

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.

SAFETY CHECKS – FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

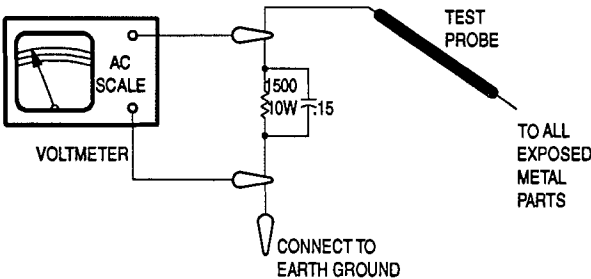
Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with 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.

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.



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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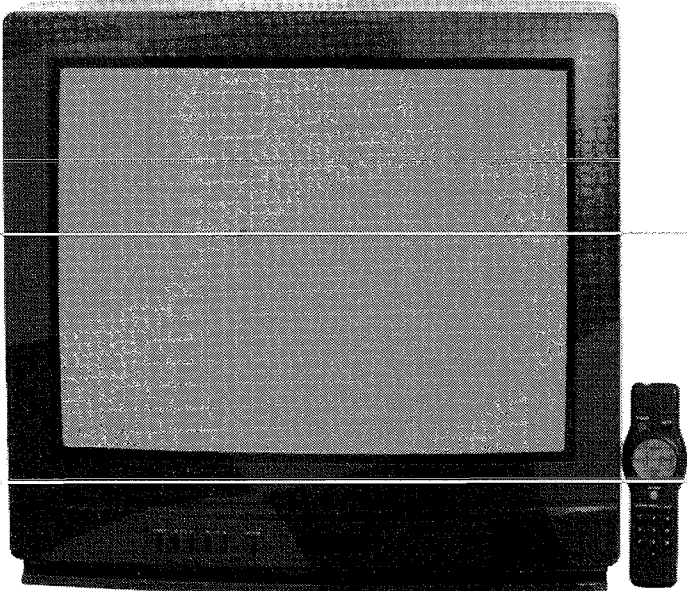
SET 3428

MODELS TP2006K, TP2006CK (CHASSIS ADC233)

QUASAR

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QUASAR
Models TP2006K, TP2006CK (Chassis ADC233)



Representative Model

Essential coverage
for servicing a television receiver...

- Schematics
- Component locations
- Parts list



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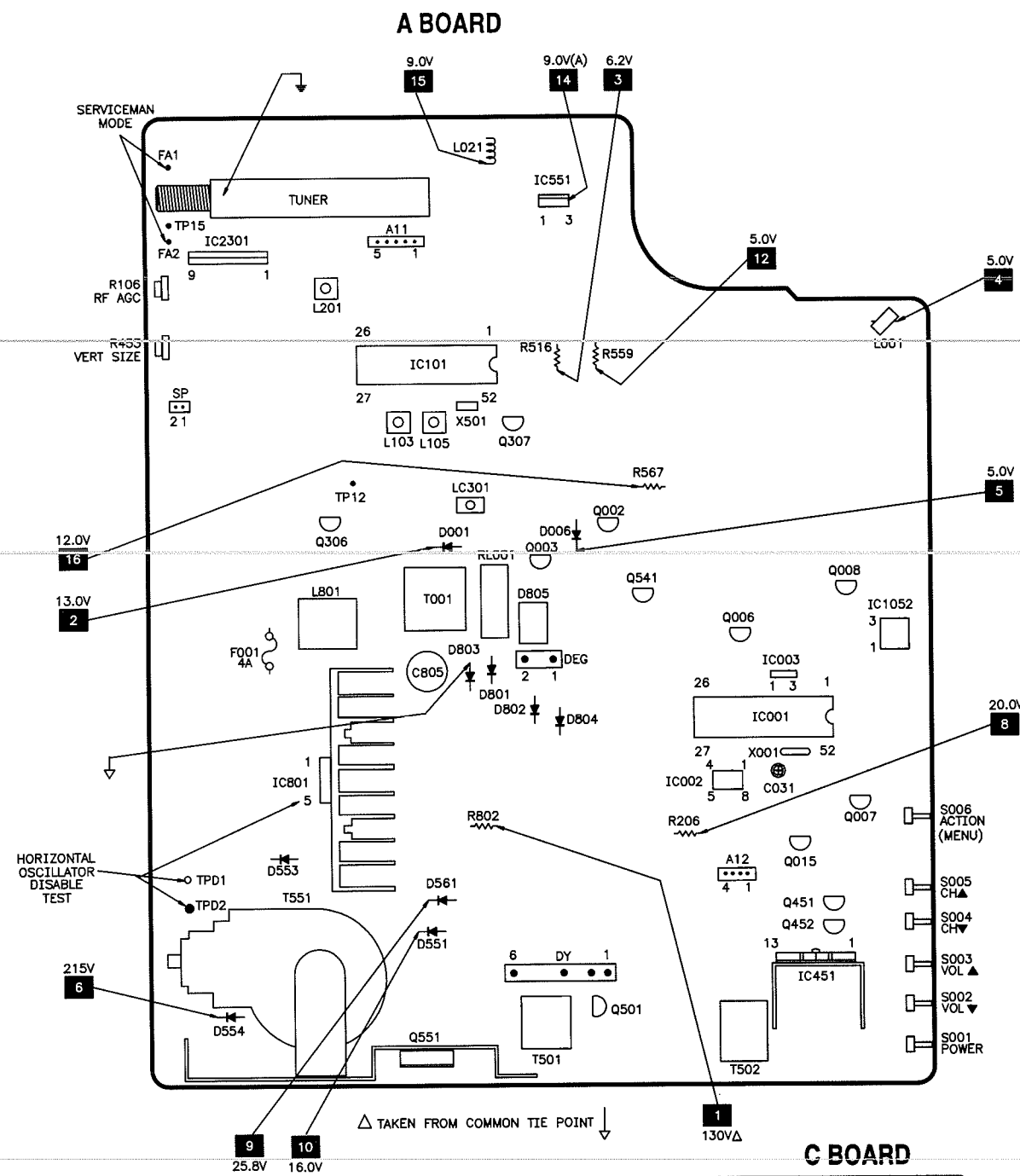
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For Supplier Address,
See PHOTOFACT Annual Index

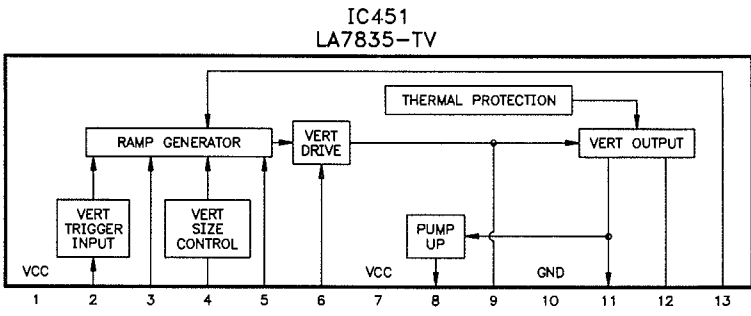
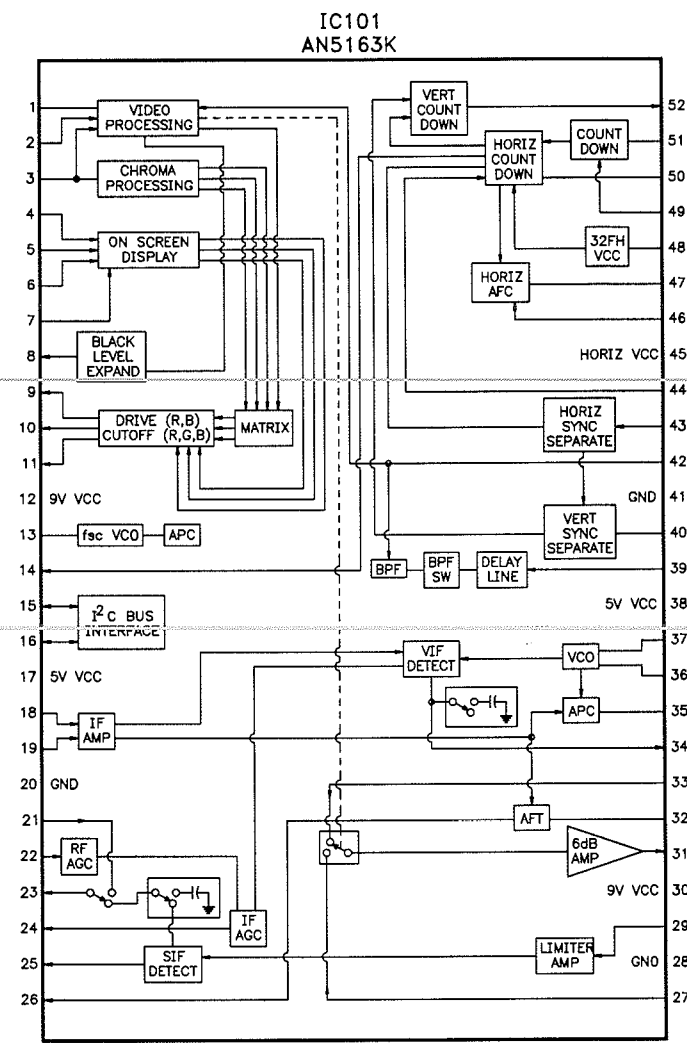
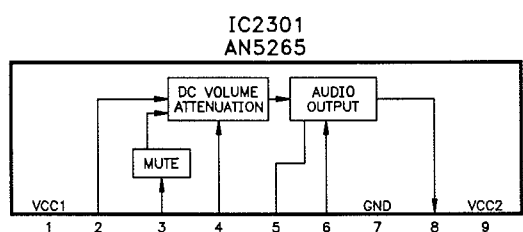
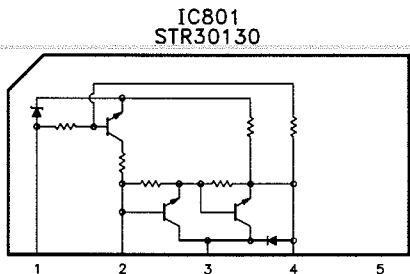
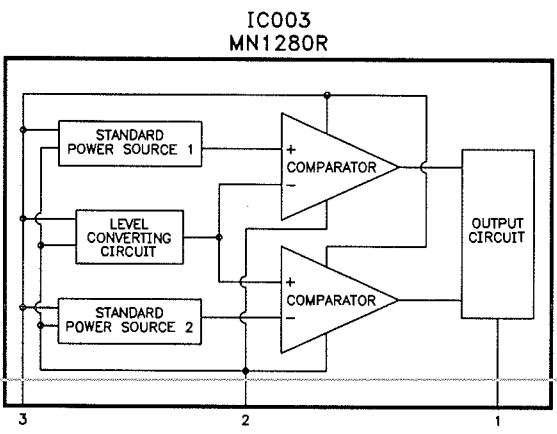
QUASAR



PLACEMENT CHART

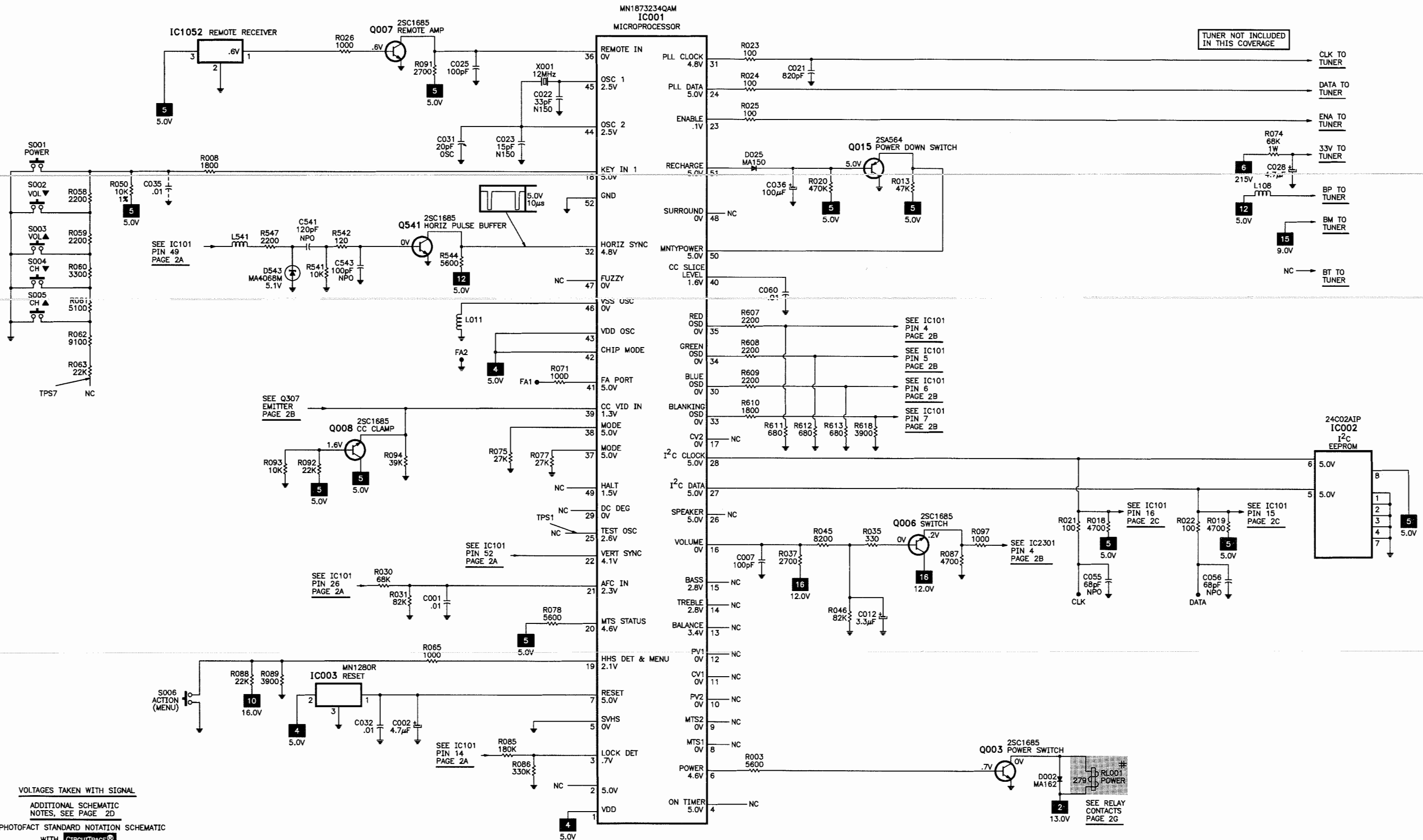


IC FUNCTIONS



QUASAR
MODELS TP2006K, TP2006CK (CHASSIS ADC233)

SYSTEM CONTROL SCHEMATIC



VOLTAGES TAKEN WITH SIGNAL

ADDITIONAL SCHEMATIC
NOTES, SEE PAGE 2D

A PHOTOFAC T STANDARD NOTATION SCHEMATIC

WITH **CIRCUITRACE®**

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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	FR57
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

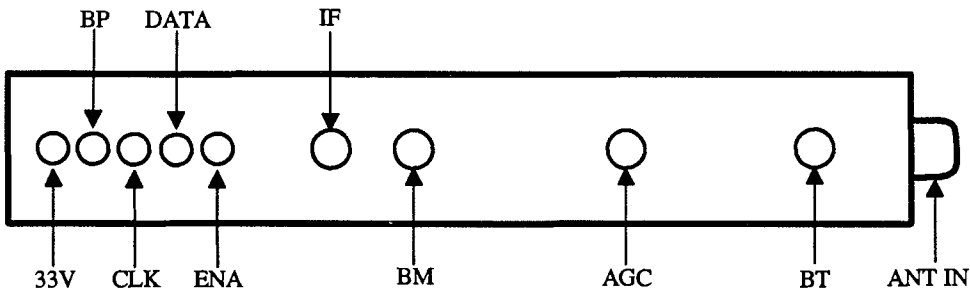
TEST JIG HOOKUP				
Function	Chek-A-Color Adapter No.	PC Board Plug No.	Pin	Color
CRT	B239	DY	1	Yellow
Yoke	D4115		2	Green
Yoke Setting	YP2A		4	Blue
Comments	Focus Tap		6	Red

TUNER INFORMATION

TUNER VOLTAGE CHART			
Pin	VHF Low Band	VHF High Band	UHF Band
BT	1.5V	4.1V	5.4V
AGC	4.5V	4.8V	3.8V
BM	9.0V	9.0V	9.0V
IF	0V	0V	0V
ENA	.2V	.2V	.2V
DATA	5.0V	5.0V	5.0V
CLK	4.2V	4.2V	5.0V
BP	5.0V	5.0V	5.0V
33V	4.5V	7.1V	8.3V

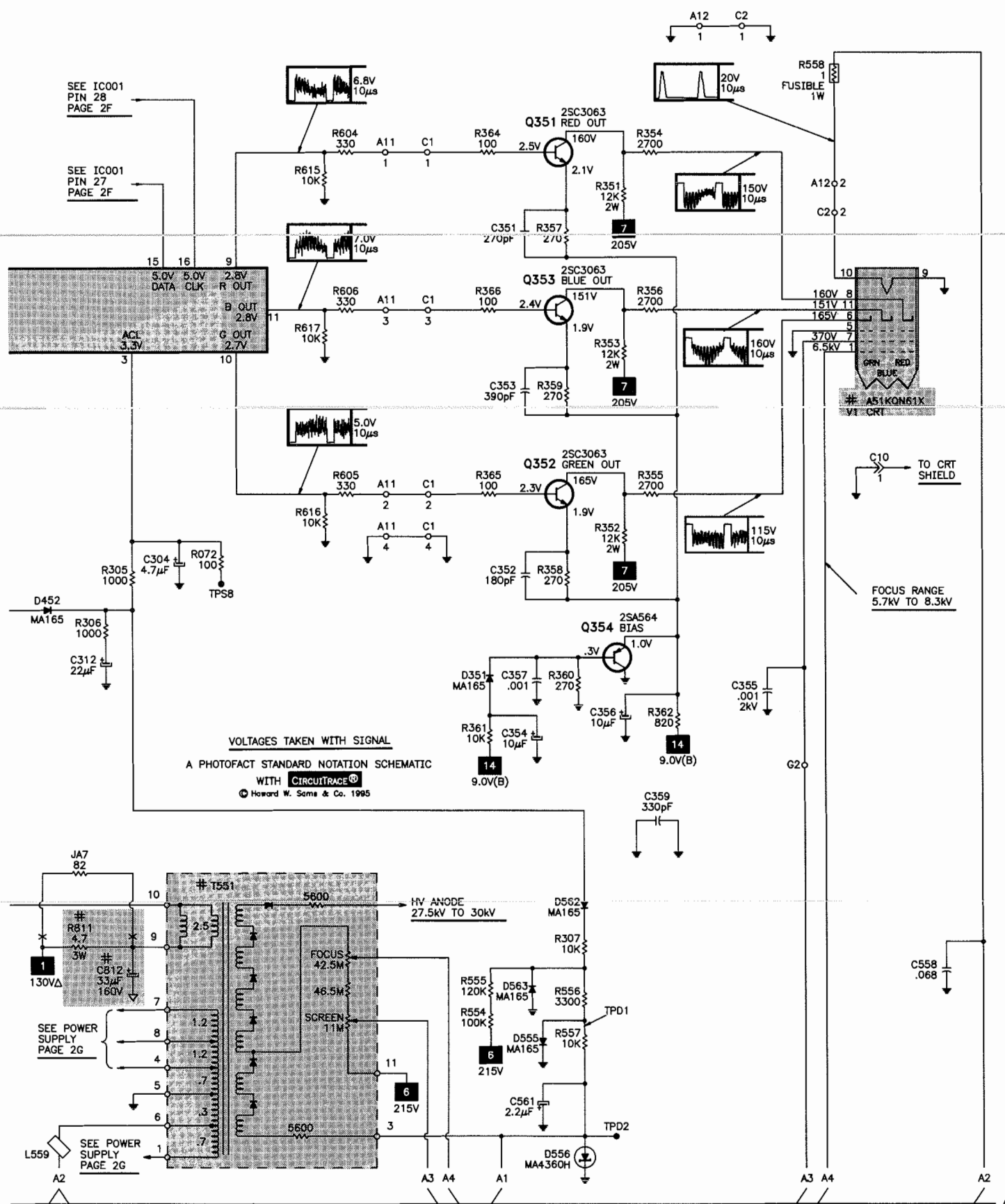
NOTE: VHF Low Band voltages taken on channel 2.
VHF High Band voltages taken on channel 7.
UHF Band voltages taken on channel 14.

TUNER TERMINAL GUIDE



C
TELEVISION SCHEMATIC continued

D 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 CIRCUITRACE®: 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 1000 μ V 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.

MISCELLANEOUS ADJUSTMENTS

ENTERING SERVICEMAN MODE

Turn on receiver and momentarily connect test point FA1 to FA2. The receiver will enter aging mode, volume up/down will adjust rapidly. Press the action button and volume up button on receiver control panel simultaneously. The receiver will enter the serviceman mode, the volume up/down buttons will adjust normally and all customer controls are set to normal. Press power button on remote transmitter to select one of three service modes.

- B= DAC Mode Adjustments
- C= CRT Mode Adjustments
- Normal = Normal operation of channel and volume buttons

EXIT SERVICEMAN MODE

Press action and power buttons on receiver control panel simultaneously for approximately 2 seconds to exit serviceman mode. The receiver will shutoff then come back on with audio on channel 3.

NOTE: Always exit serviceman mode when finished making adjustments.

DAC MODE ADJUSTMENTS

NOTE: Write down original values in detail before making any adjustments in case a misadjustment occurs. Press channel up/down buttons on remote transmitter to select any of 6 service adjustment addresses.

Press volume up/down buttons on remote transmitter to adjust level of adjustment.

DAC Mode Adjustment Range and Default Levels

Adjustment	Range	Default Level
Sub Brightness (B0)	0-127	67
Sub Color (B1)	0-63	33
Sub Tint (B2)	0-63	33
Sub Picture (B3)	0-63	35
Video Detector Level (B4)	0-15	8
Sound Out (B5)	0-15	8

SOUND OUT (B5)

This adjustment is factory set, do not adjust unless IC002 or IC101 has been replaced. Connect a generator with a 1kHz mono audio tone to the antenna terminal. Connect an oscilloscope to pin 2 of IC2301. Enter DAC mode and select sound out (B5). Adjust for 720mV ±20mV.

SUB BRIGHTNESS (B0)

This adjustment must be made after sub picture or color temperature adjustments are made. DO NOT adjust screen after sub brightness is set. Connect a color bar signal with pure white and pure black to the antenna input. Switch color off. Enter DAC mode and select sub

brightness (B0). Adjust until the black bars start to turn gray, then decrease adjustment until bars turn black.

VIDEO DETECTOR LEVEL (B4)

Connect a color bar signal to the antenna input. Connect oscilloscope to TP12. Enter DAC mode and select video detector level (B4). Adjust for 1.0Vp-p ±.2Vp-p.

SUB PICTURE (B3)

NOTE: This adjustment is factory set, DO NOT adjust unless CRT or CRT board is replaced.

Connect a color bar signal to the antenna input. Connect oscilloscope to pin 2 of connector C1 on CRT board. Connect a 1000 ohms resistor from TPD1 to pin 3 of IC551. Connect TPD2 to ground. Enter DAC mode and select sub picture (B3). Adjust for 3.0Vp-p ±.1Vp-p from white to black level. Do not include sync tip in measurement. Remove resistor and jumper.

SUB TINT (B2)

Tune in a color bar signal. Connect oscilloscope to pin 1 of connector C1 on the CRT board. Connect a 1000 ohms resistor from TPD1 to pin 3 of IC551. Connect TPD2 to ground. Enter DAC mode and select sub tint (B2). Adjust waveform so the 1st and 4th peaks are of equal amplitude. Remove resistor and jumper.

SUB COLOR (B1)

Tune in a color bar signal. Connect oscilloscope to pin 2 of connector C1 on the CRT board. Connect a 1000 ohms resistor from TPD1 to pin 3 of IC551. Connect TPD2 to ground. Enter DAC mode and select sub color (B1). Adjust waveform for .65Vp-p ±.05Vp-p. Remove resistor and jumper.

CRT MODE ADJUSTMENTS

Follow same procedure used for DAC adjustments.

CRT Mode Adjustment Range and Default Levels

Adjustment	Range	Default Level
Horizontal Centering (C0)	0-15	8
Red Cutoff (C1)	*0-511	128
Green Cutoff (C2)	*0-511	128
Blue Cutoff (C3)	*0-511	128
Red Drive (C4)	0-255	128
Blue Drive (C5)	0-255	128
* Adjustment indicated in two steps (0-255) (H0-H255).		

PURITY CHECK

Press recall button on remote transmitter to enter purity check mode. NOTE: Receiver must be in serviceman mode for purity colors to display on screen. Press recall button to display desired screen color.

COLOR TEMPERATURE (C1 thru C5)

NOTE: Observe low and high brightness areas of a B/W picture for proper tracking. Enter CRT mode. Set the red cutoff (C1), green cutoff (C2), and blue cutoff (C3) for a gray picture. Set the red drive (C4) and blue drive (C5) for correct white areas.

HORIZONTAL CENTERING (C0)

Tune in a crosshatch pattern. Enter CRT mode and select horizontal centering (C0) adjustment. Adjust crosshatch pattern for correct horizontal centering.

REMOTE OPERATION

Picture Adjustments

1. Press the action button to display the main menu.
2. Press the channel down button to select the picture icon.
3. Press the action button to display the picture adjustment menu.

4. Press the channel up or down button to select the desired picture adjustment.
5. Press the volume left or right button to adjust selection.
6. Press the action button twice to exit picture adjustment.

Normalize Settings

1. Press the action button to display the main menu.
2. Press the channel down button to select the picture icon.
3. Press the action button to display the picture adjustment menu.

4. Press the channel up or down button to select norm.

5. Press the volume left or right button to normalize picture to factory preset levels.

6. Press the action button twice to exit picture adjustment.

NOTE: This receiver employs digital customer controls. All adjustments are at normalized position unless otherwise indicated.

SERVICE INFORMATION

NOTE: Care should be taken in defeating the high voltage shutdown circuit, as this may cause excessive X-radiation and damage to the CRT, T551, and associated components. Monitor the high voltage and troubleshoot.

HORIZONTAL OSCILLATOR DISABLE

The high voltage is monitored by D531 rectifying the pulses from T551. Should the high voltage increase, the rectified voltage at the cathode of D531 will also increase. This causes the horizontal oscillator frequency to increase which lowers the high voltage.

To troubleshoot, remove D531. Use a variable AC power supply to supply 90VAC and turn on the receiver. Slowly increase AC voltage as required to isolate and repair the malfunction. Return D531 to the circuit.

Voltages Taken In Shutdown

IC001	
Pin 19	3.4V
IC101	
Pin 49	3.9V
Pin 51	4.7V

HORIZONTAL OSCILLATOR DISABLE TEST

Connect the positive lead of a voltmeter to TPD1 and the negative lead to TPD2. Apply 120VAC and turn on receiver. Normalize video menu and adjust brightness to zero. Adjust picture for .9V on voltmeter. Turn receiver off and connect a jumper between pins 3 and 4 of IC801. Set AC supply to 100VAC. Monitor the high voltage

with a high voltage probe. Turn receiver on and slowly increase AC supply. Confirm the high voltage does not exceed 34.2kV when horizontal just begins to pull out of sync. If the high voltage should exceed 34.2kV or the receiver fails to lose horizontal sync, refer to "Horizontal Oscillator Disable".

POWER SUPPLY PROTECTION CIRCUIT

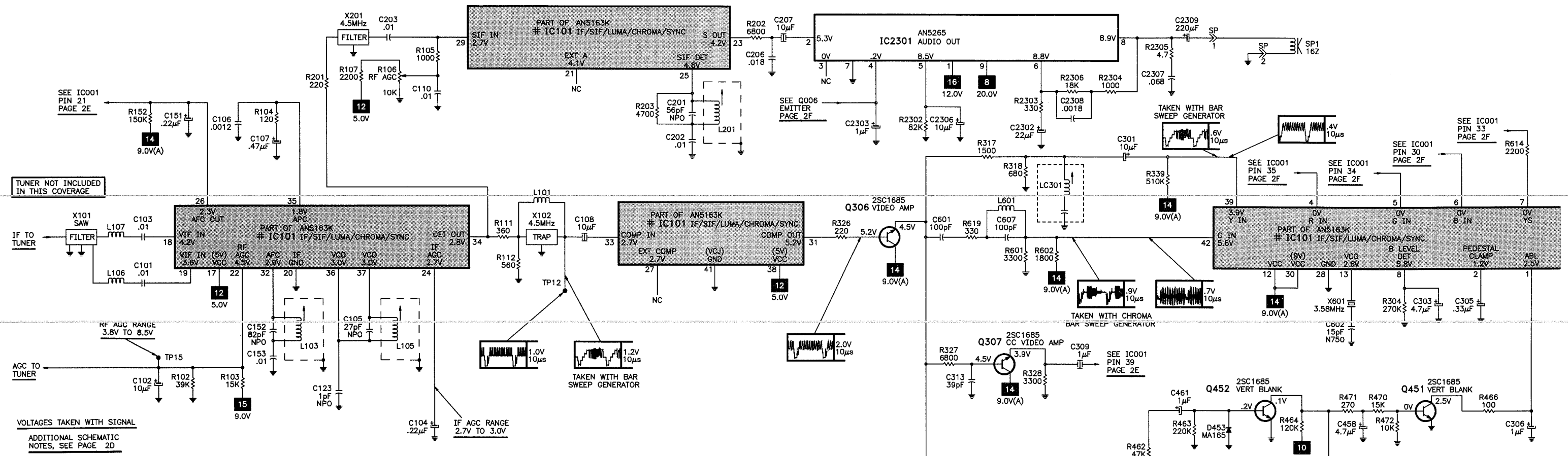
WARNING: Because pin 19 of IC001 is a dual function pin, DO NOT press the action button on the receiver when the condition listed below occurs. This will prevent over voltage protection and may cause severe damage to the entire receiver.

The 16.0V power supply voltage is monitored at pin 19 of IC001. Normal operating voltage at pin 19 is .6V to 3.1V. If a major power supply failure occurs the voltage at pin 19 will increase above 3.2V and cause pin 6 of IC001 to go low. This triggers Q003 and de-energizes RL001 turning off the receiver. This condition will remain until AC power is momentarily disconnected. If receiver goes off again, after pressing the power button when power is reapplied, there is a problem with the power supply.

CRT PROTECTION

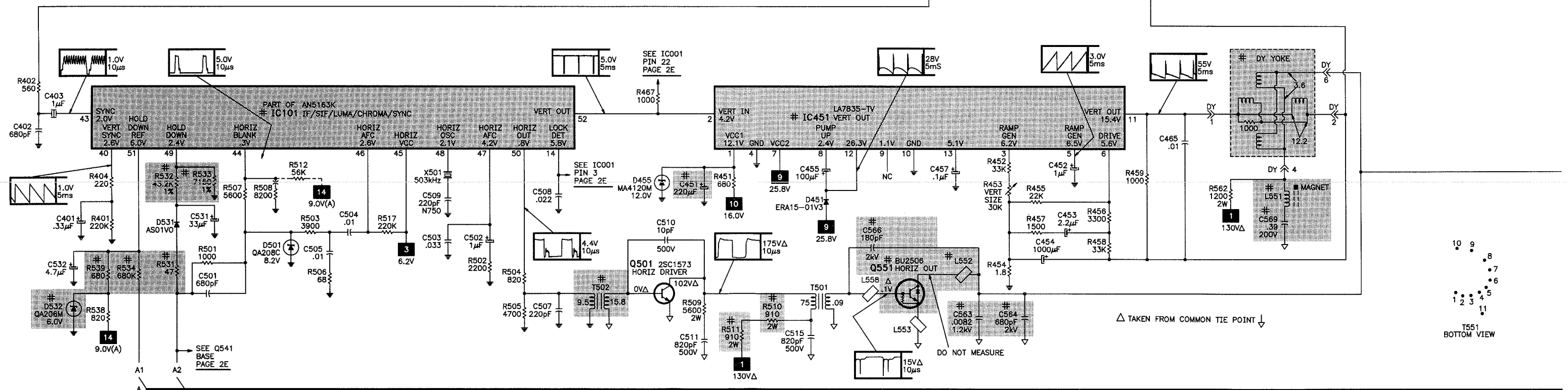
The CRT protection circuit is made up of Q451 and Q452. This circuit blanks out the CRT if vertical deflection failure occurs. It is important for the life of the CRT that this circuit be tested before returning the receiver to the customer. To test, short the base of Q452 to ground. The screen should go blank, if not this circuit needs repair.

A



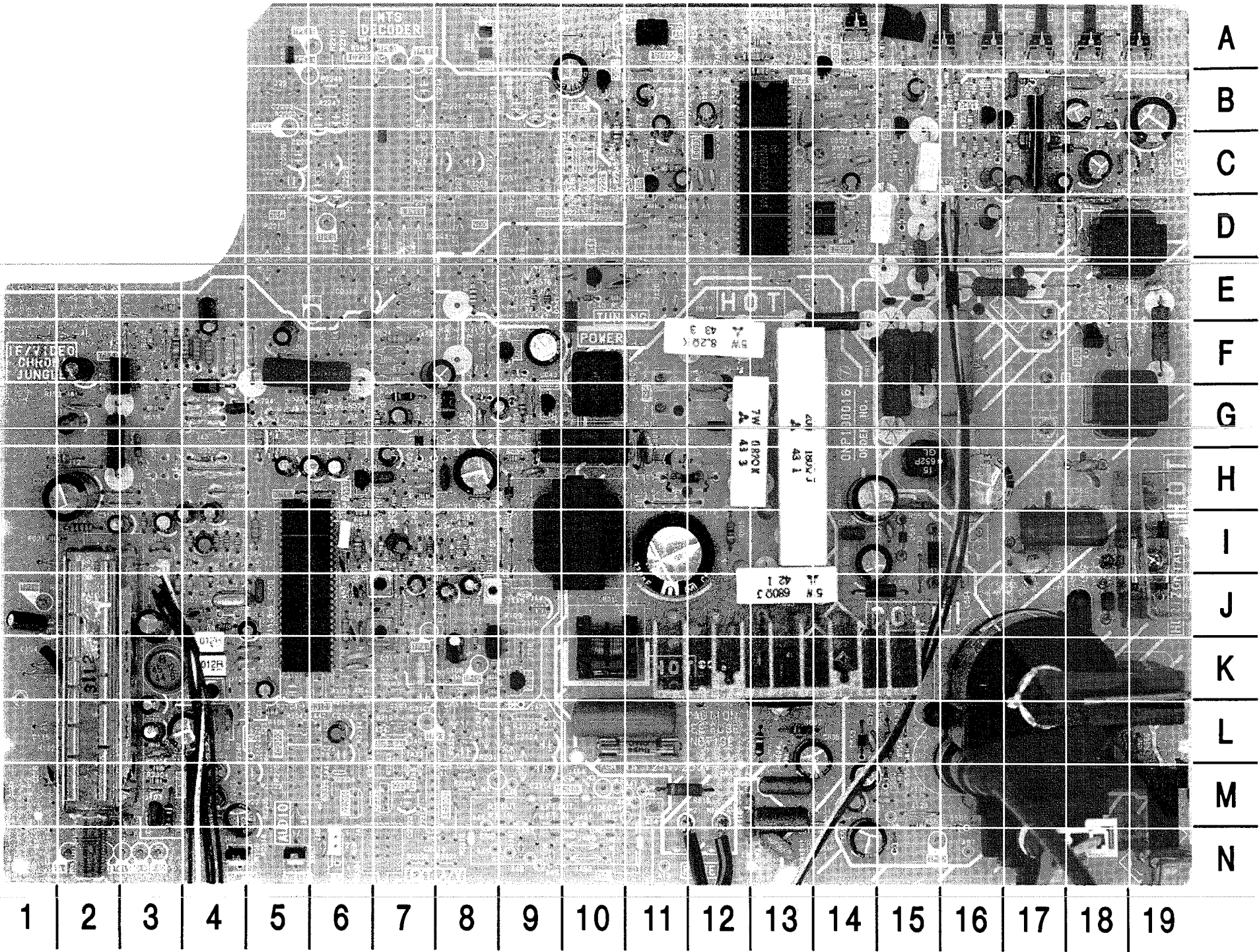
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T551
BOTTOM VIEW

A BOARD



PARTS LIST

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.
D001	ERA15-01	-	NTE552	ECG552	SK9000
D002	MA162	-	NTE519	ECG519	SK3100
D003	MA4047M	-	NTE5009A	ECG5009A	SK4A7
D006	MA165	-	NTE519	ECG519	SK3100
D022, 25	MA150	-	NTE177	ECG177	SK9091
D026	MA165	-	NTE519	ECG519	SK3100
D351	MA165	-	NTE519	ECG519	SK3100
D451	ERA15-01V3	-	NTE552	ECG552	SK9000
	ERA15-01	-	NTE552	ECG552	SK9000
D452, 53	MA165	-	NTE519	ECG519	SK3100
D455	MA4120M	-	NTE5021T1	ECG5021T1	SK9971
D501	QA208C	TVSQA208C	NTE5016A	ECG5016A	SK8A2
D531	AS01V0	-	NTE552	ECG552	SK9000
	AS01	-	NTE552	ECG552	SK9000
# D532	QA206M	TVSQA206M	NTE5012A	ECG5012A	SK6A0
D543	MA4068M	-	NTE5014A	ECG5014A	SK6A8
D551	RU2N	-	NTE552	ECG552	SK9000
D553, 54	AS01	-	NTE552	ECG552	SK9000
	ERA2204	-	NTE552	ECG552	SK9000
	AS01V0	-	NTE552	ECG552	SK9000
D555	MA165	-	NTE519	ECG519	SK3100
D556	MA4360H	-	-	-	-
D557	QB105N	TVSQB105N	-	-	-
D560	QB112ZE	TVSQB112ZE	NTE142A	ECG142A	SK12V
D561	AU01	-	NTE552	ECG552	SK9000
	ERA2204	-	NTE552	ECG552	SK9000
	AS01V0	-	NTE552	ECG552	SK9000
D562, 63	MA165	-	NTE519	ECG519	SK3100
# D801 Thru					
# D804	RM11B	-	NTE125	ECG125	SK3081
	EM02BM	-	NTE125	ECG125	SK3081
IC001	MN1873234QAM	-	-	-	-
	MN1873234QAS	-	-	-	-
IC002	24C02AIP	-	-	-	-
IC003	MN1280R	-	NTE15044	-	SK9854
# IC101	AN5163K	-	-	-	-
# IC451	LA7835-TV	-	NTE1855	ECG1855	SK10085
IC551	AN78M09LB	-	-	-	-
# IC801	STR30130	TVSSTR30130	NTE1777	ECG1777	SK9870
IC2301	AN5265	-	NTE1789	ECG1789	SK9876
Q002, 03	2SC1685QRS	-	NTE85	ECG85	SK9229
Q006					
Thru Q008	2SC1685QRS	-	NTE85	ECG85	SK9229
	JC501PQ	-	NTE85	ECG85	SK3124A
Q015	2SA564AQRS	-	NTE290A	ECG290A	SK3932
Q306, 07	2SC1685QRS	-	NTE85	ECG85	SK9229
	JC501PQ	-	NTE85	ECG85	SK3124A
Q351					
Thru Q353	2SC3063RL	-	NTE157	ECG157	SK3747
Q354	2SA564AQRS	-	NTE290A	ECG290A	SK3932
# For SAFETY use only equivalent replacement part.					

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.
Q451, 52	2SC1685QRS	-	NTE85	ECG85	SK9229
	JC501PQ	-	NTE85	ECG85	SK3124A
Q501	2SC1573AH	-	NTE399	ECG399	SK9352
Q541	2SC1685QRS	-	NTE85	ECG85	SK9229
	JC501PQ	-	NTE85	ECG85	SK3124A
# Q551	BU2506DF	-	-	-	-
# For SAFETY use only equivalent replacement part.					

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.
- Thomson Consumer Electronics, Inc. (SK, TCE)

CABINET PARTS	
Item	Mfr. Part No.
Model TP2006K	
Cabinet Back	TKU2A22204M
Cabinet Front	TKFKY1693SER
Pushbutton Assembly	TXFBX0394SER
Model TP2006CK	
Cabinet Back	TXFKU2393SER
Cabinet Front	TXFKY1593SER
Remote Transmitter	
Battery Cover	UR50EC1027



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A BOARD, GRIDTRACE LOCATION GUIDE

A11	J-3	C313	I-7	C812	H-16	L001	A-5	R060	A-17	R463	C-17	R615	J-5
A12	D-16	C401	J-7	C817	M-13	L003	E-10	R061	A-16	R464	C-16	R616	J-4
C001	D-11	C402	I-7	C818	M-13	L011	B-14	R062	A-15	R466	B-16	R617	J-4
C002	B-12	C403	I-7	C951	K-6	L021	H-2	R063	A-15	R467	E-9	R618	G-3
C007	D-12	C451	B-18	C2301	L-4	L101	J-8	R065	A-15	R470	C-16	R619	I-8
C008	C-14	C452	B-18	C2302	L-3	L103	J-7	R071	A-13	R471	C-16	R801	G-13
C012	C-11	C453	C-19	C2303	M-4	L105	J-7	R072	I-2	R472	B-16	R802	G-13
C013	C-11	C454	B-19	C2304	L-6	L106	K-4	R074	E-15	R501	G-7	R803	J-13
C014	B-10	C455	C-18	C2306	M-4	L107	K-4	R075	B-14	R502	H-7	R804	L-13
C017	B-11	C456	B-17	C2307	M-3	L108	J-4	R077	B-14	R503	H-7	R805	I-12
C018	G-9	C457	C-17	C2308	L-3	L201	K-4	R078	B-11	R504	I-6	R807	L-13
C019	G-8	C458	C-16	C2309	M-4	L541	E-9	R085	F-3	R505	I-7	R808	L-13
C021	I-3	C461	C-17	CRA801	N-13	L551	H-15	R086	A-6	R506	H-7	R810	F-12
C022	B-14	C465	D-16	D001	H-9	L552	J-18	R087	C-11	R507	H-7	R811	F-15
C023	B-14	C501	G-7	D002	G-9	L553	J-19	R088	B-16	R508	H-7	R815	M-11
C025	C-14	C502	H-7	D003	G-8	L558	L-19	R089	B-16	R509	F-19	R816	M-12
C026	H-2	C503	H-7	D006	F-9	L559	J-15	R091	B-14	R510	E-16	R2302	M-4
C028	G-2	C504	H-7	D022	H-4	L601	I-7	R092	B-10	R511	F-14	R2303	L-3
C031	C-14	C505	H-8	D025	B-14	L801	K-10	R093	B-10	R516	G-5	R2304	M-3
C032	C-12	C506	H-6	D026	G-9	LC301	J-8	R094	C-10	R517	F-6	R2305	M-3
C033	C-12	C507	I-6	D451	C-18	Q002	F-9	R097	E-3	R531	G-7	R2306	M-3
C036	B-15	C508	J-5	D452	C-16	Q003	G-9	R102	L-2	R532	G-6	RL001	G-10
C037	B-11	C509	I-6	D453	C-16	Q006	C-11	R103	L-2	R533	F-6	S001	A-19
C045	F-9	C510	F-18	D455	B-17	Q007	A-14	R104	J-7	R534	F-7	S002	A-18
C046	H-9	C511	E-19	D501	G-7	Q008	B-10	R105	L-5	R538	G-6	S003	A-17
C055	M-2	C515	F-19	D531	G-7	Q015	B-15	R106	N-4	R539	G-6	S004	A-16
C056	M-1	C531	G-7	D532	G-6	Q306	K-9	R107	M-2	R541	E-11	S005	A-16
C060	B-14	C532	H-6	D543	E-10	Q307	H-6	R111	K-8	R542	E-11	S006	A-14
C061	C-14	C541	E-10	D551	I-15	Q451	B-16	R112	K-8	R544	E-10	SP	N-6
C101	K-4	C543	E-10	D553	L-14	Q452	B-17	R152	G-2	R547	E-10	T001	I-10
C102	L-3	C552	M-14	D554	L-18	Q501	F-18	R201	K-8	R551	J-16	T501	G-19
C103	K-5	C554	J-16	D555	N-15	Q541	E-10	R202	G-5	R552	H-15	T502	D-19
C104	K-5	C555	N-14	D556	N-16	Q551	I-19	R203	L-4	R553	L-15	T551	K-17
C105	J-6	C557	F-2	D557	G-4	R003	C-11	R206	D-15	R554	L-15	TP12	K-8
C106	J-7	C558	I-14	D560	G-8	R004	G-9	R304	I-4	R555	M-15	TP15	N-3
C107	J-8	C559	I-14	D561	I-15	R005	H-9	R305	I-3	R556	M-15	TPD1	N-15
C108	K-8	C560	D-16	D562	D-15	R008	A-13	R306	I-3	R557	M-15	TPD2	N-15
C109	H-5	C561	M-14	D563	M-15	R013	B-15	R307	D-15	R558	C-15	TPS1	D-12
C110	M-3	C562	I-15	D801	H-11	R018	D-14	R317	I-8	R559	F-12	TPS7	A-15
C113	J-5	C563	I-18	D802	G-12	R019	D-14	R318	J-8	R560	G-2	TPS8	N-2
C123	J-7	C564	I-17	D803	H-12	R020	C-15	R326	K-8	R562	F-15	X001	B-13
C151	J-1	C566	H-18	D804	F-12	R021	I-1	R327	I-8	R563	D-15	X101	K-3
C152	J-6	C567	H-14	D805	F-10	R022	J-2	R328	G-6	R566	L-19	X102	K-8
C153	K-8	C569	F-16	DY	F-17	R023	J-2	R339	J-6	R567	E-8	X201	K-7
C201	L-4	C570	L-14	F001	L-11	R024	J-2	R401	I-7	R601	I-7	X501	I-6
C202	L-4	C573	F-8	FA1	N-2	R025	J-2	R402	I-8	R602	I-6	X601	J-4
C203	K-6	C576	E-10	FA2	N-3	R026	B-13	R404	I-7	R604	I-4		
C206	G-4	C577	M-19	IC001	C-13	R030	F-3	R451	B-16	R605	J-4		
C207	F-5	C601	I-8	IC002	D-14	R031	D-11	R452	B-18	R606	J-3		
C301	J-8	C602	J-4	IC003	C-12	R035	D-11	R453	N-5	R607	F-4		
C302	J-3	C607	I-8	IC101	J-5	R037	D-11	R454	B-18	R608	F-4		
C303	I-4	C801	G-11	IC451	C-17	R045	D-11	R455	B-18	R609	F-4		
C304	I-3	C803	H-11	IC551	F-3	R046	D-11	R456	C-18	R610	G-3		
C305	I-4	C804	F-12	IC801	L-13	R050	B-15	R457	C-19	R611	I-4		
C306	I-4	C805	I-11	IC1052	A-11	R055	G-3	R458	C-18	R612	I-4		
C309	E-4	C806	L-14	IC2301	M-4	R058	A-18	R459	E-16	R613	I-4		
C312	I-2	C809	L-10	JA7	F-15	R059	B-17	R462	D-17	R614	I-5		

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MODELS TP2006K, TP2006CK (CHASSIS ADC233)

PARTS LIST continued

CAPACITORS & ELECTROLYTICS		
Item No.	Rating	Mfr. Part No.
C022	33pF 5% 50V N150	ECCF1H330JP
C023	15pF 5% 50V N150	ECCF1H150JP
C031	20pF Trimmer	ECRHA020D41
C055, 56	68pF 5% 50V NPO	ECCF1H680JC
C105	27pF 5% 50V NPO	ECCF1H270JC
C108	10µF 16V NP	ECEA1CN100S
C123	1pF 50V ±.25pF NPO	ECCF1H010CC
C152	82pF 5% 50V NPO	ECCF1H820JC
C201	56pF 5% 50V NPO	ECCF1H560JC
C207	10µF 16V NP	ECEA1CN100S
C309	1µF 50V NP	ECEA1HN010S
C355	.001 10% 2kV	ECKD3D102KB
C403	1µF 50V NP	ECEA1HN010S
# C451	220µF 16V	ECEA1CGE221
C452	1µF 25V Tantalum	ECSF1EE105
C509	220pF 5% 50V N750	ECCF1H221JU
C541	120pF 5% 50V NPO	ECCF1H121JC
C543	100pF 5% 50V NPO	ECCF1H101JC
# C552	220µF 25V	ECEA1EU221
# C559	220µF 25V	ECEA1EFS221
# C563	.0082 5% 1.2kV	ECWH12H822JS
# C564	680pF 5% 2kV	ECKD3D681JB
# C566	180pF 5% 2kV	ECKD3D181JB
# C567	1000µF 35V	ECEA1VGE102
# C569	.39 5% 200V	ECQF2H394JS
C602	15pF 5% 50V N750	ECCF1H150JU
# C805	330µF 200V	EC0S2DG331G4
# C806	22µF 160V	ECEA2CU220
# C809	.22 10% 125VAC	ECQU1A224KH
# C812	33µF 160V	ECEA160V33Z
# C817, 18	.015 10% 125VAC	ECQU1A153KH
# For SAFETY use only equivalent replacement part.		

CONTROLS & RESISTORS			
Item No.	Function/Rating	Mfr. Part No.	NTE Part No.
# D805	4.6 PTC Cold, 165 NTC Cold	TRPW5B0M050D	-
R050	10K 1% 1/4W	ER0S2CKF1002	-
R106	10K RF AGC	EVND1AA00B14	-
# R206	22 5% 1W Fusible	ERQ1CJP220	F1W022
R453	30K Vertical Size	EVND1AA00B34	-
# R510, 11	910 5% 2W	ERG2ANJ911	2W191
# R531	47 5% 1/4W	ERD25FJ470	QW047
# R532	43.2K 1% 1/4W	ER0S2CKF4322	-
# R533	7150 1% 1/4W	ER0S2CKF7151	-
# R534	680K 5% 1/4W	ERD25TJ684	QW468
# R539	680 5% 1/4W	ERDS2TJ681	QW168
# For SAFETY use only equivalent replacement part.			

CONTROLS & RESISTORS continued			
Item No.	Function/Rating	Mfr. Part No.	NTE Part No.
# R551 Thru			
# R553	1 5% 1/2W	ERDS1FJ1R0	HW1D0
R558	1 5% 1W Fusible	ERQ1CJP1R0	F1W1D0
# R559	82 5% 3W	ERG3ANJ820	3W082
# R560	62 5% 2W	ERG2ANJ620	2W062
# R567	100 5% 1/2W	ERDS1TJ101	QW110
# R801	.82 10% 7W Wirewound	ERF7ZKR82	-
# R802	180 5% 20W Wirewound	ERF20ZJ181	-
# R803	680 5% 5W Wirewound	ERF5ZJ681	5W168
# R805	10K 5% 1/2W	ERDS1FJ103	HW310
# R807	47 5% 1/4W	ERD25FJ470	QW047
# R808	33 5% 1/4W	ERD25FJ330	QW033
# R810	8.2 10% 5W Wirewound	ERF5ZK8R2	5W8D2
# R811	4.7 5% 3W	ERX3ANJP4R7	3W4D7
# R815	8.2M 20% 1/2W	ERC12ZGM825	HW582
# R816	1 10% 1/2W	ERW12PK1R0	HW1D0
# For SAFETY use only equivalent replacement part.			

COILS & TRANSFORMERS			
Item No.	Function/Rating	Mfr. Part No.	On-Unit No.
# DY	Yoke 90° Horiz 2.5mH Vert 19.5mH	0LY15307F	0LY15307F
L001	Ferrite Bead	EXCELSA24	-
L003	Ferrite Bead	EXCELSA39	-
L011	1µH	TLUABTA1R0K	-
L021	39µH	TLUABTA390K	-
L101	15µH	TLUABTA150K	-
L103	AFT	EIV7EN041B	-
L105	VCO	EIV7EN053B	-
L106, 07	1.2µH	TLQ012K205C	-
L108	1µH	TLUABTA1R0K	-
L201	Quadrature	EIS7ES004B	-
L351	150µH	TLUABTA151K	-
L541	150µH	TLUABTA151K	-
# L551	Horizontal Linearity	TLH15652P	652P
# L552	Ferrite Bead	EXCELSA35	-
L553, 58	Ferrite Bead	EXCELSA35	-
L559	Ferrite Bead	EXCELSA39	-
L601	10µH	TLUABTA100K	-
# L801	Line Filter	TLP15578J	-
# For SAFETY use only equivalent replacement part.			

COILS & TRANSFORMERS continued			
Item No.	Function/Rating	Mfr. Part No.	On-Unit No.
# L820 (1)	Degaussing	0LK19042M	-
(2)	Degaussing	0LK19039A	-
LC301	3.58MHz Trap	ELB5A082	-
# T001	Standby Power	TLP16297	TLP16297
T501	Horizontal Driver	ETH19Y70AYM	H70
# T502	Horizontal Coupling	ETE19Z30AY	E1930
# T551 (3)	Horizontal Output	TLF15615F	TLF15615F
# For SAFETY use only equivalent replacement part.			
(1) Used in model TP2006K.			
(2) Used in model TP2006CK.			
(3) Focus and screen controls are part of T551.			

MISCELLANEOUS			
Item No.	Description	Mfr. Part No.	Notes
# CRA801	Component Combination	EXNG131P365	130pF / 3.6M / Spark Gap
# F001	Fuse	0BA1C40NU100	4Amp, 125VAC, Fast Acting
IC1052	Receiver	RPM-637CBRS	Remote
# M050	Line Cord	TSX5140X	AC, Polarized
# RL001	Relay	TSE1864	Power
S001	Switch	EVQQBH12T	Power
S002	Switch	EVQQBH12T	Volume Down
S003	Switch	EVQQBH12T	Volume Up
S004	Switch	EVQQBH12T	Channel Down
S005	Switch	EVQQBH12T	Channel Up
S006	Switch	EVQQBH12T	Action (Menu)
SP1	Speaker	EASG9D523A2	2" X 3 1/2", 16 Ohms
# V1	CRT	A51KQN61X	-
X001	Crystal	TSS2080MX	12MHz
X101	Filter	EFCH45MVK12N	SAW
X102	Trap	EFCS4R5MW3BA	4.5MHz
X201	Filter	EFCS4R5MS4	4.5MHz
X501	Crystal	EF0A503KS41	503kHz
X601	Crystal	TS816M32	3.58MHz
	Corrector Strip	0FMK014ZZ	Convergence
	PC Board (1)	ONP190016BA	A
	PC Board (1)	ONP15007	C
#	Socket	TJS1A5050	CRT
	Transmitter	EUR501051A	Remote
#	Tuner (1)	ENV568M4G3	UHF / VHF
	Wedge	TMM2A30202	Yoke Positioning (3 Used)
# For SAFETY use only equivalent replacement part.			
(1) Contact PTS Electronics Corporation for replacement; order by manufacturer's part number.			

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MODELS TP2006K, TP2006CK (CHASSIS ADC233)