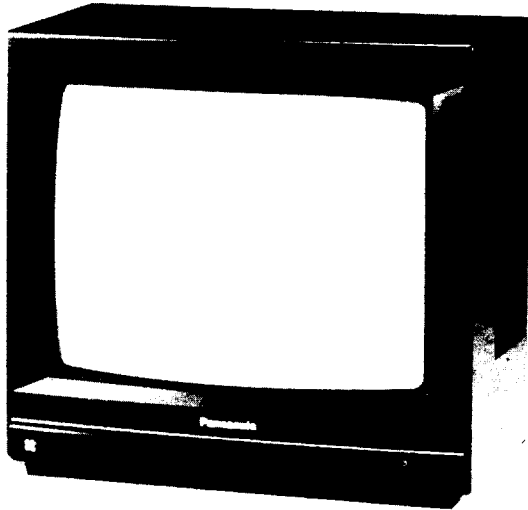


Service Manual

Colour Television

TC-1485

Z-3 Chassis



Specifications

Power Source: AC 240 V, 50 Hz
 Power Consumption: 61 W (Max.)
 Aerial Impedance: 75 Ω unbalanced, Coaxial Type
 Receiving System: CCIR: 625 Lines, PAL - I
 Receiving Channels: UHF channel 21 to 68
 Intermediate Frequency:
 Video 39.5 MHz
 Sound 33.5 MHz
 Colour 35.07 MHz
 Video/Audio Terminals:
 RCA IN Video 1 Vp-p 75 Ω
 RCA IN Audio 0.5 Vrms, 10 k Ω
 (80% modulation)
 High Voltage: 22.2 kV at zero beam current

Picture Tube: A34JRD30X01 14 inches
 (34 cm V) measured diagonally,
 90° deflection
 Audio output: 3 Watt
 Speaker: 10 cm, 8 Ω , Round Type
 Accessories supplied: Remote Controller
 UM4 Battery
 Dimensions: Height: 344 mm
 Width: 365 mm
 Depth: 376 mm
 Net Weight: 10.2 kg

Specifications are subject to change without notice.
 Net weight and dimensions shown are approximate.

IMPORTANT

This receiver uses a HOT chassis, after service please ensure that the chassis is returned to its correct position.
 Particular care being taken to the position of the customer controls.
 Failure to do so could endanger customer safety.

Panasonic

PANASONIC (U.K.) LTD.
 300-318 BATH ROAD, SLOUGH, BERKS.

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SAFETY PRECAUTIONS

GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations, are properly installed.
4. When the receiver is not to be used for a long period of time, unplug the power cord from the AC outlet.
5. Potential, as high as 22.2 kV, is present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not thoroughly familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture tube to the receiver chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

3. Use an AC voltmeter, with high impedance to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1.4 volts RMS. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screwheads, aerials, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 4MΩ and 20 MΩ. When the exposed metal does not have a return path to the chassis, the reading must be ∞.

LEAKAGE CURRENT HOT CHECK (See Fig. 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2 kΩ, 10W resistor, in series with an exposed metallic part on the receiver and an earth such as water pipe.

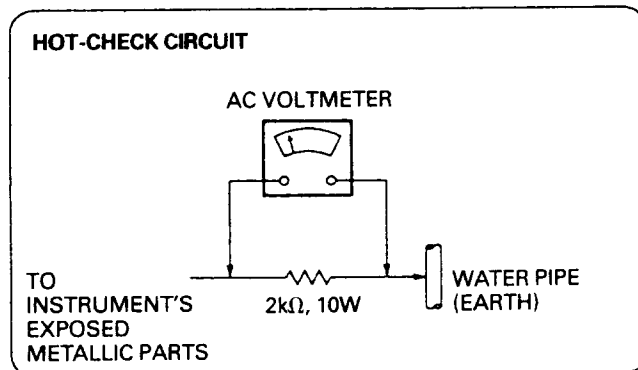


Fig. 1

X-RADIATION

WARNING:

1. The potential sources of X-Radiation in TV sets are the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 25.0 kV without causing X-Radiation.

NOTE: It is important to use an accurate periodically calibrated high voltage meter.

1. Set the brightness to minimum.
2. Set the service switch to the SERVICE position.
3. Measure the High Voltage. The meter reading should indicate 22.2 kV ± 1.5 kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
4. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.

SHUT DOWN CIRCUIT TEST

This test must be made as a final check before the set is returned to the customer.

1. Receive the Philips pattern.

2. Check that the shut down circuit functions when -60 V is applied to TPE40, but does not function when -40 V is applied.

LOCATION OF CONTROLS

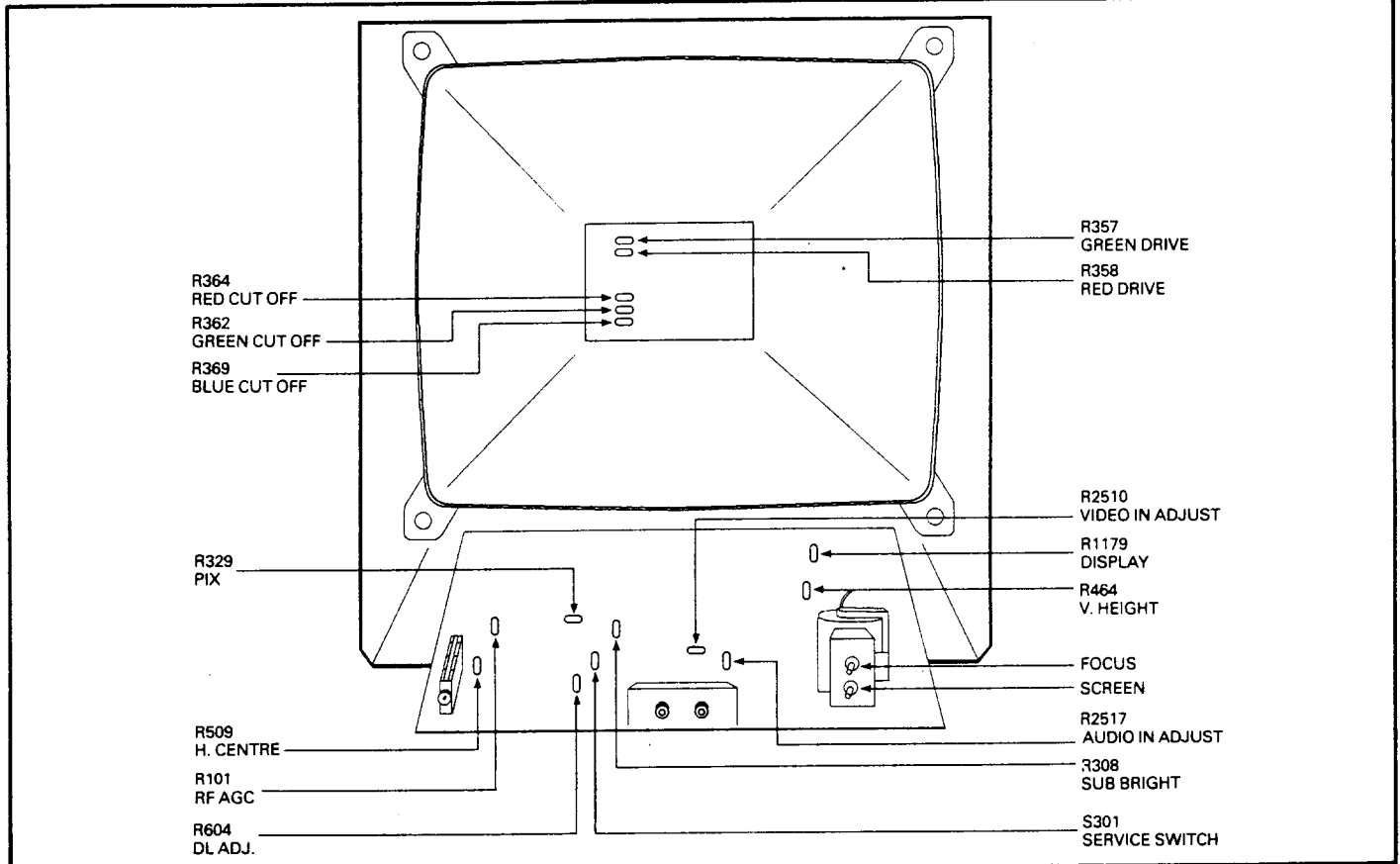


Fig. 2

SERVICE HINTS

Removal of E-Board

Note:

If the following procedure is not carried out, damage may occur to E-Board when attempting removal.

1. Using a small screwdriver release the Pcb retaining clip (A) as shown in fig. 3 and 4.
2. To remove the Pcb from the cabinet, lift the Pcb and pull backwards see fig. 5.

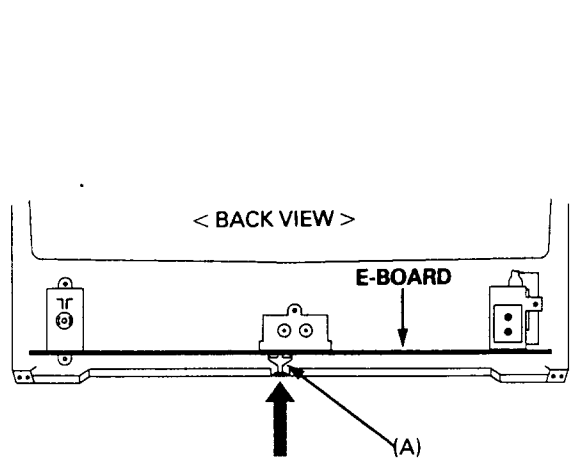


Fig. 3

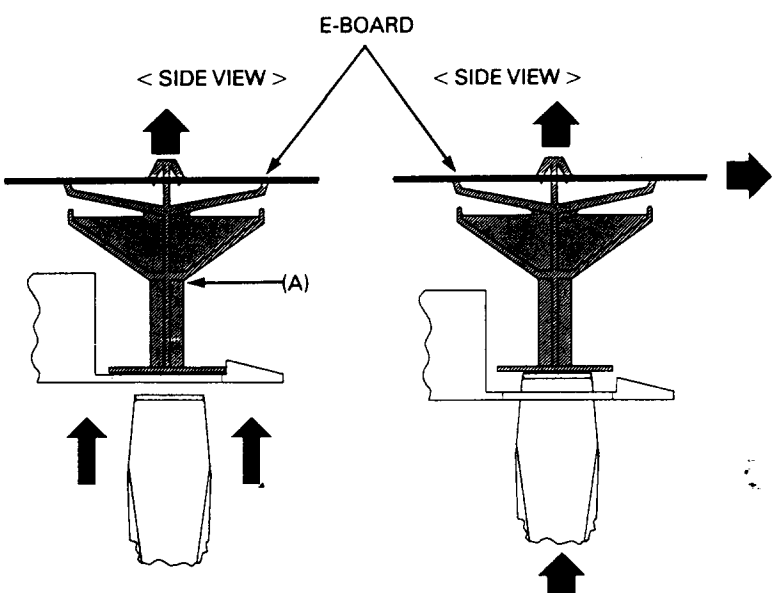
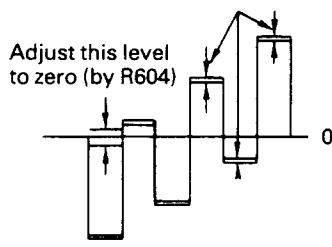


Fig. 4

Fig. 5

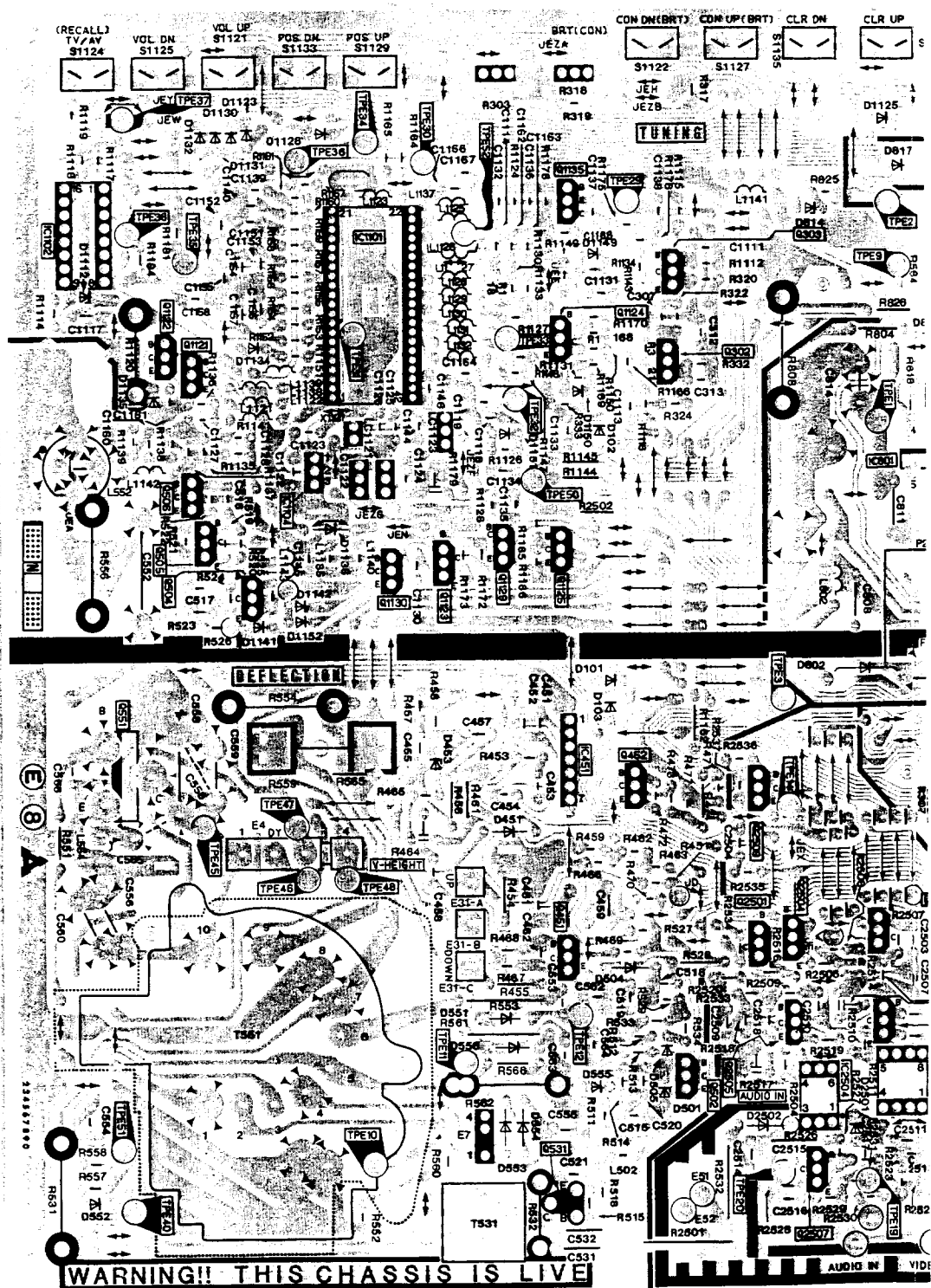
ADJUSTMENTS

ITEM/PREPARATION	ADJUSTMENT PROCEDURE								
<p>B VOLTAGE</p> <p>1. Operate the TV set.</p> <p>2. Set controls: Bright (R318)minimum Sub Bright (R308)minimum</p>	<p>1. Confirm the indicated test points for the specified voltage.</p> <table border="0"> <tr> <td>TPE1: 103 ± 1.5 V</td> <td>TPE10: 148 ± 10 V</td> </tr> <tr> <td>TPE2: 5 ± 0.5 V</td> <td>TPE11: -32 ± 2 V</td> </tr> <tr> <td>TPE4: 17 ± 1 V</td> <td>TPE12: 26 ± 2 V</td> </tr> <tr> <td>TPE5: 12 ± 1 V</td> <td>TPE49: 9 ± 1 V</td> </tr> </table>	TPE1: 103 ± 1.5 V	TPE10: 148 ± 10 V	TPE2: 5 ± 0.5 V	TPE11: -32 ± 2 V	TPE4: 17 ± 1 V	TPE12: 26 ± 2 V	TPE5: 12 ± 1 V	TPE49: 9 ± 1 V
TPE1: 103 ± 1.5 V	TPE10: 148 ± 10 V								
TPE2: 5 ± 0.5 V	TPE11: -32 ± 2 V								
TPE4: 17 ± 1 V	TPE12: 26 ± 2 V								
TPE5: 12 ± 1 V	TPE49: 9 ± 1 V								
<p>AFC</p> <p>1. Operate the TV set.</p> <p>2. Set Preset switch (S1128) to "NOR".</p> <p>3. Earth TPE3.</p> <p>4. Connect a DVM to TPE27.</p>	<p>1. Apply 39.5 MHz continuous wave to TP of Tuner (0.5 V_{p-p}/75Ω).</p> <p>2. Adjust L105 so that voltage at TPE27 becomes 4.5 ± 0.1 V.</p> <p>3. Change the frequency and confirm the voltage as shown below. + 100 kHz: less than 2.0 V - 100 kHz: more than 7.5 V</p> <p>4. Remove earth link from TPE3.</p>								
<p>RF AGC</p> <p>1. Receive the Philips pattern.</p> <p>2. Set the input level to 66 ± 2 dB (75Ω open).</p> <p>3. Connect an oscilloscope to TPE28.</p>	<p>1. Turn RF AGC control (R101) fully counterclockwise.</p> <p>2. Slowly turn RF AGC control clockwise to set it at the point just before voltage at TPE28 drops.</p>								
<p>CONTRAST/COLOUR</p> <p>1. Receive the Philips pattern.</p> <p>2. Set controls: Contrastmaximum Brightminimum Colourminimum</p>	<p>1. Connect an oscilloscope to TPE26 and confirm the amplitude of waveform is 1.8 V_{p-p} ± 0.3 V.</p> <p>2. Set Colour control to maximum.</p> <p>3. Connect oscilloscope to the following test points and confirm the voltage at end test point. TPE15: 3.0 ± 0.3 V_{p-p} TPE16: 1.5 ± 0.5 V_{p-p} TPE17: 2.5 ± 0.5 V_{p-p}</p>								
<p>HIGH VOLTAGE</p> <p>1. Receive a crosshatch pattern.</p> <p>2. Set Contrast, Bright and Sub Bright controls to their minimum positions (Zero beam current)</p>	<p>1. Connect a high voltage meter (Electro-static type) to an anode of the picture tube.</p> <p>2. Confirm that the high voltage is within a range of 22.2 ± 1.5 kV.</p>								

ITEM/PREPARATION	ADJUSTMENT PROCEDURE	WAVEFORM
<p>DELAY LINE</p> <p>1. Receive a colour bar pattern.</p> <p>2. Connect an oscilloscope to TPE15.</p> <p>3. Set controls: Contrastmaximum Colourmaximum</p>	<p>1. Adjust DL Adj. (R604) and DL Matching Trans (L602) to obtain waveform at TPE15 as shown in Fig 6.</p>	<p>Minimize the differences (by L602)</p> <p>Adjust this level to zero (by R604)</p>  <p>Fig. 6</p>

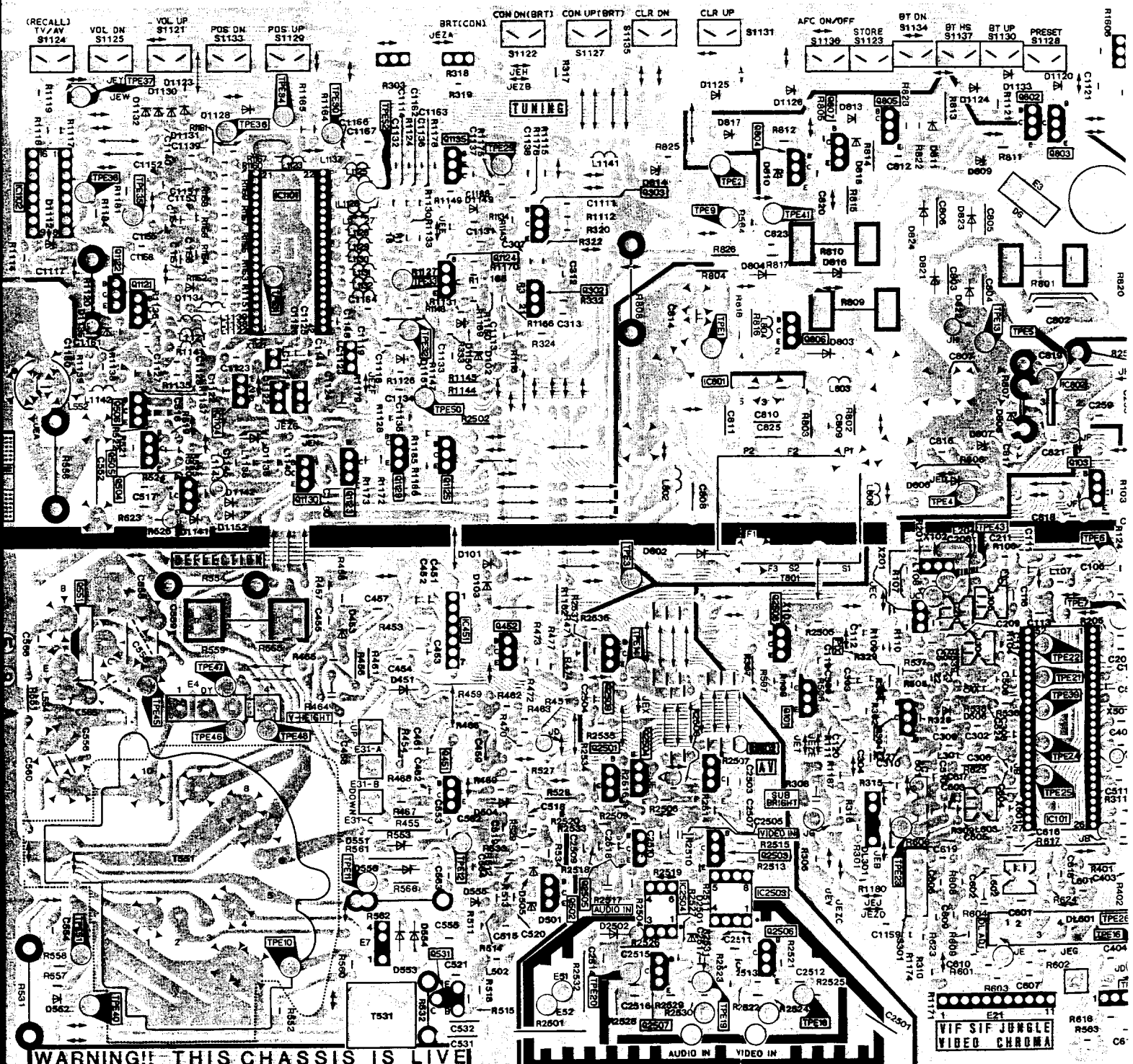
CONDUCTOR E-BOARD TNP

I.C.'s	IC1102	IC1104		IC1101	IC451		IC801		IC2504	IC250
TRANSISTORS	Q1121 Q1122 Q506 Q505 Q504 Q551	D1135 D552 D1112	D1134 D1131 D1123 D1130 D1141 D1132	D1136 D1142 D1152 D1128	D556 D453 D551	D553 D504 D101 D1149 D102 D103 D555 D1150	D501 D505	D814 D802 D2502	Q302 Q303 Q2507 Q2501 Q2505 Q502	Q804 Q2502 Q101 Q250 Q2503 Q2502
DIODES										
TEST POINTS	TPE35 TPE37 TPE38 TPE40	TPE10 TPE34 TPE31 TPE36	TPE11 TPE52	TPE50 TPE12	TPE29	TPE3 TPE14	TPE2 TPE1 TPE19			



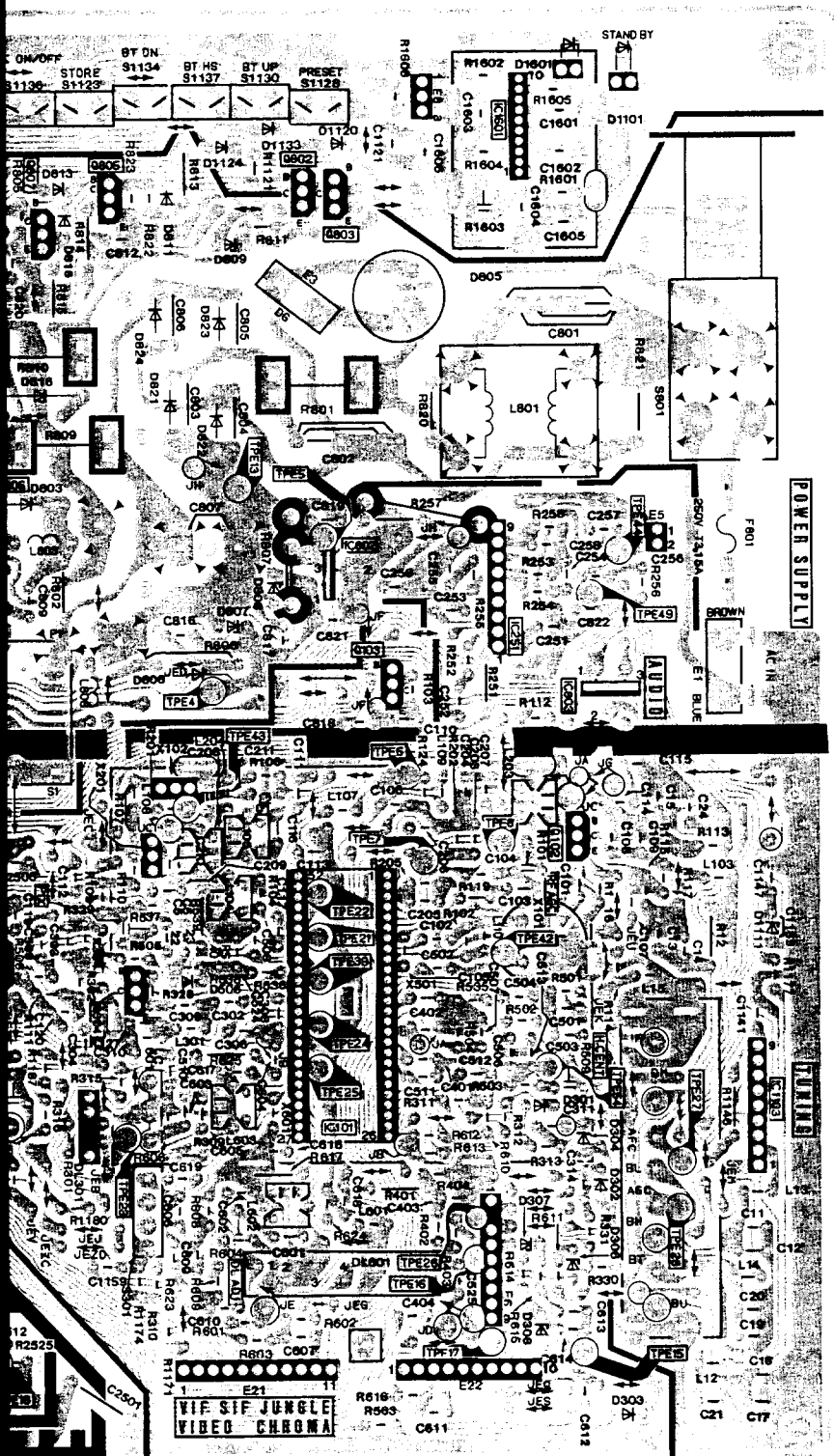
CONDUCTOR VIEW E-BOARD TNP197026

IC1102	IC1104	IC1101	IC451	IC801	IC2503	IC802			
				IC2504		IC101			
Q1121 Q1122 Q506 Q505 Q504 Q551	Q1130 Q1123 Q1129	Q1135 Q1124 Q452	Q302 Q303 Q2507 Q2501 Q2505 Q502	Q804 Q2502 Q101 Q2508 Q2506 Q2503	Q806 Q805 Q807 Q304	Q803 Q103 Q802			
D1135 D552 D1112	D1134 D1131 D1142 D1123 D1130 D1128 D1141 D1132	D1136 D556 D453 D551	D553 D504 D101 D1149 D102 D103 D555 D1150	D501 D505	D814 D802 D817 D2502 D1125 D2501	D810 D813 D818 D803	D811 D809 D823 D1133 D821 D1124 D806 D506 D824	D1120	
TPE35 TPE37 TPE38 TPE40	TPE10 TPE34 TPE31 TPE36	TPE11 TPE52	TPE50 TPE12	TPE29	TPE3 TPE14	TPE2 TPE1 TPE19	TPE41 TPE23 TPE4 TPE13 TPE43	TPE22 TPE39 TPE24 TPE25	TPE16 TPE17 TPE26 TPE6



WARNING!! THIS CHASSIS IS LIVE

	IC802 IC101		IC803 IC1601 IC251		IC1103	
Q806	Q805 Q807 Q304	Q803 Q103 Q802		Q102		
D813 D818 D803	D811 D823 D821 D822 D806 D824	D809 D1133 D1124 D506	D1120	D307 D308 D805 D1601	D1101 D304 D302 D306 D303 D301	D1111
TPE23	TPE4 TPE13 TPE43	TPE22 TPE39 TPE24 TPE25	TPE16 TPE17 TPE26 TPE6	TPE8	TPE44 TPE49 TPE15 TPE54 TPE27 TPE28	



NOTES:

- 1. RESISTOR**
All resistors marked with a symbol are 1/4W, 1%, 1000 Ohm tolerance.
 ○ : Non-inductive
 △ : Solid
 ⊠ : Wire-wound
- 2. CAPACITOR**
All capacitors marked with a symbol are 50V, 10% tolerance.
 ⊗ : Tantalum
 Cc : Ceramic
 M : Polystyrene
 ⊕ : Metallized
 ⊠ : Polyester
- 3. COIL**
Unit of inductance noted.
- 4. TEST POINT**
● : Test point
- 5. EARTH SYMBOL**
⏏ : Chassis ground

SCHEMATIC DIAGRAM FOR MODEL TC-1485 (Z-3 Chassis)

Important Safety Notice

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

NOTES:

1. **RESISTOR**
 All Resistors are carbon 1/4W resistor, unless marked as follows:
 Unit of resistance is OHM (Ω) (K = 1,000, M = 1,000,000).
 O : Nonflammable \boxtimes : Metal Oxide
 Δ : Solid \odot : Metal Film
 \square : Wire Wound \otimes : Fuse

2. **CAPACITOR**
 All capacitors are ceramic 50V capacitor, unless marked as follows:
 Unit of capacitance is μ F, unless otherwise noted.
 \otimes : Temperature Compensation $\begin{smallmatrix} + \\ \# \\ - \end{smallmatrix}$: Electrolytic
 \textcircled{M} : Polyester \textcircled{T} : Dipped Tantalum
 \textcircled{m} : Metalized Polyester \textcircled{Z} : Z - Type
 \boxtimes : Polypropylene

3. **COIL**
 Unit of inductance is μ H, unless otherwise noted.

4. **TEST POINT**
 \bullet : Test Point position.

5. **EARTH SYMBOL**
 /// : Chassis Earth (Hot) \perp : Line Earth (Cold)

6. VOLTAGE MEASUREMENT

Voltage is measured by a DC voltmeter. Conditions of the measurement are the following:
 Power Source 240 V AC, 50Hz
 Receiving Signal Colour Bar signal (RF)
 All the other customer's controls maximum

7. \rightarrow : Indicates the major signal flow.

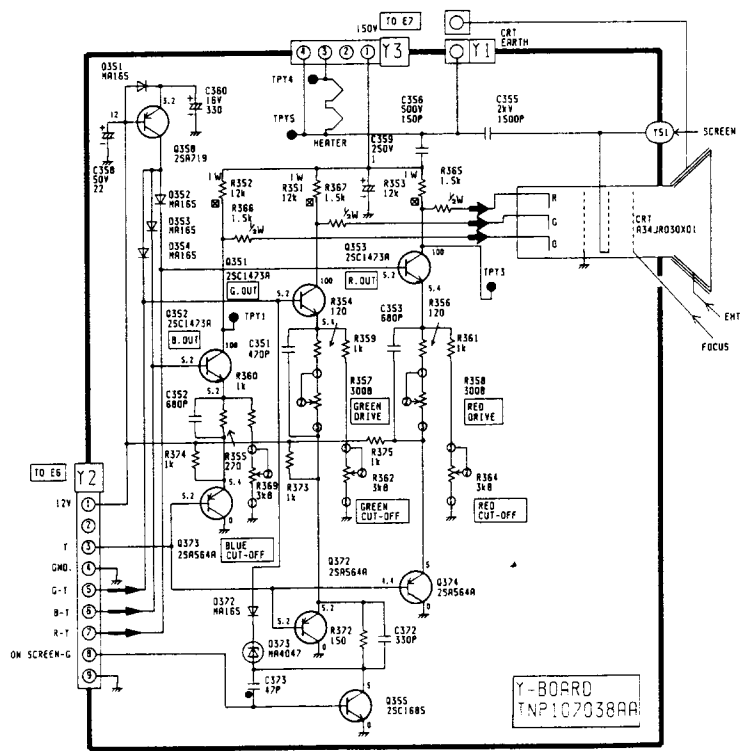
8. This schematic diagram is the latest at the time of printing and subject to change without notice.

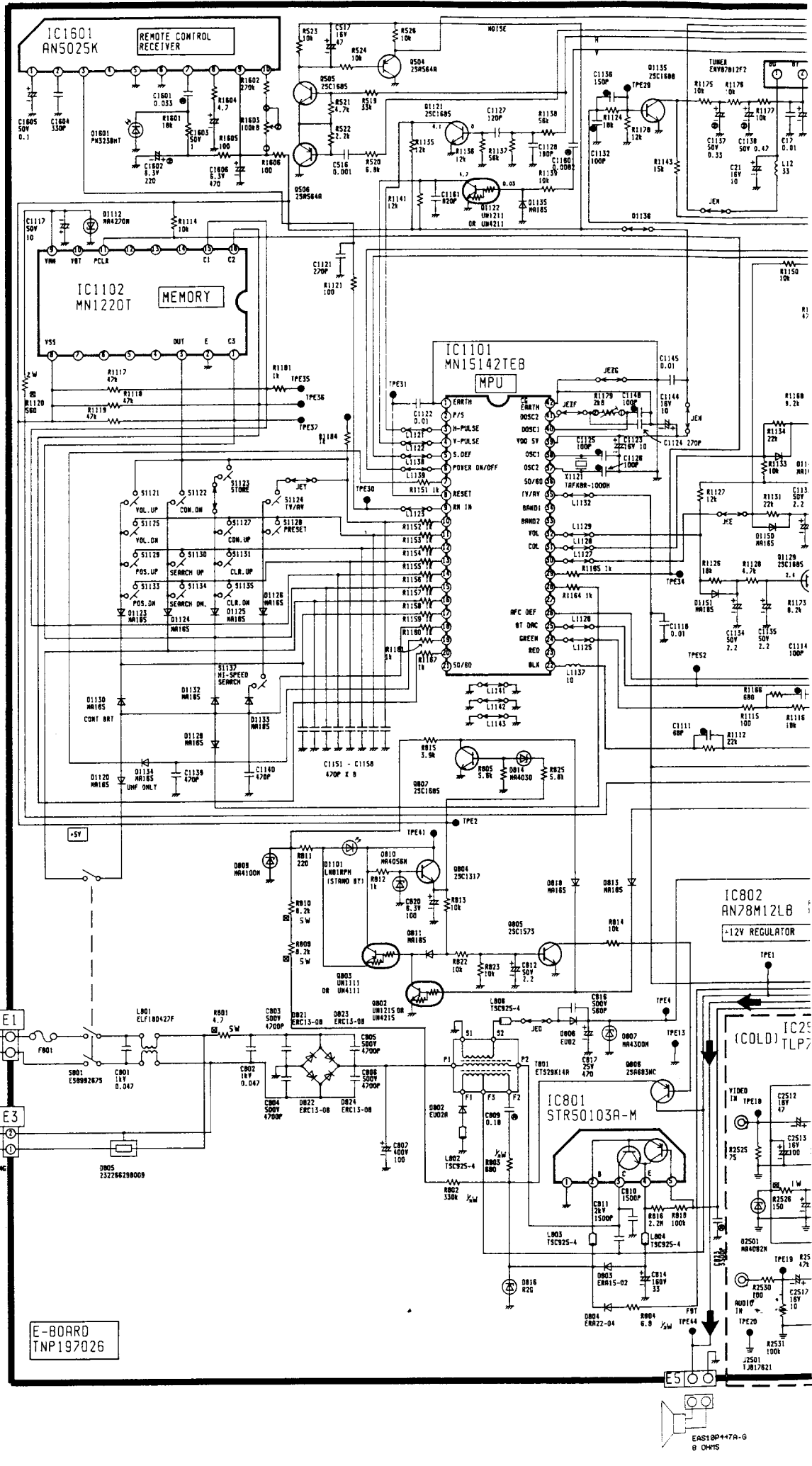
REMARKS:

1. Care must be taken when servicing this receiver, as it uses a HOT chassis. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions. All circuits except the Audio, Video input circuits are HOT.

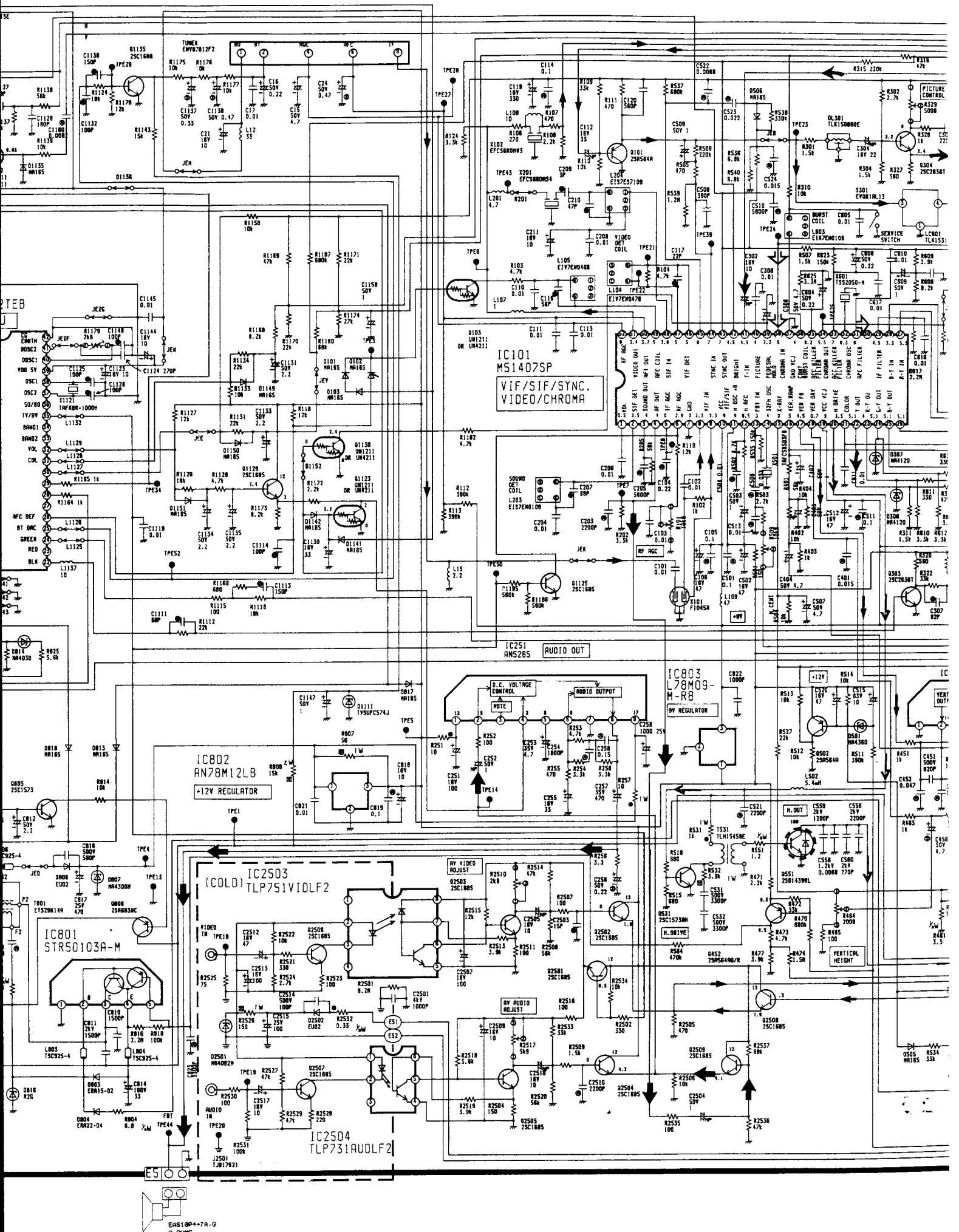
Precautions

- a. Do not touch the hot part or the hot and cold parts at the same time as you are liable to a shock hazard.
- b. Do not short-circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously, as this may cause fuse failure. Connect the earth of instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

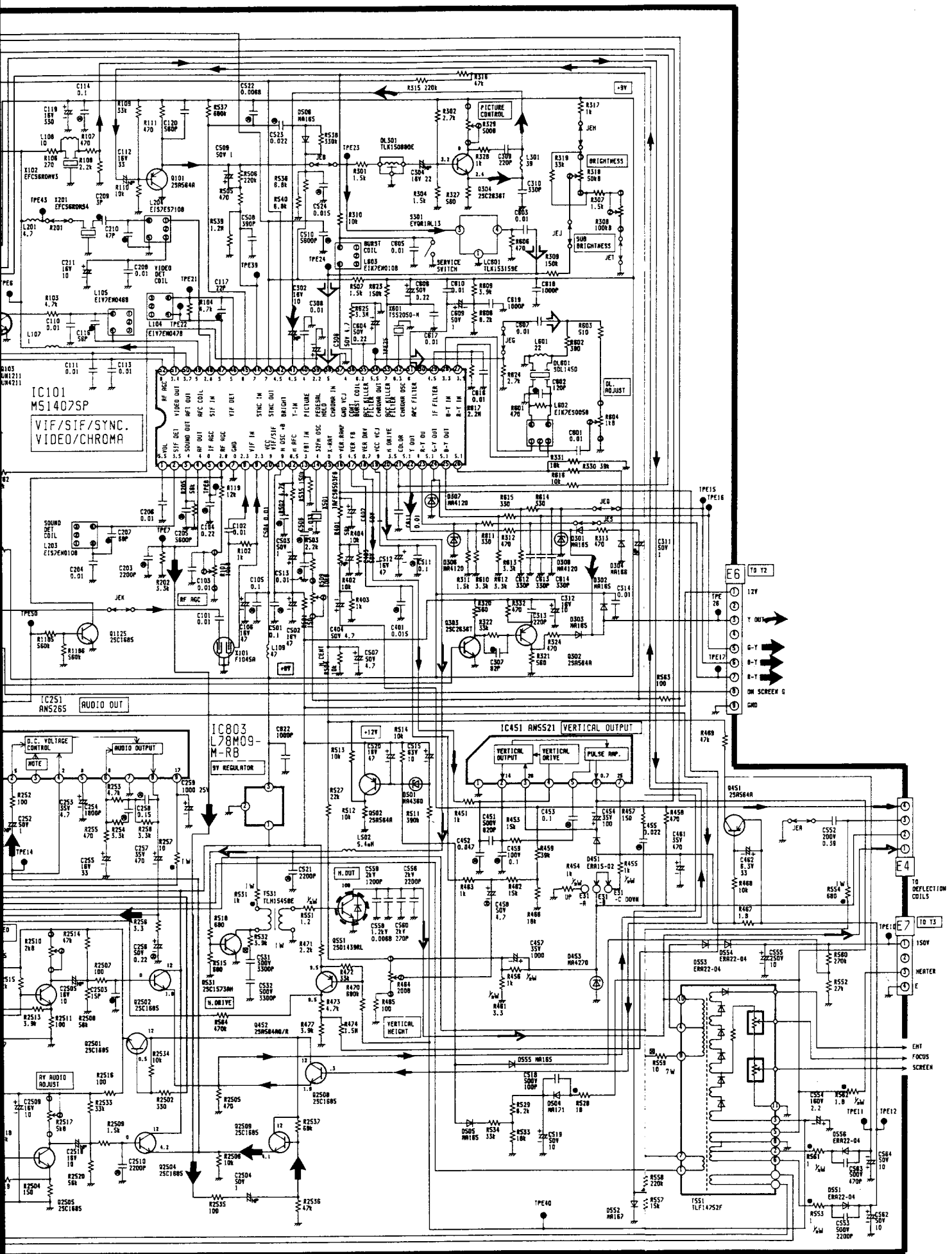




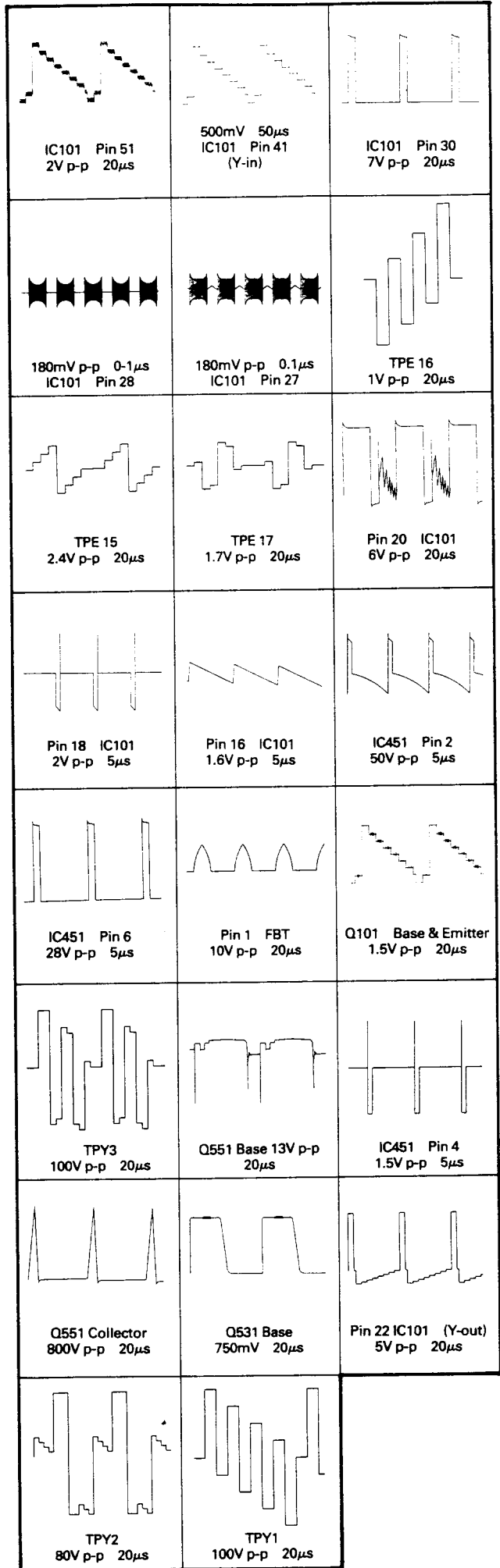
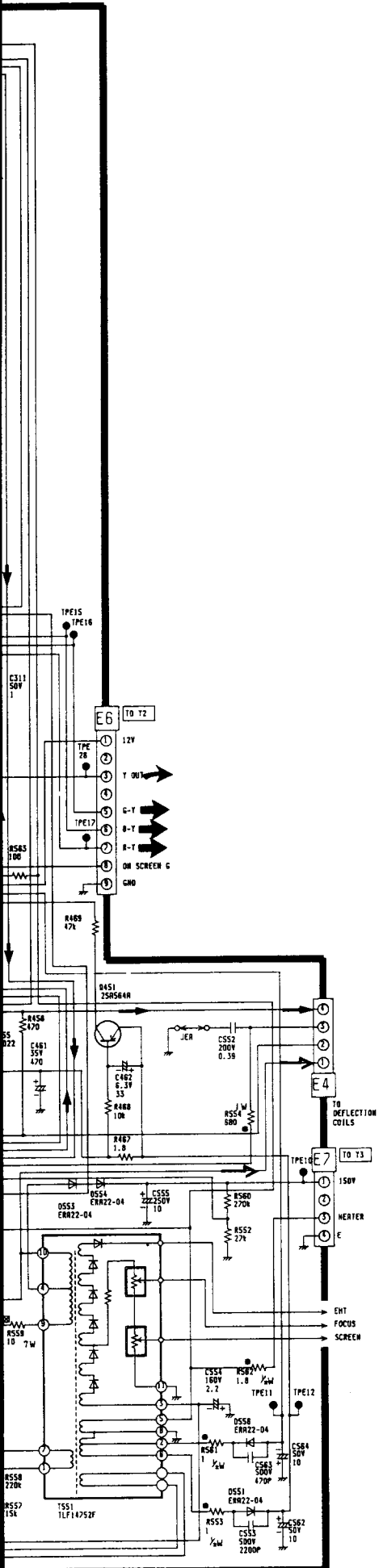
E-BOARD
TNP197026



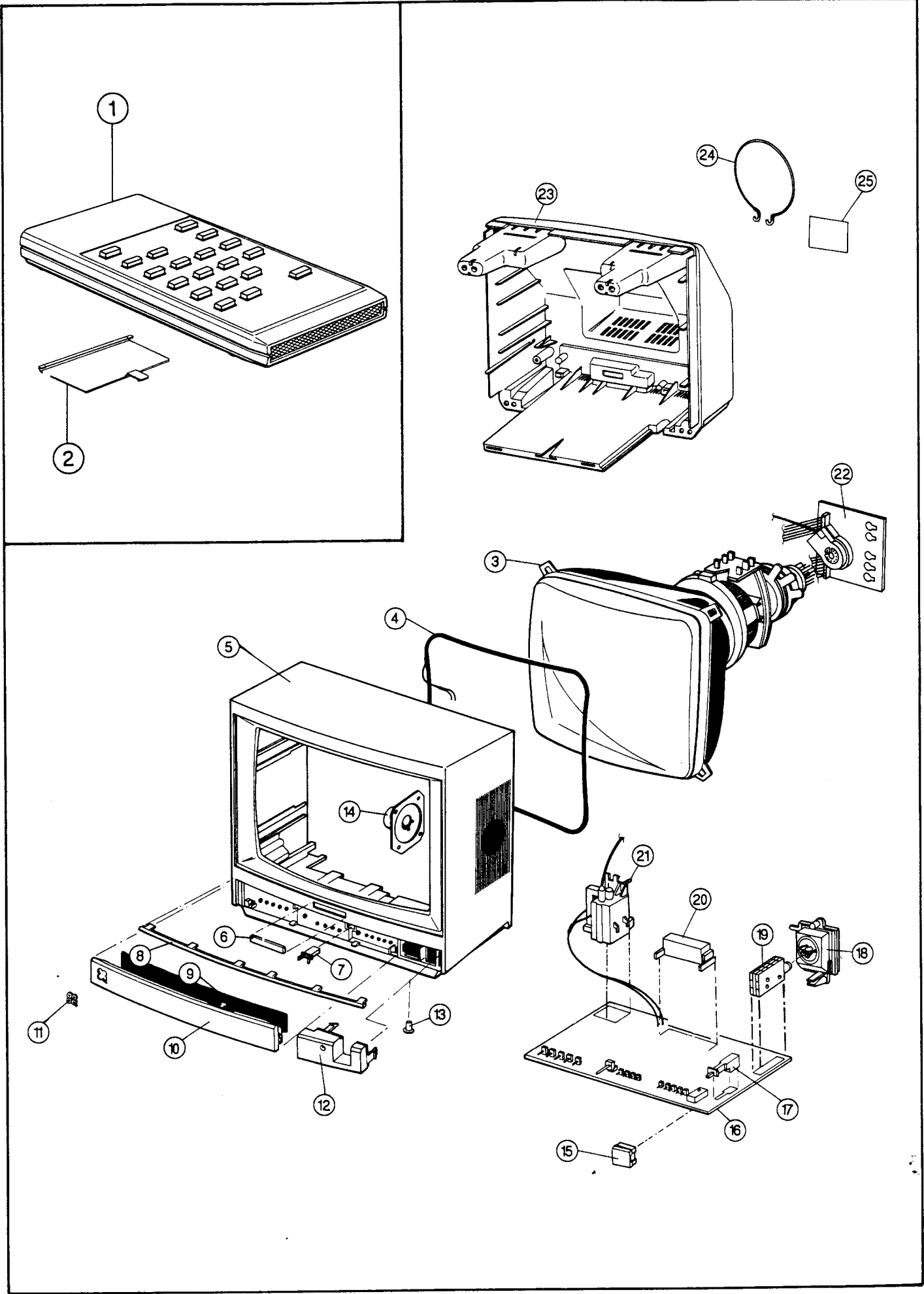
EAS10P4+7A-0
8 OHMS



WAVEFORMS



PARTS LOCATION



REPLACEMENTS PARTS LIST

Important Safety Notice

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Ref No.	Part No.	Description
MISCELLANEOUS COMPONENTS		
1)	TN08E0417	remote control
2)	FA11D1201	battery cover
3)	Δ A34JRD30X01	C.R.T.
4)	Δ TLK8E05109	degaussing coil
5)	Δ TKY180700	cabinet (black)
6)	Δ TKY180701	cabinet (white)
7)	TBM173003	Panasonic badge (black)
8)	TBM173023	Panasonic badge (white)
9)	TEK17918	lid switch
10)	TKR27680	ornament strip
11)	TBM120623-1	preset panel label
12)	TKP1810384	lid (black)
13)	TKP1810385	lid (white)
14)	TBM17461	Q badge
15)	TKP1810391	smoked panel
16)	TBL171404	set feet
17)	EAS10P447A-G	speaker
18)	TBX1888300	power button
19)	Δ TNP197026	E.P.C.B.
20)	S801	ESB99267S power switch
21)	Δ TJB1722405	Ant terminal
22)	Δ ENV87812F2	tuner
23)	TJB17621	AV terminal
24)	T551	TLF14752F transformer
25)	Δ TNP107308AA	Y.P.C.B.
	Δ TKU526901	back cover
	TSA113001	antenna
	TBM120622	back cover label
	Δ TSX8E0001	A.C. cord
	TPC1814901BK	outer carton (black)
	TPC1814901WH	outer carton (white)
	TQB8E0387	instruction book
	520-001	fuse holder
F801	Δ 195-3.15	3.15A fuse
DL301	TLK150880E	coil
DL601	SDL145D	delay line
X101	F1045A	S.A.W. filter
X102	EFCS6R0MW3	filter
X201	EFCS6R0MS4	6Mhz S.I.F. filter
X601	TSS2050-M	crystal
S301	EVQR1AL13	switch
S801	ESB99267S	switch
S1121	EVQQBH12T	switch
S1122	EVQQBH12T	switch
S1123	EVQQBH12G	switch
S1124	EVQQBH12T	switch
S1125	EVQQBH12T	switch
S1127	EVQQBH12T	switch
S1128	EVQQBH12G	switch
S1129	EVQQBH12T	switch
S1130	EVQQBH12G	switch
S1131	EVQQBH12T	switch
S1133	EVQQBH12T	switch
S1134	EVQQBH12G	switch
S1135	EVQQBH12T	switch
S1137	EVQQBH12G	switch
RESISTORS		
R101	EVND4AA00B14	control 10k Ω
R102	ERDS2TJ102	carbon 1k Ω \pm 5%
R103	ERDS2TJ472	carbon 4k7 Ω \pm 5%
R104	ERDS2TJ472	carbon 4k7 Ω \pm 5%
R106	ERDS2TJ271	carbon 270 Ω \pm 5%
R107	ERDS2TJ471	carbon 470 Ω \pm 5%
R108	ERDS2TJ222	carbon 2k2 Ω \pm 5%
R109	ERDS2TJ333	carbon 33k Ω \pm 5%
R110	ERDS2TJ103	carbon 10k Ω \pm 5%
R111	ERDS2TJ471	carbon 470 Ω \pm 5%
R112	ERDS2TJ394T	carbon 390k Ω \pm 5%
R113	ERDS2TJ394T	carbon 390k Ω \pm 5%
R118	ERDS2TJ123	carbon 12k Ω \pm 5%
R119	ERDS2TJ123	carbon 12k Ω \pm 5%

Ref No.	Part No.	Description			
R124	ERDS2TJ332	carbon	3k3 Ω	\pm 5%	$\frac{1}{4}$ W
R202	ERDS2TJ332	carbon	3k3 Ω	\pm 5%	$\frac{1}{4}$ W
R205	ERDS2TJ563	carbon	56k Ω	\pm 5%	$\frac{1}{4}$ W
R251	Δ ERQ14AJ100P	fusible	10 Ω	\pm 5%	$\frac{1}{4}$ W
R252	ERDS2TJ101	carbon	100 Ω	\pm 5%	$\frac{1}{4}$ W
R253	ERDS2TJ472	carbon	4k7 Ω	\pm 5%	$\frac{1}{4}$ W
R254	ERDS2TJ332	carbon	3k3 Ω	\pm 5%	$\frac{1}{4}$ W
R255	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R256	ERDS2TJ3R3	carbon	3.3 Ω	\pm 5%	$\frac{1}{4}$ W
R257	Δ ERQ1CJP100S	fusible	10 Ω	\pm 5%	1W
R258	ERDS2TJ332	carbon	3k3 Ω	\pm 5%	$\frac{1}{4}$ W
R301	ERDS2TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R302	ERDS2TJ272	carbon	2k7 Ω	\pm 5%	$\frac{1}{4}$ W
R304	ERDS2TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R307	ERDS2TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R308	EVND4AA00B15	control	50k Ω		
R309	ERDS2TJ154	carbon	150k Ω	\pm 5%	$\frac{1}{4}$ W
R310	ERDS2TJ103	carbon	10k Ω	\pm 5%	$\frac{1}{4}$ W
R311	ERDS2TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R312	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R313	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R315	ERDS2TJ224	carbon	220k Ω	\pm 5%	$\frac{1}{4}$ W
R316	ERDS2TJ473	carbon	47k Ω	\pm 5%	$\frac{1}{4}$ W
R317	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R318	EVUE2AM30B54	control	50k Ω		
R319	ERDS2TJ333	carbon	33k Ω	\pm 5%	$\frac{1}{4}$ W
R320	ERDS2TJ561	carbon	560 Ω	\pm 5%	$\frac{1}{4}$ W
R321	ERDS2TJ561	carbon	560 Ω	\pm 5%	$\frac{1}{4}$ W
R322	ERDS2TJ333	carbon	33k Ω	\pm 5%	$\frac{1}{4}$ W
R324	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R327	ERDS2TJ561	carbon	560 Ω	\pm 5%	$\frac{1}{4}$ W
R328	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R329	EVND4AA00B52	control	500n Ω		
R330	ERDS2TJ393	carbon	39k Ω	\pm 5%	$\frac{1}{4}$ W
R331	ERDS2TJ183	carbon	18k Ω	\pm 5%	$\frac{1}{4}$ W
R332	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R351	ERGI SJ123P	metal oxide	12k Ω	\pm 5%	1W
R352	ERGI SJ123P	metal oxide	12k Ω	\pm 5%	1W
R353	ERGI SJ123P	metal oxide	12k Ω	\pm 5%	1W
R354	ERDS2TJ121	carbon	120 Ω	\pm 5%	$\frac{1}{4}$ W
R355	ERDS2TJ271	carbon	270 Ω	\pm 5%	$\frac{1}{4}$ W
R356	ERDS2TJ121	carbon	120 Ω	\pm 5%	$\frac{1}{4}$ W
R357	EVN65AA00B32	control	300n Ω		
R358	EVN65AA00B32	control	300n Ω		
R359	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R360	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R361	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R362	EVN65AA00B33	control	3k Ω		
R364	EVN65AA00B33	control	3k Ω		
R365	ERDS1 TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R366	ERDS1 TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R367	ERDS1 TJ152	carbon	1k5 Ω	\pm 5%	$\frac{1}{4}$ W
R369	EVN65AA00B33	control	3k Ω		
R372	ERDS2TJ151	carbon	150 Ω	\pm 5%	$\frac{1}{4}$ W
R373	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R374	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R375	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R401	ERDS2TJ563	carbon	56k Ω	\pm 5%	$\frac{1}{4}$ W
R402	ERDS2TJ103	carbon	10k Ω	\pm 5%	$\frac{1}{4}$ W
R403	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R404	ERDS2TJ103	carbon	10k Ω	\pm 5%	$\frac{1}{4}$ W
R451	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R453	ERDS2TJ153	carbon	15k Ω	\pm 5%	$\frac{1}{4}$ W
R454	ERDS1 TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R455	ERDS1 TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R456	ERDS1 TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R457	ERDS2TJ151	carbon	150 Ω	\pm 5%	$\frac{1}{4}$ W
R458	ERDS2TJ471	carbon	470 Ω	\pm 5%	$\frac{1}{4}$ W
R459	ERDS2TJ393	carbon	39k Ω	\pm 5%	$\frac{1}{4}$ W
R461	ERDS1 TJ3R3	carbon	3.3 Ω	\pm 5%	$\frac{1}{4}$ W
R462	ERDS2TJ153	carbon	15k Ω	\pm 5%	$\frac{1}{4}$ W
R463	ERDS2TJ102	carbon	1k Ω	\pm 5%	$\frac{1}{4}$ W
R464	EVND4AA00B22	control	200n Ω		
R465	ERDS2TJ101	carbon	100 Ω	\pm 5%	$\frac{1}{4}$ W
R466	ERDS2TJ183	carbon	18k Ω	\pm 5%	$\frac{1}{4}$ W

Ref No.	Part No.	Description			
R467	ERDS2TJ1R8	carbon	1.8n	± 5%	W
R468	ERDS2TJ103	carbon	10kn	± 5%	W
R469	ERDS2TJ473	carbon	47kn	± 5%	W
R470	ERDS2TJ684	carbon	680kn	± 5%	W
R471	ERDS2TJ222	carbon	2k2n	± 5%	W
R472	ERDS2TJ333	carbon	33kn	± 5%	W
R473	ERDS2TJ472	carbon	4k7n	± 5%	W
R474	ERD25TJ155T	carbon	1M5n	± 5%	W
R476	ERD25TJ152	carbon	1k5n	± 5%	W
R477	ERDS2TJ392	carbon	3k9n	± 5%	W
R501	ERDS2TJ151	carbon	150n	± 5%	W
R502	ERDS2TJ472	carbon	4k7n	± 5%	W
R503	ERDS2TJ222	carbon	2k2n	± 5%	W
R504	ERDS2TJ103	carbon	10kn	± 5%	W
R505	ERDS2TJ471	carbon	470n	± 5%	W
R506	ERDS2TJ224	carbon	220kn	± 5%	W
R507	ERDS2TJ152	carbon	1k5n	± 5%	W
R509	EVND4AA00B14	control	10knB		
R511	ERDS2TJ394T	carbon	390kn	± 5%	W
R512	ERDS2TJ103	carbon	10kn	± 5%	W
R513	ERDS2TJ103	carbon	10kn	± 5%	W
R514	ERDS2TJ103	carbon	10kn	± 5%	W
R515	ERDS2TJ681	carbon	680n	± 5%	W
R518	ERDS2TJ681	carbon	680n	± 5%	W
R519	ERDS2TJ333	carbon	33kn	± 5%	W
R520	ERDS2TJ682	carbon	6k8n	± 5%	W
R521	ERDS2TJ472	carbon	4k7n	± 5%	W
R522	ERDS2TJ222	carbon	2k2n	± 5%	W
R523	ERDS2TJ103	carbon	10kn	± 5%	W
R524	ERDS2TJ103	carbon	10kn	± 5%	W
R525	ERDS2TJ333	carbon	33kn	± 5%	W
R526	ERDS2TJ103	carbon	10kn	± 5%	W
R527	ERDS2TJ223	carbon	22kn	± 5%	W
R528	Δ ERQ14AJ180P	fusible	18n	± 5%	W
R529	ERDS2TJ822	carbon	8k2n	± 5%	W
R531	Δ ERQ1CJP102S	fusible	1kn	± 5%	W
R532	ERGI SJ392H	metal oxide	3k9n	± 5%	W
R533	ERDS2TJ183	carbon	18kn	± 5%	W
R534	ERDS2TJ333	carbon	33kn	± 5%	W
R535	ERDS2TJ154	carbon	150kn	± 5%	W
R536	ERDS2TJ682	carbon	6k8n	± 5%	W
R537	ERDS2TJ684	carbon	680kn	± 5%	W
R538	ERDS2TJ334	carbon	330kn	± 5%	W
R539	ERD25TJ125	carbon	1.2Mn	± 5%	W
R540	ERDS2TJ682	carbon	6k8n	± 5%	W
R551	ERDS1TJ1R2T	carbon	1R2n	± 5%	W
R552	ERDS2TJ273	carbon	27kn	± 5%	W
R553	Δ ERQ12HJ1R0P	fusible	1n	± 5%	W
R554	Δ ERQ1CJP681S	fusible	680n	± 1%	W
R557	ERDS2TJ153	carbon	15kn	± 5%	W
R558	ERDS2TJ274	carbon	270kn	± 5%	W
R559	Δ ERF7ZJ100	wirewound	10n	± 5%	W
R560	ERDS2TJ274	carbon	270kn	± 5%	W
R561	Δ ERQ12HJ1R0P	fusible	1n	± 5%	W
R562	Δ ERQ12HJ1R8P	fusible	1.8n	± 5%	W
R563	ERDS2TJ101	carbon	100n	± 5%	W
R564	ERDS2TJ474	carbon	470kn	± 5%	W
R601	ERDS2TJ471	carbon	470n	± 5%	W
R602	ERDS2TJ391	carbon	390n	± 5%	W
R603	ERDS2TJ511T	carbon	510n	± 5%	W
R604	EVND4AA00B13	control	1knB		
R606	ERDS2TJ471	carbon	470n	± 5%	W
R608	ERDS2TJ822	carbon	8k2n	± 5%	W
R609	ERDS2TJ392	carbon	3k9n	± 5%	W
R610	ERDS2TJ332	carbon	3k3n	± 5%	W
R611	ERDS2TJ331	carbon	330n	± 5%	W
R612	ERDS2TJ332	carbon	3k3n	± 5%	W
R613	ERDS2TJ332	carbon	3k3n	± 5%	W
R614	ERDS2TJ331	carbon	330n	± 5%	W
R615	ERDS2TJ331	carbon	330n	± 5%	W
R616	ERDS2TJ103	carbon	10kn	± 5%	W
R617	ERD25TJ225	carbon	2.2Mn	± 5%	W
R623	ERDS2TJ154	carbon	150kn	± 5%	W
R624	ERDS2TJ272	carbon	2k7n	± 5%	W
R625	ERD25TJ335	carbon	3.3Mn	± 5%	W
R801	Δ ERF5ZK4R7	wirewound	4.7n	± 10%	W
R802	ERDS1TJ334	carbon	330kn	± 5%	W
R803	ERDS1TJ681	carbon	680n	± 5%	W
R804	ERDS1TJ6R8T	carbon	6R8n	± 5%	W
R805	ERDS2TJ562	carbon	5k6n	± 5%	W
R807	ERGI ANJ560H	metal oxide	56n	± 5%	W
R808	ERG2ANJ153H	metal oxide	15kn	± 5%	W
R809	ERG5ZJ822	metal oxide	8k2n	± 5%	W
R810	ERG6ZJ822	metal oxide	8k2n	± 5%	W
R811	ERDS2TJ221	carbon	220n	± 5%	W
R812	ERDS2TJ102	carbon	1kn	± 5%	W
R813	ERD25TJ103	carbon	10kn	± 5%	W
R814	ERD25TJ103	carbon	10kn	± 5%	W
R815	ERDS2TJ392	carbon	3k9n	± 5%	W
R816	ERDS2TJ225	carbon	2M2n	± 5%	W

Ref No.	Part No.	Description			
R817	ERDS2TJ333	carbon	33kn	± 5%	W
R818	ERDS2TJ104	carbon	100kn	± 5%	W
R822	ERDS2TJ103	carbon	10kn	± 5%	W
R823	ERDS2TJ103	carbon	10kn	± 5%	W
R825	ERDS2TJ562	carbon	5k6n	± 5%	W
R1111	ERDS2TJ103	carbon	10kn	± 5%	W
R1112	ERDS2TJ223	carbon	22kn	± 5%	W
R1114	ERDS2TJ103	carbon	10kn	± 5%	W
R1115	ERDS2TJ101	carbon	100n	± 5%	W
R1116	ERDS2TJ183	carbon	18kn	± 5%	W
R1117	ERDS2TJ473	carbon	47kn	± 5%	W
R1118	ERDS2TJ473	carbon	47kn	± 5%	W
R1119	ERDS2TJ473	carbon	47kn	± 5%	W
R1120	ERG2SJ561P	metal oxide	560n	± 5%	W
R1121	ERDS2TJ101	carbon	100n	± 5%	W
R1124	ERDS2TJ183	carbon	18kn	± 5%	W
R1126	ERDS2TJ183	carbon	18kn	± 5%	W
R1127	ERDS2TJ123	carbon	12kn	± 5%	W
R1128	ERDS2TJ472	carbon	4k7n	± 5%	W
R1130	ERDS2TJ103	carbon	10kn	± 5%	W
R1131	ERDS2TJ223	carbon	22kn	± 5%	W
R1133	ERDS2TJ103	carbon	10kn	± 5%	W
R1134	ERDS2TJ223	carbon	22kn	± 5%	W
R1135	ERDS2TJ123	carbon	12kn	± 5%	W
R1136	ERDS2TJ123	carbon	12kn	± 5%	W
R1137	ERDS2TJ563	carbon	56kn	± 5%	W
R1138	ERDS2TJ563	carbon	56kn	± 5%	W
R1139	ERDS2TJ103	carbon	10kn	± 5%	W
R1141	ERDS2TJ123	carbon	12kn	± 5%	W
R1143	ERDS2TJ153	carbon	15kn	± 5%	W
R1150	ERDS2TJ103	carbon	10kn	± 5%	W
R1151	ERDS2TJ102	carbon	1kn	± 5%	W
R1152	ERDS2TJ102	carbon	1kn	± 5%	W
R1153	ERDS2TJ102	carbon	1kn	± 5%	W
R1154	ERDS2TJ102	carbon	1kn	± 5%	W
R1155	ERDS2TJ102	carbon	1kn	± 5%	W
R1156	ERDS2TJ102	carbon	1kn	± 5%	W
R1157	ERDS2TJ102	carbon	1kn	± 5%	W
R1158	ERDS2TJ102	carbon	1kn	± 5%	W
R1159	ERDS2TJ102	carbon	1kn	± 5%	W
R1160	ERDS2TJ102	carbon	1kn	± 5%	W
R1161	ERDS2TJ102	carbon	1kn	± 5%	W
R1162	ERD25TJ472	carbon	4k7n	± 5%	W
R1164	ERDS2TJ102	carbon	1kn	± 5%	W
R1165	ERDS2TJ102	carbon	1kn	± 5%	W
R1166	ERDS2TJ681	carbon	680n	± 5%	W
R1167	ERDS2TJ102	carbon	1kn	± 5%	W
R1168	ERDS2TJ822	carbon	8k2n	± 5%	W
R1169	ERDS2TJ473	carbon	47kn	± 5%	W
R1170	ERDS2TJ223	carbon	22kn	± 5%	W
R1171	ERDS2TJ223	carbon	22kn	± 5%	W
R1172	ERDS2TJ222	carbon	2k2n	± 5%	W
R1173	ERDS2TJ822	carbon	8k2n	± 5%	W
R1174	ERDS2TJ273	carbon	27kn	± 5%	W
R1175	ERDS2TJ103	carbon	10kn	± 5%	W
R1176	ERDS2TJ103	carbon	10kn	± 5%	W
R1177	ERDS2TJ103	carbon	10kn	± 5%	W
R1178	ERDS2TJ123	carbon	12kn	± 5%	W
R1179	EVND4AA00B23	control	2knB		
R1180	ERDS2TJ473	carbon	47kn	± 5%	W
R1181	ERDS2TJ102	carbon	1kn	± 5%	W
R1183	ERDS2TJ102	carbon	1kn	± 5%	W
R1184	ERDS2TJ102	carbon	1kn	± 5%	W
R1185	ERDS2TJ564	carbon	560kn	± 5%	W
R1186	ERDS2TJ564	carbon	560kn	± 5%	W
R1187	ERDS2TJ684	carbon	680kn	± 5%	W
R1601	ERDS2TJ183	carbon	18kn	± 5%	W
R1602	ERDS2TJ274	carbon	270kn	± 5%	W
R1603	EVND4AA00B15	control	50kn		
R1604	ERDS2TJ4R7	carbon	4.7n	± 5%	W
R1605	ERDS2TJ101	carbon	100n	± 5%	W
R1606	ERDS2TJ101	carbon	100n	± 5%	W
R2501	ERD75TAJ825	carbon	8.2Mn	± 5%	W
R2502	ERD25TJ331	carbon	330n	± 5%	W
R2504	ERDS2TJ151	carbon	150n	± 5%	W
R2505	ERDS2TJ471	carbon	470n	± 5%	W
R2506	ERDS2TJ103	carbon	10kn	± 5%	W
R2507	ERDS2TJ101	carbon	100n	± 5%	W
R2508	ERDS2TJ563	carbon	56kn	± 5%	W
R2509	ERDS2TJ152	carbon	1k5n	± 5%	W
R2510	EVND4AA00B23	control	2knB		
R2511	ERDS2TJ101	carbon	100n	± 5%	W
R2513	ERDS2TJ392	carbon	3k9n	± 5%	W
R2514	ERDS2TJ473	carbon	47kn	± 5%	W
R2515	ERDS2TJ123	carbon	12kn	± 5%	W
R2516	ERDS2TJ101	carbon	100n	± 5%	W
R2517	EVND4AA00B53	control	5knB		
R2518	ERDS2TJ562	carbon	5k6n	± 5%	W
R2519	ERDS2TJ392	carbon	3k9n	± 5%	W
R2520	ERDS2TJ563	carbon	56kn	± 5%	W

Ref No.	Part No.	Description			
R2521	ERDS2TJ331	carbon	330n	± 5%	W
R2522	ERDS2TJ103	carbon	10kn	± 5%	W
R2523	ERDS2TJ101	carbon	100n	± 5%	W
R2524	ERDS2TJ272	carbon	2k7n	± 5%	W
R2525	ERDS2TJ750	carbon	75n	± 5%	W
R2526	ERGI SJ1 51P	metal oxide	150n	± 5%	W
R2527	ERDS2TJ473	carbon	47kn	± 5%	W
R2528	ERDS2TJ221	carbon	220n	± 5%	W
R2529	ERDS2TJ473	carbon	47kn	± 5%	W
R2530	ERDS2TJ101	carbon	100n	± 5%	W
R2531	ERDS2TJ104	carbon	100kn	± 5%	W
R2532	ERQ1 2HKR33P	fusible	R33n		
R2533	ERDS2TJ333	carbon	33kn	± 5%	W
R2534	ERDS2TJ103	carbon	10kn	± 5%	W
R2535	ERDS2TJ101	carbon	100n	± 5%	W
R2536	ERDS2TJ473	carbon	47kn	± 5%	W
R2537	ERDS2TJ683	carbon	68kn	± 5%	W

CAPACITORS

C15	ECEA1HU4R7B	electrolytic	4.7	µF	50v
C16	ECEA1HUR22B	electrolytic	0.22	µF	50v
C17	ECKR1H103ZF5	ceramic	10	nF	50v
C21	ECEA1HU100B	electrolytic	10	µF	50v
C24	ECEA50ZRA47B	electrolytic	0.47	µF	50v
C101	ECKR1H103ZF5	ceramic	10	nF	50v
C102	ECKR1H103ZF5	ceramic	10	nF	50v
C103	ECKR1H103ZF5	ceramic	10	nF	50v
C104	ECQV1H224JZ3	plastic film	220	nF	50v
C105	ECQV1H104JZ3	plastic film	100	nF	50v
C106	ECEA1CU470B	electrolytic	47	µF	16v
C110	ECKR1H103ZF5	ceramic	10	nF	50v
C111	ECKR1H103ZF5	ceramic	10	nF	50v
C112	ECEA1CN330SB	electrolytic	33	µF	16v
C113	ECKR1H103ZF5	ceramic	10	nF	50v
C114	ECQV1H104JZ3	plastic film	100	nF	50v
C116	ECCR1H560JP5	ceramic	56	pF	50v
C117	ECCR1H220JP5	ceramic	22	pF	50v
C119	ECEA1CU331B	electrolytic	330	µF	16v
C120	ECKR1H561KB5	ceramic	560	pF	50v
C203	ECQMIH222KV3	plastic film	2.2	nF	50v
C204	ECKR1H103ZF5	ceramic	10	nF	50v
C205	ECQMIH562KV3	plastic film	5.6	nF	50v
C206	ECKR1H103ZF5	ceramic	10	nF	50v
C207	ECCR1H680JP5	ceramic	68	pF	50v
C208	ECKR1H103ZF5	ceramic	10	nF	50v
C209	ECCR1H030CC	ceramic	3	pF	50v
C210	ECCR1H470JP5	ceramic	47	pF	50v
C211	ECEA1HU100B	electrolytic	10	µF	50v
C251	ECEA1CU101B	electrolytic	100	µF	16v
C252	ECEA1HNO10SB	electrolytic	1	µF	50v
C253	ECEA1VU4R7B	electrolytic	4.7	µF	35v
C254	ECQMIH182KV3	plastic film	1.8	nF	50v
C255	ECEA1CU330B	electrolytic	33	µF	16v
C256	ECEA1HUR22B	electrolytic	0.22	µF	50v
C257	ECEA1VU471E	electrolytic	470	µF	35v
C258	ECQV1H154JZ3	plastic film	150	nF	50v
C259	ECEA1EU102E	electrolytic	1000	µF	25v
C302	ECEA1CN100SB	electrolytic	10	µF	16v
C304	ECEA1CN220SB	electrolytic	22	µF	16v
C306	ECEA1HU4R7B	electrolytic	4.7	µF	50v
C307	ECCR1H820J5	ceramic	82	pF	50v
C308	ECKR1H103ZF5	ceramic	10	nF	50v
C309	ECKR1H221KB5	ceramic	220	pF	50v
C310	ECKR1H331KB5	ceramic	330	pF	50v
C311	ECEA1HNO10SB	electrolytic	1	µF	50v
C312	ECEA1HU100B	electrolytic	10	µF	50v
C313	ECKR1H221KB5	ceramic	220	pF	50v
C314	ECKR1H103ZF5	ceramic	10	nF	50v
C351	ECKR1H471KB5	ceramic	470	pF	50v
C352	ECKR1H561KB5	ceramic	560	pF	50v
C353	ECKR1H681KB5	ceramic	680	pF	50v
C355	Δ ECKW3D152KBN	ceramic	1.5	nF	2kv
C356	ECKR2H151KB2	ceramic	150	pF	500v
C358	ECEA1HU220B	electrolytic	22	µF	50v
C359	ECEA2ES010E	electrolytic	1	µF	250v
C360	ECEA1CU331B	electrolytic	330	µF	16v
C372	ECKR1H331KB5	ceramic	330	pF	50v
C373	ECCR1H470J5	ceramic	47	pF	50v
C401	ECQMIH153KV3	plastic film	15	nF	50v
C402	ECEA1HGO10SB	electrolytic	1	µF	50v
C403	ECEA1HNO10SB	electrolytic	1	µF	50v
C404	ECEA1HU4R7B	electrolytic	4.7	µF	50v
C451	ECKR2H821KB2	ceramic	820	pF	500v
C452	ECQMIH473KV3	plastic film	47	nF	50v
C453	ECQV1H104JZ3	plastic film	100	nF	50v
C454	ECEA1VU101B	electrolytic	100	µF	35v
C455	ECQMIH223KV3	plastic film	22	nF	50v
C457	ECEA1VU102E	electrolytic	1000	µF	35v
C458	ECEA50ZAR7B	electrolytic	4.7	µF	50v
C459	ECQMI104MZW	plastic film	100	nF	

Ref No.	Part No.	Description			
C460	ECEA1HNO10SB	electrolytic	1	µF	50v
C461	ECEA1VU471E	electrolytic	470	µF	35v
C462	ECEA1CU330B	electrolytic	33	µF	16v
C501	ECQV1H104JZ3	plastic film	100	nF	50v
C502	ECEA1CU470B	electrolytic	47	µF	16v
C503	ECEA1HU010B	electrolytic	1	µF	50v
C504	ECQMIH103KV3	plastic film	10	nF	50v
C506	ECQMIH333KV3	plastic film	33	nF	50v
C507	ECEA1HU4R7B	electrolytic	4.7	µF	50v
C508	ECKR1H391KB5	ceramic	390	pF	50v
C509	ECEA1HU010B	electrolytic	1	µF	50v
C510	ECQMIH562KV3	plastic film	5.6	nF	50v
C511	ECQV1H104JZ3	plastic film	100	nF	50v
C512	ECEA1CU470B	electrolytic	47	µF	16v
C513	ECQMIH103KV3	plastic film	10	nF	50v
C515	ECEA1JU100B	electrolytic	10	µF	50v
C516	ECKR1H102KB5	ceramic	1	nF	50v
C517	ECEA1CU470B	electrolytic	47	µF	16v
C518	ECKR2H101KB2	ceramic	100	pF	500v
C519	ECEA1HU100B	electrolytic	10	µF	50v
C520	ECEA1CU470B	electrolytic	47	µF	16v
C521	ECQMIH222KV3	plastic film	2.2	nF	50v
C522	ECQMIH682KV3	plastic film	6.8	nF	50v
C523	ECQMIH223KV3	plastic film	22	nF	50v
C524	ECQMIH682KV3	plastic film	6.8	nF	50v
C531	ECKW2H332KB8	ceramic	3.3	nF	500v
C532	ECKW2H332KB8	ceramic	3.3	nF	500v
C552	ECQF2H394JSA	polypropylene	390	nF	500v
C553	ECKR2H222KB2	ceramic	2.2	nF	500v
C554	ECEA2CS2R2E	electrolytic	2.2	µF	160v
C555	ECEA2ES100E	electrolytic	10	µF	250v
C556	Δ ECKW3D222JBN	ceramic	2.2	nF	2kv
C557	ECQV1H104JZ3	plastic film	100	nF	50v
C558	ECWH12H682JS	plastic film	6.8	nF	500v
C559	Δ ECKW3D122JBN	ceramic	1.2	nF	2kv
C560	Δ ECKW3D271JBN	ceramic	270	pF	2kv
C562	ECEA1HU100B	electrolytic	10	µF	50v
C563	ECKR2H471KB2	ceramic	470	pF	500v
C564	ECEA1HU100B	electrolytic	10	µF	50v
C601	ECKR1H103ZF5	ceramic	10	nF	50v
C602	ECCR1H121J5	ceramic	120	pF	50v
C603	ECKR1H103ZF5	ceramic	10	nF	50v
C604	ECEA1HUR22B	electrolytic	0.22	µF	50v
C605	ECKR1H103ZF5	ceramic	10	nF	50v
C606	ECEA1HUR22B	electrolytic	0.22	µF	50v
C607	ECKR1H103ZF5	ceramic	10	nF	50v
C609	ECEA1HU010B	electrolytic	1	µF	50v
C610	ECKR1H103ZF5	ceramic	10	nF	50v
C611	ECKR1H103ZF5	ceramic	10	nF	50v
C612	ECKR1H331KB5	ceramic	330	pF	50v
C613	ECKR1H331KB5	ceramic	330	pF	50v
C614	ECKR1H331KB5	ceramic	330	pF	50v
C616	ECKR1H103ZF5	ceramic	10	nF	50v
C617	ECKR1H103ZF5	ceramic	10	nF	50v
C618	ECKR1H102KB5	ceramic	1	nF	50v
C619	ECKR1H102KB5	ceramic	1	nF	50v
C801	ECQU2A473MNB	plastic film	47	nF	200v
C802	ECQU2A473MNB	plastic film	47	nF	200v
C803	ECKW2H472PU8	ceramic	4.7	nF	500v
C804	ECKW2H472PU8	ceramic	4.7	nF	500v
C805	ECKW2H472PU8	ceramic	4.7	nF	500v
C806	ECKW2H472PU8	ceramic	4.7	nF	500v
C807	ECES2GU101G	electrolytic	100	µF	400v
C809	ECQV1H184JZ3	plastic film	180	nF	50v
C810	Δ ECKW3D152KBN	ceramic	1.5	nF	2kv
C811	Δ ECKW3D152KBN	ceramic	1.5	nF	2kv
C812	ECEA1HU2R2B	electrolytic	2.2	µF	50v
C814	ECEA160V33WE	electrolytic	33	µF	16v
C816	ECKR2H561KB2	ceramic	560	pF	500v
C817	ECEA1EU471E	electrolytic	470	µF	25v
C818	ECEA1HU100B	electrolytic	10	µF	50v
C819	ECKR1H103ZF5	ceramic	10	nF	50v
C820	ECEA1EU101B	electrolytic	100	µF	25v
C821	ECKR1H103ZF5	ceramic	10	nF	50v
C822	ECKR1H102KB5	ceramic	1	nF	50v
C823	ECQMIH332KV3	plastic film	3.3	nF	50v
C1111	ECCR1H680JP5	ceramic	68	pF	50v
C1113	ECCR1H151J5	ceramic	150	pF	50v
C1114	ECCR1H101J5	ceramic	100	pF	50v
C1117	ECEA1HU100B	electrolytic	10	µF	50v
C1118	ECKR1H103ZF5	ceramic	10	nF	50v
C1121	ECKR1H271KB5	ceramic	270	pF	50v
C1122	ECKR1H103ZF5	ceramic	10	nF	50v
C1123	ECEA1HU100B	electrolytic	10	µF	50v
C1124	ECKR1H271KB5	ceramic	270	pF	50v
C1125	ECCR1H101J5	ceramic	100	pF	50v
C1126	ECCR1H101J5	ceramic	100	pF	50v
C1127	ECKR1H121KB5	ceramic	120	pF	50v
C1128	ECKR1H181KB5	ceramic	180	pF	50v
C1130	ECEA1CU330B	electrolytic	33	µF	16v

Ref No.	Part No.	Description			
C1131	ECEA1HU2R2B	electrolytic	2.2	µF	50v
C1132	ECCR1H101J5	ceramic	100	pF	50v
C1133	ECEA1HU2R2B	electrolytic	2.2	µF	50v
C1134	ECEA1HU2R2B	electrolytic	2.2	µF	50v
C1135	ECEA1HU2R2B	electrolytic	2.2	µF	50v
C1136	ECCR1H151J5	ceramic	150	pF	50v
C1137	ECEA50ZR33B	electrolytic	0.33	µF	50v
C1138	ECEA50ZR47B	electrolytic	0.47	µF	50v
C1139	ECKR1H471KB5	ceramic	470	pF	50v
C1140	ECKR1H471KB5	ceramic	470	pF	50v
C1144	ECEA1HU100B	electrolytic	10	µF	50v
C1145	ECKR1H103ZF5	ceramic	10	nF	50v
C1147	ECEA1HU010B	electrolytic	1	µF	50v
C1148	ECCR1H101JU5	ceramic	100	pF	50v
C1151	ECKR1H471KB5	ceramic	470	pF	50v
C1152	ECKR1H471KB5	ceramic	470	pF	50v
C1153	ECKR1H471KB5	ceramic	470	pF	50v
C1154	ECKR1H471KB5	ceramic	470	pF	50v
C1155	ECKR1H471KB5	ceramic	470	pF	50v
C1156	ECKR1H471KB5	ceramic	470	pF	50v
C1157	ECKR1H471KB5	ceramic	470	pF	50v
C1158	ECKR1H471KB5	ceramic	470	pF	50v
C1159	ECEA1HU010B	electrolytic	1	µF	50v
C1160	ECQM1H822KV3	plastic film	8.2	nF	50v
C1161	ECKR1H821KB5	ceramic	820	pF	50v
C1601	ECQM1H333KV3	plastic film	33	nF	50v
C1602	ECEA6Z220E	electrolytic	220	µF	6.3v
C1603	ECEA1HU010B	electrolytic	1	µF	50v
C1604	ECKR1H331KB5	ceramic	330	pF	50v
C1605	ECEA1HU0R1B	electrolytic	0.1	µF	50v
C1606	ECEA0JU471B	electrolytic	470	pF	6.3v
C2501	Δ ECKCNS102MBJ	ceramic	1	nF	1.2kv
C2503	ECCR1H150J5	ceramic	15	pF	50v
C2504	ECEA1HN010SB	electrolytic	1	µF	50v
C2505	ECEA1CNI00SB	electrolytic	10	µF	16v
C2507	ECEA1HU101B	electrolytic	100	µF	50v
C2509	ECEA1HU100B	electrolytic	10	µF	50v
C2510	ECQM1H223KV3	plastic film	22	nF	50v
C2512	ECEA1CU470B	electrolytic	47	µF	16v
C2513	ECEA1HU101B	electrolytic	100	µF	50v
C2514	ECKR2H101KB2	ceramic	100	pF	500v
C2515	ECEA1EU101B	electrolytic	100	µF	25v
C2517	ECEA1HU100B	electrolytic	10	µF	50v
C2518	ECEA1CNI00SB	electrolytic	10	µF	16v

COILS

LC801	TLK153159E	coil			
L12	TLT330K991R	peaking coil			
L15	TLT022L991R	peaking coil			
L104	EIV7EN047B	video IF transformer			
L105	EIV7EN046B	video IF transformer			
L107	TLT010L991R	coil			
L108	TLT100K166C	coil			
L109	TLT470K991R	peaking coil			
L201	TLT220K991R	coil			
L201	TLT047L991R	coil			
L203	EIS7EN010B	sound IF transformer			
L204	EIS7ES710B	sound IF transformer			
L301	TLT390K991R	coil			
L502	TLT542K991K	coil			
L601	TLT220K991R	coil			
L602	EIK7ES005B	coil			
L603	EIK7EN010B	coil			
L801	ELF18D427F	line filter			
L802	TSC925-4	bead choke			
L803	TSC925-4	bead choke			
L806	TSC925-4	bead choke			

TRANSFORMERS

T531	TLH15458E	transformer			
T551	Δ TLF14752F	transformer			
T801	ETS29K14A	transformer			

DIODES

D101	MA165TA5	diode			
D102	MA165TA5	diode			
D103	MA165TA5	diode			
D301	MA165TA5	diode			
D302	MA165TA5	diode			
D303	MA165TA5	diode			
D304	MA166TA5	diode			
D306	MA4120TA	diode			
D307	MA4120TA	diode			
D308	MA4120TA	diode			
D351	MA165TA5	diode			
D352	MA165TA5	diode			
D353	MA165TA5	diode			
D354	MA165TA5	diode			

Ref No.	Part No.	Description			
D372	MA165TA5	diode			
D373	MA4047TA	diode			
D451	ERA15-02V3	diode			
D453	MA4270TA	diode			
D501	MA4360TA	diode			
D504	MA171TA5	diode			
D505	MA165TA5	diode			
D506	MA165TA5	diode			
D551	ERA22-04V3	diode			
D552	MA167TA5	diode			
D553	ERA22-04V3	diode			
D554	ERA22-04V3	diode			
D555	MA165TA5	diode			
D556	ERA22-04V3	diode			
D802	EU02A	diode			
D803	ERA15-02V3	diode			
D804	ERA22-04V3	diode			
D805	232266298009	diode			
D806	EU02V0	diode			
D807	MA4300MTA	diode			
D809	MA4100MTA	diode			
D810	MA4056MTA	diode			
D811	MA165TA5	diode			
D811	MA700TA	diode			
D813	MA165TA5	diode			
D814	MA4030TA	diode			
D817	MA165TA5	diode			
D818	MA165TA5	diode			
D821	ERC13-08V3	solid resistor			
D822	ERC13-08V3	solid resistor			
D823	ERC13-08V3	solid resistor			
D824	ERC13-08V3	solid resistor			
D1111	TVSUPC574J	I.C.			
D1112	MA4270MTA	diode			
D1119	MA165TA5	diode			
D1120	MA165TA5	diode			
D1123	MA165TA5	diode			
D1124	MA165TA5	diode			
D1125	MA165TA5	diode			
D1126	MA165TA5	diode			
D1128	MA165TA5	diode			
D1130	MA165TA5	diode			
D1132	MA165TA5	diode			
D1133	MA165TA5	diode			
D1134	MA165TA5	diode			
D1135	MA165TA5	diode			
D1141	MA165TA5	diode			
D1142	MA165TA5	diode			
D1149	MA165TA5	diode			
D1150	MA165TA5	diode			
D1151	MA165TA5	diode			
D1601	PN323BHT	diode			
D2501	MA4082MTA	diode			
D2502	EU02V0	diode			

TRANSISTORS

Q101	2SA564ATA	P.N.P. transistor			
Q103	UN4211TA	transistor			
Q302	2SA564ATA	P.N.P. transistor			
Q303	2SC2636T	transistor			
Q304	2SC2636T	transistor			
Q351	2SC1473A	N.P.N. transistor			
Q352	2SC1473A	N.P.N. transistor			
Q353	2SC1473A	N.P.N. transistor			
Q355	2SC1685TA	transistor			
Q358	2SA719TA	P.N.P. transistor			
Q372	2SA564ATA	P.N.P. transistor			
Q373	2SA564ATA	P.N.P. transistor			
Q374	2SA564ATA	P.N.P. transistor			
Q451	2SA564ATA	P.N.P. transistor			
Q452	2SA564ATA/QR	transistor			
Q502	2SA564ATA	P.N.P. transistor			
Q504	2SA564ATA	P.N.P. transistor			
Q505	2SC1685TA	N.P.N. transistor			
Q506	2SA564ATA	P.N.P. transistor			
Q531	2SC1573AH	N.P.N. transistor			
Q551	2SD1439RL	N.P.N. transistor			
Q802	UNI215	transistor			
Q803	UNI111	transistor			
Q804	2SC1317TA	N.P.N. transistor			
Q805	2SC1573AH	N.P.N. transistor			
Q806	2SA683NC-Q	P.N.P. transistor			
Q807	2SC1685TA	N.P.N. transistor			
Q1121	2SC1685TA	N.P.N. transistor			
Q1122	UNI211	transistor			
Q1123	UNI211	transistor			
Q1125	2SC1685TA	N.P.N. transistor			
Q1129	2SC1685TA	N.P.N. transistor			
Q1130	UNI211	transistor			
Q1135	2SC1688	transistor			

Ref No.	Part No.	Description
Q2501	2SC1685TA	N.P.N. transistor
Q2502	2SC1685TA	N.P.N. transistor
Q2503	2SC1685TA	N.P.N. transistor
Q2504	2SC1685TA	N.P.N. transistor
Q2505	2SC1685TA	N.P.N. transistor
Q2506	2SC1685TA	N.P.N. transistor
Q2507	2SC1685TA	N.P.N. transistor
Q2508	2SC1685TA	N.P.N. transistor
Q2509	2SC1685TA	N.P.N. transistor
I.C's		
IC101	M51407SP	I.C.
IC1101	MNI 5142TEB	I.C.
IC1102	MNI 220T	I.C.
IC1601	AN5025K	I.C.
IC2503	TLP751VIDLF2	transformer
IC2504	TLP731AUDLF2	transformer
IC251	AN5265	audio I.C.
IC451	AN5521	vertical output I.C.
IC801	STR50103A-M	I.C.
IC802	AN78M12LB	I.C.
IC803	L78M09-M-RB	I.C.