

JVC

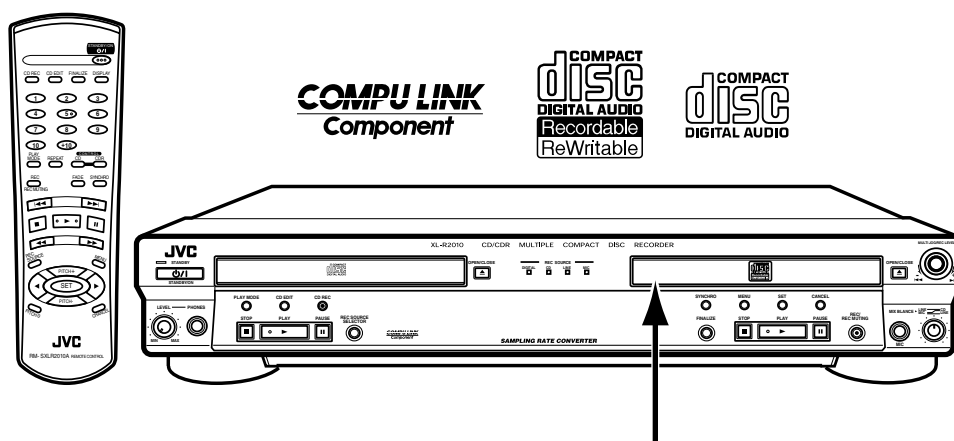
SERVICE MANUAL

CD/CDR MULTIPLE COMPACT DISC RECORDER

XL-R2010BK

Area Suffix

J ----- U.S.A.
C ----- Canada



<ATTENTION of CD-R/RW mechanism unit>

Because the CD-R/RW mechanism unit is a unit exchange,
Moreover, the [Disassembly method],[Adjustment method],[Description of major ICs],
[Standard schematic diagram],[Printed circuit board],[Block diagram] of the CD-R/RW
mechanism unit is not described.

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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 ($\triangle$) 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 current 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.

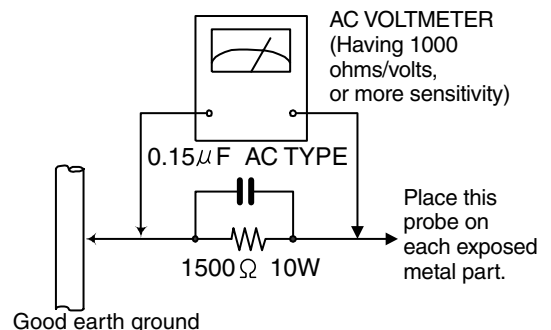
Do not use a line isolation transformer during this check.

- 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 1,500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



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.

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor ($\blacksquare$), diode ($\blacksquare$) and ICP ($\bullet$) or identified by the " $\triangle$ " mark nearby are critical for safety.

When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the J and C version)

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. Grounding to prevent damage by static electricity

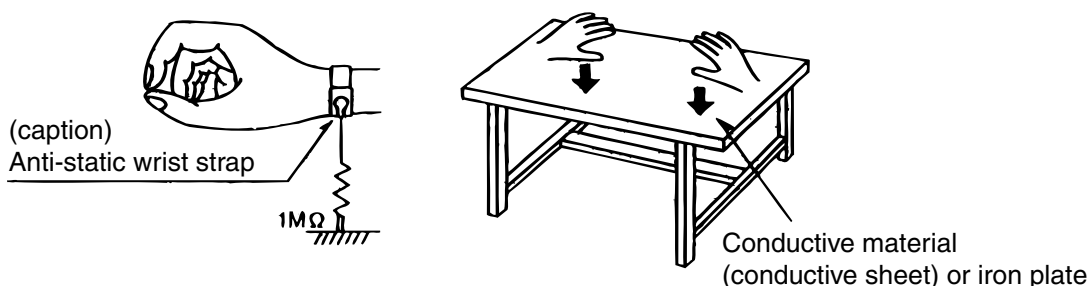
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players. Be careful to use proper grounding in the area where repairs are being performed.

1.1. 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.

1.2. Ground yourself

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



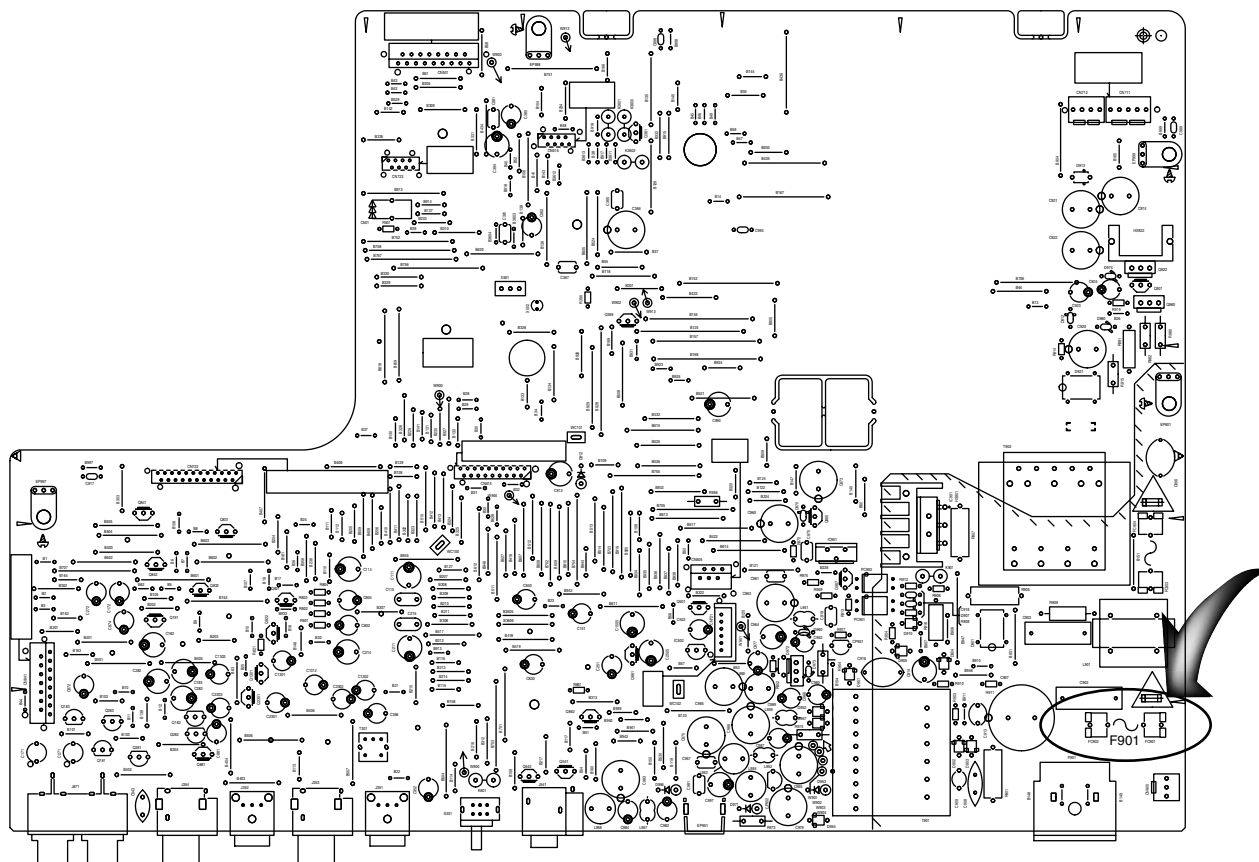
1.3. Handling the optical pickup

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.

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 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

Importance Administering point on the Safety



Full Fuse Replacement Marking

Graphic symbol mark
(This symbol means fast blow type fuse.)



should be read as follows ;

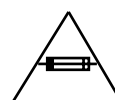
FUSE CAUTION

**FOR CONTINUED PROTECTION AGAINST RISK
OF FIRE, REPLACE ONLY WITH SAME TYPE
AND RATING OF FUSES ;**

F901 : 1.6 A / 125 V

Marquage Pour Le Remplacement Complet De Fusible

Le symbole graphique (Ce symbole signifie
fusible de type à fusion rapide.)



doit être interprété comme suit ;

PRECAUTIONS SUR LES FUSIBLES

**POUR UNE PROTECTION CONTINUE CONTRE
DES RISQUES D'INCENDIE, REMPLACER
SEULEMENT PAR UN FUSIBLE DU MEME TYPE ;**

F901 : 1.6 A / 125 V

Precautions for Service

Handling of Traverse Unit and Laser Pickup

1. Do not touch any peripheral element of the pickup or the actuator.
2. The traverse unit and the pickup are precision devices and therefore must not be subjected to strong shock.
3. Do not use a tester to examine the laser diode. (The diode can easily be destroyed by the internal power supply of the tester.)
4. To replace the traverse unit, pull out the metal short pin for protection from charging.
5. When replacing the pickup, after mounting a new pickup, remove the solder on the short land which is provided at the center of the flexible wire to open the circuit.
6. Half-fixed resistors for laser power adjustment are adjusted in pairs at shipment to match the characteristics of the optical block.

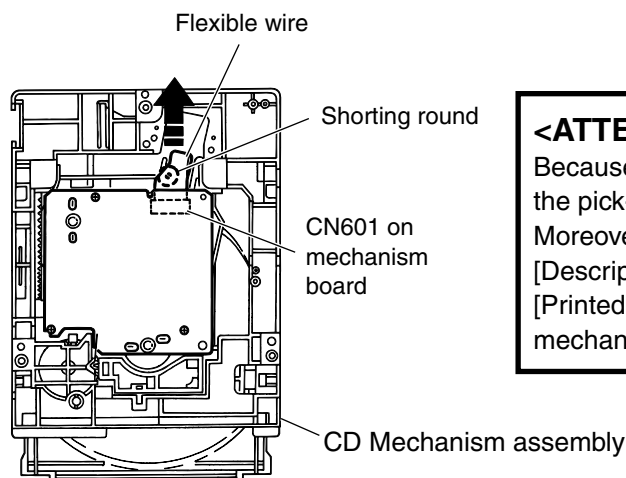
Do not change the setting of these half-fixed resistors for laser power adjustment.

Destruction of Traverse Unit and Laser Pickup by Static Electricity

Laser diodes are easily destroyed by static electricity charged on clothing or the human body. Before repairing peripheral elements of the traverse unit or pickup, be sure to take the following electrostatic protection:

1. Wear an antistatic wrist wrap.
2. With a conductive sheet or a steel plate on the workbench on which the traverse unit or the pick up is to be repaired, ground the sheet or the plate.
3. After removing the flexible wire from the connector (CN601), short-circuit the flexible wire by the metal clip.
4. Short-circuit the laser diode by soldering the land which is provided at the center of the flexible wire for the pickup. After completing the repair, remove the solder to open the circuit.

Please refer to [Removing the mechanism board] and [Removing the pickup] of the Disassembly method < CD Mechanism assembly >.



<ATTENTION of CD-R/RW mechanism unit>

Because the CD-R/RW mechanism unit is a unit exchange, the pick-up need not be detached alone. Moreover, the [Disassembly method],[Adjustment method],[Description of major ICs],[Standard schematic diagram],[Printed circuit board],[Block diagram] of the CD-R/RW mechanism unit is not described.

Disassembly method

<Main body>

■ Removing the top cover (See Fig.1)

1. Remove the four screws **A** on both sides of the body.
2. Remove the two screws **B** on the back of the body.
3. Remove the top cover from behind in the direction of the arrow while pulling its sides outwards. Disengage the three joints **a** with the front panel section.

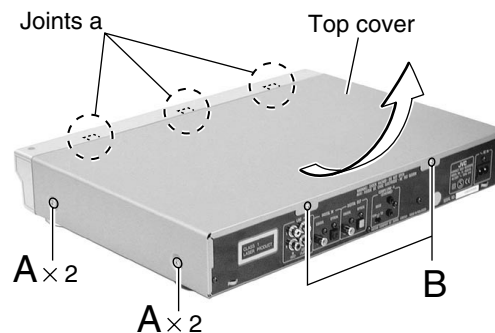


Fig.1

■ Removing the fitting of the CD mechanism section (See Fig.2 to 5)

- Prior to performing the following procedure, remove the top cover.
1. Insert a Philips screwdriver into the hole of the chassis base on the bottom and turn it as shown in the figure. The tray will move forward.
 2. Pull out the tray manually.
 3. Release the joint **b** on each side of the fitting upward, then remove the fitting from the tray.
 4. Push and return the tray.

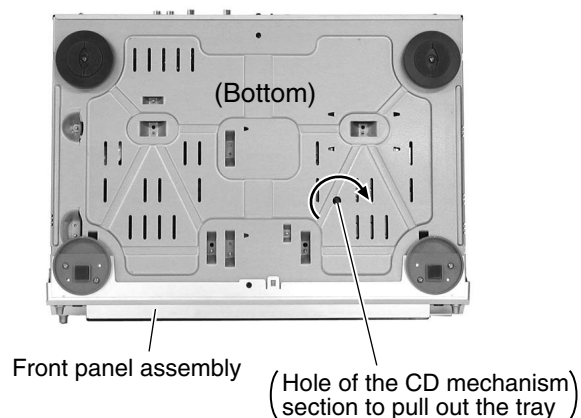


Fig.2

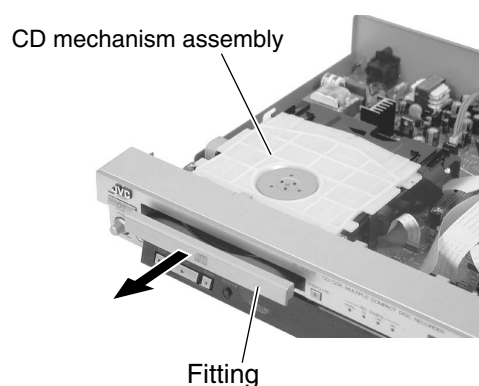


Fig.3

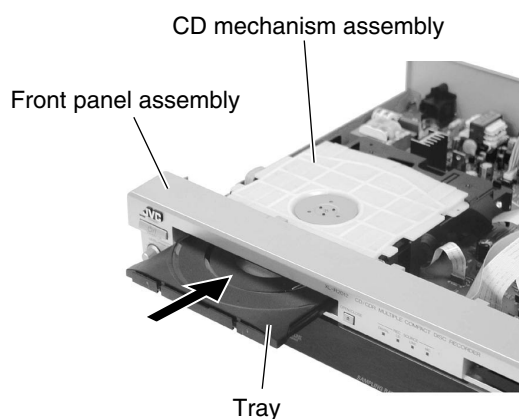


Fig.5

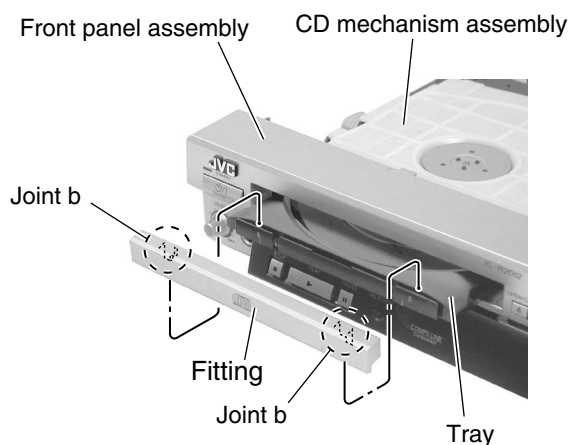


Fig.4

■ Removing the fitting of the CD-R/RW mechanism section (See Fig.6 to 9)

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

1. Push the slide cam **c** until it stops through the slot on the left side of the CD-R/RW mechanism assembly.
2. Pull out the tray manually.
3. Release the joint **d** on each side of the fitting upward, then remove the fitting from the tray.
4. Push and return the tray.

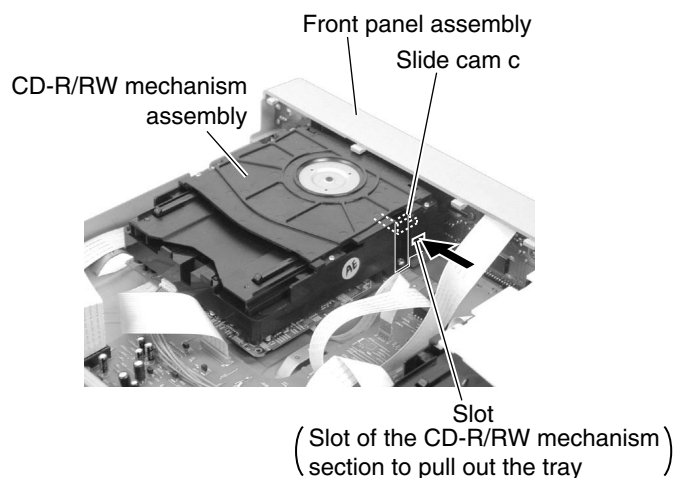


Fig.6

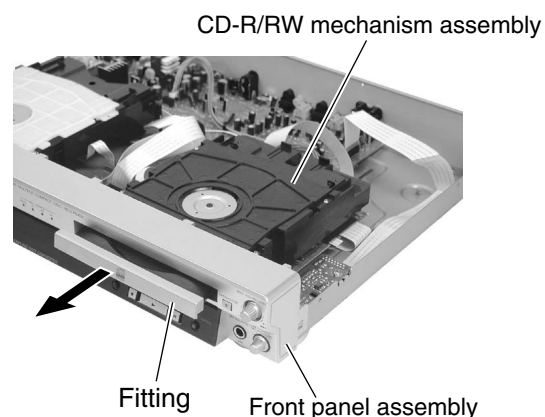


Fig.7

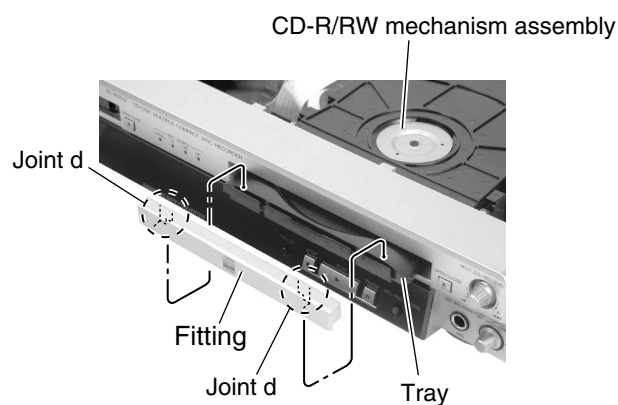


Fig.8

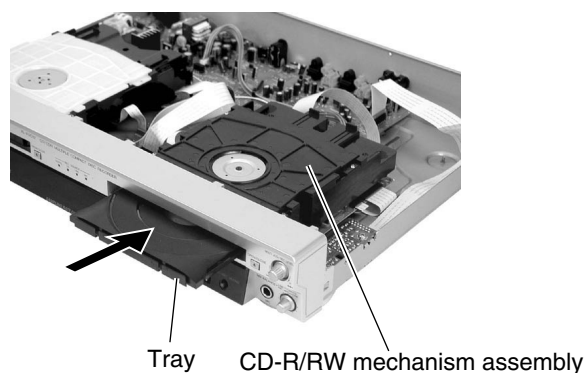


Fig.9

■ Removing the front panel assembly (See Fig.10 to 14)

- Prior to performing the following procedure, remove the top cover and both fittings of the CD mechanism section and the CD-R/RW mechanism section.

1. Disconnect the card wires from connector CN501, CN841 and the wires from CN711 and CN712 on the main board from above.
2. Remove the screw **C** and the screw **D** attaching the headphone board and the mic board on the top of the body.
3. Remove the four screws **E** attaching the right and left foot at the bottom.
4. Remove the two screws **F** and the screw **G** attaching the front panel assembly at the bottom.
5. Disengage the joint **e** on the bottom and the joints **f** on each side of the body to release the front panel assembly from the chassis base using a slotted screwdriver. Then remove the front panel assembly toward the front.

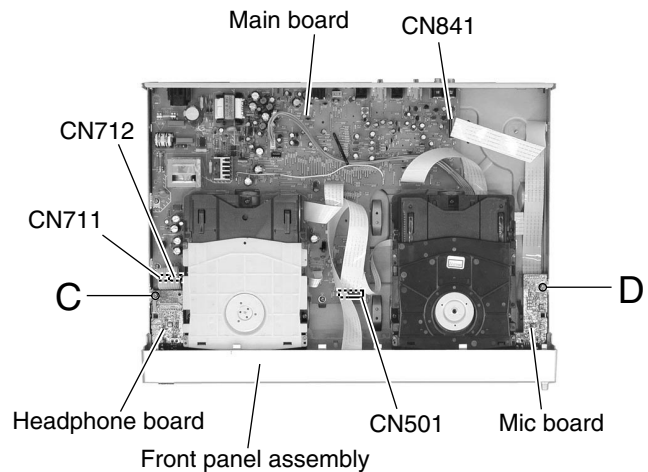


Fig.10

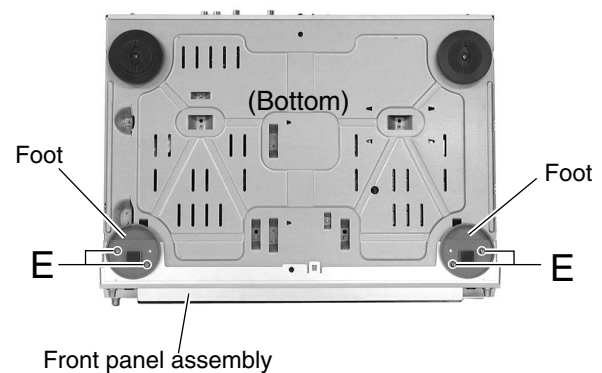


Fig.11

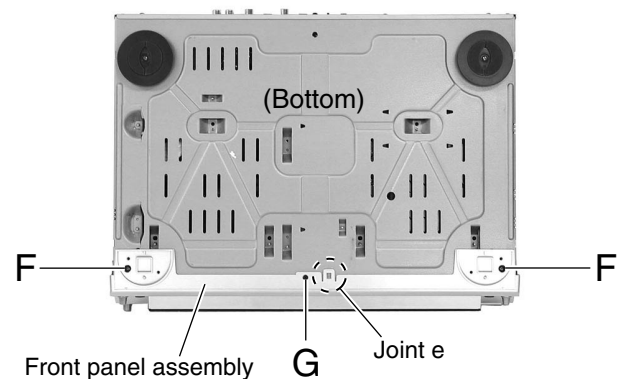


Fig.12

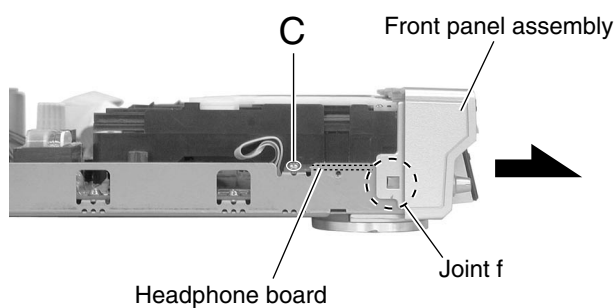


Fig.14

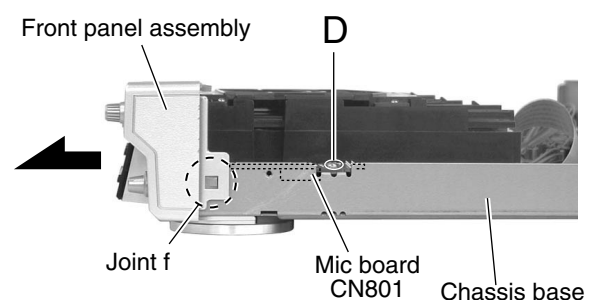


Fig.13

■ Removing the CD mechanism assembly (See Fig.15)

- Prior to performing the following procedure, remove the top cover and the fitting.
(Remove the front panel assembly is easy to work.)

1. Disconnect the card wire from connector CN615 and CN616 on the main board from above.
2. Remove the three screws **H** attaching the CD mechanism assembly.

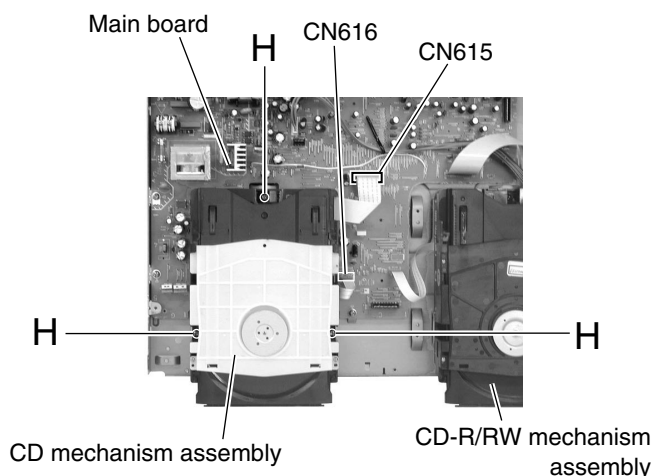


Fig.15

■ Removing the CD-R/RW mechanism assembly (See Fig.16)

- Prior to performing the following procedure, remove the top cover and the fitting.
(Remove the front panel assembly is easy to work)

1. Disconnect the wire from connector CN721 and the card wires from CN722 and CN723 on the main board from above.
2. Remove the three screws **I** attaching the CD-R/RW mechanism assembly.

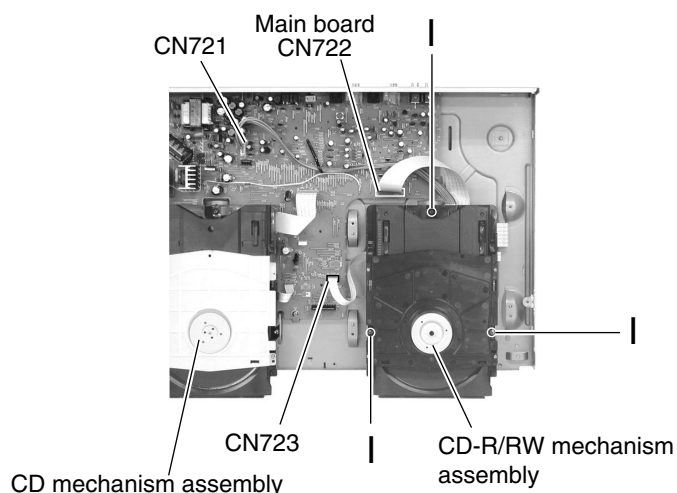


Fig.16

■ Removing the rear panel (See Fig.17)

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

1. Remove the three screws **J** and the eight screws **K** on the back of the body.

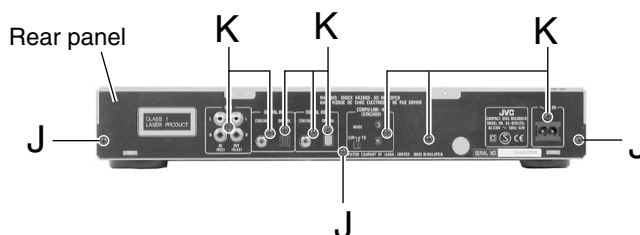


Fig.17

■ Removing the main board (See Fig.18)

- Prior to performing the following procedure, remove the top cover, the front panel assembly, the CD mechanism assembly, the CD-R/RW mechanism assembly and the rear panel.

1. Remove the four screws **L** attaching the main board.

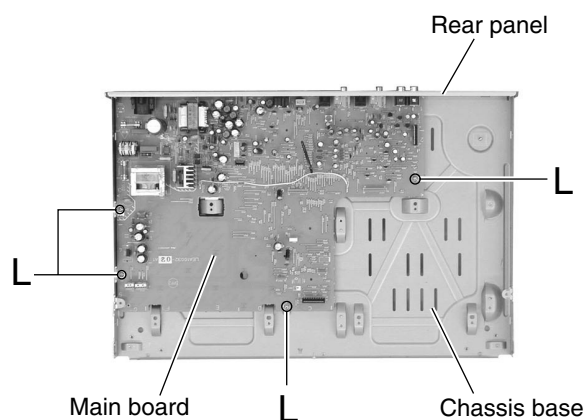


Fig.18

<Front panel assembly>

■ Removing the headphone board / power switch board (See Fig.19 to 21)

1. Pull out the volume knob on the front panel assembly.
2. Remove the two screws **M** attaching the headphone board bracket and the three screws **N** attaching the power switch board. Remove the headphone board and the power switch board at the same time.
3. Pull out the stopper attaching the headphone board bracket in the direction of the arrow.

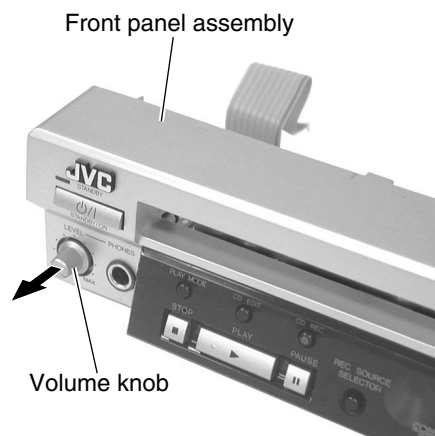


Fig.19

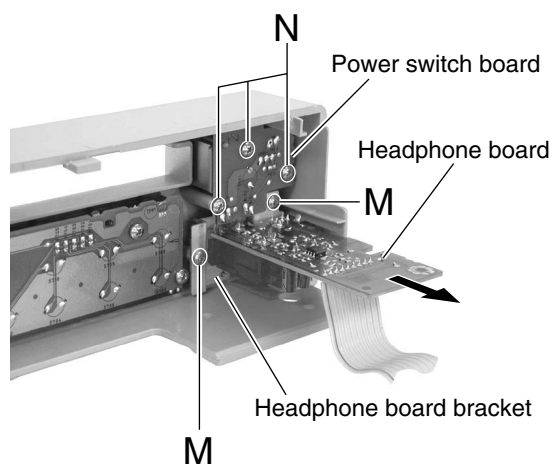


Fig.20

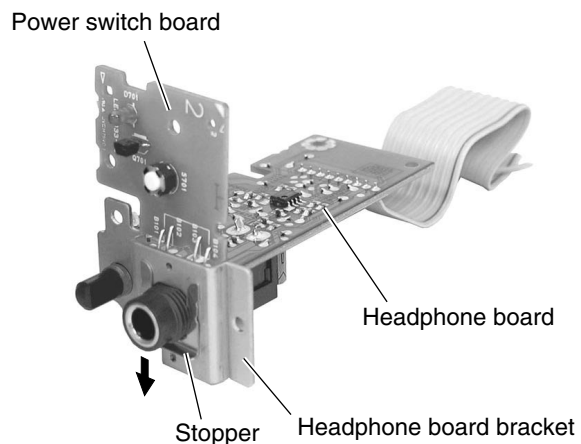


Fig.21

■ Removing the mic board / jog dial board (See Fig.22 to 24)

1. Pull out the jog dial knob and the mix balance knob on the front panel assembly.
2. Remove the two screws **O** attaching the mic board bracket and the three screws **P** attaching the jog dial board. Remove the mic board and the jog dial board at the same time.
3. Pull out the stopper attaching the mic board bracket in the direction of the arrow.

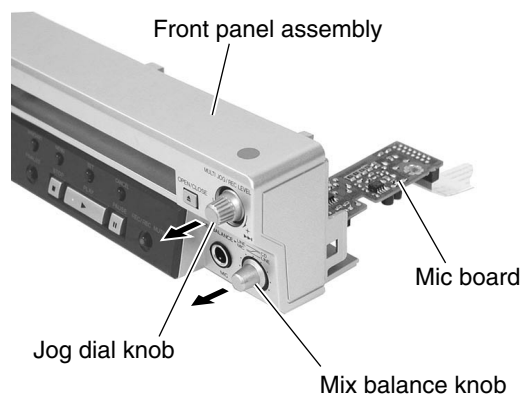


Fig.22

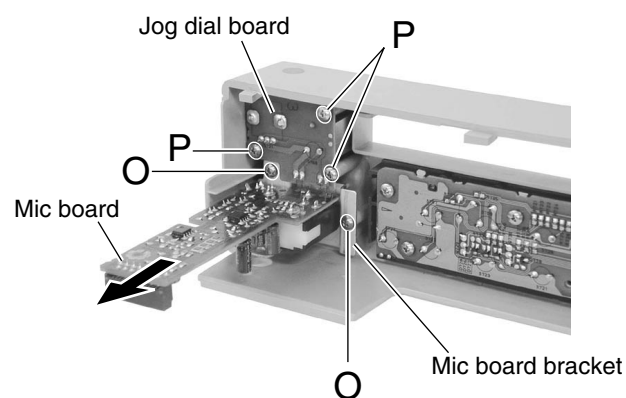


Fig.23

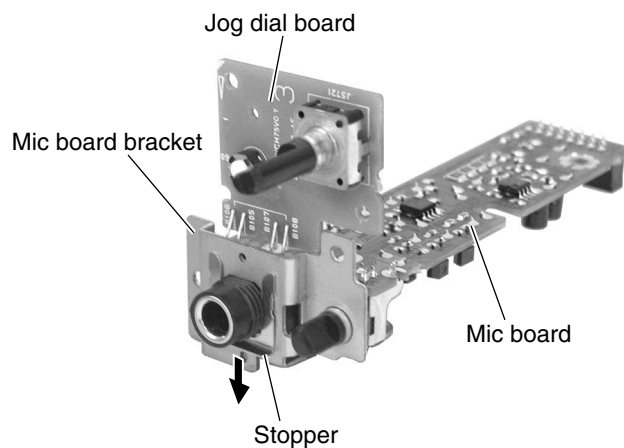


Fig.24

■ Removing the front board (See Fig.25)

1. Remove the nine screws **Q** on the back of the front panel assembly.

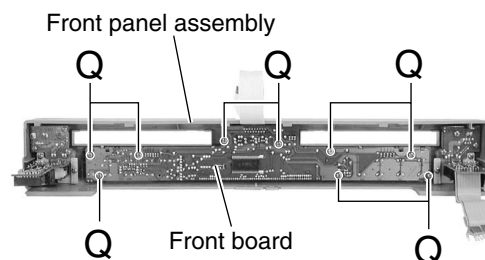


Fig.25

<CD Mechanism assembly>

■ Removing the clamber base assembly and tray (See Figs. 1 to 5)

1. Remove the two screws **A** attaching the clamber base assembly from the top of the CD mechanism assembly.
2. Move the clamber base assembly diagonally upwards as indicated by the arrow to release it from the two hooks **a**.
3. Turn the idle gear in the arrow-marked direction from the upper side of the CD mechanism assembly. Accordingly, the traverse mechanism assembly moves downwards.

Note: When drawing out the tray, shift down the traverse mechanism assembly to the position where the tray does not contact the turn table assembly of the traverse mechanism assembly.

4. Draw out the tray frontwards for removing it.

Note: When reinstalling the tray:

- Turn the idle gear so that the part **b** of the tray gear is positioned in the part **c** shown in Fig. 4. (Eject position)
- Engage the right and left hooks **d** and **e** of the tray with the right and left grooves of the loading mechanism assembly respectively for retaining the tray.

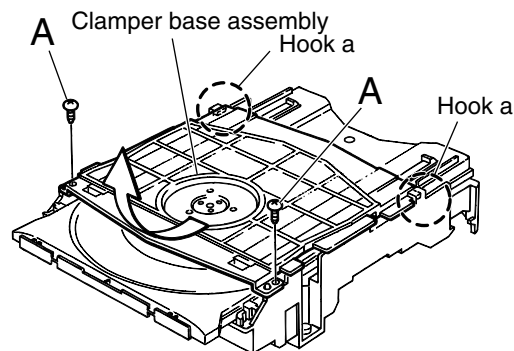


Fig. 1

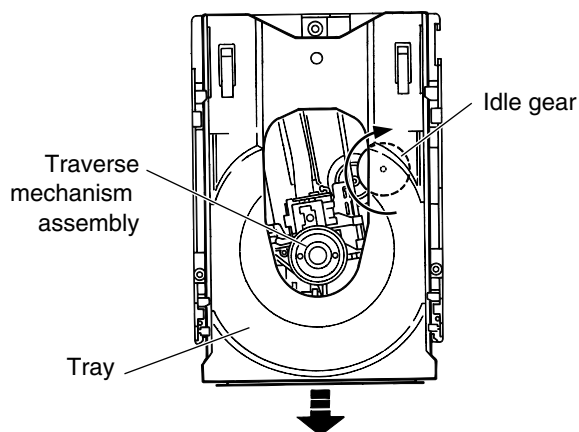


Fig. 2

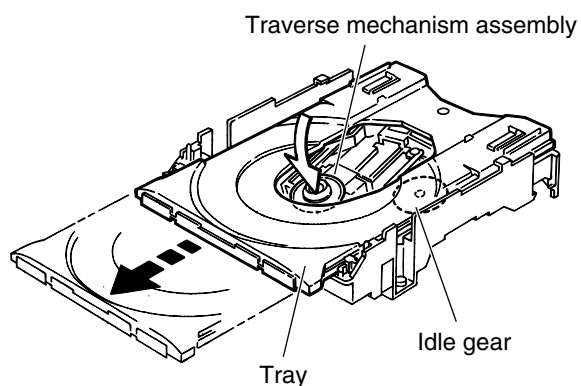


Fig. 3

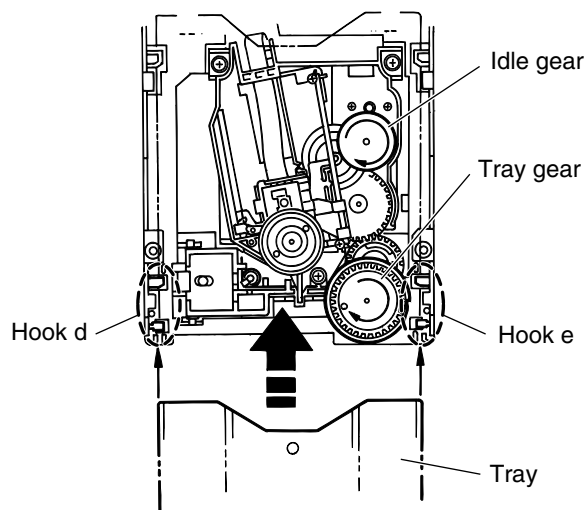


Fig. 5

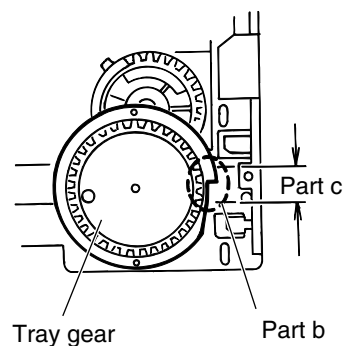


Fig. 4

■ Removing the traverse mechanism assembly (See Figs. 6 to 9)

- Remove the clamber base assembly and tray.

Reference: The traverse mechanism assembly can be removed without removal of the mechanism board.

1. If the traverse mechanism assembly is lowered and it is located out of the PLAY position, turn the idle gear in the arrow-marked direction so that the hole in the part **f** of the tray gear meets the hole on the loading base assembly. (Set the traverse mechanism assembly at the PLAY position.)
2. Remove the three screws **B** attaching the traverse mechanism assembly and then remove the traverse mechanism assembly upwards from the front side.
3. At the same time, remove the spring from the groove of the CH. base assembly in the part **g** of the traverse mechanism assembly.

Note: When reinstalling the traverse mechanism assembly:

- Check to see if the spring is properly engaged with groove of the CH. base assembly in the part **g** of the traverse mechanism assembly.
- After making sure that the three insulators of the traverse mechanism assembly are properly set on the bosses of the loading base assembly's guide, fasten them with the screws.

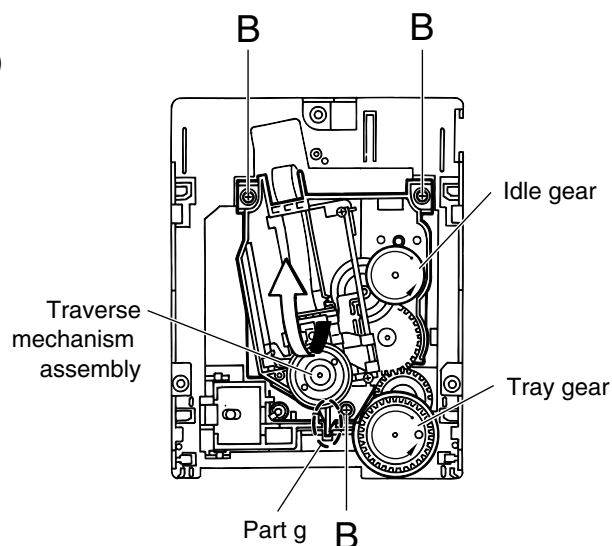


Fig. 6

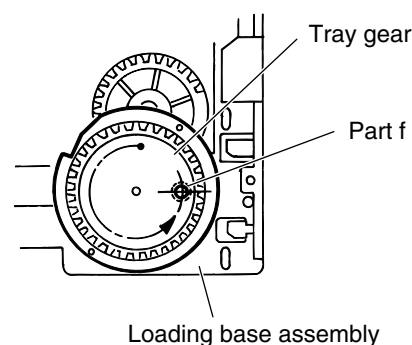


Fig. 7

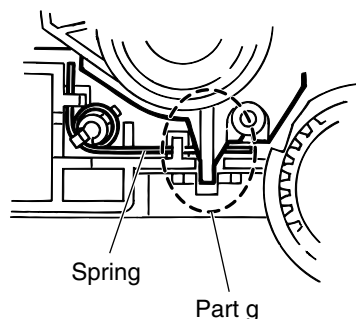


Fig. 8

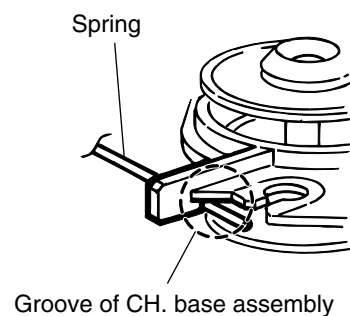


Fig. 9

■ Removing the mechanism board

(See Fig 10)

Reference: The mechanism board can be removed without removal of the traverse mechanism assembly.

Note: Before disconnecting the flexible wire coming from the pickup from the connector, be sure to solder its shorting round. If the flexible wire is connected without soldering, it may cause breakdown of the pickup.

1. Solder the shorting round of the flexible wire connected with the mechanism board from the back of the mechanism assembly.
2. Disconnect the flexible wire from the connector CN601 on the mechanism board.
3. Remove the three screws **C** attaching the mechanism board.
4. Unsolder the two points of the part **h** and two point of the part **i** of the mechanism board. Then, remove the mechanism board upwards.

Note: When reinstalling the mechanism board, connect the flexible wire coming from the pickup to the connector first and then remove the solder from the shorting round of the flexible wire.

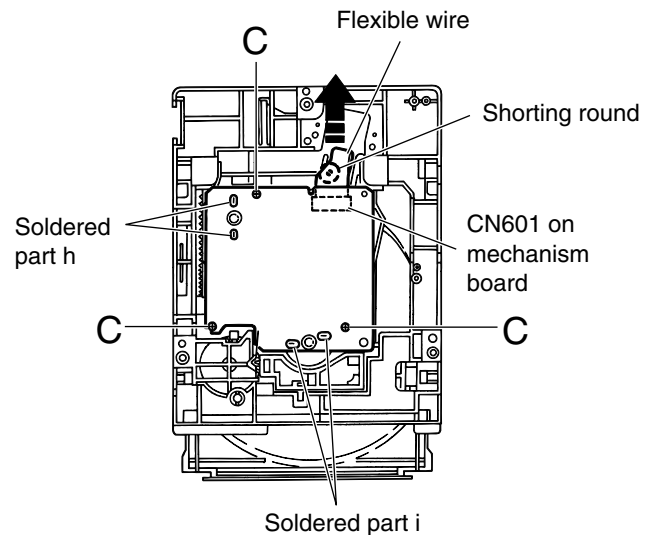


Fig. 10

■ Removing the pickup (See Figs. 11 to 14)

- Remove the clamper base assembly and tray.
- Remove the traverse mechanism assembly.

Reference: The pickup can be removed without removal of the mechanism board.

Note: Before disconnecting the flexible wire coming from the pickup from the connector, be sure to solder its shorting round.
If the flexible wire is connected without soldering, it may cause breakdown of the pickup.

1. Solder the shorting round of the flexible wire connected with the mechanism board from the back of the traverse mechanism assembly.
2. Disconnect the flexible wire from the connector CN601 on the mechanism board.
3. Turn the idle gear in the arrow-marked direction from the top of the traverse mechanism assembly so that the pickup assembly is shifted to the reverse side of the turn table assembly.
Move the pickup assembly until the part **j** of the rack plate in the lower part of the pickup assembly comes out of the CH. base assembly.
4. Remove the two screws **D** attaching the shaft of the pickup assembly. Next, disengage the part **k** from the CH. base assembly and then remove the pickup assembly together with the shaft.
5. Pull the shaft out of the pickup.
6. Remove the two screws **E** attaching the rack plate from the pickup.
7. Remove the screw **F** attaching the P.S. spring from the pickup.

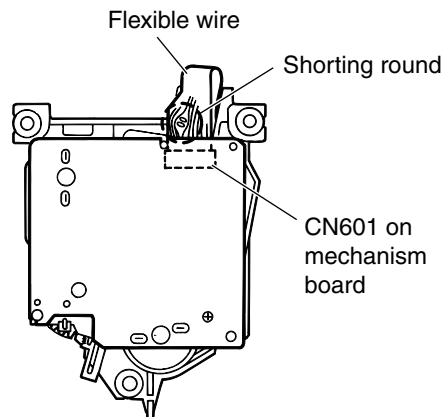


Fig. 11

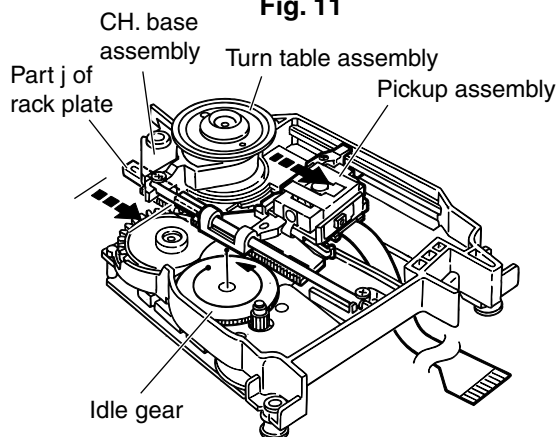


Fig. 12

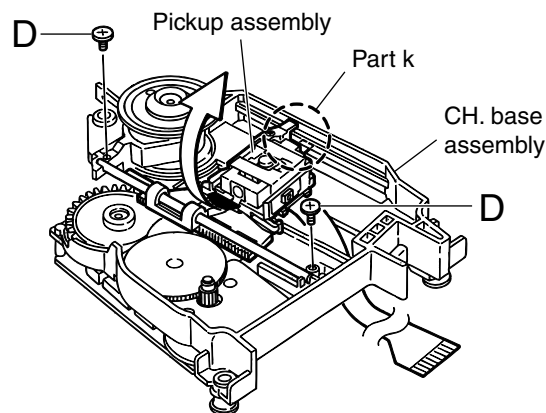


Fig. 13

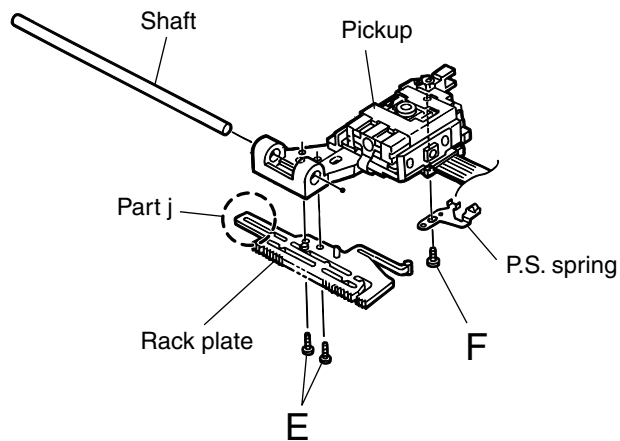


Fig. 14

■ Reinstalling the pickup assembly (See Figs. 15 and 16)

Reference: Refer to the explanation of "Removing the Pickup" on the preceding page.

1. Fit the P.S. spring and rack plate to the pickup.
2. Insert the shaft into the pickup.
3. Engage the part **k** of the pickup assembly with the CH. base assembly first, and set the part **j** of the rack plate in the opening **l** next. Then, reinstall the pickup assembly while shifting it to the turn table side (inward) so that the part **m** of the rack plate is positioned as shown in Fig. 16.
4. Move the pickup assembly to the center position and fasten the shaft with the two screws **D**. (Make sure that the part **n** of the rack plate is correctly engaged with the middle gear.)
5. After passing the flexible wire coming from the pickup through the opening of the CH. base assembly, connect it to the connector CN601.

Note: When reinstalling the pickup assembly, remove the solder from the shorting round after connecting the flexible wire coming from the pick to the connector CN601.

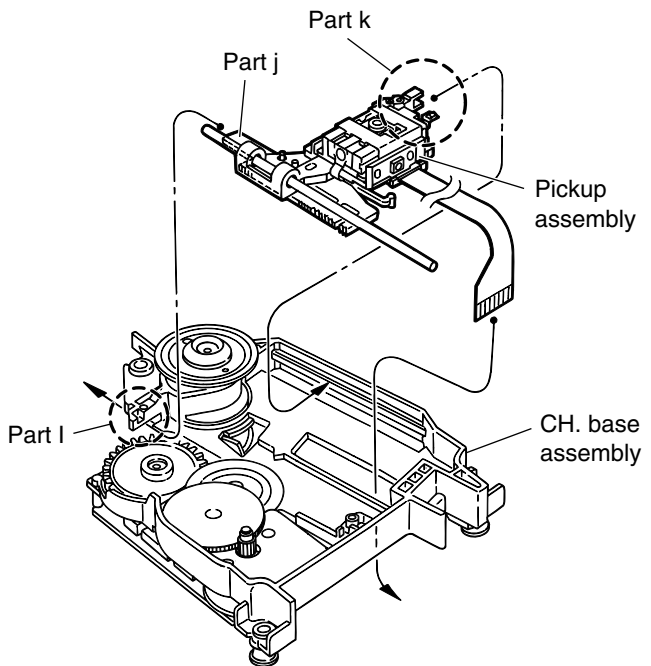


Fig. 15

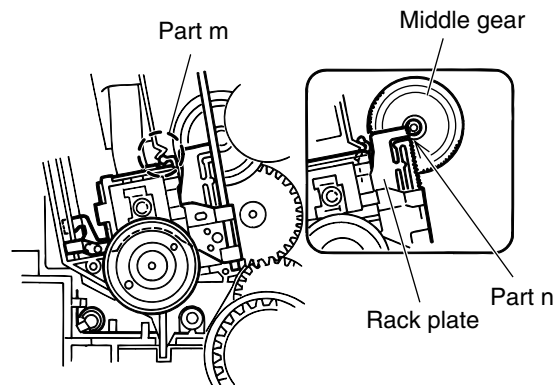


Fig. 16

■ Removing the feed motor assembly (See Fig. 17)

- Remove the clumper base assembly and tray.
- Remove the mechanism board.

Remove the two screws **G** attaching the feed motor assembly from the top of the mechanism assembly.

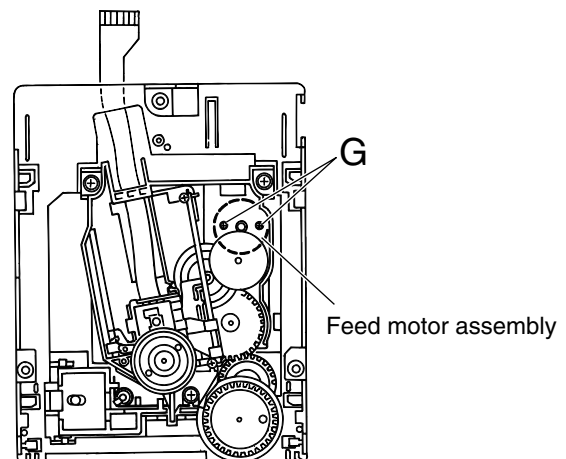


Fig. 17

Confirm method of operation

■ Check mode (All lighting FL display)

<Setting method>

"STANDBY/ON" key is pushed while pushing "REC/REC MUTING" key by the stand-by state.

<Release method>

The key to "STANDBY/ON" is pushed.

(Please set the above-mentioned again to light all FL displays again after the check mode is made clear after pulling out the power cord once.)

■ All release of set content

All content of the item in the following set is returned to initial state. (State of factory shipment)

<Setting method>

"STANDBY/ON" key is pushed while pushing "REC SOURCE SELECTOR" key by the stand-by state.

[Set items]

- The program of the program play is deleted.
- The content of the registration of the listening editing and the program editing is deleted.
- The repeat setting is turned off.
- Release of disc lock
- A current unit is set to the CD mechanism unit side.
- The play mode of CD mechanism unit is made a normal mode.
- The pitch control setting is turned off.
- The selection of the recording source is made DIGITAL of CD.
- DUB-SPEED setting is made HIGH.
- AUTO TRACK setting is turned ON.
- TRACK SPACE setting is turned ON.
- CONVERTER setting is turned ON.
- D-IN SYNCHRO setting is START
- FINALIZE setting is OFF

■ Service menu

The running operation and the version of the firmware can be confirmed by the undermentioned method.

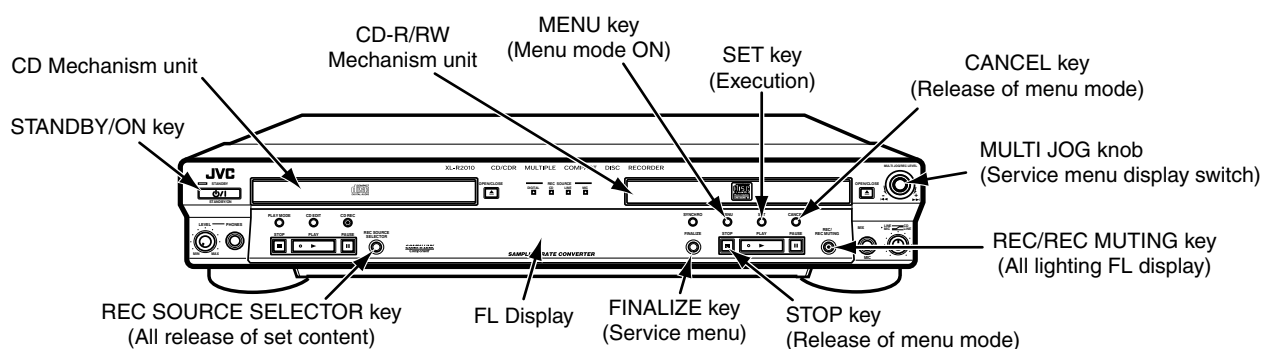
(Does not use excluding "SYSTEM_AGING" and "READ_VERSION" by the item displayed in the service menu.)

<Setting method of service menu>

- 1."STANDBY/ON" key is pushed while pushing "FINALIZE" key by the stand-by state.
- 2.When the blinking display of the disc distinction ends, "MENU" key is pushed.
The menu display changes if "MULTI JOG" knob of the main body is turned.
- 3.The execution of the each item is completed or either "CANCEL"key, "CD-RW STOP"key or "MENU"key is pushed when going out of the menu mode.

<Release method>

If "STANDBY/ON" key is pushed, and the power supply is turned off once, becomes a normal menu.



■ Running operation

When this mode is executed, the operation of the recording and the playback is repeated.
Please use to confirm operation.

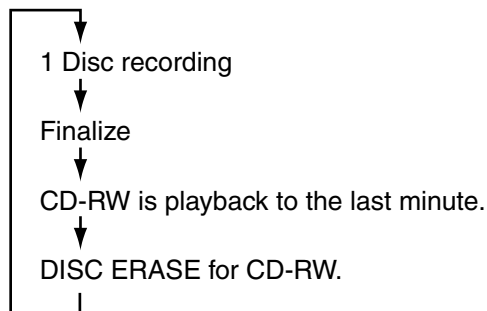
It is necessary to put the recorded disc or CD-DA in tray of CD mechanism unit beforehand to execute this item, and put CD-RW of the blank disc in CD-R/RW mechanism unit.

<Setting method of running operation>

- 1."Service menu" is made to be displayed on the FL display referring to the previous page.
- 2."SYSTEM_AGING" is made to turn "MULTI JOG" knob, and to be displayed on the FL display.
- 3.The undermentioned operation starts when "SET" key is pushed.

The undermentioned control becomes possible according to the content of the disc turned on to tray of CD mechanism unit.

- * The time required of operation of running once
- * Movement frequency of pick-up



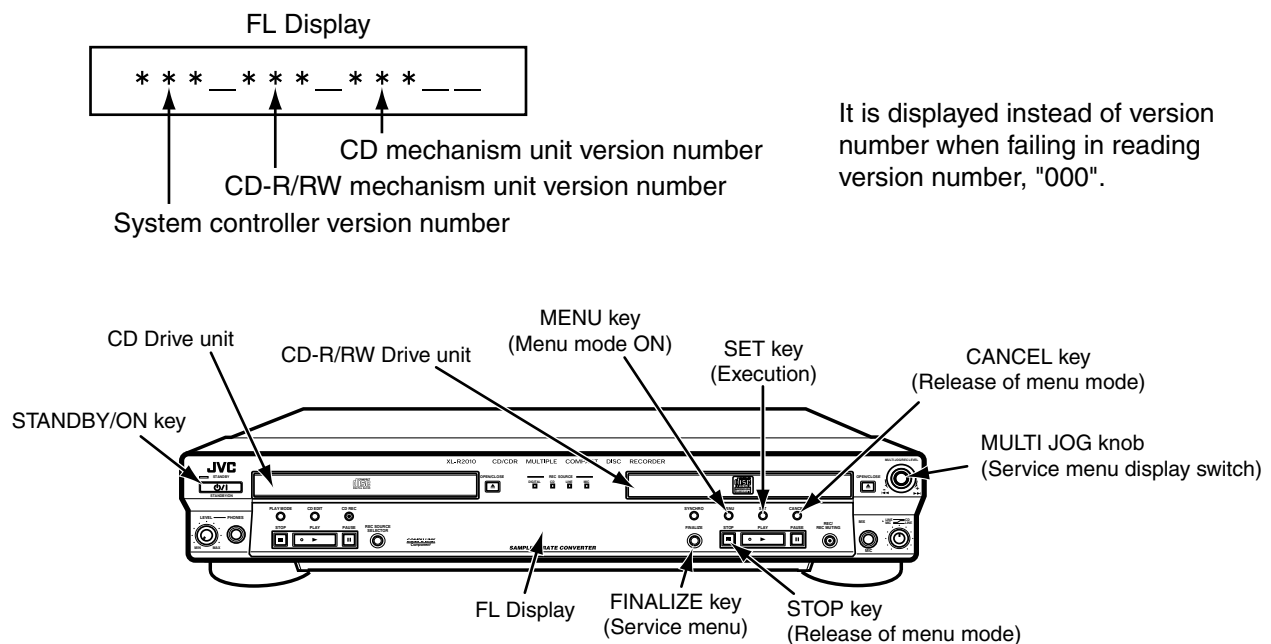
F L display becomes " * * * * ", and the frequency to which the running operation is done is displayed by the figure when "STOP" key is pushed to the running working or interrupted because of the error etc.

■ Display of version number

When this item is executed, version number "system controller", "CD-R/RW mechanism unit", and "CD mechanism unit" respectively is displayed in FL display for five seconds.
When five seconds pass, this mode is automatically made clear.

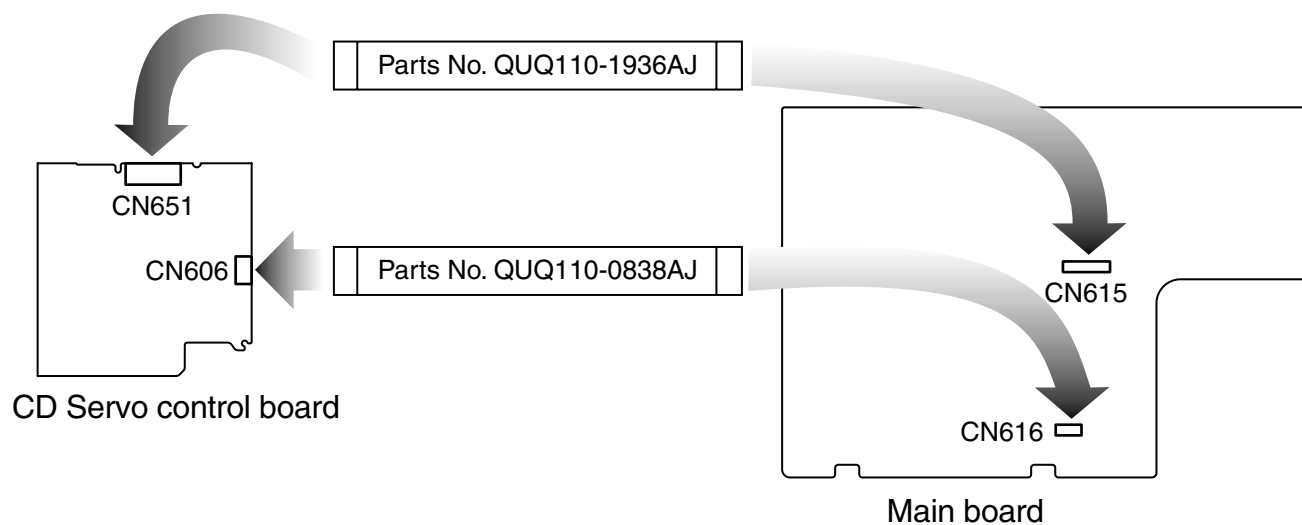
<Setting method of display of version number>

- 1."Service menu" is made to be displayed on the FL display referring to the previous page.
- 2."READ_VERSION" is made to turn "MULTI JOG" knob, and to be displayed on the FL display.
- 3.The undermentioned operation starts when "SET" key is pushed.



■ Extension cord for diagnosis of CD mechanism unit

It is an extension cord to operate with the CD mechanism unit removed from the main body.
Each connector is connected by the extension cord and used as shown in the figure below.



Description of major ICs

■ AN22000A-W(IC601):RF & SERVO AMP

1. Pin layout

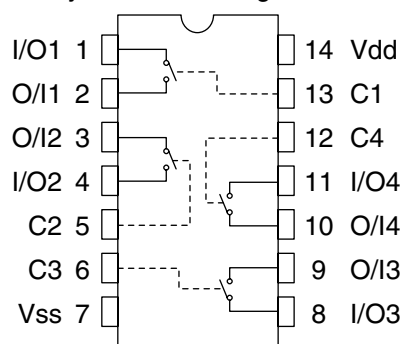
PD	1	32	A
LD	2	31	C
VCC	3	30	B
RFN	4	29	D
RFOUT	5	28	PDF
RFIN	6	27	PDE
CAGC	7	26	TBAL
ARF	8	25	FBAL
CEA	9	24	GCTRL
3TOUT	10	23	FEOUT
CBDO	11	22	FEN
BDO	12	21	TEN
COFTR	13	20	TEOUT
OFTR	14	19	TEBPF
RFDET	15	18	VDET
GND	16	17	VREF

2. Pin function

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	PD	APC Amp. Input terminal	16	GND	Connect to ground
2	LD	APC Amp. Output terminal	17	VREF	VREF output terminal
3	VCC	Power supply terminal	18	VDET	VDET output terminal
4	RFN	RF addition Amp. Reversing input terminal	19	TEBPF	VDET input terminal
5	RF OUT	RF addition Amp. Output terminal	20	TEOUT	TE Amp. output terminal
6	RF IN	AGC input terminal	21	TEN	TE Amp. reversing input terminal
7	C.AGC	Terminal of connection of capacity of AGC loop filter.	22	FEN	FE Amp. reversing input terminal
8	ARF	AGC output terminal	23	FEOUT	FE Amp. output terminal
9	CEA	Capacity connection terminal for HPF-Amp.	24	GCTRL	Terminal GCTL & APC
10	3TOUT	3TENV output terminal	25	FBAL	FBAL control terminal
11	CBDO	Capacity connection terminal for RF shade side envelope detection	26	TBAL	TBAL control terminal
12	BDO	BDO output terminal	27	PDE	Tracking signal input terminal 1
13	COFTR	Capacity connection terminal for RF discernment side envelope detection	28	PDF	Tracking signal input terminal 2
14	OFTR	OFTR output terminal	29	D	Focus signal input terminal 4
15	RFDET	RFDET output terminal	30	B	Focus signal input terminal 2
			31	C	Focus signal input terminal 3
			32	A	Focus signal input terminal 1

■ BU4066BCF-X(IC821,IC831,IC841,IC861):Source selector

1. Pin layout & block diagram

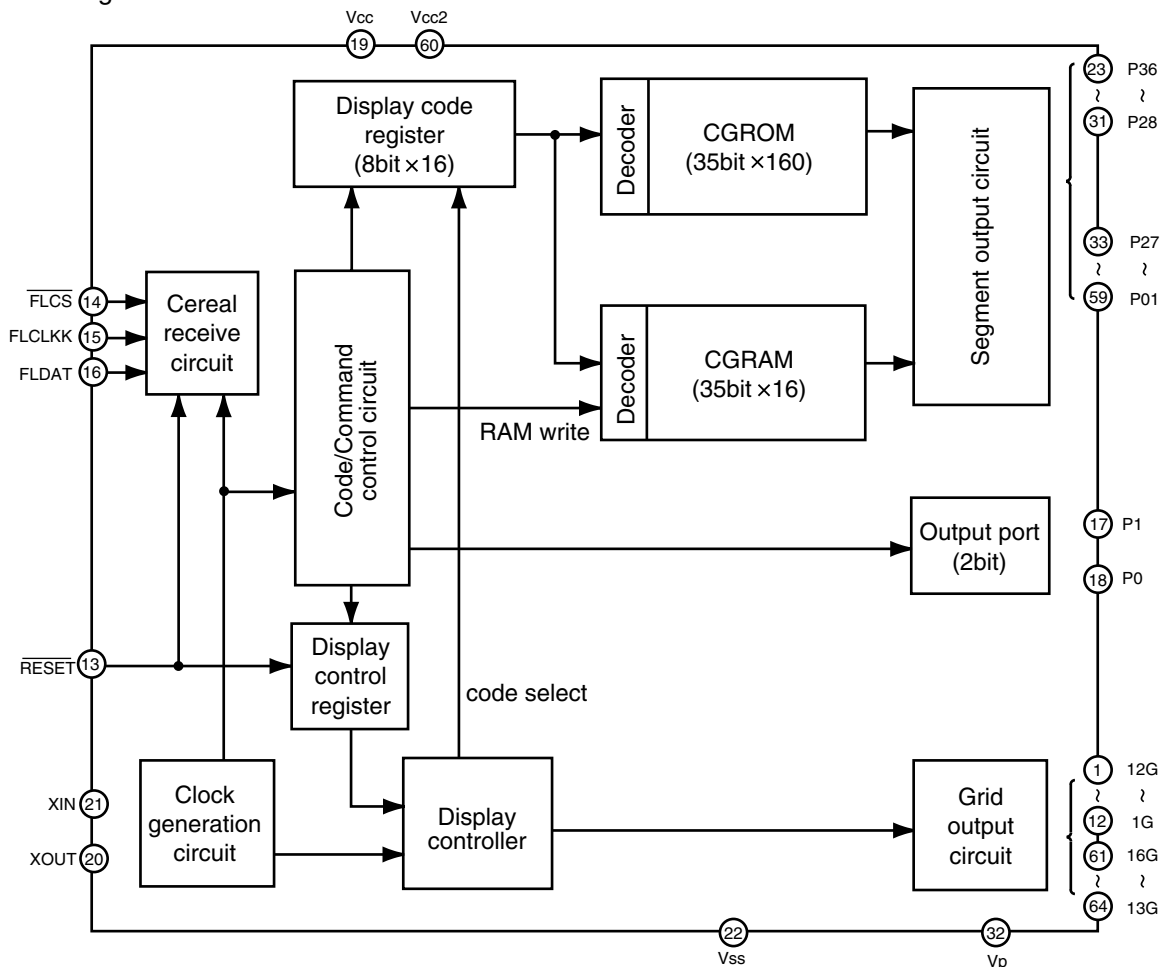


2. Truth table

Control	Switch
H	ON
L	OFF

■ M66004FP-X(IC721):FL Driver

1. Block diagram

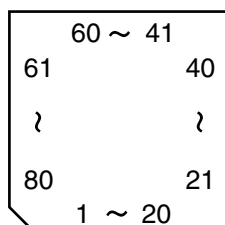


2.Pin function

Pin.No.	Symbol	I/O	Description
1~12	12G~1G	O	FL grid control signal output.
13	SRST	I	Reset signal input
14	FLCS	I	Chip select signal input.
15	FLCLK	I	Shift clock signal input.
16	FLDATA	I	Serial data input.
17	P1	O	Output port (static operation)
18	P0	O	Output port (static operation)
19	VCC1	-	Power supply for internal logic.
20	XOUT	O	Clock signal output.
21	XIN	I	Clock signal input.
22	VSS	-	Connect to ground.
23~31	P36~P28	O	FL Segment control signal output.
32	VP	-	Power supply.
33~59	P27~P01	O	FL Segment control signal output.
60	VCC2	-	Power supply for grid output and segment output.
61~64	16G~13G	O	FL grid control signal output.

■ MN662790RSC(IC651):Digital servo & processor

1.Pin layout



2.Pin function

MN662790RSC (1/2)

Pin No.	Symbol	I/O	Description
1	BCLK	O	Bit clock output for SRDATA
2	LRCK	O	Identifying signal output of L,R
3	SRDATA	O	Serial data output
4	DVDD1	-	Power supply for digital circuit
5	DVSS1	-	Connect to ground for digital circuit
6	TX	O	Digital audio interface output signal
7	MCLK	I	Micom command clock signal input
8	MDATA	I	Micom command data signal input
9	MLD	I	Micom command load signal input L:load
10	SENSE	-	Non connect
11	FLOCK	-	Non connect
12	TLOCK	-	Non connect
13	BLKCK	O	Sub code block clock signal (Command execution : CD-TEXT data readout enabling signal (DQSY) output)
14	SQCK	I	Export clock signal input for sub code Q register
15	SUBQ	O	Sub code Q data output
16	DMUTE	I	Muting input H:muting
17	STAT	O	Status signal output
18	LSI_RST	I	Reset signal input L:reset
19	SMCK	O	Clock signal output MSEL is H : 8.4672 MHz MSEL is L : 4.2336 MHz
20	CSEL	I	Oscillation frequency specification terminal H:33.8688 MHz L:16.9344 MHz
21	TEST2	-	TEST2 terminal usually : open
22	TVD	O	Traverse drive output
23	PC	-	Non connect
24	ECM	O	Spindle motor drive signal output (Compulsion mode output)
25	ECS	O	Spindle motor drive signal output (Servo error signal output)
26	VDETMON	-	Non connect
27	TRD	O	Tracking drive signal output
28	FOD	O	Focus drive signal output
29	VREF	-	Reference voltage for DA output section
30	FBAL	O	Focus balance adjust signal output
31	TBAL	O	Tracking balance adjust signal output
32	FE	I	Focus error signal input (analog input)
33	TE	I	Tracking error signal input (analog input)
34	RFENV	I	RF Envelope signal input (analog input)
35	TEST3	I	TEST3 Terminal usually : Fixation L
36	OFT	I	Off track signal input H : off track
37	TRCRS	I	Track cross signal input (analog input)
38	RFDET	I	RF detection signal input L : detection
39	BDO	I	Dropout signal input H : dropout
40	LDON	-	Non connect

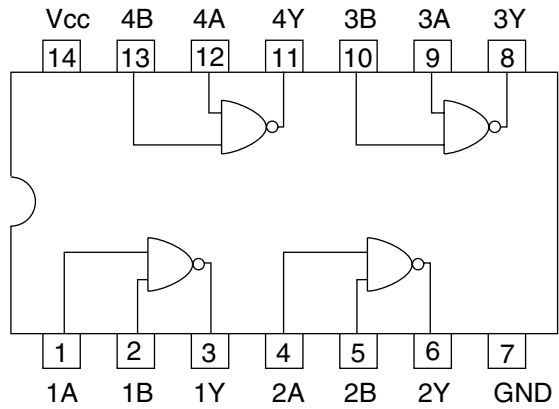
2.Pin function

MN662790RSC (2/2)

Pin No.	Symbol	I/O	Functions
41	PLLF2	I/O	Terminal for loop filter characteristic switch for PLL
42	DSLBD A	-	Non connect
43	WVEL	-	Non connect
44	ARF	I	RF Signal output
45	IREF	I	Standard electric current input terminal
46	DRF	I	Bias terminal for DSL
47	DSL F	I/O	Loop filter terminal for DSL
48	PLL F	I/O	Loop filter terminal for PLL
49	VCO F	I/O	Loop filter terminal for VCO
50	AVDD2	-	Power supply terminal for analog circuit
51	AVSS2	-	Connect to ground terminal for analog circuit
52	EFM	-	Non connect
53	DSL B	O	PLL extraction clock output
54	VCO F2	I/O	Loop filter terminal for VCO
55	SUBC	O	Sub code serial output
56	SBCK	I	Clock signal input for sub code serial output
57	VSS	-	Connect to ground terminal for oscillation circuit
58	X1	I	Oscillation circuit input terminal f=16.9344 MHz, 33.8688 MHz
59	X2	O	Oscillation circuit output terminal f=16.9344 MHz, 33.8688 MHz
60	VDD	-	Power supply terminal for oscillation circuit
61	BYTCK	-	Non connect
62	LDON	O	Laser ON signal output H : ON
63	GCTRL	O	General I/O port
64	IPFLAG	-	Non connect
65	FLAG	O	Flag signal output
66	CLVS	-	Non connect
67	CRC	-	Non connect
68	DEMPH	O	De-emphasis detection signal output
69	RESY	-	Non connect
70	IOSEL	I	Mode switch terminal
71	TEST	I	TEST terminal usually : H
72	AVDD1	-	Power supply terminal for analog circuit (for audio output section)
73	OUTL	O	Lch audio output
74	AVSS1	-	Connect to ground terminal for analog circuit (for audio output section)
75	OUTR	O	Rch audio output
76	DQSY	I	RF signal polarity specification terminal
77	VCC5V	-	Power supply terminal (5V)
78	PSEL	O	IOSEL=H TEST terminal IOSEL=L SRDATA input
79	MSEL	O	IOSEL=H SMCK terminal output (frequency switch terminal) IOSEL=L LRCK input
80	SSEL	O	IOSEL=H SUBQ terminal output mode switch terminal IOSEL=L BCLK input

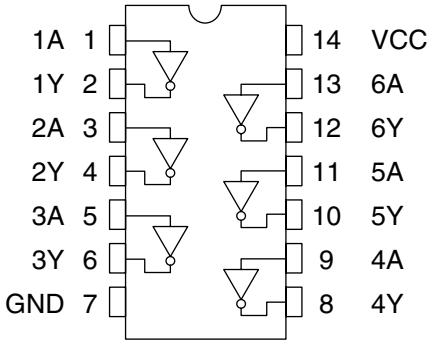
■ TC74HC00AF-W(IC301,IC311):Digital I/O selector

Pin layout & block diagram



■ TC74HCU04AF-W(IC331):Digital input selector

1.Pin layout & block diagram

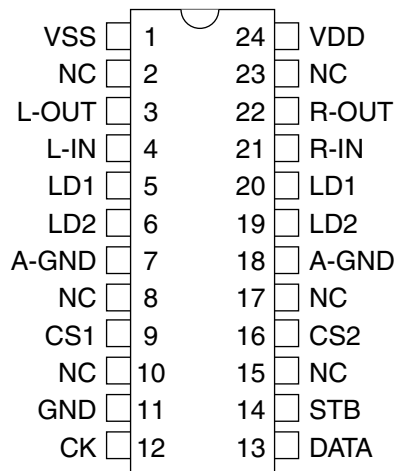


2.Truth table

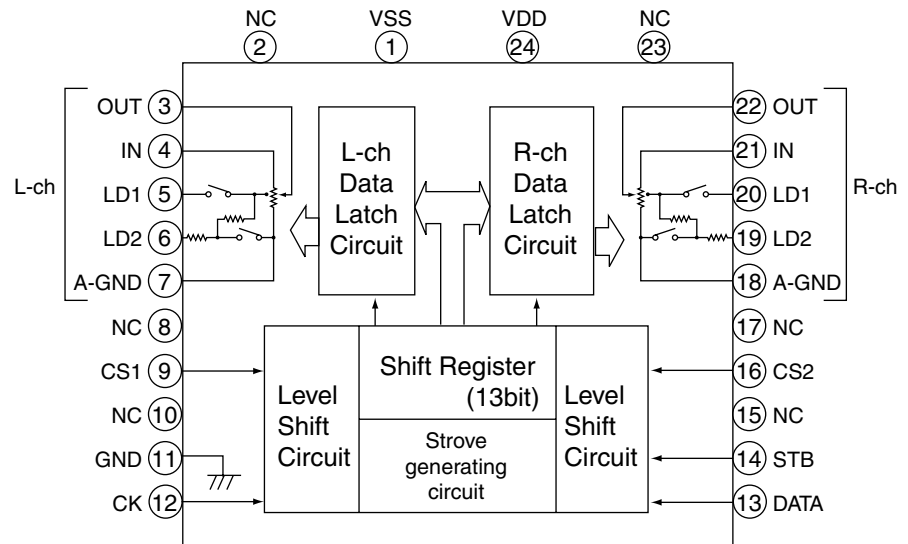
A	Y
L	H
H	L

■ TC9412AF-X(IC891) : Rec Level

1.Pin layout



2.Block diagram

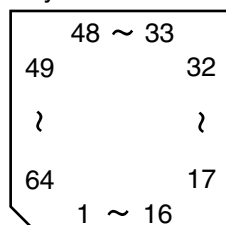


3.Pin functions

Pin No.	Symbol	Description
1	VSS	Negative power supply terminal
2	NC	Non connect
3	L-OUT	L-ch Volume output terminal
4	L-IN	L-ch Volume input terminal
5	LD1	L-ch Loudness tap output terminal
6	LD2	L-ch Loudness tap output terminal
7	A-GND	L-ch Analog ground
8	NC	Non connect
9	CS1	Chip select input terminal
10	NC	Non connect
11	GND	Digital ground
12	CK	Data transfer clock input terminal
13	DATA	Volume setup serial data input terminal
14	STB	Data write strobe input terminal
15	NC	Non connect
16	CS2	Chip select terminal
17	NC	Non connect
18	A-GND	R-ch Analog ground
19	LD2	R-ch Loudness tap output terminal
20	LD1	R-ch Loudness tap output terminal
21	R-IN	R-ch Volume input terminal
22	R-OUT	R-ch Volume output terminal
23	NC	Non connect
24	VDD	Positive power supply terminal

■ UPD780024AGKB21(IC251) : Unit microcomputer

1.Pin layout



2.Pin function

UPD780024AGKB21 1/2

Pin No.	Symbol	I/O	Description
1	P50/A8	-	Connect to ground
2	P59/A9	-	Non connect
3	MCS	-	Pull-up +B
4	MRDY	-	Non connect
5	CDINDEX	-	Non connect
6	CDEMP	I	Detection of CD emphasis
7	CDTNO	I	Detection of CD track number
8	CDCOPY	I	Detection of CD copy
9	VSS0	-	Connect to ground
10	VDD0	-	Power supply terminal
11	P30	-	Non connect
12	P31	-	Non connect
13	P32	-	Non connect
14	MUTE	O	Muting output
15	SUBQ	I	Sub-code Q data input from IC651
16	P35/SO31	-	Non connect
17	SQCK	O	Clock output for sub-code Q resistor to IC651
18	KCMND	O	Kick command data output
19	MSTAT	O	CD control to IC801 (status output)
20	MCLK	I	CD control from IC801 (command clock input)
21	RXDO	I	Digital data input
22	TXDO	O	Digital data output
23	P25/SCK0	-	Connect to ground
24	VDD1	-	Power supply terminal
25	AVSS	-	Connect to ground
26	KEY1	I	Key input 1
27	KEY2	I	Key input 2
28	PCHK	I	parity check
29	P14/AN14	-	Connect to ground
30	P13/AN13	-	Connect to ground
31	/OPEN	I	OPEN switch input
32	/REST	I	REST switch input
33	P10/AN10	-	Connect to ground
34	AVREF	-	Standard voltage for analog circuit (connect to power supply terminal for analog circuit)
35	AVDD	-	Power supply terminal for analog circuit
36	/RESET	I	CD control from IC801 (reset input)

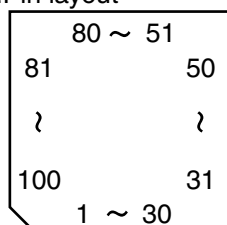
2.Pin function

UPD780024AGKB21 2/2

Pin No.	Symbol	I/O	Description
37	XT2	-	Non connect
38	XT1	-	Connect to power supply terminal
39	IC	O	Control of flash microcomputer
40	X2	-	Connect with external oscillator
41	X1	-	Connect with external oscillator
42	VSS1	-	Connect to ground
43	FLAG	I	Flag signal input from IC651
44	BLKCK	I	Sub-code,block,clock signal input from IC651
45	/RFDET	I	RF signal amplitude detection input terminal
46	EQx2	O	x2 equalizer switch
47	EQx4	O	x4 equalizer switch
48	VCOx4	-	Non connect
49	OPEN	I	Tray open detection
50	/CLOSE	I	Tray close detection
51	IREFx4	O	Electric current switch of x4 DSP
52	P75/BUZ	-	Non connect
53	/RESET	O	Reset signal output to IC651 L:reset
54	STAT	I	Status signal input from IC651
55	/DMUTE	O	Muting signal output to IC651
56	/P.ON	O	Power ON/OFF switch signal output to IC291
57	MLD	O	Microcomputer command load signal output to IC651
58	MDATA	O	Microcomputer command data output to IC651
59	MCLK	O	Microcomputer command clock signal output to IC651
60	CLKSW	-	Non connect
61	JIG	-	Non connect
62	JIG	-	Non connect
63	JIG	-	Non connect
64	JIG	-	Connect to ground

■ UPD784214AGF523(IC501):System controller

1.Pin layout



2.Pin function

UPD784214AGF523 1/2

Pin No.	Symbol	I/O	Description
1~3	NC	-	Non connect
4	TEST-	I	Test mode input terminal L : Test mode
5	VR_STB	O	Strobe signal output to IC891
6	VR_DATA	O	Data output to IC891
7	VR_CK	O	Clock signal output to IC891
8	NC	-	Non connect
9	VDD	-	Power supply terminal +5V
10,11	CS1/CS2	I	Chip select terminal
12,13	JOGA/JOGB	I	Multi jog dial A/B input
14	FLDAT	O	Serial data output to FL driver
15	FLCLK	O	Shift clock signal output to FL driver
16	FLCS	O	Chip select signal output to FL driver L : data output
17~19	MPLAY/REC/STOP	-	Non connect
20	DIN_COA	O	When digital input is coaxial for output H
21	AIN_HI	O	LINE IN gain control output H : high gain
22	VPP	-	Connect to ground
23	DIG_LED	O	Digital LED control signal output
24	CD_LED	O	CD LED control signal output
25	LIN_LED	O	Line IN LED control signal output
26	MIC_LED	O	MIC LED control signal output
27	LLEVE	-	Non connect
28	MIXBL	I	Mix balance volume level input
29	DIN_OPT	O	When digital input is optical for output H
30	SMUTE	O	System muting signal output
31	DACMUTE	-	Non connect
32	CD_DRT	O	It is a power output to the direct connection of analog recording source 3CD to the A/D input of CD-RW as for L
33	SCD	O	Analog recording source 3CD select control output L : selected 3CD
34,35	SLIN1/SLIN2	O	Analog recording source select control output
36	SMIC	O	Analog recording source MIC select control output L : selected MIC
37	VDD	-	Power supply terminal +5V (connects with the backup capacitor at power supply off.)
38	X2	O	Main system clock output terminal 10MHz
39	X1	I	Main system clock input terminal 10MHz
40	VSS	-	Connect to ground
41	XT2	O	Sub clock output terminal 32.768KHz
42	XT1	I	Sub clock input terminal 32.768KHz

2.Pin function

UPD784214AGF523 2/2

Pin No.	Symbol	I/O	Description
43	RESET	I	Reset signal input
44	REM	I	Remote control signal input
45	NC	-	Non connect
46	ACON	I	The AC power supply existence detection terminal L : No AC power supply (backup mode) H : AC power supply having (normal mode : Backup mode Release)
47	CDR_RREQ	I	Request demand input from CD-RW unit
48	NC	-	Non connect
49	DOCD	O	Output select control H : selected 3CD L : selected CD-RW
50	SLCDR	O	Output select control H : selected CD-RW L : selected 3CD
51	AVDD	-	Power supply terminal +5V (connects with the backup capacitor at power supply off.)
52	AVREF0	-	Power supply terminal +5V
53~56	KEY1~4	I	Operation switch input terminal 1~4
57	NC	-	Non connect
58	3CDINR	I	3CD analog signal level input (for Rch level meter)
59	3CDINL	I	3CD analog signal level input (for Lch level meter)
60	MODE	I	DCS mode setting switch input
61	AVSS	-	Connect to ground
62	DCSI	I	DCS command input
63	DCSO	O	DCS command output
64	AVREF1	-	Power supply terminal +5V
65	NBUSI	I	Connect to Q541
66	NBUSO	-	Non connect
67	ASCK2	-	Connect to ground
68	STAT	I	3CD status input
69	COMD	O	3CD command output
70	ASCK1	I	Connect to ground
71	SRST	O	System reset signal output L : active
72	POWER	O	System power supply control terminal / standby LED control H : power OFF / LED turning off L : power ON / LED lighting
73	CDR_DTI	I	Serial data input from CD-RW unit
74	CDR_DTO	O	Serial data output to CD-RW unit
75	XDR_ACLK	I	Clock signal input from CD-RW unit
76	CDR_SREQ	O	Request signal output to CD-RW unit L : active
77	SYS_RDY	O	System ready output to CD-RW unit L : active
78	NC	-	Non connect
79	DACPD	O	DAC power down control output
80	NC	-	Non connect
81	3CD_RES	O	Reset signal output to 3CD unit micom (IC251)
82	NC	-	Non connect
83	DOCDR	O	Output select control H : selected CD-RW L : selected 3CD
84~97		-	Non connect
98	CDRRST	O	Reset signal output to CD-RW unit L : reset ON
99	STBY_LED	O	Standby LED control signal output L : lighting
100	VSS	-	Connect to ground



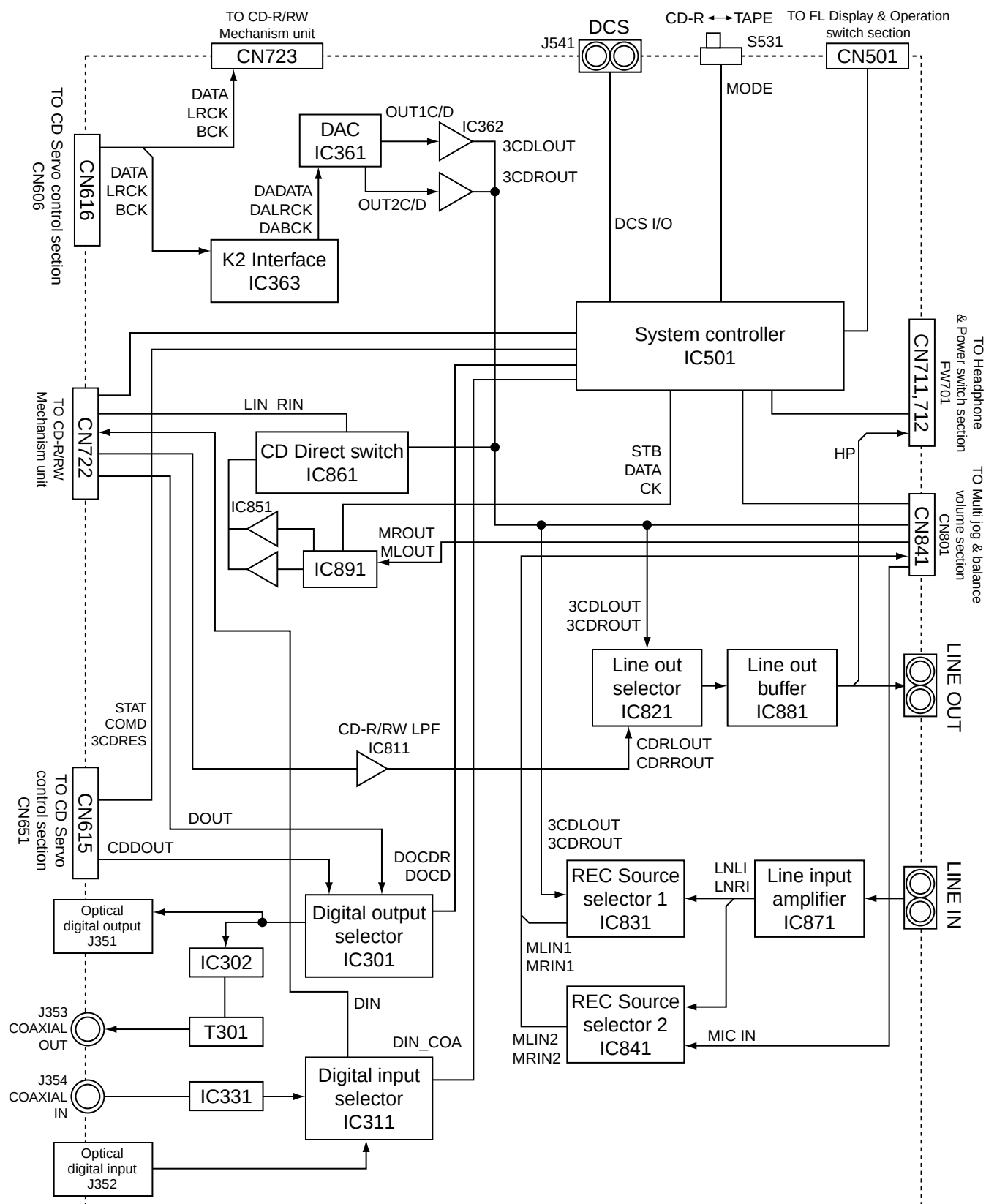
VICTOR COMPANY OF JAPAN, LIMITED
PERSONAL & MOBILE NETWORK BUSINESS UNIT
1644, Shimotsuruma, Yamato, Kanagawa 242-8514, Japan

Safety precaution

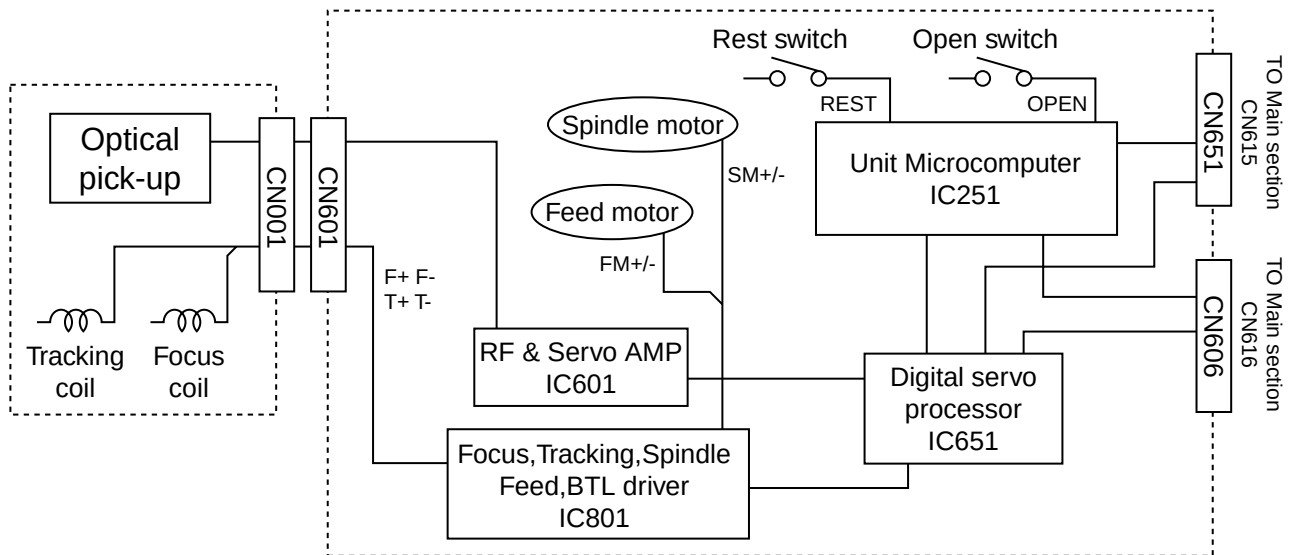
In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (⬤) and ICP (●) or identified by the "⚠" mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the JC version)

Block diagrams

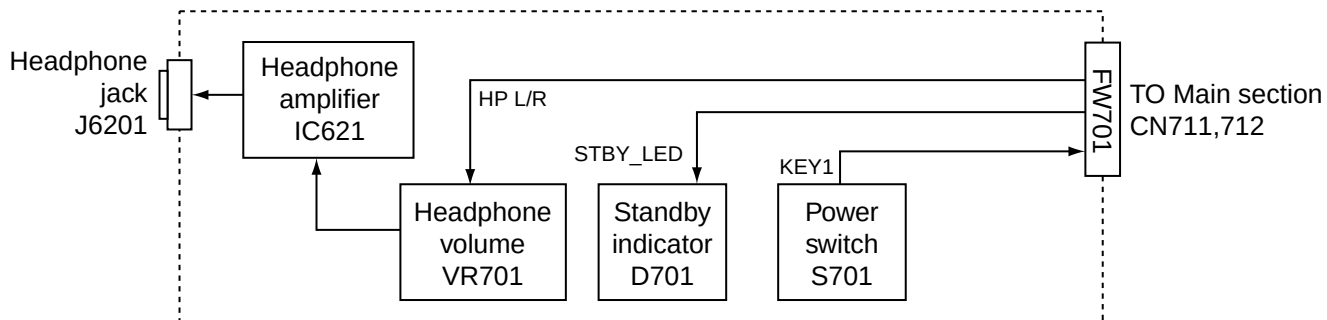
■ Main section (SHEET 1,2)



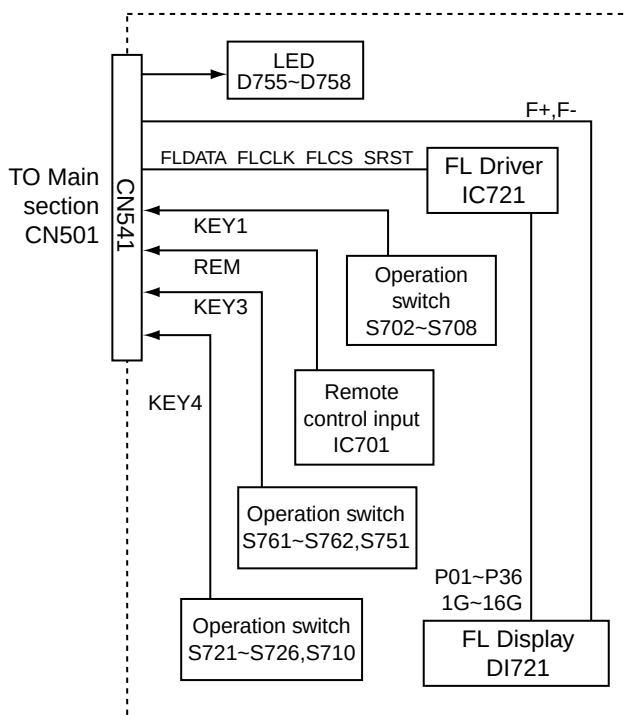
■ CD Servo control section (SHEET 4)



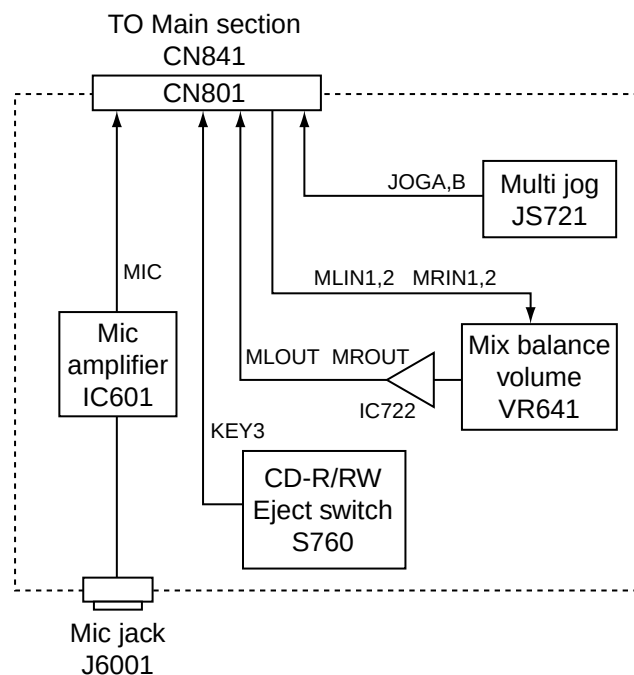
■ Headphone & Power switch section (SHEET 3)



■ FL Display & operation switch section (SHEET 3)

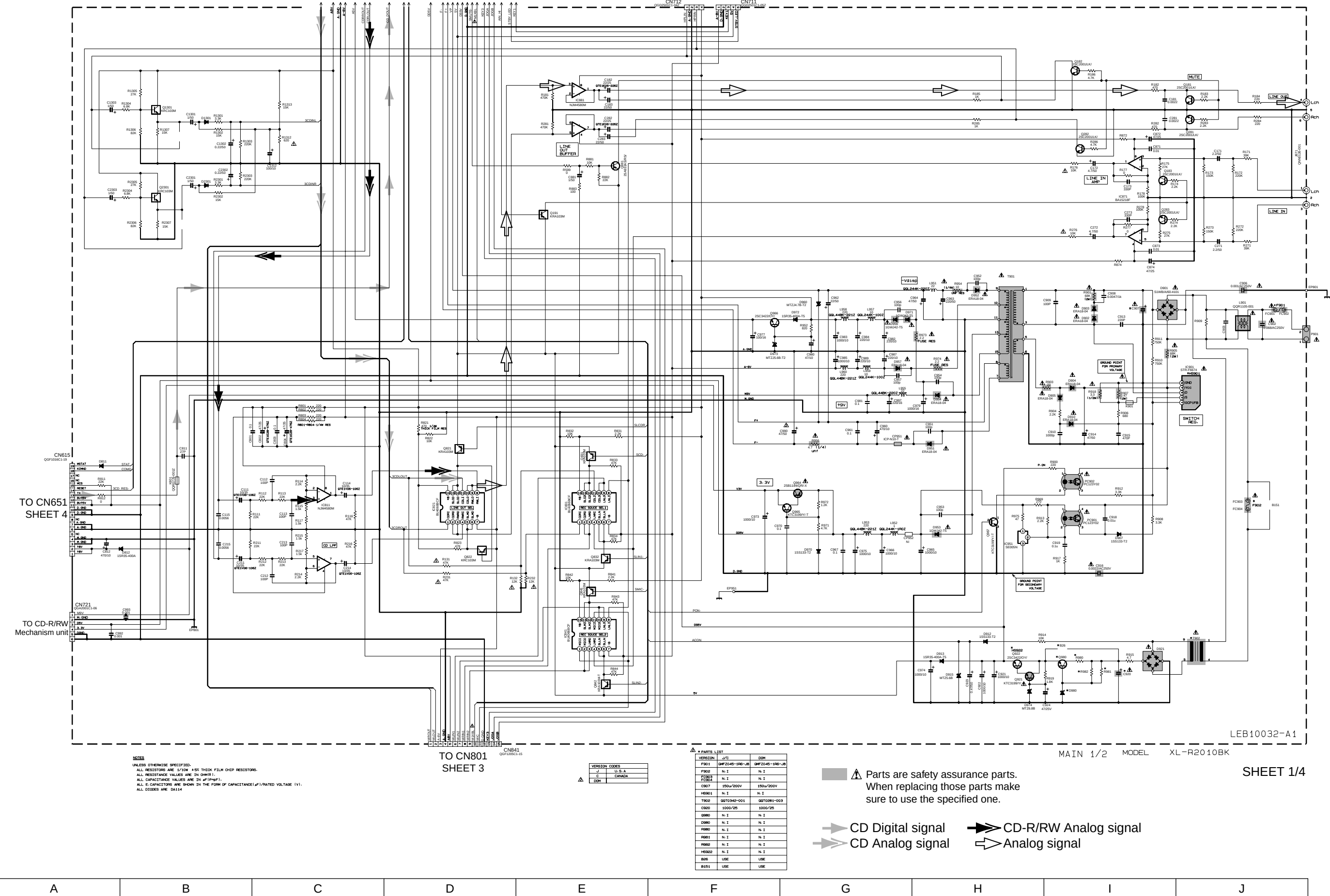


■ Multi jog & Balance volume section (SHEET 3)



Standard schematic diagrams

■ Power supply & Line input/output section



PARTS LIST

Version	J/C	DOM
R536	47K	N.I
R537	N.I	47K
R538	N.I	47K
R539	47K	N.I
R382	0ohm	56ohm
K380	0ohm	NCR0227-004
C380	N.I	220P6.3
C371	N.I	0.01
R380	N.I	1M
C381	N.I	1.5MLC
R381	N.I	100
C383	N.I	N.I
C384	N.I	N.I
C385	N.I	N.I
B3611	USE	USE
B3612	USE	USE
B3613	USE	USE
K3600	USE	N.I
K3601	USE	N.I
K3602	USE	N.I
IC364	N.I	N.I
IC363	N.I	USE
B3603	USE	USE
B3604	N.I	N.I
B170	USE	N.I
B171	USE	USE
R501	N.I	USE
C501	N.I	USE

N.I = NOT USE

NOTES

- UNLESS OTHERWISE SPECIFIED:
- ALL RESISTORS ARE 1/10W±5% THICK FILM RESISTORS.
- ALL CAPACITANCE VALUES ARE IN OHMS ±1.
- ALL CAPACITANCE VALUES ARE IN µF(THIN FILM).
- ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/µF/RATED VOLTAGE (V).
- ALL DIODES ARE DAT14
- ALL PERMET BEADS ARE NGR0227-004X

Legend:

- CD Digital signal
- CD Analog signal
- CD-R/RW Digital signal
- CD-R/RW Analog signal
- Digital signal

Connections:

- TO SHEET 1
- TO CN606 SHEET 4
- TO CN501 SHEET 3

PARTS LIST		
Version	J/C	DOM
R536	47K	N.I
R537	N.I	47K
R538	N.I	47K
R539	47K	N.I
R382	0ohm	56ohm
K380	0ohm	NQ0227-004
C380	N.I	2206.3
C371	N.I	0.01
R380	N.I	1M
C381	N.I	1.5MLC
R381	N.I	100
C383	N.I	N.I
C384	N.I	N.I
C385	N.I	N.I
B3611	USE	USE
B3612	USE	USE
B3613	USE	USE
K3600	USE	N.I
K3601	USE	N.I
K3602	USE	N.I
IC364	N.I	N.I
IC363	N.I	USE
B3603	USE	USE
B3604	N.I	N.I
B170	USE	USE
B171	USE	USE
R501	N.I	USE
C501	N.I	USE

N.I = NOT USE

NOTES

UNLESS OTHERWISE SPECIFIED.

ALL RESISTORS ARE 1/10W5% THICK FILM RESISTORS.

ALL RESISTANCE VALUES ARE IN OHMS (Ω).

ALL CAPACITANCE VALUES ARE IN PICO (PF).

ALL ELECTROLYTIC CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

ALL DIODES ARE DA114

ALL FERRITE BEADS ARE NGR0227-004X

$$N.I = N$$

Not use

TO CN541
SHEET 3

LEB10032-A1]

MAIN 2/2
MODEL XL-R2010BK
2010

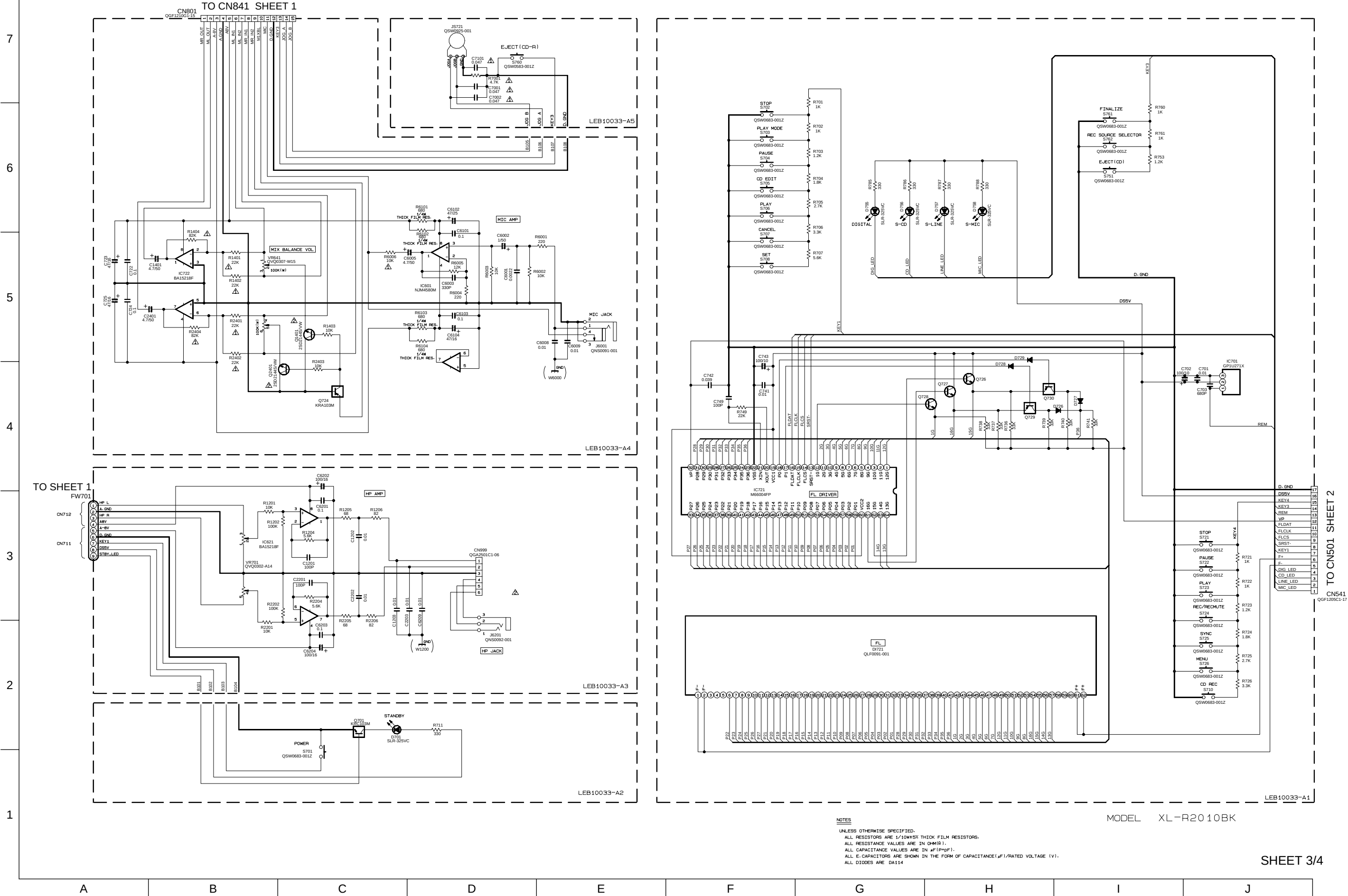
SHEET 2/4

TO SHEET 1

 CD Digital signal
 CD Analog signal

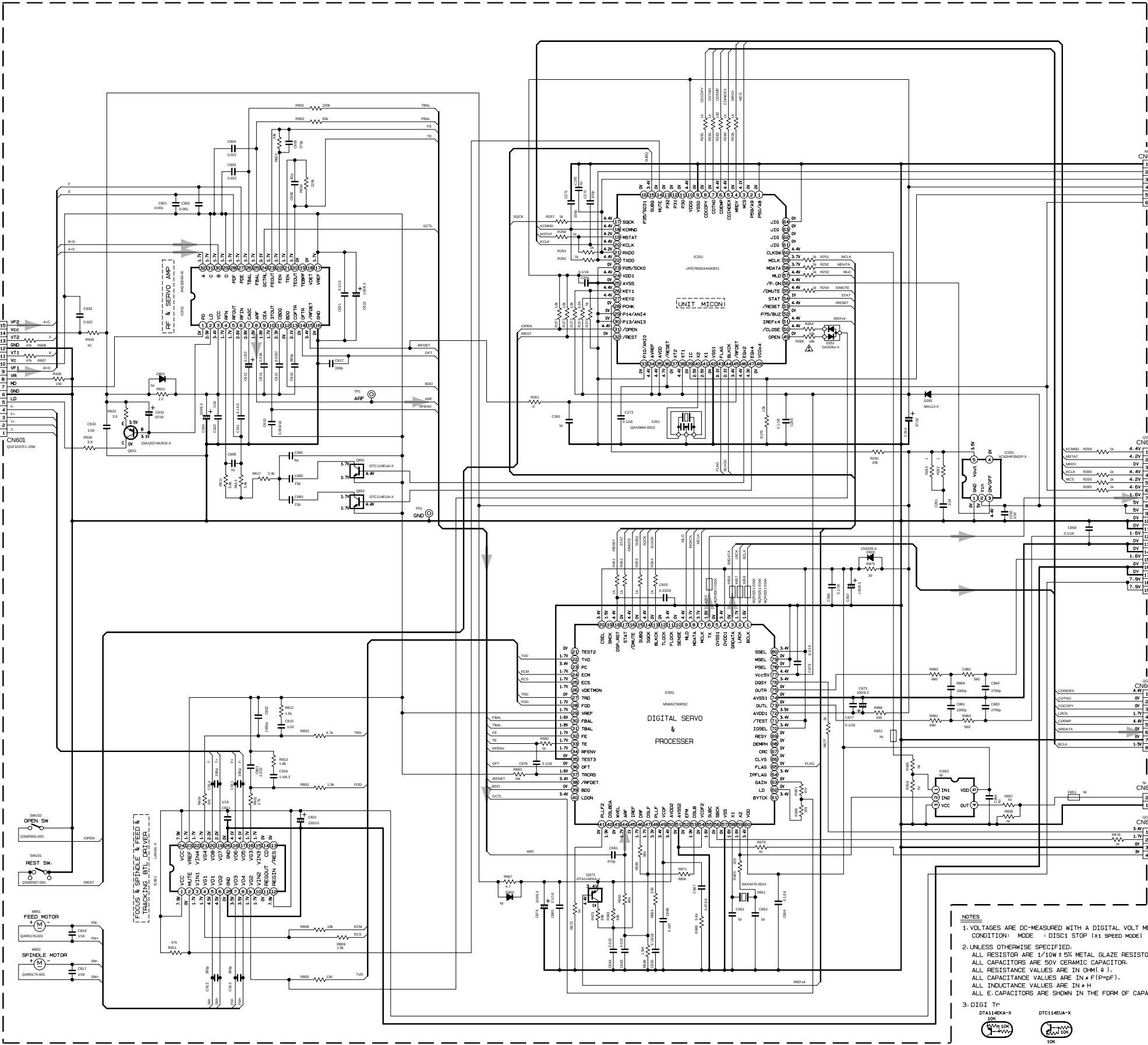
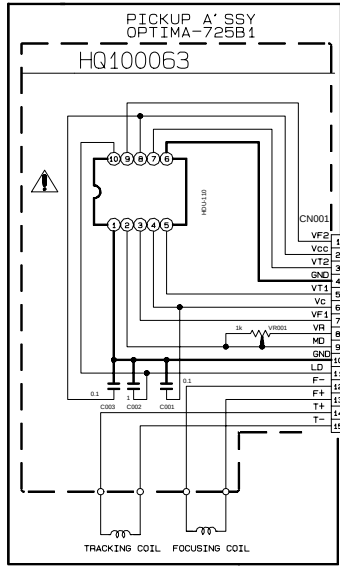
 CD-R/RW Digital signal
 CD-R/RW Analog signal
 Digital signal

FL Display & operation switch section



■ Servo control section

7
6
5
4
3
2
1



Not use

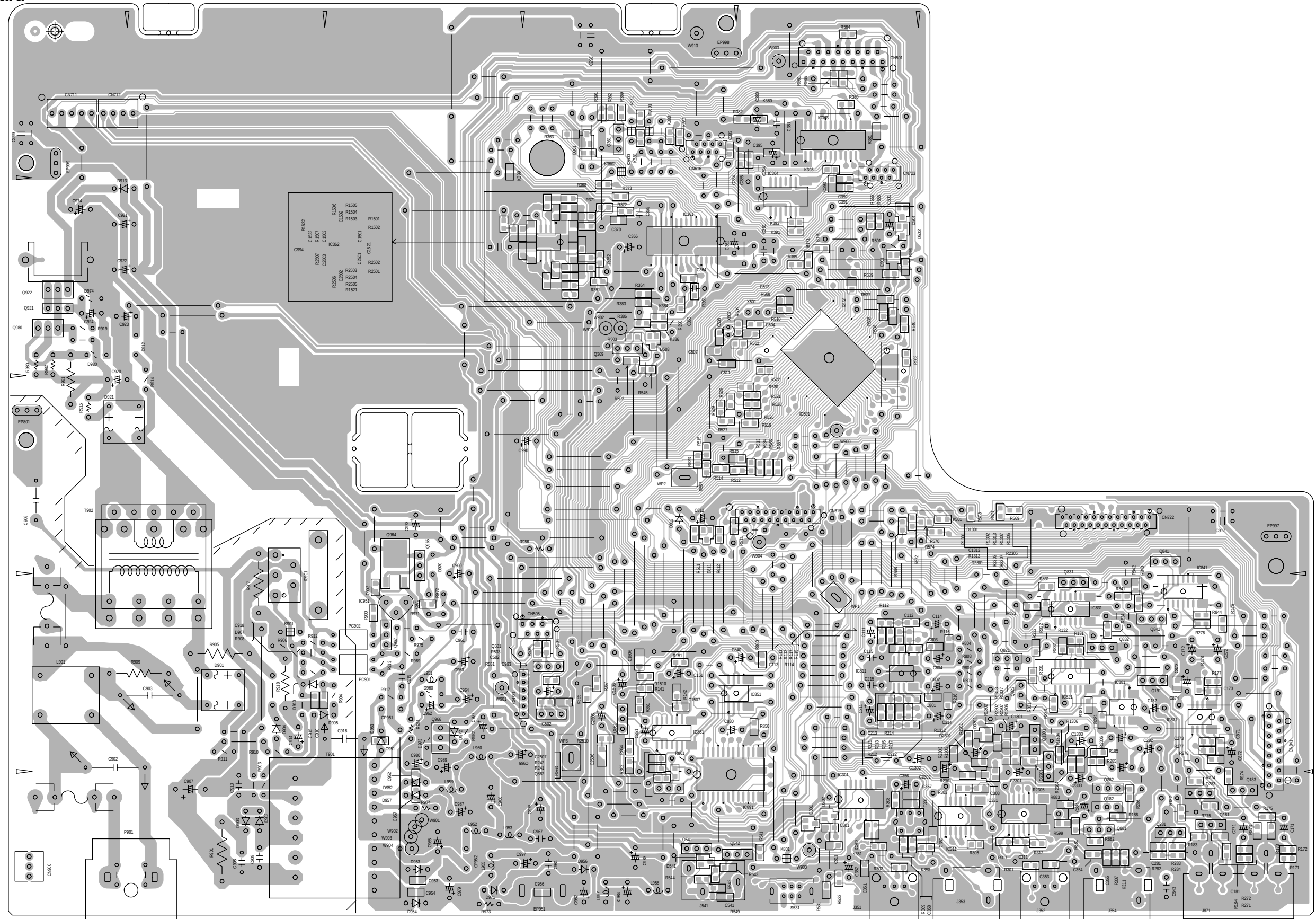
TO CN615
SHEET 1

TO CN616
SHEET 2

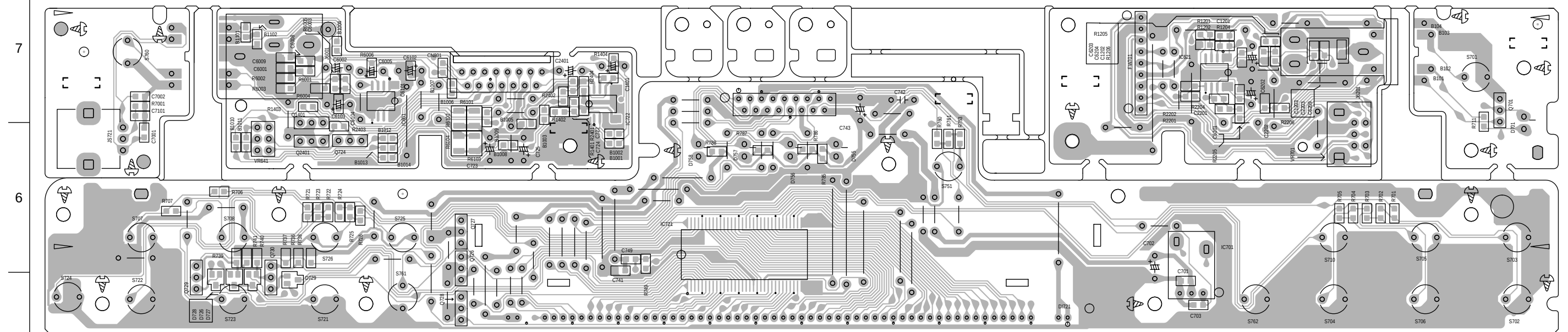
Not use

- NOTES
- 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
CONDITION: MODE : DISC1 STOP (x1 SPEED MODE)
 - 2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTOR ARE 1/10W ± 5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM (Ω).
ALL CAPACITANCE VALUES ARE IN μF (PpF).
ALL INDUCTANCE VALUES ARE IN μH
 - 3. DIGI Tr
DTA114EKA-X
DTC114EUA-X

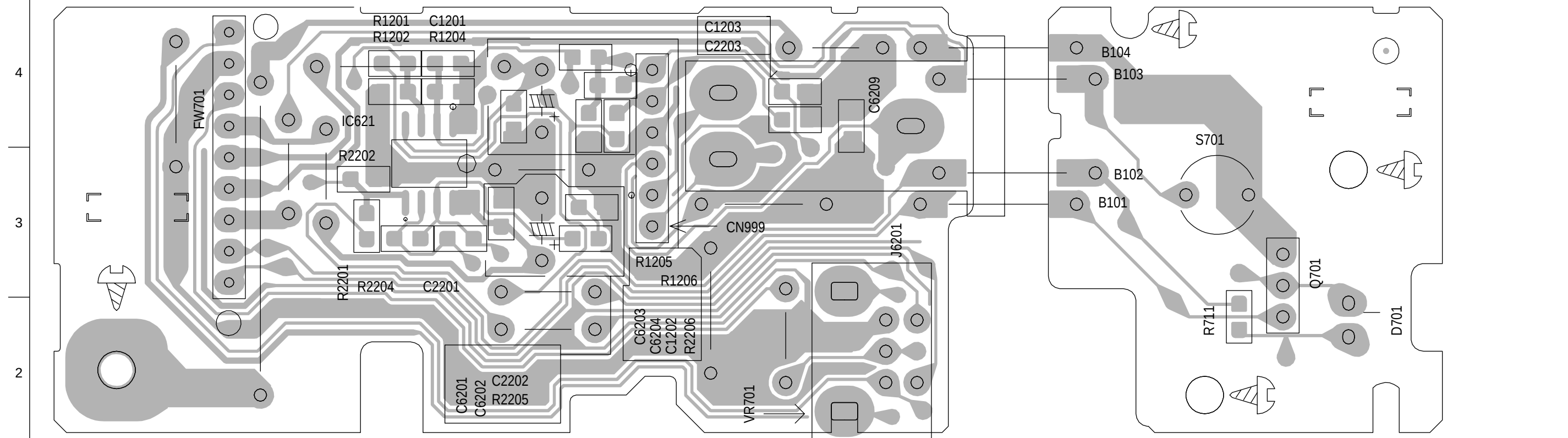
➡ CD Digital signal



■ **Front board**



■ Headphone & Power button board





PARTS LIST

[XL-R2010BK]

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

Area Suffix

J ----- U.S.A.

C ----- Canada

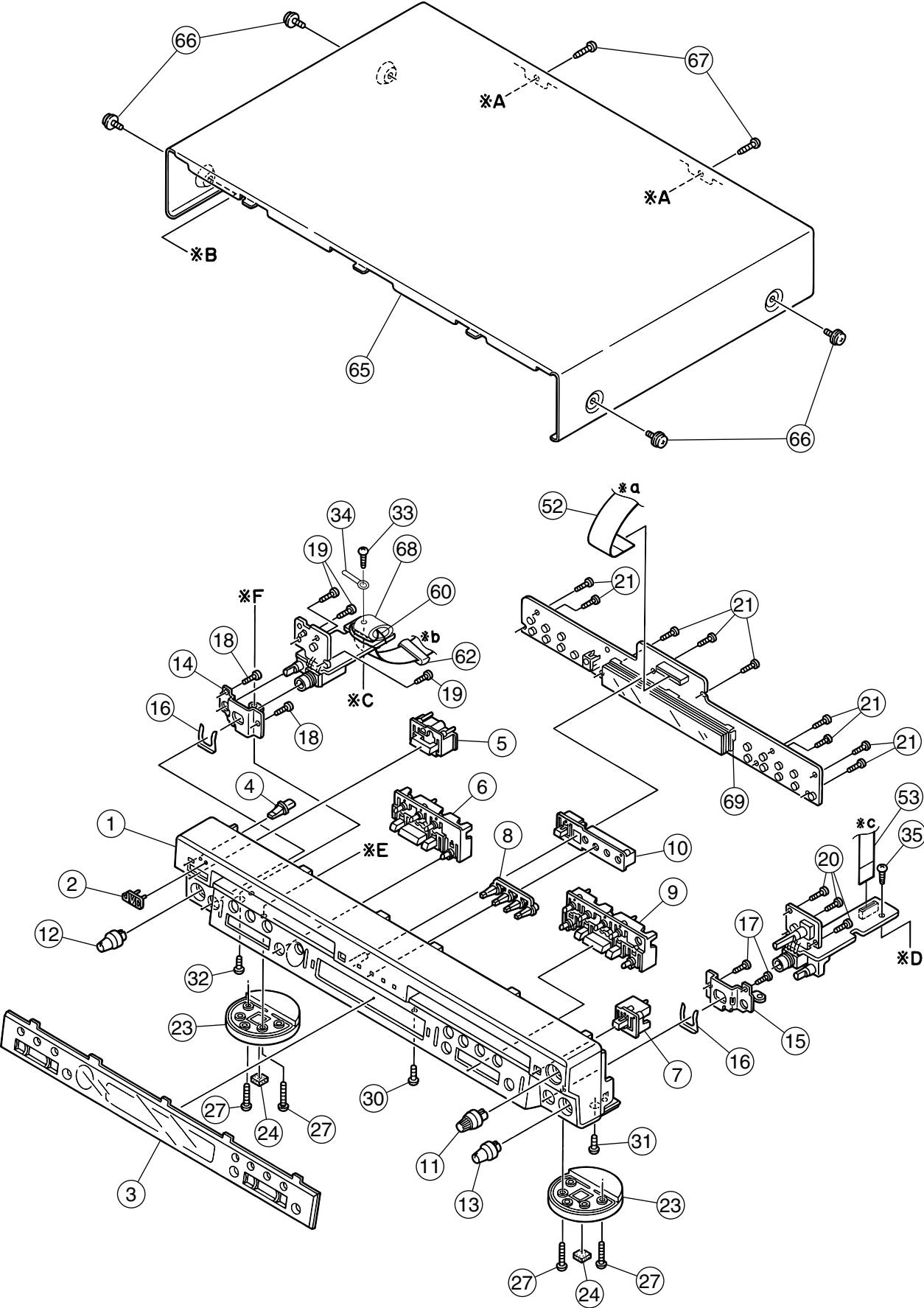
- Contents -

Exploded view of general assembly and parts list	3-2
CD Mechanism assembly and parts list	3-6
CD-R/RW Loading mechanism assembly and parts list	3-8
Electrical parts list	3-10
Packing materials and accessories parts list	3-17

Exploded view of general assembly and parts list 1/2

Block No.

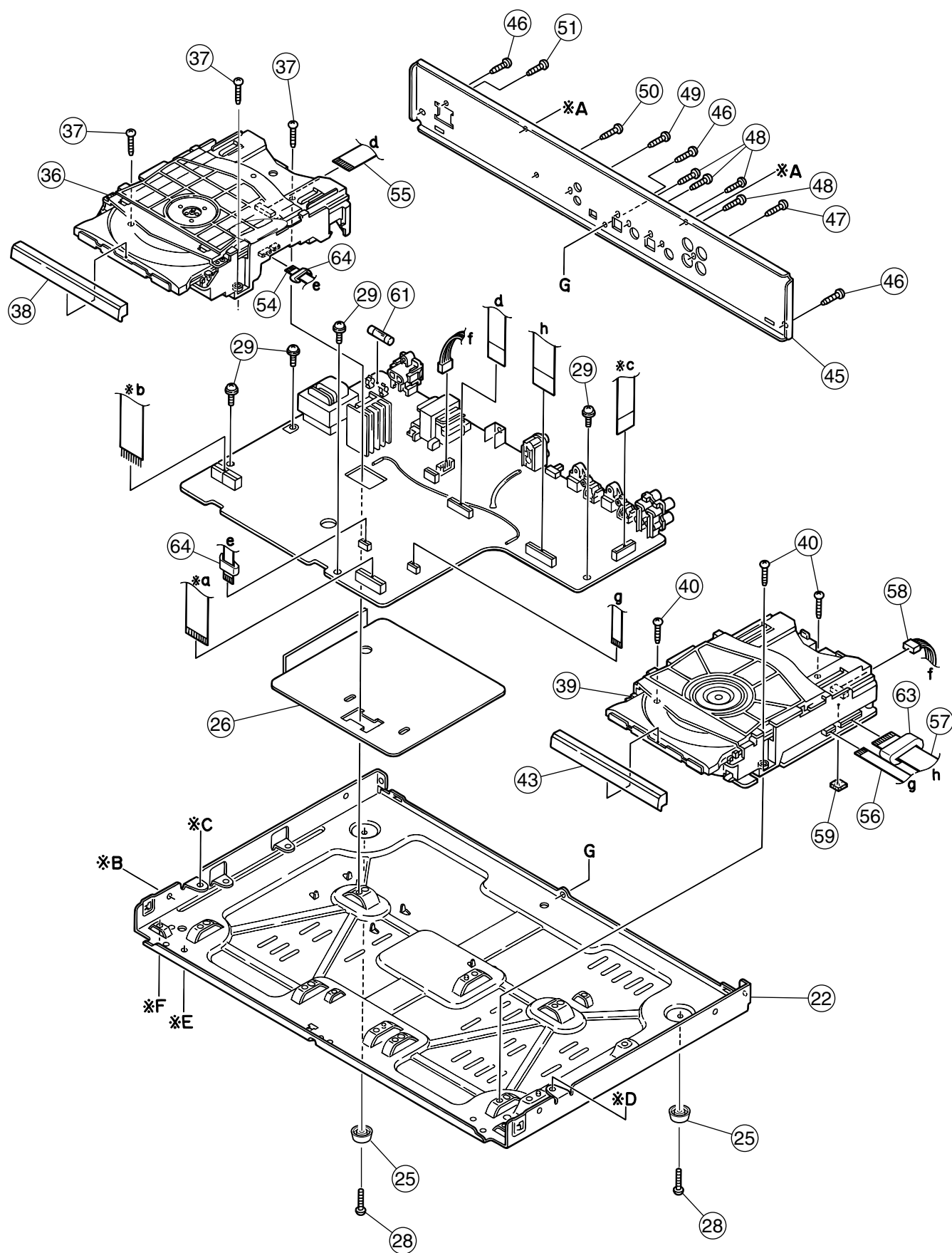
M	1	M	M
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Exploded view of general assembly and parts list 2/2

Block No.

M	1	M	M
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■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LE10254-005A	FRONT PANEL	1		
	2	VJD5429-001SS	JVC MARK	1		
	3	LE20574-002A	WINDOW SCREEN	1		
	4	LE30946-001A	INDICATOR	1		
	5	LE20575-001A	P.BUTTON	1		
	6	LE20576-001A	P.BUTTON	1		
	7	LE20577-001A	P.BUTTON	1		
	8	LE30947-001A	INDICATOR	1		
	9	LE20578-001A	P.BUTTON	1		
	10	LE20579-001A	P.BUTTON	1		
	11	LE30948-001A	JOG KNOB	1		
	12	LE30949-001A	KNOB	1		
	13	LE30949-003A	KNOB	1		
	14	LE30950-002A	HP BRACKET	1		
	15	LE30950-001A	MIC BRACKET	1		
	16	VKL6752-001	SNAP PLATE	2	FOR JACK	
	17	QYSDSF2608Z	SCREW	2	FOR MIC BKT	
	18	QYSDSF2608Z	SCREW	2		
	19	QYSDSF2608Z	SCREW	3	FOR PCB	
	20	QYSDSF2608Z	SCREW	3	FOR JOG CB	
	21	QYSDSF2608Z	SCREW	9	FOR FLONT CB	
	22	LE10255-001A	CHASSIS BASE	1		
	23	LE30951-001A	FOOT	2	FRONT	
	24	E75896-001	FELT SPACER	2		
	25	E47227-029	FOOT	2	REAR	
	26	LE30979-001A	PROTECT SHEET	2		
	27	QYSBST3010Z	T.SCREW	4	FOR FOOT	
	28	QYSBST3008Z	T.SCREW	2		
	29	QYSBSGY3008E	SPECIAL SCREW	4	CB+CHA	
	30	QYSDSG3008M	SCREW	1	PANEL+CHA	
	31	QYSBST3006Z	T.SCREW	1		
	32	QYSBST3006Z	T.SCREW	1	HP.BKT+CHA	
	33	QYSBSGY3008E	SPECIAL SCREW	1	HP.CB+CHA	
	34	VKZ4001-111S	WIRE CLAMP	1		
	35	QYSBSGY3008E	SPECIAL SCREW	1	MIC CB+CHA	
	36	----	SINGLE CD MODUL	1	N1 MECHA	
	37	QYSBST3010Z	T.SCREW	3	FOR MECHA	
	38	LE20580-002A	FITTING	1		
	39	EMU-R7-1M	CDR UNIT	1		
	40	QYSBST3010Z	T.SCREW	3		
	43	LE20580-001A	FITTING	1		
	45	LE20581-008A	REAR PANEL	1		
	46	QYSBSGY3008M	SPECIAL SCREW	3	REAR+CHASSIS	
	47	QYSBSGY3008M	SPECIAL SCREW	1	REAR+LINE	
	48	QYSBSGY3008M	SPECIAL SCREW	4	REAR+OPT	

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
⚠	49	QYSBSGY3008M	SPECIAL SCREW	1	REAR+COMP	
	50	QYSBSGY3008M	SPECIAL SCREW	1		
	51	QYSBSGY3008M	SPECIAL SCREW	1		
	52	QUQ412-1714DJ	FFC WIRE	1	FL - MAIN	
	53	QUQ412-1530DJ	FFC WIRE	1	JOG - MAIN	
	54	QUQ110-0808AJ	FFC WIRE	1	N1 - MAIN	
	55	QUQ110-1918AM	FFC WIRE	1	N1 - MAIN	
	56	QUQ110-0828AJ	FFC WIRE	1	CDR - MAIN	
	57	QUQ110-2326AM	FFC WIRE	1	CDR - MAIN	
	58	QJJ015-063001	SIN CR C-C WIRE	1	CDR POWER - MAI	
	59	VYSH101-009	SPACER	2		
	60	WJN0078-001A	E-SH C WIRE C-C	1		
	61	QMF51U1-1R6-J8	FUSE	1	F901	
	62	QQR1240-001	FERRITE CORE	1		
	63	QQR1257-001	FERRITE CORE	1		
	64	QQR1254-001	FERRITE CORE	2		
	65	LE20582-001A/S/	METAL COVER	1		
	66	E406308-003	SPECIAL SCREW	4	TOP(SIDE)	
	67	QYSBSGY3008M	SPECIAL SCREW	2	TOP+REAR	
	68	QQR1258-001	FERRITE CORE	1		
	69	LE30953-001A	FL HOLDER	1		

CD mechanism assembly and parts list

Block No.

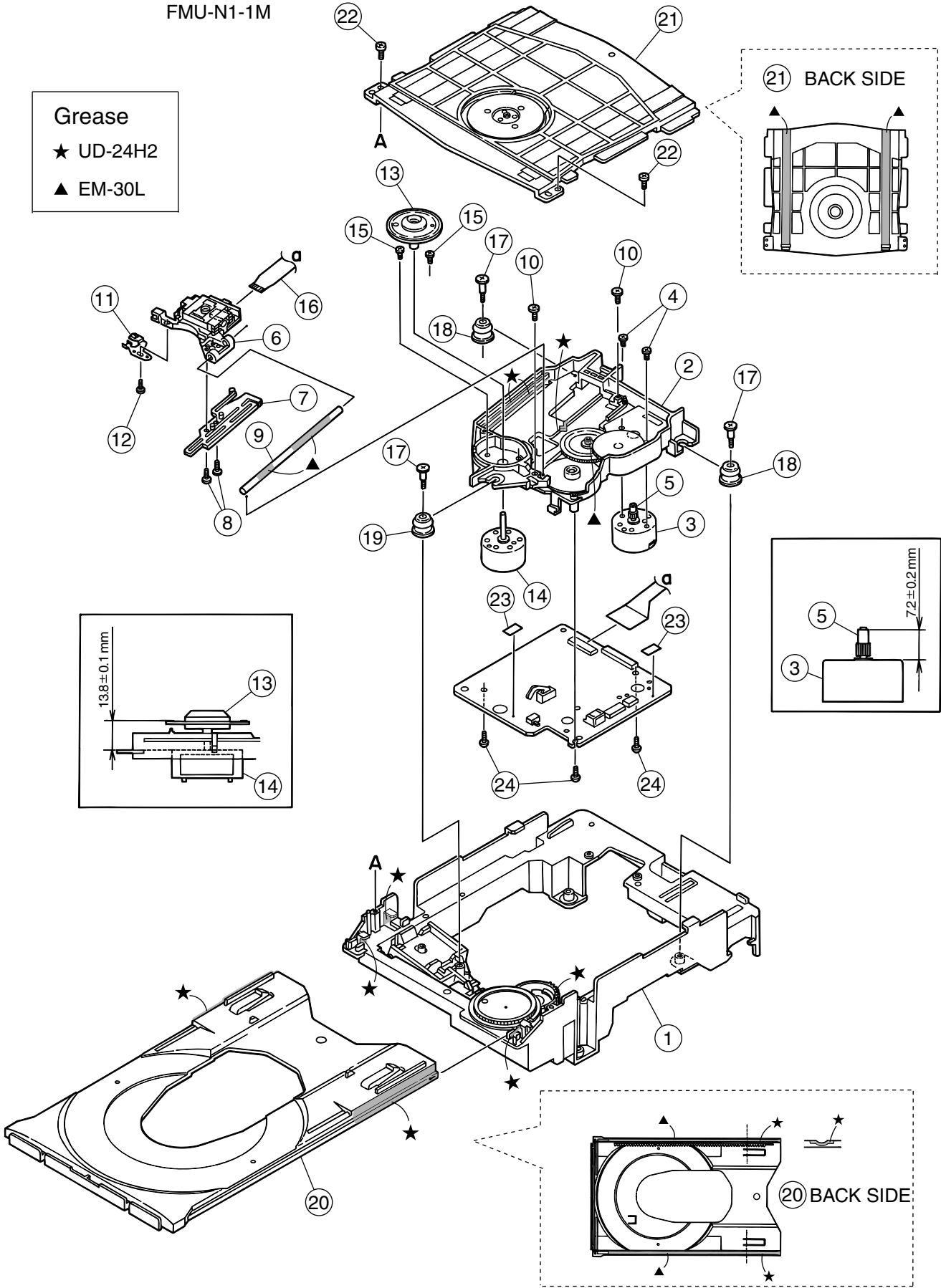
M	2	M	M
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FMU-N1-1M

Grease

★ UD-24H2

▲ EM-30L

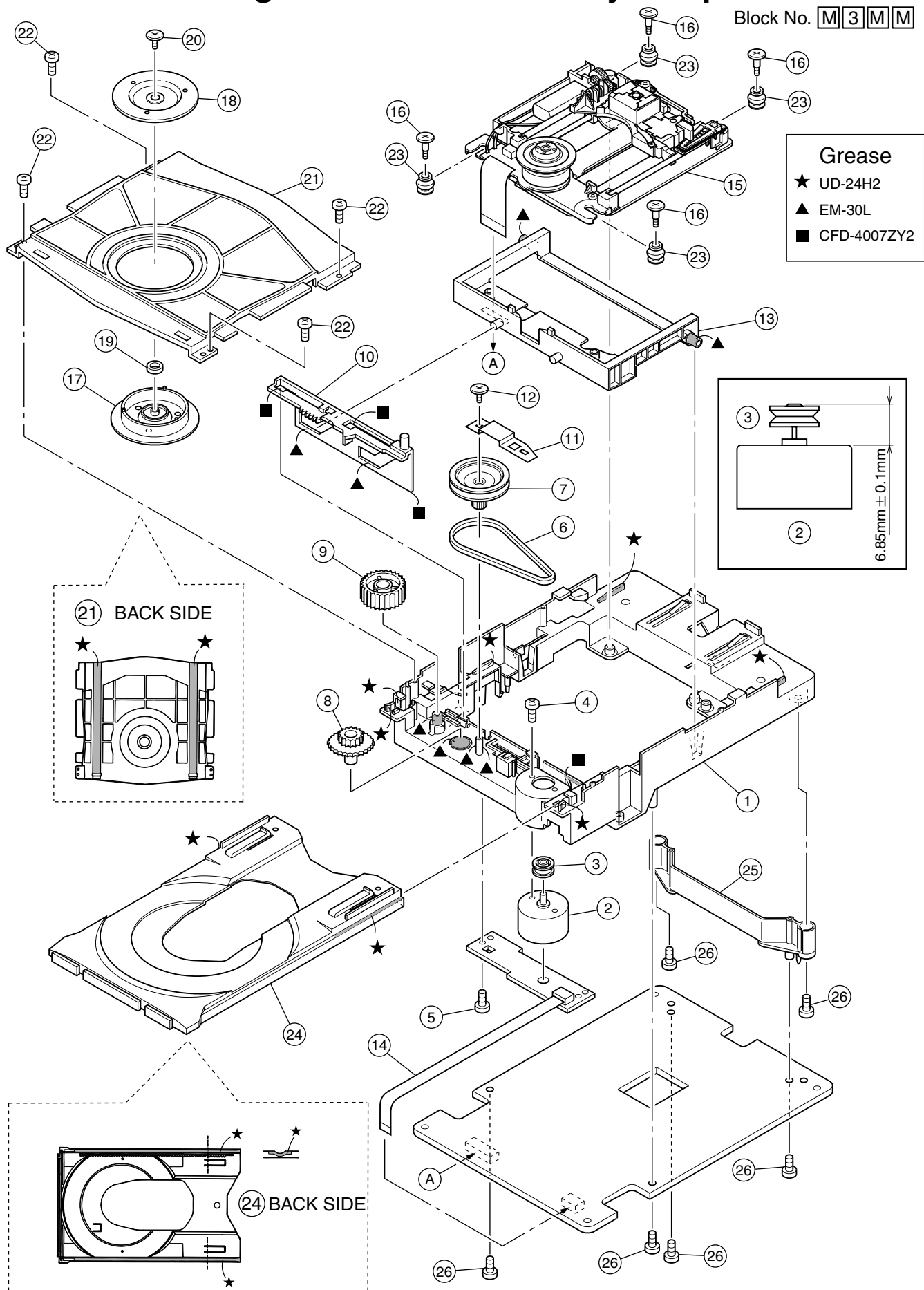


■ Parts list (CD mechanism)

Block No. M2MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV32649-004A	L.BASE ASSY	1		
	2	LV32651-002A	CH.BASE ASSY	1		
	3	QAR0176-001	FEED MOTOR	1		
	4	VKZ4743-001	SPECIAL SCREW	2		
	5	LV42229-001A	MOTOR GEAR	1		
	6	OPTIMA-725B1	CD PICK UP	1		
	7	LV20993-002A	RACK PLATE	1		
	8	QYSPSGT1735M	MINI SCREW	2		
	9	E406777-002SM	C.D SHAFT	1		
	10	LV41741-001A	SPECIAL SCREW	2		
	11	LV31744-001A	P.S.SPRING	1		
	12	QYSPSGT1425M	TAP SCREW	1		
	13	LV42350-001A	T.T.ASSY	1		
	14	QAR0175-001	SP.MOTOR	1		
	15	VKZ4743-001	SPECIAL SCREW	2		
	16	LVB30008-001A	FPC	1		
	17	LV41424-001A	SPECIAL SCREW	3		
	18	LV41659-001A	INSULATOR	2		
	19	LV41659-002A	INSULATOR	1		
	20	LV10503-001A	TRAY	1		
	21	LV32650-001A	CL.BASE ASSY	1		
	22	QYSBSF2005Z	T.SCREW	2		
	23	LV30225-0B6A	SPACER	2		
	24	QYSBSF2005Z	T.SCREW	3		

CD-R/RW Loading mechanism assembly and parts list



■ Parts list (CD-R/RW Loading mechanism assembly)

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10454-006A	LOADING BASE	1		
	2	QAR0164-001	MOTOR	1		
	3	LV42087-001A	MOTOR PULLEY	1		
	4	QYSPSPU1730Z	SCREW	1		
	5	VKZ4777-003	MINI SCREW	1		
	6	LV42209-001A	BELT	1		
	7	LV42084-002A	PULLEY GEAR	1		
	8	LV42085-002A	MIDDLE GEAR	1		
	9	LV42086-001A	IDLE GEAR	1		
	10	LV32514-002A	SLIDE CAM	1		
	11	LV42348-001A	GEAR BRACKET	1		
	12	VKZ4777-003	SCREW	1		
	13	LV20912-002A	ELEVATOR	1		
	14	QUQ110-0606AJ	FFC WIRE	1		
	15	-----	CD-R/RW TRAVERSE MECHA.	1		
	16	LV41424-001A	SCREW	4		
	17	LV32417-001A	CLAMPER	1		
	18	LV42089-001A	YOKE	1		
	19	LV41118-003A	MAGNET	1		
	20	LV41741-001A	SPECIAL SCREW	1		
	21	LV20913-002A	CLAMPER BASE	1		
	22	QYSBSF2008Z	SCREW	4		
	23	LV41659-001A	INSULATOR	4		
	24	LV10455-002A	TRAY	1		
	25	LV32525-002A	PWB BKT	1		
	26	QYSBSF2608Z	T.SCREW	6		

■ Electrical parts list (Loading motor board)

Block No. 05

△	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGF1016F3-06	CONNECTOR		
	S 1	QSW0910-002	SWITCH		
	S 2	QSW0910-002	SWITCH		

<ATTENTION>

- * The entire mechanism unit is supplied in the assembly
(The loading mechanism part is included) for other parts though parts are supplied with the single item for the loading mechanism part.
- * The loading mechanism part is the above-mentioned item.
- * The entire mechanism unit is all the one that the description is in the previous page.

Part number of CD-R/RW mechanism assembly (Refer to page 3-3 item 39)
No. EMU-R7-1M

Electrical parts list

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 111	QTE1V06-106Z	E CAPACITOR				C 881	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 112	NCS31HJ-101X	C.CAPA. C.M			△	C 902	QFZ9040-683	M CAPACITOR	.068MF	
	C 113	NCS31HJ-101X	C.CAPA. C.M				C 903	QFZ9040-683	M CAPACITOR	.068MF	
	C 114	QTE1V06-106Z	E CAPACITOR			△	C 906	QCZ9079-102	C CAPACITOR	1000PF	
	C 115	QFLM1HJ-562Z	M CAPACITOR	3CD F TOKU		△	C 907	QETM2DM-157	E CAPACITOR	150MF 20%	
	C 151	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 908	QCZ0213-472	C CAPACITOR	4700PF	
	C 171	QENC1HM-225Z	NP E.CAPA 1.M	2.2MF 20% 50V			C 909	QCZ0136-101Z	C CAPACITOR	100PF	
	C 172	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 910	NCB31HK-102X	C CAPACITOR		
	C 173	NCB31HK-331X	C CAPACITOR				C 913	QCZ0341-221Z	C CAPACITOR	220PF	
	C 181	NCB31HK-222X	C CAPACITOR				C 914	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 182	QTE1E06-226Z	E CAPACITOR				C 915	NCB31HK-471X	C CAPACITOR		
	C 183	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V		△	C 916	QCZ9079-222	C CAPACITOR	2200PF	
	C 211	QTE1V06-106Z	E CAPACITOR				C 918	QCB31HK-103Y	C CAPACITOR	.010MF 10% 50V	
	C 212	NCS31HJ-101X	C.CAPA. C.M				C 919	QCZ0207-104Z	C CAPACITOR	.10MF	
	C 213	NCS31HJ-101X	C.CAPA. C.M			△	C 920	QETM1EM-108	E CAPACITOR	1000MF 20% 25V	
	C 214	QTE1V06-106Z	E CAPACITOR				C 921	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 215	QFLM1HJ-562Z	M CAPACITOR	3CD F TOKU			C 922	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 251	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 923	QETN1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C 271	QENC1HM-225Z	NP E.CAPA 1.M	2.2MF 20% 50V			C 924	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 272	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 931	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C 273	NCB31HK-331X	C CAPACITOR				C 951	NCS31HJ-101X	C.CAPA. C.M		
	C 281	NCB31HK-222X	C CAPACITOR			△	C 952	NCS31HJ-101X	C.CAPA. C.M		
	C 282	QTE1E06-226Z	E CAPACITOR				C 953	NCS31HJ-101X	C.CAPA. C.M		
	C 283	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 954	NCS31HJ-101X	C.CAPA. C.M		
	C 301	NCF31CZ-104X	C CAPACITOR				C 956	NCS31HJ-101X	C.CAPA. C.M		
	C 303	NCS31HJ-270X	C CAPACITOR				C 957	NCS31HJ-101X	C.CAPA. C.M		
	C 311	NCB31CK-104X	C CAPACITOR				C 960	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 351	NCF31CZ-104X	C CAPACITOR				C 961	QCZ0207-104Z	C CAPACITOR	.10MF	
	C 352	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V			C 962	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C 353	NCF31CZ-104X	C CAPACITOR				C 963	QETN1HM-227Z	E CAPACITOR	220MF 20% 50V	
	C 354	NCB31CK-104X	C CAPACITOR				C 964	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 355	NCS31HJ-101X	C.CAPA. C.M				C 965	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 356	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C 966	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 357	NCS31HJ-151X	C CAPACITOR				C 967	QCZ0207-104Z	C CAPACITOR	.10MF	
	C 358	NCB31HK-221X	C CAPACITOR				C 970	QCZ0207-104Z	C CAPACITOR	.10MF	
	C 359	NCB31HK-223X	C CAPACITOR				C 973	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 361	QCZ0205-155Z	ML C CAPACITOR	1.5MF			C 974	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 362	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V			C 975	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 363	NCB31AK-224X	C CAPACITOR				C 977	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 364	NCB31HK-103X	C CAPACITOR				C 979	QETN1CM-108Z	E CAPACITOR	1000MF 20% 16V	
	C 365	QCZ0205-155Z	ML C CAPACITOR	1.5MF			C 980	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 366	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V			C 981	QCZ0207-104Z	C CAPACITOR	.10MF	
	C 367	QCZ0205-155Z	ML C CAPACITOR	1.5MF			C 982	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 370	NCB31HK-102X	C CAPACITOR				C 983	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 502	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C 984	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 504	NCB31HK-103X	C CAPACITOR				C 985	QETN1AM-108Z	E CAPACITOR	1000MF 20% 10V	
	C 507	NCS31HJ-220X	C CAPACITOR				C 987	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 508	NCS31HJ-220X	C CAPACITOR				C 989	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 511	NCF31CZ-104X	C CAPACITOR				C 990	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 512	NCF31CZ-104X	C CAPACITOR				C 992	NCB31HK-102X	C CAPACITOR		
	C 541	NCB31HK-103X	C CAPACITOR	FOR DCS			C 993	NCB31HK-102X	C CAPACITOR		
	C 543	QDX31EM-473Z	C.CAPACITOR				C 994	QCB31HK-223Y	C CAPACITOR	.022MF 10% 50V	
	C 801	NCF31CZ-104X	C CAPACITOR				C 997	QETN1CM-227Z	E CAPACITOR	220MF 20% 16V	
	C 802	QTE1E28-476Z	E CAPACITOR				C1301	QETN1HM-105Z	E CAPACITOR	FOR LEVEL	
	C 803	NCF31CZ-104X	C CAPACITOR				C1302	QETN1HM-225Z	E CAPACITOR	FOR LEVEL	
	C 804	QTE1E28-476Z	E CAPACITOR				C1303	QETN1HM-105Z	E CAPACITOR	FOR LEVEL	
	C 811	NCS31HJ-270X	C CAPACITOR				C1312	QETN1AM-107Z	E CAPACITOR	FOR LEVEL	
	C 812	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V			C1501	NFV41HJ-332X	M.CAPA.C.M		
	C 830	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1502	NFV41HJ-181X	C.CAPA. C.M		
	C 840	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V			C1503	NFV41HJ-103X	M.CAPA.C.M		
	C 871	NCB31HK-103X	C CAPACITOR				C1505	QTE1C06-226Z	E CAPACITOR		
	C 872	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C1506	NFV41HJ-103X	M.CAPA.C.M		
	C 873	NCB31HK-103X	C CAPACITOR				C1507	NCB31HK-472X	C CAPACITOR		
	C 874	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V			C1521	NCF31CZ-104X	C CAPACITOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	C1522	NCF31CZ-104X	C CAPACITOR		
	C2301	QETN1HM-105Z	E CAPACITOR	FOR LEVEL	
	C2302	QETN1HM-225Z	E CAPACITOR	FOR LEVEL	
	C2303	QETN1HM-105Z	E CAPACITOR	FOR LEVEL	
	C2501	NFV41HJ-332X	M.CAPA.C.M		
	C2502	NFV41HJ-181X	C.CAPA. C.M		
	C2503	NFV41HJ-103X	M.CAPA.C.M		
	C2505	QTE1C06-226Z	E CAPACITOR		
	C2506	NFV41HJ-103X	M.CAPA.C.M		
	C2507	NCB31HK-472X	C CAPACITOR		
	CN501	QGF1205C1-17	CONNECTOR	FRONT PWB	
	CN505	QGF1205C1-06	CONNECTOR	FOR FLASH WRITE	
	CN615	QGF1016C1-19	CONNECTOR	TO CD UNIT	
	CN616	QGF1016C1-08	CONNECTOR	D400-v	
	CN711	QGD2501C1-04Z	SOCKET	TO CN701(HPJACK	
	CN712	QGD2501C1-05Z	SOCKET I.M	TO CN701(HPJACK	
	CN721	QGA2001C1-06	6P PLUG ASSY	CDR UNIT POWER	
	CN722	QGF1016C1-23	CONNECTOR	TO CDR GENERAL	
	CN723	QGF1016C1-08	CONNECTOR	TO CDR SREAL	
	CN841	QGF1205C1-15	CONNECTOR	TO JOG PWB	
△	CP951	ICP-N10-T	ICP		
	CP952	QUY150-050Y	BUS WIRE		
	D 301	DA114-X	DIODE		
	D 302	DA114-X	DIODE		
	D 501	DA114-X	DIODE		
	D 503	DA114-X	DIODE		
	D 504	DA114-X	DIODE		
	D 541	DA114-X	DIODE		
	D 811	DA114-X	DIODE	CD STATUS	
	D 812	1SR35-400A-T5	DIODE		
△	D 901	S1WB/A/60-4101	BRIDGE DIODE		
△	D 902	ERA18-04-T1	FR DIODE		
△	D 903	ERA18-04-T1	FR DIODE		
△	D 904	ERA18-04-T1	FR DIODE		
△	D 905	ERA18-04-T1	FR DIODE		
	D 907	1SS133-T2	SI DIODE IM		
△	D 910	ERA18-04-T1	FR DIODE		
	D 912	1SS133-T2	SI DIODE IM		
	D 913	1SR139-400-T4	DIODE I.M		
△	D 921	S1WB/A/60-4101	BRIDGE DIODE		
△	D 951	ERA18-04-T1	FR DIODE		
△	D 952	ERA18-04-T1	FR DIODE		
△	D 953	1GWJ42-T5	DIODE		
△	D 954	ERA18-04-T1	FR DIODE		
△	D 956	1GWJ42-T5	DIODE		
△	D 957	ERA18-04-T1	FR DIODE		
	D 960	MTZJ4.7B-T2	Z DIODE I M		
	D 970	1SS133-T2	SI DIODE IM		
△	D 971	1GWJ42-T5	DIODE		
	D 972	1SR139-400-T4	DIODE I.M		
	D 973	MTZJ5.6B-T2	ZENER DIODE		
	D 974	MTZJ6.8B-T2	ZENER DIODE		
	D1301	DA114-X	DIODE	FOR LEVEL	
	D2301	DA114-X	DIODE	FOR LEVEL	
	EP801	QNZ0136-001Z	EARTH PLATE		
	EP951	E409182-001SM	GRAND TERMINAL		
	EP997	QNZ0136-001Z	EARTH PLATE		
	EP998	QNZ0136-001Z	EARTH PLATE		
	EP999	QNZ0136-001Z	EARTH PLATE		
△	FC901	QNG0003-001Z	FUSE CLIP		
△	FC902	QNG0003-001Z	FUSE CLIP		
	IC301	TC74HC00AF-W	IC	D.OUT SEL	
	IC302	TC7S08F-W	IC	COAX OUT BUFFER	
	IC311	TC74HC00AF-W	IC	D.IN SEL	

△	Item	Parts number	Parts name	Remarks	Area
	IC331	TC74HCU04AF-W	IC	DATA SLICE	
	IC361	MN35505-X	IC C M	DAC	
	IC362	NJM4580M-X	IC	DAC LPF .N1	
	IC501	UPD784214AGF515	IC(MICOM)	CPU	
	IC502	IC-PST600/H/-T	IC	RESET	
	IC811	NJM4580M-X	IC	CDR LPF	
	IC821	BU4066BCF-X	IC	LINE OUT SEL	
	IC831	BU4066BCF-X	IC	REC SEL1	
	IC841	BU4066BCF-X	IC	REC SEL2	
	IC851	NJM4580M-X	IC	VOLUME	
	IC861	BU4066BCF-X	IC	CD DRT SWITCH	
	IC871	BA15218F-XE	IC	LINE IN AMP	
	IC881	NJM4580M-X	IC	LINE OUT BUFFER	
	IC891	TC9412AF-X	IC		
△	IC901	STR-F6674	IC		
	IC951	SE005N	IC		
	J 351	QNZ0487-001	OPT TRANSMITTER	OPT OUT	
	J 352	QNZ0523-001	OPT RECEIVER	OPT IN	
	J 353	QNN0347-001	PIN JACK	COAX OUT	
	J 354	QNN0347-001	PIN JACK	COAX IN	
	J 541	QNS0083-001	3.5 JACK	DCS JACK	
	J 871	QNN0126-001	PIN JACK	LINE JACK	
	K 311	NQR0227-004X	FERRITE BEADS		
	K 351	NQR0227-004X	FERRITE BEADS		
	K 358	NQR0227-004X	FERRITE BEADS		
	K 381	NRSA02J-0R0X	MG RESISTOR	LRCK(N1)	
	K 382	NRSA02J-0R0X	MG RESISTOR	DATA(N1)	
	K 383	NRSA02J-0R0X	MG RESISTOR	XBCK(N1)	
	K 384	NQR0227-004X	FERRITE BEADS	DAC	
	K 385	NQR0227-004X	FERRITE BEADS	DAC	
	K 386	NQR0227-004X	FERRITE BEADS		
	K 391	NRSA02J-0R0X	MG RESISTOR		
	K 392	NRSA02J-0R0X	MG RESISTOR		
	K 393	NRSA02J-0R0X	MG RESISTOR		
	K 501	NQR0227-004X	FERRITE BEADS	CDR DOUT	
	K 801	QQR0779-001Z	INDUCTOR		
	K 901	QQR1183-001Z	F.BEADS I.M		
	K3600	QQR1183-001Z	F.BEADS I.M		
	K3601	QQR1183-001Z	F.BEADS I.M		
	K3602	QQR1183-001Z	F.BEADS I.M		
△	L 901	QQR1105-001	LINE FILTER		
	L 951	QQL244K-220Z	INDUCTOR		
	L 952	QQL244K-1R0Z	INDUCTOR		
	L 953	QQL44BK-221Z	INDUCTOR		
	L 955	QQL44BK-220Z	INDUCTOR		
	L 957	QQL244K-100Z	INDUCTOR		
	L 958	QQL44BK-221Z	INDUCTOR		
	L 959	QQL244K-100Z	INDUCTOR		
	L 960	QQL44BK-221Z	INDUCTOR		
△	P 901	QNC0082-001	AC INLET		
△	PC901	PC123Y02	IC(PHOTO COUPLE		
△	PC902	PC123Y02	IC(PHOTO COUPLE		
	Q 181	2SC2001/LK/-T	TRANSISTOR	L.OUT MUTING	
	Q 182	2SC2001/LK/-T	TRANSISTOR	HP MUTE	
	Q 183	2SC2001/LK/-T	TRANSISTOR	L.IN GAIN SWITC	
	Q 191	KRA103M-T	TRANSISTOR *	GAIN SW	
	Q 281	2SC2001/LK/-T	TRANSISTOR	L.OUT MUTING	
	Q 282	2SC2001/LK/-T	TRANSISTOR	HP MUTE	
	Q 283	2SC2001/LK/-T	TRANSISTOR	L.IN GAIN SWITC	
	Q 361	KRC103M-T	TR I/M		
	Q 369	KRC103M-T	TR I/M		
	Q 501	DTC114ESA-T	DIGITAL.TR TAPE		
	Q 541	KRA103M-T	TRANSISTOR *		
	Q 542	KTC3199/GL/-T	TRANSISTOR		
	Q 821	KRA103M-T	TRANSISTOR *	L.OUT SEL	

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	Q 822	KRC103M-T	TR I/M	L.OUT SEL			R 283	NRSA63J-222X	MG RESISTOR		
	Q 831	KRA103M-T	TRANSISTOR *	REC SEL1			R 284	NRSA63J-221X	MG RESISTOR		
	Q 832	KRA103M-T	TRANSISTOR *	REC SEL1			R 285	NRSA63J-102X	MG RESISTOR		
	Q 841	KRA103M-T	TRANSISTOR *	REC SEL2			R 286	NRSA63J-472X	MG RESISTOR		
	Q 842	KRA103M-T	TRANSISTOR *	REC SEL2			R 301	NRSA63J-101X	MG RESISTOR		
	Q 861	KRA103M-T	TRANSISTOR *	CD DIRECTION			R 302	NRSA63J-101X	MG RESISTOR		
	Q 862	KRC103M-T	TR I/M	CD DIRECTION			R 303	NRSA63J-181X	MG RESISTOR		
	Q 881	2SA933AS/RS/-T	TRANSISTOR	MUTE SW			R 305	NRSA63J-101X	MG RESISTOR		
△	Q 921	KTC3199/Y/-T	TR I/M				R 307	NRSA63J-750X	MG RESISTOR	DIN3	
	Q 922	2SC3422/OY/	TRANSISTOR				R 308	NRSA63J-151X	MG RESISTOR		
△	Q 964	2SB1184/QR/-X	TRANSISTOR				R 309	NRSA63J-270X	MG RESISTOR		
	Q 965	KTC3199/Y/-T	TR I/M				R 310	NRSA63J-331X	MG RESISTOR		
	Q 966	2SC3422/OY/	TRANSISTOR				R 311	NRSA63J-332X	MG RESISTOR		
	Q 967	KTC3199/Y/-T	TR I/M				R 312	NRSA63J-332X	MG RESISTOR		
	Q1301	KRC103M-T	TR I/M	LEVEL DETECT			R 351	NRSA63J-273X	MG RESISTOR		
	Q2301	KRC103M-T	TR I/M	LEVEL DETECT			R 352	NRSA63J-273X	MG RESISTOR		
	R 111	NRSA63J-223X	MG RESISTOR				R 361	NRSA63J-332X	MG RESISTOR		
	R 112	NRSA63J-223X	MG RESISTOR				R 362	NRSA63J-222X	MG RESISTOR		
	R 113	NRSA63J-223X	MG RESISTOR				R 367	NRSA63J-0R0X	MG RESISTOR		
	R 114	NRSA63J-222X	MG RESISTOR				R 368	NRSA63J-471X	MG RESISTOR		
	R 115	NRSA63J-152X	MG RESISTOR				R 369	NRSA63J-471X	MG RESISTOR		
	R 116	NRSA63J-473X	MG RESISTOR				R 370	NRSA63J-471X	MG RESISTOR		
	R 117	NRSA63J-152X	MG RESISTOR				R 371	NRSA63J-273X	MG RESISTOR		
	R 131	NRSA63J-472X	MG RESISTOR				R 372	NRSA63J-273X	MG RESISTOR		
	R 132	NRSA63J-472X	MG RESISTOR				R 382	NRSA63J-0R0X	MG RESISTOR		
	R 141	NRSA63J-122X	MG RESISTOR				R 383	NRSA63J-121X	MG RESISTOR		
	R 142	NRSA63J-102X	MG RESISTOR				R 386	NRSA63J-121X	MG RESISTOR		
	R 151	NRSA63J-471X	MG RESISTOR				R 387	NRSA63J-100X	MG RESISTOR		
	R 171	NRSA63J-393X	MG RESISTOR				R 390	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R 172	NRSA63J-224X	MG RESISTOR				R 391	NRSA63J-472X	MG RESISTOR		
	R 173	NRSA63J-154X	MG RESISTOR				R 502	NRSA63J-104X	MG RESISTOR		
	R 174	NRSA63J-222X	MG RESISTOR				R 503	NRSA63J-223X	MG RESISTOR		
	R 175	NRSA63J-273X	MG RESISTOR				R 504	NRSA63J-102X	MG RESISTOR		
	R 176	NRSA63J-102X	MG RESISTOR				R 506	NRSA63J-473X	MG RESISTOR		
	R 177	NRSA63J-0R0X	MG RESISTOR				R 508	NRSA63J-223X	MG RESISTOR		
	R 178	NRSA63J-104X	MG RESISTOR				R 509	NRSA63J-104X	MG RESISTOR		
	R 181	NRSA63J-474X	MG RESISTOR				R 510	NRSA63J-104X	MG RESISTOR		
	R 182	NRSA63J-471X	MG RESISTOR				R 511	NRSA63J-102X	MG RESISTOR		
	R 183	NRSA63J-222X	MG RESISTOR				R 512	NRSA63J-102X	MG RESISTOR		
	R 184	NRSA63J-221X	MG RESISTOR				R 513	NRSA63J-151X	MG RESISTOR		
	R 185	NRSA63J-102X	MG RESISTOR				R 514	NRSA63J-102X	MG RESISTOR		
	R 186	NRSA63J-472X	MG RESISTOR				R 515	NRSA63J-102X	MG RESISTOR		
	R 211	NRSA63J-223X	MG RESISTOR				R 519	NRSA63J-102X	MG RESISTOR		
	R 212	NRSA63J-223X	MG RESISTOR				R 520	NRSA63J-102X	MG RESISTOR		
	R 213	NRSA63J-223X	MG RESISTOR				R 521	NRSA63J-102X	MG RESISTOR		
	R 214	NRSA63J-222X	MG RESISTOR				R 522	NRSA63J-102X	MG RESISTOR		
	R 215	NRSA63J-152X	MG RESISTOR				R 523	NRSA63J-472X	MG RESISTOR		
	R 216	NRSA63J-473X	MG RESISTOR				R 526	NRSA63J-473X	MG RESISTOR		
	R 217	NRSA63J-152X	MG RESISTOR				R 527	NRSA63J-822X	MG RESISTOR		
	R 231	NRSA63J-472X	MG RESISTOR				R 528	NRSA63J-822X	MG RESISTOR		
	R 232	NRSA63J-472X	MG RESISTOR				R 529	NRSA63J-822X	MG RESISTOR		
	R 241	NRSA63J-122X	MG RESISTOR				R 530	NRSA63J-822X	MG RESISTOR		
	R 242	NRSA63J-102X	MG RESISTOR				R 531	NRSA63J-822X	MG RESISTOR		
	R 251	NRSA63J-471X	MG RESISTOR				R 532	NRSA63J-472X	MG RESISTOR		
	R 271	NRSA63J-393X	MG RESISTOR				R 533	NRSA63J-473X	MG RESISTOR		
	R 272	NRSA63J-224X	MG RESISTOR				R 534	NRSA63J-473X	MG RESISTOR		
	R 273	NRSA63J-154X	MG RESISTOR				R 535	NRSA63J-473X	MG RESISTOR		
	R 274	NRSA63J-222X	MG RESISTOR				R 536	NRSA63J-473X	MG RESISTOR		
	R 275	NRSA63J-273X	MG RESISTOR				R 539	NRSA63J-473X	MG RESISTOR		
	R 276	NRSA63J-102X	MG RESISTOR				R 540	NRSA63J-473X	MG RESISTOR		
	R 277	NRSA63J-0R0X	MG RESISTOR				R 541	NRSA63J-223X	MG RESISTOR		
	R 278	NRSA63J-104X	MG RESISTOR				R 542	NRSA63J-473X	MG RESISTOR		
	R 281	NRSA63J-474X	MG RESISTOR				R 543	NRSA63J-223X	MG RESISTOR		
	R 282	NRSA63J-471X	MG RESISTOR				R 544	NRSA63J-221X	MG RESISTOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	R 545	NRSA63J-223X	MG RESISTOR		
	R 549	NRSA63J-101X	MG RESISTOR		
	R 551	NRSA63J-472X	MG RESISTOR		
	R 555	NRSA63J-473X	MG RESISTOR	JOG-A PULL UP	
	R 556	NRSA63J-473X	MG RESISTOR	JOG-B PULL UP	
	R 557	NRSA63J-473X	MG RESISTOR	STATUS PULL UP	
	R 558	NRSA63J-103X	MG RESISTOR		
	R 559	NRSA63J-682X	MG RESISTOR		
	R 561	NRSA63J-471X	MG RESISTOR		
	R 562	NRSA63J-102X	MG RESISTOR		
	R 563	NRSA63J-101X	MG RESISTOR		
	R 564	NRSA63J-471X	MG RESISTOR		
	R 565	NRSA63J-471X	MG RESISTOR		
	R 566	NRSA63J-101X	MG RESISTOR		
	R 567	NRSA63J-102X	MG RESISTOR		
	R 568	NRSA63J-101X	MG RESISTOR		
	R 569	NRSA63J-101X	MG RESISTOR		
	R 570	NRSA63J-101X	MG RESISTOR		
	R 571	NRSA63J-101X	MG RESISTOR		
	R 572	NRSA63J-101X	MG RESISTOR		
	R 573	NRSA63J-101X	MG RESISTOR		
	R 574	NRSA63J-101X	MG RESISTOR		
	R 599	NRSA63J-0R0X	MG RESISTOR		
	R 801	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 802	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 803	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 804	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 811	NRSA63J-223X	MG RESISTOR		
	R 812	NRSA63J-0R0X	MG RESISTOR		
	R 821	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 822	NRSA63J-103X	MG RESISTOR		
	R 823	NRSA63J-473X	MG RESISTOR		
	R 831	NRSA63J-222X	MG RESISTOR		
	R 832	NRSA63J-103X	MG RESISTOR		
	R 833	NRSA63J-473X	MG RESISTOR		
	R 834	NRSA63J-473X	MG RESISTOR		
	R 841	NRSA63J-222X	MG RESISTOR		
	R 842	NRSA63J-103X	MG RESISTOR		
	R 843	NRSA63J-473X	MG RESISTOR		
	R 844	NRSA63J-473X	MG RESISTOR		
	R 850	NRSA63J-473X	MG RESISTOR		
	R 860	NRSA63J-473X	MG RESISTOR		
	R 861	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 862	NRSA63J-103X	MG RESISTOR		
	R 863	NRSA63J-473X	MG RESISTOR		
	R 864	NRSA63J-473X	MG RESISTOR		
	R 881	NRSA63J-103X	MG RESISTOR		
	R 882	NRSA63J-223X	MG RESISTOR		
	R 883	NRSA63J-101X	MG RESISTOR		
	R 900	NRSA63J-221X	MG RESISTOR		
△	R 901	QRL027J-683	OMF RESISTOR	68K 5% 2W	
△	R 903	QRE141J-220Y	C RESISTOR	22 5% 1/4W	
	R 904	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
△	R 905	QRL027J-683	OMF RESISTOR	68K 5% 2W	
	R 906	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
△	R 907	QRT022J-R47	OMF RESISTOR	0.47 5% 2W	
	R 908	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 909	QRZ9037-335	COMP RESISTOR	3.3M 1/0W	
	R 910	QRE141J-754Y	C RESISTOR	750K 5% 1/4W	
	R 911	QRE141J-754Y	C RESISTOR	750K 5% 1/4W	
	R 912	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 913	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 914	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 915	QRJ146J-4R7X	UNF C.RES I/M	4.7 5% 1/4W	

△	Item	Parts number	Parts name	Remarks	Area
	R 917	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
△	R 918	QRJ125J-3R3	UNF.C.RES.	3.3 5% 1/2W	
	R 919	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 952	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
△	R 954	QRZ9015-100X	F.RES I/M	10 1/0W	
△	R 956	QRJ146J-4R7X	UNF C.RES I/M	4.7 5% 1/4W	
	R 969	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R 971	NRSA63J-472X	MG RESISTOR		
	R 972	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
△	R 973	QRZ9015-2R2X	F.RES I/M	2.2 1/0W	
△	R 974	QRZ9015-2R2X	F.RES I/M	2.2 1/0W	
	R 975	QRE141J-470Y	C RESISTOR	47 5% 1/4W	
	R1301	NRSA63J-332X	MG RESISTOR		
	R1302	NRSA63J-153X	MG RESISTOR	FOR LEVEL	
	R1303	NRSA63J-224X	MG RESISTOR		
	R1304	NRSA63J-682X	MG RESISTOR	FOR LEVEL	
	R1305	NRSA63J-273X	MG RESISTOR	FOR LEVEL	
	R1306	NRSA63J-823X	MG RESISTOR	FOR LEVEL	
	R1307	NRSA63J-153X	MG RESISTOR	FOR LEVEL	
	R1312	NRSA63J-621X	MG RESISTOR	FOR LEVEL	
	R1313	NRSA63J-153X	MG RESISTOR	FOR LEVEL	
	R1501	NRSA63F-183X	MG RESISTOR		
	R1502	NRSA63F-183X	MG RESISTOR		
	R1503	NRSA63F-183X	MG RESISTOR		
	R1504	NRSA63F-222X	MG.RES C.M		
	R1505	NRSA63J-332X	MG RESISTOR		
	R1506	NRSA63J-332X	MG RESISTOR		
	R1507	NRSA63J-332X	MG RESISTOR		
	R1510	NRSA63F-561X	MG.RES C.M		
	R1521	NRSA63J-221X	MG RESISTOR		
	R1522	NRSA63J-221X	MG RESISTOR		
	R2301	NRSA63J-332X	MG RESISTOR		
	R2302	NRSA63J-153X	MG RESISTOR	FOR LEVEL	
	R2303	NRSA63J-224X	MG RESISTOR		
	R2304	NRSA63J-682X	MG RESISTOR	FOR LEVEL	
	R2305	NRSA63J-273X	MG RESISTOR	FOR LEVEL	
	R2306	NRSA63J-823X	MG RESISTOR	FOR LEVEL	
	R2307	NRSA63J-153X	MG RESISTOR	FOR LEVEL	
	R2501	NRSA63F-183X	MG RESISTOR		
	R2502	NRSA63F-183X	MG RESISTOR		
	R2503	NRSA63F-183X	MG RESISTOR		
	R2504	NRSA63F-222X	MG.RES C.M		
	R2505	NRSA63J-332X	MG RESISTOR		
	R2506	NRSA63J-332X	MG RESISTOR		
	R2507	NRSA63J-332X	MG RESISTOR		
	R2510	NRSA63F-561X	MG.RES C.M		
	S 531	QSW0454-001	SW	TAPE/CDR	
	T 301	QQR1185-001	PULSE TRANS		
△	T 901	QQS0107-001	SW TRANSF		
△	T 902	QQT0342-001	POWER TRANSF	FOR STANBY	
	WC100	QZW0038-001	WIRE CLAMP		
	WC101	QZW0038-001	WIRE CLAMP		
	WC102	QZW0038-001	WIRE CLAMP		
	X 501	QAX0356-001Z	RESONATOR	10MHZ EFO-EC100	
	X 502	QAX0401-001	CRYSTAL	CPU SUB CLK	

■ Electrical parts list (Front board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	C 701	NCB31HK-103X	C CAPACITOR		
	C 702	QER61AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 703	NCB31HK-681X	C CAPACITOR		
	C 722	NCF31CZ-104X	C CAPACITOR		
	C 723	QER61CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 724	NCF31CZ-104X	C CAPACITOR		
	C 725	QER61CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 741	NCB31HK-103X	C CAPACITOR		
	C 742	QLM1HJ-393Z	M CAPACITOR	.039MF 5% 50V	
	C 743	QER61AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 749	NCS31HJ-101X	C.CAPA. C.M		
	CN541	QGF1205C1-17	CONNECTOR	FRONT - MAIN	
	CN801	QGF1210G1-15	CONNECTOR	JOG PWB TO MAIN	
	C1401	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2401	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C6001	NCB31HK-222X	C CAPACITOR		
	C6002	QENC1HM-105Z	NP E.CAPACITOR	1.0MF 20% 50V	
	C6003	NCB31HK-331X	C CAPACITOR		
	C6005	QER61HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C6008	NCB31HK-103X	C CAPACITOR		
	C6009	NCB31HK-103X	C CAPACITOR		
	C6101	NCF31CZ-104X	C CAPACITOR		
	C6102	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C6103	NCF31CZ-104X	C CAPACITOR		
	C6104	QER61CM-476Z	E CAPACITOR	47MF 20% 16V	
	C7001	NCB31EK-473X	C CAPACITOR		
	C7002	NCB31EK-473X	C CAPACITOR		
	C7101	NCB31EK-473X	C CAPACITOR		
	D 726	DA114-X	DIODE		
	D 727	DA114-X	DIODE		
	D 728	DA114-X	DIODE		
	D 729	DA114-X	DIODE		
	D 755	SLR-342VC-T	LED	DIGITAL	
	D 756	SLR-342VC-T	LED	S-CD	
	D 757	SLR-342VC-T	LED	S-LINE	
	D 758	SLR-342VC-T	LED	S-MIC	
	DI721	QLF0091-001	FL TUBE		
	IC601	NJM4580M-X	IC	MIC AMP	
	IC701	GP1U271X	RM RECIVER		
	IC721	M66004FP-X	IC		
	IC722	BA15218F-XE	IC	MIX AMP	
	JS721	QSW0925-001	R ENCODER	JOG	
	J6001	QNS0091-001	JACK	MIC JACK	
	Q 724	KRA103M-T	TRANSISTOR *	HP DIST KAIZEN	
	Q 726	KTC3199/GL-T	TRANSISTOR	FOR 1G	
	Q 727	KTC3199/GL-T	TRANSISTOR	FOR 15G	
	Q 728	KTC3199/GL-T	TRANSISTOR	FOR 16G	
	Q 729	KRA103M-T	TRANSISTOR *		
	Q 730	KRA103M-T	TRANSISTOR *		
	Q1401	2SD2144S/VW/-T	TRANSISTOR		
	Q2401	2SD2144S/VW/-T	TRANSISTOR		
	R 701	NRSA63J-102X	MG RESISTOR		
	R 702	NRSA63J-102X	MG RESISTOR		
	R 703	NRSA63J-122X	MG RESISTOR		
	R 704	NRSA63J-182X	MG RESISTOR		
	R 705	NRSA63J-272X	MG RESISTOR		
	R 706	NRSA63J-332X	MG RESISTOR		
	R 707	NRSA63J-562X	MG RESISTOR		
	R 721	NRSA63J-102X	MG RESISTOR		
	R 722	NRSA63J-102X	MG RESISTOR		
	R 723	NRSA63J-122X	MG RESISTOR		
	R 724	NRSA63J-182X	MG RESISTOR		
	R 725	NRSA63J-272X	MG RESISTOR		
	R 726	NRSA63J-332X	MG RESISTOR		
	R 736	NRSA63J-333X	MG RESISTOR		
	R 737	NRSA63J-333X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 738	NRSA63J-333X	MG RESISTOR		
	R 739	NRSA63J-333X	MG RESISTOR		
	R 740	NRSA63J-333X	MG RESISTOR		
	R 741	NRSA63J-333X	MG RESISTOR		
	R 749	NRSA63J-223X	MG RESISTOR		
	R 753	NRSA63J-122X	MG RESISTOR		
	R 760	NRSA63J-102X	MG RESISTOR		
	R 761	NRSA63J-102X	MG RESISTOR		
	R 785	NRSA63J-331X	MG RESISTOR	FOR DIGITAL LED	
	R 786	NRSA63J-331X	MG RESISTOR	FOR S-CD LED	
	R 787	NRSA63J-331X	MG RESISTOR	FOR S-LINE LED	
	R 788	NRSA63J-331X	MG RESISTOR	FOR S-MIC LED	
	R1401	NRSA63J-223X	MG RESISTOR		
	R1402	NRSA63J-223X	MG RESISTOR		
	R1403	NRSA63J-103X	MG RESISTOR		
	R1404	NRSA63J-823X	MG RESISTOR		
	R2401	NRSA63J-223X	MG RESISTOR		
	R2402	NRSA63J-223X	MG RESISTOR		
	R2403	NRSA63J-103X	MG RESISTOR		
	R2404	NRSA63J-823X	MG RESISTOR		
	R6001	NRSA63J-221X	MG RESISTOR		
	R6002	NRSA63J-103X	MG RESISTOR		
	R6003	NRSA63J-103X	MG RESISTOR		
	R6004	NRSA63J-221X	MG RESISTOR		
	R6005	NRSA63J-123X	MG RESISTOR		
	R6006	NRSA63J-103X	MG RESISTOR		
	R6101	NRS144J-681X	RES. C.M		
	R6102	NRS144J-681X	RES. C.M		
	R6103	NRS144J-681X	RES. C.M		
	R6104	NRS144J-681X	RES. C.M		
	R7001	NRSA63J-472X	MG RESISTOR		
	S 702	QSW0683-001Z	PUSH SWITCH	STOP	
	S 703	QSW0683-001Z	PUSH SWITCH	PLAY MODE	
	S 704	QSW0683-001Z	PUSH SWITCH	PAUSE	
	S 705	QSW0683-001Z	PUSH SWITCH	CD EDIT	
	S 706	QSW0683-001Z	PUSH SWITCH	PLAY	
	S 707	QSW0683-001Z	PUSH SWITCH	CANCEL	
	S 708	QSW0683-001Z	PUSH SWITCH	SET	
	S 710	QSW0683-001Z	PUSH SWITCH	CD REC	
	S 721	QSW0683-001Z	PUSH SWITCH	STOP	
	S 722	QSW0683-001Z	PUSH SWITCH	PAUSE	
	S 723	QSW0683-001Z	PUSH SWITCH	PLAY	
	S 724	QSW0683-001Z	PUSH SWITCH	REC/REC MUTE	
	S 725	QSW0683-001Z	PUSH SWITCH	DIG.SYNC	
	S 726	QSW0683-001Z	PUSH SWITCH	MENU	
	S 751	QSW0683-001Z	PUSH SWITCH	OPEN/CLOSE3	
	S 760	QSW0683-001Z	PUSH SWITCH	EJECT	
	S 761	QSW0683-001Z	PUSH SWITCH	FINALIZE	
	S 762	QSW0683-001Z	PUSH SWITCH	REC SOURCE SELE	
	VR641	QVQ0307-W15	V RESISTOR		

■ Electrical parts list (Servo control board)

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 254	QERF1AM-476Z	E CAPACITOR	VDD0-VSS			CN601	QGF1037F1-15W	CONNECTOR	PICK UP/TR.MECH	
	C 255	NCB31CK-104X	C CAPACITOR	VDD1-VSS			CN605	QGF1016F2-04W	CONNECTOR	CD TEXT	
	C 256	NCB31CK-104X	C CAPACITOR	VDD1-VSS			CN606	QGF1016F2-08W	CONNECTOR	4T I/F	
	C 271	NCS31HJ-101X	C.CAPA. C.M	FOR KCMD			CN651	QGF1016F3-19	CONNECTOR	MAIN	
	C 272	NCS31HJ-101X	C.CAPA. C.M	FOR KCLK			D 251	DA204U-X	DIODE		
	C 273	NCB31CK-104X	C CAPACITOR	/RESET			D 292	MA112-X	DIODE		
	C 291	NCB21CK-105X	C CAPACITOR	+3.5V-GND			D 603	1SS355-X	DIODE C.M		
	C 292	NCB21CK-105X	C CAPACITOR	+5V-GND			HL251	VYH7653-002	IC HOLDER	FOR IC251	
	C 601	NCB31HK-102X	C CAPACITOR	PU E			IC251	UPD780024AGKB21	IC	MICOM	
	C 602	NCB31HK-102X	C CAPACITOR	PU F			IC291	XC62HR3502P-X	IC	3.5VREG	
	C 603	NCB31EK-223X	C CAPACITOR	TBAL			IC601	AN22000A-W	I.C C.M	RF AMP	
	C 604	NCB31EK-223X	C CAPACITOR	FBAL			IC651	MN662790RSC	IC	DSP & DAC	
	C 605	NCS31HJ-271X	C CAPACITOR	FE			IC801	LA6541-X	IC	PU DRIVE	
	C 606	NCS31HJ-820X	C CAPACITOR	TE			K 655	NQR0007-002X	FERRITE BEADS	TX	
	C 610	NCB31CK-563X	C CAPACITOR	RFENV			K 656	NQR0251-004X	FERRITE BEADS	SRDATA	
	C 611	NCB21CK-104X	C.CAPA. C.M	RF			K 657	NQR0251-004X	FERRITE BEADS	LRCK	
	C 612	QEK1HM-104Z	E CAPACITOR	CAGC			K 658	NQR0251-004X	FERRITE BEADS	BCLK	
	C 614	NCB31CK-393X	C CAPACITOR	CEA			Q 631	2SA1037AK/RS-X	TRANSISTOR	APC	
	C 615	NCB31HK-272X	C CAPACITOR	CBDO			Q 651	DTC114EUA-X	TRANSISTOR	k-----s--c	
	C 616	NCB31HK-681X	C CAPACITOR	COFTR			Q 652	DTC114EUA-X	TRANSISTOR	RF EQ	
	C 617	NCB31HK-331X	C CAPACITOR	OFT-D.GND			Q 673	DTA114EKA-X	DIGITAL.TRANSIS	IREF CHANGE	
	C 621	NCB31CK-104X	C CAPACITOR	VREF-D.GND			R 251	NRSA63J-102X	MG RESISTOR	MCLK	
	C 622	QEK0JM-107Z	E CAPACITOR	VREF-D.GND			R 252	NRSA63J-102X	MG RESISTOR	MDATA	
	C 623	NCF21CZ-105X	C CAPACITOR	VCC-D.GND			R 253	NRSA63J-102X	MG RESISTOR	MLD	
	C 624	QEK0JM-107Z	E CAPACITOR	VCC-D.GND			R 254	NRSA63J-102X	MG RESISTOR	/DMUTE	
	C 631	QEK1CM-106Z	E CAPACITOR	APC +5V-BASE			R 255	NRSA63J-102X	MG RESISTOR	MCS	
	C 632	NCF21CZ-105X	C CAPACITOR	APC +5V-D.GND			R 256	NRSA63J-102X	MG RESISTOR	MRDY	
	C 633	NCB31EK-223X	C CAPACITOR	PU VDD-VREF			R 257	NRSA63J-102X	MG RESISTOR	SQCK	
	C 651	NCS31HJ-1R0X	C.CAPA. C.M	X1			R 258	NRSA63J-102X	MG RESISTOR	KCMND	
	C 652	NCS31HJ-1R0X	C.CAPA. C.M	X2			R 259	NRSA63J-102X	MG RESISTOR	MSTAT	
	C 653	NCB31AK-334X	C.CAPA. C.M	RST-VSS			R 260	NRSA63J-102X	MG RESISTOR	KCLK	
	C 655	NCB31CK-104X	C CAPACITOR	DVDD1-DVSS1			R 261	NRSA63J-0R0X	MG RESISTOR		
	C 656	NCB31CK-104X	C CAPACITOR	VDD-VSS			R 262	NRSA63J-102X	MG RESISTOR	TXDO	
	C 657	QEK0JM-107Z	E CAPACITOR	DVDD1-DVSS1			R 263	NRSA63J-102X	MG RESISTOR	RXDO	
	C 658	NCB31CK-104X	C CAPACITOR	A.GND-D.GND			R 264	NRSA63J-103X	MG RESISTOR		
	C 661	NCS31HJ-471X	C CAPACITOR	ARF			R 265	NRSA63J-183X	MG RESISTOR		
	C 663	NCB31EK-223X	C CAPACITOR	ARF			R 271	NRSA63J-103X	MG RESISTOR	/OPEN PULL-UP	
	C 664	NCB31EK-223X	C CAPACITOR	IREF			R 272	NRSA63J-103X	MG RESISTOR	/REST PULL-UP	
	C 665	NCB21CK-154X	C.CAPA. C.M	PLL			R 273	NRSA63J-103X	MG RESISTOR	KEY1	
	C 667	NCB21CK-474X	C CAPACITOR	VCOF			R 274	NRSA63J-682X	MG RESISTOR	KEY2	
	C 668	NCB31CK-473X	C CAPACITOR				R 275	NRSA63J-103X	MG RESISTOR	IC PULL DOWN	
	C 673	QER60JM-107Z	E CAPACITOR	AVDD1-AVSS1			R 281	NRSA63J-102X	MG RESISTOR	CDCOPY	
	C 676	NCB31CK-104X	C CAPACITOR	TRCRS			R 282	NRSA63J-102X	MG RESISTOR	CDTNO	
	C 677	NCB31CK-104X	C CAPACITOR	AVDD1-AVSS1			R 283	NRSA63J-101X	MG RESISTOR	CDEMP	
	C 678	NCB31CK-104X	C CAPACITOR	VCC5V			R 284	NRSA63J-102X	MG RESISTOR	CDINDEX	
	C 679	QEK0JM-107Z	E CAPACITOR	AVDD2-AVSS2			R 285	NRSA63J-102X	MG RESISTOR	/RESET	
	C 680	NCB31CK-104X	C CAPACITOR	AVDD2-AVSS2			R 291	NRSA63J-103X	MG RESISTOR	P.CHECK	
	C 681	NCS31HJ-6R0X	C CAPACITOR				R 292	NRSA63J-1R0X	MG RESISTOR		
	C 682	NCS31HJ-150X	C CAPACITOR	RF EQ			R 293	NRSA63J-1R0X	MG RESISTOR		
	C 683	NCS31HJ-220X	C CAPACITOR	RF EQ			R 601	NRSA63J-224X	MG RESISTOR	TBAL	
	C 801	NCB31EK-223X	C CAPACITOR	FOD-LPF			R 602	NRSA63J-823X	MG RESISTOR	FBAL	
	C 802	NCS31HJ-102X	C CAPACITOR	TRD-LPF			R 603	NRSA63J-393X	MG RESISTOR	FE	
	C 811	NCS31HJ-391X	C CAPACITOR	FOCUS			R 604	NRSA63J-224X	MG RESISTOR	TE	
	C 812	NCS31HJ-391X	C CAPACITOR	SPINDLE			R 607	NRSA63J-473X	MG RESISTOR	PDE	
	C 813	NCS31HJ-391X	C CAPACITOR	FEED			R 608	NRSA63J-473X	MG RESISTOR	PDF	
	C 814	NCS31HJ-391X	C CAPACITOR	TRACKING			R 611	NRSA63J-562X	MG RESISTOR	RF	
	C 815	NCB21AK-105X	C.CAPA. C.M	TRD-LPF			R 613	NRSA63J-562X	MG RESISTOR	RF	
	C 816	NCB20JK-155X	C.CAPA. C.M	FOD-LPF			R 617	NRSA63J-332X	MG RESISTOR	RF EQ	
	C 817	NCF21CZ-105X	C CAPACITOR	SPINDLE MOTOR			R 631	NRSA63J-2R2X	MG RESISTOR	+5V DE-COUPLE	
	C 818	NCF21CZ-105X	C CAPACITOR	FEED MOTOR			R 632	NRSA63J-3R9X	MG RESISTOR	APC EMITTER	
	C 821	NCF21CZ-105X	C CAPACITOR	VCC-M.GND			R 634	NRSA63J-3R9X	MG RESISTOR	APC COLECTOR	
	C 822	QERF1AM-227Z	E CAPACITOR	VCC-M.GND			R 635	NRSA63J-100X	MG RESISTOR	PU DE-COUPLE	
	C 861	NCB31HK-102X	C CAPACITOR	AUD L			R 636	NRSA63J-151X	MG RESISTOR	PU LD	
	C 862	NCB31HK-102X	C CAPACITOR	AUD R			R 651	NRSA63J-102X	MG RESISTOR	LSI RESET	
	C 863	NCB31HK-272X	C CAPACITOR	AUD L			R 652	NRSA63J-102X	MG RESISTOR	STATAS	
	C 864	NCB31HK-272X	C CAPACITOR	AUD R			R 653	NRSA63J-102X	MG RESISTOR	SUBQ	

■ Electrical parts list (Servo control board)

Block No. 03

■ Electrical parts list (Headphone board)

Block No. 04

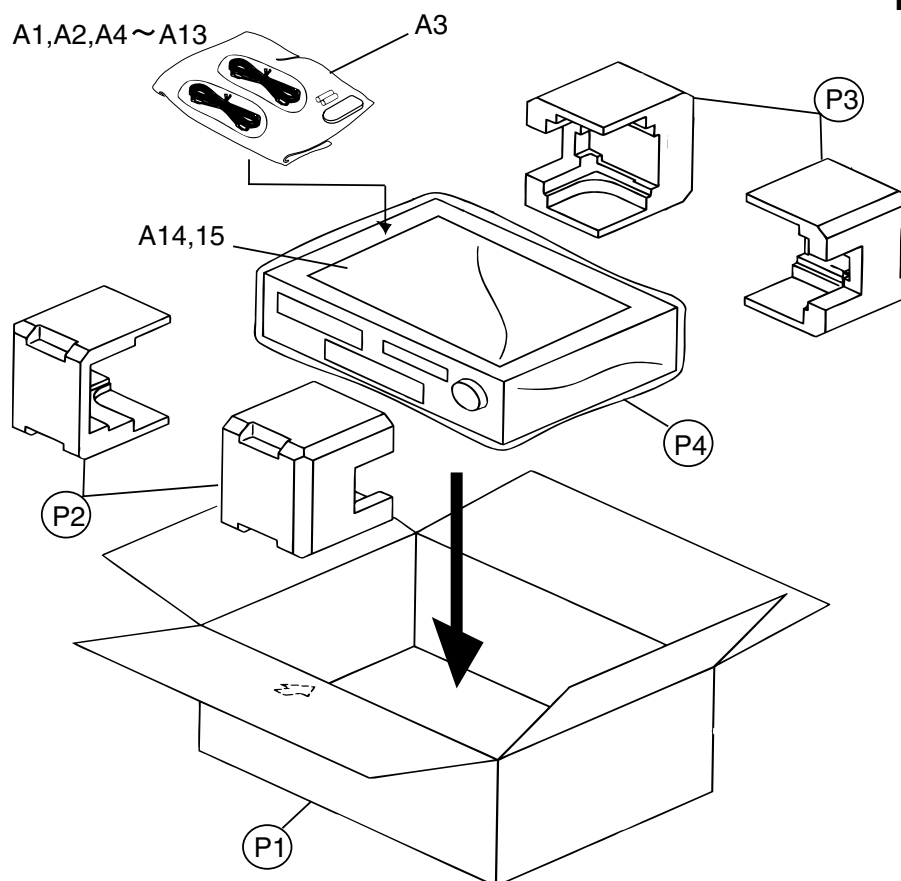
△	Item	Parts number	Parts name	Remarks	Area
	R 654	NRSA63J-102X	MG RESISTOR	BLKCK	
	R 659	NRSA63J-203X	MG RESISTOR	LD ON	
	R 661	NRSA63J-473X	MG RESISTOR	LDON	
	R 662	NRSA63J-683X	MG RESISTOR	ARF	
	R 663	NRSA63J-683X	MG RESISTOR	IREF	
	R 664	NRSA63J-331X	MG RESISTOR	PLLF	
	R 665	NRSA63J-101X	MG RESISTOR	X2	
	R 666	NRSA02J-101X	MG RESISTOR	AVDD1 DE-COUPLE	
	R 667	NRSA63J-4R7X	MG RESISTOR	AVDD2 DE-COUPLE	
	R 668	NRSA63J-155X	MG RESISTOR	DSLIF	
	R 669	NRSA63J-562X	MG RESISTOR	VCOF	
	R 671	NRSA63J-684X	MG RESISTOR	DSLB	
	R 673	NRSA63J-683X	MG RESISTOR	IREF CHANGE	
	R 675	NRSA63J-100X	MG RESISTOR	DVDD1 DE-COUPLE	
	R 677	NRSA63J-102X	MG RESISTOR	DQSY	
	R 678	NRSA63J-102X	MG RESISTOR	SBCK	
	R 679	NRSA63J-102X	MG RESISTOR	SUBC	
	R 682	NRSA63J-102X	MG RESISTOR	TE	
	R 683	NRSA63J-105X	MG RESISTOR	TRSRC	
	R 685	NRSA63J-683X	MG RESISTOR	DRF	
	R 801	NRSA63J-272X	MG RESISTOR	FOD(DRV)	
	R 802	NRSA63J-152X	MG RESISTOR	FOD(DSP)	
	R 803	NRSA63J-472X	MG RESISTOR	TRD(DSP)	
	R 804	NRSA63J-103X	MG RESISTOR	TRD(DRV)	
	R 805	NRSA63J-123X	MG RESISTOR	TVD	
	R 808	NRSA63J-183X	MG RESISTOR	ECM	
	R 809	NRSA63J-152X	MG RESISTOR	ECS	
	R 811	NRSA63J-473X	MG RESISTOR	/DRMUTE	
	R 812	NRSA63J-152X	MG RESISTOR	TRD-LPF	
	R 813	NRSA63J-182X	MG RESISTOR	FOD-LPF	
	R 861	NRSA63J-681X	MG RESISTOR	AUD L	
	R 862	NRSA63J-681X	MG RESISTOR	AUD R	
	R 863	NRSA63J-561X	MG RESISTOR	AUD L	
	R 864	NRSA63J-561X	MG RESISTOR	AUD R	
	SW101	QSW0927-001	SWITCH	REST SW	
	SW102	QSW0931-001	SWITCH	TRAY SW	
	X 251	QAX0664-001Z	C OSCILLATOR	FOR IC251 8.38M	
	X 651	NAX0476-001X	CRYSTAL	FOR IC651	

△	Item	Parts number	Parts name	Remarks	Area
	CN999	QGA2501C1-06	6P CONNECTOR		
	C1201	NCS31HJ-101X	C.CAPA. C.M		
	C1202	NCB31HK-103X	C CAPACITOR		
	C1203	NCB31HK-103X	C CAPACITOR		
	C2201	NCS31HJ-101X	C.CAPA. C.M		
	C2202	NCB31HK-103X	C CAPACITOR		
	C2203	NCB31HK-103X	C CAPACITOR		
	C6201	NCF31CZ-104X	C CAPACITOR		
	C6202	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C6203	NCF31CZ-104X	C CAPACITOR		
	C6204	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C6209	NCB31HK-103X	C CAPACITOR		
	D 701	SLR-342VC-T	LED		
	FW701	QUM029-12DGZ3	PARA RIBON WIRE		
	IC621	BA15218F-XE	IC		
	Q 701	KRC103M-T	TR I/M		
	R 711	NRSA63J-331X	MG RESISTOR		
	R1201	NRSA63J-103X	MG RESISTOR		
	R1202	NRSA63J-104X	MG RESISTOR		
	R1204	NRSA63J-562X	MG RESISTOR		
	R1205	NRSA63J-680X	MG RESISTOR		
	R1206	NRSA63J-820X	MG RESISTOR		
	R2201	NRSA63J-103X	MG RESISTOR		
	R2202	NRSA63J-104X	MG RESISTOR		
	R2204	NRSA63J-562X	MG RESISTOR		
	R2205	NRSA63J-680X	MG RESISTOR		
	R2206	NRSA63J-820X	MG RESISTOR		
	S 701	QSW0683-001Z	PUSH SWITCH		
	VR701	QVQ0302-A14	V RESISTOR		

Packing materials and accessories parts list

Block No. M4MM

Block No. M5MM



■ Parts list

Block No. M4MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	LE20583-015A	P.CASE	1		
	P 2	LE20584-001A	P.PAD(F)	1		
	P 3	LE20585-001A	P.PAD(R)	1		
	P 4	QPC06005515P	POLY BAG	1	FOR SET	

■ Parts list

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
⚠	A 1	LET0190-003A	INST BOOK	1		C
		LET0190-002A	INST BOOK	1		J
	A 2	QMPE200-183-JC	POWER CORD	1		
	A 3	QPC02504015P	POLY BAG	1	FOR INST	
	A 4	QPA01202505	POLY BAG	1		
	A 5	BT-20071B	JVC CENTER LIST	1		C
	A 6	BT-51020-2	J=REGIST CARD	1		J
	A 7	YU20333	SAFETY INST.	1		
	A 8	EWP805-001W	REMOTE WIRE	1		
	A 9	VMP0088-001JW	PIN CORD	1		
	A 10	RM-SXLR2010A	REMOCON UNIT	1		
	A 11	-----	BATTERY	2	FOR REMOCON	
	A 12	QQR1258-001	FERRITE CORE	1		
	A 13	LE40839-001A	CAUTION SHEET	1		
	A 14	LV32110-001A	CAUTION SHEET	1		
	A 15	LV42668-001B	CAUTION SHEET	1		