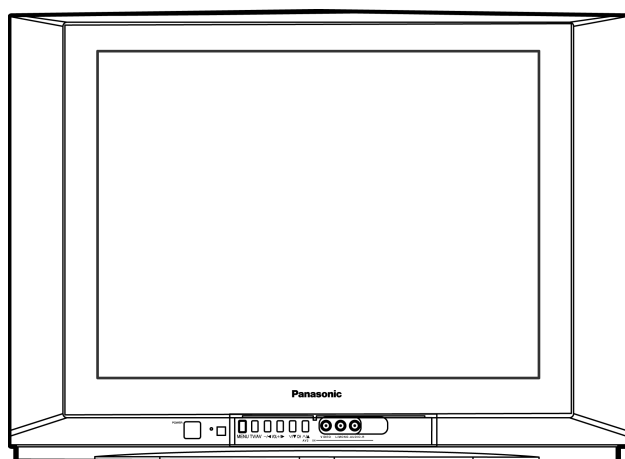


Service Manual

Colour Television



CT-F2936LC

GP41 Chassis

Specification

Power Source	AC SINGLE 110-120 V, 50/60 Hz	Y	1.0 Vp-p, 75Ω
Power Consumption	98 W	P _B	0.7 Vp-p, 75Ω
	Standby condition : 2 W	P _R	0.7 Vp-p, 75Ω
Aerial Terminal	Impedance : 75Ω, Coaxial type	AV 1, 2, 3	
Tuning System	Frequency Synthesizer	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
Receiving System	MTS STEREO		(PHONE JACK TYPE x 2)
Receiving Channels	Regular TV	High Voltage	31.0 (±1) at zero beam current
VHF BAND	2-13 (NTSC M U.S.A.)	Picture Tube	A68LZU185X-E Type 29 (67.6 cm)
UHF BAND	14-69 (NTSC M U.S.A.)		Measured diagonally,
CATV	1-125 (U.S.A. CATV)		104° deflection
Intermediate Frequency	38.0 MHz	Audio Output	16 W speaker
Video	31.5 MHz (D, K) / 32.5 MHz (B, G)	Dimensions (W x D x H)	786 mm x 512 mm x 578 mm
	32.0 MHz (I) / 32.5 MHz (M)	Weight (Mass)	43 kg (Net)
Sound	33.57 MHz (PAL) /		
Colour	33.6 MHz (SECAM)		
	34.42 MHz (NTSC) /		
	33.75 MHz (SECAM)		
Video/Audio/Terminals		Note:	Specifications are subject to change without notice. Mass and dimensions shown are approximate.
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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CONTENTS

	Page		Page
1 Safety Precautions	3	4.2. COLOUR PURITY	7
1.1. General Guide	3	4.3. CONVERGENCE	8
1.2. Leakage Current Cold Check	3	4.4. WHITE BALANCE (MARKET MODE CHK 4)	9
1.3. Leakage Current Hot Check (See Fig. 1)	3	4.5. ADJUSTMENT OF CRT VRS	10
1.4. X-Radiation	3	5 Conductor Views	11
1.5. GP41 Block Diagram	4	6 Schematic Diagrams	12
2 Service Hints	5	6.1. SCHEMATIC DIAGRAM FOR GP41 CHASSIS	12
2.1. HOW TO MOVE CHASSIS INTO SERVICE POSITION. ..	5	6.2. A Board	14
3 Market Mode Function	6	6.3. L Board	19
3.1. Service Mode Access	6	6.4. G Board	22
3.2. Service Mode 1 Controls	6	7 Parts Locations	26
3.3. Service Mode 1 Function	6	8 Replacement Parts List	27
3.4. Service Mode 2 Controls (OPTION data 1 ~ 3)	6	8.1. Replacement Parts List Notes	27
4 Adjustment Procedure	7	8.2. Replacement Parts List	28
4.1. Adjustment Procedure	7		

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.

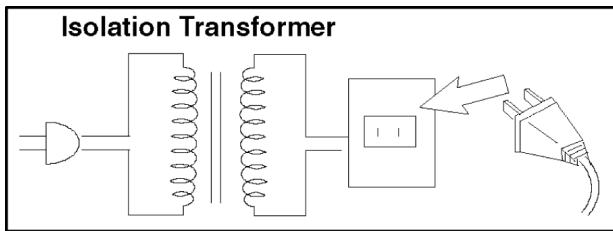


Fig. 1

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 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 **32kV** 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.

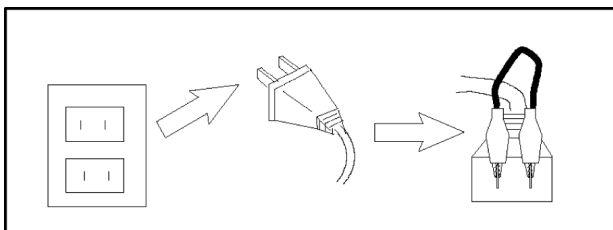


Fig. 2

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.

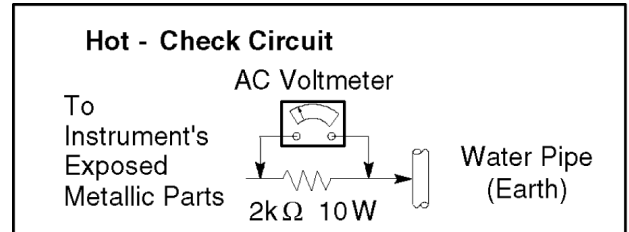


Fig. 3

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.

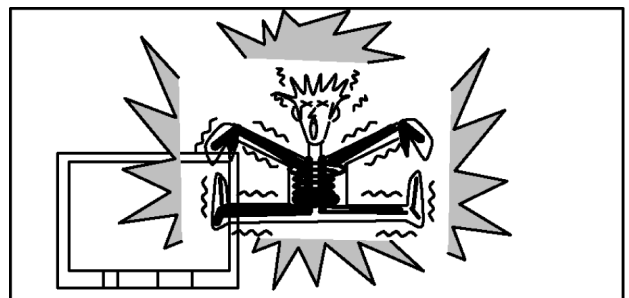


Fig. 4

1.4. X-Radiation

Warning :

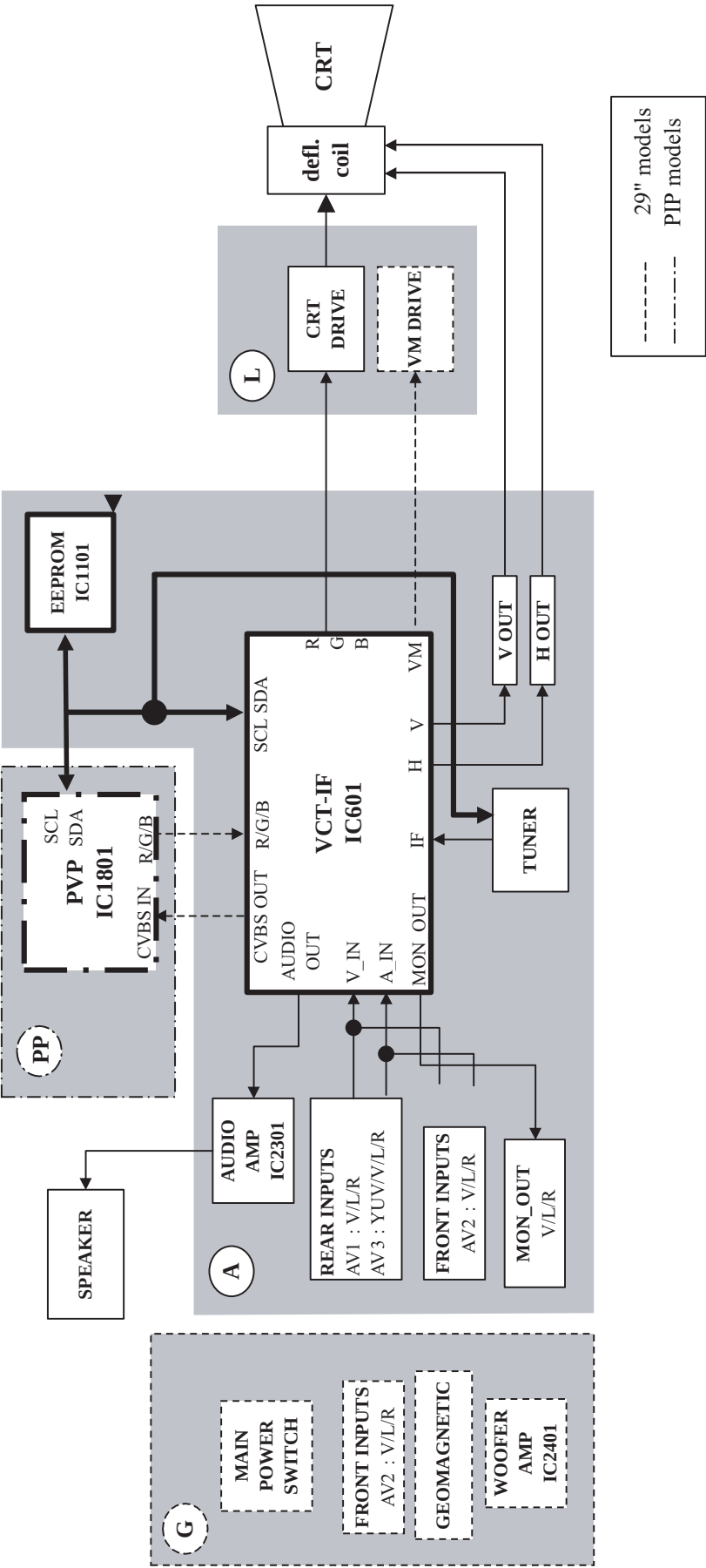
1. The potential sources of X-Radiation in TV sets are the EHT section and the picture tube.
2. When using a picture tube test rig for service, ensure that the rig is capable of handling **30 kV** without causing X-Radiation.

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 **31.0 ± 1.0kV**. 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

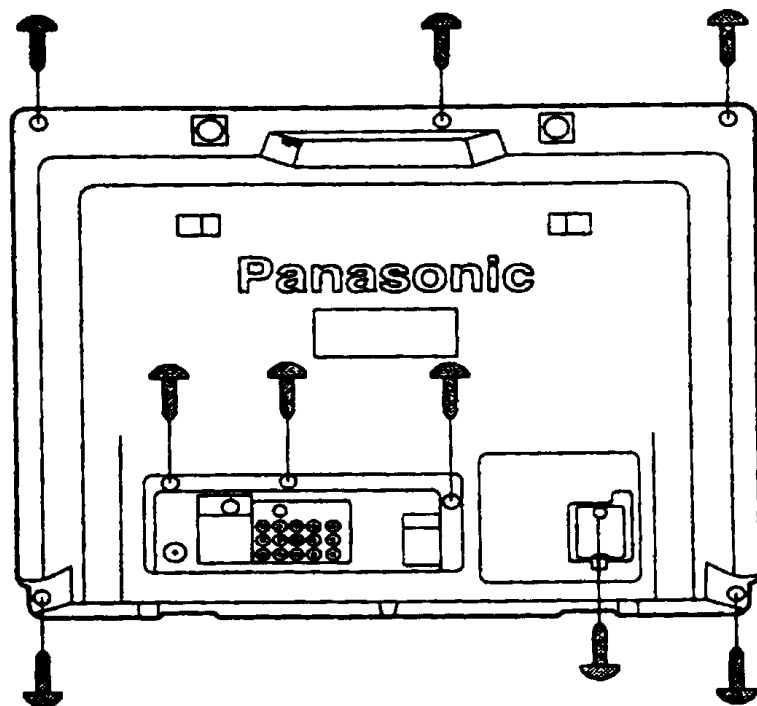
GP41 CHASSIS BLOCK DIAGRAM



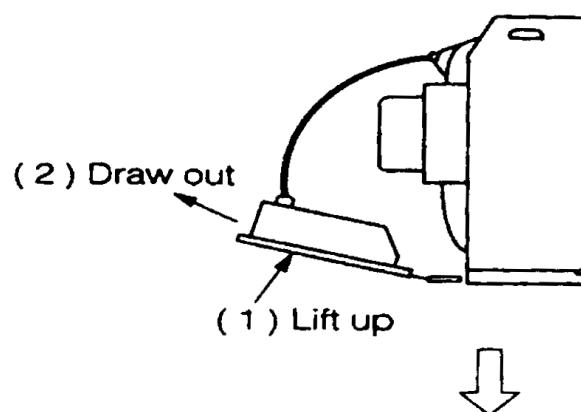
2 Service Hints

2.1. HOW TO MOVE CHASSIS INTO SERVICE POSITION.

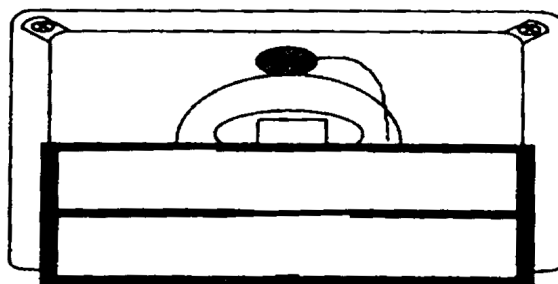
1. Remove 9 screws.



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

- | | |
|--|--|
| 1. Key 3 / 4
previous / next service 1 item | 5. Volume -
decrement of selected item |
| 2. Key 8 / 9
adjust user brightness (-/+) | 6. OK (remote)
store / save selected item |
| 3. Program up / down
program position up / down | 7. Normal (remote)
exit service mode |
| 4. Volume +
increment of selected item | |

3.3. Service Mode 1 Function

- | | |
|-----------------------------|----------------------------|
| 1. H-POS
-128~127 | 11. ANGEL
-128~127 |
| 2. V-POS
-128~127 | 12. BOW
-128~127 |
| 3. H-AMP
-128~127 | 13. DVCO
-128~127 |
| 4. V-AMP
-128~127 | 14. H-POS
-128~127 |
| 5. EW-AMP1
-128~127 | 15. G-CUT OFF
N / A |
| 6. LOW_Corner
-128~127 | 16. B-CUT OFF
0~511 |
| 7. TRAPEZ 1
-128~127 | 17. R-DRIVE
0~511 |
| 8. UPPER_Corner
-128~127 | 18. G-DRIVE
0~511 |
| 9. V-LIN
-128~127 | 19. B-DRIVE
0~511 |
| 10. V-SYM
-128~127 | 20. SUB-Bright
-128~127 |

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

- | | |
|--|--|
| 1. Key 3 / 4
previous / next service 2 item | 5. Volume -
decrement of selected item |
| 2. Key 8 / 9
toggle for options bit 0 - 7 | 6. OK (remote)
store / save selected item |
| 3. Program up / down
program position up / down | 7. Normal (remote)
exit service mode |
| 4. Volume +
increment of selected item | |

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 : $220 \pm 15V$

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 ± 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 Ω 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 ± 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.

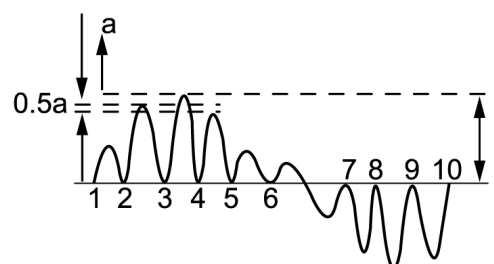
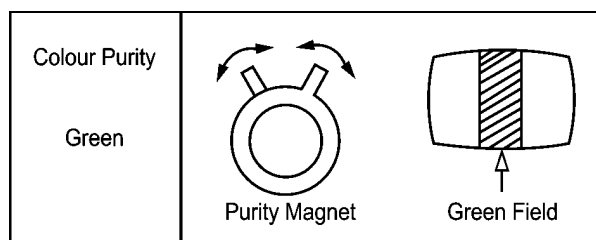
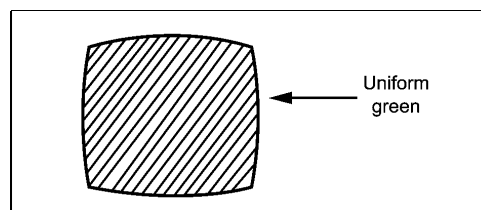


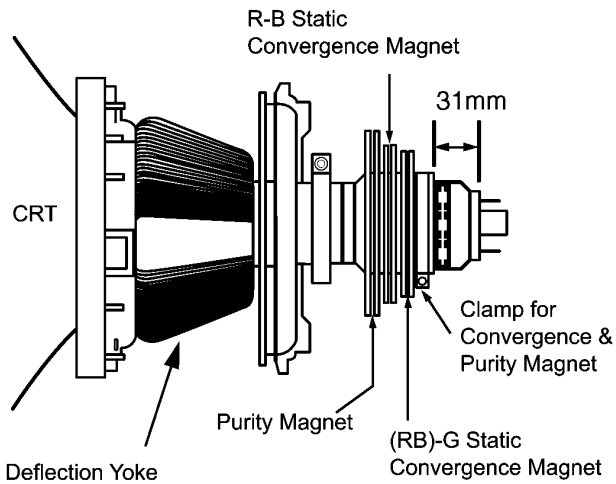
Fig. 3



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.

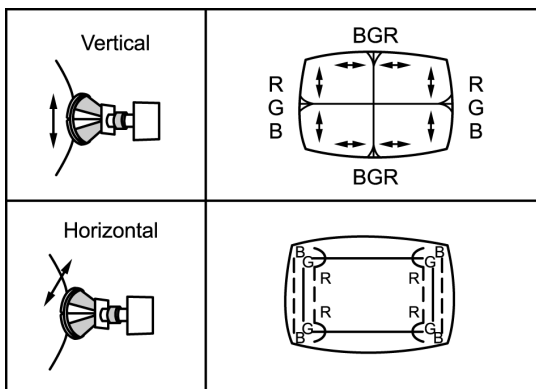


4.3. CONVERGENCE

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.

Vertical Convergence	Slide magnetic tabs toward or away from each other.
Red & Blue	R-B Static Convergence Magnet
Horizontal Convergence	Rotate both magnetic rings together.
Red & Blue	R-B Static Convergence Magnet

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 180 V as shown in Fig. 1.

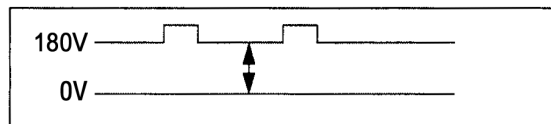
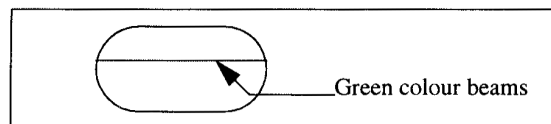


Fig. 1

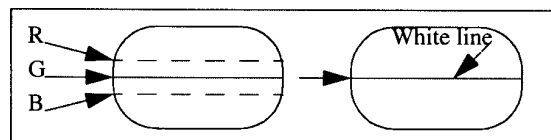
3. Slowly turn the screen control clockwise until a green colour horizontal line appears on the picture tube. This is the setting point for the screen control.

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.

Note:

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

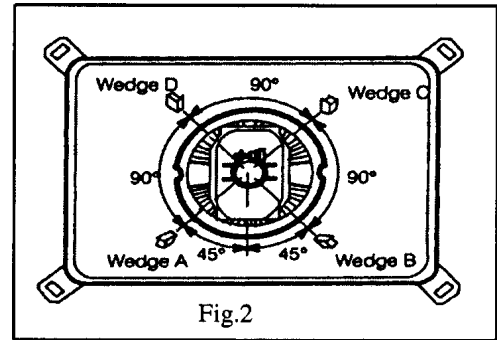


Fig.2

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

NOTE: FOR FLAT CRT ONLY

PREPARATION

- 1. Set DY to CRT not to tilt up and down left and right deflection.
- 2. Set CY to CRT and set CY magnet primarily.
Pur Mg : Set Pur Mg that 2 magnets are (top position)
VRS Mag : Set VRS Mg that 2 magnets are (horizontal position) only 21", 25" & 29"
- 3. Set geomagnetic corection DAC. AS IN TABLE 1.

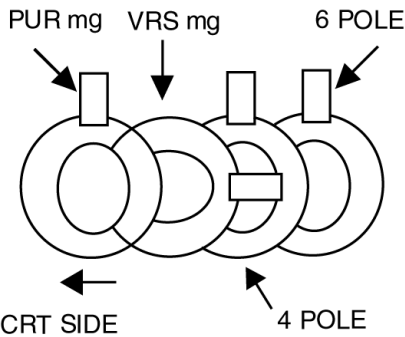
ADJUSTMENT

- 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 4)

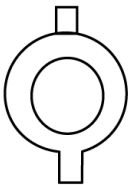
	MANNUAL	AUTO
DAC	0	1

TABLE 1

CY

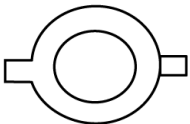


Pur Mg



Pur set to top (vertical)

VRS Mg



* VRS set to horizontal position

FIG 3

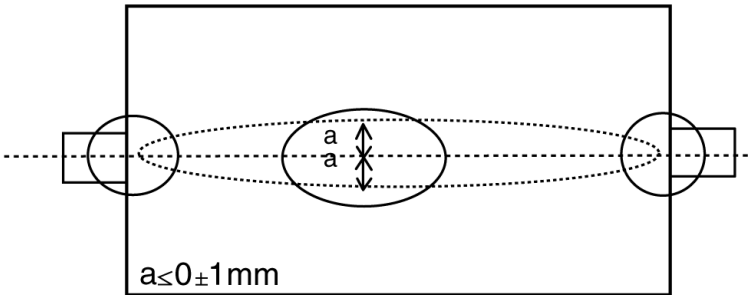
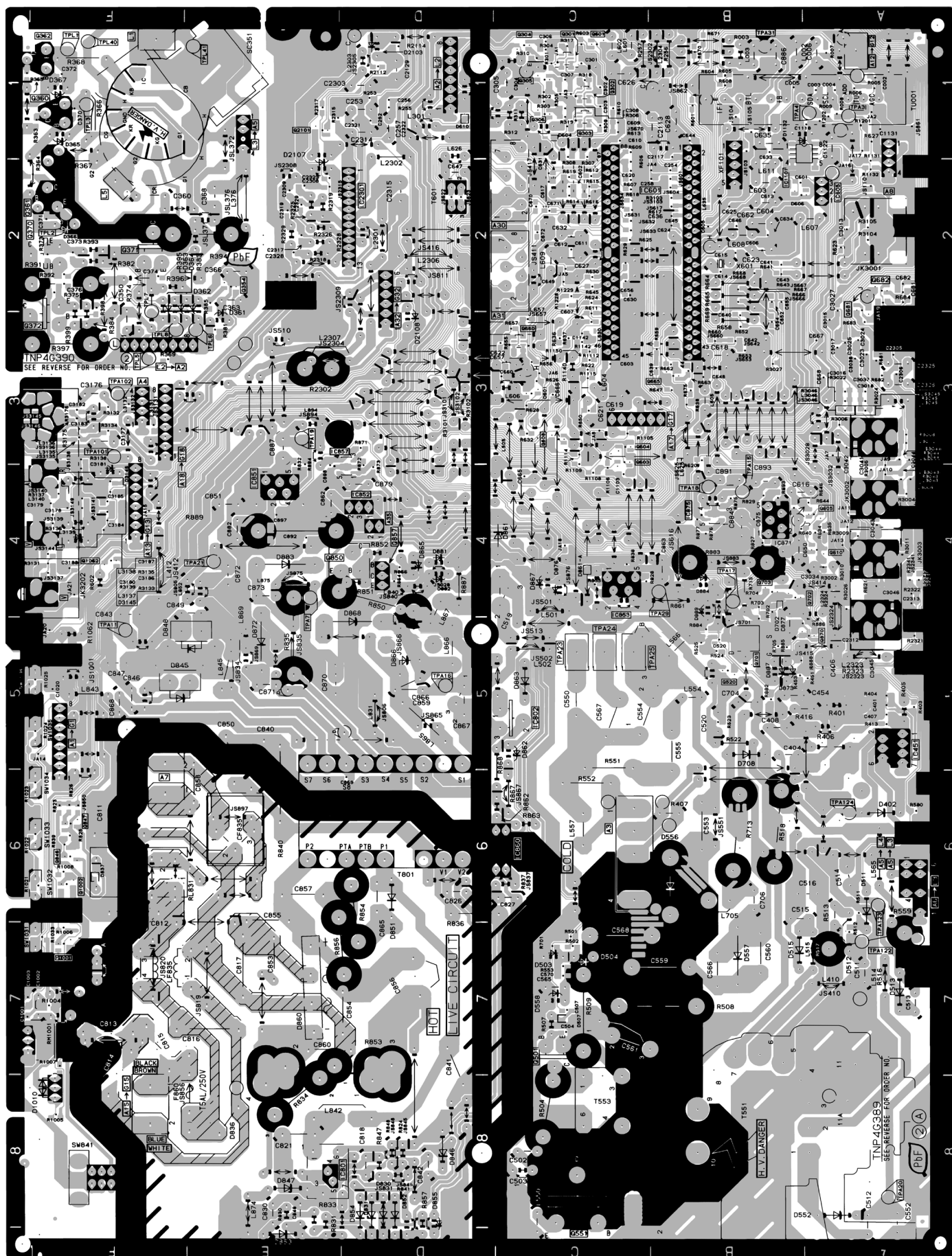


FIG 4

5 Conductor Views



6 Schematic Diagrams

6.1. SCHEMATIC DIAGRAM FOR GP41 CHASSIS

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.

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).

$\bigcirc$	: 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 μ F, unless otherwise noted.

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

3. Coil

Unit of inductance is μ H, unless otherwise noted.

4. Test Point

$\bigcirc$: Test Point position

5. Earth Symbol

$\text{---} \text{H} \text{---}$: 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. $\Rightarrow$: Video $\Rightarrow$: Audio

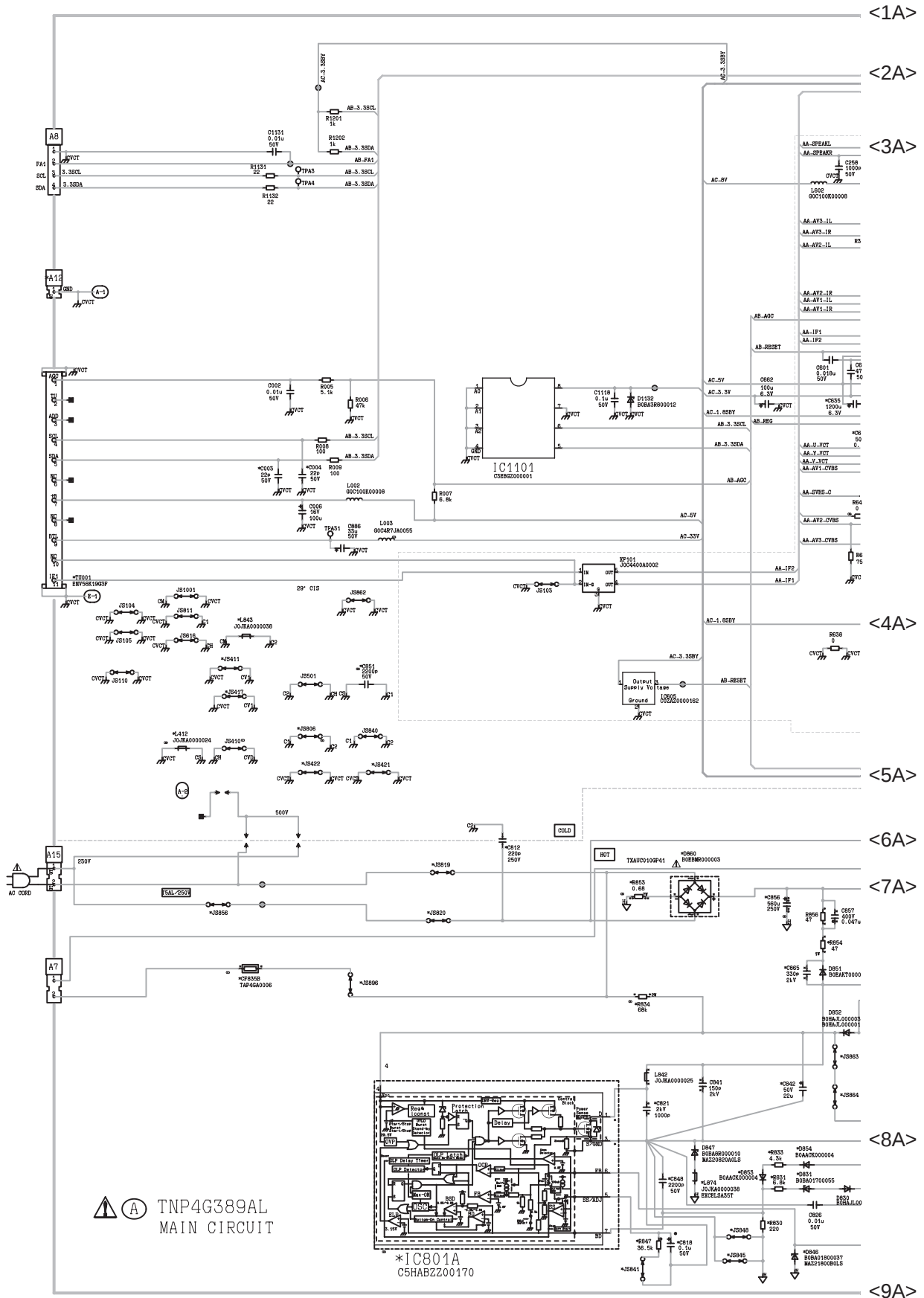
10. This schematic diagram is the latest at the time of printing and subject to change without notice.

Remarks:

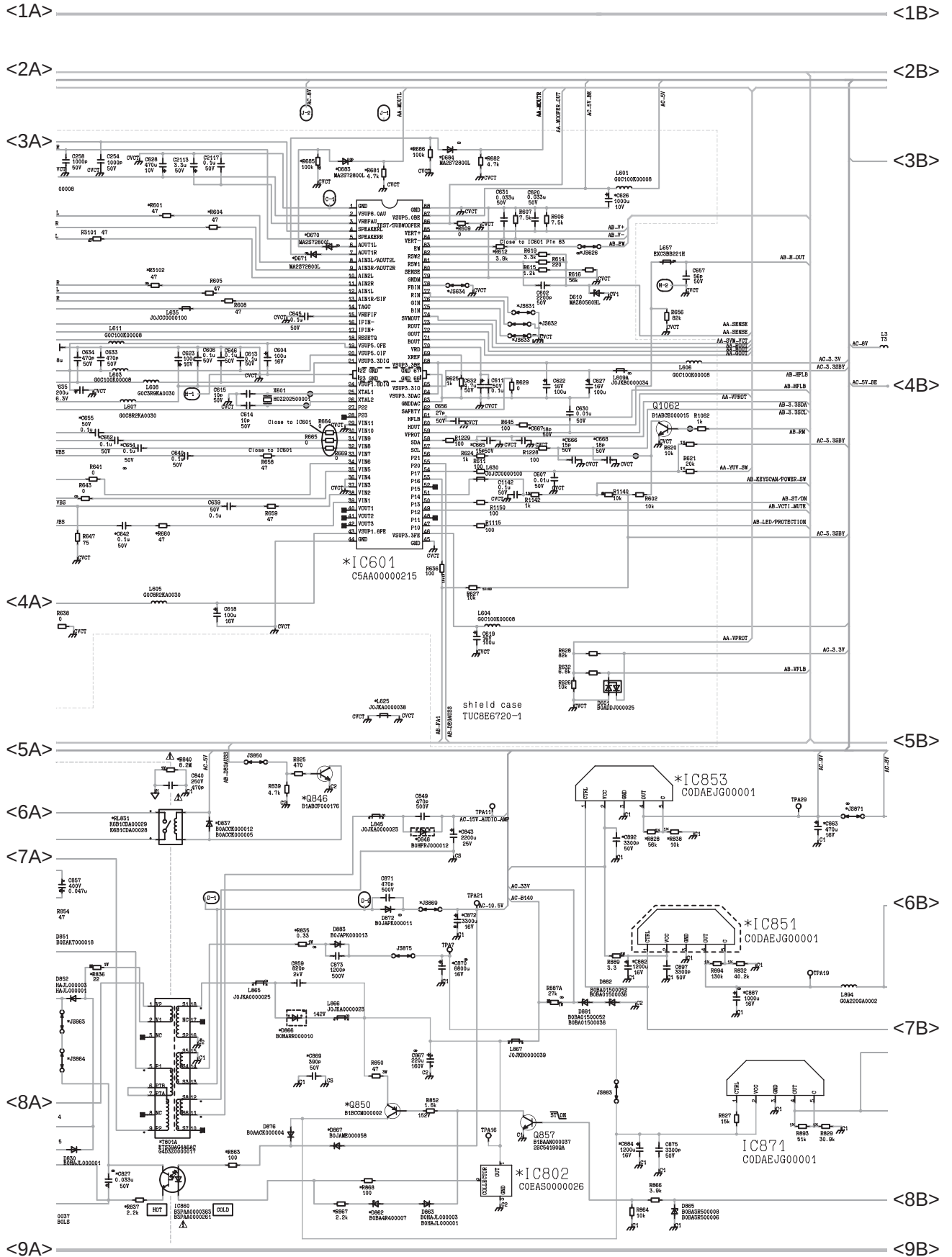
1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection.
The circuit is defined by HOT and COLD indications in the schematic diagram. Take the following precautions.
All circuits, except the Power Circuit, are cold.
Precautions
 - a. Do not touch 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

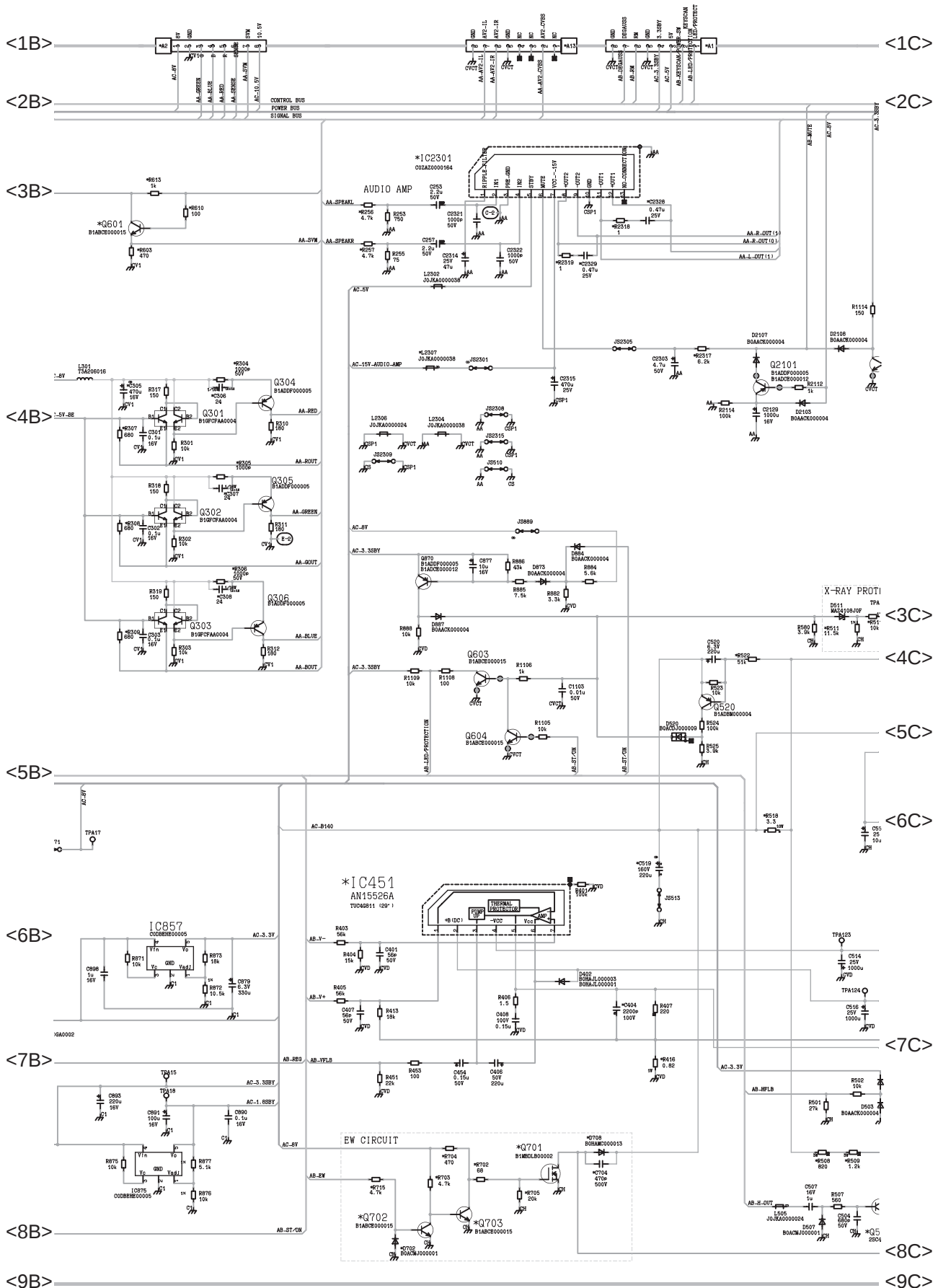
6.2.1. A Board (1/5)



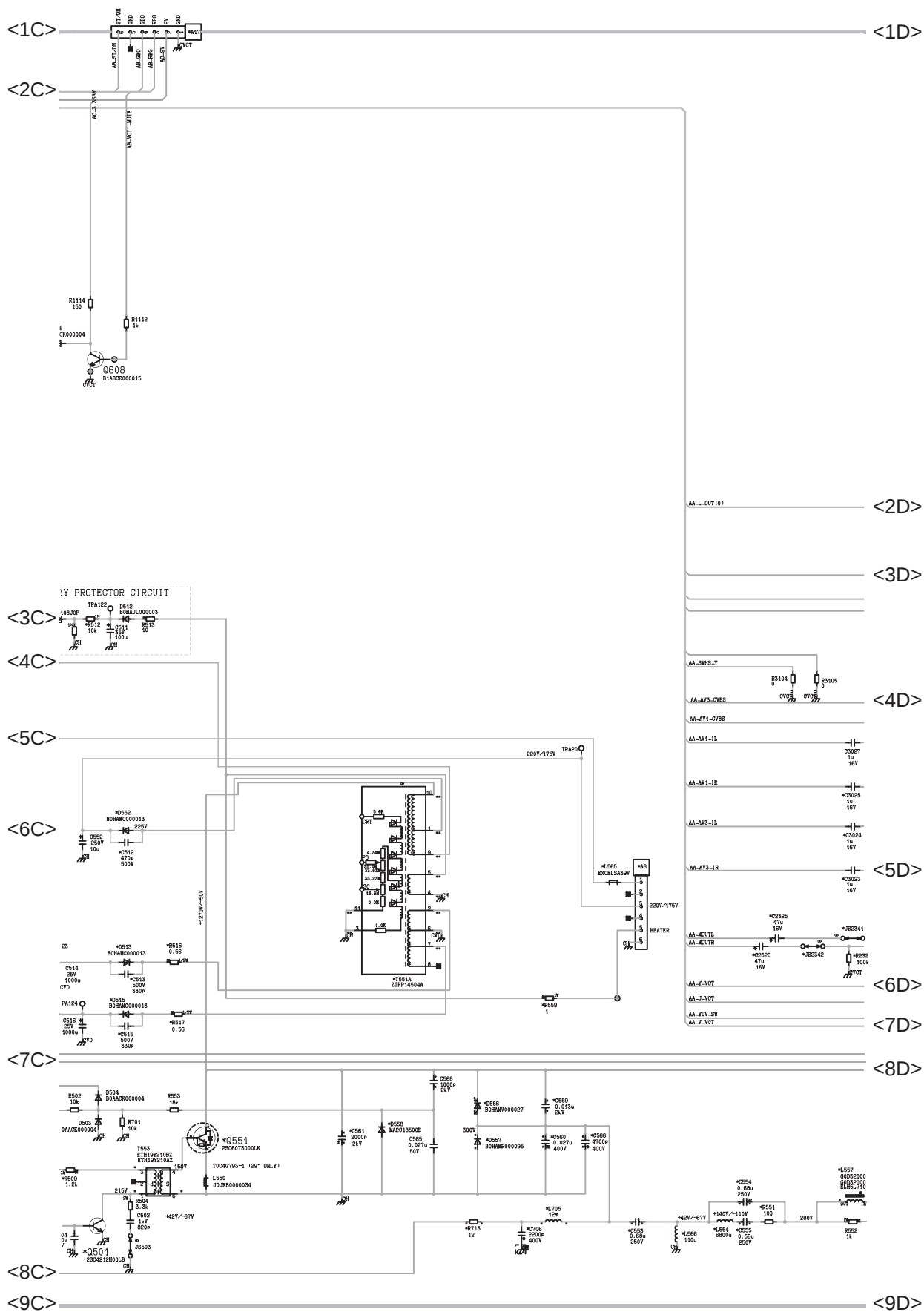
6.2.2. A Board (2/5)



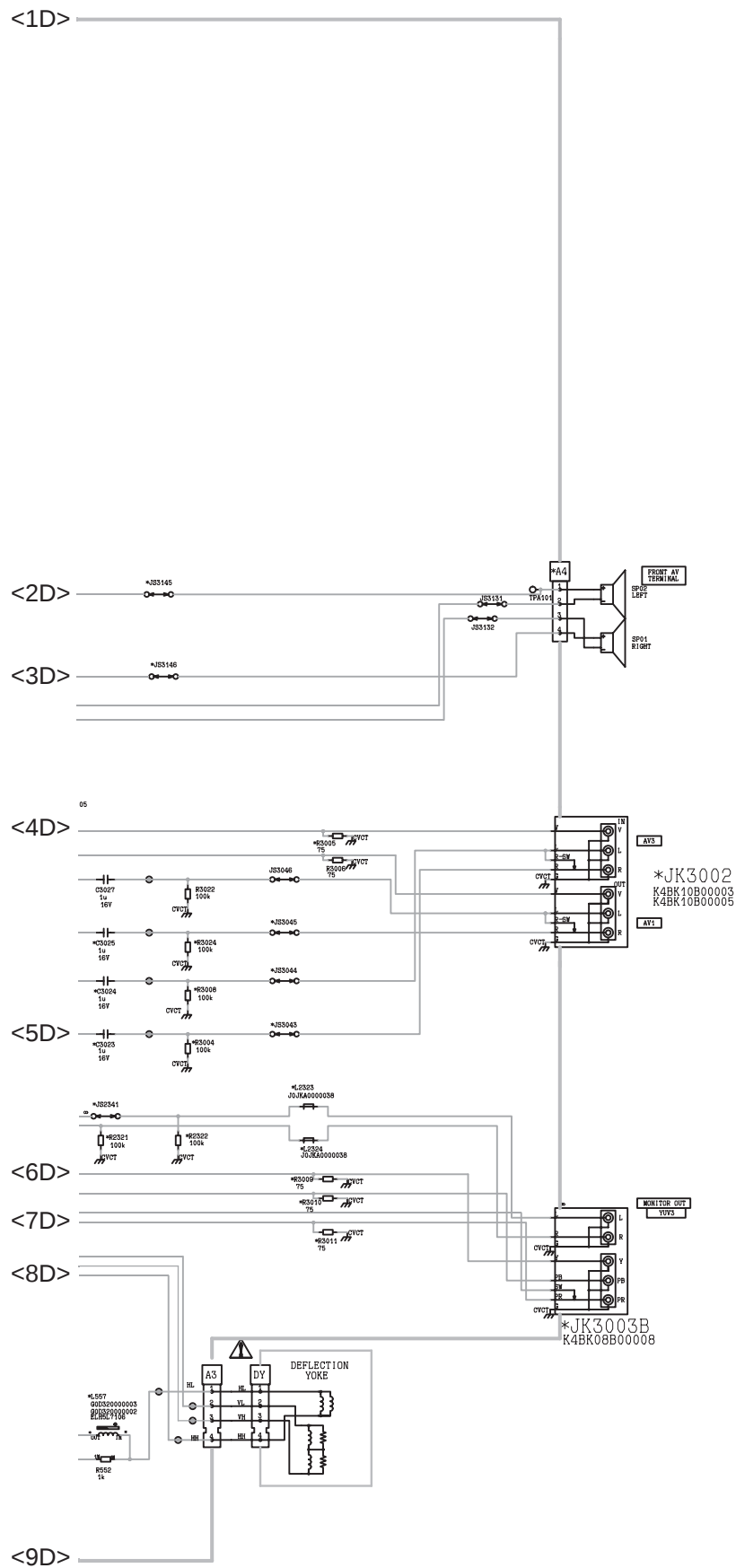
6.2.3. A Board (3/5)



6.2.4. A Board (4/5)

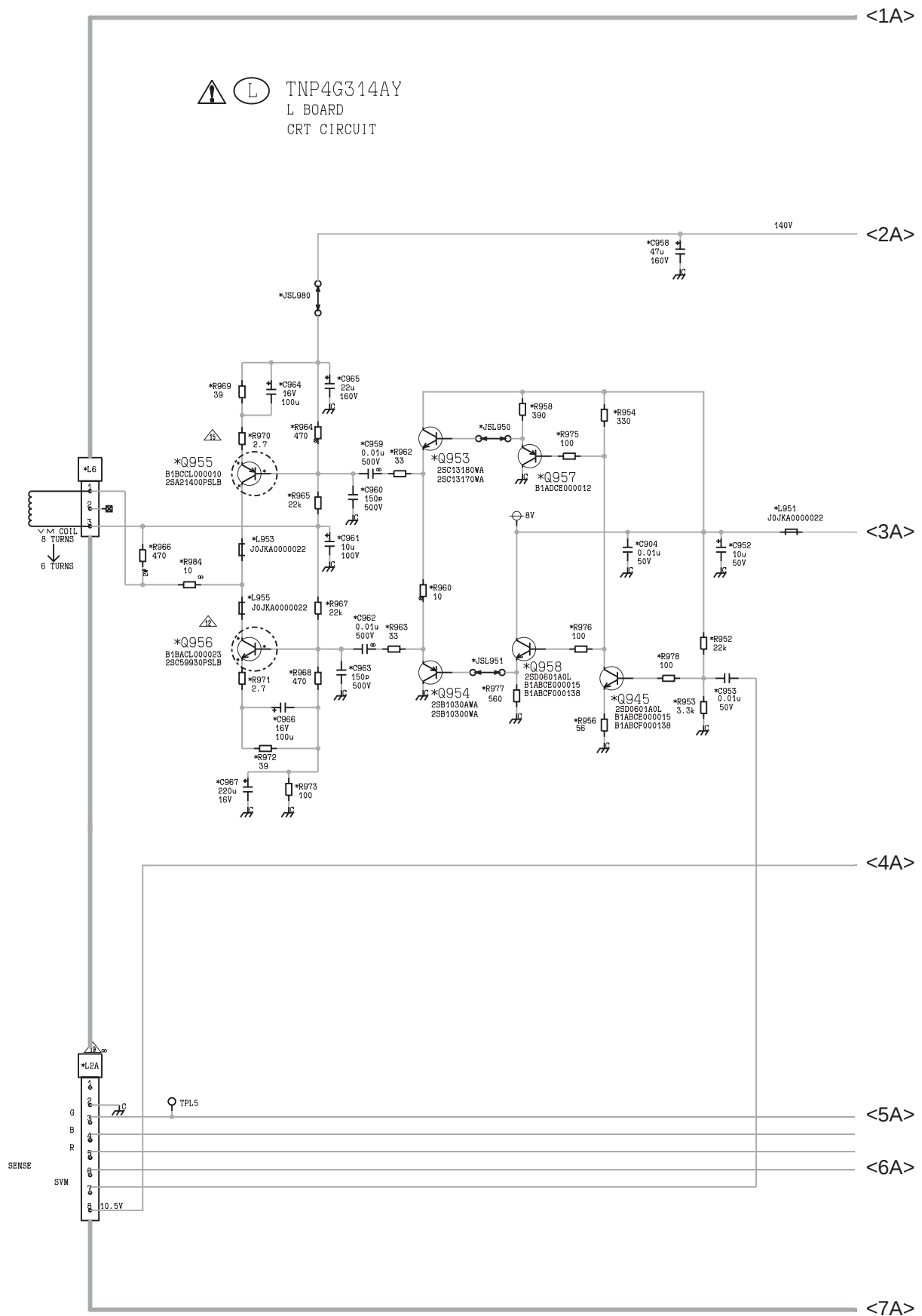


6.2.5. A Board (5/5)

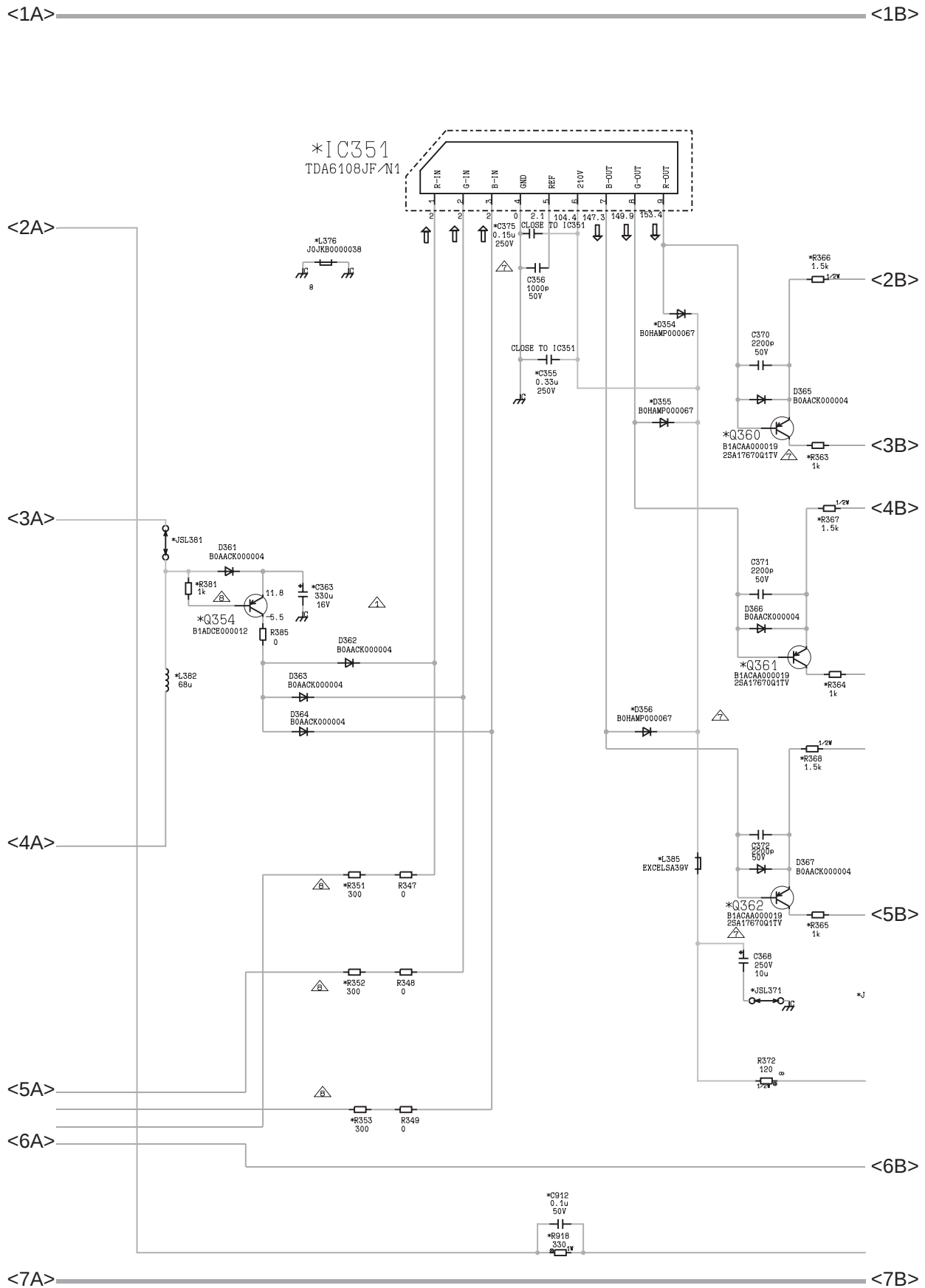


6.3. L Board

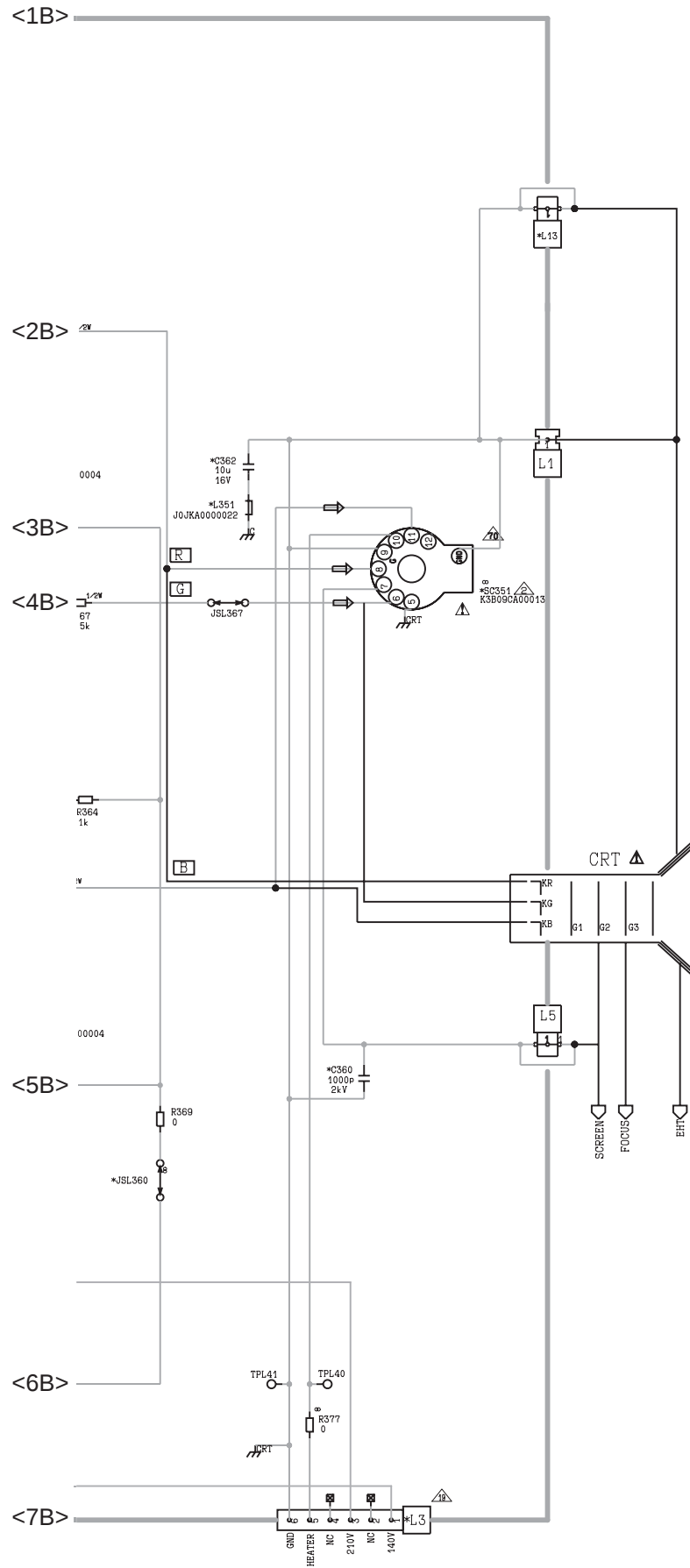
6.3.1. L Board (1/3)



6.3.2. L Board (2/3)

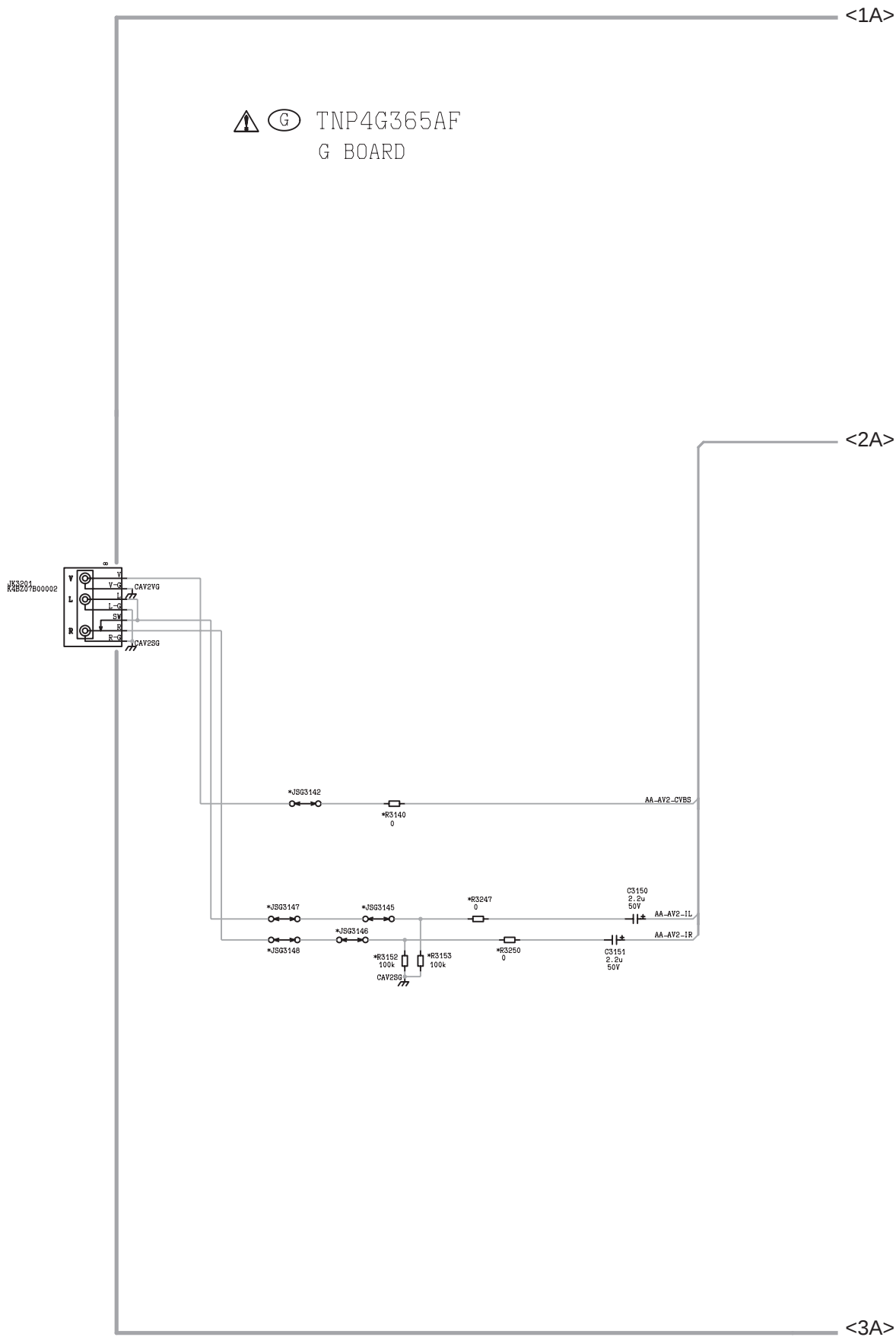


6.3.3. L Board (3/3)

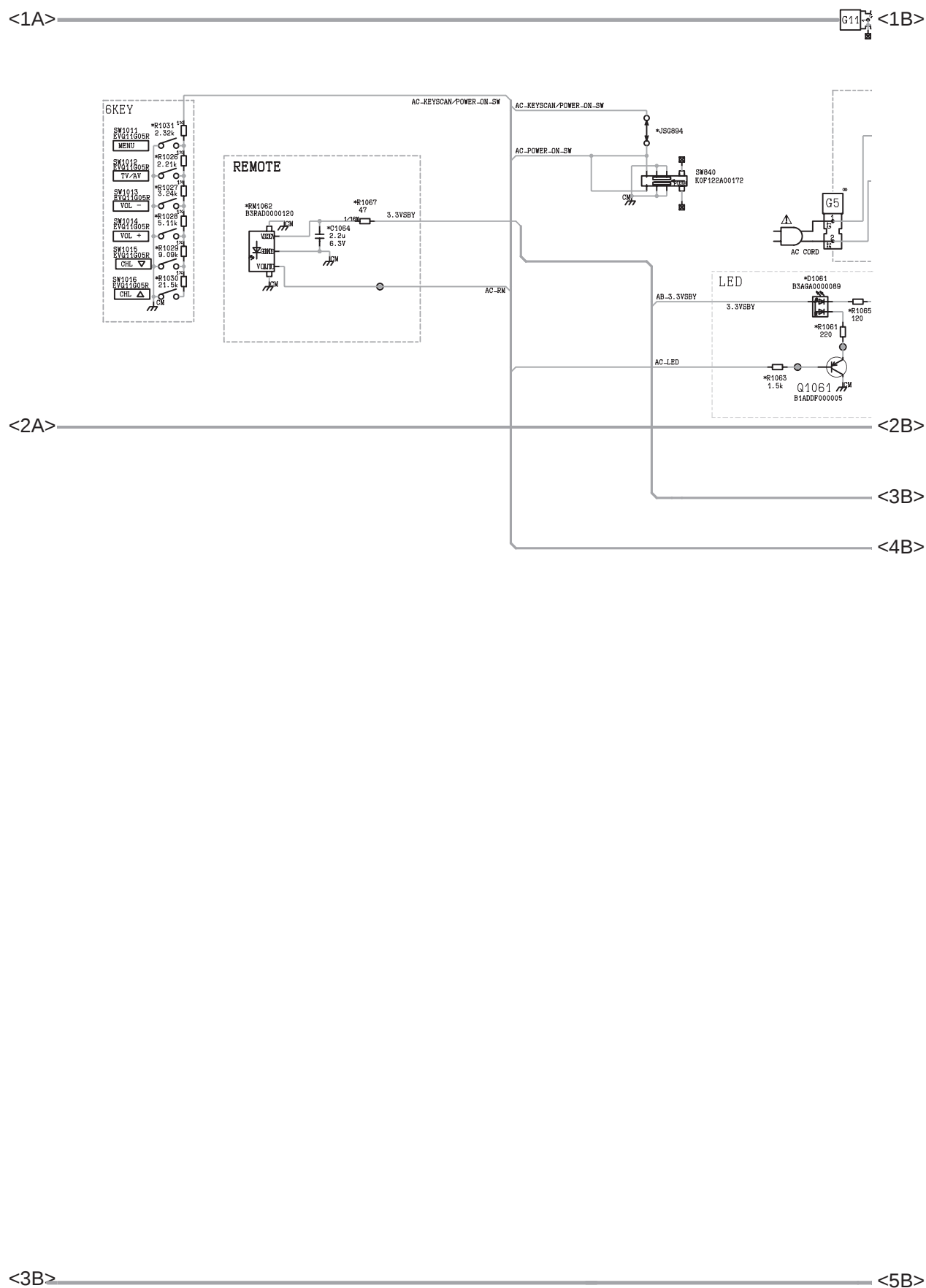


6.4. G Board

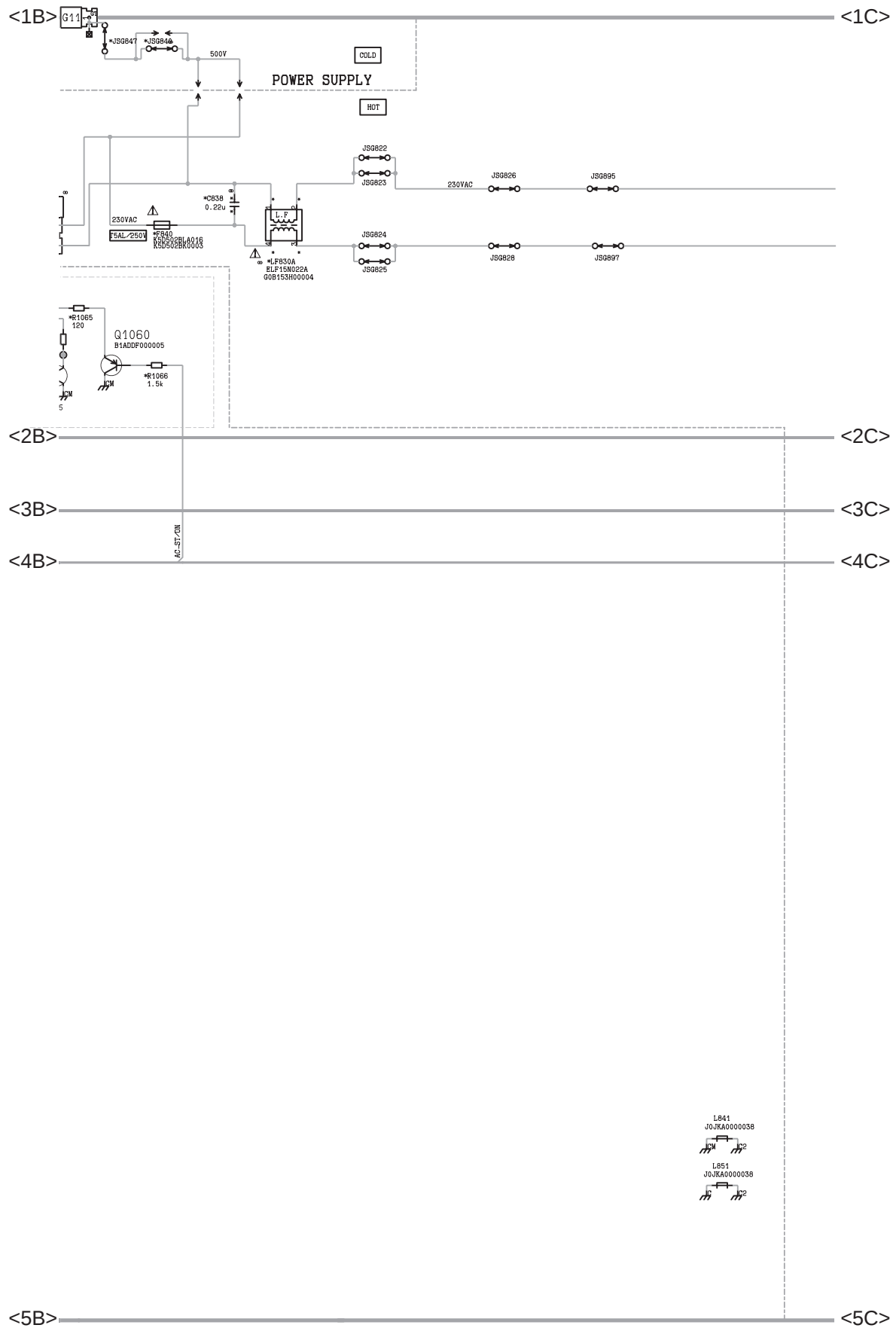
6.4.1. G Board (1/4)



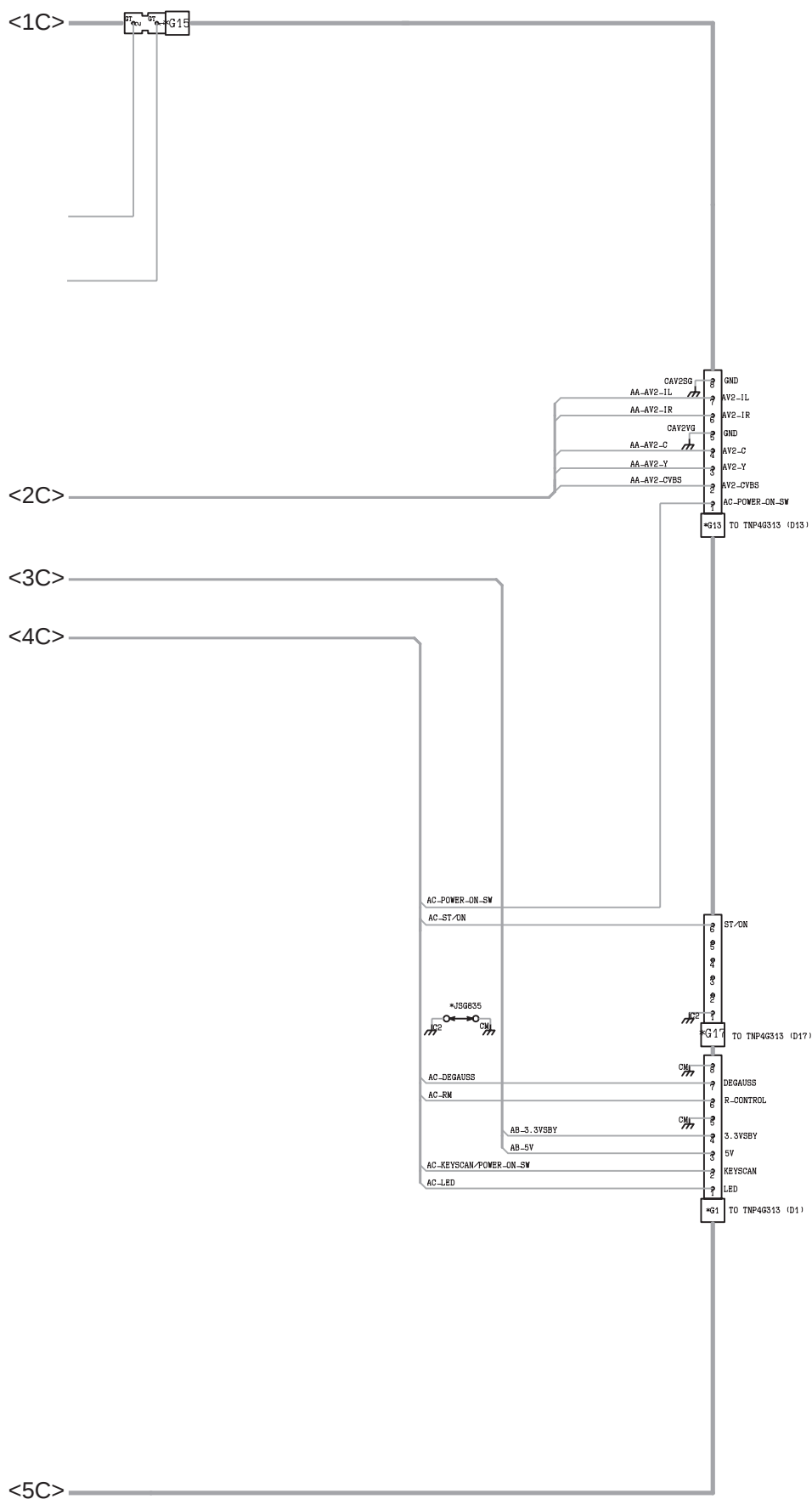
6.4.2. G Board (2/4)



6.4.3. G Board (3/4)



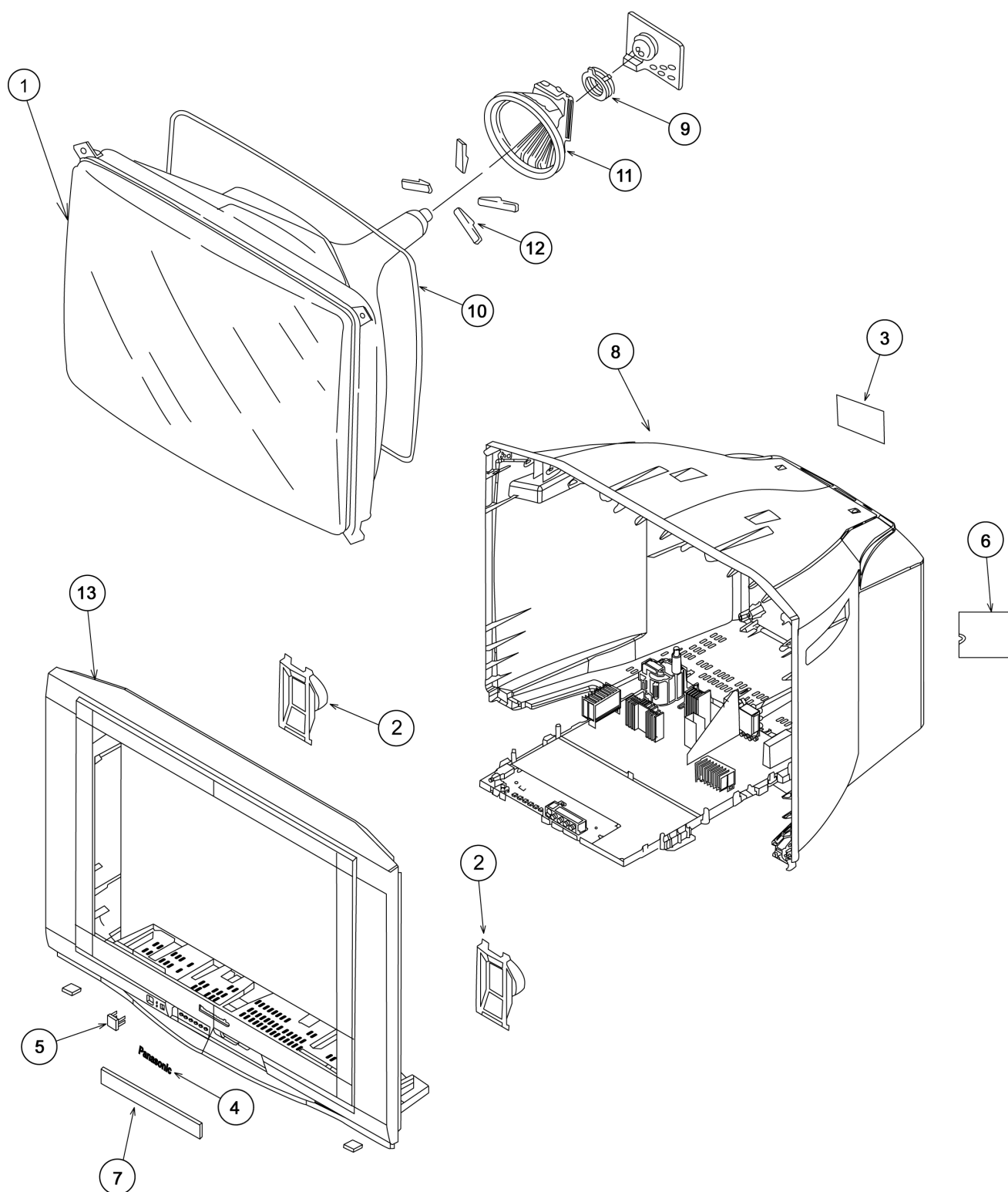
6.4.4. G Board (4/4)



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 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 C 100KOHM, J, 1/4W

Type	Allowance
------	-----------

2. Capacitor

Example:

ECKF1H103ZF C 0.01UF, Z, 50V

Type	Allowance
C	+/- 5%
Z	-10% / +10%

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

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	A68LZU185X-E	PICTURE TUBE	△
2	EASG15S02H2	SPEAKER	
	EUR7717050	REMOTE CONTROL	
3	TBM4G1372	MODEL NAME PLATE	△
4	TBM4G3017	PANASONIC BADGE	
5	TBX4G90411	POWER BUTTON	
	TES4G214	SPRING (POWER BUTTON)	
	TES4G406	COIL SPRING	
	TES4G409-1	SPRING (DOOR)	
	THT4G1011J	SCREW (SPEAKER)	
	THT4G10139	SCREW	
	TKK4G8603	SPEAKER BRACKET	
6	TKP4G11744	AC CORD BRACKET	
7	TKP4G13291	DOOR	
8	TKU4GA1170	BACK COVER	
9	TLCA005	CONVERGENCE YOKE	
10	TLK4G9099X	DEGAUSSING COIL	△
11	TLY4G342T	DEFLECTION YOKE	△
12	TMM4G503	RUBBER WEDGE	
	TMM4G902-3	RUBBER WASHER	
NLA	TNP4G314AY	L BOARD	△
NLA	TNP4G365AF	G BOARD	△
NLA	TNP4G389AL	A BOARD	△
	TPE4G14023	SET COVER	
	TPE4G14024	TOP COVER	
	TQB4G5055	FAN BAG	
	TSM011	MAGNET	
	TSN63115-4	PURITY MAGNET	
	TSX4G201L-1	AC POWER CORD	△
13	TXFKY04DW13	CABINET ASSY	
	TXFPC02DW13	CARTON	
	TXFPD01CS10	CUSHION (TOP)	
	TXFPD02CS10	CUSHION (BOTTOM)	
	CAPACITORS		
C002	ECJ2VF1H103Z	C 0.01UF, Z, 50V	
C003	ECUX1H220JCX	C 22PF, J, 50V	
C004	ECUX1H220JCX	C 22PF, J, 50V	
C006	F2A1C101A310	C 100UF, J, 16V	
C1064	ECJ2FB0J225K	C 2.2UF, J, 6.3V	
C1103	F1J1H103A590	C 0.01UF, J, 50V	
C1118	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C1131	F1J1H103A590	C 0.01UF, J, 50V	
C1142	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C2113	F2A1H3R3A317	E 3.3UF, 50V	
C2117	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C2129	F2A1C102A159	E 1000UF, 16V	
C2303	F2A1H4R7A317	E 3.3UF, 50V	
C2314	F2A1E470A270	E 47UF, 25V	
C2315	ECA1EM471B	E 470UF, 25V	
C2321	F1J1H102A018	C 1000PF, 50V	
C2322	F1J1H102A018	C 1000PF, 50V	
C2325	F2A1C470A310	E 47UF, 16V	
C2326	F2A1C470A310	E 47UF, 16V	
C2328	F1J1E474A101	C 0.47UF, 25V	
C2329	F1J1E474A101	C 0.47UF, 25V	
C253	ECEA1HN2R2U	E 2.2UF, 50V	
C254	F1J1H102A018	C 1000PF, 50V	
C257	ECEA1HN2R2U	E 2.2UF, 50V	
C258	F1J1H102A018	C 1000PF, 50V	
C301	ECJ2VB1C104K	C 0.1UF, K, 16V	
C302	ECJ2VB1C104K	C 0.1UF, K, 16V	
C3023	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3024	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3025	ECJ2VF1C105Z	C 1UF, Z, 16V	
C3027	ECJ2VF1C105Z	C 1UF, Z, 16V	
C303	ECJ2VB1C104K	C 0.1UF, K, 16V	
C305	F2A1C4710045	E 470UF, 16V	
C306	ERJ6GEYJ240	F 1.6UF, J, 1/16W	
C307	ERJ6GEYJ240	F 1.6UF, J, 1/16W	
C308	ERJ6GEYJ240	F 1.6UF, J, 1/16W	
C3150	F2A1H2R2A118	E 2.2UF, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3151	F2A1H2R2A118	E 2.2UF, 50V	
C355	ECWF2334JSR	P 0.33UF, J, 250V	
C356	ECJ2VC1H102J	C 1000PF, J, 50V	
C360	ECKW3D102KBP	C 1000PF, K, 2KV	
C362	ECEA1CN100U	E 10UF, 16V	
C363	ECA1CM331B	E 330UF, 16V	
C368	ECA2EM100B	E 10UF, 250V	
C370	ECJ2VF1H222Z	C 2200PF, Z, 50V	
C371	ECJ2VF1H222Z	C 2200PF, Z, 50V	
C372	ECJ2VF1H222Z	C 2200PF, Z, 50V	
C375	ECWF2154JSR	P 0.15UF, J, 250V	
C401	ECJ2VC1H560J	C 56PF, J, 50V	
C404	ECQB1222JF	P 2200PF, J, 100V	
C406	F2A1H221A247	E 56PF, 50V	
C407	ECJ2VC1H560J	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	F1J1H681A590	C 680PF, J, 50V	
C507	ECJ2VF1C105Z	C 1UF, Z, 16V	
C511	ECA1VM101B	E 100UF, 35V	
C512	F1B2H471A025	E 470UF, 16V	
C513	F1B2H331A025	C 330PF, 500V	
C514	F2A1E102A225	E 1000UF, 25V	
C515	F1B2H331A025	C 330PF, 500V	
C516	F2A1E102A225	E 1000UF, 25V	
C519	F2A2C2210013	E 220UF, 160V	
C520	F2A0J221A317	E 220UF, 6.3V	
C552	ECA2EM100B	E 10UF, 250V	
C553	F0C2E684A040	P 0.68UF, 250V	
C554	F0C2E684A040	P 0.68UF, 250V	
C555	ECWF2564JSB	P 0.56UF, 250V	
C559	ECWH20133JVB	P 0.013UF, 2kV	
C560	ECQF4273JZH	P 0.027UF, 400V	
C561	ECWH20202JVY	P 2000pF, 2kV	
C565	ECQB1H273JF	P 0.027UF, J, 50V	
C566	ECQM4472JZ	P 4700PF, J, 400V	
C568	F0C3D102A003	P 1000PF, 2kV	
C601	F1J1H183A021	C 0.018uF, J, 50V	
C602	ECJ1VB1H222K	C 2200PF, K, 50V	
C604	F2A1C101A310	E 100UF, 16V	
C606	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C607	ECJ2VF1H103Z	C 0.01UF, Z, 50V	
C611	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C613	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C614	ECJ2VC1H100C	C 10PF, C, 50V	
C615	ECJ2VC1H100C	C 10PF, C, 50V	
C618	F2A1C101A310	E 100UF, 16V	
C619	F2A1C101A310	E 100UF, 16V	
C620	ECJ2VB1H333K	C 0.033UF, K, 50V	
C622	F2A1C101A310	E 100UF, 16V	
C623	F2A1C101A310	E 100UF, 16V	
C626	F2A1A102A277	E 1000UF, 10V	
C627	F2A1C101A310	E 100UF, 16V	
C628	F2A1A471A274	E 470UF, 10V	
C630	ECJ2VF1H103Z	C 0.01UF, Z, 50V	
C631	ECJ2VB1H333K	C 0.033UF, K, 50V	
C632	F2A1H4R7A317	E 4.7UF, 50V	
C633	ECJ2VC1H471J	C 470PF, J, 50V	
C634	ECJ2VC1H471J	C 470PF, J, 50V	
C635	F2A0J122A272	E 1200UF, 50V	
C639	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C640	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C642	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C645	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C646	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C652	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C654	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C655	ECJ2VF1H104Z	C 0.1UF, Z, 50V	
C656	ECJ2VC1H270J	C 27PF, J, 50V	
C657	ECJ2VC1H560J	C 56PF, J, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C662	F2A0J101A317	E 100UF, 6.3V	
C665	ECJ2VC1H150J	C 15PF, J, 50V	
C666	ECJ2VC1H150J	C 15PF, J, 50V	
C667	ECJ2VC1H180J	C 18PF, J, 50V	
C668	ECJ2VC1H180J	C 18PF, J, 50V	
C704	F1B2H471A025	C 470PF, 500V	
C706	ECQM4222JZ	P 2200PF, 400V	
C812	F1A2E221A002	C 220PF, 250V	
C818	ECQB1H104JF	P 0.1UF, 50V	
C821	ECKW3D102KBP	C 1000PF, K, 2KV	
C826	ECQB1H103JF	P 0.01UF, 50V	
C827	ECQB1H333JF	P 0.033UF, J, 50V	
C838	F0CAF2240003	CAP 250VAC 0.22UF	
C840	F1A2E471A002	C 470PF, 2500V	
C841	ECKW3D151KBR	E 150PF, 2kV	
C842	F2A1H2200033	E 22UF, 50V	
C843	F2A1E222A224	E 2200UF, 25V	
C848	ECQB1H222JF	P 2200PF, J, 50V	
C849	F1B2H471A025	C 470PF, 500V	
C851	ECQB1H103JF	P 0.01UF, 50V	
C856	F2B2E5610004	E 560UF, 250V	
C857	ECQM4473JZ	P 0.047UF, J, 400V	
C859	ECKW3D821KBP	C 820PF, K, 2KV	
C863	F2A1C4710045	E 470UF, 16V	
C865	ECKW3D331JBP	C 330PF, J, 2KV	
C867	F2A2C2210013	E 220UF, 160V	
C869	ECJ2VC1H391J	C 390PF, J, 50V	
C870	F2A1C682A260	E 6800UF, 16V	
C871	F1B2H471A025	C 470PF, 500V	
C872	F2A1C332A260	E 3300UF, 16V	
C873	L6Y5P4B122K	C 1200PF, K, 500V	
C875	F1J1H332A021	C 3300PF, 50V	
C877	F2A1C1000079	E 10UF, 16V	
C879	F2A0J331A260	E 330UF, 6.3V	
C882	F2A1A102A230	E 1200UF, 16V	
C884	F2A1C122A256	E 1200UF, 16V	
C886	F2A1H330A342	E 33UF, 50V	
C887	F2A1C102A252	E 1000UF, 16V	
C891	F2A1C101A310	E 100UF, 16V	
C892	F1J1H332A021	C 3300PF, 50V	
C893	ECA1CM221B	E 220UF, 16V	
C897	F1J1H332A021	C 3300PF, 50V	
C898	ECJ2VF1C105Z	C 1UF, Z, 16V	
C904	F1B1H103A013	C 0.01UF, 50V	
C912	F1J1H104A578	C 0.1UF, J, 1V	
C952	ECA1HHG100	E 10UF, 50V	
C953	F1B1H103A013	C 0.01UF, 50V	
C958	ECA2CM470B	E 47UF, 160V	
C959	F1B2H1030028	C 0.01UF, 500V	
C960	F1A2H151A035	C 10UF, 50V	
C961	F2A2A1000016	CAPACITOR	
C962	F1B2H1030028	C 0.01UF, 500V	
C963	F1A2H151A035	C 10UF, 50V	
C964	ECA1CHG101	E 100UF, 16V	
C965	ECA2CM220B	E 22UF, 160V	
C966	ECA1CHG101	E 100UF, 16V	
C967	ECA1CM221B	E 220UF, 16V	
	DIODES		
D1061	B3AGA0000089	DIODE	
D1132	B0BA3R000012	DIODE	
D2103	B0AACK000004	DIODE	
D2107	B0AACK000004	DIODE	
D2108	B0AACK000004	DIODE	
D354	B0HAMP000067	DIODE	
D355	B0HAMP000067	DIODE	
D356	B0HAMP000067	DIODE	
D361	B0AACK000004	DIODE	
D362	B0AACK000004	DIODE	
D363	B0AACK000004	DIODE	
D364	B0AACK000004	DIODE	
D365	B0AACK000004	DIODE	
D366	B0AACK000004	DIODE	
D367	B0AACK000004	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D402	B0HAJL000003	DIODE	
D503	B0AACK000004	DIODE	
D504	B0AACK000004	DIODE	
D507	B0ACMJ000001	DIODE	
D511	MA4108J	DIODE	
D512	B0HAJL000003	DIODE	
D513	EU02	DIODE	
D515	EU02	DIODE	
D520	B0ACDJ000009	DIODE	
D552	EU02	DIODE	
D556	B0HAMV000027	DIODE	
D557	B0HAMR000095	DIODE	
D558	MA185	DIODE	
D601	B0ADDJ000025	DIODE	
D610	MAZ80560HL	DIODE	
D670	MA2S72800L	DIODE	
D671	MA2S72800L	DIODE	
D683	MA2S72800L	DIODE	
D684	MA2S72800L	DIODE	
D702	B0ACMJ000001	DIODE	
D708	EU02	DIODE	
D830	B0HAJL000001	DIODE	
D831	B0BA01700055	DIODE	
D837	B0ACCK000012	DIODE	
D846	B0BA01800037	ZENER DIODE	
D847	B0BA8R000010	DIODE	
D848	FMLG12S	DIODE	
D851	B0EAKT000018	DIODE	
D852	B0HAJL000003	DIODE	
D853	B0AACK000004	DIODE	
D854	B0AACK000004	DIODE	
D860	B0EBMR000003	DIODE	
D862	B0BA4R400007	ZENER DIODE	
D863	B0HAJL000003	DIODE	
D865	B0BA3R500008	DIODE	
D866	B0HARR000010	DIODE	
D867	B0JAME000058	DIODE	
D872	B0JAPK000011	DIODE	
D873	B0AACK000004	DIODE	
D876	B0AACK000004	DIODE	
D881	B0BA01500052	DIODE	
D882	B0BA01500052	DIODE	
D883	B0JAPK000013	DIODE	
D884	B0AACK000004	DIODE	
D887	B0AACK000004	DIODE	
	INTEDGRATED CIRCUITS		
IC1101	TVR4GAS529	EEPROM IC	
IC2301	C0ZAZ0000164	IC	
IC351	TDA6108JF/N1	IC	
IC451	AN15526A	IC	
IC601	TVR4G20-3	FLASH MEMORY IC	
IC605	C0ZAZ0000162	IC	
IC801	C5HABZZ00170	IC, HYBRID	⚠
IC802	C0EAS0000026	IC	
IC851	C0DAEJG00001	IC, POWER SUPPLY	
IC853	C0DAEJG00001	IC, POWER SUPPLY	
IC857	C0DBEHE00005	IC, POWER SUPPLY	
IC860	B3PAA0000363	PHOTO COUPLER	⚠
IC871	C0DAEJG00001	IC, POWER SUPPLY	
IC875	C0DBEHE00005	IC, POWER SUPPLY	
	COILS		
L002	G0C100K00008	COIL	
L003	G0C4R7JA0055	PEAKING COIL	
L2302	J0JKA0000038	BEAD CORE	
L2304	J0JKA0000038	BEAD CORE	
L2306	J0JKA0000024	EMI FILTER	
L2307	J0JKA0000038	BEAD CORE	
L2323	J0JKA0000038	BEAD CORE	
L2324	J0JKA0000038	BEAD CORE	
L351	J0JKA0000022	BEAD CORE	
L376	J0JKB0000038	COIL	
L382	TALL08T680KA	INDUCTION COIL	

Ref. No.	Part No.	Part Name & Description	Remarks
L385	EXCELSA39V	BEAD CORE	
L412	J0JKA0000024	EMI FILTER	
L505	J0JKA0000024	EMI FILTER	
L550	J0JKB0000034	EMI FILTER	
L554	ELC08D682E	CHOKE COIL	
L557	G0D320000003	LINEARITY COIL	
L565	EXCELSA39V	BEAD CORE	
L566	G0B111F00001	CHOKE 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	
L705	ELC10D123E	CHOKE COIL	
L841	J0JKA0000038	BEAD CORE	
L842	J0JKA0000025	BEAD CORE	
L843	J0JKA0000038	BEAD CORE	
L845	J0JKA0000023	BEAD CORE	
L851	J0JKA0000038	BEAD CORE	
L865	J0JKA0000025	BEAD CORE	
L866	J0JKA0000023	BEAD CORE	
L867	J0JKB0000039	EMI FILTER	
L874	J0JKA0000038	BEAD CORE	
L894	G0A220GA0002	CHOKE COIL	
L951	J0JKA0000022	BEAD CORE	
L953	J0JKA0000022	BEAD CORE	
L955	J0JKA0000022	BEAD CORE	
	TRANSISTORS		
Q1060	B1ADDF000005	TRANSISTOR	
Q1061	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	B1ADCE000012	TRANSISTOR	
Q360	B1ACAA000019	TRANSISTOR	
Q361	B1ACAA000019	TRANSISTOR	
Q362	B1ACAA000019	TRANSISTOR	
Q501	2SC4212H	TRANSISTOR	
Q520	B1ADB0000004	TRANSISTOR	
Q551	2SC6073000LK	TRANSISTOR	
Q601	B1ABCE000015	TRANSISTOR	
Q603	B1ABCE000015	TRANSISTOR	
Q604	B1ABCE000015	TRANSISTOR	
Q608	B1ABCE000015	TRANSISTOR	
Q701	B1MBDLB00002	TRANSISTOR	
Q702	B1ABCE000015	TRANSISTOR	
Q703	B1ABCE000015	TRANSISTOR	
Q846	B1ABCF000176	TRANSISTOR	
Q850	B1BCCM000002	TRANSISTOR	
Q857	B1BAAN000037	TRANSISTOR	
Q870	B1ADDF000005	TRANSISTOR	
Q945	2SD0601A0L	TRANSISTOR	
Q953	2SC1318	TRANSISTOR	
Q954	2SB1030A	TRANSISTOR	
Q955	B1BACL000010	TRANSISTOR	
Q956	B1BACL000023	TRANSISTOR	
Q957	B1ADCE000012	TRANSISTOR	
Q958	2SD0601A0L	TRANSISTOR	
	RESISTORS		

Ref. No.	Part No.	Part Name & Description	Remarks
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	
R1026	ERJ6ENF2211	F 3.24KOHM, J, 1/10W	
R1027	ERJ6ENF3241	M3.24KOHM, 1/10W	
R1028	ERJ6ENF5111	F 5.11KOHM, J, 1/10W	
R1029	ERJ6ENF9091	M9.09KOHM, 1/10W	
R1030	ERJ6ENF2152	M21.5KOHM, 1/10W	
R1031	ERJ6ENF2321	F 2.32KOHM, J, 1/10W	
R1061	ERJ6GEYJ221	M 220OHM, J, 1/10W	
R1062	ERDS2TJ102	C 1KOHM, J, 1/4W	
R1063	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W	
R1065	ERJ6GEYJ121	M 120OHM, J, 1/10W	
R1066	ERJ6GEYJ152	M 1.5KOHM, J, 1/10W	
R1067	ERJ6GEYJ470	M 47OHM, J, 1/10W	
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 220OHM, J, 1/10W	
R1132	ERJ6GEYJ220	M 220OHM, J, 1/10W	
R1140	ER0S2CKF1002	M 10KOHM, F, 1/4W	
R1142	ERJ6ENF1001	M 1KOHM, 1/10W	
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	
R2317	ERJ6GEYJ622	M 6.2KOHM, J, 1/10W	
R2318	D0AE1R0JA046	C 10HM, J, 1/4W	
R2319	D0AE1R0JA046	C 10HM, J, 1/4W	
R2321	ERJ6GEYJ104	M 100KOHM, J, 1/10W	
R2322	ERJ6GEYJ104	M 100KOHM, J, 1/10W	
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 750HM, 1/10W	
R3006	ERJ6GEYJ750	M 750HM, 1/10W	
R3008	ERJ6GEYJ104	M 100KOHM, J, 1/10W	
R3009	ERJ6GEYJ750	M 750HM, 1/10W	
R301	ERJ6GEYJ103	M 10KOHM, J, 1/10W	
R3010	ERJ6GEYJ750	M 750HM, 1/10W	
R3011	ERJ6GEYJ750	M 750HM, 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	ECJ1VB1H102K	C 1000PF, K, 50V	
R305	ECJ1VB1H102K	C 1000PF, K, 50V	
R306	ECJ1VB1H102K	C 1000PF, K, 50V	
R307	ERJ6GEYJ681	M 680OHM, J, 1/10W	
R308	ERJ6GEYJ681	M 680OHM, J, 1/10W	
R309	ERJ6GEYJ681	M 680OHM, J, 1/10W	
R310	D0AE181JA046	C 180OHM, J, 1/4W	
R3101	ERDS2TJ470	C 470HM, J, 1/4W	
R3102	ERDS2TJ470	C 470HM, J, 1/4W	
R3104	ERJ6GEY0R00	M 00HM, J, 1/10W	
R3105	ERJ6GEY0R00	M 00HM, J, 1/10W	
R311	D0AE181JA046	C 180OHM, J, 1/4W	
R312	D0AE181JA046	C 180OHM, J, 1/4W	
R3140	ERJ6GEY0R00	M 00HM, J, 1/10W	
R3152	ERJ6GEYJ104	M 100KOHM, J, 1/10W	
R3153	ERJ6GEYJ104	M 100KOHM, J, 1/10W	
R317	ERJ6GEYJ151	M 150OHM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R318	ERJ6GEYJ151	M 1500HM, J, 1/10W	
R319	ERJ6GEYJ151	M 1500HM, J, 1/10W	
R3247	ERJ6GEY0R00	M 00HM, J, 1/10W	
R3250	ERJ6GEY0R00	M 00HM, J, 1/10W	
R347	ERJ6GEY0R00	M 00HM, J, 1/10W	
R348	ERJ6GEY0R00	M 00HM, J, 1/10W	
R349	ERJ6GEY0R00	M 00HM, J, 1/10W	
R351	ERJ6GEYJ301	M 3000HM, J, 1/10W	
R352	ERJ6GEYJ301	M 3000HM, J, 1/10W	
R353	ERJ6GEYJ301	M 3000HM, 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	ERDS1TJ152	C 1.5KOHM, J, 1/2W	
R367	ERDS1TJ152	C 1.5KOHM, J, 1/2W	
R368	ERDS1TJ152	C 1.5KOHM, J, 1/2W	
R369	ERJ6GEY0R00	M 00HM, J, 1/10W	
R372	ERQ12AJ121P	FUSE RESISTOR	
R381	ERJ6GEYJ102	M 1KOHM, J, 1/10W	
R385	ERJ6GEY0R00	M 00HM, J, 1/10W	
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	D0AE1R5JA046	C 1.50HM, J, 1/4W	
R407	ERG1SJ221E	M 220OHM, J, 1W	
R413	ERJ6GEYJ183	M 18KOHM, J, 1/10W	
R416	ERX1SJR82E	M 0.820HM, 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, 1/10W	
R507	ERDS2TJ561	C 560OHM, J, 1/4W	
R508	ERG3FJ821H	M 820OHM, J, 3W	
R509	ERG3FJ122	M 1.2KOHM, J, 3W	
R511	ERJ6ENF1152	M11.5KOHM, 1/10W	
R512	ERJ6ENF1002	M 10KOHM, 1/10W	
R513	ERQ14AJ100E	F 100HM, J, 1/4W	
R516	ERX12SJR56P	M 0.560HM, 1/2W	
R517	ERX12SJR56P	M 0.560HM, 1/2W	
R518	D0DK3R3J0002	W 3.30HM, J, 10W	
R522	ERDS2TJ513	C 51KOHM, 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	
R551	ERG1FJ101P	M 100OHM, J, 1/10W	
R552	ERG1SJ102P	M 1KOHM, J, 1W	
R553	ERJ6GEYJ183	M 18KOHM, J, 1/10W	
R559	ERQ1CJP1R0S	F 10HM, J, 1W	
R580	ERJ6GEYJ392	M 3.9KOHM, J, 1/10W	
R601	ERJ6GEYJ470	M 470HM, J, 1/10W	
R602	ERDS2TJ103	C 10KOHM, J, 1/4W	
R603	ERJ6GEYJ471	M 470OHM, J, 1/10W	
R604	ERJ6GEYJ470	M 470HM, J, 1/10W	
R605	ERJ6GEYJ470	M 470HM, J, 1/10W	
R606	ERJ6GEYJ752	M 7.5KOHM, J, 1/10W	
R607	ERJ6GEYJ752	M 7.5KOHM, J, 1/10W	
R608	ERJ6GEYJ470	M 470HM, J, 1/10W	
R609	ERJ6GEY0R00	M 00HM, J, 1/10W	
R610	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R611	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R612	ERJ6GEYJ392	M 3.9KOHM, J, 1/10W	
R613	ERJ6GEYJ102	M 1KOHM, 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	
R619	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W	
R620	ERJ6ENF1002	M 10KOHM, 1/10W	
R621	ERJ6ENF2002	M 20KOHM, 1/10W	
R624	ERJ6GEYJ102	M 1KOHM, J, 1/10W	
R625	ERJ6GEYJ102	M 1KOHM, J, 1/10W	
R626	ERJ6GEYJ103	M 10KOHM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R627	ERJ6GEYJ103	M 10KOHM, J, 1/10W	
R628	ERJ6GEYJ823	M 82KOHM, J, 1/10W	
R629	ERJ6GEY0R00	M 00HM, J, 1/10W	
R632	ERJ6GEYJ682	M 6.8KOHM, J, 1/10W	
R636	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R638	ERJ6GEY0R00	M 00HM, J, 1/10W	
R641	ERJ6GEY0R00	M 00HM, J, 1/10W	
R643	ERJ6GEY0R00	M 00HM, J, 1/10W	
R645	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R647	ERJ6GEYJ750	M 750HM, 1/10W	
R656	ERJ6GEYJ823	M 82KOHM, J, 1/10W	
R658	ERDS2TJ470	C 470HM, J, 1/4W	
R659	ERJ6GEYJ470	M 470HM, J, 1/10W	
R660	ERJ6GEYJ470	M 470HM, J, 1/10W	
R662	ERJ6GEYJ221	M 220OHM, J, 1/10W	
R664	ERDS2T0T	C 00HM, 1/4W	
R665	ERDS2T0T	C 00HM, 1/4W	
R669	ERDS2T0T	C 00HM, 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	
R702	ERJ6GEYJ680	M 680HM, J, 1/10W	
R703	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R704	ERJ6GEYJ471	M 470OHM, J, 1/10W	
R705	ERJ6GEYJ203	M 20KOHM, J, 1/10W	
R713	ERG3SJS120H	M 120HM, J, 1/10W	
R715	ERDS2TJ472	C 4.7KOHM, J, 1/4W	
R825	ERJ6GEYJ471	M 470OHM, J, 1/10W	
R827	ERJ6GEYJ153	M 15KOHM, J, 1/10W	
R828	ERJ6ENF5602	M 56KOHM, 1/10W	
R829	ERJ6ENF3092	F 30.9KOHM, J, 1W	
R830	ERDS2TJ221	C 220OHM, J, 1/4W	
R831	ERDS2TJ682	C 6.8KOHM, J, 1/4W	
R832	ERJ6ENF4022	F 40.2KOHM, J, 1W	
R833	D0AE432JA046	C 4.3KOHM, J, 1/4W	
R834	ERG2FJ683H	M 68KOHM, J, 2W	
R835	ERQ1CJPR33S	F 0.33OHM, J, 1W	
R836	ERG1SJ220P	M 220HM, J, 1W	
R837	ERDS2TJ222	C 2.2KOHM, J, 1/4W	
R838	ERJ6ENF1002	M 10KOHM, 1/10W	
R839	ERJ6GEYJ472	M 4.7KOHM, J, 1/10W	
R840	RCR100TAJ825	M 8.2MOHM, 1/10W	
R847	ER0S2CHF3652	M 36.5KOHM, J, 1/10W	
R850	ERG3SJS470H	M 470HM, J, 3W	
R852	D0AE162JA046	C 1.6KOHM, J, 152V	
R853	D0D7R68KA002	W 0.680HM, J, 7W	
R854	ERQ1ABJP470S	F 470HM, J, 1W	
R856	ERG2SJS104H	M 100KOHM, J, 2W	
R863	ERDS2TJ101	C 100OHM, J, 1/4W	
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	ERJ6ENF1052	F 10.5KOHM, J, 1W	
R873	ERJ6ENF1802	M 18KOHM, 1/10W	
R875	ERJ6GEYJ103	M 10KOHM, J, 1/10W	
R876	ERJ6ENF1002	M 10KOHM, 1/10W	
R877	ERJ6ENF5101	F 5.1KOHM, J, 1W	
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	ERG1SJ273P	M 27KOHM, J, 1W	
R888	ERJ6GEYJ103	M 10KOHM, J, 1/10W	
R889	ERX3FJ3R3H	METAL FILM RESISTOR	
R893	ERJ6ENF5102	M 51KOHM, 1/10W	
R894	ERJ6ENF1303	M 130KOHM, 1/10W	
R918	ERQ1CJP331S	F 330OHM, J, 1W	
R952	ERJ6GEYJ223	M 22KOHM, J, 1/10W	
R953	ERJ6GEYJ332	M 3.3KOHM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R954	ERJ6GEYJ331	M 330OHM, J, 1/10W	
R956	ERJ6GEYJ560	M 560OHM, J, 1/10W	
R958	ERJ6GEYJ391	M 390OHM, J, 1/10W	
R960	ERQ14AJ100E	F 100HM, J, 1/4W	
R962	ERJ6GEYJ330	M 330HM, J, 1/10W	
R963	ERDS2TJ330	C 330HM, J, 1/4W	
R964	ERQ14AJ471E	F 470OHM, J, 1/4W	
R965	ERJ6GEYJ223	M 22KOHM, J, 1/10W	
R966	ERG2SJ471E	M 470OHM, J, 2W	
R967	ERDS2TJ223	C 22KOHM, J, 1/4W	
R968	ERDS2TJ471	C 470OHM, J, 1/4W	
R969	ERDS2TJ390	C 390HM, J, 1/4W	
R970	ERDS2TJ2R7	C 2.70HM, J, 1/4W	
R971	ERDS2TJ2R7	C 2.70HM, J, 1/4W	
R972	ERDS2TJ390	C 390HM, J, 1/4W	
R973	ERDS2TJ101	C 100OHM, J, 1/4W	
R975	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R976	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R977	ERJ6GEYJ561	M 560OHM, J, 1/10W	
R978	ERJ6GEYJ101	M 100OHM, J, 1/10W	
R984	ERC14GK100	S 100HM, J, 1/10W	△
	TRANSFORMERS		
T551	ZTFP14504A	FLYBACK TRANS	△
T553	ETH19Y210BZ	H DRIVE TRANS	△
T801	ETS39AG4A6AC	SWITCHING TRANS	△
	OTHERS		
A1	K1KA13A00140	CONNECTOR	
A13	K1KA13A00140	CONNECTOR	
A17	K1KA13A00138	CONNECTOR	
A2	K1KA13A00140	CONNECTOR	
A4	K1KA04AA0190	CONNECTOR	
A6	K1KA13A00138	CONNECTOR	
A8	K1KA04AA0093	CONNECTOR	
CF835	TAP4GA0006	POSISTOR	△
F840	K5D502BLA016	FUSE	△
JA1	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA10	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA11	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA12	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA13	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA14	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA15	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA16	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA17	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA18	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA19	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA2	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA20	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA21	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA3	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA4	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA5	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA6	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA7	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA8	ERJ6GEY0R00	M 00HM, J, 1/10W	
JA9	ERJ6GEY0R00	M 00HM, J, 1/10W	
JK3002	K4BK10B00003	REAR AV TERMINAL	
JK3003	K4BK08B00008	AV TERMINAL	
JK3201	K4BZ07B00002	AV TERMINAL	
JS103	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS104	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS105	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS110	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS2315	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS2341	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS2342	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3043	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3044	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3045	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3046	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3131	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3132	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS3145	ERJ6GEY0R00	M 00HM, J, 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
JS3146	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS631	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS632	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS633	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS634	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS850	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS63142	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS63147	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS63148	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS6835	ERJ6GEY0R00	M 00HM, J, 1/10W	
JS6894	ERJ6GEY0R00	M 00HM, J, 1/10W	
L13	K1ZZ00001300	CONNECTOR	
L5	K1ZZ00001301	CONNECTOR	
L6	K1KA03AA0190	CONNECTOR	
LF830	ELF15N022A	LINE FILTER	△
RL831	K6B1CDA00029	RELAY	△
RM1062	B3RAD0000120	REMOCON RECEIVER	
SC351	K3B09CA00013	CRT SOCKET	△
SW1011	EVQ11G05R	SWITCH	
SW1012	EVQ11G05R	SWITCH	
SW1013	EVQ11G05R	SWITCH	
SW1014	EVQ11G05R	SWITCH	
SW1015	EVQ11G05R	SWITCH	
SW1016	EVQ11G05R	SWITCH	
SW840	K0F122A00172	SWITCH	△
TU001	ENV56K19G3F	TUNER	△
X601	H0Z202500001	CRYSTAL OSC	
XF101	J0C4400A0002	DELAY LINE	△