

SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver ground and CRT anode lead. DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

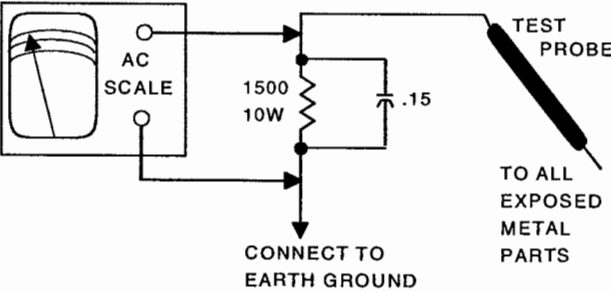
SAFETY CHECKS — FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500µA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC, Turn receiver on, and set all customer controls to normal operation. Measure voltage between TP7 and TE7. Voltage should be between 16.5V and 21.0V. If the voltage exceeds this range, the shutdown circuit should be repaired. Temporarily connect a 23.0V power supply thru a 100 ohms resistor to TP7 and ground. The receiver should lose raster and sound. If the receiver does not lose raster and sound, the shutdown circuit should be repaired. To resume normal operation, remove the DC supply, wait a few minutes then turn on the receiver.

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.

Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein.

© 2003 SAMS Technical Publishing, LLC

9850 E. 30th St.  
Indianapolis IN 46229  
www.samswebsite.com

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

03PF02182

UPC  
HERE

PHOTOFACT® Technical Service Data

4801

4801

SET 4801

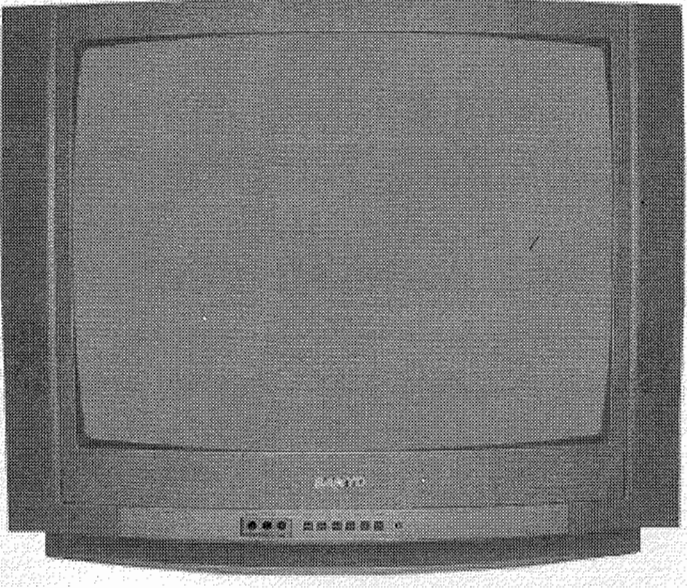
MODEL DS25320 (CHASSIS 25320-00)

SANYO

INDEX

High Voltage Shutdown Test ..... 1  
IC Functions ..... 1  
Important Parts Information ..... 4  
Miscellaneous Adjustments ..... 1  
Parts List ..... 3  
Placement Chart ..... 1  
Safety Precautions ..... 1  
Schematic Component Location ..... 1  
Schematic Notes ..... 2  
Schematics  
    Power Supply ..... 2  
    System Control ..... 2  
    Television ..... 2  
Service Mode Adjustment Chart ..... 1  
Test Equipment ..... 4  
Tuner Information ..... 1

SANYO  
Model DS25320 (Chassis 25320-00)



Representative Model

Essential coverage  
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

Coverage includes these additional models and chassis:

Models	Chassis
DS25320	25320-01
DS25320	25320-02
DS25320	25320-03
DS25320	25320-04



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

NOVEMBER 2003 SET 4801

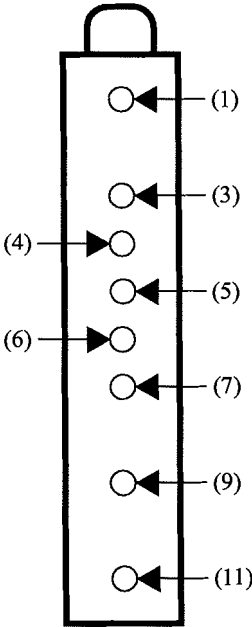
TUNER INFORMATION

TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.3V	2.4V	2.8V
(3) EN	0V	0V	0V
(4) SCL	4.2V	4.2V	4.2V
(5) SDA	4.2V	4.2V	4.2V
(6) MB	5.0V	5.0V	5.0V
(7) PB	5.0V	5.0V	5.0V
(9) TB	33.6V	33.6V	33.6V
(11) IF	0V	0V	0V

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

TUNER TERMINAL GUIDE



SCHEMATIC COMPONENT LOCATION GUIDE

A1901	A26	C506	D5	D429	B26	L821	D27	R416	E6	R631	D21	R894	E29
C001	A4	C508	C5	D481	E19	L901	B18	R421	E3	R632	D21	R897	C26
C003	A4	C509	D3	D482	E3	L902	D8	R422	E3	R634	D21	R898	C26
C004	A5	C511	D7	D483	E18	LF601	A17	R423	D3	R683	C22	R899	A29
C008	E20	C516	D6	D486	D23	PS601	A18	R426	D3	R686	B23	R1001	A3
C011	A6	C601	A17	D487	D11	Q401	E4	R428	B26	R691	B22	R1002	A9
C101	E24	C602	A19	D490	E23	Q402	E6	R430	E4	R692	D22	R1003	A2
C103	B32	C604	A19	D491	E19	Q486	D23	R441	C10	R693	D21	R1901	B26
C106	C1	C606	B18	D492	E19	Q490	E23	R442	C10	R694	D21	R1902	B26
C131	B3	C608	B21	D501	D6	Q601	B20	R443	C2	R695	D21	R1903	B25
C132	B3	C609	A20	D502	D7	Q611	B19	R444	C3	R701	B15	R1904	B25
C133	B3	C612	C18	D601	A19	Q612	C19	R449	D1	R703	B14	R1905	B25
C134	B3	C613	C19	D602	A19	Q613	C19	R481	E19	R704	B14	R1906	B25
C137	A3	C614	D18	D603	A19	Q627	B23	R482	E3	R706	B15	R1907	B25
C141	C1	C624	B21	D604	A19	Q635	D21	R483	E18	R707	B15	R1909	A25
C142	B3	C625	A22	D611	C20	Q681	C23	R484	B23	R711	C15	RL601	A18
C143	B1	C626	B22	D612	B18	Q693	D21	R485	D11	R713	C14	RL601	B24
C146	D24	C628	A24	D612	C18	Q695	D21	R486	D22	R714	C14	SP901	A7
C147	D24	C629	B23	D612	C18	Q701	B15	R487	D22	R716	C15	SW1901	B25
C151	B2	C631	A18	D613	C19	Q711	C15	R488	E19	R717	C15	SW1902	B25
C153	B2	C632	B20	D614	C19	Q721	A15	R489	D22	R721	B15	SW1903	B25
C161	B1	C633	B20	D624	B21	Q831	A27	R490	E23	R723	A14	SW1904	B25
C211	B6	C634	D21	D625	A22	Q901	B16	R491	D11	R724	A14	SW1905	B25
C212	C10	C683	C22	D627	D22	R001	A4	R492	D11	R726	A15	SW1906	C25
C252	B11	C693	D22	D629	B22	R003	A4	R493	D11	R727	A15	T151	A2
C253	C11	C693	D22	D680	C23	R106	B31	R494	D11	R801	B28	T401	E5
C256	B11	C701	B14	D683	B24	R131	A3	R495	E18	R803	C3	T402	D9
C257	E24	C711	C14	D693	D21	R132	A4	R496	D23	R804	C3	T402	E17
C258	E24	C721	A15	D801	B27	R133	B3	R497	A16	R806	D29	T601	A21
C272	C11	C742	D16	D802	B26	R142	C2	R499	E23	R807	D27	W601	A17
C284	B11	C801	E24	D831	A27	R143	B1	R503	D4	R808	D27	X141	B1
C285	B11	C803	C2	D834	C26	R151	C2	R504	D5	R809	C29	X161	B5
C401	E1	C804	C3	D836	C26	R161	B2	R505	D5	R823	E27	X251	B10
C402	E1	C805	E23	D843	C27	R162	B1	R506	D5	R829	E27	X801	B27
C403	D1	C806	E24	F601	A17	R163	B4	R507	D5	R831	A27		
C404	E4	C807	B27	IC001	A5	R164	B5	R508	D5	R832	A27		
C405	D1	C808	B27	IC101	A3	R165	B4	R509	D5	R833	A26		
C406	E5	C811	D27	IC101	B11	R166	B4	R511	D7	R834	C27		
C407	E5	C812	D27	IC101	B3	R211	B9	R517	D6	R837	C26		
C408	E5	C822	D27	IC101	D2	R212	C10	R518	D6	R842	B30		
C411	E7	C831	A28	IC501	D6	R251	C11	R601	A18	R843	C30		
C416	E8	C834	C27	IC601	D18	R252	C11	R602	B18	R844	B30		
C417	E8	C841	A12	IC681	E22	R272	B11	R603	A20	R846	B29		
C421	D3	C842	A12	IC801	A28	R273	C11	R604	B21	R847	B29		
C426	D3	C843	A11	IC802	D26	R276	C11	R606	B19	R848	C29		
C441	C10	C862	C28	K1001	A2	R281	D2	R607	C19	R849	B29		
C473	E7	C891	C27	K1001	A9	R284	B11	R608	C19	R851	B27		
C482	E19	C892	C27	L146	D24	R286	B13	R609	C19	R852	B27		
C483	A23	C894	E29	L164	B5	R287	B13	R611	C20	R856	C30		
C484	E3	C896	E29	L256	E24	R288	B13	R612	B20	R857	D30		
C487	E20	C1001	A3	L401	E6	R301	A12	R613	D20	R862	C27		
C491	E23	C1002	A10	L404	E4	R353	E2	R614	C19	R864	C27		
C493	D11	C1902	A25	L602	C20	R400	D4	R616	C19	R865	A27		
C496	E19	D001	E20	L611	C20	R401	E1	R617	D19	R881	D29		
C497	E24	D101	B31	L612	C20	R402	E1	R618	C18	R882	C29		
C501	E20	D351	E2	L623	B21	R404	E4	R619	D18	R883	E29		
C502	D6	D408	A24	L625	A21	R405	D1	R627	B23	R884	E29		
C503	D5	D421	D3	L801	E23	R406	E5	R628	C23	R886	E29		
C504	D5	D422	E3	L811	C29	R407	E5	R629	C22	R892	C27		
C505	D3	D428	B26	L812	D29	R411	E6	R630	A23	R893	E29		

MISCELLANEOUS ADJUSTMENTS

B+ CHECK

Connect a digital DC voltmeter to the cathode of D625. Set brightness and picture to minimum. With AC line set to 120VAC, B+ should read 130V ±2.0V.

HIGH VOLTAGE CHECK

Tune in a picture. Set customer controls to minimum. Connect a high voltage probe to CRT anode. High voltage should measure 26kV to 28kV.

CONVRGENCE / PURITY

The deflection yoke is bonded to the CRT. Convergence and purity adjustments are not required.

ENTERING SERVICE MODE

Disconnect the AC power cord. While pressing the menu button on the front of the set, connect the AC power cord. Use the channel up and down buttons to select the service number. Use volume up and down buttons to change the value. Press the menu button to exit the service mode.

HORIZONTAL POSITION

Tune in a crosshatch pattern. Enter the service mode and select service item number 03 HP. Adjust for the best horizontal centering.

RF AGC DELAY

Tune in a picture. Enter the service mode and select service number 42 RAD. Adjust where no snow (noise) appears in picture.

VERTICAL SIZE

Tune in a crosshatch pattern. Enter the service mode and select service item number 04 VS. Adjust for proper vertical size and best vertical linearity.

VERTICAL CENTERING

Tune in a crosshatch pattern. Check that the pattern is centered. If picture center is too low, replace resistor R513 3900 ohms 1/ 6 W, with a 470 ohms 1W. If picture center is too high, add resistor R512 470 ohms 1W.

VCO

VCO must be adjusted after IC101, IC802, or T151 is replaced. Tune in a picture. Connect positive lead of a digital voltmeter to pin 58 of IC101 and the negative lead to TE7. Adjust T151 to obtain a reading of 3.6V ± 0.2V.

VIDEO LEVEL

Tune in a color bar pattern. Set picture and brightness to normal. Connect an oscilloscope to TPV (junction of X161 and C211), and the negative lead to ground. Enter the service mode and select service number 46 VL. Adjust for 1.0Vp-p ±0.1Vp-p waveform on the oscilloscope.

GRAY SCALE

Tune in an active channel. Enter the service mode. Set the value of service numbers 15 RB, 16 GB, and 17 BB to 0. Set the value of service numbers 18 RD and 20 BD to 40. Set screen control, color, brightness, and picture to minimum. Adjust screen control, if necessary, to obtain a barely visible horizontal line. Select service number 56. Adjust the bias levels for a white line. Select service number 55 DRV and adjust the drive values for normal black and white picture at all brightness levels.

SUB BRIGHTNESS

Tune in a color bar pattern. Set picture and brightness to normal. Connect positive lead of a digital voltmeter to TP51 and the negative lead to TP50. Enter the service mode and select service number 47 SB. Adjust for 820mV ±10mV.

SUB COLOR, SUB TINT, SUB SHARPNESS

Tune in a picture. Enter the service mode. Select service number 48 SCO. Adjust for normal color level. Select service number 49 STL. Adjust for normal flesh tones. Select service number 50 SSH. Adjust for contrast range.

OSD HORIZONTAL POSITION

Tune in a local channel. Enter the service mode and select service item number 53 HR. Adjust for centered on screen menu.

SOUND

Tune in a color bar pattern with audio signal of 1kHz audio frequency. Connect an oscilloscope to pin 75 of IC101, and the negative lead to ground. Enter the service mode and select service number 45 FL. Adjust for 0.72Vp-p ± 0.07Vp-p waveform on the oscilloscope.

IC802 REPLACEMENT

Perform the following adjustments after replacing IC802. Notice that the data will appear on the screen in the Hexadecimal format. Enter the service mode, select service number 04 VS and set value to 30. Select service number 07 VLN and set value to 12. Select service number 10 VSC and set value to 0B. Select service number 32 BSG and set value to 02. Select service number 42 RAD and set value to 20. Select service number 48 SCO and set value to 07. Select service number 49 STI and set value to 14. Select service number 50 SSH and set value to 0C. Select service number 51 OPT and set value to 04. Select service number 52 OP2 and set value to 00. Press the menu button to exit service mode.

PURITY

NOTE: Operate the receiver for 15 minutes to allow warm-up of CRT. Use a degaussing coil to demagnetize the CRT. Tune in a green raster. Loosen the clamp screw. Slide deflection yoke back as far as possible. Adjust purity tabs to center the vertical green band. Slide the deflection yoke forward to produce a uniform green screen. Tighten the clamp screw.

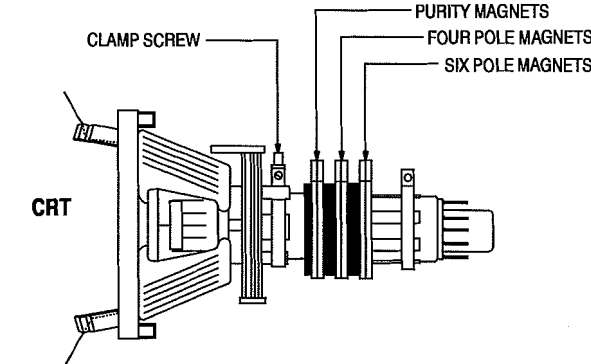
CONVERGENCE

Tune in a dot pattern. Loosen the clamp screw. Adjust the 4 pole magnets to converge the red and blue dots at the center of the screen. Adjust the 6 pole magnets to converge the red/blue dots over the green dots at the center of the screen.

NOTE: Rotate 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. The 4 and 6 pole magnets interact, repeat adjustment until center convergence is correct.

Tune in a crosshatch pattern. Remove the tilt adjustment wedges between deflection yoke and the CRT. Loosen the clamp screw. 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 to the right or left to converge the horizontal line at the top and bottom of the screen and the vertical line at the right and left sides of the screen. Adjust balance coil to correct misconvergence of red and blue horizontal lines at right and left sides of screen. Repeat convergence procedure if necessary to obtain best overall convergence.

CRT NECK ASSEMBLY



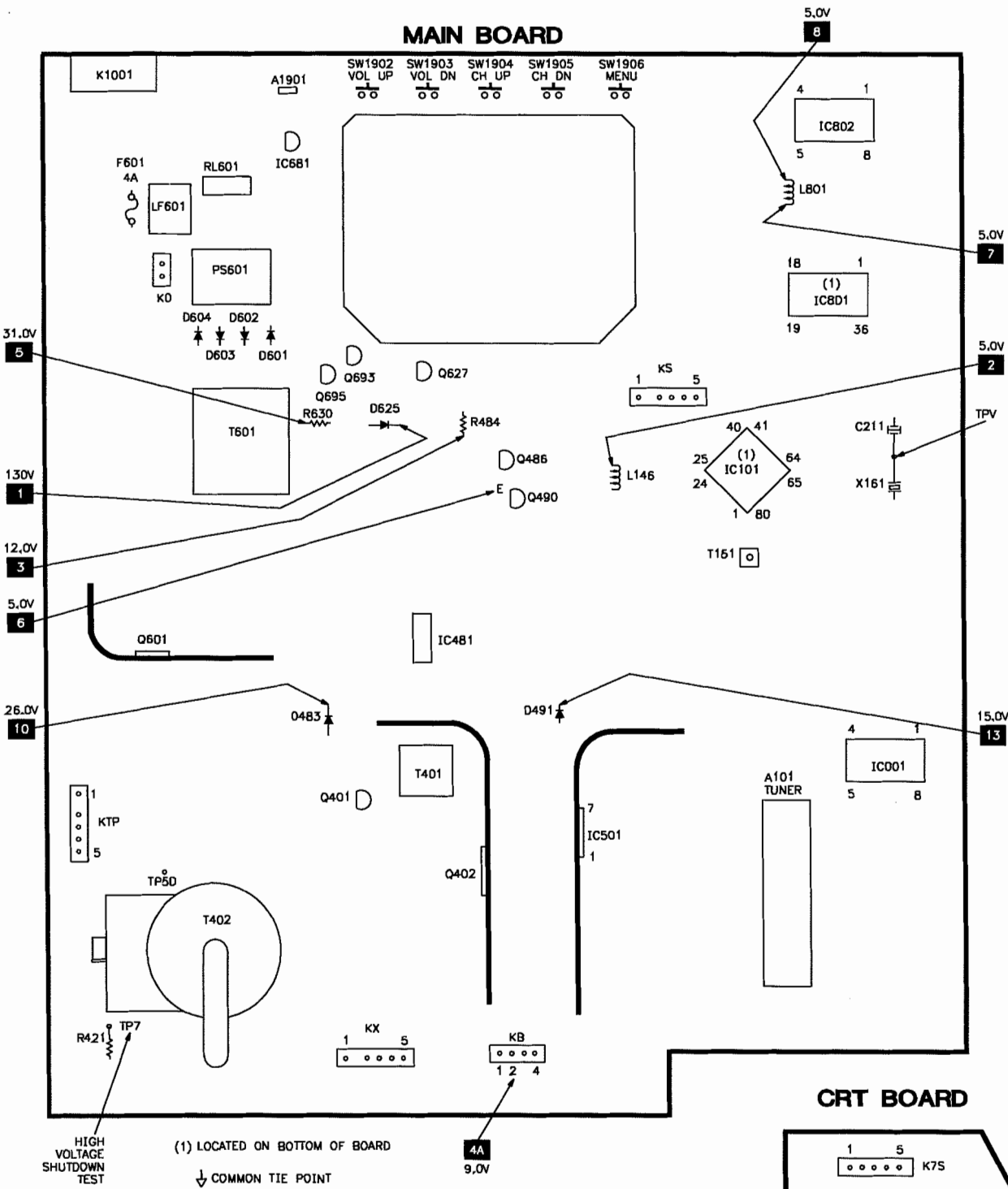
SERVICE MODE ADJUSTMENT CHART

Replace the tilt adjustment wedges. Tighten the clamp screw.

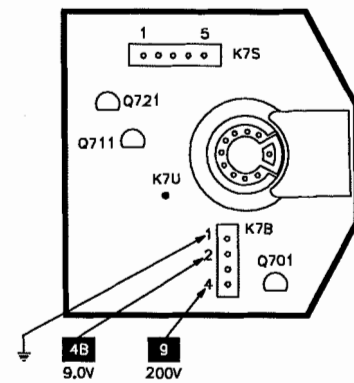
No.	Service Adjustment	Value Range	Initial Ref Value (Hex)	Initial Set Up Value (Hex)	On-Set Value (Hex)	Notes
01	HFR	00 - 3F	1E	1E	1E	Horizontal Frequency
02	AFC	00, 01	00	00	00	AFC Gain
03	HP	00 - 1F	0E	0E	0D	H-Position (H-Centering)
04	VS	00 - 7F	32	30	30	Vertical Size
05	VPO	00 - 3F	05	05	05	Vertical Position
06	VSP	00, 01	00	00	00	Vertical Set Up
07	VLN	00 - 1F	13	12	12	Vertical Linearity
08	CRS	00 - 03	00	00	00	Cross B/W
09	GRY	00, 01	01	01	01	Gray Mode
10	VSC	00 - 1F	08	0B	0B	Vertical S Correction
11	HBR	00 - 07	03	03	03	H BLK R
12	HBL	00 - 07	04	04	04	H BLK L
13	CDM	00, 01	00	00	00	CD Mode
14	VC	00 - 07	07	07	07	Vertical Compression
15	RB	00 - FF	00	00	00	Red Bias
16	GB	00 - FF	00	00	00	Green Bias
17	BB	00 - FF	00	00	07	Blue Bias
18	RD	00 - 7F	64	64	85	Red Drive
19	GD	00 - 0F	08	08	08	Green Drive
20	BD	00 - 7F	64	64	62	Blue Drive
21	SBI	00 - 7F	48	48	48	Sub Bias
22	OSD	00 - 03	02	02	03	OSD Contrast
23	POS	00, 01	01	01	01	Pre/Over/SW
24	FLS	00 - 07	01	01	01	Filter System
25	CKO	00 - 07	03	03	03	Color Killer Operation
26	GYA	00, 01	00	00	00	G-Y Angle
27	CRG	00 - 03	02	02	02	Coring Gain
28	PRE	00 - 03	03	03	03	Pre Shoot Adjust
29	WP	00, 01	01	01	01	White Peak Limiter, 0 = On, 1 = Off
30	FSW	00, 01	00	00	00	FBP Blanking Switch
31	VBL	00, 01	00	00	00	Vertical Blanking Switch
32	BSG	00 - 03	01	02	02	Black Stretch Gain
33	BSS	00 - 03	01	01	01	Black Stretch Start
34	DCR	00 - 03	01	01	01	DC Reset
35	YGM	00 - 03	01	01	01	Y Gamma
36	CBP	00, 01	00	00	00	C Bypass
37	AF	00, 01	01	01	01	Auto Flesh, 0 = Off, 1 = On
38	BAT	00 - 07	04	04	04	Bright ABL Threshold
39	MSD	00, 01	00	00	00	Mid Stop Def
40	ABL	00, 01	00	00	00	ABL Defeat, 0 = On, 1 = Off
41	RYA	00 - 0F	02	02	02	R-Y/B-Y Angle
42	RAD	00 - 3F	0F	20	20	RF AGC Delay
43	IAS	00, 01	00	00	00	IF AGC Switch, 0 = TV (Normal), 1 = AV (IF Gain Minimum)
44	FMM	00, 01	00	00	00	FM Mute
45	FL	00 - 1F	0F	0F	0F	FM Level
46	VL	00 - 07	05	05	05	Video Level
47	SB	00 - 3F	20	20	31	Sub Brightness
48	SCO	00 - 1F	0A	07	07	Sub Color
49	STI	00 - 1F	16	14	14	Sub Tint
50	SSH	00 - 1F	12	0C	0C	Sub Sharpness
51	OPT	00 - FF	00	04	00	Option, data 1 should be set to "04", in binary 8 bit "00000011"
52	OP2	00 - FF	00	00	00	Option, data 2 should be set to "00", in binary 8 bit "00000000"
53	HR	00 - 3F	13	13	14	OSD Horizontal Position
54	SBO	00 - FF	05	05	05	Sub Bright Offset
55	DRV	00 - 7F	R 40	R 40	R 42	Red Drive, press 1 to decrease value and 3 to increase value.
	DRV	00 - 7F	B 40	B 40	B 42	Blue Drive, press 7 to decrease value and 9 to increase value.
56	-	00 - FF	00	00	00	Red Bias, press 1 to decrease value and 3 to increase value.
	-	00 - FF	00	00	00	Green Bias, press 4 to decrease value and 6 to increase value.
	-	00 - FF	00	00	00	Blue Bias, press 7 to decrease value and 9 to increase value.

# PLACEMENT CHART

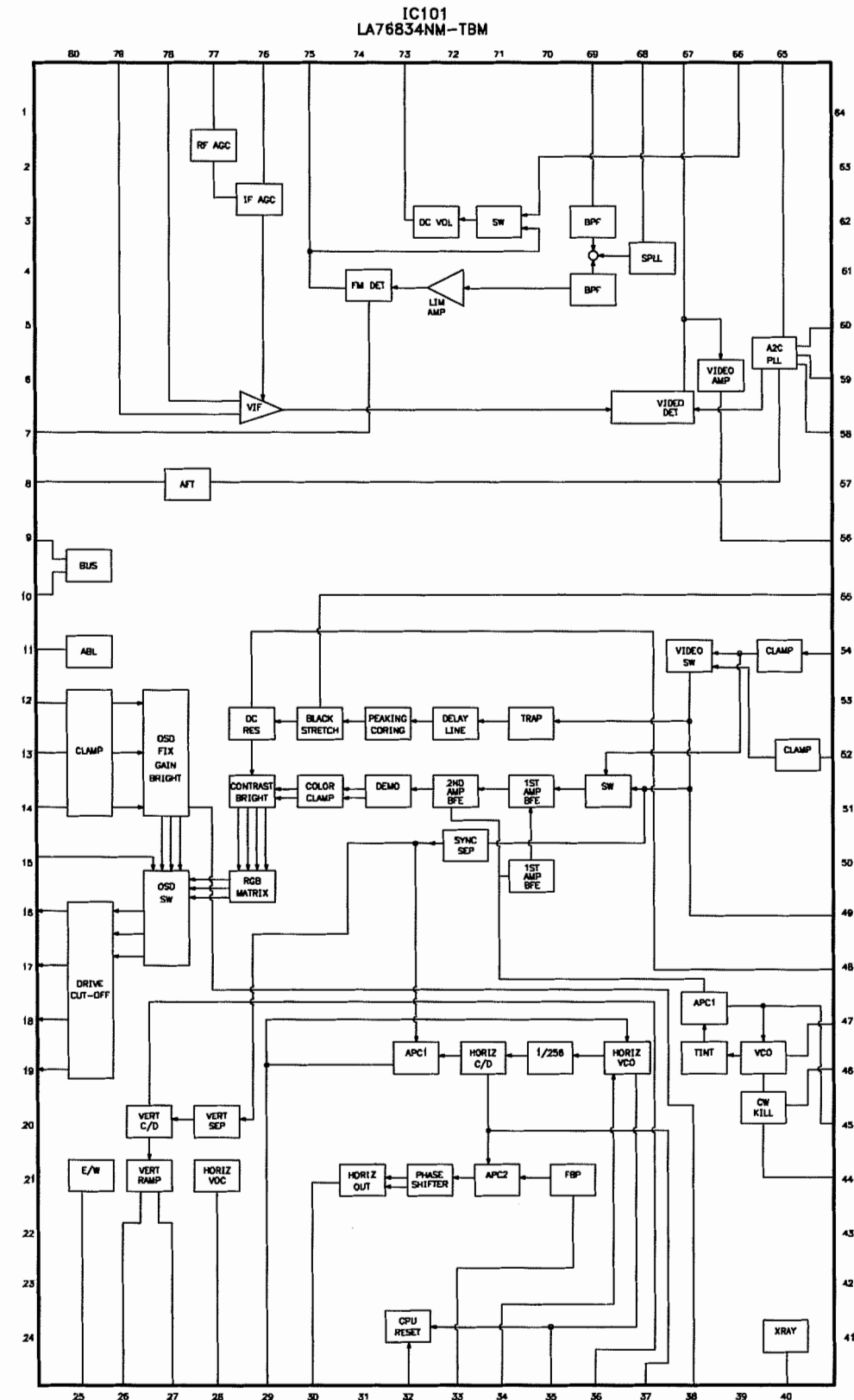
## MAIN BOARD



## CRT BOARD



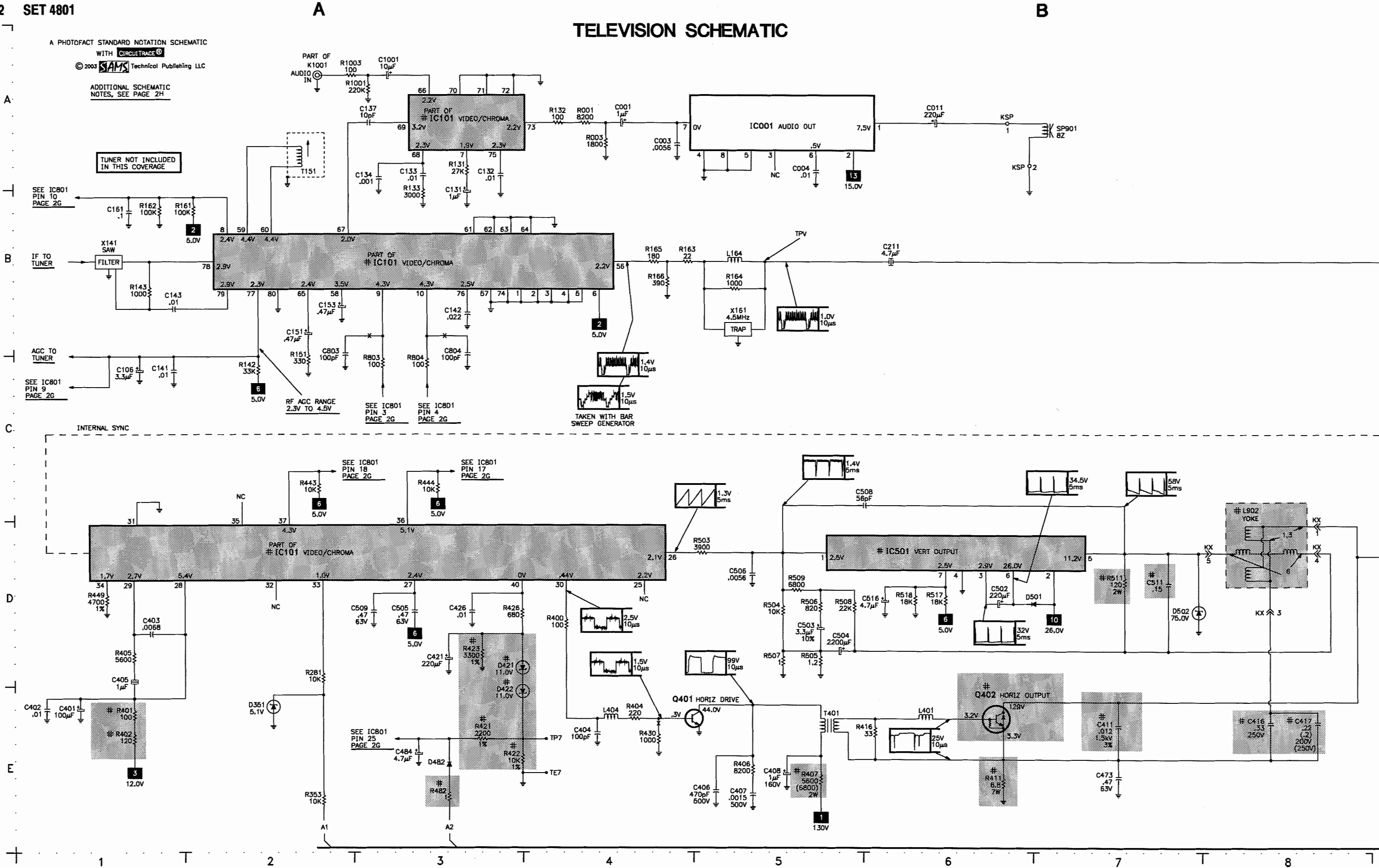
# IC FUNCTIONS



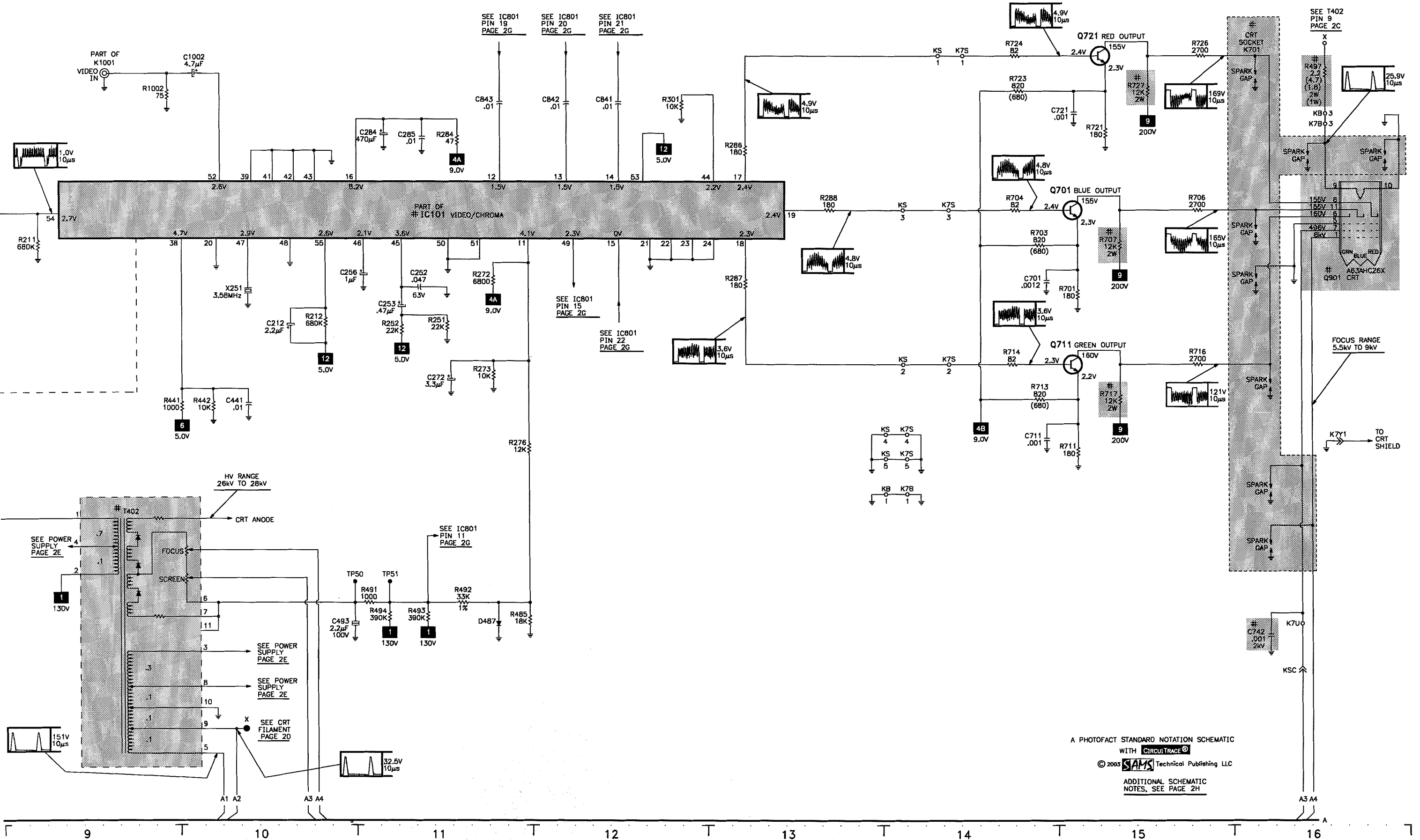
SANYO

MODEL DS25320 (CHASSIS 25320-00)

TELEVISION SCHEMATIC



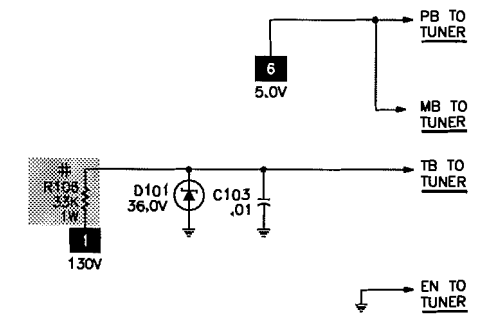




**F**



## H



A PHOTOFACT STANDARD NOTATION SCHEMATIC  
WITH **CIRCUIT TRACE®**  
© 2003 **SAMS** Technical Publishing LLC

# For SAFETY use only equivalent replacement part, see parts list.

- SET 4801 Page 2**



PARTS LIST

Item No.	Type No.	Mfr. Part No.	NTE Part No.
D001	MTZJ15B	408 047 4706	NTE5023A
D101	MTZJ36A	407 100 0204	-
D351	MTZJ5.1A	407 063 8606	NTE5010T1
D408	-	-	-
# D421, 22	HZ11B2L	407 158 1307	NTE5020A
D428	RD15EB3	407 054 5904	NTE5024A
D429	1S2076A	407 013 4306	NTE519
D481	ES1	407 007 6606	NTE552
D482	TVR1G	407 011 4407	NTE552
D483	ES1	407 007 6606	NTE552
D486	RD10EB2	407 054 0008	NTE5019A
D487	ERA15-02	407 005 8602	NTE552
D490	MTZJ5.6C	407 063 8903	-
D491	ERA15-02	407 005 8602	NTE552
D492	EU2	407 007 7603	NTE552
D501	ERA15-02	407 005 8602	NTE552
D502	1Z75	407 118 2207	NTE5093A
# D601 Thru			
# D604	EM2B	407 005 7605	NTE125
D611	1SS133	407 012 4406	NTE519
# D612	PC817C	407 104 2402	NTE3098
D613	MTZJ9.1C	407 063 9702	-
D614	ERA91-02	407 006 0100	NTE587
# D624	RU3YX	407 106 2806	NTE588
# D625	RU4AMLF-L1	407 129 7000	NTE580
D627	1S2076A	407 013 4306	NTE519
D629	RD16EB1	407 054 7007	NTE5025A
D680, 83	1S2076A	407 013 4306	NTE519
D693	RD6.2EB3	407 057 2801	NTE5013A
D801, 02	1S2076A	407 013 4306	NTE519
D831	DZS3.6B	407 222 5903	-
D834	MTZJ15B	407 099 7000	NTE5023A
D836, 43	1SS355TE-17	407 149 0807	NTE519
IC001	LA4525	409 275 7903	-
# IC101	LA76834NM-TBM	409 491 4809	-
# IC501	LA78041	409 453 5905	-
# IC601	SE130NH	409 172 8102	-
IC681	UPC78L05J	409 066 7303	NTE977
IC801	LC8634**V.****-TLM	410 416 7409	-
IC802	CAT24WC02P	409 495 6908	-
Q401	2SC2271-D	405 029 7106	NTE399
# Q402	2SD2578-YB	405 153 0202	-
Q486, 90	2SD400-E-MP	405 023 5009	NTE382
# Q601	2SK2872	405 166 7601	-
Q611	2SC2274-E	405 013 6801	NTE289A
Q612	2SA984-E	405 006 6504	-
Q613	2SC2274-E	405 013 6801	NTE289A
Q627	2SB985-S	405 009 6907	-

Item No.	Type No.	Mfr. Part No.	NTE Part No.
Q635, 81, 93	2SC1740S-Q	405 011 8401	NTE85
Q695	2SA1015-Y(SAN)	405 001 7605	NTE290A
Q701, 11, 21	2SC3620(LB-SAN-1)	406 000 3605	NTE157
Q831	2SA1037K-T-96-R	405 002 0308	NTE2409

Item No.	Function/Rating	Mfr. Part No.	Notes
# A101	Tuner	645 053 7936	-
A1901	Receiver	645 041 1519	Remote
C211	4.7μF 20% 50V NP	403 051 0607	-
C405	1μF 20% 50V NP	403 086 2607	-
# C411	.012 3% 1.5kV	404 079 1607	-
# C416	.33 5% 250V	403 346 7225	-
# C417	.22 5% 250V	403 346 6921	-
	.2 5% 250V	403 346 6822	-
C493	2.2μF 20% 100V NP	404 056 5307	-
C503	3.3μF 10% 50V	403 204 1802	-
# C511	.15 5% 50V	403 141 5802	-
# C601	.22 20% 275V	404 066 2204	-
	.22 250VAC	-	-
# C602, 04	.001 10% 500V	403 075 7111	-
# C606	470pF 10% 250VAC	404 073 5304	-
# C608	.0022 10% 1kV	403 222 1907	-
# C609	470μF 20% 200V	404 075 5005	-
# C624, 25	.0012 10% 1kV	403 266 4902	-
# C631	470pF 10% 250VAC	404 073 5304	-
# C632, 33	.001 20% 250VAC	404 088 2909	-
# C742	.001 +80% -20% 2kV	403 077 2807	-
C891	1μF 20% 50V NP	403 086 2607	-
# F601	Fuse	423 018 8101	4Amp, 125V, Fast Acting
F601A, 01B	Fuse Holder	645 000 5077	For F601
J001	5.6μH	645 008 2894	-
J101	5.6μH	645 008 2894	-
# K701	Socket	645 025 6103	CRT
K1001	Jack	645 040 5952	Assembly
L146	5.6μH	645 008 2894	-
L164	15μH	645 003 9713	-
L256	5.6μH	645 008 2894	-
L401	1μH	645 036 4198	-
L404	100μH	645 003 9676	-
L602	Ferrite Bead	645 005 0763	-
L611, 12	Ferrite Bead	610 078 5946	-
L623	Ferrite Bead	610 078 6820	-
L625	Ferrite Bead	610 078 5946	-
L801	5.6μH	645 008 2894	-
L811, 12	1μH	645 006 2490	-
L821	5.6μH	645 008 2894	-
# L901	Degaussing	645 044 9147	-

PARTS LISTcontinued

Item No.	Function/Rating	Mfr. Part No.	Notes
# L902	Yoke	610 003 4846	Horiz 1.3mH, Vert 16.5mH, Chassis 25320-00/01/03/04
	Yoke	645 036 9759	Chassis 25320-02
# LF601	Line Filter	645 012 0589	-
# PS601	3 Cold PTC	408 046 5209	-
# Q901	CRT	414 009 1300	A63AHC26X, Chassis 25320-00/03/04
	CRT	414 007 7000	A63AFW32X, Chassis 25320-01
	CRT	414 010 7605	A63QDB891X, Chassis 25320-02
# R106	33K 5% 1W	401 061 4400	-
# R401	100 5% 1/4W	401 012 4503	-
# R402	120 5% 1/4W	401 013 4205	-
# R407	5600 5% 2W	-	-
	6800 5% 2W	401 069 3702	-
# R411	6.8 5% 7W	402 080 3702	-
# R421	2200 1% 1/6W	401 053 1202	-
# R422	10K 1% 1/6W	401 052 6802	-
# R423	3300 1% 1/6W	401 053 2605	-
	R449	4700 1% 1/10W	-
# R481	47 5% 1/2W Nonflammable	401 010 2600	-
# R482	1 5% 1/4W Nonflammable	401 011 9004	-
# R483	1 5% 1/2W Nonflammable	401 006 7701	-
# R484	3.3 5% 1W	401 061 0006	-
# R486	8.2 5% 1W	401 063 4606	-
# R488	18 5% 2W	401 065 9609	-
# R489	22 5% 2W	401 066 5204	-
	R492	33K 1% 1/6W	-
# R495	2.2 5% 1/2W	401 008 3800	-
# R496	33 5% 1W	401 061 1706	-
# R497	2.2 5% 2W	401 066 3002	-
	4.7 5% 1W	401 061 8903	-
	1.8 5% 2W	401 064 5701	-
# R499	15 5% 1W	401 059 1602	-
# R511	120 5% 2W	401 065 2808	-
# R601	1 10% 7W	402 083 6106	-
# R602	3.3M 20% 1/2W	402 000 1603	-
# R604	2.2 5% 2W	401 066 3002	-
# R612	10 5% 1/2W Fusible	402 001 8502	-
# R613	.22 5% 3W	-	-
	.22 5% 2W	401 100 7706	-
# R617	680 5% 1/4W	402 001 8106	-
# R630	22K 5% 1W	401 060 5002	-
# R707, 17, 27	12K 5% 2W	401 065 4604	-
# RL601	Relay	645 000 4155	Power
	SP901	645 028 0870	3" X 3", 8 Ohms, 2W
	SW1901	645 006 9673	Power
	SW1902	645 006 9673	Volume Up
	SW1903	645 006 9673	Volume Down
	SW1904	645 006 9673	Channel Up
	SW1905	645 006 9673	Channel Down

Item No.	Function/Rating	Mfr. Part No.	Notes
SW1906	Switch	645 006 9673	Menu
T151	Oscillator	645 049 3775	45.75MHz
T401	Horizontal Drive	610 000 7901	-
# T402	Horizontal Output	645 045 8521	Chassis 25320-00/01/02/03
	Horizontal Output	645 045 6121	Chassis 25320-04
# T601	Power	645 051 4951	-
# W601	Line Cord	645 030 5283	AC, Polarized
	X141	421 008 9008	SAW
	X161	610 015 3059	4.5MHz
	X251	610 204 4195	3.58MHz
	X801	645 004 1938	32.768kHz
		610 217 7794	Purity/Convergence
	PC Board	610 295 5651	CRT, Chassis 25320-00/03
	PC Board	610 298 5757	CRT, Chassis 25320-01
	PC Board	610 299 5077	CRT, Chassis 25320-02
	PC Board	610 299 5107	CRT, Chassis 25320-04
	PC Board	610 295 5644	Main, Chassis 25320-00/03
	PC Board	610 298 5740	Main, Chassis 25320-01
	PC Board	610 299 5060	Main, Chassis 25320-02
	PC Board	610 299 5091	Main, Chassis 25320-04
	Transmitter	645 051 8539	Remote
	Wedge	610 117 0154	Yoke Positioning (3 Used)

# For SAFETY use only equivalent replacement part.

SANYO  
MODEL DS25320 (CHASSIS 25320-00)

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.

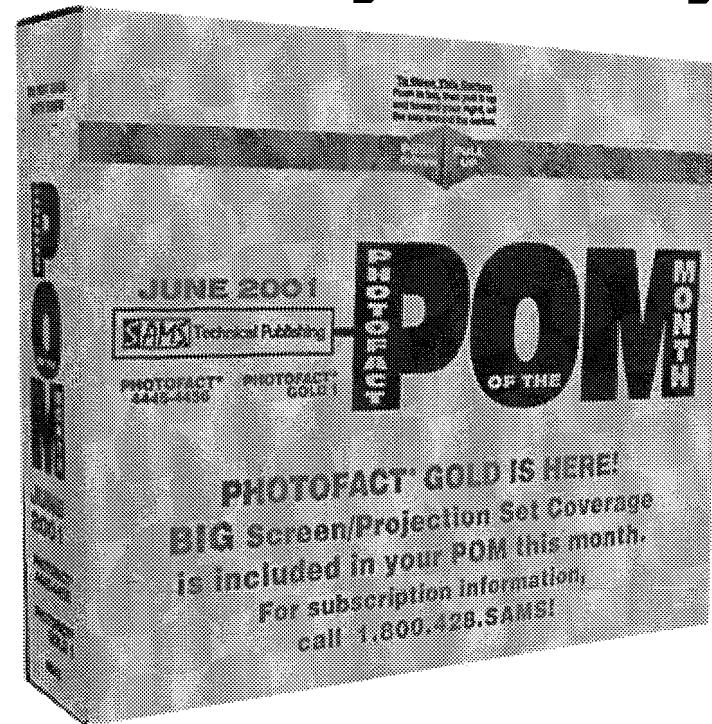
TEST EQUIPMENT

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.
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

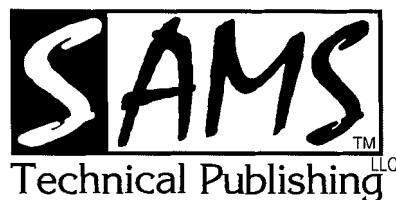
# SAMS Super Savings!

***A monthly POM subscription  
will save you money!***



***Did you know that a monthly POM subscription will save you money? A POM (Photofact® of the Month) containing 13 Photofact® sets costs less than 4 sets purchased individually. That is like getting 9 Photofact® sets for free each month!***

**Contact your local SAMS Photofact® distributor for details or contact SAMS Technical Publishing, LLC at 1-800-428-SAMS.**



**9850 E. 30th St., Indianapolis IN 46229  
1-800-428-SAMS FAX 1-800-552-3910 [www.samswebsite.com](http://www.samswebsite.com)**

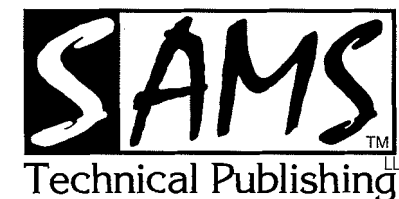
# SAMS has the Service Manuals You Need!

**SAMS Technical Publishing, LLC has a database  
of more than **190,000** listings of manuals  
for electronics repair.**

**Coverage includes antique radios, CBs, and  
televisions spanning the past 50+ years. SAMS  
also covers Big Screen and Projection Sets!**

**All manuals may be purchased from your local  
electronics parts distributor or you can contact  
SAMS Technical Publishing, LLC for more details.**

***Visit [www.samswebsite.com](http://www.samswebsite.com)  
for the most comprehensive list  
of manuals available today!***



**9850 E. 30th St., Indianapolis IN 46229  
1-800-428-SAMS FAX 1-800-552-3910 [www.samswebsite.com](http://www.samswebsite.com)**

SANYO

MODEL DS25320 (CHASSIS 25320-00)