	C17
C2202	B16	C2507	C29	D6150	D34	L5602	C35	R3141	E35	R3458	D15	R3610	C36	T5445	C27
C2203	B13	C2508	A29	D6201	C19	L5603	C35	R3149	D35	R3459	E15	R3611	B38	T5461	E14
C2204	B17	C2515	B28	D6202	C18	L5604	C35	R3150	D35	R3460	D31	R3618	D37	T5520	A29
C2205	B17	C2520	B26	D6331	B23	L5861	B1	R3150A	D2	R3463	E14	R3623	D36	TH3504	B26
C2208	B10	C2521	C25	D6332	C22	L9611	C31	R3151	D2	R3465	D19	R3624	A37	TH3510	A27
C2209	C19	C2522	B28	D6333	C23	L9672	D29	R3152	E2	R3468	E13	R3625	A37	V1010	B24
C2210	C19	C2523	B28	D6335	A23	L9678	E29	R3153	E2	R3469	E17	R3626	B38	X1002	B9
C2211	D31	C2525	B27	D6447	E20	LC5501	A26	R3154	E34	R3470	D12	R3627	D35	X1200	B12
C2213	B18	C2527	C29	D6449	E17	M0223	A16	R3156	D34	R3471	D15	R3628	D35	X1660	A35
C2214	A19	C2528	C26	D6460	E15	M0223	A17	R3156A	B7	R3472	D15	R3630	B35	X1861	B1
C2215	B19	C2540	D26	D6461	E15	M0223	A17	R3157	D34	R3473	D15	R3634	D35	ZD6001	D31
C2216	D32	C2541	D25	D6465	E15	M0223	B17	R3157A	B7	R3474	D12	R3635	E35	ZD6161	C15
C2217	D31	C2560	A30	D6466	E15	M0223	B5	R3158	D33	R3475	D13	R3636	C37	ZD6206	C19
C2219	B17	C2561	A32	D6467	A31	M0223	C14	R3159	E34	R3477	D15	R3638	C15	ZD6445	E21
C2220	D31	C2562	A30	D6468	E13	M0223	C5	R3200	B10	R3478	D15	R3640	D36	ZD6448	E20
C2221	B14	C2563	B30	D6469	B31	M0223	D1	R3201	A20	R3479	D14	R3681	B34	ZD6462	E13
C2226	B10	C2564	B30	D6470	E22	M0223	E1	R3202	C20	R3480	D15	R3682	B34	ZD6476	D14
C2227	C10	C2567	C32	D6485	C28	M0232	B8	R3203	B20	R3481	D19	R3683	B33	ZD6481	E29
C2228	C10	C2568	D25	D6486	E27	M0250	B14	R3204	C22	R3482	D19	R3684	B34	ZD6482	D28
C2229	B10	C2580	B25	D6487	D27	M0250	D1	R3205	B19	R3484	E19	R3687	C34	ZD6483	E18
C2241	D10	C2581	E31	D6488	D27	M0250	E1	R3206	C18	R3486	D17	R3688	C34	ZD6526	B28
C2242	D11	C2601	B37	D6500	A27	M0269	B13	R3207	B11	R3488	D27	R3689	B35	ZD6540	D26
C2243	D9	C2602	A35	D6520	C26	M0269	D5	R3208	B12	R3490	E17	R3691	A34	ZD6541	C26
C2244	D11	C2606	B35	D6523	C27	M0269	E5	R3209	B12	R3492	E13	R3693	A33	ZD6570	E25
C2245	D9	C2607	A35	D6524	C28	Q7101	A15	R3212	B13	R3493	E13	R3694	A34		
C2247	D31	C2608	C35	D6525	C28	Q7102	D33	R3213	B12	R3494	C28	R3801	D29		
C2248	D31	C2609	B35	D6560	A30	Q7103	D34	R3217	C18	R3495	E14	R3802	D31		
C2249	D9	C2611	D35	D6562	B30	Q7201	B11	R3218	C18	R3496	E14	R3810	C15		
C2250	D10	C2612	A37	D6563	B30	Q7204	C19	R3219	C19	R3497	E21	R3814	D7		

PLACEMENT CHART

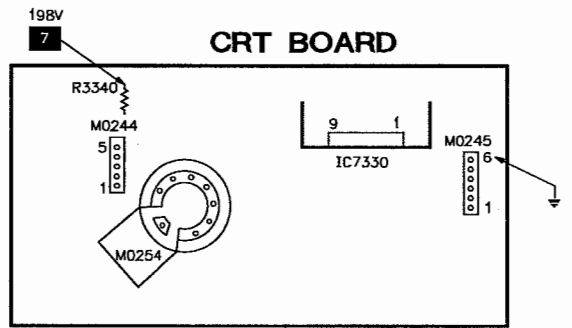
MAIN BOARD - TOP VIEW



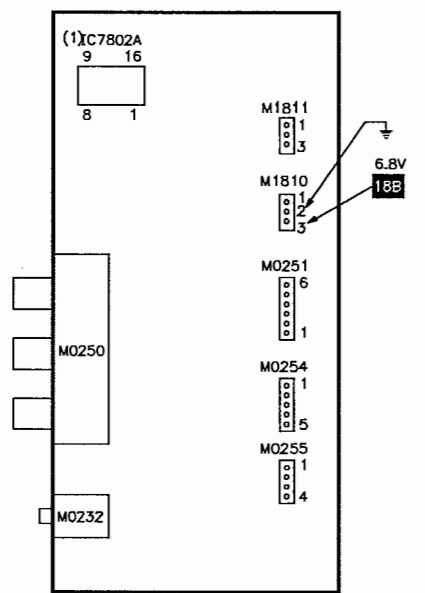
MAIN BOARD - BOTTOM VIEW



CRT BOARD

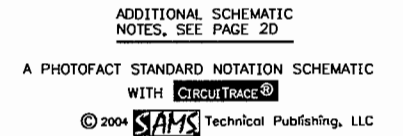


SIDE JACK PANEL BOARD



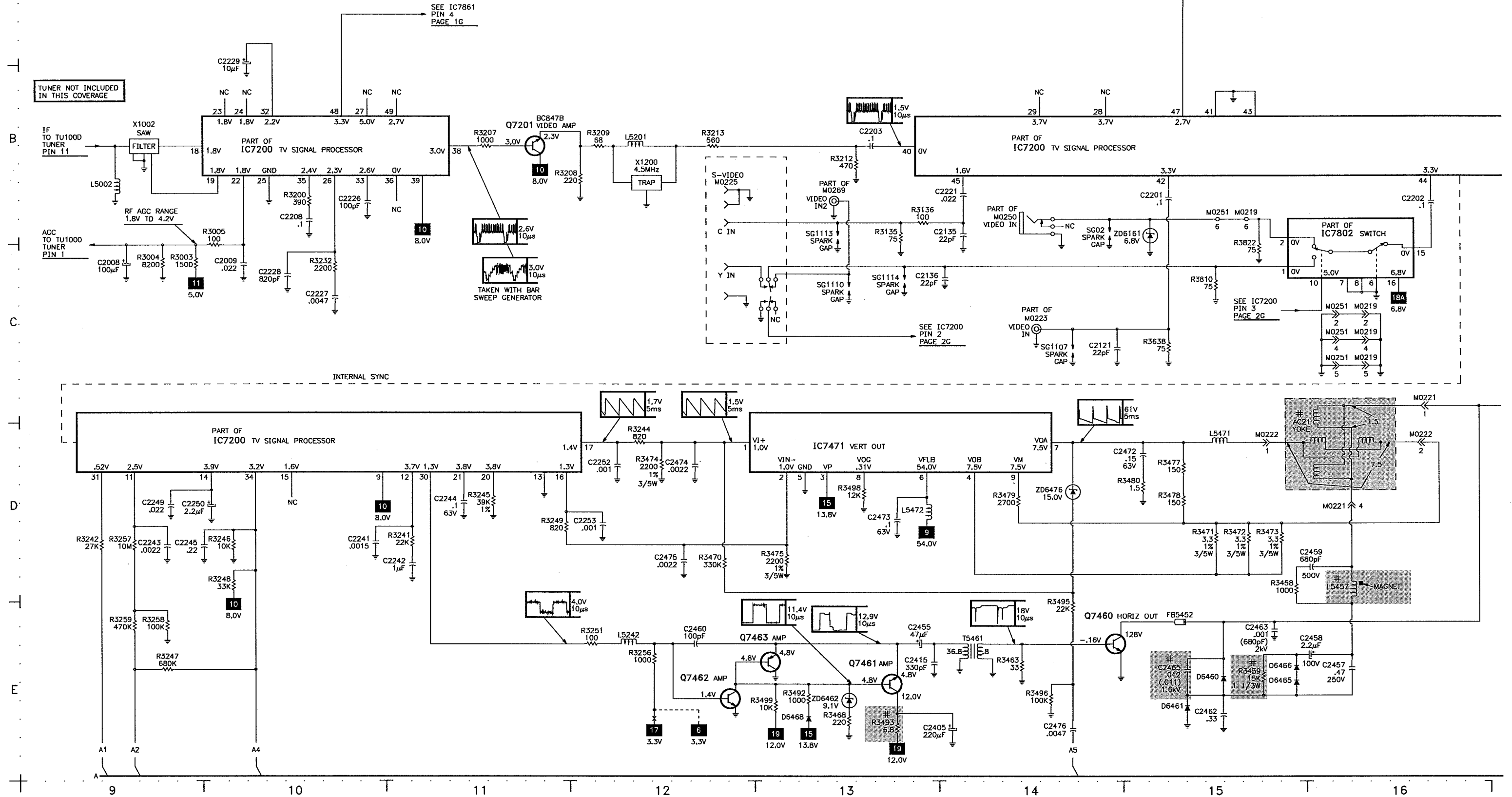
(1) LOCATED ON OTHER SIDE OF BOARD

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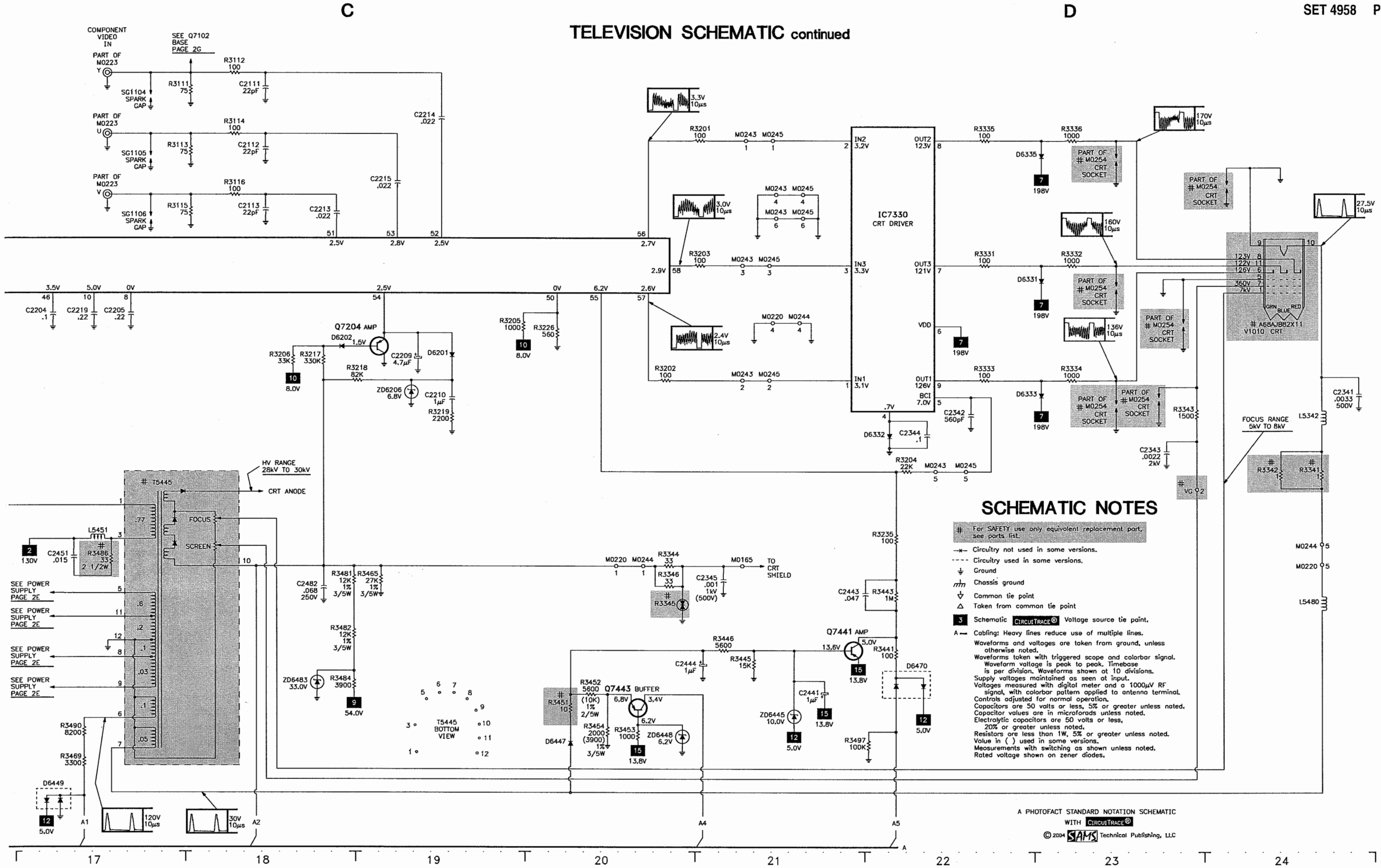


ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2D

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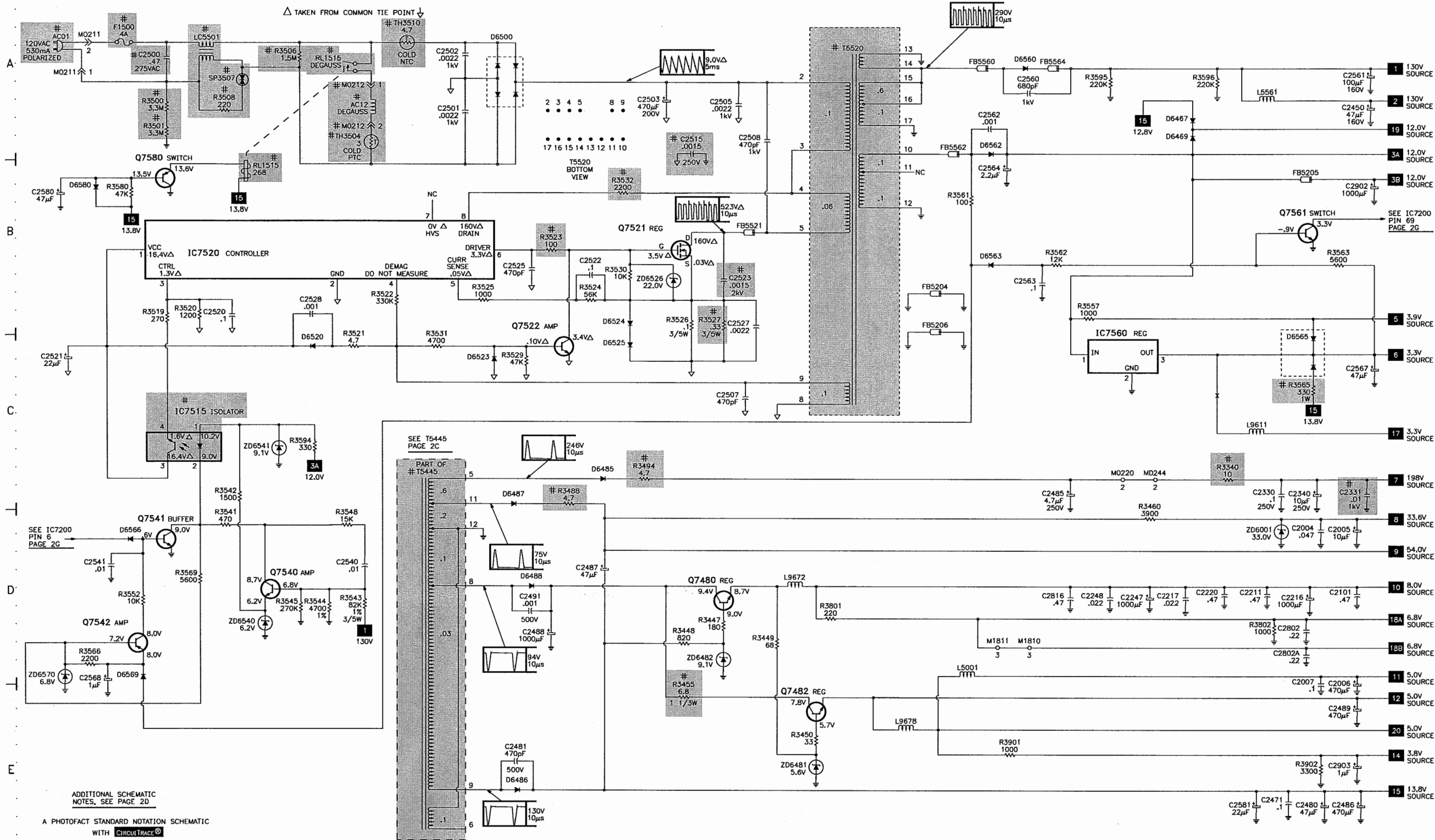
TELEVISION SCHEMATIC continued



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
 - Δ Taken from common tie point
 - 3 Schematic CIRCUITRACE® Voltage source tie point.
 - A Cabling: Heavy lines reduce use of multiple lines.
- Waveforms and voltages are taken from ground, unless 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.

POWER SUPPLY SCHEMATIC



ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2D

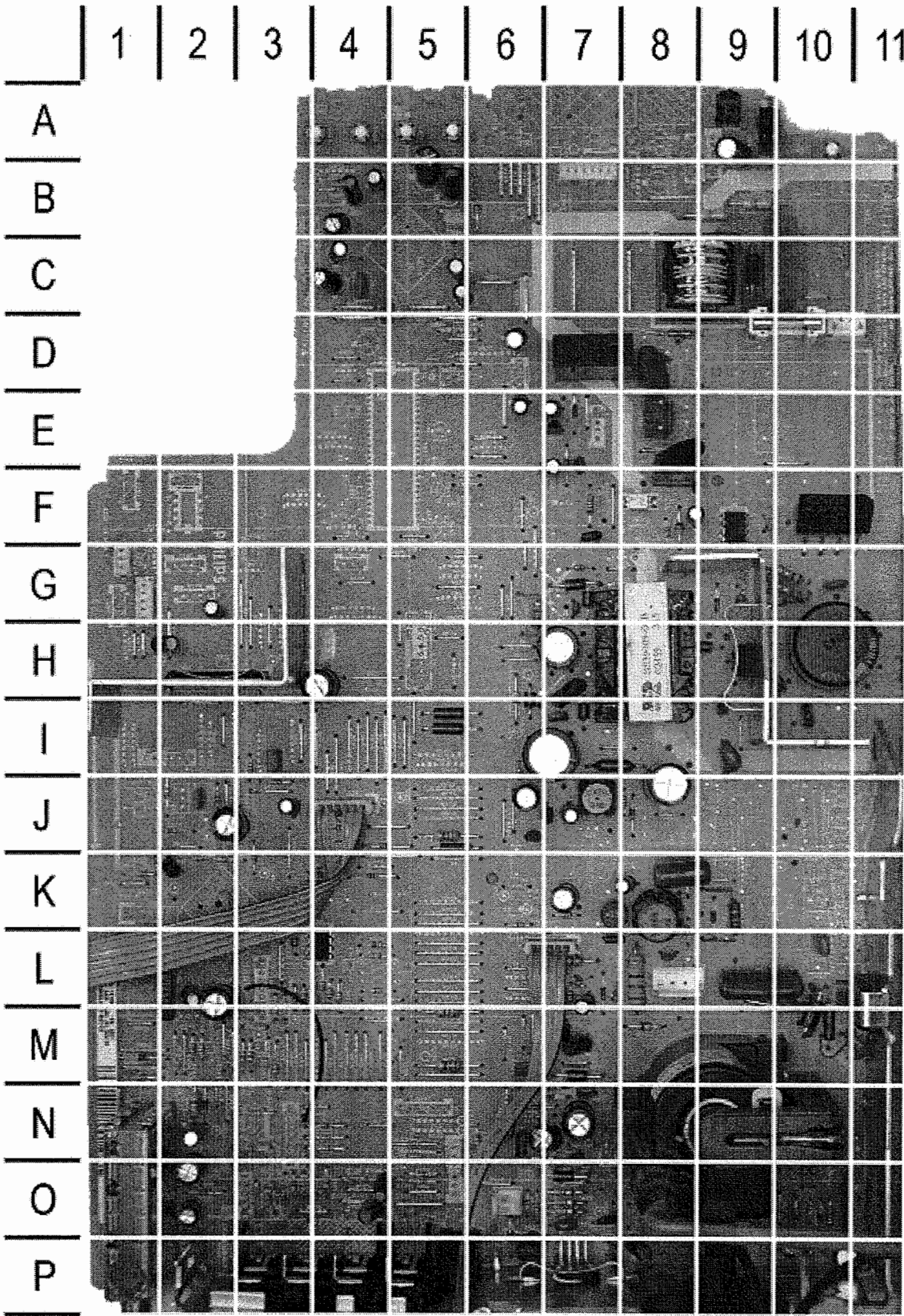
A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITTRACE®

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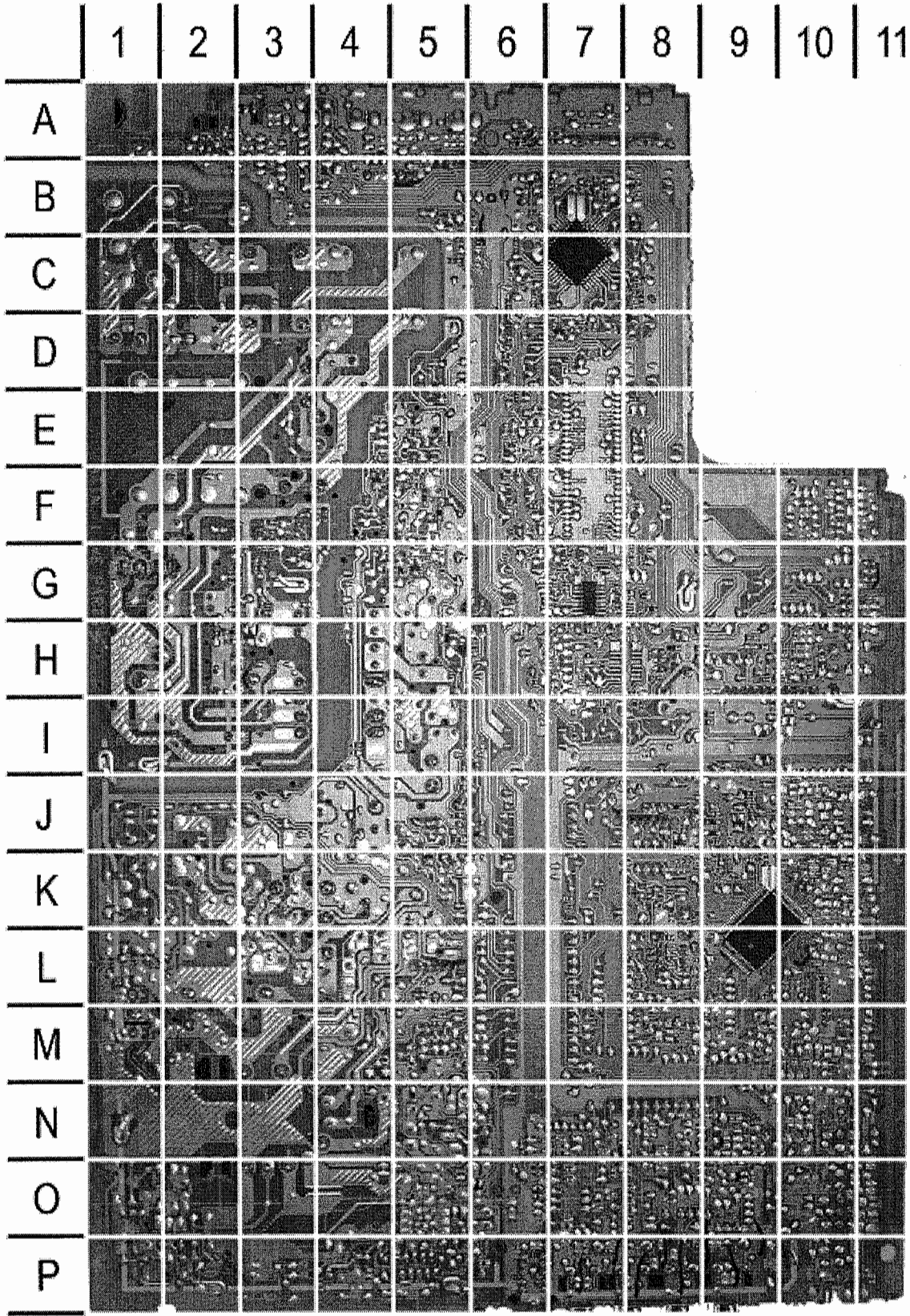
MAIN BOARD - TOP VIEW



MAIN BOARD - TOP VIEW, GRIDTRACE LOCATION GUIDE

C2005	N2	C2560	I7	FB5205	I5	Q7443	M7	R3448	N7	R3604	L4
C2006	O2	C2561	I7	FB5206	J5	Q7460	L11	R3449	N6	R3606	L4
C2008	O2	C2562	G7	FB5452	M10	Q7461	J6	R3450	N6	R3607	L4
C2105	O4	C2563	F7	FB5521	H9	Q7463	J7	R3451	L7	R3608	K4
C2106	O4	C2564	H7	FB5560	I7	Q7480	M6	R3452	L7	R3609	L4
C2209	J3	C2567	E7	FB5562	G7	Q7482	N6	R3453	M7	R3610	L4
C2211	K10	C2568	E7	FB5564	I6	Q7521	H9	R3454	L6	R3618	L4
C2216	J2	C2580	D6	IC6692	A9	Q7540	E7	R3455	N6	R3624	L3
C2220	I3	C2581	E6	IC7471	P7	R3000	O2	R3458	K8	R3625	L3
C2229	K2	C2691	A9	IC7515	F8	R3001	O2	R3459	K9	R3634	M3
C2244	L1	C2864	C5	IC7520	F9	R3005	L1	R3460	P8	R3635	M3
C2247	L2	C2865	C5	IC7560	E7	R3101	O4	R3463	L11	R3640	M3
C2250	L2	C2869	C4	IC7602	L4	R3103	O4	R3465	O10	R3865	B4
C2405	J6	C2870	C4	IC7901	H3	R3105	O4	R3468	J8	R3866	B4
C2441	M7	C2874	C4	L5001	M2	R3111	O3	R3469	K6	RL1515	D7
C2444	M7	C2875	B4	L5002	M1	R3112	N4	R3471	O7	SP3507	D8
C2450	J8	C2876	C4	L5201	J2	R3113	O3	R3472	O7	SW1600	A5
C2451	L7	C2877	B4	L5242	M1	R3114	N4	R3473	O7	SW1601	A5
C2455	J7	C2878	B4	L5451	K7	R3115	O4	R3474	P9	SW1602	A4
C2457	K8	C2883	A5	L5457	K8	R3116	N4	R3475	P9	SW1603	A4
C2458	K8	C2884	B5	L5471	P6	R3123	N5	R3477	O6	SW1606	A10
C2459	L8	C2885	B5	L5472	P9	R3125	N5	R3478	O6	T5445	N9
C2462	L10	C2902	H4	L5480	L7	R3131	O5	R3480	P7	T5461	J7
C2463	M11	C2903	G2	L5561	I7	R3133	O5	R3481	O10	T5520	H8
C2465	L9	C2908	H2	L5602	L3	R3135	N6	R3482	O10	TH3504	D8
C2471	O7	D6447	L7	L5603	K4	R3136	O5	R3484	O10	TH3510	E8
C2472	O7	D6460	L9	L5604	K4	R3141	O5	R3486	L8	TU1000	O1
C2473	P7	D6461	M10	L5861	M6	R3154	N3	R3488	P10	X1002	L2
C2480	P8	D6465	K9	L9611	J5	R3156	N3	R3490	K7	X1200	J2
C2481	N7	D6466	K8	L9672	M5	R3200	K2	R3493	I6	X1660	K3
C2482	O11	D6469	I6	L9678	M5	R3201	J4	R3494	L7	X1861	B5
C2485	K7	D6485	M8	LC5501	C9	R3202	J4	R3500	B9	ZD6001	N2
C2486	P10	D6486	O7	M0211	D10	R3203	J4	R3501	B9	ZD6448	M6
C2487	P10	D6487	O10	M0212	E8	R3204	J4	R3506	E8	ZD6462	J8
C2488	N7	D6488	M7	M0219	B7	R3207	J2	R3508	C9	ZD6476	O6
C2489	N6	D6500	F10	M0220	L7	R3213	J2	R3519	E8	ZD6481	N6
C2491	N7	D6520	F8	M0221	L8	R3220	K3	R3521	G9	ZD6482	N7
C2500	C10	D6523	G10	M0222	O6	R3221	I3	R3523	G9	ZD6483	O10
C2501	F10	D6524	H10	M0223	P3	R3222	J3	R3526	G10	ZD6540	E7
C2502	G10	D6525	G9	M0225	P5	R3235	J4	R3527	G10		
C2503	H10	D6560	H7	M0229	N5	R3244	M2	R3532	F9		
C2505	I10	D6562	G7	M0243	J4	R3249	M2	R3543	F7		
C2508	I9	D6566	E7	M0246	G1	R3251	K1	R3561	G7		
C2515	I9	D6691	A9	M0267	G1	R3445	L7	R3565	G6		
C2521	F8	F1500	D19	M0269	P5	R3446	L7	R3601	M3		
C2523	H10	FB5204	I5	M1811	H4	R3447	N7	R3603	L4		

MAIN BOARD - BOTTOM VIEW



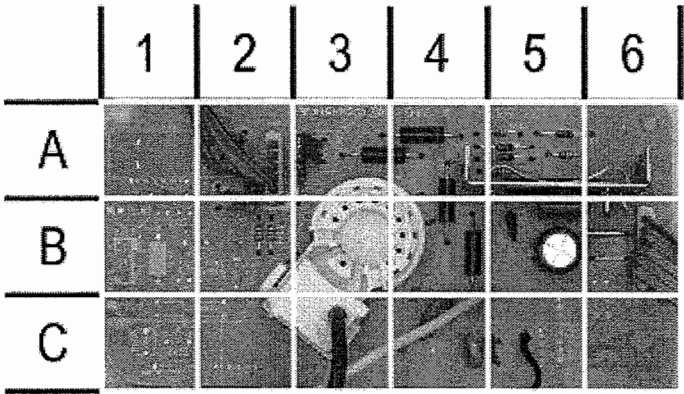
MAIN BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C2004	N10	C2228	K10	C2866	C7	Q7541	E5	R3443	M5	R3682	A7
C2007	O10	C2241	L12	C2867	D7	Q7542	E5	R3470	P6	R3683	A7
C2009	L10	C2242	L12	C2868	D7	Q7561	G5	R3479	O5	R3684	A8
C2101	O7	C2243	L10	C2871	C8	Q7580	E5	R3492	J5	R3687	A6
C2102	O8	C2245	J9	C2872	C8	Q7891	D8	R3495	O5	R3688	A6
C2103	O8	C2248	M9	C2873	B8	Q7892	D7	R3496	O5	R3689	C5
C2104	O8	C2249	L10	C2879	B7	R3003	O10	R3497	O5	R3691	A2
C2111	O8	C2252	M10	C2880	B7	R3004	P10	R3498	O5	R3693	A2
C2112	N8	C2253	M10	C2886	B7	R3102	O7	R3499	J5	R3694	A2
C2113	N8	C2415	J4	C2892	F6	R3104	O8	R3520	G3	R3801	H6
C2121	O8	C2443	M5	C2893	E6	R3106	O7	R3522	G3	R3802	H8
C2122	N7	C2460	K5	C2904	H9	R3124	N7	R3524	G2	R3810	G8
C2123	N7	C2474	P4	C2905	H9	R3126	N7	R3525	G2	R3814	G7
C2124	N7	C2475	P5	C2906	H10	R3132	P7	R3529	G3	R3815	G7
C2125	N7	C2476	O5	C2907	H10	R3134	O7	R3530	H2	R3816	G7
C2131	P7	C2507	G3	C2910	H10	R3149	N9	R3531	G3	R3817	G7
C2132	O7	C2520	G3	C2911	H8	R3150	N9	R3541	F4	R3818	G8
C2133	O7	C2522	G2	C2950	G11	R3157	O9	R3542	F4	R3819	G7
C2134	O7	C2525	G3	D6150	N8	R3158	N9	R3544	F4	R3820	G8
C2135	N7	C2527	G2	D6201	J9	R3159	O9	R3545	F4	R3821	G7
C2136	O7	C2528	G3	D6202	J8	R3205	K9	R3548	F5	R3861	C6
C2141	N7	C2540	F5	D6449	O6	R3206	J8	R3552	E5	R3862	B7
C2143	O9	C2541	E4	D6467	I6	R3208	K10	R3557	I5	R3863	B7
C2150	N9	C2601	L8	D6468	J6	R3209	J10	R3562	G4	R3864	B7
C2184	B6	C2602	K8	D6470	M4	R3212	J9	R3563	G5	R3867	B6
C2187	C6	C2606	M8	D6563	G5	R3217	J8	R3566	F5	R3891	C8
C2201	K9	C2607	K8	D6565	H5	R3218	J8	R3569	F5	R3893	C8
C2202	K9	C2608	L8	D6569	F5	R3219	K9	R3580	D5	R3894	D7
C2203	K10	C2609	K8	D6580	D5	R3226	K9	R3594	F3	R3896	C6
C2204	K9	C2611	K8	IC7200	L9	R3232	K10	R3595	I4	R3901	H9
C2205	L9	C2612	M8	IC7802	G2	R3241	L10	R3596	I4	R3902	H9
C2208	K9	C2613	M8	IC7861	C7	R3242	I9	R3605	K7	R3903	H10
C2210	J9	C2615	L8	Q7101	N7	R3245	L10	R3611	L8	R3904	H9
C2213	K8	C2618	K8	Q7102	O9	R3246	J9	R3623	L8	R3905	H10
C2214	K8	C2619	L9	Q7103	N9	R3247	L7	R3626	L8	R3906	H10
C2215	K8	C2802	G7	Q7201	K10	R3248	J9	R3627	L8	R3907	H10
C2217	K10	C2803	C6	Q7204	J8	R3256	K7	R3628	K8	ZD6206	J9
C2219	K10	C2810	F6	Q7205	J9	R3257	M9	R3630	M8	ZD6445	N5
C2221	K9	C2813	F6	Q7441	M4	R3258	M10	R3636	M9	ZD6526	H2
C2226	K10	C2816	H6	Q7462	K5	R3259	L7	R3638	K9	ZD6541	F4
C2227	K10	C2862	C6	Q7522	G3	R3441	M4	R3681	A7	ZD6570	F5

MAGNAVOX

MODEL 27MS3404/17

CRT BOARD

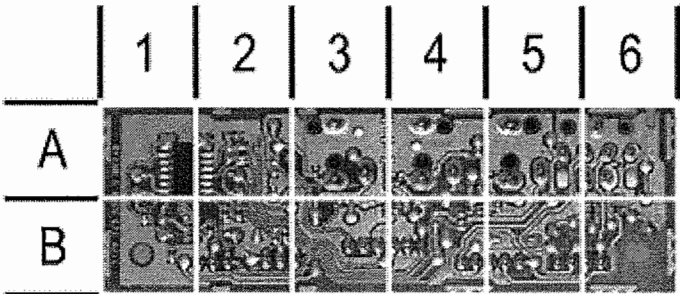


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CRT BOARD, GRIDTRACE LOCATION GUIDE

C2330	B5	D6331	A5	M0245	B6	R3336	A4	R3346	B2
C2340	B5	D6332*	B5	M0254	B3	R3340	A2		
C2341	A2	D6333	A5	R3331	A5	R3341	A2	* Located on bottom	
C2342*	B6	D6335	A5	R3332	A3	R3342	A2	of board.	
C2343	C4	IC7330	A5	R3333	A5	R3343	B4		
C2344*	B5	L5342	A3	R3334	B4	R3344	B2		
C2345	C5	M0244	A2	R3335	A5	R3345	C4		

SIDE JACK PANEL BOARD



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SIDE JACK PANEL BOARD, GRIDTRACE LOCATION GUIDE

C2171	B4	C2180	B4	M0255*	B3	R3157A	B6	ZD6161	A3
C2172	B4	C2181	B3	M1810*	B2	R3814A	B1		
C2173	B5	C2802A	B1	M1811*	B1	R3815A	B1	* Located on bottom	
C2174	A4	IC7802A	A1	R3150A	A4	R3816A	A2	of board.	
C2176	B6	M0232*	A6	R3151*	A4	R3817A	A2		
C2177*	B5	M0250*	A4	R3152	A4	R3818A	B2		
C2178	B6	M0251*	B6	R3153*	B5	R3819A	B2		
C2179*	B6	M0254*	B5	R3156A	B6	R3820A	B1		

Important Parts Information

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

Obtaining Parts

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

800-428-7267

Participating Vendors

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

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

TEST EQUIPMENT

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

Equipment	Sencore No.	Equipment	Sencore No.
Oscilloscope	SC3100	Isolation Transformer	PR570
Generators		Capacitance Analyzer	LC102
RGB	CM2125	CRT Analyzer	CR7000
Multiburst Signal	VG91	AC Leakage Tester	PR570
Color Bar	VG91	Inductance Analyzer	LC102
TV Stereo	VG91	Flyback Yoke Tester	TVA92
Digital VOM	SC3100	Field Strength Meter	SL753
Frequency Meter	SC3100	Transistor Tester	TF46
Hi-Voltage Probe	HP200	Horizontal Analyzer	HA-2500
Accessory Probes	TP212	Video Analyzer	VG91, TVA92

PARTS LIST

Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Function/Rating	Mfr. Part No.	Notes
D6150	BAS316	3198 010 10630	-	ZD6001	BZX79-C33	3198 010 23390	NTE5036A	R3159	1200 1% 1/8W	2322 734 61202	-
D6201, 02	BAS316	3198 010 10630	-	ZD6161	BZX79-C6V8	3198 010 26880	NTE5014A	R3245	39K 1% 1/16W	2322 704 63903	-
D6331	BAV21	3198 010 10070	NTE177	ZD6206	BZX384-C6V8	3198 020 56880	-	# R3341, 42	1 5% 1/3W	2306 204 03108	-
D6332	BAS316	3198 010 10630	-	ZD6445	BZX284-C10	3198 020 51090	-	# R3345	VDR	2322 593 13507	-
D6333, 35	BAV21	3198 010 10070	NTE177	ZD6448	BZX79-B6V2	9331 668 30133	-	# R3451	10 5% 1/3W	2306 204 03109	-
D6447	1N4148	3198 010 10010	NTE519	ZD6462	BZX79-C9V1	9331 177 80133	NTE5018A	R3452	5600 1% 3/5W	2312 915 15602	-
D6449	BAV99	3198 010 10620	-	ZD6476	BZX79-C15	3198 010 21590	NTE5024A	-	10K 1% 3/5W	2312 915 11003	-
D6460	BY228/24	9340 559 50112	-	ZD6481	BZX79-C5V6	3198 010 25680	NTE5011T1	R3454	2000 1% 3/5W	2312 915 1200	-
D6461	RGP30J-L7004	9338 617 60682	-	ZD6482	BZX79-C9V1	9331 177 80133	NTE5018A	-	3900 1% 3/5W	2312 915 13902	-
D6465, 66	BAV21	3198 010 10070	NTE177	ZD6483	BZX79-C33	3198 010 23390	NTE5036A	# R3455	6.8 5% 1 1/3W	3198 012 26880	-
D6467, 68	BAS316	3198 010 10630	-	ZD6526	BZX284-C22	3198 020 52290	-	# R3459	15K 5% 1 1/3W	3198 012 21530	-
D6469	BYV95C	9335 001 80133	NTE571	ZD6540	BZX79-B6V2	9331 668 30133	-	R3465	27K 1% 3/5W	2312 915 12703	-
D6470	BAV99	3198 010 10620	-	ZD6541	PDZ-10B	3198 020 51090	-	R3471, 72, 73	3.3 1% 3/5W	2312 915 13308	-
D6485	BYV95C	9335 001 80133	NTE569	ZD6570	-	3198 020 56880	-	R3474, 75	2200 1% 3/5W	2312 915 12202	-
D6486	EGP20DL-5100	9322 164 42682	-					R3481, 82	12K 1% 3/5W	2312 915 11203	-
D6487	BYV95A	9335 000 90133	NTE571					# R3486	33 5% 2 1/2W	3198 012 33390	-
D6488	EGP20DL-5100	9322 164 42682	-	Item No.	Function/Rating	Mfr. Part No.	Notes	# R3488	4.7 5% 1/2W	2306 207 03478	-
D6500	GBU6JL-7002	9322 138 08667	-	# AC01	Line Cord	3135 010 03831	AC, Polarized	# R3493	6.8 5% 1/3W	2306 204 03688	-
D6520	BYV95A	9335 001 00133	NTE571	# AC12	Degaussing	2422 549 45709	-	# R3494	4.7 5% 1/2W	2306 207 03478	-
D6523	1N4148	3198 010 10010	NTE519	# AC21 (1)	Yoke	-	Horiz 1.26mH, Vert 16.5mH	# R3500, 01	3.3M 5% 1/2W	2322 242 13335	-
D6524, 25	IN5062	3198 010 10120	NTE506	C2331	.01 +80% -20% 1kV	2020 558 90445	-	# R3506	1.5M 5% 1/2W	2322 242 13155	-
D6560	BYV29X-500	9340 555 59127	-	C2343	.0022 10% 2kV	2020 558 90559	-	# R3508	220 20% 1/2W	3198 013 02210	-
D6562	EGP20DL-5100	9322 164 42682	-	C2345	.01 +80% -20% 1kV	2020 558 90445	-	# R3527	.33 5% 3/5W	3198 012 13370	-
D6563	BAS316	3198 010 10630	-		.01 10% 500V	3198 019 41020	-	# R3532	2200 5% 1/3W	2306 204 03222	-
D6565	BAV70	9331 849 10215	NTE595	C2463	.001 10% 2kV	2020 558 90487	-	R3543	82K 1% 3/5W	2312 915 18203	-
D6566	1N4148	3198 010 10010	NTE519		680pF 10% 2kV	2020 558 90485	-	R3544	4700 1% 1/8W	2322 734 64702	-
D6569, 80	BAS316	3198 010 10630	-	# C2465	.012 5% 1.6kV	2222 375 90156	-	# R3565	330 5% 1W	3198 012 13310	-
D6691	LTL-10234WHCR	9322 185 69682	-		.011 5% 1.6kV	2020 301 90251	-	R3681	180 1% 1/8W	2322 734 61801	-
IC7200	TDA9577H/N1/AI/1130	9352 731 51557	-	# C2500	.47 20% 275VAC	2022 330 00018	-	R3682	270 1% 1/8W	2322 734 62701	-
IC7330	TDA6107JF/N3	9352 713 37112	-	C2501, 02, 05	.0022 10% 1kV	3198 019 52220	-	R3683, 84	390 1% 1/8W	2322 734 63901	-
IC7471	TDA8359J/N2	9352 701 64112	-	C2508	470pF 10% 1kV	3198 019 64710	-	R3687	75 1% 1/8W	2322 734 67509	-
# IC7515	TCET1103(G)	9322 140 14667	-	# C2515	.0015 20% 50V	2020 554 90172	-	R3688	68 1% 1/8W	2322 734 66809	-
IC7520	TEA1507P/N1	9352 673 56112	-	# C2523	.0015 10% 2kV	2020 558 90489	-	R3689	2700 1% 1/8W	2322 734 62702	-
IC7560	L78L33ACZ	9322 134 92676	-	C2560	680pF 10% 1kV	2020 558 90472	-	# RL1515	Relay	2422 132 07444	Degaussing
IC7602	M24C08-WBN6	9322 154 38682	-	C2607, 09	33pF 5% 50V NPO	3198 016 33390	-	SP3100, 01	Speaker	2422 264 00371	16 Ohms, 5W
IC7802	HEF4053BT	9333 729 60653	-	# F1500	Fuse	2422 086 10914	4Amp, 250V, Fast Acting	# SP3507	Surge Protector	2422 549 43073	-
IC7802A	HEF4053BT	9333 729 60653	-	FB5204, 05, 06	Ferrite Bead	3198 018 90020	-	SW1600	Switch	2422 128 02742	Volume -
IC7861	TDA9853H/V1	9352 671 19557	-	FB5452	Ferrite Bead	3198 018 90020	-	SW1601	Switch	2422 128 02742	Volume +
IC7901	AN7522N	9322 181 41682	-	FB5521, 60, 62, 64	Ferrite Bead	3198 018 90010	-	SW1602	Switch	2422 128 02742	Channel -
Q7101	BC847B	3198 010 42030	NTE2408	IC6692	Receiver	9322 127 54667	Remote	SW1603	Switch	2422 128 02742	Channel +
Q7102	BC857B	3198 010 42150	NTE2409	L5001	27µH	3198 018 22790	-	SW1606	Switch	2422 128 02742	Power
Q7103	BC847B	3198 010 42030	NTE2408	L5002	-	3198 018 18270	-	# T5445 (2)	Horizontal Output	2422 531 02506	1342.0043B
Q7201	BC847B	3198 010 42030	NTE2408	L5201	6.8µH	3198 018 16880	-	# T5445 (2)	Horizontal Output	2422 531 02611	J0501-21835
Q7204, 05	BC857B	3198 010 42150	NTE2409	L5242	10µH	3198 018 11090	-	T5461	Horizontal Drive	2422 531 02478	-
Q7441	BC857B	3198 010 42150	NTE2409	L5342	22µH	2422 535 97333	-	# T5520	Power	2422 531 02459	-
Q7443	BC557B	3198 020 40110	NTE159	L5451	33µH	3198 018 73390	-	# TH3504	3 Cold PTC	2122 663 00019	-
Q7460	BU4508DX	9340 550 92127	-	# L5457	Horizontal Linearity	2422 535 94865	-	# TH3510	4.7 Cold NTC	2122 612 00056	-
Q7461	BC337-25	3198 020 43530	NTE123AP	L5471, 72	3.3µH	3198 018 73380	-	# TU1000	Tuner	2422 542 90141	-
Q7462	PDTC143ZT	9340 547 00215	-	L5480	39µH	2422 535 97336	-	# V1010	CRT	9301 891 90631	A68AJB82X11
Q7463	BC327-25	3198 020 43430	NTE298	L5561	27µH	2422 535 95366	-	X1002	Filter	2422 549 44518	45.75MHz
Q7480, 82	BD135	3198 020 41010	NTE373	L5602, 03, 04	5.6µH	3198 018 15680	-	X1200	Trap	2422 549 40807	4.5MHz
Q7521	FQPF9N50	9322 187 16687	-	L5861	10µH	3198 018 11090	-	X1660	Crystal	2422 543 01203	12MHz
	STP8NC50FP	9322 160 72687	-	L9611	27µH	3198 018 22790	-	X1861	Resonator	2422 540 98344	514.5kHz
Q7522	BC847B	3198 010 42030	NTE2408	L9672, 78	22µH	3198 018 22290	-		PC Board	3139 187 15081	Main
Q7540	BC547B	3198 020 40030	NTE123AP	# LC5501	Line Choke	2422 549 43432	-		PC Board	3141 058 81981	Side Jack
Q7541	PDTC114ET	9340 310 10215	-	M0223	Jack	2422 026 05236	Assembly		Transmitter	3139 238 05781	Remote, RC1112813/1
Q7542	BC857B	3198 010 42150	NTE2409	M0225	Jack	2422 026 04926	S-Video				
Q7561	PDTC143ZT	9340 547 00215	-	M0232	Jack	2422 026 04747	Headphone				
Q7580	BC857B	3198 010 42150	NTE2409	M0250	Jack	2422 026 04815	Assembly				
Q7891, 92	BC847B	3198 010 42030	NTE2408	# M0254	Socket	2422 500 80076	CRT				

For SAFETY use only equivalent replacement part.

(1) Bonded part of CRT.

(2) Screen and focus controls are part of T5445.