

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.

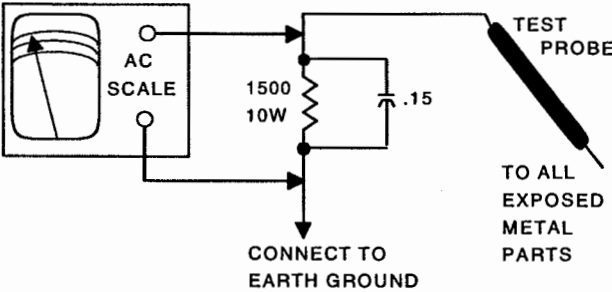
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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

After servicing the high voltage circuits, test the shutdown circuit by momentarily applying an external voltage of 4.0V to pin 50 of IC7250. The receiver should go into shutdown losing sound and raster. To return receiver to normal operation remove the external voltage source and press the power button.

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by SAMS Technical Publishing 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 by the manufacturers of the specific type of replacement part listed.

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5436 West 78th Street
Indianapolis, IN 46268-4149

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

03PF02081



PHOTOFACT[®] Technical Service Data
SILVER

SET 4705

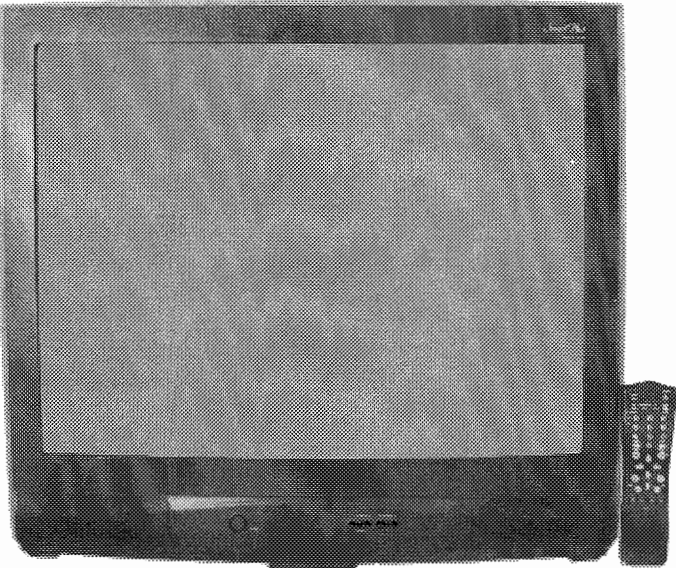
MODEL TS3661C129 (CHASSIS 36K8)

PHILIPS

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PHILIPS
Model TS3661C129 (Chassis 36K8)



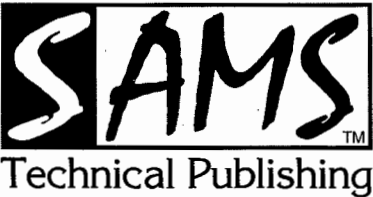
Representative Model

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

Coverage includes these additional models and chassis:

Models	Chassis
TS3260C121	32K8
TS3260C129	32K8



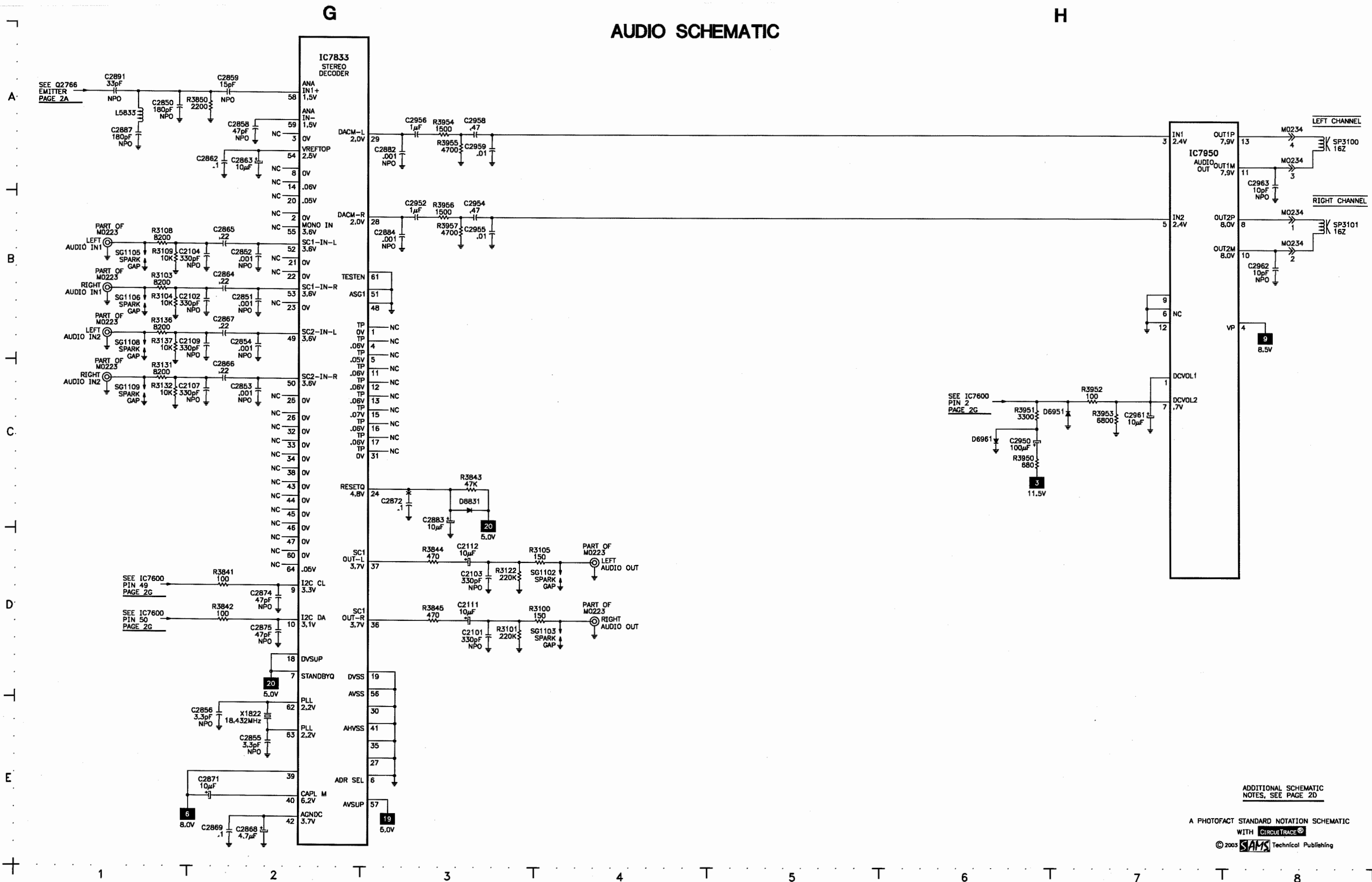
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For Supplier Address,
See PHOTOFACT Annual Index

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AUDIO SCHEMATIC

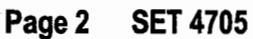


ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2D

A PHOTOFACT STANDARD NOTATION SCHEMATIC
WITH CIRCUITTRACE®

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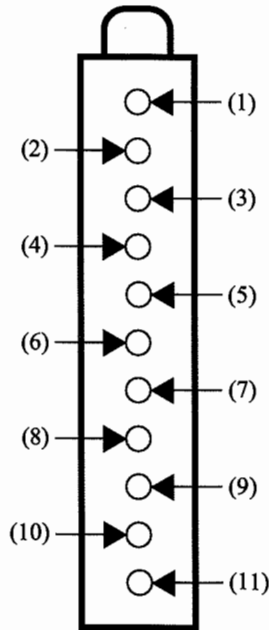
TUNER INFORMATION

TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.0V	2.1V	1.8V
(2) VT	1.0V	4.3V	4.3V
(3) NC	1.3V	1.3V	1.3V
(4) SCL	3.7V	3.7V	3.7V
(5) SDA	3.6V	3.6V	3.6V
(6) +5V	5.0V	5.0V	5.0V
(7) +5V	5.0V	5.0V	5.0V
(8) NC	0V	0V	0V
(9) +33V	33.6V	33.6V	33.6V
(10) GND	0V	0V	0V
(11) IF	0V	0V	0V

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

TUNER TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS

B+ CHECK

Tune in a picture. Set picture and brightness to normal. Connect a digital voltmeter to L5577. Check for 129.0V ±1.0V.

SERVICE ALIGNMENT MODE (SAM) INFORMATION

To enter service alignment mode, turn receiver on, then press 0, 6, 2, 5, 9, 6, and the status button on the remote, without allowing time out between key entries. The first menu is the main menu, there are three selections in the main menu. At any time within the menus, pressing the menu button will cause the receiver to display the main menu. If the exit item is selected, the receiver will display the previous menu. Press menu button for next menu. Press adjust right/left to either turn selection on/off or to proceed to next menu. Press the adjust up/down arrows to make a selection.

L90US11 1.0 SAM

AKB	0
VSD	0
TUNER	>
WHITE TONE	>
GEOMETRY	> Only four selections are displayed at a time.
PIP	>
AUDIO	>

The following chart contains specific information to the TUNER selection on the main menu.

L90US11 1.0 SAM

AKB	0
VSD	0
TUNER	>>>>> AGC 6
WHITE TONE	> YD 12 Set to 12.
GEOMETRY	> CL 4 Set to 4.
PIP	> IF-PLL 32 Auto Set.
AUDIO	> AFW 275kHz Set to 275kHz.
	AFA 1
	AFB 1

The following chart contains specific information to the PIP selection on the main menu.

L90US11 1.0 SAM

AKB	0
VSD	0
TUNER	>
WHITE TONE	>
GEOMETRY	>
PIP	>>>>> Y - BRIGHT 6 Factory Set.
AUDIO	YR 21
	UG 21
	VB 21
	DCONT 2 Factory Set.
	COLOR 26 Factory Set.

NOTE: Factory Set values are not to be changed.

The following chart contains specific information to the WHITE TONE selection on the main menu.

L90US11 1.0 SAM

AKB	0
VSD	0
TUNER	>
WHITE TONE	>>>>> Tune in a white raster pattern.
GEOMETRY	>
PIP	>
AUDIO	>

The items below will be displayed on the screen one at a time.

	Delta Warm	>
	Delta Cool	>
	Normal	>
Normal	>>>>>	Red 42
		Green 32
		Blue 39
Delta Cool	>>>>>	Red -2
		Green 0
		Blue 6
Delta Warm	>>>>>	Red 2
		Green 0
		Blue -7

The following chart contains specific information to the GEOMETRY selection on the main menu.

L90US11 1.0 SAM

AKB	0
VSD	0
TUNER	>
WHITE TONE	>
GEOMETRY	>>>>> Tune in a crosshatch pattern.
PIP	>
AUDIO	>

The GEOMETRY items below will be displayed on the screen one at a time.

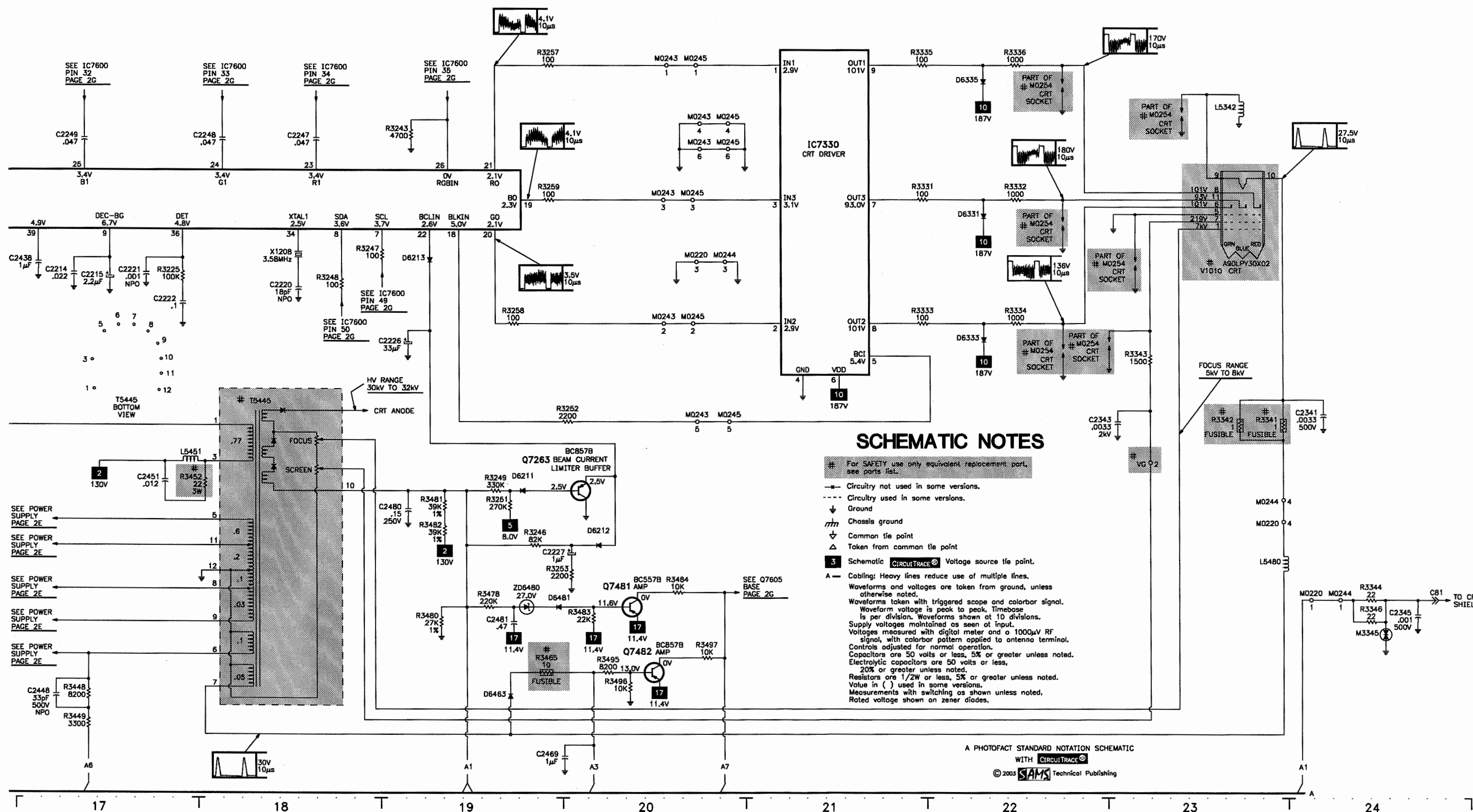
VAM	32	Adjust for vertical height.
VSL	38	Adjust for vertical centering.
SBL	0	Service blanking / no vertical sweep 1=On/0=Off.
HSH	39	Adjust for horizontal centering.
EWV	49	East - West Width (Horizontal Width).
EWP	31	East - West Parabola / Width.
EWT	31	East - West Trapezium.
EWC	33	East - West Corner Parabola.
H60	10	Set to 10 (factory preset value).
V60	5	Set to 5 (factory preset value).
VSC	17	Adjust for same size squares at top and bottom.
VSH	34	Adjust for vertical centering.

The following chart contains specific information to the AUDIO selection on the main menu.

L90US11 1.0 SAM

AKB	0	
VSD	0	
TUNER	>	
WHITE TONE	>	
GEOMETRY	>	
PIP	>	
AUDIO	>>>>>	AT 4
		(Attack time at AVL)
		(Normal setting is 4)

TELEVISION SCHEMATIC continued



MISCELLANEOUS ADJUSTMENTS continued

SERVICE DEFAULT MODE (SDM) INFORMATION

To enter service default mode, turn the receiver on, then press 0, 6, 2, 5, 9, 6, and the menu button on the remote, without allowing time out between key entries.

The first number (002A) is a run timer. The display will increment based on the amount of time the receiver has been on.

The second number (L90US11 1.0) is the software ID (L90), the software version (US) for the USA, and the cluster number (11) for English language, and (1.0) for the version number.

The letters SDM indicate that the service default mode is active.

The next line a two letter code of the name of one of the features of the receiver. Next to it is the on set value.

The next line shows the Option bytes of OB1 thru OB7.

The next line shows the error code number. The most recent errors will be displayed next to ERR.

See table below for error codes information.

Description	Description
0 No error.	6 I²C error communicating / IC7250.
1 X-Ray/ over voltage protect active.	7 General I²C Bus error.
2 High beam current protect active.	8 Internal RAM error.
3 Vertical protect active.	9 EEPROM check sum error.
4 I²C error communicating.	10 I²C error, EEPROM error.
5 Signal processor start-up error.	11 I²C error, Tuner error (PLL).

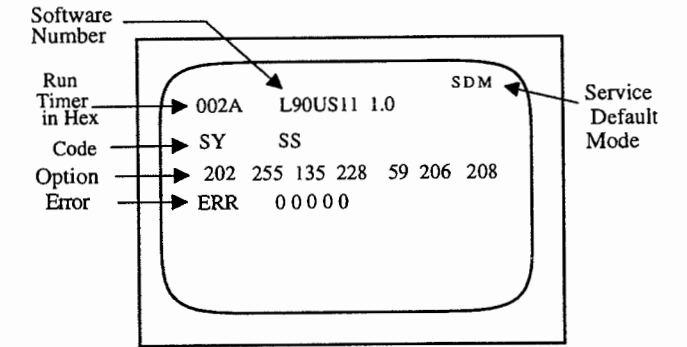
NOTE: I²C = (SCL / SDA).

WHITE BALANCE

Tune in a white raster pattern. Set the brightness, sharpness, tint, and picture to midrange. Set the color and screen to minimum. Enter service alignment mode, select the white tone adjustment. Set red to the value of 32, set the blue to the value of 32, then set the green to a value that will give a white raster. Tune in a black and white picture and adjust the red and blue for best white balance at all brightness levels.

COLOR PURITY

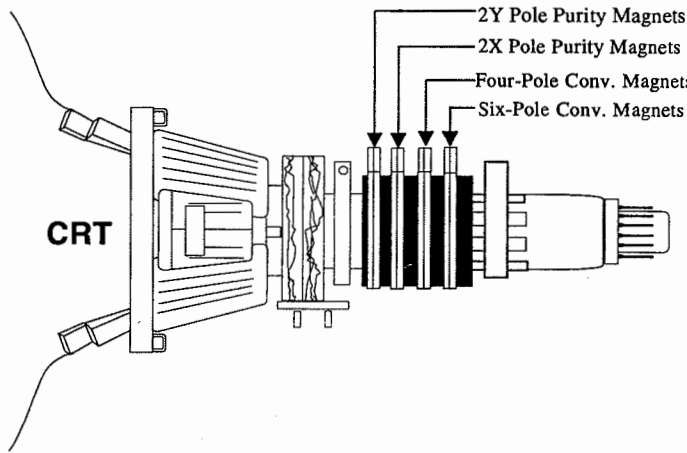
Operate the receiver for 15 minutes. Use a degaussing coil to demagnetize the CRT and mounting brackets. Position the convergence / purity assembly with the 2Y pole rings over the gun element gap nearest to the CRT bell gap (between G2 and G3). Loosen the yoke and remove the yoke wedges. Slide the yoke against the bell of the CRT and tighten the clamp enough to hold the yoke in position. Tune in a single cross pattern and adjust the 2Y pole rings for parallel red and blue lines, as centered and overlapped as possible. Tune in a white signal. Adjust purity magnets to center the vertical green band. Slide the deflection yoke little forward until a uniform green screen is obtained. Tune in a blue and red raster signal and check blue and red purity. Tighten the clamp screw. Perform convergence adjustment.



CONVERGENCE

Operate the receiver for fifteen minutes. Tune in a dot pattern. Adjust the 4 pole magnet tabs to converge the red and blue dots at the center of the screen. Adjust the 6 pole magnet tabs to converge the red/blue dots with the green dots at the center of the screen. Spread the two tabs of each set of magnets equally and opposite to converge vertically, and rotate both tabs in the same direction to converge horizontally. Since the 4 and 6 pole magnets interact, repeat the adjustment until center convergence is correct. Tune in a crosshatch pattern. Remove the rubber wedges between the deflection yoke and the CRT. Tilt the deflection yoke up or down to converge the vertical lines at the top and bottom of the screen, and the horizontal lines at the right and left sides of the screen. Tilt the deflection yoke right or left to converge the horizontal lines at the top and bottom of the screen, and vertical lines at the right and left sides of the screen. Repeat convergence procedure as necessary to obtain best overall convergence.

CRT NECK ASSEMBLY



OPTION CODE AND STATUS

On the second line, a two letter code represents one of the features of the set. The number following will be either on or off, indicating if that feature is active or not.

OPTION	OP	Value	On Set Value
System	SY	Not used in US models.	SS
Option Byte 1 (1)	OB1	-	202
Option Byte 2 (1)	OB2	-	255
Option Byte 3 (1)	OB3	-	135
Option Byte 4 (1)	OB4	-	228
Option Byte 5 (1)	OB5	-	59
Option Byte 6 (1)	OB6	-	206
Option Byte 7 (1)	OB7	-	208
Slider Bar Value Display	DP	OFF/ON	ON
Animated Menu	AM	OFF/ON	ON
Hospital Mode	HS	OFF/ON	OFF
Hotel Mode	HT	OFF/ON	OFF
Demo Mode	DM	OFF/ON	OFF
Games Mode	GM	OFF/ON	OFF
Clock	CK	OFF/ON	ON
Child Lock	CL	OFF/ON	ON
Close Caption	CC	OFF/ON	OFF
V- Chip	VC	OFF/ON	ON
V- Chip Block Unrated	VU	OFF/ON	ON
Block No Rating (V- Chip)	VN	OFF/ON	ON
Smart Sound	SS	OFF/ON	OFF
Smart Picture	SP	OFF/ON	OFF
Remote Control Type	RC	OFF = RC0702/04 remote control / ON = All other remote controls.	OFF
PIP	PI	OFF/ON	OFF
Channel Select Time Window	TW	OFF = 2 second time window / ON = 5 second time window.	OFF
Surf	SF	OFF/ON	OFF
Video Mute (Channel Change)	VM	OFF/ON	OFF
Tuner Type	TN	OFF = Philips tuner / ON = ALPS tuner.	ON
Fine Tuning	FT	OFF/ON	OFF
AV1	XT	OFF/ON	ON
AV2	2X	OFF/ON	OFF
Auto Cable Detect	CD	OFF/ON	ON
Blue Mute	BM	OFF/ON	OFF
No Ident (Auto Standby)	NI	OFF/ON	ON
Noise Reduction	NR	OFF/ON	ON
Contrast Plus	CP	OFF/ON	OFF
Color Temperature	CT	OFF/ON	OFF
East - West Function	EW	OFF/ON (Not used in US models).	OFF
Video Processor Standby	BS	OFF/ON	ON
Video Processor Auto Startup	AS	OFF/ON	OFF
Bass/Treble Control/Boost	BT	OFF/ON	OFF
Incredible Surround	IS	OFF/ON	OFF
Volume Limiter	VL	OFF/ON	OFF
Ultra Bass	UB	OFF/ON	OFF
Automatic Volume Leveler (AVL)	LV	OFF/ON	OFF
SAP - Mono/ Stereo	DU	OFF/ON	ON
Audio Out (Fixed/Variable)	AO	OFF/ON	OFF
Sound Type	ST	BG / I / DK / M (Should be set to M)	M
Sound Board	SB	DB = DBX / SAP (BTSC), EC = BTSC stereo (No SAP), MA = Mono All, MS = Bi Sonic (Mono by tuner, stereo by A/V jacks)	EC

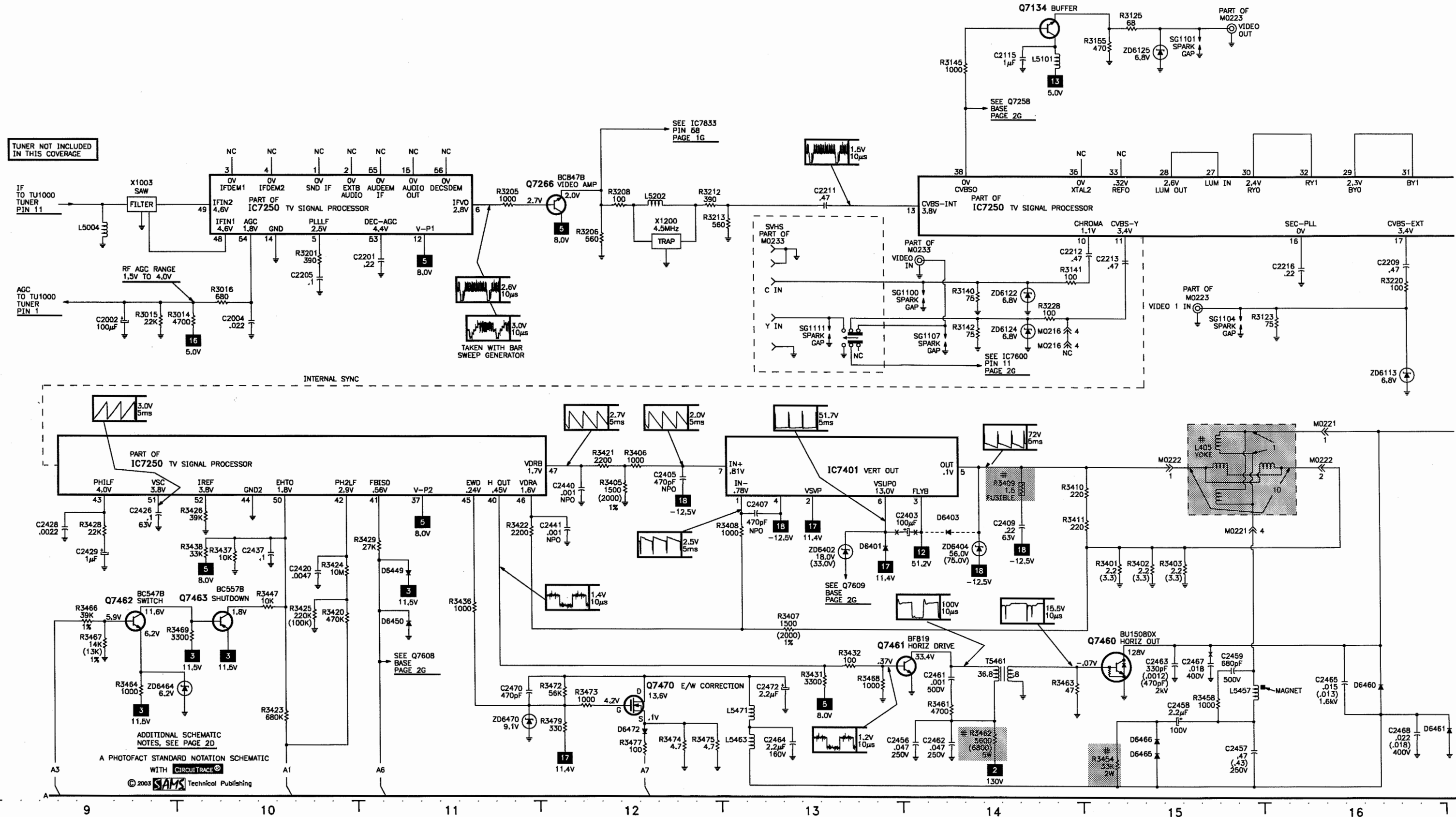
(1) Before making changes to any value, make a record of on-set values for all the options. Option Byte 1 through 7 are set at the factory for feature listing of each chassis. Each can be set to a value of 0 ~ 255. The first eight features are the total sum value of Option Byte 1, the next eight features are the total sum value of Option Byte 2, and so on. Changing any feature setting will change the value of the related option.

Warning: Before making changes to any value, record the on set value for all the features.

A

TELEVISION SCHEMATIC

B



SCHEMATIC COMPONENT LOCATION GUIDE

C2001	D29	C2465	E16	C2631	B33	D6487	D28	L5832	E31	R3209	B30	R3465	E19	R3607	E35	SP3100	A8
C2002	C9	C2467	E15	C2633	B34	D6488	E28	L5833	A1	R3212	B12	R3466	E9	R3607	E36	SP3101	B8
C2003	E32	C2468	E16	C2679	C35	D6490	E28	LC5500	A26	R3213	B13	R3467	E9	R3608	D35	SW1600	D34
C2004	C10	C2469	E20	C2681	C32	D6505	A27	LD6690	D38	R3215	B30	R3468	E13	R3608	D35	SW1601	D34
C2011	D29	C2470	E11	C2697	D35	D6507	B27	M0223	A15	R3218	D33	R3469	E10	R3608	D37	SW1602	D34
C2013	E32	C2472	E13	C2843	B32	D6508	B27	M0223	B1	R3219	D34	R3472	E12	R3608	E34	SW1603	D34
C2101	D3	C2480	D19	C2850	A1	D6511	C29	M0223	B1	R3220	C16	R3473	E12	R3609	A37	SW1606	D35
C2102	B2	C2481	E19	C2851	B2	D6512	C28	M0223	B1	R3225	C17	R3474	E12	R3609	C34	T5445	C18
C2103	D3	C2484	D32	C2852	B2	D6513	C28	M0223	C1	R3228	C14	R3475	E12	R3609	C36	T5445	D27
C2104	B2	C2485	D29	C2853	C2	D6540	B25	M0223	C15	R3243	B19	R3477	E12	R3609	C37	T5461	E14
C2107	C2	C2486	E32	C2854	B2	D6550	A30	M0223	D4	R3246	D19	R3478	D19	R3609	D36	T5545	A29
C2109	B2	C2487	D28	C2855	E2	D6560	B30	M0223	D4	R3247	C19	R3479	E12	R3609	D36	TH3503	B26
C2111	D3	C2488	E30	C2856	E2	D6570	C32	M0233	C14	R3248	C18	R3480	E19	R3611	D39	V1010	C23
C2112	D3	C2489	E32	C2858	A2	D6582	C32	M3345	E24	R3249	D19	R3481	D19	R3612	B35	X1003	B9
C2115	A14	C2490	E27	C2859	A2	D6584	B25	M3505	A26	R3251	D19	R3482	D19	R3613	B36	X1200	B12
C2201	C11	C2491	E28	C2860	E32	D6585	A34	P1500	A25	R3252	C19	R3483	E20	R3615	C36	X1208	C18
C2205	C10	C2492	E25	C2861	E32	D6590	C32	Q7134	A14	R3253	D20	R3484	D20	R3618	C38	X1660	A35
C2206	B32	C2500	A25	C2862	A2	D6591	B33	Q7254	B31	R3257	B19	R3486	E28	R3619	B35	X1822	E2
C2207	B32	C2502	A27	C2863	A2	D6831	C3	Q7256	B30	R3258	C19	R3487	E28	R3629	D34	ZD6008	D29
C2208	B32	C2504	A26	C2864	B2	D6951	C7	Q7258	D33	R3259	B19	R3488	D28	R3630	D34	ZD6113	C16
C2209	C16	C2505	A27	C2865	B2	D6961	C6	Q7263	D20	R3331	B21	R3490	E28	R3631	E36	ZD6122	C14
C2211	B13	C2507	C28	C2866	C2	DG200	A26	Q7266	B12	R3332	B22	R3491	E28	R3632	C30	ZD6124	C14
C2212	B14	C2508	A28	C2867	B2	F1500	A25	Q7460	E15	R3333	C21	R3492	E28	R3633	C30	ZD6125	A15
C2213	C15	C2511	C29	C2868	E2	F1572	B30	Q7461	E13	R3334	C22	R3495	E20	R3634	B34	ZD6402	D13
C2214	C17	C2517	C28	C2869	E2	F1573	C30	Q7462	E9	R3335	B21	R3496	E20	R3635	B33	ZD6404	D14
C2215	C17	C2518	C28	C2870	B32	IC7250	B10	Q7463	E10	R3336	B22	R3497	E20	R3636	B33	ZD6464	E10
C2216	C16	C2520	C25	C2871	E2	IC7250	B14	Q7470	E12	R3340	D29	R3501	A26	R3637	E34	ZD6470	E11
C2220	C18	C2521	C27	C2872	C3	IC7250	D9	Q7481	D20	R3341	C23	R3502	A25	R3651	A37	ZD6480	D19
C2221	C17	C2522	C27	C2874	D2	IC7251	B31	Q7482	E20	R3342	C23	R3508	A30	R3652	A37	ZD6510	B26
C2222	C17	C2524	C27	C2875	D2	IC7330	B21	Q7518	C28	R3343	C23	R3510	B27	R3653	B38	ZD6514	C27
C2226	C19	C2529	B25	C2877	E32	IC7401	D13	Q7590	B25	R3344	D24	R3511	C28	R3654	A38	ZD6601	C30
C2227	D20	C2530	C26	C2882	A3	IC7480	D30	Q7591	B34	R3346	E24	R3512	B26	R3655	A38	ZD6606	C32
C2247	B18	C2531	C26	C2883	C3	IC7520	C26	Q7592	B33	R3401	D15	R3513	B26	R3657	C31	ZD6607	B33
C2248	B18	C2532	C26	C2884	B3	IC7570	D26	Q7603	C30	R3402	D15	R3514	C27	R3661	A34		
C2249	B17	C2533	C25	C2887	A1	IC7581	D25	Q7604	B33	R3403	D15	R3515	A28	R3662	C34		
C2330	D29	C2540	B25	C2888	D32	IC7600	B36	Q7605	D34	R3405	D12	R3516	C27	R3663	C33		
C2340	D29	C2545	B28	C2889	D32	IC7601	B38	Q7608	C34	R3406	D12	R3517	C28	R3664	C33		
C2341	C24	C2550	A30	C2891	A1	IC7680	A33	Q7609	C34	R3407	E13	R3518	C28	R3665	C34		
C2343	C23	C2551	A32	C2950	C6	IC7833	A2	R3000	A39	R3408	D13	R3520	C25	R3666	C34		
C2345	D24	C2561	B32	C2952	B3	IC7950	A7	R3001	A39	R3409	D14	R3521	C27	R3667	C33		
C2401	E32	C2562	A30	C2954	B3	L405	D15	R3014	C10	R3410	D14	R3525	C27	R3672	A36		
C2402	E32	C2564	A30	C2955	B3	L5000	E31	R3015	C9	R3411	D14	R3528	B26	R3673	B36		
C2403	D13	C2565	A30	C2956	A3	L5004	B9	R3016	C10	R3420	D10	R3529	B26	R3674	B39		
C2404	D28	C2571	C32	C2958	A3	L5101	A14	R3100	D3	R3421	D12	R3530	B26	R3675	B37		
C2405	D12	C2572	C30	C2959	A3	L5201	B31	R3101	D3	R3422	D11	R3532	C26	R3676	B37		
C2407	D13	C2573	D26	C2960	C32	L5202	B12	R3103	B1	R3423	E10	R3534	C25	R3677	B37		
C2409	D14	C2575	D26	C2961	C7	L5342	B23	R3104	D3	R3424	D10	R3536	C26	R3680	D38		
C2420	D10	C2576	D25	C2962	B8	L5451	D17	R3105	D3	R3425	D10	R3537	B25	R3681	D38		
C2426	D9	C2586	B33	C2963	B8	L5457	E15	R3108	B1	R3426	D10	R3542	A25	R3682	D35		
C2428	D9	C2604	C32	D6211	D19	L5463	E13	R3109	B1	R3428	D9	R3570	E27	R3683	D35		
C2429	D9	C2609	D35	D6212	D20	L5471	E13	R3122	D3	R3429	D11	R3571	E26	R3684	A34		
C2430	B32	C2613	D34	D6213	C19	L5480	D23	R3123	C16	R3431	E13	R3573	E26	R3686	E35		
C2431	B32	C2615	D36	D6331	B22	L5516	B29	R3125	A15	R3432	E13	R3574	D26	R3841	D2		
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C2438	C17	C2617	A37	D6335	B22	L5521	C27	R3132	C1	R3436	D11	R3577	D25	R3843	C3		
C2440	D12	C2618	A34	D6401	D13	L5540	C25	R3136	B1	R3437	D10	R3578	D25	R3844	D3		
C2441	D12	C2619	D39	D6403	D14	L5551	A31	R3137	C1	R3438	D10	R3579	E26	R3845	D3		
C2448	E17	C2620	A35	D6449	D11	L5552	C28	R3140	C14	R3442	D29	R3585	D26	R3850	A2		
C2450	A32	C2621	A35	D6450	E11	L5572	C30	R3141	C14	R3447	D10	R3592	B34	R3950	C6		
C2451	D17	C2622	C32	D6460	B29	L5573	B39	R3142	C14	R3448	E17	R3594	B34	R3951	C6		
C2456	E14	C2623	C34	D6461	E16	L5575	C30	R3145	A14	R3449	E17	R3595	B33	R3952	C7		
C2457	E15	C2624	C33	D6463	E19	L5576	A30	R3155	A15	R3452	D18	R3596	B34	R3953	C7		
C2458	E15	C2625	B39	D6465	E15	L5577	A30	R3201	C10	R3454	E15	R3597	B33	R3954	A3		
C2459	E15	C2626	B37	D6466	E15	L5600	C35	R3203	B31	R3458	E15	R3598	B33	R3955	A3		
C2461	E14	C2627	B37	D6472	E12	L5601	D35	R3204	B31	R3461	E14	R3599	B33	R3956	B3		
C2462	E14	C2628	B37	D6481	D19	L5620	B37	R3205	B11	R3462	E14	R3607	B35	R3957	B3		
C2463	E15	C2629	B37	D6485	D28	L5821	B31	R3206	B12	R3463	E14	R3607	C36	RL1580	A26		
C2464	E13	C2630	D35	D6486	E27	L5831	E31	R3208	B12	R3464	E9	R3607	D38	RL1580	B25		

PARTS LIST

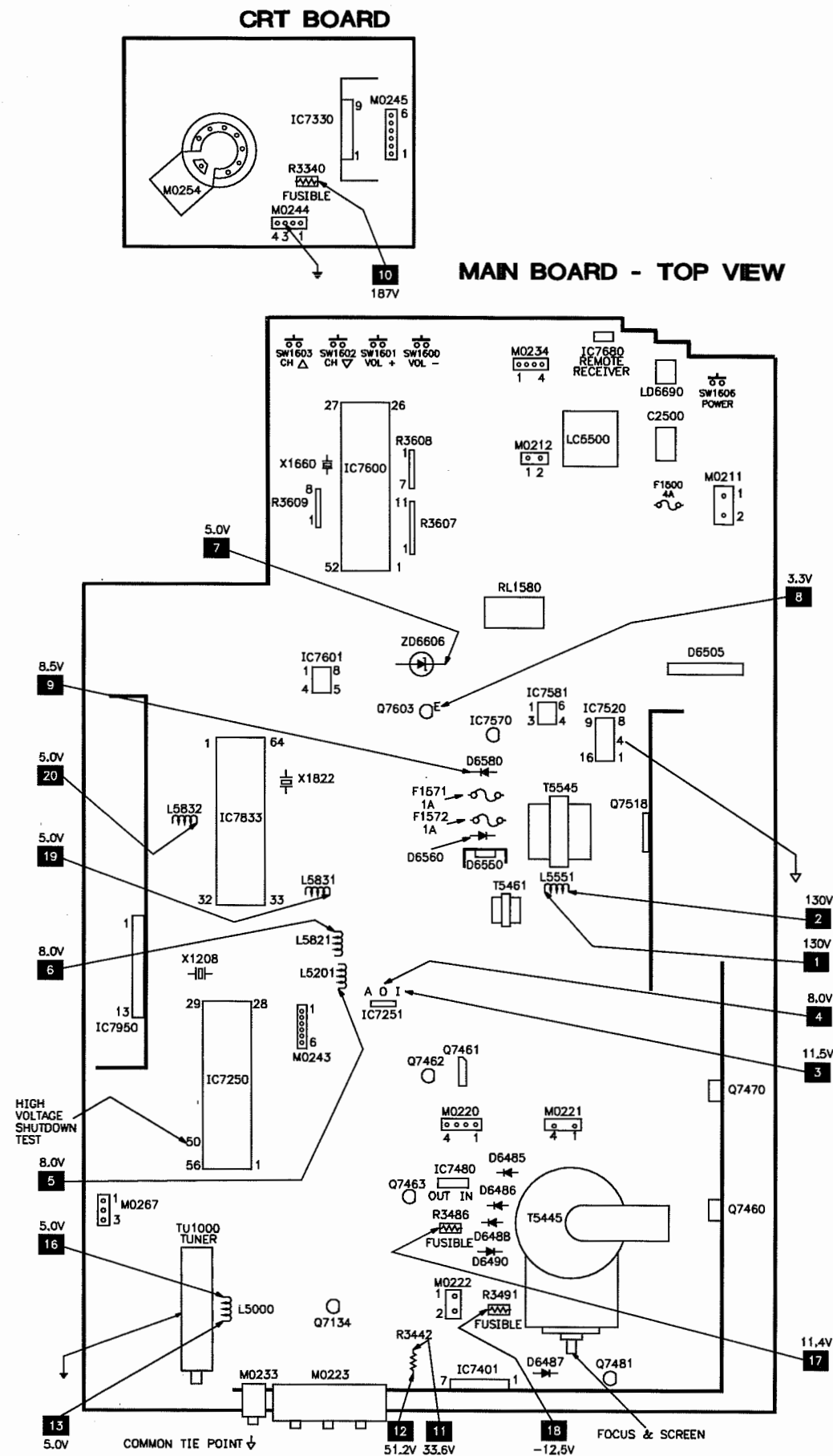
Item No.	Type No.	Mfr. Part No.	NTE Part No.
D6211, 12, 13	1N4148	3198 010 10010	NTE519
D6331, 33, 35	BAV21	3198 010 10070	NTE177
D6401, 03	BYD33D	9337 234 00133	NTE569
D6449, 50	1N4148	3198 010 10010	NTE519
D6460 (1)	DG3-7005L	9336 436 10682	-
D6460 (2)(3)	BY228/24	9340 559 50112	-
D6461	BYW95C-24	9340 559 53112	-
D6463	1N4148	3198 010 10010	NTE519
D6465, 66	BYD33J	9337 234 20133	NTE569
D6472, 81	1N4148	3198 010 10010	NTE519
D6485	BYD33J	9337 234 20133	NTE569
D6486	EGP20DL-5300	9322 100 13682	-
D6487	BYD33D	9337 234 00133	NTE569
D6488, 90	BYV27-200	9322 126 72673	NTE588
D6505	-	9322 138 08667	NTE5330
D6507, 08	BYD33J	9337 234 20133	NTE569
D6511	BYV95C	9335 001 80133	NTE569
D6512, 13	1N5062	3198 010 10120	NTE506
D6540	BAV21	3198 010 10070	NTE177
D6550	BY229X-800	9340 380 30127	-
D6560, 70, 82	EGP20DL-5300	9322 100 13682	-
D6584, 85	1N4148	3198 010 10010	NTE519
D6590	EGP20DL-5300	9322 100 13682	-
D6591	BAS16WS	9322 031 99685	-
D6831	BAS16WS	9322 031 99685	-
D6951, 61	BAS16WS	9322 031 99685	-
IC7250	TDA8843/N2/S1	9352 620 24112	-
IC7251	LM317T	9337 220 80682	NTE956
IC7330	TDA6108JF/N1	9352 561 40112	-
IC7401 (1)	TDA8172	9339 229 40682	NTE1788
IC7401 (2)	TDA9302H	9322 088 25682	NTE1788
IC7401 (3)	STV9379FA	9322 121 47687	-
IC7480	L78M05CP	9322 028 93682	NTE1960
IC7520	MC44603AP	9322 108 36682	-
IC7570	TL431CLP	9337 711 00676	NTE999
# IC7581	TCDT1101G	9338 431 30682	-
IC7600	SAA5543PS/M4/0191	9352 673 05112	-
IC7601	ST24W04B6	9322 097 23682	-
IC7833	MPS3435G-PP-A4	9322 136 54682	-
IC7950	TDA7057AQ/N2	9351 861 80112	-
LD6690	LTL-307P	9322 033 95682	-
Q7134	BC547B	3198 020 40030	NTE123AP
Q7254, 56, 58	BC847B	3198 010 42030	NTE2408
Q7263	BC857B	3198 010 42150	NTE2409
Q7266	BC847B	3198 010 42030	NTE2408
Q7460	BU1508DX	9335 170 50127	NTE2635
Q7461	BF819	9335 354 50127	NTE198
Q7462	BC547B	3198 020 40030	NTE123AP
Q7463	BC557B	3198 020 40110	NTE159
Q7470	STP16NE06FP	9322 123 96687	-
Q7481	BC557B	3198 020 40110	NTE159
Q7482	BC857B	3198 010 42150	NTE2409
Q7518	STH10NC60FI	9322 155 66687	-
Q7590, 91, 92	BC847B	3198 010 42030	NTE2408
Q7603	BC337-40	9331 796 00126	NTE199
Q7604, 05	BC847B	3198 010 42030	NTE2408
Q7608, 09	BC847B	3198 010 42030	NTE2408
ZD6008	BZX79-C33	3198 010 23390	NTE5036A
ZD6113, 22	PDZ6.8B	9340 548 55115	-

Item No.	Type No.	Mfr. Part No.	NTE Part No.
ZD6124, 25	PDZ6.8B	9340 548 55115	-
ZD6402(1)(2)	BZX79-C18	3198 010 21890	NTE5027A
ZD6402(3)	BZX79-C33	3198 010 23390	NTE5036A
ZD6404(1)(2)	BZX79-C56	3198 010 25690	NTE5042A
ZD6404(3)	BZX79-C75	9331 180 00133	NTE5046A
ZD6464	BZX79-B6V2	9331 668 30133	-
ZD6470	BZX79-C9V1	9331 177 80133	NTE5018A
ZD6480	BZX79-C27	3198 010 22790	-
ZD6510	BZX79-C20	9331 178 60133	NTE5029A
ZD6514	BZX79-C18	3198 010 21890	NTE5027A
ZD6601	BZX79-C3V9	3198 010 23980	-
ZD6606	BZX79-C4V7	3198 010 24780	NTE5009A
ZD6607	BZX79-C6V8	3198 010 26880	NTE5014A

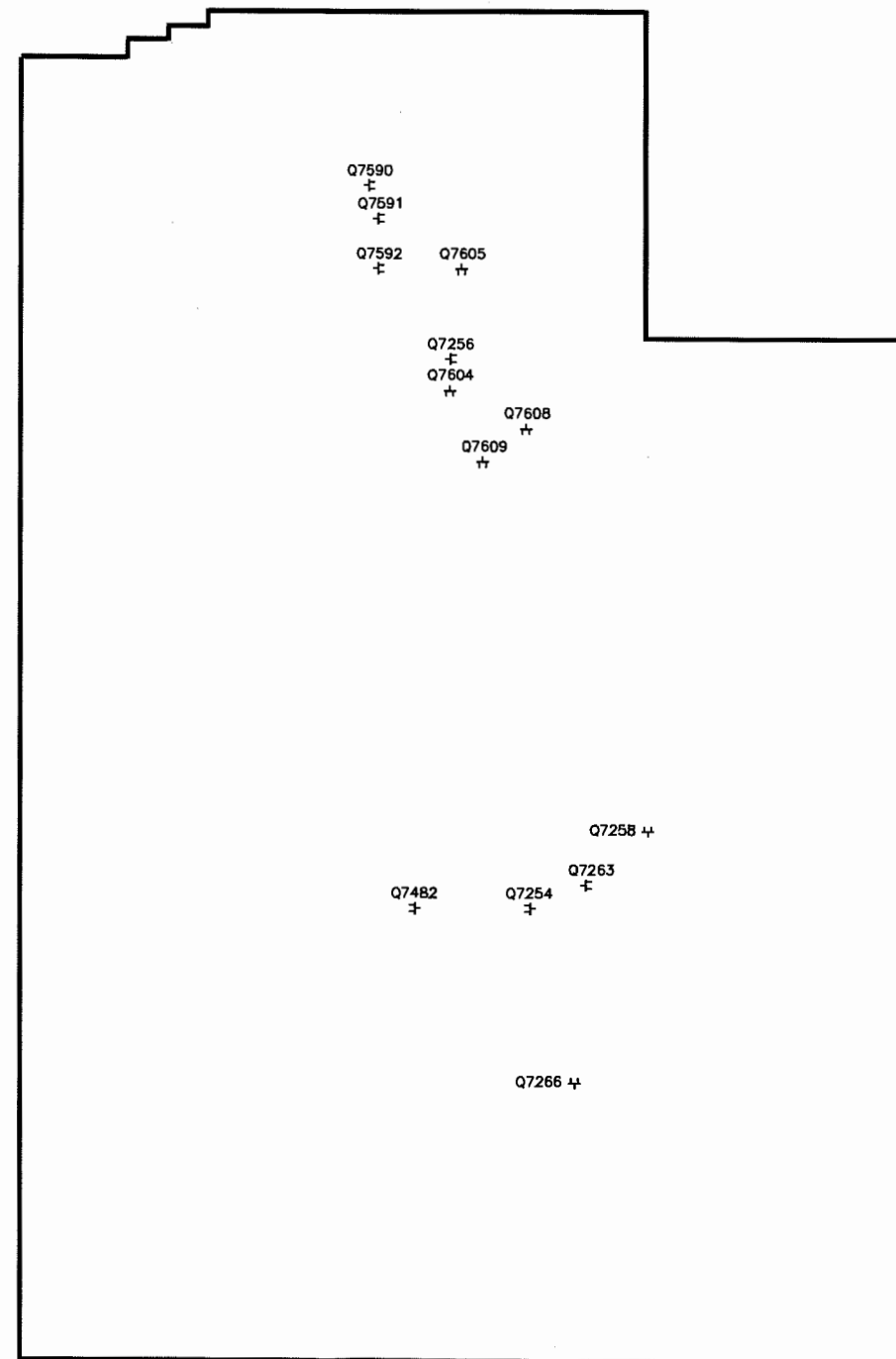
Item No.	Function/Rating	Mfr. Part No.	Notes
C2101 Thru			
C2104	330pF 50V NPO	3198 016 03310	-
C2107, 09	330pF 50V NPO	3198 016 03310	-
C2220	18pF 50V NPO	3198 016 01890	-
C2221	.001 50V NPO	3198 016 01020	-
C2343	.0033 10% 2kV	2020 558 90529	-
C2405, 07	470pF 50V NPO	3198 016 04710	-
C2440, 41	.001 50V NPO	3198 016 01020	-
C2448	33pF 5% 500V NPO	2020 557 90192	-
C2463	330pF 10% 2kV	2020 558 90481	-
	.0012 10% 2kV	2020 558 90488	-
	470pF 10% 2kV	2020 558 90483	-
C2465	.015 5% 1.6kV	2222 375 90158	-
	.013 5% 1.6kV	2222 375 90157	-
C2492	180pF 50V NPO	3198 016 01810	-
# C2500	.47 20% 275VAC	2222 336 29148	-
C2502, 04, 05	.0022 10% 1kV	3198 019 52220	-
C2507	.0012 10% 1kV	3198 019 61520	-
C2511, 18	470pF 10% 1kV	3198 019 64710	-
C2524	330pF 50V NPO	3198 016 03310	-
C2531	.001 2% 50V	2020 310 90049	-
C2532	470pF 50V NPO	3198 016 04710	-
# C2545	.0012 20% 250V	2020 554 90128	-
C2550	470pF 10% 1kV	3198 019 64710	-
C2562	220pF 10% 1kV	3198 019 62210	-
C2572	330pF 50V NPO	3198 016 03310	-
C2609	.001 50V NPO	3198 016 01020	-
C2616, 17	22pF 50V NPO	3198 016 02290	-
C2620, 21	22pF 50V NPO	3198 016 02290	-
C2624	68pF 50V NPO	3198 016 06890	-
C2625 Thru			
C2628	390pF 50V NPO	3198 016 03910	-
C2697	.001 50V NPO	3198 016 01020	-
C2850	180pF 50V NPO	3198 016 01810	-
C2851 Thru			
C2854	.001 50V NPO	3198 016 01020	-
C2855, 56	3.3pF 50V NPO	3198 016 03380	-
C2858	47pF 50V NPO	3198 016 04790	-
C2859	15pF 50V NPO	3198 016 01590	-
C2874, 75	47pF 50V NPO	3198 016 04790	-
C2882, 84	.001 50V NPO	3198 016 01020	-
C2887	180pF 50V NPO	3198 016 01810	-
C2891	33pF 50V NPO	3198 016 03390	-
C2962, 63	10pF 50V NPO	3198 016 01090	-

PLACEMENT CHART

TEST EQUIPMENT

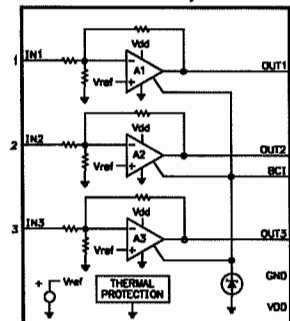
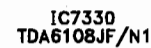
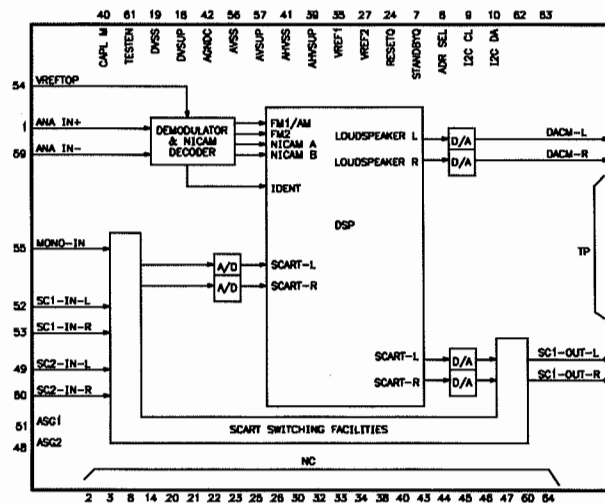
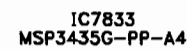


MAIN BOARD - BOTTOM VIEW



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



- 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.

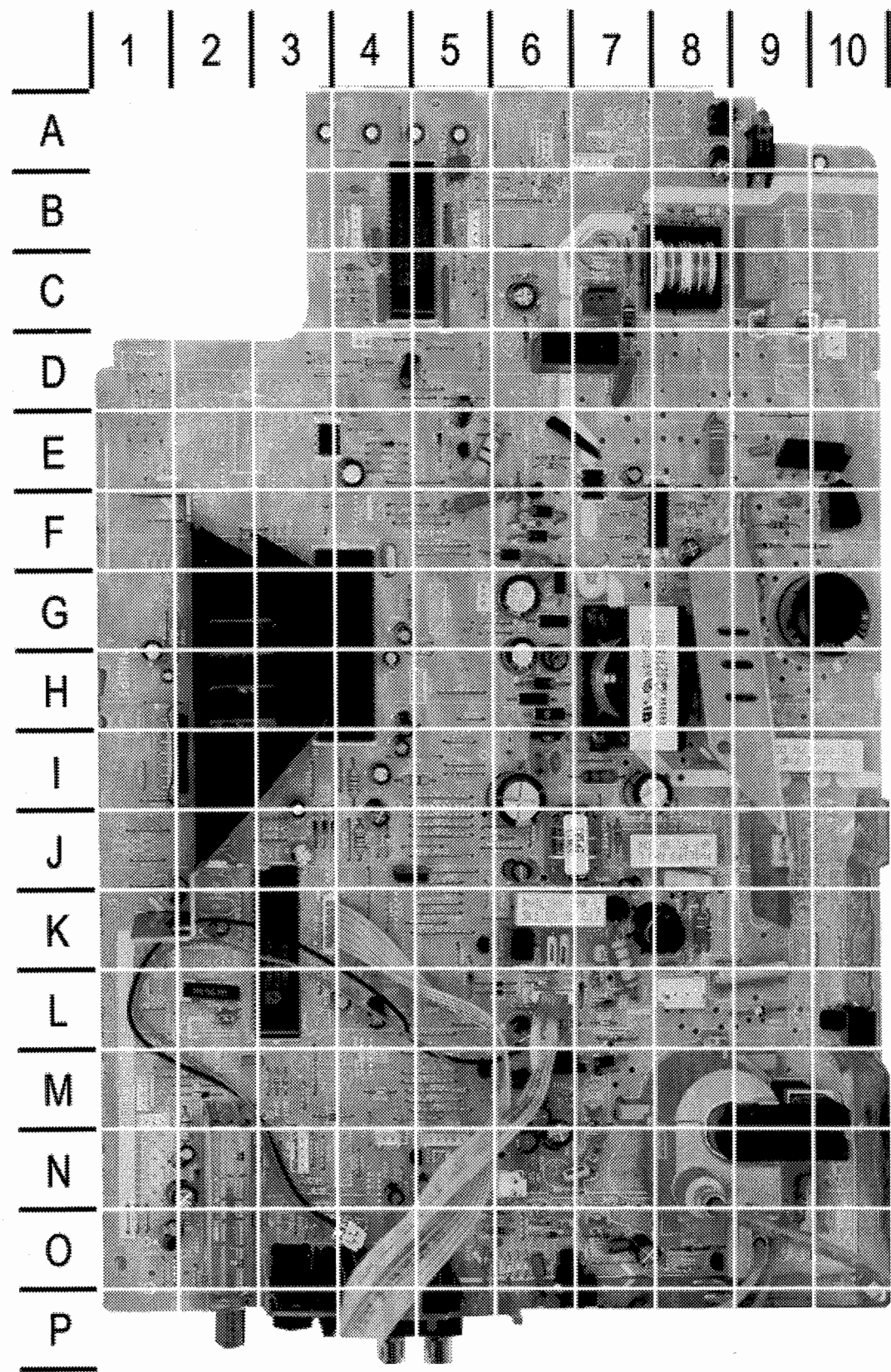
Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

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

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

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

MAIN BOARD - TOP VIEW



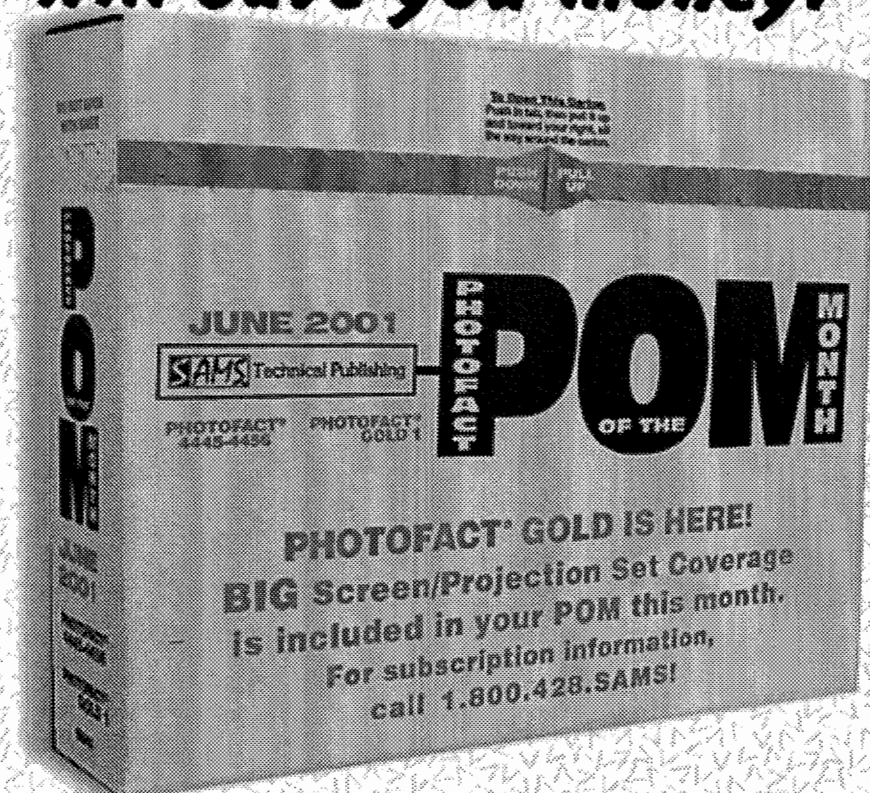
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C2002	O1	C2586	C6	L5000	N3	R3204	J4	R3577	F7
C2003	N2	C2604	E5	L5004	N2	R3208	L4	R3585	E6
C2011	N2	C2613	B5	L5101	M3	R3247	M3	R3595	C6
C2111	N4	C2619	D4	L5201	J4	R3248	M3	R3596	C6
C2112	N5	C2622	E4	L5202	L4	R3401	O6	R3607	C5
C2201	L2	C2629	E4	L5451	K7	R3402	O6	R3608	B5
C2207	L4	C2681	A8	L5457	K8	R3403	O6	R3609	C4
C2208	J4	C2843	H2	L5463	J9	R3405	O6	R3618	L5
C2215	L4	C2860	G4	L5471	K9	R3406	O6	R3630	B5
C2226	J3	C2863	H4	L5480	L6	R3407	O6	R3632	E5
C2227	J3	C2868	H4	L5516	H8	R3408	O6	R3633	E5
C2401	O7	C2871	I4	L5518	I9	R3409	O6	R3651	C4
C2402	O6	C2883	H3	L5521	F8	R3410	N6	R3652	C4
C2403	O6	C2888	I4	L5540	G8	R3411	N6	R3653	E3
C2409	O6	C2950	H1	L5551	I7	R3421	M2	R3657	F5
C2426	M2	C2960	H2	L5552	G9	R3422	M2	R3661	C4
C2429	K2	C2961	H1	L5572	G6	R3433	J6	R3841	F4
C2430	K1	D6211	J3	L5573	H6	R3438	M4	R3842	F3
C2448	L7	D6212	J3	L5575	G6	R3442	O5	R3950	F5
C2450	I7	D6213	J3	L5576	H6	R3448	L7	R3952	H2
C2451	L7	D6401	O7	L5577	I6	R3449	L6	R3955	H2
C2456	K6	D6449	L6	L5600	C4	R3452	K7	R3957	H2
C2457	J8	D6450	L6	L5601	B4	R3454	K8	RL1580	D6
C2458	K7	D6460	L9	L5620	D4	R3458	K8	SW1600	A5
C2459	K8	D6461	L9	L5821	I4	R3461	K6	SW1601	A5
C2461	J6	D6463	L7	L5831	I5	R3462	K6	SW1602	A4
C2462	K6	D6465	K8	L5832	G3	R3465	L7	SW1603	A3
C2463	M10	D6466	J8	L5833	G4	R3466	K7	SW1606	A10
C2464	J8	D6472	J10	LC5500	C8	R3467	J7	T5445	N8
C2465	L9	D6481	O9	LD6690	A9	R3468	K6	T5461	J6
C2465	L9	D6485	L7	M0211	D10	R3477	J10	T5545	H7
C2467	K10	D6486	M7	M0212	C7	R3478	O9	TH3503	D7
C2468	K10	D6487	O8	M0216	N3	R3480	O10	TU1000	O2
C2469	K7	D6488	M7	M0220	L6	R3481	N10	X1003	L2
C2470	J10	D6490	N7	M0221	L8	R3482	N10	X1200	L4
C2472	K9	D6505	E9	M0222	N6	R3483	O8	X1208	J2
C2480	O9	D6507	F9	M0223	P4	R3484	O8	X1660	B4
C2481	O9	D6508	F9	M0233	P3	R3486	M6	X1822	F4
C2484	M5	D6511	I10	M0234	A7	R3487	M6	ZD6008	N2
C2485	L6	D6512	G9	M0238	B5	R3488	O8	ZD6402	N6
C2486	N6	D6513	G9	M0243	K3	R3490	M6	ZD6404	O6
C2487	O7	D6540	F8	M3505	C7	R3491	N7	ZD6464	L5
C2488	M6	D6550	I6	Q7134	N5	R3492	N7	ZD6470	O10
C2489	N6	D6560	H6	Q7460	L10	R3501	C7	ZD6480	P9
C2490	M7	D6570	F6	Q7461	K6	R3502	B8	ZD6510	F8
C2491	N7	D6582	F6	Q7462	K5	R3508	F5	ZD6514	G8
C2500	C9	D6584	D6	Q7463	M5	R3510	E8	ZD6601	E5
C2502	F9	D6585	C6	Q7470	K10	R3511	I9	ZD6606	D5
C2504	C7	D6590	F6	Q7481	O8	R3513	F8	ZD6607	D5
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C2507	I8	F1572	H6	Q7603	E5	R3515	F10		
C2508	G10	F1573	G6	R3000	O2	R3517	G8		
C2511	H9	IC7250	L3	R3001	O2	R3518	G9		
C2517	G8	IC7251	J4	R3016	M3	R3520	F8		
C2518	H8	IC7401	O7	R3100	O5	R3525	G8		
C2530	E7	IC7480	M6	R3103	O4	R3528	F8		
C2531	F7	IC7520	F8	R3105	O4	R3529	F8		
C2540	F8	IC7570	F5	R3108	O8	R3530	F8		
C2545	G7	IC7581	E7	R3125	O5	R3532	F7		
C2550	I6	IC7600	C5	R3131	O3	R3536	G7		
C2551	I6	IC7601	E3	R3136	O3	R3537	G7		
C2561	H6	IC7680	A8	R3140	O3	R3542	B5		
C2562	I6	IC7833	F3	R3141	N3	R3571	F6		
C2571	G6	IC7950	I1	R3142	O3	R3575	E6		

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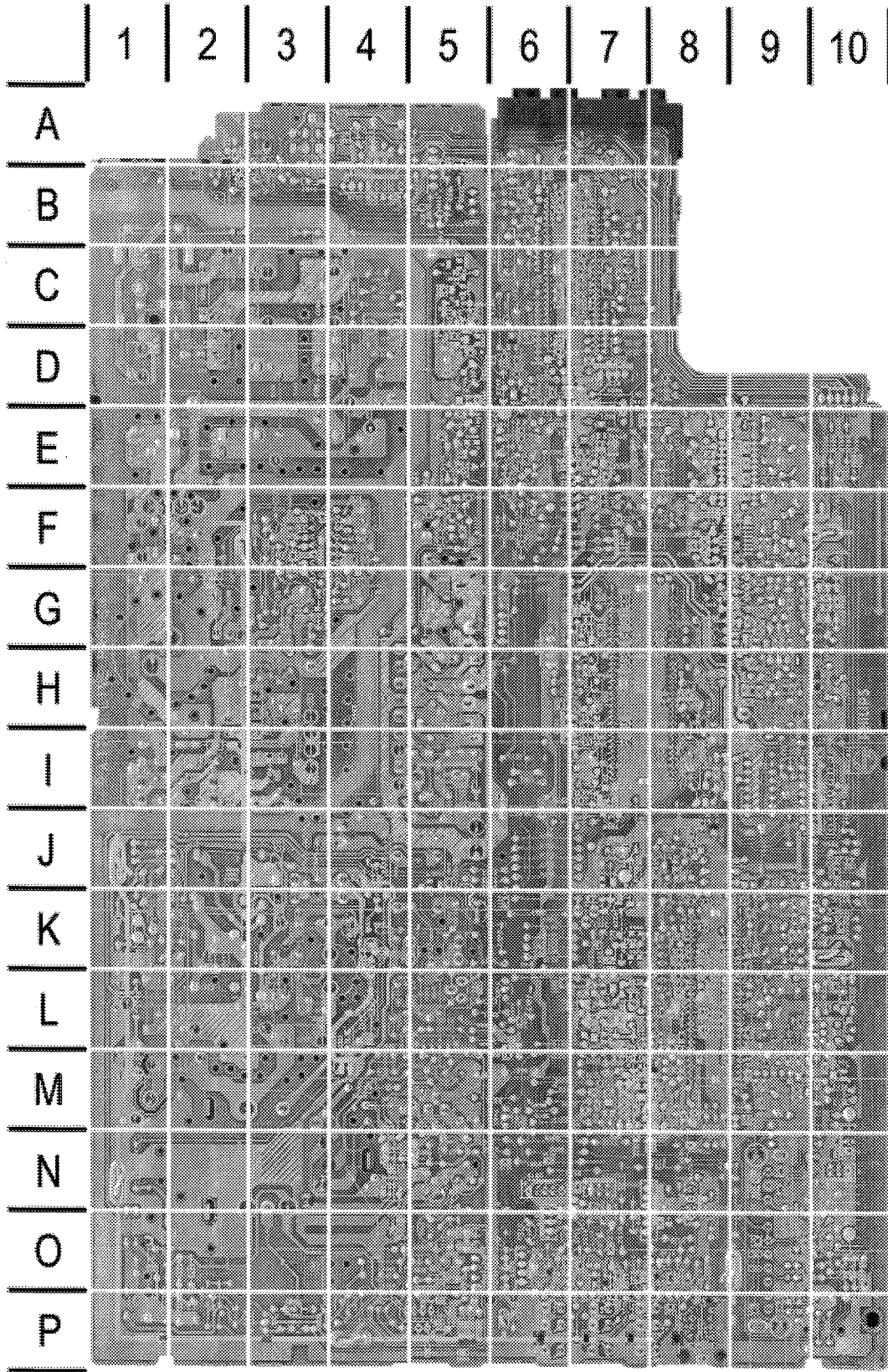
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C2001	N9	C2576	F4	C2954	H9	R3225	K9	R3598	D5
C2004	M9	C2609	D6	C2955	H9	R3228	H7	R3599	D5
C2013	O10	C2615	B6	C2956	H9	R3243	K8	R3611	D6
C2101	O7	C2616	E8	C2958	H9	R3246	J8	R3612	E6
C2102	O7	C2617	E8	C2959	H9	R3249	J8	R3613	D6
C2103	O6	C2618	C7	C2962	E10	R3251	J8	R3615	D6
C2104	O7	C2620	C7	C2963	E10	R3252	K8	R3619	D6
C2107	O8	C2621	C7	D6591	D5	R3253	J8	R3629	D6
C2109	O8	C2623	E6	D6831	H8	R3257	K8	R3631	B6
C2115	O7	C2624	E7	D6951	H10	R3258	K8	R3634	F6
C2205	L8	C2625	C7	D6961	H10	R3259	K8	R3635	E6
C2206	L8	C2626	B7	Q7254	J7	R3420	K9	R3636	E6
C2209	L8	C2627	B7	Q7256	D6	R3423	N7	R3637	D6
C2211	L8	C2628	B7	Q7258	J8	R3424	K9	R3654	E8
C2212	M7	C2630	B7	Q7263	J8	R3425	K9	R3655	E7
C2213	M7	C2631	E6	Q7266	M8	R3426	M9	R3662	C7
C2214	L8	C2633	C7	Q7482	J5	R3428	L9	R3663	E7
C2216	K8	C2679	C7	Q7590	C5	R3429	L9	R3664	E7
C2220	J9	C2697	B7	Q7591	C5	R3431	K9	R3665	C7
C2221	K9	C2850	G7	Q7592	D5	R3432	K10	R3666	E7
C2222	K8	C2851	H7	Q7604	E6	R3436	L10	R3667	E7
C2247	K7	C2852	H7	Q7605	D6	R3437	M9	R3672	B7
C2248	K8	C2853	H7	Q7608	E7	R3447	M6	R3673	B7
C2249	K7	C2854	I7	Q7609	E7	R3463	L1	R3674	E7
C2405	P5	C2855	G7	R3014	O9	R3464	L6	R3675	F7
C2407	P5	C2856	G7	R3015	P9	R3469	M6	R3676	F7
C2420	L8	C2858	G7	R3101	O7	R3472	K2	R3677	F7
C2428	L8	C2859	G7	R3104	O7	R3473	K2	R3680	B2
C2431	L8	C2861	G7	R3109	O7	R3474	K1	R3681	B2
C2437	L8	C2862	H7	R3122	O7	R3475	K1	R3682	B6
C2438	L8	C2864	H7	R3123	P7	R3479	O1	R3683	B6
C2440	L8	C2865	H7	R3132	O8	R3495	L4	R3684	A3
C2441	L8	C2866	I7	R3137	O8	R3496	L4	R3686	D6
C2492	P5	C2867	I7	R3145	O7	R3497	J5	R3843	H8
C2520	F3	C2869	H7	R3155	N7	R3512	F3	R3844	I7
C2521	F3	C2870	I7	R3201	L8	R3516	F3	R3845	I7
C2522	F3	C2872	H8	R3203	K7	R3521	G2	R3850	G6
C2524	G3	C2874	G8	R3205	L8	R3534	G4	R3951	H10
C2529	F3	C2875	H8	R3206	M8	R3570	F5	R3953	H10
C2532	F4	C2877	H8	R3209	D6	R3573	F5	R3954	H9
C2533	F4	C2882	I8	R3212	L7	R3574	F5	R3956	H9
C2564	H5	C2884	I8	R3213	L7	R3578	F4	ZD6113	O7
C2565	I5	C2887	G7	R3215	F6	R3579	F5	ZD6122	O4
C2572	H5	C2889	I7	R3218	J10	R3592	C5	ZD6124	O4
C2573	F3	C2891	H6	R3219	J8	R3594	C5	ZD6125	O3
C2575	E5	C2952	H8	R3220	L7	R3597	D5		

PHILIPS
MODEL TS3661C129 (CHASSIS 36K8)

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes
# DG200 (1)	Degaussing	3121 218 62661	-
# DG200 (2)(3)	Degaussing	3121 218 62641	-
# F1500	Fuse	2422 086 10905	4Amp, 250V, Fast Acting
# F1572	Fuse	2422 086 10779	1Amp, 250V
# F1573	Fuse	2422 086 10422	2.5Amp, 250V
IC7680	Receiver	9322 154 48667	Remote, TSOP2236UH1
# L405 (1)(4)	Yoke	-	Horiz 1mH, Vert 25mH
# L405 (2)(4)	Yoke	-	-
# L405 (3)	Yoke	4835 150 17131	-
L5000	5.6μH	3198 018 25680	-
L5004	.82μH	2422 535 97314	-
L5101	5.6μH	3198 018 15680	-
L5201	22μH	2422 535 97333	-
L5202	6.8μH	3198 018 16880	-
L5342	22μH	2422 535 97333	-
L5451	27μH	2422 535 96614	-
L5457 (1)	Horizontal Linearity	3128 138 55881	-
L5457 (2)(3)	Horizontal Linearity	3128 138 53201	-
L5463 (1)	-	3128 138 34851	-
L5463 (2)(3)	-	3128 138 37021	-
L5471	1000μH	3198 018 71020	-
L5480 (1)	4.7μH	2422 535 97324	-
L5480 (2)	47μH	2422 535 97337	-
L5480 (3)	3.9μH	2422 535 97323	-
L5516	Ferrite Bead	3198 018 90020	-
L5518	Ferrite Bead	3198 018 90010	-
L5521	2.2μH	3198 018 12280	-
L5540	1.7μH	3198 018 14780	-
L5551	27μH	2422 535 95366	-
L5552	Ferrite Bead	3198 018 90010	-
L5572, 73, 75, 76	Ferrite Bead	3198 018 90020	-
L5577	Ferrite Bead	3198 018 90010	-
L5600, 01	8.2μH	3198 018 18280	-
L5620	6.8μH	3198 018 16880	-
L5821	1000μH	3198 018 21010	-
L5831, 32	12μH	3198 018 21290	-
L5833	-	3198 018 11290	-
# LC5500	Line Filter	2422 549 43432	-
M0223	Jack	2422 026 04826	Assembly
M0233	Jack	2422 026 04926	Assembly
# M0254	Socket	2422 500 80022	CRT
M3345	VDR	2122 550 00152	-
M3505	VDR	2422 549 43073	DSP-301N-A21F
# P1500	Line Cord	3135 010 05051	AC, Polarized
# R3340	10 5% Fusible 1/3W	2306 204 03109	-
# R3341, 42	1 5% Fusible	2306 204 03108	-
R3405, 07	1500 1%	2322 156 21502	-
	2000 1%	2322 156 22002	-
# R3409	1.5 5% Fusible	2306 204 03158	-
# R3452	22 5% 3W	2322 195 63229	-
# R3454	33K 5% 2W	2322 194 63333	-
# R3462	5600 5% 5W	2322 257 41562	-
	6800 5% 5W	2322 257 41682	-
# R3465	10 5% 1/3W Fusible	2306 204 03109	-
R3466	39K 1%	2322 156 23903	-
R3467	14K 1%	2322 156 21403	-
	13K 1% 1/4W	2322 156 21303	-
R3480	27K 1% .6W	2322 156 22703	-
R3481, 82	39K 1%	2322 156 23903	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# R3486, 87	1 5% Fusible	2306 207 03108	-
# R3488	4.7 5% Fusible	2306 207 03478	-
# R3490, 91, 92	1 5% Fusible	2306 207 03108	-
# R3502	2.2M 5% 1/2W	2322 242 13225	-
# R3508	22K 5% 3W	2322 195 63223	-
# R3510	33K 5% 3W	2322 195 63333	-
# R3511	1000 10% 7W	2311 258 41102	-
R3514	820K 1%	2322 156 28204	-
# R3515	2.5 Cold NTC	2122 612 00023	-
# R3518	.22 5% 3W	3198 012 32270	-
# R3525	47 5% Fusible	2306 204 03479	-
# R3542	4.7M 5% 1/2W	2322 242 13475	-
R3571	150K 1% .6W	2322 156 21504	-
R3573	2000 1% 1/10W	2120 108 92657	-
R3579	1000 1% 1/10W	2120 108 91451	-
R3607	8200 5% X 10 Network	2120 108 93916	-
R3608	2200 5% X 6 Network	2120 108 93913	-
R3609	2200 5% X 7 Network	2120 108 93915	-
# R3632	47 5% 3W	3198 012 34790	-
# RL1580	Relay	2422 132 07317	Degaussing
SP3100, 01	Speaker	2422 264 00333	2 1/4", X 5", 16 Ohms, 5W
SW1600	Switch	2422 128 02742	Volume Down
SW1601	Switch	2422 128 02742	Volume Up
SW1602	Switch	2422 128 02742	Channel Down
SW1603	Switch	2422 128 02742	Channel Up
SW1606	Switch	2422 128 02742	Power
# T5445 (5)	Horizontal Output	3128 138 20733	-
T5461	Horizontal Drive	3128 138 33811	-
# T5545	Power	2422 531 02314	-
TH3503	10.4 Cold PTC	2120 661 00019	-
TU1000	Tuner	3139 147 16412	-
# V1010 (1)	CRT	9322 139 25682	A90LPY30X02
# V1010 (2)	CRT	9301 795 00428	A80ECK272X56
# V1010 (3)	CRT	9322 144 50682	A80LJF30X18(G)
X1003	Filter	2422 549 42433	SAW
X1200	Trap	2422 549 40807	4.5MHz
X1208	Crystal	2422 543 00832	3.58MHz
X1660	Crystal	2422 543 00488	12MHz
X1822	Crystal	2422 543 00842	18.432MHz
	Magnet (1)	4835 150 27009	Purity/Convergence
	Panel	JP0110	Jack
	PC Board (1)	3139 178 63891	Main
	PC Board (2)	3139 178 69731	Main
	PC Board (3)	3139 178 83821	Main
	Transmitter	3139 228 81592	Remote

For SAFETY use only equivalent replacement part.

(1) Used in model TS3661C129.

(2) Used in model TS3260C121.

(3) Used in model TS3260C129

(4) Bonded part of CRT.

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