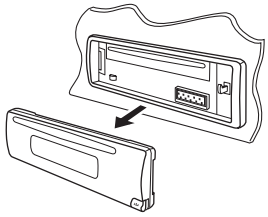
JVC

SERVICE MANUAL

CD RECEIVER

KD-G110,KD-S11

Area suffix
J ---------- Northern America

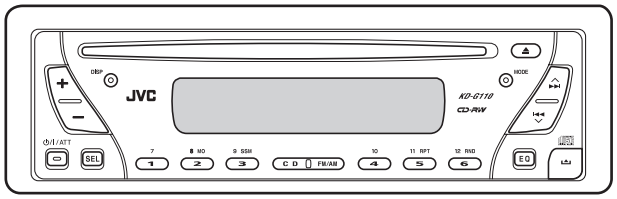


CD-RW

COMPACT disc DIGITAL AUDIO

Amplifier Power Standard CEA CEA-2006 Compliant

KD-G110



KD-S11

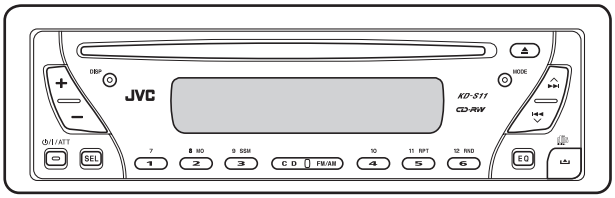


TABLE OF CONTENTS

COPYRIGHT © 2005 Victor Company of Japan, Limited

No.MA121
2005/02

SPECIFICATION

KD-G110

AUDIO AMPLIFIER SECTION		
Power Output		18 W RMS × 4 Channels at 4 Ω and [< or =] 1% THD+N
Signal to Noise Ratio		80 dBA (reference: 1 W into 4 Ω)
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range	Bass	±10 dB at 100 Hz
	Treble	±10 dB at 10 kHz
Frequency Response		40 Hz to 20 000 Hz
Line-Out Level/Impedance		2.0 V/20 kΩ load (full scale)
Output Impedance		1 kΩ
TUNER SECTION		
Frequency Range	FM	87.5 MHz to 107.9 MHz (with channel interval set to 200 kHz)
		87.5 MHz to 108.0 MHz (with channel interval set to 50 kHz)
	AM	530 kHz to 1 710 kHz (with channel interval set to 10 kHz)
		531 kHz to 1 602 kHz (with channel interval set to 9 kHz)
FM Tuner	Usable Sensitivity	11.3 dBf (1.0 μV/75 Ω)
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	35 dB
	Capture Ratio	1.5 dB
AM Tuner	Sensitivity	20 μV
	Selectivity	35 dB
CD PLAYER SECTION		
Type		Compact disc player
Signal Detection System		Non-contact optical pickup (semiconductor laser)
Number of channels		2 channels (stereo)
Frequency Response		5 Hz to 20 000 Hz
Dynamic Range		96 dB
Signal-to-Noise Ratio		98 dB
Wow and Flutter		Less than measurable limit
GENERAL		
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)
Grounding System		Negative ground
Allowable Operating Temperature		0°C to +40°C (32°F to 104°F)
Dimensions (W × H × D)	Installation Size (approx.)	182 mm × 52 mm × 150 mm (7-3/16" × 2-1/16" × 5-15/16")
	Panel Size (approx.)	188 mm × 58 mm × 11 mm (7-7/16" × 2-5/16" × 7/16")
Mass (approx.)		1.3 kg (2.9 lbs) (excluding accessories)

KD-S11

AUDIO AMPLIFIER SECTION		
Power Output		17 W RMS × 4 Channels at 4 Ω and [< or =] 1% THD+N
Signal to Noise Ratio		80 dBA (reference: 1 W into 4 Ω)
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range	Bass	±10 dB at 100 Hz
	Treble	±10 dB at 10 kHz
Frequency Response		40 Hz to 20 000 Hz
Line-Out Level/Impedance		2.0 V/20 kΩ load (full scale)
Output Impedance		1 kΩ
TUNER SECTION		
Frequency Range	FM	87.5 MHz to 107.9 MHz (with channel interval set to 200 kHz)
		87.5 MHz to 108.0 MHz (with channel interval set to 50 kHz)
	AM	530 kHz to 1 710 kHz (with channel interval set to 10 kHz)
		531 kHz to 1 602 kHz (with channel interval set to 9 kHz)
FM Tuner	Usable Sensitivity	11.3 dBf (1.0 μV/75 Ω)
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)
	Alternate Channel Selectivity (400 kHz)	65 dB
	Frequency Response	40 Hz to 15 000 Hz
	Stereo Separation	35 dB
	Capture Ratio	1.5 dB
AM Tuner	Sensitivity	20 μV
	Selectivity	35 dB
CD PLAYER SECTION		
Type		Compact disc player
Signal Detection System		Non-contact optical pickup (semiconductor laser)
Number of channels		2 channels (stereo)
Frequency Response		5 Hz to 20 000 Hz
Dynamic Range		96 dB
Signal-to-Noise Ratio		98 dB
Wow and Flutter		Less than measurable limit
GENERAL		
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)
Grounding System		Negative ground
Allowable Operating Temperature		0°C to +40°C (32°F to 104°F)
Dimensions (W × H × D)	Installation Size (approx.)	182 mm × 52 mm × 150 mm (7-3/16" × 2-1/16" × 5-15/16")
	Panel Size (approx.)	188 mm × 58 mm × 11 mm (7-7/16" × 2-5/16" × 7/16")
Mass (approx.)		1.3 kg (2.9 lbs) (excluding accessories)

Design and specifications are subject to change without notice.

SECTION 1
PRECAUTIONS

1.1 Safety Precautions

> ⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

> ⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

1.2 Preventing static electricity

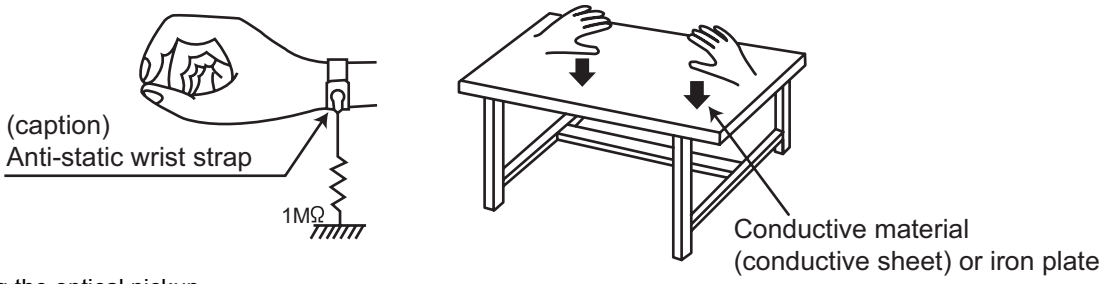
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench
Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup
- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

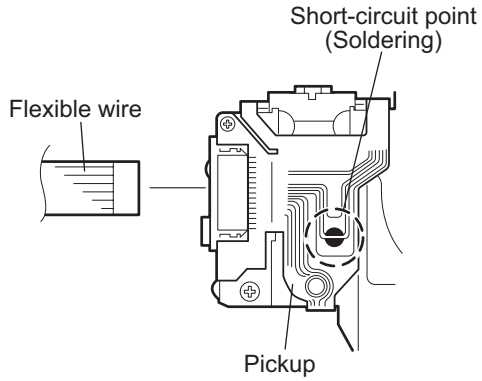
1.3 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.4 Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for the CD pickup unit.**

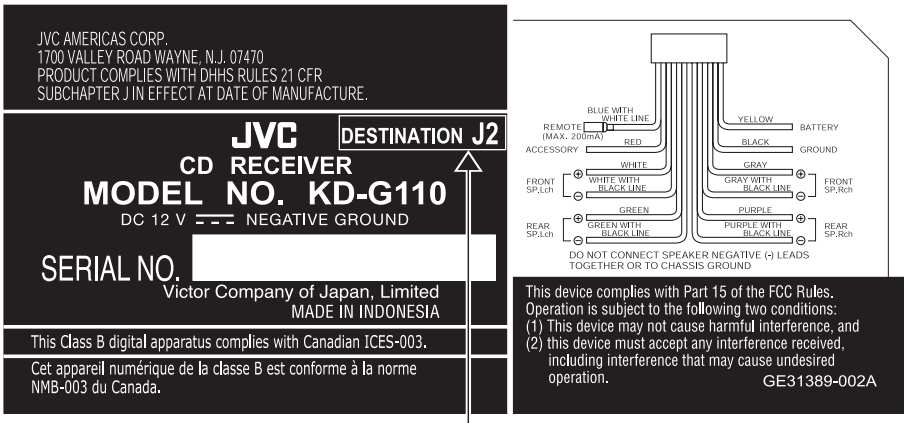
- Apply solder to the short land before the flexible wire is disconnected from the connector on the CD pickup unit. (If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land after connecting the flexible wire.



SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 HOW TO IDENTIFY MODELS

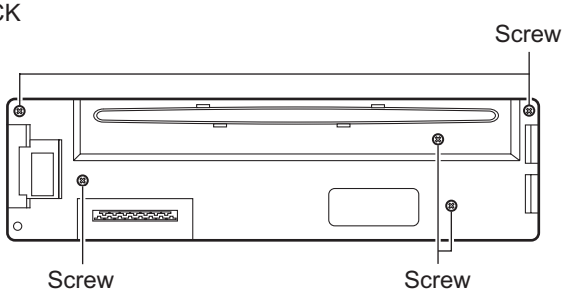
2.1.1 NAME PLATE



Discernment sign (as same as KD-S11)

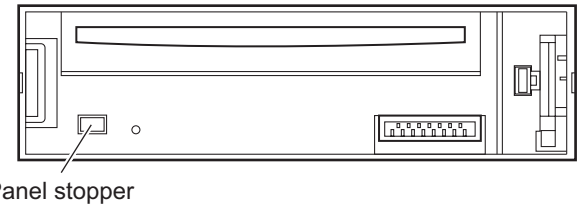
2.1.2 FRONT PANEL BACK SIDE

Screw color
J: SILVER
J2: BLACK



2.1.3 FRONT CHASSIS ASSEMBLY

Panel stopper color
J: SILVER
J2: BLACK



SECTION 3
DISASSEMBLY

3.1 Main body section

3.1.1 Removing the front panel assembly (See Fig.1)

(1) Push the detach button in the lower right part of the front panel assembly and remove the front panel assembly.

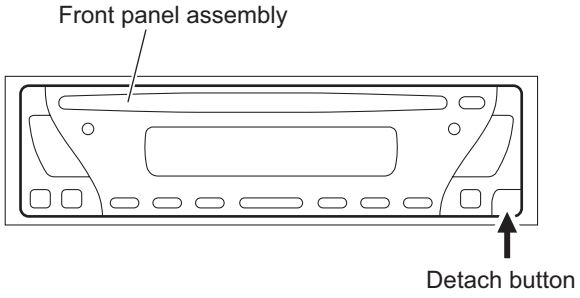


Fig.1

3.1.2 Removing the bottom cover (See Fig.2)

(1) Turn the main body up side down.

(2) Insert a screwdriver under the joints to release the two joints **a** on the left side, two joints **b** on the right side and joint **c** on the back side of the main body, then remove the bottom cover from the main body.

Note:

When releasing the joints using a screwdriver, do not damage the main board.

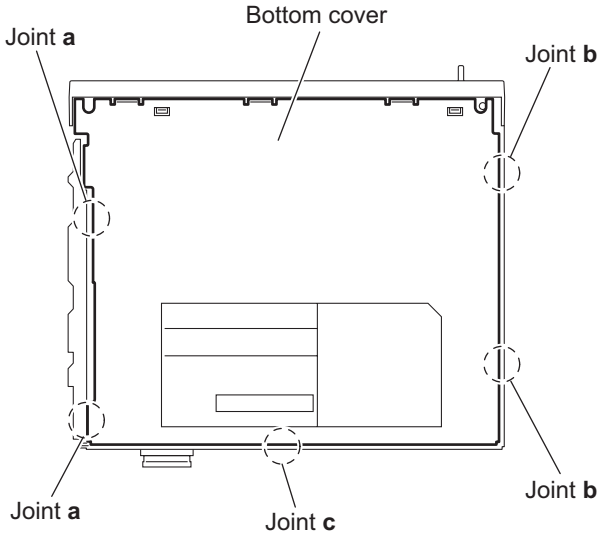


Fig.2

3.1.3 Removing the front chassis assembly (See Fig.3)

• Remove the front panel assembly and bottom cover.

(1) Remove the two screws **A** on the both sides of the main body.

(2) Release the two joints **d** and two joints **e** on the both sides of the main body, then remove the front chassis assembly toward the front.

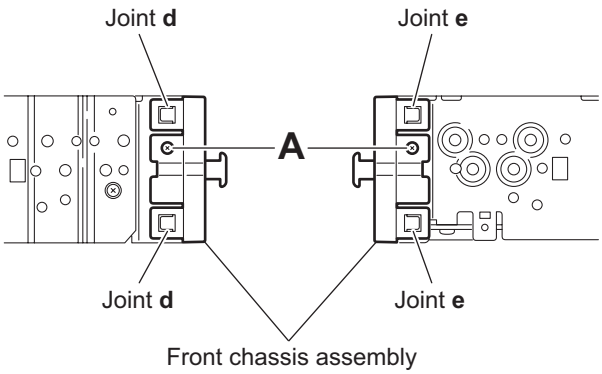


Fig.3

3.1.4 Removing the side panel (See Fig.4)

Reference:

Remove the front panel assembly as required.

(1) Remove the screw **B** and two screws **C** attaching the side panel on the left side of the main body.

(2) Remove the side panel from the main body.

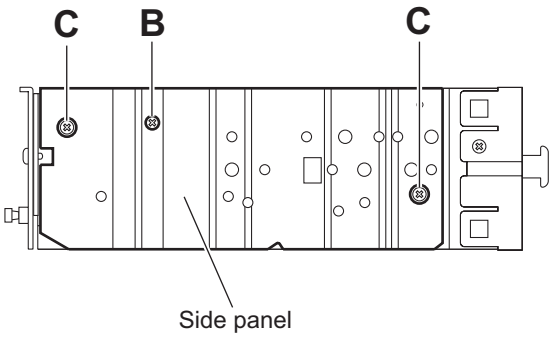


Fig.4

3.1.5 Removing the rear bracket (See Fig.5)

- Remove the bottom cover.

(1) Remove the three screws **D**, three screws **E** and two screws **F** attaching the rear bracket on the back side of the main body.

(2) Remove the rear bracket.

3.1.6 Removing the main board (See Figs.5 and 6)

- Remove the front panel assembly, bottom cover and side panel.

Reference:

Remove the front chassis assembly as required.

(1) Remove the three screws **D** attaching the rear bracket on the back side of the main body. (See Fig.5.)

(2) Remove the two screws **G** attaching the main board. (See Fig.6.)

(3) Disconnect the connector CN501 on the main board from the main body and take out the main board with the rear bracket. (See Fig.6.)

Reference:

Remove the rear bracket from the main body as required. (See "3.1.5 Removing the rear bracket".)

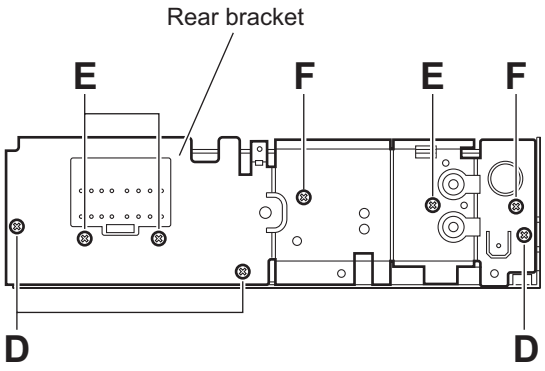


Fig.5

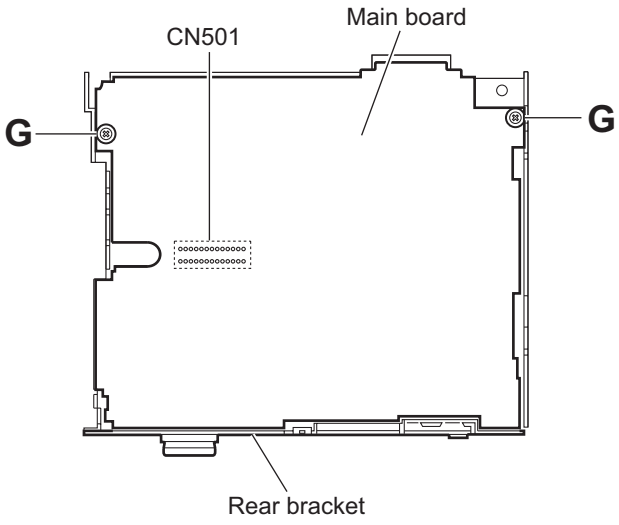


Fig.6

3.1.7 Removing the CD mechanism assembly (See Fig. 7)

- Remove the front panel assembly, bottom cover, side panel, rear bracket and main board.

Reference:

Remove the front chassis assembly as required.

(1) Remove the three screws **H** attaching the CD mechanism assembly on the top chassis.

(2) Take out the CD mechanism assembly.

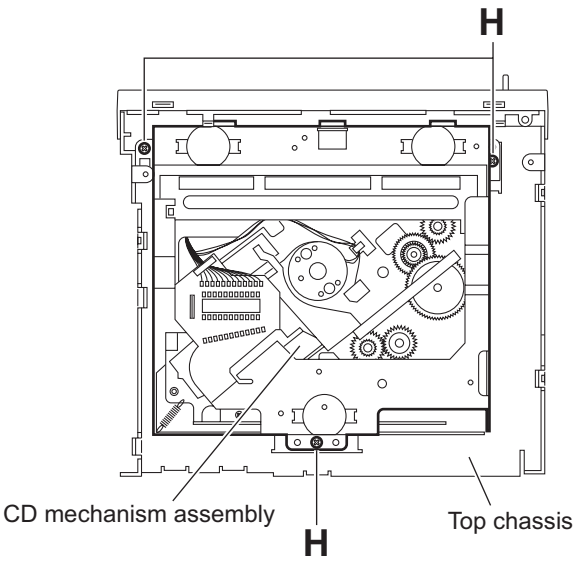


Fig.7

3.1.8 Removing the front board (See Figs.8 to 10)

- Remove the front panel assembly.

(1) Remove the five screws **J** on the back side of the front panel assembly. (See Fig.8.)

(2) Release the twelve joints **f** and remove the rear cover. (See Fig.9.)

(3) Release the joint **g** and take out the front board from the front panel assembly. (See Fig.10.)

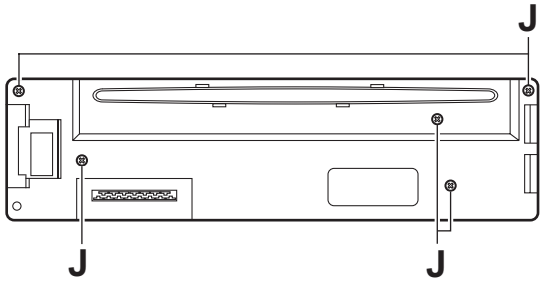


Fig.8

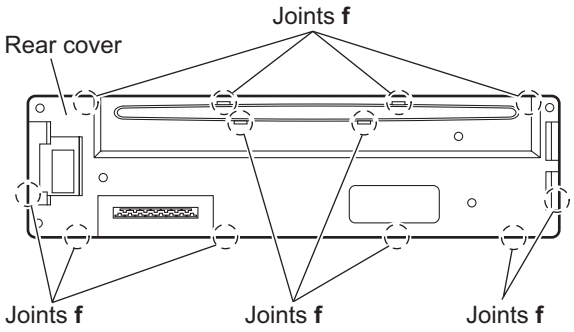


Fig.9

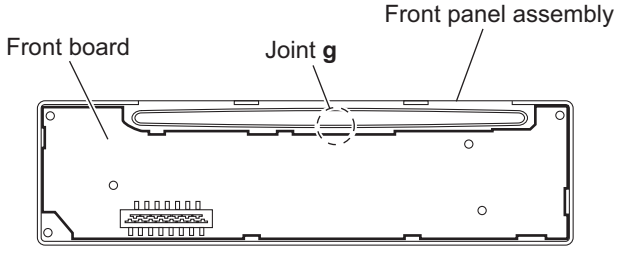


Fig.10

3.2 CD Mechanism Assembly

3.2.1 Removing the top cover (See Figs.1 and 2)

(1) Remove the two screws **A** on the both side of the body.
(2) Lift the front side of the top cover and move the top cover backward to release the two joints **a**.

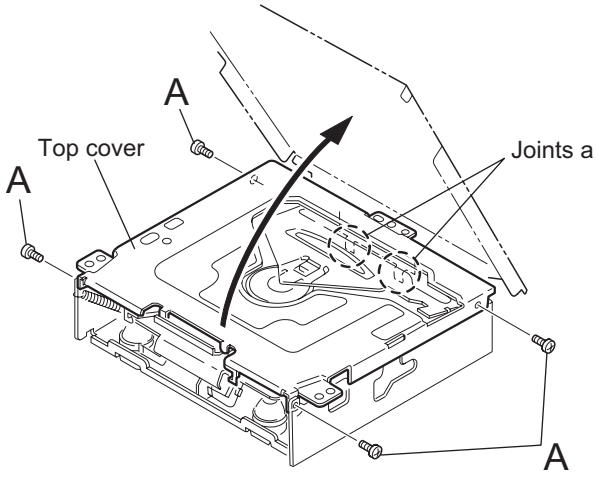


Fig.1

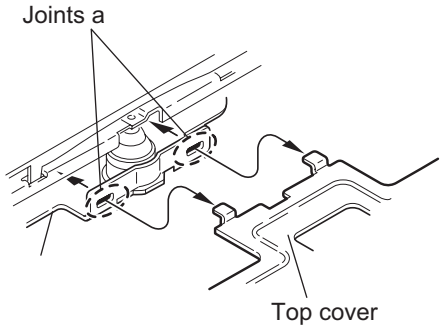


Fig.2

3.2.2 Removing the connector board (See Figs.3 to 5)

CAUTION:

Before disconnecting the flexible wire from the pickup, solder the short-circuit point on the pickup. No observance of this instruction may cause damage of the pickup.

(1) Remove the screw **B** fixing the connector board.
(2) Solder the short-circuit point on the connector board.
(3) Disconnect the flexible wire from the pickup.
(4) Move the connector board in the direction of the arrow to release the two joints **b**.
(5) Unsolder the wire on the connector board if necessary.

CAUTION:

Unsolder the short-circuit point after reassembling.

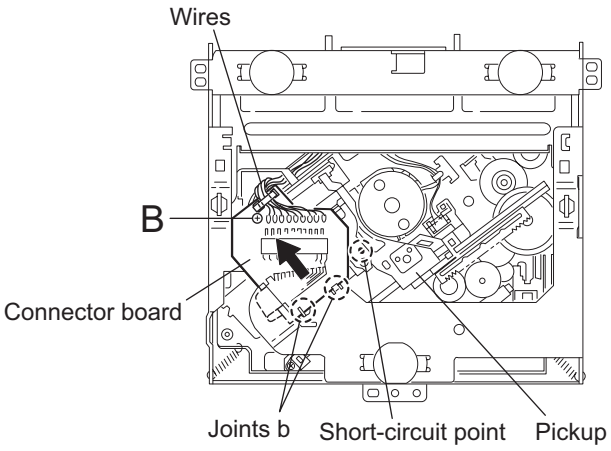


Fig.3

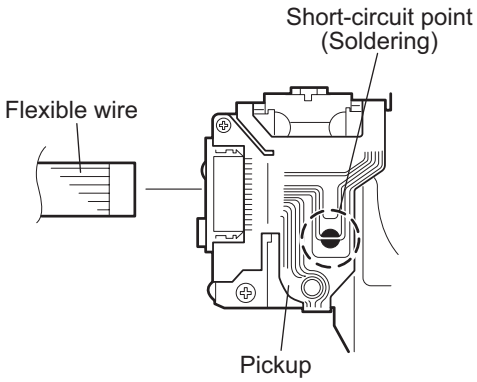


Fig.4

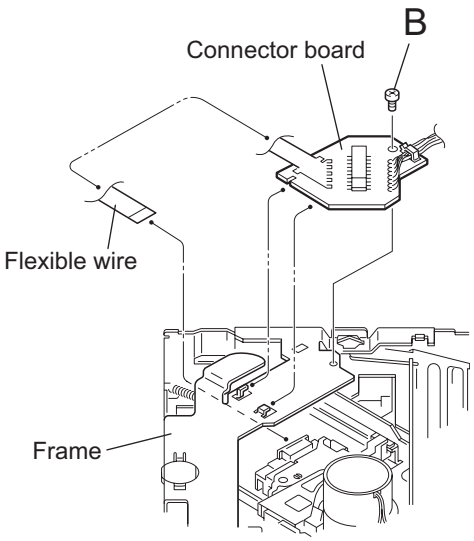


Fig.5

3.2.3 Removing the DET switch (See Figs.6 and 7)

(1) Extend the two tabs **c** of the feed sw. holder and pull out the switch.
(2) Unsolder the DET switch wire if necessary.

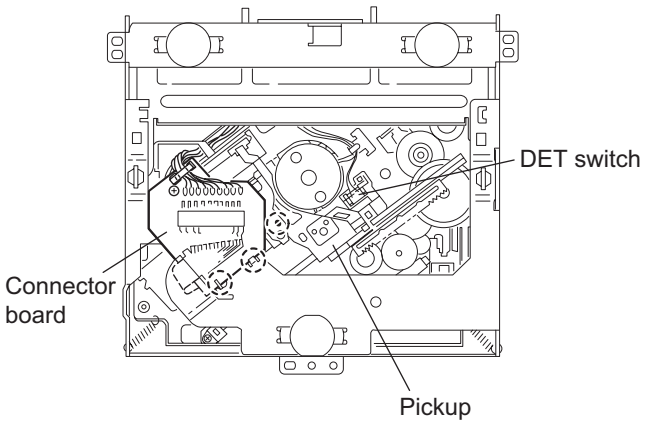


Fig.6

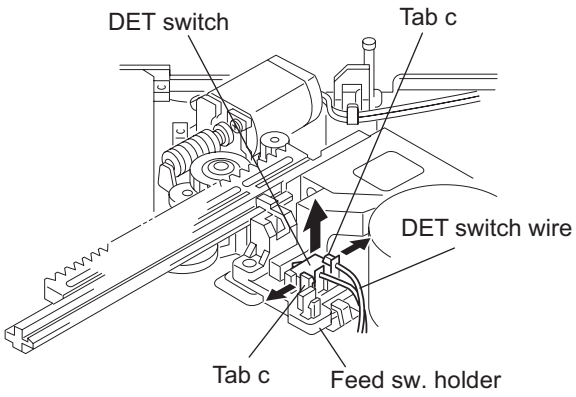


Fig.7

3.2.4 Removing the chassis unit (See Figs.8 and 9)

- Prior to performing the following procedure, remove the top cover and connector board.
  (1) Remove the two suspension springs (L) and (R) attaching the chassis unit to the frame.

  CAUTION:
  - The shape of the suspension spring (L) and (R) are different. Handle them with care.
  - When reassembling, make sure that the three shafts on the underside of the chassis unit are inserted to the dampers certainly.

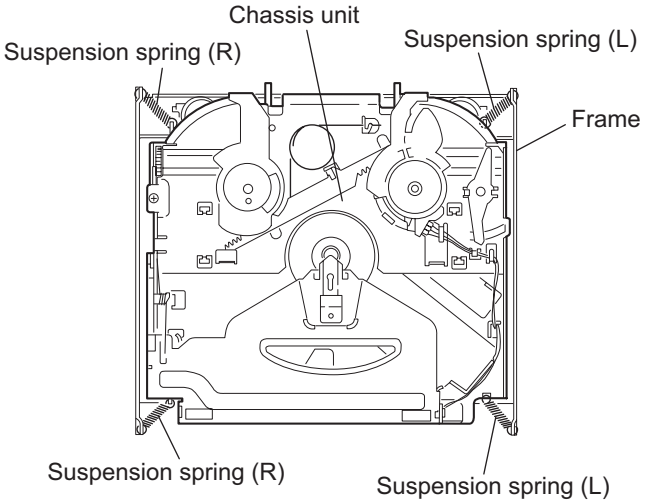


Fig.8

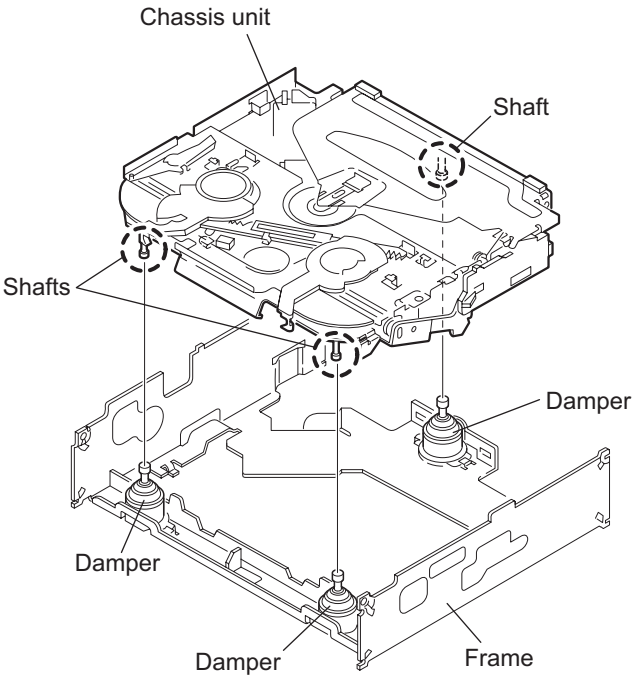


Fig.9

3.2.5 Removing the clamper assembly (See Figs.10 and 11)

- Prior to performing the following procedure, remove the top cover.
  (1) Remove the clamper arm spring.
  (2) Move the clamper assembly in the direction of the arrow to release the two joints **d**.

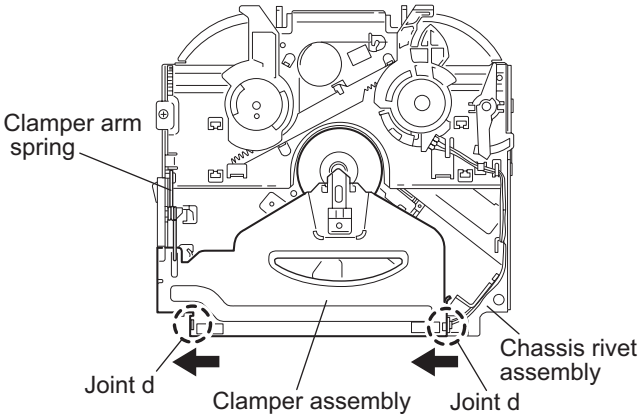


Fig.10

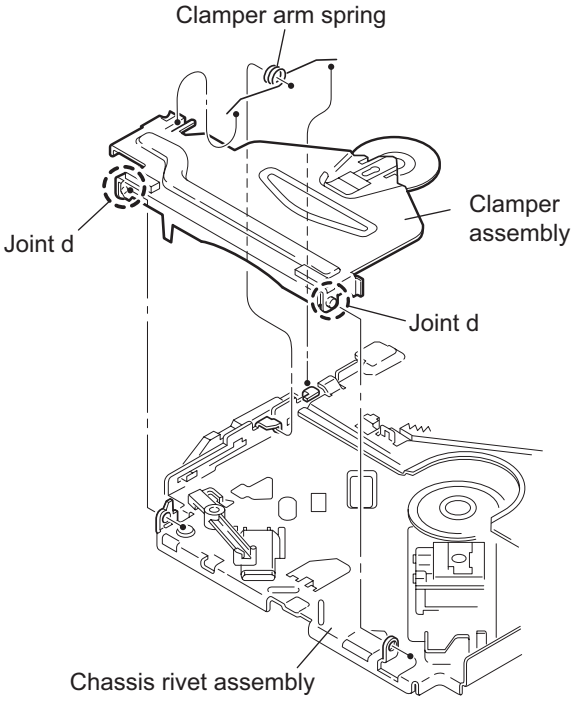


Fig.11

3.2.6 Removing the loading / feed motor assembly (See Figs.12 and 13)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) Remove the screw **C** and move the loading / feed motor assembly in the direction of the arrow to remove it from the chassis rivet assembly.
  (2) Disconnect the wire from the loading / feed motor assembly if necessary.

  CAUTION:
  When reassembling, connect the wire from the loading / feed motor assembly to the flame as shown in Fig.12.

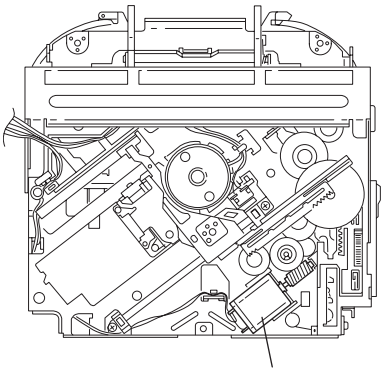


Fig.12

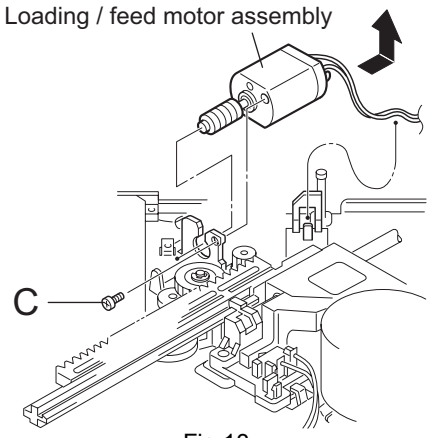


Fig.13

3.2.7 Removing the pickup unit (See Figs.14 to 18)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) Remove the screw **D** and pull out the pu. shaft holder from the pu. shaft.
  (2) Remove the screw **E** attaching the feed sw. holder.
  (3) Move the part **e** of the pickup unit upward with the pu. shaft and the feed sw. holder, then release the joint f of the feed sw. holder in the direction of the arrow. The joint **g** of the pickup unit and the feed rack is released, and the feed sw. holder comes off.
  (4) Remove the pu. shaft from the pickup unit.
  (5) Remove the screw **F** attaching the feed rack to the pickup unit.

3.2.8 Reattaching the pickup unit (See Figs.14 to 17)

(1) Reattach the feed rack to the pickup unit using the screw **F**.
(2) Reattach the feed sw. holder to the feed rack while setting the joint g to the slot of the feed rack and setting the part f of the feed rack to the switch of the feed sw. holder correctly.
(3) As the feed sw. holder is temporarily attached to the pickup unit, set to the gear of the joint g and to the bending part of the chassis (joint **h**) at a time.

CAUTION:

Make sure that the part i on the underside of the feed rack is certainly inserted to the slot j of the change lock lever.

(4) Reattach the feed sw. holder using the screw **E**.
(5) Reattach the pu. shaft to the pickup unit. Reattach the pu. shaft holder to the pu. shaft using the screw **D**.

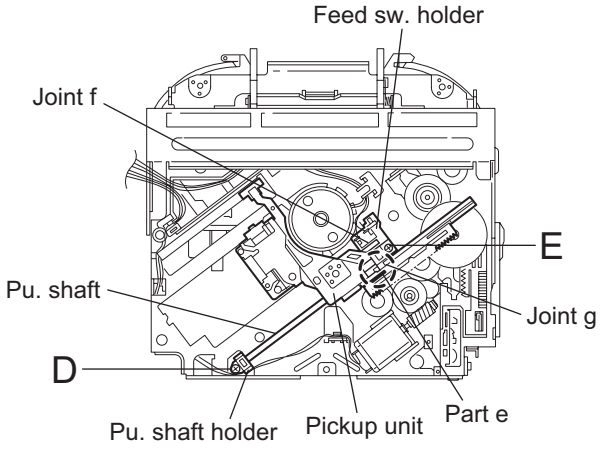


Fig.14

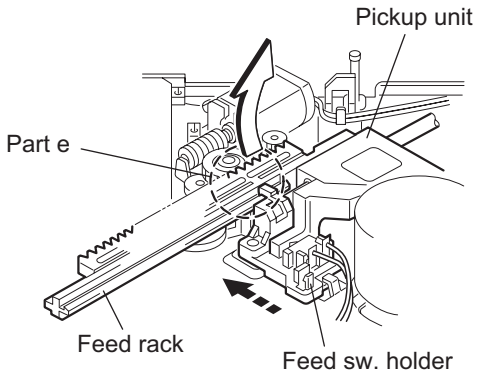


Fig.15

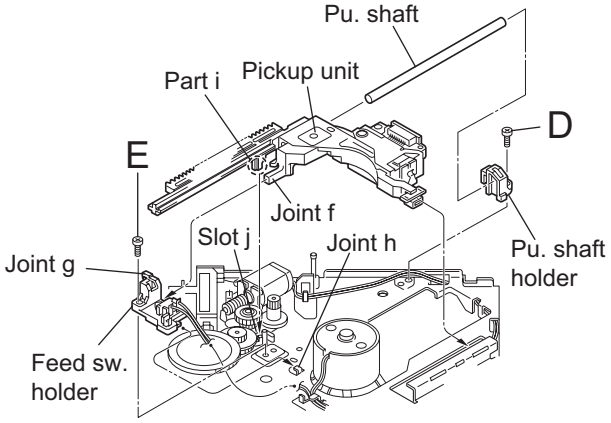


Fig.16

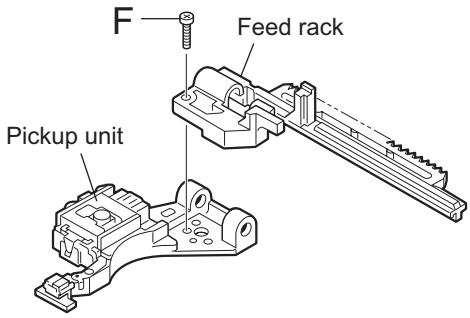


Fig.17

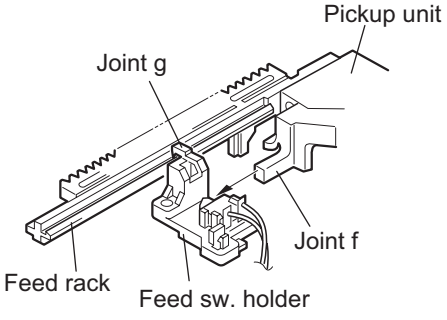


Fig.18

3.2.9 Removing the trigger arm (See Figs.19 and 20)

- Prior to performing the following procedure, remove the top cover, connector board and clamper unit.
  (1) Turn the trigger arm in the direction of the arrow to release the joint **k** and pull out upward.

  CAUTION:

  When reassembling, insert the part m and n of the trigger arm into the part **p** and **q** at the slot of the chassis rivet assembly respectively and join the joint k at a time.

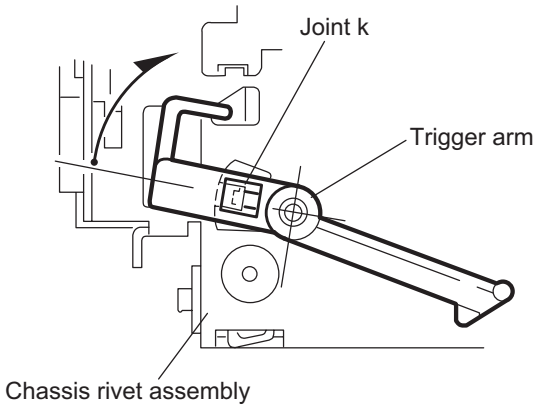


Fig.19

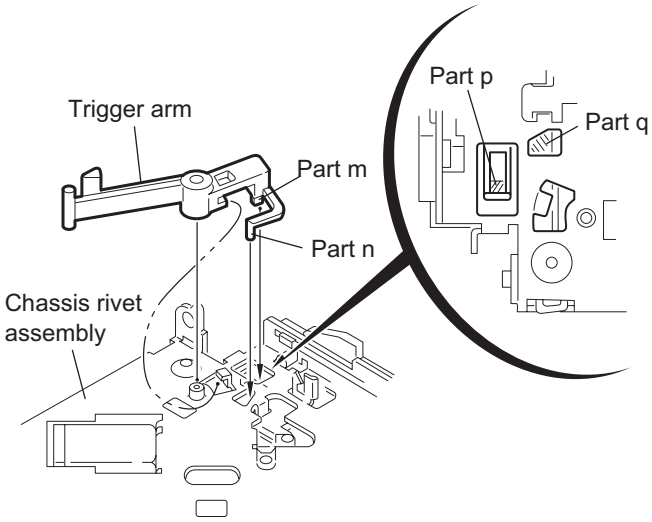


Fig.20

3.2.10 Removing the top plate assembly (See Fig.21)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit, and clamper assembly.
  (1) Remove the screw **H**.
  (2) Move the top plate assembly in the direction of the arrow to release the two joints r.
  (3) Unsolder the wire marked s if necessary.

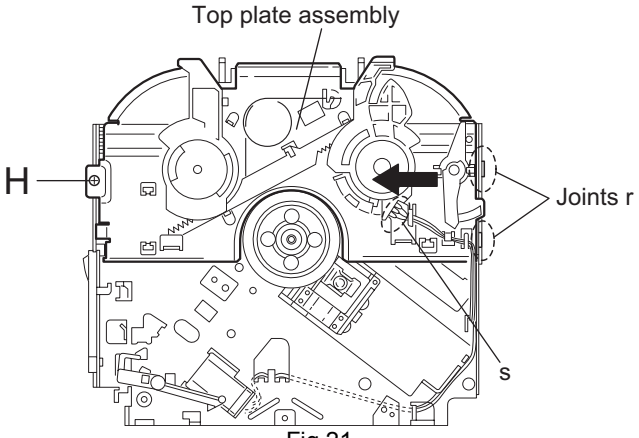


Fig.21

3.2.11 Removing the mode sw. / select lock arm (See Figs.22 and 23)

- Prior to performing the following procedure, remove the top plate assembly.
  (1) Bring up the mode sw. to release from the link plate (joint **t**) and turn in the direction of the arrow to release the joint **u**.
  (2) Unsolder the wire of the mode sw. marked s if necessary.
  (3) Turn the select lock arm in the direction of the arrow to release the two joints **v**.
  (4) The select lock arm spring comes off the select lock arm at the same time.

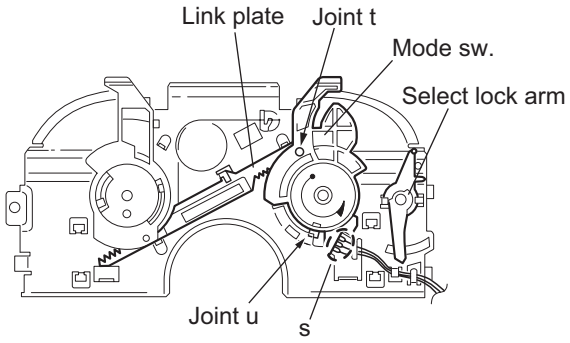


Fig.22

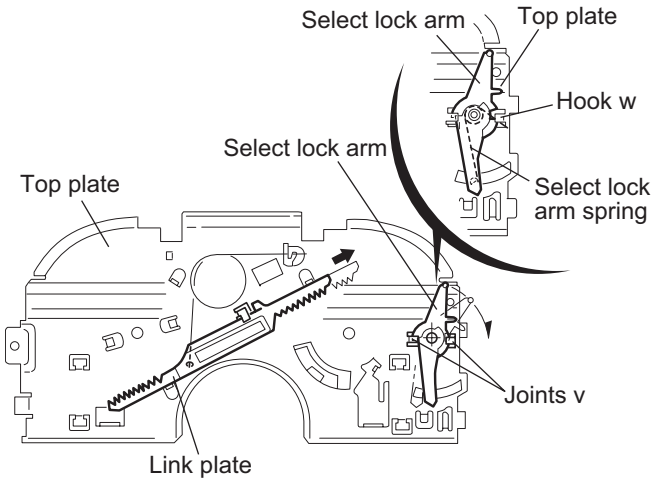


Fig.23

3.2.12 Reassembling the mode sw. / select lock arm (See Figs.24 to 26)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook w on the top plate.

(2) Set the other longer end of the select lock arm spring to the boss x on the underside of the select lock arm, and join the select lock arm to the slots (joint **v**). Turn the select lock arm as shown in the figure.

(3) Reattach the mode sw. while setting the part t to the first peak of the link plate gear, and join the joint **u**.

CAUTION:

When reattaching the mode sw., check if the points y and z are correctly fitted and if each part operates properly.

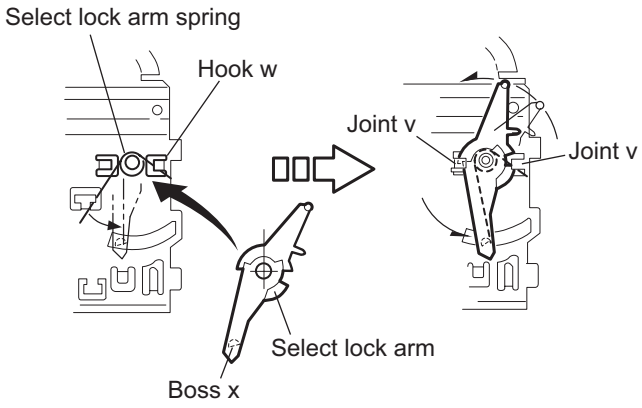


Fig.24

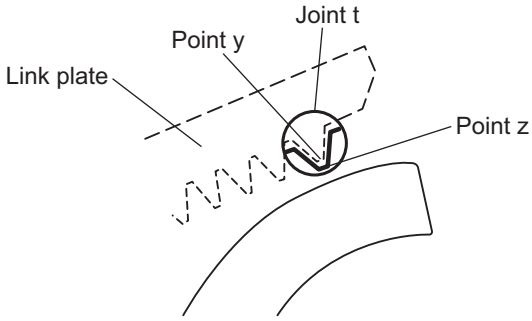


Fig.25

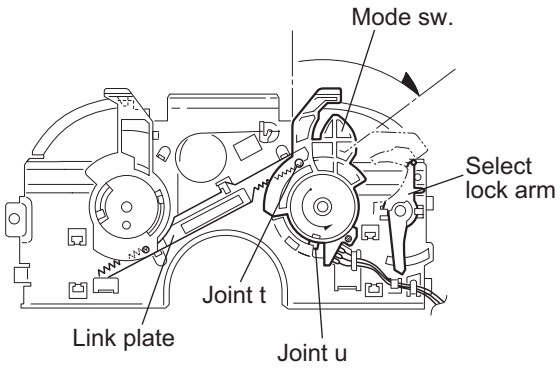


Fig.26

3.2.13 Removing the select arm R / link plate (See Figs.27 and 28)

- Prior to performing the following procedure, remove the top plate assembly.
  (1) Bring up the select arm R to release from the link plate (joint a') and turn as shown in the figure to release the two joints **b'** and joint **c'**.
  (2) Move the link plate in the direction of the arrow to release the joint d'. Remove the link plate spring at the same time.

REFERENCE:

Before removing the link plate, remove the mode sw..

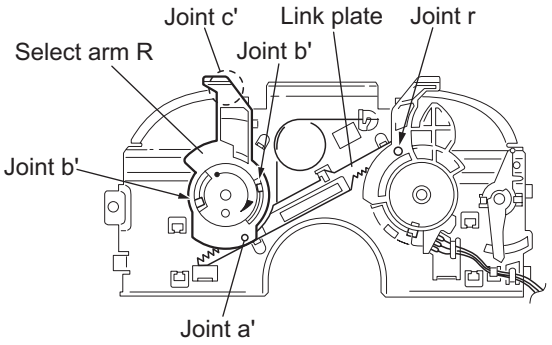


Fig.27

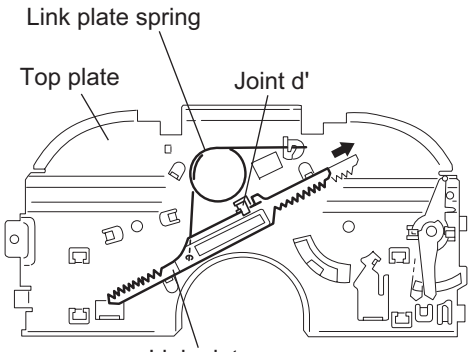


Fig.28

3.2.14 Reattaching the Select arm R / link plate (See Figs.29 and 30)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the link plate spring.
(2) Reattach the link plate to the link plate spring while joining them at joint **d'**.
(3) Reattach the joint a' of the select arm **R** to the first peak of the link plate while joining the two joints **b'** with the slots. Then turn the select arm R as shown in the figure. The top plate is joined to the joint **c'**.

CAUTION:

When reattaching the select arm **R**, check if the points **e'** and **f'** are correctly fitted and if each part operates properly.

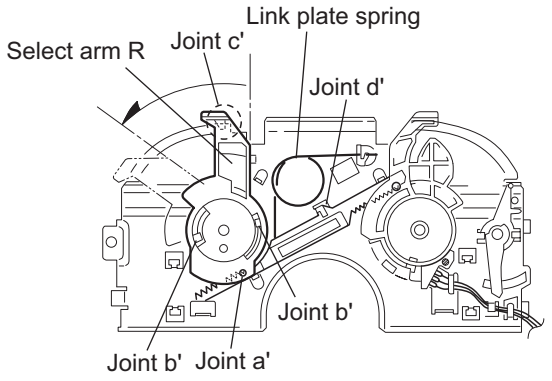


Fig.29

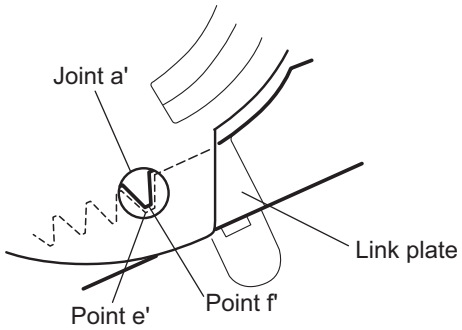


Fig.30

3.2.15 Removing the loading roller assembly (See Figs.31 to 33)

- Prior to performing the following procedure, remove the clamper assembly and top plate assembly.
  (1) Push inward the loading roller assembly on the gear side and detach it upward from the slot of the joint **g'** of the lock arm rivet assembly.
  (2) Detach the loading roller assembly from the slot of the joint **h'** of the lock arm rivet assembly.

      The roller guide comes off the gear section of the loading roller assembly.

      Remove the roller guide and the HL washer from the shaft of the loading roller assembly.
  (3) Remove the screw **J** attaching the lock arm rivet assembly.
  (4) Push the shaft at the joint **i'** of the lock arm rivet assembly inward to release the lock arm rivet assembly from the slot of the **L** side plate.
  (5) Extend the lock arm rivet assembly outward and release the joint **j'** from the boss of the chassis rivet assembly. The roller guide springs on both sides come off at the same time.

      CAUTION:

      When reassembling, reattach the left and right roller guide springs to the lock arm rivet assembly before reattaching the lock arm rivet assembly to the chassis rivet assembly. Make sure to fit the part **k'** of the roller guide spring inside of the roller guide. (Refer to Fig.34.)

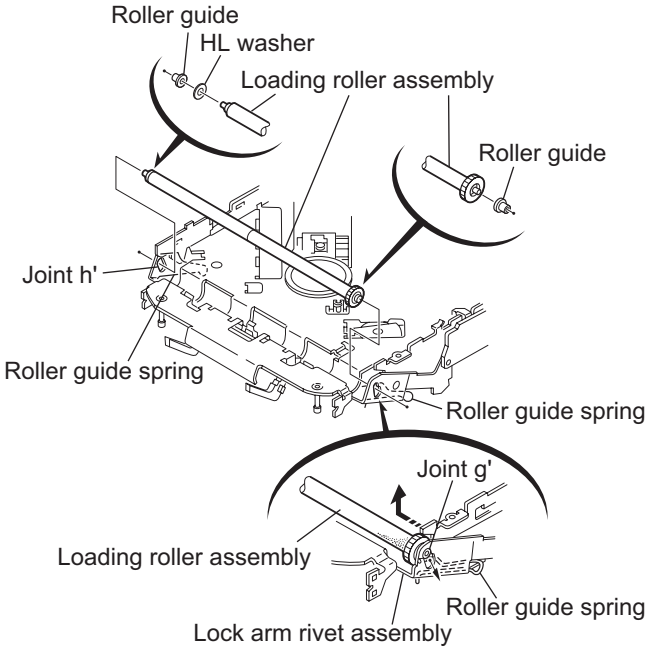


Fig.31

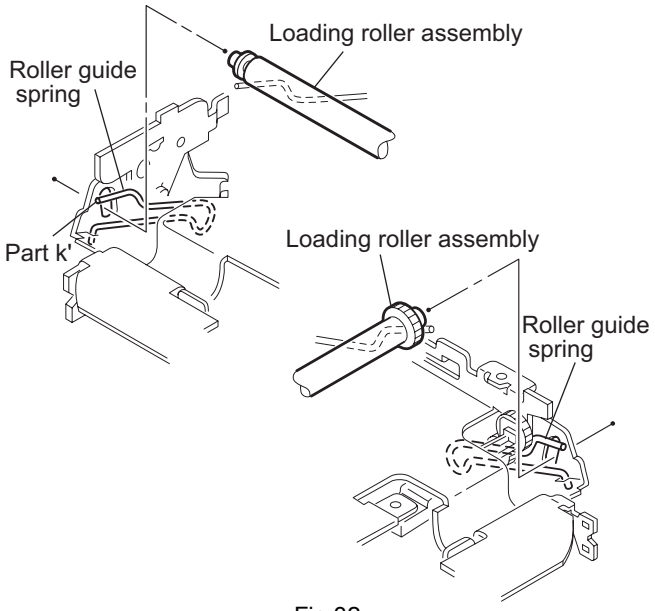


Fig.32

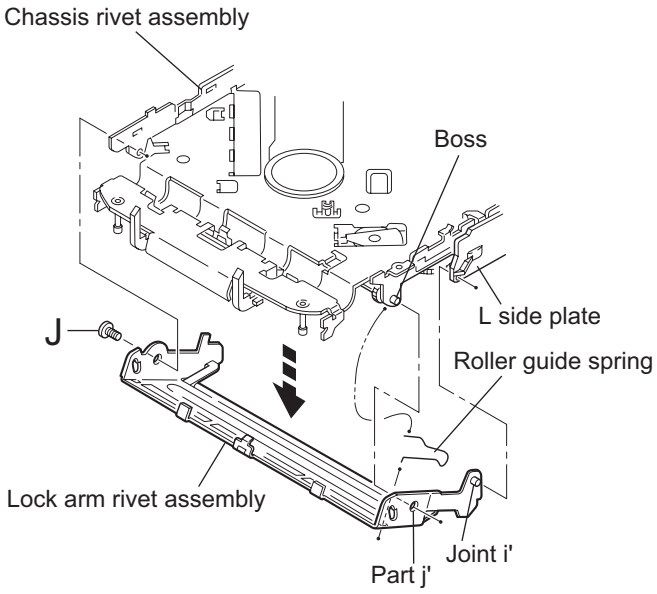


Fig.33

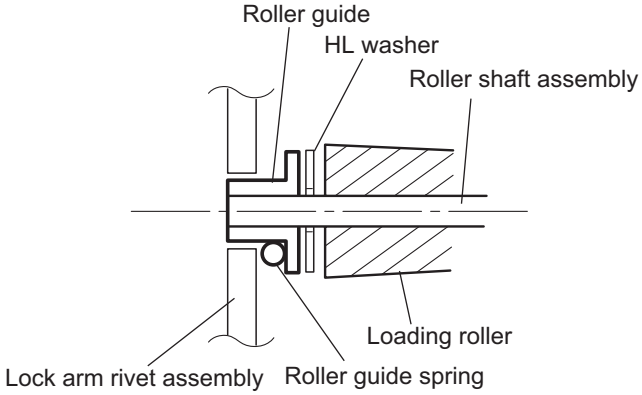


Fig.34

3.2.16 Removing the loading gear 5, 6 and 7 (See Figs.35 and 36)

- Prior to performing the following procedure, remove the top cover, chassis unit, pickup unit and top plate assembly.
  (1) Remove the screw **K** attaching the loading gear bracket. The loading gear 6 and 7 come off the loading gear bracket.
  (2) Pull out the loading gear 5.

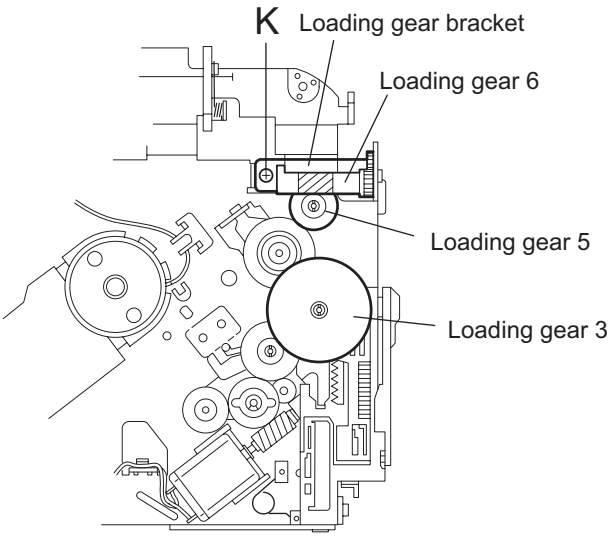


Fig.35

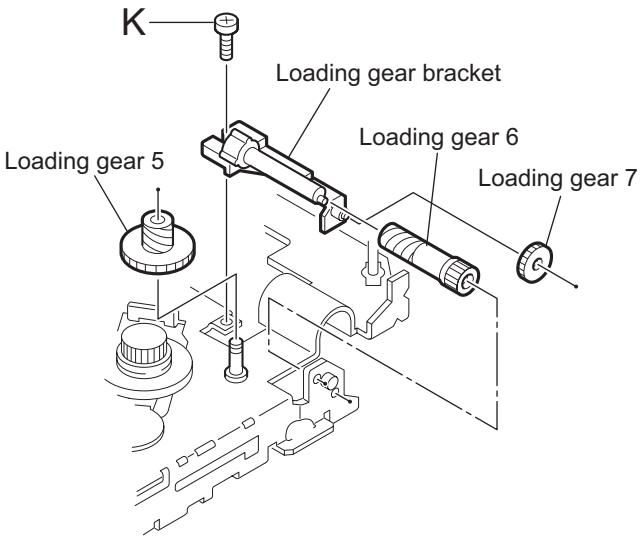


Fig.36

3.2.17 Removing the gears
(See Figs.37 to 40)

- Prior to performing the following procedure, remove the top cover, chassis unit, top plate assembly and pickup unit.
- Pull out the loading gear 3. (See Fig.35.)
  (1) Pull out the feed gear.
  (2) Move the loading plate assembly in the direction of the arrow to release the L side plate from the two slots m' of the chassis rivet assembly. (See Fig.37.)
  (3) Detach the loading plate assembly upward from the chassis rivet assembly while releasing the joint **n'**. Remove the slide hook and loading plate spring from the loading plate assembly.
  (4) Pull out the loading gear 2 and remove the change lock lever.
  (5) Remove the E ring and washer attaching the changer gear 2.
  (6) The changer gear 2, change gear spring and adjusting washer come off.
  (7) Remove the loading gear 1.
  (8) Move the change plate rivet assembly in the direction of the arrow to release from the three shafts of the chassis rivet assembly upward. (See Fig.38.)
  (9) Detach the loading gear plate rivet assembly from the shaft of the chassis rivet assembly upward while releasing the joint p'. (See Figs.38 and 40.)
  (10) Pull out the loading gear 4.

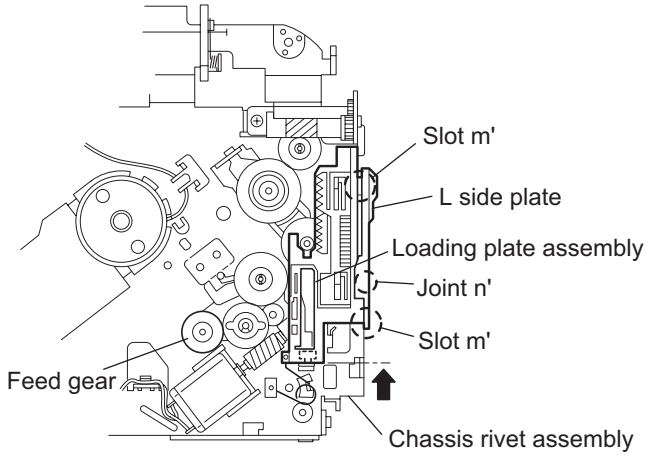


Fig.37

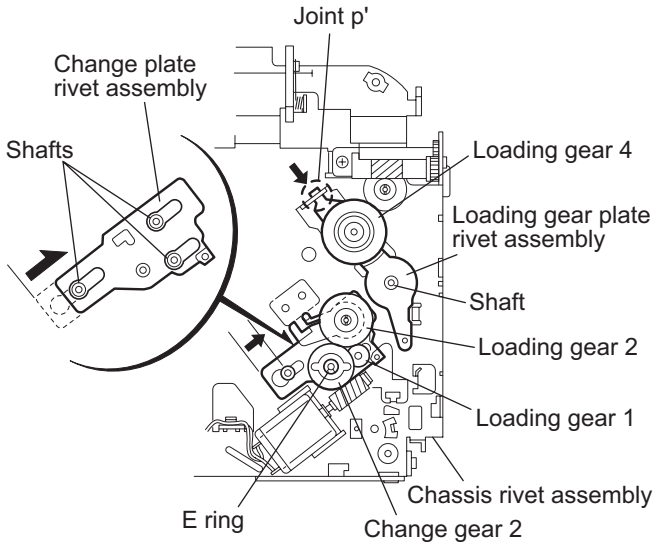


Fig.38

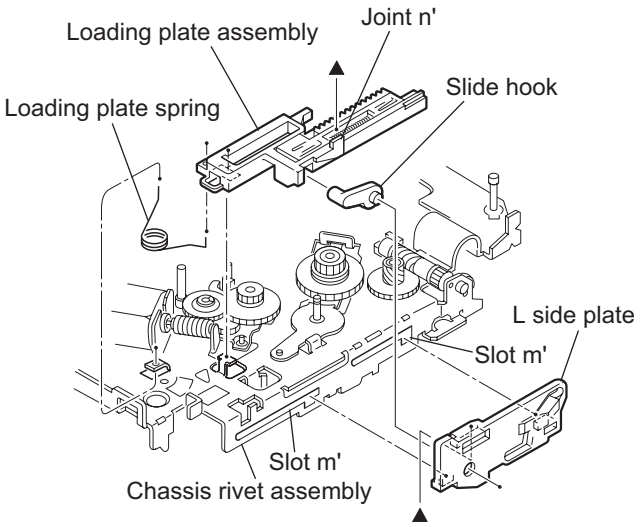


Fig.39

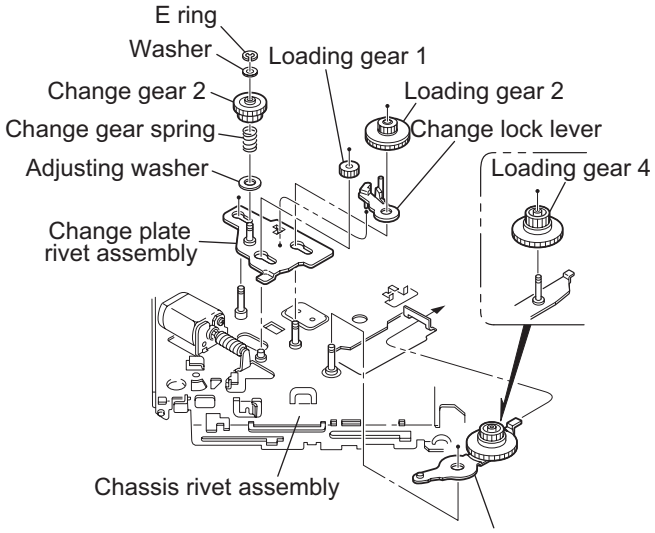


Fig.40

3.2.18 Removing the turn table / spindle motor (See Figs.41 and 42)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit and clamper assembly.
  (1) Remove the two screws **L** attaching the spindle motor assembly through the slot of the turn table on top of the body.
  (2) Unsolder the wire on the connector board if necessary.

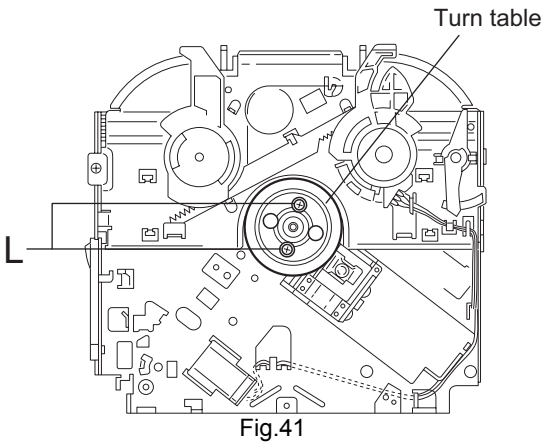


Fig.41

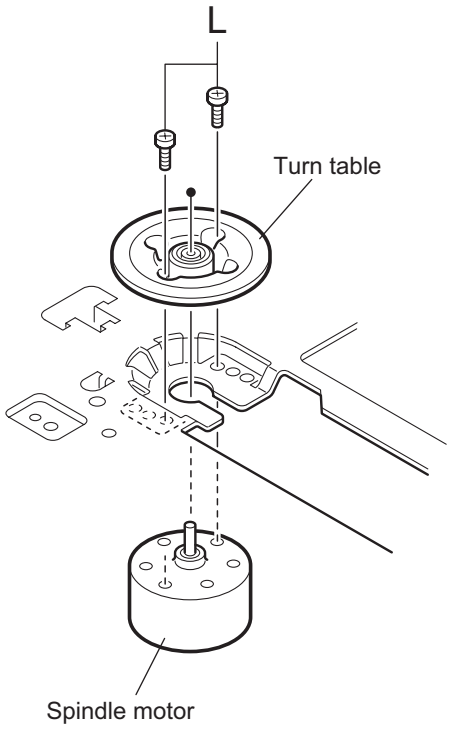


Fig.42

SECTION 4
ADJUSTMENT

4.1 Adjustment method

■ **Test instruments required for adjustment**

(1) Digital oscilloscope (100MHz)
(2) Electric voltmeter
(3) Digital tester
(4) Tracking offset meter
(5) Test Disc JVC :CTS-1000
(6) Extension cable for check
EXTSH002-22P × 1

■ **Standard volume position**

Balance and Bass &Treble volume : Indication"0"
Loudness : OFF

■ **Standard measuring conditions**

Power supply voltage	DC14.4V(10.5 to 16V)
Load impedance	20KΩ(2 Speakers connection)
Output Level	Line out 2.0V (Vol. MAX)

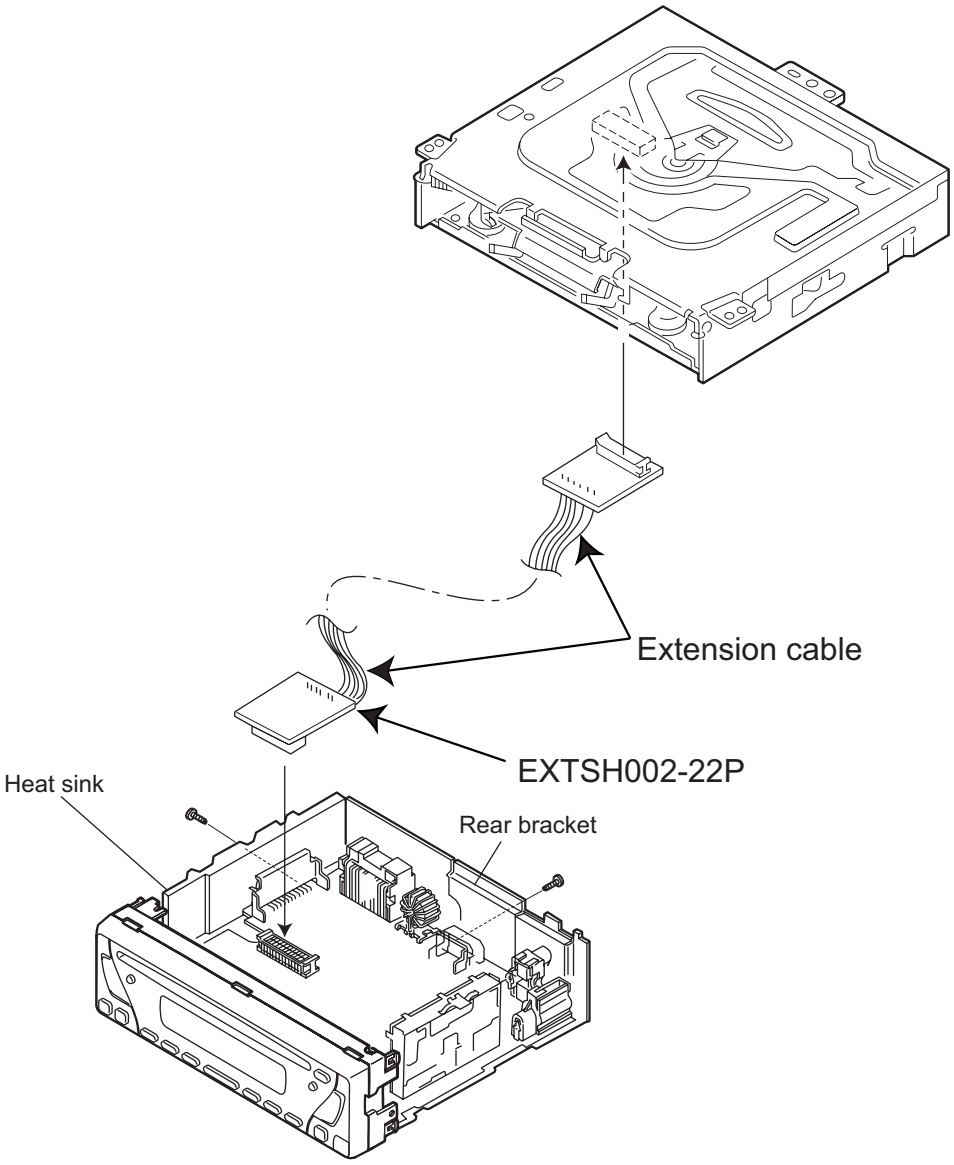
■ **Dummy load**

Exclusive dummy load should be used for AM,and FM. For FM dummy load,there is a loss of 6dB between SSG output and antenna input.The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

■ **How to connect the extension cable for adjusting**

Caution:

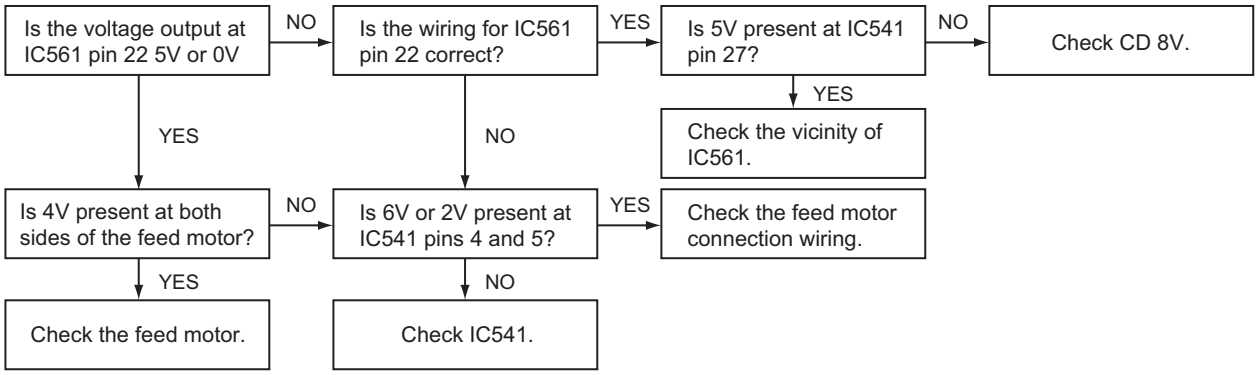
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.



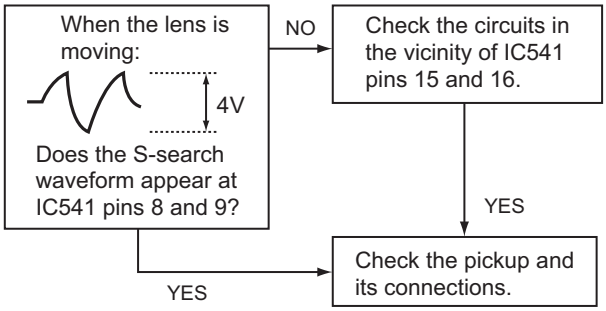
SECTION 5
TROUBLESHOOTING

5.1 KD-G110 J and KD-S11 J version model

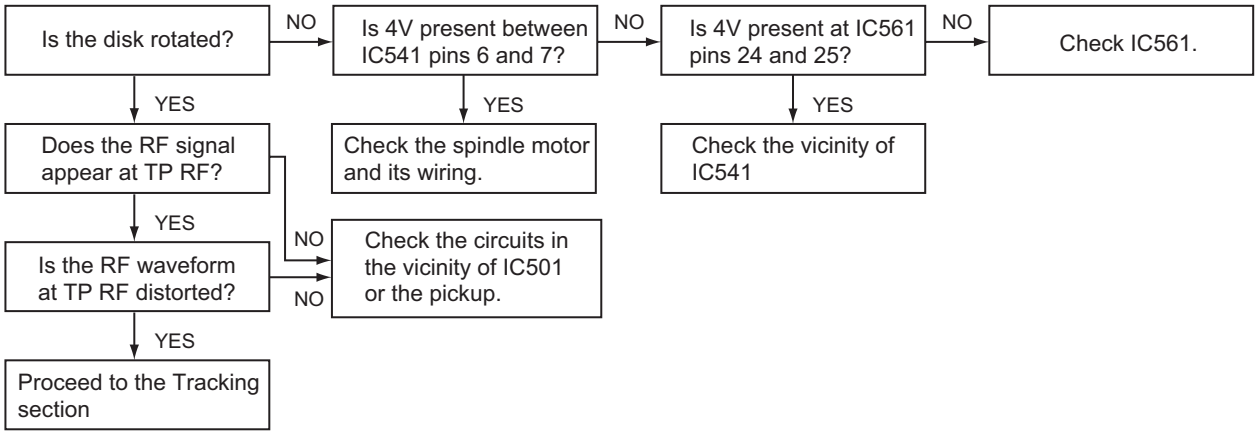
5.1.1 Feed section



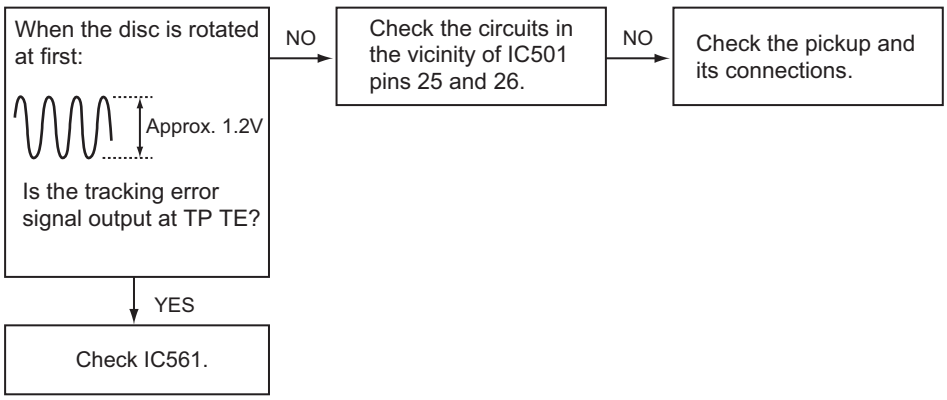
5.1.2 Focus section



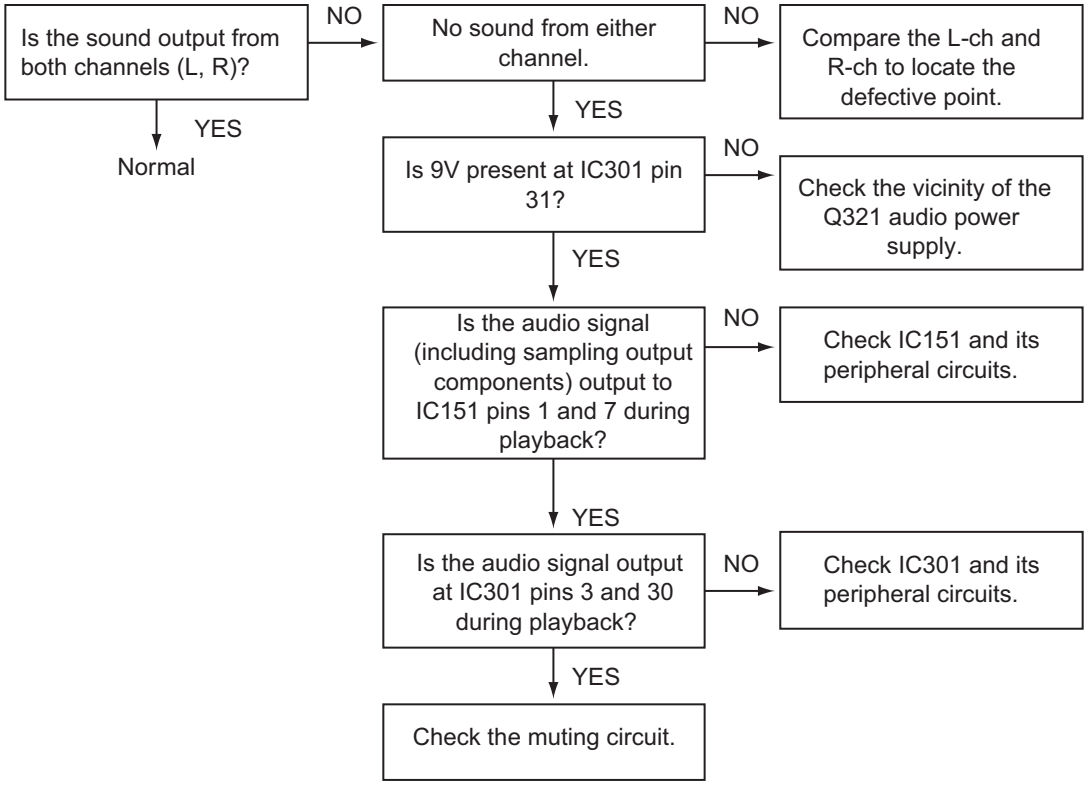
5.1.3 Spindle section



5.1.4 Tracking section

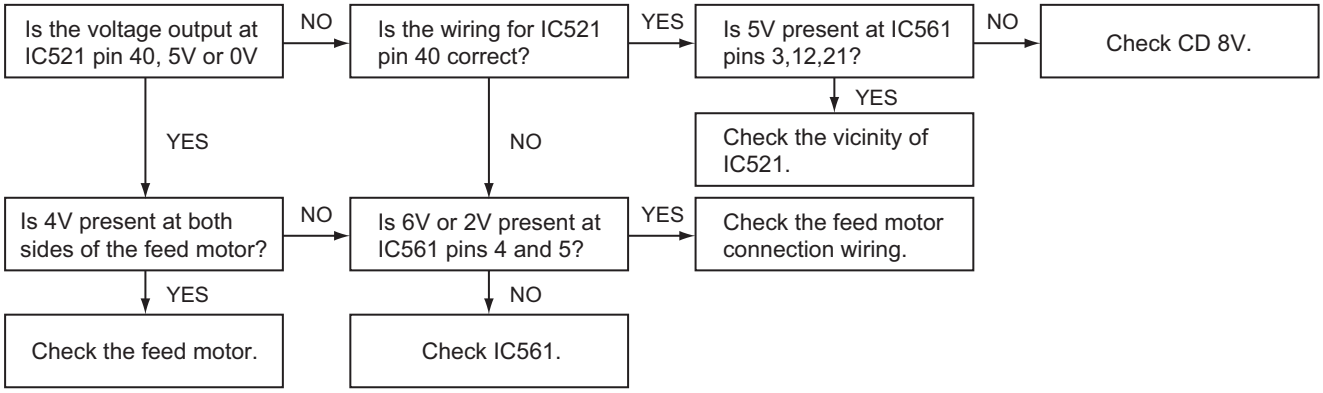


5.1.5 5.5 Signal processing section

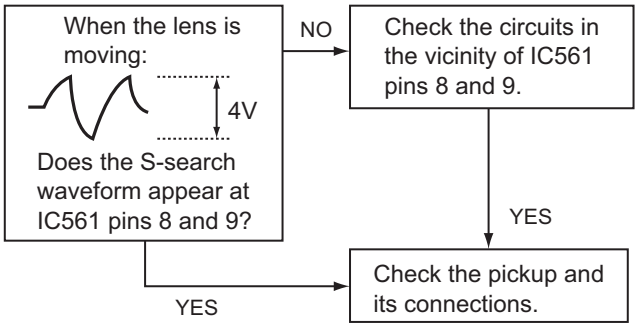


5.2 KD-G110 J2 and KD-S11 J2 version model

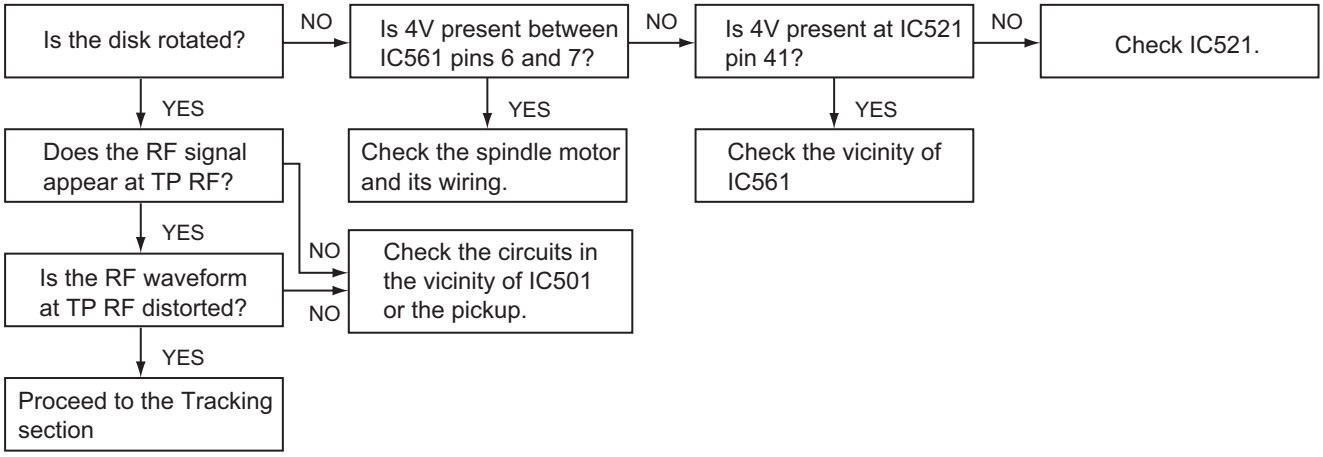
5.2.1 Feed section



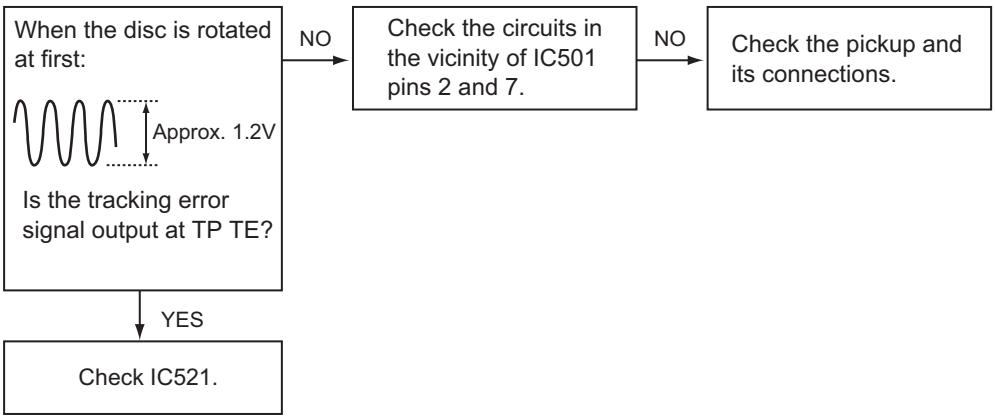
5.2.2 Focus section



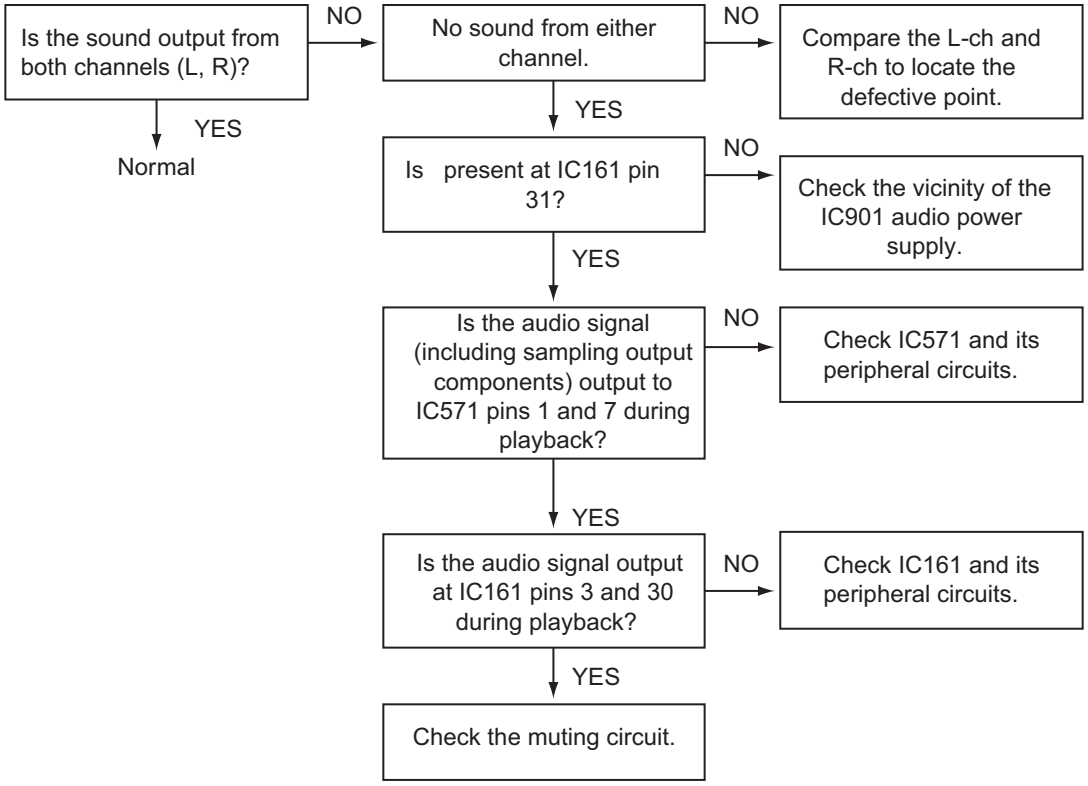
5.2.3 Spindle section



5.2.4 Tracking section



5.2.5 5.5 Signal processing section

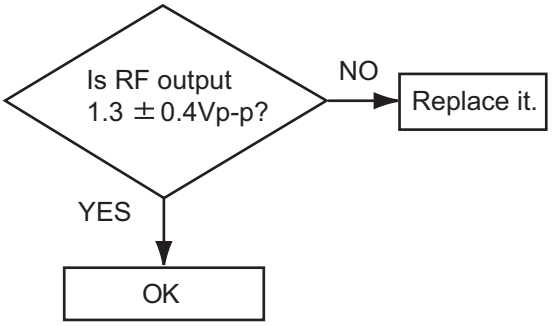


5.3 Maintenance of laser pickup

(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

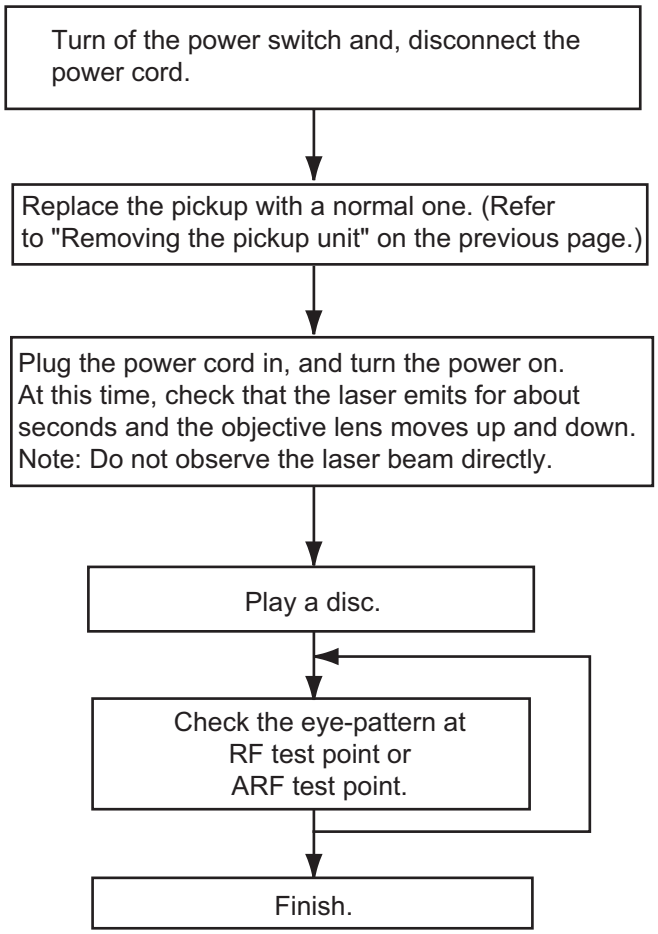
(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output: amplitude of eye pattern) will be low.

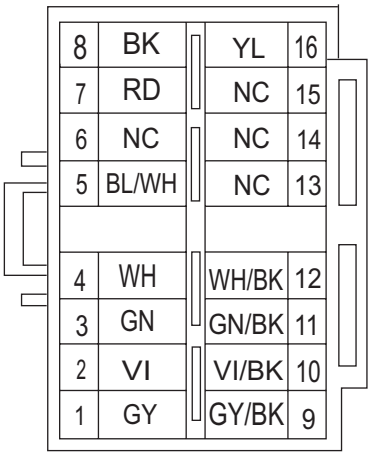


(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced. If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

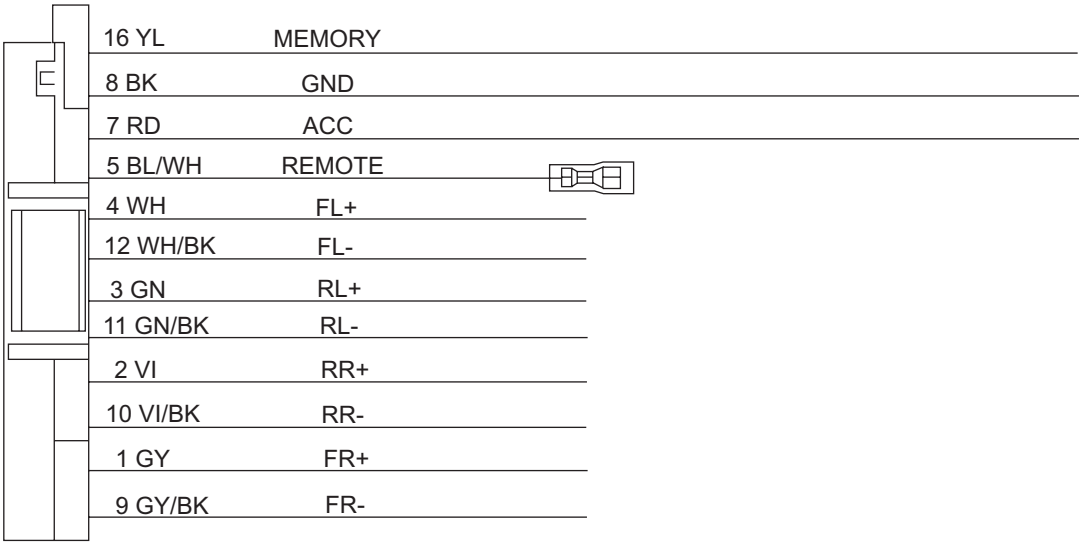
5.4 Replacement of laser pickup



5.5 16 PIN CORD DIAGRAM



BK	Black	GN	Green
RD	Red	VI	Violet
BL	Blue	GY	Gray
WH	White	YL	Yellow



RR	Rear Right	REMOTE	Remote out
FR	Front Right	ACC	ACC Line
FL	Front Left	MEMORY	Memory Backup Battery +
RL	Rear Left	GND	Ground

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY CAR ELECTRONICS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA121)

Printed in Japan
VPT

PARTS LIST

[KD-G110]
[KD-S11]

* All printed circuit boards and its assemblies are not available as service parts.

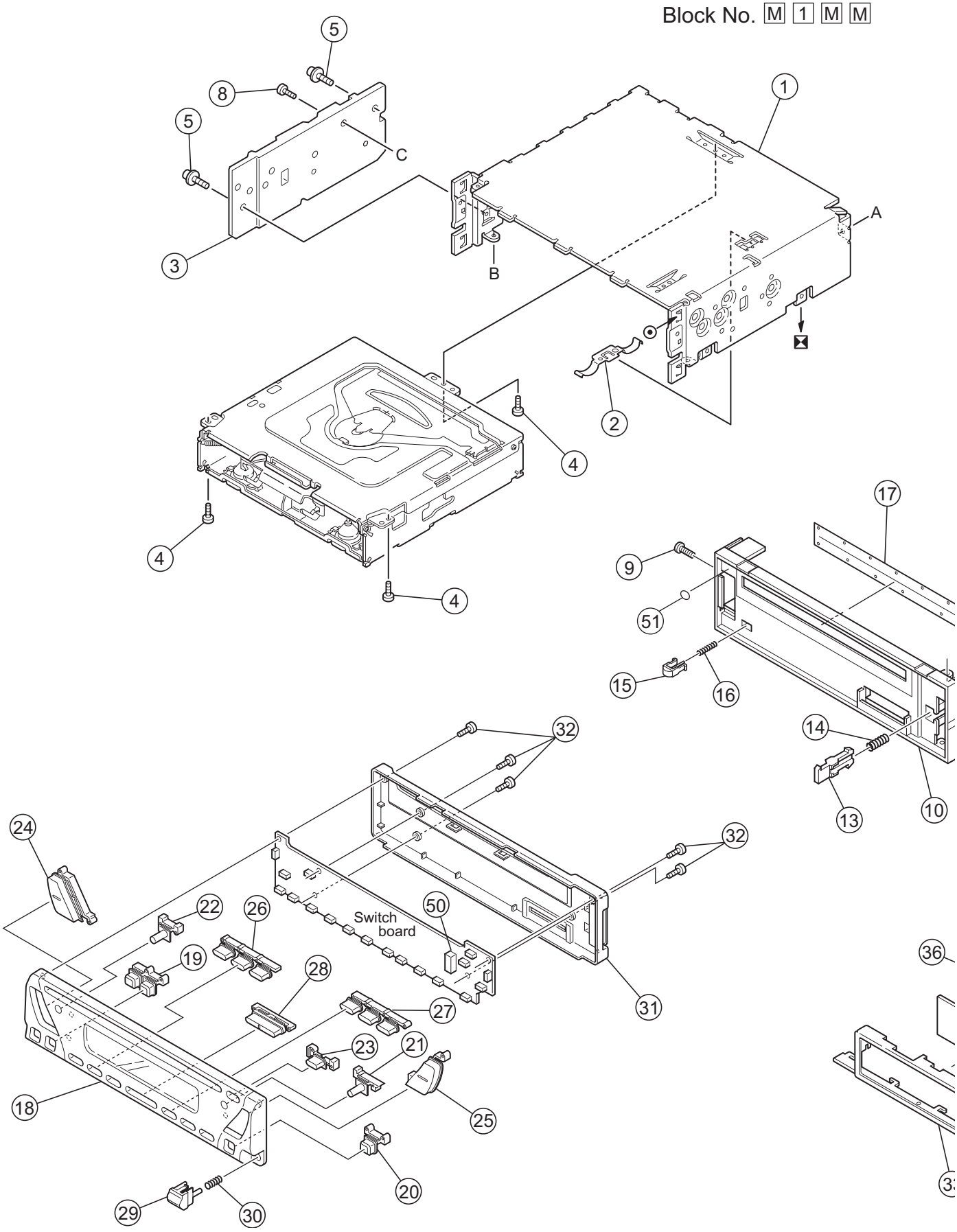
Area suffix

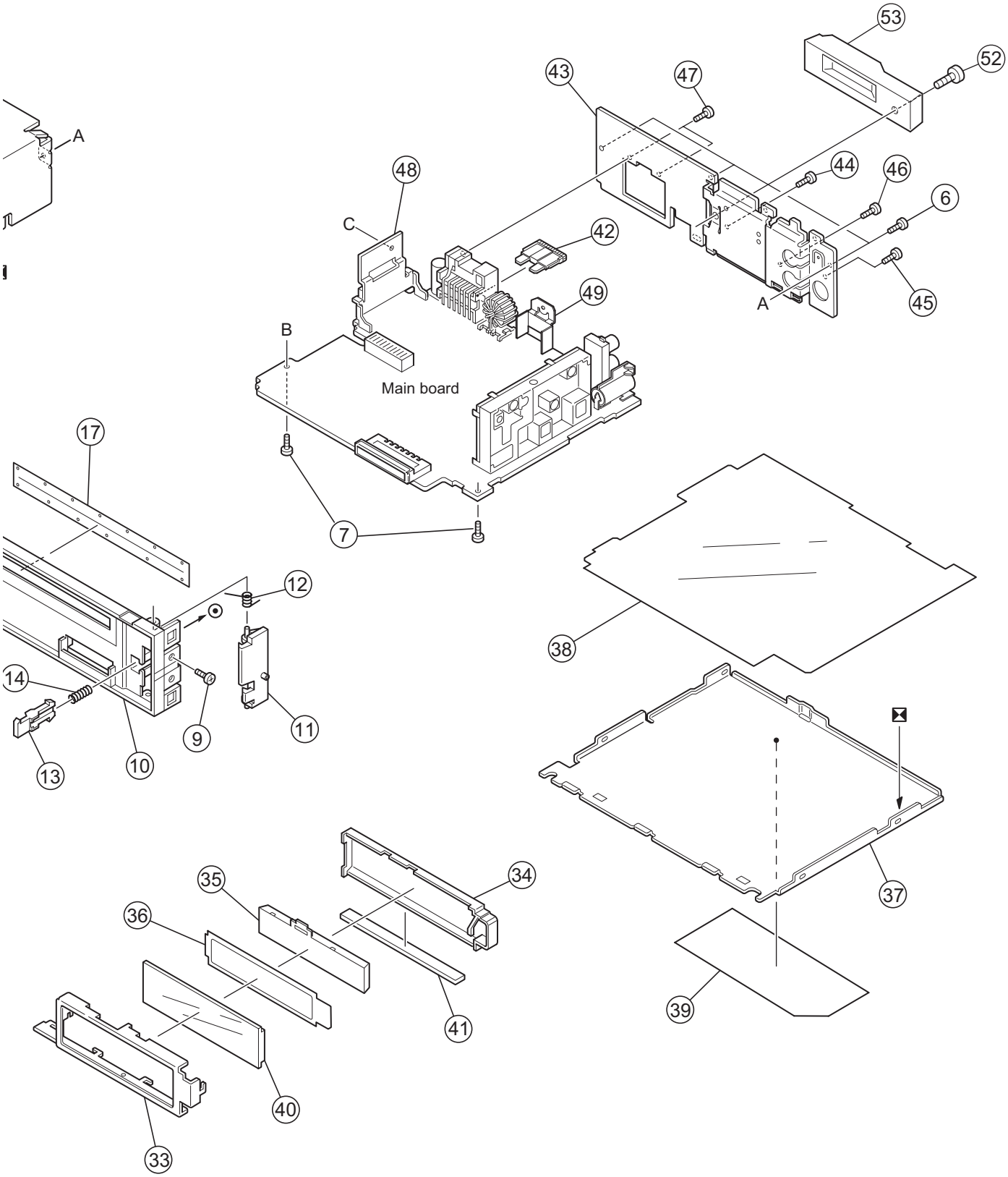
J ---------- Northern America

- Contents -

Exploded view of general assembly and parts list

Block No. M 1 M M




A
53
52
43
47
48
44
46
6
C
42
49
45
A
B
Main board
7
17
12
14
9
11
13
10
38
37
39
35
34
36
41
40
33

General Assembly

Block No. [M][1][M][M]

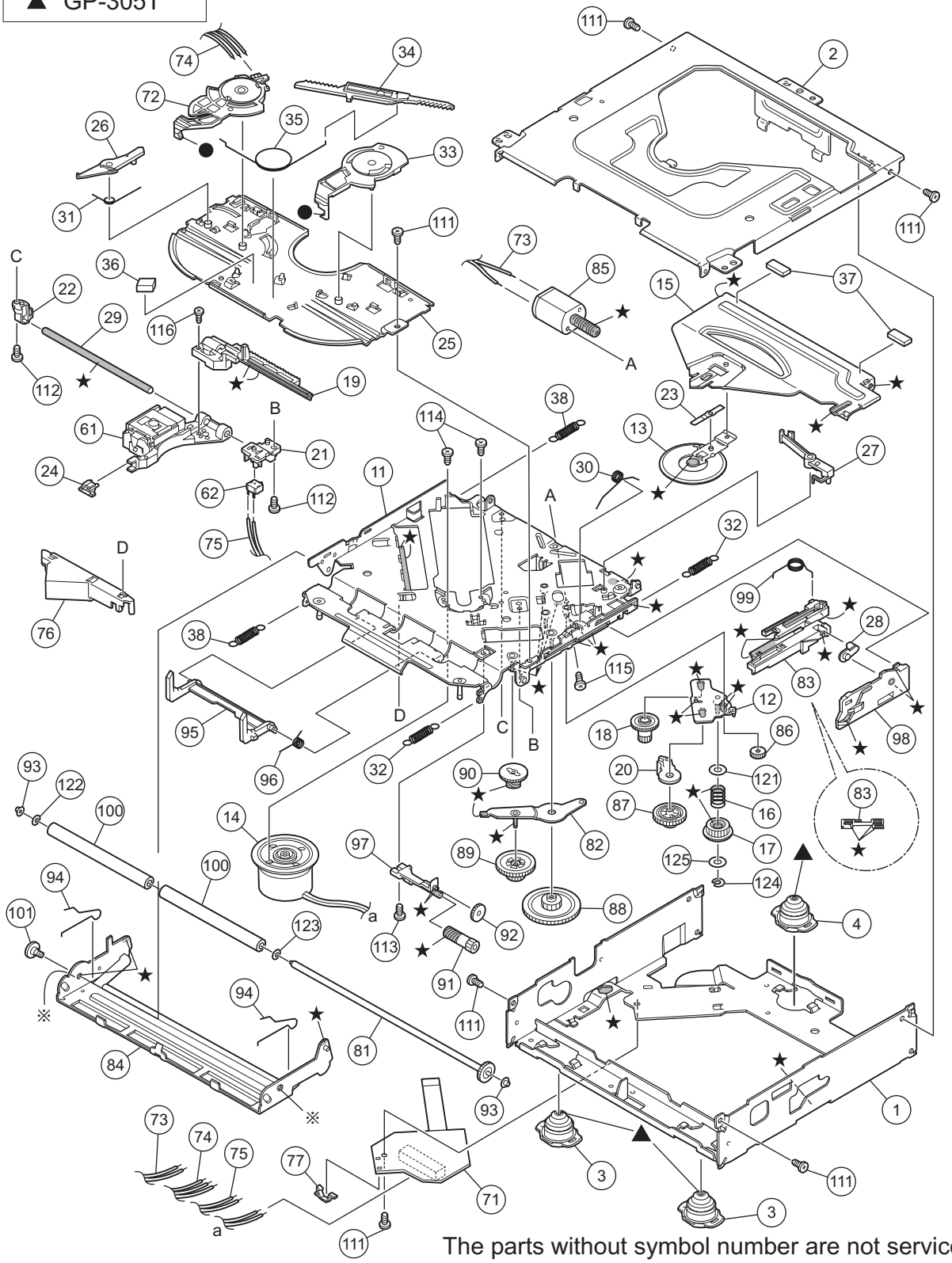
⚠	Symbol No.	Part No.	Part Name	Description	Local
	1	GE10104-001A	TOP CHASSIS		
	2	GE40135-001A	EARTH PLATE		
	3	GE30938-003A	SIDE PANEL		
	4	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
	5	GE40235-001A	SCREW	(x2)	
	6	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm(x3)	
	7	GE40235-004A	SCREW	(x2)	
	8	QYSDST2610ZA	TAP SCREW	M2.6 x 10mm	
	9	QYSDST2004ZA	TAP SCREW	M2 x 4mm(x2)	
	10	GE10103-001A	FRONT CHASSIS		
	11	GE31569-002A	LOCK LEVER		
	12	GE40269-001A	TORSION SPRING		
	13	GE31568-001A	RLS KNOB		
	14	GE40202-011A	COMP.SPRING		
	15	GE40250-001A	PANEL STOPPER		G110J,S11J
	15	GE40250-002A	PANEL STOPPER		G110J2,S11J2
	16	GE40202-009A	COMP.SPRING		
	17	GE40257-001A	BLIND		
	18	GE20176-007A	FRONT PANEL ASSY	G110J,G110J2	
	18	GE20176-005A	FRONT PANEL ASSY	S11J,S11J2	
	19	GE31561-005A	POWER/SEL BTN		G110J,G110J2
	19	GE31561-002A	POWER/SEL BTN		S11J,S11J2
	20	GE31572-009A	EQ BUTTON		G110J,G110J2
	20	GE31572-003A	EQ BUTTON		S11J,S11J2
	21	GE31562-001A	MODE BUTTON		
	22	GE31563-001A	DISP BUTTON		
	23	GE31564-001A	EJECT BUTTON		
	24	GE31560-005A	VOL BUTTON		G110J,G110J2
	24	GE31560-002A	VOL BUTTON		S11J,S11J2
	25	GE31559-005A	SEARCH BUTTON		G110J,G110J2
	25	GE31559-002A	SEARCH BUTTON		S11J,S11J2
	26	GE31555-005A	PRESET BTN (L)		G110J,G110J2
	26	GE31555-002A	PRESET BTN (L)		S11J,S11J2
	27	GE31556-005A	PRESET BTN (R)		G110J,G110J2
	27	GE31556-002A	PRESET BTN (R)		S11J,S11J2
	28	GE31557-005A	D FUNCT BUTTON		G110J,G110J2
	28	GE31557-007A	D.FUNC BUTTON		S11J,S11J2
	29	GE31558-004A	DETACH BUTTON		G110J,G110J2
	29	GE31558-002A	DETACH BUTTON		S11J,S11J2
	30	GE40202-010A	COMP.SPRING		
	31	GE10102-001A	REAR COVER		
	32	VKZ4777-010	MINI SCREW	(x5)	G110J,S11J
	32	VKZ4777-006	MINI SCREW	(x5)	G110J2,S11J2
	33	GE31565-001A	LCD CASE		
	34	GE31566-001A	LENS CASE		
	35	GE31567-001A	LCD LENS		
	36	GE40248-001A	LIGHTING SHEET		
	37	GE31570-001A	BOTTOM COVER		
	38	FSMA3004-203	INSULATOR		
	39	GE31389-001A	NAME PLATE		G110J
	39	GE31389-002A	NAME PLATE		G110J2
	39	GE31386-001A	NAME PLATE		S11J
	39	GE31386-002A	NAME PLATE		S11J2
	40	QLD0352-001	LCD MODULE		G110J,G110J2
	40	QLD0353-001	LCD MODULE		S11J,S11J2
	41	QNZ0442-001	LCD CONNECTOR		
⚠	42	QMFZ047-150-T	FUSE	15A	
	43	GE31571-005A	REAR BRACKET		
	44	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	45	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	46	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm	
	47	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
	48	GE40172-004A	IC BRACKET		
	49	GE40124-002A	REG BRACKET		
	50	GE30854-001A	LED HOLDER		
	51	FSYH4036-098	SHEET		
	52	QYSPSP5014ZA	SCREW	M5 x 14mm	S11J,S11J2
	53	GE40225-001A	CAR STEREO TAG		S11J,S11J2

CD mechanism assembly and parts list

Grease
- ★ TNG-87
- ※ GP-501MK
- ● CFD-005Z
- ▲ GP-305T

TN-2001-1011

Block No. M B M M



The parts without symbol number are not service.

CD mechanism

Block No. [M][B][M][M]

⚠	Symbol No.	Part No.	Part Name	Description	Local
	1	30320101T	FRAME		
	2	30320102T	TOP COVER		
	3	30320115T	DANPER F		
	4	30320116T	DANPER R		
	11	303205505T	CHASSIS RIVET		
	12	303205503T	CHANGE P. RVT A		
	13	303205301T	CLAMPER ASS'Y		
	14	303205302T	SPINDLE MOTOR A		
	15	30320502T	CLAMPER ARM		
	16	30320503T	CHANGE GEAR SPG		
	17	30320505T	CHANGE GEAR 2		
	18	30320506T	FEED GEAR		
	19	30320507T	FEED RACK		
	20	30320509T	CHANGE LOCK RAR		
	21	30320510T	FEED SW HOLDER		
	22	30320511T	PU SHAFT HOLDER		
	23	30320513T	CLAMPER SUB SPG		
	24	30320514T	FD SUB HOLDER		
	25	30320518T	TOP PLATE		
	26	30320519T	SELECT LOCK ARM		
	27	30320520T	TRIGGER ARM		
	28	30320521T	SLIDE HOOK		
	29	30320522T	PU SHAFT		
	30	30320525T	CLAMPER ARM SPG		
	31	30320526T	SELECT L ARM SP		
	32	30320538T	SUSPENSION SP R		
	33	30320529T	SELECT ARM R		
	34	30320530T	LINK PLATE		
	35	30320531T	LINK PLATE SPG		
	36	30320523T	CUSHION F		
	37	30320524T	CUSHION R		
	38	30320539T	SUSPENSION SP L		
	61	69011614T	PICKUP OPT-725		
	62	64180406T	DET SW ESE22		
	71	303210301T	CONN PWB ASS'Y		
	72	30321002T	MODE SW		
	73	30321003T	LOAD MOTOR WIRE		
	74	30321005T	MODE SW WIRE		
	75	30321009T	SL WIRE		
	76	30321011T	WIRE HOLDER		
	77	19501403T	WIRE CLUMPER		
	81	303211301T	ROLLER SHAFT AS		
	82	303211501T	L GEAR PLATE RV		
	83	303211302T	LOADING PLATE A		
	84	303211502T	LOCK ARM RV ASS		
	85	303211303T	L/F MOTOR ASS'Y		
	86	30321101T	LOADING GEAR 1		
	87	30321102T	LOADING GEAR 2		
	88	30321103T	LOADING GEAR 3		
	89	30321104T	LOADING GEAR 4		
	90	30321105T	LOADING GEAR 5		
	91	30321106T	LOADING GEAR 6		
	92	30321107T	LOADING GEAR 7		
	93	30321149T	ROLLER GUIDE		
	94	30321114T	ROLLER GUIDE SP		
	95	30321116T	DISC STOPPER AR		
	96	30321117T	DISC ST ARM SPG		
	97	30321118T	LD GEAR BRACKET		
	98	30321125T	L SIDE PLATE		
	99	30321131T	LOAD PLATE SPG		
	100	30321133T	LDG ROLLER		
	101	18211223T	COLLAR SCREW		
	111	9P0420031T	SCREW		
	112	9P0420041T	TAP.SCREW		
	113	9B0320041T	SCREW		
	114	9C0117183T	SCREW		
	115	9C0120203T	SCREW		
	116	9C0317503T	SCREW		
	121	9W0130170T	PW 3.5X8X0.3		
	122	9W0513060T	HL WASHER		
	123	9W0710070T	L WASHER		
	124	9E0100152T	E RING		
	125	9W0113020T	PW 2.1X4X0.13		

Electrical parts list

Main board(KD-G110,KD-S11_J)

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC151	NJM4565M-WE	IC		
IC301	TEA6320T-X	IC		
IC321	LA47516	POWER IC		
IC501	AN22002A-W	IC		
IC541	LA6242H-X	IC		
IC561	MN6627482WA	IC		
IC801	JES01-9C84	IC		
IC901	HA13164A	IC		
Q321	KTD1304-X	TRANSISTOR		
Q332	KTD1304-X	TRANSISTOR		
Q432	KTD1304-X	TRANSISTOR		
Q501	2SA2093/QR/-T	TRANSISTOR		
Q541	2SA2093/QR/-T	TRANSISTOR		
Q701	RT1N141C-X	TRANSISTOR		
Q731	2SC3928A/R/-X	TRANSISTOR		
Q732	2SC3928A/R/-X	TRANSISTOR		
Q791	2SB1197K/QR/-X	TRANSISTOR		
Q792	2SA1530A/R/-X	TRANSISTOR		
Q793	RT1N141C-X	TRANSISTOR		
Q861	RT1P141C-X	TRANSISTOR		
Q902	2SC3928A/R/-X	TRANSISTOR		
Q903	2SA1530A/R/-X	TRANSISTOR		
D321	1SS133-T2	SI DIODE		
D332	KDS4148U-X	DIODE		
D333	KDS4148U-X	DIODE		
D551	1A3G-T1	SI DIODE		
D701	1SS133-T2	SI DIODE		
D702	1SS133-T2	SI DIODE		
D791	KDS4148U-X	DIODE		
D792	KDS4148U-X	DIODE		
D801	1SS133-T2	SI DIODE		
D810	KDS4148U-X	DIODE		
D821	KDZ6.2V-X	Z DIODE		
D822	KDZ6.2V-X	Z DIODE		
D823	KDZ6.2V-X	Z DIODE		
D824	KDZ6.2V-X	Z DIODE		
D825	KDZ6.2V-X	Z DIODE		
D826	KDZ6.2V-X	Z DIODE		
D827	KDZ6.2V-X	Z DIODE		
D828	KDZ6.2V-X	Z DIODE		
D861	MTZJ4.7B-T2	Z DIODE		
D866	KDS4148U-X	DIODE		
D867	KDS4148U-X	DIODE		
D868	KDS4148U-X	DIODE		
D869	KDS4148U-X	DIODE		
D901	1N5401-F64	DIODE		
D903	1SS133-T2	SI DIODE		
D904	RB160M-30-X	SB DIODE		
D905	RB160M-30-X	SB DIODE		
C101	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C102	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C151	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C152	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C153	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C155	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C201	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C202	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C251	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C252	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C253	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C255	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C256	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C302	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C303	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C304	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C305	NCB21HK-333X	C CAPACITOR	0.033uF 50V K	
C306	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C307	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C308	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C309	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C310	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C311	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C312	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C313	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C314	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C317	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C318	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C319	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C320	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C321	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C327	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C328	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C329	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C330	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C331	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C332	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C333	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C334	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C335	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C402	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C403	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C404	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C405	NCB21HK-333X	C CAPACITOR	0.033uF 50V K	
C406	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C407	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C408	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C419	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C420	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C427	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C432	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C433	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C434	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C435	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C501	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C502	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C504	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C505	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C506	NDC31HJ-680X	C CAPACITOR	68pF 50V J	
C507	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C509	NCB31EK-393X	C CAPACITOR	0.039uF 25V K	
C510	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C511	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C513	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C514	NCB31EK-563X	C CAPACITOR	0.056uF 25V K	
C515	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C516	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C518	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C519	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C520	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C521	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C522	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C523	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C524	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C525	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C528	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C540	NCS31HJ-680X	C CAPACITOR	68pF 50V J	
C541	NBE20JM-476X	TA E CAPACITOR	47uF 6.3V M	
C542	NCB31EK-332X	C CAPACITOR	3300pF 25V K	
C543	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C545	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C546	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C551	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C552	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C556	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C557	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C561	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C562	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C563	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C564	NCB21EK-223X	C CAPACITOR	0.022uF 25V K	
C565	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C566	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C567	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C571	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C572	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C573	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C574	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C576	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C577	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C579	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C701	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C702	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C703	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C709	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C710	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C711	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C712	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C714	NCS31HJ-121X	C CAPACITOR	120pF 50V J	
C717	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C718	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C720	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C725	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C731	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C732	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C733	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C801	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C802	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C803	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C804	NDC31HJ-330X	C CAPACITOR	33pF 50V J	
C807	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C821	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C822	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C823	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C824	NCB31HK-221X	C CAPACITOR	220pF 50V K	
C861	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C862	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C901	QEZ0676-338	E CAPACITOR	3300uF	
C902	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C903	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C904	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C905	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C906	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C907	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C908	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C909	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C910	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C911	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C914	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C915	NCB11CK-225X	C CAPACITOR	2.2uF 16V K	
C916	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
R101	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R102	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R151	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R152	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R153	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R154	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R155	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R156	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R201	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R202	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R251	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R252	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R253	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R254	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R255	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R256	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R301	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R302	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R303	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R304	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R307	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R308	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R321	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R322	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R323	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R333	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R334	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R336	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R401	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R402	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R403	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R404	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R407	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R408	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R433	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R434	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R436	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R501	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R502	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R503	NRS181J-393X	MG RESISTOR	39kΩ 1/8W J	
R504	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R505	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R506	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R507	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R508	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	
R509	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R510	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R511	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	
R512	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R513	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R516	NRSA63J-623X	MG RESISTOR	62kΩ 1/16W J	
R518	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R524	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R525	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R526	NRS181J-120X	MG RESISTOR	12Ω 1/8W J	
R541	NRSA02J-682X	MG RESISTOR	6.8kΩ 1/10W J	
R542	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R543	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R544	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R545	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R546	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R547	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	
R548	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R550	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R551	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R552	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R553	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J	
R554	NRS181J-513X	MG RESISTOR	51kΩ 1/8W J	
R557	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R558	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R559	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J	
R560	NRS181J-101X	MG RESISTOR	100Ω 1/8W J	
R561	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R562	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R563	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R564	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R567	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R568	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R569	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R570	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R571	NRS181J-104X	MG RESISTOR	100kΩ 1/8W J	
R573	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	
R574	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R575	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R576	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R581	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R596	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R701	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R702	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R703	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R704	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R705	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R708	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R725	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R733	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R735	NRS181J-152X	MG RESISTOR	1.5kΩ 1/8W J	
R736	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R737	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R791	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R792	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R793	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R794	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R795	NRS181J-150X	MG RESISTOR	15Ω 1/8W J	
R796	NRS181J-150X	MG RESISTOR	15Ω 1/8W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R797	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R798	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R801	NRS181J-103X	MG RESISTOR	10kΩ 1/8W J	
R803	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J	
R804	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J	
R805	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J	
R807	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R808	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	
R809	NRS181J-103X	MG RESISTOR	10kΩ 1/8W J	
R811	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R812	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R813	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R814	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R815	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R817	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	
R818	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R820	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R822	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R823	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R825	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R826	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R827	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R828	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R829	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
R830	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R831	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	
R832	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R833	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	
R834	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R835	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	
R836	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R840	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R841	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R843	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R844	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R861	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	
R862	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	
R901	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R902	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R903	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R904	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R905	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R906	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R907	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R908	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	
R909	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R910	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R911	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	
L501	QQL231K-4R7Y	INDUCTOR I/M	4.7uH K	
L561	QQL231K-4R7Y	INDUCTOR I/M	4.7uH K	
L562	QQL231K-4R7Y	INDUCTOR I/M	4.7uH K	
L701	QQL231K-4R7Y	INDUCTOR I/M	4.7uH K	
L801	QQL231K-4R7Y	INDUCTOR I/M	4.7uH K	
L901	QQR0703-001	CHOKE COIL		
CJ321	QNN0519-001	PIN JACK		
CJ701	QNB0190-001	CAR ANT JACK		
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN801	QGZ1601J1-15	CONNECTOR	(1-15)	
CN901	QNZ0611-001	16P CONNECTOR		
TU701	QAU0394-001	TUNER PACK		
X561	QAX0714-001Z	C RESONATOR	16.000MHz	
X801	QAX0406-001Z	CRYSTAL	4.500MHz	

Switch board(KD-G110,D-S11_J)

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310VT/JK/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310LT/MN/-X	LED		G110J
D608	SML-310VT/JK/-X	LED		S11J
D609	SML-310LT/MN/-X	LED		G110J
D609	SML-310VT/JK/-X	LED		S11J
D610	SML-310VT/JK/-X	LED		
D611	SML-310VT/JK/-X	LED		
D612	SML-310VT/JK/-X	LED		
D613	SML-310VT/JK/-X	LED		
D614	SML-310VT/JK/-X	LED		
D615	SML-310VT/JK/-X	LED		
D616	SML-310VT/JK/-X	LED		
D617	SML-310VT/JK/-X	LED		
D618	SML-310LT/MN/-X	LED		
D631	NSPW310BS/B2RS/	LED		G110J
D631	NSPW310BS/BRS/	LED		S11J
D632	NSPW310BS/B2RS/	LED		G110J
D632	NSPW310BS/BRS/	LED		S11J
D641	MA8051/M/-X	Z DIODE		
D643	KDS4148U-X	DIODE		
C601	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C602	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C603	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
R601	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R602	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R603	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R604	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R605	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R606	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R607	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R608	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R609	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R610	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R611	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R612	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R613	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R614	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R615	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R627	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R628	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R629	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R630	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R631	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R632	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R634	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R636	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R638	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	G110J
R638	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	S11J
R640	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R642	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R643	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R644	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R651	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R652	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R654	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R656	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R657	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R658	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R671	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CJ601	QGZ1601K1-15S	CONNECTOR	(1-15)	

⚠ Symbol No.	Part No.	Part Name	Description	Local
S601	NSW0124-001X	TACT SW		
S602	NSW0124-001X	TACT SW		
S603	NSW0124-001X	TACT SW		
S604	NSW0124-001X	TACT SW		
S605	NSW0124-001X	TACT SW		
S606	NSW0124-001X	TACT SW		
S607	NSW0124-001X	TACT SW		
S608	NSW0124-001X	TACT SW		
S609	NSW0124-001X	TACT SW		
S610	NSW0124-001X	TACT SW		
S611	NSW0124-001X	TACT SW		
S612	NSW0124-001X	TACT SW		
S613	NSW0124-001X	TACT SW		
S614	NSW0124-001X	TACT SW		
S615	NSW0124-001X	TACT SW		
S616	NSW0124-001X	TACT SW		
S617	NSW0124-001X	TACT SW		
S618	NSW0124-001X	TACT SW		

Main board(KD-G110,KD-S11_J2)

Block No. [0][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC161	TEA6320T-X	IC		
IC301	LA47516	POWER IC		
IC501	TA2157FN-X	RF AMP IC		
IC521	TC94A14FA	CD LSI IC		
IC561	LA6242H-X	IC		
IC571	NJM4565M-WE	IC		
IC701	UPD178078GF-707	IC		
IC901	HA13164A	IC		
Q1	UN2211-X	TRANSISTOR		
Q4	2SB709A/R/-X	TRANSISTOR		
Q5	2SB624/4/-X	TRANSISTOR		
Q6	UN2211-X	TRANSISTOR		
Q7	UN2211-X	TRANSISTOR		
Q31	2SD601A/QR/-X	TRANSISTOR		
Q32	2SD601A/QR/-X	TRANSISTOR		
Q41	2SC3661-X	TRANSISTOR		
Q42	2SC3661-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q501	2SB1241/QR/-T	TRANSISTOR		
Q521	UN2111-X	TRANSISTOR		
Q522	UN2211-X	TRANSISTOR		
Q561	2SB1322/RS/-T	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2213-X	DIGI TRANSISTOR		
Q783	UN2111-X	TRANSISTOR		
Q901	2SB709A/QR/-X	TRANSISTOR		
Q902	UN2211-X	TRANSISTOR		
D1	MA111-X	SI DIODE		
D2	MA111-X	SI DIODE		
D3	MA111-X	SI DIODE		
D4	MA111-X	SI DIODE		
D321	MA111-X	SI DIODE		
D341	MA111-X	SI DIODE		
D561	1A3G-T1	SI DIODE		
D702	MA8062/M/-X	Z DIODE		
D703	MA8062/M/-X	Z DIODE		
D704	MA8062/M/-X	Z DIODE		
D705	MA8062/M/-X	Z DIODE		
D706	MA8062/M/-X	Z DIODE		
D707	MA8062/M/-X	Z DIODE		
D708	MA8062/M/-X	Z DIODE		
D781	MA111-X	SI DIODE		
D782	MA111-X	SI DIODE		
D783	MA8091/M/-X	Z DIODE		
D901	1N5401-F64	DIODE		
D902	MA111-X	SI DIODE		
D971	RB160M-30-X	SB DIODE		
D972	RB160M-30-X	SB DIODE		
C2	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C3	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C8	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C9	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C10	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C11	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C15	QEKJ1HM-224Z	E CAPACITOR	0.22uF 50V M	
C18	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C19	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C31	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C32	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C41	NCB31EK-563X	C CAPACITOR	0.056uF 25V K	
C42	NCB31EK-123X	C CAPACITOR	0.012uF 25V K	
C43	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C55	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C81	NCB31HK-333X	C CAPACITOR	0.033uF 50V K	
C91	NCB31HK-333X	C CAPACITOR	0.033uF 50V K	
C162	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C163	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C164	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C165	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C166	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C167	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C168	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C172	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C173	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C174	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C175	NCB31CK-333X	C CAPACITOR	0.033uF 16V K	
C176	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C177	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C178	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C182	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C183	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C185	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C186	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C191	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C192	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C193	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C194	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C195	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C196	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C301	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C302	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C303	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C304	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C305	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C306	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C308	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C309	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C310	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C311	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C312	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C315	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C316	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C317	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C318	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C319	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C320	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C321	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C322	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C323	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C331	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C332	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C333	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C341	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C342	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C351	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C352	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C501	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C503	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C504	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C505	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C507	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C508	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C509	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C510	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C511	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C512	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
C513	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C514	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J	
C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C522	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C523	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C524	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C525	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C526	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C527	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C528	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C529	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C530	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C531	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C533	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C534	NDC31HJ-471X	C CAPACITOR	470pF 50V J	
C535	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C536	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C537	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C538	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C539	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C540	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C541	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C544	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C545	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C546	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C547	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C548	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C549	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C550	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C551	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C552	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C553	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C554	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C555	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C556	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C559	NCB31HK-182X	C CAPACITOR	1800pF 50V K	
C560	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C561	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C563	QEDJ1AM-107Z	E CAPACITOR	100uF 10V M	
C564	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C565	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C566	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C567	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C568	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C581	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C582	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C583	NDC31HJ-121X	C CAPACITOR	120pF 50V J	
C584	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C585	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C591	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C592	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C593	NDC31HJ-121X	C CAPACITOR	120pF 50V J	
C594	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C595	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C596	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C597	NCS31HJ-102X	C CAPACITOR	1000pF 50V J	
C703	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C704	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C705	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C706	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C707	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C708	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C709	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C710	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C711	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C712	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C713	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C714	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C781	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C782	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C783	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C784	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C901	QEZ0675-338	E CAPACITOR	3300uF	
C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C903	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C904	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C906	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C909	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C910	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C911	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C915	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C918	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
R1	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R8	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R9	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R10	NRS181J-150X	MG RESISTOR	15Ω 1/8W J	
R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R12	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R13	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R14	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R16	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R17	NRS181J-150X	MG RESISTOR	15Ω 1/8W J	
R31	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R32	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R33	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R35	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R41	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R42	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R43	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R44	NRSA02J-330X	MG RESISTOR	33Ω 1/10W J	
R45	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R81	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R82	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R91	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R92	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	
R162	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R163	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R164	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R166	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R167	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R168	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R172	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R173	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R174	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R176	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R177	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R178	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R191	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
R301	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R341	NRSA02J-821X	MG RESISTOR	820Ω 1/10W J	
R342	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R343	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R351	NRSA02J-821X	MG RESISTOR	820Ω 1/10W J	
R352	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J	
R353	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R503	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R504	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R505	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R506	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R507	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R508	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R509	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R510	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R511	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R512	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R513	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R514	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R515	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R516	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R517	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R519	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R521	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R522	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R523	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R524	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R525	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R526	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R527	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R528	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R529	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R530	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R531	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R532	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R533	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R534	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R535	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R536	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R537	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R538	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R539	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R561	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R562	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R563	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R564	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R566	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R567	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R568	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J	
R569	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R571	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R572	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R573	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R574	NRS181J-220X	MG RESISTOR	22Ω 1/8W J	
R575	NRS181J-220X	MG RESISTOR	22Ω 1/8W J	
R576	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
R577	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R581	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R582	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R583	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R584	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R585	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R586	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R587	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R591	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R592	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R593	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R594	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R595	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R596	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R597	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R705	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R706	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R708	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R709	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R710	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R713	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R715	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R717	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R718	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R719	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R720	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R721	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R722	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R723	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R724	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R725	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R726	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R727	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R728	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R730	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R731	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R732	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R735	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R736	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R738	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R739	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R740	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R742	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R743	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R744	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R752	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R755	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R782	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R901	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R902	NRSA02J-912X	MG RESISTOR	9.1kΩ 1/10W J	
R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R905	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R906	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L521	QQL244J-470Z	COIL	47uH J	
L522	QQL244J-470Z	COIL	47uH J	
L523	QQL244J-470Z	COIL	47uH J	
L524	QQL244J-470Z	COIL	47uH J	
L701	QQL244K-4R7Z	COIL	4.7uH K	
L702	QQL244K-4R7Z	COIL	4.7uH K	
L703	QQL244K-4R7Z	COIL	4.7uH K	
L901	QQR0703-001	CHOKE COIL		
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN701	QGZ1601J1-15	CONNECTOR	(1-15)	
CN901	QNZ0611-001	16P CONNECTOR		
J1	QNB0100-002	CAR ANT JACK		
J301	QNN0519-001	PIN JACK		
TU1	QAU0281-001	TUNER PACK		
X521	QAX0413-001Z	CRYSTAL	16.9344MHz	
X701	QAX0406-001Z	CRYSTAL	4.500MHz	

Switch board(KD-G110,KD-S11_J2)

Block No. [0][4]

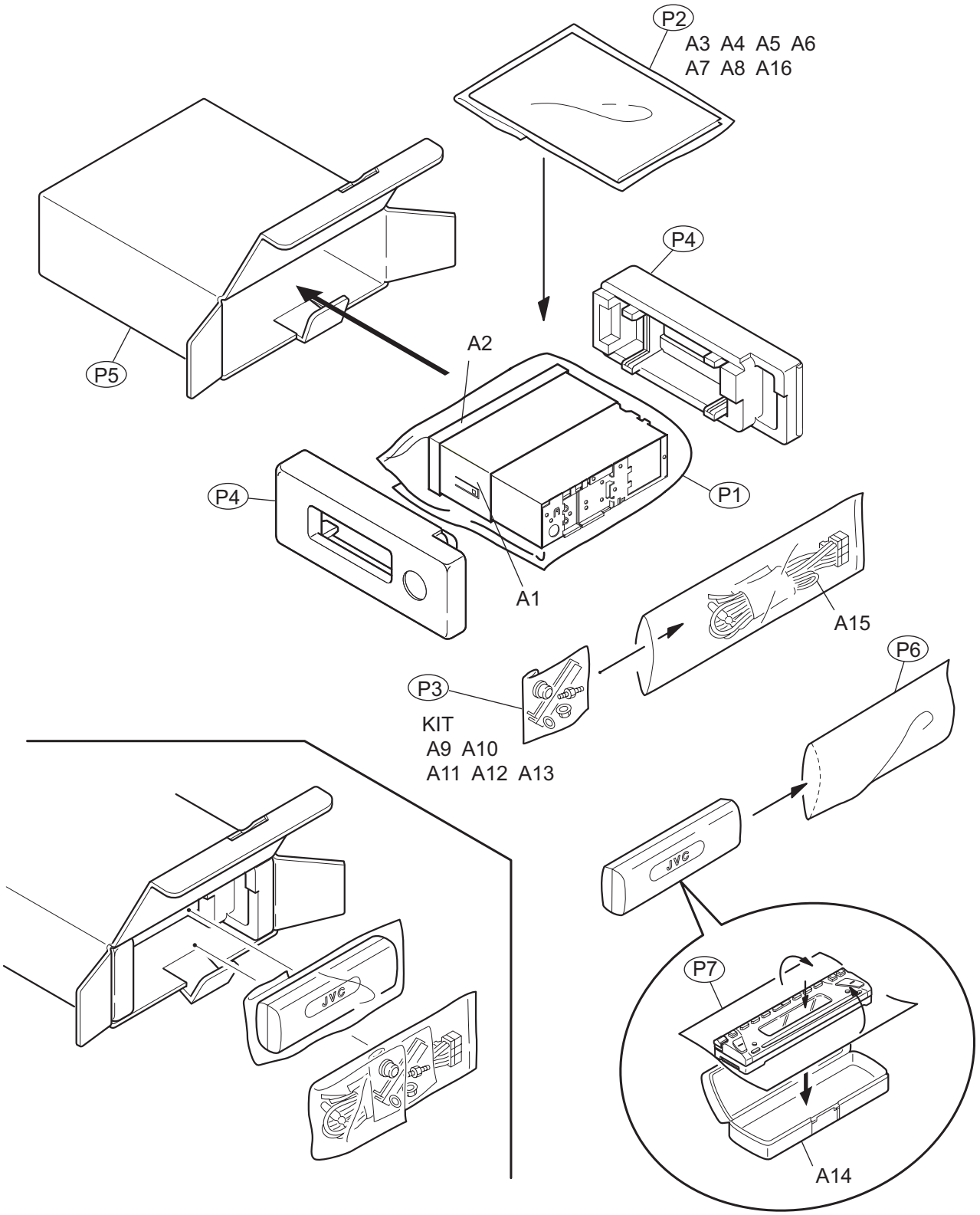
⚠ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310VT/JK/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310LT/MN/-X	LED		G110J2
D608	SML-310VT/JK/-X	LED		S11J2
D609	SML-310LT/MN/-X	LED		G110J2
D609	SML-310VT/JK/-X	LED		S11J2
D610	SML-310VT/JK/-X	LED		
D611	SML-310VT/JK/-X	LED		
D612	SML-310VT/JK/-X	LED		
D613	SML-310VT/JK/-X	LED		
D614	SML-310VT/JK/-X	LED		
D615	SML-310VT/JK/-X	LED		
D616	SML-310VT/JK/-X	LED		
D617	SML-310VT/JK/-X	LED		
D618	SML-310LT/MN/-X	LED		
D631	NSPW310BS/B2RS/	LED		G110J2
D631	NSPW310BS/BRS/	LED		S11J2
D632	NSPW310BS/B2RS/	LED		G110J2
D632	NSPW310BS/BRS/	LED		S11J2
D641	MA8051/M/-X	Z DIODE		
D643	KDS4148U-X	DIODE		
C601	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C602	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C603	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R605	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R606	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R607	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R608	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R609	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R610	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R611	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R612	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R613	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R614	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R615	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R627	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R628	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R629	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R630	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R631	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R632	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R634	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R636	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R638	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	G110J2
R638	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	S11J2
R640	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R642	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R643	NRSA63J-132X	MG RESISTOR	1.3kΩ 1/16W J	
R644	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R651	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R652	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R654	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R656	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R657	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R658	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R671	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CJ601	QGZ1601K1-15S	CONNECTOR	(1-15)	
S601	NSW0124-001X	TACT SW		
S602	NSW0124-001X	TACT SW		
S603	NSW0124-001X	TACT SW		
S604	NSW0124-001X	TACT SW		
S605	NSW0124-001X	TACT SW		
S606	NSW0124-001X	TACT SW		
S607	NSW0124-001X	TACT SW		
S608	NSW0124-001X	TACT SW		
S609	NSW0124-001X	TACT SW		
S610	NSW0124-001X	TACT SW		
S611	NSW0124-001X	TACT SW		
S612	NSW0124-001X	TACT SW		
S613	NSW0124-001X	TACT SW		
S614	NSW0124-001X	TACT SW		
S615	NSW0124-001X	TACT SW		
S616	NSW0124-001X	TACT SW		
S617	NSW0124-001X	TACT SW		
S618	NSW0124-001X	TACT SW		

Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDs are available.



Packing and Accessories

Block No. [M][3][M][M]

⚠	Symbol No.	Part No.	Part Name	Description	Local
	A 1	GE20137-005A-N	MOUNTING SLEEVE		G110J2
	A 1	GE20137-003A	MOUNTING SLEEVE		G110J,S11J,S11J2
	A 2	GE20135-010A	TRIM PLATE		G110J,G110J2
	A 2	GE20135-009A	TRIM PLATE		S11J,S11J2
	A 3	GET0251-001A	INST BOOK	ENG SPA FRE	G110J,G110J2
	A 3	GET0249-001A	INST BOOK	ENG SPA FRE	S11J,S11J2
	A 4	GET0251-002A	INSTALL MANUAL	ENG SPA FRE	G110J,G110J2
	A 4	GET0249-002A	INSTALL MANUAL	ENG SPA FRE	S11J,S11J2
	A 5	LVT0717-001B	TROUBLE SHEET(C		
	A 6	----------	WARRANTY CARD	BT-52006-2	
	A 7	----------	WARRANTY CARD	BT-51018-4	
	A 8	BT-51034-2	REGISTRATION CARD		
	A 9	VKZ4027-202	PLUG NUT		
	A 10	VKH4871-003	MOUNT BOLT		
	A 11	VKZ4328-003	LOCK NUT		
	A 12	QYWWS53A008ZA	WASHER	0mm/5.3mm x	
	A 13	GE40130-002A	HOOK	(x2)	
	A 14	FSJB3002-00C-N	HARD CASE		G110J2
	A 14	FSJB3002-00C	HARD CASE		G110J,S11J,S11J2
	A 15	QAM0013-007	16P CORD ASSY		
	A 16	GET0222-001A	TAG CAUTION SH		S11J,S11J2
	KIT	SRW-385U	SCREW PART KIT	A9 A10 A11 A12 A13	
	P 1	QPC03004315P	POLY BAG	30cm x 43cm	
	P 2	FSPG4002-001	POLY BAG		
	P 3	QPA00801205	POLY BAG	8cm x 12cm	
	P 4	GE10070-003A	EPS CUSHION		
	P 5	GE31390-001A	CARTON		G110J,G110J2
	P 5	GE31387-001A	CARTON		S11J,S11J2
	P 6	QPA01003003	POLY BAG	10cm x 30cm	
	P 7	FSYH4036-068	SHEET		

JVC

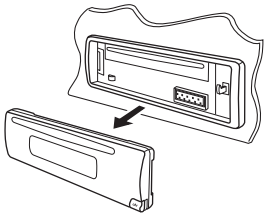
SCHEMATIC DIAGRAMS

CD RECEIVER

KD-G110, KD-S11

CD-ROM No.SML200502

Area suffix
J ---------- Northern America

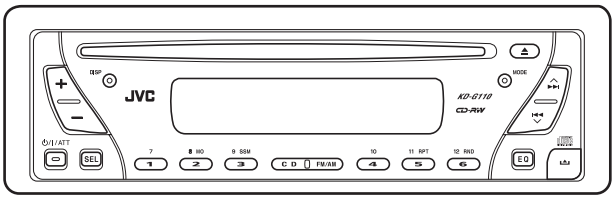


CD-RW

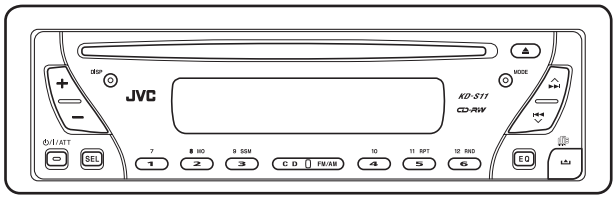
COMPACT disc DIGITAL AUDIO

Amplifier Power Standard CEA CEA-2006 Compliant

KD-G110



KD-S11



Contents

COPYRIGHT ⓒ2005 Victor Company of Japan, Limited.

No.MA121SCH
2005/2

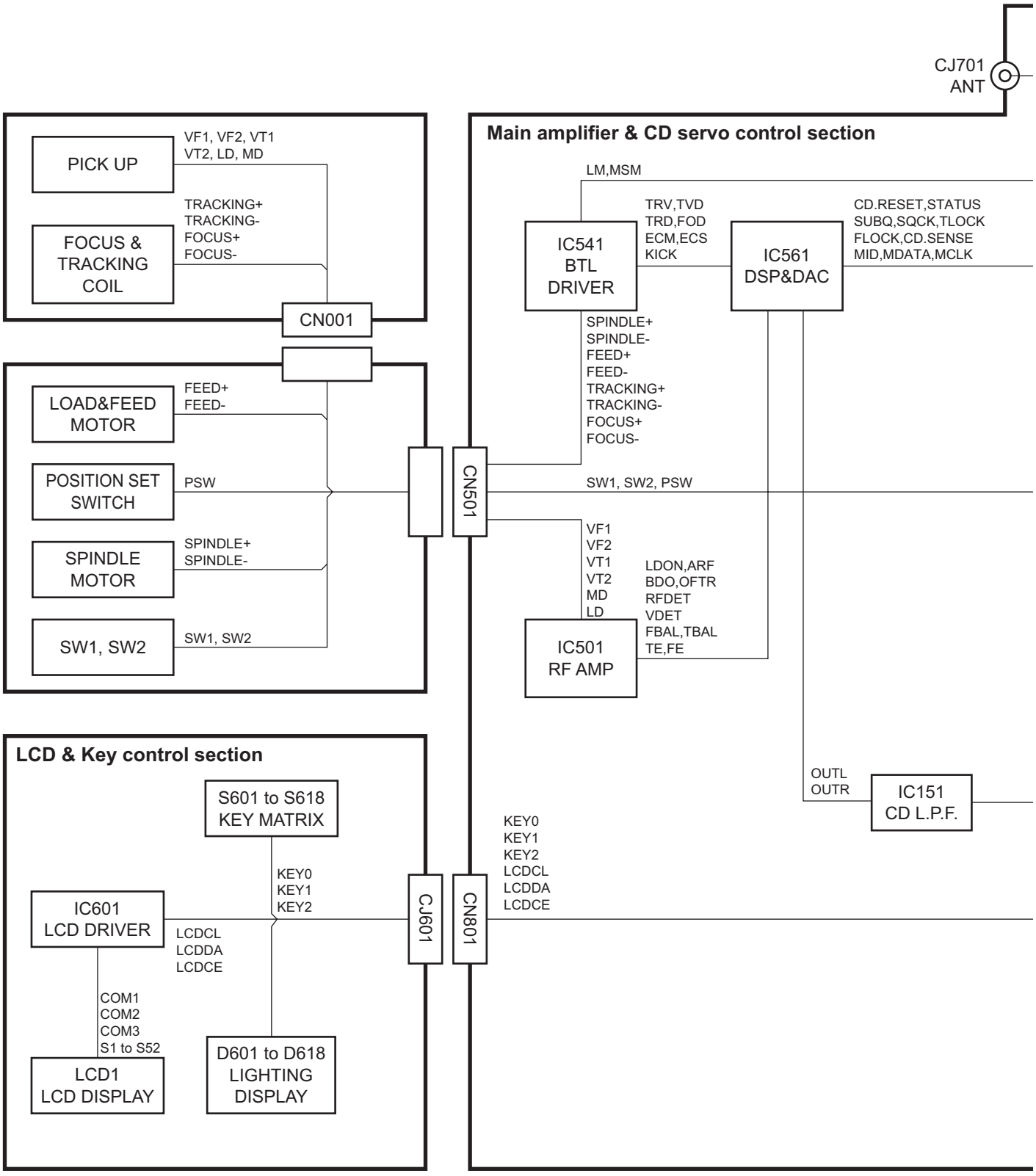
Safety precaution

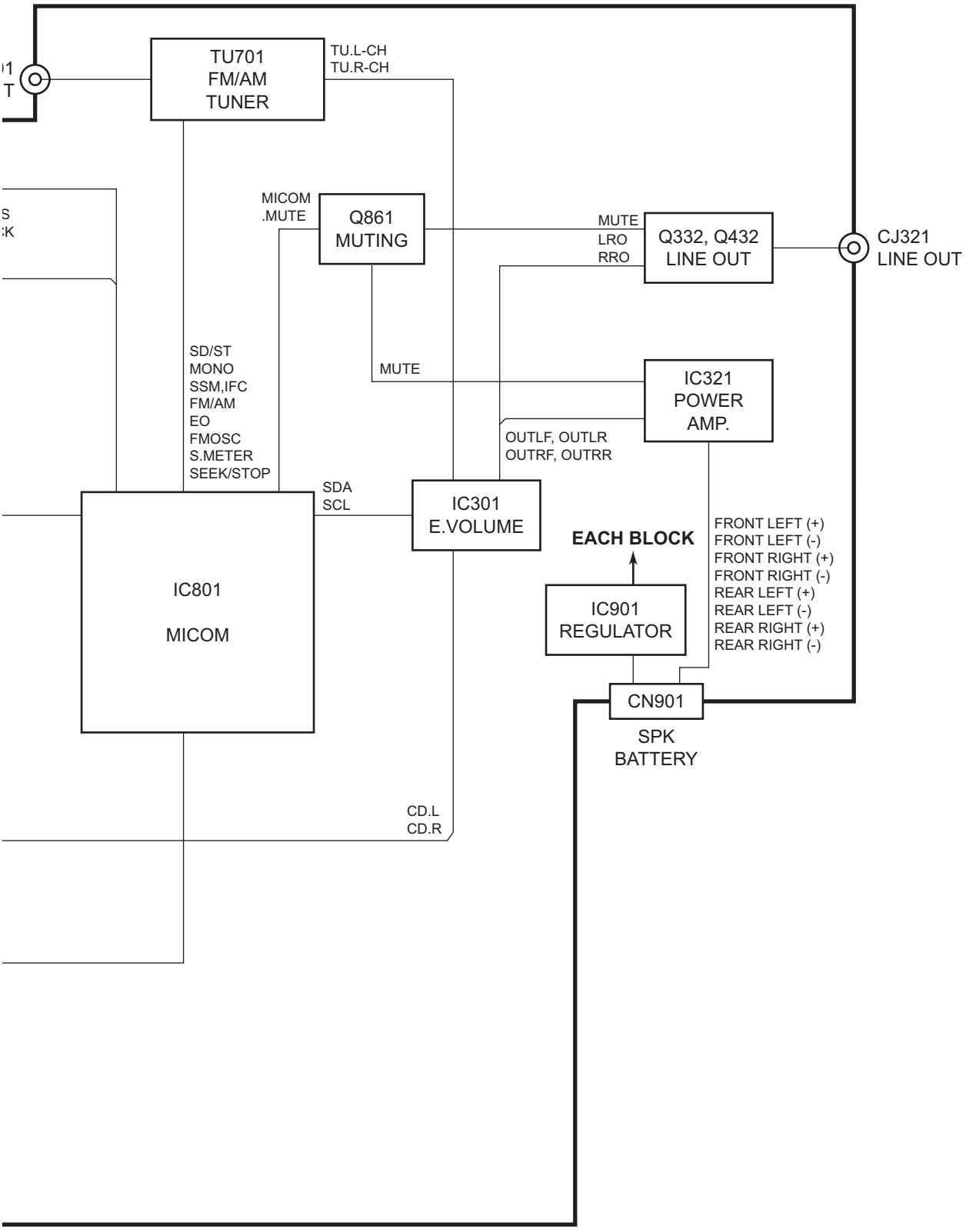
⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

< MEMO >

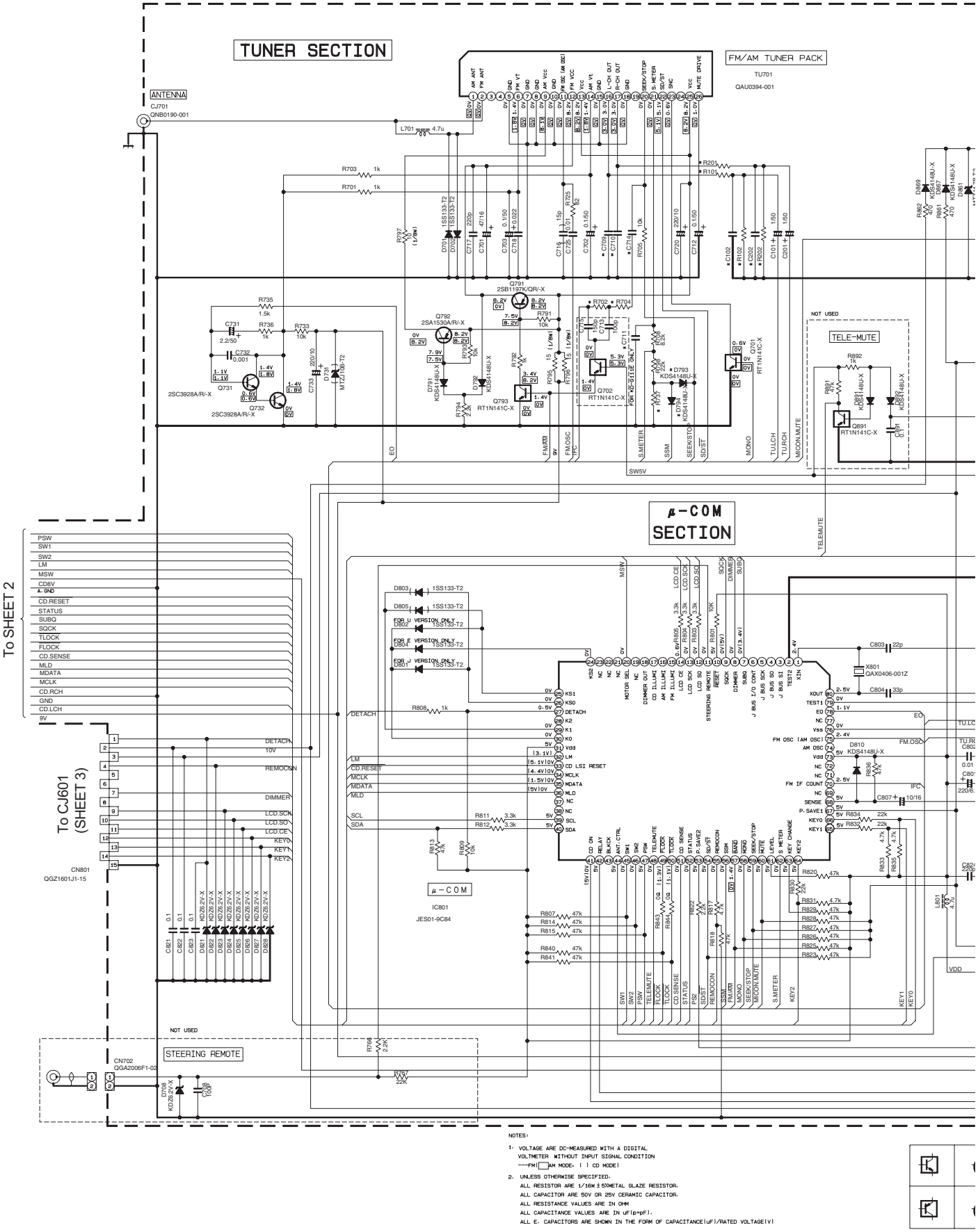
Block diagram (For J version)



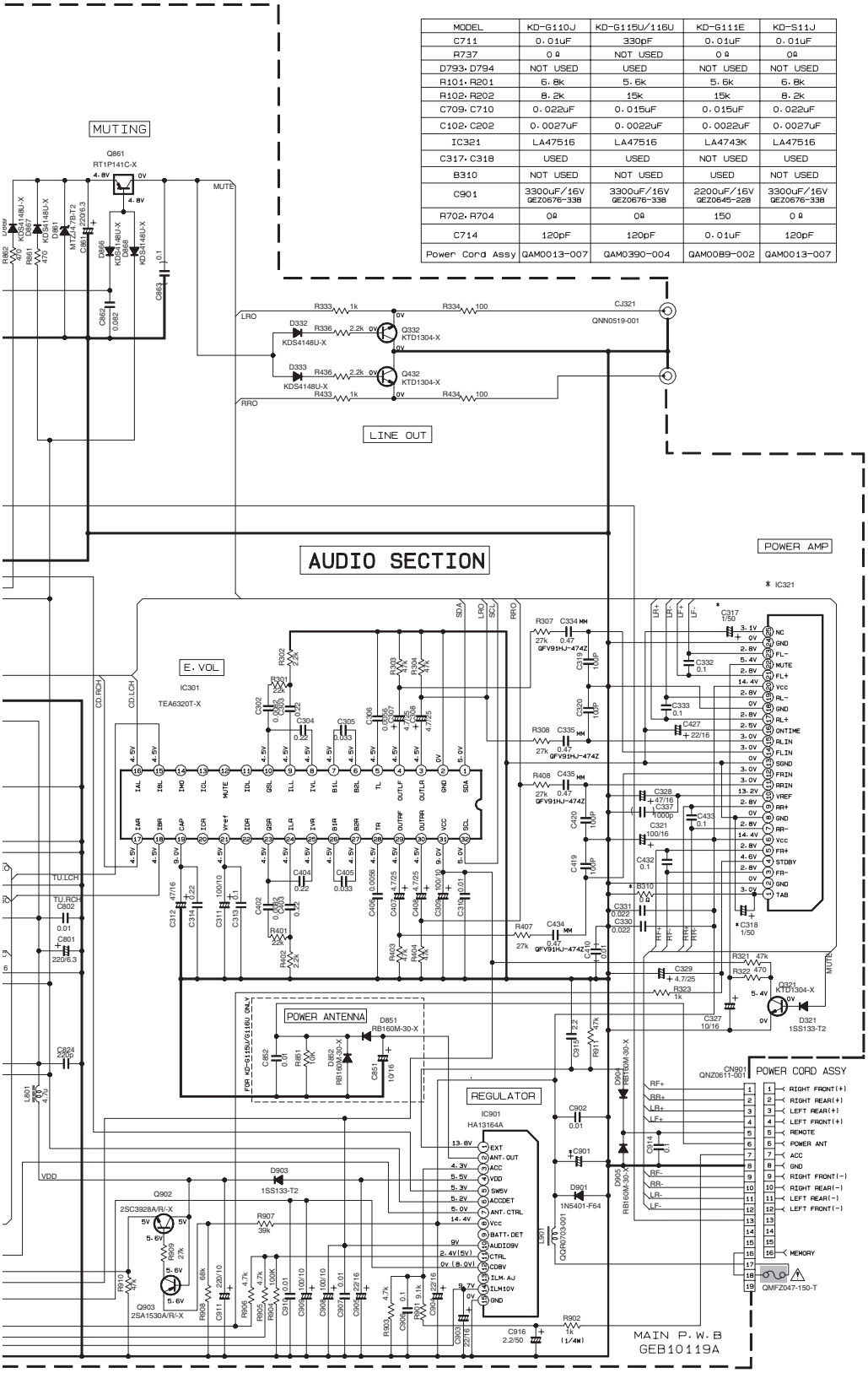

TU701
FM/AM
TUNER
TU.L-CH
TU.R-CH
MICOM
.MUTE
Q861
MUTING
MUTE
LRO
RRO
Q332, Q432
LINE OUT
CJ321
LINE OUT
SD/ST
MONO
SSM,IFC
FM/AM
EO
FMOSC
S.METER
SEEK/STOP
MUTE
IC321
POWER
AMP.
OUTLF, OUTLR
OUTRF, OUTRR
SDA
SCL
IC301
E.VOLUME
EACH BLOCK
FRONT LEFT (+)
FRONT LEFT (-)
FRONT RIGHT (+)
FRONT RIGHT (-)
REAR LEFT (+)
REAR LEFT (-)
REAR RIGHT (+)
REAR RIGHT (-)
IC801
MICOM
IC901
REGULATOR
CN901
SPK
BATTERY
CD.L
CD.R

Standard schematic diagrams (For J version)

■ Main amplifier section



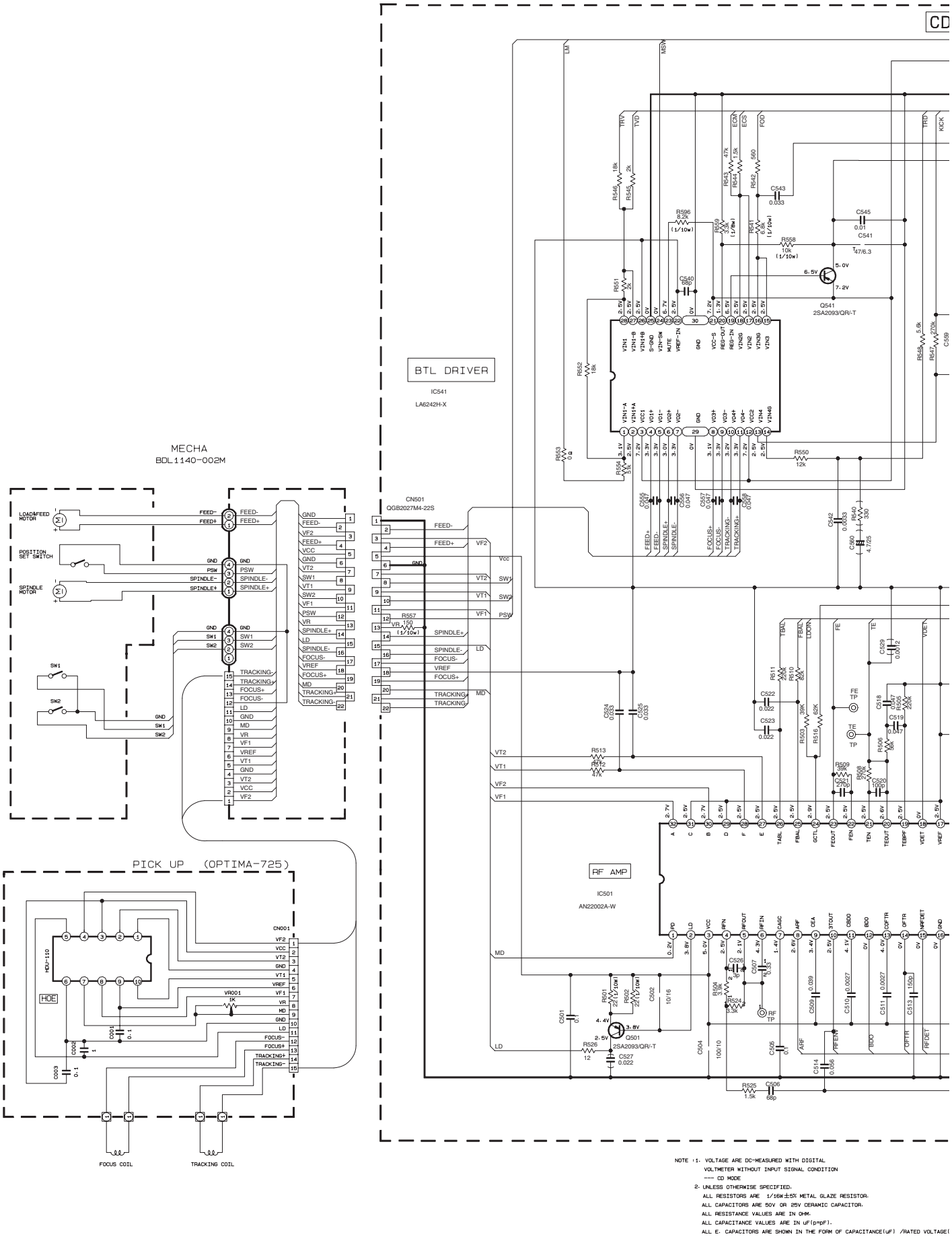
MODEL	KD-G110J	KD-G115U/116U	KD-G111E	KD-S11J
C711	0.01uF	330pF	0.01uF	0.01uF
R737	0 Ω	NOT USED	0 Ω	0Ω
D793, D794	NOT USED	USED	NOT USED	NOT USED
R101, R201	6.8k	5.6k	5.6k	6.8k
R102, R202	8.2k	15k	15k	8.2k
C709, C710	0.022uF	0.015uF	0.015uF	0.022uF
C102, C202	0.0027uF	0.0022uF	0.0022uF	0.0027uF
IC321	LA47516	LA47516	LA4743K	LA47516
C317, C318	USED	USED	NOT USED	USED
B310	NOT USED	NOT USED	USED	NOT USED
C901	3300uF/16V QEZ0676-338	3300uF/16V QEZ0676-338	2200uF/16V QEZ0645-228	3300uF/16V QEZ0676-338
R702, R704	0Ω	0Ω	150	0 Ω
C714	120pF	120pF	0.01uF	120pF
Power Cord Assy	QAM0013-007	QAM0390-004	QAM0089-002	QAM0013-007



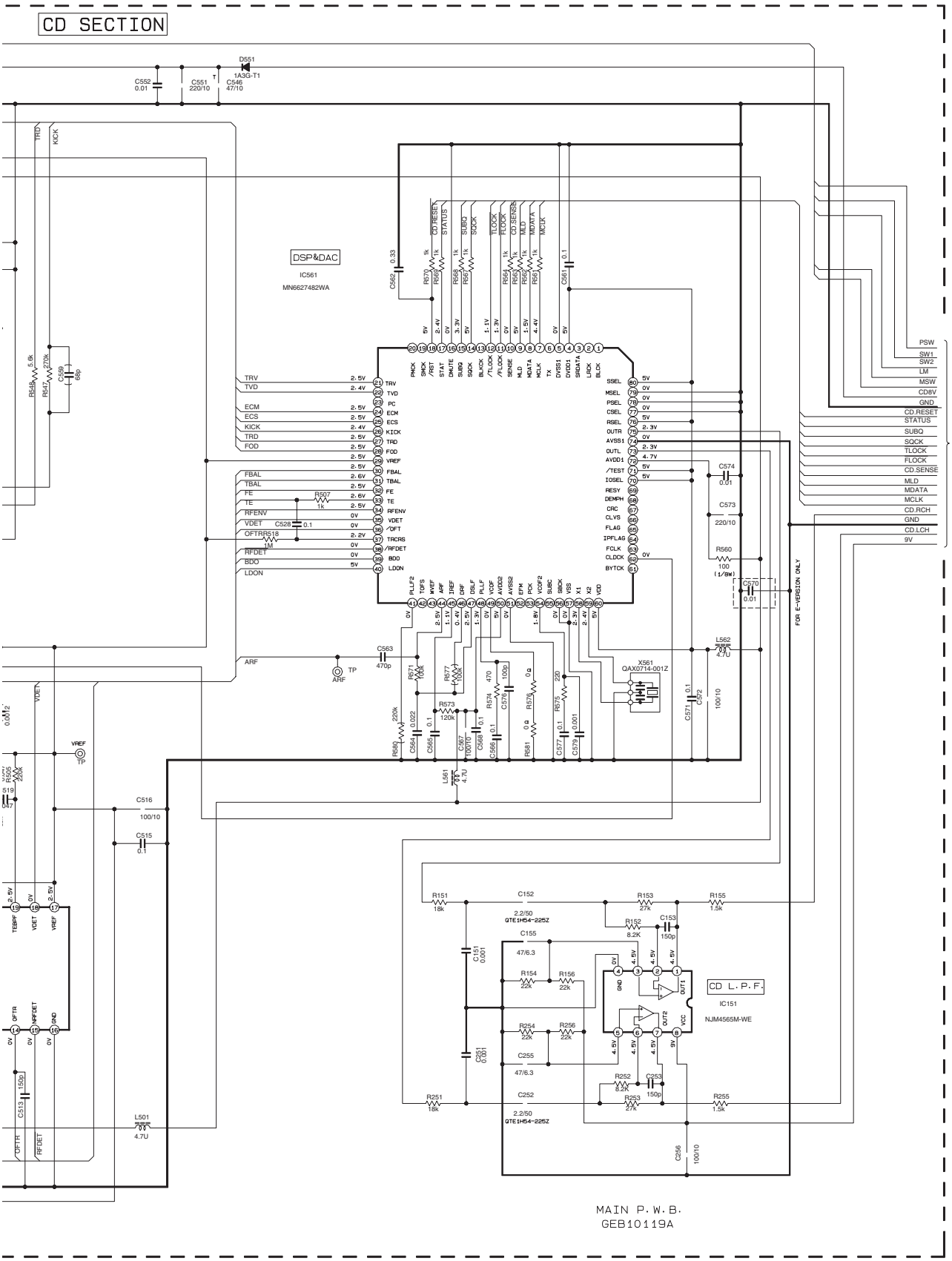
	10k 10k	UN2211-X
	10k 10k	UN2111-X

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ CD servo control section



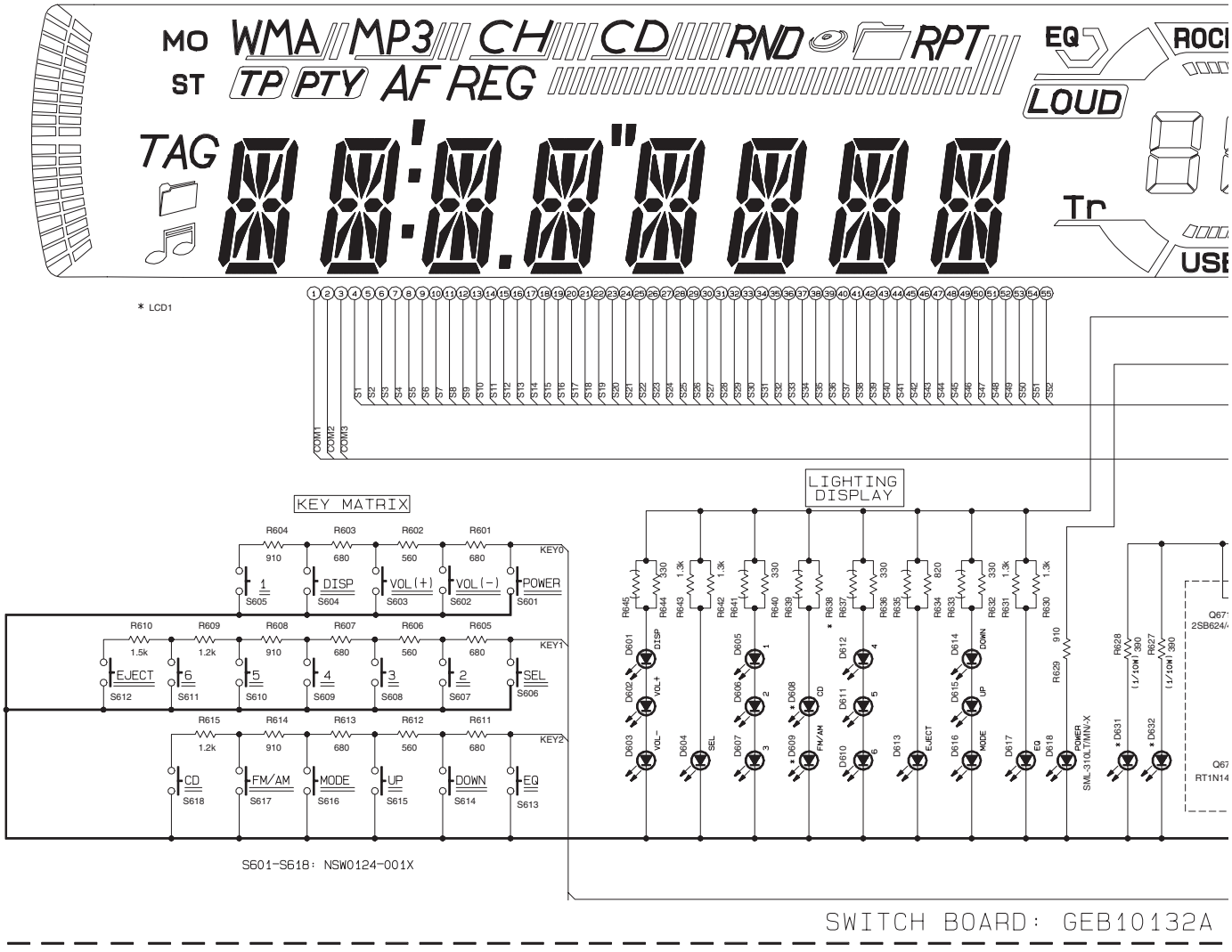
NOTE :1. VOLTAGE ARE DC-MEASURED WITH DIGITAL
VOLTMETER WITHOUT INPUT SIGNAL CONDITION
--- CD MODE
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(p=pF).
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF) /RATED VOLTAGE(



SHEET 2

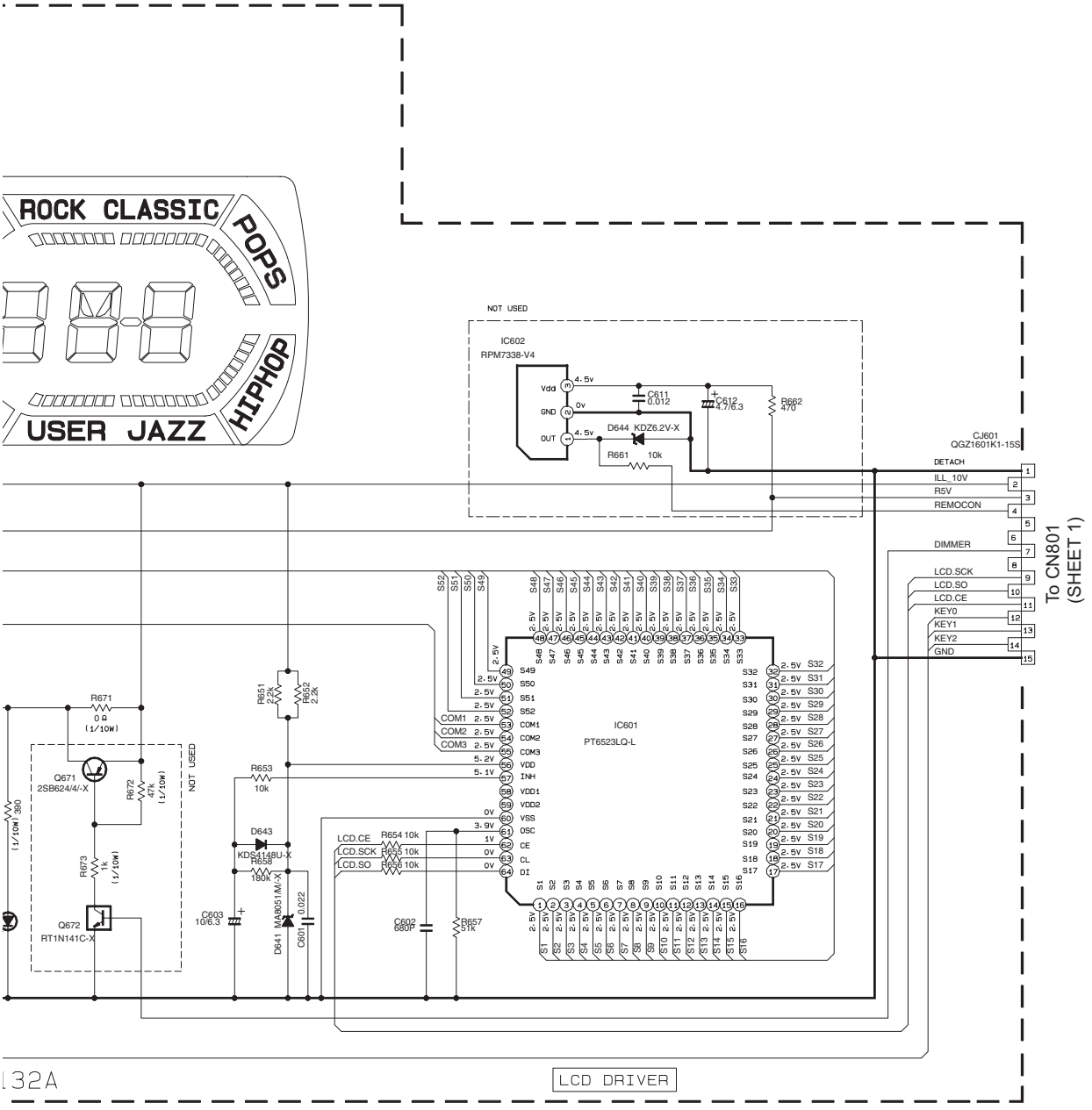
) /RATED VOLTAGE(V)

■ LCD & key control section



	KD-G110J	KD-G115U	KD-G116U	KD-G111E	KD-S11J
LCD1	QLD0352-001	QLD0353-001	QLD0353-001	QLD0353-001	QLD0353-001
D631, D632	NSPW310BS/B2RS/	NSPW310BS/BRS/	NSPW310BS/BRS/	NSPW310BS/BRS/	NSPW310BS/BRS/
D601-D607	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
D608, D609	SML-310LT/MN/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
D610-D617	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
R638	510	470	470	470	470

FRONT CIR



CIRCUIT BOARD SECTION

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.

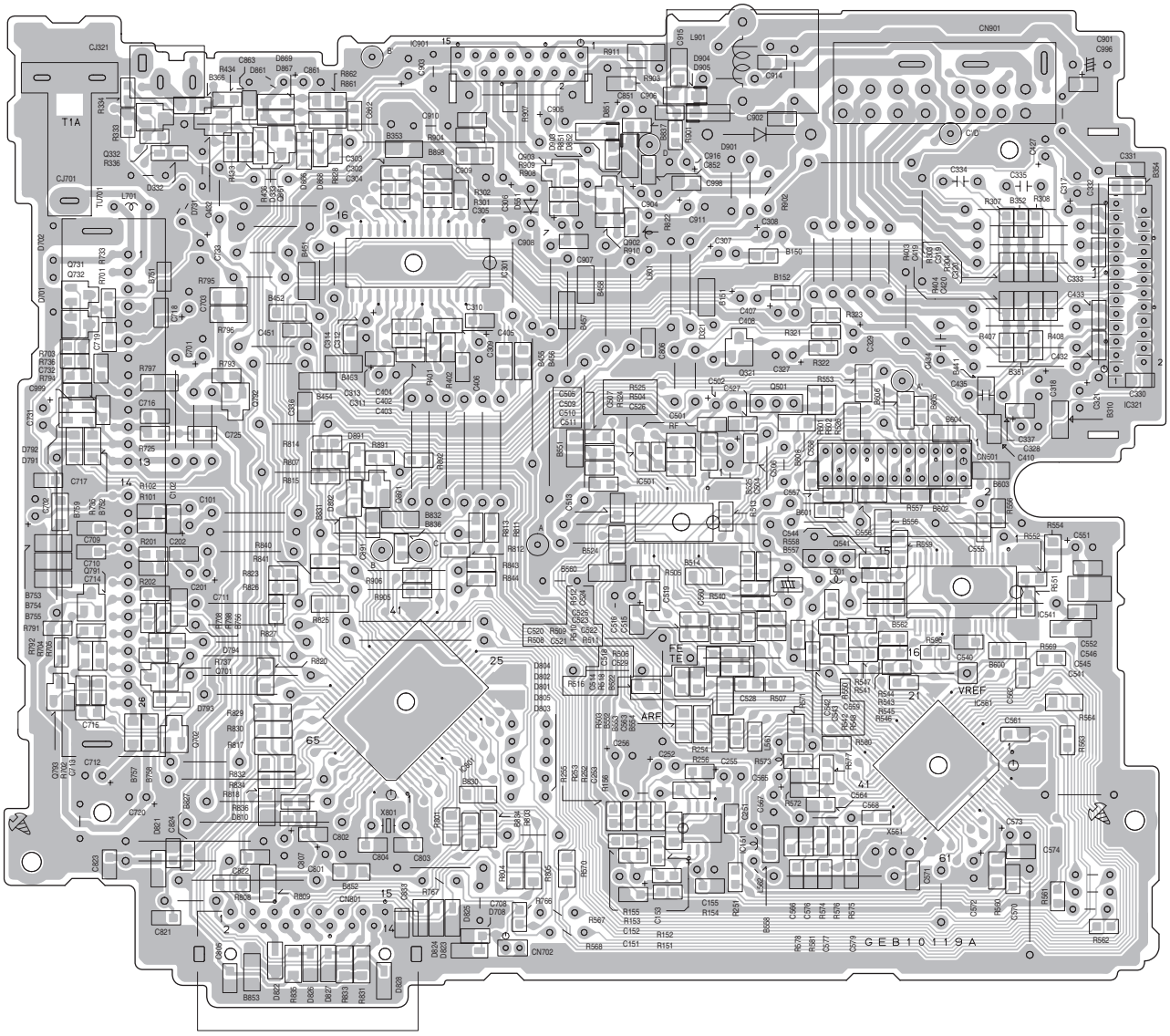
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
   T --- TANTALUM CAPACITOR.

3. COMPONENTS IN ( ) INDICATE NOT USE.

SHEET 3

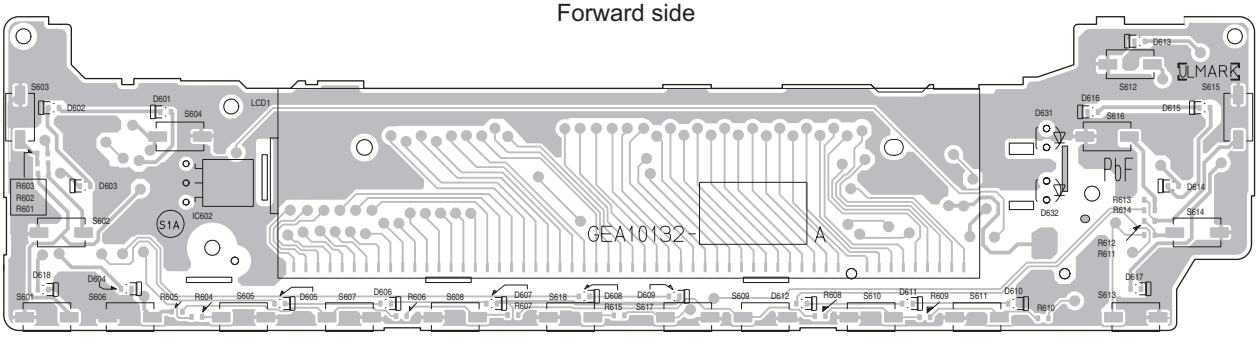
Printed circuit boards (For J version)

■ Main board

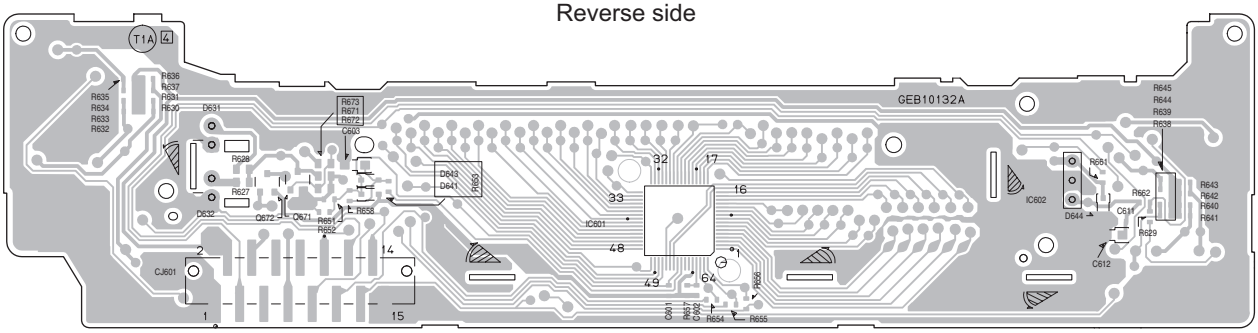


■ Switch board

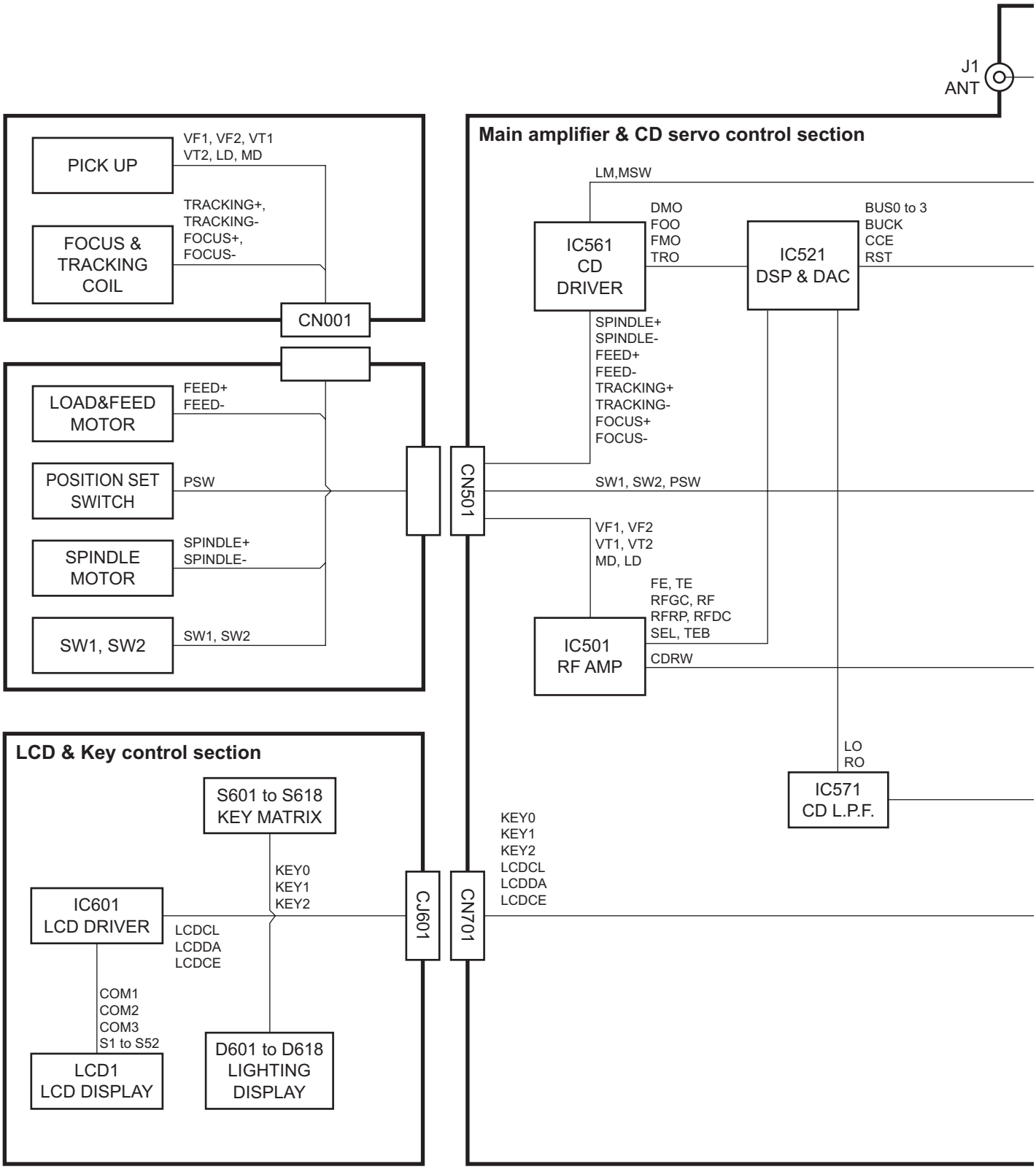
Forward side

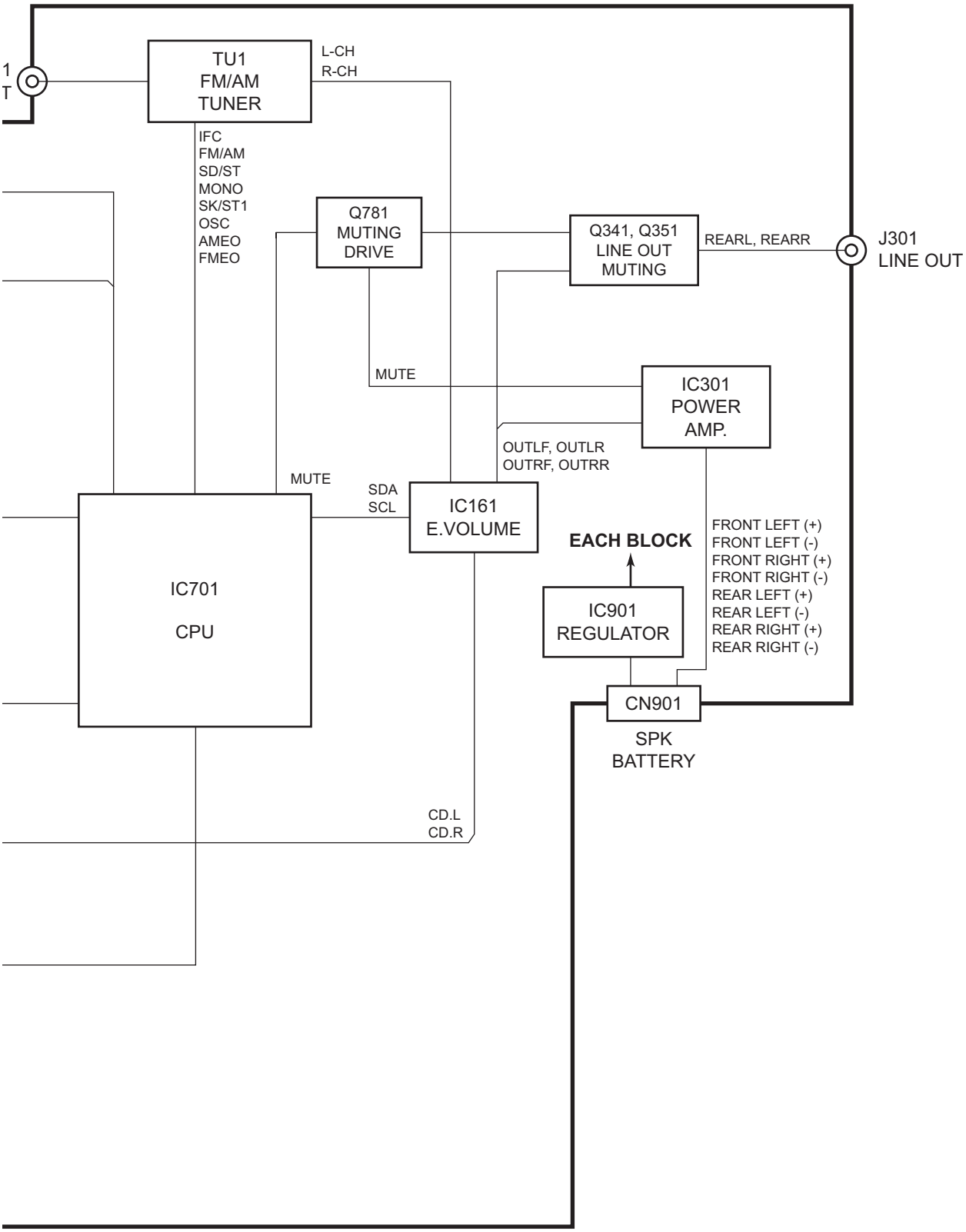


Reverse side



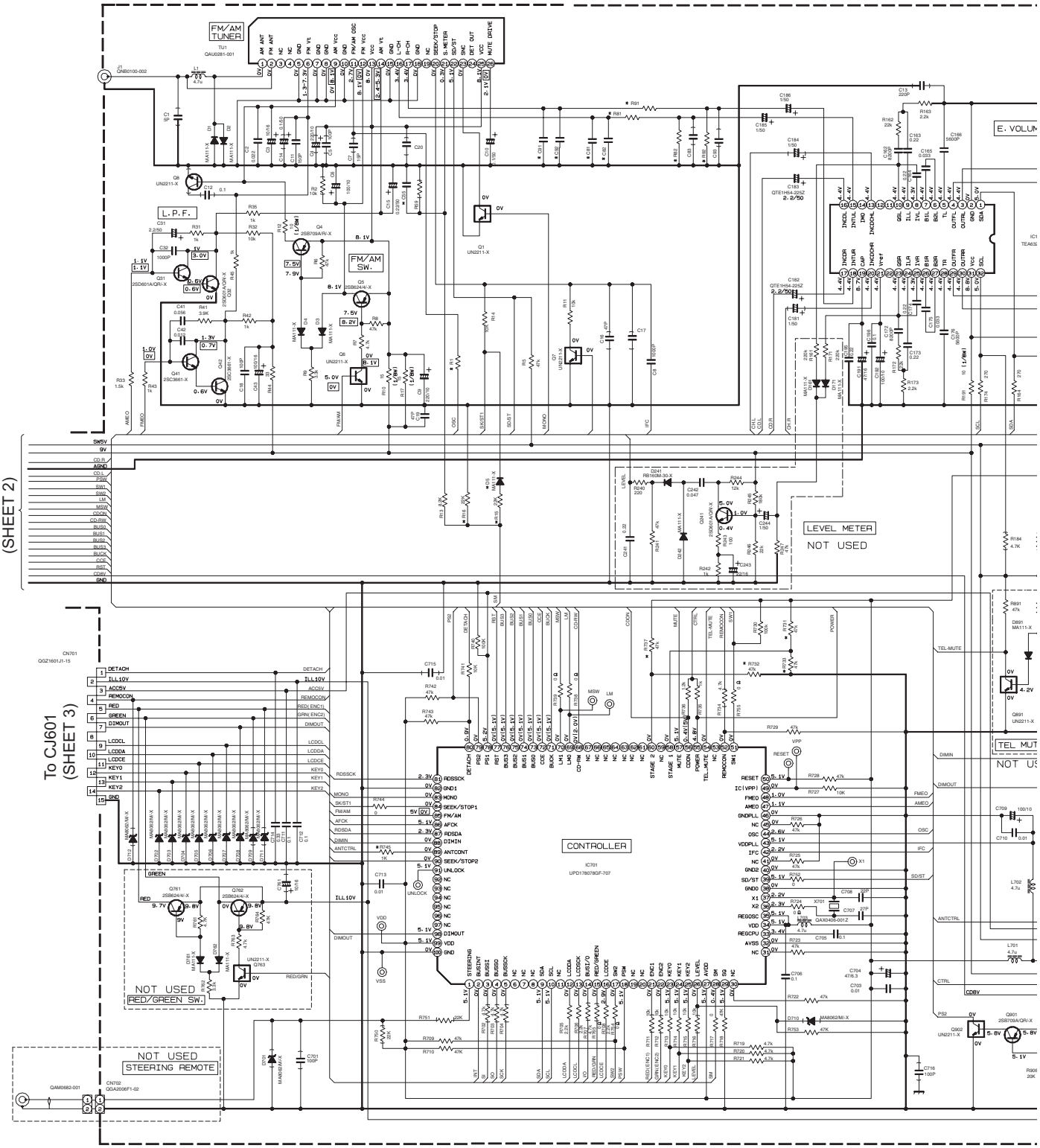
Block diagram (For J2 version)



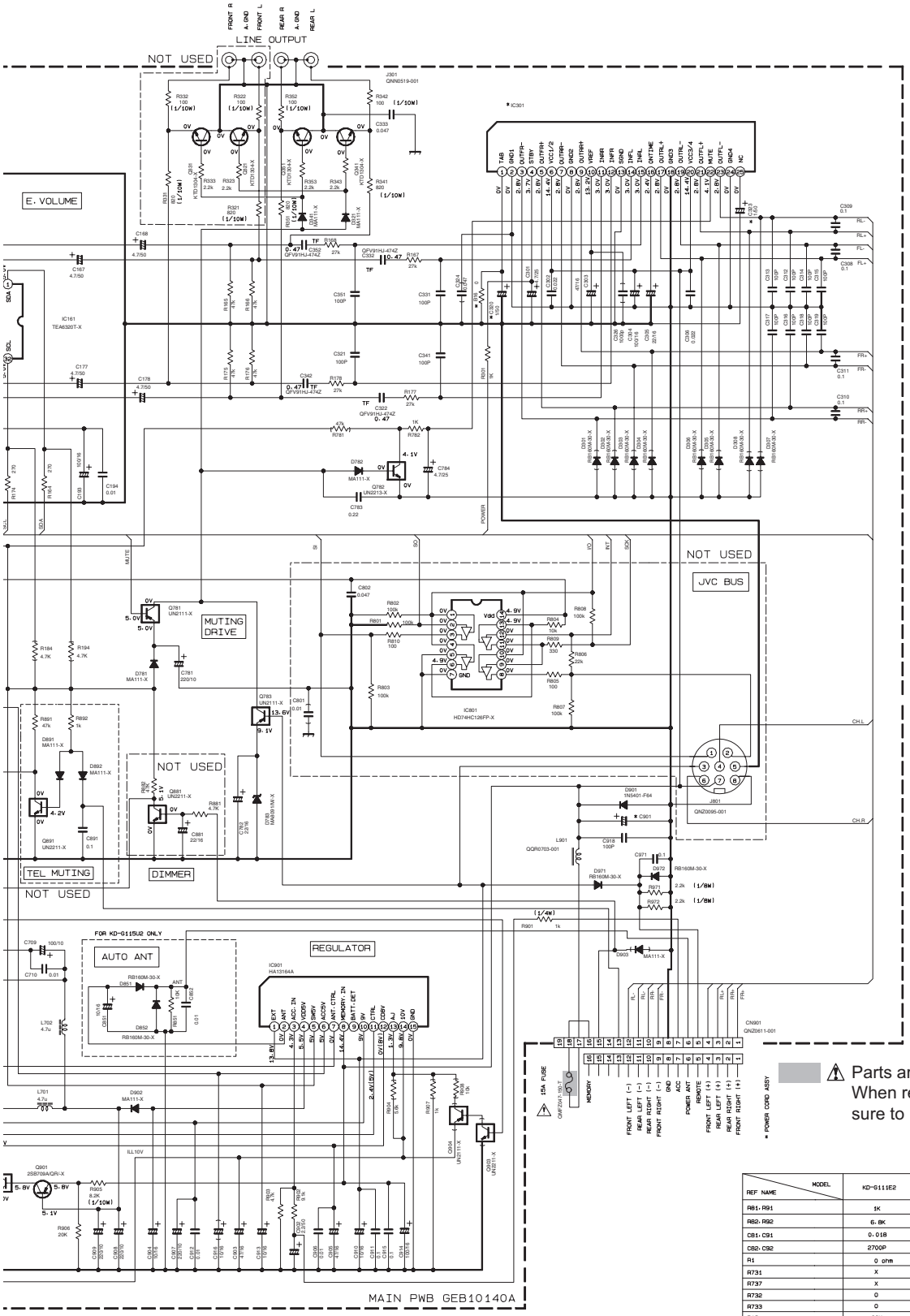

1
T
TU1
FM/AM
TUNER
L-CH
R-CH
IFC
FM/AM
SD/ST
MONO
SK/ST1
OSC
AMEO
FMEO
Q781
MUTING
DRIVE
Q341, Q351
LINE OUT
MUTING
REARL, REARR
J301
LINE OUT
MUTE
IC301
POWER
AMP.
OUTLF, OUTLR
OUTRF, OUTRR
MUTE
SDA
SCL
IC161
E.VOLUME
IC701
CPU
EACH BLOCK
IC901
REGULATOR
FRONT LEFT (+)
FRONT LEFT (-)
FRONT RIGHT (+)
FRONT RIGHT (-)
REAR LEFT (+)
REAR LEFT (-)
REAR RIGHT (+)
REAR RIGHT (-)
CN901
SPK
BATTERY
CD.L
CD.R

Standard schematic diagrams (For J2 version)

■ Main amplifier section



NOTES
1. VOLTAGES ARE DC-MEASURED WITH A
CONDITION---FM MODE. AM MODE
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W +- 5% ME
ALL CAPACITORS ARE 50V OR 25V CE
ALL RESISTANCE VALUES ARE IN OHM
ALL CAPACITANCE VALUES ARE IN uF
ALL E.CAPACITORS ARE SHOWN IN TH
TF --- T.F. CAPACITOR
3. COMPONENTS IN ( ) INDICATE NOT



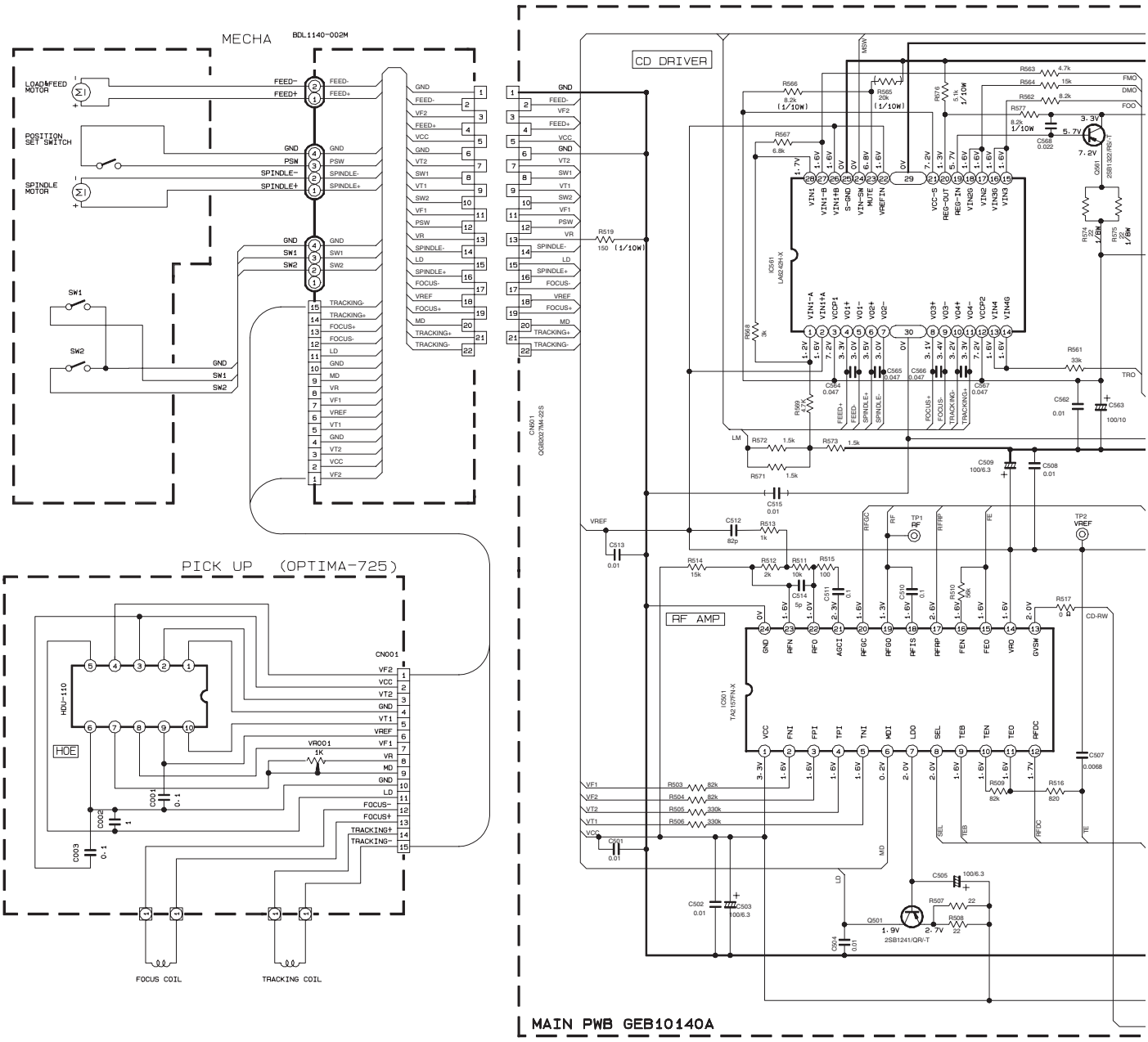
Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

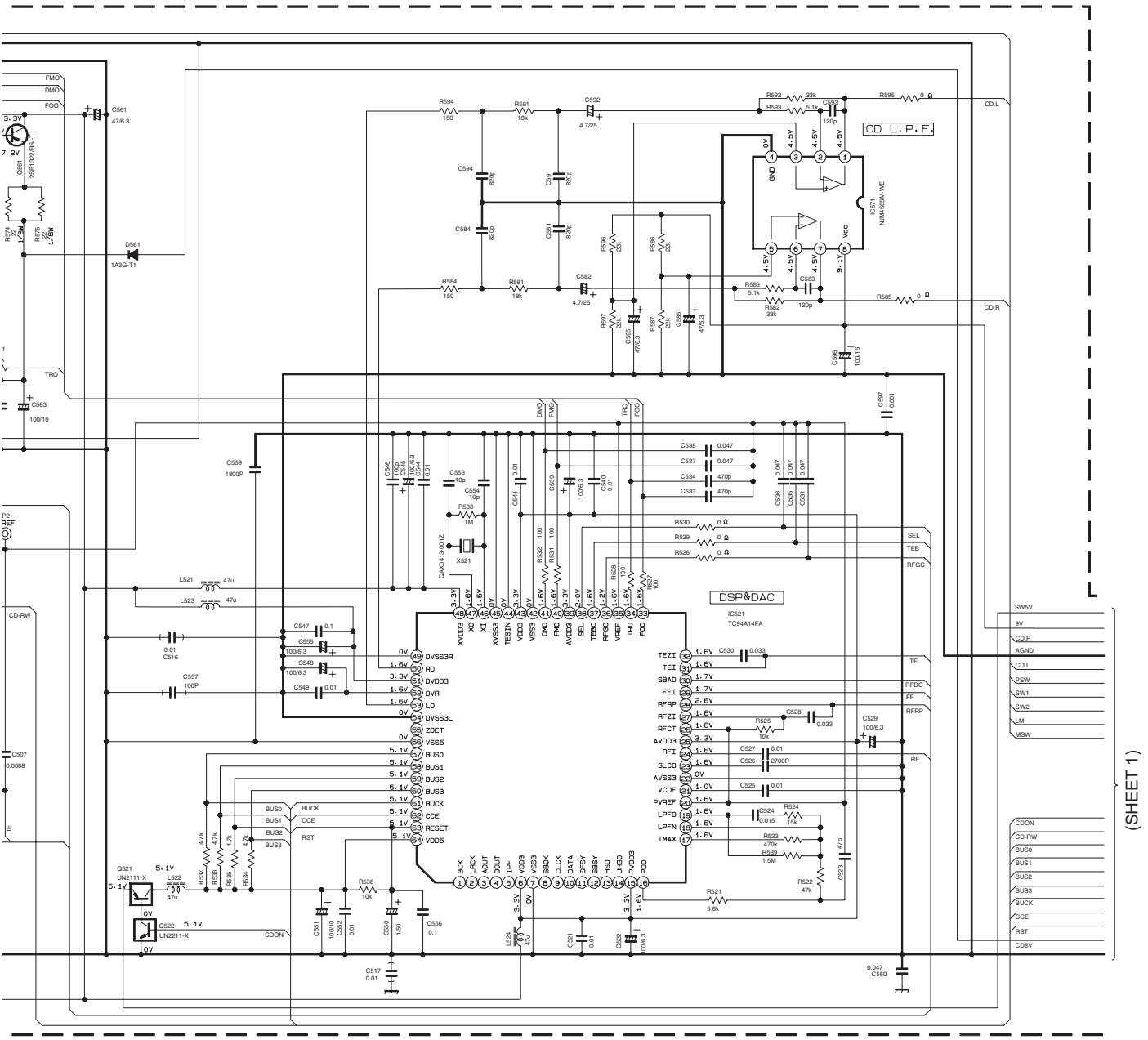
REF NAME \ MODEL	KD-G111E2	KD-G110J2/S11J2	KD-G115U2/S116U2
RB1-RB1	1K	2.7K	1K
RB2-RB2	6.8K	4.3K	6.8K
CB1-CB1	0.018	0.033	0.018
CB2-CB2	2700P	X	2700P
R1	0 ohm	47	0 ohm
R731	X	0	X
R737	X	X	0
R732	0	0	X
R733	0	X	0
R16	22K	22K	X
R15-D5	X	X	0
IC301	LA4743K	LA47516	LA47516
C320-C323	X	0	0
B16	0	X	X
C901	2200/16 QEZ0646-228	3300/16 QEZ0676-338	3300/16 QEZ0676-338
POWER CORD ASSY	GAM0089-002	GAM0013-007	GAM0390-004
C55	0.01	0.01	330P
R745	X	X	0

URED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL
AM MODE. ( )CD MODE.
CIFIED.
16W +- 5% METAL GLAZE RESISTOR.
OV OR 25V CERAMIC CAPACITOR.
S ARE IN OHM.
ES ARE IN uF(P=pF)
SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
TOR
NDICATE NOT USE.

	R	UN2211-X R=10K
	R	UN2213-X R=47K
	10K 10K	UN2111-X

■ CD servo control section





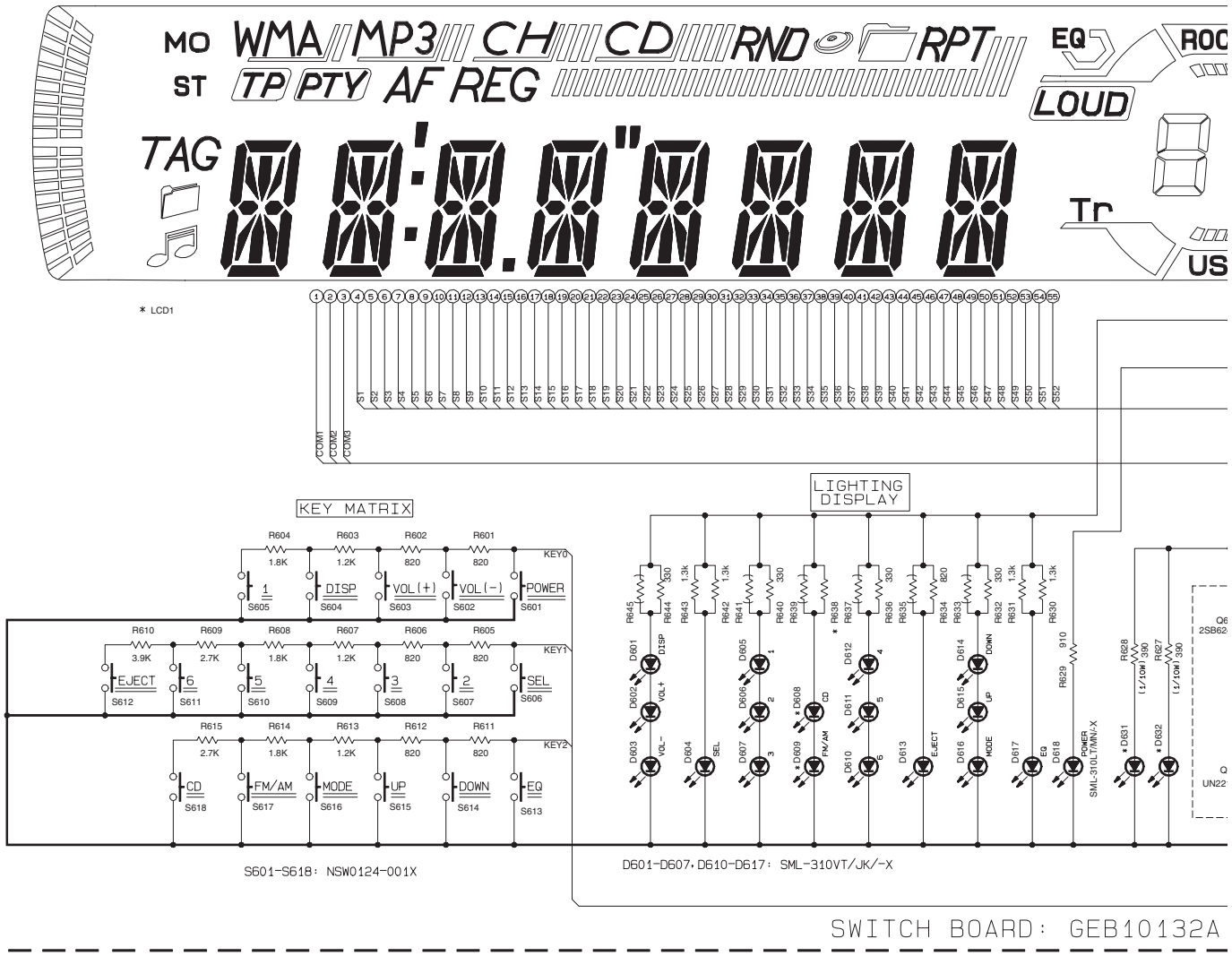
	10K / 10K	UN2211-X
	10K / 10K	UN2111-X

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W ± 5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

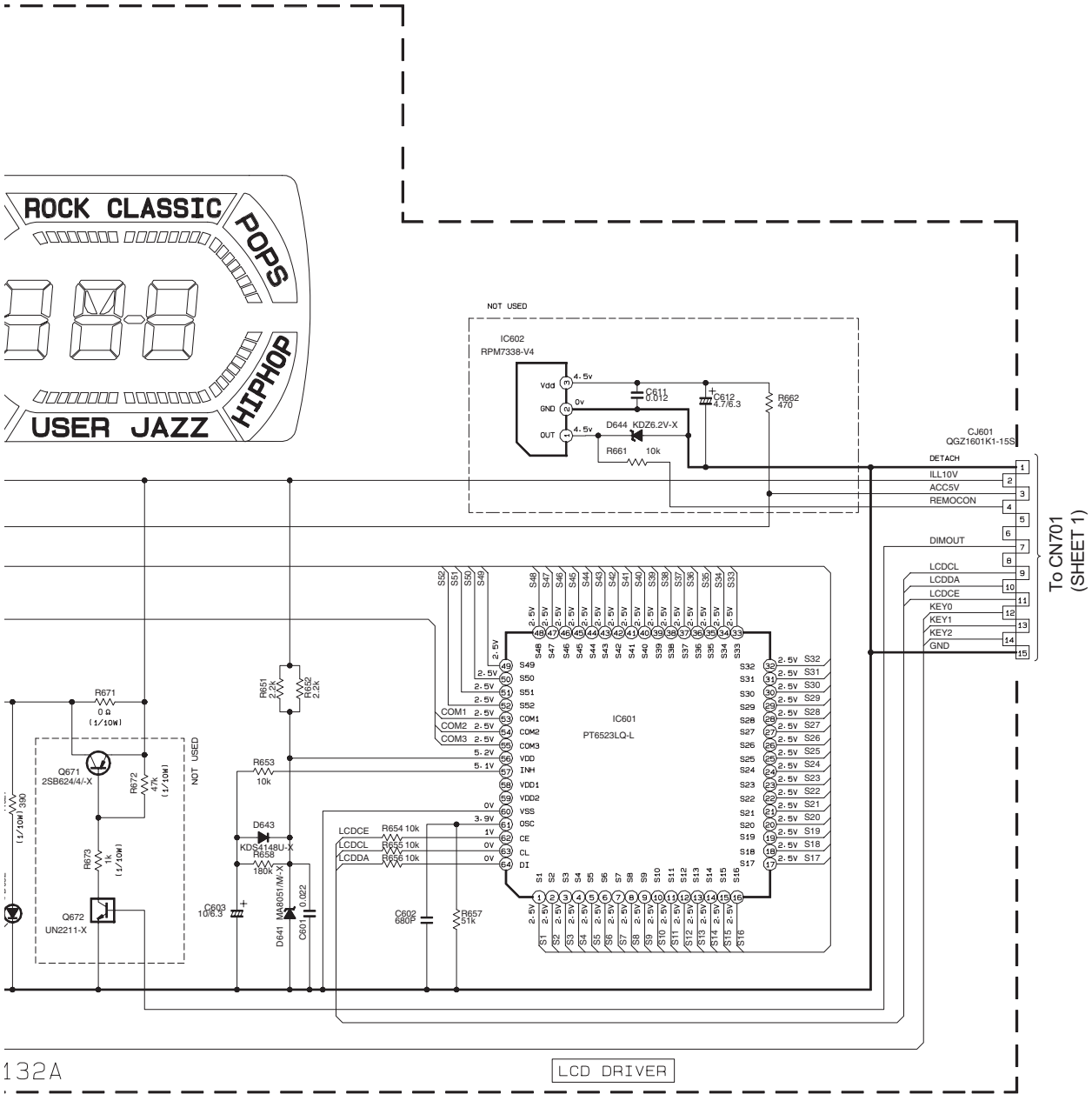
SHEET 2

■ LCD & Key control section



	KD-G110J2	KD-G115U2	KD-G116U2	KD-G111E2	KD-S11J2
LCD1	QLD0352-001	QLD0353-001	QLD0353-001	QLD0353-001	QLD0353-001
D631, D632	NSPW310BS/B2RS/	NSPW310BS/BRS/	NSPW310BS/BRS/	NSPW310BS/BRS/	NSPW310BS/BRS/
D608, D609	SML-310LT/MN/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X	SML-310VT/JK/-X
R638	510	470	470	470	470

FRONT CIR



CIRCUIT BOARD SECTION

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.

2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
   T --- TANTALUM CAPACITOR.

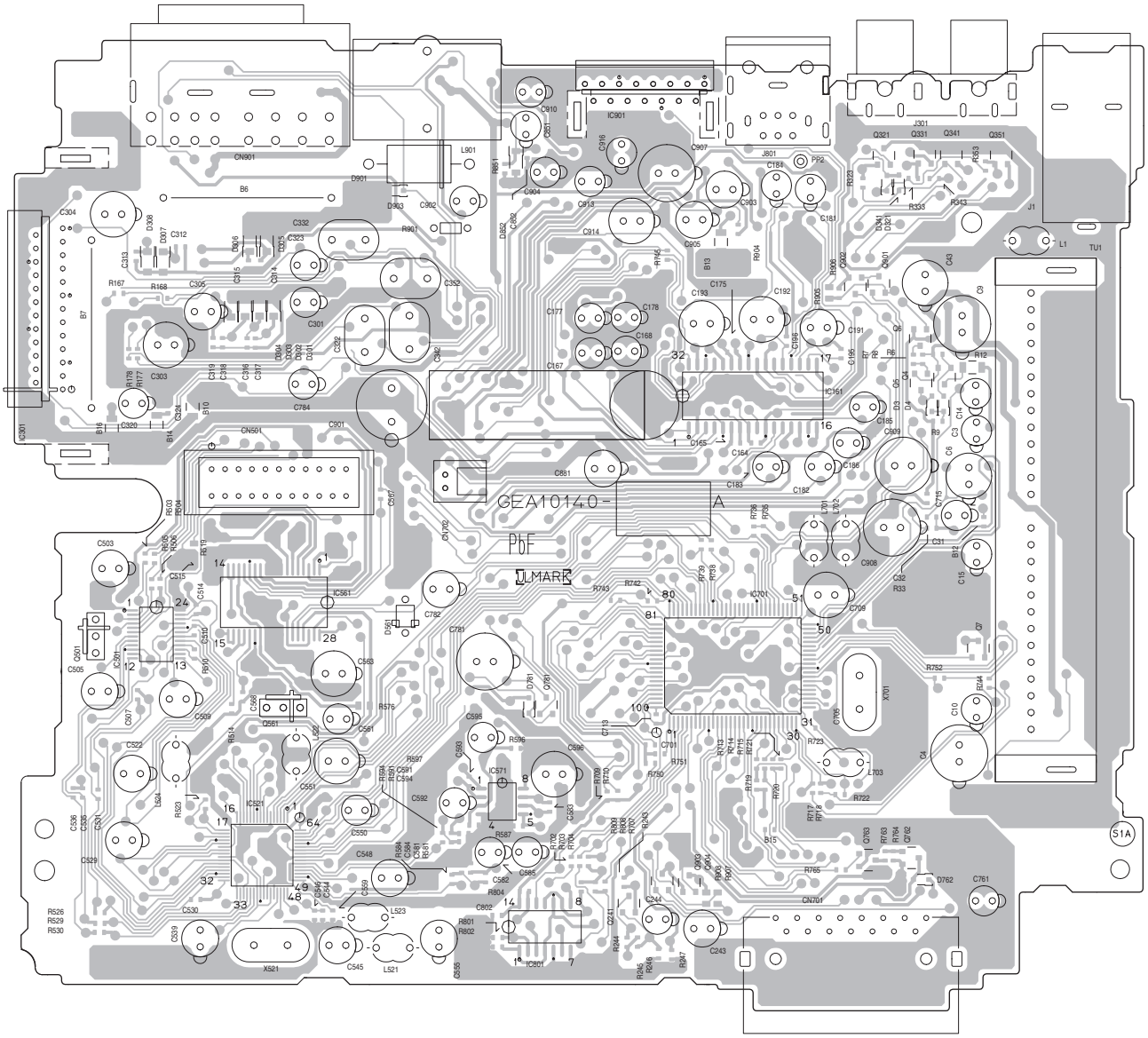
3. COMPONENTS IN ( ) INDICATE NOT USE.

SHEET 3

Printed circuit boards (For J2 version)

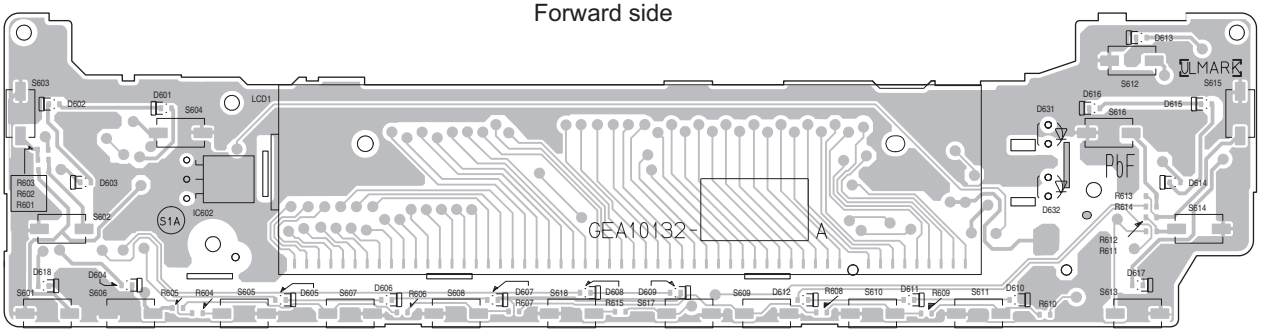
■ Main board

Forward side

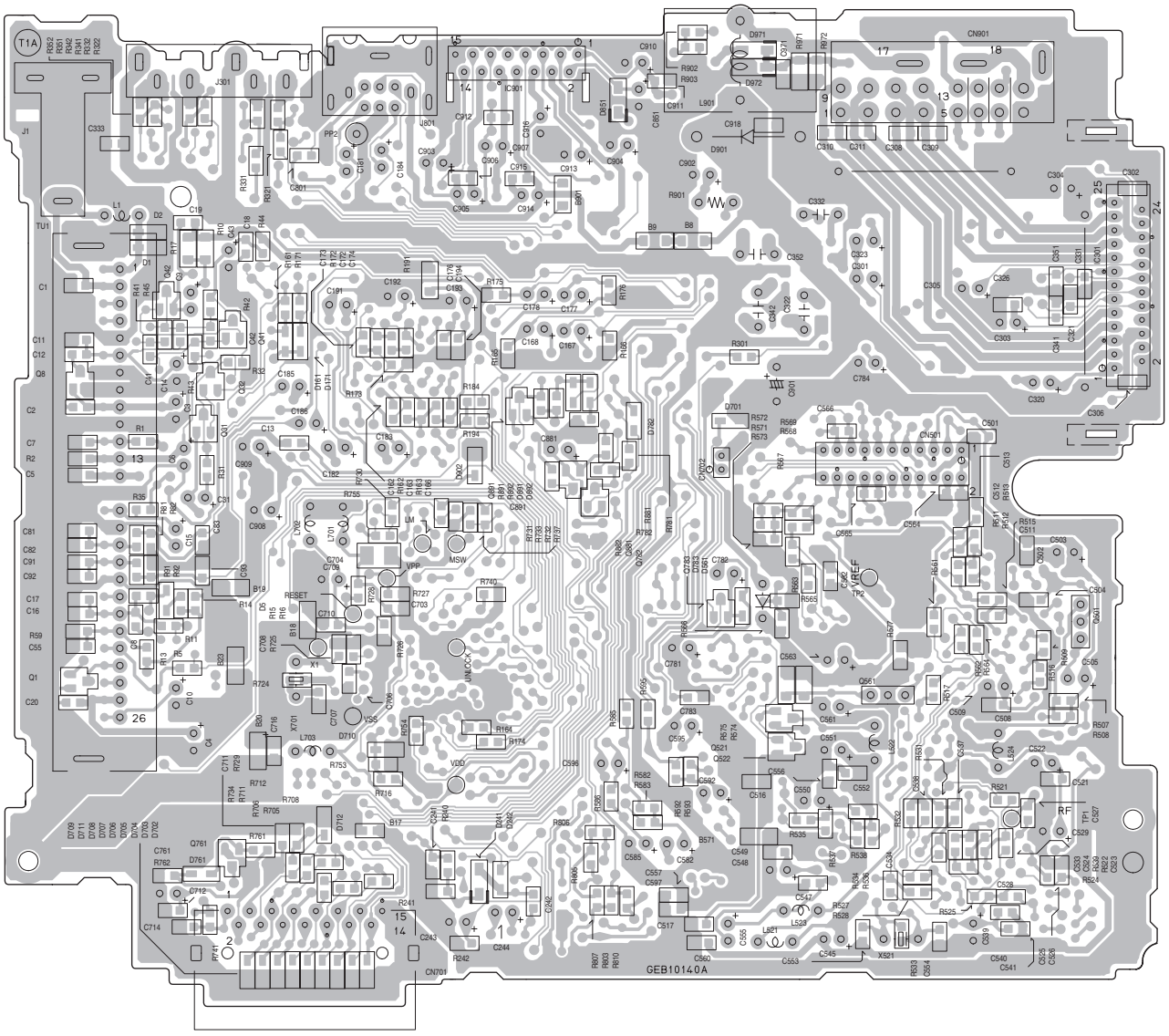


■ Switch board

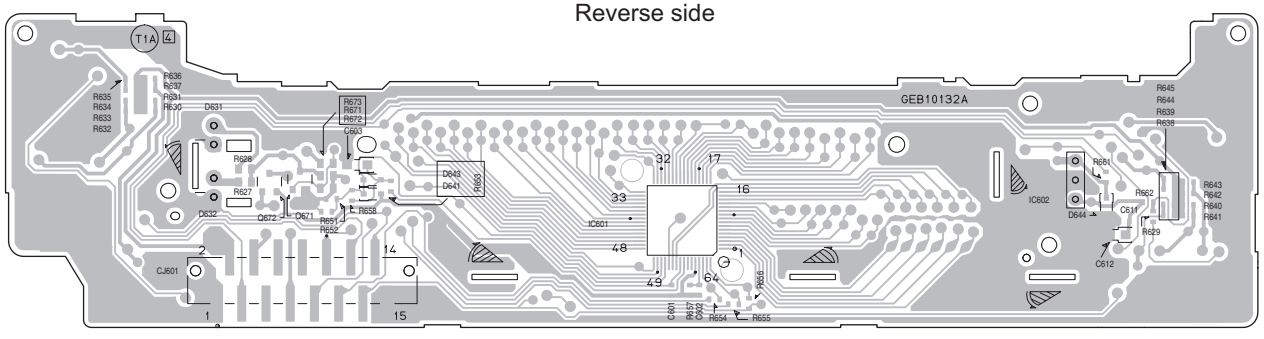
Forward side



Reverse side



Reverse side



JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY CAR ELECTRONICS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA121SCH)

Printed in Japan
VPT