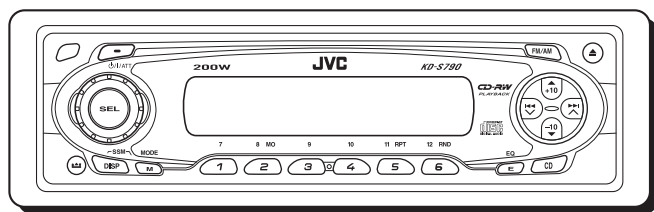
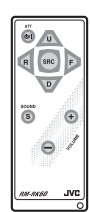
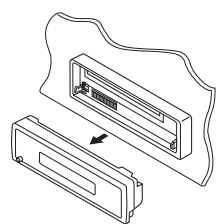


JVC

SERVICE MANUAL

CD RECEIVER

KD-S790



Area Suffix
 J ----- Northern America


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SECTION 1

Important Safety Precautions

1.1 Safety Precautions

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

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

1.2 Preventing static electricity

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

1.2.1 Grounding to prevent damage by static electricity

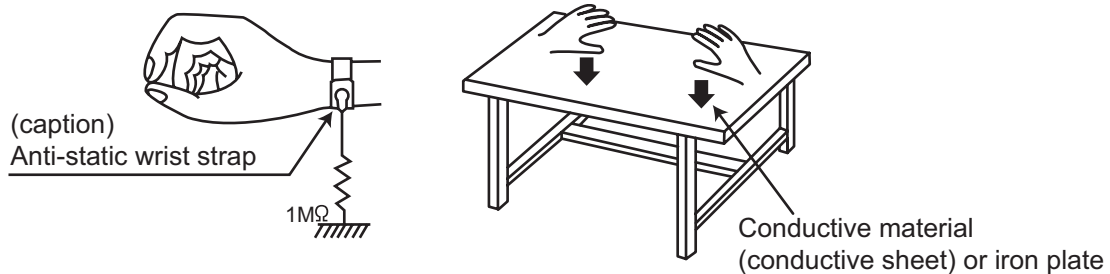
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

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

(2) Ground yourself

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



(3) Handling the optical pickup

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

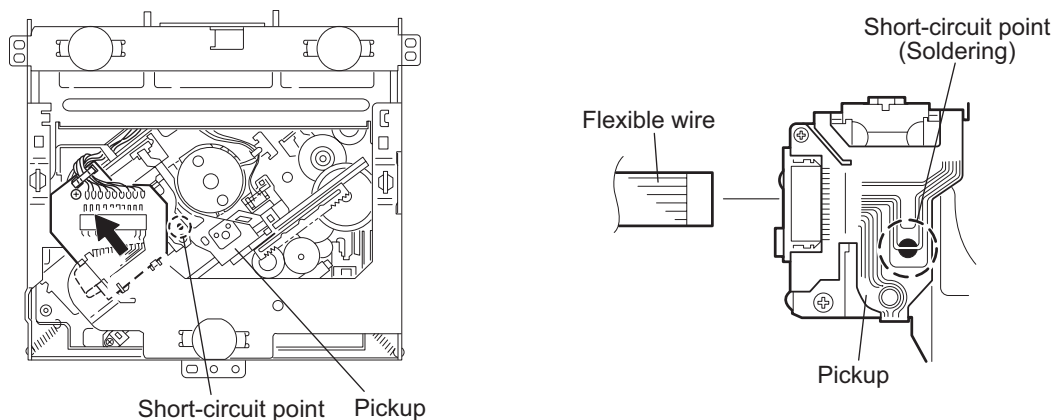
1.3 Handling the traverse unit (optical pickup)

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

1.4 Attention when traverse unit is decomposed

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

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



SECTION 2

Disassembly method

2.1 Main body

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

- (1) Push the detach button in the lower left part of the front panel assembly and remove the front panel assembly in the direction of the arrow.

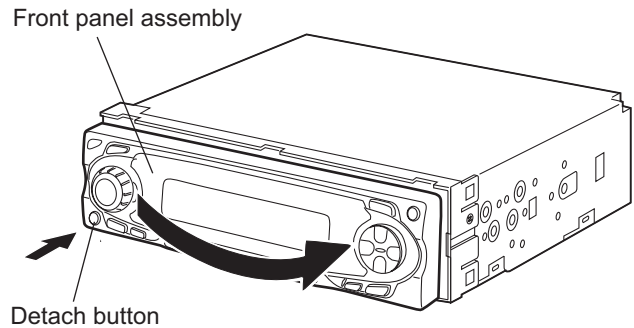


Fig.1

2.1.2 Removing the front chassis assembly (See Figs.2 to 4)

- Prior to performing the following procedure, remove the front panel assembly.
- (1) Remove the screw **A** on the both sides of the main body, and two screws **B** on the front chassis assembly.
- (2) Release the two joints **a** and the two joints **b** on both sides of the main body using a screwdriver, and remove the front chassis assembly forward.

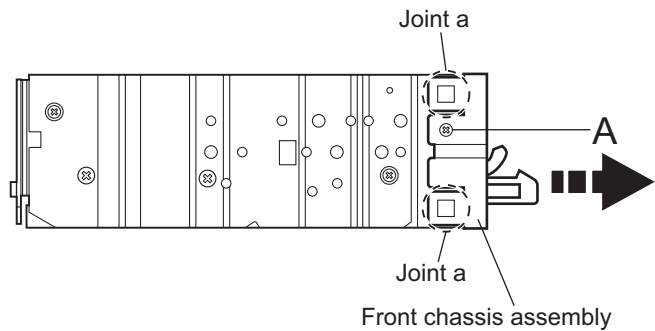


Fig.2

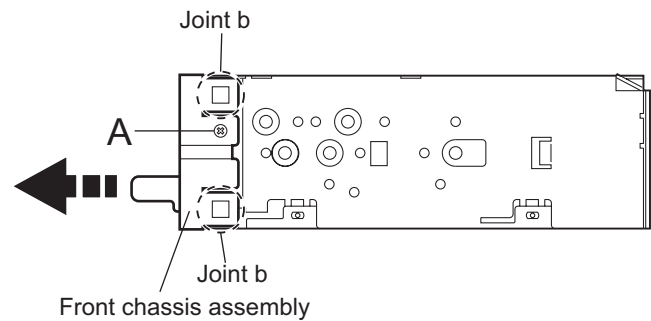


Fig.3

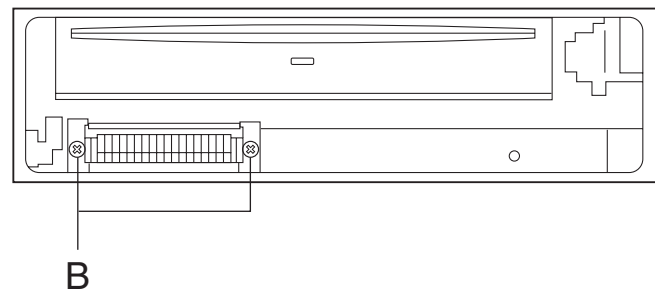


Fig.4

2.1.3 Removing the heat sink (See Fig.5)

- (1) Remove the two screws **C** and two screws **D** on the left side of the main body.

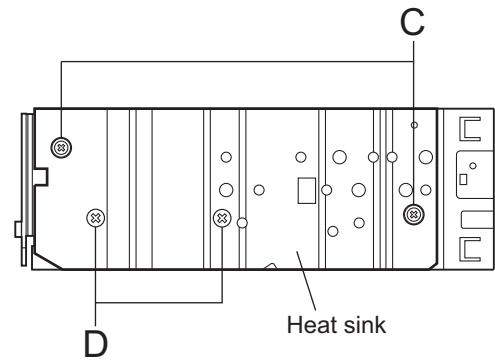


Fig.5

2.1.4 Removing the bottom cover (See Figs.6 and 7)

- Prior to performing the following procedure, remove the front panel assembly, front chassis assembly and heat sink.
- (1) Turn over the body and release the two joints **c**, two joints **d** and joint **e**.

CAUTION:

Do not damage the main board when releasing the joint **e** using a screwdriver. (See Figs.6 and 7)

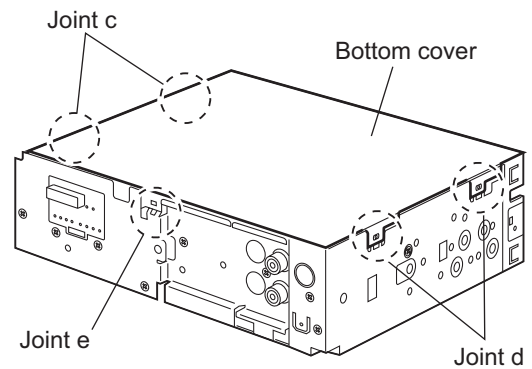


Fig.6

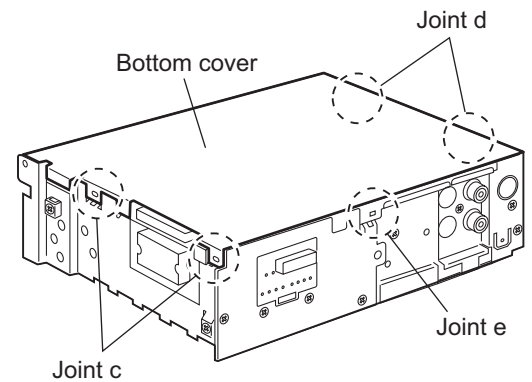


Fig.7

2.1.5 Removing the rear bracket (See Fig.8)

- Prior to performing the following procedure, remove the front panel assembly, front chassis assembly, heat sink and bottom cover.
- (1) Remove the three screws **E**, three screws **F** and two screws **G** on the back of the body.
- (2) Remove the rear bracket.

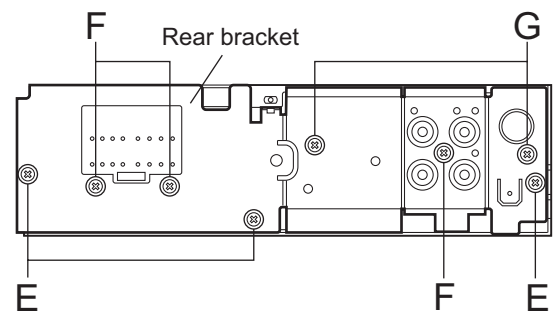


Fig.8

**2.1.6 Removing the main board
(See Fig.9)**

- Prior to performing the following procedure, remove the front panel assembly, front chassis assembly, heat sink, bottom cover and rear bracket.
 - (1) Remove the two screws **H** attaching the main board.
 - (2) Disconnect connector **CN501** and remove the main board.

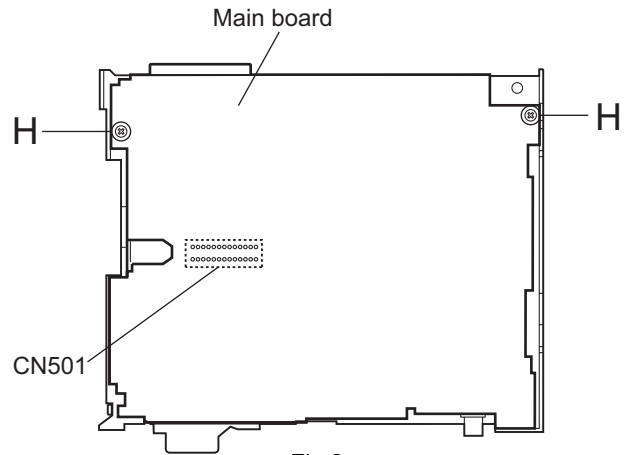


Fig.9

**2.1.7 Removing the CD mechanism assembly
(See Fig.10)**

- Prior to performing the following procedure, remove the front panel assembly, front chassis assembly, heat sink, bottom cover, rear bracket and main board.
 - (1) Remove the three screws **J**.

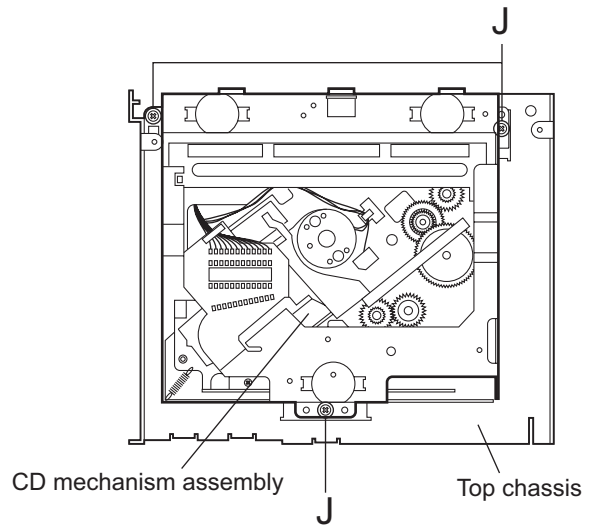


Fig.10

2.1.8 Removing the front board (See Figs.11 to 13)

- Prior to performing the following procedure, remove the front panel assembly.
 - (1) Remove the four screws **K** on the back side of the front panel assembly.
 - (2) Release the ten joints **f**.
 - (3) Take out the front board.

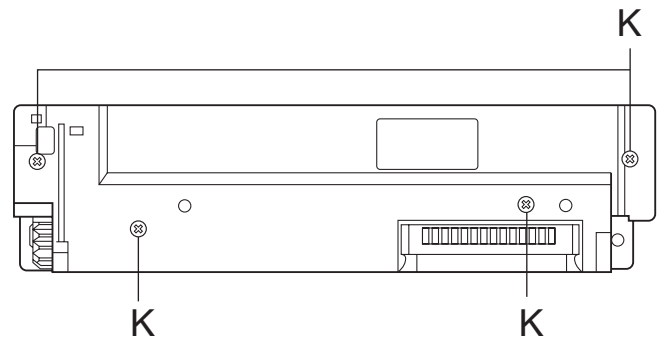


Fig.11

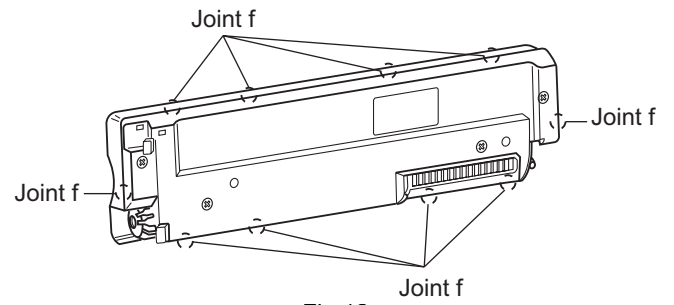


Fig.12

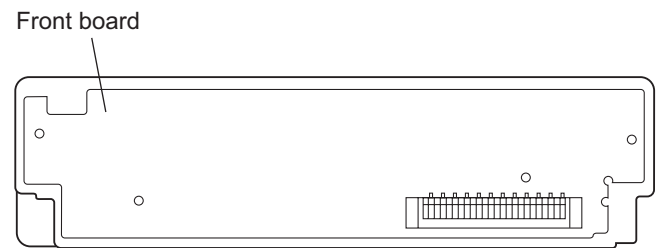


Fig.13

2.2 CD Mechanism Assembly

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

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

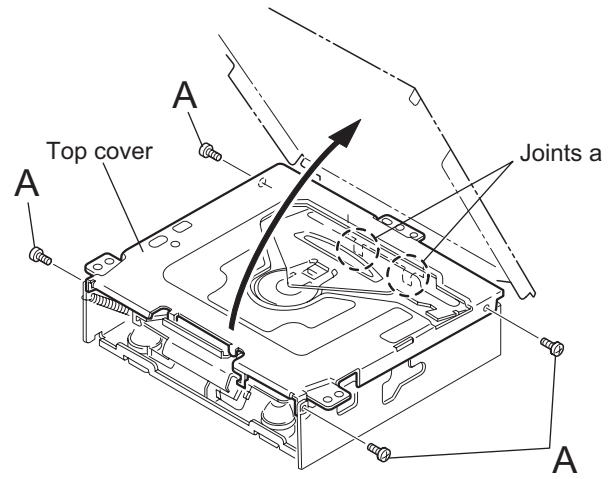


Fig.1

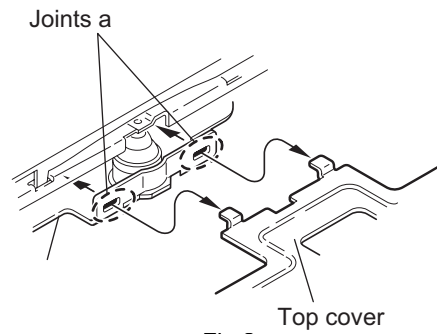


Fig.2

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

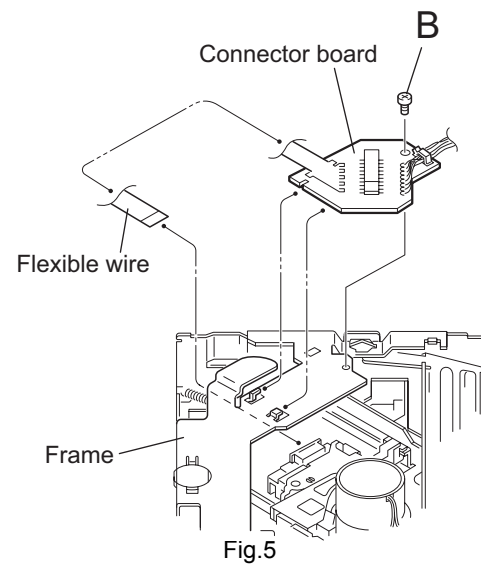
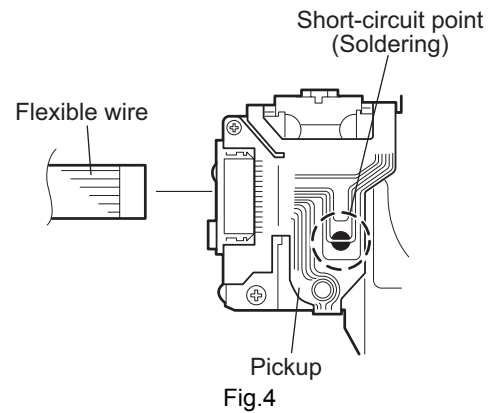
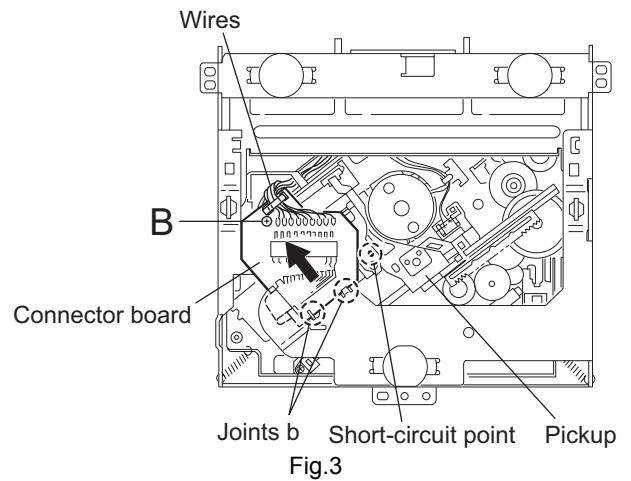
CAUTION:

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

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

CAUTION:

Unsolder the short-circuit point after reassembling.



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

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

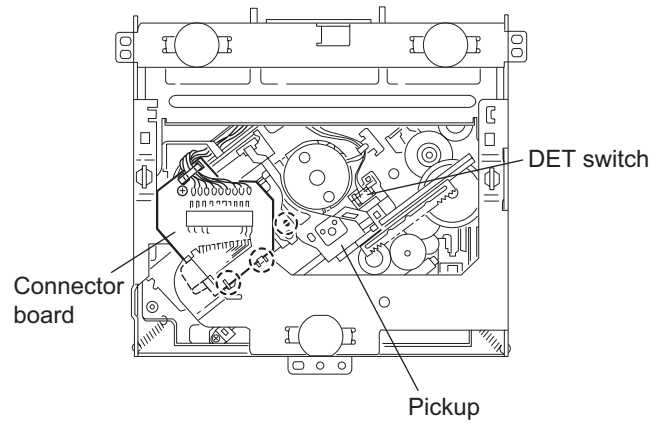


Fig.6

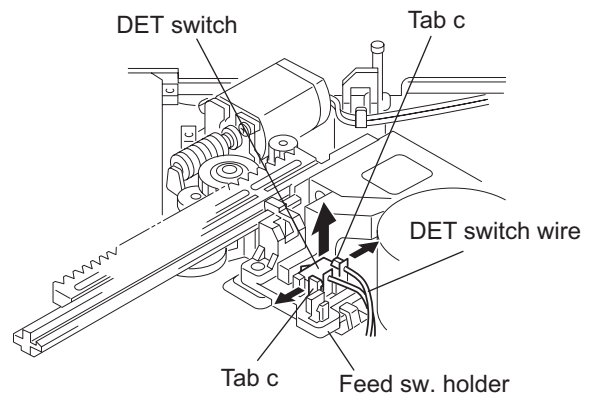


Fig.7

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

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

CAUTION:

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

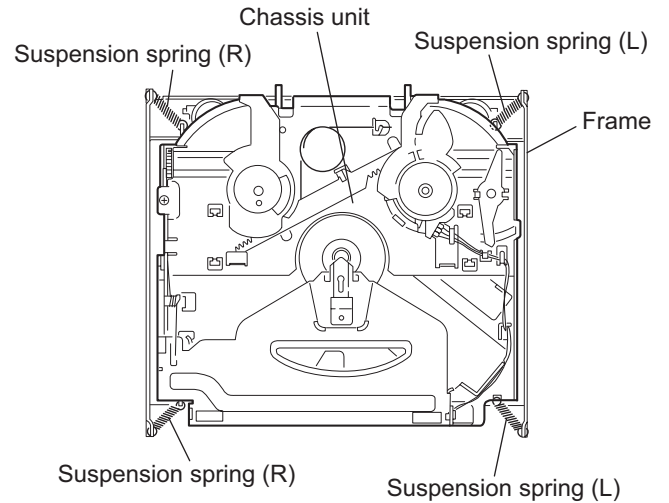


Fig.8

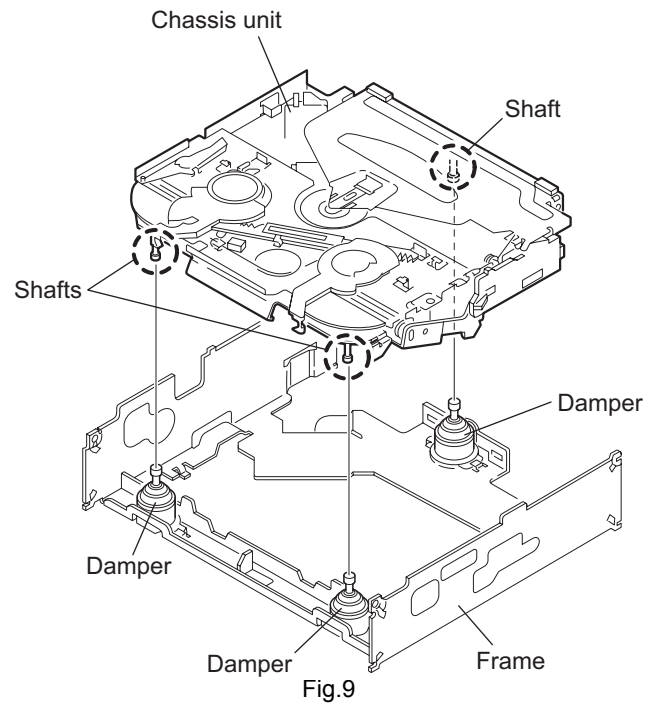
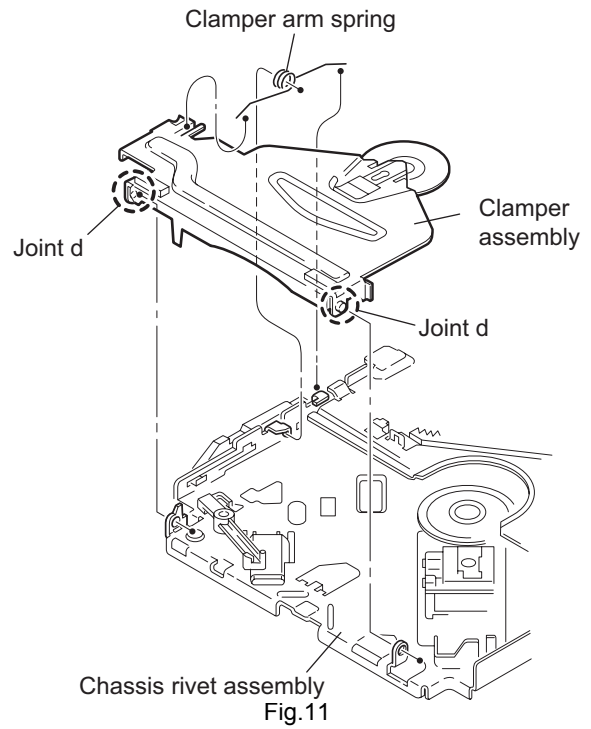
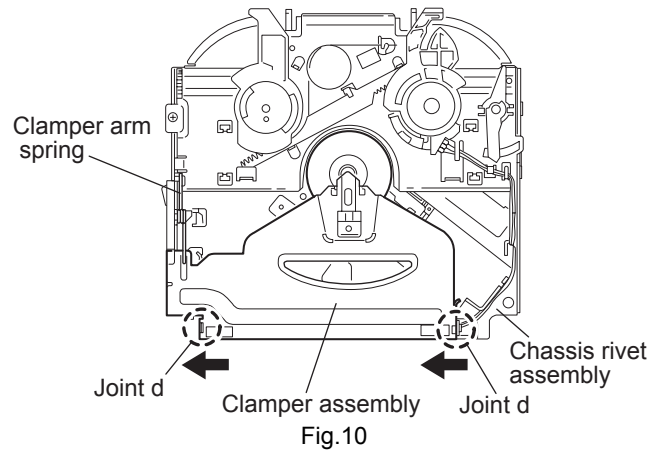


Fig.9

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

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

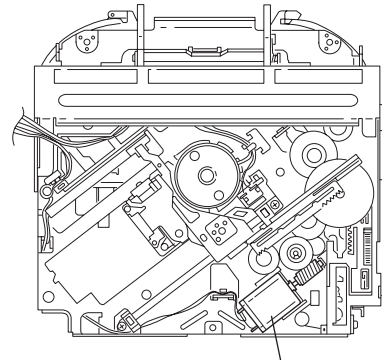


2.2.6 Removing the loading / feed motor assembly (See Figs.12 and 13)

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

CAUTION:

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



Loading / feed motor assembly
Fig.12

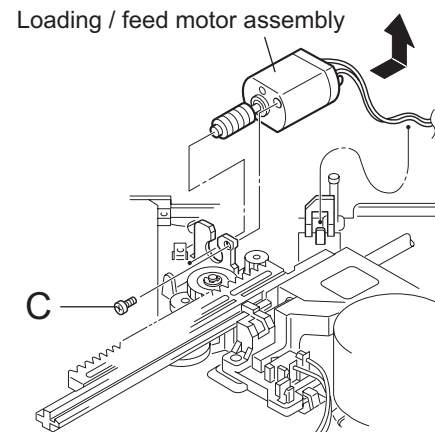


Fig.13

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

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

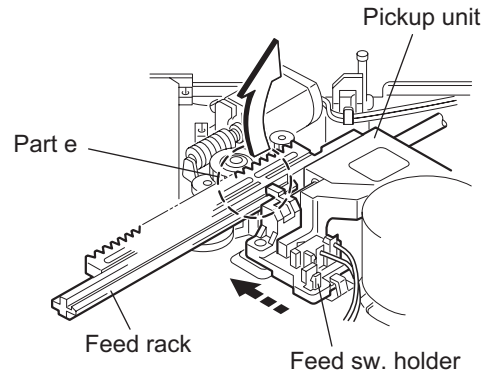


Fig.15

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

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

CAUTION:

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

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

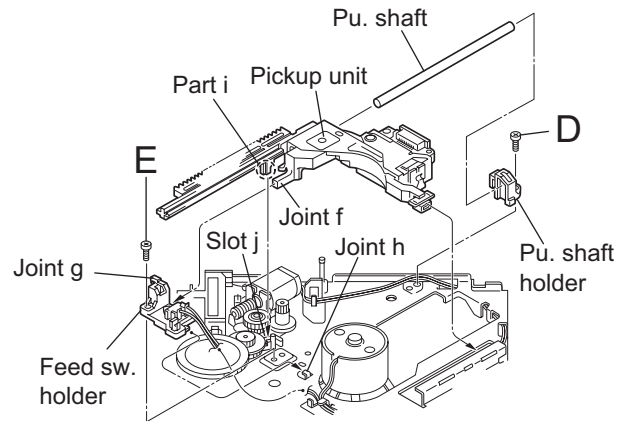


Fig.16

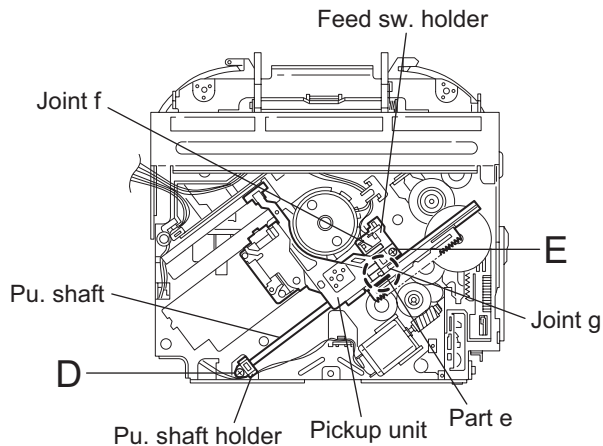


Fig.14

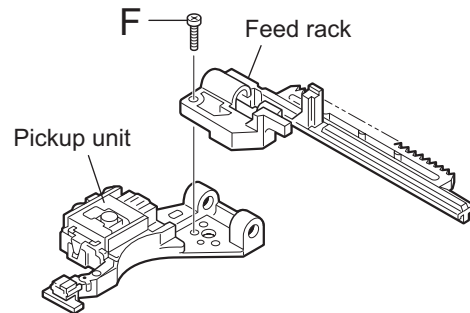


Fig.17

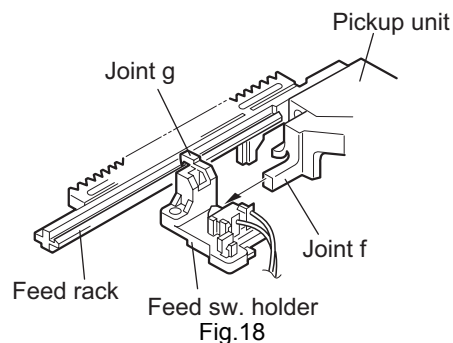


Fig.18

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

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

CAUTION:

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

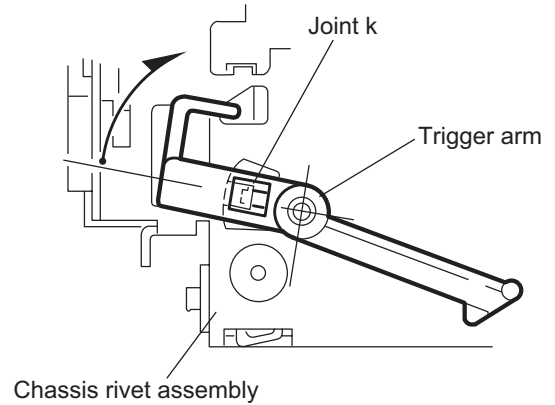


Fig.19

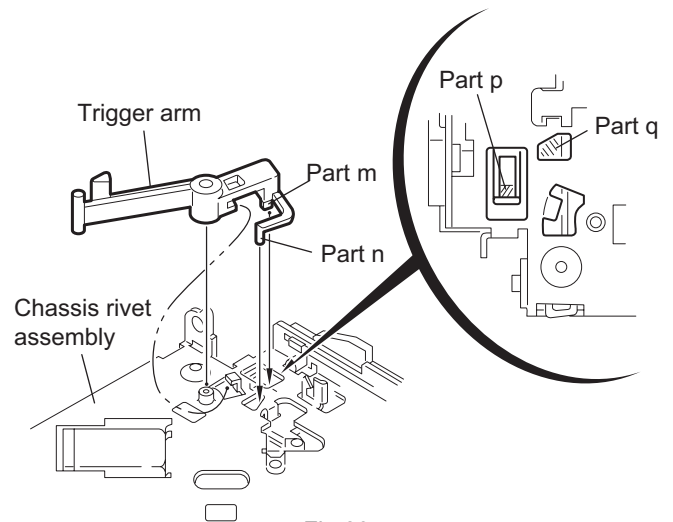


Fig.20

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

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

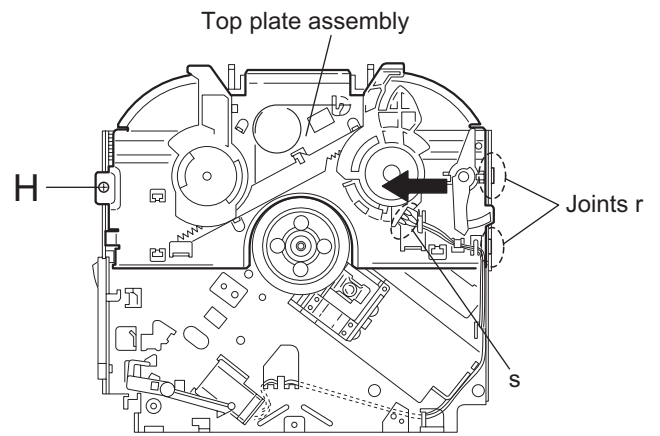


Fig.21

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

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

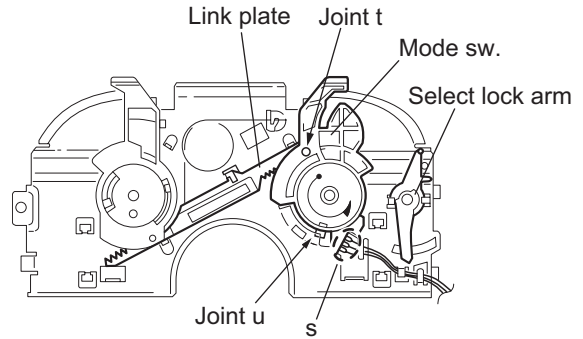


Fig.22

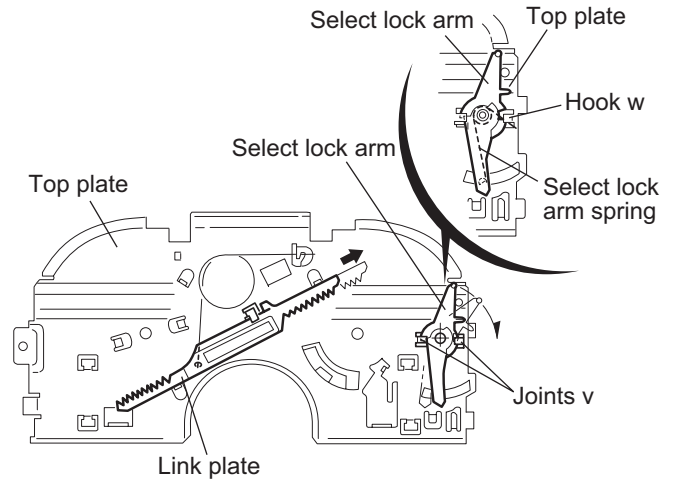


Fig.23

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

REFERENCE:

Reverse the above removing procedure.

- (1) Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook w on the top plate.
- (2) Set the other longer end of the select lock arm spring to the boss x on the underside of the select lock arm, and join the select lock arm to the slots (joint v). Turn the select lock arm as shown in the figure.
- (3) Reattach the mode sw. while setting the part t to the first peak of the link plate gear, and join the joint u.

CAUTION:

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

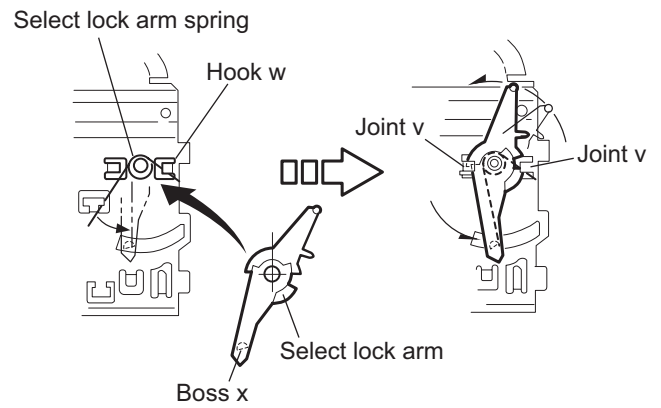


Fig.24

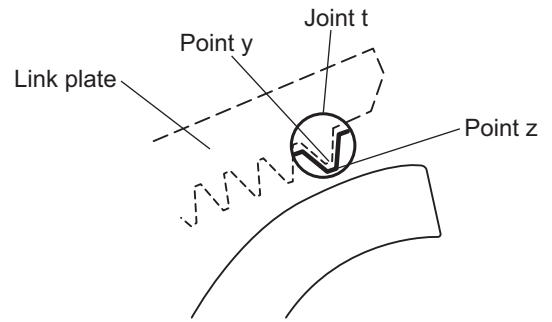


Fig.25

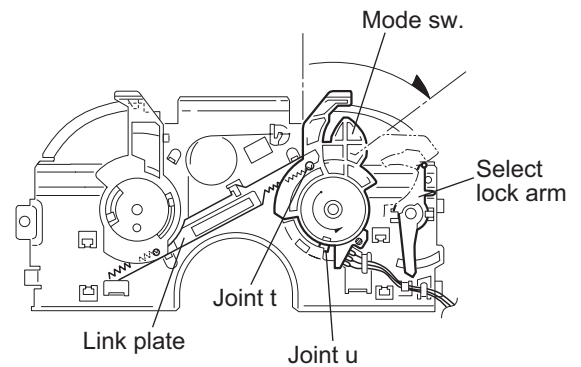


Fig.26

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

• Prior to performing the following procedure, remove the top plate assembly.

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

REFERENCE:

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

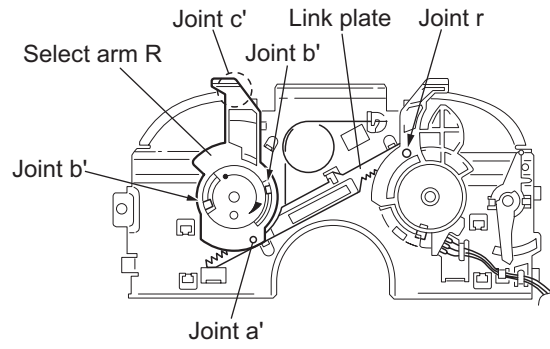


Fig.27

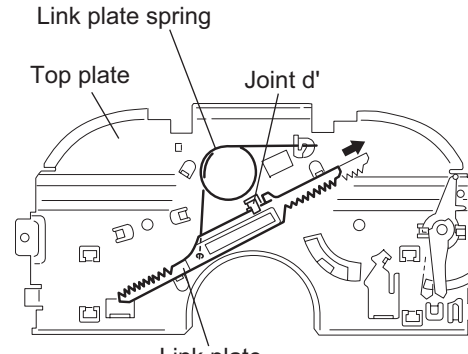


Fig.28

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

REFERENCE:

Reverse the above removing procedure.

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

CAUTION:

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

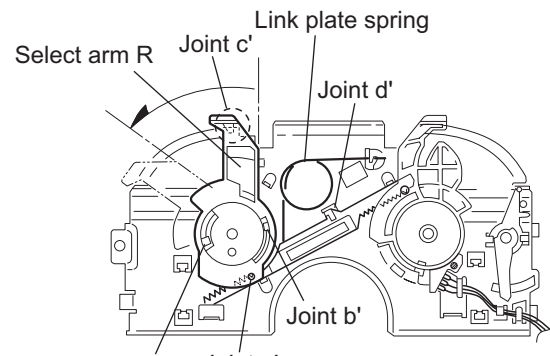


Fig.29

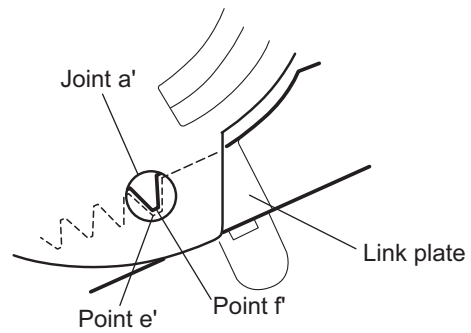


Fig.30

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

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

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

Remove the roller guide and the HL washer from the shaft of the loading roller assembly.

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

CAUTION:

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

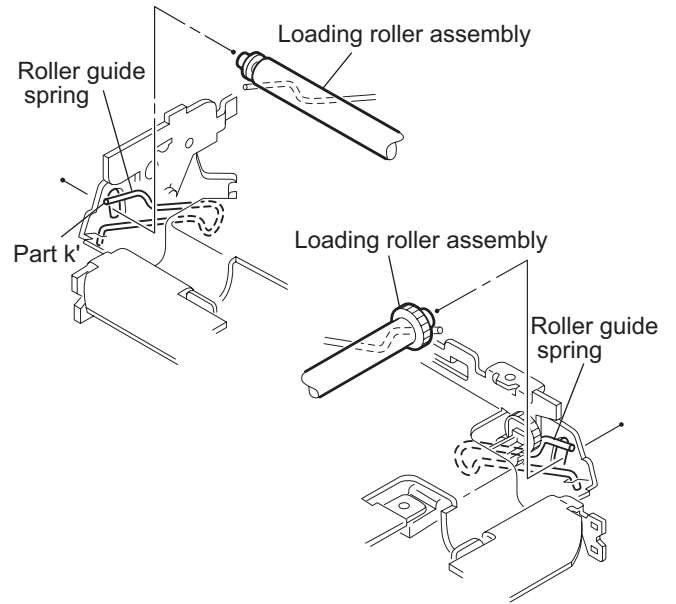


Fig.32

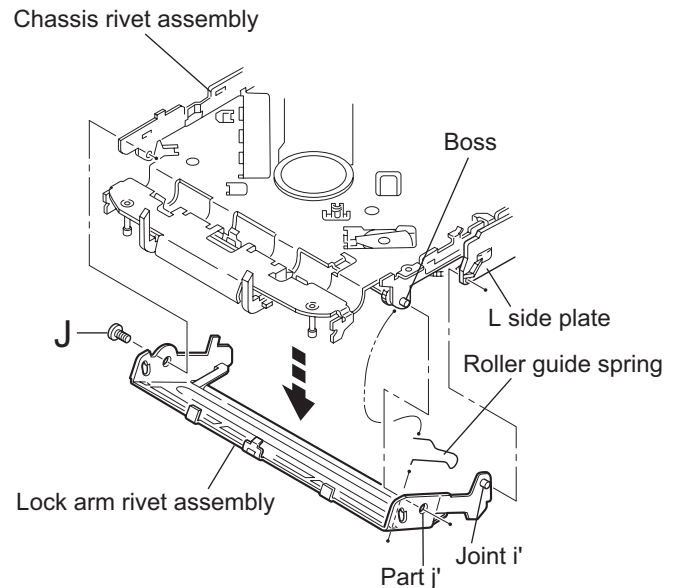


Fig.33

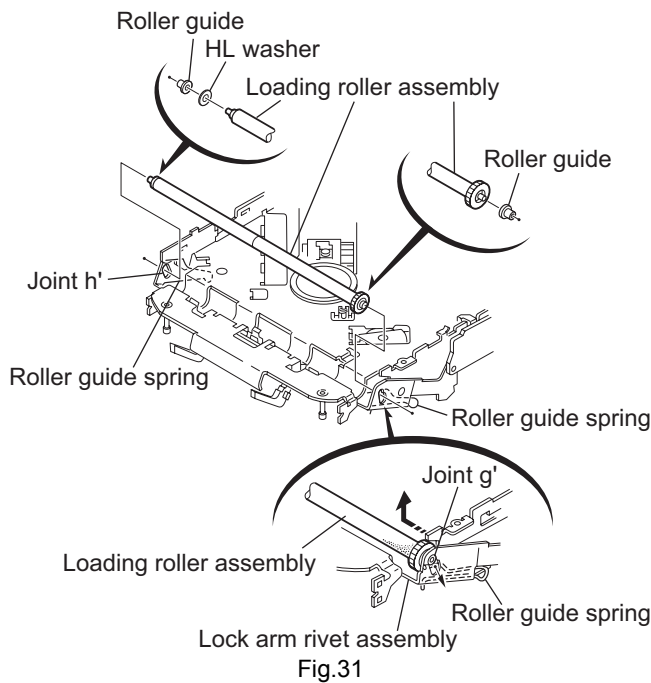


Fig.31

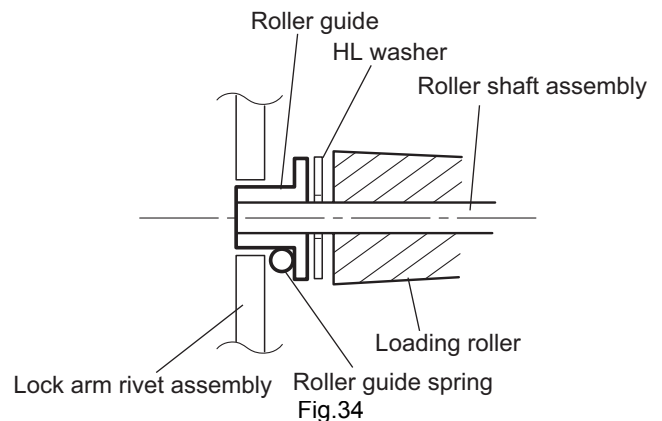
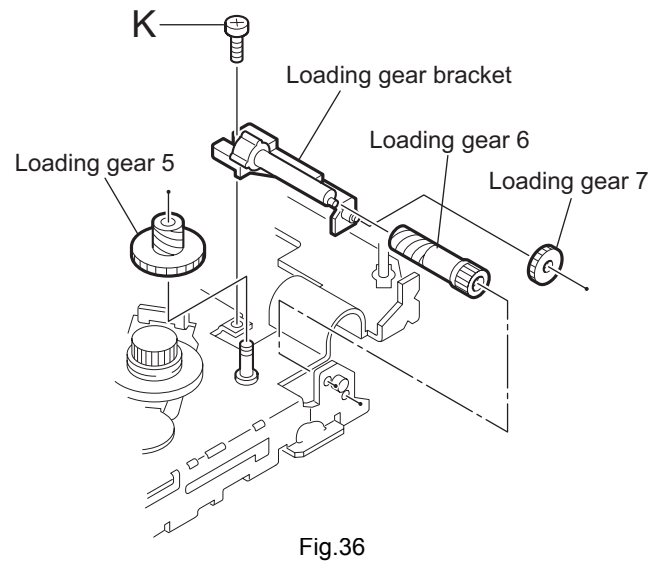
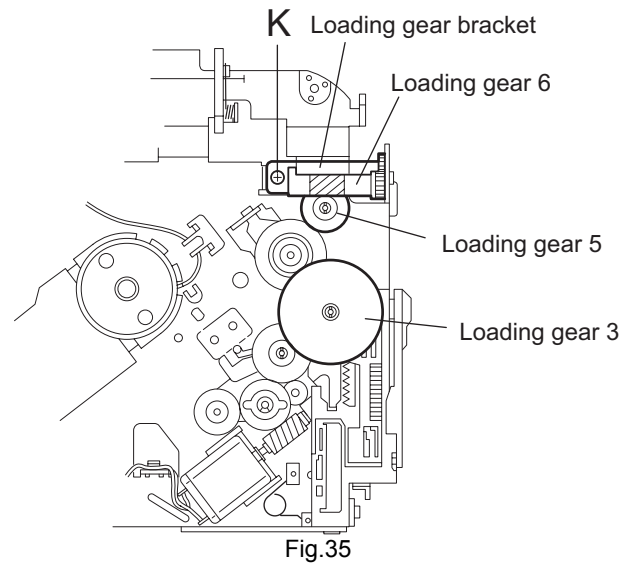


Fig.34

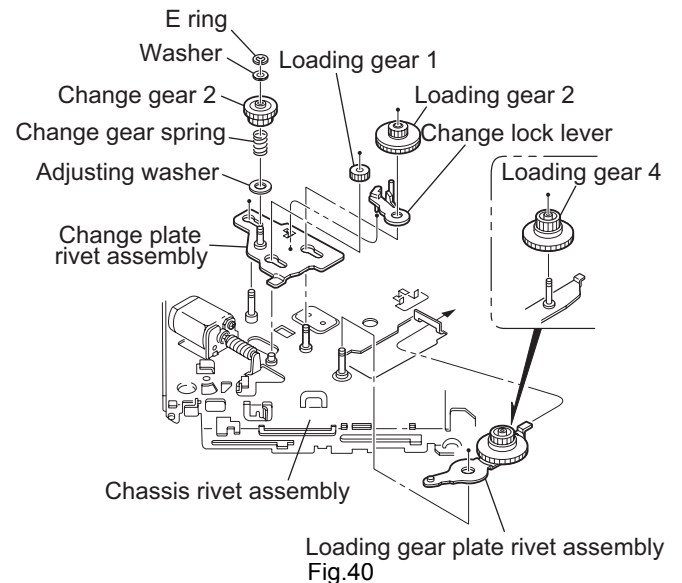
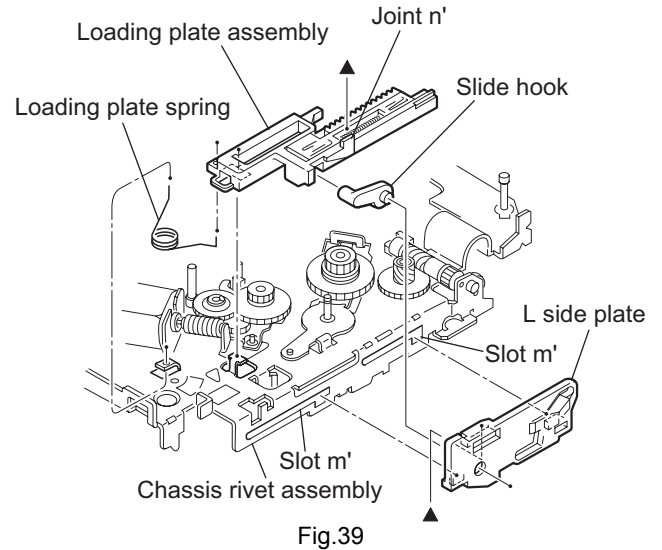
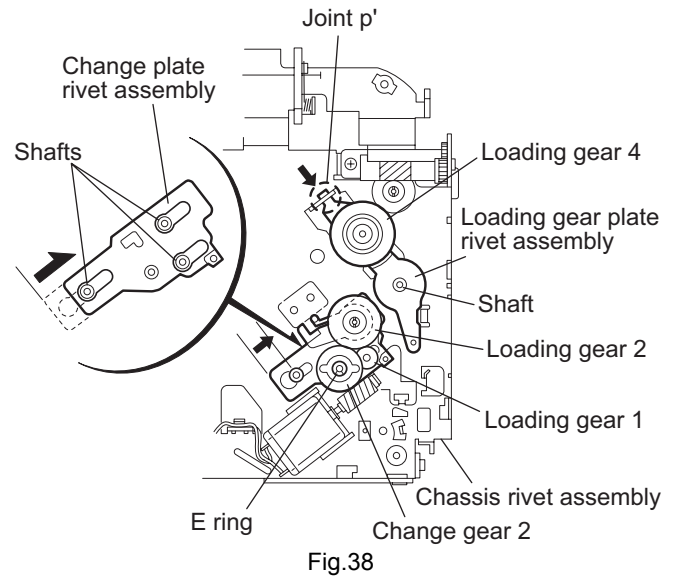
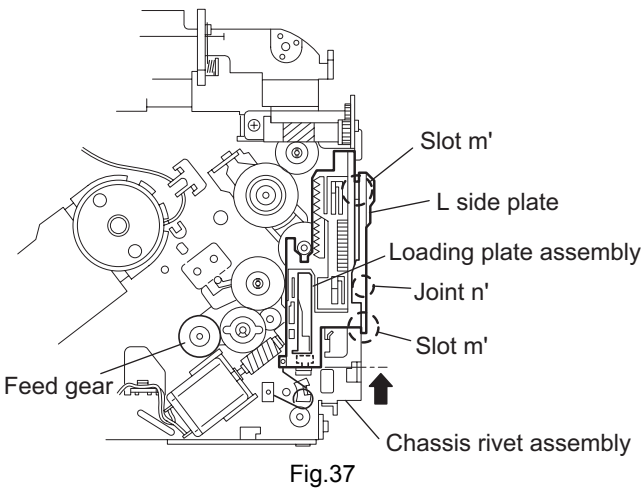
2.2.16 Removing the loading gear 5, 6 and 7 (See Figs.35 and 36)

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



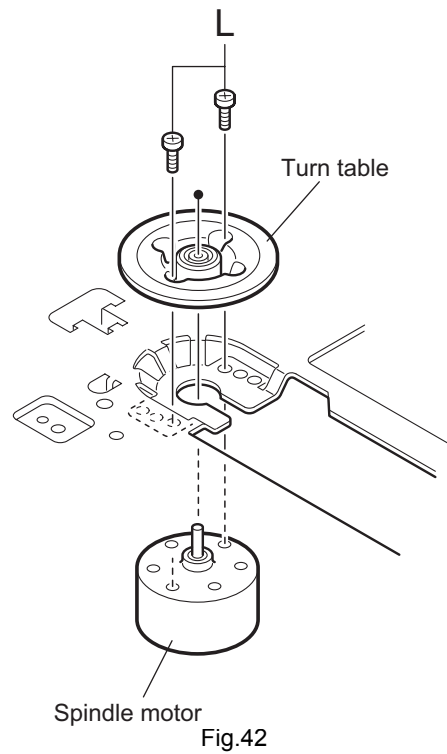
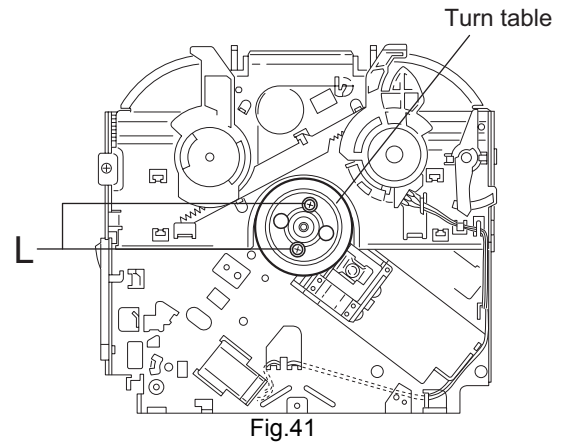
2.2.17 Removing the gears
(See Figs.37 to 40)

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



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

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



SECTION 3 Adjustment

3.1 Adjustment method

■ Test instruments required for adjustment

1. Digital oscilloscope (100MHz)
2. AM Standard signal generator
3. FM Standard signal generator
4. Stereo modulator
5. Electric voltmeter
6. Digital tester
7. Tracking offset meter
8. Test Disc JVC :CTS-1000
9. Extension cable for check
EXTSH002-22P[×] 1

■ Standard volume position

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

■ Frequency Band

FM 87.5MHz ~ 107.9MHz
AM 530kHz ~ 1710 kHz

■ Dummy load

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

■ Standard measuring conditions

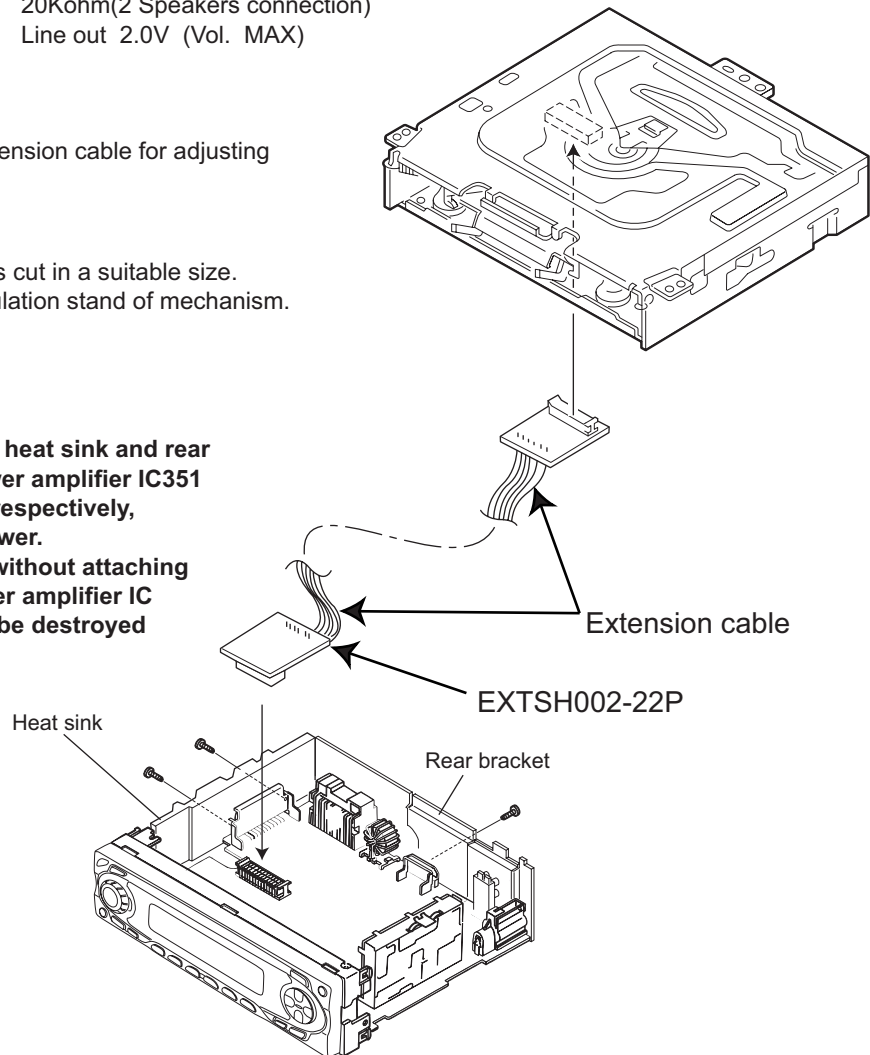
Power supply voltage DC14.4V(10.5~16V)
Load impedance 20Kohm(2 Speakers connection)
Output Level Line out 2.0V (Vol. MAX)

■ How to connect the extension cable for adjusting

* The cardboard is cut in a suitable size.
uses for the insulation stand of mechanism.

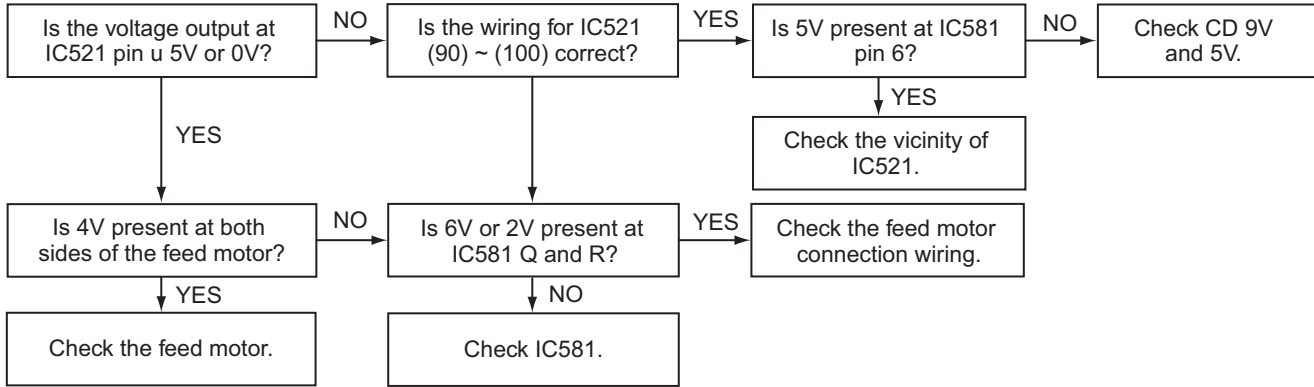
Caution:

Be sure to attach the heat sink and rear bracket onto the power amplifier IC351 and regulator IC961 respectively, before supply the power. If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

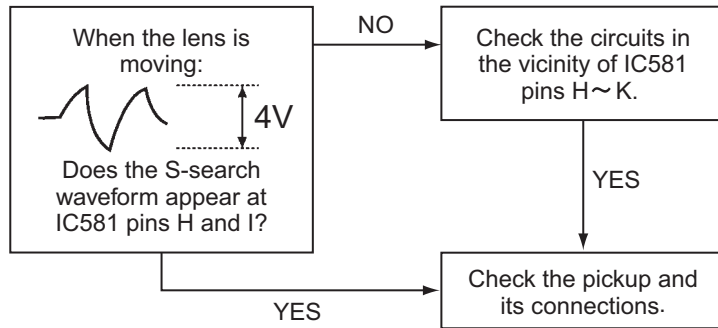


3.2 Troubleshooting

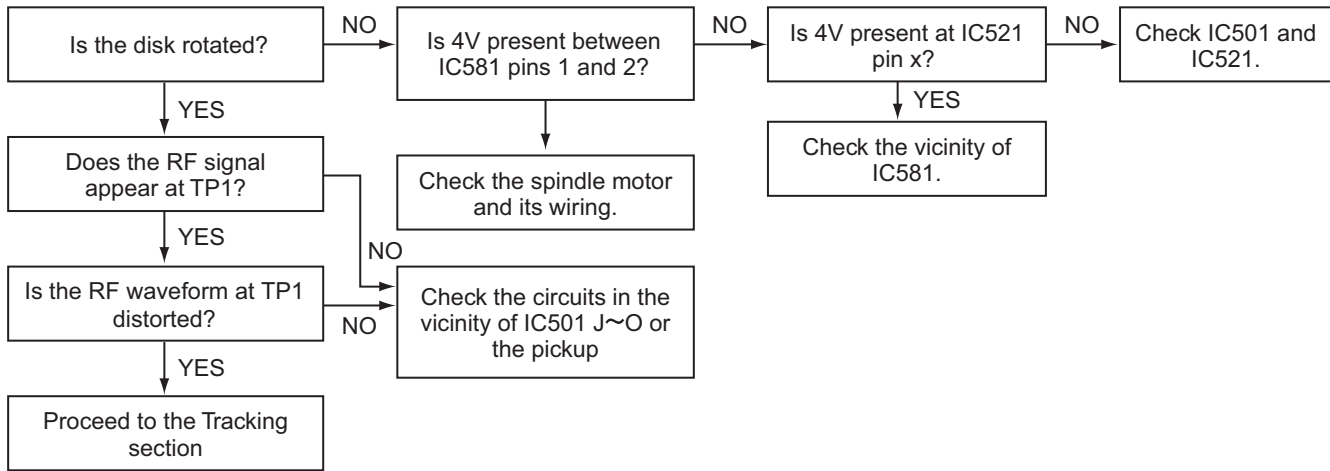
3.2.1 Feed section



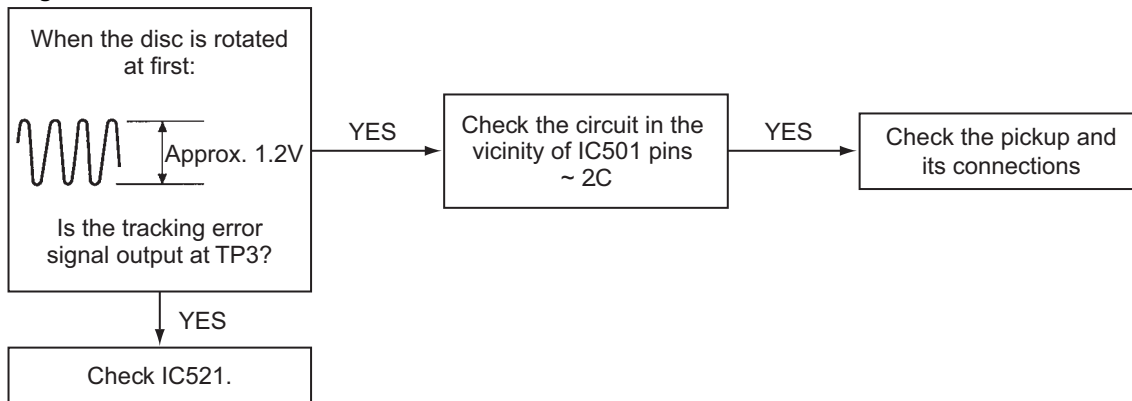
3.2.2 Focus section



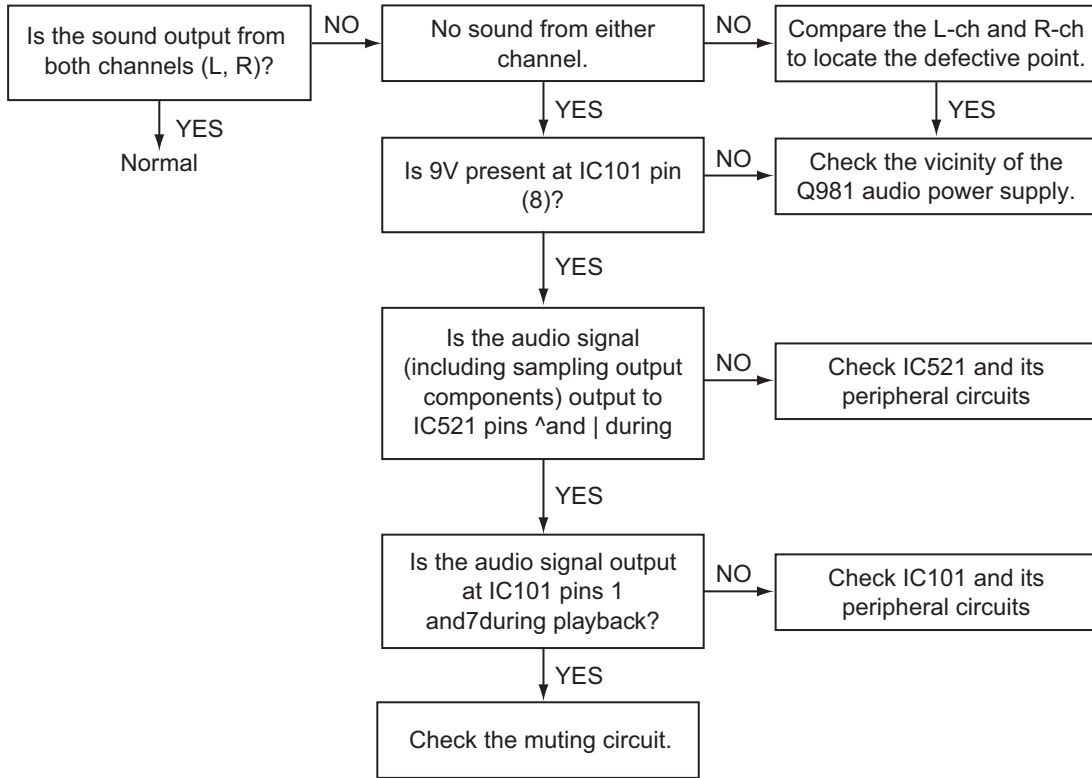
3.2.3 Spindle section



3.2.4 Tracking section



3.2.5 Signal processing section



3.3 Maintenance of laser pickup

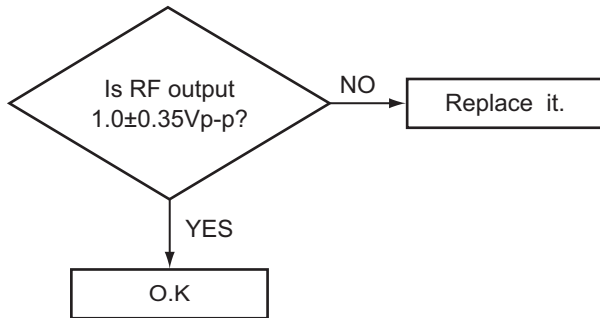
(1) Cleaning the pick up lens

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

(2) Life of the laser diode

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

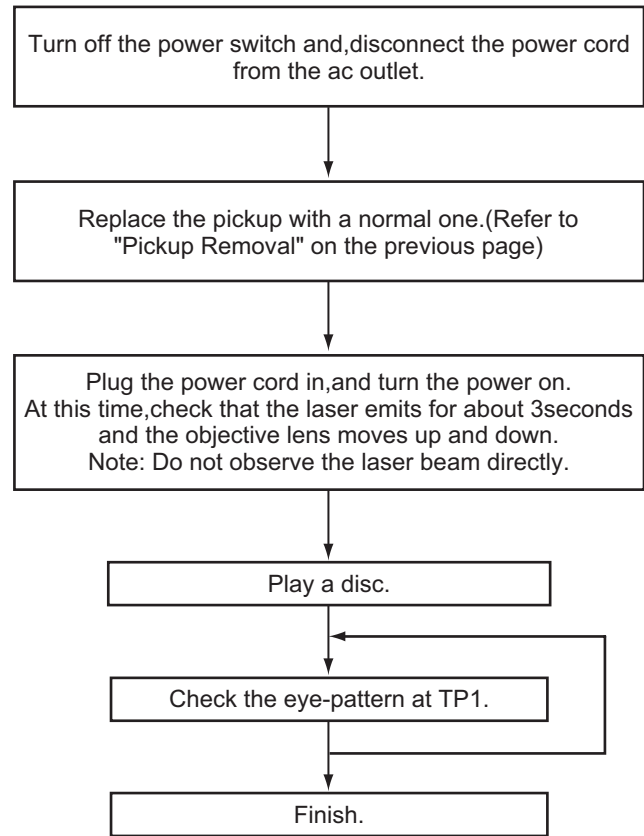
- The level of RF output (EFM output:amplitude of eye pattern) will be low.



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

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

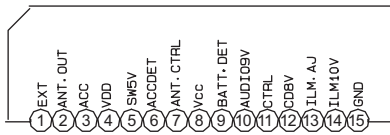
3.4 Replacement of laser pickup



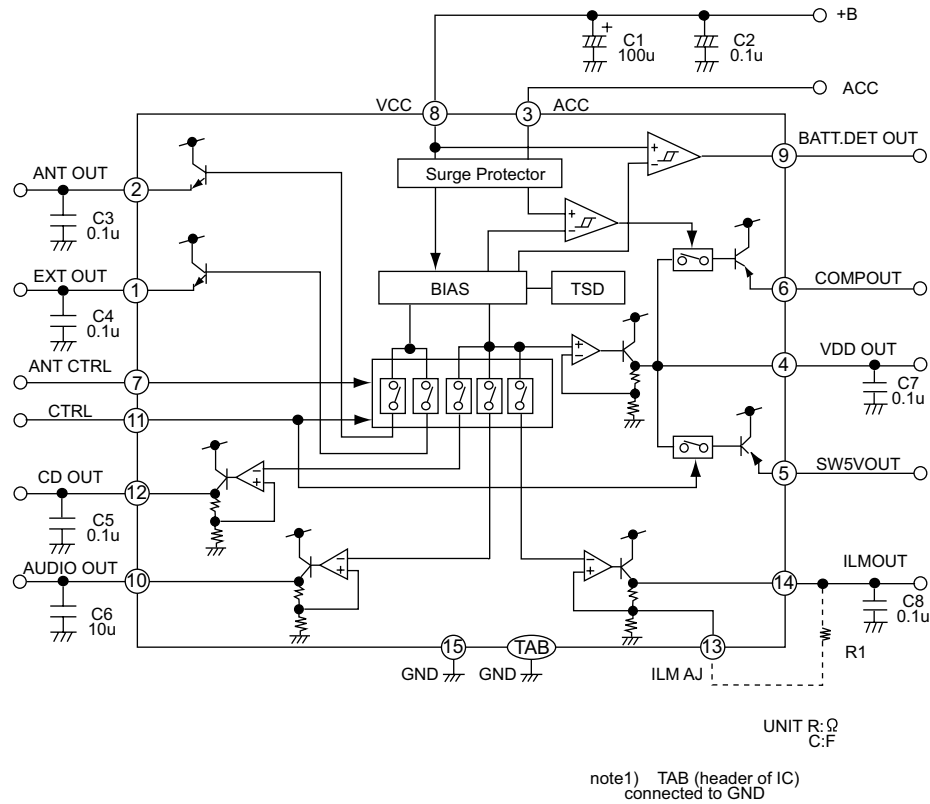
SECTION 4 Description of major ICs

4.1 HA13164A (IC961) : Regulator

- Terminal layout



- Block diagram

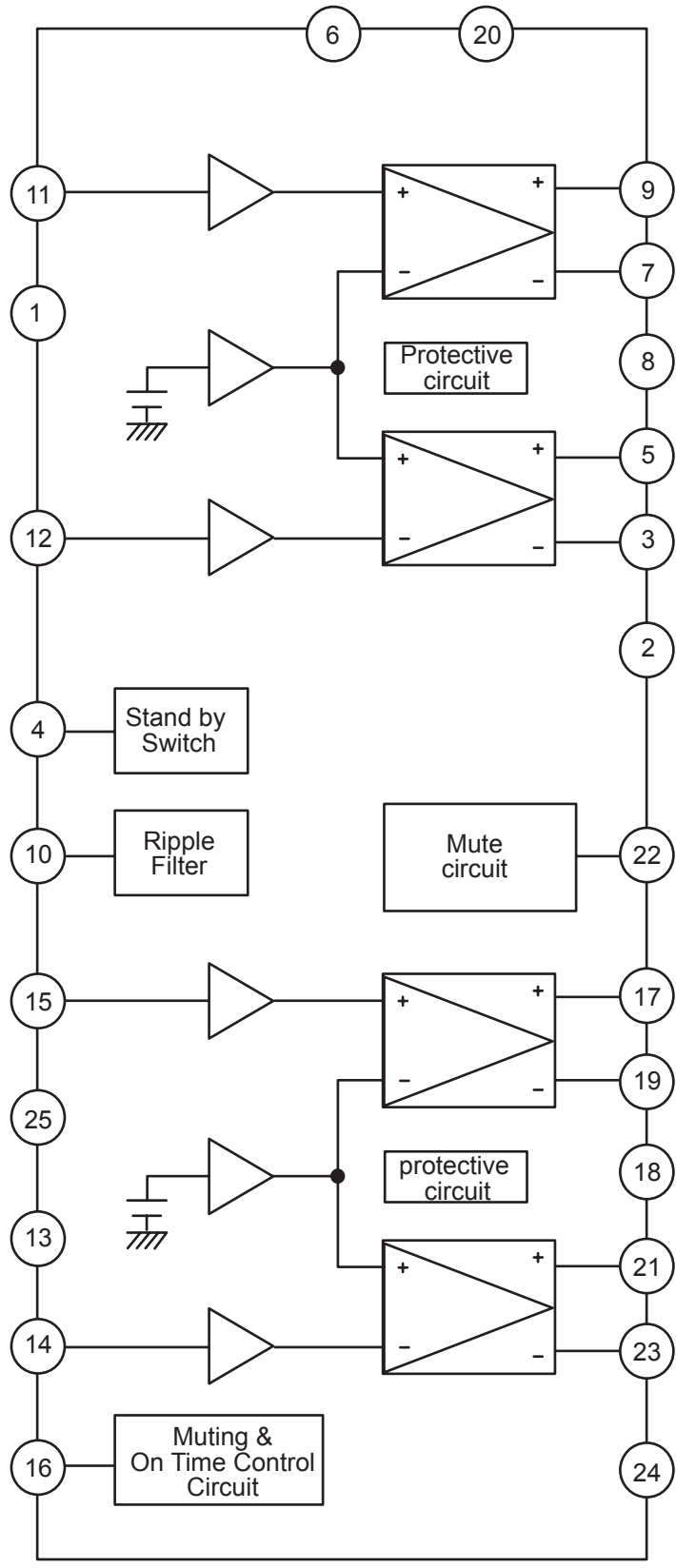


- Pin function

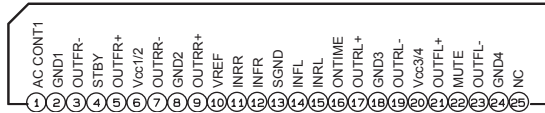
Pin No.	Symbol	Function
1	EXTOUT	Output voltage is VCC-1 V when M or H level applied to CTRL pin.
2	ANTOUT	Output voltage is VCC-1 V when M or H level to CTRL pin and H level to ANT-CTRL.
3	ACCIN	Connected to ACC.
4	VDDOUT	Regular 5.7V.
5	SW5VOUT	Output voltage is 5V when M or H level applied to CTRL pin.
6	COMPOUT	Output for ACC detector.
7	ANT CTRL	L:ANT output OFF H:ANT output ON
8	VCC	Connected to VCC.
9	BATT DET	Low battery detect.
10	AUDIO OUT	Output voltage is 9V when M or H level applied to CTRL pin.
11	CTRL	L:BIAS OFF M:BIAS ON H:CD ON
12	CD OUT	Output voltage is 8V when H level applied to CTRL pin.
13	ILM AJ	Adjustment pin for ILM output voltage.
14	ILM OUT	Output voltage is 10V when M or H level applied to CTRL pin.
15	GND	Connected to GND.

4.2 LA47505 (IC351) : Power amp.

- Terminal layout



- Terminal layout



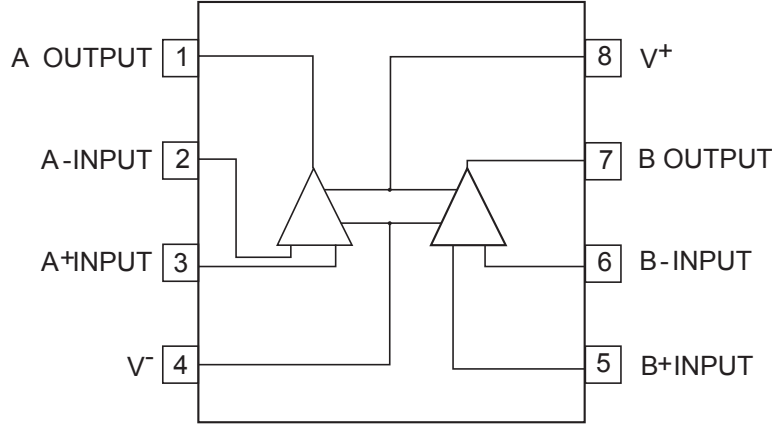
- Pin function

Pin No.	Symbol	Function
1	AC CONT1	Header of IC
2	GND1	Power GND
3	OUTFR-	Output(-) for front Rch
4	STBY	Stand by input
5	OUTFR+	Output (+) for front Rch
6	Vcc1/2	Power input
7	OUTRR-	Output (-) for rear Rch
8	GND2	Power GND
9	OUTRR+	Output (+) for rear Rch
10	VREF	Ripple filter
11	INRR	Rear Rch input
12	INFR	Front Rch input
13	SGND	Signal GND
14	INFL	Front Lch input
15	INRL	Rear Lch input
16	ONTIME	Power on time control
17	OUTRL+	Output (+) for rear Lch
18	GND3	Power GND
19	OUTRL-	Output (-) for rear Lch
20	Vcc3/4	Power input
21	OUTFL+	Output (+) for front
22	MUTE	Muting control input
23	OUTFL-	Output (-) for front
24	GND4	Power GND
25	NC	No connection

- Pin function

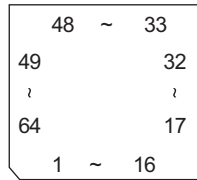
Pin No.	Symbol	Function
1	VIN1-A	CH1 input AMP_inverted input
2	VIN1+A	CH1 input AMP_non-inverted input
3	VCCP1	CH1 and CH2 power stage power supply
4	VO1+	Output pin(+)for channel 1
5	VO1-	CH1 output pin (-) for channel 1
6	VO2+	Output pin(+)for channel 2
7	VO2-	Output pin(-)for channel 2
8	VO3+	Output pin(+)for channel 3
9	VO3-	Output pin(-)for channel 3
10	VO4+	Output pin(+)for channel 4
11	VO4-	Output pin(-)for channel 4
12	VCCP2	CH3 and CH4 power stage powr supply
13	VIN4	Input pin for channel 4
14	VIN4G	Input pin for channel 4(for gain adjustment)
15	VIN3	Input pin for channel 3
16	VIN3G	Input pin for channel 3(for gain adjustment)
17	VIN2	Input pin for channel 2
18	VIN2G	Input pin for channel 2(for gain adjustment)
19	REGIN	External PNP transistor base connection
20	3.3VREG	3.3VREG output pin external PNP transistor,collector connection
21	VCCS	Signal system GND
22	VREFIN	Reference voltage application pin
23	MUTE	Output ON/OFF pin
24	VIN1_SW	CH1 input OP AMP_changeover pin
25	S_GND	Signal system GND
26	VIN1+B	CH1 AMP_B non-inverted input pin
27	VIN1-B	CH1 AMP_B inverted input pin
28	VIN1	CH1 input pin input OP_AMP output pin

4.4 NJM4565M-WE (IC571) : CD L.P.F.

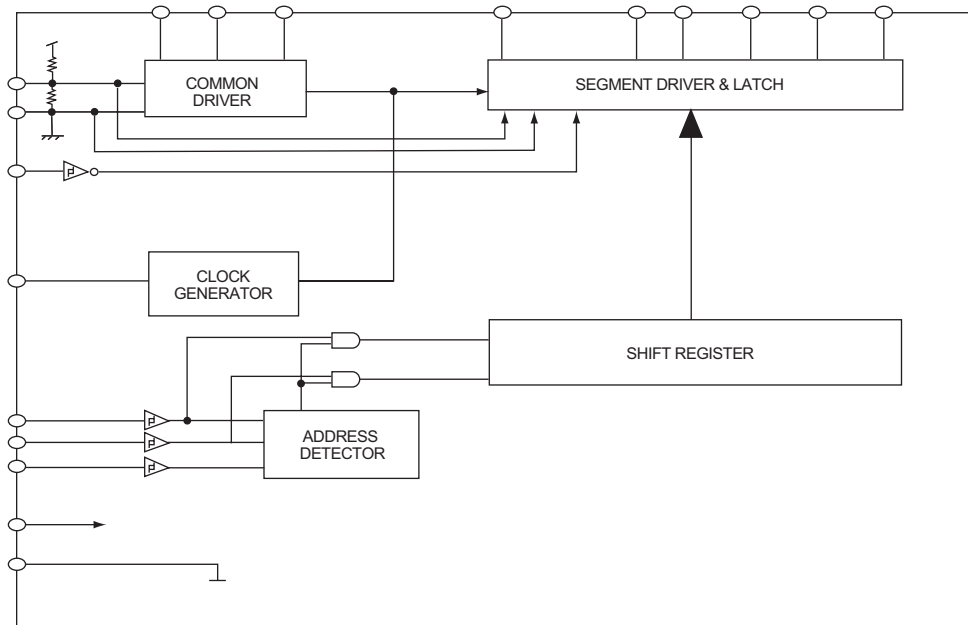


4.5 PT6523LQ (IC601) : LCD driver

- Pin layout



- Block diagram



- Pin function

Pin No.	Pin Name	I/O	Description
1~ 52	SG1 ~ SG52	O	Segment Output Pins
53~55	COM1 ~ COM3	O	Common Driver Output Pins
56	VDD	-	Power Supply
57	$\overline{\text{INH}}$	I	Display OFF Control Input Pin When this pin is "Low", the Display is forcibly turned OFF. (SG1 to SG52, COM1 to COM3 are set to "LOW"). (See Note 1) When this pin is set to "High", the Displa is ON.
58	VDD1	I	Used for the 2/3 Bias Voltage when the Bias Voltages are provided externally. Connect to VDD2 when 1/2 Bias is used.
59	VDD2	I	Used for 1/3 Bias Voltage when the Bias Voltages are provided externally. Connect to VDD1 when 1/2 Bias is used.
60	VSS	-	Ground Pin.
61	OSC	I/O	Oscillation Input /Outout Pin
62	CE	I	Chip Enable Pin
63	CLK	I	Synchronization Clock
64	DI	I	Transfer Data Pin

Note 1:

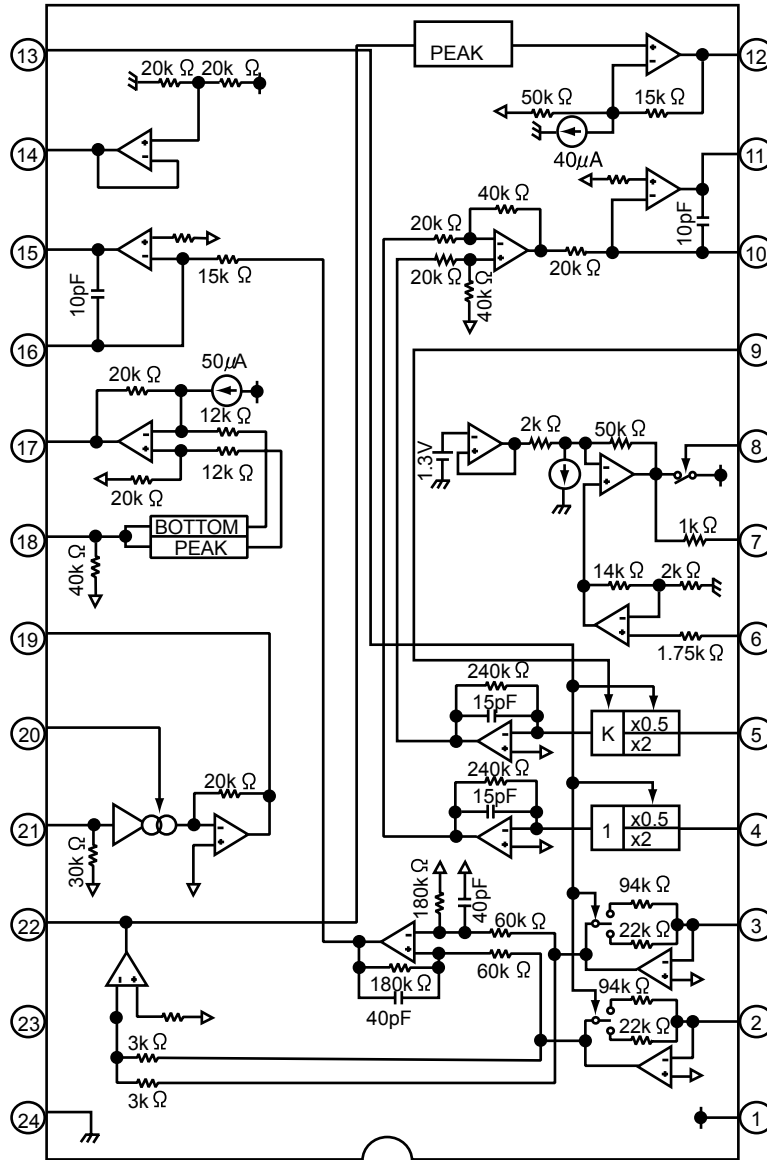
When $\overline{\text{INH}}$ = "LOW" : Serial data transfers can be performed when the display is forcibly OFF.

4.6 TA2157FN-X(IC501):RF amp

- Terminal layout



- Block diagram



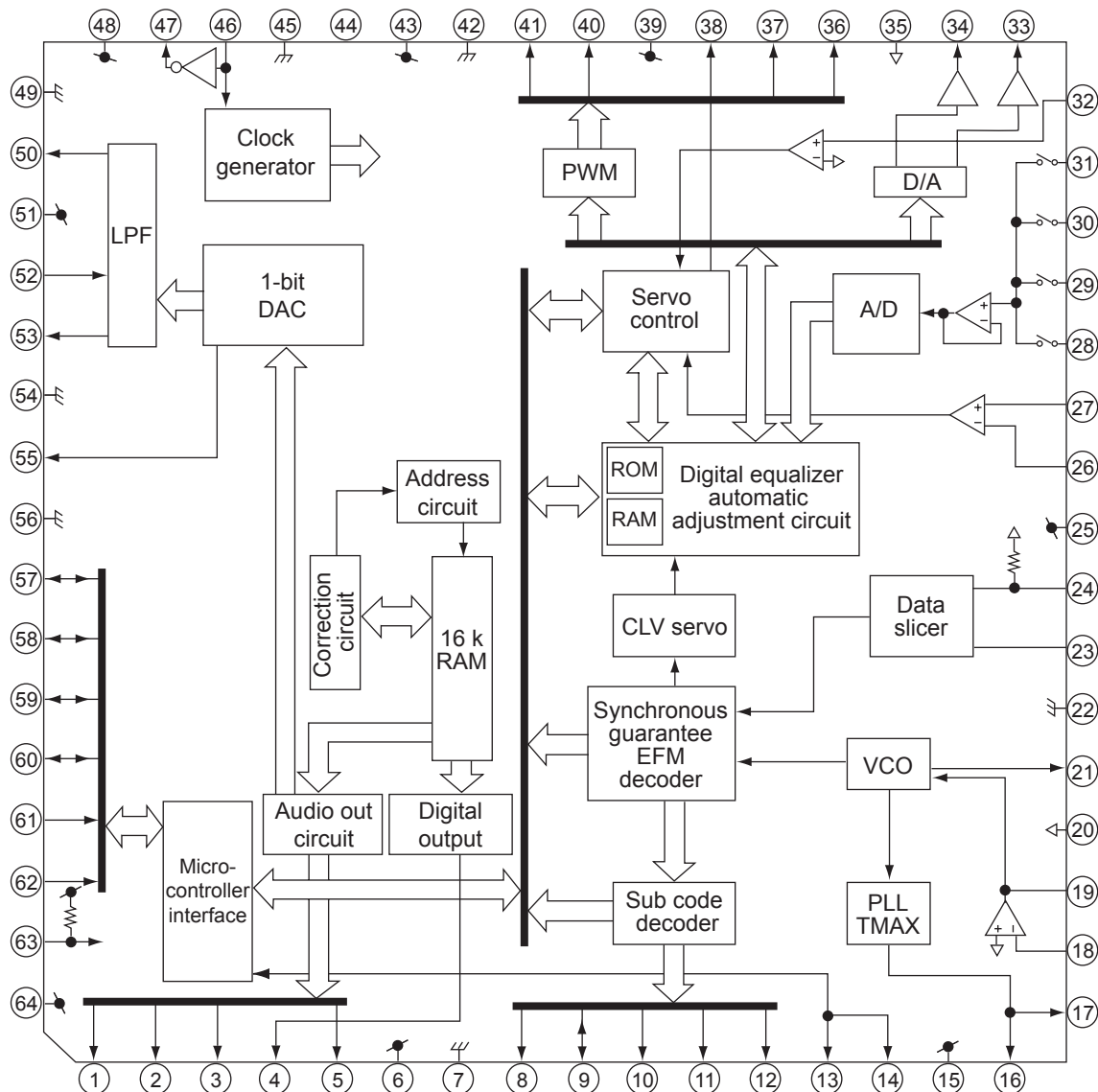
PIN	SEL (APC SW)	TEB (TE BAL)	RFGC (AGC Gian)	TEB (TE BAL)
VCC	APC ON	-50%	+12dB	Normal mode (0dB)
HiZ	APC ON	0%	+6dB	Normal mode (0dB)
GND	APC OFF (LDO=H)	50%	0dB	CD-RW mode (+12dB)

• Pin function

Pin No.	Symbol	I/O	Function												
1	VCC	-	3.3V power supply pin												
2	FNI	I	Main-beam amp input pin												
3	FPI	I	Main-beam amp input pin												
4	TPI	I	Sub-beam amp input pin												
5	TNI	I	Sub-beam amp input pin												
6	MDI	I	Monitor photo diode amp input pin												
7	LDO	O	Laser diode amp output pin												
8	SEL	I	APC circuit ON/OFF control signal, laser diode (LDO) control signal input or bottom/peak detection frequency change pin. <table border="1" data-bbox="662 548 1321 743"> <thead> <tr> <th>SEL</th> <th>APC circuit</th> <th>LDO</th> </tr> </thead> <tbody> <tr> <td>GND</td> <td>OFF</td> <td>Connected VCC through 1kΩ resistor</td> </tr> <tr> <td>Hiz</td> <td>ON</td> <td>Control signal output</td> </tr> <tr> <td>VCC</td> <td>ON</td> <td>Control signal output</td> </tr> </tbody> </table>	SEL	APC circuit	LDO	GND	OFF	Connected VCC through 1kΩ resistor	Hiz	ON	Control signal output	VCC	ON	Control signal output
SEL	APC circuit	LDO													
GND	OFF	Connected VCC through 1kΩ resistor													
Hiz	ON	Control signal output													
VCC	ON	Control signal output													
9	TEB	I	Tracking error balance adjustment signal input pin Adjusts TE signal balance by eliminating carrier component from PWM signal (3-state output, PWM carrier = 88.2kHz) output from TC94A14F/FA TEBC pin using RC-LPF and inputting DC. TEBC input voltage:GND~VCC												
10	TEN	I	Tracking error signal generation amp negative-phase input pin												
11	TEO	O	Tracking error signal generation amp output pin. Combining TEO signal RFRP signal with TC94A14F/FA configures tracking search system.												
12	RFDC	O	RF signal peak detection output pin												
13	GVSW	I	AGC/FE/TE amp gain change pin <table border="1" data-bbox="867 1115 1117 1310"> <thead> <tr> <th>GVSW</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td>GND</td> <td>CD-RW</td> </tr> <tr> <td>Hiz</td> <td>Normal</td> </tr> <tr> <td>VCC</td> <td></td> </tr> </tbody> </table>	GVSW	Mode	GND	CD-RW	Hiz	Normal	VCC					
GVSW	Mode														
GND	CD-RW														
Hiz	Normal														
VCC															
14	VRO	O	Reference voltage (VRO) output pin *VRO=1/2VCC When VCC=3.3V												
15	FEO	O	Focus error signal generation amp output pin												
16	FEN	I	Focus error signal generation amp negative-phase input pin												
17	RFRP	O	Signal amp output pin for track count Combining RFRP signal and TEO signal with TC94A14F/FA configures tracking search system.												
18	REIS	I	RF signal amplitude adjustment amp output pin Adjusts RF signal amplitude by eliminating carrier component from PWM signal (3-state output, PWM carrier=88.2kHz)output fromTC94A14F/14FA *RFGC pin using RC-LPF and inputting DC. *RFGC input voltage:GND~VCC												
19	RFGO	O													
20	RFGC	I													
21	AGCIN	I	RF signal amplitude adjustment amp input pin												
22	RFO	O	RF signal generation amp output pin												
23	RFI	I	RF signal generation amp input pin												
24	GND	-	GND pin												

4.7 TC94A14FA (IC521) : DSP & DAC

• Terminal layout & block diagram



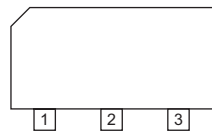
• Pin function

Pin No	Symbol	I/O	Description
1	BCK	O	Bit clock output pin. 32fs/48fs or 64fs selectable by command.
2	LRCK	O	L/R channel clock output pin. "L" for L channel and "H" for R channel. Output polarity can be inverted by command.
3	AOUT	O	Audio data output pin. MSB-first or LSB-first selectable by command.
4	DOUT	O	Digital data output pin. Outputs up to double-speed playback.
5	IPF	O	Correction flag output pin. When set to "H" AOUT output cannot be corrected by C2 correction processing.
6	V _{DD3}	-	Digital 3.3V power supply voltage pin.
7	V _{SS3}	-	Digital GND pin.
8	SBOK	O	Subcode Q data CRCC result output pin. "H" level when result is OK.
9	CLCK	O	Subcode P-W data read I/O pin. I/O polarity selectable by command.
10	DATA	O	Subcode P-W data output pin.
11	SFSY	O	Playback frame sync signal output pin.
12	SBSY	O	Subcode block sync signal output pin. "H" level at S1 when subcode sync is detected.
13	HSO	I/O	General-purpose input / output pins. Input port at reset.
14	UHSO		
15	PV _{DD3}	-	PLL-only 3.3V power supply voltage pin.
16	PDO	O	EFM and PLCK phase difference signal output pin.

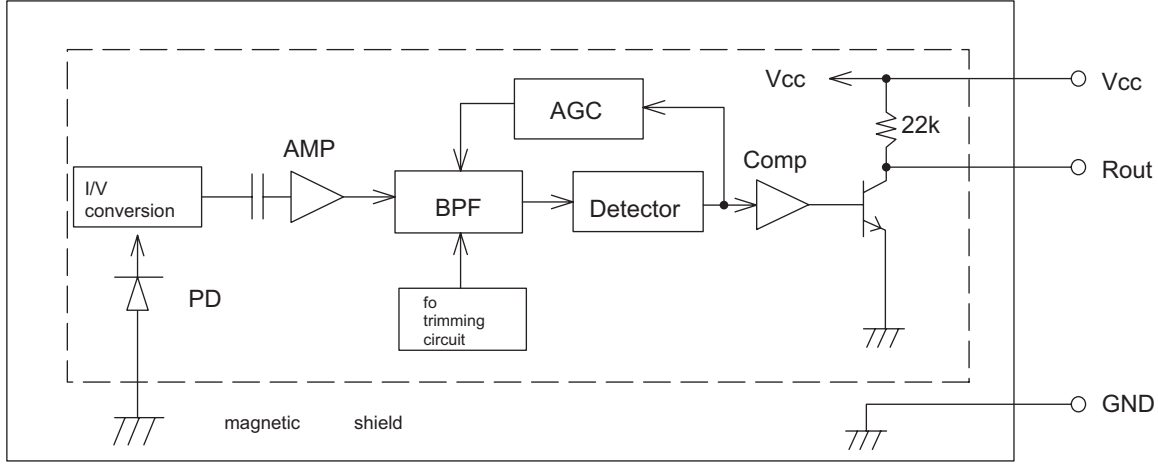
Pin No	Symbol	I/O	Description	
17	TMAX	O	TMAX detection result output pin.	
			TMAX Detection Result	TMAX Output
			Longer than fixed period	"PVDD3"
			Shorter than fixed period	"AVSS3"
18	LPFN	I	Inverted input pin for PLL LPF amp.	
19	LPFO	O	Output pin for PLL LPF amp.	
20	PVREF	-	PLL-only VREF pin.	
21	VCOF	O	VCO filter pin.	
22	AV _{SS3}	-	Analog GND pin.	
23	SLCO	O	DAC output pin for data slice level generation.	
24	RFI	I	RF signal input pin. Zin selectable by command.	
25	AV _{DD3}	-	Analog 3.3V power supply voltage pin.	
26	RFCT	I	RFRP signal center level input pin.	
27	RFZI	I	RFRP signal zero-cross input pin.	
28	RFRP	I	RF ripple signal input pin.	
29	FEI	I	Focus error signal input pin.	
30	SBAD	I	Sub-beam adder signal input pin.	
31	TEI	I	Tracking error input pin. Inputs when tracking servo is on.	
32	TEZI	I	Tracking error signal zero-cross input pin.	
33	FOO	O	Focus equalizer output pin.	
34	TRO	O	Tracking equalizer output pin.	
35	VREF	-	Analog reference power supply voltage pin.	
36	RFGC	O	RF amplitude adjustment control signal output pin.	
37	TEBC	O	Tracking balance control signal output pin.	
38	SEL	O	APC circuit ON/OFF signal output pin. At laser on, high impedance with UHS="L", H output with UHS="H".	
39	AV _{DD3}	-	Analog 3.3V power supply voltage pin.	
40	FMO	O	Feed equalizer output pin.	
41	DMO	O	Disc equalizer output pin.	
42	V _{SS3}	-	Digital GND pin.	
43	V _{DD3}	-	Digital 3.3V power supply voltage pin.	
44	TESIN	I	Test input pin. Normally, fixed to "L".	
45	XV _{SS3}	-	System clock oscillator GND pin.	
46	XI	I	System clock oscillator input pin.	
47	XO	O	System clock oscillator output pin.	
48	XV _{DD3}	-	System clock oscillator 3.3V power supply voltage pin.	
49	DV _{SS3R}	-	DA converter GND pin.	
50	RO	O	R-channel data forward output pin.	
51	DV _{DD3}	-	DA converter 3.3V power supply pin.	
52	DVR	-	Reference voltage pin.	
53	LO	O	L-channel data forward output pin.	
54	DV _{SS3L}	-	DA converter GND pin.	
55	ZDET	O	1 bit DA converter zero detection flag output pin.	
56	V _{SS5}	-	Microcontroller interface GND pin.	
57	BUS0	I/O	Microcontroller interface data I/O pins.	
58	BUS1			
59	BUS2			
60	BUS3			
61	BUCK	I	Microcontroller interface clock input pin.	
62	/CCE	I	Microcontroller interface chip enable signal input pin. At "L", BUS0 to BUS3 are active.	
63	/RST	I	Reset signal input pin. At reset, "L".	
64	V _{DD5}	-	Microcontroller interface 5V power supply pin.	

4.8 RPM6938-SV4 (IC602) : Remote sensor

- Pin diagram



- Block diagram

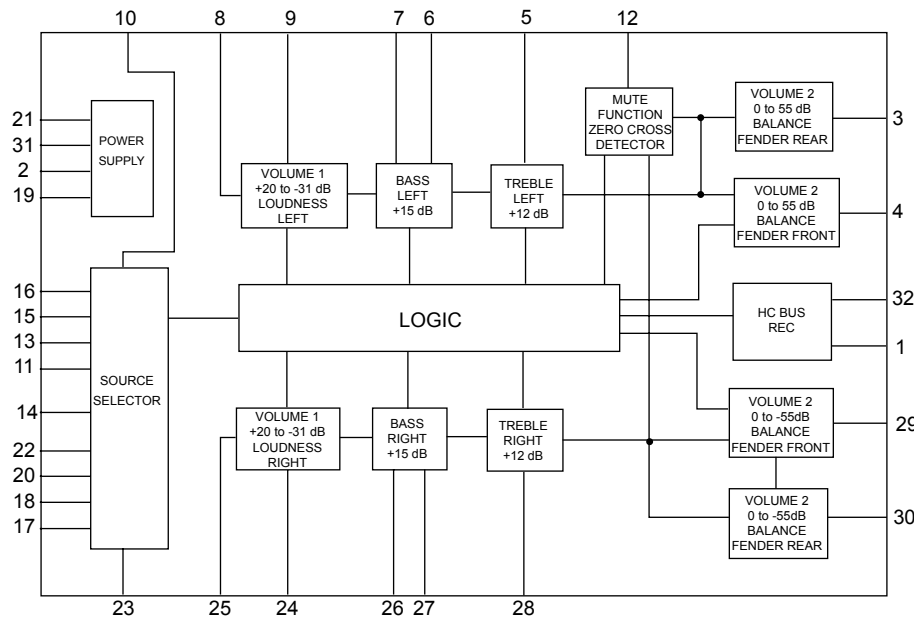


4.9 TEA6320T-X (IC301) : E.volume

- Pin layout

SDA	1	32	SCL
GND	2	31	VCC
OUTLR	3	30	OUTRR
OUTLF	4	29	OUTRF
TL	5	28	TR
B2L	6	27	B2R
B1L	7	26	B1R
IVL	8	25	IVR
ILL	9	24	ILR
QSL	10	23	QSR
IDL	11	22	IDR
MUTE	12	21	Vref
ICL	13	20	ICR
IMD	14	19	CAP
IBL	15	18	IBR
IAL	16	17	IAR
			CD-CH
			TAPE
			TUNER

- Block diagram



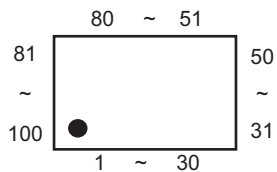
- Pin functions

Pin No.	Symbol	I/O	Functions
1	SDA	I/O	Serial data input/output.
2	GND	-	Ground.
3	OUTLR	O	output left rear.
4	OUTLF	O	output left front.
5	TL	I	Treble control capacitor left channel or input from an external equalizer.
6	B2L	-	Bass control capacitor left channel or output to an external equalizer.
7	B1L	-	Bass control capacitor left channel.
8	IVL	I	Input volume 1. left control part.
9	ILL	I	Input loudness. left control part.
10	QSL	O	Output source selector. left channel.
11	IDL	-	Not used
12	MUTE	-	Not used
13	ICL	I	Input C left source.
14	IMO	-	Not used
15	IBL	I	Input B left source.
16	IAL	I	Input A left source.

Pin No.	Symbol	I/O	Functions
17	IAR	I	Input A right source.
18	IBR	I	Input B right source.
19	CAP	-	Electronic filtering for supply.
20	ICR	I	Input C right source.
21	Vref	-	Reference voltage (0.5Vcc)
22	IDR	-	Not used
23	QSR	O	Output source selector right channel.
24	ILR	I	Input loudness right channel.
25	IVR	I	Input volume 1. right control part.
26	B1R	-	Bass control capacitor right channel
27	B2R	O	Bass control capacitor right channel or output to an external equalizer.
28	TR	I	Treble control capacitor right channel or input from an external equalizer.
29	OUTRF	O	Output right front.
30	OUTRR	O	Output right rear.
31	Vcc	-	Supply voltage.
32	SCL	I	Serial clock input.

4.10 UPD178078GF-594 (IC701) : System CPU

- Pin layout



- Pin function

Pin No.	Symbol	I/O	Function
1~8	NC	-	No use
9	VOL-DA	I/O	VOL IC communication line
10	VOL-CLK	O	VOL IC communication line
11	NC	-	No use
12	LCD-DA	O	LCD driver communication line
13	LCD-CLK	O	LCD driver communication line
14,15	NC	-	No use
16	LCD-CE	O	LCD driver communication line
17	SW2	I	CD mechanism switch
18	PSW	I	CD mechanism switch
19	LED RED	O	Red led lighting control
20	LED BLUE	O	Blue led lighting control
21	VOL-1	I	Encoder input
22	VOL-2	I	Encoder input
23	KEY0	I	Key input
24	KEY1	I	Key input
25	KEY2	I	Key input
26	LEVEL	I	Audio level input
27	AVDD	-	Power supply
28	SM	I	Signal level meter input
29	NC	-	No use
30	DOOR SW	I	Door open switch
31	NC	-	No use
32	AVSS	-	Ground
33	REGCPU	-	---
34	VDD	-	Power supply
35	REGOSC	-	---
36	X2	-	System clock
37	X1	I	System clock
38	GND0	-	Ground
39	SD/ST	I	Station detector & Stereo indicator
40	GND2	-	Ground
41	NC	-	No use
42	IFC	I	IF count input
43	VDDPLL	-	Power supply
44	OSC INPUT	I	FM, AM OSC input
45	NC	-	No use
46	GNDPLL	-	Ground
47	AM E.OUT	O	PLL error output for AM

Pin No.	Symbol	I/O	Function
48	FM E.OUT	O	PLL error output for FM
49	IC(VPP)	-	Setting to write for flash
50	RESET	I	System reset
51	SW1	I	CD mechanism switch
52	REMOCON	I	Remocon input
53,54	NC	-	No use
55	POWER	O	Power control
56	CD-ON	O	CD power control
57	MUTING	O	Muting control
58	STAGE1	I	Setting for destination
59	BUZZER	O	Buzzer output
60	STAGE2	I	Setting for destination
61~67	NC	-	No use
68	CD-RW	O	RF gain control L = CD-RW, H = CD-DA
69	LM	O	Disc loading and ejecting control
70	MOTOR SEL	O	Motor select
71	BUCK	O	Clock output for CD LSI
72	CCE	O	CE output for CD LSI
73	BUS0	I/O	Data output and input 0 for CD LSI
74	BUS1	I/O	Data output and input 1 for CD LSI
75	BUS2	I/O	Data output and input 2 for CD LSI
76	BUS3	I/O	Data output and input 3 for CD LSI
77	RST	O	CD LSI communication line
78	PS1	I	ACC detection input
79	PS2	I	Memory detection
80	DETACH	I	Detach detection
81	NC	-	No use
82	GND1	-	Ground
83	MONO	O	Mono by force
84	SEEK/STOP	O	Switching SEEK & STOP
85	FM/AM	O	Band switch
86,87	NC	-	Not use
88	DIMMER IN	I	Dimmer in
89	ANTENNA	O	Antenna control output
90	IFC CONT	O	IF out control
91	UNLOCK	O	PLL unlock monitor output
92~97	NC	-	Not use
98	DIMMER OUT	O	Dimmer control output
99	VDDPORT	-	Power supply
100	GNDPORT	-	Ground



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(No.49788)

PARTS LIST

[KD-S790]

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

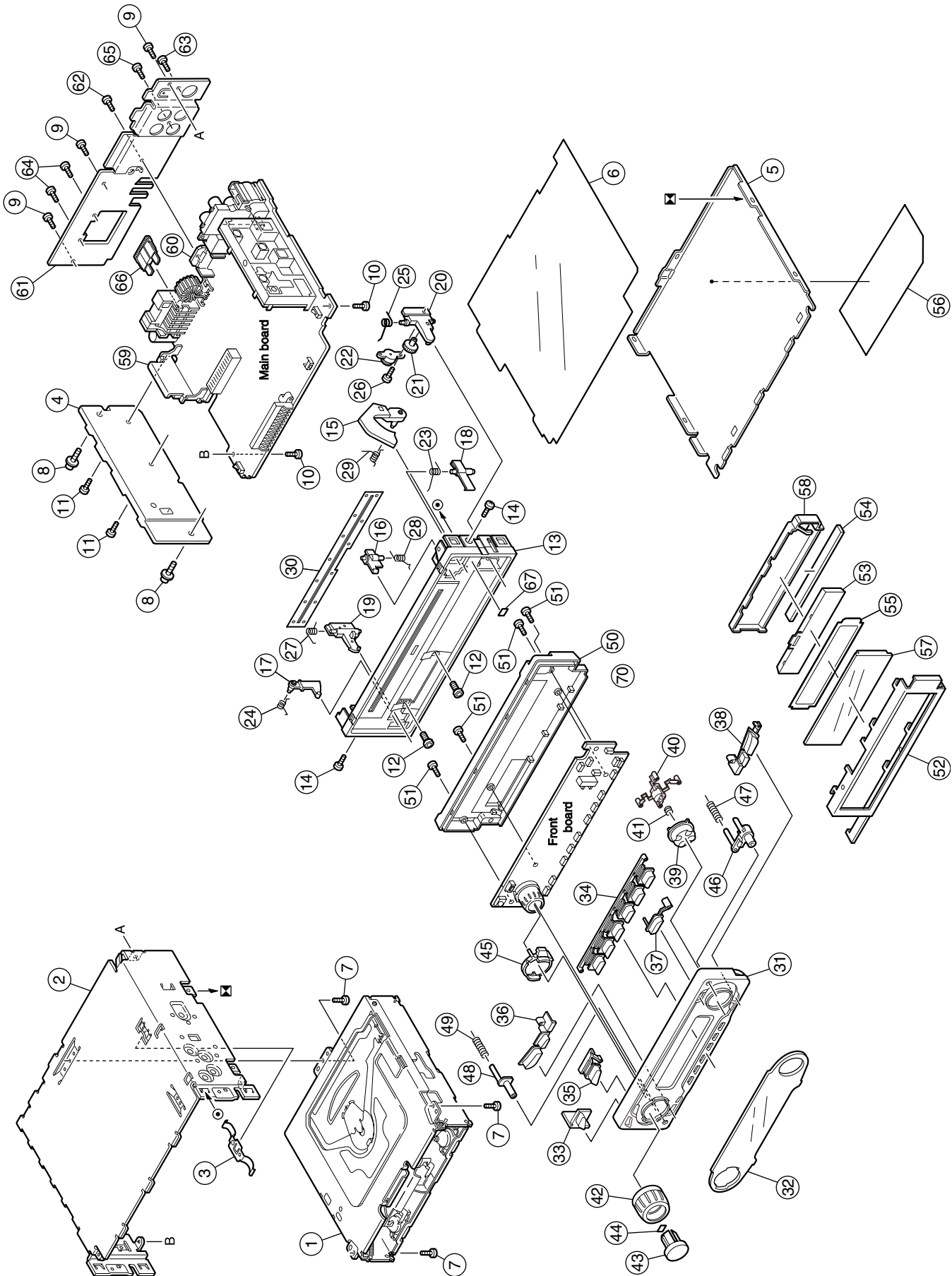
Area suffix
J ----- Northern America

- Contents -

Exploded view of general assembly and parts list (Block No.M1)	3- 2
CD mechanism assembly and parts list (Block No.MB)	3- 5
Electrical parts list (Block No.01~02)	3- 8
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Exploded view of general assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	-----	CD MECHA	1		
	2	GE10043-210A	TOP CHASSIS	1		
	3	GE40135-001A	EARTH PLATE	1		
	4	GE30568-006A	HEAT SINK	1		
	5	GE30393-002A	BOTTOM COVER	1		
	6	FSMA3005-001	INSULATOR	1		
	7	QYSDST2604Z	SCREW	3	CHASSIS+CD MECH	
	8	FSKZ4005-001	SCREW	2	CHASSIS+SIDE PA	
	9	QYSDST2604Z	SCREW	3	CHASSIS+REAR BK	
	10	QYSDST2606Z	SCREW	2	CHASSIS+MAIN PW	
	11	QYSDST2612Z	SCREW	2	SIDE PANEL+IC B	
	12	QYSDSF2006M	SCREW	2	F.CHASSIS+CONEC	
	13	GE30823-001A	FRONT CHASSIS	1		
	14	QYSDST2004M	SCREW	2		
	15	GE30827-001A	OPEN LEVER(O.L)	1		
	16	GE30824-002A	LOCK LEVER(O.L)	1		
	17	GE30826-001A	RELEASE LEVER	1		
	18	GE30829-001A	LOCK LEVER(TOP)	1		
	19	GE30825-001A	LOCK LEVER(L)	1		
	20	GE30828-001A	LOCK LEVER(R)	1		
	21	GE40154-001A	GEAR	1		
	22	QZW0108-002	DAMPER	1		
	23	FSKW4012-002	T.SPRING	1	FOR L.LEVER(TOP	
	24	VKW5264-005	T.SPRING	1	FOR RELEASE LEV	
	25	GE40155-001A	T.SPRING	1	FOR L.LEVER(R)	
	26	QYSDSF2006M	SCREW	1	DAMPER+L.LEVER(
	27	VKW5263-002	T.SPRING	1	FOR L.LEVER(L)	
	28	GE40157-001A	T.SPRING	1	LOCK LEVER(O.L.	
	29	GE40153-001A	T.SPRING	1	FOR OPEN LEVER	
	30	GE40156-001A	BLIND	1		
	31	GE10059-001A	FRONT PANEL	1		
	32	GE30809-001A	FINDER ASSY	1		
	33	GE40163-002A	REMOTE LENS	1	FOR REMOTE CON.	
	34	GE20143-001A	PRESET BUTTON	1	1-6 (LASER CUT)	
	35	GE30810-001A	POWER BUTTON	1		
	36	GE30915-001A	PUSH BUTTON	1	DISP,MODE	
	37	GE30813-001A	D FUNC BTN (U)	1	FM/AM	
	38	GE30916-001A	D FUNC BTN (D)	1	EQ/CD	
	39	GE30818-001A	NAVIGATION BTN	1	+10/-10	
	40	GE30819-001A	NAVIGATION BASE	1		
	41	GE40127-002A	COMP.SPRING	1	FOR NAVI BASE	
	42	GE30815-002A	VOLUME KNOB	1		
	43	GE30816-002A	SEL BUTTON	1		
	44	FSYH4036-053	SHEET	1		
	45	GE30817-002A	RIM LENS	1		
	46	GE30820-001A	EJECT BUTTON	1		
	47	VKW3001-330	COMP.SPRING	1	FOR EJECT BUTTO	
	48	GE30812-001A	DETACH BUTTON	1		

■ Parts list (General assembly)

Block No. M1MM

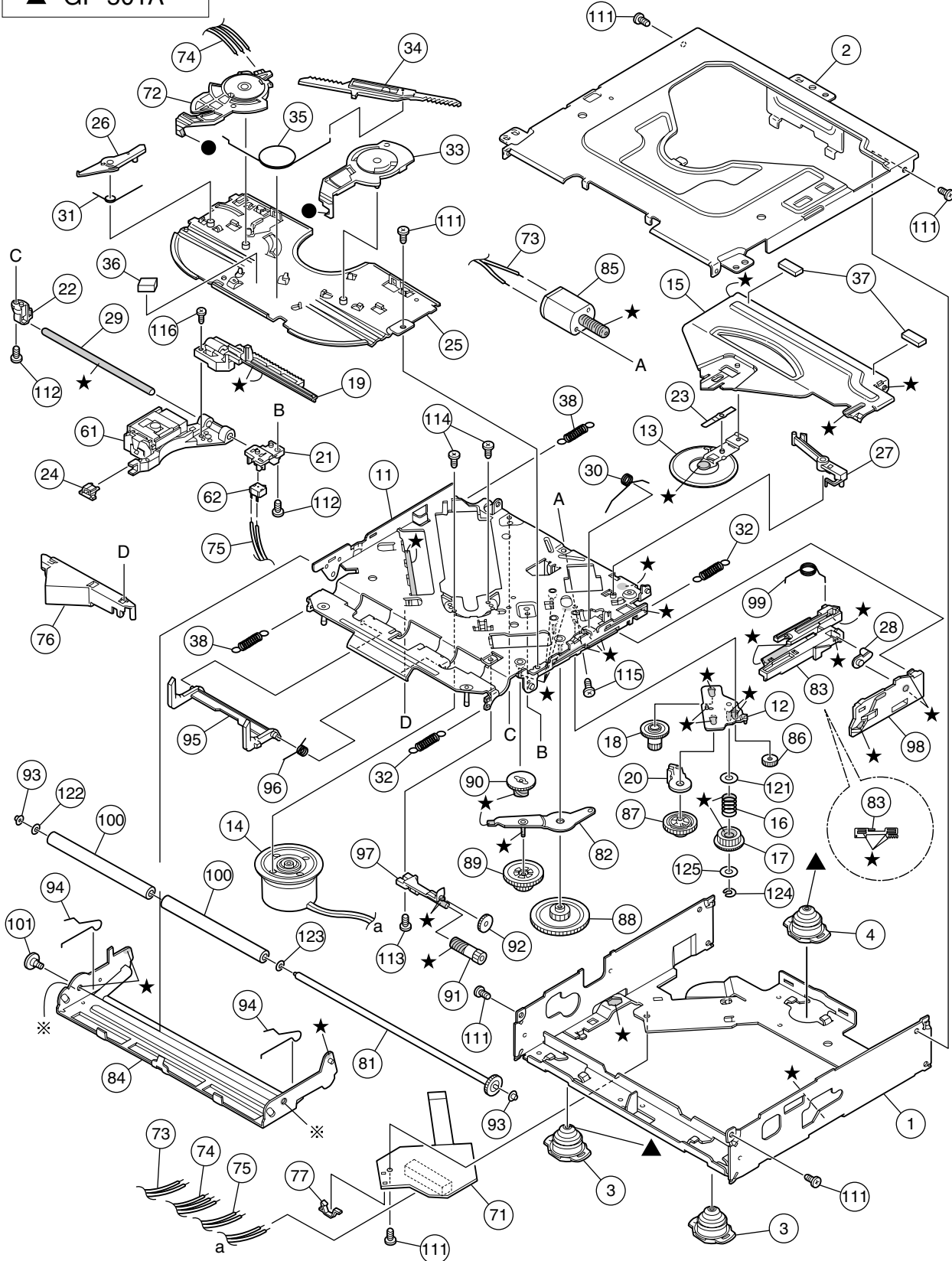
△	Item	Parts number	Parts name	Q'ty	Description	Area
	49	VKW3001-330	COMP.SPRING	1	FOR DETACH BUTT	
	50	GE10060-001A	REAR COVER	1		
	51	VKZ4777-001	MINI SCREW	4	FRONT+REAR	
	52	GE30821-001A	LCD CASE	1		
	53	GE30805-001A	LCD LENS	1		
	54	GE30806-001A	LENS CASE	1		
	55	GE40150-001A	LIGHTING SHEET	1		
	56	GE30756-001A	NAME PLATE	1		
	57	QLD0256-001	LCD MODULE	1		
	58	QNZ0442-001	LCD CONNECTOR	1		
	59	GE40136-001A	IC BRACKET	1		
	60	GE40124-001A	REG BRACKET	1		
	61	GE30912-008A	REAR BRACKET	1		
	62	QYSDST2606Z	SCREW	1	REAR BKT+REG BK	
	63	QYSDST2606Z	SCREW	1	REAR BKT+ANT JA	
	64	QYSDSF2606Z	SCREW	2	REAR BKT+16P CO	
	65	QYSDSF2606Z	SCREW	1	REAR BKT+PIN JA	
△	66	QMFZ047-150-T	FUSE	1		
	67	FSYH4036-046	SHEET	1		

CD mechanism assembly and parts list

Block No. M B M M

TN-2001-1011

- Grease**
- ★ TNG-87
 - ※ GP-501MK
 - CFD-005Z
 - ▲ GP-501A



■ Parts list (CD mechanism)

Block No. MBMM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	30320101T	FRAME	1		
	2	30320102T	TOP COVER	1		
	3	30320115T	DANPER F	2		
	4	30320116T	DANPER R	1		
	11	303205505T	CHASSIS RIVET	1		
	12	303205503T	CHANGE P. RVT A	1		
	13	303205301T	CLAMPER ASS'Y	1		
	14	303205302T	SPINDLE MOTOR A	1	MDN-3BL3LSBS	
	15	30320502T	CLAMPER ARM	1		
	16	30320503T	CHANGE GEAR SPG	1		
	17	30320505T	CHANGE GEAR 2	1		
	18	30320506T	FEED GEAR	1		
	19	30320507T	FEED RACK	1		
	20	30320509T	CHANGE LOCK RAR	1		
	21	30320510T	FEED SW HOLDER	1		
	22	30320511T	PU SHAFT HOLDER	1		
	23	30320513T	CLAMPER SUB SPG	1		
	24	30320514T	FD SUB HOLDER	1		
	25	30320518T	TOP PLATE	1		
	26	30320519T	SELECT LOCK ARM	1		
	27	30320520T	TRIGGER ARM	1		
	28	30320521T	SLIDE HOOK	1		
	29	30320522T	PU SHAFT	1		
	30	30320525T	CLAMPER ARM SPG	1		
	31	30320526T	SELECT L ARM SP	1		
	32	30320538T	SUSPENSION SP R	1		
	33	30320529T	SELECT ARM R	1		
	34	30320530T	LINK PLATE	1		
	35	30320531T	LINK PLATE SPG	1		
	36	30320523T	CUSHION F	1		
	37	30320524T	CUSHION R	2		
	38	30320539T	SUSPENSION SP L	2		
	61	69011614T	PICKUP OPT-725	1		
	62	64180406T	DET SW ESE22	1	ESE22MH56	
	71	303210301T	CONN PWB ASS'Y	1		
	72	30321002T	MODE SW	1	MMS000690ZMB0	
	73	30321003T	LOAD MOTOR WIRE	1		
	74	30321005T	MODE SW WIRE	1		
	75	30321009T	SL WIRE	1		
	76	30321011T	WIRE HOLDER	1		
	77	19501403T	WIRE CLAMPER	1		
	81	303211301T	ROLLER SHAFT AS	1		
	82	303211501T	L GEAR PLATE RV	1		
	83	303211302T	LOADING PLATE A	1		
	84	303211502T	LOCK ARM RV ASS	1		
	85	303211303T	L/F MOTOR ASS'Y	1	FF030PK-10180	
	86	30321101T	LOADING GEAR 1	1		
	87	30321102T	LOADING GEAR 2	1		

■ Parts list (CD mechanism)

Block No. MBMM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	88	30321103T	LOADING GEAR 3	1		
	89	30321104T	LOADING GEAR 4	1		
	90	30321105T	LOADING GEAR 5	1		
	91	30321106T	LOADING GEAR 6	1		
	92	30321107T	LOADING GEAR 7	1		
	93	30321111T	ROLLER GUIDE	2		
	94	30321114T	ROLLER GUIDE SP	2		
	95	30321116T	DISC STOPPER AR	1		
	96	30321117T	DISC ST ARM SPG	1		
	97	30321118T	LD GEAR BRACKET	1		
	98	30321125T	L SIDE PLATE	1		
	99	30321131T	LOAD PLATE SPG	1		
	100	30321133T	LDG ROLLER	2		
	101	18211223T	COLLAR SCREW	1		
	111	9P0420031T	SCREW M2X3	6	TAP 2X3	
	112	9P0420041T	SCREW(M2 X 4)	2	TAP 2X4	
	113	9B0320041T	SCREW(M2 X 4)	1	BIND 2X4	
	114	9C0117183T	SCREW	2	SCR M1.7X1.8	
	115	9C0120203T	SCREW	1	SCR M2X2	
	116	9C0317503T	SCREW	1	T SCR M1.7X5	
	121	9W0130170T	PW 3.5X8X0.3	1		
	122	9W0513060T	HL WASHER	1	HLW1.85X5X0.13	
	123	9W0710070T	L WASHER	1	LW3.1X6X0.1	
	124	9E0100152T	E RING	1	S 1.5	
	125	9W0113020T	PW 2.1X4X0.13	1		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
C	1	NCB31EK-473X	C CAPACITOR		
C	2	QEKJ1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C	4	QEKJ1AM-227Z	E CAPACITOR	220MF 20% 10V	
C	5	NCB31HK-103X	C CAPACITOR		
C	6	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
C	7	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
C	11	NCB31HK-103X	C CAPACITOR		
C	12	NCB31HK-103X	C CAPACITOR		
C	15	NDC31HJ-120X	C CAPACITOR		
C	16	NDC31HJ-7R0X	C CAPACITOR		
C	17	NCS31HJ-121X	C CAPACITOR		
C	31	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
C	32	NCB31HK-102X	C CAPACITOR		
C	33	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
C	34	QEKJ1HM-224Z	E CAPACITOR	.22MF 20% 50V	
C	41	NCB31EK-563X	C CAPACITOR		
C	42	NCB31EK-123X	C CAPACITOR		
C	43	NCS31HJ-151X	C CAPACITOR		
C	103	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	105	NCB31EK-333X	C CAPACITOR		
C	203	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	205	NCB31EK-333X	C CAPACITOR		
C	302	NCB31HK-822X	C CAPACITOR		
C	303	NCB21CK-184X	C CAPACITOR		
C	304	NCB31AK-224X	C CAPACITOR		
C	305	NCB31CK-333X	C CAPACITOR		
C	306	NCB31HK-562X	C CAPACITOR		
C	307	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	308	NCB31CK-103X	C CAPACITOR		
C	309	QERF1CM-476Z	E CAPACITOR	47MF 20% 16V	
C	310	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	346	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
C	347	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
C	351	QFV61HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
C	352	QFV61HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
C	353	NCS31HJ-391X	C CAPACITOR		
C	354	NCS31HJ-391X	C CAPACITOR		
C	355	QEKJ1CM-107Z	E CAPACITOR	100MF 20% 16V	
C	356	NCB31HK-223X	C CAPACITOR		
C	357	NCB31HK-223X	C CAPACITOR		
C	358	QERF1CM-476Z	E CAPACITOR	47MF 20% 16V	
C	359	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
C	361	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	362	QERF1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
C	364	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	365	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	371	NCB31EK-473X	C CAPACITOR		
C	402	NCB31HK-822X	C CAPACITOR		
C	403	NCB21CK-184X	C CAPACITOR		
C	404	NCB31AK-224X	C CAPACITOR		
C	405	NCB31CK-333X	C CAPACITOR		
C	406	NCB31HK-562X	C CAPACITOR		
C	446	QEKJ1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
C	447	QEKJ1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
C	451	QFV61HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
C	452	QFV61HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
C	453	NCS31HJ-391X	C CAPACITOR		
C	454	NCS31HJ-391X	C CAPACITOR		
C	501	NCB31HK-103X	C CAPACITOR		
C	502	NCB31HK-103X	C CAPACITOR		
C	503	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	504	NCB31HK-103X	C CAPACITOR		
C	505	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	507	NCB31HK-682X	C CAPACITOR		
C	508	NCB31HK-103X	C CAPACITOR		
C	509	QERF1AM-107Z	E CAPACITOR	100MF 20% 10V	

△	Item	Parts number	Parts name	Remarks	Area
C	510	NCB31CK-104X	C CAPACITOR		
C	511	NCB31CK-104X	C CAPACITOR		
C	512	NDC31HJ-820X	C CAPACITOR		
C	513	NCB31HK-103X	C CAPACITOR		
C	514	NDC31HJ-5R0X	C CAPACITOR		
C	521	NCB31HK-103X	C CAPACITOR		
C	522	QERF1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	523	NDC31HJ-470X	C CAPACITOR		
C	524	NCB31HK-153X	C CAPACITOR		
C	525	NCB31HK-103X	C CAPACITOR		
C	526	NCB31HK-272X	C CAPACITOR		
C	527	NCB31HK-103X	C CAPACITOR		
C	528	NCB31EK-333X	C CAPACITOR		
C	529	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	530	NCB31EK-333X	C CAPACITOR		
C	531	NCB31EK-473X	C CAPACITOR		
C	533	NCS31HJ-471X	C CAPACITOR		
C	534	NCS31HJ-471X	C CAPACITOR		
C	535	NCB31EK-473X	C CAPACITOR		
C	536	NCB31EK-473X	C CAPACITOR		
C	537	NCB31EK-473X	C CAPACITOR		
C	538	NCB31EK-473X	C CAPACITOR		
C	539	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	540	NCB31HK-103X	C CAPACITOR		
C	541	NCB31HK-103X	C CAPACITOR		
C	545	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	546	NCS31HJ-101X	C CAPACITOR		
C	547	NCB31CK-104X	C CAPACITOR		
C	548	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	549	NCB31HK-103X	C CAPACITOR		
C	550	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
C	551	QERF1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	552	NCB31HK-103X	C CAPACITOR		
C	553	NDC31HJ-180X	C.CAPACITOR		
C	554	NDC31HJ-180X	C.CAPACITOR		
C	555	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	556	NCB31HK-103X	C CAPACITOR		
C	561	QERF0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
C	562	NCB31HK-103X	C CAPACITOR		
C	563	QERF1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	564	NCB31EK-473X	C CAPACITOR		
C	565	NCB31EK-473X	C CAPACITOR		
C	566	NCB31EK-473X	C CAPACITOR		
C	567	NCB31EK-473X	C CAPACITOR		
C	581	NCS31HJ-821X	C CAPACITOR		
C	582	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
C	583	NCS31HJ-121X	C CAPACITOR		
C	584	NCS31HJ-821X	C CAPACITOR		
C	585	QEKJ0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
C	587	NCB31EK-473X	C CAPACITOR		
C	588	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
C	589	NCB31HK-182X	C CAPACITOR		
C	591	NCS31HJ-821X	C CAPACITOR		
C	592	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
C	593	NCS31HJ-121X	C CAPACITOR		
C	594	NCS31HJ-821X	C CAPACITOR		
C	595	QEKJ0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
C	596	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
C	598	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
C	599	NDC31HJ-221X	C CAPACITOR		
C	698	NCB21CK-474X	C CAPACITOR		
C	699	NCB31EK-104X	C CAPACITOR		
C	702	NCB31EK-104X	C CAPACITOR		
C	703	NCB31EK-104X	C CAPACITOR		
C	705	NCS31HJ-220X	C CAPACITOR		
C	706	NCS31HJ-220X	C CAPACITOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 707	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V			D 713	LNJ308G81/1-3/X	LED		
	C 708	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V			D 714	LNJ308G81/1-3/X	LED		
	C 709	NCB31EK-473X	C CAPACITOR				D 715	LNJ308G81/1-3/X	LED		
	C 710	NCB31EK-104X	C CAPACITOR				D 951	RB160M-30-X	SB DIODE		
	C 711	NCB31EK-473X	C CAPACITOR				D 952	1SS355-X	DIODE		
	C 712	NCB31EK-103X	C CAPACITOR				D 953	UDZS5.1B-X	Z DIODE		
	C 713	NCB31EK-103X	C CAPACITOR				D 960	1N5401-F64	DIODE		
	C 714	NCB31EK-104X	C CAPACITOR				D 961	1SS355-X	DIODE		
	C 715	NCB31EK-104X	C CAPACITOR				D 962	RB160M-30-X	SB DIODE		
	C 716	NCB31HK-331X	C CAPACITOR				D 963	RB160M-30-X	SB DIODE		
	C 951	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 976	1SS355-X	DIODE		
	C 952	NCB31EK-473X	C CAPACITOR				D 977	UDZS11B-X	Z.DIODE		
	C 953	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V			IC301	TEA6320T-X	IC		
	C 954	QEKJ1HM-224Z	E CAPACITOR	.22MF 20% 50V			IC351	LA47505	IC		
	C 960	QEZ0622-338	E CAPACITOR	3300MF			IC501	TA2157FN-X	IC		
	C 961	QEKJ1HM-225Z	E CAPACITOR	2.2MF 20% 50V			IC521	TC94A14FA	IC		
	C 962	QEKJ1CM-476Z	E CAPACITOR	47MF 20% 16V			IC561	LA6579H-X	IC		
	C 963	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V			IC571	NJM4565M-WE	IC		
	C 964	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V			IC701	UPD178078GF-594	I.C(MICRO-COMP)		
	C 965	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V			IC961	HA13164A	IC		
	C 966	NCB31AK-474X	C CAPACITOR				J 1	QNB0100-002	ANT TERMINAL		
	C 967	QEKJ1AM-227Z	E CAPACITOR	220MF 20% 10V			J 931	QNN0519-001	PIN JACK		
	C 968	QEKJ1AM-227Z	E CAPACITOR	220MF 20% 10V			L 1	QQL244J-4R7Z	INDUCTOR		
	C 969	QEKJ1AM-227Z	E CAPACITOR	220MF 20% 10V			L 521	QQL244J-4R7Z	INDUCTOR		
	C 970	NCB31EK-104X	C CAPACITOR				L 522	QQL244J-4R7Z	INDUCTOR		
	C 975	NCB31EK-103X	C CAPACITOR				L 523	QQL244J-470Z	INDUCTOR		
	C 976	QEKJ0JM-107Z	E CAPACITOR	100MF 20% 6.3V			L 524	QQL244J-4R7Z	INDUCTOR		
	C 977	QEKJ1CM-107Z	E CAPACITOR	100MF 20% 16V			L 701	QQL244J-4R7Z	INDUCTOR		
	C 981	NCB31CK-104X	C CAPACITOR				L 702	QQL244J-4R7Z	INDUCTOR		
	C 982	NCB31CK-104X	C CAPACITOR				L 961	QQR0703-001	CHOKE COIL		
	C 983	NCB31CK-104X	C CAPACITOR				Q 2	UN2211-X	TRANSISTOR		
	C 984	NCB31CK-104X	C CAPACITOR				Q 5	2SB709A/R/-X	TRANSISTOR		
	C 991	NCS31HJ-101X	C CAPACITOR				Q 6	2SB624/4/-X	TRANSISTOR		
	C 992	NCS31HJ-101X	C CAPACITOR				Q 7	UN2211-X	TRANSISTOR		
	C 993	NCS31HJ-101X	C CAPACITOR				Q 8	UN2211-X	TRANSISTOR		
	C 994	NCS31HJ-101X	C CAPACITOR				Q 31	2SD601A/R/-X	TRANSISTOR		
	C 995	NCS31HJ-101X	C CAPACITOR				Q 32	2SD601A/R/-X	TRANSISTOR		
	C 996	NCS31HJ-101X	C CAPACITOR				Q 41	2SC3661-X	TRANSISTOR		
	C 997	NCS31HJ-101X	C CAPACITOR				Q 42	2SC3661-X	TRANSISTOR		
	C 998	NCS31HJ-101X	C CAPACITOR				Q 351	UN2211-X	TRANSISTOR		
	CN501	QGB2027M4-22S	CONNECTOR				Q 372	2SD1781K/QR/-X	TRANSISTOR		
	CN701	QNZ0605-001	CAR CONNECTOR				Q 472	2SD1781K/QR/-X	TRANSISTOR		
	CN901	QNZ0611-001	CAR CONNECTOR				Q 501	2SB1241/QR/-T	TRANSISTOR		
	D 1	1SS355-X	DIODE				Q 521	UN2111-X	TRANSISTOR		
	D 2	1SS355-X	DIODE				Q 522	UN2211-X	TRANSISTOR		
	D 3	1SS355-X	DIODE				Q 561	2SB1322/RS/-T	TRANSISTOR		
	D 4	1SS355-X	DIODE				Q 951	2SD601A/R/-X	TRANSISTOR		
	D 7	1SS355-X	DIODE				Q 963	2SB709A/R/-X	TRANSISTOR		
	D 301	1SS355-X	DIODE				Q 964	UN2211-X	TRANSISTOR		
	D 302	1SS355-X	DIODE				Q 976	UN2111-X	TRANSISTOR		
	D 351	1SS355-X	DIODE				Q 977	UN2111-X	TRANSISTOR		
	D 372	1SS355-X	DIODE				R 1	NRSA63J-680X	MG RESISTOR		
	D 472	1SS355-X	DIODE				R 2	NRSA63J-223X	MG RESISTOR		
	D 561	1A3G-T1	DIODE				R 3	NRSA63J-822X	MG RESISTOR		
	D 701	UDZS6.2B-X	SI DIODE				R 4	NRSA63J-473X	MG RESISTOR		
	D 702	UDZS6.2B-X	SI DIODE				R 5	NRSA02J-332X	MG RESISTOR		
	D 703	UDZS6.2B-X	SI DIODE				R 6	NRSA63J-473X	MG RESISTOR		
	D 704	UDZS6.2B-X	SI DIODE				R 7	NRSA63J-473X	MG RESISTOR		
	D 705	UDZS6.2B-X	SI DIODE				R 8	NRSA63J-472X	MG RESISTOR		
	D 706	UDZS6.2B-X	SI DIODE				R 404	NRSA63J-472X	MG RESISTOR		
	D 707	UDZS6.2B-X	SI DIODE				R 446	NRSA63J-473X	MG RESISTOR		
	D 708	UDZS6.2B-X	SI DIODE				R 447	NRSA63J-473X	MG RESISTOR		
	D 709	UDZS6.2B-X	SI DIODE				R 451	NRSA63J-273X	MG RESISTOR		
	D 710	UDZS6.2B-X	SI DIODE				R 452	NRSA63J-273X	MG RESISTOR		
	D 711	UDZS6.2B-X	SI DIODE				R 472	NRSA02J-821X	MG RESISTOR		
	D 712	UDZS6.2B-X	SI DIODE				R 474	NRSA63J-222X	MG RESISTOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	R 476	NRSA02J-101X	MG RESISTOR		
	R 503	NRSA63J-823X	MG RESISTOR		
	R 504	NRSA63J-823X	MG RESISTOR		
	R 505	NRSA63J-334X	MG RESISTOR		
	R 506	NRSA63J-334X	MG RESISTOR		
	R 507	NRSA02J-220X	MG RESISTOR		
	R 508	NRSA02J-220X	MG RESISTOR		
	R 509	NRSA63J-823X	MG RESISTOR		
	R 510	NRSA63J-563X	MG RESISTOR		
	R 511	NRSA63J-103X	MG RESISTOR		
	R 512	NRSA63J-202X	MG RESISTOR		
	R 513	NRSA63J-102X	MG RESISTOR		
	R 514	NRSA63J-153X	MG RESISTOR		
	R 515	NRSA63J-101X	MG RESISTOR		
	R 516	NRSA63J-821X	MG RESISTOR		
	R 517	NRSA63J-0R0X	MG RESISTOR		
	R 519	NRSA02J-151X	MG RESISTOR		
	R 521	NRSA63J-562X	MG RESISTOR		
	R 522	NRSA63J-473X	MG RESISTOR		
	R 523	NRSA63J-474X	MG RESISTOR		
	R 524	NRSA63J-153X	MG RESISTOR		
	R 525	NRSA63J-103X	MG RESISTOR		
	R 526	NRSA63J-0R0X	MG RESISTOR		
	R 527	NRSA63J-101X	MG RESISTOR		
	R 528	NRSA63J-101X	MG RESISTOR		
	R 529	NRSA63J-0R0X	MG RESISTOR		
	R 530	NRSA63J-0R0X	MG RESISTOR		
	R 531	NRSA63J-101X	MG RESISTOR		
	R 532	NRSA63J-101X	MG RESISTOR		
	R 533	NRSA63J-105X	MG RESISTOR		
	R 534	NRSA63J-472X	MG RESISTOR		
	R 535	NRSA63J-472X	MG RESISTOR		
	R 536	NRSA63J-472X	MG RESISTOR		
	R 537	NRSA63J-472X	MG RESISTOR		
	R 538	NRSA63J-103X	MG RESISTOR		
	R 539	NRSA63J-155X	MG RESISTOR		
	R 540	NRSA63J-0R0X	MG RESISTOR		
	R 561	NRSA63J-333X	MG RESISTOR		
	R 562	NRSA63J-822X	MG RESISTOR		
	R 563	NRSA63J-472X	MG RESISTOR		
	R 564	NRSA63J-153X	MG RESISTOR		
	R 566	NRSA02J-822X	MG RESISTOR		
	R 567	NRSA63J-682X	MG RESISTOR		
	R 568	NRSA63J-302X	MG RESISTOR		
	R 569	NRSA63J-512X	MG RESISTOR		
	R 570	NRSA63J-0R0X	MG RESISTOR		
	R 571	NRSA63J-152X	MG RESISTOR		
	R 572	NRSA63J-152X	MG RESISTOR		
	R 573	NRSA63J-152X	MG RESISTOR		
	R 578	NRS181J-220X	MG RESISTOR		
	R 579	NRS181J-220X	MG RESISTOR		
	R 581	NRSA63J-183X	MG RESISTOR		
	R 582	NRSA63J-333X	MG RESISTOR		
	R 583	NRSA63J-123X	MG RESISTOR		
	R 584	NRSA63J-151X	MG RESISTOR		
	R 585	NRSA63J-0R0X	MG RESISTOR		
	R 586	NRSA63J-223X	MG RESISTOR		
	R 587	NRSA63J-223X	MG RESISTOR		
	R 591	NRSA63J-183X	MG RESISTOR		
	R 592	NRSA63J-333X	MG RESISTOR		
	R 593	NRSA63J-123X	MG RESISTOR		
	R 594	NRSA63J-151X	MG RESISTOR		
	R 595	NRSA63J-0R0X	MG RESISTOR		
	R 596	NRSA63J-223X	MG RESISTOR		
	R 597	NRSA63J-223X	MG RESISTOR		
	R 704	NRSA63J-271X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 705	NRSA63J-271X	MG RESISTOR		
	R 706	NRSA63J-222X	MG RESISTOR		
	R 707	NRSA63J-222X	MG RESISTOR		
	R 709	NRSA63J-222X	MG RESISTOR		
	R 710	NRSA63J-473X	MG RESISTOR		
	R 711	NRSA63J-473X	MG RESISTOR		
	R 714	NRSA63J-103X	MG RESISTOR		
	R 715	NRSA63J-103X	MG RESISTOR		
	R 717	NRSA63J-103X	MG RESISTOR		
	R 718	NRSA63J-472X	MG RESISTOR		
	R 719	NRSA63J-103X	MG RESISTOR		
	R 720	NRSA63J-472X	MG RESISTOR		
	R 721	NRSA63J-103X	MG RESISTOR		
	R 722	NRSA63J-472X	MG RESISTOR		
	R 725	NRSA63J-473X	MG RESISTOR		
	R 726	NRSA63J-0R0X	MG RESISTOR		
	R 727	NRSA63J-105X	MG RESISTOR		
	R 728	NRSA63J-473X	MG RESISTOR		
	R 729	NRSA63J-473X	MG RESISTOR		
	R 730	NRSA63J-103X	MG RESISTOR		
	R 731	NRSA63J-473X	MG RESISTOR		
	R 732	NRSA63J-103X	MG RESISTOR		
	R 733	NRSA63J-473X	MG RESISTOR		
	R 734	NRSA63J-104X	MG RESISTOR		
	R 735	NRSA63J-103X	MG RESISTOR		
	R 736	NRSA63J-103X	MG RESISTOR		
	R 737	NRSA63J-473X	MG RESISTOR		
	R 738	NRSA63J-473X	MG RESISTOR		
	R 744	NRSA63J-0R0X	MG RESISTOR		
	R 745	NRSA63J-0R0X	MG RESISTOR		
	R 746	NRSA63J-103X	MG RESISTOR		
	R 747	NRSA63J-472X	MG RESISTOR		
	R 751	NRSA63J-103X	MG RESISTOR		
	R 752	NRSA63J-103X	MG RESISTOR		
	R 753	NRSA63J-473X	MG RESISTOR		
	R 754	NRSA63J-102X	MG RESISTOR		
	R 755	NRSA63J-122X	MG RESISTOR		
	R 756	NRSA63J-472X	MG RESISTOR		
	R 758	NRSA63J-103X	MG RESISTOR		
	R 759	NRSA63J-473X	MG RESISTOR		
	R 760	NRSA63J-103X	MG RESISTOR		
	R 762	NRSA63J-103X	MG RESISTOR		
	R 763	NRSA63J-103X	MG RESISTOR		
	R 764	NRSA63J-473X	MG RESISTOR		
	R 766	NRSA63J-473X	MG RESISTOR		
	R 767	NRSA63J-473X	MG RESISTOR		
	R 769	NRSA63J-101X	MG RESISTOR		
	R 791	NRS181J-181X	MG RESISTOR		
	R 893	NRSA63J-473X	MG RESISTOR		
	R 951	NRSA63J-473X	MG RESISTOR		
	R 952	NRSA63J-123X	MG RESISTOR		
	R 953	NRSA63J-184X	MG RESISTOR		
	R 954	NRSA63J-223X	MG RESISTOR		
	R 955	NRSA63J-470X	MG RESISTOR		
	R 956	NRSA63J-102X	MG RESISTOR		
	R 957	NRSA63J-224X	MG RESISTOR		
	R 958	NRSA63J-221X	MG RESISTOR		
	R 961	QRE142J-102X	C RESISTOR	1.0K 5% 1/4W	
	R 962	NRSA02J-912X	MG RESISTOR		
	R 963	NRSA02J-472X	MG RESISTOR		
	R 966	NRSA63J-123X	MG RESISTOR		
	R 967	NRSA63J-273X	MG RESISTOR		
	R 968	NRS181J-222X	MG RESISTOR		
	R 969	NRS181J-222X	MG RESISTOR		
	S 701	QSW0451-001	DETECT SWITCH	OPEN	
	S 702	QSW0451-001	DETECT SWITCH	DETACH	

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	S 703	QSQ1A11-V06Z	TACT SWITCH	RESET	
	TU 1	QAU0281-001	TUNER PACK		
	X 521	QAX0741-001Z	C RESONATOR		
	X 701	QAX0406-001Z	CRYSTAL		
	R 9	NRSA63J-473X	MG RESISTOR		
	R 11	NRSA02J-0R0X	MG RESISTOR		
	R 12	NRS181J-150X	MG RESISTOR		
	R 13	NRS181J-150X	MG RESISTOR		
	R 14	NRSA63J-103X	MG RESISTOR		
	R 15	NRSA63J-103X	MG RESISTOR		
	R 31	NRSA63J-152X	MG RESISTOR		
	R 32	NRSA63J-102X	MG RESISTOR		
	R 33	NRSA63J-103X	MG RESISTOR		
	R 34	NRSA02J-330X	MG RESISTOR		
	R 35	NRSA63J-102X	MG RESISTOR		
	R 41	NRSA63J-102X	MG RESISTOR		
	R 42	NRSA63J-392X	MG RESISTOR		
	R 43	NRSA02J-102X	MG RESISTOR		
	R 45	NRSA63J-102X	MG RESISTOR		
	R 101	NRSA63J-272X	MG RESISTOR		
	R 102	NRSA63J-432X	MG RESISTOR		
	R 201	NRSA63J-272X	MG RESISTOR		
	R 202	NRSA63J-432X	MG RESISTOR		
	R 301	NRSA63J-224X	MG RESISTOR		
	R 302	NRSA63J-223X	MG RESISTOR		
	R 303	NRSA63J-222X	MG RESISTOR		
	R 304	NRSA63J-472X	MG RESISTOR		
	R 346	NRSA63J-473X	MG RESISTOR		
	R 347	NRSA63J-473X	MG RESISTOR		
	R 351	NRSA63J-273X	MG RESISTOR		
	R 352	NRSA63J-273X	MG RESISTOR		
	R 356	NRSA02J-103X	MG RESISTOR		
	R 357	NRSA63J-103X	MG RESISTOR		
	R 372	NRSA02J-821X	MG RESISTOR		
	R 374	NRSA63J-222X	MG RESISTOR		
	R 376	NRSA02J-101X	MG RESISTOR		
	R 401	NRSA63J-224X	MG RESISTOR		
	R 402	NRSA63J-223X	MG RESISTOR		
	R 403	NRSA63J-222X	MG RESISTOR		

■ Electrical parts list (Front board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	C 601	NCB31HK-223X	C CAPACITOR		
	C 602	NCS31HJ-681X	C CAPACITOR		
	C 603	NBE20JM-106X	TS E CAP SVB20J		
	C 611	NCB31HK-123X	C CAPACITOR		
	C 612	NBE20JM-475X	TS E CAPACITOR		
	CN601	NNZ0087-001	CAR CONNECTOR		
	D 601	SML-310VT/JK/-X	LED		
	D 602	SML-310VT/JK/-X	LED		
	D 603	SML-310VT/JK/-X	LED		
	D 604	SML-310VT/JK/-X	LED		
	D 605	SML-310VT/JK/-X	LED		
	D 606	SML-310VT/JK/-X	LED		
	D 607	SML-310VT/JK/-X	LED		
	D 609	SML-310VT/JK/-X	LED		
	D 610	SML-310VT/JK/-X	LED		
	D 611	SML-310VT/JK/-X	LED		
	D 613	SML-310VT/JK/-X	LED		
	D 614	SML-310VT/JK/-X	LED		
	D 615	SML-310VT/JK/-X	LED		
	D 616	SML-310VT/JK/-X	LED		
	D 617	SML-310VT/JK/-X	LED		
	D 619	SML-310VT/JK/-X	LED		
	D 620	SML-310VT/JK/-X	LED		
	D 621	SML-310VT/JK/-X	LED		
	D 622	SML-310VT/JK/-X	LED		
	D 623	SML-310VT/JK/-X	LED		
	D 624	SML-310VT/JK/-X	LED		
	D 625	SML-310LT/MN/-X	LED		
	D 641	UDZS5.1B-X	Z DIODE		
	D 643	1SS355-X	DIODE		
	D 644	NSPW310BS/BRS/	LED		
	D 645	NSPW310BS/BRS/	LED		
	D 646	UDZS6.2B-X	SI DIODE		
	EN601	QSW0793-001	ROTARY ENCODER		
	IC601	PT6523LQ	IC		
	IC602	RPM6938-SV4	IC		
	R 601	NRSA63J-821X	MG RESISTOR		
	R 602	NRSA63J-821X	MG RESISTOR		
	R 603	NRSA63J-122X	MG RESISTOR		
	R 604	NRSA63J-182X	MG RESISTOR		
	R 605	NRSA63J-272X	MG RESISTOR		
	R 606	NRSA63J-821X	MG RESISTOR		
	R 607	NRSA63J-821X	MG RESISTOR		
	R 608	NRSA63J-122X	MG RESISTOR		
	R 609	NRSA63J-182X	MG RESISTOR		
	R 610	NRSA63J-272X	MG RESISTOR		
	R 612	NRSA63J-821X	MG RESISTOR		
	R 613	NRSA63J-821X	MG RESISTOR		
	R 614	NRSA63J-122X	MG RESISTOR		
	R 615	NRSA63J-392X	MG RESISTOR		
	R 631	NRS181J-821X	MG RESISTOR		
	R 632	NRSA02J-561X	MG RESISTOR		
	R 633	NRSA02J-561X	MG RESISTOR		
	R 634	NRSA02J-561X	MG RESISTOR		
	R 635	NRSA02J-561X	MG RESISTOR		
	R 636	NRSA02J-821X	MG RESISTOR		
	R 637	NRSA02J-821X	MG RESISTOR		
	R 638	NRSA02J-511X	MG RESISTOR		
	R 639	NRSA02J-511X	MG RESISTOR		
	R 640	NRSA02J-511X	MG RESISTOR		
	R 641	NRSA02J-511X	MG RESISTOR		
	R 642	NRSA02J-821X	MG RESISTOR		
	R 643	NRSA02J-821X	MG RESISTOR		
	R 644	NRSA02J-561X	MG RESISTOR		
	R 645	NRSA02J-561X	MG RESISTOR		
	R 646	NRSA02J-122X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 647	NRSA02J-122X	MG RESISTOR		
	R 648	NRSA02J-122X	MG RESISTOR		
	R 649	NRSA02J-122X	MG RESISTOR		
	R 651	NRSA63J-222X	MG RESISTOR		
	R 652	NRSA63J-222X	MG RESISTOR		
	R 653	NRSA63J-103X	MG RESISTOR		
	R 654	NRSA63J-103X	MG RESISTOR		
	R 655	NRSA63J-103X	MG RESISTOR		
	R 656	NRSA63J-103X	MG RESISTOR		
	R 657	NRSA63J-513X	MG RESISTOR		
	R 658	NRSA63J-184X	MG RESISTOR		
	R 659	NRS181J-391X	MG RESISTOR		
	R 660	NRS181J-391X	MG RESISTOR		
	R 661	NRSA63J-103X	MG RESISTOR		
	R 662	NRSA63J-471X	MG RESISTOR		
	R 672	NRS181J-0R0X	MG RESISTOR		
	R 681	NRSA63J-101X	MG RESISTOR		
	S 601	NSW0066-001X	TACT SW		
	S 602	NSW0066-001X	TACT SW		
	S 603	NSW0066-001X	TACT SW		
	S 604	NSW0066-001X	TACT SW		
	S 605	NSW0066-001X	TACT SW		
	S 606	NSW0066-001X	TACT SW		
	S 607	NSW0066-001X	TACT SW		
	S 608	NSW0066-001X	TACT SW		
	S 609	NSW0066-001X	TACT SW		
	S 610	NSW0066-001X	TACT SW		
	S 611	NSW0066-001X	TACT SW		
	S 612	NSW0066-001X	TACT SW		
	S 613	NSW0066-001X	TACT SW		
	S 614	NSW0066-001X	TACT SW		
	S 615	NSW0066-001X	TACT SW		
	S 616	NSW0066-001X	TACT SW		
	S 617	NSW0066-001X	TACT SW		

< MEMO >

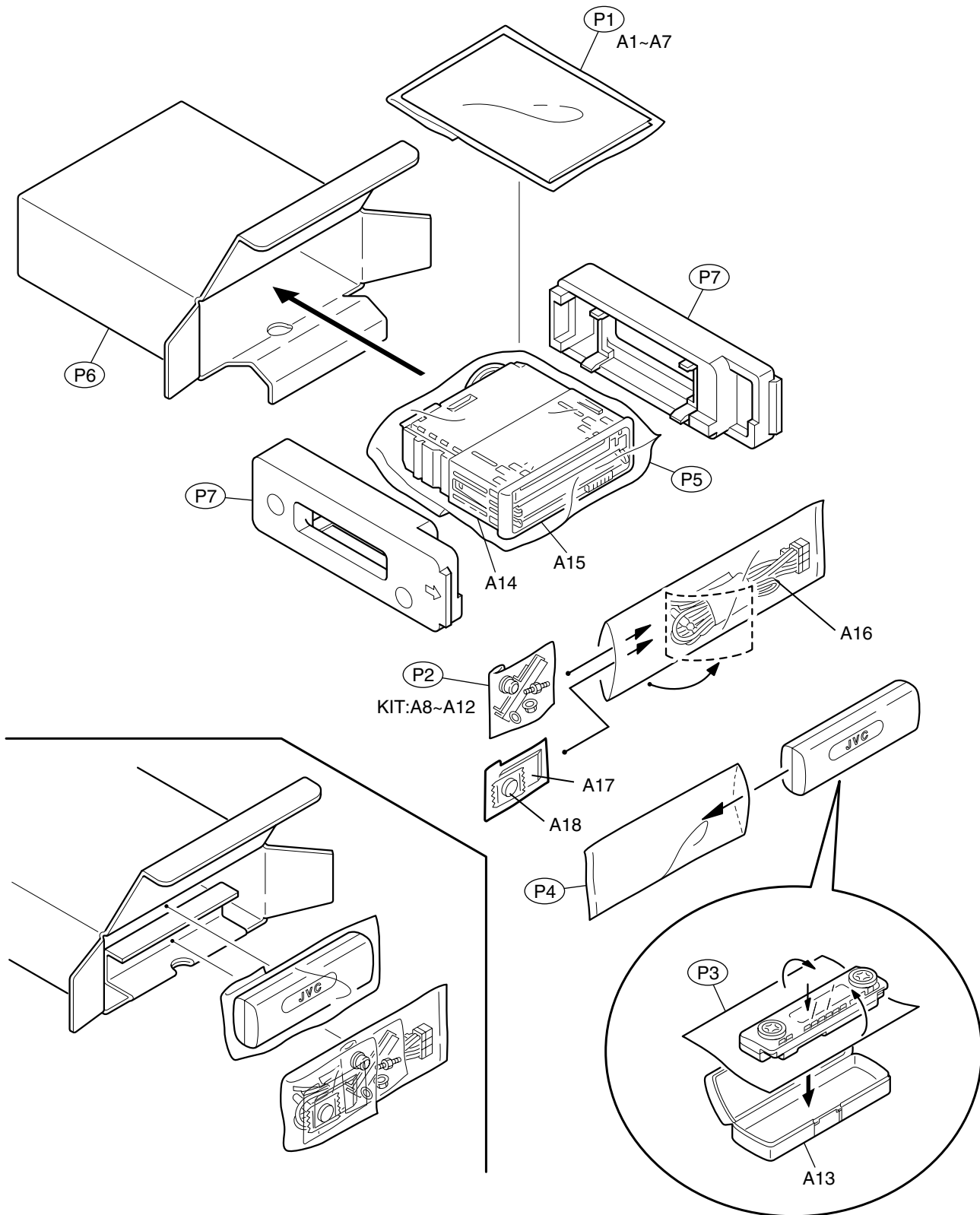
Packing materials and accessories parts list

Block No.

M	3	M	M
---	---	---	---

Block No.

M	5	M	M
---	---	---	---



■ Parts list (Packing)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	FSPG4002-001	POLY BAG	1	FOR INST. BOOK	
	P 2	QPA00801205	POLY BAG	1		
	P 3	FSYH4036-068	SHEET	1	MIRAMA SHEET	
	P 4	QPA01003003	POLY BAG	1		
	P 5	QPC03004315P	POLY BAG	1		
	P 6	GE30757-001A	CARTON	1		
	P 7	GE10070-001A	EPS CUSHION	1		

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	GET0142-001A	INST.BOOK	1	ENG,FRE,SPA	
	A 2	GET0142-002A	INSTALL MANUAL	1	ENG,FRE,SPA	
	A 3	GET0154-001A	CAUTION SHEET	1	ENG,FRE,SPA	
	A 4	BT-51018-3	WARRANTY CARD	1	FOR J	
	A 5	LVT0717-001B	TROUBLE SHEET(C	1		
	A 6	BT-52006-2	WARRANTY CARD	1	FOR C	
	A 7	BT-51028-2	J=REGIST CARD	1	FOR J	
	A 8	VKZ4027-202	PLUG NUT	1		
	A 9	VKH4871-001SS	MOUNT BOLT	1		
	A 10	VKZ4328-001	LOCK NUT	1		
	A 11	WNS5000Z	WASHER	1		
	A 12	GE40130-001A	HOOK	2		
	A 13	FSJB3002-00C	HARD CASE	1		
	A 14	GE20137-003A	MOUNTING SLEEVE	1		
	A 15	GE20149-004A	TRIM PLATE	1		
	A 16	QAM0013-006	16P CORD ASS'Y	1		
	A 17	RM-RK60	REMOCON	1		
	A 18	-----	LI BATTERY	1		
	K I T	KSFX480K-SCREW1	SCREW PARTS KIT	1	A8~A12	

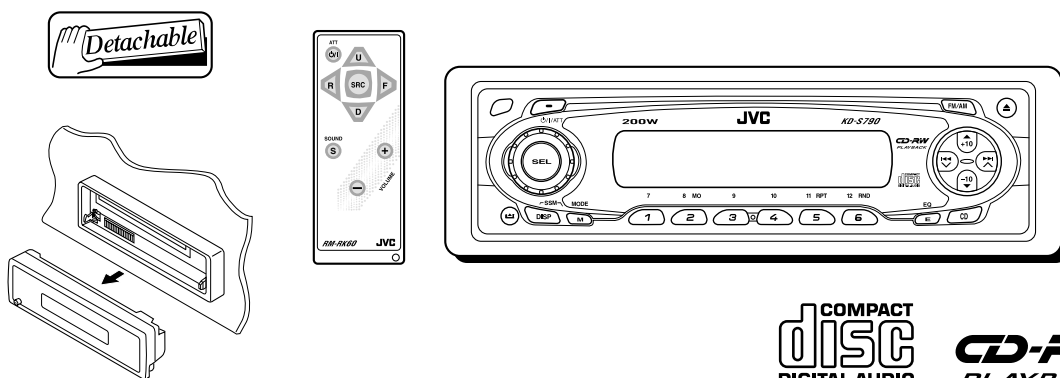
JVC

SCHEMATIC DIAGRAMS

CD RECEIVER

KD-S790

CD-ROM No.SML200302




<p>Area suffix</p> <p>J ----- Northern America</p>

Contents

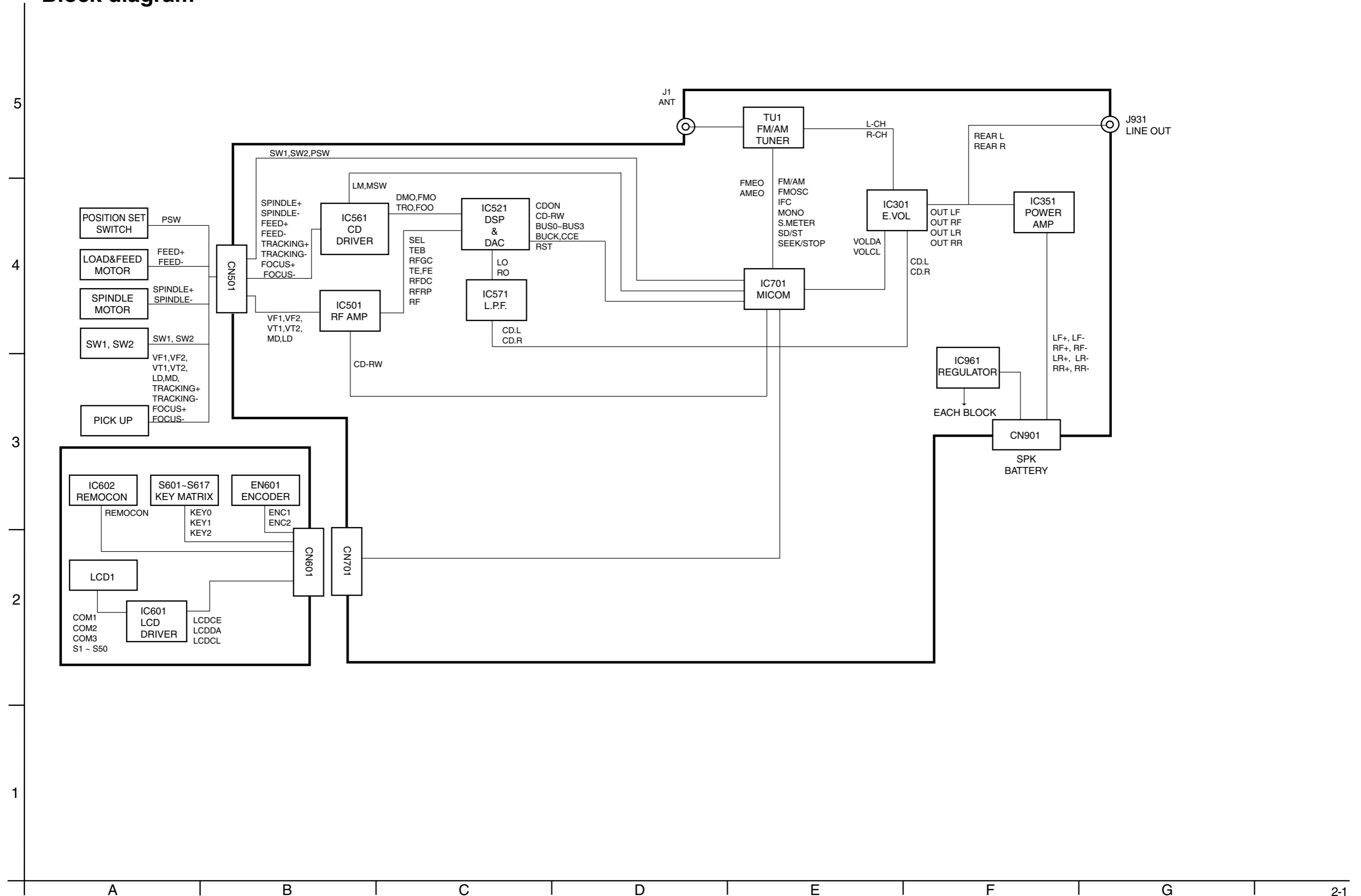
Block diagram	2-1
Standard schematic diagrams	2-2
Printed circuit boards	2-5~7

Safety precaution

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

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

Block diagram



Standard schematic diagrams

Main amplifier section

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION—FM MODE. () AM MODE. () CD MODE.
- UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W 5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(p-pF) MM — Metallized polyethylene terephthalate film capacitor

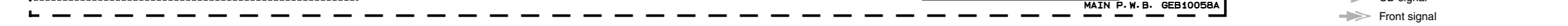
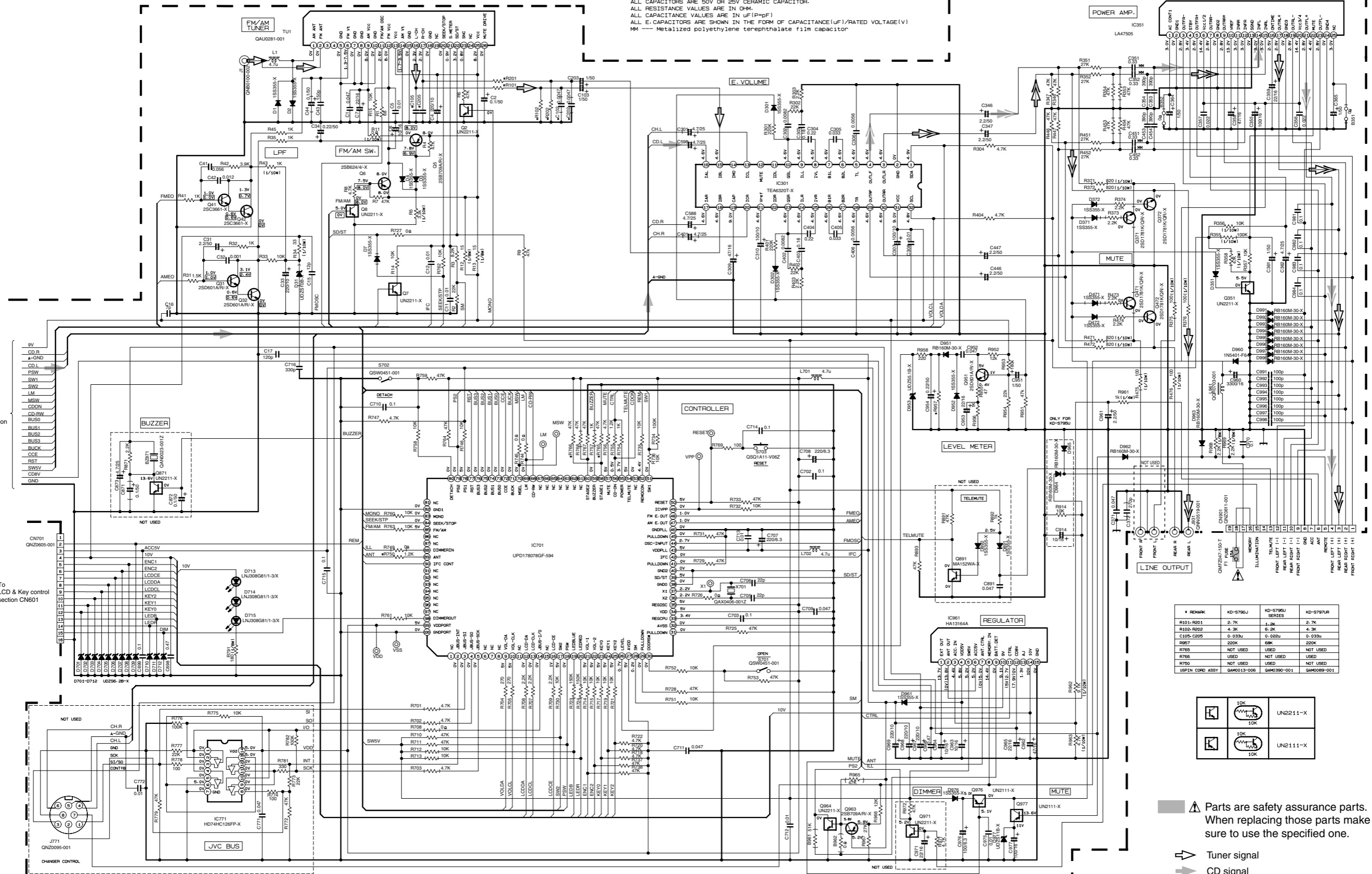
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4

3

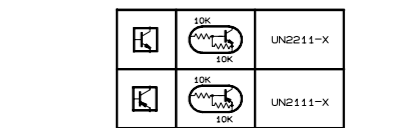
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1



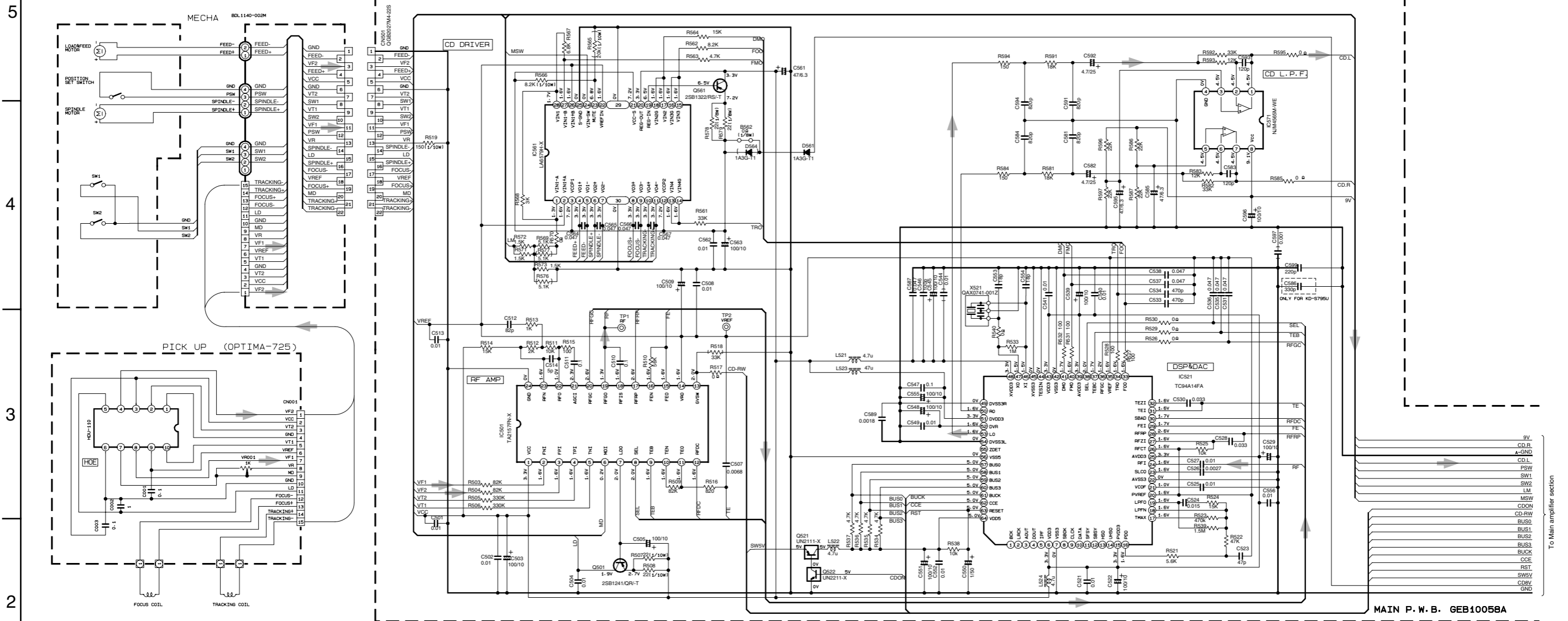
A B C 2-2 D E F G H

REMARK	KD-S790J	KD-S790U SERIES	KD-S790UR
R101-R101	2.7K	1.2K	2.7K
R102-R102	4.3K	6.2K	4.3K
C105-C105	0.033u	0.022u	0.033u
R97	220K	68K	220K
R785	NOT USED	USED	NOT USED
R786	USED	NOT USED	USED
R786	NOT USED	USED	NOT USED
1E1FN CORD ASSY	GM0013-006	GM0390-001	GM0069-001

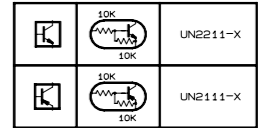


- Parts are safety assurance parts. When replacing those parts make sure to use the specified one.
- Tuner signal
- CD signal
- Front signal
- Rear signal

CD servo control section



➔ CD signal



- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
 - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W 1% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(P=pF) ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF1/RATED VOLTAGE(V))

5
4
3
2
1

■ LCD & Key control section

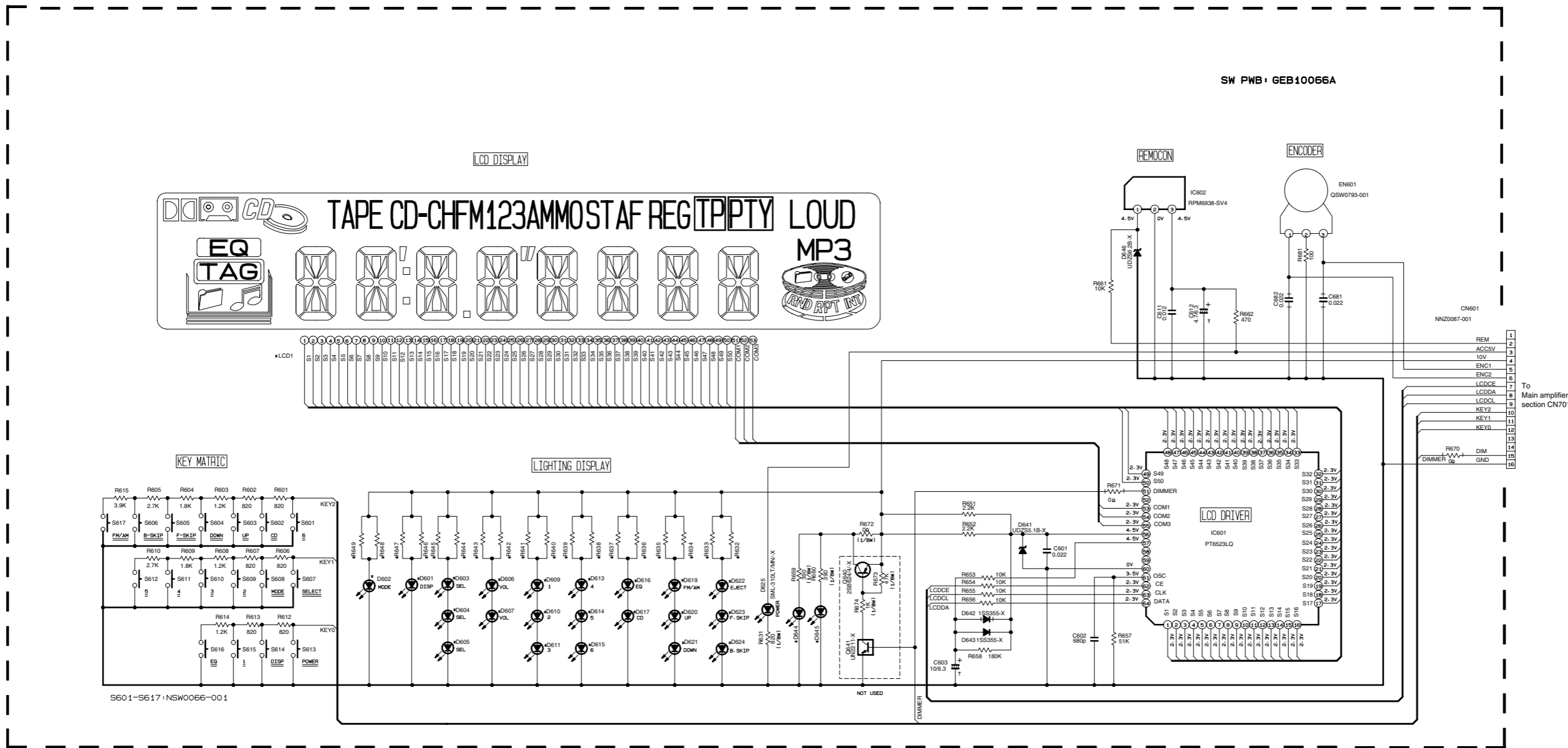
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4

3

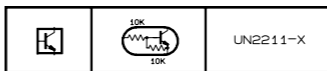
2

1



*REMARKS

MODEL	KD-S790J/KD-S797UR	KD-S795U
LCD1	QLD0256-001	QLD0254-001
D601-D611	SML-310VT/JK/-X	LNJ308GB1/1-3/X
D613-D624	NSPW310BS/BRS	NSPW310BS/B2RS
D644 D645	560	510
R632 R633	560	510
R634 R635	820	820
R636 R637	510	510
R638 R639	510	510
R640 R641	820	820
R642 R643	560	510
R644 R645	1.2k	1.2k
R646 R647	1.2k	1.2k
R648 R649	1.2k	1.2k



NOTES

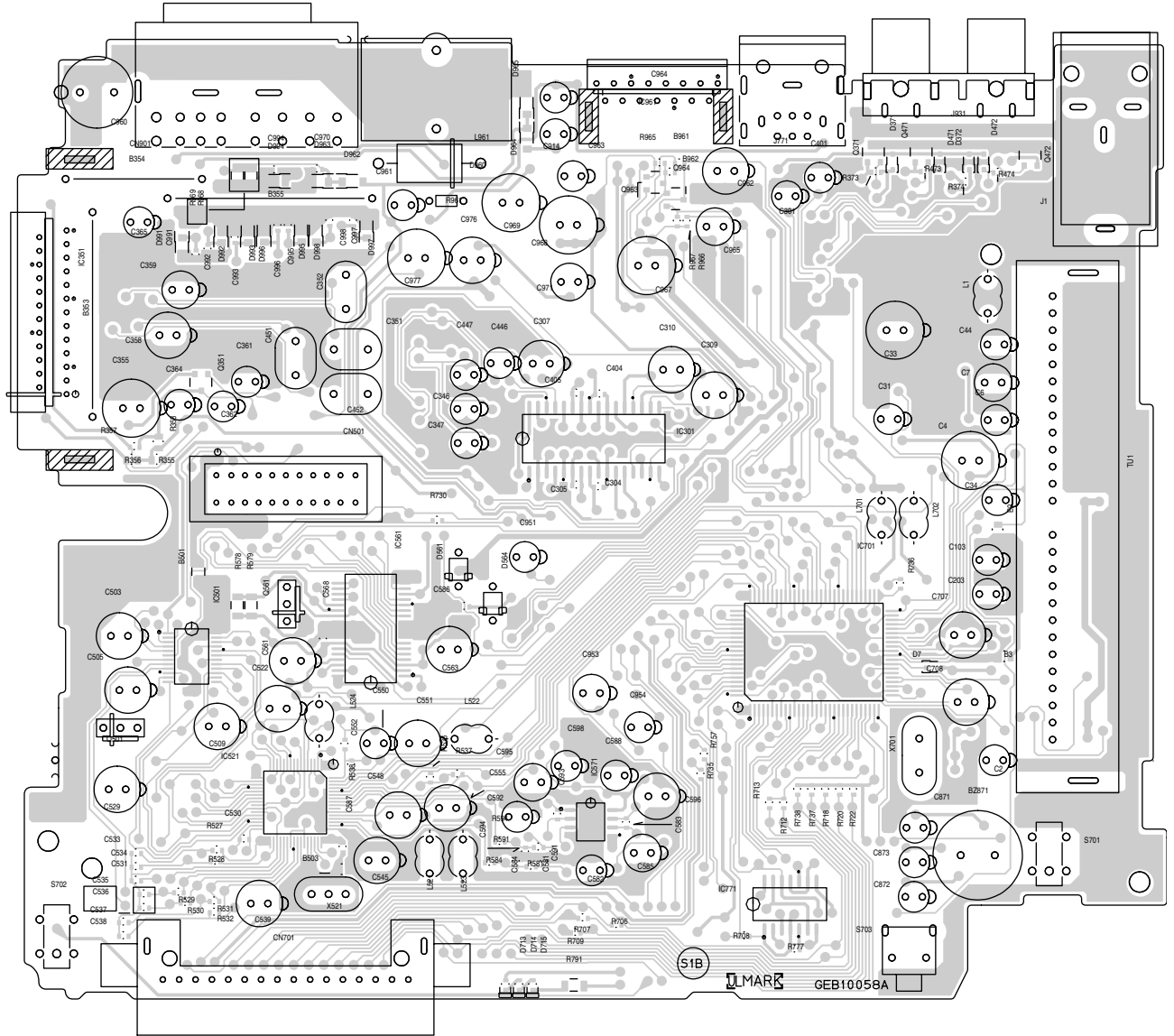
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
- UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/16W METAL GLAZE RESISTORS. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(P=pF) ALL E-CAPACITORS ARE SHOWN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

Printed circuit boards

■ Main board

5
4
3
2
1

Forward side



A

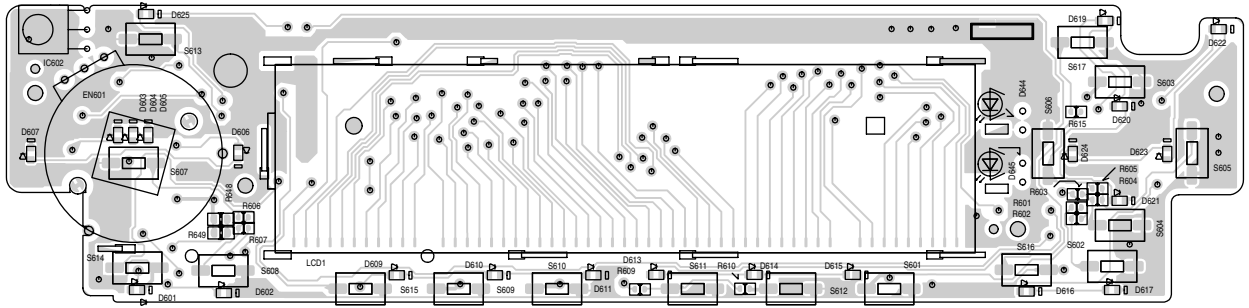
B

C

■ Front board

5

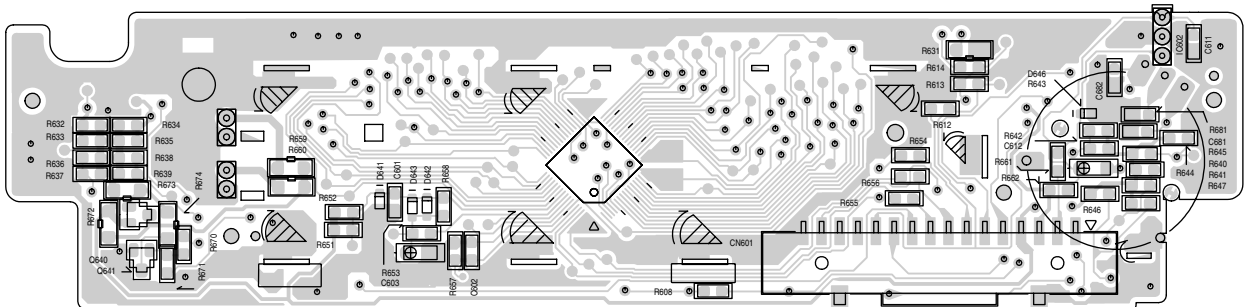
Forward side



4

3

Reverse side



2

1

A

B

C

KD-S790

JVC

VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY 10-1, 1Chome, Ohwatari-machi, Maebashi-city, 371-8543, Japan

(No.49788SCH)



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