JVC

SERVICE MANUAL

CD RECEIVER

KD-A615J, KD-R610J, KD-R611E, KD-R611EU, KD-R611EY, KD-R612E, KD-R616U, KD-R616UH, KD-R616UN, KD-R618J

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)
Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade)

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No.MA467<Rev.002>
2010/6

SPECIFICATION

KD-R618/KD-A615/KD-R610			
AUDIO AMPLIFIER SECTION			
Power Output		20 W RMS × 4 Channels at 4 Ω and < 1% THD+N	
Signal-to-Noise Ratio		80 dBA (reference: 1 W into 4 Ω)	
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)	
Tone Control Range	Bass	±12 dB (60 Hz, 80 Hz, 100 Hz, 200 Hz) Q1.0, Q1.25, Q1.5, Q2.0	
	Middle	±12 dB (0.5 kHz, 1.0 kHz, 1.5 kHz, 2.5 kHz) Q0.75, Q1.0, Q1.25	
	Treble	±12 dB (10.0 kHz, 12.5 kHz, 15.0 kHz, 17.5 kHz) Q (Fixed)	
Frequency Response		40 Hz to 20 000 Hz	
Line-Out Level/Impedance	KD-R618/KD-A615	5.0 V/20 kΩ load (full scale)	
	KD-R610	2.5 V/20 kΩ load (full scale)	
Output Impedance		1 kΩ	
Other Terminal	AUX (auxiliary) input jack, USB input jack, Antenna input, Expansion port, Steering wheel remote input (for KD-R618/KD-A615)		
TUNER SECTION			
Frequency Range	FM	with channel interval set to 100 kHz or 200 kHz	87.5 MHz to 108.0 MHz
		with channel interval set to 50 kHz	87.5 MHz to 108.0 MHz
	AM	with channel interval set to 10 kHz	530 kHz to 1 710 kHz
		with channel interval set to 9 kHz	531 kHz to 1 602 kHz
FM Tuner	Usable Sensitivity	9.3 dBf (0.8 μV/75 Ω)	
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)	
	Alternate Channel Selectivity (400 kHz)		65 dB
	Frequency Response	40 Hz to 15 000 Hz	
	Stereo Separation	40 dB	
AM Tuner	Sensitivity	20 μV	
	Selectivity	40 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: 320 kbps	
USB SECTION			
USB Standard		USB 1.1, USB 2.0	
Data Transfer Rate (Full Speed)		Max. 12 Mbps	
Compatible Device		Mass storage class	
Compatible File System		FAT 32/16/12	
Playable Audio Format		MP3/WMA	
Max. Current		DC 5 V 500 mA	
GENERAL			
Power Requirement	Operating Voltage	DC 14.4 V (11 V to 16 V allowance)	
Grounding System		Negative ground	
Allowable Operating Temperature		0°C to +40°C (32°F to 104°F)	
Dimensions (W × H × D): (approx.)	Installation Size	182 mm × 52 mm × 160 mm (7-3/16" × 2-1/16" × 6-5/16")	
	Panel Size	188 mm × 58 mm × 6 mm (7-7/16" × 2-5/16" × 1/4")	
Mass		1.3 kg (excluding accessories)	

Designs & specifications are subject to change without notice.

KD-R616			
AUDIO AMPLIFIER SECTION			
Maximum Power Output	Front/Rear	50 W per channel	
Continuous Power Output (RMS)	Front/Rear	20 W RMS × 4 Channels at 4 Ω and < 1% THD+N	
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)	
Tone Control Range	Bass	±12 dB (60 Hz, 80 Hz, 100 Hz, 200 Hz) Q1.0, Q1.25, Q1.5, Q2.0	
	Middle	±12 dB (0.5 kHz, 1.0 kHz, 1.5 kHz, 2.5 kHz) Q0.75, Q1.0, Q1.25	
	Treble	±12 dB (10.0 kHz, 12.5 kHz, 15.0 kHz, 17.5 kHz) Q (Fixed)	
Frequency Response		40 Hz to 20 000 Hz	
Signal-to-Noise Ratio		5.0 V/20 kΩ load (full scale)	
Line-Out Level/Impedance		5.0 V/20 kΩ load (full scale)	
Output Impedance		1 kΩ	
Other Terminal	AUX (auxiliary) input jack, USB input jack, Antenna input, Expansion port, Steering wheel remote input		
TUNER SECTION			
Frequency Range	FM	87.5 MHz to 108.0 MHz	
	AM	531 kHz to 1 602 kHz	
FM Tuner	Usable Sensitivity	9.3 dBf (0.8 μV/75 Ω)	
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)	
	Alternate Channel Selectivity (400 kHz)		65 dB
	Frequency Response	40 Hz to 15 000 Hz	
	Stereo Separation	40 dB	
AM Tuner	Sensitivity	20 μV	
	Selectivity	40 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: 320 kbps	
USB SECTION			
USB Standard		USB 1.1, USB 2.0	
Data Transfer Rate (Full Speed)		Max. 12 Mbps	
Compatible Device		Mass storage class	
Compatible File System		FAT 32/16/12	
Playable Audio Format		MP3/WMA	
Max. Current		DC 5 V 500 mA	
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 × H × D): (approx.)	Installation Size	182 mm × 52 mm × 160 mm	
	Panel Size	188 mm × 58 mm × 6 mm	
Mass		1.3 kg (excluding accessories)	

Designs & specifications are subject to change without notice.

KD-R611/KD-R612			
AUDIO AMPLIFIER SECTION			
Maximum Power Output	Front/Rear	50 W per channel	
Continuous Power Output (RMS)	Front/Rear	20 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 1% total harmonic distortion.	
Load Impedance		4 Ω (4 Ω to 8 Ω allowance)	
Tone Control Range	Bass	±12 dB (60 Hz, 80 Hz, 100 Hz, 200 Hz) Q1.0, Q1.25, Q1.5, Q2.0	
	Middle	±12 dB (0.5 kHz, 1.0 kHz, 1.5 kHz, 2.5 kHz) Q0.75, Q1.0, Q1.25	
	Treble	±12 dB (10.0 kHz, 12.5 kHz, 15.0 kHz, 17.5 kHz) Q (Fixed)	
Frequency Response		40 Hz to 20 000 Hz	
Signal-to-Noise Ratio		70 dB	
Line-Out Level/Impedance		2.5 V/20 kΩ load (full scale)	
Subwoofer-Out Level/Impedance		2.5 V/20 kΩ load (full scale)	
Output Impedance		1 kΩ	
Other Terminal	AUX (auxiliary) input jack, USB input jack, Antenna input, Expansion port, Steering wheel remote input		
TUNER SECTION			
Frequency Range	FM	87.5 MHz to 108.0 MHz	
	AM	MW: 522 kHz to 1 620 kHz	
		LW: 144 kHz to 279 kHz	
FM Tuner	Usable Sensitivity	9.3 dBf (0.8 μV/75 Ω)	
	50 dB Quieting Sensitivity	16.3 dBf (1.8 μV/75 Ω)	
	Alternate Channel Selectivity (400 kHz)		65 dB
	Frequency Response	40 Hz to 15 000 Hz	
	Stereo Separation	40 dB	
MW Tuner	Sensitivity	20 μV	
	Selectivity	40 dB	
LW Tuner	Sensitivity	50 μV	
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: 320 kbps	
USB SECTION			
USB Standard		USB 1.1, USB 2.0	
Data Transfer Rate (Full Speed)		Max. 12 Mbps	
Compatible Device		Mass storage class	
Compatible File System		FAT 32/16/12	
Playable Audio Format		MP3/WMA	
Max. Current		DC 5 V 500 mA	
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 × H × D): (approx.)	Installation Size	182 mm × 52 mm × 160 mm	
	Panel Size	188 mm × 58 mm × 12 mm	
Mass		1.3 kg (excluding accessories)	

Designs & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 Safety Precautions

(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

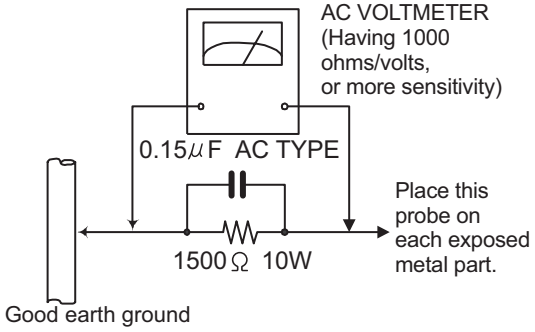
(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
  Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
  Measure the AC voltage across the resistor with the AC voltmeter.
  Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.
(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
(3) Repairs must be made in accordance with the relevant safety standards.
(4) It is essential that safety critical components are replaced by approved parts.
(5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

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

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the " ⚠ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Preventing static electricity

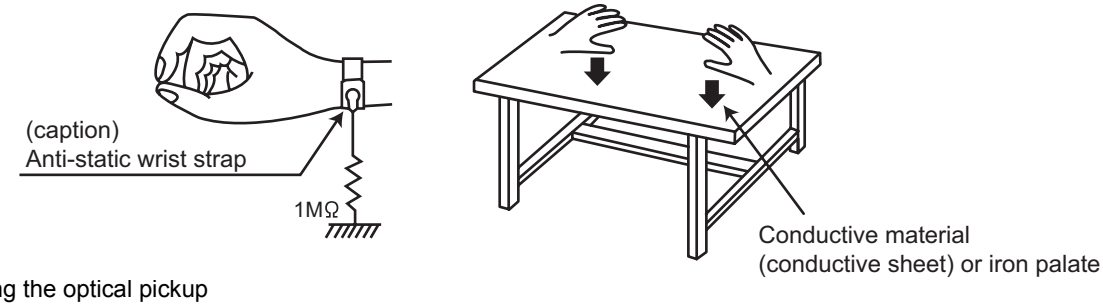
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.5.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as laser products.
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.

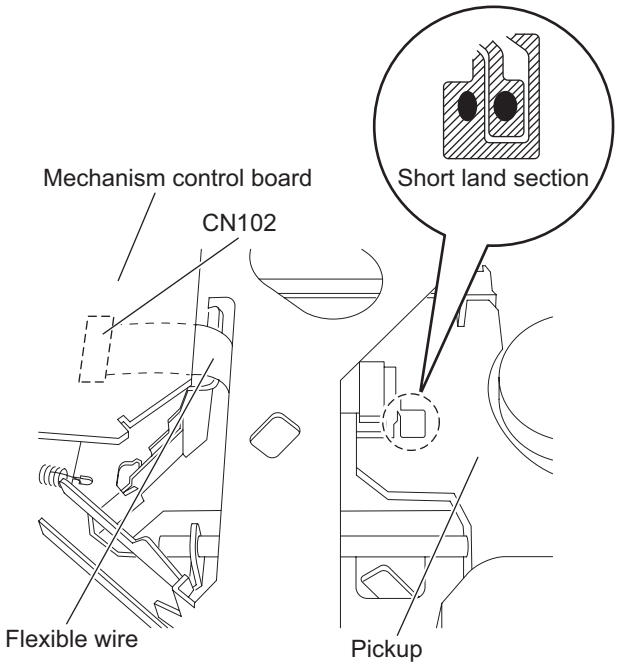
1.6 Handling the traverse unit (optical pickup)

(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) I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.7 Attention when traverse unit is decomposed

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

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



1.8 Important for laser products

1.CLASS 1 LASER PRODUCT

2.CAUTION :
(For U.S.A.) Visible and/or invisible class II laser radiation when open. Do not stare into beam.
(Others) Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.

3.CAUTION : Visible and/or invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

4.CAUTION : This laser product uses visible and/or 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.**

(For U.S.A.)
CAUTION : Visible and/or invisible class II laser radiation when open. Do not stare into beam.
(Others)
CAUTION : Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments

ACHTUNG: Sichtbare und/oder unsichtbare Laserstrahlung der Klasse 1M bei offenen Abdeckungen. Nicht direkt mit optischen Instrumenten betrachten.

ATTENTION: Rayonnement laser visible et/ou invisible de classe 1M une fois ouvert. Ne pas regarder directement avec des instruments optiques.

VOORZICHTIG: Zichtbare en/of onzichtbare klasse 1M laserstralen indien geopend. Bekijk niet direct met optische instrumenten.

ATTENZIONE: Radiazione laser in classe 1M visibile e/o invisibile quando aperto. Non osservare direttamente con strumenti ottici.

VARNING: Synlig och/eller osynlig laserstrålning, klass 1M, när denna del är öppnad. Betrakta ej strålen med optiska instrument.

VARO!: Avattaessa olet alttiina nakyvalle ja/tai näkymättömälle luokan 1M lasersateilylle. Älä tarkastele sitä optisen laitteen läpi.

ADVARSEL: Synlig og/eller usynlig klasse 1M-laserstråling ved åbning. Se ikke direkte med optiske instrumenter.

AVISO: Radiación láser de clase 1M visible y/o invisible cuando está abierto. No mirar directamente con instrumental óptico.

PRECAUÇÃO: Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe directamente com instrumentos ópticos.

PRECAUÇÃO: Radiação laser de classe 1M visível e/ou invisível quando aberto. Não olhe diretamente com instrumentos óticos.

ПРЕДУПРЕЖДЕНИЕ: В открытом состоянии происходит видимое и/или невидимое излучение лазера класса 1M. Не смотрите непосредственно в оптические инструменты.

UWAGA: Otwarcie spowoduje narażenie na widzialne i/lub niewidzialne promieniowanie lasera klasy 1M. Nie patrzeć bezpośrednio w przyrządy optyczne.

UPOZORNĚNÍ: Při otevření vydává viditelné popř. neviditelné laserové ozáření třídy 1M. Nedívejte se do otvoru přímo s optickými nástroji.

FIGYELMEZTETÉS: Látható és/vagy láthatatlan 1M osztályú sugárzás nyitott állapotban. Ne nézze közvetlenül optikai műszerekkel.

注意：打開蓋板可能會產生可見或不可見的 1M 級鐳射。
不要使用光學儀器直接進行窺視。

注意：打开盖板可能会产生可见或不可见的 1M 级镭射。
不要使用光学仪器直接进行窥视。

تنبيه: يوجد إشعاع ليزري مرئي و/أو غير مرئي من الفئة 1M عندما يكون الجهاز مفتوحا. تجنب النظر مباشرة داخل الجهاز باستخدام أدوات بصرية.

احتياط: هنگامی که باز گردد، تشعشع مرئی و یا نامرئی کلاس 1M لیزر وجود دارد. با لوازم چشمی مستقیماً به آن نگاه نکنید.

주의: 개방하면 가시 및/또는 비가시 클래스 1M 레이저 방사선이 나옵니다. 광학 기구로 직접 들여다보지 마십시오.

REPRODUCTION AND POSITION OF LABELS and PRINT

WARNING LABEL and PRINT

CAUTION	ATTENTION	AVISO	VARNING	注意	CAUTION
VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1:2001 (ENG)	RAYONNEMENT LASER VISIBLE ET/OU INVISIBLE DE CLASSE 1M UNE FOIS OUVERT. NE PAS REGARDER DIRECTEMENT AVEC DES INSTRUMENTS OPTIQUES. (FRA)	RADIACIÓN LÁSER DE CLASE 1M VISIBLE Y/O INVISIBLE CUANDO ESTÁ ABIERTO. NO MIRAR DIRECTAMENTE CON INSTRUMENTAL ÓPTICO. (ESP)	SYNLIG OCH/ELLER OSYNLIG LASERSTRÅLNING, KLASS 1M, NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT. (SWE)	ここを開くと可視及び/または不可視のクラス1Mレーザー放射が出ます。光学装置で直接見ないでください。(JPN)	VISIBLE AND/OR INVISIBLE CLASS II LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR (ENG) LV44603-003A

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe SPECIFIC SERVICE INSTRUCTIONS.

SECTION 3
DISASSEMBLY

3.1 Main body (Used figure were KD-R610U)

3.1.1 Removing the Bottom chassis (See Fig.1)

(1) Remove the three screws **A** attaching the Heat sink.
(2) Remove the one screw **B** and one screw **C** attaching the Bottom chassis.

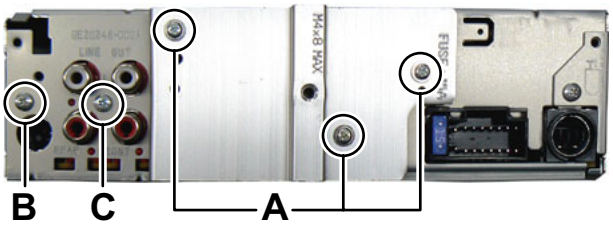


Fig.1

3.1.2 Removing the Front chassis (See Fig.2)

(1) Disengage four hooks **a** engaged both side of the Front chassis.

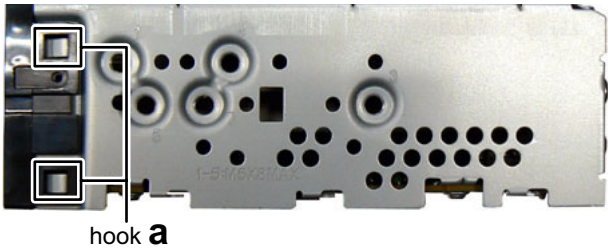


Fig.2

3.1.3 Removing the Main board (See Fig.3, 4, 5)

(1) Remove the two screws **D** and one screw **E** attaching the Side plate. (See Fig.3)

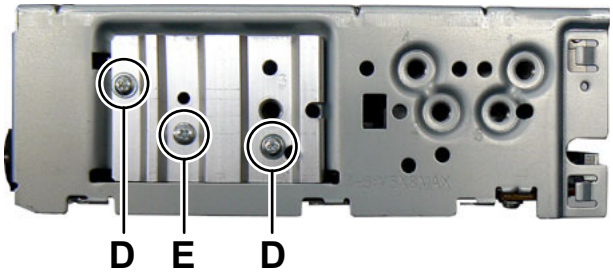


Fig.3

(2) Remove the two screw **F** attaching the Top chassis. (See Fig.4)

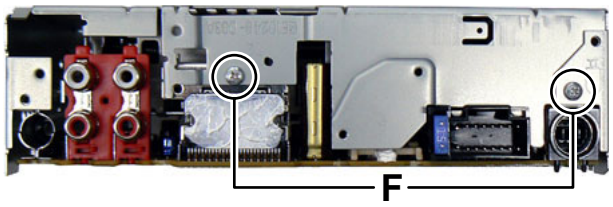


Fig.4

(3) Remove the three screws **G** attaching the Main board. (See Fig.5)
(4) Disconnect the B-B connector connected CD mechanism and Main board CN501 of the Main board. (See Fig.5)

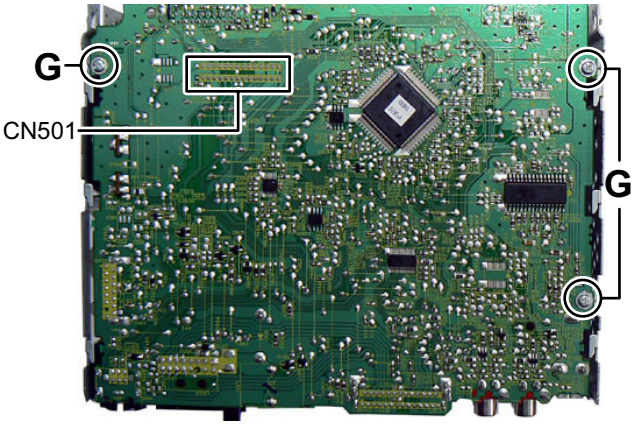


Fig.5

3.1.4 Removing the CD mechanism (See Fig.6)

(1) Remove the three screws **H** attaching the CD mechanism.

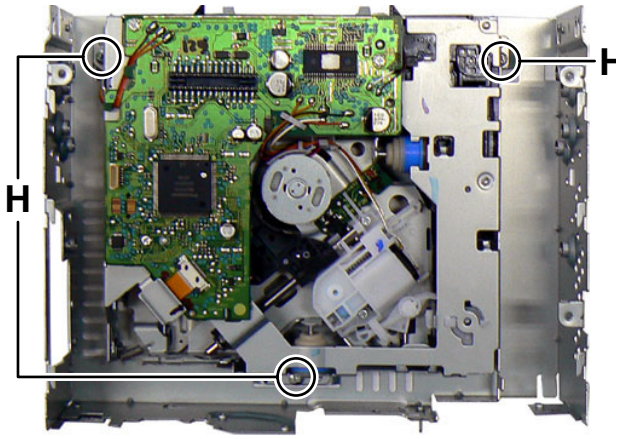


Fig.6

3.1.5 Removing the Switch board (See Fig.7)

(1) Remove the Volume knob.ZZ

(2) Remove the four screws **J** attaching the Rear cover.

(3) Disengage eleven hooks **b** engaged Rear cover.

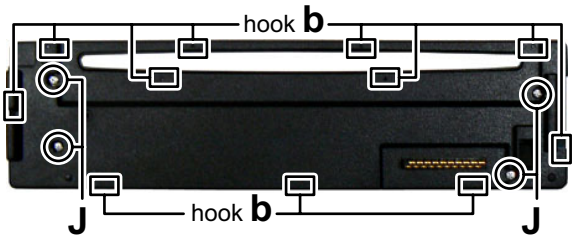


Fig.7

3.2 CD MECHANISM assembly section

- Remove the CD MECHANISM assembly from the main body.

3.2.1 Removing the MECHANISM CONTROL BOARD assembly (See Fig.1 and 2)

(1) From the bottom side of CD MECHANISM assembly, remove the solders from the soldered sections (**a**, **b** and **c**) on the MECHANISM CONTROL BOARD assembly. (See Fig.1.)

(2) Remove the three screws **A** attaching the MECHANISM CONTROL BOARD assembly. (See Fig.1.)

(3) Solder the short land sections on the pickup. (See Fig.2.)

Caution:

- Solder the short land sections on the pickup before disconnecting the flexible wire from the connector CN102 on the MECHANISM CONTROL BOARD assembly.
  If the card wire is disconnected without attaching solder, the pickup may be destroyed by static electricity. (See Fig.2.)
- When attaching the MECHANISM CONTROL BOARD assembly, remove the solders from the short land sections after connecting the flexible wire to the connector CN102 on the MECHANISM CONTROL BOARD assembly.

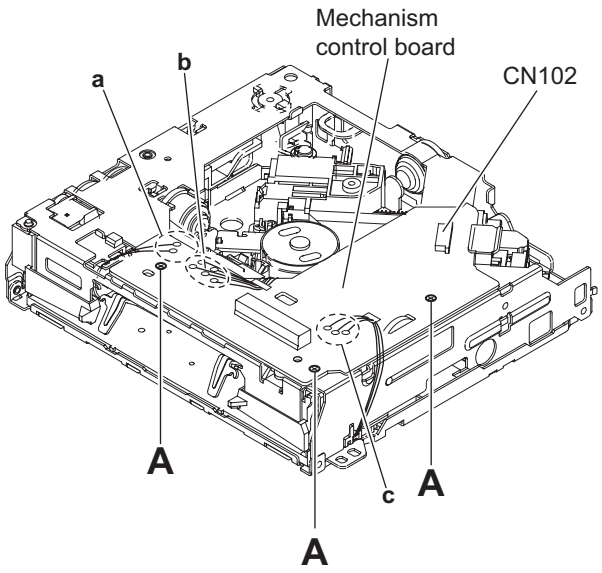


Fig.1

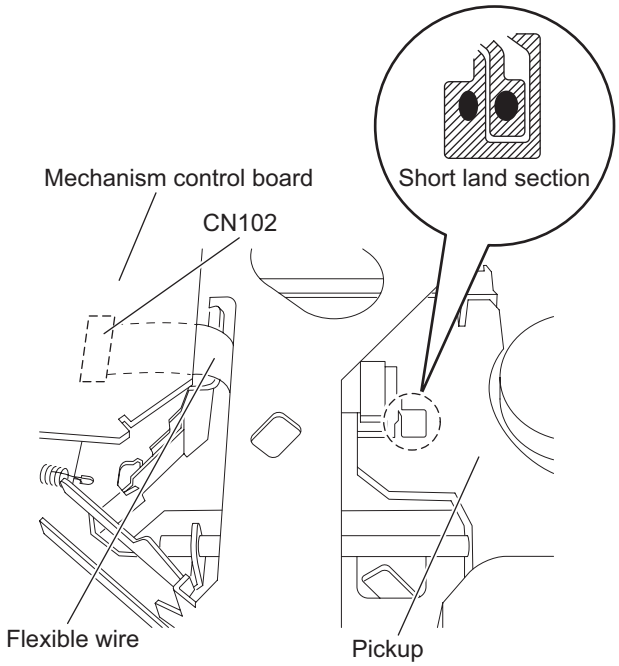


Fig.2

3.2.2 Removing the top cover (See Fig.3 to 5)

- Remove the MECHANISM CONTROL BOARD assembly.
  (1) From the front side of the CD MECHANISM assembly, change the hook position of the two roller springs. (See Fig.3.)
  (2) From the side of the CD MECHANISM assembly, remove the six screws **B** attaching the top cover. (See Fig.3 and 4.)
  (3) Take out the top cover in an upward direction. (See Fig.5.)

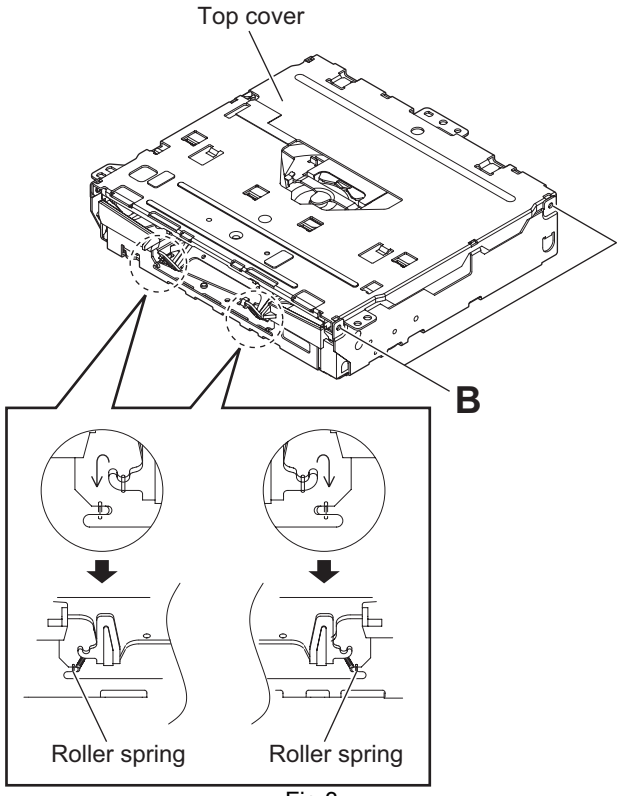


Fig.3

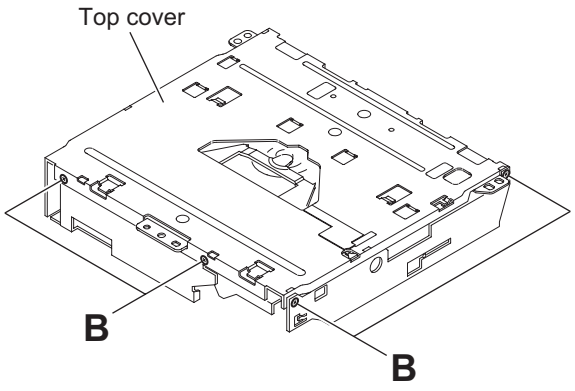


Fig.4

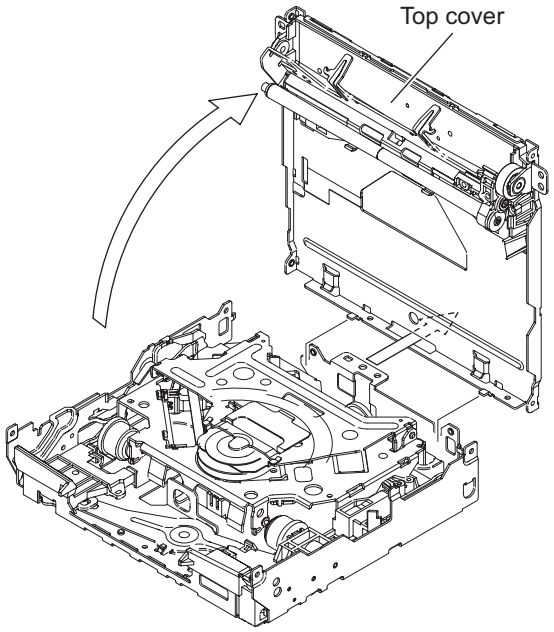


Fig.5

3.2.3 Removing the roller (See Fig.6)

- Remove the MECHANISM CONTROL BOARD assembly and top cover.
  (1) From the bottom side of the top cover, remove the screw **C** attaching the gear holder.
  (2) Remove the R.holder assembly from disc plate, and then take out the roller from R.holder assembly in the direction of the arrow.

  Reference:
  When attaching the R.ACT gear (2) and R.ACT gear (3), apply grease to the section **d** of R.holder assembly.

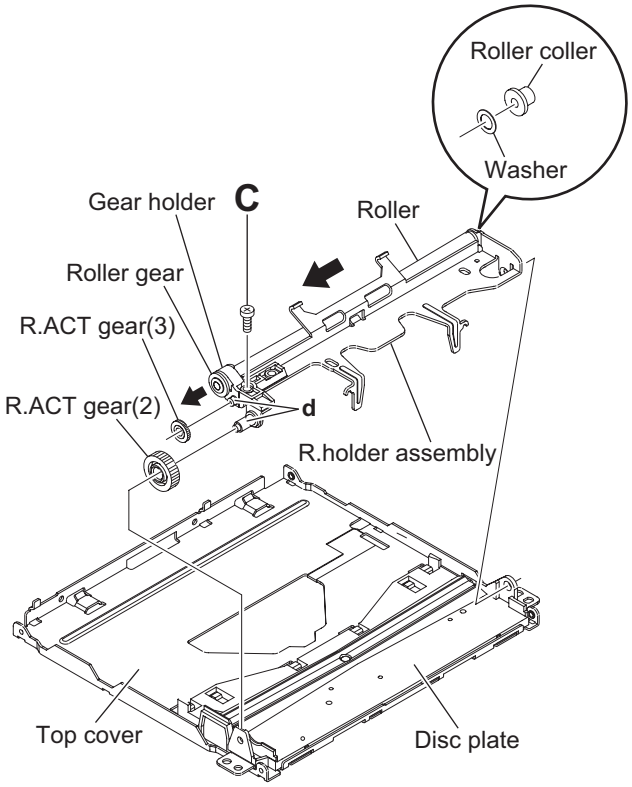


Fig.6

3.2.4 Removing the PHOTO BOARD assembly (See Fig.7 and 8)

- Remove the MECHANISM CONTROL BOARD assembly and top cover.
  (1) From the bottom side of the top cover, release the projection **e** from the notch of the disc plate. (See Fig.7.)
  (2) Take out the disc plate in the direction of the arrow. (See Fig.7.)
  (3) From the reverse side of the disc plate, remove the screw **D** attaching the PHOTO BOARD assembly. (See Fig.8.)

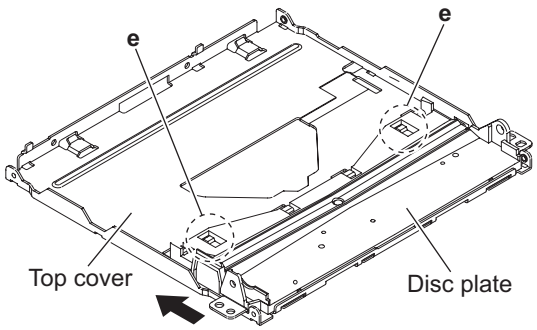


Fig.7

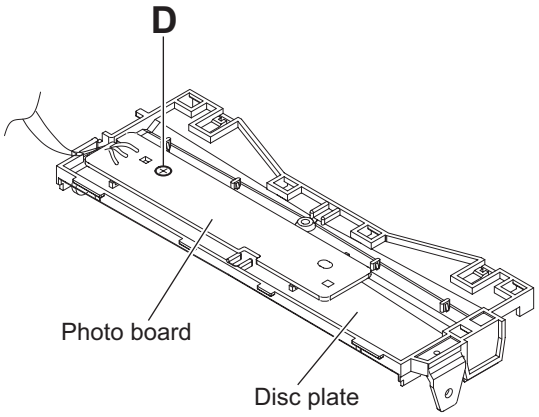


Fig.8

3.2.5 Removing the mechanism section (See Fig.9 and 10)

- Remove the MECHANISM CONTROL BOARD assembly and top cover.
  (1) From the top side of the CD MECHANISM assembly, remove the two screws **E** attaching the loading motor assembly. (See Fig.9.)
  (2) Remove the two roller springs on the top side of the mecha frame. (See Fig.9.)
  (3) Remove the four SUS springs on the top side of the mecha frame. (See Fig.9.)
  (4) Remove the link spring on the top side of the mecha frame. (See Fig.10.)
  (5) Release section **f** of the three dampers from the mecha frame. (See Fig.10.)

  Reference:
  When attaching the roller spring and SUS spring, keep direction before remove.

  (6) Move the slide cam (R) assembly in the direction of the arrow, and then take out the mechanism section in an upward direction. (See Fig.10.)

  Reference:
  When attaching the mechanism section, apply grease to the section **g**. (See Fig.10.)

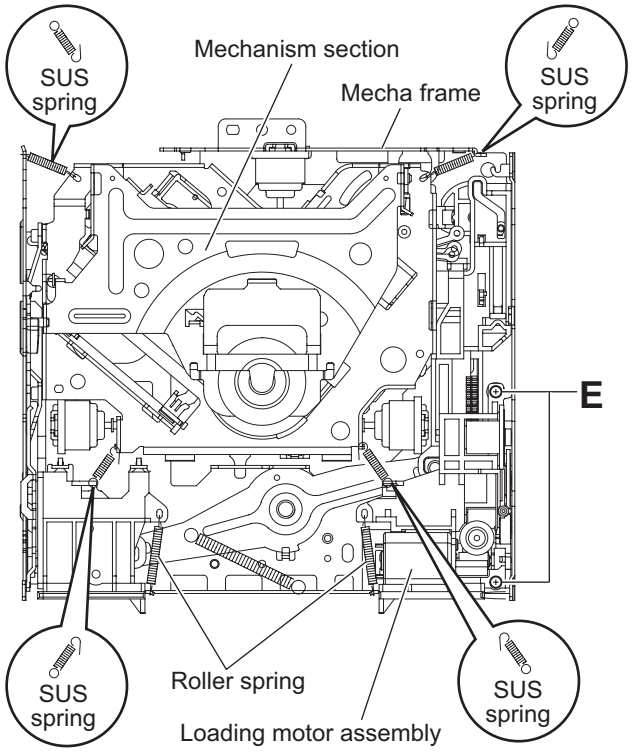


Fig.9

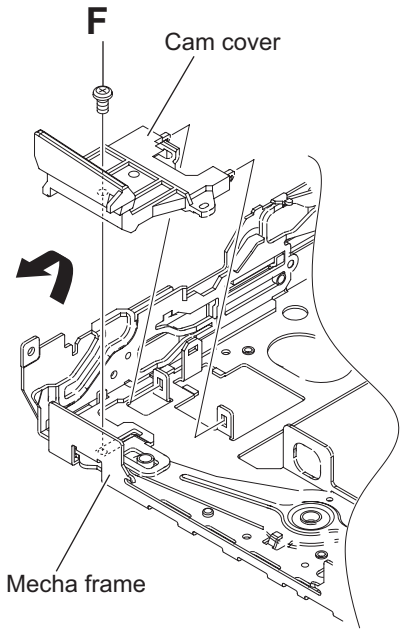


Fig.10

3.2.6 Removing the slide cam (L) (See Fig.11 to 13)

- Remove the MECHANISM CONTROL BOARD assembly, top cover and mechanism section.
  (1) From the top side of the mecha frame, remove the screw **F** attaching the cam cover. (See Fig.11.)
  (2) Take out the cam cover from mecha frame in an upward direction. (See Fig.11.)
  (3) Take out the slide cam (L) in the direction of the arrow. (See Fig.12.)

  Reference:

  When attaching the slide cam (L), apply grease to the section **h**. (See Fig.13.)

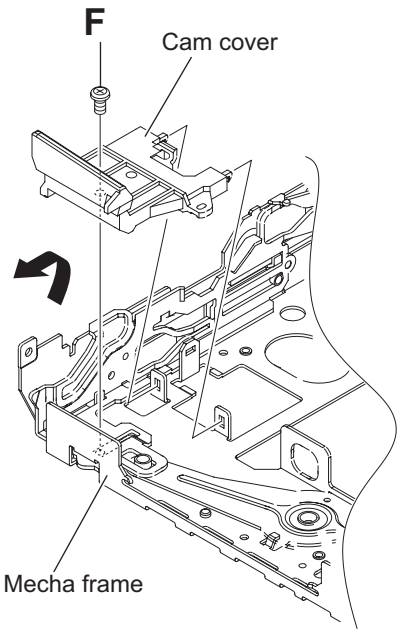


Fig.11

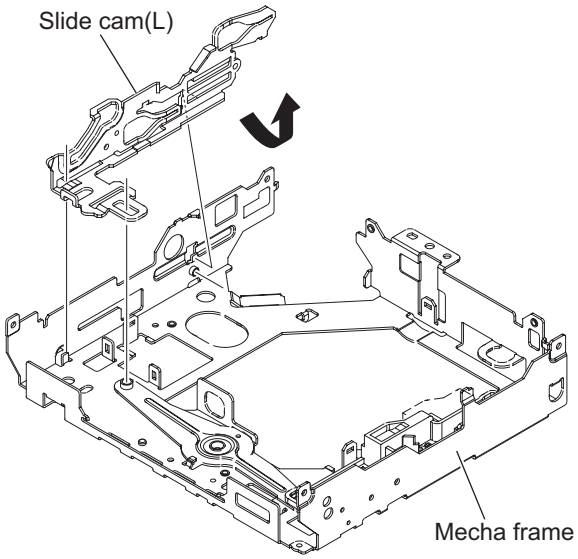


Fig.12

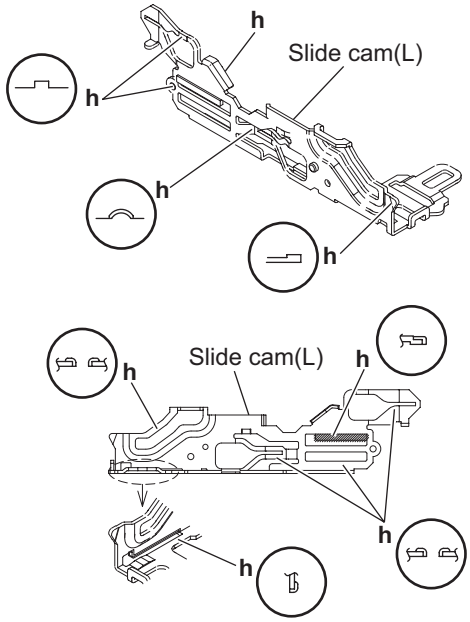


Fig.13

3.2.7 Removing the F.lock lever and slide cam (R) (See Fig.14 and 15)

- Remove the MECHANISM CONTROL BOARD assembly, top cover and mechanism section.
  (1) From the top side of the mecha frame, take out the slide cam (R) assembly in an upward direction. (See Fig.14.)
  (2) Rotate the F.lock lever in the direction of the arrow 1, and then take out the direction of the arrow 2. (See Fig.14.)

Reference:

When attaching the slide cam (R) assembly, the f.lock lever and the link arm apply grease to the section **h**. (See Fig.14 and 15.)

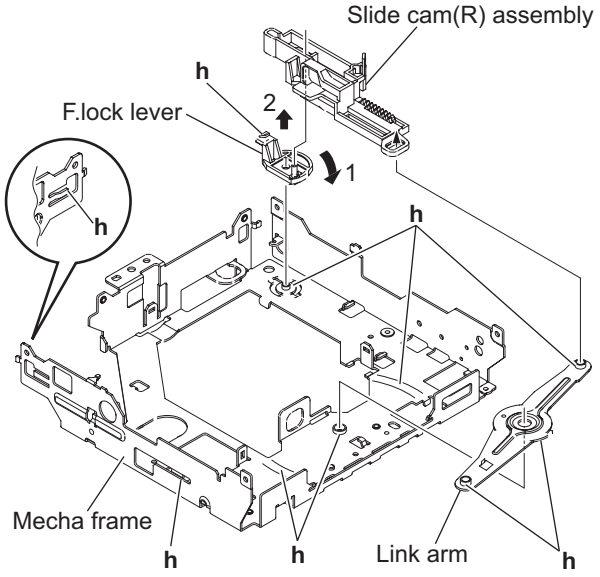


Fig.14

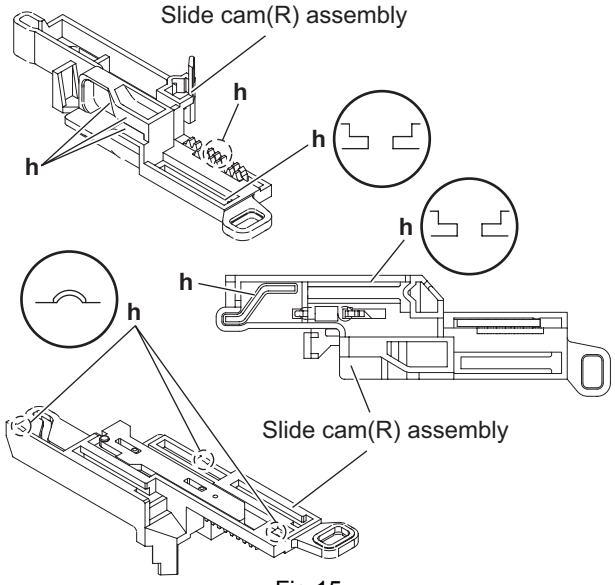


Fig.15

3.2.8 Removing the damper (See Fig.16)

- Remove the MECHANISM CONTROL BOARD assembly, top cover and mechanism section.
  From the mechanism section, pull out the three dampers in the direction of the arrow.

Reference:

Before inserting the shaft to the dampers, apply IPA to the pocket **j** of damper.

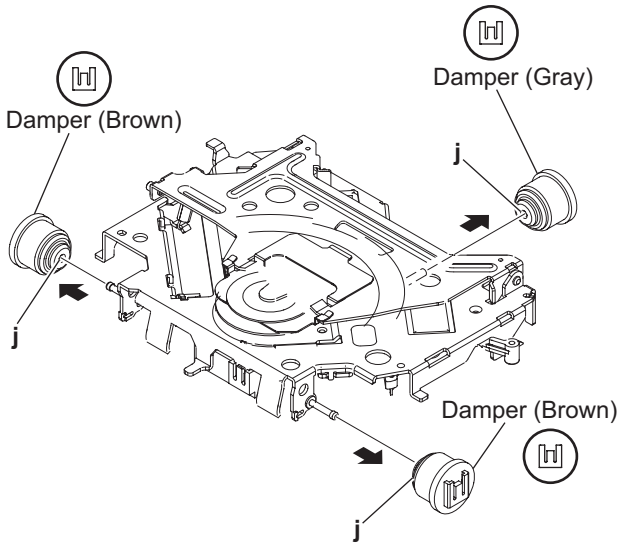


Fig.16

3.2.9 Removing the clamper assembly (See Fig.17)

- Remove the MECHANISM CONTROL BOARD assembly, top cover and mechanism section.
  (1) From the top side of the mechanism section, release the clamper spring.
  (2) Move the clamper assembly in the direction of the arrow, and then release the joints (**k** and **m**).
  (3) Take out the clamper assembly from the T.M chassis assembly.

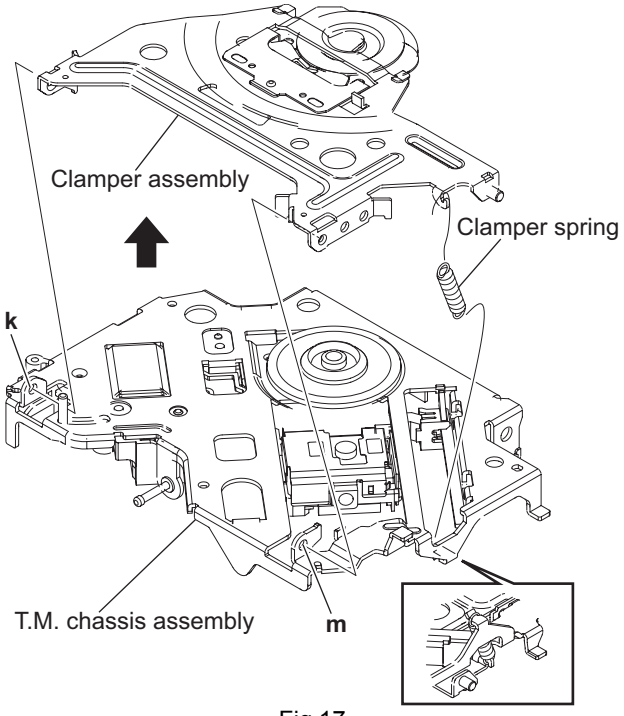


Fig.17

3.2.10 Removing the feed motor (See Fig.18 and 19)

- Remove the MECHANISM CONTROL BOARD assembly, top cover, mechanism section and clamper assembly.
  (1) From the bottom side of the T.M chassis assembly, remove the two screws **G** attaching the feed motor assembly. (See Fig.18.)
  (2) Remove the two screws **H** attaching the feed motor to f.motor holder. (See Fig.19.)

  Reference:

  When attaching the f. wheel gear, trigger arm and feed motor, apply grease to the sections (**n**, **p** and **q**). (See Fig.18 and 19.)

3.2.11 Removing the SWITCH BOARD assembly (See Fig.18)

- Remove the MECHANISM CONTROL BOARD assembly, top cover, mechanism section, clamper assembly and feed motor assembly.
  From the bottom side of the T.M chassis assembly, take out the SWITCH BOARD assembly in an upward direction from T.M chassis assembly.

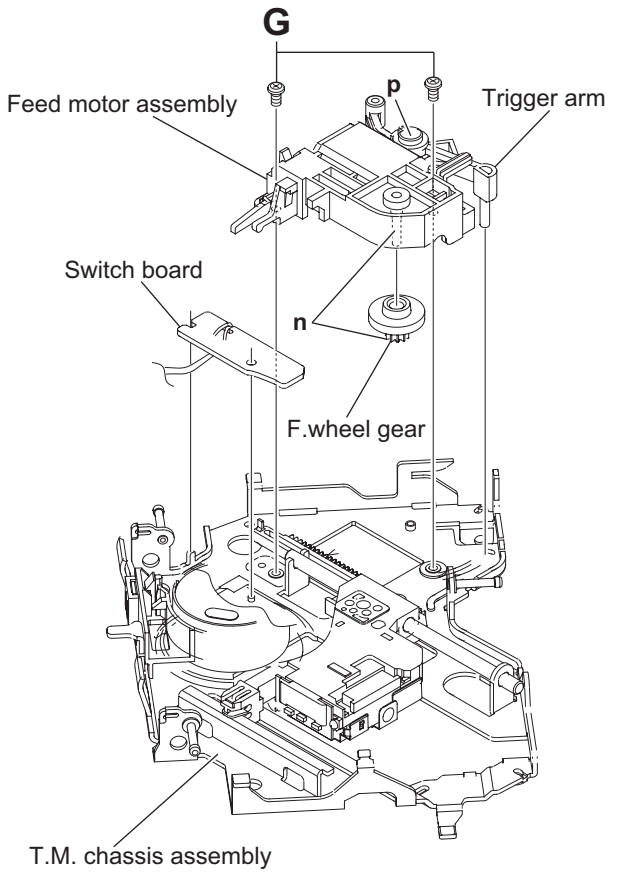


Fig.18

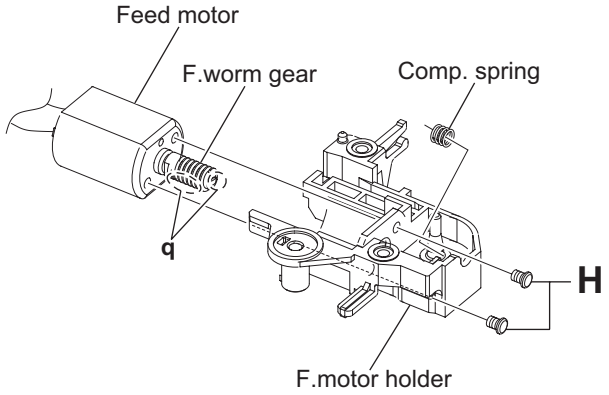


Fig.19

3.2.12 Removing the loading motor (See Fig.20)

- Remove the MECHANISM CONTROL BOARD assembly, top cover, mechanism section and clamper assembly.
  (1) From the right side of the L.M base assembly, remove the two screws **J** attaching the loading motor.
  (2) Take out the loading motor in the direction of the arrow from the L.M base assembly.

  Reference:

  When attaching the loading motor, apply grease to the section **r**.

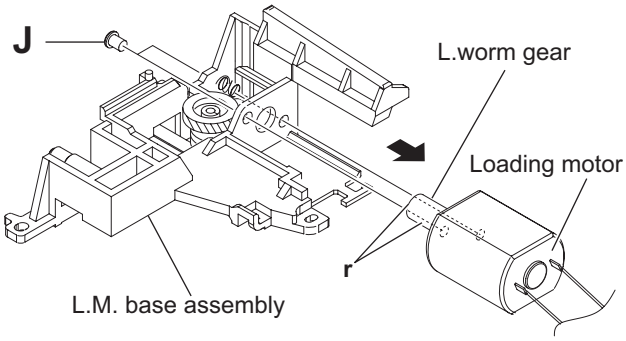


Fig.20

3.2.13 Removing the pickup assembly (See Fig.21 to 22)

- Remove the MECHANISM CONTROL BOARD assembly, top cover, mechanism section, clamper assembly and feed motor assembly.

Caution:

- Do not touch section **u** on the pickup assembly. (See Fig.21 and 22.)

(1) From the bottom side of the T.M chassis assembly, move the pickup assembly in the direction of the arrow from the T.M chassis assembly. (See Fig.21.)
(2) Pull out the main shaft. (See Fig.21.)
(3) Remove the screw **K** attaching the pickup to the rack plate. (See Fig.22.)

Reference:

When attaching the loading motor, apply grease to the sections **s** and **t**. (See Fig.21.)

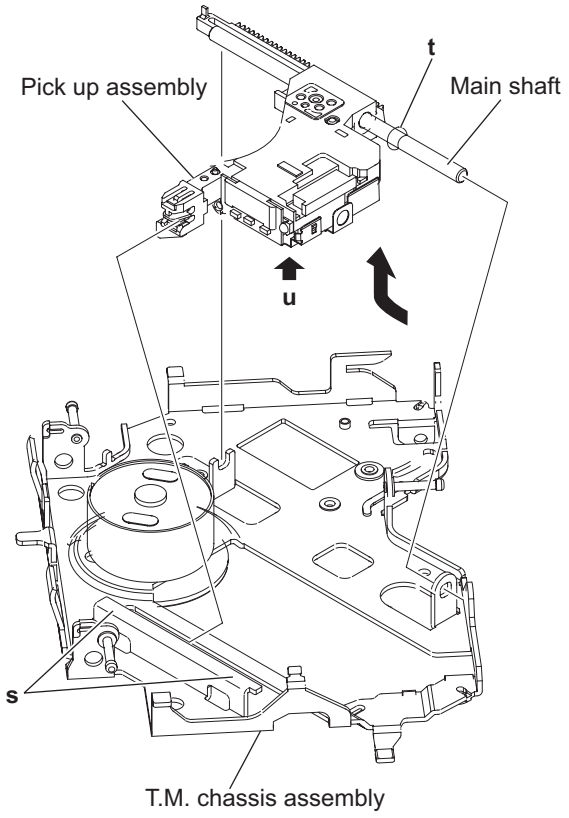


Fig.21

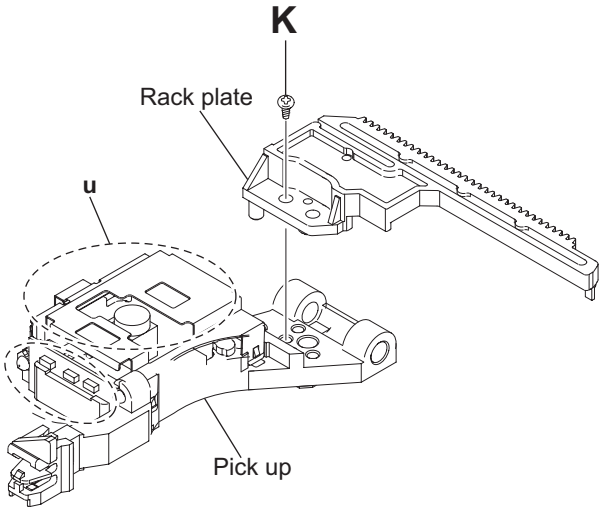


Fig.22

3.2.14 Removing the spindle motor (See Fig.23 and 24)

- Remove the MECHANISM CONTROL BOARD assembly, top cover, mechanism section, clamper assembly, feed motor assembly and pickup assembly.

(1) From the top side of the T.M chassis assembly, remove the CD T.table assembly from the spindle motor. (See Fig.23.)
(2) Remove the two screws **L** attaching the spindle motor. (See Fig.23.)
(3) Take out the spindle motor from the bottom side of the T.M chassis assembly. (See Fig.23.)

Reference:

When attaching the CD T.table assembly to the spindle motor shaft, apply loctite 460 to inside the CD T.table assembly. (See Fig.24.)

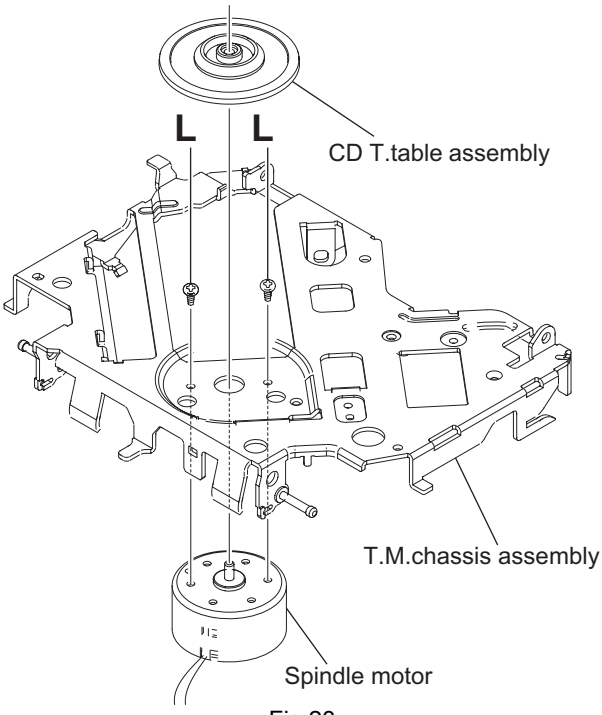


Fig.23

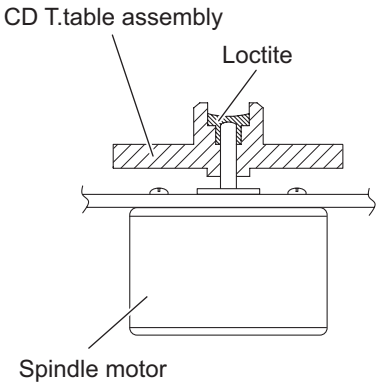


Fig.24

SECTION 4
ADJUSTMENT

4.1 Test instruments required for adjustment

(1) Digital oscilloscope (100MHz)
(2) Digital tester
(3) Test Disc
(4) Extension cable : EXTCD004-28P

4.2 Standard measuring conditions

Power supply voltage DC14.4V(10.5 to 16V)
Load impedance 20K ohm (2 Speakers connection)
Output Level Line out 2.5V (Vol. MAX)

4.3 Standard volume position

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

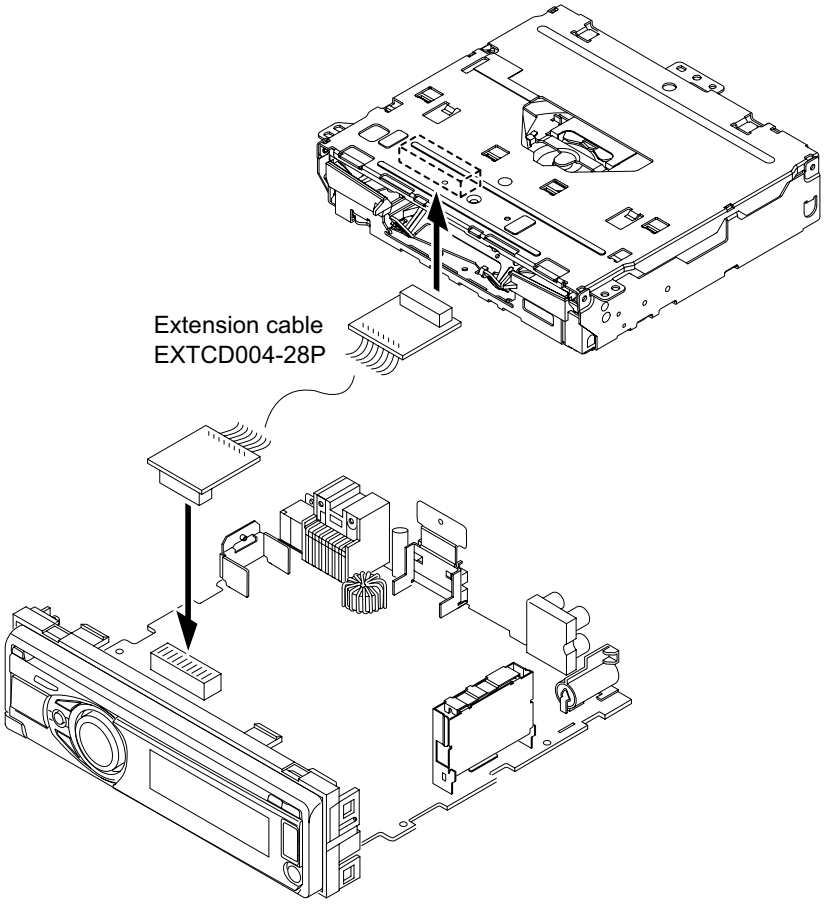
4.4 Dummy load

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 sincedirect reading of figures are applied in this working standard.

4.5 How to connect the extension cable for adjusting

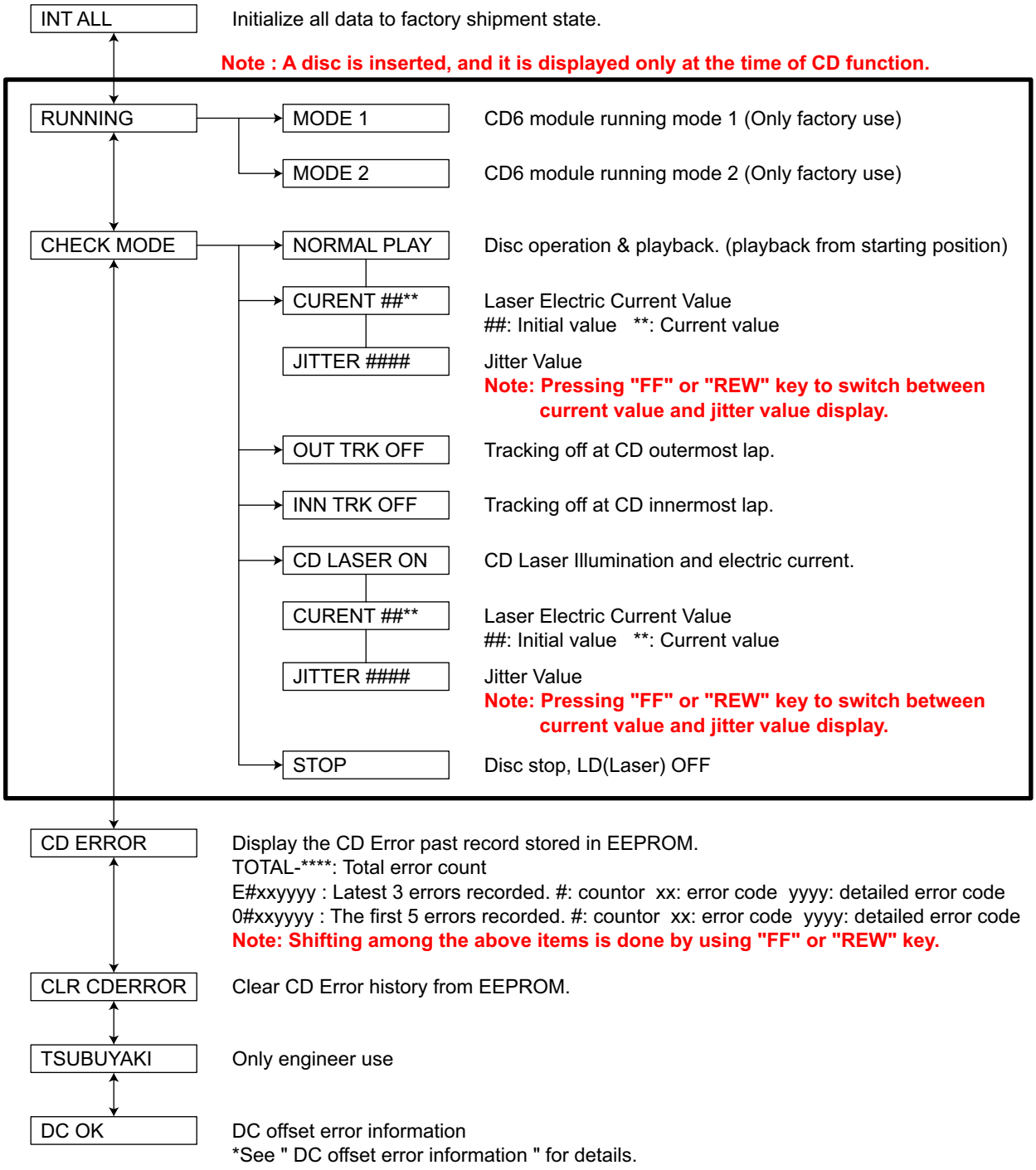
Caution:

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.



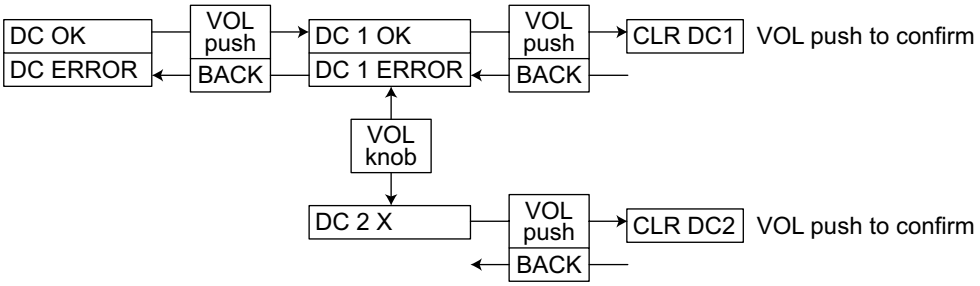
4.6 SERVICE MODE

Operating key: [MENU] → [DOWN] (3 sec)
Navigation key : Press [SEL] in any main display item to select that option.
Volume Knob Turn: forward and backward selection



4.7 DC OFFSET ERROR INFORMATION

4.7.1 Display indication



4.7.2 Error content confirmation.

Whether it turns on power and the "PROTECT" display appears are confirmed.

(1) When the "PROTECT" display appears.

The content of the DC offset error is confirmed in the Service mode.

* Because it takes DC offset protection, the following is displayed.

"DC ERROR"

(1-1) When "DC1 ERROR" is displayed. (DC ERROR1)

•Forecast cause

It comes in contact with improper connection or GND of the speaker wiring.

It is confirmed that there is no improper connection of the speaker wiring and pushes reset.

•When "PROTECT" is not displayed, it is unquestionable.

The error data of EEPROM, it deletes it. (CLR DC1)

•When "PROTECT" is still displayed.

The DC offset has been generated by the reasons other than the improper connection.

Forecast cause: Power AMP is broken.

After parts are exchanged, reset is confirmed pushing again.

(1-2) When "DC2 X" is displayed. (DC ERROR2)

* As for X, the detected number is displayed. (0-4)

* When X is 0, it is unquestionable because the DC offset has never been detected.

When leak of capacitor is detected, it is displayed.

It is confirmed that there is no problem in the capacitor and deletes the error data of EEPROM. (CLR DC2)

It is confirmed that reset is pushed and "PROTECT" is not displayed.

After above-mentioned (1-1) and (1-2) are executed, the conect of the DC offset error is confirmed in the Service mode.

If the part displayed as "DC ERROR" becomes "DC OK", it is unquestionable.

(2) When the "PROTECT" display doesn't appear.

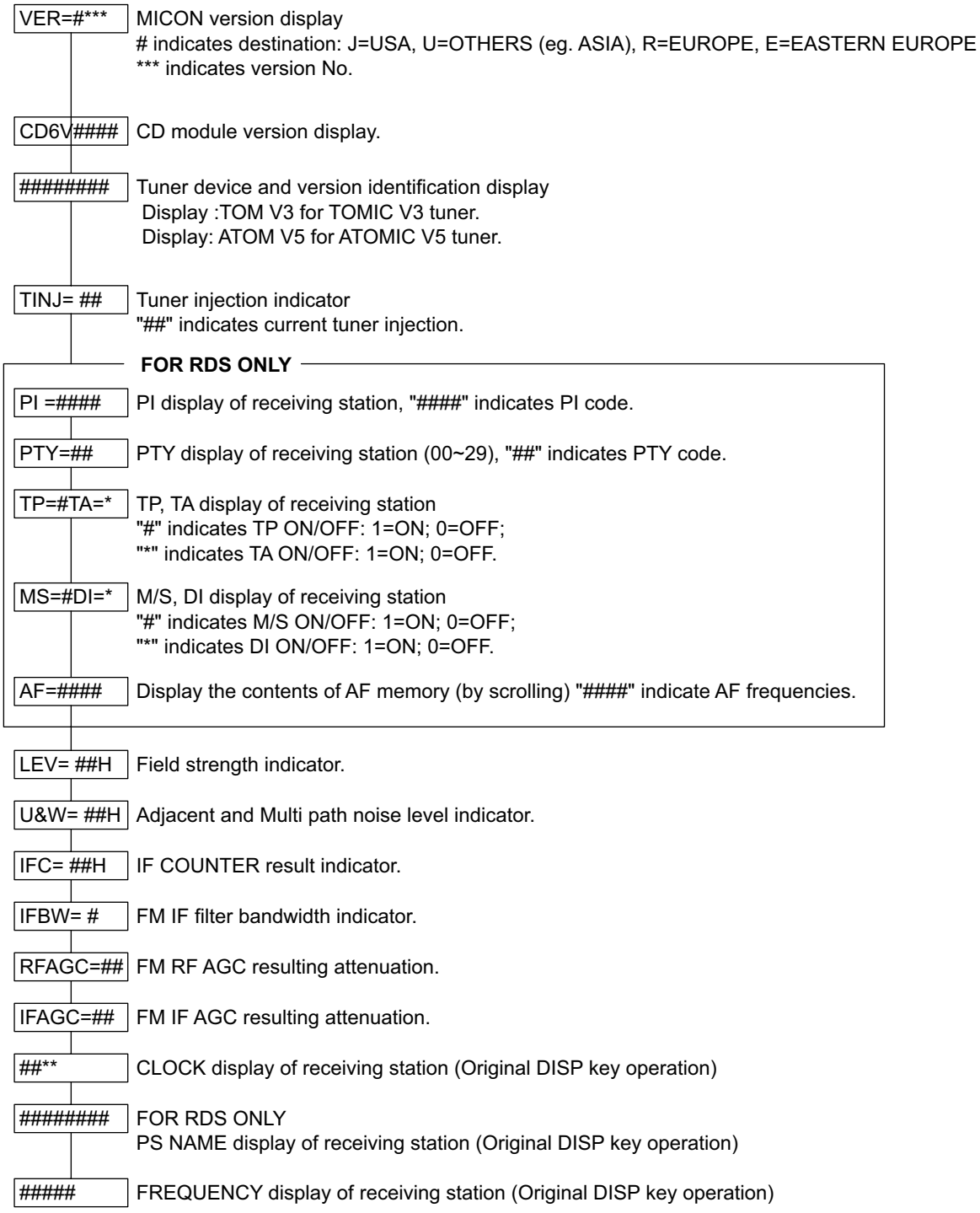
The content of the DC offset error is confirmed in the Service mode.

(2-1) When "DC OK" is displayed, it is unquestionable because the DC offset has not been detected in the past.

(2-2) When "DC ERROR" is displayed, the confirmation similar to (1-1) and (1-2) is done because there is a history that detected the DC offset error in the past.

4.8 TUNER SERVICE MODE

Key operation (FM and AM mode)
Enter service mode: [SEL] → [MENU] (3 sec)
Exit service mode: press [ENTER] (SEL) key.
Go to next item: press [DISP] key
Back to previous item: press [BACK] key



4.9 ERROR CODE

4.9.1 Mechanical Error Detail Codes

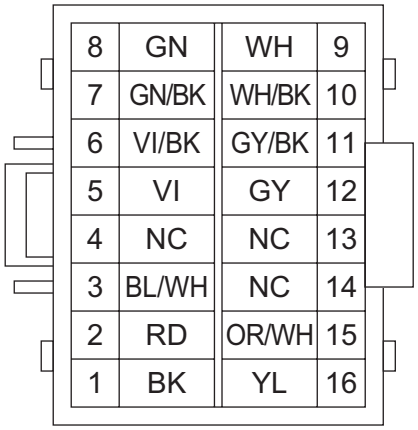
Condition	Details	Error code	Detailed code
LOADING Error	Error without SW change in LOAD when time-out is done		
B1 time out	When there is no change in the state of the switch from the state with DISC forward.	09	0011
C1 time out	When there is no change in the state of the switch from the state that DISC is drawn in a half.	09	0012
B2 time out	When there is no change in the state of the switch from the state that DISC is in the interior.	09	0015
EJECT Error	Error without SW change in EJECT when time-out is done.		
B1 time out	When there is no change in the state of the switch from the state that DISC is in the interior.	01	0023
C2 time out	When there is no change in the state of the switch from the state that DISC is drawn in a half.	01	0026
B2 time out	When there is no change in the state of the switch in EJECT from initial LOAD ERROR.	01	0027
FORCE EJECT Error	Transition to Force EJECT waiting or Force EJECT transition from error Error by abnormal SW.		
E1 FORCE EJECT ERROR	When detect abnormal SW from the state of NO DISC	01	0041
E2 FORCE EJECT ERROR	When detect abnormal SW from the state with DISC forward in LOAD.	01	0042
E3 FORCE EJECT ERROR	When detect abnormal SW from the initial state.	01	0043
E5 FORCE EJECT ERROR	When detect abnormal SW from the state that half DISC is drawn in LOAD and EJECT.	01	0045
E7 FORCE EJECT ERROR	When detect abnormal SW from the atate that DISC is in the interior in LOAD and EJECT.	01	0047
E8 FORCE EJECT ERROR	When receive Force EJECT key after it makes an error from Force EJECT.	01	0048
E9 FORCE EJECT ERROR	When receive Force EJECT key after it makes an error from LOAD error or EJECT error.	01	0049
Error in Running mode			
Case 1	When DISC was extracted or fall in EJECT END and EJECT START.	09	0031
Case 2	When DISC is pushed in EJECT END.	09	0032

4.9.2 Disc error code

Condition	Details	Error code	Detailed code
TOC READING Error	When it hasn't completed CD TOC reading.	84	0059
1'st track access Error	It doesn't end even if the first track access passes 30sec after the TOC reading ends in the running mode.	80	0060
Last track access Error	It doesn't end even if the last track access passes 30sec after the first track ends in the running mode.	80	0061
NODISC judgement	It be judged NODISC.	80	0090
NO DISC with start failure	Not possible to start.	80	0091
Stopped with no playback	When it was stopped in playback in the running mode.	80	0093
Logical format NG	Analysis of logical format is impossible or it does not correspond to logical formats.	80	0094

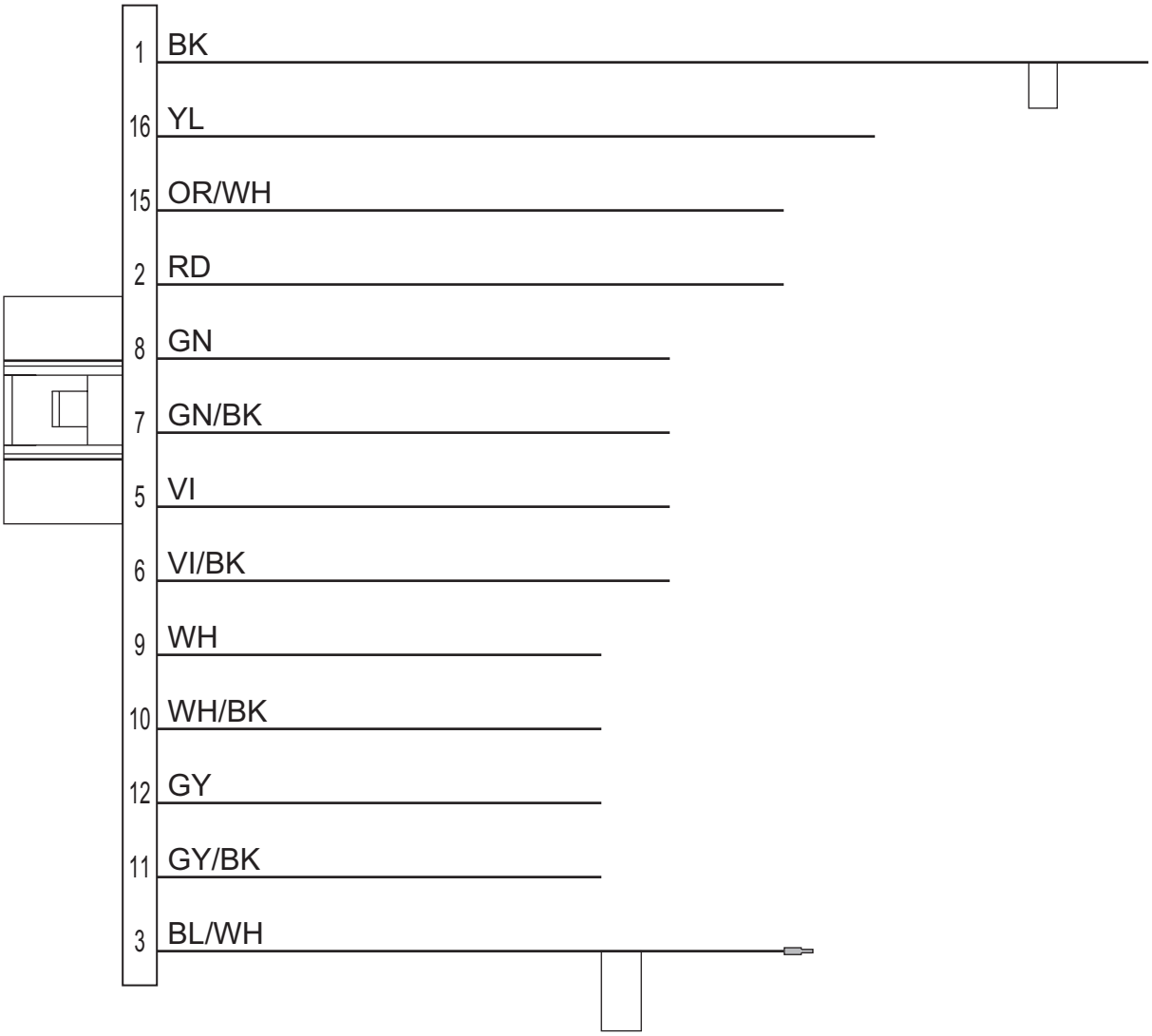
SECTION 5
TROUBLESHOOTING

16 PIN CORD DIAGRAM (For KD-A615/KD-R610/KD-R618)



8	GN	WH	9
7	GN/BK	WH/BK	10
6	VI/BK	GY/BK	11
5	VI	GY	12
4	NC	NC	13
3	BL/WH	NC	14
2	RD	OR/WH	15
1	BK	YL	16

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

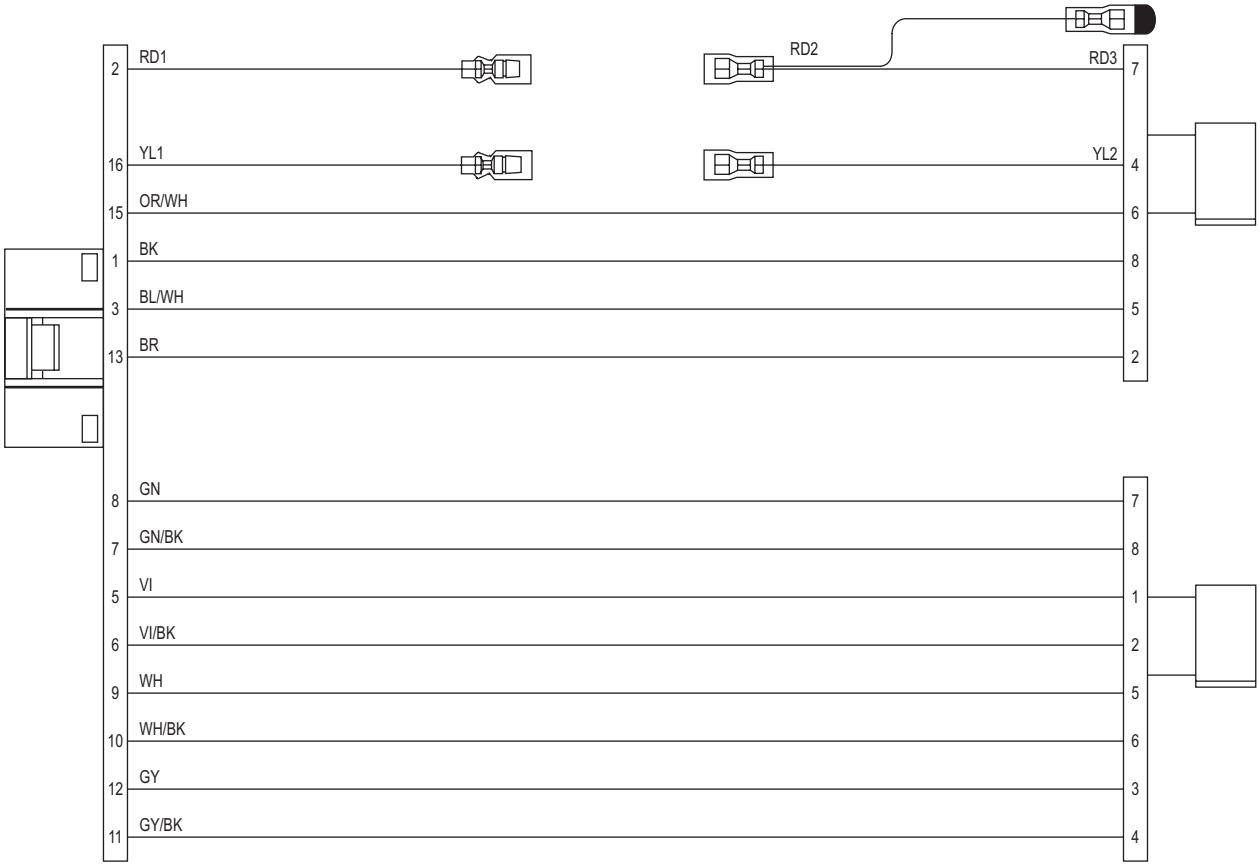


16 PIN CORD DIAGRAM (For KD-R611/KD-R612)

8	GN	WH	9
7	GN/BK	WH/BK	10
6	VI/BK	GY/BK	11
5	VI	GY	12
4	NC	BR	13
3	BL/WH	NC	14
2	RD	OR/WH	15
1	BK	YL	16

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

1	NC	BR	2
3	NC	YL2	4
5	BL/WH	OR/WH	6
7	RD3	BK	8

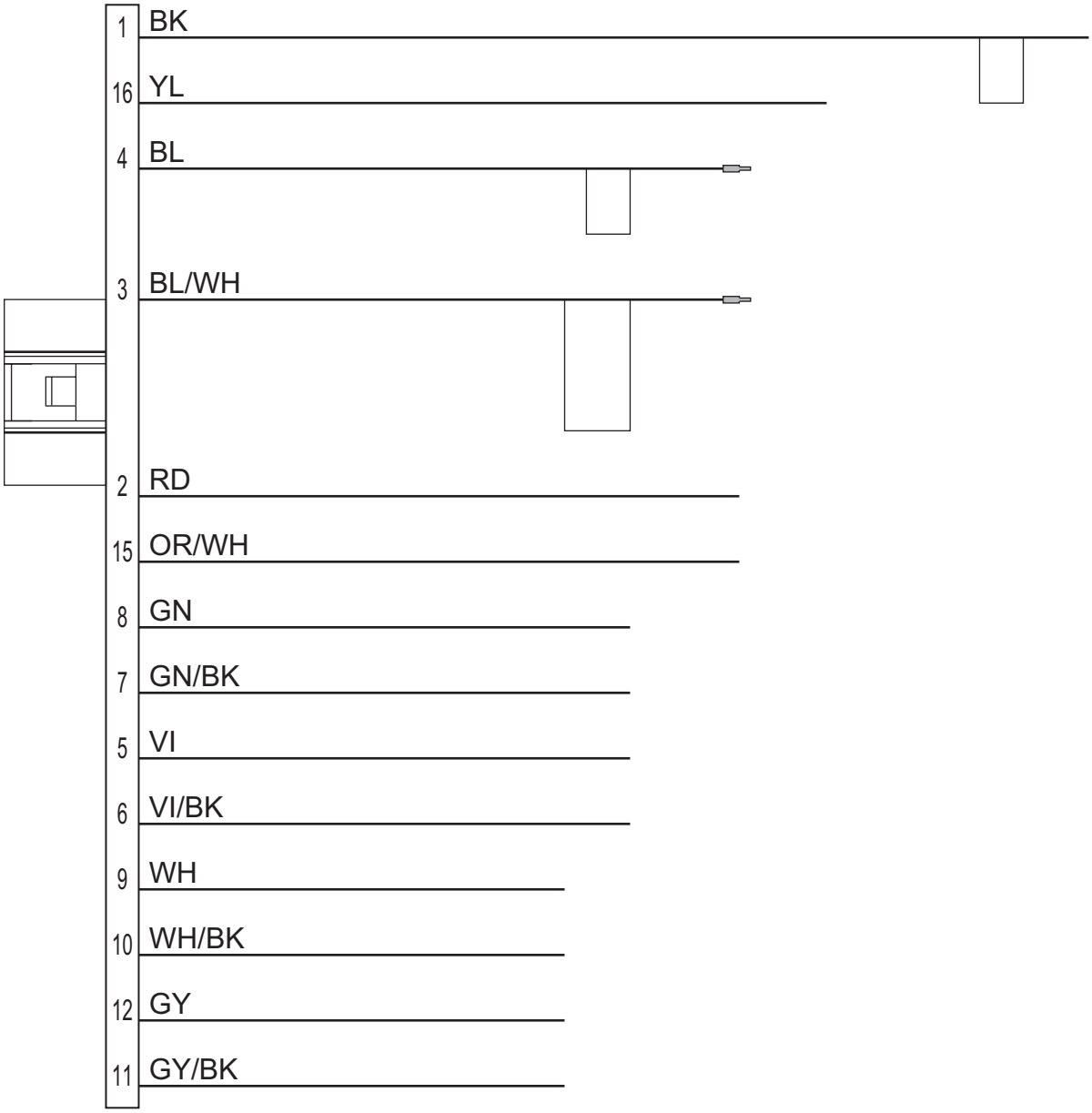


1	VI	VI/BK	2
3	GY	GY/BK	4
5	WH	WH/BK	6
7	GN	GN/BK	8

16 PIN CORD DIAGRAM (For KD-R616)

8	GN	WH	9
7	GN/BK	WH/BK	10
6	VI/BK	GY/BK	11
5	VI	GY	12
4	NC	NC	13
3	BL/WH	NC	14
2	RD	OR/WH	15
1	BK	YL	16

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



JVC

Victor Company of Japan, Limited
Mobile Entertainment Division 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.MA467<Rev.002>)

Printed in Japan
VSE

JVC

REVISION INFORMATION

CD RECEIVER

KD-A615J, KD-R610J, KD-R611E, KD-R611EU, KD-R611EY, KD-R612E, KD-R616U, KD-R616UH, KD-R616UN, KD-R618J

■ OVERVIEW

Add KD-R612E.

■ DETAILS

COVER SECTION

Title	Line	No.MA467<Rev.001>	No.MA467<Rev.002>	Description
Revision		Rev.001	Rev.002	
Issue Date		2010/02	2010/06	
Model No.		KD-A615J, KD-R610J, KD-R611E, KD-R611EU, KD-R611EY, KD-R616U, KD-R616UH, KD-R616UN, KD-R618J	KD-A615J, KD-R610J, KD-R611E, KD-R611EU, KD-R611EY, KD-R612E, KD-R616U, KD-R616UH, KD-R616UN, KD-R618J	
Cover Illustration		ILLUSTRATION(ma467_0001.png)	ILLUSTRATION(ma467_0001.png)	
SPECIFICATION	104	KD-R611	KD-R611/KD-R612	

PARTS LIST

MODEL No. LIST

Model No.	No.MA467<Rev.002>
KD-A615J	01
KD-R610J	02
KD-R611E	03
KD-R611EU	04

Model No.	No.MA467<Rev.002>
KD-R611EY	05
KD-R612E	06
KD-R616U	07
KD-R616UH	08

Model No.	No.MA467<Rev.002>
KD-R616UN	09
KD-R618J	0A

General assembly [M1MM]

⚠	Symbol		or	Part No. <Rev.001>	Part No. <Rev.002>	Part Name	Description	Qty	Models
	M1MM	23		----------	GE33885-027A	FINDER ASSY	(Addition)	1	06
	M1MM	31		----------	GE33806-019A	PHONE BACK BTN	(Addition)	1	06
	M1MM	40		----------	GE10273-004A	REAR COVER	(Addition)	1	06
	M1MM	47		----------	GE34322-001A	NAME PLATE	(Addition)	1	06

Electrical parts list Main board [01]

⚠	Symbol		or	Part No. <Rev.001>	Part No. <Rev.002>	Part Name	Description	Qty	Models
	01	C303		----------	NCB21CK-474X-A	C CAPACITOR	(Addition)	1	06
	01	C304		----------	NCB21CK-474X-A	C CAPACITOR	(Addition)	1	06
	01	C313		----------	NCB21CK-474X-A	C CAPACITOR	(Addition)	1	06
	01	C314		----------	NCB21CK-474X-A	C CAPACITOR	(Addition)	1	06
	01	C326		----------	QERF1CM-106Z-E	E CAPACITOR	(Addition)	1	06
	01	C327		----------	NCB21AK-105X-A	C CAPACITOR	(Addition)	1	06

Packing and accessories [M3MM]

⚠	Symbol		or	Part No. <Rev.001>	Part No. <Rev.002>	Part Name	Description	Qty	Models
	M3MM	A1		----------	GET0640-001C	INST BOOK	(Addition)	1	06
	M3MM	A2		----------	GET0640-002C	INST BOOK	(Addition)	1	06
	M3MM	A5		----------	GET0640-008B	INSTALL MANUAL	(Addition)	1	06
	M3MM	A6		----------	GET0640-009B	INSTALL MANUAL	(Addition)	1	06
	M3MM	A13		----------	GE20204-320A	TRIM PLATE	(Addition)	1	06
	M3MM	P1		----------	GE34323-002A	CARTON	(Addition)	1	06
	M3MM	P3		----------	QPC03004315PG	POLY BAG	(Addition)	1	06

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(MA467-R002)

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PARTS LIST

CD RECEIVER

KD-A615J	KD-R610J	KD-R611E
KD-R611EY	KD-R611EU	KD-R616U
KD-R616UN	KD-R616UH	KD-R618J

■ PRECAUTIONS ON SCHEMATIC DIAGRAMS

- Due to the improvement in performance, some part numbers shown in the circuit diagrams may not agree with those indicated in the Parts List.
- The parts numbers, values and rated voltage etc. in the Schematic Diagrams are for reference only.
- Since the circuit diagrams are standard ones, the circuits and circuit constants may be subject to change for improvement without any notice.

■ PRECAUTIONS ON PARTS LIST

- The parts identified by the ⚠ symbol are critical for safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.
- When ordering chips, screws etc., place bulk orders (unit of tens) whenever possible to improve shipping efficiency.
- There are cases where the actual implemented parts in the sets and the service parts are different. When ordering parts, make sure to refer to the Parts List.

■ PRECAUTIONS ON SERVICE

Certain parts of the power circuits and the GNDs differ according to the models. Care must be taken for the following points as the differences are indicated separately in the LIVE GND (⏚) and the ISOLATED (NEUTRAL) GND (⊥).

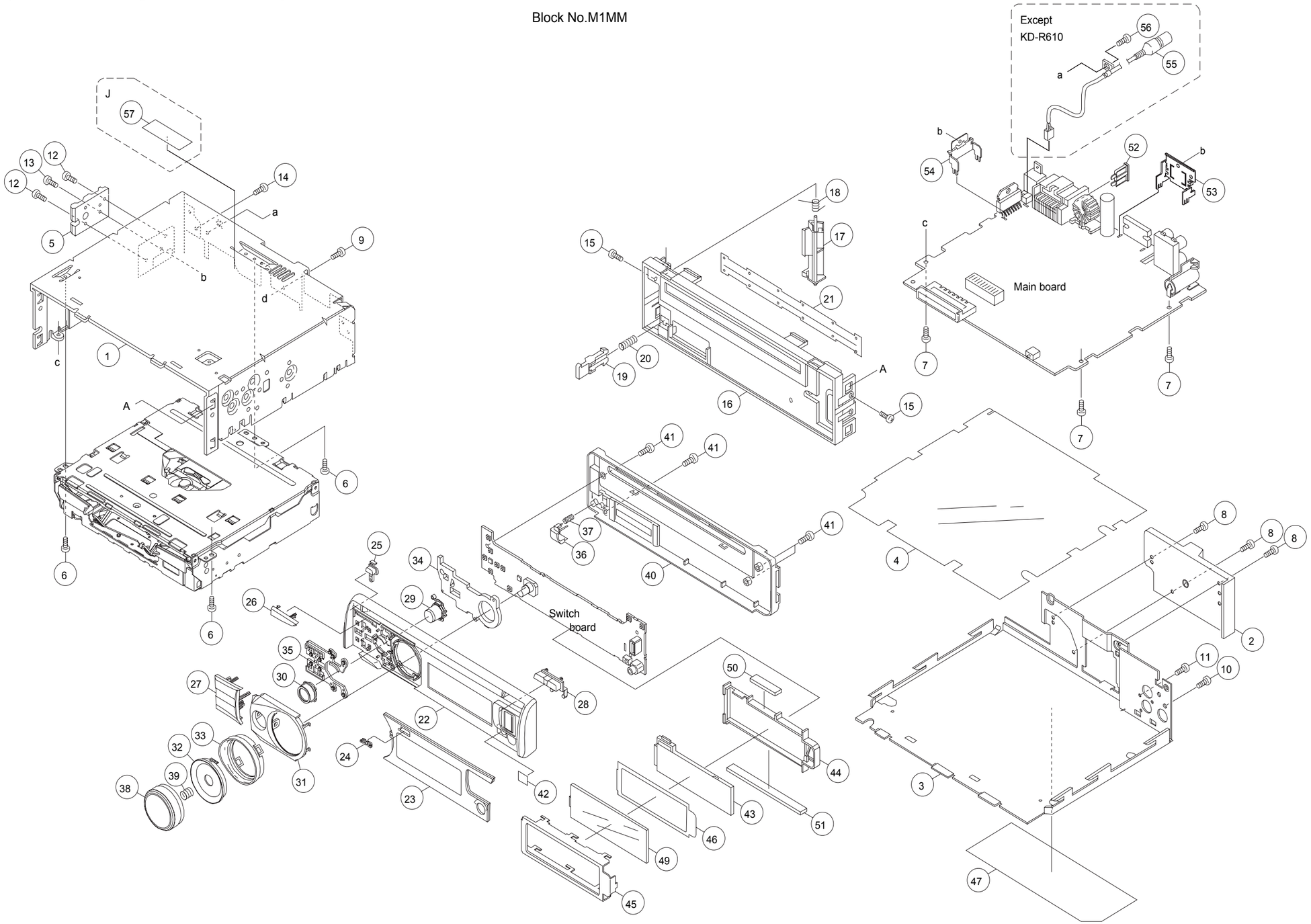
1. Do not touch the LIVE GND, or do not touch the LIVE GND and the ISOLATED (NEUTRAL) GND at the same time. It may cause an electric shock.
   Before pulling out the chassis or other parts, make sure to pull out the power cord from the wall outlet first.
2. Do not short circuit between the LIVE GND and ISOLATED (NEUTRAL) GND, or never measure the LIVE GND and ISOLATED (NEUTRAL) GND at the same time using measuring instruments (oscilloscope, etc.). It may blow fuses or damage other parts.

■ DEVIATION TOLERANCE RANGE

DEVIATION TOLERANCE RANGE									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

Exploded view of general assembly

Block No.M1MM



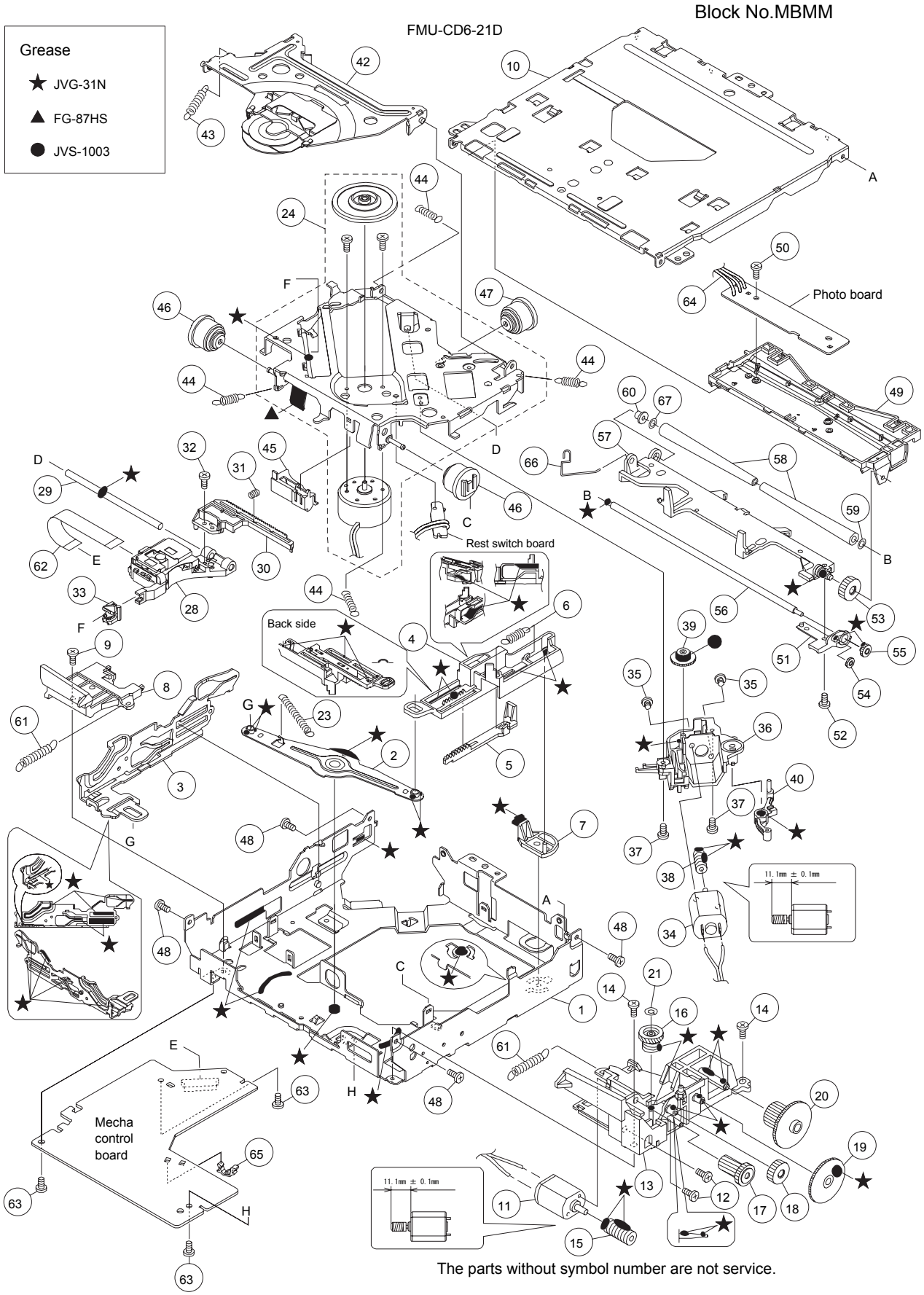
The parts without symbol number are not service.

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
General assembly <M1MM>						
	1	GE10248-012A	TOP CHASSIS		1	A,C,D,E,F,G,H,I
	1	GE10248-003A	TOP CHASSIS		1	B
	2	GE33323-002A	HEAT SINK		1	
	3	GE20248-003A	BOTTOM COVER		1	
	4	GE33325-003A	INSULATOR		1	
	5	GE40395-002A	SIDE PANEL		1	
	6	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm	3	
	7	GE40377-002A	SCREW		3	
	8	GE40377-003A	SPECIAL SCREW		3	
	9	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	1	
	10	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	1	
	11	QYSDSF2606ZA	TAP SCREW	M2.6 x 6mm	1	
	12	GE40377-002A	SCREW		2	
	13	QYSDST2608ZA	TAP SCREW	M2.6 x 8mm	1	
	14	QYSDST2606ZA	TAP SCREW	M2.6 x 6mm	1	
	15	QYSDST2004ZA	TAP SCREW	M2 x 4mm	2	
	16	GE10242-012A	FRONT CHASSIS		1	
	17	GE33792-001A	LOCK LEVER		1	
	18	GE40368-002A	TORSION SPRING		1	
	19	GE32810-001A	RELEASE LEVER		1	
	20	GE30999-004A	COMP.SPRING		1	
	21	GE40432-001A	BLIND		1	
	22	GE33886-002A	FRT PANEL ASSY		1	A
	22	GE33886-003A	FRT PANEL ASSY		1	B,C,D,E,F,G,H
	22	GE33886-006A	FRT PANEL ASSY		1	I
	23	GE33885-019A	FINDER ASSY		1	A
	23	GE33885-013A	FINDER ASSY		1	B
	23	GE33885-021A	FINDER ASSY		1	C,D,E
	23	GE33885-015A	FINDER ASSY		1	F,G,H
	23	GE33885-014A	FINDER ASSY		1	I
	24	GE40463-001A	JVC BADGE		1	
	25	GE33800-002A	EJECT BUTTON		1	
	26	GE33801-002A	SOURCE BUTTON		1	
	27	GE33802-004A	NAVI BUTTON		1	
	28	GE33803-001A	DISP BUTTON		1	
	29	GE40495-001A	MENU BTN ASSY		1	
	30	GE33805-003A	BUTTON RIM		1	A
	30	GE33805-001A	BUTTON RIM		1	B,C,D,E,F,G,H
	30	GE33805-002A	BUTTON RIM		1	I
	31	GE33806-002A	PHONE BACK BTN		1	A
	31	GE33806-003A	PHONE BACK BTN		1	B,F,G,H
	31	GE33806-004A	PHONE BACK BTN		1	C,D,E
	31	GE33806-001A	PHONE BACK BTN		1	I
	32	GE33807-001A	RIM LENS		1	
	33	GE33808-003A	RIM COVER		1	A
	33	GE33808-001A	RIM COVER		1	B,C,D,E,F,G,H
	33	GE33808-002A	RIM COVER		1	I
	34	GE33809-002A	LIGHT GUIDE		1	
	35	GE33810-001A	RUBBER BASE		1	
	36	GE33881-002A	DETACH BUTTON		1	
	37	GE30999-009A	COMP.SPRING		1	
	38	GE33704-003A	VOLUME KNOB		1	A
	38	GE33704-001A	VOLUME KNOB		1	B,C,D,E,F,G,H
	38	GE33704-002A	VOLUME KNOB		1	I
	39	GE40127-006A	KNOB SPRING		1	
	40	GE10273-003A	REAR COVER		1	
	41	VKZ4777-010	MINI SCREW		4	
	42	GE40431-003A	REMOTE SHEET		1	
	43	GE33813-001A	LCD LENS		1	
	44	GE33814-001A	LENS CASE		1	
	45	GE33815-001A	LCD CASE		1	
	46	GE40482-001A	LIGHTING SHEET		1	
	47	GE33854-001A	NAME PLATE		1	A
	47	GE33860-001A	NAME PLATE		1	B
	47	GE33866-002A	NAME PLATE		1	C,D,E
	47	GE33863-001A	NAME PLATE		1	F,G,H
	47	GE33857-002A	NAME PLATE		1	I
	49	QLD0631-001	LCD MODULE		1	
	50	QNZ1002-001	RUBBER CONNE		1	
	51	QNZ1003-001	RUBBER CONNE		1	
⚠	52	QMFZ064-150-J1	FUSE	15A	1	
	53	GE40439-001A	POWER IC BKT		1	
	54	GE40308-001A	REG IC BRACKET		1	
	55	QAM0992-002	CAR CABLE		1	A,C,D,E,F,G,H,I
	56	QYSDST2604ZA	TAP SCREW	M2.6 x 4mm	1	A,C,D,E,F,G,H,I
	57	GE40442-001A	FCC RULE LABEL		1	A,B,I

CD mechanism assembly

Block No.MBMM



The parts without symbol number are not service.

No.MA467

created date:2010-02-09

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.		Parts No.	Parts Name	Description	QTY	Local
FMU-CD6-21D CD mechanism <MBMM>							
	1		LV11598-001A	MECHA FRAME		1	A,B,C,D,E,F,G,H,I
	2		LV36800-002A	LINK ARM		1	A,B,C,D,E,F,G,H,I
	3		LV22300-002A	SLIDE CAM (L)		1	A,B,C,D,E,F,G,H,I
	4		LV22298-002A	SLIDE CAM(R)		1	A,B,C,D,E,F,G,H,I
	5		LV36802-001A	LOAD RACK		1	A,B,C,D,E,F,G,H,I
	6		LV44552-001A	RETURN SPRING		1	A,B,C,D,E,F,G,H,I
	7		LV36803-002A	F LOCK LEVER		1	A,B,C,D,E,F,G,H,I
	8		LV36804-002A	CAM COVER		1	A,B,C,D,E,F,G,H,I
	9		VKZ4539-054	MINI SCREW		1	A,B,C,D,E,F,G,H,I
	10		LV11260-003A	TOP COVER		1	A,B,C,D,E,F,G,H,I
	11		QAR0373-002	MOTOR		1	A,B,C,D,E,F,G,H,I
	12		QYSPSPT2025MA	SCREW	M2 x 2.5mm	2	A,B,C,D,E,F,G,H,I
	13		LV36903-003A	L M BASE ASSY		1	A,B,C,D,E,F,G,H,I
	14		VKZ4539-054	MINI SCREW		2	A,B,C,D,E,F,G,H,I
	15		LV36806-001A	L WORM GEAR		1	A,B,C,D,E,F,G,H,I
	16		LV36805-002A	M WHEEL GEAR		1	A,B,C,D,E,F,G,H,I
	17		LV36807-001A	A WHEEL GEAR		1	A,B,C,D,E,F,G,H,I
	18		LV36808-001A	R ACT GEAR(1)		1	A,B,C,D,E,F,G,H,I
	19		LV36809-001A	LOAD ACT GEAR		1	A,B,C,D,E,F,G,H,I
	20		LV36810-001A	LOADING GEAR		1	A,B,C,D,E,F,G,H,I
	21		QYWDL1230250	SLIT WASHER	3mm/1.2mm x 0.25mm	1	A,B,C,D,E,F,G,H,I
	23		LV44658-001A	LINK SPRING		1	A,B,C,D,E,F,G,H,I
	24		CM-FLMCD1D	SPINDLE MOTOR ASSY		1	A,B,C,D,E,F,G,H,I
	28		QAL1226-001	PICK UP		1	A,B,C,D,E,F,G,H,I
	29		LV44555-001A	MAIN SHAFT		1	A,B,C,D,E,F,G,H,I
	30		LV36799-001A	RACK PLATE		1	A,B,C,D,E,F,G,H,I
	31		LV45227-001A	RACK SPRING		1	A,B,C,D,E,F,G,H,I
	32		QYSPSGT1745ZA	TAP SCREW	M1.7 x 4.5mm	1	A,B,C,D,E,F,G,H,I
	33		LV36813-001A	SUB GUIDE CAP		1	A,B,C,D,E,F,G,H,I
	34		QAR0144-003	MOTOR	2.0V DC	1	A,B,C,D,E,F,G,H,I
	35		QYSPSPT2025MA	SCREW	M2 x 2.5mm	2	A,B,C,D,E,F,G,H,I
	36		LV22296-001A	F MOTOR HOLDER		1	A,B,C,D,E,F,G,H,I
	37		VKZ4539-054	MINI SCREW		2	A,B,C,D,E,F,G,H,I
	38		LV36814-001A	F WORM GEAR		1	A,B,C,D,E,F,G,H,I
	39		LV36815-002A	F WHEEL GEAR		1	A,B,C,D,E,F,G,H,I
	40		LV36816-001A	TRIGGER ARM		1	A,B,C,D,E,F,G,H,I
	42		LV37326-003A	CLAMPER ASSY		1	A,B,C,D,E,F,G,H,I
	43		LV44557-002A	CLAMPER SPRING		1	A,B,C,D,E,F,G,H,I
	44		LV44558-001A	SUS SPRING		4	A,B,C,D,E,F,G,H,I
	45		LV36820-001A	WIRE HOLDER		1	A,B,C,D,E,F,G,H,I
	46		LV36904-001A	DAMPER		2	A,B,C,D,E,F,G,H,I
	47		LV37061-001A	DAMPER		1	A,B,C,D,E,F,G,H,I
	48		VKZ4539-054	MINI SCREW		4	A,B,C,D,E,F,G,H,I
	49		LV11264-003A	DISC PLATE		1	A,B,C,D,E,F,G,H,I
	50		LV44586-001A	SPECIAL SCREW		1	A,B,C,D,E,F,G,H,I
	51		LV36801-002A	GEAR HOLDER		1	A,B,C,D,E,F,G,H,I
	52		VKZ4539-054	MINI SCREW		1	A,B,C,D,E,F,G,H,I
	53		LV36821-001A	R ACT GEAR(2)		1	A,B,C,D,E,F,G,H,I
	54		LV36822-001A	R ACT GEAR(3)		1	A,B,C,D,E,F,G,H,I
	55		LV36823-001A	ROLLER GEAR		1	A,B,C,D,E,F,G,H,I
	56		LV44559-003A	ROLLER SHAFT		1	A,B,C,D,E,F,G,H,I
	57		LV22744-001A	R HOLDER ASSY 2		1	A,B,C,D,E,F,G,H,I
	58		LV44560-001A	ROLLER		2	A,B,C,D,E,F,G,H,I
	59		LV44590-001A	WASHER		1	A,B,C,D,E,F,G,H,I
	60		LV45268-001A	ROLLER COLLAR 2		1	A,B,C,D,E,F,G,H,I
	61		LV44562-002A	ROLLER SPRING		2	A,B,C,D,E,F,G,H,I
	62		QAL0817-003	FPC		1	A,B,C,D,E,F,G,H,I
	63		VKZ4539-054	MINI SCREW		3	A,B,C,D,E,F,G,H,I
	64		WJS0085-001A-E	E-FL/RB WIRE		1	A,B,C,D,E,F,G,H,I
	65		LV34916-002A	WIRE CLAMP		1	A,B,C,D,E,F,G,H,I
	66		LV45269-001A	R HOLDER ROD		1	A,B,C,D,E,F,G,H,I
	67		LV45270-001A	WASHER 2		1	A,B,C,D,E,F,G,H,I
Electrical parts list Main board <01>							
⚠	IC1		TEF6606T/V5-X	IC		1	
	IC71		LC72725KV-X	IC		1	C,D,E
	IC161		TDA7718N-X	IC		1	
⚠	IC301		TDA7851A	IC		1	
	IC371		NJM2792V-X	IC		1	A,F,G,H,I
	IC581		NJM4565E-X	IC		1	
⚠	IC701		MN101E16YFM	IC(MCU)		1	A,B,F,G,H,I
⚠	IC701		MN101E16YFP	IC(MCU)		1	C,D,E
	IC702		S-80824CNNB-G-W	IC		1	
	IC702	or	IC-PST3424U-X	IC		1	
	IC771		R1EX24002ASAA-X	IC		1	A,B,F,G,H,I
	IC771		R1EX24016ASAA-X	IC		1	C,D,E
	IC801		74AHCT126PW-X	IC		1	
⚠	IC901		R2S25400DS-E	IC		1	
	IC902		XC6213B332NG-X	IC		1	
	Q321		IMX9-W	PAIR TRANSISTOR		1	
	Q331		IMX9-W	PAIR TRANSISTOR		1	
	Q701		RT1N441C-X	TRANSISTOR		1	
	Q781		RT1P141C-X	DIGI TRANSISTOR		1	
	Q781	or	UN2111-X	TRANSISTOR		1	A
	Q782		2SC1623A/5-6/-X	TRANSISTOR		1	
	Q782	or	2SC3928A/QR/-X	TRANSISTOR		1	
	Q784		RT1P141C-X	DIGI TRANSISTOR		1	
	Q784	or	UN2111-X	TRANSISTOR		1	A

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.		Parts No.	Parts Name	Description	QTY	Local
	Q881		RT1N141C-X	DIGI TRANSISTOR		1	
	Q881	or	UN2211-X	TRANSISTOR		1	A
	Q891		RT1N141C-X	DIGI TRANSISTOR		1	C,D,E
	Q921		2SB1132/QR/-W	TRANSISTOR		1	F,G,H
	Q922		RT1N141C-X	DIGI TRANSISTOR		1	F,G,H
	Q976		RT1N141C-X	DIGI TRANSISTOR		1	
	Q976	or	UN2211-X	TRANSISTOR		1	A
	Q977		2SA812A/5-6/-X	TRANSISTOR		1	
	Q977	or	ISA1530AC1/QR/X	TRANSISTOR		1	
	Q978		2SC1623A/5-6/-X	TRANSISTOR		1	
	Q978	or	2SC3928A/QR/-X	TRANSISTOR		1	
	D321		BAW56-TP-X	SI DIODE		1	
	D321	or	MC2836-X	DIODE		1	
	D331		BAW56-TP-X	SI DIODE		1	
	D331	or	MC2836-X	DIODE		1	
	D712		HSU119-X	SI DIODE		1	
	D712	or	MA111-X	SI DIODE		1	A
	D715		RKZ5.1B2KG-X	Z DIODE		1	
	D716		RKZ5.1B2KG-X	Z DIODE		1	
	D717		RKZ5.1B2KG-X	Z DIODE		1	
	D718		RKZ5.1B2KG-X	Z DIODE		1	
	D781		HSU119-X	SI DIODE		1	
	D781	or	MA111-X	SI DIODE		1	A
	D784		RKZ10B2KG-X	Z DIODE		1	
	D851		MBRX130-TP-X	SB DIODE		1	F,G,H
	D852		MBRX130-TP-X	SB DIODE		1	F,G,H
	D891		BAW56-TP-X	SI DIODE		1	C,D,E
	D891	or	MC2836-X	DIODE		1	C,D,E
⚠	D901		1N5401-BPC04	SI DIODE		1	
⚠	D901	or	1N5401-04	SI DIODE		1	
	D903		HSU119-X	SI DIODE		1	
	D903	or	MA111-X	SI DIODE		1	A
	D971		MBRX130-TP-X	SB DIODE		1	
	D971	or	MA22D23-X	SB DIODE		1	A
	D972		MBRX130-TP-X	SB DIODE		1	
	D972	or	MA22D23-X	SB DIODE		1	A
	C1		NCB31HK-102X	C CAPACITOR	1000pF 50V K	1	
	C2		NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	1	
	C3		NCB31HK-102X	C CAPACITOR	1000pF 50V K	1	
	C4		NCB31CK-224X	C CAPACITOR	0.22uF 16V K	1	
	C5		NDC31HJ-150X	C CAPACITOR	15pF 50V J	1	
	C7		NDC31HJ-220X	C CAPACITOR	22pF 50V J	1	
	C10		NCB21EK-105X	C CAPACITOR	1uF 25V K	1	
	C11		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C12		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C13		NCB21EK-105X	C CAPACITOR	1uF 25V K	1	
	C14		NCB31CK-224X	C CAPACITOR	0.22uF 16V K	1	
	C15		NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C16		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C17		NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C18		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C19		NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C22		NDC31HJ-120X	C CAPACITOR	12pF 50V J	1	
	C23		NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C24		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C25		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C26		NCJ11EK-106X-A	C CAPACITOR	10uF 25V K	1	
	C27		QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	1	
	C33		NDC31HJ-5R6X	C CAPACITOR	5.6pF 50V J	1	
	C71		NCB31HK-561X	C CAPACITOR	560pF 50V K	1	C,D,E
	C72		NDC31HJ-331X	C CAPACITOR	330pF 50V J	1	C,D,E
	C73		QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	1	C,D,E
	C74		NDC31HJ-270X	C CAPACITOR	27pF 50V J	1	C,D,E
	C75		NDC31HJ-270X	C CAPACITOR	27pF 50V J	1	C,D,E
	C76		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	C,D,E
	C78		NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	C,D,E
	C161		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C162		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C163		QTE1H64-225Z	E CAPACITOR	2.2uF 50V	1	
	C164		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C165		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C168		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C170		QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	1	
	C171		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C172		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C173		QTE1H64-225Z	E CAPACITOR	2.2uF 50V	1	
	C174		NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C175		QTE1H57-335Z	E CAPACITOR	3.3uF 50V	1	
	C176		QTE1H57-335Z	E CAPACITOR	3.3uF 50V	1	
	C177		NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	
	C178		QTE1C57-106Z	E CAPACITOR	10uF 16V	1	
	C184		NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C301		QTE1C66-474Z	E CAPACITOR	0.47uF 16V	1	
	C302		QTE1C66-474Z	E CAPACITOR	0.47uF 16V	1	
	C303		NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	C304		NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	C305		NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	
	C306		NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	
	C311		QTE1C66-474Z	E CAPACITOR	0.47uF 16V	1	
	C312		QTE1C66-474Z	E CAPACITOR	0.47uF 16V	1	

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	C313	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	C314	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	C315	NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C316	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	
	C317	QTE1C57-476Z	E CAPACITOR	47uF 16V	1	
	C319	NDC31HJ-101X	C CAPACITOR	100pF 50V J	1	
	C320	NDC31HJ-101X	C CAPACITOR	100pF 50V J	1	
	C322	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C323	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C326	QERF1CM-226Z-E	E CAPACITOR	22uF 16V M	1	
	C327	NCB21AK-225X-A	C CAPACITOR	2.2uF 10V K	1	
	C328	NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	
	C329	NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	
	C340	NDC31HJ-820X	C CAPACITOR	82pF 50V J	1	
	C365	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	
	C366	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	
	C371	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	A,F,G,H,I
	C372	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	A,F,G,H,I
	C373	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	1	A,F,G,H,I
	C374	NCB31HK-152X	C CAPACITOR	1500pF 50V K	1	A,F,G,H,I
	C375	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	1	A,F,G,H,I
	C376	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	A,F,G,H,I
	C381	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	A,F,G,H,I
	C382	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	A,F,G,H,I
	C383	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	1	A,F,G,H,I
	C384	NCB31HK-152X	C CAPACITOR	1500pF 50V K	1	A,F,G,H,I
	C393	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	
	C394	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	1	
	C583	NCB31HK-821X	C CAPACITOR	820pF 50V K	1	
	C584	NCB31HK-821X	C CAPACITOR	820pF 50V K	1	
	C585	QTE1H57-475Z	E CAPACITOR	4.7uF 50V	1	
	C586	QTE1H57-475Z	E CAPACITOR	4.7uF 50V	1	
	C587	NDC31HJ-151X	C CAPACITOR	150pF 50V J	1	
	C588	NDC31HJ-151X	C CAPACITOR	150pF 50V J	1	
	C590	QTE0J57-476Z	E CAPACITOR	47uF 6.3V	1	
	C591	QTE1A57-107Z	E CAPACITOR	100uF 10V	1	
	C592	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	
	C703	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J	1	
	C704	NDC31HJ-9R0X	C CAPACITOR	9pF 50V J	1	
	C707	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	1	
	C708	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C709	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C711	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	1	
	C714	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C715	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C717	NCB31HK-821X	C CAPACITOR	820pF 50V K	1	
	C718	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C719	QERF1AM-107Z	E CAPACITOR	100uF 10V M	1	
	C720	NDC31HJ-820X	C CAPACITOR	82pF 50V J	1	
	C721	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C722	QERF1EM-475Z	E CAPACITOR	4.7uF 25V M	1	
	C723	NDC31HJ-560X	C CAPACITOR	56pF 50V J	1	C,D,E
	C724	NDC31HJ-101X	C CAPACITOR	100pF 50V J	1	
	C725	NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C733	NCB10JK-106X-A	C CAPACITOR	10uF 6.3V K	1	
	C736	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C771	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	1	
	C781	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	1	
	C784	QERF1CM-107Z	E CAPACITOR	100uF 16V M	1	
	C801	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	1	
	C851	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	1	F,G,H
	C852	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	1	F,G,H
	C881	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	1	
	C891	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	C,D,E
	C901	QEZ0870-278	E CAPACITOR	2700uF	1	
	C902	NCB21EK-474X	C CAPACITOR	0.47uF 25V K	1	
	C903	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	1	
	C905	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	1	
	C906	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C907	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	1	
	C908	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	1	
	C909	QERF1AM-227Z	E CAPACITOR	220uF 10V M	1	
	C910	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	1	
	C912	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	1	
	C913	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	1	
	C915	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C917	QERF0JM-337Z	E CAPACITOR	330uF 6.3V M	1	
	C951	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C952	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C971	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	
	R1	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	1	
	R2	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	1	
	R3	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R4	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R5	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	1	
	R6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R8	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	1	

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	R11	NRS181J-4R7X	MG RESISTOR	4.7Ω 1/8W J	1	
	R14	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R15	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	1	
	R71	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	C,D,E
	R72	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	C,D,E
	R73	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	C,D,E
	R74	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	C,D,E
	R161	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R162	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R164	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R168	NRS181J-103X	MG RESISTOR	10kΩ 1/8W J	1	
	R169	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R171	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R172	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R301	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R302	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R305	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R309	NRS181J-100X	MG RESISTOR	10Ω 1/8W J	1	
	R310	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R311	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R321	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R322	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R323	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R324	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R331	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R332	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R333	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R334	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R341	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R342	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R343	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R344	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R351	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R352	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R353	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R354	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R371	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,F,G,H,I
	R372	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,F,G,H,I
	R373	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,F,G,H,I
	R374	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,F,G,H,I
	R375	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	1	A,F,G,H,I
	R376	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	A,F,G,H,I
	R377	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,F,G,H,I
	R378	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,F,G,H,I
	R381	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,F,G,H,I
	R382	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,F,G,H,I
	R383	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,F,G,H,I
	R384	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,F,G,H,I
	R385	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	A,F,G,H,I
	R386	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	A,F,G,H,I
	R387	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,F,G,H,I
	R388	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,F,G,H,I
	R389	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	B,C,D,E
	R390	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	B,C,D,E
	R391	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	B,C,D,E
	R392	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	B,C,D,E
	R583	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	1	
	R584	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	1	
	R585	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	1	
	R586	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	1	
	R587	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	1	
	R588	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	1	
	R591	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R592	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R593	NRS181J-223X	MG RESISTOR	22kΩ 1/8W J	1	
	R594	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	
	R701	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R702	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R703	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R704	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R708	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	F,G,H
	R709	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,I
	R711	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R713	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R714	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R715	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	1	
	R716	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	1	
	R717	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R718	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R719	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R720	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R721	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	1	
	R722	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	1	
	R723	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R724	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R725	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R726	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	1	
	R727	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	1	
	R728	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	R730	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R731	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R732	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R733	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R736	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	1	
	R737	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	1	
	R738	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	1	
	R739	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R740	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	1	
	R741	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R742	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R743	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	C,D,E
	R744	NRS181J-101X	MG RESISTOR	100Ω 1/8W J	1	
	R745	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	1	C,D,E
	R746	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R747	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R748	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	1	
	R749	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R750	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R752	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R753	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R755	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R756	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R758	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R759	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R761	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R762	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	F,G,H
	R763	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	1	
	R764	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	1	C,D,E
	R765	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R766	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R767	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R768	NRS181J-472X	MG RESISTOR	4.7kΩ 1/8W J	1	
	R770	NRS181J-222X	MG RESISTOR	2.2kΩ 1/8W J	1	
	R771	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	1	
	R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	1	
	R773	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	
	R774	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R775	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	
	R777	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R779	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R781	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	1	
	R782	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R783	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R784	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R801	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R802	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R803	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	
	R804	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	1	
	R805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R806	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R807	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R808	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R809	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R810	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	1	
	R811	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	1	
	R812	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	
	R813	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R814	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R819	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R851	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	F,G,H
	R881	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	
	R882	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	1	
	R891	NRS181J-102X	MG RESISTOR	1kΩ 1/8W J	1	C,D,E
	R892	NRS181J-473X	MG RESISTOR	47kΩ 1/8W J	1	C,D,E
	R901	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	1	
	R902	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R903	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	1	
	R921	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	F,G,H
	R922	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	1	F,G,H
	R930	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R971	NRS181J-332X	MG RESISTOR	3.3kΩ 1/8W J	1	
	R976	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	1	
	R977	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	1	
	L1	NQL093K-R47X	P COIL	0.47uH K	1	
	L2	NQL093K-1R8X	P COIL	1.8uH K	1	
	L3	NQL093K-R22X	P COIL	0.22uH K	1	
	L4	QQR1872-001	RF COIL		1	
	L5	QQL244J-561Z	COIL	560uH J	1	
	L6	QQL244J-561Z	COIL	560uH J	1	
	L8	QQL231K-4R7Y	INDUCTOR	4.7uH K	1	
	L9	QQL231K-4R7Y	INDUCTOR	4.7uH K	1	
	L31	NQL093K-R47X	P COIL	0.47uH K	1	
	L177	NQL553J-27NX	COIL	27nH J	1	
	L701	QQL231K-4R7Y	INDUCTOR	4.7uH K	1	
	L702	QQL231K-4R7Y	INDUCTOR	4.7uH K	1	
⚠	L901	QQR1852-001	CHOKE COIL		1	
⚠	L901 or	QQR0703-001	CHOKE COIL		1	

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	L930	NQLH25M-4R7X	COIL	4.7uH M	1	
	CN501	QGB2027ME-28	CONNECTOR	B-B (1-28)	1	
	CN701	QGZ1101J1-20	CONNECTOR	(1-20)	1	
	CN702	QGA2001C1-02	CONNECTOR	W-B (1-2)	1	A,C,D,E,F,G,H,I
	CN901	QNZ0607-001	CAR CONNECTOR		1	
	J1	QNB0190-001	ANT TERMINAL		1	
	J1 or	QNB0348-001	ANT TERMINAL		1	
	J321	QNN0490-001	PIN JACK		1	A
	J321	QNN0815-001	PIN JACK		1	B,C,D,E,F,G,H,I
	J801	QNZ0095-001	CONNECTOR		1	
	K161	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	1	
	K162	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	K163	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	1	
	PP1	QZW0010-001	STYLE PIN		1	A,C,D,E,F,G,H,I
	PP2	QZW0010-001	STYLE PIN		1	A,C,D,E,F,G,H,I
	S701	QSW0648-001Z	TACT SWITCH		1	
	X1	QAX0952-001Z	CRYSTAL		1	
	X71	QAX0954-001Z	CRYSTAL		1	C,D,E
	X701	QAX0667-001Z	C RESONATOR	8.000MHz	1	
	X702	QAX0953-001	CRYSTAL		1	

Switch board <02>

	IC601	PCA9624PW-X	IC		1	
	IC661	PTC6526LQ-L	IC		1	
	IC681	KSM-2003TN2M	IR DETECT UNIT		1	
	IC930	TPS54040DGQ-X	IC		1	
	Q627	2SC1623A/5-6/-X	TRANSISTOR		1	
	Q627 or	2SC3928A/QR/-X	TRANSISTOR		1	
	D623	NSSM065T-X	LED		1	
	D624	NSSM065T-X	LED		1	
	D625	NSSM065T-X	LED		1	
	D627	RKZ5.6B2KG-X	Z DIODE		1	
	D631	LHQ974/LM/-X	LED		1	
	D632	LHQ974/LM/-X	LED		1	
	D661	HSU119-X	SI DIODE		1	
	D691	RKZ5.1B2KG-X	Z DIODE		1	
	D692	RKZ5.1B2KG-X	Z DIODE		1	
	D930	MBRX130-TP-X	SB DIODE		1	
	C620	NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	
	C628	NCB21EK-105X	C CAPACITOR	1uF 25V K	1	
	C661	NCB31CK-105X	C CAPACITOR	1uF 16V K	1	
	C662	NDC31HJ-151X	C CAPACITOR	150pF 50V J	1	
	C663	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	1	
	C682	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	
	C687	NCB31HK-472X	C CAPACITOR	4700pF 50V K	1	
	C688	NCB31HK-472X	C CAPACITOR	4700pF 50V K	1	
	C691	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C692	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C930	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C931	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C932	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C933	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	
	C934	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	1	
	C935	NCB31HK-272X	C CAPACITOR	2700pF 50V K	1	
	C936	NDC31HJ-5R6X	C CAPACITOR	5.6pF 50V J	1	
	C937	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C938	NCJ11EK-106X-R	C CAPACITOR	10uF 25V	1	
	C939	NDC31HJ-100X	C CAPACITOR	10pF 50V J	1	
	R601	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R602	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R603	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	1	
	R604	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	1	
	R605	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	1	
	R607	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	
	R609	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	1	
	R610	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	1	
	R611	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	1	
	R612	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	1	
	R613	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R621	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	
	R623	NRS181J-331X	MG RESISTOR	330Ω 1/8W J	1	
	R624	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R627	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R628	NRS181J-4R7X	MG RESISTOR	4.7Ω 1/8W J	1	
	R631	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	1	
	R647	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	1	
	R648	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	1	
	R649	NRS181J-821X	MG RESISTOR	820Ω 1/8W J	1	
	R656	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	1	
	R657	NRS181J-471X	MG RESISTOR	470Ω 1/8W J	1	
	R658	NRS181J-751X	MG RESISTOR	750Ω 1/8W J	1	
	R660	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	1	
	R661	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R662	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R663	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R664	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	1	
	R665	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R666	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	
	R667	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	R674	NQR0007-002X	FERRITE BEADS		1	
	R675	NQR0007-002X	FERRITE BEADS		1	
	R676	NQR0007-002X	FERRITE BEADS		1	
	R681	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	1	
	R682	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	
	R693	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	
	R931	NRSA63J-432X	MG RESISTOR	4.3kΩ 1/16W J	1	
	R932	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	1	
	R933	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	1	
	R934	NRSA63J-753X	MG RESISTOR	75kΩ 1/16W J	1	
	R935	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	1	
	R936	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D	1	
	R937	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	1	
	R938	NRSA63D-513X	MG RESISTOR	51kΩ 1/16W D	1	
	L691	NQR0536-001X	CHOKE COIL		1	
	L931	NQL52EM-220X	COIL	22uH M	1	
	CJ601	QGZ1101K1-20	CONNECTOR	(1-20)	1	
	CN603	QNZ1006-001	USB CONNECTOR		1	
	CN603 or	QNZ0963-002	USB CONNECTOR		1	
	J601	QNS0280-001	3.5 JACK		1	
	JS686	QSW1231-002	ROTARY ENCODER		1	
	S601	NSW0326-001X	TACT SWITCH		1	
	S602	NSW0326-001X	TACT SWITCH		1	
	S603	NSW0326-001X	TACT SWITCH		1	
	S604	NSW0326-001X	TACT SWITCH		1	
	S605	NSW0326-001X	TACT SWITCH		1	
	S606	NSW0326-001X	TACT SWITCH		1	
	S607	NSW0326-001X	TACT SWITCH		1	
	S608	NSW0326-001X	TACT SWITCH		1	
	S609	NSW0326-001X	TACT SWITCH		1	
	S610	NSW0326-001X	TACT SWITCH		1	
	S611	NSW0326-001X	TACT SWITCH		1	

FMU-CD6-21D CD control board <03>

	IC301	MN6627946JE	IC(MCU)		1	A,B,C,D,E,F,G,H,I
	IC302	R1EX24016ASAA-X	IC		1	A,B,C,D,E,F,G,H,I
	IC303	MFI341S2162-X	IC		1	A,B,C,D,E,F,G,H,I
	IC501	LA6565-X	IC		1	A,B,C,D,E,F,G,H,I
	Q101	2SC3928A/R/-X	TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q201	2SC3928A/R/-X	TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q211	PS1191RB22/BC/X	PHOTO TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q212	PS1191RB22/BC/X	PHOTO TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q301	2SA2188/F/-X	TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q302	RT1N441C-X	TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	Q501	2SB1424/R/-W	TRANSISTOR		1	A,B,C,D,E,F,G,H,I
	D101	AN1105W21/AB/-X	IR LED		1	A,B,C,D,E,F,G,H,I
	D201	AN1105W21/AB/-X	IR LED		1	A,B,C,D,E,F,G,H,I
	D301	MA2SD31-X	SB DIODE		1	A,B,C,D,E,F,G,H,I
	D501	1SR154-400-X	SI DIODE		1	A,B,C,D,E,F,G,H,I
	D502	1SR154-400-X	SI DIODE		1	A,B,C,D,E,F,G,H,I
	D503	1SR154-400-X	SI DIODE		1	A,B,C,D,E,F,G,H,I
	C101	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C102	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C103	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C104	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C301	NEAF0JM-226X	E CAPACITOR	22uF 6.3V M	1	A,B,C,D,E,F,G,H,I
	C302	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C303	NEAF0JM-476X	E CAPACITOR	47uF 6.3V M	1	A,B,C,D,E,F,G,H,I
	C304	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C305	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C307	NCB31CK-334X	C CAPACITOR	0.33uF 16V K	1	A,B,C,D,E,F,G,H,I
	C308	NCB31HK-102X	C CAPACITOR	1000pF 50V K	1	A,B,C,D,E,F,G,H,I
	C309	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	1	A,B,C,D,E,F,G,H,I
	C310	NCB31HK-102X	C CAPACITOR	1000pF 50V K	1	A,B,C,D,E,F,G,H,I
	C311	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C312	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	1	A,B,C,D,E,F,G,H,I
	C313	NCJ21CK-475X-R	C CAPACITOR	4.7uF 16V K	1	A,B,C,D,E,F,G,H,I
	C314	NCB31HK-332X	C CAPACITOR	3300pF 50V K	1	A,B,C,D,E,F,G,H,I
	C316	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	1	A,B,C,D,E,F,G,H,I
	C317	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	1	A,B,C,D,E,F,G,H,I
	C319	NCB31CK-334X	C CAPACITOR	0.33uF 16V K	1	A,B,C,D,E,F,G,H,I
	C321	NCB31HK-272X	C CAPACITOR	2700pF 50V K	1	A,B,C,D,E,F,G,H,I
	C322	NCB31CK-154X	C CAPACITOR	0.15uF 16V K	1	A,B,C,D,E,F,G,H,I
	C323	NEAF0JM-476X	E CAPACITOR	47uF 6.3V M	1	A,B,C,D,E,F,G,H,I
	C324	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C326	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C327	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C328	NCB31HK-681X	C CAPACITOR	680pF 50V K	1	A,B,C,D,E,F,G,H,I
	C329	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C331	NCJ20JK-106X-R	C CAPACITOR	10uF 6.3V K	1	A,B,C,D,E,F,G,H,I
	C334	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C335	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C337	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C338	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C339	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C343	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C345	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C346	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C347	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	C351	NDC31HJ-270X	C CAPACITOR	27pF 50V J	1	A,B,C,D,E,F,G,H,I
	C352	NDC31HJ-270X	C CAPACITOR	27pF 50V J	1	A,B,C,D,E,F,G,H,I
	C373	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C393	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C394	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C395	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C501	NEHN1EM-476X	E CAPACITOR	47uF 25V M	1	A,B,C,D,E,F,G,H,I
	C502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C503	NDC31HJ-680X	C CAPACITOR	68pF 50V J	1	A,B,C,D,E,F,G,H,I
	C511	NCB31HK-682X	C CAPACITOR	6800pF 50V K	1	A,B,C,D,E,F,G,H,I
	C512	NCB31HK-222X	C CAPACITOR	2200pF 50V K	1	A,B,C,D,E,F,G,H,I
	C513	NCB31HK-562X	C CAPACITOR	5600pF 50V K	1	A,B,C,D,E,F,G,H,I
	C514	NCB31HK-222X	C CAPACITOR	2200pF 50V K	1	A,B,C,D,E,F,G,H,I
	C531	NEHL0JM-107X	E CAPACITOR	100uF 6.3V M	1	A,B,C,D,E,F,G,H,I
	C532	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	1	A,B,C,D,E,F,G,H,I
	C534	NCB31HK-102X	C CAPACITOR	1000pF 50V K	1	A,B,C,D,E,F,G,H,I
	C551	NEHN1AM-107X	E CAPACITOR	100uF 10V M	1	A,B,C,D,E,F,G,H,I
	R101	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R102	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R103	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R104	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R105	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R201	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R203	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R204	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R205	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R206	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R214	NRSA63D-153X	MG RESISTOR	15kΩ 1/16W D	1	A,B,C,D,E,F,G,H,I
	R215	NRSA63D-153X	MG RESISTOR	15kΩ 1/16W D	1	A,B,C,D,E,F,G,H,I
	R216	NRS181F-300X	MG RESISTOR	30Ω 1/8W F	1	A,B,C,D,E,F,G,H,I
	R217	NRS181F-300X	MG RESISTOR	30Ω 1/8W F	1	A,B,C,D,E,F,G,H,I
	R228	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R229	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R230	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R242	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R246	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	R301	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R302	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R304	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R307	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R308	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R309	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R310	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R311	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R312	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R313	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R314	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R315	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R316	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R318	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R321	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	R322	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R323	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R324	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R325	NRSA02F-100X	MG RESISTOR	10Ω 1/10W F	1	A,B,C,D,E,F,G,H,I
	R326	NRSA02F-100X	MG RESISTOR	10Ω 1/10W F	1	A,B,C,D,E,F,G,H,I
	R330	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R331	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R332	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R333	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R334	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R336	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R349	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	R361	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R362	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	1	A,B,C,D,E,F,G,H,I
	R501	NRS125J-100X	MG RESISTOR	10Ω 1/2W J	1	A,B,C,D,E,F,G,H,I
	R503	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R504	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R505	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R506	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R507	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R508	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R509	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R510	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R511	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R512	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R513	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R514	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R515	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R516	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R519	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R520	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R521	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R522	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R523	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	R524	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I

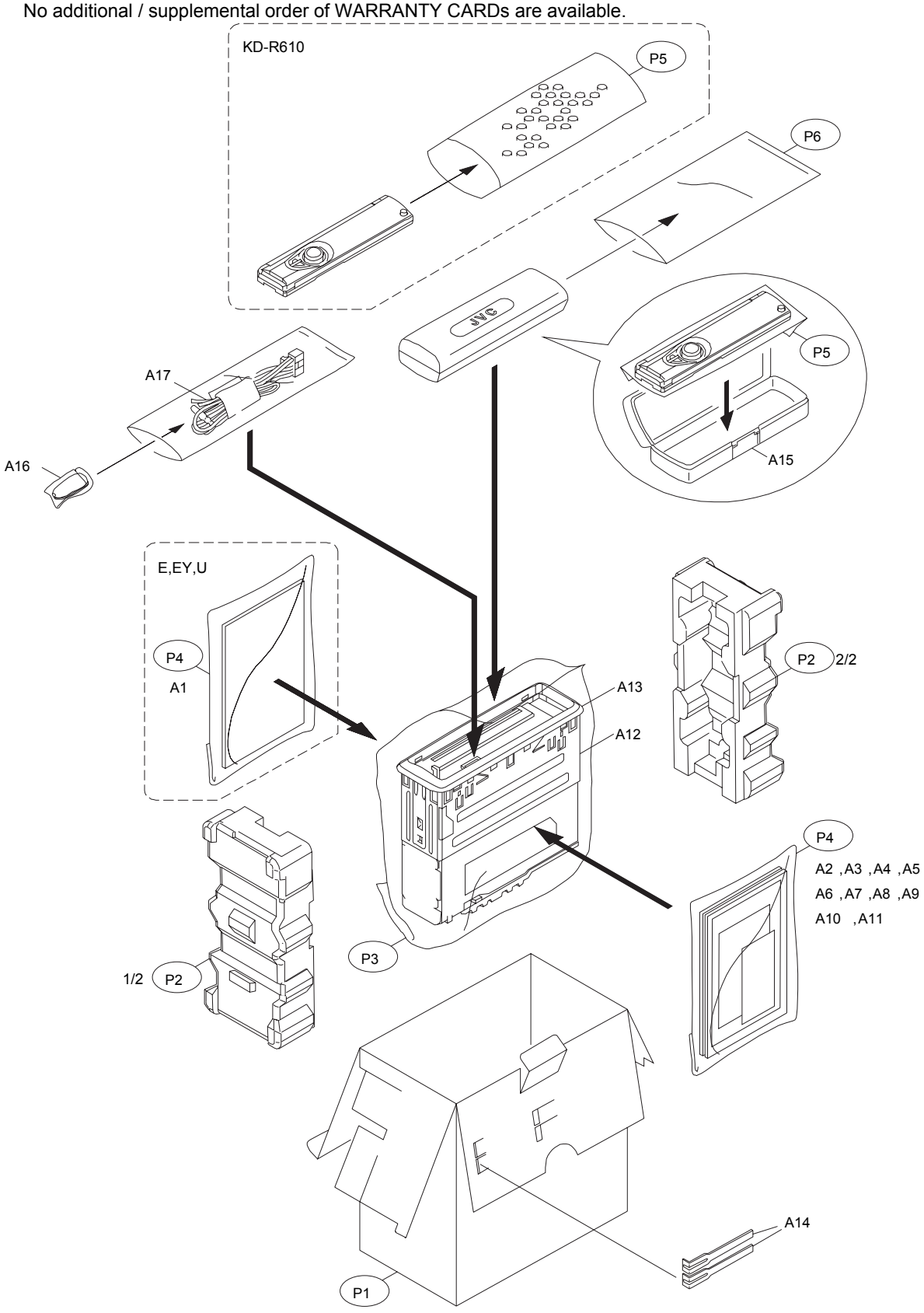
MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
	R525	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	1	A,B,C,D,E,F,G,H,I
	CN101	QGB2027L5-28X	CONNECTOR	B-B (1-28)	1	A,B,C,D,E,F,G,H,I
	CN102	QGF0522F3-15W	CONNECTOR	FFC/FPC (1-15)	1	A,B,C,D,E,F,G,H,I
	CN301	QGA1002C1-06X	CONNECTOR	W-B (1-6)	1	A,B,C,D,E,F,G,H,I
	K101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	K102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	K103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/10W J	1	A,B,C,D,E,F,G,H,I
	SW1	NSW0291-001X	DETECT SWITCH		1	A,B,C,D,E,F,G,H,I
	X301	NAX0566-001X	C RESONATOR	16.934MHz	1	A,B,C,D,E,F,G,H,I
	X302	NAX0367-001X	CRYSTAL		1	A,B,C,D,E,F,G,H,I

Packing materials and accessories

Block No.M3MM

No additional / supplemental order of WARRANTY CARDs are available.



The parts without symbol number are not service.

MODEL	MARK	MODEL	MARK	MODEL	MARK	MODEL	MARK
KD-A615J	A	KD-R610J	B	KD-R611E	C	KD-R611EY	D
KD-R611EU	E	KD-R616U	F	KD-R616UN	G	KD-R616UH	H
KD-R618J	I						

Safe	Symbol No.	Parts No.	Parts Name	Description	QTY	Local
Packing and accessories <M3MM>						
	A1	GET0640-001A	INST BOOK	GER	1	C,D
	A1	GET0639-002B	INST BOOK	KOR CHI(TAIWAN) ARA PER	1	F
	A2	GET0638-001A	INST BOOK	ENG SPA FRE	1	A,B,I
	A2	GET0640-002A	INST BOOK	DUT SPA ITA POR	1	C
	A2	GET0640-006A	INST BOOK	POL RUS GRE	1	D
	A2	GET0639-001A	INST BOOK	ENG THA	1	F,H
	A2	GET0639-004A	INST BOOK	ENG INA	1	G
	A3	GET0640-003A	INST BOOK	ENG FRE	1	C,E
	A3	GET0640-007A	INST BOOK	RUM BUL CZE HUN	1	D
	A3	GET0639-003B	INST BOOK	RUS	1	F
	A4	GET0640-005A	INST BOOK	SPA RUS TUR PER	1	E
	A5	GET0638-002A	INSTALL MANUAL	ENG SPA FRE	1	A,B,I
	A5	GET0640-008A	INSTALL MANUAL	GER	1	C,D
	A5	GET0639-006A	INSTALL MANUAL	ENG THA	1	F,H
	A5	GET0639-009A	INSTALL MANUAL	ENG INA	1	G
	A6	GET0640-009A	INSTALL MANUAL	DUT SPA ITA POR	1	C
	A6	GET0640-013A	INSTALL MANUAL	POL RUS GRE	1	D
	A6	GET0639-007B	INSTALL MANUAL	KOR CHI(TAIWAN) ARA PER	1	F
	A7	GET0640-010A	INSTALL MANUAL	ENG FRE	1	C,E
	A7	GET0640-014A	INSTALL MANUAL	RUM BUL CZE HUN	1	D
	A7	GET0639-008A	INSTALL MANUAL	RUS	1	F
	A8	GET0640-012A	INSTALL MANUAL	SPA RUS TUR PER	1	E
	A9	----------	WARRANTY CARD	BT-52008-1	1	A,B,I
	A9	----------	WARRANTY CARD	BT-54042-1	1	C,D
	A10	----------	WARRANTY CARD	BT-51029-3	1	A
	A10	----------	WARRANTY CARD	BT-51018-6	1	B,I
	A11	BT-51044-1	REGISTRATION CARD		1	A,B,I
	A12	GE20267-001A	MOUNTING SLEEVE		1	
	A13	GE20235-014A	TRIM PLATE		1	A,B,F,G,H,I
	A13	GE20204-020A	TRIM PLATE		1	C,D,E
	A14	GE40481-001A	HOOK		2	
	A15	GE32320-001A	HARD CASE ASSY		1	A,C,D,E,F,G,H,I
	A16	RM-RK50C1	REMOCON UNIT		1	A,B,C,D,E,I
	A16	RM-RK50M	REMOCON UNIT		1	F,G,H
	A17	QAM1143-001	CAR CABLE		1	A,B,I
	A17	QAM1237-001	CAR CABLE		1	C,D,E
	A17	QAM1146-001	CAR CABLE		1	F,G,H
	P1	GE33855-001A	CARTON		1	A
	P1	GE33861-001A	CARTON		1	B
	P1	GE33867-001A	CARTON		1	C,D,E
	P1	GE33864-001A	CARTON		1	F,G,H
	P1	GE33858-001A	CARTON		1	I
	P2	GE10271-001A	CUSHION		1	A,B,F,G,H,I
	P2	GE10270-001A	CUSHION		1	C,D,E
	P3	QPC03004315PB	POLY BAG	30cm x 43cm	1	
	P4	FSPG4002-001	POLY BAG		1	A,B,E,G,H,I
	P4	FSPG4002-001	POLY BAG		2	C,D,F
	P5	QPC01002515	POLY BAG	10cm x 25cm	1	A,C,D,E,F,G,H,I
	P5	GE40276-003A	AIR BUBBLE		1	B
	P6	QPA01003003	POLY BAG	10cm x 30cm	1	A,C,D,E,F,G,H,I

SCHEMATIC DIAGRAMS

CD RECEIVER

KD-A615J	KD-R610J	KD-R611E
KD-R611EY	KD-R611EU	KD-R616U
KD-R616UN	KD-R616UH	KD-R618J

■ PRECAUTIONS ON SCHEMATIC DIAGRAMS

- Due to the improvement in performance, some part numbers shown in the circuit diagrams may not agree with those indicated in the Parts List.
- The parts numbers, values and rated voltage etc. in the Schematic Diagrams are for reference only.
- Since the circuit diagrams are standard ones, the circuits and circuit constants may be subject to change for improvement without any notice.

■ PRECAUTIONS ON PARTS LIST

- The parts identified by the ⚠ symbol are critical for safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.
- When ordering chips, screws etc., place bulk orders (unit of tens) whenever possible to improve shipping efficiency.
- There are cases where the actual implemented parts in the sets and the service parts are different. When ordering parts, make sure to refer to the Parts List.

■ PRECAUTIONS ON SERVICE

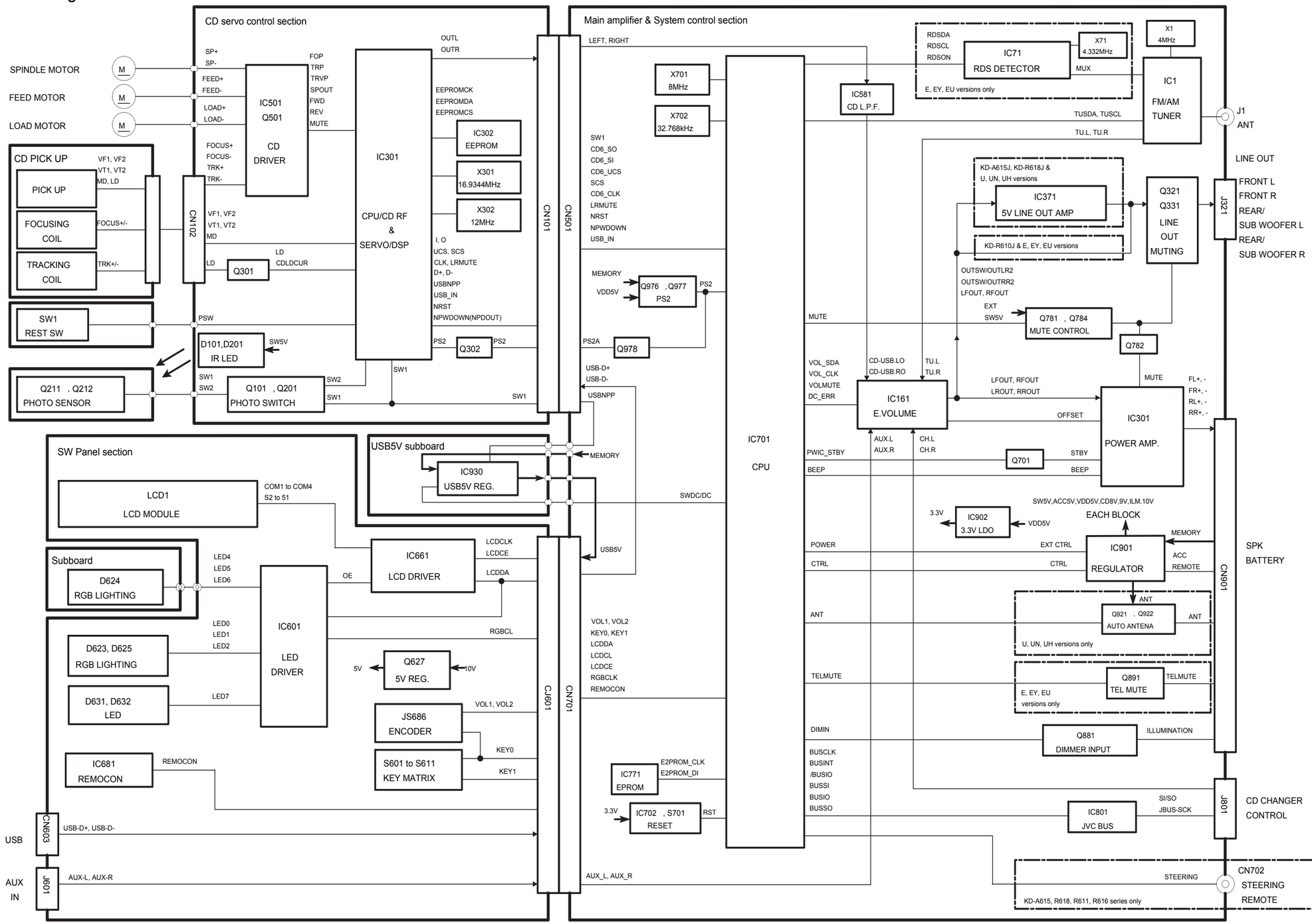
Certain parts of the power circuits and the GNDs differ according to the models. Care must be taken for the following points as the differences are indicated separately in the LIVE GND (⏚) and the ISOLATED (NEUTRAL) GND (⊥).

1. Do not touch the LIVE GND, or do not touch the LIVE GND and the ISOLATED (NEUTRAL) GND at the same time. It may cause an electric shock.
   Before pulling out the chassis or other parts, make sure to pull out the power cord from the wall outlet first.
2. Do not short circuit between the LIVE GND and ISOLATED (NEUTRAL) GND, or never measure the LIVE GND and ISOLATED (NEUTRAL) GND at the same time using measuring instruments (oscilloscope, etc.). It may blow fuses or damage other parts.

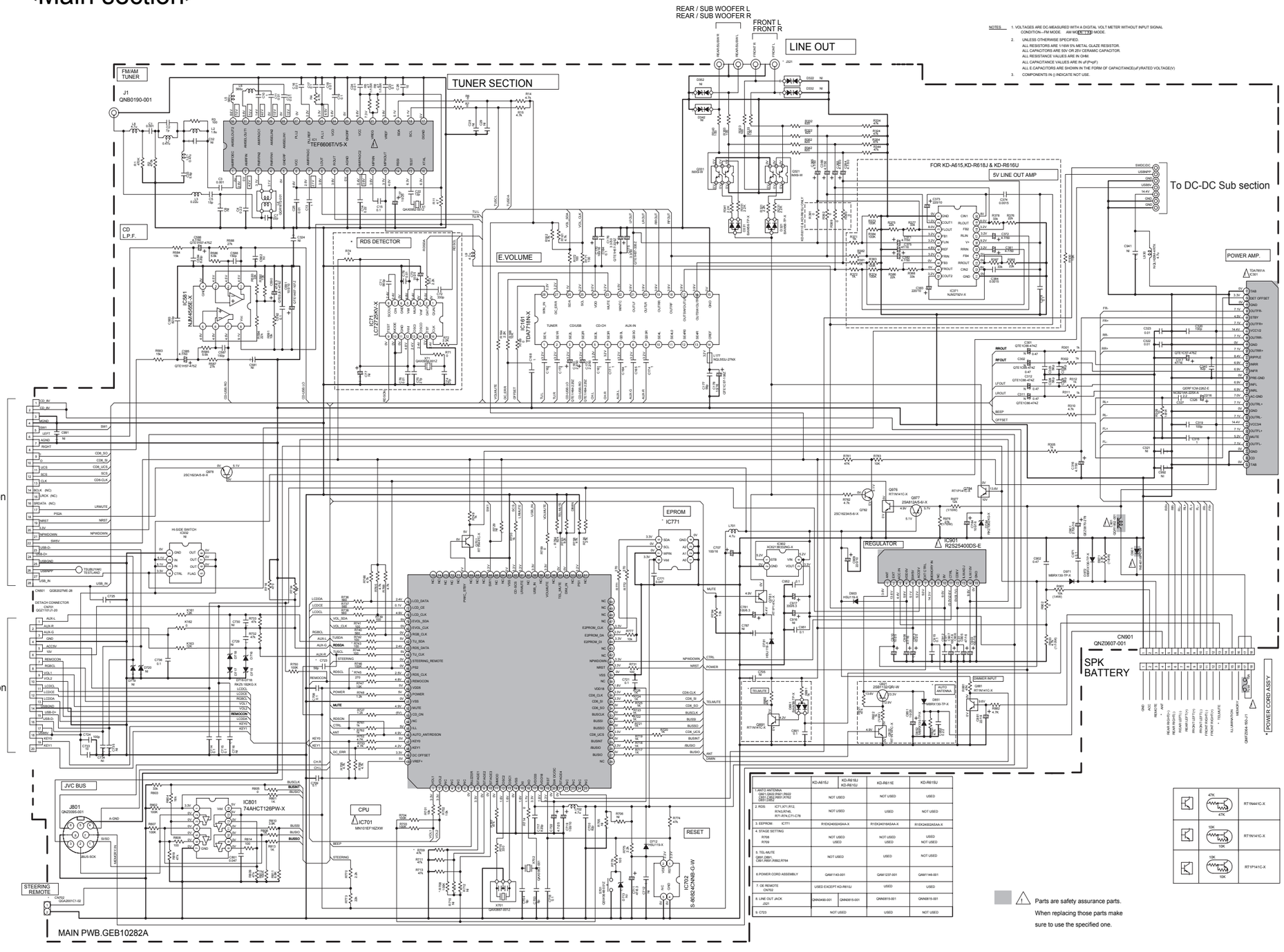
■ DEVIATION TOLERANCE RANGE

DEVIATION TOLERANCE RANGE									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

Block diagram



<Main section>



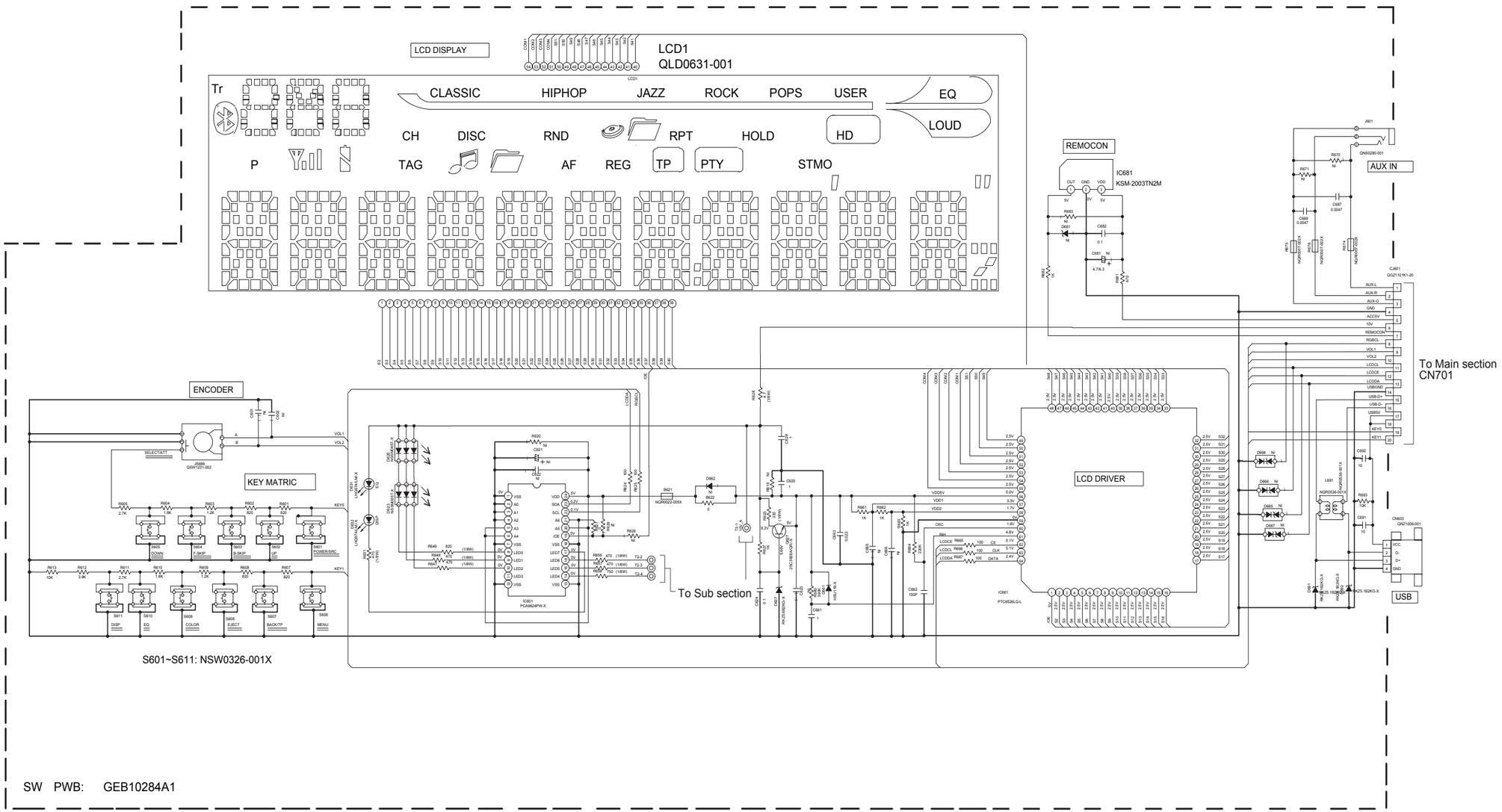
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL
CONDITION---FM MODE. AM MODE
2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W 5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN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

	KD-A615J	KD-R618J KD-R616J	KD-R611E	KD-R619J
1.ANTO ANTENNA	Q901,Q902,R921,R922 Q911,Q912,R913,R762 Q951,Q952	NOT USED	NOT USED	USED
2. RDS	IC71,X71,R12, R743,R745, R71-R74,C71-C78	NOT USED	USED	NOT USED
3. EEPROM	IC771	R1EK24032A5AA-X	R1EK24016A5AA-X	R1EK24032A5AA-X
4. STAGE SETTING	R708 R709	NOT USED USED	NOT USED USED	USED NOT USED
5. TEL-MUTE	Q951,Q951, CB51,R891,R892,R764	NOT USED	USED	NOT USED
6.POWER CORD ASSEMBLY		QAM1143-001	QAM1237-001	QAM1146-001
7. OE REMOTE	CN702	USED-EXCEPT KD-R615J	USED	USED
8. LINE OUT JACK	J521	QNN0490-001	QNN0615-001	QNN0615-001
9. C723		NOT USED	USED	NOT USED

	47K	RT1N441C-X
	10K	RT1N141C-X
	50K	RT1P141C-X

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

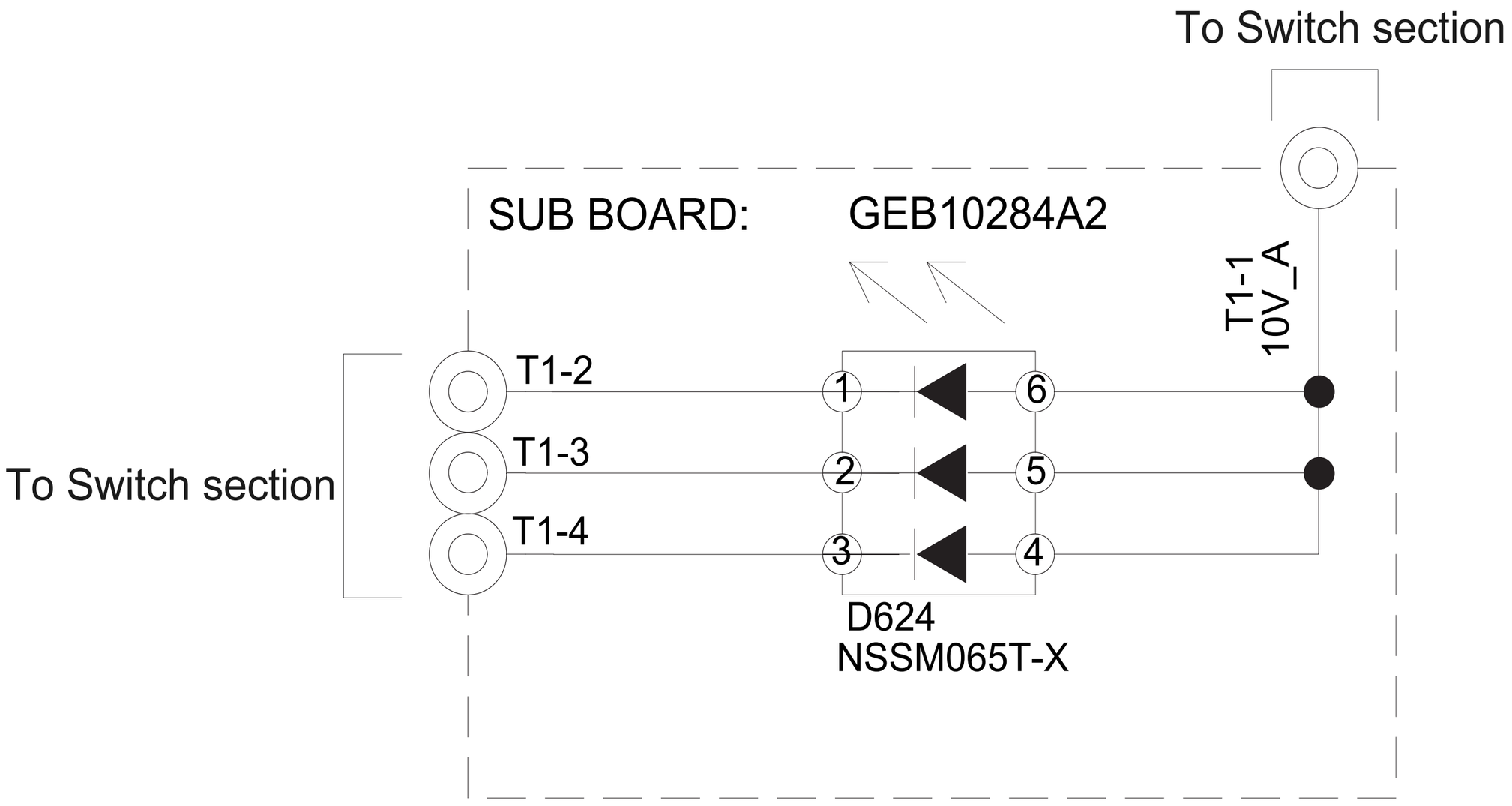
<Switch section>



NOTES

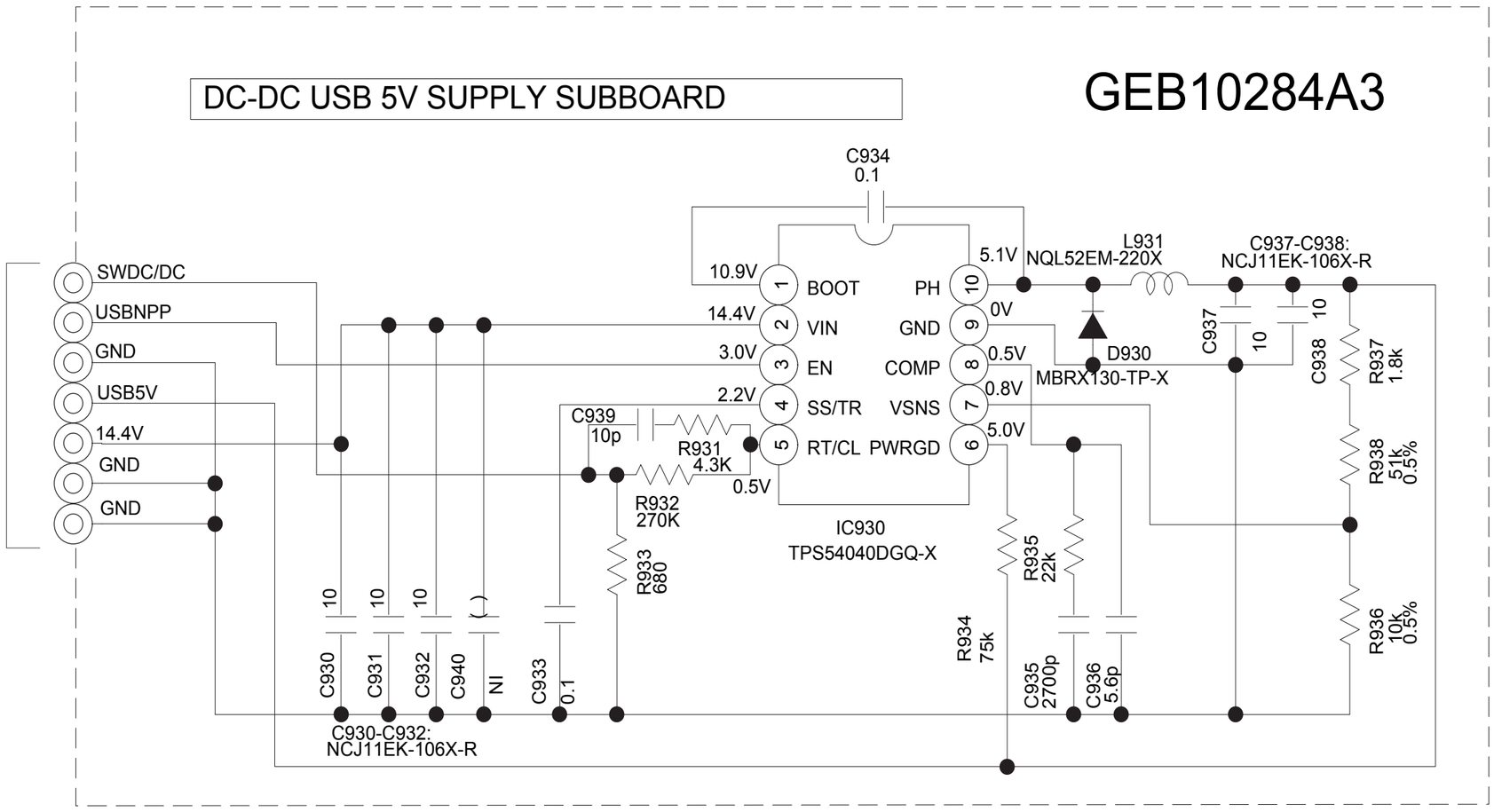
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W +5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(=PnF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
   T --- TANTAL CAPACITOR.
3. COMPONENTS IN ( ) INDICATE NOT USE.

<Sub section>

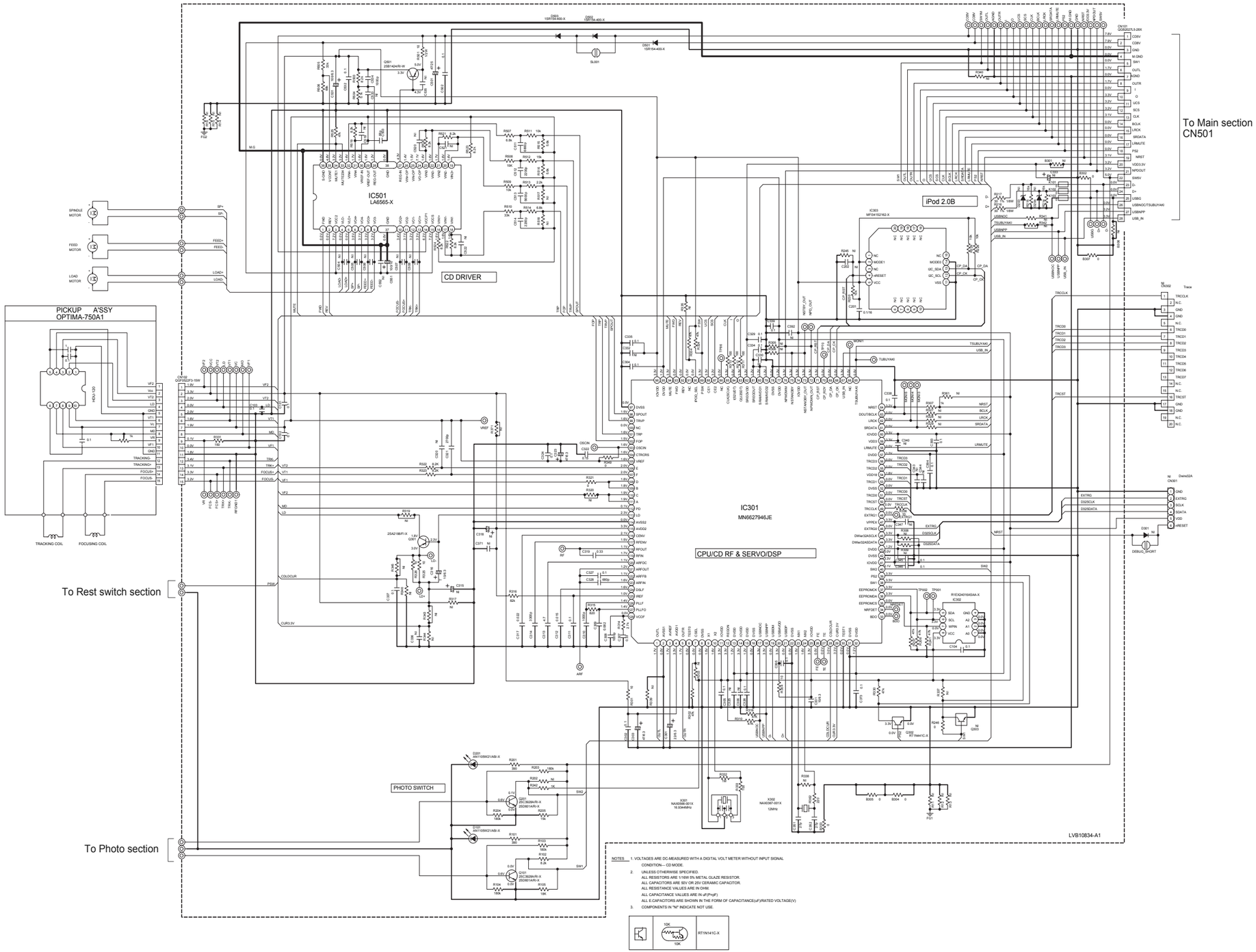

To Switch section
SUB BOARD:
GEB10284A2
T1-1
10V_A
T1-2
T1-3
T1-4
1
2
3
4
5
6
D624
NSSM065T-X
To Switch section

<DC-DC Sub section>

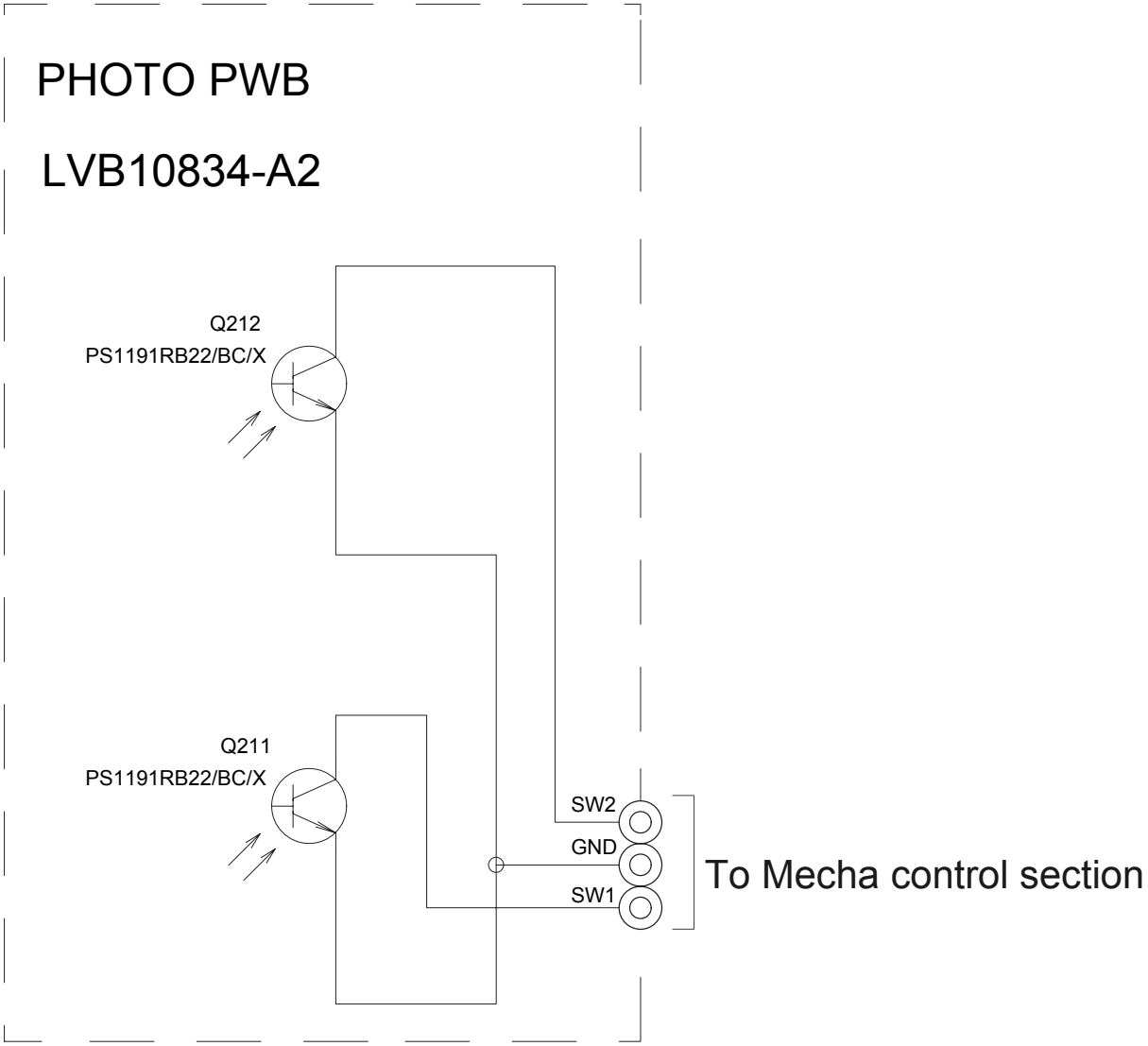
To Main section



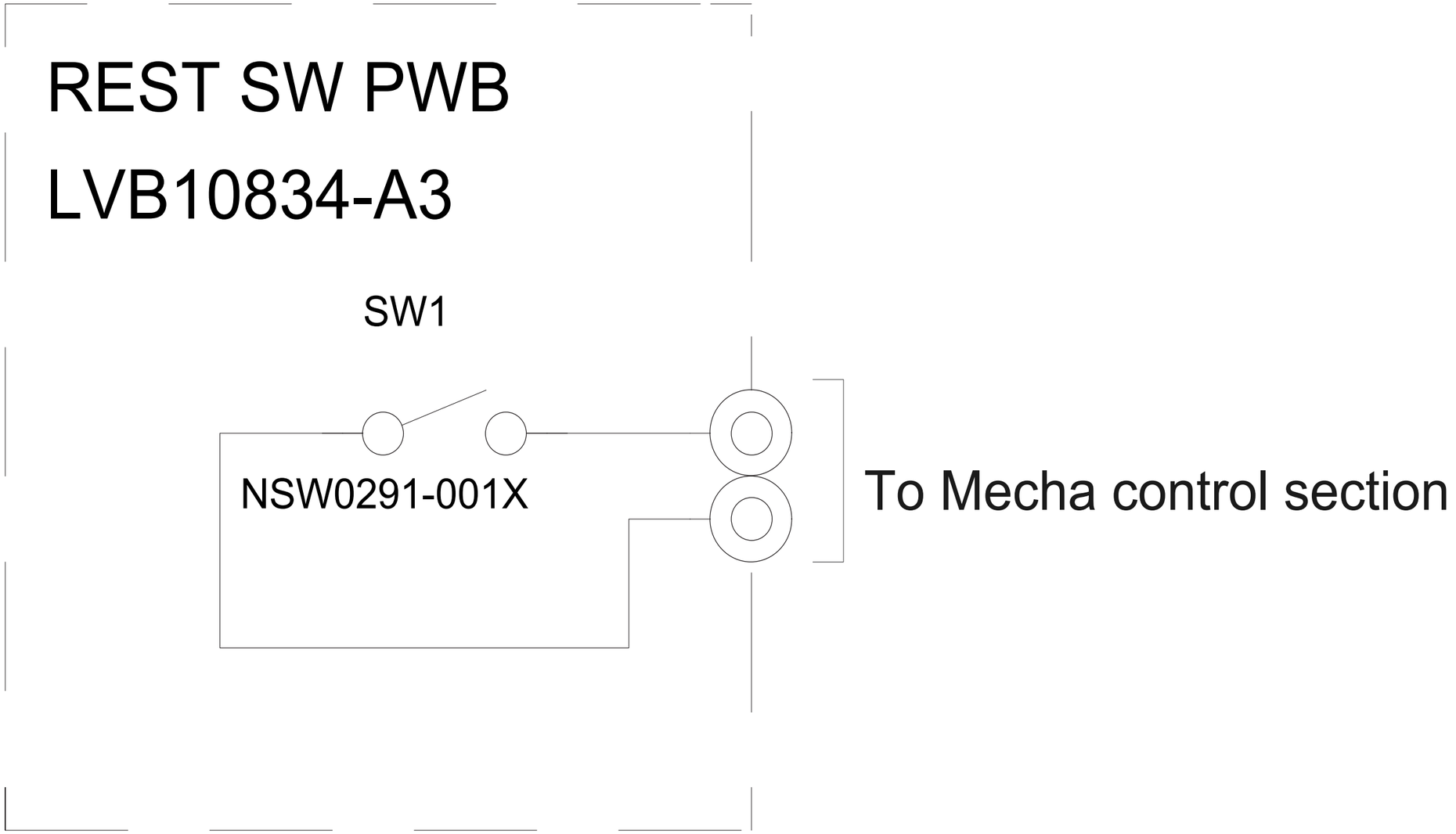
<Mecha control section>



<Photo section>

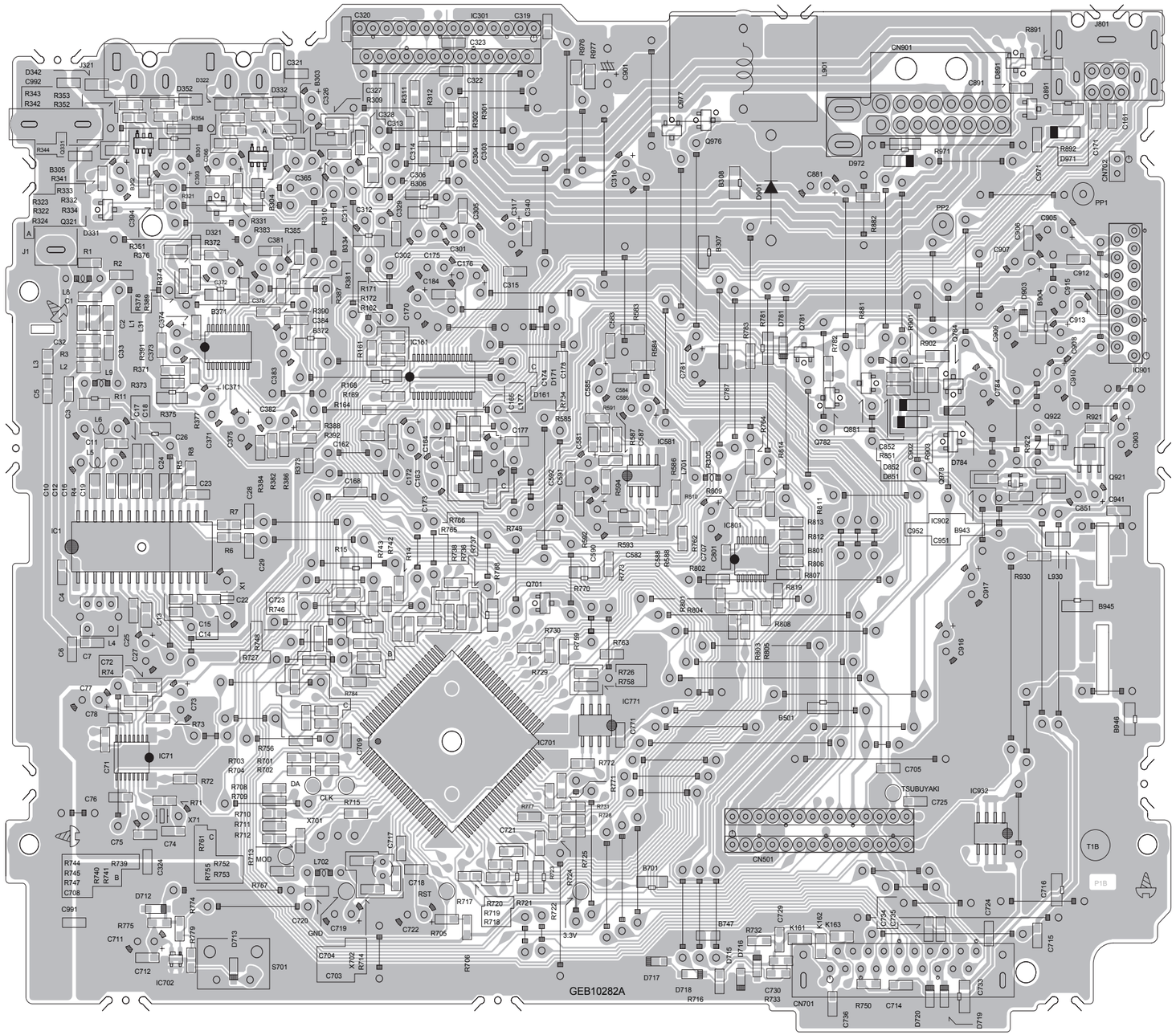


<Rest switch section>



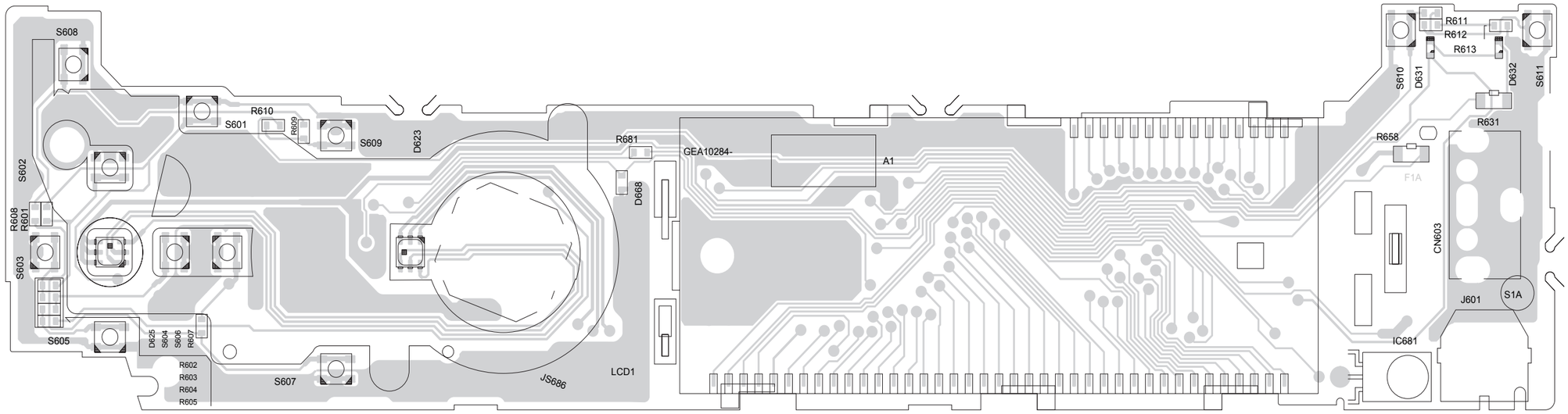
<Main board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



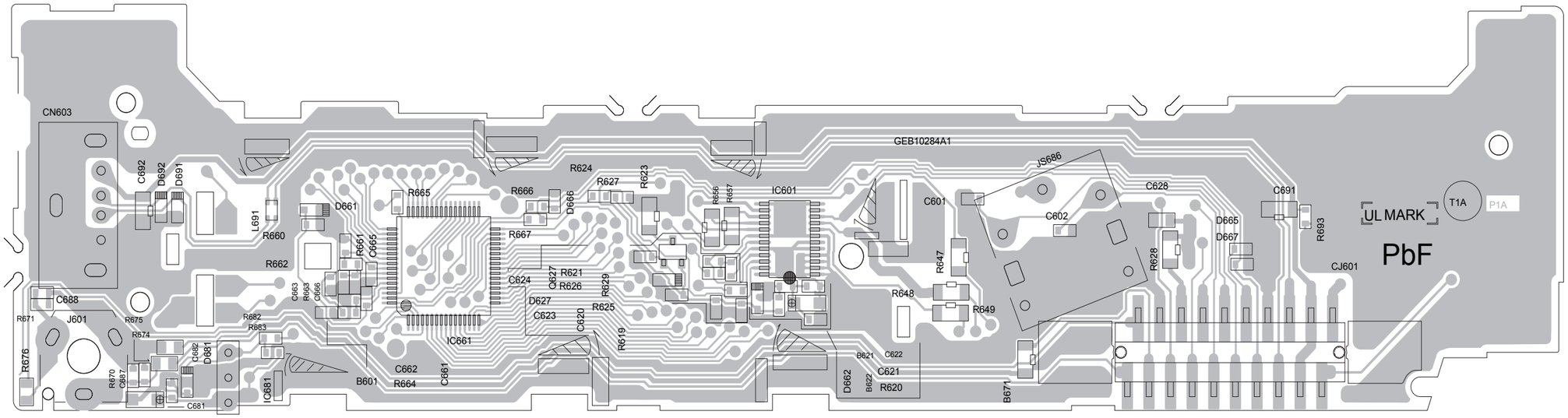
<Switch board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



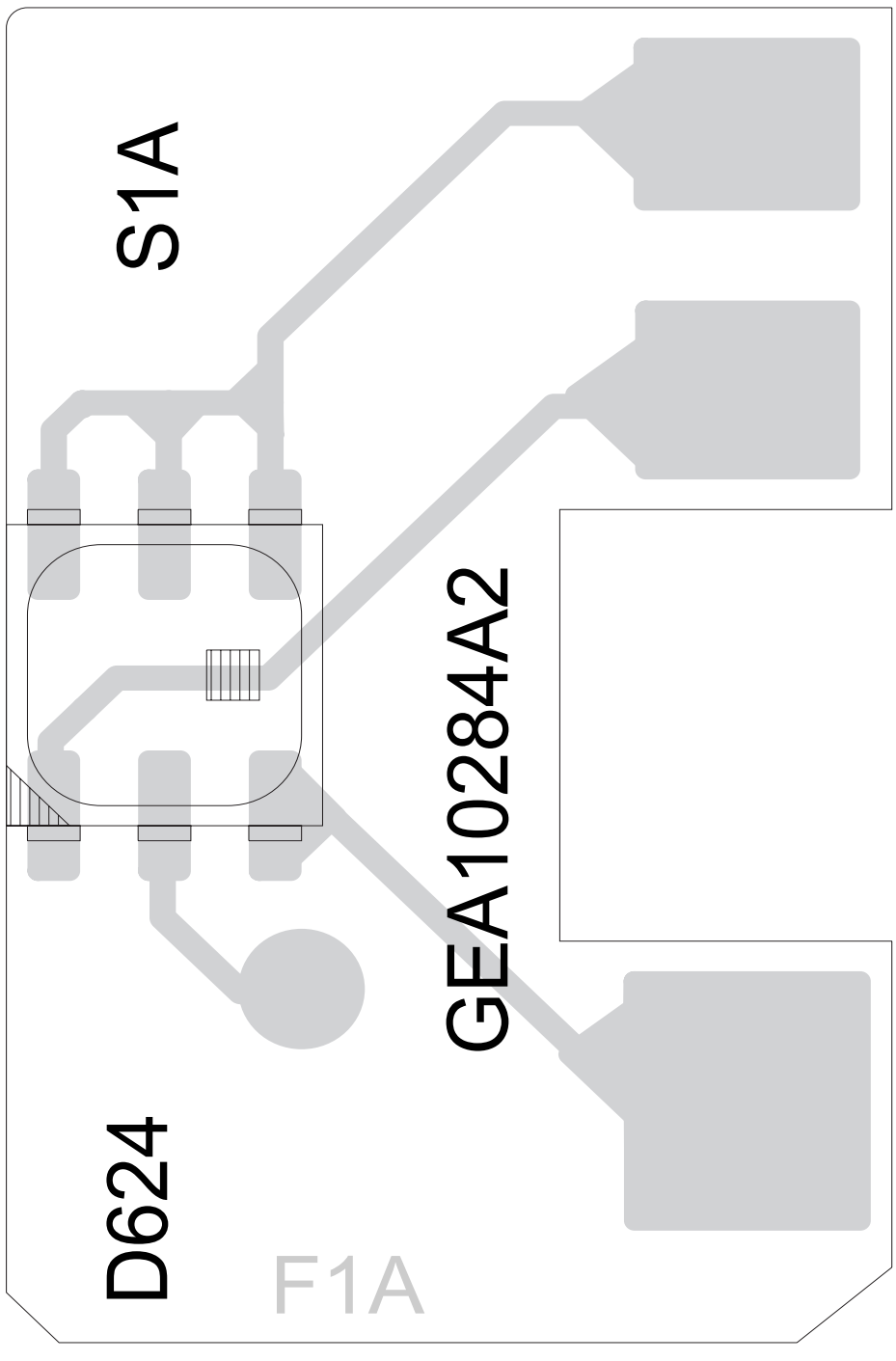
<Switch board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



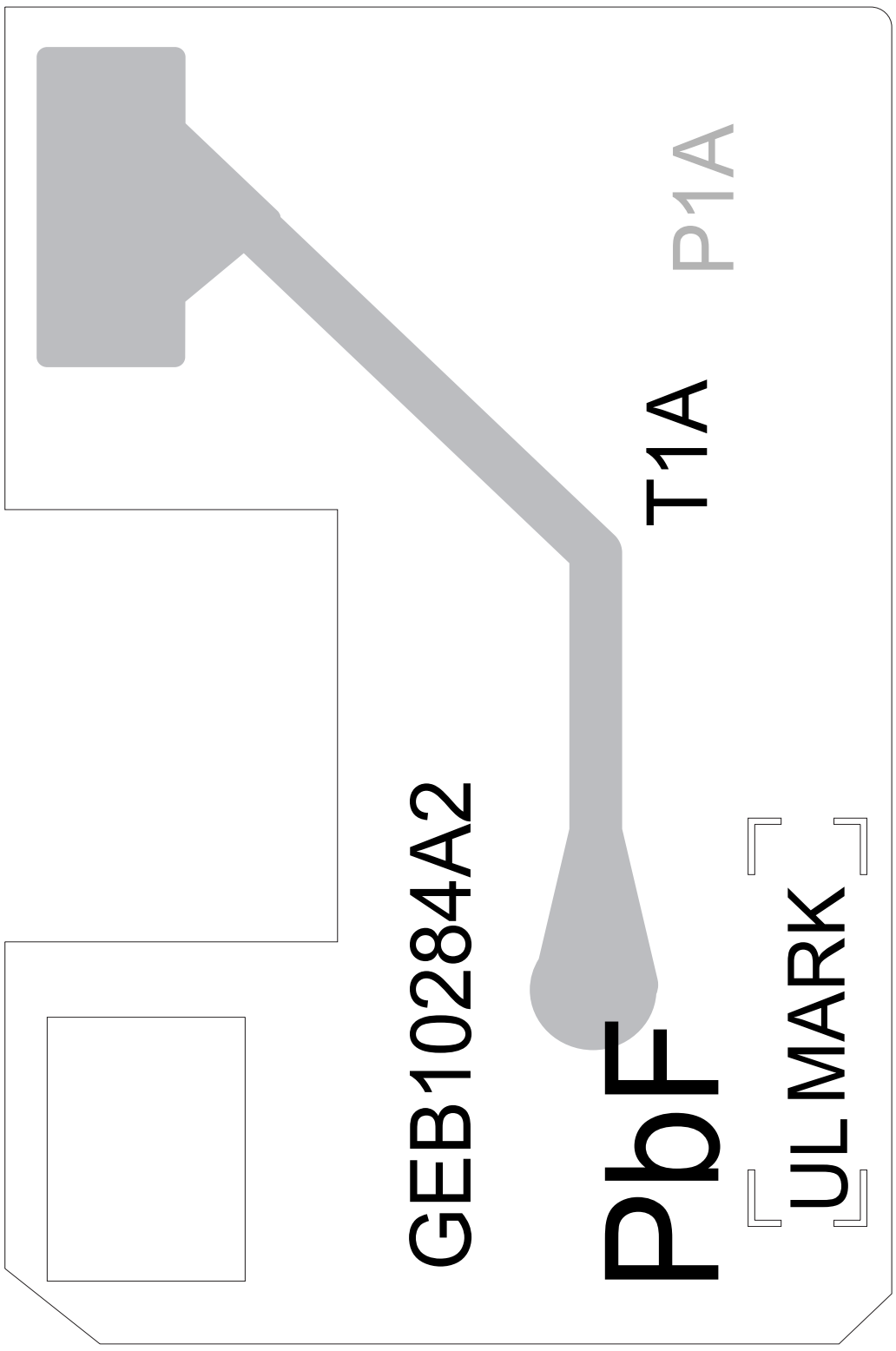
<Sub board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



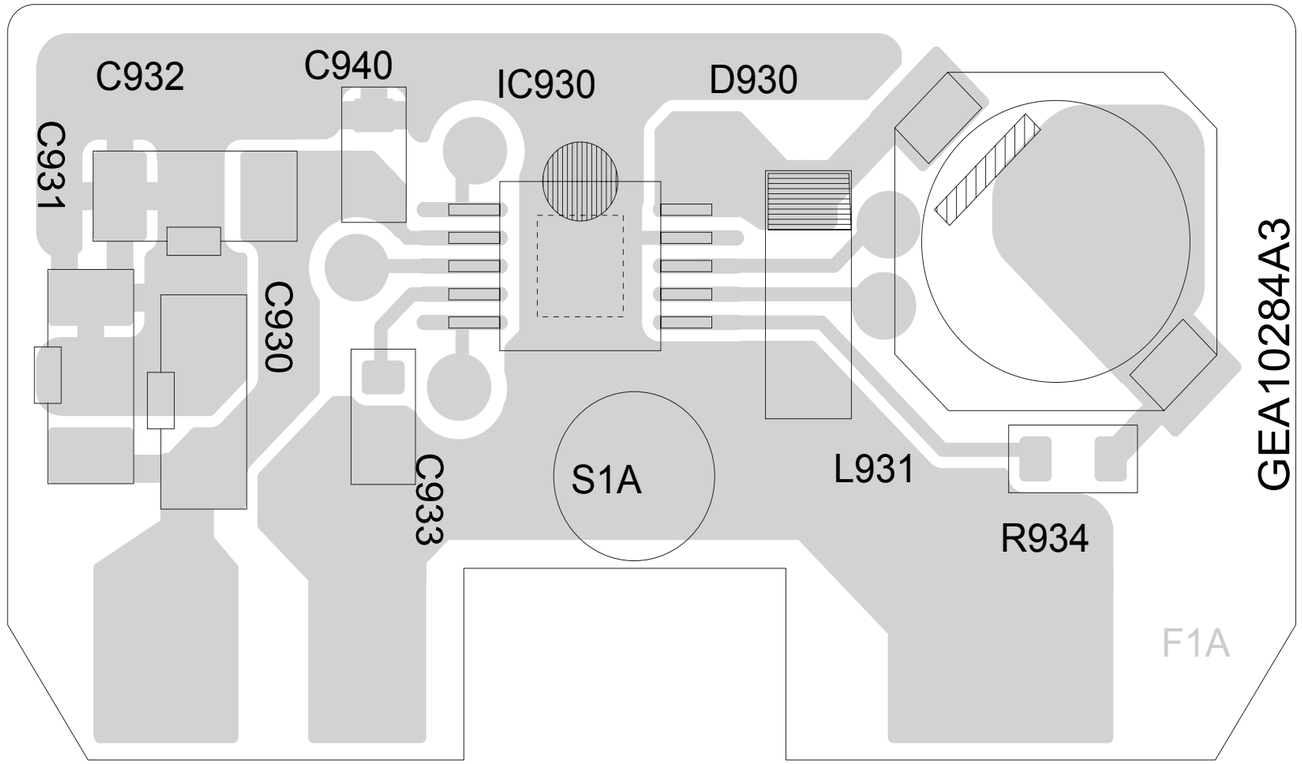
<Sub board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



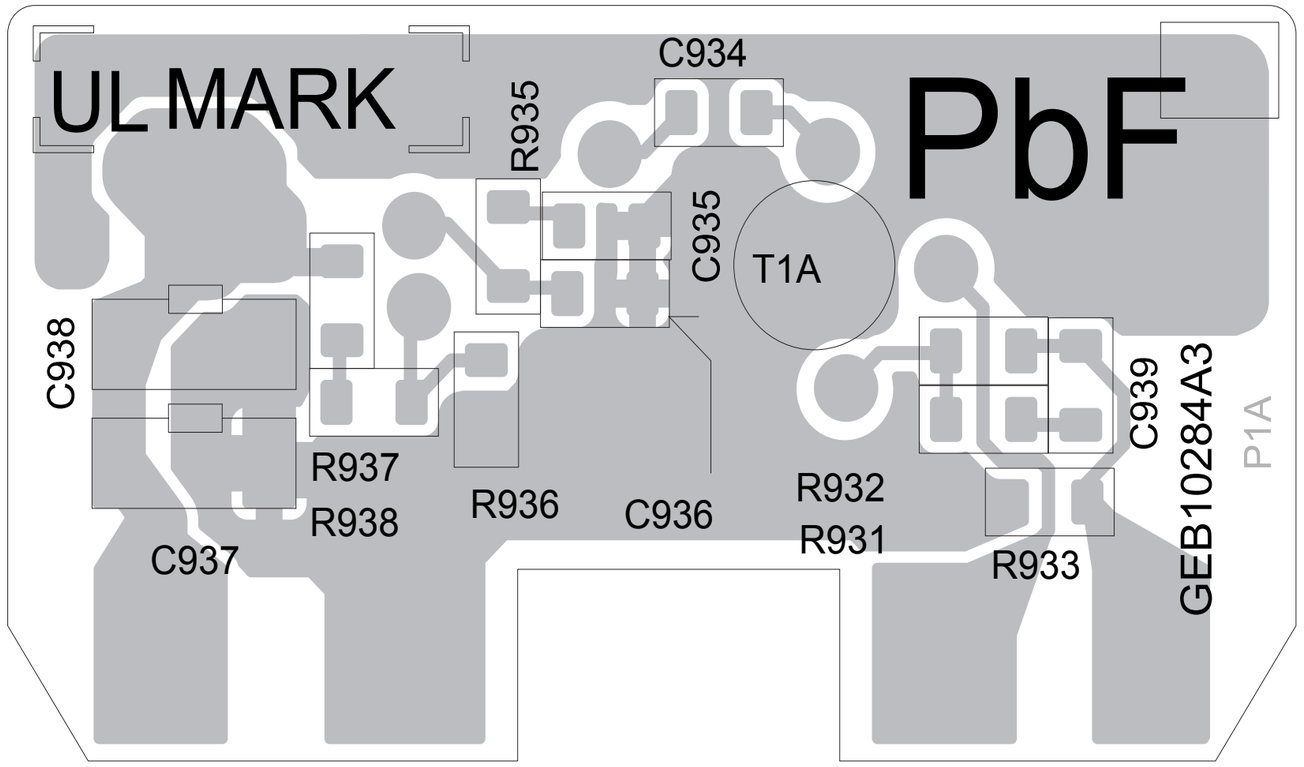
<DC-DC Sub board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



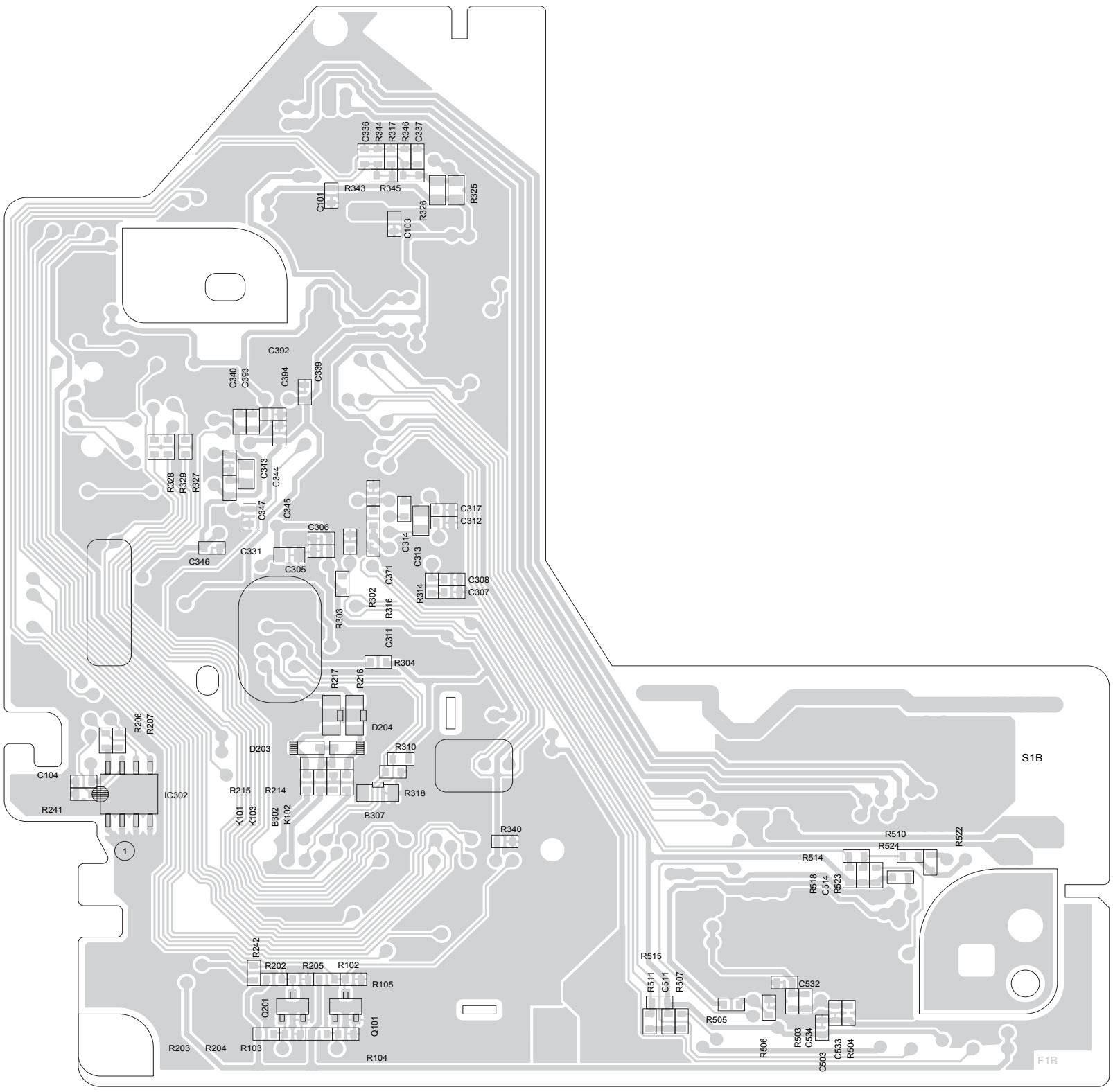
<DC-DC Sub board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Mecha control board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))

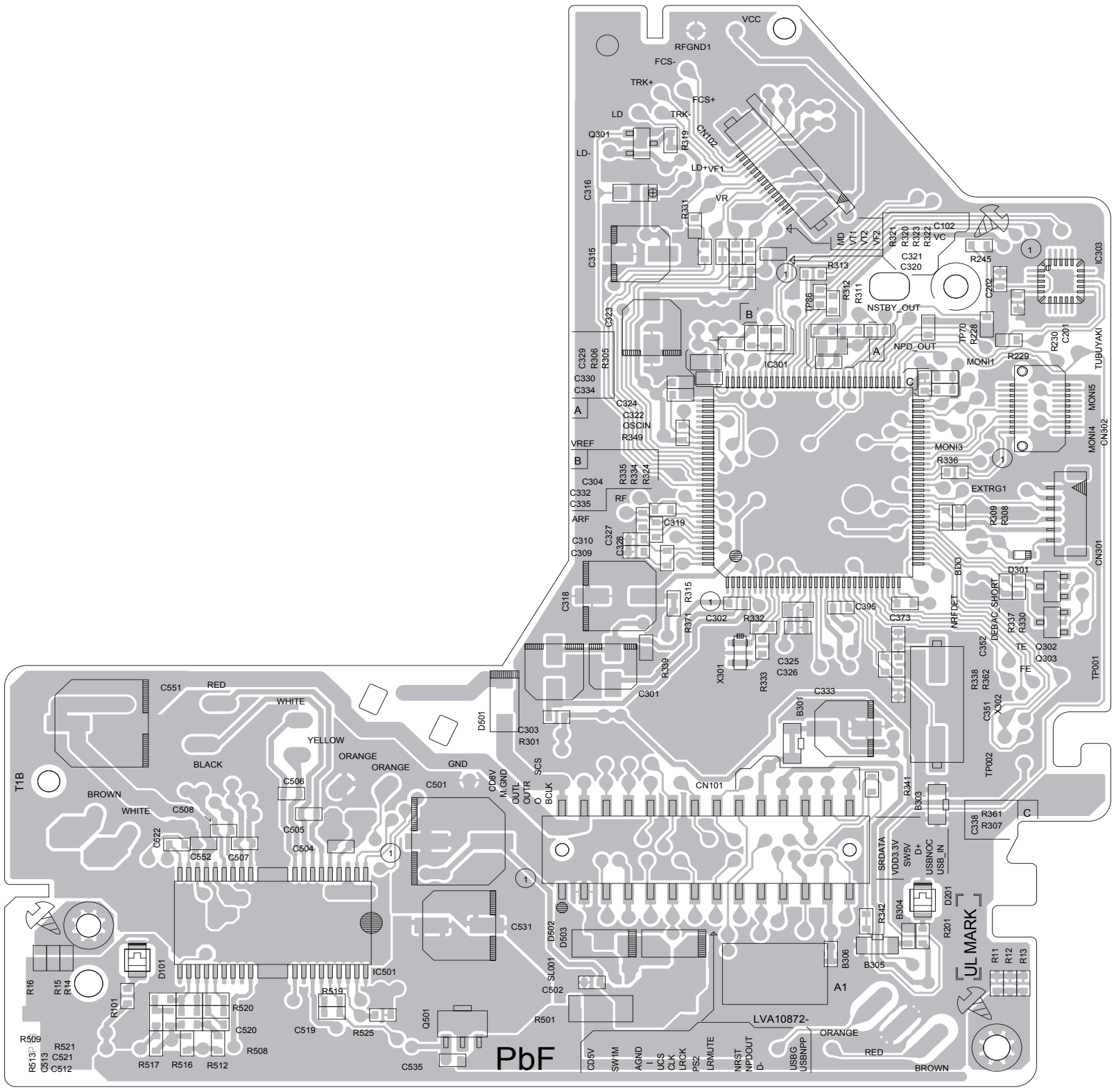


No.MA467

created date:2010-02-09

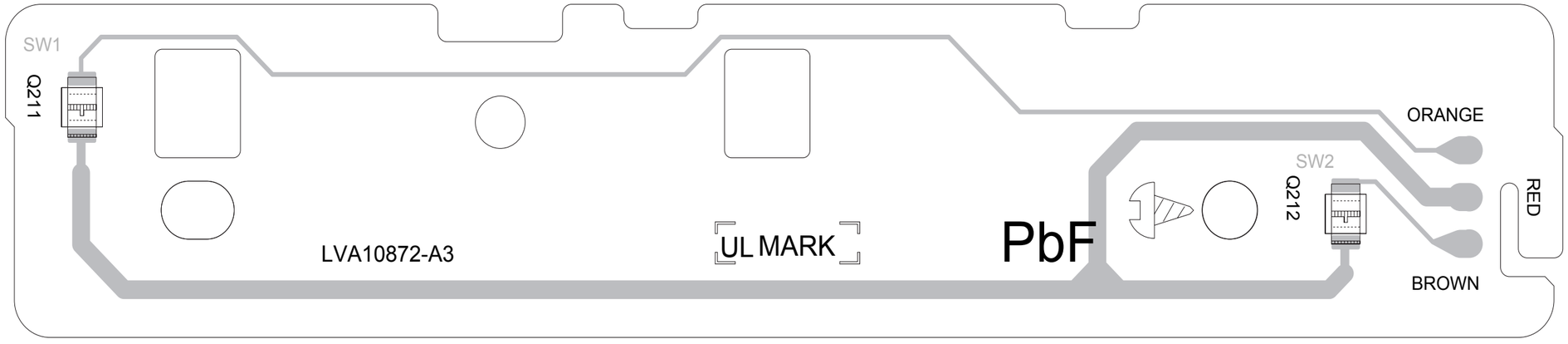
<Mecha control board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Photo board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Rest switch board>

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))