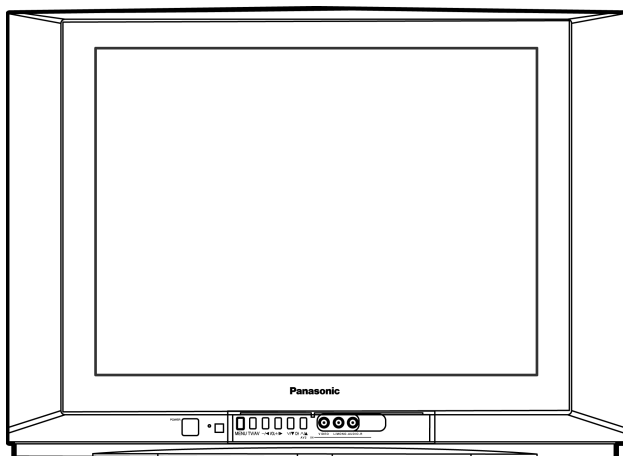


# Service Manual

## Colour Television



### CT-F2136LC

GP41 Chassis

### Specification

Power Source	AC SINGLE 110-220 V, 50/60 Hz	Y	1.0 Vp-p, 75Ω
Power Consumption	67 W	P <sub>B</sub>	0.7 Vp-p, 75Ω
	Standby condition : 2 W	P <sub>R</sub>	0.7 Vp-p, 75Ω
Aerial Terminal	Impedance : 75Ω, Coaxial type	AV 1, 2, 3	
Tuning System	<b>Frequency Synthesizer</b>	Video in	1.0 Vp-p, 75Ω
	Auto Search Tuning	Audio in	Approx. 0.5V, 47KΩ
	Pos : 100 Positions	Audio Amp	AUDIO L-R 0.5VRMS (PHONE JACK TYPE x 2)
Receiving System	MTS STEREO	High Voltage	27.5 ±1.5 at zero beam current
Receiving Channels	Regular TV	Picture Tube	A51LYZ295X Type 21 (500 mm) Measured diagonally,
VHF BAND	2-13 (NTSC M U.S.A.)		90° deflection
UHF BAND	14-69 (NTSC M U.S.A.)	Audio Output	16 W speaker
CATV	1-125 (U.S.A. CATV)	Dimensions (W x D x H)	648 mm x 488 mm x 473 mm
Intermediate Frequency	38.0 MHz	Weight (Mass)	27 kg (Net)
Video	31.5 MHz (D, K) / 32.5 MHz (B, G)		
	32.0 MHz (I) / 32.5 MHz (M)	<b>Note:</b>	
Sound	33.57 MHz (PAL) /	Specifications are subject to change without notice. Mass and dimensions shown are approximate.	
Colour	33.6 MHz (SECAM)		
	34.42 MHz (NTSC) /		
	33.75 MHz (SECAM)		
Video/Audio/Terminals			
DVD			

#### WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic®

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# 1 Safety Precautions

## 1.1. General Guide

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis. Fig. 1.

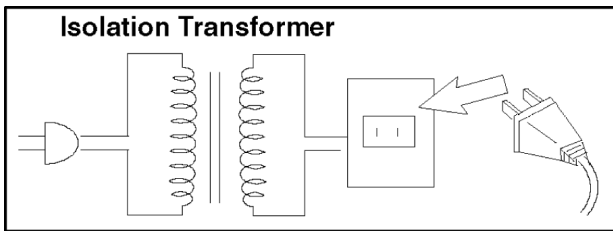


Fig. 1

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, observe that all the protective devices such as insulation barriers, insulation papers, shields, and insulation 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 **29kV** kV is present when this receiver is in operation. Operation of the receiver without 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.

After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

## 1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug. Fig. 2.

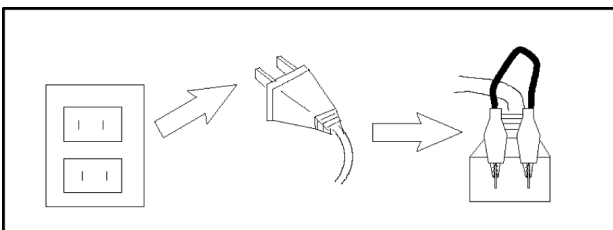


Fig. 2

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 screw heads, aerials, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between **4 MΩ and 20 MΩ**. When the exposed metal does not have a return path to the chassis, the reading must be zero.

## 1.3. 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, 10 W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter, with high impedance type, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point. Fig. 3.

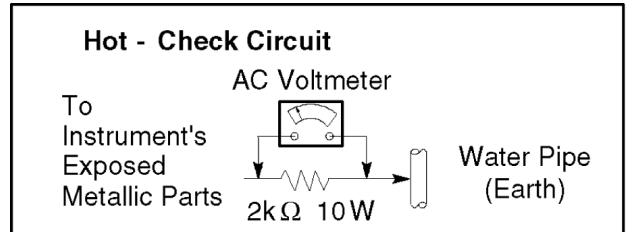


Fig. 3

5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential any point should not exceed **1.0 V rms**. In the case of a measurement being outside of the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and re-checked before it is returned to the customer. Fig. 4.

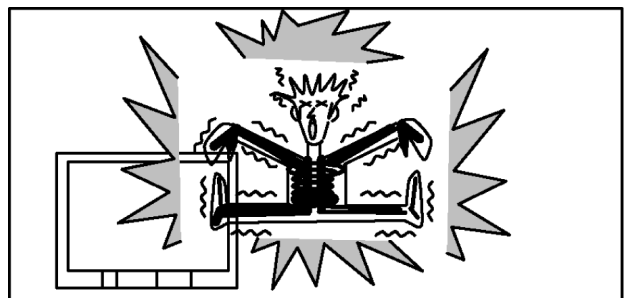


Fig. 4

## 1.4. X-Radiation

Warning :

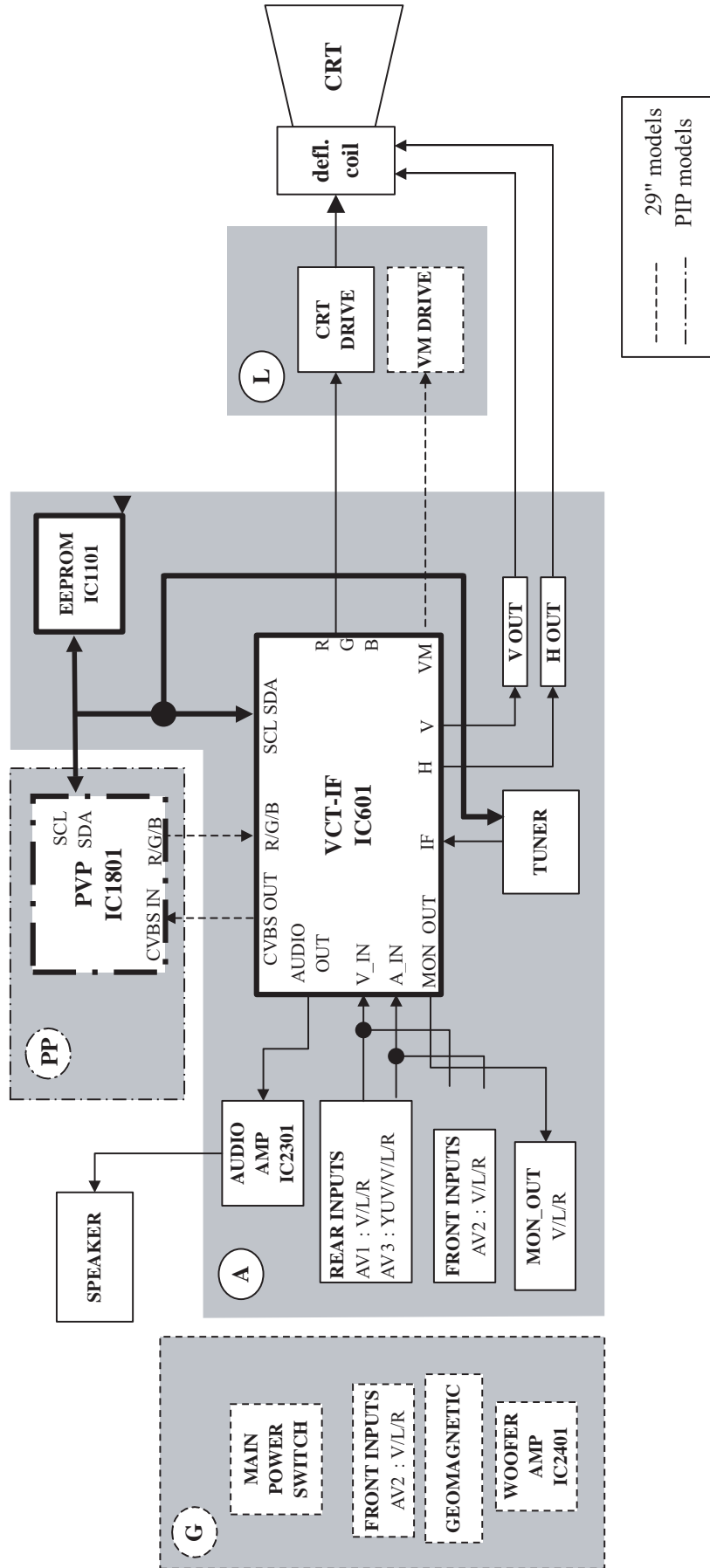
1. The potential sources of X-Radiation in TV sets are the EHT section and the picture tube.
2. When using a picture tube test rig for service, ensure that the rig is capable of handling **29 kV** without causing X-Radiation.

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

1. Set the brightness to minimum.
2. Measure the High Voltage. The meter reading should indicate **27.5 ± 1.5V**. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent the possibility of X-Radiation, it is essential to use the specified picture tube.

# 1.5. GP41 Block Diagram

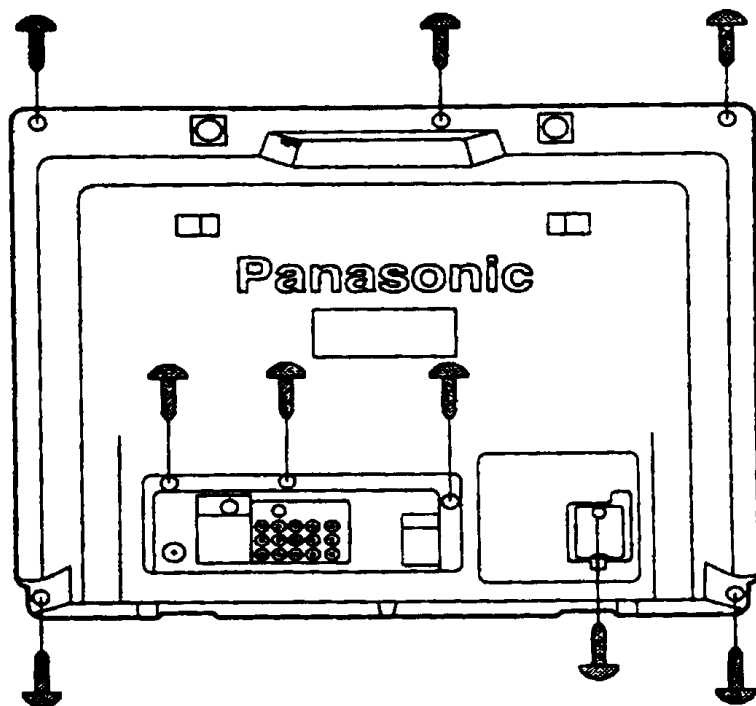
## GP41 CHASSIS BLOCK DIAGRAM



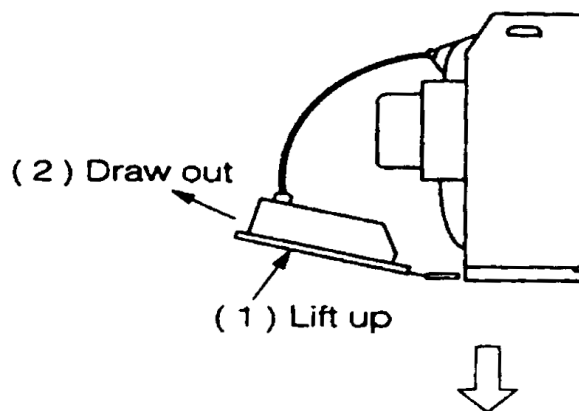
## 2 Service Hints

### 2.1. HOW TO MOVE CHASSIS INTO SERVICE POSITION.

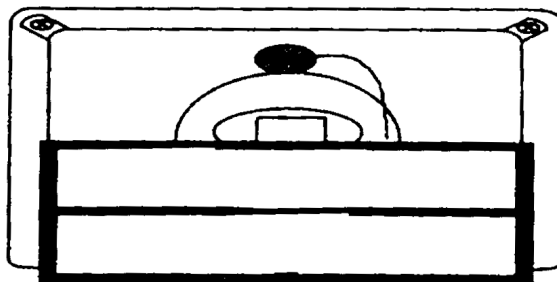
1. Remove 9 screws.



2. Draw out Main Chassis.



3. Stand the Main Chassis.



## 3 Market Mode Function

### 3.1. Service Mode Access

1. Set timer ON.
2. Press remote's RECALL (⏮) and panel's volume down key simultaneously to enter SERVICE 1.
3. Set to normal mode : Press the volume down button on front, together press the off timer button on remote control.

### 3.2. Service Mode 1 Controls

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Key 3 / 4<br/>previous / next service 1 item</li> <li>2. Key 8 / 9<br/>adjust user brightness (-/+)</li> <li>3. Program up / down<br/>program position up / down</li> <li>4. Volume +<br/>increment of selected item</li> </ol> | <ol style="list-style-type: none"> <li>5. Volume -<br/>decrement of selected item</li> <li>6. OK (remote)<br/>store / save selected item</li> <li>7. Normal (remote)<br/>exit service mode</li> </ol> |
|---|---|

### 3.3. Service Mode 1 Function

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. H-POS<br/>-128~127</li> <li>2. V-POS<br/>-128~127</li> <li>3. H-AMP<br/>-128~127</li> <li>4. V-AMP<br/>-128~127</li> <li>5. EW-AMP1<br/>-128~127</li> <li>6. LOW_Corner<br/>-128~127</li> <li>7. TRAPEZ 1<br/>-128~127</li> <li>8. UPPER_Corner<br/>-128~127</li> <li>9. V-LIN<br/>-128~127</li> <li>10. V-SYM<br/>-128~127</li> </ol> | <ol style="list-style-type: none"> <li>11. ANGEL<br/>-128~127</li> <li>12. BOW<br/>-128~127</li> <li>13. DVCO<br/>-128~127</li> <li>14. H-POS<br/>-128~127</li> <li>15. G-CUT OFF<br/>N / A</li> <li>16. B-CUT OFF<br/>0~511</li> <li>17. R-DRIVE<br/>0~511</li> <li>18. G-DRIVE<br/>0~511</li> <li>19. B-DRIVE<br/>0~511</li> <li>20. SUB-Bright<br/>-128~127</li> </ol> |
|--|---|

### 3.4. Service Mode 2 Controls (OPTION data 1 ~ 3)

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Key 3 / 4<br/>previous / next service 2 item</li> <li>2. Key 8 / 9<br/>toggle for options bit 0 - 7</li> <li>3. Program up / down<br/>program position up / down</li> <li>4. Volume +<br/>increment of selected item</li> </ol> | <ol style="list-style-type: none"> <li>5. Volume -<br/>decrement of selected item</li> <li>6. OK (remote)<br/>store / save selected item</li> <li>7. Normal (remote)<br/>exit service mode</li> </ol> |
|---|---|

NOTE: Service mode 2 options bit refer to each model spec.

## 4 Adjustment Procedure

### 4.1. Adjustment Procedure

#### 4.1.1. +B Voltage

##### Item / preparation

1. Operate the TV set.
2. Set control as follows :  
Brightness ..... minimum  
Contrast ..... minimum

##### Adjustment procedure

1. Confirm the DC voltage at the indicated test points, as follows :  
TPD 15 :  $3.35 \pm 0.2V$   
TPD 16 :  $141 \pm 2V$   
TPD 17 :  $8.2 \pm 0.5V$   
TPD 18 :  $1.9 \pm 0.2V$   
TPD 19 :  $5.2 \pm 0.2V$   
TPD 20 :  $175 \pm 15V$

#### 4.1.2. High Voltage

##### Item / preparation

1. Receive the crosshatch pattern.
2. Set to 0 Beam.  
Screen VR ..... minimum  
Contrast ..... minimum

##### Adjustment procedure

1. Connect a DC voltage meter to D866 and confirm the +B voltage is  $141.0 \pm 2V$ .
2. Connect a high frequency voltmeter to heater and confirm that voltage reads  $6.30 \pm 0.24$  (VRMS).
3. Normalize the brightness and contrast.

### 4.2. COLOUR PURITY

1. Set Bright and Contrast controls to their maximum positions.
2. Operate the TV set over 60 minutes.
3. Full degauss the picture tube by using an external degaussing coil. By rotating R-B static convergence magnet.
4. Apply a crosshatch pattern signal and adjust roughly the static convergence magnets.
5. Apply a green pattern signal.
6. Loosen a clamp screw for the Deflection Yoke and move the Deflection Yoke as close to the purity magnet as possible.
7. Adjust the purity magnet so that a vertical green field is obtained at the center of the screen.

#### 4.1.3. NTSC TINT COLOUR

##### Item / preparation

1. Connect oscilloscope probe to TPL1 (R OUT) with 10k $\Omega$  series resistor.
2. Press Main Menu and set system to use AV-NTSC (3.58 MHz).  
DYNAMIC ..... Normal  
Channel CLR Set ..... STD

##### Adjustment procedure

1. Adjust Sub-Tint so that No. 2, 3 and 4 becomes level waveform is similar to Fig. 3.
2. Confirm phase at Tint is changes more than  $\pm 15$  by Tint control.
3. Confirm that colour level is maximum when colour DAC is adjusted to maximum position.

**Note:** Use remote control only when adjusting user mode to Sub-Tint.

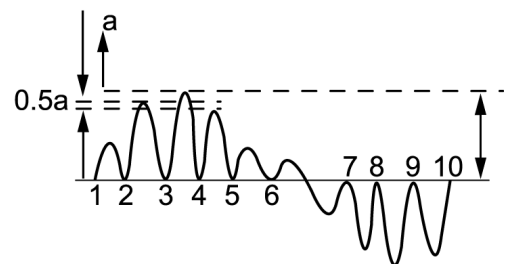
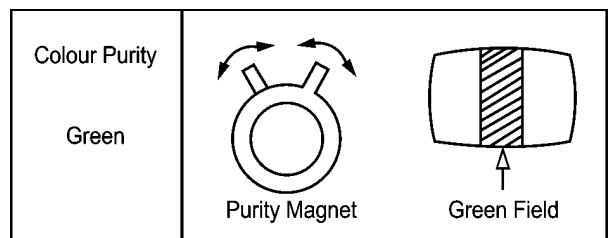
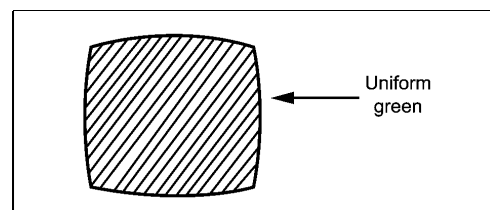


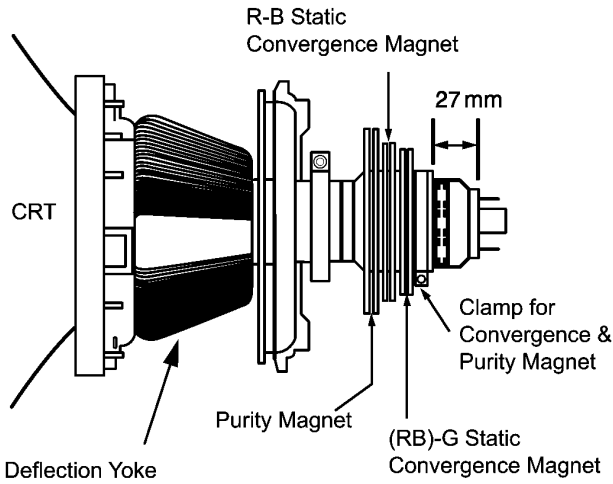
Fig. 3



8. Slowly press the Deflection Yoke and set it where a uniform green field is obtained.

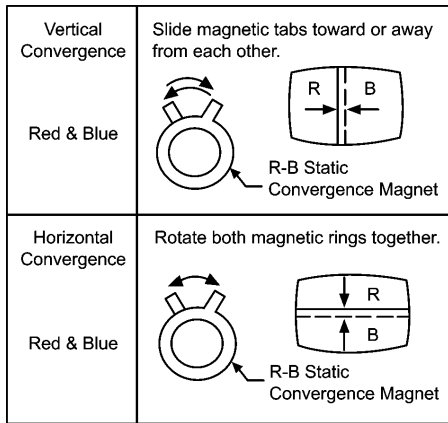


9. Adjust roughly the Low Light controls and make sure that a uniform white field is obtained.
10. Tighten the clamp screw.

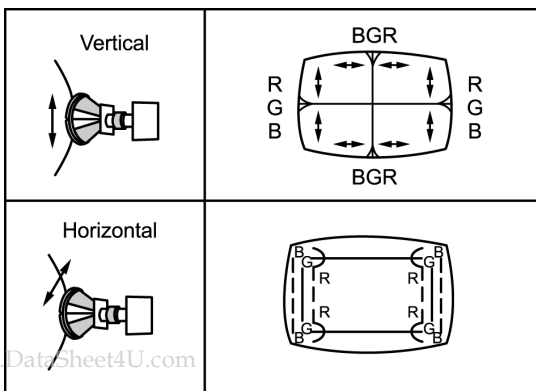


### 4.3. CONVERGENCE

1. Apply a crosshatch pattern signal and set Contrast control to the maximum position.
2. Adjust Bright control to obtain a clear pattern.
3. Adjust Red and Blue line at center of the screen.



4. Adjust Red and Blue with Green line at center of the screen by rotating (RB)-G static convergence magnet.
5. Lock convergence magnets with silicone sealer.
6. Remove the DY wedges and slightly tilt the Deflection Yoke vertically.



7. Fix the Deflection Yoke by re-inserting the DY wedges.
8. If purity error is found, repeat "Colour Purity" adjustment.



## 4.4. WHITE BALANCE (MARKET MODE CHK 4)

### Preparation

1. Receive a colour bar signal with colour "OFF", and operate the TV set for more than 30 minutes.
2. Set the picture menu to "DYNAMIC NORMAL" and the AI to off.
3. Connect an oscilloscope to KG on L BOARD.
4. Set the TV set to Market Mode : white balance adjustment (CHK 4).
5. Screen VR : Min.
6. Set the data level of RGB CUT OFF / DRIVE and SUB BRIGHT.

### Adjustment

1. Select G-CUTOFF adjustment mode and collapse vertical scan.
2. Adjust G-CUTOFF control to become the DC=0 V to video level at 150 V as shown in Fig. 1.

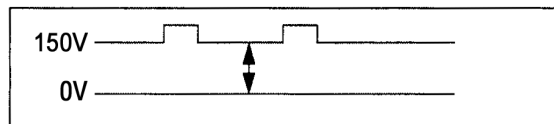
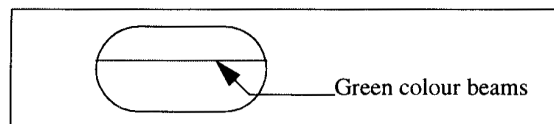


Fig. 1

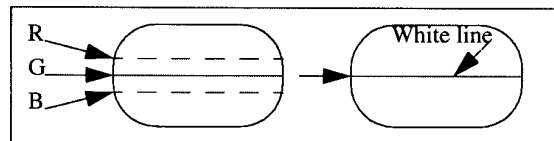
3. Slowly turn the screen control clockwise until a green colour horizontal line appears on the picture tube. This is the setting point for the screen control.

Note:

Do not adjust the G-CUTOFF setting in the following procedure.



4. Adjust the remaining R and B-CUTOFF controls so as to get a white horizontal line on the screen.

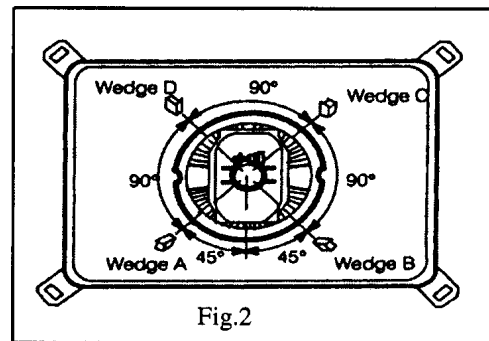


5. Return to full field SCAN by pushing the position 5 key on the remote control.
6. Adjust the R-Drive and B-Drive controls as to obtain a uniform white on the white bar of the greyscale pattern.
7. Confirm correct B/W rendition and greyscale tracking or repeat CUTOFF and drive control setup.

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### Note:

Write down the original value for each address adjustment before adjusting anything.



8. Wedge A shown in Fig. 2 should be fixed within a range of 45° to the left of the vertical line as shown.
9. After inserting wedge A, insert wedges B, C and D. The wedges should be set 90° apart from each other.
10. Be certain that the four wedges are firmly fixed and the Deflection Yoke is tightly clamped in place otherwise the Deflection Yoke may shift its position and cause a loss of convergence and purity.

## 4.5. ADJUSTMENT OF CRT VRS

### PREPARATION

1. Set DY to CRT not to tilt up and down left and right deflection. (fig 1)
2. Set CY to CRT and set CY magnet primarily.  
 Pur Mg : Set Pur Mg that 2magnets are top position.  
 VRS Mag : Set VRS Mg that 2magnets are horizontal position.

### ADJUSTMENT

1. Receive the white balance pattern.
2. Adjust V-CENTER.
3. Set R,B CUT OFF to minimum, and set G CUT OFF to center.
4. Receive the aging pattern.
5. Set 2 magnet of vertical position to up and down equally so that center part of CRT (Fig. 2)

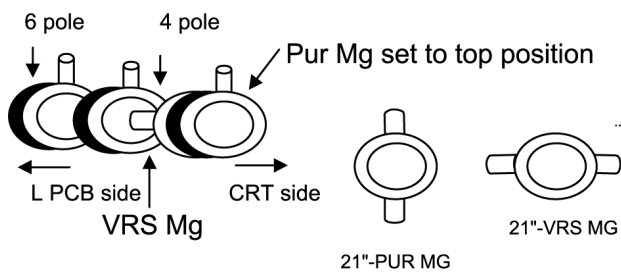


Fig . 1

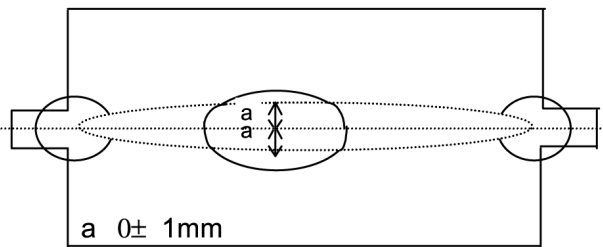
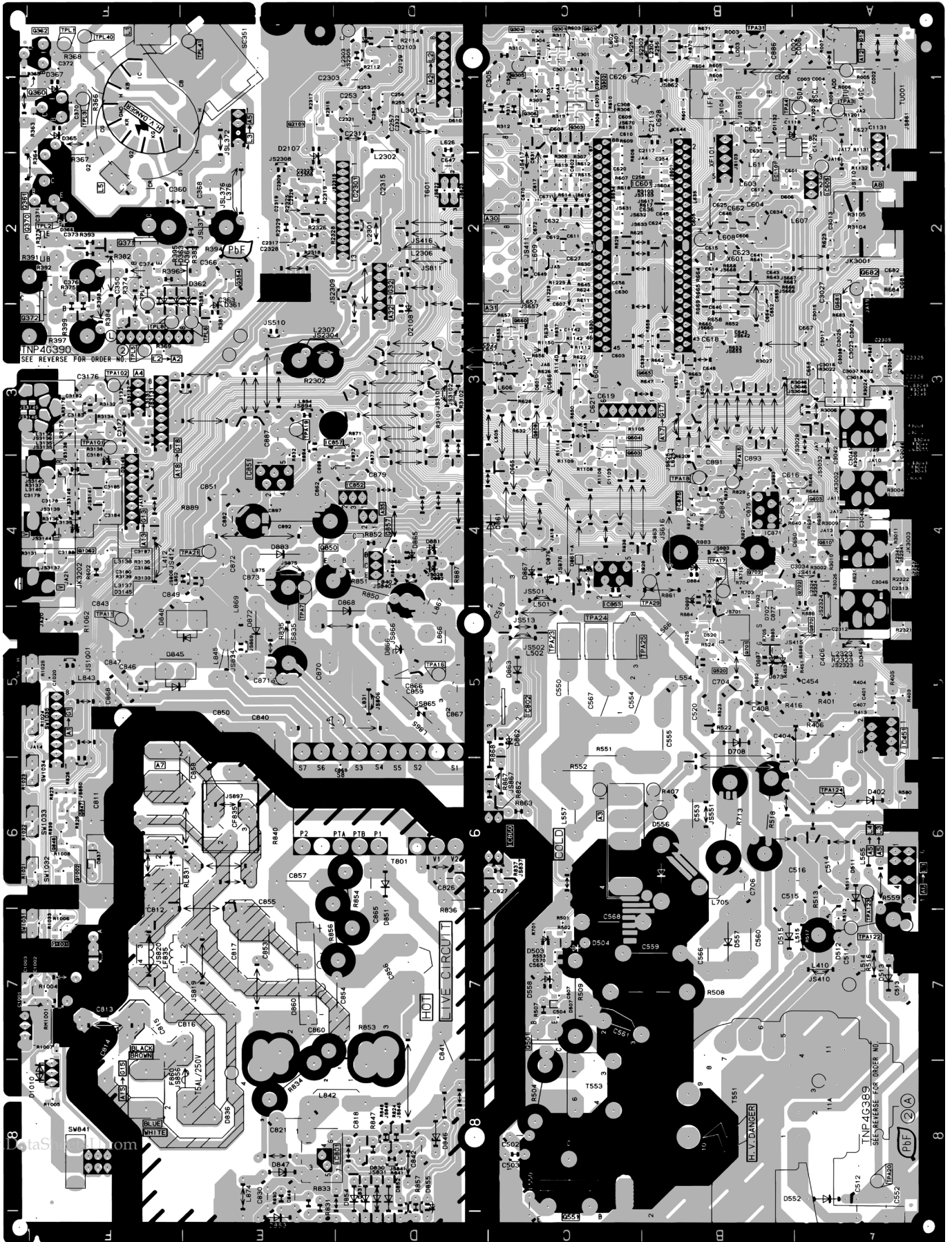


Fig . 2

# 5 Conductor Views



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## 6 Schematic Diagrams

### 6.1. SCHEMATIC DIAGRAM FOR GP41 CHASSIS

#### Important Safety Notice

Components identified by  $\Delta$  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 [ $\Omega$ ] (K=1,000, M=1,000,000).

$\bigcirc$	: Nonflammable	$\boxtimes$	: Metal Oxide
$\triangle$	: Solid	$\odot$	: Metal Film
$\boxplus$	: Wire Wound	$\otimes$	: Fuse:

##### 2. Capacitor

All capacitors are ceramic 50V capacitor, unless marked as follows:

Unit of capacitance is  $\mu\text{F}$ , unless otherwise noted.

$\otimes$	: Temperature Compensation	$\text{---} \text{---} \text{---}$	: Electrolytic
$\textcircled{M}$	: Polyester	$\text{---} \text{---} \text{---}$	: Bipolar
$\textcircled{m}$	: Metalized Polyester	$\textcircled{T}$	: Dipped Tantalum
$\boxtimes$	: Polypropylene	$\textcircled{Z}$	: Z-Type

##### 3. Coil

Unit of inductance is  $\mu\text{H}$ , unless otherwise noted.

##### 4. Test Point

$\bigcirc$  : Test Point position

##### 5. Earth Symbol

$\text{---}$  : Chassis Earth (Cold)  $\downarrow$  : Line Earth (Hot)

##### 6. Voltage Measurement

Voltage is measured by a DC voltmeter.

Conditions of the measurement are the following:

Power Source ..... AC 110-240V, 50/60 Hz

Receiving Signal ..... Colour Bar signal (RF)

All customer's controls ..... Maximum positions

##### 7. Number in red circle indicates waveform number.

(See waveform pattern table.)

##### 8. When arrow mark ( $\nearrow$ ) is found, connection is easily found from the direction of arrow

##### 9. Indicates the major signal flow. $\blackrightarrow$ : Video $\rightleftarrows$ : Audio

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

**Remarks:**

1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.

The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.

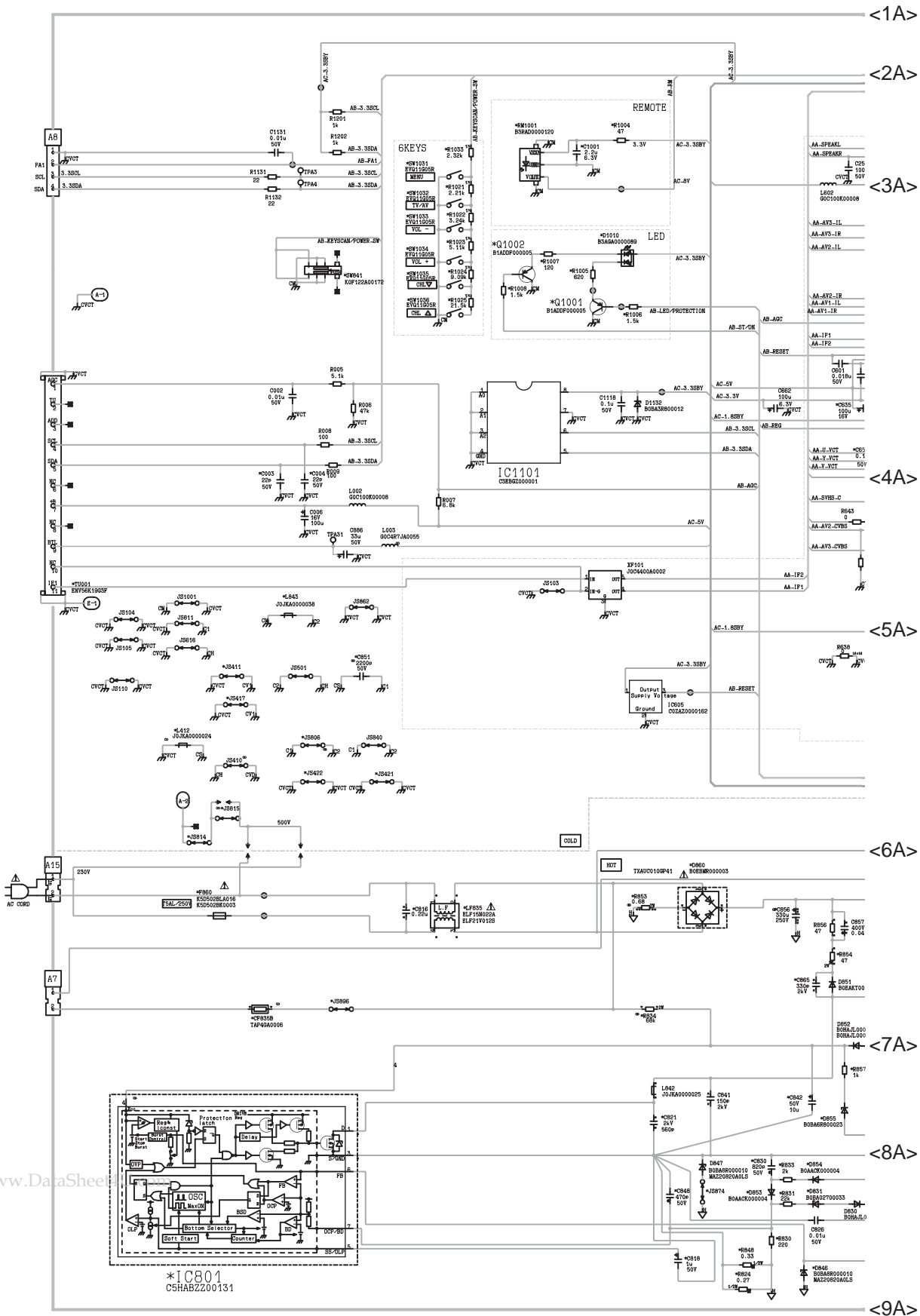
All circuits, except the Power Circuit, are cold.

**Precautions**

- a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
  - b. Do not short- circuit the hot and cold circuits or a fuse may blow and parts may break.
  - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously or a fuse may blow.  
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.
2. Following diodes are interchangeable.  
MA150- MA162 (Replacement part)

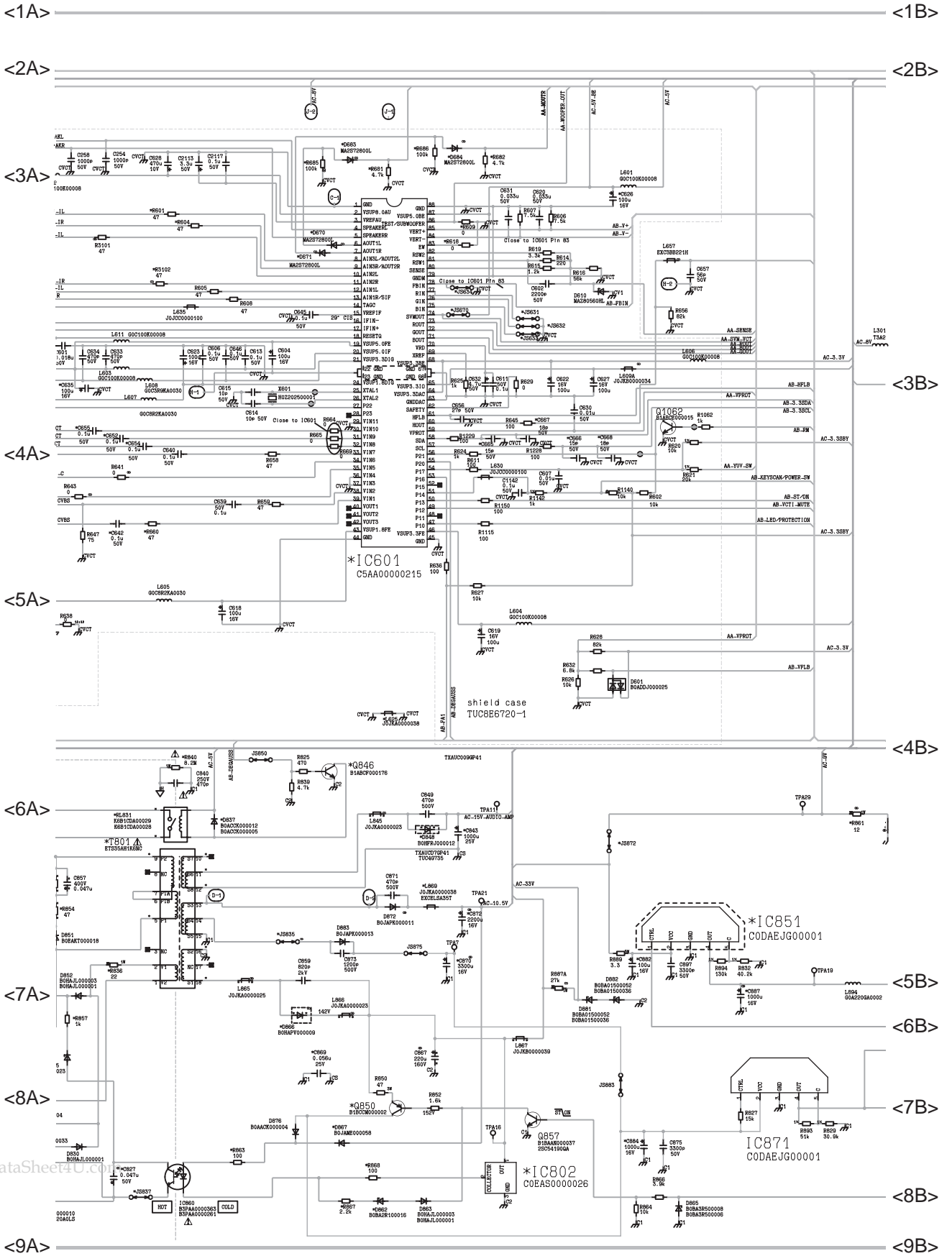
# 6.2. A Board

## 6.2.1. A Board (1/5)



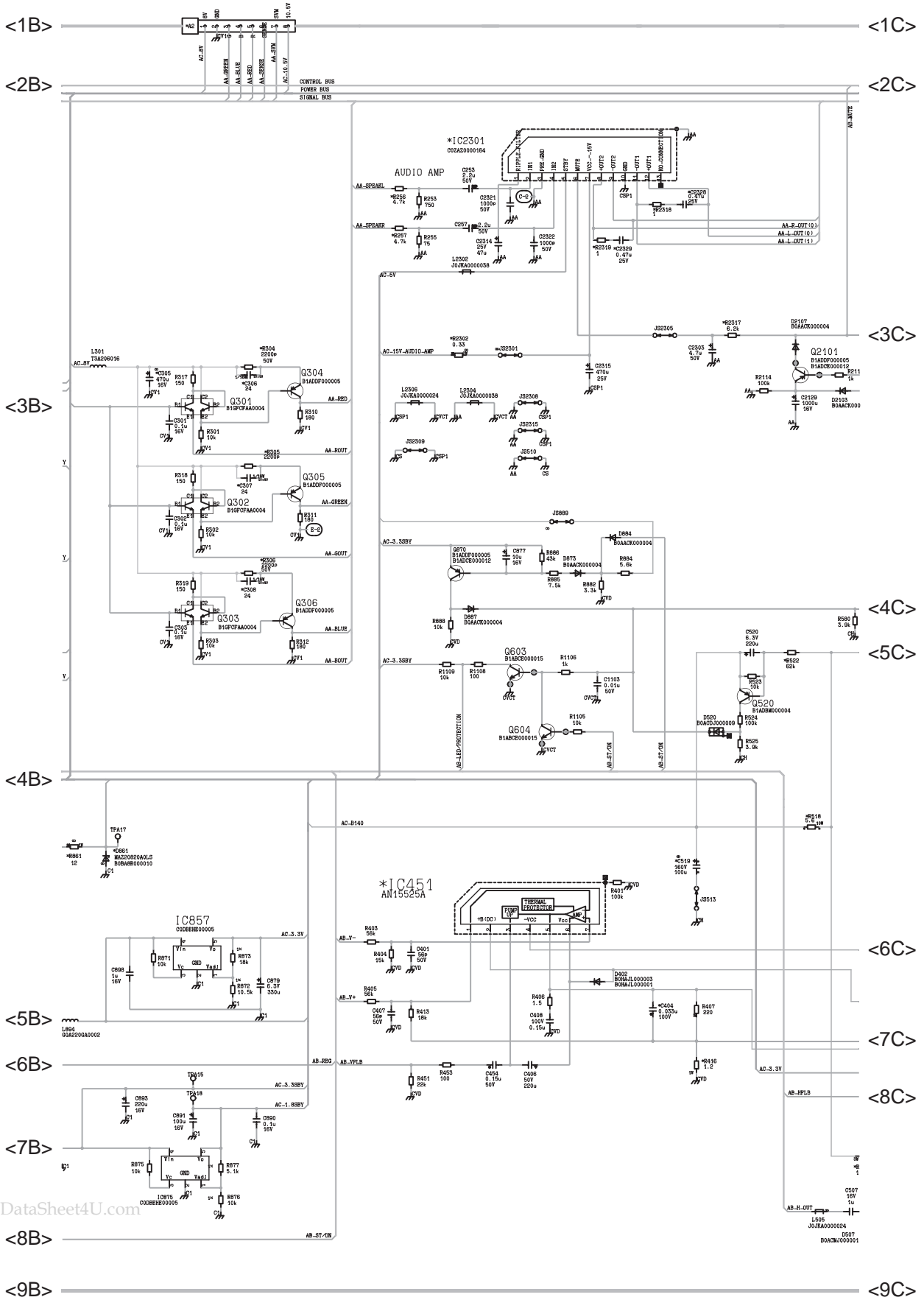
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### 6.2.2. A Board (2/5)



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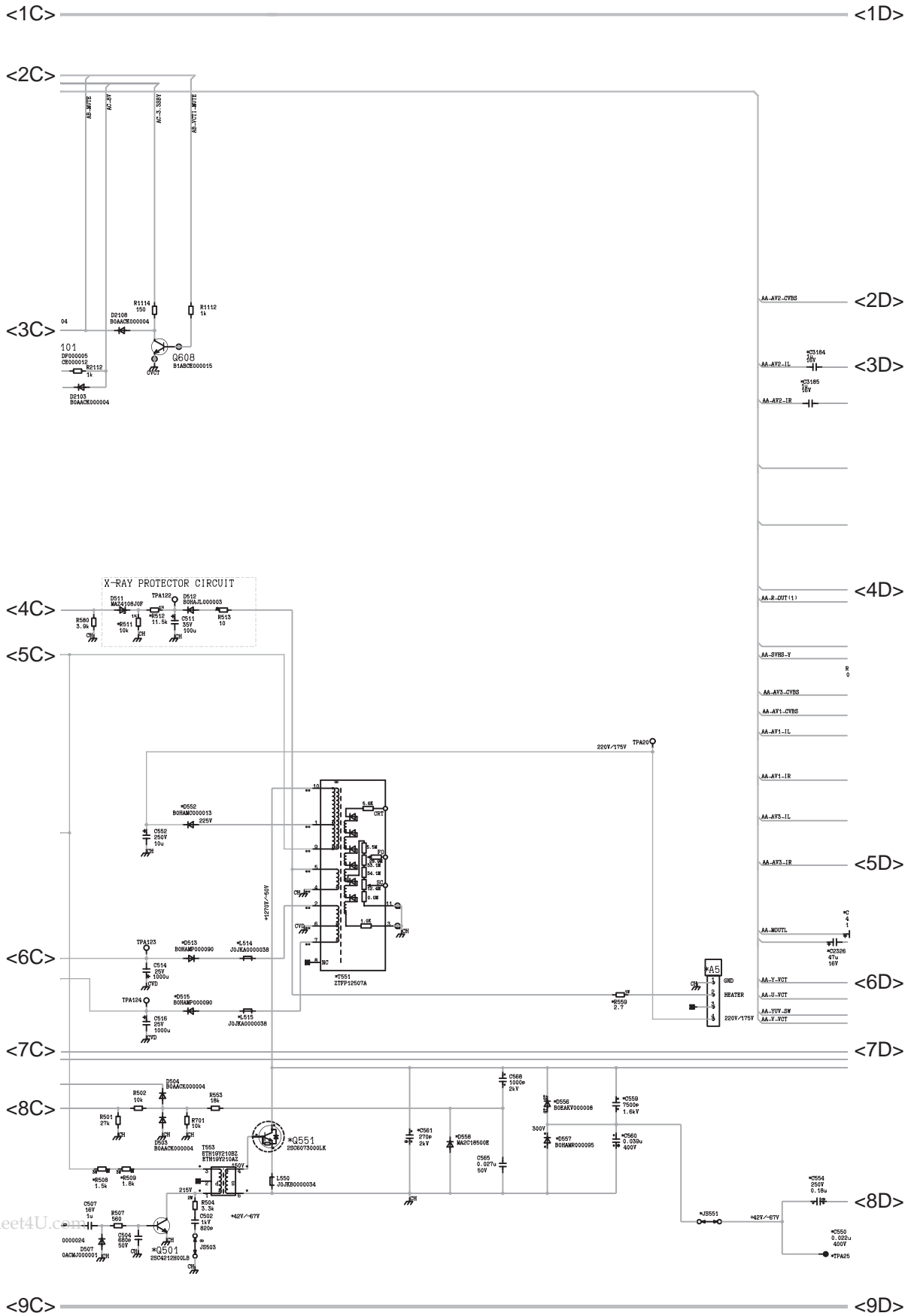
### 6.2.3. A Board (3/5)



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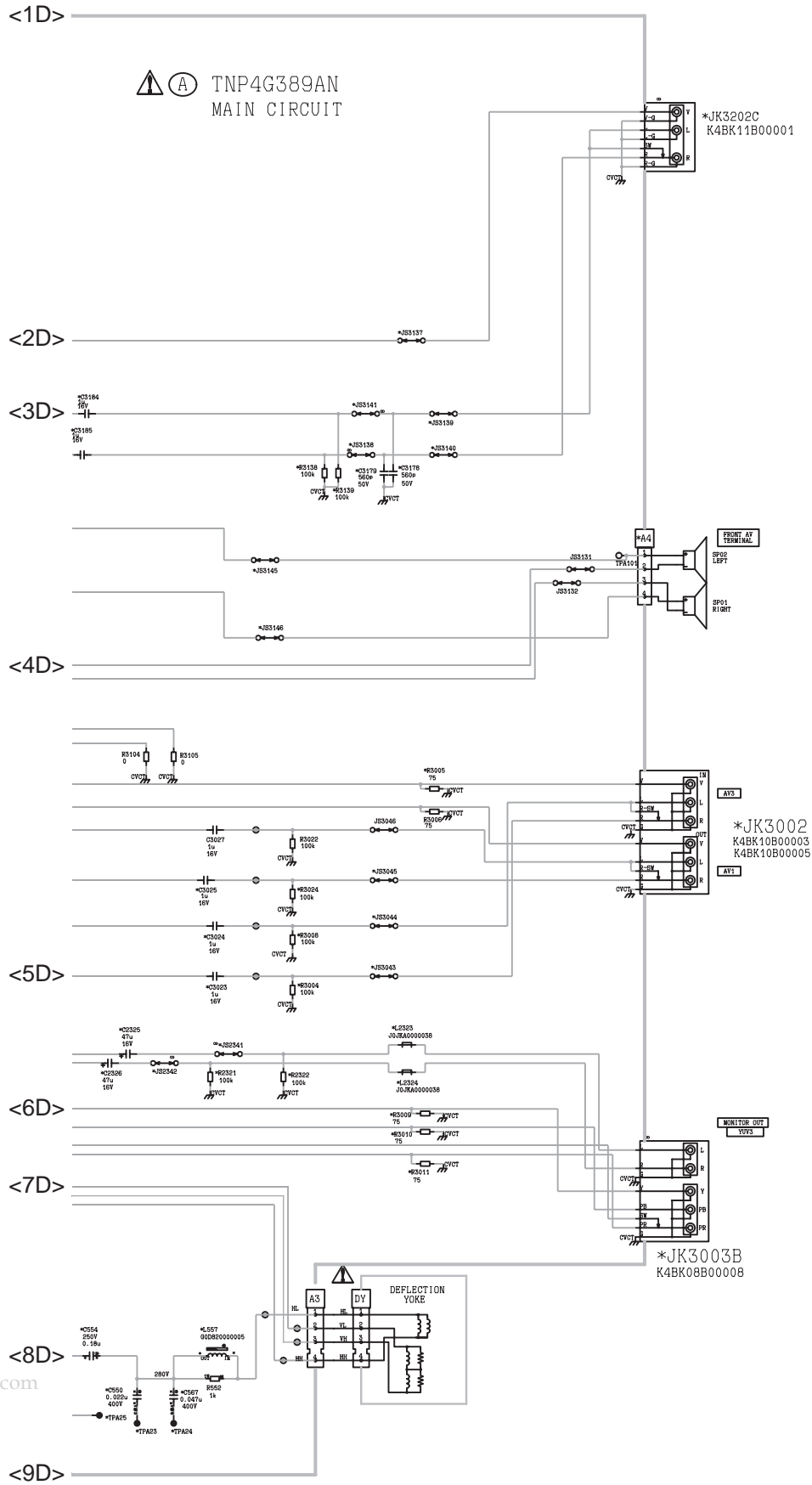


6.2.4. A Board (4/5)



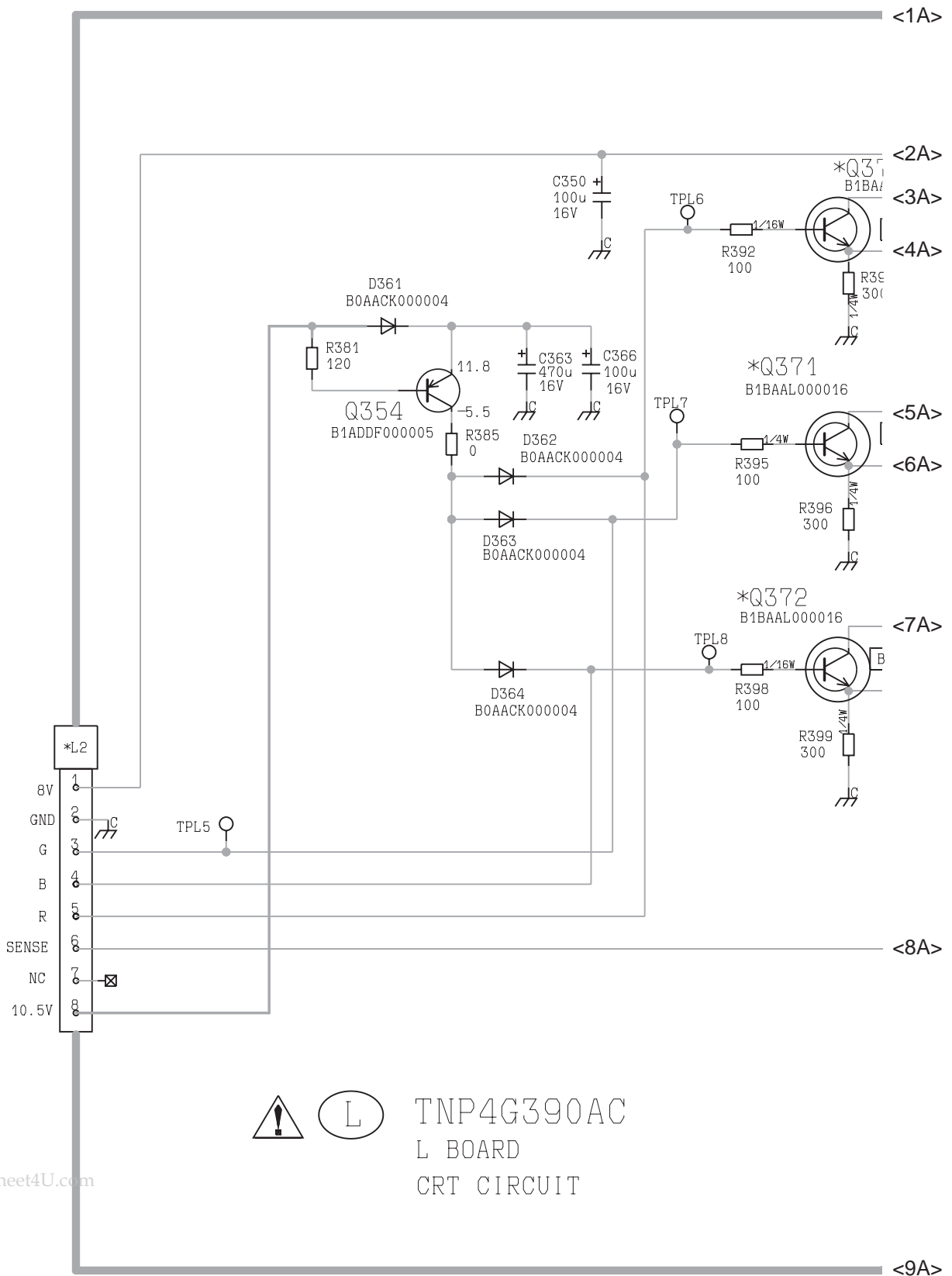
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### 6.2.5. A Board (5/5)

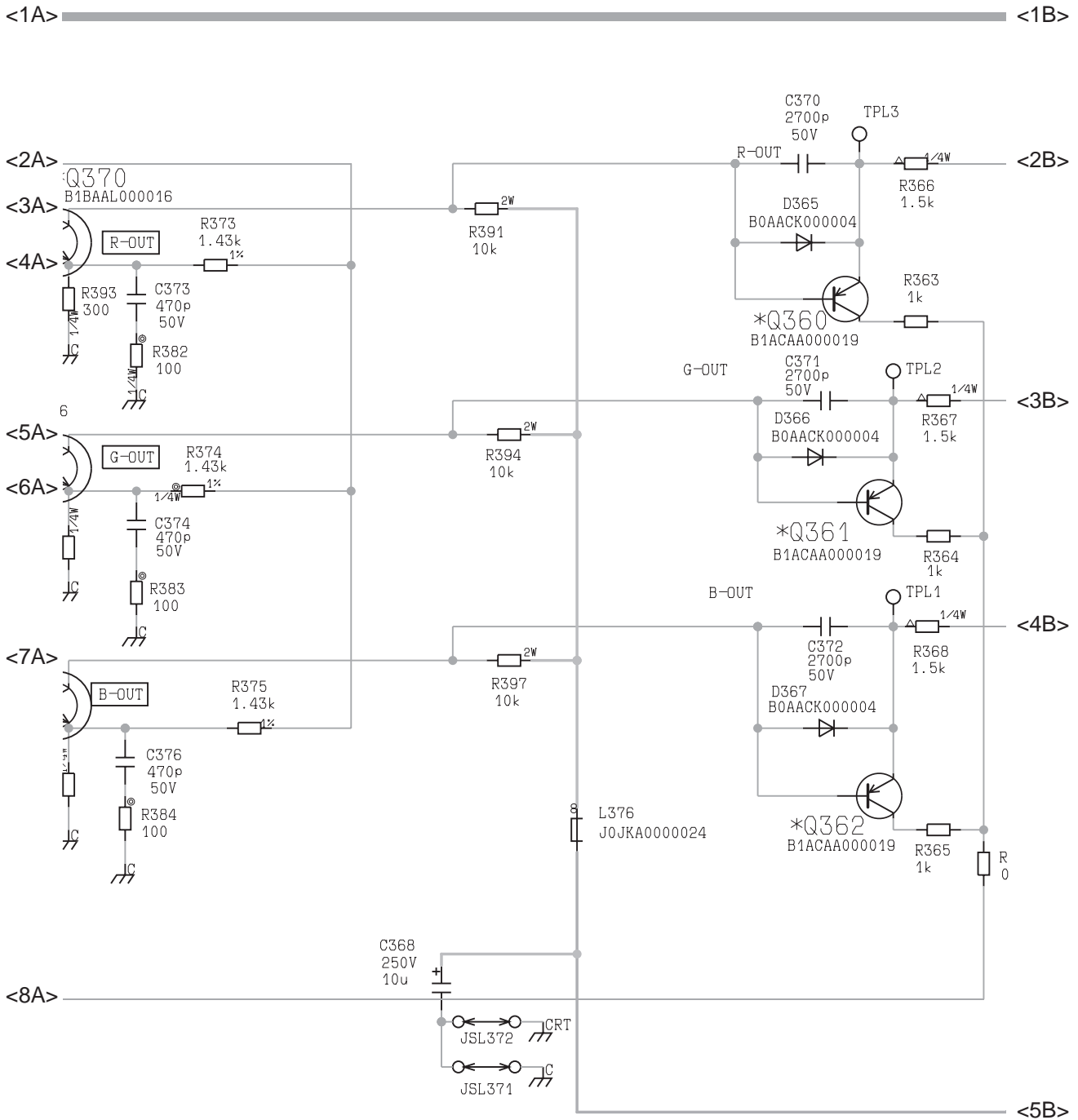


### 6.3. L Board

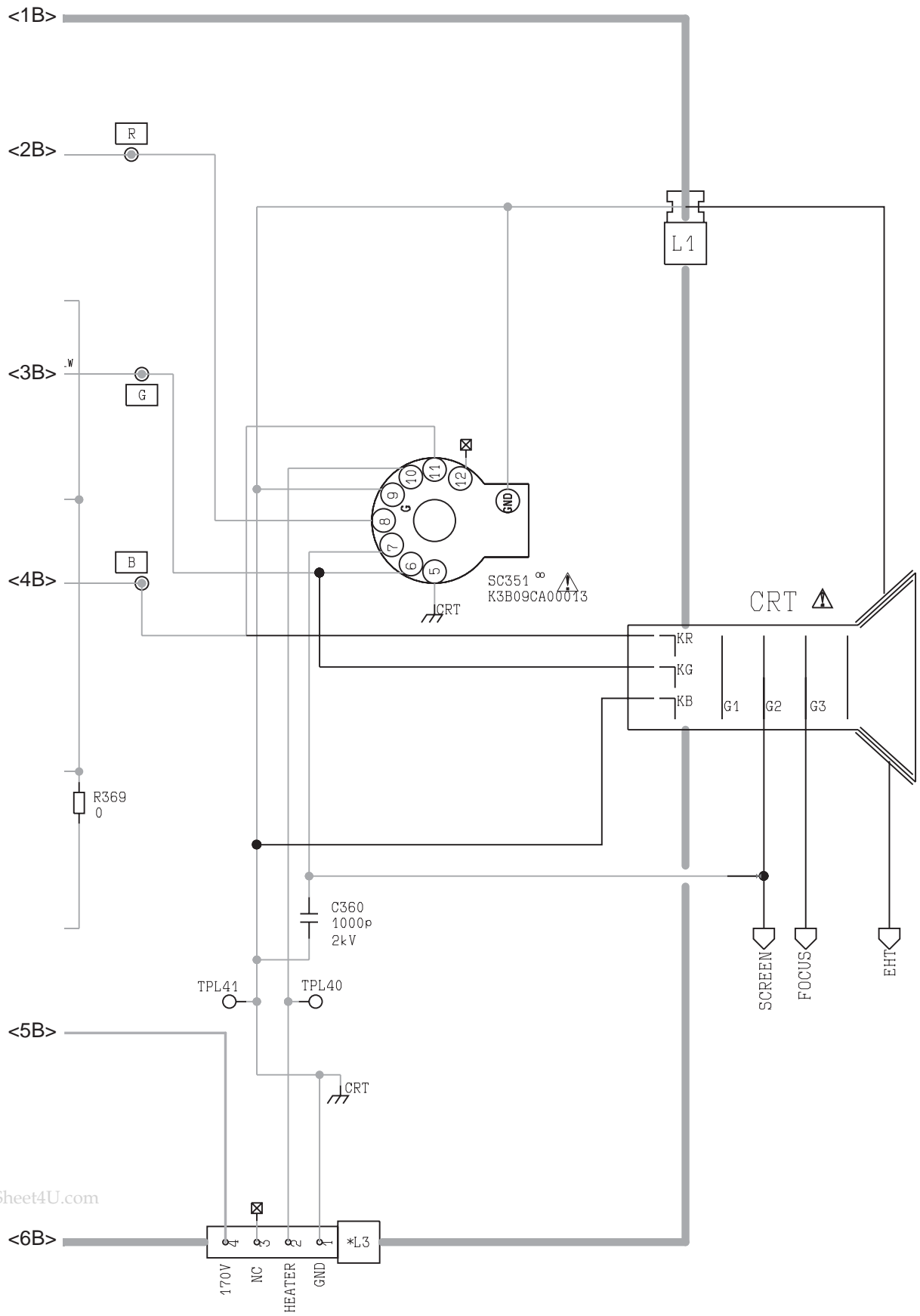
#### 6.3.1. L Board (1/3)



### 6.3.2. L Board (2/3)



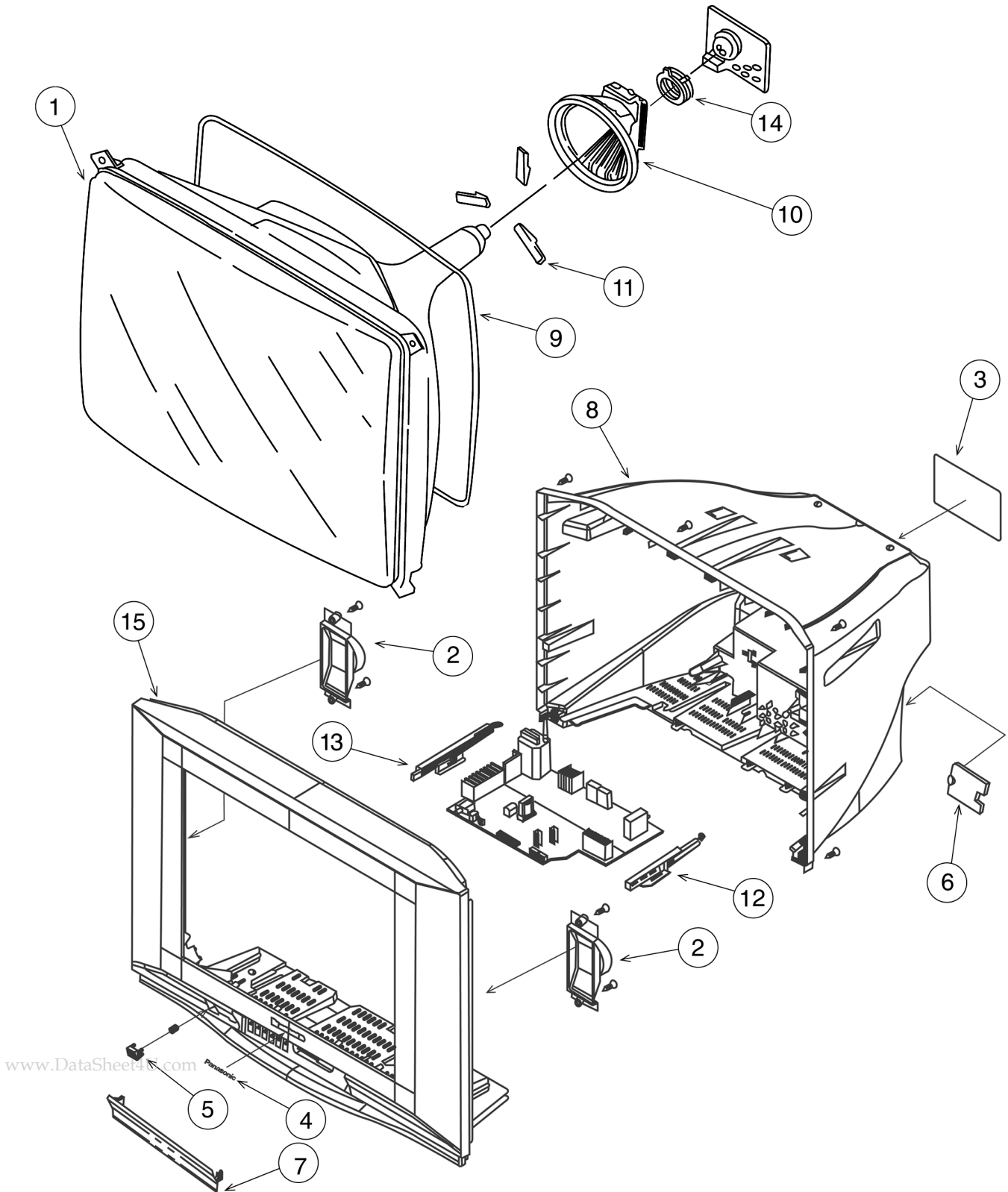
6.3.3. L Board (3/3)



# 7 Parts Locations

## PARTS LOCATION

Note: The number on mechanical parts indicates Ref. No. of Replacement Parts List.



## 8 Replacement Parts List

### 8.1. Replacement Parts List Notes

#### Important Safety Notice

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

#### RTL (Retention Time Limited)

**Note:** Printed circuit board assembly with "NLA" is no longer available after production discontinuation of the complete set.

Abbreviation of part name and description

#### 1. Resistor

Example:

ERD25TJ104     $\underline{C}$  100KOHM,  $\underline{J}$ , 1/4W  
                                 Type                  Allowance

Type	Allowance
C : Carbon	F : $\pm 1\%$
F : Fuse	G : $\pm 2\%$
M : Metal Oxide Metal Film	J : $\pm 5\%$
S : Solid	K : $\pm 10\%$
W : Wire Wound	M : $\pm 20\%$

#### 2. Capacitor

Example:

ECKF1H103ZF     $\underline{C}$  0.01UF,  $\underline{Z}$ , 50V  
                                 Type                  Allowance

Type	Allowance
C : Ceramic	C : $\pm 0.25\text{pF}$
E : Electrolytic	D : $\pm 0.5\text{pF}$
P : Polyester	F : $\pm 1\text{pF}$
Polypropylene	G : $\pm 3\text{pF}$
T : Tantalum	J : $\pm 5\text{pF}$
	K : $\pm 10\text{pF}$
	L : $\pm 15\text{pF}$
	M : $\pm 20\text{pF}$
	P : +100%, -0%
	Z : +80%, -20%

## 8.2. Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
1	A51LYZ295X	PICTURE TUBE	△
2	EASG15S02H2	SPEAKER	
	EUR7717050	REMOTE CONTROL	
3	TBM4G1374	MODEL NAME PLATE	△
4	TBM4G3017	PANASONIC BADGE	
5	TBX4G90411	POWER BUTTON	
	TES4G206	COIL SPRING	
	TES4G214	SPRING (POWER BUTTON)	
	TES4G409-1	SPRING (DOOR)	
	THT4G10139	SCREW	
	THT4G1014J	SCREW	
	TKK4G8603	SPEAKER BRACKET	
6	TKP4G11744	AC CORD BRACKET	
7	TKP4G13291	DOOR	
8	TKU4GA2600	BACK COVER	
9	TLK4G9093X	DEGAUSSING COIL	△
10	TLY4G348T	DEFLECTION YOKE	△
11	TMM4G503	RUBBER WEDGE	
	TMM4G904	RUBBER WASHER	
12	TMZ4G9818-1	CHASSIS RAIL (L)	
13	TMZ4G9824	CHASSIS RAIL (R)	
NLA	TNP4G389AN	A BOARD	△
NLA	TNP4G390AC	L BOARD	△
14	TP-5400PW	CONVERGENCE YOKE	
	TPE4G14003	LAMI BAG	
	TPE4G14025	SET COVER	
	TQB4G5057	FAN BAG	
	TSMA011	MAGNET	
	TSN63115-4	PURITY MAGNET	
	TSX4G201L-1	AC POWER CORD	△
15	TXFKY03DW15	CABINET ASSY	
	TXFPC01DW15	CARTON	
	TXFPD03CG13	CUSHION (TOP)	
	TXFPD04CG13	CUSHION (BOTTOM)	
		CAPACITORS	
C002	ECJ1VFLH103Z	C 0.01UF, Z, 50V	
C003	ECJ1VC1H220J	C 22PF, J, 50V	
C004	ECJ1VC1H220J	C 22PF, J, 50V	
C006	F2A1C101A310	E 100UF, 16V	
C1001	ECJ2FB0J225K	C 2.2UF, K, 6.3V	
C1103	ECJ2VB1H103K	C 0.01UF, K, 50V	
C1118	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C1131	ECJ2VB1H103K	C 0.01UF, K, 50V	
C1142	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C2113	F2A1H3R3A317	E 3.3UF, 50V	
C2117	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C2129	F2A1C102A159	E 1000UF, 16V	
C2303	F2A1H4R7A317	E 4.7UF, 50V	
C2314	F2A1E470A270	E 47UF, 25V	
C2315	ECA1EM471B	E 470UF, 25V	
C2321	ECJ2VB1H102J	C 1000PF, 50V	
C2322	ECJ2VB1H102J	C 1000PF, 50V	
C2325	F2A1C470A310	E 47UF, 16V	
C2326	F2A1C470A310	E 47UF, 16V	
C2328	FLJ1E474A101	C 0.47UF, 25V	
C2329	FLJ1E474A101	C 0.47UF, 25V	
C253	ECEA1HN2R2U	E 2.2UF, 50V	
C254	ECJ2VB1H102J	C 1000PF, 50V	
C257	ECEA1HN2R2U	E 2.2UF, 50V	
C258	ECJ2VB1H102J	C 1000PF, 50V	
C301	ECJ2VB1C104K	C 0.1UF, K, 16V	
C302	ECJ2VB1C104K	C 0.1UF, K, 16V	
C3023	ECJ1VFLC105Z	C 10UF, Z, 16V	
C3024	ECJ1VFLC105Z	C 10UF, Z, 16V	
C3025	ECJ1VFLC105Z	C 10UF, Z, 16V	
C3027	ECJ1VFLC105Z	C 10UF, Z, 16V	
C303	ECJ2VB1C104K	C 0.1UF, K, 16V	
C305	F2A1C4710045	E 470UF, 16V	
C306	ERJ6GEYJ240	F 24PF, J, 1/16W	
C307	ERJ6GEYJ240	F 24PF, J, 1/16W	
C308	ERJ6GEYJ240	F 24PF, J, 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
C3178	ECJ1VC1H561J	C 560PF, J, 50V	
C3179	ECJ1VC1H561J	C 560PF, J, 50V	
C3184	ECJ1VFLC105Z	C 1UF, Z, 16V	
C3185	ECJ1VFLC105Z	C 1UF, Z, 16V	
C350	ECA1CM101B	E 100UF, 16V	
C360	ECKW3D102KBP	C 1000PF, K, 2KV	
C363	F2A1C4710045	E 470UF, 16V	
C366	F2A1C101A310	E 100UF, 16V	
C368	ECA2EM100B	E 10UF, 250V	
C370	ECJ2VB1H272K	C 2700PF, K, 50V	
C371	ECJ2VB1H272K	C 2700PF, K, 50V	
C372	ECJ2VB1H272K	C 2700PF, K, 50V	
C373	ECJ1VC1H471J	C 470PF, J, 50V	
C374	ECJ1VC1H471J	C 470PF, J, 50V	
C376	ECJ1VC1H471J	C 470PF, J, 50V	
C401	ECJ1VC1H560J	C 56PF, J, 50V	
C404	ECQB1333JF	P 0.033UF, J, 100V	
C406	F2A1H221A247	E 220UF, 50V	
C407	ECJ1VC1H560J	C 56PF, J, 50V	
C408	ECQB1154JF	P 0.15UF, J, 100V	
C454	ECQV1H154JM	P 0.15UF, J, 50V	
C502	ECKR3A821KBP	C 820PF, K, 1KV	
C504	ECJ2VB1H681K	C 680PF, K, 50V	
C507	ECJ1VFLC105Z	C 1UF, K, 16V	
C511	ECA1VM101B	E 100UF, 35V	
C514	F2A1E102A225	E 1000UF, 25V	
C516	F2A1E102A225	E 1000UF, 25V	
C519	F2A2C1010015	E 100UF, 160V	
C520	F2A0J221A317	E 220UF, 6.3V	
C550	ECQM4223JZ	P 0.022UF, J, 400V	
C552	ECA2EM100B	E 10UF, 250V	
C554	F0C2E184A039	P 0.18UF, 250V	
C559	F0C3C752A002	P 7500PF, 1.6kV	
C560	ECQM4393JZ	P 0.039UF, J, 400V	
C561	ECKW3D271JBR	C 270PF, J, 2kV	
C565	F0A1H273A039	CAPACITOR	
C567	ECQM4473JZ	P 0.047UF, J, 400V	
C568	F0C3D102A003	C 0.027UF, 50V	
C601	ECJ2VB1H183K	C 0.018UF, K, 50V	
C602	ECJ1VB1H222K	C 2200PF, K, 50V	
C604	F2A1C101A310	E 100UF, 16V	
C606	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C607	ECJ1VFLH103Z	C 0.01UF, Z, 50V	
C611	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C613	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C614	ECJ1VC1H100C	C 10PF, C, 50V	
C615	ECJ1VC1H100C	C 10PF, C, 50V	
C618	F2A1C101A310	E 100UF, 16V	
C619	F2A1C101A310	E 100UF, 16V	
C620	ECJ1VB1H333K	C 0.033UF, K, 50V	
C622	F2A1C101A310	E 100UF, 16V	
C623	F2A1C101A310	E 100UF, 16V	
C626	F2A1C101A310	E 100UF, 16V	
C627	F2A1C101A310	E 100UF, 16V	
C628	F2A1A471A274	E 470UF, 10V	
C630	ECJ1VFLH103Z	C 0.01UF, Z, 50V	
C631	ECJ1VB1H333K	C 0.033UF, K, 50V	
C632	F2A1H4R7A317	E 4.7UF, 50V	
C633	ECJ1VC1H471J	C 470PF, J, 50V	
C634	ECJ1VC1H471J	C 470PF, J, 50V	
C635	F2A1C101A310	E 100UF, 16V	
C639	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C640	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C642	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C645	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C646	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C652	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C654	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C655	ECJ1VFLH104Z	C 0.1UF, Z, 50V	
C656	ECJ1VC1H270J	C 27PF, J, 50V	
C657	ECJ1VC1H560J	C 56PF, J, 50V	



Ref. No.	Part No.	Part Name & Description	Remarks
C662	F2A0J101A317	E 100UF, 6.3V	
C665	ECJ1VC1H150J	C 15PF, J, 50V	
C666	ECJ1VC1H150J	C 15PF, J, 50V	
C667	ECJ1VC1H180J	C 18PF, J, 50V	
C668	ECJ1VC1H180J	C 18PF, J, 50V	
C816	F0CAF2240003	CAP 250VAC 0.22UF	
C818	F2A1H1R0A317	E 1UF, 50V	
C821	ECKW3D561KBP	C 560PF, K, 2KV	
C826	F0A1H103A039	CAPACITOR	
C827	ECQB1H473JF	P 0.047UF, J, 50V	
C830	ECQB1H821KF	P 820PF, J, 50V	
C840	FLA2E471A002	C 470pF, 250V	
C841	ECKW3D151KBR	C 150PF, 2kV	
C842	F2A1H1000084	E 10UF, 50V	
C843	F2A1E102A223	E 1000UF, 25V	
C848	ECQB1H471JF	P 470PF, J, 50V	
C849	FLB2H471A025	C 470PF, 500V	
C851	F0A1H103A039	C 2200PF, 50V	
C856	F2B2E3310006	ELECTROLYTIC CAPACITOR	
C857	ECQM4473JZ	P 0.047UF, J, 400V	
C859	ECKW3D821KBP	C 820PF, K, 2KV	
C865	ECKW3D331JBP	C 330PF, J, 2KV	
C867	F2A2C2210013	E 220UF, 160V	
C869	ECJ2VB1E563K	C 0.056UF, K, 25V	
C870	F2A1C332A260	E 3300UF, 16V	
C871	FLB2H471A025	C 470PF, 500V	
C872	F2A1C222A117	E 2200UF, 16V	
C873	L6Y5P4B122K	C 1200PF, K, 500V	
C875	ECJ2VB1H332K	C 3300PF, K, 50V	
C877	F2A1C1000079	E 10UF, 16V	
C879	F2A0J331A260	E 330UF, 6.3V	
C882	F2A1C101A310	E 100UF, 16V	
C884	F2A1C102A159	E 1000UF, 16V	
C886	F2A1H330A342	E 33UF, 50V	
C887	F2A1C102A159	E 1000UF, 16V	
C890	ECQB1H104KF	P 0.1UF, K, 50V	
C891	F2A1C101A310	E 100UF, 16V	
C893	ECA1CM221B	E 220UF, 16V	
C897	ECJ2VB1H332K	C 3300PF, K, 50V	
C898	ECJ1VF1C105Z	C 1UF, Z, 16V	
	DIODES		
D1010	B3AGA0000089	DIODE	
D1132	BOBA3R800012	DIODE	
D2103	BOAACK000004	DIODE	
D2107	BOAACK000004	DIODE	
D2108	BOAACK000004	DIODE	
D361	BOAACK000004	DIODE	
D362	BOAACK000004	DIODE	
D363	BOAACK000004	DIODE	
D364	BOAACK000004	DIODE	
D365	BOAACK000004	DIODE	
D366	BOAACK000004	DIODE	
D367	BOAACK000004	DIODE	
D402	BOHAJL000003	DIODE	
D503	BOAACK000004	DIODE	
D504	BOAACK000004	DIODE	
D507	BOACMF000001	DIODE	
D511	MA4108J	DIODE	
D512	BOHAJL000003	DIODE	
D513	BOHAMP000090	DIODE	
D515	BOHAMP000090	DIODE	
D520	BOACDJ000009	DIODE	
D552	EU02	DIODE	
D556	ERB06-15	DIODE	
D557	BOHAMR000095	DIODE	
D558	MA185	DIODE	
D601	BOADDJ000025	DIODE	
D610	MAZ80560HL	DIODE	
D670	MA2S72800L	DIODE	
D671	MA2S72800L	DIODE	
D683	MA2S72800L	DIODE	
D684	MA2S72800L	DIODE	
D830	BOHAJL000001	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D831	BOBA02700033	DIODE	
D837	BOACK000012	DIODE	
D846	BOBA8R000010	DIODE	
D847	BOBA8R000010	DIODE	
D848	FMLG12S	DIODE	
D851	BOEAKT000018	DIODE	
D852	BOHAJL000003	DIODE	
D853	BOAACK000004	DIODE	
D854	BOAACK000004	DIODE	
D855	BOBA6R800023	DIODE	
D860	BOEBMR000003	DIODE	
D861	MAZ20820A0LS	DIODE	
D862	MTZJ2.0B	ZENER DIODE	
D863	BOHAJL000003	DIODE	
D865	BOBA3R500008	DIODE	
D866	BOHARR000010	DIODE	
D867	BOJAME000058	DIODE	
D872	BOJAPK000011	DIODE	
D873	BOAACK000004	DIODE	
D876	BOAACK000004	DIODE	
D881	BOBA01500052	DIODE	
D882	BOBA01500052	DIODE	
D883	BOJAPK000013	DIODE	
D884	BOAACK000004	DIODE	
D887	BOAACK000004	DIODE	
	INTEDGRATED CIRCUITS		
IC1101	TVR4GAS527	EEPROM IC	
IC2301	COZAZ0000164	IC	
IC451	AN15525A	IC	
IC601	TVR4G20-6	FLASH MEMORY IC	
IC605	COZAZ0000162	IC	
IC801	C5HABZZ00131	IC, HYBRID	△
IC802	COEAS0000026	IC	
IC851	CODAEJG00001	IC, POWER SUPPLY	
IC857	CODBEHE00005	IC, POWER SUPPLY	
IC860	B3PAA0000363	PHOTO COUPLER	△
IC871	CODAEJG00001	IC, POWER SUPPLY	
IC875	CODBEHE00005	IC, POWER SUPPLY	
	COILS		
L002	G0C100K00008	COIL	
L003	G0C4R7JA0055	PEAKING COIL	
L2302	J0JKA0000038	BEAD CORE	
L2304	J0JKA0000038	BEAD CORE	
L2306	J0JKA0000024	EMI FILTER	
L2323	J0JKA0000038	BEAD CORE	
L2324	J0JKA0000038	BEAD CORE	
L376	J0JKA0000024	EMI FILTER	
L412	J0JKA0000024	EMI FILTER	
L505	J0JKA0000024	EMI FILTER	
L514	J0JKA0000038	BEAD CORE	
L515	J0JKA0000038	BEAD CORE	
L550	J0JKB0000034	EMI FILTER	
L557	G0D82000005	LINEARITY COIL	
L601	G0C100K00008	COIL	
L602	G0C100K00008	COIL	
L603	G0C100K00008	COIL	
L604	G0C100K00008	COIL	
L605	TALV35VB8R2K	PEAKING COIL	
L606	G0C100K00008	COIL	
L607	TALV35VB8R2K	PEAKING COIL	
L608	G0C3R9KA0030	PEAKING COIL	
L609	J0JKB0000034	EMI FILTER	
L611	G0C100K00008	COIL	
L625	J0JKA0000038	BEAD CORE	
L630	TSK1032	BEAD CORE	
L635	TSK1032	BEAD CORE	
L657	EXC3BB221H	CHIP BEAD CORE	
L842	J0JKA0000025	BEAD CORE	
L843	J0JKA0000038	BEAD CORE	
L845	J0JKA0000023	BEAD CORE	
L865	J0JKA0000025	BEAD CORE	
L866	J0JKA0000023	BEAD CORE	

Ref. No.	Part No.	Part Name & Description	Remarks
L867	J0JKB0000039	EMI FILTER	
L869	J0JKA0000038	BEAD CORE	
L894	G0A220GA0002	CHOKE COIL	
	TRANSISTORS		
Q1001	B1ADDF000005	TRANSISTOR	
Q1002	B1ADDF000005	TRANSISTOR	
Q1062	B1ABCE000015	TRANSISTOR	
Q2101	B1ADDF000005	TRANSISTOR	
Q301	B1GFCFAA0004	TRANSISTOR	
Q302	B1GFCFAA0004	TRANSISTOR	
Q303	B1GFCFAA0004	TRANSISTOR	
Q304	B1ADDF000005	TRANSISTOR	
Q305	B1ADDF000005	TRANSISTOR	
Q306	B1ADDF000005	TRANSISTOR	
Q354	B1ADDF000005	TRANSISTOR	
Q360	B1ACAA000019	TRANSISTOR	
Q361	B1ACAA000019	TRANSISTOR	
Q362	B1ACAA000019	TRANSISTOR	
Q370	B1BAAL000016	TRANSISTOR	
Q371	B1BAAL000016	TRANSISTOR	
Q372	B1BAAL000016	TRANSISTOR	
Q501	2SC4212H	TRANSISTOR	
Q520	B1ADBM000004	TRANSISTOR	
Q551	2SC6073000LK	TRANSISTOR	
Q603	B1ABCE000015	TRANSISTOR	
Q604	B1ABCE000015	TRANSISTOR	
Q608	B1ABCE000015	TRANSISTOR	
Q846	B1ABCF000176	TRANSISTOR	
Q850	B1BCCM000002	TRANSISTOR	
Q857	B1BAAN000037	TRANSISTOR	
Q870	B1ADDF000005	TRANSISTOR	
	RESISTORS		
R005	ERJ6GEYJ512	M 5.1KOHM,J,1/10W	
R006	ERJ6GEYJ473	M 47KOHM,J,1/10W	
R007	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	
R008	ERJ6GEYJ101	M 100OHM,J,1/10W	
R009	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1004	ERJ6GEYJ470	M 47OHM,J,1/10W	
R1005	ERJ6GEYJ621	M 620OHM,J,1/10W	
R1006	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	
R1007	ERJ6GEYJ121	M 120OHM,J,1/10W	
R1008	ERJ6GEYJ152	M 1.5KOHM,J,1/10W	
R1021	ERJ3EKF2211	M2.21KOHM,F,1/16W	
R1022	ERJ3EKF3241	M3.24KOHM,F,1/16W	
R1023	ERJ3EKF5111	M5.11KOHM,F,1/16W	
R1024	ERJ3EKF9091	M9.09KOHM,F,1/16W	
R1025	ERJ3EKF2152	M21.5KOHM,F,1/16W	
R1033	ERJ3EKF2321	M2.32KOHM,F,1/16W	
R1062	ERDS2TJ102	C 1KOHM,J, 1/4W	
R1105	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R1106	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R1108	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1109	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R1112	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R1114	ERJ6GEYJ151	M 150OHM,J,1/10W	
R1115	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1131	ERJ6GEYJ220	M 22OHM,J,1/10W	
R1132	ERJ6GEYJ220	M 22OHM,J,1/10W	
R1140	ER0S2CKF1002	M 10KOHM,F, 1/4W	
R1142	ERJ3EKF1001	M 1KOHM,F,1/16W	
R1150	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1201	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R1202	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R1228	ERJ6GEYJ101	M 100OHM,J,1/10W	
R1229	ERJ6GEYJ101	M 100OHM,J,1/10W	
R2112	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R2114	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R2302	ERX2FJSR33E	M 0.33OHM,J, 2W	
R2317	ERJ6GEYJ622	M 6.2KOHM,J,1/10W	
R2318	D0AELR0JA046	C 1OHM,J,1/10W	
R2319	D0AELR0JA046	C 1OHM,J,1/10W	
R2321	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R2322	ERJ6GEYJ104	M 100KOHM,J,1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R253	ERJ6GEYJ751	M 750OHM,J,1/10W	
R255	ERJ6GEYJ751	M 750OHM,J,1/10W	
R256	ERDS2TJ472	C 4.7KOHM,J, 1/4W	
R257	ERDS2TJ472	C 4.7KOHM,J, 1/4W	
R3004	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R3005	ERJ6GEYJ750	M 75OHM, 1/10W	
R3006	ERJ6GEYJ750	M 75OHM, 1/10W	
R3008	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R3009	ERJ6GEYJ750	M 75OHM, 1/10W	
R301	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R3010	ERJ6GEYJ750	M 75OHM, 1/10W	
R3011	ERJ6GEYJ750	M 75OHM, 1/10W	
R302	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R3022	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R3024	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R303	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R304	ECJ1VB1H222K	C 2200PF, K, 50V	
R305	ECJ1VB1H222K	C 2200PF, K, 50V	
R306	ECJ1VB1H222K	C 2200PF, K, 50V	
R310	D0AEL181JA046	C 180OHM,J, 1/4W	
R3101	ERDS2TJ470	C 47OHM,J, 1/4W	
R3102	ERDS2TJ470	C 47OHM,J, 1/4W	
R3104	ERJ3GEY0R00	M 0OHM,J,1/16W	
R3105	ERJ3GEY0R00	M 0OHM,J,1/16W	
R311	D0AEL181JA046	C 180OHM,J, 1/4W	
R312	D0AEL181JA046	C 180OHM,J, 1/4W	
R3138	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R3139	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R317	ERJ6GEYJ151	M 150OHM,J,1/10W	
R318	ERJ6GEYJ151	M 150OHM,J,1/10W	
R319	ERJ6GEYJ151	M 150OHM,J,1/10W	
R363	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R364	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R365	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R366	ERC14GK152	S 1.5KOHM,J,1/4W	
R367	ERC14GK152	S 1.5KOHM,J,1/4W	
R368	ERC14GK152	S 1.5KOHM,J,1/4W	
R369	ERJ3GEY0R00	M 0OHM,J,1/16W	
R373	ERJ3EKF1431	F 1.43KOHM,J,1/10W	
R374	ER0S2CHF1431	M 1.43KOHM,J,1/10W	
R375	ERJ3EKF1431	F 1.43KOHM,J,1/10W	
R381	ERJ6GEYJ121	M 120OHM,J,1/10W	
R382	ER0S2CHF1000	M 100OHM,J,1/4W	
R383	ER0S2CHF1000	M 100OHM,J,1/4W	
R384	ER0S2CHF1000	M 100OHM,J,1/4W	
R385	ERJ3GEY0R00	M 0OHM,J,1/16W	
R391	ERG2FJ103H	M 10KOHM,J, 2W	
R392	ERJ6GEYJ101	M 100OHM,J,1/10W	
R393	D0AEL301JA046	C 300OHM,J,1/4W	
R394	ERG2FJ103H	M 10KOHM,J, 2W	
R395	ERDS2TJ101	C 100OHM,J, 1/4W	
R396	D0AEL301JA046	C 300OHM,J,1/4W	
R397	ERG2FJ103H	M 10KOHM,J, 2W	
R398	ERJ6GEYJ101	M 100OHM,J,1/10W	
R399	D0AEL301JA046	C 300OHM,J,1/4W	
R401	ERDS2TJ104	C 100KOHM,J, 1/4W	
R403	ERJ6GEYJ563	M 56KOHM,J,1/10W	
R404	ERJ6GEYJ153	M 15KOHM,J,1/10W	
R405	ERDS2TJ563	C 56KOHM,J, 1/4W	
R406	D0AELR5JA046	C 1.5OHM,J, 1/4W	
R407	ERGLS221E	M 220OHM,J, 1W	
R413	ERJ6GEYJ183	M 18KOHM,J,1/10W	
R416	ERX1SJR2E	M 1.2OHM,J, 1W	
R451	ERJ6GEYJ223	M 22KOHM,J,1/10W	
R453	ERJ6GEYJ101	M 100OHM,J,1/10W	
R501	ERJ6GEYJ273	M 27KOHM,J,1/10W	
R502	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R504	ERG2SJS332H	M 3.3KOHM,J, 2W	
R507	ERDS2TJ561	C 560OHM,J, 1/4W	
R508	ERG3FJ152H	M 1.5KOHM,J, 3W	
R509	ERG3FJ182H	M 1.8KOHM,J, 3W	
R511	ERJ3EKF1002	M 10KOHM,F,1/16W	
R512	ERJ3EKF1152	F 11.5KOHM,J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R513	ERQ14AJ100E	F 100HM,J, 1/4W	
R518	DODK5R6JA019	W 5.6OHM,J, 10W	
R522	DOAE623JA046	C 62KOHM,J, 1/4W	
R523	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R524	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R525	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	
R552	ERGLSJ102P	M 1KOHM,J, 1W	
R553	ERJ6GEYJ183	M 18KOHM,J,1/10W	
R559	DOC12R7JA042	M 2.7OHM,J, 1W	
R580	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	
R601	ERJ6GEYJ470	M 47OHM,J,1/10W	
R602	ERDS2TJ103	C 10KOHM,J, 1/4W	
R604	ERJ6GEYJ470	M 47OHM,J,1/10W	
R605	ERJ6GEYJ470	M 47OHM,J,1/10W	
R606	ERJ6GEYJ752	M 7.5KOHM,J,1/10W	
R607	ERJ6GEYJ752	M 7.5KOHM,J,1/10W	
R608	ERJ6GEYJ470	M 47OHM,J,1/10W	
R609	ERJ3GEY0R00	M 0OHM,J,1/16W	
R611	ERJ6GEYJ101	M 100OHM,J,1/10W	
R614	ERJ6GEYJ221	M 220OHM,J,1/10W	
R615	ERJ6GEYJ122	M 1.2KOHM,J,1/10W	
R616	ERJ6GEYJ563	M 56KOHM,J,1/10W	
R618	ERJ3GEY0R00	M 0OHM,J,1/16W	
R619	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R620	ERJ3EKF1002	M 10KOHM,F,1/16W	
R621	ERJ3EKF2002	M 20KOHM,F,1/16W	
R624	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R625	ERJ6GEYJ102	M 1KOHM,J,1/10W	
R626	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R627	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R628	ERJ6GEYJ823	M 82KOHM,J,1/10W	
R629	ERJ3GEY0R00	M 0OHM,J,1/16W	
R632	ERJ6GEYJ682	M 6.8KOHM,J,1/10W	
R636	ERJ6GEYJ101	M 100OHM,J,1/10W	
R638	ERJ3GEY0R00	M 0OHM,J,1/16W	
R641	ERJ3GEY0R00	M 0OHM,J,1/16W	
R643	ERJ3GEY0R00	M 0OHM,J,1/16W	
R645	ERJ6GEYJ101	M 100OHM,J,1/10W	
R647	ERJ6GEYJ750	M 75OHM, 1/10W	
R656	ERJ6GEYJ823	M 82KOHM,J,1/10W	
R658	ERDS2TJ470	C 47OHM,J, 1/4W	
R659	ERJ6GEYJ470	M 47OHM,J,1/10W	
R660	ERJ6GEYJ470	M 47OHM,J,1/10W	
R662	ERJ6GEYJ221	M 220OHM,J,1/10W	
R664	ERDS2T0T	C 0OHM, 1/4W	
R665	ERDS2T0T	C 0OHM, 1/4W	
R669	ERDS2T0T	C 0OHM, 1/4W	
R681	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R682	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R685	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R686	ERJ6GEYJ104	M 100KOHM,J,1/10W	
R701	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R824	ERX12SJR27E	M 0.27OHM,J, 1/2W	
R825	ERJ6GEYJ471	M 47OHM,J,1/10W	
R827	ERJ6GEYJ153	M 15KOHM,J,1/10W	
R829	ERJ3EKF3092	F 30.9KOHM,J,1/10W	
R830	ERDS2TJ221	C 220OHM,J, 1/4W	
R831	ERDS2TJ223	C 22KOHM,J, 1/4W	
R832	ERJ3EKF4022	M 40.2KOHM,J,1/10W	
R833	DOAE202JA046	C 2.0KOHM,J, 152V	
R834	ERG2FJ683H	M 68KOHM,J, 2W	
R836	ERGLSJ220P	M 22OHM,J, 1W	
R839	ERJ6GEYJ472	M 4.7KOHM,J,1/10W	
R840	RRC100TAJ825	C 8.2MOHM,J, 1W	
R848	ERX12SJR33E	M 0.33OHM,J, 1/2W	
R850	ERG3SJS470H	M 47OHM,J, 3W	
R852	DOAE162JA046	C 1.6KOHM,J, 152V	
R853	DOD7R68KA002	WIRE WOUND RESISTOR	
R854	ERG2FJ470H	M 47OHM,J, 2W	
R856	ERG2SJS104H	M 100KOHM,J, 2W	
R857	ERDS2TJ102	C 1KOHM,J, 1/4W	
R861	ERGLSJ120P	M 12OHM,J, 1W	
R863	ERDS2TJ101	C 100OHM,J, 1/4W	

Ref. No.	Part No.	Part Name & Description	Remarks
R864	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R866	ERJ6GEYJ392	M 3.9KOHM,J,1/10W	
R867	ERDS2TJ222	C 2.2KOHM,J, 1/4W	
R868	ERDS1TJ101	C 100OHM,J, 1/2W	
R871	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R872	ERJ3EKF1052	F 10.5KOHM,J,1/10W	
R873	ERJ3EKF1802	M 18KOHM,F,1/16W	
R875	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R876	ERJ3EKF1002	M 10KOHM,F,1/16W	
R877	ERJ3EKF5101	F 5.1KOHM,J,1/10W	
R882	ERJ6GEYJ332	M 3.3KOHM,J,1/10W	
R884	ERJ6GEYJ562	M 5.6KOHM,J,1/10W	
R885	ERJ6GEYJ752	M 7.5KOHM,J,1/10W	
R886	ERJ6GEYJ433	M 43KOHM,J,1/10W	
R887	ERGLSJ273P	M 27KOHM,J, 1W	
R888	ERJ6GEYJ103	M 10KOHM,J,1/10W	
R889	ERX3FJ3R3H	M 3.3OHM,J, 3W	
R893	ERJ3EKF5102	F 51KOHM,J,1/10W	
R894	ERJ3EKF1303	F 130KOHM,J,1/10W	
	TRANSFORMERS		
T551	ZTFP12507A	FLYBACK TRANS	△
T553	ETH19Y210BZ	H DRIVE TRANS	△
T801	ETS35AH1K6NC	SWITCHING TRANS	△
	OTHERS		
A2	K1KA13A00140	CONNECTOR	
A4	K1KA04AA0190	CONNECTOR	
A5	K1KA04AA0190	CONNECTOR	
A8	K1KA04AA0093	CONNECTOR	
CF835	TAP4GA0006	POSISTOR	△
F860	K5D502BLA016	FUSE	△
JA1	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA10	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA11	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA12	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA13	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA14	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA16	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA17	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA19	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA2	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA20	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA21	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA3	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA4	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA5	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA6	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA7	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA8	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA9	ERJ3GEY0R00	M 0OHM,J,1/16W	
JK3002	K4BK10B00003	REAR AV TERMINAL	
JK3003	K4BK08B00008	AV TERMINAL	
JK3202	K4BK11B00001	AV TERMINAL	
JS103	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS104	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS105	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS110	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2315	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2341	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS2342	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3043	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3044	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3045	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3046	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3131	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3132	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3137	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3139	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3140	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3145	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3146	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS631	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS632	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS633	ERJ3GEY0R00	M 0OHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
JS634	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS670	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS850	ERJ3GEY0R00	M 0OHM,J,1/16W	
L2	K1KA13A00140	CONNECTOR	
L3	K1KA04AA0190	CONNECTOR	
LF835	ELF15N022A	LINE FILTER	△
RL831	K6B1CDA00029	RELAY	△
RML001	B3RAD0000120	REMOCON RECEIVER	
SC351	K3B09CA00013	CRT SOCKET	△
SW1031	EVQ11G05R	SWITCH	
SW1032	EVQ11G05R	SWITCH	
SW1033	EVQ11G05R	SWITCH	
SW1034	EVQ11G05R	SWITCH	
SW1035	EVQ11G05R	SWITCH	
SW1036	EVQ11G05R	SWITCH	
SW841	K0F122A00172	SWITCH	△
TU001	ENV56K19G3F	TUNER	△
X601	H0Z202500001	CRYSTAL OSC	
XF101	J0C4400A0002	DELAY LINE	△