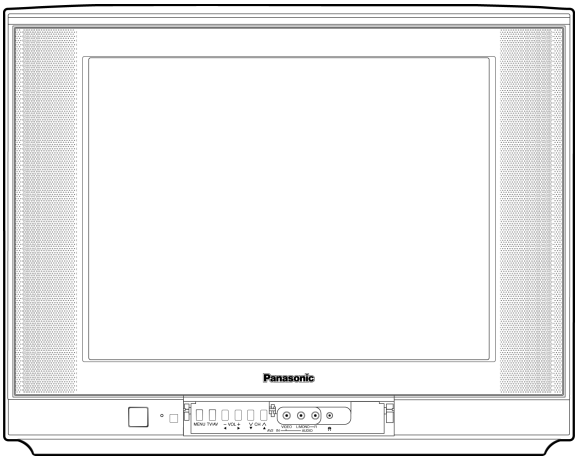
ORDER NO. MTV0701522CE

Service Manual

Colour Television



TX-21GX25R-IRAN

GP41N Chassis

Specifications

Power Source :	AC SINGLE 220-240V, 50/60 Hz
Power Consumption :	58W
Aerial Impedance :	75Ω unbalanced
	Coaxial type
Receiving System :	17 Systems
Receiving Channels :	
VHF	2-12 PAL / SECAM B,K1
	0-12 PAL B (N ZEALAND)
	1-9 PAL B (N ZEALAND)
	1-12 PAL / SECAM D
	1-12 NTSC M (JAPAN)
	2-13 NTSC M (U.S.A)
UHF	21-69 PAL G,H,I / SECAM G.K.KI
	28-69 PAL B (Australia)
	13-57 PAL D,K
	13-62 NTSC M (JAPAN)
	14-69 NTSC M (U.S.A)
CATV	S1-S20 (OSCAR)
	1-125 (U.S.A CATV)
	C13-C49 (JAPAN)
	Z1-Z37 (CHINA)
	5A,9A (AUSTRALIA)
	S21-S41 (HYPER)

Audio Terminal :

DVD

	Y	1.0 Vp-p, 75Ω
	PB	0.7 Vp-p, 75Ω
	PR	0.7 Vp-p, 75Ω
AV 1, 2, 3		
	Video In	1 Vp-p, 75Ω
	Audio In	Approx. 0.5V, 47kΩ
Monitor Out		
	Video Out	1 Vp-p, 75Ω
	Audio Out	Approx. 0.5V, 1kΩ
High Voltage :		27.5kV ±1.5
		at zero beam current
Picture Tube :		A51LYZ395X62
		50.5cm (21 inches)
		Measured diagonally,
		90° deflection
Audio Output :		5W + 5w = 10W
Dimensions :		Height : 472 mm
		Width : 598 mm
		Depth : 479 mm
Mass :		22.5 kg (Net Wt.)

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

Panasonic®

⚠ 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.

CONTENTS

1 Safety Precautions

1.1. General Guide Lines

1. It is advisable to insert an isolation transformer in the AC supply before servicing this 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 cord outlet.
5. Potential, as high as **29.0kV** 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. 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.
2. Turn on the receiver's power switch.
   Measure the resistance value, with an ohmmeter, between the jumper 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 infinite.

1.3. Leakage Current Hot Check (Fig. 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Check a 2 kΩ non-inductive resistor and an AC/DC current meter, in series with each exposed metallic part on the receiver in turn and an earth such as a water pipe.

   The current from any point should not exceed 0.7 mA peak AC or 2 mA DC. In the case of a measurement being outside of these 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.

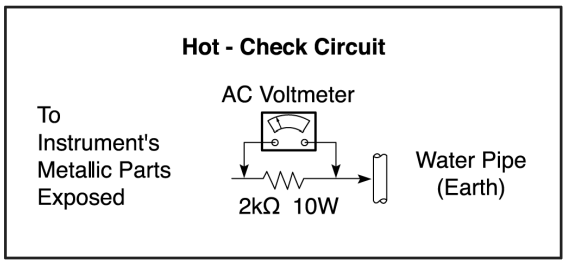


Fig. 1

1.4. X-Radiation

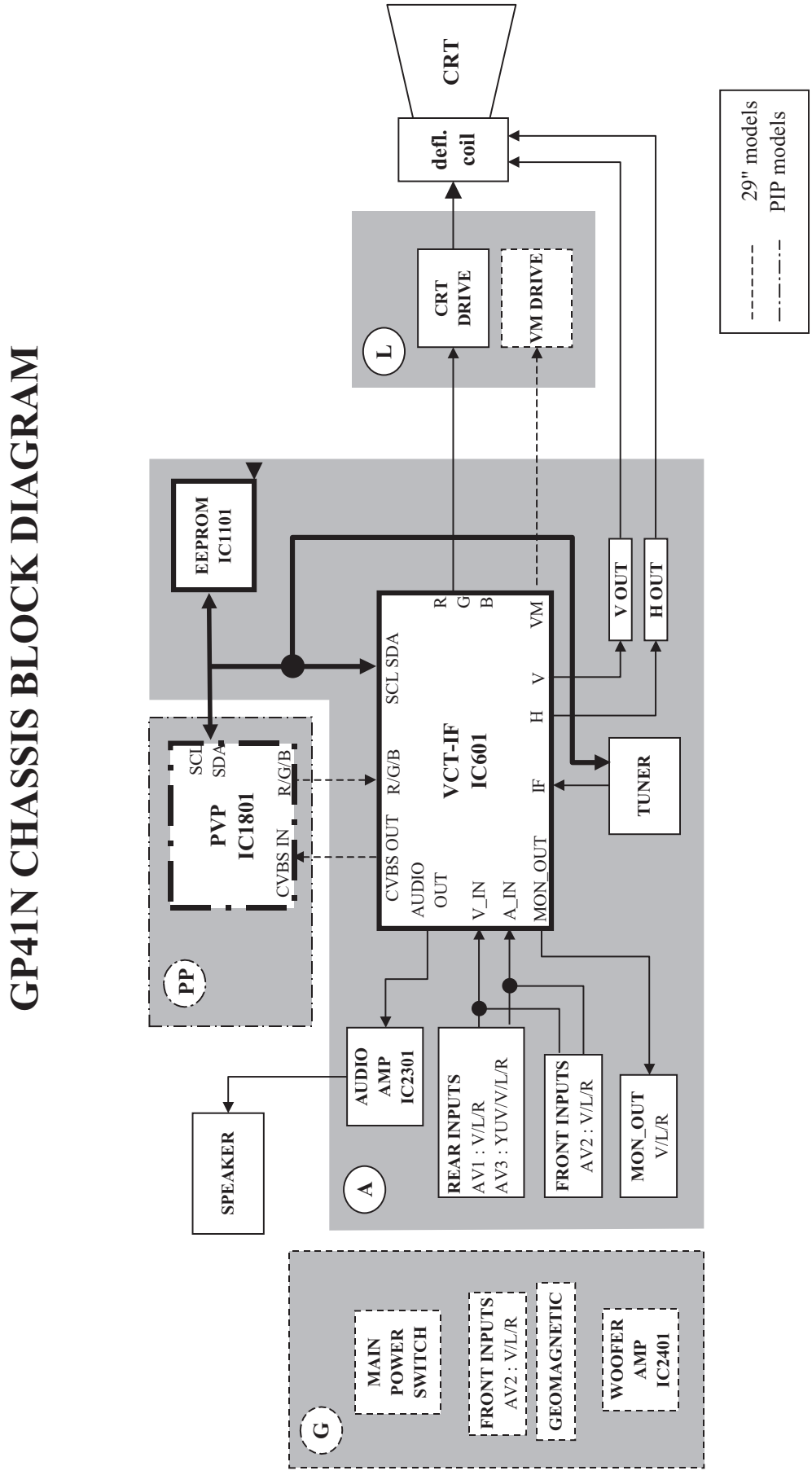
Warning:

The potential sources of X-Radiation in TV set are the EHT section and the picture tube. When using a picture tube test jig for service, ensure that jig is capable of handling **29.0kV** without causing X-Radiation.

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

1. Set the brightness to minimum.
2. Use the remocon to get into Service Mode.
3. Measure the EHT. The meter reading should indicate **27.5±1.5kV**. 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 the possibility X-Radiation, it is essential to use the specified picture tube, if service replacement becomes necessary.

1.5. GP41N Chassis Block Diagram



2 Service Hints

2.1. Service Position for E-Board

1. Remove the back cover.
2. Stand the TV set as shown in Fig. 2.
3. Remove the A-Board from the TV set by pulling the main board out as shown in Figure 2.

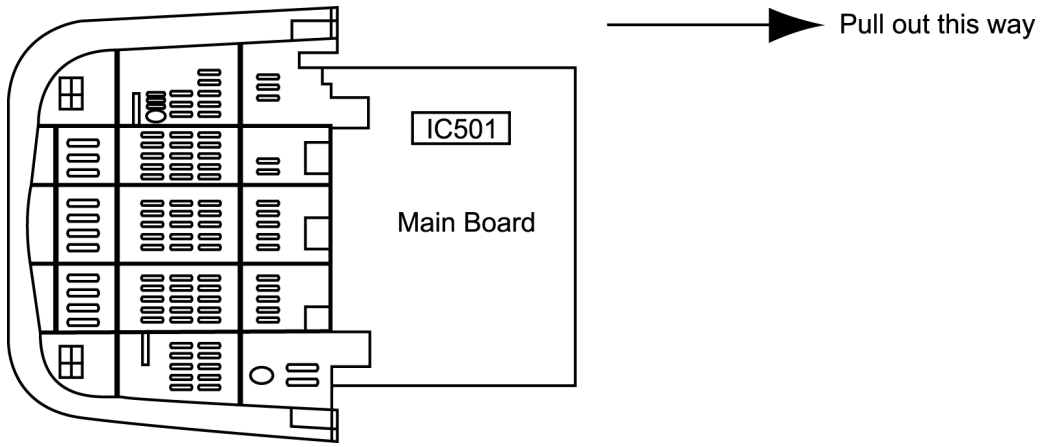
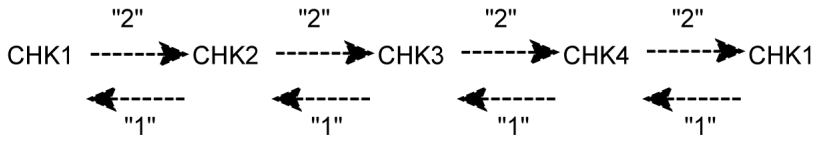


Fig. 2

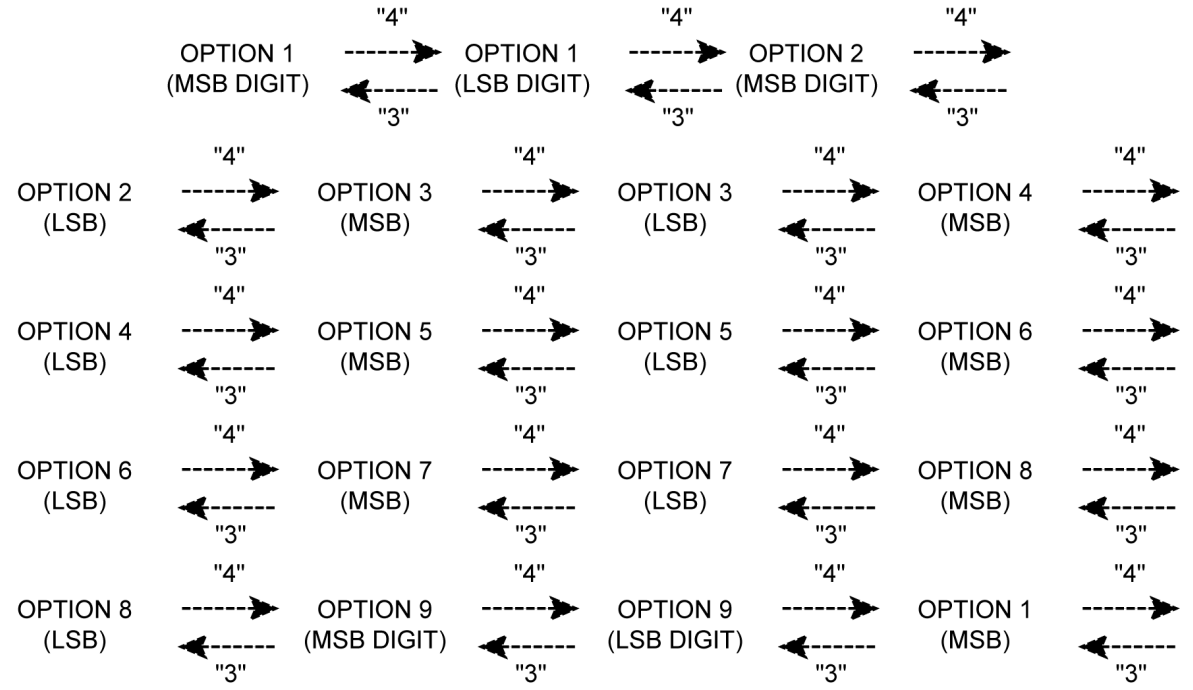
2.2. Factory Mode Adjustment

1. Adjustment.
   a. Set Timer ON (30 minutes)
      Press remote's RECALL & panel's vol down key simultaneously to select service mode.
   b. CHK should appear on right side of TV screen.
      After few seconds CHK 1 should appear on right side of TV screen.

      NOTE :
      To move from CHK 1 to CHK 2 mode, etc, please follow below rotation:-



   c. CHK 1
      Press digit key "4" to move option mode forward.
      Press digit key "3" to move option backward.
      The function rotation will be as follows :-

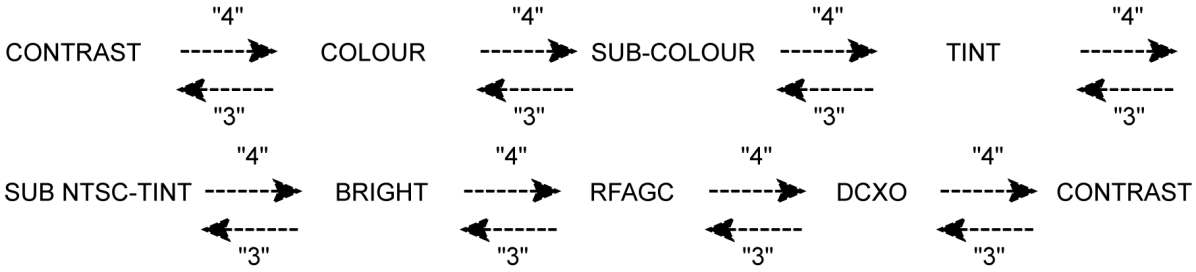


d. After selecting the required option mode press Vol up / Vol down to adjust correct option. OSD will change to RED colour. Press digit “0” to memorize data.

e. CHK2

Press digit key “2” to move forward to CHK2.

The function rotation will be as follows:-



f. Press digit key “4” to move forward from Colour ------> Sub-Colour, etc.

Press digit key “3” to move backward from Sub-Colour ------> Colour, etc.

g. Press volume up / volume down to adjust setting.

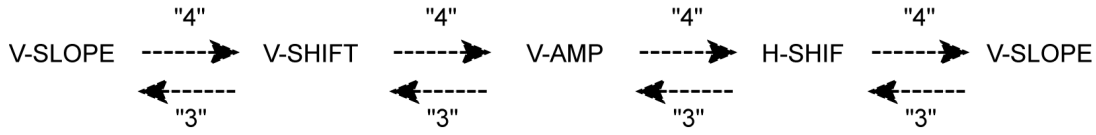
h. Press digit key “5” to make the AKB OFF (Blue OSD) - first time.

Press digit key “5” to make the AKB On (White OSD) - second time.

i. CHK3

Press digit key “2” to move forward to CHK 3.

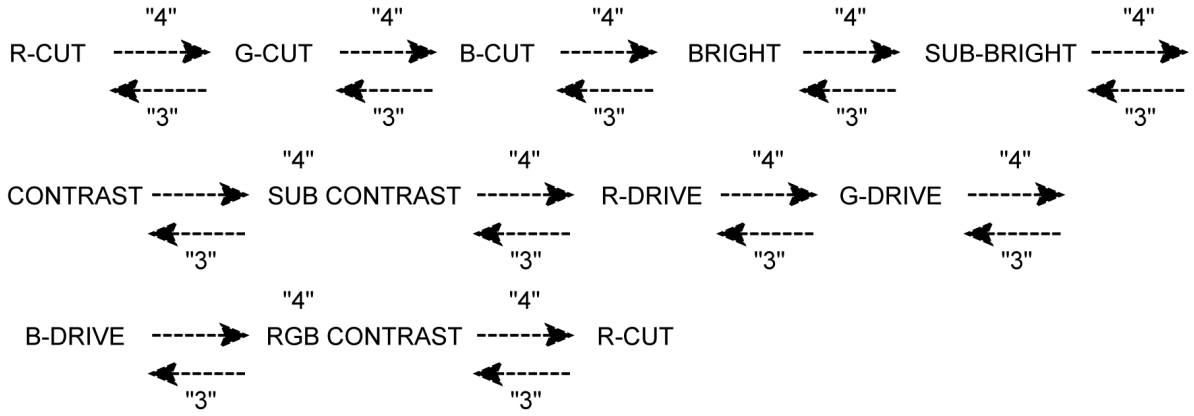
The function rotation will be as follows:-



j. Press digit key “4” to move forward from V-SLOPE ------> V-SHIFT
Press digit key “3” to move backward from V-SHIFT ------> V-SLOPE

k. Press volume up / volume down to adjust required setting.

l. CHK4
Press digit key “2” to move forward to CHK 4.
The function rotation will be as follows:-



m. Press digit key “4” to move forward from R-CUT ------> G-CUT
Press digit key “3” to move backward from G-CUT ------> R-CUT

n. After selecting the required mode, press volume up / volume down to adjust required setting.

o. Press digit key “5” to make the AKB OFF and H-Line mode - first time.
Press digit key “5” to make the AKB ON and Normal picture - second time.

p. After finish adjustment, press Power ON / OFF button on remote control to go to normal TV mode.

2. HOW TO CHANGE CHANNEL BY I2C BUS CONTROLLER
a. Short FA1 and FA2
b. Select Slave address ‘70H’, Sub-address ‘43H’ for RF AGC.
* Example :
Slave Address = 70H’, Sub-Address = 43H’
Data = 80H’ = Center

2.3. Adjustment for White Balance

Preparation:

1. Receive the white balance pattern and aging should have been performed over 30 minutes.
2. Set the picture menu to DYNAMIC NORMAL.
3. Degausse the CRT face.
4. Fix the CRT colour analyzer receiver unit to CRT face.

Adjustment of Low Light.

1. Adjustment Sub Bright, so that Y = 6.5 ± 1.0 nit.
2. Adjustment R-CUT OFF, so that X = 0.246 ± 0.003 nit.
3. Adjustment G-CUT OFF, so that Y = 0.256 ± 0.005 nit.

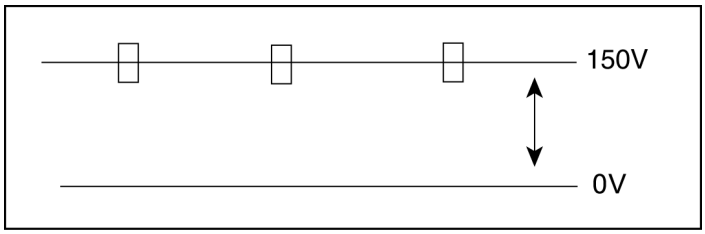
Adjustment of High Light

1. Adjustment Sub Bright, so that Y = 150 nit.
2. Adjustment R-Drive, so that X = 0.263 ± 0.003 nit.
3. Adjustment G-Drive, so that Y = 0.271 ± 0.003 nit.

2.4. Adjustment for CRT CUT OFF

Preparation:

1. Connect the oscilloscope probe to KG.
2. Screen VR min.
3. Set the data Sub Bright, Bright.
4. In service Mode at “Bright” dac press [5] in factory mode to enter vertical line and adjust by volume down or up button.
5. Adjust “Screen VR” until 1-H Line appears.



2.5. Adjustment Procedure

2.5.1. +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 :

   TPA 15 : 3.35 ± 0.2V

   TPA 16 : 141.0 ± 2V

   TPA 17 : 8.2 ± 0.3V

   TPA 18 : 1.9 ± 0.2V

   TPA 19 : 5.2 ± 0.2V

   TPA 20 : 175 ± 15V

2.5.2. 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 TPA 10 and confirm the +B voltage is 141.0 ± 1.5V.
2. Connect a high frequency voltmeter to heater and confirm that voltage reads 6.3 ± 0.24 (VRMS).
3. Normalize the brightness and contrast.

2.6. Adjustment

Before Colour Purity, Convergence and White Balance adjustment are attempted, V. Height, H. Centre and Focus adjustments must be completed.

Colour Purity

1. Set the Brightness and Contrast controls to their maximum positions.
2. Operate the TV set for 60 minutes.
3. Fully degausse the picture tube by using an external degaussing coil.
4. Apply a crosshatch pattern signal and adjust the static convergence magnets to the approximately correct position.
5. Receive a black and white signal.
6. Set the control as follows:
   Red.....minimum
   Green.....minimum
   Blue.....minimum
   Press the Shipping button on the remote control twice to select CRT Adjustment Mode to select low light.
7. Loosen the clamp screw for the Deflection Yoke A in Fig. 10 and move the Deflection Yoke as close to the purity magnet as possible.
8. Adjust the purity magnetic rings so that a vertical green field is obtained at the centre of the screen.

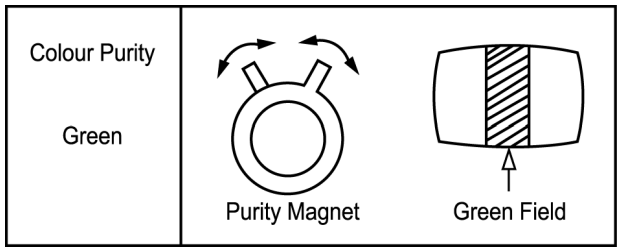


Fig. 6

9. Slowly push the Deflection Yoke and set it where a uniform green field is obtained.

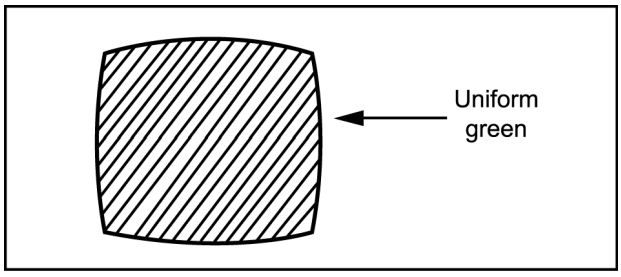


Fig. 21

10. Re-adjust the Low Light controls to their correct settings and make sure that a uniform white field is obtained.
11. Tighten the clamp screw A in Fig. 10.

Convergence

1. Apply a crosshatch pattern signal and Normalize Contrast control to the maximum positions.
2. Adjust Brightness until the grey position of the crosshatch pattern just becomes black.
3. Adjust the Red and Blue line at the centre of the screen by rotating the R-B static.

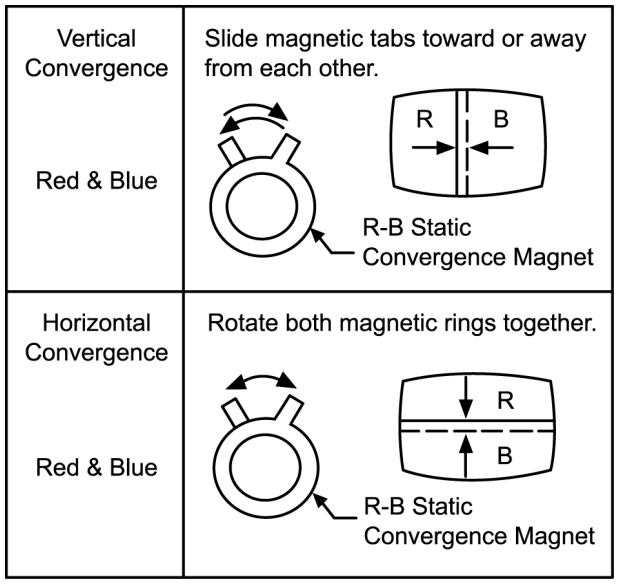


Fig. 8

4. Adjust Red and Blue with Green line at centre of the screen by rotating (RB)-G static convergence magnetic rings.
5. Lock convergence magnets with silicone sealer.
6. Remove the DY wedges and slightly tilt the Deflection Yoke vertically and horizontally to obtain the good overall convergence.

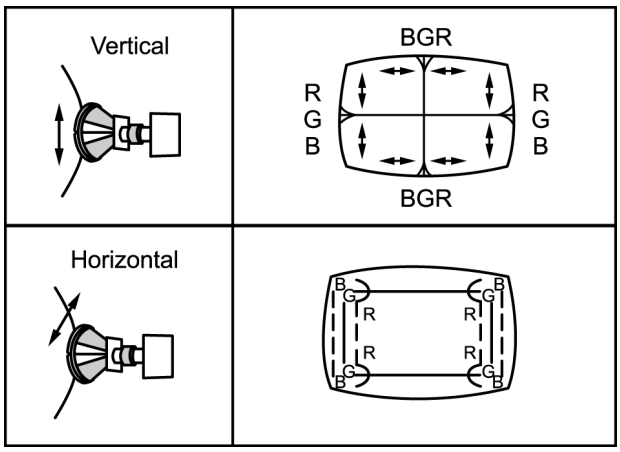


Fig. 9

7. Fix the Deflection Yoke by reinserting the DY wedges. Refer to Fig. 10.
8. If purity error is found, repeat “Colour Purity” adjustment.

Adjustment of CRT VRS

1. **Preparation**

a. Set DY to CRT not to tilt up and down left and right deflection.
b. Set CY to CRT and set CY magnet primarily (Fig. 1)
Purity magnet : Set purity magnet that 2 magnets are (TOP POSITION)
VRS magnet : Set purity magnet 2 magnets are (HORIZONTAL POSITION)

2. **Adjustment**

a. Receive that Cross Hatch pattern.
b. Adjust V-SHIFT -50Hz.
c. Set 2 magnets of horizontal position to up and down equally so that it will be the center part of CRT. (Fig. 2)

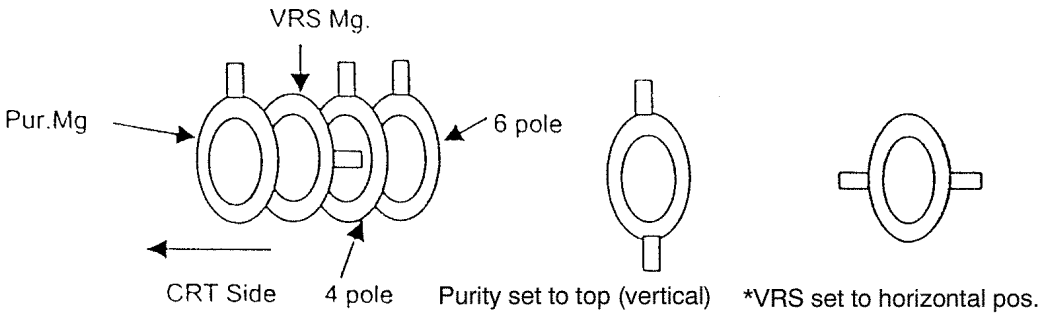
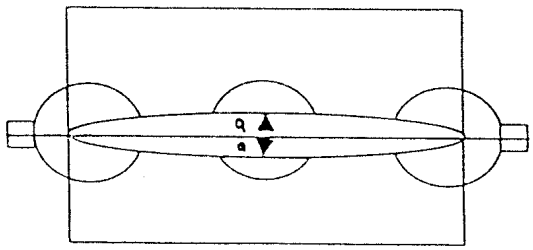


FIG 1.



a ≤ 0 ± 1mm

FIG 2.

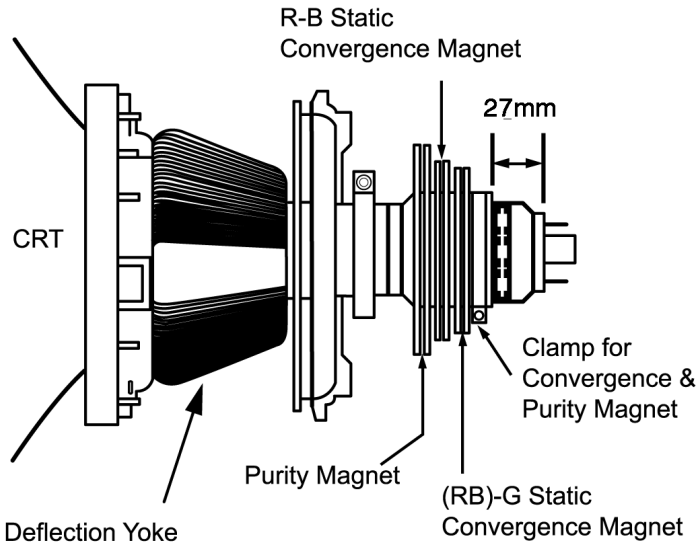


Fig. 10

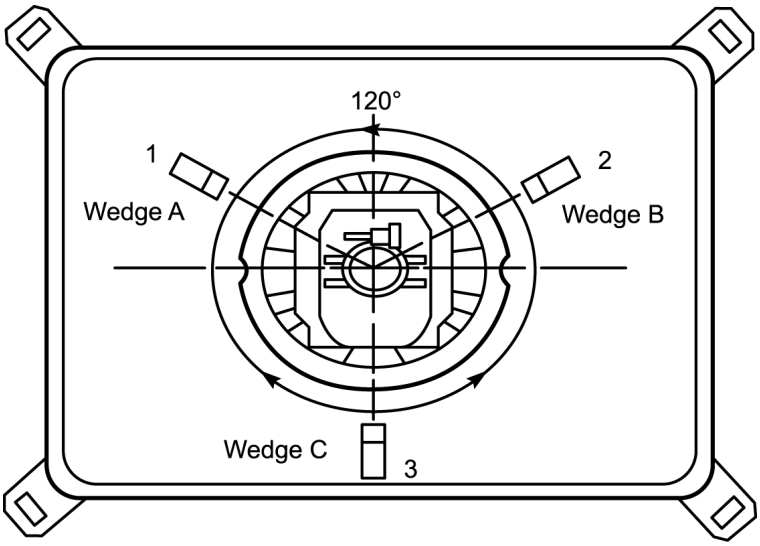
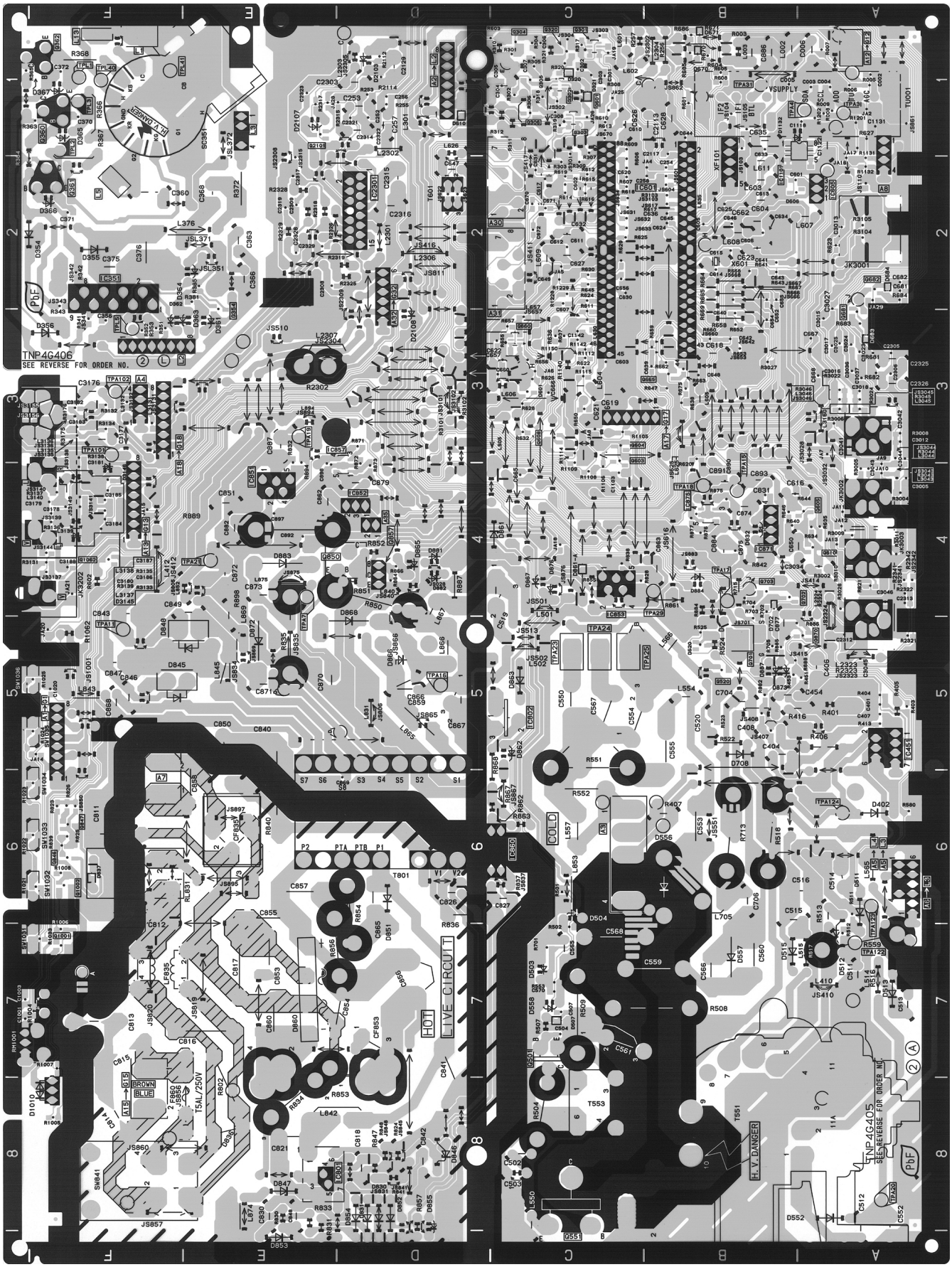


Fig. 11

Notes:

1. Wedge A, B and C should be inserted following the sequence of 1, 2 and 3 shown in Fig. 11.
2. The wedges should be set 120° apart from each other.
3. Be certain that three 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.

3 Conductor Views



4 Schematic Diagram

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.

Notes :

1. Resistor

   All resistors are carbon 1/4W resistors unless marked as follows :

   Unit of resistance is OHM (Ω) (K = 1 000 M = 1 000 000)

◯	Nonflammable	⊠	Metal Oxide
△	Solid	◎	Metal Film
⊠	Wire Wound	⊗	Fuse

2. Capacitor

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

   Unit of capacitance is μF unless otherwise noted.

⊗	Temperature Compensation	+ -	Electrolytic
Ⓜ	Polyester	NP	Bipolar
ⓜ	Metalized Polyester	Ⓣ	Dipped Tantalum
⊠	Polypropylene	Ⓩ	Z-Type

3. Coil

   Unit of inductance is μH, unless otherwise noted.

4. Test Point

   ⫽ : Test Point position

5. Earth Symbol

   ⏚ : Chassis Earth (Cold) ⏚ : Line Earth (Hot)

6. Voltage Measurement
   Voltage is measured using DC voltmeter.
   Conditions of the measurement are the following :
   Power Source..... AC AUTO 110-240V, 50/60Hz
   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 (↗) is found, connection is easily found from the direction of arrow.

9. → : Indicates the major signal flow.

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

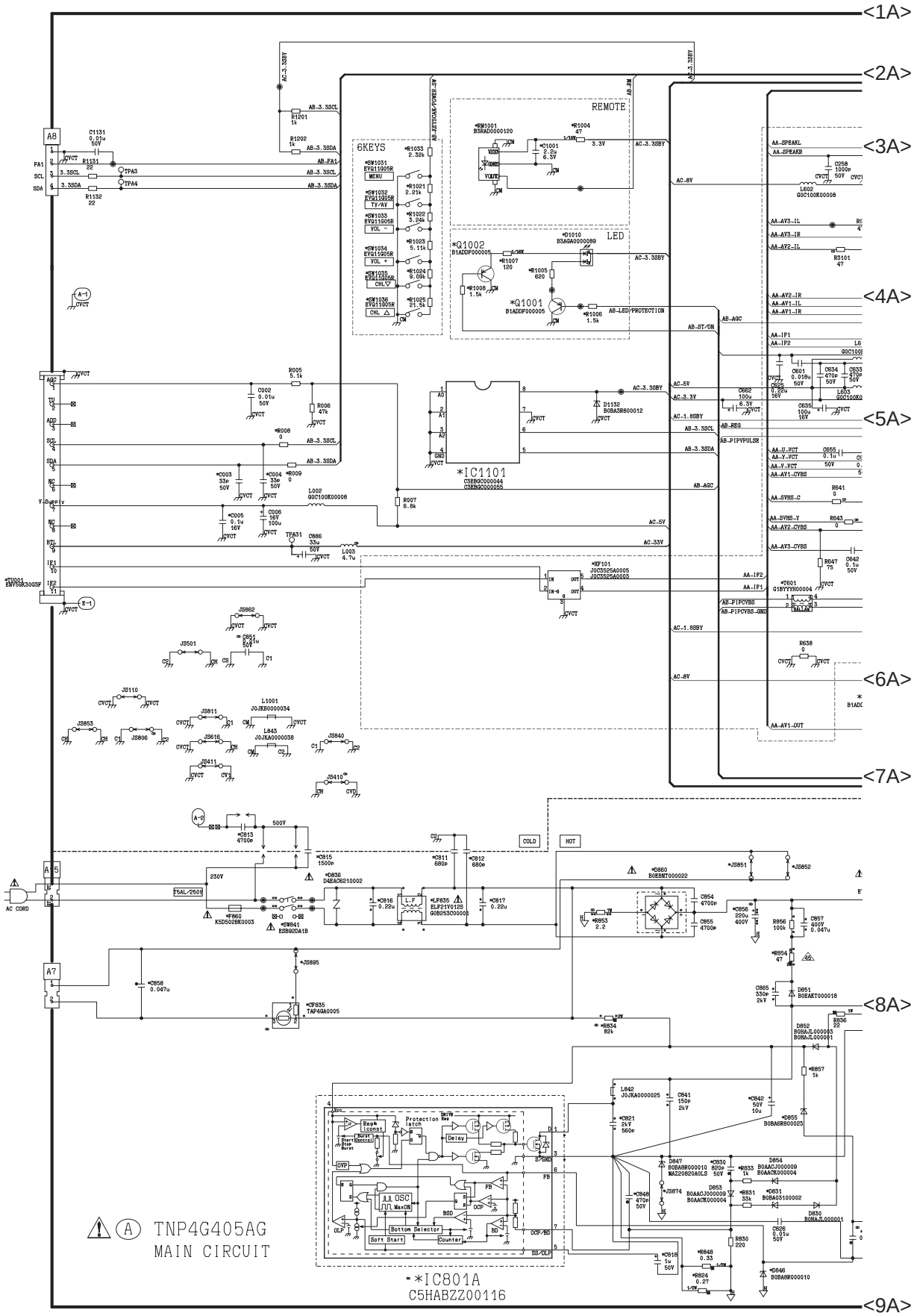
Remarks :

The Power Circuit contains a circuit area which uses a seperate 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 :

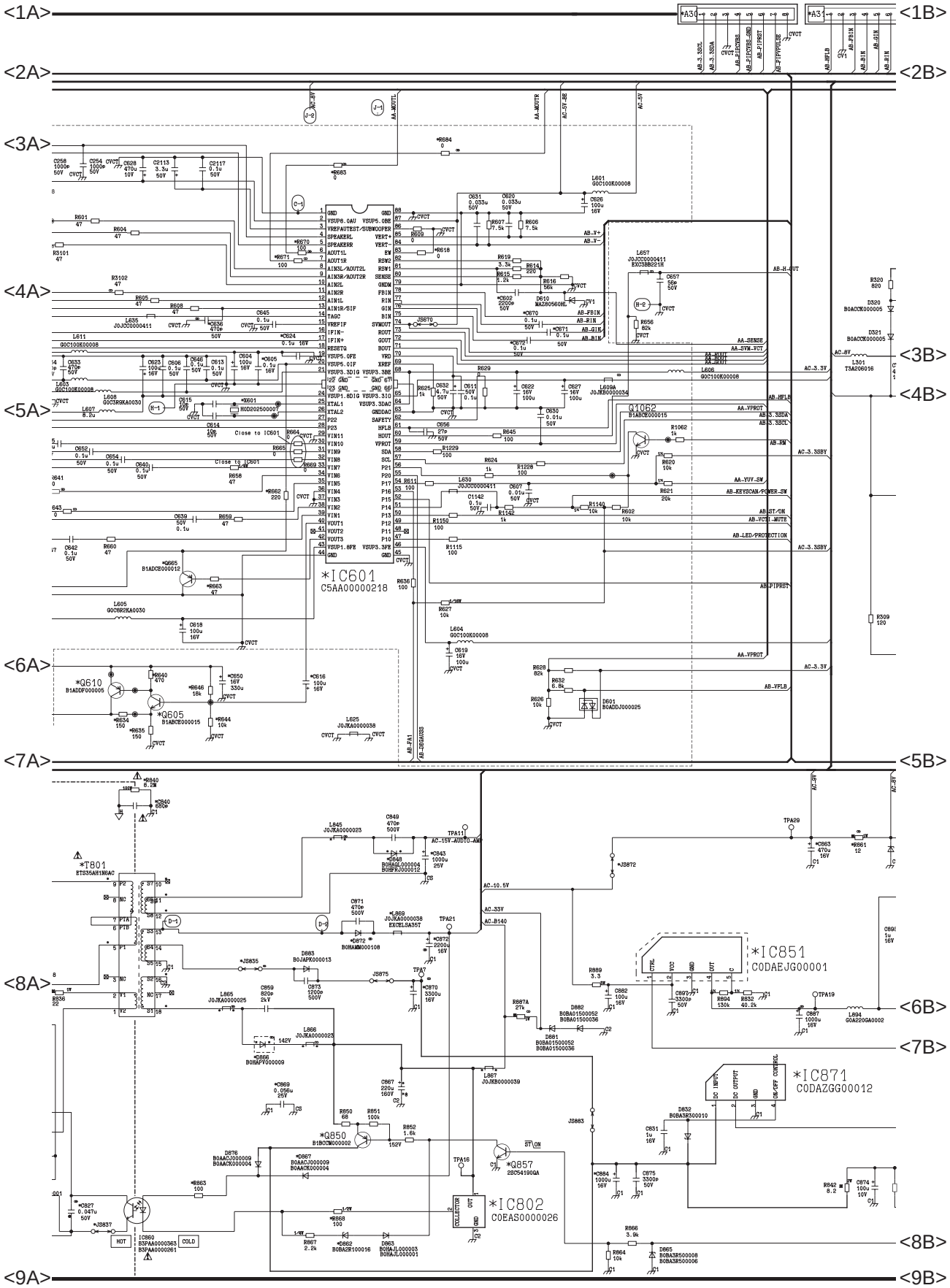
a. Do not touch the hot part or the hot and cold parts at the same time or you may be shocked.
b. Do not short-circuit the hot and cold circuits or a fuse may blow and parts may break.
c. Do not connect an instrument such as an oscilloscope to the hot and cold circuits simultaneously or a fuse may be blown.
   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.

4.1. A Board

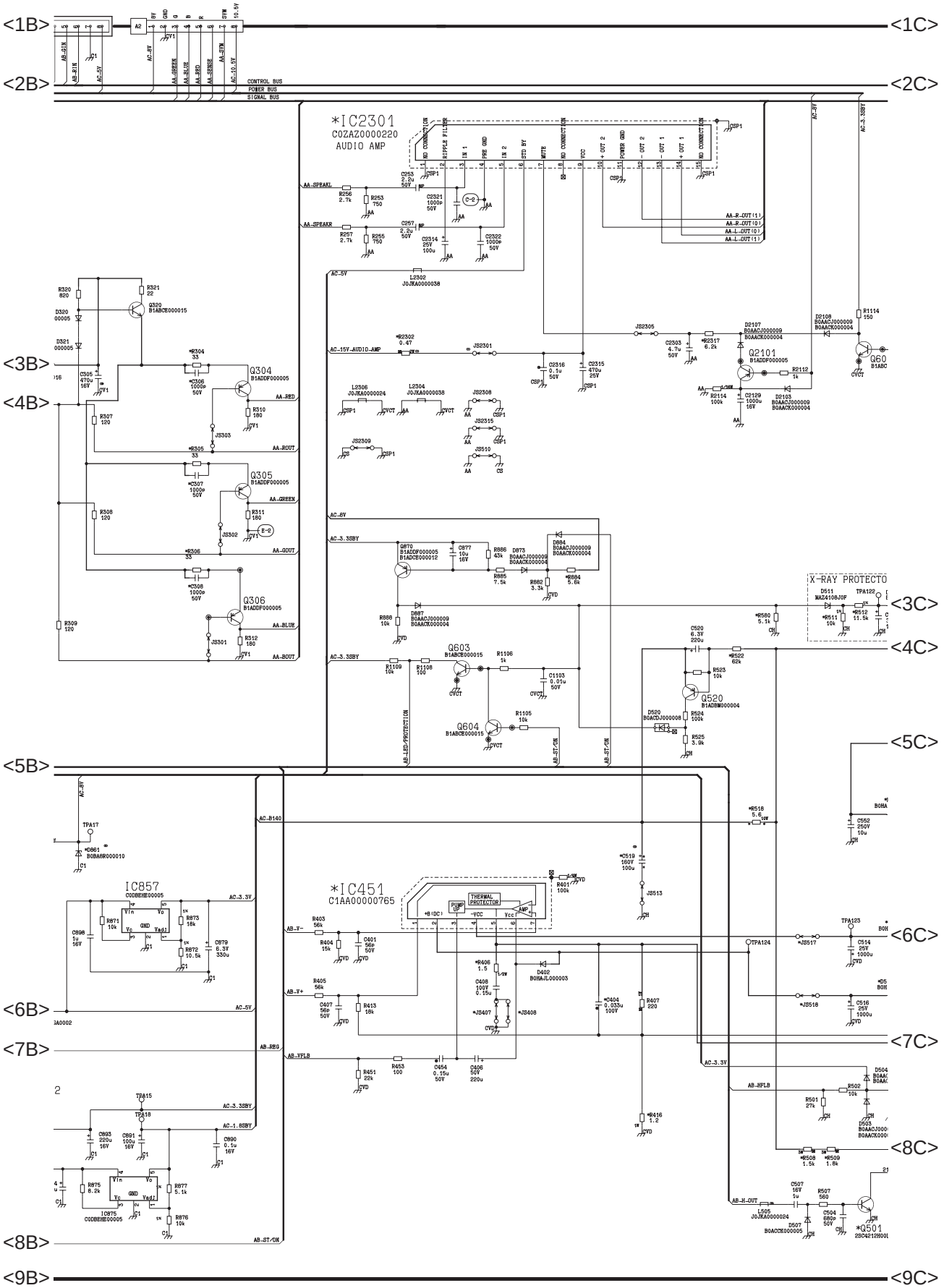
4.1.1. A Board (1/5)



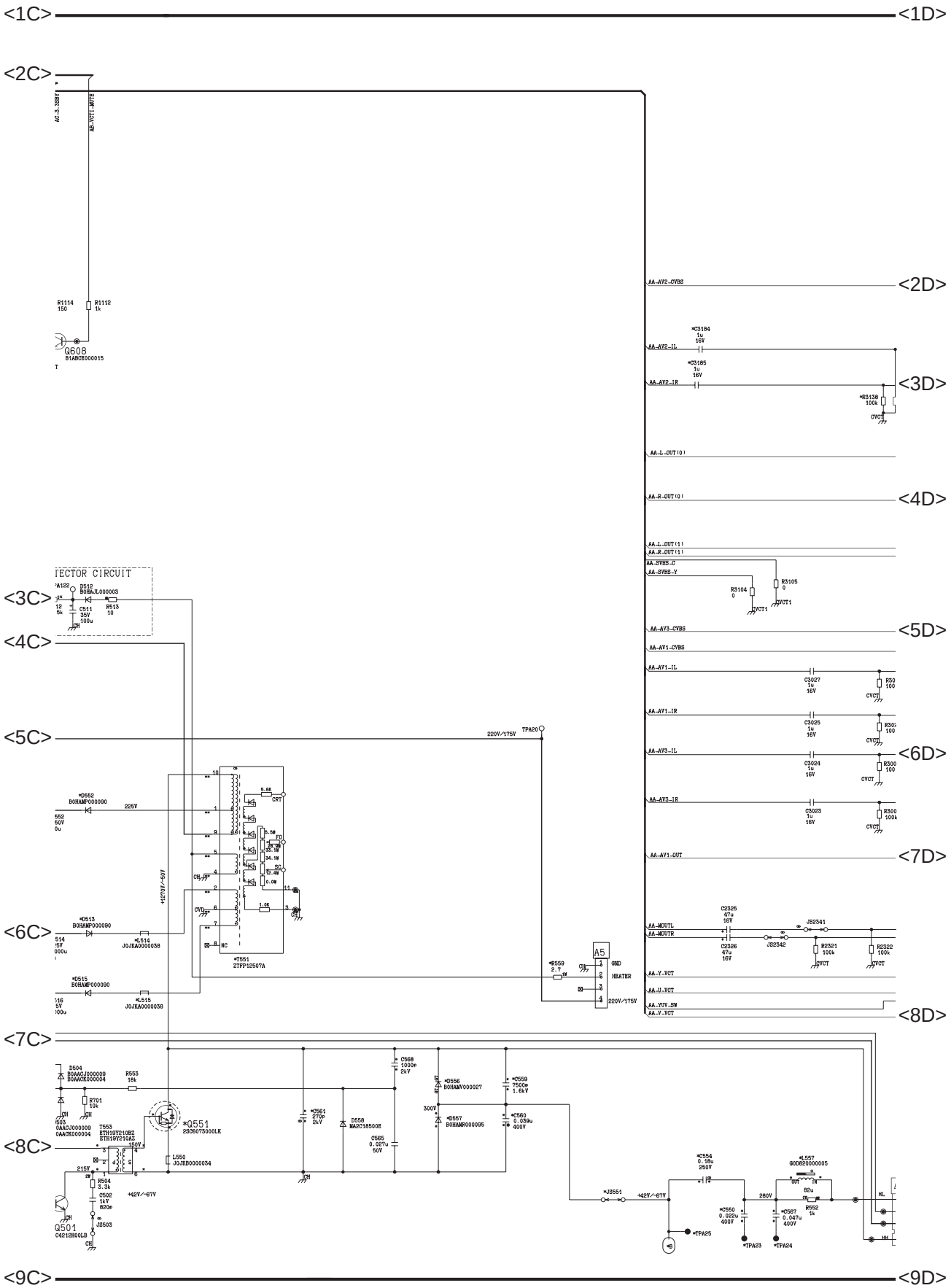
4.1.2. A Board (2/5)



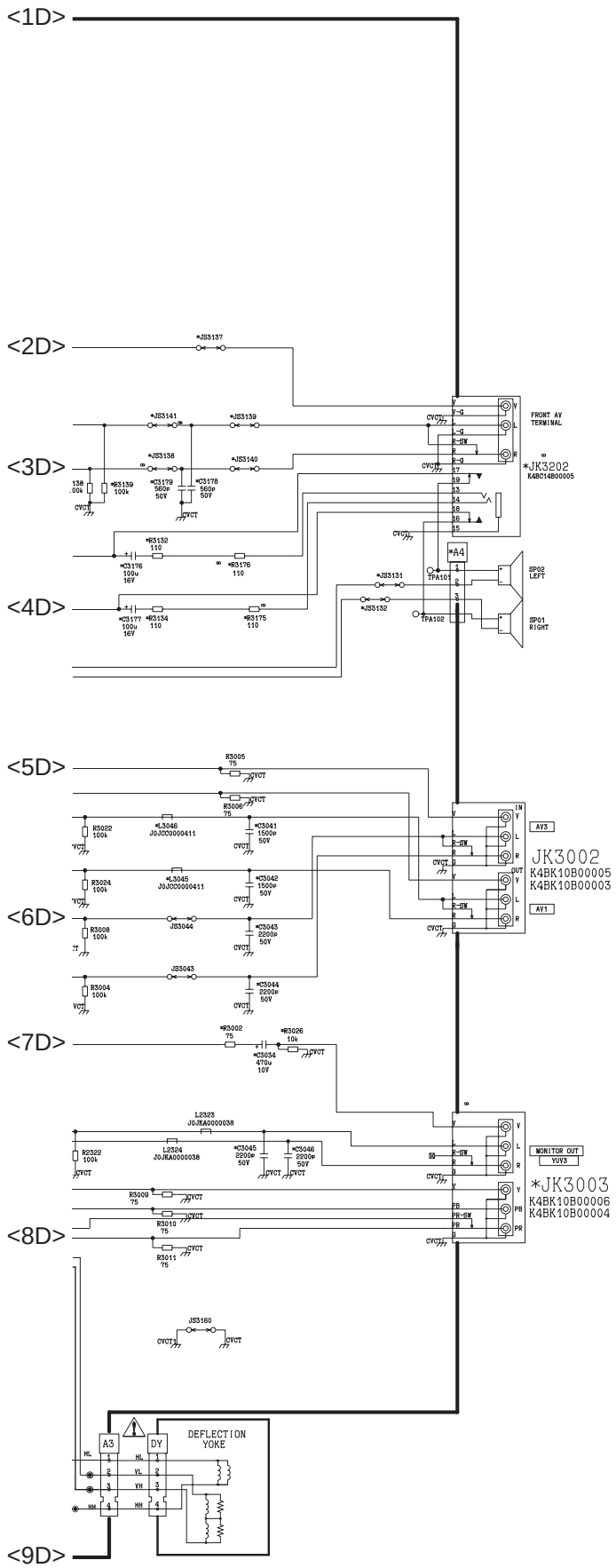
4.1.3. A Board (3/5)



4.1.4. A Board (4/5)

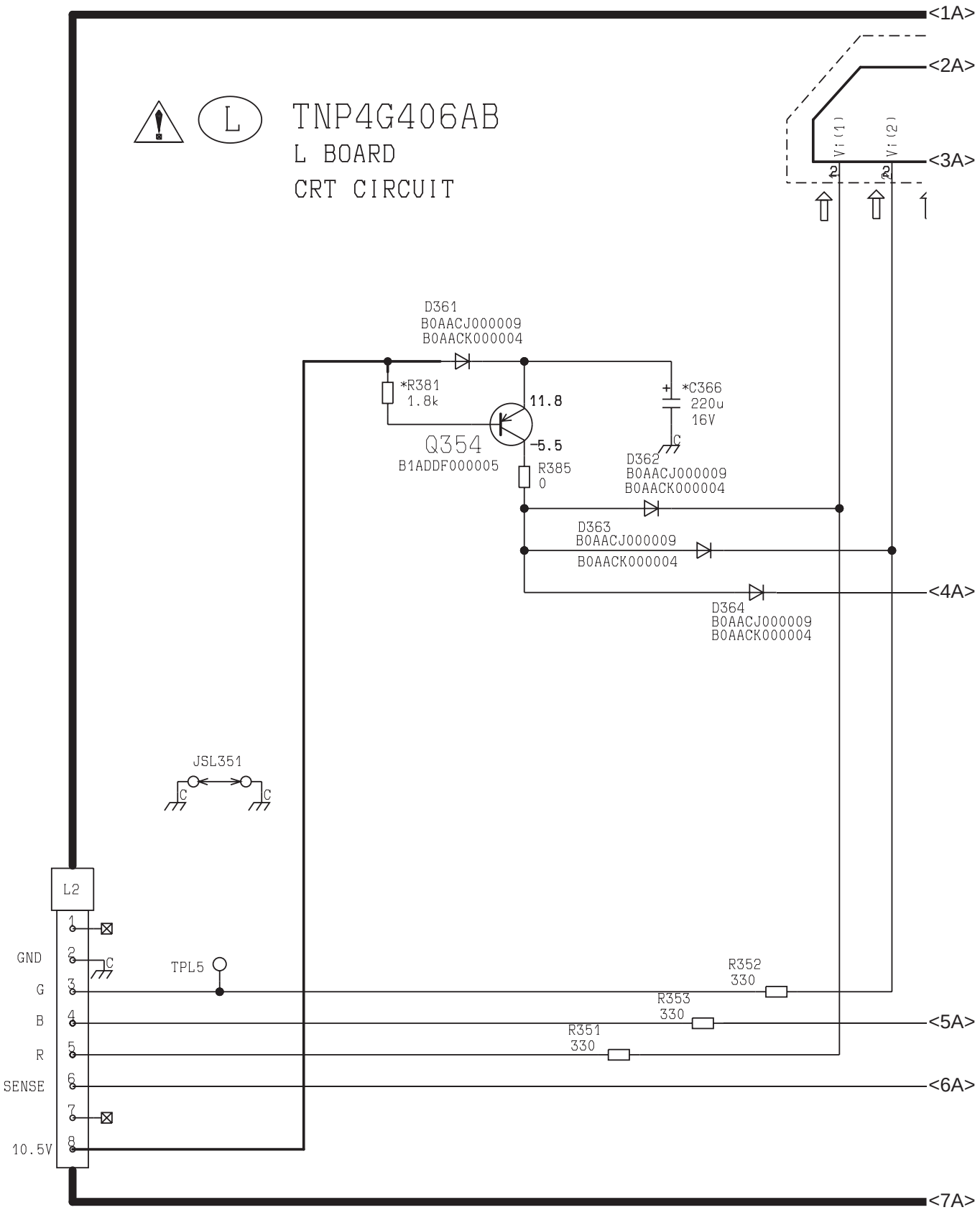


4.1.5. A Board (5/5)

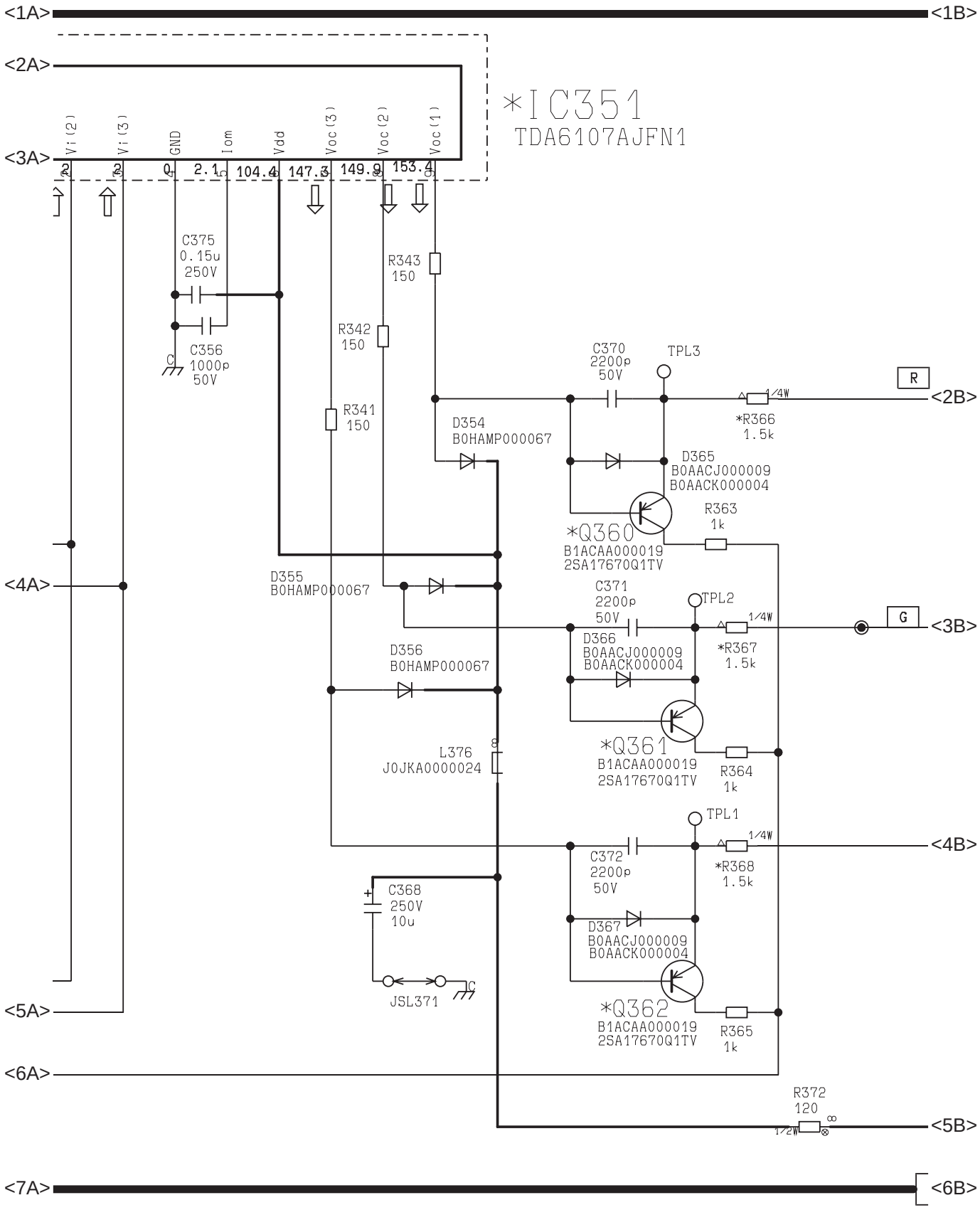


4.2. L Board

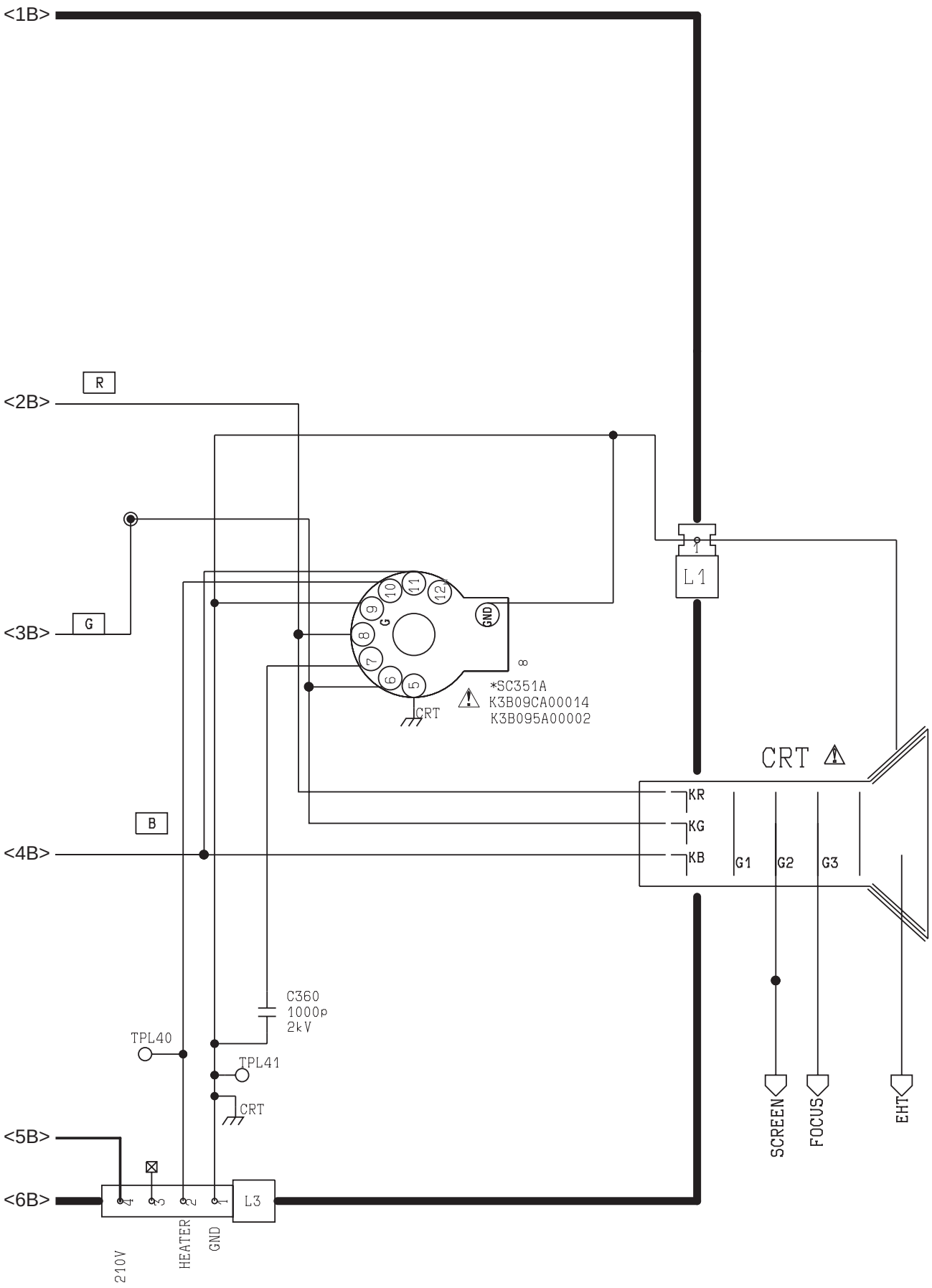
4.2.1. L Board (1/3)



4.2.2. L Board (2/3)

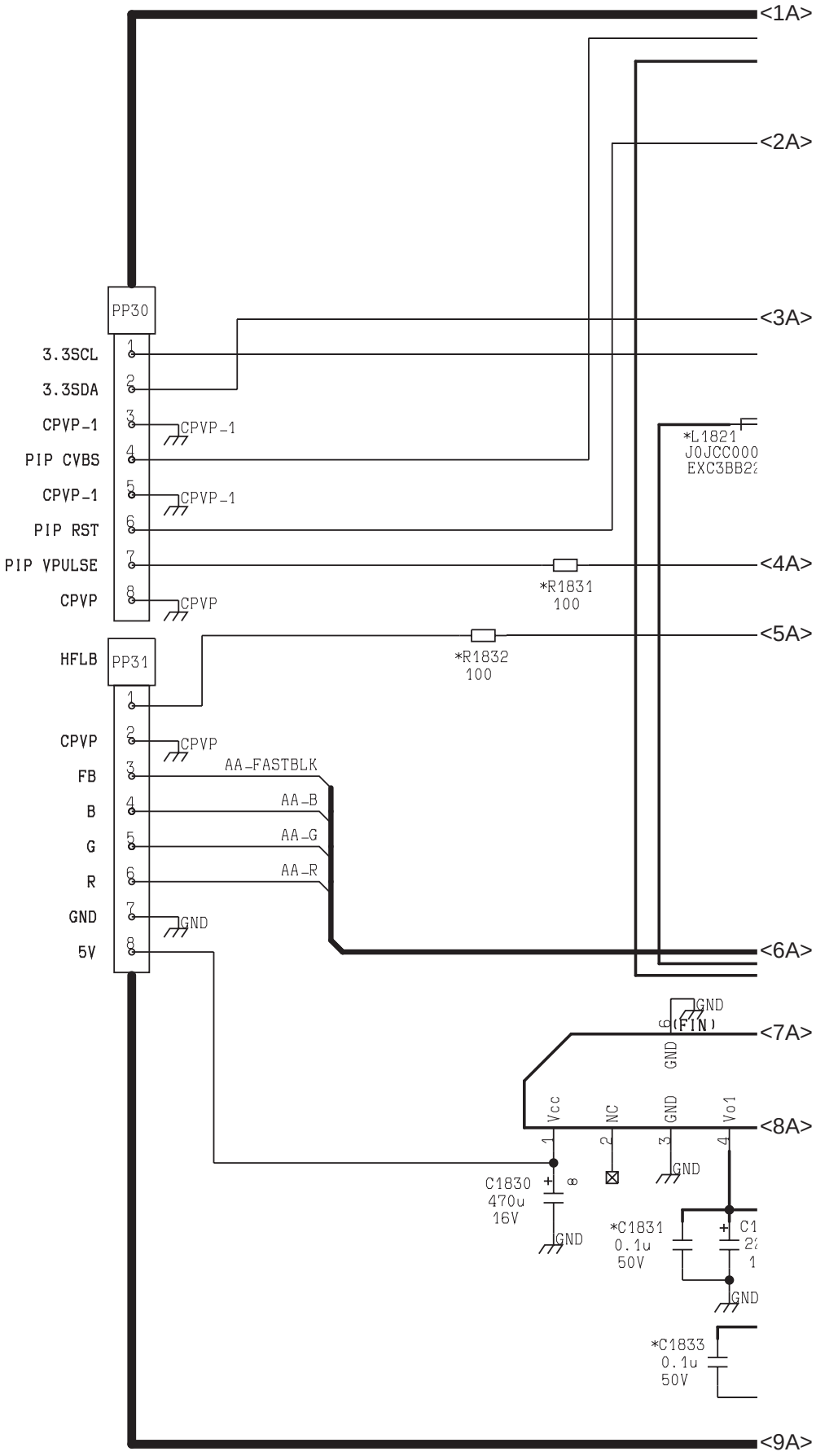


4.2.3. L Board (3/3)

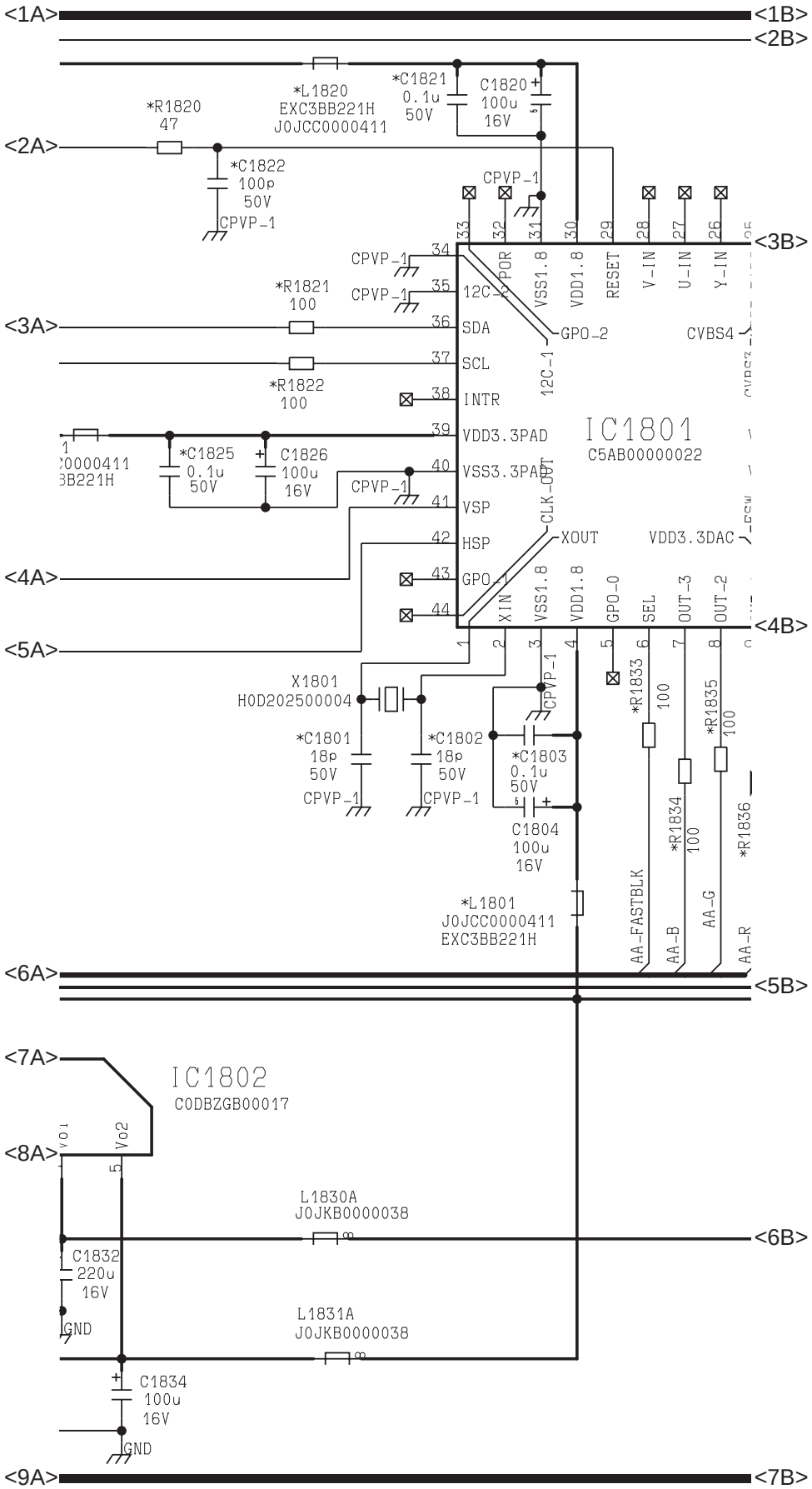


4.3. PP Board

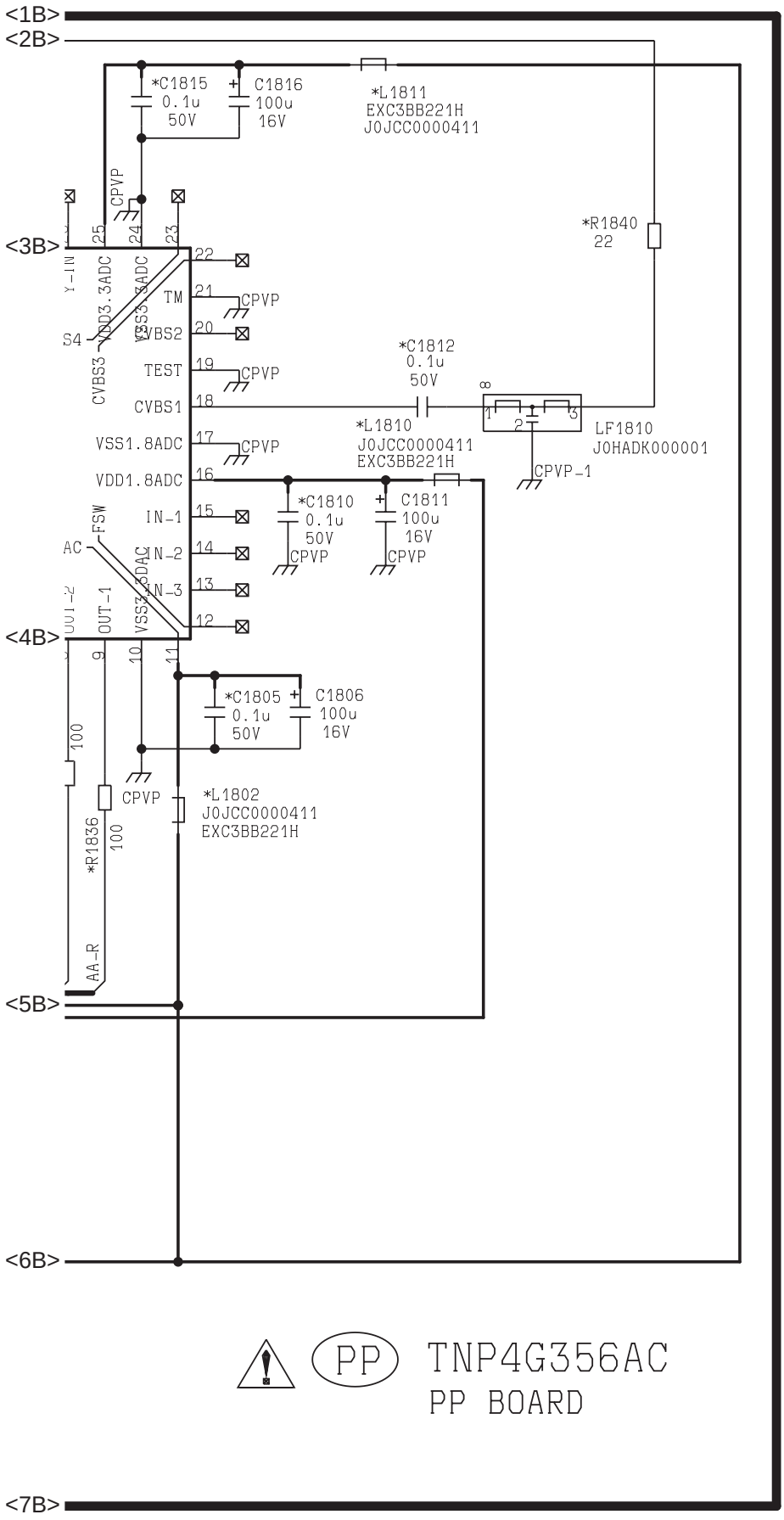
4.3.1. PP Board (1/3)



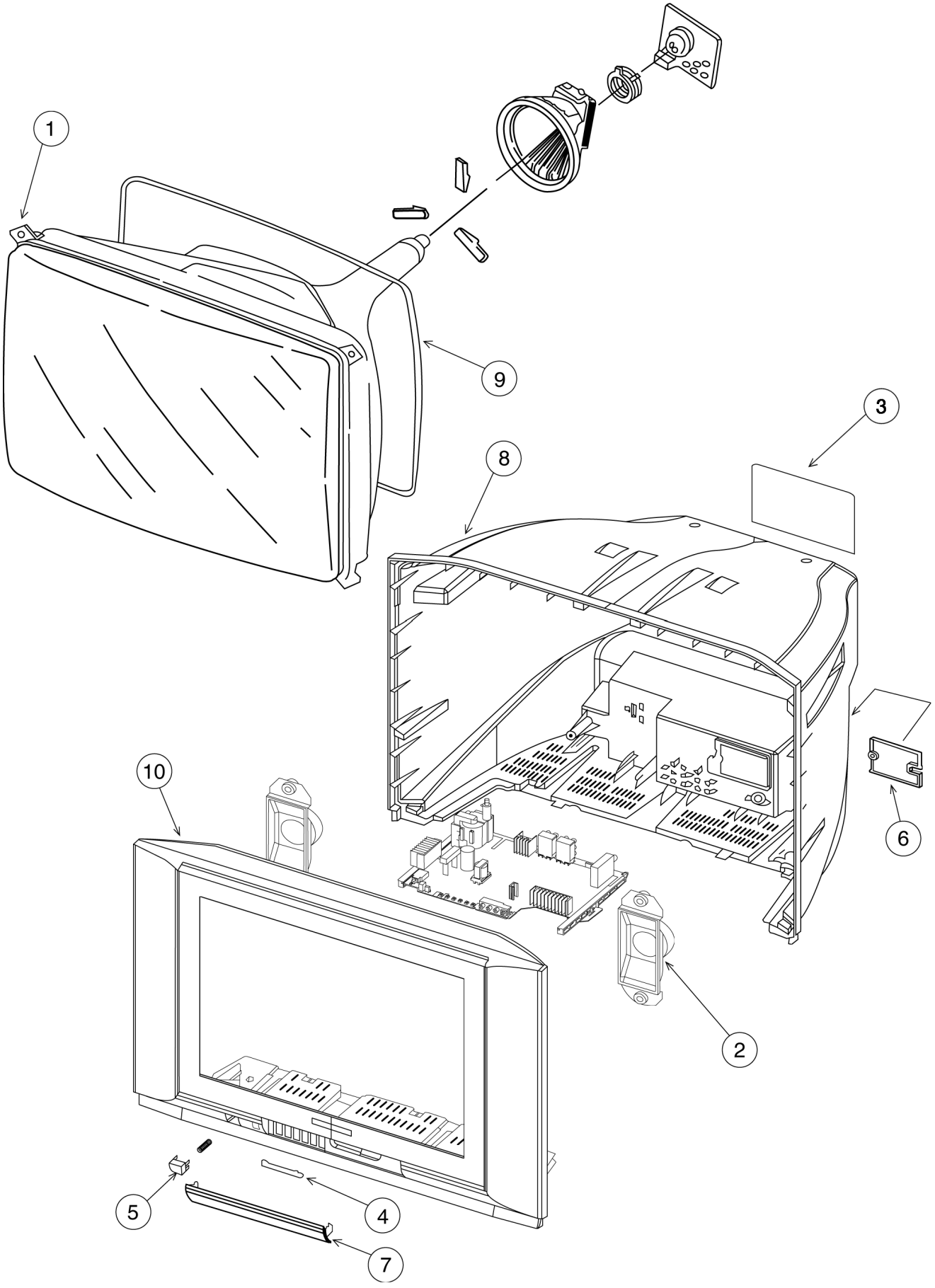
4.3.2. PP Board (2/3)



4.3.3. PP Board (3/3)



5 Parts Locations



6 Replacement Parts List

Important Safety Notice

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

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** 100KΩ, **J**, 1/4W
Type Allowance

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

2. Capacitor

Example :

ECKF1H103ZF **C** 0.01μF, **Z**, 50V
Type Allowance

Type	Allowance
C : Carbon	C : ± 0.25pF
E : Electrolytic	D : ± 0.5pF
P : Polyester Polypropylene	F : ± 1pF G : ± 3%
T : Tantalum	J : ± 5%
	K : ± 10%
	L : ± 15%
	M : ± 20%
	P : ± 100%, -0%
	Z : ± 80%, -20%

6.1. Replacement Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
1	A51LYZ395X62	ITC	⚠
2	L0AA11C00005	SPEAKER	
	N2QAHB000067	REMOTE CONTROL	
3	TBM4G1486	MODEL NAME PLATE	⚠
4	TBM4G3021	PANASONIC BADGE	
5	TBX4G91211	POWER BUTTON	
	TES4G206	COIL SPRING	
	TES4G214	SPRING (POWER BUTTON)	
	TES4G409-1	SPRING (DOOR)	
	THT4G1005J	SCREW (CRT)	
	THT4G10139	SCREW	
6	TKP4G11744	AC CORD BRACKET	
7	TKP4G13551-1	DOOR	
8	TKU4GA2910	BACK COVER	
9	TLK4G9097X	DEGAUSSING COIL	⚠
NLA	TNP4G356AC	PP BOARD	⚠
NLA	TNP4G405AG	A BOARD	⚠
NLA	TNP4G406AB	L BOARD	⚠
	TPE4G14036	SET COVER	
	TQB4G5199	FAN BAG	
	TSX4G161L-1	AC POWER CORD	⚠
10	TXFKY02EG15	CABINET ASSY	
	TXFPC01EG15	CARTON	
	TXFPD01EG13	CUSHION (TOP)	
	TXFPD02EG13	CUSHION (BOTTOM)	
	CAPACITORS		
C002	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C003	ECJ1VC1H330J	C 33PF, J, 50V	
C004	ECJ1VC1H330J	C 33PF, J, 50V	
C005	ECJ1VB1C104K	C 0.1UF, K, 16V	
C006	F2A1C101A310	E 100UF, 16V	
C1001	ECJ2FB0J225K	C 2.2UF, J, 6.3V	
C1103	F1J1H103A590	C 0.01UF, J, 50V	
C1131	F1J1H103A590	C 0.01UF, J, 50V	
C1142	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1801	ECJ1VC1H180J	C 18PF, J, 50V	
C1802	ECJ1VC1H180J	C 18PF, J, 50V	
C1803	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1804	ECA1CM101B	E 100UF, 16V	
C1805	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1806	ECA1CM101B	E 100UF, 16V	
C1810	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1811	ECA1CM101B	E 100UF, 16V	
C1812	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1815	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1816	ECA1CM101B	E 100UF, 16V	
C1820	ECA1CM101B	E 100UF, 16V	
C1821	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1822	ECUX1H101JCX	C 100PF, J, 50V	
C1825	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1826	ECA1CM101B	E 100UF, 16V	
C1830	F2A1C4710045	E 470UF, 16V	
C1831	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1832	ECA1CM221B	E 220UF, 16V	
C1833	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C1834	ECA1CM101B	E 100UF, 16V	
C2113	F2A1H3R3A317	E 3.3UF, 50V	
C2117	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C2129	F2A1C102A317	E 1000UF, 16V	
C2303	F2A1H4R7A317	E 4.7UF, 50V	
C2314	F2A1E101A273	E 100UF ,25V	
C2315	F2A1E471A299	E 470UF, 25V	
C2316	ECQV1H104JL	P 0.1UF, J, 50V	
C2321	F1J1H102A018	C 1000PF, 50V	
C2322	F1J1H102A018	C 1000PF, 50V	
C2325	F2A1C470A310	E 47UF, 16V	
C2326	F2A1C470A310	E 47UF, 16V	
C253	ECA1HEN2R2B	E 2.2UF, 50V	
C254	F1J1H102A018	C 1000PF, 50V	
C257	ECA1HEN2R2B	E 2.2UF, 50V	
C258	F1J1H102A018	E 1000UF, 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3023	ECJ1VF1C105Z	C 1UF, Z, 16V	
C3024	ECJ1VF1C105Z	C 1UF, Z, 16V	
C3025	ECJ1VF1C105Z	C 1UF, Z, 16V	
C3027	ECJ1VF1C105Z	C 1UF, Z, 16V	
C3034	F2A1A471A274	E 470UF, 10V	
C3041	ECJ2VC1H152J	C 1500PF, J, 50V	
C3042	ECJ2VC1H152J	C 1500PF, J, 50V	
C3043	ECJ2VC1H222J	C 2200PF, J, 50V	
C3044	ECJ2VC1H222J	C 2200PF, J, 50V	
C3045	ECJ2VC1H222J	C 2200PF, J, 50V	
C3046	ECJ2VC1H222J	C 2200PF, J, 50V	
C305	F2A1C471A339	E 470UF, 16V	
C306	ECJ1VB1H102K	C 1000PF, K, 50V	
C307	ECJ1VB1H102K	C 1000PF, K, 50V	
C308	ECJ1VB1H102K	C 1000PF, K, 50V	
C3176	F2A1C101A310	E 100UF, 16V	
C3177	F2A1C101A310	E 100UF, 16V	
C3178	ECJ1VC1H561J	C 560PF, J, 50V	
C3179	ECJ1VC1H561J	C 560PF, J, 50V	
C3184	ECJ1VF1C105Z	C 1UF, Z, 16V	
C3185	ECJ1VF1C105Z	C 1UF, Z, 16V	
C356	ECJ1VC1H102J	C 1000PF, J, 50V	
C360	ECKW3D102KBP	C 1000PF, K, 2KV	
C363	F2A1C330A180	E 330UF, 50V	
C366	ECA1CM221B	E 220UF, 16V	
C368	ECA2EM100B	E 10UF, 250V	
C370	F1J1H222A590	C 2200PF, 50V	
C371	F1J1H222A590	C 2200PF, 50V	
C372	F1J1H222A590	C 2200PF, 50V	
C375	F0C2E154A087	P 0.15UF, 250V	
C401	ECJ1VC1H560J	C 56PF, J, 50V	
C404	ECQB1333JF	P 0.033UF, J, 100V	
C406	F2A1H221A247	E 220UF, 50V	
C407	ECJ1VC1H181J	C 180PF, 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, 50V	
C507	ECJ1VF1C105Z	C 1UF, 16V	
C511	F2A1V101A246	E 100UF, 35V	
C514	F2A1E102A199	E 1000UF, 25V	
C516	F2A1E102A199	E 1000UF, 25V	
C519	F2A2C1010015	E 100UF, 160V	
C520	F2A0J221A317	E 220UF, 6.3V	
C550	ECQM4223JZ	P 0.022UF, J,400V	
C552	F2A2E1000023	E 10UF, 250V	
C554	F0C2E184A088	P 0.18UF, 250V	
C559	F0C3C752A002	P 7500PF, 1.6kV	
C560	ECQM4393JZ	P 0.039UF, J,400V	
C561	ECKW3D271JBR	C 270PF, 2kV	
C565	F0A1H273A039	C 0.027UF, 50V	
C567	ECQM4473JZ	P 0.047UF, J,400V	
C568	F0C3D102A003	P 1000PF, 2kV	
C601	F1J1H183A021	C 0.018UF, 50V	
C602	ECJ1VB1H222K	C 2200PF, K, 50V	
C604	F2A1C101A310	E 100UF, 16V	
C605	ECJ2VB1C104K	C 0.1UF, K, 16V	
C606	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C607	ECJ1VF1H103Z	C 0.01UF, Z, 50V	
C611	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C613	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C614	ECJ1VC1H100C	C 10PF, C, 50V	
C615	ECJ1VC1H100C	C 10PF, C, 50V	
C616	F2A1C101A310	E 100UF, 16V	
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	
C624	ECJ2VB1C104K	C 0.1UF, K, 16V	
C625	ECJ1VB1C224K	C 0.22UF, K, 16V	
C626	F2A1C101A310	E 100UF, 16V	
C627	F2A1C101A310	E 100UF, 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C628	F2A1A471A274	E 470UF, 10V	
C630	ECJ1VF1H103Z	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	
C636	F1J1H4710002	C 470PF, 50V	
C639	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C640	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C642	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C645	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C646	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C650	F2A1C331A339	E 330UF, 16V	
C652	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C654	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C655	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C656	ECJ1VC1H270J	C 27PF, J, 50V	
C657	ECJ1VC1H560J	C 56PF, J, 50V	
C662	F2A0J101A317	E 100UF, 6.3V	
C670	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C671	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C672	ECJ1VF1H104Z	C 0.1UF, Z, 50V	
C811	F1A2E681A002	C 680PF, 50V	
C812	F1A2E681A002	C 680PF, 50V	
C813	ECKCNA472ME7	C 4700PF, M,	
C815	F1A2E152A001	C 1500PF, 500V	⚠
C816	F0CAF224A066	P 0.22UF, 250V	⚠
C817	F0CAF224A066	P 0.22UF, 250V	⚠
C818	F2A1H1R0A317	E 1UF, 50V	
C821	ECKW3D561KBP	C 560PF, K, 2KV	
C826	F0A1H103A039	C 0.01UF, 50V	
C827	ECQB1H473JF	P 0.047UF, J, 50V	
C830	ECQB1H821KF	P 820PF, K, 50V	
C831	ECJ1VF1C105Z	C 1UF, Z, 16V	
C840	F1A2E681A002	C 680PF, 100V	
C841	ECKW3D151KBR	C 150PF, K, 2KV	
C842	F2A1H1000084	E 10UF, 50V	
C843	F2A1E102A223	E 1000UF, 25V	
C848	ECQB1H471JF	P 470PF, J, 50V	
C849	F1B2H471A022	C 470PF, 500V	⚠
C851	F0A1H103A039	C 0.01UF, 50V	
C854	ECKWAE472ZED	C 4700PF, Z,500V	⚠
C855	ECKWAE472ZED	C 4700PF, Z,500V	⚠
C856	F2B2G2210012	E 220UF, 400V	
C857	ECQM4473JZ	P 0.047UF, J,400V	⚠
C858	ECQE2A473JF	P 0.047UF, J,250V	⚠
C859	ECKW3D821KBP	C 820PF, K, 2KV	
C863	F2A1C471A339	E 470UF, 16V	
C865	ECKW3D331JBP	C 330PF, J, 2KV	
C867	F2A2C2210013	E 220UF, 160V	
C869	F1J1E563A003	C 0.056UF, 25V	
C870	F2A1C332A232	E 3300UF, 16V	
C871	F1B2H471A022	C 470PF, 500V	
C872	F2A1C222A232	E 2200UF, 16V	
C873	L6Y5P4B122K	C 1200PF, K,500V	⚠
C874	F2A1A101A159	E 100UF, 10V	
C875	F1J1H332A021	C 3300PF, 50V	
C877	F2A1C1000079	E 10UF, 16V	
C879	F2A0J331A260	E 330UF, 6.3V	
C882	F2A1C101A310	E 100UF, 16V	
C884	F2A1C1020060	E 1000UF, 16V	
C886	F2A1H330A342	E 33UF, 50V	
C887	F2A1C102A317	E 1000UF, 16V	
C890	ECJ1VB1C104K	C 0.1UF, K, 16V	
C891	F2A1C101A310	E 100UF, 16V	
C893	F2A1C221A338	E 220UF, 16V	
C897	F1J1H332A021	C 3300PF, 50V	
C898	ECJ1VF1C105Z	C 1UF, Z, 16V	
	DIODES		
D1010	B3AGA0000089	DIODE	
D1132	B0BA3R800012	DIODE	
D2103	B0AACJ000009	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D2107	B0AACJ000009	DIODE	
D2108	B0AACJ000009	DIODE	
D320	B0ACCK000005	DIODE	
D321	B0ACCK000005	DIODE	
D354	B0HAMP000067	DIODE	
D355	B0HAMP000067	DIODE	
D356	B0HAMP000067	DIODE	
D361	B0AACJ000009	DIODE	
D362	B0AACJ000009	DIODE	
D363	B0AACJ000009	DIODE	
D364	B0AACJ000009	DIODE	
D365	B0AACJ000009	DIODE	
D366	B0AACJ000009	DIODE	
D367	B0AACJ000009	DIODE	
D402	B0HAJL000003	DIODE	
D503	B0AACJ000009	DIODE	
D504	B0AACJ000009	DIODE	
D507	B0ACCK000005	DIODE	
D511	MA4108J	DIODE	
D512	B0HAJL000003	DIODE	
D513	B0HAMP000090	DIODE	
D515	B0HAMP000090	DIODE	
D520	B0ACDJ000008	DIODE	
D552	B0HAMP000090	DIODE	
D556	B0HAMV000027	DIODE	
D557	B0HAMR000095	DIODE	
D558	MA185	DIODE	
D601	B0ADDJ000025	DIODE	
D610	MAZ80560HL	DIODE	
D830	B0HAJL000001	DIODE	
D831	MTZJ33B	ZENER DIODE	
D832	B0BA3R300010	ZENER DIODE	
D836	D4EAC6210002	VARISTOR	⚠
D846	B0BA8R000010	DIODE	
D847	B0BA8R000010	DIODE	
D848	B0HAQL000004	DIODE	
D851	B0EAKT000018	DIODE	
D852	B0HAJL000003	DIODE	
D853	B0AACJ000009	DIODE	
D854	B0AACJ000009	DIODE	
D855	B0BA6R800023	DIODE	
D860	B0EBNT000022	DIODE	
D861	B0BA8R000010	DIODE	
D862	MTZJ2.0B	ZENER DIODE	
D863	B0HAJL000003	DIODE	
D865	B0BA3R500008	DIODE	
D866	B0HAPV000009	DIODE	
D867	B0AACJ000009	DIODE	
D872	B0HAMM000108	DIODE	
D873	B0AACJ000009	DIODE	
D876	B0AACJ000009	DIODE	
D881	B0BA01500052	DIODE	
D882	B0BA01500052	DIODE	
D883	B0JAPK000013	DIODE	
D884	B0AACJ000009	DIODE	
D887	B0AACJ000009	DIODE	
	INTEDGRATED CIRCUITS		
IC1101	TVR4GAS611	EEPROM IC	
IC1801	C5AB00000022	IC	
IC1802	C0DBZGB00017	IC, POWER SUPPLY	
IC2301	C0ZAZ0000220	IC	
IC351	TDA6107AJFN1	IC	
IC451	C1AA00000765	IC	
IC601	TVR4G19-15	FLASH MEMORY IC	
IC801	C5HABZZ00116	IC, HYBRID	⚠
IC802	C0EAS0000026	IC	
IC851	C0DAEJG00001	IC, POWER SUPPLY	
IC857	C0DBEHE00005	IC, POWER SUPPLY	
IC860	B3PAA0000363	PHOTO COUPLER	⚠
IC871	C0DAZGG00012	IC, POWER SUPPLY	
IC875	C0DBEHE00005	IC, POWER SUPPLY	
	COILS		

Ref. No.	Part No.	Part Name & Description	Remarks
L002	G0C100K00008	COIL	
L003	G0C4R7JA0055	PEAKING COIL	
L1001	J0JKB0000034	EMI FILTER	
L1801	J0JCC0000411	BEAD CORE	
L1802	J0JCC0000411	BEAD CORE	
L1810	J0JCC0000411	BEAD CORE	
L1811	J0JCC0000411	BEAD CORE	
L1820	J0JCC0000411	BEAD CORE	
L1821	J0JCC0000411	BEAD CORE	
L1830	J0JKB0000038	COIL	
L1831	J0JKB0000038	COIL	
L2302	J0JKA0000038	BEAD CORE	
L2304	J0JKA0000038	BEAD CORE	
L2306	J0JKA0000024	EMI FILTER	
L2323	J0JKA0000038	BEAD CORE	
L2324	J0JKA0000038	BEAD CORE	
L3045	J0JCC0000411	BEAD CORE	
L3046	J0JCC0000411	BEAD CORE	
L376	J0JKA0000024	EMI FILTER	
L505	J0JKA0000024	EMI FILTER	
L514	J0JKA0000038	BEAD CORE	
L515	J0JKA0000038	BEAD CORE	
L550	J0JKB0000034	EMI FILTER	
L557	G0D820000005	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	J0JCC0000411	BEAD CORE	
L635	J0JCC0000411	BEAD CORE	
L657	J0JCC0000411	BEAD CORE	
L842	J0JKA0000025	BEAD CORE	
L843	J0JKA0000038	BEAD CORE	
L845	J0JKA0000023	BEAD CORE	
L865	J0JKA0000025	BEAD CORE	
L866	J0JKA0000023	BEAD CORE	
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	
Q304	B1ADDF000005	TRANSISTOR	
Q305	B1ADDF000005	TRANSISTOR	
Q306	B1ADDF000005	TRANSISTOR	
Q320	B1ABCE000015	TRANSISTOR	
Q354	B1ADDF000005	TRANSISTOR	
Q360	B1ACAA000019	TRANSISTOR	
Q361	B1ACAA000019	TRANSISTOR	
Q362	B1ACAA000019	TRANSISTOR	
Q501	2SC4212H	TRANSISTOR	
Q520	B1ADBM000004	TRANSISTOR	
Q551	2SC6073000LK	TRANSISTOR	
Q603	B1ABCE000015	TRANSISTOR	
Q604	B1ABCE000015	TRANSISTOR	
Q605	B1ABCE000015	TRANSISTOR	
Q608	B1ABCE000015	TRANSISTOR	
Q610	B1ADDF000005	TRANSISTOR	
Q665	B1ADCE000012	TRANSISTOR	
Q850	B1BCCM000002	TRANSISTOR	
Q857	2SC54190QA	TRANSISTOR	
Q870	B1ADDF000005	TRANSISTOR	
	RESISTORS		
R005	D0GB512JA008	F 5.1KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R006	ERJ3GEYJ473	M 47KOHM,J,1/16W	
R007	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R008	ERJ3GEY0R00	M 0OHM,J,1/16W	
R009	ERJ3GEY0R00	M 0OHM,J,1/16W	
R1004	ERJ3GEYJ470	M 47OHM,J,1/16W	
R1005	ERJ3GEYJ621	M 620OHM,J,1/16W	
R1006	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
R1007	ERJ3GEYJ121	M 120OHM,J,1/16W	
R1008	ERJ3GEYJ152	M 1.5KOHM,J,1/16W	
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	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1106	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1108	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1109	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R1112	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1114	ERJ3GEYJ151	M 150OHM,J,1/16W	
R1115	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1131	ERJ3GEYJ220	M 22OHM,J,1/16W	
R1132	ERJ3GEYJ220	M 22OHM,J,1/16W	
R1140	D1AC1002A094	M 10KOHM, 1/10W	
R1142	ERJ3EKF1001	M 1KOHM,F,1/16W	
R1150	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1201	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1202	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R1228	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1229	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1820	ERJ3GEYJ470	M 47OHM,J,1/16W	
R1821	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1822	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1831	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1832	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1833	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1834	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1835	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1836	ERJ3GEYJ101	M 100OHM,J,1/16W	
R1840	ERJ3GEYJ220	M 22OHM,J,1/16W	
R2112	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R2114	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R2302	ERX2FJSR47E	M 0.47OHM,J,2W	
R2317	D0GB622JA008	F 6.2KOHM,J,1/16W	
R2321	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R2322	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R253	D0GB751JA008	F 750OHM,J,1/16W	
R255	D0GB751JA008	F 750OHM,J,1/16W	
R256	ERDS2TJ272	C 2.7KOHM,J, 1/4W	
R257	ERDS2TJ272	C 2.7KOHM,J, 1/4W	
R3002	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3004	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3005	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3006	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3008	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3009	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3010	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3011	ERJ3GEYJ750	M 75OHM,J,1/16W	
R3022	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3024	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3026	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R304	ERJ3GEYJ330	M 33OHM,J,1/16W	
R305	ERJ3GEYJ330	M 33OHM,J,1/16W	
R306	ERJ3GEYJ330	M 33OHM,J,1/16W	
R307	ERJ3GEYJ121	M 120OHM,J,1/16W	
R308	ERJ3GEYJ121	M 120OHM,J,1/16W	
R309	ERJ3GEYJ121	M 120OHM,J,1/16W	
R310	D0AE181JA046	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	

Ref. No.	Part No.	Part Name & Description	Remarks
R3105	ERJ3GEY0R00	M 0OHM,J,1/16W	
R311	D0AE181JA046	C 180OHM,J, 1/4W	
R312	D0AE181JA046	C 180OHM,J, 1/4W	
R3132	D0GB111JA008	F 110OHM,J,1/16W	
R3134	D0GB111JA008	F 110OHM,J,1/16W	
R3138	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3139	ERJ3GEYJ104	M 100KOHM,J,1/16W	
R3175	D0GB111JA008	F 110OHM,J,1/16W	
R3176	D0GB111JA008	F 110OHM,J,1/16W	
R320	ERJ3GEYJ821	M 820OHM,J,1/16W	
R321	ERDS2TJ220	C 22OHM,J, 1/4W	
R341	ERJ3GEYJ151	M 150OHM,J,1/16W	
R342	ERJ3GEYJ151	M 150OHM,J,1/16W	
R343	ERJ3GEYJ151	M 150OHM,J,1/16W	
R351	ERJ3GEYJ331	M 330OHM,J,1/16W	
R352	ERJ3GEYJ331	M 330OHM,J,1/16W	
R353	ERJ3GEYJ331	M 330OHM,J,1/16W	
R363	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R364	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R365	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R366	ERC14GK152	S 1.5KOHM, 1/4W	
R367	ERC14GK152	S 1.5KOHM, 1/4W	
R368	ERC14GK152	S 1.5KOHM, 1/4W	
R372	ERQ12AJ121P	F 120OHM,J, 1/2W	
R381	ERJ3GEYJ182	M 1.8KOHM,J,1/16W	
R385	ERJ3GEY0R00	M 0OHM,J,1/16W	
R401	ERDS2TJ104	C 100KOHM,J, 1/4W	
R403	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R404	ERJ3GEYJ153	M 15KOHM,J,1/16W	
R405	ERDS2TJ563	C 56KOHM,J, 1/4W	
R406	ERDS1TJ1R5	C 1.5OHM,J, 1/2W	
R407	ERG1SJ221E	M 220OHM,J, 1W	
R413	ERJ3GEYJ183	M 18KOHM,J,1/16W	
R416	ERX1SJ1R2E	M 1.2OHM,J, 1W	
R451	ERJ3GEYJ223	M 22KOHM,J,1/16W	
R453	ERJ3GEYJ101	M 100OHM,J,1/16W	
R501	ERJ3GEYJ273	M 27KOHM,J,1/16W	
R502	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R504	ERG2SJS332H	M 10KOHM,J,1/10W	
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	
R513	ERQ14AJ100E	F 10OHM,J, 1/4W	
R518	D0DK5R6JA019	W 5.6KOHM,J,10W	
R522	D0AE623JA046	C 62KOHM,J, 1/4W	
R523	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R524	ERDS2TJ104	C 100KOHM,J, 1/4W	
R525	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R552	ERG1SJ102P	M 1KOHM,J, 1W	
R553	ERJ3GEYJ183	M 18KOHM,J,1/16W	
R559	D0C12R7JA042	M 2.7OHM,J, 1W	
R580	D0GB512JA008	F 5.1KOHM,J,1/16W	
R601	ERJ3GEYJ470	M 47OHM,J,1/16W	
R602	ERDS2TJ103	C 10KOHM,J, 1/4W	
R604	ERJ3GEYJ470	M 47OHM,J,1/16W	
R605	ERJ3GEYJ470	M 47OHM,J,1/16W	
R606	ERJ3GEYJ752	M 7.5KOHM,J,1/16W	
R607	ERJ3GEYJ752	M 7.5KOHM,J,1/16W	
R608	ERJ3GEYJ470	M 47OHM,J,1/16W	
R609	ERJ3GEY0R00	M 0OHM,J,1/16W	
R611	ERJ3GEYJ101	M 100OHM,J,1/16W	
R614	ERJ3GEYJ221	M 220OHM,J,1/16W	
R615	ERJ3GEYJ122	M 1.2KOHM,J,1/16W	
R616	ERJ3GEYJ563	M 56KOHM,J,1/16W	
R618	ERJ3GEY0R00	M 0OHM,J,1/16W	
R619	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R620	ERJ3EKF1002	M 10KOHM,F,1/16W	
R621	ERJ3EKF2002	M 20KOHM, 1/10W	
R624	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R625	ERJ3GEYJ102	M 1KOHM,J,1/16W	
R626	ERJ3GEYJ103	M 10KOHM,J,1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R627	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R628	ERJ3GEYJ823	M 82KOHM,J,1/16W	
R629	ERJ3GEY0R00	M 0OHM,J,1/16W	
R632	ERJ3GEYJ682	M 6.8KOHM,J,1/16W	
R634	ERJ3GEYJ151	M 150OHM,J,1/16W	
R635	ERJ3GEYJ151	M 150OHM,J,1/16W	
R636	ERJ3GEYJ101	M 100OHM,J,1/16W	
R638	ERJ3GEY0R00	M 0OHM,J,1/16W	
R640	ERJ3GEYJ471	M 470OHM,J,1/16W	
R641	ERJ3GEY0R00	M 0OHM,J,1/16W	
R643	ERJ3GEY0R00	M 0OHM,J,1/16W	
R644	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R645	ERJ3GEYJ101	M 100OHM,J,1/16W	
R646	ERJ3GEYJ183	M 18KOHM,J,1/16W	
R647	ERJ3GEYJ750	M 75OHM,J,1/16W	
R656	ERJ3GEYJ823	M 82KOHM,J,1/16W	
R658	ERDS2TJ470	C 47OHM,J, 1/4W	
R659	ERJ3GEYJ470	M 47OHM,J,1/16W	
R660	ERJ3GEYJ470	M 47OHM,J,1/16W	
R662	ERJ3GEYJ221	M 220OHM,J,1/16W	
R663	ERJ3GEYJ470	M 47OHM,J,1/16W	
R664	ERDS2T0T	C 0OHM, 1/4W	
R665	ERDS2T0T	C 0OHM, 1/4W	
R669	ERDS2T0T	C 0OHM, 1/4W	
R670	ERJ3GEYJ101	M 100OHM,J,1/16W	
R671	ERJ3GEYJ101	M 100OHM,J,1/16W	
R683	ERJ3GEY0R00	M 0OHM,J,1/16W	
R684	ERJ3GEY0R00	M 0OHM,J,1/16W	
R701	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R824	ERX12SJR27E	M 0.27OHM,J, 1/2W	
R830	ERDS2TJ221	C 220OHM,J, 1/4W	
R831	ERDS2TJ333	C 33KOHM,J, 1/4W	
R832	ERJ3EKF4022	M 40.2KOHM,J,1/10W	
R833	ERDS2TJ102	C 1KOHM,J, 1/4W	
R834	ERG2FJ823H	M 82KOHM,J,2W	
R836	ERG1SJ220P	M 22OHM,J,1W	
R840	D0AW825JA001	C 8.2MOHM,J, 100W	
R842	ERX2SJ8R2E	M 8.2OHM,J,2W	
R848	ERX12SJR33E	M 0.33OHM,J, 1/2W	
R850	ERG3SJS680H	M 68OHM,J,1/16W	
R851	ERDS2TJ104	C 100KOHM,J, 1/4W	
R852	D0AE162JA046	C 1.6KOHM,J, 152W	
R853	D0D72R2KA002	W 2.2OHM,K, 7W	⚠
R854	ERG2FJ470H	M 47OHM,J, 2W	
R856	ERG2SJS104H	M 100KOHM,J, 2W	
R857	ERDS2TJ102	C 1KOHM,J, 1/4W	
R861	ERG1SJ120P	M 12OHM,J, 1W	
R863	ERDS2TJ101	C 100OHM,J, 1/4W	
R864	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R866	ERJ3GEYJ392	M 3.9KOHM,J,1/16W	
R867	ERDS2TJ222	C 2.2KOHM,J, 1/4W	
R868	ERDS1TJ101	C 100OHM,J, 1/2W	
R871	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R872	ERJ3EKF1052	F 10.5KOHM, 1/10W	
R873	ERJ3EKF1802	M 18KOHM,F,1/16W	
R875	ERJ3GEYJ822	M 8.2KOHM,J,1/16W	
R876	ERJ3EKF1002	M 10KOHM,F,1/16W	
R877	ERJ3EKF5101	F 5.1KOHM, 1/10W	
R882	ERJ3GEYJ332	M 3.3KOHM,J,1/16W	
R884	ERDS2TJ562	C 5.6KOHM,J, 1/4W	
R885	ERJ3GEYJ752	M 7.5KOHM,J,1/16W	
R886	D0GB433JA008	F 43KOHM, 1/10W	
R887	ERG1SJ273P	M 27KOHM,J, 1W	
R888	ERJ3GEYJ103	M 10KOHM,J,1/16W	
R889	ERX3FJ3R3H	M 3.3OHM,J, 3W	
R894	ERJ3EKF1303	M 130KOHM, 1/10W	
	TRANSFORMERS		
T551	ZTFP12507A	FLYBACK TRANS	⚠
T553	ETH19Y210BZ	H DRIVE TRANS	⚠
T601	TSK1040	BEAD CORE	⚠
T801	ETS35AH1N6AC	SWITCHING TRANS	⚠
	OTHERS		
A2	K1KA08AA0659	CONNECTOR	

Ref. No.	Part No.	Part Name & Description	Remarks
A4	K1KA04AA0190	CONNECTOR	
A5	K1KA04AA0190	CONNECTOR	
A8	K1KA04AA0093	CONNECTOR	
CF835	TAP4GA0005	POSISTOR	⚠
F860	K5D502BK0003	FUSE	⚠
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	
JA2	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA20	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA25	ERJ8GEY0R00	M 0OHM,J, 1/8W	
JA26	ERJ8GEY0R00	M 0OHM,J, 1/8W	
JA28	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA29	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA4	ERJ3GEY0R00	M 0OHM,J,1/16W	
JA5	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	K4BK10B00005	AV TERMINAL	
JK3003	K4BK10B00006	AV TERMINAL	
JK3202	K4BC14B00005	FRONT AV TERMINAL	
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	
JS301	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS302	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS303	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3043	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS3044	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	
JS407	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS408	ERJ3GEY0R00	M 0OHM,J,1/16W	
JS670	ERJ3GEY0R00	M 0OHM,J,1/16W	
L2	K1KA08AA0659	CONNECTOR	
L3	K1KA04AA0190	CONNECTOR	
LF1810	J0HADK000001	EMI FILTER	
LF835	ELF21V012S	LINE FILTER	⚠
RM1001	B3RAD0000120	REMOCON RECEIVER	
SC351	K3B09CA00014	CRT SOCKET	⚠
SW1031	EVQ11G05R	SWITCH	
SW1032	EVQ11G05R	SWITCH	
SW1033	EVQ11G05R	SWITCH	
SW1034	EVQ11G05R	SWITCH	
SW1035	EVQ11G05R	SWITCH	
SW1036	EVQ11G05R	SWITCH	
SW841	ESB92DA1B	SWITCH	⚠
TU001	ENV59K30G3F	TUNER	⚠
X1801	H0D202500004	CRYSTAL OSC	⚠
X601	H0D202500007	CRYSTAL OSC	⚠
XF101	J0C3525A0003	SAW FILTER	⚠