

JVC

SERVICE MANUAL

CD PORTABLE SYSTEM

RC-NX1 B/E/G/GE/GI



COMPACT
disc
DIGITAL AUDIO

Area Suffix

B.....	U.K.
E.....	Continental Europe
G.....	Germany
GE.....	Eastern Europe, Austria and Switzerland
GI.....	Italy

■ Self-diagnosis function

This model has a convenient self-diagnosis function for CD section.

- This model is divided by two colors to the Gray (GR) and white (WT) types (In the parts list, both of the types are indicated by abbreviations (GR) and (WT)).

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■ Safety Precautions

1. The design 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. Service 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 manufacture'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 product 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 (■) and (▲) on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

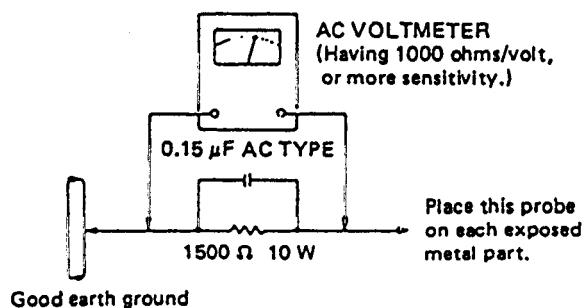
5. Leakage current check (Electrical shock hazard testing)

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 part 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 ohms 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. Any voltage measured must not exceed 0.75V AC(r.m.s.). This corresponds to 0.5mA AC(r.m.s.).



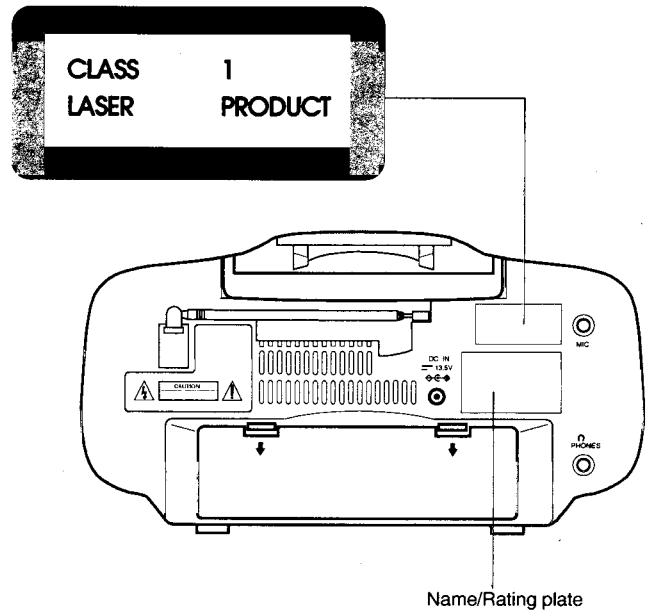
Warning (UK ONLY)

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.

IMPORTANT FOR LASER PRODUCTS

PRECAUTIONS

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 rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The CD player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder or CD tray is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.



REPRODUCTION OF LABELS AND THEIR LOCATION

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

VAROITUS: Varmuuskytkimen oliessa pois päältä kun laite avataan, siellä kehittyä näkymätöntä lasersäteitä. Älä pane itseäsi säteilyn alttiiksi.

WARNING: Osynlig laserstråling uppstår vid komponentens öppning när säkerhetsbrytaren är frånslagen.

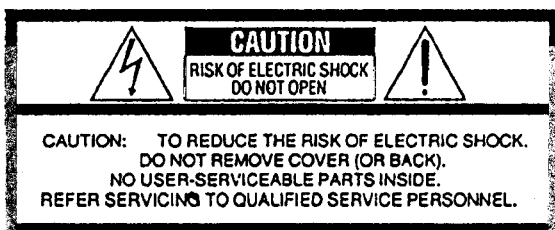
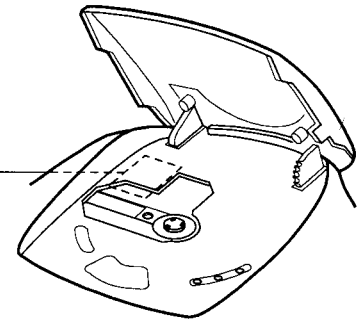
ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsbryteren er ude af funktion. Unngå utsettelse for stråling.

DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

WARNING: Osynlig laserstråling när denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)

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

VARO: Avattessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)



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.

IMPORTANT (In the United Kingdom) Mains Supply (AC 230 V ~, 50 Hz only)

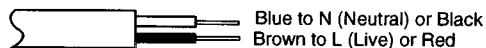
DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover. If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:



As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

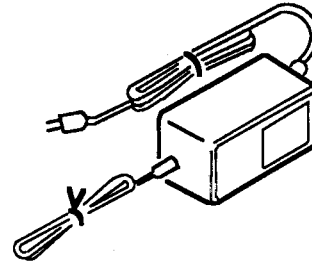
IF IN DOUBT-CONSULT A COMPETENT ELECTRICIAN.

■ Major safety control points for RC – NX1

■ Main safety control points

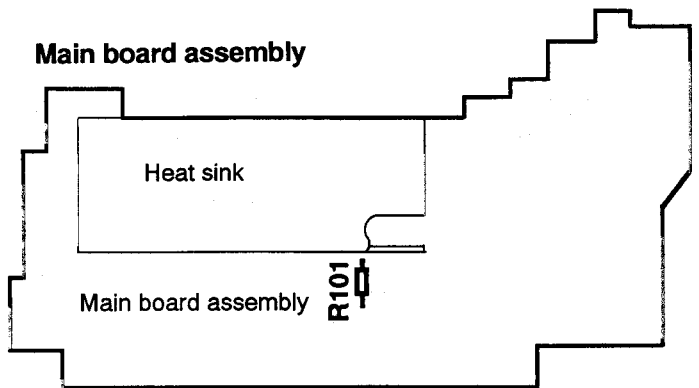
- ◆ Confirm that the model number of AC adapter is AA – R1206.
- ◆ Confirm that the type approval number is No. ▽ 91 – 5468.
- ◆ Confirm that the AC adapter cord mark is ▽ 12 – 7077.
- ◆ Confirm that the AC plug mark is ▽ 41 – 23904.

AC adapter

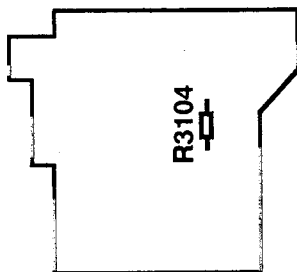


- ◆ The following parts are exothermic.
Confirm that the non – combustible parts are free from lift – up or falling.
The parts in are out of the scope of safety control.
IC602, R101, IC703, Q631, R3104, Q808, Q904, IC301, D901, R315, R20, Q806, R3206, R3201, R311, R912, heat sink.

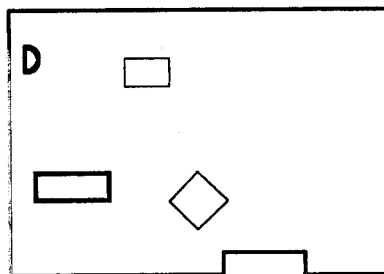
Main board assembly



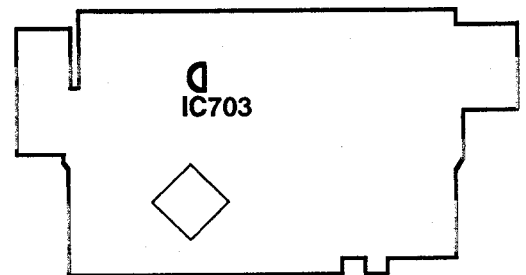
Preamplifier P. C. board assembly



CD P. C. board assembly



Microprocessor P. C. board assembly

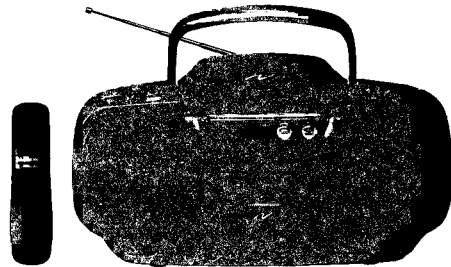


JVC



CD PORTABLE SYSTEM

RC-NX1 B



COMPACT
disc
DIGITAL AUDIO

INSTRUCTIONS

ENGLISH

Thank you for purchasing this JVC product. Please read these instructions carefully before starting operation to be sure to obtain optimum performance and a longer service life from the unit.



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



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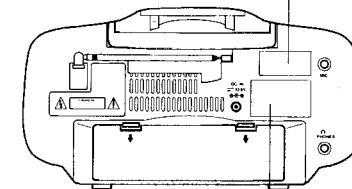
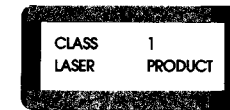
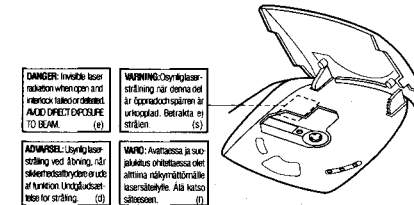
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REPRODUCTION OF LABELS AND THEIR LOCATION



Name/Rating plate

Instructions

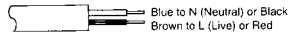
RC - NX1 B/E/G/GE/GI

**IMPORTANT (in the United Kingdom)
Mains Supply (AC 230 V~, 50 Hz only)**

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.
BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.
If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.
The wires in the mains lead on this product are coloured in accordance with the following code:



As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

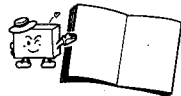
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.

FEATURES

- One-touch operation (COMPU PLAY) (only when AC power is used)
- 23-key remote control unit operates all CD, cassette deck and tuner functions
- Skip/Search Play
- Repeat Play
- Random Play
- U-Turn auto-reverse full-logic mechanism
- Auto tape select mechanism
- Metal (type IV) and CrO₂ (type II) tape can be played back for superior tone quality
- CrO₂ (type II) tape recording capability
- 2-Band digital synthesizer tuner with 30-station (15 FM and 15 AM) preset capability
- Seek/manual tuning
- Auto preset tuning
- Multi-Bass Horn circuit for low-frequency sound reproduction
- Sound mode control
- Timer/Clock function
- Timer on/off with preset volume function
- Sleep timer can be set for up to 120 minutes
- Microphone mixing facility

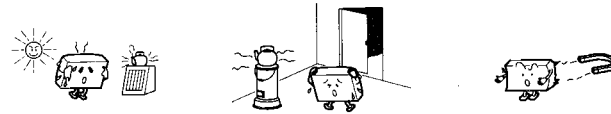
SAFETY PRECAUTIONS**Prevention of Electric Shocks, Fire Hazards and Damage**

1. Even when the POWER button is set to STANDBY, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.
2. Do not handle the power cord with wet hands.
3. When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
4. Consult your nearest dealer when damage, disconnection, or contact failure affects the cord.
5. Do not bend the cord severely, or pull or twist it.
6. Do not modify the power cord in any manner.
7. To avoid accidents, do not remove screws to disassemble the unit and do not touch anything inside the unit.
8. Do not insert any metallic objects into the unit.
9. Unplug the power cord when there is a possibility of lightning.
10. If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
11. Do not block the unit's ventilation holes that allow heat to escape. Do not install the unit in a badly ventilated place.

POWER button

When the power cord of the AC adapter is connected to a household AC outlet, the power indicator lights in red indicating STANDBY mode (this red indicator does not light when the power is supplied by batteries). When the POWER button is pressed, the red indicator turns green showing that the power is on (this green indicator lights whether the power is supplied through the AC adapter or by batteries).

While this unit is plugged into a household AC outlet using the AC adapter, it consumes current even if its POWER button is set to STANDBY.

HANDLING PRECAUTIONS

Do not use this unit in direct sunlight or leave the unit in closed automobiles (or yachts, etc.) where it would be exposed to high temperatures above 40°C (104°F).

1. Avoid installing in the following places

- Where it could be subject to vibrations.
- Where it is excessively humid, such as in a bathroom.
- Where it could be magnetized by a magnet or speaker.

2. Pay attention to dust

Be sure to close the CD door so that dust does not collect on the lens. Do not touch the lens.

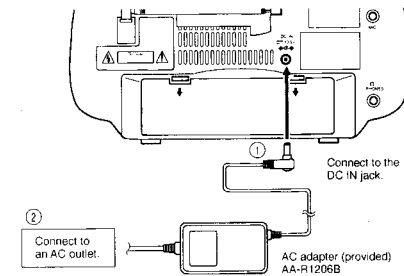
3. Condensation

In the following cases, condensation may occur in the unit, in which case the unit may not operate correctly.

- In a room where a heater has just been switched on.
 - In a place where there is smoke or high humidity.
 - When the unit is moved directly from a cold to a warm room.
- In these cases, set the POWER button to ON and wait 1 or 2 hours before use.

POWER SUPPLY**A. Operation on household AC****Note:**

The provided AC adapter has a built-in transformer, which creates a magnetic field. When it is placed close to the unit, a hum may emanate from the adapter. If this happens, move the AC adapter as far from the unit as possible and use it.

**CAUTIONS:**

1. ONLY USE WITH JVC AC ADAPTER PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT. REMOVE BATTERIES WHEN USING THE AC ADAPTER.
2. BE SURE TO UNPLUG THE POWER CORD OF THE AC ADAPTER FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.

B. Batteries for memory back-up system

It is recommended that batteries be loaded to prevent the preset station memory and timer, etc. from being erased when there is a power failure, or when the AC power cord is disconnected.

4. Volume setting

CDs produce very little noise compared with analog sources. If the volume level is adjusted for these sources, the speakers may be damaged by the sudden increase of output level. Therefore, lower the volume before operation and adjust it as required during play.

5. Safety mechanism

This unit incorporates a safety interlock mechanism which switches the laser beam on and off, so that when the CD door is open, the laser beam stops automatically.

6. Do not place cassette tapes, etc. near the speakers

Since there are magnets in the speakers, do not place tapes or magnetic cards on them as recorded data could be erased.

7. Keep this unit away from your TV

When this unit is used near a TV, the TV picture could be distorted. If this happens, move this unit away from the TV. If this does not correct the situation, avoid using this unit when the TV is turned on.

8. Cleaning the cabinet

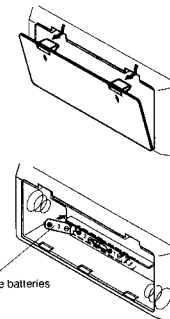
If the cabinet gets dirty, wipe it with a soft, dry cloth. Never use benzine or thinner as these could damage the surface finish.

9. When listening with headphones

- Do not listen at high volumes as it could damage your hearing.
- For safety, do not drive while listening to this unit.

• Loading batteries

Load three "R6/AA (15F)" size batteries (optional) into the battery compartment.



- When removing the batteries, push from the bottom of the unit.

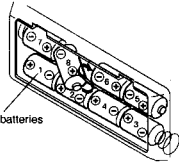
Notes:

- The three "R6/AA (15F)" size batteries supply the power to the memory back-up system which prevents the contents of memory being lost when there is a power failure, or the power cord of the AC adapter is disconnected. Battery power is not consumed when the power cord of the AC adapter is connected to the household AC outlet. (When the memory backup function is activated, the time is not displayed to reduce the power consumption.)
- When the power cord of the AC adapter is not connected or the "R14/C (14F)" size batteries are not loaded, the batteries should be replaced with new ones approximately every 6 months. (Connect the power cord of the AC adapter when replacing batteries in order to backup the memory.)

C. Operation on batteries

Loading batteries

1. Open the battery cover by pulling it toward you while pressing the sections marked by the arrows.
2. Insert eight "R14/C (14F)" size batteries as shown in the diagram.
 - Be careful to insert the batteries with the ⊕ and ⊖ terminals positioned correctly.
3. Replace the cover.



"R14/C (14F)" size batteries

Checking batteries

When the tape speed or output sound decreases, or CD play is intermittent, replace all batteries with fresh ones.

When making an important recording, use new batteries (preferably alkaline batteries with a longer service life) to avoid any possible failure.

• For better battery usage

Continuous operation of the unit causes the battery power to be consumed quicker than noncontinuous operation.

Operation of the unit in a cold place causes the battery power to be consumed more quickly than in a warm place.

CAUTIONS:

• WHEN NOT USING THE UNIT FOR A LONG TIME (MORE THAN TWO WEEKS) OR WHEN ALWAYS USING HOUSEHOLD AC, REMOVE THE BATTERIES TO AVOID A MALFUNCTION OR DAMAGE TO THE UNIT.

• WHEN THE JVC AC ADAPTER PROVIDED WITH THIS UNIT IS CONNECTED, THE POWER IS AUTOMATICALLY SWITCHED FROM THE BATTERIES TO THE HOUSEHOLD AC EVEN WHEN THE BATTERIES ARE LOADED. HOWEVER, REMOVE THE BATTERIES WHEN USING THE AC ADAPTER.

CAUTIONS WHEN USING BATTERIES

When batteries are used incorrectly, it may result in the leakage of chemicals from the batteries or they may explode. The following care should be taken:

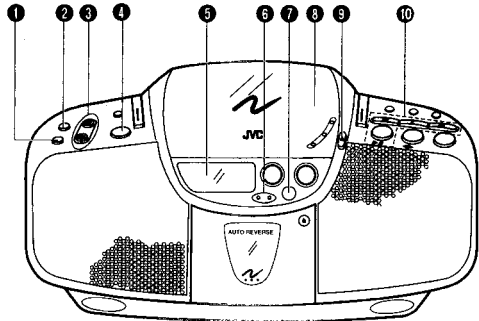
- Check that the positive ⊕ and negative ⊖ terminals of the batteries are positioned correctly and load them as shown in the diagram.
- Do not mix new and old batteries together, or mix different types of batteries.
- Do not try to recharge non-rechargeable batteries.

• Remove the batteries when the unit is not to be used for an extended period of time.

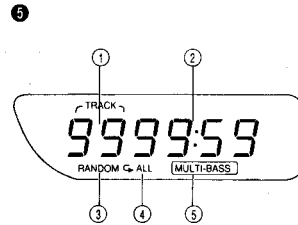
If chemicals from the batteries come in contact with your skin, wash them off immediately with water. If chemicals leak onto the unit, clean the unit completely.

NAMES OF PARTS AND THEIR FUNCTIONS

CD player/General section

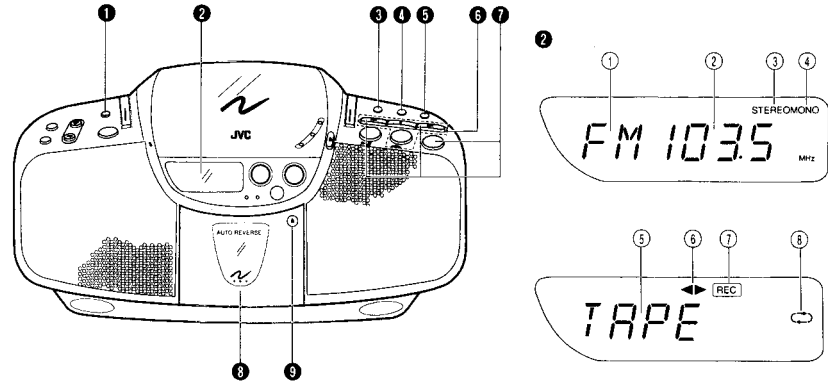


1. MULTI-BASS HORN button
2. SOUND button
3. VOLUME buttons (+, -)
4. POWER button
5. Display window
 - ① Function/Track number display
 - ② Play time display
 - ③ RANDOM play indicator
 - ④ Repeat play indicator (ALL)
 - ⑤ MULTI-BASS indicator
- See page 15 for the clock adjustment.
6. POWER ON/STANDBY indicators



7. Remote sensor section
8. CD door
9. CD door open (▲) button
10. CD operation buttons
 - ① CD search buttons (←, →, ⏮, ⏭): Press to locate the beginning of a track and to start forward/reverse search operations.
 - ② Stop button (■): Press to stop playing a CD.
 - ③ CD play/pause button (⏮ || ⏭): Press to play a CD or to stop temporarily.

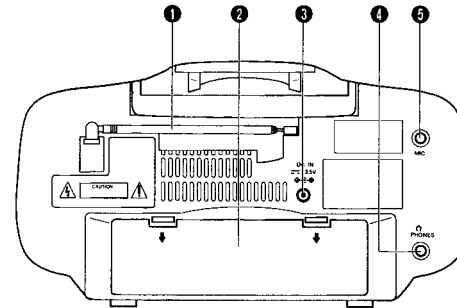
Tuner/Deck section



1. PRESET TUNING/AUTO PRESET button
2. Display window
 - ① Band indicator
 - ② Radio frequency display
 - ③ STEREO indicator
 - ④ MONO indicator
 - ⑤ Tape (TAPE) mode display
 - ⑥ Tape direction indicator (←, →)
 - ⑦ Recording indicator (REC)
 - ⑧ Reverse mode indicator (⏮, ⏭, ⏪, ⏩)
3. ONE TOUCH REC button
4. //II button
5. REVERSE MODE button
 - ⏮: For single-side recording or playback
 - ⏭: For recording or playback on both sides
 - ⏪: For continuous play

6. Cassette operation buttons
 - REW: Press to rewind the tape.
 - : Press to stop the tape.
 - FF: Press to fast wind the tape.
 - TAPE (←, →): Press to select the TAPE mode.
 - ▶: Press to play back the tape in the forward direction. The indicator lights in the display window.
 - ◀: Press to play back the tape in the reverse direction. The indicator lights in the display window.
7. TUNER (FM/AM) button
 - ▶: Press to select tuner mode.
 - ▶: Press to select the band.
 - Tuning buttons (←, →)
8. Cassette holder
9. Cassette holder PUSH EJECT (▲) section

Rear panel

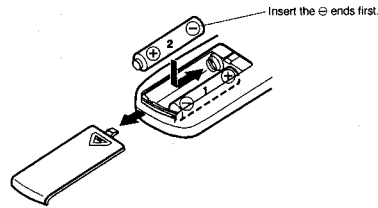


1. Telescopic antenna
2. Battery compartment cover
3. DC IN jack (13.5 V)
4. Headphones jack (3.5 mm dia. stereo mini)
 - Connect headphones (impedance 16 Ω to 1 kΩ) to this jack. Speaker sound is automatically switched off when the headphones are connected.
5. MIC jack

REMOTE CONTROL UNIT

Preparation before use

- **Installing batteries in the remote control unit**
- 1. Remove the battery cover from the back of the remote control unit.
- 2. Insert two "R6/AA (15F)" size batteries.
 - Insert the batteries with the ⊕ and ⊖ terminals matching the indication inside the battery compartment.
- 3. Replace the cover.



Battery replacement

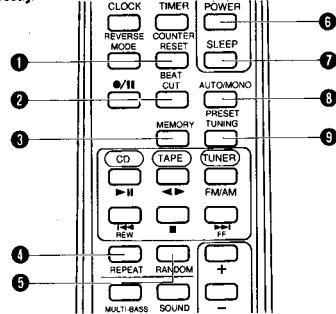
When the remote control operation becomes unstable or the distance from which remote control is possible decreases, replace the batteries.

Using the remote control unit

- Point at the remote sensor and operate within about 7 m (approx. 23 ft).
- The remote control range is less when the unit is used at an angle.
- Do not expose the remote sensor to strong direct sunlight or artificial lighting.
- Make sure that there are no obstacles between the remote sensor and the unit.

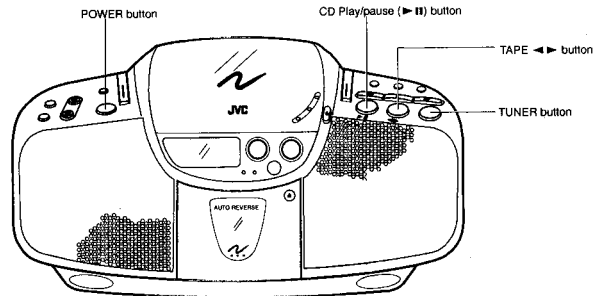
The following operations can be performed using the remote control unit.

- Check the operation button functions carefully and operate them correctly.



- 1 COUNTER RESET button
- 2 BEAT CUT button
- 3 MEMORY button
- 4 REPEAT play button
- 5 RANDOM play button
- 6 POWER (AC) button
 - When the main unit power is supplied from batteries, this POWER (AC) button cannot turn on main unit power. (In this case, switch on the POWER button of the main unit first.)
- 7 SLEEP button
- 8 AUTO/MONO button
- 9 PRESET TUNING button
 - When pressed for more than 2 seconds, the auto preset tuning mode is activated.
- Buttons not mentioned here have the same functions as those on the main unit.

SWITCHING THE POWER ON/OFF



Switching the power on/off

● Switching on:



POWER STANDBY ON

The green indicator lights.

● Switching off:



POWER STANDBY ON

The red indicator lights. (The indicator does not light when the power is supplied by batteries.)

COMPU PLAY (only when AC power is used)

Even when the power is set to STANDBY, pressing the button shown below switches on the power and selects the source.

Function mode	Operations
	CD When this button is pressed with a CD loaded, CD playback begins.
	TAPE When this button is pressed with a tape loaded, tape playback begins.
	TUNER When this button is pressed, the tuner is engaged.

Notes:

- When switching off the power, be sure to press the POWER button.
- The COMPU PLAY button on the remote control has the same function as that on the main unit.

VOLUME, TONE AND OTHER CONTROLS

VOLUME button

- + : Use to increase the volume.
 - : Use to decrease the volume.
- (Control range from VOL 0 to VOL 25.)



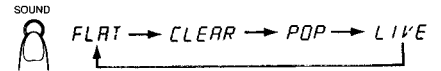
MULTI-BASS HORN button

- ON : The MULTI-BASS indicator lights. Set to this position to activate MULTI-BASS HORN sound.
- OFF: The MULTI-BASS indicator goes out. Set to this position when MULTI-BASS HORN sound is not required.

Sound mode button

This unit has three preset sound modes (CLEAR, POP, LIVE). These modes can be selected to enhance the type of music being played.

- Press the SOUND button to select the sound mode.
- Each time the SOUND button is pressed the sound mode changes as follows;



Sound mode selection

FLAT (No sound effect (flat characteristics)):

Set to this position when listening to classical music.

CLEAR:

Set to this position for crisp and clear sounding music with transparent highs.

POP:

Set to this position for light music including popular and vocal music.

LIVE:

Set to this position for the sound of live jazz music.

Note:

The sound modes only affect the sound output from the speakers or headphones. They do not affect the sound when recording.

HANDLING CDs

Since dirty, damaged and warped CDs may damage the unit, take care regarding the following:

1. Usable CDs

Use CDs with the mark shown.

2. Notes on handling CDs

- Do not touch the reflective recorded surface.
- Do not stick or write anything on the label side.
- Do not bend CDs.

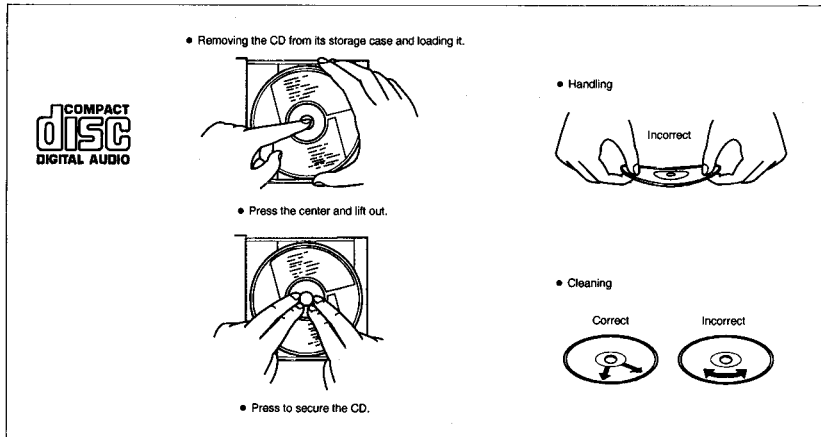
3. Storage

- After removing a CD from the unit, be sure to put it back in its case.
- Do not expose CDs to direct sunlight, high temperatures from a heater, etc., high humidity, or dust.

4. Cleaning CDs

- Before loading a CD, wipe off any dust, dirt or fingerprints with a soft cloth. CDs should be cleaned by wiping radially from the center to the edge.

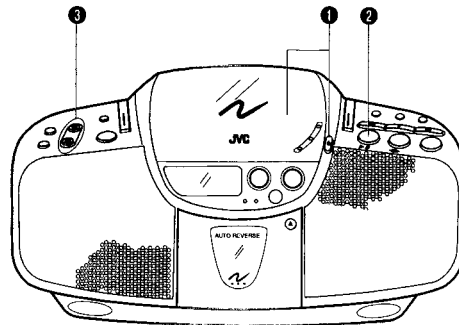
- Never use thinner, benzine, record cleaner or antistatic spray.



PLAYING CDs

Playing an entire CD

The following example of playing an entire CD assumes a CD with 19 tracks and a total playing time of 61 minutes 3 seconds.



- Load a CD with the label side facing up and close the CD door.
- Press the CD (▶||) button to start play. (The power is switched ON when AC power is supplied.)
 - When battery power is used, switch on the POWER button first, then perform operations.
- Adjust.

CD Loading and Unloading

- With the label side facing up.
- Press down on the CD's center until you hear a click.

- When unloading the CD, hold its center with one finger, then grab the CD by its edges and lift it out.

Indicators inside CD door

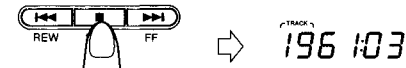
When the power is switched on, the indicators light and they blink in sequence during CD playback.

Note:

When the CD door is closed after a CD is unloaded, the CD player lens moves up and down several times. This is not a malfunction.

To stop play

- To stop in the middle of a CD
During play, press the ■/STOP button to stop play.



- The total number of tracks and total playback time are displayed.

To stop a CD temporarily

Press the CD (▶||) button to stop play temporarily and the playing time display blinks. When pressed again, play resumes from the point where it was paused.

Notes:

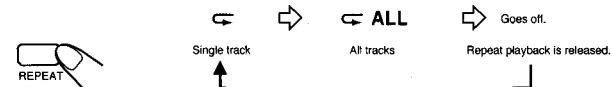
- The following indication may appear when a CD is dirty or scratched, or when the CD is loaded upside down. In such a case, check the CD and insert again after cleaning the CD or turning it over.

000000

- Do not use the unit at excessively high or low temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After play, unload the CD.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i. e. in a car traveling on a rough road).
- Do not look directly at the CD player laser emitter (red light).

Repeat play (using the remote control unit)

Press the REPEAT button before or during play. A single track or all the tracks can be repeated.



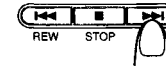
Whether a single track or all tracks are to be repeated can be specified. Each time the REPEAT button is pressed, the mode will change from a single track (◀), to all the tracks (◀ ALL), to the clear mode, in this order.

Skip play

- During play, it is possible to skip forward to the beginning of the next track or back to the beginning of the track being played or the previous track; when the beginning of the required track has been located, play starts automatically.

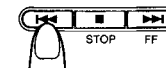
To listen to the next track...

Press the ▶ button once to skip to the beginning of the next track.



To listen to the previous track...

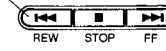
Press the ◀ button to skip to the beginning of the track being played. Press twice quickly to skip to the beginning of the previous track.



Search play (to locate the required position on the CD)

- The required position can be located using fast-forward or reverse search while playing a CD.

Keep pressing for fast-reverse search.



Keep pressing for fast-forward search.

- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

Random play (using the remote control unit)

Press the RANDOM button, and all tracks on a CD play once in random order.



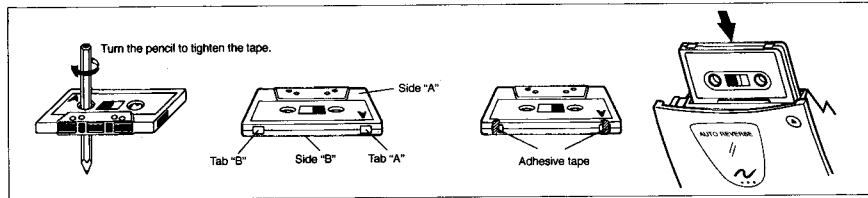
HANDLING CASSETTE TAPES

Cassette tapes

- Loose tape may cause trouble. Using a pencil or like object, gently tighten the tape as shown.
- To prevent recordings from being erased accidentally, remove the tab(s) with a screwdriver, etc. Reseal the slots with adhesive tape to erase and re-record after the tabs have been removed.
- C-120 cassettes are not recommended because they are prone to malfunction.

Cassette loading

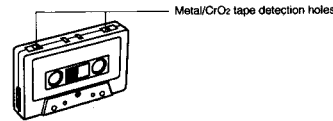
- Press the PUSH EJECT section on the cassette holder to open the holder.
- Load a cassette as shown.
- Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.



Note:
If the power is switched off while tape is running, it may be impossible to remove the cassette. If this happens, switch the power on again before attempting to remove the cassette.

Auto tape select mechanism

This unit has an Auto Tape Select mechanism which distinguishes between different types of tape using detection holes in the cassette. After the type of tape has been detected, bias and equalization suitable for the tape are set.

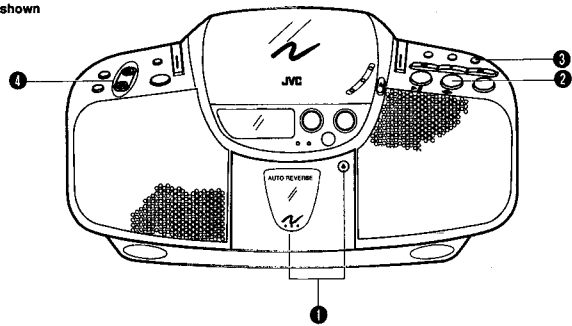


- Cassettes with detection holes:
 - Metal tape (EQ: 70 μs) Type IV
 - CR2 (chrome) tape (EQ: 70 μs) Type II
- Cassettes without detection holes:
 - Normal tape (EQ: 120 μs) Type I

CASSETTE PLAYBACK



Operate in the order shown



- Load a cassette tape with side A facing out.
- Press to start playback. (The power is switched on and the TAPE mode is engaged to start tape playback.)
 - When battery power is used, switch on the POWER button first, then perform operations.
- Select the reverse mode (◀▶) button.
- Adjust.

- When the tape plays back with the reverse mode set to ◀▶ (single side play) or ▶▶ (both side play) mode, the tape stops automatically at the end of tape after playing one or both sides. When the reverse mode is set to the ▶▶ (continuous play) mode, the tape continuously plays one side after the other until you stop operation.

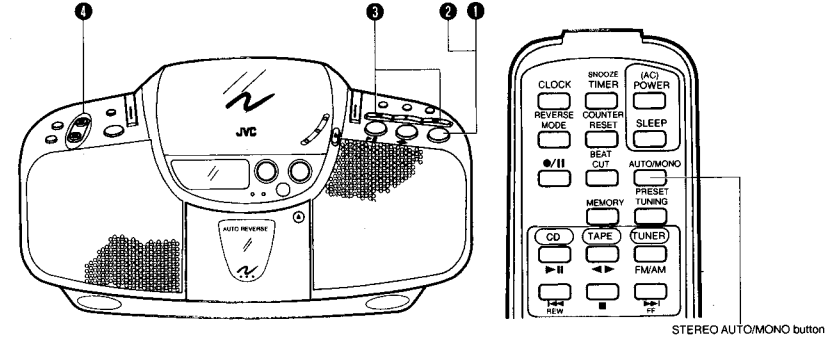
How to fast-wind tapes

- Press the TAPE (◀▶) button (to set TAPE mode).
- Press the REW or FF button.
 - A tape can be fast-wound in either tape playback direction, and when it reaches the end of a side, it stops automatically.

- The display window changes from the TAPE display mode to the Counter display mode. To reset the counter to "0000," press the COUNTER RESET button on the remote control unit.

RADIO RECEPTION

Operate in the order shown



- Press the TUNER button.
 - The power is switched on and a band and radio frequency will be shown in the display.
 - When battery power is used, switch on the POWER button first, then perform operations.
- Select the band.
- Tune to the required station.
- Adjust.

STEREO AUTO/MONO button (using the remote control unit)

Auto mode:
Set to this position when listening to or recording an FM stereo broadcast. The STEREO indicator lights when the FM stereo broadcast is received.

MONO:
Set to this position when FM stereo reception is noisy. When another station is tuned to in the MONO mode, the unit automatically enters Auto mode.



- Notes:**
- When seek tuning to the required station is not possible because the broadcast signal is too weak, press the ◀▶ button momentarily to perform manual tuning.
 - When the power is set to STANDBY, or another mode (TAPE or CD) is selected, the last tuned frequency is stored in memory. When the power is switched on again and TUNER button is pressed, the same station will be tuned to.

- Seek tuning**
Press the ◀▶ or ▶▶ button for one second or more. The unit enters the seek tuning mode to tune in the nearest station automatically, so the broadcast can be heard.
- Manual tuning**
Each time the ◀▶ or ▶▶ button is pressed, the unit steps through the current frequency band. Tuning is done in steps of 50 kHz for FM and 9 kHz for AM.

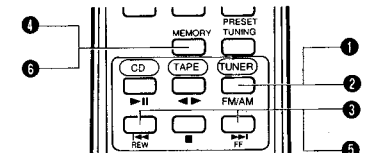
Auto preset tuning

This function scans the current band, detecting frequencies used to broadcast signals, and stores the first 15 frequencies in memory automatically.

- Press the AUTO PRESET button for more than 2 seconds. The frequencies of stations broadcasting signals can be stored in memory automatically in the order of increasing frequency. (15 stations in each band.)

Presetting stations (using the remote control unit)

15 stations in each band can be preset as follows:
 • Example: (Presetting an FM station broadcasting on 103.5 MHz to preset button "15")



- Press the TUNER button.
- Select the FM band using the TUNER button.
- Tune to the required station.

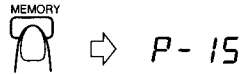


- Press the MEMORY button.

- Select the preset number using the **▶▶** or **◀◀** button.



- Press the **MEMORY** button again to store the station.



- Repeat the above procedure for each of the other stations and the other band.

Notes:

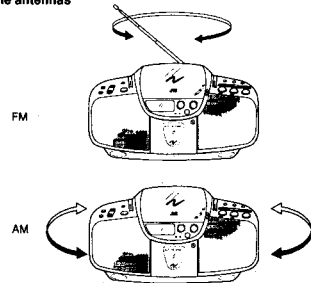
- The previous stored station is erased when a new station is stored, because the new station's frequency replaces the previous frequency in memory.
- When listening to an AM broadcast, noise may be heard if the remote control unit is used.

Preset tuning

- The stations must be preset before this operation can be performed.

- Press the **TUNER** button.
- Select the band using the **TUNER** button.
- Press the **PRESET TUNING** button to select the required preset station.

Using the antennas



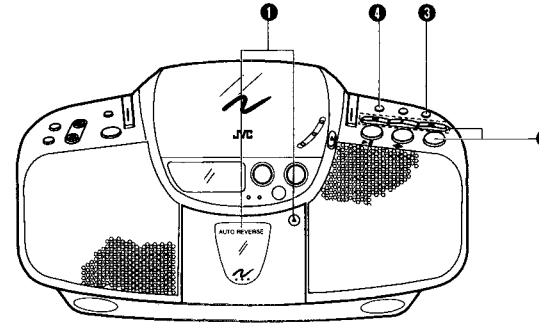
Note:
The built-in ferrite core antenna can pick up interference from television receivers in the neighborhood and thereby disturb AM reception.

How to rewind tapes

- Press the **TAPE** (**◀▶**) button (to set **TAPE** mode).
- Press the **REW** button.

Recording from the radio

Operate in the order shown



- Load a cassette with side A facing out. (Wind past the tape leader before starting recording.)
- Press the **TUNER** button.
- Tune to the required station.
- Select the desired reverse mode.
- Press the **ONE TOUCH REC** button.
 - Recording will start.
 - The function switch is locked and its position cannot be changed.

- To stop recording temporarily, press the **●/||** button (recording indicator will blink). To resume recording, press the **●/||** button again.

RECORDING



- During recording, the **ALC** (Automatic Level Control) circuit automatically optimizes the recording level, so manual recording level adjustment is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

Note:

This unit has recording characteristics suitable for normal and CrO₂ tapes. Normal and CrO₂ tapes have different characteristics from metal tapes.

Synchronized recording with the CD player

- In this system, the CD player starts play when the cassette deck enters the recording mode.

Operate in the order shown

- Load a CD and close the CD door.
- Set to the CD mode.
- Press the **■** button to set stop mode.
- Load a cassette with side A facing out. (Wind past the tape leader before starting recording.)
- Select the required reverse mode (**↔** or **↔**).
- Press the **ONE TOUCH REC** button; synchronized recording will start. (The recording indicator lights up.)

- Recording starts in the forward direction and CD play starts automatically.
- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- When the CD player stops, the tape deck stops automatically.
- To stop recording in the middle, press the **■** button.

Note:

- During CD synchro recording, the **▶||** and (**◀◀**, **▶▶**) buttons do not function.

When non-recorded section between tunes is not required...

- Press the **CD ▶||** button twice. The CD player enters the pause mode.
- Press the **ONE TOUCH REC** button to start recording.

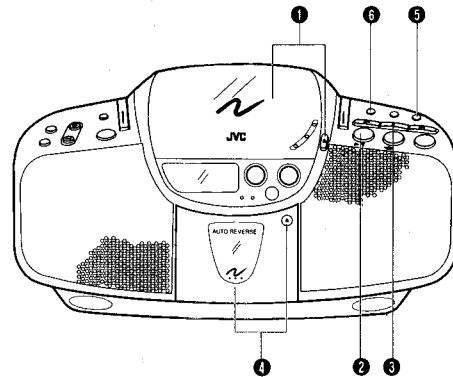
Note:

- Depending on the CD used, non-recorded sections of different lengths may be left between tunes.

CD complete recording function (Synchro recording mode only)

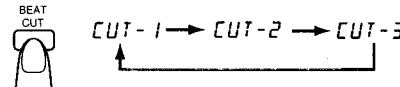
If the tape is reversed while a CD is being played, recording will be done on the reverse side of the tape as follows:

- When less than 10 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the previous track.
- When more than 10 seconds of the last tune on the forward side of the tape have been recorded, recording on the other side of the tape will start from the beginning of the current track.



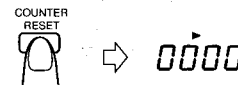
BEAT CUT button (using the remote control unit)

When recording an AM broadcast, beats may be produced which are not heard when listening to the broadcast. In such case, set this button after setting the deck to the record mode so that the beats are eliminated. Normally set this button to "CUT-1".



COUNTER RESET button (using the remote control unit)

- Before recording, press the **TAPE** (**◀▶**) button to engage the **TAPE** mode. Then press the **■/STOP** button to change the display to the Counter mode.
- Press the **COUNTER RESET** button to reset the counter to 0000.



- Select the desired source and start recording.

- After the recording is completed, press the **TAPE** (**◀▶**) button to engage the **TAPE** mode. Then rewind the tape till the counter shows "0000" and play it back. Make a note of the counter number of the beginning of the song recorded.

Erasing

A recorded tape can be erased by recording new material over the previous material.

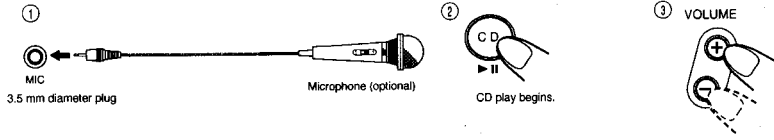
To erase a tape without making a new recording...

- Press the **TAPE** (**◀▶**) button to set to the **TAPE** mode.
- Press the **■/STOP** button.
- Insert the cassette with the side to be erased facing out.
- Press the **●/||** button twice.

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 work embodied therein.

MICROPHONE MIXING

Microphone sound can be mixed with source sound.



• Example: Mixing sound from microphone and CD

Operate in the order shown

- ① Connect a microphone to the MIC jack. (If there is a switch on the microphone, switch it on.)
- ② Select the source sound (CD/TAPE/TUNER).
 - Play back the source sound selected.
- ③ Adjust the VOLUME controls.

To record the mixed sound

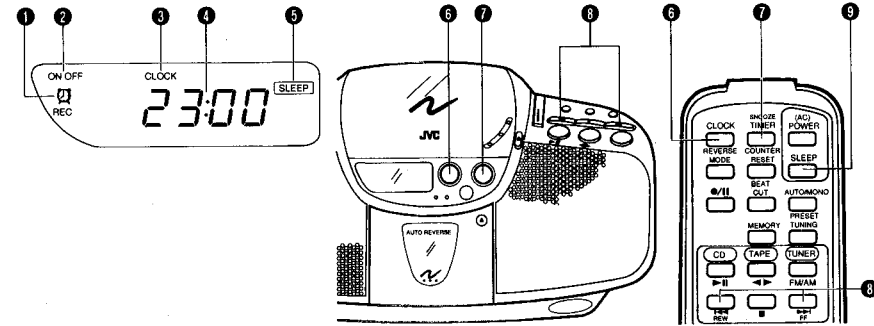
To record this mixed sound onto a tape in the deck, press the **●/II** button to engage record standby mode following the above procedure, then press the **●/II** button.

Notes:

- Use the microphone as far away from the set as possible. When the microphone is too near the speakers, howling may occur.
- Disconnect the microphone from the MIC jack after use.

CLOCK ADJUSTMENT

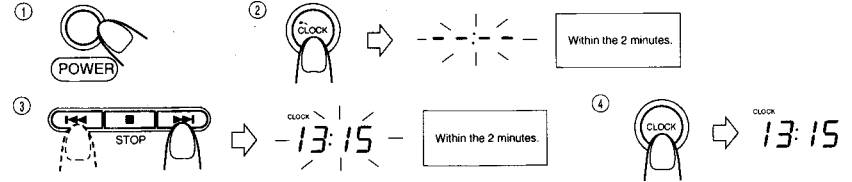
Names of parts in the clock/timer section, and their functions:



- ① Timer mode indicator
- ② Timer indicator (ON/OFF)
- ③ CLOCK indicator
- ④ Time display
- ⑤ SLEEP indicator
- ⑥ CLOCK button
- ⑦ TIMER/SNOOZE button
- ⑧ **◀▶** buttons
- ⑨ SLEEP button

Setting the current time (when this unit is used for the first time)

(Example: To set the clock to 13:15.)



- ① Set the POWER button to ON.
 - ② Press the CLOCK button for 2 seconds or more; "----" will blink in the display.
 - ③ Set to 13:15 by pressing the **◀▶** buttons. (When the button is kept pressed, the minute/hour indication changes continuously.)
 - ④ Press the CLOCK button; the time will light in the display.
- To set to the nearest second...
Press the CLOCK button when you hear the time signal from a TV or radio.

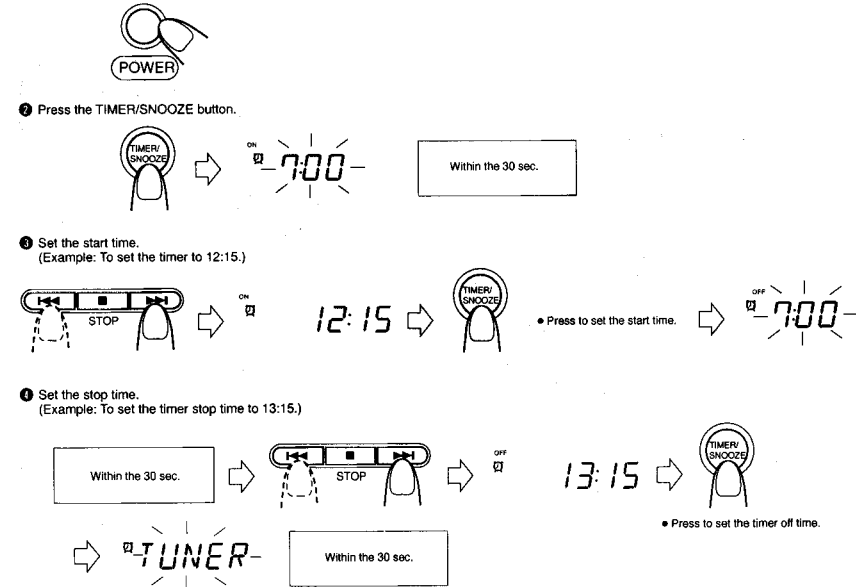
Notes:

- Before performing timer recording or playback, it is necessary to set the current time.
- When the power cord of the AC adapter is plugged in again after being disconnected or power is restored after a power failure, "CLOCK" will blink in the display. Set the current time again.
- To confirm the current time (when the power is ON.)
Press the CLOCK button. When the button is pressed again, the display shows the previously engaged mode.

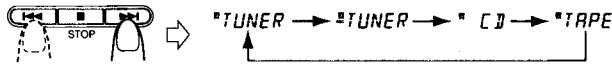
TIMER OPERATIONS

Setting the timer

- The current time must be set before the timer can be used.
- ① Set the POWER button to ON.



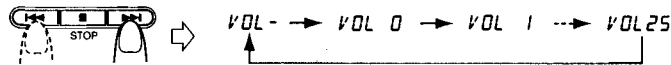
- ④ Select the **TIMER** mode.
- The selected timer mode is shown in the display.



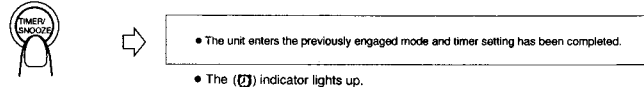
When the **TUNER** button is pressed to select the timer mode, the mode changes from **TUNER** (timer reception of a broadcast), to **TUNER/REC** (timer recording of a broadcast), to **CD** (timer play of a CD), to **TAPE** (timer playback of a tape), in this order.



- ⑤ Set the volume.



This shows when volume level 1 is selected.



- When the volume setting is set to "VOL-" (volume level is not specified), the timer playback volume is at the level used before setting the timer.

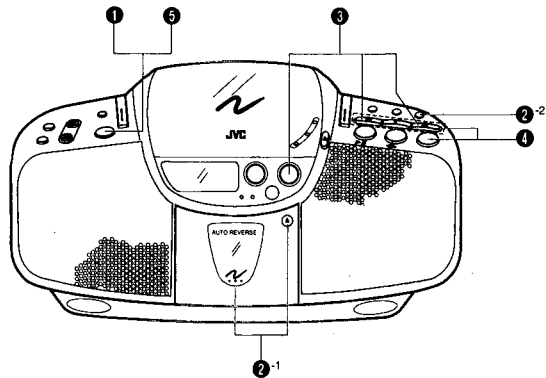
Note:
• When the timer is set incorrectly or the correct mode is not selected, perform "Setting the timer" from the beginning.

- **To confirm the timer setting (when the power is ON.)**
- 1. Each time the **TIMER/SNOOZE** button is pressed, the timer setting can be confirmed.
- 2. When the previously engaged mode is displayed, timer setting has been completed.

Timer recording of broadcast

- The current time must be set before the timer can be used.
- Make sure that the safety tabs of the cassette have not been broken off.

Operations



- ① Set the **POWER** button to **ON**.
- ② Load a cassette.
 - Insert the cassette with the side to be recorded facing out.
 - Select the required reverse mode (⏮ or ⏭).
- ③ Set the timer. (Refer to "Setting the timer" on page 16.)
 - Set the timer about a minute before the broadcast to be recorded is scheduled to start.

- ④ Tune to the station to be recorded. (Refer to page 12.)
- ⑤ Set the **POWER** button to **STANDBY**.

• **Timer recording will start at timer start time and the power will be switched off at timer stop time.** (The timer mode is then released.)

- To perform timer recording of the same broadcasting station at the same time on consecutive days
Switch the power on and press the **TIMER/SNOOZE** button 5 times. The timer indicator (T) appears in the display.
Switch the power off to engage the timer.

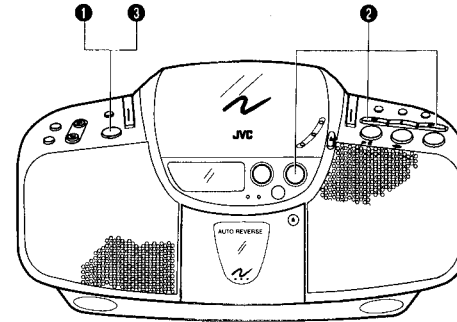
Notes:

- Once the timer has been set, the start and stop times, etc., are stored in memory. When timer recording or playback is required at different times, the timer must be set again.
- After setting the timer start and stop times, check that the tuner is tuned to the required frequency.

Timer playback

- Timer playback of tapes, broadcasts and CDs is possible.

Operations



- ① Set the **POWER** button to **ON**.
- ② Set the timer. (Refer to "Setting the timer" on page 16.)

Source sound	Timer mode	Operations
CD play	CD	Load a disc.
Tape playback	TAPE	Load a cassette tape.
Broadcast	TUNER	Tune to the required station.

To cancel timer operation

- Press the **TIMER/SNOOZE** button so that the timer mode indicator (T) goes out.

Notes:

- When the volume setting is set to "VOL-" (volume level is not specified), the timer playback volume is at the level used before setting the timer.
- To stop during timer playback, press the **POWER** button to switch the unit off.

To get an extra 5 minutes of sleep....

- When timer playback starts, press the **TIMER/SNOOZE** button. The power is switched off and timer playback restarts after 5 minutes (snooze function).



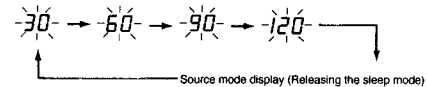
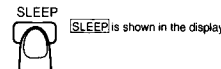
- ③ Set the **POWER** button to **STANDBY**.

- Timer playback will start at the timer start time and the power will be switched off at the timer stop time.
The unit remains in the same timer mode even after the power is switched off. The same timer function will repeat at the same time on the following day.
- When the timer mode is activated, the "T" indicator blinks.
- When the power is switched on, it is possible to fade in the sound from volume level 0 (zero) to the preset volume.

Sleep timer operations (using the remote control unit)

A. Use this when you want to fall asleep while listening to a tape, broadcast or CD.

- ① Set to the required source and tune (broadcast) or play back (CD or tape).
- ② Press the **SLEEP** button to set the sleep time.



- Sleep time settings of 30, 60, 90 or 120 minutes can be set. When you release the **SLEEP** button, the source is displayed after 5 sec.

- The sleep timer operation will start and the power will be switched off after the specified time.

Checking the sleep time

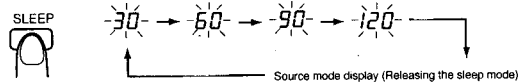
- When the **SLEEP** button is pressed, the remaining sleep time is displayed. If it is pressed again, a new sleep time can be set.

To cancel the sleep timer operation

- Press the **POWER** button to switch the power off or press the **SLEEP** button until the sleep time indicator disappears.

B. To fall asleep while listening to a tape, broadcast or CD and to perform timer playback the following morning

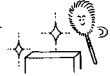
- ① Set the timer. (Refer to "Setting the timer" on page 16.)
- ② Set to the required source (broadcast, tape or CD).
- ③ Press the SLEEP button to set the sleep time.



- Any source can be selected for sleep timer operation and timer playback. For example:
 - CD play for sleep timer operation and broadcast reception for timer playback.
 - Tape playback for sleep timer operation and CD play for timer playback.

However, when broadcast reception is selected for both sleep timer operation and timer playback, the station you heard at night will be tuned to the following morning.

MAINTENANCE



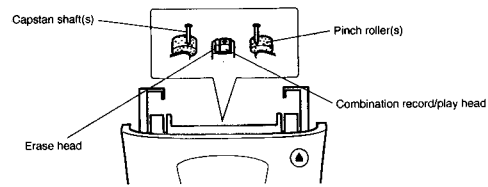
Cleaning is important!

When the tape is running, magnetic powder and dust naturally accumulate on the heads, capstan and pinch roller. When they become too dirty...

- Sound quality deteriorates.
 - The output sound level drops.
 - Previously recorded tape is not completely erased.
 - Recording is not performed satisfactorily.
- Therefore, you should clean the heads, etc. after every 10 hours of use for optimal recording conditions.

Cleaning the heads, capstan and pinch roller

Open the cassette holder. Clean the heads, pinch roller and capstan. For effective cleaning, use a cleaning kit available from an audio store. After cleaning, be sure that the cleaning fluid has dried completely before loading a cassette.



2. Do not use anything other than alcohol for cleaning. Thinner and benzine will damage the rubber pinch roller.

Cautions:

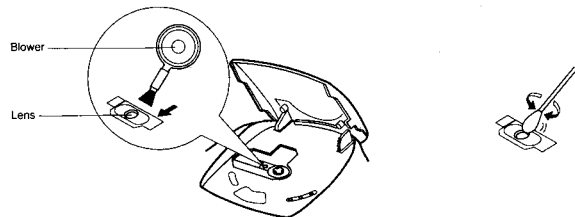
1. Keep magnets and metallic objects away from the head. If the head becomes magnetized, noise will increase and the sound will deteriorate. Demagnetize the head every 20-30 hours of use with a head eraser (available from an audio store). (When demagnetizing the head, the POWER button should be set to STANDBY.)

Cleaning the lens

If the lens in the CD pickup is dirty, dropout, etc., could degrade sound.

Open the CD holder and clean the lens as shown.

- Use a blower (available from a camera store) to blow dust off the lens.
- If there are fingerprints, etc. on the lens, gently wipe clean with a cotton swab.



TROUBLESHOOTING



What appears to be trouble is not always serious. First make sure....

- **When abnormal operation occurs.**
 - * Unplug the AC power cord from the AC outlet and remove all the batteries. Then reload the batteries after a few minutes, reconnect the AC power cord and switch the power ON.

- **Power cannot be turned on.**
 - * Is the power cord of the AC adapter unplugged?
- **No sound from the speakers.**
 - * Are headphones connected?

(CD Player Section)

- **The CD player does not play.**
 - * Is the CD upside down?
 - * Is the CD dirty?
- **A certain portion of the CD does not play correctly.**
 - * Is the CD scratched?

(Cassette Deck Section)

- **Playback sound is at a very low level.**
 - * Is the head dirty?
- **The ♪/II button does not function.**
 - * Have the safety tabs of the cassette been broken off?

(Tuner Section)

- **Reception is noisy.**
 - * Try adjusting the antenna.

(Timer Section)

- **Timer operation does not start.**
 - * Is the current time set correctly?
 - * Is the timer mode indicator (⏰) displayed?

(Remote Control)

- **Remote control is impossible.**
 - * Are the batteries in the remote control exhausted?
 - * Is the remote sensor section exposed to bright light (direct sunlight, etc.)?

Note:

Before making an important recording, be sure to make a test recording first to check that the dock, etc. is working correctly.

SPECIFICATIONS

CD player section

Type	: Compact disc player
Signal detection system	: Non-contact optical pickup
Number of channels	: 2 channels
Frequency response	: 20 Hz - 20,000 Hz
Signal-to-noise ratio	: 90 dB
Wow & flutter	: Less than measurable limit

Radio section

Frequency range	: FM 87.5-108 MHz AM 522-1,629 kHz
Antennas	: Telescopic antenna for FM Ferrite core antenna for AM

Tape deck section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC motor for capstan
Heads	: Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (Combination head)
Frequency response	: 50-15,000 Hz (with CrO ₂ tape)
Wow & flutter	: 0.15% (WRMS)
Fast wind time	: Approx. 130 sec (C-60 cassette)

General

Speakers	: 10 cm x 2
Power output	: 10 W (5 W + 5 W) at 6 Ω (Max.) 7 W (3.5 W + 3.5 W) at 6 Ω (10% THD)
Input terminals	: MIC (3.5 mm dia. mini jack) (Matching impedance 200 Ω - 2 kΩ)

Output terminal	: PHONES x 1 (Output level: 0 - 15 mW/ch, 32 Ω, Matching impedance : 16 Ω - 1 kΩ)
Power requirements	: AC 230 V, 50 Hz (Using the AC adapter provided) DC 12 V ("R14/C (14F)" batteries x 8)
Power consumption	: 19 W (with POWER SW ON) 2.5 W (with POWER SW STANDBY)
Dimensions	: 401 (W) x 207 (H) x 152 (D) mm, including knobs
Weight	: 3.3 kg (7.3 lbs) (with batteries) 2.8 kg (6.2 lbs) (without batteries)
Accessories provided	: AC adapter (AA-R1206B) x 1 Remote control unit (RM-RXNX1BK) x 1 "R6/AA (15F)" batteries x 2 (for the remote control)

Design and specifications are subject to change without notice.

JVC
VICTOR COMPANY OF JAPAN, LIMITED

1 Location of main parts

◆ Internal view of the front cabinet

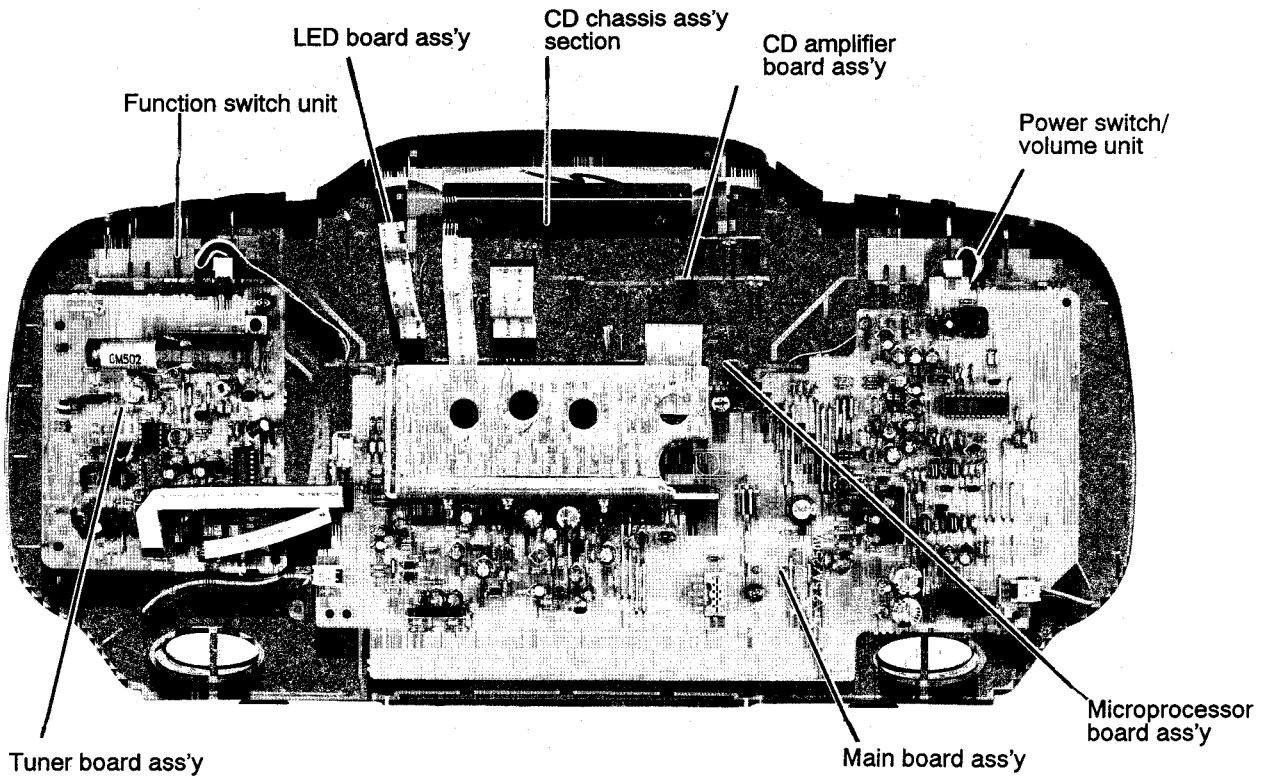


Fig. 1-1

◆ Internal view of the rear cabinet

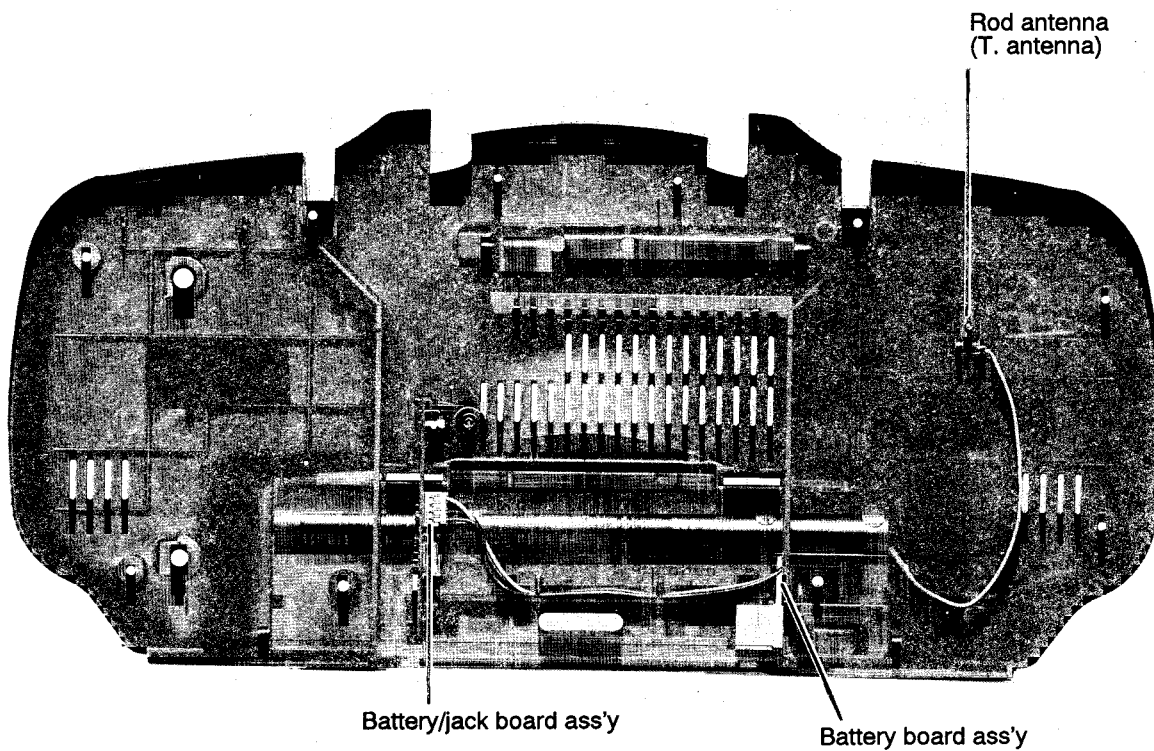


Fig. 1-2

◆ CD unit section

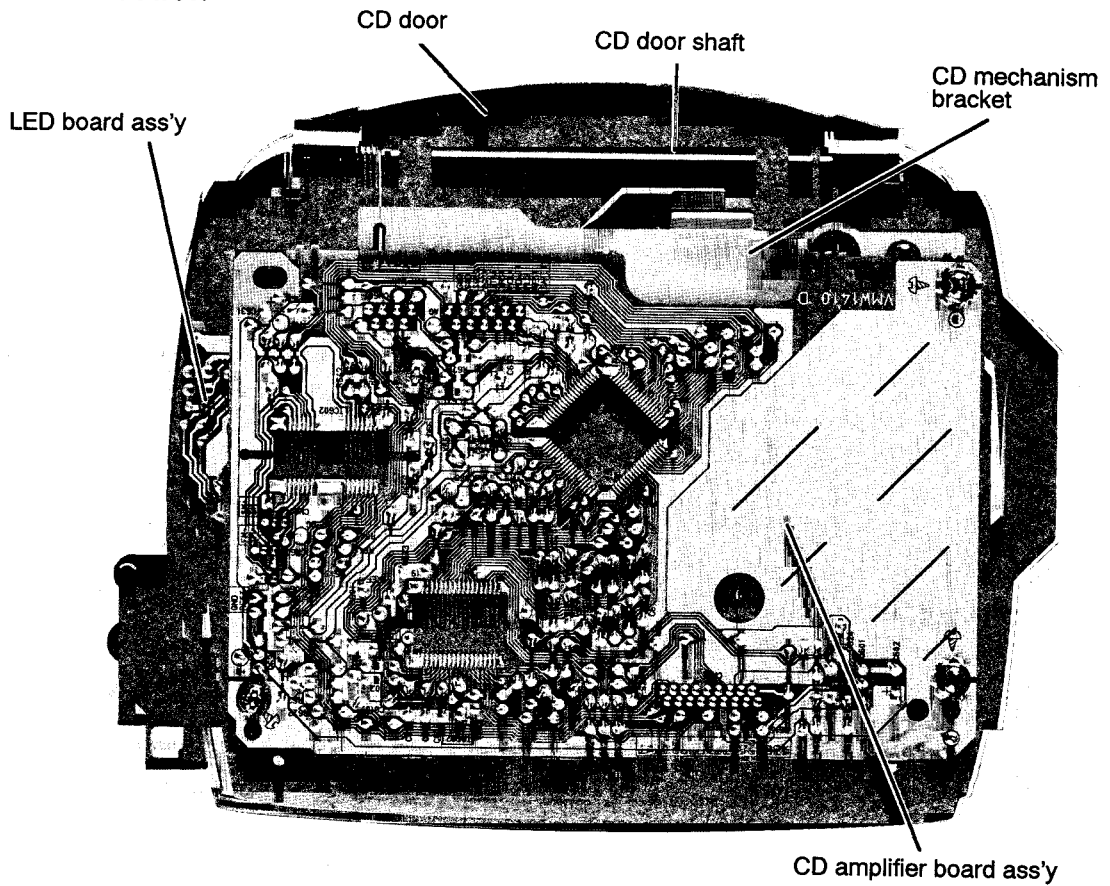


Fig. 1-3

◆ Cassette mechanism section

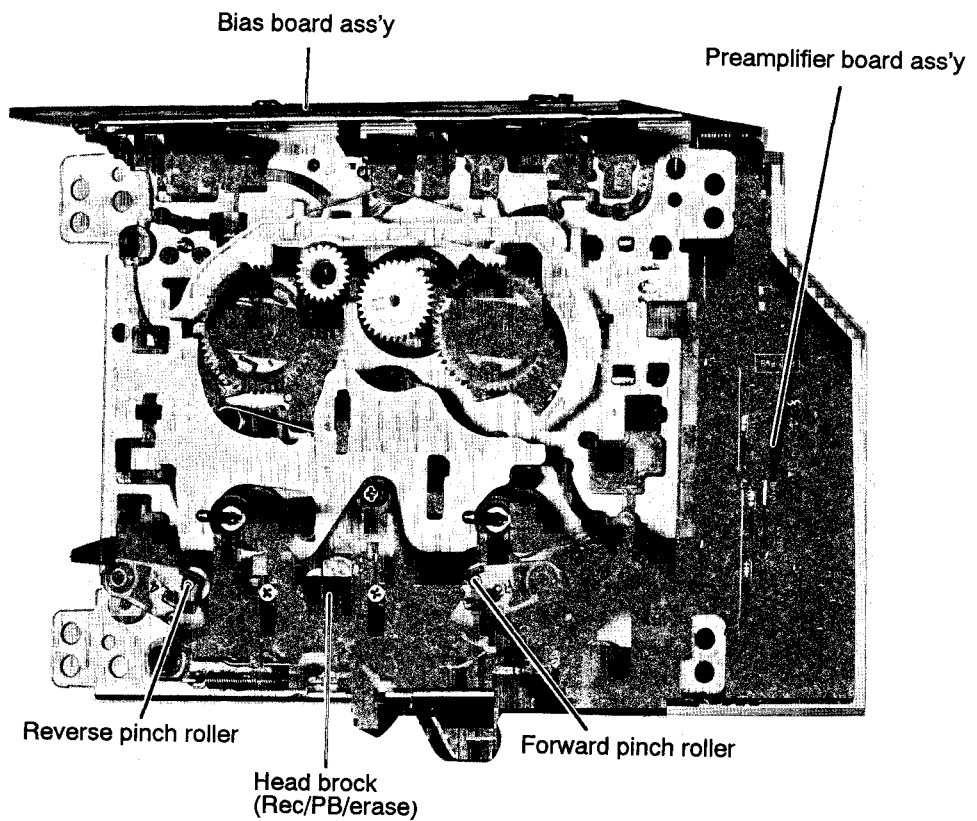


Fig. 1-4

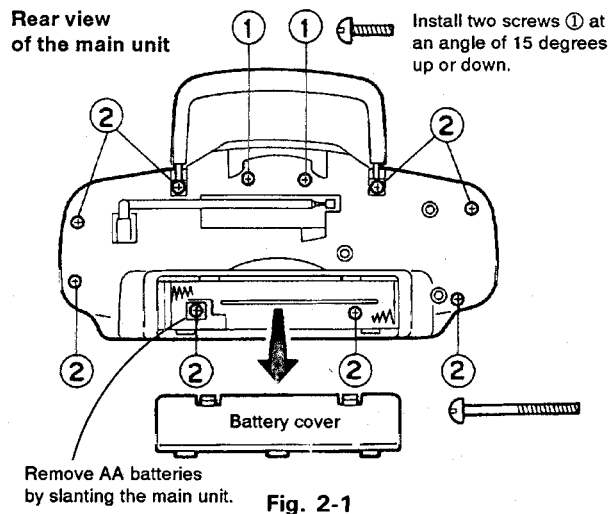
2 Removal of main parts

■ Cabinet

◆ Remove the battery cover. (see Figure 2-1)

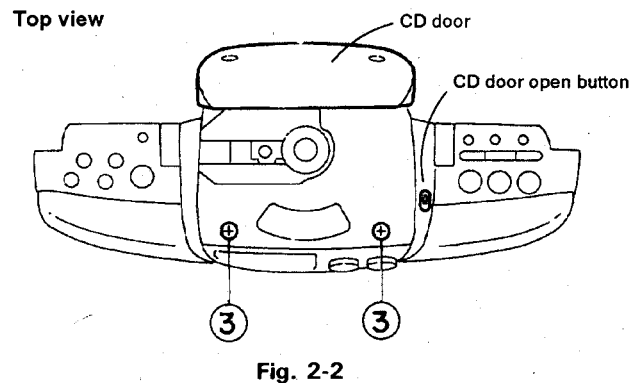
◆ How to remove the rear cabinet (see Figure 2-1)

- 1) Remove the two screws ① fixing the CD section.
 - 2) Remove the eight screws ② fixing the rear cabinet and handle.
 - 3) Slightly open the rear cover, then remove the antenna wire from TP1 on the tuner PC board. (see Figure 2-3)
- ★ Caution: In order not to damage the tuner PC board, before removing the rear cabinet, open it slightly, then remove the antenna wire from TP1.
- 4) The handle can now be removed.



◆ How to remove the CD unit (see Figures 2-1 to 2-3)

- 1) Remove the rear cabinet.
- 2) Open the CD door, then remove two the screws ③ before closing the door.
- 3) Disconnect the card wires from CN601 and CN602 on the CD amp PC board at the rear. Pull out the CD unit (as the door button sticks, push it in), then disconnect the card wire from CN705 on the microprocessor PC board.



◆ How to remove the tuner PC board assembly

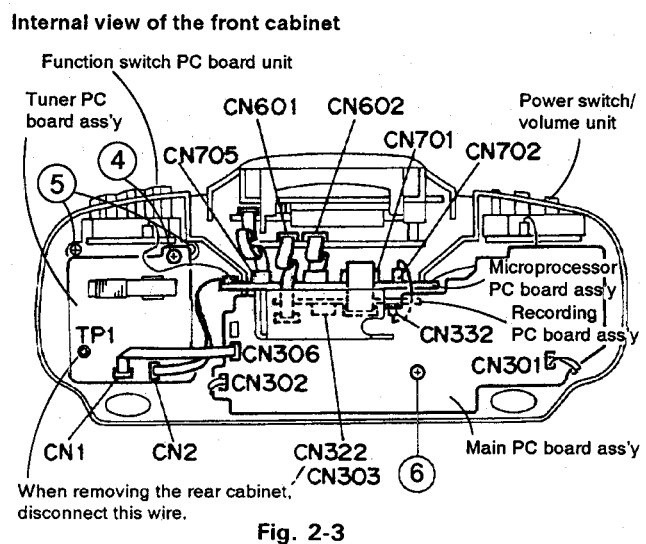
(see Figure 2-3)

- 1) Remove the rear cabinet.
- 2) Loosen the screw ④ securing the tuner PC board, then remove the PC board assembly. Disconnect the wires connected to CN1 and CN2 if necessary.

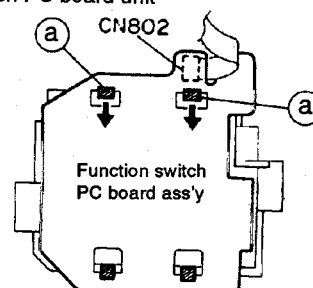
◆ How to remove the function switch PC board unit

(see Figure 2-4)

- 1) Remove the tuner PC board assembly.
- 2) Remove the two screws ⑤ securing the function switch PC board holder.
- 3) Remove the function switch unit from the front cabinet, then disengage the two tabs ⑥ on the PC board.
- 4) Disconnect the wire from CN802 if necessary.



Function switch PC board unit



◆ **How to remove the main PC board assembly**

(see Figure 2-3)

- 1) Remove the rear cabinet.
- 2) Disconnect the speaker wires from CN301 and CN302 on the main PC board assembly.
- 3) Disconnect the card wire from CN701 on the microprocessor PC board.
- 4) Disconnect the card wire to the tuner PC board from CN306.
- 5) Disconnect the card wire between the main PC board and CD PC board from CN601.
- 6) Remove the screw ⑥ securing the main PC board, then pull the main PC board assembly toward the bottom, and disconnect CN303 and CN322.

◆ **How to remove the power switch/volume unit**

(see Figures 2-6 and 2-7)

- 1) Remove the main PC board assembly.
- 2) Pull out the power switch/volume unit from the cabinet.
- 3) Disconnect the wire from CN801 if necessary.
- 4) Remove screw the ⑰ and disengage the two tabs ① securing the PC board.

◆ **How to remove the microprocessor PC board assembly** (see Figure 2-5)

- 1) Remove the CD unit and the main PC board assembly.
- 2) Disconnect the card wire (ribbon cable) from CN702 on the microprocessor PC board assembly, then pull the board toward the cassette mechanism.
- 3) The microprocessor PC board can now be removed.

◆ **How to remove the cassette mechanism assembly unit** (see Figure 2-6)

- 1) Remove the main PC board assembly.
- 2) Disconnect the card wire (ribbon cable) from CN702 on the microprocessor PC board.
- 3) Remove the four screws ⑦ securing the cassette mechanism.

◆ **How to remove the left speaker** (see Figure 2-6)

- 1) Remove the main PC board assembly.
- 2) Remove the four screws ⑨ securing the speaker.

◆ **How to remove the right speaker** (see Figure 2-6)

- 1) Remove the tuner PC board assembly.
- 2) Remove the four screws ⑩ securing the speaker.

Card wire (ribbon cable) connection diagram

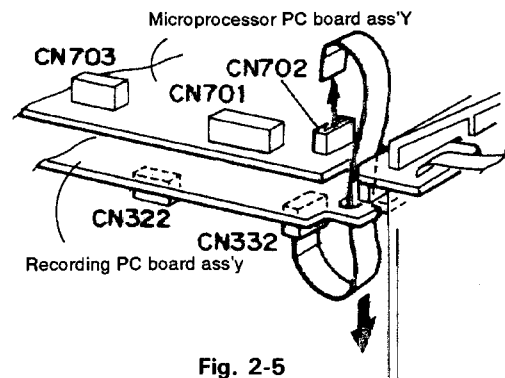


Fig. 2-5

Internal view of the front cabinet

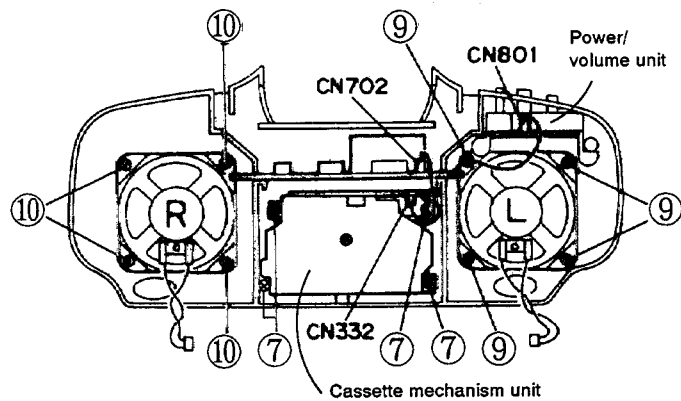


Fig. 2-6

Power switch/volume PC board ass'y

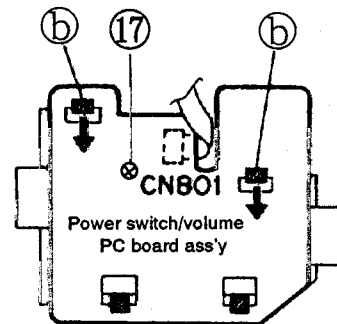


Fig. 2-7

Cassette mechanism unit

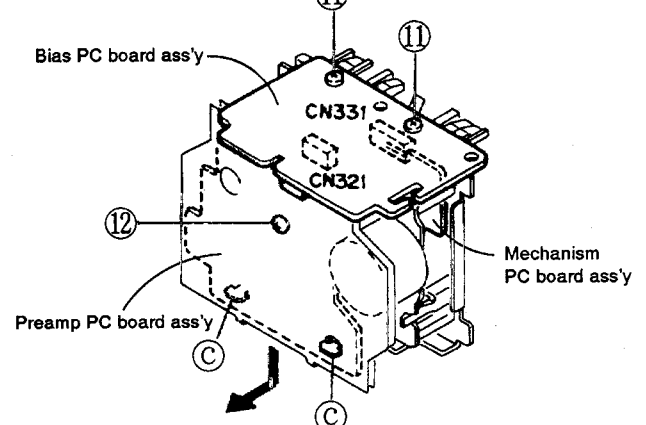


Fig. 2-8

◆ **How to disassemble the cassette mechanism unit**

(see Figure 2-8)

- 1) Remove the two screws ⑪ securing the bias PC board assembly from the top.
- 2) Lift the bias PC board assembly straight up, then disconnect the connectors CN321 to the playback PC board and CN331 to the mechanism PC board.
- 3) Remove the screw ⑫ securing the preamp PC board, then slide the board downward to disengage the tabs ㉞.

◆ **How to disassemble the CD unit**

(see Figures 2-9 to 2-13)

- 1) Open the CD door, then pull the door shaft toward the rear to disengage the door.
- 2) Remove the four screws ⑬ securing the CD amp PC board.
- 3) Lift the PC board and disconnect pickup connector CN603. Next, disconnect mechanism connectors-- CN604, CN605 and CN606. (When reconnecting them, match them with the connector colors printed on the PC board.)
- 4) Remove the two screws ⑭ securing the LED PC board.
- 5) Remove the three screws ⑮ securing the mechanism chassis.
- 6) Remove the CD mechanism assembly from the chassis. Remove the damper cushion by pushing it outward.

※ **How to reassemble the CD door unit**

◆ **CD door**

- 1) Reattach the shaft and door spring to the CD door as shown in Fig. 2-9.
- 2) Reinstall the chassis. (see Figure 2-10)
- 3) Hook the door spring onto the mechanism chassis (metal)(as indicated by a dotted line in Figure 2-10).

Inside view of the CD door

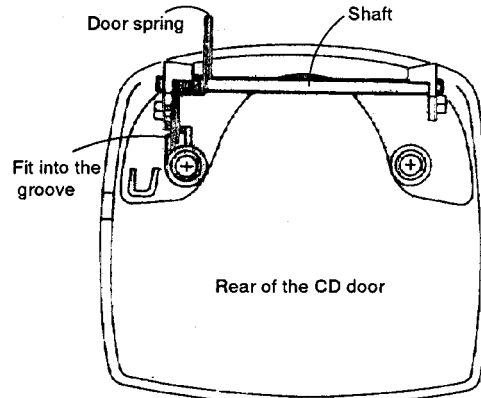


Fig. 2-9

CD unit (reinstallation of door)

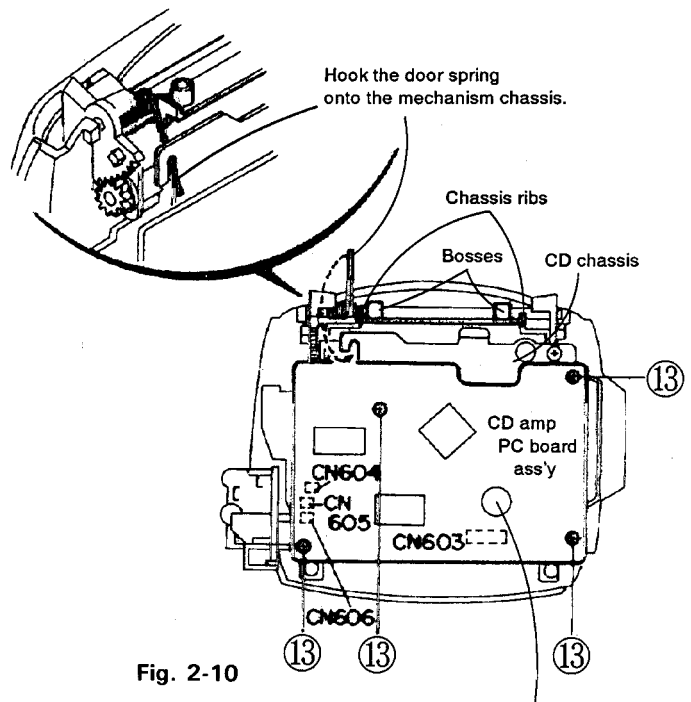


Fig. 2-10

Note : The shorting round land visible through the hole in the CD PC board assembly is used for protecting the pickup. When removing the pickup, short it with solder. After reinstallation is complete, desolder the short. Also desolder the short when the pickup has been replaced with a new pickup assembly.

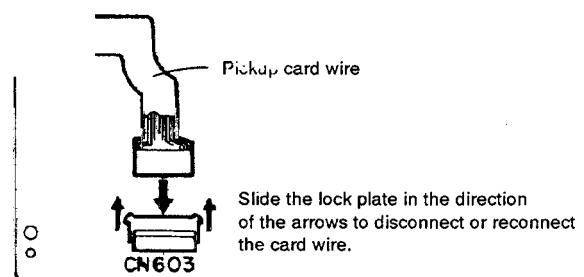


Fig. 2-11

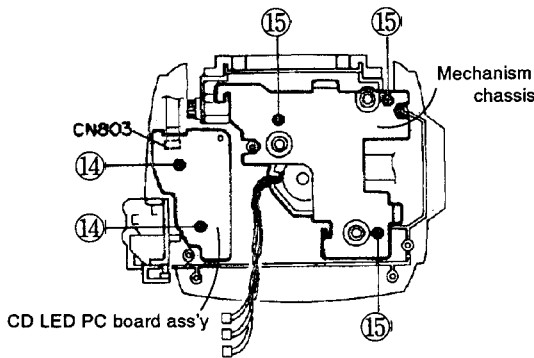


Fig. 2-12

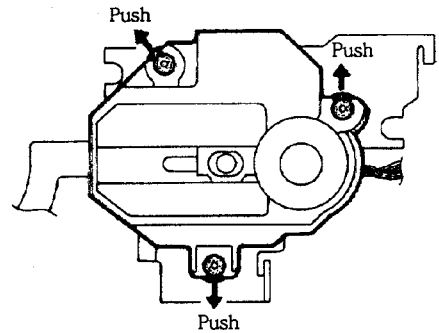


Fig. 2-13

◆ How to remove the cassette door

(see Figures 2-14 to 2-15)

- 1) Open the door, then disengage the door spring from the cassette door (the spring is longer on the door side).
- 2) Remove the door shaft from the front cabinet. At this time, be careful not to displace the damper gear on the door.

Removing the cassette door

(Remove in ascending order starting from ①)

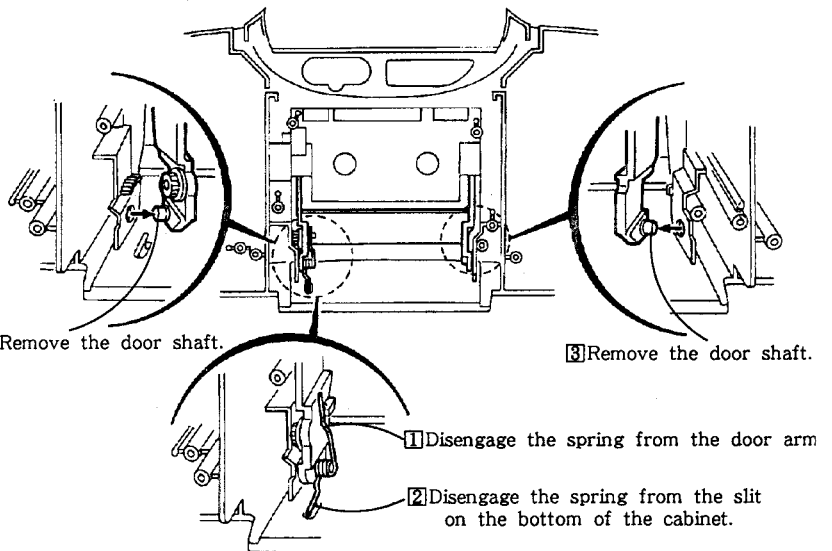


Fig. 2-14

※ How to reinstall the door spring

- 1) Reattach the door to the cabinet.
- 2) Open the door and fit the door spring to the shaft. Next, hook the spring over the door hook. Fit the spring into the slit on the bottom.

◆ How to remove the battery PC board assembly (see Figure 2-15)

- 1) Remove the screw ⑯ securing the battery PC board assembly.
- 2) While disengaging the PC board stopper tab, pull out the PC board assembly.

Internal view of the rear cabinet

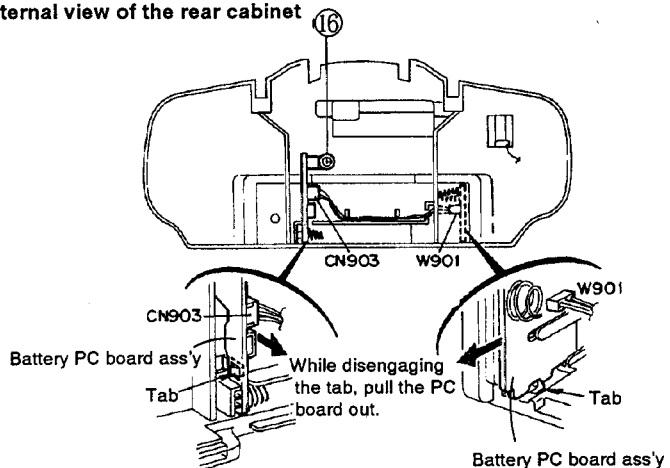


Fig. 2-15

■ How to disassemble the cassette mechanism

◆ Head mount assembly (See Figure 2-16)

1. Remove the three head mount assembly mounting screws ①.
 2. Remove the head wire holder from the chassis.
- ★ After replacing the head mount, adjust the angle of the head.
- How to engage the gear section of the direction lever with the head mount gear during assembly is illustrated on the right.

◆ Pinch roller assembly (See Figure 2-17)

Right

1. After opening the pinch roller assembly retaining tab ① outwards, pull out the pinch roller assembly.
- When assembling, the studs, located under the pinch roller, must be inserted between the direction lever and pinch roller spring.

Left

1. Perform the same procedure for the right as shown above.

◆ Capstan motor and flywheel assembly

(See Figures 2-18 to 2-20)

1. Remove the three FM bracket assembly mounting screws ②.
2. Open outwards and remove the two FM bracket retaining tabs ③.
3. The capstan belt, flywheel and other related parts can be removed with the FM bracket pulled up slightly. Since, at this time, the reel belt between the flywheel and main pulley will be hooked on the FM bracket, remove the belt using a tool which will not damage the belt. If the flywheel is hooked on the FM bracket, remove them together as they are.

Cassette mechanism top view

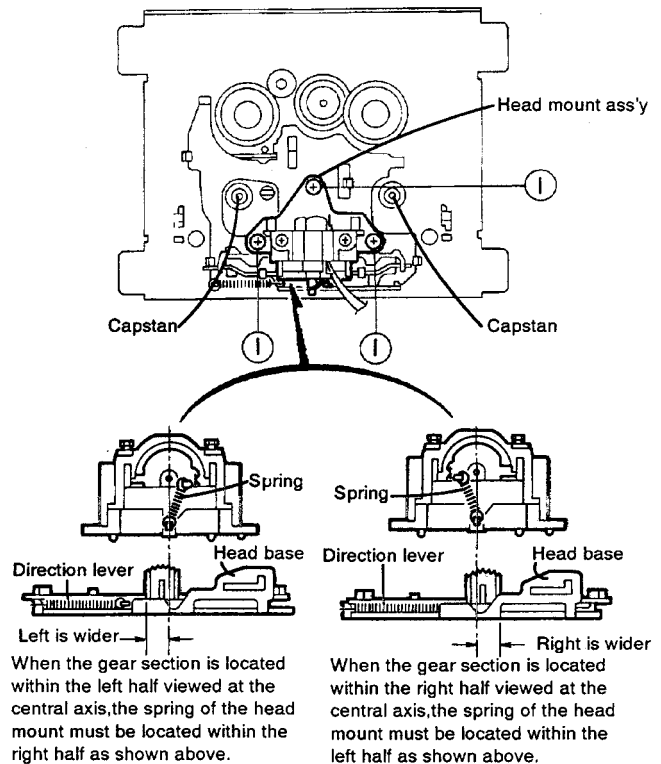


Fig. 2-16

Pinch roller section

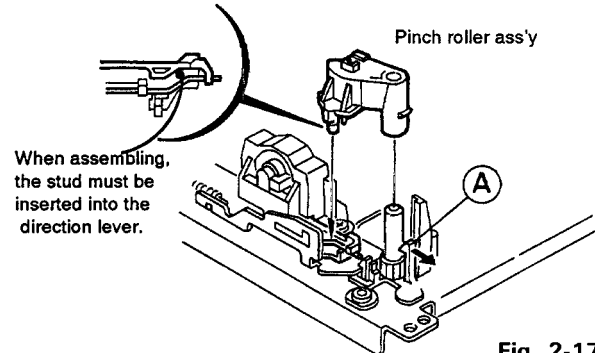


Fig. 2-17

Cassette mechanism top view

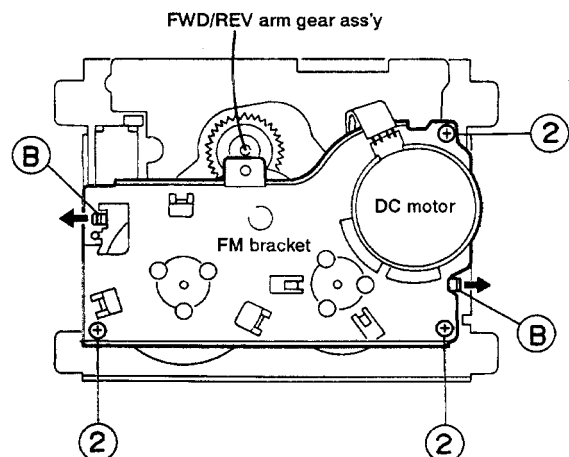


Fig. 2-18

1. Set the flywheel shaft into the thrust guide.
2. Hook the flywheel on the FM bracket with tabs (a) and (b).
3. After setting the notch (c) on the round of the flywheel through the corresponding tab on the FM bracket, turn the flywheel.

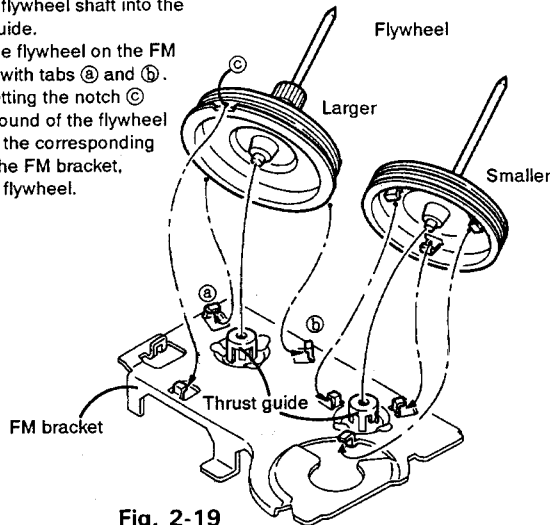


Fig. 2-19

● How to assemble

1. Attach the larger flywheel on the FM bracket as shown.
2. Thread the capstan belt.
3. Attach the smaller flywheel.
4. Thread the reel belt onto the mechanism assembly studs as shown. At this time, be careful that the belt is not twisted.
5. With the FM bracket turned upside down, insert the capstans into the capstan metals.
6. Take off the reel belt from the studs and thread it onto the flywheel. (Check that the belt is not twisted.)

◆ Mechanism PC board assembly (See Figure 2-21)

1. When the solenoid is not removed, separate the soldered parts of the PC board on the solenoid terminal.
2. Remove the PC board mounting screw (3).
3. Remove the four PC board assembly retaining tabs (C).
4. In this state, the PC board can be removed. The Hall IC, S6 relay and other related parts can be replaced. The leaf switch can be replaced without removing the PC board.

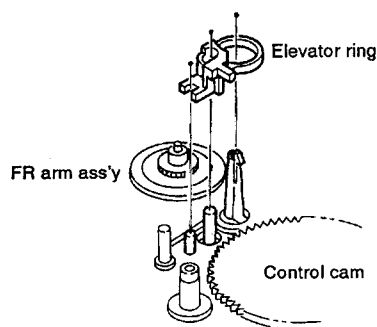
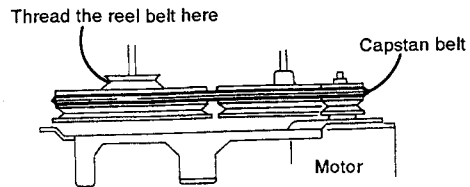
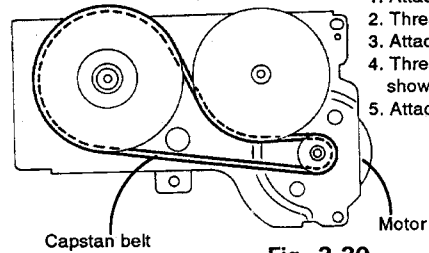


Fig. 2-23

Belt location



How to thread the belt



How to assemble the FM bracket

1. Attach the larger flywheel.
2. Thread the belt.
3. Attach the smaller flywheel.
4. Thread the reel belt as shown below.
5. Attach to the mechanism ass'y.

Fig. 2-20

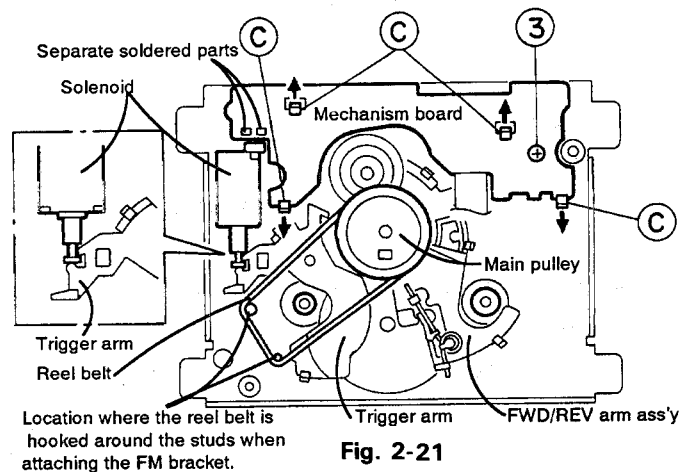


Fig. 2-21

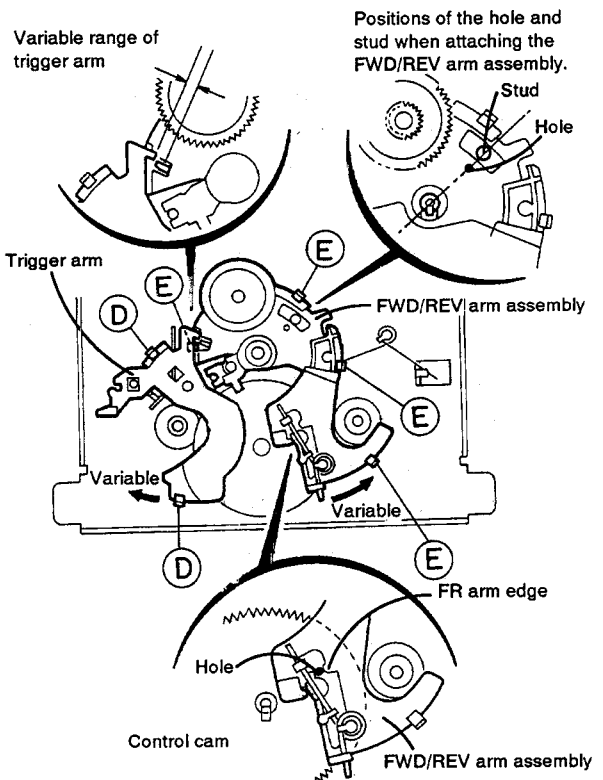


Fig. 2-22

Positions of the cam hole and arm edge when attaching the FWD/REV arm assembly.

◆ **Control cam** (Figures 2-22 to 2-27)

1. Remove the FM bracket and flywheel.
2. Pull out the main pulley.
3. Remove the trigger arm.

While opening the two tabs ① under the trigger arm, pull out the trigger arm from the shaft.

4. Pull out the elevator ring.
5. Remove the FWD/REV arm assembly.
 - a. Remove the FWD/REV arm spring.
 - b. While opening the four FWD/REV arm retaining tabs ② outwards, pull out the FWD/REV arm.
6. Pull out the control cam.

While pulling the shaft stopper section of the control cam in the central direction, pull out the control cam.

● **How to assemble**

1. Move the FWD/REV arm in the direction of the arrow.
2. In step 1, pull the head base forward.
3. In step 2, after inserting the cam into the shaft, move the head base and FWD/REV arm slightly until the cam is fully inserted and it clicks to indicate it is locked.
4. Rotate the cam counterclockwise to check if the cam rotates smoothly and the spring clicks according to the forward/backward movement of the head base.
5. After checking the rotation of the cam, rotate the cam until the notch section comes to the right so that the FWD/REV arm assembly can be attached.
6. Attach the FWD/REV arm assembly while observing the positioning of the hole and stud, the cam hole and arm edge as shown in the Figure 2-33.

After attachment, move the FWD/REV arm in the direction of the arrow to check if it moves back to the original position.

7. Attach the elevator ring.
8. Attach the trigger arm.

After attachment, move the trigger arm in the direction of the arrow to check if it moves back to the original position.

When attaching the control cam

While pressing the FWD/REV arm in the direction of the arrow, pull the head towards the front.

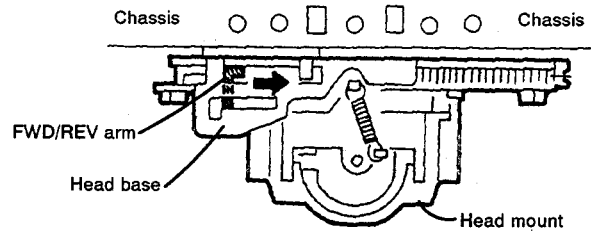


Fig. 2-24

After performing the procedure shown above, the studs under the control cam move as shown.

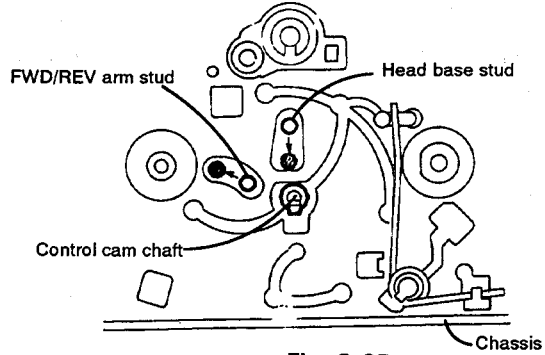
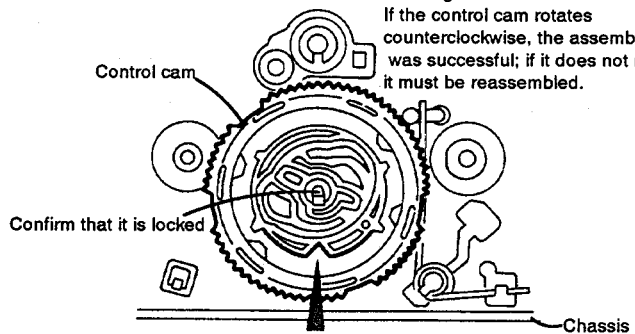


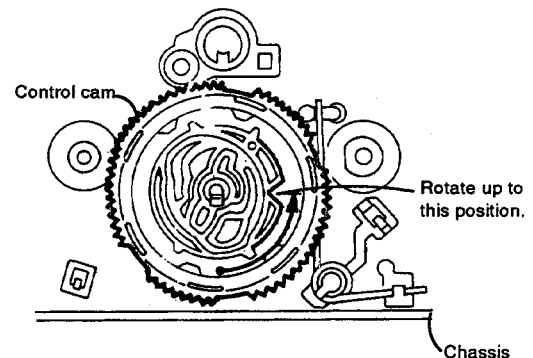
Fig. 2-25

Working confirmation:
If the control cam rotates counterclockwise, the assembly was successful; if it does not rotate, it must be reassembled.



Fit the control cam with its notch located as shown.
(Engage with the gear of the control cam while moving the FWD/REV arm and head base slightly.)

Fig. 2-26



Attach the FWD/REV arm with the control cam rotated up to the position shown.

Fig. 2-27

3 Troubleshooting

■ Pickup maintenance

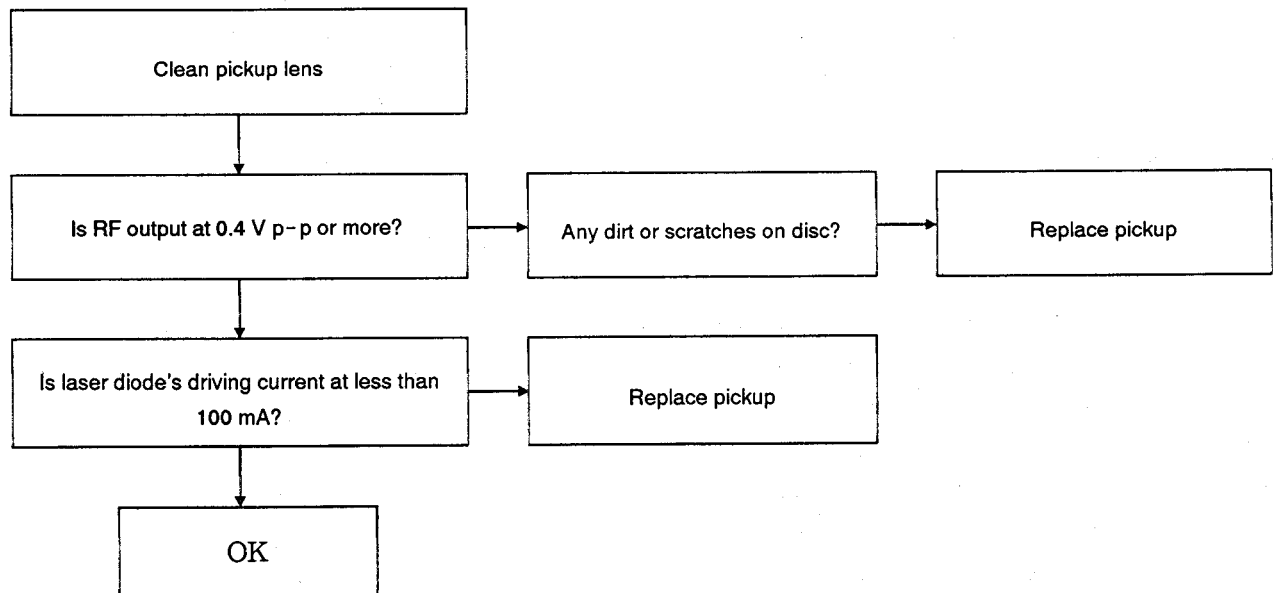
(1) Checking the service life of laser diode

If a laser diode reaches the end of its service life, the following phenomena will show up. Similar symptoms may also appear when the pickup lens becomes too dirty. In this case, clean the lens.

1) The RF output (between IC601 ⑦ and ⑱ (GND)) lowers.

2) The driving current, necessary for the laser diode to emit lights, increases. (Calculate from the voltage level at both ends of the R614 at 10 Ω .)

◆ Following the flow chart shown below, check the service life.



◆ How to measure laser diode's driving current

After connecting a voltmeter at both ends of the R614(10 Ω), measure the voltage during playback. If the voltage level is at 1.0 V or more, the service life of the laser diode has expired.

Laser diode's driving current (A)

= Voltage level at both ends of R614 (V)/10 (Ω)

When voltage level is at 1.0 V:

$1.0 \text{ V}/10 \Omega = 0.1 \text{ A} = 100 \text{ mA}$

Note:

The laser diode easily breaks down. Be sure to turn the power off before connecting a voltmeter.

◆ HOW TO OPERATE THE CD SELF - DIAGNOSIS FUNCTION

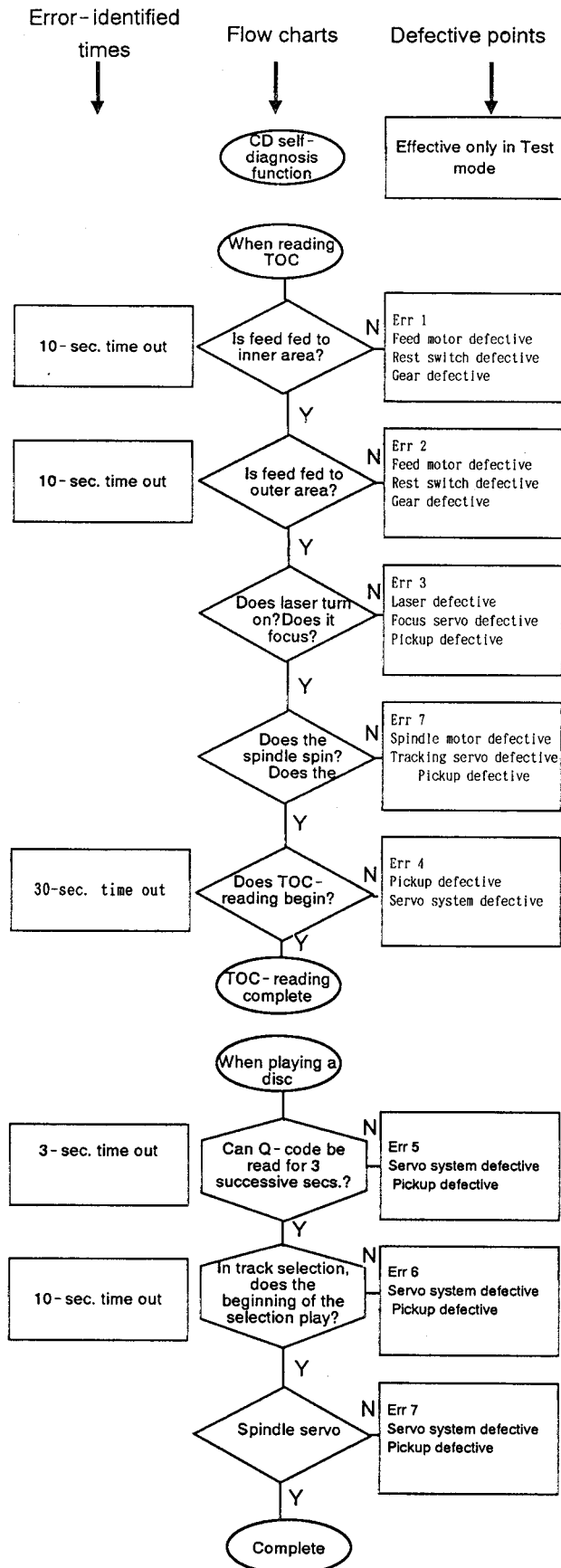
◆ The CD Self-diagnosis Function

If any malfunction occurs in the CD player, this system can be set to make an error code indication appear on the LCD to point out the defective parts. This efficiently helps service personnel find the causes of the malfunction.

1. Operation

- 1 Press the three **STOP**, **MULTI-BASS HORN** and **POWER** buttons on the remote control to enter the Test mode. (Then the illuminating portions of the LCD all light up together. This indicates that the system has entered the Test mode.)
- 2 Play a CD. If the operation is defective in any way, an error code should appear on the LCD.
- 3 Identify the point of malfunction in accordance with the error code displayed.

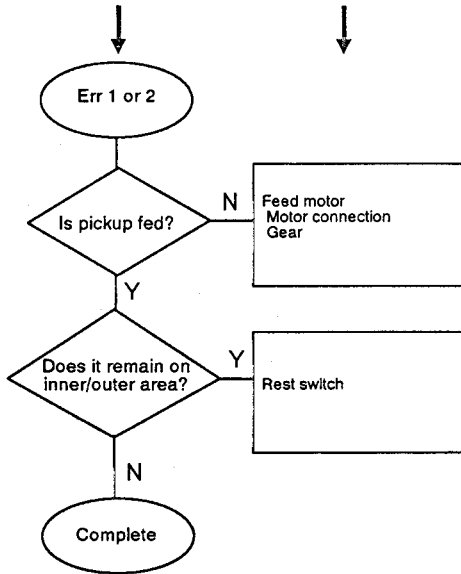
2. Error codes & defective points



Error-identified times

Flow charts

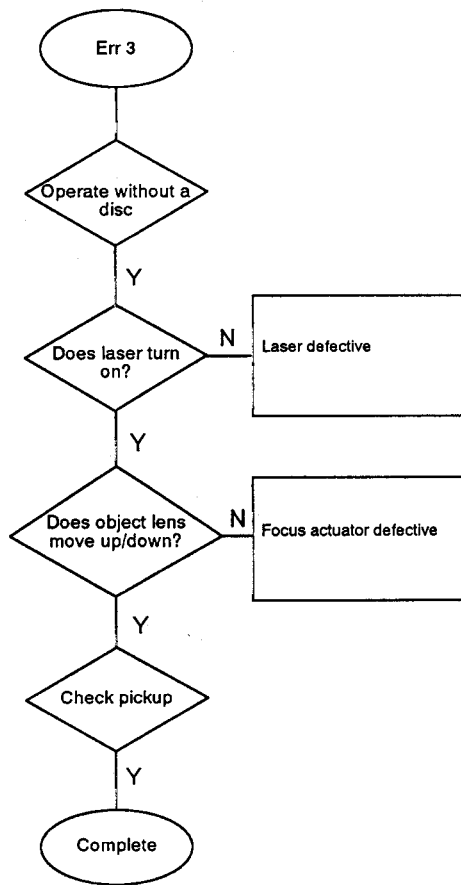
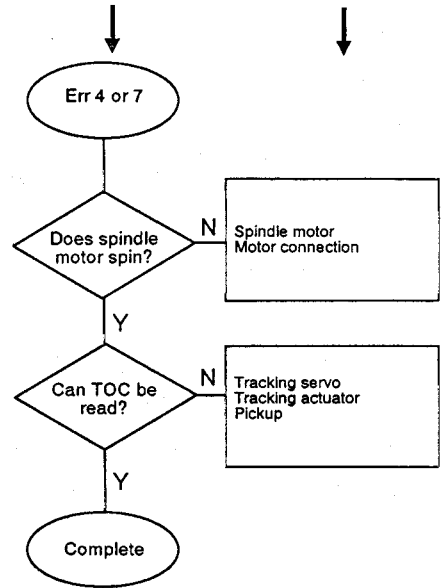
Defective points



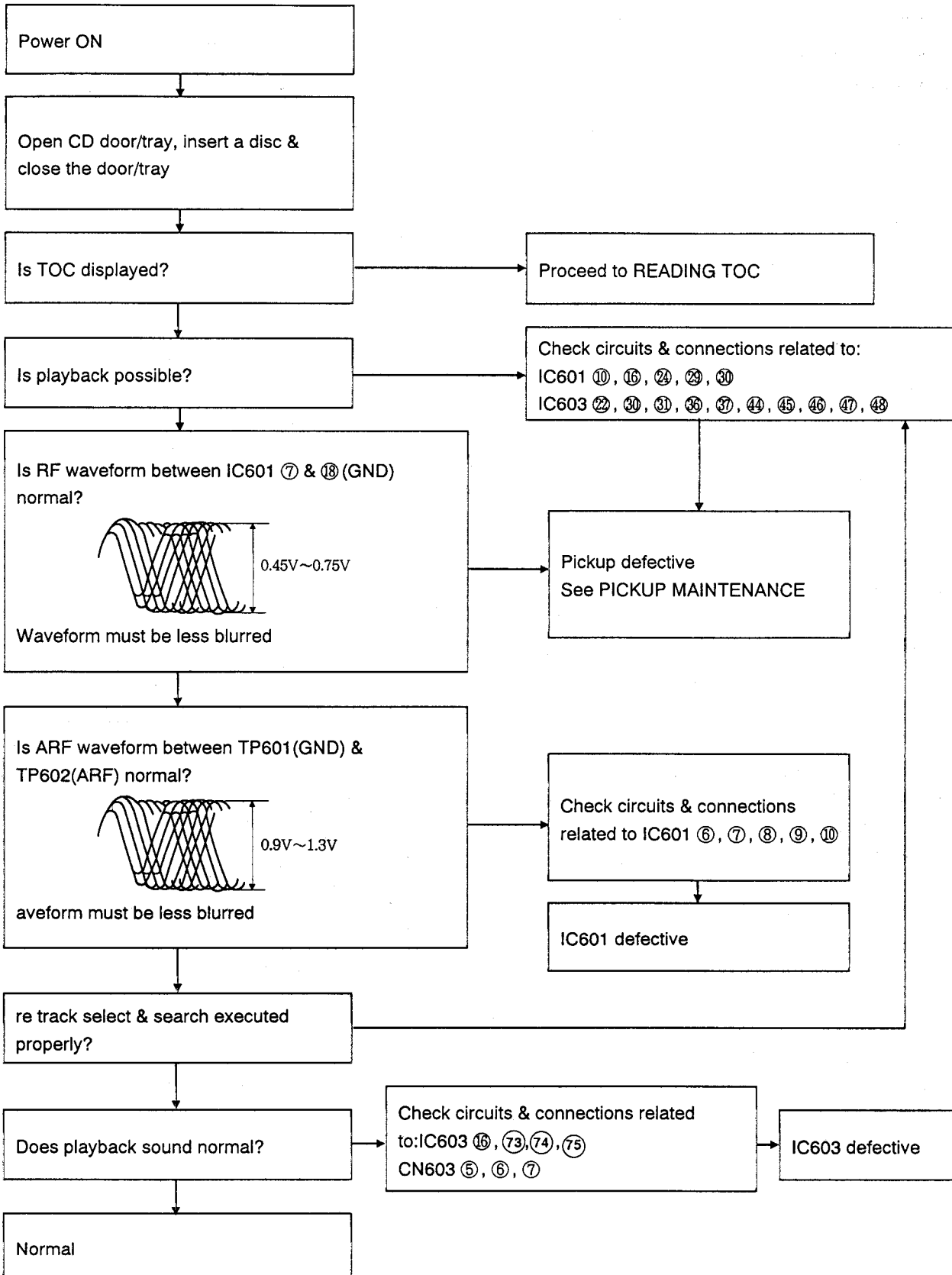
Error-identified times

Flow charts

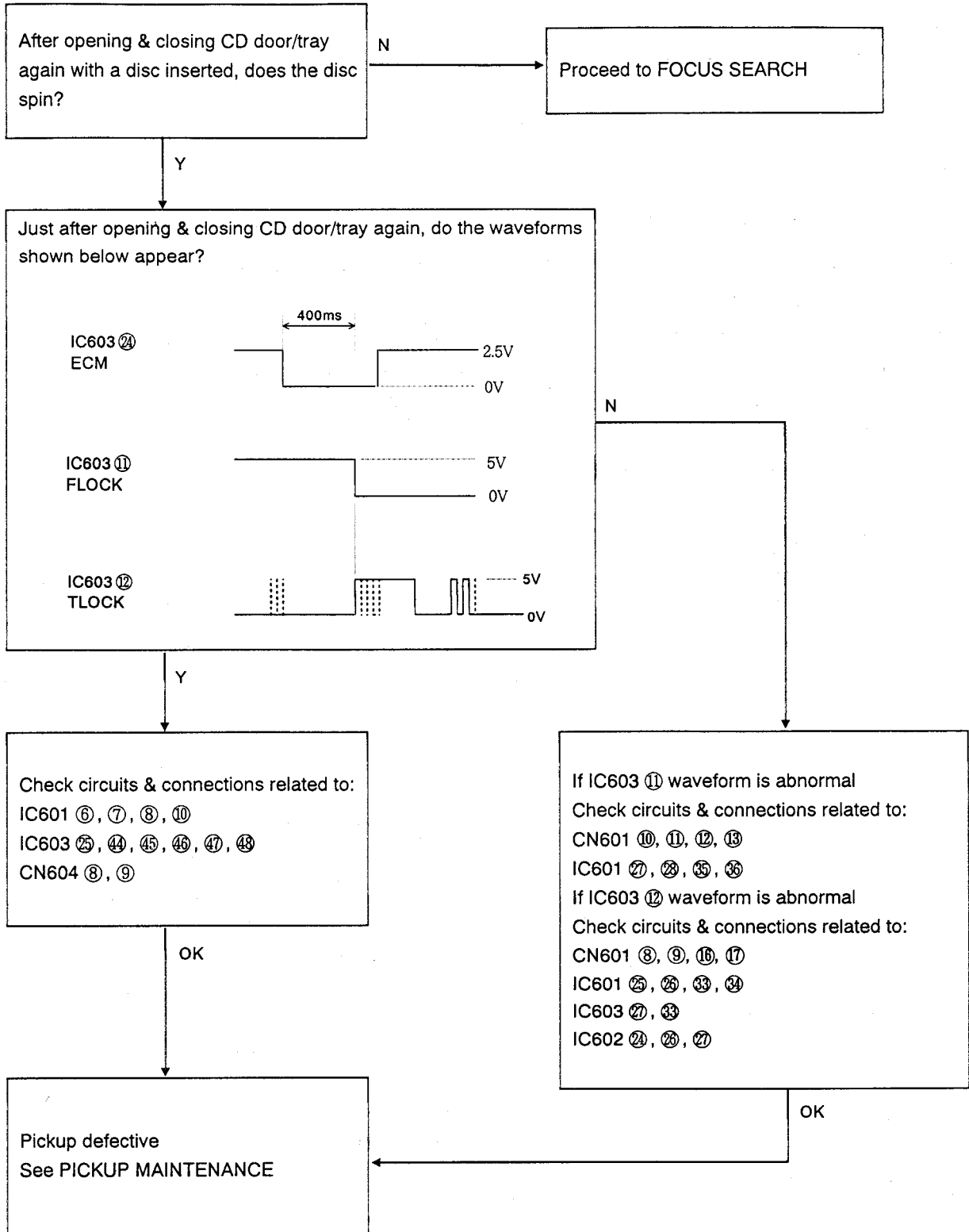
Defective points



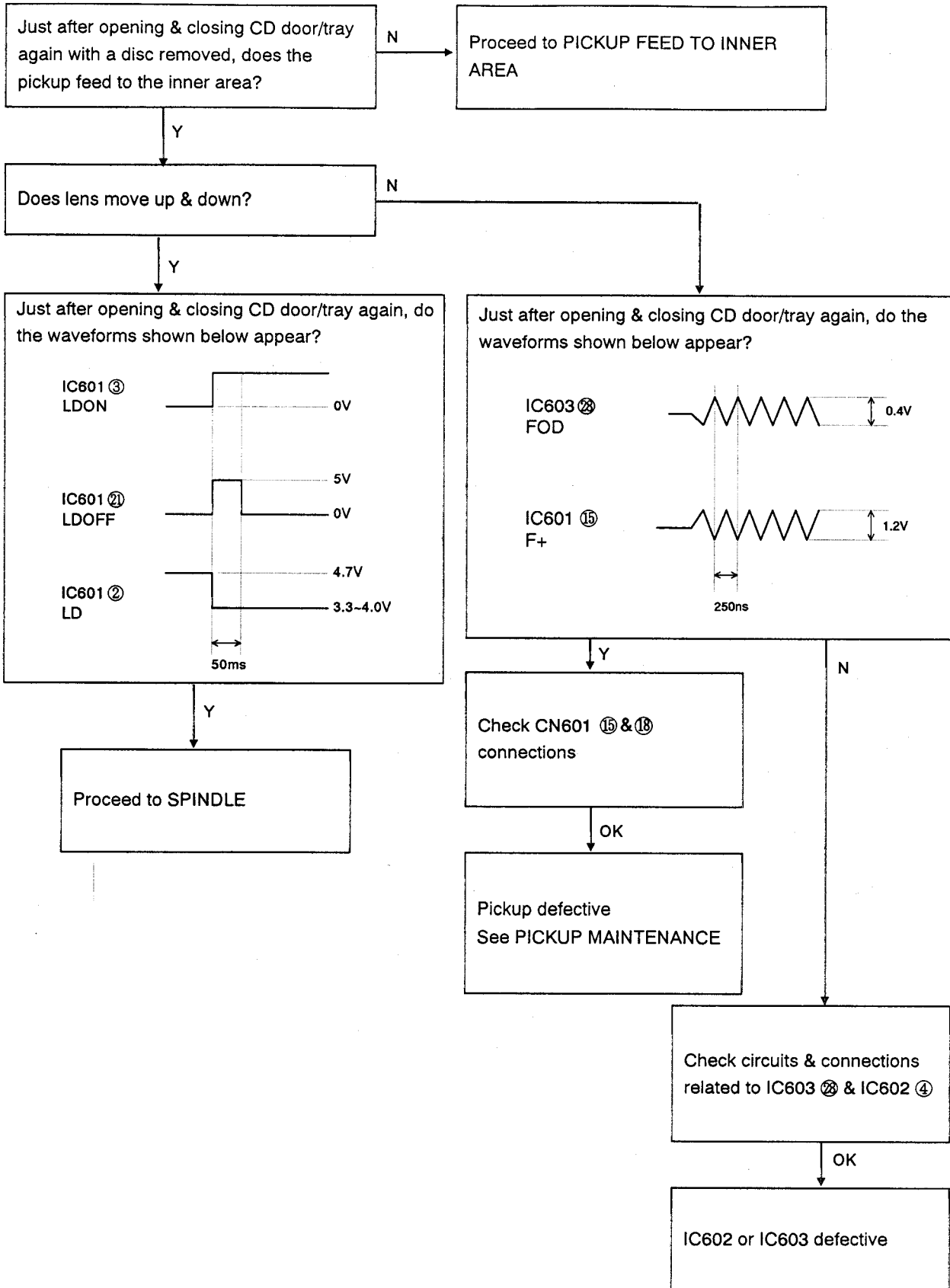
◆ General



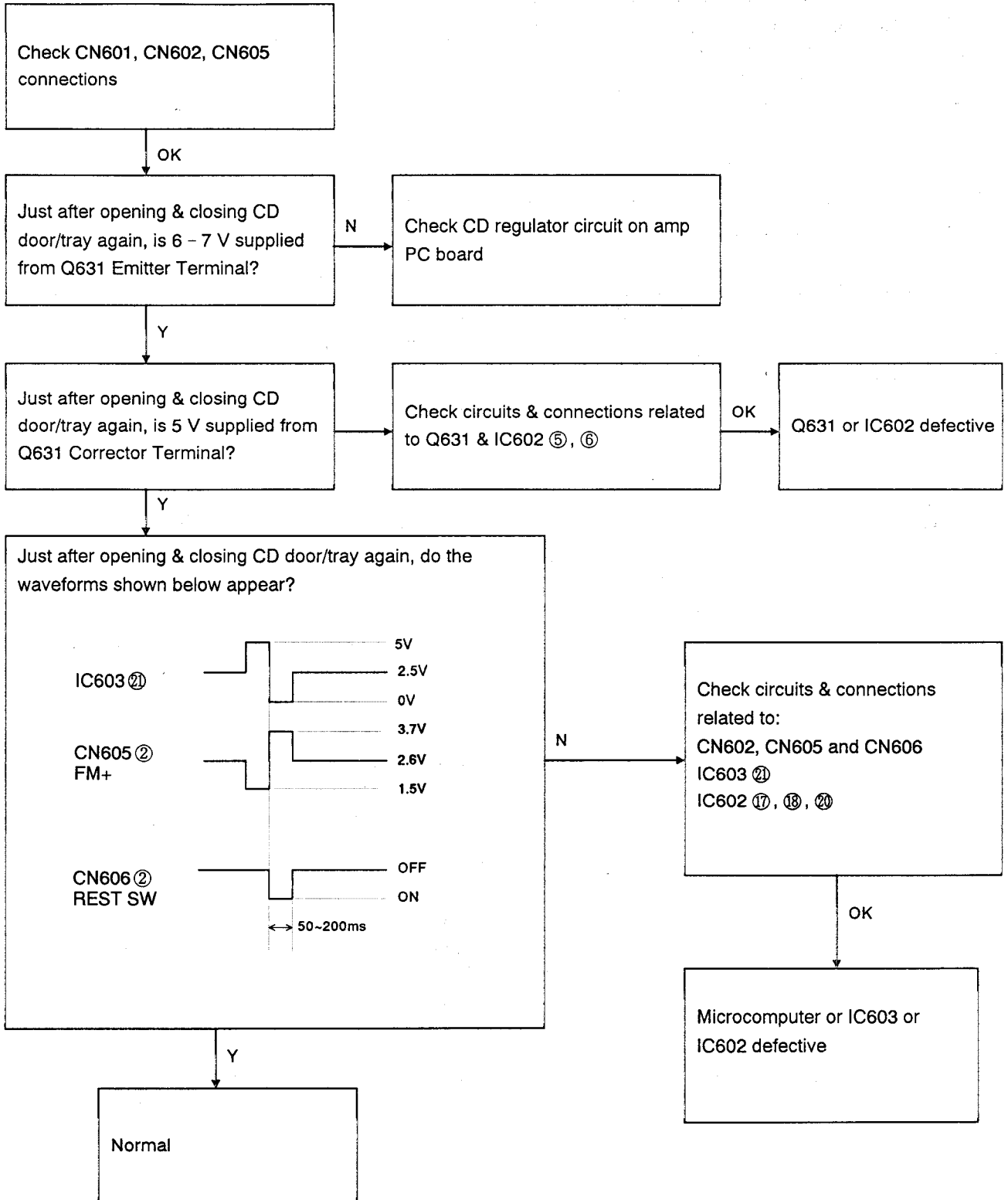
◆ Reading TOC



◆ Focus search

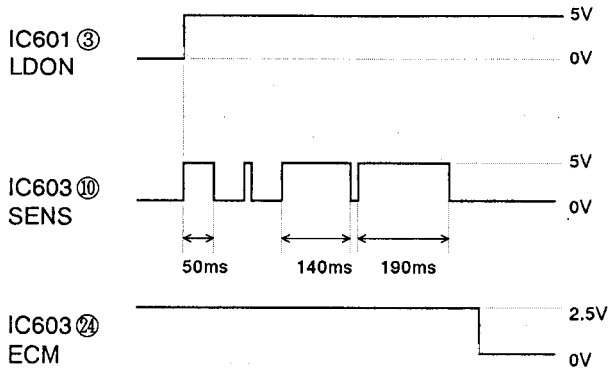


◆ Pickup feed to inner area



◆ Spindle

Just after inserting a disc & closing CD door/tray again, do the waveforms shown below appear?



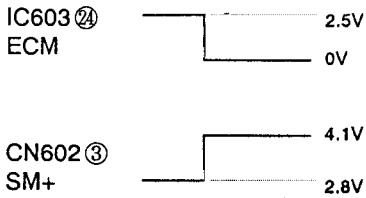
Is IC603 ⑩ waveform normal?

Is IC603 ⑫ waveform normal?

Check circuits & connections related to IC603 ⑫

IC603 defective

Just after opening & closing CD door/tray again, do the waveforms shown below appear?



Check circuits & connections related to CN604

Spindle motor defective

Check circuits & connections related to IC602 ⑨, ⑪, ⑫

IC602 defective

Check circuits & connections related to CN603

Any dirt or scratches on disc?

Pickup defective See PICKUP MAINTENANCE

4 Main Adjustment

■ Measuring instructions required for adjustment

1. Low-frequency oscillator(oscillation frequency 50Hz~20kHz, 0dB output with 600 Ω impedance)
2. Attenuator(600 Ω impedance)
3. Electronic voltmeter
4. Distortion meter
5. Torque gauge(cassette for CTG-N,
6. Wow & flutter meter
7. Frequency counter meter
8. Oscilloscope
9. Ext. jig cord...EXTRCNX1 – JIG

◇ Test tape

● Playback tape

- VTT 712 (VT712) (tape speed ,wow flutter)
 VTT 724 (VT724) (reference level)
 VTT 739 (VT739) (playback frequency)
 VTT 703 (VT703) (10kHz azimuth)

● Recording tape

- AC 225(TS – 12) (normal tape)
 AC 514(TS – 9) (chrome)

● Power supply voltage

- Your local voltage
 AC230V (50/60Hz)

■ Measuring instruments

● Radio section

- ◇ FM :400Hz, 22.5kHz deviation
 ◇ FM STEREO : 1kHz, 40kHz, deviation
 pilot signal 7.5kHz
 ◇ AM : 400Hz, 30%, modulation
 ◇ Reference output :
 speaker output : 15mW(0.3V)/6 Ω
 H.phone output : 0.15mW(0.07V)/32 Ω ,
 ◇ Standard position of function switch
 Function switch : FM
 Timer : OFF
 Main volume : Reference output
 Sound : Flat

● Amplifier section

- ◇ Reference output :
 speaker output : 0dBs(0.755V)/6 Ω
 H.phone output : – 10dBs(0.245V)/32 Ω
 Reference input : – 20dBs / CN305

◇ Standard position of function switch

Function switch TAPE

Mode switch STEREO

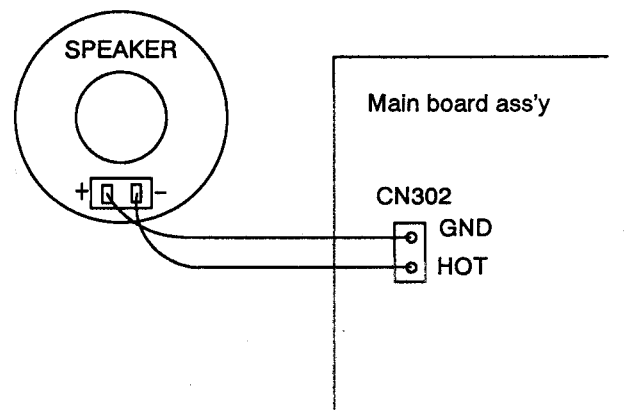
● CD section

- ◇ Test disc (JVC CTS – 1000)
 (CRG – 1242)

⚠ CAUTION

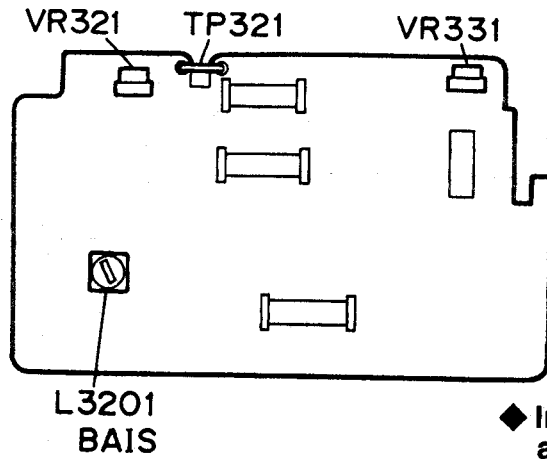
The electrical circuits of this system have been designed as shown in the diagram below to improve its sound quality.

The minus terminal of the speaker is not a gland.

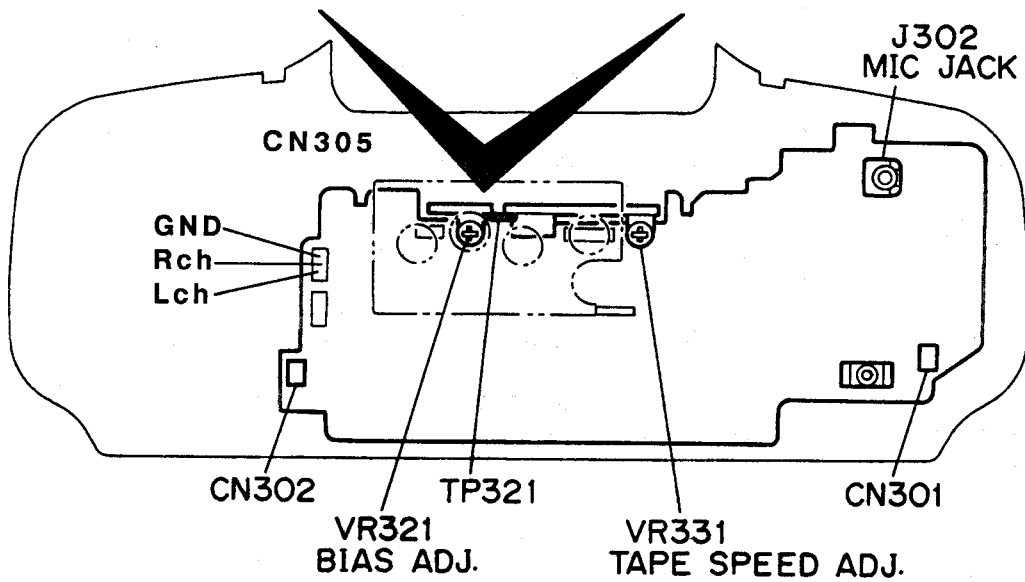


■ Adjusting point

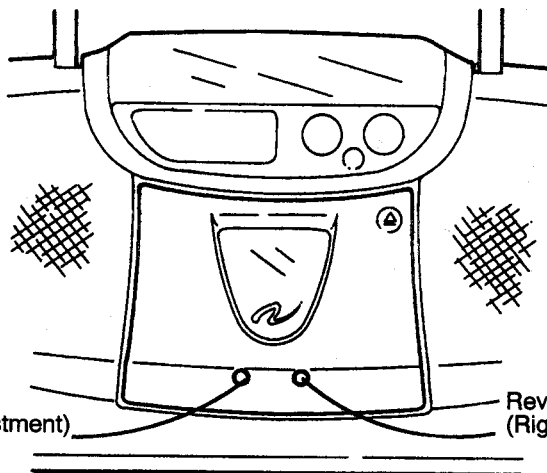
◆ Bias board



◆ Internal view of the front cabinet and adjusting point



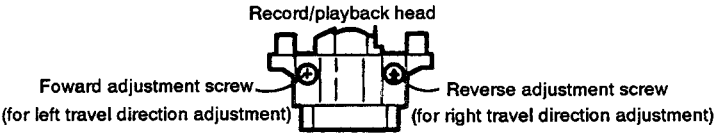
◆ Head adjusting point of after assembly



Forward adjustment
(Left travel direction adjustment)

Reverse adjustment
(Right travel direction adjustment)

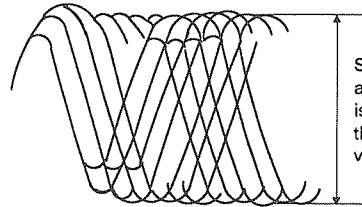
■ Amplifier adjustment

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Azimuth adjustment	Test tape: VT703 (10kHz) Measuring terminal: PHONES	<ol style="list-style-type: none"> 1. Connect the measuring instrument to the PHONES jack. 2. Play back test tape VT703, then adjust the head azimuth screw for the maximum output level and minimum phase difference. 3. Reverse the tape travel direction, then check to see if the output level is the same as in 2. 	Output level: Maximum Phase difference: Minimum (within 90)	
				
2. Tape speed adjustment and wow & flutter confirmation	Test tape: VT712 (3kHz) Measuring terminal: PHONES	<ol style="list-style-type: none"> 1. Connect the measuring instrument to the PHONES jack. 2. Rewind test tape VT712, then play it back. Adjust VR701 until the frequency reads 3010 Hz. 3. Confirm that the wow/flutter meter reads 0.25% (JIS WRMS) in 2. 	Tape speed: 3010 ± 10Hz 0.25% or less (JIS WRMS)	VR331
3. Playback output level confirmation	Test tape: VT724 (1kHz) Measuring terminal: PHONES	<ol style="list-style-type: none"> 1. Connect the measuring instrument to the PHONES jack. 2. Play back test tape VT724(1kHz), then confirm that the output level falls within -10dB ± 3dB. 	-10dB ± 3dB	
4. Playback frequency characteristics confirmation	Test tape: VT739 (63/1k/10kHz) Measuring terminal: PHONES	<ol style="list-style-type: none"> 1. Connect the measuring instrument to the PHONES jack. 2. Play back test tape VT739 (1kHz/10kHz), then confirm that the 10kHz playback level falls within +4 ± 4dB with respect to the 1kHz output level. 	+4 ± 4dB	
5. Auto tape select function confirmation		<ol style="list-style-type: none"> 1. Connect the measuring instrument to the PHONES jack. 2. If a chrome tape detection hole is drilled in the VT739 cassette and the tape is played back, confirm that the 10kHz output level drops. 		
6. Bias frequency confirmation and adjustment	FM record mode Output point: TP321	<ol style="list-style-type: none"> 1. Set the unit to the FM recording mode. 2. Connect the frequency counter to TP321, then confirm that its reading falls within 89kHz ± 3kHz. If it is outside this range, adjust the L3201 coil. 3. Change the mode from FM to AM, then confirm that the frequency falls within the following ranges. (Preset 1): 86.2kHz ± 3kHz (Preset 2): 81.6kHz ± 3kHz The beat cut should be switched using a remote control unit. 	CUT1 89 ± 3 kHz CUT2 86.2 ± 3kHz CUT3 81.6 ± 3kHz	L3201

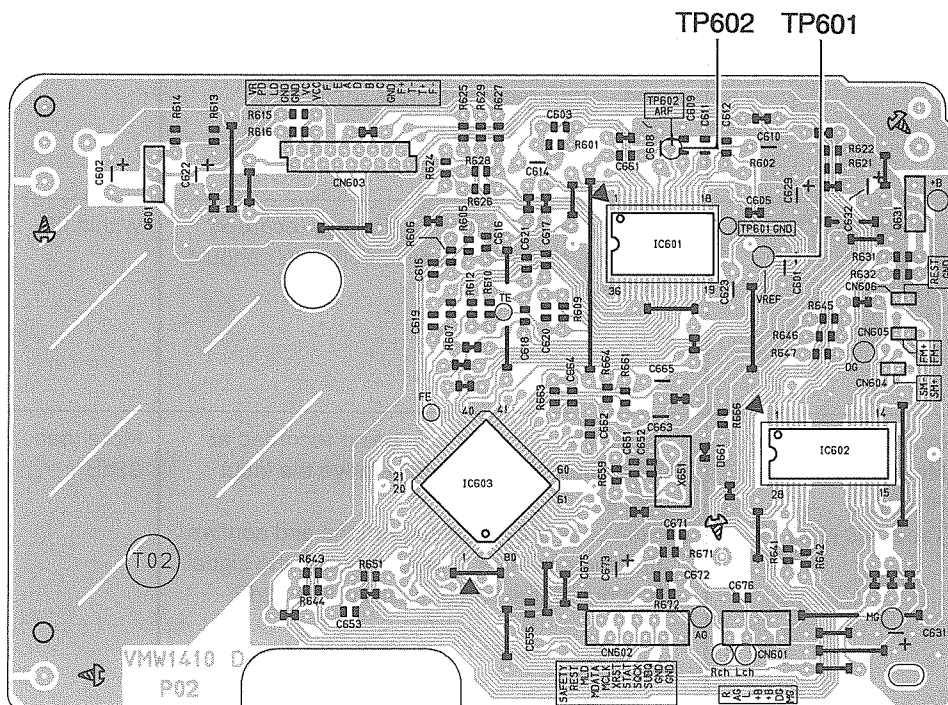
Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
7. Record/ playback frequency characteristics adjustment	Tape mode Input point: TP301 Measuring point: PHONES Tape: AC225	<ol style="list-style-type: none"> 1. Apply the input signal to TP301 on the unit. 2. Connect the output to the PHONES jack. 3. Load normal tape AC225, then set the unit to the record mode. Apply an input whose level is attenuated 20dB below the reference level, then switch the input between 1kHz and 10kHz several times. 4. Adjust VR321 so that when the recorded portion is played back, the level deviation of the 10kHz signal with respect to 1kHz is $+4 \pm 1\text{dB}$. 	$+4 \pm 1\text{dB}$	VR321
8. Recording sensitivity confirmation	Input point: TP301 Measuring point: PHONES Tape: AC225	<ol style="list-style-type: none"> 1. Confirm that the level falls within the following ranges when the 1kHz - 20dB (attenuated by 20dB with respect to the reference level) signal with respect to the VT724 playback level is recorded and played back. Normal (AC225) tape: $+2 \pm 3\text{dB}$ Chrome (AC514) tape: $-2 \pm 3\text{dB}$ 	Normal (1kHz/10kHz) : $+2 \pm 3\text{dB}$, Chrome (1kHz/10kHz) $-2 \pm 3\text{dB}$	
9. ALC operation confirmation	Input point: TP301 Measuring point: PHONES Tape: AC225	<ol style="list-style-type: none"> 1. While the 1kHz signal is being recorded at an input level of - 20dB, change its input level from - 20dB to - 10dB. 2. Play back the recorded portions and confirm that the deviation in level between the - 20dB and - 10dB recordings falls within 8dB. 	Within 8dB	
10. Record/ playback distortion factor confirmation	Input point: CN301 Measuring point: PHONES Tape: AC- 225	<ol style="list-style-type: none"> 1. When the 1kHz - 20dBs signal is recorded and played back, the distortion meter should read within 6%. 	Within 6%	
11. Record/ playback S/N	Input point: CN301 Measuring point: PHONES Tape: AC- 225	<ol style="list-style-type: none"> 1. While the 1kHz signal is being recorded at an input level of - 20dB, remove the input signal. 2. Play back the recorded portions and confirm that the deviation in level between the signal and no-signal portions falls within 32dB. 	More than 32dB	

■ CD amplifier adjustment

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Jitter confirmation	Jitter meter: MJM-631 Oscilloscope Test points TP601: Ground side TP602: Hot side	Connect the jitter meter across TP601 and TP602, and confirm that the jitter meter reading is 27 nsec or less when "Track 1" on the test disc is played back.	27 nsec or less	
2. RF level (eye pattern) confirmation	Measuring instrument: Oscilloscope TP601: Ground side TP602: Hot side	Connect the oscilloscope across TP601 and TP602, and confirm that the peak-to-peak value of the oscilloscope waveform is within $1.1V \pm 0.2V$. Eye-pattern waveform	$1.1V \pm 0.2V$	
3. Outermost track area check	CTC-1000	Select track 28 on the test disc using direct access play. Confirm that the playback starts smoothly and is free of abnormalities such as sound skipping or jumping.		
4. Outer tracks to inner tracks movement check		Let the pickup skip from the outermost track of the disc to track 1, and confirm that it takes less than 10 seconds for the player to enter the play mode.	Within 10 seconds	

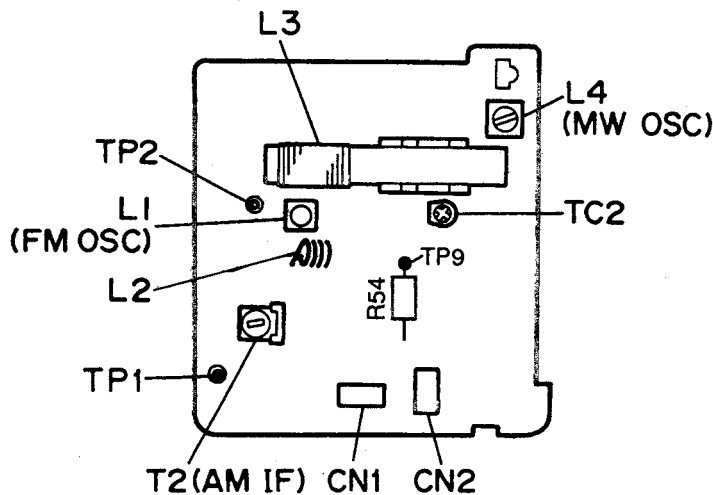


See that the peak-to-peak amplitude of this waveform is within the standard and that the waveform is clearly visible.



■ Tuner adjustment

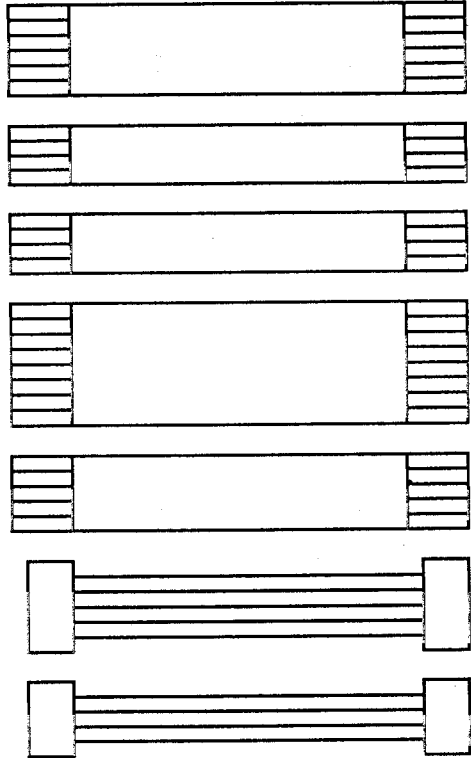
Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
FM IF adjustment		No adjustment is required because a fixed IF is used.		
MPX adjustment		No adjustment is required because a ceramic oscillator is used.		
FM tracking adjustment		No adjustment is required because a fixed coil is used.		
AM tracking adjustment		<ol style="list-style-type: none"> 1. Confirm that 522kHz (preset 1) is receivable. 2. Tune to 1629kHz (preset 2). If the voltage at TP9 exceeds 5.0V, adjust the L-4 coil so that the voltage is $5.0 \pm 0.1V$. (If the voltage is below 5.0V, no adjustment is required.) 3. Tune to 603kHz (preset 3), then adjust L3 so that the output level is maximum. 4. Tune to 1404kHz (preset 4), then adjust TC2 so that the output level is maximum. 5. Repeat the adjustments described in 3 and 4 until the output is maximum. 	$5.0 \pm 0.1v$ (If below 5.0V, no adjustment is required.) Max. level Max. level Max. level	L4 L3 TC2 L3 TC2



5 Jig list

■ Extention cable parts number and using location

Extention cable kit number : EXTRCNX1 - JIG



CD amp. board (CN602) ⇔ Microprocessor board (CN703)
11-pin card wire

CD amp. board (CN601) ⇔ Main board (CN307)
7-pin card wire

CD LED board (CN803) ⇔ Microprocessor board (CN705)
6-pin card wire

Microprocessor board (CN701) ⇔ Main board (CN304)
15-pin card wire

Microprocessor board (CN702) ⇔ Bias board (CN332)
9-pin card wire

Main board (CN303) ⇔ Bias board (CN322)
10-pin card wire

Main board (CN901) ⇔ Power supply board (CN902)
5-pin card wire

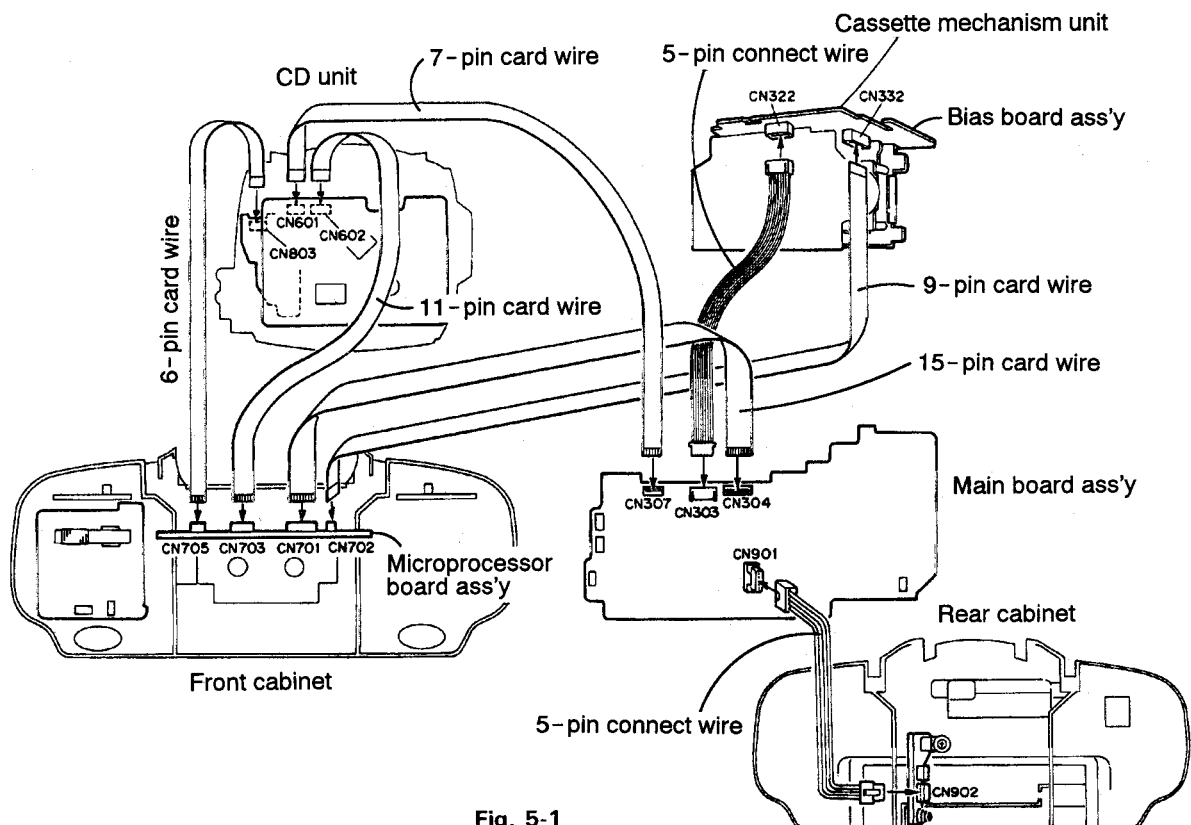


Fig. 5-1

6 Wiring connections

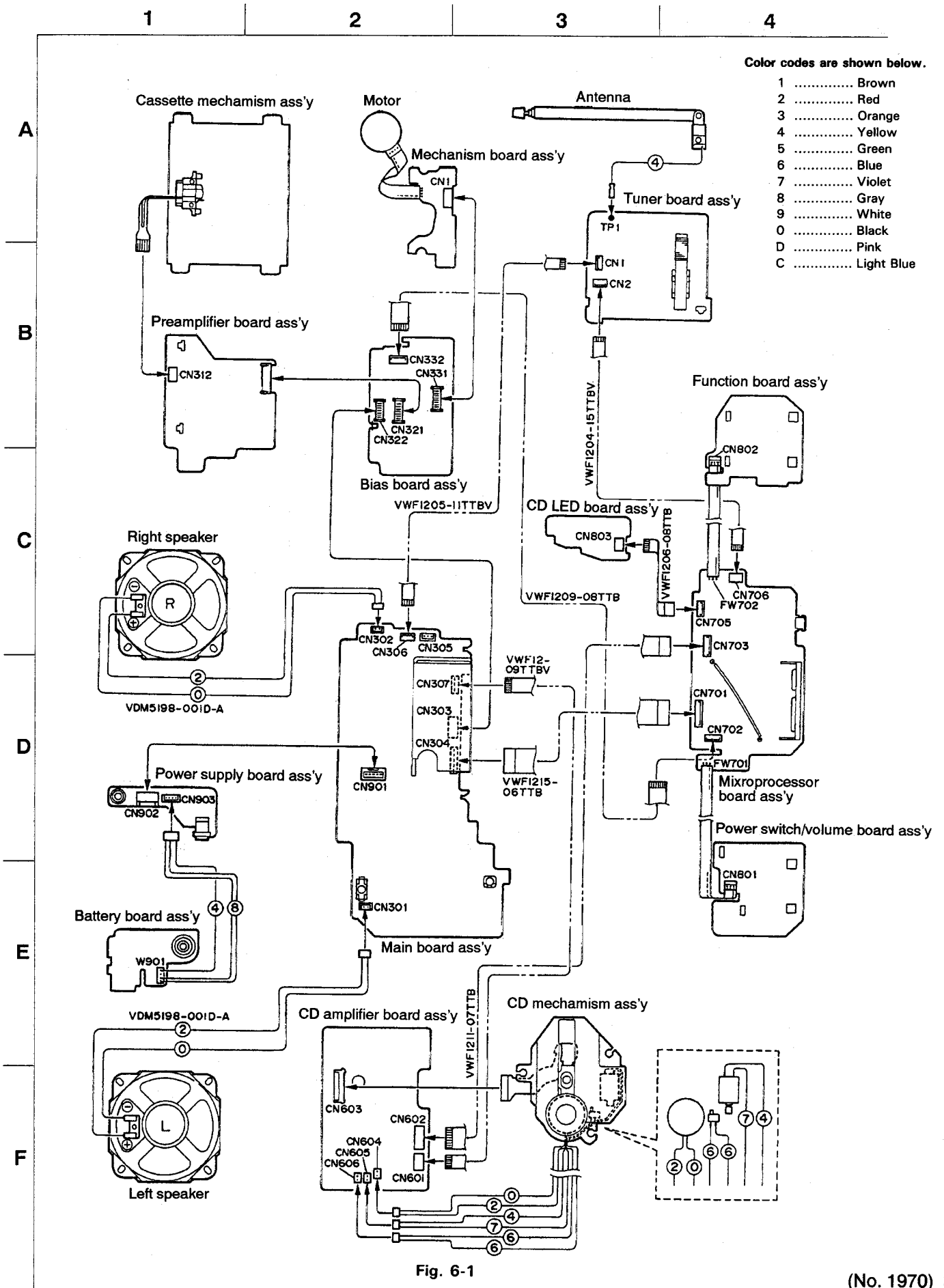
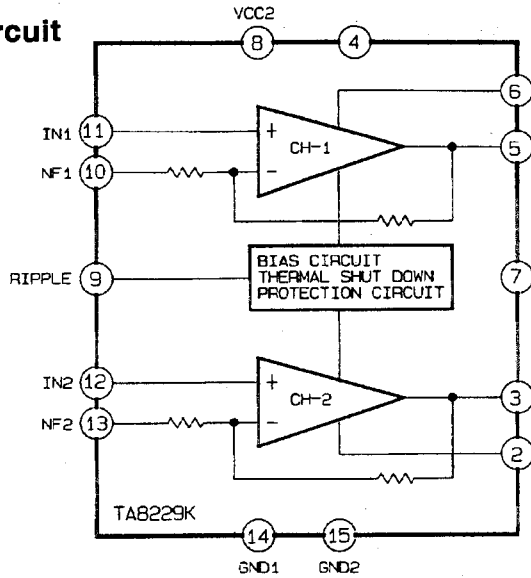
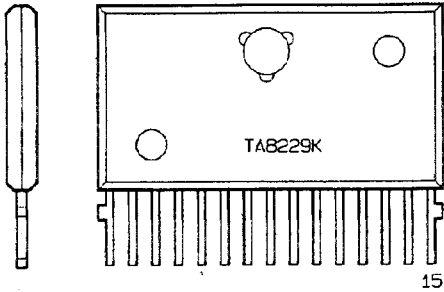


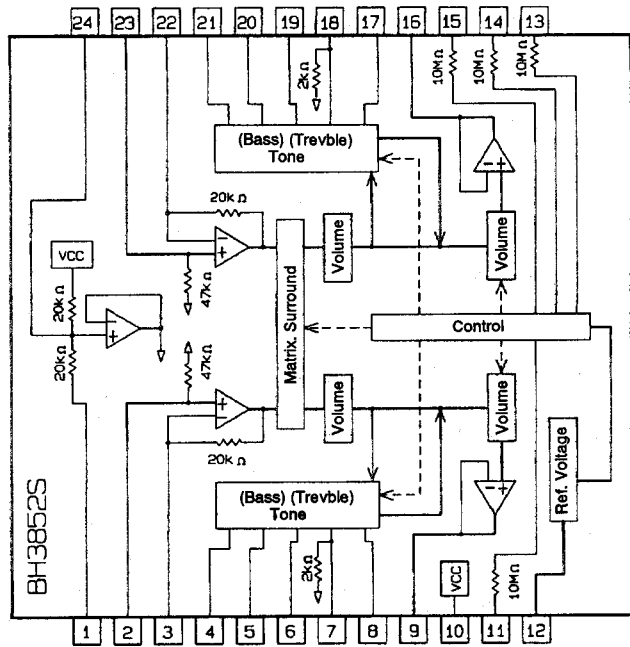
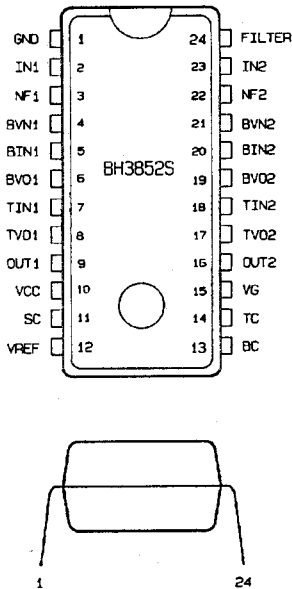
Fig. 6-1

7 Block diagram ■ Integrated circuit

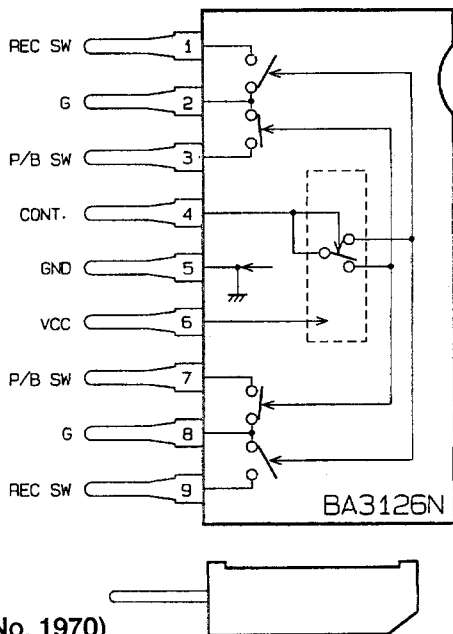
◆ IC301 (TA8229K) POWER AMP.



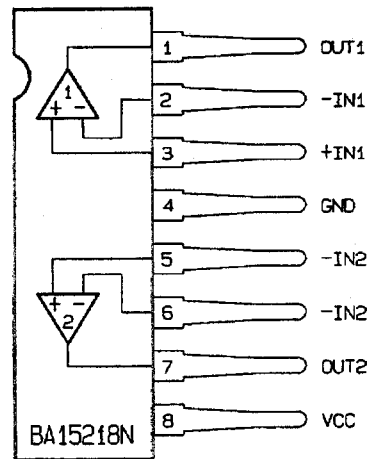
◆ IC302 (BA3852S) VO/TONE CONT.



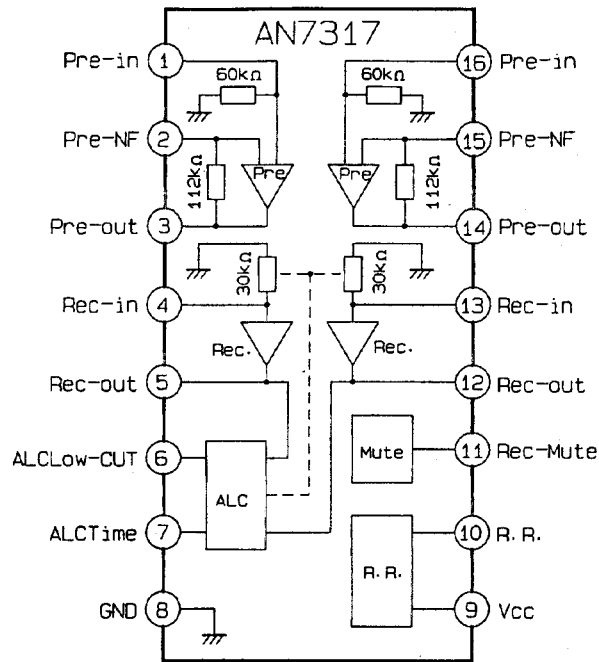
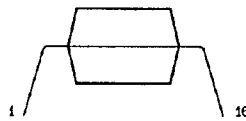
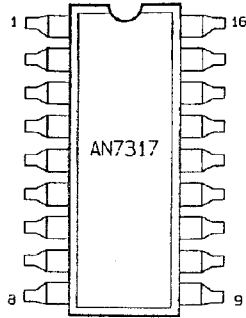
◆ IC311 (BA3126N) R/P SWITCH



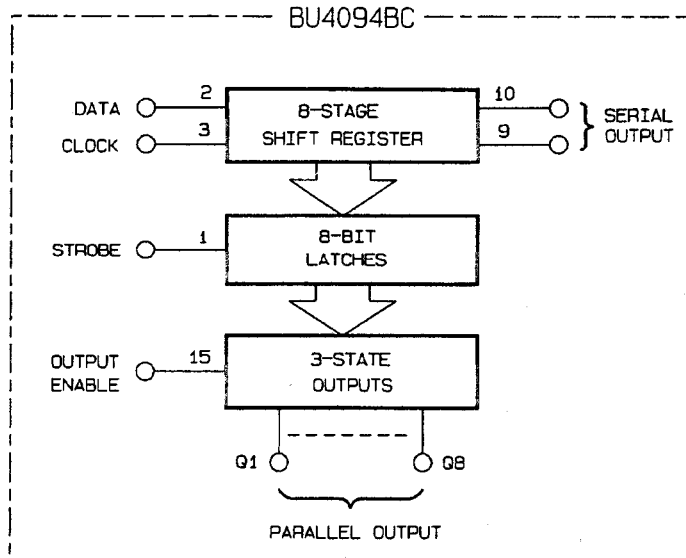
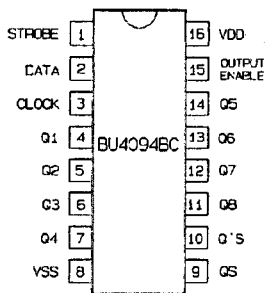
◆ IC304 (BA15218N) SUPER BASS



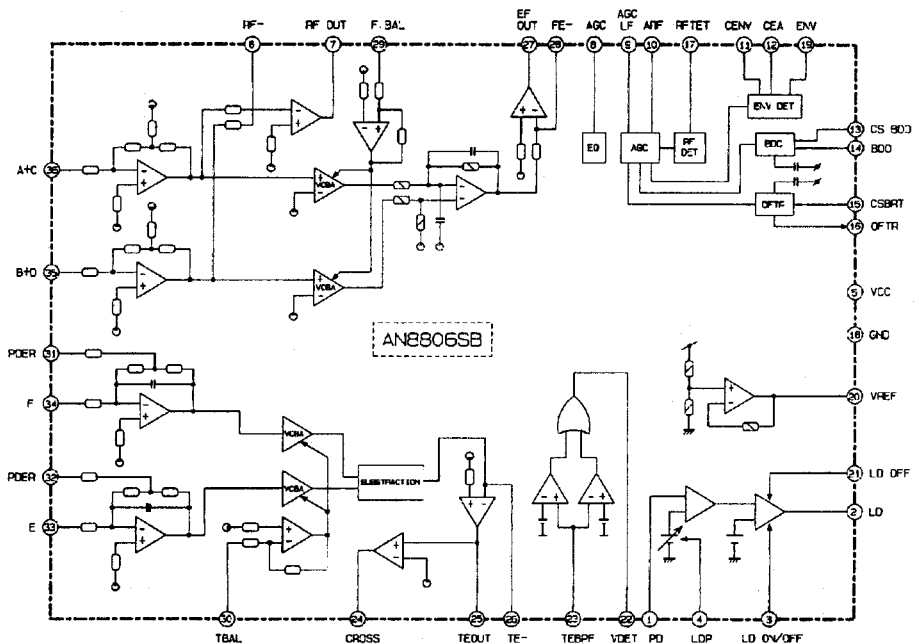
◆ IC312(AN7317)PB/REC AMP.



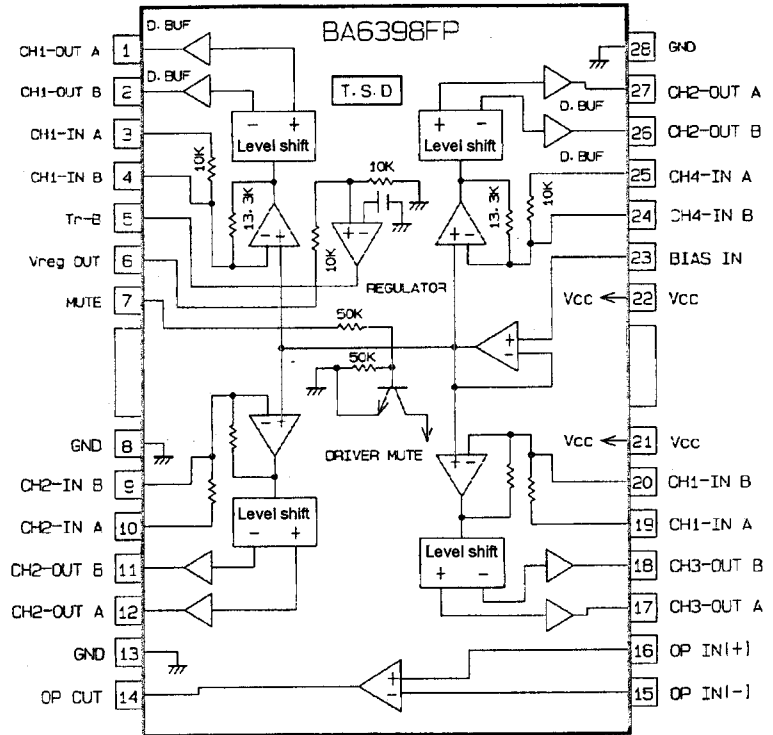
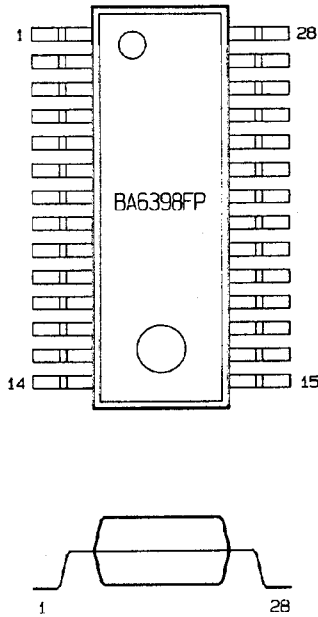
◆ IC331(BU4094BC)



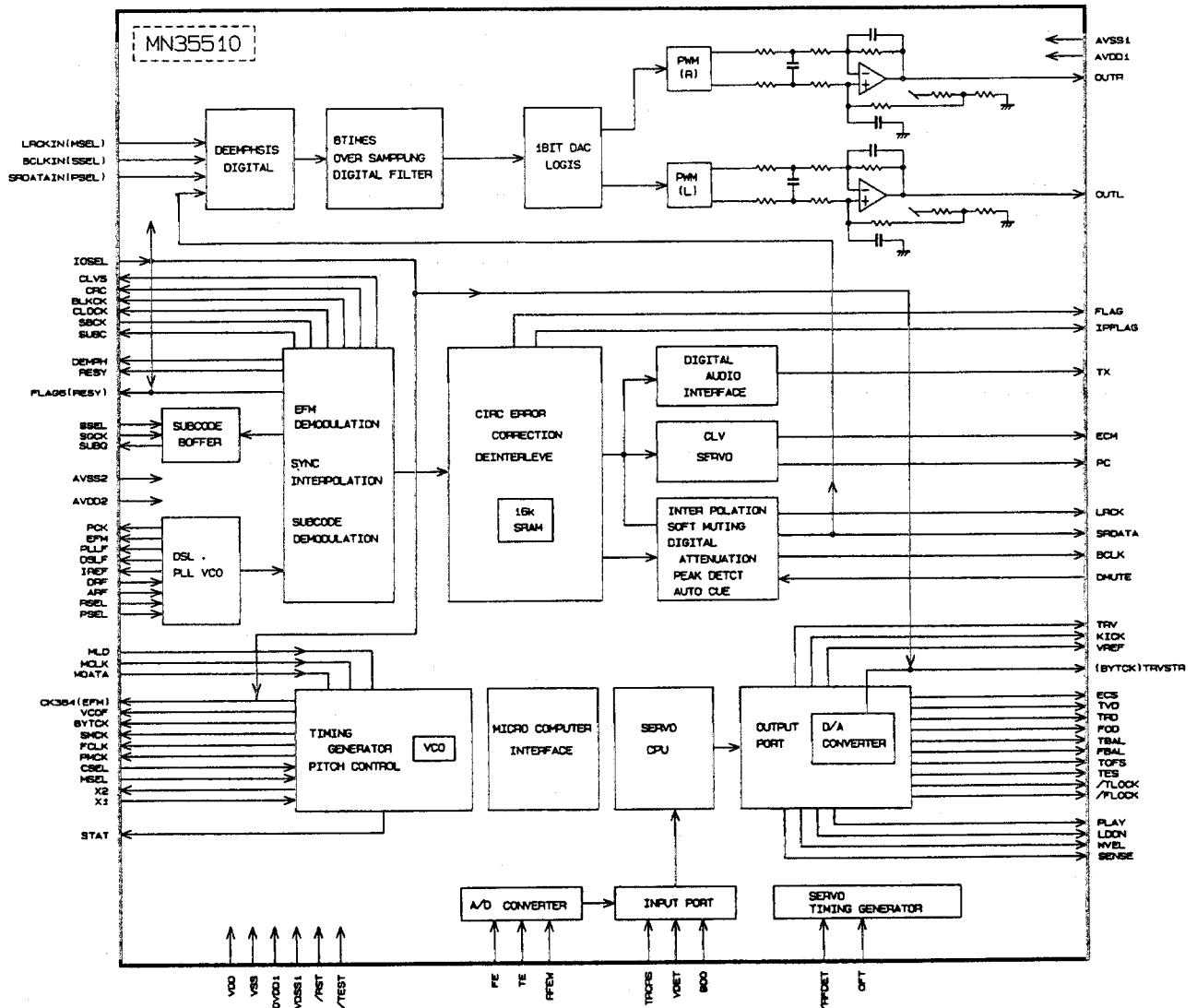
◆ IC601(AN8806SB) RF AMP.



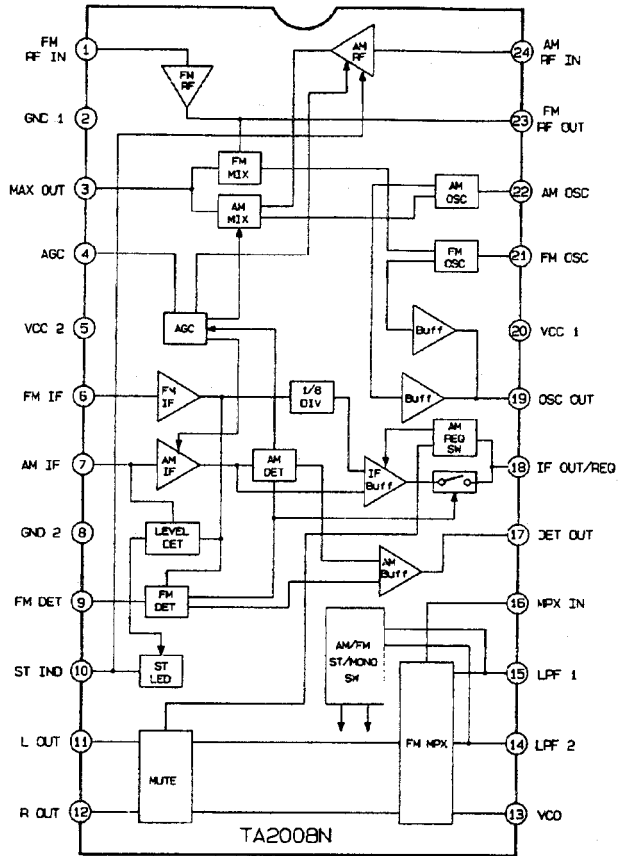
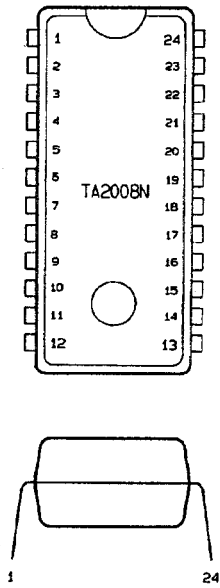
◆ IC 602(BA6398FP)



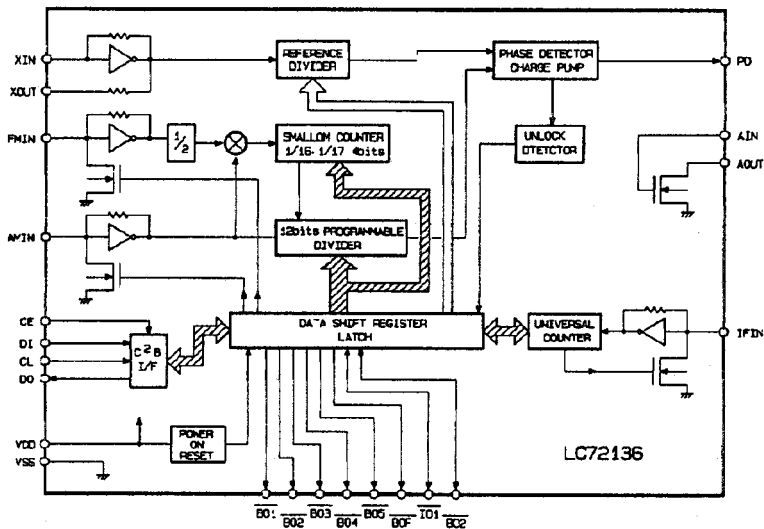
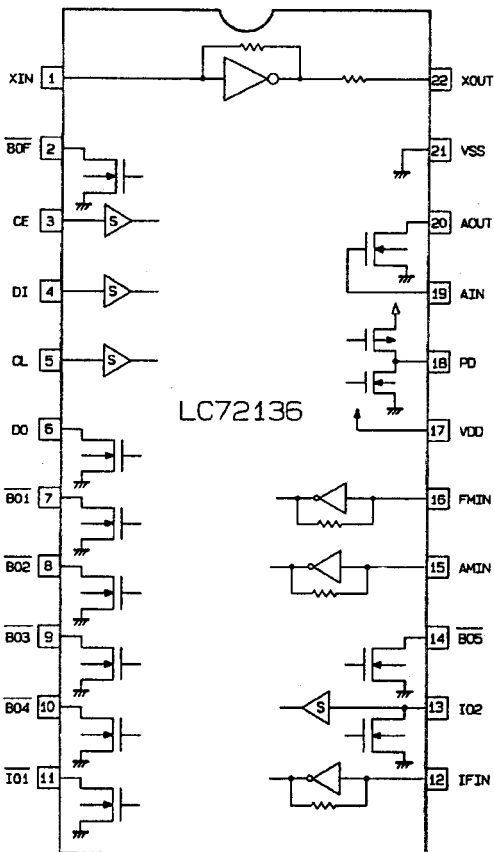
◆ IC603(MN35510) DIGITAL SERVO



◆ IC 2(TA2008N)IF&MPX



◆ IC 3(LC72136) PLL

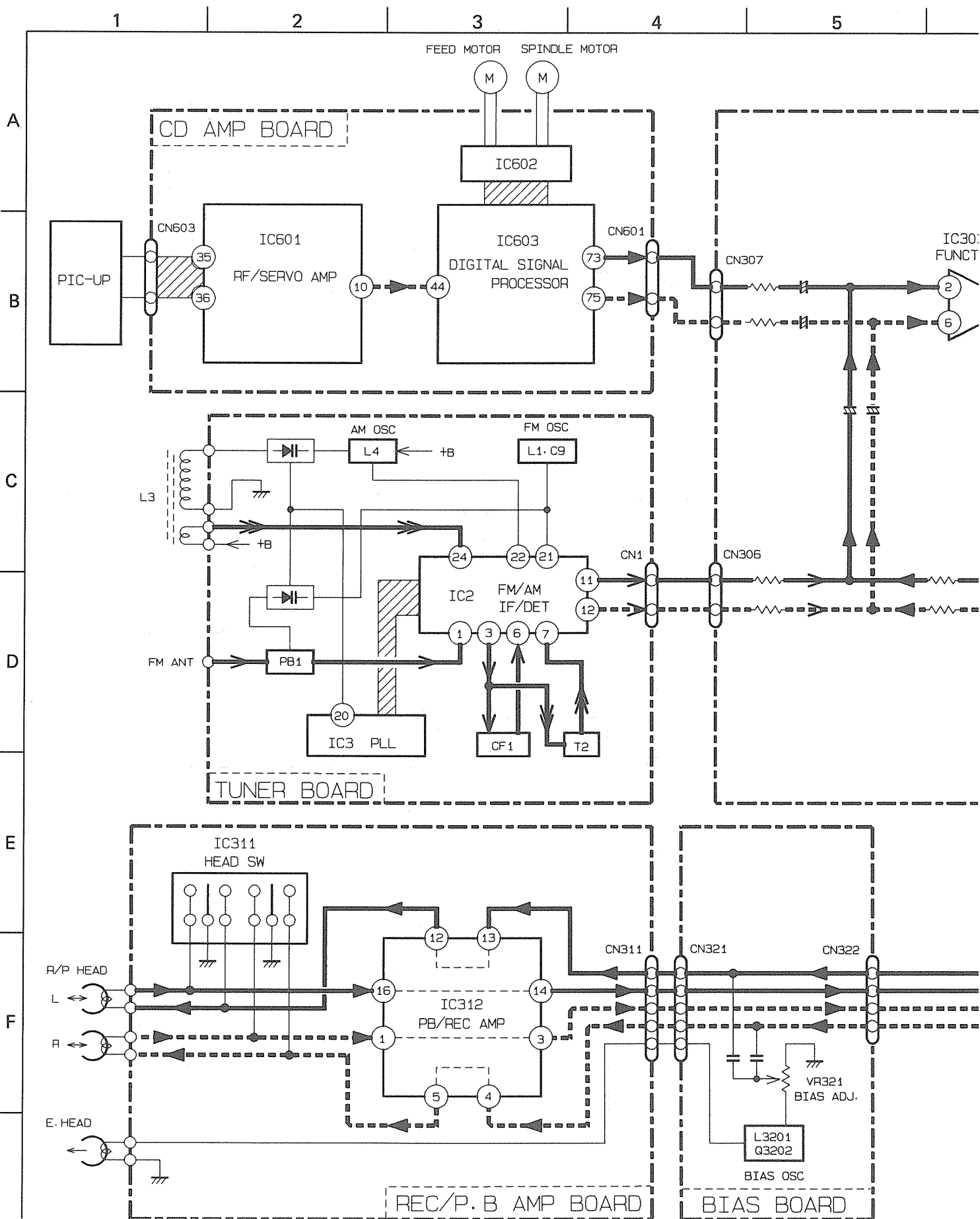


IC701 MN171603J8F Description of pin function

No.	Signal name	I/O	Explanation for this signal	ACT
1	HALL	I	TAPE COUNTER	-
2	PLAY	I	TAPE PLAY SW	L
3	AVSS		ANALOG GND	
4	KEY1	I	KEY IN 1	-
5	KEY2	I	KEY IN 2	-
6	TAPE	I	TAPE SW	-
7	REST	I	REST SW	L
8	BATT	I	BATTERY VOLTAGE	-
9	SAFETY	I	SAFETY DETECT	-
10	CLOSE	I	DOOR CLOSE	L
11	NC		NC	
12	AVDD		ANALOG VDD	
13	VLC1		LCD VOLTAGE	
14	VLC2		↓	
15	VLC3		↓	
16	COM3	O	LCD COMMON	
17	COM2	O	↓	
18	COM1	O	↓	
19	COM0	O	↓	
20	SEG0	O	LCD SEGMENT	
21	SEG1	O		
22	SEG2	O		
23	SEG3	O		
24	SEG4	O		
25	SEG5	O		
26	SEG6	O		
27	SEG7	O		
28	SEG8	O		
29	SEG9	O		
30	SEG10	O		
31	SEG11	O		
32	SEG12	O		
33	SEG13	O		
34	SEG14	O		
35	SEG15	O		
36	SEG16	O		
37	SEG17	O		
38	SEG18	O		
39	SEG19	O		
40	SEG20	O	↓	
41	SEG21	O	NC	
42	SEG22	O	NC	
43	SEG23	O	NC	

No.	Signal name	I/O	Explanation for this signal	ACT
44	/MPX	I	TUNER STEREO	L
45	CLOCK	I	CLOCK KEY	L
46	WAKEUP	I	WAKEUP TIMER KEY	L
47	AC/DC	I	AC/DC DETECT	-
48	STTU	O	STROBE TUNER	L
49	+ BCTL	O	+ B CONTROL	L
50	LIVE	O	LIVE SURROUND	H
51	F.TU	O	FUNCTION TUNER	H
52	F.CD	O	FUNCTION CD	H
53	POUT	O	POWER CONTROL	H
54	TRE	O	PWM TREBLE	-
55	BASS	O	PWM BASS	-
56	VOL	O	PWM VOL	-
57	CLD1	O	CD LED 1	H
58	CLD2	O	CD LED 2	H
59	CLD3	O	CD LED 3	H
60	MLD	O	MICOM COMMAND LOAD	L
61	MDATA	O	MICOM COMMAND DATA	-
62	MCLK	O	MICOM COMMAND CLK	↑
63	XRST	O	CD LSI RESET	-
64	SMUTE	O	SYSTEM MUTE	L
65	AHB	O	ACTIVE HYPER BASS	H
66	BEAT	O	BEAT	-
67	NC		NC	
68	RST	I	RST	L
69	X1		X1	
70	X2		X2	
71	VSS		VSS	
72	OSC1		OSC1	
73	OSC2		OSC2	
74	VDD		VDD	
75	STAT	I	STATUS	-
76	SOCK	O	SUBQ CLOCK	↑
77	SUBQ	I	SUBQ DATA	-
78	BUP	I	BUCK UP DETECT	H
79	STTA	O	STROBE TAPE	L
80	CK	O	SERIAL CLOCK	↑
81	SI	I	SERIAL DATA IN	-
82	SO	O	SERIAL DATA OUT	-
83	PIN	I	POWER KEY	L
84	REM	I	REMOCON IN	↓

■ Signal block diagram



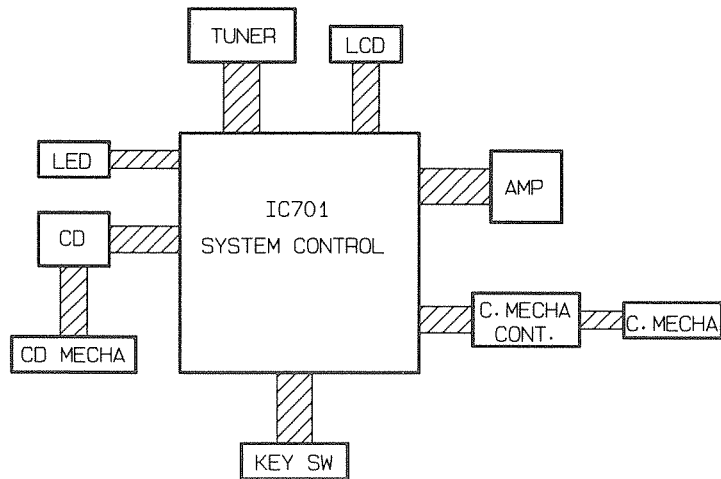
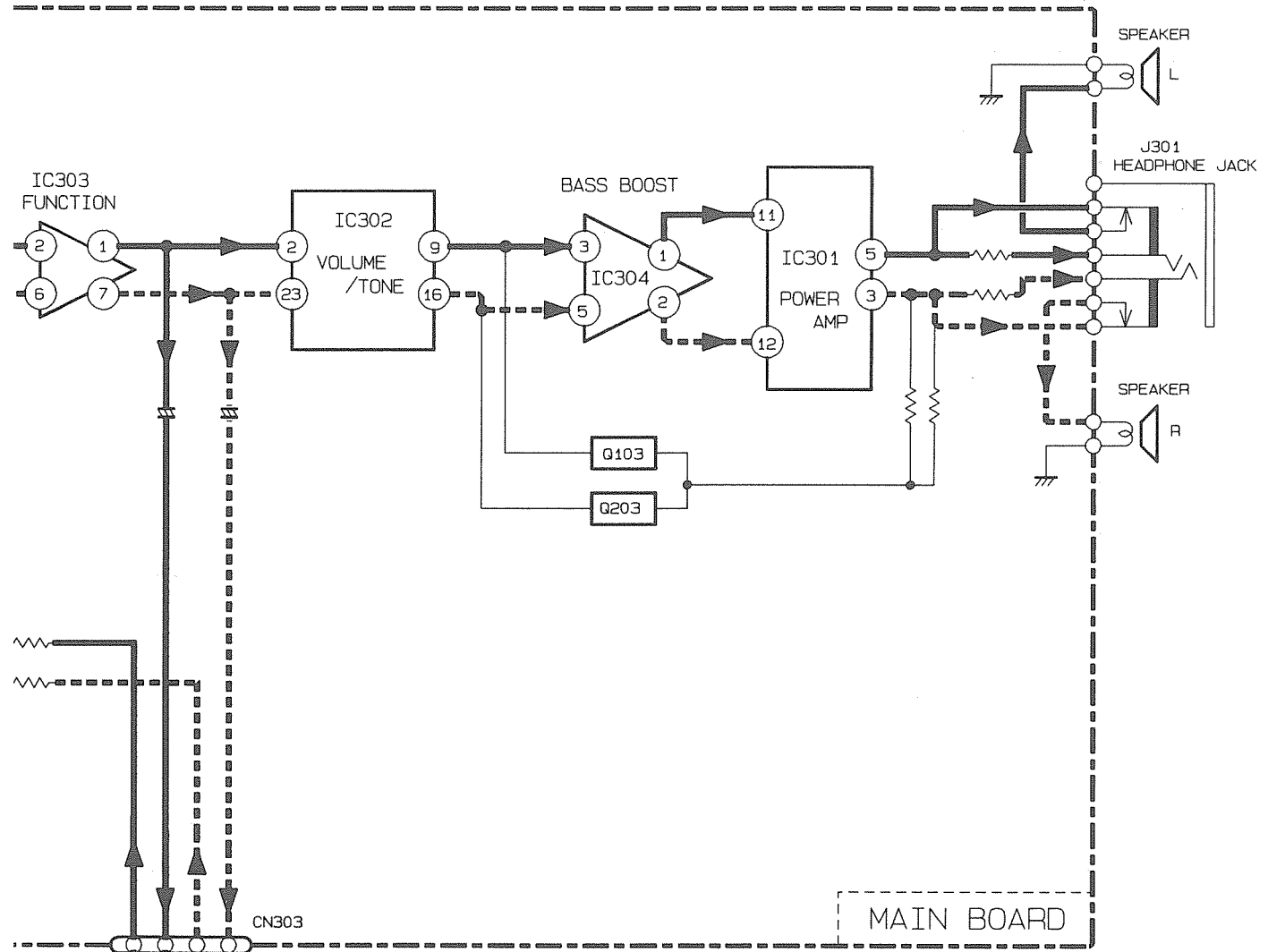
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8 Standard circuit diagram ■ Tuner circuit

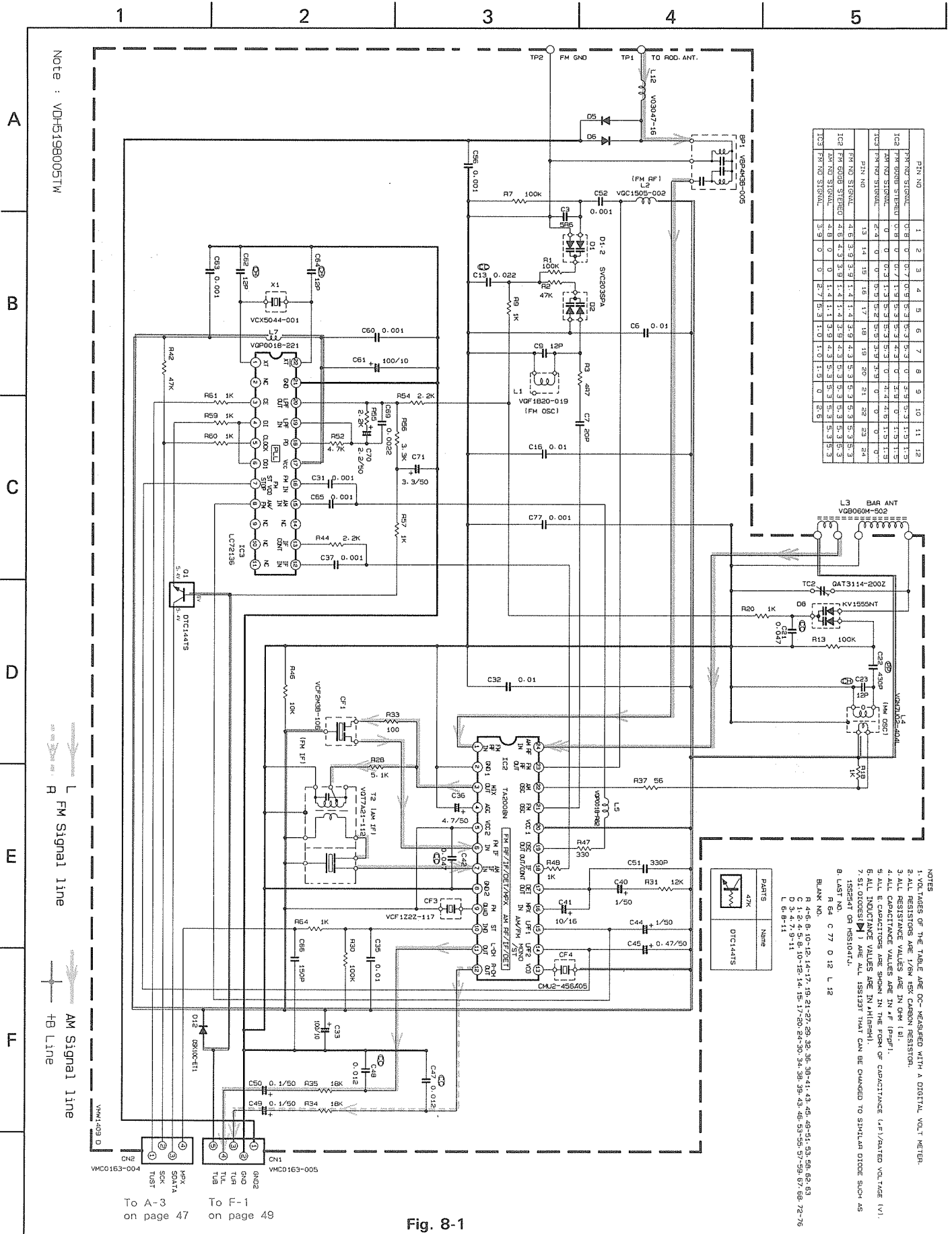


Fig. 8-1

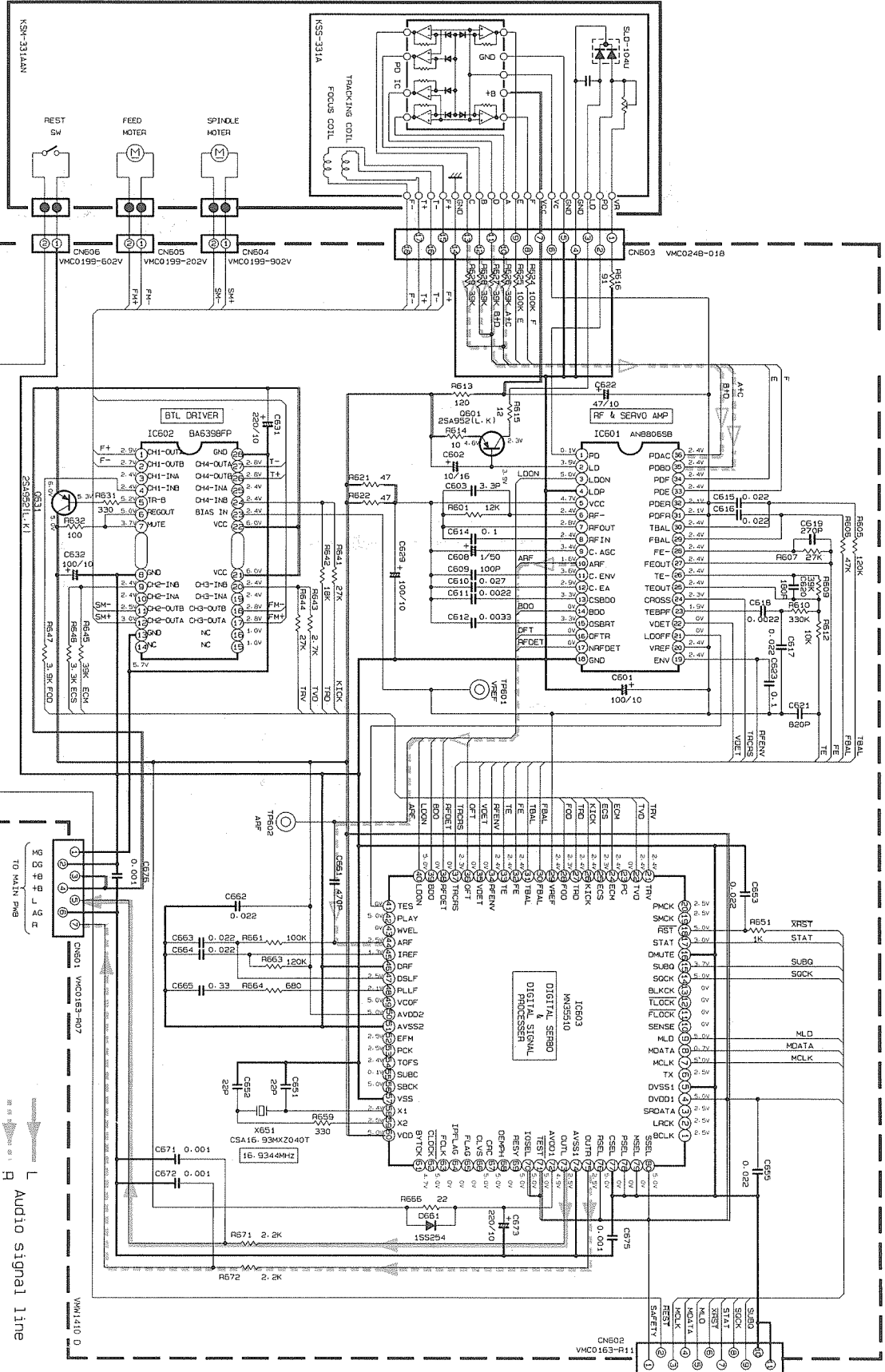
CD amplifier circuit

1 2 3 4 5

Note : VDH519B001CW NEW

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. VALUES OTHERWISE SPECIFIED, RESISTORS ARE 1/4W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHMS (Ω).
4. ALL CAPACITANCE VALUES ARE IN PICO FARADS (PF).
5. ALL CAPACITORS ARE CERAMIC CAPACITORS UNLESS OTHERWISE SPECIFIED.
6. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (PF)/RATED VOLTAGE (V).



To B-1 on page 49

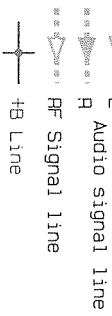
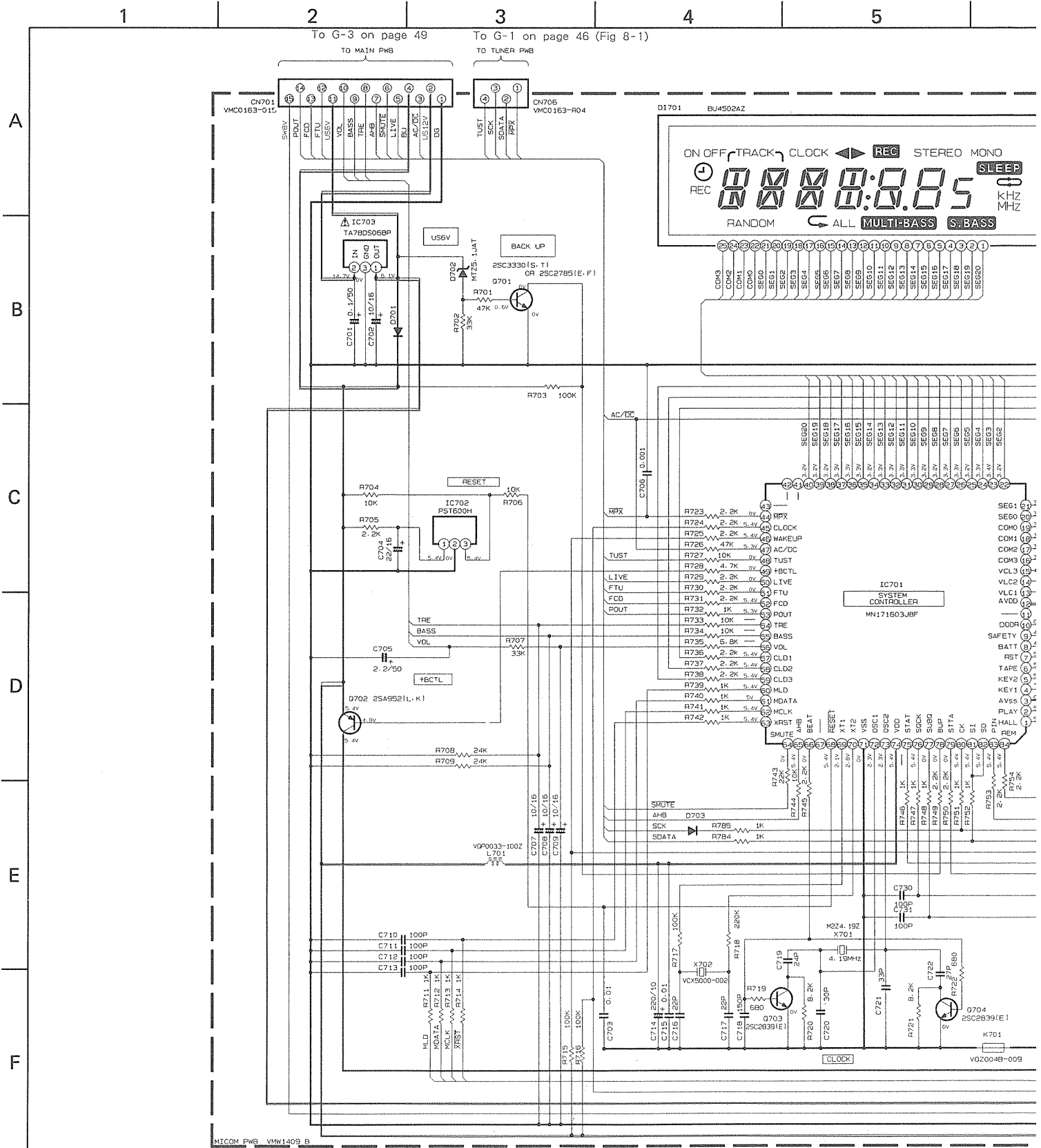


Fig. 8-2

TO MICON PWB
To F-8
on page 47

System control circuit



- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION --- CD MODE, VOL 15, SOUND FLAT
 - UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN Ω(MB).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN nF(pF).
ALL INDUCTANCE VALUES ARE IN μH(mH).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254T OR HSS104TJ

Fig. 8-3

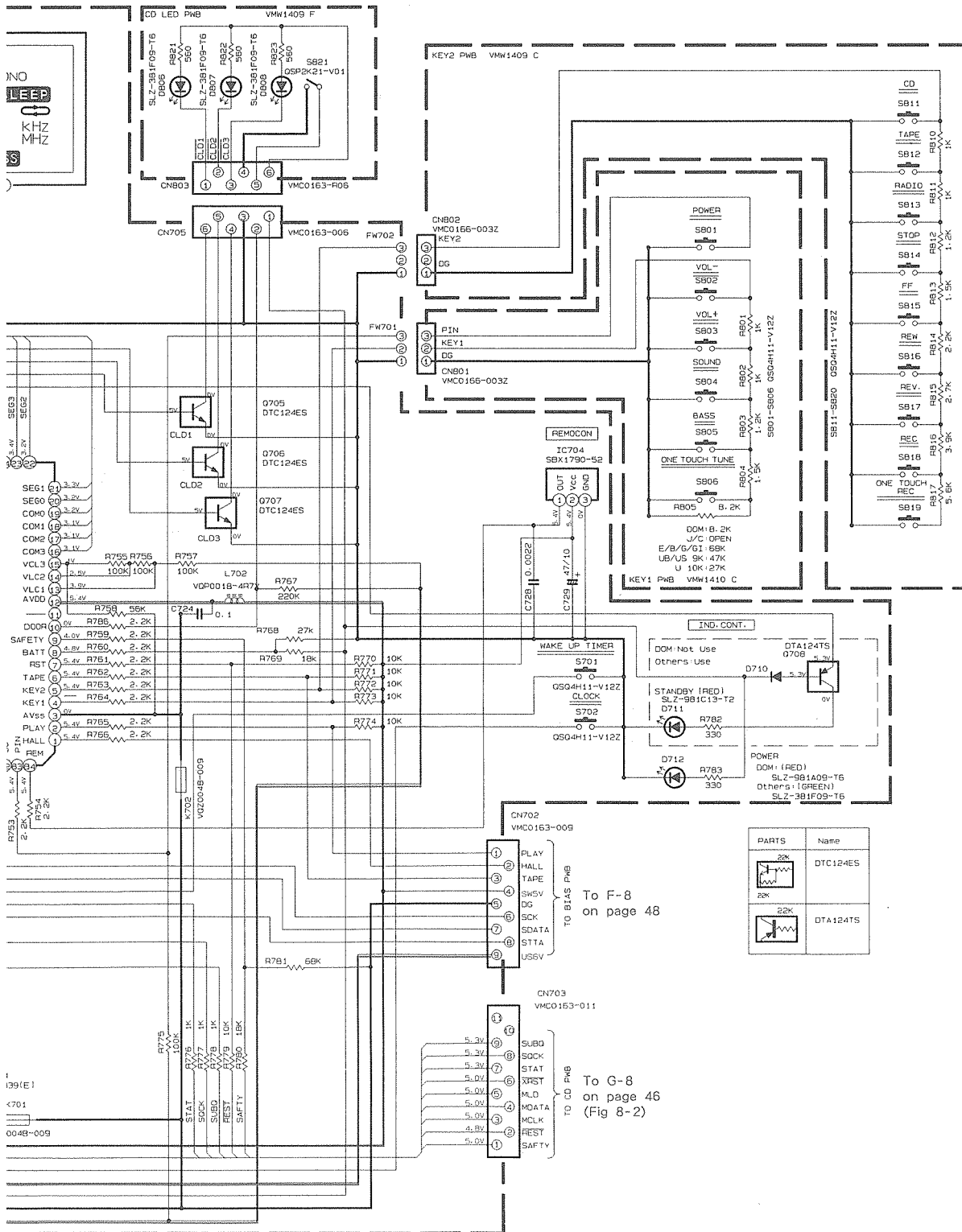
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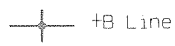
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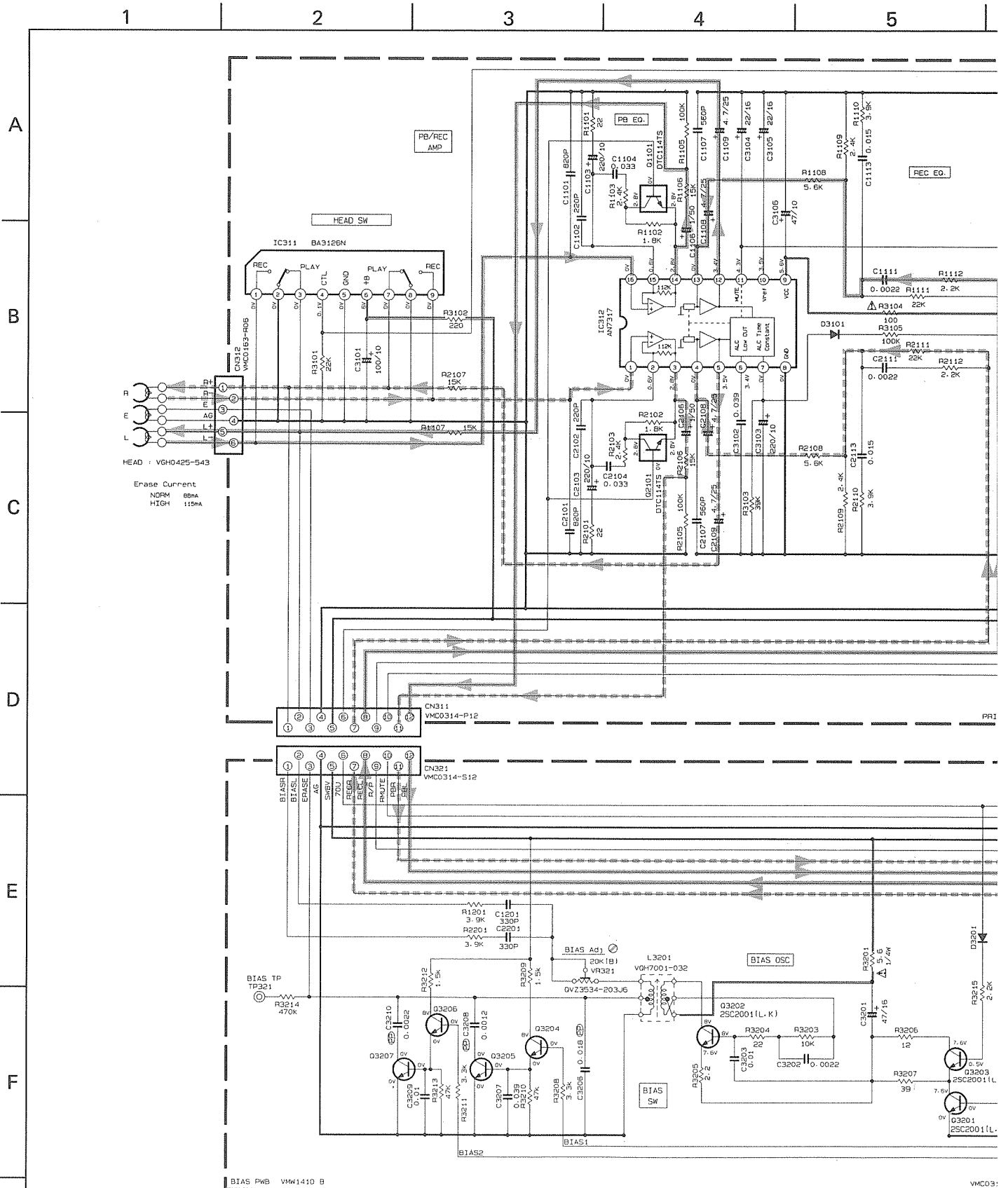
PARTS	Name
	DTC124ES
	DTA124TS

To F-8 on page 48

To G-8 on page 46 (Fig 8-2)



Head amplifier/bias circuit



NOTES
 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION TAPE MODE MECHA PB
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W ±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN #F(FEMTO)H. ALL INDUCTANCE VALUES ARE IN #H(HENRY)H. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F)/RATED VOLTAGE (V). ALL DIODES ARE 1SS254T OR HS5104T. ALL TRANSISTORS ARE 2SC27B51E-F1 OR 2SC3330(S1-T) POLYPROPYLENE CAPACITOR

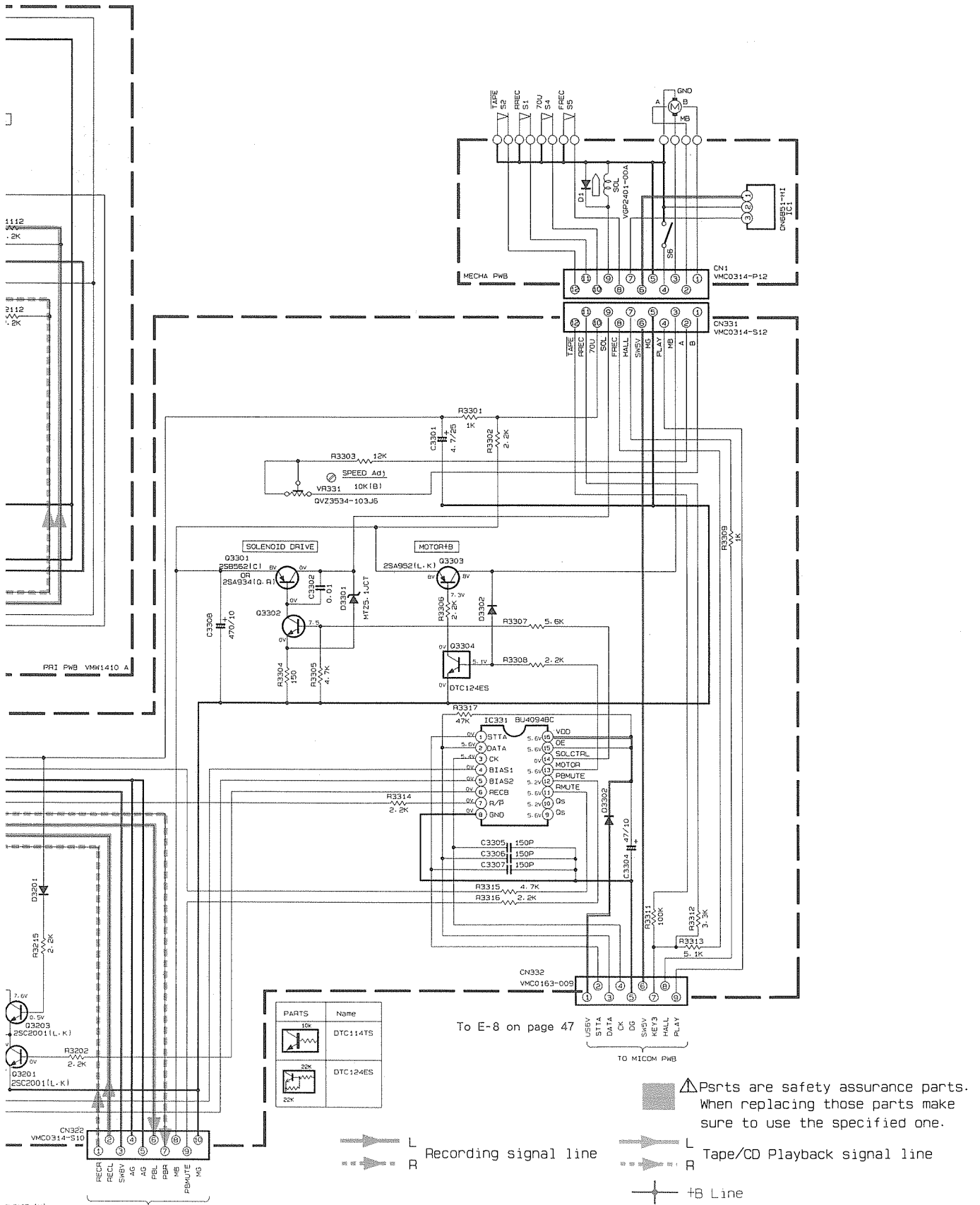
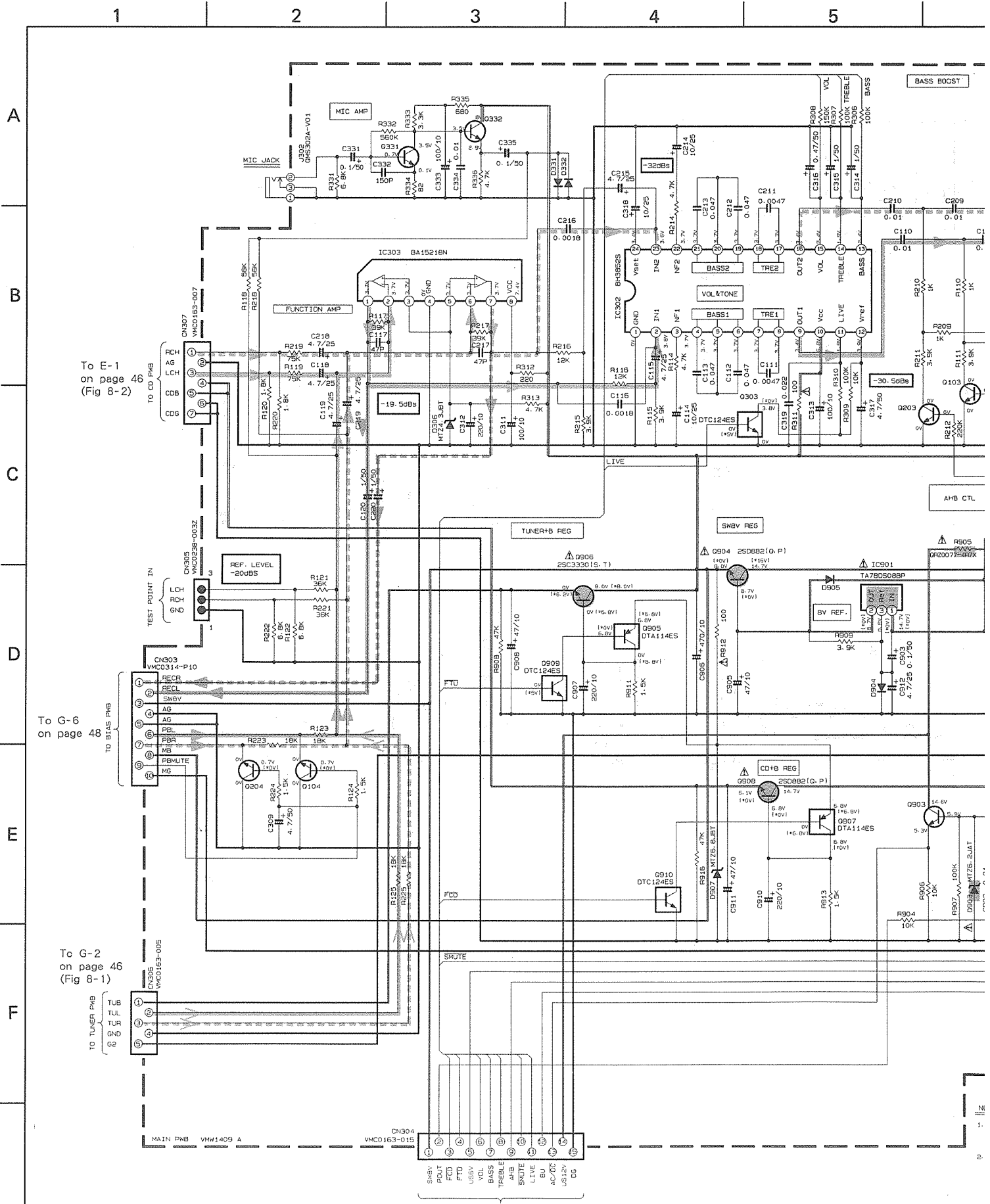


Fig. 8-4

Power amplifier circuit



Note : VD45198001AV NEW

Fig. 8-5

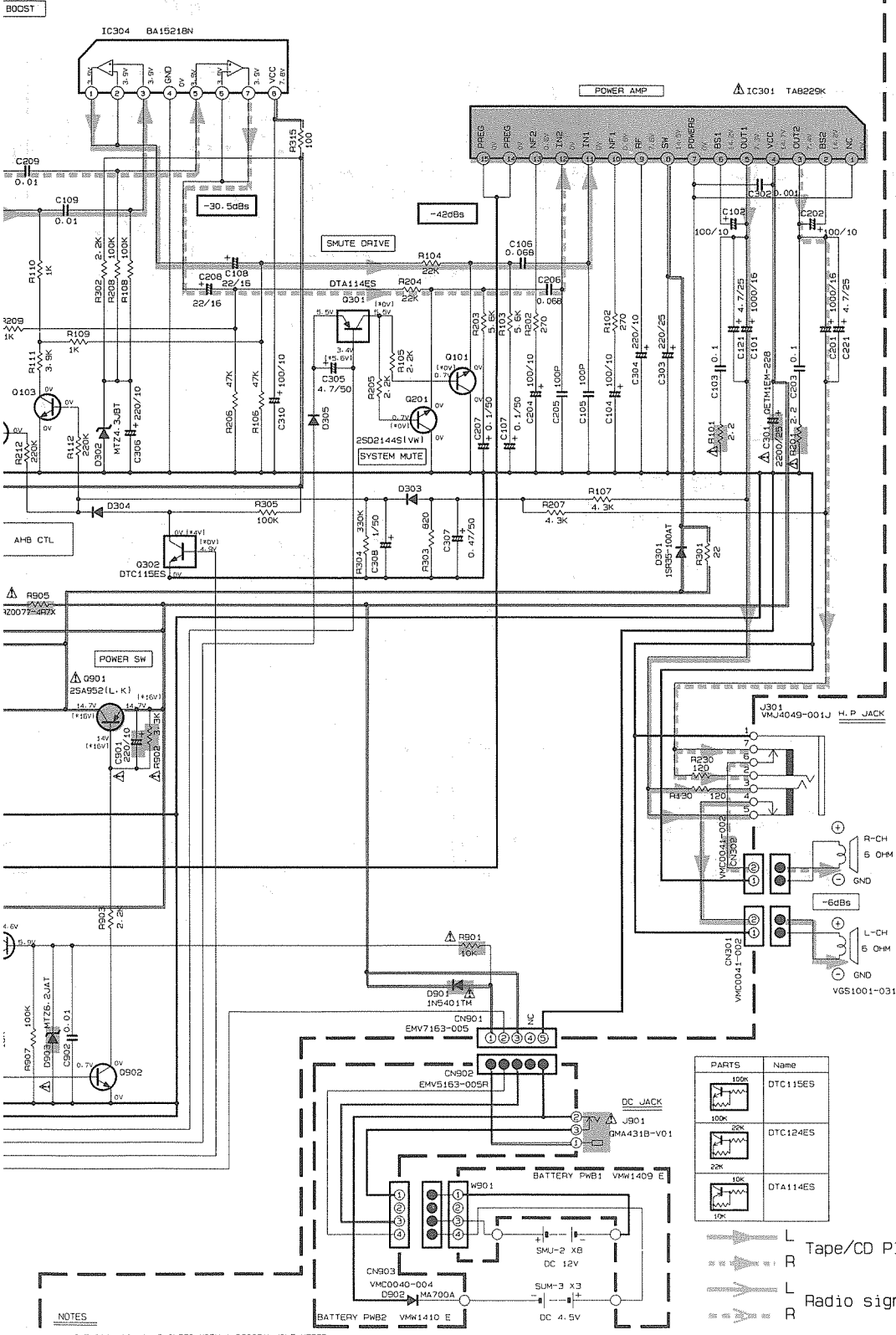
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PARTS	Name
	DTC115ES
	DTC124ES
	DTA114ES

- L Tape/CD Playback signal line
- R Tape/CD Playback signal line
- L Radio signal line
- R Radio signal line

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

- +B Line
- L Recording signal line
- R Recording signal line

- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION --- CD STOP MODE AT AC SUPPLY
() IS INVERT MODE VOL 15 SOUND MODE (FLAT MBH ON)
 - UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/8W 5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(μF).
ALL INDUCTANCE VALUES ARE IN mH(mH).
ALL ELECTROLYTIC CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254T (OR 1SS104T).
ALL NPN TRANSISTOR ARE 2SC2795(E, F) OR 2SC3330(1, 1).

9 Location of p. c. board and parts list ■ Main board

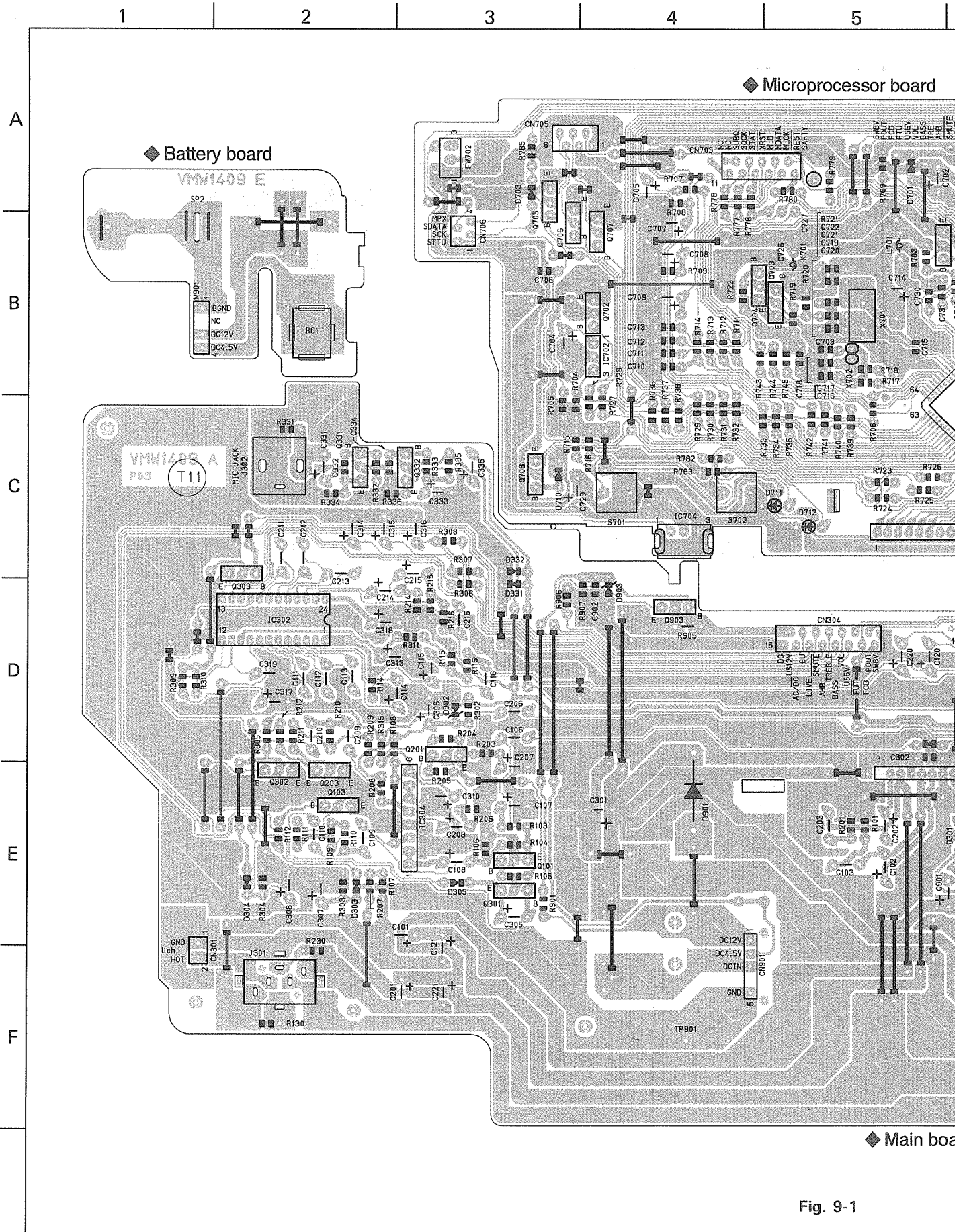


Fig. 9-1

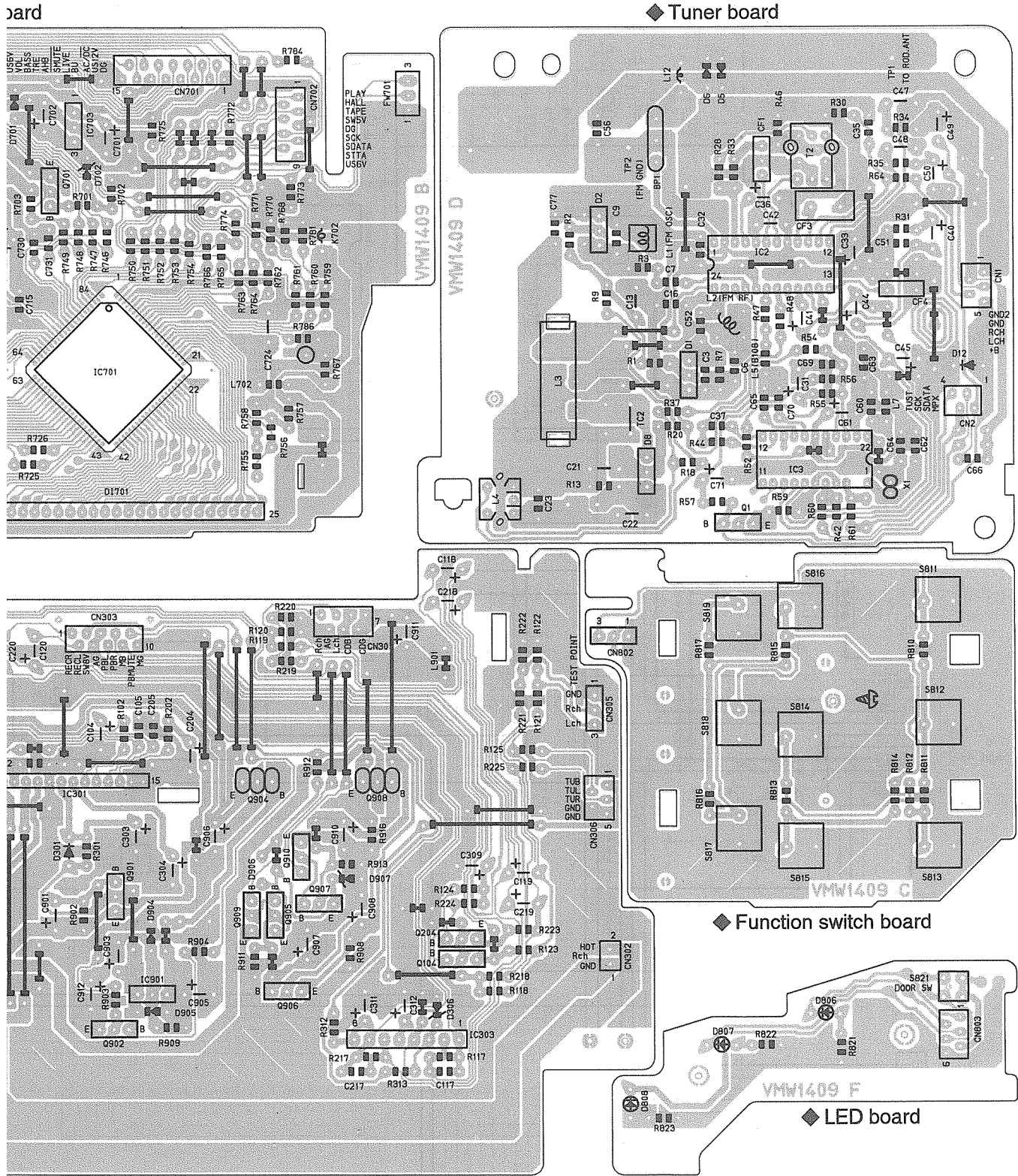
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main board

● Main board parts list

BLOCK NO. 01

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BC 1	VYH8062-001	BATTERY CONTACT		
BP 1	VBP4M3B-005	B.PASS FILTER	BPF	
C 3	QCSB1HK-5R6Y	C.CAPACITOR	5.6PF 10% 50V	
C 6	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 7	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
C 9	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
C 13	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
C 16	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 21	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
C 22	QFG32AJ-431ZM	PP CAPACITOR	430PF 5% 100V	
C 23	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
C 31	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 32	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 33	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 35	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
C 36	QET41HM-475	E CAPACITOR	=R19	
C 37	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 40	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 41	QET41CM-106	E CAPACITOR	10MF 20% 16V	
C 42	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
C 44	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 45	QET41HM-474	E CAPACITOR	.47MF 20% 50V	
C 47	QCC11EM-123V	C.CAPACITOR	.012MF 20% 25V	
C 48	QCC11EM-123V	C.CAPACITOR	.012MF 20% 25V	
C 49	QETC1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C 50	QETC1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C 51	QCB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
C 52	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 56	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 60	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 61	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 62	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
C 63	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 64	QCT30CH-120Y	C.CAPACITOR	12PF 5% 50V	
C 65	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 66	QCB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 69	QXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
C 70	QETC1HM-225ZM	E CAPACITOR	2.2MF 20% 50V	
C 71	QETC1HM-335ZM	E CAPACITOR	3.3MF 20% 50V	
C 77	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 101	QETB1CM-108N	E.CAPACITOR	1000MF 20% 16V	
C 102	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 103	QFN41HJ-104	M.CAPACITOR	.10MF 5% 50V	
C 104	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 105	QCB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C 106	QFV71HJ-683ZM	FILM CAPACITOR	AZM ONLY	
C 107	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
C 108	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
C 109	QFV41HJ-104ZM	FILM CAPACITOR	AZM ONLY	
C 110	QFV41HJ-104ZM	FILM CAPACITOR	AZM ONLY	
C 111	QFN41HJ-472	M.CAPACITOR	4700PF 5% 50V	
C 112	QFN41HJ-473	M.CAPACITOR	.047MF 5% 50V	
C 113	QFN41HJ-473	M.CAPACITOR	.047MF 5% 50V	
C 114	QEK41EM-106	E CAPACITOR	10MF 20% 25V	
C 115	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 116	QFN41HJ-182	M.CAPACITOR	1800PF 5% 50V	
C 117	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
C 118	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
C 119	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C 120	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 121	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
C 201	QETB1CM-108N	E.CAPACITOR	1000MF 20% 16V	
C 202	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 203	QFN41HJ-104	M.CAPACITOR	.10MF 5% 50V	
C 204	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 205	QCB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C 206	QFV71HJ-683ZM	FILM CAPACITOR	AZM ONLY	
C 207	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
C 208	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
C 209	QFV41HJ-104ZM	FILM CAPACITOR	AZM ONLY	
C 210	QFV41HJ-104ZM	FILM CAPACITOR	AZM ONLY	
C 211	QFN41HJ-472	M.CAPACITOR	4700PF 5% 50V	
C 212	QFN41HJ-473	M.CAPACITOR	.047MF 5% 50V	
C 213	QFN41HJ-473	M.CAPACITOR	.047MF 5% 50V	
C 214	QEK41EM-106	E CAPACITOR	10MF 20% 25V	
C 215	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
C 216	QFN41HJ-182	M.CAPACITOR	1800PF 5% 50V	
C 217	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
C 218	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
C 219	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C 220	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 221	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
C 301	QETM1EM-228	E CAPACITOR	2200MF 20% 25V	
C 302	QCB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 303	QET41EM-227	E.CAPACITOR	220MF 20% 25V	
C 304	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 305	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
C 306	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 307	QET41HM-474	E CAPACITOR	.47MF 20% 50V	
C 308	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 309	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
C 310	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 311	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 312	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 313	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 314	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 315	QET41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 316	QET41HM-474	E CAPACITOR	.47MF 20% 50V	
C 317	QET41HM-475	E CAPACITOR	4.7MF 20% 50V	
C 318	QET41EM-106	E CAPACITOR	10MF 20% 25V	
C 319	QFN81HJ-223	M.CAPACITOR	.022MF 5% 50V	
C 331	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
C 332	QCB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C 333	QET41AM-107	E CAPACITOR	100MF 20% 10V	
C 334	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C 335	QETC1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C 701	QETC1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C 702	QET41CM-106	E CAPACITOR	10MF 20% 16V	
C 703	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C 704	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 705	QETC1HM-225ZM	E CAPACITOR	2.2MF 20% 50V	
C 706	QCB1HK-102Y	C. CAPACITOR	100PF 10% 50V	
C 707	QET41CM-106	E CAPACITOR	10MF 20% 16V	
C 708	QET41CM-106	E CAPACITOR	10MF 20% 16V	
C 709	QEK41CM-106	E. CAPACITOR	10MF 20% 16V	
C 710	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 711	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 712	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 713	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 714	QEK61AM-227ZM	E. CAPACITOR	220MF 20% 10V	
C 715	QCVB1CM-103Y	C. CAPACITOR	.010MF 20% 16V	
C 716	QCS11HJ-220	C. CAPACITOR	22PF 5% 50V	
C 717	QCS11HJ-220	C. CAPACITOR	22PF 5% 50V	
C 718	QCB1HK-151Y	C. CAPACITOR	150PF 10% 50V	
C 719	QCS11HJ-240	C. CAPACITOR	24PF 5% 50V	
C 720	QCS11HJ-300	C. CAPACITOR	30PF 5% 50V	
C 721	QCS11HJ-330	C. CAPACITOR	33PF 5% 50V	
C 722	QCS31HJ-270Z	C. CAPACITOR	27PF 5% 50V	
C 724	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
C 729	QET41AM-476	E CAPACITOR	47MF 20% 10V	
C 730	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 731	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 901	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 902	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	
C 903	QETC1HM-104Z	E CAPACITOR	.10MF 20% 50V	
C 905	QET41AM-476	E CAPACITOR	47MF 20% 10V	
C 906	QET41AM-477	E CAPACITOR	470MF 20% 10V	
C 907	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 908	QET41AM-476	E CAPACITOR	47MF 20% 10V	
C 910	QET41AM-227	E CAPACITOR	220MF 20% 10V	
C 911	QET41AM-476	E CAPACITOR	47MF 20% 10V	
C 912	QET41EM-475	E CAPACITOR	4.7MF 20% 25V	
CF 1	VCF2M3B-106	C FILTER		
CF 3	VCF1Z2Z-117Z	C FILTER		
CF 4	CMU2-456A05	CERA LOCK		
CN 1	VMC0163-005	CONNECTOR		
CN 2	VMC0163-004	CONNECTOR		
CN301	VMC0041-002	CONNECTOR	SPK OUT LCH	
CN302	VMC0041-002	CONNECTOR	SPK OUT RCH	
CN303	VMC0314-P10	CONNECTOR	MAIN/BIAS	
CN304	VMC0163-015	CONNECTOR	MAIN/MICOM	
CN305	TTL25V-003	CONNECTOR	TEST POINT	
CN306	VMC0163-005	CONNECTOR	MAIN/TUNER	
CN307	VMC0163-007	CONNECTOR	MAIN/CD	
CN701	VMC0163-015	CONNECTOR	MICOM/MAIN	
CN702	VMC0163-009	CONNECTOR	MICOM/BIAS	
CN703	VMC0163-011	CONNECTOR	MICOM/CD	
CN705	VMC0163-006	CONNECTOR	MICOM/CD LED	
CN706	VMC0163-R04	CONNECTOR	MICOM/TUNER	
CN802	EMV7122-103Z	SOCKET	KEY2/MICOM	
CN803	VMC0163-R06	CONNECTOR	CD LED/MICOM	
CN901	EMV7163-005	CONNECTOR	MAIN/BAT2	
CN902	EMV5163-005R	CONNECTOR	BAT2/MAIN	
CN903	VMC0040-004	CONNECTOR	BAT2/BAT1	
D 1	SVC203SPA-AB-AL	VARI CAP		

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
D 2	SVC203SPA-AB-AL	VARI CAP		
D 5	1SS133	SI DIODE		
D 6	1SS133	SI DIODE		
D 8	KV1555NT	VARI CAPACITOR		
D 12	DSK10C-E	DIODE		
D 301	1SR35-100	SI DIODE		
D 302	MTZ4.3JB	ZENER DIODE		
D 303	1SS133	SI DIODE		
D 304	1SS133	SI DIODE		
D 305	1SS133	SI DIODE		
D 306	MTZ4.3JB	ZENER DIODE		
D 331	1SS133	SI DIODE		
D 332	1SS133	SI DIODE		
D 701	1SS133	SI DIODE		
D 702	MTZ5.1JAT-77	ZENER DIODE		
D 703	1SS133	SI DIODE		
D 710	1SS133	SI DIODE		
D 711	SLZ-981C13-T2	LED	STANDBY	
D 712	SLZ-381F09-T6	LED	POWER	
D 806	SLZ-381F09-T6	LED	LCD	
D 807	SLZ-381F09-T6	LED	LCD	
D 808	SLZ-381F09-T6	LED	LCD	
D 901	1N5401TM	SI DIODE		
D 902	RB721Q	DIODE		
D 903	MTZ6.2JAT-77	ZENER DIODE		
D 904	1SS133	SI DIODE		
D 905	1SS133	SI DIODE		
D 907	MTZ6.8JB	ZENER DIODE		
DI701	BU4502AZ	LCD	LCD DISPLAY	
IC 2	TA2008N	IC		
IC 3	LC72136	IC		
IC301	TA8229K	IC	POWER AMP	
IC302	BH3852S	IC	VOL&TONE	
IC303	BA15218N	IC	FUNCTION AMP	
IC304	BA15218N	IC	S. BASS	
IC701	MN171603J8F2	IC	MICOM	
IC702	PST600H-T	IC	RESET IC	
IC703	TA78DS06BP	IC	US6V	
IC704	SBX1790-52	REMOCON SENSOR	REMOCON	
IC901	TA78DS08BP	IC		
J 301	VMJ4049-001J	HEADPHONE JACK	FOR IC304	
J 302	QMS302A-V01	JACK	MIC JACK	
J 901	QMA431B-V01	FILM CAPACITOR	DC JACK	
K 701	VQZ0048-009	INDUCTOR		
K 702	VQZ0048-009	INDUCTOR		
L 1	VQF1B20-019	OSC COIL	FM OSC	
L 2	VQC1505-002	RF COIL	FM RF	
L 3	VQB060M-502	BAR ANTENA	MW RF	
L 4	VQM7U02-404	OSC COIL(MW)	MW OSC	
L 5	VQP0018-R82Y	INDUCTOR		
L 7	VQP0018-221	INDUCTOR		
L 12	V03047-16	INDUCTOR		
L 701	VQP0033-100Z	INDUCTOR		
L 702	VQP0018-4R7	INDUCTOR		
Q 1	DTC144TS	TRANSISTOR		

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 101	2SD2144S(VW)	TRANSISTOR	S MUTE	
Q 103	2SC3330	TRANSISTOR		
Q 104	2SC3330	TRANSISTOR	PB MUTE	
Q 201	2SD2144S(VW)	TRANSISTOR	S MUTE	
Q 203	2SC3330	TRANSISTOR		
Q 204	2SC3330	TRANSISTOR	PB MUTE	
Q 301	DTA114ES	TRANSISTOR		
Q 302	DTC115ES	TRANSISTOR		
Q 303	DTC124ES	TRANSISTOR		
Q 331	2SC3330	TRANSISTOR		
Q 332	2SC3330	TRANSISTOR		
Q 701	2SC3330	TRANSISTOR		
Q 702	2SA1175	TRANSISTOR		
Q 703	2SC2668(0)	TRANSISTOR		
Q 704	2SC2668(0)	TRANSISTOR		
Q 705	DTC124ES	TRANSISTOR		
Q 706	DTC124ES	TRANSISTOR		
Q 707	DTC124ES	TRANSISTOR		
Q 708	DTA124TSTP	TRANSISTOR		
Q 901	2SA952(L,K)	TRANSISTOR		
Q 902	2SC3330	TRANSISTOR		
Q 903	2SC3330	TRANSISTOR		
Q 904	2SD882(P,Q)	TRANSISTOR	SW8V REG	
Q 905	DTA114ES	TRANSISTOR		
Q 906	2SC3330	TRANSISTOR	TUB	
Q 907	DTA114ES	TRANSISTOR		
Q 908	2SD882(P,Q)	TRANSISTOR	CDB	
Q 909	DTC124ES	TRANSISTOR		
Q 910	DTC124ES	TRANSISTOR		
R 1	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 2	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 3	QRD167J-4R7	CARBON RESISTOR	4.7 5% 1/6W	
R 7	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 9	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 13	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 18	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 20	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 28	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W	
R -30	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 31	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 33	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 34	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 35	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 37	QRD161J-560	CARBON RESISTOR	56 5% 1/6W	
R 42	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 44	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 46	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 47	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 48	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 52	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 54	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 55	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 56	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 57	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 59	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 60	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 61	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 64	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 101	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R 102	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R 103	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 104	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 105	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 106	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 107	QRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
R 108	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 109	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 110	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 111	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 112	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 114	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 115	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 116	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 117	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 118	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 119	QRD161J-753	CARBON RESISTOR	75K 5% 1/6W	
R 120	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 121	QRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 122	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 123	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 124	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 125	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 130	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 201	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R 202	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R 203	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 204	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 205	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 206	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 207	QRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
R 208	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 209	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 210	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 211	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 212	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 214	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 215	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 216	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 217	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 218	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 219	QRD161J-753	CARBON RESISTOR	75K 5% 1/6W	
R 220	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 221	QRD161J-363	CARBON RESISTOR	36K 5% 1/6W	
R 222	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 223	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 224	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 225	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 230	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 301	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R 302	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	

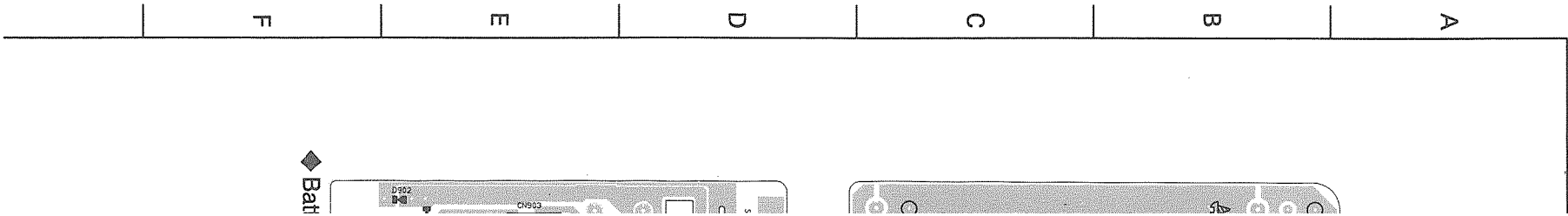
BLOCK NO. 0111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 303	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 304	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
R 305	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 306	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 307	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 308	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
R 309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 310	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 311	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 312	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R 313	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 315	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 331	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 332	QRD161J-564	CARBON RESISTOR	560K 5% 1/6W	
R 333	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 334	QRD161J-820	CARBON RESISTOR	82 5% 1/6W	
R 335	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 336	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 701	QRD161J-473	CARBON RESISTOR	4.7K 5% 1/6W	
R 702	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 703	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 704	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 705	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 706	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 707	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R 708	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
R 709	QRD161J-243	CARBON RESISTOR	24K 5% 1/6W	
R 711	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 712	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 713	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 714	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 715	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 716	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 717	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 718	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 719	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 720	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 721	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R 722	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 723	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 724	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 725	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 726	QRD161J-473	CARBON RESISTOR	4.7K 5% 1/6W	
R 727	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 728	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R 729	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 730	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 731	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 732	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 733	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 734	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 735	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 736	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 737	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 738	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	

BLOCK NO. 0111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 739	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 740	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 741	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 742	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 743	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R 744	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 745	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 746	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 747	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 748	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 749	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 750	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 751	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 752	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 753	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 754	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 755	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 756	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 757	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 758	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R 759	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 760	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 761	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 762	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 763	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 764	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 765	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 766	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 767	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R 768	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 769	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 770	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 771	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 772	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 773	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 774	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 775	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 776	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 777	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 778	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 779	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 780	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 781	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R 782	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 783	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 784	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 785	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 786	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 810	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 811	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 812	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 813	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 814	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 815	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 816	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 817	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R 821	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R 822	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R 823	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R 901	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 902	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 903	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 904	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 905	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
R 906	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 907	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 908	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 909	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 911	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 912	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 913	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 916	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
S 701	QSQ4H11-V12Z	TACT SWITCH	TIMER	
S 702	QSQ4H11-V12Z	TACT SWITCH	CLOCK	
S 811	QSQ4H11-V12Z	TACT SWITCH	CD	
S 812	QSQ4H11-V12Z	TACT SWITCH	TAPE	
S 813	QSQ4H11-V12Z	TACT SWITCH	RADIO	
S 814	QSQ4H11-V12Z	TACT SWITCH	STOP	
S 815	QSQ4H11-V12Z	TACT SWITCH	FF	
S 816	QSQ4H11-V12Z	TACT SWITCH	REW	
S 817	QSQ4H11-V12Z	TACT SWITCH	REV	
S 818	QSQ4H11-V12Z	TACT SWITCH	REC	
S 819	QSQ4H11-V12Z	TACT SWITCH	ONE TOUCH REC	
S 821	QSP2K21-V01	PUSH SWITCH	CD OPEN/CLOSE	
T 2	VQT7A21-112	IFT		
TC 2	QAT3114-200Z	T CAPACITOR	MW RF	
TP 1	VMZ0015-002	POST PIN	TO ROD ANT	
TP 2	VMZ0015-002	POST PIN	GND	
TP901	VMZ0015-002	POST PIN		
X 1	VCX5044-001	CRYSTAL		
X 701	M274.19	CERA LOCK		
X 702	VCX5000-002	CRYSTAL		



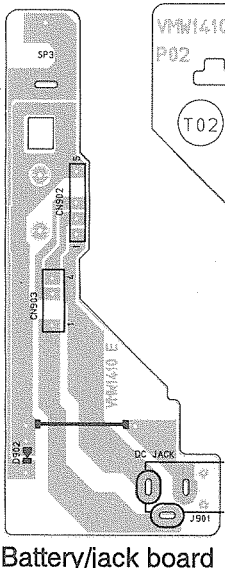
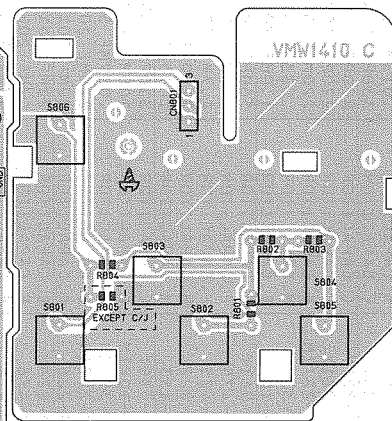
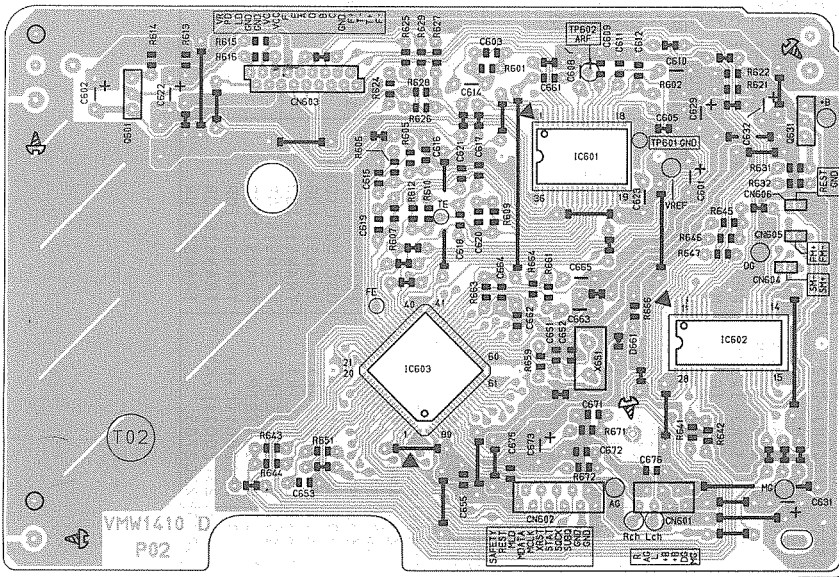
Sab board

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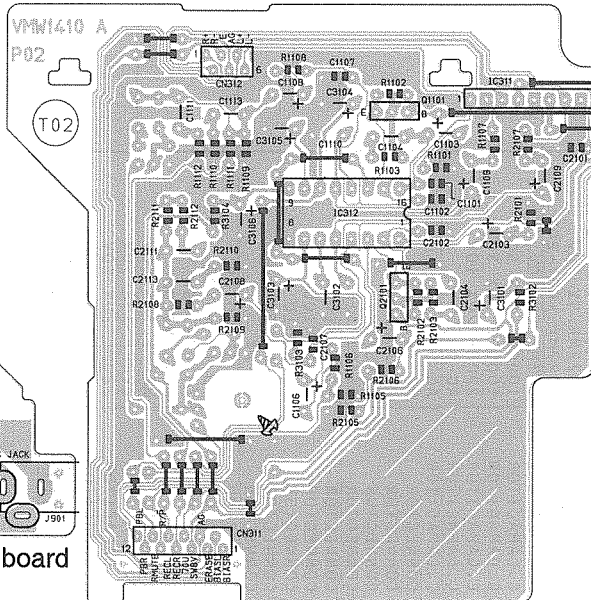


◆ CD amplifier board

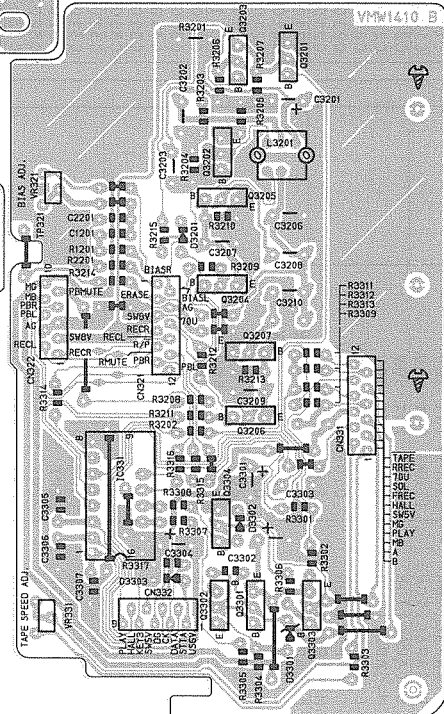
◆ Power switch/volume board



◆ Battery/jack board



◆ Preamplifier board



◆ Bias/mechanism control board (Recording board)

Fig. 9-2

● Sab board parts list

BLOCK NO. 0211111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 601	QEK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C 602	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
C 603	QCSB1HK-3R3Y	C.CAPACITOR	3.3PF 10% 50V	
C 605	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
C 608	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C 609	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C 610	QFN41HJ-273	M.CAPACITOR	.027MF 5% 50V	
C 611	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
C 612	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C 614	QFN41HJ-104	M.CAPACITOR	.10MF 5% 50V	
C 615	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 616	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 617	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 618	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
C 619	QCBB1HK-271Y	C.CAPACITOR	270PF 10% 50V	
C 620	QCBB1HK-181Y	C.CAPACITOR	180PF 10% 50V	
C 621	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
C 622	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
C 623	QFN41HJ-104	M.CAPACITOR	.10MF 5% 50V	
C 629	QEK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C 631	QEK61AM-227ZM	E.CAPACITOR	220MF 20% 10V	
C 632	QEK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C 651	QCS11HJ-220	C.CAPACITOR	22PF 5% 50V	
C 652	QCS11HJ-220	C.CAPACITOR	22PF 5% 50V	
C 653	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 655	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 661	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
C 662	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 663	QFN81HJ-223	M.CAPACITOR	.022MF 5% 50V	
C 664	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
C 665	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
C 671	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 672	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C 673	QER51AM-227	E.CAPACITOR	220MF 20% 10V	
C 675	QCBB1HK-102Y	C.CAPACITOR	AG-DG	
C 676	QCXB1CM-332Y	C.CAPACITOR	AG-DG	
CN311	VMC0314-P12	CONNECTOR	PRI/BIAS	
CN312	VMC0163-R06	CONNECTOR	PRI/HEAD	
CN321	VMC0314-S12	CONNECTOR	BIAS/PRI	
CN322	VMC0314-S10	CONNECTOR	BIAS/MAIN	
CN331	VMC0314-S12	CONNECTOR	BIAS/MECHA	
CN332	VMC0163-009	CONNECTOR	BIAS/MICOM	
CN601	VMC0163-R07	CONNECTOR	TO AUDIO	
CN602	VMC0163-R11	CONNECTOR	TO MICON	
CN603	VMC0248-018	CONNECTOR	TO SP	
CN604	VMC0199-902V	CONNECTOR	TO RF MOTOR	
CN605	VMC0199-202V	CONNECTOR	TO FD MOTOR	
CN606	VMC0199-602V	CONNECTOR	TO REST SW	
CN801	EMV7122-103Z	SOCKET	KEY1/MICOM	
C1101	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
C1102	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
C1103	QEK61AM-227ZM	E.CAPACITOR	220MF 20% 10V	
C1104	QFN41HJ-333	M.CAPACITOR	.033MF 5% 50V	
C1106	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C1107	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	

BLOCK NO. 0211111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C1108	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C1109	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C1111	QFN41HJ-222	M.CAPACITOR	2200PF 5% 50V	
C1113	QFN41HJ-153	M.CAPACITOR	.015MF 5% 50V	
C1201	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
C2101	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
C2102	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
C2103	QEK61AM-227ZM	E.CAPACITOR	220MF 20% 10V	
C2104	QFN41HJ-333	M.CAPACITOR	.033MF 5% 50V	
C2106	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C2107	QCBB1HK-561Y	C.CAPACITOR	560PF 10% 50V	
C2108	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C2109	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C2111	QFN41HJ-222	M.CAPACITOR	2200PF 5% 50V	
C2113	QFN41HJ-153	M.CAPACITOR	.015MF 5% 50V	
C2201	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
C3101	QEK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C3102	QFN31HJ-393ZM	M.CAPACITOR	.039MF 5% 50V	
C3103	QEK61AM-227ZM	E.CAPACITOR	220MF 20% 10V	
C3104	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
C3105	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
C3106	QEK41AM-476	E.CAPACITOR	47MF 20% 10V	
C3201	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
C3202	QFN41HJ-222	M.CAPACITOR	2200PF 5% 50V	
C3203	QFN81HJ-103	M.CAPACITOR	.010MF 5% 50V	
C3206	QFG32AJ-183ZN	PP CAPACITOR	.018MF 5% 100V	
C3207	QFN31HJ-393ZN	M.CAPACITOR	.039MF 5% 50V	
C3208	QFG32AJ-122ZN	PP CAPACITOR	1200PF 5% 100V	
C3209	QFN81HJ-103	M.CAPACITOR	.010MF 5% 50V	
C3210	QFG32AJ-222ZN	PP CAPACITOR	2200PF 5% 100V	
C3301	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
C3302	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C3304	QET41AM-476	E.CAPACITOR	47MF 20% 10V	
C3305	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C3306	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C3307	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C3308	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
D 661	1SS133	SI DIODE		
D3201	1SS133	SI DIODE		
D3301	MTZ5.1JC	ZENER DIODE		
D3303	1SS133	SI DIODE		
IC311	BA3126N	IC	HEAD SW	
IC312	AN7317	IC	PB&REC	
IC331	BU4094BC	IC		
IC601	AN8806SB	IC	RF AMP	
IC602	BA6897FP	IC	DRIVER	
IC603	MN35510	IC	1CHIP PROCESSER	
L3201	VQH7001-032	OSC COIL(BIAS)		
Q 601	2SA952(L,K)	TRANSISTOR		
Q 631	2SA952(L,K)	TRANSISTOR		
Q1101	DTC114TSTP	TRANSISTOR		
Q2101	DTC114TSTP	TRANSISTOR		
Q3201	2SC2001(L,K)	TRANSISTOR		
Q3202	2SC2001(L,K)	TRANSISTOR		
Q3203	2SC2785	TRANSISTOR		

BLOCK NO. 02 [] [] [] []

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q3204	2SC3330	TRANSISTOR		
Q3205	2SC3330	TRANSISTOR		
Q3206	2SC3330	TRANSISTOR		
Q3207	2SC3330	TRANSISTOR		
Q3301	2SB562(C)	TRANSISTOR	SOLENOID DRIVE	
Q3302	2SC3330	TRANSISTOR		
Q3303	2SA952(L,K)	TRANSISTOR	MOTER+B	
Q3304	DTC124ES	TRANSISTOR		
R 601	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 602	QRD161J-225	CARBON RESISTOR	2.2M 5% 1/6W	
R 605	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
R 606	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R 607	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 609	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 610	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
R 612	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 613	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R 614	QRD161J-100	CARBON RESISTOR	10 5% 1/6W	
R 615	QRD161J-120	CARBON RESISTOR	12 5% 1/6W	
R 616	QRD161J-910Y	CARBON RESISTOR	91 5% 1/6W	
R 621	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
R 622	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
R 624	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 625	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 626	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 627	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 628	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 629	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 631	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 632	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 641	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 642	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
R 643	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R 644	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 645	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R 646	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 647	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 651	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 659	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	
R 661	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 663	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
R 664	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 666	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R 671	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 672	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 801	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 802	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 803	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 804	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R 805	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R1101	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R1102	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R1103	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R1105	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R1106	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	

BLOCK NO. 02 [] [] [] []

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R1107	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R1108	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R1109	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R1110	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R1111	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R1112	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R1201	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R2101	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R2102	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R2103	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R2105	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R2106	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R2107	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R2108	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R2109	QRD161J-242	CARBON RESISTOR	2.4K 5% 1/6W	
R2110	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R2111	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R2112	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R2201	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R3102	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R3103	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R3104	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R3201	QRD14CJ-5R6SX	UNF.C.RESISTOR	5.6 5% 1/4W	
R3202	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3203	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R3204	QRD161J-470	CARBON RESISTOR	47 5% 1/6W	
R3205	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3206	QRD161J-120	CARBON RESISTOR	12 5% 1/6W	
R3207	QRD161J-390	CARBON RESISTOR	39 5% 1/6W	
R3208	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R3209	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R3210	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R3211	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R3212	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R3213	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
R3214	QRD161J-474	CARBON RESISTOR	470K 5% 1/6W	
R3215	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3301	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3302	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3303	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R3304	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
R3305	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R3306	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3307	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R3308	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3309	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3311	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R3312	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R3313	QRD161J-512	CARBON RESISTOR	5.1K 5% 1/6W	
R3314	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3315	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R3316	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3317	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
S 801	QS04H11-V122	TACT SWITCH	POWER	
S 802	QS04H11-V122	TACT SWITCH	VOL-	

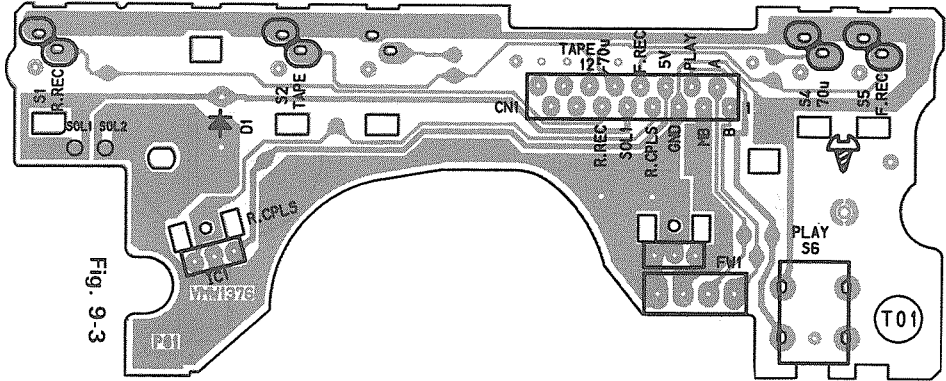
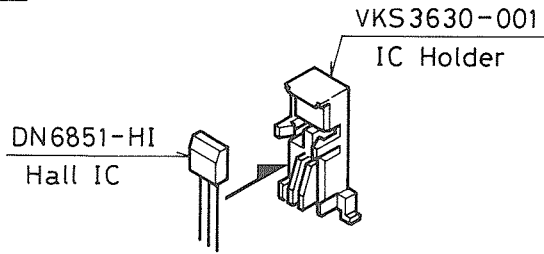


Fig. 9-3



Cassette mechanism board

BLOCK NO. 02

△ REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
S 803	QSQ4H11-V12Z	TACT SWITCH	VOL+	
S 804	QSQ4H11-V12Z	TACT SWITCH	SOUND	
S 805	QSQ4H11-V12Z	TACT SWITCH	BASS	
S 806	QSQ4H11-V12Z	TACT SWITCH	ONE TOUCH TUNE	
VR321	QVZ3534-203J6	SEMI V RESISTOR	BIAS ADJ	
VR331	QVZ3534-103J6	V RESISTOR	TAPE SPEED ADJ	
X 651	CSA16.93MXZ040T	CERA LOCK	16.9344MHZ	

Cassette mechanism board parts list

BLOCK NO. 03

△ REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CN 1	VMC0314-P12	CONNECTOR		
D 1	1SR139-400	SI DIODE		
FW 1	VWSC04-11A13K	TM FLAT WIRE		
IC H	VKS3630-001MM	IC HOLDER		
IC 1	DN6851-HI	HALL IC		
S 1	MXS00220MVLO	CASSETTE SWITCH		
S 2	MXS00220MVLO	CASSETTE SWITCH		
S 4	MXS00220MVLO	CASSETTE SWITCH		
S 5	MXS00220MVLO	CASSETTE SWITCH		
S 6	QSEC001-E03	SWITCH		

10 Exploded view of mechanism assembly

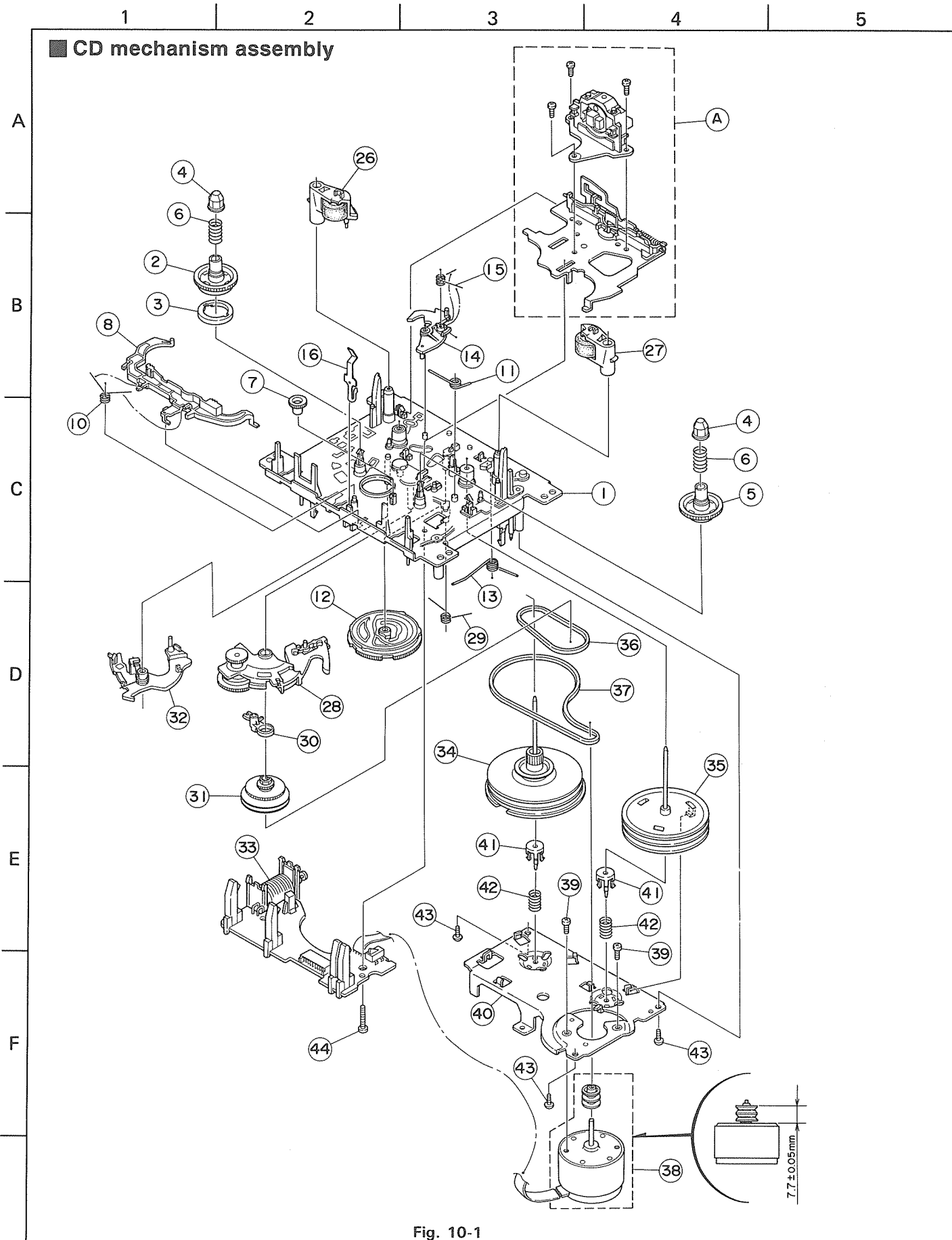


Fig. 10-1

■ CD mechanism assembly

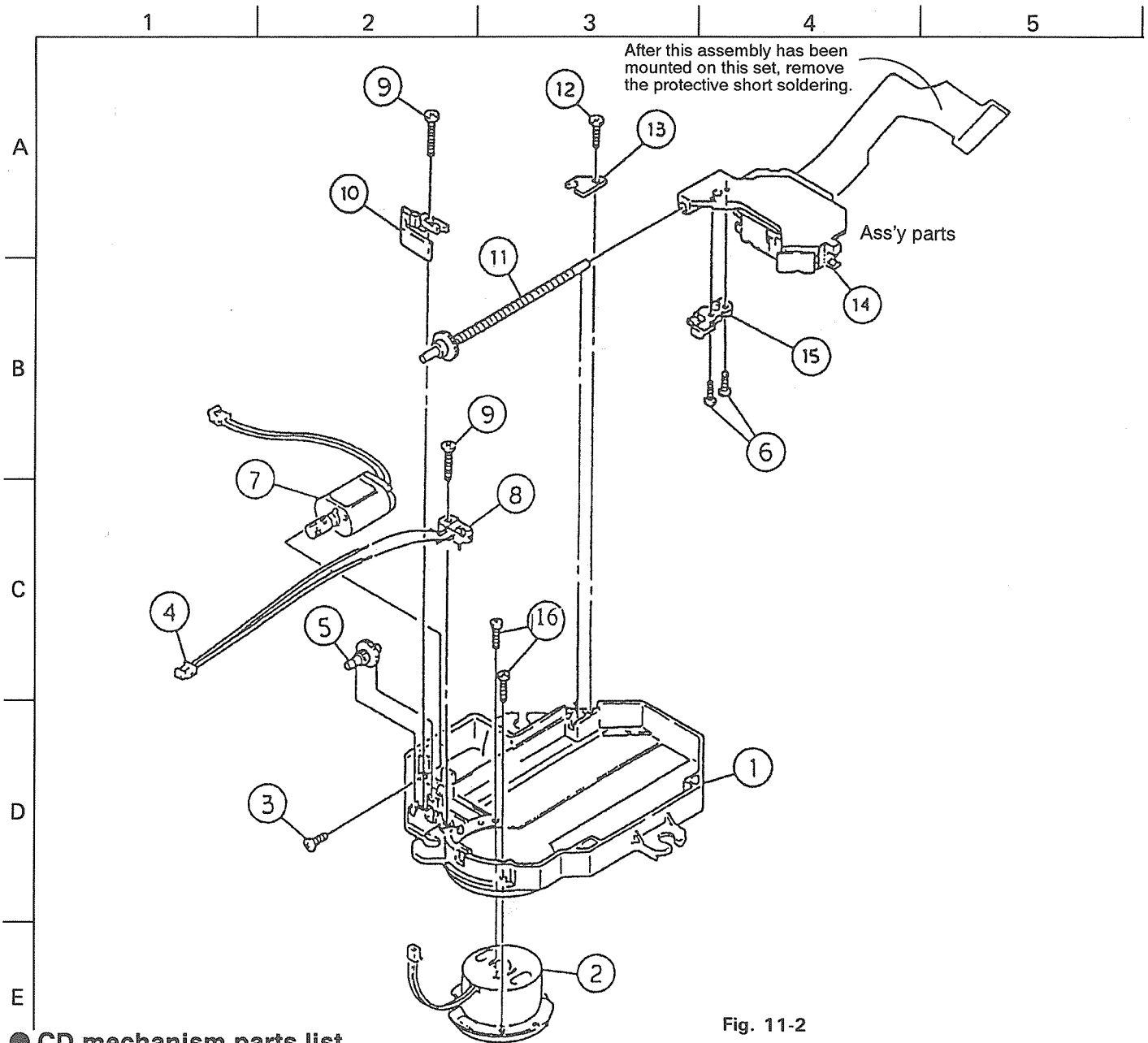


Fig. 11-2

● CD mechanism parts list

BLOCK NO. M2MM

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	2-625-415-05	SHASSIS		1		
2	X-2625-485-1SA	MOTOR ASS'Y		1		
3	3-732-988-01	SCREW	M2 X 2.5	1		
4	1-948-418-21	HARNESS		1		
5	2-625-410-01	GEAR(B)		1		
6	7-627-852-17	SCREW	FOR RACK	2		
7	X-2625-171-2	FEED MOTOR ASSY		1		
8	1-570-771-11	SWITCH		1		
9	2-625-623-11	SCREW	FOR SWITCH	2		
10	2-625-412-02	SLED SCREW		1		
11	X-2625-483-1	SLED SCREW ASSY		1		
12	2-625-623-01	SCREW	SLED SCREW	1		
13	2-625-411-01	RETAINER SHAFT		1		
14	8-848-289-31SA	PIC UP ASS'Y		1		
15	2-625-414-02	RACK		1		
16	7-627-852-18	SCREW	FOR MOTOR	2		

11 Exploded view of enclosure assembly

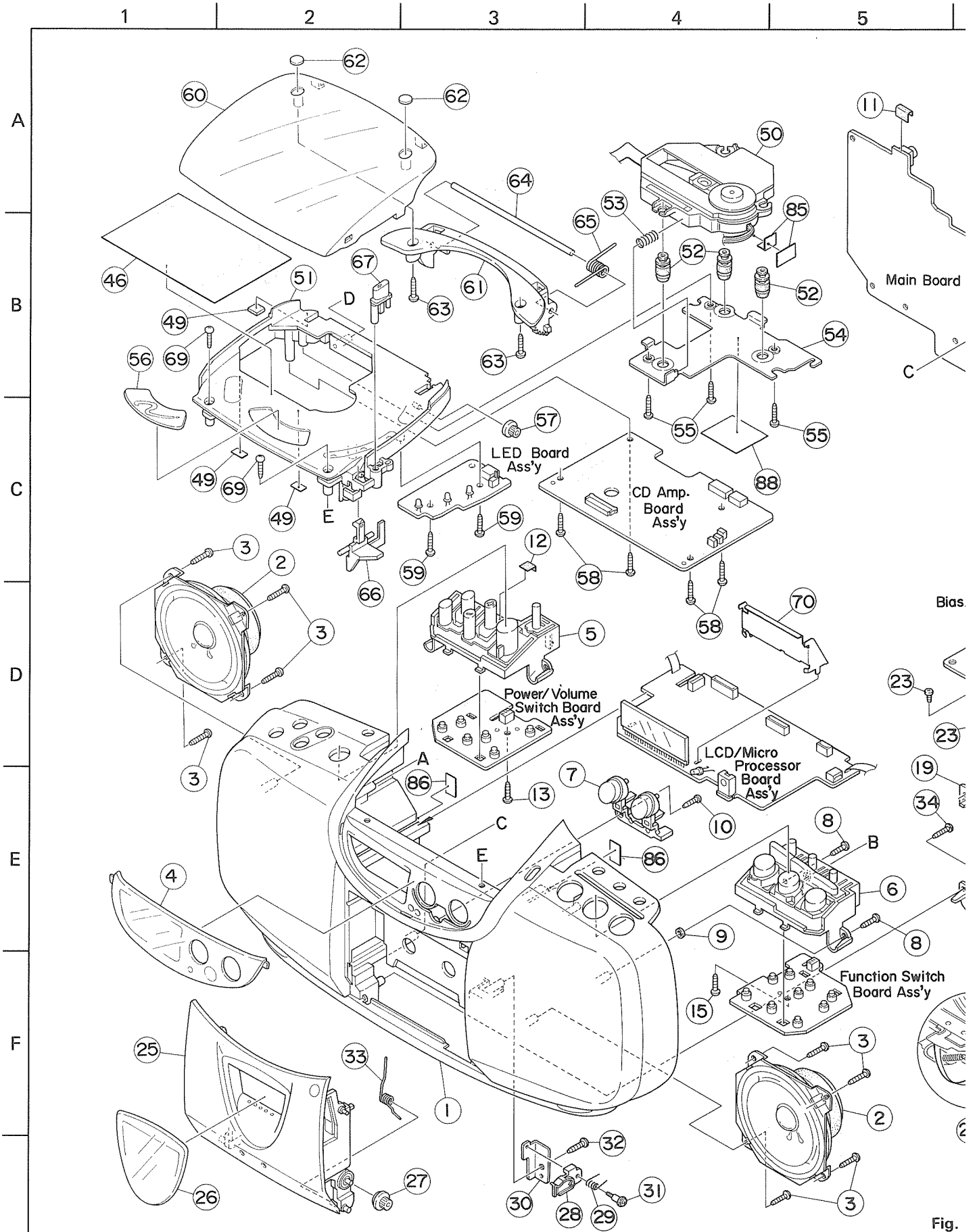


Fig.

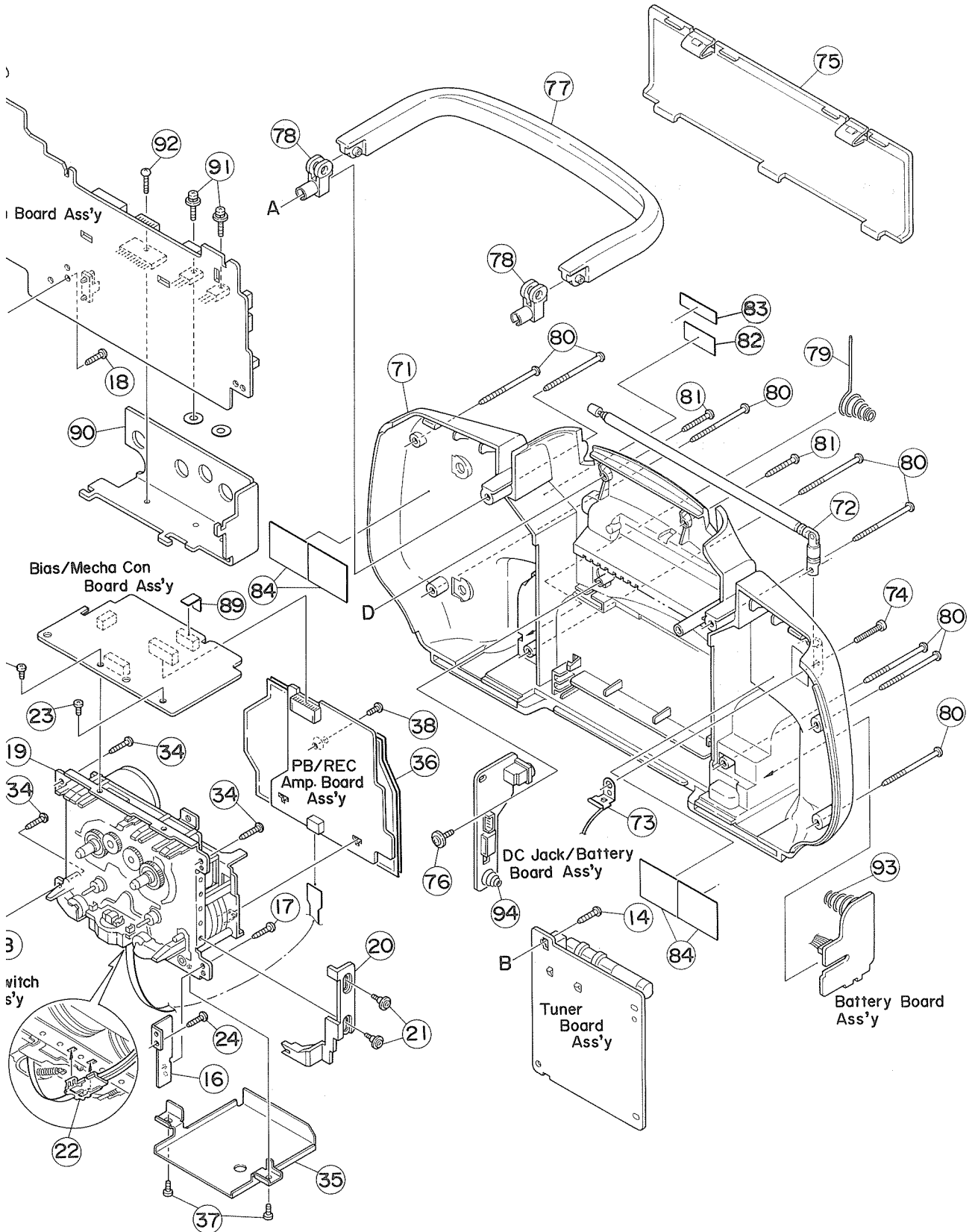
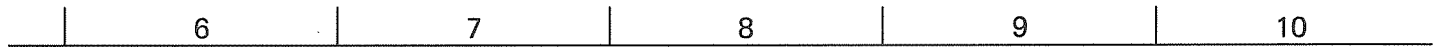


Fig. 11-1

● Enclosure parts list

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	VJG1389-00E	FRONT CAB ASS'Y		1		GR
	VJG1389-00F	F.CABINET ASS'Y		1		WT
2	VGS1001-031	SPEAKER		2		
3	SBSF3010Z	SCREW	FOR SPEAKER	8		
4	VJK3677-002	LCD LENS		1		
5	VXP3759-001	POWER BUTTON		1		GR
	VXP3759-011	POWER BUTTON		1		WT
6	VXP3760-00D	FUNC.BTN. ASS'Y		1		WT
	VXP3760-00C	FUNC.BTN. ASS'Y		1		GR
7	VXP5324-00C	TIMER BTN ASS'Y		1		GR
	VXP5324-00D	TIMER BTN ASS'Y		1		WT
8	SSSF3010Z	SCREW	FUNC.BTN+FRONT	2		
9	VYSS2R5-024	SPACER	FOR FRONT CABI	1		
10	SBSF2608Z	SCREW	TIMER BTN+FRONT	1		
11	VYSA1R4-056	SPACER	MAIN PWB	1		
12	VYSA1R4-056	SPACER	FOR P.BUTTON	1		
13	SSSF3010Z	SCREW	P.BUTTON+SW PWB	1		
14	SBSF3010Z	SCREW	FOR TUNER PWB	1		
15	SSSF3010Z	SCREW	FUNC.BTN+SW PWB	1		
16	VYH8046-001	MECHA SUPPORT		1		
17	SBST3006Z	SCREW	M.SUPPORT+MECHA	1		
18	SBSF3010Z	SCREW	FOR MAIN PWB	1		
19	-----	CASSETTE MECHA		1		
20	VYH8041-001	EJECT SAFETY		1		
21	VKZ4323-002	SCREW	FOR E.SAFETY	2		
22	VKS3655-002	F.P.C. HOLDER		1		
23	SDST2604Z	SCREW	MECHA PWB	2		
24	SSSF3012Z	SCREW	FOR FRONT+MECHA	1		
25	VJT2366-003	CASSETTE DOOR		1		GR
	VJT2366-013	CASSETTE DOOR		1		WT
26	VJT4231-011	DOOR LENS		1		WT
	VJT4231-001	DOOR LENS		1		GR
27	VYH5601-001	GEAR	USE GREES G332	1		
28	VYH8027-001	LOCK CAM		1		
29	VKW5229-001	SPRING	FOR LOCK CAM	1		
30	VYH8042-001	CAM HOLDER		1		
31	VKZ4341-001	SPECIAL SCREW	LOCK CAM+CAM HO	1		
32	SBSF3010Z	SCREW	F.CABI+LOCK CAM	1		
33	VKW5219-004	DOOR SPRING		1		
34	SSSF3012Z	SCREW	FOR FRONT+MECH	3		
35	VMA4668-001	SHIELD CASE	FOR C MECHA HEA	1		
36	VMA3232-004	SHIELD	FOR REC AMP PWB	1		
37	SDST2604Z	SCREW	FOR S.CASE	2		
38	SBST3006Z	SCREW	FOR SHIELD&PRE	1		
46	VND5093-002	CAUTION SHEET		1		
49	VYSS1R5-079	SPACER		3		
50	-----	CD MECHA		1		
51	VJD1206-011	CD CASE		1		WT
	VJD1206-003	CD CASE		1		GR
52	VYH8028-001	DAMPER	CD MECHA+CD CAS	3		
53	VKW5220-001	CONICAL SPRING		1		
54	VYH3913-002	CD HOLDER		1		
55	SBSF3008Z	SCREW	CD CASE+CD HOLD	3		
56	VJD5482-001	PLATE	FOR CD CASE	1		GR
	VJD5482-011	PLATE		1		WT

BLOCK NO. M1MMM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
57	VYH8044-001	GEAR	CD CASE+CD DOOR	1		
58	SBSF3008Z	SCREW	CD CASE+CD PWB	4		
59	SBSF3008Z	SCREW	CD CASE+LED PWB	2		
60	VJT2367-002	CD DOOR		1		GR
	VJT2367-012	CD DOOR		1		WT
61	VJD3994-001	CD DOOR HOLDER		1		
62	VJD5458-002	PLATE		2		
63	SSST3006M	SCREW	CD DOOR+CD COVE	2		
64	VYH8029-002	SHAFT	CD DOOR	1		
65	VKW5221-001	CD DOOR SPRING		1		
66	VYH8030-001	LOCK LEVER		1		
67	VXP5326-001	CD EJECT BUTTON		1		GR
	VXP5326-011	CD EJECT BUTTON		1		WT
69	SSSF3010M	SCREW	CD CASE+FRONT	2		
70	VYH3914-001	LCD HOLDER		1		
71	VJG1392-003	REAR CABINET		1		GR
	VJG1392-013	REAR CABINET		1		WT
72	VJA3001-00A(C)	ROD ANT ASS'Y		1		
73	VYH8025-001	TERMINAL LUG		1		
74	SDSP3012N	SCREW	FOR ROD ANT	1		
75	VJC2557-011	BATTERY COVER		1		WT
	VJC2557-001	BATTERY COVER		1		GR
76	E65923-003	TAPPING SCREW	BATTERY PWB	1		
77	VJH2017-001	HANDLE		1		GR
	VJH2017-011	HANDLE		1		WT
78	VYH8043-001	HANDLE SUPPORTE		2		
79	VYH8026-001	BATTERY SPRING		1		
80	SBSF3035Z	SCREW	FRONT+REAR	8		
81	SBSF3010Z	SCREW	CD CASE+REAR	2		
82	VYN5198-C002T	NAME PLATE		1	B	GR
	VYN5198-C005T	NAME PLATE		1	E,GI	GR
	VYN5198-C008T	NAME PLATE		1	G	GR
	VYN5198-C102T	NEME PLATE		1	B	WT
	VYN5198-C105T	NAME PLATE		1	E	WT
	VYN5198-C108T	NAME PLATE		1	G	WT
83	E70891-001	CLASS 1 LABEL		1		
84	VYSA1R6-071	SPACER	SOUND ADJUST	4		
85	VYSA1R4-056	SPACER		2		
86	VYSA1R4-056	SPACER		2		
88	E406507-001	MECHA C.LABEL		1		
89	VYSA1R6-072	SPACER	FOR DROPPING TE	1		
90	VYH3915-001	HEAT SINK	IC301,Q904,Q908	1		
91	DPSP3010Z	SCREW	FOR Q908	2		
92	SBSF3010Z	SCREW	FOR IC301	1		
93	VYH8047-001	BATTERY SPRING		1		
94	VYH7199-001	BATTERY SPRING		1		

12 Packing illustration and parts list

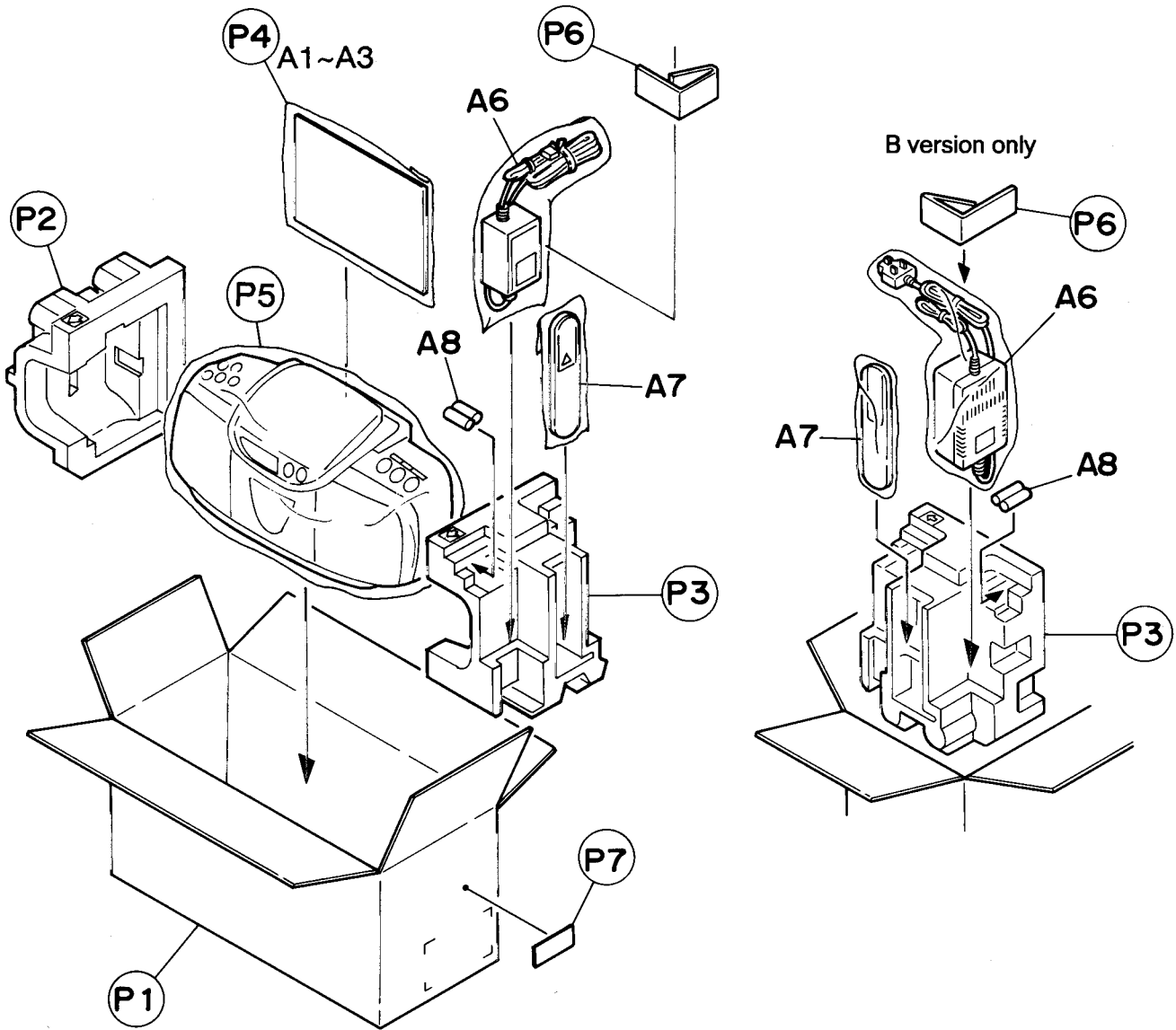


Fig. 12-1

● Packing parts list

BLOCK NO. M4MM

▲	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
P	1	VPC5198-C002	CARTON		1		GR
		VPC5198-C012	CARTON		1		WT
P	2	VPH1685-001	CUSHION (L)		1		
P	3	VPH1685-002	CUSHION (R)		1		
P	4	VPE3005-007	POLY BAG		1		
P	5	VPE3026-003	POLY BAG		1		
P	6	VPK4324-001	SPACER	FOR AC ADAPTOR	1	B	
		VPK4323-001	SPACER	FOR AC ADAPTOR	1	E,G,GI	
P	7	-----	CARTON LABEL	4975769132308	1		GR
		-----	CARTON LABEL	4975769131875	1		WT

● Accessories

BLOCK NO. M5MM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	VNN5198-261C	INSTRUCTIONS		1	E,G	
		VNN5198-671C	INSTRUCTIONS		1	B	
		VNN5198-251C	INSTRUCTIONS		1	E,G,I	
	A 2	BT-54003-1	WARRANTY CARD		1	B	
		BT-20066A	WARRANTY CARD		1	B	
		BT-20135	WARRANTY CARD		1	G	
	A 3	E43486-340B	SAFETY INST SHE		1	B	
△	A 6	VGB0120-007	AC ADAPTOR	AA-R1206B	1	B	
△		VGB0120-006	AC ADAPTOR	AA-R1206E	1	E,G,G,I	
	A 7	VGR0049-101	REMO-CON UNIT	RM-RXNX1BK	1		
	A 8	R6PPTT-2STSA	BATTERY		1		

JVC

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