

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 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 inner 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.

TEST JIG HOOKUP

Chek-A-Color Function	Adapter No.	PC Board Plug No.	Pin	Color
CRT	B239	H	1	Blue
Yoke	D482		2	Red
Yoke Setting	YP2A	V	1	Yellow
Comments	Focus Tap		2	Black

The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by Howard W. Sams & Company as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to Howard W. Sams & Company by the manufacturers of the specific type of replacement part listed.

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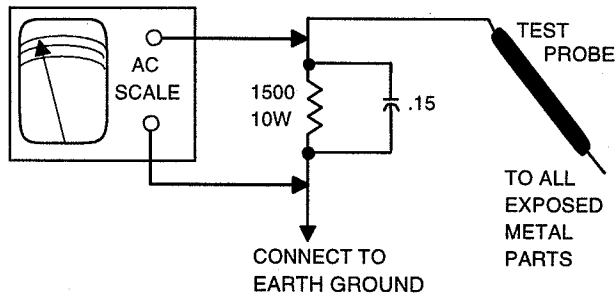
SAFETY CHECKS – FIRE AND SHOCK HAZARD

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.



HIGH VOLTAGE SHUTDOWN TEST

Apply AC power and turn on the receiver. Momentarily short test point R to test point X. The receiver should lose sound and raster. If the receiver does not lose sound and raster, the shutdown circuit should be repaired. To return to normal operation, press the power button.



97PF01172



PHOTOFACT® Technical Service Data

SET 3832

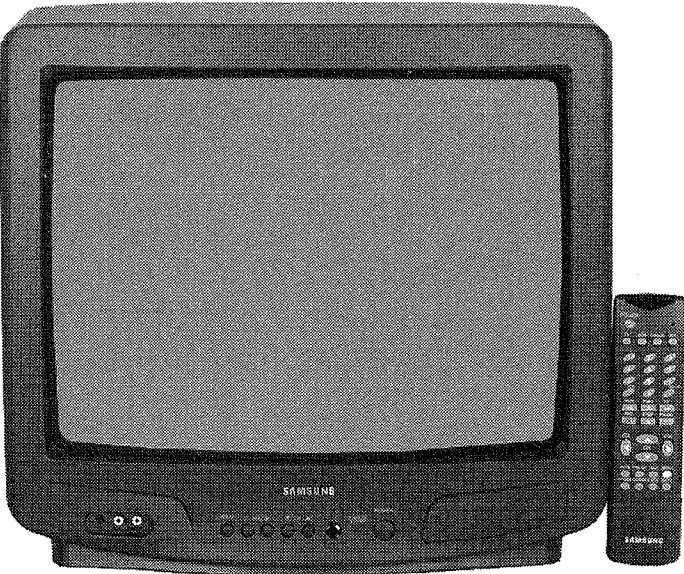
MODEL TXE1986 (CHASSIS K1)

SAMSUNG

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SAMSUNG  
Model TXE1986 (Chassis K1)



Essential coverage  
for servicing a television receiver...

- Schematics
- Component locations
- Parts list

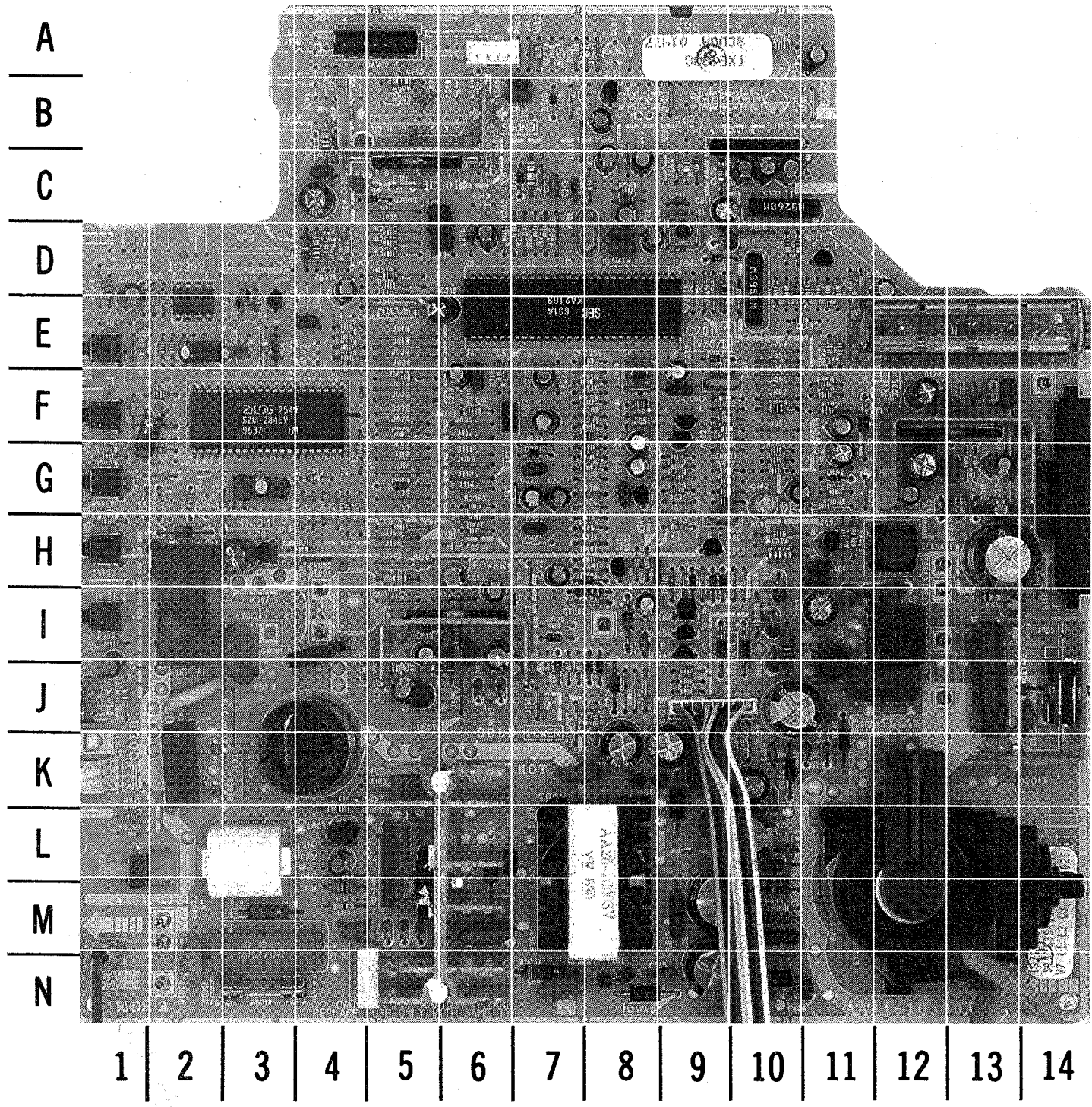


HOWARD W. SAMS & COMPANY

JUNE 1997 SET 3832

For Supplier Address,  
See PHOTOFACT Annual Index

MAIN BOARD

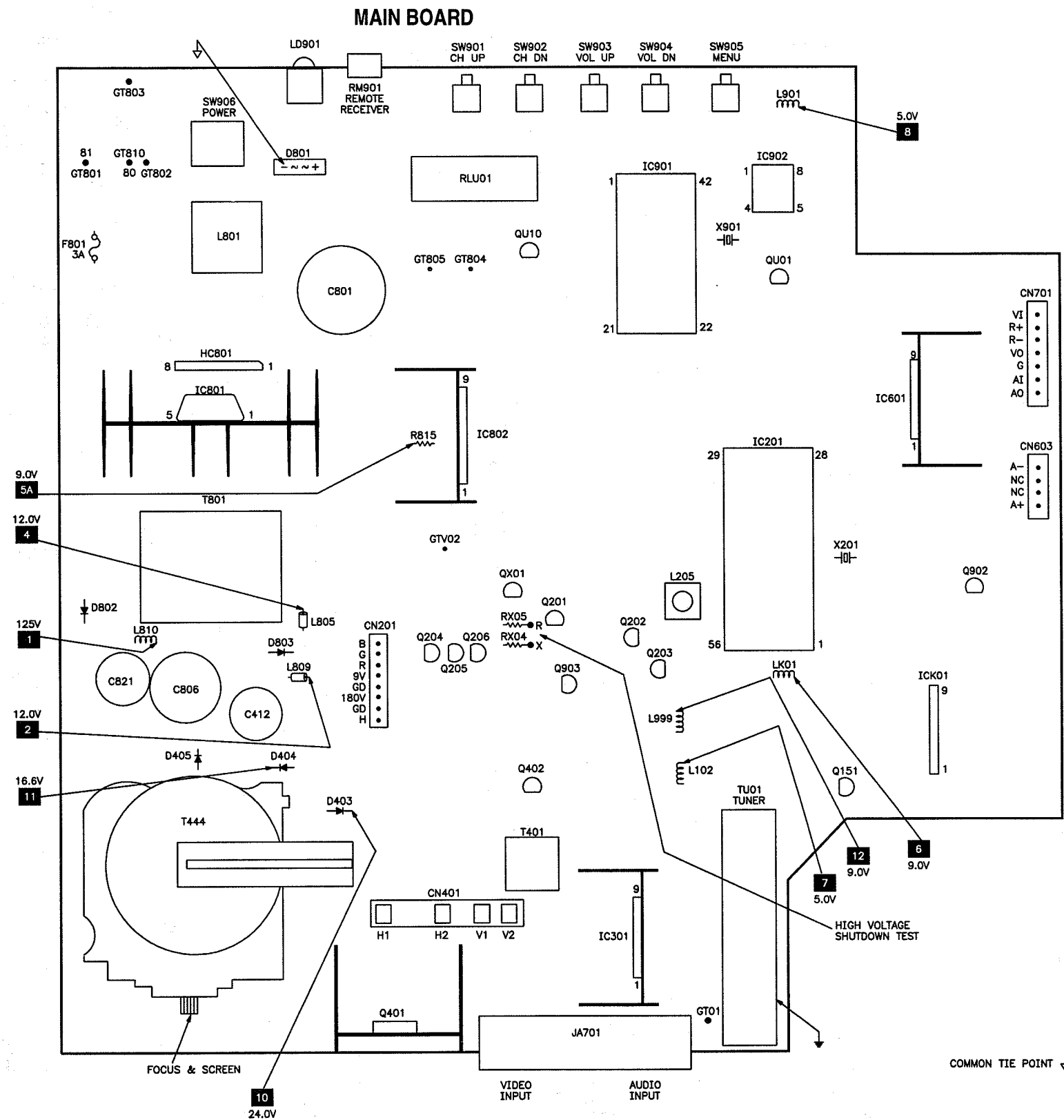


A HOWARD W. SAMS    GridTrace™    PHOTO

MAIN BOARD, GRIDTRACE LOCATION GUIDE

C101	C-9	C603	B-7	D205	J-7	L805	K-8	R229	G-9	R816	M-5	X201	D-8
C102	D-12	C604	A-11	D206	J-8	L807	L-6	R230	G-9	R817	L-4	X202	F-6
C104	D-10	C605	B-7	D207	J-8	L808	M-4	R231	F-8	R819	C-4	X901	E-3
C108	F-11	C606	C-4	D208	J-8	L809	K-9	R233	F-8	R852	L-4	Z201	H-9
C109	G-11	C609	C-4	D210	H-9	L810	M-9	R234	G-8	R853	M-4	Z601	F-9
C110	F-12	C611	F-9	D301	G-12	L811	N-8	R235	G-3	R901	J-1		
C151	E-11	C612	F-9	D401	I-9	L901	D-1	R236	G-3	R902	I-1		
C152	D-11	C701	G-7	D402	I-10	L902	F-2	R237	G-3	R903	E-2		
C153	E-11	C702	G-10	D403	K-11	L910	H-2	R239	G-9	R904	E-2		
C154	D-10	C703	H-9	D404	K-10	L999	F-10	R240	G-9	R906	D-1		
C201	C-9	C705	D-4	D405	L-10	LD901	K-1	R241	G-9	R907	G-1		
C202	D-8	C801	K-4	D406	N-10	LK01	D-9	R242	G-9	R908	G-1		
C203	C-8	C803	M-6	D601	B-5	NT801	I-4	R251	D-7	R910	H-1		
C204	D-8	C804	N-7	D602	B-4	P801	I-3	R252	D-7	R911	G-11		
C205	C-8	C805	N-9	D701	G-7	Q151	D-11	R253	D-7	R912	L-1		
C206	D-8	C806	M-9	D704	E-9	Q201	G-8	R254	J-9	R913	L-1		
C207	C-8	C807	L-9	D801	K-1	Q202	F-9	R255	J-9	R916	E-4		
C209	D-6	C808	M-4	D802	N-8	Q203	F-9	R256	J-9	R917	E-4		
C210	D-6	C809	K-9	D803	K-9	Q204	I-9	R257	K-10	R918	E-4		
C211	C-6	C810	I-6	D804	D-9	Q205	I-9	R301	D-7	R919	N-17		
C212	C-7	C811	C-9	D855	I-5	Q206	I-9	R302	G-11	R920	I-7		
C213	C-7	C812	J-5	D856	I-7	Q401	J-14	R303	G-13	R921	F-5		
C214	D-6	C813	I-5	D903	G-5	Q402	H-11	R304	G-13	R922	E-2		
C215	E-5	C814	N-3	D904	I-7	Q902	B-8	R305	F-13	R923	E-2		
C218	F-6	C815	H-6	D905	E-2	Q903	H-9	R306	G-13	R924	E-1		
C219	F-6	C816	I-6	D906	B-7	QU01	E-1	R307	G-14	R925	E-2		
C220	G-7	C817	I-6	DU01	H-2	QU10	H-3	R308	G-11	R926	G-4		
C221	G-7	C818	J-2	DX01	H-8	QX01	H-8	R309	G-12	R927	G-4		
C222	H-7	C819	K-7	DX02	I-8	R	H-8	R401	H-10	R928	I-6		
C225	F-7	C820	K-8	DZ609	C-5	R101	C-9	R402	H-11	R929	L-1		
C226	F-7	C821	N-9	DZ801	N-2	R102	D-11	R403	H-11	R930	E-2		
C227	G-8	C851	L-4	F801	N-3	R103	D-10	R404	H-10	R931	A-7		
C229	G-8	C852	K-4	GT101	F-14	R104	J-10	R405	I-12	R932	J-8		
C230	G-3	C901	J-1	GT801	N-2	R105	I-10	R406	N-11	R933	J-8		
C231	G-8	C902	G-2	GT802	M-2	R120	F-13	R407	N-10	R940	A-8		
C232	G-8	C903	D-1	GT803	N-1	R152	D-11	R408	M-10	R951	G-2		
C233	F-9	C904	E-1	GT804	I-4	R153	D-11	R409	K-11	R952	F-1		
C234	F-9	C905	G-3	GT805	I-4	R154	D-11	R410	K-11	RLU01	H-2		
C235	F-8	C907	D-4	GT810	M-2	R155	E-11	R411	M-10	RM901	J-1		
C236	E-8	C908	E-3	GTV02	I-8	R156	D-10	R412	M-10	RU01	M-3		
C237	G-8	C909	E-3	HC801	L-5	R157	D-11	R413	I-13	RU02	E-4		
C301	G-13	C910	E-2	QIC201	D-9	R158	F-11	R415	I-11	RU06	E-3		
C302	F-13	C912	F-13	IC301	F-13	R159	F-11	R416	H-14	RU07	E-3		
C303	D-6	C914A	B-8	IC601	C-6	R160	I-10	R417	K-9	RU10	D-4		
C304	G-13	C915	G-4	IC802	I-6	R201	C-8	R602	A-7	RU11	H-4		
C305	G-13	CK01	D-10	IC901	G-2	R202	C-8	R603	A-7	RU12	I-5		
C306	H-13	CK02	C-11	IC902	E-2	R203	F-5	R606	B-5	RU13	H-5		
C308	F-13	CK03	C-10	ICK01	B-10	R204	D-5	R607	B-4	RU20	H-5		
C309	G-12	CK04	C-10	JA701	G-14	R205	D-5	R610	F-9	RX01	H-8		
C310	G-12	CK05	C-10	L102	F-11	R206	D-5	R611	F-9	RX02	H-8		
C311	G-13	CK06	C-9	L152	D-10	R207	C-7	R612	A-8	RX03	I-8		
C312	G-10	CN201	J-9	L201	D-9	R208	G-10	R613	A-10	RX04	H-9		
C313	G-14	CN401	H-12	L202	C-8	R209	G-10	R701	D-4	RX05	H-8		
C401	H-11	CN703	A-4	L203	G-9	R210	G-10	R702	D-4	RX08	H-6		
C402	J-13	CU02	E-4	L204	F-8	R211	D-5	R703	H-8	SF101	D-10		
C403	J-14	CU10	H-3	L205	F-8	R212	D-5	R801	N-1	SFK01	C-10		
C404	J-12	CX01	F-6	L206	D-6	R213	J-7	R803	M-5	SW901	I-1		
C405	M-10	CX02	H-7	L208	F-8	R214	J-7	R804	M-5	SW902	H-1		
C406	J-11	CX03	I-8	L301	I-10	R215	J-7	R805	N-7	SW903	G-1		
C407	J-10	CX04	I-8	L401	I-12	R218	F-6	R806	I-11	SW904	F-1		
C408	K-10	D101	F-11	L402	N-13	R219	F-6	R807	M-10	SW905	E-1		
C409	K-10	D102	G-11	L403	I-11	R222	H-6	R809	J-6	SW906	L-1		
C410	H-11	D201	C-7	L602	F-9	R223	H-8	R810	D-10	T401	H-12		
C411	L-10	D202	H-9	L801	L-3	R226	G-6	R812	J-6	T444	L-12		
C412	L-10	D203	H-9	L803	L-4	R227	F-7	R814	J-6	T801	L-8		
C413	I-11	D204	H-9	L804	L-6	R228	G-9	R815	J-6	X	H-9		

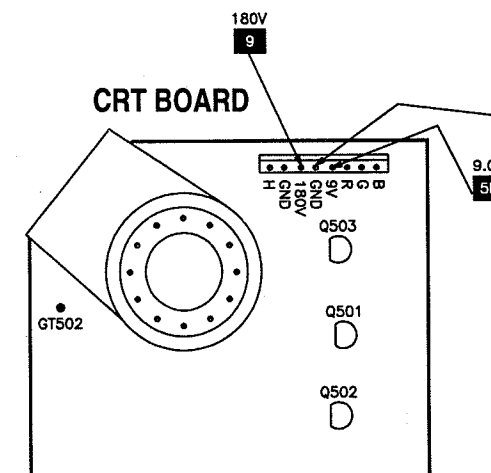
## PLACEMENT CHART



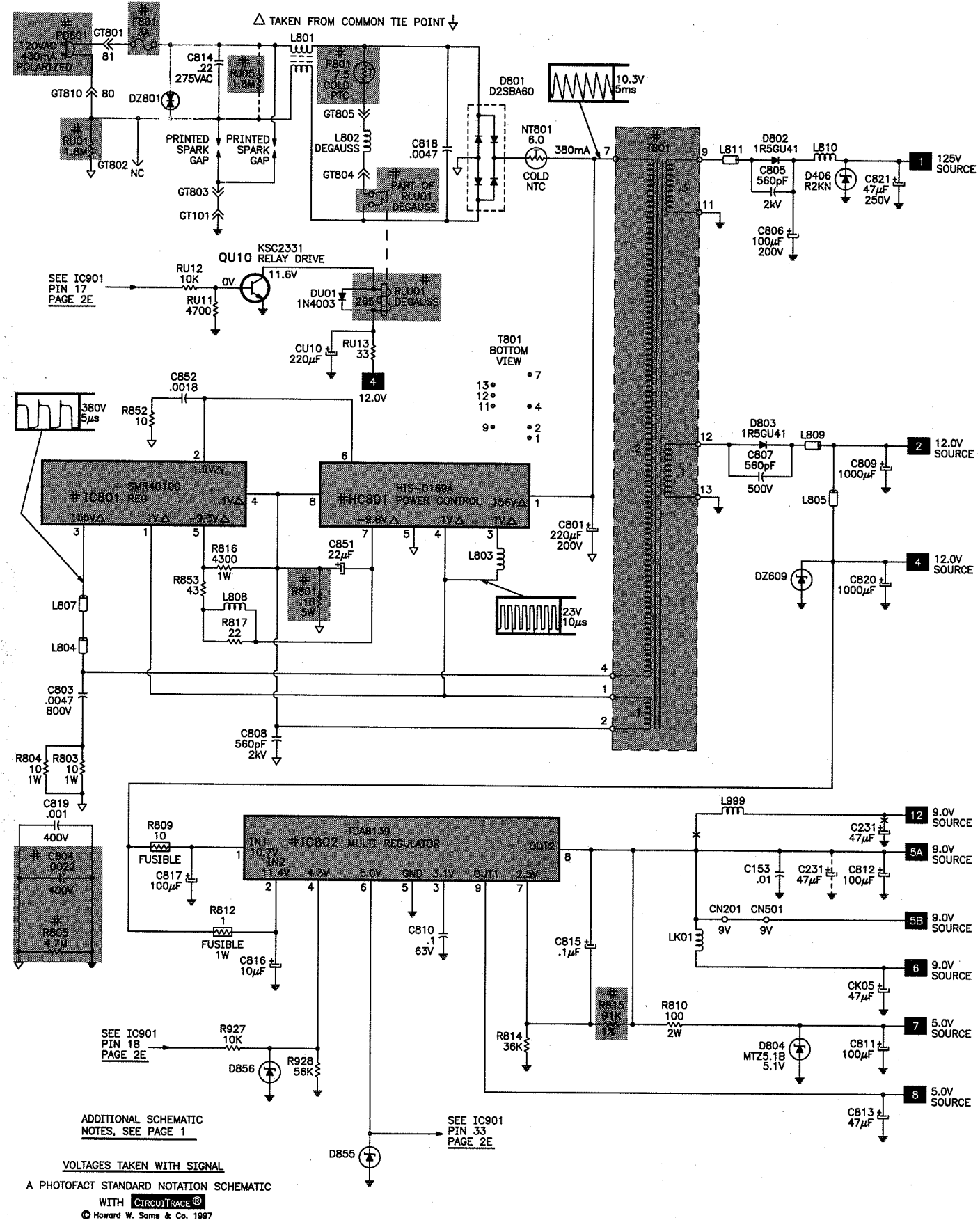
## TEST EQUIPMENT

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.

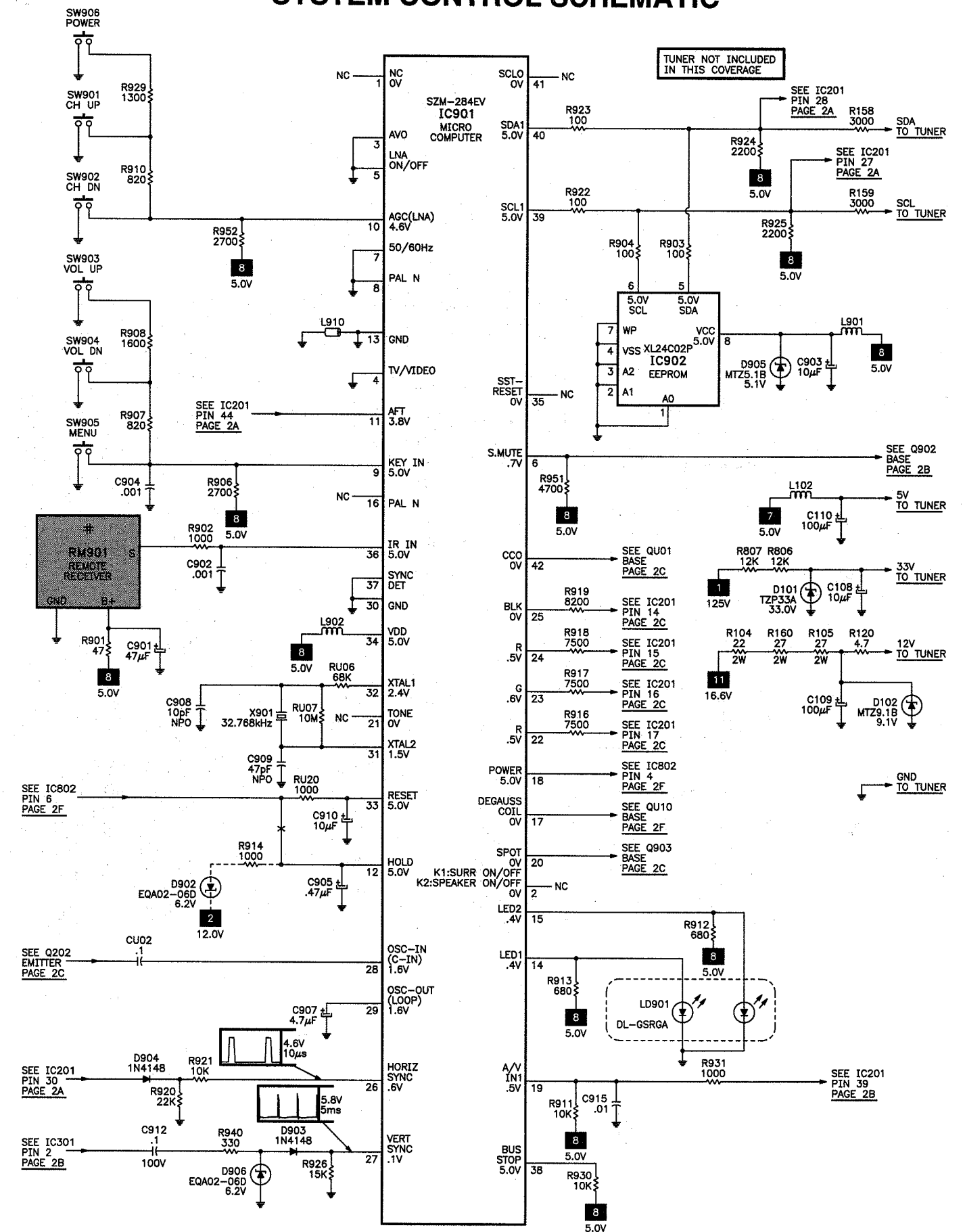
Equipment	Sencore No.
Oscilloscope	SC3100
Generators	
RGB	CM2000
Multiburst Signal	VG91
Color Bar	VG91
TV Stereo	VG91
Digital VOM	SC3100
Frequency Meter	SC3100
Hi-Voltage Probe	HP200
Accessory Probes	TP212
Isolation Transformer	PR57
Capacitance Analyzer	LC101, LC102
CRT Analyzer	CR70
AC Leakage Tester	PR57
Inductance Analyzer	LC101, LC102
Flyback Yoke Tester	TVA92
TV Stereo Power Monitor	SR68, PA81
Field Strength Meter	SL750
Transistor Tester	TF46
Video Analyzer	VG91, TVA92



## POWER SUPPLY SCHEMATIC

**F**

## SYSTEM CONTROL SCHEMATIC



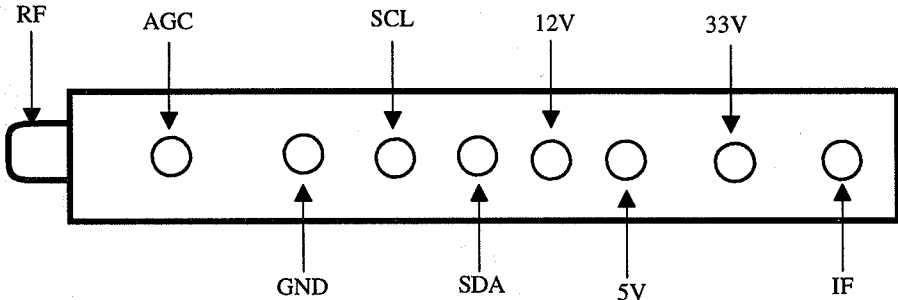
**E**



TUNER INFORMATION

TUNER VOLTAGE CHART							
Pin	VHF Low Band	VHF High Band	UHF Band	Pin	VHF Low Band	VHF High Band	UHF Band
AGC	4.4V	3.9V	4.3V	33V	33.3V	33.3V	33.3V
GND	0V	0V	0V	IF	0V	0V	0V
SCL	5.0V	5.0V	5.0V	NOTE: VHF Low Band voltages taken on channel 2. VHF High Band voltages taken on channel 7. UHF Band voltages taken on channel 14.			
SDA	5.0V	5.0V	5.0V				
12V	8.8V	8.8V	8.8V				
5V	5.0V	5.0V	5.0V				

TUNER TERMINAL GIDE



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

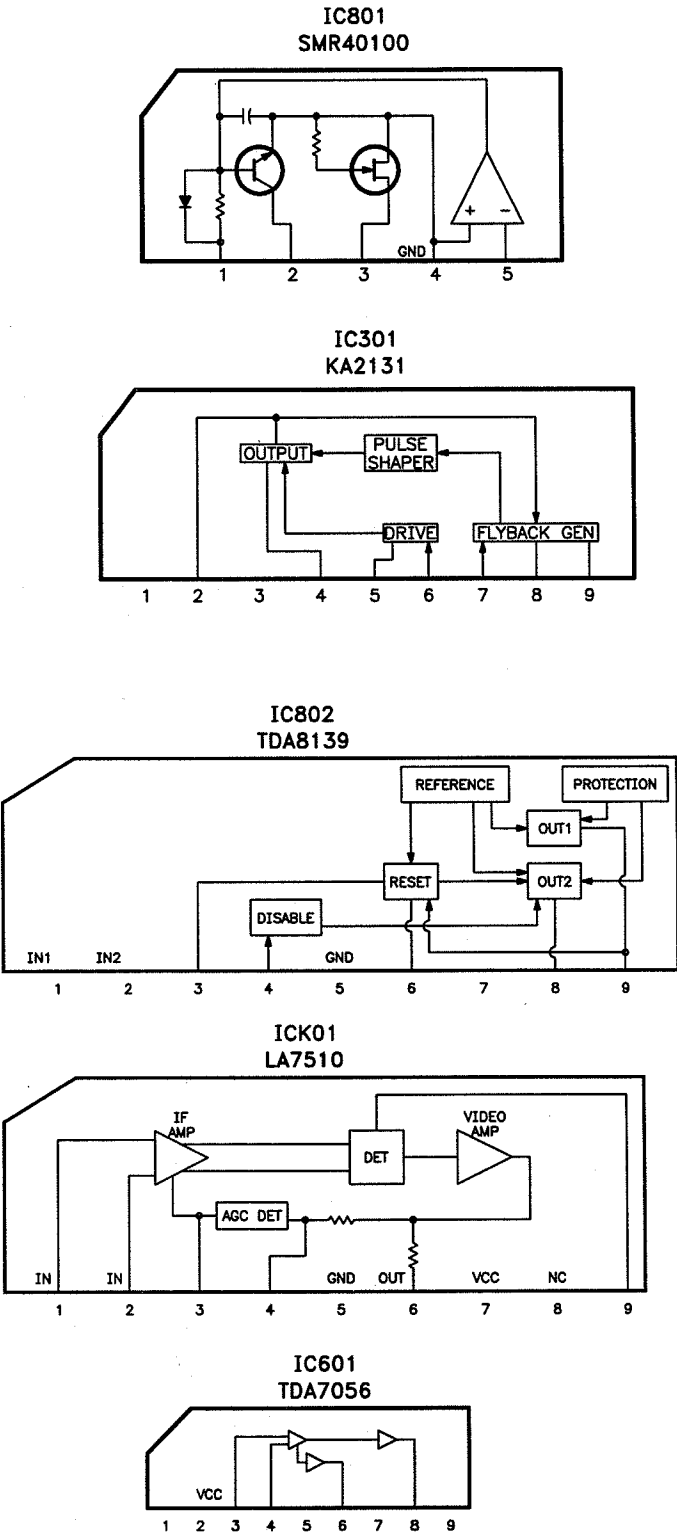
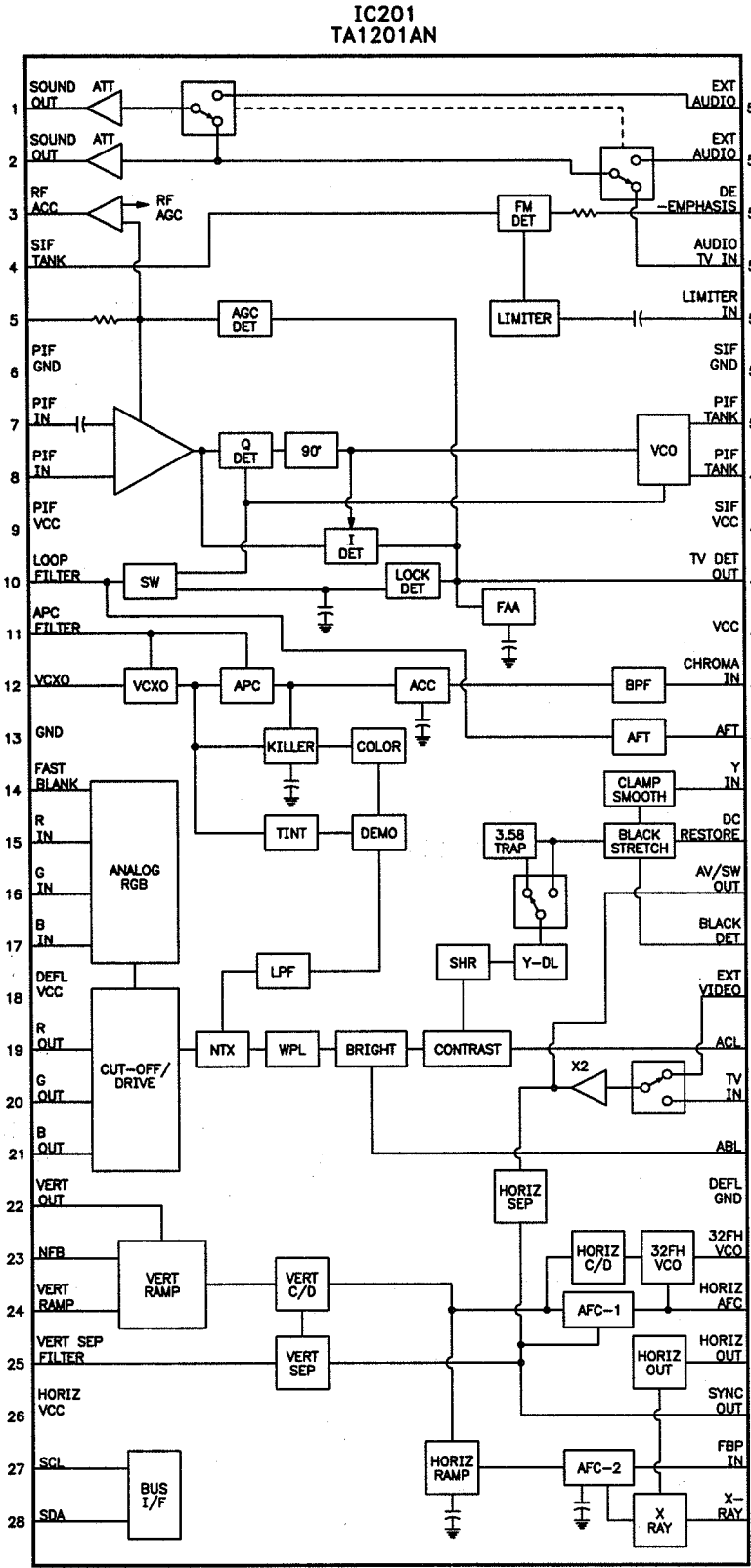
△ Taken from common tie point

3 Schematic **CircuitTrace** Voltage source tie point.

A Cabling: Heavy lines reduce use of multiple lines.

Waveforms and voltages are taken from ground, unless noted otherwise.  
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. Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.  
Resistors are 1/2W or less, 5% or greater unless noted. Value in ( ) used in some versions.  
Measurements with switching as shown, unless noted. Rated voltage shown on zener diodes.

IC FUNCTIONS





MISCELLANEOUS ADJUSTMENTS

FACTORY MODE

The adjustments for this receiver are all accomplished using the factory mode.

Entering the Factory Mode

To enter the factory mode, turn off the receiver. Without pausing between buttons, press mute, 1, 8, 2, and power. The receiver should come on with the following displayed on the CRT. To select between menus, use the channel up or down buttons. To enter the selected menu, use the volume + or - buttons. After adjusting, press the menu button to return to the menu. To exit the factory press the power button.

Factory Mode

Adjustment  
Test Pattern  
Set Option Byte  
Factory Reset

ADJUSTMENT MENU

After entering the adjustment menu, use the channel buttons to select the item and the volume buttons to adjust the on-set value of that item.

Item	Function	Data Range	Factory Value	On-Set Value
AGC	RF AGC	0 - 63	43	38
VCO	PIF VCO	0 - 127	63	76
SCT	Sub Contrast	0 - 63	39	39
SCR	Sub Color	0 - 27	4	2
STT	Sub Tint	0 - 27	19	12
RC	Red Cutoff	0 - 255	0	5
GC	Green Cutoff	0 - 255	0	22
BC	Blue Cutoff	0 - 255	0	5
GG	Green Gain	0 - 255	90	134
BG	Blue Gain	0 - 255	140	114
SB	Sub Brightness	0 - 63	16	13
VA	Vertical Size	0 - 63	35	34
VS	Vertical Center (1)	-	0	0
HS	Horizontal Center	0 - 31	15	19
SS	Sub Sharpness	0 - 31	25	25
SVC	Service Line (2)	-	-	-

(1) Vertical center will not adjust from 0.  
(2) Press mute button for service line (vertical collapse).

RF AGC

Tune in a medium strength station. Enter the factory mode and select AGC. Decrease the on-set value to a point where snow appears. Then increase the data value to a point where snow disappears.

PIF VCO

Remove AC power and disconnect one side of R237. Reapply AC power, turn on receiver, and tune in a signal. Connect a DC voltmeter to pin 44 of IC201. Enter the factory mode and select VCO and adjust the on-set value for 2.5V ± .4V.

Sub Contrast

Tune in a 10 bar staircase pattern. Place a short jumper across D208. Connect an oscilloscope to the emitter of Q204. Enter the factory mode and select RC, GC, and BC and set the on-set values to 0. Select SCT and adjust the data value so that the luminance portion of the waveform is 2.5Vp-p ± .1Vp-p. Remove the jumper from D208.

Sub Tint

Tune in a color bar pattern. Connect an oscilloscope to the emitter of Q206. Enter the factory mode and select STT. Adjust the on-set value so that the fifth and seventh peaks are equal in amplitude.

Sub Color

Note: perform sub contrast and sub tint adjustments before performing the sub color adjustment.

Tune in a color bar pattern. Connect an oscilloscope to the emitter of Q204. Enter the factory mode and select sub color. Adjust the on-set value for 5.3Vp-p

White Balance

Disconnect the antenna. Set the contrast, brightness, sharpness, and tint to midrange. Set the color to midrange. Enter the factory mode and select RC, GC, and BC and set the on-set values to 0. Press the mute button to vertically collapse the picture. Adjust the screen control for a dim line of one color. Adjust the data values of RC, GC, and BC for the best white balance of the line. Press the mute button for a full picture. Tune in a black and white picture and adjust the data values of GG and BG for best white balance at high and low brightness. Set color to midrange.

Sub Brightness

Tune in a 10 bar staircase pattern. Enter the factory mode and select SB and adjust the on-set value so that the fifth bar from the right is brighter than the bars on the left.

Vertical Size

Tune in a picture. Enter the factory mode and select VA. Adjust the on-set value for slightly overscan vertical.

Horizontal Center

Tune in a picture. Enter the factory mode and select HS. Adjust the on-set value to center the picture horizontally.

Sub Sharpness

Tune in a picture. Set sharpness to midrange. Enter the factory mode and select SS. Adjust the on-set value for best sharpness.

TEST PATTERN

This menu allows red, green, and blue raster to be displayed on the CRT. Use the channel buttons to select the color and the volume buttons to turn on the raster. Press the menu button to exit.

SET OPTION BYTE

This menu is used to set the options whenever IC902 is replaced. The byte code should be on the back of the cabinet. Use the number keypad on the remote control to select a bit and to alter its data. The following is displayed on the CRT when in the set option byte menu.

Byte 0:00  
7 6 5 4 3 2 1 0  
Byte 0: 0 0 0 0 0 0 0 0

FACTORY RESET

This menu will reset the custom video menu to factory specifications. Use the volume + button to reset.

CONVERGENCE

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 four and six pole magnets interact, repeat adjustment until center convergence is correct.

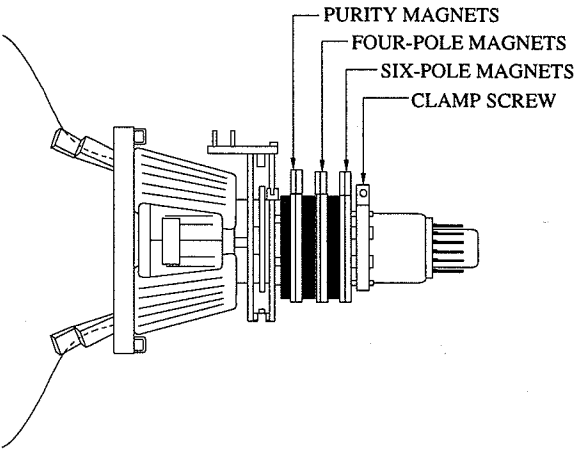
Connect a color bar generator to the antenna input and tune in a dot pattern. Loosen the retainer screw. Adjust the four pole magnets to converge the red and blue dots at the center of the screen. Adjust the six pole magnets to converge the red/blue dots over the green dots at the center of the screen. Tune in a crosshatch pattern. Remove the rubber 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. Replace the rubber wedges. Tighten the clamp screw and retainer screw.

PURITY

NOTE: Operate the receiver for 15 minutes to allow warm-up of CRT. Use a degaussing coil to demagnetize the CRT.

Set contrast and brightness to maximum, and color to minimum. Tune in a green raster. Loosen the clamp screw and slide the deflection yoke back. Loosen the retainer screw. Adjust purity tabs to center the vertical green band. Slide the deflection yoke forward to produce a uniform green screen. Tighten the clamp and retainer screws.

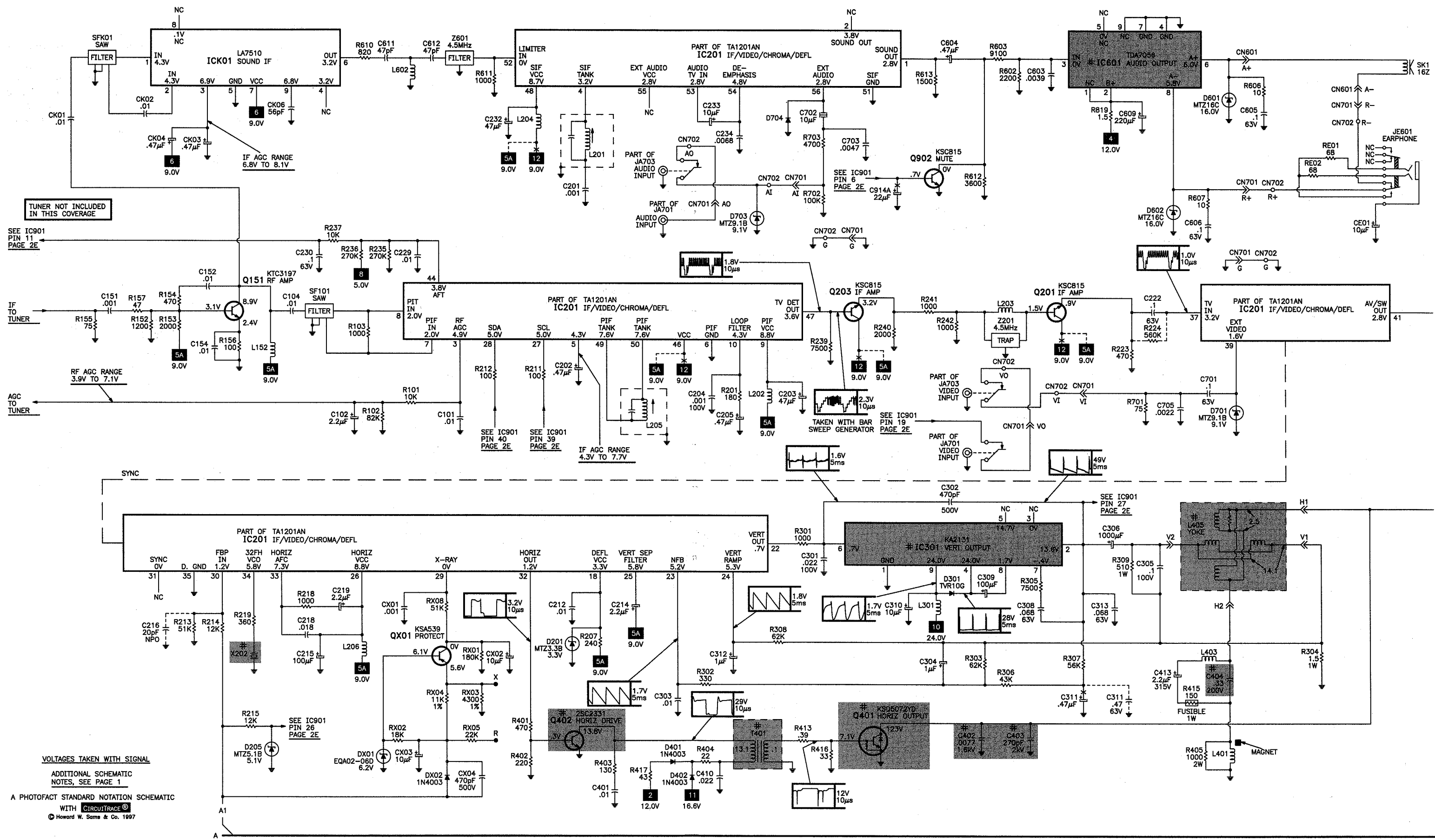
CRT NECK ASSEMBLY



A

TELEVISION SCHEMATIC

B





PARTS LIST continued

SEMICONDUCTORS continued

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
IC902	XL24C02P	-	-	-	-
	XLS24C02P	B4000-0049	-	-	-
	X24C02P	-	-	-	-
ICK01	LA7510	B4012-0360	NTE7067	ECG7067	-
LD901	DL-GSRGA	3H77-00001-070	-	-	-
Q151	KTC3197	-	NTE107	ECG107	SK3293
	2SC388ATM	32137-301-090	NTE85	ECG85	SK3132
Q201	KSC815-Y	32137-301-720	NTE123AP	ECG123AP	SK3854
Q202	KSC815-Y	32137-301-720	NTE123AP	ECG123AP	SK3854
Q203	KSC815-Y	32137-301-720	NTE123AP	ECG123AP	SK3854
Q204	KSA539-Y	32137-401-530	NTE159	ECG159	SK3466
Q205	KSA539-Y	32137-401-530	NTE159	ECG159	SK3466
Q206	KSA539-Y	32137-401-530	NTE159	ECG159	SK3466
# Q401	KSD5072YD	32139-410-020	-	-	-
# Q402	2SC2331Y	-	NTE375*	ECG375*	SK9118*
	KSC2331-Y	32137-301-560	NTE24	ECG24	SK3849
Q501	KSC2330-0	32137-301-530	-	-	-
Q502	KSC2330-0	32137-301-530	-	-	-
Q503	KSC2330-0	32137-301-530	-	-	-
Q902	KSC815-Y	32137-301-720	NTE123AP	ECG123AP	SK3854
Q903	KSC815-Y	32137-301-720	NTE123AP	ECG123AP	SK3854
QU01	KSR1010	A4060-0033	-	-	-
QU10	KSC2331-Y	32137-301-560	NTE24	ECG24	SK3849
QX01	KSA539-Y	32137-401-530	NTE159	ECG159	SK3466

# For SAFETY use only equivalent replacement part.

\* Lead configuration may vary from original.

CONTROLS & RESISTORS

Item No.	Function/Rating	Mfr. Part No.	NTE Part No.
DZ801	Varistor	32167-401-041	-
NT801	6.0 Cold NTC	A1334-0019	-
# P801	7.5 Cold PTC	B1332-0018	-
R257	.47 5% 1/2W Fusible	A1010-0061	-
# R408	1000 2% 1/2W	31048-361-001	HW210
R409	.22 10% 1/2W Fusible	A1010-0036	-
R410	1 5% 1/2W Fusible	A1010-0035	-
# R411, 12	100K 1% 1/2W	31049-375-104	-
R415	150 5% 1W Fusible	A1010-0062	F1W115
# R515	4700 10% 1/2W	31028-328-472	HW247
R518A	10 5% 2W Fusible	A1010-0061	F2W010
R518B	.47 10% 1/2W Fusible	A1010-0038	-
# R801	.18 10% 5W Wirewound	31035-578-188	5WD18
# R805	4.7M 10% 1/2W	31028-328-475	HW4D7
R809	10 5% 1/2W Fusible	A1010-0052	-
R812	1 5% 1W Fusible	-	F1W1D0
# R815	91K 1% 1/2W	31049-375-913	-
# RH01, 02	4700 10% 1/2W	31028-328-472	HW247
# RJ05	1.8M 10% 1/2W	31028-328-185	HW518
# RU01	1.8M 10% 1/2W	31028-328-185	HW518
RX03	4300 1% 1/2W	A1006-0845	-
RX04	11K 1% 1/2W	A1006-0739	-

# For SAFETY use only equivalent replacement part.

SAMSUNG

MODEL TXE1986 (CHASSIS K1)

PARTS LIST continued

MISCELLANEOUS

Item No.	Description	Mfr. Part No.	Notes
# F801	Fuse	34709-097-140	3A, 250VAC, Fast Acting
JA701	Jack	A3040-0186	Assembly
JA703	Jack	A3040-0187	Assembly
JE601	Jack	33339-521-070	Earphone
# PD601	Line Cord	A6006-0253	AC, Polarized
# RLU01	Relay	34726-100-002	Degaussing
# RM901	Receiver	A1294-0035	Remote
SF101	Filter	B1245-0052	SAW
SFK01	Filter	B1245-0045	SAW
SK1	Speaker	A1300-0067	1 5/8" x 4 1/4", 3W, 16 Ohm
SW901	Switch	B3018-0034	Channel Up
SW902	Switch	B3018-0034	Channel Down
SW903	Switch	B3018-0034	Volume Up
SW904	Switch	B3018-0034	Volume Down
SW905	Switch	B3018-0034	Menu
SW906	Switch	A3018-0044	Power
# TU01	Tuner (1)(2)	A1292-0078	UHF/VHF, TECC1080PK25A
# V999	CRT	A1320-0156	A48KRD82X(U)
X201	Crystal	34537-001-002	3.58MHz
# X202	Resonator	34539-300-005	-
X901	Crystal	B1280-0053	32.768kHz
Z201	Trap	34527-460-001	4.5MHz
Z601	Filter	B1243-0071	4.5MHz
	Magnet	A1155D0003	Purity/Convergence
	PC Board (1)	36029-0489-000	Main
	Socket	A3047-0020	CRT
	Transmitter	3F14-00038D470	Remote
	Wedge	33309-0020-000	Yoke Positioning (3 Used)

# For SAFETY use only equivalent replacement part.  
(1) Contact PTS Electronics Corporation for replacement; order by manufacturer's part number.  
(2) Contact TNI Electronics for replacement; order by part number on tuner.



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J. Barker, N. Beck, A. Bonner,  
B. Buchanan, T. Clensy,  
G. Farrell, B. Fink, M. Herkless,  
J. Kocha, F. Malek, B. Medaris,  
R. Raus, B. Skinner

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MODEL TXE1986 (CHASSIS K1)

PARTS LIST

Important Parts Information

- 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

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

Participating Vendors

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

- Custom Components Corporation (Chek-A-Color)
  - NTE Electronics, Inc. (NTE)
  - Philips ECG Company (ECG)
  - PTS Electronics Corporation (PTS)
- Sencore, Inc.
  - Terrell & Nobis (TNI Electronics)
  - Thomson Consumer Electronics, Inc. (SK, TCE)

SEMICONDUCTORS

(Select the replacement that gives the best results.)

Item No.	Type No.	Mfr. Part No.	NTE Part No.	ECG Part No.	TCE Part No.
D101	TZP33A	A4106-0227	-	-	-
D102	MTZ9.1B	32167-406-130	-	-	-
D201	MTZ3.3B	A4106-0229	-	-	-
D202	1N4148	32167-406-480	NTE519	ECG519	SK3100
D203	1N4148	32167-406-480	NTE519	ECG519	SK3100
D204	1N4148	32167-406-480	NTE519	ECG519	SK3100
D205	MTZ5.1B	32167-406-080	NTE5010A	ECG5010A	SK5A1
D206	1N4148	32167-406-480	NTE519	ECG519	SK3100
D207	1N4148	32167-406-480	NTE519	ECG519	SK3100
D208	1N4003	32167-201-070	NTE116	ECG116	SK3113
D209 (1)	1N4148	32167-201-070	NTE519	ECG519	SK3100
D210	MTZ9.1B	32167-406-130	-	-	-
D301	TVR10G	32167-201-170	NTE552	ECG552	SK9000
D401	1N4003	32167-201-070	NTE116	ECG116	SK3113
D402	1N4003	32167-201-070	NTE116	ECG116	SK3113
D403	TVR10G	32167-201-170	NTE552	ECG552	SK9000
D404	TVR10G	32167-201-170	NTE552	ECG552	SK9000
D405	TVR10G	32167-201-170	NTE552	ECG552	SK9000
D406	R2KN	32167-401-880	-	-	-
D601	MTZ16C	32167-406-180	NTE5025A	ECG5025A	SK16A
D602	MTZ16C	32167-406-180	NTE5025A	ECG5025A	SK16A
D701	MTZ9.1B	32167-406-130	NTE5018A	ECG5018A	SK9A1
D703	MTZ9.1B	32167-406-130	NTE5018A	ECG5018A	SK9A1
D704	-	-	-	-	-
D801	D2SBA60	B4104-0093	-	-	-
D802	1R5GU41	32167-207-120	NTE576	ECG576	-
D803	1R5GU41	32167-207-120	NTE576	ECG576	-
D804	MTZ5.1B	32167-406-080	-	-	-
D814	1R5GU41	32167-207-120	NTE576	ECG576	-
D855	-	-	-	-	-
D856	-	-	-	-	-
D902	EQA02-06D	32167-408-080	NTE5013A	ECG5013A	SK6A2
D903	1N4148	32167-406-480	NTE519	ECG519	SK3100
D904	1N4148	32167-406-480	NTE519	ECG519	SK3100
D905	MTZ5.1B	32167-406-080	NTE5010A	ECG5010A	SK5A1
D906	EQA02-06D	32167-401-800	NTE5013A	ECG5013A	SK6A2
DU01	1N4003	32167-201-070	NTE116	ECG116	SK3113
DX01	EQA02-06D	32167-408-080	NTE5013A	ECG5013A	SK6A2
DX02	1N4003	32167-201-070	NTE116	ECG116	SK3113
DZ609	-	-	-	-	-
# HC801	HIS-0169A	A4010-0071	-	-	-
IC201	KA2163	B4012-0400	-	-	-
	TA1201AN	B4012-0400	-	-	-
# IC301	KA2131	32119-102-300	NTE1674	ECG1674	SK9325
# IC601	TDA7056/N2	B4012-0472	-	-	-
# IC801	SMR40100	A4010-0078	-	-	-
# IC802	TDA8139	B4008-1190	-	-	-
IC901	SZM-284EV	-	-	-	-
	SZM-284	B4002-0721	-	-	-
	Z8933212PSC-R1857	B4002-0721	-	-	-

# For SAFETY use only equivalent replacement part.

(1) Used in some versions.

PARTS LIST continued

COILS & TRANSFORMERS

Item No.	Function/Rating	Mfr. Part No.
L102	22μH	32427-805-878
L152	.8μH	32427-904-945
L201	4.5MHz	A1193-0008
L202	56μH	A1132-0060
L203	10μH	32427-904-924
L204	56μH	A1132-0060
L205	45.75MHz	A1190-0010
L206	-	32427-904-930
L208	10μH	32427-904-924
L301	-	32427-805-882
L401	Horizontal Linearity	32446-705-050
L402	100μH	B1133-0009
L403	6.8μH	32426-833-020
# L405	Yoke Horiz 2.2mH Vert 27.6mH	32439-310-029
L602	-	32427-904-928
L801	6μH	32429-633-160
L802	Degaussing	32479-028-510
L803	580μH	B1160-0067
L804	Ferrite Bead	34047-019-060
L805	Ferrite Bead, 1.1μH	B1247-0051
L807	Ferrite Bead	34047-019-060
L808	-	32427-904-943
L809	Ferrite Bead	B1247-0051
L810	100μH	B1133-0009
L811	Ferrite Bead	B1247-0051
L901	-	32427-904-922
L902	10μH	32427-904-924
L910	Ferrite Bead, 1.1μH	B1247-0051
L999	10μH	32427-904-924
LK01	10μH	32427-904-924
# T401	Horizontal Drive	32846-070-007
# T444 (1)	Horizontal Output	A1201-0033
# T801	Switching	A1206-0083

# For SAFETY use only equivalent replacement part.  
(1) Focus and screen controls are part of T444.

CAPACITORS & ELECTROLYTICS

Item No.	Rating	Mfr. Part No.
C213	10pF 5% 50V NPO	31407-105-090
C216	20pF 5% 50V NPO	31407-057-200
# C402	.0077 5% 1.6kV	31519-400-003
# C403	270pF 2kV	-
# C404	.33 5% 200V	31517-333-334
# C405	.1 5% 250V	31517-390-502
C505	.01 5% 3kV	A1100-0783
C702	10μF 20% 50V NP	31607-974-003
# C804	.0022 20% 400V	31466-001-005
C805, 08	560pF 10% 2kV	31417-901-400
C908	10pF 50V NPO	-
C909	47pF 5% 50V NPO	-

# For SAFETY use only equivalent replacement part.