SAFETY PRECAUTIONS

SERVICE WARNING

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

SERVICING THE HIGH VOLTAGE AND CRT

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

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

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

GENERAL GUIDELINES

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

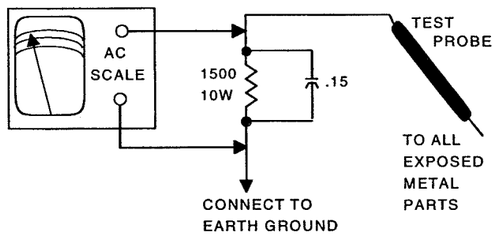
SAFETY CHECKS — FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

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

Hot Leakage Current Check

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



HIGH VOLTAGE SHUTDOWN TEST

Apply 120VAC to the receiver. Press the power button. Momentarily place a 20K ohms resistor across pin 1 and pin 3 of plug X. The receiver should lose raster and sound and remain in that state. If the receiver does not lose raster and sound, the high voltage shutdown circuit requires repair. To resume normal operation, remove AC power and wait 15 seconds. Restore power and test the receiver for normal operation.

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PHOTOFACT® *Technical Service Data*

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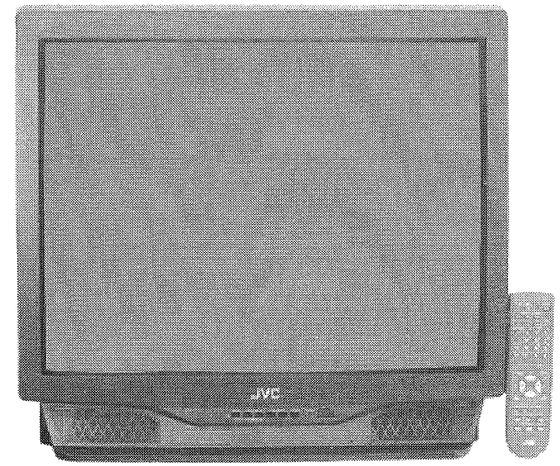
For Supplier Address, See PHOTOFACT Annual Index

JVC
Model AV-36150



Representative Model

Essential coverage for servicing a television receiver...

- **Schematics**
- **Component locations**
- **Parts list**

Coverage includes these additional models:

Models
AV-36120
AV-36120 Version A
AV-36150 Version A

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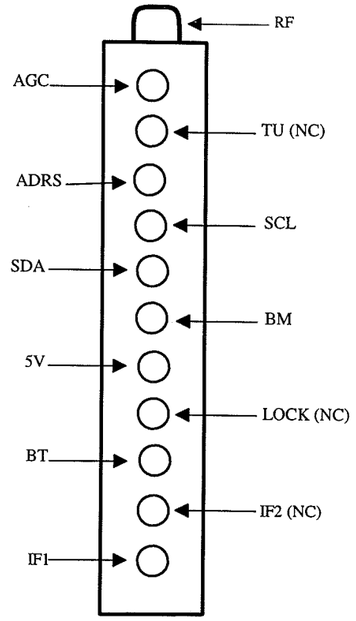
TUNER INFORMATION

MAIN TUNER VOLTAGE CHART

PIN	HF Low Band	VHF High Band	UHF Band
AGC	3.7V	3.9V	4.4V
TU (NC)	0V	0V	0
ADRS	0V	0V	0V
SCL	2.7V	2.7V	2.7V
SDA	2.9V	2.9V	2.9V
BM	5.0V	5.0V	5.0V
5V	5.0V	5.0V	5.0V
LOCK (NC)	0V	0V	0V
BT	32.0V	32.0V	32.0V
IF2 (NC)	0V	0V	0V
IF1	0V	0V	0V

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

MAIN TUNER TERMINAL GUIDE

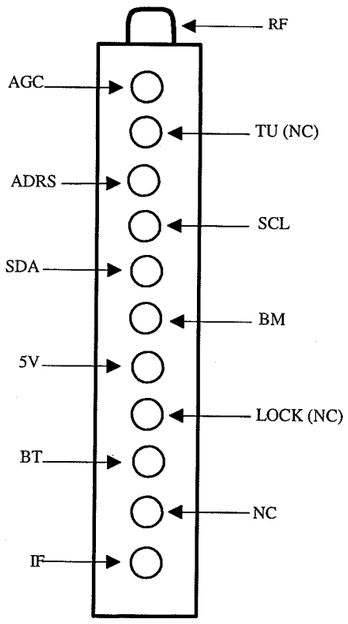


SUB TUNER VOLTAGE CHART

PIN	HF Low Band	VHF High Band	UHF Band
AGC	3.7V	4.1V	4.8V
TU (NC)	0V	0V	0V
ADRS	4.2V	4.2V	4.2V
SCL	2.7V	2.7V	2.7V
SDA	2.9V	2.9V	2.9V
BM	5.0V	5.0V	5.0V
5V	5.0V	5.0V	5.0V
LOCK (NC)	0V	0V	0V
BT	32.0V	32.0V	32.0V
NC	0V	0V	0V
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.

SUB TUNER TERMINAL GUIDE



MISCELLANEOUS ADJUSTMENTS

NOTE: This receiver employs digital customer controls. Unless otherwise indicated all adjustments were performed with the customer controls at center.

B+ CHECK

Tune in a picture. Connect a digital DC voltmeter to cathode of D921 and ground. With AC line set to 120VAC, voltage should read 134V ± 2.0V.

HIGH VOLTAGE CHECK

Tune in a picture. Connect a high voltage probe to the CRT anode. High voltage should read 29.5kV to 31.5kV.

COLOR PURITY / CONVERGENCE

CRT and yoke are bonded. Color purity and convergence adjustments are not recommended.

IC702 MEMORY IC REPLACEMENT

After replacing IC702 the following adustment must be accomplished. Ensure that the proper memory IC with the initial data values is used.

Enter the service menu and press the display and video status buttons together to display the system constant screen. If the system constant screen information differs from the system constant chart displayed below, use the menu up and down buttons to select the setting and the menu left and right buttons to adjust the setting. Press the exit button twice to exit.

System Constant Chart

SYSTEM CONSTANT	
MODEL	AV-36150
PLUG IN	YES
CCD	YES
V-CHIP	YES
MN1874xxx xxx	

SERVICE MENU

To enter the service menu, press the sleep timer key, and while the message "Sleep Timer 0 Min" is displayed on the screen, press the display and video status buttons together. The service menu is displayed as shown below. While in the service menu, use the menu up and down buttons to select and use the menu left and right buttons to adjust. To exit the service menu, press the exit button.

Service Menu Chart

PICTURE	SOUND
THEATER	OTHERS
PIP	
LOW LIGHT	HIGH LIGHT
RF AFC1	RF AFC2
VCO (CW)	I²C BUS CTRL

PICTURE MODE

Select Picture Mode from the service menu.

Picture Mode Menu Chart

No.	Adjustment	Range	Initial Value	On-set Value
1	BRIGHT	000 ~ 127	064	060
2	PICTURE	000 ~ 127	088	088
3	WPS	000 / 001	001	001
4	TV DETAIL	000 ~ 063	040	040
5	TV BPF	000 / 001	001	001
6	TINT	000 ~ 127	067	067
7	COLOR	000 ~ 127	047	046
8	EXT BRIGHT	-025 ~ +025	+001	+001
9	EXT PICT	-025 ~ +025	±000	±000
10	EXT DETAIL	000 ~ 063	038	038
11	EXT BPF	000 / 001	001	001
12	EXT TINT	-025 ~ +025	+002	+002
13	EXT COLOR	-025 ~ +025	+003	+003
14	V SIZE	000 ~ 063	027	025
15	V CENTER	000 ~ 007	000	000
16	H POSITION	000 ~ 031	025	023
17	H AFC	000 / 001	000	000
18	BLANKING	000 / 001	000	000
19	RF AGC	000 ~ 063	047	050
20	PIF VCO	000 ~ 127	064	064

RF AGC

Tune in a picture. Decrease the value of RF AGC (19) until snow appears in the picture. Increase the value of RF AGC (19) until snow disappears from the picture. Check all channels for proper picture and readjust if necessary.

Vertical Size / Vertical Center / Vertical Position

Tune in a crosshatch pattern. Adjust V Size (14) for a slightly underscanned picture. Adjust V Center (15) and S421 to center the picture. Adjust V Size (14) for a 92% of vertical screen size.

Horizontal Position / Horizontal Width / Side Pin Correction

Tune in a crosshatch pattern. Adjust R579 to obtain straight vertical lines on both sides of pattern. Adjust the H Position (16) to center the picture. Adjust R581 for a 92% of horizontal screen size.

Sub Bright / Sub Contrast / Sub Color / Sub Tint

Tune in a picture. Adjust Bright (1) for best brightness. Adjust Picture (2) for best contrast. Adjust Color (7) for best color. Adjust Tint (6) for best fleshtone.

MISCELLANEOUS ADJUSTMENTS continued

SOUND MODE

Select Sound Mode from the service menu. Receive a RF signal.

Sound Mode Menu Chart

No.	Adjustment	Range	Initial Value	On-set Value
1	ATTENUATOR	000 ~ 063	050	050
2	BALANCE	000 ~ 063	032	032
3	NOISE DET	000 / 001	001	001
4	IN LEVEL	000 ~ 063	026	027
5	FH MONITOR	000 / 001	000	000
6	STEREO VCO	000 ~ 063	040	040
7	PILOT CAN.	000 / 001	000	000
8	FILTER	000 ~ 063	038	030
9	LOW SEP	000 ~ 063	028	028
10	HI SEP	000 ~ 063	024	019
11	5FH MON	000 / 001	000	000
12	SAP VCO	000 ~ 063	038	038
13	IN GAIN	000 / 001	000	000
14	FI. OFFSET	000 ~ 010	000	±000

MTS Input Level / MTS Filter

Select In Level (4) and set to initial value. Select Filter (8) and set to initial value.

MTS Stereo VCO

Set FH Monitor (5) to 1. Connect a frequency counter to pin 2 of connector MPX. Adjust Stereo VCO (6) for 15.73kHz ± .1kHz. Set FH Monitor (5) to 0.

MTS SAP VCO

Connect a 1M ohms resistor between pins 3 and 4 of connector MPX. Set 5FH MON (11) to 1. Connect a frequency counter to pin 2 of connector MPX. Adjust SAP VCO (12) for 78.67kHz ± .5kHz. Set 5FH MON (11) to 0.

MTS Separation

Connect an MTS TV stereo generator to the antenna input. Select pilot, 300Hz audio frequency, and left modulating signal on the generator. Connect an oscilloscope to pin 1 of connector MPX and adjust to display one cycle of the 300Hz signal. Connect oscilloscope to pin 2 of connector MPX. Adjust Low Sep (9) for minimum amplitude of the waveform. Select 8kHz audio frequency on the generator. Adjust HI Sep (10) for minimum amplitude of the waveform.

THEATER MODE

Select Theater Mode from the service menu.

Theater Mode Menu Chart

No.	Adjustment	Range	Initial Value	On-set Value
1	TINT	-20 ~ +20	±00	±00
2	COLOR	-20 ~ +20	-02	-02
3	PICTURE	-20 ~ +20	-15	-15
4	BRIGHT	-20 ~ +20	±00	±00
5	DETAIL	-15 ~ +15	-03	-03
6	G DRIVE	-99 ~ +50	-25	-25
7	B DRIVE	-99 ~ +50	-72	-72
8	R CUT	-10 ~ +10	±00	±00
9	G CUT	-10 ~ +10	±00	±00
10	B CUT	-10 ~ +10	±00	±00

OTHERS MODE

Select Others Mode from the service menu.

Others Mode Menu Chart

No.	Adjustment	Range	Initial Value	On-set Value
1	OSD POS.	000 ~ 007	000	000
2	CCD POS.	000 ~ 015	002	004
3	EOSEL	000, 001	000	000
4	F1-FIELD	000, 001	000	000
5	F1-LINE 21	000 ~ 015	008	008
6	F2-LINE 21	000 ~ 015	008	008
7	OSD STABI.	000, 001	000	000
8	SYNC SEP.	000 , 001	001	001
9	MENU COLOR	-030 ~ ±000	-010	-010
10	MENU PICT	-030 ~ ±000	-012	-012
11	MENU BRI	-030 ~ ±000	-012	-012

PIP MODE

Select PIP Mode from the service menu.

PIP Mode Menu Chart

No.	Adjustment	Range	Initial Value	On-set Value
1	PIP BR	000 ~ 015	007	004
2	PIP PICT	000 ~ 075	036	036
3	PIP TINT	000 ~ 063	032	039
4	PIP COL	000 ~ 015	009	007
5	P R CUT	000 ~ 015	000	000
6	P G CUT	000 ~ 015	000	000
7	P B CUT	000 ~ 015	000	000
8	P R DR	000 ~ 225	128	128
9	P G DR	000 ~ 225	128	128
10	P B DR.	000 ~ 225	128	128
11	LEFT POS	000 ~ 225	019	020
12	RIGHT POS	000 ~ 225	019	018
13	UPPER POS	000 ~ 127	012	012
14	LOWER POS	000 ~ 127	011	011
15	PICT LOCK	000 / 001	000	000
16	SELDEL	000 ~ 015	000	000
17	AGC FIX	000 / 001	001	001
18	AGCADST	000 / 001	001	001
19	AGC	000 ~ 015	006	006
20	VSPDEL	000 ~ 031	000	000
21	VSPISQ	000 / 001	001	001
22	YCOR	000 / 001	001	001
23	XFREQF	000 / 001	001	001

VCO (CW) MODE

Select VCO (CW) Mode from the service menu.

VCO (CW)

Mode Menu Chart IF VCO

TOO HIGH
ABOVE REFERENCE
BELOW REFERENCE <---------- Yellow in color
TOO LOW

SYNC : YES

Adjust PIF Transformer T131 until BELOW REFERENCE mark turns yellow in color, confirm that SYNC : YES being shown on the screen. Exit service menu and check the picture quality.

LOW LIGHT MODE

Select Low Light Mode from the service menu.

Low Light Mode Menu Chart

Adjustment	Range	Initial Value	On-set Value
BRIGHT	000 ~ 127	064	060
RED CUTOFF	000 ~ 255	020	039
GREEN CUTOFF	000 ~ 255	020	033
BLUE CUTOFF	000 ~ 255	020	027

NOTE: While in the Low Light Mode Menu adjustments are performed using the following buttons on the remote:

1 - Horizontal line.	4 - Increase red cutoff.	7 - Decrease red cutoff.
2 - Restores full picture.	5 - Increase green cutoff.	8 - Decrease green cutoff.
3 - Exit	6 - Increase blue cutoff.	9 - Decrease blue cutoff.

White Balance (Low Light Adjustment)

Tune in a black and white signal. Press 1 to display a horizontal line. Adjust the screen control for a dim line of one dominant color. Adjust the other two cutoffs for a dim white line. Press 2 for a full picture.

HIGH LIGHT MODE

Select High Light Mode from the service menu.

High Light Mode Menu Chart

Adjustment	Range	Initial Value	On-set Value
GREEN DRIVE	000 ~ 255	128	111
BLUE DRIVE	000 ~ 255	128	092

NOTE: While in the High Light Mode Menu adjustments are performed using the following buttons on the remote:

1 - Horizontal line.	5 - Increase green drive.	8 - Decrease green drive.
2 - Restores full picture.	6 - Increase blue drive.	9 - Decrease blue drive.
3 - Exit		

White Balance (High Light Adjustment)

Tune in a black and white signal. Adjust green and blue drives for best white balance. Exit Service menu and check white balance at high and low brightness.

RF AFC1 MODE

Select RF AFC1 from the service menu.

RF AFC1 Mode Menu Chart

Adjustment	Range	Initial Value	On-set Value
RF AFC 1	On / Off	On	On, Do not adjust.
Fine -77 ~ +77	±00	±00	Do not adjust.

RF AFC2 MODE

Select RF AFC2 from the service menu.

RF AFC2 Mode Menu Chart

Adjustment	Range	Initial Value	On-set Value
RF AFC 2	On / Off	On	On, Do not adjust.
Fine -77 ~ +77	±00	+04	Do not adjust.

I²C BUS CTRL MODE

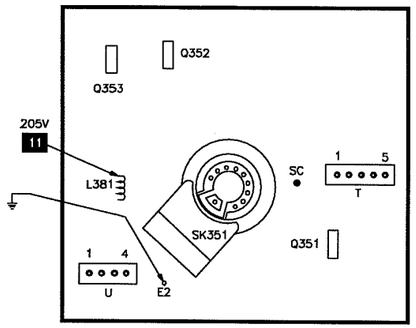
Select I²C Bus CTRL from the service menu.

I²C Bus CTRL Mode Menu Chart

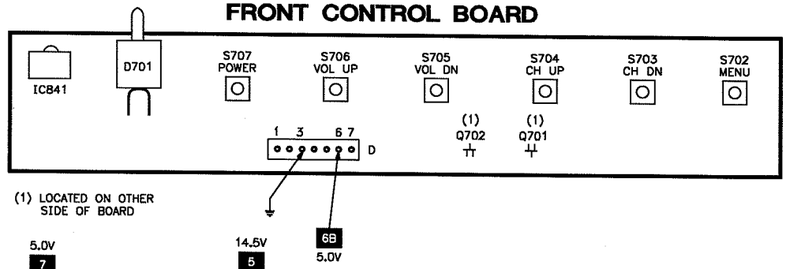
Adjustment	Range	Initial Value	On-set Value
I²C BUS	On / Off	On	On, Fixed On. Do not adjust.

PLACEMENT CHART

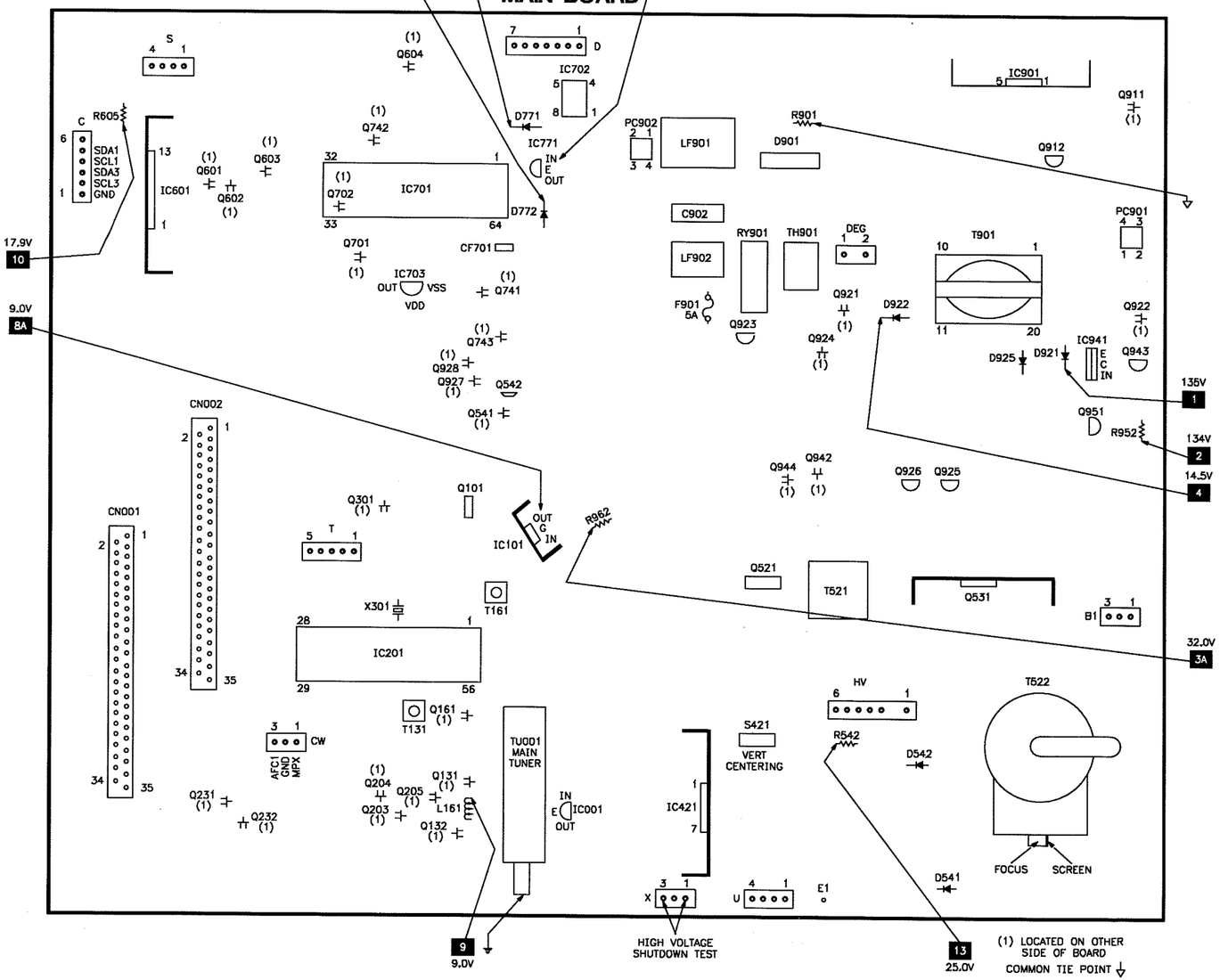
CRT BOARD



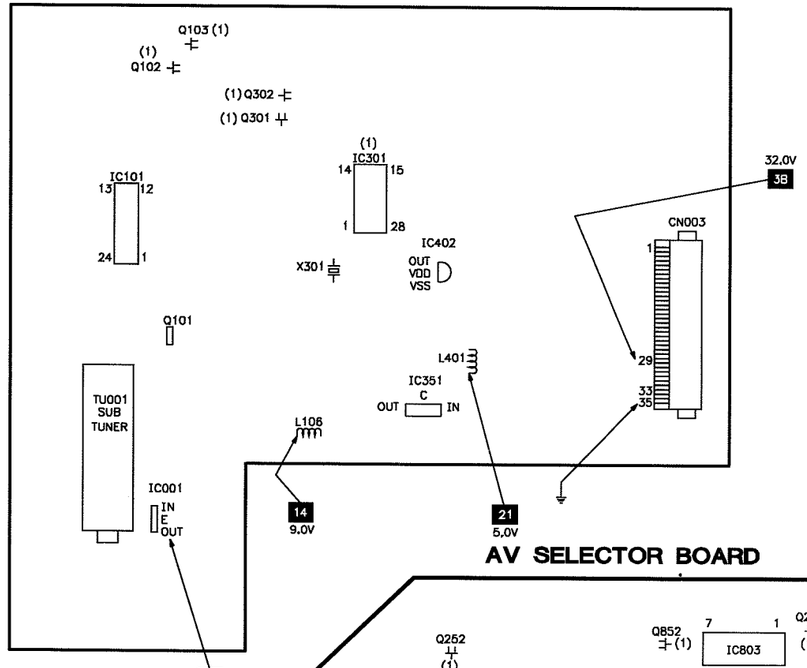
FRONT CONTROL BOARD



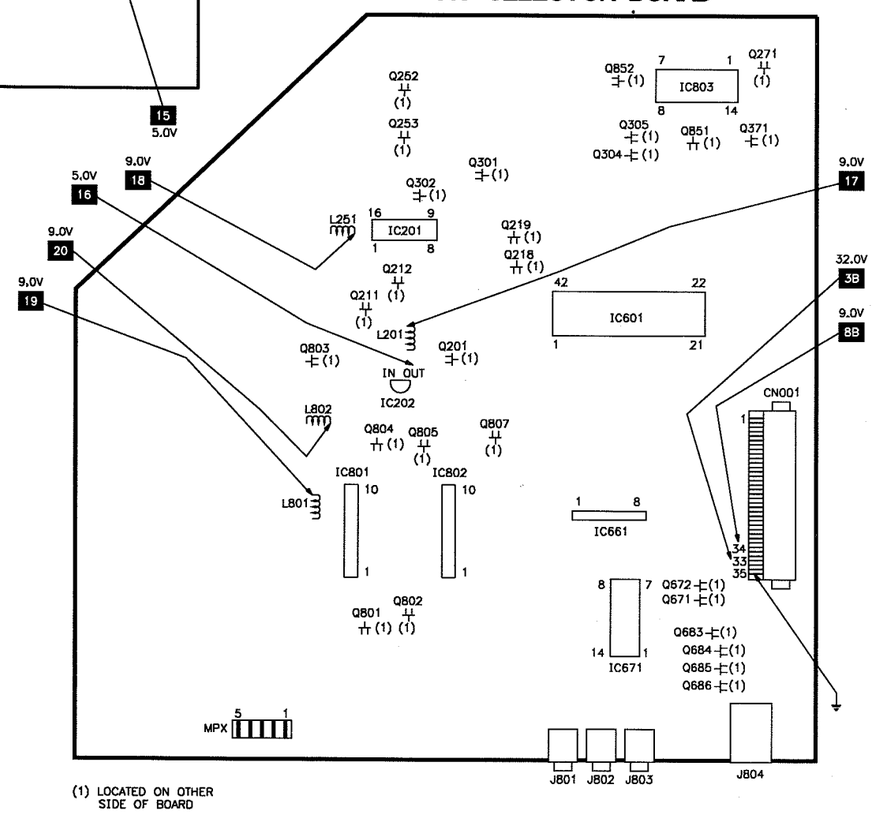
MAIN BOARD



PIP BOARD



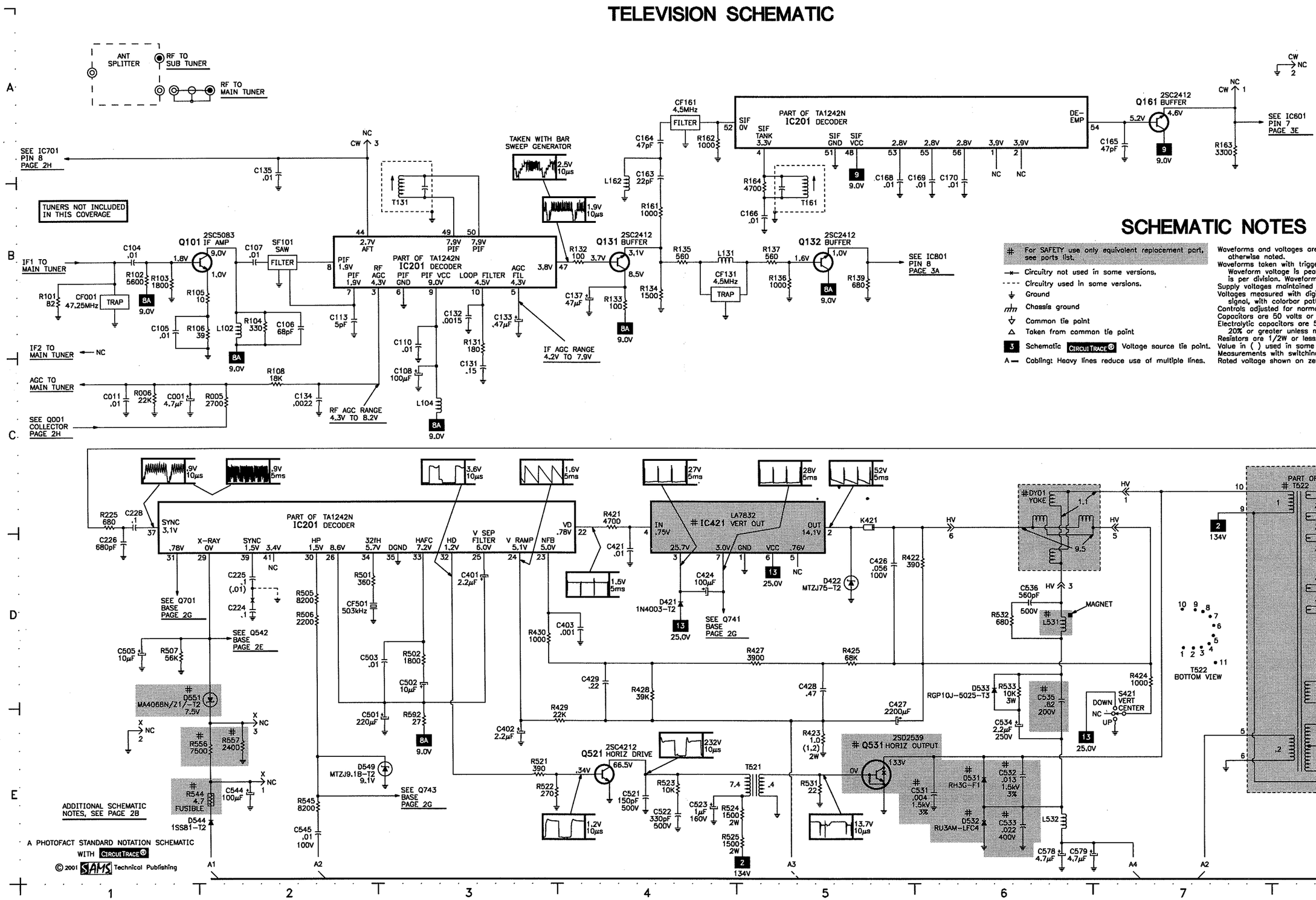
AV SELECTOR BOARD



JVC

MODEL AV-36150

TELEVISION SCHEMATIC

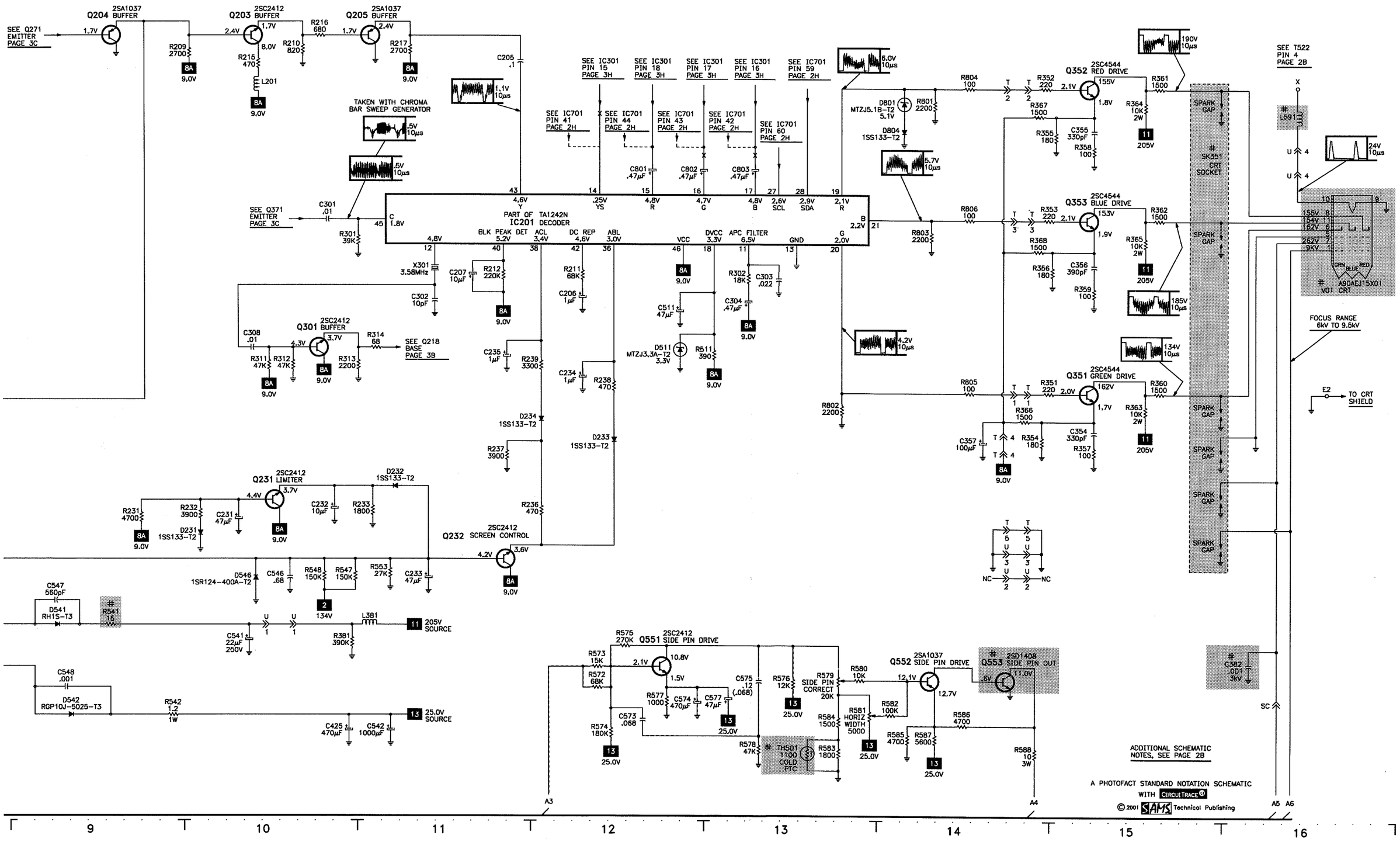


SCHEMATIC NOTES

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 otherwise noted.
Waveforms taken with triggered scope and colorbar signal. Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
Supply voltages maintained as seen at input.
Voltages measured with digital meter and a 1000µV RF signal, with colorbar pattern applied to antenna terminal.
Controls adjusted for normal operation.
Capacitors are 50 volts or less, 5% or greater unless noted.
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.

TELEVISION SCHEMATIC continued



POWER SUPPLY SCHEMATIC

E F

A B C D E

17 18 19 20 21 22 23 24

△ TAKEN FROM COMMON TIE POINT

CN1 1PW 120VAC 1.1A POLARIZED

F901 5A

LF902 LF901

C901 VA901 C902 .047 275VAC C903 .1 275VAC

R998 2.7M

C991 .01 250VAC C990 .01 250VAC

C904 .001 125VAC R999 120

C938 .001

D901 D3SBA60-S1

PART OF RY901 DEGAUSS

TH901 5.1 COLD PTC

L01 DEGAUSS R901 .47 7W

C906 .001 250VAC C908 .001 250VAC C907 .001 250VAC

C910 470µF 200V

T901

155V△

8.0V△ 5ms

Q921 2SC2412 SWITCH 0V 14.2V

D926 1SS133-T2

PART OF RY901 DEGAUSS

5 14.5V

R913 33K

PC802 TLP621(B) VOLTAGE FEEDBACK 60.1V△ 60.3V△

R912 33K

D909 MTZJ15A-T2 15.0V

R920 10K

5 14.5V

Q742 DTC124 SWITCH 5.5V 2.0V

C743 .01 R744 10K

SEE IC701 PIN 11 PAGE 2H

6A 5.0V

370V△ 10µs

C915 .022 400V R908 39K 3W R907 39K 3W

D905 EG1A-T3 C916 .0033 2kV

K901 K905

IC901 STR-F6626 POWER REG 1.8V△ .08V△ 18.0V△ 155V△

C914 390pF 2kV C913 .0033 2kV K902

D902 RGP10J-5025-T3

R906 8200 R902 8200

D916 RGP10J-5025-T3 Q912 REG 2SD2088 13.3V△ 33.9V△ 13.3V△

D914 RGP10J-5025-T3

85V△ 10µs

R936 2200

D918 MTZJ15A-T2 15.0V C935 100µF

R914 2.2

D913 RGP10J-5025-T3

D910 RGP10J-5025-T3

D911 1SS133-T2 R916 3900 Q911 2SA1037 SWITCH 8.2V△ 8.3V△ 7.8V△

C919 .0022 R915 3900

C918 .001 R917 10K

46V△ 10µs

R918 1000

C912 .001

C911 1000µF

D912 MTZJ15A-T2 15.0V

D903 1SS133-T2

PC901 TLP621(B) VOLTAGE FEEDBACK 2.0V△ 13.1V 17.0V△ 14.1V

IC941 SE135N ERROR AMP

C920 .082

R909 3300

R941 1000

C (2) IN (1) E (3)

1 135V

Q943 2SC2240 STANBY SWITCH 13.1V

D942 MTZJ6.8C-T2 6.8V

R942 2200

Q944 DTC124 SWITCH .1V 1.2V

R940 100K

Q942 2SC2412 SWITCH .64V

R945 1000 R944 39K

4 14.5V

Q927 DTC124 SWITCH 1.3V

C934 .001

Q928 DTC124 SWITCH .1V 6.1V

R928 6800 C954 22µF

5 14.5V

SEE IC701 PIN 52 PAGE 2H

SEE IC701 PIN 53 PAGE 2H

R757 6800

6A 5.0V

SEE IC201 PIN 29 PAGE 2A

SWITCH Q542 2SC2785 0V 14.1V

R559 12K C551 10µF R558 33K

Q541 2SA1037 SWITCH 0V 14.1V

R561 10K R560 27K

5 14.5V

D561 1SS133-T2

D560 1SS133-T2

T921 BOTTOM VIEW

20 1 19 2 18 3 17 4 16 15 6 14 7 13 8 12 9 11 10

R903 680 K906 K903 D904 1SS133-T2

R905 .22 2W R904 .22 2W

R949 100K R948 2200

D927 1SS133-T2 C932 47µF

D933 1SS133-T2 R947 4700

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2B

A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

337V 10µs

RY921 POWER

K924 K921

C921 .0015 500V

D921 RU30A-F1

Q922 2SD1383 SWITCH 1.3V .65V

D928 1SS133-T2

276 RY921 POWER

5 14.5V

R933 12K R934 100K

L921

Q951 2SA949 B1 PROTECT

135V 133V -.01V

R951 1.2 2W R952 22 2W R954 2700

C951 100µF

R955 47K

D951 MTZJ7.5S-T2 7.5V

SEE IC701 PIN 14 PAGE 2H

R956 22K C952 47µF R958 10K

R962 4700

PART OF PIP BOARD

CN003 29 CN002

C005 .01 C006 10µF

D925 RGP10J-5025-T3

C925 .0015 500V

R961 3.3 C937 10µF

Q925 2SA949 SWITCH 69.7V 69.5V 69.0V

R966 22K R967 68K

Q926 2SC2240 SWITCH .53V .05V

R963 10K

38.2V 10µs

C923 .0015 500V

D923 EGP10DL-6006-F1

K923

CP902

D001 MTZJ33A-T2 33.0V

C006 .01 C007 10µF

C924 100µF 160V

C538 100µF 160V

C928 1000µF

R605 2.7 3W

C606 1000µF

C922 .0015 500V

D922 RU3YX-LFC4

K922

48V 10µs

L922

C926 1000µF

IC771 AN77L05-T 5V REG IN (1) 14.5V .8V E (3) 5.7V OUT (2)

R772 1000

C772 .01 C773 100µF

D772 1SS133-T2

D771 1SS133-T2

C771 47µF C927 220µF

C720 .01 C721 .01 C774 220µF

PART OF FRONT CONTROL BOARD

D 6 D 6

C841 47µF

R773 120 C784 33µF

1 135V SOURCE

2 134V SOURCE

3B 32.0V SOURCE

3A 32.0V SOURCE

10 17.9V SOURCE

4 14.5V SOURCE

5 14.5V SOURCE

6A 5.0V SOURCE

6B 5.0V SOURCE

7 5.0V SOURCE

CN002 CN003 11 CN002 CN003 10

IC351 AN7805F 5V REG IN (1) 10.9V C (3) OUT (2)

R351 22 C351 47µF

PART OF PIP BOARD

21 5.0V SOURCE

R110 33 2W

IC101 AN7809F 9V REG IN 13.4V G OUT

C353 .01 C352 47µF

C102 .01 C004 220µF C111 .0022 C305 100µF C103 100µF

C101 .1

Q923 2SA1020 12V SWITCH 13.4V 13.7V

R926 .82 2W

8A 9.0V SOURCE

9 9.0V SOURCE

L161

C171 .0022 C162 .01 C161 220µF

R925 10K

R924 220 1W

R931 12K

Q924 2SC2412 12V SWITCH .73V .52V

R946 1000

D931 1SS133-T2

C931 47µF

CN002 CN003 34

PART OF PIP BOARD

L106

IC001 AN7805F 5V REG IN OUT E

C104 .0022 C008 47µF C105 100µF C116 100µF

C112 .0022 C004 10µF C113 47µF C007 47µF

14 9.0V SOURCE

15 5.0V SOURCE

CN001 34

PART OF AV SELECTOR BOARD

IC202 AN78L05-T 5V REG IN OUT E

C602 .01 C601 100µF C201 100µF

C208 .01 C209 47µF

L201 C204 .01 C203 47µF

L251 C252 .01 C251 47µF

L801 C832 .01 C831 47µF

L802 C842 .01 C841 47µF

8B 9.0V SOURCE

16 5.0V SOURCE

17 9.0V SOURCE

18 9.0V SOURCE

19 9.0V SOURCE

20 9.0V SOURCE

SYSTEM CONTROL SCHEMATIC

G H

PART OF FRONT CONTROL BOARD

GP1U281Q
IC841 REMOTE RECEIVER

VCC 4.1V GND

PART OF AV SELECTOR BOARD

J804 COMPULINK
D703 MTZJ5.6B-T2 5.6V
CN001

MN1878478JE
IC701
CPU

VSS 64
RMIN 5.0V 1
VCP 1.2V NC 25
RM8BIT .44V 10
HAZARD .03V 14
KEY1 5.0V 5
STBY G+ ON/OFF 5.0V NC 51
KEY2 5.0V 4
AFC2 2.2V 9
SEL4 5.0V 61
0V NC 48
ACIN 2.0V 11
0V NC 16
SD 4.5V 40
SYNC 2.5V NC 13
VSYNC 4.8V 55
SV1/CV1 4.0V 28
AVDD 5.0V 22
H SYNC 4.0V 39
VSS 38
CM 12
CVBS 1.9V 26
VPH 2.4V 24
AVSS 27
5.0V 54
GP-RST 0V NC 47
AFC1 1.8V 8
RMR FAIL 4.6V 56
OSC1 2.2V 62
OSC2 2.3V 63
XO 2.7V 36
XI 2.8V 37

AGC M 0V 33
SV/OTHER 5.0V 32
TV/EXT 5.0V 31
NC 0V 50
B1 ON/OFF .1V 52
NC 0V 35
R 0V 44
G 0V 43
NOTCH ON/OFF 0V NC 45
B 0V 42
YS 0V 41
PDWN 0V NC 49
SDA3 2.9V 59
SCL3 2.7V 60
BL ON/OFF .1V 53
VARI/FIX 0V 17
AMUTE 0V 29
SEL1 5.0V 21
SEL3 5.0V 19
SEL2 5.0V 20
SEL4 5.0V 18
SCL1 5.0V 3
SCL2 5.0V NC 58
SDA2 5.0V 2
BUS FREE 0V 15
CREF 0V 23
LEDT 5.0V 6
YM 0V NC 46
SDA2 5.0V NC 57
LEDS 0V 7
SP ON/OFF 0V 30

Q001 DTC124 AGC BUFFER 3.7V

TUNERS NOT INCLUDED IN THIS COVERAGE

AN7805F
IC001 5V REG 5.0V
IN (3) 9.0V
OUT (1) 32.0V
E (2)
C005 47µF

BM TO MAIN TUNER
5V TO MAIN TUNER
BT TO MAIN TUNER
NC LOCK (NC) TO MAIN TUNER
ADRS TO MAIN TUNER
NC TU TO MAIN TUNER
R004 100 SDA TO MAIN TUNER
R003 100 SCL TO MAIN TUNER

S-80840ALY-T
IC703 RESET
VSS (3) RES 5.0V OUT (1) VDD (2)

AT24C02-32150U
IC702 MEMORY
NP A0 A1 A2 VSS VDD
SDA SCL

Q701 DTC124 SWITCH .78V
Q741 2SC2412 VERT PULSE DRIVER 4.8V 0V
Q743 2SC2412 HORIZ PULSE DRIVER 4.0V -.36V
Q742 DTC124 SWITCH 1.9V
Q702 DTA124 SWITCH 5.0V

D741 1SS133-T2
D742 1SS133-T2
D703 1SS133-T2
D704 1SS133-T2
D702 1SS133-T2
D701 ON TIMER GL2PR6 RED

K703
CF701 12MHz

PART OF AV SELECTOR BOARD
CN001 21 → SEE IC601 PIN 22 PAGE 3E
CN001 22 → SEE IC601 PIN 23 PAGE 3E

PART OF FRONT CONTROL BOARD

SEE IC201 PIN 3 PAGE 2A
SEE Q851 BASE PAGE 3C
SEE Q305 BASE PAGE 3B
SEE Q928 BASE PAGE 2E
SEE IC301 PIN 11 PAGE 3H
SEE IC201 PIN 15 PAGE 2C
SEE IC301 PIN 12 PAGE 3H
SEE IC201 PIN 14 PAGE 2C
SEE IC301 PIN 13 PAGE 3H
SEE IC201 PIN 17 PAGE 2D
SEE IC301 PIN 14 PAGE 3H
SEE IC201 PIN 14 PAGE 2C
SEE Q944 BASE PAGE 2E
SEE Q671 BASE PAGE 3E
SEE Q603 BASE PAGE 3F
SEE IC801 PIN 2 PAGE 3A
SEE IC802 PIN 2 PAGE 3B
SEE IC801 PIN 3 PAGE 3A
SEE IC802 PIN 3 PAGE 3A
SEE Q601 BASE PAGE 3F
SEE IC301 PIN 5 PAGE 3H
SEE IC201 PIN 28 PAGE 2D
SEE IC201 PIN 27 PAGE 2D
SEE IC301 PIN 6 PAGE 3H
SEE Q102 EMITTER PAGE 3G
SEE Q742 COLLECTOR PAGE 2E
SEE IC201 PIN 31 PAGE 2A
SEE IC421 PIN 7 PAGE 2A
SEE Q302 BASE PAGE 3H
SEE J801 PIN 7 PAGE 3A
SEE Q301 BASE PAGE 3H
SEE IC201 PIN 30 PAGE 2A
SEE Q201 EMITTER PAGE 3C
SEE IC201 PIN 44 PAGE 2A
SEE Q951 COLLECTOR PAGE 2F

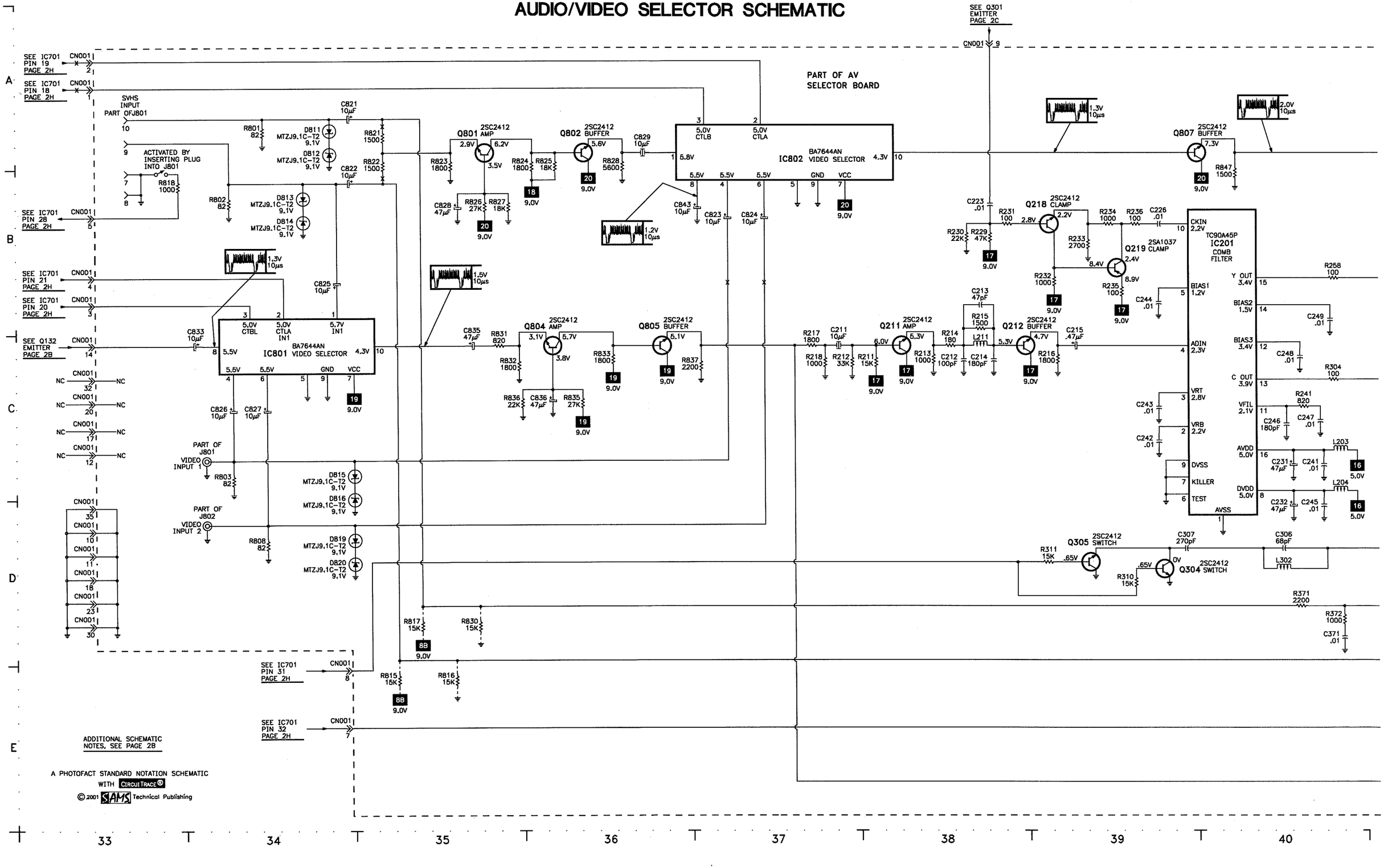
S705 VOL DN
S706 VOL UP
S707 POWER
S704 CH UP
S703 CH DN
S702 MENU

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2B

A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

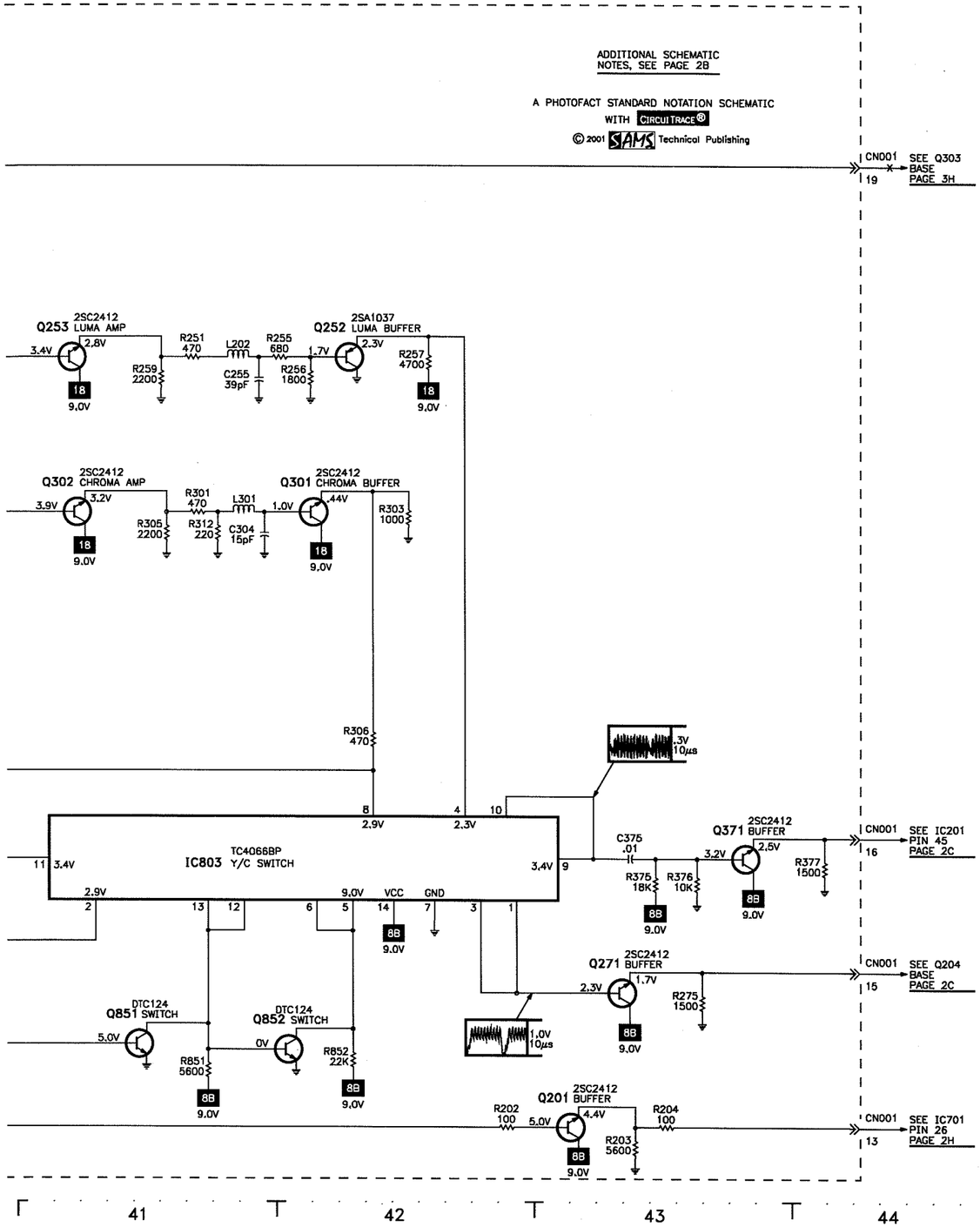
MODEL AV-36150 JVC

AUDIO/VIDEO SELECTOR SCHEMATIC



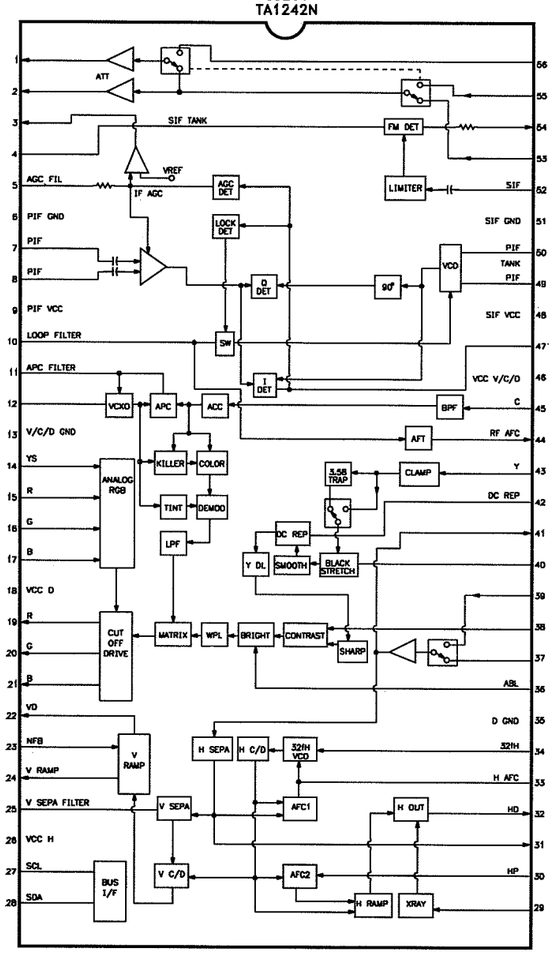
C
AUDIO/VIDEO SELECTOR SCHEMATIC continued

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2B

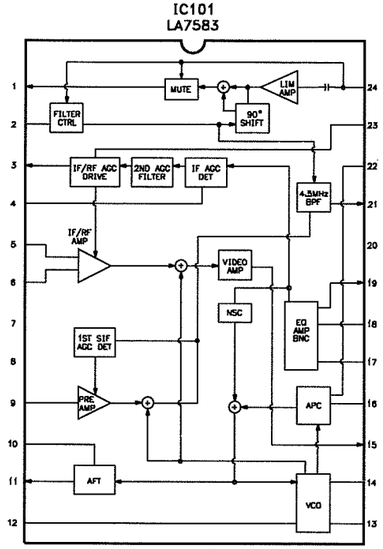


IC FUNCTIONS

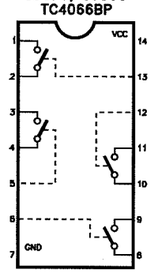
IC201 TA1242N



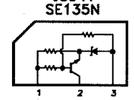
IC101 LA7583



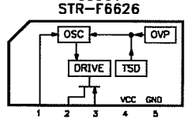
IC671, IC803 TC4066BP



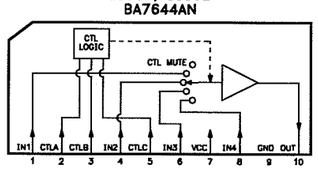
IC941 SE135N



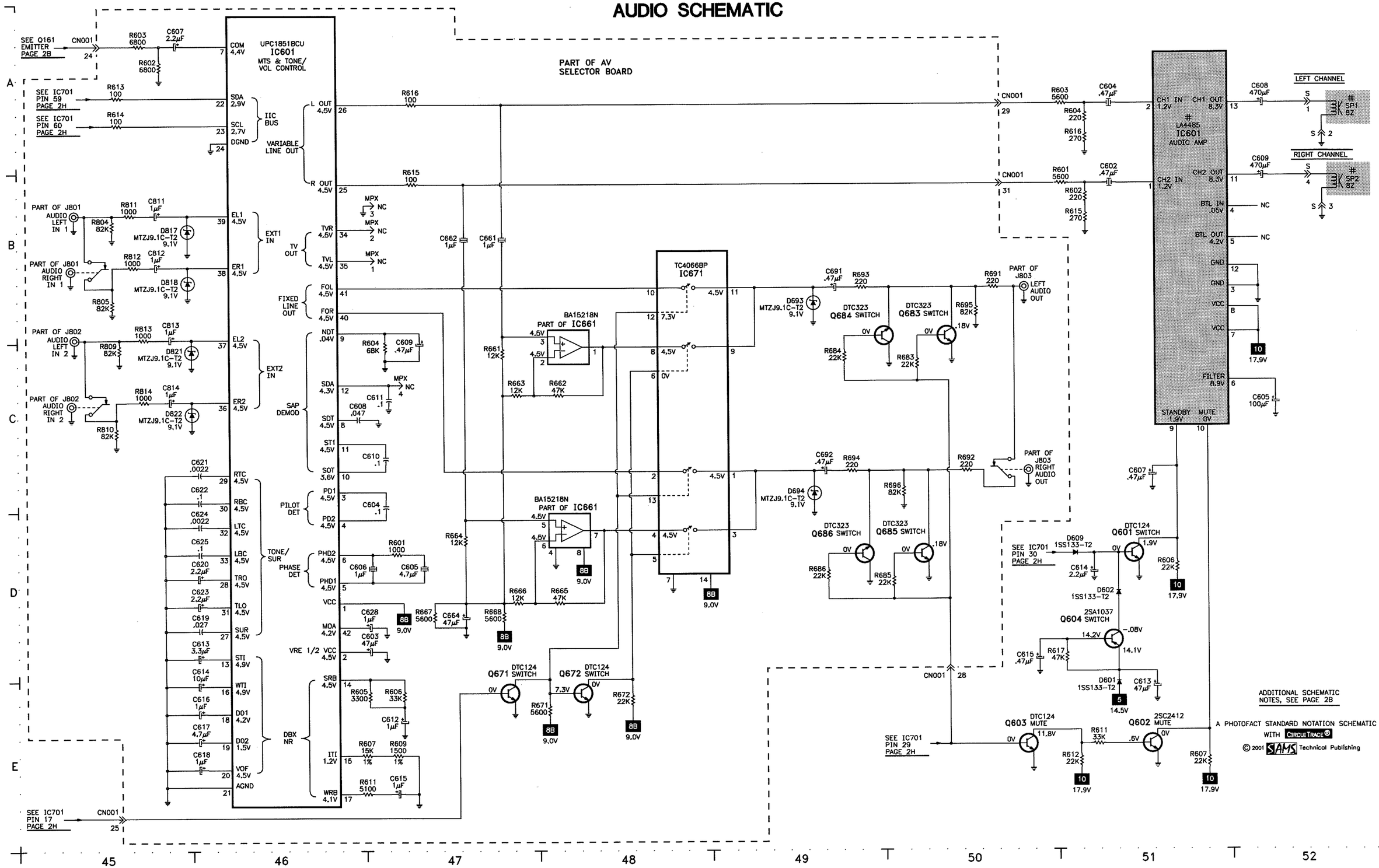
IC901 STR-F6626



IC801, IC802 BA7644AN



AUDIO SCHEMATIC



PIP SCHEMATIC

G H

IF TO SUB TUNER
C101 .01
Q101 2SC5083 IF AMP
1.8V 8.9V 1.0V
C103 .01
SF101 SAW FILTER
R101 82
R102 5600
R103 1800
R104 18
L101
R106 100
C102 .01
R105 27
14 9.0V
14 9.0V
TUNERS NOT INCLUDED IN THIS COVERAGE
C115 .01
AGC TO SUB TUNER
R124 10K
R001 10K
C001 4.7µF
RF AGC RANGE 5.1V TO 8.0V
BM TO SUB TUNER
15 5.0V
NC TO SUB TUNER ← NC
TU TO SUB TUNER ← NC
LOCK TO SUB TUNER ← NC
BT TO SUB TUNER
3B 32.0V
5V TO SUB TUNER
15 5.0V
R002 10K
ADRS TO SUB TUNER
15 5.0V
R126 22K
R121 33
C114 .47µF
L104
R115 180 (220)
CF103 4.5MHz
TRAP
R117 180
C110 .22
C109 .22
C108 100pF
L103
LA7583 IC101 IF/VIDEO DET
PIF 3.6V 5
PIF 3.6V 6
3.6V 24
RF AGC 5.1V 3
2.2V 23
1.8V 17
2.9V 22
1.8V 15
3.0V 16
4.5V 13
4.5V 14
20 8
15 5.0V
14 9.0V
Q103 2SA1037 BUFFER
1.8V 1.2V
R119 820
R120 1000
R127 1000
15 9.0V
1.9V 10µs
2.2V 10µs
TAKEN WITH BAR SWEEP GENERATOR
Q102 2SA1037 BUFFER
5.8V
AFT 5.3V 11
R110 100K
C107 .01
R111 100K
14 9.0V
R112 100
R113 10K
14 9.0V
3.4V 2
C117 10µF
1.8V 4
R125 330K
C118 .22
6.1V 1 NC
2.0V 18
R118 2700
2.5V 21 NC
C111 47pF
1.8V 9
C106 .0022
7
4.0V 10
R114 220 1%
4.0V 12
FILTER CF102 5.71MHz
19 2.2V
R119 820
R120 1000
1.2V 1.8V
R127 1000
15 9.0V
1.9V 10µs
2.2V 10µs
TAKEN WITH BAR SWEEP GENERATOR
NC CN003 CN002 26 CN003 CN002 25 NC
R112 100 CN003 CN002 30 SEE IC701 PIN 9 PAGE 2H
SEE IC701 PIN 44 PAGE 2H CN002 CN003 5
SEE IC701 PIN 43 PAGE 2H CN002 CN003 4
SEE IC701 PIN 42 PAGE 2H CN002 CN003 3
SEE IC701 PIN 41 PAGE 2H CN002 CN003 2
C316 .1
C317 .1
C318 .1
SDA9389X-X IC301 PIP DECODER
RIN .61V 11
GIN .61V 12
BIN .61V 13
YSIN 0V 14
VP/SCP .07V 4
CVBS2 0V 26
C326 .01
5.4V 5ms
SEE IC701 PIN 55 PAGE 2H CN002 CN003 9
R304 47K
Q302 2SC2412 VERT AMP
.65V
R306 2200
21 5.0V
ROUT .65V 18 CN003 CN002 SEE IC201 PIN 15 PAGE 2C
GOUT .64V 17 CN003 CN002 SEE IC201 PIN 16 PAGE 2C
BOUT .65V 16 CN003 CN002 SEE IC201 PIN 17 PAGE 2D
YSOUT .25V 15 CN003 CN002 SEE IC201 PIN 14 PAGE 2C
CVBS2 0V 24
C325 .01
R316 330
VHEFH 2.2V 27
C329 2.2µF
C330 .01
VREFL 2.2V 25
C327 2.2µF
C328 .01
VDD 5.0V 7
L302
C314 10µF
C315 .01
21 5.0V
VDDA1 22
C323 10µF
C324 .01
L304
VDDA2 5.0V 19
C319 10µF
C320 .01
21 5.0V
L303
UREF 5.0V 21
C321 1µF
C322 .01
21 5.0V
VSSA2 20
XFREQ 10
T 9
VSS 8
VSSA1 23
K102
CN003 CN002 35
CN003 CN002 33
CN003 CN002 28
CN003 CN002 27
CN003 CN002 1
CN003 CN002 7
CN003 CN002 12
CN003 CN002 13
CN003 CN002 19
CN003 CN002 20
D301
2SC2412 Q301 HORIZ AMP
SEE IC701 PIN 39 PAGE 2H CN002 CN003 8
R301 47K
.6V
R303 2200
21 5.0V
SCP .9V 3
1.3V 10µs
SEE Q807 EMITTER PAGE 38 CN002 CN003 18
R307 1000 1.8V
2SC2412 Q303 BUFFER
1.2V
C331 .1
CVBS1 3.1V 28
R309 1000
21 5.0V
C313 27pF
X301 27MHz
C312 27pF
XIN 1.6V 1
XO 1.6V 2
SCL SUB TUNER
R003 100 CN003 CN002 31
SDA SUB TUNER
R004 100 CN003 CN002 32
SEE IC701 PIN 59 PAGE 2H CN002 CN003 21
R311 100
SDA 2.9V 5
SEE IC701 PIN 60 PAGE 2H CN002 CN003 22
R313 100
SCL 2.6V 6
ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2B
A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

PART OF PIP BOARD

SCHEMATIC COMPONENT LOCATION GUIDE

C001	B53	C212	C38	C375	D43	C616	E45	C841	C24	D549	E3	IC202	E22	L701	D28	Q743	D26	R139	B5	R313	C11	R573	E12	R703	B27	R813	C45	R963	B22
C001	C1	C213	B38	C382	E16	C617	E45	C841	E24	D551	D2	IC301	A58	L702	E28	Q801	B35	R161	B4	R313	E58	R574	E12	R704	B25	R814	C45	R966	B22
C004	D23	C214	C38	C401	D3	C618	E45	C842	E24	D560	E19	IC351	C24	L771	C28	Q802	B36	R162	A4	R314	C11	R575	E12	R704	C27	R815	E35	R967	B22
C004	D24	C215	C39	C402	E3	C619	D45	C843	B36	D561	E19	IC421	D4	L801	E23	Q804	C36	R163	A7	R316	B59	R576	E13	R705	B25	R816	E35	R998	A17
C005	A32	C223	B38	C403	D4	C620	D45	C901	A17	D601	E51	IC601	A46	L802	E23	Q805	C36	R164	B5	R351	C14	R577	E12	R705	B28	R817	D35	R999	B18
C005	B24	C224	D2	C421	D4	C621	C45	C902	A18	D602	D51	IC601	A51	L921	A22	Q807	B39	R202	E42	R351	C23	R578	E13	R706	B25	R818	B33	RY901	A19
C006	B24	C225	D2	C424	D4	C622	D45	C903	A18	D609	D51	IC661	C48	L922	B21	Q851	E41	R203	E43	R352	A14	R579	E13	R706	B28	R821	A35	RY901	B18
C006	B24	C226	B39	C425	E10	C623	D45	C904	A18	D693	B49	IC661	D48	LF901	A18	Q852	E42	R204	E43	R353	B14	R580	E13	R707	E32	R822	B35	RY921	A22
C007	B24	C226	D1	C426	D5	C624	D45	C906	A19	D694	C49	IC671	B48	LF902	A17	Q911	D19	R209	A10	R354	C14	R581	E13	R708	E32	R823	B35	RY921	A22
C007	D24	C228	D1	C427	E5	C625	D45	C907	B19	D701	E32	IC701	A29	PC901	D20	Q912	C20	R210	A10	R355	B15	R582	E14	R709	A25	R824	B36	S421	E7
C008	D24	C231	C40	C428	D5	C628	D46	C908	A19	D702	B29	IC702	E30	PC902	B19	Q921	B17	R211	B12	R356	B14	R583	E13	R710	D26	R825	B36	S702	B25
C011	C1	C231	D10	C429	D4	C661	B47	C910	A20	D703	B27	IC703	D28	Q001	A29	Q922	A21	R211	C38	R357	C15	R584	E13	R711	D29	R826	B35	S703	B25
C101	A53	C232	D10	C501	E3	C662	B47	C911	D18	D703	C29	IC771	C22	Q101	A54	Q923	D22	R212	B11	R358	B15	R585	E14	R713	C26	R827	B35	S704	B25
C101	D22	C232	D40	C502	D3	C664	D47	C912	D18	D704	E28	IC801	C34	Q101	B1	Q924	D22	R212	C37	R359	B15	R586	E14	R714	C29	R828	B36	S705	B25
C102	A54	C233	D11	C503	D3	C691	B49	C913	C20	D741	C26	IC802	B37	Q102	B55	Q925	B22	R213	C38	R360	C15	R587	E14	R715	C30	R830	D35	S706	B25
C102	D23	C234	C12	C505	D1	C692	C49	C914	C19	D742	D26	IC803	D41	Q103	A55	Q926	B22	R214	C38	R361	A15	R588	E14	R716	B29	R831	C35	S707	B26
C103	A54	C235	C11	C511	C12	C701	E27	C915	B20	D771	C23	IC841	A25	Q131	B4	Q927	E18	R215	A10	R362	B15	R592	E3	R717	C30	R832	C35	SF101	A54
C103	D24	C241	C40	C521	E4	C702	C28	C916	B20	D772	C23	IC901	C19	Q132	B5	Q928	D17	R215	C38	R363	C15	R601	B50	R718	B29	R833	C36	SF101	B2
C104	B1	C242	C39	C522	E4	C703	D28	C918	D20	D801	A14	IC941	D21	Q161	A7	Q942	E20	R216	A10	R364	A15	R601	D47	R719	B30	R835	C36	SP1	A52
C104	D23	C243	C39	C523	E4	C704	D29	C919	D19	D804	B14	J801	C34	Q201	E43	Q943	E20	R216	C39	R365	B15	R602	A45	R720	B29	R836	C35	SP2	B52
C105	B1	C244	B39	C531	E6	C705	E29	C920	D19	D811	A34	J801	B45	Q203	A10	Q944	E19	R217	A11	R366	C14	R602	B51	R721	B30	R837	C37	T131	B3
C105	D24	C245	D40	C532	E6	C706	D28	C921	A22	D812	B34	J801	B45	Q204	A9	Q951	A23	R217	C37	R367	A14	R603	A45	R724	D28	R847	B40	T161	B5
C106	B2	C246	C40	C533	E6	C708	D28	C922	B21	D813	B34	J802	D34	Q205	A11	R001	B53	R218	C37	R368	B14	R603	A50	R725	E29	R851	E41	T521	E5
C106	C55	C247	C40	C534	E6	C709	D27	C923	B23	D814	B34	J802	C45	Q211	C38	R002	C53	R225	D1	R371	D40	R604	A51	R728	C31	R852	E42	T522	C8
C107	B2	C248	C40	C535	D6	C710	E28	C924	A24	D815	C34	J802	C45	Q212	C38	R003	B31	R229	B38	R372	D40	R604	C47	R729	C30	R901	B19	T901	A21
C107	B55	C249	B40	C536	D6	C711	E28	C925	B21	D816	D34	J803	B50	Q218	B39	R003	D56	R230	B38	R375	D43	R605	B24	R730	C31	R902	C19	TH501	E13
C108	C3	C251	E24	C538	A24	C712	C29	C926	B24	D817	B45	J803	C50	Q219	B39	R004	B32	R231	B38	R376	D43	R605	E46	R731	C31	R903	C18	TH901	A19
C108	C54	C252	E24	C541	D10	C714	D28	C927	B24	D818	B45	J804	A26	Q231	D10	R004	E56	R231	D9	R377	D44	R606	D51	R732	C28	R904	C18	V01	B16
C109	C54	C255	B41	C542	E11	C715	C28	C928	B24	D819	D34	K102	C59	Q232	D11	R005	C2	R232	B39	R381	D10	R606	E47	R733	D30	R905	C18	VA901	A17
C110	C3	C301	B10	C544	E2	C716	C28	C931	E21	D820	D34	K421	D5	Q252	B42	R006	C1	R232	D10	R421	D4	R607	E46	R734	D30	R906	C19	X	E8
C110	C54	C302	C11	C545	E2	C717	E29	C932	D17	D821	C45	K703	E26	Q253	B41	R101	A53	R233	B39	R422	D5	R607	E51	R735	C26	R907	B20	X301	B11
C111	C55	C303	B13	C546	D10	C718	E28	C934	E18	D822	C45	K901	C20	Q271	E43	R101	B1	R233	D11	R423	E5	R609	E47	R736	A27	R908	B20	X301	D58
C111	D24	C304	C13	C547	D9	C719	D28	C935	C20	D901	A19	K902	C20	Q301	C10	R102	A53	R234	B39	R424	D7	R611	E46	R739	A28	R909	D19		
C112	D23	C304	C41	C548	E9	C720	C24	C937	B22	D902	C19	K903	C18	Q301	C42	R102	B1	R235	B39	R425	D5	R611	E51	R741	C25	R912	B19		
C113	B2	C305	D24	C551	E18	C721	C24	C938	B17	D903	D19	K905	C20	Q301	C58	R103	A53	R236	B39	R427	D5	R612	E51	R742	C26	R913	B18		
C113	D24	C306	D40	C573	E12	C724	C28	C951	A23	D904	C18	K906	C18	Q302	B58	R103	B1	R236	D12	R428	D4	R613	A45	R743	C27	R914	C20		
C114	C54	C307	D39	C574	E12	C736	B27	C952	B23	D905	C20	K921	A22	Q302	C41	R104	A54	R237	C11	R429	E3	R614	A45	R744	B20	R915	D19		
C115	B54	C308	C10	C575	E13	C741	C26	C954	D18	D909	B18	K922	B21	Q303	D58	R104	B2	R238	C12	R430	D3	R615	B47	R745	D25	R916	D19		
C116	D24	C312	E58	C577	E13	C743	B20	C990	B17	D910	D20	K923	B23	Q304	D39	R105	A54	R239	C12	R501	D2	R615	B51	R746	D26	R917	D20		
C117	B55	C313	D58	C578	E6	C744	D26	C991	B17	D911	D19	K924	A22	Q305	D39	R105	B2	R241	C40	R502	D3	R616	A47	R747	D27	R918	D19		
C118	C55	C314	B59	C579	E6	C771	B24	CF001	B1	D912	D19	L01	B19	Q351	C15	R106	A54	R251	B41	R505	D2	R616	A51	R756	B30	R920	B19		
C131	C3	C315	B59	C601	E24	C772	C23	CF102	D55	D913	C19	L101	A54	Q352	A15	R106	B2	R255	B41	R506	D2	R617	D50	R757	E17	R924	D22		
C132	B3	C316	A58	C602	B51	C773	C23	CF103	C54	D914	C20	L102	B2	Q353	B15	R108	C2	R256	B42	R507	D1	R661	C47	R759	C27	R925	D22		
C133	B3	C317	A58	C602	E24	C774	C24	CF131	B4	D916	C19	L103	D54	Q371	D43	R110	B55	R257	B42	R511	C13	R662	C48	R772	C22	R926	D22		
C134	C2	C318	B58	C603	D46	C784	C22	CF161	A4	D918	C20	L104	C3	Q521	E4	R110	C22	R258	B40	R521	E3	R663	C47	R773	C22	R928	D17		
C135	B2	C319	C59	C604	A51	C801	B12	CF501	D2	D921	A22	L104	C54	Q531	E5	R111	B55	R259	B41	R522	E3	R664	D47	R791	E29	R931	D21		
C137	B4	C320	C59	C604	D47	C802	B12	CF701	E28	D922	B21	L106	D22	Q541	E18	R112	B56	R275	E43	R523	E4	R665	D48	R792	D30	R933	A21		
C161	D24	C321	C59	C605	C52	C803	B13	CN11PW	A17	D923	B23	L131	B4	Q542	E18	R113	B56	R301	B11	R524	E4	R666	D47	R793	D30	R934	A21		
C162	D24	C322	C59	C605	D47	C811	B45	CP902	B23	D925	B21	L161	D23	Q551	E12	R114	D55	R301	C41	R525	E4	R667	D47	R794	C32	R936	C20		
C163	B4	C323	C59	C606	B24	C812	B45	CRT	B16	D926	B18	L162	B4	Q552	E14	R115	C54	R301	C57	R531	E5	R668	D47	R795	C32	R940	E19		
C164	A4	C324	C59	C606	D47	C813	C45	D001	B24	D927	D17	L201	A10	Q553	E14	R117	C54	R302	B13	R532	D6	R671	E48	R801	A14	R941	D20		
C165	A7	C325	B59	C607	A45	C814	C45	D231	D10	D928	A22	L201	E23	Q601	D51	R118	C55	R303	C42	R533	D6	R672	E48	R801	A34	R942	E21		
C166	B5	C326	C58	C607	C51	C821	A34	D232	D11	D931	D21	L202	B41	Q602	E51	R119	A55	R303	C58	R541	D9	R683	C50	R802	B34	R944	E20		
C168	B5	C327	B59	C608	A52	C822	B34	D233	C12	D933	D17	L203	C40	Q603	E50	R120	A55	R304	B57	R542	E9	R684	C49	R802	C13	R945	E19		
C169	B6	C328	B60	C608	C46	C823	B37	D234	C12	D942	E20	L204	D40	Q604	D51	R121	C54	R304	C40	R544	E2	R685	D49	R803	B14	R946	D21		
C170	B6	C329	B59	C609	B52	C824	B37	D301	C58	D951	B23	L211	C38	Q671	E47	R124	B53	R305	C41	R545	E2	R686	D49	R803	C34	R947	D18		
C171	D24	C330	B59	C609	C47	C825	B34	D421	D4	F901	A17	L251	E23	Q672	E48	R125	C55	R306	B58	R547	D11	R691	B50	R804	A14	R948	D17		
C201	E24	C331	D58	C610	C47	C826	C34	D422	D5	IC001	A31	L301	C41	Q683	C50	R126	B54	R306	D42	R548	D10	R692	C50	R804	B45	R949	D17		
C203	E24	C351	C23	C611	C47	C827	C34	D511	C12	IC001	D23	L302	B59	Q684	C49	R127	A55	R307	D57	R553	D11	R693	B49	R805	B45	R951	A23		
C204	E24	C352	D24	C612	E47	C828	B35	D531	E6	IC101	A55	L302	D40	Q685	D50	R131	C3	R309	D58	R556	E2	R694	C49	R805	C14	R952	A23		
C205	A11	C353	D24	C613	D45	C829	B36	D532	E6	IC101	D22	L303	C59	Q686	D49	R132	B4	R310	D39	R557	E2	R695	B50	R806	B14	R954	A23		
C206	B12	C354	C15	C613	E51	C831	E24	D533	D6	IC201	A5	L304	C59	Q701	C26	R133	B4	R311	C10	R558	E18	R696	C50	R808	D34	R955	A22		
C207	B11	C355	B15	C614	D51	C832	E24	D541	D9	IC201	B12	L381	D11	Q701	E31	R134	B4	R311	D39	R559	E18	R701	B26	R809	C45	R956	B22		
C208	E24	C356	B15	C614	E45	C833	C34	D542	E9	IC201	B3	L531	D6	Q702	E31	R135	B4	R311	E58	R560	E19	R701	E27	R810	C45	R958	B23		
C209	E24	C357	C14	C615	D50	C835	C35	D544	E2	IC201	B40	L532	E6	Q741	C27	R136	B5	R312	C10	R561	E18	R702	B25	R811	B45	R961	B22		
C211	C37	C371	D40	C615	E47	C836	C36	D546	D10	IC201	D2	L591	A16	Q742	B19	R137	B5	R312	C41	R572	E12	R703	B25	R812	B45	R962	B23		

PARTS LIST

	Item No.	Type No.	Mfr. Part No.	NTE Part No.
	D001	-	MTZJ33A-T2	-
	D231 Thru			
	D234	-	1SS133-T2	NTE177
	D421	-	1N4003-T2	NTE116
	D422	-	MTZJ75-T2	-
	D511	-	MTZJ3.3A-T2	-
#	**D531**	-	RH3G-F1	NTE977
#	**D532**	-	RU3AM-LFC4	NTE580
	D533	-	RGP10J-5025-T3	-
	D541	-	RH1S-T3	NTE552
	D542	-	RGP10J-5025-T3	-
	D544	-	1SS81-T2	NTE177
	D546	-	1SR124-400A-T2	-
	D549	-	MTZJ9.1B-T2	-
#	**D551**	-	MA4068N/Z1/-T2	-
	D560, 61	-	1SS133-T2	NTE177
	D601, 02, 09	-	1SS133-T2	NTE177
	D702, 03, 04	-	1SS133-T2	NTE177
	D741, 42	-	1SS133-T2	NTE177
	D771, 72	-	1SS133-T2	NTE177
	D801	-	MTZJ5.1B-T2	-
	D804	-	1SS133-T2	NTE177
#	**D901**	D3SBA60	D3SBA60-S1	NTE5330
#	**D902**	-	RGP10J-5025-T3	-
	D903, 04	-	1SS133-T2	NTE177
	D905	-	EG1A-T3	-
	D909	-	MTZJ15A-T2	-
	D910	-	RGP10J-5025-T3	-
	D911	-	1SS133-T2	NTE177
	D912	-	MTZJ15A-T2	-
	D913, 14, 16	-	RGP10J-5025-T3	-
	D918	-	MTZJ15A-T2	-
	D921	-	RU30A-F1	-
	D922	-	RU3YX-LFC4	-
	D923	-	EGP10DL-6006-F1	-
	D925	-	RGP10J-5025-T3	-
	D926, 27, 28	-	1SS133-T2	NTE177
	D931, 33	-	1SS133-T2	NTE177
	D942	-	MTZJ6.8C-T2	-
	D951	-	MTZJ7.5S-T2	-
	IC001	-	AN7805F	NTE1960
		-	BA17805T	NTE1960
	IC101	-	AN7809F	NTE1966
		-	BA17809T	NTE1966
	IC201	-	TA1242N	-
#	**IC421**	-	LA7832	-
#	**IC601**	-	LA4485	-
	IC701	-	MN1876478JE	-
	IC702	-	AT24C02-32150U	-
	IC703	-	S-80840ALY-T	-
	IC771	-	AN77L05-T	-
#	**IC901**	-	STR-F6626/F7	-
#	**IC941**	-	SE135N	-
#	**PC901, 02**	-	TLP621(B)	NTE3098
	Q001	DTC124	DTC124EKA-X	NTE2357
	Q101	2SC5083	2SC5083/L-P/-T	-
	Q131, 32	2SC2412	2SC2412K/QR/-X	NTE2408
	Q161	2SC2412	2SC2412K/QR/-X	NTE2408
	Q203	2SC2412	2SC2412K/QR/-X	NTE2408
	Q204, 05	2SA1037	2SA1037AK/QR/-X	NTE2409
	Q231, 32	2SC2412	2SC2412K/QR/-X	NTE2408
	Q301	2SC2412	2SC2412K/QR/-X	NTE2408
	Q351, 52, 53	2SC4544	2SC4544-LB	NTE376%
	Q521	2SC4212	2SC2412/Z1/	NTE2501
#	**Q531**	2SD2539	2SD2539-LB	NTE2353
	Q541	2SA1037	2SA1037AK/QR/-X	NTE2409
#	**Q542**	2SC2785	2SC2785/JH/-T	NTE2361
	Q551	2SC2412	2SC2412K/QR/-X	NTE2408
	Q552	2SA1037	2SA1037AK/QR/-X	NTE2409
#	**Q553**	2SD1408Y	2SD1408/OY/-LB	NTE291
	Q601	DTC124	DTC124EKA-X	NTE2357
	Q602	2SC2412	2SC2412K/QR/-X	NTE2408
	Q603	DTC124	DTC124EKA-X	NTE2416
	Q604	2SA1037	2SA1037AK/QR/-X	NTE2409
	Q701	DTC124	DTC124EKA-X	NTE2357
	Q741	2SC2412	2SC2412K/QR/-X	NTE2408
	Q742	DTC124	DTA124EKA-X	NTE2357
	Q743	2SC2412	2SC2412K/QR/-X	NTE2408
	Q911	2SA1037	2SA1037AK/QR/-X	NTE2409
	Q912	2SD2088	2SD2088-T	-
	Q921	2SC2412	2SC2412K/QR/-X	NTE2408
	Q922	2SD1383	2SD1388K/AB/-X	NTE2404
	Q923	2SA1020	2SA1020/Y/-T	NTE25
	Q924	2SC2412	2SC2412K/QR/-X	NTE2408
	Q925	2SA949	2SA949/Y/Z1-T	NTE383
	Q926	2SC2240	2SC2240/GL/-T	NTE382
	Q927, 28	DTC124	DTC124EKA-X	NTE2357
	Q942	2SC2412	2SC2412K/QR/-X	NTE2408
	Q943	2SC2240	2SC2240/GL/-T	NTE382
	Q944	DTC124	DTC124EKA-X	NTE2357
	Q951	2SA949	2SA949/Y/Z1-T	NTE383

AV SELECTOR BOARD

D693, 94	-	MTZJ9.1C-T2	-
D703	-	MTZJ5.6B-T2	-
D811 Thru			
D822	-	MTZJ9.1C-T2	-
IC201	-	TC90A45P	-
IC202	-	AN78L05-T	-
IC601	-	UPC1851BCU	-
IC661	-	BA151218N	-
IC671	-	TC4066BP/N/	NTE4066B
IC801, 02	-	BA7644AN	-
IC803	-	TC4066BP/N/	NTE4066B
Q201, 11, 12	2SC2412	2SC2412K/QR/-X	NTE2408
Q218	2SC2412	2SC2412K/QR/-X	NTE2408
Q219, 52	2SA1037	2SA1037AK/QR/-X	NTE2409
Q253, 71	2SC2412	2SC2412K/QR/-X	NTE2408
Q301, 02	2SC2412	2SC2412K/QR/-X	NTE2408
Q304, 05	2SC2412	2SC2412K/QR/-X	NTE2408
Q371	2SC2412	2SC2412K/QR/-X	NTE2408
Q671, 72	DTC124	DTC124EKA-X	NTE2357
Q683 Thru			
Q686	DTC323	DTC323TK-X	-
Q801, 02	2SC2412	2SC2412K/QR/-X	NTE2408
Q804, 05, 07	2SC2412	2SC2412K/QR/-X	NTE2408
Q851, 52	DTC124	DTC124EKA-X	NTE2357

FRONT CONTROL BOARD

D701	-	GL2PR6	-
Q701, 02	DTA124	DTA124EKA-X	-

PIP BOARD

D301	-	1SS133-T2	NTE177
IC001	-	AN7805F	NTE1960
IC101	-	LA7583	-
IC301	-	SDA9389X-X	-
IC351	-	AN7805F	NTE1960
Q101	2SC5083	2SC5083/L-P/-T	-
Q102, 03	2SA1037	2SA1037AK/QR/-X	NTE2409
Q301, 02, 03	2SC2412	2SC2412K/QR/-X	NTE2408

	Item No.	Function/Rating	Mfr. Part No.	Notes
#	**C382**	.001 +80% -20% 3kV	QCZ0121-102	-
#	**C531**	.004 3% 1.5kV	QFZ0196-402	-
#	**C532**	.013 3% 1.5kV	QFZ0198-133	-
#	**C533**	.022 5% 400V	QFP32GJ-223	-
#	**C535**	.62 5% 250V	QFZ0197-624	-
	C602, 04	.47µF 20% 50V NP	QEN61HM-474Z	-
#	**C901**	.1 20% 275VAC	QFZ9040-104	-
#	**C902**	.047 20% 275VAC	QFZ9040-473	-
#	**C903**	.1 20% 275VAC	QFZ9040-104	-
#	**C904**	.001 20% 125VAC	QCZ9052-102	-

	Item No.	Function/Rating	Mfr. Part No.	Notes
#	**C906, 07, 08**	.001 20% 250VAC	QCZ9078-102	-
#	**C910**	470µF 20% 200V	QEZ0429-477	-
	C913	.0033 10% 2kV	QCZ0131-102	-
	C914	390pF 10% 2kV	QCZ0325-391	-
	C916	.0033 10% 2kV	QCZ0131-332	-
#	**C990, 91**	.01 20% 250VAC	QCZ9074-103	-
	CF001	Trap	GAX0349-001	47.25MHz
	CF131	Trap	QAX0339-001	4.5MHz
	CF161	Filter	SFSH4.5MCB	4.5MHz
	CF501	Resonator	CSB503F30-T2	503kHz
	CF701	Resonator	FCR12.0M2S	12MHz
#	**CN11PW**	Line Cord	QMPD270-200-K2	AC, Polarized
#	**CP902**	IC Protect	ICP-N75-Y	-
#	**DY01** (1)	Yoke	-	Horiz .9mH, Vert 24.5mH
#	**F901**	Fuse	QMF0007-5R0J1	5Amp, 125V Fast Acting
	K421	Ferrite Bead	QQR0582-001Z	-
	K703	Ferrite Bead	QQR0582-001Z	-
	K901, 02, 03	Ferrite Bead	QQR0621-002Z	-
	K905, 06	Ferrite Bead	QQR0621-002Z	-
	K921 Thru			
	K924	Ferrite Bead	QQR0621-002Z	-
#	**L01**	Degaussing Coil	CELD067-001JA	-
	L102	.22µH	QQLZ014-R22	-
	L104	68µH	QQL29BJ-680Z	-
	L131	22µH	QQL29BJ-220Z	-
	L161	68µH	QQL29BJ-680Z	-
	L162	22µH	QQL29BJ-220Z	-
	L201	27µH	QQL244K-270Z	-
	L381	100µH	QQL29BJ-101Z	-
#	**L531**	Horizontal Linearity	QQR1027-003	-
	L532	Choke	QQLZ027-821	-
#	**L591**	Choke	QQLZ026-430	-
	L701	4.7µH	QQL29BJ-4R7Z	-
	L702	10µH	QQL244J-100Z	-
	L771	4.7µH	QQL29BJ-4R7Z	-
	L921, 22	Choke	QQL42AK-820Z	-
#	**LF901**	Line Filter	QQR1085-001	-
#	**LF902**	Line Filter	QQR0532-003	-
	R533	10K 5% 3W	QRL039J-103	-
#	**R541**	15 5% 1/2W	QRK129J-150	-
#	**R544**	4.7 5% 1/4W Fusible	QRZ9017-4R7	-
#	**R556**	7500 1/10W	NRVA02D-752X	-
#	**R557**	2400 1/10W	NRVA02D-242X	-
	R579	20K Side Pin Correction	QVP0067-203Z	-
	R581	5000 Horizontal Width	QVP0067-502Z	-
	R588	10 5% 3W	QRL039J-100	-
	R605	2.7 5% 3W	QRT039J-2R7	-
#	**R901**	.47 10% 7W Wirewound	QRF074K-R47	-
	R907, 08	39 5% 3W	QRL039J-393	-
#	**R998**	2.7M 10% 1/2W	QRZ9041-275	-
#	**R999**	120 5% 1/2W	QRE121J-121Y	-
#	**RY901**	Relay	CESK028-001	Degaussing
#	**RY921**	Relay	CESK028-001	Power
	S421	Switch	QSL4A13-C02	Vertical Centering
	SF101	Filter	QAX0324-002	SAW
#	**SK351**	Socket	CE42446-001	CRT
#	**SP1, 2**	Speaker	CEBSS12D-02J2	2" X 4 1/2", 8 Ohms, 5W
	T131	PIF	QQR0907-001	-
	T161	SIF	CELT003-109J3	-
	T521	Horizontal Drive	CE42034-002	-
#	**T522** (2)	Horizontal Output	QQH0062-001	-
#	**T901**	Switching	QQS0063-001	-
#	**TH501**	1100 Cold PTC	CEKP004-002	-
#	**TH901**	5.1 Cold PTC	CEKP007-002	-
#	**TU001** (3)	Tuner	QAU0168-001	UHF/VHF
#	**TU001** (4)	Tuner	QAU0176-001	UHF/VHF

PARTS LIST continued

	Item No.	Function/Rating	Mfr. Part No.	Notes
#	**V01**	CRT	A90AEJ15X01	-
		CRT	A90LPY30X04	-
#	**VA901**	Varistor	ERZV10V621CS	-
	X301	Crystal	QAX0310-001Z	3.58MHz
		PC Board	SGF-3001A-M2	CRT
		PC Board (5)	SGF-1007A-M2	Main
		PC Board (6)	SGF-1012A-M2	Main
		PC Board (7)	SGF-1006A-M2	Main
		PC Board (8)	SGF-1011A-M2	Main
		Transmitter	RM-C382-1A	Remote

AV SELECTOR BOARD

C211	10µF 20% 25V NP	QENC1EM-106Z	-
C605	4.7µF 10% 50V NP	QENC1HM-475Z	-
C606	1µF 20% 50V NP	QENC1EM-105Z	-
C613	3.3µF 10% 16V Tantalum	QBTC1CK-335Z	-
C614	10µF 10% 16V Tantalum	QBTC1CK-106Z	-
C661, 62	1µF 20% 50V NP	QENC1HM-105Z	-
C829	10µF 20% 25V NP	QENC1EM-106Z	-
J801	Jack	QNZ0454-001	Assembly
	Jack	QNZ0117-001	Assembly
J802	Jack	QNN0350-001	Assembly
J803	Jack	QNN0348-001	Assembly
J804	Jack	QNS0001-001	Compulink
L201	6.8µH	QQL29BJ-6R8Z	-
L202	15µH	QQL29BJ-150Z	-
L203, 04, 11	4.7µH	QQL29BJ-4R7Z	-
L251	6.8µH	QQL29BJ-6R8Z	-
L301, 02	15µH	QQL29BJ-150Z	-
L801, 02	6.8µH	QQL29BJ-6R8Z	-
R607	15K 1% 1/10W	NRVA02D-153X	-
R609	1500 1% 1/10W	NRVA02D-152X	-
	PC Board (3)	SGF-8002A-M2	Audio Video Selector
	PC Board (4)	SGF-8001A-M2	Audio Video Selector

FRONT CONTROL BOARD

IC841	Receiver	PIC-28143SY	Remote
S702	Switch	QSW0707-001Z	Menu
S703	Switch	QSW0707-001Z	Channel Down
S704	Switch	QSW0707-001Z	Channel Up
S705	Switch	QSW0707-001Z	Volume Down
S706	Switch	QSW0707-001Z	Volume Up
S707	Switch	QSW0707-001Z	Power
	Knobs	CM35776-B01-H	-
	PC Board	SGF-4002A-M2	Front Control

	Item No.	Function/Rating	Mfr. Part No.	Notes

PIP BOARD

CF102	Filter	FCR5.71M2SF3	5.71MHz
CF103	Trap	CE41433-001	4.5MHz
K102	Ferrite Bead	QQR0582-001Z	-
L101	.22µH	QQLZ014-R22	-
L103	-	CE42452-003	-
L104	22µH	QQL29BJ-220Z	-
L106	6.8µH	QQL29BJ-6R8Z	-
L302, 03, 04	6.8µH	QQL29BJ-6R8Z	-
R114	220 1% 1/10W	NRVA02D-221X	-
SF101	Filter	QAX0483-001	SAW
# **TU001**	Tuner	QAU0176-001	UHF/VHF
X301	Crystal	QAX0521-001Z	27MHz
	PC Board (3)	SGF0P001A-M2	PIP

 # For SAFETY use only equivalent replacement part.
(1) Bonded part of CRT.
(2) Screen and focus controls are part of T551.
(3) Used in models AV-36150 and AV-36150 Version A.
(4) Used in models AV-36120 and AV-36120 Version A.
(5) Used in model AV-36150.
(6) Used in model AV-36120 Version A.
(7) Used in model AV-36120.
(8) Used in model AV-36120 Version A.
% Use insulating hardware supplied with replacement.

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.
Oscilloscope	SC3100
Generators	
RGB	CM2125
Multiburst Signal	VG91
Color Bar	VG91
TV Stereo	VG91
Digital VOM	SC3100
Frequency Meter	SC3100
Hi-Voltage Probe	HP200
Accessory Probes	TP212
Isolation Transformer	PR570
Capacitance Analyzer	LC102
CRT Analyzer	CR7000
AC Leakage Tester	PR570
Inductance Analyzer	LC102
Flyback Yoke Tester	TVA92
Field Strength Meter	SL753
Transistor Tester	TF46
Horizontal Analyzer	HA-2500
Video Analyzer	VG91, TVA92