

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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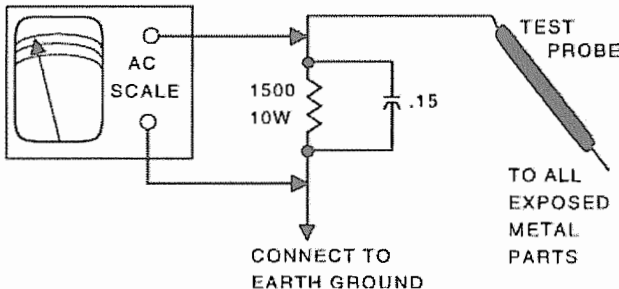
SAFETY CHECKS — FIRE AND SHOCK HAZARD

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

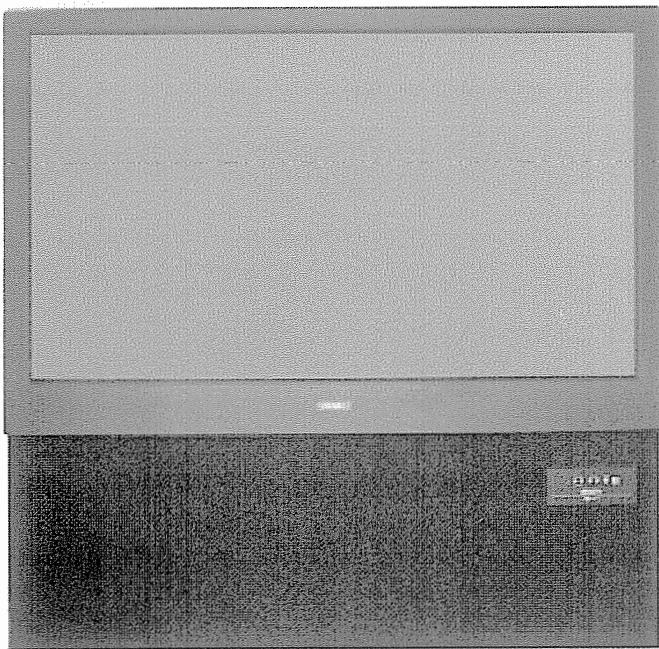
Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt 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.



PHOTOFACT[®] Technical Service Data
HD

PHILIPS

Model 55PP9363H17 (Chassis DPTV335)



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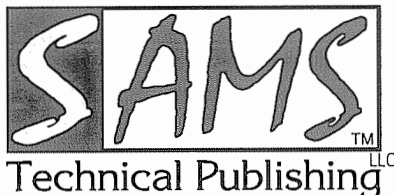
Representative Model

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

Coverage includes these additional models and chassis:

Models	Chassis
55PW936317F	DPTV335
55PW936399	DPTV335
60PP9363H17	DPTV335
60PW936317F	DPTV335
60PW936399	DPTV335



DECEMBER 2006 SET 5212

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Visit www.samswebsite.com



06HD04051

SET 5212

MODEL 55PP9363H17 (CHASSIS DPTV335)

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SCHEMATIC COMPONENT LOCATION GUIDE																																							
AC01	A73	C2016	B174	C2041	D156	C2106	D94	C2216	E68	C2314	B140	C2358	E20	C2425	C91	C2570	B106	C2702	D90	C2776	C114	C2831	D42	C2911	E46	D6201	D70	FB3904	B58	FB5902	C90	IC7651	A108	L5242	E77				
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SCHEMATIC COMPONENT LOCATION GUIDE continued

Q7036	D154	Q7710	C117	R3008	D61	R3029	B62	R3069	A13	R3153	B167	R3212	D68	R3261	A26	R3326	B74	R3384	C140	R3438	D28	R3520	C30	R3651	D107	R3724	A119	R3810	D33	R3841	C23	R3906	D53	TP1302	E153
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Q7300	A79	Q7807	D149	R3012	B57	R3035	A59	R3080	D154	R3170	B25	R3217	C87	R3301	C79	R3332	E154	R3401	C131	R3453	D132	R3530	E110	R3688	E107	R3733	B1	R3815	D19	R3850	A51	R3922	E47	ZD6004	D124
Q7301	B79	Q7808	B23	R3012	B59	R3035	D156	R3081	D154	R3171	B25	R3217	D158	R3302	C79	R3332	E31	R3401	C160	R3454	B29	R3531	A33	R3689	E107	R3739	B5	R3815	E33	R3851	A52	ZD6005	E124		
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Q7304	E23	Q7808	D150	R3013	A75	R3039	B13	R3083	D155	R3176	B127	R3217	D87	R3303	B79	R3333	D30	R3402	C131	R3456	B15	R3532	A33	R3691	E107	R3741	E2	R3816	C88	R3852	A52	R3924	E47	ZD6007	D121
Q7305	C140	Q7809	B24	R3013	B153	R3039	B59	R3084	D165	R3177	A127	R3218	A70	R3303	C18	R3333	E154	R3403	A130	R3456	B29	R3532	C106	R3692	C107	R3744	E1	R3816	D19	R3852	E46	ZD6008	E121		
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Q7307	A140	Q7809	D150	R3013	B57	R3041	E62	R3086	B165	R3181	C25	R3218	D70	R3304	C91	R3335	A143	R3405	B130	R3457	B15	R3540	B32	R3694	C107	R3746	E8	R3817	A149	R3853	A52	R3927	C42	ZD6009	E121
Q7309	A78	Q7810	A50	R3013	C57	R3042	E62	R3087	B165	R3182	E19	R3218	E159	R3304	D35	R3335	E31	R3405	B15	R3457	C132	R3540	D105	R3695	C107	R3747	A4	R3817	C86	R3853	B23	R3928	C43	ZD6010	D112
Q7320	A17	Q7810	C23	R3014	A75	R3043	B60	R3088	E165	R3183	E19	R3219	E159	R3305	B139	R3336	E144	R3410	C27	R3458	A28	R3541	B34	R3698	B109	R3748	A4	R3817	D20	R3854	A53	R3929	A35	ZD6011	B57
Q7322	A15	Q7810	D149	R3014	B155	R3044	E62	R3089	E165	R3185	C25	R3220	B69	R3305	B78	R3336	E31	R3411	A134	R3458	B140	R3542	B35	R3700	A37	R3749	B4	R3818	B148	R3854	B24	R3930	C43	ZD6011	C112
Q7331	A143	Q7811	C24	R3014	C57	R3045	A125	R3090	C166	R3186	C25	R3220	C69	R3305	D35	R3337	D57	R3411	C27	R3458	E23	R3546	B110	R3701	A38	R3750	D95	R3818	B43	R3854	E146	R3931	C43	ZD6012	C112
Q7337	E144	Q7812	A52	R3014	D57	R3045	A59	R3091	E166	R3200	A66	R3220	E159	R3306	B78	R3338	A140	R3412	A134	R3459	A29	R3550	A106	R3701	B114	R3754	E4	R3818	D20	R3855	A53	R3932	C43	ZD6012	C124
Q7368	C145	Q7813	A53	R3014	E172	R3046	A125	R3092	B166	R3200	C153	R3220	E69	R3306	C162	R3339	D144	R3412	B111	R3460	B21	R3558	A111	R3702	A39	R3790	B117	R3819	B43	R3855	C23	R3933	C48	ZD6013	A57
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Q7385	C141	Q7824	D146	R3015	C57	R3048	A164	R3094	E167	R3200	D66	R3222	E159	R3307	C77	R3340	A22	R3413	A134	R3460	E132	R3560	C106	R3702	B5	R3791	A117	R3821	A19	R3856	C24	R3935	C43	ZD6013	D124
Q7386	C141	Q7828	C149	R3015	C57	R3048	A60	R3095	B167	R3201	A66	R3223	A67	R3308	B79	R3341	C144	R3413	C28	R3461	A30	R3561	D109	R3703	A39	R3791	A7	R3821	B149	R3856	D145	R3936	E45	ZD6014	A57
Q7410	B15	Q7832	E146	R3015	C9	R3048	C122	R3096	C167	R3201	B154	R3223	C159	R3308	C162	R3341	C22	R3414	B134	R3461	B22	R3562	C106	R3703	B1	R3792	A116	R3821	C46	R3857	A54	R3937	E46	ZD6015	B57
Q7411	A12	Q7871	E145	R3015	D156	R3049	A164	R3097	D167	R3201	C66	R3223	C67	R3309	B162	R3342	B22	R3414	D29	R3461	D132	R3563	B111	R3703	B116	R3792	A7	R3822	A19	R3857	B24	R3940	C48	ZD6016	B57
Q7411	B135	Q7874	E145	R3016	C58	R3049	B125	R3098	A167	R3201	D66	R3223	D67	R3309	B79	R3343	B78	R3415	B11	R3462	A30	R3564	D107	R3704	A39	R3793	B116	R3822	D146	R3857	D145	R3944	C90	ZD6017	D124
Q7411	C29	Q7876	E146	R3016	D156	R3049	C62	R3099	D166	R3201	D76	R3223	E74	R3310	B77	R3344	A78	R3415	B134	R3462	B21	R3565	C109	R3704	B117	R3793	D8	R3822	D46	R3858	A54	R3951	D95	ZD6019	D124
Q7412	A134	Q7891	B150	R3017	C13	R3050	A164	R3100	D18	R3202	A71	R3224	A68	R3311	C76	R3344	C144	R3415	C110	R3462	B98	R3566	C109	R3705	A39	R3794	D8	R3823	A19	R3858	C24	R3952	D84	ZD6022	B125
Q7412	C33	Q7892	C145	R3017	C170	R3050	B125	R3101	D112	R3202	C71	R3224	C160	R3311	D140	R3345	C77	R3415	C28	R3463	A30	R3567	D107	R3705	B1	R3795	C8	R3823	D149	R3858	D146	R3953	D95	ZD6025	B125
Q7413	B21	Q7893	C145	R3017	C57	R3050	C59	R3102	C122	R3202	D71	R3224	C68	R3311	D59	R3346	A140	R3416	A12	R3463	B11	R3570	E107	R3											

FEATURES SCHEMATIC

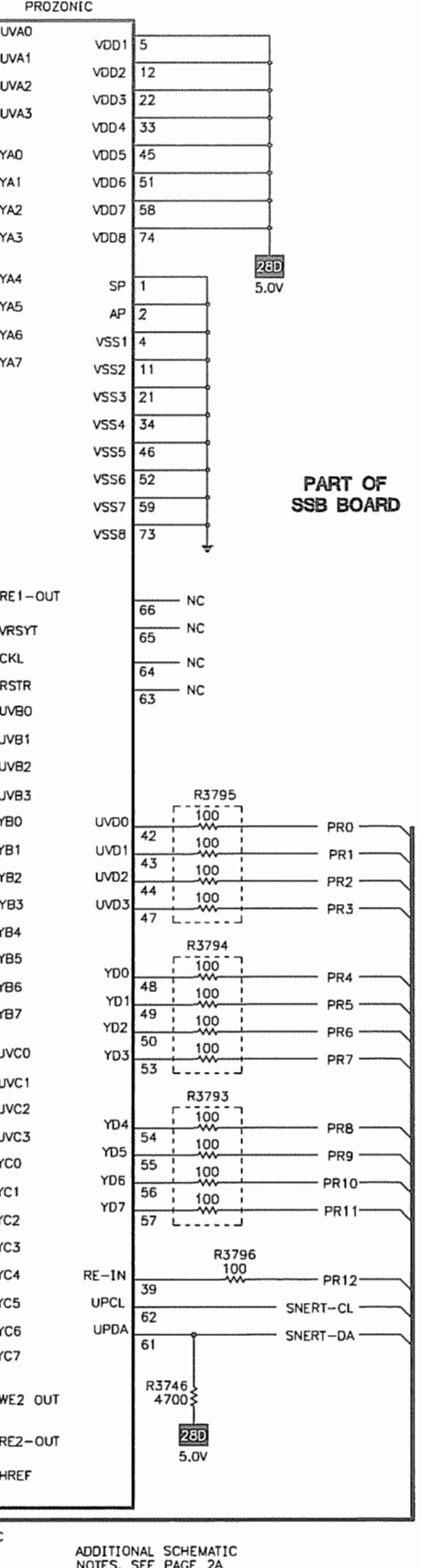
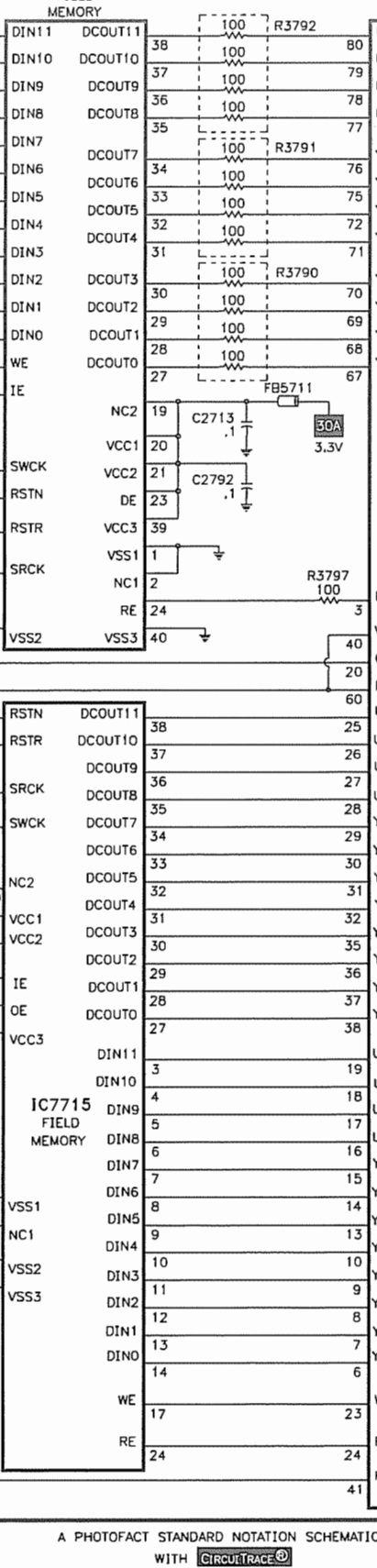
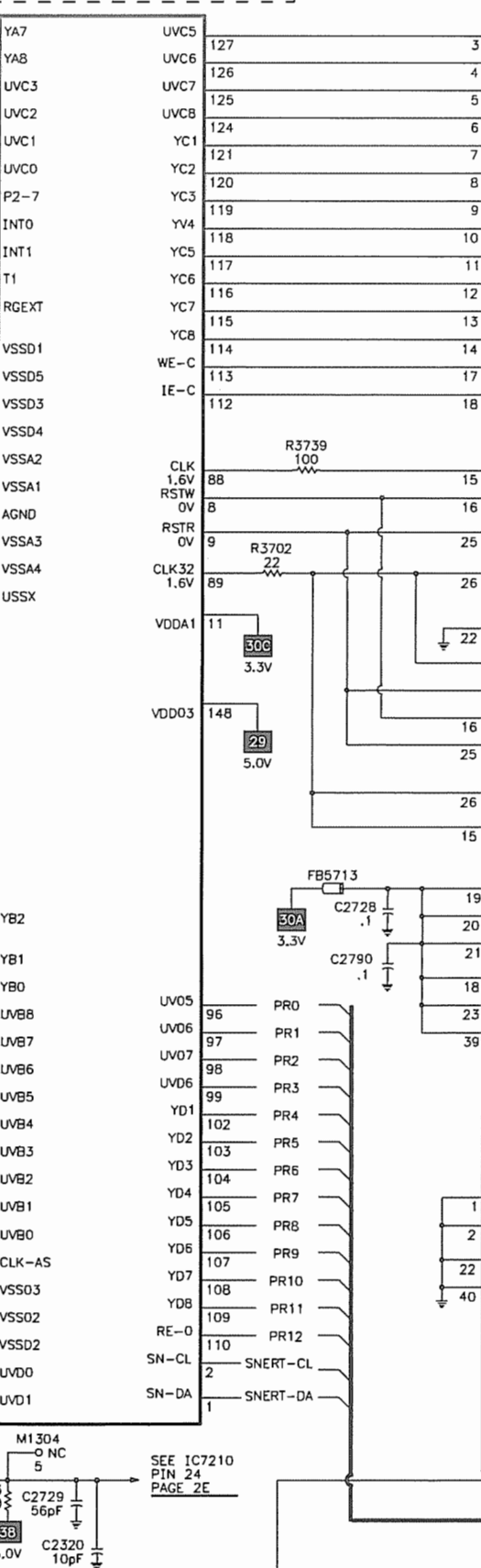
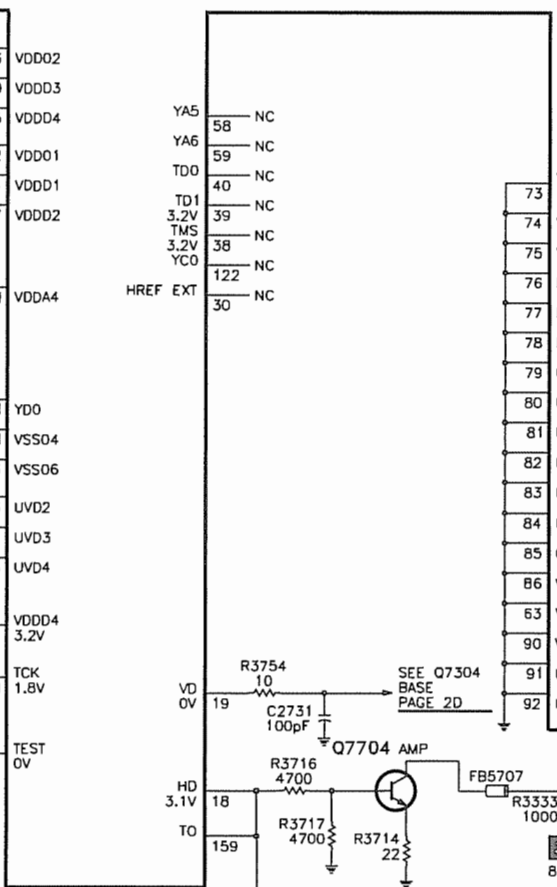
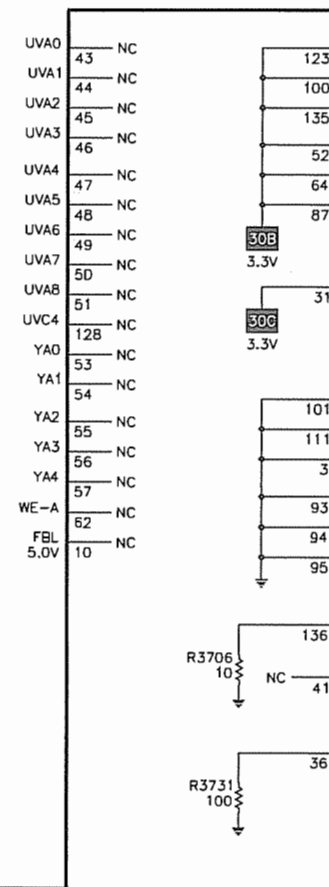
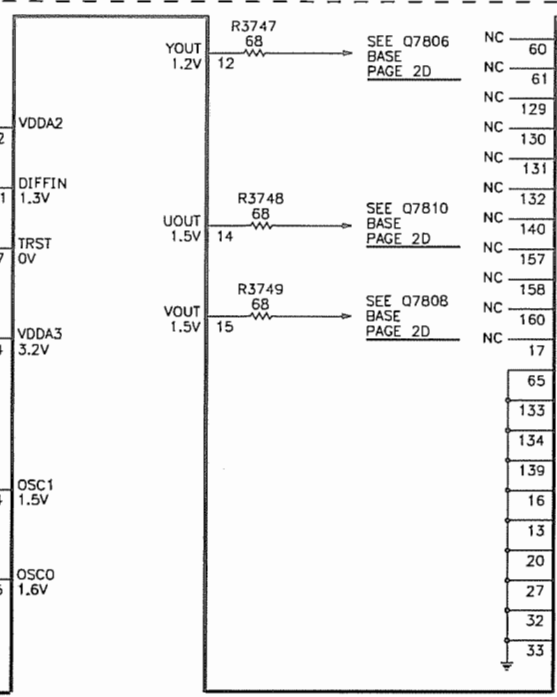
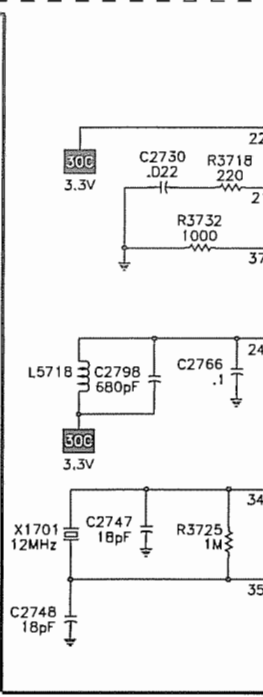
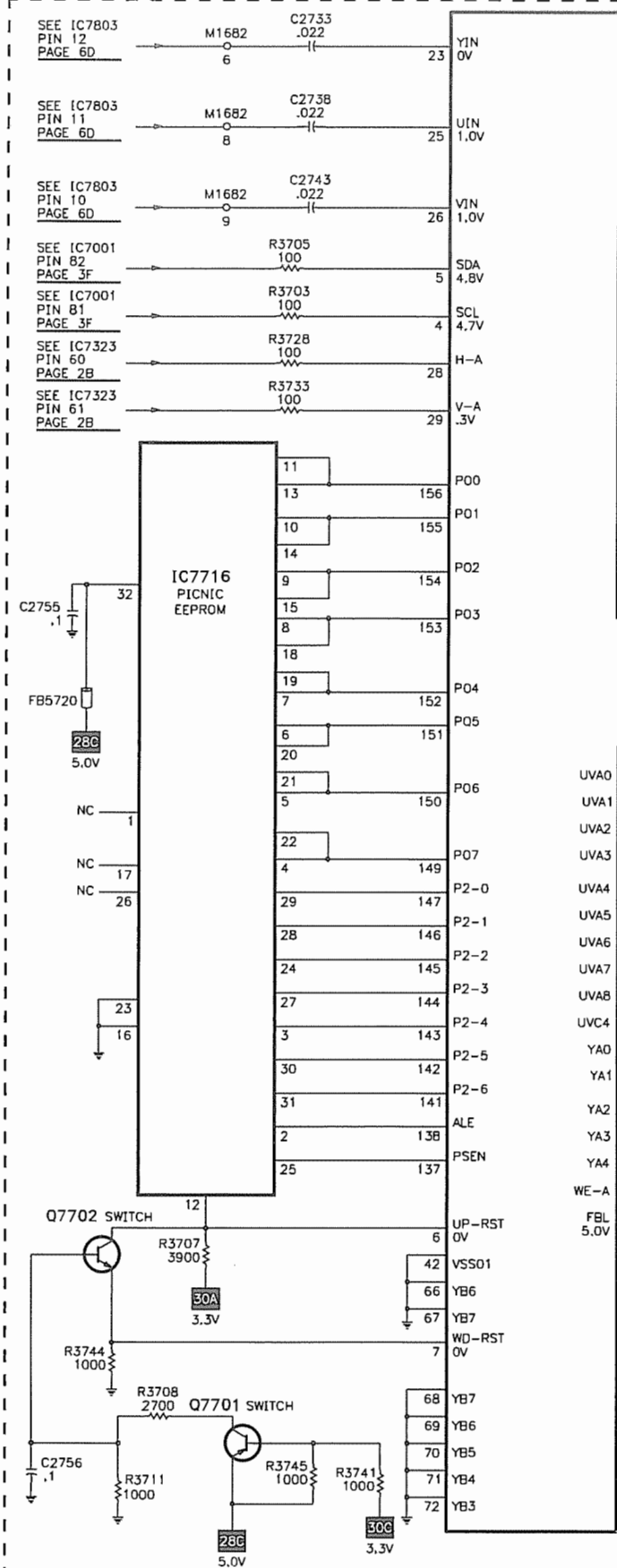
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ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2A

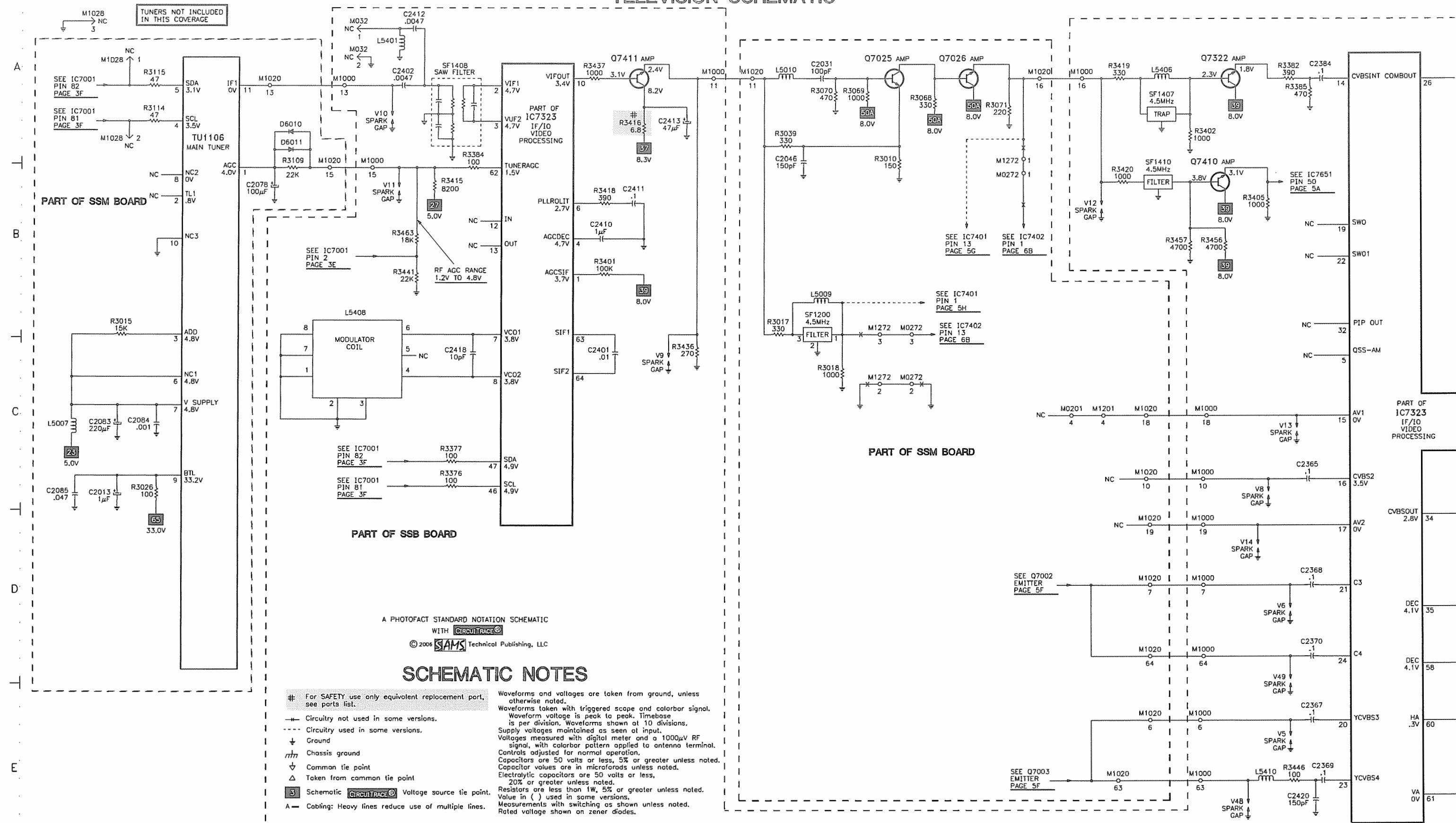
PART OF
SSB BOARD

PHILIPS
MODEL 55P9363H17 (CHASSIS DPTV335)

A

B

TELEVISION SCHEMATIC

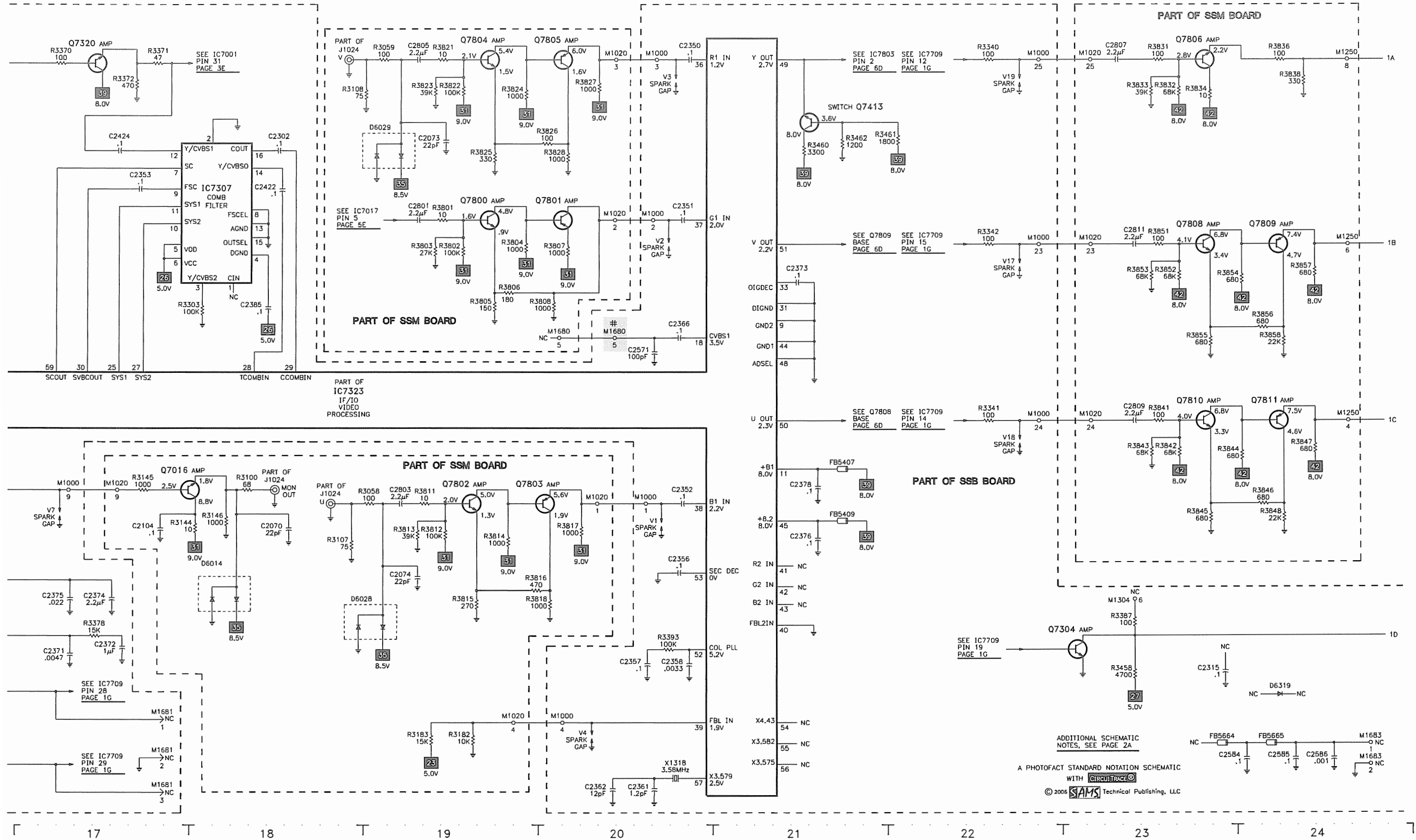


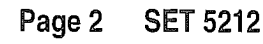
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SCHEMATIC NOTES

- # 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.
 - 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.
Rotted voltage shown on zener diodes.

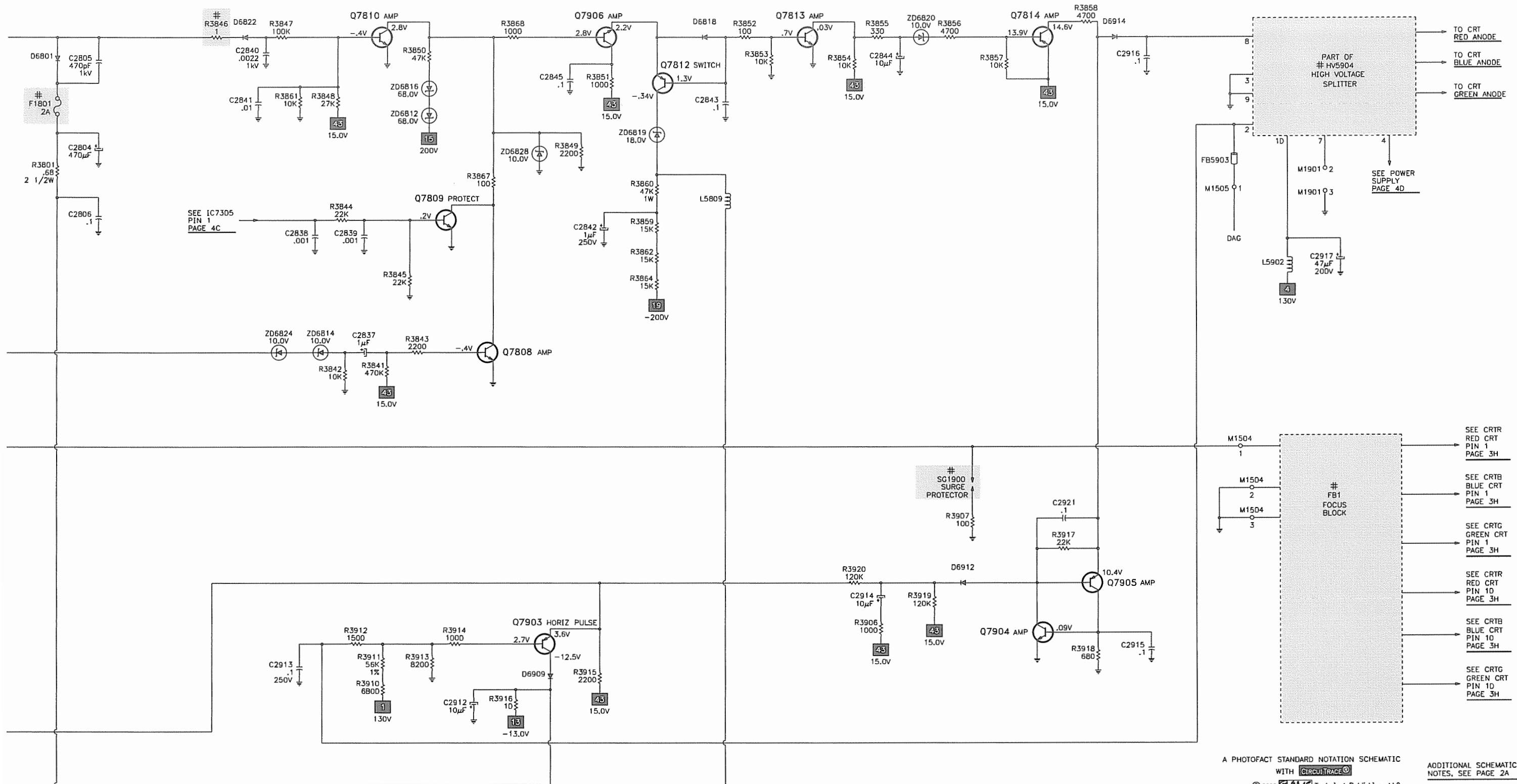
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F

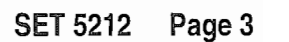


DEFLECTION SCHEMATIC continued



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ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2A

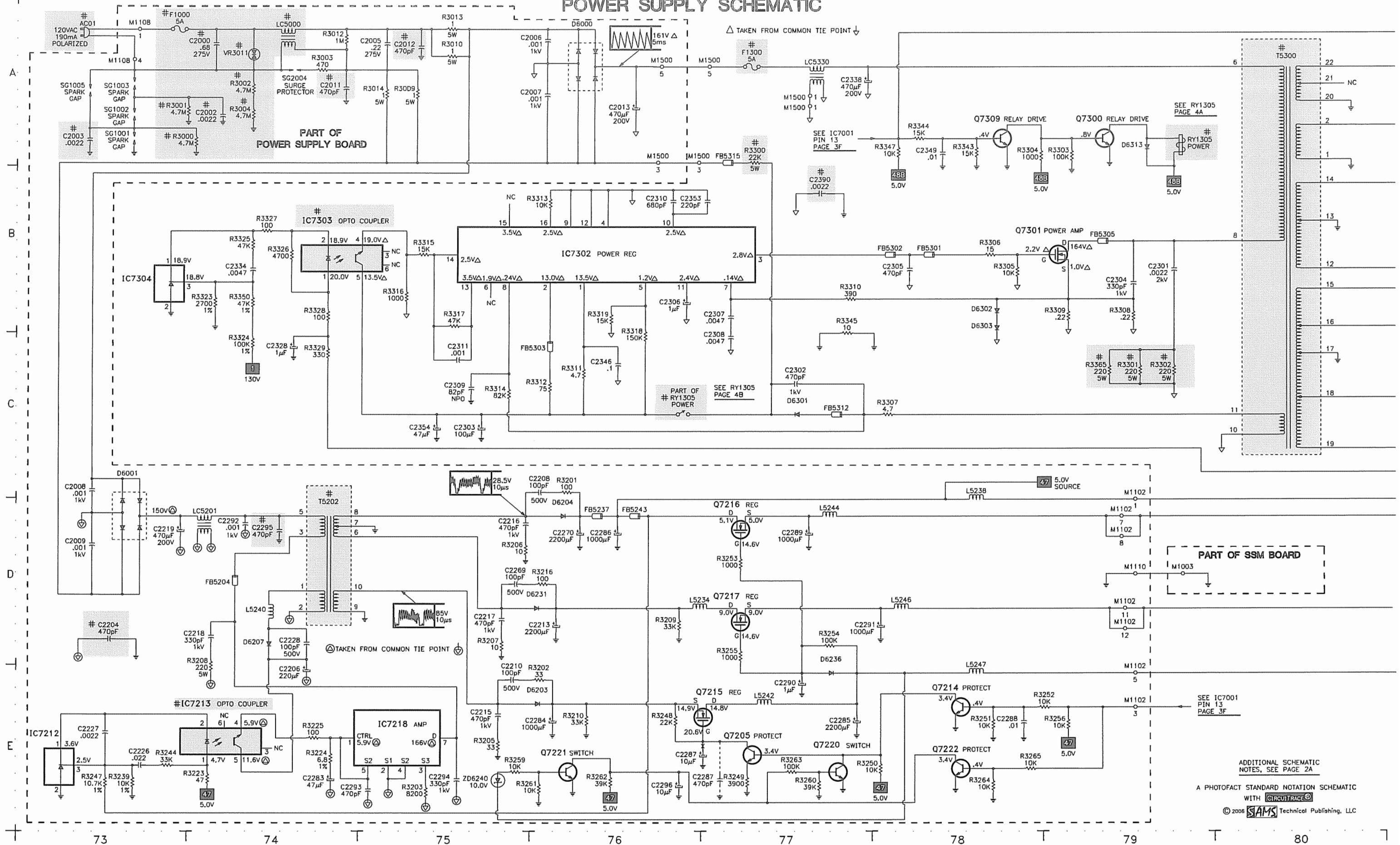


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POWER SUPPLY SCHEMATIC





ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2A

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WITH 

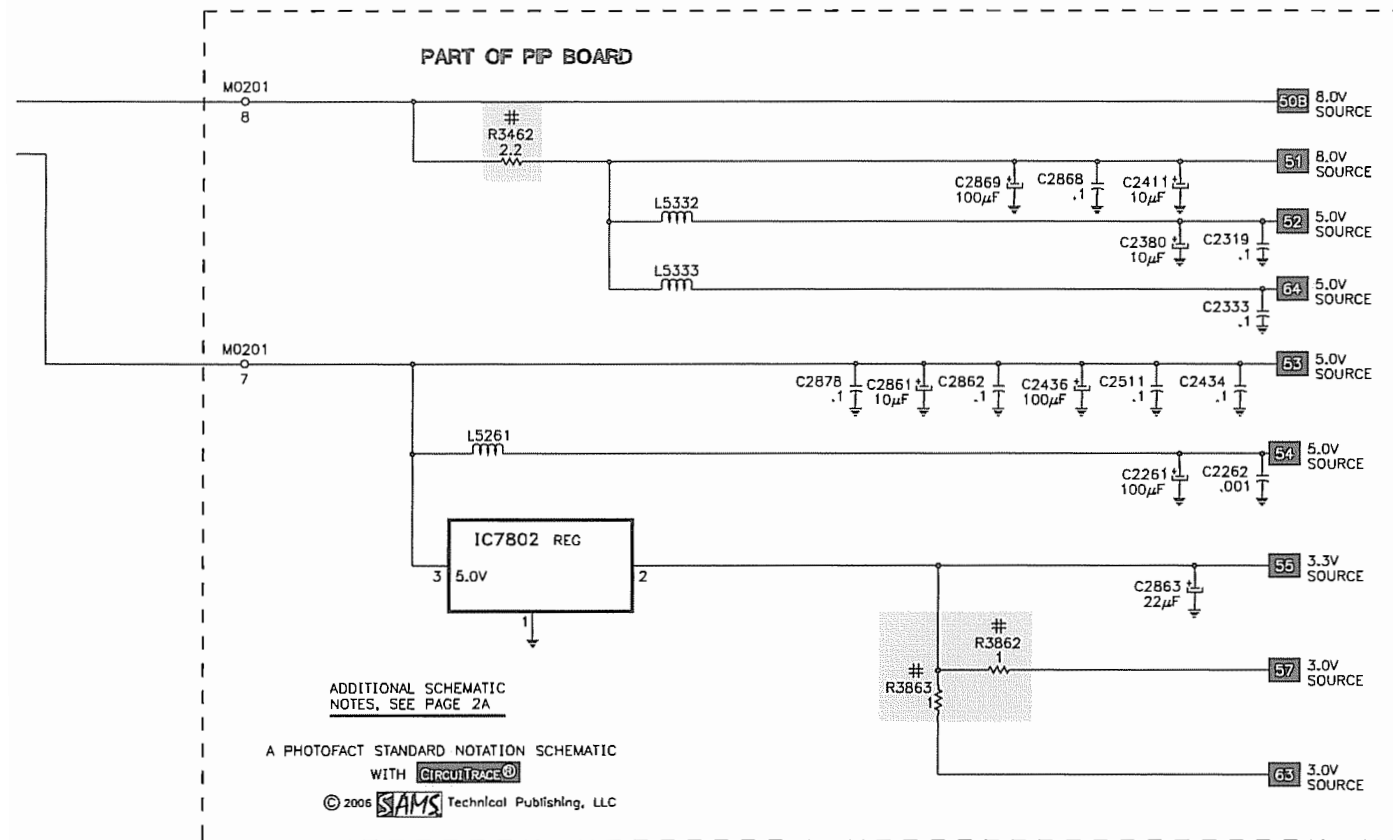
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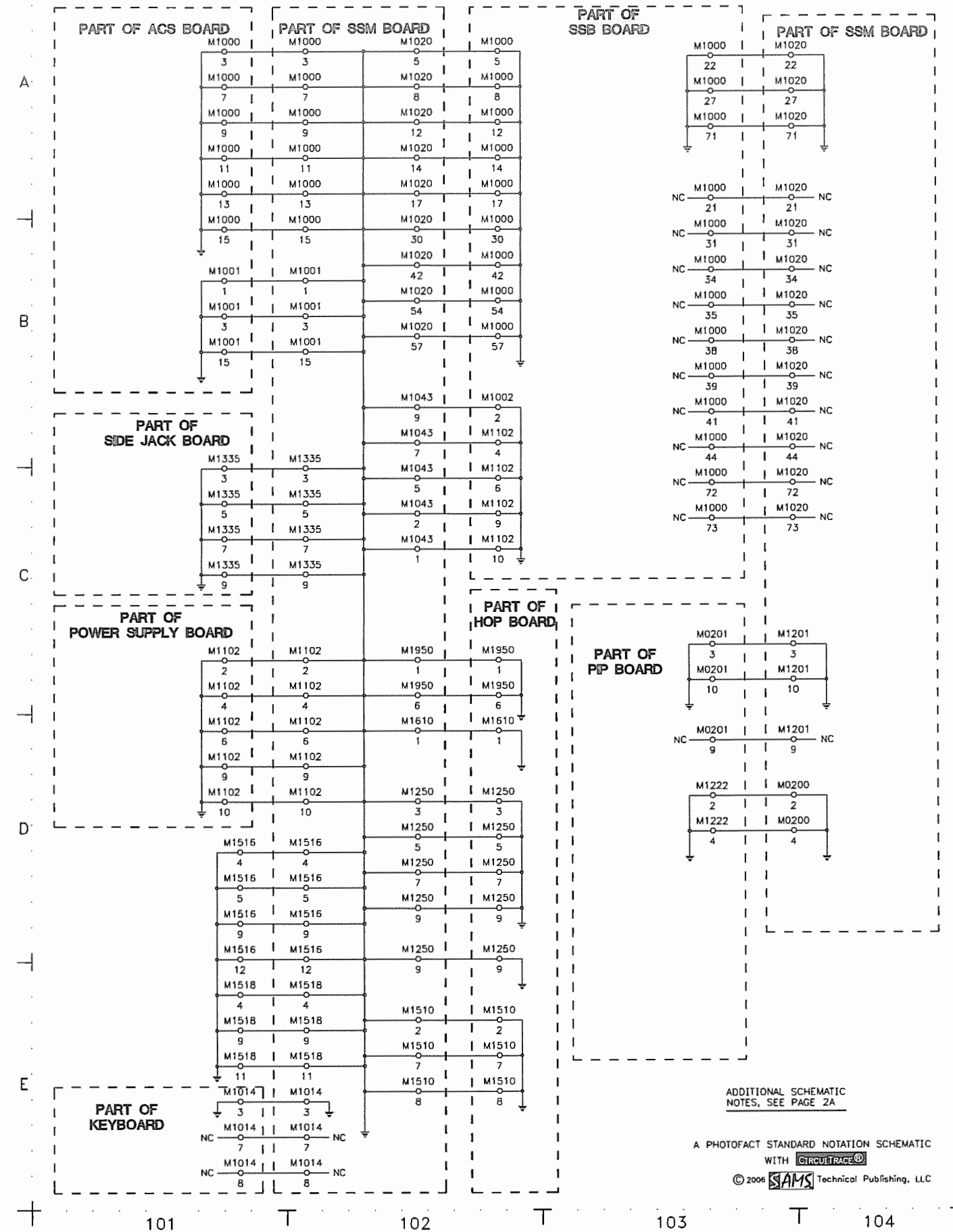


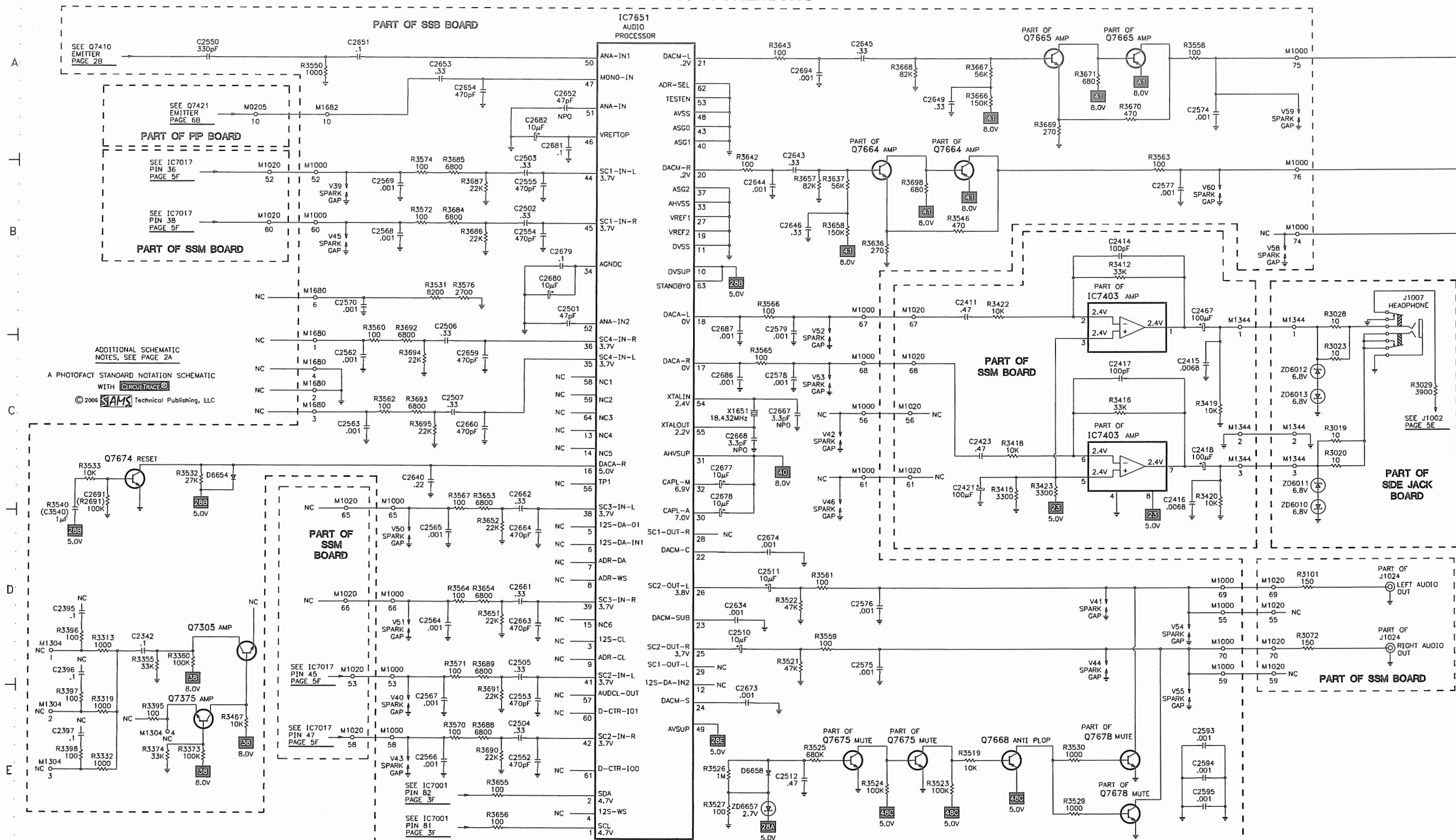
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G POWER SUPPLY SCHEMATIC continued



H BOARD GROUND SCHEMATIC



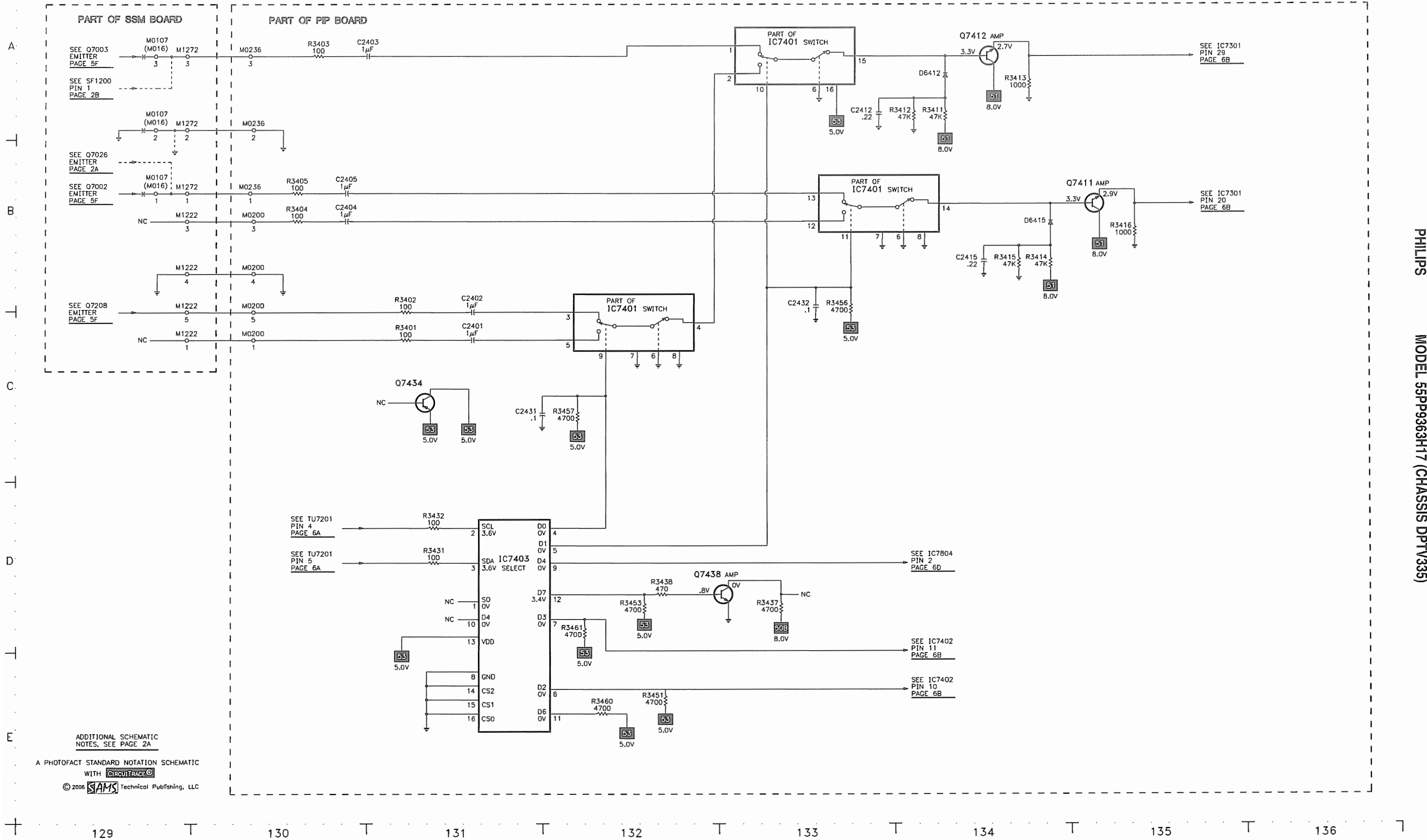




PART OF SSM BOARD

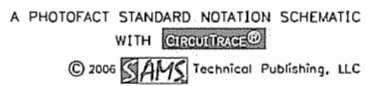


PIP SCHEMATIC





PART OF PP BOARD



**PART OF
SSB BOARD**

PART OF SSM BOARD

SEE IC7323 PIN 51 PAGE 2D	SEE IC7323 PIN 50 PAGE 2D	SEE IC7323 PIN 49 PAGE 2D
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SEE IC7323
PIN 50
PAGE 20

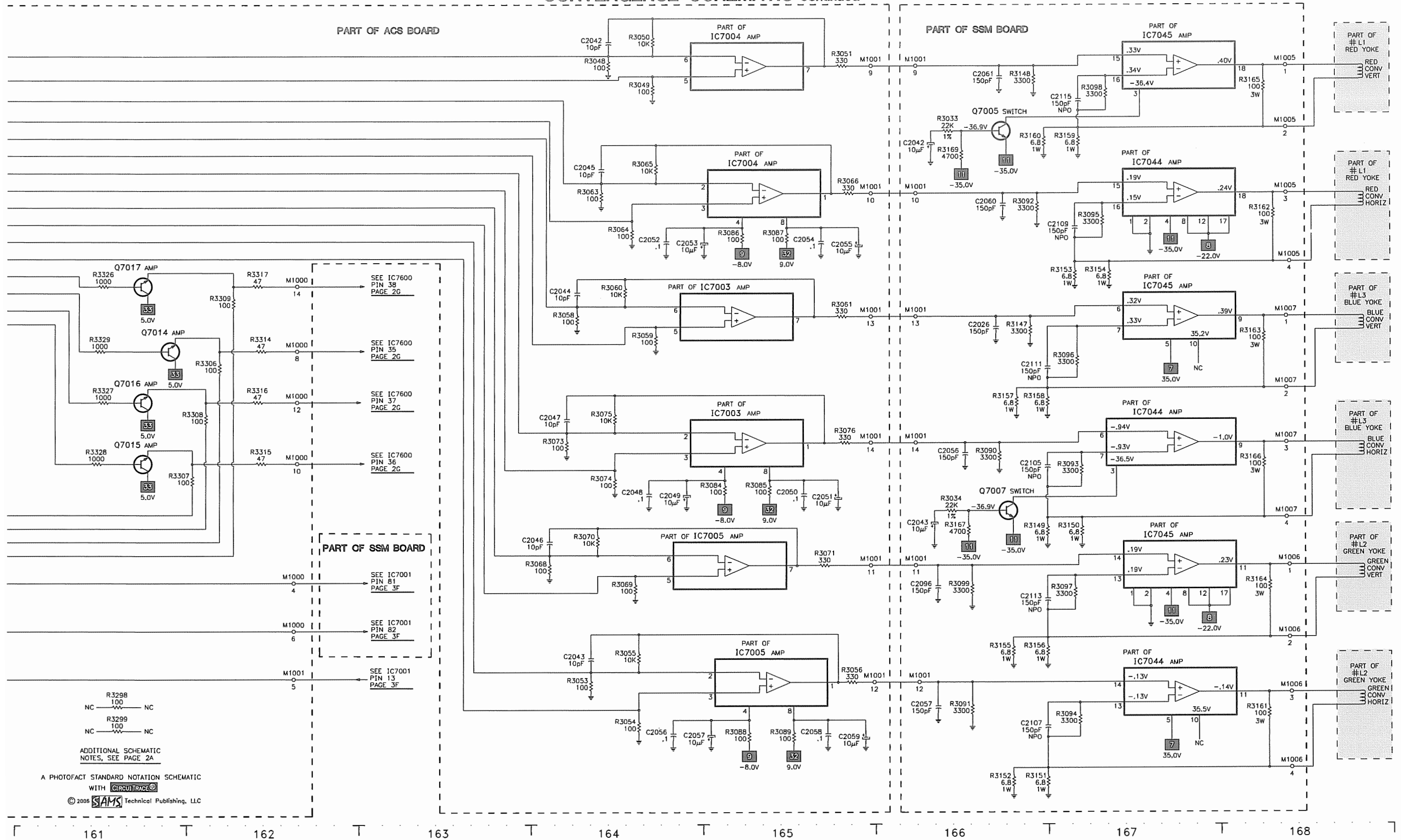
SEE IC7323
PIN 49
PAGE 2D

F

G

CONVERGENCE SCHEMATIC continued

H



PHILIPS

MODEL 55PP9363H17 (CHASSIS DPTV335)

A

B

DVI SCHEMATIC

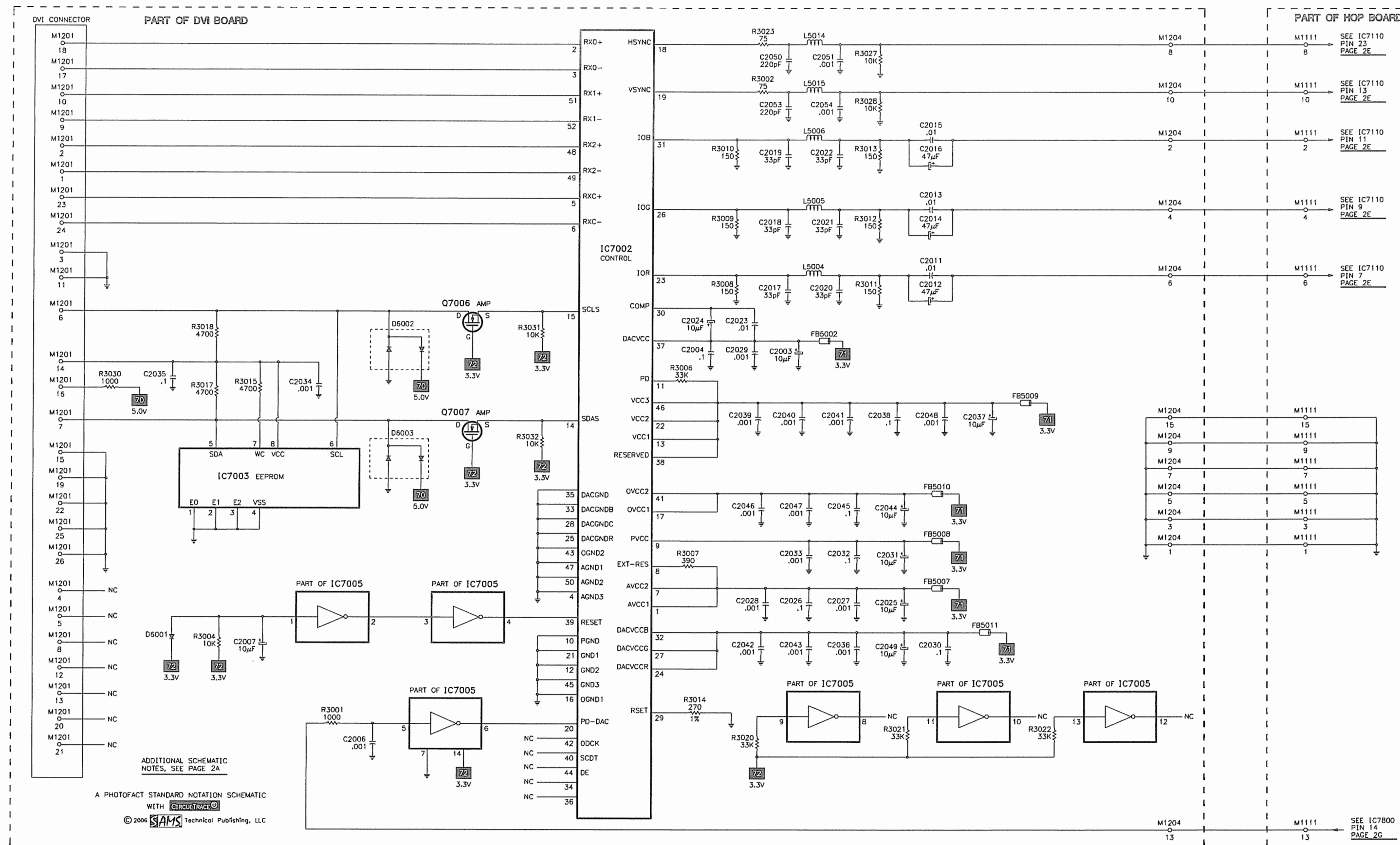
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MISCELLANEOUS ADJUSTMENTS

Measurements should be performed under the following conditions: Video: color bar signal and Audio: 3kHz left, 1kHz right.

SERVICE DEFAULT MODE (SDM)

The Service Default Mode (SDM) is a technical aid for the service technician. The SDM establishes fixed, repeatable settings of customer controls, which allow for consistent measurements. The SDM places the set in the following pre-defined conditions: tuning frequency set to channel 3; volume level set to 25% of the maximum volume level; other picture and sound settings set to 50%. The following functions are turned off while in SDM: timer and sleep timer. The following functions are disabled during SDM and enabled after leaving SDM: parental lock; blue mute; hospitality mode; and No IdentTimer, normally the set is automatically switched off when no video signal (IDENT) is received for 15 minutes. Remaining other controls will operate normally.

Entering Service Default Mode (SDM)

To enter the Service Default Mode (SDM), press the following key sequence on the remote: 0, 6, 2, 5, 9, 6, and menu buttons. Do not allow the display to time out between entries while keying the sequence. Upon entry into the Service Default Mode, the letters SDM will be displayed at the upper right corner of the screen.

Service Default Mode (SDM) Screen Display

SDM									
HRS: 0279	SWID: LCHDR: 2US1-TTR-2-2.045								
ERR: 0	0	0	0	0	0	0	0	0	0

Service Default Mode (SDM) Functions

The menu button on the remote switches between the Service Default Mode (SDM) and the normal user menus, with the SDM still active in the background. The status button on the remote is used to toggle the OSD, except SDM, on and off to prevent the OSD from interfering with measurements and oscilloscope waveforms. To access the Service Alignment Mode (SAM) while in SDM, press volume + and volume – buttons on the set simultaneously for at least 4 seconds.

Exiting Service Default Mode (SDM)

To exit the Service Default Mode (SDM), press the power button. To save the error codes, unplug the AC power without turning off the set. When the power is turned back on, the SDM will still be active.

SERVICE ALIGNMENT MODE (SAM)

The Service Alignment Mode (SAM) is used to align the set and adjust the option settings and to display/clear the error code buffer values.

Entering Service Alignment Mode (SAM)

To enter the Service Alignment Mode (SAM), press the following button sequence on the remote: 0, 6, 2, 5, 9, 6, and status buttons. Do not allow the display to time out between entries while keying the sequence. It is also possible to enter SAM by pressing volume + and volume - on the set simultaneously for at least 4 seconds when the set is in SDM.

Exiting Service Alignment Mode (SAM)

To exit the Service Alignment Mode (SAM), press the power button. To save the error codes, unplug the AC power without turning off the set. When the power is turned back on, the SAM will still be active.

Service Alignment Mode (SAM) Screen Display

SAM									
HRS: 027A	SWID: LCHDR: 2US1-TTR-2-2.045								
ERR: 0	0	0	0	0	0	0	0	0	0
OPT: 254	122	247	174	64	0	0	0	0	0

CLEAR ERRORS	>
OPTIONS	>
TUNER	>
SMART SETTINGS	>
GDE SAM	>

Service Alignment Mode (SAM) Menu Control

Menu items may be selected using the cursor up or down buttons. Selected item will be highlighted. Pressing the cursor up or down buttons on the remote will display the next or previous menu items, when applicable. With the cursor left or right buttons, it is possible to: activate or deactivate the selected menu item; change the value of the selected menu item; and activate the selected submenu.

NOTE: Pressing the menu button on the remote switches between SAM and the normal user menus, with SAM active in the background. Pressing the menu button in a submenu will return the screen to the previous menu.

Clear Errors

Select CLEAR ERRORS while in SAM to clear error code buffer. The error code buffer contains all errors detected since the last time the buffer was erased. The buffer is written from left to right. When an error occurs that is not yet in the error code buffer, the error code will appear at the left side and all other errors shift one position to the right. The error code buffer will be cleared in the following cases: when activating CLEAR ERRORS in SAM menu; when exiting SDM or SAM with the standby command on the remote; or upon automatic reset when content has not changed for 50 consecutive hours. By leaving SDM or SAM via the power switch, the error buffer will not be reset.

To erase the contents of the error buffer, select the CLEAR ERRORS menu item and press the cursor left or right button. The contents of the error buffer are then cleared.

In case of non-intermittent faults, clear the error buffer before starting the repair. If possible check the entire content of the error buffers. In some situations an error code is only the result of another error code. A fault in the protection detection circuitry can also lead to a protection.

Options

Select OPTIONS while in SAM.

Item	Value
ASBY	OFF
SBNP	ON
CVI	ON
C169	OFF
E149	OFF
SMCK	ON
AV3	ON
AUSB	ON
CBFL	ON
IPIX	OFF
IPMU	OFF
VDBY	OFF
PLST	OFF
SOSD	ON
PIPC	OFF
PIPT	OFF
PIPF	OFF
VSLC	OFF
SURF	OFF
CCAP	ON
TIME	ON
AAVL	ON
FUNN	OFF
SPKC	OFF
VCBK	ON
VBNR	ON
BNUM	ON
TMWIN	OFF
AOUT	OFF
INCF	ON
PAGC	ON
WSCR	ON
INIT TIMEOUT	ON
I AM ALIVE MSG	OFF
ACS	OFF
MCS	ON
AV5	OFF
DVI	OFF
WDT	ON
OB1	103
OB2	132
OB3	28
OB4	231
OB5	146
OB6	0
OB7	0
OB8	0

Tuner Options

Select TUNER while in SAM.

Item	Value
IF-PLL OFFSET	63
AGC	22
AFA	1
AFB	1

Smart Settings

Select SMART SETTINGS while in SAM.

PERSONAL	
Item	Value
MOVIE BGT	50
MOVIE COL	50
MOVIE PIC	50
MOVIE SHP	84
MOVIE TINT	0
MOVIE 2FH SHP	84
SPORT BGT	50
SPORT COL	59
SPORT PIC	54
SPORT SHP	70
SPORT TINT	0
SPORT 2FH SHP	70
WEAK BGT	50
WEAK COL	40
WEAK PIC	40
WEAK SHP	28
WEAK TINT	0
WEAK 2FH SHP	28
MULTI BGT	50
MULTI COL	40
MULTI PIC	40
MULTI SHP	70
MULTI TINT	0
MULTI 2FH SHP	70

MISCELLANEOUS ADJUSTMENTS continued

GDE SAM

Select GED SAM while in SAM.

	GDE SAM INPUT 480P
SWID: GDE 1.02 ERR:	
DISPLAY MODE	480P
SERV BLANK	OFF
GEOMETRY	>
PICTURE	>
WHITE TONE	>
CLAMP PULSE	NORMAL
CONV PROC	ENABLED

In this menu, the DISPLAY MODE can be selected. If the input signal is NTSC, the selection should be 480p. The selection SERV BLANK causes the bottom half of the screen to blank. This selection is useful when adjusting the Yoke rotation. The CONV PROC selection allows for the disabling of the Convergence drive.

Default settings should be entered when the SSB board has been changed. When the CRTs have been changed, the display should be centered using the centering rings on the CRT. The center point can be found by placing a string from corner to corner or by using the center point on the convergence template. In the 4x3 aspect ratio sets, there are three geometry settings, and in the 16x9 aspect ratio sets, there are two geometry settings. Make sure the set is in the mode that is being adjusted and that the correct signal is applied.

GDE SAM Defaults Table

GDE SAM Register Name	Default Value 480p	Default Value 1080i Full	Default Value 1080i Comp
SERV BLANK	OFF	OFF	OFF
GEOMETRY			
WIDE BLANK	7	7	7
HOR SHIFT	23	21	21
HOR. PARALLEL	8	8	8
EW. WIDTH	29	42	42
EW. PARA	36	36	31
EW. TRAP	31	31	31
HOR. BOW	7	7	7
VER. SLOPE	40	36	38
VER. AMPL	38	37	11
S CORR	31	31	31
VER. SHIFT	31	31	31
FAST BLANK	0	0	0
PICTURE			
BRIGHTNESS	31	31	31
PICTURE	31	31	31
COLOR	31	31	31
TINT	31	31	31
SHARPNESS	31	31	31
SUB-BRIGHT	31	31	31

GDE SAM Register Name	Default Value 480p	Default Value 1080i
WHITE TONE		
NORMAL CUTOFF RED	35	35
NORMAL CUTOFF GREEN	34	34
NORMAL CUTOFF BLUE	31	31
NORMAL DRIVE RED	20	20
NORMAL DRIVE GREEN	43	43
NORMAL DRIVE BLUE	31	31
COOL CUTOFF RED	0	0
COOL CUTOFF GREEN	0	0
COOL CUTOFF BLUE	0	0
COOL DRIVE RED	-7	-7
COOL DRIVE GREEN	-6	-6
COOL DRIVE BLUE	0	0
WARM CUTOFF RED	0	0
WARM CUTOFF GREEN	0	0
WARM CUTOFF BLUE	0	0
WARM DRIVE RED	+7	+7
WARM DRIVE GREEN	+4	+4
WARM DRIVE BLUE	-6	-6
CLAMP PULSE	NORMAL	HDTV
CONV PROC	ENABLED	ENABLED

CONVERGENCE AND GEOMETRY

The set should be allowed to warm up for at least 20 minutes before any adjustments are made. This set incorporates a Digital Convergence System using 208 adjustment points. The convergence processor is located on the ACS (Automatic Convergence System) board. The convergence drive circuits are located on the SSP (Small Signal Panel) board. Data for the convergence settings are stored in the EEPROM located on the ACS board. Data for geometry is stored in the EEPROM located on the SSB (Small Signal Board) board. If the CRTs, the LSP (Large Signal Panel) board, or the SSB board are changed, a complete geometry and convergence alignment will be necessary. If the ACS board, the SSP, or CRTs are changed, a complete convergence alignment will be necessary. To obtain the correct geometry during convergence, a template must be used.

Sets with 4x3 aspect ratio have three convergence and geometry settings. Sets with 16x9 aspect ratio sets have two convergence and geometry settings. Sets with 4x3 aspect ratio have a 480p mode and a 1080i full screen mode. There are geometry and convergence settings for each mode.

There are two chassis versions: basic and core. The core version has an Automatic Convergence System called Intellisense. The Intellisense system makes minor changes in the convergence to compensate for changes in the magnetic field from one location to another. In the convergence procedure, both versions have the setup for the Intellisense sensors. If TEST SENSORS is selected in the basic version a message will appear on the screen indicating that the sensors are not working. In the basic version, the results of the sensor test are not applicable.

When performing convergence or geometry alignments, correct signal must be applied to the set. This is necessary to provide the correct horizontal and vertical sync to the convergence circuits. Failure to do so will result in an out of convergence picture. NTSC signal should be used when adjusting the 480p mode. A 1080i signal should be applied to the set when using the HD mode. The HD should have a horizontal frequency of 33.75kHz and a

vertical frequency of 60Hz. There are two geometry and convergence alignments in the HD mode for the 4x3 aspect ratio set. The two modes are a full screen mode 4x3 and a 16x9 compressed mode. Select these in the customer menu.

This adjustment procedure is divided into the following sections: Screen Centering; Geometry Alignment; Convergence Alignment; and Grey Scale Alignment.

If the ACS board has been replaced, the following adjustments should be performed in the following order: Geometry; Convergence; and Grey Scale.

If the LSB board has been changed, the following adjustments should be performed in the following order: Screen Centering; Geometry; and Convergence.

If the CRTs have been changed, the following adjustments should be performed in the following order: Screen Centering; Geometry; Convergence; and Grey Scale.

If the SSM board has been changed, the Convergence adjustment should be performed.

Geometry Alignment

The Geometry alignment data is stored in the NVM located on the ACS module. Whenever the ACS board or the LSB board has been changed, a geometry alignment will be needed. The geometry alignment is performed in the SAM GDE alignment mode. To enter the SAM mode, press 0, 6, 2, 5, 9, 6, and index buttons on the remote. Be sure the set is in the mode in which you wish to align before entering the SAM mode. Use the AV button on the remote to select the input with a signal applied after entering the SAM mode. The following will appear after entering the SAM mode. Press the cursor down button on the remote to view SMART SETTINGS and GDE SAM.

		SAM
SAM		
HRS: 0015 SWID:		LCHDR: 2US1-EMB1.439
ERR: 0 0 0 0 0 0 0 0		
OPT: 124 247 189 100 64 0 0 0		
CLEAR ERRORS		
OPTIONS		
TUNER		
SMART SETTINGS		
GDE SAM		
Geometry settings are located in the GDE SAM mode. Press the cursor down button to highlight the GDE SAM, press the right cursor button to select. The following will appear:		
SWID: GDE 0.20		GDE SAM
ERR: AINO		INPUT 480P
DISPLAY MODE		480P
SERV BLANK		OFF
GEOMETRY		>
PICTURE		>
WHITE TONE		>
CLAMP PULSE		NORMAL
CONV PROC		ENABLED

If the CRTs have been replaced, screen centering adjustment will be necessary. Apply a crosshatch pattern to the set. Cursor down to CONV PROC in the menu and press the right cursor button to select. This will disable the convergence drive. Select GEOMETRY in the menu and enter the following default values for the mode being adjusted. Other mode values can be entered by selecting a different DISPLAY MODE in the menu. Most times, no additional adjustment will be necessary.

Geometry Default Values

GDE SAM Register Name	Default Value Mode 1 480p	Default Value Mode 2 1080i	Default Value Mode 3 1080i Comp
Wide Blank	7	5	7
Hor. Shift	24	21	21
Hor. Parallel	8	8	8
EW Width	31	44	44
EW Para	45	45	45
EW Trap	31	31	31
Hor. Bow	7	7	7
Ver Slope	40	33	33
Vertical Ampl	40	40	12
S Corr	31	31	31
Vert Shift	31	31	31
Fast Blank	0	1	1

To exit the Service Alignment Mode (SAM), press the menu button to return to the main SAM menu. Then turn the set off.

CONVERGENCE ALIGNMENT

Enter the Convergence Alignment mode, by pressing 0, 6, 2, 5, 9, 7, and index buttons on the remote. Listed below is a map of the convergence menus. Be sure that a signal is applied to the set for the mode being adjusted. Be sure that the set is in the mode you wish to adjust before entering the Convergence Alignment mode.

Display Convergence Menu Flow Diagram

Use the cursor up or down button to highlight the selection. Press the cursor right button to make the selection. In the second menu, MANUAL CONVERGENCE Without VIDEO means the screen behind the adjustment grid will be blank. MANUAL CONVERGENCE With VIDEO displays the applied video behind the adjustment grid. RESTORE FACTORY loads the values from the last saved convergence alignment. RESTORE DEFAULT loads values from the ROM on the ACS Microprocessor. If the ACS board has been changed, there may not be data in the NVM for RESTORE FACTORY. The RESTORE DEFAULT settings will then be loaded. Loading default values will overwrite all of the Convergence modes.

Internally generated grid will be displayed in the convergence mode as shown below. Shaded area is the screen area. Horizontal lines A and M are displayed on the top and bottom edge of the visible screen area. Lines 1 and 15 are also displayed on the left and right edge of the visible screen area. Vertical line 0 is adjustable, but not visible.

MISCELLANEOUS ADJUSTMENTS continued

Green Geometry

The green geometry must first be done when performing a complete convergence alignment. A Screen Template is needed to obtain the correct geometry. Failure to use the Screen Template or misalignment of the convergence will result in reduced life of the Convergence amplifiers.

Place the Screen Template on the screen. Select GREEN in selection menu. The Cursor will appear in the center of the screen.

When the ACS board has been replaced and default settings have been loaded, the following procedure should be used to adjust the convergence. Or use the cursor up or down and right or left buttons to navigate to the area to be adjusted. Press the menu button to adjust then use the cursor buttons to move the green cross onto the Template. The adjustment of the cross has two step sizes, large and small. Use the menu button to toggle between the two. After a point has been adjusted, press index button to return to navigate. When default settings have been loaded, the leftmost line that is not visible should be adjusted first. Adjust the vertical line 0 while observing line 1 to make line 1 parallel with the left edge of the screen. The adjustment should be made in small steps. Do not adjust any one point more than 1/4 the distance of one grid. After the left most line is adjusted, start at the center left of the screen and work to the right, aligning the horizontal line. When adjusting the Horizontal lines, best results are obtained when working from left to right. After the center line is adjusted, go to the next line down until all of the lines have been adjusted. Work from the center up to adjust the horizontal lines. Using the same method, work from center out to adjust the vertical lines. A minimum of three passes will be necessary to complete the alignment. Press the index button to return to the selection menu.

When the green geometry is complete, store the data. Remove the Template from the screen, and select red to green in the selection menu. Use the same method that was used to adjust the green grid to the Template, adjust the red grid onto the green Grid.

When the red to green is complete, select the blue to green and use the same alignment method. Each time data is stored, the Intellisense circuit will recalculate the position of the four sensors in the set.

Repeat the adjustment for each of the remaining modes as necessary.

GRAY SCALE ALIGNMENT

1. Place the input to the RGB (Aux 5) or YPb Pr (Aux 4) mode. Connect a computer or computer monitor generator to the Aux 5 input or a compo-
nent generator to Aux 4.
2. Preset G2 controls counterclockwise.
3. Turn green G2 clockwise to make the menu visible.
4. Enter SAM mode by entering 0, 6, 2, 5, 9, 6, and status buttons on the remote. Select the GDE mode and select WHITE TONE.
5. Set the brightness, picture, and sharpness to their center position. Select a black raster pattern on the computer or computer monitor generator.
6. Place a scope set to measure DC on each cathode to determine the dominant (lowest) color.
7. Adjust the SUB BRIGHTNESS control to set the black level equal to 180V on the scope.
8. Move the probe to the remaining cathodes and adjust the corresponding cutoff registers to make the black part of the waveform at 180V.
9. Set the corresponding G2 control to just make cutoff for the black part of the waveform for that CRT.
10. Remove the scope.
11. Apply a grayscale pattern to the set.
12. Adjust the Drive Controls to achieve proper white balance.
13. Press the Menu button to return to the SAM menu. Exit the Service mode by turning the set Off.

WHITE TONE

Name	Value
Normal Cutoff Red	30
Normal Green Cutoff	27
Normal Blue Cutoff	31
Normal Red Drive	20
Normal Green Drive	42
Normal Blue Drive	27
Cool Cutoff Red	+0
Cool Cutoff Green	+0
Cool Cutoff Blue	+0
Cool Drive Red	-7
Cool Drive Green	-6
Cool Drive Blue	+0
Warm Cutoff Red	+0
Warm Cutoff Green	+0
Warm Cutoff Blue	+0
Warm Drive Red	+7
Warm Drive Green	+4
Warm Drive Blue	-6

ELECTRICAL FOCUS ADJUSTMENT

Before starting the following adjustment procedures set the picture, sharpness, brightness, and tint controls to midrange and the color control to minimum.

1. Remove the back cover of the set and the light shield, turn the set on and apply an NTSC crosshatch pattern signal into the antenna terminal. The crosshatch pattern will appear clearer if the front of the screen is covered with a dark cloth.
2. Cover two of the CRT output lenses with cardboard pieces, or other non-conductive opaque material, to observe the magnified reflection of the other CRT on the back side of the viewing screen.
3. Adjust the CRT's focus control, located on the focus block, for the sharpest raster image.
4. Confirm correct focus by viewing the screen from the front of the set.
5. Repeat steps 2 through 4 to adjust the focus of the two remaining CRT's.

OPTICAL FOCUS

Before beginning the following adjustment procedures, set the customer picture, sharpness, brightness, and tint controls to midrange and the customer color control to minimum.

1. Remove back cover of the set and the light shield, then turn these on and apply an NTSC crosshatch pattern signal into the antenna terminal. The crosshatch pattern will appear clearer if the front of the screen is covered with a dark cloth.
2. Cover two of the CRT output lenses with cardboard pieces, or other non-conductive opaque material, and observe the magnified reflection of the other picture tube on the backside of the viewing screen.
3. Loosen the lens retaining wing nuts on the CRT focus assembly.
4. Move the wing nut in the slot of the uncovered lens to locate the optimum optical focus, viewing the picture from the back side of the screen, re-tighten the wing nut.
5. Confirm correct focus by viewing the screen from the front of the set.
6. Repeat steps 2 through 5 to adjust the focus of the two remaining CRT's.

CUSTOMER SERVICE MODE

All HDRPTV sets are equipped with the Customer Service Mode (CSM). CSM is a special service mode that can be activated and deactivated by the customer, by request of the service technician/dealer in order to identify the status of the set. This CSM is a read only mode, and modifications in this mode are not possible.

Entering the Customer Service Mode.

To enter the Customer Service Mode press the mute button on the remote and any button on the keyboard (channel up, channel down, volume up, volume down) on the set simultaneously for at least 4 seconds. Once the CSM is activated picture and sound settings are set to nominal levels and modes that interfere with the behavior of the set are switched off (sleep timer, auto standby, etc.). NOTE: When CSM is entered, CSM may flash or may stay constant in the upper right corner.

Changing the system setting of a preset.

Press the menu button on the remote. Select the INSTALL sub menu. Select the MANUAL STORE sub menu. Select and change the SYSTEM setting until picture and sound are correct. Select the STORE menu item.

Exit the Customer Service Mode.

To exit the Customer Service Mode press any button on the remote except channel up or channel down buttons. Switch off the set by pressing the power button on the remote or the set. Exiting CSM resets the set back to its initial values.

The Customer Service Mode Information Screen

Upon entry into the Customer Service Mode the following screen will appear.

Display of CSM Screen

	CSM
1	HRS: 027A SWID: LCHDR: 2US1-TTR-2-2.045
2	CODES: 0 0 0 0 0 0 0
3	OPT: 254 122 247 174 46 0 0 0
4	
5	No Signal
6	
7	
8	
9	
10	SOURCE: 96
11	SOUND: MONO
12	VOLUME: 0
13	BALANCE: 1
14	TINT: 50
15	COLOR: 41
16	BRIGHTNESS 50
17	PICTURE 41

The Customer Service Menu shows the following information:

Line 1 HRS: nnnn and SWID: 2US1-BBC-X.YY. HRS: indicates the accumulated total of operational hours in hexadecimal format, standby hours are not counted as operating hours. SWID: indicates software identification of the main microcontroller. 2US1-TTR-100. US1 indicates the software type and the supported languages, US is NAFTA region, 1 is the main software language version number and 2.045 is the subversion number.

Line 2 CODES: is the error code buffer and displays the last 7 errors.

Line 3 OPT: option bits control software and hardware functionality. An option byte or option number represents 8 of those bits. Each option number is displayed as a number between 0 and 255. The set may not work correctly when an incorrect option code is set.

Line 4: SYSTEM : AUTO. Indicates which color and sound system is installed for this preset: NTSC, PAL,SECAM.

Line 5: NO SIGNAL. Indicates that the set is not receiving an ident signal on the selected source. This may be caused by: absent or bad antenna signal or antenna not connected; no preset channel is stored at this program number; or the tuner is faulty. If the tuner is the problem line 2: CODES will contain number 13 or 16; check the tuner and replace or repair if necessary.

Line 6: TIMER ON. Indicates that the on/off timer is running. The following may be caused by the activation of the sleep timer: the set may turn on from standby or may switch to a different channel without using either the remote or the set. To switch off the activation timer: select TIMER in the FEATURE menu; select ACTIVATE in the TIMER menu. Set to OFF with the left or right cursor button.

Line 7: CHANNEL BLOCKED. Indicates that all channels are locked except the selected channel. The following may be generated due to locked channels: set cannot be switched on from standby with the set buttons; or channel up and channel down buttons on the set do not function. Use remote to disable the LOCK feature: select FEATURE menu; select LOCK; and set to OFF.

Line 8: NOT REFERED. Indicates that at least one channel is deleted as a preferred channel, by default, all channels are skipped. SKIPPED will always be displayed in CSM unless all the channels are not skipped. To add a channel as a selected channel to the list of preferred channels: select INSTALL menu; CHANNEL EDIT; ADD/DELETE; and set to ADD with the left or right cursor buttons.

Line 9: HOTELMODE ON. The Hotel mode has been activated.

Line 10: SOURCE. Indicates which SOURCE is installed for this preset: AV1; AV2; SVHS2; or channel number (8).

Line 11: SOUND. Indicates which sound mode is installed for this preset: Mono; Stereo; SAP; NICAM; L1; L2; Virtual; or Digital.

Line 12: VOLUME. Value indicates level at CSM entry.

Line 13: BALANCE. Value indicates level at CSM entry.

Line 14: TINT. Value indicates level at CSM entry.

Line 15: COLOR. Value indicates level at CSM entry.

Line 16: BRIGHTNESS. Value indicates level at CSM entry.

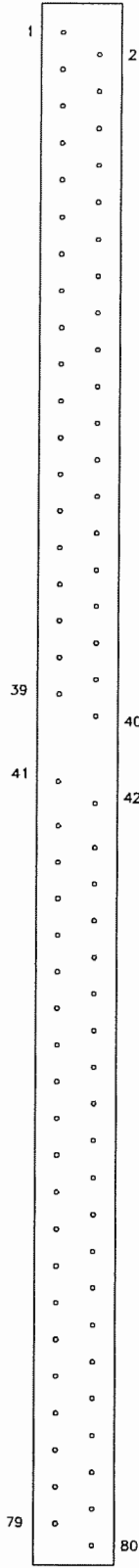
Line 17: PICTURE. Value indicates level at CSM entry.

M1020 CONNECTOR INFORMATION

M1020 VOLTAGE CHART (BOTTOM VIEW)

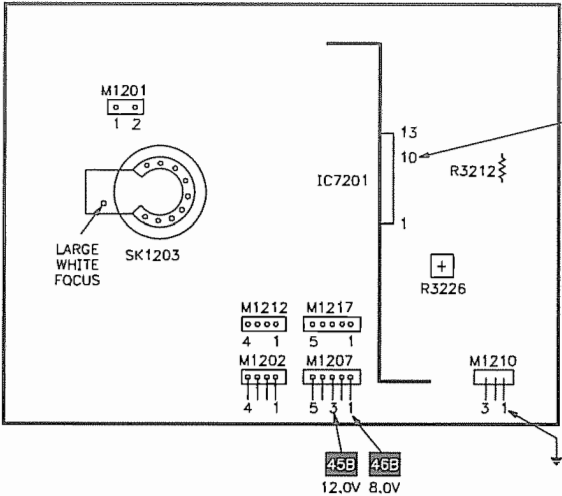
PIN	VOLTAGE		PIN	VOLTAGE
1	5.6V		41	8.3V
2	1.3V		42	0V
3	6.0V		43	8.4V
4	1.9V		44	0V
5	0V		45	5.0V
6	1.0V		46	3.2V
7	1.4V		47	3.2V
8	0V		48	5.0V
9	2.8V		49	5.0V
10	0V		50	.3V
11	2.4V		51	0V
12	0V		52	4.4V
13	0V		53	4.4V
14	0V		54	0V
15	1.7V		55	0V
16	2.4V		56	0V
17	0V		57	0V
18	0V		58	4.4V
19	0V		59	0V
20	0V		60	4.4V
21	0V		61	0V
22	0V		62	1.3V
23	1.5V		63	1.0V
24	1.4V		64	1.4V
25	1.2V		65	0V
26	1.4V		66	0V
27	0V		67	.2V
28	.05V		68	.2V
29	.09V		69	0V
30	0V		70	0V
31	0V		71	0V
32	.19V		72	NC
33	.1V		73	NC
34	0V		74	0V
35	0V		75	3.4V
36	.5V		76	3.4V
37	.09V		77	.8V
38	0V		78	3.1V
39	0V		79	3.3V
40	5.0V		80	.3V

M1020 TERMINAL GUIDE (BOTTOM VIEW)

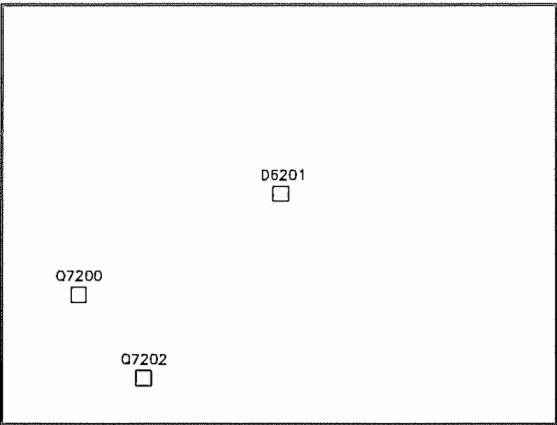


PLACEMENT CHART

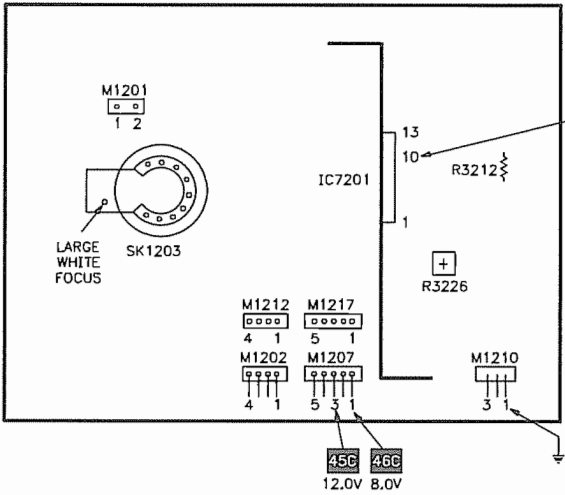
BLUE CRT BOARD - TOP VIEW



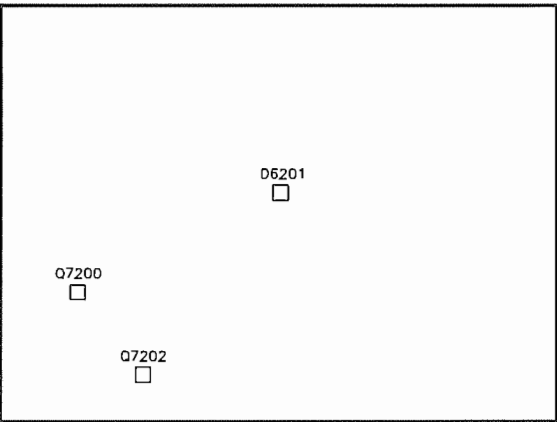
BLUE CRT BOARD - BOTTOM VIEW



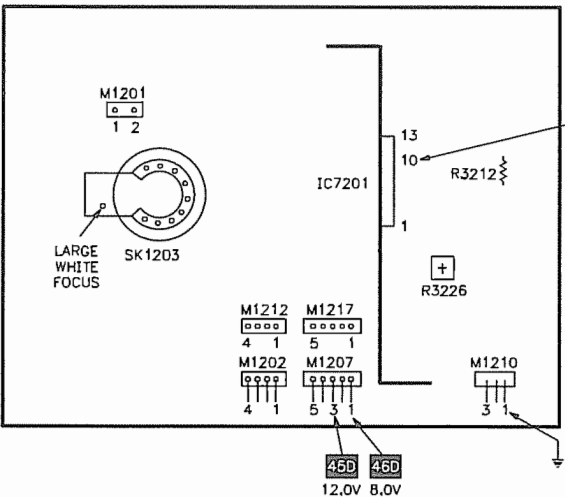
GREEN CRT BOARD - TOP VIEW



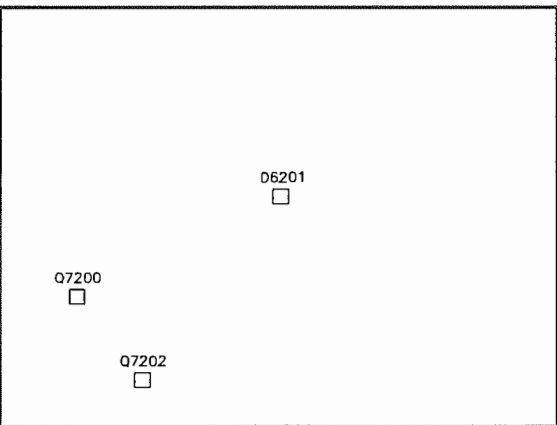
GREEN CRT BOARD - BOTTOM VIEW



RED CRT BOARD - TOP VIEW

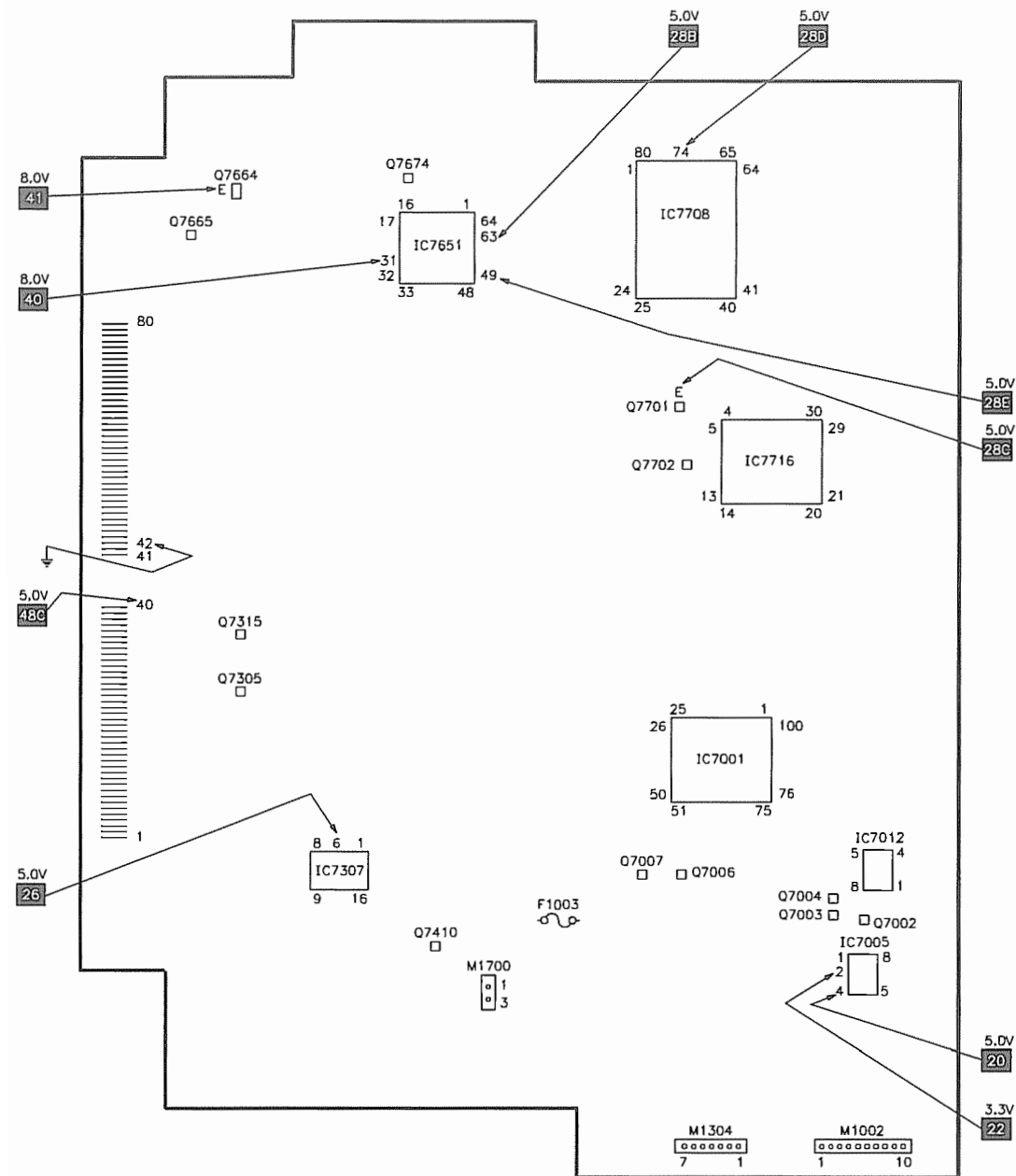


RED CRT BOARD - BOTTOM VIEW

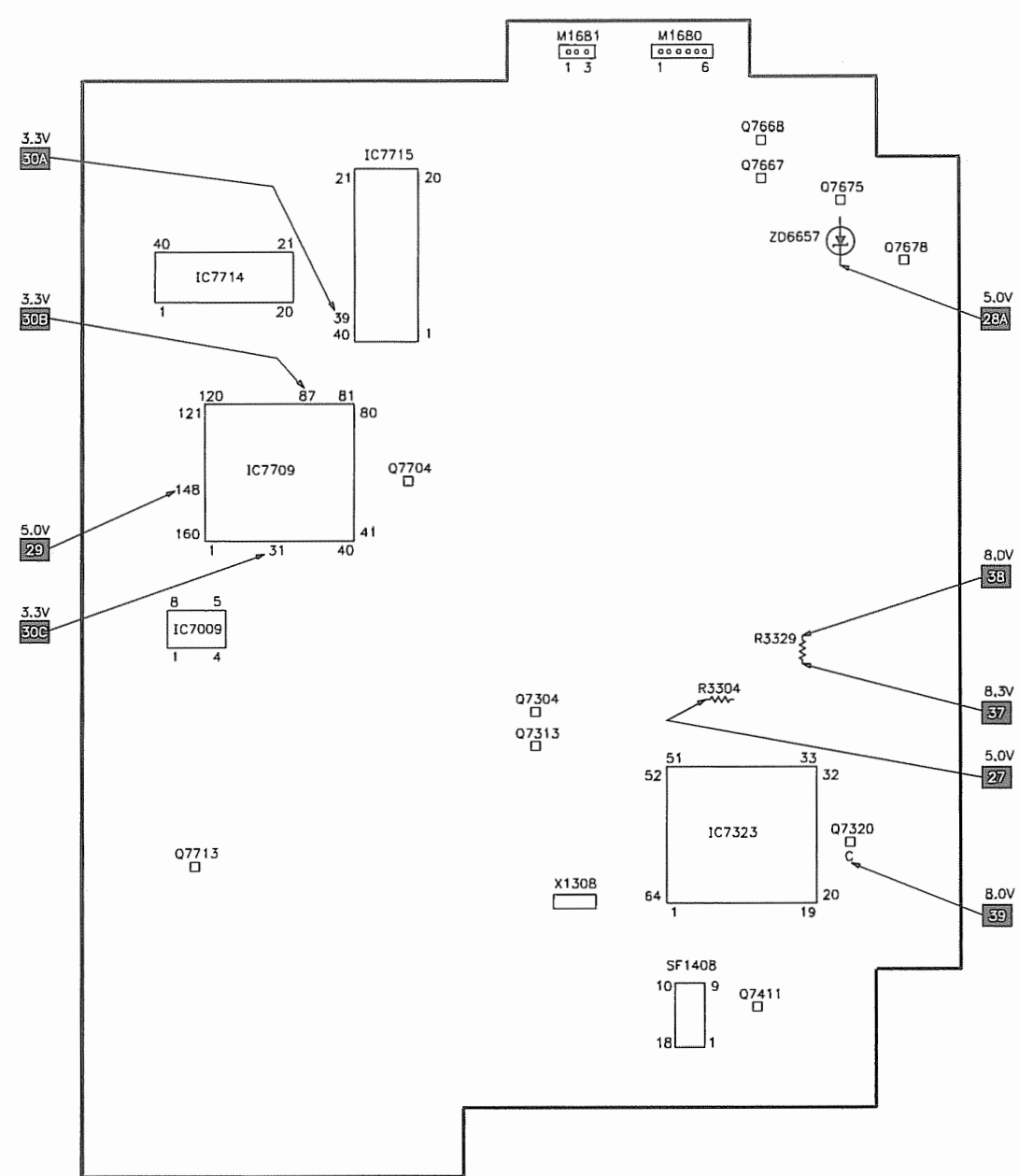


PLACEMENT CHART continued

SSB BOARD - TOP VIEW

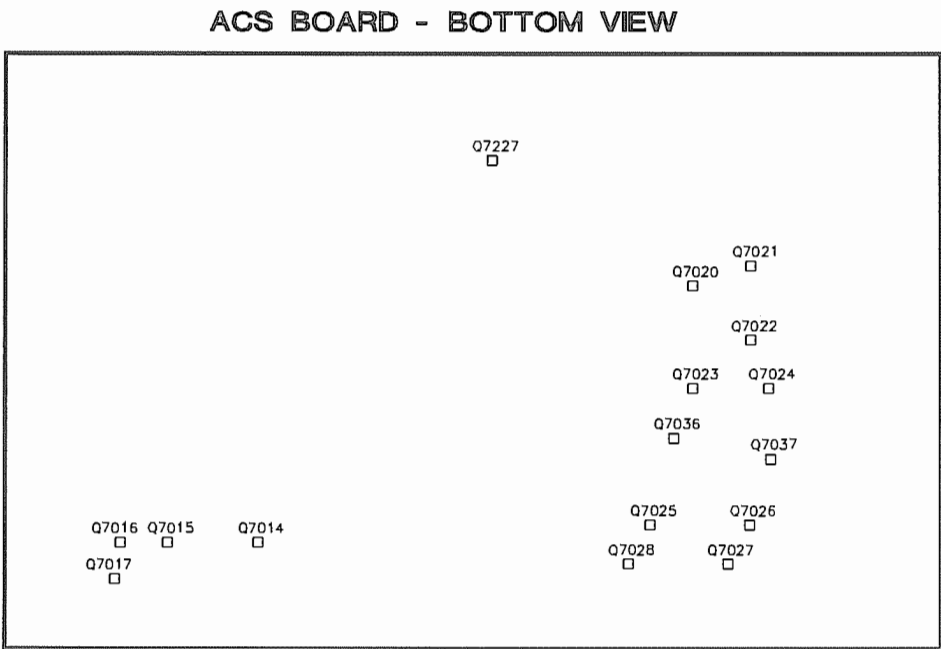
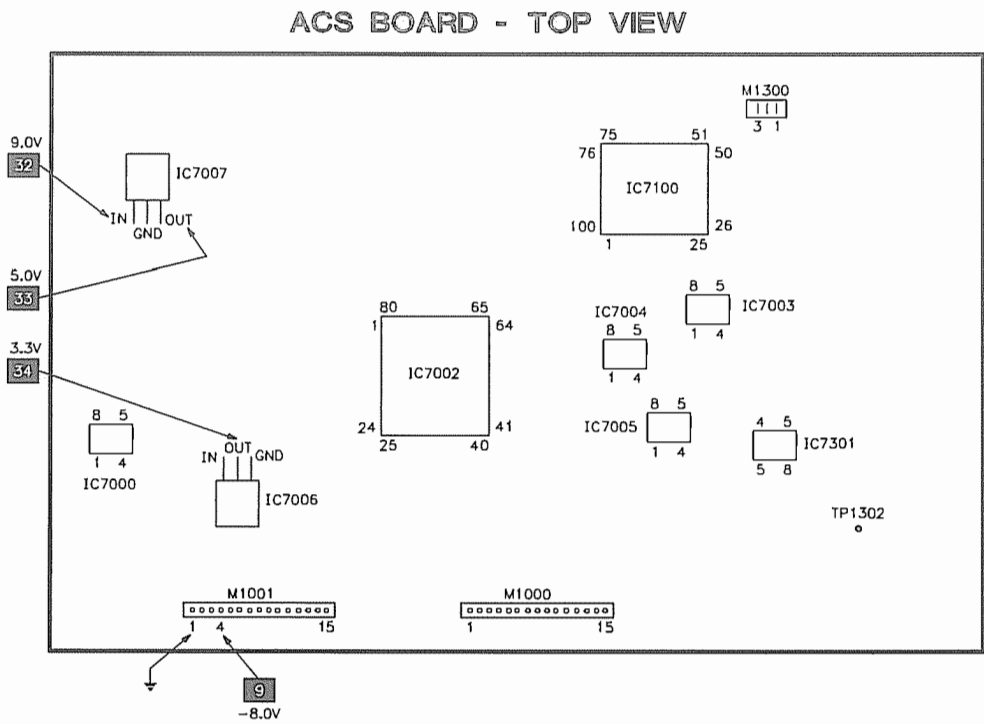
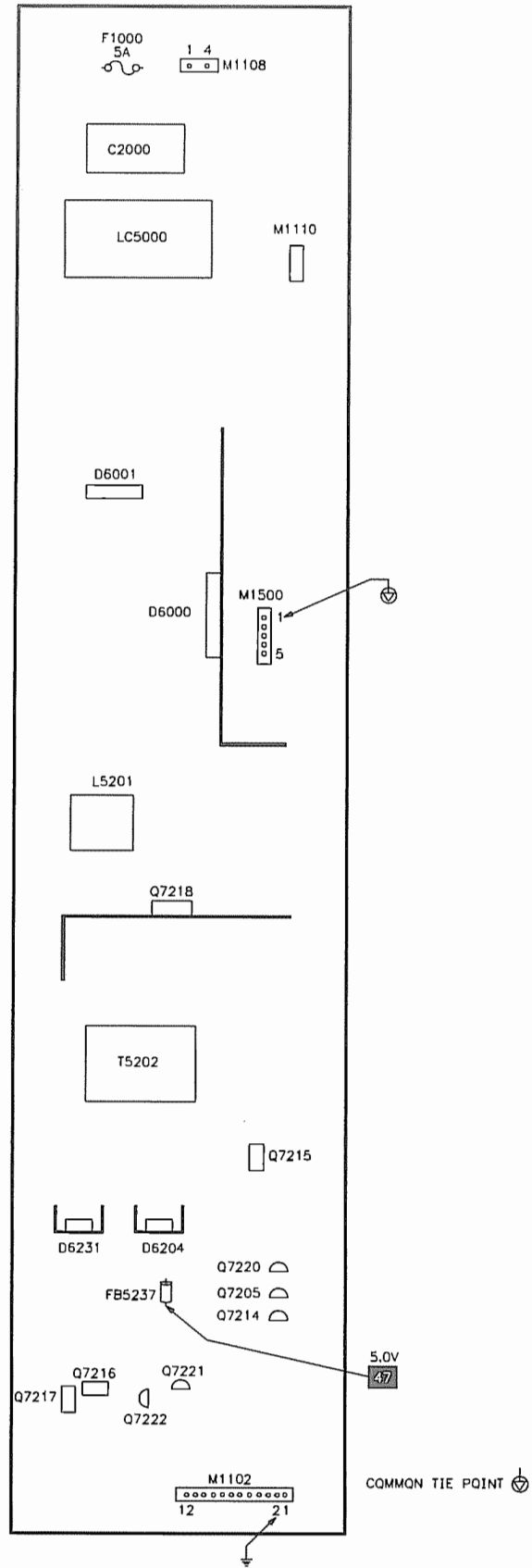
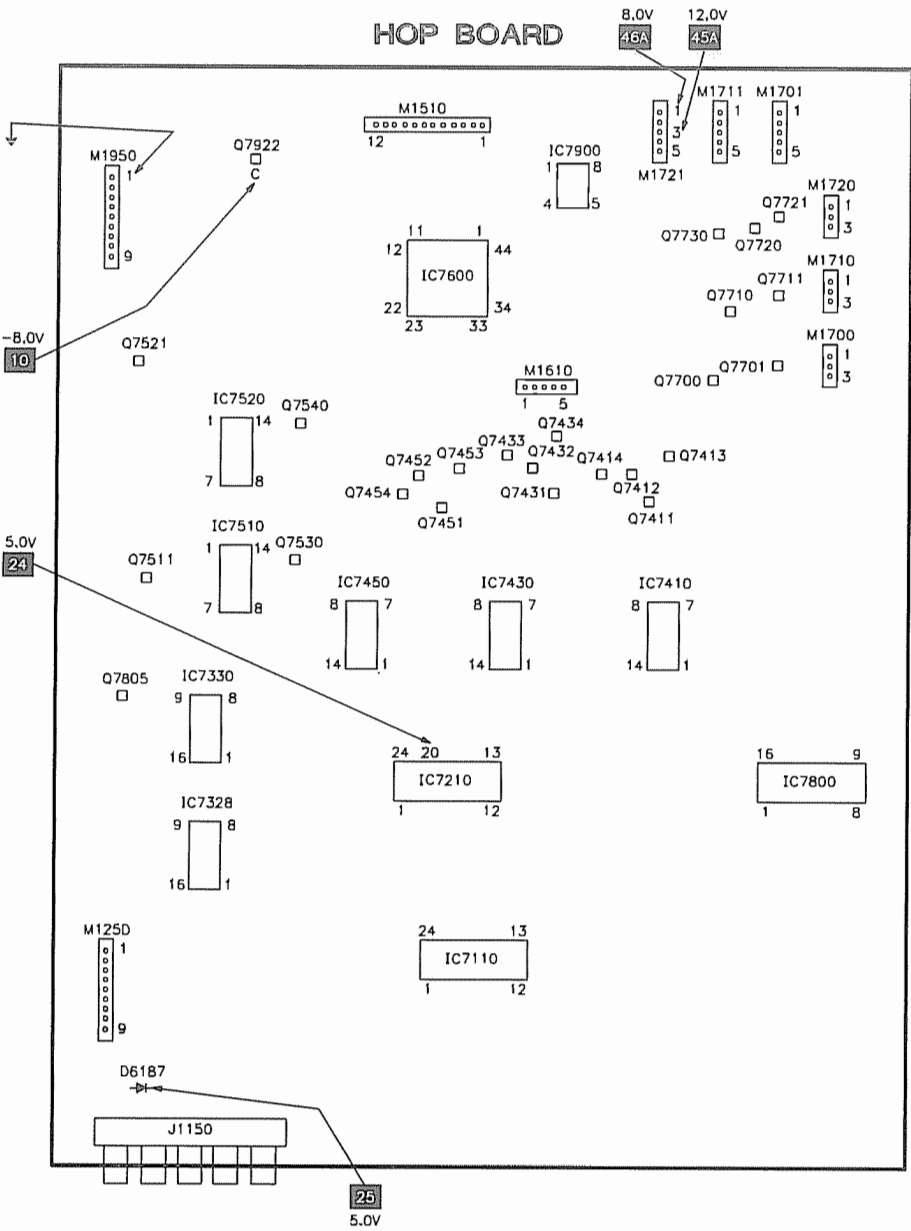


SSB BOARD - BOTTOM VIEW

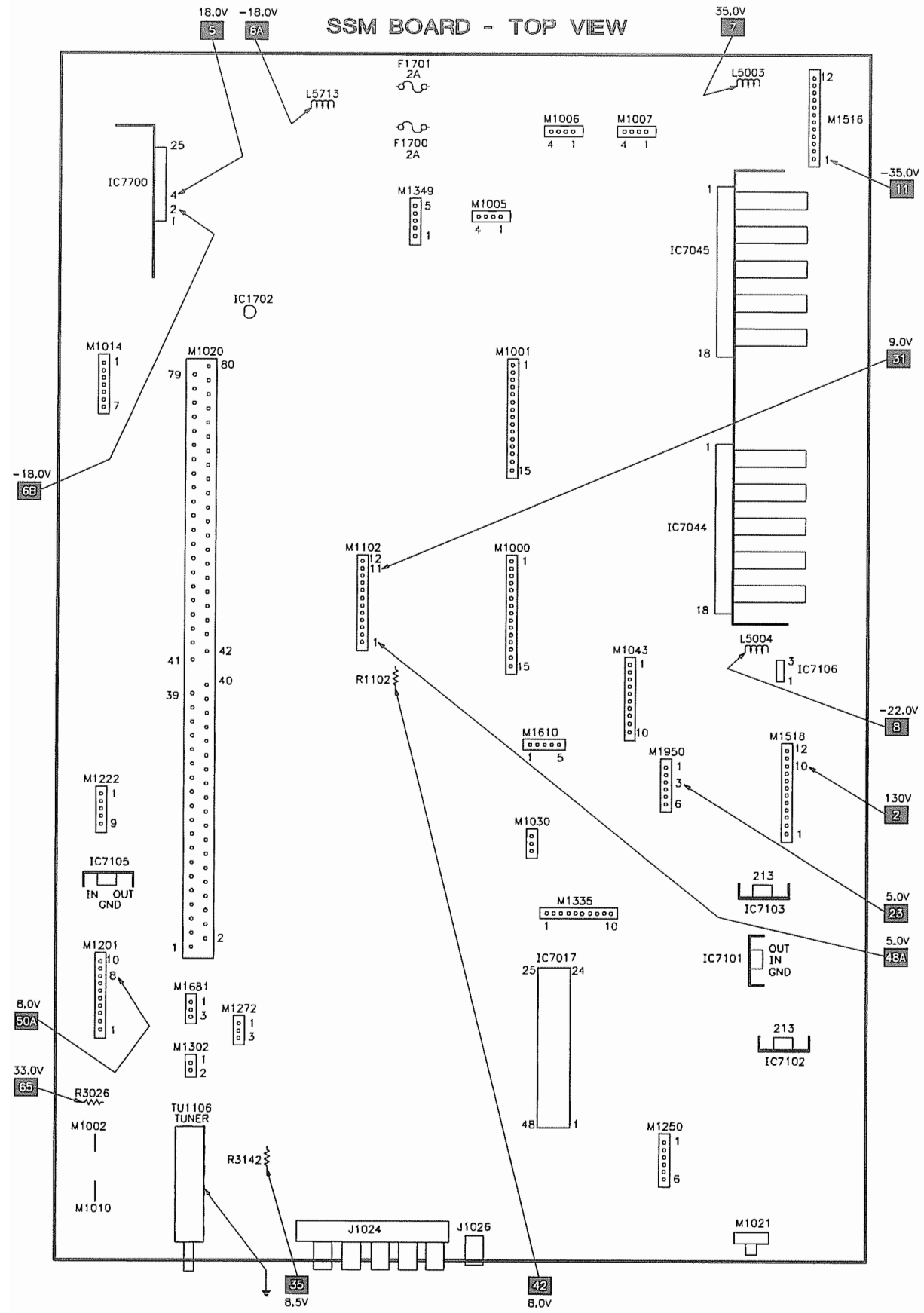


PLACEMENT CHART continued

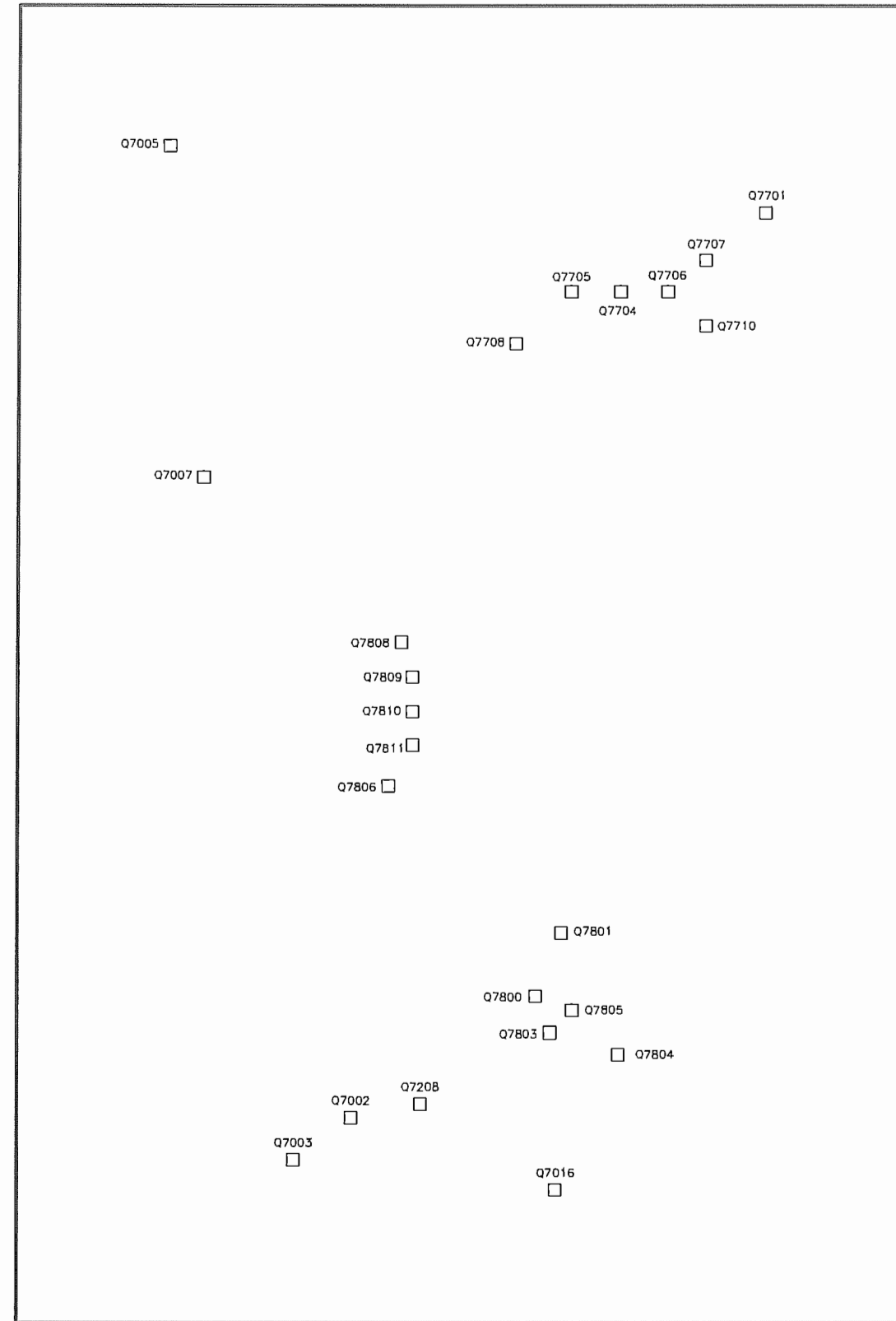
POWER SUPPLY BOARD



PLACEMENT CHART continued

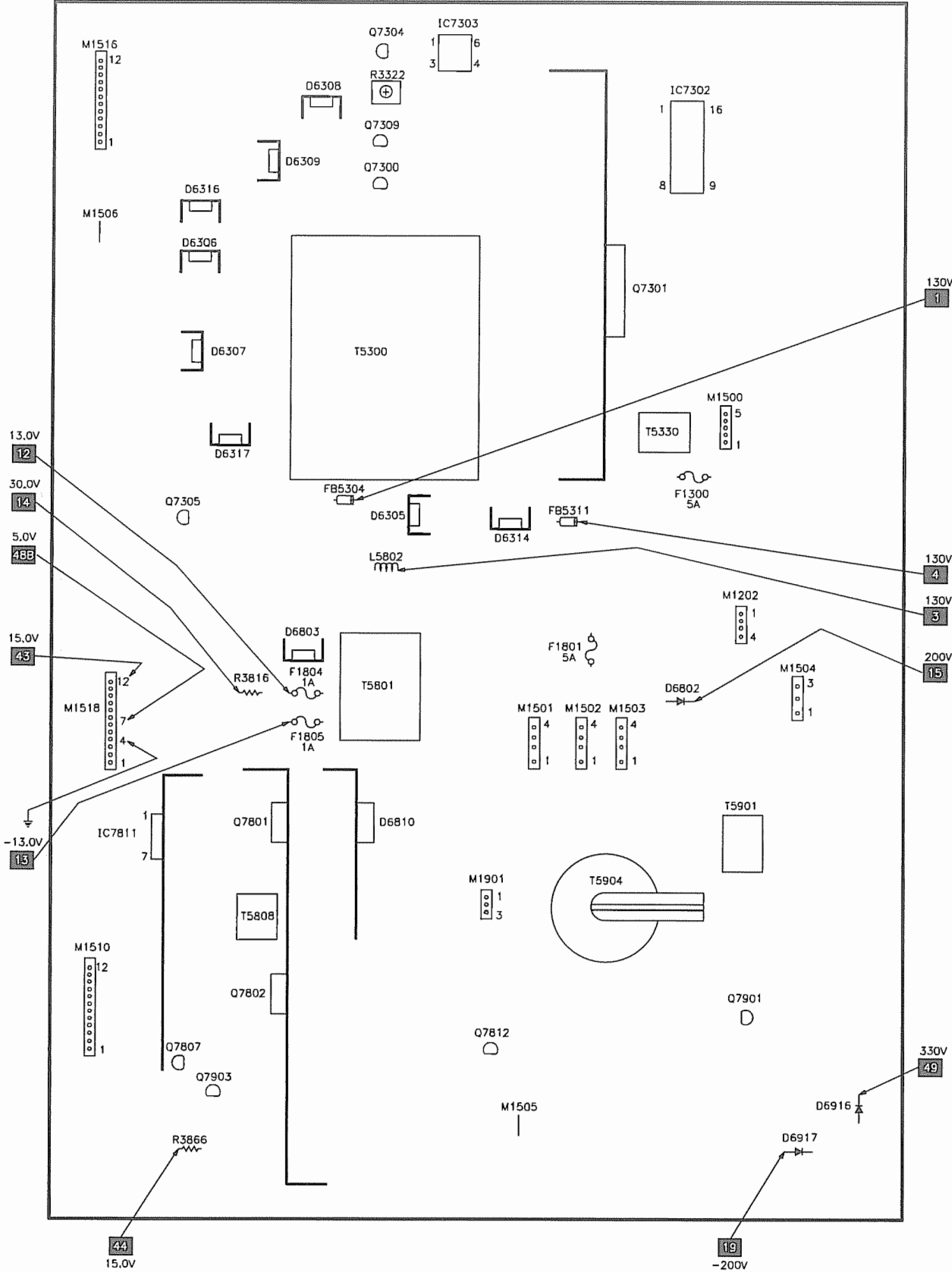


SSM BOARD - BOTTOM VIEW

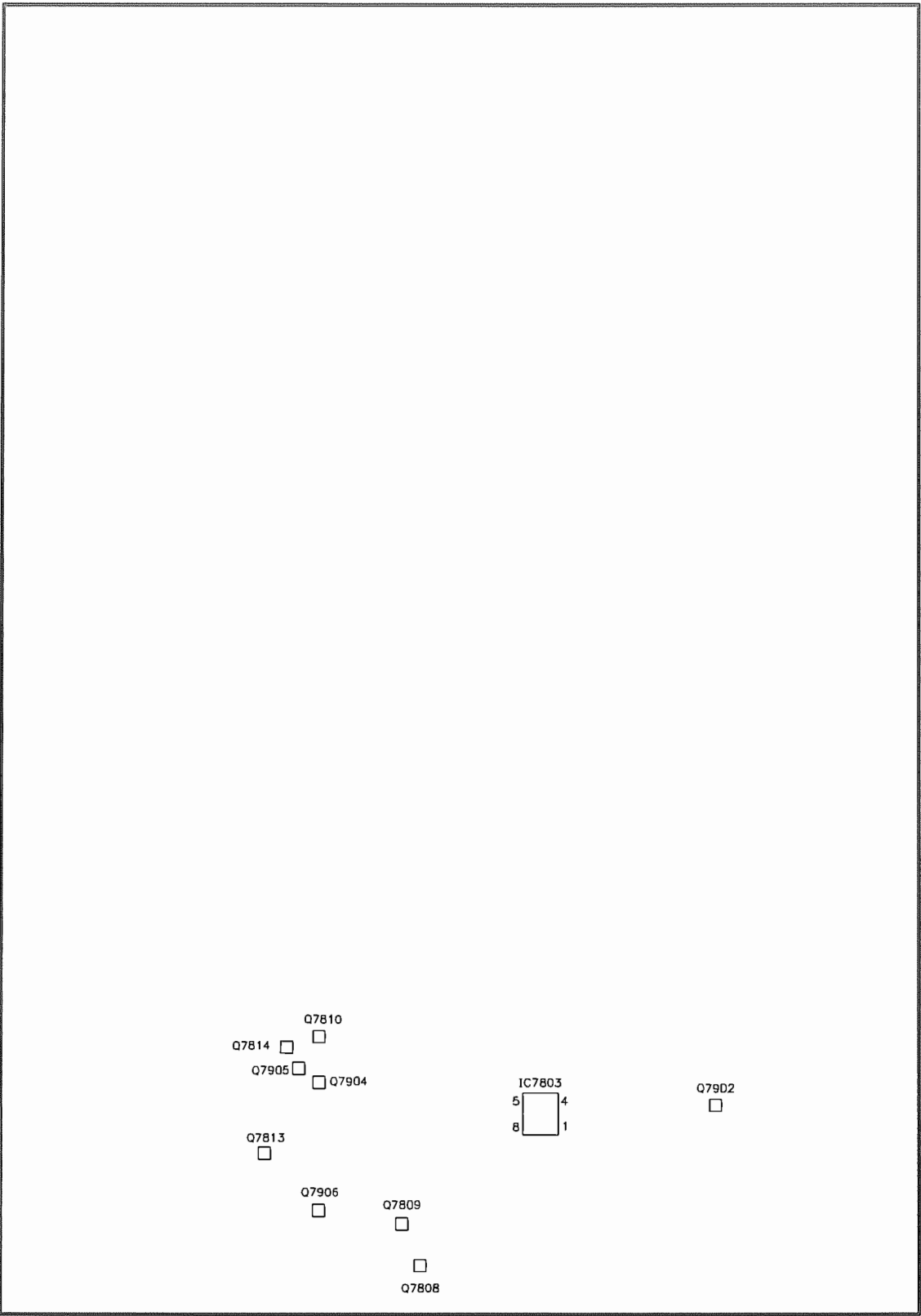


PLACEMENT CHART continued

LSB BOARD - TOP VIEW



LSB BOARD - BOTTOM VIEW



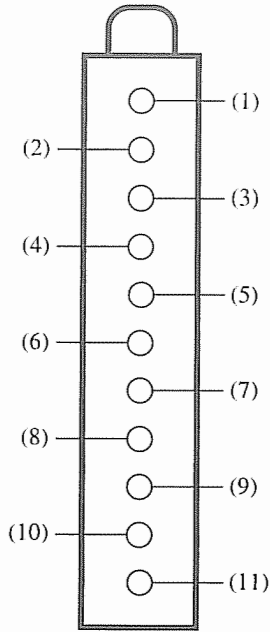
TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	4.0V	4.0V	3.9V
(2) TL1	.8V	4.6V	5.1V
(3) ADD	4.8V	4.2V	4.8V
(4) SCL	3.5V	3.3V	3.2V
(5) SDA	3.1V	3.1V	3.1V
(6) NC1	4.8V	4.8V	4.8V
(7) V SUPPLY	4.8V	4.8V	4.8V
(8) NC2	0V	0V	0V
(9) BTL	33.2V	33.3V	33.4V
(10) NC3	0V	0V	0V
(11) IF1	0V	0V	0V

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

MAIN TUNER TERMINAL GUIDE



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.
D6301	BYV95C	9335 001 80133	NTE569
D6302, 03	1N5062	9330 764 50133	NTE506
D6304	BY229X-600	9340 380 20127	-
D6306 Thru			
D6309	BY229X-600	9340 380 20127	-
D6310	BYV95A	9335 000 90133	NTE571
D6313	1N4148	9330 839 90133	NTE519
D6314, 16, 17	BY229X-600	9340 380 20127	-
D6318	BYV95C	9335 001 80133	NTE569
D6320, 21	1N4148	9330 839 90133	NTE519
D6801	BY229X-200	9340 380 00127	-
D6802	BYV95C	9335 001 80133	NTE569
D6803	BY229X-200	9340 380 00127	-
D6805, 06	BYV27-200	9335 526 80133	NTE588
D6809	BYD33J	9337 234 20133	NTE580
D6810	BYM357DX	9340 560 29127	-
D6811	BYV27-200	9335 526 80133	NTE588
D6818	BAS216	9340 255 30115	NTE631
D6822	BYV95C	9335 001 80133	NTE569
D6827	BYV27-200	9335 526 80133	NTE588
D6904	BAS216	9340 255 30115	NTE631
D6909	1N4148	3198 010 10010	NTE519
D6910	BAT85	9336 247 60133	NTE585
D6812, 14	BAS316	3198 010 10630	NTE633
D6915, 16	BYV27-600	9340 418 70133	-
D6917	BYV27-400	9340 366 90133	-
D6919	BAT254	9340 393 00115	NTE585
IC7302	MC44603AP	9322 108 36682	-
# IC7303	CQY80NG	9338 941 50682	-
IC7304, 05	TL431BCLP	9322 115 98676	NTE999
IC7803	TDA8601T/C1	9351 538 90518	-
IC7811	TDA8177	9322 066 43687	-
Q7300	BC547B	3198 020 40030	NTE123AP
Q7301	STW13NB60	9322 121 46687	-
Q7309	BC547B	3198 020 40030	NTE123AP
Q7801	BU2520AF	9340 153 80127	NTE2354
Q7802	2SK2232	9322 135 90687	-
Q7807	BSN304	9340 235 30126	-
Q7808, 09, 10	BC847B	3198 010 42030	NTE2646
Q7812	BF423	9332 593 60126	NTE288
Q7813	BC847B	3198 010 42030	NTE2646
Q7814	BC857B	3198 010 42150	NTE2409
Q7901	BF487	9337 626 60112	-
Q7902	BC847B	3198 010 42030	NTE2646
Q7903	BC327-25	3198 020 43430	NTE298
Q7904	BC847B	3198 010 42030	NTE2646
Q7905	BC857B	3198 010 42150	NTE2409
Q7906	BC847B	3198 010 42030	NTE2646

Item No.	Type No.	Mfr. Part No.	NTE Part No.
ZD6804	BZX79-C4V7	3198 010 24780	NTE5009A
ZD6812	BZX79-C68	3198 010 26890	NTE5045A
ZD6813, 14	BZX284-C10	9340 386 80115	-
ZD6816	BZX79-C68	3198 010 26890	NTE5045A
ZD6819	BZX79-C18	3198 010 21890	NTE5027A
ZD6820, 24, 25	BZX284-C10	9340 386 80115	-
ZD6826	BZX79-C18	3198 010 21890	NTE5027A
ZD6828	BZX284-C10	9340 386 80115	-
ZD6832	BZX284-C15	9340 387 20115	-
ZD6902	BZX79-C18	3198 010 21890	NTE5027A
ZD6903	BZX79-C4V7	3198 010 24780	NTE5009A
ZD6905	BZX79-C3V9	3198 010 23980	-
ZD6906	BZX79-C8V2	3198 010 28280	NTE5016A
ACS BOARD			
D6000, 01, 06	BAS216	9340 255 30115	NTE631
D6308 Thru			
D6315	BAS216	9340 255 30115	NTE631
IC7000	M24128-MN6	9322 117 46668	-
IC7002	STV2050A	9322 169 57671	-
IC7003, 04, 05	LM833D	9322 068 82668	NTE891SM
IC7006	LD1117DT33C	9322 119 88668	-
IC7007	L78M05CDT	9322 104 47668	-
IC7100	SAA5677/HL/M1	9352 692 99557	-
IC7301	TPS3707-33D	9322 173 08668	-
Q7014 Thru			
Q7017	BC847B	3198 010 42030	NTE2646
Q7020	BC847B	3198 010 42030	NTE2646
Q7021	BC857B	3198 010 42150	NTE2409
Q7022, 23	BC847B	3198 010 42030	NTE2646
Q7024, 25	BC857B	3198 010 42150	NTE2409
Q7026, 27	BC847B	3198 010 42030	NTE2646
Q7028	BC857B	3198 010 42150	NTE2409
Q7036, 37	BC847B	3198 010 42030	NTE2646
Q7227	BF570	9338 144 20215	-
CRT BOARD (BLUE, GREEN, RED)			
D6200	BYD33M	9337 410 30133	NTE571
D6201	BAS21	9335 020 40215	NTE592
D6204	BAS316	3198 010 10630	NTE633
IC7201	TDA612Q/N2	9352 626 34112	-
Q7200, 02	BF570	9338 144 20215	-
DVI BOARD			
D6001	BAS316	3198 010 10630	NTE633
D6002	BAV90	3198 010 10620	-
D6003	BAV99	3198 010 10620	-
D6004	BYG10J	9322 099 61685	-
IC7001	LD1117DT33	9322 134 45668	-

PARTS LIST continued

Item No.	Type No.	Mfr. Part No.	NTE Part No.
IC7002	SII907BCQ52	9322 183 616 82	-
IC7003	M24C02-WMN6	9322 145 26668	-
IC7005	74LVC14AD	9352 607 37118	-
Q7006, 07	BSN20	9340 125 00235	-
HOP BOARD			
D6151, 52	BAS316	3198 010 10630	NTE633
D6161, 62	BAS316	3198 010 10630	NTE633
D6171, 72	BAS316	3198 010 10630	NTE633
D6181, 82	BAS316	3198 010 10630	NTE633
D6186, 87	BAS316	3198 010 10630	NTE633
D6331	BAS316	3198 010 10630	NTE633
D6495	BAS316	3198 010 10630	NTE633
D6643	BAS316	3198 010 10630	NTE633
D6963	S1D	9322 128 69685	NTE125
IC7110	BA7657F	9322 115 62668	-
IC7210	BA7657F	9322 115 62668	-
IC7328	74HC4538D	9337 149 10653	-
IC7330	74HC157D	9337 137 40653	-
IC7410, 30, 50	MC1496D	9339 656 40668	-
IC7510, 20	MC1496D	9339 656 40668	-
IC7600	TDA9332H/N2	9352 625 21557	-
IC7800	TDA8444T/N4	9350 897 50118	-
IC7900	LM393D	9339 849 10668	NTE943SM
Q7411	BF570	9338 144 20215	-
Q7412, 13, 14	BF550	9334 509 00215	NTE2408
Q7431	BF570	9338 144 20215	-
Q7432, 33, 34	BF550	9334 509 00215	NTE2408
Q7451	BF570	9338 144 20215	-
Q7452, 53, 54	BF550	9334 509 00215	NTE2408
Q7511, 21	BF570	9338 144 20215	-
Q7530, 40	BF570	9338 144 20215	-
Q7700	BF570	9338 144 20215	-
Q7701	BF550	9334 509 00215	NTE2408
Q7710	BF570	9338 144 20215	-
Q7711	BF550	9334 509 00215	NTE2408
Q7720	BF570	9338 144 20215	-
Q7721, 30	BF550	9334 509 00215	NTE2408
Q7805	BC847B	9335 895 90215	NTE2646
Q7922	BC807-25	9336 285 70215	NTE2407
ZD6923	BZM55-C6V8	9340 386 40115	-
KEYBOARD			
# D6002	TLDR5400	9322 110 34682	-
ZD6009, 11	BZX284-C6V8	9340 386 40115	-
ZD6013 Thru			
ZD6016	BZX284-C6V8	9340 386 40115	-

Item No.	Type No.	Mfr. Part No.	NTE Part No.
PIP BOARD			
D6412, 15	BAS316	3198 010 10630	NTE633
IC7301	TDA8887H/N1	9352 638 72557	-
IC7401, 02	HEF4053BT	9333 729 60653	NTE4053BT
IC7403	M62320FP	9322 127 15668	-
IC7501	Z86130-12SSC	9322 147 01668	-
IC7801	SAB9081H/N4	9352 639 81557	-
IC7802	LD1117V33	9322 123 54687	-
IC7803	TDA8601T/C1	9351 538 90518	-
IC7804	74HC1G32GW	9352 457 50115	-
Q7305, 07	BC847BW	3198 010 42310	NTE2646
Q7331	BC857BW	3198 010 42320	-
Q7337	BC847BW	3198 010 42310	NTE2646
Q7368, 85, 86	BC847BW	3198 010 42310	NTE2646
Q7411, 12	BC847BW	3198 010 42310	NTE2646
Q7421, 22	BC857BW	3198 010 42320	-
Q7434	BC369	9332 592 50126	NTE294
Q7438	BC847BW	3198 010 42310	NTE2646
Q7805 Thru			
Q7810	BC847BW	3198 010 42310	NTE2646
Q7824, 28, 32	BC847BW	3198 010 42310	NTE2646
Q7871, 74	BC847BW	3198 010 42310	NTE2646
Q7876	BC857BW	3198 010 42320	-
Q7891, 92, 93	BC847BW	3198 010 42310	NTE2646
Q7894	BC857BW	3198 010 42320	-
Q7895	BC847BW	3198 010 42310	NTE2646
ZD6801, 02	UDZ-3.9B	3198 020 53980	-
POWER SUPPLY BOARD			
D6000, 01	GBU4JL-7002	9322 132 55667	-
D6203	BY229X-200	9340 380 00127	-
D6204	PBYR10100X	9340 555 24127	-
D6207	BYD33D	9337 234 00133	NTE552
D6231	PBYR10100X	9340 555 24127	-
D6236	1N4148	3198 010 10010	NTE519
IC7212	TL431BCLP	9322 115 98676	NTE999
# IC7213	CQY80NG	9338 941 50682	-
IC7218	TOP246Y	9322 166 44687	-
Q7205, 14	BC547B	3198 020 40030	NTE123AP
Q7215	IRF9Z24N	9322 134 76687	-
Q7216, 17	2SK2232	9322 135 90687	-
Q7220, 21, 22	BC547B	3198 020 40030	NTE123AP
ZD6240	-	3198 010 31090	-
SIDE JACK BOARD			
ZD6000 Thru			
ZD6013	BZM55-C6V8	3198 020 56880	-

PARTS LIST continued

Item No.	Type No.	Mfr. Part No.	NTE Part No.	Item No.	Type No.	Mfr. Part No.	NTE Part No.
SSB BOARD				IC7017	CXA2089S	9322 162 27682	-
D6003	BAS316	3198 010 10630	NTE633	IC7044, 45	STK392-120	9322 123 44682	-
D6304	BAS316	3198 010 10630	NTE633	IC7101	L7912CV	9337 107 20682	NTE967
D6312, 14, 15	BAS316	3198 010 10630	NTE633	IC7102	L7908CV	9322 069 79682	NTE965
D6316, 19	BAS316	3198 010 10630	NTE633	IC7103	L7912CV	9335 040 20682	NTE967
D6654, 58	BAS316	3198 010 10630	NTE633	IC7105	L7912CV	9335 202 90682	NTE967
IC7001	SAA5677/HL/M1	9352 692 99557	-	IC7106	LM317T	9337 220 80682	NTE956
IC7005, 09	LD1117D33	9322 116 74668	-	IC7403	TDA1308T/N1	9350 721 10115	-
IC7012	M24C32-WMN6	9322 124 74668	-	IC7700	TDA7490	9322 147 50667	-
IC7307	TDA9181T	9352 630 99118	-	Q7002, 03	BC847B	3198 010 42030	NTE2646
IC7323	TDA9321H/N2	9352 625 24518	-	Q7005, 07	BC817-25	3198 010 43230	NTE2406
IC7651	MSP3451G-FH-B8	9322 169 39702	-	Q7016, 25, 26	BC847B	3198 010 42030	NTE2646
IC7708	SAA4990H/V2	9352 067 50557	-	Q7208	BC847B	3198 010 42030	NTE2646
IC7709	SAA4978H/V204	9352 688 09557	-	Q7701	BC847B	3198 010 42030	NTE2646
IC7714, 15	MSM54V12222B-25JS	9322 183 81668	-	Q7704, 05	BC847B	3198 010 42030	NTE2646
IC7716	M87C257-90C1	9322 130 45668	-	Q7706	BC857B	3198 010 42150	NTE2409
Q7002	BC857B	3198 010 42150	NTE2409	Q7707	BC847B	3198 010 42030	NTE2646
Q7003, 04	BC847BW	3198 010 42310	NTE2646	Q7708	BC857B	3198 010 42150	NTE2409
Q7006, 07	PMBT2369	3198 010 43360	NTE2406	Q7710	BC847B	3198 010 42030	NTE2646
Q7013	PDTC144EU	3198 010 44330	-	Q7800	BC847B	3198 010 42030	NTE2646
Q7303	BC857BW	3198 010 42320	-	Q7801	BC857B	3198 010 42150	NTE2409
Q7304	PDTC144EU	3198 010 44330	-	Q7802	BC847B	3198 010 42030	NTE2646
Q7305, 20, 22, 75	BC847BW	3198 010 42310	NTE2646	Q7803	BC857B	3198 010 42150	NTE2409
Q7410	BC847BW	3198 010 42310	NTE2646	Q7804	BC847B	3198 010 42030	NTE2646
Q7411	BC847B	3198 010 42030	NTE2646	Q7805	BC857B	3198 010 42150	NTE2409
Q7413	BFS20	9330 921 11215	NTE2406	Q7806, 08	BC847B	3198 010 42030	NTE2646
Q7664, 65	BC847BPN	9340 425 30115	-	Q7809	BC857B	3198 010 42150	NTE2409
Q7668	BC857BW	3198 010 42320	-	Q7810	BC847B	3198 010 42030	NTE2646
Q7674	BC847CW	9340 217 80115	-	Q7811	BC857B	3198 010 42150	NTE2409
Q7675, 78	BC847BS	9340 425 20115	NTE2408	SCR6701	BT169B	9338 268 50126	NTE5404
Q7701	BC857BW	3198 010 42320	-	ZD6012, 13, 17	BZX284-C6V8	9340 386 40115	-
Q7702	BC847BW	3198 010 42310	NTE2646	ZD6019, 22	BZX284-C6V8	9340 386 40115	-
Q7704	PMBT2369	3198 010 43360	NTE2406	ZD6025, 26, 27	BZX284-C6V8	9340 386 40115	-
ZD6303	-	9340 389 00115	-	ZD6034	BZX284-C33	9340 388 00115	-
ZD6313	BZM55-C22	3198 020 52290	-	ZD6036	-	3198 020 54780	-
ZD6652	BZX384-C10	3198 020 51090	-				
ZD6657	PDZ-2.7B	9340 548 43115	-				
SSM BOARD				Item No.	Function/Rating	Mfr. Part No.	Notes
D6001, 02, 03	S1D	9322 128 69685	NTE125	# AC01	Line Cord	2422 070 98164	AC, Polarized
D6004	SB140	9339 577 60673	NTE585	C2301	.0022 10% 2kV	2020 558 90559	-
D6005	S1D	9322 128 69685	NTE125	C2302	470pF 10% 1kV	2020 558 90471	-
D6009, 10, 11	BAS216	9340 255 30115	NTE631	C2304	330pF 10% 1kV	2020 558 90554	-
D6014, 18, 20, 21	BAV99	9332 153 70215	NTE632	C2309	82pF 5% 50V NPO	3198 019 08290	-
D6023, 24, 28, 29	BAV99	9332 153 70215	NTE632	C2312, 15	470pF 10% 1kV	2020 558 90471	-
D6052, 53	BAS316	3198 010 10630	NTE633	C2319, 23, 29	470pF 10% 1kV	2020 558 90471	-
D6702	S1D	9322 128 69685	NTE125	C2350	470pF 10% 1kV	2020 558 90471	-
				C2361, 64	470pF 10% 1kV	2020 558 90471	-
				# C2390	.0022 20% 50V	2020 554 90173	-

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Item No.	Function/Rating	Mfr. Part No.	Notes
C2803, 05, 07	470pF 10% 1kV	2020 558 90555	-
C2811, 14	470pF 10% 1kV	2020 558 90555	-
C2817	560pF 10% 2kV	2020 558 90484	-
C2818	.0082 5% 2kV	2222 375 90173	-
C2840	.0022 10% 1kV	3198 019 52220	-
C2847	470pF 10% 1kV	2020 558 90555	-
C2902	.0022 10% 1kV	3198 019 52220	-
C2908	220pF 10% 2kV	2020 558 90478	-
C2918	.0022 10% 1kV	3198 019 52220	-
C2919	.001 10% 1kV	3198 019 61020	-
C2922, 24, 25	100pF 10% 1kV	3198 019 51010	-
# CRTB	CRT	9322 173 23682	Blue, P16LTG00BMB(U)
# CRTG	CRT	9322 173 21682	Green, P16LTG00HHA(U)
# CRTR	CRT	9322 173 22682	Red, P16LTG00RFA(U)
# F1300	Fuse	2422 093 00035	5Amp, 250V
# F1801	Fuse	2422 086 10783	2Amp, 250V
# F1804, 05	Fuse	2422 086 10779	1Amp, 250V
# FB1	Focus Block	2422 549 45511	15kV
FB5301 Thru			
FB5306	Ferrite Bead	3198 018 90020	-
FB5310 Thru			
FB5313	Ferrite Bead	3198 018 90020	-
FB5315	Ferrite Bead	3198 018 90020	-
FB5318, 19	Ferrite Bead	3198 018 90020	-
FB5320, 23, 24	Ferrite Bead	3198 018 90020	-
FB5810	Ferrite Bead	3198 018 90020	-
FB5811	Ferrite Bead	3198 018 90010	-
FB5903	Ferrite Bead	3198 018 90020	-
# HV5904	High Voltage Splitter	3122 268 32865	-
# L1 (1)	Red Yoke	2422 549 45509	-
# L2 (1)	Green Yoke	2422 549 45509	-
# L3 (1)	Blue Yoke	2422 549 45509	-
L5307	10μH	2422 535 95363	-
L5308	1μH	2422 535 95387	-
L5309	10μH	2422 535 95363	-
L5314, 16, 17	10μH	2422 535 95363	-
L5321	1μH	2422 535 95387	-
L5322	10μH	2422 535 95363	-
L5336	10μH	2422 535 95363	-
L5802	47μH	2422 535 95282	-
L5803	2.2μH	2422 535 91014	-
L5804	5.1μH	2422 549 45206	-
L5805	90μH	2422 536 00272	-
L5807	1.5μH	2422 535 95723	-
L5809	47μH	3198 018 24790	-
L5902	47μH	2422 535 95282	-
LC5330	Line Choke	2422 549 44041	-
# R3300	22K 5% 5W	2322 257 41223	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# R3301, 02	220 5% 5W	2322 251 41221	-
R3323	2700 1% 3/5W	2312 915 12702	-
R3324	100K 1% 3/5W	2312 915 11004	-
R3350	47K 1% 3/5W	2312 915 14703	-
R3352 Thru			
R3357	4700 1% 3/5W	2312 915 14702	-
# R3365	220 5% 5W	2322 251 41221	-
R3804, 05, 06	220 1% 3/5W	2312 915 12201	-
# R3810	1 5% 1/3W	2322 205 33108	-
R3813, 14	1870 1% 1/8W	2322 734 61872	-
# R3817, 22	1 5% 1/3W	2322 205 33108	-
# R3839, 40	4700 5% 5W	2322 257 41472	-
# R3846	1 5% 1/3W	2322 205 33108	-
# R3908	22 5% 1/3W	2322 205 33229	-
R3911	56K 1% 3/5W	2312 915 15603	-
# RY1305	Relay	2422 132 07314	Power
# SG1900	Surge Protector	2422 549 43675	-
SP1, 2	Speaker	2422 264 00455	8 Ohms, 15W
# T5300	SMT	2422 531 02507	-
# T5801	Horizontal Output	2422 531 02512	-
T5808	Horizontal Drive	2422 531 02515	-
T5901	DAF	2422 531 02434	-
	Coupler	3135 011 04281	Green
	Coupler	3135 011 04272	Blue or Red, 55" Models
	Coupler	3135 011 02555	Blue or Red, 60" Models
	Diaphragm	3135 013 01061	Coupler
	Lens	3135 037 50721	Delta, 260
	Lens	3135 034 00721	C Element, Clear
	Lens	3135 034 00731	C Element, Green
	Lens	3135 033 20201	Fresnel, 55" Models
	Lens	3135 033 20221	Fresnel, 60" Models
	Mirror	3135 037 51191	Mylar, 55" Models
	Mirror	3135 037 51201	Mylar, 60" Models
	PC Board	3135 037 10991	LSB
	Screen	3135 033 20091	Lenticular, 55" Models
	Screen	3135 013 03441	Lenticular 60" Models
	Screen	3135 034 01331	Protector, 55" Models
	Screen	3135 034 01341	Protector, 60" Models
	Transmitter	3128 147 14611	Remote, RC2061/01
ACS BOARD			
FB5006	Ferrite Bead	3198 018 90060	-
L5200	100μH	2422 535 94279	-
R3034	1000 1% 1/8W	2322 734 61002	-
R3240	24K 1% 1/8W	2322 734 62403	-
X1200	Resonator	2422 543 01095	12MHz
	PC Board	3135 037 11381	ACS

PARTS LIST continued							
Item No.	Function/Rating	Mfr. Part No.	Notes	Item No.	Function/Rating	Mfr. Part No.	Notes
CRT BOARD (BLUE, GREEN, RED)				S1004	Switch	2422 128 02742	Channel -
C2206	.001 10% 2kV	2020 558 90487	-	S1006	Switch	2422 128 02742	Standby
C2208, 18	100pF 10% 1kV	2020 558 90522	-	S1007	Switch	2422 128 02742	Source/Select
FB5200, 01	Ferrite Bead	3198 018 90020	-		PC Board	3135 037 10551	Keyboard
L5202, 03	470µH	3198 018 34770	-	PIP BOARD			
# R3212	22K 5% 2 1/2W	2322 195 63223	-	C3202	820pF 5% 50V NPO	3198 016 08210	-
# R3216	10 5% 1/8W	2322 750 61009	-	C2327, 28	33pF 5% 50V NPO	3198 016 33390	-
# R3217	1 5% 1/3W	2322 205 33108	-	FB5816, 18, 27	Ferrite Bead	3198 018 90070	-
# SG1205	Surge Protector	2422 549 43675	1.5kV	FB5834, 39	Ferrite Bead	3198 018 90070	-
# SG1206, 09	Surge Protector	2422 549 43073	-	FB5848, 49	Ferrite Bead	3198 018 90070	-
# SK1203	Socket	2422 500 80037	CRT, Blue, Green, or Red	FB5851, 53	Ferrite Bead	3198 018 90070	-
	PC Board	3135 037 10081	CRT, Blue, Green, or Red	L5261	5.6µH	3198 018 35680	-
DVI BOARD				L5309, 32, 33, 34	6.8µH	3198 018 66880	-
FB5002, 03	Ferrite Bead	3198 018 90040	-	L5349	-	3198 018 38270	-
FB5007 Thru				L5350, 51	15µH	3198 018 61590	-
FB5011	Ferrite Bead	3198 018 90040	-	L5501	6.8µH	3198 018 66880	-
L5004, 05, 06	1.5µH	3198 018 31580	-	R3315	39K 1% 1/10W	2120 108 92633	-
L5014, 15	5.6µH	3198 018 35680	-	R3326	1000 1% 1/10W	2120 108 91451	-
R3014	270 1% 1/8W	2322 734 62701	-	R3365	1000 1% 1/10W	2120 108 91451	-
	PC Board	3135 037 10371	DVI	# R3462	2.2 5% 1/3W	2306 204 03228	-
HOP BOARD				# R3862, 63	1 5% 1/3W	2306 204 03108	-
J1150	Jack	2422 026 05298	Assembly	SF1352	Filter	2422 549 43074	SAW
J1180	Jack	2422 026 05297	Assembly	TU7201	Tuner	2422 542 90077	PIP
L5410	-	3198 018 36870	-	X1327	Crystal	2422 543 00488	12MHz
L5411	1.5µH	3198 018 31580	-	X1334	Trap	2422 549 44043	4.5MHz
L5430	-	3198 018 36870	-	X1501	Crystal	2422 543 01069	32.768kHz
L5431	1.5µH	3198 018 31580	-		PC Board	3139 127 28331	PIP
L5450	-	3198 018 36870	-	POWER SUPPLY BOARD			
L5451	1.5µH	3198 018 31580	-	# C2000	.68 20% 275V	2222 336 29149	-
L5701, 11, 21	-	3198 018 38270	-	# C2002, 03	.0022 20% 50V	2020 554 90173	-
R3419, 39, 59	430 1% 1/8W	2322 734 64301	-	C2006 Thru			
R3616	39K 1% 1/10W	2120 108 92633	-	C2009	.001 10% 1kV	2020 558 90557	-
R3804	3000 1% 1/8W	2322 734 63002	-	# C2011, 12	470pF 10% 50V	2020 554 90169	-
X1601	Crystal	2422 543 01095	12MHz	# C2204	470pF 10% 50V	2020 554 90169	-
	PC Board	3135 037 10361	HOP	C2215, 16, 17	470pF 10% 1kV	3198 019 64710	-
KEYBOARD				C2218	330pF 10% 1kV	2020 558 90519	-
R3010	1500 1% 1/8W	2322 734 61502	-	C2292	.001 10% 1kV	2020 558 90557	-
R3011	750 1% 1/8W	2322 734 87501	-	C2294	330pF 10% 1kV	2020 558 90519	-
R3012	2000 1% 1/8W	2322 734 62002	-	# C2295	470pF 10% 50V	2020 554 90169	-
R3013	270 1% 1/8W	2322 734 62701	-	# F1000	Fuse	2422 093 00035	5Amp, 250V
R3015	2700 1% 1/8W	2322 734 62702	-	FB5204	Ferrite Bead	3198 018 90020	-
R3017	3900 1% 1/8W	2322 734 63902	-	FB5237	Ferrite Bead	3198 018 90020	-
RM6005	Receiver	9322 152 44687	Remote, TSOP1736	FB5243	Ferrite Bead	3198 018 90020	-
S1001	Switch	2422 128 02742	Volume -	L5234	10µH	2422 535 95363	-
S1002	Switch	2422 128 02742	Volume +	L5238	10µH	2422 535 95363	-
S1003	Switch	2422 128 02742	Channel +	L5240, 42, 44	10µH	2422 535 95363	-
				L5246, 47	10µH	2422 535 95363	-

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes
# LC5000	Line Choke	2422 549 44591	-
LC5201	Line Choke	2422 549 44101	-
# R3000, 01, 02	4.7M 5% 1/2W	2322 242 13475	-
# R3004	4.7M 5% 1/2W	2322 242 13475	-
R3009, 10	1 10% 5W	2322 251 41108	-
R3013, 14	1 10% 5W	2322 251 41108	-
R3208	220 5% 5W	2322 251 41221	-
R3224	6.8 1% 3/5W	2322 156 26808	-
R3239	10K 1% 3/5W	2322 156 21003	-
R3247	10.7K 1% 3/5W	2322 156 21073	-
SG2004	Surge Protector	2422 549 42349	-
# T5202	Power	2422 531 02496	-
# VR3011	Varistor	2322 595 90021	-
	PC Board	3135 037 10591	Power Supply
SIDE JACK BOARD			
J1001	Jack	2422 026 04756	Assembly
J1002	Jack	2422 026 04926	SVHS
J1007	Jack	2422 026 04747	Headphone
	PC Board	3135 037 10581	Side Jack
SSB BOARD			
C2652	47pF 5% 50V NPO	3198 016 34790	-
C2667, 68	3.3pF 8% 50V NPO	3198 016 33380	-
# F1003	Fuse	2422 086 11092	500mAmp, 50V
FB3900 Thru			
FB3911	Ferrite Bead	3198 018 90040	-
FB5407, 09	Ferrite Bead	2422 535 95427	-
FB5651, 52, 53	Ferrite Bead	2422 549 43769	-
FB5654	Ferrite Bead	3198 018 90060	-
FB5664, 65	Ferrite Bead	3198 018 90060	-
FB5701	Ferrite Bead	3198 018 90080	-
FB5702	Ferrite Bead	2422 535 95427	-
FB5703	Ferrite Bead	3198 018 90060	-
FB5705	Ferrite Bead	2422 535 95427	-
FB5707	Ferrite Bead	3198 018 90040	-
FB5711, 13	Ferrite Bead	3198 018 90040	-
FB5720	Ferrite Bead	3198 018 90040	-
FB5798, 99	Ferrite Bead	3198 018 90060	-
FB5900 Thru			
FB5904	Ferrite Bead	3198 018 90060	-
L5301	6.8μH	3198 018 36880	-
L5401	-	3198 018 33970	-
L5406	15μH	3198 018 31590	-
L5408	Modulator Coil	2422 549 44875	-
L5410	1μH	3198 018 51080	-
L5656	6.8μH	3198 018 36880	-
L5706	5.6μH	3198 018 35680	-
L5718	-	3198 018 33370	-
R3018	24K 1% 1/16W	2322 704 62403	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# R3070, 71	1.5 5% 1/8W	2322 750 61508	-
# R3300, 04	3.9 5% 1/8W	2322 750 63908	-
# R3329	6.8 5% 1/8W	2322 750 66808	-
# R3400	4.7 5% 1/8W	2322 750 64708	-
# R3416	6.8 5% 1/8W	2322 750 66808	-
# R3464	3.9 5% 1/8W	2322 750 63908	-
# R3644	4.7 5% 1/8W	2322 750 64708	-
R3790 Thru			
R3795	100 X 4 Network	3198 031 11010	-
SF1407	Trap	2422 549 44043	4.5MHz
SF1408	Filter	2422 549 44377	SAW
SF1410	Filter	2422 549 44534	4.5MHz
X1001	Resonator	2422 543 89018	12MHz
X1318	Crystal	2422 543 00861	3.58MHz
X1651	Crystal	2422 543 89019	18.432MHz
X1701	Resonator	2422 543 89018	12MHz
	PC Board	3104 328 25651	SSB
SSM BOARD			
C2105, 07, 09	150pF 5% 50V NPO	20202 552 94291	-
C2111, 13, 15	150pF 5% 50V NPO	20202 552 94291	-
# F1700, 01	Fuse	2422 086 10783	2Amp, 250V
FB5005, 06, 08	Ferrite Bead	3198 018 90080	-
FB5709, 10	Ferrite Bead	3198 018 90020	-
FB5711, 12	Ferrite Bead	3198 018 90060	-
FB5715, 16	Ferrite Bead	3198 018 90020	-
J1021	Jack	2422 026 05293	Assembly
J1024	Jack	2422 026 05064	Assembly
J1025	Jack	2422 026 04926	SVHS
J1026	Jack	2422 026 04926	SVHS
J1027	Jack	2422 026 05294	Assembly
L5000 Thru			
L5004	10μH	2422 535 95363	-
L5007	5.6μH	3198 018 15680	-
L5009, 10	15μH	3198 018 31590	-
L5011	10μH	2422 535 95363	-
L5701, 02	68μH	2422 536 00385	-
L5713, 14	10μH	2422 535 95363	-
R3033, 34	22K 1% 1/8W	2322 734 62203	-
R3138	2700 1% 1/8W	2322 734 62702	-
R3139	430 1% 1/8W	2322 734 64301	-
R3161 Thru			
R3166	100 5% 3W	2120 105 93449	-
SF1200	Filter	2422 549 43302	4.5MHz
TU1106	Tuner	2422 542 90113	Main
	PC Board	3135 037 11231	SSM

For SAFETY use only equivalent replacement part.
(1) Includes Convergence Vertical/Horizontal.

PHILIPS

MODEL 55PP9363H17 (CHASSIS DPTV335)