

# JVC

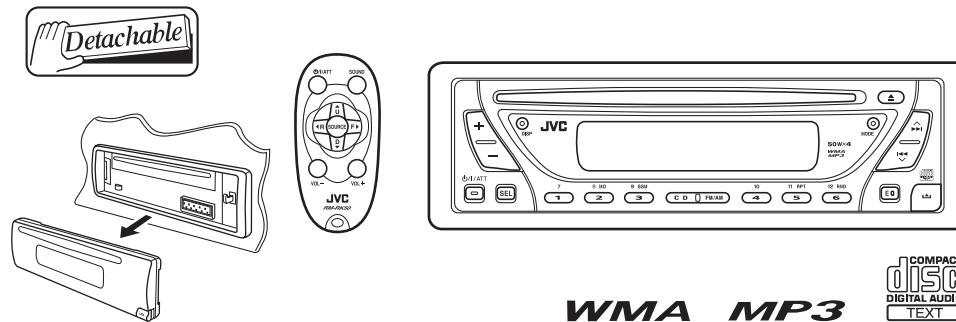
## SERVICE MANUAL

### CD RECEIVER

## KD-G415, KD-G416

#### Area suffix

UT ----- Taiwan  
 UH ----- Thailand  
 UN ----- Asean  
 U ----- Other Areas



	KD-G416	KD-G415
CONTROL PANEL	SILVER	BLACK

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# SPECIFICATION

## AUDIO AMPLIFIER SECTION

Maximum Power Output	Front	50 W per channel
	Rear	50 W per channel
Continuous Power Output (RMS)	Front	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
	Rear	19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.
Load Impedance		4 $\Omega$ (4 $\Omega$ to 8 $\Omega$ allowance)
Tone Control Range	Bass	$\pm$ 10 dB at 100 Hz
	Treble	$\pm$ 10 dB at 10 kHz
Frequency Response		40 Hz to 20 000 Hz
Signal-to-Noise Ratio		70 dB
Line-Out Level/Impedance		2.0 V/20 k $\Omega$ load (full scale)
Output Impedance		1 k $\Omega$

## TUNER SECTION

Frequency Range	FM	87.5 MHz to 108.0 MHz
	AM	531 kHz to 1 602 kHz
FM Tuner	Usable Sensitivity	11.3 dBf (1.0 $\mu$ V/75 $\Omega$ )
	50 dB Quieting Sensitivity	16.3 dBf (1.8 $\mu$ V/75 $\Omega$ )
	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 $\mu$ V
	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
MP3 Decoding Format	MPEG1/2 Audio Layer 3 Max. Bit Rate: 320 kbps
WMA (Windows Media Audio) Decoding Format	Max. Bit Rate: 192 kbps


## 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
Dimensions (W $\times$ H $\times$ D)	Installation Size (approx.)	182 mm $\times$ 52 mm $\times$ 150 mm
	Panel Size (approx.)	188 mm $\times$ 58 mm $\times$ 11 mm
Mass (approx.)		1.3 kg (excluding accessories)

- Design and specifications are subject to change without notice.
- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

# 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 performing 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.

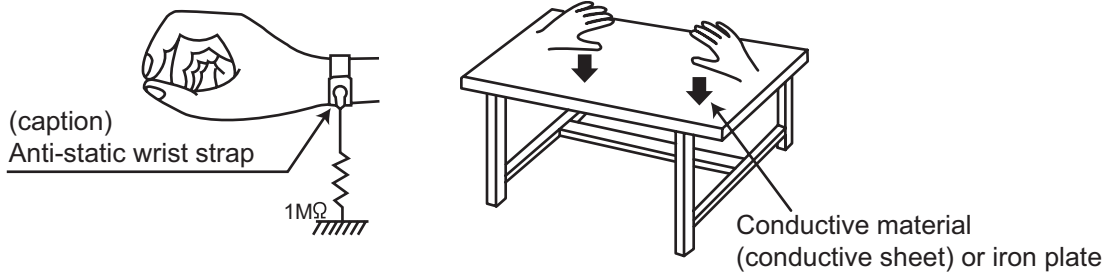
Be careful to use proper grounding in the area where repairs are being performed.

(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.

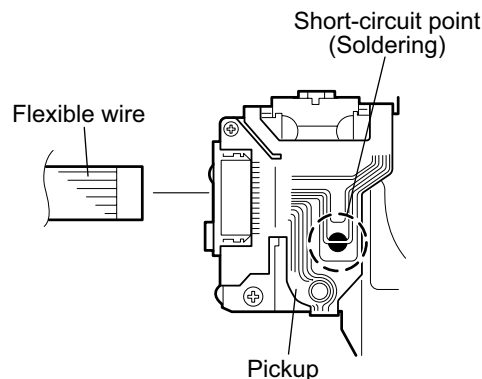
## 1.3 Handling the traverse unit (optical pickup)

- (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.



**1.5 Important for laser products**

**1.CLASS 1 LASER PRODUCT**


**2.DANGER** : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

**3.CAUTION** : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

**4.CAUTION** : The CD,MD and DVD player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

**5.CAUTION** : If safety switches malfunction, the laser is able to function.

**6.CAUTION** : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

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

**CAUTION** : Visible and invisible laser radiation when open and interlock failed or defeated.  
AVOID DIRECT EXPOSURE TO BEAM.

**ADVARSEL** : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.

**VARNING** : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.

**VARO** : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alltiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

**REPRODUCTION AND POSITION OF LABELS**

**WARNING LABEL**



<p><b>CAUTION</b> : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)</p>	<p><b>ADVARSEL</b> : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)</p>	<p><b>VARNING</b> : Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)</p>	<p><b>VARO</b> : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alltiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)</p>
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# SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

## 2.1 HOW TO IDENTIFY MODELS

### 2.1.1 NAME PLATE (as same as KD-G416)

<b>N835</b>	
<b>JVC</b> <span style="border: 1px solid black; padding: 2px;">DESTINATION U2</span> <b>CD RECEIVER</b> <b>MODEL NO. KD-G415</b> DC 12 V  NEGATIVE GROUND SERIAL NO. <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span> Victor Company of Japan, Limited MADE IN INDONESIA	<p style="font-size: small;">DO NOT CONNECT SPEAKER NEGATIVE (-) LEADS TOGETHER OR TO CHASSIS GROUND</p>
	GE31434-002A

Discernment sign

<b>N835</b>	
<b>JVC</b> <span style="border: 1px solid black; padding: 2px;">DESTINATION U3</span> <b>CD RECEIVER</b> <b>MODEL NO. KD-G415</b> DC 12 V  NEGATIVE GROUND SERIAL NO. <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span> Victor Company of Japan, Limited MADE IN INDONESIA	<p style="font-size: small;">DO NOT CONNECT SPEAKER NEGATIVE (-) LEADS TOGETHER OR TO CHASSIS GROUND</p>
	GE31434-003A

Discernment sign

## 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.

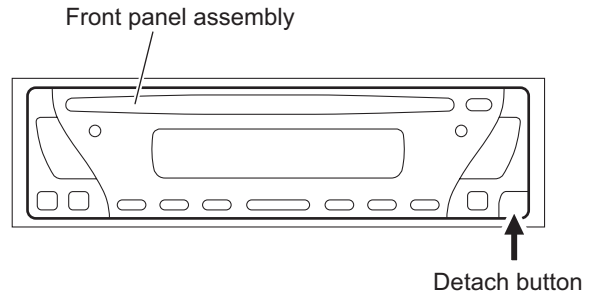


Fig.1

#### 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.

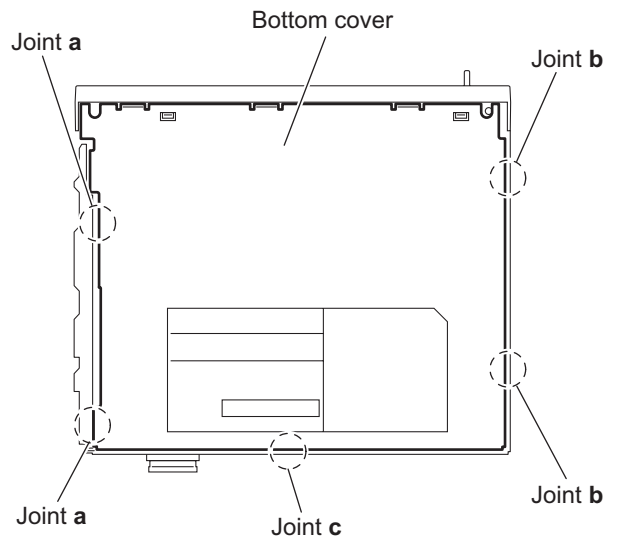


Fig.2

#### 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.

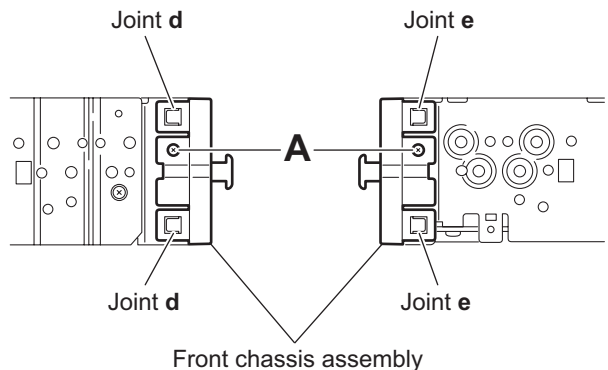


Fig.3

### 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.

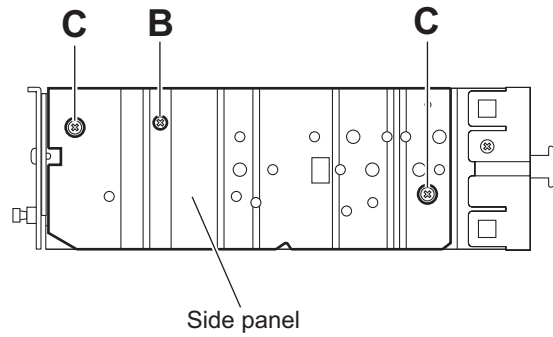


Fig.4

### 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".)

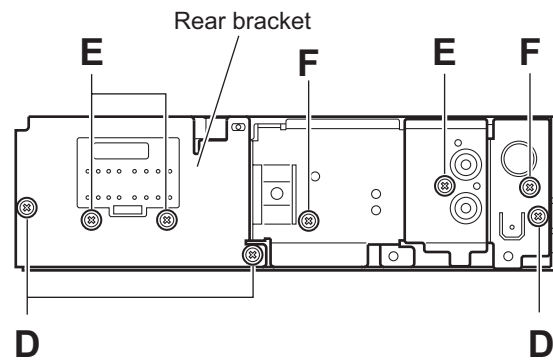


Fig.5

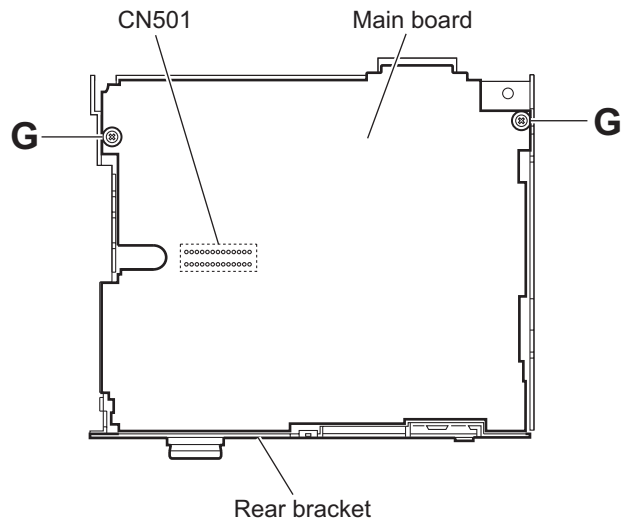


Fig.6



### 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.

- Remove the three screws **H** attaching the CD mechanism assembly on the top chassis.
- Take out the CD mechanism assembly.

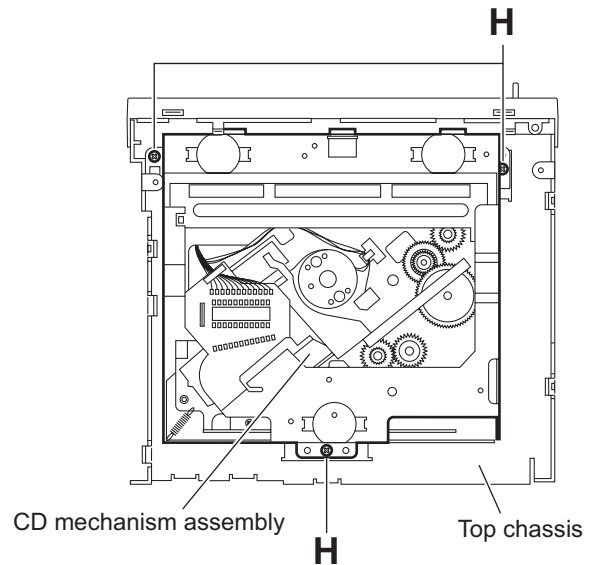


Fig.7

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

- Remove the front panel assembly.
  - Remove the five screws **J** on the back side of the front panel assembly. (See Fig.8.)
  - Release the twelve joints **f** and remove the rear cover. (See Fig.9.)
  - Release the joint **g** and take out the switch board from the front panel assembly. (See Fig.10.)

#### Note:

When removing the rear cover assembly and switch board, be careful not to lose the spring.

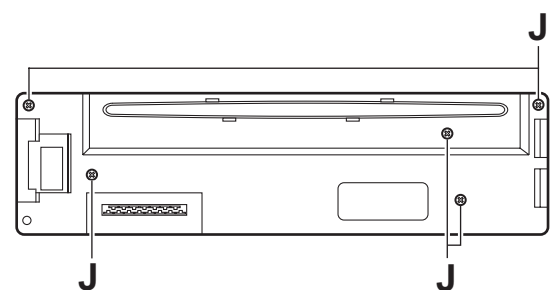


Fig.8

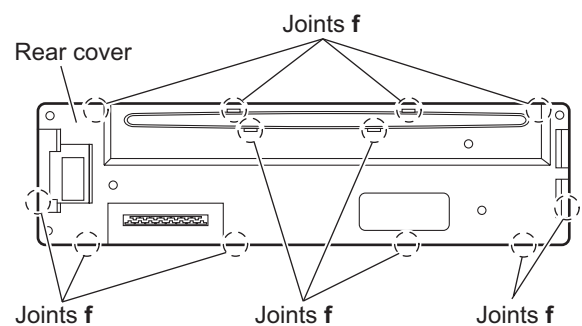


Fig.9

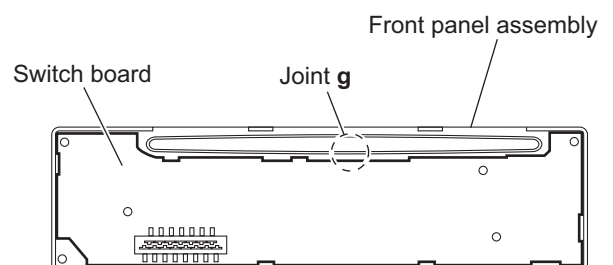


Fig.10

## 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**.

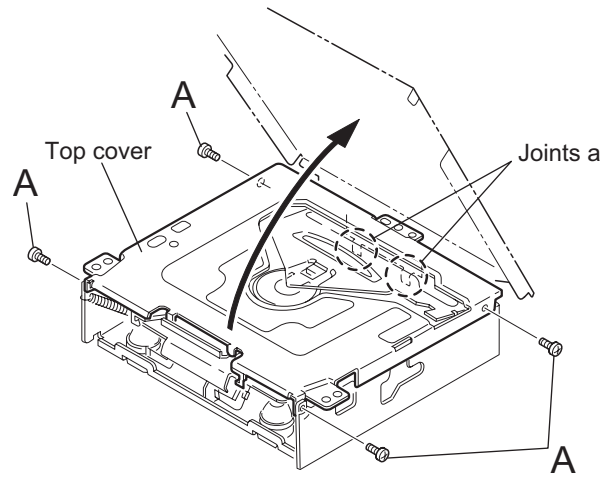


Fig.1

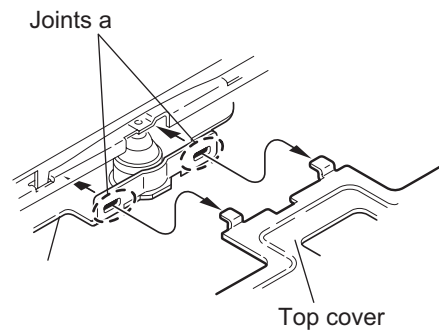


Fig.2

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

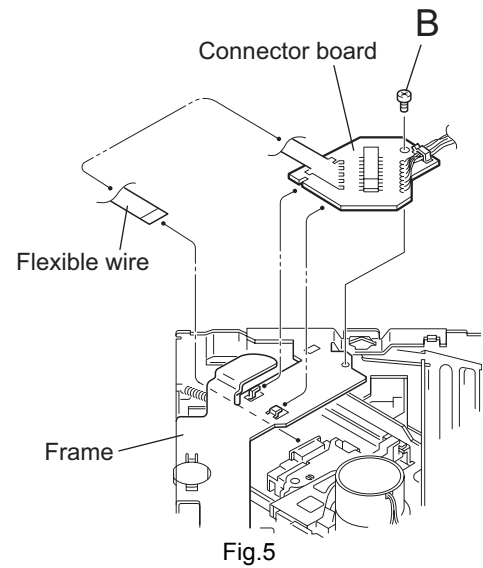
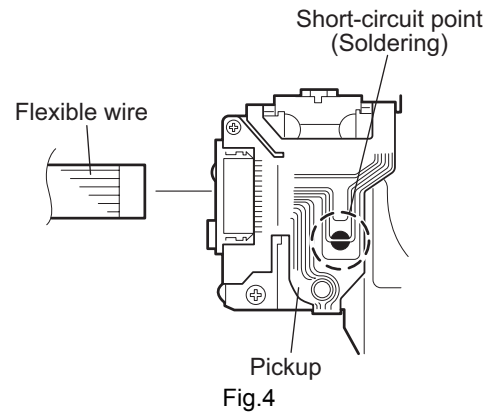
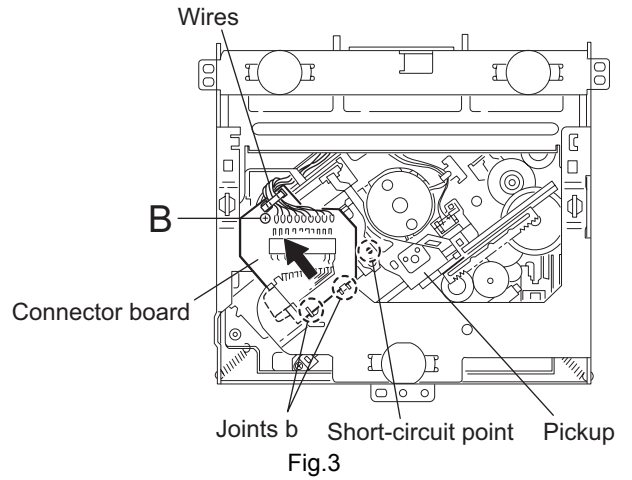
#### CAUTION:

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.



### 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.

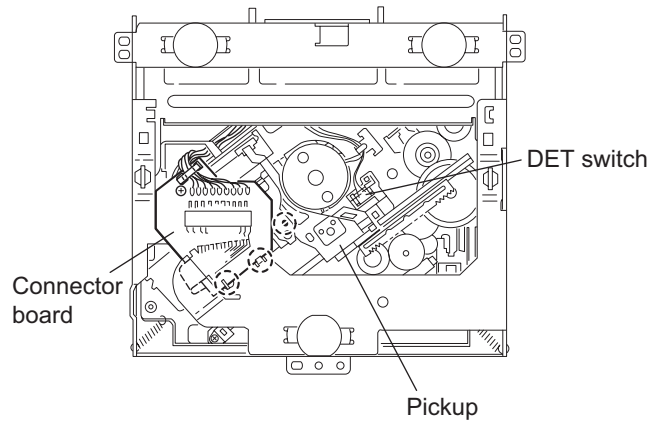


Fig.6

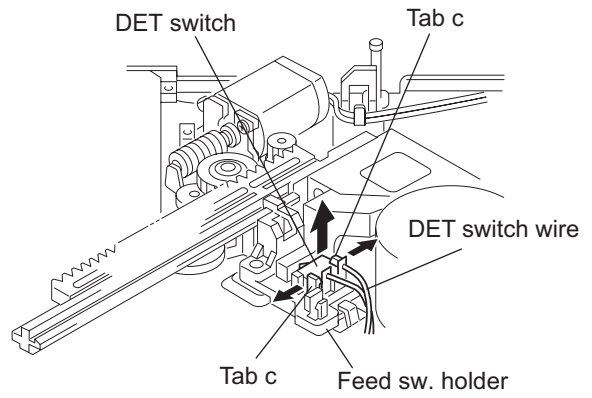


Fig.7

### 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.

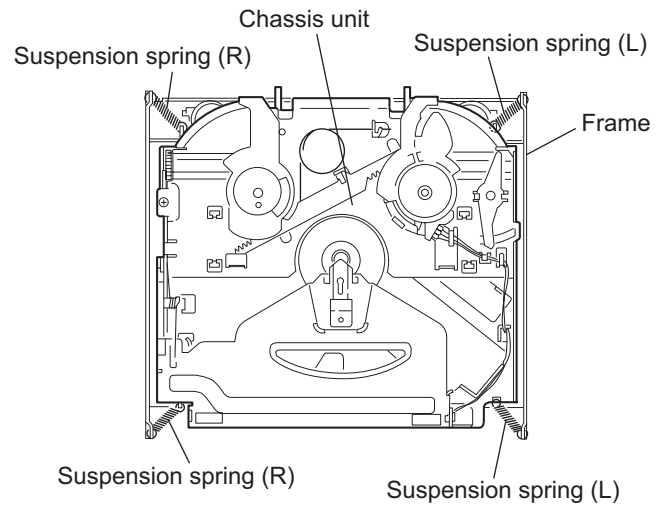


Fig.8

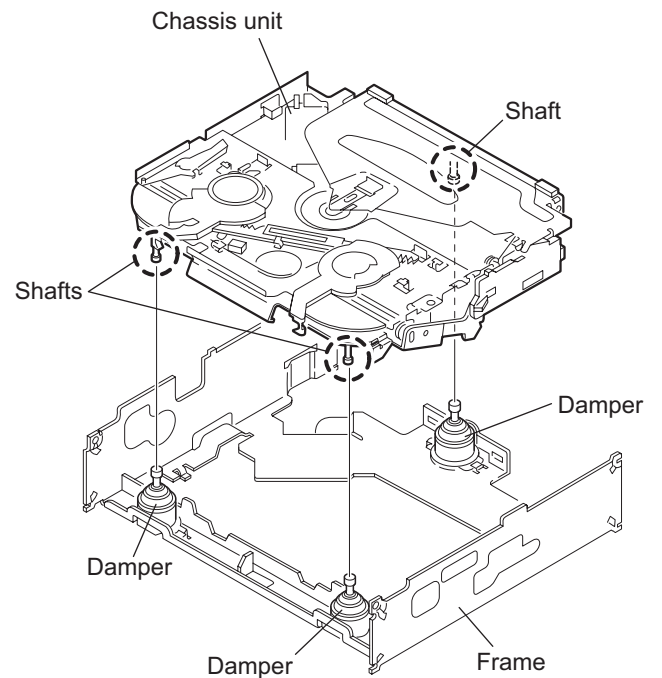
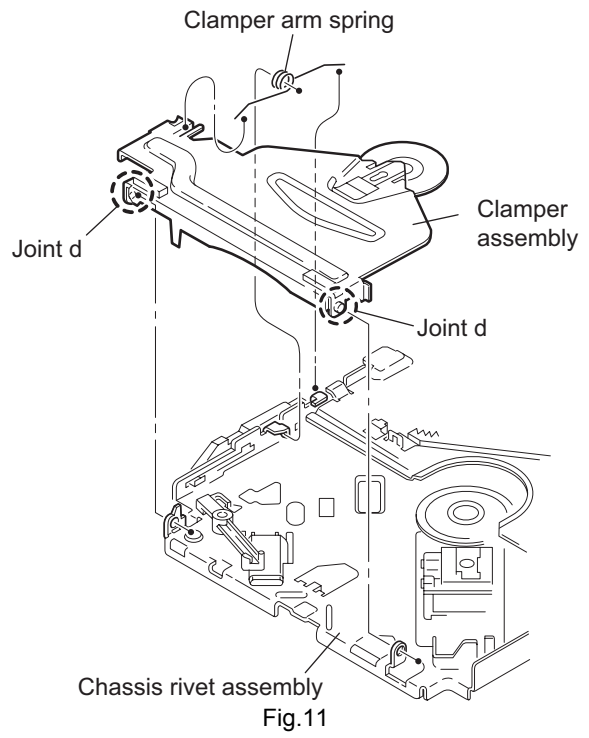
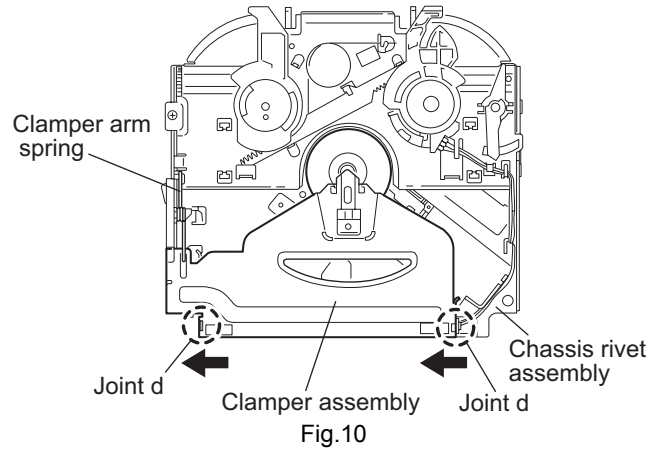


Fig.9

### 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.

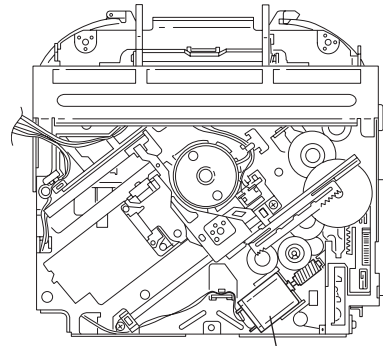


### 3.2.6 Removing the loading / feed motor assembly (See Figs.12 and 13)

- 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.



Loading / feed motor assembly  
Fig.12

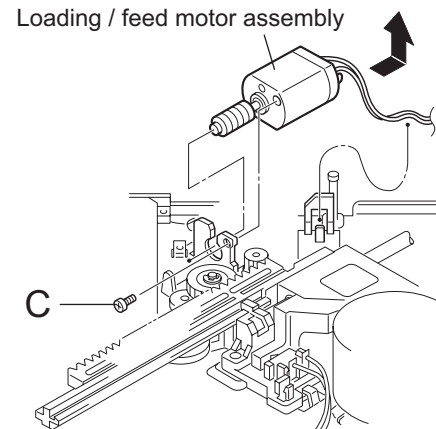


Fig.13

### 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.

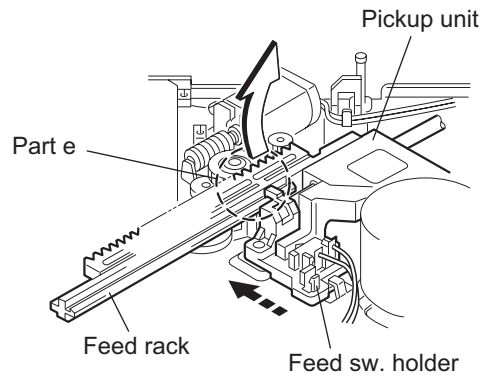


Fig. 15

### 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**.

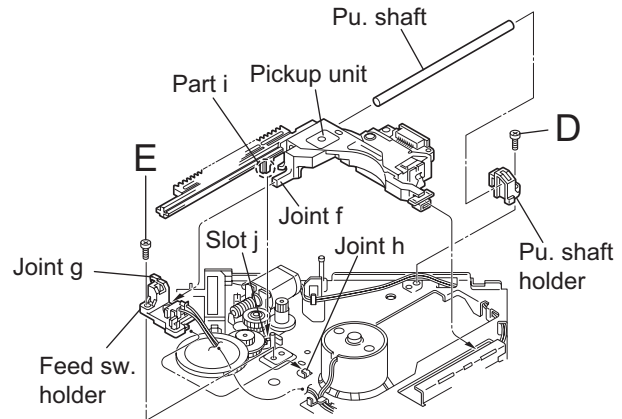


Fig. 16

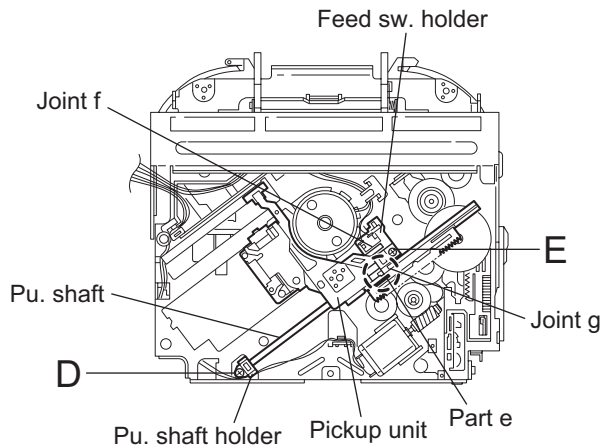


Fig. 14

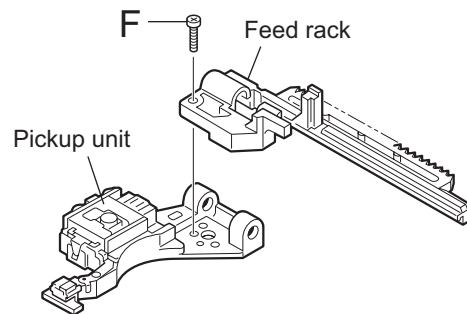


Fig. 17

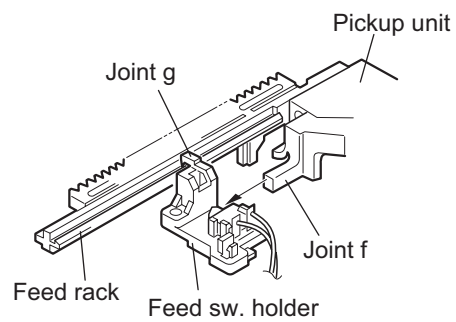


Fig. 18



### 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.

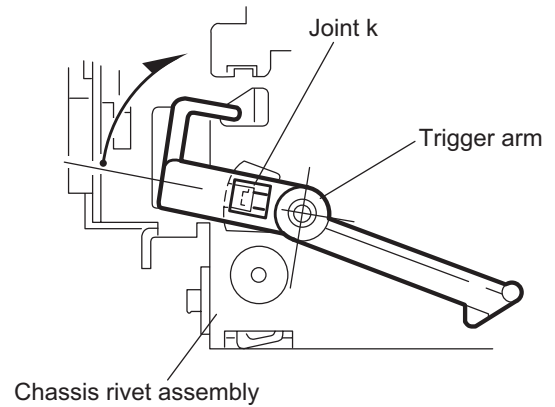


Fig.19

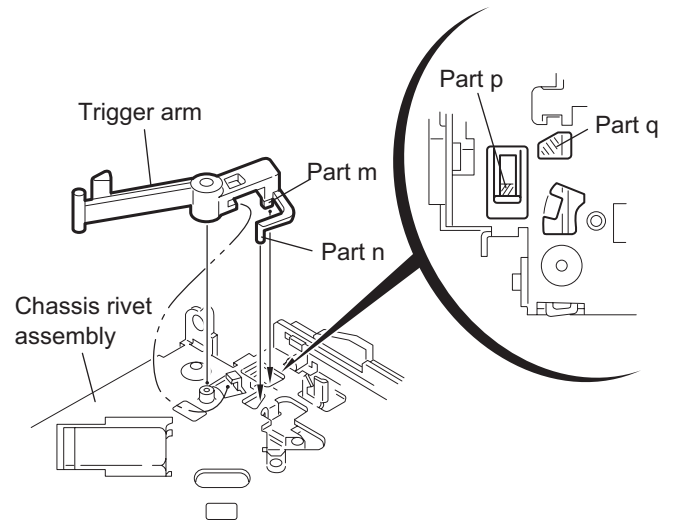


Fig.20

### 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.

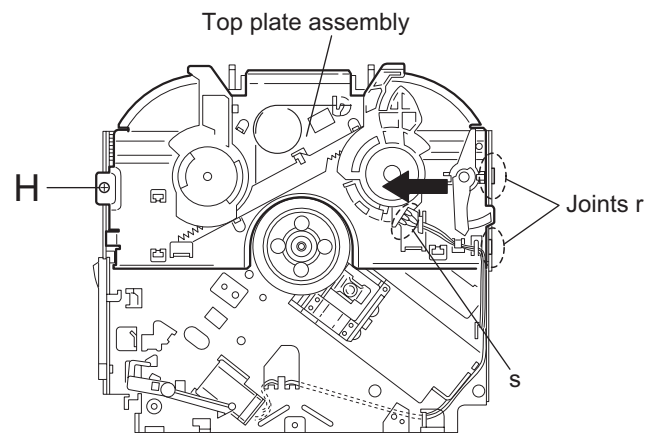


Fig.21

### 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.

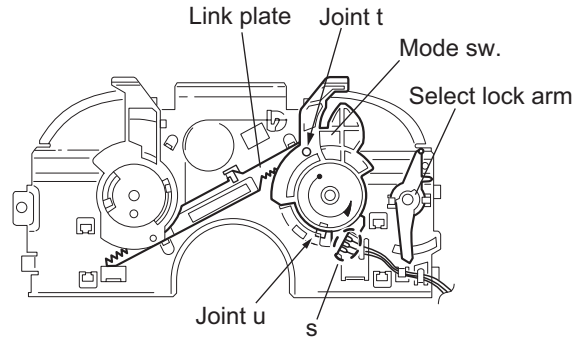


Fig.22

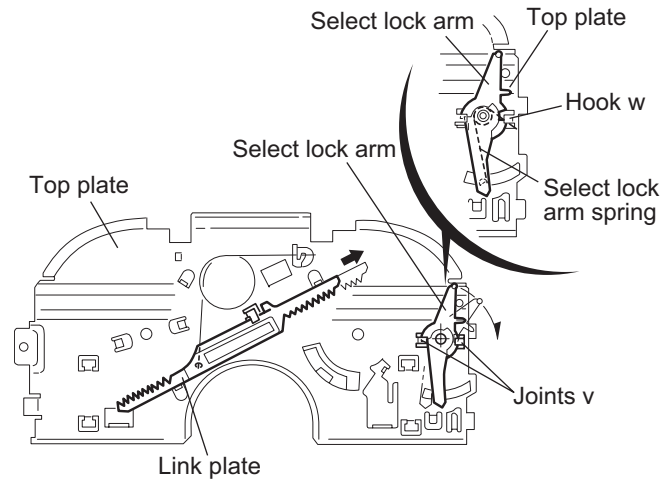


Fig.23

### 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.

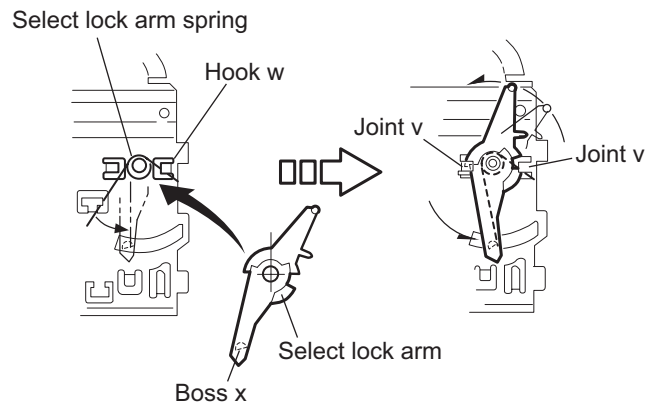


Fig.24

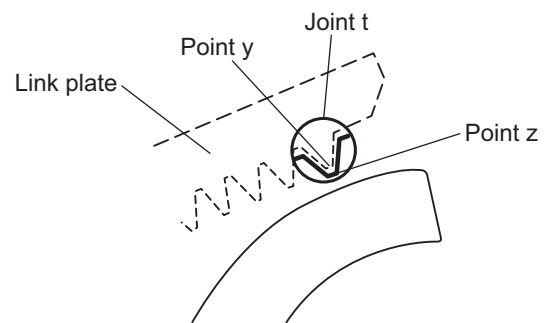


Fig.25

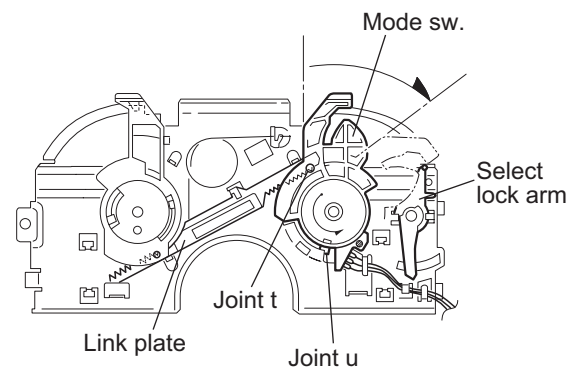


Fig.26

**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..

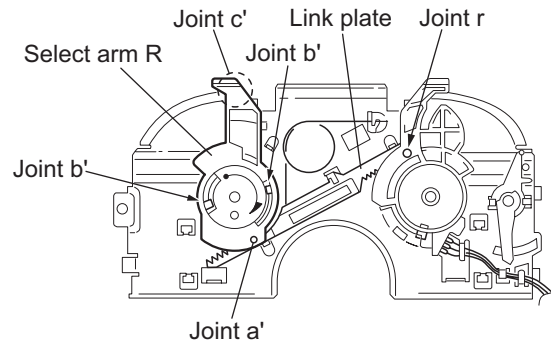


Fig.27

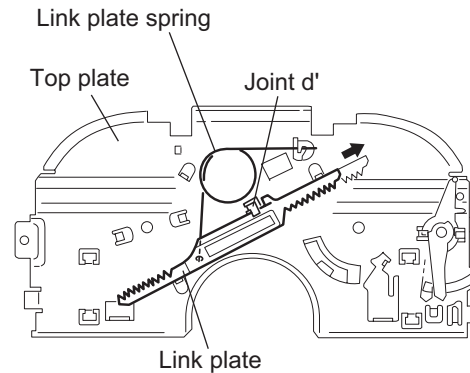


Fig.28

**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.

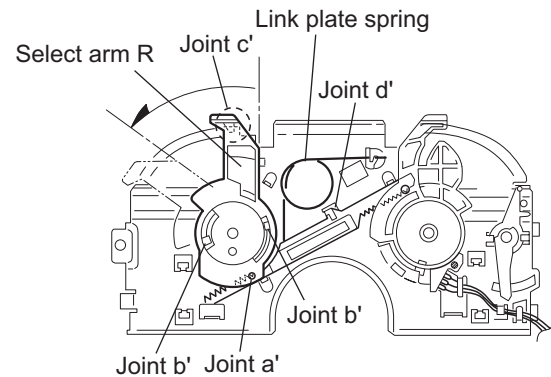


Fig.29

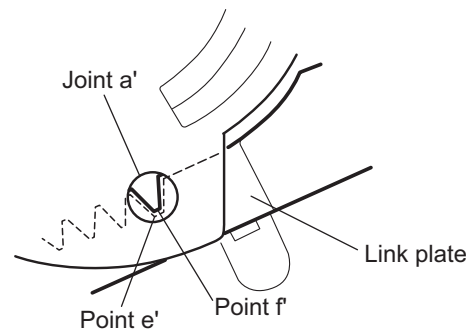


Fig.30

**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.)

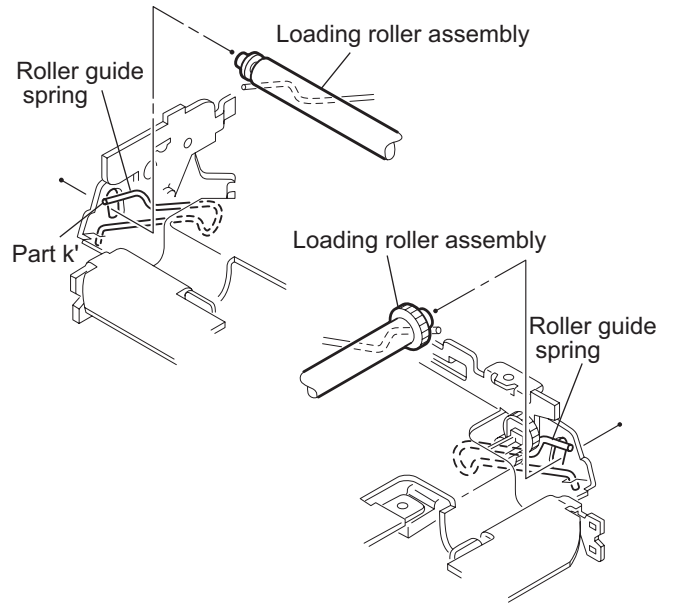


Fig.32

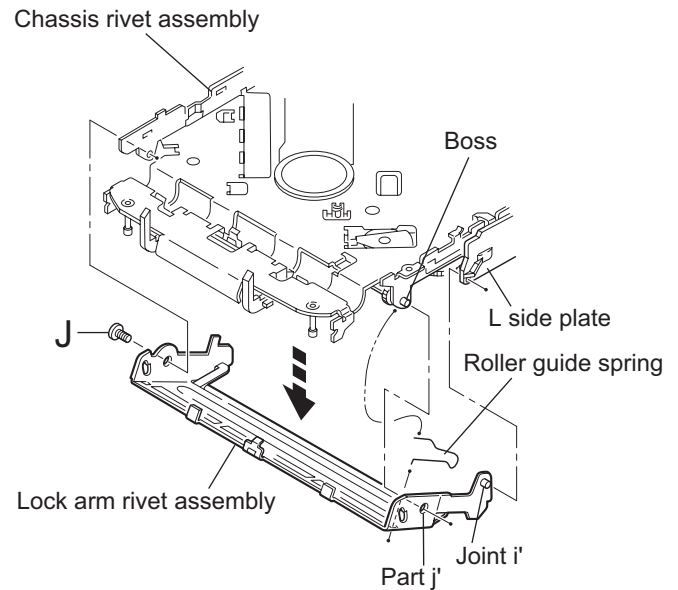


Fig.33

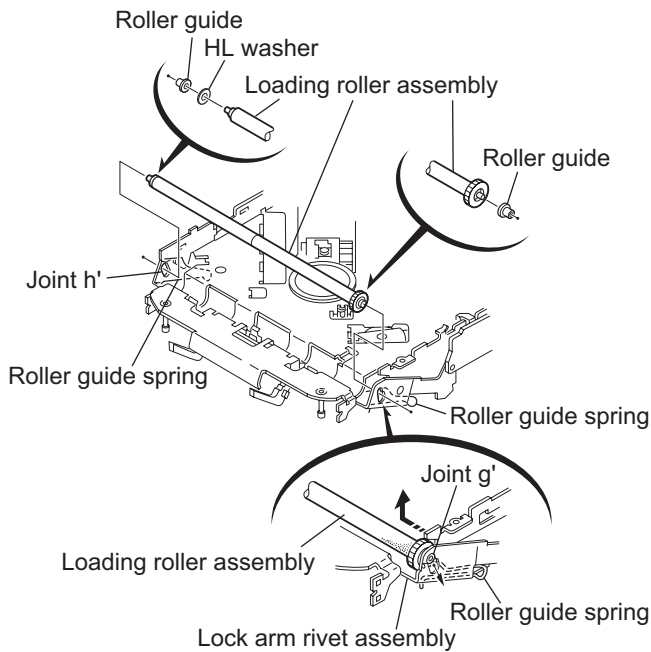


Fig.31

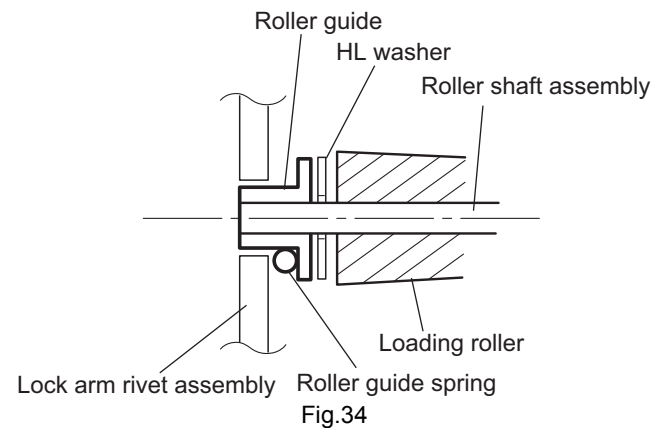


Fig.34

### 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.

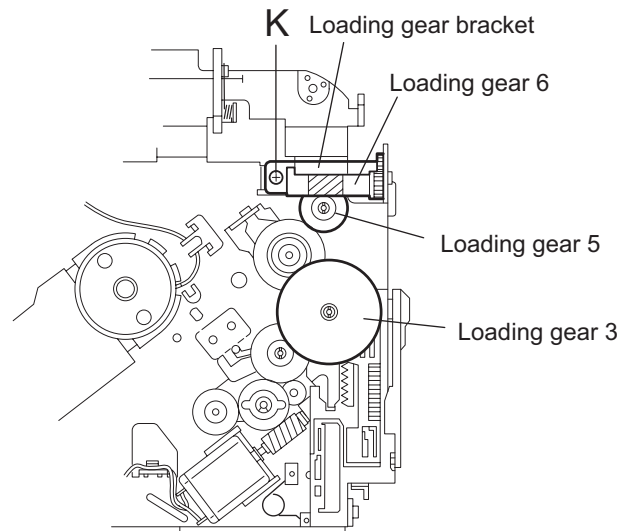


Fig.35

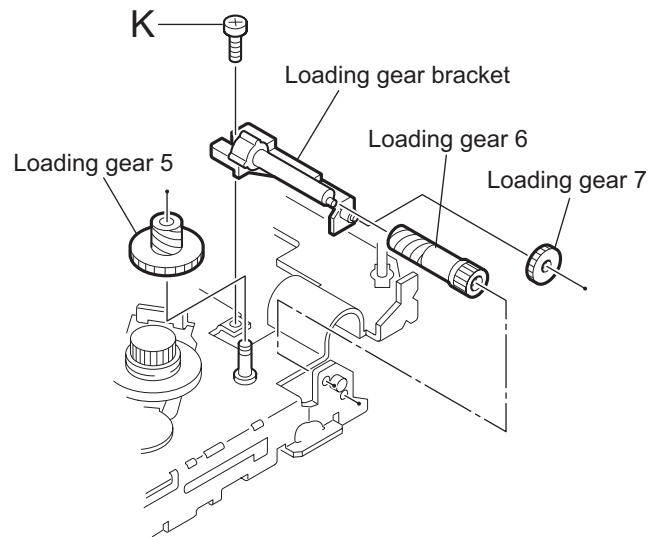
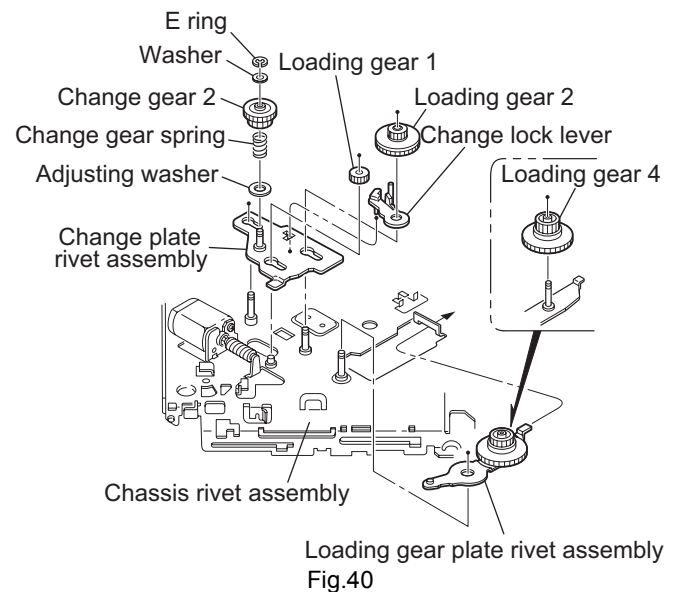
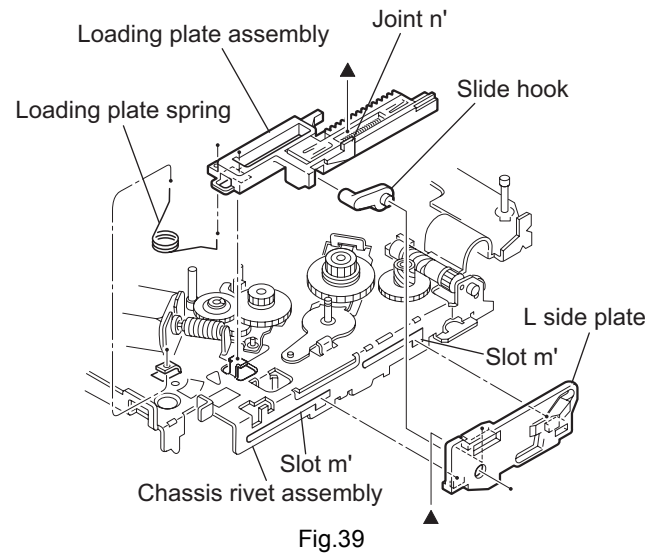
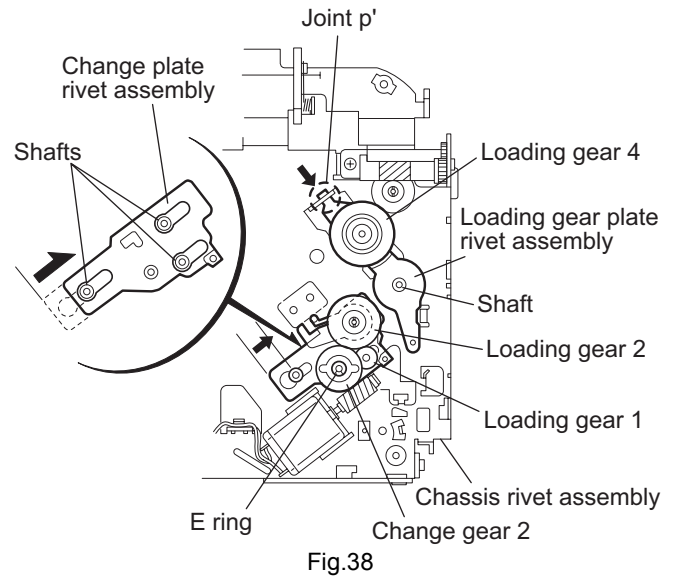
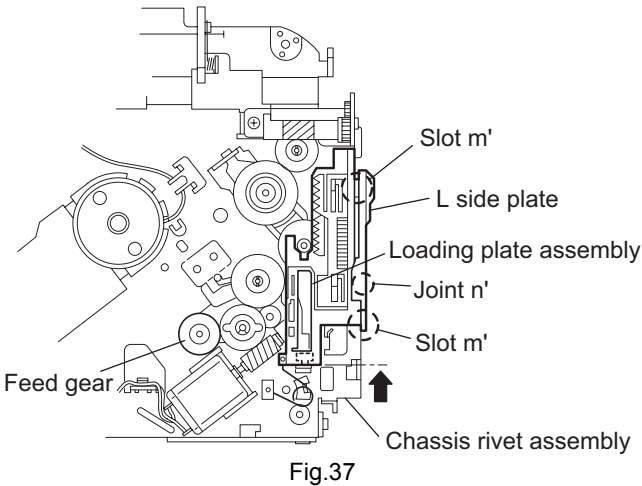


Fig.36

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

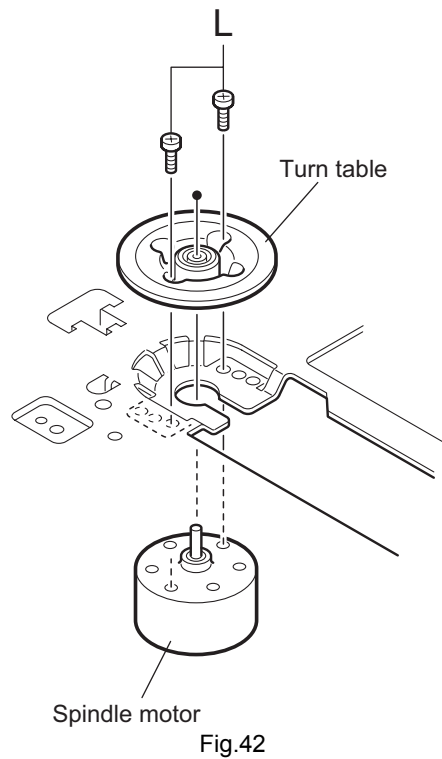
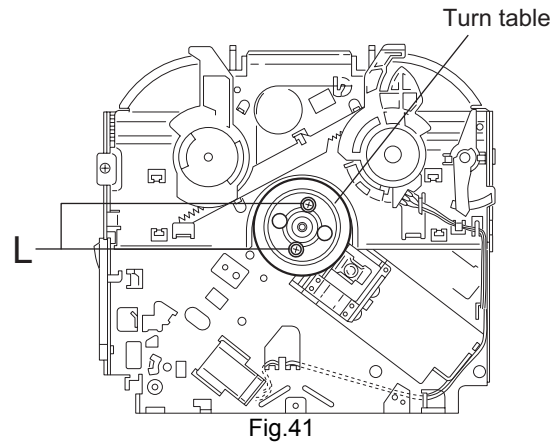
- Prior to performing the following procedure, remove the top cover, chassis unit, top plate assembly and pickup unit.
- Pull out the loading gear 3. (See Fig.35.)

- (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.



### 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 clasper 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.





# 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

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

#### Caution:

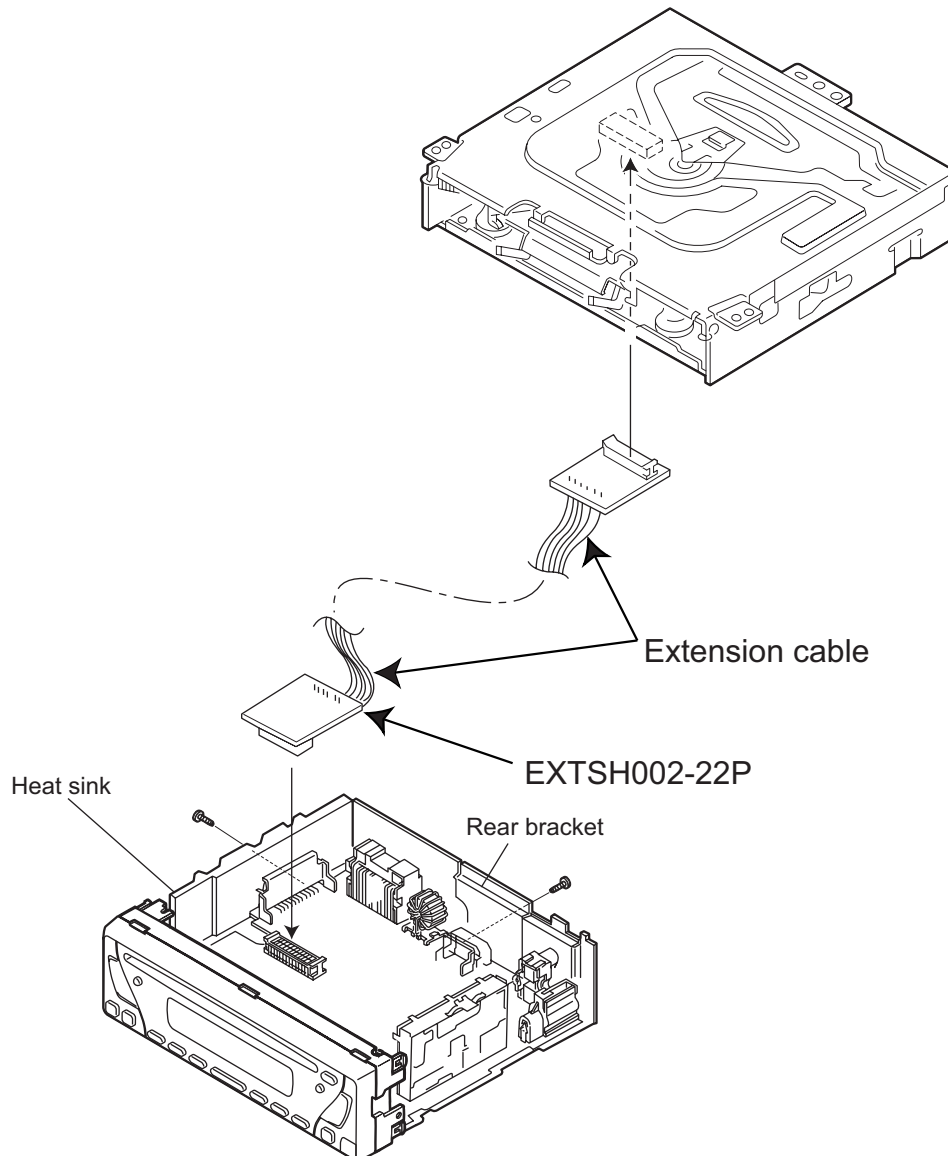
Be sure to attach the heat sink and rear bracket onto the power amplifier IC and regulator IC respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

### ■ Standard measuring conditions

Power supply voltage	DC14.4V(11 to 16V)
Load impedance	20KΩ(2 Speakers connection)
Output Level	Line out 2.0V (Vol. MAX)

### ■ Dummy load

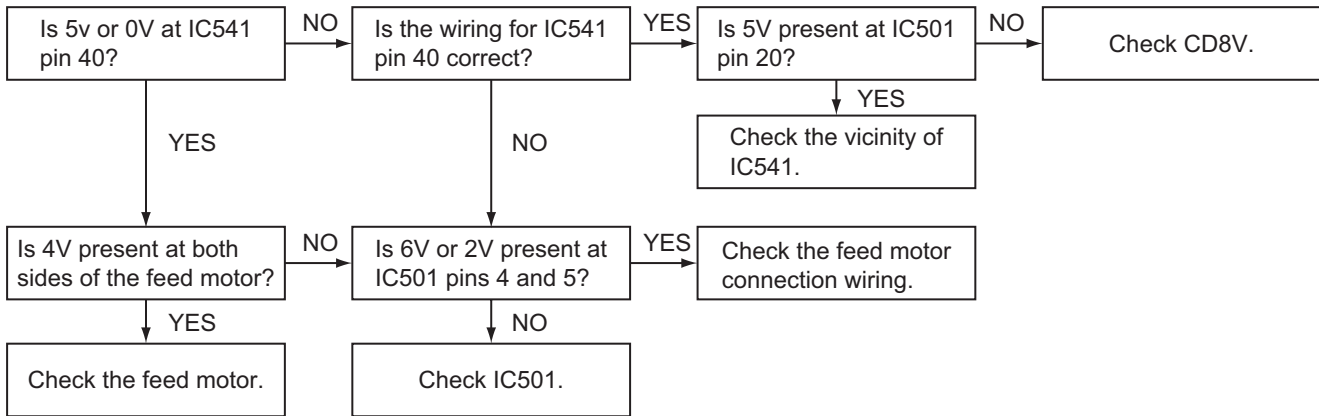
Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.



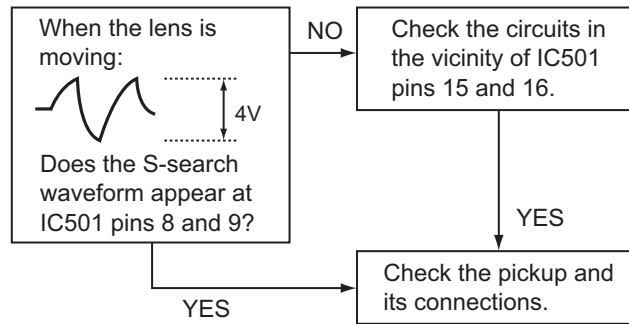
# SECTION 5 TROUBLESHOOTING

## 5.1 KD-G416, KD-G415 J model

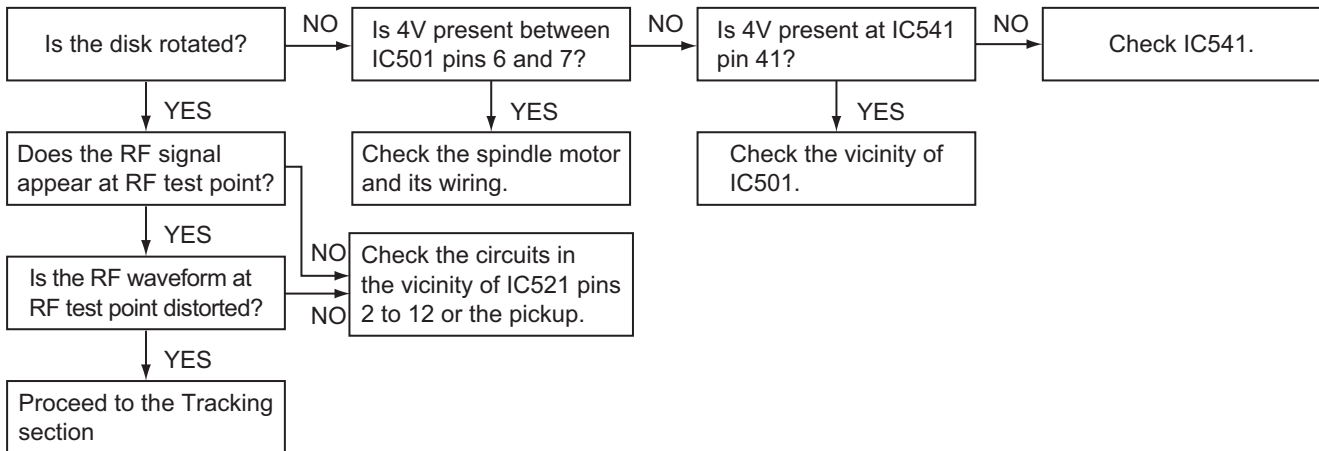
### 5.1.1 Feed section



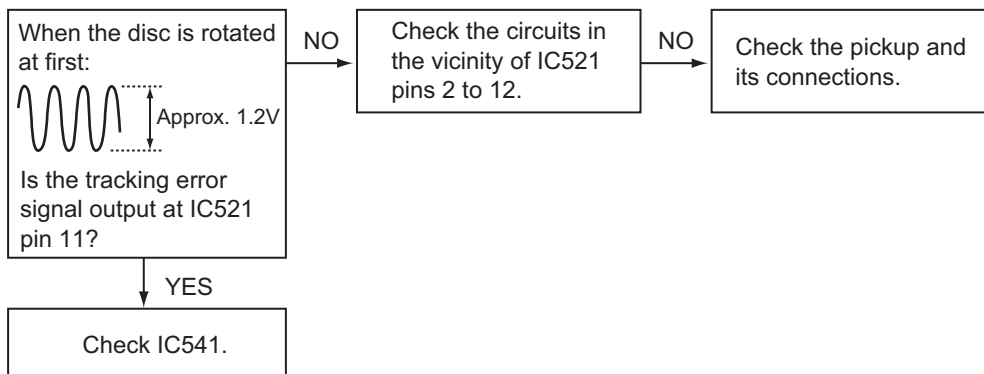
### 5.1.2 Focus section



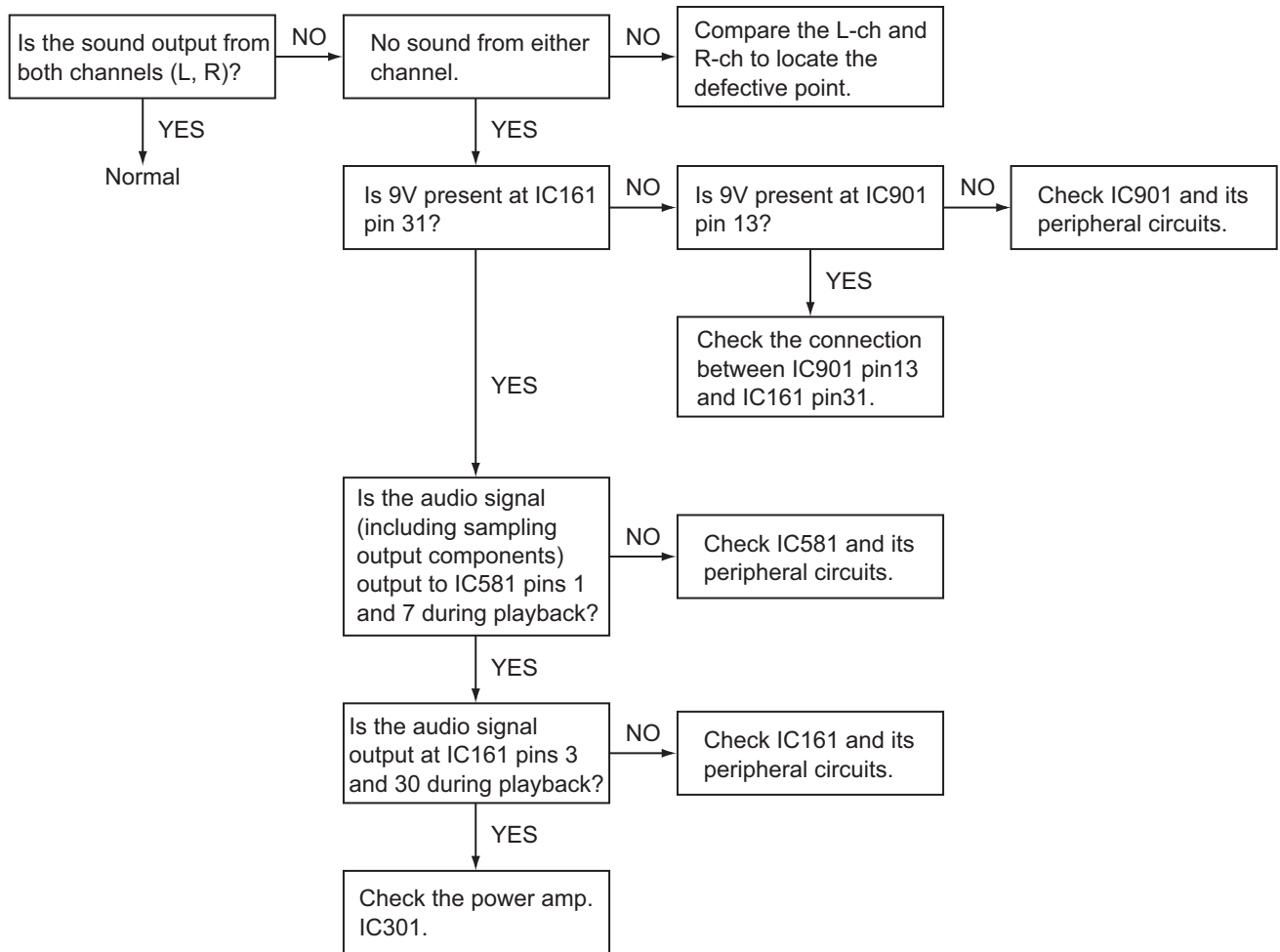
### 5.1.3 Spindle section



### 5.1.4 Tracking section

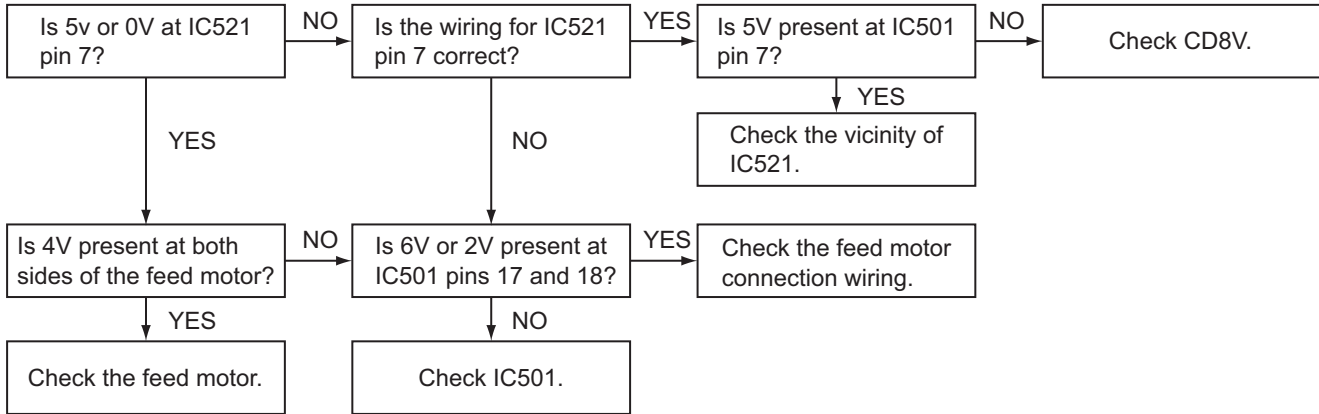


### 5.1.5 Signal processing section

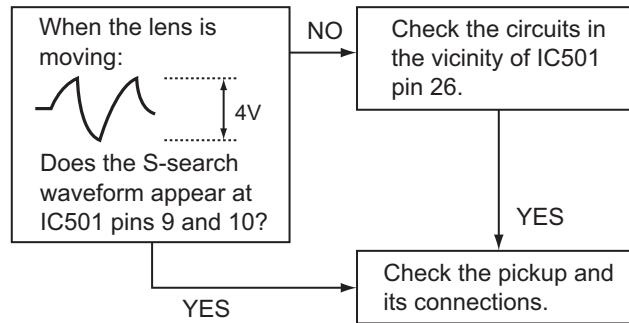


## 5.2 KD-G416, KD-G415 J2 version model

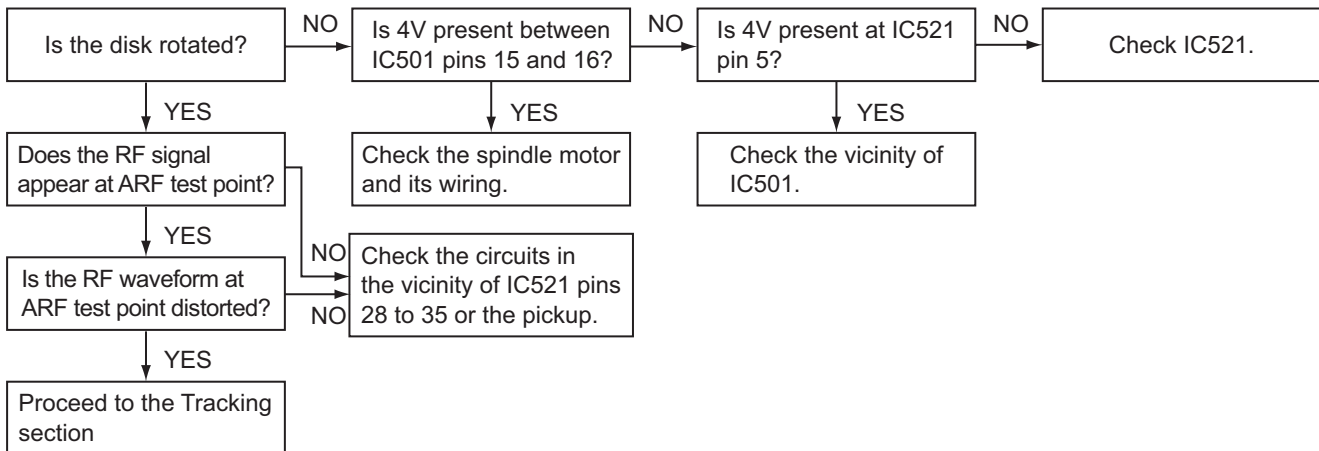
### 5.2.1 Feed section



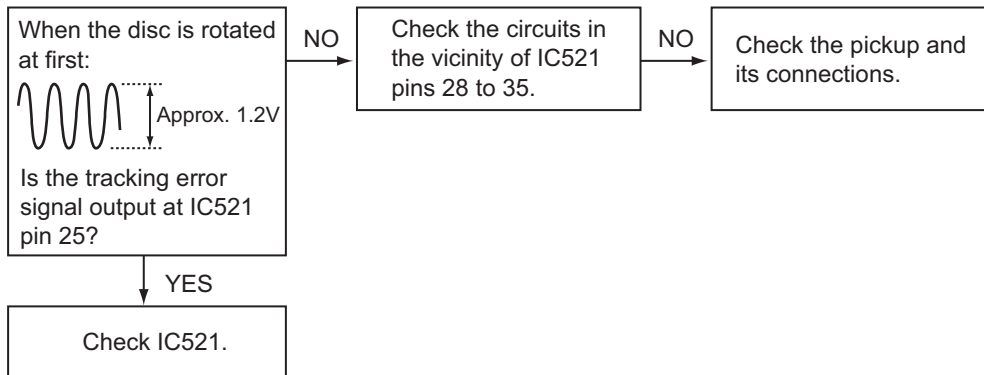
### 5.2.2 Focus section



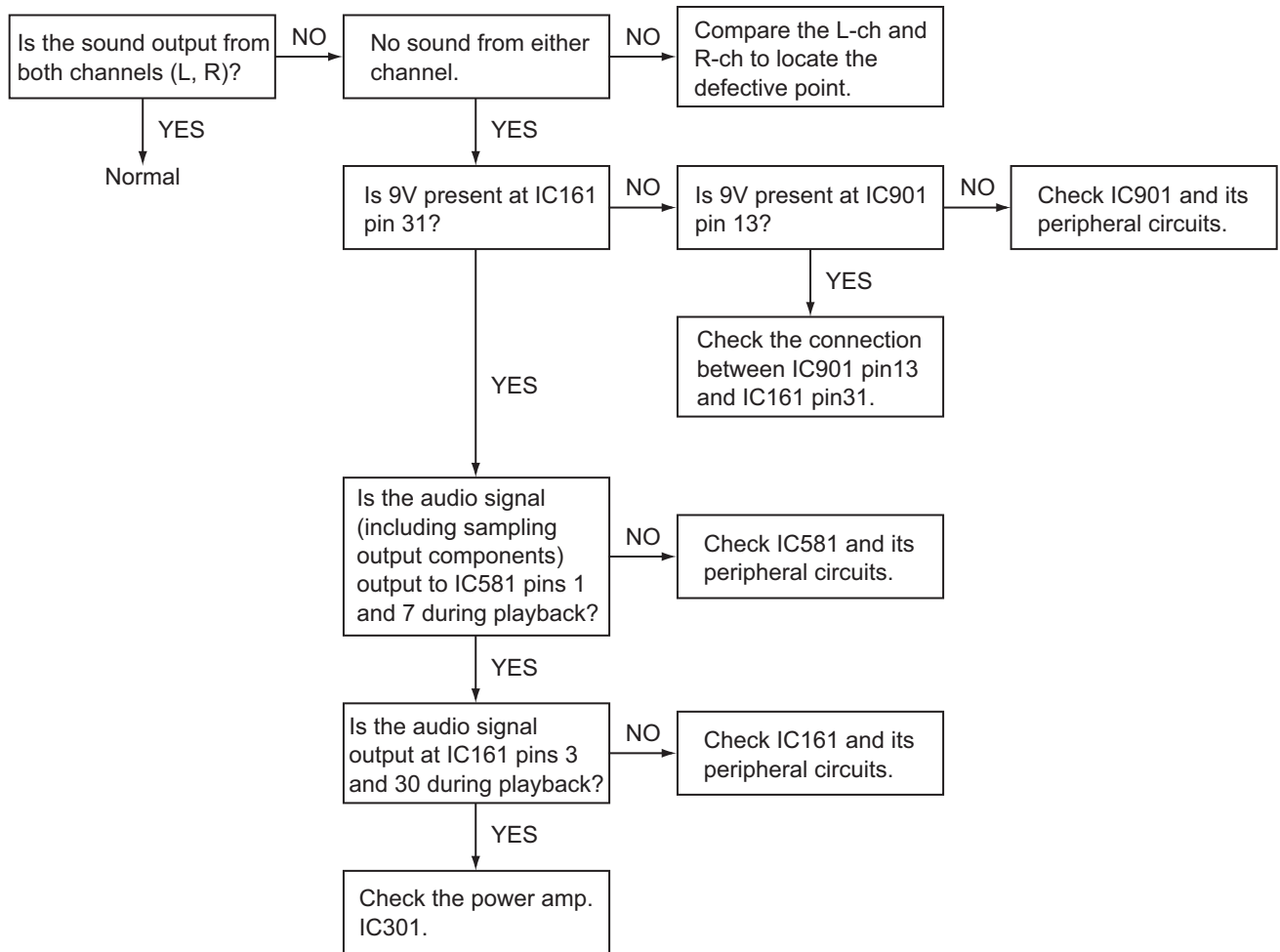
### 5.2.3 Spindle section



### 5.2.4 Tracking section



### 5.2.5 Signal processing section



### 5.3 Maintenance of laser pickup

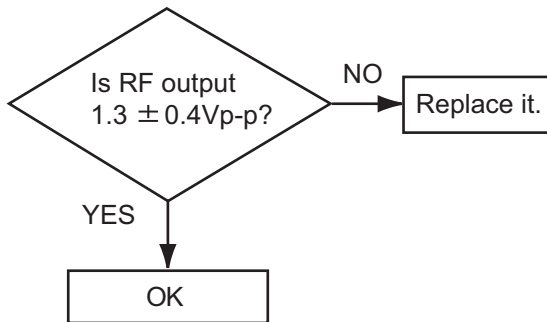
(1) Cleaning the pick up lens

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.

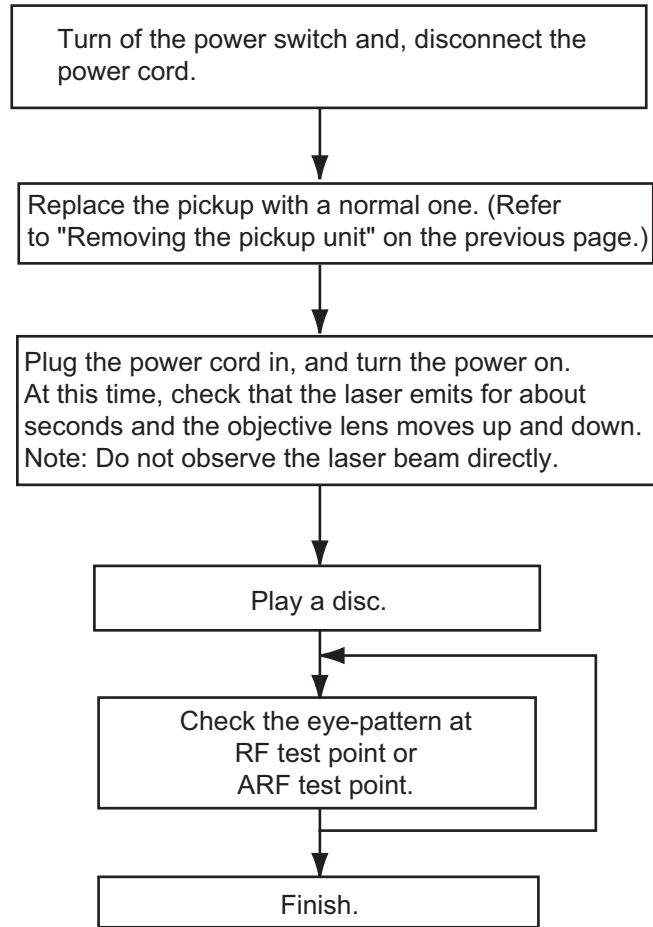


(3) Semi-fixed resistor on the APC PC board

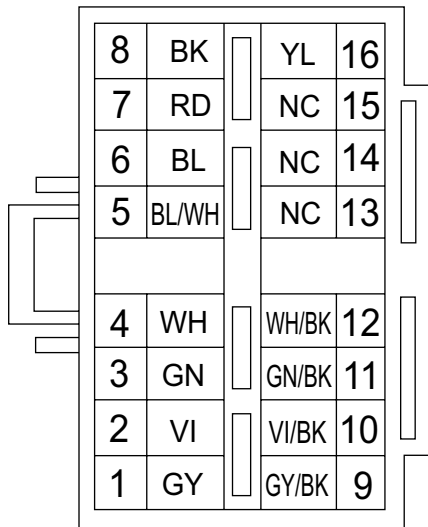
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

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.

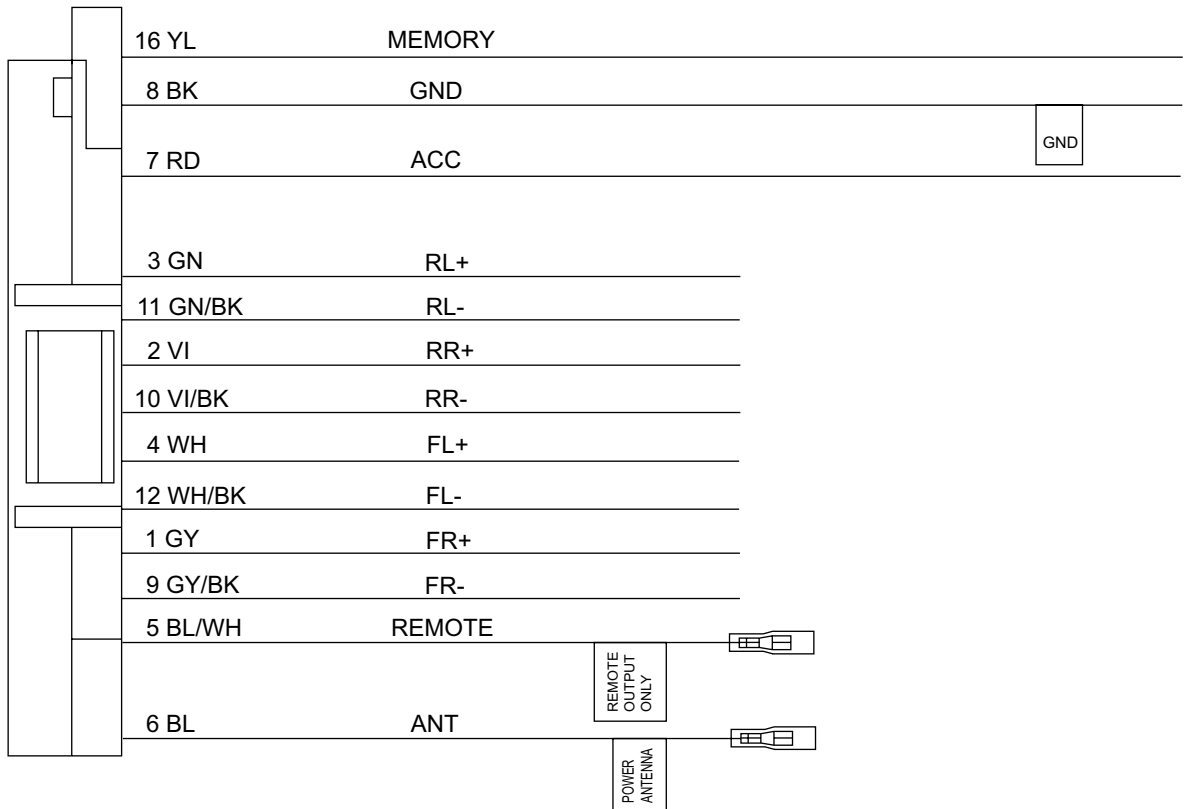
### 5.4 Replacement of laser pickup



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	ANT	Auto Antenna
FR	Front Right	ACC	ACC Line
FL	Front Left	GND	Ground
RL	Rear Left	MEMORY	Memory Backup Battery+
REMOTE	Remote		



**JVC**

Victor Company of Japan, Limited  
AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA136)



# PARTS LIST

[ KD-G415 ] [ KD-G416 ]

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

## Area suffix

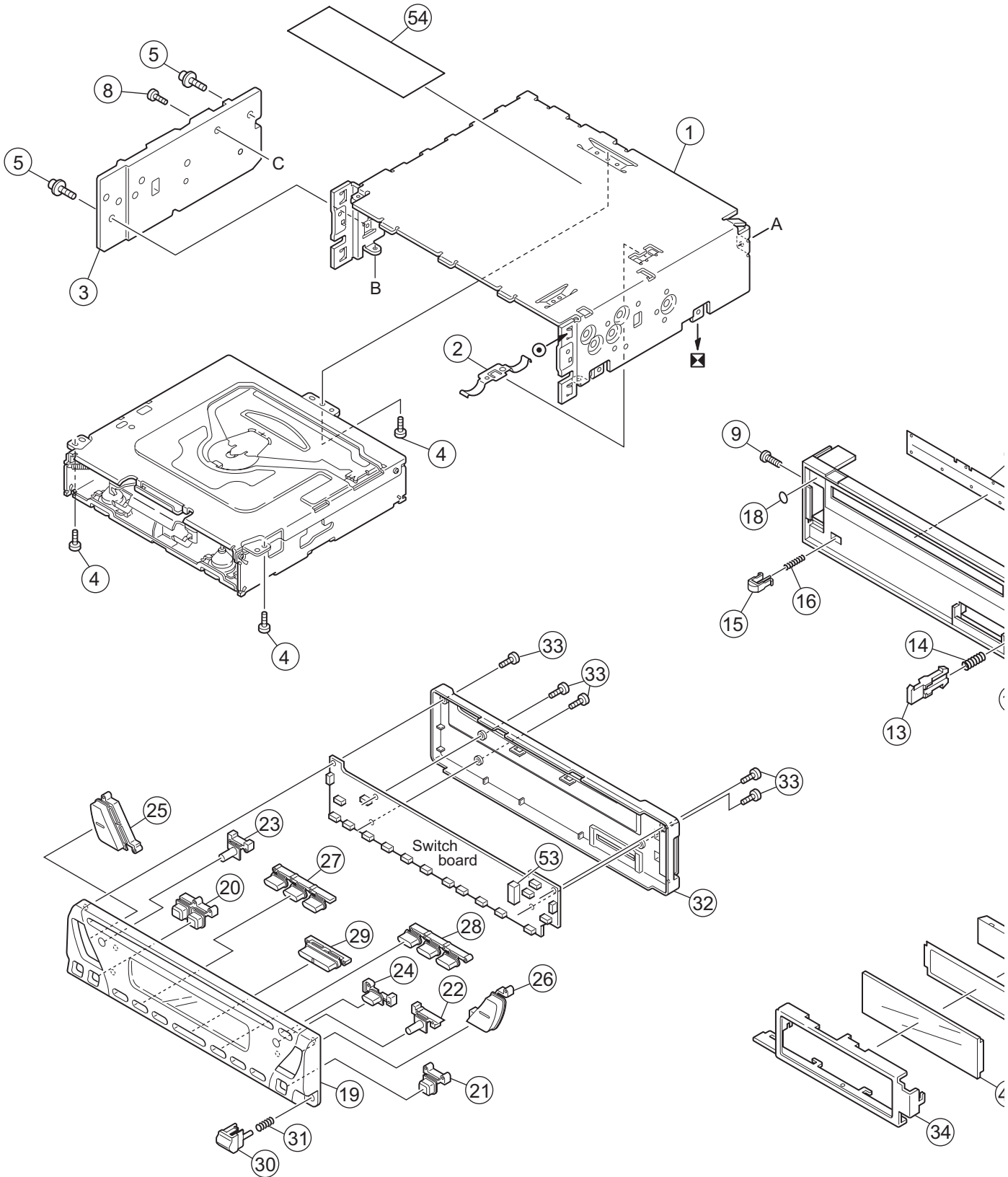
UT	-----	Taiwan
UH	-----	Thailand
UN	-----	Asean
U	-----	OtherAreas

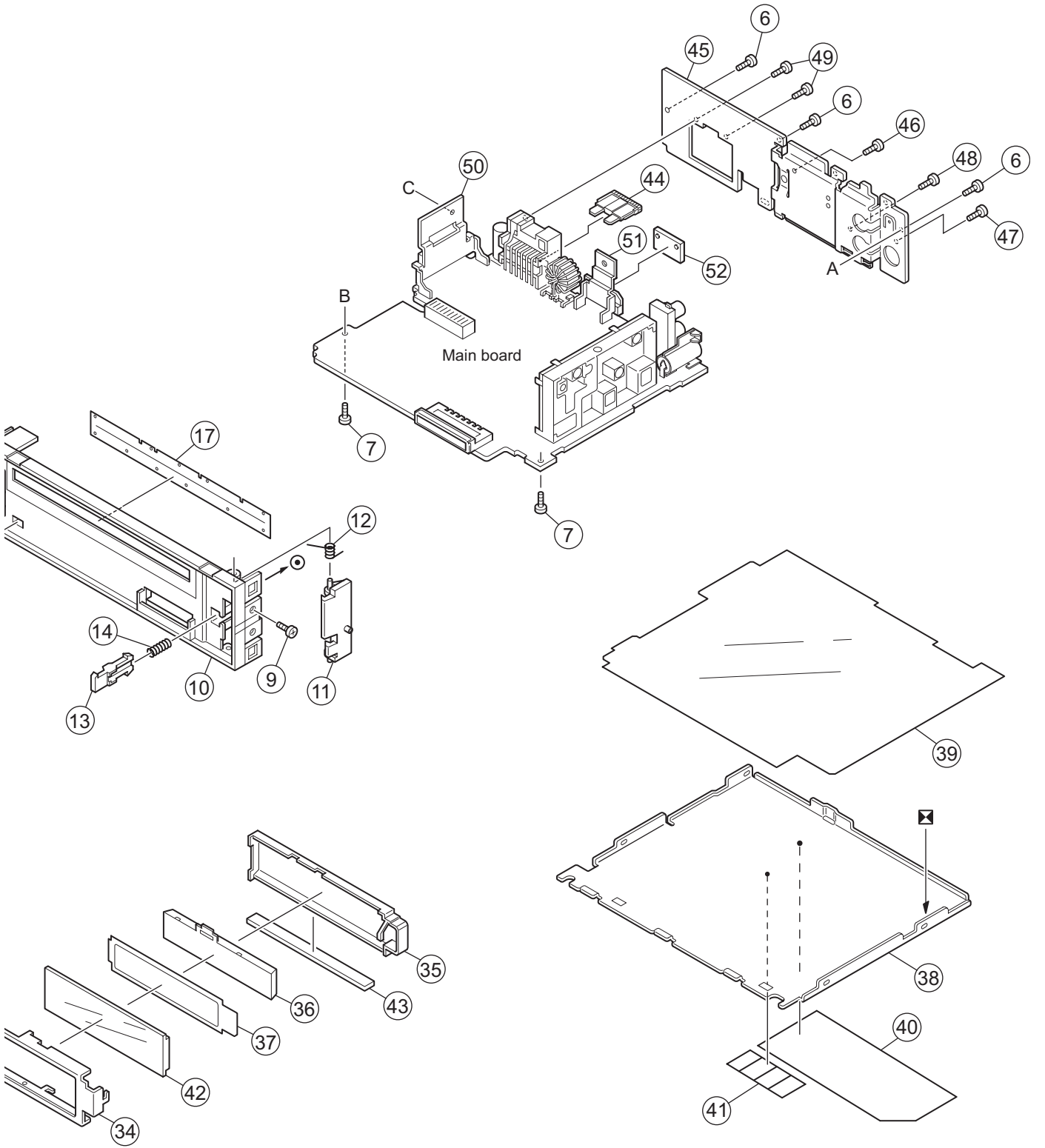
## - Contents -

Exploded view of general assembly and parts list (Block No.M1) .....	3- 2
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Electrical parts list (Block No.05~06) (UH3.UN3.U3) .....	3-16
Packing materials and accessories parts list (Block No.M3) .....	3-22

# Exploded view of general assembly and parts list

Block No. M 1 M M





# 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		
	16	GE40202-009A	COMP.SPRING		
	17	GE40257-001A	BLIND		
	18	FSYH4036-098	SHEET		
	19	GE20172-009A	FRONT PANEL ASSY		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	19	GE20172-013A	FRONT PANEL ASSY		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	20	GE31561-007A	POWER/SEL BTN		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	20	GE31561-008A	POWER/SEL BTN		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	21	GE31572-013A	EQ BUTTON		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	21	GE31572-015A	EQ BUTTON		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	22	GE31562-001A	MODE BUTTON		
	23	GE31563-001A	DISP BUTTON		
	24	GE31564-001A	EJECT BUTTON		
	25	GE31560-007A	VOL BUTTON		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	25	GE31560-008A	VOL BUTTON		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	26	GE31559-007A	SEARCH BUTTON		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	26	GE31559-008A	SEARCH BUTTON		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	27	GE31555-001A	PRESET BTN (L)		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	27	GE31555-005A	PRESET BTN (L)		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	28	GE31556-001A	PRESET BTN (R)		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	28	GE31556-005A	PRESET BTN (R)		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	29	GE31557-007A	D.FUNC BUTTON		
	30	GE31558-003A	DETACH BUTTON		G415U,G415U2,G415U3,G415UH,G415UH2, G415UH3,G415UN,G415UN2,G415UN3,G415UT, G415UT2
	30	GE31558-005A	DETACH BUTTON		G416U,G416U2,G416U3,G416UH,G416UH2, G416UH3,G416UN,G416UN2,G416UN3,G416UT, G416UT2
	31	GE40202-010A	COMP.SPRING		
	32	GE10102-001A	REAR COVER		
	33	VKZ4777-010	MINI SCREW	(x5)	
	34	GE31565-001A	LCD CASE		
	35	GE31566-001A	LENS CASE		
	36	GE31567-001A	LCD LENS		
	37	GE40248-001A	LIGHTING SHEET		
	38	GE31570-001A	BOTTOM COVER		
	39	FSMA3004-203	INSULATOR		
	40	GE31434-003A	NAME PLATE		G415U3,G415UH3,G415UN3
	40	GE31434-001A	NAME PLATE		G415U,G415UH,G415UN,G415UT
	40	GE31434-002A	NAME PLATE		G415U2,G415UH2,G415UN2,G415UT2
	40	GE31437-003A	NAME PLATE		G416U3,G416UH3,G416UN3
	40	GE31437-001A	NAME PLATE		G416U,G416UH,G416UN,G416UT

△	Symbol No.	Part No.	Part Name	Description	Local
	40	GE31437-002A	NAME PLATE		G416U2,G416UH2,G416UN2,G416UT2
	41	LV41843-002A	LASER CAUTION		
	42	QLD0355-001	LCD MODULE		
	43	QNZ0442-001	LCD CONNECTOR		
△	44	QMFZ047-150-T	FUSE	15A	
	45	GE31571-005A	REAR BRACKET		
	46	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	47	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	
	48	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm	
	49	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
	50	GE40172-004A	IC BRACKET		
	51	GE40103-003A	REG BRACKET		
	52	GE40107-002A	HEAT SINK		
	53	GE30854-001A	LED HOLDER		
	54	GE31574-008A	UT LABEL		G415UT,G415UT2
	54	GE31574-009A	UT LABEL		G416UT,G416UT2

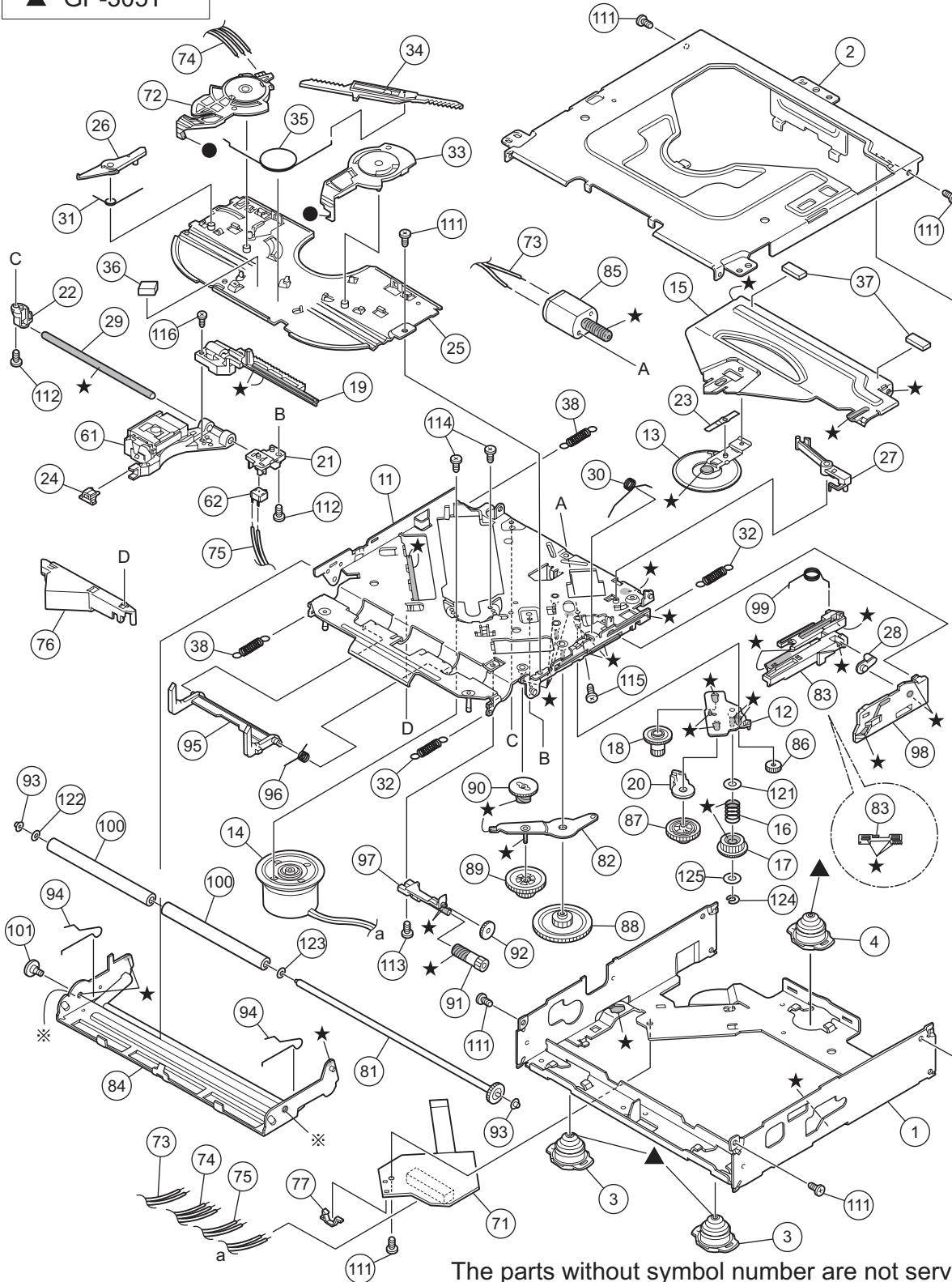
# CD mechanism assembly and parts list

## Grease

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

TN-2001-1011

Block No. M B M M



# 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 (UT.UH.UN.U)

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC161	TEA6320T-X	IC		
IC301	LA47516	POWER IC		
IC401	TC94A34FG-002	IC		
IC461	NJU7772F15-X	IC		
IC481	AK4385ET-X	IC		
IC501	LA6242H-X	IC		
IC521	TA2157FN-X	RF AMP IC		
IC541	TC94A14FA	CD LSI IC		
IC581	NJM4565M-WE	IC		
IC701	UPD784217AGC302	IC		
IC702	IC-PST3433U-X	IC		
IC901	AN80T07A	REGULATOR IC		
Q1	2SD601A/QR/-X	TRANSISTOR		
Q5	2SB709A/R/-X	TRANSISTOR		
Q6	2SB624/4/-X	TRANSISTOR		
Q7	UN2211-X	TRANSISTOR		
Q10	UN2211-X	TRANSISTOR		
Q31	UN2211-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q401	2SB624/4/-X	TRANSISTOR		
Q402	UN2211-X	TRANSISTOR		
Q430	2SD601A/QR/-X	TRANSISTOR		
Q440	UN2211-X	TRANSISTOR		
Q501	2SB1322/RS/-T	TRANSISTOR		
Q502	2SB1132/QR/-W	TRANSISTOR		
Q521	2SB1241/QR/-T	TRANSISTOR		
Q541	UN2111-X	TRANSISTOR		
Q542	UN2211-X	TRANSISTOR		
Q543	UN2111-X	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2211-X	TRANSISTOR		
Q784	UN2111-X	TRANSISTOR		
Q976	UN2211-X	TRANSISTOR		
Q977	2SB709A/QR/-X	TRANSISTOR		
D1	MA111-X	SI DIODE		
D2	MA111-X	SI DIODE		
D4	MA111-X	SI DIODE		
D5	MA111-X	SI DIODE		
D51	MA111-X	SI DIODE		
D341	MA111-X	SI DIODE		
D351	MA111-X	SI DIODE		
D481	MA8051/M/-X	Z DIODE		
D701	MA8062/M/-X	Z 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		
D709	MA8062/M/-X	Z DIODE		
D710	MA111-X	SI DIODE		
D712	MA8062/M/-X	Z DIODE		
D713	MA8062/M/-X	Z DIODE		
D781	MA111-X	SI DIODE		
D782	MA111-X	SI DIODE		
D784	MA8110/M/-X	Z DIODE		
D851	RB160M-30-X	SB DIODE		
D852	RB160M-30-X	SB DIODE		
D901	1N5401-F64	DIODE		
D902	MA111-X	SI DIODE		
D971	RB160M-30-X	SB DIODE		
D972	RB160M-30-X	SB DIODE		
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C3	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	

△ Symbol No.	Part No.	Part Name	Description	Local
C5	QERF1HM-104Z	E CAPACITOR	0.1uF 50V M	
C6	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C7	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C31	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C40	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J	
C44	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C45	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C51	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C81	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C82	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C84	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C91	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C92	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C94	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C95	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C161	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C162	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C164	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C165	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C166	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C167	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C168	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C169	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C170	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C171	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C172	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C174	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C175	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C176	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C177	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C178	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C179	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C180	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C191	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C192	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C193	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C194	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C303	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C304	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C307	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C308	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C315	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C316	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C317	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C318	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C320	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C322	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C323	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C324	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C325	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C341	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C355	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C357	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	



△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C403	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C572	QERF1AM-107Z	E CAPACITOR	100uF 10V M	
C404	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C580	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C405	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C581	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C406	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C582	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C407	QERF1AM-107Z	E CAPACITOR	100uF 10V M		C583	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C408	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C584	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C411	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C585	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C412	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C589	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C413	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C590	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C414	NCB31HK-222X	C CAPACITOR	2200pF 50V K		C591	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C415	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C592	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C416	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C593	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C418	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C594	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C419	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J		C595	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C420	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J		C596	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C421	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C597	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C422	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C599	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C430	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C701	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C431	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C702	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C440	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C461	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	
C462	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C705	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C463	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C706	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C464	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C707	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C481	QERF1CM-476Z	E CAPACITOR	47uF 16V M		C708	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C482	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C709	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C483	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C710	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C501	QERF1AM-476Z	E CAPACITOR	47uF 10V M		C711	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C712	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C713	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C504	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C505	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C506	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C718	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C507	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C770	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C510	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C771	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C512	QERF1CM-476Z	E CAPACITOR	47uF 16V M		C772	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C513	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C781	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C514	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C783	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C784	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C522	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C801	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C523	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C851	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C524	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C852	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C525	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C901	QEZ0676-338	E CAPACITOR	3300uF	
C527	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C528	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C903	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C529	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C904	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C530	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C531	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C532	NDC31HJ-680X	C CAPACITOR	68pF 50V J		C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C533	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C534	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J		C909	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C541	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C910	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C542	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C543	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C544	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C545	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C546	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C547	NCB31HK-153X	C CAPACITOR	0.015uF 50V K		C919	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C548	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C961	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C549	NCB31HK-272X	C CAPACITOR	2700pF 50V K		C962	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C550	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C963	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C551	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C964	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C552	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C965	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C553	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C966	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C554	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C967	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C968	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C556	NCB31HK-471X	C CAPACITOR	470pF 50V K		C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C557	NCB31HK-471X	C CAPACITOR	470pF 50V K						
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R1	NRS181J-120X	MG RESISTOR	12Ω 1/8W J	
C559	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C560	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C561	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C565	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C566	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		R9	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R10	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C570	QERF1AM-476Z	E CAPACITOR	47uF 10V M		R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C571	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R513	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R34	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R514	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R35	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R515	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R36	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R516	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R37	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R517	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R518	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R523	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R524	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R41	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R525	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R42	NRS181J-100X	MG RESISTOR	10Ω 1/8W J		R526	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R527	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R528	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R51	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R52	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R530	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R81	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R531	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R82	NRSA63J-133X	MG RESISTOR	13kΩ 1/16W J		R532	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R91	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R92	NRSA63J-133X	MG RESISTOR	13kΩ 1/16W J		R534	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R162	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R163	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R536	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R164	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R537	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R539	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R172	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R541	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R173	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R542	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R543	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R544	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R181	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R182	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R546	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R301	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R302	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R311	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R549	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R312	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R550	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R551	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R552	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R343	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R553	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R554	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R555	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R556	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R402	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R557	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R558	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R405	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J		R559	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R406	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R581	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R407	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R582	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R408	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R409	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R584	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R412	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R585	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R586	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R587	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R415	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R588	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R591	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R423	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R592	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R424	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R593	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R430	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R594	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R431	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R595	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R432	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R596	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R433	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R597	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R440	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R598	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R451	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R452	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R702	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R453	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R703	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R455	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R705	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R456	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R457	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R709	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R458	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R710	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R461	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R711	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R462	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R712	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R481	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J		R713	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R501	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R502	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R715	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R503	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R716	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R504	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R717	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R508	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J		R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R509	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R510	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R511	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R512	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

△ Symbol No. Part No. Part Name Description Local

## Switch board (UT.UH.UN.U)

Block No. [0][2]

△ Symbol No.	Part No.	Part Name	Description	Local
R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R752	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R759	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R763	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R765	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R771	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R772	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R774	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R776	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R804	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R811	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R851	NRSA63J-103X	MG RESISTOR	10kΩ 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	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L401	NQL114K-470X	INDUCTOR	47uH K	
L402	NQL114K-470X	INDUCTOR	47uH K	
L404	NQL114K-470X	INDUCTOR	47uH K	
L541	NQL114K-470X	INDUCTOR	47uH K	
L543	NQL114K-470X	INDUCTOR	47uH K	
L544	NQL114K-470X	INDUCTOR	47uH K	
L701	QQL244J-4R7Z	COIL	4.7uH J	
L702	NQL79GM-4R7X	COIL	4.7uH M	
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		
J321	QNN0519-001	PIN JACK		
TU1	QAU0312-002	TUNER PACK		
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X401	QAX0413-001Z	CRYSTAL	16.9344MHz	
X701	QAX0617-001Z	CRYSTAL	12.500MHz	
X702	QAX0401-001	CRYSTAL	32.768KHz	

△ Symbol No. Part No. Part Name Description Local

△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
IC602	RPM7338-V4	RM.RECEIVER		
Q671	2SB624/4/-X	TRANSISTOR		
Q672	UN2211-X	TRANSISTOR		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310LT/MN/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310VT/JK/-X	LED		
D609	SML-310VT/JK/-X	LED		
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-310LT/MN/-X	LED		
D618	SML-310LT/MN/-X	LED		
D631	NSPW310BS/BRST/	WHITE LED		
D632	NSPW310BS/BRST/	WHITE LED		
D641	MA8051/M/-X	Z DIODE		
D643	MA111-X	SI DIODE		
D644	MA8062/M/-X	Z 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	
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 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	
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-821X	MG RESISTOR	820Ω 1/16W J	
R630	NRSA63J-122X	MG RESISTOR	1.2kΩ 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-471X	MG RESISTOR	470Ω 1/16W J	
R640	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R642	NRSA63J-122X	MG RESISTOR	1.2kΩ 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	
R661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R662	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R671	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R672	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
R673	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	

△ Symbol No. Part No. Part Name Description Local

## Main board (UT2.UH2.UN2.U2)

Block No. [0][3]

△ Symbol No.	Part No.	Part Name	Description	Local
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		

△ Symbol No.	Part No.	Part Name	Description	Local
IC161	TEA6320T-X	IC		
IC301	LA47516	POWER IC		
IC501	AN41012A-W	IC		
IC521	MN6627945ECUC	IC		
IC523	SN74LVC07ANS-X	LOGIC IC		
IC581	NJM4565M-WE	IC		
IC701	LC723784-9C90	IC		
IC901	AN80T71	REGULATOR IC		
IC981	NJU7772F15-X	IC		
Q1	UN2211-X	TRANSISTOR		
Q2	UN2211-X	TRANSISTOR		
Q4	UN2211-X	TRANSISTOR		
Q5	2SB1197K/QR/-X	TRANSISTOR		
Q6	2SB709A/QR/-X	TRANSISTOR		
Q31	2SD601A/QR/-X	TRANSISTOR		
Q32	2SD601A/QR/-X	TRANSISTOR		
Q301	2SD601A/QR/-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q501	2SB1322/RS/-T	TRANSISTOR		
Q521	2SB709A/QR/-X	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2111-X	TRANSISTOR		
Q902	2SD601A/QR/-X	TRANSISTOR		
Q903	2SB709A/QR/-X	TRANSISTOR		
D1	MA111-X	SI DIODE		
D2	MA111-X	SI DIODE		
D3	MA111-X	SI DIODE		
D4	MA111-X	SI DIODE		
D6	MA111-X	SI DIODE		
D301	UDZS3.3B-X	Z DIODE		
D341	MA111-X	SI DIODE		
D351	MA111-X	SI DIODE		
D501	1A3G-T1	SI DIODE		
D703	MA111-X	SI DIODE		
D706	MA111-X	SI DIODE		
D711	MA8062/M/-X	Z DIODE		
D712	MA8062/M/-X	Z DIODE		
D713	MA8062/M/-X	Z DIODE		
D714	MA8062/M/-X	Z DIODE		
D715	MA8062/M/-X	Z DIODE		
D716	MA8062/M/-X	Z DIODE		
D717	MA8062/M/-X	Z DIODE		
D718	MA8062/M/-X	Z DIODE		
D719	MA8062/M/-X	Z DIODE		
D720	MA8062/M/-X	Z DIODE		
D721	MA8062/M/-X	Z DIODE		
D781	MA111-X	SI DIODE		
D782	MA8110/M/-X	Z DIODE		
D901	1N5401-F64	DIODE		
D903	MA111-X	SI DIODE		
D904	RB160M-30-X	SB DIODE		
D905	RB160M-30-X	SB DIODE		
D906	RB160M-30-X	SB DIODE		
D907	RB160M-30-X	SB DIODE		
C1	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C2	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C3	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C4	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C6	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C8	NDC31HJ-121X	C CAPACITOR	120pF 50V J	
C9	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C10	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C11	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C31	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C32	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C33	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C81	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C82	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C83	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C91	NCB31EK-153X	C CAPACITOR	0.015uF 25V K		C540	NCS31HJ-681X	C CAPACITOR	680pF 50V J	
C92	NCB31HK-562X	C CAPACITOR	5600pF 50V K		C541	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C93	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C542	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C96	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C543	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C99	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C544	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C161	NCB31HK-822X	C CAPACITOR	8200pF 50V K		C545	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C162	NCB31CK-224X	C CAPACITOR	0.22uF 16V K		C546	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C163	NCB21CK-224X	C CAPACITOR	0.22uF 16V K		C547	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C164	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C548	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C165	NCB31HK-562X	C CAPACITOR	5600pF 50V K		C549	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C166	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C550	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C167	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C551	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C168	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C552	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C169	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C553	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C171	NCB31HK-822X	C CAPACITOR	8200pF 50V K		C554	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C172	NCB31CK-224X	C CAPACITOR	0.22uF 16V K		C571	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C173	NCB21CK-224X	C CAPACITOR	0.22uF 16V K		C572	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C174	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C573	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C175	NCB31HK-562X	C CAPACITOR	5600pF 50V K		C574	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C176	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C583	NDC31HJ-821X	C CAPACITOR	820pF 50V J	
C177	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C584	NDC31HJ-821X	C CAPACITOR	820pF 50V J	
C178	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C585	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C179	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J		C586	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C183	QTE1H54-225Z	E CAPACITOR	2.2uF 50V		C587	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C184	QTE1H54-225Z	E CAPACITOR	2.2uF 50V		C588	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C191	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C589	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C192	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C590	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C193	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C591	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C194	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		C592	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C195	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C701	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C301	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C702	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C302	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		C703	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C303	NCB31HK-223X	C CAPACITOR	0.022uF 50V K		C704	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C304	NCB31HK-223X	C CAPACITOR	0.022uF 50V K		C705	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C305	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C706	NDC31HJ-221X	C CAPACITOR	220pF 50V J	
C306	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C711	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C307	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C712	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C308	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C713	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C309	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M		C715	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C310	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C311	QERF1CM-226Z	E CAPACITOR	22uF 16V M		C781	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C312	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C782	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C783	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C801	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C315	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C901	QEZ0676-338	E CAPACITOR	3300uF	
C317	QERF1HM-105Z	E CAPACITOR	1uF 50V M		C902	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C318	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C903	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K		C904	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C341	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C905	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C351	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C906	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C501	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		C907	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C502	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C908	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C909	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C504	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C910	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C505	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M		C911	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C506	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C913	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C511	NCB31HK-222X	C CAPACITOR	2200pF 50V K		C914	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C513	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C915	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C515	NCB31HK-122X	C CAPACITOR	1200pF 50V K		C916	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C517	NCB31HK-182X	C CAPACITOR	1800pF 50V K		C919	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C518	NDC31HJ-680X	C CAPACITOR	68pF 50V J		C971	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C521	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C972	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C522	NCB31CK-224X	C CAPACITOR	0.22uF 16V K		C983	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C523	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C984	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C524	NDC31HJ-561X	C CAPACITOR	560pF 50V J						
C525	NCB31HK-223X	C CAPACITOR	0.022uF 50V K		R1	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C526	NCB31HK-223X	C CAPACITOR	0.022uF 50V K		R2	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C527	NCB31EK-332X	C CAPACITOR	3300pF 25V K		R3	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C528	NDC31HJ-331X	C CAPACITOR	330pF 50V J		R4	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C531	NCB31AK-334X	C CAPACITOR	0.33uF 10V K		R5	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
C532	NCB31AK-334X	C CAPACITOR	0.33uF 10V K		R6	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
C533	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R9	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
C534	NCB31EK-332X	C CAPACITOR	3300pF 25V K		R10	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
C535	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C536	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R12	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C537	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R13	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C538	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R14	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C539	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R16	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R31	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R548	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R32	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R550	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R33	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R551	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R34	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R553	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R35	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R554	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R36	NRS181J-471X	MG RESISTOR	470Ω 1/8W J		R555	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R556	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R81	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R557	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R82	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J		R558	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R91	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R559	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R92	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J		R560	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J	
R162	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R561	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R163	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R562	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R164	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R565	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R566	NRSA02J-100X	MG RESISTOR	10Ω 1/10W J	
R166	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R581	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R167	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R582	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R172	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R583	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R173	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R584	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R585	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R586	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R176	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R587	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R177	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R588	NRSA63J-303X	MG RESISTOR	30kΩ 1/16W J	
R191	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J		R589	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R301	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J		R590	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R302	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R591	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	
R303	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R592	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R304	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R593	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R341	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R594	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R342	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R701	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R345	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R703	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R351	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R352	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R705	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R355	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R706	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R501	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J		R707	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R502	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R503	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J		R709	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R504	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		R710	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R505	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R711	NRS181J-103X	MG RESISTOR	10kΩ 1/8W J	
R506	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R712	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R507	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		R713	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R508	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R715	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R509	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		R716	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R510	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R717	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R511	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R718	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R512	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R513	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R727	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R514	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R728	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R515	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R516	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R517	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R731	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R518	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R732	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R519	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R733	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R521	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		R735	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R522	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R736	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R523	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R737	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R524	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R738	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R525	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R739	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R526	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R740	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R527	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R741	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R528	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R742	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R529	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R743	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R530	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R745	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R531	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R749	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R532	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R533	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R752	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R534	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J		R753	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R535	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R754	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R537	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J		R755	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R538	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J		R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R539	NRS181J-0R0X	MG RESISTOR	0Ω 1/8W J		R804	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R540	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R811	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R541	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R901	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R542	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R902	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R543	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R903	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R544	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R905	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R545	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R906	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R907	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R908	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R612	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R909	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R613	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R910	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R614	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R911	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J		R615	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R912	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J		R627	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R918	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J		R628	NRSA02J-391X	MG RESISTOR	390Ω 1/10W J	
R971	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R629	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R972	NRSA02J-101X	MG RESISTOR	100Ω 1/10W J		R630	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
L1	QLL244J-4R7Z	COIL	4.7uH J		R632	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
L571	QLL244K-4R7Z	COIL	4.7uH K		R634	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
L701	QLL244K-4R7Z	COIL	4.7uH K		R636	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
L901	QQR0703-001	CHOKE COIL			R638	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
CN501	QGB2027M4-22S	CONNECTOR	B-B (1-22)		R640	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
CN701	QGZ1601J1-15	CONNECTOR	(1-15)		R642	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
CN901	QNZ0611-001	16P CONNECTOR			R644	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
J1	QNB0190-001	CAR ANT JACK			R651	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
J321	QNN0519-001	PIN JACK			R652	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
TU1	QAU0394-002	TUNER PACK			R653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
X521	QAX0714-001Z	C RESONATOR	16.000MHz		R654	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
X701	QAX0406-001Z	CRYSTAL	4.500MHz		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	
					R661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
					R662	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
					R671	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
					R672	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
					R673	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	

## Switch board (UT2.UH2.UN2.U2)

Block No. [0][4]

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER			S601	NSW0124-001X	TACT SW		
IC602	RPM7338-V4	RM.RECEIVER			S602	NSW0124-001X	TACT SW		
Q671	2SB624/4/-X	TRANSISTOR			S603	NSW0124-001X	TACT SW		
Q672	UN2211-X	TRANSISTOR			S604	NSW0124-001X	TACT SW		
D601	SML-310VT/JK/-X	LED			S605	NSW0124-001X	TACT SW		
D602	SML-310VT/JK/-X	LED			S606	NSW0124-001X	TACT SW		
D603	SML-310VT/JK/-X	LED			S607	NSW0124-001X	TACT SW		
D604	SML-310LT/MN/-X	LED			S608	NSW0124-001X	TACT SW		
D605	SML-310VT/JK/-X	LED			S609	NSW0124-001X	TACT SW		
D606	SML-310VT/JK/-X	LED			S610	NSW0124-001X	TACT SW		
D607	SML-310VT/JK/-X	LED			S611	NSW0124-001X	TACT SW		
D608	SML-310VT/JK/-X	LED			S612	NSW0124-001X	TACT SW		
D609	SML-310VT/JK/-X	LED			S613	NSW0124-001X	TACT SW		
D610	SML-310VT/JK/-X	LED			S614	NSW0124-001X	TACT SW		
D611	SML-310VT/JK/-X	LED			S615	NSW0124-001X	TACT SW		
D612	SML-310VT/JK/-X	LED			S616	NSW0124-001X	TACT SW		
D613	SML-310VT/JK/-X	LED			S617	NSW0124-001X	TACT SW		
D614	SML-310VT/JK/-X	LED			S618	NSW0124-001X	TACT SW		
D615	SML-310VT/JK/-X	LED							
D616	SML-310VT/JK/-X	LED							
D617	SML-310LT/MN/-X	LED							
D618	SML-310LT/MN/-X	LED							
D631	NSPW310BS/BRST/	WHITE LED							
D632	NSPW310BS/BRST/	WHITE LED							
D641	MA8051/M/-X	Z DIODE							
D643	MA111-X	SI DIODE							
D644	MA8062/M/-X	Z 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						
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 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						
R611	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J						

# Main board (UH3.UN3.U3)

Block No. [0][5]

Symbol No.	Part No.	Part Name	Description	Local
IC31	TB2118F-X	PLL IC		
IC161	TEA6320T-X	IC		
IC301	LA47516	POWER IC		
IC401	TC94A34FG-002	IC		
IC461	NJU7772F15-X	IC		
IC481	AK4385ET-X	IC		
IC501	LA6242H-X	IC		
IC521	TA2157FN-X	RF AMP IC		
IC541	TC94A14FA	CD LSI IC		
IC581	NJM4565M-WE	IC		
IC701	UPD784217AGC302	IC		
IC702	IC-PST3433U-X	IC		
IC901	AN80T07A	REGULATOR IC		
Q1	2SD601A/QR/-X	TRANSISTOR		
Q5	2SB709A/R/-X	TRANSISTOR		
Q6	2SB624/4/-X	TRANSISTOR		
Q7	UN2211-X	TRANSISTOR		
Q10	UN2211-X	TRANSISTOR		
Q31	UN2211-X	TRANSISTOR		
Q341	KTD1304-X	TRANSISTOR		
Q351	KTD1304-X	TRANSISTOR		
Q401	2SB624/4/-X	TRANSISTOR		
Q402	UN2211-X	TRANSISTOR		
Q430	2SD601A/QR/-X	TRANSISTOR		
Q440	UN2211-X	TRANSISTOR		
Q501	2SB1322/RS-T	TRANSISTOR		
Q502	2SB1132/QR/-W	TRANSISTOR		
Q521	2SB1241/QR-T	TRANSISTOR		
Q541	UN2111-X	TRANSISTOR		
Q542	UN2211-X	TRANSISTOR		
Q543	UN2111-X	TRANSISTOR		
Q781	UN2111-X	TRANSISTOR		
Q782	UN2211-X	TRANSISTOR		
Q784	UN2111-X	TRANSISTOR		
Q976	UN2211-X	TRANSISTOR		
Q977	2SB709A/QR/-X	TRANSISTOR		
D1	MA111-X	SI DIODE		
D2	MA111-X	SI DIODE		
D4	MA111-X	SI DIODE		
D5	MA111-X	SI DIODE		
D51	MA111-X	SI DIODE		
D341	MA111-X	SI DIODE		
D351	MA111-X	SI DIODE		
D481	MA8051/M/-X	Z DIODE		
D701	MA8062/M/-X	Z 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		
D709	MA8062/M/-X	Z DIODE		
D710	MA111-X	SI DIODE		
D712	MA8062/M/-X	Z DIODE		
D713	MA8062/M/-X	Z DIODE		
D781	MA111-X	SI DIODE		
D782	MA111-X	SI DIODE		
D784	MA8110/M/-X	Z DIODE		
D851	RB160M-30-X	SB DIODE		
D852	RB160M-30-X	SB DIODE		
D901	1N5401-F64	DIODE		
D902	MA111-X	SI DIODE		
D971	RB160M-30-X	SB DIODE		
D972	RB160M-30-X	SB DIODE		
C1	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C2	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C3	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C4	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C5	QERF1HM-104Z	E CAPACITOR	0.1uF 50V M	
C6	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	

Symbol No.	Part No.	Part Name	Description	Local
C7	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C31	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C32	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
C33	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C34	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C35	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C36	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	
C37	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C38	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C39	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C40	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C41	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C42	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C43	QFV61HJ-473Z	MF CAPACITOR	0.047uF 50V J	
C44	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C45	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C46	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C47	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C48	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C49	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C50	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C51	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C81	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C82	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C84	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C91	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C92	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C94	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C95	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C161	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C162	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C164	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C165	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C166	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C167	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C168	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C169	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C170	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C171	QTE1H54-225Z	E CAPACITOR	2.2uF 50V	
C172	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C174	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C175	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C176	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C177	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C178	NCB31HK-562X	C CAPACITOR	5600pF 50V K	
C179	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C180	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C191	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C192	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C193	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C194	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C301	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C302	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C303	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C304	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C307	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C308	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C311	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C312	QFV91HJ-474Z	MF CAPACITOR	0.47uF 50V J	
C313	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C314	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C315	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C316	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C317	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C318	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C319	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C320	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C322	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C323	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C324	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C325	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C341	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C355	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C357	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C403	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C404	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C405	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C406	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	



△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C407	QERF1AM-107Z	E CAPACITOR	100uF 10V M		C583	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C408	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C584	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C411	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C585	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C412	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C589	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C413	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C590	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C414	NCB31HK-222X	C CAPACITOR	2200pF 50V K		C591	NCB31HK-332X	C CAPACITOR	3300pF 50V K	
C415	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C592	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C416	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C593	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C418	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C594	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C419	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J		C595	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C420	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J		C596	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C421	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C597	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C422	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C599	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C430	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C701	NDC31HJ-220X	C CAPACITOR	22pF 50V J	
C431	NDC31HJ-101X	C CAPACITOR	100pF 50V J		C702	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C440	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C703	NDC31HJ-270X	C CAPACITOR	27pF 50V J	
C461	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C704	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	
C462	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C705	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C463	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		C706	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C464	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C707	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C481	QERF1CM-476Z	E CAPACITOR	47uF 16V M		C708	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C482	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C709	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C483	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C710	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M	
C501	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		C711	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C712	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C503	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C713	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C504	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C716	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C505	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C717	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C506	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C718	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C507	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C770	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C510	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C771	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C512	QERF1CM-476Z	E CAPACITOR	47uF 16V M		C772	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C513	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C781	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C514	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C783	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	
C521	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C784	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C522	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C801	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C523	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C851	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C524	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C852	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C525	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C901	QEZ0676-338	E CAPACITOR	3300uF	
C527	NCB31HK-682X	C CAPACITOR	6800pF 50V K		C902	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C528	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C903	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C529	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C904	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C530	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C531	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C532	NDC31HJ-680X	C CAPACITOR	68pF 50V J		C907	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C533	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C534	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J		C909	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C541	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C910	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C542	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C543	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C544	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		C913	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C545	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C914	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C546	NDC31HJ-470X	C CAPACITOR	47pF 50V J		C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C547	NCB31HK-153X	C CAPACITOR	0.015uF 50V K		C919	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C548	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C961	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C549	NCB31HK-272X	C CAPACITOR	2700pF 50V K		C962	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C550	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		C963	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C551	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C964	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C552	NCB31EK-333X	C CAPACITOR	0.033uF 25V K		C965	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C553	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C966	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C554	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C967	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C555	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		C968	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C556	NCB31HK-471X	C CAPACITOR	470pF 50V K		C971	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C557	NCB31HK-471X	C CAPACITOR	470pF 50V K						
C558	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R1	NRS181J-120X	MG RESISTOR	12Ω 1/8W J	
C559	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R2	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C560	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R4	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C561	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		R5	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C562	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R6	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C565	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C566	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M		R9	NRSA63J-470X	MG RESISTOR	4.7kΩ 1/16W J	
C568	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R10	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C570	QERF1AM-476Z	E CAPACITOR	47uF 10V M		R31	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	
C571	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R32	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J	
C572	QERF1AM-107Z	E CAPACITOR	100uF 10V M		R33	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C580	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M		R34	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C581	NCB31HK-332X	C CAPACITOR	3300pF 50V K		R35	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C582	NDC31HJ-271X	C CAPACITOR	270pF 50V J		R36	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R37	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R517	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R38	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R518	NRSA02J-822X	MG RESISTOR	8.2kΩ 1/10W J	
R39	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R523	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R40	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J		R524	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R41	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R525	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R42	NRSA02J-100X	MG RESISTOR	10Ω 1/10W J		R526	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R527	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R44	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R528	NRSA02J-220X	MG RESISTOR	22Ω 1/10W J	
R51	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R529	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R52	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R530	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R81	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R531	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R82	NRSA63J-133X	MG RESISTOR	13kΩ 1/16W J		R532	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R91	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R533	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R92	NRSA63J-133X	MG RESISTOR	13kΩ 1/16W J		R534	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R162	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R535	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R163	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R536	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R164	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R537	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R165	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R539	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R172	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R541	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R173	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R542	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R543	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R175	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R544	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R181	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R545	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R182	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R546	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R301	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R302	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R311	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R549	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R312	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R550	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R551	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R552	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R343	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R553	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R554	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J		R555	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R556	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R402	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R557	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R404	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R558	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R405	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J		R559	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R406	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R581	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R407	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R582	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R408	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R583	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R409	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R584	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R412	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R585	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R413	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R586	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R414	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R587	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R415	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R588	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R416	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R591	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R423	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R592	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R424	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R593	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R430	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R594	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R431	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R595	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R432	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R596	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R433	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R597	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R440	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R598	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R451	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J		R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R452	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R702	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R453	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R703	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R454	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R455	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R705	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R456	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R708	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R457	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R709	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R458	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R710	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R461	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R711	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R462	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R712	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R481	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J		R713	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R501	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R714	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R502	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R715	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R503	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R716	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R504	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R717	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R508	NRSA63J-302X	MG RESISTOR	3kΩ 1/16W J		R720	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R509	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J		R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R510	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		R722	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R511	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R723	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R512	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R725	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R513	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R726	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R514	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		R728	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R515	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		R729	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R516	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R734	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R735	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R736	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R745	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R746	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R747	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R748	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R749	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R752	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R753	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R754	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R755	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R756	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R757	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R759	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R763	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R765	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R771	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R772	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R774	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R776	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R804	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R811	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R851	NRSA63J-103X	MG RESISTOR	10kΩ 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	
R971	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R972	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	
R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
L1	QQL244J-4R7Z	COIL	4.7uH J	
L401	NQL114K-470X	INDUCTOR	47uH K	
L402	NQL114K-470X	INDUCTOR	47uH K	
L404	NQL114K-470X	INDUCTOR	47uH K	
L541	NQL114K-470X	INDUCTOR	47uH K	
L543	NQL114K-470X	INDUCTOR	47uH K	
L544	NQL114K-470X	INDUCTOR	47uH K	
L701	QQL244J-4R7Z	COIL	4.7uH J	
L702	NQL79GM-4R7X	COIL	4.7uH M	
L901	QQR0703-001	CHOKO 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		
J321	QNN0519-001	PIN JACK		
TU1	QAU0223-001	TUNER		
X31	QAX0616-001Z	CRYSTAL	10.250MHz	
X401	QAX0413-001Z	CRYSTAL	16.9344MHz	
X701	QAX0617-001Z	CRYSTAL	12.500MHz	
X702	QAX0401-001	CRYSTAL	32.768KHz	

## Switch board (UH3.UN3.U3)

Block No. [0][6]

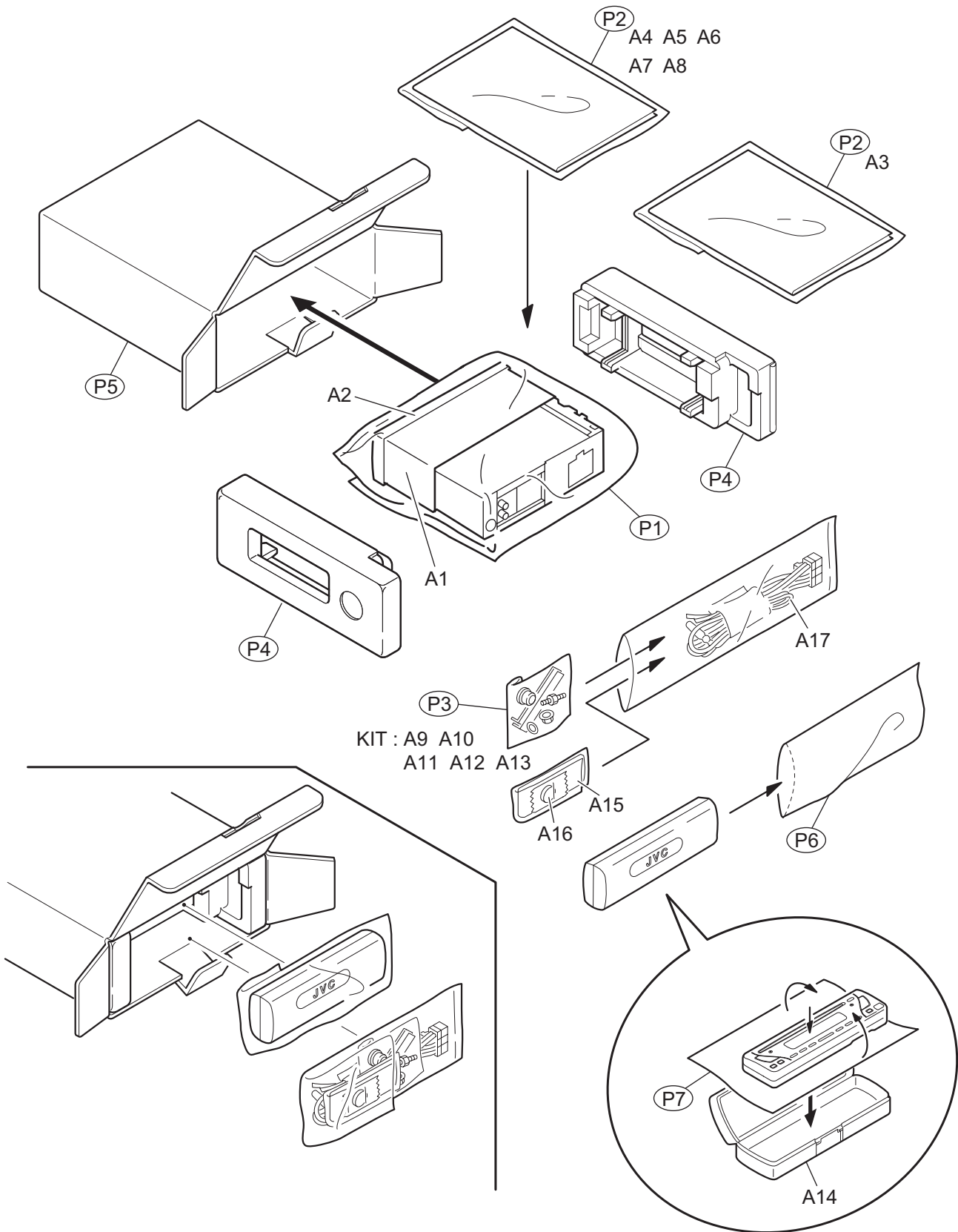
△ Symbol No.	Part No.	Part Name	Description	Local
IC601	PT6523LQ-L	LCD DRIVER		
IC602	RPM7338-V4	RM.RECEIVER		
Q671	2SB624/4/-X	TRANSISTOR		
Q672	UN2211-X	TRANSISTOR		
D601	SML-310VT/JK/-X	LED		
D602	SML-310VT/JK/-X	LED		
D603	SML-310VT/JK/-X	LED		
D604	SML-310LT/MN/-X	LED		
D605	SML-310VT/JK/-X	LED		
D606	SML-310VT/JK/-X	LED		
D607	SML-310VT/JK/-X	LED		
D608	SML-310VT/JK/-X	LED		
D609	SML-310VT/JK/-X	LED		
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-310LT/MN/-X	LED		
D618	SML-310LT/MN/-X	LED		
D631	NSPW310BS/BRST/	WHITE LED		
D632	NSPW310BS/BRST/	WHITE LED		
D641	MA8051/M/-X	Z DIODE		
D643	MA111-X	SI DIODE		
D644	MA8062/M/-X	Z 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	
C612	NBE20JM-475X	TA E CAPACITOR	4.7uF 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	
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-821X	MG RESISTOR	820Ω 1/16W J	
R630	NRSA63J-122X	MG RESISTOR	1.2kΩ 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-471X	MG RESISTOR	470Ω 1/16W J	
R640	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R642	NRSA63J-122X	MG RESISTOR	1.2kΩ 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	
R661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R662	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R671	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R672	NRSA02J-473X	MG RESISTOR	47kΩ 1/10W J	
R673	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	

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		

**<MEMO>**

# Packing materials and accessories parts list

Block No. M 3 M M



# Packing and Accessories

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

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	GE20137-003A	MOUNTING SLEEVE		
A 2	GE20135-001A	TRIM PLATE		G415U, G415U2, G415U3, G415UH, G415UH2, G415UH3, G415UN, G415UN2, G415UN3, G415UT, G415UT2
A 2	GE20135-003A	TRIM PLATE		G416U, G416U2, G416U3, G416UH, G416UH2, G416UH3, G416UN, G416UN2, G416UN3, G416UT, G416UT2
A 3	GET0259-002B	INST BOOK	KOR CHI(TAIWAN) ARA PER	G415U2, G416U2
A 3	GET0259-002A	INST BOOK	KOR CHI(TAIWAN) ARA PER	G415U, G415U3, G416U, G416U3
A 4	GET0259-001B	INST BOOK	ENG THA	G415U2, G415UH2, G416U2, G416UH2
A 4	GET0259-001A	INST BOOK	ENG THA	G415U, G415U3, G415UH, G415UH3, G416U, G416U3, G416UH, G416UH3
A 4	GET0259-003B	INST BOOK	ENG INA	G415UN2, G416UN2
A 4	GET0259-003A	INST BOOK	ENG INA	G415UN, G415UN3, G416UN, G416UN3
A 4	GET0259-007A	INST BOOK	ENG CHI(TAIWAN)	G415UT, G416UT
A 4	GET0259-007B	INST BOOK	ENG CHI(TAIWAN)	G415UT2, G416UT2
A 5	GET0259-009B	INST BOOK	RUS	G415U2, G416U2
A 5	GET0259-009A	INST BOOK	RUS	G415U, G415U3, G416U, G416U3
A 6	GET0259-004A	INSTALL MANUAL		G415U, G415U2, G415U3, G415UH, G415UH2, G415UH3, G416U, G416U2, G416U3, G416UH, G416UH2, G416UH3
A 6	GET0259-006A	INSTALL MANUAL		G415UN, G415UN2, G415UN3, G416UN, G416UN2, G416UN3
A 6	GET0259-008A	INSTALL MANUAL		G415UT, G415UT2, G416UT, G416UT2
A 7	GET0259-005A	INSTALL MANUAL		G415U, G415U2, G415U3, G416U, G416U2, G416U3
A 8	GET0259-010A	INSTALL MANUAL		G415U, G415U2, G415U3, G416U, G416U2, G416U3
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	HARD CASE		
A 15	RM-RK50	REMOCON UNIT		
A 16	-----	BATTERY		
A 17	QAM0390-004	16P CORD ASSY		
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	(x2)	G415U, G415U2, G415U3, G416U, G416U2, G416U3
P 2	FSPG4002-001	POLY BAG		G415UH, G415UH2, G415UH3, G415UN, G415UN2, G415UN3, G415UT, G415UT2, G416UH, G416UH2, G416UH3, G416UN, G416UN2, G416UN3, G416UT, G416UT2
P 3	QPA00801205	POLY BAG	8cm x 12cm	
P 4	GE10070-003A	EPS CUSHION		
P 5	GE31435-002A	CARTON		G415U, G415U2, G415U3, G415UH, G415UH2, G415UH3, G415UN, G415UN2, G415UN3, G415UT, G415UT2
P 5	GE31438-002A	CARTON		G416U, G416U2, G416U3, G416UH, G416UH2, G416UH3, G416UN, G416UN2, G416UN3, G416UT, G416UT2
P 6	QPA01003003	POLY BAG	10cm x 30cm	
P 7	FSYH4036-068	SHEET		

# JVC

# SCHEMATIC DIAGRAMS

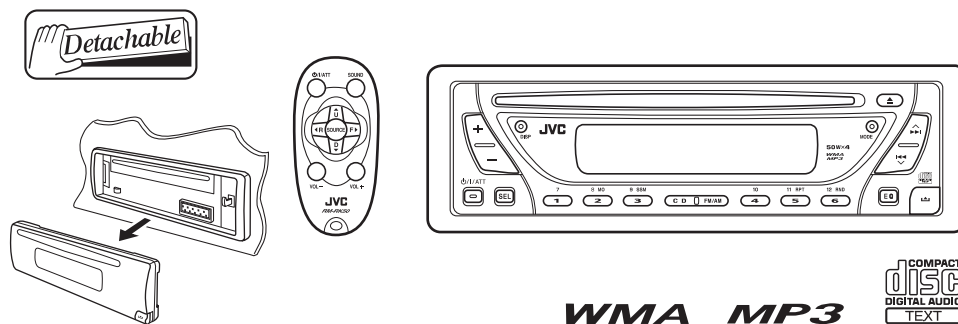
## CD RECEIVER

# KD-G415, KD-G416

CD-ROM No.SML200504

### Area suffix

UT ----- Taiwan  
UH ----- Thailand  
UN ----- Indonesia  
U ----- Other Areas




	KD-G415	KD-G416
CONTROL PANEL	BLACK	SILVER

### Contents

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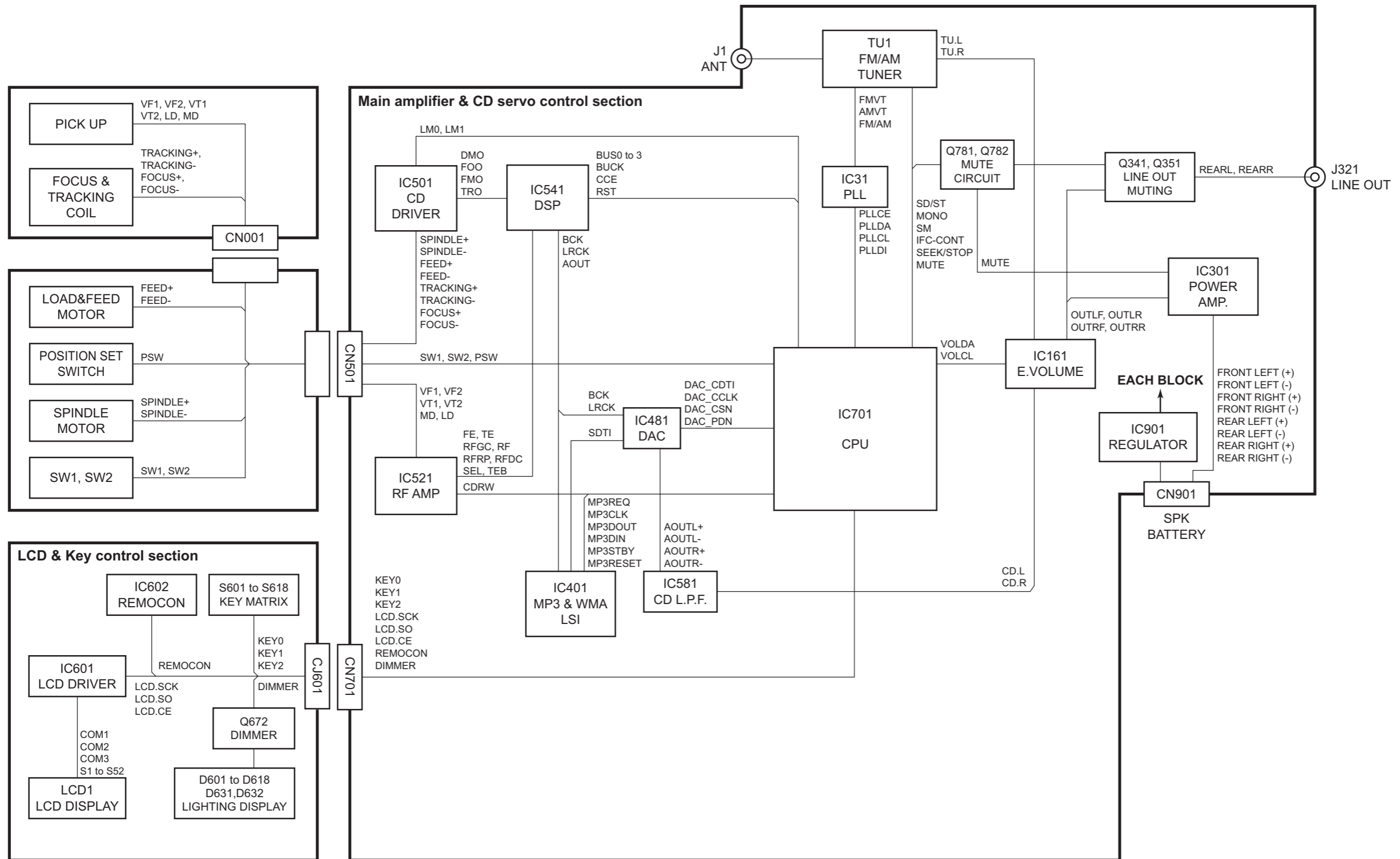


## Safety precaution

 **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 performing 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.

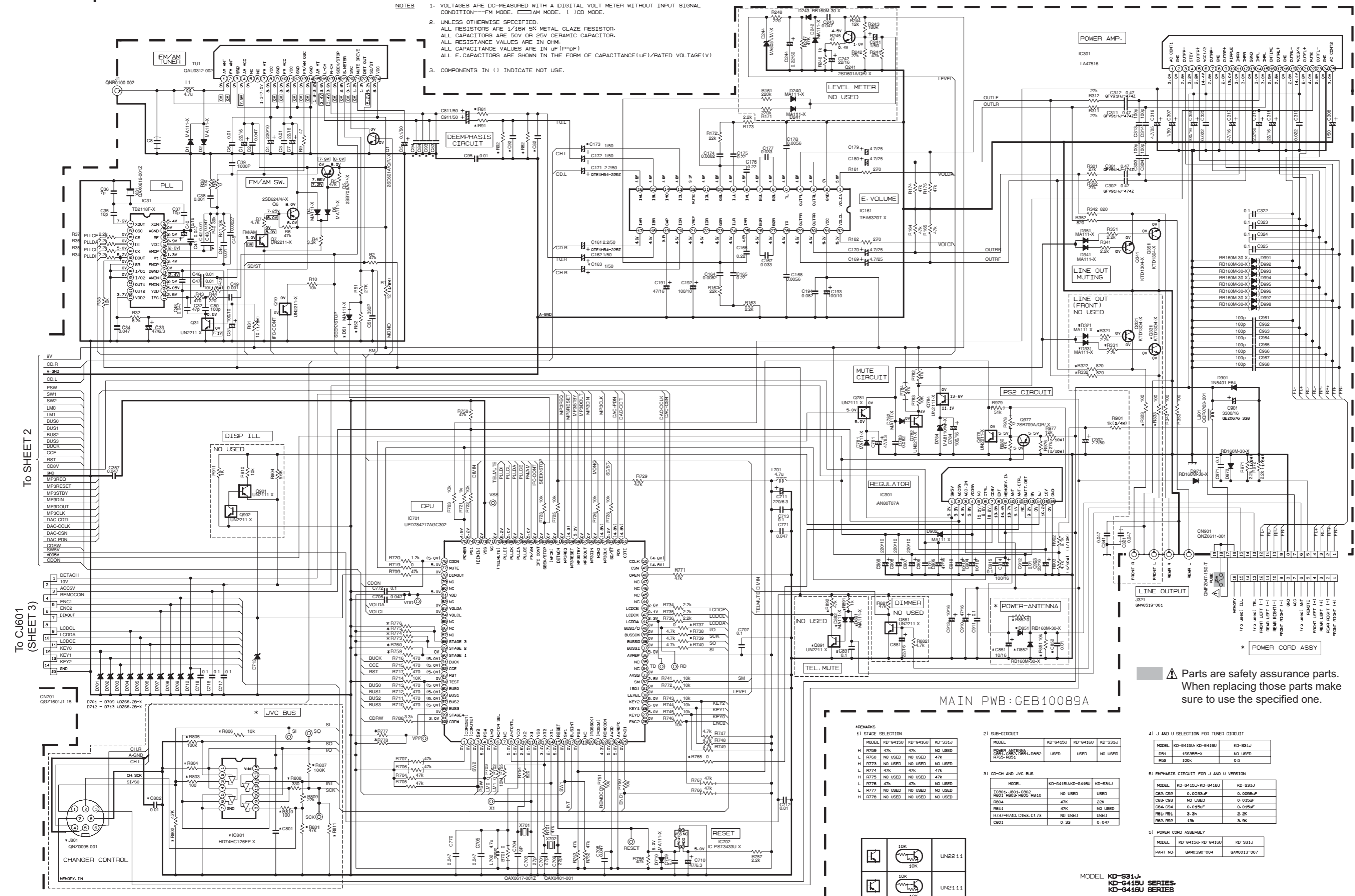
# Block diagram (for UT, UH, UN and U version)



# Standard schematic diagrams (for UT, UH, UN and U version)

## ■ Main amplifier section

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION—FM MODE. □ AM MODE. ( ) CD MODE.
  2. UNLESS OTHERWISE SPECIFIED.  
ALL RESISTORS ARE 1/16W 5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V DR 25V CERAMIC CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM.  
ALL CAPACITANCE VALUES ARE IN UF(PF)  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(UF)/RATED VOLTAGE(V)
  3. COMPONENTS IN ( ) INDICATE NOT USE.



REMARKS

1) STAGE SELECTION			
MODEL	KD-G415U	KD-G416U	KD-831J
H	R759	47k	NO USED
L	R760	NO USED	NO USED
H	R773	NO USED	NO USED
L	R774	47k	47k
L	R775	NO USED	NO USED
L	R776	47k	47k
L	R777	NO USED	NO USED
L	R778	NO USED	NO USED

2) SUB-CIRCUIT			
MODEL	KD-G415U	KD-G416U	KD-831J
POWER ANTENNA	USED	USED	NO USED
R765, R851			

3) CD-CH AND JVC BUS			
MODEL	KD-G415U(KD-G416U)	KD-831J	
JVC BUS	NO USED	USED	
R804	47k	NO USED	
R811	47k	NO USED	
R737-R740, C163, C173	NO USED	USED	
C801	0.33	0.047	

4) J AND U SELECTION FOR TUNER CIRCUIT			
MODEL	KD-G415U(KD-G416U)	KD-831J	
D51	1S8355-X	NO USED	
R82	100k	0.0	

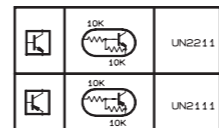
  

5) EMPHASIS CIRCUIT FOR J AND U VERSION			
MODEL	KD-G415U(KD-G416U)	KD-831J	
C82, C82	0.0033UF	0.0056UF	
C83, C83	NO USED	0.015UF	
C84, C84	0.015UF	0.015UF	
R81, R81	3.3k	2.2k	
R82, R82	15k	3.9k	

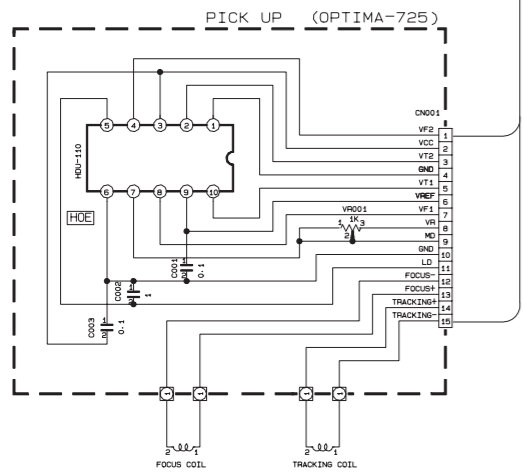
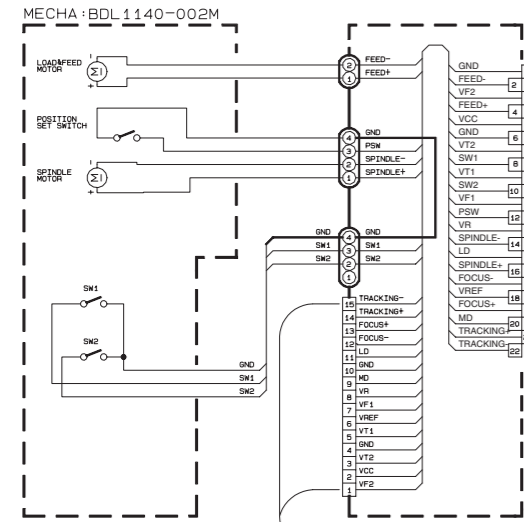
5) POWER CORD ASSEMBLY			
MODEL	KD-G415U(KD-G416U)	KD-831J	
PART NO.	G4M0390-004	G4M013-007	

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

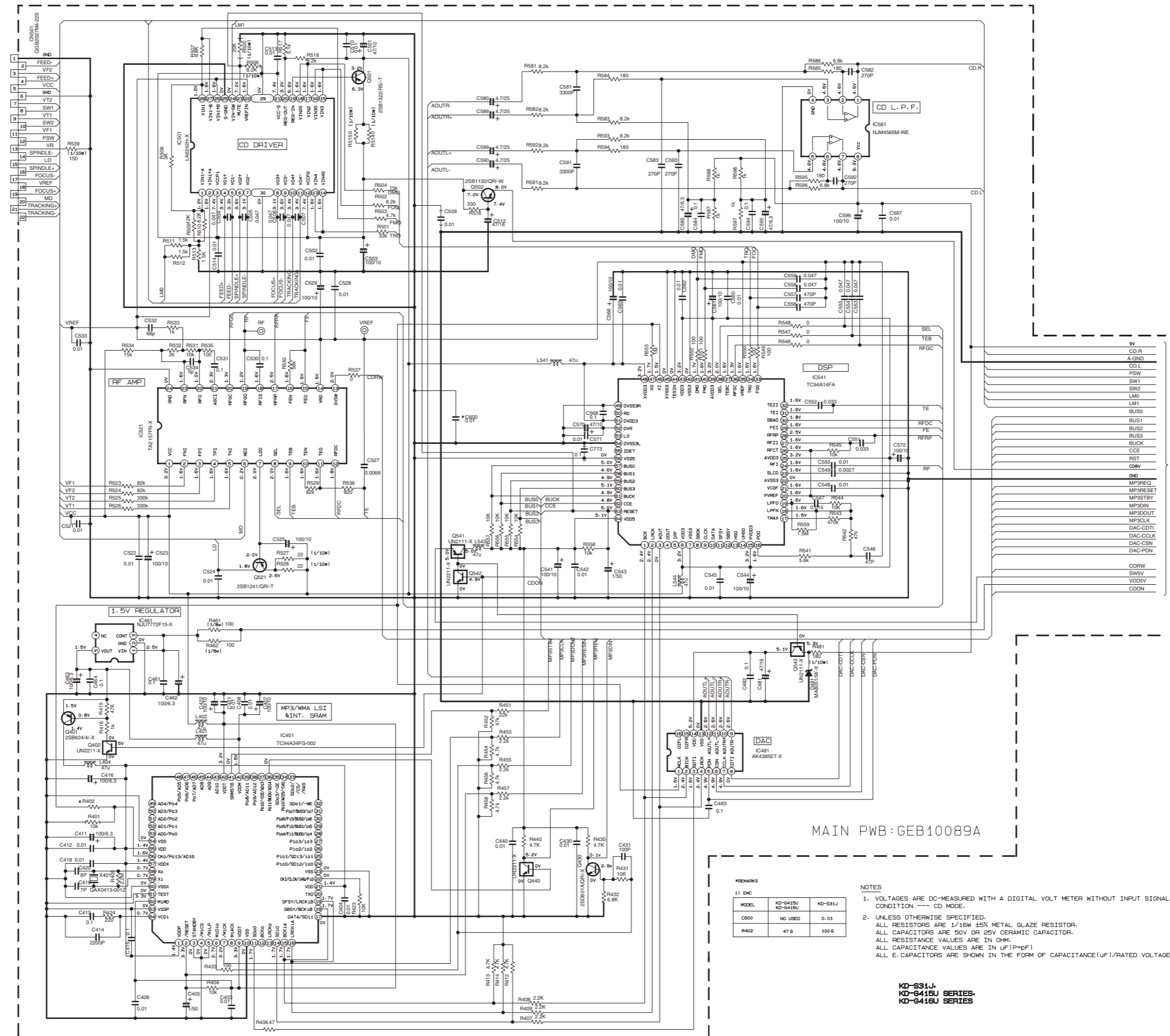


MODEL KD-831J, KD-G415U SERIES, KD-G416U SERIES

# CD servo control section



	10K	UN2211
	10K	UN2111



MAIN PWB: GEB10089A

REMARKS

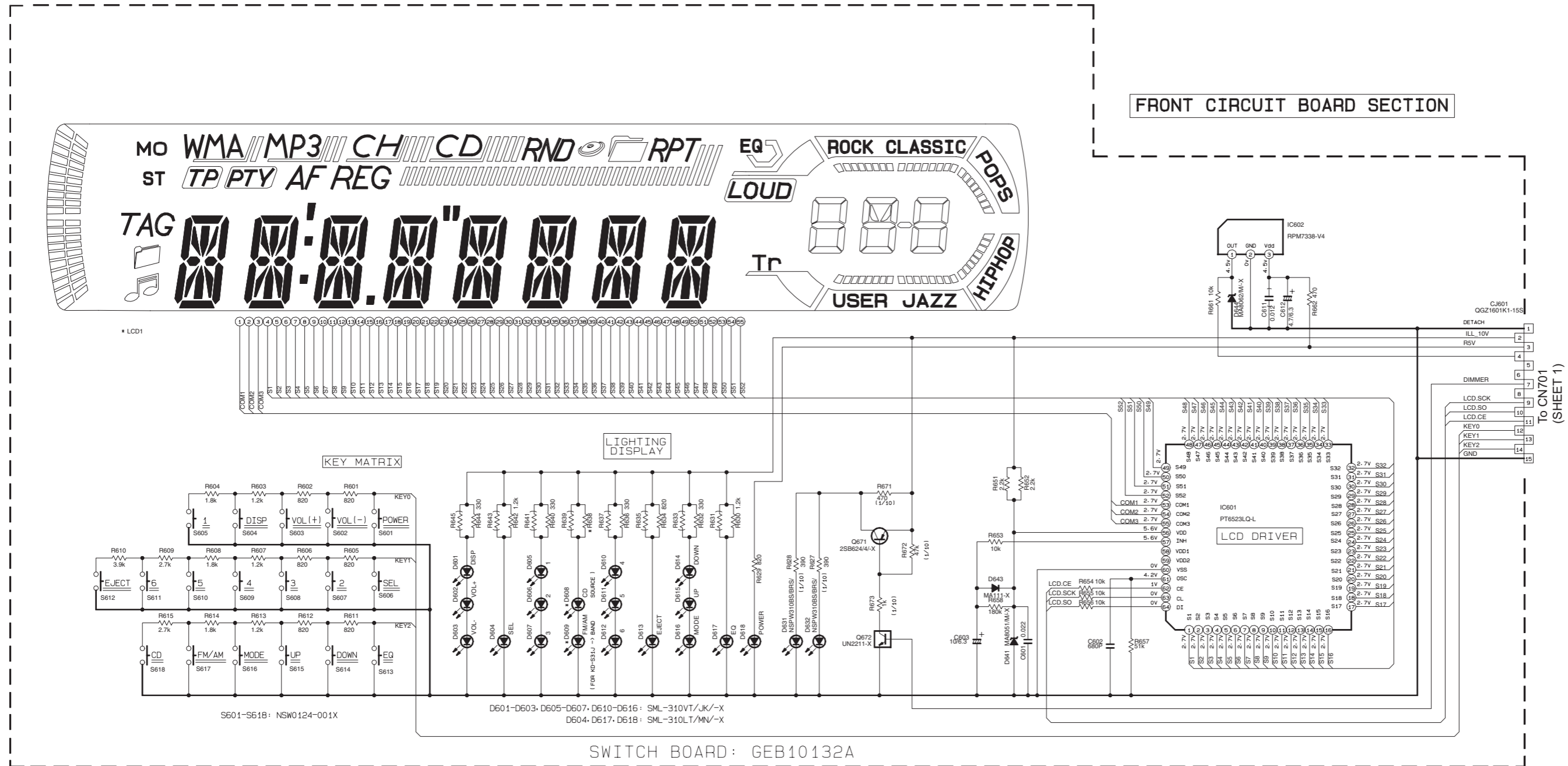
11 EMC		
MODEL	KD-6418U	KD-631U
	KD-6416U	
C600	NO USED	0.01
R402	47 Ω	100 Ω

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
  - 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 (PpF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

KD-631U,  
KD-6418U SERIES,  
KD-6416U SERIES

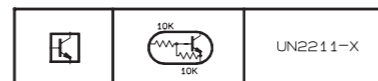
TO SHEET 1

■ LCD & Key control section



\*REMARK

MODEL	KD-G415U	KD-G416U	KD-S31J
LCD1	QLD0355-001	QLD0355-001	QLD0350-001
D608, D609	SML310VT/JK/-X	SML310VT/JK/-X	SML310LT/MN/-X
R638	470	470	510



NOTES

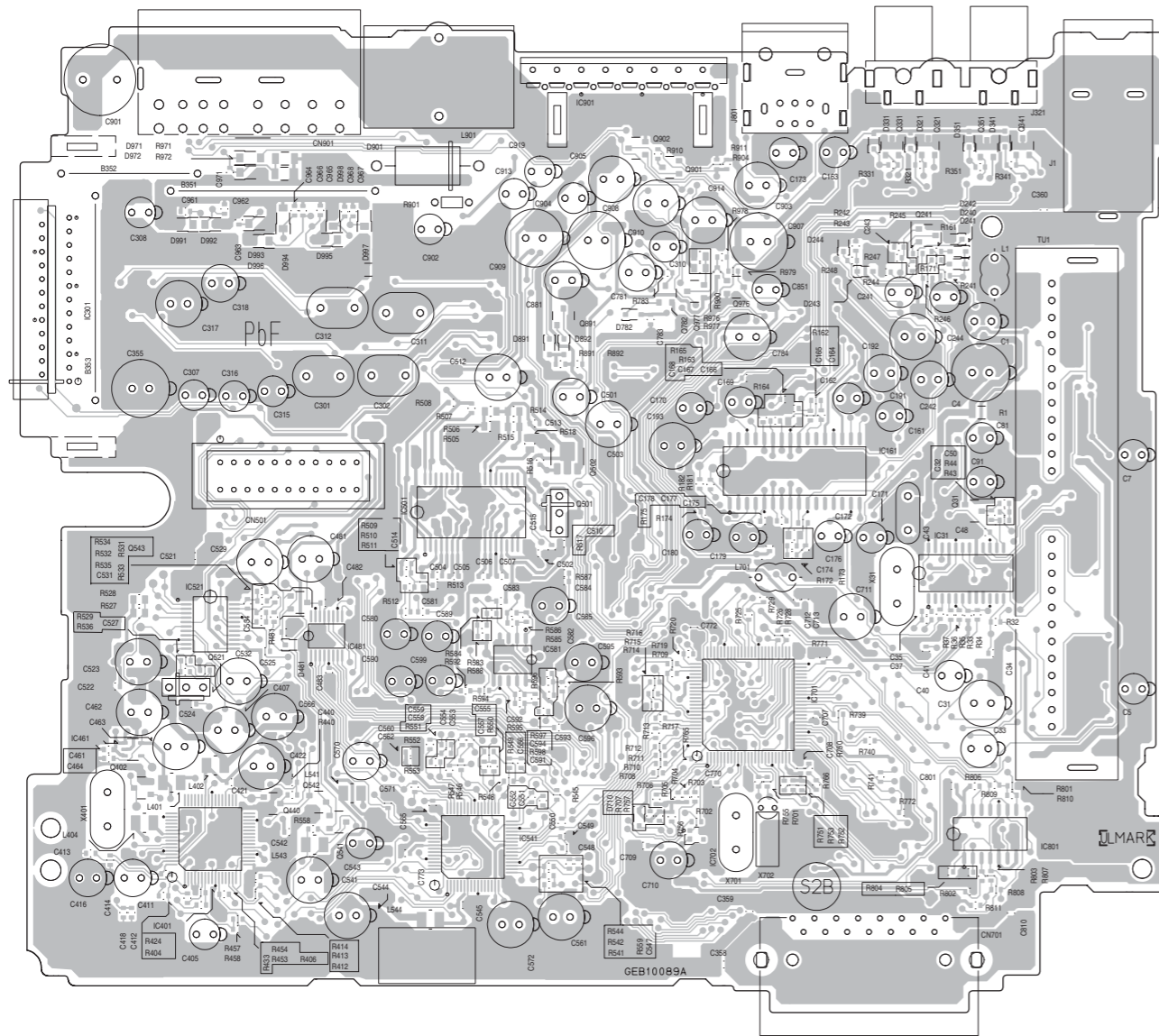
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
- UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF (P=pF) ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V) T --- TANTALUM CAPACITOR.
- COMPONENTS IN ( ) INDICATE NOT USE.

MODEL **KD-S31J, KD-G415U SERIES, KD-G416U SERIES**

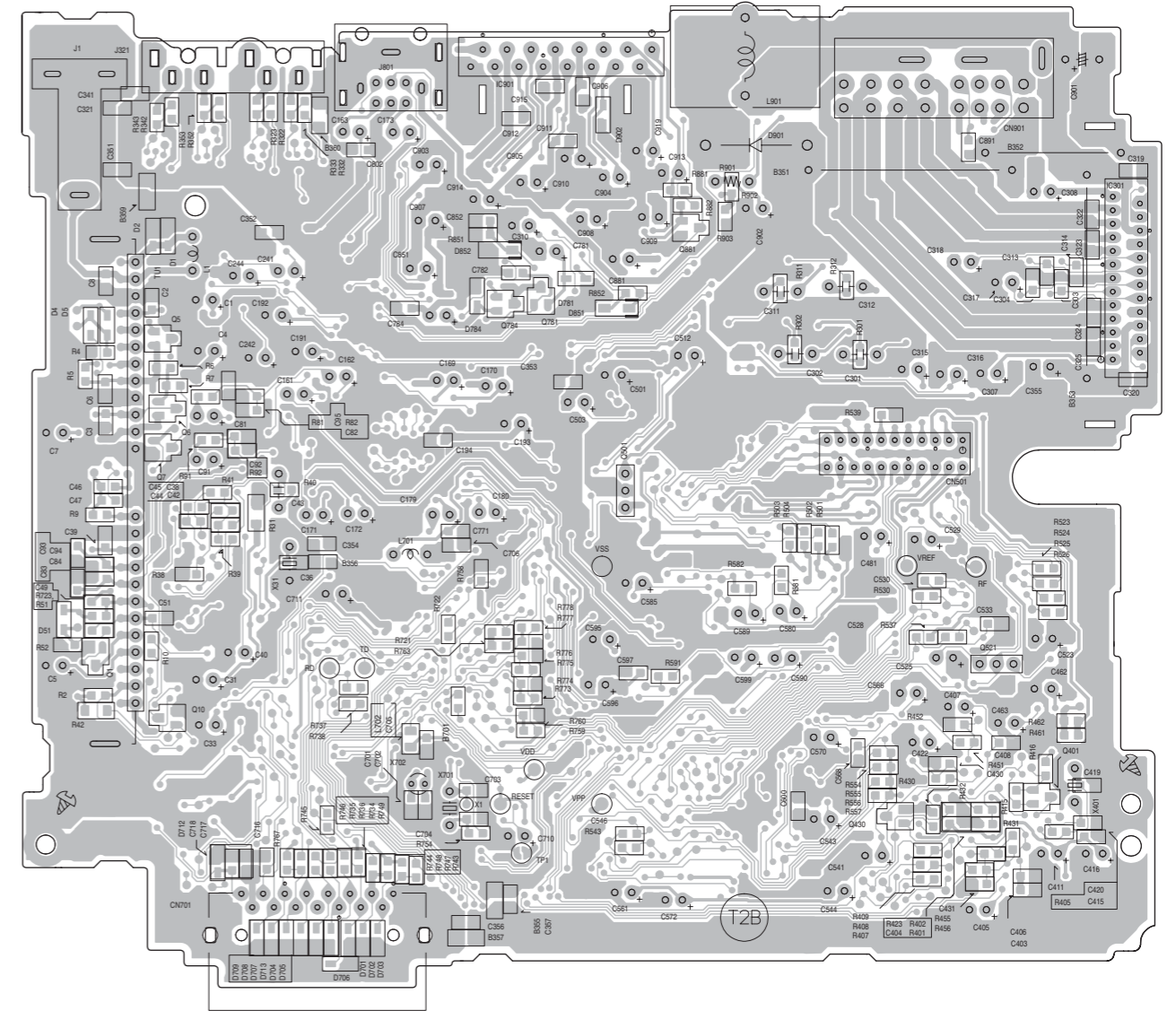
# Printed circuit boards (for UT, UH, UN and U version)

## ■ Main board

Forward side

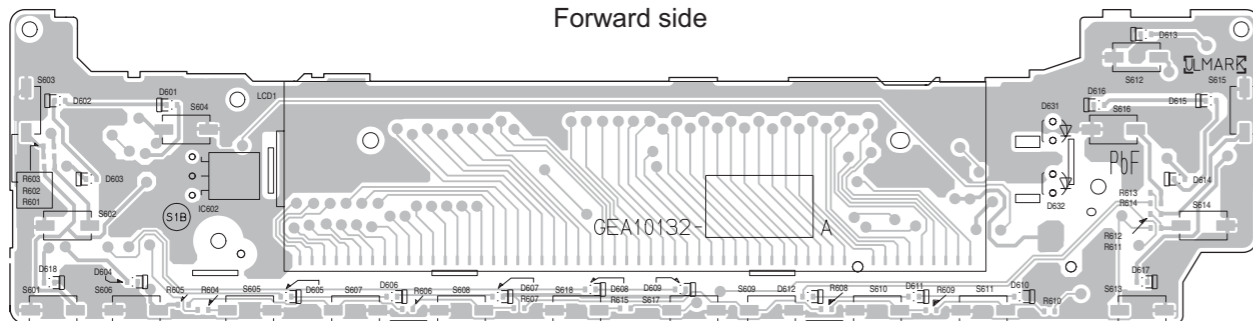


Reverse side

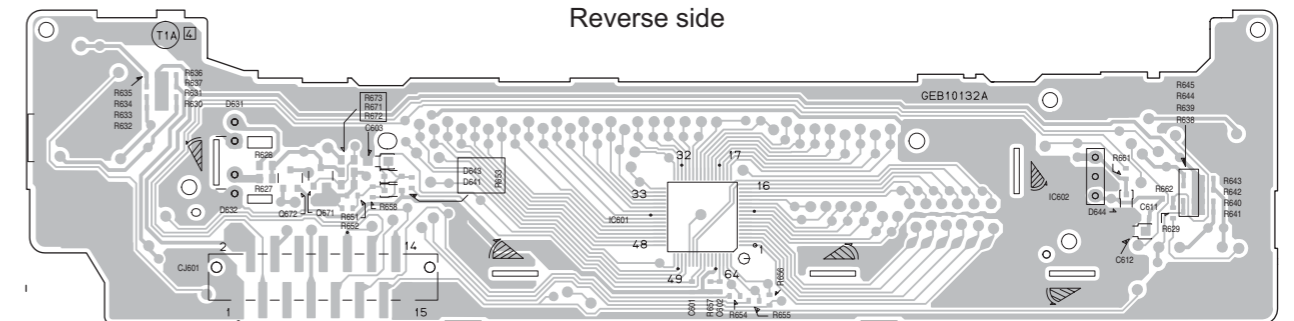


## ■ Switch board

Forward side



Reverse side

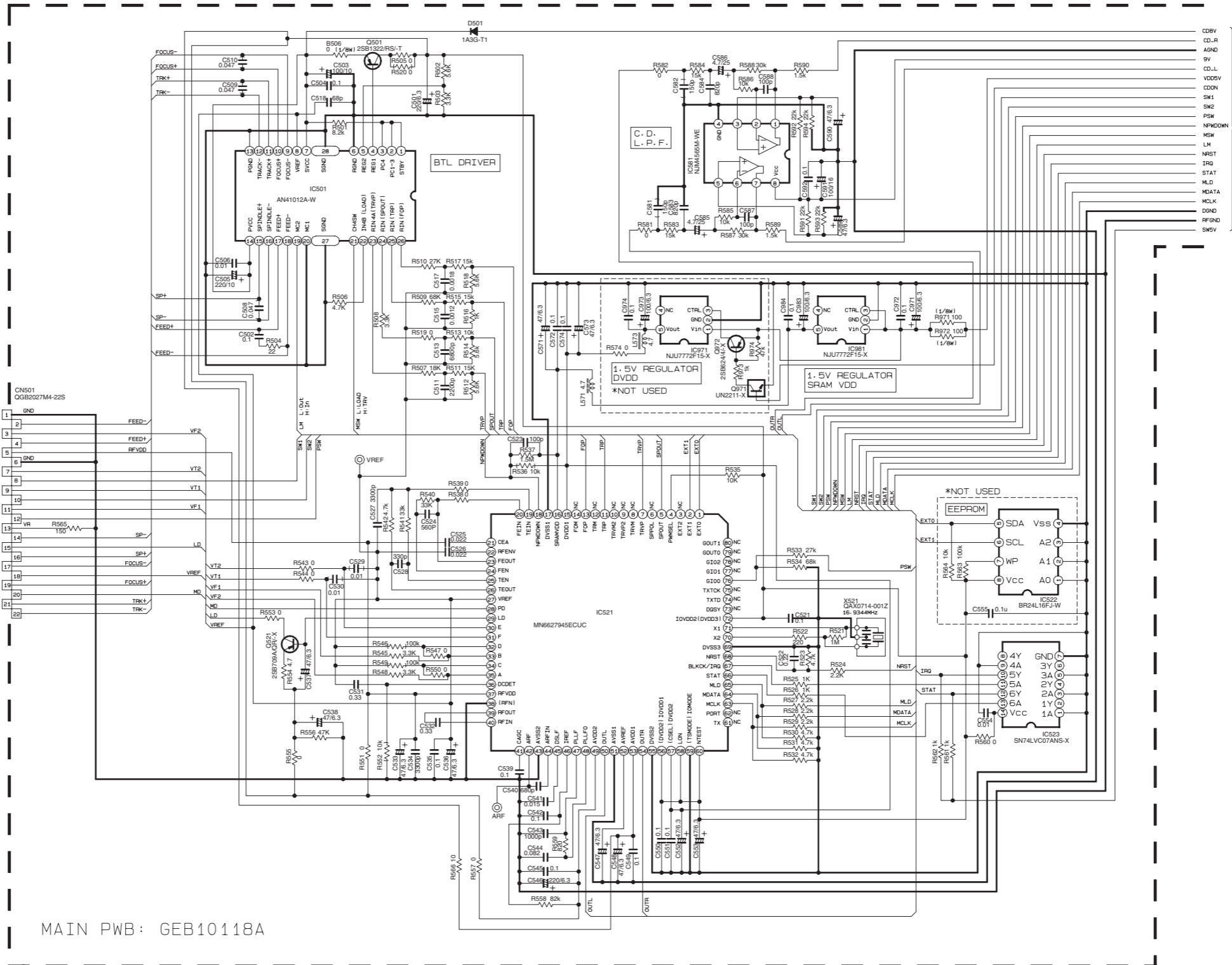
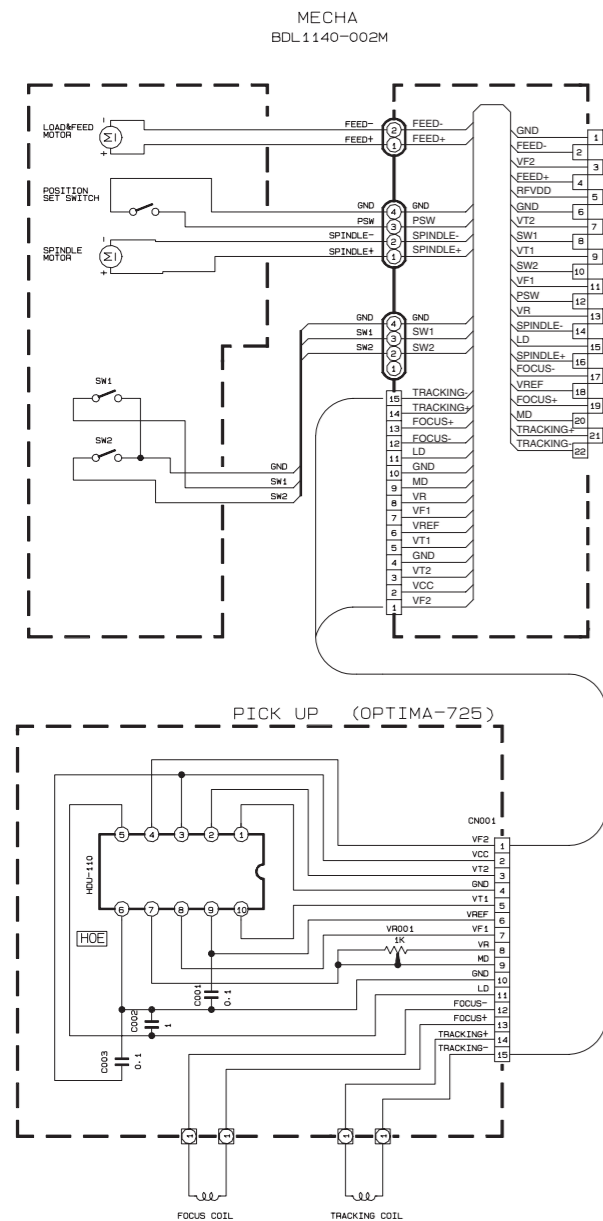








CD servo control section



		UN2211-X
		UN2111-X

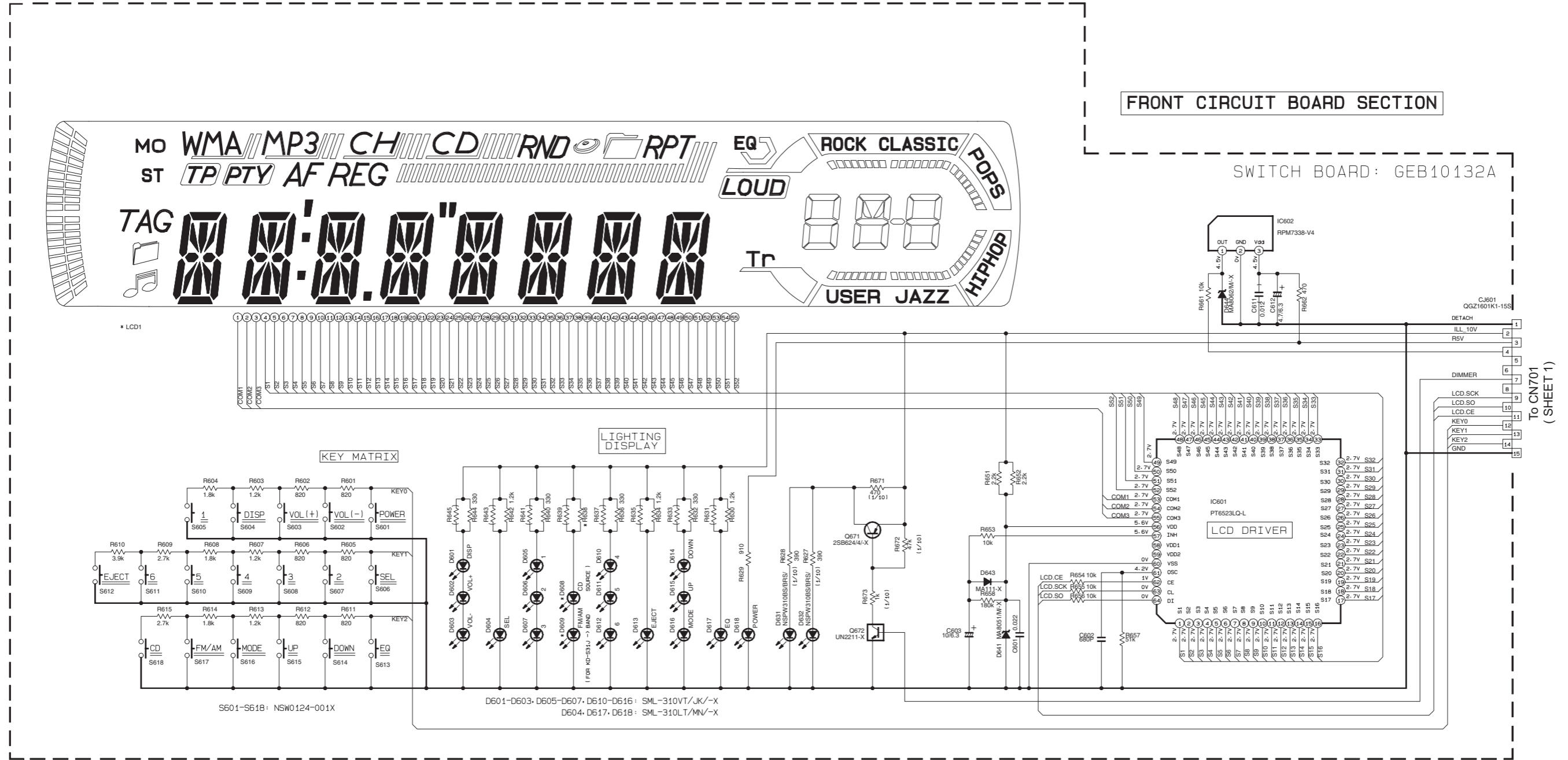
NOTES:

- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION  
--- CD MODE.
- UNLESS OTHERWISE SPECIFIED.  
ALL RESISTOR ARE 1/16W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITOR 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)

MODEL KD-S31J2  
KD-G415U2 SERIES  
KD-G416U2 SERIES

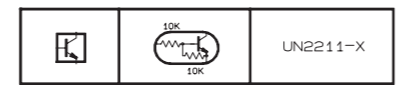
TO SHEET 1

■ LCD & key control section



\*REMARK

MODEL	KD-G415U2	KD-G416U2	KD-S31J2
LCD1	QLD0355-001	QLD0355-001	QLD0350-001
D608, D609	SML310VT/JK/-X	SML310VT/JK/-X	SML310LT/MN/-X
R638	470	470	510

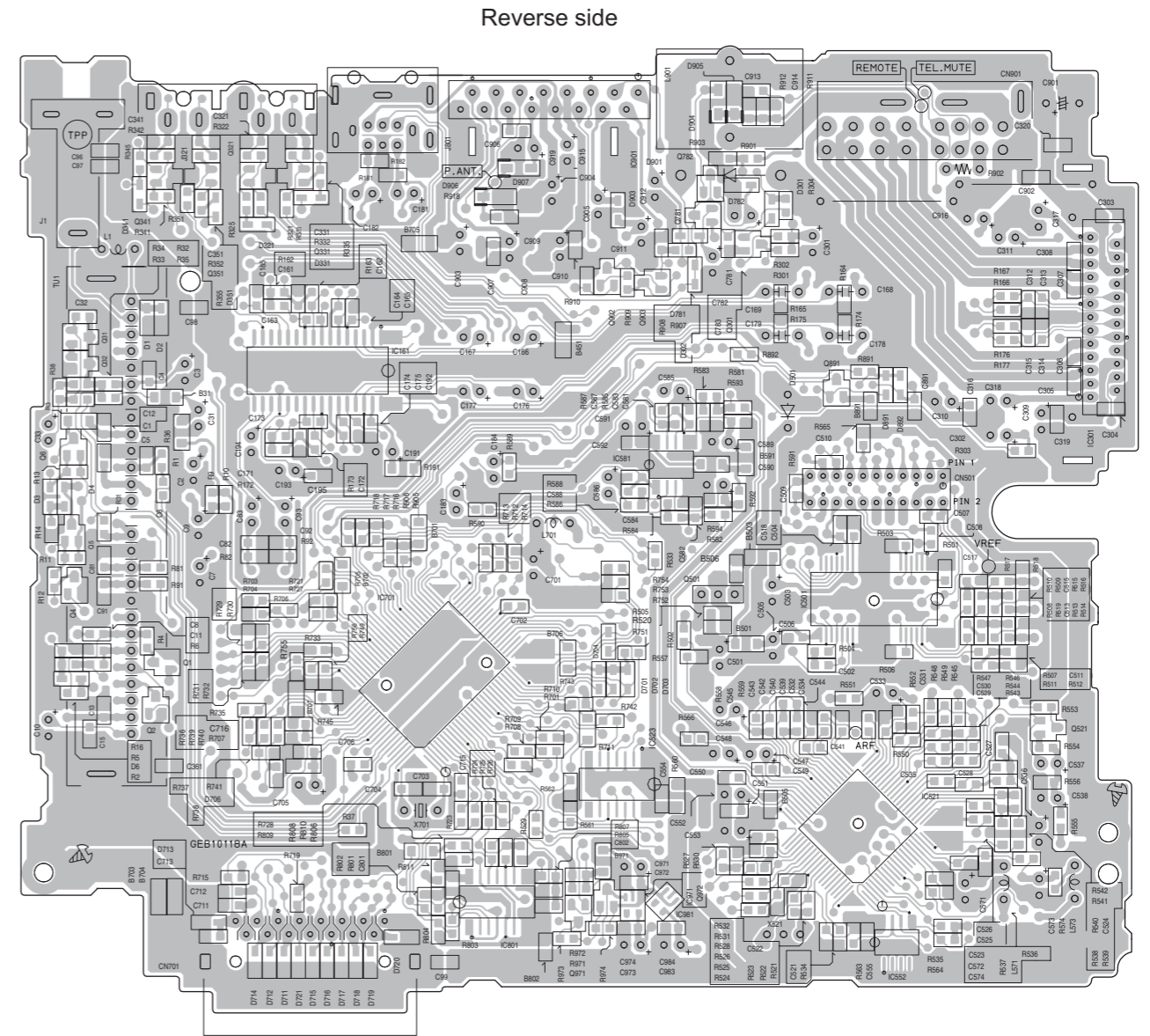
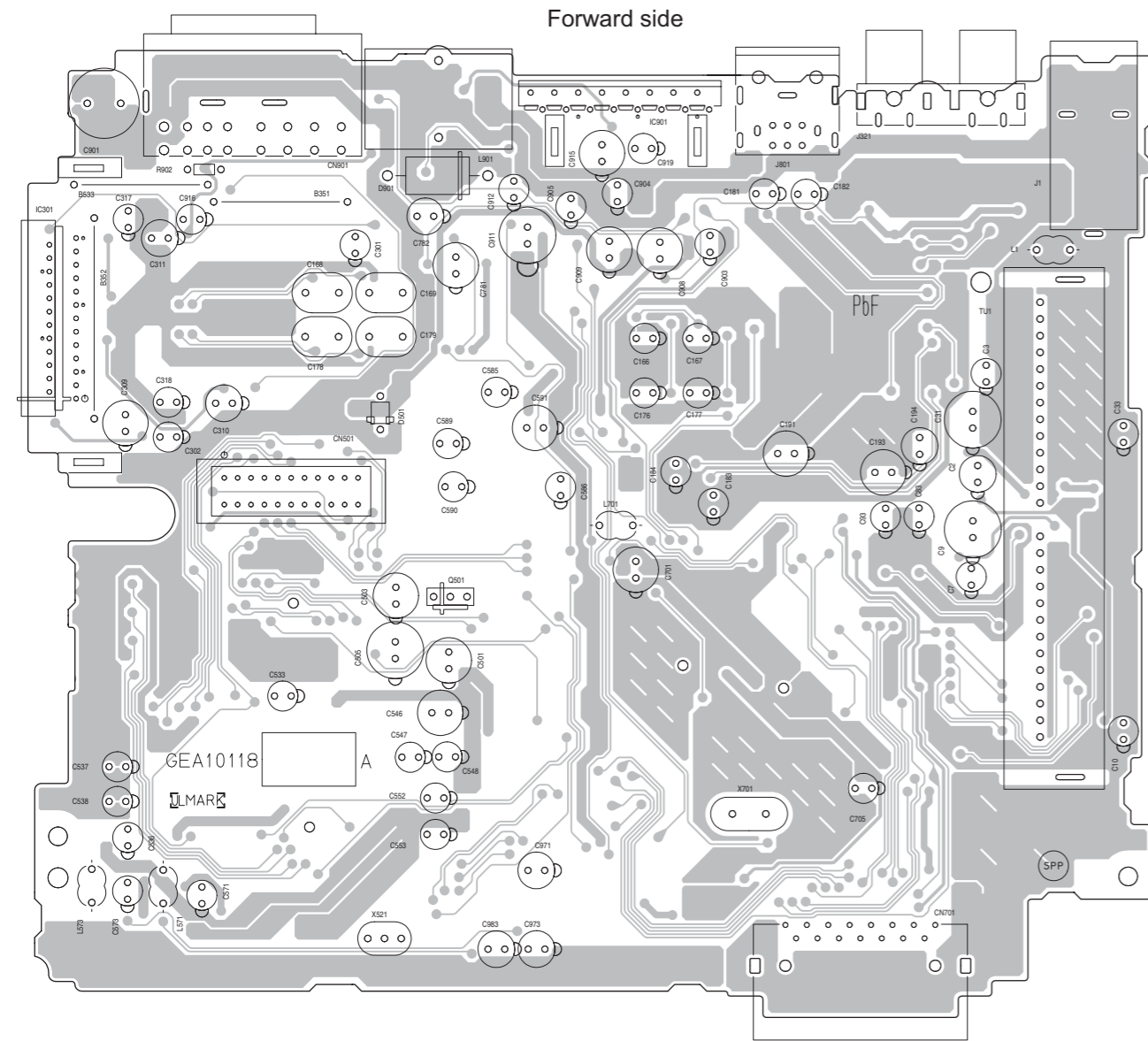


- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF (P=pF) ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V) T --- TANTALUM CAPACITOR.
  - COMPONENTS IN ( ) INDICATE NOT USE.

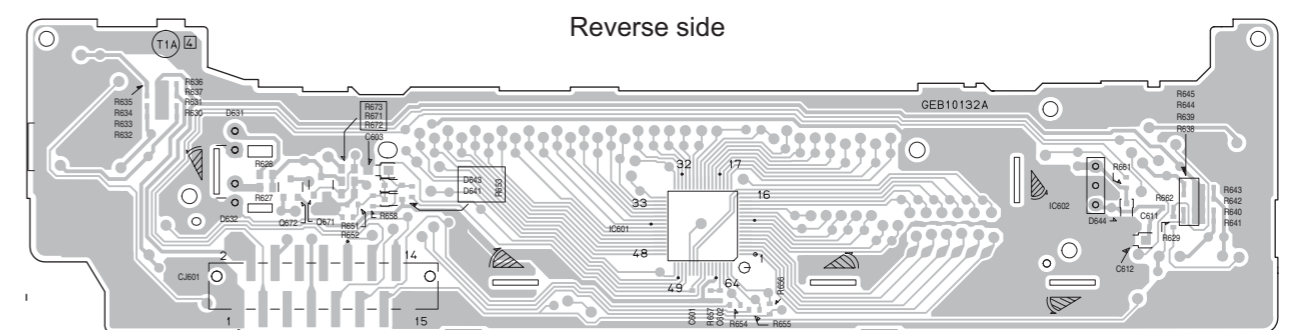
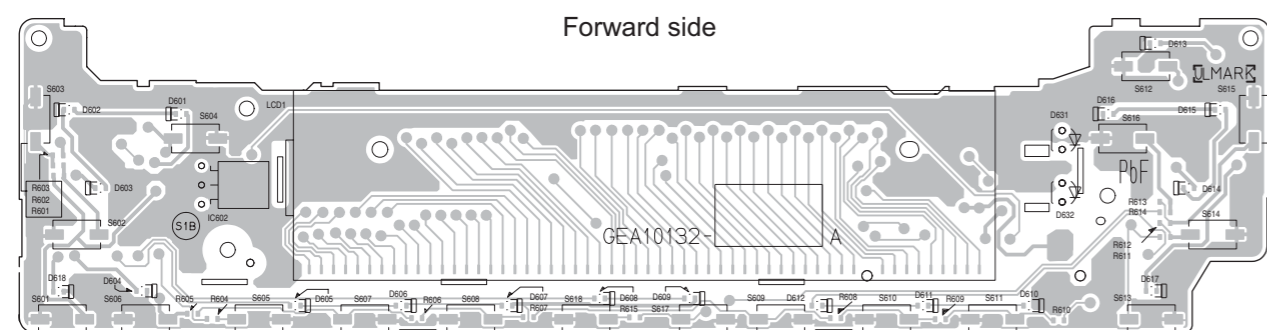
KD-S31J2  
 KD-G415U2 SERIES  
 KD-G416U2 SERIES

# Printed circuit boards (for UT2, UH2, UN2 and U2 version)

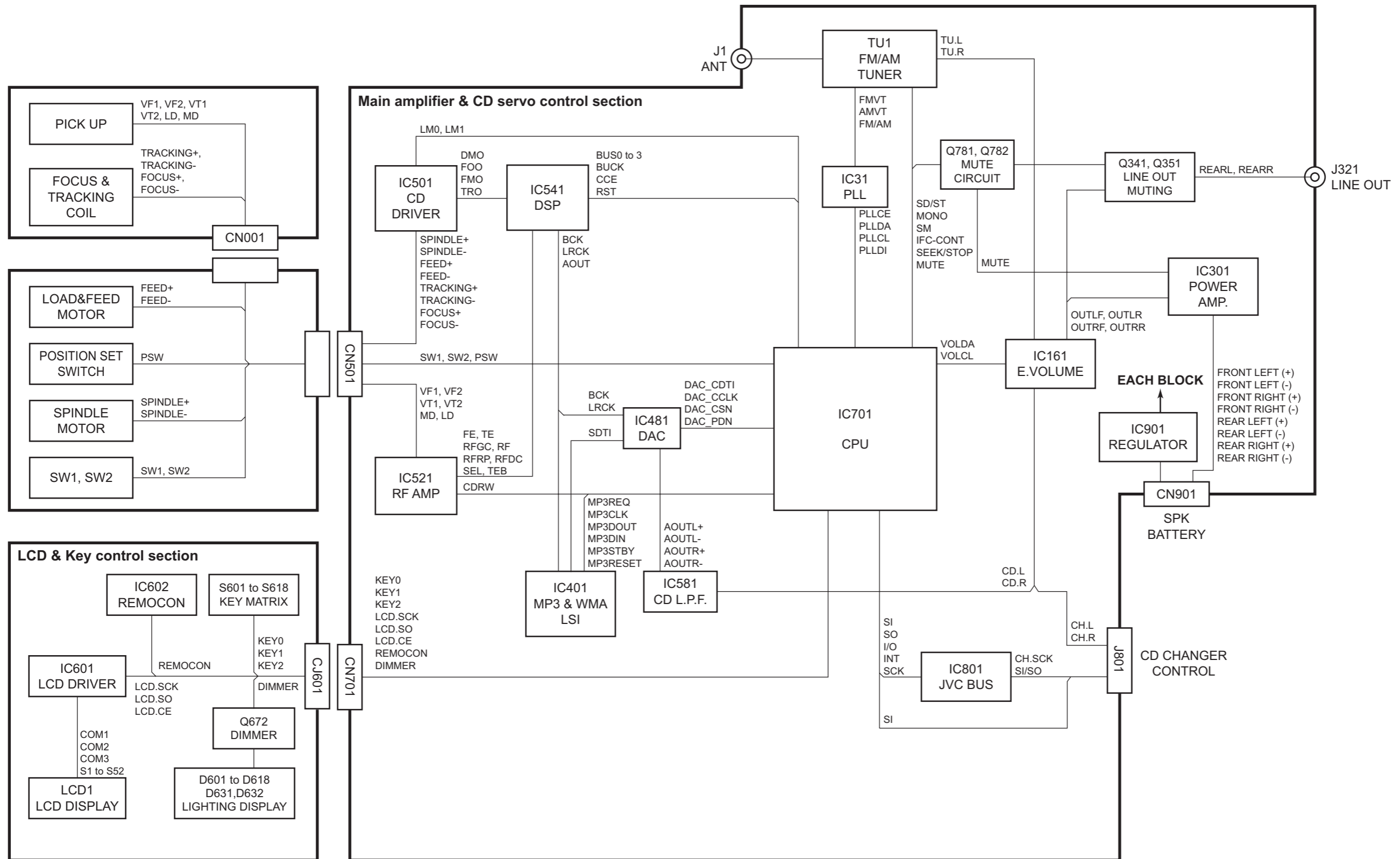
## ■ Main board



## ■ Switch board



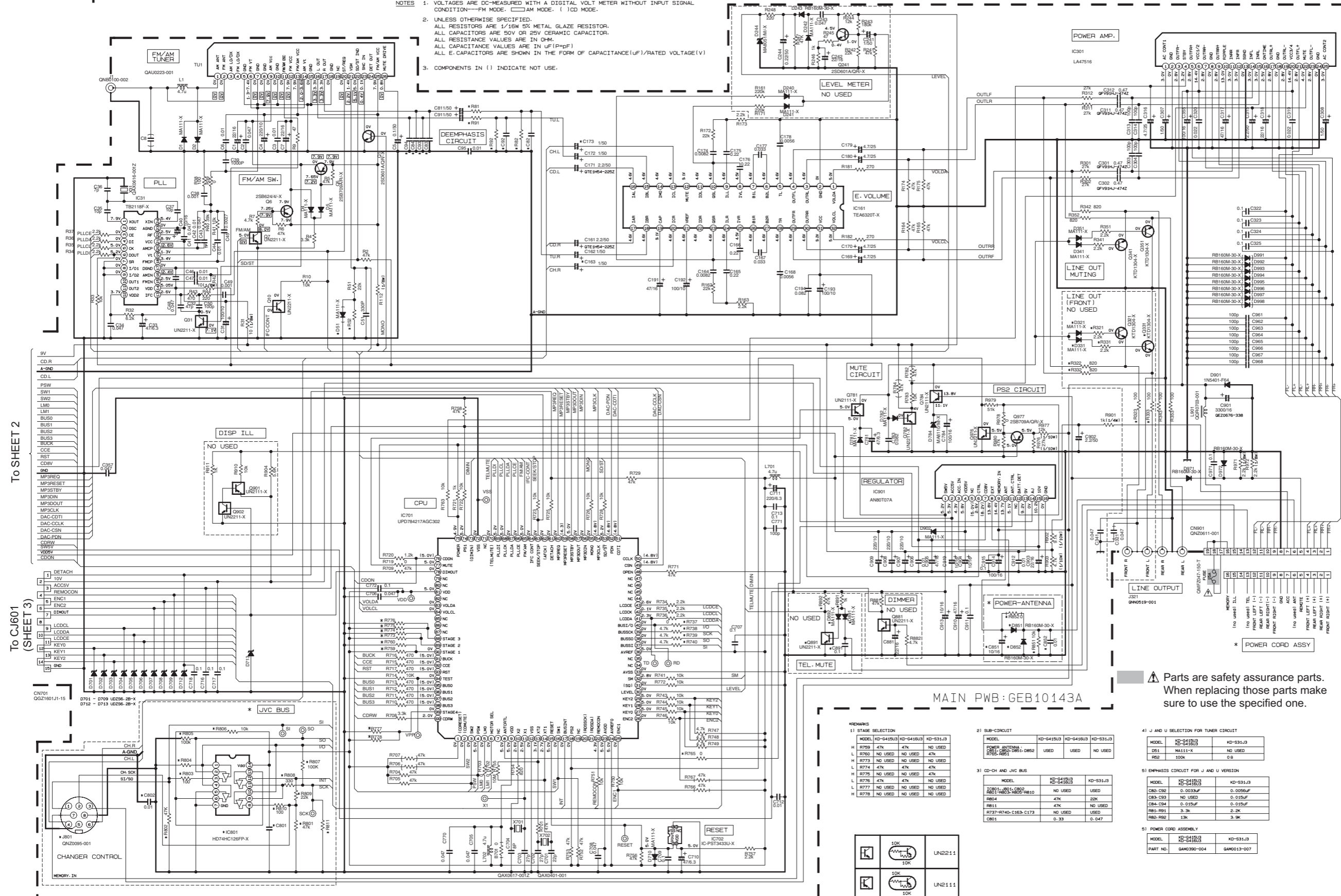
# Block diagram (for UH3, UN3 and U3 version)



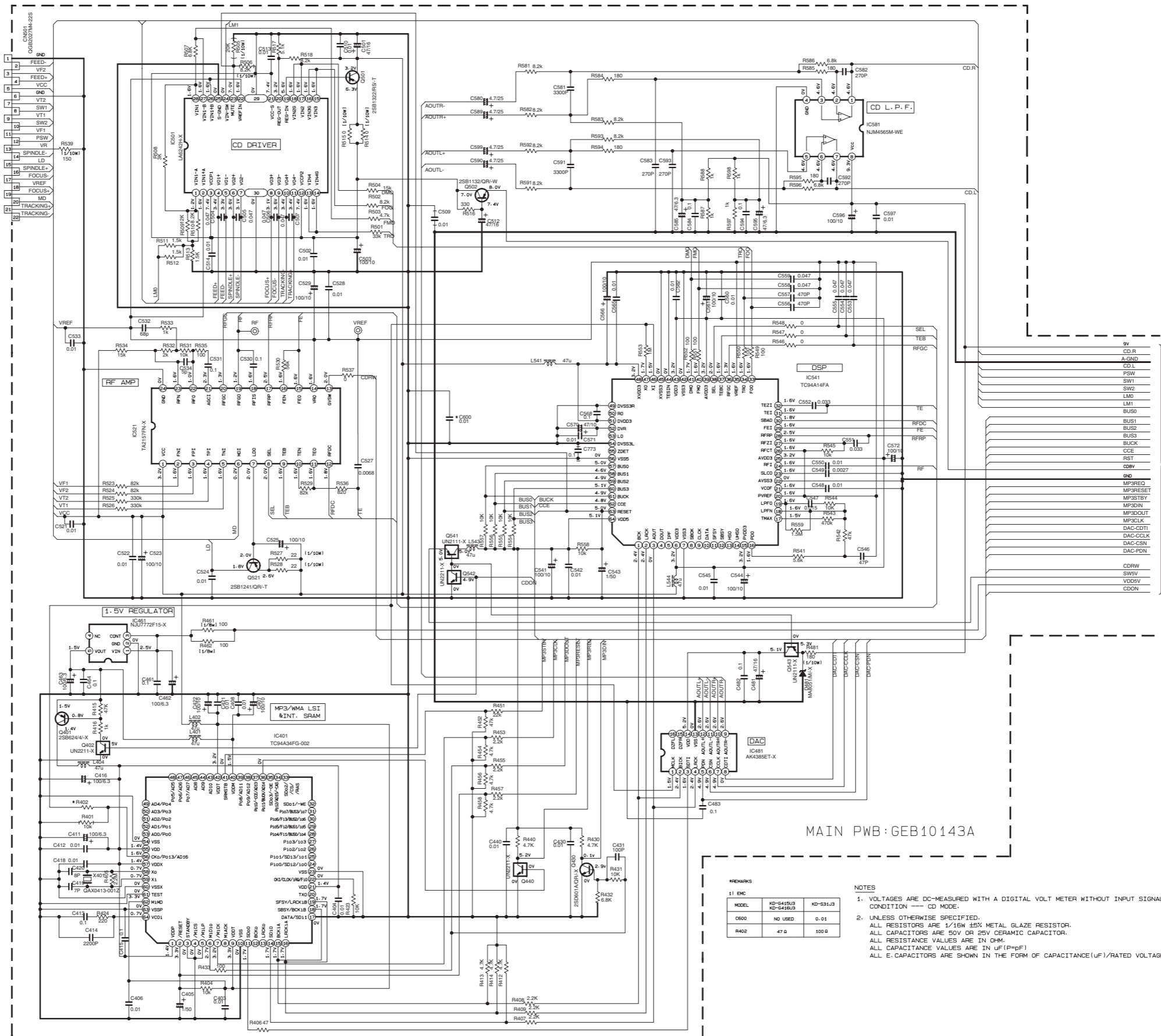
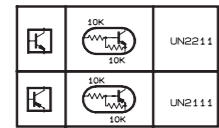
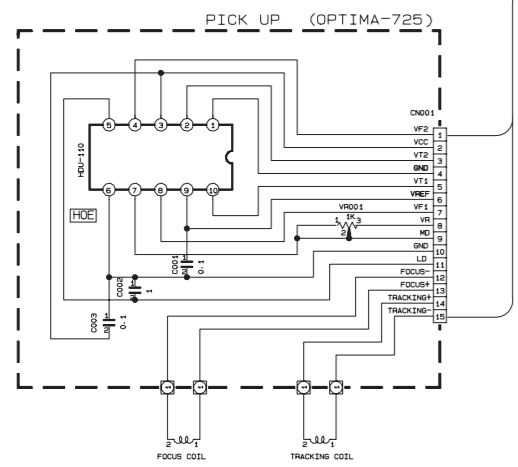
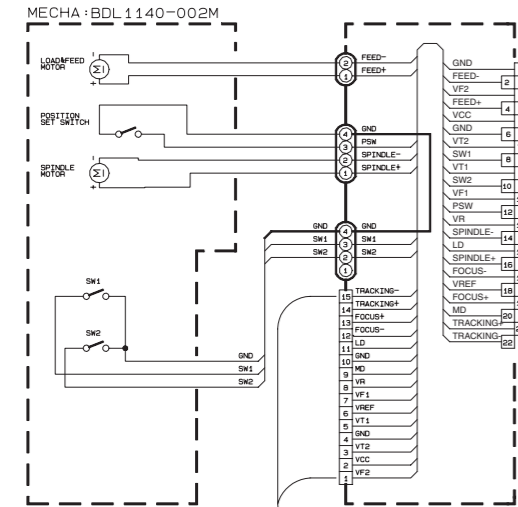
# Standard schematic diagrams (for UH3, UN3 and U3 version)

## Main amplifier section

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION—FM MODE. □ AM MODE. ( ) LCD 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  $\mu\text{F}$  (P=PF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE( $\mu\text{F}$ )/RATED VOLTAGE(V).
  3. COMPONENTS IN ( ) INDICATE NOT USE.



CD servo control section



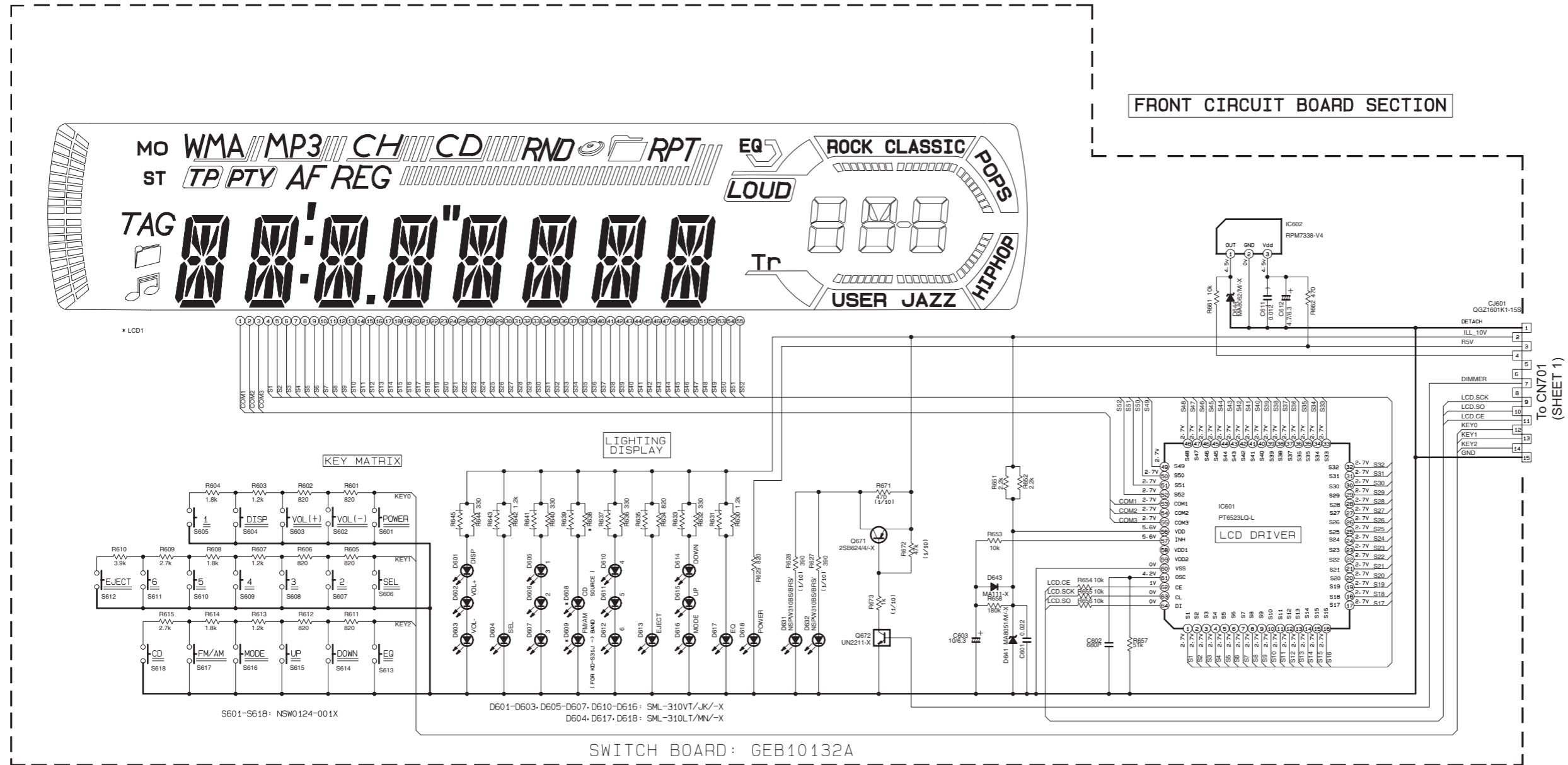
REMARKS

11 EDC		
MODEL	KD-S415/3	KD-S31/3
0000	NO USED	0.01
R402	47 Ω	100 Ω

- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION — CD MODE.
  - 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 Ω-M. ALL CAPACITANCE VALUES ARE IN μF(P=PF) ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V)

TO SHEET 1

■ LCD & Key control section

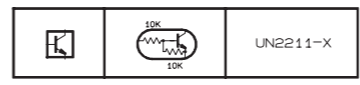


FRONT CIRCUIT BOARD SECTION

To CN701 (SHEET 1)

\*REMARK

MODEL	KD-G415U3	KD-G416U3	KD-S31J3
LCD1	QLD0355-001	QLD0355-001	QLD0350-001
D608, D609	SML310VT/JK/-X	SML310VT/JK/-X	SML310LT/MN/-X
R638	470	470	510



- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
  - 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 (pPF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V). T --- TANTALUM CAPACITOR.
  - COMPONENTS IN ( ) INDICATE NOT USE.

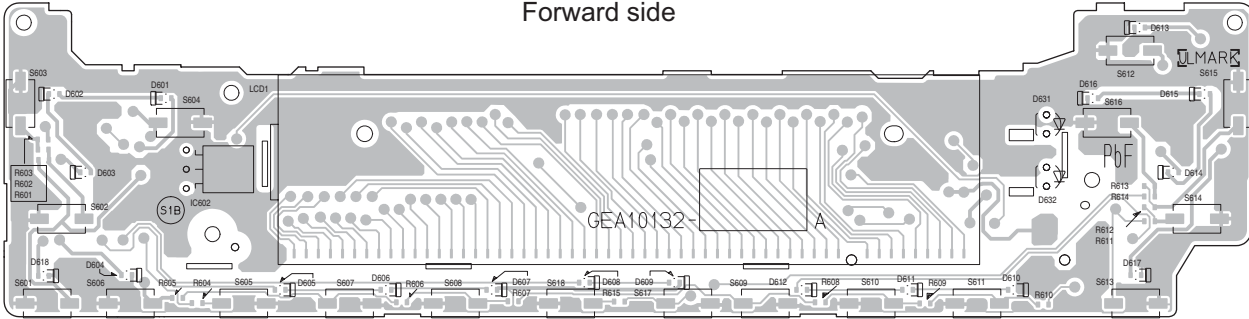




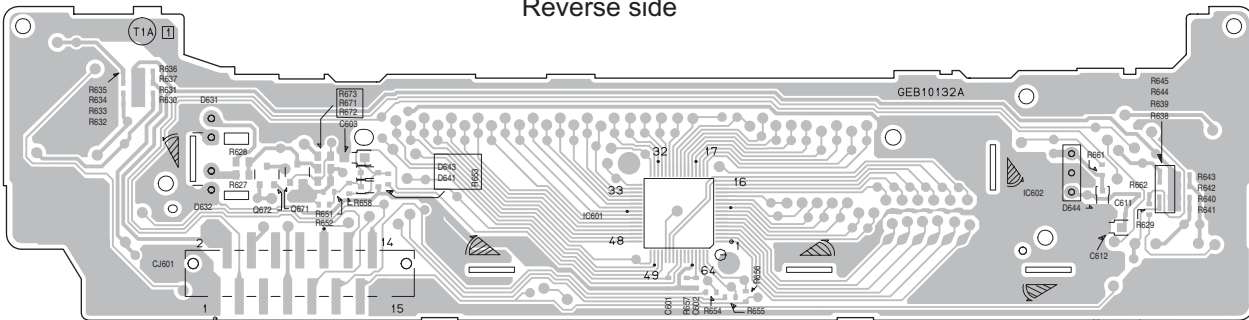


# ■ Switch board

## Forward side



## Reverse side



**JVC**

Victor Company of Japan, Limited

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(No.MA136SCH)



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