

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.

HIGH VOLTAGE SHUTDOWN TEST

Set all customer controls for normal picture. Check for 13.2V ±0.7V at pin 3 of P651. Using an external power supply, apply 16.3V to pin 3 of P651. The receiver should shut down. If the receiver fails to shut down, the high voltage shutdown circuit requires repair. To return to normal operation, remove AC power and momentarily place a short between pin 1 of P651 and pin 3 of P651. Restore AC power and check receiver for proper operation.

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

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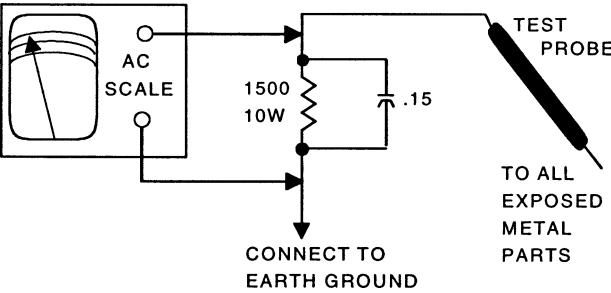
SAFETY CHECKS — FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

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

Hot Leakage Current Check

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



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PHOTOFACT[®] Technical Service Data
SILVER

SET 4675

MODELS 27U-F810, 32U-F810

SHARP

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See PHOTOFACT Annual Index

4675

4675

SHARP
Models 27U-F810, 32U-F810



Representative Model

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list



JANUARY 2003 SET 4675

TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

Pin	VHF Low Band	VHF High Band	UHF Band
(1) AGC	2.3V	2.1V	2.4V
(3) AD	0V	0V	0V
(4) SCL	3.6V	3.6V	3.6V
(5) SDA	3.7V	3.7V	3.7V
(6) B+	5.0V	5.0V	5.0V
(7) 5V	5.0V	5.0V	5.0V
(9) 30V	33.8V	33.8V	33.8V
(10) NC	0V	0V	0V
(11) IF	0V	0V	0V

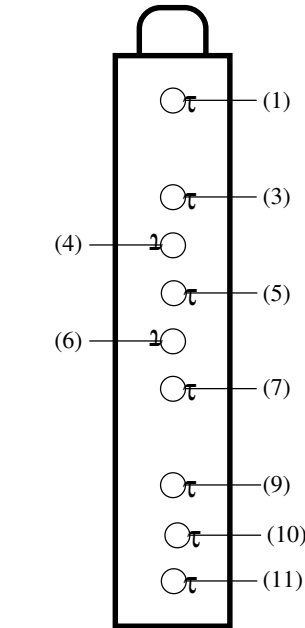
NOTE: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14

PIP TUNER VOLTAGE CHART

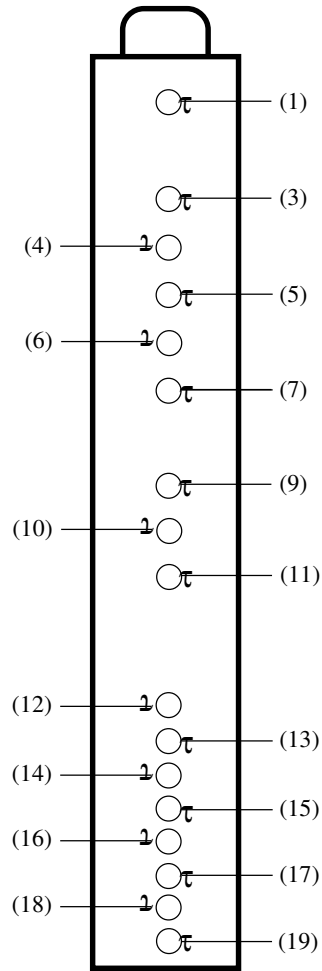
Pin	VHF Low Band	VHF High Band	UHF Band
(1) NC	0V	0V	0V
(3) AS	4.8V	4.8V	4.8V
(4) SCL	3.6V	3.6V	3.6V
(5) SDA	3.7V	3.7V	3.7V
(6) NC	0V	0V	0V
(7) 5V	5.0V	5.0V	5.0V
(9) BT	33.2V	33.2V	33.2V
(10) NC	0V	0V	0V
(11) NC	0V	0V	0V
(12) NC	0V	0V	0V
(13) RF AGC	0V	0V	0V
(14) IF OUT	0V	0V	0V
(15) IF AGC	0V	0V	0V
(16) AF	2.5V	2.5V	2.5V
(17) NC	2.2V	2.2V	2.2V
(18) AFT	2.2V	2.2V	2.2V
(19) V	2.6V	2.6V	2.6V

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



PIP TUNER TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS

HIGH VOLTAGE CHECK

Tune in a picture. Set brightness, color, picture, and screen control to minimum. Connect a high voltage probe to CRT anode. High voltage should measure 28kV to 30kV.

B+ CHECK

Tune in a picture. Connect voltmeter to the cathode of D709 and ground. Check for 120V ±1V.

COLOR PURITY / CONVERGENCE

The CRT and yoke are bonded. Adjustment is not recommended.

ENTERING SERVICE MODE

Service mode adjustments are required when IC201 and IC2101 are replaced. If CRT is replaced perform only adjustments relating to the picture tube. If IC3001 is replaced perform adjustments relating to audio only.

Turn on receiver and use reset function in the video adjustment menu to ensure that customer controls are in their proper reset position. Remove AC power. Press and hold the channel up and volume down buttons on the receiver while restoring AC power. The service mode will now be displayed.

When in the service mode a letter S with a number is displayed in the upper left part of the screen and a data number is displayed in the upper center part of the screen. The channel number is displayed in the upper right part of the screen. The S number is the service number and it is changed by pressing the channel up / down buttons on the receiver or remote transmitter. The on-set data value can be changed by pressing the volume up / down buttons on the receiver or remote transmitter. For a complete listing of the service adjustments, refer to the Service Mode Adjustment Chart.

EXIT SERVICE MODE

Turn off the power or unplug the receiver to exit service mode.

RESETTING TO INITIAL VALUES

The initial values are written to IC2101 by entering the service mode and pressing the channel up and down buttons on the receiver for more than two seconds.

RF AGC

Tune in a picture. Enter the service mode and select service number R01. Set the data value to a point where no snow (noise) appears in picture. Exit the service mode to select another channel. Check all channels for proper operation.

CAPTION POSITION

Enter the service mode and select service number EX2. A black text box appears on screen. Adjust data value to center text box.

PIF VCO

Connect a digital voltmeter to pin 55 of IC201 and ground. Tune in a local channel. Enter the service mode and select service number R02. Adjust T201 to obtain a reading of 2.5V ± 1.0V on the digital voltmeter.

WHITE BALANCE

Operate the receiver for 15 minutes. Enter the service mode and select service number V03. Set the data value to 00. Set brightness for a visible raster. Alternately adjust data value of V09 and V10 until a good gray scale with normal white is obtained. Select service number V03. Set the data value for normal color level.

GRAY SCALE

Tune in an active channel. Set color, brightness, and picture to minimum. Enter the service mode and adjust screen control, if necessary, to obtain a barely visible raster. Adjust service numbers V06, V07, and V08 for a good gray scale with normal white at high and low brightness. Set color to midrange. Adjust screen control for normal brightness.

MTS ADJUSTMENTS

Input Level

Connect an MTS/TV stereo generator to the antenna input jack. Select pilot, 300Hz audio frequency, and right modulating signal. Enter the service mode and select M01. Connect an oscilloscope to pin 39 of IC3001. Adjust the data value for 1.4Vp-p.

MTS VCO

Disconnect the antenna. Connect a 100µF 50V electrolytic capacitor to pin 14 of IC3001 and ground. Enter the service mode and select M02. Connect a frequency counter to pin 39 of IC3001. Adjust the data value for 62.94kHz ± 750Hz.

Separation

Connect an MTS/TV stereo generator to the antenna input jack. Select pilot, 300Hz audio frequency, and right modulating signal. Enter the service mode and select M04. Connect an oscilloscope to pin 40 of IC3001. Adjust the data value for minimum amplitude of the waveform. Select 8kHz audio frequency on the generator. Select M05 and adjust the data value for minimum amplitude of the waveform.

Filter

Connect an MTS/TV stereo generator to the antenna input jack. Select pilot, 300Hz audio frequency, and L-R modulating signal. Enter the service, select M03 and set data value to 00. Increase the data value until OK appears on-screen. Note the data value. Increase the data value until OK disappears from the screen. Note the data value. Set the data value to the average of the noted data values.

MISCELLANEOUS ADJUSTMENTS continued

SERVICE MODE ADJUSTMENT CHART

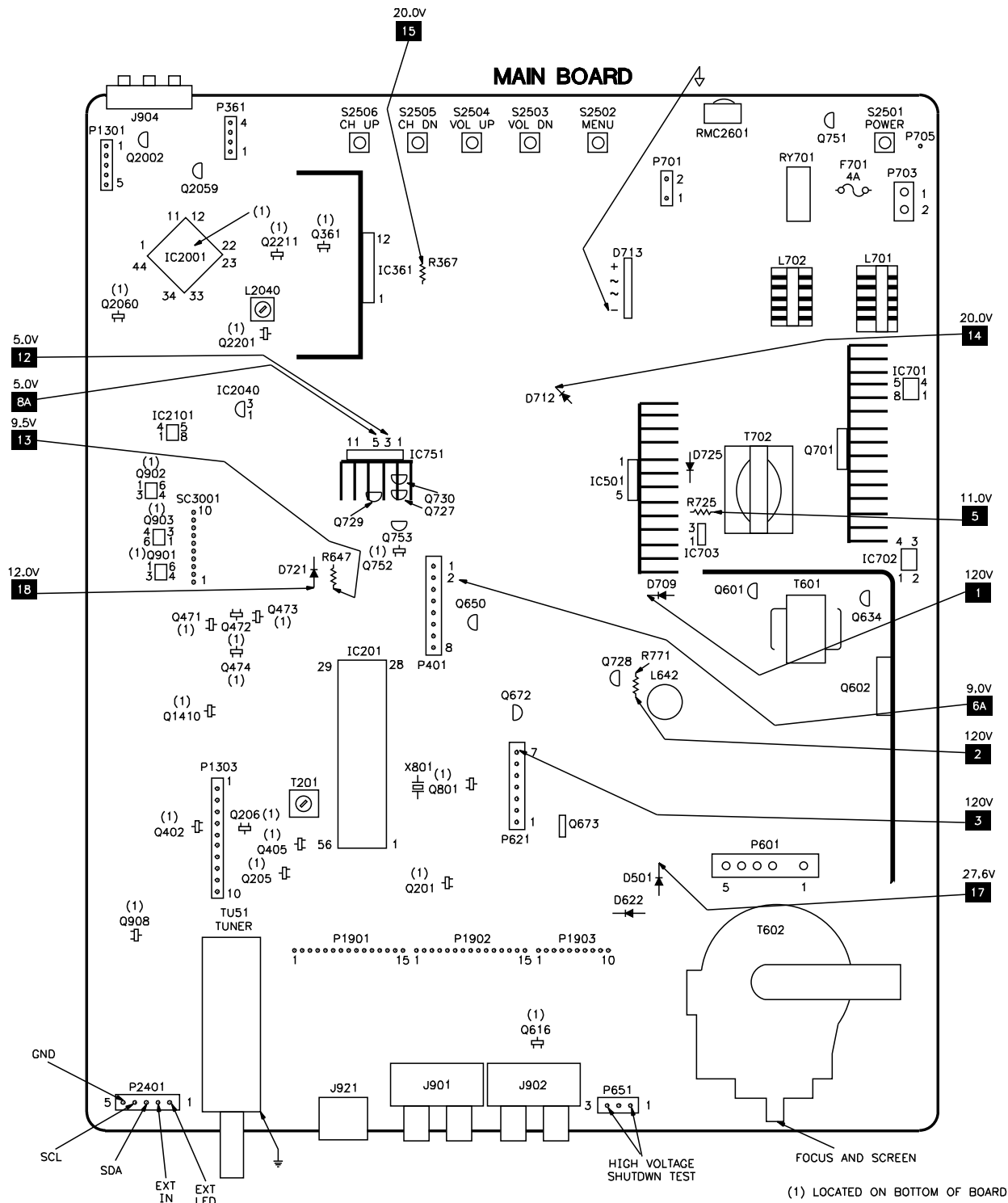
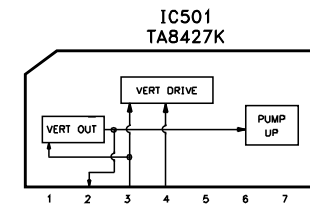
Service No.	Service Adjustment	Data Value Range	Initial Data Value	On-Set Data Value	Notes
V01	Picture	00 - 0F	03	09	Adjust for normal contrast range.
V02	Tint	00 - 7F	3E	43	Adjust for normal flesh tones.
V03	Color	00 - 7F	2D	38	Adjust for normal color level.
V04	Sub Color	00 - 1F	10	10	Must be set to 10.
V05	Brightness	00 - 7F	4D	4E	Adjust for normal brightness level.
V06	Red Cut-Off	40 - FF	40	45	-
V07	Green Cut-Off	40 - FF	40	40	-
V08	Blue Cut-Off	40 - FF	40	4C	-
V09	Green Drive	00 - 7F	40	37	-
V10	Blue Drive	00 - 7F	40	43	-
V11	Sharpness	00 - 3F	14	1E	Must be set to 1E.
V12	N Phase	00 - 03	01	01	Must be set to 01.
V13	DC Restoration	00 - 03	00	00	Must be set to 00.
V14	Black Stretch	00 - 03	03	03	Must be set to 03.
V15	ABL Start Point	00 - 03	03	03	Must be set to 03.
V16	ABL Gain	00 - 03	02	02	Must be set to 02.
V17	y Point	00 - 03	00	00	Must be set to 00.
V18	Y-Mute/V-Stop	00 - 02	00	00	00= Normal, 01= No Y, and 02= No Vertical.
V19	Energy Save Offset	00 - 3F	28	28	Must be set to 28.
V20	Rtone-G	00 - FF	F6	F6	Must be set to F6.
V21	Rtone-B	00 - FF	F6	F6	Must be set to F6.
V22	Btone-G	00 - FF	00	00	Must be set to 00.
V23	Btone-B	00 - FF	0A	0A	Must be set to 0A.
V24	Low-G	00 - FF	F7	F7	Must be set to F7.
V25	Low-B	00 - FF	E8	E8	Must be set to E8.
V26	ML-G	00 - FF	00	00	Must be set to 00.
V27	ML-B	00 - FF	F9	F9	Must be set to F9.
V28	High-G	00 - FF	03	03	Must be set to 03.
V29	High-B	00 - FF	06	06	Must be set to 06.
V30	WPS	00 , 01	01	01	Must be set to 01.
V31	RGB Contrast	00 - 3F	20	25	Must be set to 25.
V32	Y-DL	00 - 07	02	02	Must be set to 02.
V33	Y-DL-Input	00 - 07	01	01	Must be set to 01.
V34	VSM Gain	00 - 07	07	07	Must be set to 07.
V35	N Comb	00 , 01	01	01	Must be set to 01.
V36	BPF/TOF-Input	00 , 01	00	00	Must be set to 00.
V37	Coring	00 , 01	00	00	Must be set to 00.
V38	VSM Phase	00 , 01	00	00	Must be set to 00.
V39	Color y	00 , 01	00	00	Must be set to 00.
V40	Sharp-Input	00 - 3F	14	1E	Must be set to 1E.
V41	Tint-Input	00 - 7F	3E	43	-
V42	Picture-Component	00 - 0F	03	08	-
V43	Tint-Component	00 - 1F	10	10	Must be set to 10.
V44	Color-Component	00 - 7F	30	44	Must be set to 44.
V45	Bright-Component	00 - 7F	4A	43	-
V46	R Cut Off-Component	40 - FF	40	5B	-
V47	G Cut Off-Component	40 - FF	40	40	-
V48	B Cut Off-Component	40 - FF	40	68	-
V49	G Drive-Component	00 - 7F	40	36	-
V50	B Drive-Component	00 - 7F	40	43	-
V51	Sharp-Component	00 - 3F	14	1E	Must be set to 1E.
V52	N Phase-Component	00 - 03	01	01	Must be set to 01.
V53	C-Trap	00 , 01	00	00	Must be set to 00.
V54	ANT-B Picture	00 - 0F	03	03	-
V55	ANT-B Tint	00 - 7F	3E	3E	-
V56	ANT-B Color	00 - 7F	2D	2D	-
V57	ANT-B Sharp	00 - 3F	14	1E	Must be set to 1E.
R01	RF AGC	00 - 3F	24	23	00 produces black raster.
R02	PIF VCO Coil	-	-	-	See PIF VCO Adjustment.
R03	RF AGC Ref.	00 - FF	5C	5C	Must be set to 5C.

SERVICE MODE ADJUSTMENT CHART continued

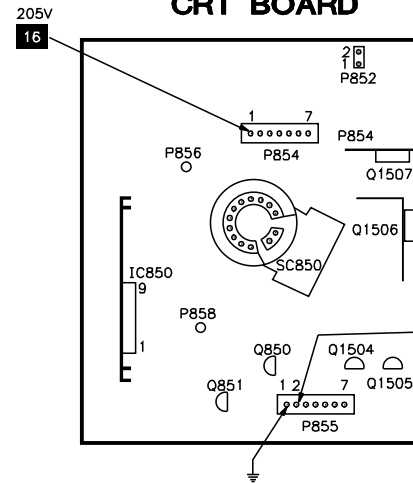
Service No.	Service Adjustment	Data Value Range	Initial Data Value	On-Set Data Value	Notes
D01	Vertical Position	00 - 07	00	00	-
D02	Horizontal Position	00 - 1F	10	0F	Adjust for best horizontal centering on screen.
D03	Vertical Size	00 - 3F	12	32	Adjust for proper vertical size with best linearity.
D04	Horizontal Size	00 - 3F	1F	0B	Must be set to 0B.
D05	Vertical Linearity	00 - 0F	07	03	-
D06	V-S Correction	00 - 0F	08	08	Must be set to 08.
D07	EW Parabola	00 - 3F	21	21	Must be set to 21.
D08	EW Trapezium	00 - 0F	0E	0E	Must be set to 0E.
D09	EW Corner	00 - 0F	0C	0C	Must be set to 0C.
D10	AFC Gain	00 - 03	02	02	Must be set to 02.
D11	V EHT	00 - 07	07	07	Must be set to 07.
D12	H EHT	00 - 07	03	03	Must be set to 03.
EX1	FAO Volume	00 - 32	24	24	Must be set to 24.
EX2	CC- Position	00 - 7F	21	1C	-
EX3	INT	00 - FF	7A	7A	Must be set to 7A.
EX4	A - ATT	00 - 7F	90	90	-
EX5	Tuner Data	00 - 03	00	00	Must be set to 00.
EX6	Sync Slice Level	00 - 7F	36	36	Must be set to 36.
OP1	Option 1 (Set to each model)	00 - FF	F7	F7	Must be set to F7 .
OP2	Option 2 (Set to each model)	00 - FF	B9	B9	Must be set to B9 .
OP3	Option 3 (Set to each model)	00 - FF	0E	0E	Must be set to 0E.
M01	INPUT Level	00 - 0F	09	09	Must be set to 09.
M02	MTS VCO	00 - 3F	24	26	-
M03	Filter	00 - 3F	1F	20	-
M04	Wide Band (Low Separation)	00 - 3F	18	2B	-
M05	Spectral (High Separation)	00 - 3F	10	05	-
M06	ANT-B Input Level	00 - 0F	09	09	-
M07	ANT-B Wide Band	00 - 3F	18	2B	-
M08	ANT-B Spectral	00 - 3F	10	05	-
M09	SRS Level	00 - FF	FF	E0	Must be set to E0.
M10	BBE Level	00 - FF	FF	D9	Must be set to D9.
M11	SRS & BBE Level	00 - FF	FF	D0	Must be set to D0.
M12	SRS & BBE Off Level	00 - FF	FF	E5	Must be set to E5.
M13	SRS Effect	02- 03	02	02	Must be set to 02.
M14	BBE L Level	00 - 0F	08	0F	Must be set to 0F.
M15	BBE H Level	00 - 0F	08	0F	Must be set to 0F.
M16	AGC Level	00 - 07	07	01	Must be set to 01.
M17	Bass Offset	00 - 1F	00	10	Must be set to 10.
M18	Treble Offset	00 - 1F	00	10	Must be set to 10.
M19	Bass Offset BBE	00 - 1F	00	11	Must be set to 11.
M20	Treble Offset BBE	00 - 1F	00	10	Must be set to 10.
P01	Contrast - PIP	00 - 7F	32	32	-
P02	Tint - PIP	00 - 3F	29	29	Must be set to 29.
P03	Color - Sat - PIP	00 - 7F	32	30	-
P04	Y - Off Set - PIP	00 - 1F	09	09	Must be set to 09.
P05	HXA - PIP	00 - FF	0A	0A	Must be set to 0A.
P06	HADJ - PIP	00 - 0F	00	00	Must be set to 00.
P07	Free Run - PIP	00 - 0F	0B	0B	Must be set to 0B.
P08	Tint - PIP- Input	00 - 3F	24	24	Must be set to 24.

PLACEMENT CHART

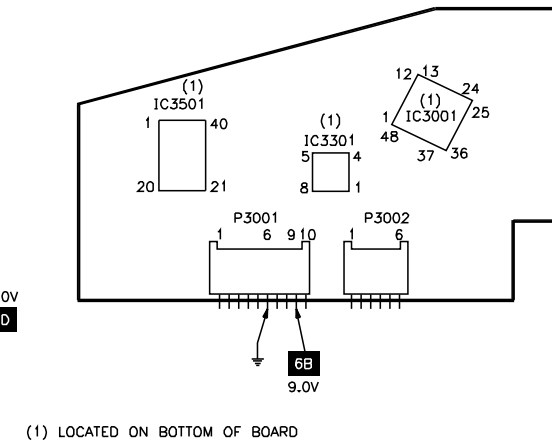
IC FUNCTIONS



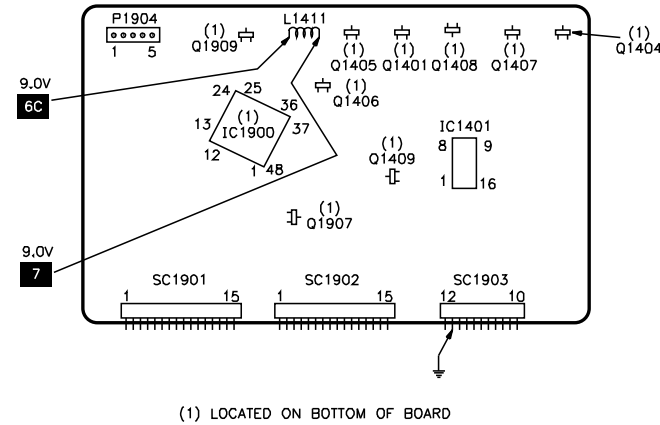
CRT BOARD



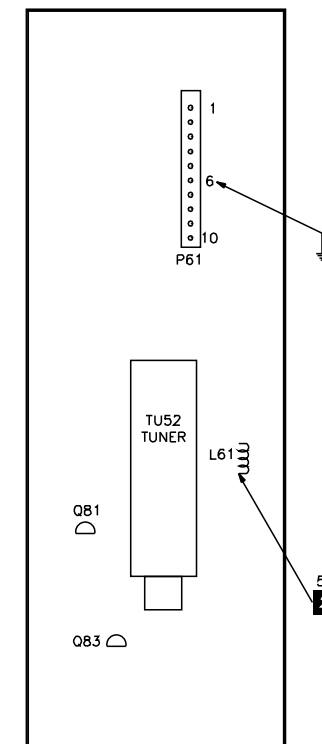
MTS BOARD



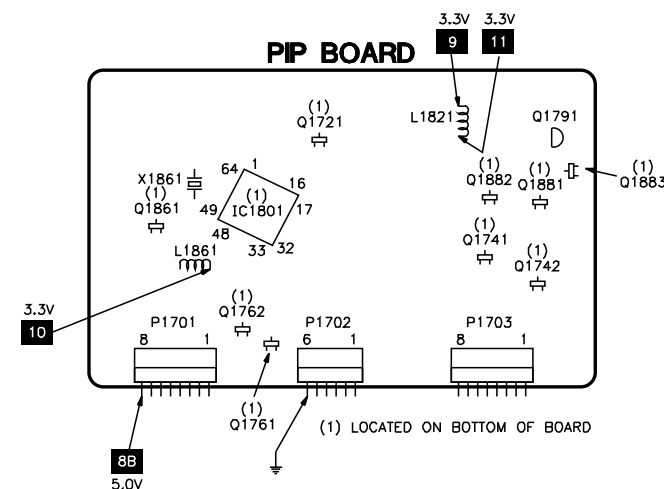
A/V SWITCHING BOARD



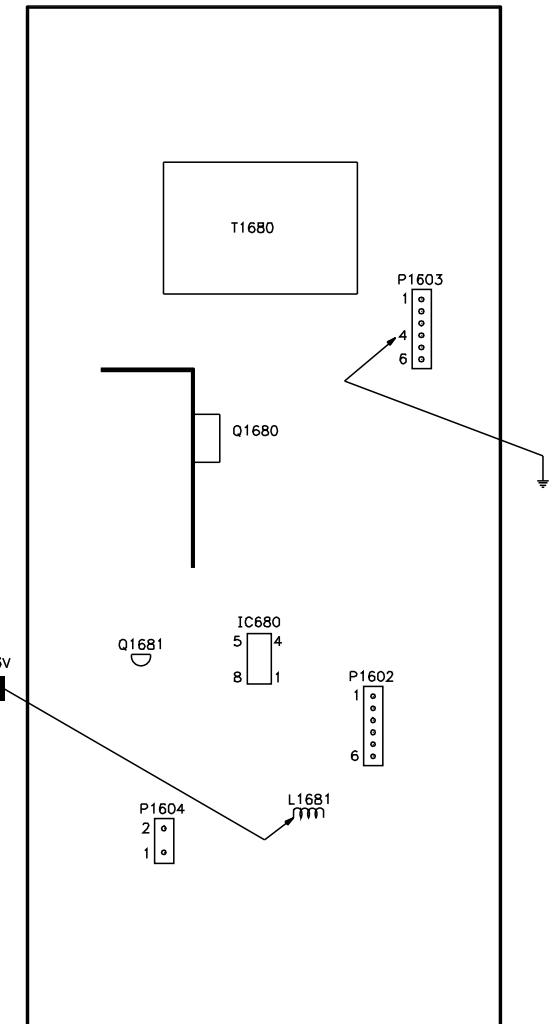
PIP TUNER BOARD



PIP BOARD



DF BOARD



TELEVISION SCHEMATIC

TUNERS NOT INCLUDED IN THIS COVERAGE

SEE IC2001 PIN 34 PAGE 2G

SEE IC2001 PIN 33 PAGE 2G

SEE IC2001 PIN 10 PAGE 2G

SEE IC1900 PIN 47 PAGE 3A

SEE Q1861 EMITTER PAGE 3F

SEE IC2001 PIN 8 PAGE 2G

SEE Q410 EMITTER PAGE 3A

SEE Q2201 BASE PAGE 2G

SEE IC1801 PIN 31 PAGE 3E

SEE T1680 PIN 12 PAGE 2H

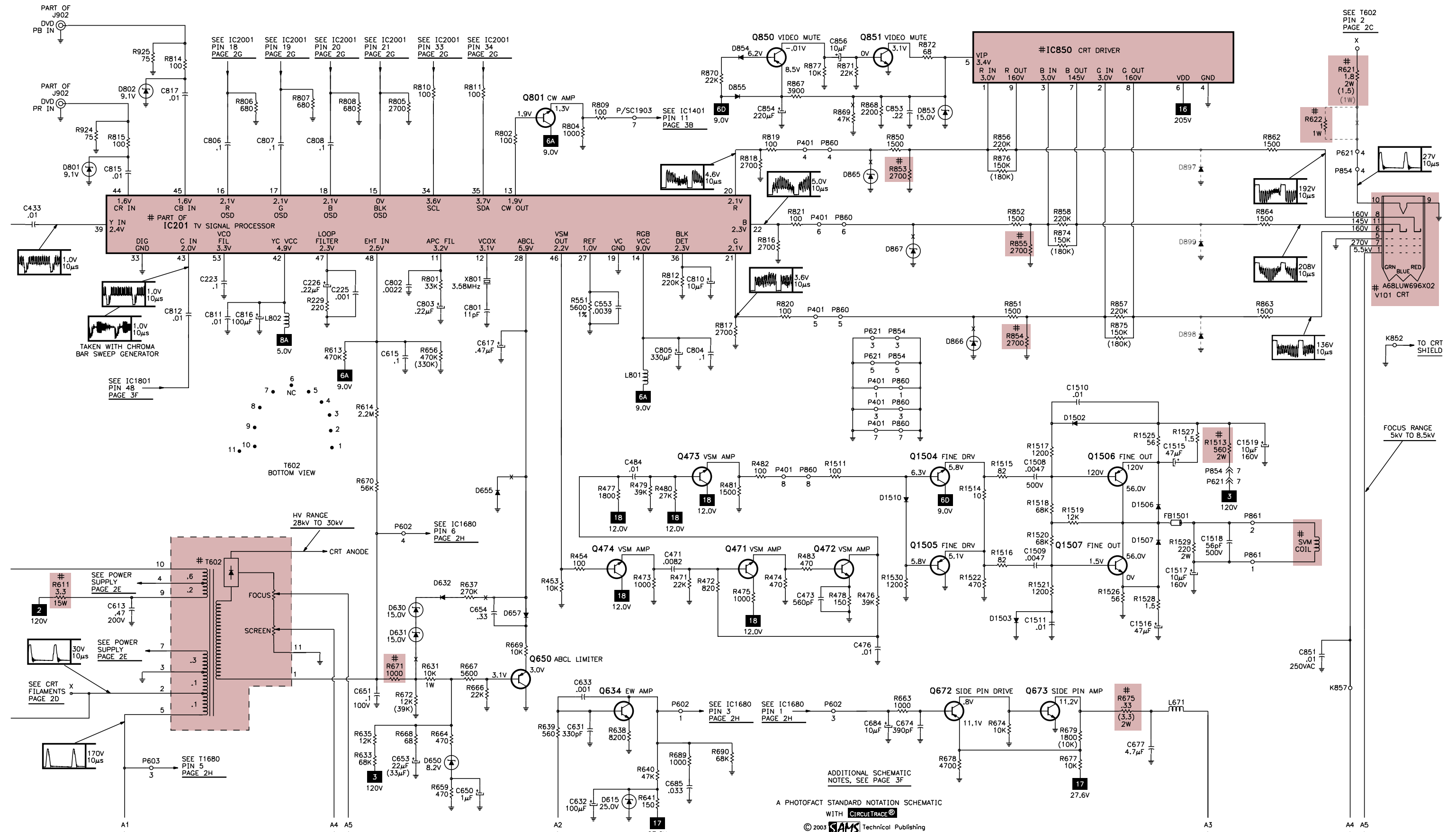
SEE Q2002 BASE PAGE 2G

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 3F

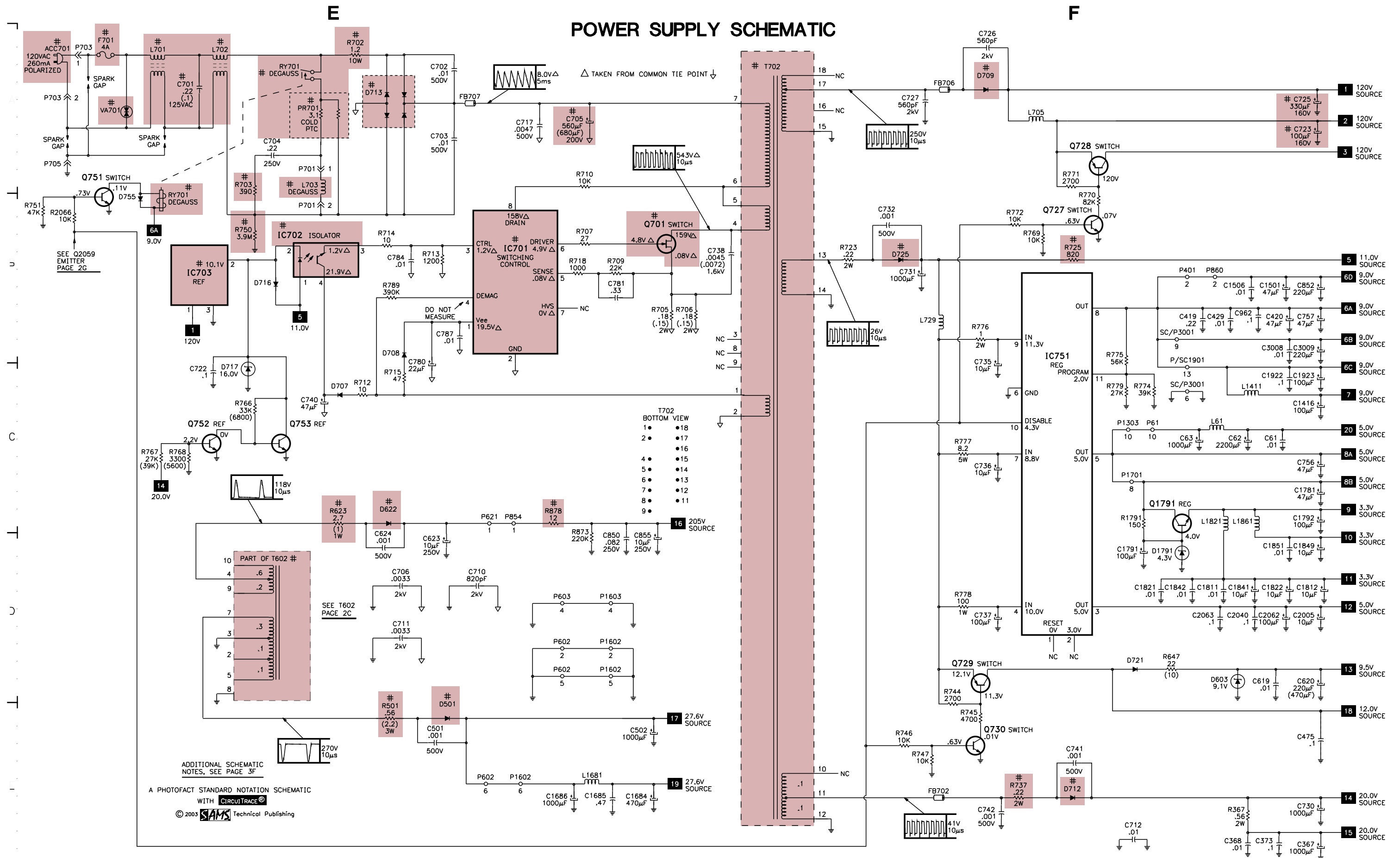
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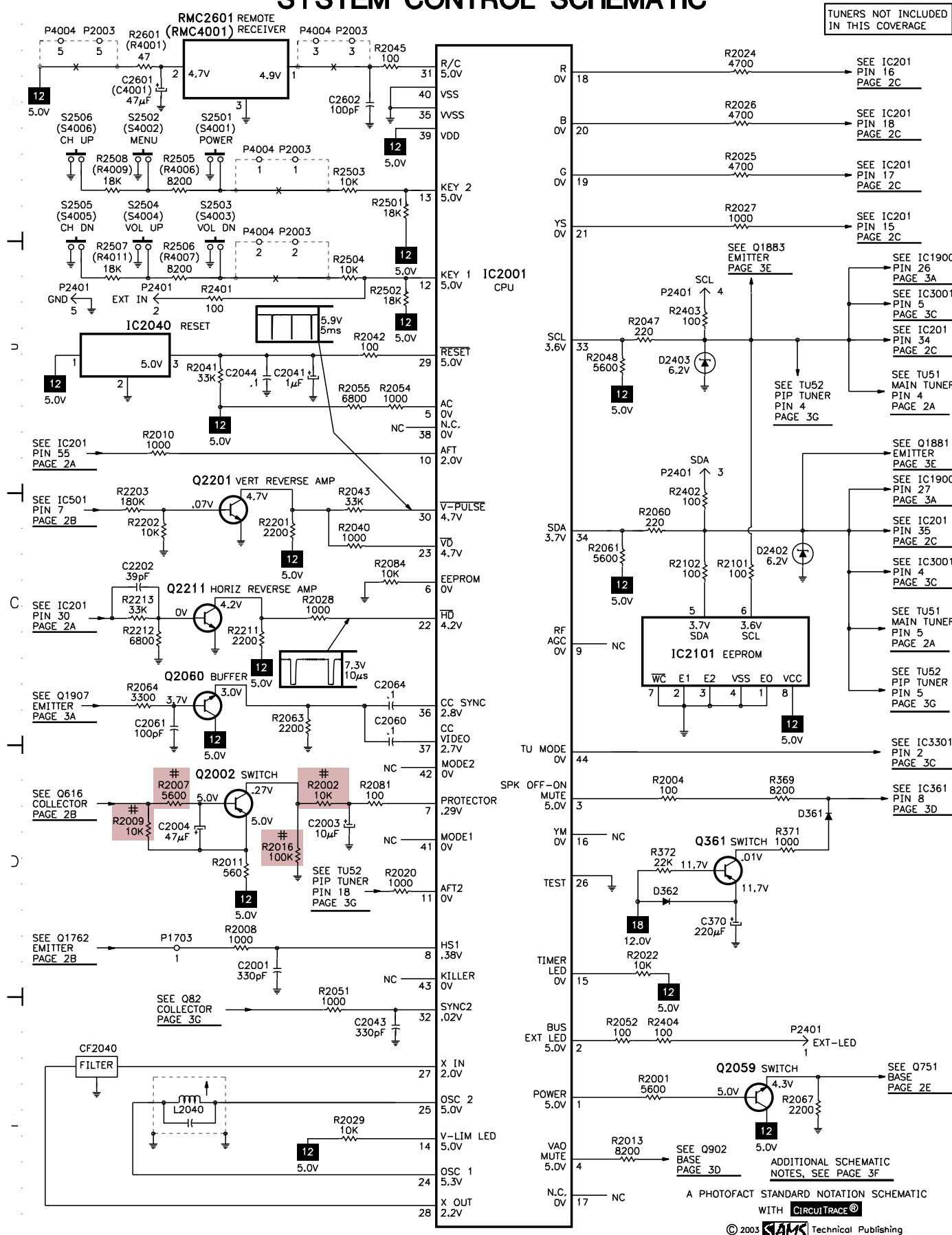
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TELEVISION SCHEMATIC continued

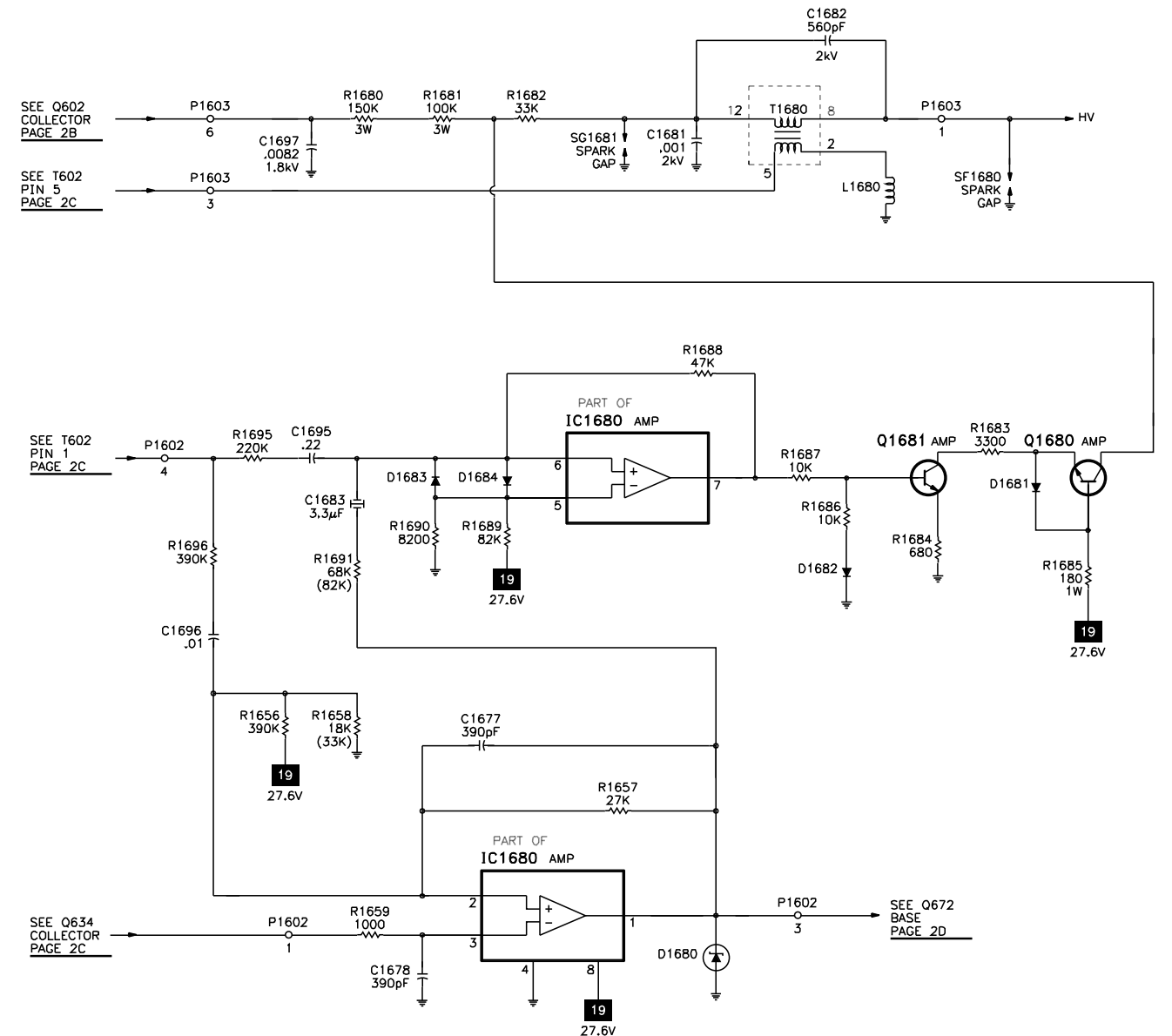
POWER SUPPLY SCHEMATIC



G SYSTEM CONTROL SCHEMATIC

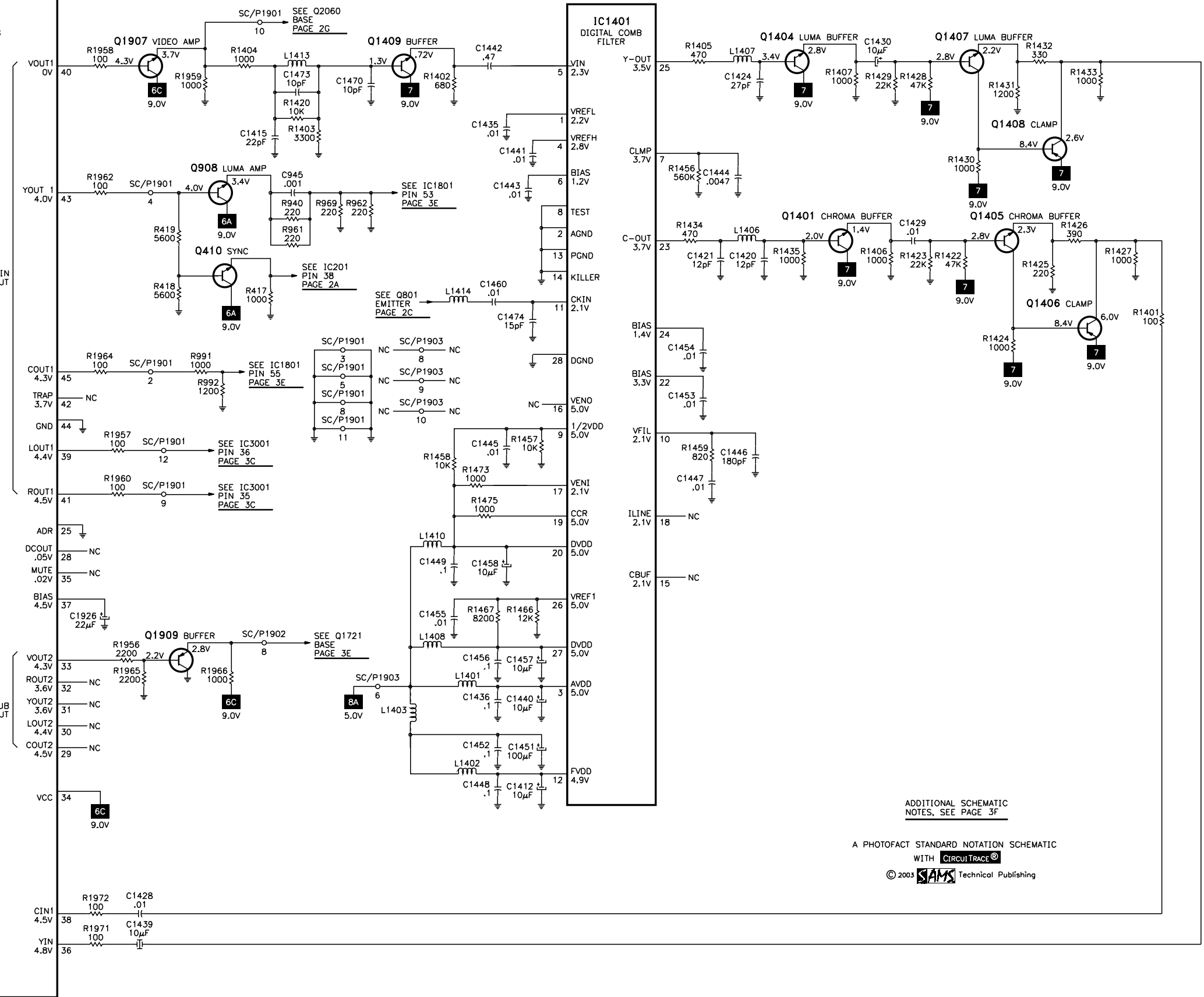
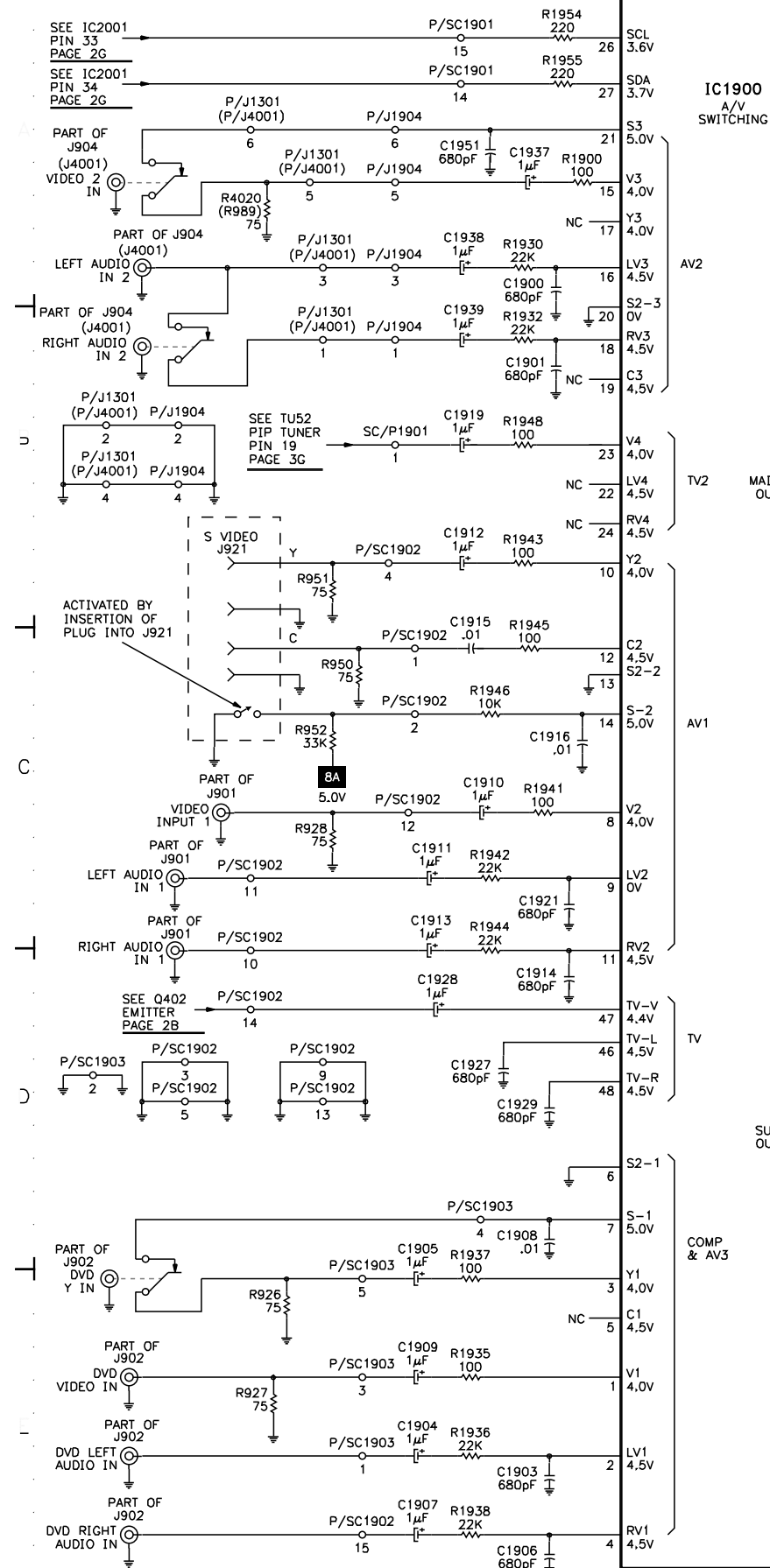


H DF SCHEMATIC



SHARP
MODELS 27U-F810, 32U-F810

A/V SWITCHING - COMB FILTER SCHEMATIC



ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 3F

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D



SCHEMATIC NOTES

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

~~—x—~~ 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 $1000\mu\text{V}$ RF signal, with colorbar pattern applied to antenna terminal. Controls adjusted for normal operation.

Electrolytic capacitors are 50 volts or less,
20% or greater unless noted.

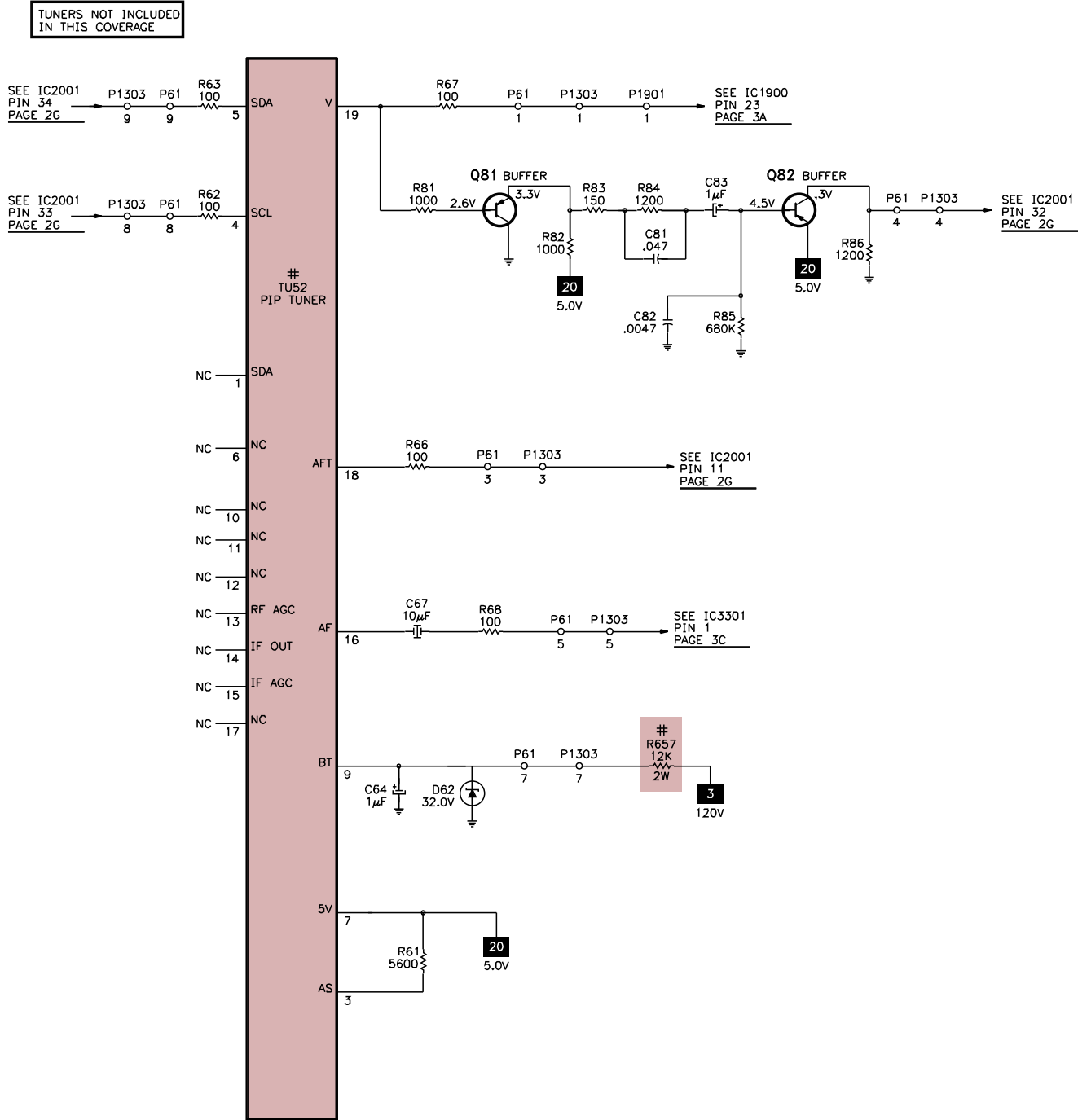
Resistors are 1/2W or less, 5% or greater unless noted.
Value in () used in some versions,
Measurements with switching as shown unless noted.
Rated voltage shown on zener diodes.

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G
PIP TUNER SCHEMATIC



ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 3F

A PHOTOFAC STANDARD NOTATION SCHEMATIC

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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.

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

TEST EQUIPMENT

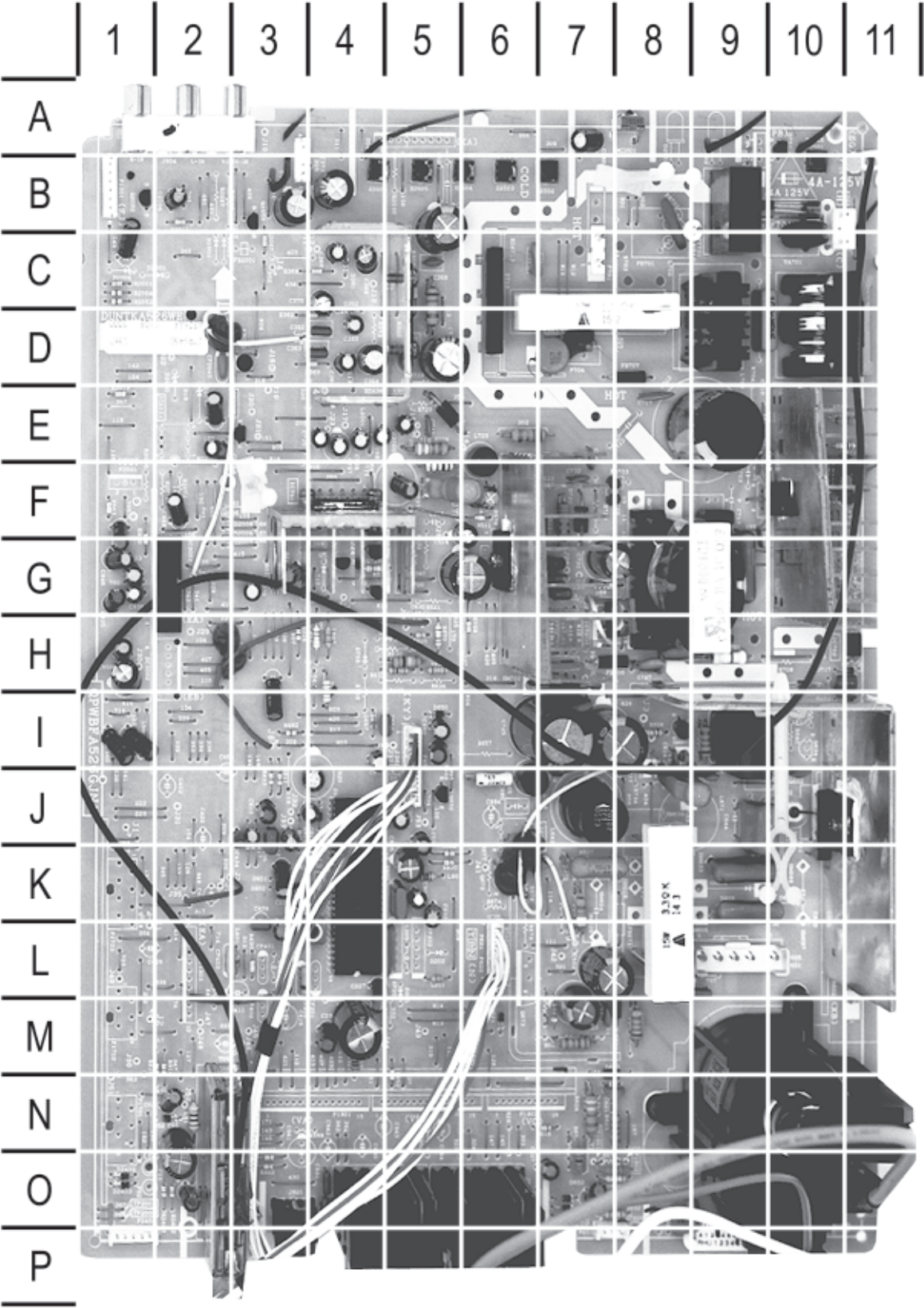
Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

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

SHARP

MODELS 27U-F810, 32U-F810

MAIN BOARD - TOP VIEW



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C53	N2	C701	D10	D650	I5	Q634	I10	R679	L6
C54	O2	C702	D7	D651	O7	Q650	J5	R702	D7
C55	O2	C703	C6	D652	O7	Q672	K6	R705	F10
C224	L3	C705	E9	D653	O7	Q673	L6	R706	G10
C226	K3	C706	H8	D657	I4	Q701	F10	R707	E10
C227	L4	C710	E9	D673	L8	Q727	G4	R709	F10
C229	M4	C717	E8	D680	K10	Q728	J7	R710	F10
C230	M4	C722	H11	D707	G10	Q729	G4	R712	G10
C232	K5	C723	I8	D708	G11	Q730	F4	R713	E11
C361	D4	C725	I7	D709	H7	Q751	A10	R714	E11
C362	D4	C726	I7	D712	E5	Q753	G4	R715	G11
C363	D4	C727	H8	D713	C6	Q2002	B1	R718	F10
C364	D4	C730	D5	D716	I11	Q2059	B3	R723	G8
C365	D4	C731	G8	D717	H11	R225	N3	R725	G7
C366	C4	C732	F7	D721	H4	R226	H3	R726	H7
C367	B5	C735	E4	D725	F7	R362	D4	R737	E6
C368	C5	C736	E5	D755	A9	R363	D4	R750	C5
C369	C4	C737	F5	D801	K3	R367	C5	R770	G4
C370	C4	C738	G9	D802	K3	R368	C5	R771	I7
C371	B3	C740	G10	D2402	O1	R369	C4	R776	E5
C372	B4	C741	E5	D2403	O1	R430	L3	R777	F5
C374	G3	C742	E7	F701	B10	R454	J3	R778	F5
C375	G3	C756	E4	FB601	K10	R482	I3	R810	J3
C420	I3	C757	E4	FB671	L8	R501	M8	R811	J3
C429	L3	C780	E10	FB702	F7	R510	M6	R813	J3
C434	J3	C781	F10	FB706	H8	R511	F6	R814	M2
C435	J3	C803	K5	FB707	D8	R512	F6	R815	M2
C501	M7	C805	K5	IC201	K4	R523	F7	R822	K5
C502	L7	C809	J5	IC361	C5	R524	K7	R830	K5
C510	G7	C810	J3	IC501	G6	R532	G4	R910	G1
C511	G7	C813	J3	IC701	F10	R534	F6	R922	O3
C512	G7	C816	K3	IC702	H11	R578	F6	R923	O3
C513	G7	C930	H1	IC703	H8	R601	I10	R952	N5
C514	F6	C931	O4	IC751	F4	R604	J9	R963	F1
C515	F7	C932	O4	IC2040	E3	R605	H4	R2001	C1
C516	F6	C933	G1	IC2101	E2	R606	I8	R2004	C1
C517	G6	C934	F1	J901	O5	R609	I9	R2011	B2
C518	F5	C935	G1	J902	O6	R611	K8	R2013	E1
C519	L4	C936	G1	J904	A2	R616	N7	R2052	C1
C551	J5	C946	G1	J921	O3	R621	M7	R2067	C3
C606	J9	C948	F2	L51	N2	R622	M7	R2402	O2
C607	J10	C956	H1	L201	L5	R623	N8	R2403	O2
C609	K9	C960	I1	L203	M4	R624	N7	R2601	A7
C610	K9	C961	I1	L401	L3	R625	H5	RMC2601	A8
C613	L9	C2003	C1	L671	J7	R631	H5	RY701	B9
C614	I8	C2004	B2	L701	D10	R633	H5	S2501	B10
C616	J4	C2005	E4	L702	D9	R635	H5	S2502	B7
C617	I5	C2041	E2	L705	J6	R639	I11	S2503	B6
C620	J4	C2062	E2	L729	E6	R640	I10	S2504	B6
C623	M7	C2601	A7	L801	K5	R641	I10	S2505	B5
C624	N7	CF202	L3	L802	H4	R647	I4	S2506	B4
C627	O7	CF403	L2	L2040	D3	R651	O7	T201	L4
C631	I11	CF2040	D2	P361	B3	R652	O8	T601	I9
C632	I10	D52	N2	P401	I5	R653	O8	T602	N10
C633	J10	D361	C4	P601	L9	R654	O8	T702	G9
C650	I5	D362	D4	P621	L6	R657	H5	TU51	O3
C651	O8	D501	M8	P651	P8	R658	J6	VA701	C10
C652	O9	D510	G6	P701	P7	R668	J5	X801	K5
C653	I5	D511	F7	P703	B11	R670	H5		
C654	I5	D603	J4	P1301	B1	R671	O8		
C677	K7	D605	K9	P1303	L2	R672	O8		
C678	K9	D615	I10	PR701	B8	R675	L6		
C684	J6	D621	M6	Q601	I8	R677	L6		
C685	J6	D622	M7	Q602	J10	R678	L6		

MAIN BOARD - BOTTOM VIEW



MAIN BOARD - BOTTOM VIEW, GRIDTRACE LOCATION GUIDE

C201	M7	Q410	J10	R513	F6	R906	H12	R2204	E10
C202	M7	Q471	I10	R514	G6	R907	H7	R2211	D10
C203	M7	Q472	I10	R520	F6	R909	H12	R2212	D10
C204	M7	Q473	I9	R551	J8	R911	G12	R2213	D10
C223	L9	Q474	I10	R612	J9	R912	H11	R2401	P12
C225	L9	Q616	O6	R613	L10	R913	G12	R2404	P11
C228	L8	Q752	H8	R614	L9	R914	H11	R2501	B11
C231	M9	Q801	L7	R617	O6	R915	H12	R2502	B11
C233	L9	Q901	H12	R618	O5	R916	G12	R2503	A9
C307	M9	Q902	G12	R638	J1	R924	P6	R2504	A9
C373	C8	Q903	H12	R655	J9	R925	O6	R2505	B6
C419	L10	Q908	N12	R656	L9	R926	O6	R2506	B7
C433	K11	Q2060	D12	R659	I7	R927	P7	R2507	B6
C471	I10	Q2201	E10	R663	K6	R928	O7	R2508	B6
C473	I10	Q2211	C10	R664	J7	R940	N12		
C475	I10	R57	P10	R666	J7	R950	P9		
C476	I10	R201	N11	R667	J7	R951	O9		
C484	I10	R202	M7	R669	I8	R961	N12		
C552	K8	R203	M7	R674	K6	R962	N12		
C553	J8	R204	M7	R689	K6	R969	N12		
C615	L9	R211	M9	R690	K6	R991	N10		
C618	J9	R215	M9	R698	K9	R992	O11		
C619	J9	R217	M9	R699	J9	R2002	C12		
C674	K6	R219	M9	R744	G8	R2007	B11		
C712	E4	R220	M7	R745	G8	R2008	C11		
C784	F1	R227	N8	R746	F8	R2009	B11		
C787	F1	R228	L9	R747	F8	R2010	B11		
C801	K8	R229	L9	R751	A2	R2016	B12		
C802	L8	R233	L9	R766	G8	R2022	C11		
C804	K7	R234	M9	R767	H8	R2024	C10		
C806	K8	R235	L10	R768	H8	R2025	C10		
C807	K8	R236	L10	R769	G8	R2026	C10		
C808	K8	R307	L8	R772	G8	R2027	C10		
C811	K9	R361	D8	R774	F9	R2028	C10		
C812	K9	R364	D9	R775	F9	R2029	B10		
C814	K9	R365	D9	R779	F9	R2040	D10		
C815	K9	R371	C9	R789	F1	R2041	E10		
C817	K9	R372	C8	R801	L8	R2042	E10		
C945	N12	R415	M10	R802	K7	R2043	D10		
C962	M12	R419	J10	R804	L7	R2045	D10		
C2001	B11	R417	J10	R805	K8	R2047	E11		
C2040	E11	R418	J10	R806	K8	R2048	E11		
C2043	E11	R431	L10	R807	K8	R2051	E11		
C2060	D11	R432	L10	R808	K8	R2054	D12		
C2061	D12	R453	L9	R809	L7	R2055	D12		
C2063	D11	R471	I10	R812	K9	R2060	E11		
C2064	D11	R472	I10	R816	K8	R2061	E11		
C2202	D10	R473	I10	R817	K8	R2063	D12		
C2203	E10	R474	I10	R818	K8	R2064	D11		
C2602	A4	R475	I10	R819	J8	R2066	A2		
IC2001	C11	R476	I10	R820	J8	R2081	C11		
Q201	M7	R477	I10	R821	J8	R2084	D12		
Q205	M9	R478	I10	R901	G12	R2101	E11		
Q206	L10	R479	I10	R902	G12	R2102	E11		
Q361	C9	R480	I10	R903	G12	R2201	E10		
Q402	L10	R481	I10	R904	H11	R2202	E10		
Q405	L9	R483	I10	R905	H12	R2203	E10		

PARTS LIST

Item No.	Type No.	Mfr. Part No.	NTE Part No.
D52	-	RH-EX0676GEZZ	-
D53	-	RH-EX0619GEZZ	-
D62	-	RH-EX0673GEZZ	-
D361, 62	1SS119	VHD1SS119//-1	NTE519
# D501 (1)	-	RH-DX0131CEZZ	NTE552
# D501 (2)	-	RH-DX0302CEZZ	NTE558
D510	-	RH-DX0441CEZZ	NTE116
D511	-	RH-EX0654CEZZ	-
D603	-	RH-EX0631GEZZ	-
# D605	-	RH-DX0255CEZZ	NTE558
D615	-	RH-EX0665GEZZ	-
D621	-	RH-EX0631GEZZ	-
# D622	-	RH-DX0131CEZZ	NTE552
D630	-	RH-EX0647GEZZ	-
D631	-	RH-EX0647GEZZ	-
D632	1SS119	VHD1SS119//-1	NTE519
D650	-	RH-EX0628GEZZ	-
# D651	-	VHD1SS82///1A	NTE177
# D652	-	RH-EX0641GEZZ	-
# D653	1SS119	VHD1SS119//-1	NTE519
D655, 57	1SS119	VHD1SS119//-1	NTE519
# D673	-	RH-DX0229CEZZ	NTE580
D680	-	RH-DX0484CEZZ	-
D707, 08	1SS119	VHD1SS119//-1	NTE519
# D709	-	RH-DX0229CEZZ	NTE580
# D712	-	RH-DX0468CEZZ	-
# D713	-	RH-DX0477CEZZ	-
D716	1SS119	VHD1SS119//-1	NTE519
D717	-	RH-EX0650GEZZ	-
D721	1SS119	VHD1SS119//-1	NTE519
# D725	-	RH-DX0407CEZZ	-
D755	1SS119	VHD1SS119//-1	NTE519
D801, 02	-	RH-EX0631GEZZ	-
D853	-	RH-EX0647GEZZ	-
D854, 55	1SS119	VHD1SS119//-1	NTE519
D865, 66, 67 (1)	-	RH-EX0633GEZZ	-
D897, 98, 99 (2)	-	RH-DX0220CEZZ	NTE116
D1502, 03	1SS119	VHD1SS119//-1	NTE519
D1506	-	RH-DX0487CEZZ	-
D1507	-	RH-DX0487CEZZ	-
D1510	1SS119	VHD1SS119//-1	NTE519
D1610	-	RH-DX0202CEZZ	NTE552
D1680	-	RH-EX0666GEZZ	-
D1681 Thru	-	-	-
D1684	-	RH-DX0475CEZZ	-
D1791	-	RH-EX0604GEZZ	-
D1801, 21	1SS119	VHD1SS119//-1	NTE519
D2402, 03	-	RH-EX0619GEZZ	-
D3501, 02	-	RH-EX0619GEZZ	-
# IC201	TB1252CN	RH-iX3395CEN2	-
# IC361	AN5277	VHiAN5277//-1	-
# IC501	TA8427K	VHiTA8724K/-1	-
# IC701	TEA1507P/N1	VHiTEA1507/-1	-
# IC702	PC123FY8	RH-FX0008GEZZ	-
# IC703 (1)	SE120N	VHiSE120N//-1	-
# IC703 (2)	SE130N	VHiSE130N//-1	-
IC751	-	VHiSTV8164+-1	-
# IC850	TDA6103Q/N3	VHiTDA6103Q-1	NTE7139
IC1401	TC90A53F	VHiTC90A53F-1	-
IC1680	KIA358P	VHiKiA358P+-1	-
IC1801	M65667FP	VHiM65667FP-2	-
IC1900	CXA2089Q	VHiCXA2089Q-1	-
IC2001	TMPA8700CSF	RH-iXA192WJZZ	-
IC2040	KA7045AP	VHiKiA7045A-1	-
IC2101	M24C16-BN6	VHiM24C16B/-1	-
IC3001	CXA2074Q	VHiCXA2074Q-1	-
IC3301	MM1111XFBE	VHiMM1111XF1E	-
IC3501	NJW1144G	VHiNJW1144G-1	-
Q81, 82	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q201	2SC2735	VS2SC2735//1E	NTE2402
Q205, 06	2PD601AR	VS2PD601AR/-1	-
Q361	2PB709AR	VS2PB709AR/-1	-
Q402	2PB709AR	VS2PB709AR/-1	-
Q405, 10	2PD601AR	VS2PD601AR/-1	-
Q471 Thru	-	-	-
Q474	2PD601AR	VS2PD601AR/-1	-
Q601	2SC2482	VS2SC2482//-1	NTE399
# Q602	2SD2581	VS2SD2581++2E	-

Item No.	Type No.	Mfr. Part No.	NTE Part No.
Q616	2PD601AR	VS2PD601AR/-1	-
Q634	2SC3198-G	VS2SC3198-G-1	-
Q650, 72	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q673	2SD2045	VS2SD2045//-1	NTE2559
# Q701 (1)	ST6NC60FP	VSSST6NC60FP1E	-
# Q701 (2)	ST9NC60FP	VSSST9NC60FP1E	-
Q727	2SC3333	VS2SC3333//-1	NTE399
Q728	2SA1091	VS2SA1091-O1A	NTE288
Q729	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q730, 51	2SC3198-G	VS2SC3198-G-1	-
Q752	2PD601AR	VS2PD601AR/-1	-
Q753	2SC3198-G	VS2SC3198-G-1	-
Q801	2PD601AR	VS2PD601AR/-1	-
Q850	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q851	2SC3198-G	VS2SC3198-G-1	-
Q901, 02, 03	IMX1C/C	VSiMX1C/C//1	-
Q908	2PD601AR	VS2PD601AR/-1	-
Q1401, 04, 05	2PD601AR	VS2PD601AR/-1	-
Q1406	2PB709AR	VS2PB709AR/-1	-
Q1407	2PD601AR	VS2PD601AR/-1	-
Q1408	2PB709AR	VS2PB709AR/-1	-
Q1409	2PD601AR	VS2PD601AR/-1	-
Q1504	2SC3198-G	VS2SC3198-G-1	-
Q1505	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q1506	2SA1964E	VS2SA1964E/-1	-
Q1507	2SC5248E	VS2SC5248E/-1	-
Q1680	2SC5022	VS2SC5022//1E	-
Q1681	2SC3198-G	VS2SC3198-G-1	-
Q1721	2PD601AR	VS2PD601AR/-1	-
Q1741, 42	2PB709AR	VS2PB709AR/-1	-
Q1761, 62	2PB709AR	VS2PB709AR/-1	-
Q1791	2SC1959Y	VS2SC1959Y/1E	NTE85
Q1861	2PB709AR	VS2PB709AR/-1	-
Q1881, 82, 83	2PD601AR	VS2PD601AR/-1	-
Q1907	2PD601AR	VS2PD601AR/-1	-
Q1909	2PB709AR	VS2PB709AR/-1	-
Q2002	2SA1266-Y	VS2SA1266-Y-1	NTE290A
Q2059	2SC3198-G	VS2SC3198-G-1	-
Q2060	2PD601AR	VS2PD601AR/-1	-
Q2201, 11	2PD601AR	VS2PD601AR/-1	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# ACC701	Line Cord	QACCD3065CESA	AC, Polarized
C67	10µF 20% 16V NP	VCE9GA1CW106M	-
C608	150pF 2kV	RC-KZ0033CEZZ	-
# C609	.0091 1.6kV	VCFPFD3ZA912H	-
	.0095 1.8kV	VCFPFD3ZA952H	-
# C610	.0091 1.6kV	VCFPFD3ZA912H	-
	.012 1.8kV	VCFPFD3ZA123H	-
# C678	.047 5% 400V	VCQPPC2GB473J	-
	.051 5% 400V	VCQPPC2GB513J	-
# C701	.1 125VAC	RC-FZ036SCEZZ	-
	.22 250VAC	RC-FZ029SCEZZ	-
# C705	560µF 200V	RC-EZ0719CEZZ	-
	680µF 200V	RC-EZ0720CEZZ	-
C706	.0033 2kV	RC-KZ021SCEZZ	-
C710	820pF 2kV	RC-KZ0040CEZZ	-
C711	.0033 2kV	RC-KZ021SCEZZ	-
# C723	100µF 160V	RC-EZ0724CEZZ	-
# C725	330µF 160V	RC-EZ0810CEZZ	-
C726, 27	560pF 10% 2kV	VCKYPH3DB561K	-
C738	.0045 1.6kV	VCFPVC3CA452H	-
	.0072 3% 1.6kV	VCFPVC3CA722H	-
C851	.01 250VAC	RC-KZ018JCEZZ	-
C960, 61	4.7µF 20% 50V NP	VCE9GA1HW475M	-
C1439	10µF 20% 16V NP	VCE9GA1CW106M	-
C1681	.001 2kV	RC-KZ0024CEZZ	-
C1682	560pF 10% 2kV	VCKYPH3DB561K	-
C1683	3.3µH 20% 50V NP	VCE9GA1HW335M	-
C1697	.0082 1.8kV	VCFPVC3ZA822H	-
C3001, 05	4.7µF 20% 50V NP	VCE9GA1HW475M	-
C3010, 12, 16	4.7µF 20% 50V NP	VCE9GA1HW475M	-

Item No.	Function/Rating	Mfr. Part No.	Notes
C3033, 34	4.7µF 20% 50V NP	VCE9GA1HW475M	-
CF202	Filter	RFiLC0447CEZZ	4.5MHz
CF403	Filter	RFiLC0446CEZZ	4.5MHz
CF2040	Filter	RFiLA0099CEZZ	-
# DY601 (3)	Yoke	-	Horiz 1mH, Vert 16.6mH
# F701	Fuse	QFS-B4023CEZZ	4Amp, 125V, Slow Blow
FB601, 71	Ferrite Bead	RBLN-0037CEZZ	-
FB702	Ferrite Bead	RBLN-0020CEZZ	-
FB706, 07	Ferrite Bead	RBLN-0037CEZZ	-
FB1501	Ferrite Bead	RBLN-0020CEZZ	-
FH701	Fuse Holder	QFShD1013CEZZ	For F701
FH702	Fuse Holder	QFShD1014CEZZ	For F701
J901	Jack	QTANZA004WJZZ	Assembly
J902	Jack	QTANJ0655CEZZ	Assembly
J904 (1)	Jack	QJAKG0091CEZZ	Assembly
J921	Jack	QSODC0430CEZZ	S-Video
J4001 (2)	Jack	QJAKG0091CEZZ	Assembly
L51	27µH	VP-CF270K0000	-
L61	10µH	VP-CF100K0000	-
L201	1.2µH	VP-XF1R2K0000	-
L203	10µH	VP-DF100K0000	-
L401	10µH	VP-XF100K0000	-
L671	-	RCiLZ1005CEZZ	-
# L701, 02	Line Filter	RCiLF0313CEZZ	-
# L703 (1)	Degaussing	RCiLG0056PEZZ	-
# L703 (2)	Degaussing	RCiLG0121GJZZ	-
L705, 29	-	RCiLP0179CEZZ	-
L801	10µH	VP-DF100K0000	-
L802	6.8µH	VP-DF6R8K0000	-
L1401, 02	10µH	VP-XF100K0000	-
L1403	150µH	VP-DF151K0000	-
L1406	33µH	VP-XF330K0000	-
L1407	22µH	VP-XF220K0000	-
L1408, 10, 11	10µH	VP-XF100K0000	-
L1413, 14	33µH	VP-XF330K0000	-
L1640	-	RCiLZ0982CEZZ	-
L1641 (1)	-	RCiLZ1022CEZZ	-
L1641 (2)	-	RCiLZ1026CEZZ	-
L1680	-	RCiLZ0034PEZZ	-
L1681	8.2µH	VP-DF8R2K0000	-
L1721	68µH	VP-XF680K0000	-
L1801, 21	10µH	VP-XF100K0000	-
L1861, 62, 63	10µH	VP-XF100K0000	-
L2040	Oscillator	RCiLB0131CEZZ	-
# PR701	3.1 Cold PTC	RMPTP0072CEZZ	-
# R501	.56 5% 1W	VRN-RL3ABR56J	-
	2.2 5% 3W	VRN-RL3LB2R2J	-
R551	5600 1% 1/6W	VRS-CY1JF562F	-
# R604	1200 5% 7W Wirewound	VRS-KA3NG122J	-
	1000 5% 7W Wirewound	VRS-KA3NG102J	-
# R611	3.3 10% 15W Wirewound	VRW-KQ41C3R3K	-
# R616	10K 5% 1/8W	VRD-RA2BE103J	-
# R617	10K 5% 1/16W	VRS-CY1JF103J	-
# R618	47K 5% 1/16W	VRS-CY1JF473J	-
# R621	1.8 5% 2W	VRN-RL3DB1R8J	-
	1.5 5% 1W	VRN-RL3AB1R5J	-
# R622	1 5% 1W	VRN-RL3AB1R0J	-
# R623	2.7 5% 1W	VRN-RL3AB2R7J	-
	1 5% 1W	VRN-RL3AB1R0J	-
# R624	3300 5% 2W	VRS-RG3DB332J	-
# R651	1 5% 1/2W	VRN-RL2HC1R0J	-
# R652	10K 2% 1/4W	VRD-RA2EE103G	-
# R653	5600 2% 1/4W	VRD-RA2EE562G	-
# R654	39K 2% 1/4W	VRD-RA2EE393G	-
	33K 2% 1/4W	VRD-RA2EE333G	-
# R657, 58	12K 5% 2W	VRS-VV3DB123J	-
# R671	1000 5% 1/2W	VRS-RG2HC102J	-

PARTS LIST continued

Item No.	Function/Rating	Mfr. Part No.	Notes
# R675	.33 5% 2W	VRN-RL3DBR33J	-
	3.3 5% 3W	VRN-RL3DB3R3J	-
	1.2 10% 10W Wirewound	VRW-KQ4AC1R2K	-
# R702	390 5% 1/2W	VRD-RM2HD391J	-
# R703	820 5% 1/2W	VRD-RM2HD821J	-
# R725	.22 5% 2W	VRN-RL3DBR22J	-
# R737	3.9M 1/2W	RR-DZ0049CEZZ	-
# R750	8.2 10% 5W	VRS-KA3HG8R2K	-
R777	2700 5% 1/2W	VRS-SV2HC272J	-
# R853, 54, 55	12 5% 1/2W	VRS-SV2HC120J	-
# R878	560 5% 2W	VRS-VV3DB561J	-
# R1513	1200 5% 3W	VRS-KT3LB122J	-
R1627	150K 5% 3W	VRS-SV3LB154J	-
R1680	100K 5% 3W	VRS-KT3LB104J	-
R1681	10K 5% 1/16W	VRS-CY1JF103J	-
# R2002	5600 5% 1/16W	VRS-CY1JF562J	-
# R2007	10K 5% 1/16W	VRS-CY1JF103J	-
# R2009	100K 5% 1/16W	VRS-CY1JF104J	-
# R2016	Receiver	RRMCU0222CEZZ	Remote
RMC2601 (1)	Receiver	RRMCU0222CEZZ	Remote
RMC4001 (2)	Relay	RRLYJ0081CEZZ	Power
# RY701	Switch	QSW-K0003AJZZ	Power
S2501 (1)	Switch	QSW-K0003AJZZ	Menu
S2502 (1)	Switch	QSW-K0003AJZZ	Volume Down
S2503 (1)	Switch	QSW-K0003AJZZ	Volume Up
S2504 (1)	Switch	QSW-K0003AJZZ	Channel Down
S2505 (1)	Switch	QSW-K0003AJZZ	Channel Up
S2506 (1)	Switch	QSW-K0003AJZZ	Power
S4001 (2)	Switch	QSW-K0003AJZZ	Menu
S4002 (2)	Switch	QSW-K0003AJZZ	Volume Down
S4003 (2)	Switch	QSW-K0003AJZZ	Volume Up
S4004 (2)	Switch	QSW-K0003AJZZ	Channel Down
S4005 (2)	Switch	QSW-K0003AJZZ	Channel Up
S4006 (2)	Socket	QSOCV0936CEZZ	CRT
SC850	Filter	RFiLC0405CEZZ	SAW
SF201	Speaker	VSP1206PB648A	8 Ohms
SP1, 2	IF	RCiLi0636CEZZ	-
T201	Horizontal Driver	RTRNZ0057PEZZ	-
# T601	Horizontal Output	RTRNFA016WJZZ	-
# T602 (1) (4)	Horizontal Output	RTRNFA017WJZZ	-
# T602 (2) (4)	Horizontal Output	RTRNFA017WJZZ	-
# T702 (1)	SMT	RTRNWA045WJZZ	-
# T702 (2)	SMT	RTRNWA027WJZZ	-
T1680	Dynamic Focus	RTRNZ0726CEZZ	-
# TU51	Main Tuner	VTUVTST5UF740	Main
# TU52	PIP Tuner	VTUVTBT5UR202	PIP
# V101 (1)	CRT	VB68LUW696X2E	A68LUW696X02
# V101 (2)	CRT	VB80AJZ90X+1E	A80AJZ90X01
# VA701	Varistor	RH-VX0019CEZZ	-
X801	Crystal	RCRSAA011WJZZ	3.58MHz
X1861	Crystal	RCRSB0283CEZZ	-
	PC Board	DUNTKA602WEA1	AV
	PC Board (2)	DUNTKB207WEA1	Control
	PC Board (1)	DUNTKA527WEB4	CRT
	PC Board (2)	DUNTKA527WEB5	CRT
	PC Board (1)	DUNTKB225WEA2	DF
	PC Board (2)	DUNTKB225WEA0	DF
	PC Board (1)	DUNTKA526WEC8	Main
	PC Board (2)	DUNTKA526WEC9	Main
	PC Board	DUNTKB224WEA0	MTS
	PC Board	DUNTKA533WEA1	PIP
	PC Board	DUNTKB223WEA0	2 Tuner
	Transmitter	RRMCGA027WJSA	Remote

For SAFETY use only equivalent replacement part.

(1) Used in model 27U-F810.

(2) Used in model 32U-F810.

(3) Bonded part of CRT.

(4) Screen and focus controls are part of T602.

SCHEMATIC COMPONENT LOCATION GUIDE

A17	C651	E11	C1436	D37	C1868	D53	C3541	D44	IC1680	D30	Q851	A13	R454	D12	R714	B19	R923	D48	R1742	A50	R2041	B25	
C53	A2	C652	E7	C1439	E35	C1869	D53	CF202	A5	IC1801	C53	Q901	E46	R471	D12	R715	C19	R924	B9	R1743	A50	R2042	B26
C54	C2	C653	E11	C1440	D37	C1870	D53	CF403	B6	IC1900	A35	Q901	E47	R472	D12	R718	B20	R925	A9	R1744	A50	R2043	C26
C55	A2	C654	D11	C1441	B37	C1871	C54	CF2040	E25	IC2001	B26	Q902	C46	R473	D12	R723	B21	R926	E33	R1745	A50	R2045	A26
C61	C24	C674	E14	C1442	A37	C1872	C54	D52	A2	IC2040	B25	Q902	D46	R474	D13	R725	B22	R927	E33	R1746	A51	R2047	B27
C62	C23	C677	E15	C1443	B37	C1900	B34	D53	B2	IC2101	C27	Q903	D46	R475	D13	R737	E22	R928	C33	R1747	A51	R2048	B27
C63	C23	C678	E6	C1444	B38	C1901	B34	D62	C58	IC3001	A43	Q903	D47	R476	D13	R744	E22	R940	B36	R1761	C6	R2051	E26
C64	C58	C684	E13	C1445	C37	C1903	E34	D361	D28	IC3301	A42	Q908	B36	R477	D12	R745	E22	R950	C33	R1762	C7	R2052	E27
C67	C58	C685	E12	C1446	C38	C1904	E34	D362	D27	IC3501	C45	Q1401	B38	R478	D13	R746	E21	R951	B33	R1763	C7	R2054	B26
C81	B59	C701	A18	C1447	C38	C1905	E34	D501	E19	J901	C33	Q1404	A38	R479	C12	R747	E22	R952	C33	R1764	C7	R2055	B26
C82	B59	C702	A19	C1448	D37	C1906	E34	D510	D4	J901	C33	Q1405	B39	R480	D12	R750	B18	R961	B36	R1765	C7	R2060	C27
C83	B59	C703	A19	C1449	C37	C1907	E34	D511	D6	J901	D33	Q1406	B40	R481	C13	R751	B17	R962	B36	R1766	C8	R2061	C27
C201	B2	C704	A18	C1451	D37	C1908	D34	D603	D23	J901	D48	Q1407	A39	R482	C13	R766	C18	R963	D47	R1791	C23	R2063	C26
C202	B2	C705	A20	C1452	D37	C1909	E34	D605	E6	J901	E48	Q1408	B39	R483	D13	R767	C17	R969	B36	R1801	B53	R2064	C25
C203	B3	C706	D19	C1453	C38	C1910	C34	D615	E12	J902	A9	Q1409	A36	R501	E19	R768	C17	R991	C36	R1821	A51	R2066	B17
C204	B3	C710	D19	C1454	B38	C1911	C34	D621	E1	J902	A9	Q1504	C14	R510	D4	R769	B22	R992	C36	R1822	E52	R2067	E28
C223	B10	C711	D19	C1455	D37	C1912	B34	D622	D19	J902	E33	Q1505	D14	R511	D5	R770	B23	R1401	B40	R1823	E51	R2081	D26
C224	A6	C712	E23	C1456	D37	C1913	D34	D630	D11	J902	E33	Q1506	C15	R512	D6	R771	B22	R1402	A37	R1825	D51	R2084	C26
C225	B10	C717	A19	C1457	D37	C1914	D34	D631	D11	J902	E33	Q1507	D15	R513	D6	R772	B22	R1403	B36	R1828	B52	R2101	C27
C226	B10	C722	C18	C1458	C37	C1915	C34	D632	D11	J902	E33	Q1680	B32	R514	D4	R774	C23	R1404	A36	R1831	D51	R2102	C27
C227	A6	C723	A24	C1460	B37	C1916	C34	D650	E11	J904	A33	Q1681	B31	R520	D6	R775	C23	R1405	A38	R1832	D51	R2201	C26
C228	B5	C725	A24	C1470	A36	C1919	B34	D651	E7	J904	B33	Q1721	B50	R523	D6	R776	B22	R1406	B39	R1833	D51	R2202	C25
C229	B5	C726	A22	C1473	A36	C1921	C34	D652	E7	J904	B33	Q1741	A49	R524	D7	R777	C22	R1407	A39	R1834	D51	R2203	C25
C230	B4	C727	A22	C1474	B37	C1922	C24	D653	E7	L51	A2	Q1742	A51	R532	D6	R778	D22	R1420	A36	R1841	B52	R2204	D5
C231	B3	C730	E24	C1501	B24	C1923	C24	D655	D11	L61	C23	Q1761	C6	R534	D6	R779	C23	R1422	B39	R1842	B54	R2211	C25
C232	C4	C731	B22	C1506	B24	C1926	D35	D657	D11	L201	B3	Q1762	C8	R551	B12	R789	B19	R1423	B39	R1843	C54	R2212	C25
C233	A5	C732	B21	C1508	C14	C1927	D34	D673	E6	L203	C5	Q1791	D23	R578	D6	R801	B11	R1424	B39	R1861	D54	R2213	C25
C361	A47	C735	C22	C1509	D14	C1928	D34	D680	E6	L401	B6	Q1861	A54	R601	E5	R802	B11	R1425	B39	R1862	A54	R2401	B25
C362	B47	C736	C22	C1510	C14	C1929	D34	D707	C18	L671	E15	Q1881	E50	R604	E4	R804	A12	R1426	B40	R1863	A54	R2402	C27
C363	A47	C737	D22	C1511	D14	C1937	A34	D708	C19	L701	A17	Q1882	E52	R605	E3	R805	A11	R1427	B40	R1864	D53	R2403	B27
C364	B48	C738	B21	C1515	C15	C1938	B34	D709	A22	L702	A18	Q1883	D50	R606	E3	R806	A10	R1428	A39	R1865	D53	R2404	E27
C365	B47	C740	C18	C1516	D15	C1939	B34	D712	E22	L703	B18	Q1907	A35	R609	E4	R807	A10	R1429	A39	R1866	D53	R2501	A26
C366	B47	C741	E22	C1517	D15	C1951	A34	D713	A19	L705	A22	Q1909	D35	R611	D9	R808	A10	R1430	B39	R1867	D53	R2502	B26
C367	E24	C742	E22	C1518	D15	C2001	D25	D716	B18	L729	B22	Q2002	D25	R612	D2	R809	A12	R1431	A39	R1868	C53	R2503	A26
C368	E23	C756	C24	C1519	C16	C2003	D26	D717	C18	L801	C12	Q2059	E27	R613	C10	R810	A11	R1432	A39	R1881	E50	R2504	B26
C369	B47	C757	B24	C1610	E7	C2004	D25	D721	D23	L802	C10	Q2060	C25	R614	C11	R811	A11	R1433	A40	R1882	E50	R2505	A25
C370	D27	C780	C19	C1644	D7	C2005	D24	D725	B21	L1401	D37	Q2201	C25	R616	E8	R812	B12	R1434	B38	R1883	E50	R2506	B25
C371	B48	C781	B20	C1677	C30	C2040	D24	D755	B17	L1402	D37	Q2211	C25	R617	E8	R813	D2	R1435	B38	R1884	E50	R2507	B25
C372	A48	C784	B19	C1678	D30	C2041	B26	D801	B9	L1403	D37	R57	C2	R618	E7	R814	A9	R1456	B38	R1885	E50	R2508	A25
C373	E24	C787	B19	C1681	A31	C2043	E26	D802	A9	L1406	B38	R61	D58	R621	A16	R815	B9	R1457	C37	R1886	E50	R2531	C44
C374	A46	C801	B11	C1682	A31	C2044	B25	D853	A14	L1407	A38	R62	B57	R622	A16	R816	B13	R1458	C37	R1887	D50	R2532	C44
C375	B46	C802	B11	C1683	C30	C2060	D26	D854	A13	L1408	D37	R63	A57	R623	D18	R817	C13	R1459	C38	R1889	D50	R2601	A25
C419	B23	C803	B11	C1684	E20	C2061	C25	D855	A13	L1410	C37	R66	B58	R624	E2	R818	B13	R1466	D37	R1900	A34	R3001	C43
C420	B24	C804	C12	C1685	E20	C2062	D24	D865	B13	L1411	C23	R67	A58	R631	E11	R819	B13	R1467	D37	R1930	B34	R3002	C43
C429	B23	C805	C12	C1686	E20	C2063	D23	D866	C14	L1413	A36	R68	C58	R633	E11	R820	C13	R1473	C37	R1932	B34	R3003	C43
C433	B9	C806	B10	C1695	B29	C2064	C26	D867	B13	L1414	B37	R81	B58	R635	E11	R821	B13	R1475	C37	R1935	E34	R3004	C42
C434	D1	C807	B10	C1696	C29	C2202	C25	D897	B15	L1640	D7	R82	B58	R637	D11	R822	D3	R1511	C13	R1936	E34	R3005	D43
C435	D1	C808	B10	C1697	A29	C2203	D5	D898	C15	L1641	D7	R83	B58	R638	E12	R830	D3	R1513	C15	R1937	E34	R3007	B43
C471	D12	C809	D3	C1721	B49	C2601	A25	D899	B15	L1680	B31	R84	B59	R639	E12	R850	B13	R1514	D14	R1938	E34	R3008	D44
C473	D13	C810	B12	C1722	B50	C2602	A26	D1502	C14	L1681	E20	R85	B59	R640	E12	R851	C14	R1515	C14	R1941	C34	R3010	E43
C475	E24	C811	C10	C1741	B50	C3001	C43	D1503	D14	L1721	B50	R86	B59	R641	E12	R852	B14	R1516	D14	R1942	C34	R3011	C42
C476	D13	C812	C9	C1742	A50	C3002	C42	D1506	D15	L1801	E54	R201	B2	R647	D23	R853	B13	R1517	C14	R1943	B34	R3012	C42
C484	C12	C813	D2	C1743	A50	C3003	D42	D1507	D15	L1821	C23	R202	B2	R651	E7	R854	C14	R1518	D14	R1944	D34	R3301	B41
C501	E19	C814	D2	C1761	C7	C3004	A43	D1510	D13	L1861	C24	R203	B2	R652	E7	R855	B14	R1519	D14	R1945	C34	R3501	E44
C502	E20	C815	B9	C1762	C7	C3005	A42	D1610	E8	L1862	D53	R204	B3	R653	E7	R856	B14	R1520	D14	R1946	C34	R3503	C46
C510	D6	C816	C10	C1763	C7	C3006	B43	D1680	D31	L1863	C54	R211	A5	R654	E7	R857	C15	R1521	D14	R1948	B34	R3533	C46
C511	D5	C817	A9	C1781	C24	C3007	E43	D1681	C32	L2040	E25	R215	A8	R655	E2	R858	B14	R1522	D14	R1954	A34	R4020	A34
C512	D4	C850	D20	C1791	D23	C3008	C24	D1682	C31	PR701	A18	R217	A8	R656	C11	R862	B16	R1525	C15	R1955	A34	RM2601	A25
C513	D4	C851	D16	C1792	C24	C3009	C24	D1683	B30	Q81	B58	R219	A7	R657	C59	R863	C15	R1526	D15	R1956	D35	RY701	A18
C514	D5	C852	B24	C1801	C51	C3010	D43	D1684	B30	Q82	B59	R220	B2	R658	A3	R864	B15	R1527	C15	R1957	C35	RY701	B1
C515	D6	C853	A13	C1802	E53	C3011	B43	D1791	D23	Q201	B3	R225	B2	R659	E11	R867	A13	R1528	D15	R1958	A35	S2501	A25
C516	D6	C854	A13	C1803	E51	C3012	D43	D1801	B53	Q205	A7	R226	B3	R663	E13	R868	A13	R1529	D15	R1959	A36	S2502	A25
C517	D6	C855	D20	C1804	E54	C3013	B43	D1821	D51	Q206	A5	R227	C2	R664	E11	R869	A13	R1530	D13	R1960	C35	S2503	B25
C518	D6	C856	A13	C1805	E54	C3014	D43	D2402	C27	Q361	D27	R228	B5	R666	E11	R870	A12	R1610	E8	R1962	B35	S2504	B25
C519	D7	C930	E48	C1806	B51	C3015	B43	D2403	B27	Q402	B6	R229	B10	R667	E11	R871	A13	R1627	D7	R1964	C35	S2505	B25
C551	D3	C931	D48	C1807	C52	C3016	D43	D3501	C44	Q405	B5	R233	A5	R668</									