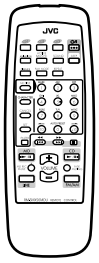
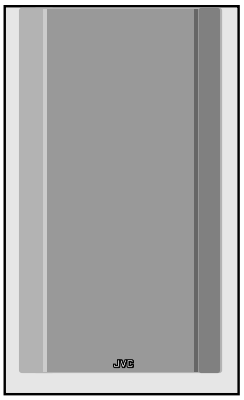
JVC

SERVICE MANUAL

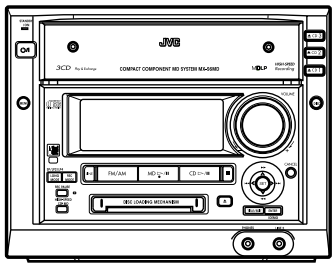
COMPACT COMPONENT MD SYSTEM

MX-S6MD

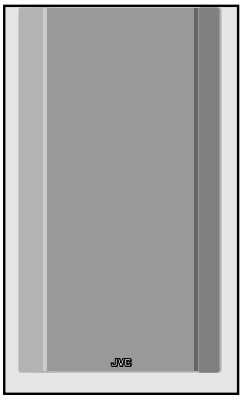




SP-MXS6MD



CA-MXS6MD



SP-MXS6MD

MDLP

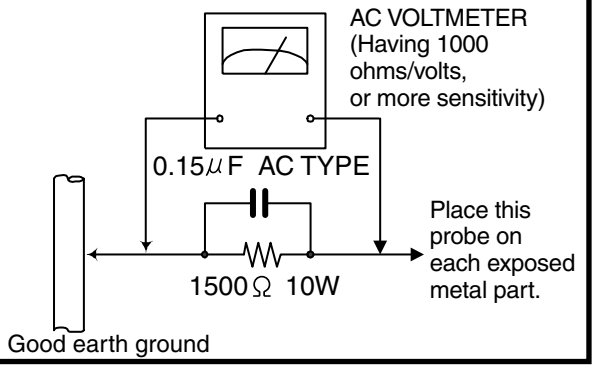
Area Suffix	
US	Singapore
UB	Hong Kong
UT	Taiwan

Contents

No.20887
Nov. 2000

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 manufacturer`s 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 re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling 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, 1,000 ohms 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 eachexposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre 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.).



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.

⚠ ***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.**

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.

1.1. Grounding to prevent damage by static electricity

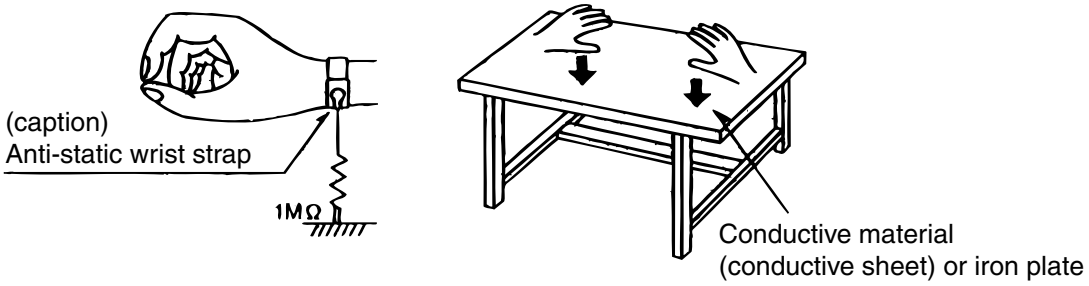
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD/MD players. Be careful to use proper grounding in the area where repairs are being performed.

1.1.1. Ground the workbench

1. 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.

1.1.2. Ground yourself

1. Use an anti-static wrist strap to release any static electricity built up in your body.

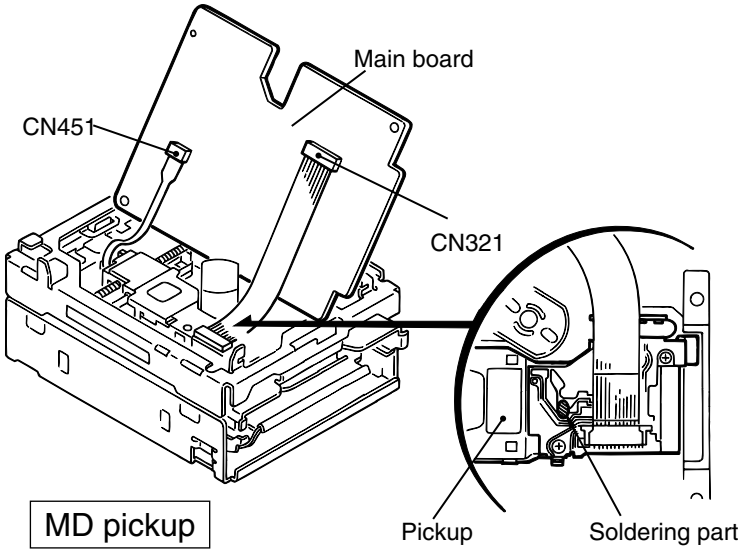


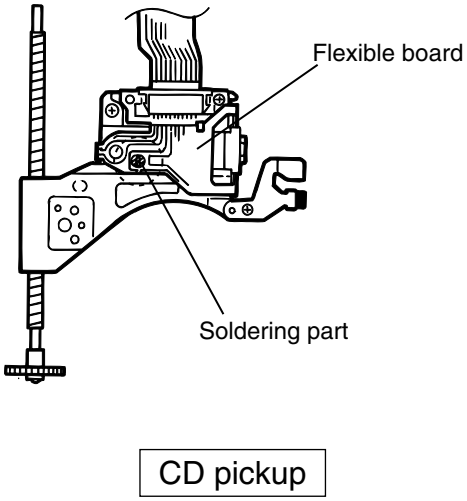
1.1.3. Handling the optical pickup

1. 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.)
2. 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.

1.2. Handling the traverse unit (optical pickup)

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





Important for laser products

1.CLASS 1 LASER PRODUCT

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

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

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. 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 herein 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.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

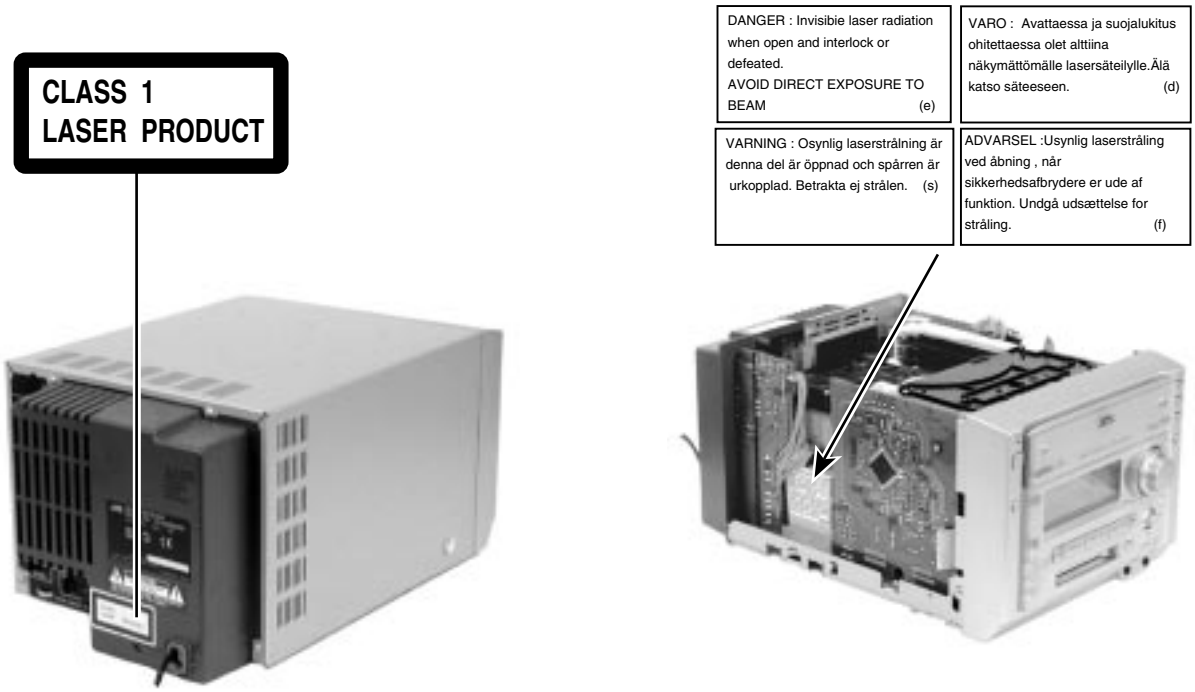
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL

WARNING LABEL



Disassembly method

<Main body>

■ Removing the top cover

(See Fig. 1 and 2)

1. Remove the four screws **A** on the back of the body.
2. Remove the two screws **B** on both sides of the body.
3. Lift up the rear part of the top cover while pulling both sides, then remove the top cover.

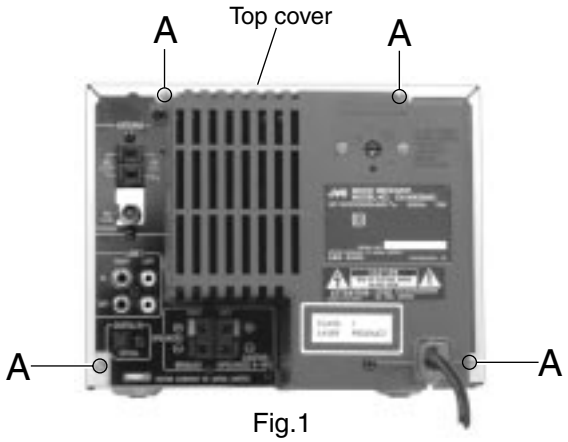


Fig.1

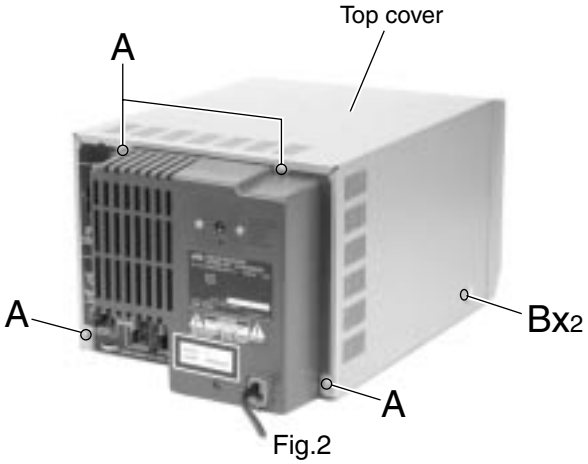


Fig.2

■ Removing the CD changer mechanism assembly (See Fig.3 to 5)

- Prior to performing the following procedure, remove the top cover.

1. Disconnect the card wire from connector CN661 on the input board.
2. Remove the four screws **C** on the upper side of the body.
3. Remove the screw **D** on the left side of the body.
4. Release the wires from the clamp on the right side of the CD changer mechanism assembly. Lift up the rear part of the CD changer mechanism assembly and pull out it from the front assembly.

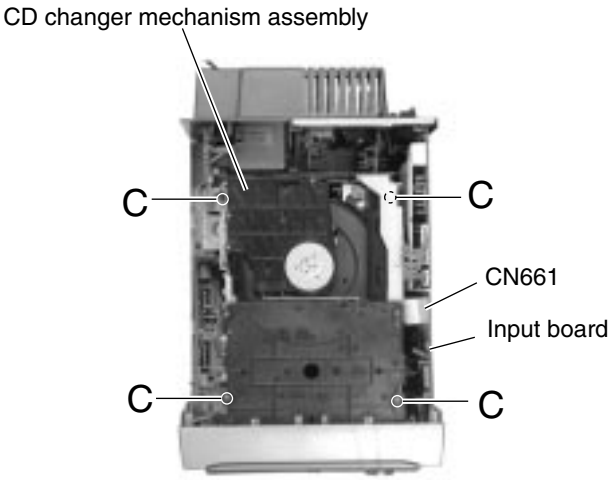


Fig.3

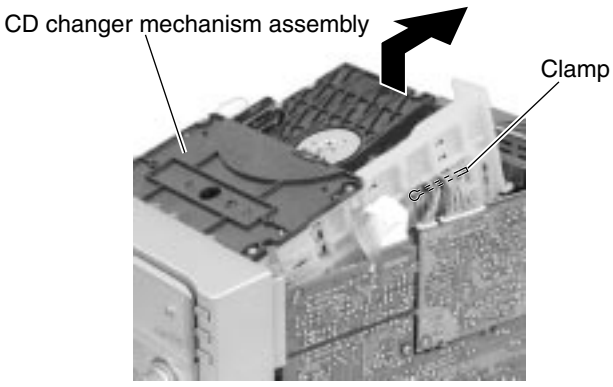


Fig.5

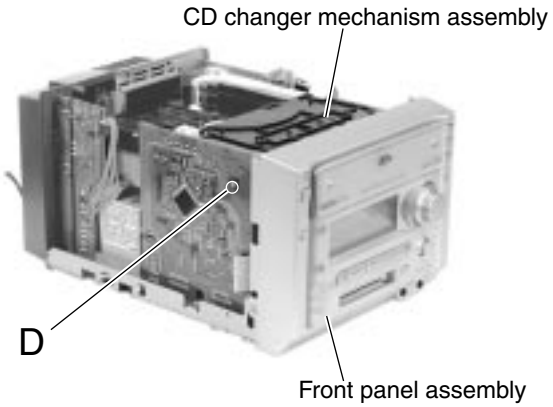


Fig.4

■ Removing the font panel assembly (See Fig.6 to 8)

- Prior to performing the following procedure, remove the top cover.

1. Disconnect the wire from connector CN603 on the input board and the card wire from CN801 on the microcomputer board.

2. Remove the two screws **E** on the bottom of the body.

3. Release the joint **a** on the bottom and the two joints **b** and **c** on the lower sides of the body using a screwdriver. Detach the front panel assembly toward the front.

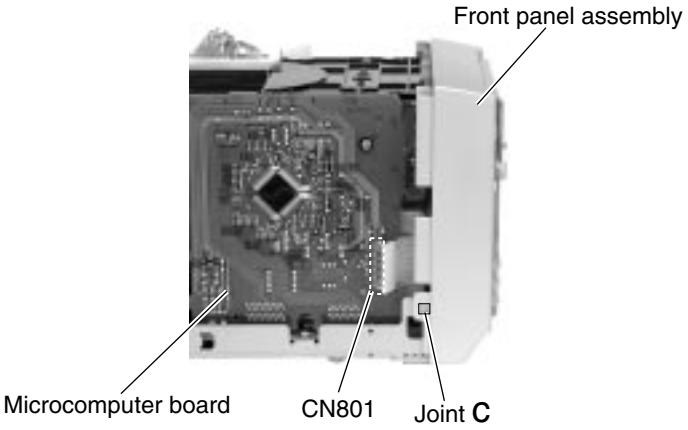


Fig.8

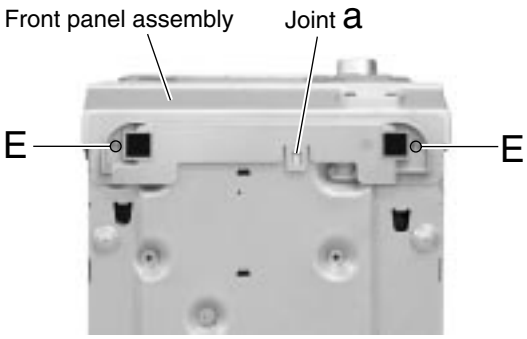


Fig.6

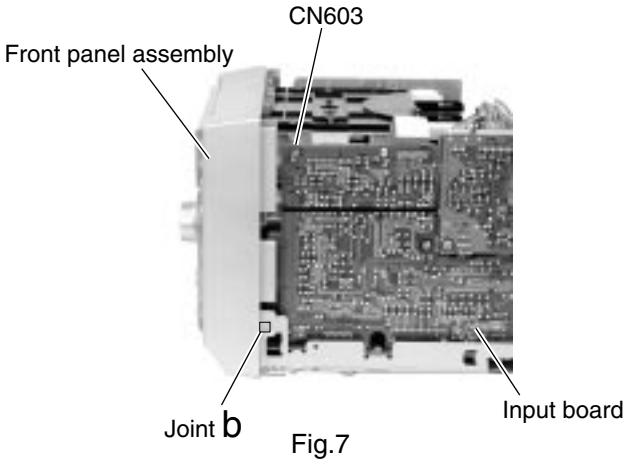


Fig.7

■ Removing the display board (See Fig.9)

- Prior to performing the following procedure, remove the top cover and the front panel assembly.

1. Remove the nine screws **F** attaching the display board to the front panel assembly.

2. Disconnect connector CN791 on the display board from the control board on the front panel assembly.

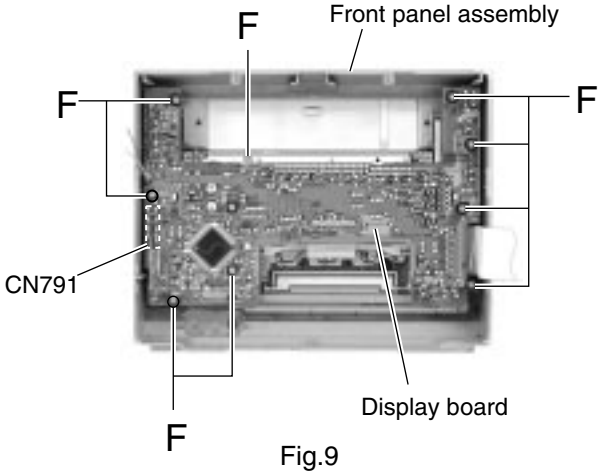


Fig.9

■ Removing the control board / the key board (See Fig.10)

- Prior to performing the following procedure, remove the top cover, the front panel assembly and the display board.

1. Remove the five screws **G** and the four screws **H** attaching the control board and the key board.

REFERANCE: When removing the control board and the key board respectively, unsolder each board.

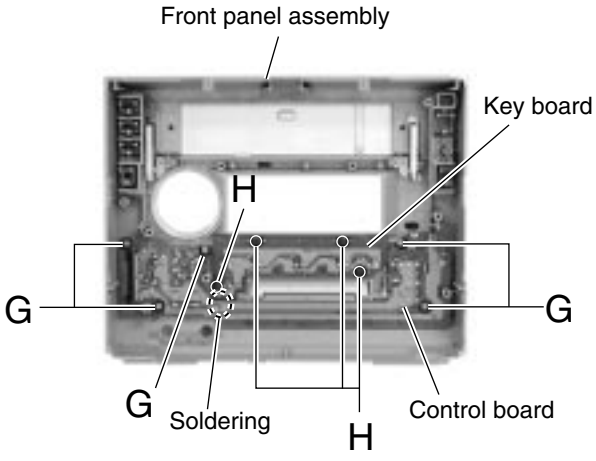


Fig.10

■ Removing the MD changer mechanism (See Fig.11 to 13)

- Prior to performing the following procedure, remove the top cover and the CD changer mechanism assembly.

1. Disconnect the card wire from connectors CN511 on the main board.
2. Remove the four screws **I** on both sides of the body.
3. Pull out the MD changer mechanism assembly from behind upward while releasing the four joints **d** using a screwdriver.

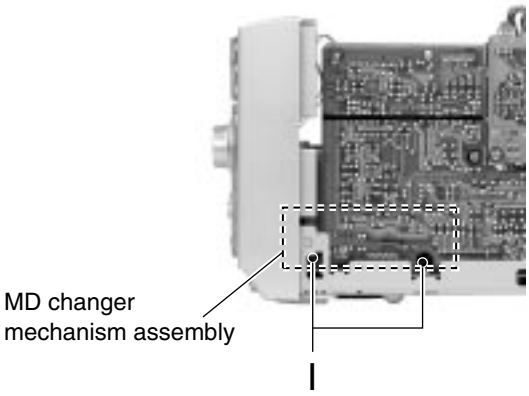


Fig.11

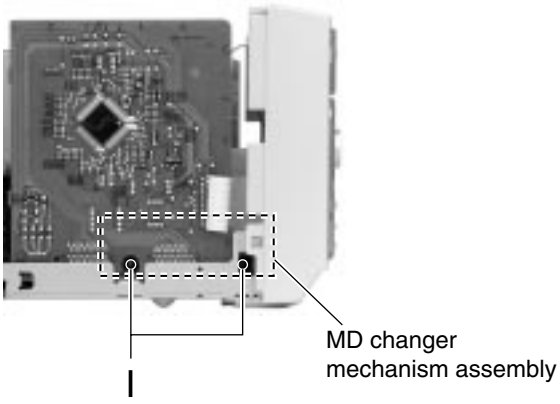


Fig.12

■ Removing the microcomputer board (See Fig.14)

- Prior to performing the following procedure, remove the top cover.

1. Disconnect the card wire from connector CN801 on the microcomputer board.
2. Remove the screw **D** attaching the microcomputer board.
3. Disconnect the lower connector CN391, CN392 and CN393 from the main board by pulling them.

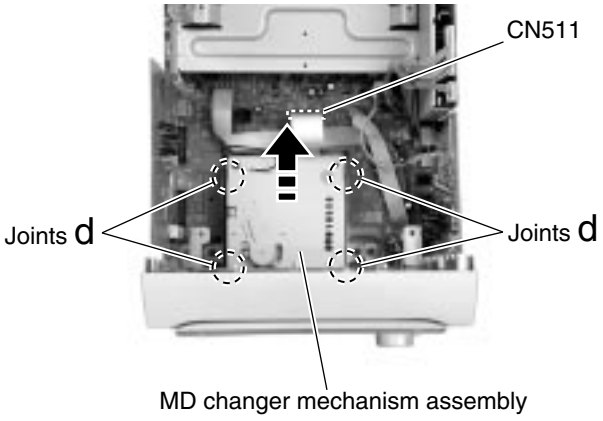


Fig.13

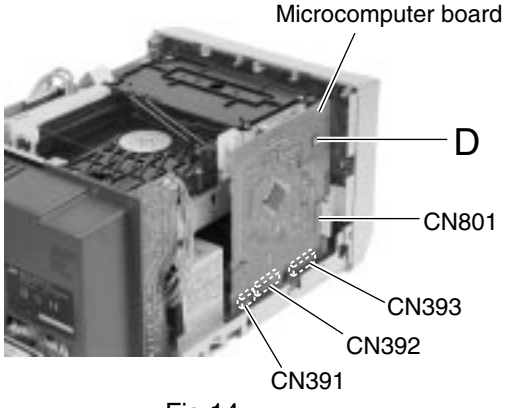


Fig.14

■ Removing the tuner board (See Fig.15 and 16)

- Prior to performing the following procedure, remove the top cover.

1. Disconnect the wire from connector CN111 and CN112 on the tuner board.
2. Remove the screw **J** on the side of the body.
3. Remove the two screws **K** on the back of the rear panel.

REFERANCE: To facilitate the procedure, remove the rear panel in advance.

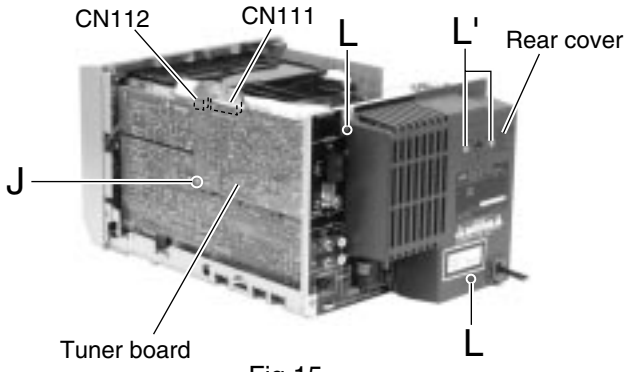


Fig.15

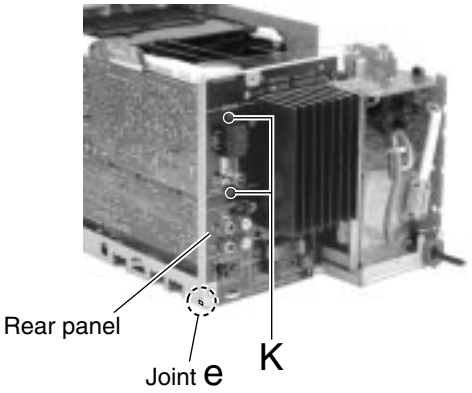


Fig.16

■ Remove the rear cover / the rear panel (See Fig.15 to 17)

- Prior to performing the procedure, remove the top cover.

1. Remove the two screws **L** and the two screws **L'** attaching the rear cover to the body.
2. Remove the two screws **K**, **M**, **N**, **O**, and the screw **P** and **Q** respectively.
3. Release the joint **e** on the lower left side of the rear panel.

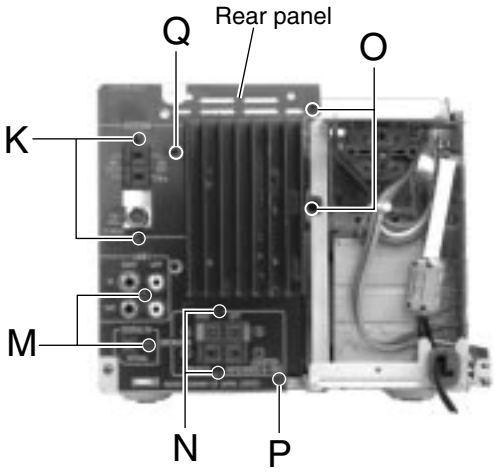


Fig.17

■ Removing the Input board (See Fig.18)

- Prior to performing the procedure, remove the top cover, the rear cover, the rear panel and the tuner board.

1. Disconnect the card wire from connector CN661 and the wire from CN603 on the input board.
2. Remove the two screws **R** attaching the bracket and remove the bracket in the direction of the arrow.
3. Disconnect the lower connector CN602, CN913 and CN922 from the main board. Disconnect the wire from CN691 on the input board.

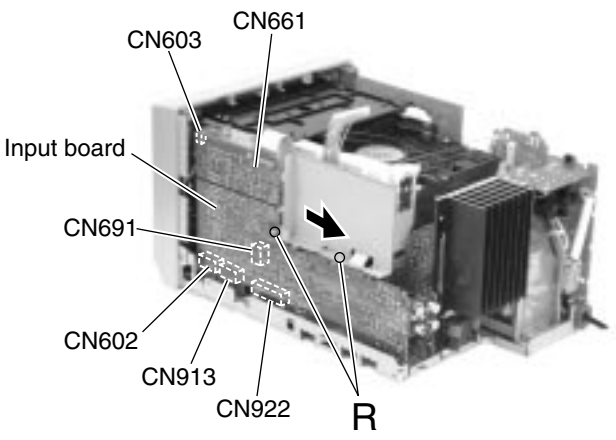


Fig.18

■ Removing the heat sink assembly (See Fig.19 and 20)

- Prior to performing the procedure, remove the top cover, the CD changer mechanism assembly, the rear cover, the rear panel, the tuner board and the input board.

1. Remove the four screws **S** attaching the bracket.

2. Disconnect connector CN924 and CN394 from the main board.

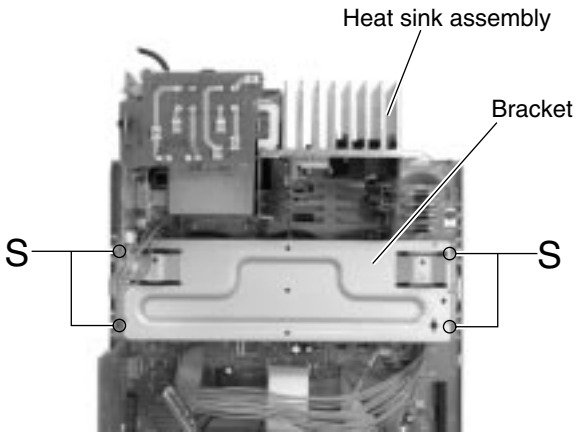


Fig.19

■ Removing the regulator board / the amplifier board (See Fig.21)

- Prior to performing the procedure, remove the top cover, the CD changer mechanism assembly, the rear cover, the rear panel, the tuner board, the input board and the heat sink assembly.

1. Remove the two screws **T** or **U** attaching the regulator board and the amplifier board to the heat sink.

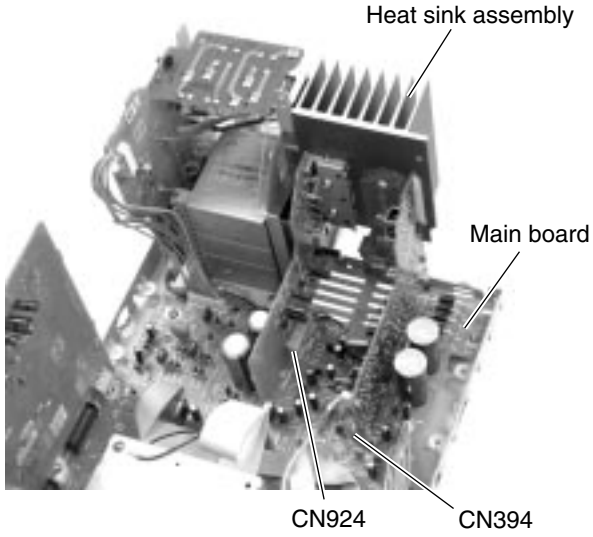


Fig.20

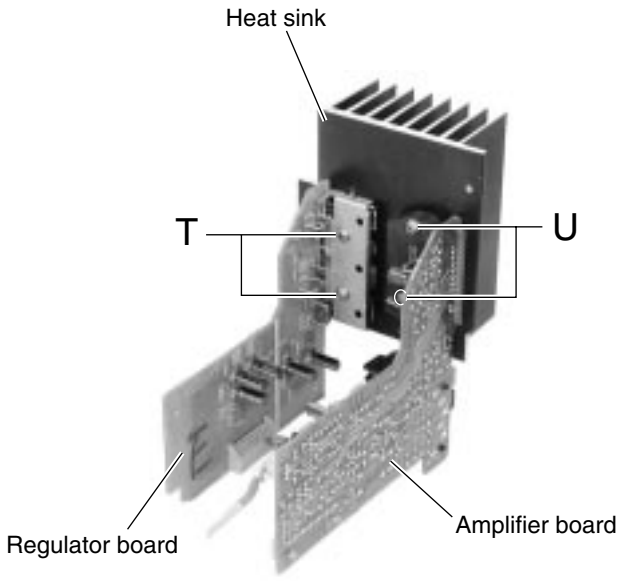


Fig.21

■ Removing the Main board (See Fig.22)

- Prior to performing the procedure, remove the top cover, the CD changer mechanism assembly, the rear cover, the rear panel, the tuner board, the input board and the heat sink assembly.

1. Disconnect the wire from connector CN911 on the main board and CN991 on the power transformer assembly.
2. Disconnect the card wire from connector CN511 on the main board.
3. Remove the four screws **V** attaching the main board.
4. If necessary, unsolder the wire on the headphone board.

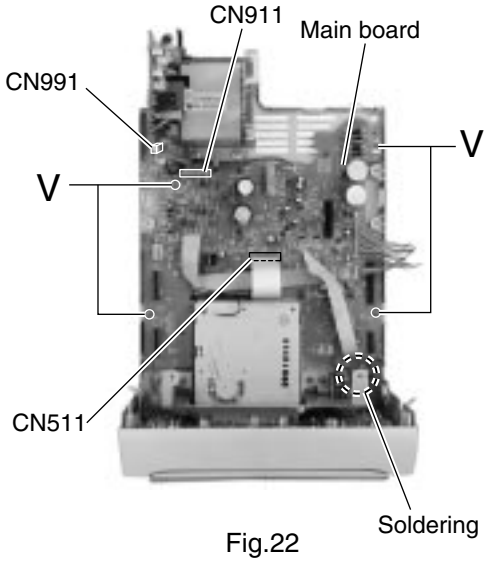


Fig.22

■ Removing the power transformer assembly (See Fig.23 and 24)

- Prior to performing the following procedure, remove the top cover, the rear cover, the voltage selector.

1. Remove the four screws **W** attaching the power transformer assembly.
2. Pull out the power cord stopper from the body upward. Turn the power transformer assembly while lifting it as shown in the figure.
3. Disconnect the wire from connector CN911 on the main board and CN991 on the power transformer board. Remove the power transformer assembly from the body.

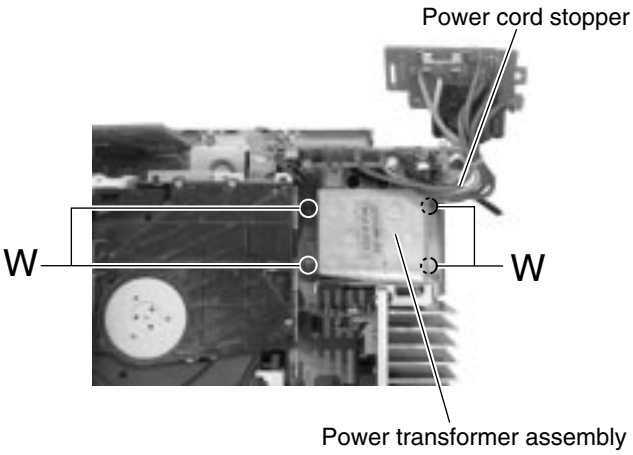


Fig.23

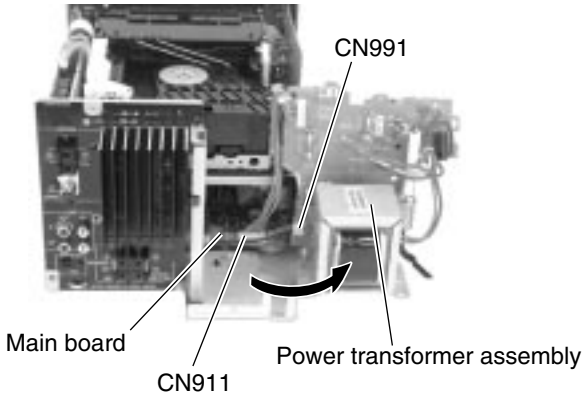


Fig.24

■ Removing the headphone board (See Fig.25)

- Prior to performing the procedure, remove the top cover, the CD changer mechanism assembly, the front panel assembly, the rear cover, the rear panel, the tuner board and the input board.

1. Remove the screw **X** attaching the headphone board.

   If necessary, unsolder the wire on the headphone board.

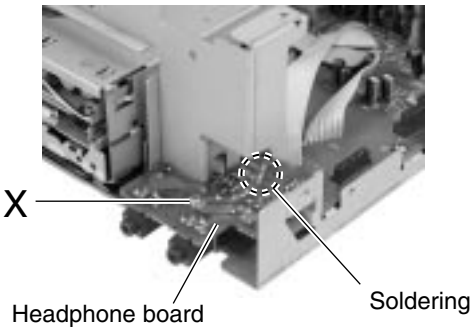


Fig.25

■ Removing the voltage selector

(See Fig.26)

- Prior to performing the following procedure, remove the top cover and the rear cover.

1. Remove the plastic rivet retaining the voltage selector.

2. Disengage the joint **f** to release the voltage selector from the transformer bracket. If necessary, unsolder each wire.

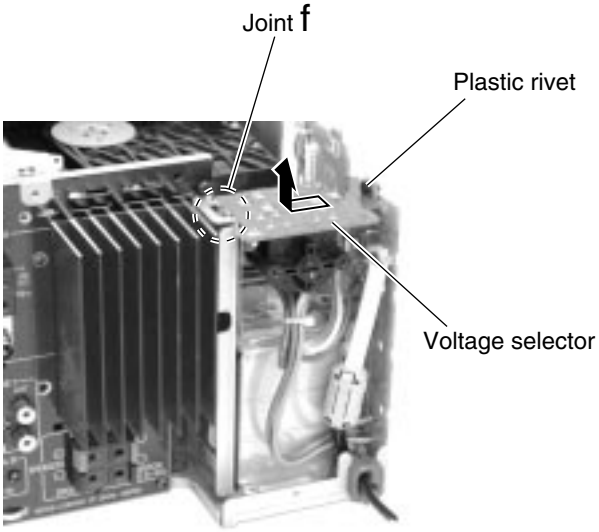


Fig.26

<MD section>

■Removing the main board (See Fig.1 and 2)

1. Turn over the body and disconnect the card wire from connector CN408 and the flexible wire from CN407 on the main board.

2. Remove the two screws A attaching the main board. Slide the main board in the direction of the arrow to release the two joints a with the single flame.

3. Solder part b on the pickup in the body. Disconnect the flexible harness from connector CN321 and CN451 on the underside of the main board. Then remove the main board.

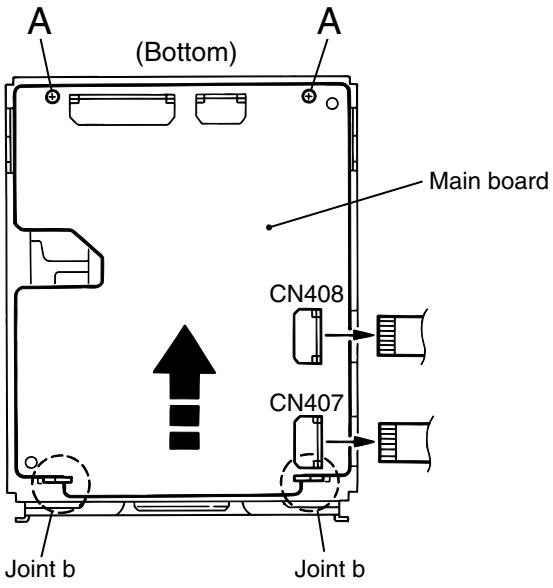


Fig.1

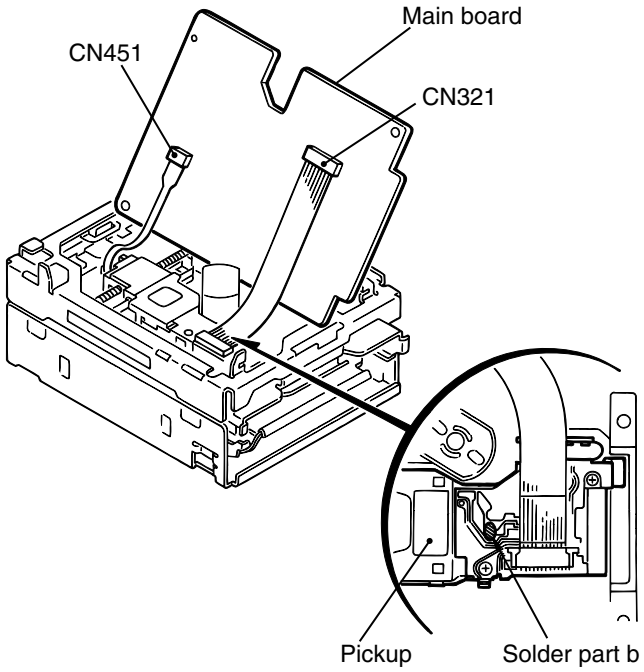


Fig.2

■Removing the mechanism cover (See Fig.3)

1. Remove the four screws B on both sides of the body.

2. Move the mechanism cover toward the front to disengage the front hook of the mechanism cover from the internal loading assembly (Joint c). Then remove the mechanism cover upward.

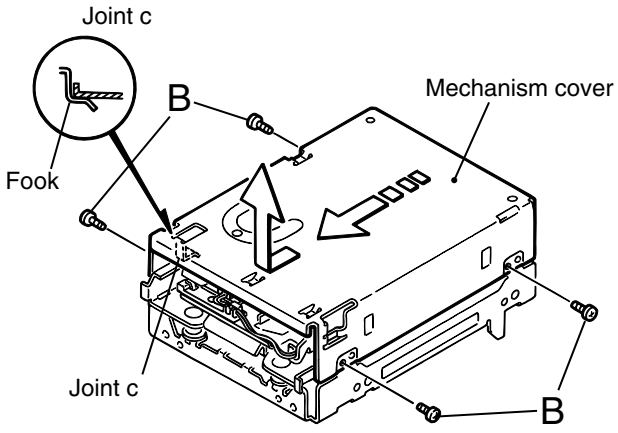


Fig.3

■Removing the head lifter (See Fig.4 to 6)

1. Move the head lifter on top of the body in the direction of the arrow and turn around.

2. Detach the spring from the hook of the body. Remove the head lifter with the spring.

3. If necessary, remove the spring from the head lifter.

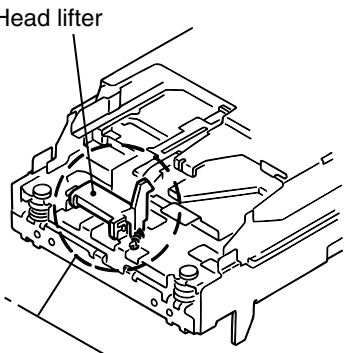


Fig.4

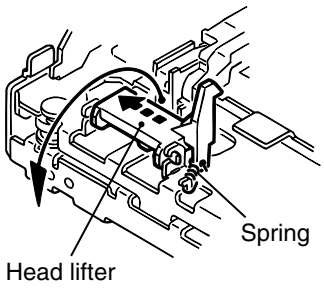


Fig.5

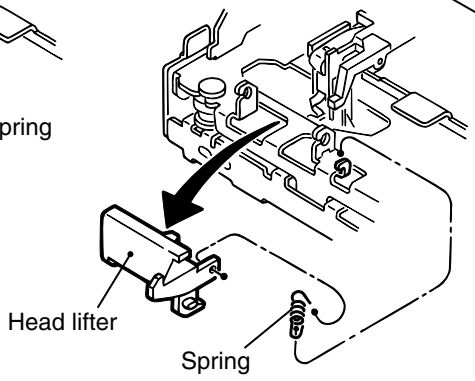


Fig.6

■Removing the head assembly (See Fig.7)

1. Remove the screw C on the upper side of the body. Remove the head assembly while pulling the flexible harness from the body.

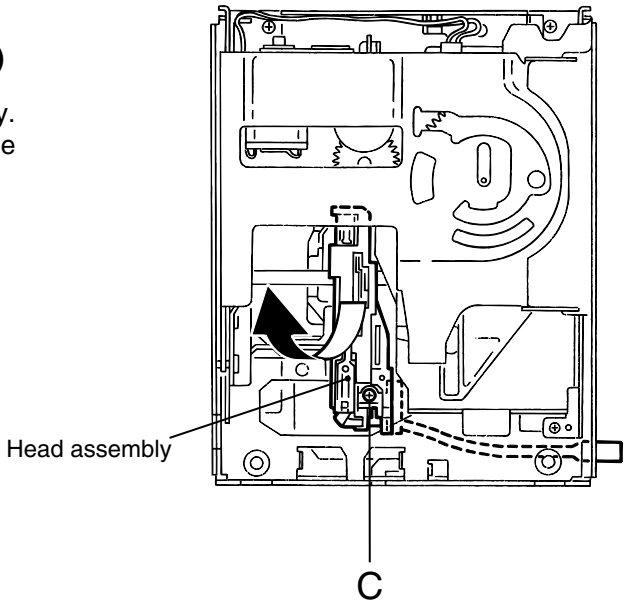


Fig.7

■Removing the Loading assembly (See Fig.8 and 9)

Ref: The loading assembly, the traverse mechanism assembly and the single flame will be removable after removing the loading assembly from the body.

・ Prior to performing the following procedure, remove the main board, the mechanism cover, the head lifter and the head assembly.

1. Remove the three screws D on the upper side of the body.

2. Move the loading assembly forward to disengage it from the traverse mechanism assembly (Joint d). Then remove it upward.

3. Remove the traverse mechanism assembly from the single flame.

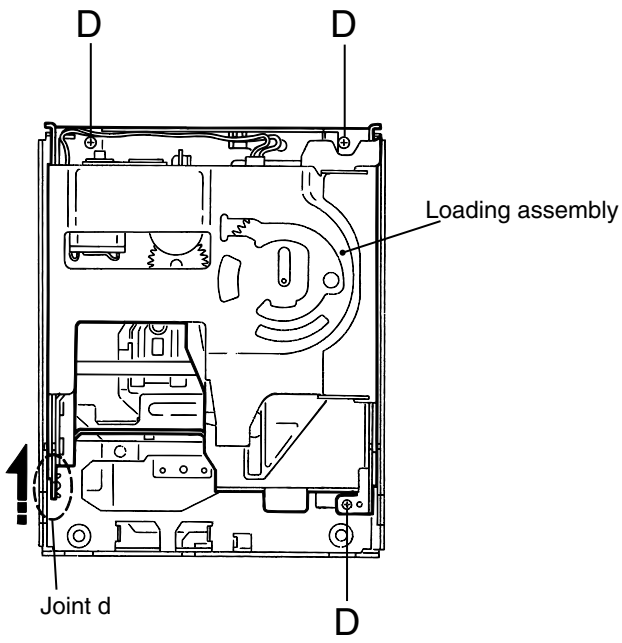


Fig.8

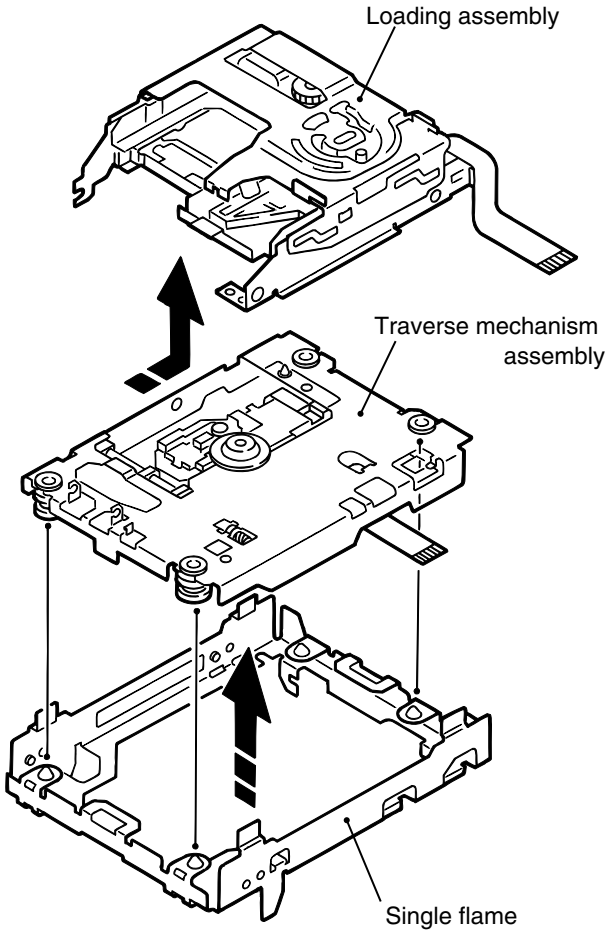


Fig.9

<Loading assembly>

■Removing the slide base (L) / (R) (See Fig.10)

1. Remove the two screws E on the upper side of the loading assembly.
2. Remove the slide base (L) outward. (Release it from the joint bosses E.)
3. Remove the slide base (R) outward.

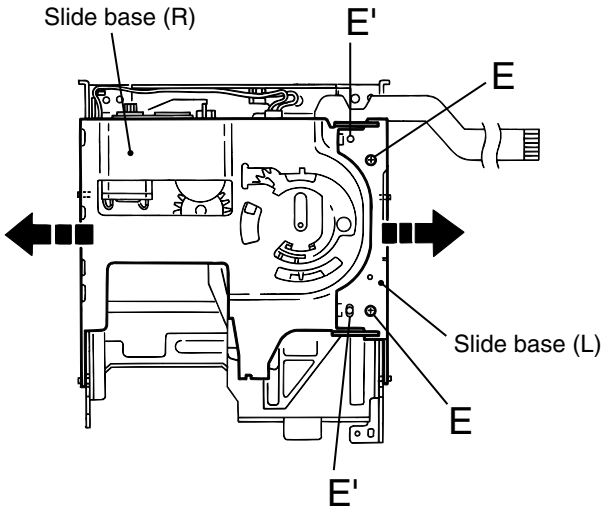


Fig.10

■Removing the loading mechanism assembly (See Fig.11)

1. Detach the loading mechanism assembly upward to release the four pins on both sides from the loading motor, paying attention to the part e of the loading mechanism base.

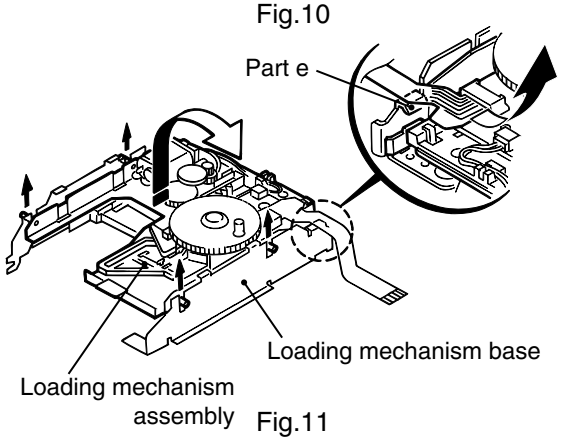


Fig.11

— **Loading mechanism assembly** —

■Removing the loading motor (See Fig.12 and 13)

1. Disconnect the harnesses from the wire holder and from connector CN612 on the cam switch board.
2. Remove the screw F attaching the loading motor and release the joint f.
3. Remove the belt from the loading motor assembly.
4. Remove the two screws G attaching the loading motor.

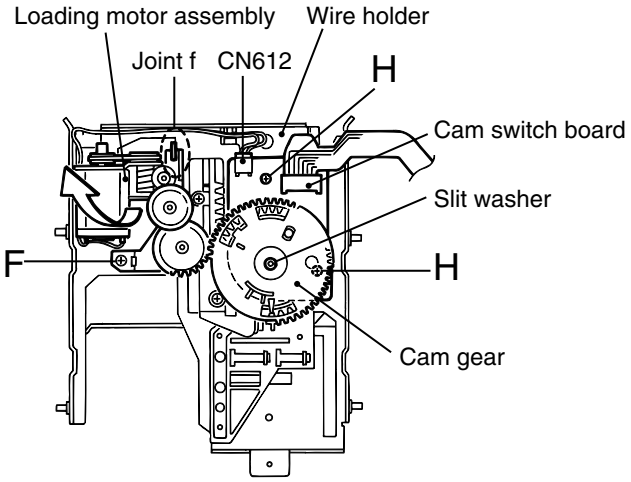


Fig.12

■Removing the cam gear and the cam switch board (See Fig.12)

1. Remove the slit washer attaching the cam gear and pull out the cam gear.
2. Disconnect the harness from the wire holder and from connector CN612 on the cam switch board.
3. Remove the two screws H and the clamp. Remove the cam switch board.

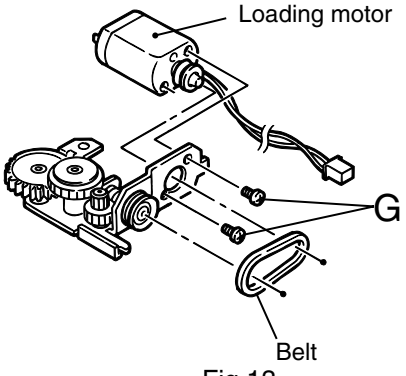


Fig.13

■Removing the cartridge holder assembly (See Fig.14 and 15)

1. Remove the two screws l on the upper side of the loading assembly.

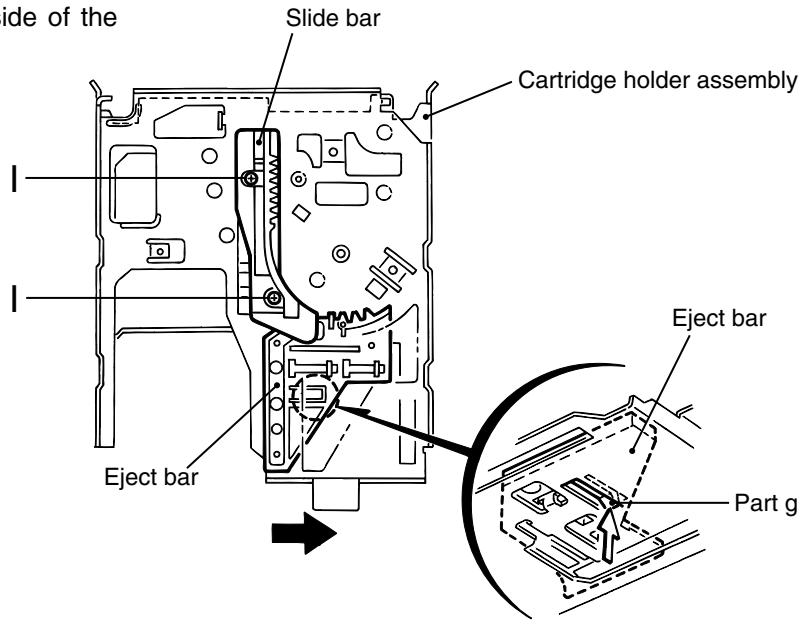


Fig.14

■ Removing the slide bar and the eject bar (See Fig.14 and 15)

・ Prior to performing the following procedure, remove the cartridge holder assembly.

1. Remove the slide bar upward.

2. Move the eject bar outward until it stops as shown in Fig.14. Push the convex part g on the bottom of the body and remove the eject bar from the chassis.

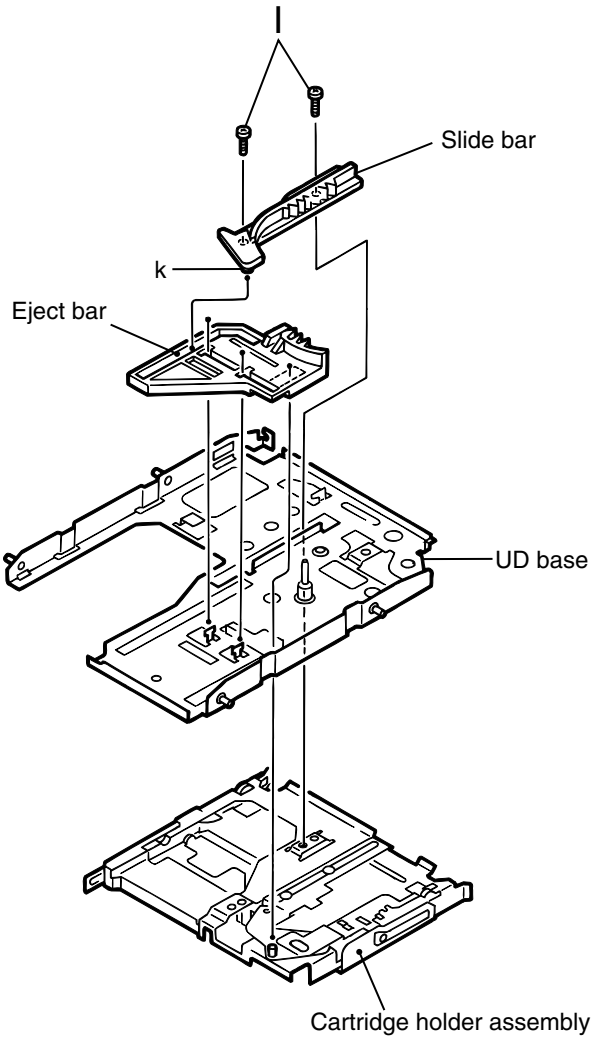


Fig.15

<Traverse mechanism assembly>

■Removing the Insulators (See Fig.16)

1. Disengage the four insulators from the notches of the traverse mechanism chassis.

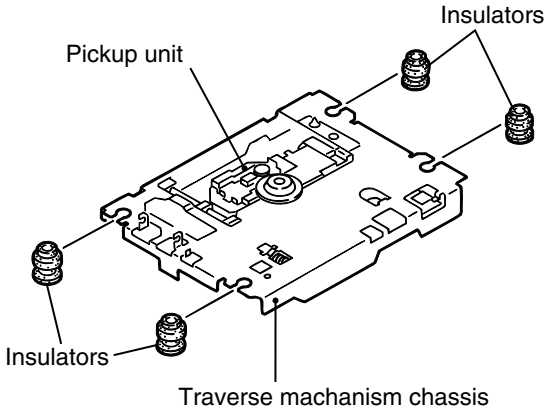


Fig.16

■Removing the pickup unit (See Fig.17)

1. Turn over the traverse mechanism assembly and remove the screw J attaching the shaft holder (F).

2. Move the shaft inward and remove it from the shaft holder (R).

3. Detach the shaft side of the pickup unit upward and release the joint h with the pickup guide. Then remove the pickup unit with the shaft.

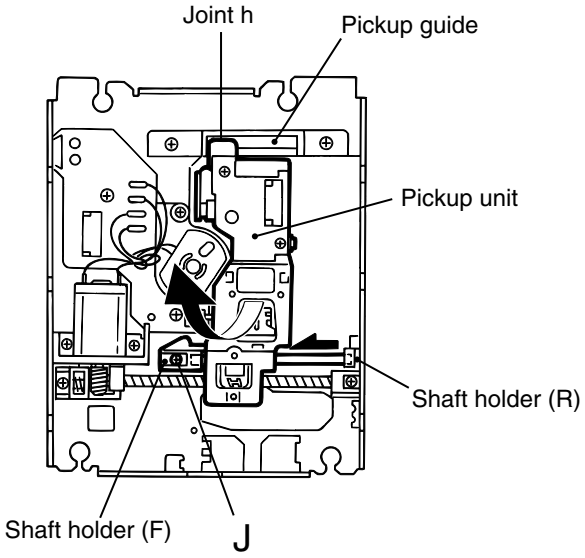


Fig.17

■Removing the pickup (See Fig.18)

1. Draw out the shaft from the pickup.

2. Remove the two screws K attaching the rack spring.

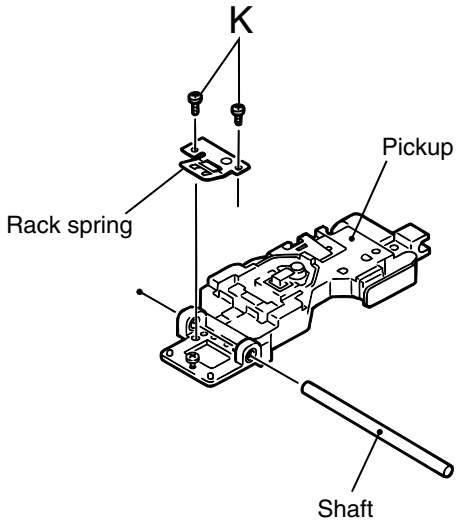


Fig.18

■Removing the feed motor assembly (See Fig.19-1, 19-2)

・It is not necessary to remove the pickup unit.

1. For the white and black harnesses extending from the feed motor assembly, unsolder the soldering i on the traverse mechanism board.
2. Remove the two screws L attaching the feed motor assembly.
3. Remove the two screws N attaching the feed motor bracket.

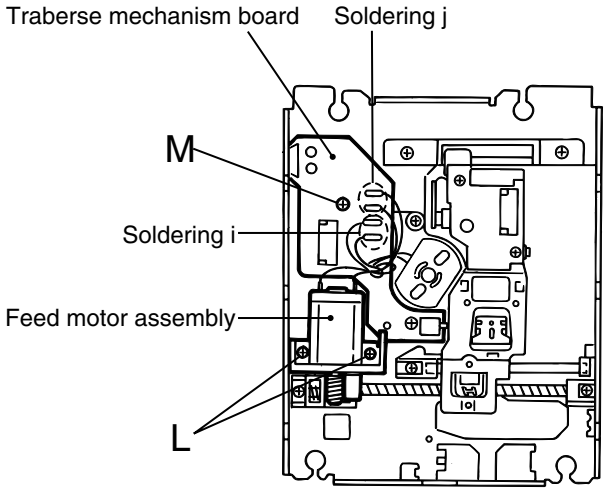


Fig.19-1

■Removing the traverse mechanism board (See Fig.19-1)

・Prior to performing procedure, remove the feed motor assembly.

1. For the red and black harnesses extending from the spindle motor, unsolder the soldering j on the traverse mechanism board.
2. Remove the screw M attaching the traverse mechanism board.

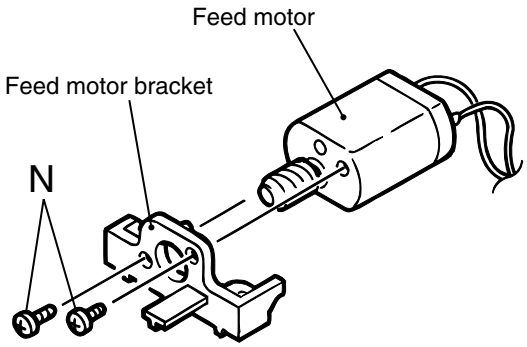


Fig.19-2

<Reattaching the loading assembly>

1. Reattach the eject bar to the UD base.
(Fig.15 and 20)

2. Reattach the slide bar to the loading mechanism chassis while fitting the boss marked k to the eject bar slot. (Fig.20)

3. Slide the slide bar and the eject bar in the direction of the arrow in Fig.20 and reattach the cartridge holder assembly using the two screws I.
(Fig.20 and 21)

ATTENTION: Make sure the pin of the eject lever marked l is fitted to the slot of the eject bar marked m at the bottom of the loading mechanism chassis after moving the eject lever and the loading slider of the cartridge holder assembly in the direction of the arrow.
(Refer to Fig.21)

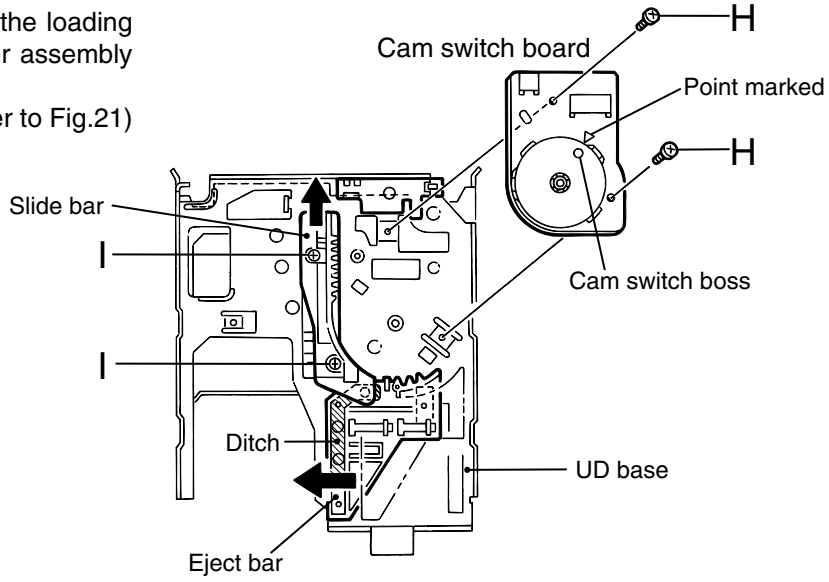


Fig.20

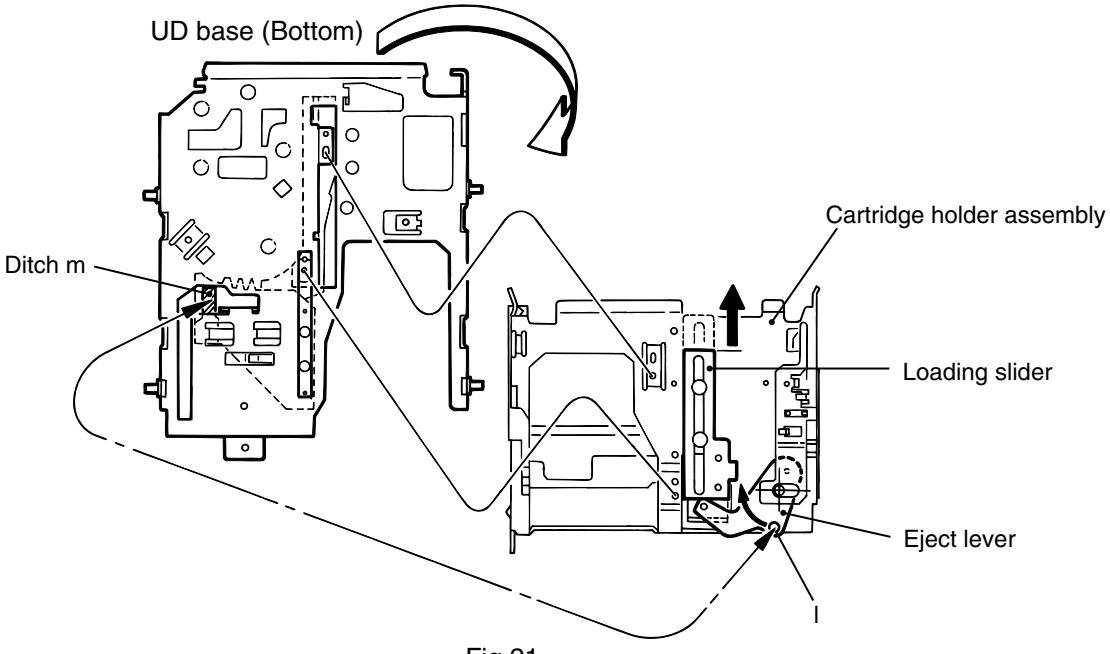


Fig.21

4. Reattach the wire holder to the UD base while engaging the UD base hook marked u to the wire holder slot marked t (At the same time, the boss on the reverse side of the wire holder is fitted to the UD base round hole).

5. Reattach the cam switch board using the two screws H. (Fig.22)

6. Turn the cam switch to bring the boss to the point marked △ on the cam switch board. Reattach the cam gear using a slit washer while fitting the cam gear slot to the cam switch boss. (Fig.22)

   ATTENTION: When reattaching the cam gear, the cam switch boss should be fitted to the cam gear slot, and the triangle mark of the cam gear should be aligned to the hole of the eject bar as shown in Fig.22.

7. Reattach the loading motor assembly, using the screw F. Connect the harness extending from the loading motor to connector CN612 on the switch board and fix it with the wire holder. (Fig.22)

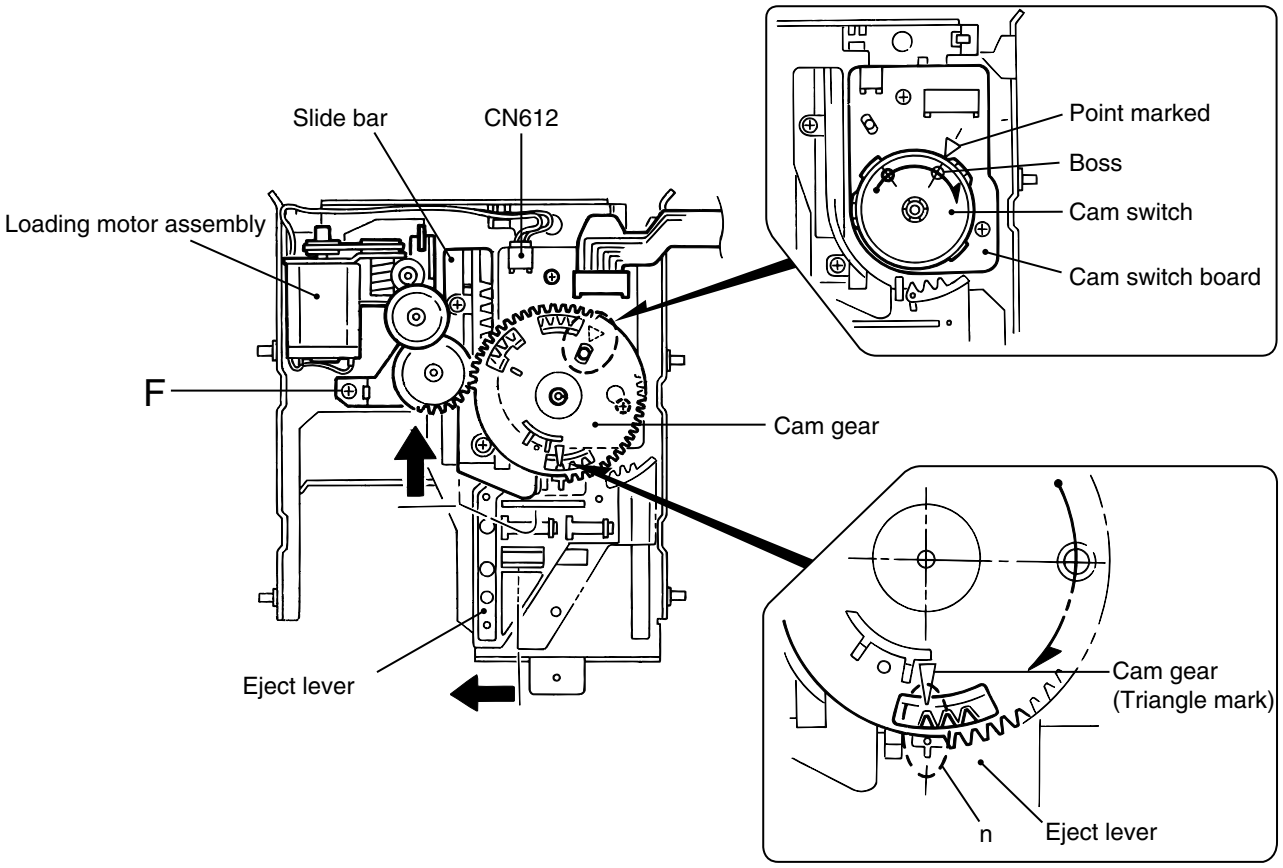


Fig.22

8. Reattach the UD base while engaging the four pins on both sides of the UD base to the notches of the loading mechanism base and placing the edge (marked e') of the cartridge holder assembly under the hook e of the loading mechanism base. (Fig.23)

9. Reattach the slide base (R) while fitting the two pins on another side of the UD base to the slots of the slide base (R). (Fig.24)

   ATTENTION: Fit the part v of the slide base (R) to the part w on the inward side of the cam gear rib. (Fig.25)

10. Reattach the slide base (L) on the slide base (R) while fitting the two pins on another side of the UD base to the slots of the slide base (L) (Fig.25). Make sure the two slots of the slide base (L) are fitted to the two bosses marked E' and tighten the two screws E. (Fig.26)

    Ref: To expedite the work, bring up the UD base slightly when fitting each pin to the appropriate notch.

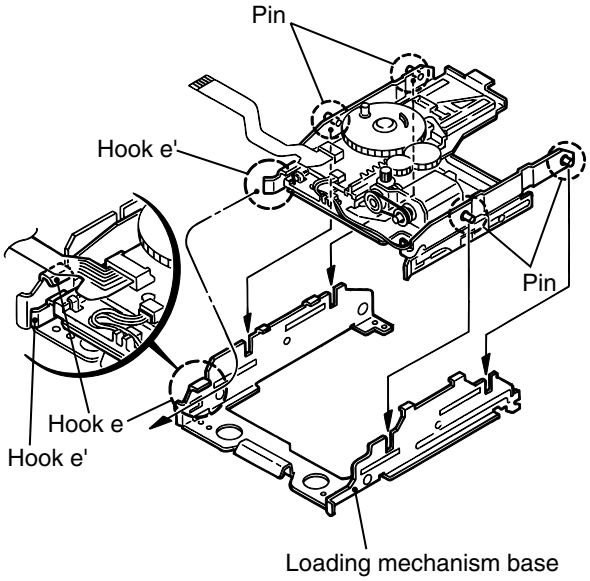


Fig.23

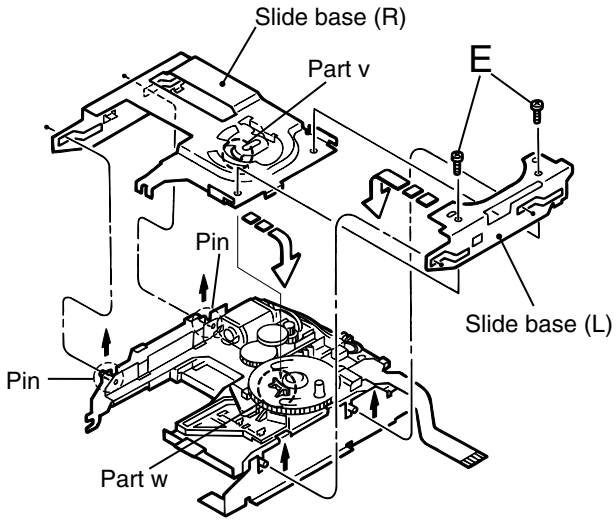


Fig.24

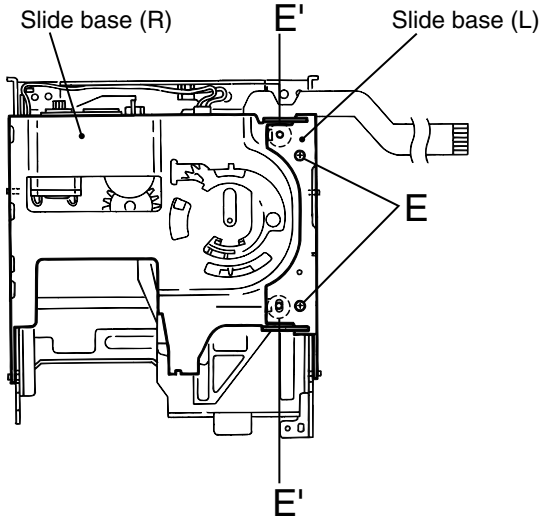


Fig.26

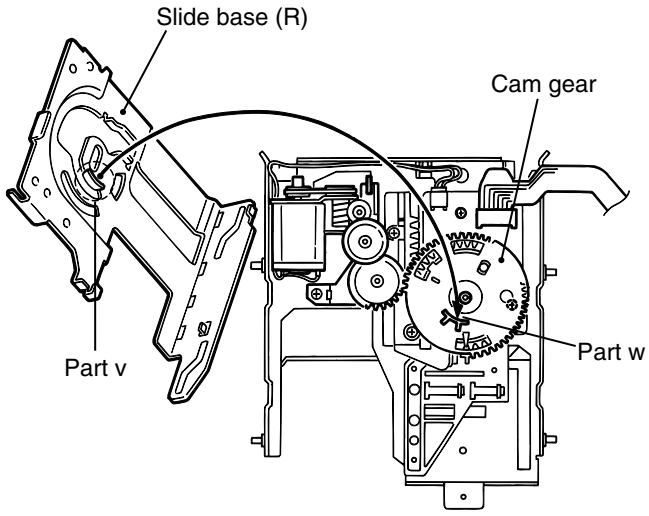


Fig.25

<CD mechanism section>

■ Removing the servo control board (See Fig.1 to 4)

ATTENTION: Make sure the sub chassis unit is locating at the lowest position. If not,perform the following procedure from 1 to 3.

1. Insert a screwdriver into the sub chassis slot on the back of the body and push the slider (R) toward the front.

2. From the top of the body, slide the hook and the slider (R) forward until they stop.

3. From the right side of the body, slide the slide cam (L) backward until it stops. The sub chassis unit will move to the lowest position.

4. From the bottom of the body, unsolder each soldered part a and b of the motors on the servo control board.

5. Remove the five screws A attaching the servo control board.

6. Disconnect connector CN610 on the servo control board from the tray select switch board to suspend the servo control board tentatively. Solder the part c of the flexible wire connected to connector CN601 on the underside of the servo control board.

7. Disconnect the flexible wire from connector CN601 and remove the servo control board from the body.

ATTENTION: In case of disconnecting the flexible wire without soldering, the CD pick up may be damaged.

ATTENTION: When reassembling, make sure the cam switch boss of the servo control board is fitted to the slot p of the control cam on the bottom of the body (Refer to Fig.3-1).

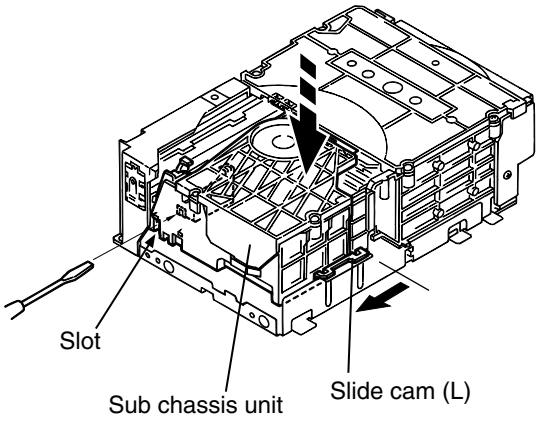


Fig.1

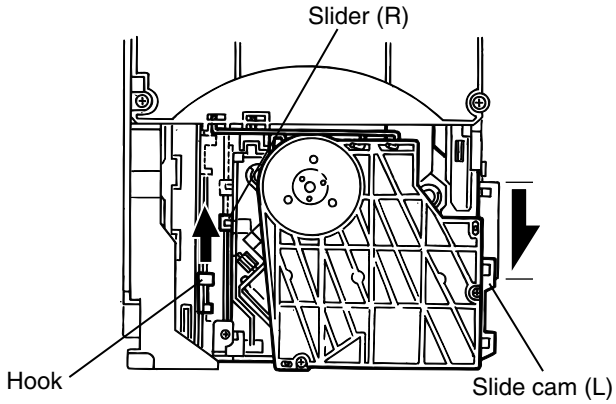


Fig.2

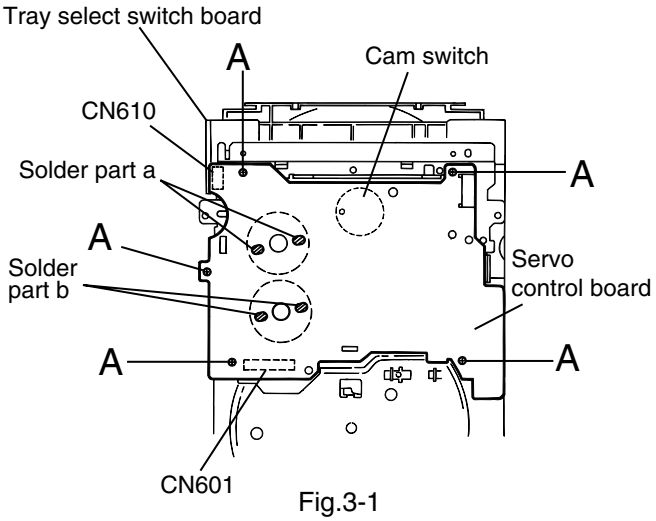


Fig.3-1

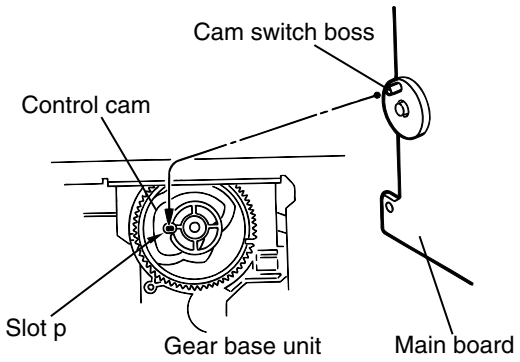


Fig.3-2

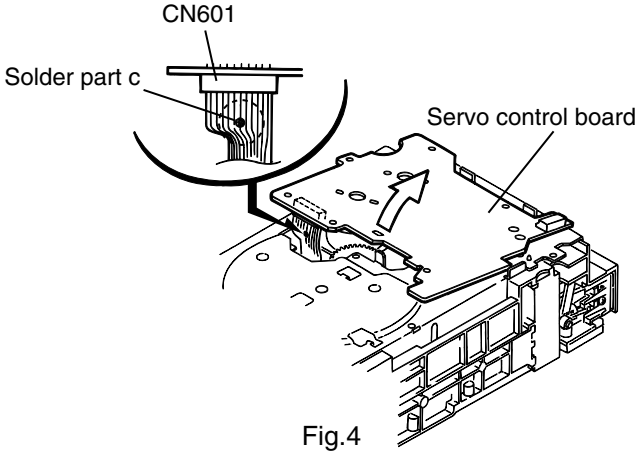


Fig.4

■ Removing the tray unit (See Fig.5 to 8)

※ The tray unit can be removed despite the position of the sub chassis unit, but the lowest position is recommended to expedite the work.

1. Remove the four screws B attaching the top cover on the top of the body.

2. Remove the top cover with the two rods attached to the top cover and the clamper base unit.

3. Pull the lock lever of the return spring on the right side of the body to eject the tray unit.

4. From the top of the body, release the tray from the joint hook marked d (Push the tray toward the front).

5. Release the stoppers on both sides in the direction of the arrow and pull out the tray unit from the body.

ATTENTION: Pull out the tray unit from the top tray 3 in sequence.

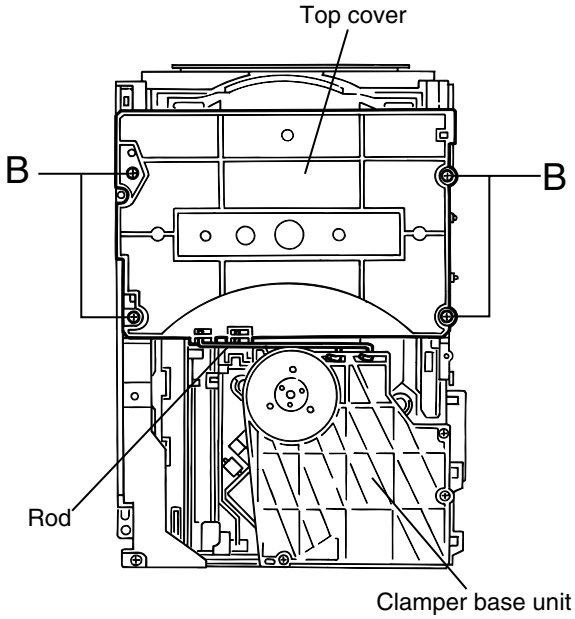


Fig.5

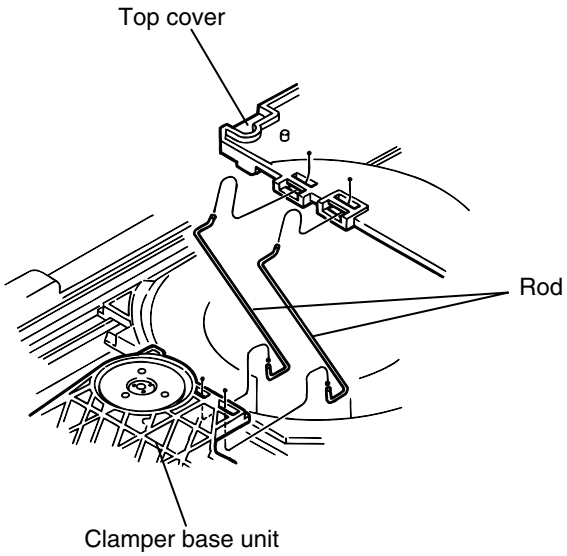


Fig.6

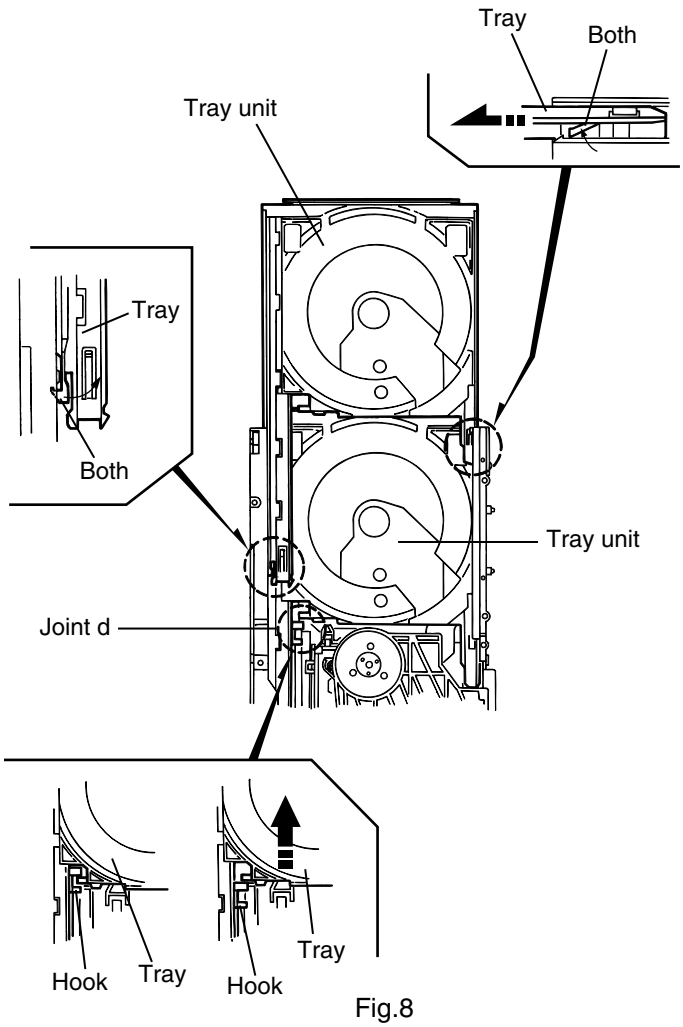


Fig.8

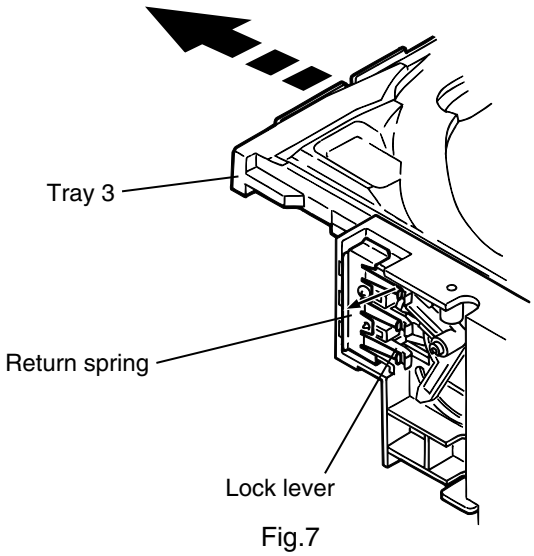


Fig.7

■Removing the side unit (L) and (R) (See Fig.9-1 to 9-5)

- Prior to performing the following procedures, remove the servo control board, the top cover and the tray unit.

1. Remove the two screws C attaching the side unit (L).

2. Slide and remove the side unit (L) toward the front while releasing the two joints e and the joint f with the chassis unit.

3. Slide the slide cam (L) toward the front until it stops to place the sub chassis unit at the top position.

   ATTENTION: The side unit (R) can be removed when the sub chassis unit is located at the top position.

4. Turn the hook gear counterclockwise to move the slide hook and the slider (R) backward until they stop.

5. Remove the three screws D attaching the side unit (R). Raise the side unit (R) upward and release the joint g with the chassis unit and the boss from the select arm marked h. Then remove the side unit (R) from the body.

   ATTENTION: When reassembling, make sure the boss is fitted to the select arm marked h.

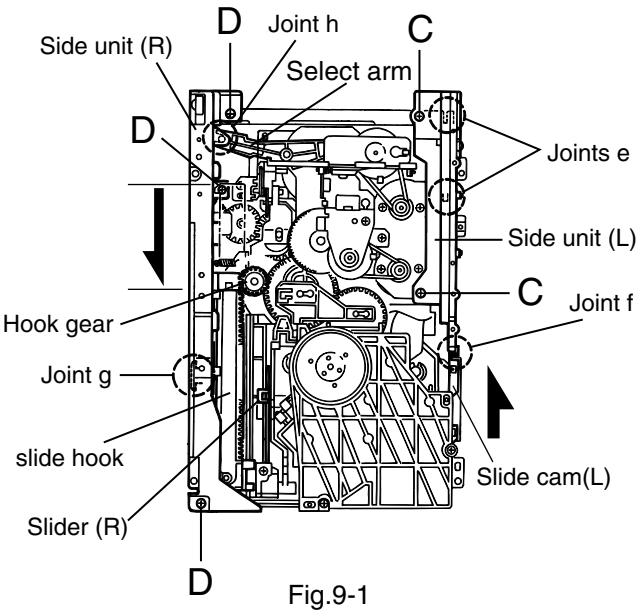


Fig.9-1

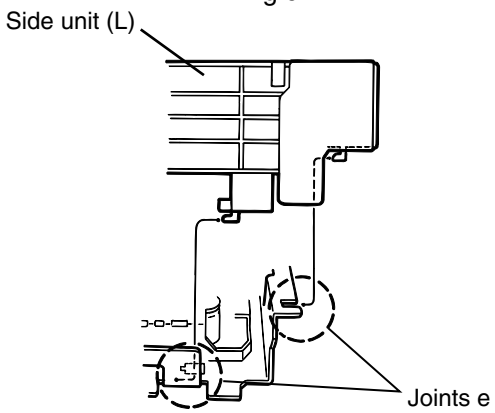


Fig.9-2

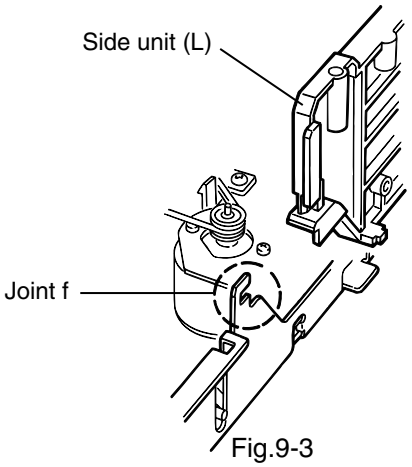


Fig.9-3

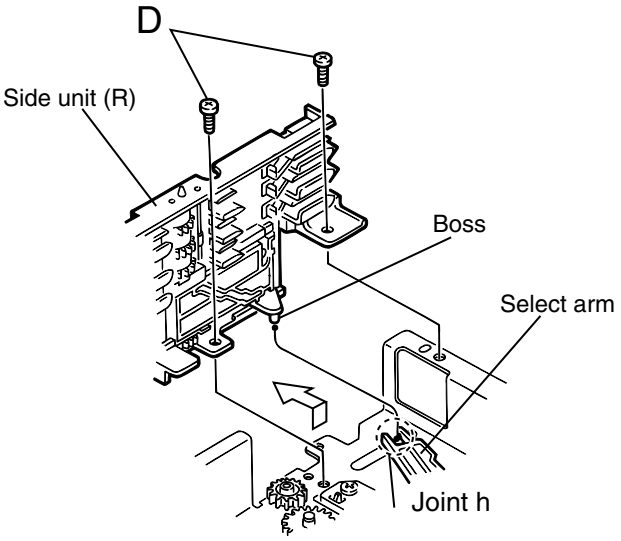


Fig.9-4

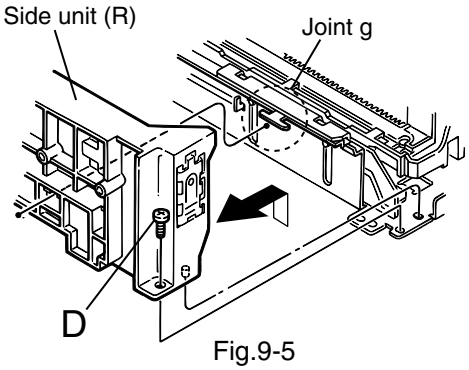


Fig.9-5

■ Removing the sub chassis unit (See Fig.10 to 12)

- Prior to performing the following procedures, remove the servo control board, the top cover, the tray unit, the side unit (L) and the side unit (R).

1. Turn the hook gear counterclockwise to move the slide hook and the slider (R) backward until they stop.

2. Slide the slide cam (L) and the slide cam (R) in the direction of the arrow until they stop.

   (The notches of each slide cam are fitted to the pins on both sides of the sub chassis unit.)

3. Detach the sub chassis unit upward.

   ATTENTION: When reassembling, turn the hook gear of the chassis unit counterclockwise until it stops and slide the slide hook and the slider (R) of the sub chassis unit backward until they stop.

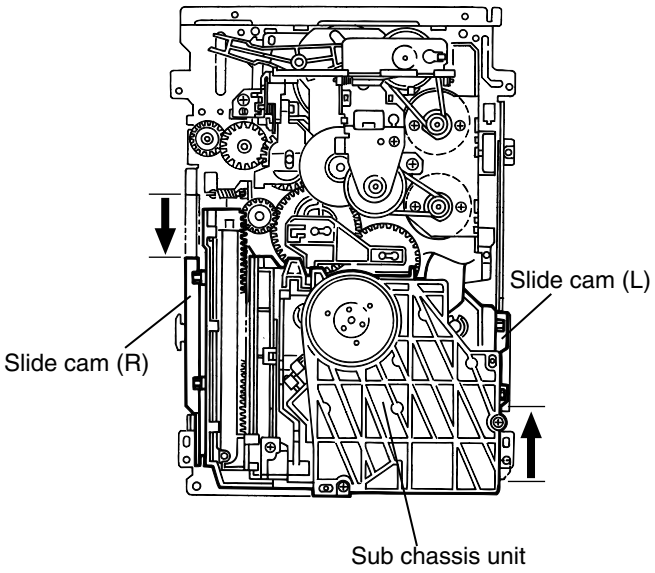


Fig.10

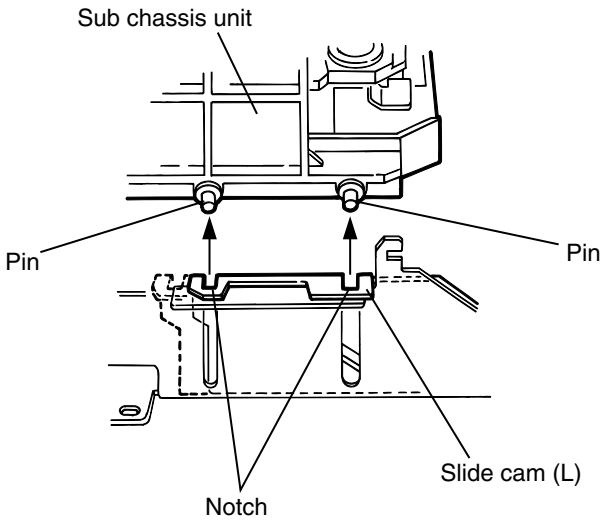


Fig.11

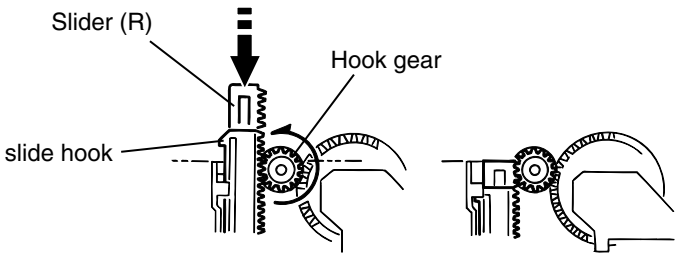


Fig.12

■ Removing the flap base unit and the gear base unit (See Fig.13 and 14)

- Prior to performing the following procedures, remove the servo control board, the top cover, the tray unit, the side unit (L) and the side unit (R).

1. Remove the screw E attaching the flap base unit. Release the joint tabs i and j, then remove the flap base unit from the body.

2. Remove the belts from the two pulleys on the gear base unit.

3. Remove the three screws F and remove the gear base unit from the body.

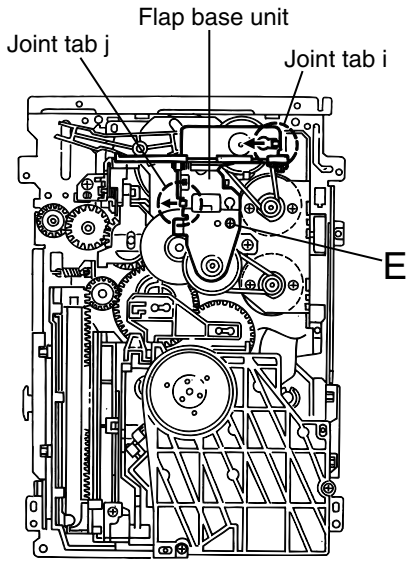


Fig.13

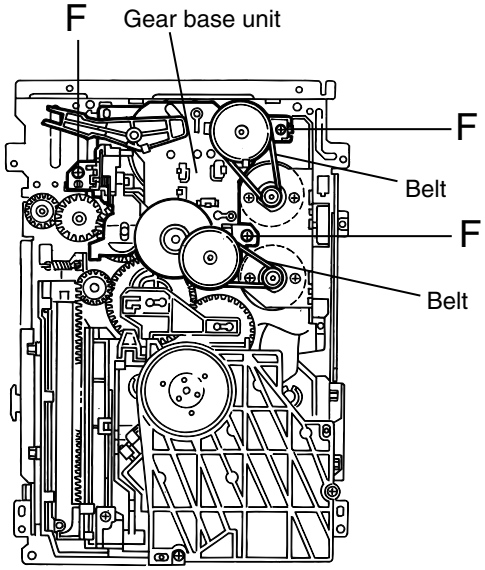


Fig.14

■ Removing the motors (See Fig.15)

- Prior to performing the following procedure, remove the main board.

1. Remove the belts from the two pulleys.

2. Remove the four screws G and detach each motor from the body.

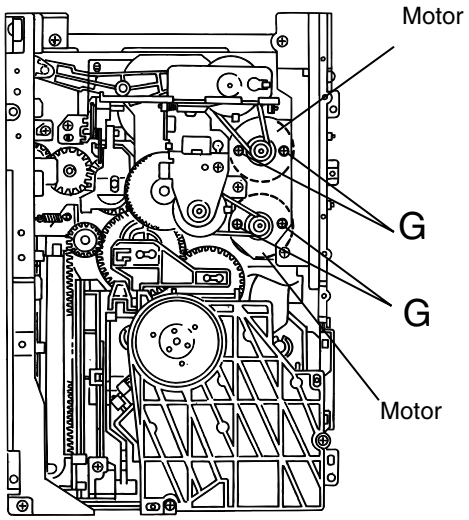


Fig.15

■ Removing the pickup (See Fig.16 to 20)

1. From the top of the body, remove the three screws H attaching the clamper base unit.

2. Remove the clamper base unit with the two rods attached to the clamper base unit and the top cover.

3. Turn the screw shaft gear marked k in the direction of the arrow to move the pickup unit.

4. Remove the screw I attaching the shaft holder.

5. Move the screw shaft in the direction of the arrow and release it from the joint l. Then release it from the joint m with the pickup holder. Detach the pickup with the screw shaft.

6. Solder the part n of the flexible board on the underside of the pickup. After soldering, disconnect the flexible wire connected to the pickup (In case of disconnecting the flexible wire without soldering, it may cause damage to the CD pickup).

7. Remove the two screws J attaching the rack arm to the pickup unit.

8. Pull out the screw shaft from the pickup.

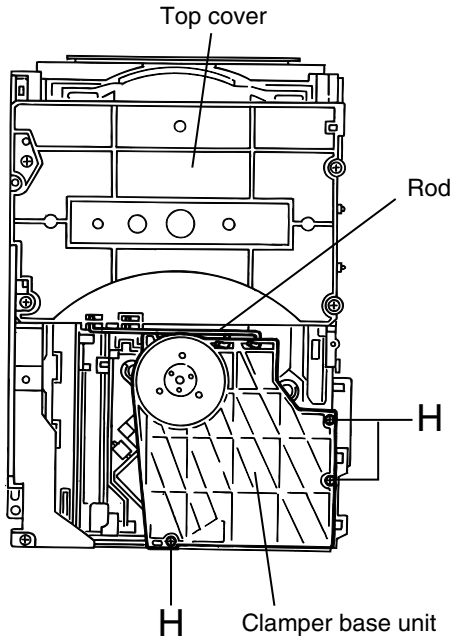


Fig.16

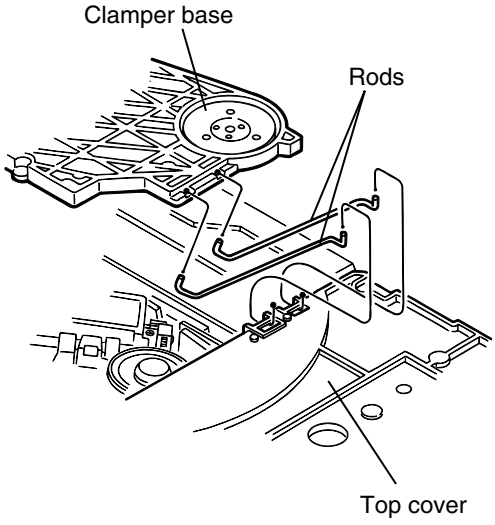


Fig.17

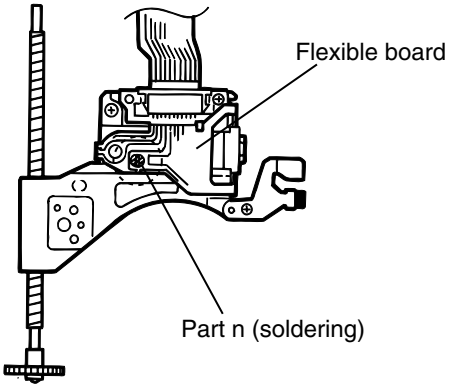


Fig.19

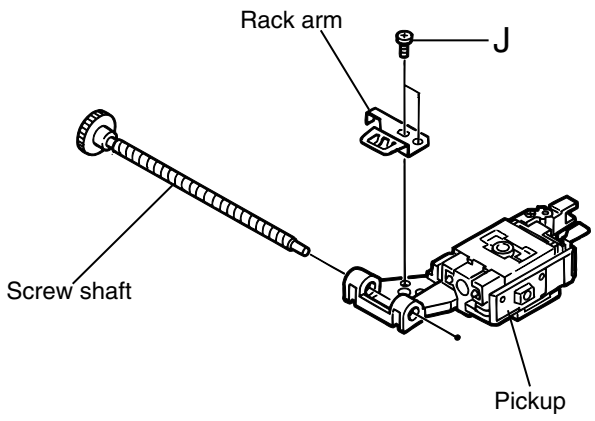


Fig.20

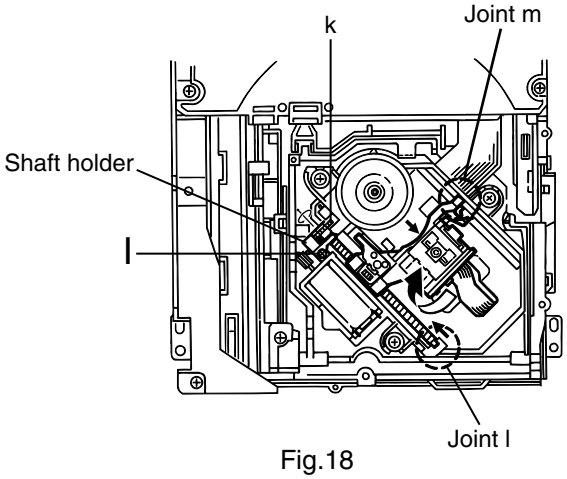


Fig.18

■Removing the traverse mechanism assembly (See Fig.21)

- Prior to performing the following procedure, remove the servo control board and the clamper base unit.

1. Remove the three screws K attaching the traverse mechanism assembly.

2. Detach the rear part of the traverse mechanism assembly upward to release the joint o with the sub chassis unit. Then remove the assembly from the body.

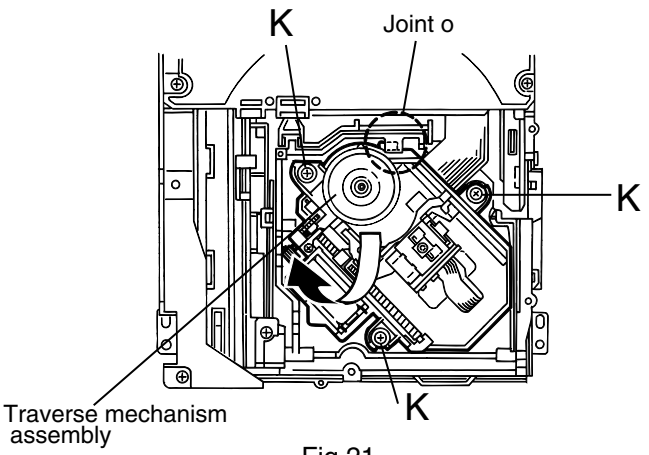


Fig.21

■Removing the feed motor (See Fig.22)

- Prior to performing the following procedure, remove the traverse mechanism assembly.

1. Remove the screw L attaching the feed motor.

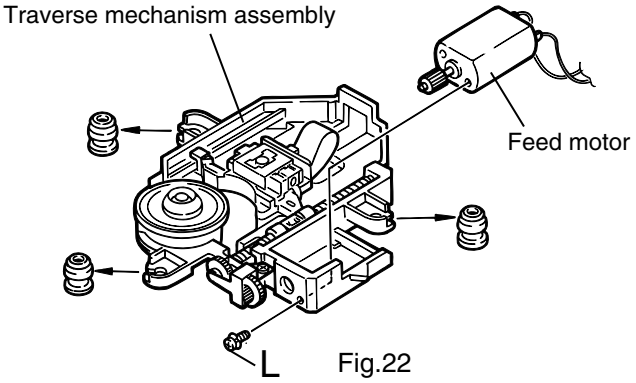


Fig.22

■Removing the tray select switch board (See Fig.5,6 and 23)

1. Remove the four screws B attaching the top cover on the top of the body.

2. Remove the top cover with the two rods attached to the top cover and the clamper base unit.

3. Remove the screw M on the right side of the body.

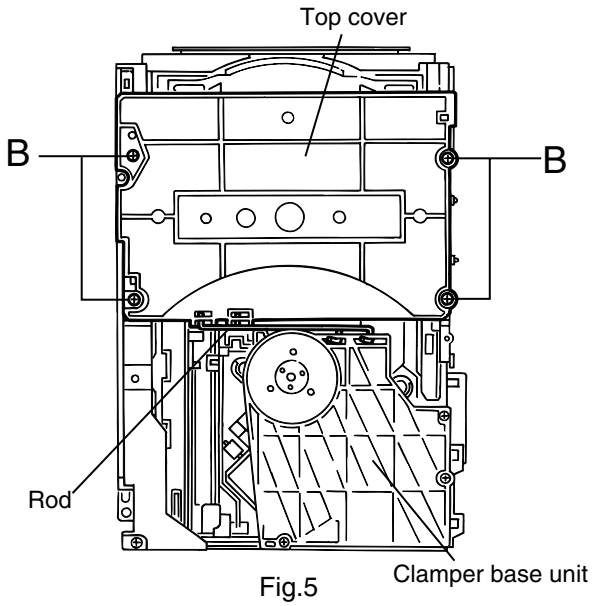


Fig.5

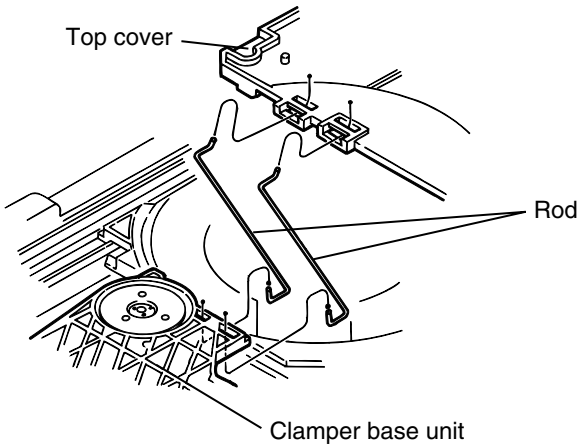


Fig.6

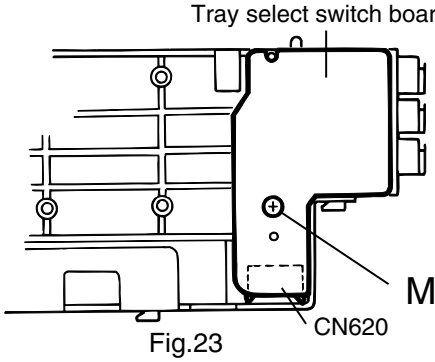


Fig.23

<Speaker section>

Information

This is a method of dis assembly.
As parts of the repair of this speaker system, it is only the speaker box assemblies.
It is not possible to supply with each part unit.

- Prior to performing the following procedure, remove the front grille.

■ Removing the speaker (woofer) (See Fig.1,3 to 5)

1. Insert a screwdriver under the ornament grille attached to the woofer.

2. Pull out the ornament grille with each boss by means of a lever as shown in Fig.2.

ATTENTION: As the ornament grille is damaged, replace it with the woofer.

ATTENTION: When replacing the ornament grille, make sure the boss with adequate amount of bond.

3. Remove the four screws **A** and the woofer from the body. Disconnect the wire from the speaker terminals.

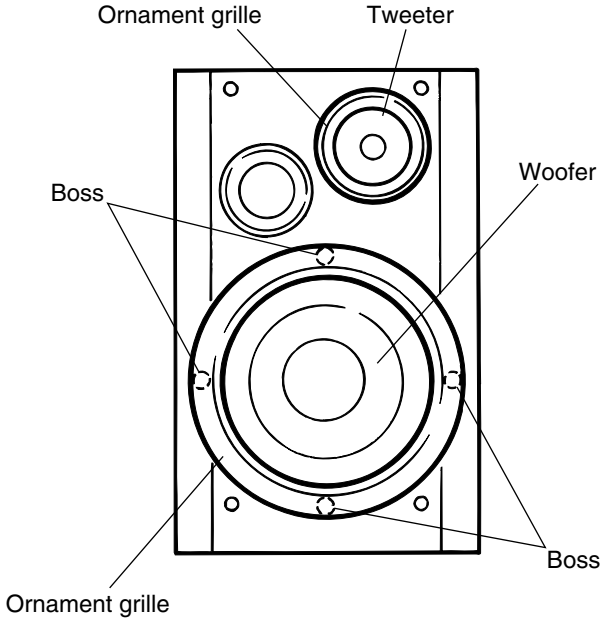


Fig.1

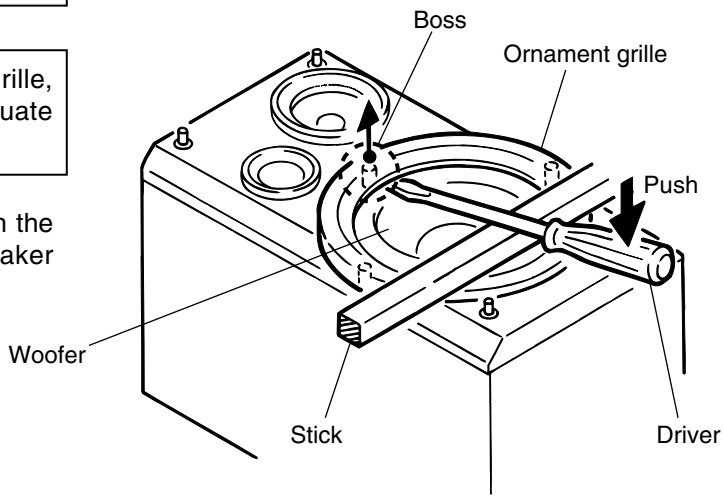


Fig.2

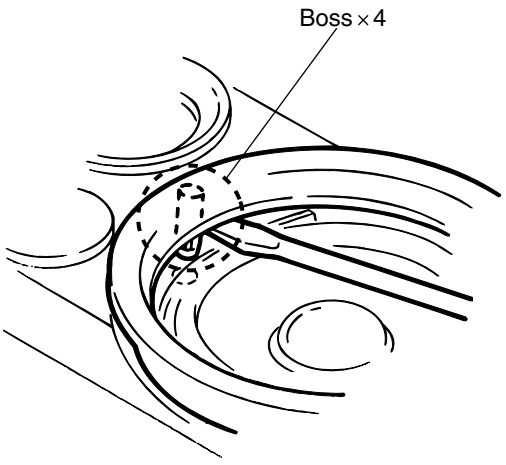


Fig.3

■ **Removing the speaker (tweeter) (See Fig.4 and 5)**

1. Insert a screwdriver under the ornament grille and remove it from the body.

ATTENTION: As the ornament grille is damaged, replace it with the tweeter.

3. Remove the three screws **B** and the tweeter from the body. Disconnect the wire from the speaker terminals.

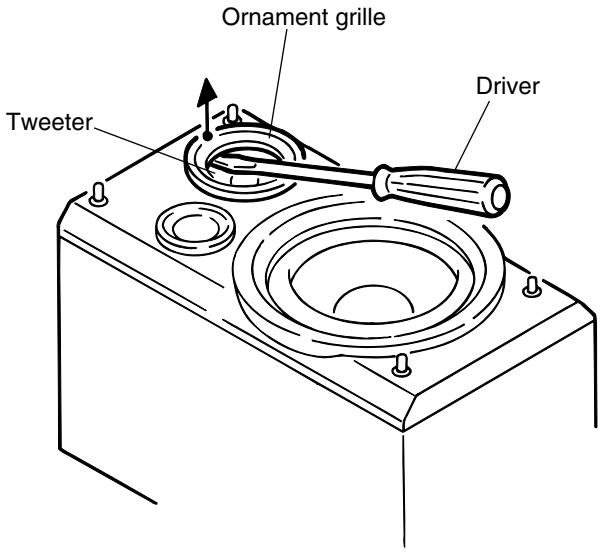


Fig.4

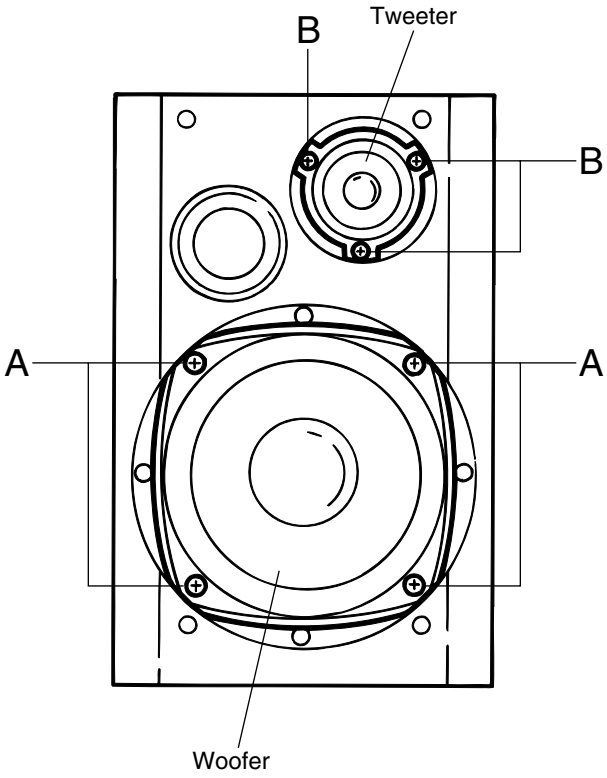


Fig.5

Adjustment method

※ This model is auto adjust system.

MD TEST MODE 1

1.Setting the TEST MODE1

(CAUTION) MD mode should NO DISC condition, when POWER ON to not read TOC.

Press [STOP■ key] and [CANCEL key] together, and connect the power cord.

↓

LCD indication MD TEST MODE 1

↓

Setting the MD TEST MODE1 by press [POWER key]

↓

LCD indication [HELLO] then [MD TEST MODE 1]

↓

Setting OK

2.Initialize the EEPROM

Setting the MD TEST MODE 1

↓

Press [REC PAUSE key] of the Remote controller

↓

LCD indication DATA INITIAL

↓

Initialize OK

3.Laser power adjustment

Insert the sensor of laser power meter

↓

Press [2 key] of Remote controller

↓

LCD indication L.POWER PLAY

↓

Adjust the PLAYBACK laser power

- Laser power up by [▶▶| key] of Remote controller → LCD indication L.POWER UP
- Laser power down by [|◀◀ key] of Remote controller → LCD indication L.POWER DOWN

↓

0.68mW ≧ Adjustment

↓

Press [STOP key] of Remote controller

↓

Playback laser power adjustment complete

↓

Press [4 key] of Remote controller

↓

LCD indication L.POWER REC

↓

Adjust the RECORDING laser power

- Laser power up by [▶▶| key] of Remote controller → LCD indication L.POWER UP
- Laser power down by [|◀◀ key] of Remote controller → LCD indication L.POWER DOWN

↓

6.23mW ≦ Adjustment

↓

Press [STOP key] of Remote controller

↓

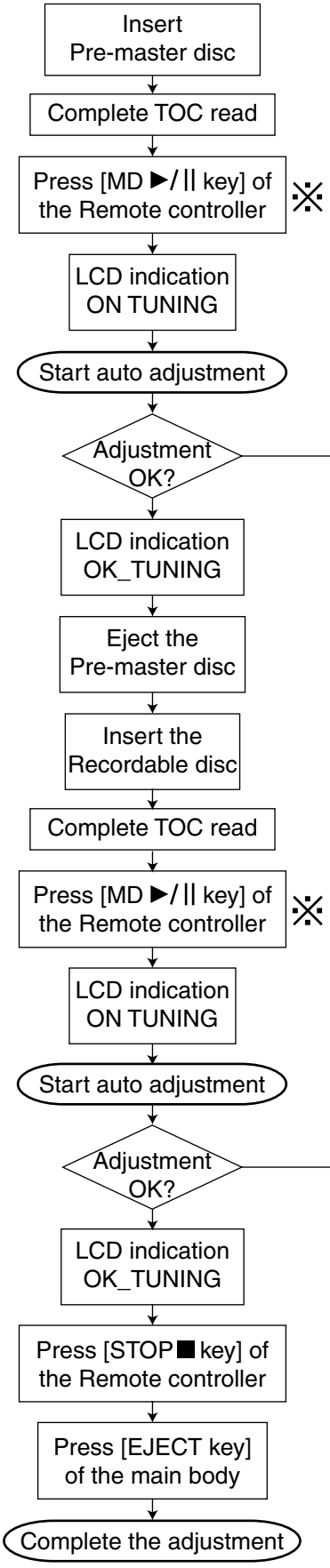
Press [EJECT key] of main body

↓

Adjustment complete

4.Disc adjustment

This adjustment should done after laser power adjustment.



※

[CAUTION]
Please push the [STOP key] to remote control when the LCD display becomes [NG ERROR], and push the [MD ▶/II key] to remote control again.

<NG code list>

CODE	Adjustment NG section
00	Auto adjustment not complete
01	REST switch detection
02	FOCUS ON
03	PIT section EF balance, tracking offset adjustment
04	PIT section ABCD level (IV impedance) adjustment
05	PIT section focus servo AGC
06	PIT section tracking servo AGC
07	PIT section focus bias adjustment
08	GRV section EF balance, tracking offset adjustment
09	GRV section ABCD level (IV impedance) adjustment
0A	GRV section focus servo AGC
0B	GRV section tracking servo AGC
0C	GRV section focus bias adjustment
0D	Room temperature
0E	EEPROM writing
FF	Auto adjustment complete (OK)

5.Independent operation mode

In case the checking mode or adjustment when occur the error at disc adjustment, Independent mode into by select the key before release the TERST MODE.

Operation key	MODE
Remote controller [SLEEP]	Focus search [FOCUS_SEARCH]
Remote controller [6 key]	Pit rough servo [P.R.SERVO]
Remote controller [7 key]	Groove rough servo [GR.R.SERVO]
Remote controller [8 key]	Tracking ON [TRACKING_ON]
Remote controller [9 key]	Tracking OFF [TRACKING_OFF]
Remote controller [STOP]	STOP [STOP]
Main body [EJECT]	EJECT [EJECT]

MD TEST MODE 2

1.Setting the TEST MODE 2

(CAUTION) MD mode should NO DISC condition, when POWER ON to not read TOC.

Press [STOP■ key] and [CANCEL key] together, and connect the power cord.

↓

LCD indication MD TEST MODE 1

↓

Setting the MD TEST MODE1 by press [POWER key]

↓

LCD indication [HELLO] then [MD TEST MODE 1]

↓

Setting the MD TEST MODE2 by press [STOP■ key] and [TITLE/EDIT key] together

↓

Setting OK

2.Indication the drift level of the pickup adjustment value

TEST MODE 2

↓

Insert the Pre-master disc

↓

Read the TOC

↓

Press [6 key] of the Remote controller

↓

LCD indication [＊＊＊＊_±＊＊]

Adjustment value

IVR	IVR (Pre-master, Recordable groove)
TAGC	TRK AGC (〃)
TBAL	TRK BALANCE (〃) = 0
LPOW	Laser power (Play power=0・Rec power)
FBIA	Focus bias (〃) = 0
FAGC	Focus AGC (〃)
TEOF	TE offset (〃) = 0
SAGC	Sled AGC (〃)

3.Indication the C1 ERROR

TEST MODE 2

↓

Insert the recordable disc (basically 74min.)

↓

Read the TOC

↓

Press [8 key] of the Remote controller

↓

LCD indication (change by each 10sec.) [_＊＊_＊＊_＊＊_＊＊_]

↓

LCD indication (change be each 10sec.) [_____＊＊ Times_]

4.Release the MD TEST MODE

TEST MODE

↓

Press [POWER key]

↓

POWER OFF

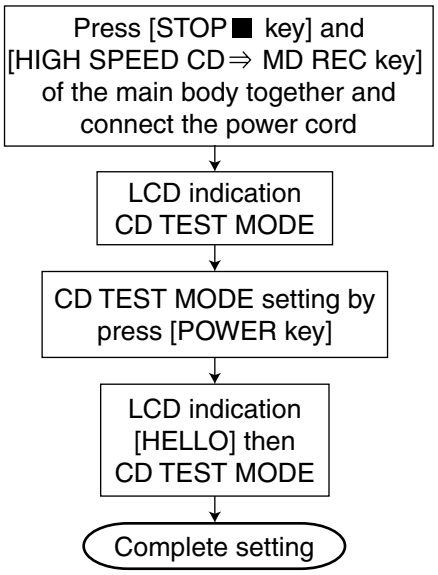
↓

Release the TEST MODE

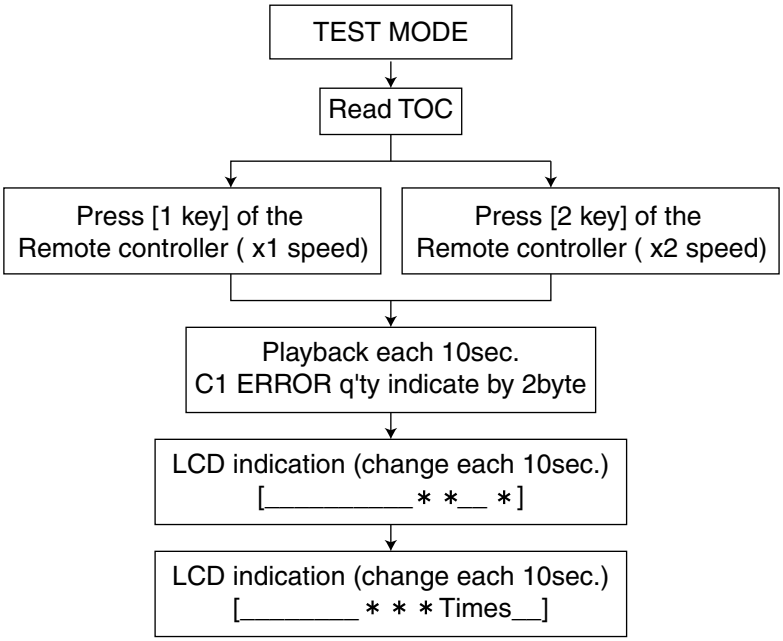
CD TEST MODE

CD section is no need the adjustment by design.

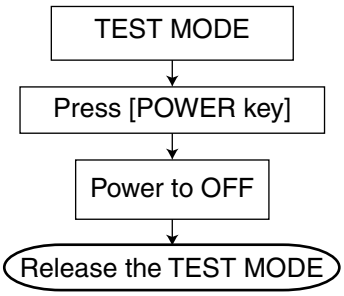
1.Setting the TEST MODE



2.Indication the C1 ERROR

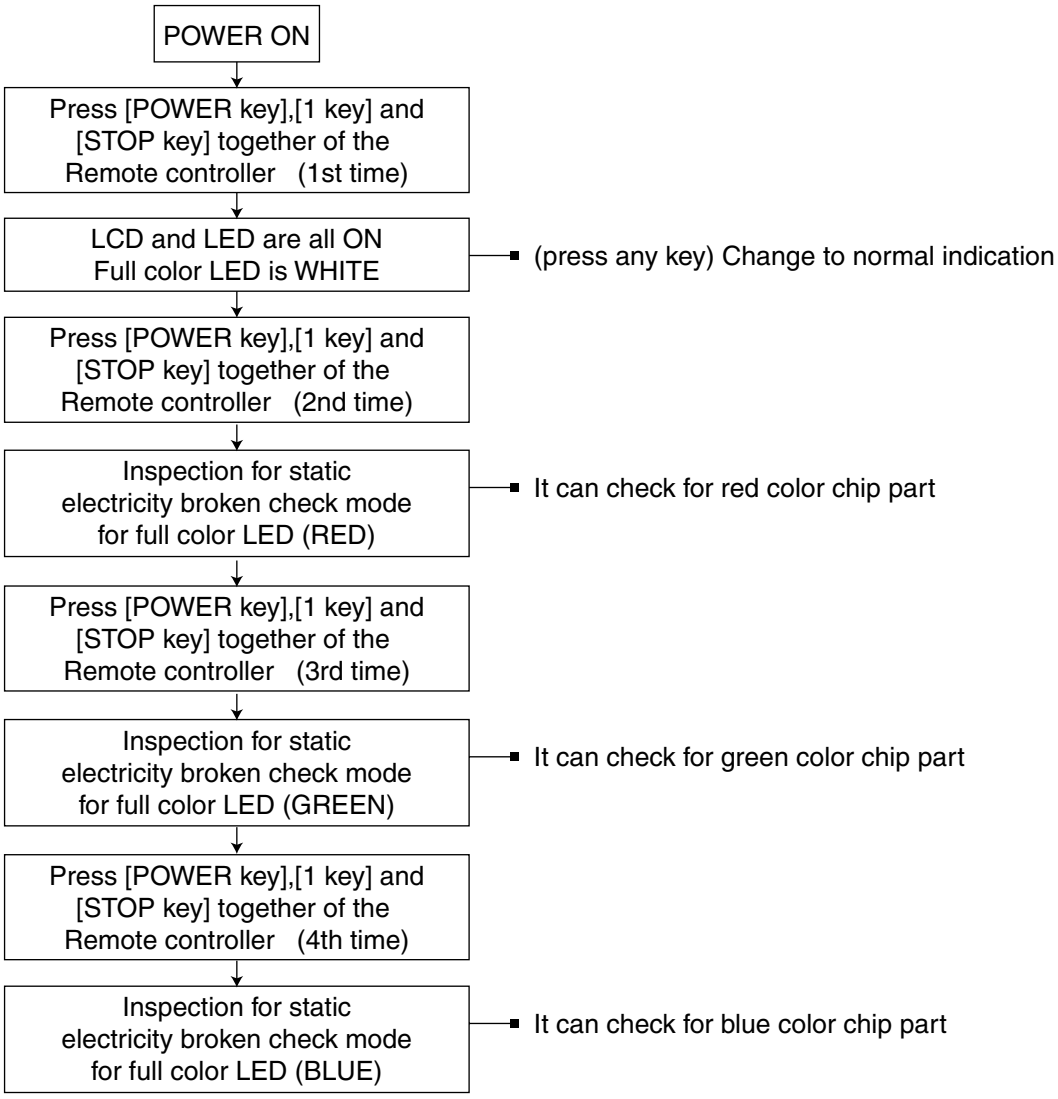


3.Release the CD TEST MODE



LCD ALL INDICATION, TIME COMPRESSION TEST MODE

1.Setting the TEST MODE



Caution:Full color LED is keep white condition, when loop out by any key at test mode.

2.Fast forward of CLOCK/SLEEP TIMER

Including the ALL LED ON mode and Static electricity broken thes, clock count up is change to 1min. to 1sec.
Check for only [CLOCK mode] and [SLEEP TIMER].

3.Release the TEST MODE

TEST MODE is release by disconnect the AC power cord.

RUNNING MODE

This running mode is a mode by which the recording is compulsorily deleted with ALL-ERASE after U-TOC is written when the recording of MD ends, and the recording is repeated again.
This TEST MODE is continue recording (loop recording), it is for recording stop when MD end.
This TEST MODE is only can use manual operation recording [MD REC PAUSE]. CD synchro recording (CD→MD REC,BEST HIT REC,1CD→ MD REC) is not operate correctly.

1.Setting the TEST MODE

1:Setting normal speed recording mode by pressing together [POWER key], [2 key] and [STOP key] of Remote controller.
2:If normal speed mode is default then change to high speed mode, press [HIGH SPEED CD>MD key] of main body before recording start.
3:Once change to high speed mode, TEST MODE is continue until release.
4:Return to normal speed recording mode, it should release the TEST MODE then resetting the TEST MODE.
(REMARKS) Case of CD high speed recording : After setting TEST MODE, if it need setting CD play mode or repeat mode. Press [HIGH SPEED CD > MD key] setting high speed mode. RUNNING MODE is start by REC STANDBY (indicate [RUNNING MODE] on LCD) at [MD REC PAUSE key] then playback the CD.
(During recording, LCD indicate [RUNNING MODE])

2.Release the TEST MODE

Test mode is release by POWER OFF.

Indication the [CAUTION !] when abnormal

1.Detect the abnormal condition of stability power supply

Abnormal detection dine of the stability power supply(REG.) at CPU [SAFETY1~3] port (IC801:6,7,9pin), when system CPU (IC801) supply voltage (US D5.6V) is normal condition.
Watching the abnormal at POWER ON condition, if detect the abnormal indicate [CAUTION!] and come under stability power supply (8V/10V or 12V OR 6V), and indicate [DATA(HEX)] of the abnormal port voltage then power off to forcibly.

Detect the abnormal condition of stability power supply is next.
[8V/10V] : SAFETY1 port (Power supply of full color LED/Power supply of CD mechanism)
[12V] : SAFETY2 port (Power supply for tuner module REG, MD mechanism REG, volume IC, LPF IC and CD/MD SELECTOR)
[6V] : SAFETY3 port (Power supply for MD mechanism, power supply for OPT. module, power supply for CD/OPT SELECTOR)
＊(REMARKS) Safety port voltage at detect the abnormal condition.

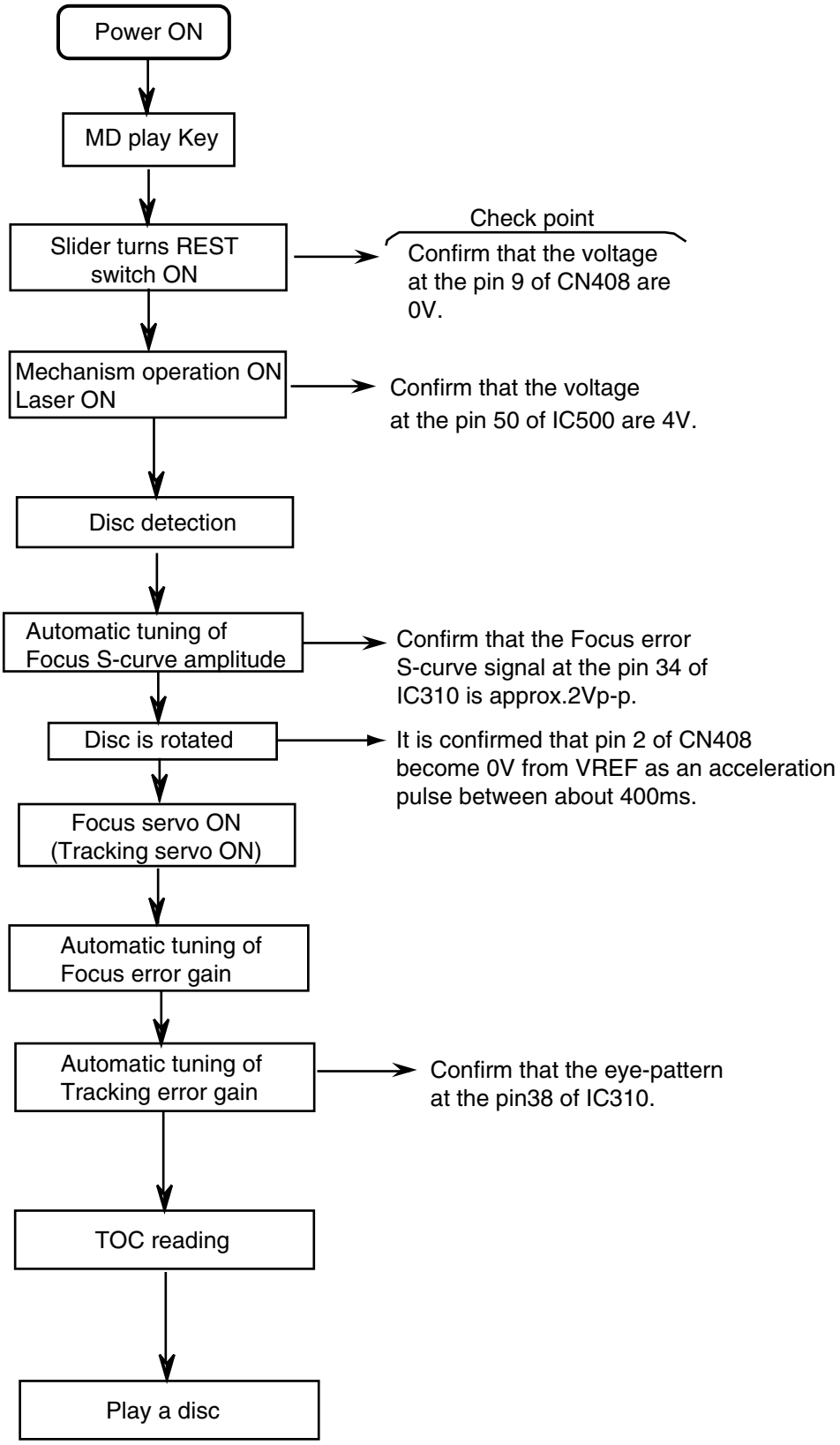
DATA(HEX)	PORT voltage	Detect condition
3FF~2D0	5.0~3.52V	Abnormal (Power off at 1sec. forcibly)
2CF~12C	3.515~1.456V	Normal
12B~000	1.46V~0V	Abnormal (Power off at 3sec. forcibly)

2.Abnormal detection of CD mechanism

When detect the abnormal condition of CD mechanism, indicate [CAUTION !] and come under condition and back light is change to [RED] forcibly.

Indication when mechanism abnormal condition.
[CD INITIAL] : Abnormal condition when mechanism initialize after power cord to connect to AC outlet then power to ON.
[CD MECH] : Abnormal condition when mechanism initialize at return operation, it is Sub Tray Load/Unload operation, Lifter shift operation, or CAM operation are defect.
[CD MECHA 5V] : Abnormal condition at 5V (LSI) internal the CD mechanism.

Flow of functional operation until TOC read (MD section)



Maintenance of laser pickup (MD)

1. Cleaning of pickup lens

(1) Prior to changing the pickup, clean the pickup lens.

(2) For cleaning the lens, use the following cotton swab after mearsing it in alcohol.
Product No : JCB-B4 Manufacturer : Nippon Cotton Swab

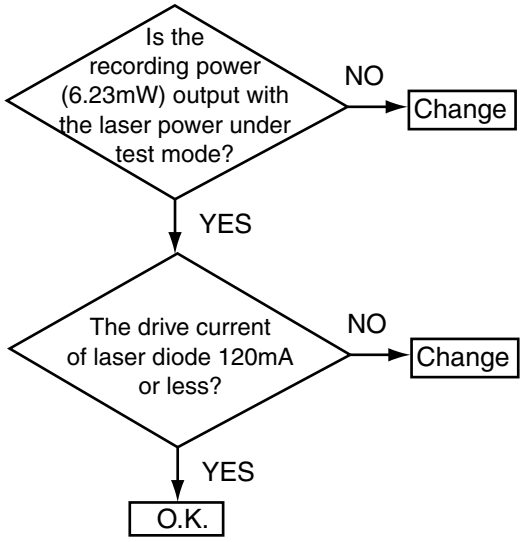
2. Confirmation of the service life of laser diode when the service life of the laser diode has been exhausted, the following symptoms will appear.

(1) Recording will become impossible.

(2) The RF output (EFM output and eye-pattern amplitude) will become lower.

(3) The drive current required for light emitting of laser diode will be increased.

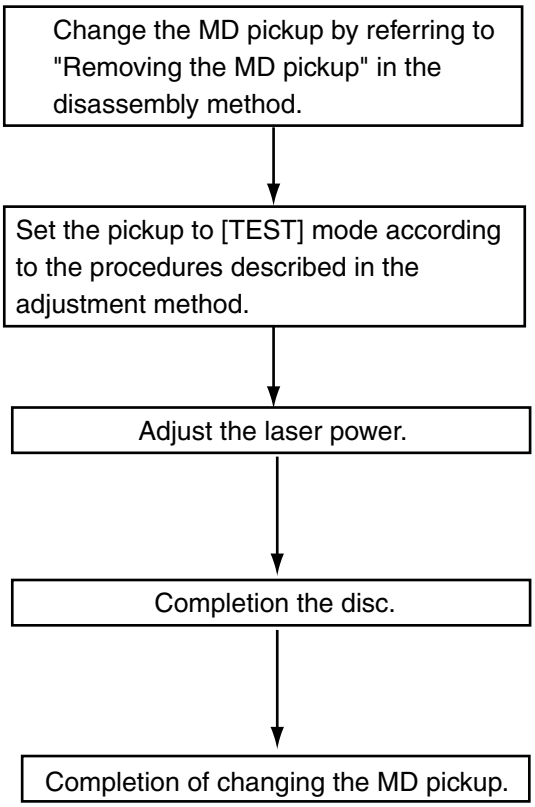
Confirm the service life according to the following flow chart.



3. Method of measuring the drive current of laser diode

When the voltage measured at each side of R337, it become 120mV or over, the service life of laser diode is judged to have been exhausted.

Replacement of laser pickup (MD)



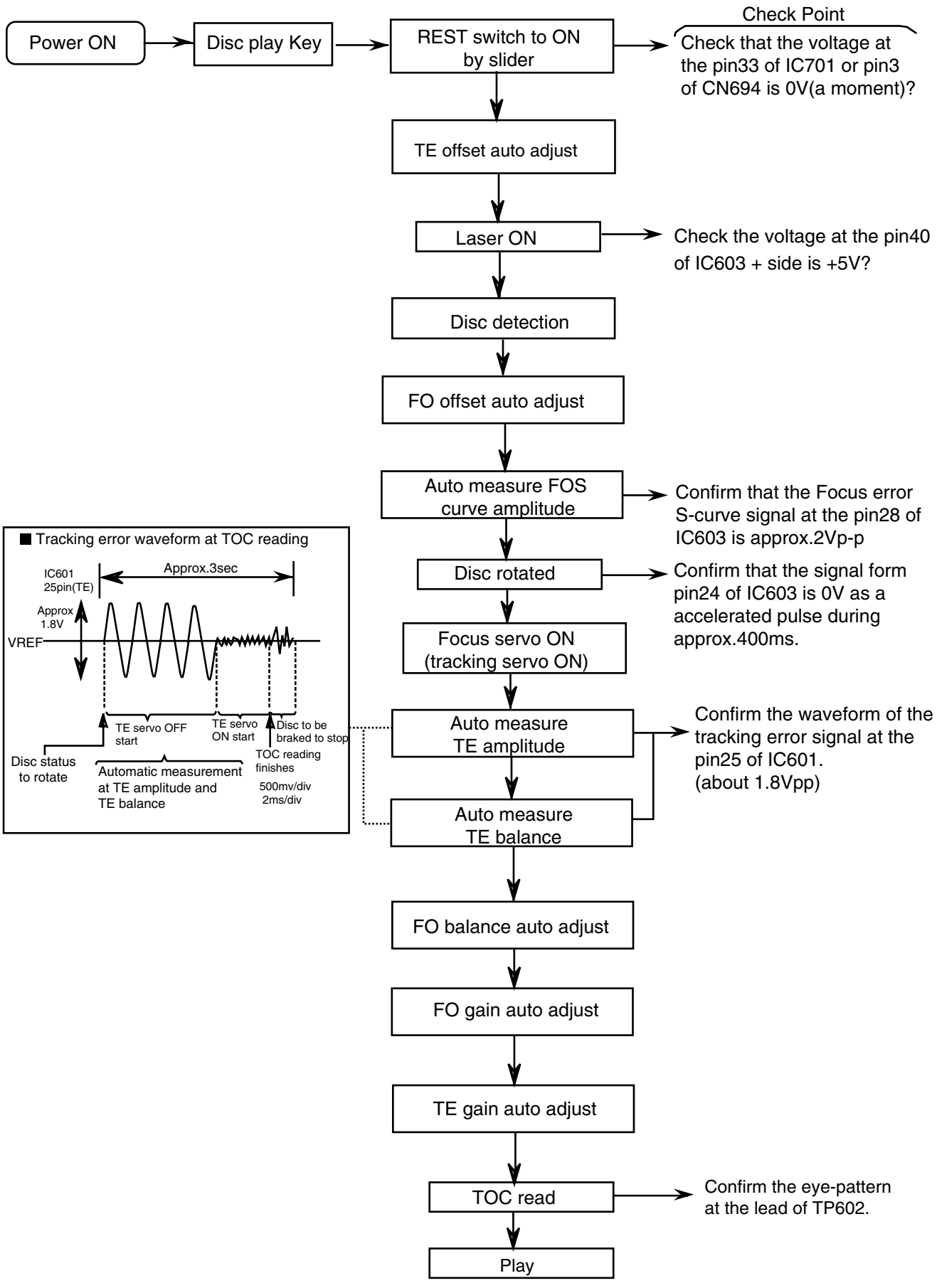
CAUTION

Since this system is designed to perform magnetic recording, the laser power ten times or over of the conventional MD player will be output. Therefore, be sure to perform not only adjustment and operation of this system so carefully as not to directly look at the laser beam or touch on the body.

4.Semi-solid state resistors on the APC board.

The semi-solid state resistor on the APC board attached to the pickup is used for adjusting the laser power. Since these resistor should be adjusted in pair according to the characteristics of the optical block, be sure not touch on the resistors.
Since the service life of the laser diode will be exhausted when the laser power is low, it is necessary to change the pickup.
Meanwhile, do not pickup.
Otherwise, the pickup will be damaged due to over current.

Flow of functional operation until TOC read (CD section)



Maintenance of laser pickup (CD)

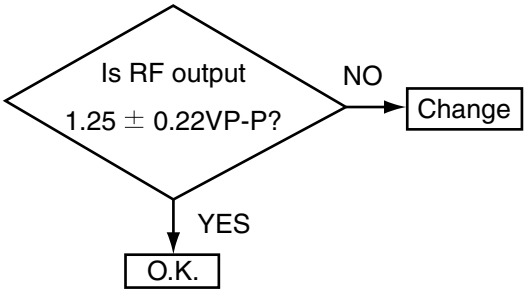
(1) Cleaning the pickup lens

Before you replace the pickup, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

(1) The level of RF output (EFM output : amplitude of eye-pattern) will below.



(3) Semi-fixed resistor on the APC board

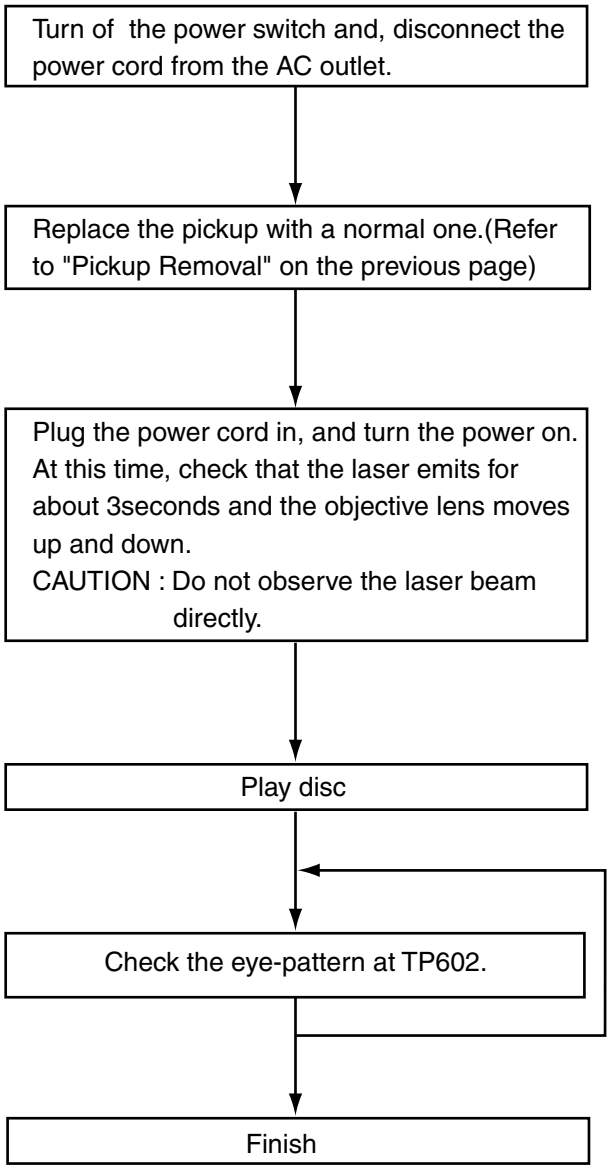
The semi-fixed resistor on the APC board which is attached to the pickup is used to adjust the laser power.

Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

If the laser power is lower than specified value, the laser diode is almost worm out, and the pickup should be replaced.

If the semi-fixed resistor is adjust while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

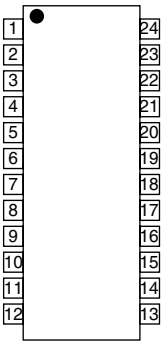
Replacement of laser pickup (CD)



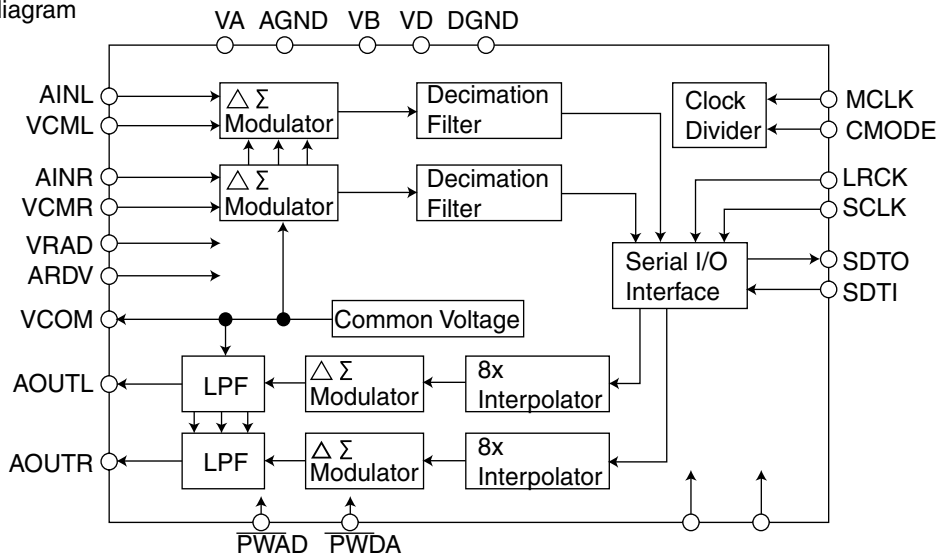
Description of major ICs

■ AK4519VF-X (IC480) : A / D D / A converter

1.Pin layout



2.Block diagram

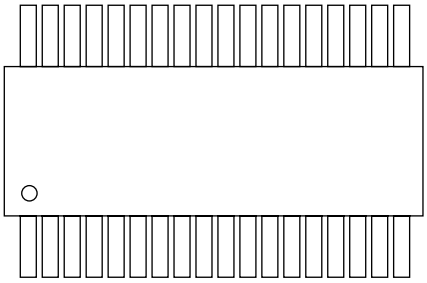


3.Pin Function

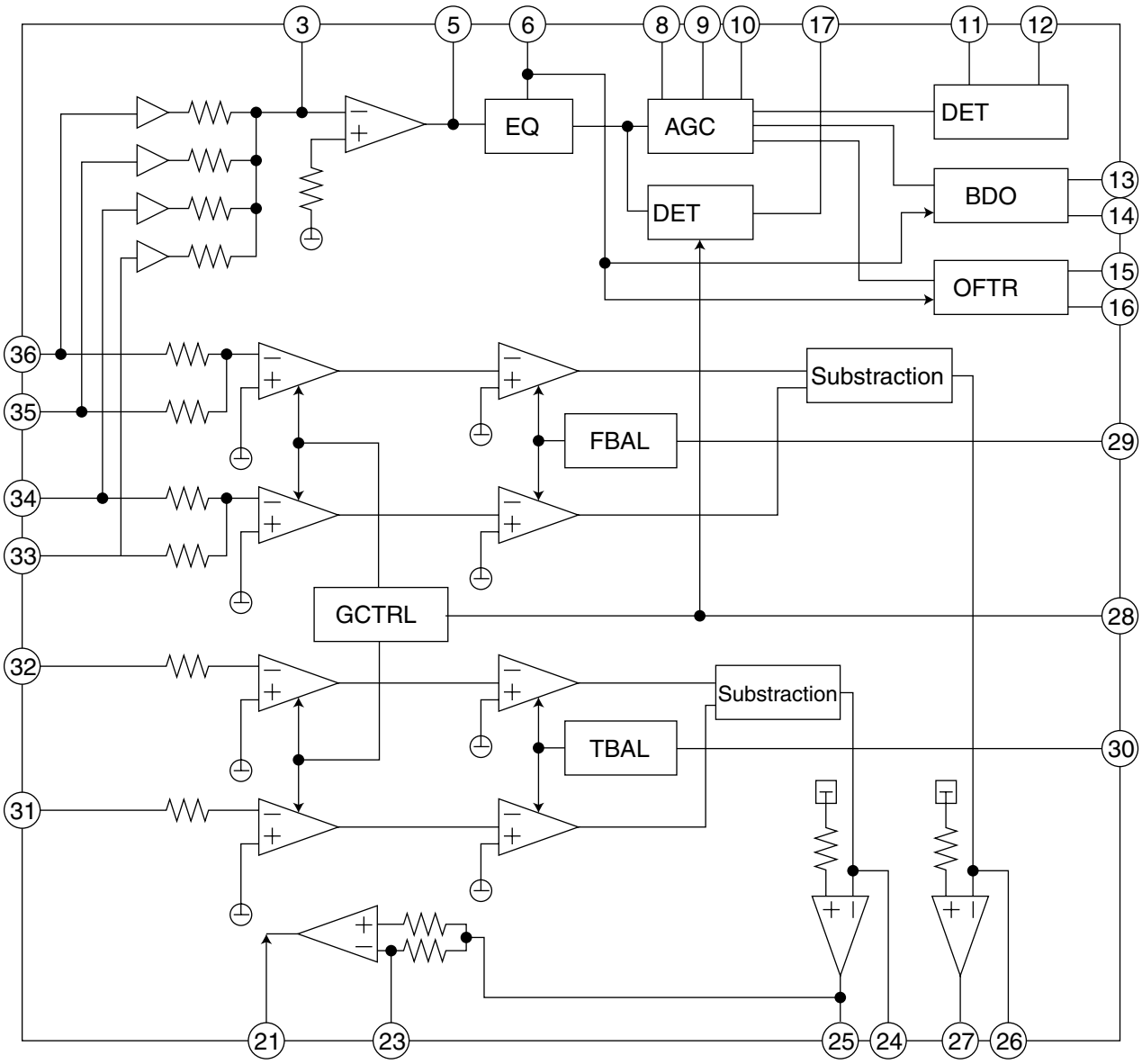
Pin NO.	Symbol	I/O	Function
1	VRDA	I	Voltage Reference Input Pin for DAC, VA
2	VRAD	I	Voltage Reference Input Pin for ADC, VA
3	AINR	I	RCH Analog Input Pin
4	VCMR	O	Rch Common Voltage Output Pin, 0.45xVA
5	VCML	O	Lch Common Voltage Output Pin, 0.45xVA
6	AINL	I	Lch Analog Input Pin
7	PWAD	I	ADC Power-Down Mode Pin "L":Power Down
8	PWDA	I	DAC Power-Down Mode Pin "L":Power Down
9	MCLK	I	Master Clock Input Pin
10	LRCK	I	Input/Output Channel Clock Pin
11	SCLK	I	Audio Serial Data Clock Pin
12	SDTO	O	Audio Serial Data Output Pin
13	DGND	-	Digital Ground Pin
14	VD	-	Digital Power Supply Pin
15	SDTI	I	Audio Serial Data Input Pin
16	CMODE	I	Master Clock Select Pin
17	DEM1	I	De-emphasis Frequency Select Pin
18	DEM0	I	De-emphasis Frequensy Select Pin
19	AOUTL	O	Lch Analog Output Pin
20	AOUTR	O	Rch Analog Output Pin
21	VCOM	O	Common Voltage Output Pin, 0.45xVA
22	AGND	-	Analog Ground Pin
23	VB	-	Substrate Pin
24	VA	-	Analog Power Supply Pin

■ AN8849SB-W (IC601) : Head amp

1.Pin layout



2.Block diagram

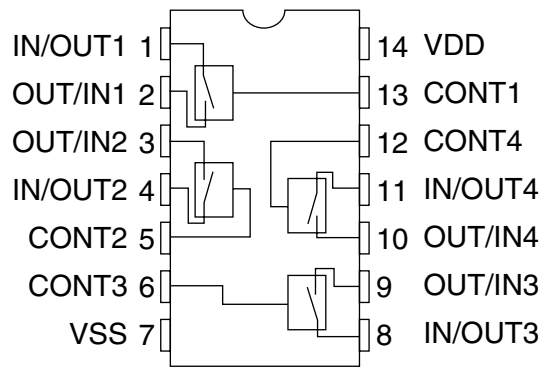


3.Pin Function

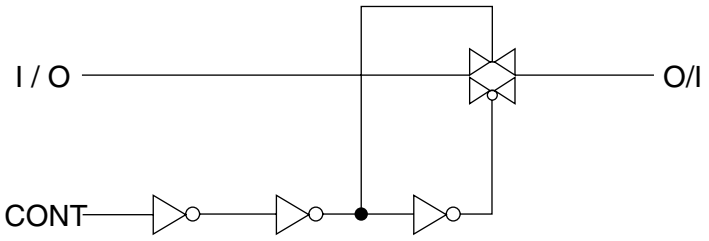
Pin NO.	Symbol	Function
1	PD	Photo detector signal input.
2	LD	Laser diode drive terminal.
3	RFN	RF amp negative input terminal.
4	Vcc1	Power supply terminal.
5	RFOUT	Equaruzer connect terminal.
6	EQSW	Power supply terminal.
7	Vcc2	RF AGC input terminal.
8	RFC	RF AGC filter connect terminal.
9	CAGC	ARF output terminal.
10	ARF	3T envelope detect filter terminal.
11	CEA	Envelope detect output circuit.
12	ENV	Low level DO detect connect terminal.
13	CBDO	DO detect signal output terminal.
14	BDO	OFF TRACK detect signal connect terminal.
15	COFTR	OFF TRACK detect signal output terminal.
16	OFTR	RF signal amp. detection output.
17	NRFDET	Ground.
18	GND	LD APC ON / OFF select.
19	LDON	Reference voltage output terminal.
20	VREF1	CROSS detect signal output terminal.
21	CROSS	Reference voltage output terminal.
22	VREF2	CROSS detect filter connect terminal.
23	CCRS	Tracking error output terminal.
24	TEN	TE amp.negative input terminal.
25	TEOUT	FE amp.negative input terminal.
26	FEN	Focus error output terminal.
27	FEOUT	Focus gain, tracking gain adjust control signal inout terminal.
28	GCTRL	Focus barance adjust control input terminal.
29	FBAL	Tracking barance adjust control input terminal.
30	TBAL	Connect PDIC.
31	E	Connect PDIC.
32	F	Connect PDIC.
33	D	Connect PDIC.
34	B	Connect PDIC.
35	C	Connect PDIC.
36	A	Connect PDIC.

■ TC4066BP / N / (IC673) : Switch

1.Pin layout & block diagram

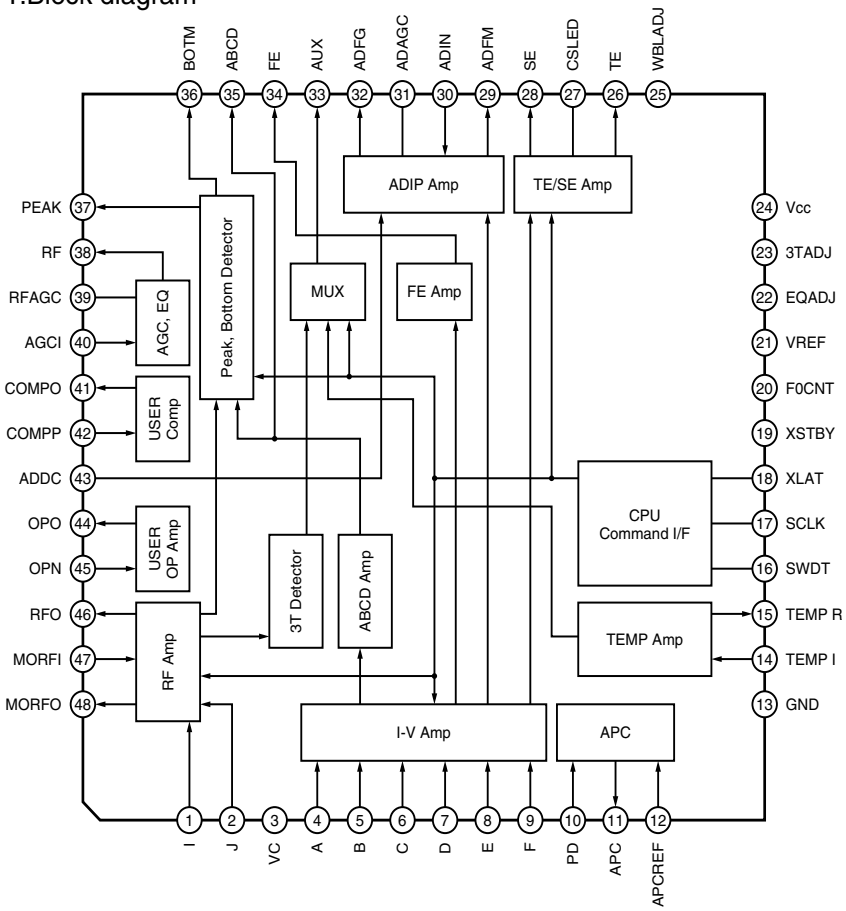


2.The truth circuit



■ CXA2523AR (IC310) : MD servo

1.Block diagram



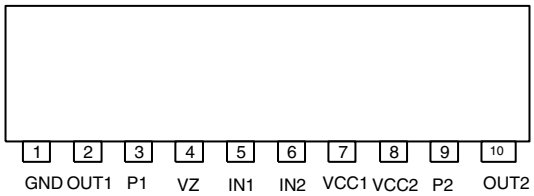
2.Pin function

Pin No.	Symbol	I/O	Function
1	I	I	I-V converted RF signal I input.
2	J	I	I-V converted RF signal J input.
3	VC	O	Vcc/2 voltage output.
4	A	I	A current input for main beam servo signal.
5	B	I	B current input for main beam servo signal.
6	C	I	C current input for main beam servo signal.
7	D	I	D current input for main beam servo signal.
8	E	I	E current input for side beam servo signal.
9	F	I	F current input for side beam servo signal.
10	PD	I	Reflection light quantity monitor signal input.
11	APC	O	Laser APC output.
12	APCREF	I	Reference voltage input for the laser power intensity setting.
13	GND	-	Connect to GND.
14	TEMPI	I	Connects the temperature sensor.
15	TEMP R	I	Connects the temperature sensor. outputs the reference voltage.
16	SWDT	I	Data input for microcomputer serial interface.
17	SCLK	I	Shift clock input for microcomputer serial interface.
18	XLAT	I	Latch signal input for microcomputer serial interface.Latched when low.
19	XSTBY	I	Standby setting pin. Normal operation when high Standby when low.
20	F0CNT	I	Internal current source setting pin.

Pin No.	Symbol	I/O	Function
21	VREF	O	Reference voltage output.
22	EQADJ	I/O	Equalizer center frequency setting pin.
23	3TADJ	I/O	BPF3T center frequency setting pin.
24	Vcc	-	Power supply.
25	WBLADJ	I/O	BPF22 center frequency setting pin.
26	TE	O	Tracking error signal output.
27	CSLED	-	Connects the sled error signal LPF capacitor.
28	SE	O	Sled error signal output.
29	ADFM	O	ADIP FM signal output.
30	ADIN	I	ADIP signal comparator input.
31	ADAGC	-	Connects the ADIPAGC capacitor.
32	ADFG	O	ADIP2 binary value signal output.
33	AUX	O	13 output / temperature signal output. Switched with serial commands.
34	FE	O	Focus error signal output.
35	ABCD	O	Reflection light quantity signal output for the main beam servo detector.
36	BOTM	O	RF/ABCD bottom hold signal output.
37	PEAK	O	Peak hold signal output for the RF/ABCD signals.
38	RF	O	RF equalizer output.
39	RFAGC	-	Connects the RFAGC capacitor.
40	AGCI	I	RFAGC input.
41	COMPO	O	User comparator output.
42	COMPP	I	User comparator non-inverted input.
43	ADDC	I/O	Connects the capacitor for ADIP amplifier feedback circuit.
44	OPO	O	User operational amplifier output.
45	OPN	I	User operational amplifier inverted input.
46	RFO	O	RF amplifier output. Eye pattern checkpoint.
47	MORFI	I	Input of the groove RF signal with AC coupling.
48	MORFO	O	Groove RF signal output.

■ LB1641 (IC851,IC852) : DC motor driver

1. Pin layout

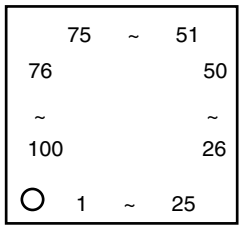


2. Pin function

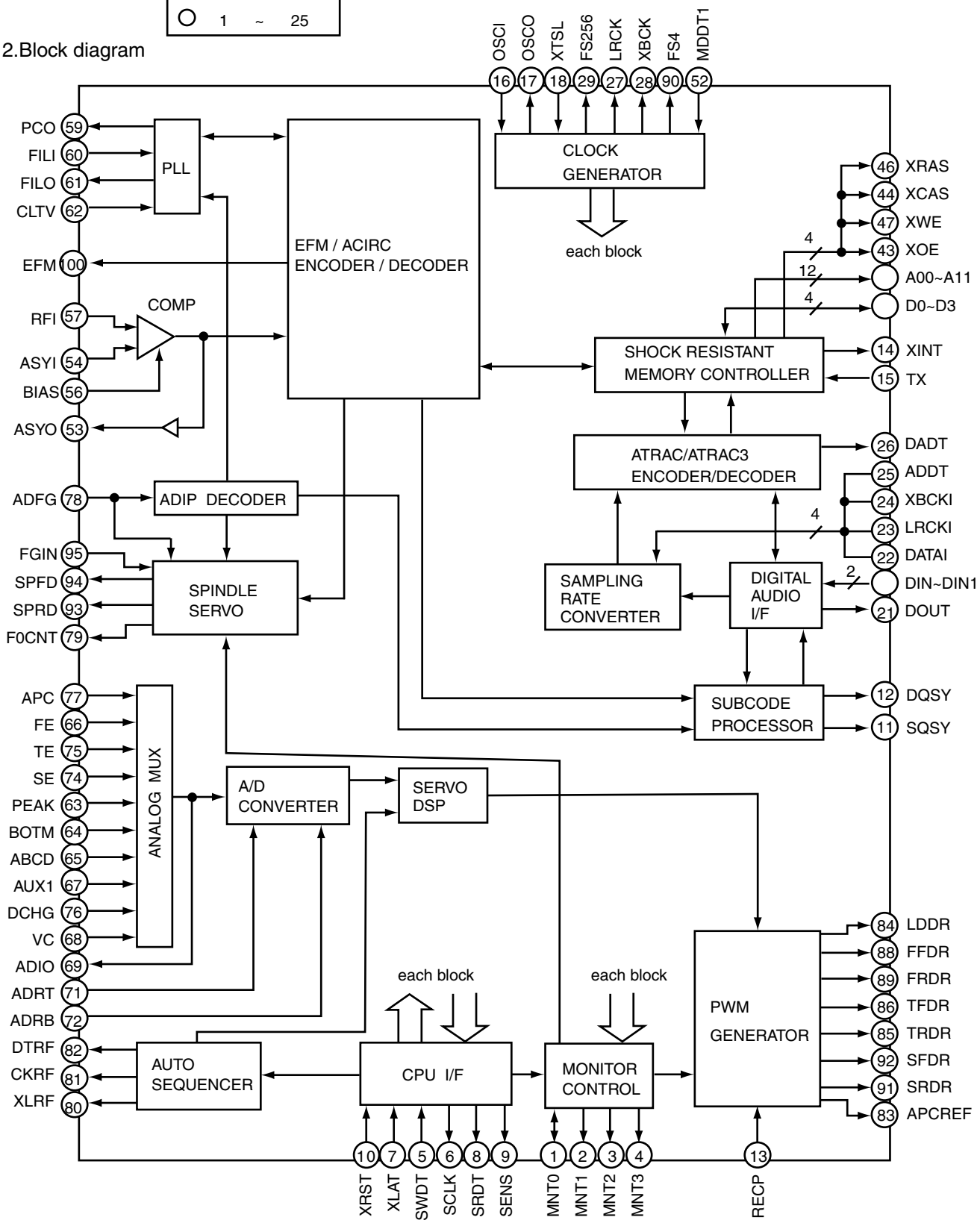
Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

■ CXD2662R (IC350) : DSP

1.Pin layout



2.Block diagram



3.Pin function

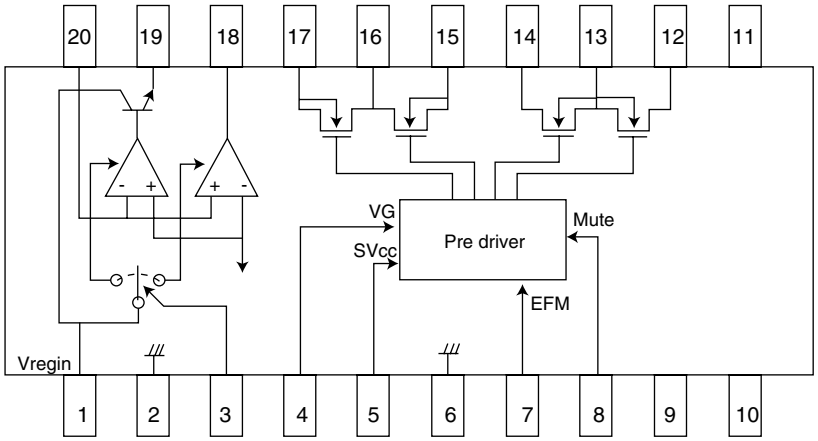
Pin No.	Symbol	I/O	Function
1	MNT0	I/O	Monitor output.
2	MNT1	O	Monitor output.
3	MNT2	O	Monitor output.
4	MNT3	O	Monitor output.
5	SWDT	I	Data input for microcomputer serial interface.
6	SCLK	I	Shift clook input for microcomputer serial interface.
7	XLAT	I	Latch input for microcomputer serial interface.Latched at the falling edge.
8	SRDT	O	Data output for microcomputer serial interface.
9	SENS	O	Outputs the internal status corresponding to the microcomputer serial interface address.
10	XRST	I	Reset input. Low : reset
11	SQSY	O	Disc subcode Q sync / ADIP sync output.
12	DQSY	O	Subcode Q sync output in U-bit CD or MD format when the Digital In source is CD or MD.
13	RECP	I	Laser power switching input. High : recording power ; low ; playback power
14	XINT	O	Interruption request output. Low when the interruption status occurs.
15	TX	I	Enable signal input for recoding data output. High : enabled
16	OSCI	I	Crystal oscillation circuit input.
17	OSCO	O	Crystal oscillation circuit output. (inverted output ofthe OSCI pin)
18	XTSL	I	OSCI input frequency switching. XTSL1(command) = low and XTSL = high : 512Fs (22.5792MHz) XTSL1(command) = low and XTSL = low : 1024Fs (45.1584MHz) XTSL1(command) = high : 2048Fs (90.3168MHz)
19	DIN0	I	Digital audio interface signal input 1.
20	DIN1	I	Digital audio interface signal input 2.
21	DOUT	O	Digital audio interface signal output.
22	DATAI	I	Test pin. Connect to GND.
23	LRCKI	I	Test pin. Connect to GND.
24	XBCKI	I	Test pin. Connect to GND.
25	ADDT	I	Data input from A / D converter.
26	DADT	O	REC monitor output / decoded audio data output.
27	LRCK	O	LA clock (44.1kHz) output to the external audio block.
28	XBCK	O	Bit clock (2.8224kHz) output to the external audio block.
29	FS256	O	256Fs output.
30	DVDD	-	Digital power supply.
31	A03	O	External DRAM address output.
32	A02	O	External DRAM address output.
33	A01	O	External DRAM address output.
34	A00	O	External DRAM address output.
35	A10	O	External DRAM address output.
36	A04	O	External DRAM address output.
37	A05	O	External DRAM address output.
38	A06	O	External DRAM address output.
39	A07	O	External DRAM address output.
40	A08	O	External DRAM address output.
41	A11	O	External DRAM address output.
42	DVSS	-	Digital ground.
43	XOE	O	External DRAM output enable.

Pin No.	Symbol	I/O	Function
44	XCAS	O	External DRAM CAS output.
45	A09	O	External DRAM address output.
46	XRAS	O	External DRAM RAS output.
47	XWE	O	External DRAM write enable.
48	D1	I/O	External DRAM data bus.
49	D0	I/O	External DRAM data bus.
50	D2	I/O	External DRAM data bus.
51	D3	I/O	External DRAM data bus.
52	MDDTI	I	MD-DATA mode 1 switching input. (Low : normal mode ; high : MD-DATA mode 1)
53	ASYO	O	Playback EFM full-swing input. (Low : vss ; jigh : Vdd)
54	ASYI	I	Playback EFM comparator slice voltage input.
55	AVDD	-	Analog power supply.
56	BIAS	I	Playback EFM comparator bias current input.
57	RFI	I	Playback EFM RE signal input.
58	AVSS	-	Analog ground.
59	PCO	O	Phase comparison output for master PLL of playback digital PLL and recording EFM PLL.
60	FILI	I	Filter input for master PLL of playback digital PLL and recording EFM PLL.
61	FILO	O	Filter output for master PLL of playback digital PLL and recording EFM PLL.
62	CLTV	I	Internal VCO control voltage input for master PLL of playback digital EFM PLL and recording EFM PLL.
63	PEAK	I	Peak hold signal input for quantity of light.
64	BOTM	I	Bottom hold signal input for quantity of light.
65	ABCD	I	Signal input for quantity of light.
66	FE	I	Focus error signal input.
67	AUXI	I	Auxillary input 1.
68	VC	I	Center voltage input.
69	ADIO	I	Monitor output for A / D converter input signal.
70	AVDD	-	Analog power supply.
71	ADRT	I	Voltage input for the upper limit of the A / D converter operating range.
72	ADRB	I	Voltage input for the lower limit of the A / D converter operating range.
73	AVSS	-	Analog ground.
74	SE	I	Sled error signal input.
75	TE	I	Tracking error signal input.
76	DCHG	I	Connect to he low-inpedance power supply.
77	APC	I	Error signal input for laser digital APC.
78	ADFG	I	ADIP binary FM signal (22.05 ± 1kHz) input.
79	F0CNT	O	CXA2523 current source setting output.
80	XLRF	O	CXA2523 control latch output. Latched at the falling edge.
81	CKRF	O	CXA2523 control shift clook output.
82	DTRF	O	CXA2523 control data output.
83	APCREF	O	Referevce PWM output for laser APC.
84	LDDR	O	PWM output for laser digital APC.
85	TRDR	O	Tracking servo drive PWM output. (–)
86	TFDR	O	Tracking servo drive PWM output. (+)
87	DVDD	-	Digital power supply.
88	FFDR	O	Focus servo drive PWM output. (+)
89	FRDR	O	Focus servo drive PWM output. (–)
90	FS4	O	4Fs output. (176.4kHz)

Pin No.	Symbol	I/O	Function
91	SRDR	O	Sled servo drive PWM output. (−)
92	SFDR	O	Sled servo drive PWM output. (+)
93	SPRD	O	Spindle servo drive output. (PWM (−) or polarty)
94	SPFD	O	Spindle servo drive output. (PWM (+) or PWM absolute value)
95	FGIN	I	Spindle CAV servo FG input.
96	TEST1	I	Test pin. Connect to GND.
97	TEST2	I	Test pin. Connect to GND.
98	TEST3	I	Test pin. Connect to GND.
99	DVSS	-	Digital ground.
100	EFMO	O	Low when playback ; EFM (encoded data) output when recording.

■ BD7910FV-X (IC450) : Pre driver

1.Block diagram

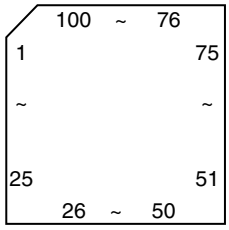


2.Pin function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	Vreg IN	I	Regulator input and regulator power supply	11	NC	-	Non connect
				12	VOD2	O	Sync.output (Lower power MOS,drain)
2	Reg GN	-	Regulator GND	13	VSS	-	"H"bridge GND (Lower power MOS,source)
3	NC	-	Non connect	14	VOD1	O	Sync.output (Lower power MOS,drain)
4	VG	I	Voltage input for power MOS drive	15	VOS1	O	Source output (Upper power MOS,source)
5	SVCC	O	EFM high level output voltage	16	VDD	-	"H" bridge power supply terminal (Upper power MOS,source)
6	PDGND	-	Pre-driver GND				
7	EFM	I	EFM signal input	17	VOS2	O	Source output (Upper power MOS,source)
8	MUTE	I	Mute control (Low active)	18	Reg DRV	O	External PNP drive output for regulator
9	NC	O	Non conncet	19	Reg OUT	O	Reglator output (Emitter follower output)
10	NC	O	Non connect	20	Reg NF	-	Regulator feedbaack terminal

■ HD6432345A15FA (IC500) : MD servo control

1.Pin layout



2.Pin function (1 / 2)

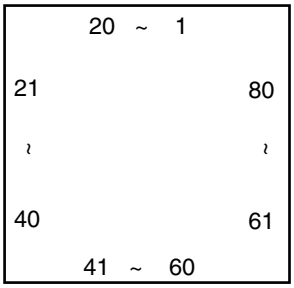
PIN No.	I/O	Symbol	Function
1	I	DO	Data input for EEPROM.
2	O	DI	Data input for EEPROM.
3	O	SCL	Clock output for EEPROM.
4	O	CS	Chip select for EEPROM 1.
5	-	STSRDY	Non connected.
6	-	NC	Non connected.
7	-	VSS	Ground
8	O	STATUS	Status output for host.
9	O	SWDT	Data output to CXD2662R.
10	I	COMMAND	Command input from host.
11	I	SRDT	Data input from CXD2662R.
12	I	COMCLK	Clock input from host.
13	O	SCLK	Serial clock output to CDX2662R.
14~16	-	NC	Non connected.
17	-	POWER	Power supply.
18	-	VSS	Ground
19	O	PWAD	AD power control output.
20	O	PWDA	DA power control output.
21	O	EMPHA	Emphasis control output.
22,23	-	NC	Non connected.
24	O	MODON	High frequency ON / OFF output.
25	O	MODCHG	High frequency power select output.
26	-	NC	Non connected.
27	O	MONIDATA	Data output for debag / test mode.
28	O	MONICLK	Clock output for debag / test mode.
29	O	MONILAT	Latch output for debag / test mode.
30	O	XTSL	Input frequency select output to CXD2662R.
31	-	VSS	Ground
32	O	TX	Write data output permission to CXD2662R.
33	-	NC	Non connected.
34	O	RECP	Recording power output to CXD2662R.
35,36	-	NC	Non connected.
37	O	XRST	LSI reset output to CXD2662R.
38	I	SENS	Monitor input from CXD2662R.
39	I	XLAT	Write protect switch input.
40	-	VCC	Power supply.
41~44	I	MNT3~0	LSI monitor signal from CXD2662R.
45~48	I	CAM4^1	Mechanism position detect input.
49	-	VSS	Ground
50	O	DRVON	4ch CLV drive power save.

2.Pin function(2/2)

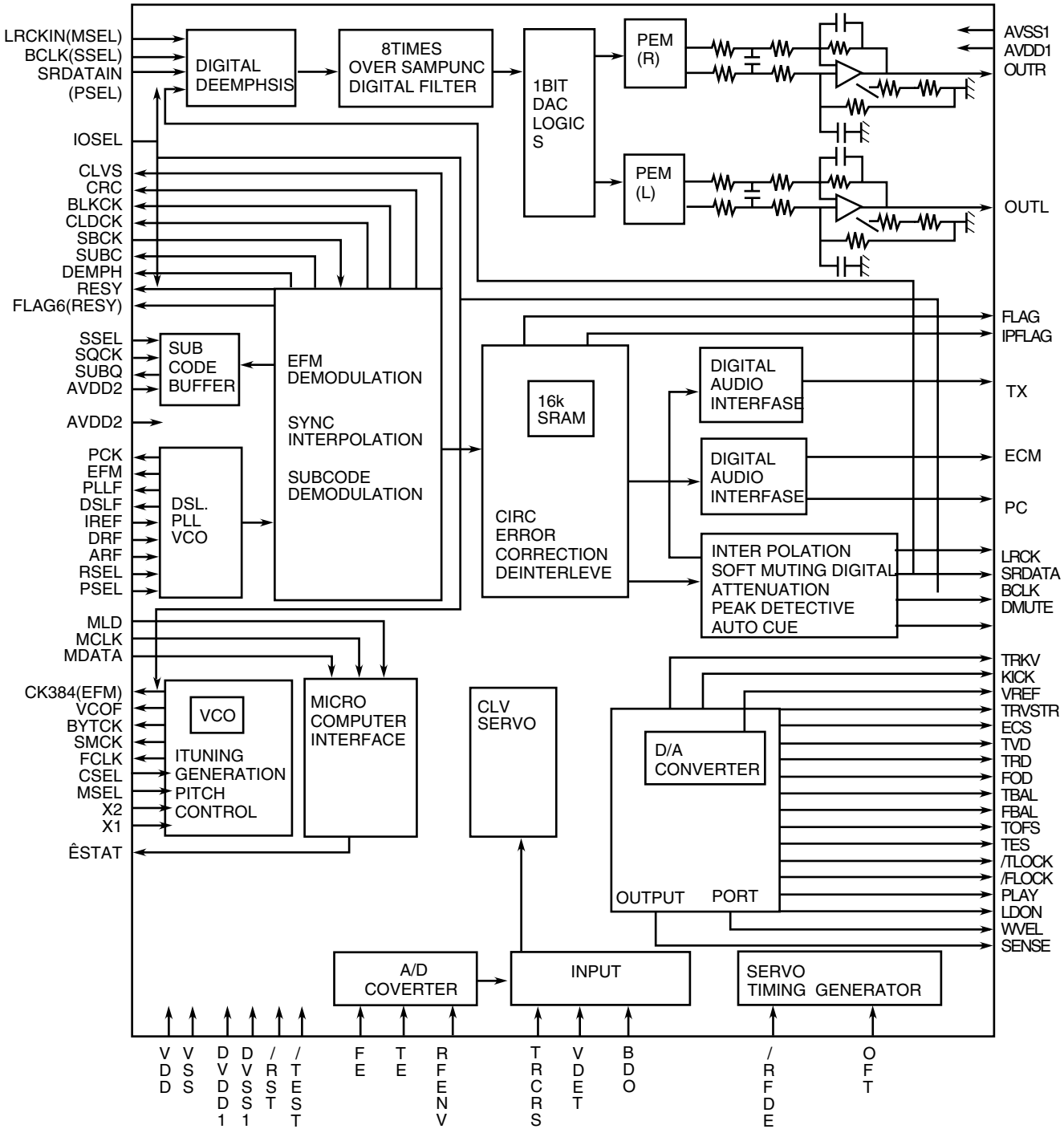
Pin No.	Symbol	I/O	Function
46	COMM IN	I	Common in control signal input terminal
47	COMM CLOCK	O	Common clock signal output terminal
48	COMM PANEREQ	O	Common panel regulator signal output terminal
49	COMM RESET	O	Common reset signal output terminal
50	TUNER DATA INPUT	I/O	Tuner data input terminal
51	TUNER CLOCK	O	Tuner clock signal output terminal
52	TUNER CE	O	Tuner chip enable output terminal
53	TUNER MPX	I	Tuner MPX signal input terminal
54	TUNER TUNED	I	Tuner tuned signal input terminal
55	TUNER MUTE	O	Tuner mute signal output terminal
56	-	-	Non connect
57	-	-	Non connect
58	SPEAKER RELAY	O	Speaker mute signal output terminal
59	AMP SOURCE MUTE	O	Amp mute signal output terminal
60	AMP LINE OUT MUTE	O	Amp line out mute signal output terminal
61	AMP STANDBY	O	Amp standby signal output terminal
62	AMP SOROUND ON/OFF	O	Surround ON/OFF signal control terminal
63	AMP SOURCE CD/MD	O	Amp source CD/MD select signal control terminal
64	MD DIGITAL CD/AUX	O	MD digital CD/AUX select signal control terminal
65	-	-	Non connect
66	-	-	Non connect
67	AMP TDA7439CLOCK	O	IC671 clock signal output terminal
68	AMP DATA	O	Amp data signal control terminal
69	AMP POWER	O	Amp power signal control terminal
70	AMP TR.SWITCH	O	TR switch control terminal
71	AMP VOLUME JOG-1	I	JOG-1 control terminal
72	AMP VOLUME JOG-2	I	JOG-2 control terminal
73~78	-	-	Non connect
79	AMP PROTECT	I	Amp protect signal control terminal
80	AMP INH	I	Amp inhibit signal control terminal
81	-	-	Non connect
82	AMP BAND-1(CS)	I	BAND-1 signal control terminal
83	AMP BAND-2(CS)	I	BAND-2 signal control terminal
84	-	-	Non connect
85	-	-	Non connect
86	TUNER power	O	Tuner power supply signal control terminal
87	JOY A+H(SW1)	I	JOY signal control terminal[
88	JOY B+G(SW1)	I	JOY signal control terminal[
89	JOY C+F(SW1)	I	JOY signal control terminal[
90	JOY D+E(SW1)	I	JOY signal control terminal[
91	JOY COM1(SW1)	I	JOY signal control terminal[
92	JOY COM2(SW1)	I	JOY signal control terminal[
93	-	-	Non connect
94	-	-	Non connect
95	DAVss	-	Connect to GND
96	JOY PUSH(SW2)	I	JOY signal control terminal[
97~99	-	-	Non connect
100	DAVdd	-	DA power supply

■ MN662748RPM (IC651) : Digital servo & digital signal processer

1. Pin layout



2.Block diagram

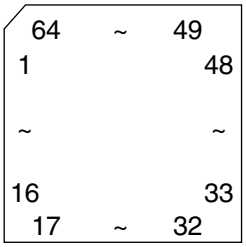


3. Pin function

Pin No.	Dymbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output (H:shunt)
2	LRCK	O	Not used	42	PLAY	—	Not used
3	SRDATA	O	Not used	43	WVEL	—	Not used
4	DVDD1	—	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	—	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	CPU command clock signal input (Data is latched at signal's rising point)	47	DSLF	I/O	Loop filter pin for DSL
8	MDATA	I	CPU command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	CPU command load signal input	49	VCOF	—	Not used
10	SENSE	O	Sense signal output	50	AVDD2	—	Power supply (Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	—	Connected to GND (Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	—	Not used
13	BLKCK	O	sub-code/block/clock signal output	53	PCK	—	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	—	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	—	Not used
16	DMUTE	—	Connected to GND	56	SBCK	—	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	—	Connected to GND (for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	—	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	—	Not used	60	VDD	—	Power supply (for X'tal oscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	—	Not used
22	TVD	O	Traverse drive output	62	CLDCK	—	Not used
23	PC	—	Not used	63	FLAG	—	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	—	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	—	Not used
26	KICK	O	Kick pulse output	66	CLVS	—	Not used
27	TRD	O	Tracking drive output	67	CRC	—	Not used
28	FOD	O	Focus drive output	68	DEMPH		Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	—	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	—	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	—	pull up
32	FE	I	Focus error signal input (Analog input)	72	AVDD1	—	Power supply (Digital)
33	TE	I	Tracking error signal input (Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input (Analog input)	74	AVSS1	—	Connected to GND
35	VDET	I	Vibration detect signal input (H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input (H:off track)	76	RSEL	—	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	—	Connected to GND
38	RFDET	I	RF detect signal input (L:detect)	78	PSEL	—	Connected to GND
39	BDO	I	BDO input pin (L:detect)	79	MSEL	—	Connected to GND
40	LDON	O	Laser ON signal output (H:on)	80	SSEL	—	Pull up

■ UPD780024AGKB08 (IC251) : Unit micon

1. Pin layout



2. Pin function (1/2)

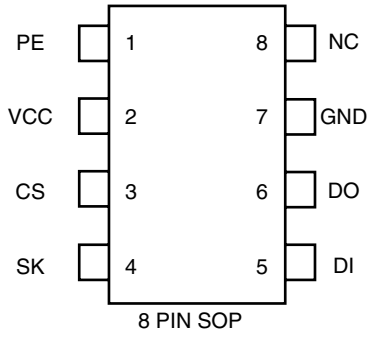
Pin No.	Symbol	I/O	Function
1	E2SCK	O	EEPROM serial clock output
2	E2SDL	O	EEPROM serial data I/O
3	MCS	O	Synchronization / asynchronous system
4	MRDY	I	Ready signal input terminal
5	ITRVP3	O	Tray play position 3
6	ITRVP2	O	Tray play position 2
7	ITRVP1	O	Tray play position 1
8	ITRYSoc	I	Sub tray open/close
9	VSSO	I	Ground
10	VDDO	I	Reference power supply voltage
11	/REST	I	Rest switch
12	CDEMP	O	CD emphasis
13	CDTNO	I	CD track No. change
14	CDCOPY	O	CD copy right or wrong
15	SUBQ	I	Sub Q data input
16	ICAMP1	O	Cam position 1
17	SQCK	O	Sub Q clock output
18	KCMND	I	Command signal input
19	MSTAT	O	Status output
20	KCLK	I	Command data clock input
21	RXDO	I	(Command in)
22	TXDO	O	(Status out)
23	ICAMP2	O	Cam position 2
24	VDD1	I	Reference power supply 1
25	AVSS	I	Ground
26	KEY1	I	key1 signal from running jig
27	KEY2	I	Key2 signal from running jig
28	TRY3CLOSE	I	Tray 3 close signal input
29	TRY3OPEN	I	Tray 3 open signal input
30	TRY2CLOSE	I	Tray 2 close signal input
31	TRY2OPEN	I	Tray 2 open signal input
32	TRY1OPEN	I	Tray 1 open signal input

2. Pin function (2/2)

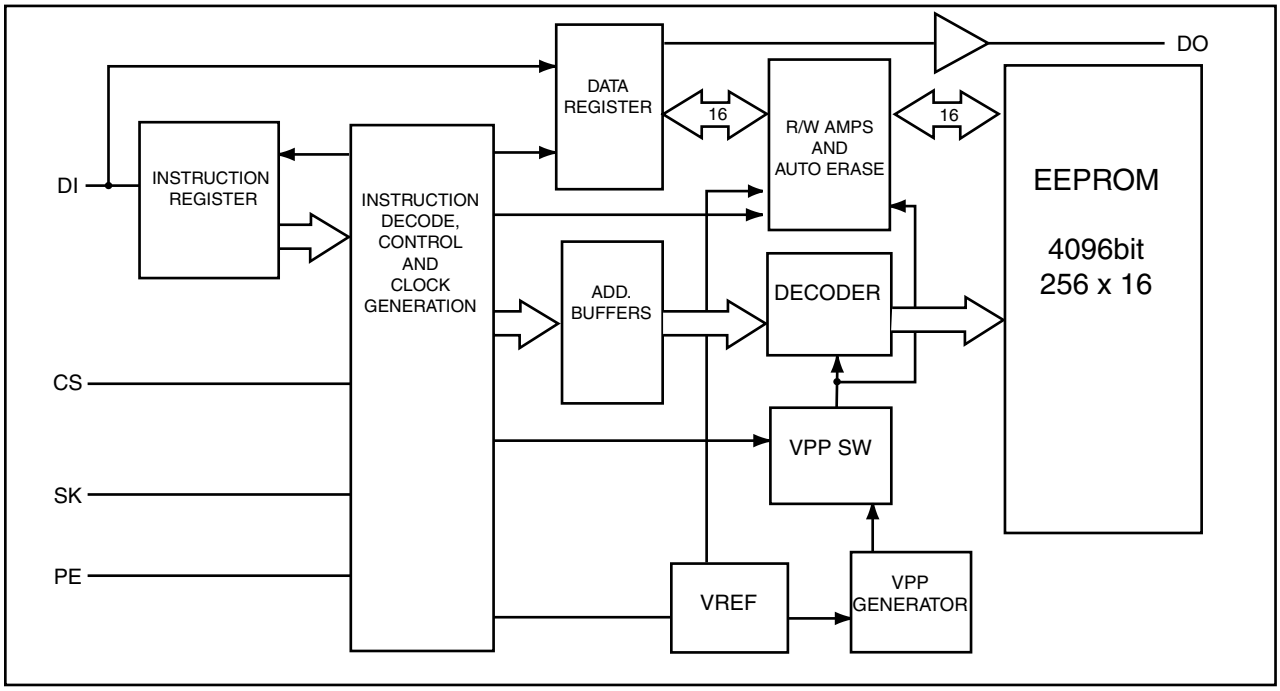
Pin No.	Symbol	I/O	Function
33	TRY1CLOSE	I	Tray 1 close signal input
34	AVREF	I	Reference power supply voltage
35	AVDD	I	Reference power supply voltage
36	/RESET	I	CD reset signal input
37	XT2	O	Non connect
38	XT1	I	Reference power supply voltage
39	IC	I	No use (for Flash micon)
40	X2	O	X'tal osc output
41	X1	I	X'tal osc input
42	VSS1	I	Ground
43	FLAG	O	FLAG for C1 error
44	BLKCK	O	Sub Q block clock signal output
45	CAM_CW	O	Cam motor rotation clockwise
46	CAM_CCW	O	Cam motor rotation counter clockwise
47	ACT_CCW	O	Actuator motor rotation counter clockwise
48	ACT_CW	O	Actuator motor rotation clockwise
49	GCTRL	I	Gain select 2/4 speed
50	EQSW	I	Equalizer select 2/4 speed
51	ICAMP3	I	Cam position 3
52	ICAMP4	I	Cam position 4
53	/RESET	O	Reset signal output
54	STAT	I	Status signal input
55	/DMUTE	I	Digital mute signal input
56	/P.ON	I	Power on signal input
57	MLD	I	Command load signal input
58	MDATA	I	Command data input
59	MCLK	I	Command clock input
60	SELECT	I	Communication select signal input
61	RUNDATA	I	Running data input from running jig
62	RUNLOAD2	I	Running load 2 signal input from running jig
63	RUNLOAD1	I	Running load 1 signal input from running jig
64	RUNCLOCK	I	Running clock signal input from running jig

■ AK93C65AF-X (IC590) : EEPROM

1.Pin layout



2.Block diagram



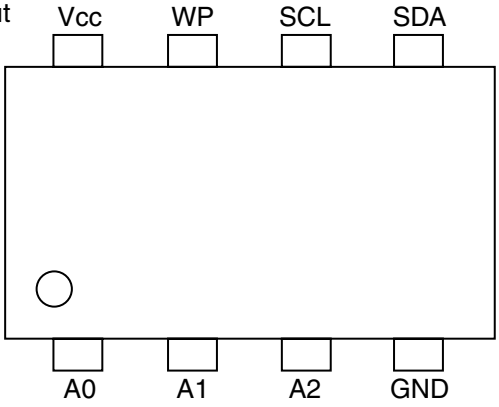
3.Pin function

Pin no.	Symbol	Function
1	PE	Program enable (With built-in pull-up resistor)
2	VCC	Power supply
3	CS	Chip selection
4	SK	Cereal clock input
5	DI	Cereal data input
6	DO	Cereal data output
7	GND	Ground
8	NC	No connection

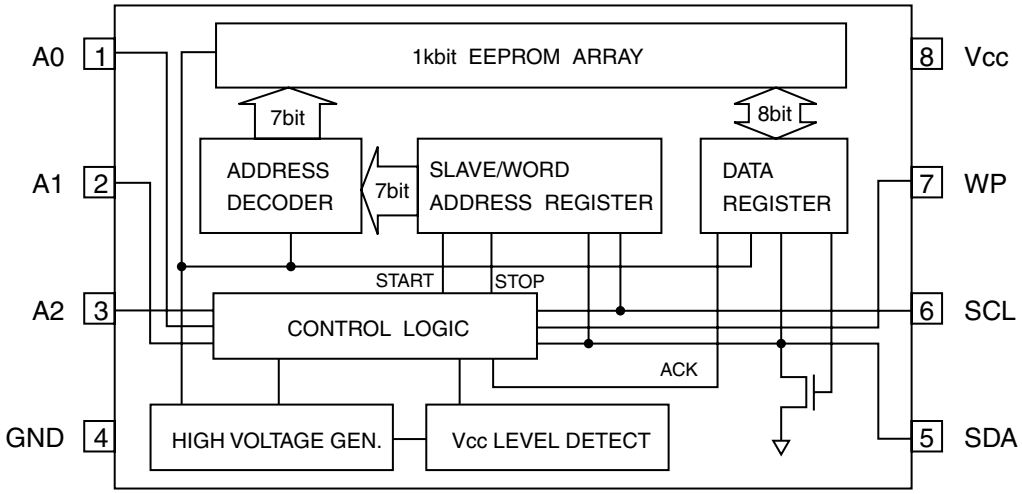
NOTE : The pull-up resistor of the PE pin is about 2.5M Ω (VCC=5V)

■ BR24C01AFV-W-X (IC201) : EEPROM

1.Pin layout



2.Block diagram



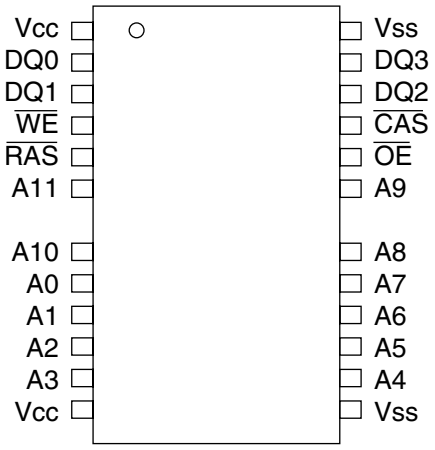
3.Pin function

Pin name	I/O	Function
Vcc	-	Power supply
GND	-	Ground (0v)
A0,A1,A2	IN	Slave address set
SCL	IN	Serial clock input
SDA	IN / OUT	Slave and word address, serial data input, serial data output *1
WP	IN	Write protect input

*1 An open drain output requires a pull-up resister.

■HY51V17400CT-60 (IC390) : DRAM

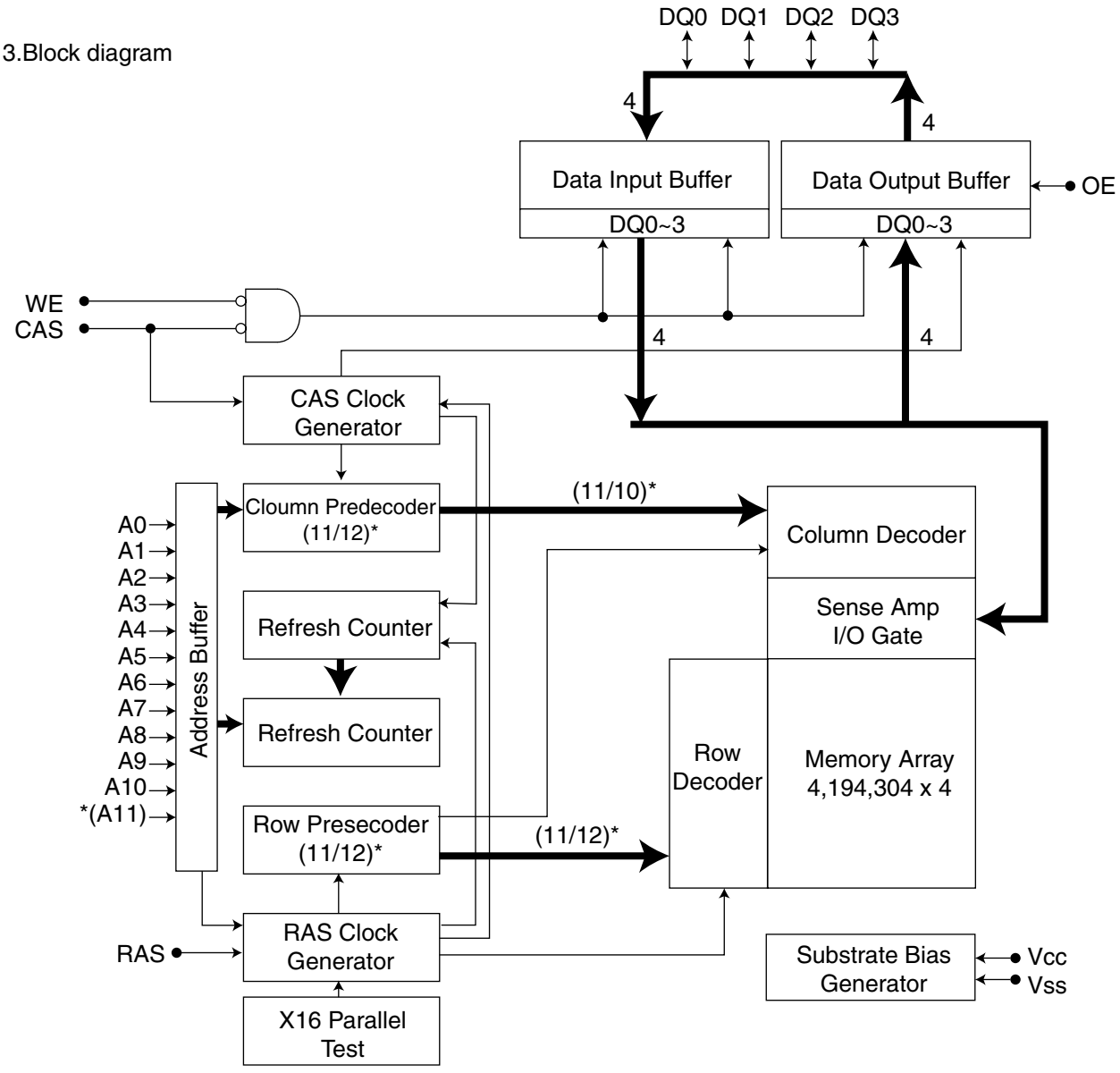
1.Pin layout



2.Pin function

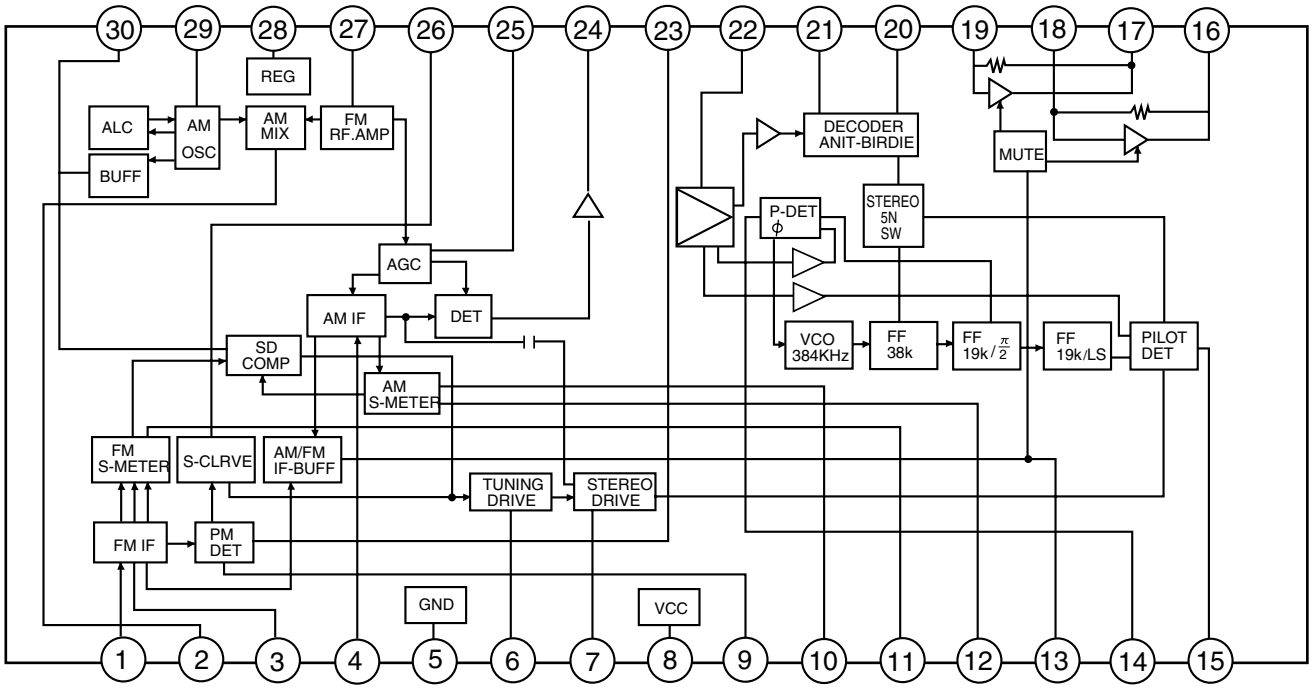
Pin Name	Parameter
/RAS	Row Address Strobe
/CAS	Column Address Strobe
/WE	Write Enable
/OE	Output Enable
A0~A11	Address Input (4K Refresh Product)
A0~A10	Address Input (2K Refresh Product)
DQ0~DQ3	Data In/Out
Vcc	Power (3.3V)
Vss	Ground
NC	No Connection

3.Block diagram



■ LA1838 (IC102): FM AM IF AMP&detector, FM MPX decoder

1. Block Diagram

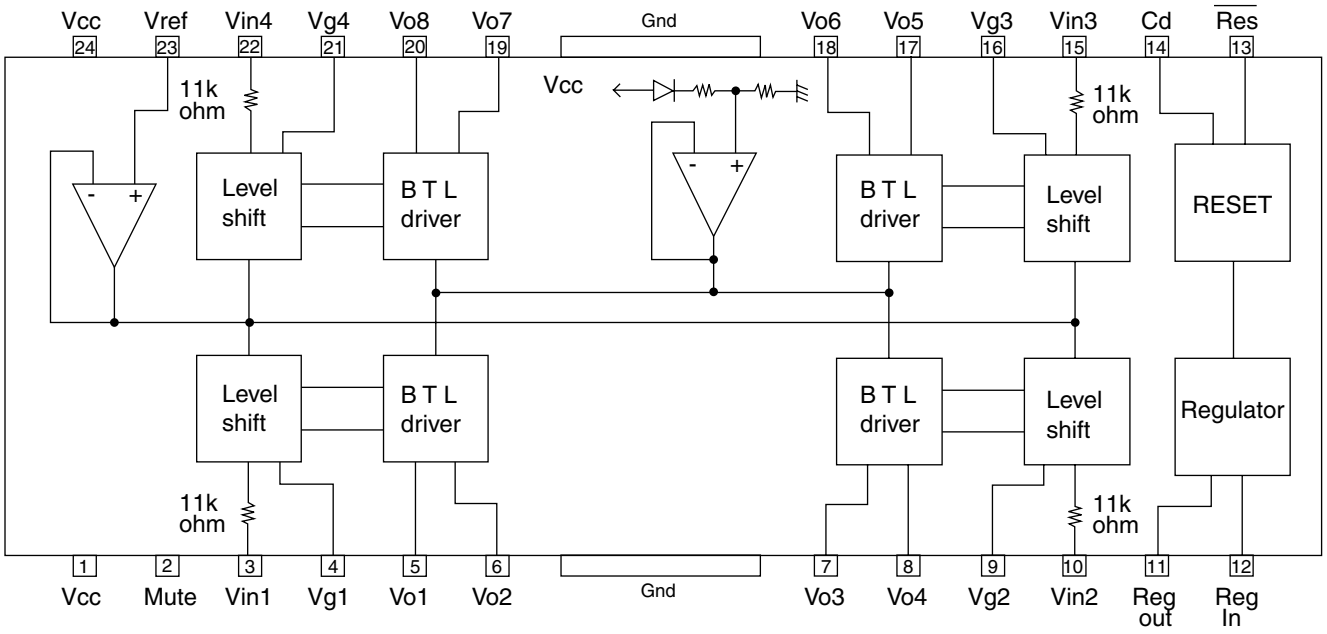


2. Pin Function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.	16	L OUT	O	Left channel signal output.
2	AM MIX	O	This is an out put terminal for AM mixer.	17	R OUT	O	Right channel signal output.
3	FM IF	I	Bypass of FM IF	18	L IN	I	Input terminal of the left channel post AMP.
4	AM IF	I	Input of AM IF Signal.	19	R IN	I	Input terminal of the right channel post AMP.
5	GND	—	This is the device ground terminal.	20	RO	O	Mpx Right channel signal output.
6	TUNED	O	When the set is tuning, this terminal becomes "L".	21	LO	O	Mpx Left channel signal output.
7	STEREO	O	Stereo indicator output. Stereo "L", Mono: "H"	22	IF IN	I	Mpx input terminal
8	VCC	—	This is the power supply terminal.	23	FM OUT	O	FM detection output.
9	FM DET	—	FM detect transformer.	24	AM DET	O	AM detection output.
10	AM SD	—	This is a terminal of AM ceramic filter.	25	AM AGC	I	This is an AGC voltage input terminal for AM
11	FM VSM	O	Adjust FM SD sensitivity.	26	AFC	—	This is an output terminal of voltage for FM-AFC.
12	AM VSM	O	Adjust AM SD sensitivity.	27	AM RF	I	AM RF signal input.
13	MUTE	I/O	When the signal of IF REQ of IC121(LC72131) appear, the signal of FM/AM IF output. //Muting control input.	28	REG	O	Register value between pin 26 and pin28 desides the frequency width of the input signal.
14	FM/AM	I	Change over the FM/AM input. "H" :FM, "L" : AM	29	AM OSC	—	This is a terminal of AM Local oscillation circuit.
15	MONO/ST	O	Stereo : "H", Mono: "L"	30	OSC BUFFER	O	AM Local oscillation Signal output.

■ LA6541-X (IC801) : Servo driver

1. Pin Layout & block diagram

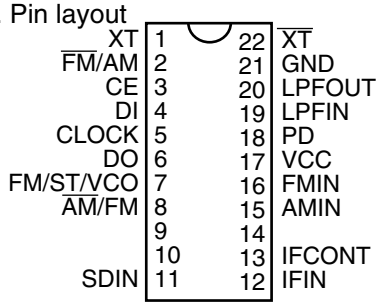


2. Pin function

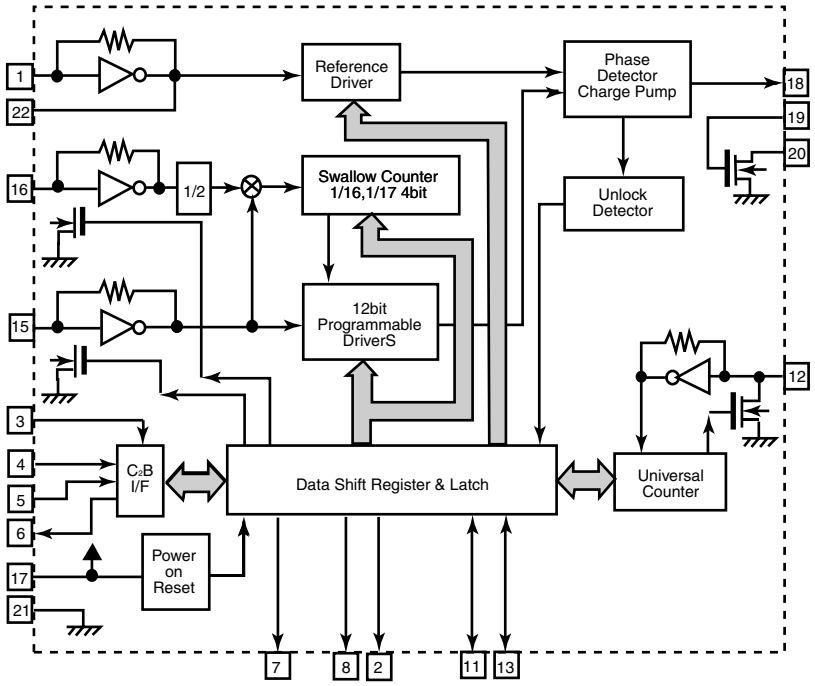
Pin No.	Symbol	Function
1	Vcc	Power supply (Shorted to pin 24)
2	Mute	All BTL amplifier outputs ON/OFF
3	Vin1	BTL AMP 1 input pin
4	Vg1	BTL AMP 1 input pin (For gain adjustment)
5	Vo1	BTL AMP 1 input pin (Non inverting side)
6	Vo2	BTL AMP 1 input pin (Inverting side)
7	Vo3	BTL AMP 2 input pin (Inverting side)
8	Vo4	BTL AMP 2 input pin (Non inverting side)
9	Vg2	BTL AMP 2 input pin (For gain adjustment)
10	Vin2	BTL AMP 2 input pin
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output
12	Reg In	External transistor (PNP) base connection
13	Res	Reset output
14	Cd	Reset output delay time setting (Capacitor connected externally)
15	Vin3	BTL AMP 3 input pin
16	Vg3	BTL AMP 3 input pin (For gain adjustment)
17	Vo5	BTL AMP 3 output pin (Non inverting side)
18	Vo6	BTL AMP 3 output pin (Inverting side)
19	Vo7	BTL AMP 4 output pin (Inverting side)
20	Vo8	BTL AMP 4 output pin (Non inverting side)
21	Vg4	BTL AMP 4 output pin (For gain adjustment)
22	Vin4	BTL AMP 4 output pin
23	Vref	Level shift circuit's reference voltage application
24	Vcc	Power supply (Shorted to pin 1)

■ LC72136N (IC121) : PLL frequency synthesizer

1. Pin layout



2. Block diagram

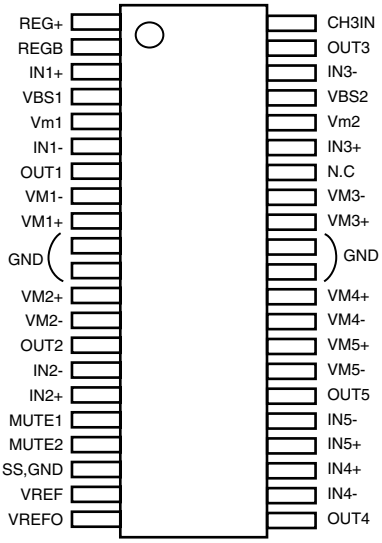


3. Pin function

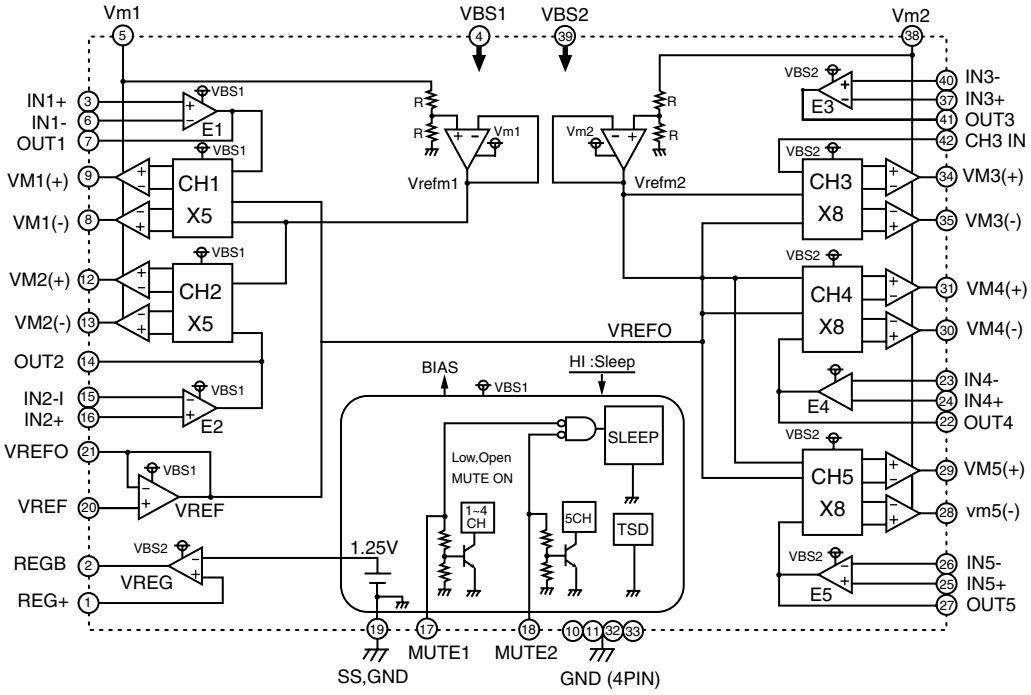
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	$\overline{FM}$/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power suplly(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	$\overline{AM}$/FM	O	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	O	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	$\overline{XT}$	I	X'tal oscillator(75KHz)

■ M63008FP-X (IC410) : 5ch Actuator driver

1.Pin layout

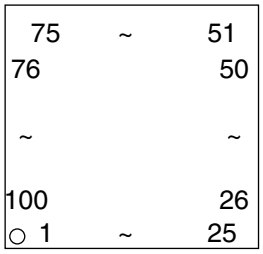


2.Block diagram



■ MN101C12GDW (IC851) : Panel micon

1.Pin layout

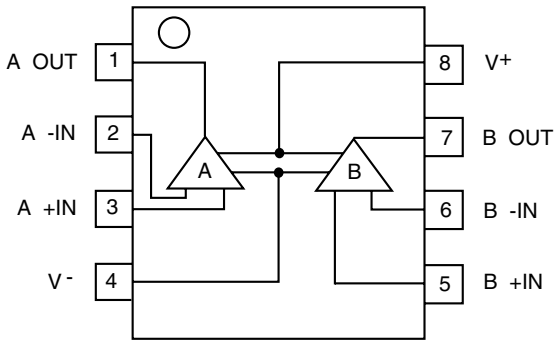


2. Pin function

Pin No.	Symbol	I/O	Function
1	-	-	Connect to ground.
2	LEVEL Lch	I	Input terminal.
3	LEVEL Rch	I	Input terminal.
4~9	-	-	Connect to ground.
10	A / D Power	-	A / D Ref. voltage.
11	Vdd	-	Ref. voltage.
12	8.38MHz	I	OSC frequency input terminal.
13	8.38MHz	O	OSC frequency output terminal.
14	GND	-	Connect to ground.
15	-	-	Connect to ground.
16	-	-	Non use.
17~20	-	-	Connect to ground.
21	comm sysreq	O	System CPU require signal output terminal.
22	LED STBY red	O	Stand by LED (RED) output terminal.
23	LED POWER green	O	Power LED (GREEN) output terminal.
24	-	-	Connect to ground.
25	-	-	Connect to ground.
26	comm panereq	I	Panel CPU require signal input terminal.
27~32	-	-	Connect to ground.
33	comm reset	I	Reset signal input terminal.
34,35	-	-	Connect to ground.
36	LED MD REC	O	MD (RED) output terminal.
37~41	-	-	Connect to ground.
42	comm out	O	Commor signal output terminal.
43	comm in	I	Commor signal input terminal.
44	comm clock	I	Commor clock signal input terminal.
45~57	-	-	Connect to ground.
58	LCD WE	O	Write enable output terminal.
59	LCD RE	O	Read enable output terminal.
60	LCD CS1	O	Chip select output terminal.
61,62	-	-	Connect to ground.
63	LCD AO	O	Data select signal output terminal.
64	LCD RESET	O	LCD reset signal output terminal.
65~72	-	-	Connect to ground.
73	LCD LEDdimmer	O	Dimmer control terminal.
74~78	-	-	Connect to ground.
79~86	LCD D7~D0	O	Pata bus signal output terminal.
87~94	-	-	Connect to ground.
95	DVASS	-	Connect to ground.
96	-	-	Non use.
97	LED RED	O	Red LED control terminal.
98	LED GREEN	O	Green LED control terminar.
99	LED BLUE	O	Blue LED control terminal.
100	DAVdd	-	Ref. voltage.

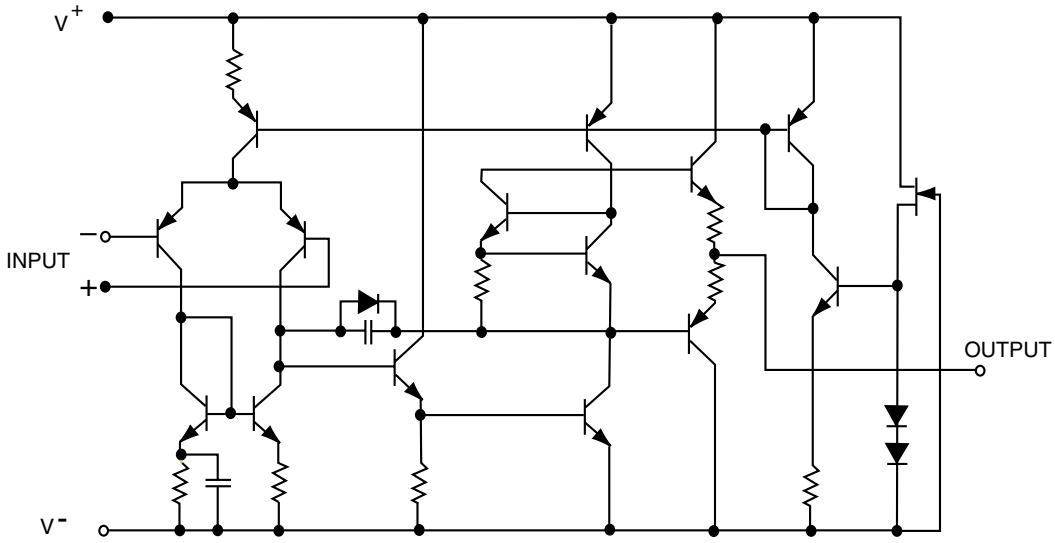
■ NJM4580D (IC652) : LPF, Mic and H.phone Amp.

1.Terminal layout

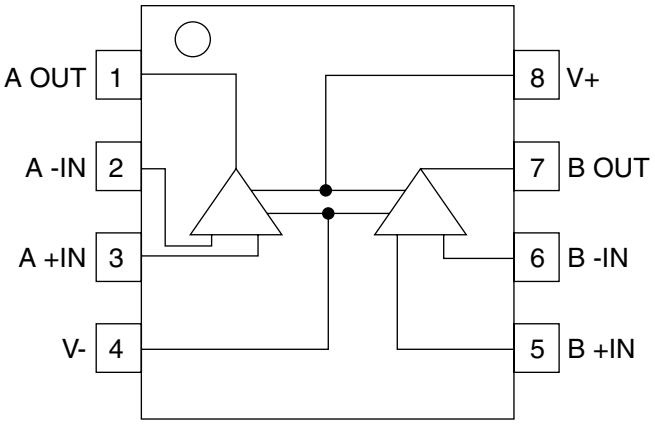


(TOP VIEW)

2.Block diagram

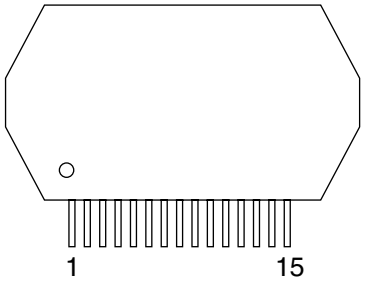


■ NJM4580E-W (IC672):

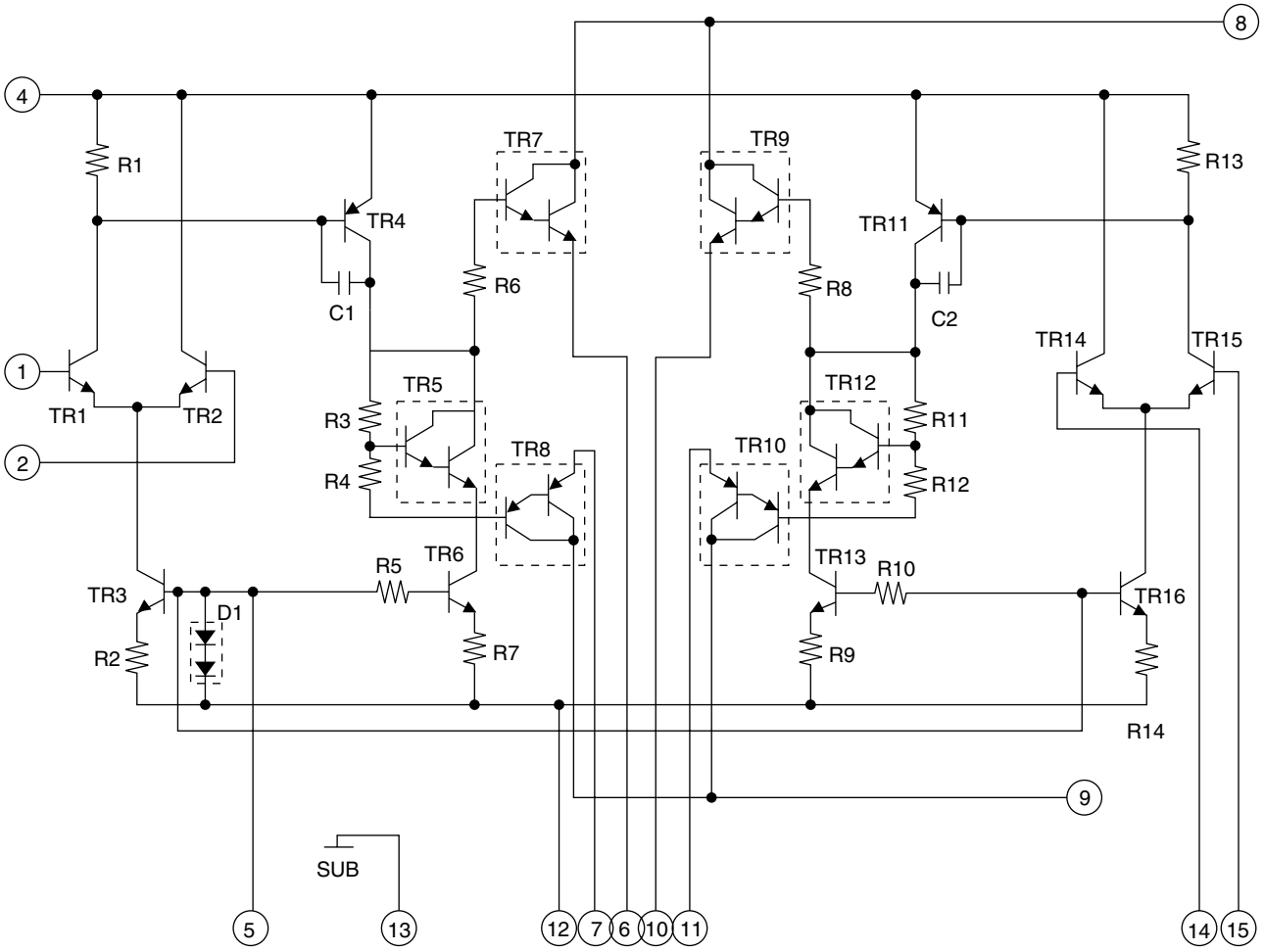


■STK402-030 (IC301) :

1.Pin layout

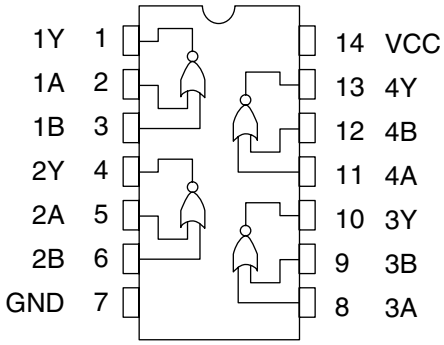


2.Block diagram



■ TC74HC02AP (IC674) : 2ch Nor gate

1.Pin layout & block diagram

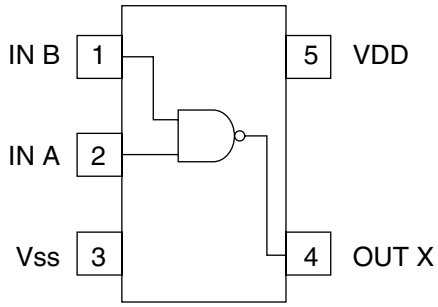


2.The truth value table

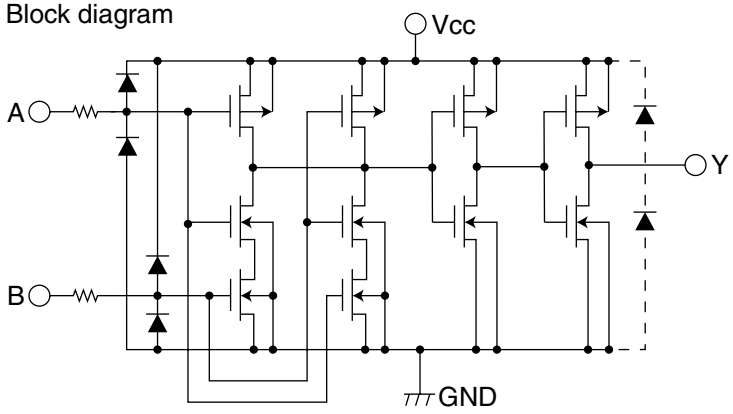
A	B	Y
L	L	H
L	H	L
H	L	L
H	H	L

■ TC7S08F-W (IC340) : Buffer

1. Pin layout

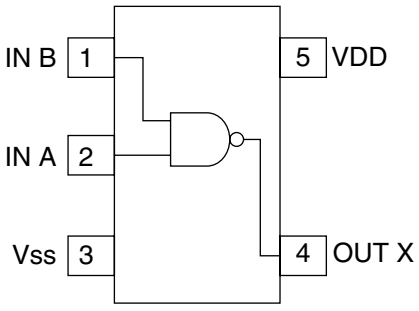


2. Block diagram

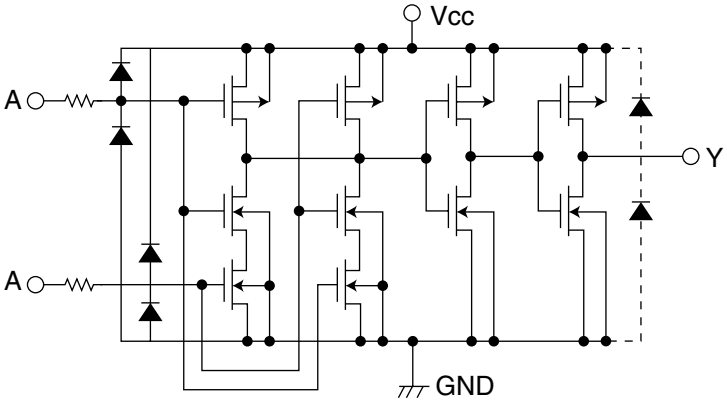


■ TC7S32F-X (IC603) : NAND gata

1.Pin layout

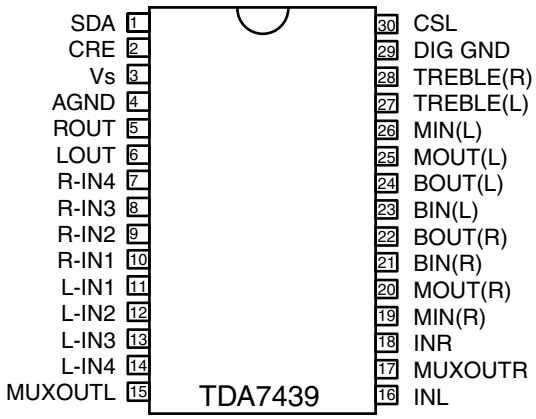


2.Block diagram

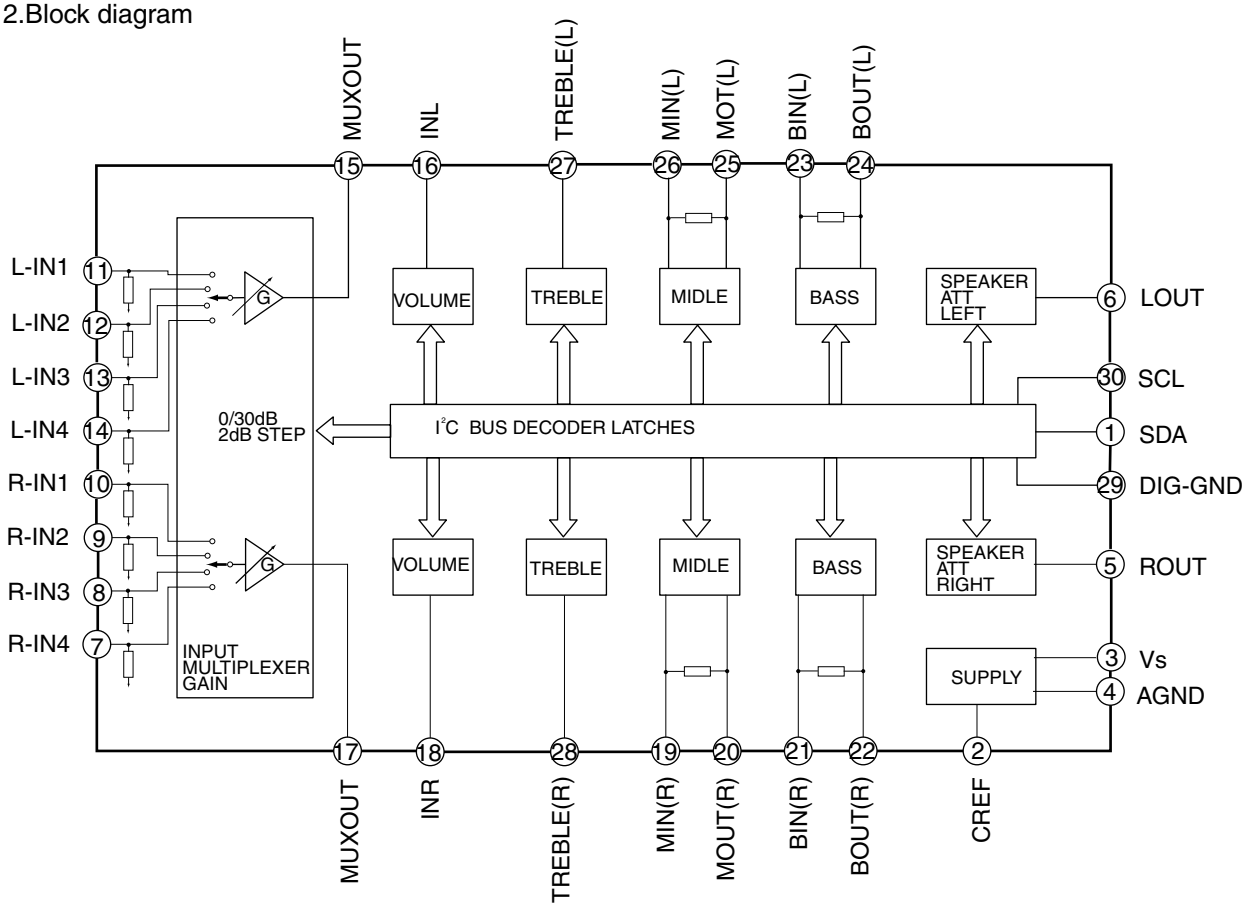


■ TDA7439 (IC671) : Control volume

1.Pin layout

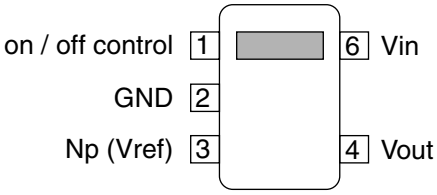


2.Block diagram

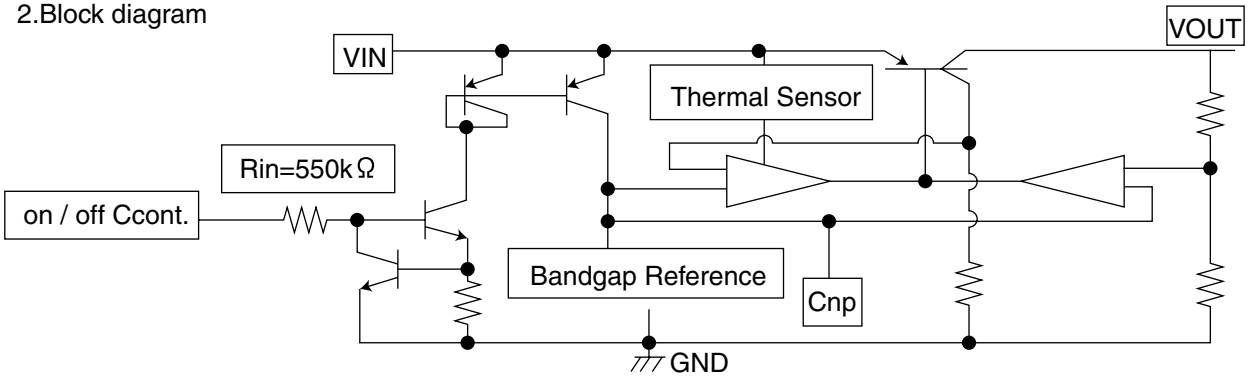


■ TK11140SC-W (IC485) :

1.Pin layout

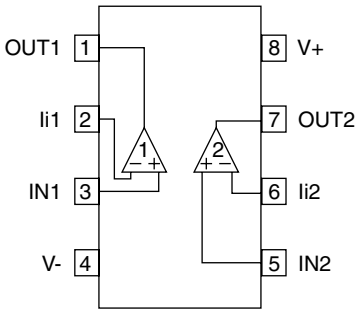


2.Block diagram

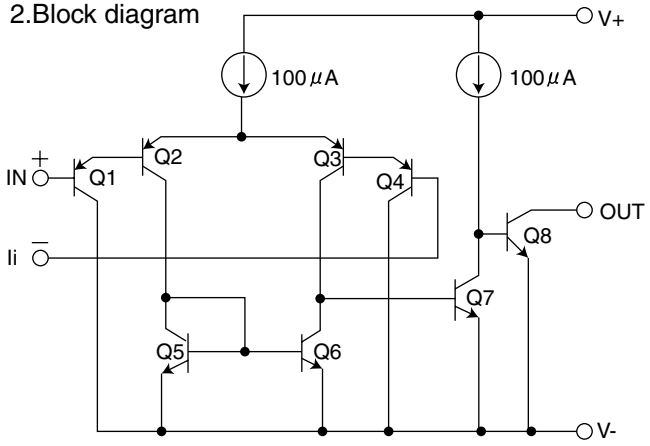


■ UPC393G2-W (IC602) :

1.Pin layout

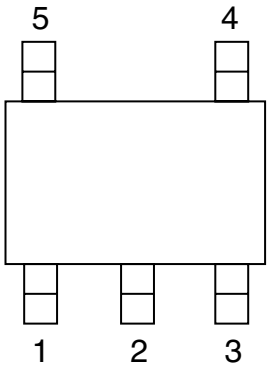


2.Block diagram

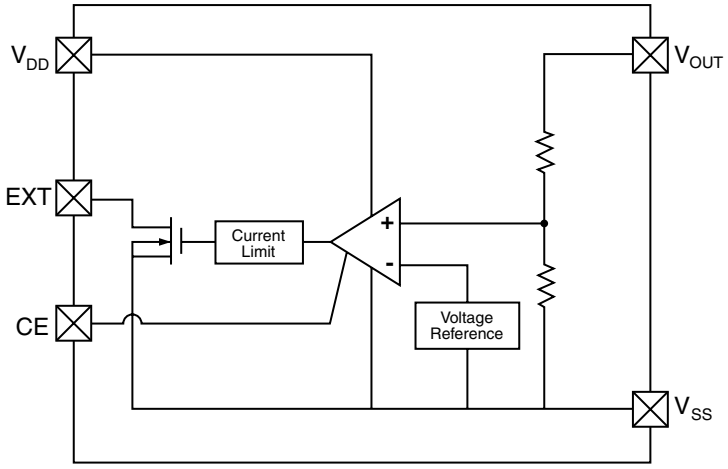


■ XC62ER3602M-X (IC400) :

1.Pin layout



2.Block diagram



3.Pin function

Pin No.	Symbol	Function
1	V_{SS}	GND
2	V_{IN}	Power supply input
3	V_{OUT}	Regulator output
4	EXT	Base current control terminal
5	CE	Chip enable

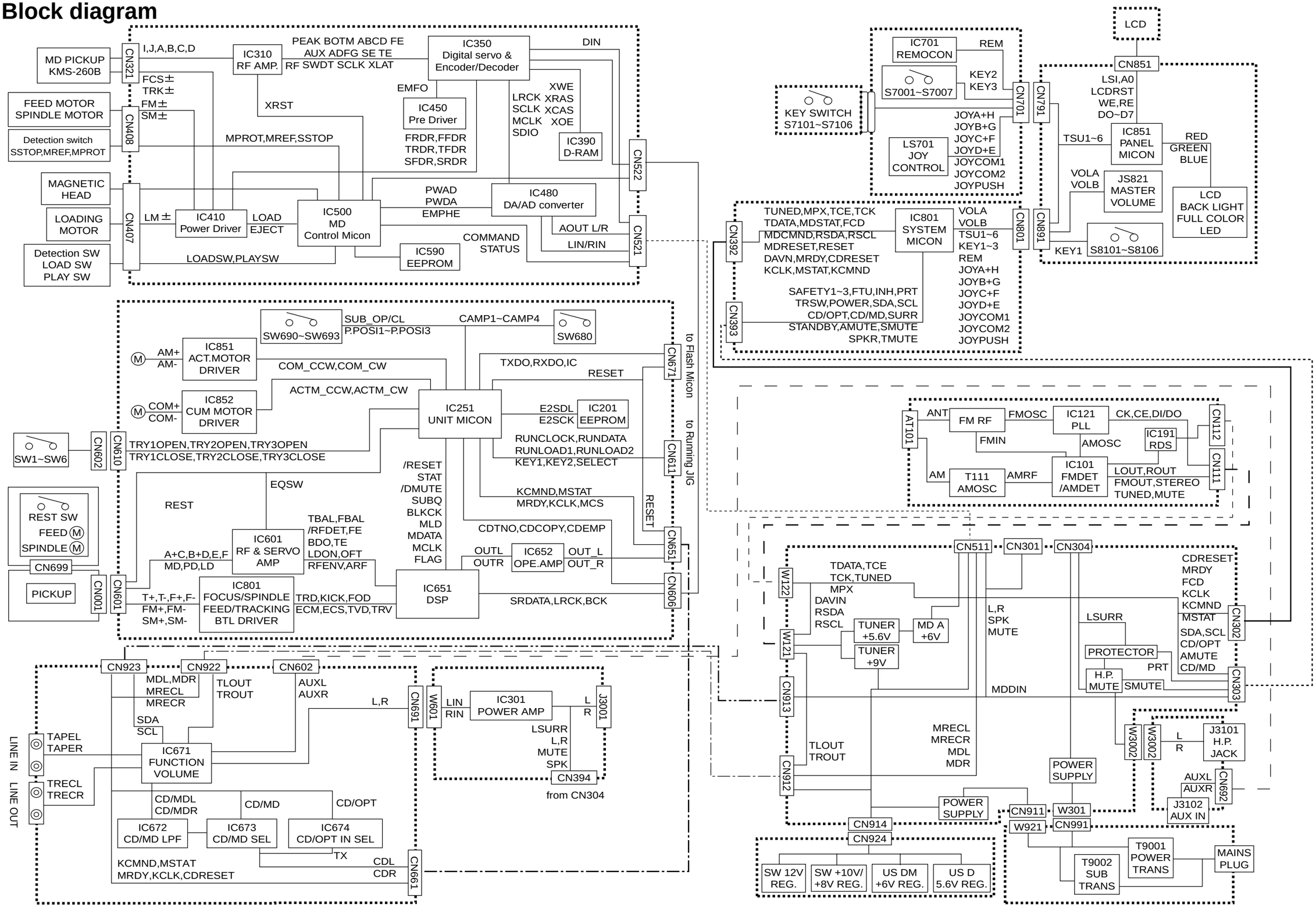
JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO & COMMUNICATION BUSINESS DIVISION
PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1Chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

No.20887

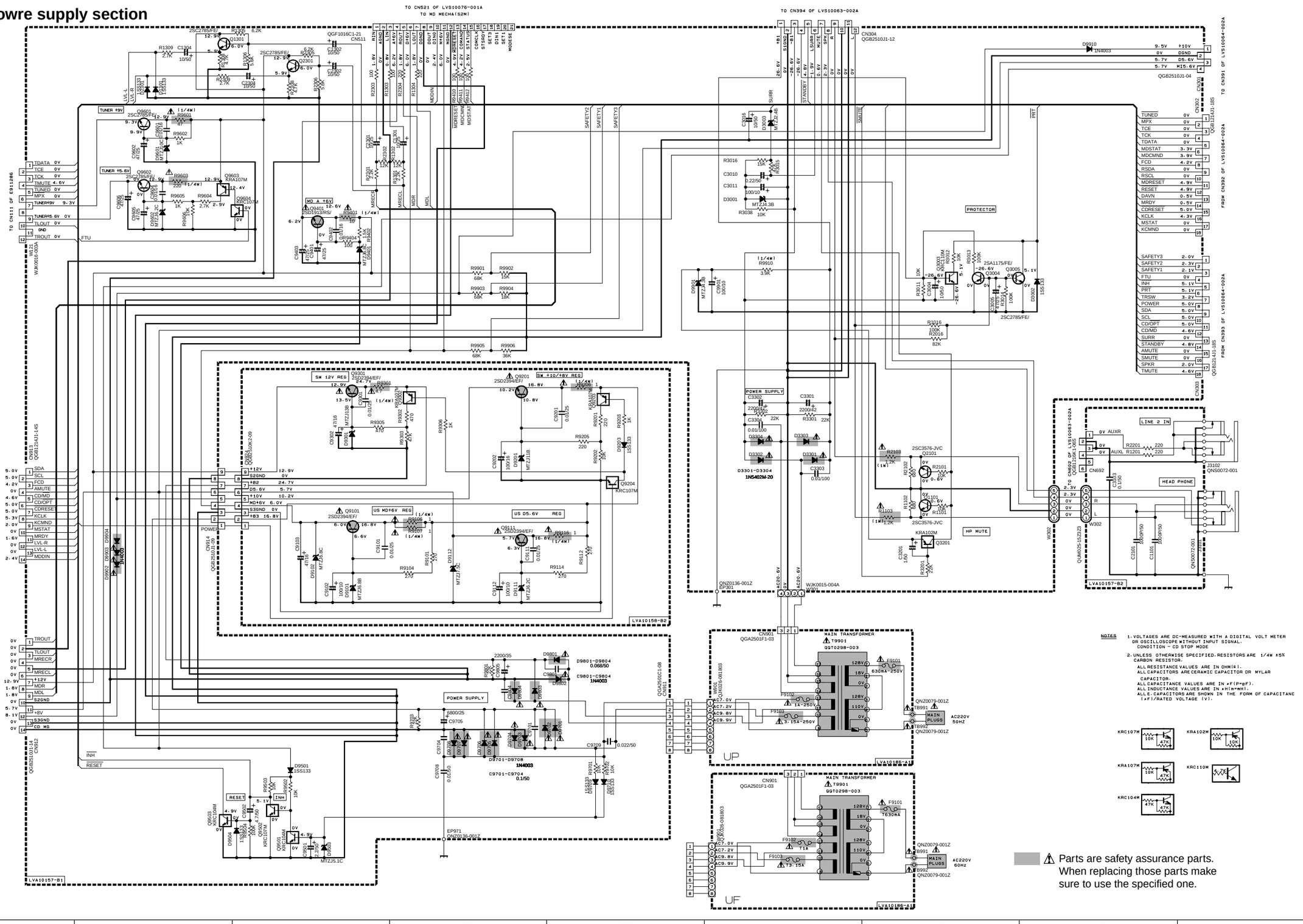
Printed in Japan
200011(O)

Block diagram

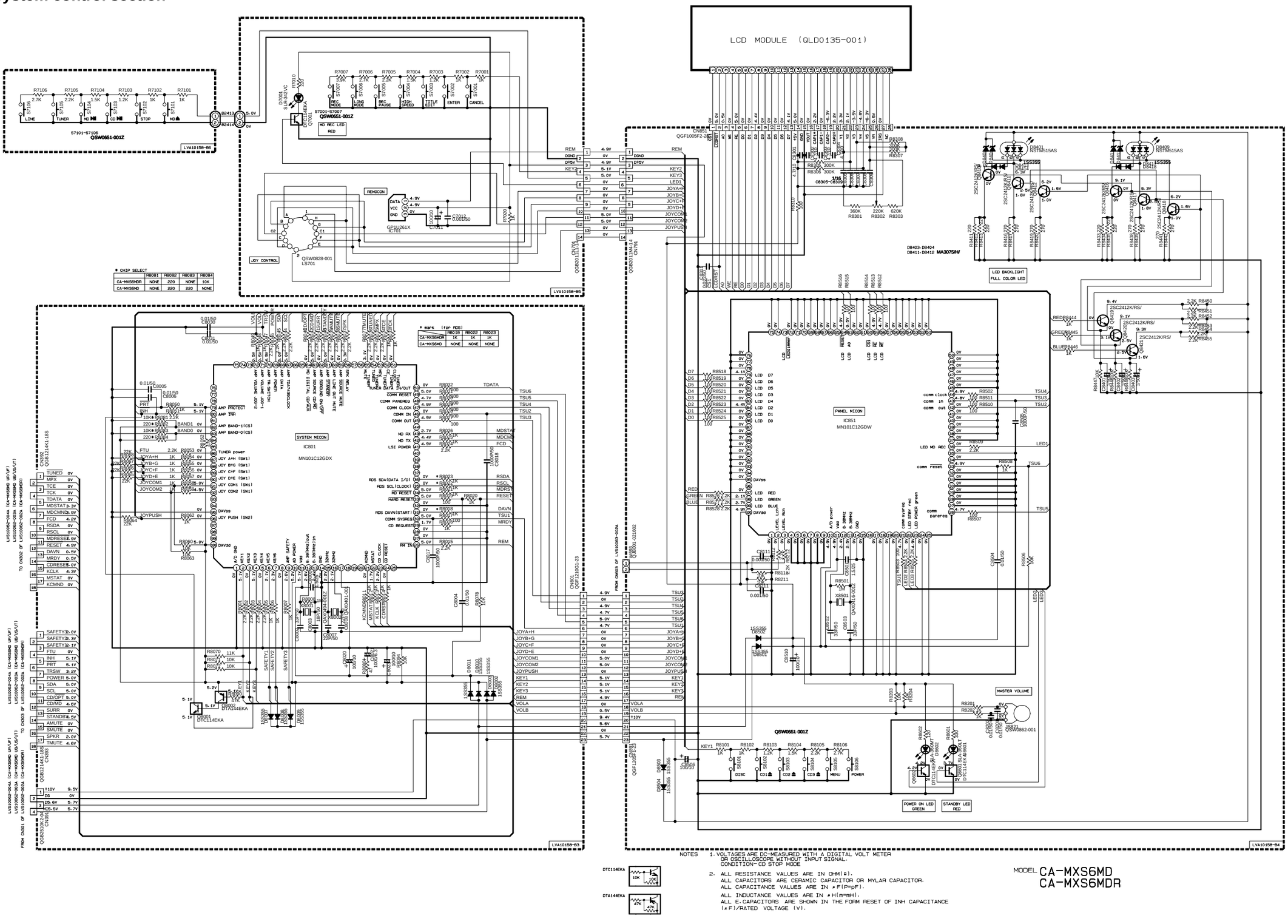


Schematic diagrams

■ Powre supply section



■ System control section

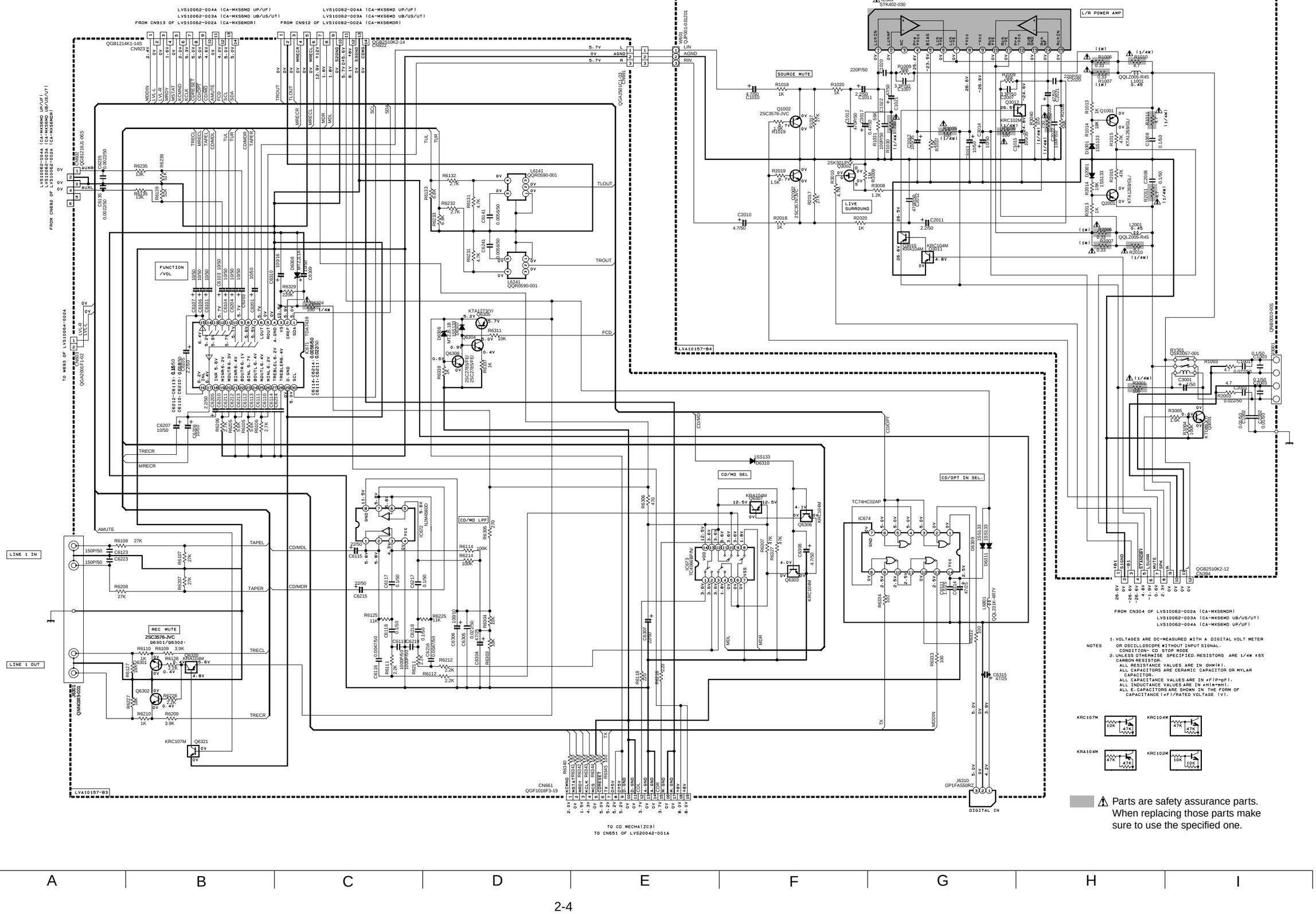


NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION- CD STOP MODE
2. ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM RESET OF INH CAPACITANCE (μF)/RATED VOLTAGE (V).

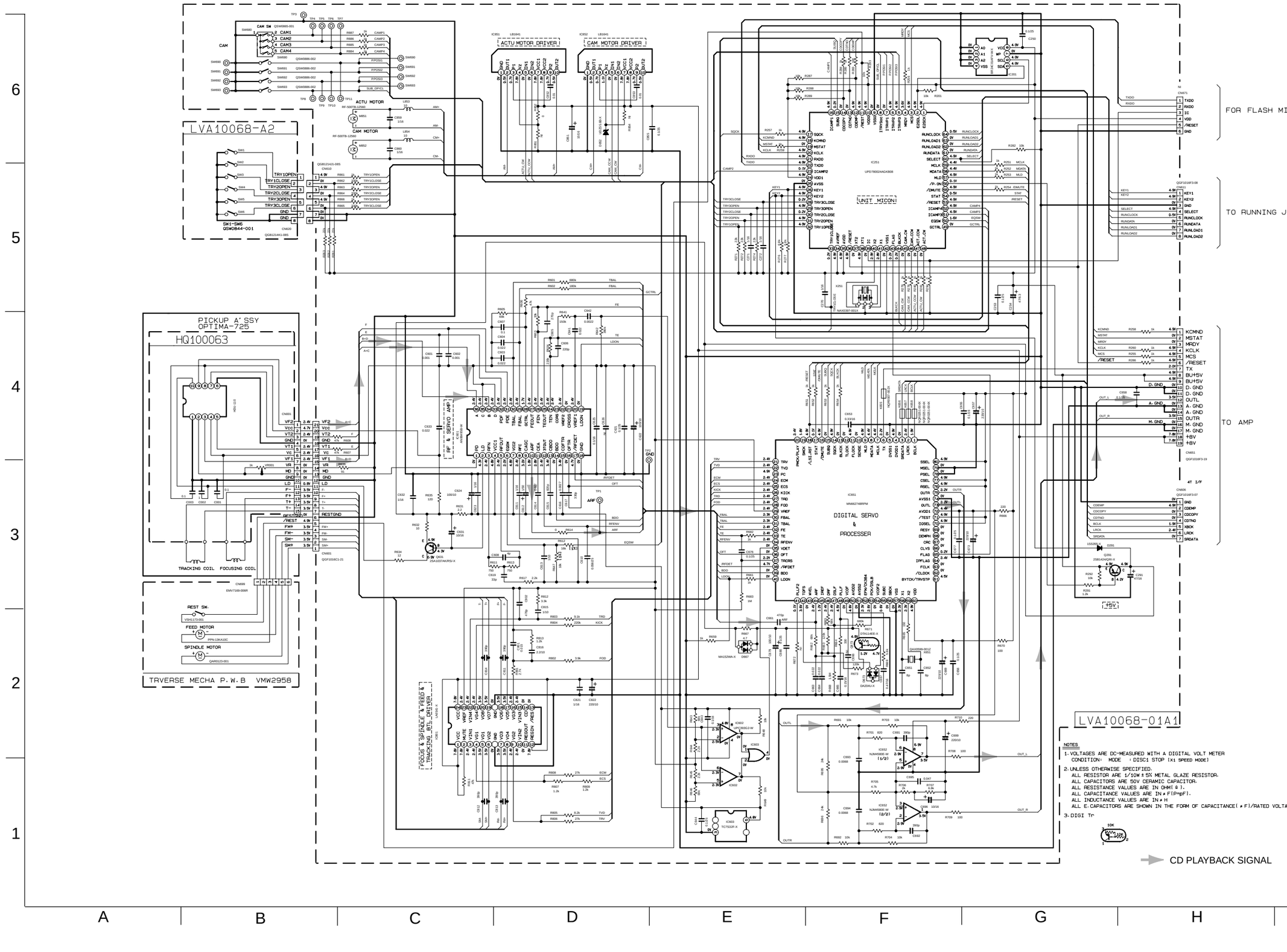
DTC114EKA: 10K / 10K
DTA144EKA: 47K / 47K

MODEL CA-MXS6MD
CA-MXS6MDR

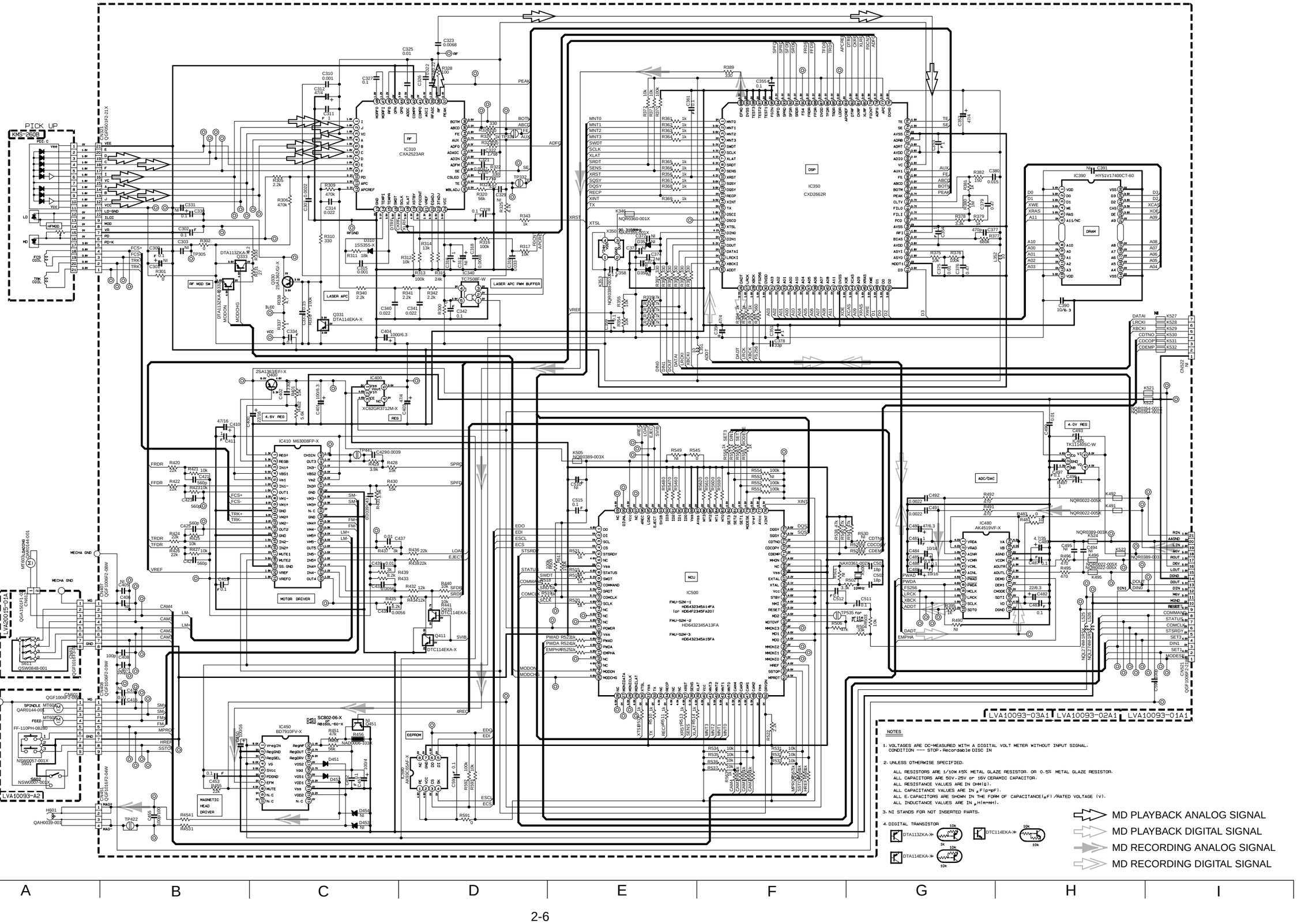
■ Function selector section



■ CD servo control section

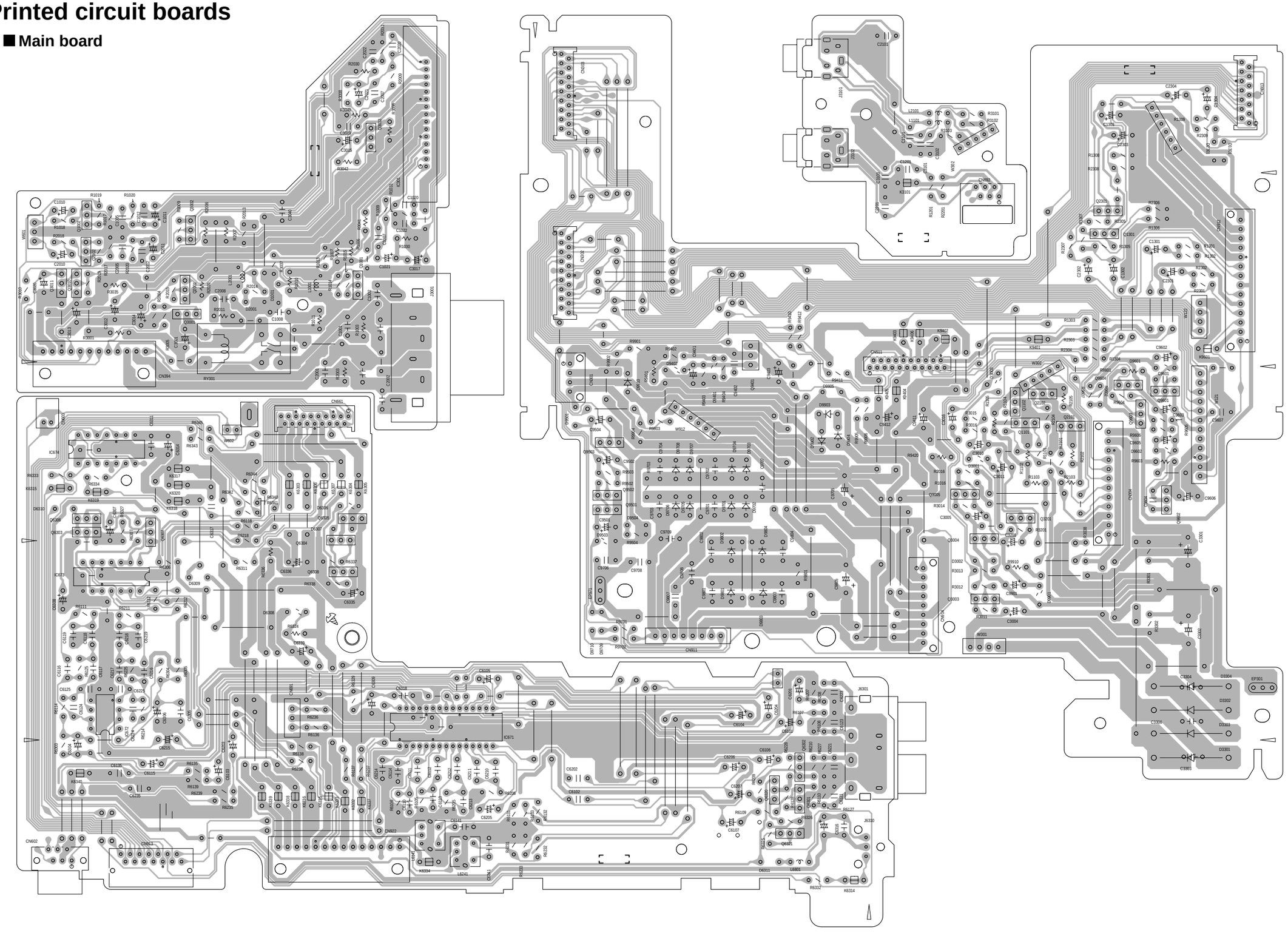


■ MD servo control section

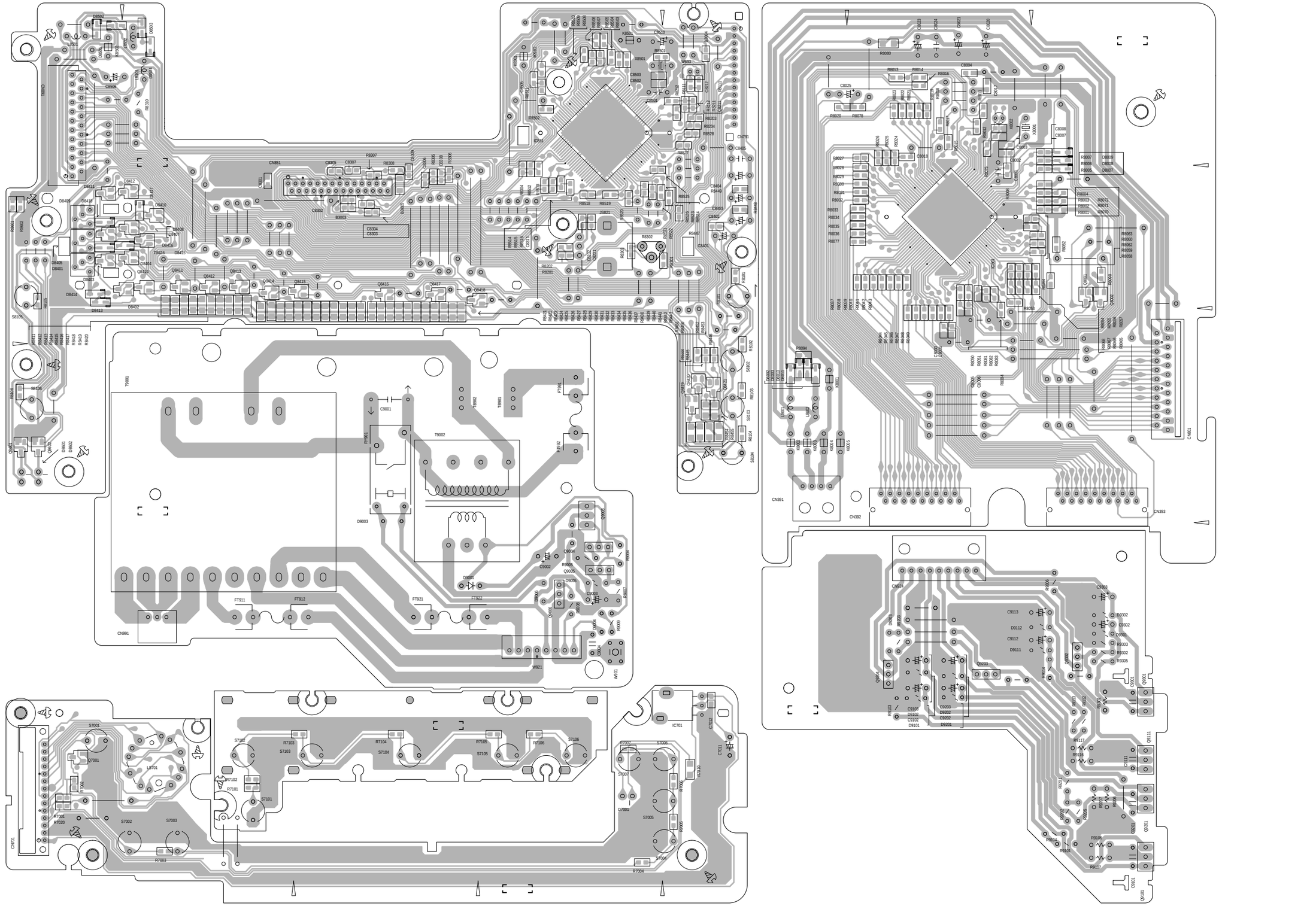


Printed circuit boards

■ Main board

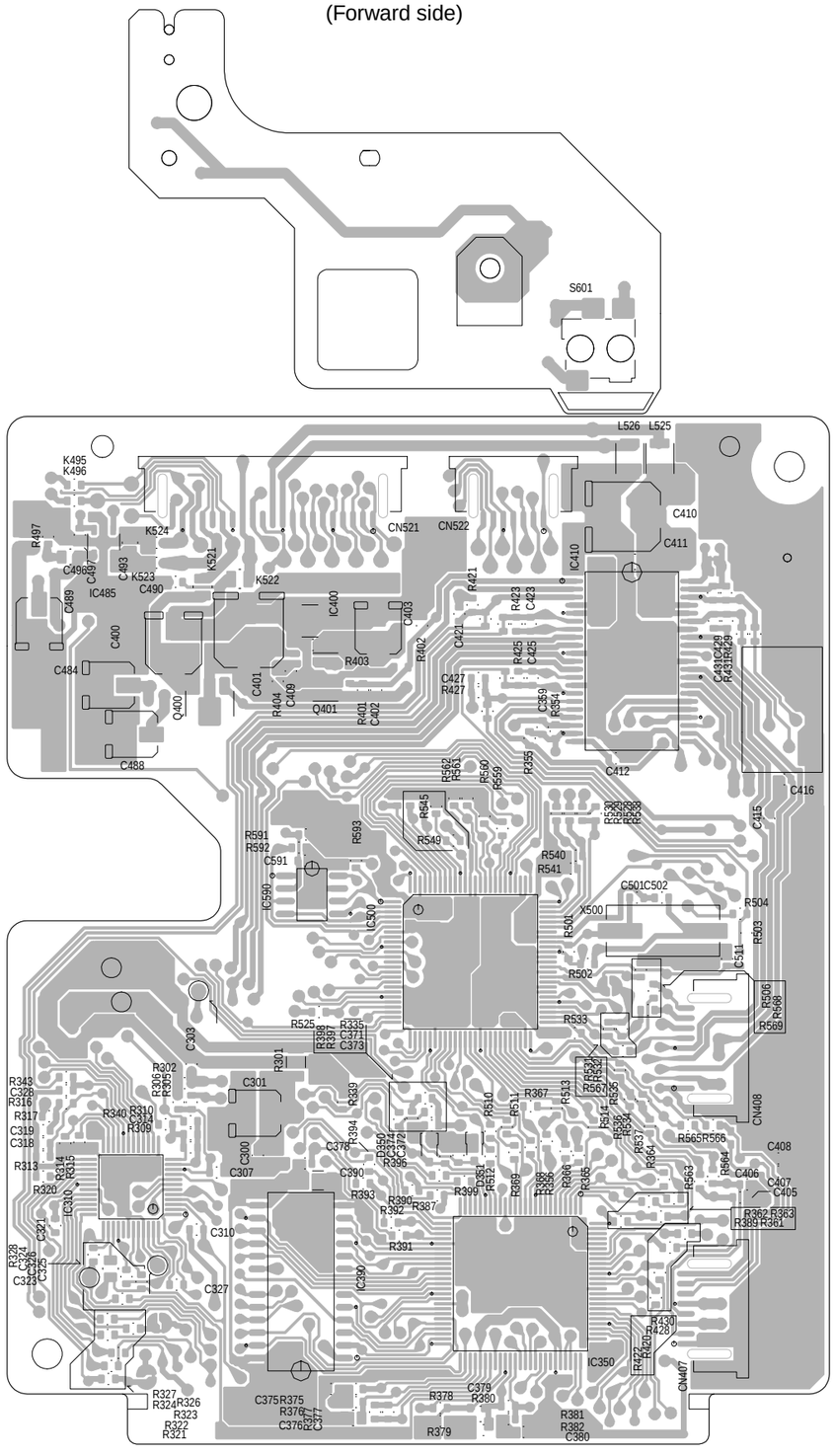


■Micon board

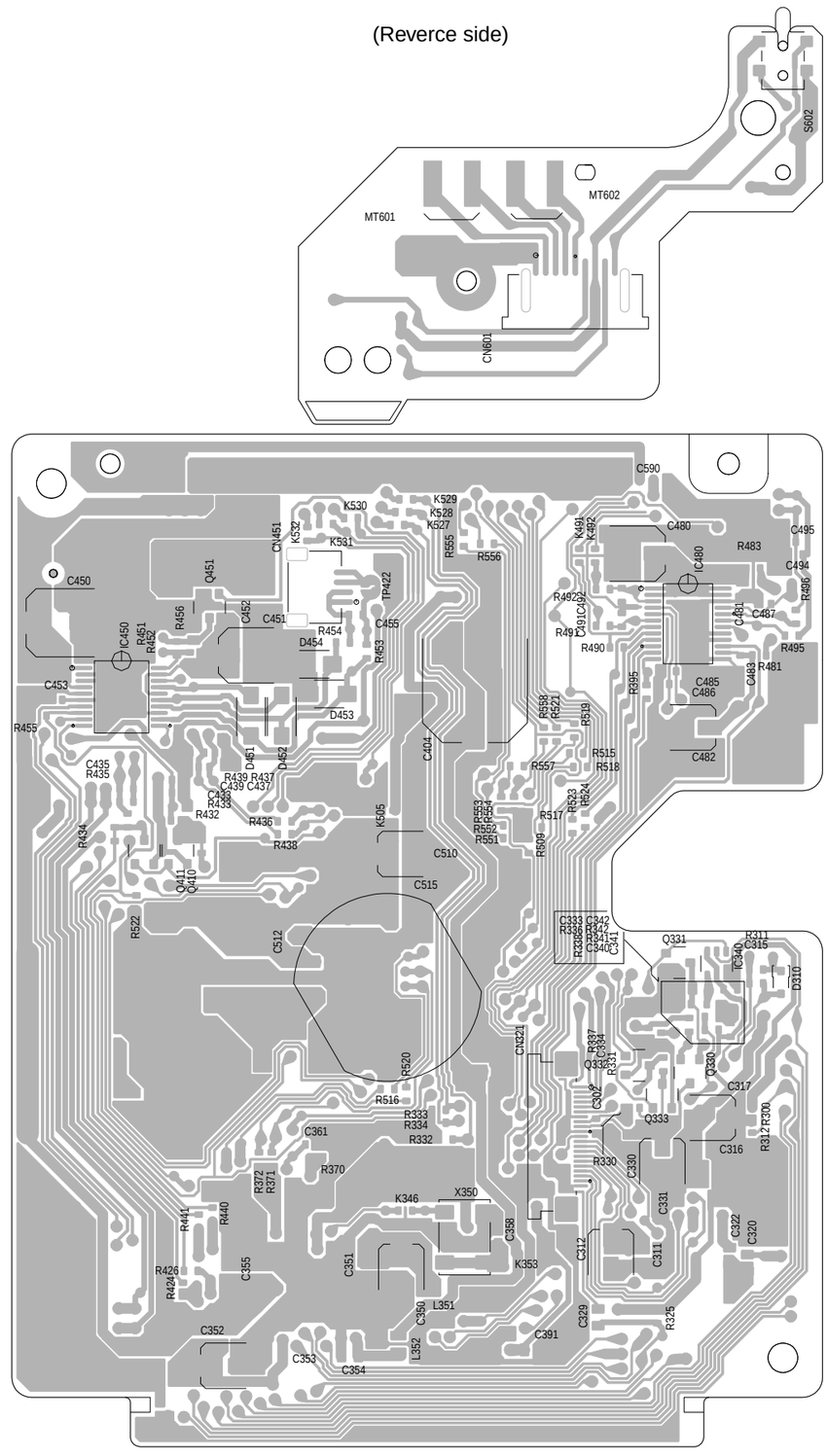


■ MD servo board

(Forward side)

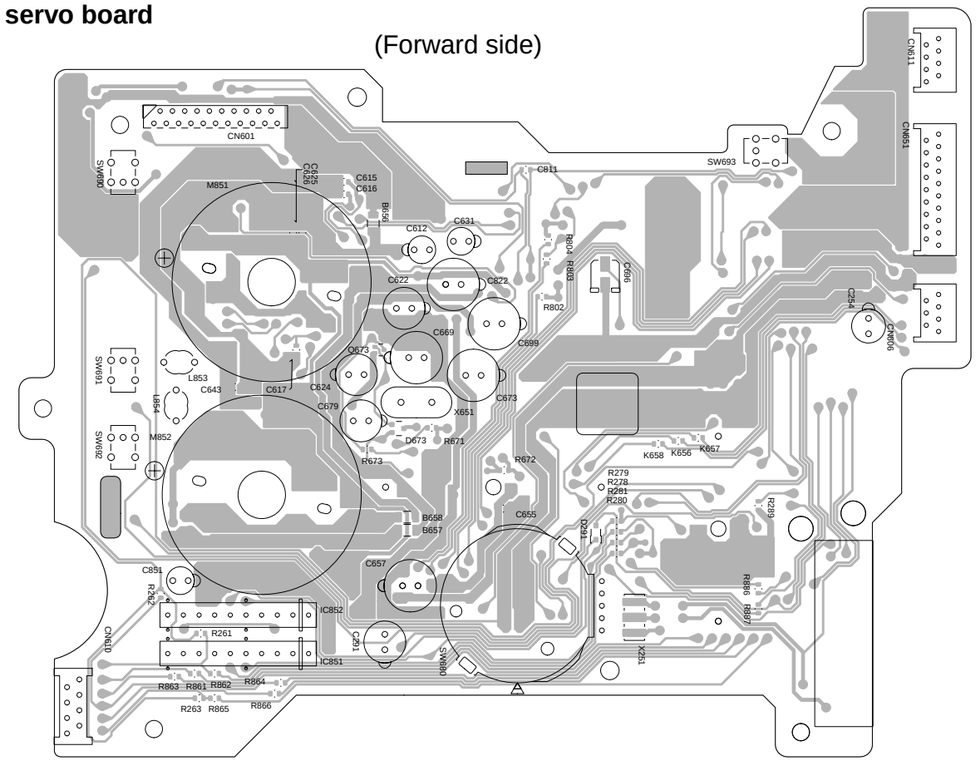


(Reverce side)

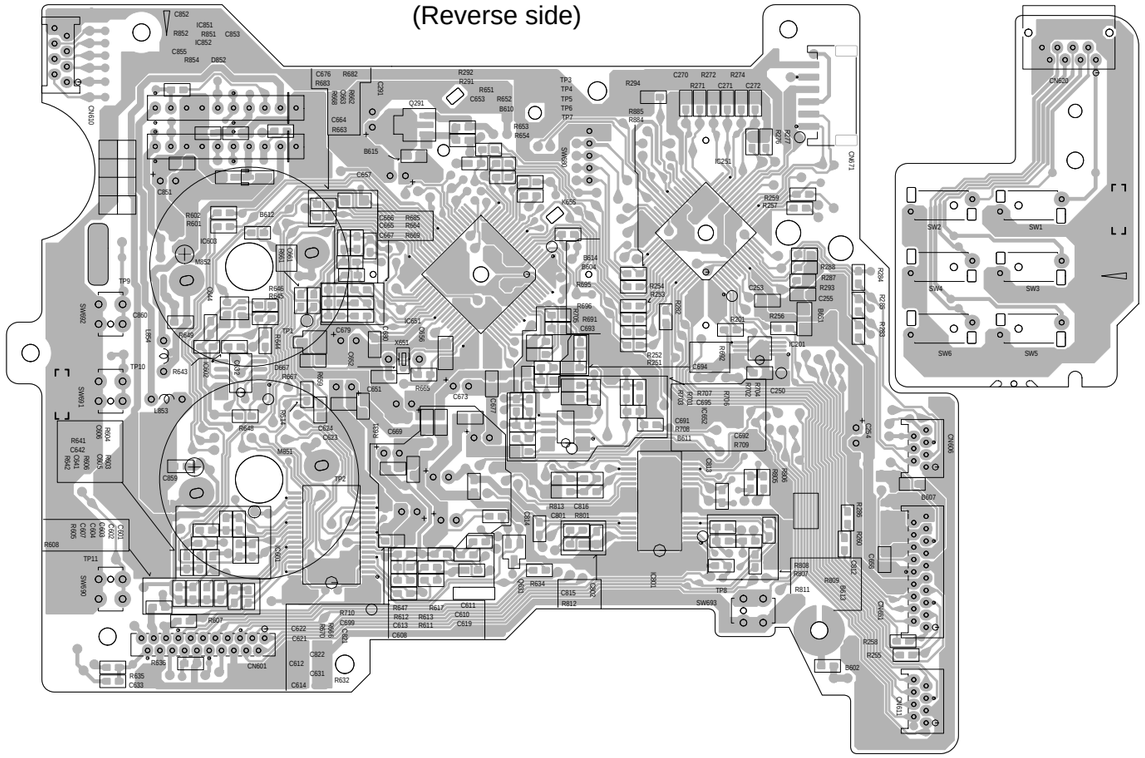


■ CD servo board

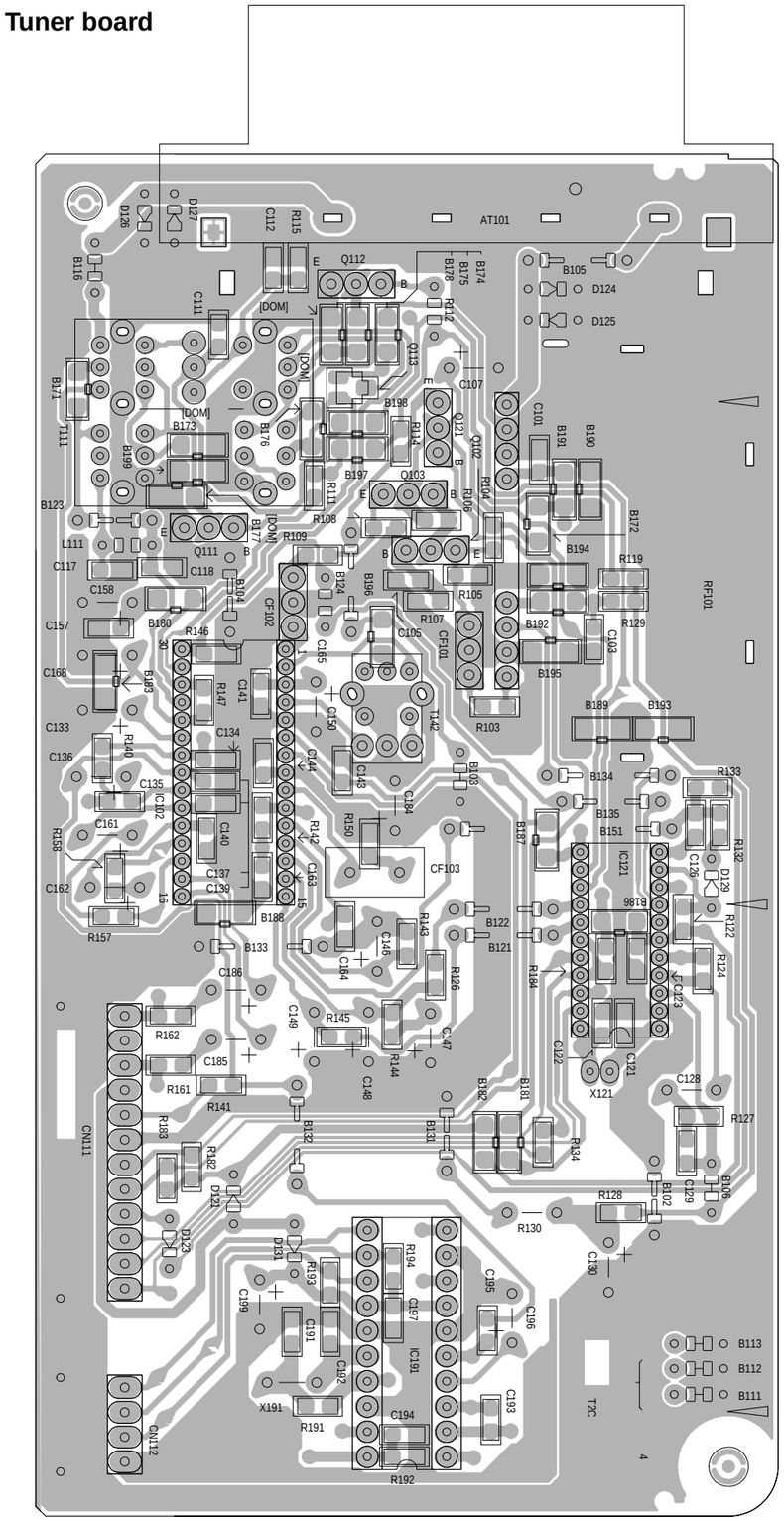
(Forward side)



(Reverse side)



■ Tuner board



PARTS LIST

[MX-S6MD]

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

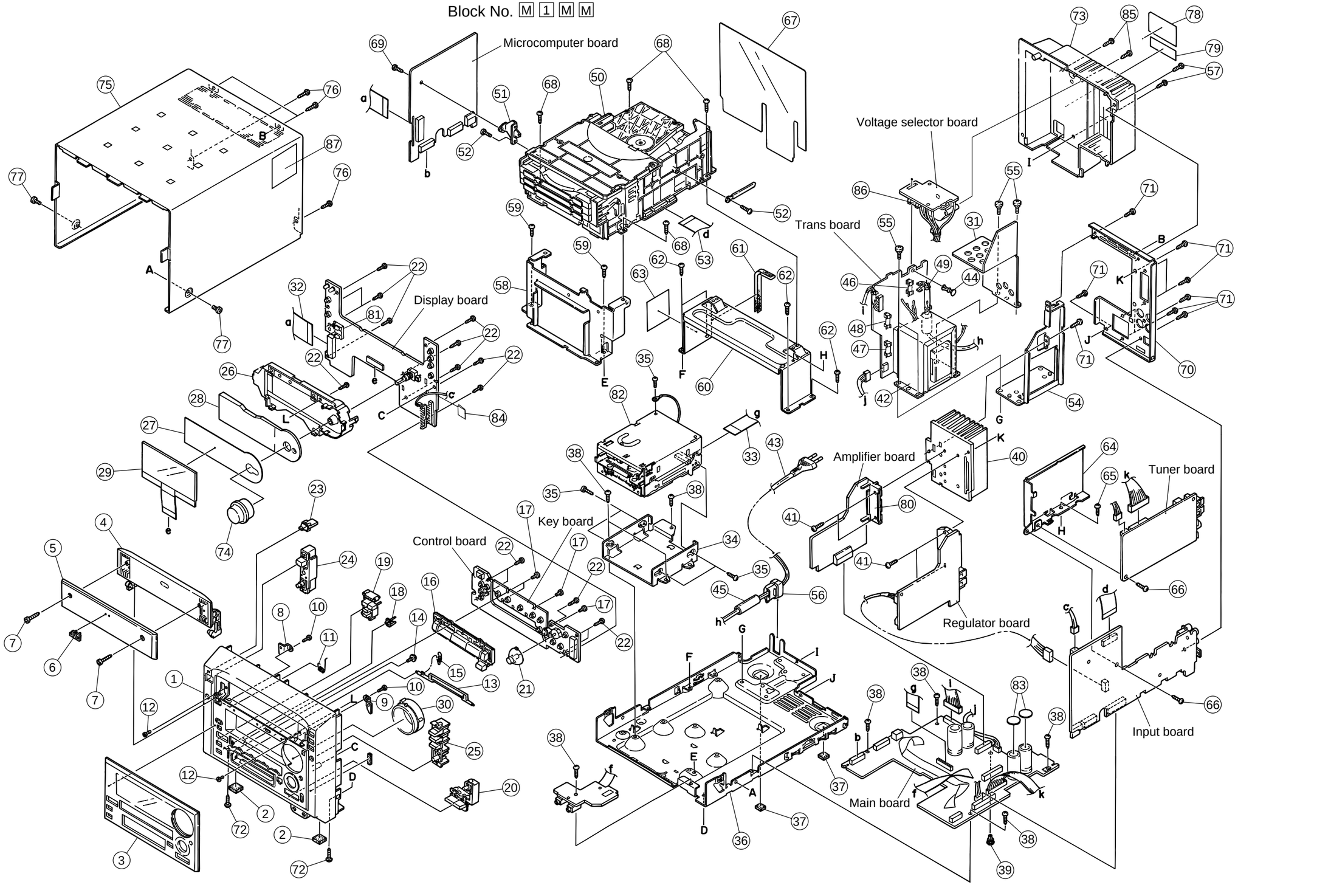
CA-MXS6MD
Area suffix US ---------- Singapore UB ---------- Hong Kong UT ---------- Taiwan

- Contents -

<<MEMO>>

Exploded view of genaral assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

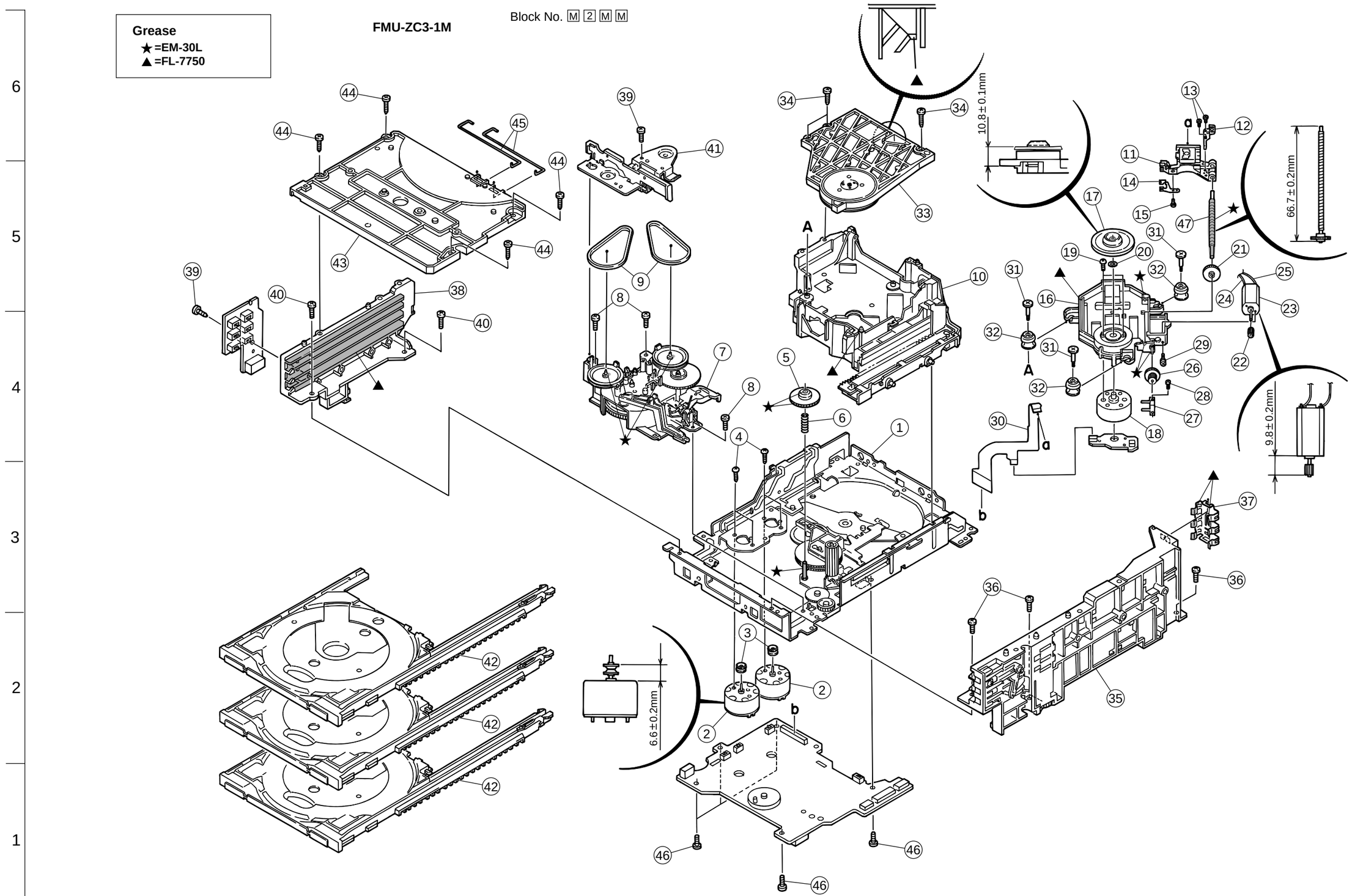
⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10386-002A	FRONT PANEL	1		
	2	E75896-002	FELT SPACER	2	FOOT	
	3	LV20766-002A	WINDOW SCREEN	1		
	4	LV20767-002A	CD DOOR	1		
	5	LV31907-005A	CD DOOR LENS	1		
	6	E406971-001SM	JVC MARK	1	GOLD 14W	
	7	LV40744-001A	SOCKET BOLT	2		
	8	LV41694-001A	DOOR BKT(L)	1	FOR CD DOOR	
	9	LV41695-001A	DOOR BKT(R)	1	FOR CD DOOR	
	10	QYSBSF2608Z	T.SCREW	2	DOOR BKT+F.PANE	
	11	LV41696-001A	DOOR SPRING	1	FOR CD DOOR	
	12	E69897-002	CUSHION	2	FOR F.PANEL	
	13	LV31906-001A	SHUTTER	1	MD	
	14	E72405-001SS	SPECIAL SCREW	1	FOR SHUTTER	
	15	LV41165-003A	SPRING	1		
	16	LV20772-002A	PUSH BUTTON(PLY	1		
	17	QYSDSF2606M	SCREW	4	FOR KEY PWB-F	
	18	LV41698-001A	INDICATOR(REC	1		
	19	LV20771-002A	PUSH BUTTON(REC	1		
	20	LV20773-001A	PUSH BUTTON(ENT	1		
	21	LV31912-002A	BUTTON KNOB	1	002A-ENGRAVING	
	22	QYSBSF2608Z	T.SCREW	15	FOR KEY-E	
	23	LV41697-001A	INDICATOR(STAND	1		
	24	LV20770-003A	PUSH BUTTON(PWR	1		
	25	LV20774-002A	PUSH BUTTON(3CD	1		
	26	LV20768-002A	LENS HOLDER	1	002A-PS MS-500	
	27	LV41699-001A	LCD FILTER	1		
	28	LV31909-001A	LCD LENS	1		
	29	QLD0135-001	LCD MODULE	1		
	30	LV31910-001A	INDICATOR(VOL)	1		
	31	LV32217-001A	WIRE BARRIER	1	PC T1	
	32	QUQ412-2310CM	FFC WIRE	1	KEY PWB-D--MICO	
	33	QUQ110-2118AJ	FFC WIRE	1	S2M- BOTTOM PWB	
	34	LV31914-001A	MD BKT	1		
	35	QYSBST3006Z	T.SCREW	5	S2M + MD BKT	
	36	LV10388-001A	BOTTOM CHASSIS	1		
	37	E75896-006	FELT SPACER	2	FOOT FOR BOTTOM	
	38	QYSBSG3008Z	T.SCREW	8	MD MECHA SA+BTM	
	39	QZW0036-002	PC SUPPORT	1	INSERT TO BOTTO	
	40	LV31924-002A	HEAT SINK	1	002A-BLK ALUMIT	
	41	QYSBSG3014Z	T.SCREW	4	IC HOLDER+H.SIN	
⚠	42	QQT0298-003	POWER TRANSF	1		
⚠	43	QMPR120-200-JD	POWER CORD	1		UT
⚠		QMPK150-200-JD	POWER CORD	1		US
⚠		QMPN100-200-JD	POWER CORD	1		UB
	44	FMYH4004-001	PLASTIC RIVET	1	FOR VOL SELE CB	UB,UT,US
	45	QQR0917-001	NOISE FILTER	1		
⚠	46	QMF51E2-1R25-J1	FUSE	1	F9101	UB,UT,US

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
⚠	47	QMF51E2-1R0-J1	FUSE	1	F9102	
⚠	48	QMF51E2-3R15-J1	FUSE	1	F9103	
	49	E307572-001	FASTENER	1		
	50	----------	JEM 3CD CHANGER	1	BDL1093-001U	
	51	LV31918-001A	CB BKT	1	TO ZC3 LEFT SID	
	52	QYSBSF3010Z	SCREW	2	CB BKT + ZC3	
	53	QUQ110-1912BJ	FFC WIRE	1	ZC3--INPUT PWB	
	54	LV31915-001A	HEAT SINK BKT	1		
	55	QYSDSTL4008E	SPECIAL SCREW	4	TRANS SA+BOTTOM	
	56	QZW0033-001	STRAIN RELIEF	1	FOR POWER CORD	
	57	QYSBSGY3008M	SPECIAL SCREW	2	R.COVER+R.PANEL	
	58	LV20793-001A	CD BKT(F)	1		
	59	QYSBSG3008Z	T.SCREW	2	CD BKT(F)+BOTTO	
	60	LV20779-001A	CD BKT(R)	1		
	61	LV41897-001A	SPACER	1	TO CD BKT(R) ED	
	62	QYSBSG3008Z	T.SCREW	4	CD BKT(R)+BOTTO	
	63	E406507-001	LASER CAUTION	1	TO CD BKT(R)LEF	
	64	LV31990-001A	TUNER BKT	1		
	65	QYSBSG3008Z	T.SCREW	1	TU.BKT+CD BKT(R	
	66	QYSBSG3008Z	T.SCREW	2	INPUT PWB+TU.BK	
	67	LV31920-002A	HEAT BARRIER	1		
	68	QYSBST3006Z	T.SCREW	4	ZC3+CD BKT(F/R)	
	69	QYSBSG3008Z	T.SCREW	1	MICON PWB+ZC3	
	70	LV20778-002A	REAR PANEL	1		
	71	QYSBSGY3008M	SPECIAL SCREW	10	H.SINK BK+H.SIN	
	72	QYSBSG3008Z	T.SCREW	2	F.PANEL+BOTTOM	
	73	LV10387-005A	REAR COVER	1	110/127/220/230	US,UT,UB
	74	LV31911-002A	VOL.KNOB	1	MASTER VOL	
	75	LV20781-002A/S/	METAL COVER	1		
	76	QYSBSG3010E	T.SCREW	4	REAR UPPER RIGH	
	77	QYSDSG3006N	T.SCREW	2	L / R SIDE	
	78	LV31922-005A	NAME PLATE	1	TO REAR COVER	US,UB
		LV31922-004A	NAME PLATE	1	TO REAR COVER	UT
	79	VND4118-004	CAUTION LABEL	1		
	80	LV31916-001A	IC HOLDER	1		
	81	LV31908-002A	LED HOLDER	1	002A-ABS 777D	
	82	----------	JEM MD UNIT	1		
	83	E75303-003	SHIELD TAPE	2		
	84	LV30225-011A	SPACER	1		
	85	QYSBSG3010E	T.SCREW	2	FOR VOL SELE	UB,UT,US
	86	QMF51E2-R63-J1	FUSE	1	F9008	UB,UT,US
	87	LV32158-006A	UT LABEL	1		UT

CD changer mechanism assembly and parts list



■ Parts list(CD changer mechanism)

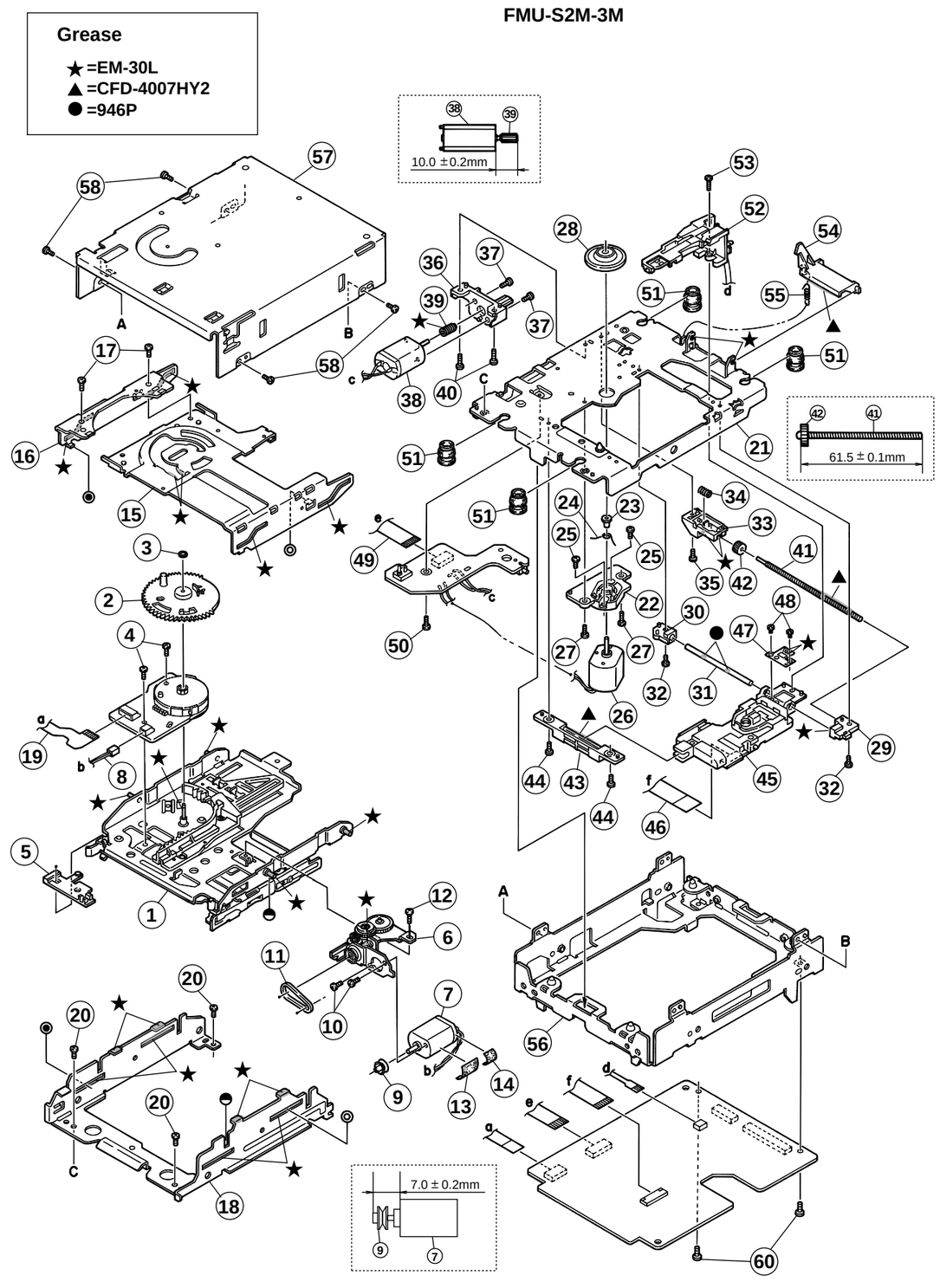
Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV20581-001A	CHASSIS UNIT	1		
	2	RF-500TB-12560	MOTOR	2		
	3	VKS5548-001	MOTOR PULLEY	2		
	4	QYSPSP2603Z	SCREW	4		
	5	LV31586-001A	SELECT GEAR	1		
	6	LV41427-001A	SELECT SPRING	1		
	7	LV20588-001A	GEAR BASE UNIT	1		
	8	QYSDST2606Z	SCREW	3		
	9	LV41431-001A	BELT	2		
	10	LV20586-001A	SUB CHAS. UNIT	1		
	11	OPTIMA-725A1	CD PICK UNIT	1		
	12	LV32013-003A	RACK ARM	1		
	13	QYSPSPT1720M	MINI SCREW	2		
	14	LV31744-001A	P.S.SPRING	1		
	15	QYSPSGT1425M	TAP SCREW	1		
	16	VKS1161-005	T.MECHA CHASSIS	1		
	17	LV31745-001A	TURN TABLE ASSY	1		
	18	QAR0123-001	SPINDLE MOTOR	1		
	19	VKZ4743-001	SPECIAL SCREW	2		
	20	WFM214025	WASHER	1		
	21	VKS5556-001	S.S. GEAR	1		
	22	VKS5557-001	F.M. GEAR	1		
	23	PPN-13KA10C	MOTOR	1		
	24	VWE292-07AZAZ	UL VINYL WIRE	1		
	25	VWE290-08AZAZ	WIRE	1		
	26	VKS5558-001	MIDDLE GEAR	1		
	27	VKM3904-001	SHAFT HOLDER	1		
	28	VKZ4248-204	MINI TAP SCREW	1		
	29	QYSPSPL2004Z	SCREW	1		
	30	LVB30006-001A	FPC	1		
	31	LV41424-001A	SPECIAL SCREW	3		
	32	LV41659-001A	INSULATOR	3		
	33	LV31799-001A	CLAMPER UNIT	1		
	34	QYSBSF2608Z	T.SCREW	3		
	35	LV20594-001A	SIDE(R) UNIT	1		
	36	QYSDST2606Z	SCREW	3		
	37	LV31575-001A	CLICK SPRING	1		
	38	LV10308-001A	SIDE BKT(L)	1		
	39	QYSBSF2608Z	T.SCREW	1		
	40	QYSDST2606Z	SCREW	2		
	41	LV32067-001A	FLAP BASE UNIT	1		
	42	LV20590-001A	TRAY UNIT	3		
	43	LV10309-001A	TOP COVER	1		
	44	QYSBSF2608Z	T.SCREW	4		
	45	LV41429-002A	ROD	2		
	46	QYSDST2606Z	SCREW	5		
	47	VKZ4781-002	SCREW SHAFT	1		

MD mechanism assembly and parts list

Block No. M 3 M M

FMU-S2M-3M



■ Parts list(MD mechanism)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV20548-007A	LOADING ASSY	1		
	2	LV31472-002A	CAM GEAR	1		
	3	QYWDL1230252	SLIT WASHER	1		
	4	LV41477-001A	MINI TAP SCREW	2	CAM SW PWB	
	5	LV32168-001A	WIRE HOLDER	1		
	6	LV31710-002A	L.MOTOR ASSY	1		
	7	QAR0144-001	MOTOR	1		
	8	WJM0117-003A	E-SI C WIRE C-F	1		
	9	LV41341-001A	MOTOR PULLEY	1		
	10	QYSPSPT2020M	MINI SCREW	2	LOAD.MOTOR	
	11	LV41342-001A	BELT	1		
	12	LV41477-001A	MINI TAP SCREW	1	L.MOTOR BKT.	
	13	LV30225-068A	SPACER	1		
	14	LV30225-085A	SPACER	1		
	15	LV20543-002A	SLIDE BASE R	1		
	16	LV31483-001A	SLIDE BASE L	1		
	17	LV41477-001A	MINI TAP SCREW	2	SLIDE BASE	
	18	LV10286-002A	LOAD.MECHA BASE	1		
	19	LVB40003-001A	FPC CABLE	1		
	20	LV41477-001A	MINI TAP SCREW	3	L.MECHA BASE	
	21	LV31709-003A	TM.CHASSIS ASSY	1		
	22	LV20545-001A	SP.MOTOR BASE	1		
	23	LE40515-001A	COLLAR	1		
	24	LE40516-001A	SPRING	1		
	25	QYSPSPU1720N	SCREW	2	SP.MOTOR	
	26	FF-110PH-08280	SP.MOTOR	1		
	27	LV41477-001A	MINI TAP SCREW	2	SP.MOTOR BASE	
	28	LE30470-202A	T.TABLE ASSY	1		
	29	LV41343-001A	SHAFT HOLDER R	1		
	30	LV41344-002A	SHAFT HOLDER F	1		
	31	VKH5803-001	GUIDE SHAFT	1		
	32	LV41477-001A	MINI TAP SCREW	2	SHAFT HOLDER	
	33	LV31484-001A	T.SPRING HOLDER	1		
	34	LV41350-001A	COM.SPRING	1		
	35	LV41477-001A	MINI TAP SCREW	1	T.SP.HOLDER	
	36	LV31485-001A	FEED MOTOR BKT.	1		
	37	QYSPSPT2025N	MINI SCREW	2	FEED MOTOR	
	38	QAR0144-001	MOTOR	1	(FEED MOTOR)	
	39	LV41345-001A	FEED WORM	1		
	40	LV41477-001A	MINI TAP SCREW	2	FEED MOTOR BKT.	
	41	LV41346-001A	SCREW SHAFT	1		
	42	LV41347-001A	S.SHAFT GEAR	1		
	43	LV31486-001A	PICK UP GUIDE	1		
	44	LV41477-001A	MINI TAP SCREW	2	P-UP GUIDE	
	45	KMS-260B1	MD PICK UNIT	1		
	46	LVB30007-001A	FPC CABLE	1		
	47	LV41348-001A	RACK SPRING	1		
	48	QYSPSPT1414M	MINI SCREW	2	RACK SPRING	

■ Parts list(MD mechanism)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	49	WJT0042-001A	E-CARD WIRE	1		
	50	LV41477-001A	MINI TAP SCREW	1	T.MECHA PWB	
	51	LV40761-003A	INSULATOR	4		
	52	QAH0039-002	MD HEAD	1		
	53	QYSPSPT1740N	MINI SCREW	1	MD HEAD	
	54	LV31487-002A	HEAD LIFTER	1		
	55	LV41349-001A	H.LIFTER SPRING	1		
	56	LV10284-002A	SINGLE FRAME	1		
	57	LV10285-003A	MECHA COVER	1		
	58	LV41477-001A	MINI TAP SCREW	4	MECHA COVER	
	59	LV30225-068A	SPACER	1		
	60	VKZ4539-024	MINI SCREW	2	SERVO PWB	
	61	LV30225-096A	SPACER	1		

■ **Electrical parts list(Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN301	QGB2510J1-04	CONNECTOR		
	CN302	QGB1214J1-18S	CONNECTOR		
	CN303	QGB1214J1-18S	CONNECTOR		
	CN304	QGB2510J1-12	CONNECTOR		
	CN394	QGB2510K2-12	CONNECTOR		
	CN511	QGF1016C1-21	CONNECTOR		
	CN602	QGB1216J1-06S	CONNECTOR		
	CN603	QGA2001F1-02	2P CONNECTOR		
	CN661	QGF1016F3-19	CONNECTOR		
	CN691	QGA2501C1-03	3P CONNECTOR		
	CN692	QGB1216K1-06S	CONNECTOR		
	CN911	QGA2501C1-08	8P CONNECTOR		
	CN912	QGB2510J1-14	CONNECTOR		
	CN913	QGB1214J1-14S	CONNECTOR		
	CN914	QGB2510J1-09	CONNECTOR		
	CN922	QGB2510K2-14	CONNECTOR		
	CN923	QGB1214K1-14S	CONNECTOR		
	C1001	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C1002	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C1003	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1007	QCSB1HK-3R3Y	C CAPACITOR	3.3PF 10% 50V	
	C1008	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1010	QTE1H28-475Z	E CAPACITOR		
	C1011	QTE1H28-225Z	E CAPACITOR		
	C1012	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V	
	C1020	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C1021	QTE1H28-476Z	E CAPACITOR		
	C1022	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C1101	QDGB1HK-102Y	C CAPACITOR		
	C1301	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C1302	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C1304	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2001	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C2002	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C2003	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2007	QCSB1HK-3R3Y	C CAPACITOR	3.3PF 10% 50V	
	C2008	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2010	QTE1H28-475Z	E CAPACITOR		
	C2011	QTE1H28-225Z	E CAPACITOR		
	C2012	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V	
	C2020	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C2021	QTE1H28-476Z	E CAPACITOR		
	C2022	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C2101	QDGB1HK-102Y	C CAPACITOR		
	C2301	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C2302	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2304	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3001	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C3004	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3005	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C3010	QETN1HM-224Z	E CAPACITOR	.22MF 20% 50V	
	C3011	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C3012	QETN1VM-107Z	E CAPACITOR	100MF 20% 35V	
	C3013	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3014	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3015	QETN1VM-107Z	E CAPACITOR	100MF 20% 35V	
	C3016	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C3017	QETN1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C3103	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C3201	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C3301	QEZ0428-228	E.CAPACITOR	2200MF	
	C3302	QEZ0428-228	E.CAPACITOR	2200MF	
	C3303	QFLC2AJ-103Z	M.CAPA. I.M	.010MF 5% 100V	

⚠	Item	Parts number	Parts name	Remarks	Area
	C3304	QFLC2AJ-103Z	M.CAPA. I.M	.010MF 5% 100V	
	C6101	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6103	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6104	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6105	QTE1H28-225Z	E CAPACITOR		
	C6106	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6107	QER61HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6110	QFLM1HJ-183Z	M CAPACITOR	.018MF 5% 50V	
	C6111	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C6112	QFVF1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C6113	QFVF1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C6114	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C6115	QTE1H28-226Z	E CAPACITOR		
	C6116	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V	
	C6117	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C6118	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C6119	QFLM1HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C6123	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C6135	QCBB1HK-222Y	C CAPA IM	2200PF 10% 50V	
	C6141	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C6201	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6203	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6204	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6205	QTE1H28-225Z	E CAPACITOR		
	C6206	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6207	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6210	QFLM1HJ-183Z	M CAPACITOR	.018MF 5% 50V	
	C6211	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C6212	QFVF1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C6213	QFVF1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C6214	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C6215	QTE1H28-226Z	E CAPACITOR		
	C6216	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V	
	C6217	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C6218	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C6219	QFLM1HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	C6223	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C6235	QCBB1HK-222Y	C CAPA IM	2200PF 10% 50V	
	C6241	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C6304	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C6305	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C6306	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C6307	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C6308	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C6309	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C6310	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C6311	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C6314	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C6315	QEKC1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9401	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9402	QDYB1CM-103Y	C.CAPACITOR		
	C9403	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9411	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C9501	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C9502	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C9601	QDYB1CM-103Y	C.CAPACITOR		
	C9602	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9604	QDYB1CM-103Y	C.CAPACITOR		
	C9605	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9606	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C9701	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C9704	QFLC1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C9705	QETM1EM-688	E CAPACITOR	6800MF 20% 25V	

■ **Electrical parts list(Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C9708	QDYB1CM-103Y	C.CAPACITOR		
	C9709	QFZ0160-223Z	PP CAPA IM	.022MF	
	C9801	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C9804	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C9805	QETM1VM-228	E.CAPACITOR	2200MF 20% 35V	
	C9901	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	D1001	1SS133-T2	SI DIODE		
	D1301	1SS133-T2	SI DIODE		
	D2001	1SS133-T2	SI DIODE		
	D2301	1SS133-T2	SI DIODE		
	D3001	MTZJ4.3B-T2	ZENER DIODE		
	D3002	1SS133-T2	SI DIODE		
	D3003	MTZJ2.4B-T2	Z.DIODE I.M		
⚠	D3301	1N5402M-20	DIODE		
⚠	D3302	1N5402M-20	DIODE		
⚠	D3303	1N5402M-20	DIODE		
⚠	D3304	1N5402M-20	DIODE		
	D6306	MTZJ5.1B-T2	ZENER DIODE		
	D6307	1SS133-T2	SI DIODE		
	D6308	MTZJ11A-T2	Z.DIODE I.M		
	D6309	1SS133-T2	SI DIODE		
	D6310	1SS133-T2	SI DIODE		
	D6311	1SS133-T2	SI DIODE		
	D9401	MTZJ6.8C-T2	Z DIODE I/M		
	D9501	1SS133-T2	SI DIODE		
	D9503	MTZJ5.1C-T2	ZENER DIODE		
	D9504	1SS133-T2	SI DIODE		
	D9601	MTZJ10C-T2	Z.DIODE I.M		
	D9602	MTZJ6.2C-T2	Z DIODE I/M		
⚠	D9701	1N4003S-T5	SI DIODE		
⚠	D9702	1N4003S-T5	SI DIODE		
⚠	D9703	1N4003S-T5	SI DIODE		
⚠	D9704	1N4003S-T5	SI DIODE		
⚠	D9705	1N4003S-T5	SI DIODE		
⚠	D9706	1N4003S-T5	SI DIODE		
⚠	D9707	1N4003S-T5	SI DIODE		
⚠	D9708	1N4003S-T5	SI DIODE		
	D9709	1SS133-T2	SI DIODE	U ONLY	
	D9710	1SS133-T2	SI DIODE	U ONLY	
⚠	D9801	1N4003S-T5	SI DIODE		
⚠	D9802	1N4003S-T5	SI DIODE		
⚠	D9803	1N4003S-T5	SI DIODE		
⚠	D9804	1N4003S-T5	SI DIODE		
	D9901	MTZJ4.3B-T2	ZENER DIODE		
⚠	D9902	1N4003S-T5	SI DIODE		
⚠	D9903	1N4003S-T5	SI DIODE		
⚠	D9904	1N4003S-T5	SI DIODE		
	D9910	1N4003S-T5	SI DIODE	+10V	
	EP301	QNZ0136-001Z	EARTH PLATE		
	EP971	QNZ0136-001Z	EARTH PLATE		
⚠	IC301	STK402-030	IC		
	IC671	TDA7439	IC		
	IC672	NJM4580D	IC		
	IC673	TC4066BP/N/	IC		
	IC674	TC74HC02AP	IC		
	J3001	QNB0010-001	SPK TERMINAL		
	J3101	QNS0072-001	HEADPHONE JACK		
	J3102	QNS0072-001	HEADPHONE JACK		
	J6301	QNN0365-001	PIN JACK		
	J6310	GP1FA550RZ	OPT RECEIVER		
	L1001	QQLZ005-R45	INDUCTOR		
	L2001	QQLZ005-R45	INDUCTOR		
	L6141	QQR0590-001	FILTER		
	L6241	QQR0590-001	FILTER		
	L6801	QQL231K-4R7Y	INDUCTOR		
	O1001	KTA1268/GL/-T	TRANSISTOR		
	Q1002	2SC3576-JVC-T	TRANSISTOR I/M		
	O1101	2SC3576-JVC-T	TRANSISTOR I/M		
	O1301	2SC2785/FE/-T	TRANSISTOR		
	O2001	KTA1268/GL/-T	TRANSISTOR		
	O2002	2SC3576-JVC-T	TRANSISTOR I/M		
	O2101	2SC3576-JVC-T	TRANSISTOR I/M		
	O2301	2SC2785/FE/-T	TRANSISTOR		
	O3001	KTD863/Y/-T	TRANSISTOR		
	O3002	2SK301/PQ/-T	TRANSISTOR(FET)		
	O3003	KRC110M-T	TR I/M		
	O3004	2SA1175/FE/-T	TRANSISTOR		
	O3005	2SC2785/FE/-T	TRANSISTOR		
	O3010	KRA104M-T	D.TR.I.M		
	O3011	KRC104M-T	D.TR.I.M		
	Q3012	KRC102M-T	D.TRANSISTOR		
	Q3201	KRA102M-T	D.TRANSISTOR		
	O6301	2SC3576-JVC-T	TRANSISTOR I/M		
	O6302	2SC3576-JVC-T	TRANSISTOR I/M		
	O6303	KRC104M-T	D.TR.I.M		
	Q6304	2SC2785/FE/-T	TRANSISTOR		
	O6305	KTA1273/Y/-T	TRANSISTOR		
	O6306	KRC104M-T	D.TR.I.M		
	O6307	KRA104M-T	D.TR.I.M		
	O6308	2SC2785/FE/-T	TRANSISTOR		
	Q6320	KRA104M-T	D.TR.I.M		
	O6321	KRC107M-T	D.TR.I.M		
⚠	O9401	2SD1913/RS/	TRANSISTOR *		
	O9501	KRC104M-T	D.TR.I.M		
	O9502	KRC107M-T	D.TR.I.M		
	Q9503	KRC104M-T	D.TR.I.M		
	O9601	2SC2785/FE/-T	TRANSISTOR		
	O9602	2SC2785/FE/-T	TRANSISTOR		
	Q9603	KRA107M-T	D.TR.I.M		
	O9604	KRC107M-T	D.TR.I.M		
	RY301	QSK0057-001	RELAY		
	R1003	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	
⚠	R1006	QRT01DJ-R33X	UNF.MF.RES.I/M	5% 1/1W	
⚠	R1007	QRT01DJ-R33X	UNF.MF.RES.I/M	5% 1/1W	
	R1009	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
⚠	R1010	QRJ146J-4R7X	UNF C.RES I/M	4.7 5% 1/4W	
⚠	R1011	QRZ9043-4R7X	F.RES. I.M	4.7 1/0W	
	R1013	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1014	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R1015	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R1016	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R1017	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R1018	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1019	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R1020	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
⚠	R1030	QRJ146J-751X	UNF C.RES I/M	750 5% 1/4W	
	R1031	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R1101	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1102	QRJ146J-681X	UNF C.RES I/M	680 5% 1/4W	
⚠	R1103	QRL01DJ-122X	OMF RESISTOR	1.2K 5% 1/1W	
	R1201	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R1302	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R1303	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1304	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R1305	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	

■ **Electrical parts list(Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R1306	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R1308	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1309	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R2003	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	
⚠	R2006	QRT01DJ-R33X	UNF.MF.RES.I/M	5% 1/1W	
⚠	R2007	QRT01DJ-R33X	UNF.MF.RES.I/M	5% 1/1W	
	R2009	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
⚠	R2010	QRJ146J-4R7X	UNF C.RES I/M	4.7 5% 1/4W	
⚠	R2011	QRZ9043-4R7X	F.RES. I.M	4.7 1/0W	
	R2013	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R2014	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R2015	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2016	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R2017	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R2018	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R2019	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R2020	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
⚠	R2030	QRJ146J-751X	UNF C.RES I/M	750 5% 1/4W	
	R2031	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R2101	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2102	QRJ146J-681X	UNF C.RES I/M	680 5% 1/4W	
⚠	R2103	QRL01DJ-122X	OMF RESISTOR	1.2K 5% 1/1W	
	R2201	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R2301	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2302	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R2303	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R2304	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R2305	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R2306	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R2308	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R2309	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
⚠	R3001	QRZ9005-101X	F.RES I/M	100 1/0W	
	R3004	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R3005	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R3008	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R3009	QRE141J-105Y	C RESISTOR	1.0M 5% 1/4W	
	R3010	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R3011	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3012	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3013	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R3014	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R3015	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R3016	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
⚠	R3035	QRJ146J-101X	UNF C.RES I/M	100 5% 1/4W	
⚠	R3036	QRJ146J-101X	UNF C.RES I/M	100 5% 1/4W	
	R3037	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3038	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3040	QRJ146J-101X	UNF C.RES I/M	100 5% 1/4W	
	R3103	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R3201	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R3301	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R3302	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R6105	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R6106	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R6107	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R6108	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R6109	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R6110	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6111	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6112	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6114	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R6118	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R6125	QRE141J-113Y	C RESISTOR	11K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R6127	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R6128	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6131	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R6132	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R6133	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R6135	QRE141J-133Y	C RESISTOR	13K 5% 1/4W	
	R6139	QRE141J-513Y	C RESISTOR	51K 5% 1/4W	
	R6205	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R6206	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R6207	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R6208	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R6209	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R6210	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6211	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6212	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6214	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R6218	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R6225	QRE141J-113Y	C RESISTOR	11K 5% 1/4W	
	R6227	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R6228	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R6231	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R6232	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R6233	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R6235	QRE141J-133Y	C RESISTOR	13K 5% 1/4W	
	R6239	QRE141J-513Y	C RESISTOR	51K 5% 1/4W	
	R6303	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R6304	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R6305	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R6306	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R6307	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R6311	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R6324	QRJ146J-101X	UNF C.RES I/M	100 5% 1/4W	
	R6327	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R6329	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R6332	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6333	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
⚠	R6334	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6337	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6338	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6340	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6341	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6342	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6343	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6344	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R6345	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
⚠	R9401	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R9402	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R9404	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R9410	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R9411	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R9412	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R9502	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R9503	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R9504	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R9601	QRZ9005-470X	F.RES I/M	47 1/0W	
	R9602	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
⚠	R9603	QRJ146J-221X	UNF C.RES I/M	220 5% 1/4W	
	R9604	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R9605	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R9606	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R9701	QRE141J-103Y	C RESISTOR	U ONLY	
	R9702	QRE141J-103Y	C RESISTOR	U ONLY	
	R9703	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	

■ **Electrical parts list(Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R9801	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R9901	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R9902	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R9903	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R9904	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R9905	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R9906	QRE141J-363Y	C RESISTOR	36K 5% 1/4W	
	R9910	QRJ146J-392X	UNF C.RES I/M	3.9K 5% 1/4W	
	W 121	WJK0016-003A	E-SI C WIRE C-B		
	W 301	WJK0015-004A	E-SI C WIRE C-B		
	W 302	QUM025-15Z3Z3	PARA RIBON WIRE		
	W 601	QJP001-031201	SHI CR C-B WIRE		
	W 912	QUM026-24Z3Z3	PARA RIBON WIRE		

■ **Electrical parts list(Micon board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN391	QGB2510K2-04	CONNECTOR		
	CN392	QGB1214K1-18S	CONNECTOR		
	CN393	QGB1214K1-18S	CONNECTOR		
	CN701	QGB2011L1-14	B TO B CONNECTO		
	CN791	QGB2011M4-14	CONNECTOR		
	CN801	QGF1210G1-23	FFC CONNECTOR		
	CN851	QGF1005F2-28	FFC/FPC CONNE		
	CN891	QGF1205F1-23	CONNECTOR		
	CN924	QGB2510K2-09	CONNECTOR		
	C7011	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C7012	NCB21HK-102X	C CAPACITOR		
	C8001	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C8002	NCS21HJ-330X	C CAPACITOR		
	C8003	NCS21HJ-180X	C CAPACITOR		
	C8004	NCB21HK-103X	C CAPACITOR		
	C8005	NCB21HK-103X	C CAPACITOR		
	C8006	NCB21HK-103X	C CAPACITOR		
	C8007	NCS21HJ-220X	C CAPACITOR	EXCEPT DO	
	C8008	NCS21HJ-220X	C CAPACITOR	EXCEPT DO	
	C8017	NCB21HK-102X	C CAPACITOR		
	C8018	NCB21HK-102X	C CAPACITOR		
	C8020	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C8021	QETN0JM-108Z	E CAPACITOR	1000MF 20% 6.3V	
	C8023	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C8030	NCB21HK-103X	C CAPACITOR		
	C8031	NCB21HK-103X	C CAPACITOR		
	C8111	NCB21HK-102X	C CAPACITOR		
	C8201	NCB21HK-103X	C CAPACITOR		
	C8202	NCB21HK-103X	C CAPACITOR		
	C8211	NCB21HK-102X	C CAPACITOR		
	C8301	NCF21AZ-475X	C CAPACITOR		
	C8302	NCF21AZ-475X	C CAPACITOR		
	C8303	NCF21AZ-475X	C CAPACITOR		
	C8304	NCF21AZ-475X	C CAPACITOR		
	C8305	NCB21CK-105X	C CAPACITOR		
	C8306	NCB21CK-105X	C CAPACITOR		
	C8307	NCB21CK-105X	C CAPACITOR		
	C8308	NCB21CK-105X	C CAPACITOR		
	C8309	NCB21CK-105X	C CAPACITOR		
	C8311	NCB21HK-223X	C CAPACITOR		
	C8401	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C8402	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C8403	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C8501	QCZ0202-155Z	ML C CAPA I/M	1.5MF	
	C8502	NCS21HJ-330X	C CAPACITOR		
	C8503	NCS21HJ-330X	C CAPACITOR		
	C8504	NCB21HK-103X	C CAPACITOR		
	C8505	NCB21HK-102X	C CAPACITOR		
	C8506	QEKC1AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C8510	QEKC1AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C9101	QDVB1EZ-103Y	C CAPACITOR		
	C9102	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C9103	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C9111	QDVB1EZ-103Y	C CAPACITOR		
	C9112	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C9201	QDVB1EZ-103Y	C CAPACITOR		
	C9202	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C9301	QDVB1EZ-103Y	C CAPACITOR		
	C9302	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	D7001	SLR-342VC-T	LED		
	D8002	1SS355-X	DIODE		
	D8003	1SS355-X	DIODE		
	D8007	1SS355-X	DIODE		

⚠	Item	Parts number	Parts name	Remarks	Area
	D8008	1SS355-X	DIODE		
	D8009	1SS355-X	DIODE		
	D8010	1SS355-X	DIODE		
	D8011	1SS355-X	DIODE		
	D8401	NSTM515AS	LED	FULL COLOR	
	D8403	MA3075/H/-X	ZENER DIODE		
	D8404	MA3075/H/-X	ZENER DIODE		
	D8409	NSTM515AS	LED	FULL COLOR	
	D8411	MA3075/H/-X	ZENER DIODE		
	D8412	MA3075/H/-X	ZENER DIODE		
	D8413	1SS355-X	DIODE		
	D8414	1SS355-X	DIODE		
	D8417	1SS355-X	DIODE		
	D8418	1SS355-X	DIODE		
	D8501	1SS355-X	DIODE		
	D8502	1SS355-X	DIODE		
	D8503	1SS355-X	DIODE		
	D8504	1SS355-X	DIODE		
	D8601	SLA-360LT3F	LED	STBY RED	
	D8602	SLA-360MT3F	LED	P-ON GREEN	
	D9101	MTZJ6.8B-T2	NER DIODE		
	D9102	MTZJ6.8C-T2	Z DIODE I/M		
	D9111	MTZJ6.2C-T2	Z DIODE I/M		
	D9112	MTZJ7.5C-T2	ZENER DIODE		
	D9201	MTZJ11B-T2	ZENER DIODE		
	D9203	1SS133-T2	SI DIODE		
	D9301	MTZJ13B-T2	Z DIODE		
	IC701	GP1U261X	IR DETECT UNIT		
	IC801	MN101C12GDX1	IC		
	IC851	MN101C12GDW	IC		
	JS821	QSW0862-001	ROTALY SW		
	LS701	QSW0828-001	LEVER SWITCH		
	O7001	DTC114EKA-X	TRANSISTOR		
	Q8001	DTC114EKA-X	TR		
	O8002	DTA144EKA-X	TRANSISTOR		
	O8410	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8411	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8412	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8416	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8417	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8418	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8419	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8420	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8421	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O8601	DTC114EKA-X	TR		
	O8602	DTC114EKA-X	TR		
⚠	O9101	2SD2394/EF/	TRANSISTOR		
⚠	O9111	2SD2394/EF/	TRANSISTOR		
⚠	O9201	2SD2394/EF/	TRANSISTOR		
	O9203	KRA107M-T	D.TR.I.M		
	O9204	KRC107M-T	D.TR.I.M		
⚠	Q9301	2SD2394/EF/	TRANSISTOR		
	O9302	KRA107M-T	D.TR.I.M		
	R7001	NRSA02J-102X	MG RESISTOR		
	R7002	NRSA02J-102X	MG RESISTOR		
	R7003	NRSA02J-122X	MG RESISTOR		
	R7004	NRSA02J-152X	MG RESISTOR		
	R7005	NRSA02J-222X	MG RESISTOR		
	R7006	NRSA02J-272X	MG RESISTOR		
	R7007	NRSA02J-392X	MG RESISTOR		
	R7010	NRS181J-221X	MG RESISTOR		
	R7020	NRSA02J-102X	MG RESISTOR		
	R7101	NRSA02J-102X	MG RESISTOR		

■ **Electrical parts list(Micon board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	R7102	NRSA02J-102X	MG RESISTOR		
	R7103	NRSA02J-122X	MG RESISTOR		
	R7104	NRSA02J-152X	MG RESISTOR		
	R7105	NRSA02J-222X	MG RESISTOR		
	R7106	NRSA02J-272X	MG RESISTOR		
	R8001	NRSA02J-222X	MG RESISTOR		
	R8002	NRSA02J-222X	MG RESISTOR		
	R8003	NRSA02J-222X	MG RESISTOR		
	R8004	NRSA02J-222X	MG RESISTOR		
	R8005	NRSA02J-102X	MG RESISTOR		
	R8006	NRSA02J-102X	MG RESISTOR		
	R8007	NRSA02J-102X	MG RESISTOR		
	R8008	NRSA02J-105X	MG RESISTOR		
	R8011	NRSA02J-102X	MG RESISTOR		
	R8012	NRSA02J-102X	MG RESISTOR		
	R8013	NRSA02J-102X	MG RESISTOR		
	R8014	NRSA02J-102X	MG RESISTOR		
	R8015	NRSA02J-222X	MG RESISTOR		
	R8016	NRSA02J-102X	MG RESISTOR		
	R8017	NRSA02J-101X	MG RESISTOR		
	R8019	NRSA02J-101X	MG RESISTOR		
	R8020	NRSA02J-102X	MG RESISTOR		
	R8021	NRSA02J-102X	MG RESISTOR		
	R8024	NRSA02J-222X	MG RESISTOR		
	R8025	NRSA02J-102X	MG RESISTOR		
	R8026	NRSA02J-102X	MG RESISTOR		
	R8027	NRSA02J-101X	MG RESISTOR		
	R8028	NRSA02J-101X	MG RESISTOR		
	R8029	NRSA02J-101X	MG RESISTOR		
	R8030	NRSA02J-101X	MG RESISTOR		
	R8031	NRSA02J-101X	MG RESISTOR		
	R8032	NRSA02J-101X	MG RESISTOR		
	R8033	NRSA02J-102X	MG RESISTOR		
	R8034	NRSA02J-102X	MG RESISTOR		
	R8035	NRSA02J-222X	MG RESISTOR		
	R8036	NRSA02J-222X	MG RESISTOR		
	R8037	NRSA02J-222X	MG RESISTOR		
	R8038	NRSA02J-222X	MG RESISTOR		
	R8039	NRSA02J-222X	MG RESISTOR		
	R8040	NRSA02J-222X	MG RESISTOR		
	R8041	NRSA02J-222X	MG RESISTOR		
	R8042	NRSA02J-222X	MG RESISTOR		
	R8043	NRSA02J-222X	MG RESISTOR		
	R8044	NRSA02J-222X	MG RESISTOR		
	R8045	NRSA02J-222X	MG RESISTOR		
	R8046	NRSA02J-222X	MG RESISTOR		
	R8047	NRSA02J-222X	MG RESISTOR		
	R8048	NRSA02J-102X	MG RESISTOR		
	R8049	NRSA02J-102X	MG RESISTOR		
	R8050	NRSA02J-102X	MG RESISTOR		
	R8051	NRSA02J-222X	MG RESISTOR		
	R8052	NRSA02J-473X	MG RESISTOR		
	R8053	NRSA02J-222X	MG RESISTOR		
	R8054	NRSA02J-102X	MG RESISTOR		
	R8055	NRSA02J-102X	MG RESISTOR		
	R8056	NRSA02J-102X	MG RESISTOR		
	R8057	NRSA02J-102X	MG RESISTOR		
	R8058	NRSA02J-102X	MG RESISTOR		
	R8059	NRSA02J-102X	MG RESISTOR		
	R8060	NRSA02J-103X	MG RESISTOR		
	R8062	NRSA02J-102X	MG RESISTOR		
	R8063	NRSA02J-103X	MG RESISTOR		
	R8064	NRSA02J-223X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R8065	NRSA02J-223X	MG RESISTOR		
	R8066	NRSA02J-223X	MG RESISTOR		
	R8067	NRSA02J-223X	MG RESISTOR		
	R8068	NRSA02J-223X	MG RESISTOR		
	R8070	NRSA02J-113X	MG RESISTOR		
	R8071	NRSA02J-103X	MG RESISTOR		
	R8072	NRSA02J-103X	MG RESISTOR		
	R8077	NRSA02J-222X	MG RESISTOR		
	R8078	NRSA02J-103X	MG RESISTOR		
	R8080	NRS181J-470X	MG RESISTOR		
	R8082	NRSA02J-221X	MG RESISTOR	E	
	R8084	NRSA02J-221X	MG RESISTOR	U	
	R8090	NRSA02J-473X	MG RESISTOR		
	R8094	NRSA02J-103X	MG RESISTOR		
	R8101	NRSA02J-102X	MG RESISTOR		
	R8102	NRSA02J-102X	MG RESISTOR		
	R8103	NRSA02J-122X	MG RESISTOR		
	R8104	NRSA02J-152X	MG RESISTOR		
	R8105	NRSA02J-222X	MG RESISTOR		
	R8106	NRSA02J-272X	MG RESISTOR		
	R8111	NRSA02J-103X	MG RESISTOR		
	R8112	NRSA02J-222X	MG RESISTOR		
	R8201	NRSA02J-102X	MG RESISTOR		
	R8202	NRSA02J-102X	MG RESISTOR		
	R8203	NRSA02J-103X	MG RESISTOR		
	R8204	NRSA02J-103X	MG RESISTOR		
	R8211	NRSA02J-103X	MG RESISTOR		
	R8212	NRSA02J-222X	MG RESISTOR		
	R8301	NRSA02J-364X	MG RESISTOR		
	R8302	QVP0079-224Z	V.RES. I.M		
	R8303	NRSA02J-624X	MG RESISTOR		
	R8305	NRSA02J-304X	MG RESISTOR		
	R8306	NRSA02J-304X	MG RESISTOR		
	R8307	NRSA02J-304X	MG RESISTOR		
	R8308	NRSA02J-304X	MG RESISTOR		
	R8310	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8411	NRS181J-221X	MG RESISTOR	RED	
	R8412	NRS181J-221X	MG RESISTOR	RED	
	R8413	NRS181J-221X	MG RESISTOR	RED	
	R8416	NRS181J-271X	MG RESISTOR	BLUE	
	R8417	NRS181J-271X	MG RESISTOR	BLUE	
	R8419	NRS181J-271X	MG RESISTOR	GREEN	
	R8420	NRS181J-271X	MG RESISTOR	GREEN	
	R8433	NRS181J-221X	MG RESISTOR	RED	
	R8434	NRS181J-221X	MG RESISTOR	RED	
	R8435	NRS181J-221X	MG RESISTOR	RED	
	R8438	NRS181J-271X	MG RESISTOR	BLUE	
	R8439	NRS181J-271X	MG RESISTOR	BLUE	
	R8441	NRS181J-271X	MG RESISTOR	GREEN	
	R8442	NRS181J-271X	MG RESISTOR	GREEN	
	R8444	NRSA02J-102X	MG RESISTOR		
	R8445	NRSA02J-102X	MG RESISTOR		
	R8446	NRSA02J-102X	MG RESISTOR		
	R8447	NRSA02J-103X	MG RESISTOR		
	R8448	NRSA02J-103X	MG RESISTOR		
	R8449	NRSA02J-103X	MG RESISTOR		
	R8450	NRS181J-222X	MG RESISTOR		
	R8451	NRS181J-222X	MG RESISTOR		
	R8452	NRS181J-222X	MG RESISTOR		
	R8453	NRS181J-222X	MG RESISTOR		
	R8454	NRS181J-222X	MG RESISTOR		
	R8455	NRS181J-222X	MG RESISTOR		
	R8501	NRSA02J-105X	MG RESISTOR		

■ **Electrical parts list(Micon board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	R8502	NRSA02J-101X	MG RESISTOR		
	R8503	NRSA02J-101X	MG RESISTOR		
	R8504	NRSA02J-222X	MG RESISTOR		
	R8505	NRSA02J-222X	MG RESISTOR		
	R8506	NRSA02J-103X	MG RESISTOR		
	R8507	NRSA02J-101X	MG RESISTOR		
	R8508	NRSA02J-102X	MG RESISTOR		
	R8509	NRSA02J-222X	MG RESISTOR		
	R8510	NRSA02J-101X	MG RESISTOR		
	R8511	NRSA02J-101X	MG RESISTOR		
	R8512	NRSA02J-101X	MG RESISTOR		
	R8513	NRSA02J-101X	MG RESISTOR		
	R8514	NRSA02J-101X	MG RESISTOR		
	R8515	NRSA02J-101X	MG RESISTOR		
	R8516	NRSA02J-101X	MG RESISTOR		
	R8518	NRSA02J-101X	MG RESISTOR		
	R8519	NRSA02J-101X	MG RESISTOR		
	R8520	NRSA02J-101X	MG RESISTOR		
	R8521	NRSA02J-101X	MG RESISTOR		
	R8522	NRSA02J-101X	MG RESISTOR		
	R8523	NRSA02J-101X	MG RESISTOR		
	R8524	NRSA02J-101X	MG RESISTOR		
	R8525	NRSA02J-101X	MG RESISTOR		
	R8526	NRSA02J-222X	MG RESISTOR		
	R8527	NRSA02J-222X	MG RESISTOR		
	R8528	NRSA02J-222X	MG RESISTOR		
	R8601	NRSA02J-331X	MG RESISTOR		
	R8602	NRSA02J-121X	MG RESISTOR		
	R9101	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R9104	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
⚠	R9106	QRJ146J-1R0X	UNF C.RES I/M	1.0 5% 1/4W	
⚠	R9107	QRJ146J-1R0X	UNF C.RES I/M	1.0 5% 1/4W	
	R9112	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R9114	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
⚠	R9116	QRJ146J-1R0X	UNF C.RES I/M	1.0 5% 1/4W	
	R9201	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R9202	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R9203	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R9205	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
⚠	R9206	QRJ146J-1R0X	UNF C.RES I/M	1.0 5% 1/4W	
⚠	R9301	QRJ146J-4R7X	UNF C.RES I/M	4.7 5% 1/4W	
	R9302	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R9303	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R9305	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R9306	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	S7001	QSW0651-001Z	TACT SWITCH	CANCEL	
	S7002	QSW0651-001Z	TACT SWITCH	ENTER	
	S7003	QSW0651-001Z	TACT SWITCH	TITLE/EDIT	
	S7004	QSW0651-001Z	TACT SWITCH	HIGH SPEED CDMD	
	S7005	QSW0651-001Z	TACT SWITCH	REC PAUSE	
	S7006	QSW0651-001Z	TACT SWITCH	LONG MODE	
	S7007	QSW0651-001Z	TACT SWITCH	REC MODE	
	S7101	QSW0651-001Z	TACT SWITCH	MD EJECT	
	S7102	QSW0651-001Z	TACT SWITCH	STOP	
	S7103	QSW0651-001Z	TACT SWITCH	CD PLAY	
	S7104	QSW0651-001Z	TACT SWITCH	MD PLAY	
	S7105	QSW0651-001Z	TACT SWITCH	TUNER	
	S7106	QSW0651-001Z	TACT SWITCH	LINE	
	S8101	QSW0651-001Z	TACT SWITCH	DISC	
	S8102	QSW0651-001Z	TACT SWITCH	CD1 EJECT	
	S8103	QSW0651-001Z	TACT SWITCH	CD2 EJECT	
	S8104	QSW0651-001Z	TACT SWITCH	CD3 EJECT	
	S8105	QSW0651-001Z	TACT SWITCH	MENU	

⚠	Item	Parts number	Parts name	Remarks	Area
	S8106	QSW0651-001Z	TACT SWITCH	POWER	
	W 693	QJB001-021602	C-B WIRE ASSY		
	X8001	QAX0494-001Z	RESONATOR I.M		
	X8002	QAX0401-001	CRYSTAL	EXCEPT DO	
	X8501	QAX0416-001Z	CERA LOCK		

■ **Electrical parts list(Trans board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN901	QGA2501F1-03	CONNECTOR		
⚠	FT901	QNG0003-001Z	FUSE CLIP	FOR F9101	
⚠	FT902	QNG0003-001Z	FUSE CLIP	FOR F9101	
⚠	FT903	QNG0003-001Z	FUSE CLIP	FOR F9102	
⚠	FT904	QNG0003-001Z	FUSE CLIP	FOR F9102	
⚠	FT905	QNG0003-001Z	FUSE CLIP	FOR F9103	
⚠	FT906	QNG0003-001Z	FUSE CLIP	FOR F9103	
⚠	FT981	QNG0003-001Z	FUSE CLIP	FOR F9008	UB,UT,US
⚠	FT982	QNG0003-001Z	FUSE CLIP	FOR F9008	UB,UT,US
⚠	S8001	QSW0812-001	VOLTAGE SWITCH		UB,UT,US
⚠	TB991	QNZ0079-001Z	TAB I.M		
⚠	TB992	QNZ0079-001Z	TAB I.M		

■ **Electrical parts list(Tuner board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	AT101	QNB0014-001	ANT TERMINAL		
	BK 1	LV31618-001A	SHIELD BKT		
	C 101	NCB21HK-103X	C CAPACITOR	C/M B	
	C 103	NCB21HK-223X	C CAPACITOR	C/M B	
	C 105	NCB21HK-223X	C CAPACITOR	C/M B	
	C 107	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 111	NCB21HK-473X	C CAPACITOR	C/M B	
	C 112	NDC21HJ-120X	C CAPACITOR	C/M B	
	C 121	NDC21HJ-120X	C CAPACITOR	C/M B	
	C 122	NDC21HJ-120X	C CAPACITOR	C/M B	
	C 123	NCB21HK-473X	C CAPACITOR	C/M B	
	C 126	NCS21HJ-101X	C CAPACITOR	C/M B	
	C 128	QENC1HM-474Z	NP E.CAPA I.M	.47MF 20% 50V	
	C 129	NCB21HK-102X	C CAPACITOR	C/M B	
	C 130	QEKC1AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 133	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 134	NCB21HK-222X	C CAPACITOR		
	C 135	NCB21HK-223X	C CAPACITOR	C/M B	
	C 136	QEKC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 137	NCB21HK-331X	C CAPACITOR	C/M B	
	C 139	NCB21HK-223X	C CAPACITOR	C/M B	
	C 140	NCB21HK-223X	C CAPACITOR	C/M B	
	C 141	NCB21HK-473X	C CAPACITOR	C/M B	
	C 143	NCB21HK-223X	C CAPACITOR	C/M B	
	C 144	NCB21HK-473X	C CAPACITOR	C/M B	
	C 146	QEKC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 147	QEKC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 148	QEKC1HM-224Z	E CAPACITOR	.22MF 20% 50V	
	C 149	QEKC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 150	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 156	QDGB1HK-102Y	C CAPACITOR	C/M B	
	C 157	NCB21HK-473X	C CAPACITOR	C/M B	
	C 158	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 161	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 162	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 163	NCB21HK-223X	C CAPACITOR	C/M B	
	C 164	NCB21HK-473X	C CAPACITOR	C/M B	
	C 168	QEKC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	
	C 184	QEKC1CM-107Z	E.CAPACITOR	100MF 20% 16V	
	C 185	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 186	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	CF101	QAX0419-001Z	C FILTER		
	CF102	QAX0419-001Z	C FILTER		
	CF103	QAX0519-001Z	C FILTER		
	CN111	QGB2501K2-12	CONECTOR		
	D 121	1SS133-T2	SI DIODE		
	D 123	1SS133-T2	SI DIODE		
	D 129	1SS133-T2	SI DIODE		
	IC102	LA1838	IC		
	IC121	LC72136N	IC		
	Q 102	2SC535/BC/-T	TRANSISTOR		
	O 103	2SC461/BC/-T	TRANSISTOR		
	O 121	KRA103M-T	TRANSISTOR *	FM+B	
	R 103	NRSA02J-101X	MG RESISTOR	C/M B	
	R 104	NRSA02J-272X	MG RESISTOR	C/M B	
	R 105	NRSA02J-391X	MG RESISTOR	C/M B	
	R 106	NRSA02J-102X	MG RESISTOR	C/M B	
	R 107	NRSA02J-561X	MG RESISTOR	C/M B	
	R 108	NRSA02J-332X	MG RESISTOR	C/M B	
	R 109	NRSA02J-221X	MG RESISTOR	C/M B	
	R 115	NRSA02J-104X	MG RESISTOR	C/M B	
	R 119	NRSA02J-103X	MG RESISTOR	C/M B	
	R 122	NRSA02J-472X	MG RESISTOR	C/M B	

⚠	Item	Parts number	Parts name	Remarks	Area
	R 124	NRSA02J-222X	MG RESISTOR	C/M B	
	R 126	NRSA02J-562X	MG RESISTOR	C/M B	
	R 127	NRSA02J-822X	MG RESISTOR	C/M B	
	R 128	NRSA02J-472X	MG RESISTOR	C/M B	
	R 129	NRSA02J-222X	MG RESISTOR	C/M B	
	R 130	QRZ9005-680X	F.RES I/M	68 1/0W	
	R 132	NRSA02J-393X	MG RESISTOR	C/M B	
	R 133	NRSA02J-392X	MG RESISTOR	C/M B	
	R 134	NRSA02J-102X	MG RESISTOR	C/M B	
	R 140	NRSA02J-183X	MG RESISTOR	C/M B	
	R 141	NRSA02J-102X	MG RESISTOR	C/M B	
	R 142	NRSA02J-470X	MG RESISTOR	C/M B	
	R 143	NRSA02J-562X	MG RESISTOR	C/M B	
	R 144	NRSA02J-332X	MG RESISTOR	C/M B	
	R 145	NRSA02J-103X	MG RESISTOR	C/M B	
	R 146	NRSA02J-472X	MG RESISTOR	C/M B	
	R 147	NRSA02J-332X	MG RESISTOR	C/M B	
	R 150	NRSA02J-331X	MG RESISTOR	C/M B	
	R 157	NRSA02J-682X	MG RESISTOR	C/M B	
	R 158	NRSA02J-682X	MG RESISTOR	C/M B	
	R 161	NRSA02J-102X	MG RESISTOR	C/M B	
	R 162	NRSA02J-102X	MG RESISTOR	C/M B	
	R 182	NRSA02J-103X	MG RESISTOR		
	R 183	NRSA02J-103X	MG RESISTOR		
	R 184	NRSA02J-103X	MG RESISTOR		
	RF101	QAU0124-001	FRONT END		
	T 111	QQR0796-001	COIL BLOCK		
	T 142	QQR0973-001	IFT		
	X 121	QAX0402-001	CRYSTAL		

■ **Electrical parts list(Servo board)** **Block No. 05**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 250	NCB21EK-104X	C CAPACITOR		
	C 253	NCB21EK-104X	C CAPACITOR		
	C 254	QERF0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
	C 270	NCB21CK-105X	C CAPACITOR		
	C 271	NCB21CK-105X	C CAPACITOR		
	C 272	NCB21CK-105X	C CAPACITOR		
	C 291	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C 601	NCB21HK-102X	C CAPACITOR		
	C 602	NCB21HK-102X	C CAPACITOR		
	C 603	NCB21HK-223X	C CAPACITOR		
	C 604	NCB21HK-223X	C CAPACITOR		
	C 605	NCS21HJ-271X	C CAPACITOR		
	C 606	NCS21HJ-221X	C CAPACITOR		
	C 607	NCB21HK-104X	C CAPACITOR		
	C 608	NCS21HJ-4R0X	C CAPACITOR		
	C 610	NCB21EK-563X	C CAPACITOR		
	C 611	NCB21CK-105X	C CAPACITOR		
	C 612	QER41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 613	NCB21AK-105X	C CAPACITOR		
	C 614	NCB21HK-273X	C CAPACITOR		
	C 615	NCB31HK-821X	C CAPACITOR		
	C 616	NCB31HK-272X	C CAPACITOR		
	C 617	NCB31HK-331X	C CAPACITOR		
	C 619	NCS21HJ-330X	C CAPACITOR		
	C 621	NCB21EK-104X	C CAPACITOR		
	C 622	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 623	NCF21CZ-105X	C CAPACITOR		
	C 624	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 625	NCB31CK-104X	C CAPACITOR		
	C 631	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 632	NCF21CZ-105X	C CAPACITOR		
	C 633	NCB21HK-223X	C CAPACITOR		
	C 641	NCB21HK-223X	C CAPACITOR		
	C 642	NCB21HK-222X	C CAPACITOR		
	C 643	NCB31CK-104X	C CAPACITOR		
	C 644	NCB21EK-104X	C CAPACITOR		
	C 651	NCS21HJ-8R0X	C CAPACITOR		
	C 652	NCS21HJ-8R0X	C CAPACITOR		
	C 653	NCB21CK-334X	C CAPACITOR		
	C 655	NCB31CK-104X	C CAPACITOR		
	C 656	NCB11EK-104X	C CAPACITOR		
	C 657	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 658	NCB21EK-104X	C CAPACITOR		
	C 661	NCS21HJ-471X	C CAPACITOR		
	C 663	NCB21HK-223X	C CAPACITOR		
	C 664	NCB21HK-223X	C CAPACITOR		
	C 665	NCB21CK-154X	C CAPACITOR		
	C 667	NCB21CK-474X	C CAPACITOR		
	C 669	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 673	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 676	NCB21EK-104X	C CAPACITOR		
	C 677	NCB21EK-104X	C CAPACITOR		
	C 679	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 680	NCB21EK-104X	C CAPACITOR		
	C 691	NCS21HJ-391X	C CAPACITOR		
	C 692	NCS21HJ-391X	C CAPACITOR		
	C 693	NCB21HK-682X	C CAPACITOR		
	C 694	NCB21HK-682X	C CAPACITOR		
	C 695	NCB21HK-473X	C CAPACITOR		
	C 696	NEAD1CM-106X	E.CAPACITOR		
	C 699	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 801	NCB21HK-153X	C CAPACITOR		
	C 802	NCS21HJ-471X	C CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C 811	NCS31HJ-391X	C CAPACITOR		
	C 812	NCS21HJ-391X	C CAPACITOR		
	C 813	NCS21HJ-391X	C CAPACITOR		
	C 814	NCS21HJ-391X	C CAPACITOR		
	C 815	NCB21AK-105X	C CAPACITOR		
	C 816	NCB21AK-225X	C.CAPA. C.M		
	C 821	NCF21CZ-105X	C CAPACITOR		
	C 822	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 851	QER41CM-106	E CAPACITOR	10MF 20% 16V	
	C 852	NCB21HK-103X	C CAPACITOR		
	C 853	NCB21HK-103X	C CAPACITOR		
	C 855	NCB21EK-104X	C CAPACITOR		
	C 859	NCF21CZ-105X	C CAPACITOR		
	C 860	NCF21CZ-105X	C CAPACITOR		
	CN601	QGF1016C1-21	CONNECTOR	TRAVERSE	
	CN606	QGF1016F3-07	FFC/FPC CONNE	4T I/F	
	CN610	QGB1214J1-08S	CONNECTOR	TO SW CB(CN620)	
	CN611	QGF1016F3-08	CONNECTOR	FOR JIG	
	CN620	QGB1214K1-08S	CONNECTOR	TO CN610	
	CN651	QGF1016F3-19	CONNECTOR	MAIN	
	D 291	1SS355-X	DIODE		
	D 667	MA152WA-X	DIODE		
	D 673	DA204U-X	DIODE		
	D 852	UDZS5.6B-X	Z DIODE	VZ	
	IC201	BR24C01AFV-W-X	IC	E2PROM	
	IC251	UPD780024AGKB08	IC		
	IC601	AN8849SB-W	IC	RF AMP	
	IC602	UPC393G2-W	IC	TE VDET	
	IC603	TC7S32F-X	I.C C.M	TE VDET	
	IC651	MN662748RPM	IC	DSP & DAC	
	IC652	NJM4580E-W	IC C.M.		
	IC801	LA6541-X	IC	PU DRIVE	
	IC851	LB1641	IC	ACTU MOTOR DRIV	
	IC852	LB1641	IC	CAM MOTOR DRIVE	
	K 655	NQR0007-002X	FERRITE BEADS		
	K 656	NQR0251-004X	FERRITE BEADS		
	K 657	NQR0251-004X	FERRITE BEADS		
	K 658	NQR0251-004X	FERRITE BEADS		
	L 853	QQL29BJ-100Z	INDUCTOR	L MOTOR	
	L 854	QQL29BJ-100Z	INDUCTOR	R MOTOR	
	O 291	2SB1424/QR/-X	TRANSISTOR	/P.ON	
	Q 631	2SA1037AK/RS/-X	TRANSISTOR	APC	
	O 673	DTA114EE-X	DIGITAL.TR		
	R 201	NRSA02J-103X	MG RESISTOR		
	R 251	NRSA02J-102X	MG RESISTOR		
	R 252	NRSA02J-102X	MG RESISTOR		
	R 253	NRSA02J-102X	MG RESISTOR		
	R 254	NRSA02J-102X	MG RESISTOR		
	R 255	NRSA02J-102X	MG RESISTOR		
	R 256	NRSA02J-102X	MG RESISTOR		
	R 257	NRSA02J-102X	MG RESISTOR		
	R 258	NRSA02J-102X	MG RESISTOR		
	R 259	NRSA02J-102X	MG RESISTOR		
	R 260	NRSA02J-102X	MG RESISTOR		
	R 261	NRSA63J-223X	MG RESISTOR		
	R 262	NRSA63J-223X	MG RESISTOR		
	R 263	NRSA63J-223X	MG RESISTOR		
	R 271	NRSA02J-223X	MG RESISTOR		
	R 272	NRSA02J-223X	MG RESISTOR		
	R 274	NRSA02J-223X	MG RESISTOR		
	R 276	NRSA02J-682X	MG RESISTOR		
	R 277	NRSA02J-682X	MG RESISTOR		
	R 278	NRSA63J-102X	MG RESISTOR		

■ **Electrical parts list(Servo board)** **Block No. 05**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 279	NRSA63J-102X	MG RESISTOR		
	R 280	NRSA63J-102X	MG RESISTOR		
	R 281	NRSA63J-102X	MG RESISTOR		
	R 282	NRSA02J-103X	MG RESISTOR		
	R 283	NRSA02J-101X	MG RESISTOR		
	R 284	NRSA02J-102X	MG RESISTOR		
	R 285	NRSA02J-102X	MG RESISTOR		
	R 286	NRSA02J-102X	MG RESISTOR		
	R 287	NRSA02J-103X	MG RESISTOR		
	R 288	NRSA02J-103X	MG RESISTOR		
	R 289	NRSA63J-103X	MG RESISTOR		
	R 291	NRSA02J-122X	MG RESISTOR		
	R 292	NRSA02J-103X	MG RESISTOR		
	R 293	NRSA02J-103X	MG RESISTOR		
	R 294	NRSA02J-0R0X	MG RESISTOR		
	R 601	NRSA02J-684X	MG RESISTOR		
	R 602	NRSA02J-184X	MG RESISTOR		
	R 603	NRSA02J-333X	MG RESISTOR		
	R 604	NRSA02J-224X	MG RESISTOR		
	R 605	NRSA02J-683X	MG RESISTOR		
	R 606	NRSA02J-473X	MG RESISTOR		
	R 607	NRSA02J-473X	MG RESISTOR		
	R 608	NRSA02J-473X	MG RESISTOR		
	R 611	NRSA02J-751X	MG RESISTOR		
	R 612	NRSA02F-163X	MG RESISTOR		
	R 613	NRSA02J-751X	MG RESISTOR		
	R 614	NRSA02J-0R0X	MG RESISTOR		
	R 617	NRSA02J-222X	MG RESISTOR		
	R 631	NRSA02J-2R2X	MG RESISTOR		
	R 632	NRSA02J-100X	MG RESISTOR		
	R 634	NRSA02J-120X	MG RESISTOR		
	R 635	NRSA02J-121X	MG RESISTOR		
	R 636	NRSA02J-910X	MG RESISTOR		
	R 641	NRSA02J-154X	MG RESISTOR		
	R 642	NRSA02J-394X	MG RESISTOR		
	R 643	NRSA02J-683X	MG RESISTOR		
	R 644	NRSA02J-222X	MG RESISTOR		
	R 645	NRSA02J-222X	MG RESISTOR		
	R 646	NRSA02J-683X	MG RESISTOR		
	R 647	NRSA02F-163X	MG RESISTOR		
	R 648	NRSA02J-103X	MG RESISTOR		
	R 649	NRSA02J-103X	MG RESISTOR		
	R 651	NRSA02J-102X	MG RESISTOR		
	R 652	NRSA02J-102X	MG RESISTOR		
	R 653	NRSA02J-102X	MG RESISTOR		
	R 654	NRSA02J-102X	MG RESISTOR		
	R 659	NRSA02J-102X	MG RESISTOR		
	R 661	NRSA02J-102X	MG RESISTOR		
	R 662	NRSA02J-683X	MG RESISTOR		
	R 663	NRSA02J-124X	MG RESISTOR		
	R 664	NRSA02J-331X	MG RESISTOR		
	R 665	NRSA02J-151X	MG RESISTOR		
	R 666	NRSA02J-221X	MG RESISTOR		
	R 667	NRSA02J-4R7X	MG RESISTOR		
	R 668	NRSA02J-155X	MG RESISTOR		
	R 669	NRSA02J-562X	MG RESISTOR		
	R 670	NRSA02J-101X	MG RESISTOR		
	R 671	NRSA63J-684X	MG RESISTOR		
	R 673	NRSA63J-124X	MG RESISTOR		
	R 682	NRS181J-102X	MG RESISTOR		
	R 683	NRSA02J-105X	MG RESISTOR		
	R 685	NRSA02J-683X	MG RESISTOR		
	R 691	NRSA02J-103X	MG RESISTOR		
	R 692	NRSA02J-103X	MG RESISTOR		
	R 695	NRSA02J-243X	MG RESISTOR		
	R 696	NRSA02J-243X	MG RESISTOR		
	R 701	NRSA02J-821X	MG RESISTOR		
	R 702	NRSA02J-821X	MG RESISTOR		
	R 703	NRSA02J-103X	MG RESISTOR		
	R 704	NRSA02J-103X	MG RESISTOR		
	R 705	NRSA02J-472X	MG RESISTOR		
	R 706	NRSA02J-202X	MG RESISTOR		
	R 707	NRSA02J-682X	MG RESISTOR		
	R 708	NRSA02J-101X	MG RESISTOR		
	R 709	NRSA02J-101X	MG RESISTOR		
	R 710	NRSA02J-221X	MG RESISTOR		
	R 801	NRSA02J-272X	MG RESISTOR		
	R 802	NRSA63J-392X	MG RESISTOR		
	R 803	NRSA63J-912X	MG RESISTOR		
	R 804	NRSA63J-224X	MG RESISTOR		
	R 805	NRSA02J-822X	MG RESISTOR		
	R 806	NRSA02J-273X	MG RESISTOR		
	R 807	NRSA02J-122X	MG RESISTOR		
	R 808	NRSA02J-273X	MG RESISTOR		
	R 809	NRSA02J-122X	MG RESISTOR		
	R 811	NRSA02J-473X	MG RESISTOR		
	R 812	NRSA02J-332X	MG RESISTOR		
	R 813	NRSA02J-122X	MG RESISTOR		
	R 852	NRSA02J-0R0X	MG RESISTOR	VZ	
	R 861	NRSA63J-102X	MG RESISTOR		
	R 862	NRSA63J-334X	MG RESISTOR		
	R 863	NRSA63J-102X	MG RESISTOR		
	R 864	NRSA63J-334X	MG RESISTOR		
	R 865	NRSA63J-334X	MG RESISTOR		
	R 866	NRSA63J-102X	MG RESISTOR		
	R 884	NRSA02J-102X	MG RESISTOR		
	R 885	NRSA02J-102X	MG RESISTOR		
	R 886	NRSA63J-102X	MG RESISTOR		
	R 887	NRSA63J-102X	MG RESISTOR		
	SW 1	QSW0844-001	PUSH SWITCH	TRY1 OPEN	
	SW 2	QSW0844-001	PUSH SWITCH	TRY1 CLOSE	
	SW 3	QSW0844-001	PUSH SWITCH	TRY2 OPEN	
	SW 4	QSW0844-001	PUSH SWITCH	TRY2 CLOSE	
	SW 5	QSW0844-001	PUSH SWITCH	TRY3 OPEN	
	SW 6	QSW0844-001	PUSH SWITCH	TRY3 CLOSE	
	SW680	QSW0865-001	CAM SWITCH	CAM SW	
	SW690	QSW0886-002	DETECT SWITCH	P.POSI1	
	SW691	QSW0886-002	DETECT SWITCH	P.POSI2	
	SW692	QSW0886-002	DETECT SWITCH	P.POSI3	
	SW693	QSW0886-002	DETECT SWITCH	SUB.TRY OP/CL	
	X 251	NAX0397-001X	C OSCILLATOR	FOR IC251 8.38M	
	X 651	QAX0599-001Z	CRYSTAL	FOR IC651	

■ **Electrical parts list(Motor board)** **Block No. 06**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN699	EMV7169-006R	CONNECTOR		
	S 699	VSH1173-001	SWITCH		

■ **Electrical parts list(MD Main board)** **Block No. 07**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 300	NCF31CZ-104X	C CAPACITOR		
	C 302	NCF31CZ-104X	C CAPACITOR		
	C 307	NCB31HK-222X	C CAPACITOR		
	C 310	NCB31HK-102X	C CAPACITOR		
	C 311	NCF21CZ-105X	C CAPACITOR		
	C 312	NEA70GM-476X	E CAPACITOR		
	C 314	NCB31EK-223X	C CAPACITOR		
	C 315	NCB31HK-102X	C CAPACITOR		
	C 316	NCF21CZ-105X	C CAPACITOR		
	C 318	NCB31HK-682X	C CAPACITOR		
	C 319	NCB31CK-333X	C CAPACITOR		
	C 320	NCB21AK-105X	C CAPACITOR		
	C 321	NCB31HK-472X	C CAPACITOR		
	C 322	NCB21AK-105X	C CAPACITOR		
	C 323	NCB31HK-682X	C CAPACITOR		
	C 324	NCB21CK-224X	C CAPACITOR		
	C 325	NCB31CK-103X	C CAPACITOR		
	C 326	NCB31EK-223X	C CAPACITOR		
	C 327	NCB31CK-104X	C CAPACITOR		
	C 328	NCB31CK-104X	C CAPACITOR		
	C 330	NCF31CZ-104X	C CAPACITOR		
	C 333	NCB21CK-154X	C CAPACITOR		
	C 334	NCF31CZ-104X	C CAPACITOR		
	C 340	NCB31EK-223X	C CAPACITOR		
	C 341	NCB31EK-223X	C CAPACITOR		
	C 342	NCF31CZ-104X	C CAPACITOR		
	C 350	NEA70GM-476X	E CAPACITOR		
	C 351	NCF21CZ-105X	C CAPACITOR		
	C 352	NEA70GM-476X	E CAPACITOR		
	C 353	NCF21CZ-105X	C CAPACITOR		
	C 354	NCF21CZ-105X	C CAPACITOR		
	C 355	NCF31CZ-104X	C CAPACITOR		
	C 358	NCF31CZ-104X	C CAPACITOR		
	C 359	NCF31CZ-104X	C CAPACITOR		
	C 361	NCF31CZ-104X	C CAPACITOR		
	C 375	NCB31CK-103X	C CAPACITOR		
	C 376	NCB21CK-474X	C CAPACITOR		
	C 377	NCS31HJ-471X	C CAPACITOR		
	C 378	NCS31HJ-330X	C CAPACITOR		
	C 379	NCB21CK-474X	C CAPACITOR		
	C 380	NCB31CK-153X	C CAPACITOR		
	C 390	NCB10JM-106X	C CAPACITOR		
	C 400	NEAD1CM-226X	E CAPACITOR		
	C 401	NEAD0JM-107X	E CAPACITOR		
	C 402	NCB31HK-331X	C CAPACITOR		
	C 403	NEAD0GM-476X	E CAPACITOR		
	C 407	NCS31HJ-101X	C CAPACITOR		
	C 408	NCS31HJ-101X	C CAPACITOR		
	C 409	NCB31CK-104X	C CAPACITOR		
	C 411	NCF21CZ-105X	C CAPACITOR		
	C 412	NCF31CZ-104X	C CAPACITOR		
	C 415	NCB31CK-103X	C CAPACITOR		
	C 421	NCB31HK-561X	C CAPACITOR		
	C 423	NCB31HK-561X	C CAPACITOR		
	C 425	NCB31HK-561X	C CAPACITOR		
	C 427	NCB31HK-561X	C CAPACITOR		
	C 429	NCB31HK-392X	C CAPACITOR		
	C 431	NCB31HK-392X	C CAPACITOR		
	C 433	NCB31HK-562X	C CAPACITOR		
	C 435	NCB31HK-562X	C CAPACITOR		
	C 437	NCB31HK-103X	C CAPACITOR		
	C 439	NCB31HK-103X	C CAPACITOR		
	C 450	NEA71CM-107X	E CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	C 451	NEA70GM-107X	E CAPACITOR		
	C 452	NCF31CZ-104X	C CAPACITOR		
	C 453	NCF31CZ-104X	C CAPACITOR		
	C 455	NDC32AJ-101X	C CAPACITOR		
	C 480	NEA70JM-476X	E CAPACITOR		
	C 481	NCF21CZ-105X	C CAPACITOR		
	C 482	NEA70JM-226X	E CAPACITOR		
	C 483	NCF31CZ-104X	C CAPACITOR		
	C 484	NEAD1CM-106X	E CAPACITOR		
	C 485	NCF31CZ-104X	C CAPACITOR		
	C 486	NCF31CZ-104X	C CAPACITOR		
	C 487	NCF31CZ-104X	C CAPACITOR		
	C 488	NEAD1CM-106X	E CAPACITOR		
	C 489	NEAD1VM-475X	E CAPACITOR		
	C 490	NCB31CK-103X	C CAPACITOR		
	C 491	NCB31HK-222X	C CAPACITOR		
	C 492	NCB31HK-222X	C CAPACITOR		
	C 493	NCF21CZ-105X	C CAPACITOR		
	C 496	NCF21CZ-105X	C CAPACITOR		
	C 497	NCF31CZ-104X	C CAPACITOR		
	C 501	NCS31HJ-180X	C CAPACITOR		
	C 502	NCS31HJ-180X	C CAPACITOR		
	C 511	NCF31CZ-104X	C CAPACITOR		
	C 512	NCF31CZ-104X	C CAPACITOR		
	C 515	NCF31CZ-104X	C CAPACITOR		
	C 590	NCS31HJ-101X	C CAPACITOR		
	C 591	NCF31CZ-104X	C CAPACITOR		
	CN321	QGF0501F2-21X	CONNECTOR	FOR PICK-UP A'S	
	CN407	QGF1006F2-08W	SOCKET	FOR CAM SW	
	CN408	QGF1006F2-09W	CONNECTOR	FOR TRAMECHA PW	
	CN451	QGF1016F2-04W	CONNECTOR	FOR HEAD	
	CN521	QGF1006F2-21W	SOCKET	FOR SYSTEM	
	CN601	QGF1006F2-09W	CONNECTOR		
	D 310	1SS355-X	DIODE	TEMP DET	
	D 451	RB160L-60-X	SB DIODE		
	D 452	RB160L-60-X	SB DIODE		
	IC310	CXA2523AR	IC	RF	
	IC340	TC7S08F-W	IC	APC PWM BUFFER	
	IC350	CXD2662R	IC		
	IC390	HY51V17400CT-60	IC	4M*4 DRAM	
	IC400	XC62ER3602M-X	IC		
	IC410	M63008FP-X	IC	BTL DRIVER	
	IC450	BD7910FV-X	IC	DRIVER	
	IC480	AK4519VF-X	IC		
	IC485	TK11140SC-W	IC		
	IC500	HD6432345A15FA	IC(MCU)		
	IC590	AK93C65AF-X	IC	256*16BIT EEPRO	
	K 346	NQR0360-001X	FERRITE BEADS		
	K 353	NQR0389-003X	FERRITE BEADS		
	K 491	NQR0022-005X	FERRITE BEADS		
	K 492	NQR0022-005X	FERRITE BEADS		
	K 495	NQR0022-005X	FERRITE BEADS		
	K 496	NQR0022-005X	FERRITE BEADS		
	K 505	NQR0389-003X	FERRITE BEADS		
	K 521	NQR0354-001X	FERRITE BEADS		
	K 522	NQR0354-001X	FERRITE BEADS		
	K 523	NQR0389-003X	FERRITE BEADS		
	K 524	NQR0389-003X	FERRITE BEADS		
	L 351	NQL38DK-100X	INDUCTOR		
	L 352	NQL38DK-100X	INDUCTOR		
	L 525	NQL274M-1R5X	INDUCTOR		
	L 526	NQL274M-1R5X	INDUCTOR		
	Q 330	2SA1362/G/-X	TRANSISTOR		

■ **Electrical parts list(MD Main board)** **Block No. 07**

⚠	Item	Parts number	Parts name	Remarks	Area
	Q 331	DTA114EKA-X	DIGITAL.TRANSIS		
	O 332	DTA113ZKA-X	TRANSISTOR		
	O 333	DTA113ZKA-X	TRANSISTOR		
	O 400	2SA1363/EF/-X	TRANSISTOR		
	O 401	2SA1363/EF/-X	TRANSISTOR		
	O 410	DTC114EKA-X	TRANSISTOR		
	O 411	DTC114EKA-X	TRANSISTOR		
	R 300	NRSA63J-0R0X	MG RESISTOR		
	R 301	NRS181J-0R0X	MG RESISTOR		
	R 302	NRSA63J-0R0X	MG RESISTOR		
	R 305	NRSA63J-222X	MG RESISTOR		
	R 306	NRSA63J-474X	MG RESISTOR		
	R 309	NRSA63J-474X	MG RESISTOR		
	R 310	NRSA63J-331X	MG RESISTOR		
	R 311	NRSA63J-183X	MG RESISTOR		
	R 312	NRSA63J-103X	MG RESISTOR		
	R 313	NRSA63J-104X	MG RESISTOR		
	R 314	NRSA63J-133X	MG RESISTOR		
	R 315	NRSA63J-243X	MG RESISTOR		
	R 316	NRSA63J-104X	MG RESISTOR		
	R 317	NRSA63J-103X	MG RESISTOR		
	R 320	NRSA63J-563X	MG RESISTOR		
	R 321	NRSA63J-331X	MG RESISTOR		
	R 322	NRSA63J-331X	MG RESISTOR		
	R 323	NRSA63J-331X	MG RESISTOR		
	R 324	NRSA63J-102X	MG RESISTOR		
	R 325	NRSA63J-472X	MG RESISTOR		
	R 326	NRSA63J-331X	MG RESISTOR		
	R 327	NRSA63J-331X	MG RESISTOR		
	R 328	NRSA63J-101X	MG RESISTOR		
	R 330	NRSA63J-8R2X	MG RESISTOR		
	R 331	NRSA63J-270X	MG RESISTOR		
	R 332	NRSA63J-473X	MG RESISTOR		
	R 333	NRSA63J-473X	MG RESISTOR		
	R 334	NRSA63J-473X	MG RESISTOR		
	R 335	NRSA63J-473X	MG RESISTOR		
	R 336	NRSA63J-104X	MG RESISTOR		
	R 337	NRSA63J-1R0X	MG RESISTOR		
	R 338	NRSA63J-4R7X	MG RESISTOR		
	R 339	NRSA63J-473X	MG RESISTOR		
	R 340	NRSA63J-222X	MG RESISTOR		
	R 341	NRSA63J-222X	MG RESISTOR		
	R 342	NRSA63J-222X	MG RESISTOR		
	R 343	NRSA63J-102X	MG RESISTOR		
	R 354	NRSA63D-103X	MG RESISTER		
	R 355	NRSA63D-103X	MG RESISTER		
	R 356	NRSA63J-102X	MG RESISTOR		
	R 361	NRSA63J-102X	MG RESISTOR		
	R 362	NRSA63J-102X	MG RESISTOR		
	R 363	NRSA63J-102X	MG RESISTOR		
	R 364	NRSA63J-102X	MG RESISTOR		
	R 365	NRSA63J-102X	MG RESISTOR		
	R 366	NRSA63J-102X	MG RESISTOR		
	R 367	NRSA63J-102X	MG RESISTOR		
	R 368	NRSA63J-102X	MG RESISTOR		
	R 369	NRSA63J-102X	MG RESISTOR		
	R 370	NRSA63J-104X	MG RESISTOR		
	R 371	NRSA63J-103X	MG RESISTOR		
	R 372	NRSA63J-103X	MG RESISTOR		
	R 375	NRSA63J-103X	MG RESISTOR		
	R 376	NRSA63J-104X	MG RESISTOR		
	R 377	NRSA63J-684X	MG RESISTOR		
	R 378	NRSA63J-332X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 379	NRSA63J-102X	MG RESISTOR		
	R 380	NRSA63J-105X	MG RESISTOR		
	R 381	NRSA63J-102X	MG RESISTOR		
	R 382	NRSA63J-151X	MG RESISTOR		
	R 387	NRSA63J-331X	MG RESISTOR		
	R 389	NRSA63J-331X	MG RESISTOR		
	R 390	NRSA63J-331X	MG RESISTOR		
	R 391	NRSA63J-561X	MG RESISTOR		
	R 392	NRSA63J-102X	MG RESISTOR		
	R 393	NRSA63J-102X	MG RESISTOR		
	R 394	NRSA63J-102X	MG RESISTOR		
	R 395	NRSA63J-102X	MG RESISTOR		
	R 396	NRSA63J-331X	MG RESISTOR		
	R 397	NRSA63J-331X	MG RESISTOR		
	R 398	NRSA63J-331X	MG RESISTOR		
	R 399	NRSA63J-331X	MG RESISTOR		
	R 401	NRSA63D-153X	MG RESISTOR		
	R 402	NRSA63D-562X	MG RESISTER		
	R 403	NRSA63D-471X	MG RESISTER		
	R 404	NRSA63D-333X	MG RESISTER		
	R 420	NRSA63D-223X	RESISTOR		
	R 421	NRSA63D-103X	MG RESISTER		
	R 422	NRSA63D-223X	MG RESISTER		
	R 423	NRSA63D-103X	MG RESISTER		
	R 424	NRSA63D-223X	MG RESISTER		
	R 425	NRSA63D-103X	MG RESISTER		
	R 426	NRSA63D-223X	MG RESISTER		
	R 427	NRSA63D-103X	MG RESISTER		
	R 428	NRSA63D-153X	MG RESISTOR		
	R 429	NRSA63D-392X	MG RESISTER		
	R 430	NRSA63D-153X	MG RESISTOR		
	R 431	NRSA63D-392X	MG RESISTER		
	R 432	NRSA63D-123X	MG RESISTOR		
	R 433	NRSA63D-822X	MG RESISTER		
	R 434	NRSA63D-123X	MG RESISTOR		
	R 435	NRSA63D-822X	MG RESISTER		
	R 436	NRSA63J-223X	MG RESISTOR		
	R 437	NRSA63J-302X	MG RESISTOR		
	R 438	NRSA63J-223X	MG RESISTOR		
	R 439	NRSA63J-302X	MG RESISTOR		
	R 440	NRSA63D-103X	MG RESISTER		
	R 441	NRSA63D-103X	MG RESISTER		
	R 451	NRSA63J-473X	MG RESISTOR		
	R 452	NRSA63J-563X	MG RESISTOR		
	R 453	NRSA63J-1R0X	MG RESISTOR		
	R 454	NRSA63J-1R0X	MG RESISTOR		
	R 455	NRSA63J-223X	MG RESISTOR		
	R 456	NAD0006-103X	THERMISTOR		
	R 481	NRSA63J-100X	MG RESISTOR		
	R 483	NRSA63J-0R0X	MG RESISTOR		
	R 491	NRSA63J-471X	MG RESISTOR		
	R 492	NRSA63J-471X	MG RESISTOR		
	R 495	NRSA63J-471X	MG RESISTOR		
	R 496	NRSA63J-471X	MG RESISTOR		
	R 497	NRSA63J-1R0X	MG RESISTOR		
	R 502	NRSA63J-332X	MG RESISTOR		
	R 503	NRSA63J-103X	MG RESISTOR		
	R 504	NRSA63J-333X	MG RESISTOR		
	R 506	NRSA63J-473X	MG RESISTOR		
	R 509	NRSA63J-104X	MG RESISTOR		
	R 510	NRSA63J-102X	MG RESISTOR		
	R 511	NRSA63J-102X	MG RESISTOR		
	R 512	NRSA63J-102X	MG RESISTOR		

■ **Electrical parts list(MD Main board)** **Block No. 07**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 513	NRSA63J-102X	MG RESISTOR		
	R 514	NRSA63J-102X	MG RESISTOR		
	R 515	NRSA63J-102X	MG RESISTOR		
	R 516	NRSA63J-102X	MG RESISTOR		
	R 517	NRSA63J-104X	MG RESISTOR		
	R 518	NRSA63J-102X	MG RESISTOR		
	R 519	NRSA63J-102X	MG RESISTOR		
	R 520	NRSA63J-102X	MG RESISTOR		
	R 521	NRSA63J-102X	MG RESISTOR		
	R 522	NRSA63J-222X	MG RESISTOR		
	R 523	NRSA63J-102X	MG RESISTOR		
	R 524	NRSA63J-102X	MG RESISTOR		
	R 525	NRSA63J-102X	MG RESISTOR		
	R 531	NRSA63J-103X	MG RESISTOR		
	R 532	NRSA63J-103X	MG RESISTOR		
	R 533	NRSA63J-103X	MG RESISTOR		
	R 534	NRSA63J-103X	MG RESISTOR		
	R 535	NRSA63J-103X	MG RESISTOR		
	R 536	NRSA63J-103X	MG RESISTOR		
	R 537	NRSA63J-103X	MG RESISTOR		
	R 538	NRSA63J-473X	MG RESISTOR		
	R 540	NRSA63J-473X	MG RESISTOR		
	R 541	NRSA63J-473X	MG RESISTOR		
	R 545	NRSA63J-0R0X	MG RESISTOR		
	R 551	NRSA63J-104X	MG RESISTOR		
	R 552	NRSA63J-104X	MG RESISTOR		
	R 554	NRSA63J-104X	MG RESISTOR		
	R 555	NRSA63J-102X	MG RESISTOR		
	R 556	NRSA63J-102X	MG RESISTOR		
	R 557	NRSA63J-102X	MG RESISTOR		
	R 558	NRSA63J-102X	MG RESISTOR		
	R 563	NRSA63J-102X	MG RESISTOR		
	R 564	NRSA63J-102X	MG RESISTOR		
	R 565	NRSA63J-102X	MG RESISTOR		
	R 566	NRSA63J-102X	MG RESISTOR		
	R 567	NRSA63J-102X	MG RESISTOR		
	R 568	NRSA63J-102X	MG RESISTOR		
	R 569	NRSA63J-102X	MG RESISTOR		
	R 592	NRSA63J-104X	MG RESISTOR		
	R 593	NRSA63J-103X	MG RESISTOR		
	S 601	NSW0057-001X	2-SWITCH		
	S 602	NSW0007-001X	PUSH SWITCH		
	X 350	NAX0355-001X	CRYSTAL	90.3168MHZ	
	X 500	NAX0361-002X	CRYSTAL	10MHZ 30PPM	

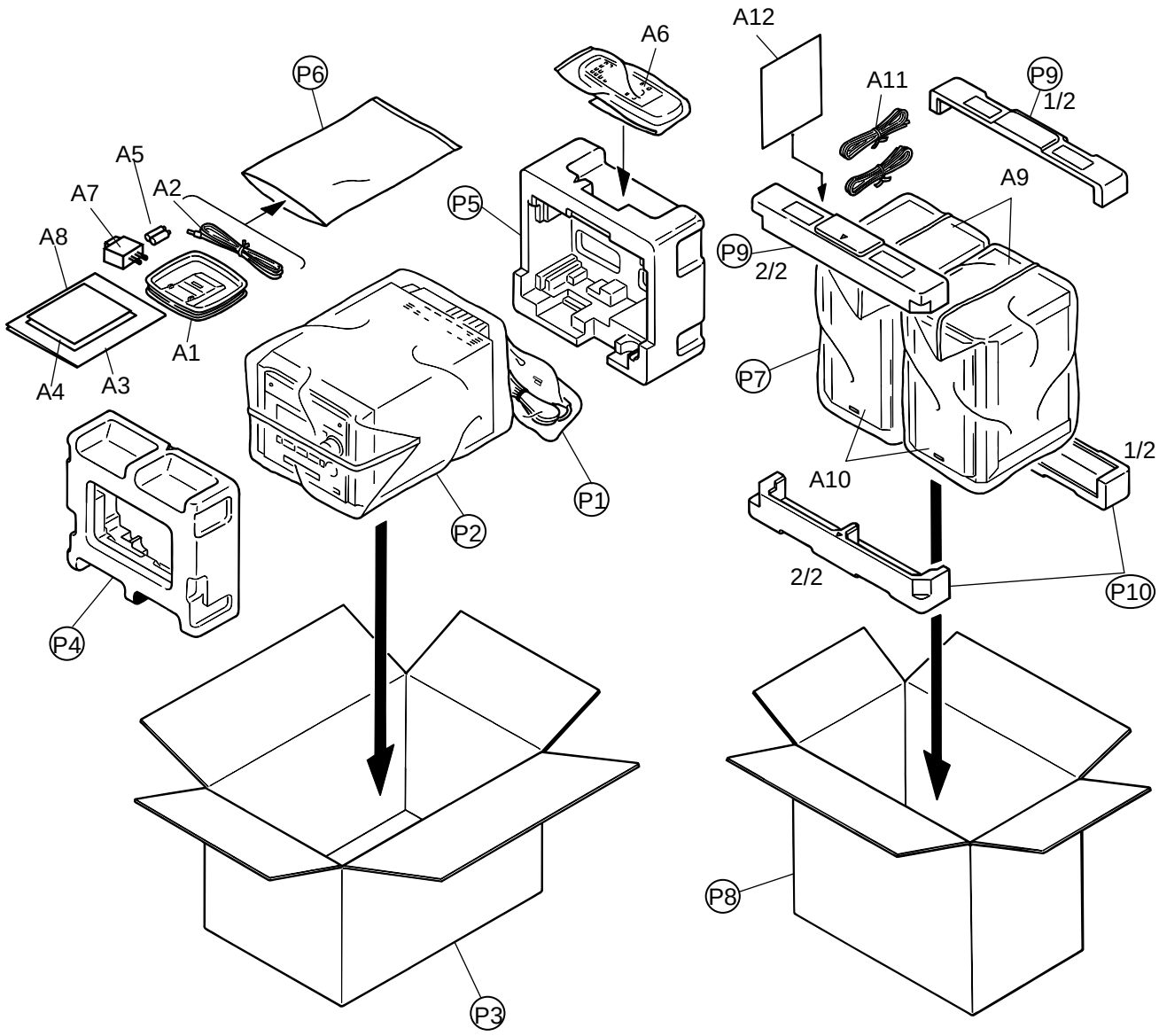
■ **Electrical parts list(Cam Swith board)** **Block No. 08**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN611	QGF1016F3-08	CONNECTOR		
	CN612	QGA1501F1-02	CONNECTOR		
	S 611	QSW0848-001	CAM SWITCH		

Packing materials and accessories parts list

Block No. M 4 M M

Block No. M 5 M M



CA-MXS6MD

SP-MXS6MD

■ Parts list (Packing)

Block No. M4MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPA01504505	ENVELOPE	1	CA-MXS6MD	UB
	P 2	QPC05006515P	POLY BAG	1	CA-MXS6MD	
	P 3	LV32192-002A	PACKING CASE	1	CA-MXS6MD	
	P 4	LV10394-001A	PACKING PAD(FRO	1	CA-MXS6MD	
	P 5	LV10395-001A	PACKING PAD(REA	1	CA-MXS6MD	
	P 6	QPC02503510P	POLY BAG	1	CA-MXS6MD	
	P 7	8500028981	POLY BAG	1	SP-MXS6MD	
	P 8	8300040251	PACKING CASE	1	SP-MXS6MD	US,UB
		8300040261	PACKING CASE	1	SP-MXS6MD	UT
	P 9	8000042601	TOP CUSHION	1	SP-MXS6MD	
	P 10	8000042611	BOTTOM CUSHION	1	SP-MXS6MD	

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	QAL0014-001	AM LOOP ANT	1		
	A 2	EWP503-001C	ANT.WIRE	1		
	A 3	LVT0529-003A	I.B(CA-MXS6MD)	1	CHI(TAIWAN)	UT
		LVT0529-001A	I.B(CA-MXS6MD)	1	ENG CHI(PEKIN)	UB,US
	A 4	LV42252-001A	INST SHEET	1		UB,US,UT
	A 5	----------	BATTERY	2		
	A 6	RM-SMXS6MDU	REMOCON	1	INSERT TO P.PAD	
	A 7	QAM0027-001	SIEMENS PLUG	1		UT
		QAM0112-001	AC PLUG ADAPTER	1		US
	A 8	LV30258-073A	UB SHEET	1		UB
	A 9	MXS6MDK-SPBOX-L	SPEAKER BOX	1	SP-MXS6MD	
		MXS6MDK-SPBOX-R	SPEAKER BOX	1	SP-MXS6MD	
	A 10	9913006711	SARAN BOARD	1	SP-MXS6MD	
	A 11	6200036801	SPEAKER CORD	2	SP-MXS6MD	
	A 12	LVT0575-002A	I.B(SP-MXS6MD)	1	CHI(PEKIN)	UB,US
		LVT0575-003A	I.B(SP-MXS6MD)	1	KOR CHI(TAIWAN)	UT