

JVC

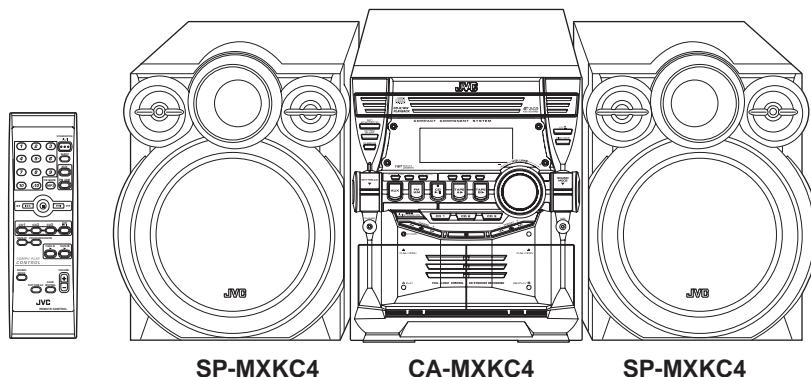
SERVICE MANUAL

COMPACT COMPONENT SYSTEM

MX-KC4

Area suffix

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



COMPACT
disc
DIGITAL AUDIO

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SPECIFICATION

Amplifier	Output Power	180 W per channel, min. RMS, driven into 6 Ω at 1kHz, with no more than 10% total harmonic distortion
	Input Sensitivity/Impedance (1 kHz)	AUX IN:400 mV/50 kΩ
	Speaker terminals	6 - 16 Ω
	Phones	32 Ω - 1 kΩ 15 mW/ch output into 32 Ω
Cassette Deck Section	Frequency Response : Type I (NORMAL)	63 Hz - 12 500 Hz
	Wow And Flutter	0.15% (WRMS)
CD Player	CD Capacity	3 CDs
	Dynamic Range	85 dB
	Signal-To-Noise Ratio	85 dB
	Wow And Flutter	Unmeasurable
Tuner	FM Tuner	87.5 MHz - 108.0 MHz
	AM Tuner	530 kHz - 1 710 kHz
Unit	Dimensions	270 mm × 306 mm × 456 mm (W/H/D) (10-11/16" × 12-1/16" × 18")
	Mass	Approx. 8.6 kg (19.0 lbs)
Speaker Specifications (each unit) SP-MXKC4	Type	3-way bass-reflex type
	Speaker Unit	Woofer: 16 cm (6-5/16") cone × 1 Mid: 5cm (2") cone × 1 Tweeter: 2 cm (13/16") dome × 1
	Power Handling Capacity	180 W
	Impedance	6 Ω
	Frequency Range	45 Hz - 22 000 Hz
	Sound pressure level	87 dB/W·m
	Dimensions	266 mm × 333 mm × 241 mm (W/H/D) (10-1/2" × 13-1/8" × 9-1/2")
	Mass	Approx. 3.9 kg (8.6 lbs)
Power Specifications	Power Requirements	AC 120 V , 60 Hz
	Power Consumption	150 W (power on mode) 22 W (in Standby mode)

Design and specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 Safety Precautions

- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
- (5) Leakage shock hazard testing

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

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

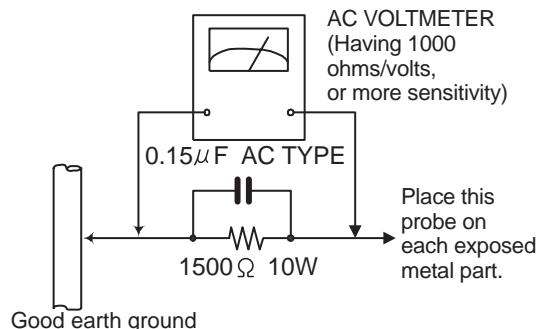
- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 Ω 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.).



1.2 Warning

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

1.3 Caution

Burrs formed during molding may be left over on some parts of the chassis.

Therefore, pay attention to such burrs in the case of performing repair of this system.

1.4 Critical parts for safety

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

1.5 Preventing static electricity

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

1.5.1 Grounding to prevent damage by static electricity

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

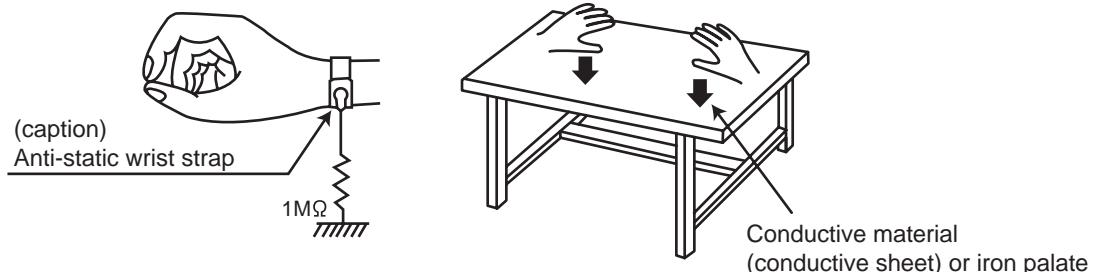
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

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

(2) Ground yourself

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



(3) Handling the optical pickup

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

1.6 Handling the traverse unit (optical pickup)

- Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- 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.
- Handle the flexible cable carefully as it may break when subjected to strong force.
- It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

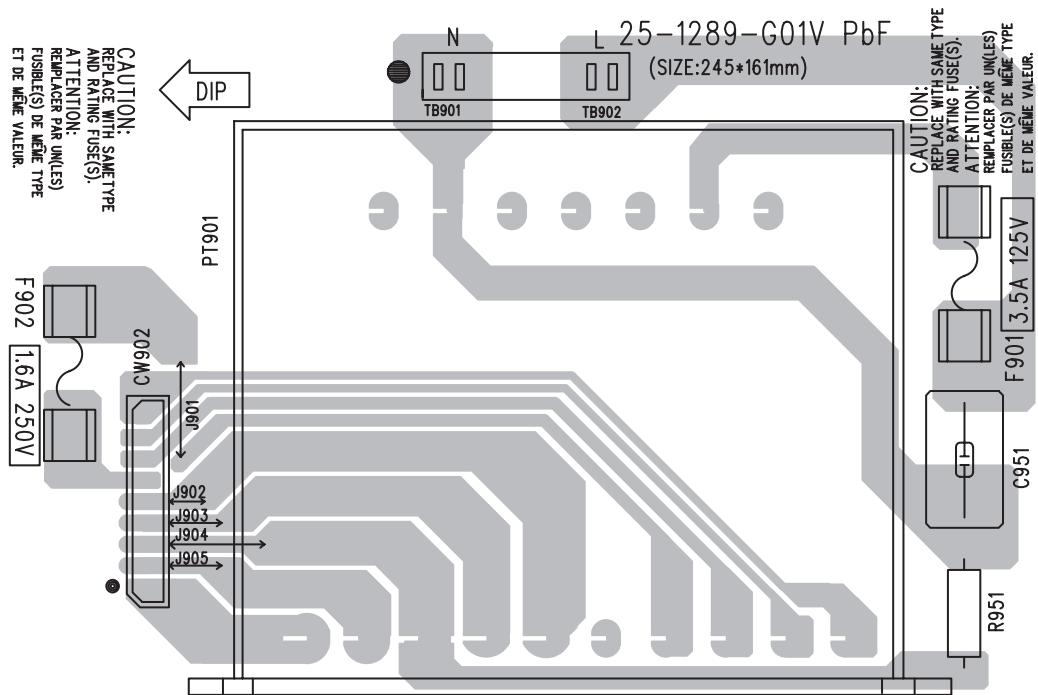
1.7 Attention when traverse unit is decomposed

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

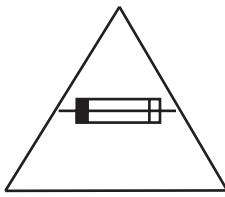
- Apply solder to the short land sections before the flexible wire is disconnected from the connector on the servo board. (If the flexible wire is disconnected without applying solder, the pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land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



1.8 Importance administering point on the safety



For USA and Canada / pour États - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 3.5A/125V for F901 and 1.6A/250V for F902. This symbol specifies type of fast operating fuse.

Précaution: Pour éviter risques de feux, remplacez le fusible de sûreté de F901 comme le même type que 3.5A/125V et F902 que 1.6A/250V .
Ce sont des fusibles sûres qui fonctionnent rapidement.

SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

This service manual does not describe PRECAUTION.

SECTION 3 DISASSEMBLY

3.1 Main body

3.1.1 Removing the metal cover/ rear cover

(See Fig.1 to 5)

- (1) Remove the four screws **A** on the back of the body.
- (2) Remove the six screws **B** on the back of the body.
- (3) Remove the four screws **C** and the two screws **D** on both sides of the body.
- (4) Move the metal covers in the direction of the arrow with pulling them sideways, and release two joints **a** and six joints **b**.

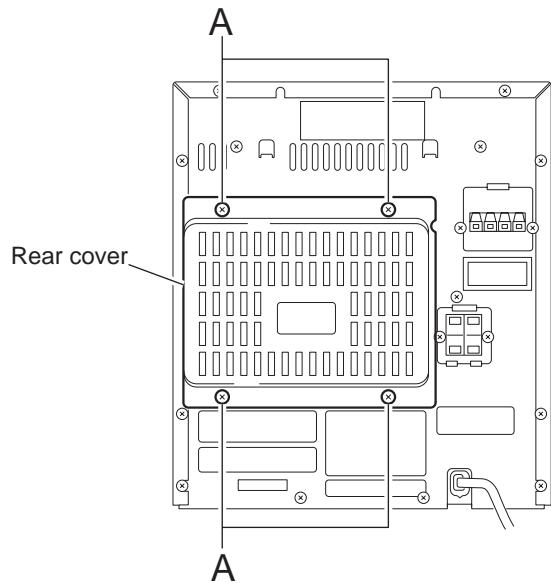


Fig.1

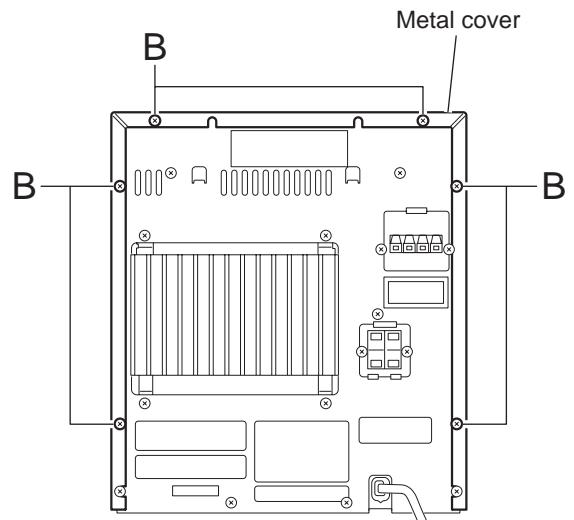


Fig.2

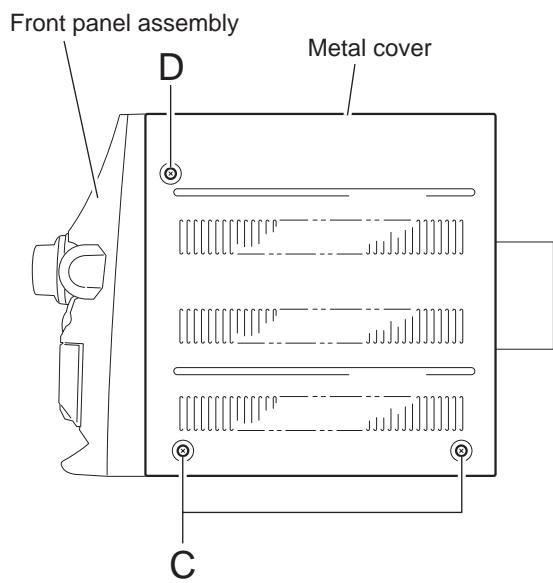


Fig.3

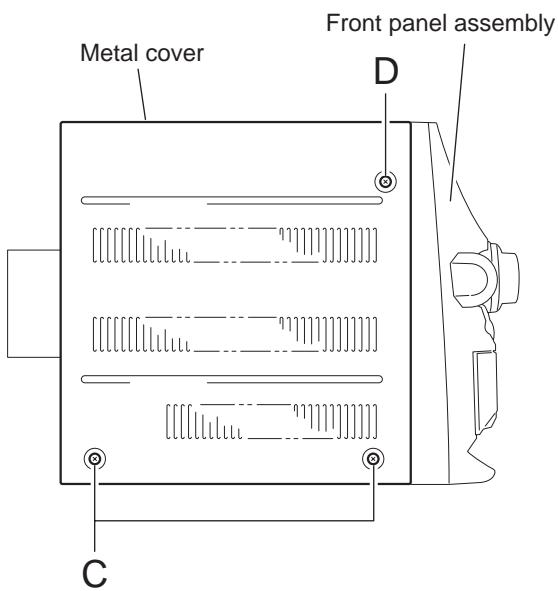


Fig.4

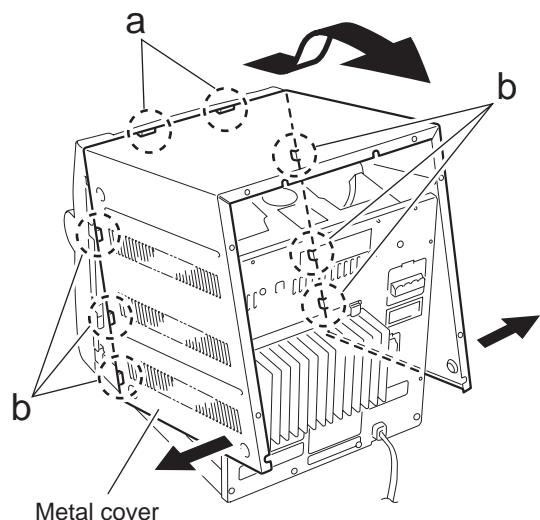


Fig.5

3.1.2 Removing the CD fitting (See Fig.6 to 8)

- Prior to performing the following procedure, remove the metal cover/ rear cover.

Caution:

For protecting the CD fitting from damage, remove it before detaching the CD changer mechanism unit.

- Push STANDBY/ON key to turn on the power.
- Push CD tray eject key.
- Move the CD fitting in the direction of the arrow to release two joints **d** of the CD tray.
- Push STANDBY/ON key to close the tray.

3.1.3 Removing the CD fitting (See Fig.7 to 9)

[How to eject the CD tray without turning on the power]

- Prior to performing the following procedure, remove the metal cover/ rear cover.
- Turn the loading pulley gear on the bottom of the CD changer mechanism unit (part **e**) as shown in the figure to move the CD tray forward.
 - Move the CD fitting in the direction of the arrow to release two joints **d**.
 - Push and close the CD tray.

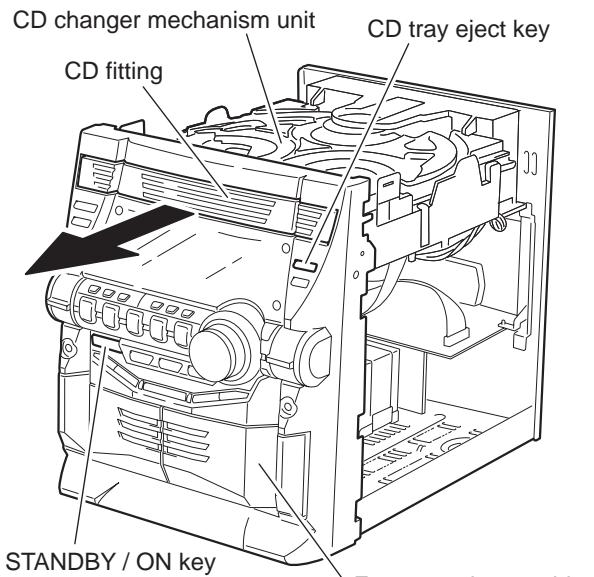


Fig.6

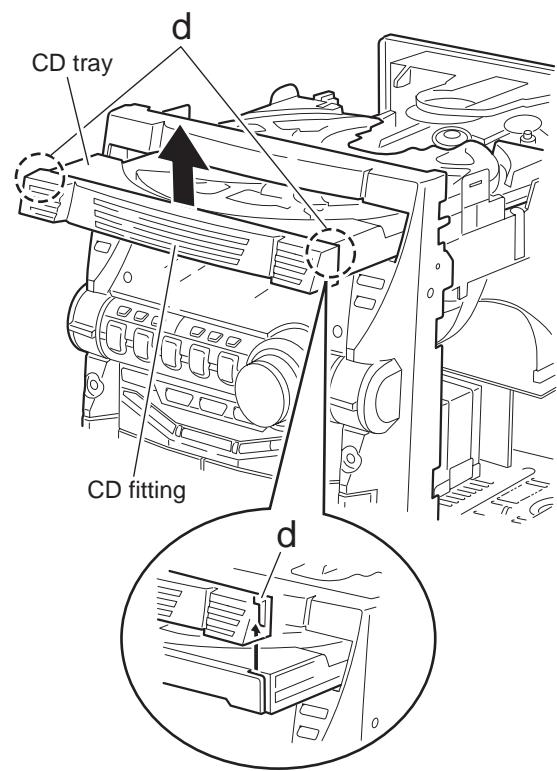


Fig.7

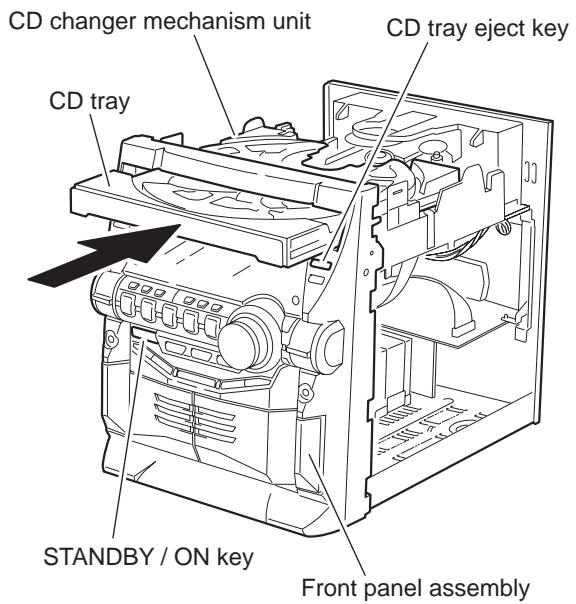


Fig.8

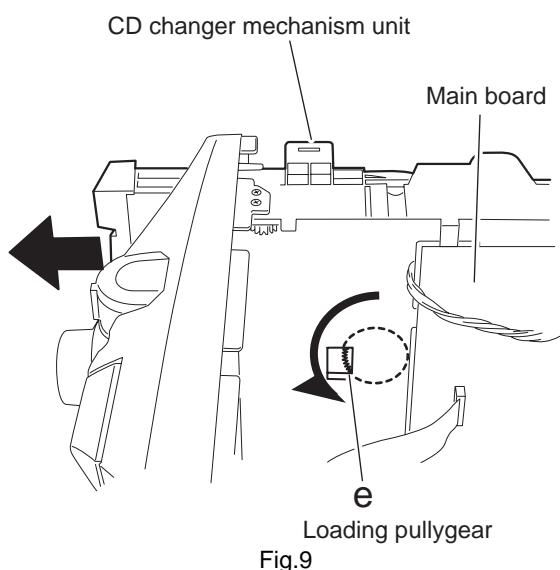


Fig.9

3.1.4 Removing the CD changer mechanism unit

(See Fig.10 to 14)

- Prior to performing the following procedure, remove the metal cover/ rear cover and the CD fitting.
- (1) From the bottom of the CD changer mechanism unit, disconnect the wire from connector [CN401](#), [CN402](#) and [CN205](#) on the main board.
- (2) Disconnect the card wire from connector [CN403](#), [CN201](#) and [CN601](#) on the main board.
- (3) From the back of the body, remove the four screws **E** attaching the CD changer mechanism unit.
- (4) From the back of the body, remove the four screws **F** attaching the CD changer mechanism unit.
- (5) Pulling the rear panel backward, move the CD changer mechanism unit in the direction of the arrow and remove.

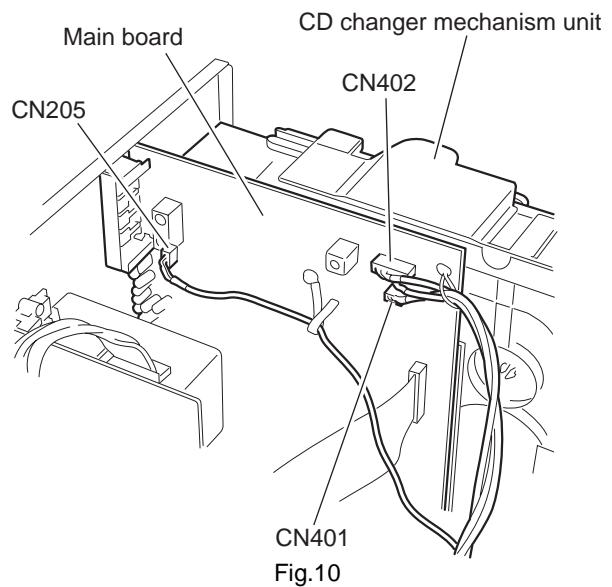


Fig.10

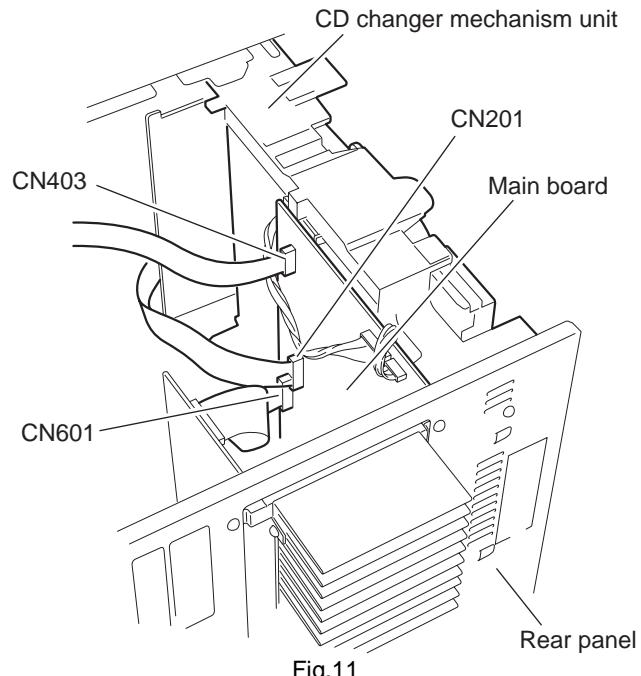


Fig.11

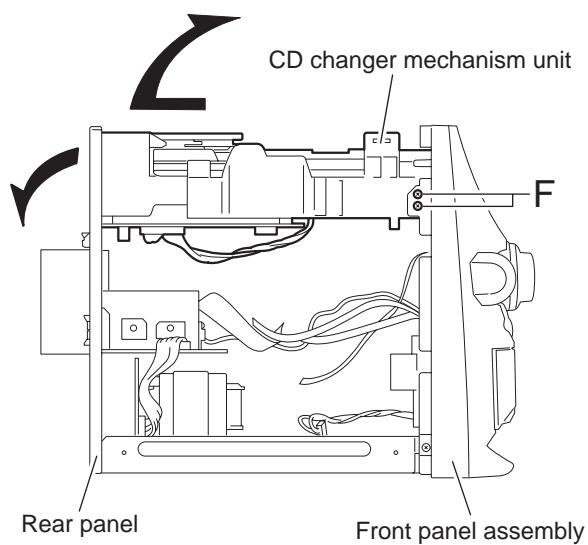
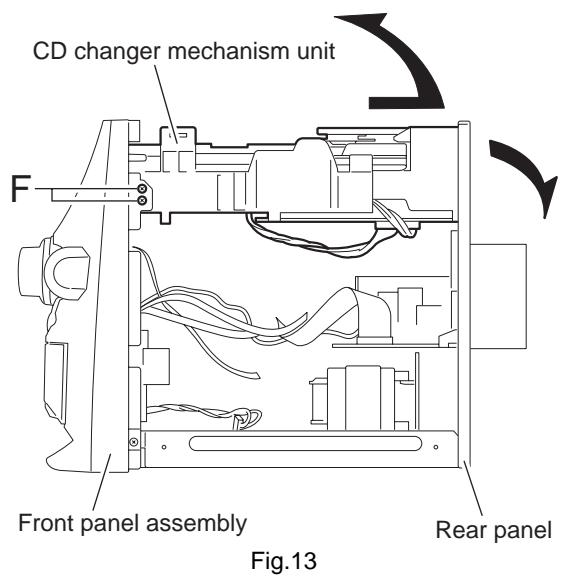
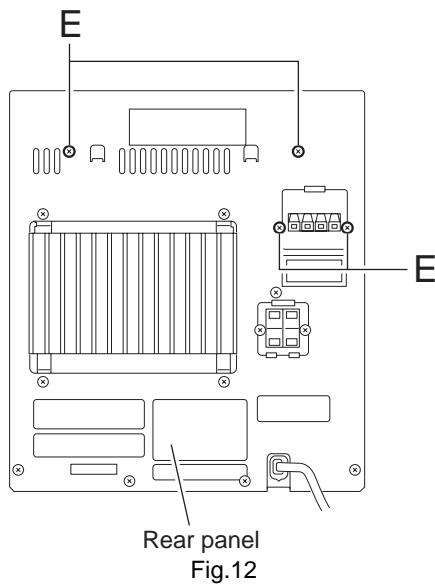


Fig.14

3.1.5 Removing the power board

(See Fig.15 to 19)

- Prior to performing the following procedure, remove the metal cover/ rear cover, the CD fitting and the CD changer mechanism unit.
- (1) Disconnect the wire from connector [CN903](#) and [CN202](#) on the power board.
- (2) Disconnect the card wire from connector [CW601](#) on the power board.
- (3) From the back of the body, remove the four screws **G** and the three screws **H** attaching the power board.
- (4) Release the two tabs **f** from the notch of the rear panel. Move the power board in the direction of the arrow and remove frontward.
- (5) From the bottom of the power board, remove the four screws **J** attaching the heat sink.
- (6) Remove the two screws **K** attaching the heat sink.

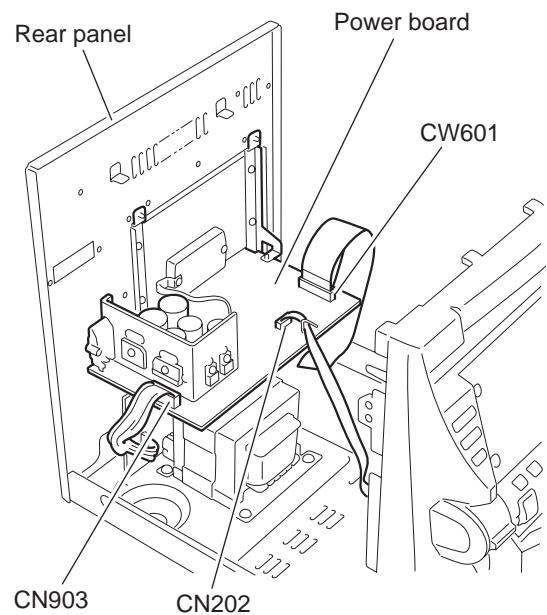


Fig.15

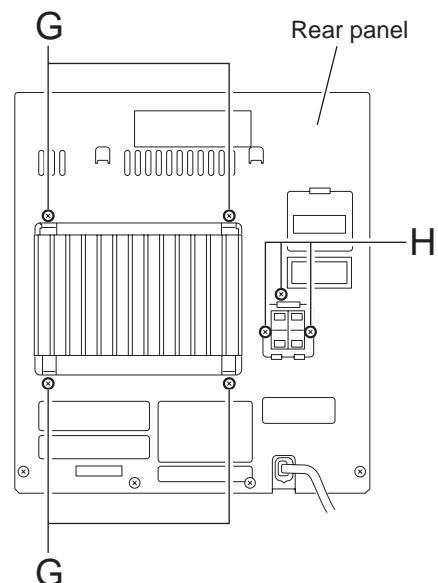


Fig.16

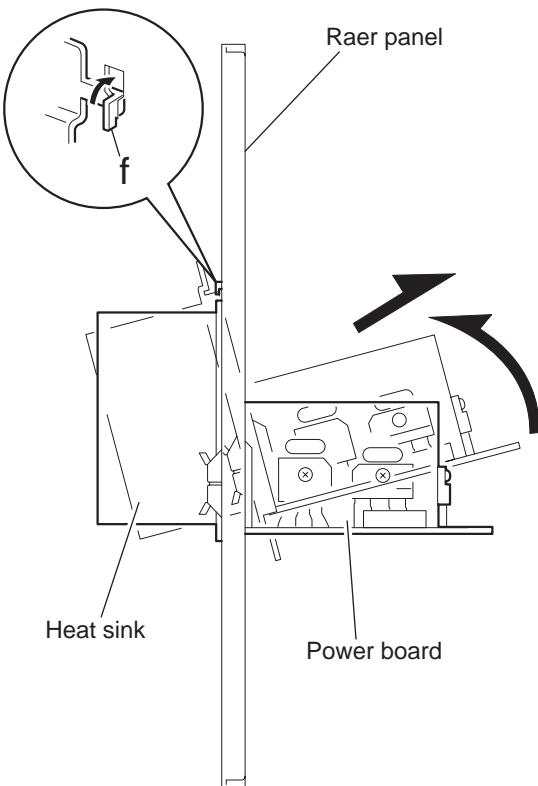


Fig.17

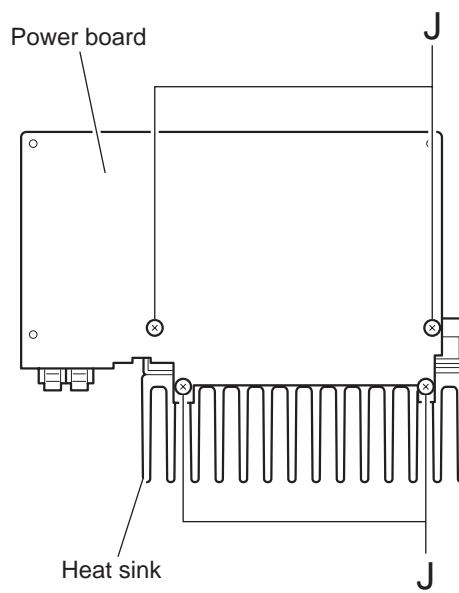


Fig.18

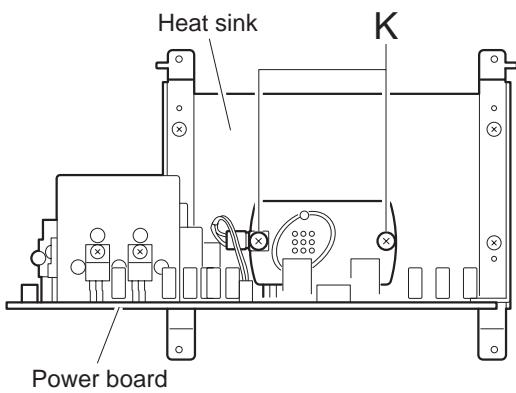


Fig.19

3.1.6 Removing the transformer board

(See Fig.20 to 23)

- Prior to performing the following procedure, remove the metal cover/ rear cover, the CD fitting and the CD changer mechanism unit.
- (1) Disconnect the wire from connector [CN903](#) and [CN202](#) on the power board.
- (2) From the back of the body, remove the four screws **L** attaching the rear panel.
- (3) Remove the cord clamp in the direction of the arrow.
- (4) From the base chassis, remove the four screws **M** attaching the transformer.
- (5) If necessary, unsolder the power cord and the wire extending from the power transformer assembly.

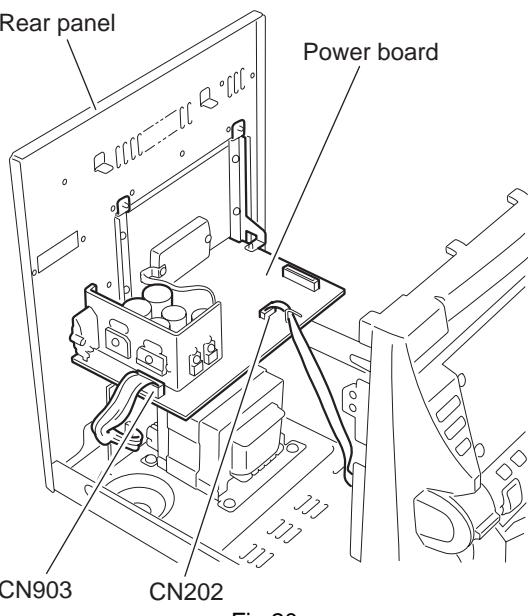


Fig.20

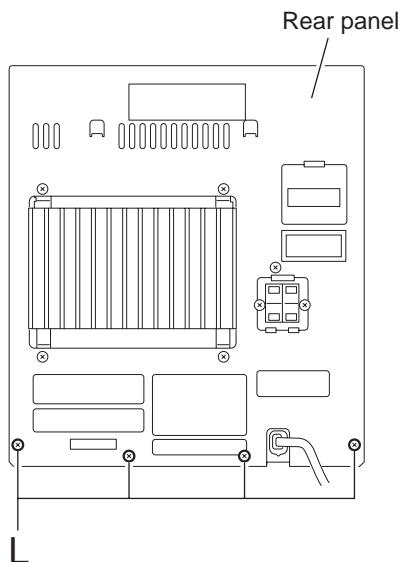


Fig.21

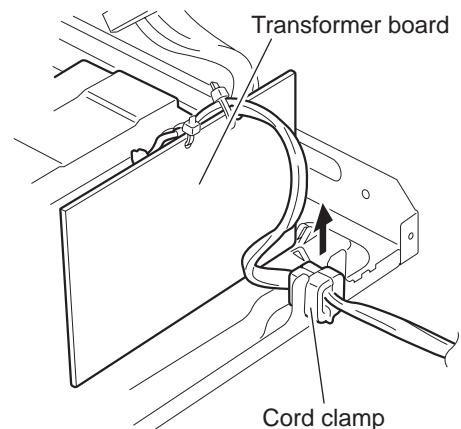


Fig.22

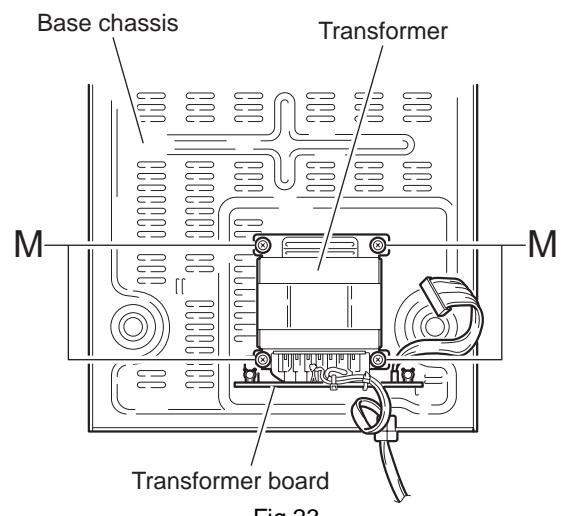


Fig.23

3.1.7 Removing the front panel assembly

(See Fig.24 to 27)

- Prior to performing the following procedure, remove the metal cover, the CD fitting and the CD changer mechanism unit.
- (1) Disconnect the wire from connector CN202 on the power board.
- (2) Disconnect the earth wire connected to the main base chassis.
- (3) From the bottom of the body, remove the screw **N** attaching the front panel assembly.
- (4) From each side of the body, remove the two screws **P** attaching the front panel assembly.
- (5) Release joints **g** on each side of the body using a screwdriver. Remove the front panel assembly forward.

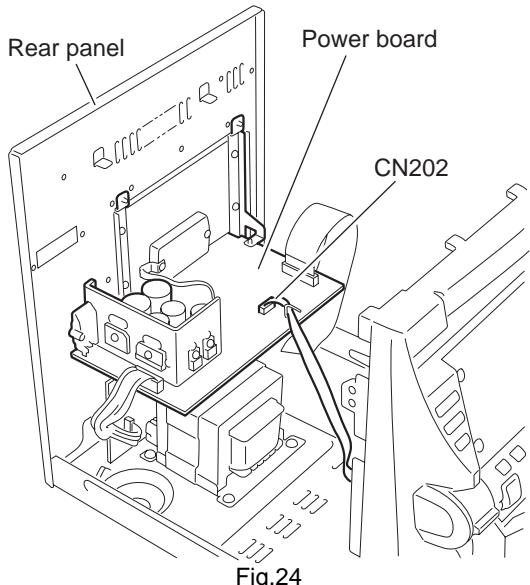


Fig.24

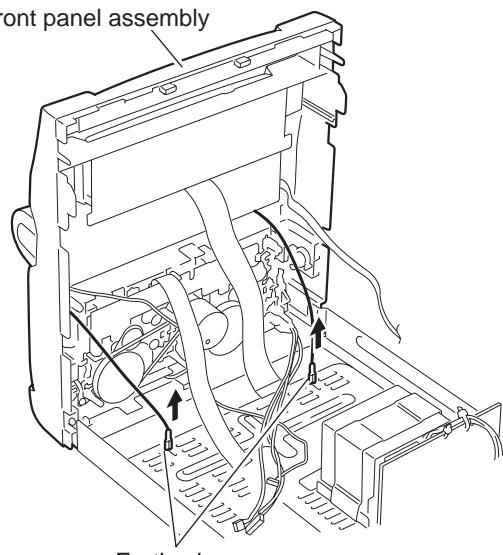


Fig.25

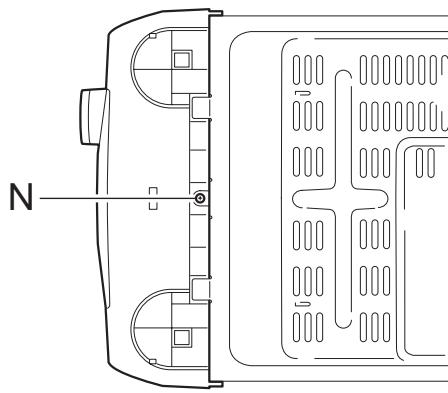


Fig.26

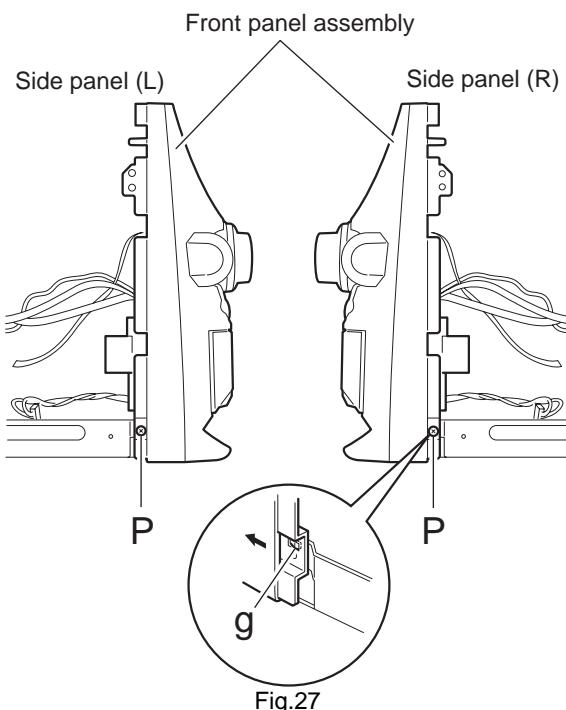


Fig.27

3.1.8 Removing the LCD board, CD tray eject switch board, REC select switch board and Operation board (See Fig.28 , 29)

- Prior to performing the following procedure, remove the front panel assembly.
- (1) Pull out the volume knob on the front panel assembly.
- (2) Remove the twenty-six screws **Q** attaching the LCD board, CD tray eject switch board, REC select switch board and Operation board.

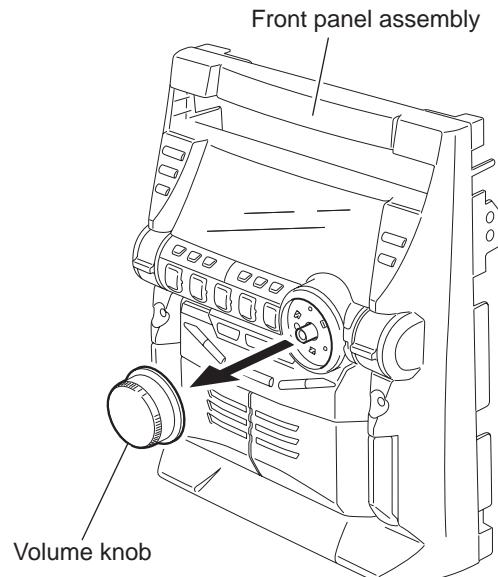


Fig.28

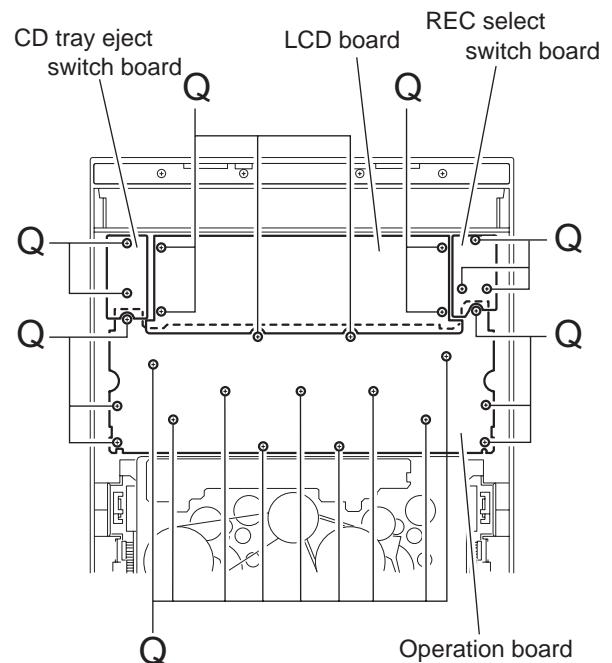


Fig.29

3.1.9 Removing the cassette mechanism assembly (See Fig.30)

- Prior to performing the following procedure, remove the front panel assembly.
- (1) Remove the six screws **R** attaching the cassette mechanism assembly.

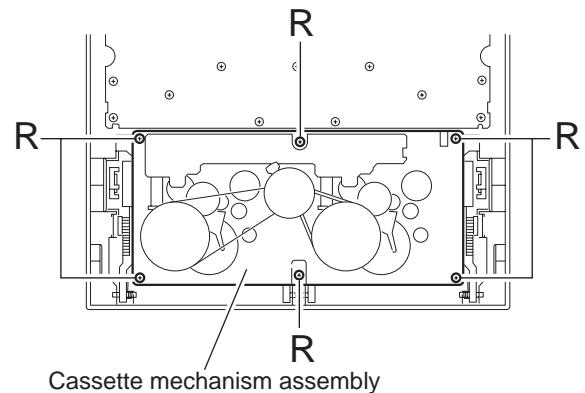


Fig.30

3.1.10 Removing the main board

(See Fig.31 to 33)

- Prior to performing the following procedure, remove the metal cover/ rear cover, the CD fitting and the CD changer mechanism unit.

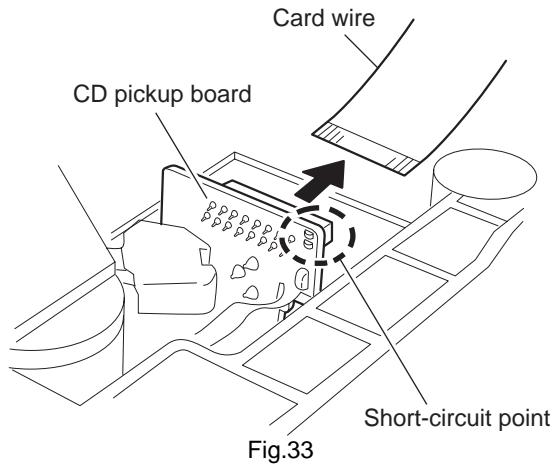
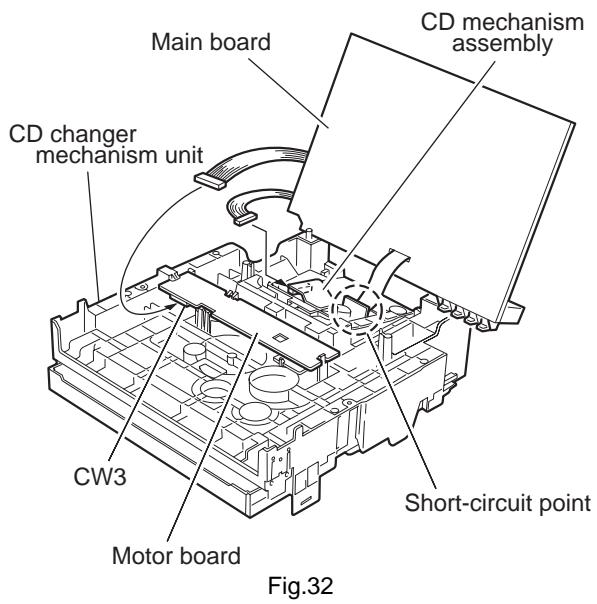
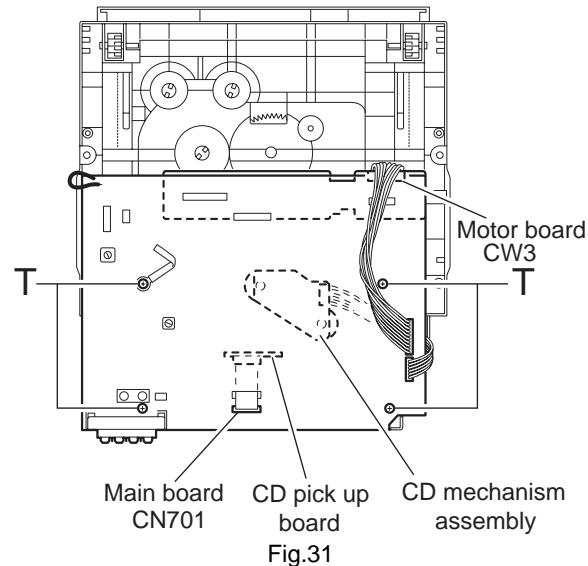
Caution:

Before disconnecting the card wire from connector [CN701](#) on the main board and the CD pickup board, make sure to solder the short-circuit point on the CD pickup board. If you do not follow this instruction, the pickup may be damaged.

- Disconnect the wire from connector [CW3](#) on the motor board under the main board.
- From the bottom of the CD changer mechanism unit, remove the four screws **T** attaching the main board.
- Move the main board as shown in Fig.32 and disconnect the wire from the connector on the CD mechanism board.
- Solder the short-circuit point on the CD pickup board and disconnect the card wire from the CD pickup board.

Caution:

When reattaching the main board, make sure to connect the card wire to connector [CN701](#) on the main board and the CD pickup board before unsoldering the short-circuit point.



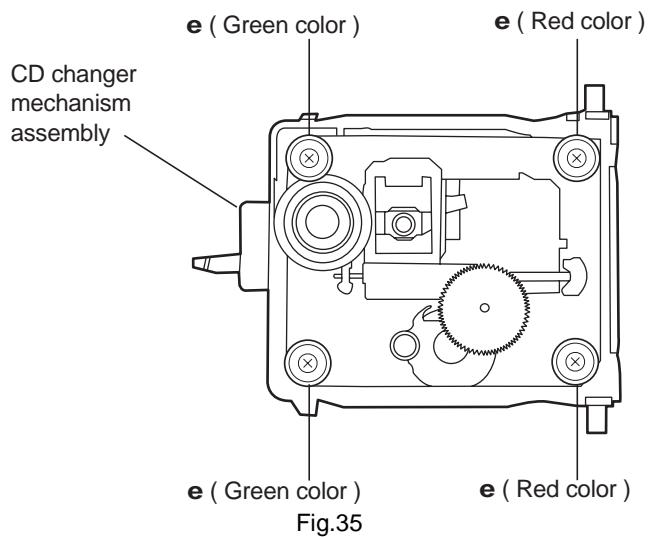
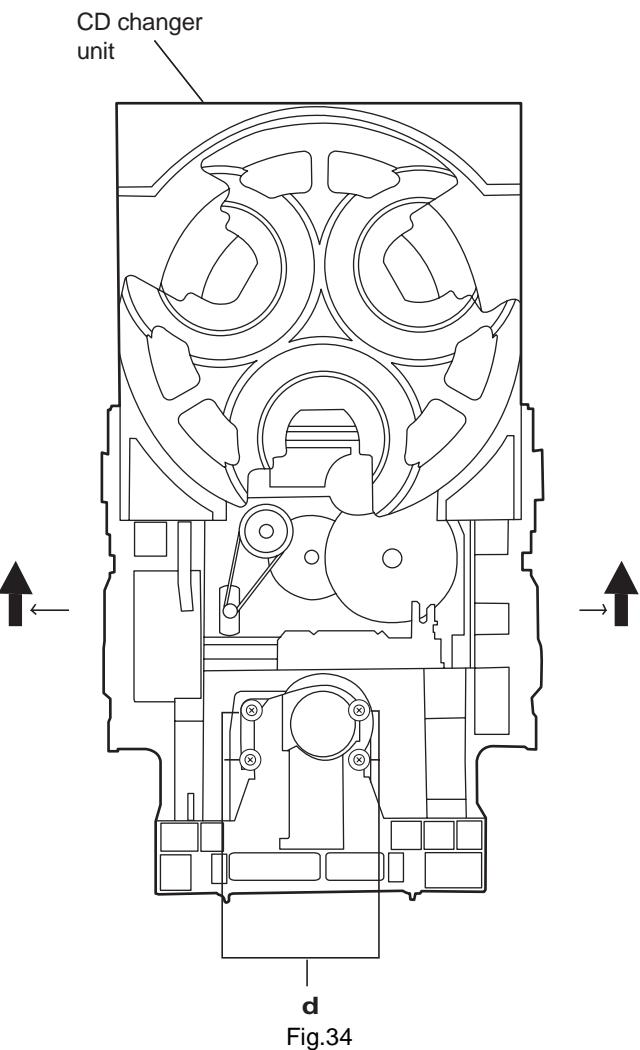
3.1.11 Removing the CD changer mechanism assembly

(See Fig.34 to 35)

- Also remove the CD changer unit.
- (1) Turn the CD changer mechanism cover base and remove the screws **d** connecting the unit to the CD changer mechanism assembly.
 - (2) Removing four screws **e** retaining the CD mechanism holder assembly.

Caution:

When replacing the CD changer mechanism assembly, be sure not to mistake the positions of the silver color and copper color spring.



3.1.12 Removing the CD pickup

(See Fig.36)

- Prior to performing the following procedures, remove the top cover.
- Also remove the CD changer unit.
- Also remove the CD changer mechanism.
- (1) Widen the section **f**.
- (2) While keeping the section **f** wide open, push the section **g** in the direction of the arrow to remove the shaft, and then remove the CD pickup.

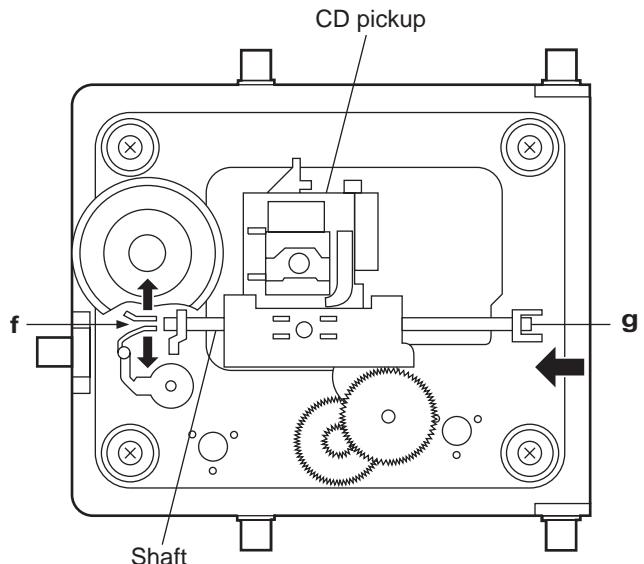


Fig.36

3.1.13 Replacing the loading motor and rotor belt of the CD changer

(See Fig .37)

- Prior to performing the following procedures, remove the top cover.
- Also open the CD changer tray.
- (1) Remove the two screws **L** retaining the CD changer tray loading motor.
- (2) Remove the two screws **M** retaining the gear plate and take it out, after remove the rotor belt from the pulley.

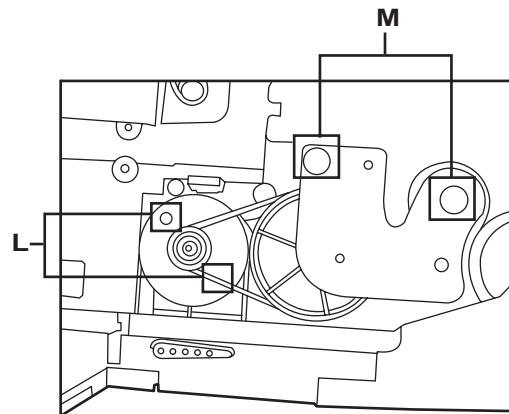


Fig.37

3.1.14 Replacing the CD turn table and removing the motor

(See Fig.38)

- Prior to performing the following procedures, remove the top cover.
- Also remove the CD changer unit.
- (1) Remove the one screws retaining the CD (Turn table).
- (2) Remove the two screws retaining the stopper brackets on both sides of the CD changer unit.
- (3) Remove the stopper brackets from both sides of the CD changer unit.
- (4) Pull out the CD tray from the CD changer unit, all the way and lift the tray to remove.
- (5) Remove the gear and after push out the tray motor locker and pull out the tray motor from the CD tray.

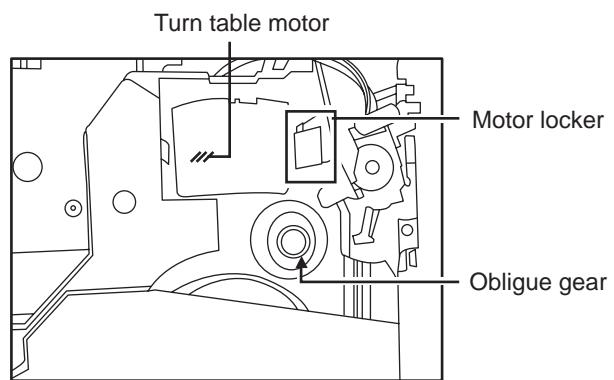


Fig.38

3.1.15 Removing the cassette deck main motor, and replacing the main belts (See Fig.39 and 40)

- Prior to performing the following procedures, remove the top cover and both sides board.
- Also remove the CD changer unit.
- Also remove the front panel assembly.
- (1) Remove six screws **Z** retaining the cassette deck mechanism. (Fig.39)
- (2) Remove the cassette deck mechanism.
- (3) Remove two screws **t** retaining the main motor from the front side of the cassette deck.

Caution:

After attaching the main motor, check the orientation of the motor and the polarity of the wires.

- From the backside of the cassette deck, remove the main motor and two main belts.

Caution:

The lengths of the cassette A(playback only) and cassette B(record/play) main belts are different. When attaching the main belts, use the longer belt for cassette A.

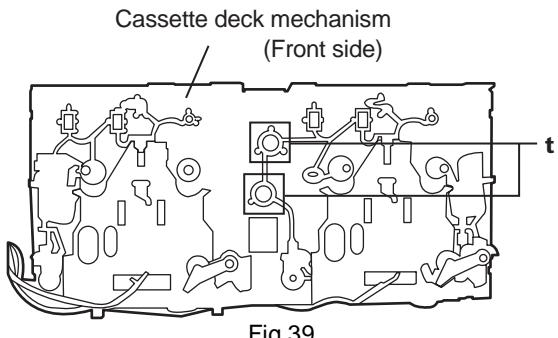


Fig.39

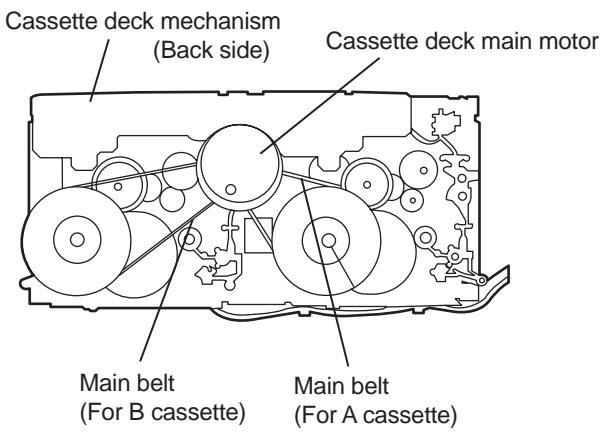


Fig.40

3.1.16 Removing the leaf switches of the cassette deck mechanism (See Fig. 39 and 41)

- Prior to performing the following procedures, remove the top cover and both sides board.
- Also remove the CD changer unit.
- Also remove the front panel assembly.
- (1) Remove the six screws **Z** that retain the cassette deck mechanism. (Fig.39)
- (2) Remove the cassette deck mechanism.
- (3) Turn the cassette deck mechanism upside down.
- (4) Remove the solder from around the leaf switches.
- (5) Pull out the leaf switches from the front side of the cassette deck mechanism.

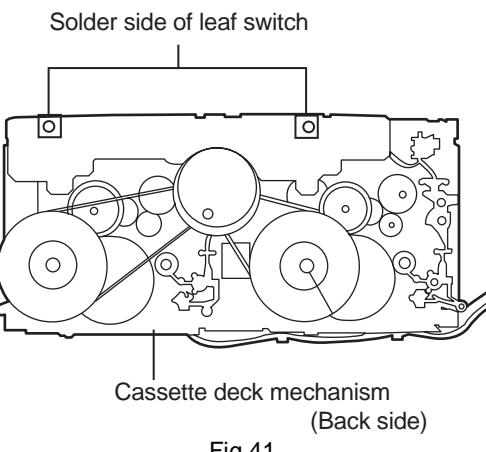


Fig.41

3.1.17 Removing the cassette deck heads

(See Fig. 39 and 42)

- Prior to performing the following procedures, remove the top cover and both sides board.
- Also remove the CD changer unit.
- Also remove the front panel assembly.
 - Remove six screws **Z** that retain the cassette deck mechanism. (Fig.39)
 - Remove the cassette deck mechanism and place it so that the front side faces up.
 - Remove the solder from the bottom side of the head terminal and disconnect the wire.
 - Remove screws **U** that retains the head.
 - Remove screws **V** that retains the head.
 - Hold the head and slide it in the direction of the arrow to remove it.

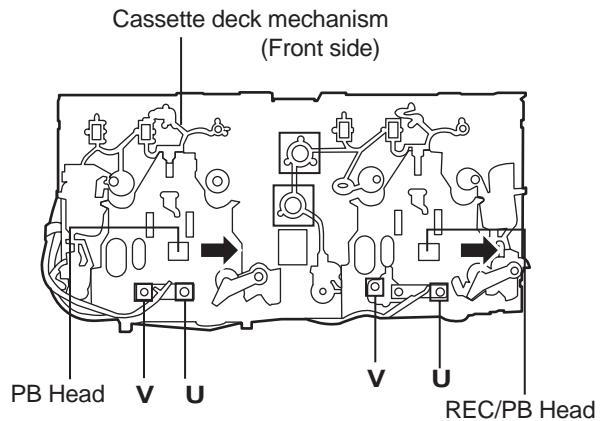


Fig.42

3.1.18 Removing the 3-pin regulator and bridge diode

(See Fig. 43)

- Prior to performing the following procedures, remove the top cover and both sides board.
- Remove two screws **A** that connect the heat sink.
- (1) Remove two screws **A** that connect the heat sink.
- (2) Remove two screws **W** that connect the heat sink.
- (3) Remove the solder fixing the the 3-pin terminal regulator [Q604](#), [Q608](#).
- (4) Remove the solder fixing the 4-pin bridge diode ([D614](#), [D615](#)).

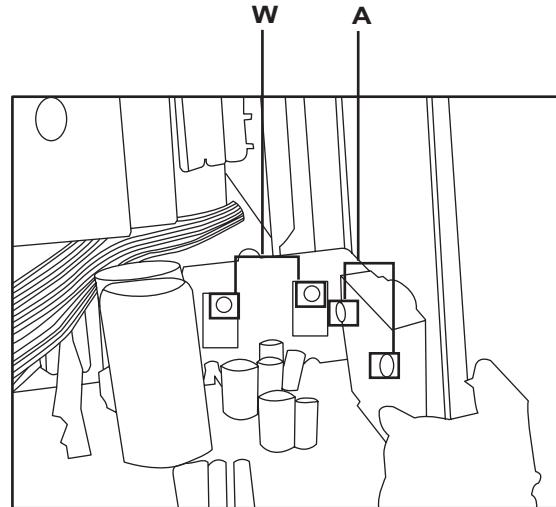


Fig.43

3.2 Speaker

3.2.1 Removing the front cabinet (See Fig.1, 2)

Caution:

Cover the product with cloth to avoid damage.

- (1) Insert a screwdriver into the two slots **h** at the bottom of the speaker and release the seven bosses on the inside of the front panel assembly toward the front.

Caution:

The seven bosses are attached with adhesion bond. Cover the product with cloth to avoid damage and release each boss slowly.

Reference:

Also the speaker wire extending from the main speaker comes off. Remove each speaker if necessary.

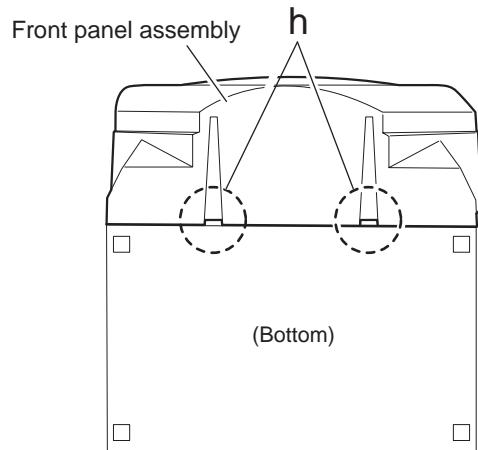


Fig.1

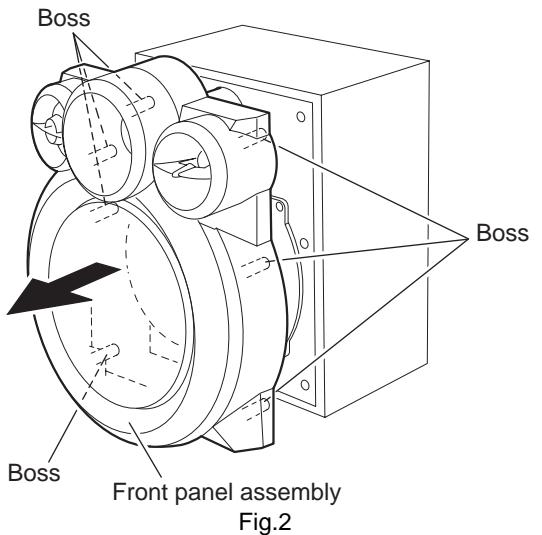


Fig.2

3.2.2 Removing the sub speaker/speaker

(See Fig.3)

- Prior to performing the following procedure, remove the front cabinet.
 - (1) Disconnect the wire from the two sub speaker terminals.
 - (2) Remove the two screws **U** attaching the sub speaker.
 - (3) Detach the speaker, which is attached with bond.

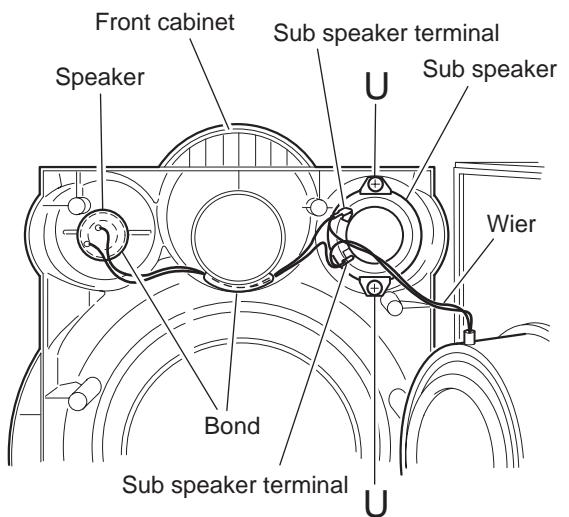


Fig.3

3.2.3 Removing the main speaker

(See Fig.4)

- Prior to performing the following procedure, remove the front cabinet.
- (1) Remove the four screws V attaching the main speaker.
If necessary, disconnect the wire connected to the sub speaker terminal and the speaker.

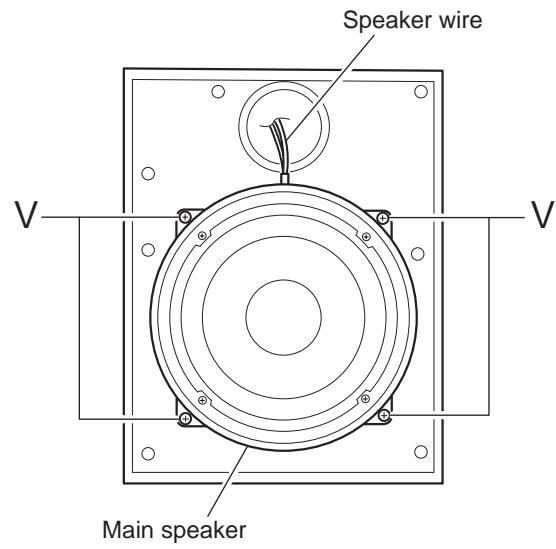


Fig.4

SECTION 4 ADJUSTMENT

4.1 Measurement Instruments Required for Adjustment

- (1) Low frequency oscillator
This oscillator should have a capacity to output 0dBs to 600Ω at an oscillation frequency of 50Hz-20kHz.
- (2) Attenuator impedance : 600Ω
- (3) Electronic voltmeter
- (4) Frequency counter
- (5) Wow & flutter meter
- (6) Test tape
VT712 : For Tape speed and wow flutter (3kHz)
VT703 : For Head angle (10kHz)
- (7) Blank tape
TYPE I : AC-225
TYPE II : AC-514
- (8) Torque gauge
For play and back tension forward; TW2111A
Reverse; TW2121A
Fast Forward and Rewind; TW2231A
- (9) Test disc
CTS-1000(12cm)
GRG-1211(8cm)
- (10) Jitter meter

4.2 Measurement conditions

Power supply voltage	AC 120V (60Hz)
Measurement output terminal	Speaker out TP101 (Measuring for TUNER/ DECK/CD) Dummy load 6Ω

4.3 Radio Input signal

AM modulation frequency	400Hz
Modulation factor	30%
FM modulation frequency	1 kHz
Frequency displacement	22.5kHz

4.4 Frequency Range

AM	530kHz - 1710kHz
FM	87.5MHz - 108MHz

4.5 Standard measurement position of volume and switch

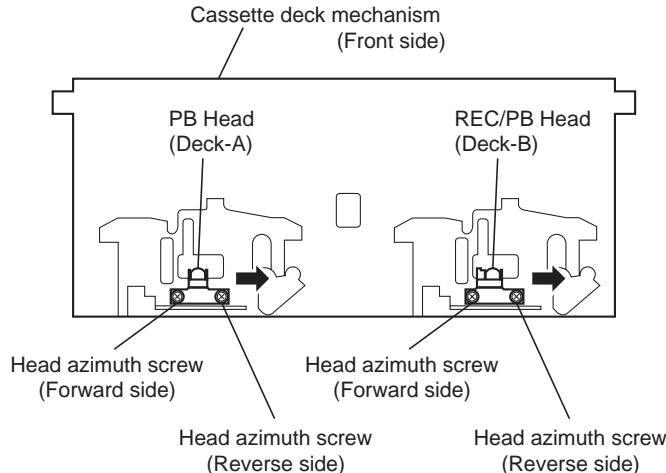
Power	Standby (Light STANDBY Indicator)
Sound Turbo,A,BASS EX	OFF
Sound mode	OFF
Main VOL.	0 Minimum

Travers mecha set position Disc 1

Precautions for measurement

- (1) Apply 30pF and 33kΩ to the IF sweeper output side and 0.082μ F and 100kΩ in series to the sweeper input side.
- (2) The IF sweeper output level should be made as low as possible within the adjustable range.
- (3) Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
- (4) Since a ceramic oscillator is used, there is no need to perform any MIX adjustment.
- (5) Since a fixed coil is used, there is no need to adjust the FM tracking.
- (6) The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly carefully.
- (7) In the case of BTL connection amp., the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an BTL system.
- (8) For connecting a dummy resistor when measuring the output, use the wire with a greater code size.
- (9) Whenever any mixed tape is used, use the band pass filter (DV-12).

4.6 Arrangement of adjusting positions



4.6.1 Tape recorder section

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Head azimuth alignments	Test tape : VT703 (10kHz) Measurement output terminal : Left and Right speaker output (6-ohm loaded) or H/P output (32-ohm loaded)	1. Playback the test tape VT703 (10KHz) or equivalent. 2. Adjust the head azimuth screw to obtain maximum output and both output of L / R is in 3dB. 3.Put on the screw lock paint after alignments.	Maximum output	Adjust the head azimuth screw only when the head has been changed.
Bias frequency alignment	Test tape : TYPE I AC-514 Measurement output terminal : E. head terminal (CN308 8-Pin)	1. Insert the recording tape in deck-B. 2. Starting the recording. 3. Adjust the oscillation frequency to 80kHz+/-3kHz by core of oscillation coil of L301.	80kHz+/-3kHz	Use the High-Impedance Probe or Frequency counter input.

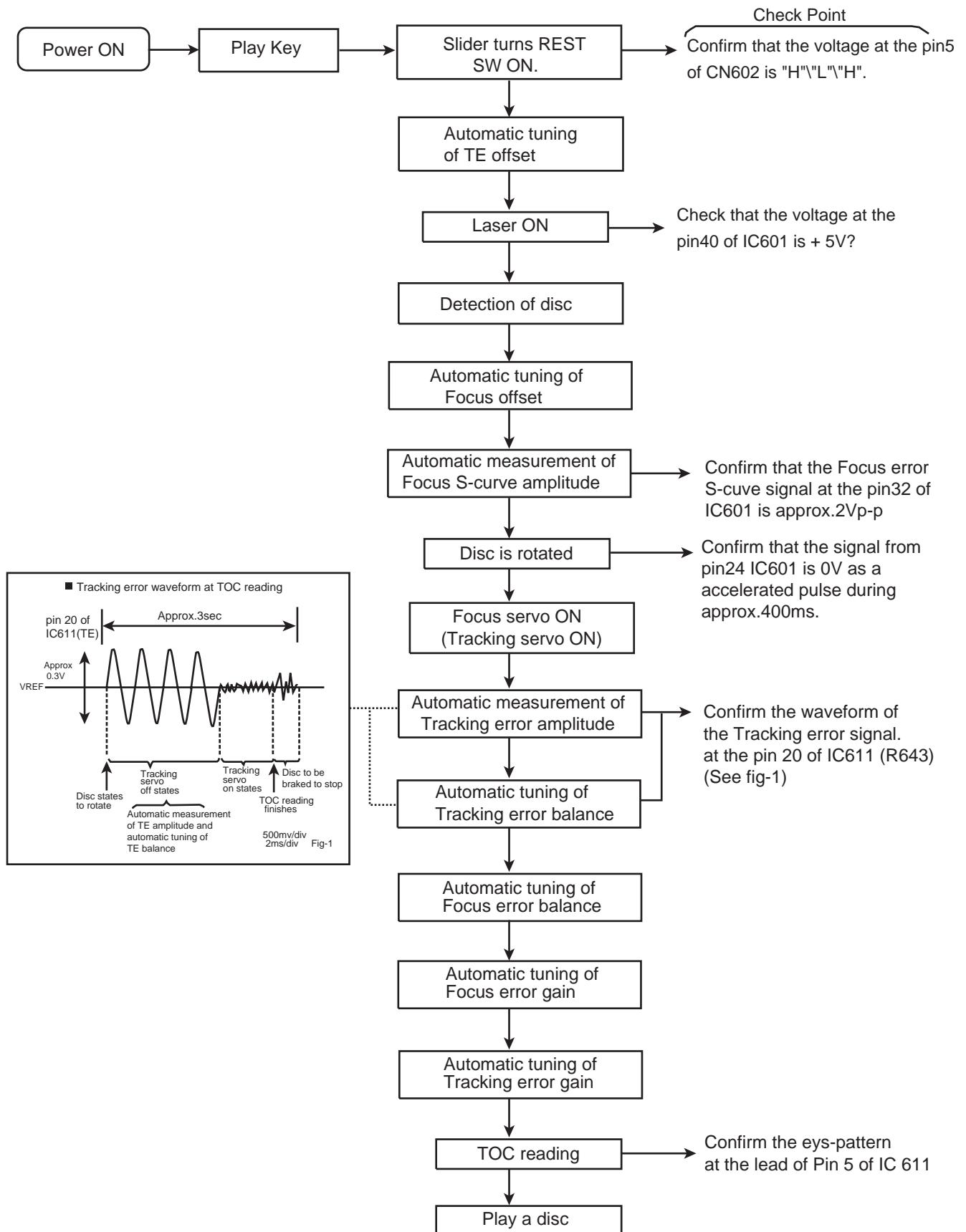
4.6.2 Tuner section

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
AM Tracking alignments	Input signal : 530kHz 600kHz Adjustment point : Antenna coil (L2)	1. Set the Signal Generator signal to 530KHz the feed to Loop Antenna. 2. Receiving the signal and the adjust the OSC coil (L2) obtain the V.T is 1.40V +/-0.05V. 3. Change the receiving frequency to 600KHz (603KHz). 4. Adjust the Antenna coil (L2) obtain maximum sensitivity. (Adjust the SSG output to out of AGC range.)	V.T :1.40V+/-0.05V Maximum sensitivity	Adjust the OSC coil only when the AM coil block has been changed.
AM IFT alignments	Input signal : 530kHz Adjustment point : IFT (T1)	1. Set the receiving frequency to 530KHz. 2. Feed the 450KHz signal to AM antenna input. 3.Adjust the IFT Block T1 obtain to maximum output. (Adjust the SSG output to out of AGC range.)	Maximum output	Adjust the IFT only when the IFT block has been changed.

Note: The adjustment of CD section is not required.

SECTION 5 TROUBLESHOOTING

5.1 Flow of functional operation until TOC read



5.2 Maintenance of laser pickup

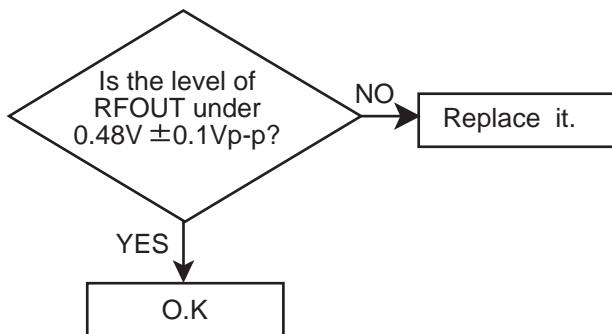
(1) Cleaning the pick up lens

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 below.



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

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

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

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

5.3 Replacement of laser pickup

Turn off the power switch and, disconnect the power cord from the ac outlet.

Replace the pickup with a normal one.(Refer to "Pickup Removal" on the previous page)

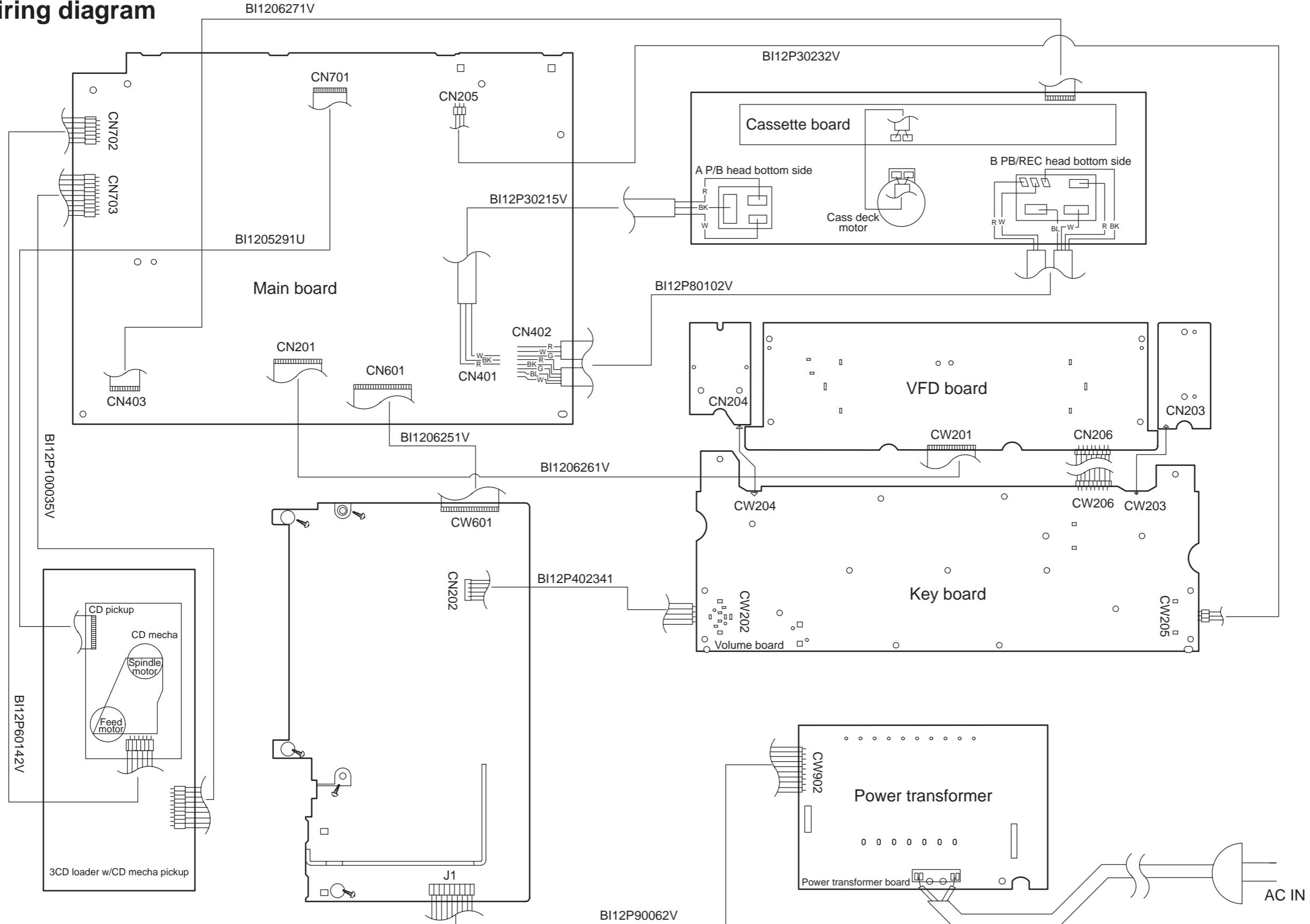
Plug the power cord in, and turn the power on. At this time, check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.

Play a disc.

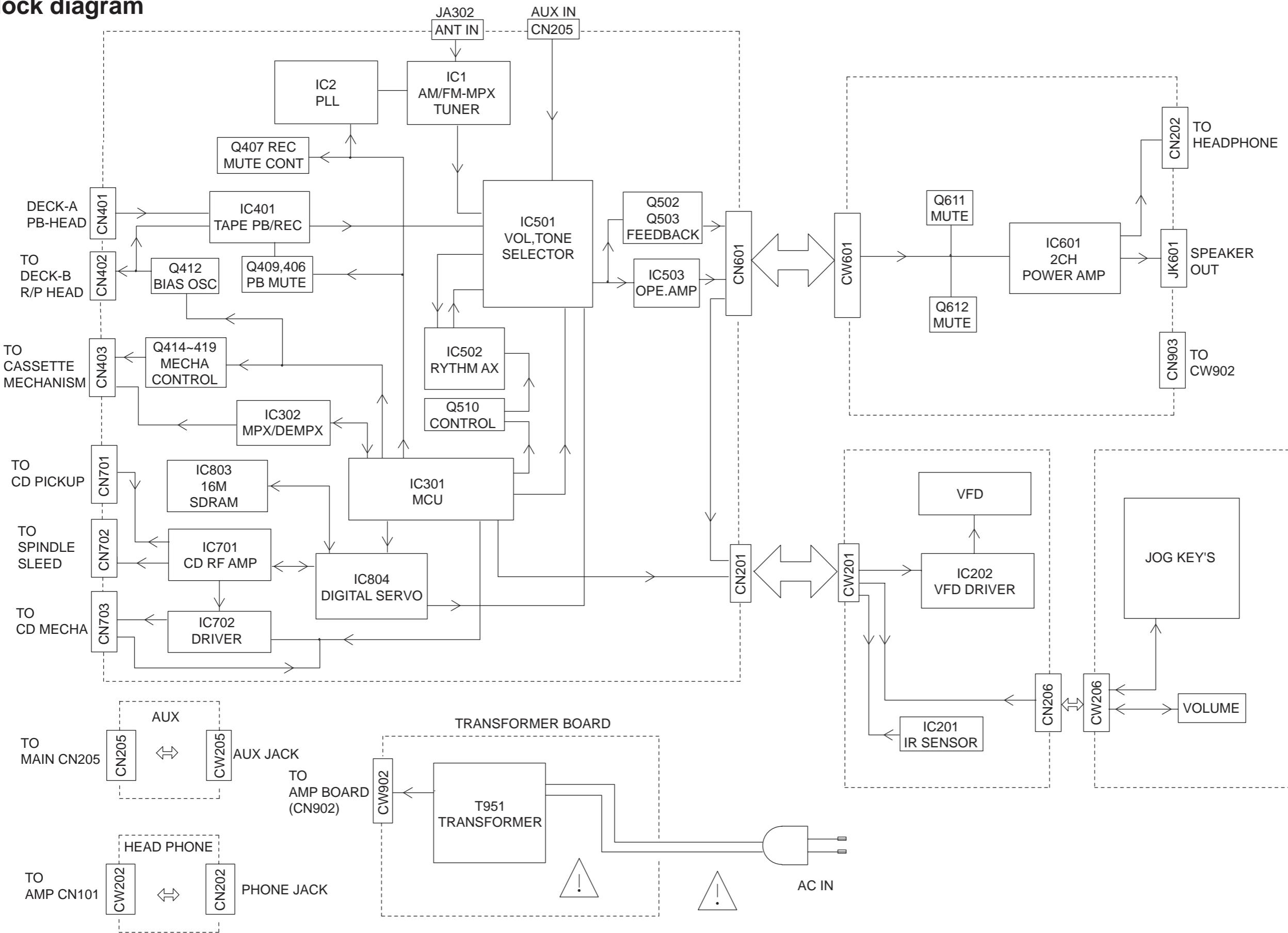
Check the eye-pattern at pin 5 of IC611

Finish.

Wiring diagram

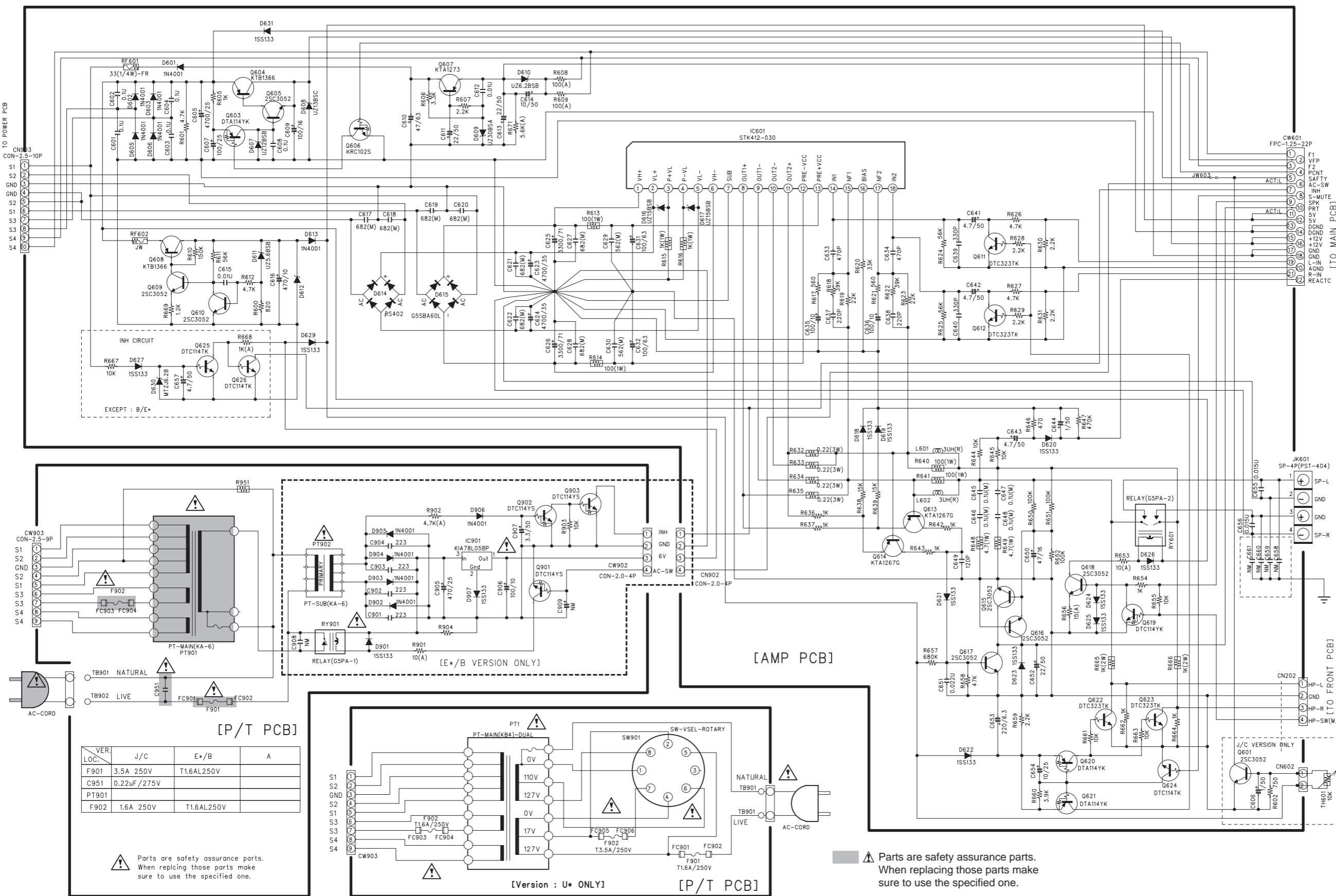


Block diagram

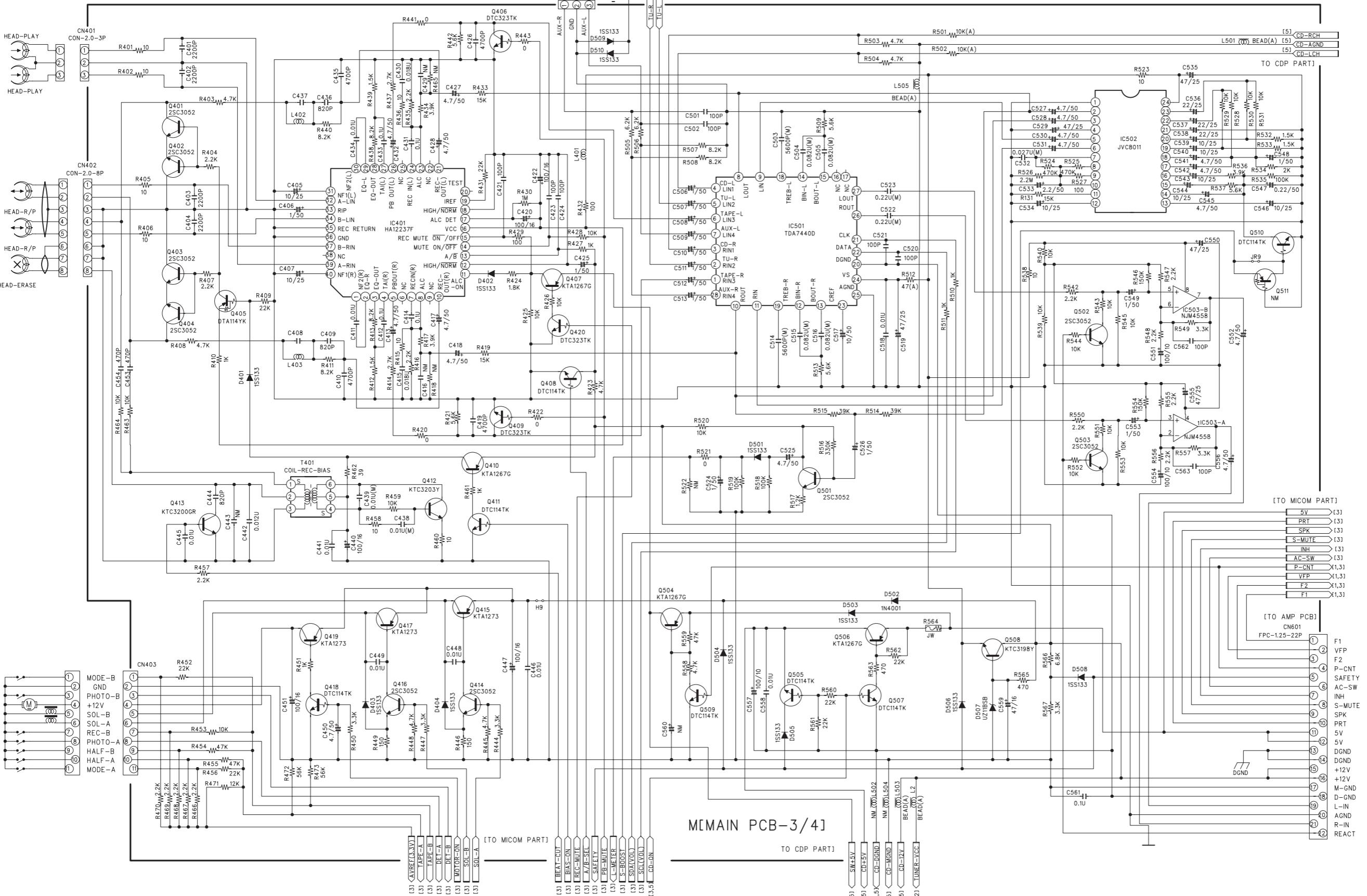


Standard schematic diagrams

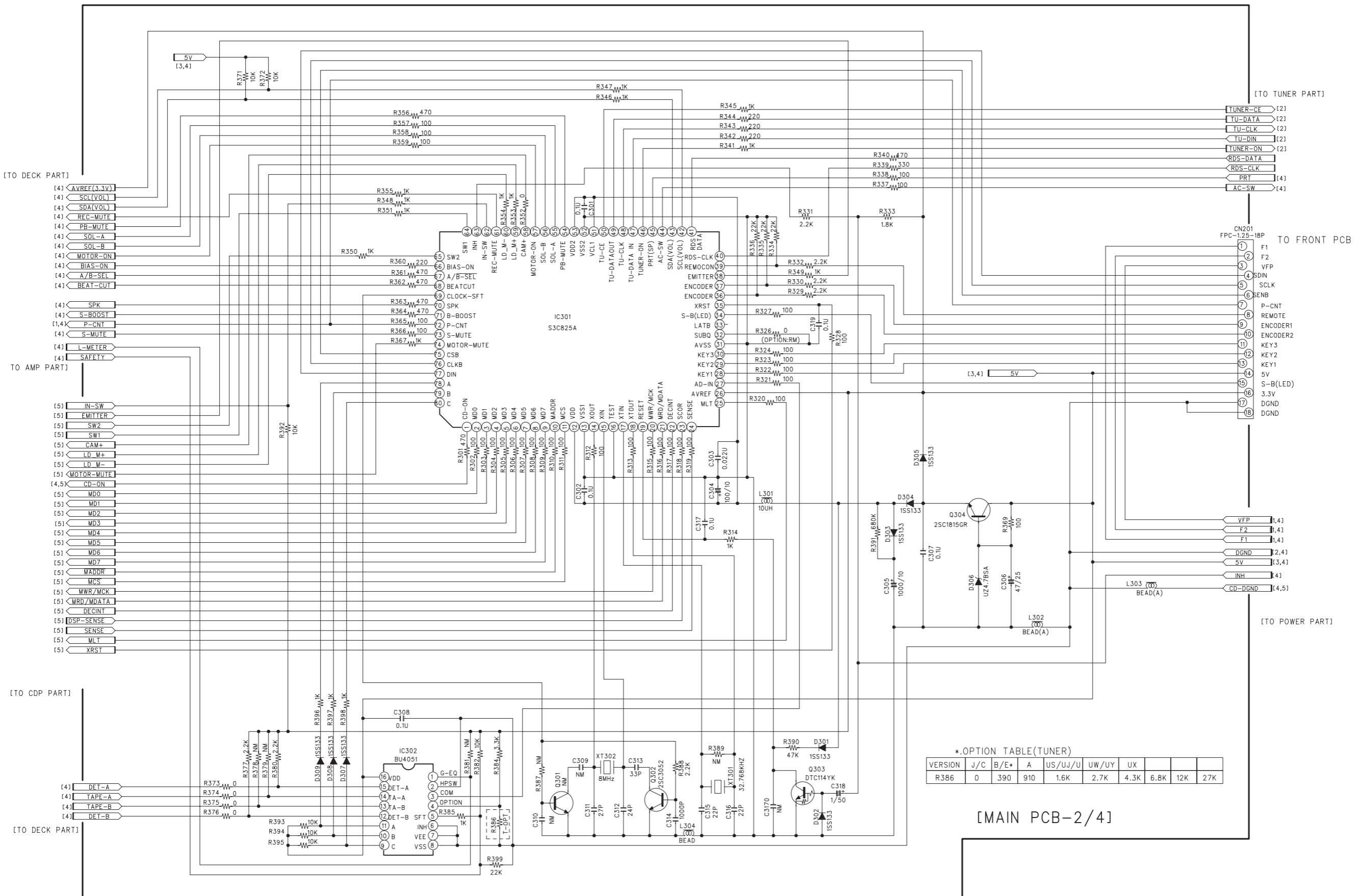
■ CDP/AMP POWER section



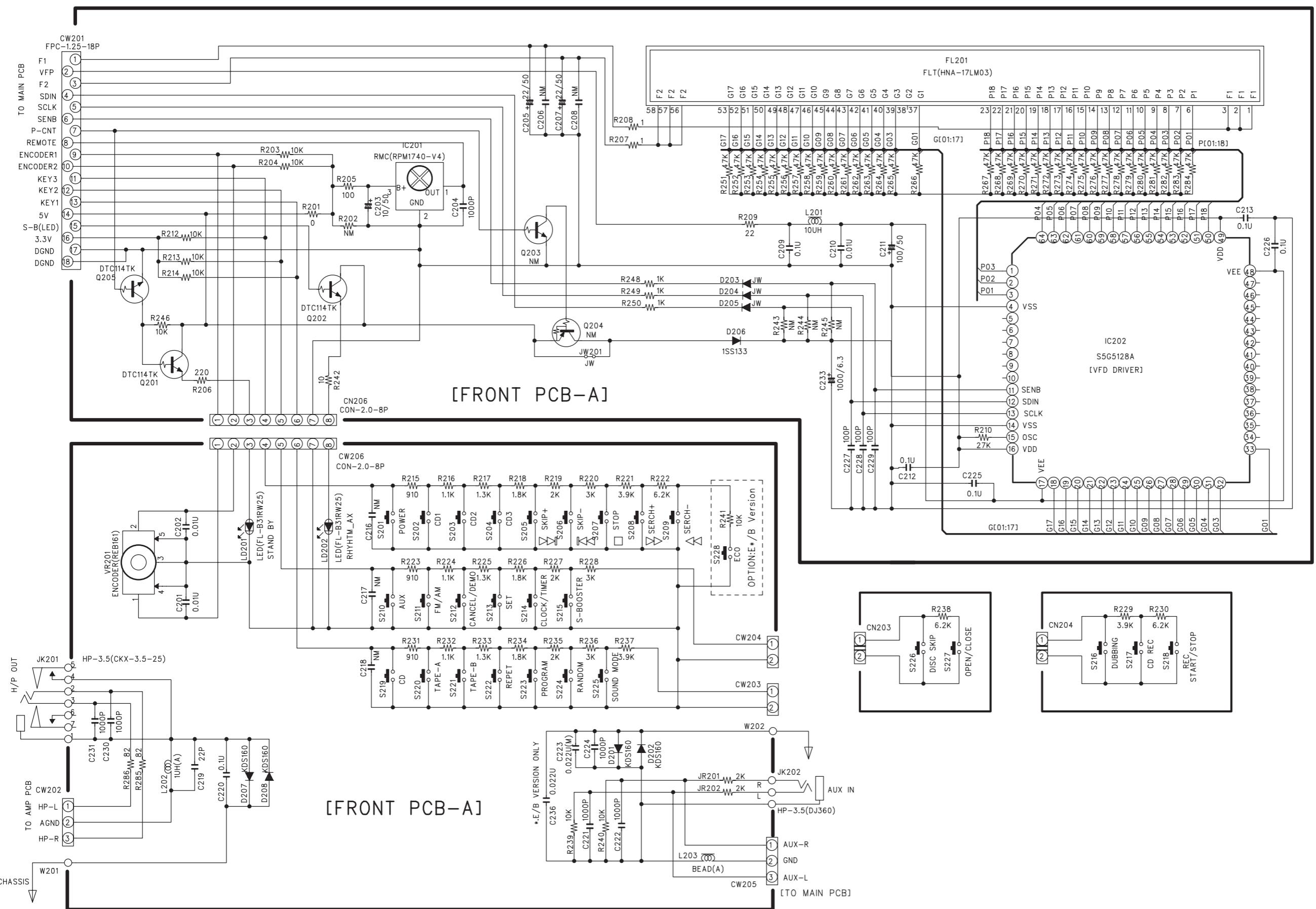
■ Function section



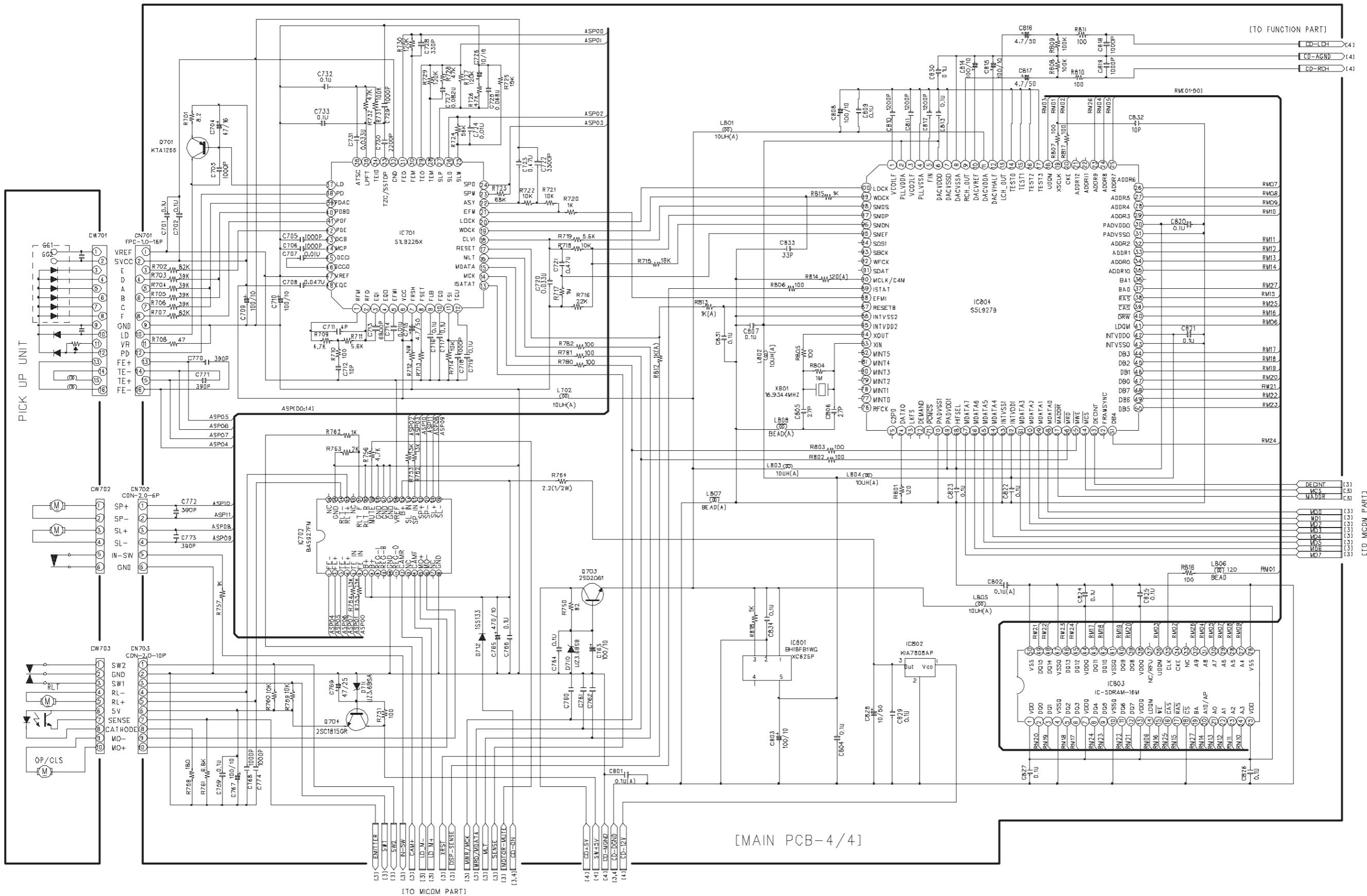
■ CPU section



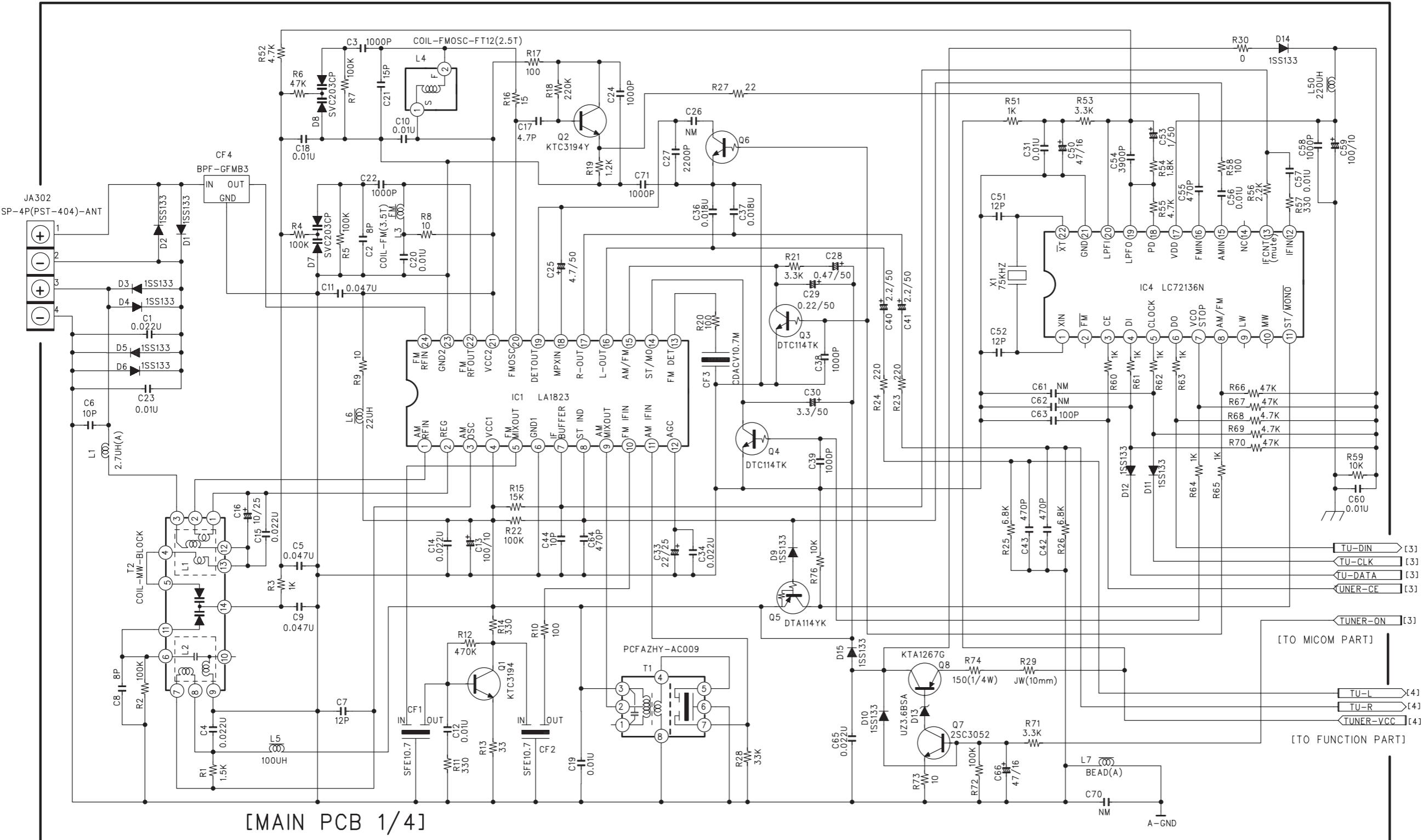
■ FL / Key control section



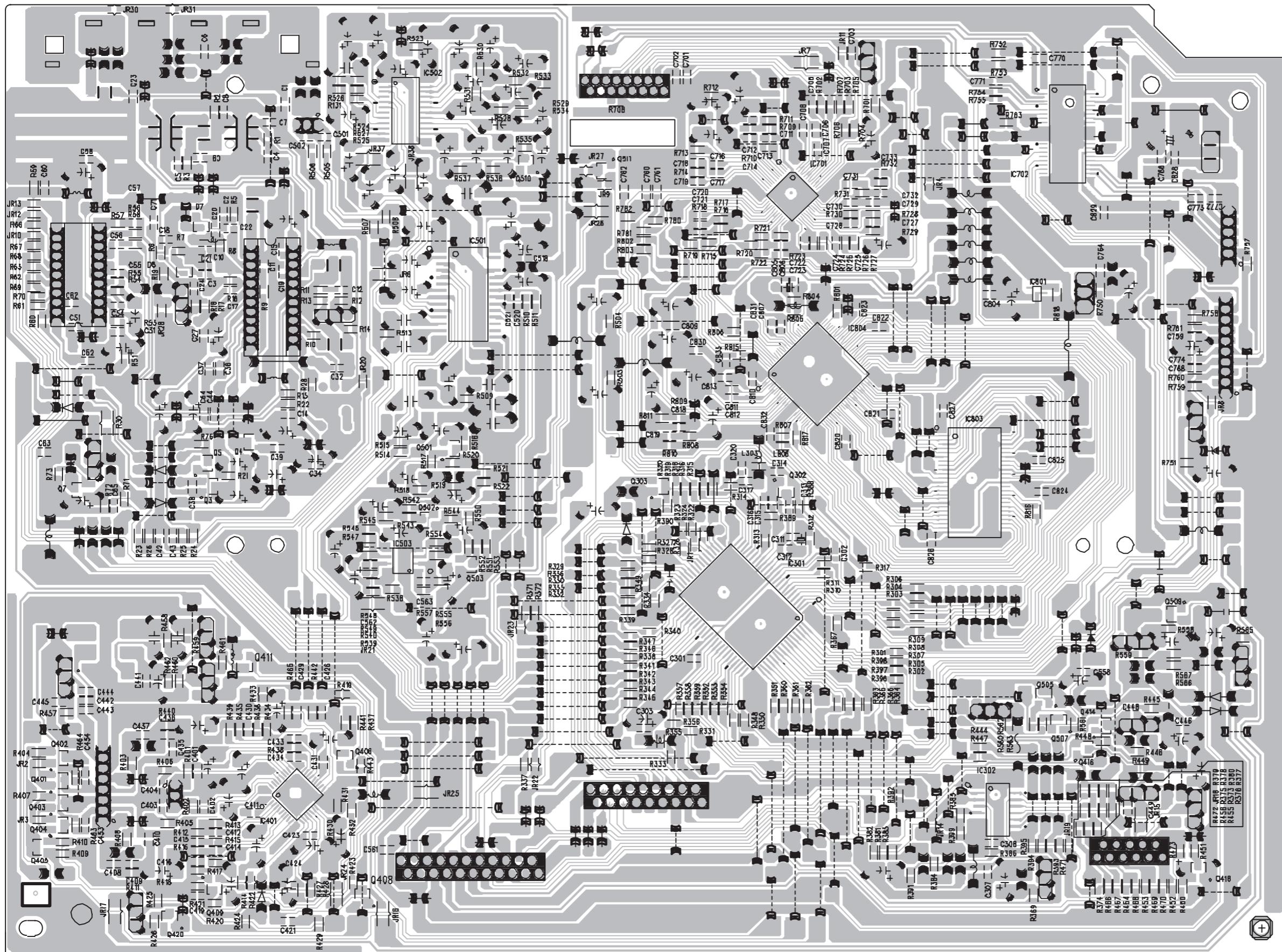
■ CD MP3 section



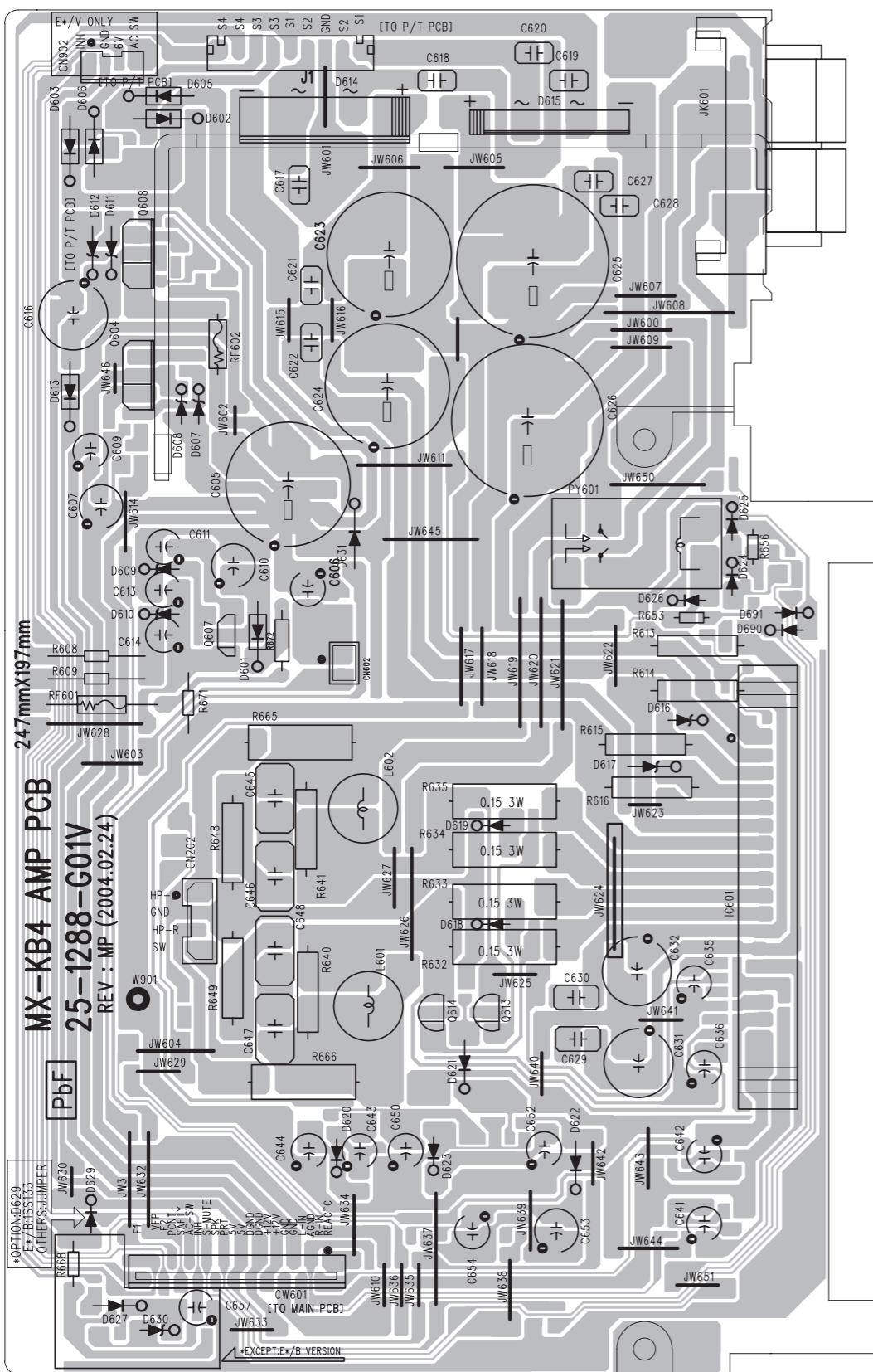
■ Tuner section



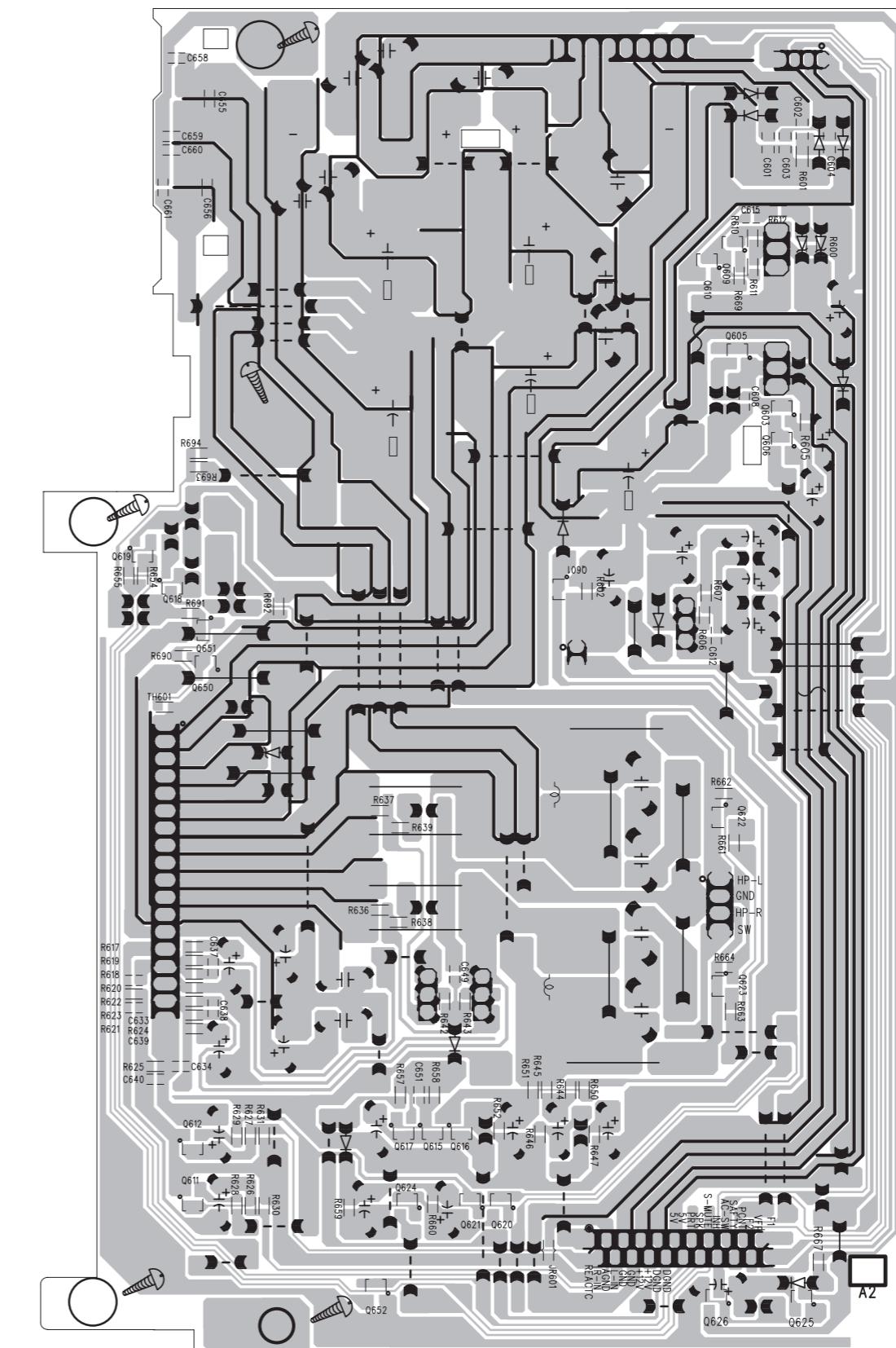
■ Main board (reverse side)



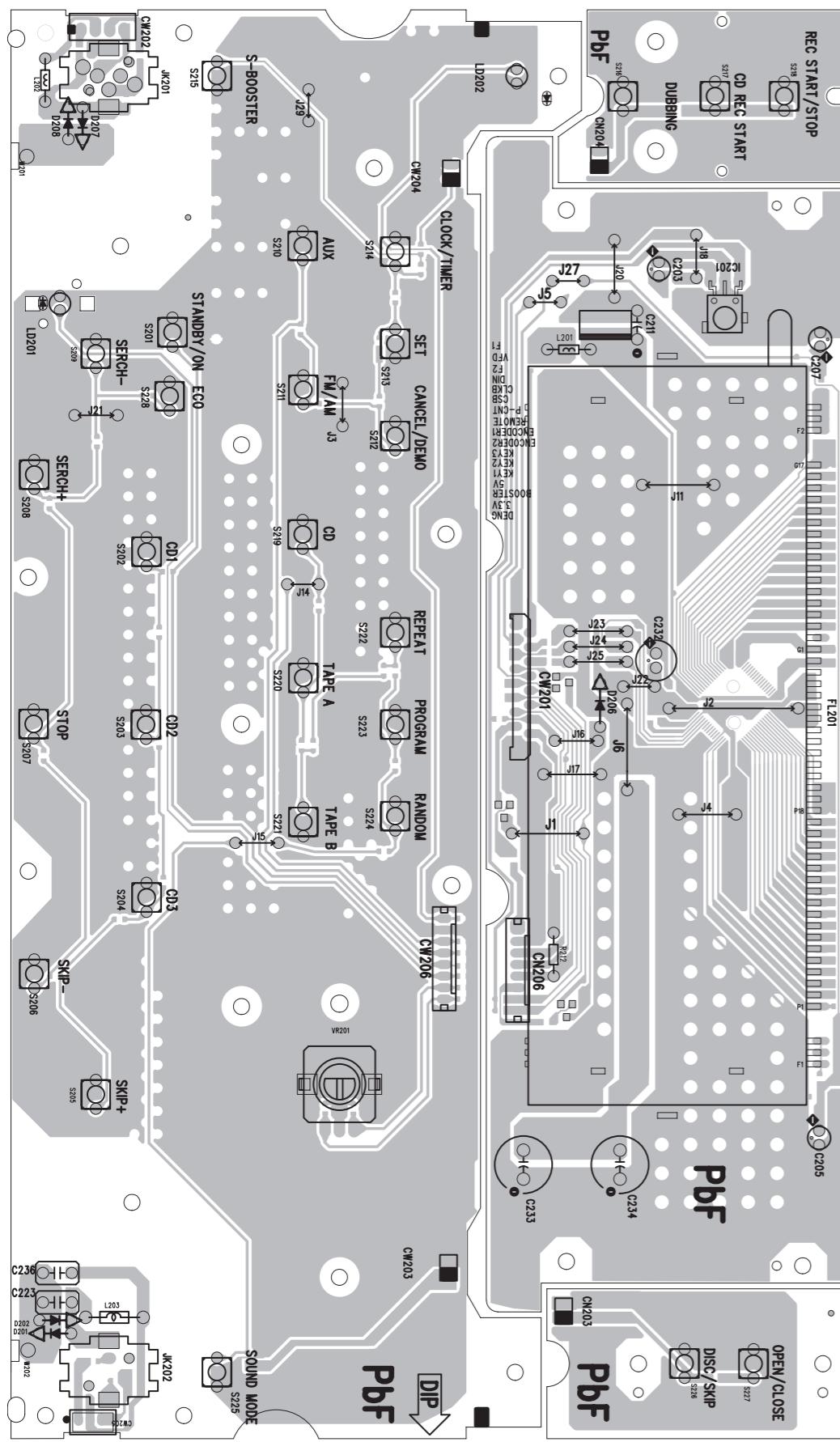
■ Amp board (forward side)



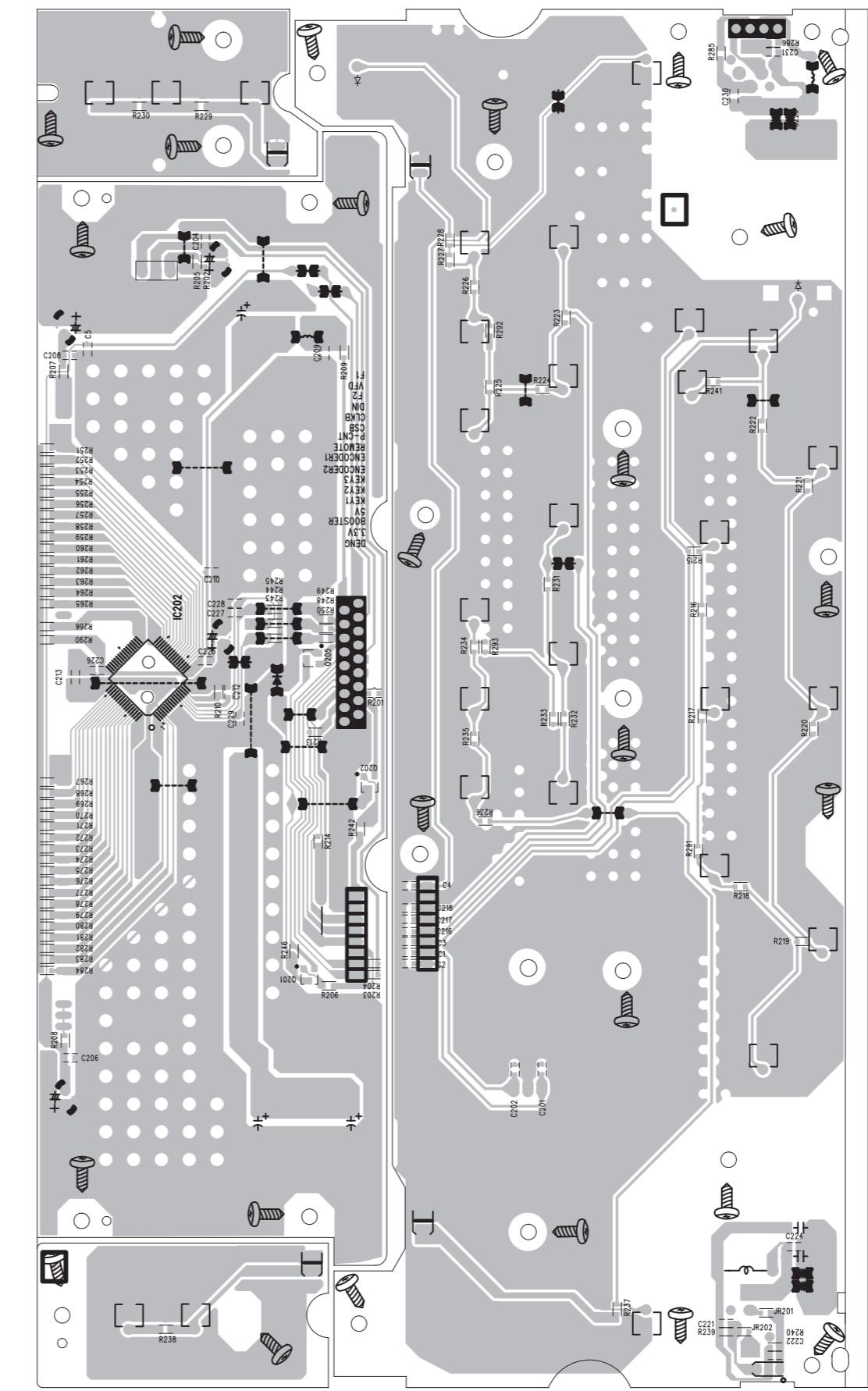
(reverse side)



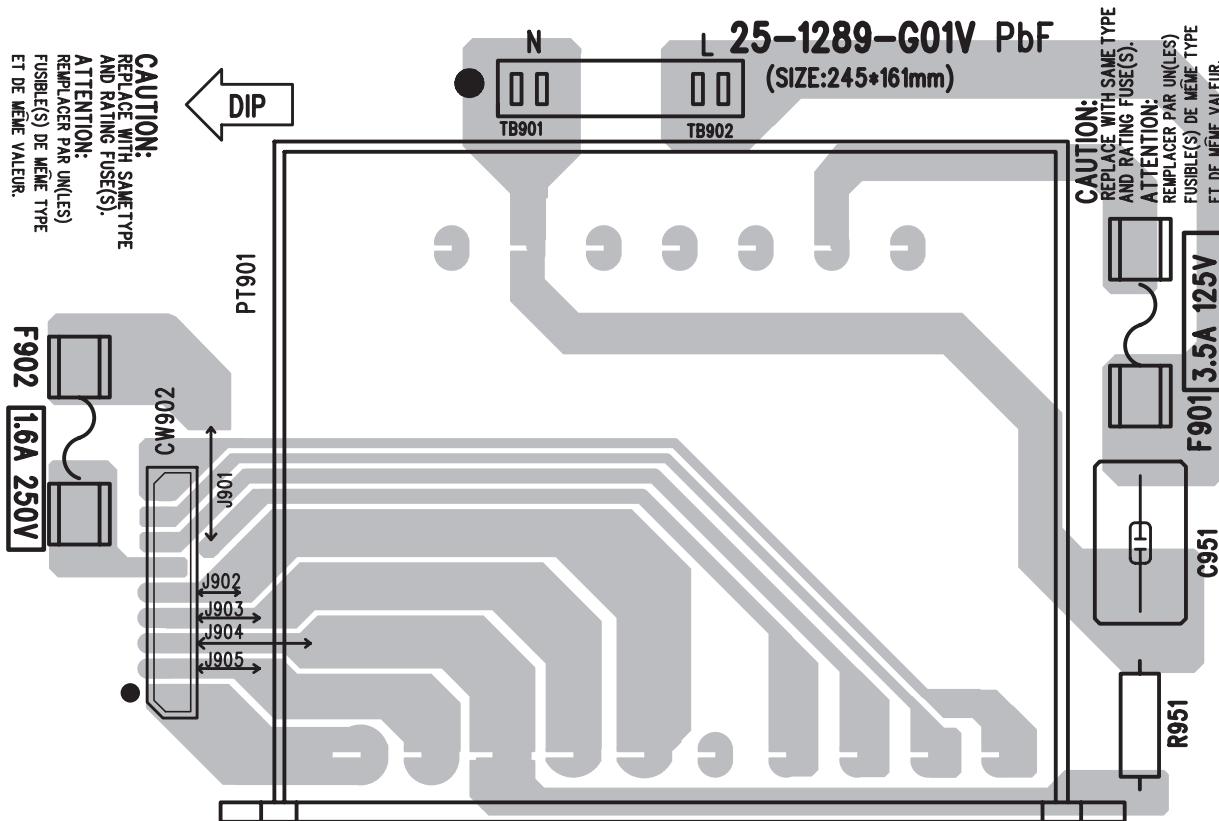
■ Front board (forward seide)



(reverse seide)



■ Trans board



PARTS LIST

[MX-KC4]

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

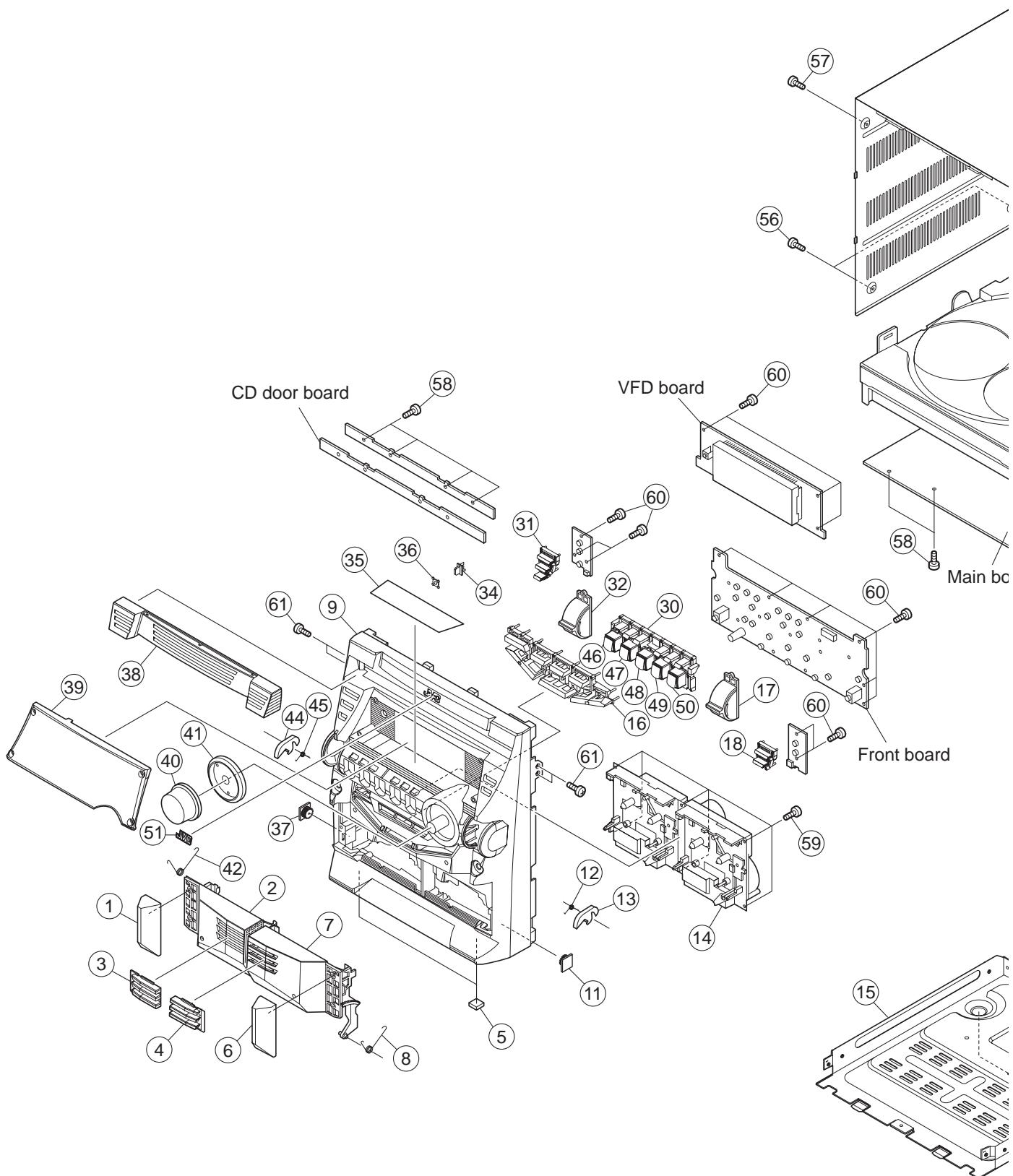
Area suffix	
J	----- U.S.A.
C	----- Canada

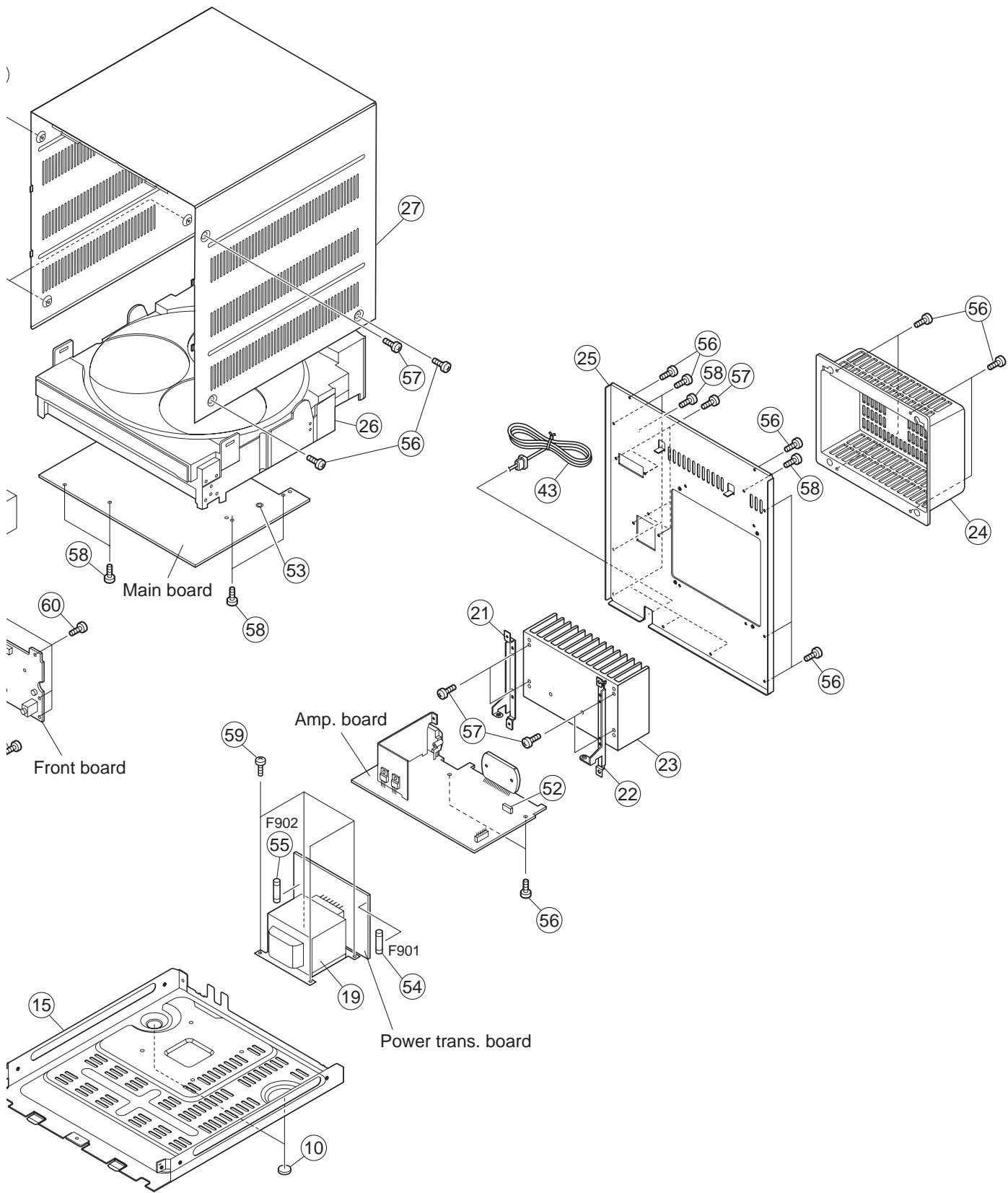
- Contents -

Exploded view of general assembly and parts list (Block No.M1)	3- 2
CD changer mechanism assembly and parts list (Block No.MA)	3- 5
Cassette mechanism assembly and parts list (Block No.MP)	3- 7
Electrical parts list (Block No.01~05)	3- 9
Packing materials and accessories parts list (Block No.M3)	3-18

Exploded view of general assembly and parts list

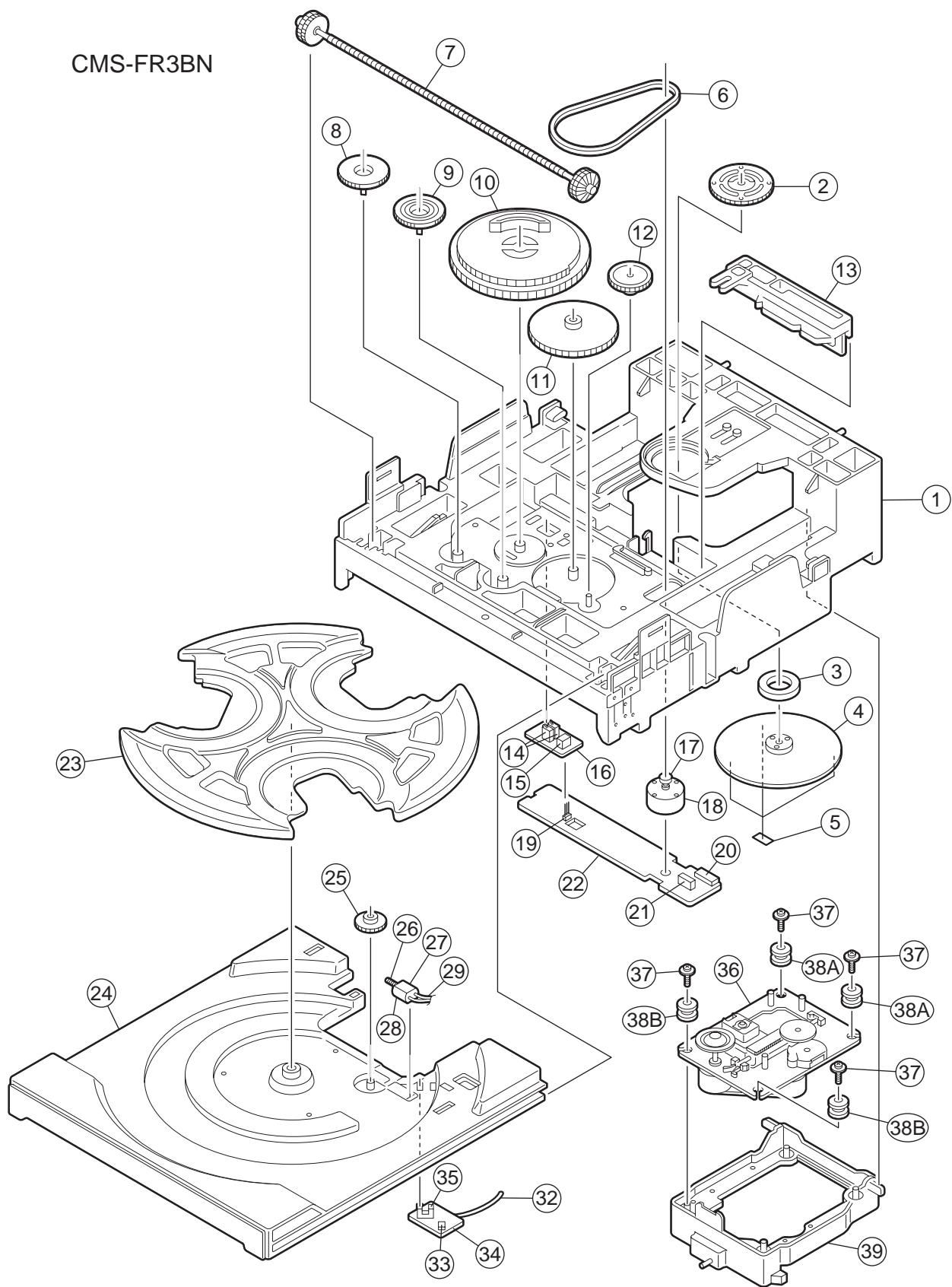
Block No. M 1 M M





CD changer mechanism assembly and parts list

Block No. M A M M



CD changer mechanism

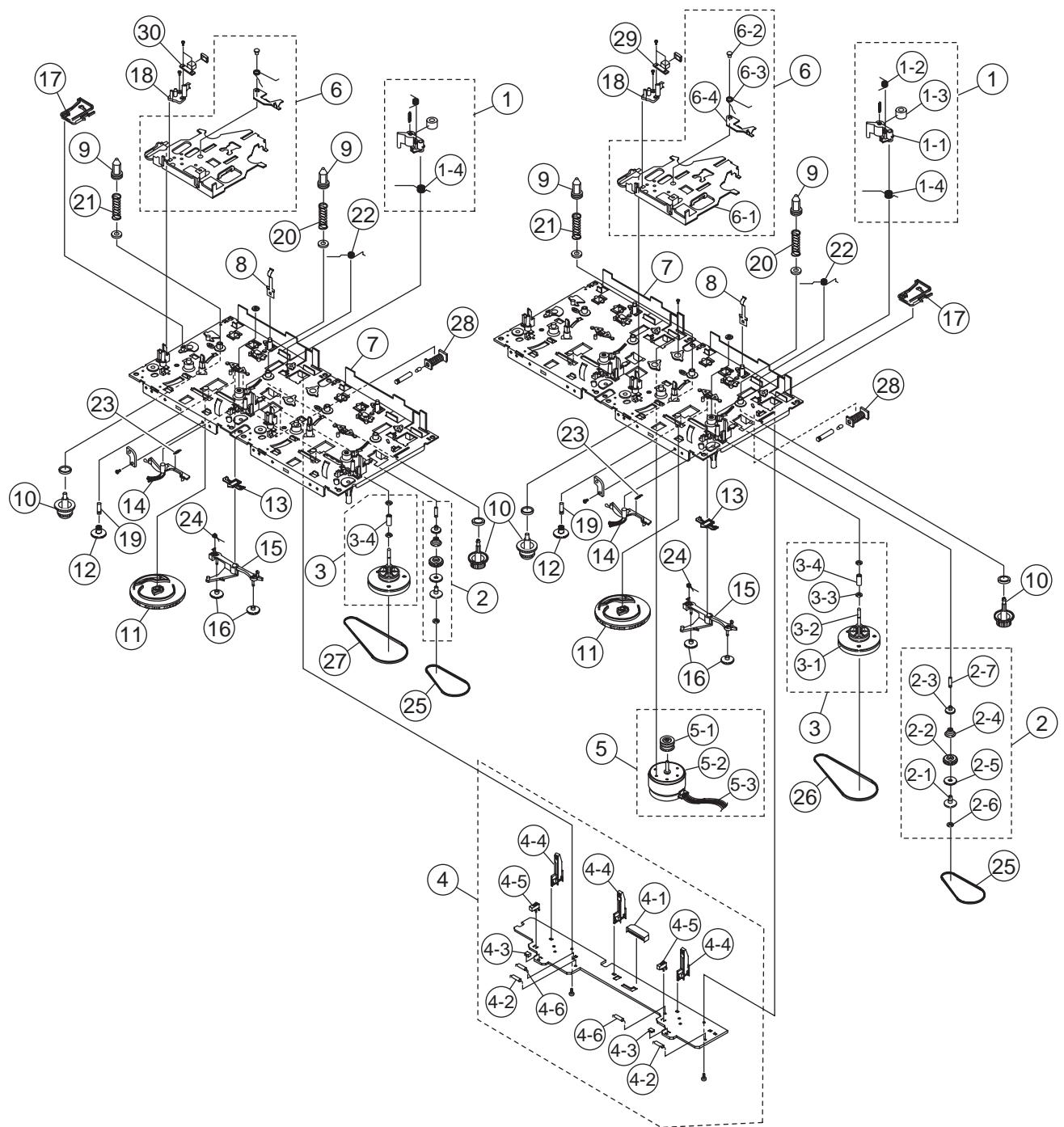
Block No. [M][A][M][M]

△	Symbol No.	Part No.	Part Name	Description	Local
1		BIAJ7200601J	BASE-MAIN	1X1	
2		BIAJ6100601P	BRKT-CHUCK		
3		BI3302000158	MAGNET-FERRITE		
4		BIAJ7200601L	TABLE-CHUCK	1X4	
5		BIAJ6300601A	SHEET-CHUCK	(x3)	
6		BIAJ7300601B	BELT-LOAD		
7		BIAJ6600601N	GEAR-SYNCRO	1X2	
8		BIAJ6600601L	GEAR-CONVERT	1X4	
9		BIAJ6600601M	GEAR-TRAY	1X4	
10		BIAJ6600601R	GEAR-CAM	1X2	
11		BIAJ6600601K	GEAR-LOAD	1X4	
12		BIAJ6600601J	GEAR-PULLEY	1X4	
13		BIAJ7200601N	SLIDER-CAM	1X4	
14		BI3405000101	SWITCH-MICRO	(x2)	
15		BI3711003379	CONNECTOR-HEADE		
16		BIAJ4100601K	PCB-SW		
17		BIAJ6100601K	PULLEY-MOTOR	1X4	
18		BIAJ3100601F	MOTOR-DC		
19		BI3710001248	CONNECTOR-SOCE		
20		BI3711003692	CONNECTOR-HEADE		
21		BI3708001163	CONNECTOR-FPC		
22		BIAJ4100601L	PCB-MECHA		
23		BIAJ7200601P	TRAY-ROULETTE	1X2	
24		BIAJ7200601Q	TRAY-DISC	1X2	
25		BIAJ6600601Q	GEAR-ROULETTE	1X4	
26		BIAJ6600601P	GEAR-WORM	1X2	
27		BIAJ3100601K	MOTOR-LOADING		
28		BIAJ6300601B	SHEET-MOTOR		
29		BIAJ3900601A	WIRE-ROULETTE		
32		BIAJ3900601B	WIRE-TRAY		
33		BI3711000003	CONNECTOR-HEADE		
34		BIAJ4100601J	PCB-SENSOR		
35		BIAJ3200601A	SENSOR-ROULETTE		
36		BIAJ9050605F	CMS-B31NG6U		
37		BIAJ6000601F	SCREW	(x4)	
38A		BIAJ7300601F	RUBBER-B31Y	(x2)	
38B		BIAJ7300601D	RUBBER-B31	(x2)	
39		BIAJ7200602F	LEVER-LIFTER	1X2	

Cassette mechanism assembly and parts list

Block No. M P M M

ADR268DSW

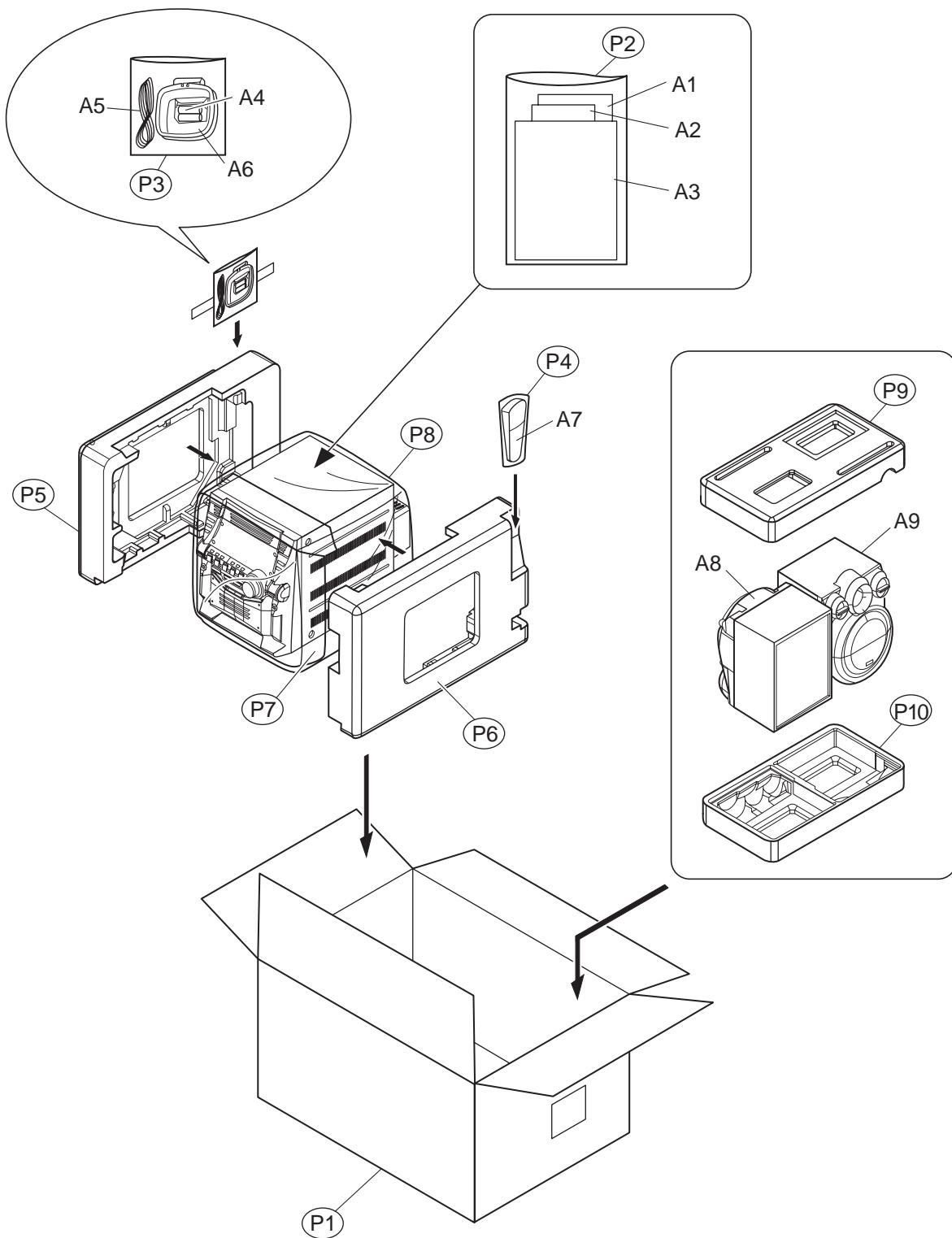


<MEMO>

Packing materials and accessories parts list

Block No. M 3 M M

No additional / supplemental order of WARRANTY CARDS are available.



Packing and Accessories

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

△	Symbol No.	Part No.	Part Name	Description	Local
A 1		BI440001511001W	INST BOOK	ENG FRE LVT1343-002B	C
A 1		BI440001504001W	INST BOOK	ENG LVT1343-001B	J
A 2	-----		WARRANTY CARD	BT520062(1002)	C
A 2	-----		WARRANTY CARD	BT510341(0301)	J
A 3		BI4032603U	SAFTEY CARD		
A 4	-----		BATTERY	(x2)	
A 5		BIAN01012V	ANT WIRE		
A 6		BIAN01031V	AM LOOP ANT		
A 7		BI643MXKB405SV	REMOTE CONTROL		
A 8		MXKC4-SPBOX-R	SPEAKER BOX R	R	
A 9		MXKC4-SPBOX-L	SPEAKER BOX L	L	
P 1		BI430001814001W	CARTON		C
P 1		BI430001808001W	CARTON		J
P 2		BI4710312U	POLY BAG	INST BOOK	
P 3		BI4710572U	POLY BAG	LOOP ANT	
P 4		BI4005355	POLY BAG		
P 5		BI450012048000W	CUSHION L	UNIT	
P 6		BI450012049000W	CUSHION R	UNIT	
P 7		BI4511452W	SH FOAMED-MAT		
P 8		BI4710322U	POLY BAG	UNIT	
P 9		BI450012014000W	CUSHION TOP	SPEAKER BOX	
P 10		BI450012015000W	CUSHION BOTTOM	SPEAKER BOX	



JVC

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