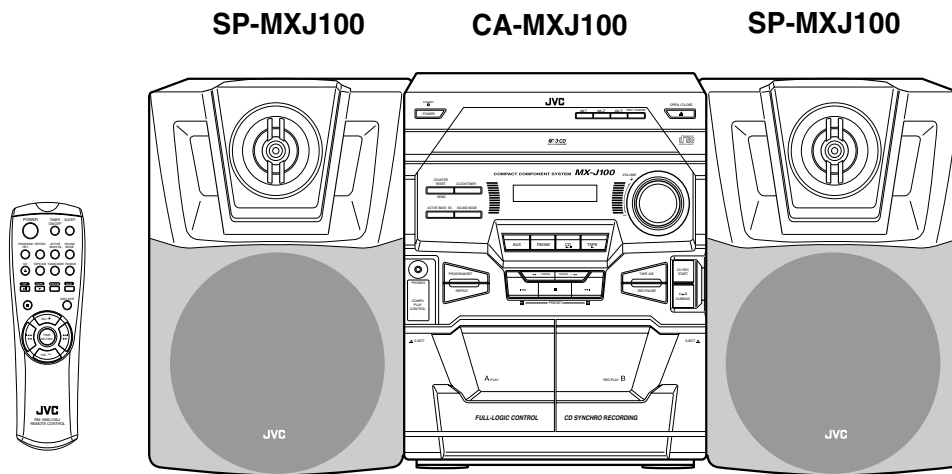


JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

MX-J100



COMPACT
disc
DIGITAL AUDIO

Area Suffix

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

Contents

Safety precautions	1-2	Flow of functional operation	
Important for laser products	1-3	until TOC read	1-23
Preventing static electricity	1-4	Maintenance of laser pickup	1-24
Disassembly method	1-5	Replacement of laser pickup	1-24
Adjustment method	1-19	Description of major ICs	1-25

Safety precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (\triangle) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

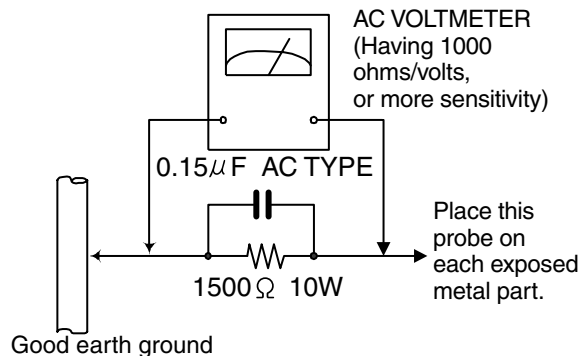
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA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

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

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



Warning

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

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

Important for laser products

1. CLASS 1 LASER PRODUCT

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

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

4. CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5. CAUTION : If safety switches malfunction, the laser is able to function.

6. CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



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

Preventing static electricity

1. Grounding to prevent damage by 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.

2. About the earth processing for the destruction prevention by static electricity

In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.

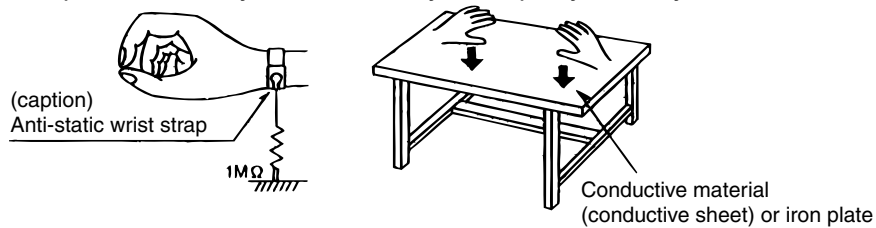
Be careful to use proper grounding in the area where repairs are being performed.

2-1 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.

2-2 Ground yourself

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



3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4. 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.

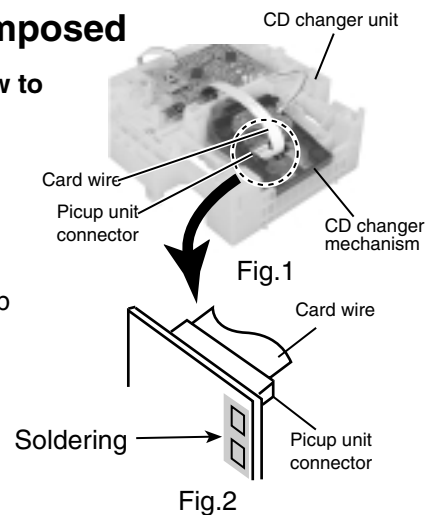
3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when CD mechanism assembly is decomposed

***Please refer to "Disassembly method" in the text for pick-up and how to detach the CD mechanism assembly.**

1. Remove the CD changer unit.
2. Remove the CD changer mechanism.
3. Solder is put up before the card wire is removed from the pickup unit connector on the CD mechanism assembly.
(When the card wire is removed without putting up solder, the CD pick-up assembly might destroy.)
4. Please remove solder after connecting the card wire with the pickup unit connector when you install picking up in the substrate.



Disassembly method

<Main body>

■ Removing the top cover and the side covers (See Fig.1 to 3)

1. Remove the three screws A on the back of the body and the two screws B on both sides of the body.
2. Remove the top cover upward from behind.
3. Remove the two screws C attaching the side covers on the back of the body and the six screws D on both sides.
4. Slide the right and left covers backward and unhook the two hooks a in the lower part of the side covers as shown in Fig.2-2.

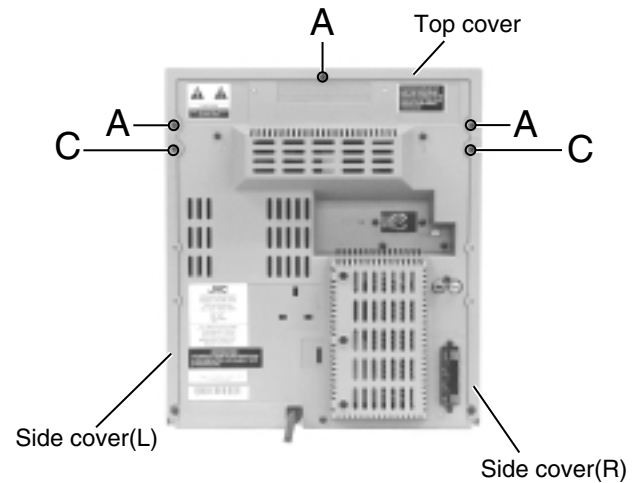


Fig.1

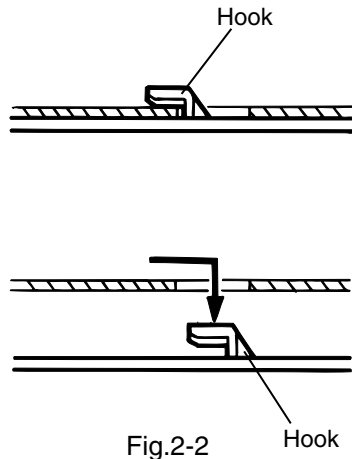


Fig.2-2

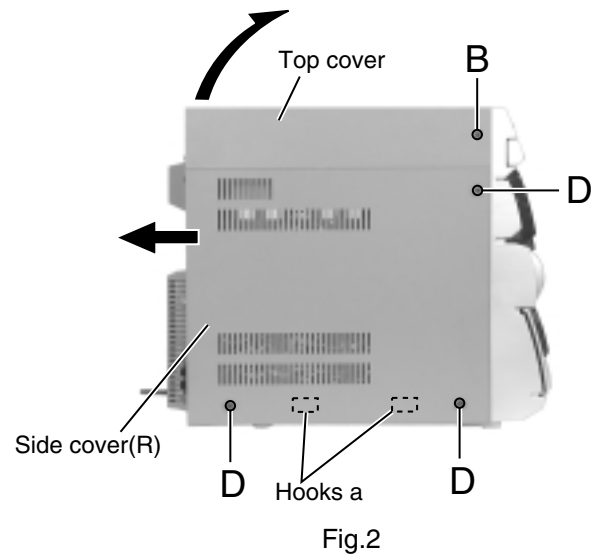


Fig.2

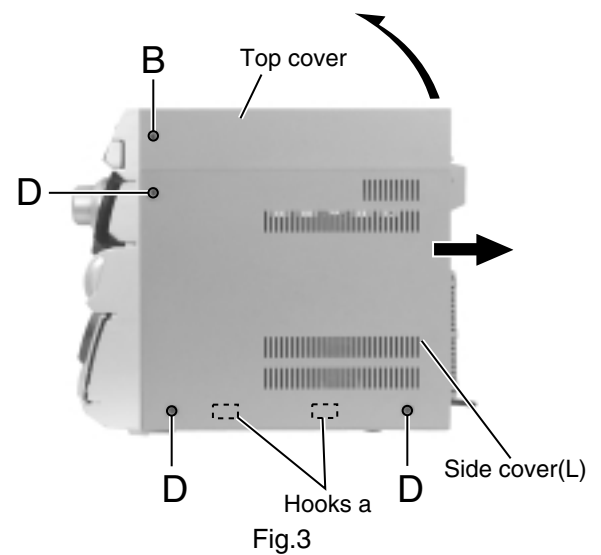


Fig.3

■Removing the CD Tray fitting
(See Fig. 4 to 6)

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

ATTENTION: Be sure to remove the CD tray fitting before removing the CD changer unit.

1. Press the POWER button. Press the OPEN/CLOSE button to eject the CD tray.
2. Move the CD tray fitting upward and release the joint b.
3. Press the OPEN/CLOSE button to insert the tray.

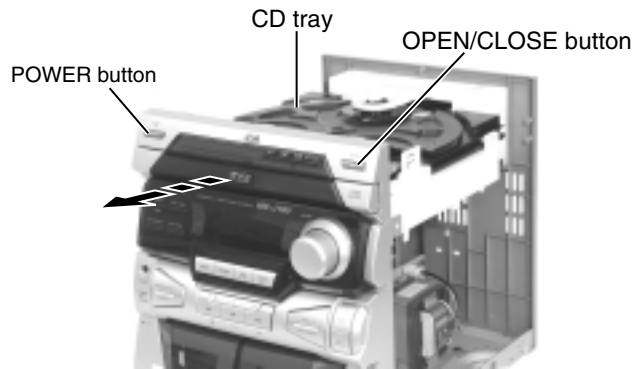


Fig.4

■Removing the CD Tray fitting
(See Fig. 5 to 7)

- How to eject the CD tray without turning on power -

1. Turn the black loading pulley gear marked c from the back of the CD changer unit as shown in Fig.7 and draw the CD tray toward the front.
2. Move the CD tray fitting upward and release the joint b.
3. Push and insert the CD tray manually.

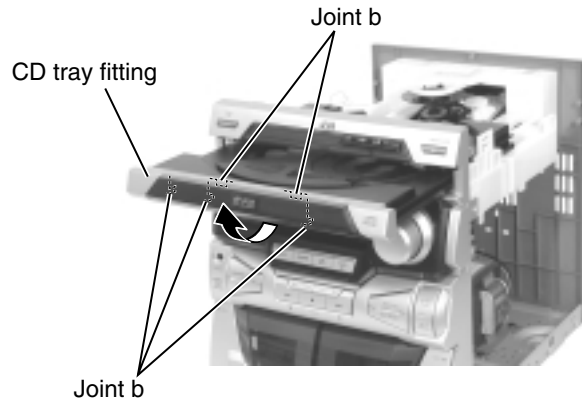


Fig.5

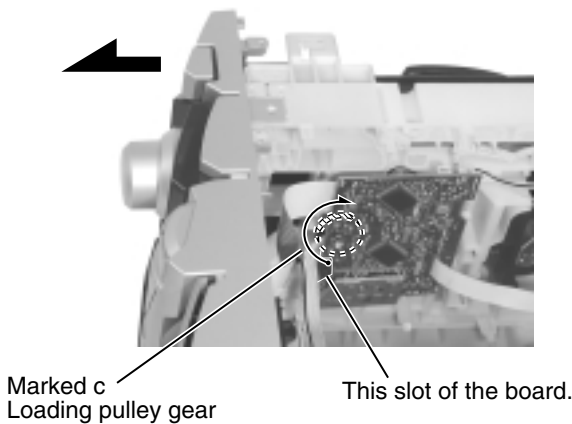


Fig.7

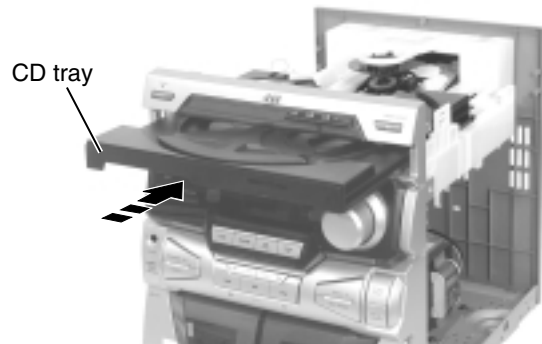


Fig.6

■ Removing the CD changer unit (See Fig.8 to 10)

- Prior to performing the following procedure, remove the top cover, the side covers and the CD Tray fitting.
1. Disconnect the card wire from connector SCW1 of the CD servo board on the back of the CD changer unit.
 2. Disconnect the harness from connector FW2 on the inner side of the mother(main) board in the body.
 3. Remove the two screws E attaching the CD changer unit on the back of the body.
 4. Draw the CD changer unit upward from behind while pulling the rear panel outward.

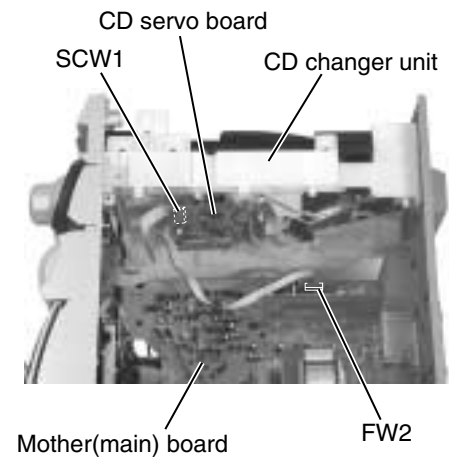


Fig.8

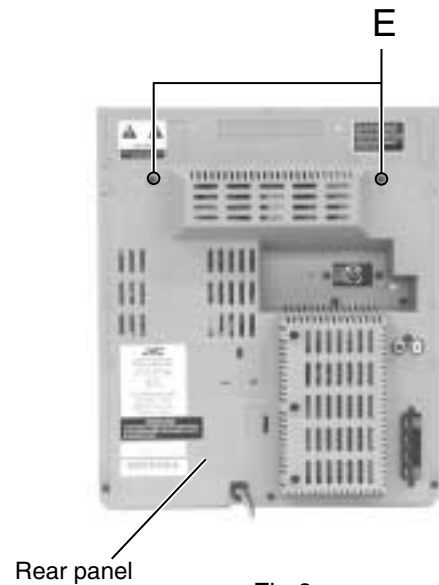


Fig.9

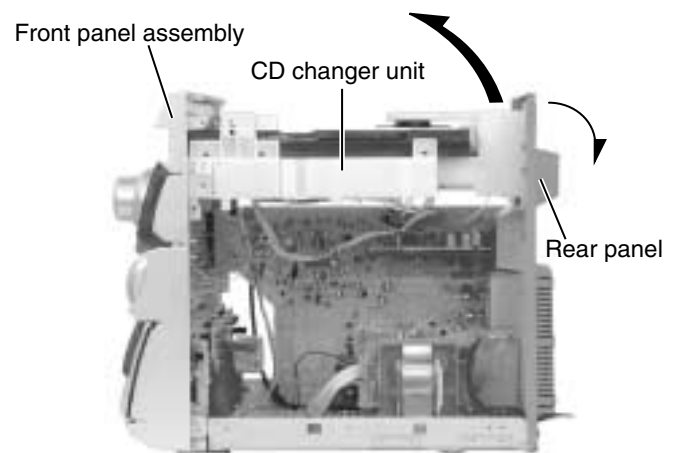
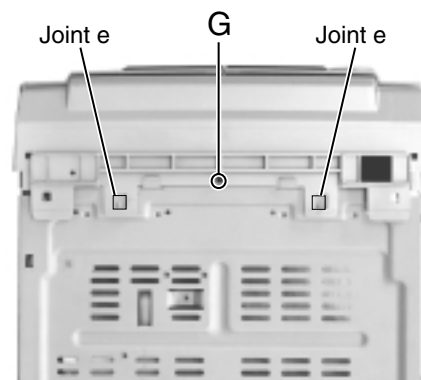
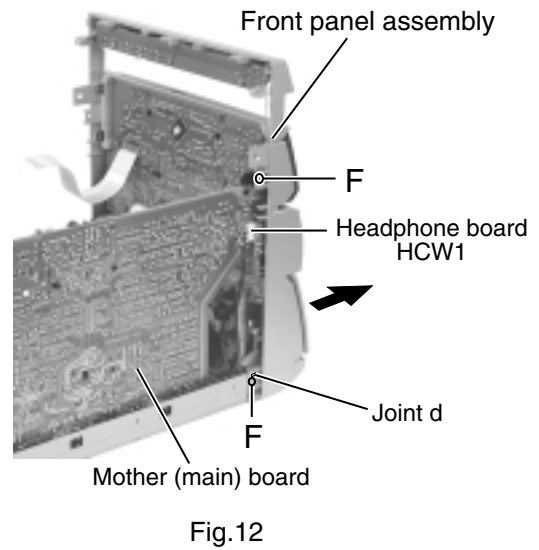
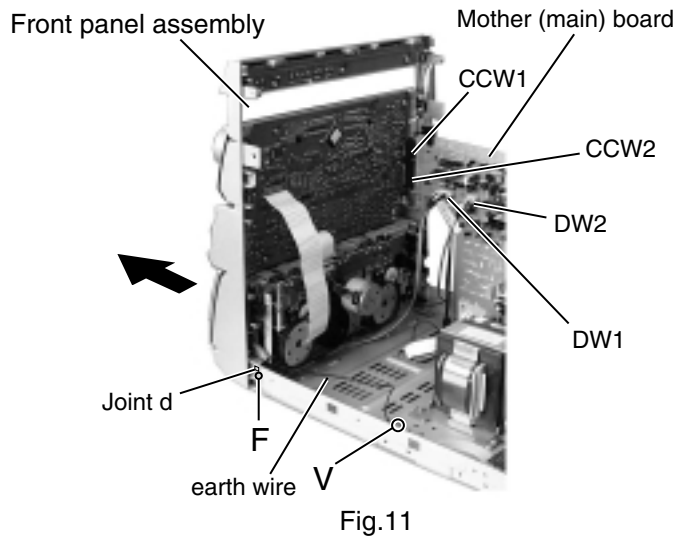


Fig.10

■Removing the front panel assembly

(See Fig.11 to 13)

- Prior to performing the following procedure, remove the top cover, the side covers, the CD Tray fitting and the CD changer unit.
 - There is no need to remove the rear panel.
1. Disconnect the harness from head wire connector DW1 and DW2 on the inner side of the mother (main) board in the body.
 2. Disconnect the harness from connector HCW1 of the headphone board on the right side of the body.
 3. Remove the three screws F attaching the front panel assembly on both sides of the body. Remove the screw V attaching the earth terminal extending from the front compartment.
 4. Remove the screw G attaching the front panel assembly on the bottom of the body.
 5. Release the two joints d on both sides and two joints e on the bottom of the body using a screwdriver. At the same time, disconnect the front compartment from connector CCW1 and CCW2 of the mother(main) board.



■ Removing the rear panel (See Fig.14)

- Prior to performing the following procedure, remove the top cover, the side covers, the CD Tray fitting and the CD changer unit.
 - There is no need to remove the front panel assembly.
1. Remove the seven screws H attaching the mother(main) board and the tuner board to the rear panel on the back of the body.
 2. Remove the three screws I attaching the heat sink to the rear panel on the back of the body.
 3. Remove the three screws J attaching the rear panel on the back of the body.

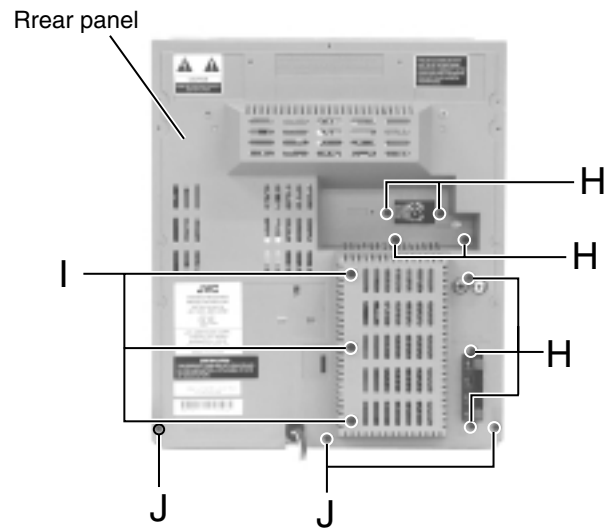


Fig.14

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

- Prior to performing the following procedure, remove the rear panel.
1. Disconnect the harness from connector HCW1 of the mother(main) board on the right side of the body. Release the harness from the clamp in the body.
 2. Disconnect the harness from head wire connector DW1 and DW2 extending to the mother(main) board in the body.
 3. Disconnect the harness from connector RCW1 of the power transformer.
 4. Remove the screw K attaching the earth terminal to the base chassis.
 5. Disconnect connector CCW1 and CCW2 connected to the mother(main) board from the front compartment (The mother(main) board will be detached with the tuner board and the assembly).

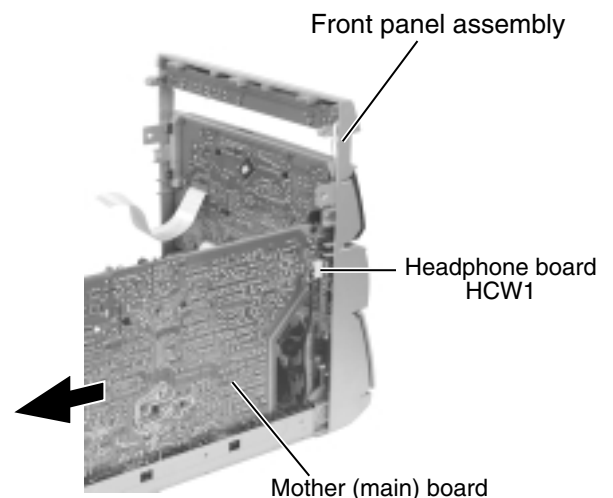


Fig.15

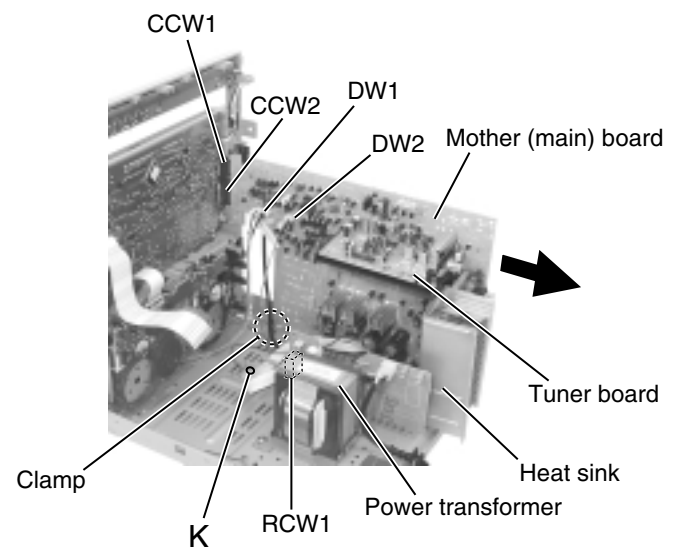


Fig.16

■Removing the heat sink

(See Fig.17 and 18)

- Prior to performing the following procedure, remove the mother(main) board.
1. Remove the three screws L attaching the heat sink cover plate.
 2. Remove the two screws M attaching the power IC to the heat sink and the three screws N attaching the heat sink to the mother (main) board.

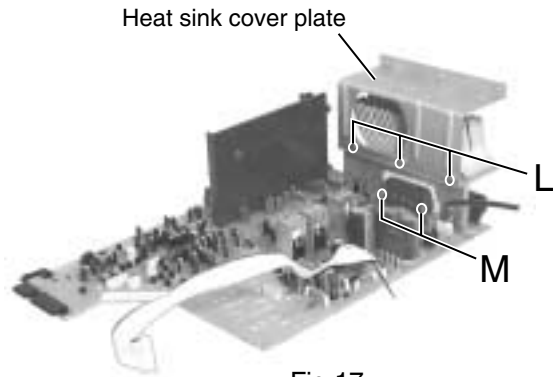


Fig.17

■Removing the tuner Board

(See Fig. 18 to 20)

- The tuner board can be removed even if the mother(main) board is attached.
1. Release the joint tab f of the tuner board holder and the mother(main) board, and disconnect connector FW1 connected to the mother(main) board. Remove the tuner board assembly (Refer to Fig.18).
 2. Remove the screw O attaching the tuner board holder. Release the two tabs g outward and remove the tuner board from the holder.

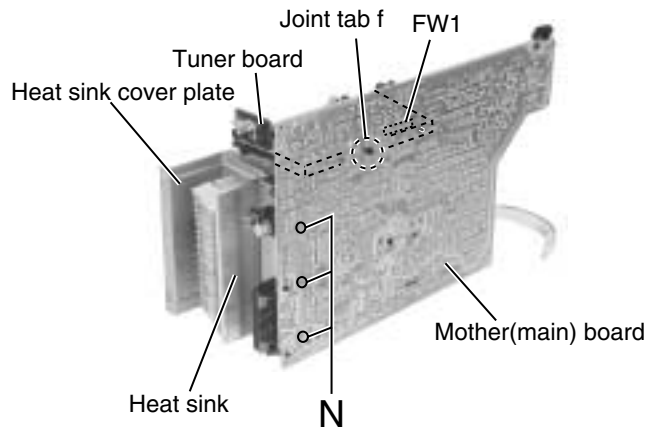


Fig.18

■Removing the power transformer

(See Fig .21)

- Prior to performing the following procedure, remove the top cover and the side covers.
1. Disconnect the power cord from connector RCW2 of the power transformer.
 2. Disconnect the harness from connector RCW1 of the power transformer.
 3. Remove the four screws P attaching the power transformer and the screw Q attaching the earth terminal.

ATTENTION: Prior to disconnecting the power cord from the body, remove the rear panel.

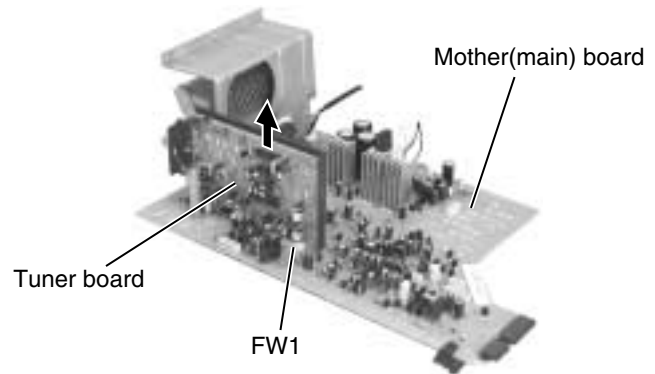


Fig.19

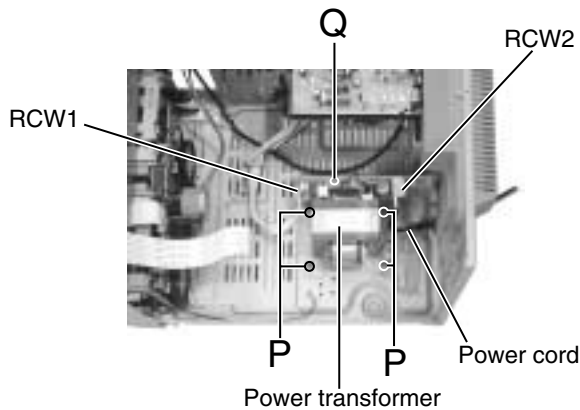


Fig.21

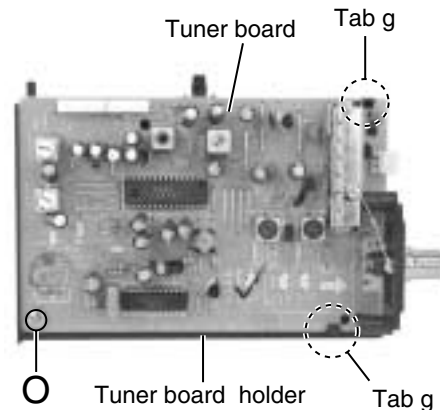


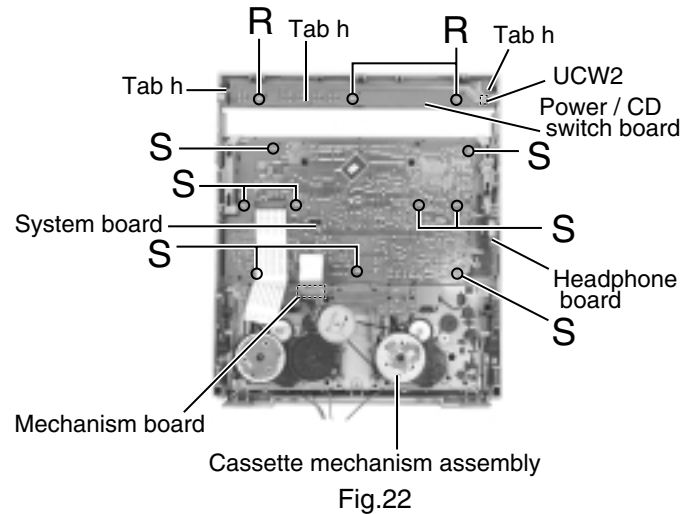
Fig.20

<Front panel assembly>

- Prior to performing the following procedure, remove the top cover, the side covers, the CD tray fitting and the front panel assembly.

■ Removing the power / CD switch board (See Fig.22)

1. Remove the three screws R attaching the power / CD switch board and release the three tabs h outward.
2. Disconnect the harness from connector UCW2 of the power / CD switch board.



■ Removing the system board (See Fig.22 and 23)

- Prior to performing the following procedure, remove the power / CD switch board.

1. Pull out the volume knob toward the front.
2. Disconnect the card wire from the mechanism board of the cassette mechanism assembly.
3. Remove the nine screws S attaching the system board.

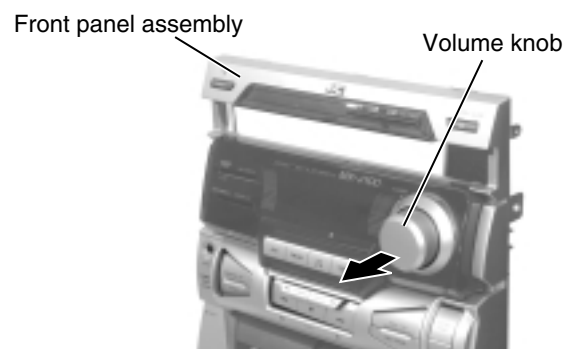


Fig.23

■ Removing the headphone board (See Fig.24)

1. Remove the system board temporarily and remove the screw T attaching the headphone board. Pull out the headphone board.

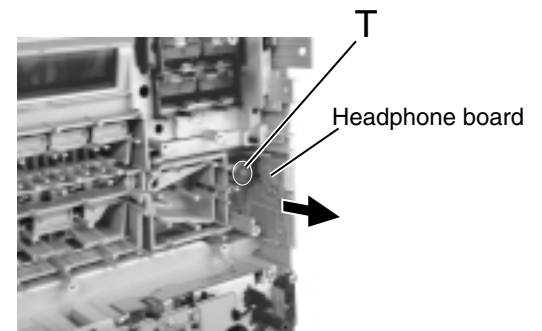


Fig.24

■ Removing the cassette mechanism assembly (See Fig.25)

1. Disconnect the card wire from the mechanism board of the cassette mechanism assembly.
2. Remove the seven screws U attaching the cassette mechanism assembly.

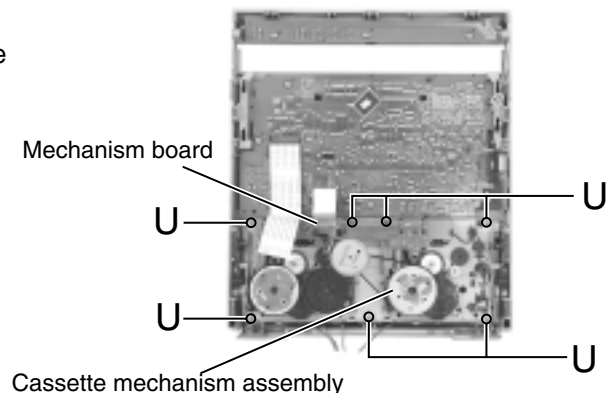


Fig.25

<CD changer unit>

- Prior to performing the following procedure, remove the CD changer unit.

■Removing the CD tray (See Fig.26 to 28)

1. Turn the black loading pulley gear marked c on the under side of the CD changer unit in the direction of the arrow and draw the CD tray toward the front until it stops.
2. Disconnect the card wire from connector SCW5 of the CD servo board on the upper side of the CD changer unit.
3. Push down the two tray stoppers marked i and pull out the CD tray.

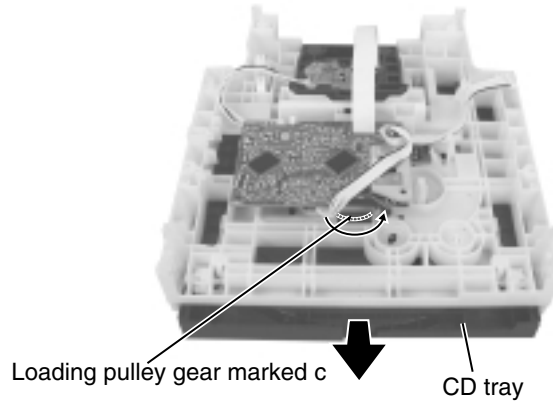


Fig.26

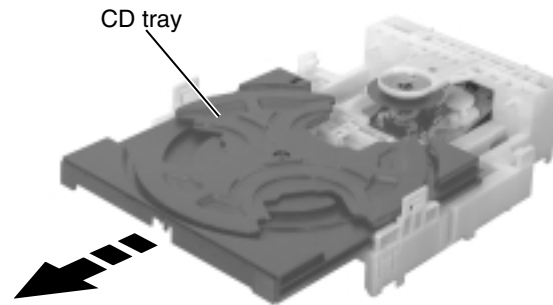


Fig.27

■Reinstall the CD tray (See Fig.29 to 30)

1. Align the gear-cam with the gear-tray as shown fig.29, then mount the CD tray.
2. When assembling the CD tray, take extreme care not engage with gear - synchro.

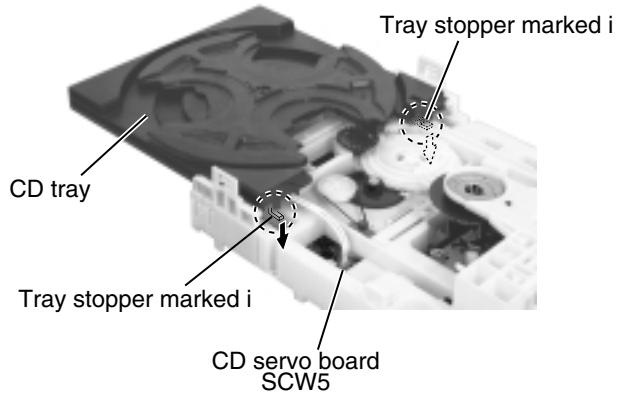


Fig.28

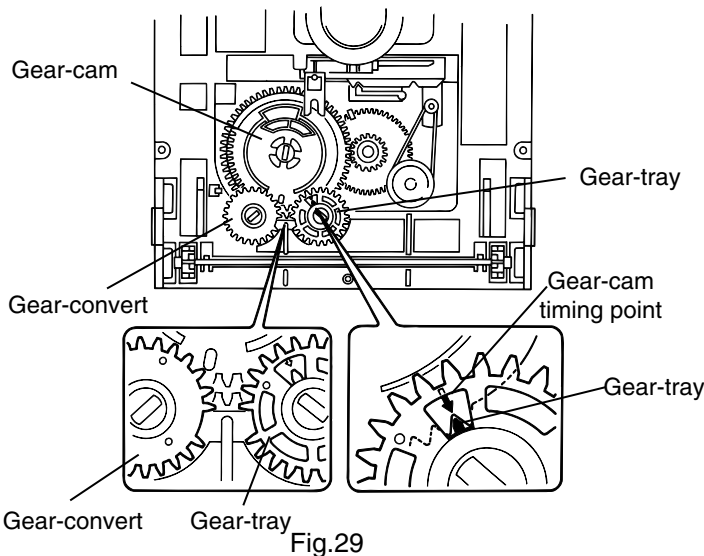


Fig.29

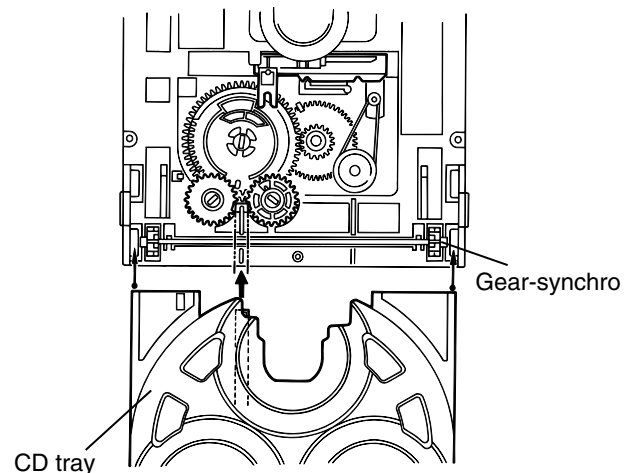


Fig.30

■ Removing the sensor board / the tray motor (See Fig.31 to 33)

- Prior to performing the following procedure, remove the CD tray.
1. Release the two tabs j attaching the sensor board on the under side of the CD tray.
 2. Disconnect the harness from connector CW1 on the sensor board and release the harness from the two hooks k. Remove the sensor board.
 3. Remove the screw W attaching the tray turn table. Detach the tray turn table from the tray.
 4. Pull outward the tab marked m attaching the tray turn table motor assembly on the upper side of the tray and detach the tray turn table motor assembly from the tray.

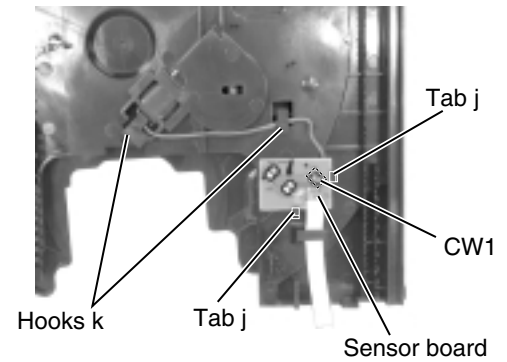


Fig.31

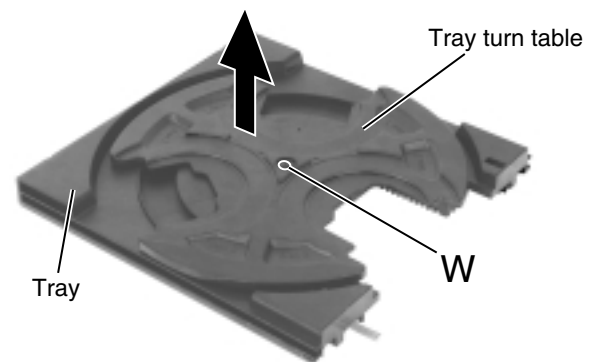


Fig.32

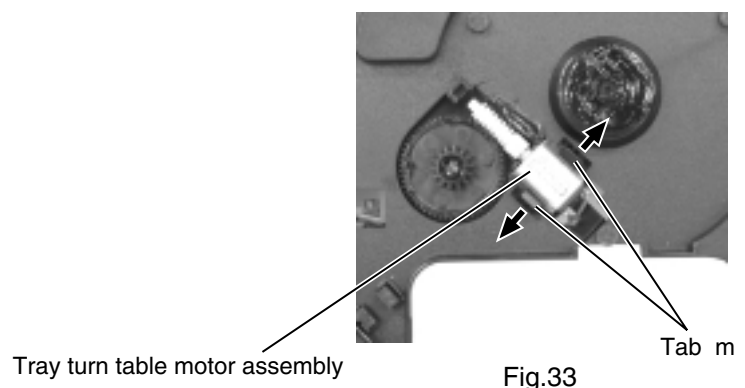


Fig.33

■ Removing the belt, the CD servo board and the switch board (See Fig.34 and 35)

- Prior to performing the following procedure, remove the CD tray.
1. Detach the belt from the pulley on the upper side of the CD changer unit (Do not stain the belt with grease).
 2. Disconnect the card wire from the pickup unit connector on the under side of the CD changer unit.
 3. Disconnect the motor wire harness from connector on the CD mechanism board.
 4. Remove the two screws X attaching the CD servo board. First release the n side of the two tabs n and two tabs o attaching the CD servo board motor to raise the CD servo board slightly, then release the o side.
- ※ If the tabs n and o are hard to release, it is recommendable to unsolder the two soldered parts on the motor terminal of the CD servo board. Disconnect the terminal CW3 connected to the switch board and remove the CD servo board.
5. Release the three tabs p attaching the switch board outward and detach the switch board.

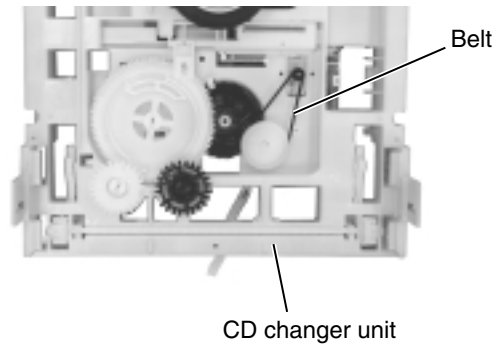


Fig.34

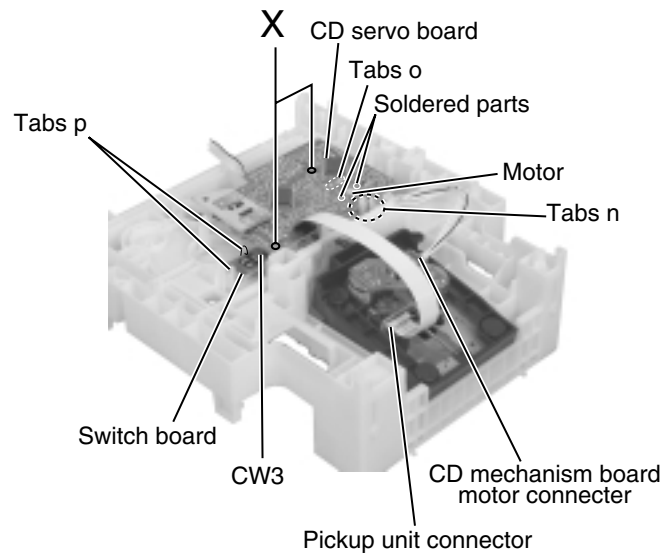


Fig.35

■Removing the CD mechanism holder assembly (mechanism included)
(See Fig.36 to 39)

1. Disconnect the harness from connector on the CD mechanism board in the CD mechanism assembly on the under side of the CD changer unit. Disconnect the card wire from the pickup unit connector.
2. Remove the screw Y attaching the shaft on the right side of the CD mechanism holder assembly. Pull outward the stopper fixing the shaft on the left side and remove the CD mechanism holder assembly from behind in the direction of the arrow.
3. Turn the CD mechanism holder assembly half around the lift up slide shaft r of the CD mechanism holder assembly until the turn table is reversed, and pull out the CD mechanism holder assembly.

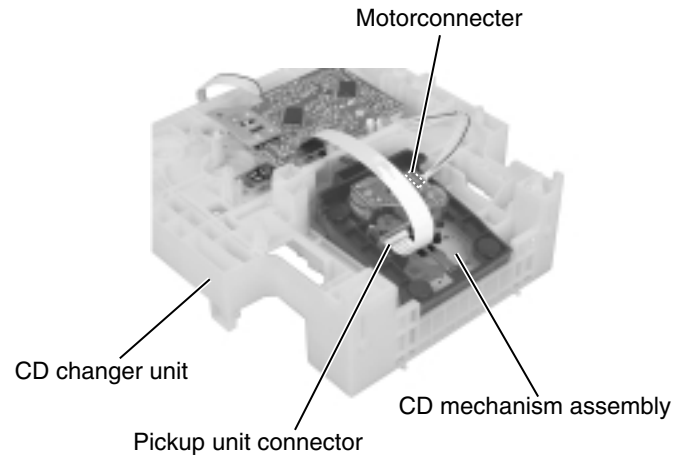


Fig.36

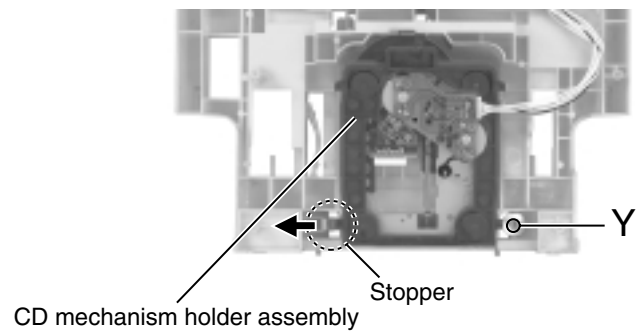


Fig.37

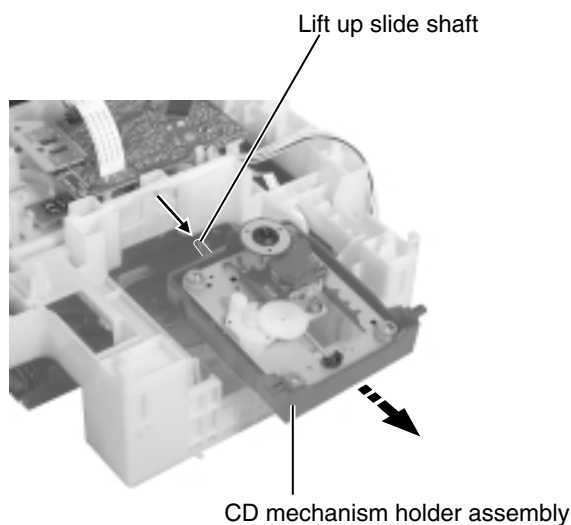


Fig.39

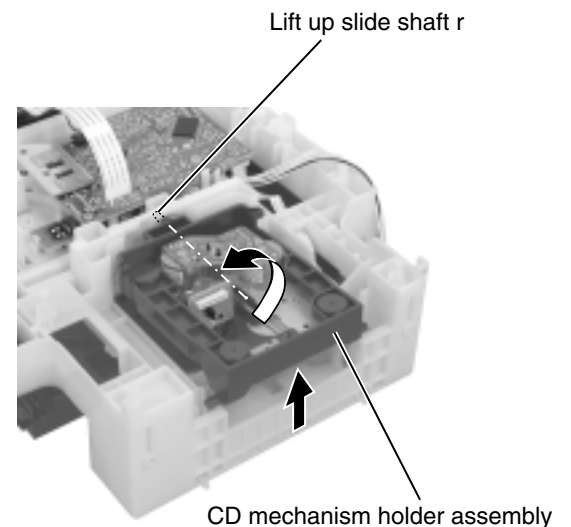


Fig.38

<CD mechanism section>

Removing the CD mechanism holder from the CD chassis to remove the CD mechanism.
 (Refer to "Removing the CD mechanism holder assembly" (Pag.2-11))

■ Removing the pickup unit.

1. Loosen the two screws **A** fixing the chassis.(Fig.1)
2. Removing the feed gear stopper **c** on the bottom of the mechanism and pull out the gear. (Fig.1, Fig.3, Fig.4)
3. Pull out the shaft by opening the pickup shaft stopper outward to unlock.(Fig.1, Fig.2)
4. Removing the pickup unit.(Fig.1)

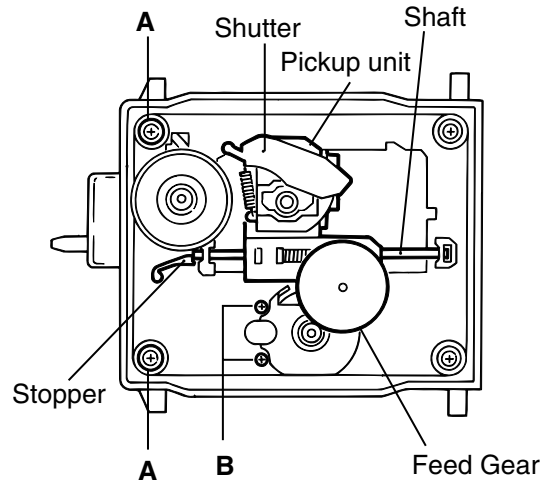


Fig.1

■ Removing the motor board.

1. Unsolder the motor terminal on the motor board.(Fig.3)
2. Remove the motor board.(Fig.3)

■ Removing the feed motor.

Remove the two motor fixing screws at **B** and removing the feed motor.(Fig.1, Fig.3)

■ Removing the spindle motor.

The spindle motor cannot be removed as a single unit. When removing the spindle motor, change the chasis and turntable together as a unit.(Fig.5)

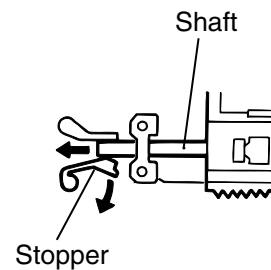


Fig.2

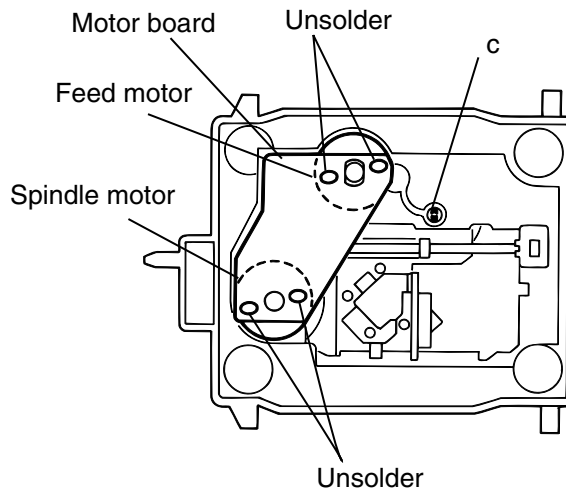


Fig.3

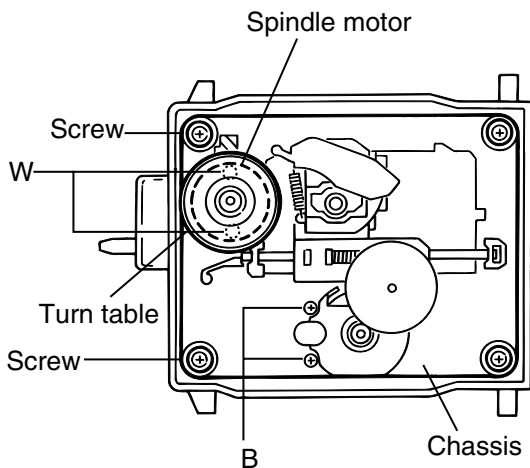


Fig.5

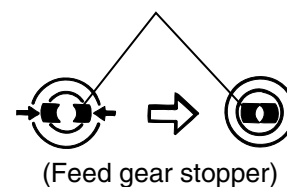


Fig.4

<Cassette mechanism section>

- Removing the record/playback mechanism.

■ Removing the R/P head.

1. Remove the screw **A** on the right side of the R/P head.(Fig.1, Fig.2)
2. Remove the screw **B** on the left side of the R/P head.(Fig.1, Fig.2)

■ Remove the erase head.

Remove the screw **C** fixing the erase head.(Fig.1)

■ Removing the pinch roller.

1. Pull out the pinch roller by opening the pinch roller stopper outward to unlock .(Fig.3)
2. When reassembling the pinch roller, refer to fig. 4 to hook up the spring.

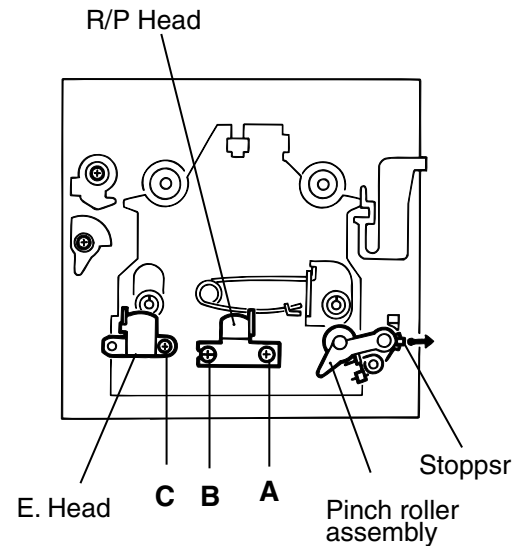


Fig.1

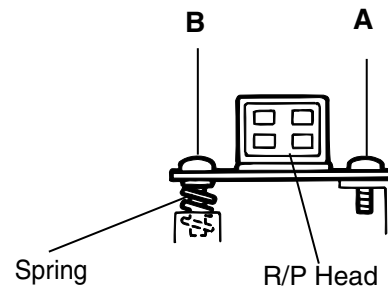


Fig.2

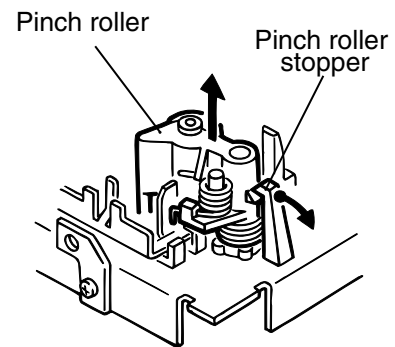


Fig.3

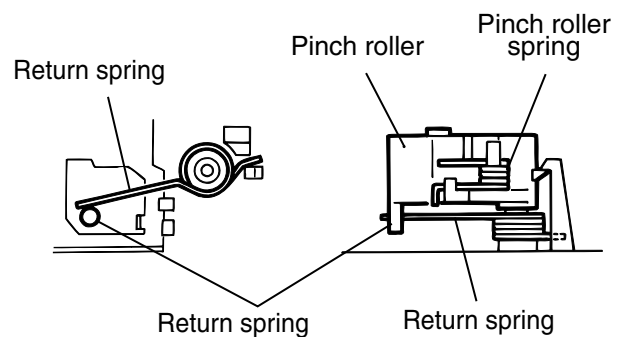


Fig.4

■ **Removing the motor.**

1. Remove the two screws **D** fixing the motor.
Be careful to grease's splash when the drive belt comes off.(Fig.5, Fig.6)
2. Unsolder the motor terminal.(Fig.5)

■ **Removing the mechanism board.**

1. Unsolder the four parts **a** on the solenoid coil terminal.(Fig.5)
2. Remove the two screws **E** fixing the board.(Fig.5)
3. Unhook the three parts **b** from the board.(Fig.5)
4. Remove the mechanism board.(Fig.5)

■ **Removing the flywheel.**

Remove the cut-washers at **c** and **d** from the capstan shaft, then remove the flywheel.
When reassembling the flywheel, be sure to use new washers as they cannot be reused.(Fig.8, Fig.9)

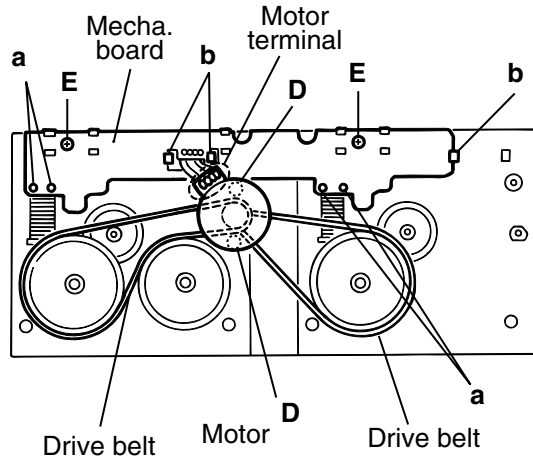


Fig.5

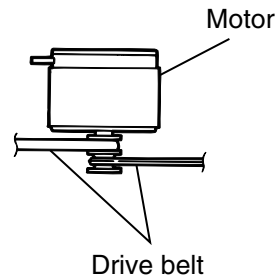


Fig.6

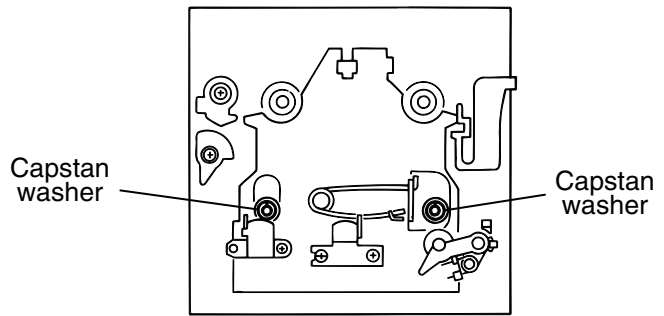


Fig.7

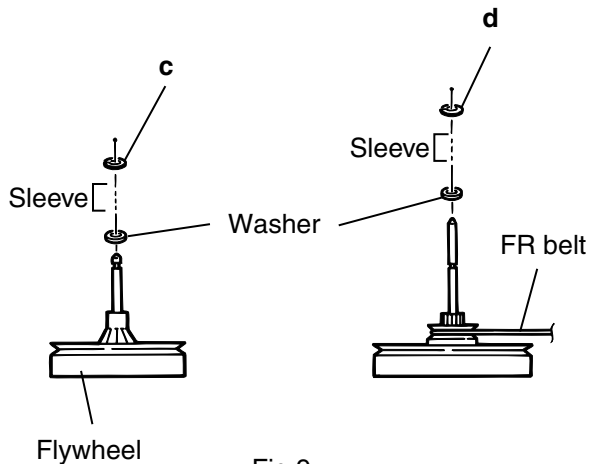


Fig.9

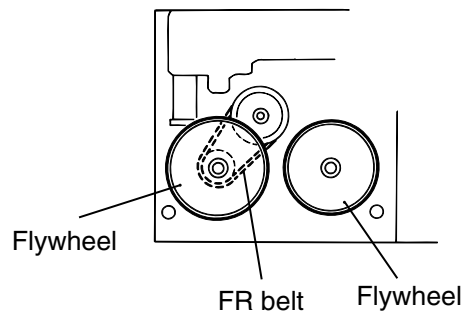
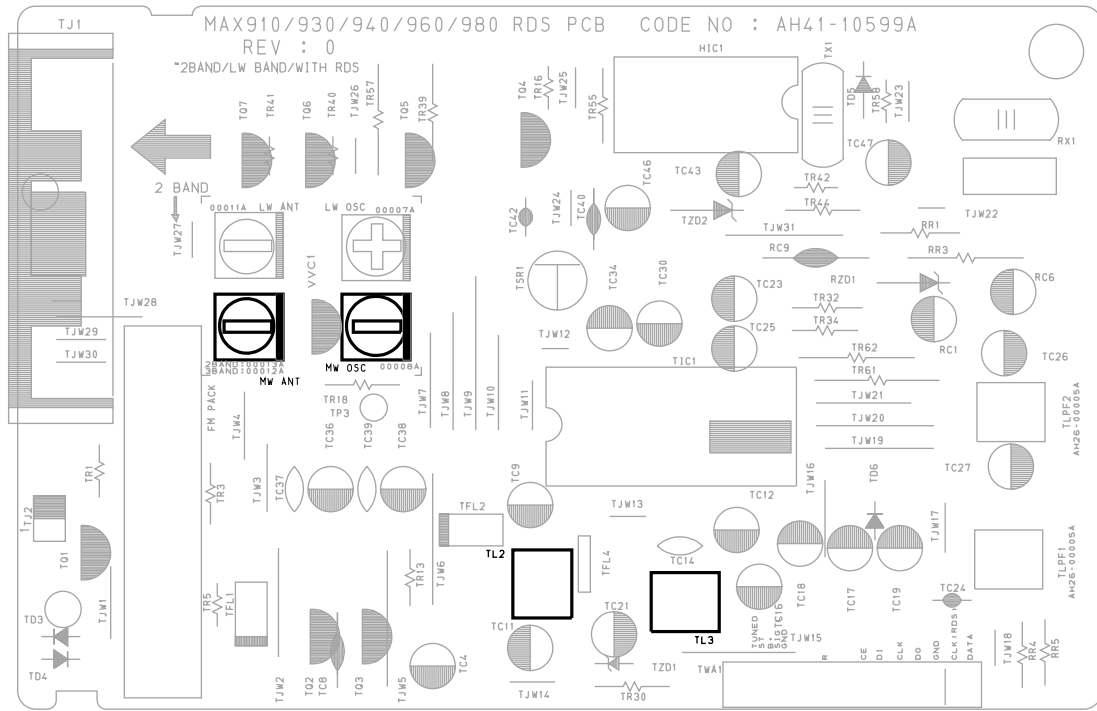


Fig.8

Ajustment method

■ Tuner



✦ Adjustment Location of Tuner PCB

ITEAM	AM(MW) OSC Adjustment	AM(MW) RF Adjustment
Received FREQ.	520~1720 KHz	590 KHz
Adjustment point	Non- Adjustment	MW -ANT
Output	1~7.0±0.5V	Maximum Output(Fig1-4)

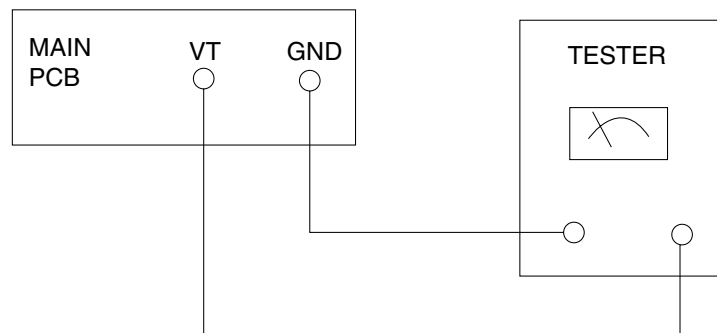


Fig 1-4 OSC Voltage

FM THD Adjustment	
SSG FREQ.	98 MHz
Adjustment point (TL3)	FM DETECTOR COIL
Output	60 dB
Minimum Distortion (0.3% below) (Figure 1-1)	

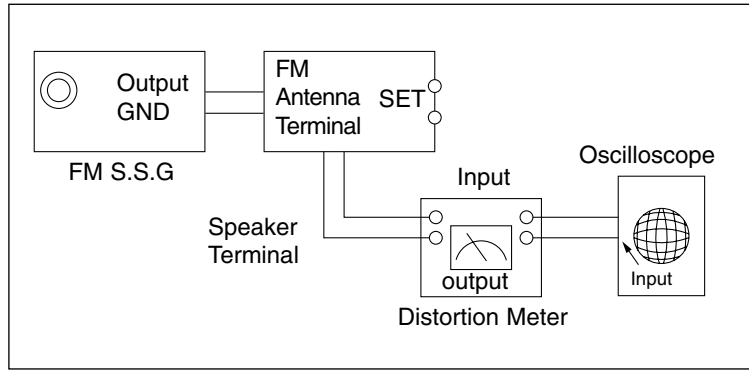


Figure1-1 IF CENTER and THD Adjustment

FM Search Level Adjustment	
SSG FREQ.	98 MHz
Adjustment point (TSR1)	BEACON SENSITIVITY SEMI-VR(20K½)
Output	28 dB(±2dB)
Adjust TSR1 so that "TUNED" of FL T is lighted (Figure 1-2)	

*Adjust FM S.S.G level to 28dB

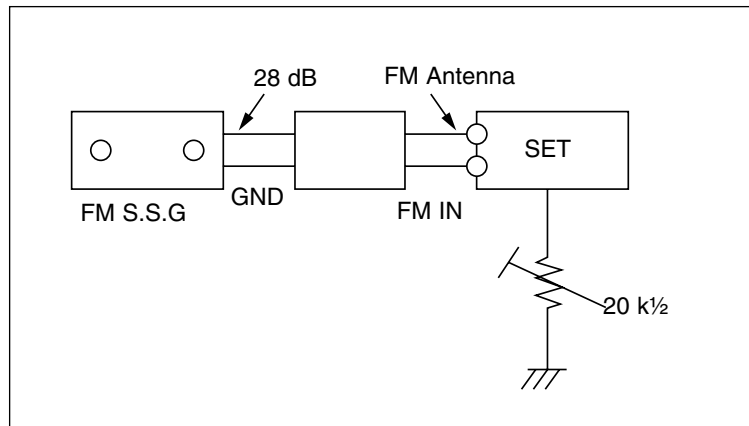


Figure1-2 FM Auto Search Level Adjustment

AM(MW) I.F Adjustment	
SSG FREQ.	450 kHz
Frequency	520 kHz
Adjustment point (TL2)	AM I.F COIL
Maximum output (Figure 1-3)	

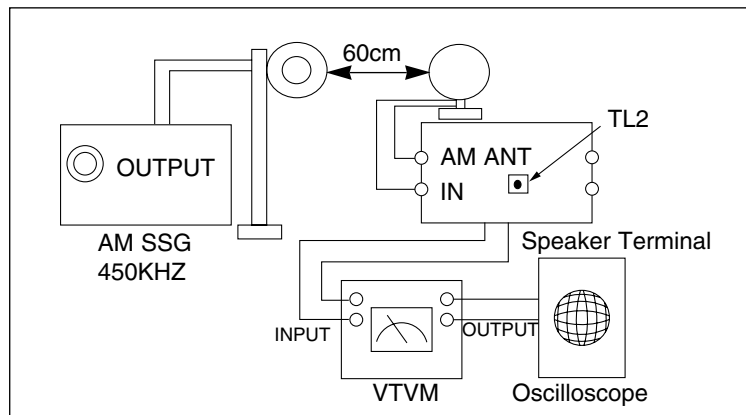


Figure1-3 AM I.F Adjustment

■ Cassette deck

1. To adjust tape speed

Notes

- 1) Measuring tape: VT 712 (or equivalent)
(Tapes recorded with 3kHz)
- 2) Connect the cassette deck to the frequency counter as in figure 1-5.

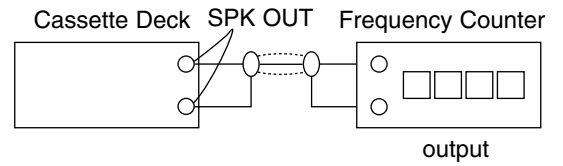


Figure 1-5

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	NOR SPEED Control	OUT (connected to the frequency counter)	1) Deck A:VT 712 2) Press PLAY SW button 3) Deck B:Same as above	Turn UVR2 to left and right (FRONT PCB)	3KHz	±1% range

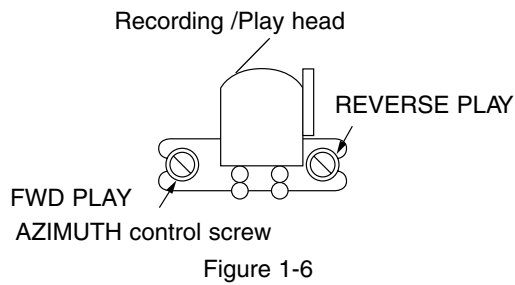


Figure 1-6

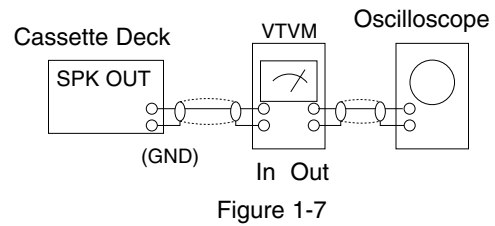


Figure 1-7

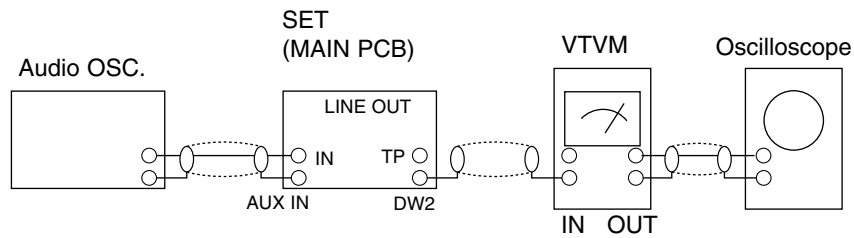


Figure 1-8

2. To adjust playback level/REC

Notes

- 1) Before the actual adjustment, clean the play/recording head.
- 2) Measuring tape :
 - i) VT 705(or equivalent 12.5kHz AZIMUTH control)
- 3) The cassette deck is connections as shown in figure 1-7.

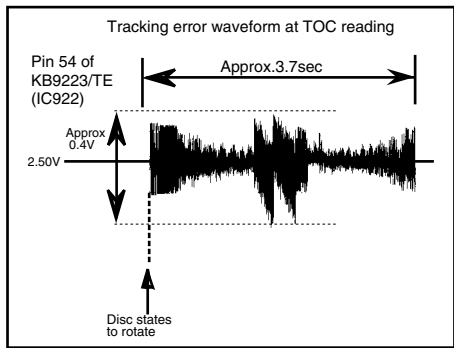
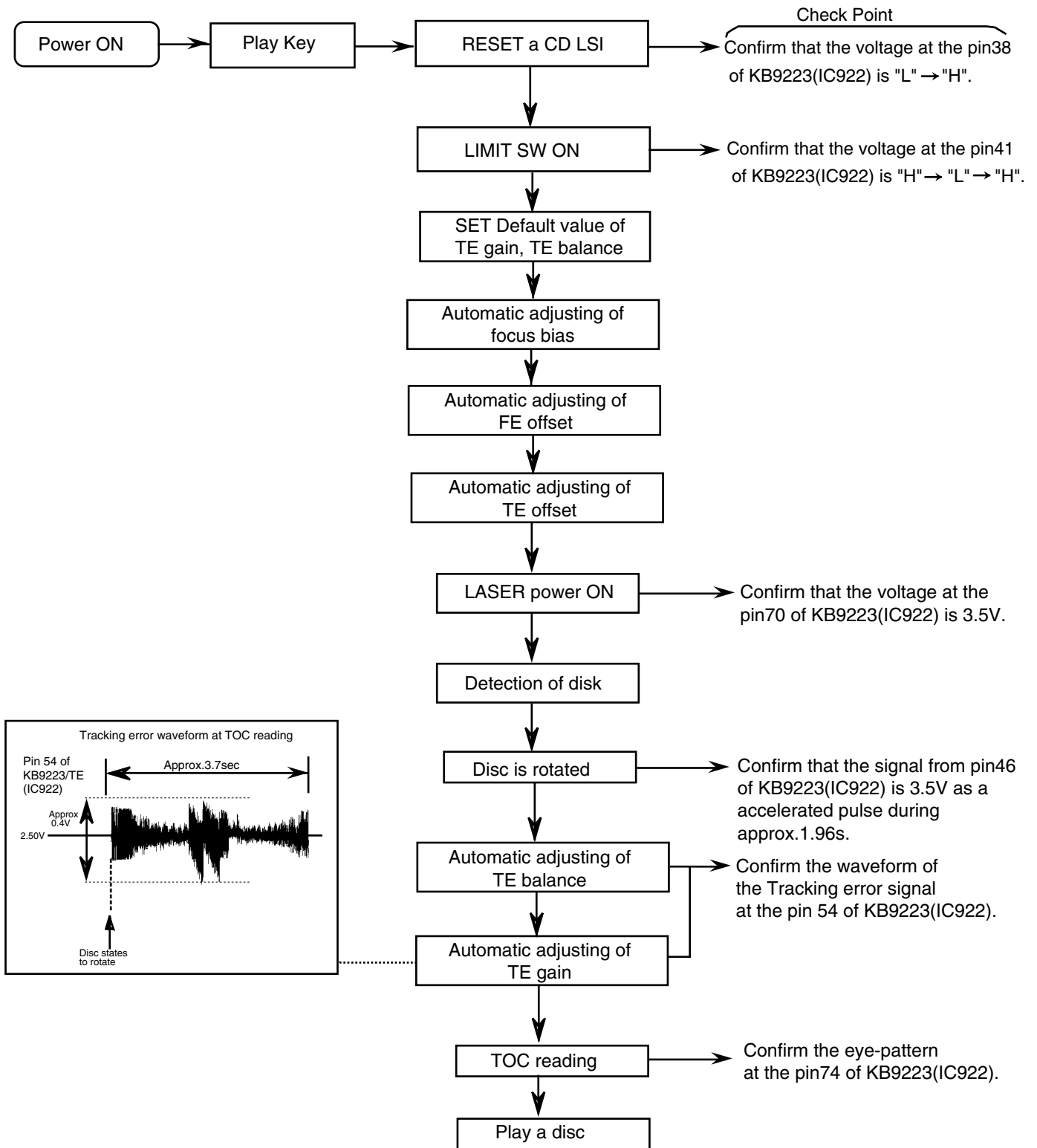
1 Adjust Deck A Play Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP1 OUT (VTVM is connected to the scope)	After putting VT705 into Deck A - Press FWD PLAY button.	- Turn the control screw to as shown in Figure 1-6.	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.

2 Adjust Deck B Play Level/REC BIAS

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP1 OUT (VTVM is connected to the scope)	After putting VT705 into Deck B 1) Press FWD PLAY button. 2) Press REV PLAY button.	- Turn the control screw to as shown in Figure 1-6.	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.
2	Recording Bias Voltage	Fig 1-8	After putting MTT 5512 into Deck B 1) Press REC PLAY button. 2) MAIN PCB DCW2, connected to VTVM	Turn DVR1, DVR2 to the right and left	7V($\pm 0.5V$)	

Flow of functional operation until TOC read



Maintenance of laser pickup

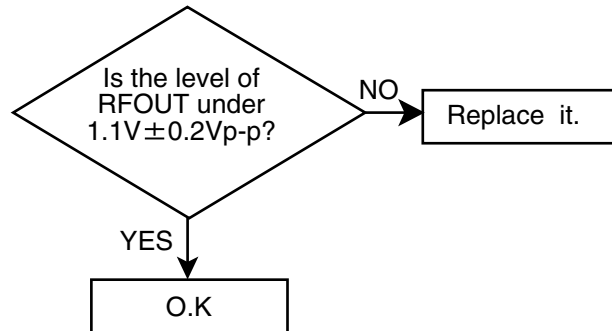
(1) Cleaning the pick up lens

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

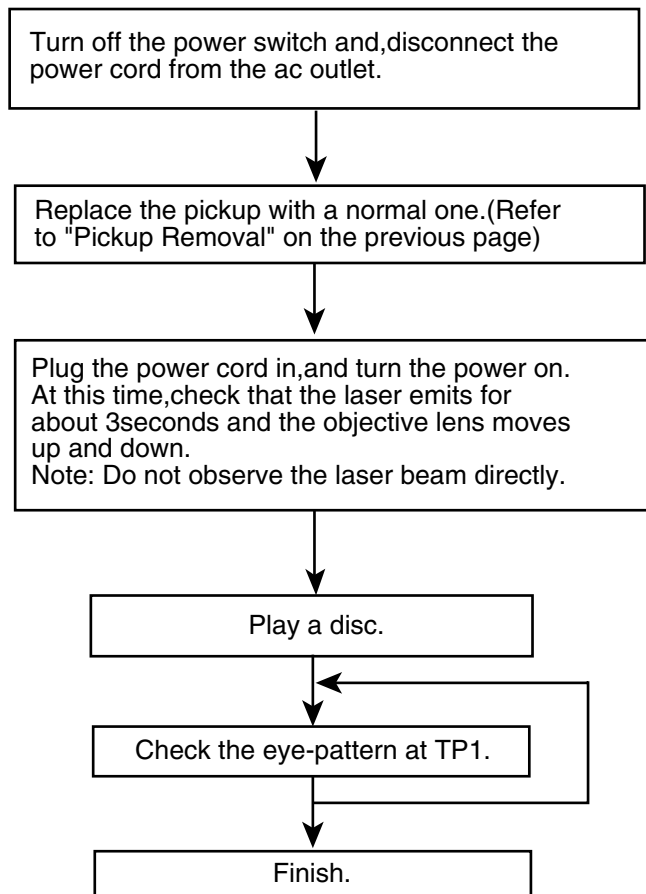
(2) Life of the laser diode

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

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



Replacement of laser pickup



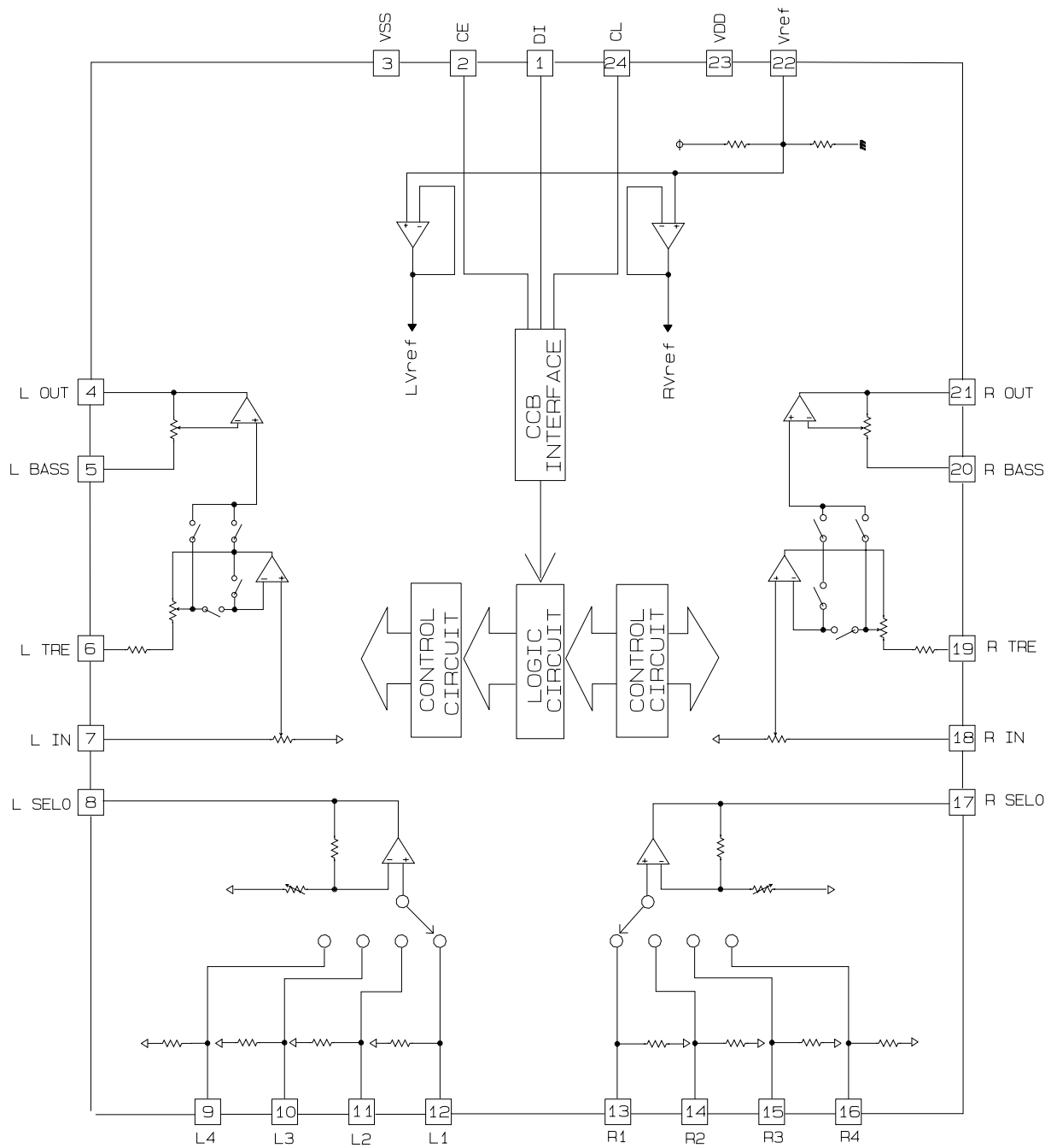
- (3) Semi-fixed resistor on the APC PC board The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

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

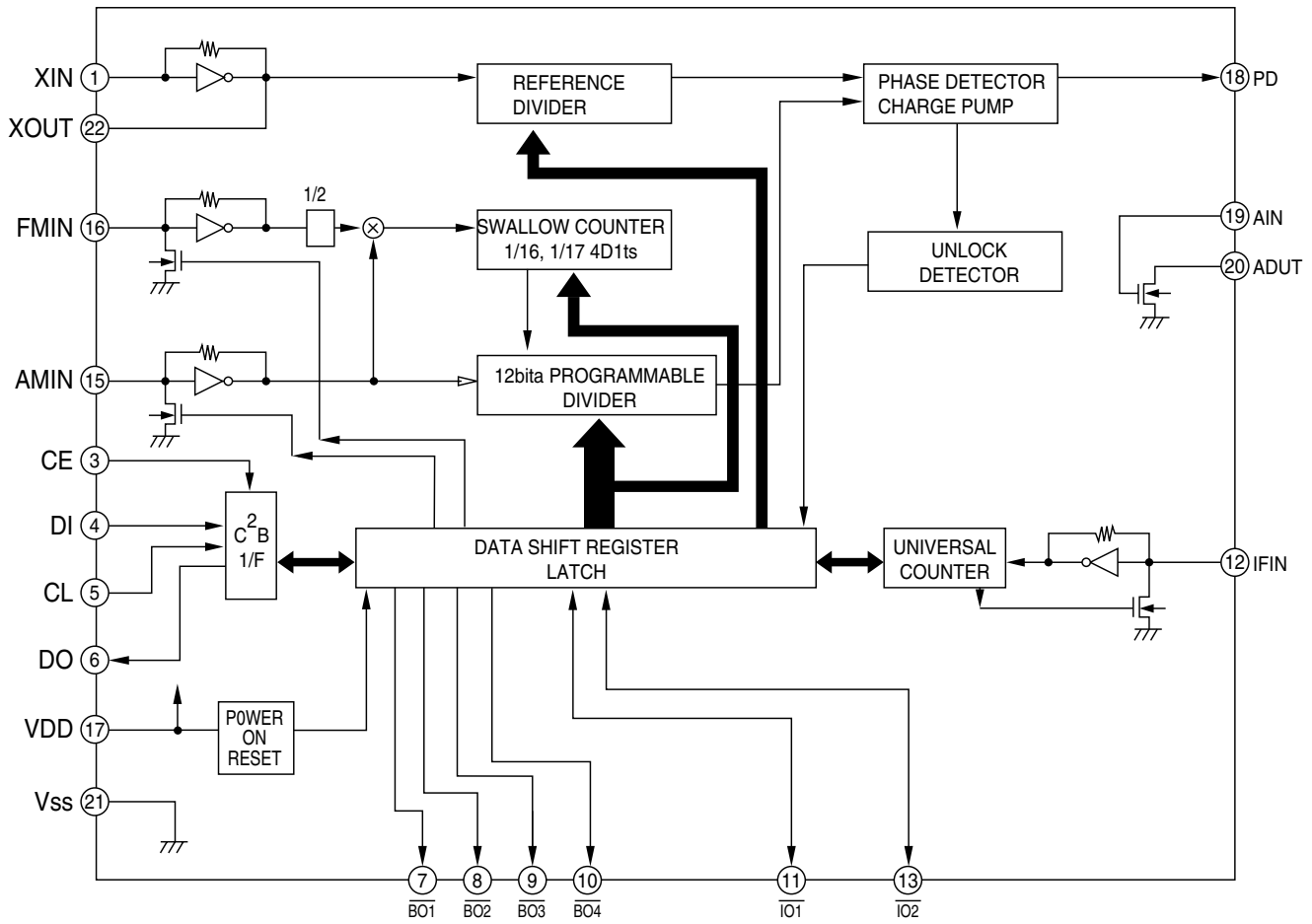
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

Description of major ICs

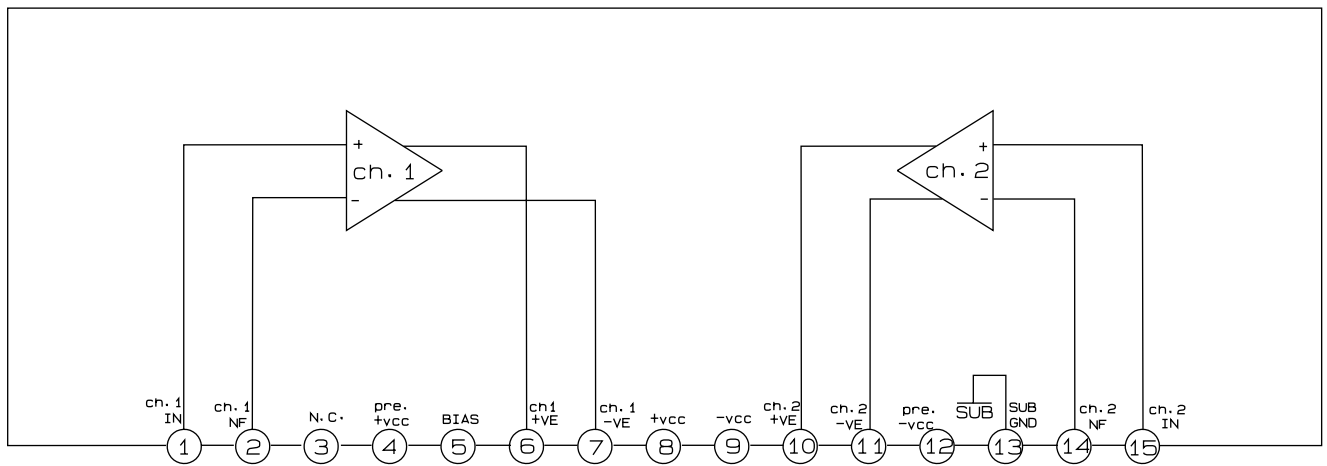
■ LC75341 (FIC1):Function



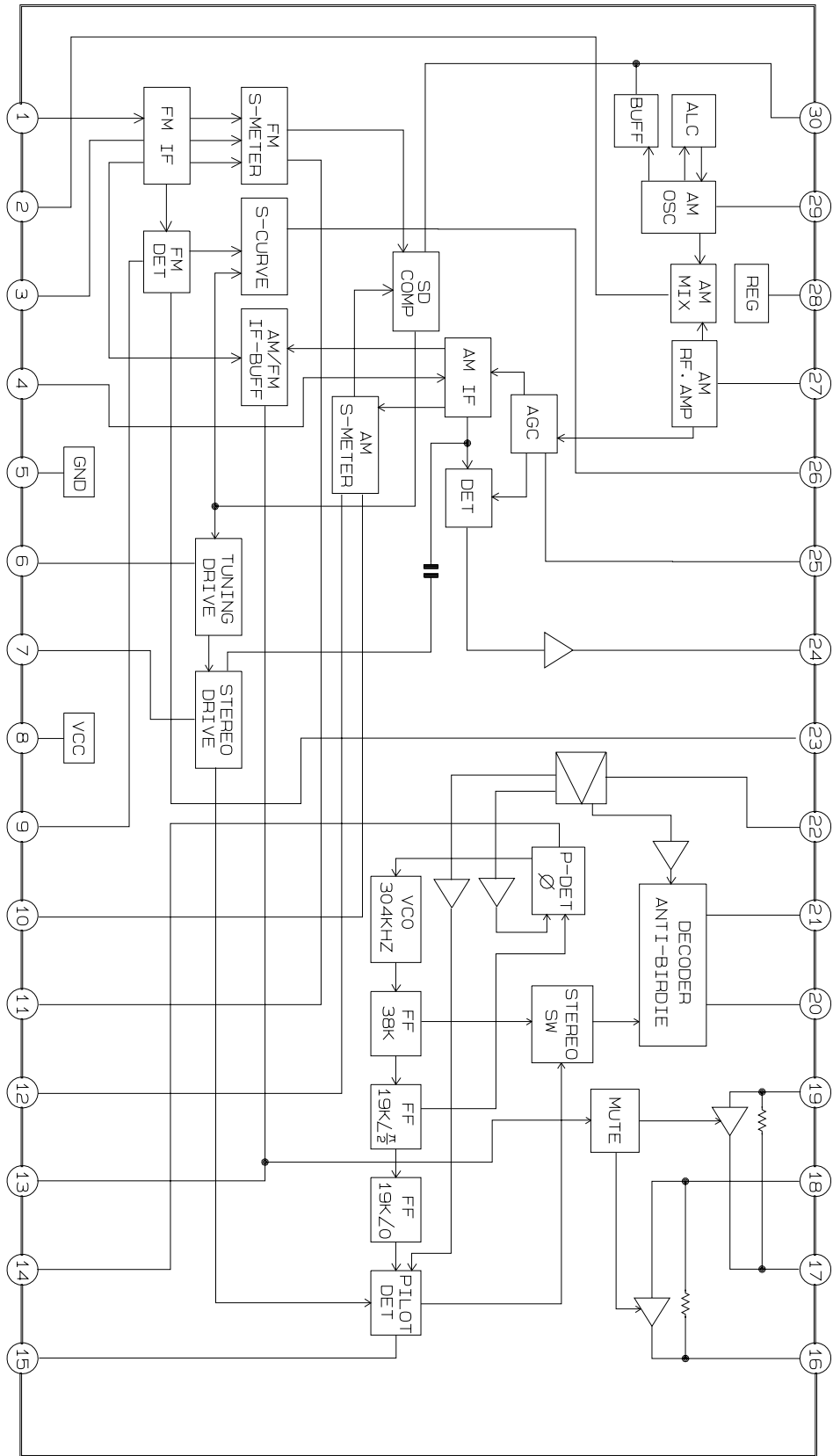
■ LC72131D (HIC1) : PLL



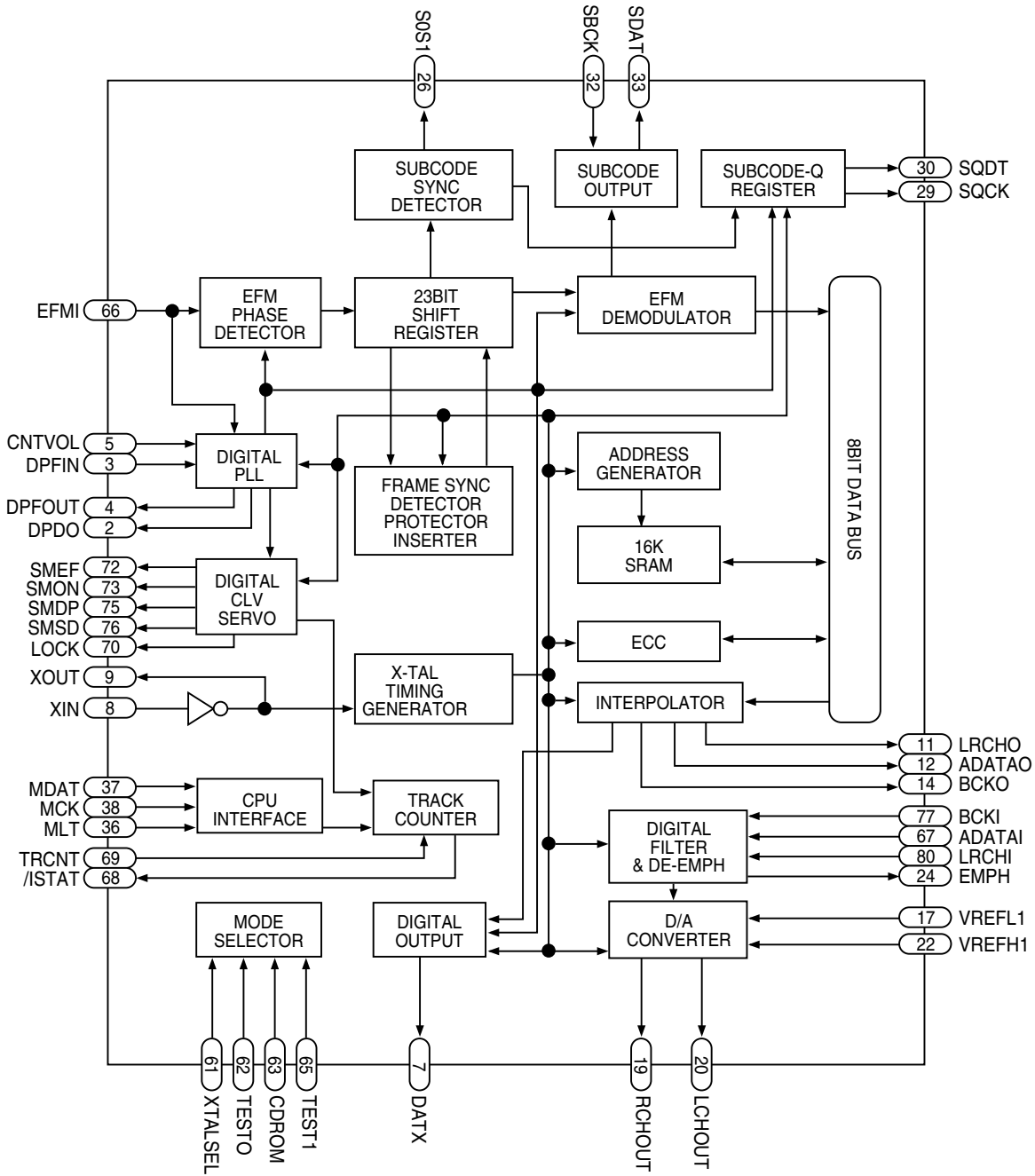
■ STK402-040 (AIC1)



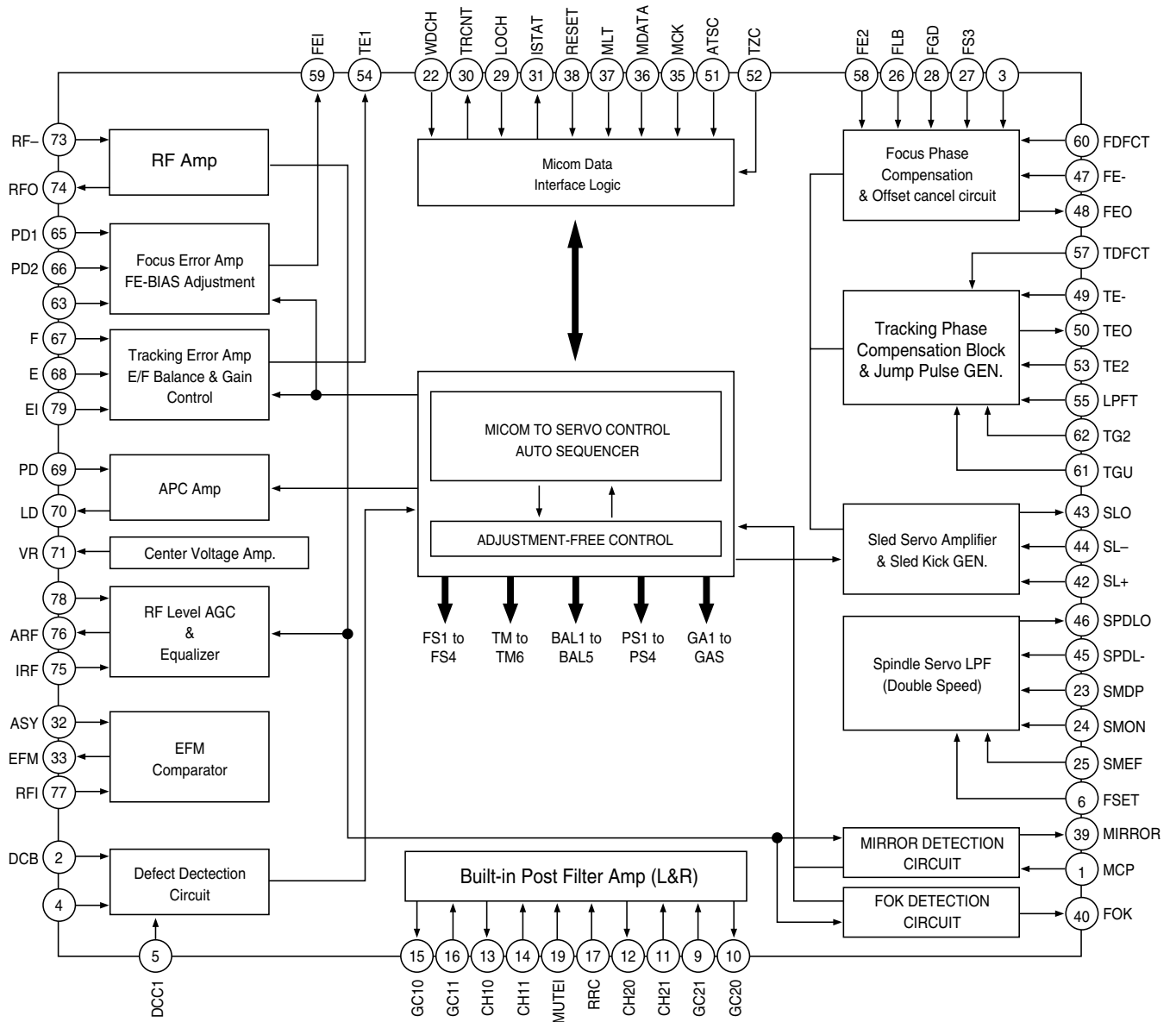
■ LA1837 (TIC1) : FM IF/DET AM RF/IF/DET



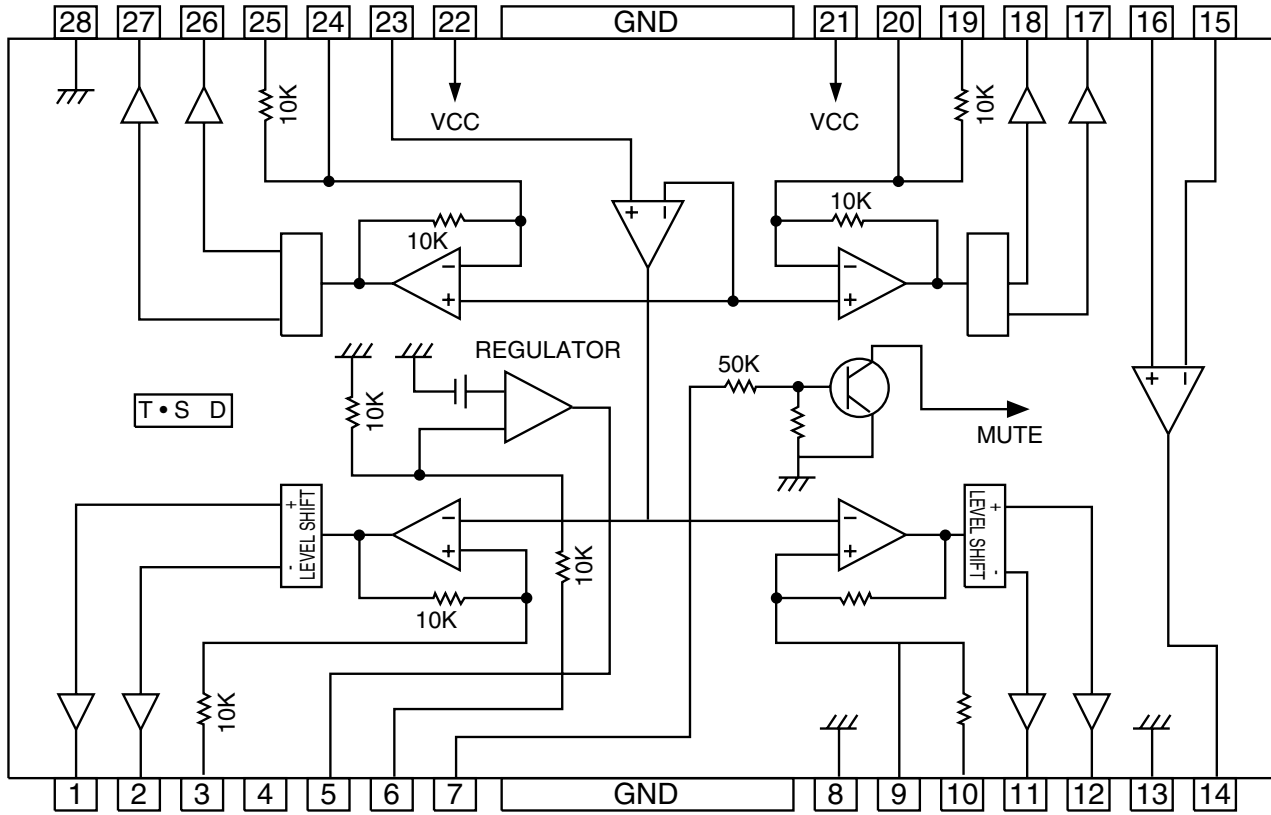
■ KS9286B (IC928) : DSP/D-A Converter



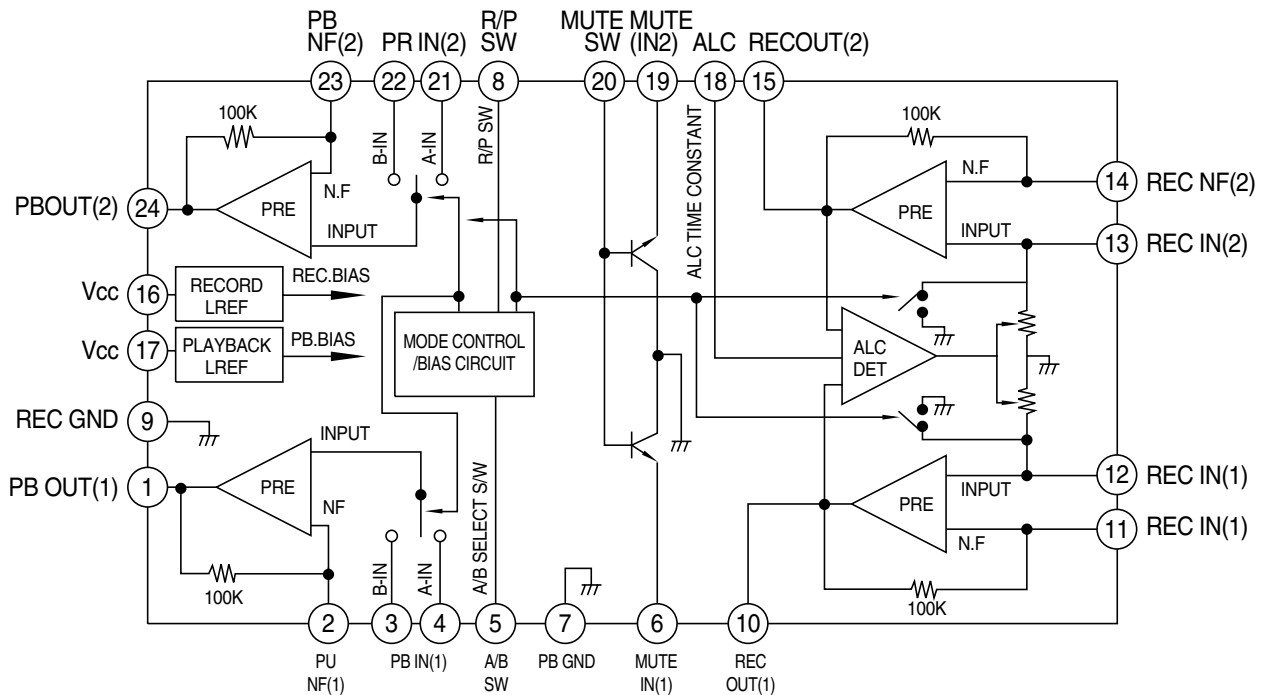
■ KB9223 (IC922) : ASSP(CD RF)



■ KA9258D (IC925) : 4-ch Motor driver



■ KA22291(DIC1) :Cassette amp.



PARTS LIST

[MX-J100]

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

MX-J100	
Area suffix	
J	U.S.A.
C	Canada

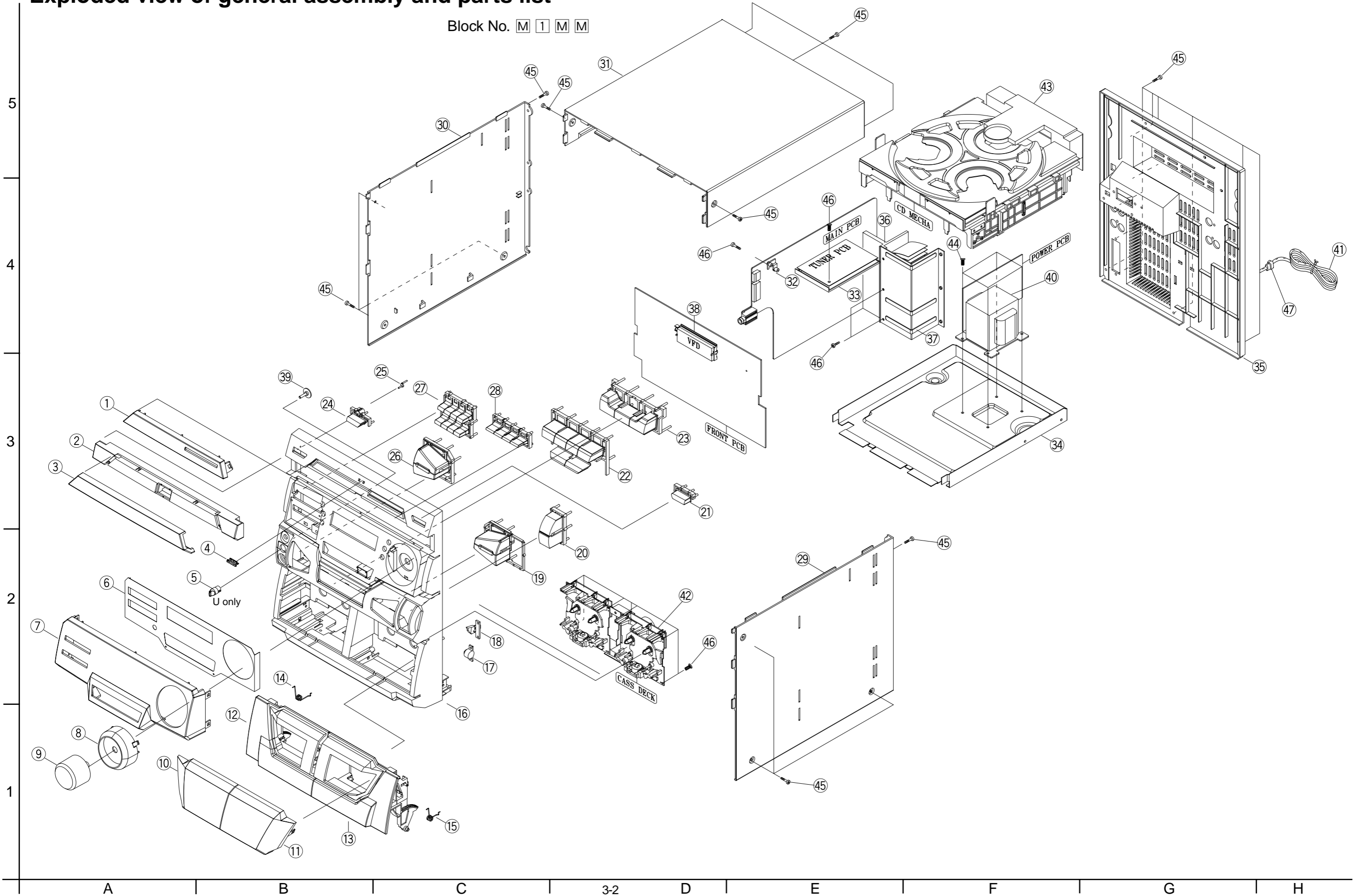
- Contents -

- Exploded view of general assembly and parts list 3- 2
- CD mechanism assembly and parts list 3- 4
- CD changer mechanism assembly and parts list 3- 5
- Cassette mechanism assembly and parts list 3- 7
- Electrical parts list 3- 8
- Packing materials and accessories parts list 3-19

Exploded view of general assembly and parts list

Block No.

M	1	M	M
---	---	---	---



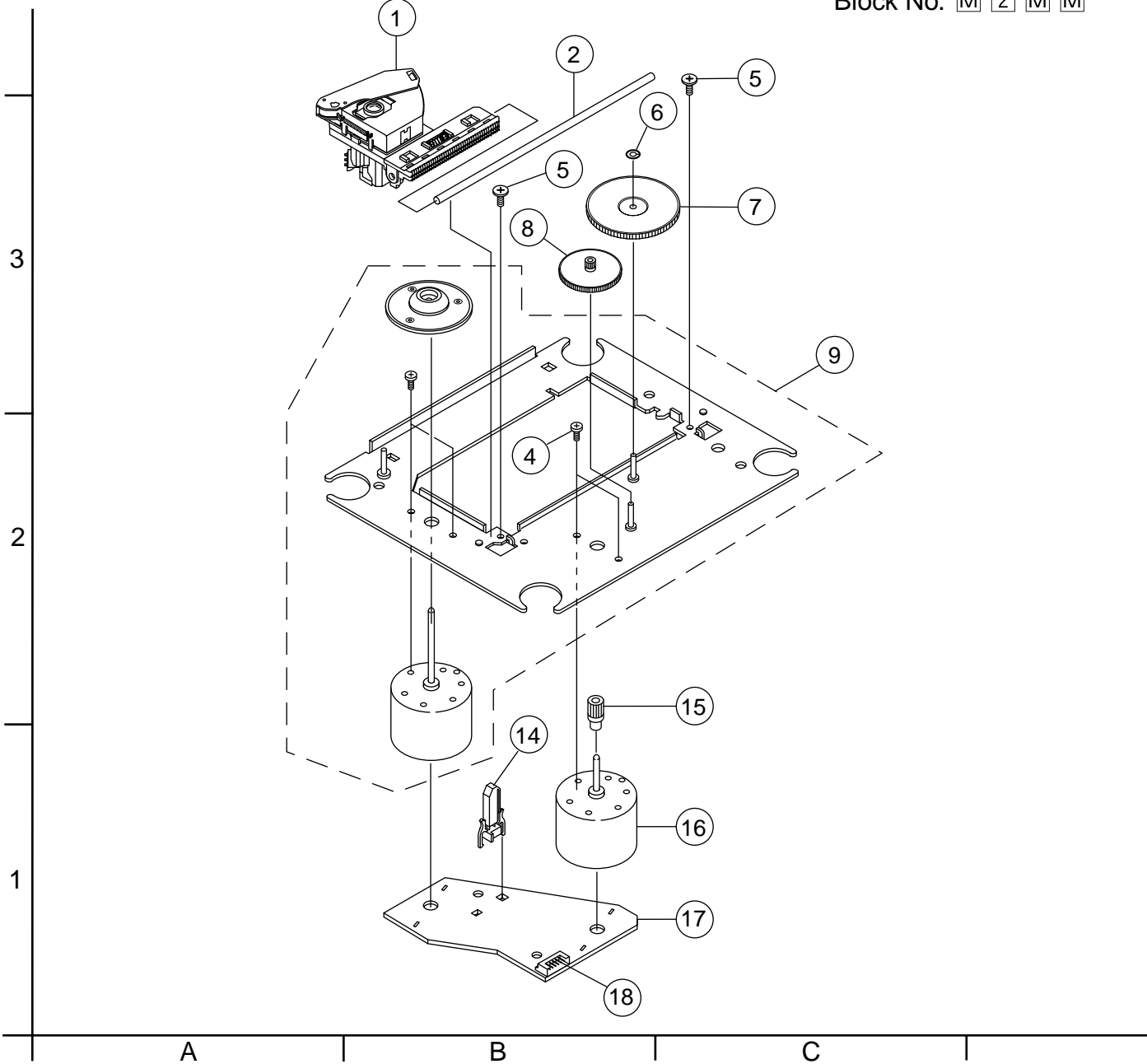
Parts list (General assembly)

Block No. M1MM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH64-00426B	WINDOW-CD	1		
	2	AH64-00414B	DOOR-CD	1		
	3	AH64-00429B	WINDOW-DOOR CD	1		
	4	AH64-00462A	BADGE-JVC	1		
	6	AH63-00107A	SHEET-FRONT	1		
	7	AH64-00430B	WINDOW-VFD	1		
	8	AH61-00271B	CAP-VOLUME	1		
	9	AH64-00422B	KNOB-VOLUME	1		
	10	AH64-00427B	CASSETTE-LID A	1		
	11	AH64-00428B	CASSETTE-LID B	1		
	12	AH64-00412B	DOOR-CASSETTE A	1		
	13	AH64-00413B	DOOR-CASSETTE B	1		
	14	AH61-62004A	SPRING-EJECT A	1		
	15	AH61-62004B	SPRING-EJECT B	1		
	16	AH64-00364B	CABINET-FRONT	1		
	17	AH61-80030A	DAMPER-ASSY	2		
	18	AH59-50001A	LATCH-ASSY	2		
	19	AH64-00421B	KNOB-RECORD	1		
	20	AH64-00423B	KNOB-DUBBING	1		
	21	AH64-00420B	KNOB-CD OPEN	1		
	22	AH64-00415B	KNOB-FUNCTION	1		
	23	AH64-00418B	KNOB-PRESET	1		
	24	AH64-00425B	KNOB-POWER	1		
	25	AH67-00035A	LENS-POWER	1		
	26	AH64-00440B	KNOB-PROGRAM	1		
	27	AH64-00424A	KNOB-SLEEP	1		
	28	AH64-00416A	KNOB-DISC	1		
	29	AH64-00432A	CABINET-SIDE R	1		
	30	AH64-00431A	CABINET-SIDE L	1		
	31	AH64-00443A	CABNET-TOP	1		
	32	AH61-00021A	HOLDER-PCB	1		
	33	AH61-20540A	HOLDER-TUNER	1		
	34	AH64-30416A	CABINET-BOTTOM	1		
	35	AH64-00365B	CABINET-REAR	1		
	36	AH62-00023A	HEAT SINK-MAIN	1		
	37	AH61-00250A	BRKT-H/SINK	1		
	38	AH61-00252A	HOLDER-VFD	1		
	39	AH61-00380A	SHAFT-H/PHONE	1		
	40	AH26-00054A	POWER TRANS	1		
	41	QMPE090-183-JD	POWER CORD	1		
	42	-----	DECK CASEETTE	1		
	43	-----	CD MECHANISM	1		
	44	QYSBSF4008Z	TAPPING SCREW	4		
	45	QYSDSF3008N	TAPPING SCREW	19		
	46	QYSBSF3008Z	TAPPING SCREW	12		
	47	AH39-20002D	STRAIN RELIEF	1		

CD mechanism assembly and parts list

Block No. M 2 M M



Parts list (CD mechanism)

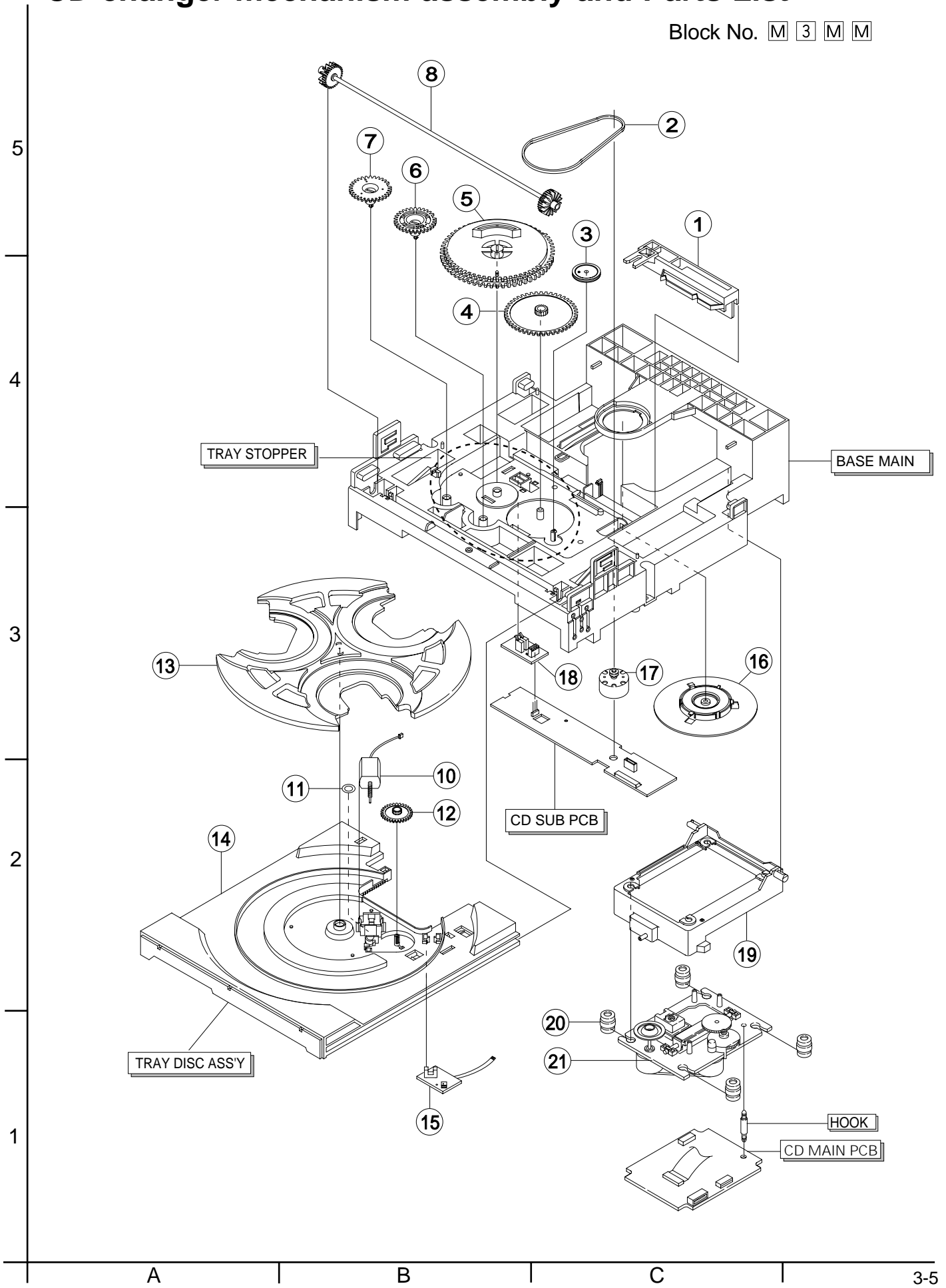
Block No. M2MM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH30-00007A	OPTICAL PICK-UP	1		
	2	AJ70-00601A	SHAFT-PU	1		
	4	AJ60-00601D	SCREW	2	FEED MOTOR	
	5	6003-000294	SCREW	2	SHAFT	
	6	AJ60-00608A	WASHER	1	PLAIN	
	7	AJ66-00006A	GEAR(C)	1		
	8	AJ66-00005A	GEAR(B)	1		
	9	AH91-60150C	CHASSIS BASE Ass'y	1		
	14	3409-001078	LEAF SWITCH	1		
	15	AJ66-00004A	GEAR(A)	1	FEED	
	16	AJ31-00601E	MOTOR-FEED	1		
	17	AJ41-00601S	MOTOR-PCB ASSY	1		
	18	AJ37-00601A	CONNECTOR	1		

CD changer mechanism assembly and Parts List

Block No.

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



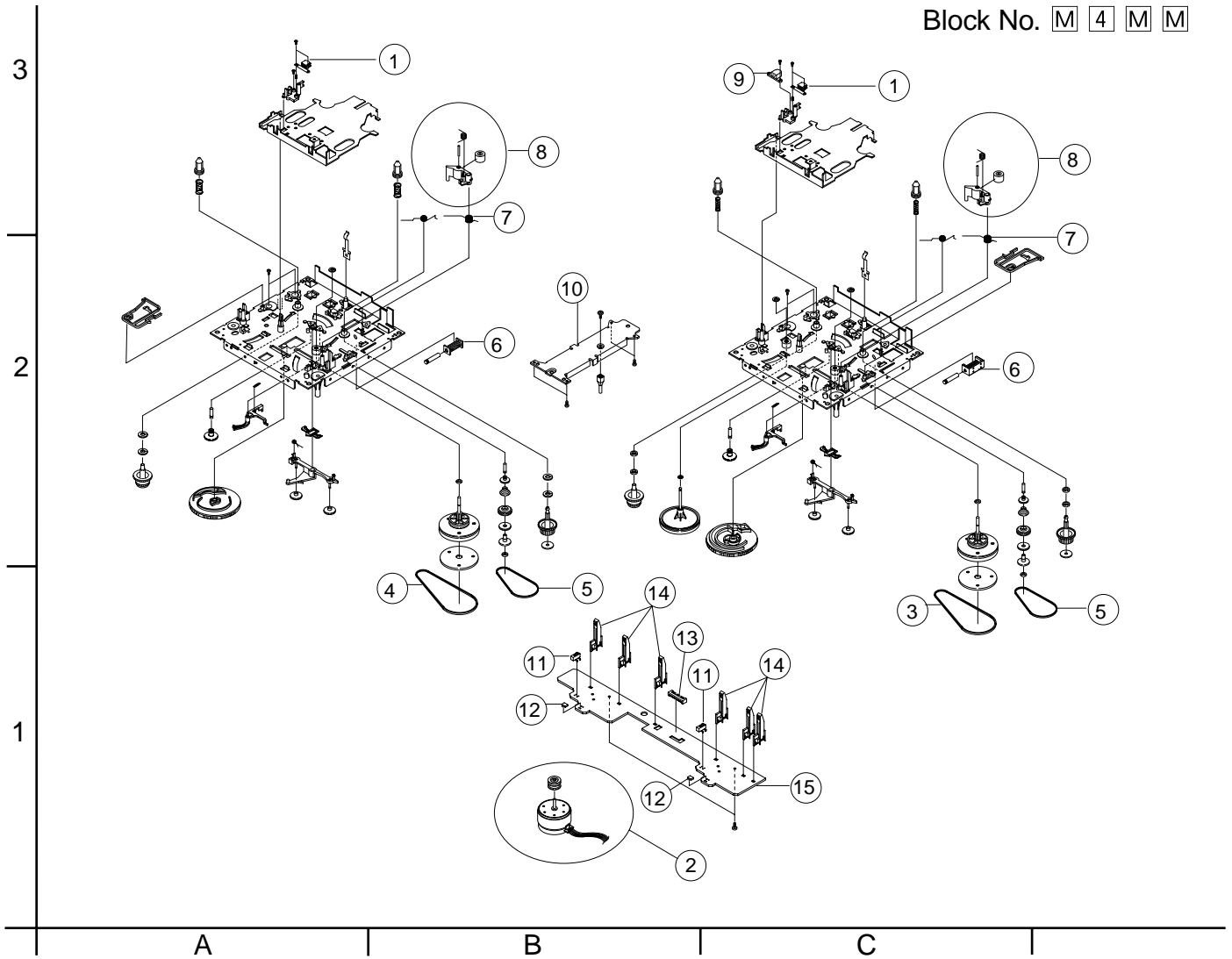
■ Parts list

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH66-80022A	SLIDER CAM	1		
	2	AH66-60034A	ROAD BELT	1		
	3	AH66-20186A	PULLEY GEAR	1		
	4	AH66-20187A	ROAD GEAR	1		
	5	AH66-20188A	CAM GEAR	1		
	6	AH66-20189A	TRAY GEAR	1		
	7	AH66-20190A	CONVERT GEAR	1		
	8	AH66-20191A	SYNCRO GEAR	1		
	10	AH59-10098A	WORM-MOTOR ASSY	1		
	11	AH69-20044A	MOTOR CUSHION	1		
	12	AH66-20193A	ROULLETTE GEAR	1		
	13	AH66-90056A	ROULLETTE TRAY	1		
	14	AH66-90055A	DISK TRAY	1		
	15	AH59-10099A	SENSOR PCB ASSY	1		
	16	AH59-10100B	TABLE CHUCK ASS	1		
	17	AH59-10101A	MOTOR	1	ASS'Y PARTS	
	18	-----	SWITCH BOARD	1		
	19	AH66-30086A	LIFTER LEVER	1		
	20	AH73-10016A	RUBBER CUSHION	1		
	21	-----	CD MECHANISM	1		

Cassette mechanism assembly and parts list

Block No. **M 4 M M**



Parts list (Cassette mechanism)

Block No. **M4MM**

Item	Parts number	Parts name	Q'ty	Description	Area
1	AH81-00141A	R/P HEAD	2	TC881CB	
2	AH81-00142A	C.MOTOR ASS'Y	1	ADR2400-SHU2L	
3	AH81-00143A	MAIN BELT 1	1	ADR2400-MAIN76.	
4	AH81-00144A	MAIN BELT 2	1	ADR2400-MAIN64.	
5	AH81-00101A	SUB BELT	2	ADR2400-FR34.7	
6	AH81-00102A	SOLENOIDE	2	ADR2400-1	
7	AH81-00282A	SPRING	2		
8	AH81-00283A	PINCH LOLLER	2	ASS'Y PARTS	
9	AH81-00284A	E-HEAD	1	TC2131F	
10	AH81-00285A	MOTOR BRACKET	1		
11	AH81-00286A	LEAF SWITCH	2	ADR2400-MODE	
12	AH81-00287A	PHOTO SENSOR	2	ADR2400-SENSOR	
13	AH81-00288A	CONNECTOR	1	ADR2400-16	
14	AH81-00289A	LEAF SWITCH	6	ADR2400-MXS0022	
15	AH81-00290A	P.C.BOARD	1		

Electrical parts list

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	A-DEC	AH39-20002D	CONNECTOR				AR 32	2001-000290	C RESISTOR		
	AC 1	2201-000557	C CAPACITOR				AR 33	2001-000780	C RESISTOR		
	AC 2	2401-000419	E CAPACITOR				AR 34	2001-000429	C RESISTOR		
	AC 3	2201-000368	C CAPACITOR				AR 35	2001-000429	C RESISTOR		
	AC 4	2401-001164	E CAPACITOR				AR 35	2001-000411	C RESISTOR		
	AC 5	2201-000659	C CAPACITOR				AR 36	2001-000440	C RESISTOR		
	AC 6	2401-000357	E CAPACITOR				AR 37	2001-000591	C RESISTOR		
	AC 7	2401-000357	E CAPACITOR				AR 38	2001-000429	C RESISTOR		
	AC 8	2202-000817	C CAPACITOR				AR 39	2001-000429	C RESISTOR		
	AC 10	2202-000854	C CAPACITOR				AR100	2001-000449	C RESISTOR		
	AC 11	2202-000854	C CAPACITOR				AR200	2001-000290	C RESISTOR		
	AC 13	2202-000817	C CAPACITOR				AR201	2001-000290	C RESISTOR		
	AC 14	2201-000368	C CAPACITOR				AR204	2001-000734	C RESISTOR		
	AC 15	2201-000659	C CAPACITOR				AR205	2001-000734	C RESISTOR		
	AC 16	2401-000419	E CAPACITOR				CCW 1	3710-001567	CONNECTOR		
	AC 17	2201-000557	C CAPACITOR				CCW 2	3710-001571	CONNECTOR		
	AC 18	2401-001164	E CAPACITOR				CON 1	AH39-50001L	LEAD-FASTEN		
	AC 20	2301-000375	C CAPACITOR				DC 1	2301-000412	C CAPACITOR		
	AC 21	2301-000375	C CAPACITOR				DC 2	2301-000379	C CAPACITOR		
	AC 22	2401-001092	E CAPACITOR				DC 3	2301-000404	C CAPACITOR		
	AC 23	2401-002180	E CAPACITOR				DC 4	2301-000442	C CAPACITOR		
	AC 24	2401-002180	E CAPACITOR				DC 5	2201-000368	C CAPACITOR		
	AC 25	2401-001889	E CAPACITOR				DC 6	2201-000368	C CAPACITOR		
	AC 26	2401-000871	E CAPACITOR				DC 7	2401-001912	E CAPACITOR		
	AC100	2401-001912	E CAPACITOR				DC 9	2301-000390	C CAPACITOR		
	AC102	2401-000419	E CAPACITOR				DC 10	2301-000379	C CAPACITOR		
	AD 1	1N4148	GE DIODE				DC 11	2301-000370	C CAPACITOR		
	AD 2	1N4148	GE DIODE				DC 12	2301-000370	C CAPACITOR		
	AD 3	1N4148	GE DIODE				DC 13	2401-001022	E CAPACITOR		
	AD 10	1N4148	GE DIODE				DC 14	2401-001511	E CAPACITOR		
△	AIC 1	STK402-040	IC	POWER AMP			DC 15	2401-000240	E CAPACITOR		
	AJACK	3716-000209	TERMINAL BLOCK				DC 16	2301-000474	C CAPACITOR		
	AJW 1	AH39-00157D	LEAD-CONNECTOR				DC 17	2301-000393	C CAPACITOR		
	AQ 1	KSD471-YTA	TRANSISTOR				DC 18	2301-000375	C CAPACITOR		
	AQ 2	KSD471-YTA	TRANSISTOR				DC 19	2401-002180	E CAPACITOR		
	AQ 6	KSR2003TA	TRANSISTOR				DC 20	2401-001954	E CAPACITOR		
	AQ 7	KSA708-YTA	TRANSISTOR				DC 21	2401-001022	E CAPACITOR		
	AQ 8	KSA928A	TRANSISTOR				DC 22	2202-000781	C CAPACITOR		
	AQ 9	KSD471-YTA	TRANSISTOR				DC 23	2401-001511	E CAPACITOR		
	AQ 10	KSD471-YTA	TRANSISTOR				DC 24	2401-000795	E CAPACITOR		
	AR 1	2001-000429	C RESISTOR				DC 25	2401-001022	E CAPACITOR		
	AR 2	2001-000773	C RESISTOR				DC 26	2201-000674	C CAPACITOR		
	AR 3	2001-000273	C RESISTOR				DC 27	2301-000400	C CAPACITOR		
	AR 4	2001-000281	C RESISTOR				DC 31	2401-001080	E CAPACITOR		
	AR 5	2001-000864	C RESISTOR				DC 32	2401-001022	E CAPACITOR		
	AR 6	2001-000924	C RESISTOR				DC 33	2401-001912	E CAPACITOR		
	AR 7	2001-000864	C RESISTOR				DC 34	2401-001080	E CAPACITOR		
	AR 8	2001-001153	C RESISTOR				DC 36	2201-000674	C CAPACITOR		
	AR 9	2003-000390	OM RESISTOR				DC 37	2301-000407	C CAPACITOR		
	AR 10	2003-000390	OM RESISTOR				DC 38	2401-001022	E CAPACITOR		
	AR 11	2003-000390	OM RESISTOR				DC 39	2401-001511	E CAPACITOR		
	AR 12	2003-000390	OM RESISTOR				DC 40	2202-000781	C CAPACITOR		
	AR 17	2001-000028	C RESISTOR				DC 41	2401-001022	E CAPACITOR		
	AR 18	2001-000890	C RESISTOR				DC 42	2301-000375	C CAPACITOR		
	AR 19	2001-000793	C RESISTOR				DC 43	2202-000781	C CAPACITOR		
	AR 20	2001-000864	C RESISTOR				DC 44	2401-002180	E CAPACITOR		
	AR 23	2001-000273	C RESISTOR				DC 45	2202-000781	C CAPACITOR		
	AR 24	2001-000429	C RESISTOR				DC 47	2301-000400	C CAPACITOR		
	AR 25	2001-000780	C RESISTOR				DC 48	2202-000796	C CAPACITOR		
	AR 26	2001-000290	C RESISTOR				DC 49	2401-000240	E CAPACITOR		
	AR 27	2001-000281	C RESISTOR				DC 50	2401-001511	E CAPACITOR		
	AR 30	2003-000689	OM RESISTOR				DC 51	2301-000393	C CAPACITOR		
	AR 31	2003-000689	OM RESISTOR				DC 52	2401-001022	E CAPACITOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	DC 54	2301-000390	C CAPACITOR				DR 22	2001-000864	C RESISTOR		
	DC 55	2301-000370	C CAPACITOR				DR 23	2001-000003	C RESISTOR		
	DC 56	2301-000370	C CAPACITOR				DR 24	2001-000786	C RESISTOR		
	DC 57	2301-000379	C CAPACITOR				DR 25	2001-000890	C RESISTOR		
	DC 58	2301-000474	C CAPACITOR				DR 26	2001-000702	C RESISTOR		
	DC 59	2401-000438	E CAPACITOR				DR 27	2001-000325	C RESISTOR		
	DC 60	2401-000438	E CAPACITOR				DR 28	2001-000290	C RESISTOR		
	DC 61	2401-001022	E CAPACITOR				DR 40	2001-000449	C RESISTOR		
	DC 62	2401-001912	E CAPACITOR				DR 41	2001-000734	C RESISTOR		
	DC 63	2202-000821	C CAPACITOR				DR 42	2001-000591	C RESISTOR		
	DC 64	2202-000821	C CAPACITOR				DR 43	2001-000258	C RESISTOR		
	DC 70	2401-001895	E CAPACITOR				DR 47	2001-000522	C RESISTOR		
	DC 71	2202-000781	C CAPACITOR				DR 48	2001-000591	C RESISTOR		
	DC 72	2202-000781	C CAPACITOR				DR 49	2001-000734	C RESISTOR		
	DC 73	2301-000407	C CAPACITOR				DR 50	2001-000613	C RESISTOR		
	DC 74	2202-000243	C CAPACITOR				DR 58	2001-000325	C RESISTOR		
	DC 75	2202-000243	C CAPACITOR				DR 59	2001-000331	C RESISTOR		
	DD 1	1N4148	GE DIODE				DR 61	2001-000734	C RESISTOR		
	DD 2	1N4148	GE DIODE				DR 62	2001-000786	C RESISTOR		
	DD 3	1N4148	GE DIODE				DR 63	2001-000591	C RESISTOR		
	DD 4	1N4148	GE DIODE				DR 64	2001-000290	C RESISTOR		
	DIC 1	KA22291	TRANSISTOR	PREAMP			DR 65	2001-000429	C RESISTOR		
	DIC 2	KA4558	TRANSISTOR	OP AMP			DR 66	2001-000003	C RESISTOR		
	DL 1	AH26-10002Y	COIL	BIAS-TRAP			DR 67	2001-000924	C RESISTOR		
	DL 2	AH26-10002Y	COIL	BIAS-TRAP			DR 68	2001-000290	C RESISTOR		
	DL 5	AH27-00018A	COIL	BAIS-OSC 85K			DR 69	2001-000331	C RESISTOR		
	DQ 1	KSC2331-Y-TA	TRANSISTOR				DR 70	2001-000003	C RESISTOR		
	DQ 2	KSA928A	TRANSISTOR				DR 71	2001-000397	C RESISTOR	RN 1/8T 180K-J	
	DQ 3	KSC945-YTA	TRANSISTOR				DR 72	2001-000977	C RESISTOR		
	DQ 4	KSR1003TA	TRANSISTOR				DR 73	2001-000449	C RESISTOR		
	DQ 5	KSC1008-YTA	TRANSISTOR				DR 74	2001-000786	C RESISTOR		
	DQ 6	KSC1008-YTA	TRANSISTOR				DR 75	2001-000449	C RESISTOR		
	DQ 7	KSC1008-YTA	TRANSISTOR				DR 76	2001-000429	C RESISTOR		
	DQ 8	KSC1008-YTA	TRANSISTOR				DR 77	2001-000522	C RESISTOR		
	DQ 9	KSR2003TA	TRANSISTOR				DR 78	2001-000734	C RESISTOR		
	DQ 10	KSR1003TA	TRANSISTOR				DR 79	2001-000449	C RESISTOR		
	DQ 11	KSC945-YTA	TRANSISTOR				DR 80	2001-000449	C RESISTOR		
	DQ 12	KSC945-YTA	TRANSISTOR				DR 81	2001-000449	C RESISTOR		
	DQ 13	KSC945-YTA	TRANSISTOR				DR 82	2001-000449	C RESISTOR		
	DQ 14	KSC945-YTA	TRANSISTOR				DR 83	2001-000449	C RESISTOR		
	DQ 15	KSR2003TA	TRANSISTOR				DR 84	2001-000449	C RESISTOR		
	DQ 16	KSC945-YTA	TRANSISTOR				DR 85	2001-000786	C RESISTOR		
	DQ 17	KSC945-YTA	TRANSISTOR				DR 86	2001-000734	C RESISTOR		
	DQ 18	KSR2003TA	TRANSISTOR				DR 87	2001-000522	C RESISTOR		
	DQ 20	KSR1003TA	TRANSISTOR				DR 88	2001-000449	C RESISTOR		
	DR 1	2001-000429	C RESISTOR				DR 89	2001-000008	C RESISTOR		
	DR 2	2001-000440	C RESISTOR				DR 90	2001-000591	C RESISTOR		
	DR 3	2001-000734	C RESISTOR				DR 91	2001-000008	C RESISTOR		
	DR 5	2001-000290	C RESISTOR				DR 92	2001-000591	C RESISTOR		
	DR 6	2001-001095	C RESISTOR				DR 93	2001-000591	C RESISTOR		
	DR 7	2001-000786	C RESISTOR				DR 94	2001-000864	C RESISTOR		
	DR 8	2001-000591	C RESISTOR				DR 95	2001-000449	C RESISTOR		
	DR 9	2001-000290	C RESISTOR				DR 96	2001-000864	C RESISTOR		
	DR 10	2001-000429	C RESISTOR				DR 97	2001-000525	C RESISTOR		
	DR 11	2001-000708	C RESISTOR				DR 98	2001-000449	C RESISTOR		
	DR 12	2001-000924	C RESISTOR				DR 99	2001-000563	C RESISTOR		
	DR 13	2001-000005	C RESISTOR				DR100	2001-000258	C RESISTOR		
	DR 15	2001-000290	C RESISTOR				DR101	2001-000281	C RESISTOR		
	DR 16	2001-000290	C RESISTOR				DR102	2001-000281	C RESISTOR		
	DR 18	2001-000734	C RESISTOR				DVR 1	2103-000248	SEMI F.VR.		
	DR 19	2001-000290	C RESISTOR				DVR 2	2103-000248	SEMI F.VR.		
	DR 20	2001-000924	C RESISTOR				DVR 3	2103-000492	SEMI F.VR.		
	DR 21	2001-000331	C RESISTOR	RN 1/8T 180K-J			DW 1	3711-003111	CONNECTOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	DW 2	3711-003107	CONNECTOR				PC 10	2401-001954	E CAPACITOR		
	DW 3	3711-003107	CONNECTOR				PC 11	2401-001895	E CAPACITOR		
	EC 6	2401-000907	E CAPACITOR				PC 13	2401-001895	E CAPACITOR		
	FC 1	2301-000375	C CAPACITOR				PC 14	2401-001954	E CAPACITOR		
	FC 2	2301-000375	C CAPACITOR				PC 15	2401-001954	E CAPACITOR		
	FC 3	2201-000928	C CAPACITOR				PC 16	2401-001912	E CAPACITOR		
	FC 4	2401-001912	E CAPACITOR				PC 17	2401-000475	E CAPACITOR		
	FC 5	2401-001511	E CAPACITOR				PC 18	2401-001511	E CAPACITOR		
	FC 7	2301-000375	C CAPACITOR				PC 19	2401-000475	E CAPACITOR		
	FC 8	2201-000928	C CAPACITOR				PC 20	2401-000230	E CAPACITOR		
	FC 9	2401-001912	E CAPACITOR				PC 21	2401-001954	E CAPACITOR		
	FC 10	2202-000781	C CAPACITOR				PC 23	2201-000783	C CAPACITOR		
	FC 11	2301-000375	C CAPACITOR				PC 24	2201-000783	C CAPACITOR		
	FC 12	2202-000781	C CAPACITOR				PC 25	2401-001538	E CAPACITOR		
	FC 14	2401-001912	E CAPACITOR				PC 26	2401-001538	E CAPACITOR		
	FC 15	2401-001912	E CAPACITOR				PC 27	2301-000449	C CAPACITOR		
	FC 16	2201-000368	C CAPACITOR				PC 28	2401-000795	E CAPACITOR		
	FC 17	2201-000368	C CAPACITOR				PC 29	2401-001511	E CAPACITOR		
	FC 18	2401-001954	E CAPACITOR				PC 30	2201-000565	C CAPACITOR		
	FC 19	2401-001912	E CAPACITOR				PC 31	2401-001895	E CAPACITOR		
	FC 20	2401-001912	E CAPACITOR				PC 32	2401-001895	E CAPACITOR		
	FC 21	2301-000379	C CAPACITOR				PC 33	2202-000797	C CAPACITOR		
	FC 22	2201-000504	C CAPACITOR				PCW 1	AH39-00144A	LEAD-CONNECTOR	9P	
	FC 23	2401-001912	E CAPACITOR				PD 2	1N5392	DIODE		
	FC 24	2401-001912	E CAPACITOR				PD 3	1N5392	DIODE		
	FC 25	2401-001912	E CAPACITOR				PD 4	1N5392	DIODE		
	FC 26	2401-001912	E CAPACITOR				PD 5	1N5392	DIODE		
	FD 1	1N4148	GE DIODE				PD 6	1N4002	DIODE		
	FIC 1	LC75341	IC	VOLUME/TONE CON 4P/2C			PD 7	1N4002	DIODE		
	FJACK	3722-000377	JACK-RCA				PD 8	1N4002	DIODE		
	FQ 1	KSR1009TA	TRANSISTOR				PD 9	1N5392	DIODE		
	FQ 2	KSR1009TA	TRANSISTOR				PD 10	1N5392	DIODE		
	FQ 3	KSR2003TA	TRANSISTOR				PIC 1	KA7812-ABC	IC	REGULATOR	
	FQ 4	KSD471-YTA	TRANSISTOR			△	PIC 2	KA7805-AB	IC	REGULATOR +	
	FR 1	2001-000613	C RESISTOR				PIC 3	KA7912-AB	IC	REGULATOR -	
	FR 2	2001-000241	C RESISTOR				PL 1	2701-000116	INDUCTOR-AXIAL		
	FR 3	2001-000023	C RESISTOR				PL 2	2701-000298	INDUCTOR-AXIAL	AX470UH	
	FR 4	2001-000281	C RESISTOR			△	PQ 1	2SB1566/EF/	TRANSISTOR	POWER	
	FR 5	2001-000281	C RESISTOR			△	PQ 2	2SB1566/EF/	TRANSISTOR	POWER	
	FR 6	2001-000281	C RESISTOR				PQ 3	KSC1009-YTA	TRANSISTOR		
	FR 7	2001-000613	C RESISTOR				PQ 4	KSC945-YTA	TRANSISTOR		
	FR 8	2001-000411	C RESISTOR				PQ 5	KSA708-YTA	TRANSISTOR		
	FR 9	2001-000008	C RESISTOR				PQ 6	KSA928A	TRANSISTOR		
	FR 11	2001-000397	C RESISTOR				PQ 9	KSR1003TA	TRANSISTOR		
	FR 12	2001-000786	C RESISTOR				PQ 10	KSA708-YTA	TRANSISTOR		
	FR 13	2001-000613	C RESISTOR			△	PQ 11	KTC4369-Y	TRANSISTOR	POWER	
	FR 14	2001-000786	C RESISTOR			△	PR 1	2003-000690	OM RESISTOR		
	FR 15	2001-000702	C RESISTOR				PR 3	2001-000786	C RESISTOR		
	FR 16	2001-000429	C RESISTOR				PR 4	2001-000793	C RESISTOR		
	FR 17	2001-000429	C RESISTOR			△	PR 5	2008-000135	FUSE RESISTOR		
	FR 18	2001-000977	C RESISTOR			△	PR 6	2008-000135	FUSE RESISTOR		
	FR 19	2001-000221	C RESISTOR			△	PR 7	2008-000135	FUSE RESISTOR		
	FW 1	3711-004109	CONNECTOR				PR 8	2001-000890	C RESISTOR		
	FW 2	3711-002809	CONNECTOR				PR 9	2001-000613	C RESISTOR		
	PC 1	2401-002592	E CAPACITOR				PR 10	2001-000734	C RESISTOR		
	PC 2	2401-002592	E CAPACITOR				PR 11	2003-000701	OM RESISTOR		
	PC 3	2201-000783	C CAPACITOR				PR 12	2001-001096	C RESISTOR		
	PC 4	2201-000783	C CAPACITOR				PR 13	2001-001153	C RESISTOR		
	PC 5	2201-000783	C CAPACITOR				PR 14	2001-000290	C RESISTOR		
	PC 6	2201-000783	C CAPACITOR				PR 15	2001-000522	C RESISTOR		
	PC 7	2401-003116	E CAPACITOR				PR 16	2001-000786	C RESISTOR		
	PC 8	2401-001413	E CAPACITOR				PR 17	2001-000734	C RESISTOR		
	PC 9	2401-001954	E CAPACITOR				PR 18	2001-000977	C RESISTOR		

■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	PR 19	2001-000290	C RESISTOR		
△	PR 20	2003-000690	OM RESISTOR		
	PR 21	2001-000290	C RESISTOR		
	PR 22	2001-000522	C RESISTOR		
	PR 23	2001-000780	C RESISTOR		
	PR 26	2003-000468	OM RESISTOR		
	PR 27	2001-000027	C RESISTOR		
	PZD 1	TZP16A	ZENER DIODE		
	PZD 2	TZP16A	ZENER DIODE		
	PZD 3	UZP5.6B	ZENER DIODE		
	PZD 4	UZ5.1BSB	ZENER DIODE		
	PZD 5	UZP10B	ZENER DIODE		
	PZD 6	UZP10B	ZENER DIODE		
	PZD 8	UZP10B	ZENER DIODE		
△	R 100	2001-000977	C RESISTOR		
△	RC 1	2201-000546	C CAPACITOR		
	RCW 1	3711-001167	CONNECTOR	BOX 9P	
	RCW 2	3711-000190	CONNECTOR		
△	RF 1	3601-001204	FUSE	GMC-1.6A	
△	RR 1	2008-000135	FUSE RESISTOR		
△	RR 2	2008-000135	FUSE RESISTOR		
△	RR 3	2008-000137	FUSE RESISTOR		
△	RR 4	2008-000137	FUSE RESISTOR		
	RUCL1	3602-000147	FUSE CLIP		
	TO CH	AH39-50001L	LEAD-FASTEN		
	VR 32	2001-000786	C RESISTOR		
	VR 32	2001-000786	C RESISTOR		
	VR 35	2001-000786	C RESISTOR		
	VR 35	2001-000786	C RESISTOR		

■ Electrical parts list (Tuner board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	ANT	AH27-00012A	OSC COIL				TJ 1	3716-000210	ANT TARMINAL		
	FMPAK	AH40-00003A	TUNER PACK				TJ 2	3711-000814	CONNECTOR		
	HIC 1	LC72131D	IC	PLL			JW100	2007-000029	CHIP RESISTOR		
	HR 1	2007-000586	CHIP RESISTOR				TJW41	2007-000029	CHIP RESISTOR		
	OSC	AH27-00008A	OSC COIL				TJW42	2007-000029	CHIP RESISTOR		
	TC 1	2203-000609	C CAPASITOR				TL 2	AH26-10001E	IFT		
	TC 2	2203-001517	C CAPASITOR				TL 3	AH26-10020A	TRANS DET		
	TC 3	2203-000260	C CAPASITOR				TLPF1	AH26-00005A	IFT		
	TC 4	2401-001975	C CAPACITOR				TLPF2	AH26-00005A	IFT		
	TC 5	2203-000609	C CAPASITOR				TQ 1	KSC945-YTA	TRANSISTOR		
	TC 6	2203-000979	C CAPASITOR				TQ 2	KSC838-OTA	TRANSISTOR		
	TC 7	2203-000429	C CAPASITOR				TQ 3	KSC838-OTA	TRANSISTOR		
	TC 9	2401-001975	C CAPACITOR				TQ 4	KSA708-YTA	TRANSISTOR		
	TC 10	2203-000979	C CAPASITOR				TR 1	2001-000331	C RESISTOR		
	TC 11	2401-001912	E CAPACITOR				TR 2	2007-000300	CHIP RESISTOR		
	TC 12	2401-000419	E CAPACITOR				TR 3	2001-000449	C RESISTOR		
	TC 13	2203-000979	C CAPASITOR				TR 4	2007-000872	CHIP RESISTOR		
	TC 14	2201-000565	C CAPACITOR				TR 5	2001-000281	C RESISTOR		
	TC 15	2203-000979	C CAPASITOR				TR 6	2007-000030	CHIP RESISTOR		
	TC 16	2401-001954	E CAPACITOR				TR 7	2007-000518	CHIP RESISTOR		
	TC 17	2401-001912	E CAPACITOR				TR 8	2007-000822	CHIP RESISTOR		
	TC 18	2401-001968	C CAPACITOR				TR 9	2007-000468	CHIP RESISTOR		
	TC 19	2401-001912	E CAPACITOR				TR 10	2007-000308	CHIP RESISTOR		
	TC 20	2203-000260	C CAPASITOR				TR 11	2007-000572	CHIP RESISTOR		
	TC 21	2401-000240	E CAPACITOR				TR 12	2007-000686	CHIP RESISTOR		
	TC 23	2401-001954	E CAPACITOR				TR 13	2001-000515	C RESISTOR		
	TC 25	2401-001954	E CAPACITOR				TR 15	2007-000586	CHIP RESISTOR		
	TC 26	2401-000419	E CAPACITOR				TR 16	2001-000527	C RESISTOR		
	TC 27	2401-000419	E CAPACITOR				TR 17	2007-000981	CHIP RESISTOR		
	TC 28	2203-000260	C CAPASITOR				TR 18	2001-000449	C RESISTOR		
	TC 29	2203-000260	C CAPASITOR				TR 19	2007-000282	CHIP RESISTOR		
	TC 30	2401-000419	E CAPACITOR				TR 20	2007-000409	CHIP RESISTOR		
	TC 32	2203-001132	C CAPASITOR				TR 21	2007-000300	CHIP RESISTOR		
	TC 33	2203-000844	C CAPASITOR				TR 22	2007-000300	CHIP RESISTOR		
	TC 34	2401-000907	E CAPACITOR				TR 23	2007-000710	CHIP RESISTOR		
	TC 35	2203-000979	C CAPASITOR				TR 24	2007-000290	CHIP RESISTOR		
	TC 36	2401-001022	E CAPACITOR				TR 25	2007-001043	CHIP RESISTOR		
	TC 38	2401-001164	E CAPACITOR				TR 27	2007-001071	CHIP RESISTOR		
	TC 39	2201-000565	C CAPACITOR				TR 28	2007-000457	CHIP RESISTOR		
	TC 40	2202-000796	C CAPACITOR				TR 29	2007-000686	CHIP RESISTOR		
	TC 41	2203-000239	C CAPASITOR				TR 30	2001-000117	C RESISTOR		
	TC 42	2202-000796	C CAPACITOR				TR 32	2001-000429	C RESISTOR		
	TC 43	2401-001968	C CAPACITOR				TR 34	2001-000429	C RESISTOR		
	TC 44	2203-000260	C CAPASITOR				TR 35	2007-000493	CHIP RESISTOR		
	TC 45	2203-000979	C CAPASITOR				TR 36	2007-000493	CHIP RESISTOR		
	TC 46	2401-000240	E CAPACITOR				TR 37	2007-000586	CHIP RESISTOR		
	TC 47	2401-001895	E CAPACITOR				TR 38	2007-001177	CHIP RESISTOR		
	TC 48	2202-000807	C CAPASITOR				TR 39	2001-000290	C RESISTOR		
	TC 50	2203-001611	C CAPASITOR				TR 40	2001-000522	C RESISTOR		
	TC 51	2203-001611	C CAPASITOR				TR 40	2001-000522	C RESISTOR		
	TC 61	2203-001105	C CAPASITOR				TR 41	2001-000522	C RESISTOR		
	TC 62	2203-001105	C CAPASITOR				TR 42	2001-000734	C RESISTOR		
	TC 63	2203-001551	C CAPASITOR				TR 43	2007-000290	CHIP RESISTOR		
	TC 64	2203-001551	C CAPASITOR				TR 44	2001-000118	C RESISTOR		
	TC100	2201-000389	C CAPACITOR				TR 45	2007-000282	CHIP RESISTOR		
	TD 3	1N4148	GE DIODE				TR 46	2007-000300	CHIP RESISTOR		
	TD 4	1N4148	GE DIODE				TR 47	2007-000282	CHIP RESISTOR		
	TD 5	1N4148	GE DIODE				TR 48	2007-000300	CHIP RESISTOR		
	TD 6	1N4148	GE DIODE				TR 49	2007-000282	CHIP RESISTOR		
	TFL 1	2903-000119	CERAMIC FILTER	SFE10.7MJA-10-A			TR 50	2007-000300	CHIP RESISTOR		
	TFL 2	2903-000105	CERAMIC FILTER	10.7MHZ			TR 51	2007-000872	CHIP RESISTOR		
	TFL 4	14529-304-610	CERAMIC FILTER	AHCM2-450BL			TR 52	2007-000468	CHIP RESISTOR		
	TIC 1	LA1837	IC				TR 53	2007-000300	CHIP RESISTOR		

■ Electrical parts list (Tuner board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	TR 54	2007-000300	CHIP RESISTOR		
	TR 55	2001-000429	C RESISTOR		
	TR 56	2007-000300	CHIP RESISTOR		
	TR 57	2001-000290	C RESISTOR		
	TR 58	2001-000273	C RESISTOR		
	TR 61	2001-000591	C RESISTOR		
	TR 62	2001-000591	C RESISTOR		
	TR100	2001-000527	C RESISTOR		
	TR101	2007-000033	CHIP RESISTOR		
	TR102	2007-000033	CHIP RESISTOR		
	TR103	2007-000033	CHIP RESISTOR		
	TR104	2007-000033	CHIP RESISTOR		
	TR105	2007-000029	CHIP RESISTOR		
	TSR 1	2103-000290	VR-SEMI F.VR		
	TWA 1	3710-001421	C/SOCKET	14P	
	TX 1	2801-000734	CRYSTAL UNIT	7.2MHZ	
	TZD 1	UZ7.5BSC	ZENER DIODE	7.5V	
	TZD 2	UZP5.1B	ZENER DIODE	5.1V	
	VVC 1	KV1260	VARI-CAPA		

■ Electrical parts list (Front board)

Block No. 03

△	Item	Parts number	Parts name	Remarks	Area
	GND 1	AH39-50001L	LEAD-FASTEN		
	REEYE	GP1U281R	REMOCON SENSOER		
	SW 1	3404-000165	TACT SWITCH		
	SW 2	3404-000165	TACT SWITCH		
	SW 3	3404-000165	TACT SWITCH		
	SW 4	3404-000165	TACT SWITCH		
	SW 5	3404-000165	TACT SWITCH		
	SW 6	3404-000165	TACT SWITCH		
	SW 7	3404-000165	TACT SWITCH		
	SW 8	3404-000165	TACT SWITCH		
	SW 9	3404-000165	TACT SWITCH		
	SW 10	3404-000165	TACT SWITCH		
	SW 11	3404-000165	TACT SWITCH		
	SW 12	3404-000165	TACT SWITCH		
	SW 13	3404-000165	TACT SWITCH		
	SW 14	3404-000165	TACT SWITCH		
	SW 15	3404-000165	TACT SWITCH		
	SW 16	3404-000165	TACT SWITCH		
	SW 17	3404-000165	TACT SWITCH		
	SW 18	3404-000165	TACT SWITCH		
	SW 19	3404-000165	TACT SWITCH		
	SW 20	3404-000165	TACT SWITCH		
	SW 21	3404-000165	TACT SWITCH		
	SW 22	3404-000165	TACT SWITCH		
	SW 23	3404-000165	TACT SWITCH		
	SW 24	3404-000165	TACT SWITCH		
	SW 25	3404-000165	TACT SWITCH		
	SW 27	3404-000165	TACT SWITCH		
	SW 28	3404-000165	TACT SWITCH		
	SW 29	3404-000165	TACT SWITCH		
	SW 30	3404-000165	TACT SWITCH		
	SW 31	3404-000165	TACT SWITCH		
	SW 32	3404-000165	TACT SWITCH		
	SW 33	3404-000165	TACT SWITCH		
	SW 34	3404-000165	TACT SWITCH		
	UC 1	2401-000475	E CAPACITOR		
	UC 2	2401-000475	E CAPACITOR		
	UC 3	2201-000565	C CAPACITOR		
	UC 4	2201-000565	C CAPACITOR		
	UC 5	2201-000565	C CAPACITOR		
	UC 6	2401-000244	E CAPACITOR		
	UC 7	2201-000825	C CAPACITOR		
	UC 8	2201-000825	C CAPACITOR		
	UC 9	2201-000247	C CAPACITOR		
	UC 10	2201-000247	C CAPACITOR		
	UC 11	2401-000475	E CAPACITOR		
	UC 12	2401-000759	E CAPACITOR		
	UC 13	2401-001952	E CAPACITOR		
	UC 15	2202-000854	C CAPACITOR		
	UC 16	2201-000300	C CAPACITOR		
	UC 17	2202-000797	C CAPACITOR		
	UC 18	2202-000797	C CAPACITOR		
	UC 30	2401-001355	E CAPACITOR		
	UCW 1	3711-004420	CONNECTOR	TMC-D10P	
	UCW 2	3711-004424	CONNECTOR	TMC-D20P	
	UCW 3	3708-000454	CONNECTOR	22P	
	UCW 7	3711-000906	CONNECTOR		
	UCW 8	3809-001146	CABLE FLAT		
	UCW8W	3708-000451	CONNECTOR	16P	
	UCW 9	AH39-00157A	LEAD CONNECTOR	3P	
	UD 20	1N4002	DIODE		
	UD 21	1N4002	DIODE		
	UD 22	1N4002	DIODE		
	UD 23	1N4148	GE DIODE		

Item	Parts number	Parts name	Remarks	Area
UD 24	1N4002	DIODE		
UD 25	1N4148	GE DIODE		
UD 27	1N4148	GE DIODE		
UD 28	1N4148	GE DIODE		
UD 29	1N4148	GE DIODE		
UD 30	1N4002	DIODE		
UIC 2	NJU3711M	IC		
ULD 1	LTL-1CHESS-UA	LED		
UQ 1	KSC945-YTA	TRANSISTOR		
UQ 2	KSC945-YTA	TRANSISTOR		
UQ 3	KSA928A	TRANSISTOR		
UQ 4	KSR1003TA	TRANSISTOR		
UQ 5	KSR1003TA	TRANSISTOR		
UQ 6	KSA928A	TRANSISTOR		
UQ 7	KSA928A	TRANSISTOR		
UQ 8	KSR1003TA	TRANSISTOR		
UQ 9	KSC945-YTA	TRANSISTOR		
UQ 10	KSR1003TA	TRANSISTOR		
UQ 15	KSR1003TA	TRANSISTOR		
UR 1	2001-000258	C RESISTOR		
UR 2	2001-000405	C RESISTOR	RN 1/8T 180-J	
UR 3	2001-000241	C RESISTOR		
UR 4	2001-000429	C RESISTOR		
UR 5	2001-000429	C RESISTOR		
UR 6	2001-000429	C RESISTOR		
UR 7	2001-000734	C RESISTOR		
UR 8	2001-000734	C RESISTOR		
UR 9	2001-000734	C RESISTOR		
UR 10	2001-000734	C RESISTOR		
UR 11	2001-000734	C RESISTOR		
UR 12	2001-000734	C RESISTOR		
UR 13	2001-000734	C RESISTOR		
UR 14	2001-000734	C RESISTOR		
UR 15	2001-000734	C RESISTOR		
UR 16	2001-000734	C RESISTOR		
UR 17	2001-000734	C RESISTOR		
UR 20	2001-000290	C RESISTOR		
UR 21	2001-000290	C RESISTOR		
UR 22	2001-000290	C RESISTOR		
UR 23	2001-000290	C RESISTOR		
UR 24	2001-000281	C RESISTOR		
UR 25	2001-000429	C RESISTOR		
UR 26	2001-000429	C RESISTOR		
UR 27	2001-000429	C RESISTOR		
UR 28	2001-000429	C RESISTOR		
UR 29	2001-000429	C RESISTOR		
UR 30	2001-000429	C RESISTOR		
UR 31	2001-000591	C RESISTOR		
UR 32	2001-000429	C RESISTOR		
UR 33	2001-000429	C RESISTOR		
UR 34	2001-000429	C RESISTOR		
UR 35	2001-000429	C RESISTOR		
UR 36	2001-000429	C RESISTOR		
UR 37	2001-000429	C RESISTOR		
UR 38	2001-000290	C RESISTOR		
UR 39	2001-000290	C RESISTOR		
UR 40	2001-000290	C RESISTOR		
UR 41	2001-000290	C RESISTOR		
UR 42	2001-000281	C RESISTOR		
UR 43	2001-000281	C RESISTOR		
UR 44	2001-000281	C RESISTOR		
UR 45	2001-000281	C RESISTOR		
UR 46	2001-000734	C RESISTOR		

■ Electrical parts list (Front board)

Block No. 03

△	Item	Parts number	Parts name	Remarks	Area
	UR 47	2001-000449	C RESISTOR		
	UR 48	2001-000591	C RESISTOR		
	UR 49	2001-000449	C RESISTOR		
	UR 50	2001-000258	C RESISTOR		
	UR 51	2001-001178	C RESISTOR		
	UR 52	2001-000241	C RESISTOR		
	UR 53	2001-000429	C RESISTOR		
	UR 54	2001-000734	C RESISTOR		
	UR 55	2001-000591	C RESISTOR		
	UR 56	2001-000508	C RESISTOR		
	UR 57	2001-000793	C RESISTOR		
	UR 58	2001-000429	C RESISTOR		
	UR 59	2001-000241	C RESISTOR		
	UR 60	2001-000258	C RESISTOR		
	UR 61	2001-000273	C RESISTOR		
	UR 62	2001-000273	C RESISTOR		
	UR 63	2001-000273	C RESISTOR		
	UR 64	2001-000273	C RESISTOR		
	UR 65	2001-000429	C RESISTOR		
	UR 66	2001-000429	C RESISTOR		
	UR 67	2001-000449	C RESISTOR		
	UR 68	2001-000281	C RESISTOR		
	UR 69	2001-000281	C RESISTOR		
	UR 70	2001-000281	C RESISTOR		
	UR 71	2001-000429	C RESISTOR		
	UR 72	2001-000522	C RESISTOR		
	UR 73	2001-000429	C RESISTOR		
	UR 74	2001-000429	C RESISTOR		
	UR 75	2001-000429	C RESISTOR		
	UR 76	2001-000429	C RESISTOR		
	UR 77	2001-000429	C RESISTOR		
	UR 78	2001-000429	C RESISTOR		
	UR 79	2001-000429	C RESISTOR		
	UR 80	2001-000290	C RESISTOR		
	UR 81	2001-000290	C RESISTOR		
	UR 82	2001-000429	C RESISTOR		
	UR 83	2001-000273	C RESISTOR		
	UR 84	2001-000977	C RESISTOR		
	UR 85	2001-000411	C RESISTOR		
	UR 86	2001-000786	C RESISTOR		
	UR 87	2001-000290	C RESISTOR		
	UR 88	2001-000613	C RESISTOR		
	UR 89	2001-000613	C RESISTOR		
	UR 90	2001-000613	C RESISTOR		
	UR 91	2001-001178	C RESISTOR		
	UR 92	2001-001178	C RESISTOR		
	UR 93	2001-000449	C RESISTOR		
	UR 94	2001-000591	C RESISTOR		
	UR 95	2001-000290	C RESISTOR		
	UR 95	2001-000734	C RESISTOR		
	UR 96	2001-000977	C RESISTOR		
	UR 97	2001-000411	C RESISTOR		
	UR 99	2001-000522	C RESISTOR		
	UR201	2001-000273	C RESISTOR		
	UVR 1	3406-001047	ROTARY SWITCH		
	UVR 2	2103-000492	SEMI F.VR.		
	UX 1	2802-000181	CERAMIC RESONAT	6MHZ	
	UX 2	2801-001394	CRYSTAL-UNIT	32.768KHZ	
	UXR 1	2001-000850	C RESISTOR		
	UXR 2	2001-000295	C RESISTOR		
	VFDHL	AH61-00252A	HOLDER-VFD		
	VFD	AH07-00016A	FL DISPLAY TUBE		

■ Electrical parts list (CD board)

Block No. 04

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	NC 1	2203-000260	C CAPASITOR				NC901	2203-000206	C CAPACITOR		
	NC 54	2401-001952	E CAPACITOR				NC903	2203-001537	C CAPACITOR		
	CW101	AH39-20025S	CONNECTOR				NC904	2401-000240	E CAPACITOR		
	CW102	AH39-20561P	CONNECTOR				NC905	2203-000260	C CAPASITOR		
	CW500	3711-000906	CONNECTOR				ND200	1N4148	GE DIODE		
	NC100	2203-000892	C CAPACITOR				ND201	1N4148	GE DIODE		
	NC101	2203-000802	C CAPACITOR				ND202	1N4148	GE DIODE		
	NC102	2203-001551	C CAPASITOR				ND203	1N4148	GE DIODE		
	NC103	2203-000260	C CAPASITOR				NIC05	KA78L05Z-TA	IC	POSI.ADJUST REG	
	NC104	2203-001537	C CAPACITOR				IC925	KA9258D	IC	MOTOR DRIVER	
	NC105	2401-000240	E CAPACITOR				IC922	KB9223	IC	ASP	
	NC106	2203-000892	C CAPACITOR				IC928	KS9286B	IC	DSP	
	NC106	2202-000817	C CAPACITOR				NL100	2701-000114	INDUCTOR-AXIAL	10UH	
	NC107	2203-000206	C CAPACITOR				NL101	2701-000111	INDUCTOR-AXIAL	100UH	
	NC108	2203-000206	C CAPACITOR				NL102	2701-000111	INDUCTOR-AXIAL	100UH	
	NC110	2203-000495	C CAPACITOR				NL105	3301-000325	CORE-FERRITE BE		
	NC111	2203-000802	C CAPACITOR				NL300	3301-000297	CORE-FERRITE		
	NC112	2203-000260	C CAPASITOR				NL301	3301-000297	CORE-FERRITE		
	NC113	2203-000260	C CAPASITOR				NL302	3301-000297	CORE-FERRITE		
	NC114	2401-000419	E CAPACITOR				Q1501	KSA928A	TRANSISTOR		
	NC115	2203-001137	C CAPACITOR				Q1502	KSA812	TRANSISTOR		
	NC116	2203-000260	C CAPASITOR				NR 1	2001-000429	C RESISTOR		
	NC117	2203-000477	C CAPACITOR				NR 2	2001-000429	C RESISTOR		
	NC118	2203-000787	C CAPACITOR				NR 3	2001-000429	C RESISTOR		
	NC119	2203-000206	C CAPACITOR				NR 4	2007-000468	CHIP RESISTOR		
	NC120	2203-000206	C CAPACITOR				NR 5	2007-000468	CHIP RESISTOR		
	NC121	2203-000206	C CAPACITOR				NR 6	2007-000468	CHIP RESISTOR		
	NC122	2401-001952	E CAPACITOR				NR 7	2007-000468	CHIP RESISTOR		
	NC124	2401-001324	E CAPACITOR				NR 8	2001-000429	C RESISTOR		
	NC125	2203-000802	C CAPACITOR				NR 10	2007-000468	CHIP RESISTOR		
	NC190	2203-000429	C CAPASITOR				NR 11	2007-000468	CHIP RESISTOR		
	NC200	2203-000979	C CAPASITOR				NR 12	2007-000468	CHIP RESISTOR		
	NC201	2203-001551	C CAPASITOR				NR 13	2007-000395	CHIP RESISTOR		
	NC202	2203-001619	C CAPACITOR				NR100	2007-000355	CHIP RESISTOR		
	NC203	2203-001619	C CAPACITOR				NR101	2007-000593	CHIP RESISTOR		
	NC204	2401-001324	E CAPACITOR				NR103	2007-000395	CHIP RESISTOR		
	NC205	2203-000260	C CAPASITOR				NR104	2007-000338	CHIP RESISTOR		
	NC300	2202-000796	C CAPACITOR				NR105	2007-000830	CHIP RESISTOR		
	NC301	2401-000778	E CAPACITOR				NR106	2001-000319	C RESISTOR		
	NC400	2202-000243	C CAPACITOR				NR107	2007-000338	CHIP RESISTOR		
	NC50L	2401-001952	E CAPACITOR				NR108	2007-000941	CHIP RESISTOR		
	NC50R	2401-001952	E CAPACITOR				NR109	2007-000282	CHIP RESISTOR		
	NC501	2401-000240	E CAPACITOR				NR111	2007-000941	CHIP RESISTOR		
	NC502	2203-000260	C CAPASITOR				NR112	2007-001039	CHIP RESISTOR		
	NC503	2203-000260	C CAPASITOR				NR113	2001-000977	C RESISTOR		
	NC504	2203-000260	C CAPASITOR				NR114	2007-000477	CHIP RESISTOR		
	NC52L	2203-001537	C CAPACITOR				NR115	2007-000444	CHIP RESISTOR		
	NC52R	2203-001537	C CAPACITOR				NR116	2007-001195	CHIP RESISTOR		
	NC53L	2203-000260	C CAPASITOR				NR117	2007-000898	CHIP RESISTOR		
	NC53R	2203-000260	C CAPASITOR				NR119	2007-000395	CHIP RESISTOR		
	NC55L	2401-001952	E CAPACITOR				NR120	2007-000355	CHIP RESISTOR		
	NC55R	2401-001952	E CAPACITOR				NR121	2007-000355	CHIP RESISTOR		
	NC600	2203-000206	C CAPACITOR				NR200	2007-000653	CHIP RESISTOR		
	NC601	2401-001895	E CAPACITOR				NR201	2007-000686	CHIP RESISTOR		
	NC602	2203-000260	C CAPASITOR				NR202	2007-000686	CHIP RESISTOR		
	NC603	2203-001537	C CAPACITOR				NR203	2007-000282	CHIP RESISTOR		
	NC604	2203-000979	C CAPASITOR				NR204	2007-000355	CHIP RESISTOR		
	NC700	2401-000778	E CAPACITOR				NR300	2007-000282	CHIP RESISTOR		
	NC701	2401-000778	E CAPACITOR				NR400	2007-000409	CHIP RESISTOR		
	NC702	2401-000240	E CAPACITOR				NR50L	2007-000586	CHIP RESISTOR		
	NC703	2401-001102	E CAPACITOR				NR50R	2007-000586	CHIP RESISTOR		
	NC800	2203-000260	C CAPASITOR				NR52L	2007-000653	CHIP RESISTOR		
	NC804	2203-000260	C CAPASITOR				NR52R	2007-000653	CHIP RESISTOR		

■ Electrical parts list (CD board)

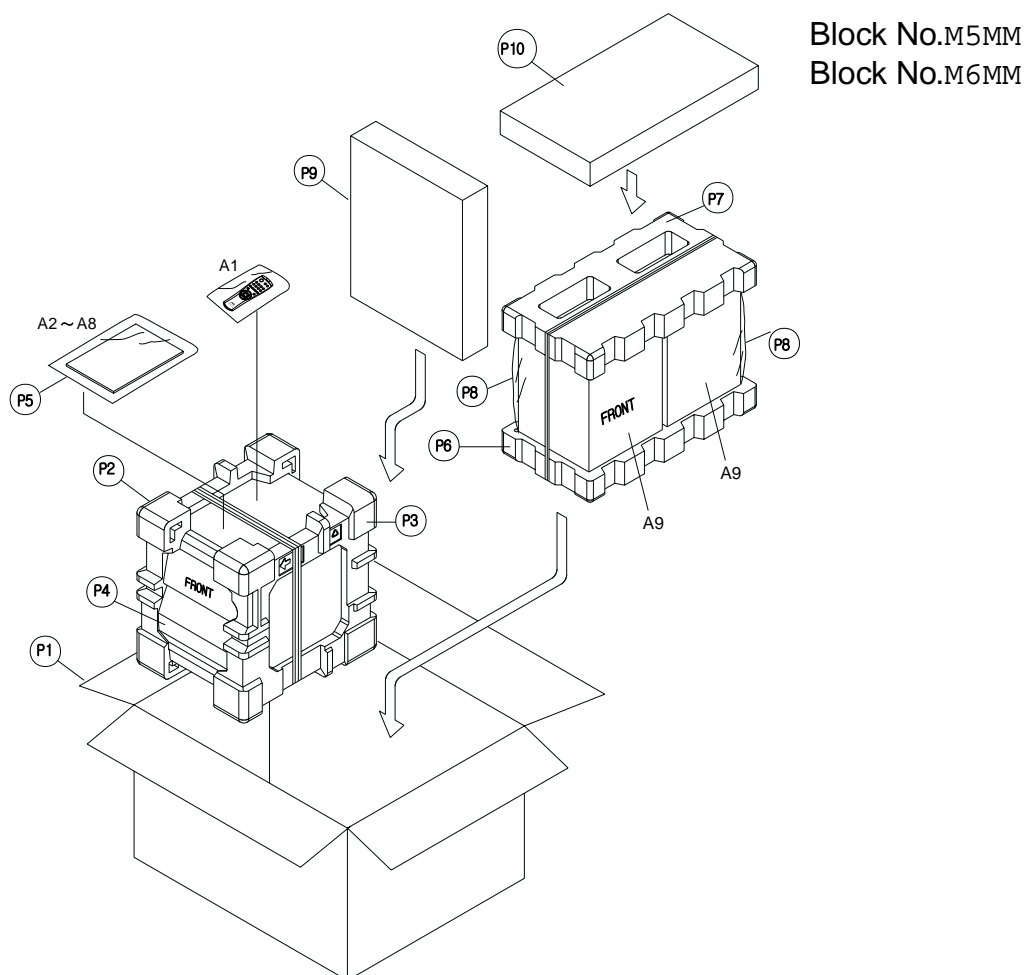
Block No. 04

△	Item	Parts number	Parts name	Remarks	Area
	NR53L	2007-000872	CHIP RESISTOR		
	NR53R	2007-000872	CHIP RESISTOR		
	NR54L	2007-000468	CHIP RESISTOR		
	NR54R	2007-000468	CHIP RESISTOR		
	NR55L	2007-000872	CHIP RESISTOR		
	NR55R	2007-000872	CHIP RESISTOR		
	NR555	2008-000140	C RESISTOR		
	NR57L	2007-000282	CHIP RESISTOR		
	NR57R	2007-000282	CHIP RESISTOR		
	NR602	2007-000300	CHIP RESISTOR		
	NR603	2007-000300	CHIP RESISTOR		
	NR604	2007-000468	CHIP RESISTOR		
	NR606	2007-000282	CHIP RESISTOR		
	NR804	2007-000468	CHIP RESISTOR		
	NR994	2007-001208	CHIP RESISTOR		
	NR995	2007-000830	CHIP RESISTOR		
	NR996	2007-000830	CHIP RESISTOR		
	NR997	2007-000830	CHIP RESISTOR		
	NR998	2007-000830	CHIP RESISTOR		
	NR999	2007-001208	CHIP RESISTOR		
	XF100	2802-000211	CERAMIC RESONAT	16.93MHZ	
	SC 1	2203-000260	C CAPASITOR		
	SC 2	2203-000260	C CAPASITOR		
	SC 5	2401-000795	E CAPACITOR		
	SC 6	2203-000260	C CAPASITOR		
	SC 14	2401-000240	E CAPACITOR		
	SCO 4	KA78L05Z-TA	IC	POSI.ADJUST REG	
	SCW 1	3708-001438	CONNECTOR	22P	
	SCW 5	3708-001131	CONNECTOR	5P	
	SCW 7	3711-003379	CONNECTOR		
	SIC 1	KA3082	IC	MOTOR DRIVER	
	SIC 2	KA3082	IC	MOTOR DRIVER	
	SL 1	2701-000179	INDUCTOR-AXIAL	33UH	
	SR 1	2001-000027	C RESISTOR		
	SR 2	2007-000872	CHIP RESISTOR		
	SR 3	2007-000468	CHIP RESISTOR		
	SR 4	2007-000468	CHIP RESISTOR		
	SZD 1	UZ4.7BM	ZENER DIODE	4.7V	
	SZD 2	UZ6.2BSB	ZENER DIODE	6.2V	
	WCW 1	3708-001252	CONNECTOR	16P	

■ Electrical parts list (Mic / Headphone board) Block No. 05

△	Item	Parts number	Parts name	Remarks	Area
	HC 1	2202-000796	C CAPACITOR		
	HC 2	2202-000796	C CAPACITOR		
	HC 3	2202-000263	C CAPACITOR		
	HC 4	2202-000263	C CAPACITOR		
	HCW 1	3711-001009	CONNECTOR		
	JACK 1	3722-000363	JACK PHONE		
	HL 1	2701-000111	INDUCTOR-AXIAL		
	HL 2	2701-000111	INDUCTOR-AXIAL		
	HR 1	2001-001178	C RESISTOR		
	HR 2	2001-001178	C RESISTOR		

Packing materials and accessories parts list



■ Packing Parts list

Block No. M5MM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	AH69-00180A	CARTON	1		
	P 2	AH69-00152A	CUSHION-L	1		
	P 3	AH69-00153A	CUSHION-R	1		
	P 4	AH69-30012T	POLY BAG	1	SET	
	P 5	QPA02503503P	POLY BAG	1	INSTRUCTIONS	
	P 6	AH81-00243M	CUSHION-BOTTOM	1	SPEAKER	
	P 7	AH81-00243L	CUSHION-TOP	1	SPEAKER	
	P 8	AH81-00243P	POLY BAG	2	SPEAKER	
	P 9	AH69-00185A	PAD-ROLE A	1		
	P 10	AH69-00185B	PAD-ROLE B	1		

■ Accessories Parts list

Block No. M6MM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	AH59-00044A	REMOTE-CONTROL	1	22KEY	
	A 2	AH68-00337A	INSTRUCTIONS	1	ENG SPA FRE	
	A 3	BT-20044G	SAFETY SHEET	1		
	A 4	BT-52004-1	WARRANTY CARD	1		C
		BT51018-2	WARRANTY CARD	1		J
	A 5	BT-20071B	SERVICE NETWORK	1		C
	A 6	EWP503-001	ANTENNA WIRE	1	FM	
	A 7	QAL0014-001	LOOP ANTENNA	1	AM	
	A 8	-----	BATTERY	2		
	A 9	MXJ100J-SPBOX	SPEAKER BOX	2		

Warnings, Cautions and Others

Mises en garde, précautions et indications diverses



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

ATTENTION

Afin d'éviter tout risque d'électrocution, d'incendie, etc.:

1. Ne pas enlever les vis ni les panneaux et ne pas ouvrir le coffret de l'appareil.
2. Ne pas exposer l'appareil à la pluie ni à l'humidité.

Caution — POWER switch!

Disconnect the mains plug to shut the power off completely. The POWER switch in any position does not disconnect the mains line. The power can be remote controlled.

Attention — Commutateur POWER!

Déconnecter la fiche de secteur pour couper complètement le courant. Le commutateur POWER ne coupe jamais complètement la ligne de secteur, quelle que soit sa position. Le courant peut être télécommandé.

1. CLASS 1 LASER PRODUCT
 2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
 3. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.
1. PRODUIT LASER CLASSE 1
 2. **ATTENTION:** Radiation laser invisible quand l'appareil est ouvert ou que le verrouillage est en panne ou désactivé. Éviter une exposition directe au rayon.
 3. **ATTENTION:** Ne pas ouvrir le couvercle du dessus. Il n'y a aucune pièce utilisable à l'intérieur. Laisser à un personnel qualifié le soin de réparer votre appareil.

For Canada/pour le Canada

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

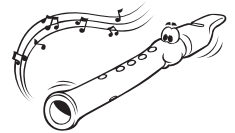
ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

For Canada/pour le Canada

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE INTERFERENCE-CAUSING EQUIPMENT STANDARD ENTITLED "DIGITAL APPARATUS," ICES-003 OF THE DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMERIQUE RESPECTE LES LIMITES DE BRUITS RADIOELECTRIQUES APPLICABLES AUX APPAREILS NUMIRIQUES DE CLASSE B PRESCRITES DANS LA NORME SUR LE MATERIEL BROUILLEUR: "APPAREILS NUMERIQUES", NMB-003 EDICTEE PAR LE MINISTRE DES COMMUNICATIONS.

Introduction



We would like to thank you for purchasing one of our JVC products. Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

About This Manual

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the unit. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the unit. If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section “Common Operations” on pages 9 and 10.
- The following marks are used in this manual:



Gives you warnings and cautions to prevent from a damage or risk of fire/electric shock. Also gives you information which is not good for obtaining the best possible performance from the unit.



Gives you information and hints you had better know.

Precautions

Installation

- Install in a place which is level, dry and neither too hot nor too cold — between 5°C (41°F) and 35°C (95°F).
- Install the unit in a location with adequate ventilation to prevent internal heat built-up in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.



DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

Power sources

- When unplugging from the wall outlet, always pull the plug, not the AC power cord.



DO NOT handle the AC power cord with wet hands.

Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After starting heating in the room
 - In a damp room
 - If the unit is brought directly from a cold to a warm place
- Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

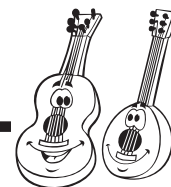
Others

- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.



DO NOT disassemble the unit since there are no user serviceable parts inside.

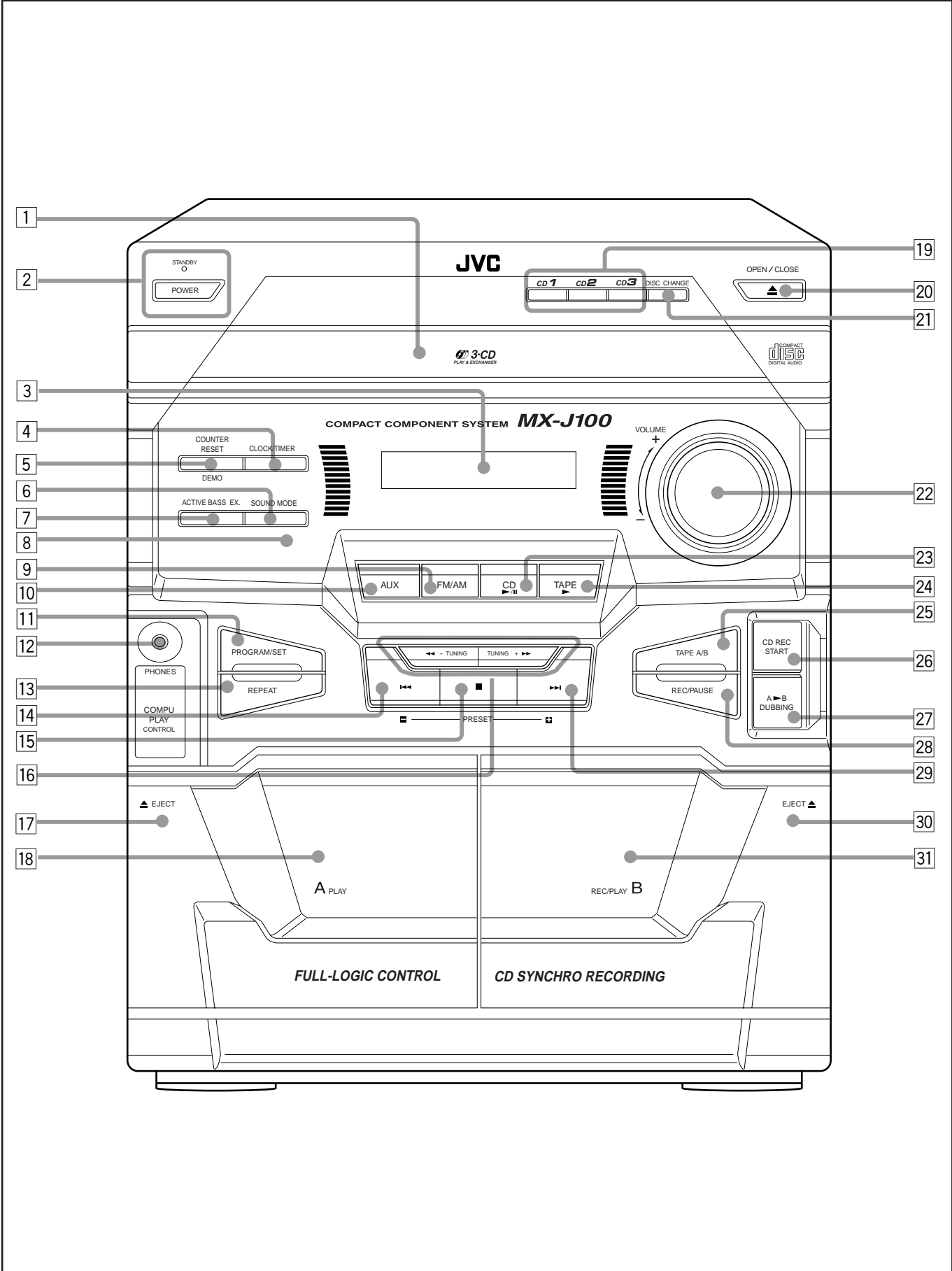
If anything goes wrong, unplug the AC power cord and consult your dealer.



Location of the Buttons and Controls	3
Front Panel	4
Remote Control	5
Getting Started	6
Unpacking	6
Putting the Batteries into the Remote Control	6
Connecting Antennas	6
Connecting Speakers	7
Connecting Other Equipment	8
Common Operations	9
Setting the Clock	9
Turning On the Power and Selecting the Sources	9
Adjusting the Volume	10
Reinforcing the Bass Sound	10
Selecting the Sound Modes	10
Listening to FM and AM Broadcasts	11
Tuning in a Station	11
Presetting Stations	11
Tuning in a Preset Station	11
Playing Back CDs	12
Loading CDs	12
Playing Back CDs	12
Basic CD Operations	13
Programming the Playing Order of the Tracks	
— Program Play	13
Playing Back Tapes	14
Playing Back a Tape	14
Recording	15
Recording Tapes on Deck B	15
Resetting the tape counter	15
Dubbing Tapes	15
CD Direct Recording	15
Using the Timers	16
Using Recording and Daily Timer	16
Using Sleep Timer	18
Maintenance	19
Troubleshooting	20
Specifications	20

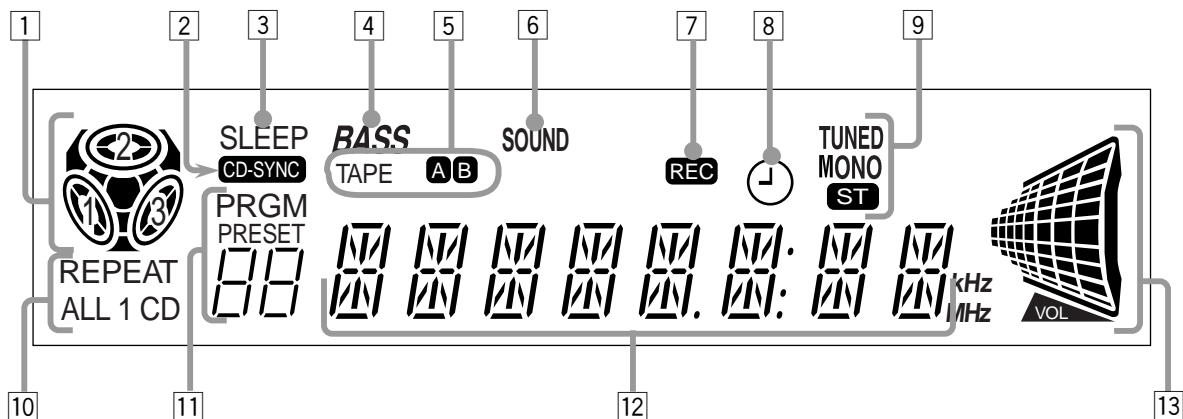
Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.





Display Window



See pages in the parentheses for details.

Front Panel

- 1 Carousel
- 2 POWER button and STANDBY lamp (9)
- 3 Display window
- 4 CLOCK/TIMER button (9, 16)
- 5 COUNTER RESET button (15)
DEMO button (8)
- 6 SOUND MODE button (10)
- 7 ACTIVE BASS EX. (extension) button (10)
- 8 Remote sensor
- 9 FM/AM button (11)
Pressing this button also turns on the unit.
- 10 AUX button (9)
Pressing this button also turns on the unit.
- 11 PROGRAM/SET button (9, 13, 16)
- 12 PHONES jack (10)
- 13 REPEAT button (12)
- 14 PRESET - button (11)
◀◀ (reverse search) button (9, 13, 16)
- 15 ■ (stop) button (12, 15)
- 16 TUNING + / - buttons (11)
◀◀ / ▶▶ (fast left/fast right) buttons (11, 13, 14)
- 17 ▲ EJECT button for deck A (14)
- 18 Deck A cassette holder (14)
- 19 Disc number buttons (CD 1, CD 2, CD 3) (12)
Pressing one of these buttons also turns on the unit.
- 20 ▲ OPEN/CLOSE button (12)
Pressing this button also turns on the unit.
- 21 DISC CHANGE button (12)
- 22 VOLUME control (10)
- 23 CD ▶/|| (play/pause) button (12)
Pressing this button also turns on the unit.
- 24 TAPE ▶ button (14)
Pressing this button also turns on the unit.
- 25 TAPE A/B button (14)

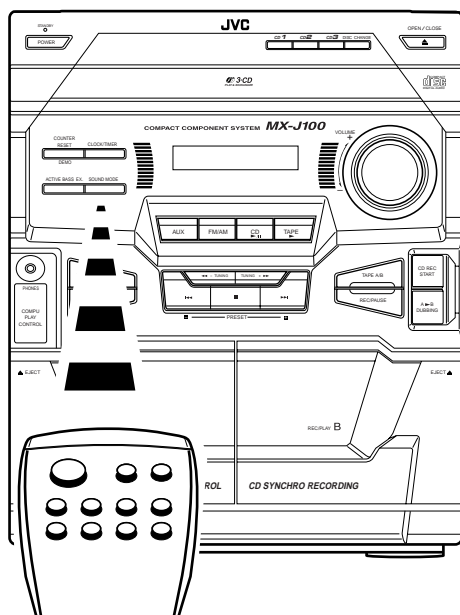
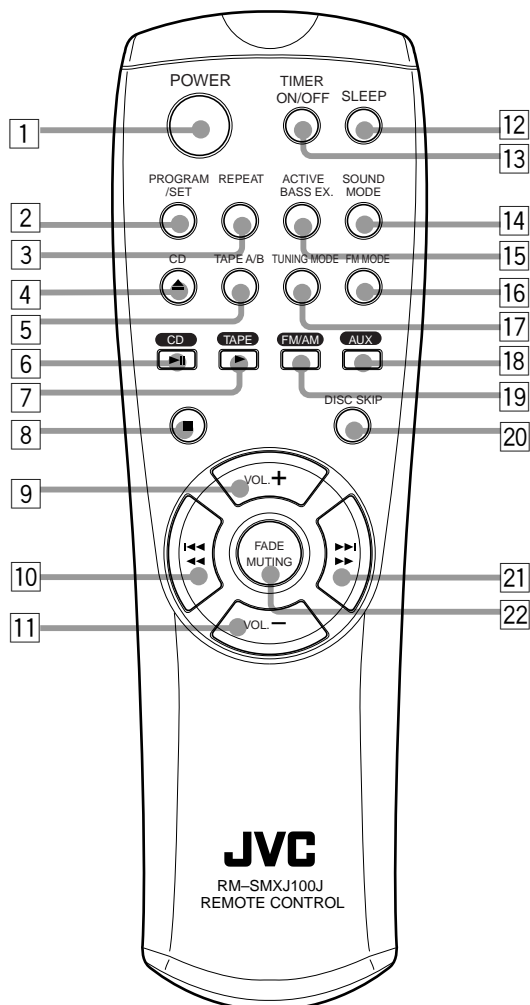
- 26 CD REC START button (15)
- 27 A ▶ B DUBBING button (15)
- 28 REC/PAUSE button (15)
- 29 PRESET + button (11)
▶▶ (forward search) button (9, 13, 16)
- 30 EJECT ▲ button for deck B (15)
- 31 Deck B cassette holder (15)

Display window

- 1 Disc indicators
- 2 CD-SYNC indicator
- 3 SLEEP indicator
- 4 BASS indicator
- 5 Tape operation indicators
 - TAPE and A B (operating deck) indicators
- 6 SOUND indicator
- 7 REC indicator
- 8 ⊖ (timer) indicator
- 9 Tuner operation indicators
 - TUNED, MONO and ST (stereo) indicators
- 10 CD play mode indicators
 - REPEAT and (ALL/1/CD) indicators
- 11 PRESET and PRGM (program) number indicators
- 12 Main display
 - Shows the source name, frequency, etc.
- 13 Volume level indicators



Remote Control



When using the remote control, point it at the remote sensor on the front panel.

Remote Control

- 1 POWER button (9)
- 2 PROGRAM/SET button (9)
- 3 REPEAT button (12)
- 4 CD button (12)
Pressing this button also turns on the unit.
- 5 TAPE A/ B button (14)
- 6 CD button (12)
Pressing this button also turns on the unit.
- 7 TAPE button (14 – 15)
Pressing this button also turns on the unit.
- 8 (stop) button (12 – 13)
- 9 VOL. + button (10)
- 10 / (fast rewind/reverse search) button (13 – 14)
- 11 VOL. – button (10)
- 12 SLEEP button (18)
- 13 TIMER ON/OFF button (17)
- 14 SOUND MODE button (10)
- 15 ACTIVE BASS EX. (extension) button (10)
- 16 FM MODE button (11)
- 17 TUNING MODE button (11)
- 18 AUX button (9)
Pressing this button also turns on the unit.
- 19 FM/AM button (11)
Pressing this button also turns on the unit.
- 20 DISC SKIP button (12)
- 21 / (fast forward/forward search) button (13 – 14)
- 22 FADE MUTING button (10)

Unpacking

After unpacking, check to be sure that you have all the following items.

The number in the parentheses indicates the quantity of the pieces supplied.

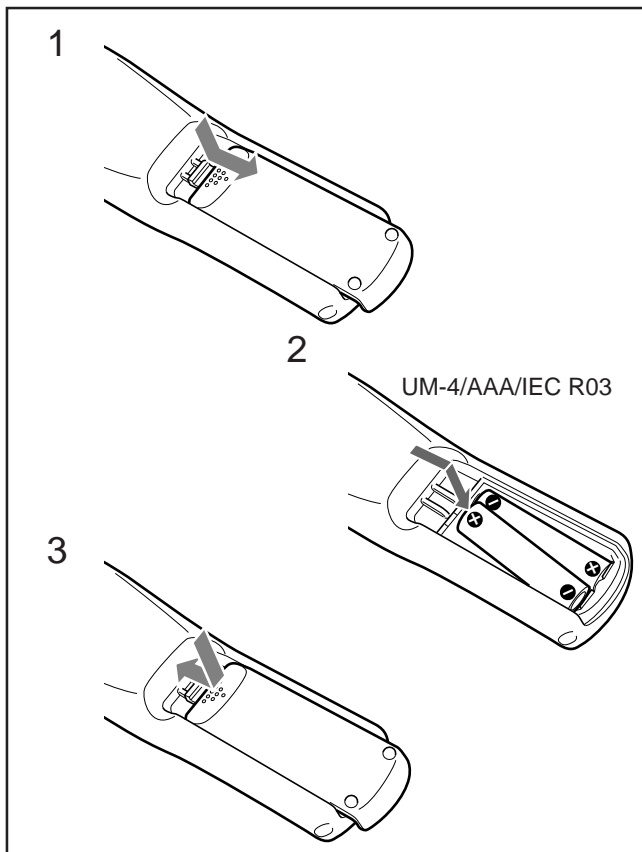
- AM loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)

If any is missing, consult your dealer immediately.

Putting the Batteries into the Remote Control

Insert the batteries — UM-4/AAA/IEC R03 — into the remote control, by matching the polarity (+ and –) on the batteries with the + and – markings on the battery compartment.

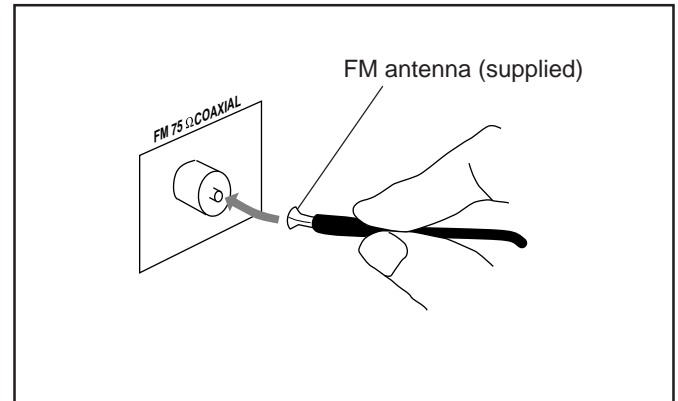
When the remote control can no longer operate the unit, replace both batteries at the same time.



- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, it will be damaged from battery leakage.

Connecting Antennas

FM antenna



- 1 Attach the FM antenna to the FM 75 Ω COAXIAL terminal.
- 2 Extend the FM antenna.
- 3 Fasten it up in the position which gives you the best reception, then fix it on the wall, etc.

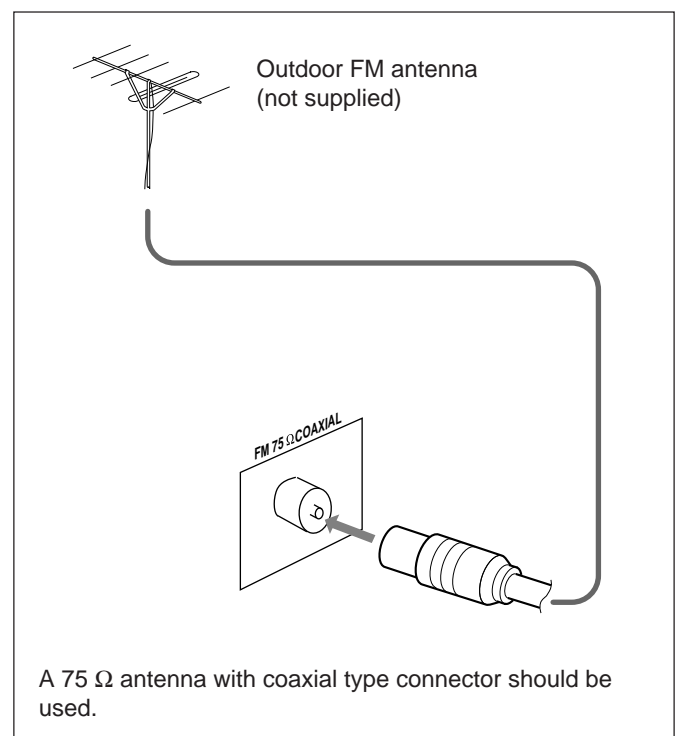


About the supplied FM antenna

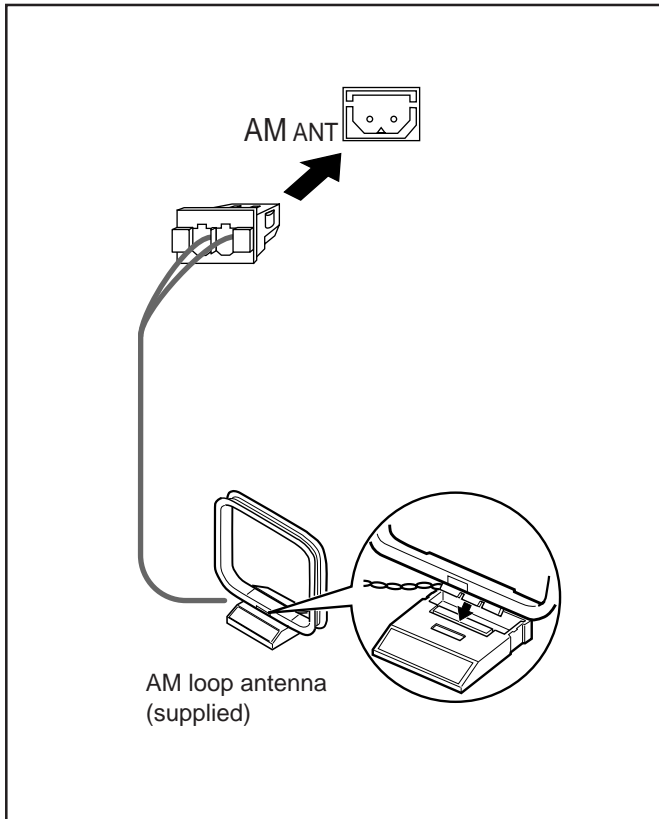
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.



AM antenna



- 1 **Connect the AM loop antenna to the AM LOOP terminals as illustrated.**
- 2 **Turn the AM loop antenna until you have the best reception.**

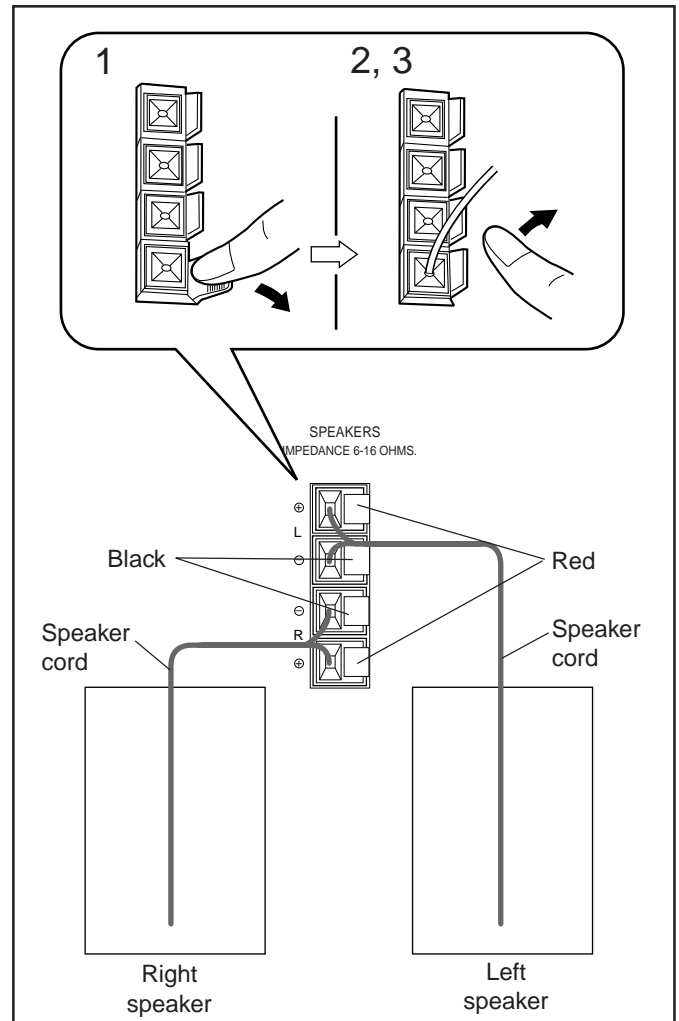


For better reception of both FM and AM

- Make sure the antenna conductors do not touch any other terminals and connecting cords.
- Keep the antennas away from metallic parts of the unit, connecting cords, and the AC power cord.

Connecting Speakers

You can connect a pair of the front speakers.



- 1 **Press and hold the clamp of the speaker terminal on the rear of the unit.**
- 2 **Insert the end of the speaker cord into the terminal.**
Match the polarity of the speaker terminals: Red (+) to red (+) and black (-) to black (-).
- 3 **Release the finger from the clamp.**

IMPORTANT: Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.



Connecting Other Equipment

You can connect an audio equipment — used only as a playback device.

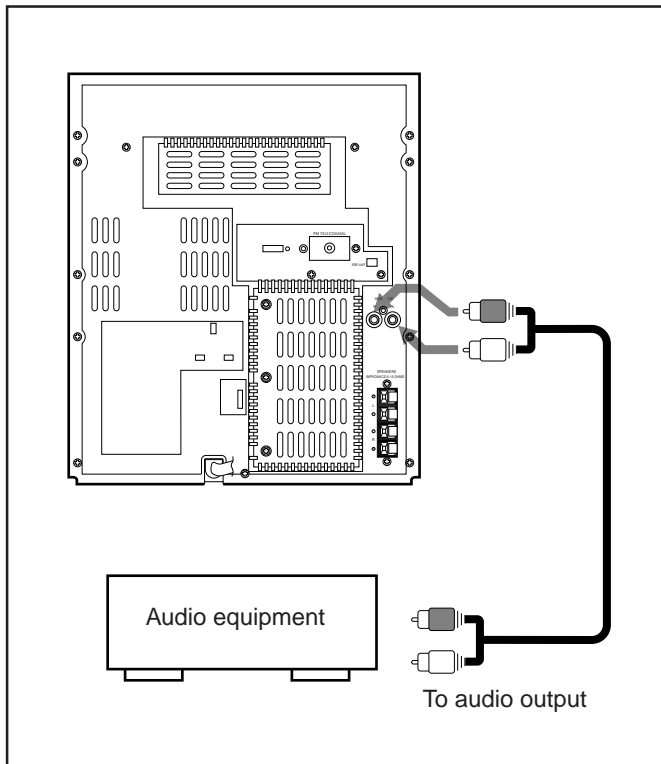
When you connect and use this equipment, refer also to its manual.

Be sure that the plugs of the audio cords are color coded: White plugs and jacks are for left audio signals, and red ones for right audio signals.



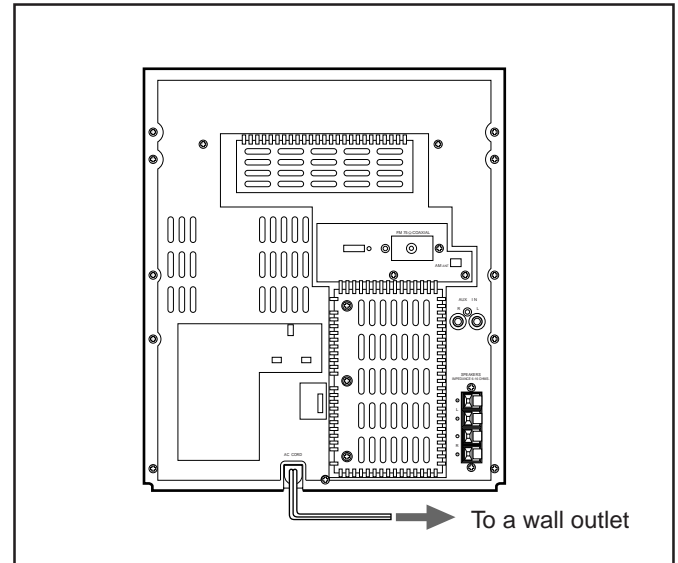
- DO NOT connect any equipment while the power is on.
- DO NOT plug in any equipment until all connections are complete.

To connect audio equipment

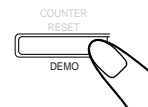


Connect the audio output jacks on the other equipment and the AUX jacks on the rear, using an audio cord (not supplied).

NOW, you can plug in the unit and other connected equipment FINALLY!



To start the display demonstration
Press **DEMO** while the unit is turned off (on stand by).



To stop the display demonstration, press any button.

Common Operations

Setting the Clock

Before operating the unit any further, first set the clock built in this unit.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you want to stop clock setting, press CLOCK/TIMER once or wait until the time limit of 15 seconds comes.

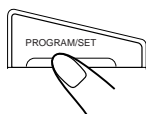
1 Press CLOCK/TIMER twice.

The "CLOCK" appears on the display.



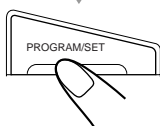
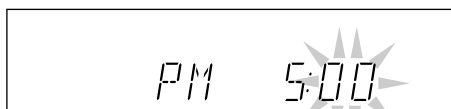
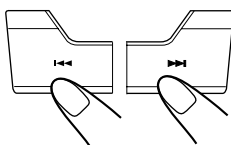
2 Press PROGRAM/SET.

The hour digits start flashing on the display.

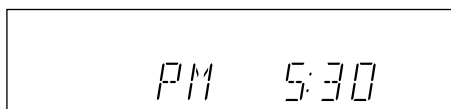
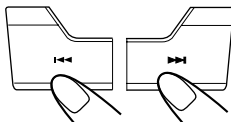


3 Press ◀◀ or ▶▶ to adjust the hour, then press PROGRAM/SET.

After hour digits are set, the minute digits start flashing on the display.



4 Press ◀◀ or ▶▶ to adjust the minute, then press PROGRAM/SET.



5 Press CLOCK/TIMER twice to finish the clock setting.



To check the clock time

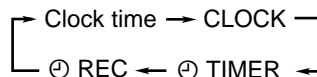
Press CLOCK/TIMER while playing any source. The clock time appears on the display for a while.



To adjust the clock again

If you have adjusted the clock before, you need to press CLOCK/TIMER until the "CLOCK" is selected.

- Each time you press the button, the clock/timer setting modes change as follows:



If there is a power failure

The clock loses the setting and is reset to "AM 12:00." You need to set the clock again.

Turning On the Power and Selecting the Sources

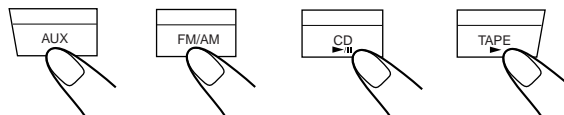
When you press the play button for a particular source (AUX, FM/AM, CD ▶/⏸, and TAPE ▶), the unit turns on (and the unit starts playing the source if it is ready — COMPU PLAY CONTROL).

To listen to the FM/AM broadcasts, press FM/AM. (See page 11.)

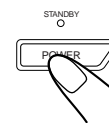
To play back CDs, press CD ▶/⏸. (See pages 12 – 13.)

To play back tapes, press TAPE ▶. (See page 14.)

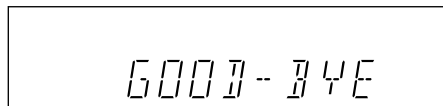
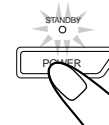
To select the external equipment as the source, press AUX.



To turn on the unit without playing, press POWER so that the STANDBY lamp goes off.



To turn off the unit (on standby), press POWER again so that the STANDBY lamp lights up.



A little power is always consumed even while the unit is on standby.

To switch off the power supply completely, unplug the AC power cord from the AC outlet.



When you unplug the AC power cord or if a power failure occurs

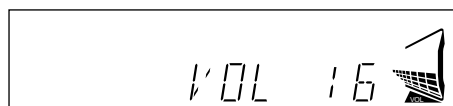
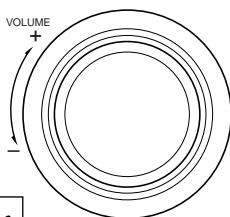
The clock is reset to "AM 12:00" right away, while the tuner preset stations (see page 11) will be erased in a few days.



Adjusting the Volume

You can adjust the volume level only while the unit is turned on.

Turn VOLUME clockwise to increase the volume or counterclockwise to decrease it.



When using the remote control, press VOL. + to increase the volume or press VOL. – to decrease it.



For private listening

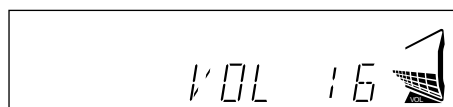
Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones on the unit.



DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time. REMEMBER you cannot adjust the volume level while the unit is on standby.

To turn down the volume level temporarily

Press FADE MUTING on the remote control.

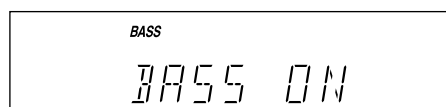


To restore the sound, press the button again.

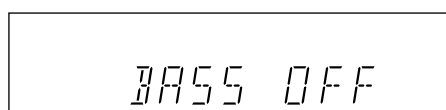
Reinforcing the Bass Sound

The richness and fullness of the bass sound is maintained regardless of how low you set the volume. You can use this effect only for playback.

To get the effect, press ACTIVE BASS EX. so that the BASS indicator appears on the display.



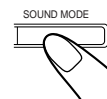
To cancel the effect, press the button again so that the indicator also goes off.



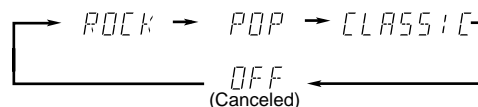
Selecting the Sound Modes

You can select one of the 3 preset sound modes (3 SEA – Sound Effect Amplifier – modes). The sound modes can be applied only to playback sounds, and cannot be used for recording.

To select the sound modes, press SOUND MODE until the sound mode you want appears on the display. The SOUND indicator also lights up on the display.



- Each time you press the button, the sound modes change as follows:



SEA modes:

- ROCK:** Boosts low and high frequency. Good for acoustic music.
- POP:** Good for vocal music.
- CLASSIC:** Good for classical music.
- OFF:** Cancels the sound mode.

Listening to FM and AM Broadcasts

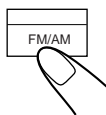


Tuning in a Station

1 Press FM/AM.

The unit automatically turns on and tunes in the previously tuned station (either FM or AM).

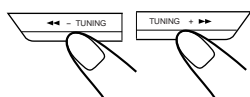
- Each time you press the button, the band alternates between FM and AM.



2 Select a station.

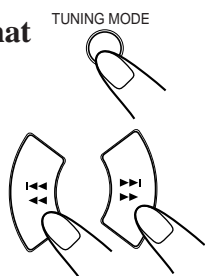
On the unit:

Press and hold TUNING – or TUNING + for more than 1 second.



On the remote control:

- 1) Press TUNING MODE so that “MANUAL” appears on the display.
- 2) Press and hold ◀◀◀/◀◀ or ▶▶▶/▶▶▶ for more than 1 second.



The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in.

If a program is broadcast in stereo, the ST (stereo) indicator lights up.

To stop during searching, press TUNING – or TUNING + or (◀◀◀/◀◀ or ▶▶▶/▶▶▶ on the remote control).

notes When you press TUNING – or TUNING + (◀◀◀/◀◀ or ▶▶▶/▶▶▶ on the remote control) briefly and repeatedly

The frequency changes step by step.

To change the FM reception mode

When an FM stereo broadcast is hard to receive or noisy, press FM MODE on the remote control so that the MONO indicator lights up on the display. Reception improves.



To restore the stereo effect, press FM MODE again so that the MONO indicator goes off.

In this stereo mode, you can hear stereo sounds when a program is broadcast in stereo.

The FM reception mode is restored even when the unit is turned off.

Presetting Stations

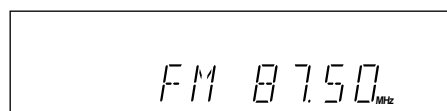
You can preset 30 FM and 15 AM stations.

In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the stations you want into memory by following the presetting method.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

1 Tune in the station you want to preset.

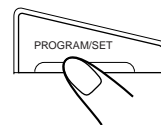
- See “Tuning in a Station” to the left.



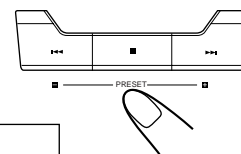
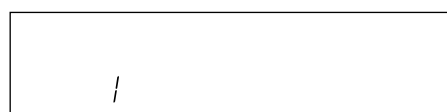
2 Press PROGRAM/SET.



The PRGM flashes on the display.



3 Press PRESET – or + to select a preset number.



4 Press PROGRAM/SET again.

The tuned station in step 1 is stored in the preset number selected in step 3.

- Storing a new station on a used number erases the previously stored one.



notes When you unplug the AC power cord or if a power failure occurs

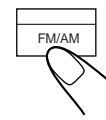
The preset stations will be erased in a few days. If this happens, preset the stations again.

Tuning in a Preset Station

1 Press FM/AM.

The unit automatically turns on and tunes in the previously tuned station (either FM or AM).

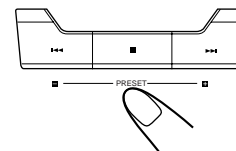
- Each time you press the button, the band alternates between FM and AM.



2 Select a preset number.

On the unit:

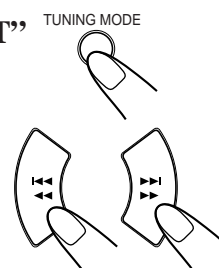
Press PRESET – or +.



On the remote control:

- 1) Press TUNING MODE so that “PRESET” appears on the display.

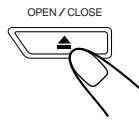
- 2) Press ◀◀◀/◀◀ or ▶▶▶/▶▶▶.



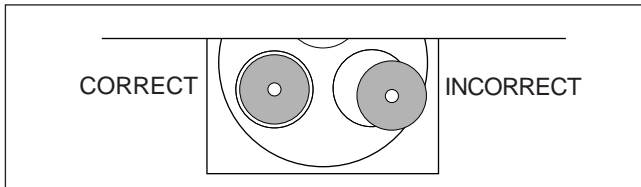
Loading CDs

1 Press **▲ OPEN/CLOSE** on the unit.

The unit automatically turns on and the carousel comes out.



2 Place one or two discs correctly on the front slots of the carousel, with its label side up.



- When using a CD single (8 cm), place it on the inner circle of the disc tray.

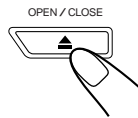
3 If you wish to load a third disc, press **DISC CHANGE** on the unit (or **DISC SKIP** on the remote control).

The carousel rotates by 120°.



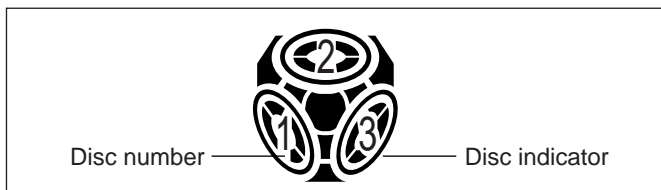
4 Press **▲ OPEN/CLOSE** again.

The carousel closes, and the corresponding disc number indicator (disc 1 to disc 3) lights up on the display.



About the disc indicators

Each disc indicator corresponds to the disc tray of the same number.



- The disc indicator flashes while the corresponding CD is currently selected.
- The disc indicator goes off when the unit has detected that there is no CD on the corresponding disc tray.

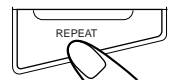
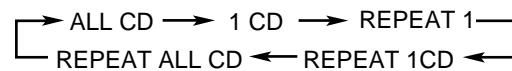
Playing Back CDs

You can play CDs continuously.

1 Load CDs.

2 Press **REPEAT** on the unit (or **REPEAT** on the remote control) to select a play mode you want.

Each time you press the button, play modes change as follows:



REPEAT



ALL CD: Plays all loaded CD. (When you turned on the unit, "ALL CD" is automatically selected.)

1CD: Plays back one CD.

REPEAT 1: Repeats one track on one CD.

REPEAT ALL CD: Repeats all the tracks on all the CDs, or all the tracks in the program.

REPEAT 1CD*: Repeats all the tracks on one CD.

*REPEAT 1CD is not used for Program play.

3 Select the disc you want to start play from.

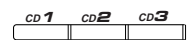
On the unit :

Press one of the disc number buttons (CD 1, CD 2, and CD 3).

On the remote control :

Press **DISC SKIP** repeatedly.

CD play starts from the first track of the selected disc.



DISC SKIP



Disc No. flashes



Track number

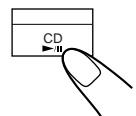
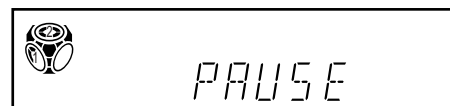
Elapsed playing time

- Pressing **CD ►/||** instead of the disc number buttons starts playing back if a CD is on the trays.

To stop during play, press **■**.

To stop play for a moment

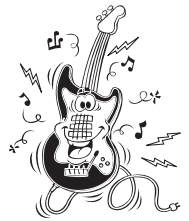
Press **CD ►/||**.



"PAUSE" appears on the display.

To resume play, press **CD ►/||** again.

To remove the disc, press **▲ OPEN/CLOSE**.



Basic CD Operations

While playing a CD, you can do the following operations.

To exchange CDs during playback of another

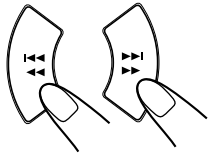
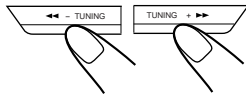
Press DISC CHANGE to eject and exchange the CD.

To locate a particular point in a track

During play, press and hold ◀◀ or ▶▶.

- ◀◀ : Fast reverses the disc.
- ▶▶ : Fast forwards the disc.

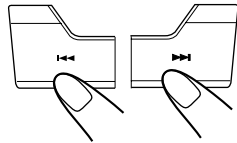
When using the remote control, press and hold ◀◀ / ◀◀ or ▶▶ / ▶▶.



To go to another track

Press ◀◀ or ▶▶ repeatedly before or during playback.

- ◀◀: Goes back to the beginning of the current or previous tracks.
- ▶▶: Skips to the beginning of the next or succeeding tracks.



When using the remote control, press ◀◀ / ◀◀ or ▶▶ / ▶▶ before playing.



notes If you press and hold ◀◀ / ▶▶ on the unit you can change the tracks continuously.

Programming the Playing Order of the Tracks — Program Play

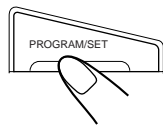
You can arrange the order in which the tracks play before you start playing. **You can program up to 24 tracks.**

- To repeat the program, select "REPEAT ALL CD" by pressing REPEAT repeatedly.

1 Load discs.

- If the current playing source is not the CD player, press CD ▶/II, then ■ before going to the next step.

2 Press PROGRAM/SET.



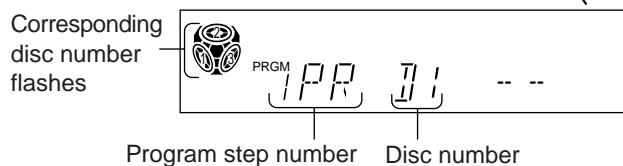
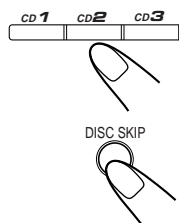
3 Select the disc number.

On the unit:

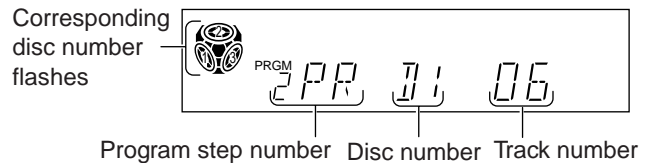
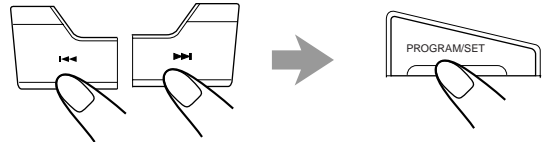
Press one of the disc number buttons (CD 1, CD 2, and CD 3).

On the remote control:

Press DISC SKIP repeatedly.



4 Press ◀◀ or ▶▶ (◀◀ / ◀◀ or ▶▶ / ▶▶ on the remote control) to select the track number, then press PROGRAM/SET.



5 Program other tracks you want.

- To program tracks from the same disc, repeat step 4.
- To program tracks from a different disc, repeat steps 3 and 4.

6 Press CD ▶/II.

The tracks are played in the order you have programmed.

To add more tracks into the program

Press PROGRAM/SET.

You can add the tracks into the program before or after play. If you have already programmed all 24 tracks, you cannot add more. If you do, it will overwrite the 1st track and so on.

- You cannot erase or modify the programmed tracks.
- If you want to modify the program, erase all the program and start from the beginning.

To stop during play, press ■.

To erase the entire program before or after play, press ■.

- Ejecting the Carousel will also erase the program.



notes If your entry is ignored

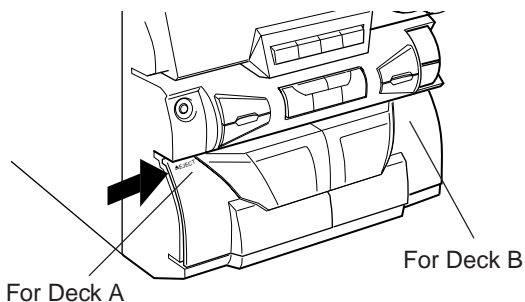
You have tried to program a track from an empty tray, or a track number that does not exist on the CD (for example, selecting track 14 on a CD that only has 12 tracks). Such entries are ignored.

Playing Back Tapes



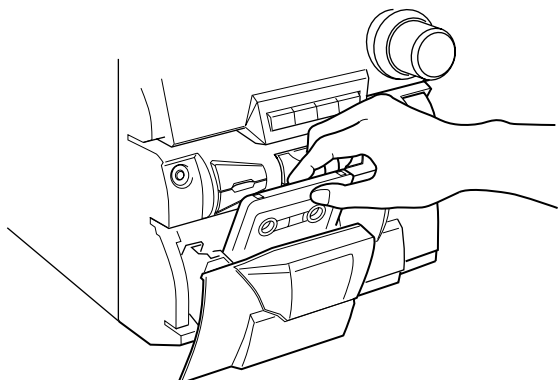
Playing Back a Tape

1 Press EJECT ▲ for the deck you want to use.



2 Put a cassette in, with the exposed part of the tape down.

- You can play back only type I.



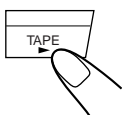
3 Close the cassette holder gently.

If you put cassettes in both decks A and B, the deck which you have put a cassette into last is selected.

To operate the other deck, press TAPE A/B.

4 Press TAPE ►.

The tape play starts.



When the tape plays to the end, the deck automatically stops .

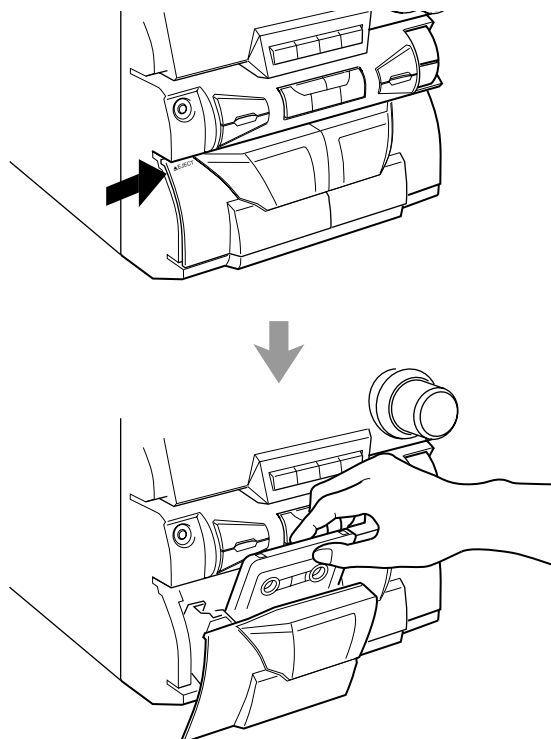
To stop during play, press ■.

To operate the other deck, press TAPE A/B, then TAPE ►.

To fast-forward the tape, press ►► or (►►| / ►► on the remote control).

To rewind the tape, press ◀◀ or (◀◀| / ◀◀ on the remote control).

To remove the cassette, press ▲ EJECT for deck A or EJECT ▲ for deck B.



The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers and the capstans.

Recording

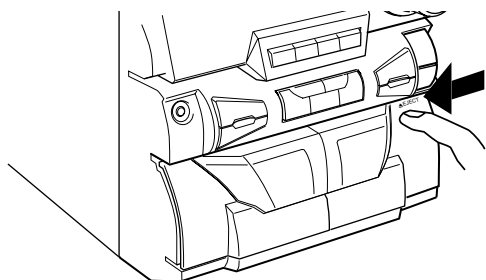


IMPORTANT:

- It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic embodied therein.
- The recording level is automatically set correctly, so it is not affected by the VOLUME control. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- While recording, you can hear tunes with sound modes and/or the active bass extension effect through the speakers or headphones. However, the sound is recorded without these effects (see page 10).
- If the sound recorded have excessive noise or static, the unit may be too close to a TV. Please separate the TV from the unit.
- You can use only type I tape for recording.

Recording Tapes on Deck B

1 Press EJECT ▲ for the deck B.



2 Put in a recordable cassette, with the exposed part of the tape down.

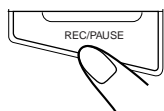
3 Close the cassette holder gently.

4 Start playing the source — FM, AM, CD player or auxiliary equipment connected to AUX jacks.

- When the source is CD, you can also use CD Direct Recording.

5 Start recording. Press REC/PAUSE.

The REC indicator lights up on the display and recording starts.



To stop during recording, press ■.

To stop recording temporarily, press REC/PAUSE on the unit. The REC indicator starts flashing on the display.

To resume recording, press REC/PAUSE.

To remove the cassette, press EJECT ▲ for deck B.

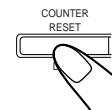
Resetting the tape counter

If you wish to take a note on the counter value at the beginning of each track, reset the counter before starting a recording.

Press COUNTER RESET on the unit to reset the counter.

The counter reading becomes “0000.”

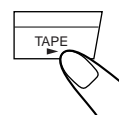
- The counter reading also becomes “0000” when the unit is turned off (stands by).



Dubbing Tapes

1 Press TAPE ►, then ■.

2 Put the source cassette in deck A, and a recordable cassette into deck B.



3 Press A ► B DUBBING.

Dubbing starts.

“DUBBING” and REC indicators light up on the display.



To stop during dubbing, press ■.

To remove the cassette, press ▲ EJECT for deck A and EJECT ▲ for deck B.

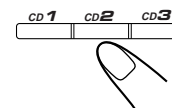
CD Direct Recording

Everything on the CD goes onto the tape in the order it is on the CD, or according to the order you have made for Program play.

1 Put a recordable cassette into deck B.

2 Place a disc correctly on the circle of the disc tray, with its label side up.

3 Press one of the disc number buttons (CD 1 to CD 3) to select the disc, then ■.



4 Press CD REC START.

“SYNCHRO” appears, and the CD-SYNC, REC and 1CD indicator light up on the display.

Deck B starts recording and the CD player starts playing. When the recording is done, the CD player and deck B stop.

To stop during CD Direct Recording, press ■.

To remove the cassette, press EJECT ▲ for deck B.



There are three types of timers available — Recording Timer, Daily Timer and Sleep Timer.

Before using the timers, you need to set the clock built in the unit. (See page 9.)

Using Recording and Daily Timer

With Recording Timer, you can make a tape of a radio broadcast automatically.

How Recording Timer actually works

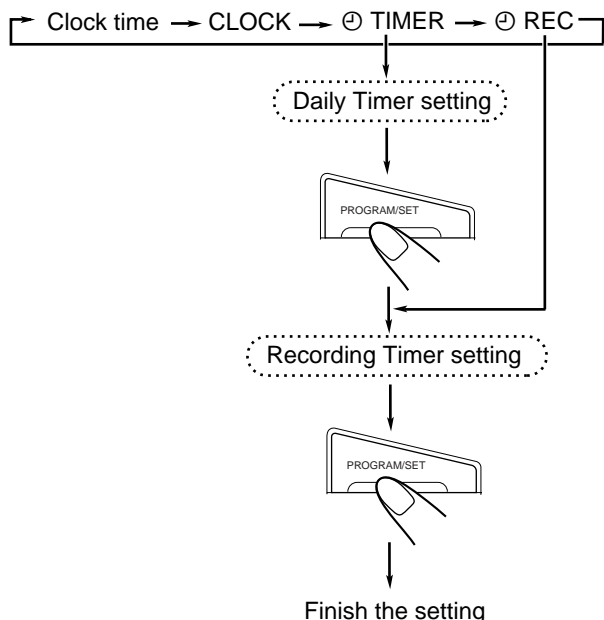
The unit automatically turns on, tunes into the specified station, adjust the volume, and starts recording when the on-time comes. Then, when the off-time comes, the unit automatically turns off (stands by).

Using Daily Timer, you can wake up with your favorite music or radio program.

How Daily Timer actually works

The unit automatically turns on, adjust the volume, and starts playing the specified source when the on-time comes. Then, when the off-time comes, the unit automatically turns off (stands by).

When you want to set the daily timer or the recording timer, press CLOCK/TIMER. Each time you press the button, the timer setting mode changes as follows:



- ⊕ TIMER: Select this when you want to set the Daily Timer.
- ⊕ REC: Select this when you want to set the Recording Timer.

As you can see from the above flow chart, for Recording Timer setting, you can skip the Daily Timer setting. When you want to change the timer mode, press TIMER ON/OFF on the remote control. (See page 17.)

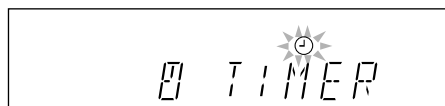
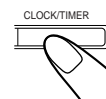
On the unit ONLY:

The condition of the timer setting remains in memory until you change it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you have made a mistake while setting timer, press CLOCK/TIMER repeatedly and start from step 1 again.
- To cancel the Daily Timer setting anytime during the process, press CLOCK/TIMER twice.
- To cancel the Recording Timer setting anytime during the process, press CLOCK/TIMER once.

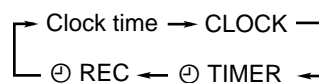
The unit enters Daily Timer setting mode.

1 Press CLOCK/TIMER until “⊕ TIMER” appears on the display.



The ⊕ indicator also starts flashing on the display.

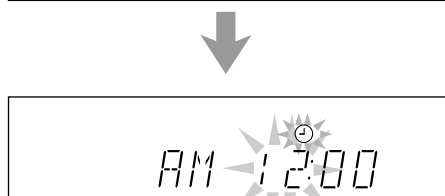
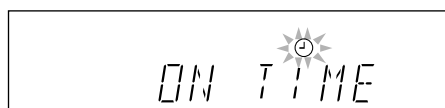
- Each time you press the button, the timer setting mode changes as follows:



- If you select ⊕ REC in step 1, skip step 8.

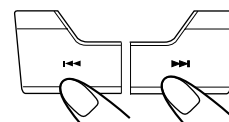
2 Press PROGRAM/SET.

“ON TIME” appears for 2 seconds, then the unit enters on-time setting mode.



3 Set the on-time you want the unit to turn on.

- 1) Press ◀ or ▶ to set the hour, then press PROGRAM/SET.
- 2) Press ◀ or ▶ to set the minute, then press PROGRAM/SET.

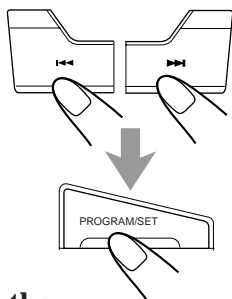


“OFF TIME” appears for 2 seconds, then the unit enters off-time setting mode.



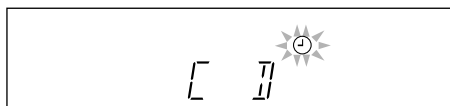
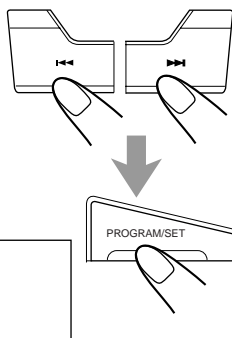
4 Set the off-time you want the unit to turn off (on standby).

- 1) Press **◀◀** or **▶▶** to set the hour, then press **PROGRAM/SET**.
- 2) Press **◀◀** or **▶▶** to set the minute, then press **PROGRAM/SET**.



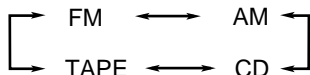
5 Set the volume level when the unit is turned on.

- The last set volume level appears on the display.
- Press **◀◀** or **▶▶** to set the volume, then press **PROGRAM/SET**.
- The selected source is displayed.



6 Press **◀◀** or **▶▶** to select the source to play.

- Each time you press **◀◀** or **▶▶**, the source changes as follows:

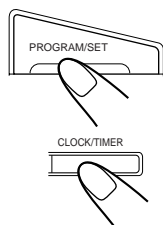


- FM:** tunes into a specified preset FM station. → Press **◀◀** or **▶▶** to select the preset station number.
- AM:** tunes into a specified preset AM station. → Press **◀◀** or **▶▶** to select the preset station number.
- CD:** plays a disc from the 1st track of a selected disc.
- Make sure there is a CD on the selected disc number tray.
- TAPE:** plays a tape in deck A or B.
- Make sure that a tape is in the deck whose deck indicator (A or B) is lit on the display.

- As for Recording Timer setting, you can select only AM or FM as a source.

7 Press **PROGRAM/SET**.

Press **CLOCK/TIMER** to finish the Daily Timer setting.

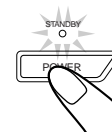


The unit enters Recording Timer setting mode.

8 Repeat from step 2 to step 7 for on-time setting, off-time setting, volume setting and source selecting.

The ☹ indicator remains lit.

9 Press **POWER** to turn off the unit (on standby) if you have set the Recording or Daily Timer with the unit operating.



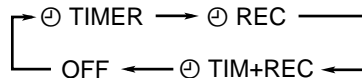
When the Recording Timer setting is finished, The REC indicator lights up on the display.

To select Recording or Daily Timer after its setting has been done

Press **TIMER ON/OFF** on the remote control.

TIMER ON/OFF

Each time you press the button, the timer mode changes as follows:



- ☹ **TIMER:** Select this when you want to use only the Daily Timer.
- ☹ **REC:** Select this when you want to use only the Recording Timer.
- ☹ **TIM+REC:** Select this when you want to use both the Daily Timer and the Recording Timer.
- OFF:** Select this when you want to cancel the timer mode setting.

- **When the timer is set to OFF**, the ☹ indicator and/or REC indicator goes off from the display. Even if the Recording or Daily Timer is canceled, but the setting condition for the Recording or Daily Timer remains in memory.
- **When the timer is set to on**, the ☹ indicator and/or REC indicator lights up again.



If the unit is operating when the timer-on time comes Recording or Daily Timer does not work.



Using Sleep Timer

With Sleep Timer, you can fall asleep to music.
You can set Sleep Timer when the unit is operating.

How Sleep Timer actually works

The unit automatically turns off after the specified time length passes by.

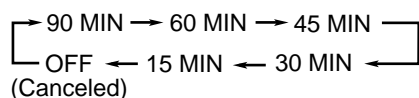
On the remote control ONLY:

1 Press SLEEP.

The time length until the shut-off time appears and the SLEEP indicator lights up on the display.



- Each time you press the button, the time length changes as follows:



2 Wait for about 5 seconds after specifying the time length.

The SLEEP indicator remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 3 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

To cancel the setting, press SLEEP repeatedly so that the SLEEP indicator goes off.

- Sleep Timer is also canceled when you turn off the unit.

Maintenance

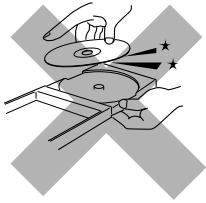


To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

Handling discs



- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.



- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



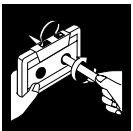
To clean the disc

Wipe the disc with a soft cloth in a straight line from center to edge.



DO NOT use any solvent — such as conventional record cleaner, spray, thinner, or benzene — to clean the disc.

Handling cassette tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.



- Be careful not to touch the tape surface.



- Avoid the following places to store the tape:
 - In dusty places
 - In direct sunlight or heat
 - In moist areas
 - Near a magnet

To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording.

To protect your recording, remove these tabs.

To re-record on a protected tape, cover the holes with adhesive tape.

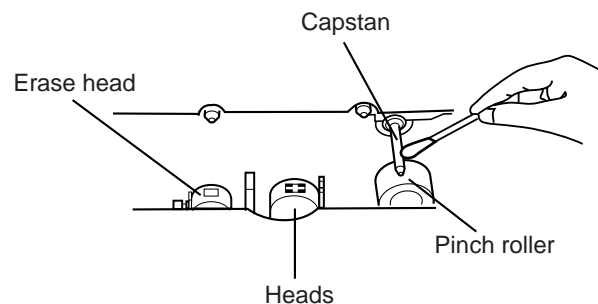
Cassette decks

If the heads, capstans, and pinch rollers of the cassette decks become dirty, the following will occur:

- Impaired sound quality
- Discontinuous sound
- Fading
- Incomplete erasure
- Difficulty in recording

To clean the heads, capstans, and pinch rollers

Use a cotton swab moistened with alcohol.



To demagnetize the heads

Turn off the unit, and use a head demagnetizer (available at electronics and record shops).

Troubleshooting



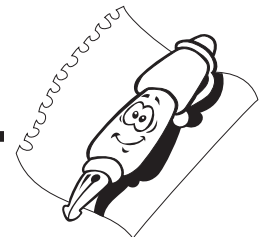
If you are having a problem with your unit, check this list for a possible solution before calling for service.

If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Cause	Action
No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 6 to 8.)
Hard to listen to broadcasts because of noise.	<ul style="list-style-type: none"> Antennas are disconnected. The AM loop antenna is too close to the unit. The FM antenna is not properly extended and positioned. 	<ul style="list-style-type: none"> Reconnect the antennas correctly and securely. Change the position and direction of the AM loop antenna. Extend the FM antenna at the best position.
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 19.)
The disc tray does not open or close.	The AC power cord is not plugged in.	Plug the AC power cord.
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.
Impossible to record.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape.
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
Unable to operate the unit from the remote control unit.	<ul style="list-style-type: none"> The path between the remote control unit and the remote sensor on the unit is blocked. The batteries are exhausted. 	<ul style="list-style-type: none"> Remove the obstruction. Replace the batteries.

Specifications

Design and specifications are subject to change without notice.



Amplifier section – CA-MXJ100

Output Power
40 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

Audio input sensitivity/Impedance (at 1 kHz)
 AUX: 400 mV/50 kΩ

Speakers Impedance: 6 Ω – 16 Ω

Tuner

FM tuning range: 87.5 MHz – 108.0 MHz
 AM tuning range: 530 kHz – 1,710 kHz

CD player

CD Capacity: 3 CDs
 Dynamic range: 85 dB
 Signal-to-noise ratio: 90 dB
 Wow and flutter: Unmeasurable

Cassette deck

Frequency response
 Normal (type I): 50 Hz — 14,000 Hz
 Wow and flutter
 0.15% (WRMS)

General

Power requirement: AC 120 V \sim , 60 Hz
 Power consumption: 55 W (at operation)
 13 W (on standby)
 Dimensions (approx.): 270 mm x 317 mm x 380 mm (W/H/D)
 (10¹¹/₁₆ in. x 12¹/₂ in. x 15 in.)
 Mass (approx.): 6.9 kg (15.3 lbs)

Supplied accessories

See page 6.

Speaker section — SP-MXJ100

Type: 2-way bass-reflex type
 Speaker units: Woofer: 12 cm (4³/₄") cone x1
 Tweeter: 2 cm (¹³/₁₆") piezo x1
 Power handling capacity: 40 W
 Impedance: 6 Ω
 Frequency range: 50 Hz — 18,000 Hz
 Sound pressure level: 87 dB/w•m
 Dimensions (approx.): 219 mm x 317 mm x 219 mm (W/H/D)
 (8⁵/₈ in. x 12¹/₂ in. x 8⁵/₈ in.)
 Mass (approx.): 3.1 kg (6.9 lbs) each

HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE : 1-800-537-5722

<http://www.jvcservice.com>

Dear customer:

In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, Call 1-800-537-5722 for your authorized servicer. Remember to retain your Bill of Sale for Warranty Service.

—JVC

JVC SERVICE & ENGINEERING COMPANY OF AMERICA DIVISION OF JVC AMERICAS CORP.

FACTORY SERVICE CENTER LOCATIONS

10 New Maple Avenue
Pine Brook, NJ 07058-9641
(973) 396-1000

1500 Lakes Parkway
Lawrenceville, GA 30243-5857
(770) 339-2582

705 Enterprise Street
Aurora, IL 60504-8149
(630) 851-7855

5665 Corporate Avenue
Cypress, CA 90630-0024
(714) 229-8011

2969 Mapunapuna Place
Honolulu, HI 96819-2040
(808) 833-5828

10700 Hammerly, Suite 110
Houston, TX 77043
(713) 935-9331

13 Cummings Park
Woburn, MA 01801
(781) 376-9100

8192 State Road 84
Davie, FL 33324
(954) 472-1960

890 Dubuque Avenue
South San Francisco, CA 94080-1804
(650) 871-2666

Sophisticated electronic products may require occasional service. Just as quality is a keyword in the engineering and production of the wide array of JVC products, service is the key to maintaining the high level of performance for which JVC is world famous. The JVC service and engineering organization stands behind our products.

NATIONAL HEADQUARTERS
JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.
1700 Valley Road
Wayne, NJ 07470

If you ship the product •••

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and the inside of the carton. Send to the appropriate JVC Factory Service Center as listed above.

Don't service it yourself.

CAUTION

*To prevent electrical shock, do not open the cabinet. No user serviceable parts inside.
Refer servicing to qualified service personnel.*

ACCESSORIES

*To purchase accessories for your JVC product, you may contact your local JVC Dealer.
Or from the 48 Continental United States call toll free : 800-882-2345*



LIMITED WARRANTY AUDIO-1

JVC COMPANY OF AMERICA warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL PURCHASER AT RETAIL to be FREE FROM DEFECTIVE MATERIAL AND WORKMANSHIP from the date of original retail purchase for the period as shown below. ("The Warranty Period.")

PARTS	LABOR
1YR	1YR

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY(50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective, JVC will repair or replace defective parts at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products and parts thereof may be brought to a JVC authorized service center on a carry-in basis except for Television sets having a screen size 25 inches and above which are covered on an in-home basis.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Return your product to a JVC authorized service center with a copy of your bill of sale. For your nearest JVC authorized service center, please call toll free: (800)537-5722. If service is not available locally, box the product carefully, preferably in the original carton, and ship, insured, with a copy of your bill of sale plus and letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location of which will be given to you by the toll-free number. If you have any questions concerning your JVC Product, please contact our Customer Relations Department.

WHAT IS NOT COVERED:

- This limited warranty provided by JVC does not cover:
1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model number or serial number has been altered, tampered with, defaced or removed;
 2. Initial installation and installation and removal for repair;
 3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
 4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
 5. Signal reception problems and failures due to line power surge;
 6. Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus(Needle) are covered for 90 days from the date of purchase;
 7. Accessories;
 8. Batteries (except the Rechargeable Batteries are covered for 90 days from the date of purchase);

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty last, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.

1700 Valley Road
Wayne, NJ 07470

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAILS OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:

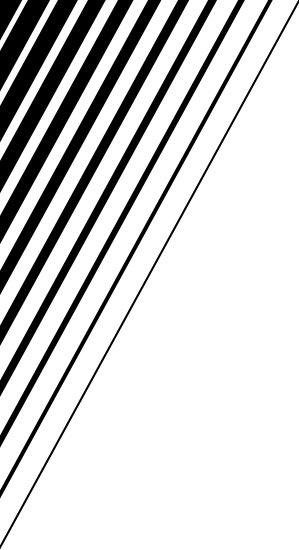
Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.: _____

Serial No.: _____

Purchase date: _____

Name of dealer: _____



JVC
VICTOR COMPANY OF JAPAN, LIMITED