JVC

SERVICE MANUAL

CD PORTABLE SYSTEM

UX-C30 B/E/G/EN/GI

COMPACT disc DIGITAL AUDIO

Area Suffix	
B	U.K.
E	Continental Europe
G	Germany
EN	North Europe
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 black (BK) and white (WT) types (In the parts list, both of the types are indicated by abbreviations (BK) and (WT)).

Contents

No.1960
March 1996

1. 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 by (⚠) on the parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement 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, mpving 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.).

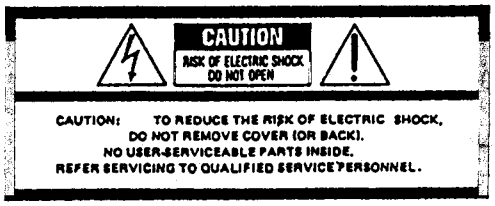
⚠ CAUTION

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

2. Safety Precaution about UX – C30

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** 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 compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder 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.



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.

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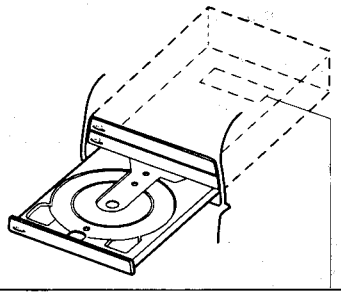
REPRODUCTION OF LABELS AND THEIR LOCATION



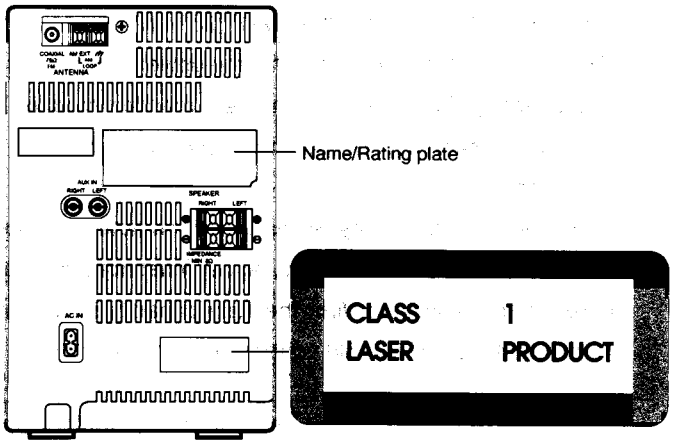
DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	**ADVARSEL:** Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (d)	**VARNING:** Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)	**VARO:** Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

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

VAROITUS: Varmuuskytkimen oliessa pois päältä kun laite avataan, siellä kehittyy näkymätöbtä lasersäteilä. Älä pane itseäsi säteilyn altiiksi.

VARNING: Osynlig laserståining uppstår vid komponentens öppning när säkerhetsbrytaren är frånslagen.

ADVARSEL: Usynling laserstråling ved åpning når sikkerhetsbryteren er ude af funktion Unngå utsettelse for stråling.

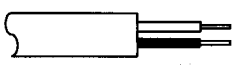


IMPORTANT (In the United Kingdom)
Mains Supply (AC 230 V~, 50 Hz only)

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:



Blue to N (Neutral) or Black
Brown to L (Live) or Red

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.

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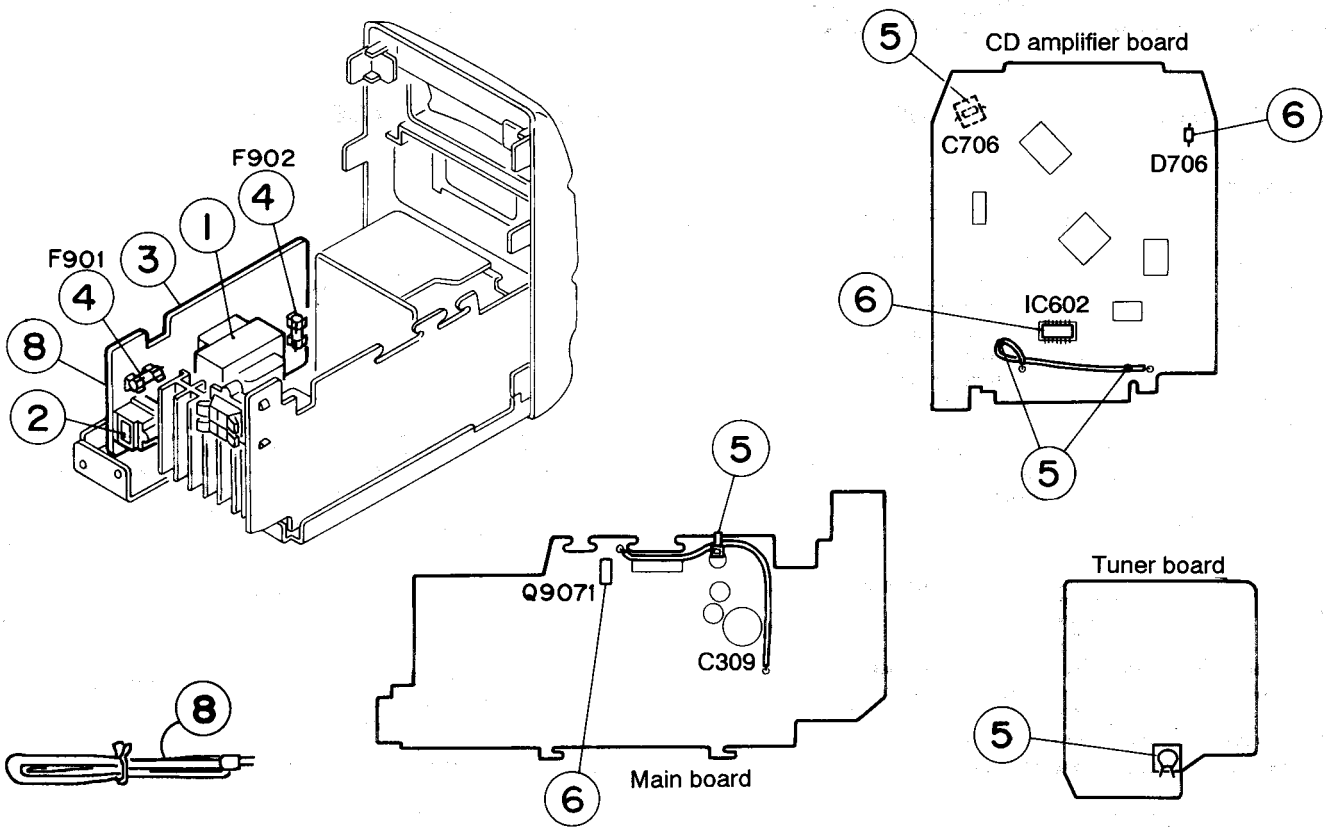
IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN.



■ Inportant management points regarding safety(Item demanding special safety precautions)

1. Power transformer marking : VTP66J9-12A
   The torque of the screw driver for the power transformor must be controlled.
2. Concerning the AC socket, the next marking must be confirmed and to avoid print circuit board pattern damage. The AC socket must not float from print circuit board.
   •Marking ·····HSC0586
3. Concerning the primary terminal and the adjacent secondary terminal on the print circuit board to provide proper creeping and spatial distance, solder must not protrude from soldering round.
4. Before installation confirm the fuse capacity indication, UL or CSA mark on the fuse capacity. When installing, confirm if the fuse is held tightly with the fuse holder.

REF. NO	Capacity and mark	Indication on P. C. board
F901	T500mA / 250V	T500mA
F902	T5A / 250V	T5A

5. The parts on the pattern side of the print circuit board must be fixed with spacers or bond.
6. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up the parts in ( ) must be controled.
   •Diode: D901~D904, D9072, (D706) •IC: IC31, IC602 •Transistor: (Q9071), Q9041 •Resistor: R902, R9005, R3021, R9073
8. Check the power cord markong, and check that the power cord is mot externally damaged.

	B version	E/G/GI/EN version
Cord mark:	BASEC BS6500	◀ VDE ▶
Attachment plug:	KP-610, ▽ 3A	KP-419C
Connect plug:	KS-15F, ▽	KS-15F

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.

CONTENTS

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

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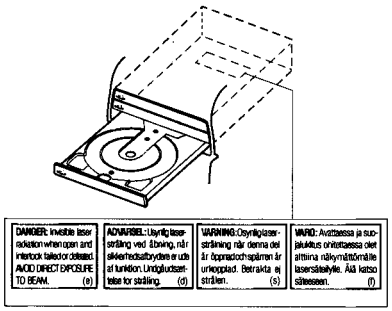

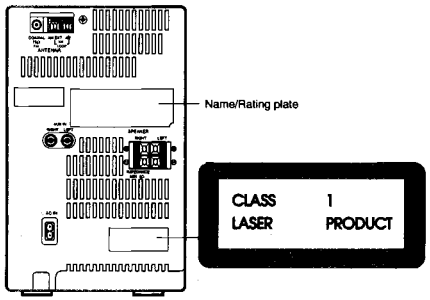

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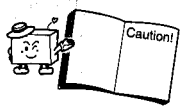
3. Instructions

FEATURES

- Multi-function 3-CD changer
- Active Hyper-Bass PRO circuit for low-frequency sound reproduction
- One-touch operation (IlluminMagic COMPU PLAY)
- 38-key remote control unit operates all CD, cassette deck and tuner functions
- Direct Disc Select/Skip Play/Search Play/Continuous Play/Repeat Play/Random Play
- Programmed play of up to 20 tracks
- U-Turn auto-reverse full-logic mechanism with Dolby* B NR
- Auto tape select mechanism
- Metal (type IV) and CrO_2 (type II) tape can be played back for superior tone quality
- CrO_2 (type II) tape recording capability
- Music scan in forward or reverse direction
- 2-band digital synthesizer tuner with 30-station (15 FM and 15 AM (MW/LW)) preset capability
- Seek/manual tuning
- Auto preset tuning
- Timer/Clock function
- Timer on/off with preset volume function
- Sleep timer can be set for up to 120 minutes

* Dolby noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

SAFETY PRECAUTIONS



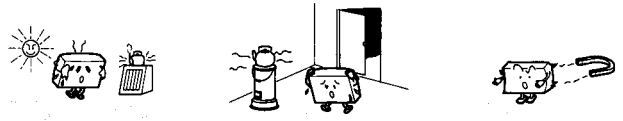
Prevention of Electric Shocks, Fire Hazards and Damage

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.
12. Since this unit uses a motor-driven CD holder or CD tray, make sure that your hand or other object does not obstruct holder or tray movement.

POWER button
When the power cord is connected to a household AC outlet, the power STANDBY indicator lights in the display window. When the POWER button is pressed, the power STANDBY indicator goes out.

When this unit is plugged into an AC outlet, it consumes a small current to operate the remote control and timer, or to back up the memory of the microprocessor, even when the POWER button is set to STANDBY.

HANDLING PRECAUTIONS



Do not use this unit in direct sunlight where it would be exposed to high temperatures above 40°C (104°F).

- When abnormal operation occurs.
  * Unplug the AC power cord from the AC outlet. Then reconnect and switch the power ON.

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 holder or CD tray so that dust does not collect on 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.
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. **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.
6. **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.
7. **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.
8. **When listening with headphones**
   - Do not listen at high volumes as this could damage your hearing.

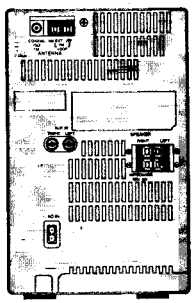
UX – C30 B/E/G/EN/GI
(No. 1960) 5

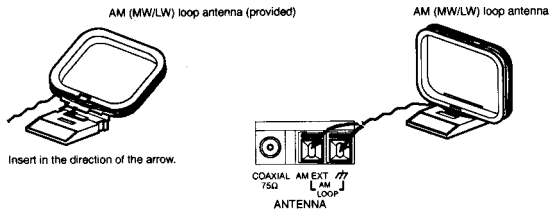
CONNECTIONS

- Do not switch the power on until all connections are completed.

Antenna connection and adjustment

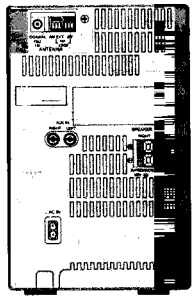
- AM (MW/LW) loop antenna adjustment

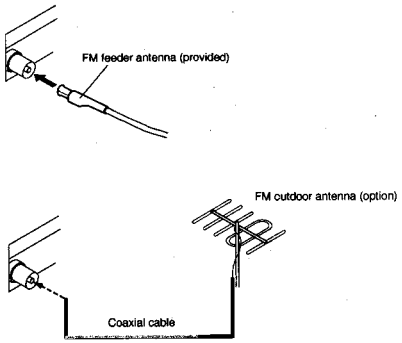




- Keep the loop antenna away from the unit and install it so that the best reception is obtained. (Do not leave the antenna wire in a bundle.)

- FM antenna connections and adjustments

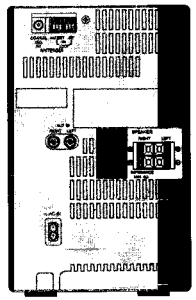


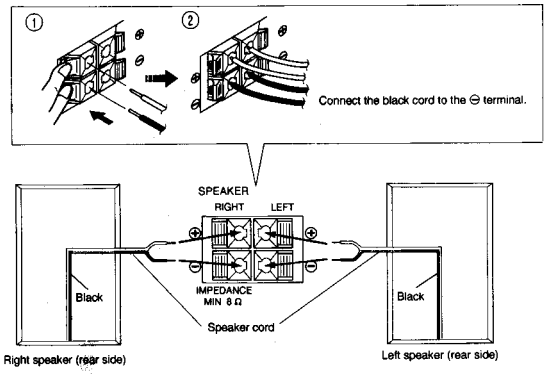


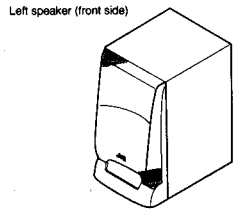
- Use an outdoor antenna when stable reception cannot be obtained with the provided antenna.

Notes:
- Do not place the loop antenna on a metal desk or near a TV or personal computer.
- Installing an outdoor antenna requires expertise; we recommend that you consult an audio dealer.
- Install the antenna cord away from the power and speaker cords as these could generate noise. Do not install the loop antenna so that it touches the rear of the unit.

Speaker cord connection



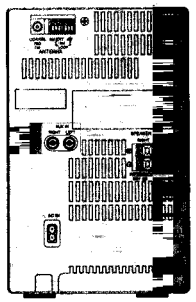


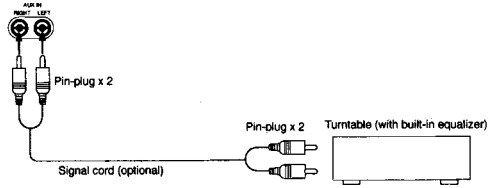


- Speaker set up
  The speaker side with the longer length should be facing the side of the main unit.

Notes:
- The polarity of the two connected speakers will be the same if the black speaker cords are connected to the ⊖ terminals. If the speakers are connected with polarities reversed, stereo effect and tone will be degraded.
- The speakers of this unit are not magnetically shielded. When they are placed directly on or adjacent to a TV, the TV's picture could be distorted. Install the speakers more than 10 cm away from your TV.
- If the speakers are to be placed away from the main unit, purchase optional speaker cords from an audio store.
- When connecting the speaker cord make sure that the wire core, not the insulating cover, is connected to the speaker terminal. Otherwise, sound cannot be heard.

Connection of external audio units

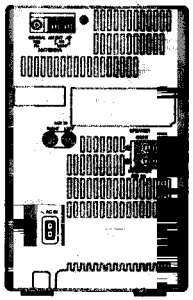




POWER SUPPLY

Connection of AC power cord

- Connect the AC power cord after all other connections have been made.



CAUTIONS:

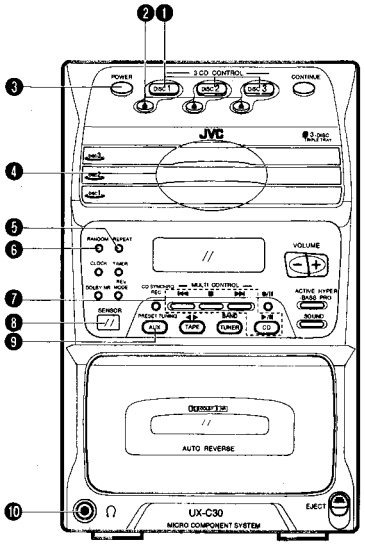
1. **ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT.**
2. **BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.**

Note:

- When there is a power failure or the AC power cord is disconnected, the timer/clock setting is erased from memory. Reset the clock when the power supply is restored.

NAMES OF PARTS AND THEIR FUNCTIONS

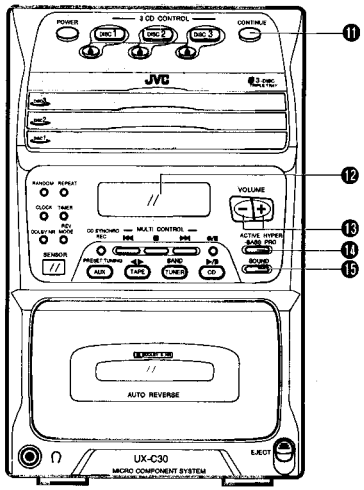
CD changer/General section

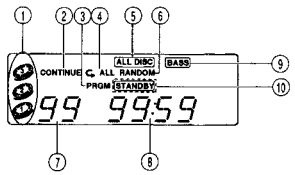


❶ 3CD CONTROL buttons (DISC 1-DISC 3)
❷ CD tray (⏏) open/close buttons (DISC 1-DISC 3)
❸ POWER button
❹ CD trays (DISC 1-DISC 3)
❺ REPEAT play button
❻ RANDOM play button
❼ CD operation buttons
CD search buttons (I◄◄, ►►I):
Press to locate the beginning of a track and to start forward/reverse search operations.
Stop/clear button (■):
Press to stop playing a CD or cancel programmed play.
Play/pause button (►/❚❚):
Press to play a CD or to stop temporarily.
❽ SENSOR section
The remote control signal is received in the SENSOR section. Approach this section with your hand to activate IllumiMagic COMPU PLAY.
❾ AUX button
❿ Headphones jack (Ω) (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.
⓫ CONTINUE play button
⓬ Display window
① CD number indicators (Disc 1-Disc 3)
② CONTINUE play indicator
③ Program mode indicator (PRGM)
④ Repeat play indicator (⇄ ALL)
⑤ ALL DISC indicator
⑥ RANDOM play indicator
⑦ Function/Track number display
⑧ Play time display
⑨ ACTIVE HYPER-BASS PRO indicator (BASS)
⑩ Power STANDBY indicator

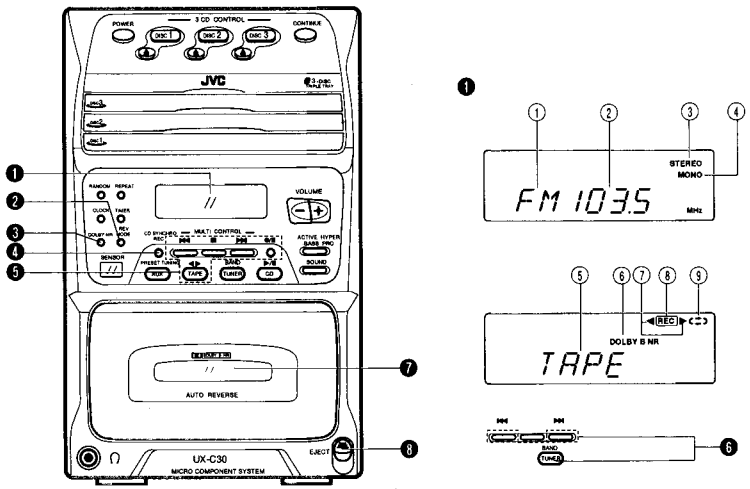
- See page 22 for the clock adjustment.

⓭ VOLUME buttons (+, –)
⓮ ACTIVE HYPER-BASS PRO button
⓯ SOUND button





Tuner/Deck section



❶ Display window
① Band indicator
② Radio frequency display
③ STEREO indicator
④ MONO indicator
⑤ Tape (TAPE) mode display
⑥ DOLBY B NR indicator
⑦ Tape direction indicator (◄, ►)
⑧ Recording indicator (REC)
⑨ Reverse mode indicator (⇕ /⇉ /⇄)

❷ Reverse (REV) MODE button
⇕ : For single-side recording or playback
⇉ : For recording or playback on both sides
⇄ : For continuous play

❸ DOLBY NR button
Set to ON when recording or playing back tapes using the noise reduction system.

❹ CD SYNCHRO REC button
PRESET TUNING button

❺ Cassette operation buttons
I◄◄: Press to fast wind the tape from right to left or to start Music scan.
■ : Press to stop the tape.
►►I: Press to fast wind the tape from left to right or to start Music scan.
●/II : Press to set the unit to the record or record-pause mode.
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.

❻ TUNER/BAND button
Press to select tuner mode.
Press to select the band.
Tuning buttons (I◄◄/►►I)

❼ Cassette holder

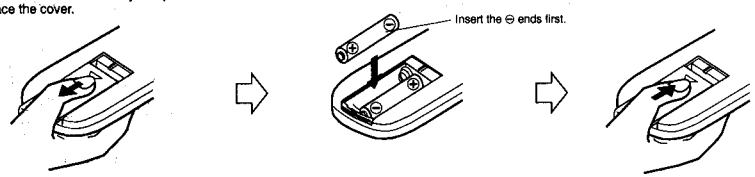
❽ EJECT button

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.



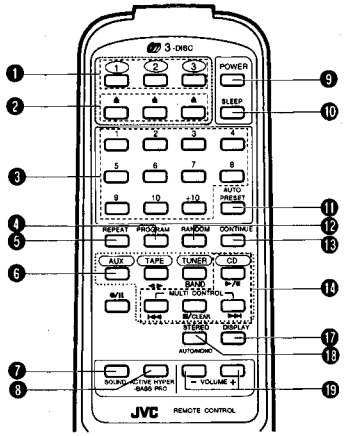
• Battery replacement
When the remote control operation becomes unstable or the distance from which remote control is possible decreases, replace the batteries.

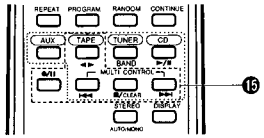
Using the remote control unit

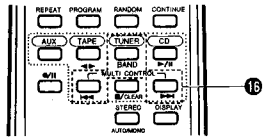
- Point at the remote SENSOR and operate within about 7 m (approx. 23 ft).
- The remote control range is less when the unit is used at an angle.
- Do not expose the remote SENSOR to strong direct sunlight or artificial lighting.
- Make sure that there are no obstacles between the remote SENSOR and the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

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

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







❶ 3CD CONTROL buttons (DISC 1-DISC 3)
❷ CD tray (▲) open/close buttons (DISC 1-DISC 3)
❸ Track number buttons (No. 1 to No. 10, +10)
Preset station buttons (No. 1 to No. 10, +10)
❹ PROGRAM button
❺ REPEAT play button
❻ AUX button
❼ SOUND button
❽ ACTIVE HYPER-BASS PRO button
❾ POWER button
❿ SLEEP button
⓫ AUTO PRESET button
⓬ RANDOM play button
⓭ CONTINUE play button
⓮ CD operation buttons
Play/pause button (►/II):
Press to play a CD or to stop temporarily.
Stop (■)/CLEAR button
CD search buttons (I◄◄, ►►I):
Press to locate the beginning of a track and to start forward/reverse search operations.

⓯ Cassette operation buttons
I◄◄: Press to fast wind the tape from right to left or to start Music scan.
■/CLEAR : Press to stop the tape.
►►I: Press to fast wind the tape from left to right or to start Music scan.
●/II : Press to set the unit to the record or record-pause mode.
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.

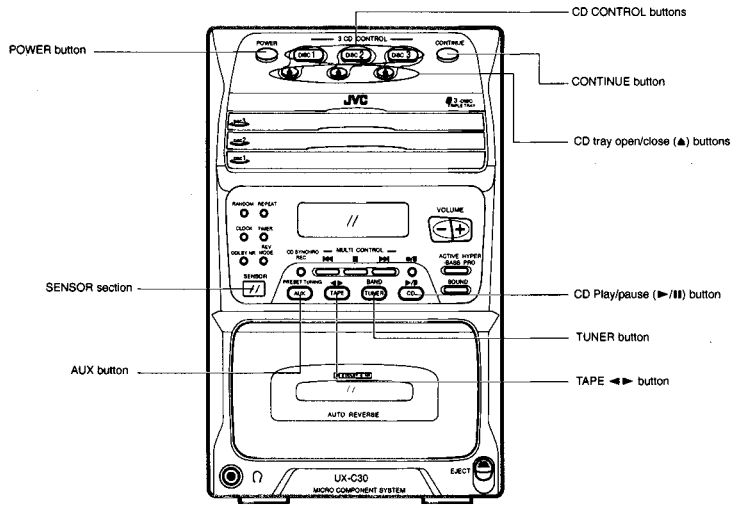
⓰ TUNER/BAND button
Press to select tuner mode.
Press to select the band.
Tuning buttons (I◄◄/►►I)

⓱ DISPLAY button
Use to display the current time.

⓲ STEREO AUTO/MONO button

⓳ VOLUME buttons (+, –)

SWITCHING THE POWER ON/OFF



Switching the power on/off

- Switching on:

POWER

The STANDBY indicator goes out. • One of the function buttons (AUX/TAPE/TUNER/CD) lights.

- Switching off:

POWER

The STANDBY indicator lights. • The indicator in the display window goes out and only the clock is indicated.

One touch operation (COMPU PLAY)

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

	Function mode	Operations
►/II CD; DISC 1 DISC 2 DISC 3; CONTINUE	CD	When this button is pressed with a CD loaded, CD playback begins.
◄► TAPE	TAPE	When this button is pressed with a tape loaded, tape playback begins.
BAND TUNER	TUNER	When this button is pressed, the tuner is engaged.
AUX	AUX	A sound source connected to the AUX IN terminal can be engaged.

IllumiMagic COMPU PLAY

When approaching the SENSOR section with your hand while the POWER button is set to STANDBY, one touch operation button indicators automatically blink for 10 seconds so that these button indicators can be easily found for sound source selection.

If nothing is done while these indicators blink.....
The blinking indicators go out after 10 seconds. Then, after 2 seconds elapse, IllumiMagic COMPU PLAY will be activated again.

When the same operation is performed with the POWER button set to ON, one touch operation button indicators light for 10 seconds. Select the desired source while the indicators are lit. If a source is not selected while these indicators are lit, all one touch operation button indicators, except that of the mode you preset, will go out.

Notes:

- When your hand approaches a point approx. 30 cm (11-13/16") from the SENSOR section, the indicators blink (or light).
- Since the sensor detects light reflection, an object other than a hand approaching the sensor can activate IllumiMagic COMPU PLAY. However, operational distance varies depending on the shape or color of object, or brightness of conditions.
- When an object is placed in front of the SENSOR section, the indicator may blink repeatedly. However, this is not a malfunction. Take one of the following measures.
  - Do not place anything in front of the SENSOR section within a distance of 1 m (3.28 ft).
  - Change the direction of this unit.
  - Relocate this unit.

When the indicator blinking (or lighting) is not required.....

When the POWER buttton is set to STANDBY, operate as follows.

SOUND POWER

Press the POWER button while pressing the SOUND button. "OFF" is shown in the display window.
(Perform the same operations to activate IllumiMagic COMPU PLAY again. "ON" is displayed in the display window.)

Notes:

- When the CD tray open/close (▲) button is pressed, the sound source does not switch over, and the CD tray opens or closes. (When the POWER is switched off with the CD tray open, the CD tray closes, then the POWER switches off.)
- 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. IllumiMagic COMPU PLAY is activated using the main unit only.
- If installed in an audio rack, the rack's front glass plate may impede the unit's SENSOR section function so that IllumiMagic COMPU PLAY may not be activated.

VOLUME, TONE AND OTHER CONTROLS

VOLUME button
+ : Use to increase the volume.
– : Use to decrease the volume.
(Control range from VOLUME 0 to VOLUME 50.)

VOLUME

ACTIVE HYPER-BASS PRO button
ON : The BASS indicator lights up. Set to this position to activate ACTIVE HYPER-BASS PRO sound.
OFF: The BASS indicator goes out. Set to this position when ACTIVE HYPER-BASS PRO sound is not required.

Sound mode button
This unit has four preset sound modes (BEAT, POP, CLEAR, 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

FLAT → BEAT → POP → CLEAR → LIVE

Sound mode selection
FLAT (No sound effect (flat characteristics)):
Set to this position when listening to classical music.
BEAT:
Set to this position for music with a heavy beat, such as rock or disco music.
POP:
Set to this position for light music including popular and vocal music.
CLEAR:
Set to this position for crisp and clear sounding music with transparent highs.
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:

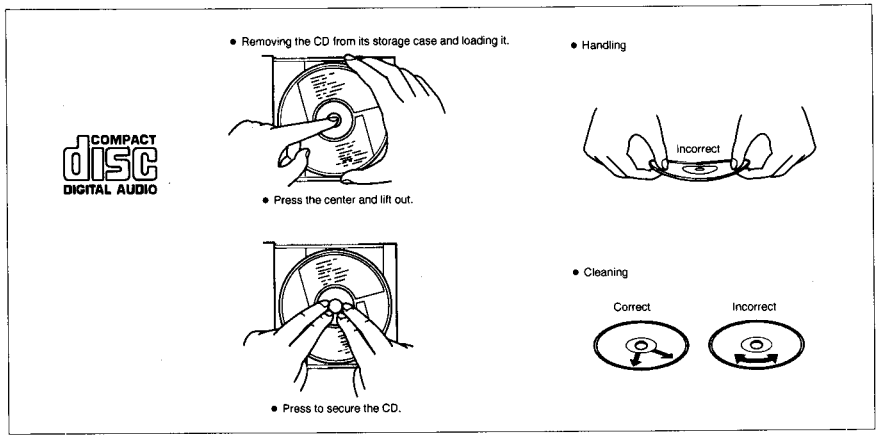
1. **Usable CDs**
   Use CDs with the mark shown.

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.**

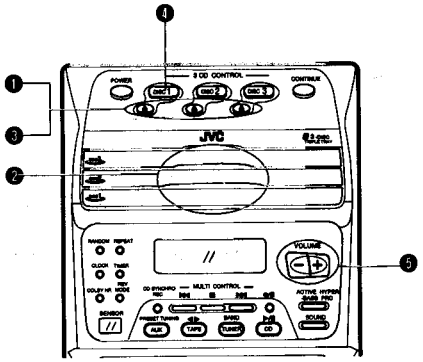


PLAYING CDs

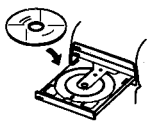
CD number indicators
The red marker under its CD number indicator lights up corresponding to the CD number you select.
While a CD is playing, the display inside its respective CD number indicator rotates.
The indicators show whether or not the tray corresponding to the CD number you select holds a CD. When a CD is not loaded in the tray, the CD number indicator goes out and the red marker remains lit.

(Example: When playing back a CD loaded in the DISC 1 tray, which contains 12 tracks and whose total playback time is 48 minutes and 57 seconds.)

Operate in the order shown

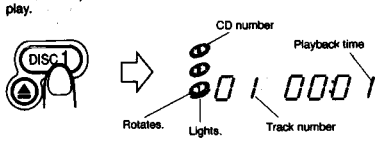


❶ Press the required CD tray open/close button (▲) (DISC 1 to DISC 3). The CD tray opens. (The power is switched on.)
❷ Load a CD with the label side facing up.



❸ Press the CD tray open/close button (▲) to close the CD tray.
- Repeat the above procedures to load the other CDs.

❹ Press the required CD CONTROL button (DISC 1 to DISC 3) to start play.



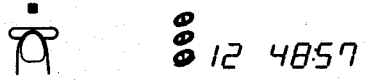
❺ Adjust.

- During CD playback, other CDs can be exchanged by opening their trays with the appropriate CD tray open/close buttons (▲).
- 8-cm (3") CDs can be used in this unit without an adapter.

Notes:
- When the POWER button is set to STANDBY, or another mode (TAPE, TUNER or AUX) is selected, the last CD played is stored in memory. The same CD will be played when the power is switched on again and the ►/II button is pressed.
- When a CD tray is open, press any of ►/II, ▲ or the CD CONTROL buttons (DISC 1 to DISC 3), and the tray will close.

When the AC power cord is unplugged, never close the open tray by hand. To close it, plug the power cord in again and press the ▲ button. Otherwise it may cause damage to the unit.

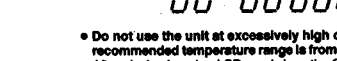
- **To stop in the middle of a CD**
  During play, press the stop/clear (■) button to stop play.



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

- **To stop a CD temporarily**
  Press the ►/II button to stop play temporarily and the indicator 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.
- When the CD ►/II or DISC 1 through 3 buttons are pressed with no CDs loaded in the trays, "00 00000" is displayed.



- **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 playback, unload CDs and close the CD trays.
- If mistracking occurs during play, lower the volume.

Skip play

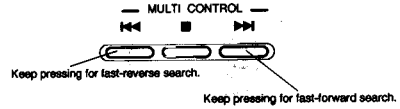
- During play, it is possible to skip forward to the beginning of the next track or back to the beginning of the track being played or the previous track; when the beginning of the required track has been located, play starts automatically.

To listen to the next track...
Press the ►►I button once to skip to the beginning of the next track.

To listen to the previous track...
Press the I◄◄ 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.

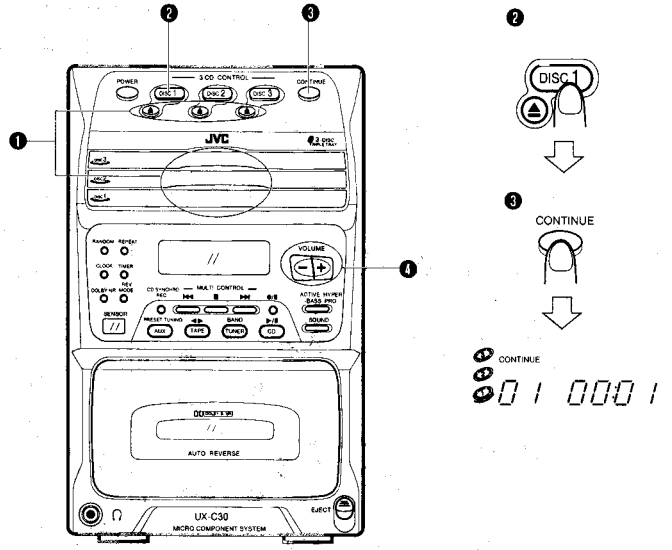


- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

Continuous play

How to play all tracks

Operate in the order shown



❶ Load a CD in each tray (DISC 1-DISC 3).
❷ Press the CD CONTROL button (DISC 1) to start play.
❸ Press the CONTINUE button to set continuous play mode.
❹ Adjust.

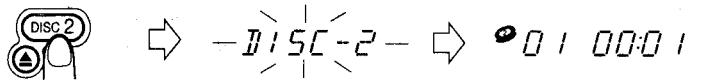
- CD play starts from DISC 1 and continues to the last track of the last CD in the CD changer.
- When a CD is loaded in each tray, continuous play can be started by pressing any CD CONTROL button (DISC 1 to DISC 3). Continuous play ends with the last track of the CD loaded in the DISC 3 tray.

Notes:
- During CD play, continuous play will not function if another CD tray is open.
- While CDs are being changed in the CD changer, there will be a short delay after pressing the ▲ button until the CD tray opens.

DISC CONTROL button

- **Direct Disc Selection**
  Press the CD CONTROL button (DISC 1 to DISC 3) corresponding to the No. of the required CD.

Example: To designate Disc 2

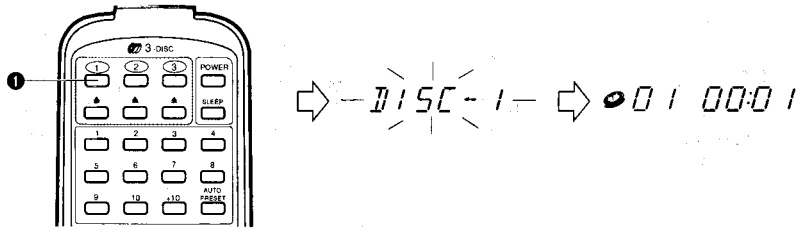


The tracks on the designated CD are played in sequence.

Note:
- When "PRGM" is shown in the display and the direct select operation is performed, the CD cannot be played.

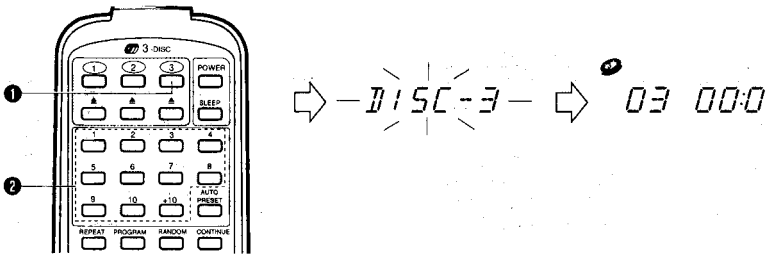
Direct access play (using the remote control unit)

Example 1: To designate Disc 1



❶ Designate the required CD using CD CONTROL button (DISC 1 to DISC 3).
- CD play starts.

Example 2: To designate the 3rd track of Disc 3



❶ Designate the required CD using the CD CONTROL buttons (DISC 1 to DISC 3).
❷ The track number is displayed and the required track number is selected using the track button.
- CD play starts.

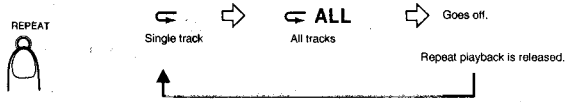
- To designate track numbers 1 to 10, press the track number button corresponding to the track number.
- To designate track number 11 or higher, press the +10 button the required number of times, then a track number button. (Example: To designate the 20th track, press the +10 button once, then press track number button 10.)

* +10 button:
Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.

Repeat play

Press the REPEAT button before or during play. It is possible to perform repeat play of a single track, all tracks on one CD, or all tracks on all CDs in the CD changer.

Each time the REPEAT button is pressed, the mode will change in the order from a single track (⇆), to all tracks (⇆ ALL), to clear mode.



- **Single track repeat (⇆)**
  The current or specified track will be played repeatedly.
- **All tracks of one CD repeat (⇆ ALL)**
  All tracks on the current or specified CD will be played repeatedly.
- **All tracks of all CDs repeat (ALL DISC. CONTINUE.⇆ ALL)**
  When the CONTINUE button is pressed in the "⇆ ALL" mode, CD play starts from the current or specified track, then all tracks on all CDs will be played repeatedly.

Random play

Press the RANDOM button before or during play. It is possible to perform random play from one or all CDs.

- **One disc random (RANDOM)**
  Press the RANDOM button to randomly play tracks on the current or specified CD, except in continuous mode.
- **All disc random (ALL DISC, CONTINUE, RANDOM)**
  Press the RANDOM button in continuous play mode to randomly select and play tracks from all of the CDs in the CD changer.

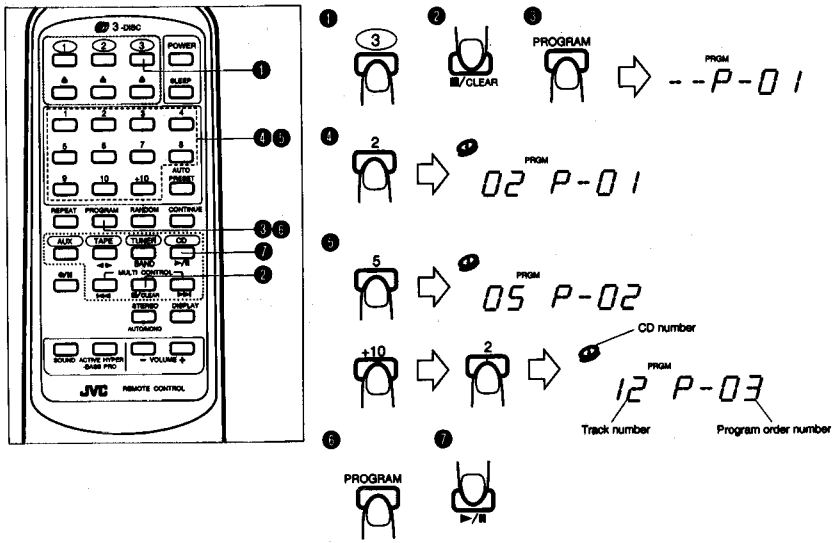
Notes:
- It is not a malfunction that a certain track be played back several times during random play.
- All disc random does not function when a CD tray other than one played at the time is open.

Programmed play (using the remote control unit)

- Up to 20 tracks can be programmed to be played in any required order from one CD or all CDs in the CD changer.

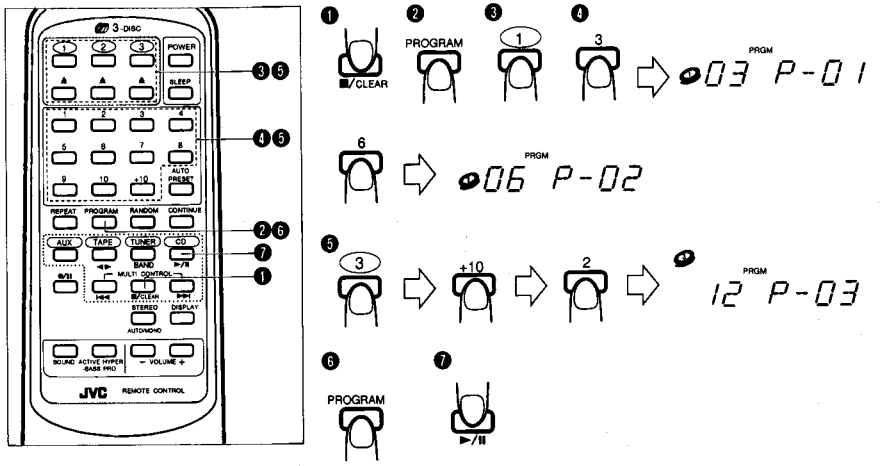
Example: Programming tracks from disc 3 (tracks 2, 5, and 12).

Example 1: (CD containing more than 12 tracks)



1. Press the No. 3 CD CONTROL button.
2. Press the ■/CLEAR button.
3. Press the PROGRAM button to set to the programming mode.
4. Press to designate the required track number.
5. Designate the remaining tracks by pressing the track number buttons.
6. Press the PROGRAM button to confirm program details.
   - Repeat from step 4 to readjust the program.
   - Repeat from step 5 to add to the program.
7. Press the ►/II button when programming is completed. Programmed play starts.

- Example 2: Programming tracks from 2 or more CDs in the order of disc 1 (track 3), disc 1 (track 6), and disc 3 (track 12).



1. Press the ■/CLEAR button.
2. Press the PROGRAM button to set to the programming mode.
3. Designate the required CD using the CD CONTROL buttons (No. 1 to No. 3).
4. Designate the required track using the track number buttons (No. 1 to No. 10, and +10).
5. Repeat steps 3 and 4 to designate the other tracks.
6. Press the PROGRAM button to confirm program details.
   - Repeat from step 1 to readjust the program.
   - Repeat from step 3 to add to the program.
7. Press the ►/II button when programming is completed. Programmed play starts.

To confirm the details of a program...
Press the PROGRAM button in stop mode: the tracks making up the program will be displayed in programmed order.

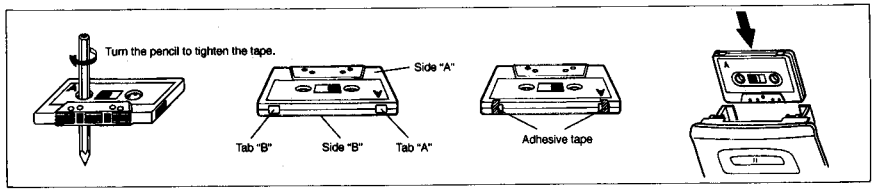
To clear the programmed tracks ...
Press the ■/CLEAR button before playing a CD. During programmed play, press this button twice.

Notes:
- Programming is possible even when a CD tray is open. (The tracks on the CD can be confirmed as the labels are visible.)
- Programmed tracks are not cleared even if the CD tray is open.
- During programmed play from more than 2 CDs, if a CD tray is open, programmed play will not function.

HANDLING CASSETTE TAPES

Cassette tapes
1. Loose tape may cause trouble. Using a pencil or like object, gently tighten the tape as shown.
2. 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.
3. C-120 cassettes are not recommended because they are prone to malfunction.

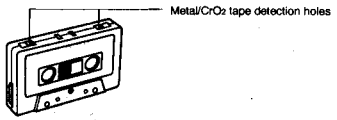
Cassette loading
1. Press the EJECT button to open the cassette holder.
2. Load a cassette as shown.
3. Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.



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.

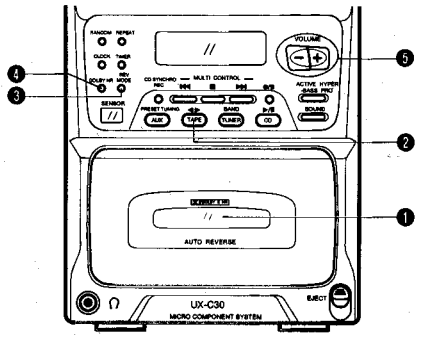
Auto tape select mechanism
This unit has an Auto Tape Select mechanism which distinguishes between different types of tape using detection holes in the cassette. After the type of tape has been detected, bias and equalization suitable for the tape are set.

- Cassettes with detection holes:
  Metal tape (EQ: 70 µs) ..... Type IV
  CrO_2 (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



❶ Load a cassette tape with side A facing out.
❷ Press to start playback. (The power is switched on and the TAPE mode is engaged to start tape playback.)
❸ Select the reverse mode (⇄ / ⇉ / ⊂⊃).
❹ Set the DOLBY NR switch as required.
❺ Adjust.

- After loading a cassette tape, simply press the TAPE ◄/► button. The power is switched on and the tape starts playback. (To select the playback direction, press the TAPE ◄/► button. The change in direction can be checked in the tape direction indicator (◄ or ►).)

- 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.

DOLBY NR system

- **Set the DOLBY NR as required. The DOLBY B NR indicator lights.**

Note:
The optimum sound quality will not be obtained if different DOLBY NR switch settings are used during recording and playback.

How to fast-wind tapes

1. Press the TAPE ◄/► button (to set TAPE mode).
2. Press the ■ button.
3. Press the ⏮ or ⏭ button.
   During tape playback, when the ⏮ or ⏭ button is pressed, music scan starts.

Music Scan

- The beginning of the current tune or the next tune can be located using the music scan function.

① Press the TAPE ◄/► button for tape playback.
(To select the playback direction, press the TAPE ◄/► button.)
② Press the ⏮ or ⏭ button for music scan.

	• To the start of the next tune	• To the start of the tune being played back
(Forward (►) direction playback)	⏭	⏮
(Reverse (◄) direction playback)	⏮	⏭

The tape direction indicator blinks twice, repeatedly, during music scanning.

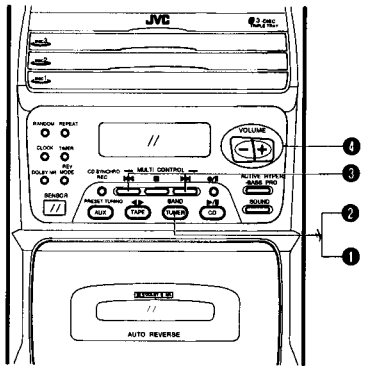
③ When the specified tune is located, playback will start automatically.

- To skip two or more tunes, repeat steps ② and ③ above.

Notes:
With the following types of tape, the Music Scan mechanism may not operate correctly. This is not a malfunction; use music scan function only with suitable tapes.
- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portion during tunes.
- Tapes with short non-recorded sections.
- Tapes with high-level noise or hum between tunes.

RADIO RECEPTION

Operate in the order shown



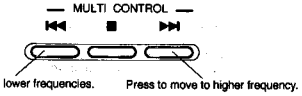
❶ Press the TUNER/BAND button.
- The power is switched on and a band and radio frequency will be shown in the display.

❷ Select the band.
❸ Tune to the required station.
❹ 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.

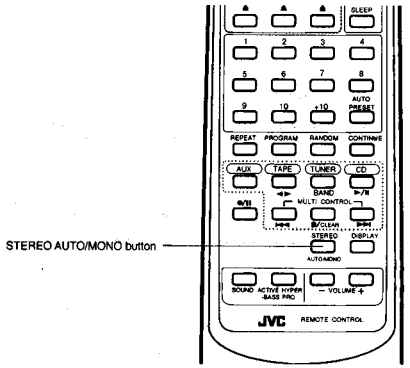
- **Seek tuning**
  Press the ⏮ or ⏭ button for one second or more. The unit enters the seek tuning mode to tune in the nearest station automatically, so the broadcast can be heard. In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.
- **Manual tuning**
  Each 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 (MW/LW).
  In AM operation, the tuned frequency moves continuously from the MW (522-1,629 kHz) to the LW (144-288 kHz) band and vice versa.



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

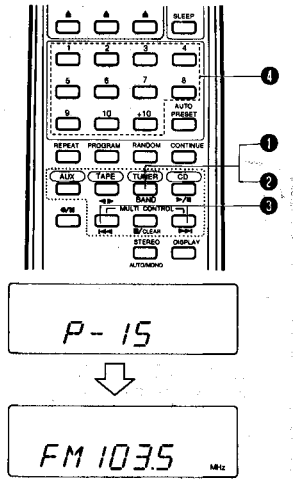
Auto preset tuning (using the remote control unit)

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. 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")



❶ Press the TUNER/BAND button.
❷ Select the FM band using the TUNER/BAND button.
❸ Tune to the required station.
❹ Press preset button "+10", then "5" for more than 2 sec.
(When "15" blinks in the preset station display, the station has been stored.)

- Repeat the above procedure for each of the other stations, using a different preset button each time.
- Repeat the above procedure for the other band.

- **To change preset stations**
  Perform step ❹ above after tuning to the required station.

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 (MW/LW) broadcast, noise may be heard if the remote control unit is used.

- All preset stations will be erased when the power cord is disconnected or a power failure occurs for more than 24 hours. In such cases, store the stations again.

Preset tuning

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

(Using the main unit)
① Press the TUNER/BAND button.
② Select the band using the TUNER/BAND button.
③ Press the PRESET TUNING button to select the required preset station.

(Using the remote control unit)
① Press the TUNER/BAND button.
② Select the band using the TUNER/BAND button.
③ Press the required preset station buttons (No. 1 – No. 10 and +10).
- The preset station number and frequency corresponding to the button pressed are shown.

Using the antennas
FM: Connect the provided FM feeder antenna (see page 4).
AM (MW/LW): Adjust the position of AM (MW/LW) loop antenna.

RECORDING

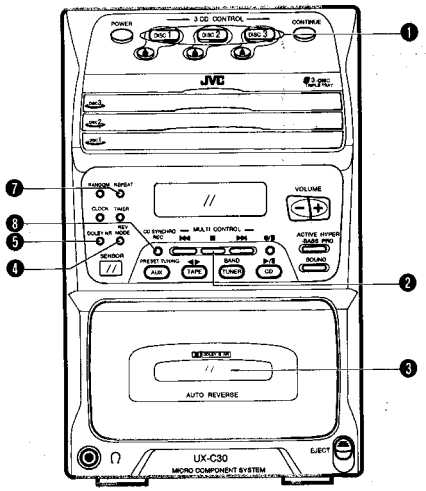
- During recording, the ALC (Automatic Level Control) circuit automatically optimizes the recording level, so manual recording level adjustment is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

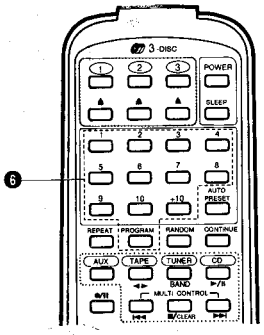
Note:
This unit has recording characteristics suitable for normal and CrO_2 tapes. Normal and CrO_2 tapes have different characteristics from metal tapes.

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





❶ Press the CD CONTROL button corresponding to the CD to be recorded.
❷ Press the ■ button to set stop mode.
❸ Load a cassette with side A facing out. (Wind past the tape leader before starting recording.)
❹ Select the required reverse mode (⇄ or ⇉).
❺ Set the DOLBY NR switch as required.
❻ When programmed play is required, program the required tracks using the remote control. (See page 16.)
- Select tracks with a total playing time which does not exceed the tape length (refer to the liner notes).

❼ When recording a CD in repeat play mode, set as required.
❽ Press the CD SYNCHRO 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.
- Before CD synchro recording of CD continuous play, press the CONTINUE button. (See page 14.)

Notes:
- During CD synchro recording, the ►/II and (I◄◄, ►►I) buttons do not function.
- When CD synchro recording is performed using more than two CDs, there will be a little blank space while the CDs change.

When non-recorded section between tunes is not required ...
① Press the ►/II button of the CD player twice. The CD player enters the pause mode.
② Press the CD SYNCHRO 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.

- **To record an entire disc in the track order of the CD**
After the operations in steps ❶-❺ above, press the ►/II button after the ●/II button has been pressed twice.

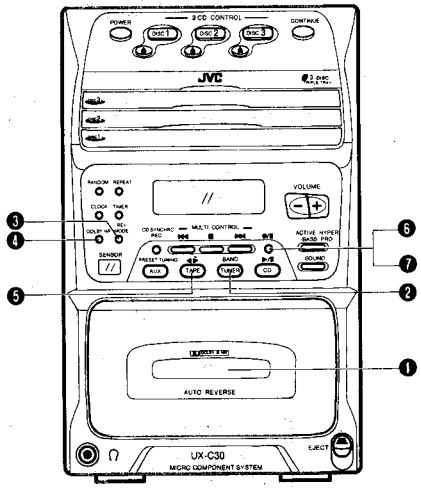
How to fast-wind tapes

1. Press the TAPE ◄► button (to set TAPE mode).
2. Press the ■ button.
3. Press the I◄◄ or ►►I button.
During tape playback, when the I◄◄ or ►►I button is pressed, music scan starts.

When tape recording is completed in the reverse (◄) direction
After the tape is ejected, the tape deck is automatically set to the forward (►) direction, making it easier to record on side A the next time.

Recording from the radio or an external source connected to the AUX IN terminals

Operate in the order shown



❶ Load a cassette with side A facing out.
(Wind past the tape leader before starting recording.)
❷ Select the source to be recorded.
TUNER: Press the TUNER/BAND button. Tune to the required station.
AUX: Press the AUX button.
❸ Select the desired reverse mode.
❹ Set the Dolby NR switch as required.
❺ Press the ●/II button (recording-pause mode).
- The REC indicator blinks.
- The function switch is locked and its position cannot be changed.

❻ Press the ●/II button to start recording.

- To stop recording temporarily, press the ●/II button. To resume recording, press the ●/II button again.

Erasing

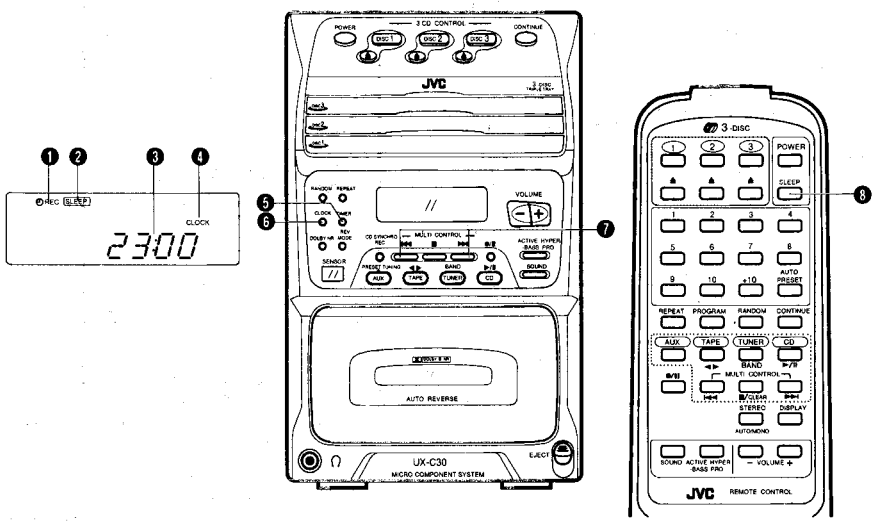
A recorded tape can be erased by recording new material over the previous material.

To erase a tape without making a new recording.....
Select the playback direction with the TAPE ◄► button, press the ■ button then the ●/II button twice to record.

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.

CLOCK ADJUSTMENT

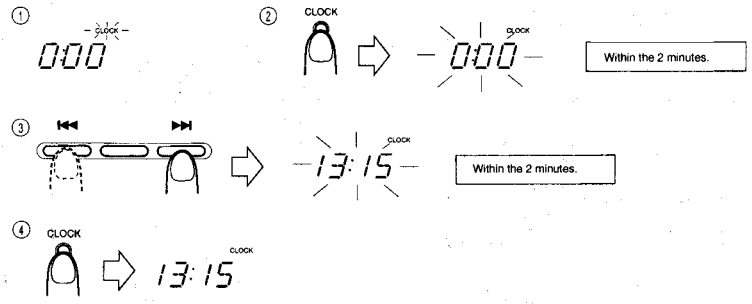
Names of parts in the clock/timer section, and their functions:



❶ Timer mode indicator
❷ SLEEP indicator
❸ Time display
❹ CLOCK indicator
❺ TIMER button
❻ CLOCK button
❼ ⏮/⏭ buttons
❽ SLEEP button

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

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



① Connect the AC power cord; "CLOCK" will blink in the display.
② Press the CLOCK button for 2 sec. or more; "0:00" 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.

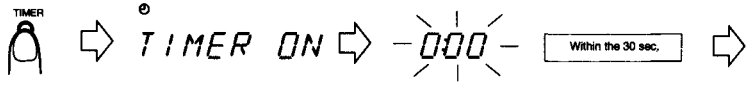
Notes:
- Before performing timer recording or playback, it is necessary to set the current time.
- It is recommended to set the current time with the POWER button set to STANDBY so that the current display mode is maintained.
- When the power cord is plugged in again after being disconnected or power is restored after a power failure, "CLOCK" will blink in the display. Set the current time again.

TIMER OPERATIONS

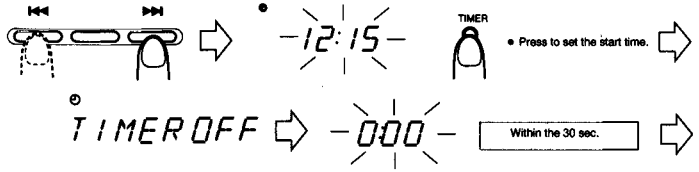
Setting the timer

- The current time must be set before the timer can be used.

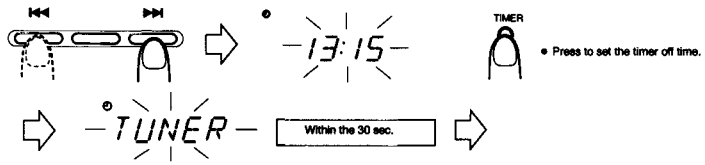
❶ Press the TIMER button. (The (⏲) indicator lights up.)



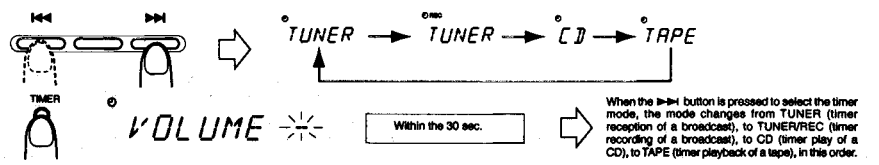
❷ Set the start time.
(Example: To set the timer to 12:15.)



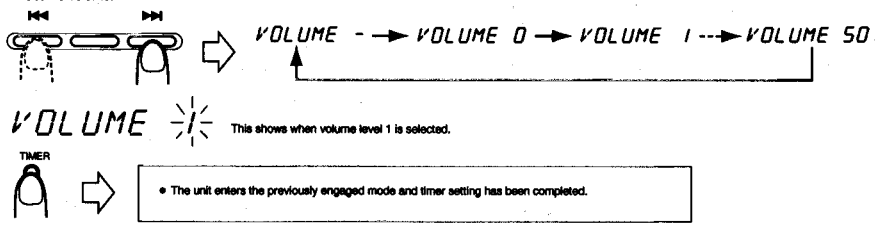
❸ Set the stop time.
(Example: To set the timer stop time to 13:15.)



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



Set the volume.



- When the volume setting is set to "VOLUME -" (volume level is not specified), the timer playback volume is at the level used before setting the timer. (In this case, the fade-in mode does not function.)

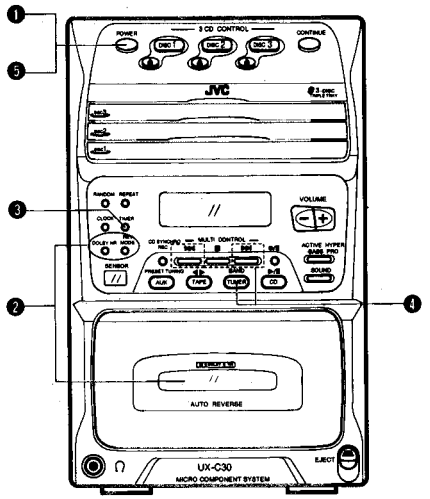
- **To confirm the timer setting**
1. Each time the TIMER button is pressed, the timer setting can be confirmed.
2. When the previously engaged mode is displayed, timer setting has been completed.

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

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.
- Set the reverse mode button to "⇄" or "⇆" and set the DOLBY NR button as required.

3 Set the timer. (Refer to "Setting the timer" on page 23.)
- 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 19.)
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 cancel timer operation**
  Press the TIMER button so that the timer mode indicator (⏲) goes out.

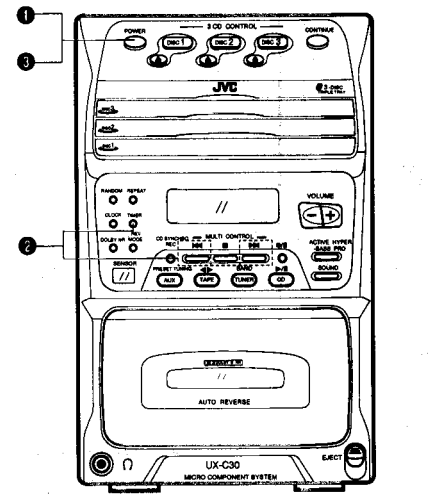
If you do this, timer recording will not start at the timer start time.

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.
- When the power cord is disconnected or there is a power failure, timer settings will be erased from memory. If this happens, set the current time and perform the timer setting again.

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 23.)

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.

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 "⏲" 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.

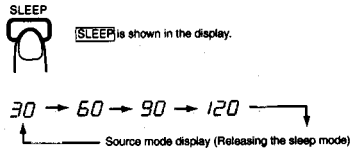
- **To cancel timer operation**
  Press the TIMER button so that the timer mode indicator (⏲) goes out.

Notes:
- When the volume setting is set to "VOLUME -" (volume level is not specified), the timer playback volume is at the level used before setting the timer. (In this case, the fade-in mode does not function.)
- To stop during timer playback, press the POWER button to switch the unit off.

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.

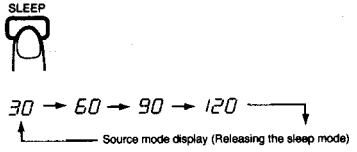


- Sleep time settings of 30, 60, 90 or 120 minutes can be set. When you release the SLEEP button, the source is displayed after 5 sec.

- 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 23.)
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.

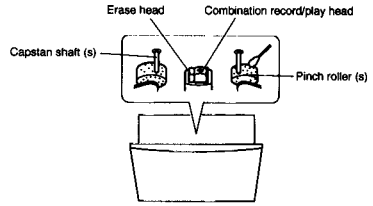
However, when broadcast reception is selected for both sleep timer operation and timer playback, the station you heard at night will be tuned to the following morning.

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.



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

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. Then reconnect and switch the power ON.
- **Power cannot be turned on.**
  * Is the power cord 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?
- **CD playback is not performed when the CD CONTROL button is pressed.**
  * Is program mode engaged?
- **When the operation stops.**
  * Switch the power OFF (STANDBY) and ON again.

(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 deck, 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 (MW) 522-1,629 kHz (LW) 144-288 kHz
Antennas	:	Loop antenna for AM (MW/LW) External antenna terminal for FM (75 Ω)

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 CrO2 tape)
Wow & flutter	:	0.15% (WRMS)
Fast wind time	:	Approx. 130 sec (C-60 cassette)

Speaker Section (each unit)

Speaker	:	10 cm x 1
Impedance	:	8 Ω
Dimensions	:	151 (W) x 258 (H) x 228 (D) mm
Weight	:	Approx. 2.1 kg

General

Power output	:	28 W (14 W + 14 W) at 8 Ω (Max.) 20 W (10 W + 10 W) at 8 Ω (10% THD)
Input terminals	:	AUX IN (300 mV/50 kΩ)
Output terminals	:	PHONES x 1 (Output level: 0-15 mW/ch, 32 Ω, Matching impedance : 16 Ω - 1 kΩ) Speaker x 2 (Matching impedance 8 Ω - 16 Ω)
Power requirements	:	AC 230 V, 50 Hz
Power consumption	:	30 W (with POWER SW ON) 5.0 W (with POWER SW STANDBY)
Dimensions	:	488 (W) x 260 (H) x 306 (D) mm, including knobs
Weight	:	Approx. 9.4 kg
Accessories provided	:	Power cord x 1 Remote control unit (RM-RXUC30BK or RM-RXUC30WT)* x 1 "R6/AA (15F)" batteries x 2 (for the remote control) FM feeder antenna x 1 AM (MW/LW) loop antenna x 1

* RM-RXUC30BK - Black
  RM-RXUC30WT - White

Design and specifications are subject to change without notice.

4. Location of Main Parts

◆Left side view

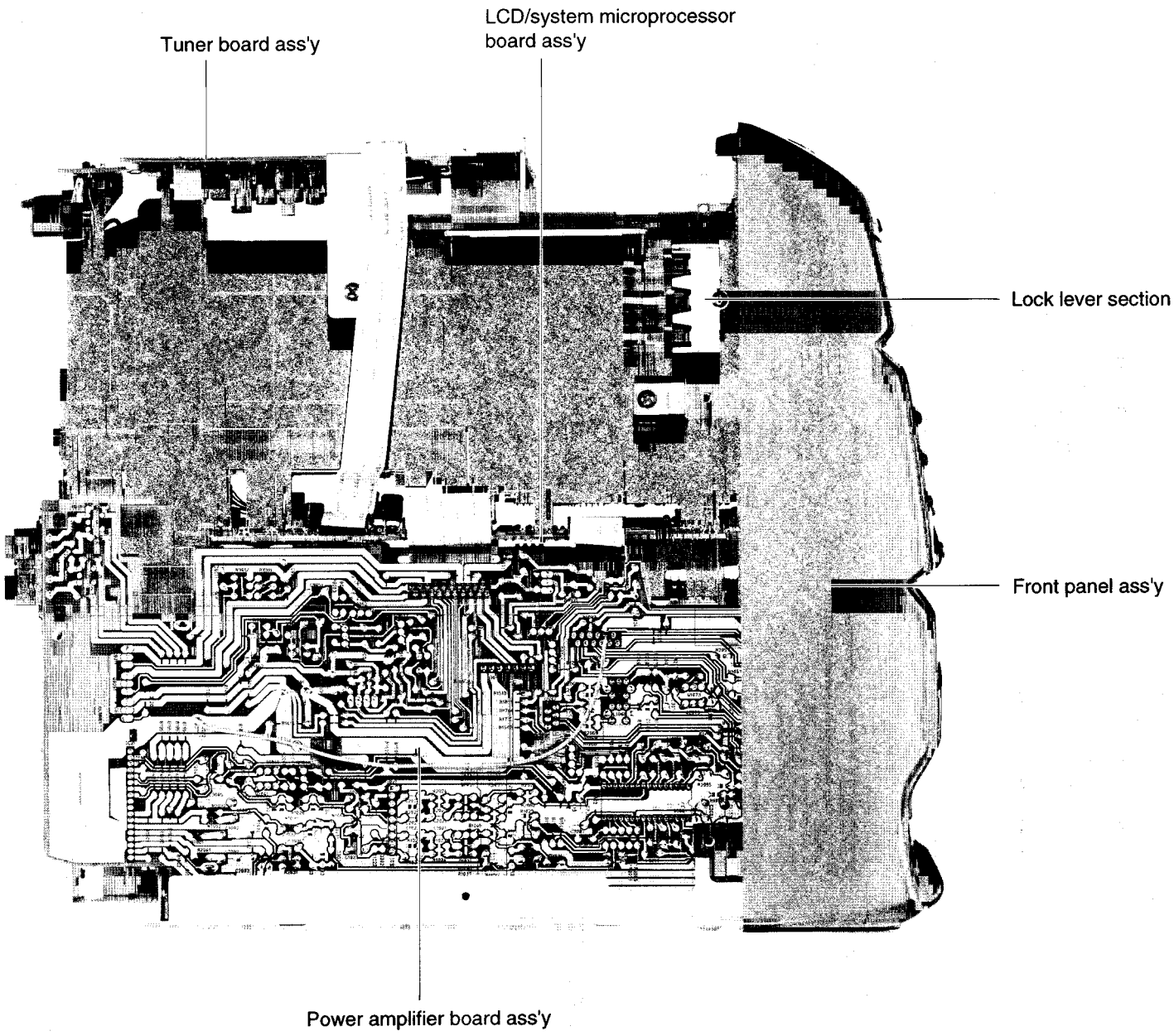


Fig. 4-1

◆Right side view

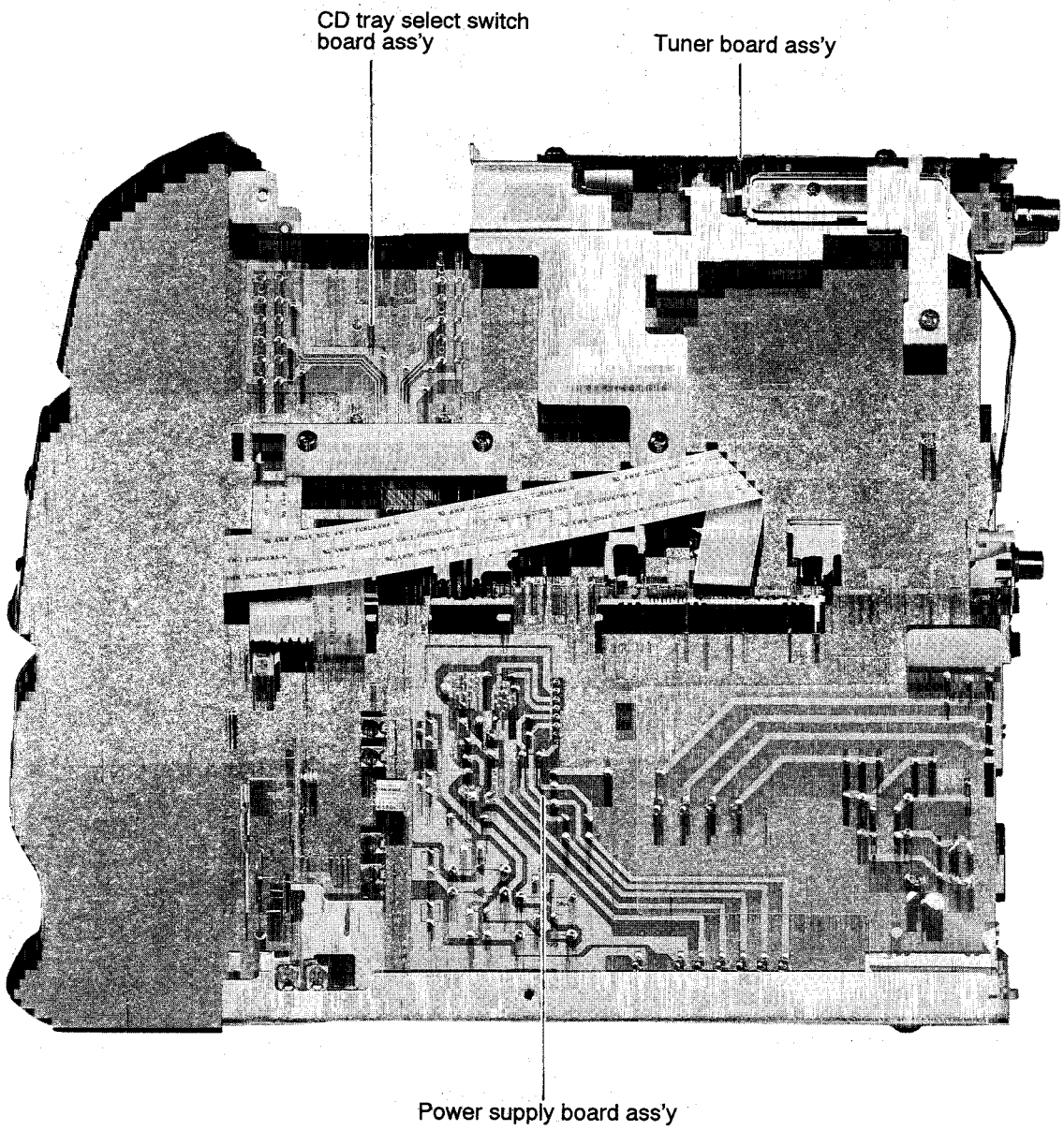


Fig. 4-2

◆CD unit top side

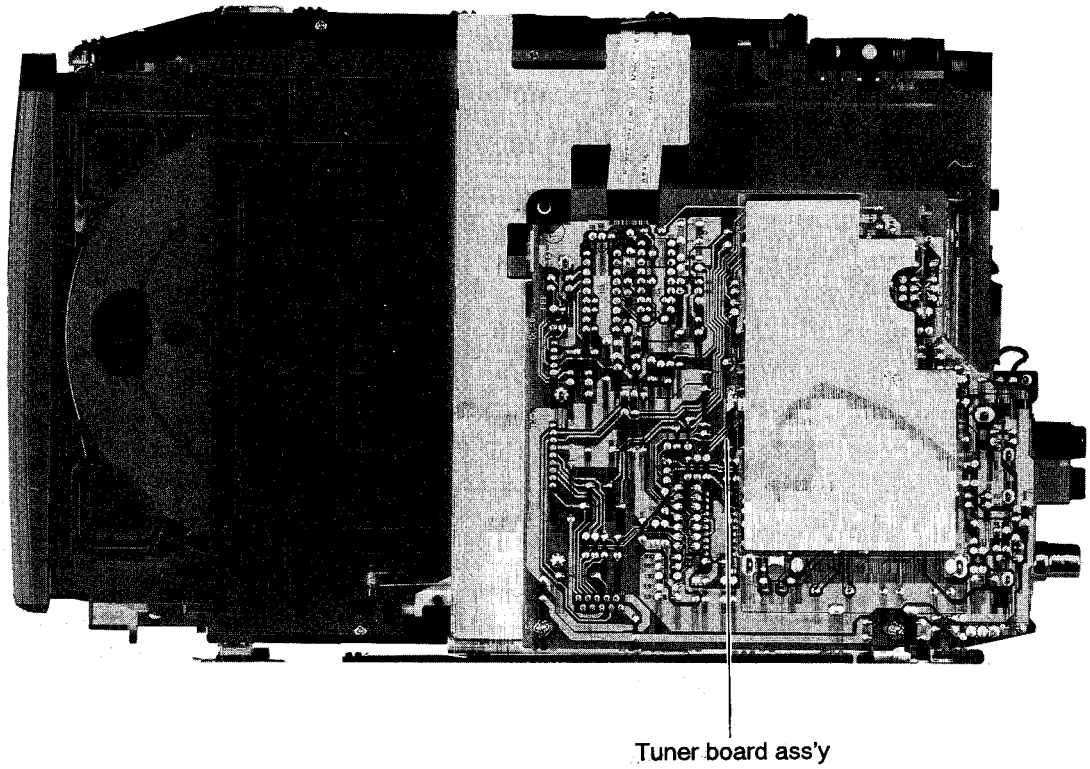


Fig. 4-3

◆CD unit bottom side

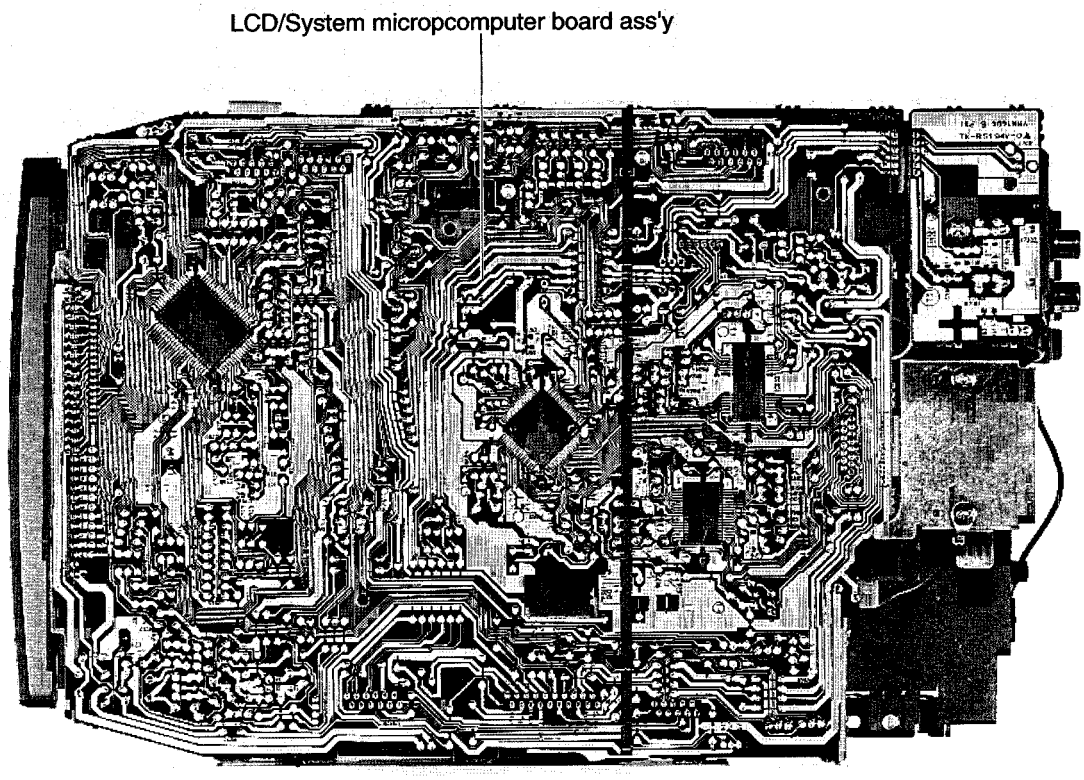


Fig. 4-4

◆Front panel ass'y

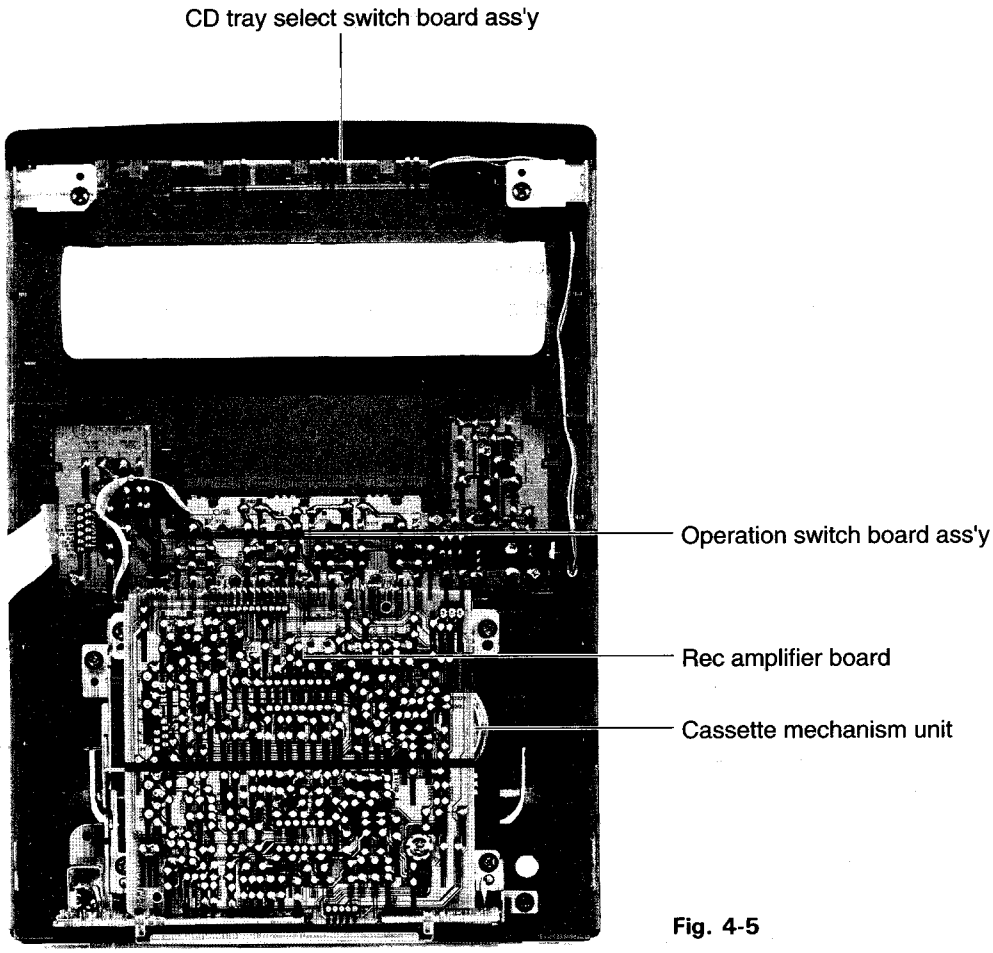


Fig. 4-5

◆Chassis top side

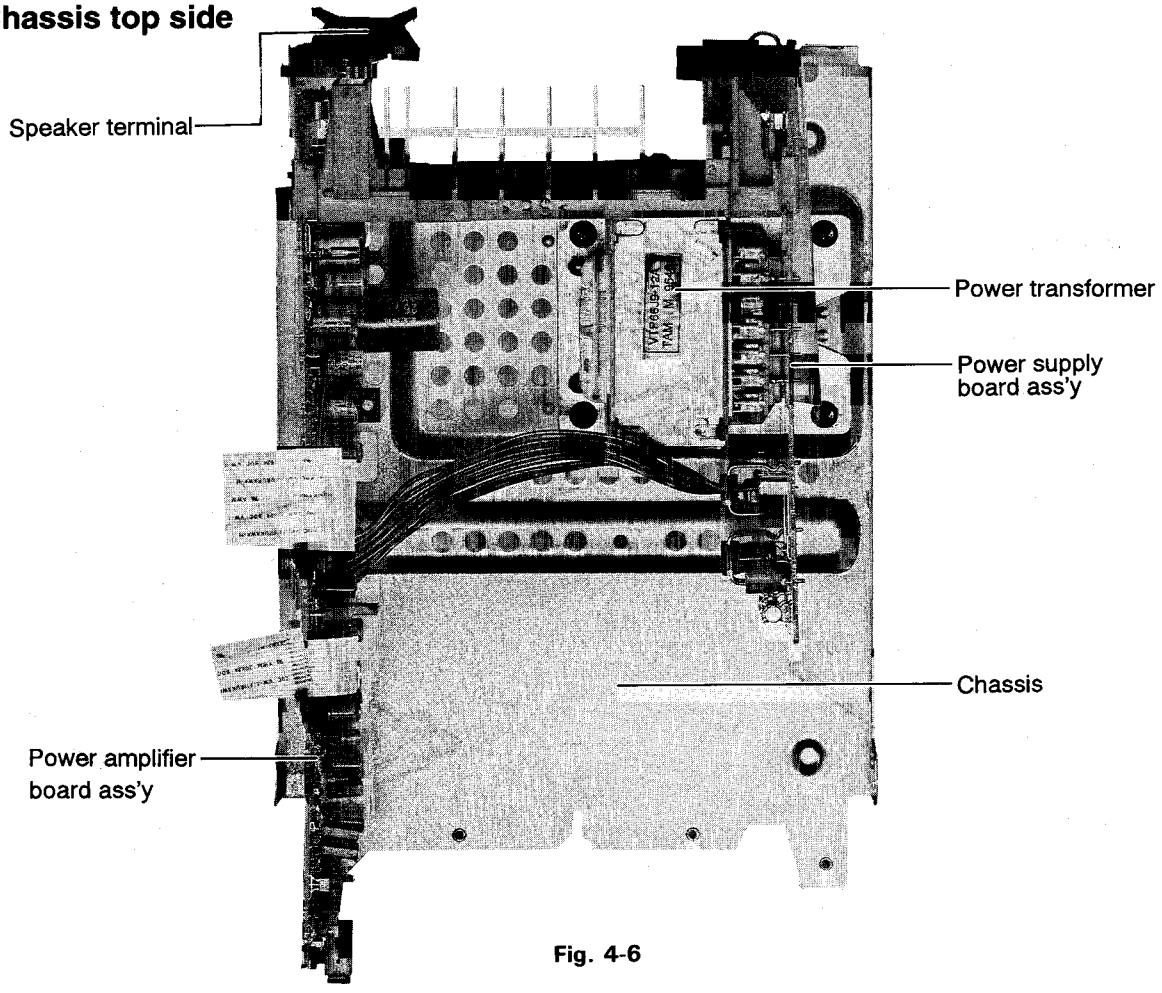


Fig. 4-6

5. Removal of Main Parts

■ Removing the upper cabinet

(Figs. 5-1 to 5-4)

1. Remove six screws (① x 1, ② x 3, ③ x 2) on the rear of the main unit which secure the upper cabinet.
2. Remove four screws ④ on the right and left sides of the main unit which secure the upper cabinet.

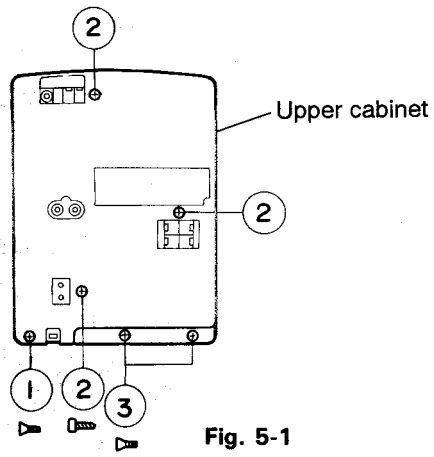


Fig. 5-1

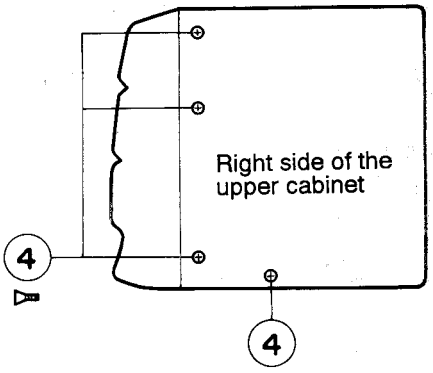


Fig. 5-2

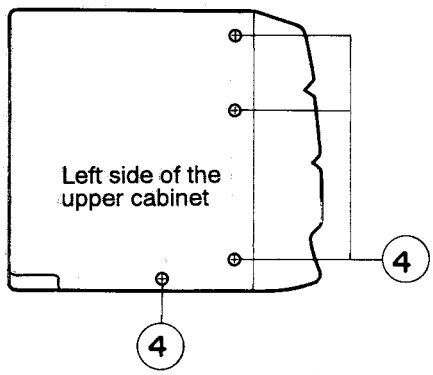


Fig. 5-3

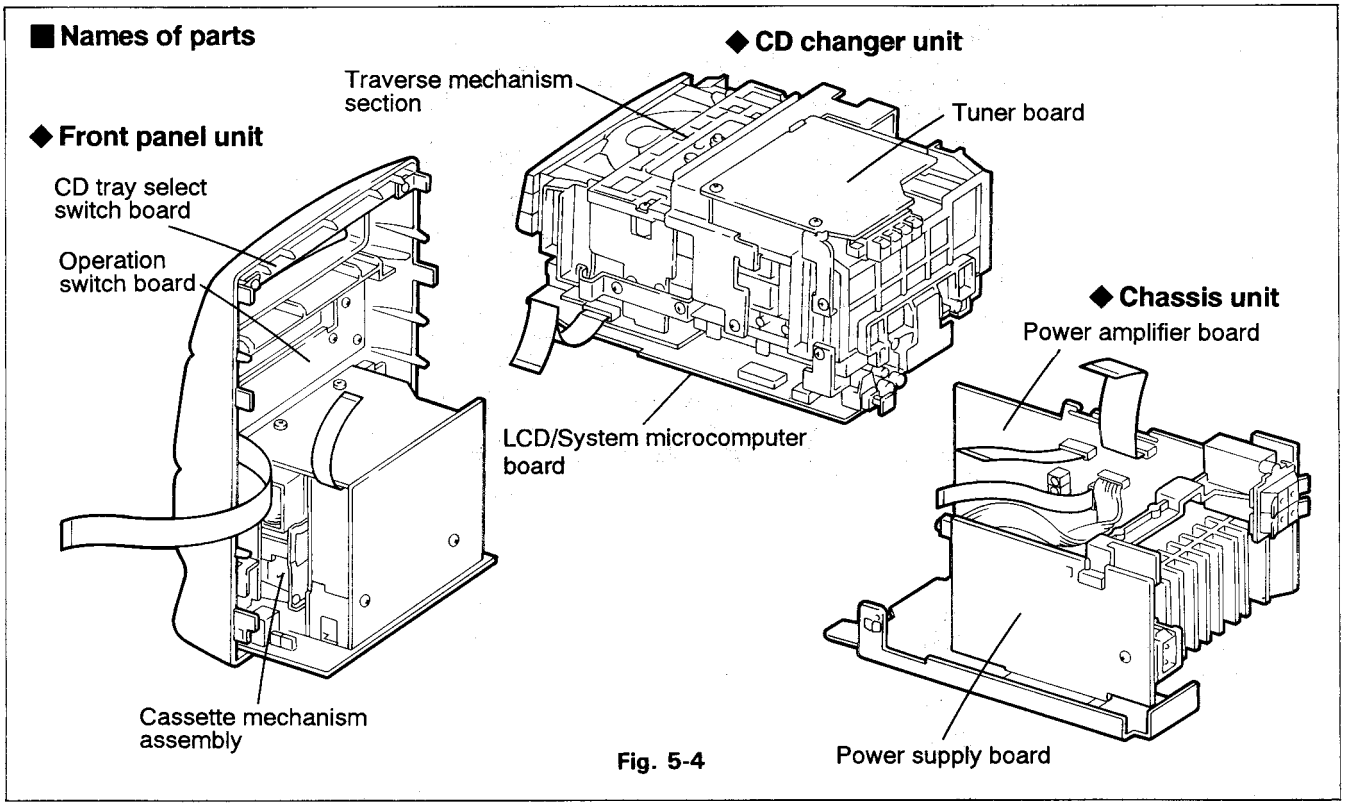


Fig. 5-4

◆ Removing the CD changer unit and chassis unit

(Figs. 5-5 and 5-6)

1. Face the main unit from the right side. Remove the card wire coming from the front panel assembly from connector CN702 on the LCD/System microcomputer board (Fig. 5-5).
2. Remove the card wire coming from connector CN712 on the mechanism control board from connector CN781 on the LCD/System microcomputer board (Fig. 5-5).
3. Face the main unit from the left side. Remove the card wire coming from connector CN32 on the power amplifier board from connector CN706 on the LCD/System microcomputer board (Fig. 5-6).
4. Remove the card wire coming from connector CN31 on the power amplifier board from connector CN708 on the LCD/System microcomputer board (Fig. 5-6).
5. Remove the screw Ⓐ securing the heat sink to remove the ground wire from the LCD/System microcomputer board assembly (Fig. 5-11).
6. Remove the CD changer unit.
7. Remove the card wire coming from connector CN33 of the power amplifier board from connector CN321 on the Rec amplifier board (Fig. 5-5).
8. Insert a flat driver into the fittings at sections A and B on the right and left sides of the main unit to remove the front panel assembly and the bottom chassis (Fig. 5-5, 5-6).
9. Following these procedures separates the main unit into the CD changer unit, front panel unit and chassis unit.

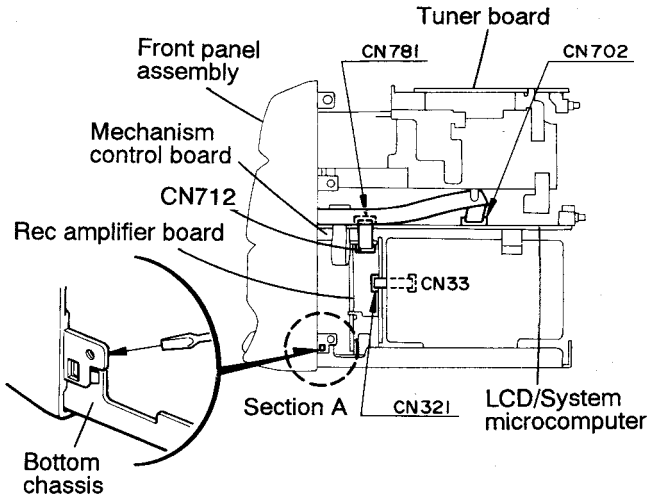


Fig. 5-5

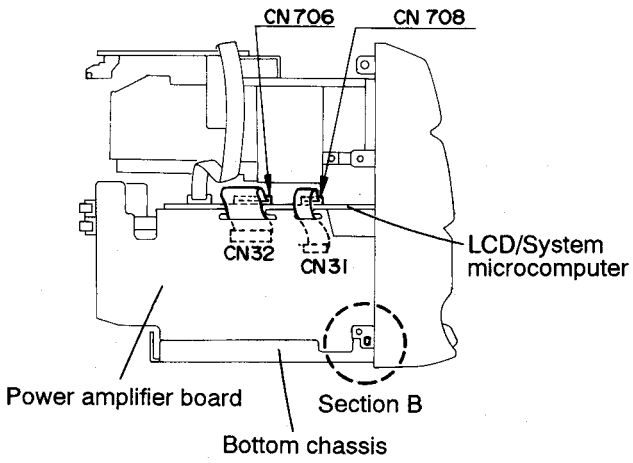


Fig. 5-6

■ Front panel unit section

◆ Removing the cassette mechanism assembly

(Fig. 5-7).

Remove four screws ⑤ and ⑥ securing the cassette mechanism assembly from the front panel unit.

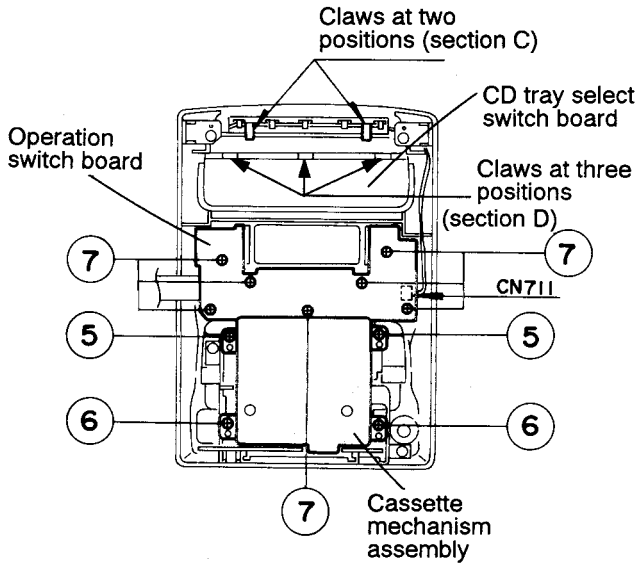


Fig. 5-7

◆Removing the CD tray select and operation switch boards (Figs. 5-7 to 5-9)

1. Remove seven screws ⑦ securing the operation switch board (Fig. 5-7).
2. Remove the 2-pin connector coming from the CD tray select switch board from connector CN711 on the operation switch board (Fig. 5-7).
3. Release two claws in section C and three claws in section D as shown in Fig. 5-8 and remove the CD tray select switch board by pressing it from inside to the front.
4. Remove three screws ⑧ securing the CD tray select switch board assembly (Fig. 5-9).
5. Release five claws in section E which secure the CD tray select switch board (Fig. 5-9).
6. Remove the CD select switch board by shifting two claws in section F in the direction shown with the arrows (Fig. 5-9).

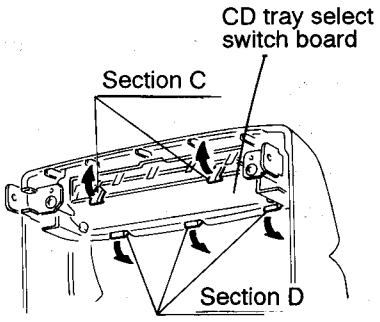


Fig. 5-8

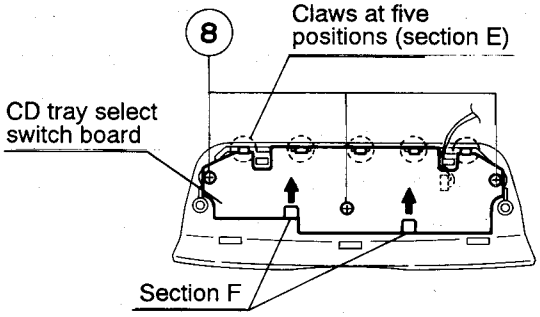


Fig. 5-9

■ Chassis unit section

◆ Removing the power supply board (Fig. 5-10).

1. While pushing in the claws in sections G and H on the right and left of the holder, lift and remove the holder securing the power supply board and power amplifier board from the power supply section (Figs. 5-10a and 5-10b).
2. Remove four screws ⑨ securing the power transformer.

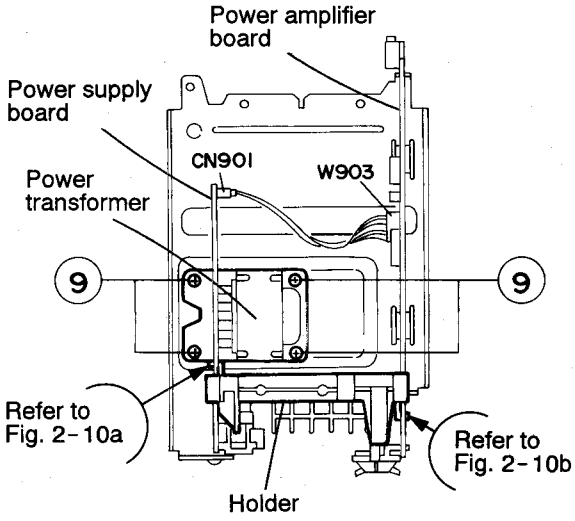


Fig. 5-10

◆ Removing the power amplifier board

(Fig. 5-11).

Remove the screw ⑩ securing the power amplifier board. To remove the heat sink, remove three screws ⑪ and ⑫ as well.

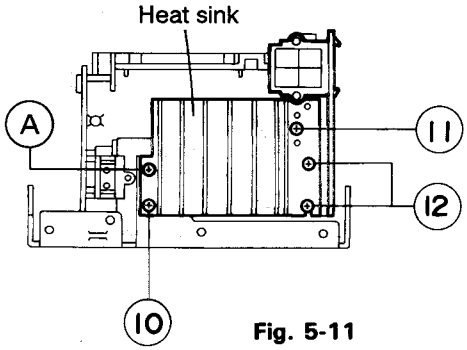


Fig. 5-11

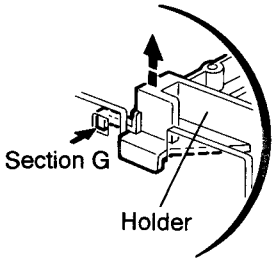


Fig. 5-10a

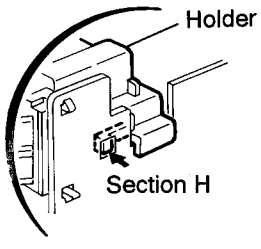


Fig. 5-10b

■ CD changer unit section

◆ Removing the tuner board

(Figs. 5-12 and 5-14)

After dismounting two spacers Ⓑ in advance, remove three screws ⑬ securing the tuner board assembly. Then, remove the card wire coming from connector CN705 on the LCD/microcomputer board from connector CN1 on the tuner board (Fig. 5-14). When removing only the tuner board, remove two screws ⑭ as shown in Fig. 5-14.

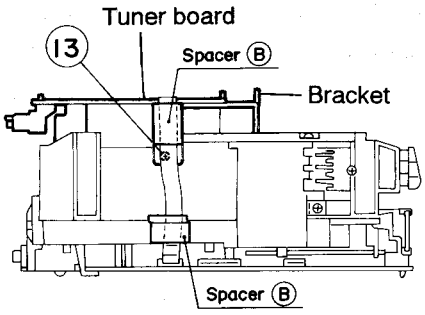


Fig. 5-12

◆ Removing the CD tray fitting (Fig. 5-15)

1. Pull the lock levers in the direction shown with the arrow to release the locks for the CD trays. Pull out the CD trays one by one starting with the DISC 1 tray.
2. Remove the CD tray fitting by lifting it up while pulling it toward you from below and disengage the claws as shown in the figure.
3. Perform the same procedure for DISC 2 and DISC 3.

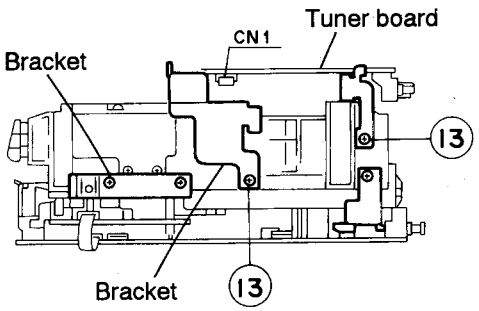


Fig. 5-13

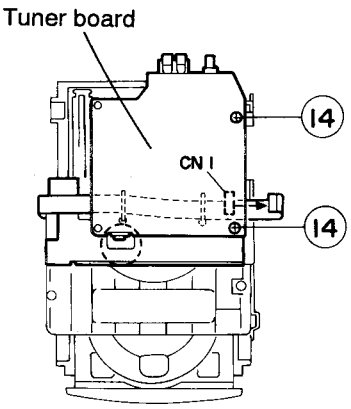


Fig. 5-14

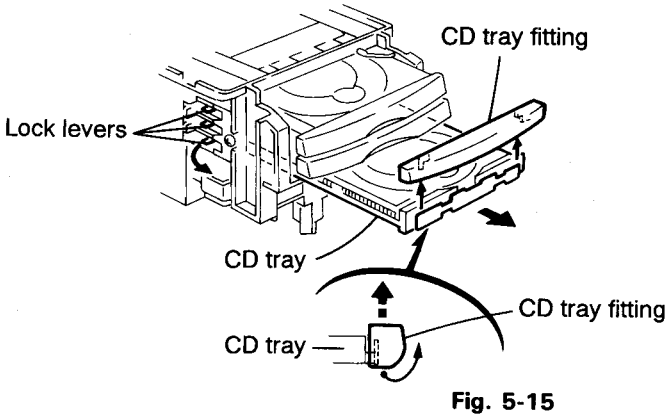


Fig. 5-15

◆Removing the LCD/System microcomputer and AUX IN jack boards (Figs. 5-16 and 5-17).

1. Remove the soldered section of the shield case from the rear of the CD traverse mechanism and remove two screws ⑮ (Fig. 5-16).
2. Remove the screw ⑯ securing the AUX IN jack board. Then, remove connector CN722 from connector CN721 on the LCD/System microcomputer board (Fig. 5-16).
3. Remove the card wire coming from the CD mechanism from connector CN601 on the LCD/System micro-computer board.
4. Remove two screws ⑰ securing the LCD/System microcomputer board from the front of the CD traverse mechanism (Fig. 5-17).
5. Release three claws (I, J, K) securing the LCD/System microcomputer board and shift and lift up the whole board toward you for removal (Fig. 5-16).

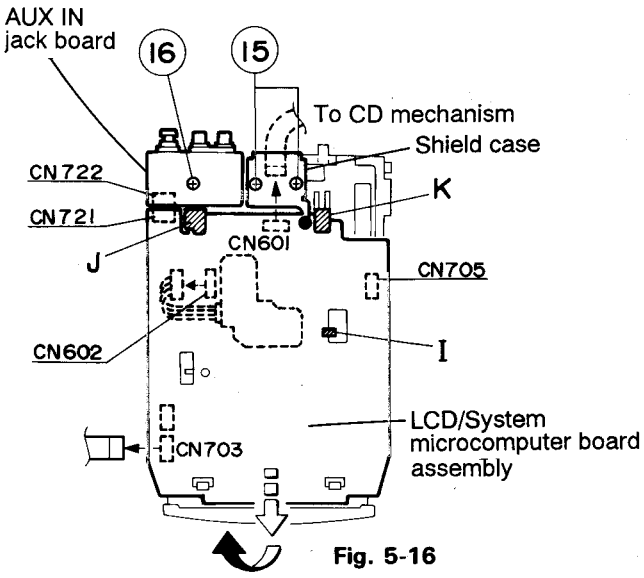


Fig. 5-16

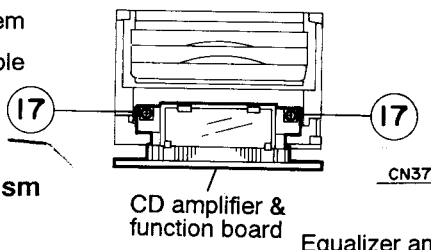


Fig. 5-17

◆Removing the pre-amplifier, bias and mechanism control boards (Figs. 5-18 and 5-19).

1. Turn over the cassette mechanism section and remove two screws ⑱ securing the Rec amplifier board. Pull and remove connector CN324 from the mechanism control board and CN329 from the Rec bias board assembly.
2. Remove two screws ⑲ securing the mechanism control board. Then, remove connector CN373 from connector CN303 on the Rec bias board and connector CN371 from the cassette mechanism.
3. Remove the screw ⑳ securing the Rec bias board assembly and the flexible wire coming from the rec/play head from connector CN301.
4. Remove the Rec bias board assembly from two claws in section L.
5. Remove two screws ㉑ securing the equalizer amplifier board and remove connector CN302 from CN352 (Fig. 5-19).
6. Remove the screw ㉒ securing the Rec bias board then remove the Rec bias board from the Print circuit board holder (Fig. 5-19).

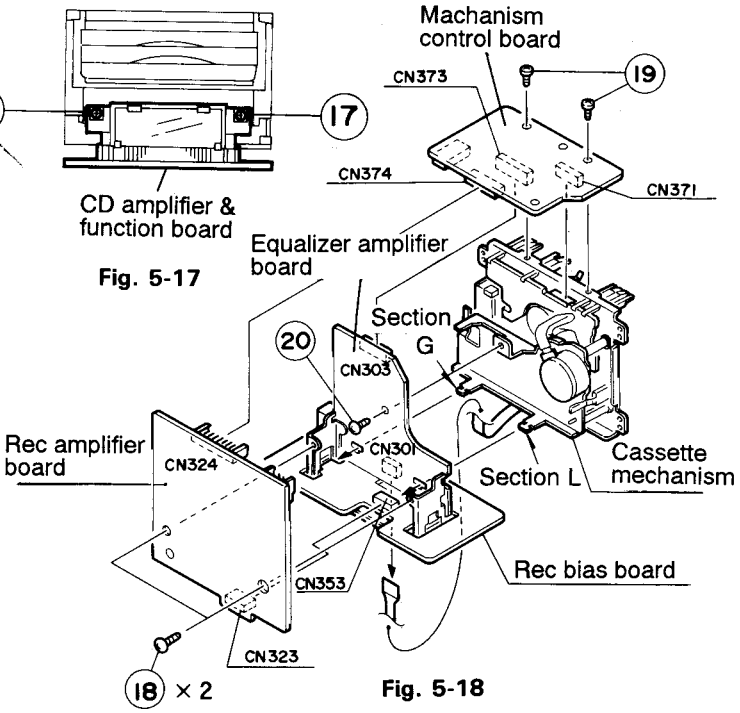


Fig. 5-18

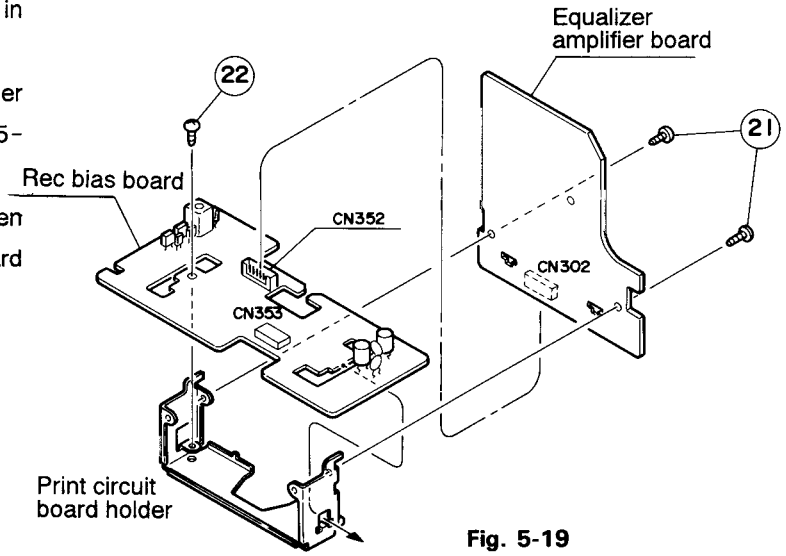


Fig. 5-19

■ How to disassemble the cassette mechanism

◆ Head mount assembly (See Figure 5-20)

1. Remove three scrwes ① retaining the from the cassette mechanism head mount assembly mounting .
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 5-21)

Right

After opening the pinch roller assembly retaining tab (A) 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

Perform the same procedure for the right as shown above.

◆ Capstan motor and flywheel assembly

(See Figures 5-22 to 5-24)

1. Remove three screws ② retaining the FM bracket assembly mounting from the chassis base. (See Figure 5-22)
2. Open outwards and remove two tabs (B) retaining the FM bracket .
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

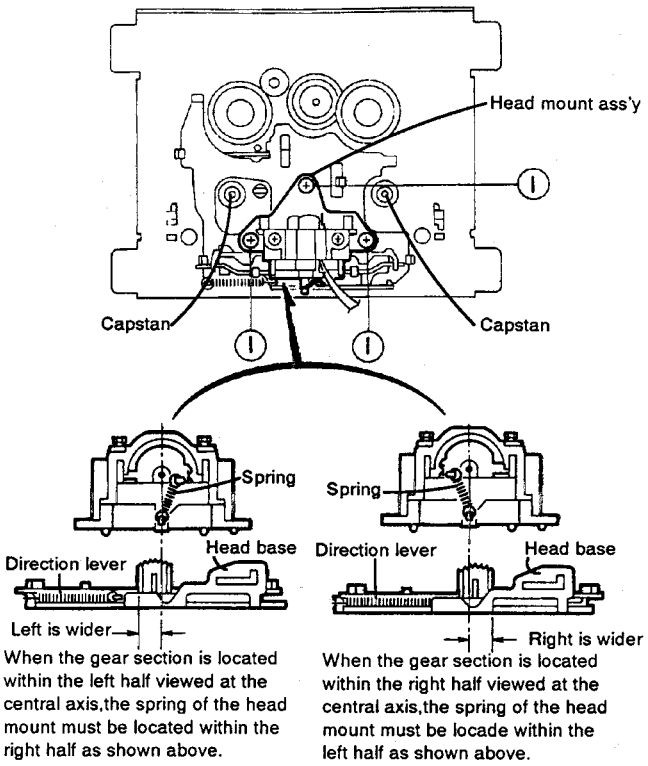


Fig. 5-20a **Fig. 5-20**

Pinch roller section

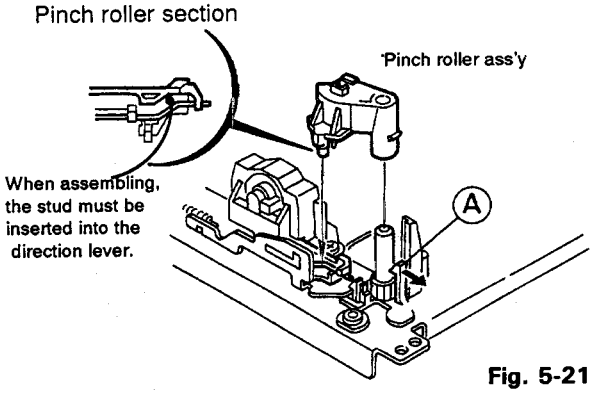


Fig. 5-21

Cassette mechanism top view

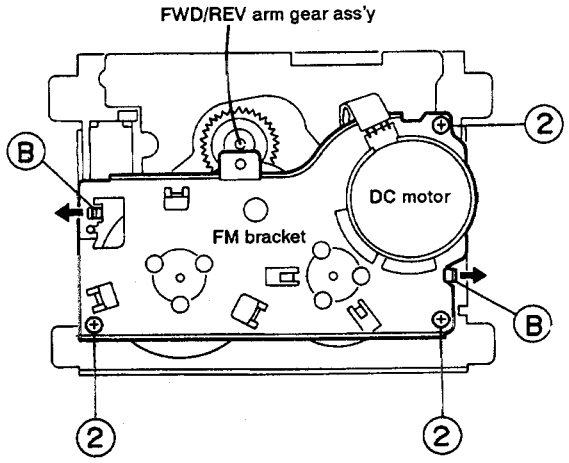


Fig. 5-22

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

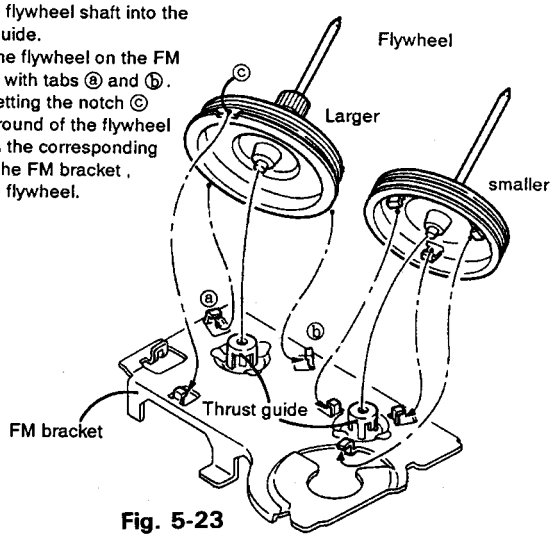


Fig. 5-23

● How to assemble the FM bracket

(See Figure 5-24)

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 board assembly (See Figure 5-25)

1. When the solenoid is not removed, separate the soldered parts of the PC board on the solenoid terminal.
2. Remove the screw ③ retaining the PC board mounting.
3. Remove the four tabs (C) mechanism board retaining.
4. In this state, the mechanism 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 mechanism board.

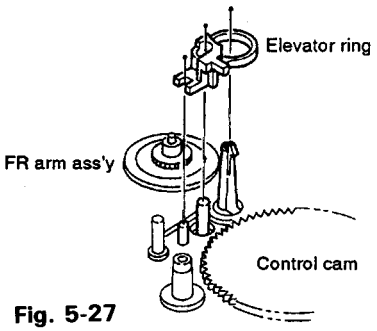


Fig. 5-27

Belt location

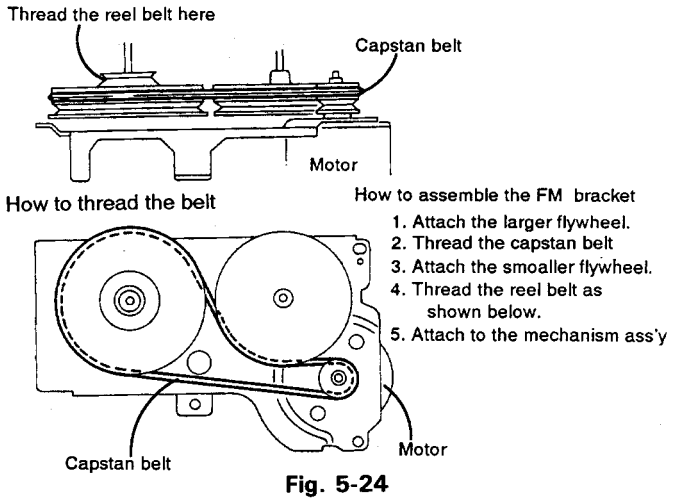


Fig. 5-24

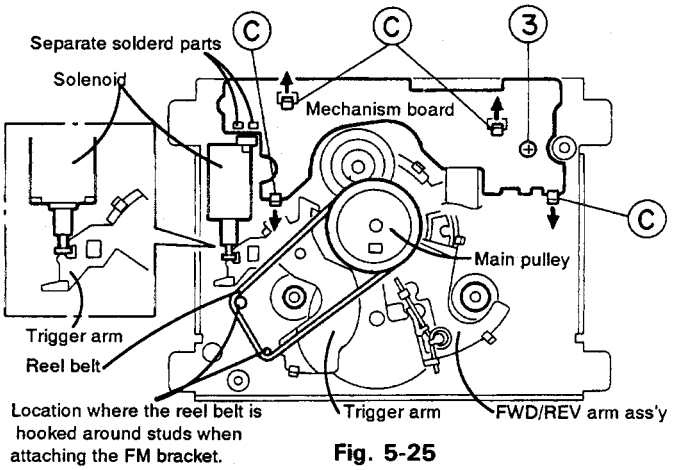


Fig. 5-25

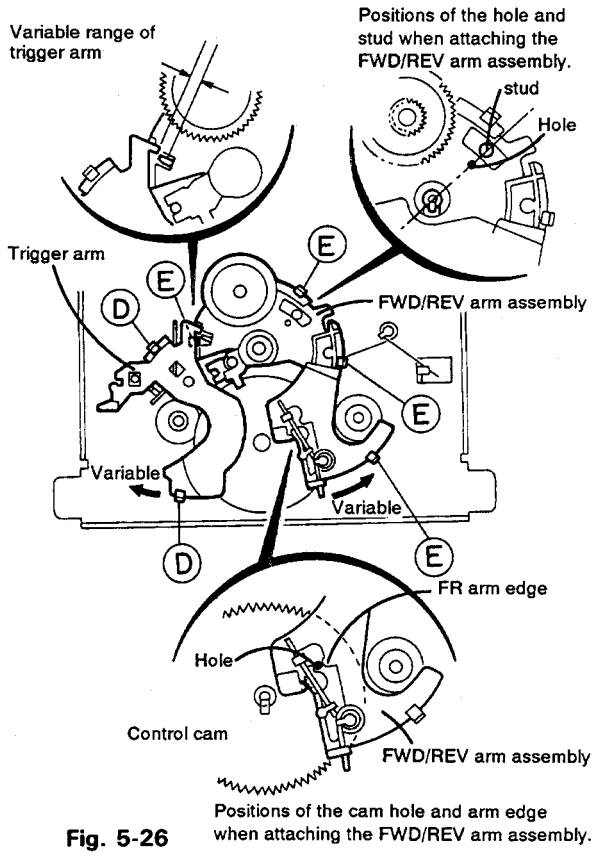


Fig. 5-26

◆ Control cam (Figures 5-26 to 5-31)

1. Remove the FM bracket and flywheel.
2. Pull out the main pulley.
3. Remove the trigger arm.
   While opening two tabs (D) 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. Whilr opening four tabs (E) retaining the FWD/REV arm 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 inform when it has been 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
   shown in the Figure 5-26.
   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

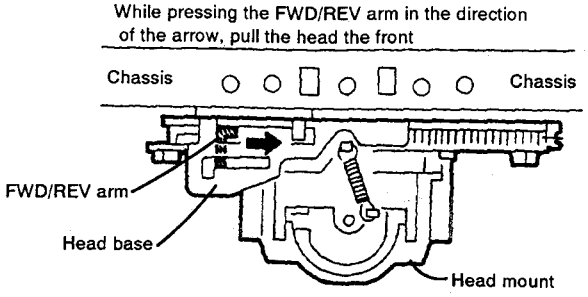


Fig. 5-28

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

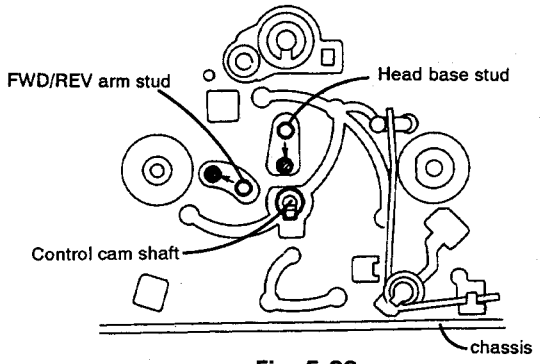
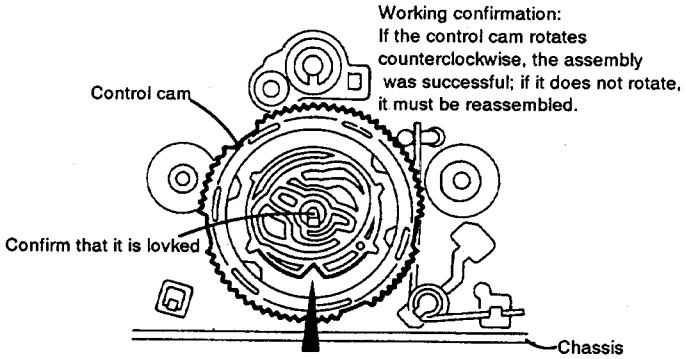
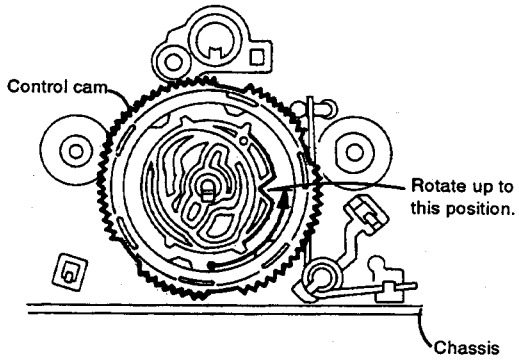


Fig. 5-29



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. 5-30



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

Fig. 5-31

CD Changer Mechanism Sections

■ Removing the CD tray assembly

(See Figs. 5-32~5-38)

1. Remove the front panel assembly.
2. Remove the CD changer assembly.
3. Remove the CD amplifier board.
4. From the T. bracket section (A) and clamper base section (B), remove both of the edges fixing the rod (See Figs. 5-32 and 5-33).
5. Remove the three screws (1) retaining the T. bracket (See Fig. 5-32).
6. From the left side face of the chassis assembly, remove the one screw (4) retaining both of the return spring and lock lever.
7. By removing the pawl at the section (D) fixing the return spring, dismount the return spring (See Fig. 5-34).
8. Remove the three lock levers (See 5-34).

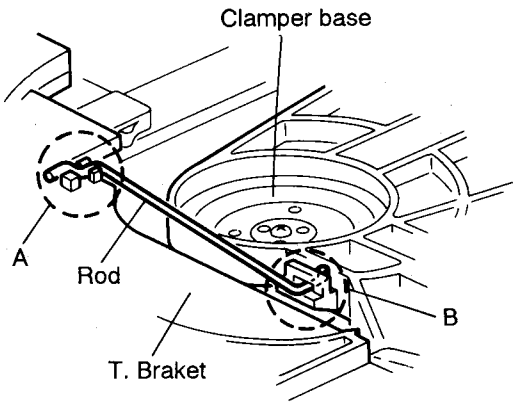


Fig. 5-32

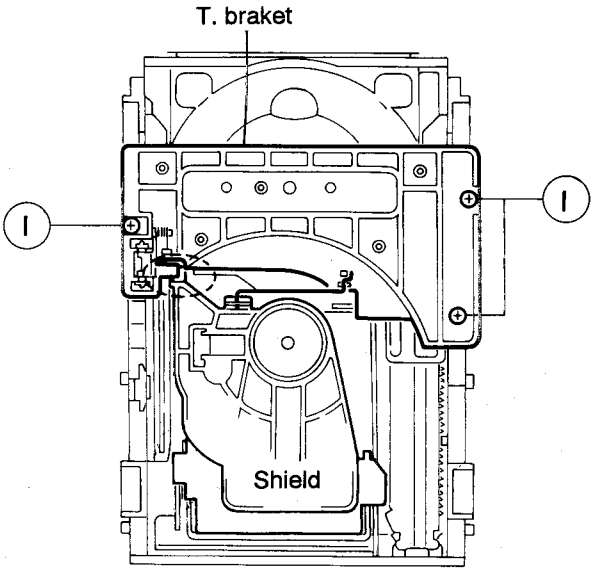


Fig. 5-33

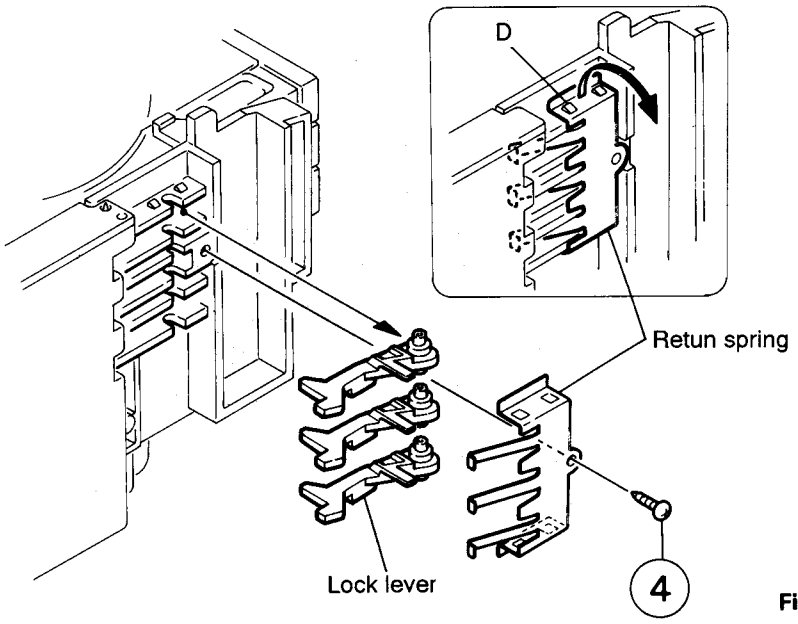


Fig. 5-34

11. Check whether the lifter unit stopper has been caught into the hole at the section (F) of CD tray assembly as shown in Fig. 5-36.
12. Make sure that the driver unit elevator is positioned as shown in Fig. 5-36a from to the second or fifth hole on the left side face of the CD changer mechanism.

[Caution] In case the driver unit elevator is not at the above position, set the elevator to the position as shown in Fig. 5-36a by manually turning the pulley gear as shown in Fig. 5-37.

13. Manually turn the motor pulley in the clockwise direction until the lifter unit stopper is lowered from the section (F) of CD tray assembly (See Fig. 5-37).
14. Pull out all of the three stages of CD tray assembly in the arrow direction (E) until these stages stop (See Fig. 5-35).
15. At the position where the CD tray assembly has stopped, pull out the CD tray assembly while pressing (H) the two pawls (G) on the back side of CD tray assembly (See Fig. 5-38). In this case, it is easy to pull out the assembly when it is pulled out first from the stage CD tray assembly.

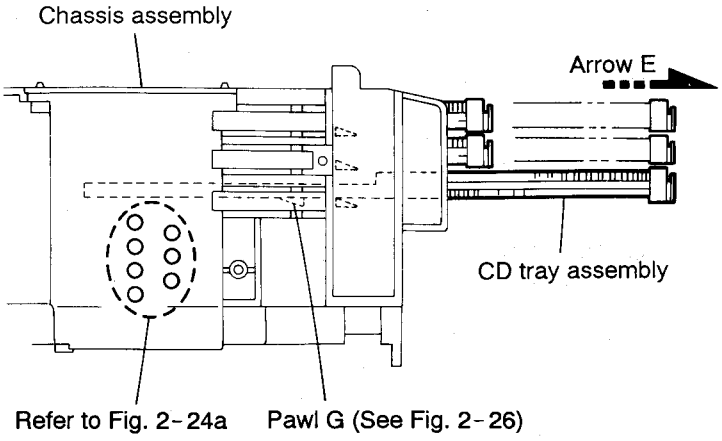


Fig. 5-35

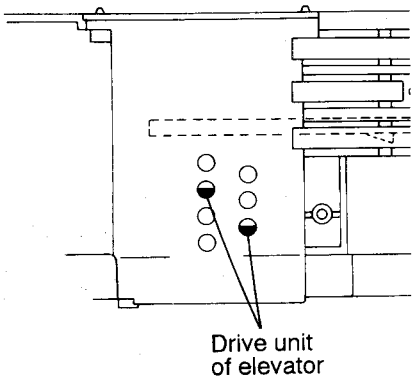


Fig. 5-36a

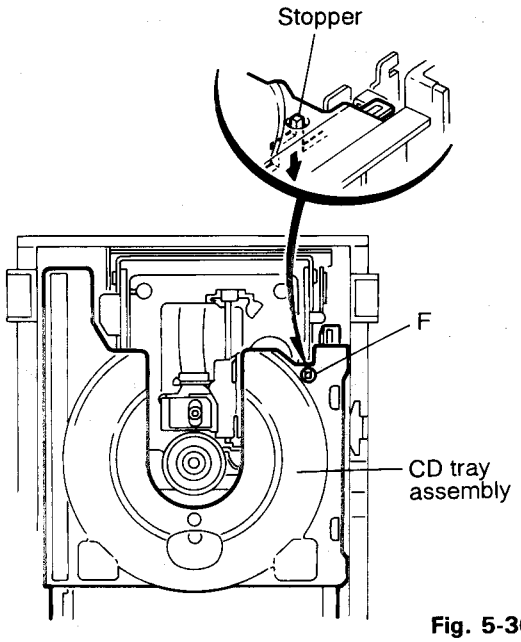


Fig. 5-36

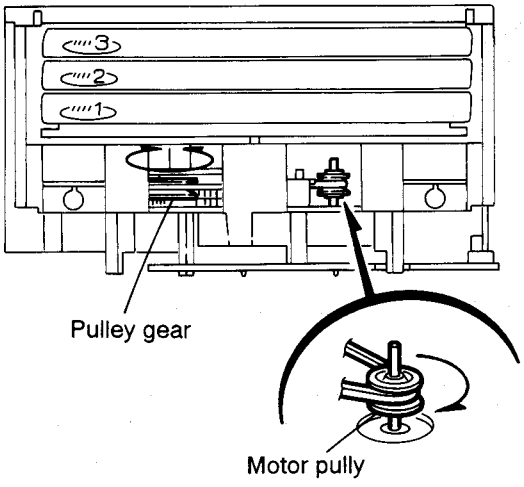


Fig. 5-37

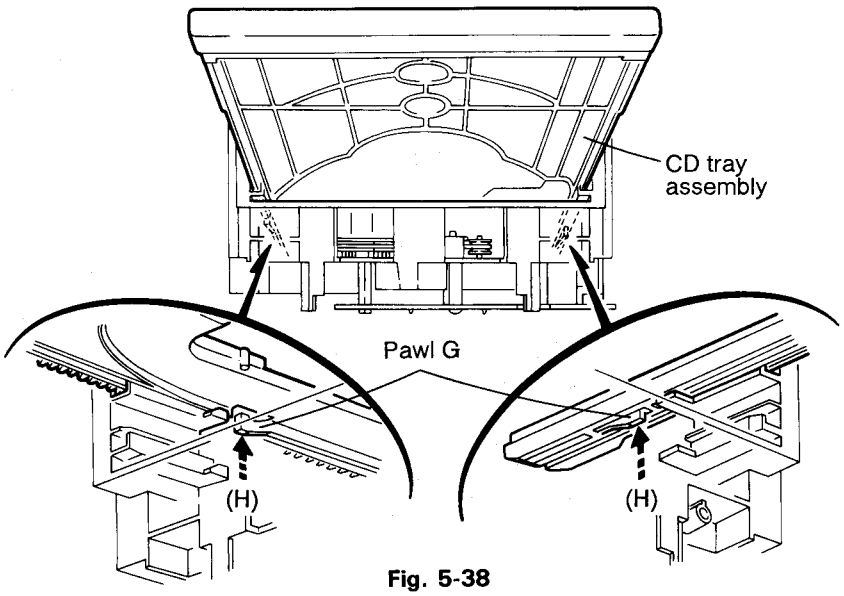


Fig. 5-38

■ Removing the CD mechanism assembly (See Fig. 5-39)

1. While turning the cams R1 and R2 assembly in the arrow direction (I), align the shaft (J) of the CD mechanism assembly to the position shown in Fig. 5-39.
2. Remove the four screws (5) retaining the CD mechanism assembly (See Fig. 5-39).

■ Removing the CD mechanism (See Figs. 5-40 and 5-41)

1. For dismounting only the CD mechanism without removing the CD mechanism assembly, align the shaft (L) of the CD mechanism assembly to the position shown in Fig. 5-40 while turning the cam R1 and R2 assembly in the arrow direction (K).
2. By raising the CD mechanism assembly in the arrow direction (M), remove the assembly from the lifter unit (Fig. 5-41).

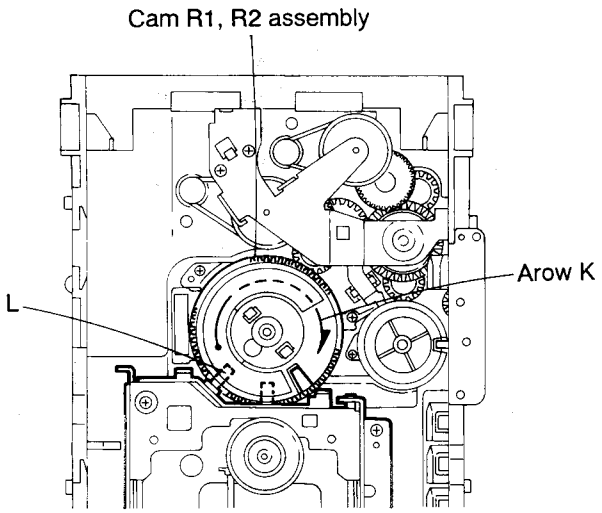


Fig. 5-40

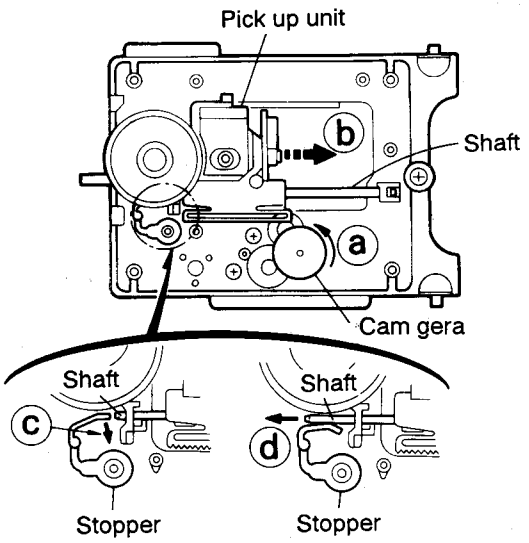


Fig. 5-42

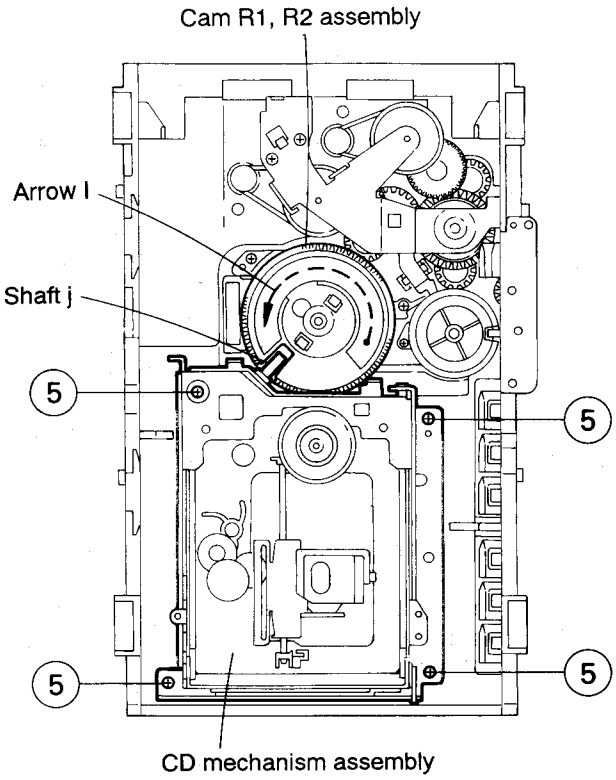


Fig. 5-39

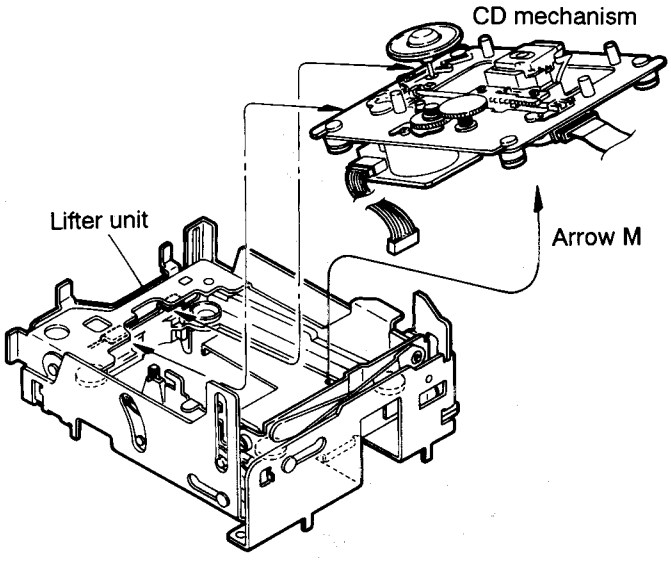


Fig. 5-41

■ Removing the CD pickup unit (See Fig. 5-42)

1. Move the cam gear in the arrow direction ⓐ. Then, the CD pickup unit will be moved in the arrow direction ⓑ.
2. According to the above step, shift the CD pickup unit to the center position (Fig. 5-42).
3. While pressing the stopper retaining the shaft in the arrow direction ⓒ, pull out the shaft in the arrow direction ⓓ (See Fig. 5-42).
4. After dismounting the shaft from the CD pickup unit, remove the CD pickup unit.

■ Removing the actuator motor board

(See Figs. 5-43 and 5-44)

1. Absorb the four soldered positions (N) of the right and left motors with a soldering absorber (See Fig. 5-43).
2. Remove the two screws (6) retaining the actuator motor board (See Fig. 5-44).
3. Remove the one screw (11) retaining the bracket (See Fig. 5-43).
4. Remove the two screws (7) retaining the tray select switch board (See Fig. 5-44).

■ Removing the cam unit

(See Figs. 5-33~5-35)

1. Remove the CD mechanism assembly.
2. While turning the cam gear L, align the pawl (N) position of the drive unit to the notch position (Fig. 5-45) on the cam gear L.
3. Pull out the drive unit and cylinder gear (See Fig. 5-46).
4. While turning the cam gear L, align the pawl (O) position of the select lever to the notch position (Fig. 5-47) on the cam gear L.
5. Remove the four screws (8) retaining the cam unit (cam gear L and cams R1/R2 assembly) (See Fig. 5-47).

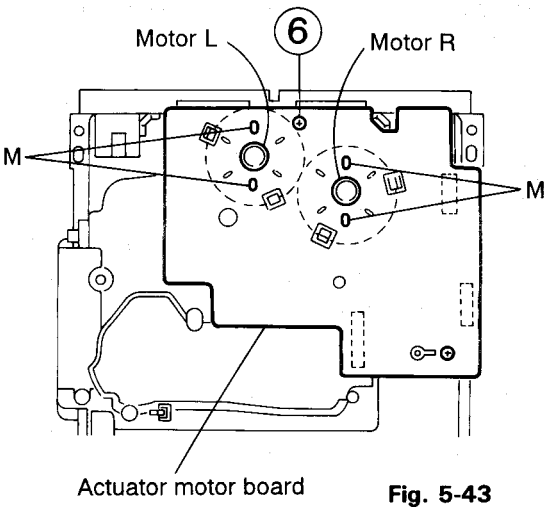


Fig. 5-43

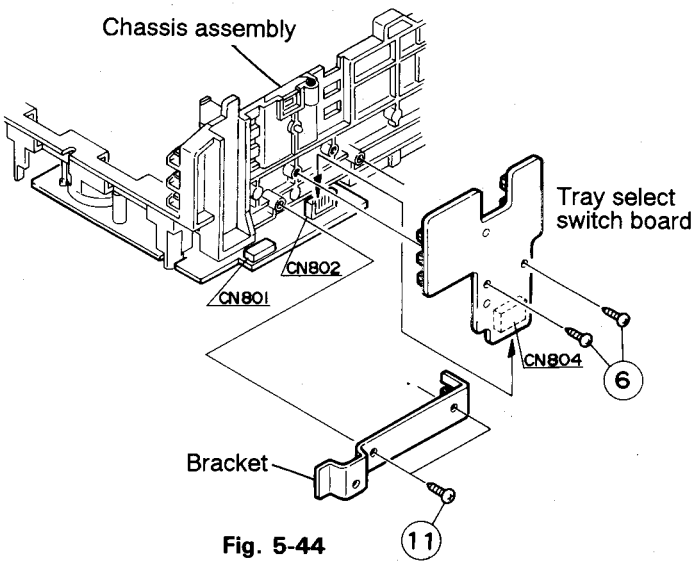


Fig. 5-44

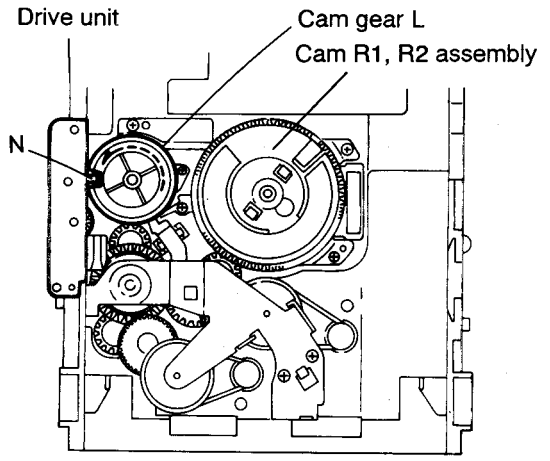


Fig. 5-45

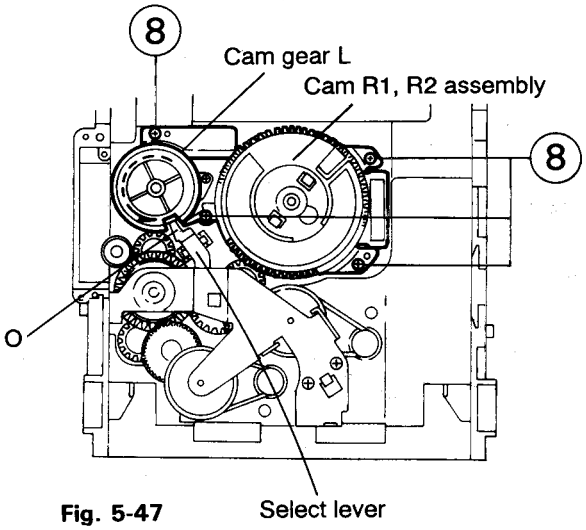


Fig. 5-47

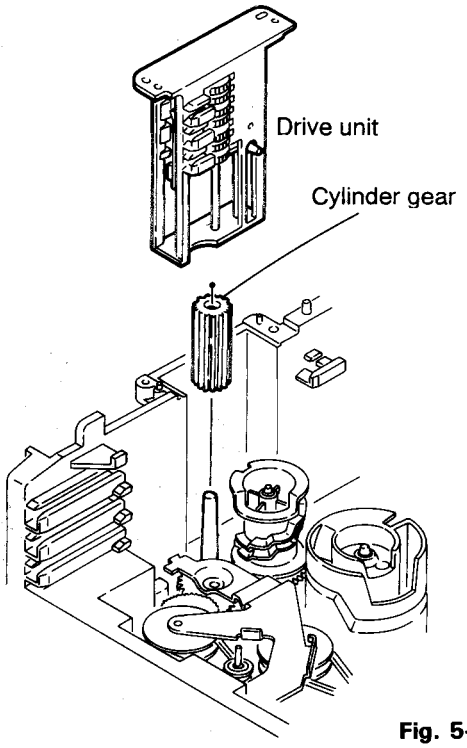


Fig. 5-46

■ Removing the actuator motor and belt

(See Figs. 5-48~5-51)

1. Remove the two screws (9) retaining the gear bracket (See Fig. 5-48).
2. While pressing the pawl (P) fixing the gear bracket in the arrow direction, remove the gear bracket (See Fig. 5-48).
3. From the notch (Q section) on the chassis assembly fixing the edge of gear bracket, remove and take out the gear bracket (See Fig. 5-49).
4. Remove the belts respectively from the right and left actuator motor pulleys and pulley gears (See Fig. 5-50).
5. After turning over the chassis assembly, remove the actuator motor while spreading the four pawls (R) fixing the right and left actuator motors in the arrow direction (See Fig. 5-50).

[Note] When the chassis assembly is turned over under the conditions wherein the gear bracket and belt have been removed, then the pulley gear as well as the gear, etc. constituting the gear unit can possibly be separated to pieces. In such a case, assemble these parts by referring to the assembly and configuration diagram in Fig. 5-51.

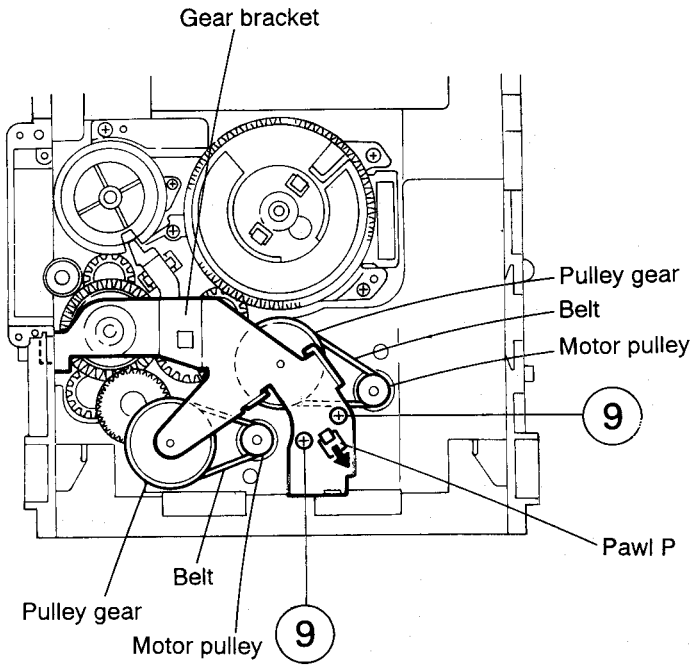


Fig. 5-48

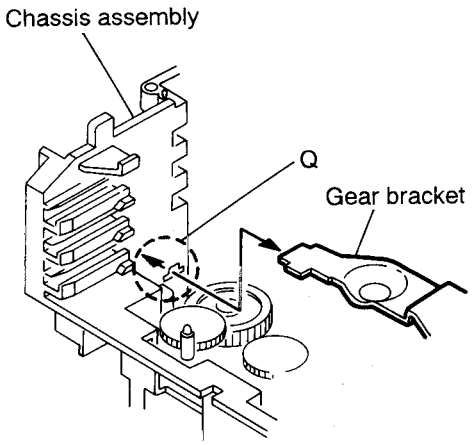


Fig. 5-49

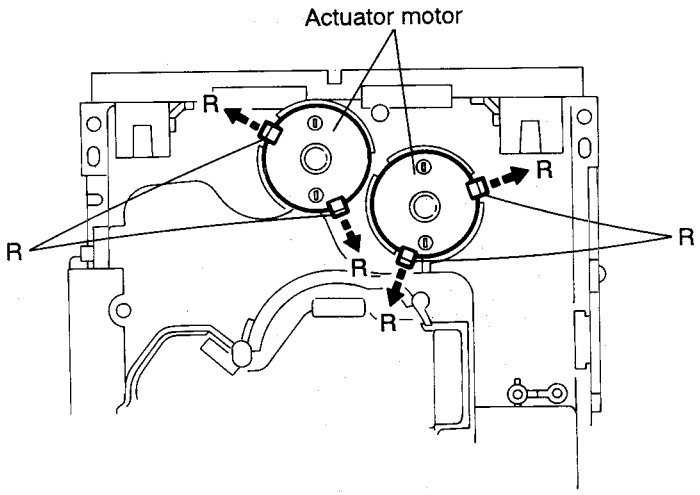


Fig. 5-50

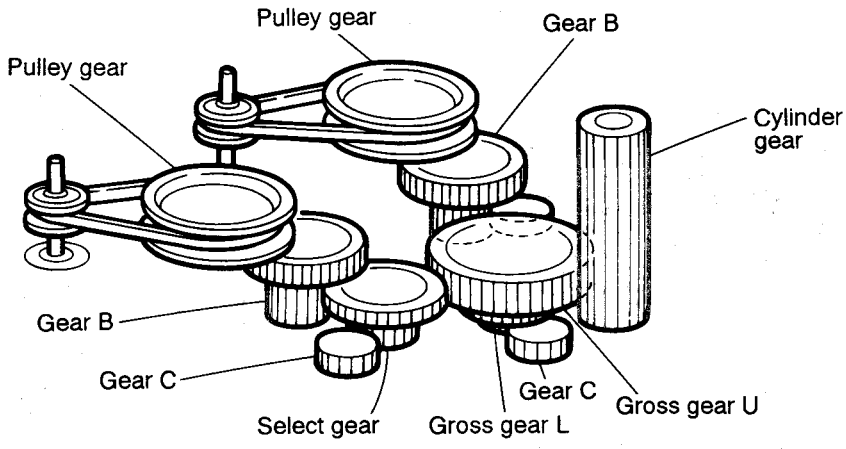


Fig. 5-51

■ Removing the cams R1/R2 assembly and cam gear L (See Fig. 5-52)

1. Remove the slit washer fixing the cams R1 and R2 assembly.
2. By removing the two pawls (S) fixing the cam R1, separate R2 from R1.
3. Remove the slit washer fixing the cam gear L.
4. Pull out the cam gear L from the C.G. base assembly.

■ Removing the C.G. base assembly

(See Figs. 5-52 and 5-53)

Remove the three screws (10) retaining the C.G. base assembly.

[Caution] To reassemble the cylinder gear, etc. with the cam unit (cam gear and cams R1/R2 assembly), gear unit and drive unit, align the position of the pawl (N) on the drive unit to that of the notch on the cam gear L. Then, make sure that the gear unit is engaged by turning the cam gear L.

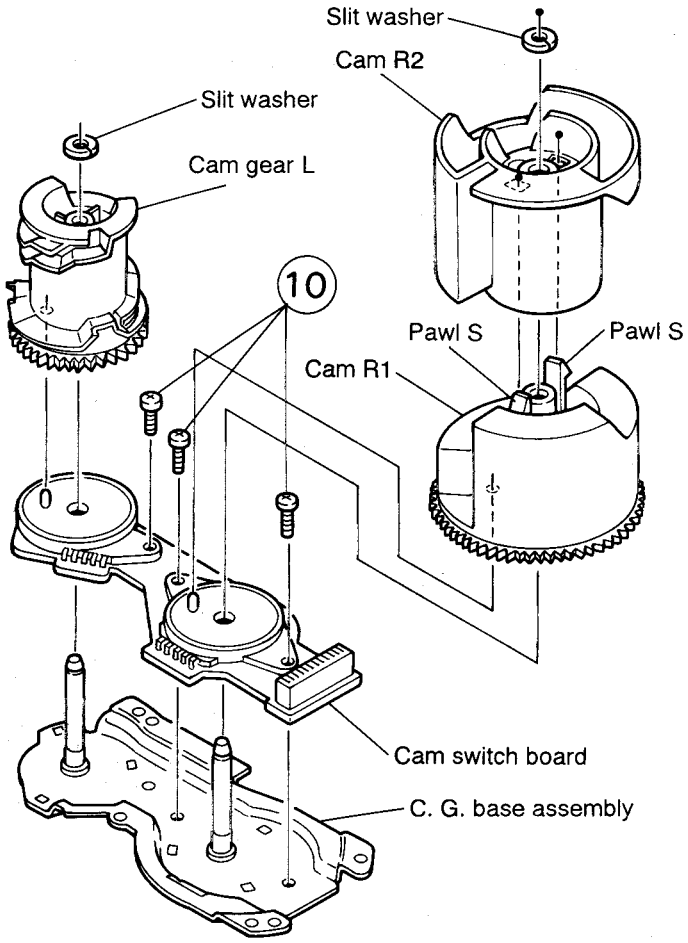


Fig. 5-52

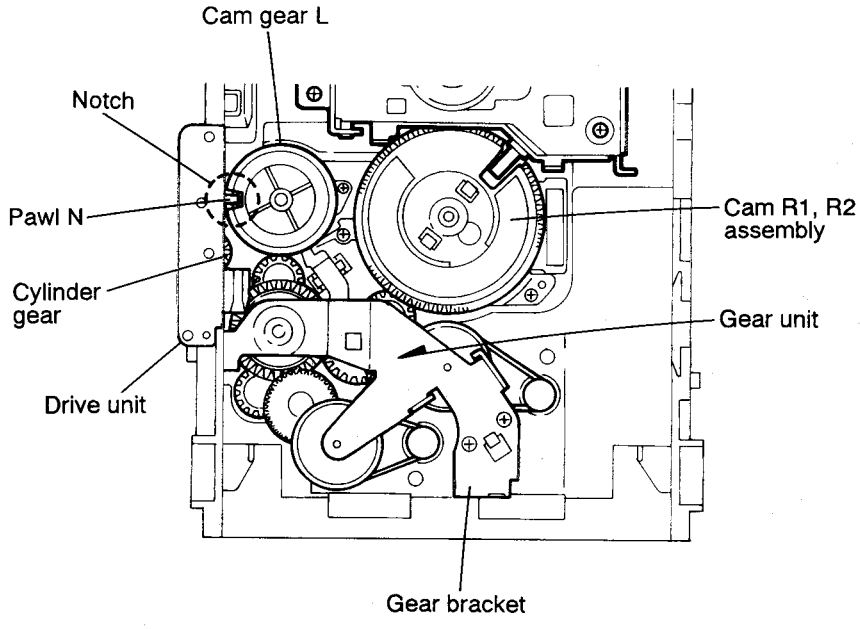


Fig. 5-53

6. Exploded View of Enclesure Assembly

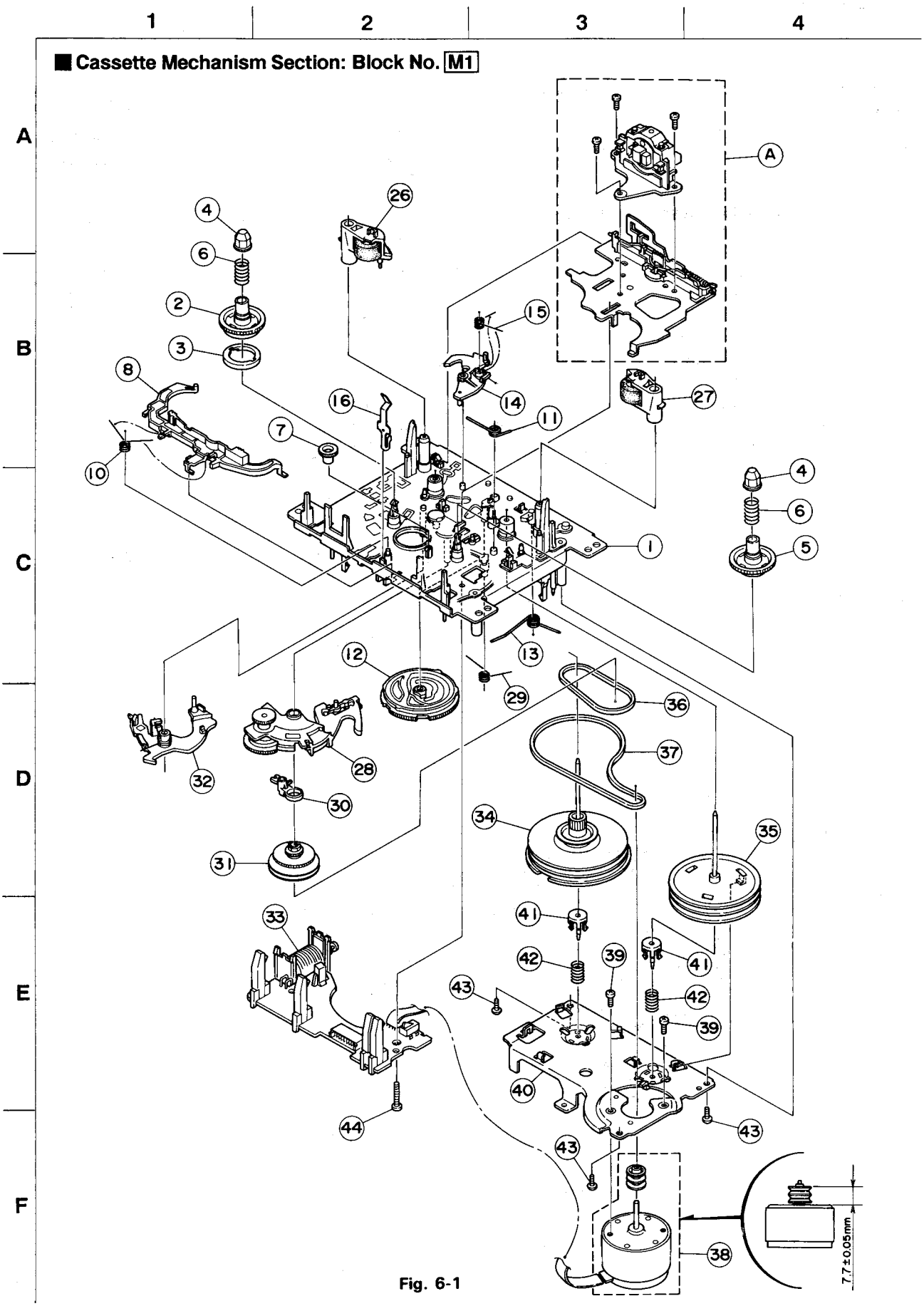


Fig. 6-1

Cassette Mechanism Parts List

BLOCK NO. M1MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	VKM3852-00B	HEAD BLOCK ASSY		1		
	1	VKS1147-00A	CHASSIS B. ASY		1		
	2	VKS3707-002	REEL GEAR		1		
	3	VKZ4690-002	MAGNET		1		
	4	VKS3708-002	REEL FEATHER		2		
	5	VKS3707-002	REEL GEAR		1		
	6	VKW5162-002	B.T. SPRING		2		
	7	VKS5519-002	IDLER GEAR		1		
	8	VKS2261-002	REEL BRAKE		1		
	10	VKW5178-001	BRAKE SPRING		1		
	11	VKW5202-002	LIFTER SPRING		1		
	12	VKS1150-002	CONTROL CAM		1		
	13	VKW5170-002	CAM SPRING		1		
	14	VKS2255-001	DIR. TRIGGER		1		
	15	VKW5163-001	DIR. SPRING		1		
	16	VKY4670-001	CASSETTE SPRING		1		
	26	VKP4231-00B	P.ROLLER(R) ASY		1		
	27	VKP4232-00B	P.ROLLER(L) ASY		1		
	28	VKS3714-00B	FR ARM ASY		1		
	29	VKW5173-001	FR SPRING		1		
	30	VKS3719-002	ELEVATOR RING		1		
	31	VKS5523-00C	MAIN PLY ASY		1		
	32	VKS5525-00B	TRIGGER ARM ASY		1		
	33	VGP2401-00A	DC SOLENOID		1		
	34	VKF3200-00A	F.WHEEL (R) ASY		1		
	35	VKF3202-00A	F.WHEEL (L) ASY		1		
	36	VKB3000-167	REEL BELT		1		
	37	VKB3000-160	CAPSTAN BELT		1		
	38	MSI5U2LWA-SA3	D.C.MOTOR ASS'Y	CAPSTAN	1		
	39	SPSP2603Z	SCREW		2		
	40	VKM3833-001	FM BRACKET		1		
	41	VKS5524-001	THRUST GUIDE		2		
	42	VKW5177-002	THRUST SPRING		2		
	43	SBSF2608Z	SCREW		3		
	44	SDST2612Z	SCREW		1		

CD Mechanism Section: Block No. M2

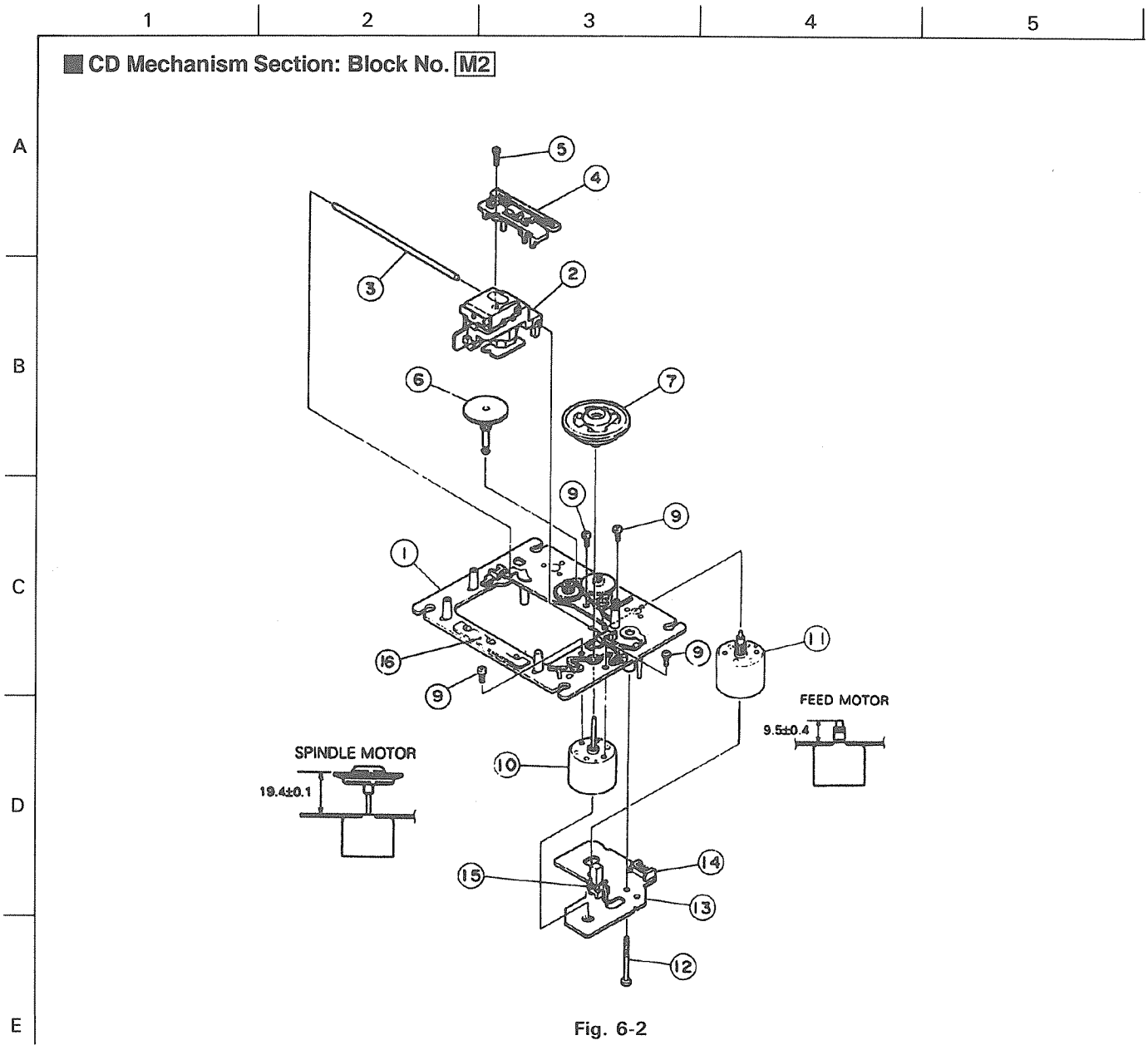


Fig. 6-2

CD Mechanism Parts List

BLOCK NO. M2MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	EPB-002A	MECHA BASE ASSY		1		
	2	OPTIMA-6S	CD PICK-UP ENIT		1		
	3	E406777-001	PICK-UP SHAFT		1		
	4	E307746-001	CD RACK		1		
	5	SDSF2006Z	SCREW	CD LACK ASS'Y	1		
	6	EPB-003A	MECHA GEAR		1		
	7	E75807-301	CD T.TABLE ASSY		1		
	9	SDSP2003N	SCREW	FOR MOTOR	4		
	10	E406783-001	SP MOTOR	SPINDL MOTOR	1		
	11	E406784-001SA	DCMOTOR ASSY	FEED MOTOR	1		
	12	E75832-001	S.SCREW	M.REAF SWITCH	1		
	13	EMW10190-001	PRINTED BOARD	LEAF SWITCH	1		
	14	EMV5109-006B	6P PLUG ASSY		1		
	15	ESB1100-005	LEAF SWITCH		1		
	16	E407212-001	LR DAMPER		1		

Enclosure Assembly Section: Block No. M3

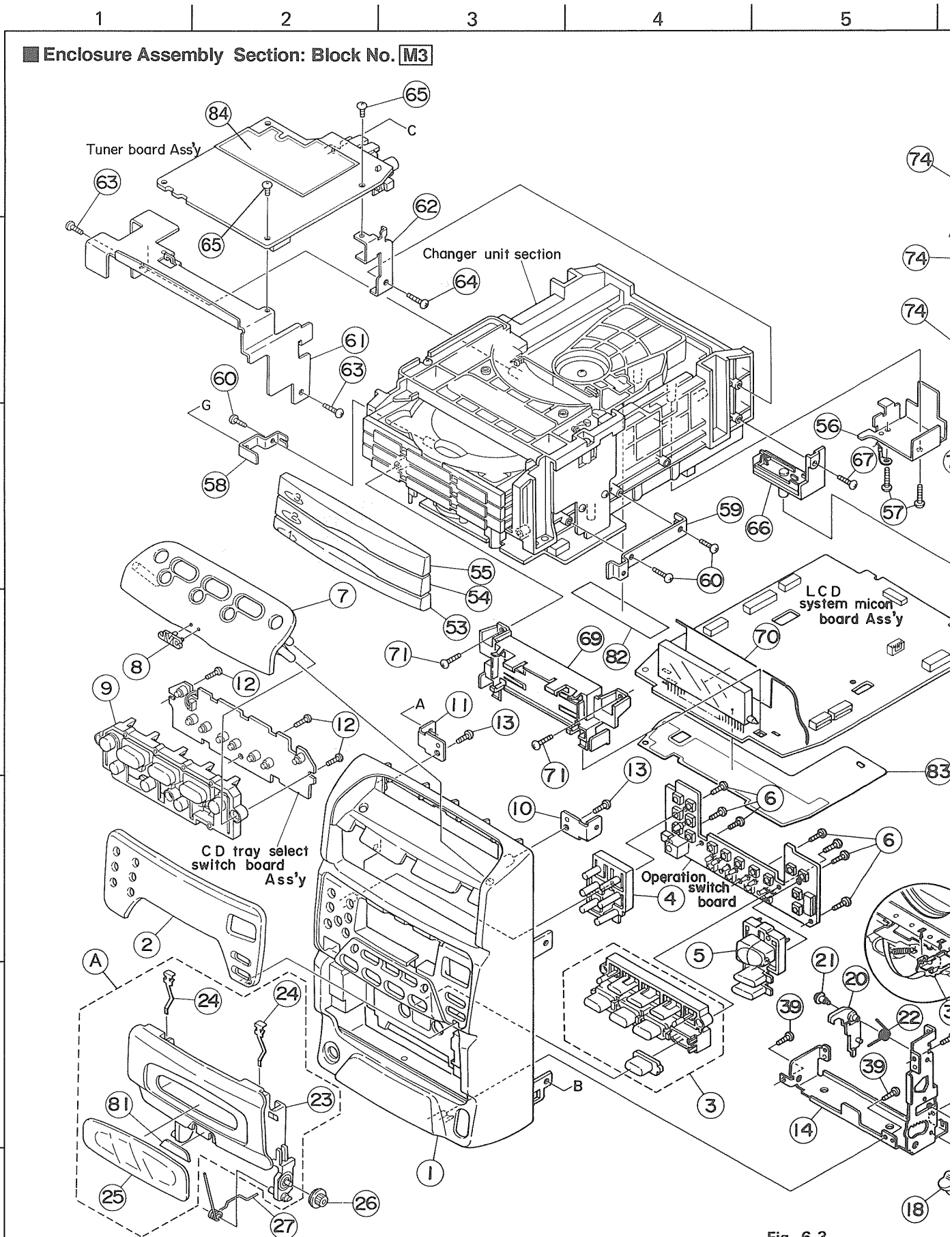
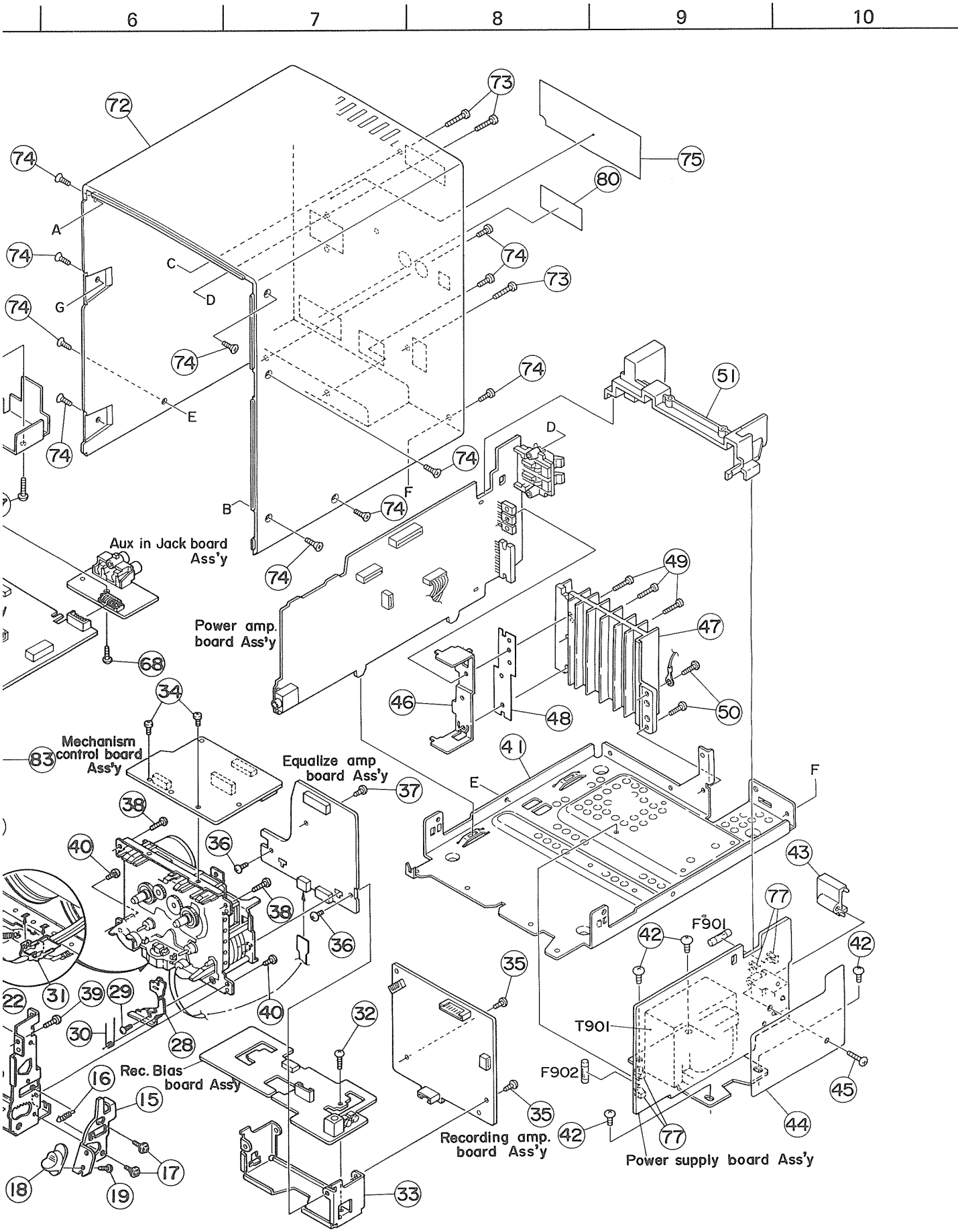


Fig. 6-3


6
7
8
9
10
Aux in Jack board Ass'y
Power amp. board Ass'y
Mechanism control board Ass'y
Equalize amp board Ass'y
Rec. Bias board Ass'y
Recording amp. board Ass'y
Power supply board Ass'y
F901
T901
F902

Enclosure Assembly Parts List

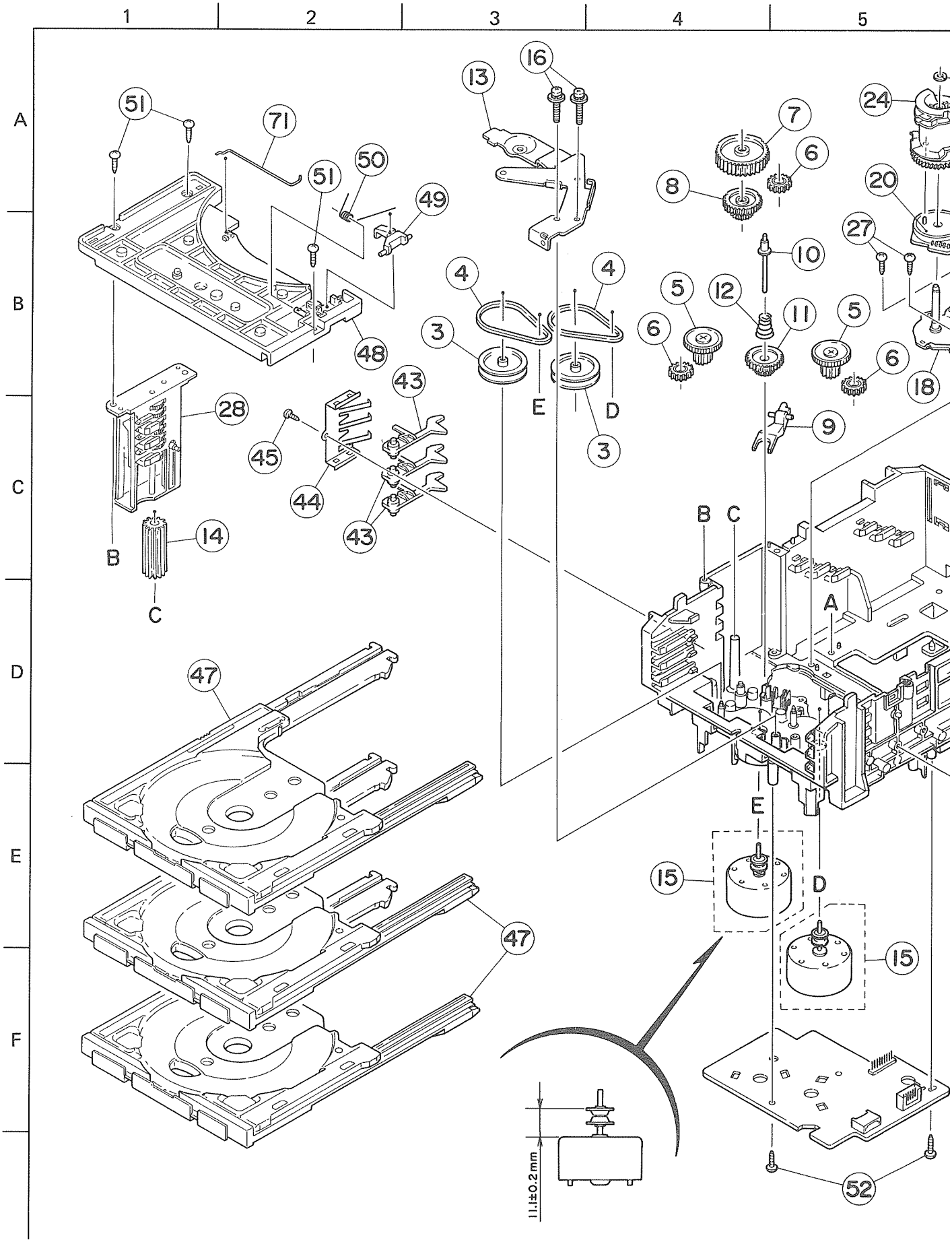
BLOCK NO. M3MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	ZCUXC30K-CB	C.DOOR ASS'Y	NO.23-25,81	1		BK
		ZCUXC30K-CW	C.DOOR ASS'Y	NO.23-25,81	1		WT
	1	VJG1376-003	FRONT PANEL		1		BK
		VJG1376-103	FRONT PANEL		1		WT
	2	VJK4483-00A	FL LENS ASSY		1		
	3	VXP5317-00B	BUTTON ASSY		1		
		VXP5317-00C	BUTTON ASSY		1		WT
	4	VXP3751-001	BUTTON		1		
	5	VXP3752-001	VOLUME BUTTON		1		
	6	SBSF2608Z	SCREW	FRONT+BTN+PWB	7		
	7	VJD3990-003	TOP COVER		1		WT
		VJD3990-002	TOP COVER		1		BK
	8	E406971-001SM	JVC MARK		1		
	9	VXP5320-00A	CD BTN ASS'Y		1		
	10	VYH8016-001	TOP BRACKET		1		
	11	VYH8016-002	TOP BRACKET		1		
	12	SBSF2608Z	SCREW	TOP+BTN+PWB	3		
	13	SBSF3010Z	SCREW	FRONT+BKT	2		
	14	VYH3902-001	DOOR HOLDER		1		
	15	VYH8017-001	EJECT LEVER		1		
	16	VKW3002-274	TENSION SPRING	FOR EJECT LEVER	1		
	17	VKZ4323-002	SCREW	FOR EJECT LEVER	2		
	18	VXQ4123-001	EJECT KNOB		1		BK
		VXQ4123-002	EJECT KNOB		1		WT
	19	SBSF2608Z	SCREW	FOR EJECT KONB	1		
	20	VYH7347-001	EJECT ARM		1		
	21	VKZ4341-001	SPECIAL SCREW	FOR EJECT ARM	1		
	22	VKW4938-001	TORSION SPRING	FOR EJECT ARM	1		
	23	VJT2364-002	CASSETTE DOOR		1		WT
		VJT2364-001	CASSETTE DOOR		1		BK
	24	VKY4180-001	CASSETTE SPRING		2		
	25	VJK4467-001	DOOR LENS		1		
	26	VYH5601-001	GEAR	C.BASE+LCD PWB	1		
	27	VKW5216-001	DOOR SPRING		1		
	28	VKL7777-002	EJECT SAFETY(R)		1		
	29	SBSF3010Z	SCREW	FOR EJECT SAFTY	1		
	30	VKW5224-001	TORSION SPRING	FOR EJECT SAFTY	1		
	31	VKS3655-002	F.P.C. HOLDER		1		
	32	SBST3006Z	SCREW	BIAS PWB+PWB BK	1		
	33	VYH8018-001	PWB BKT		1		
	34	SDST2604Z	SCREW	MECHACON PWB+ME	2		
	35	SBST3006Z	SCREW	REC PWB+PWB BKT	2		
	36	SBST3006Z	SCREW	PLAY PWB+PWB BK	2		
	37	SBST3006Z	SCREW	PLAY PWB+MECHA	1		
	38	SBSF3010Z	SCREW	F.PANEL+MECHA	2		
	39	SBSF3010Z	SCREW	F.PANEL+DOOR HO	3		
	40	SBST3006Z	SCREW	DOOR HOL+MECHA	2		
	41	VYH1257-001	BOTTOM CHASSIS		1		
	42	SBST4006Z	SCREW	CHASSIS+TRANS	4		
	43	VYH8032-001	AC HOLDER	ABS FOR AC/DC	1		
	44	VMA4677-001	BARRIER	FOR AC/DC PWB	1		
	45	SBSF3010Z	SCREW	AC/DC PWB+AC HO	1		
	46	VYH8036-001	IC HOLDER		1		
	47	VYH7802-003	RADIATION		1		
	48	VYH8045-001	SHEET		1		

BLOCK NO. M3MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	49	SDST2612Z	SCREW	IC HOL+RADIATIO	3		
	50	SBST3008Z	SCREW	CHASSIS+RADI.	2		
	51	VYH3904-001	JOINT		1		
	53	VJD3989-021	CD FITTING 1		1		WT
		VJD3989-011	CD FITTING 1		1		BK
	54	VJD3989-022	CD FITTING 2		1		WT
		VJD3989-012	CD FITTING 2		1		BK
	55	VJD3989-023	CD FITTING 3		1		WT
		VJD3989-013	CD FITTING 3		1		BK
	56	VMA4658-001	SHIELD CASE		1		
	57	SBSF3008Z	SCREW		2		
	58	VYH8019-001	JOINT BRKT(L)		1		
	59	VYH8020-001	JOINT BRKT(R)		1		
	60	SBSF3008Z	SCREW	JOINT+C3MECHA	3		
	61	VYH3907-001	TUNER BRACKET		1		
	62	VYH8021-001	TUNER SUPPORT		1		
	63	SBSF3008Z	SCREW	TU BRKT+C3MECHA	2		
	64	SBSF3008Z	SCREW	TU SUPP+C3MECHA	1		
	65	SBST3006Z	SCREW	FOR TUNER PWB	2		
	66	VYH3909-001	AUX HOLDER		1		
	67	SBSF3008Z	SCREW	FOR AUX HOL+CHA	1		
	68	SBSF3008Z	SCREW	AUX PWB+AUX HOL	1		
	69	VYH3908-001	FL HOLDER		1		
	70	VMA4674-001	SHIELD		1		
	71	SBSF3008Z	SCREW	HOLDER+C3MECHA	2		
	72	VJG1380-103	REAR CABINET		1		WT
		VJG1380-003	REAR CABINET		1		BK
	73	SDSF3010N	SCREW	REAR.COVER	3		WT
		SDSF3010M	SCREW	REAR.COVER	3		BK
	74	SSST3008M	SCREW	REAR.COVER+CHAS	11		BK
		SSST3008N	SCREW	REAR.COVER+CHAS	11		WT
	75	VYN9273-M108	NAME PLATE		1	G	WT
		VYN9273-M105	NAME PLATE		1	E	WT
		VYN9273-M102	NAME PLATE		1	B	WT
		VYN9273-M005	NAME PLATE		1	E	BK
		VYN9273-M109	NAME PLATE		1	EN	WT
		VYN9273-M008	NAME PLATE		1	G	BK
		VYN9273-M009	NAME PLATE		1	EN	BK
		VYN9273-M002	NAME PLATE		1	B	BK
	77	VMZ0125-001Z	FUSE CLIP	F901	2		
		VMZ0125-001Z	FUSE CLIP	F902	2		
	80	E70891-001	CLASS 1 LABEL		1		
	81	VJK4482-002	PLATE		1		WT
		VJK4482-001	PLATE		1		BK
	82	E406709-001	LASER CAUTION		1		
	83	VMA4676-001	SHIELD		1		
	84	VMA4684-001	SHIELD		1		
⚠	F 901	QMF51E2-R50SBS	FUSE		1		
⚠	F 902	QMF51E2-5R0	FUSE	SEC	1		
⚠	T 901	VTP66J9-12A	POWER TRANS		1		

CD Traverse Mechanism Section: Block No. M4



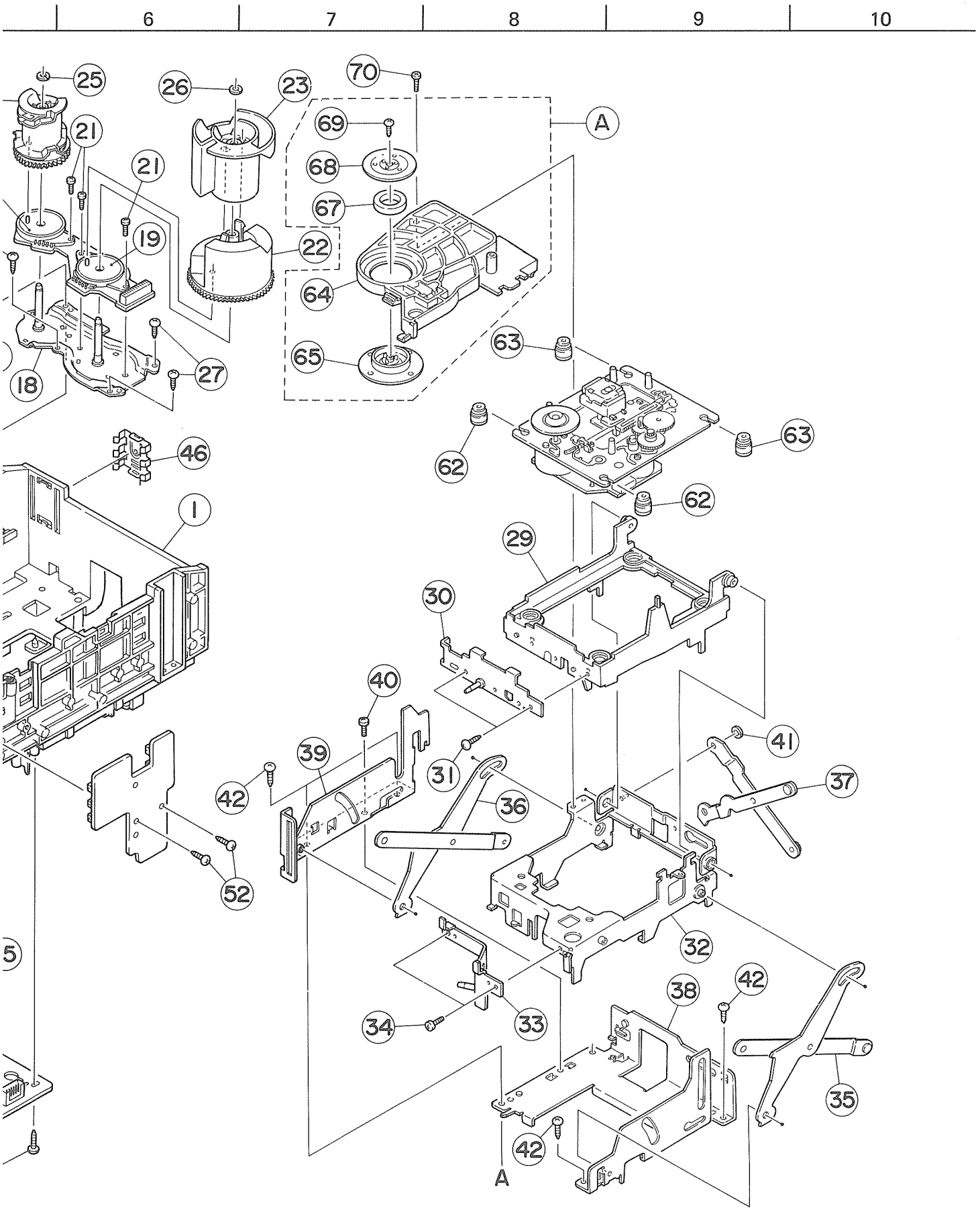

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Fig. 6-4

■ CD Traverse Mechanism Parts List

BLOCK NO. M4MM

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A	VKS3703-00DMM	CLAMPER ASS'Y	NO.64-65,67-69	1		
	1	VKS1144-003	CHASSIS		1		
	3	VKS5532-003	PULLEY GEAR		2		
	4	VKB3000-164	BELT		2		
	5	VKS5505-003	GEAR B		2		
	6	VKS5506-002	GEAR C		3		
	7	VKS5507-002	CROSS GEAR U		1		
	8	VKS5508-002	CROSS GEAR L		1		
	9	VKS5510-003	SELECT LEVER		1		
	10	VKH5769-001	S.G.SHAFT		1		
	11	VKS5511-002	SELECT GEAR		1		
	12	VKW5155-003	COMP.SPRING	FOR SELECT GEAR	1		
	13	VKM3846-002	GEAR BRACKET		1		
	14	VKS5509-002MM	CYLINDER GEAR		1		
	15	MSN5D257A-SA2	D.C.MOTOR ASSY		2		
	16	DPSP2616Z	SCREW	FOR MOTOR	2		
	18	VKM3825-00A	C.G.BASE ASS'Y		1		
	19	VKZ3172-00A	CAM SW. R ASS'Y		1		
	20	VKZ3173-00A	CAM SW. L ASS'Y		1		
	21	SPST2606Z	SCREW	FOR CAM SW.	3		
	22	VKS2263-002MM	CAM R1		1		
	23	VKS2264-002MM	CAM R2		1		
	24	VKS2265-002MM	CAM GEAR L		1		
	25	WDL316050	SLIT WASHER	FOR CAM GEAR L	1		
	26	WDL316050	SLIT WASHER		1		
	27	SBSF2608Z	SCREW	FOR C.GEAR BASE	4		
	28	VKS3702-00FMM	DRIVE UNIT		1		
	29	VKS2247-003	MECHA HOLDER A		1		
	30	VKL7767-00B	BRACKET ASS'Y		1		
	31	SBSF2606Z	SCREW	FOR BRACKET	2		
	32	VKM3860-00A	M.HOLDER B AS'Y		1		
	33	VKL7802-00C	M.HOLDER C AS'Y		1		
	34	SDST2604Z	SCREW	FOR M.HOLDER C	2		
	35	VKL7810-00A	LIFTER ASS'Y R		1		
	36	VKL7811-00A	LIFTER ASS'Y L		1		
	37	VKL7812-00A	LIFTER ASS'Y H		1		
	38	VKL2732-002	LIFTER BASE		1		
	39	VKM3823-001	LIFTER BRACKET		1		
	40	SDST2604Z	SCREW		1		
	41	WDL266035-2	SLIT WASHER		1		
	42	SBSF2608Z	SCREW		4		
	43	VKS5514-002MM	LOCK LEVER		3		
	44	VKY3133-002	RETURN SPRING		1		
	45	SBSF2608Z	SCREW	FOR RETURN SP.	1		
	46	VKY3134-003	CLICK SPRING		1		
	47	VKS2252-00C	TRAY ASS'Y		3		
	48	VKS2250-003	TOP BRACKET		1		
	49	VKS5515-002	S.TRAY STOPPER		1		
	50	VKW5156-004	TORSION SPRING		1		
	51	SBSF2608Z	SCREW		3		
	52	SBSF2608Z	SCREW		4		
	62	FMYH4003-002	INSULATOR		2		
	63	FMYH4003-001	INSULATOR		2		
	64	VKS2248-003	CLAMPER BASE		1		
	65	VKS3697-001	CLAMPER		1		
	67	VYH7313-003	MAGNET		1		
	68	VKL7757-001	YOKE		1		
	69	SBSF2606Z	SCREW		1		
	70	SPST2606Z	SCREW		1		
	71	VKW5187-001	ROD		1		

7. Main Adjustment

■ Test instruments required for adjustment

1. Low frequency oscillator
   - •Oscillation frequency:50Hz to 20kHz
   - •Output:dBs with 600 Ω terminator
2. Attenuator(impedance:600 Ω)
3. Electronic voltmeter
4. Resistor ····· 600 Ω for attenuator matching
5. Distortion meter
6. Torque gauge ····· Cassette type for CTG-N mechanism adjustment
7. Wow and Flutter meter
8. Frequency counter
9. Test Tapes

VTT704(12.5kHz) ····· Head azimuth
VTT712 (3kHz) ····· Tape speed and wow & flutter
VTT727 (400Hz) ····· Playback output level
TMT735 (1kHz/12.5kHz)···· Frequency response check
VTT739(63Hz/1kHz/10kHz) · Frequency response check
AC-225 ····· Normal tape(Rec/PB)
AC-515 ····· Chrome tape(Rec/PB)

10. Extension cable ····· EXTUXC30-JIG
11. Test disc ····· CTS-1000

■ Measuring conditions(Amplifier section)

Supply voltage : AC230V/50Hz
Reference output:Speaker ····· 0dBs(0.775V)/3 Ω
:Headphone ·· – 20dBs(0.775V)/32 Ω
Reference input: AUX IN ···· -8dBs

● Standard position of function switches

Function switch ····· TAPE
DOLBY NR switch ····· OFF
Super -Bass switch ····· OFF

● Standard position of volume control

Main volume adjust ····· Adjust 0dB
Bass Treble ····· Flat
Measuring point ····· CN322 or Headphone

■ Measuring condition(Radio section)

(Radio alignment is not necessary for this model.)

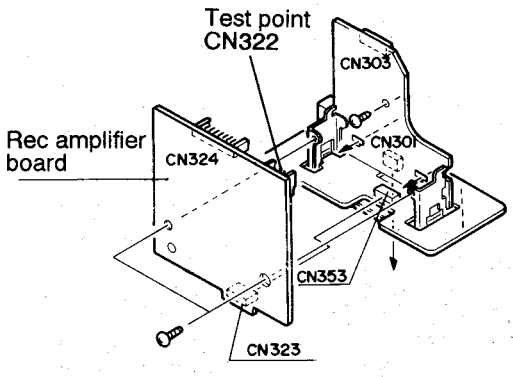
AM frequency ····· 400Hz modulation 30%
FM frequency ····· 400Hz modulation frequency deviation 22.5kHz

● Standard position of switches and controlls

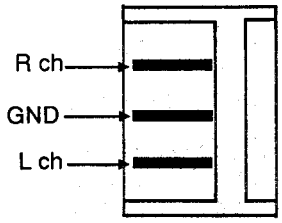
Function ····· RADIO
Mode ····· STEREO

● Careful points for adjustment

1. Connect 30 pF capacitor and 33k Ω resistor to the output side of the IF sweeper in series while 0.082 μ F capacitor and 1000k Ω resistor to the input side in series.
2. Set output level of the IF sweeper as minimum as adjustable.



CN322 Test point

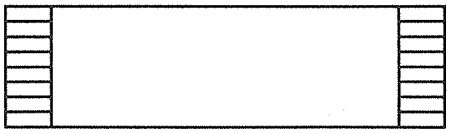


Extension Cable Parts Number and using Locations

Extension cable kit No. : EXTUXC30-JIG

LCD/System microcomputer board (CN706) Power amplifier board
20pin card wire

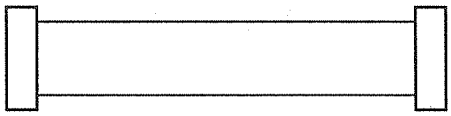
LCD/System microcomputer board (CN708) Power amplifier board
12pin card wire



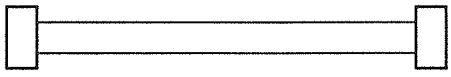
LCD/System microcomputer board (CN701) Mechanism control board (CN372)
11pin card wire

LCD/System microcomputer board (CN702) Operations switch board (CN710)
12pin card wire

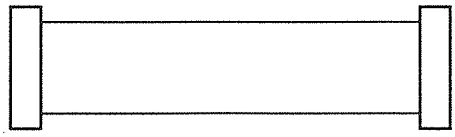
LCD/System microcomputer board (CN705) Power amplifier board (CN32)
6pin card wire



Rec. amplifier board (CN324) Mechanism control board (CN374)
11pin card wire



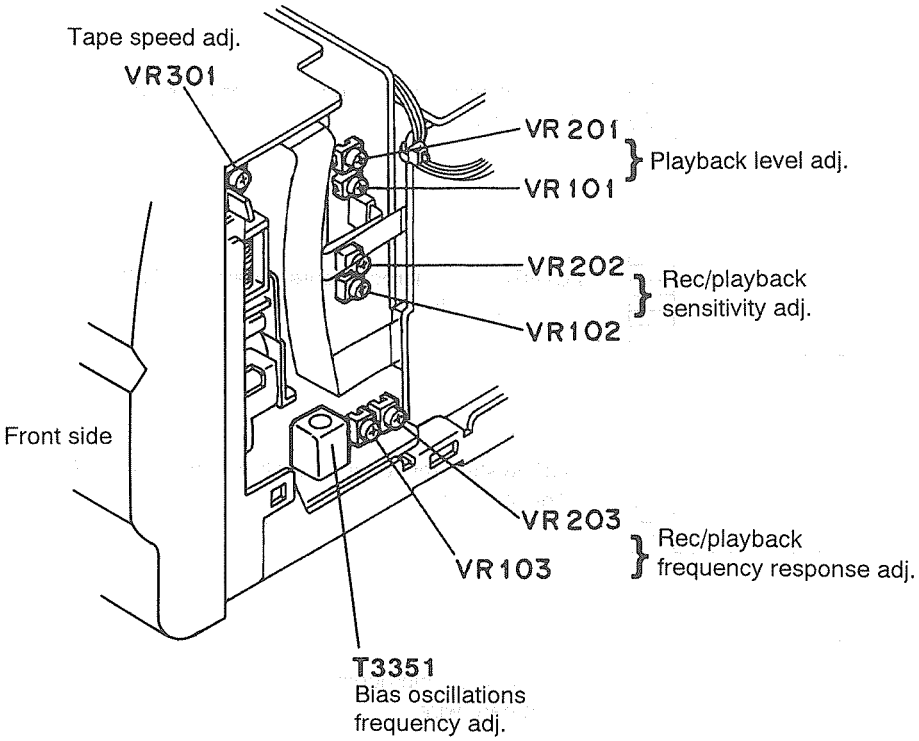
Rec. amplifier board (CN323) Rec bias board (CN373)
5pin card wire



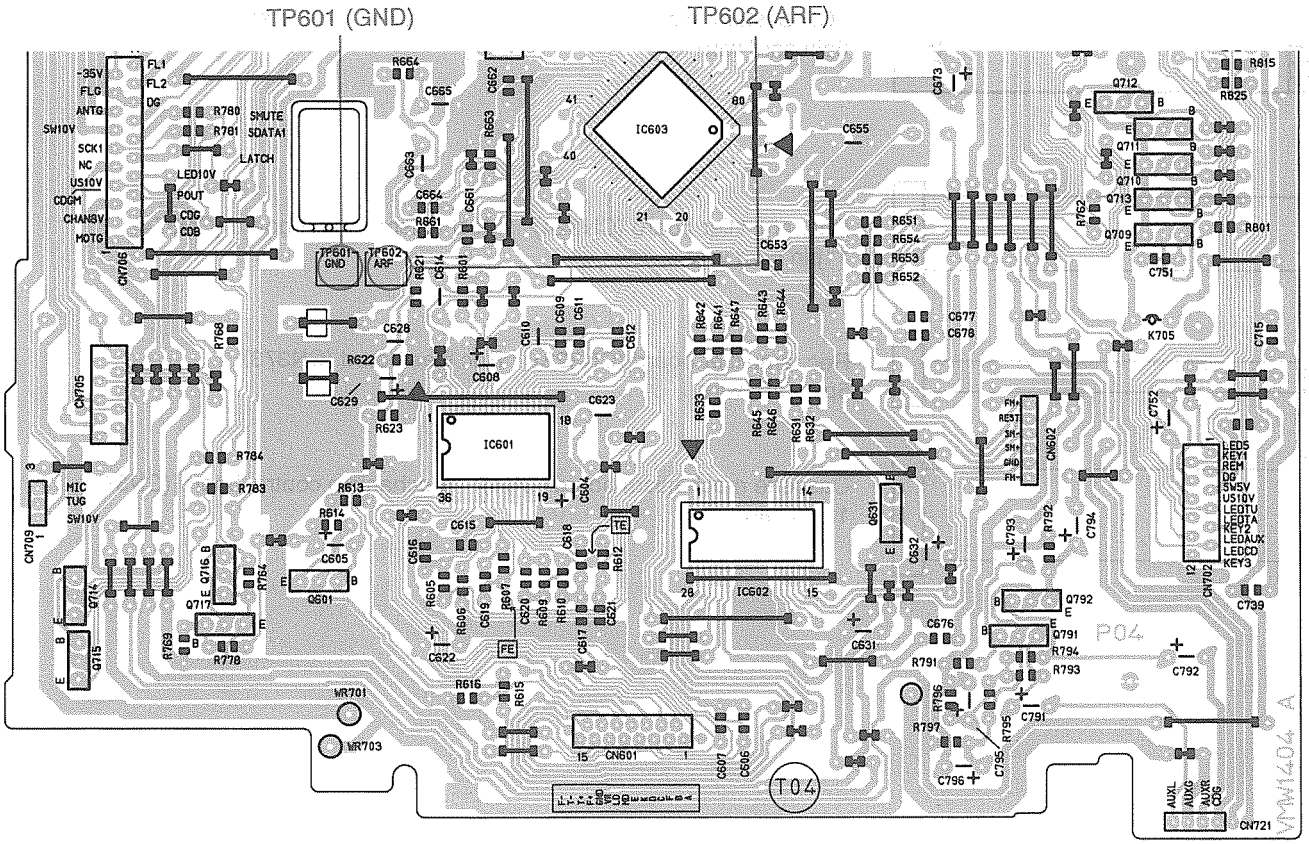
Cassette mechanism board (CN1) Mechanism control board (CN371)
12pin card wire

■ Arrangement of Adjusting and Test Points

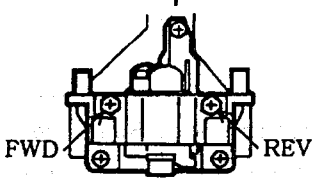
● Cassette Mechanism Section



● CD Amplifier & Function Board Section

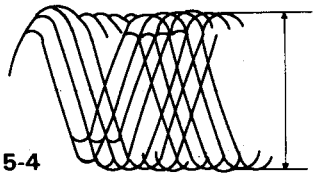


■ Cassette mechanism & Amplifier section

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
Adjusting the head angle	Test tape : VTT704 (12.5 kHz) Measured output terminal: Speaker terminals (L, R channels) (load impedance: 8 Ω)	(1) Play test tape VTT704 (12.5 kHz). (2) Turn to adjust the head azimuth adjustment screw so that the playback output level's deviation from the peak point comes to within 2 dBs and that the phase difference becomes the minimum. After adjusting, apply a screw-locking compound so that it covers over half of the screw head in order to prevent the head from moving. (3) If measured levels are not as those specified, fine-adjust them using the head azimuth adjustment screw.	Within 2 dB deviation from peak point Minimum phase difference  	Readjust after head replacement
Adjustinfg the tape speed Checking the wow & flutter	Test tape :VTT712 (3 kHz) Measured output terminal : CN322 (TP) pin or speaker terminal (load impedance: 3 Ω)	(1) Adjust the VR301 so that the frequency counter reads 3010 ± 10 Hz when playing back the ending of test tape VTT712 (3 kHz). (2) Check that wow and flutter are less than 0.25% (JIS WTD).	Tape speed: Within 3010 ± 10 Hz Wow and flutter: Lower than 0.25% (JIS WTD)	VR301
Adjusting the playback output level	Test tape: VTT727 (400 Hz) Measured output terminal : CN322 (TP) pin	Adjust the VR101 (L) and VR201 (R) so that the level at the CN322 pin comes to -8 dBs ± 1 dB when playing back test tape VTT727.	-8 dBs ± 1 dB	L: VR101 R: VR201
Checking the playback frequency response	Test tapes: VTT739 (63 Hz, 1 kHz, 10 kHz) TMT735 (1 kHz, 12.5 kHz) Measured output terminal : CN322 (TP) pin	Check that the level deviations, when playing back the test tapes VTT739 (1 kHz, 63 Hz) and TMT735 (1 kHz, 12.5 kHz), are within 0 ± 4 dBs at 63 Hz and 0 ± 3 dBs at 12.5 kHz when compared to those at 1 kHz.	1 kHz/63 Hz: 0 ± 4 dBs 1kHz/12.5kHz: 0 ± 3 dBs	

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
Adjusting the bias oscillation frequency	Test tape : AC-515 Measured output : Oscillation coil secondary side (erase)	(1) Connect a frequency counter (with a 1 M Ω resistor inserted in series) to the L321 secondary side erase pin. (2) Load the test tape (AC-515) in the deck and set to Record-Pause mode. (3) Adjust the T3351 so that the frequency counter level reads 100 kHz ± 0.2 kHz in Record mode.	100 kHz ± 0.2 kHz	T3351
Adjusting the Rec /Playback frequency response	Reference frequencies : 1.25 kHz, 12.5 kHz (Reference level: -20 dBs) Measured input terminal : AUX IN Measured output : CN322 Test tape : AC-225	(1) Alternately repeat recording reference frequencies of 1.25 kHz and 12.5 kHz via the AUX IN terminal on a normal tape. (2) Adjust the VR103 and VR203 so that the output deviation between 1.25 kHz and 12.5 kHz at the CN322 pin comes to -0.5 ± 1 dB when playing back recorded sections.	Normal tape: -0.5 ± 1 dB	L: VR103 R: VR203
Adjusting the recording/playb sensitivity	Test tape: AC-225 Input terminal : AUX IN Output terminal : CN322 Reference frequency : 400 Hz (Reference level: -20 dBs)	Record and play back a reference frequency of 400 Hz with a reference level of -20 dBs via the AUX IN terminal on test tape AC-225, and adjust the VR102 and VR202 so that the level at this time comes to 0 ± 1 dB when compared to the monitor level.	0 ± 1 dB	L: VR102 R: VR202
Checking Dolby NR effect	Test tape: VTT704 (12.5 kHz) Measured output : CN344	When playing back the VTT704 (12.5 kHz) and turning the Dolby NR switch from OFF to ON, check that the level lowers by approx. 4 dBs.	Lowers by 4 dBs	

■ CD section

Items	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Checking jitter	Measurement equipment: Oscilloscope (jitter meter) Test points: TP601: ground side TP602: hot side	Connect the jitter meter between the TP601 and TP602, and check that the jitter meter reads 26 nsec. or less when playing back the test disc "Track 1".	26 nsec. or less	
2. Checking the RF level (eye pattern)	Measurement equipment: Oscilloscope TP601: ground side TP602: hot side	Connect the oscilloscope between the TP1 and TP2, and check that the peak-to-peak value of the oscilloscope waveform reads within 1.1 V ± 0.2 V when playing back the test disc "Track 1". Eye pattern waveform  Check that the maximum level of this waveform is within the standard values and that the waveform is clearly visible. Fig. 5-4	1.1 V ± 0.2 V	
3. Checking the outermost area	CTC-1000	Select "Track 28" on the outer area of test disc directly and check that it begins playback smoothly and that there are no abnormal conditions such as a tracking error.		
4. Checking the pickup movement from the outer area to the inner area		Allow the pickup to skip over from the disc's outermost area to "Track 1" and check that it takes within 10 seconds for the player to enter Play mode.	Within 10 seconds	

8. Traubleshooting

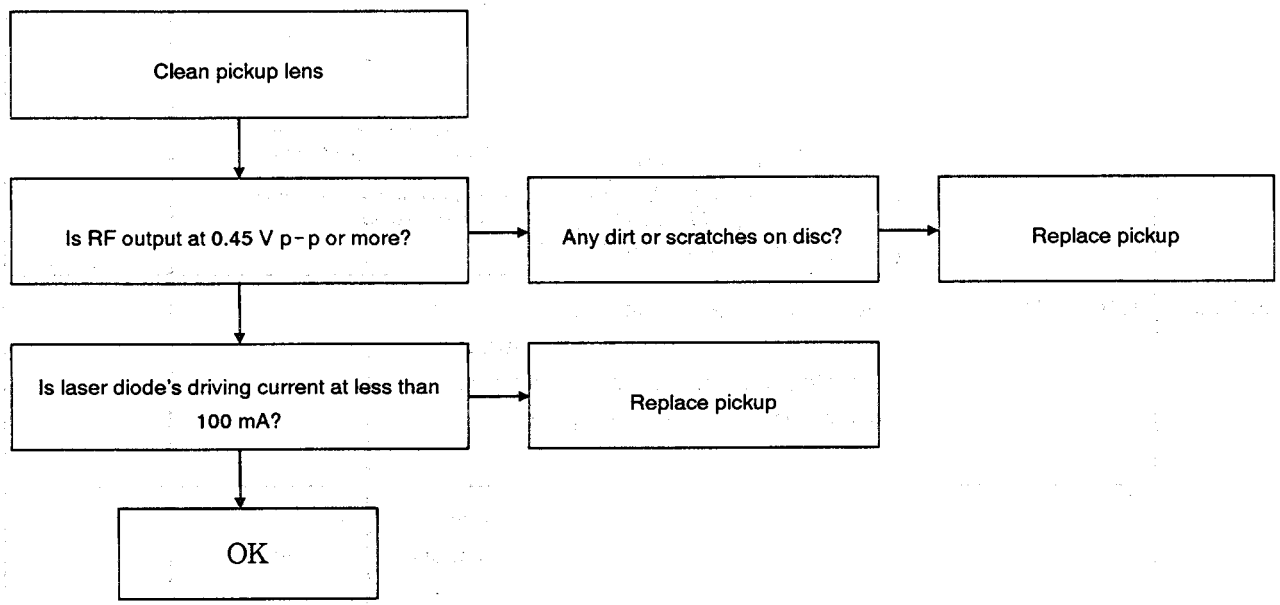
■ Pickup maintenance

(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 pickuplens 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 V/10 Ω = 0.1 A = 100 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.

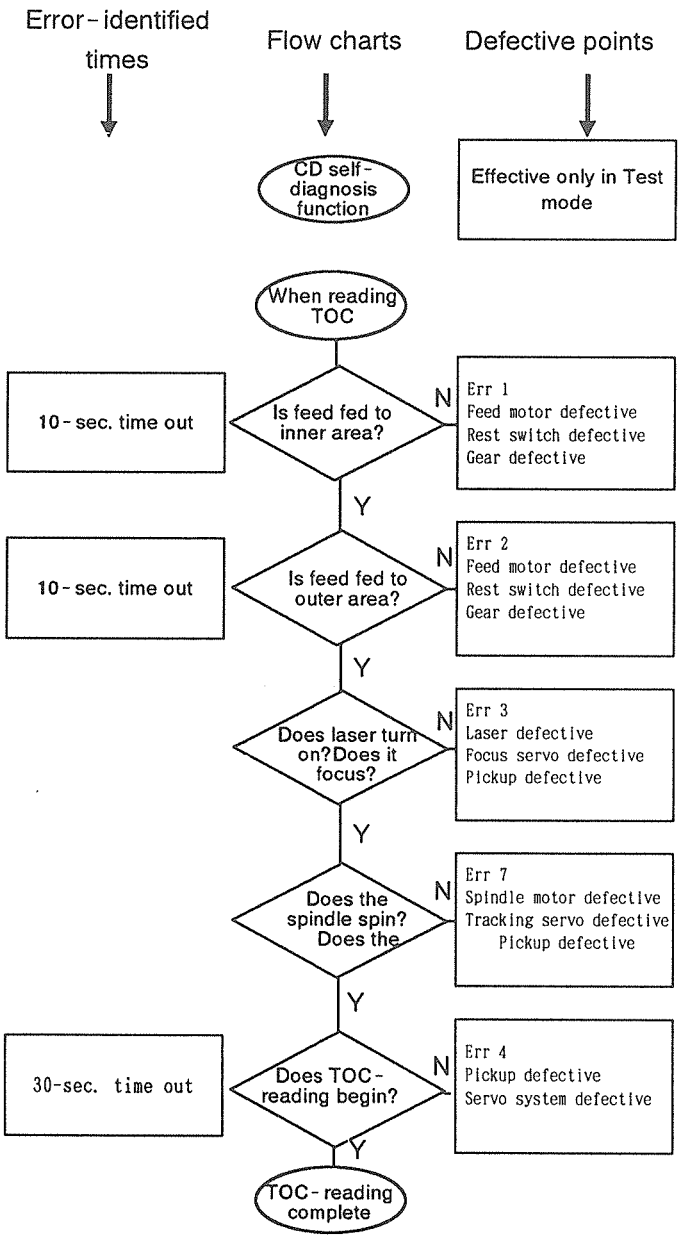
1. Operation

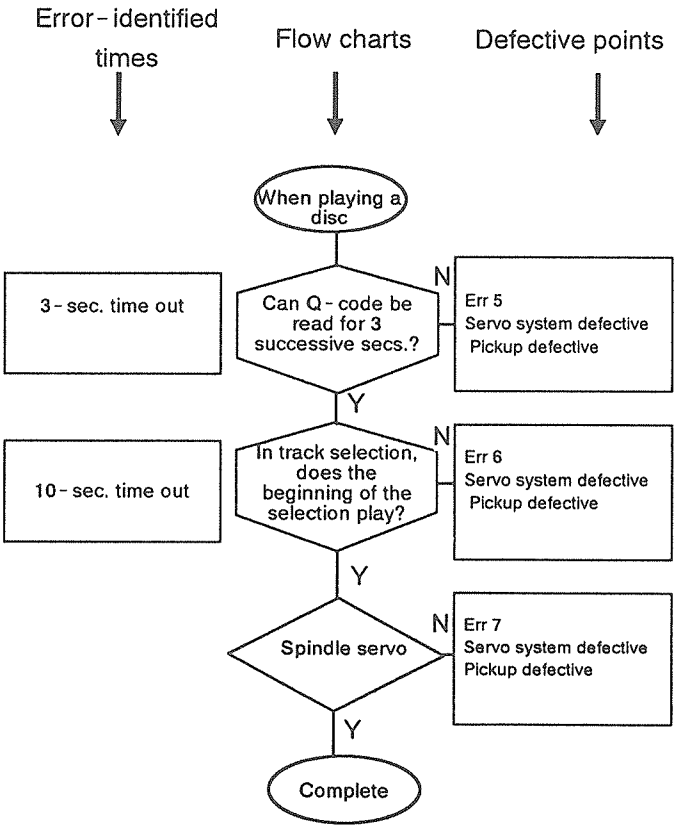
[1] Press the three [■], [+10] and [POWER] buttons on the remote control to enter the Test mode. (Then the illuminating portions of the LCD all light up together. This indicates that the system has entered the Test mode.)

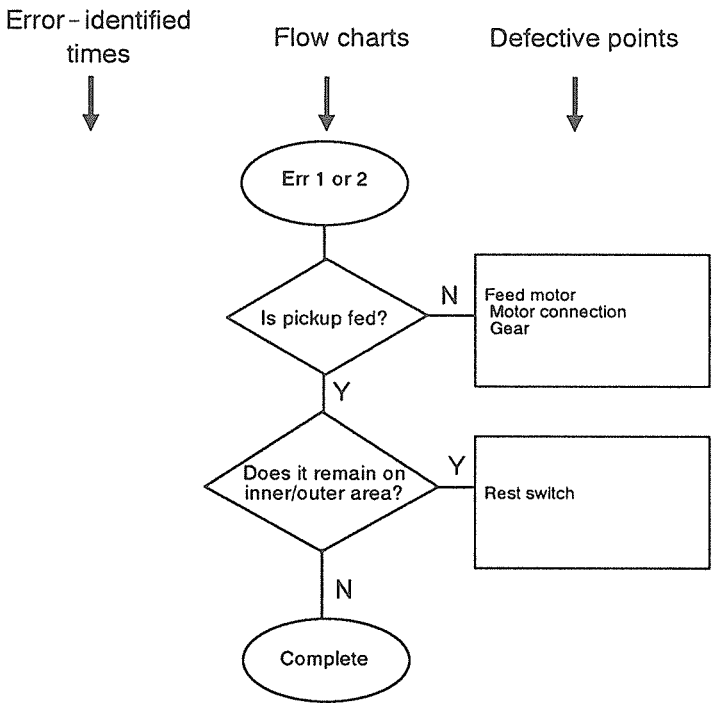
[2] Play a CD. If the operation is defective in any way, an error code should appear on the LCD.

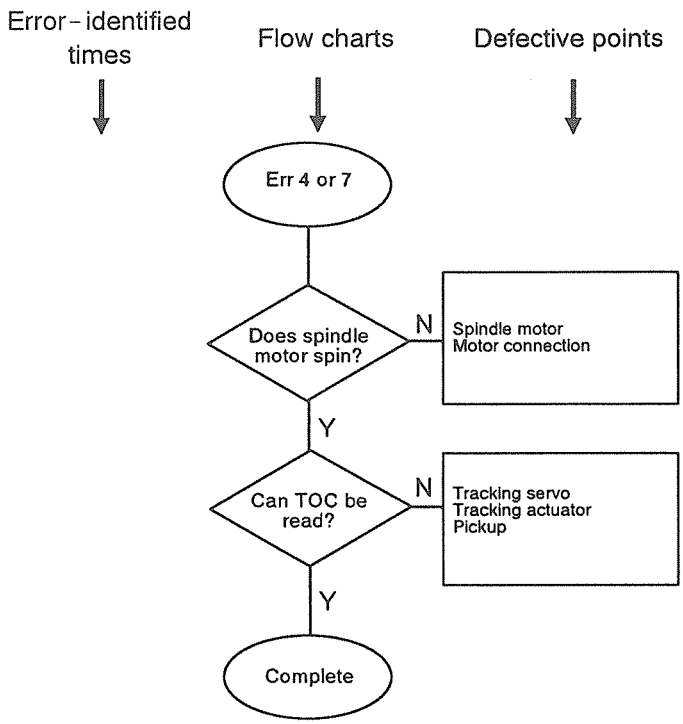
[3] Identify the point of malfunction in accordance with the error code displayed.

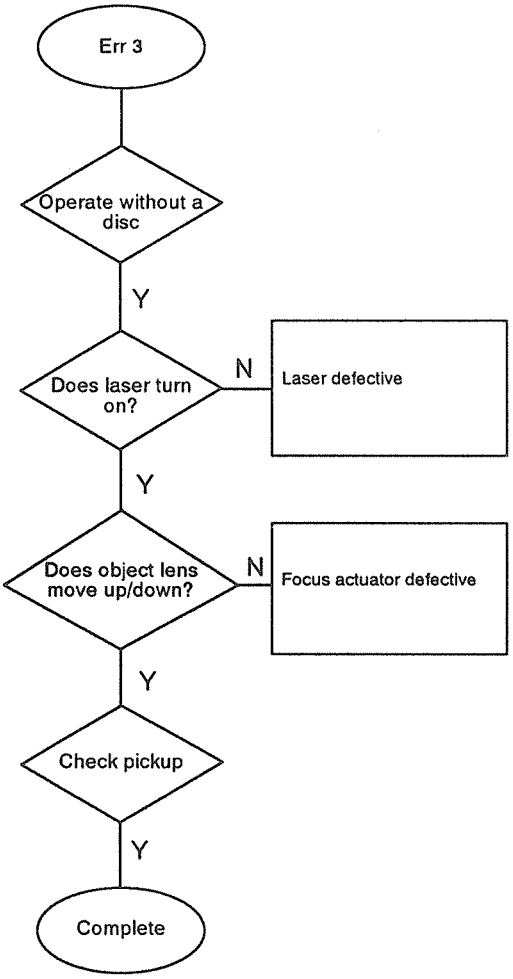
2. Error codes & defective points



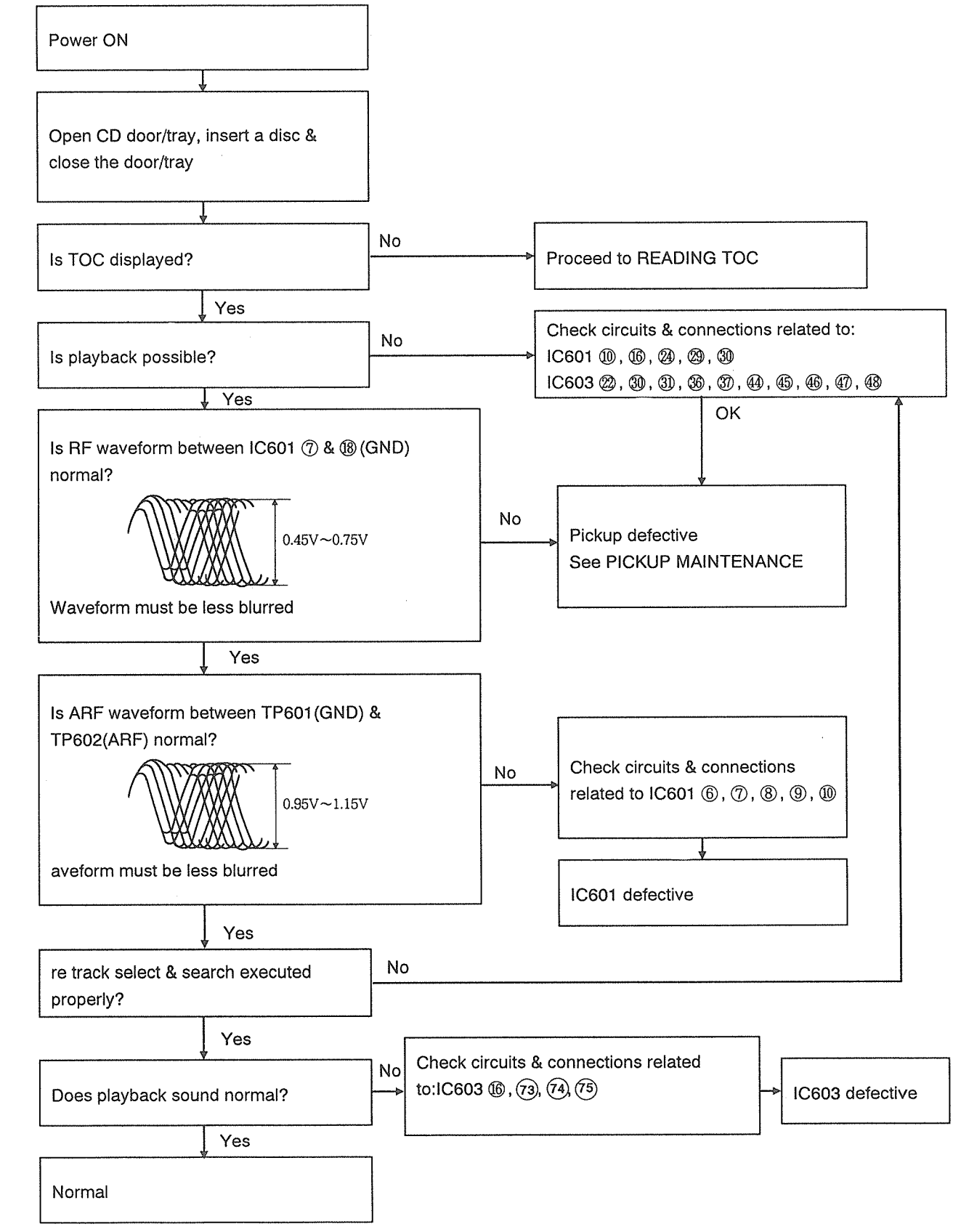

Error-identified times
Flow charts
Defective points
When playing a disc
Can Q-code be read for 3 successive secs.?
N
Err 5
Servo system defective
Pickup defective
3-sec. time out
Y
In track selection, does the beginning of the selection play?
N
Err 6
Servo system defective
Pickup defective
10-sec. time out
Y
Spindle servo
N
Err 7
Servo system defective
Pickup defective
Y
Complete


Error-identified times
Flow charts
Defective points
Err 1 or 2
Is pickup fed?
N
Feed motor
Motor connection
Gear
Y
Does it remain on inner/outer area?
Y
Rest switch
N
Complete


Error-identified times
Flow charts
Defective points
Err 4 or 7
Does spindle motor spin?
N
Spindle motor
Motor connection
Y
Can TOC be read?
N
Tracking servo
Tracking actuator
Pickup
Y
Complete


Err 3
Operate without a disc
Y
Does laser turn on?
N
Laser defective
Y
Does object lens move up/down?
N
Focus actuator defective
Y
Check pickup
Y
Complete

General


Power ON
Open CD door/tray, insert a disc & close the door/tray
Is TOC displayed?
No
Proceed to READING TOC
Yes
Is playback possible?
No
Check circuits & connections related to:
IC601 ⑩, ⑯, ㉔, ㉙, ㉚
IC603 ㉒, ㉚, ㉛, ㊱, ㊲, ㊹, ㊺, ㊻, ㊼, ㊽
Yes
OK
Is RF waveform between IC601 ⑦ & ⑱ (GND) normal?
0.45V~0.75V
Waveform must be less blurred
No
Pickup defective
See PICKUP MAINTENANCE
Yes
Is ARF waveform between TP601(GND) & TP602(ARF) normal?
0.95V~1.15V
aveform must be less blurred
No
Check circuits & connections related to IC601 ⑥, ⑦, ⑧, ⑨, ⑩
IC601 defective
Yes
re track select & search executed properly?
No
Yes
Does playback sound normal?
No
Check circuits & connections related to:IC603 ⑯, ⑦③, ⑦④, ⑦⑤
IC603 defective
Yes
Normal

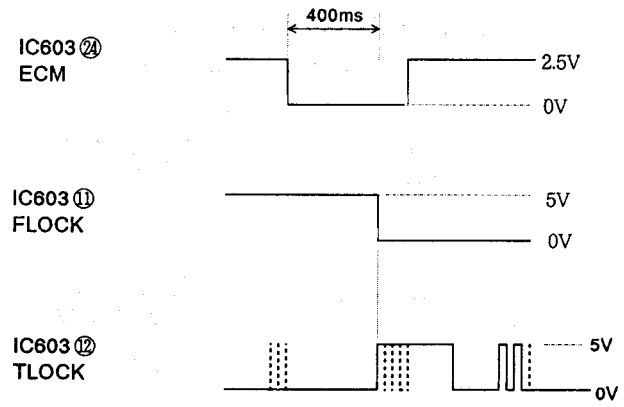
■ Reading TOC

After opening & closing CD door/tray again with a disc inserted, does the disc spin?

No → Proceed to FOCUS SEARCH

Yes

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



No

Yes

Check circuits & connections related to:
IC601 ⑥, ⑦, ⑧, ⑩
IC603 ⑭, ⑮, ㉕, ㊹, ㊺, ㊻, ㊼, ㊽

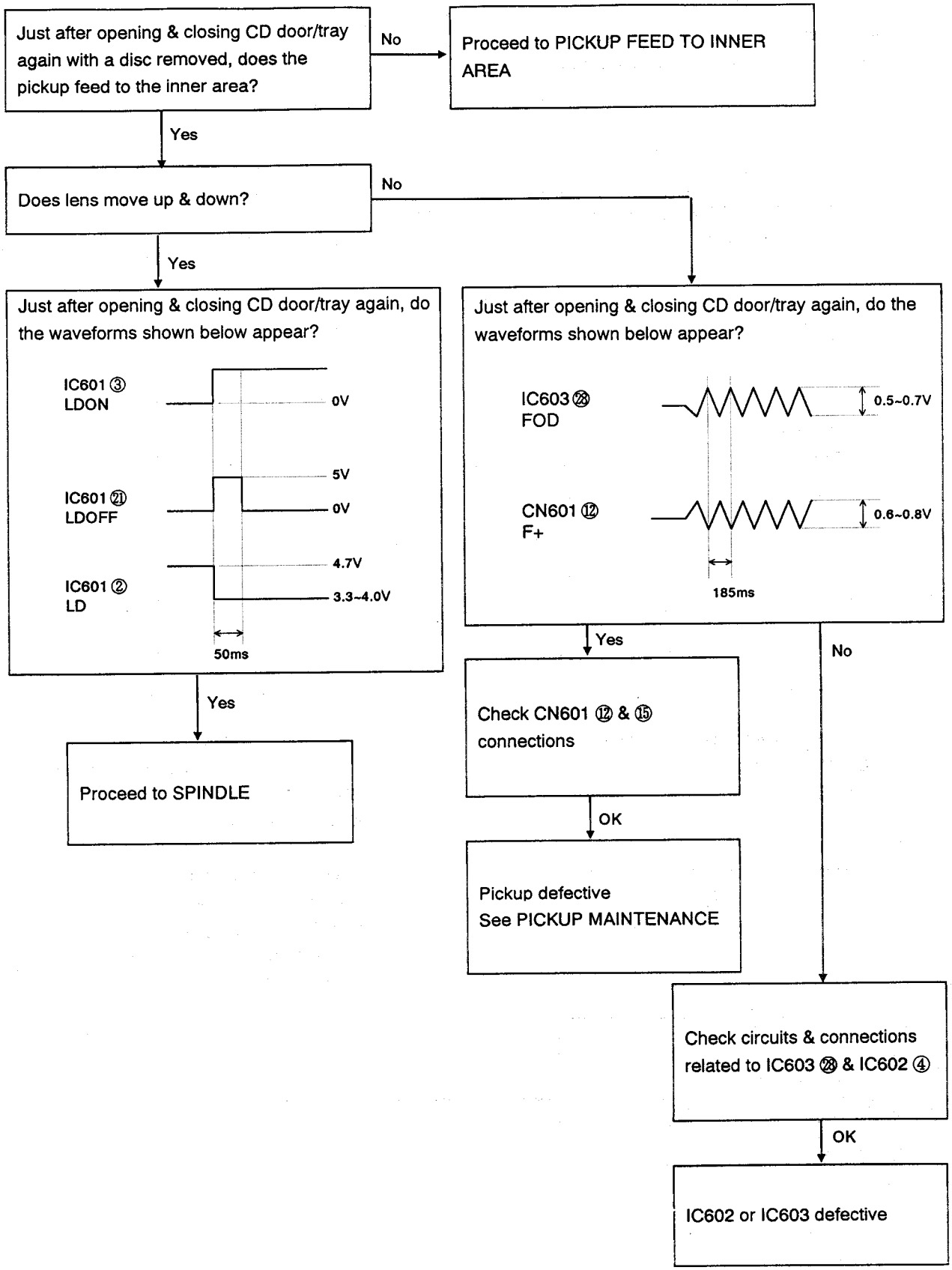
OK

If IC603 ⑪ waveform is abnormal
Check circuits & connections related to:
CN601 ①, ②, ④, ⑤
IC601 ㉗, ㉘, ㉟, ㊱
If IC603 ⑫ waveform is abnormal
Check circuits & connections related to:
CN601 ③, ⑦, ⑬, ⑭
IC601 ㉕, ㉖, ㉝, ㉞
IC603 ㉗, ㉝
IC602 ㉔, ㉖, ㉗

OK

Pickup defective
See PICKUP MAINTENANCE

■ Focus search



■ Pickup feed to inner area

Check CN602 connections

OK

Just after opening & closing CD door/tray again, is 6 - 8 V supplied from Q631 Emitter Terminal?

No → Check CD regulator circuit on amplifier P.C. board

Yes

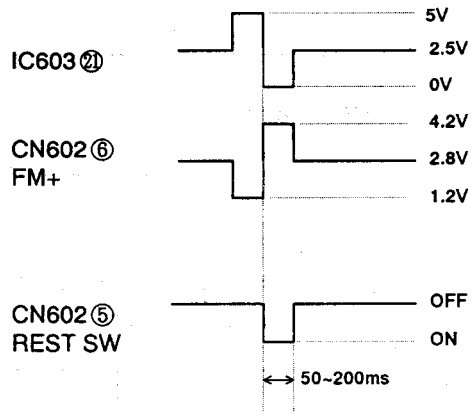
Just after opening & closing CD door/tray again, is 5 V supplied from Q631 Corrector Terminal?

No → Check circuits & connections related to Q631 & IC602 ⑤, ⑥

OK → Q631 or IC602 defective

Yes

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

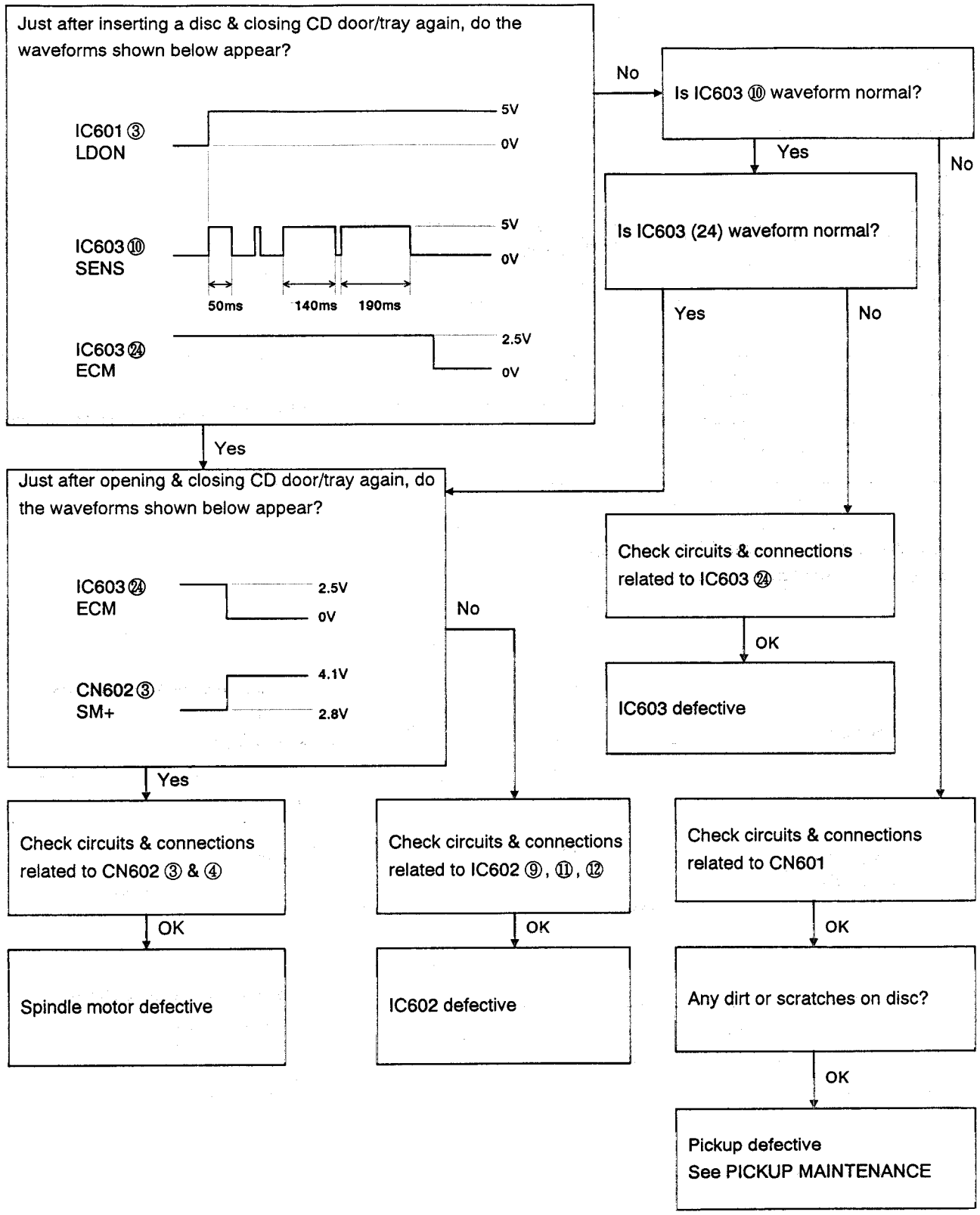


No → Check circuits & connections related to·
IC603 ㉑
IC602 ①, ②, ⑤, ⑥, ⑰, ⑱, ⑳

OK → Microcomputer or IC603 or IC602 defective

Yes → Normal

■ Spindle


Just after inserting a disc & closing CD door/tray again, do the waveforms shown below appear?
IC601 ③ LDON
5V
0V
IC603 ⑩ SENS
5V
0V
50ms
140ms
190ms
IC603 ㉔ ECM
2.5V
0V
No
Is IC603 ⑩ waveform normal?
Yes
No
Is IC603 (24) waveform normal?
Yes
No
Yes
Just after opening & closing CD door/tray again, do the waveforms shown below appear?
IC603 ㉔ ECM
2.5V
0V
CN602 ③ SM+
4.1V
2.8V
No
Check circuits & connections related to IC603 ㉔
OK
IC603 defective
Yes
Check circuits & connections related to CN602 ③ & ④
OK
Spindle motor defective
Check circuits & connections related to IC602 ⑨, ⑪, ⑫
OK
IC602 defective
Check circuits & connections related to CN601
OK
Any dirt or scratches on disc?
OK
Pickup defective
See PICKUP MAINTENANCE

9. Outline of Main IC

■IC1 : TA2057N (FM/AM IF & MPX)

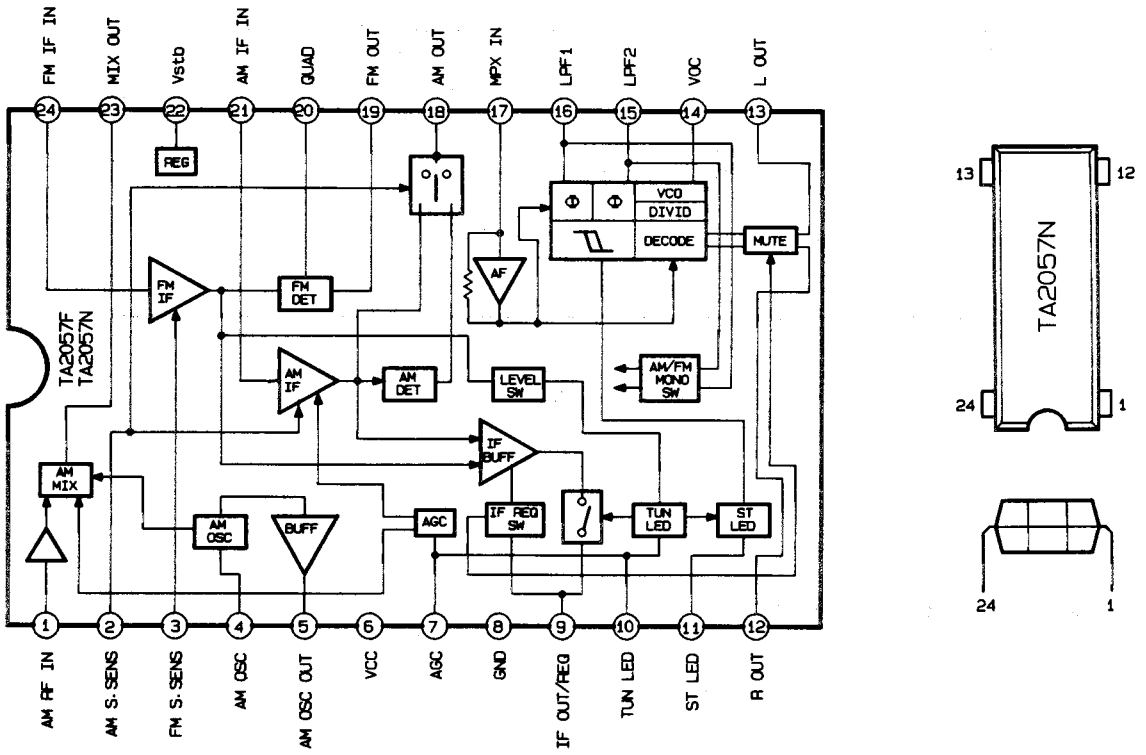


Fig. 9-1

■IC2 : LC72136 (PLL)

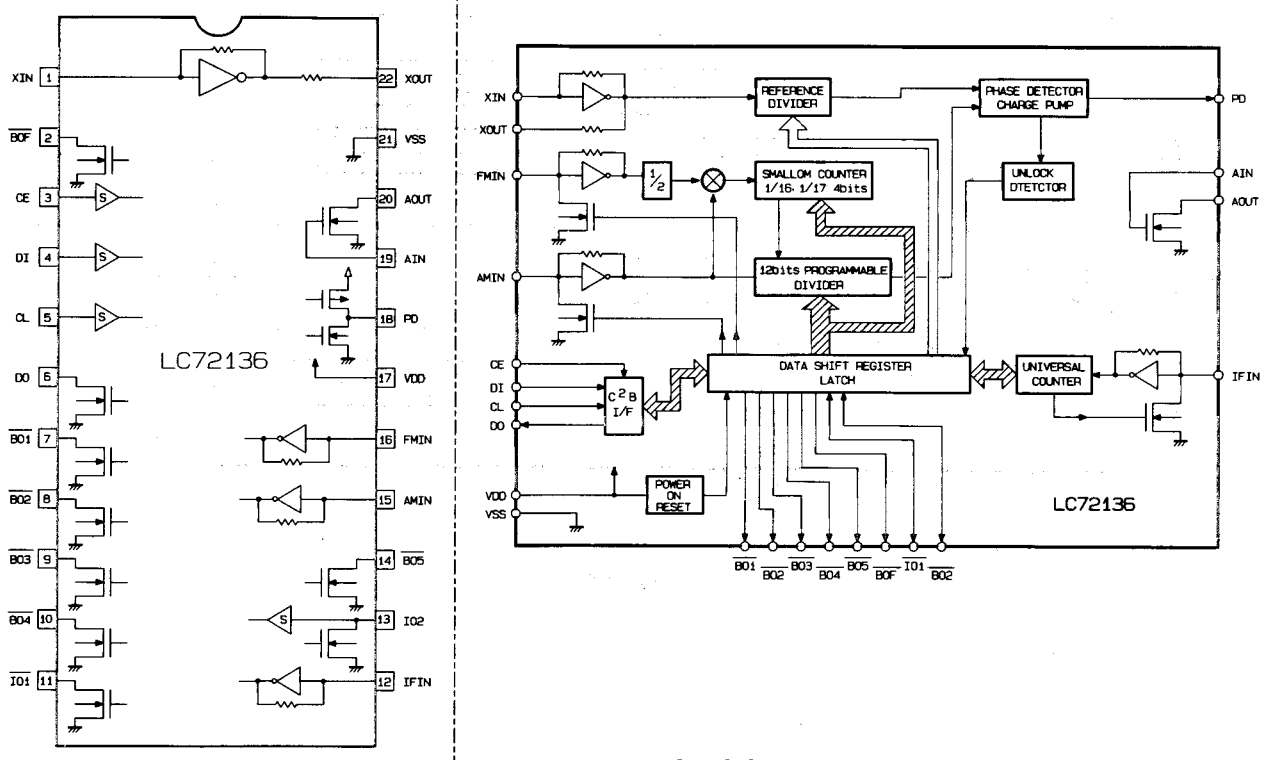


Fig. 9-2

■ IC4 : TA7358P (FM FRONT END)

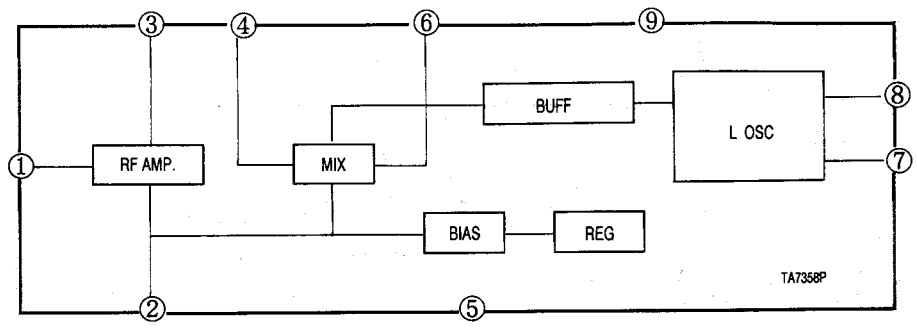


Fig. 9-3

■ IC31 : LA4705 (PAWER AMP)

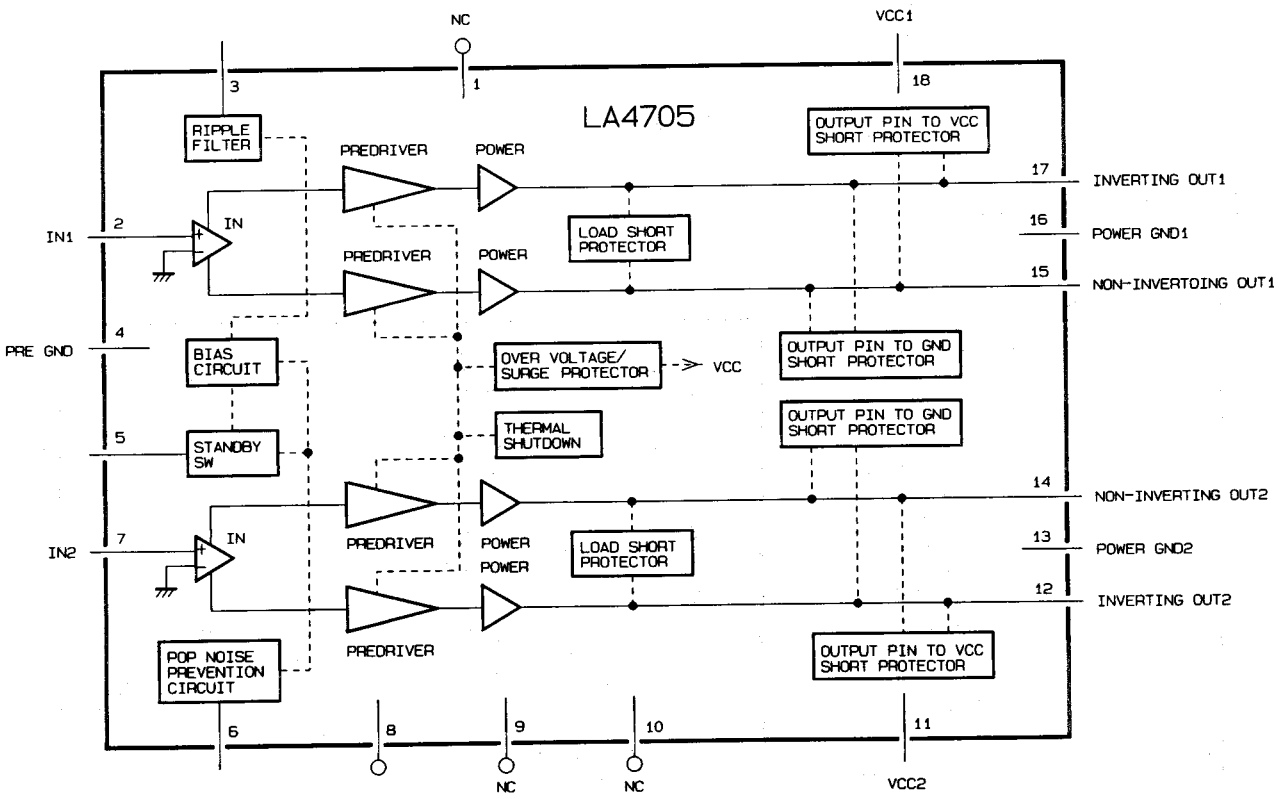


Fig. 9-4

■ IC38 : BH3854S (E. VOLUME)

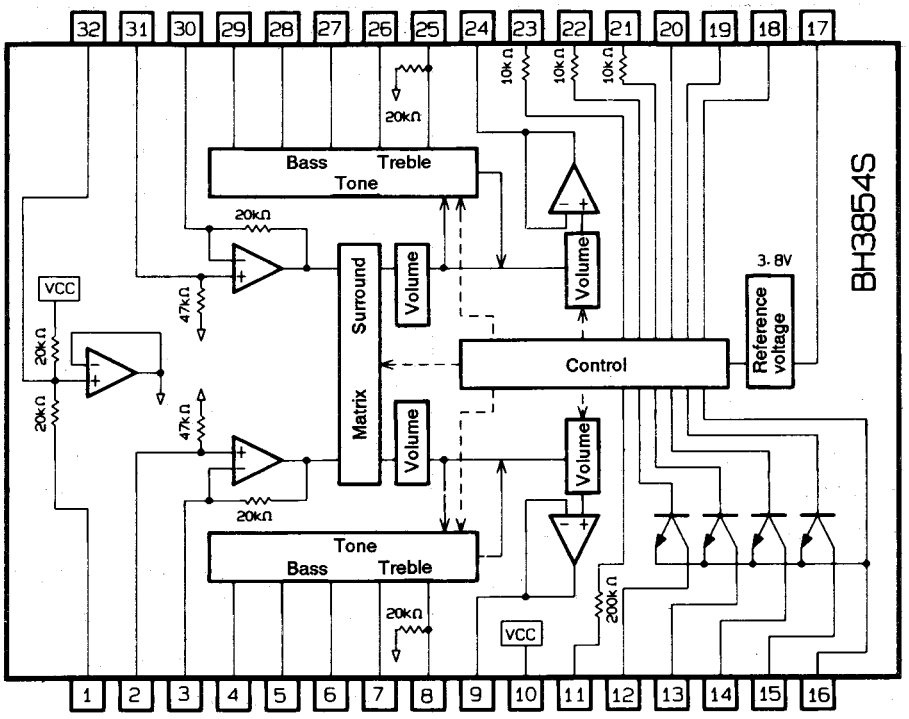


Fig. 9-5

■ IC701 : μ PD78044AGF-156 (SYSTEM CONTROLLER)

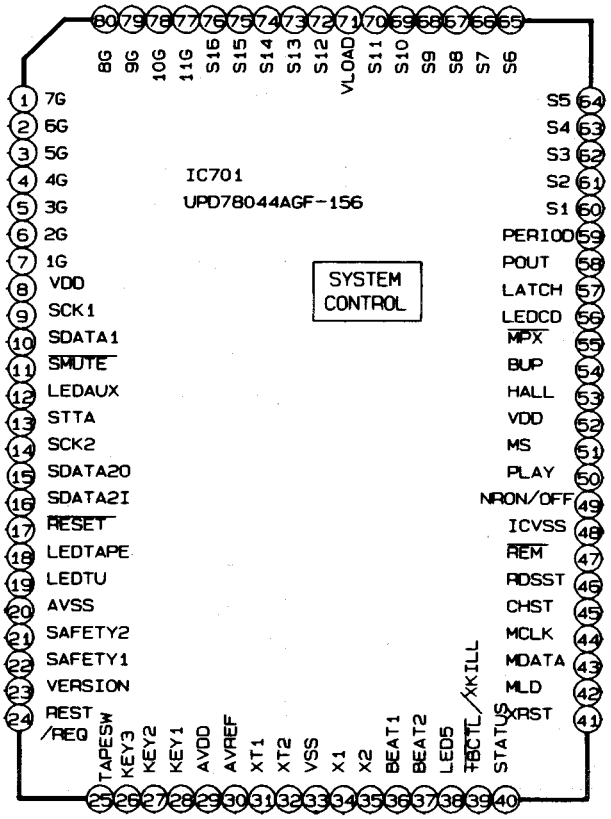


Fig. 9-6

■ IC701 μ PD78044A GF-156 (SYSTEM CONTROLLOR)

NO.	NAME	I/O	DISCRIPTION	ACT.
1	7G	O	FL GRID	
2	6G	O		
3	5G	O		
4	4G	O		
5	3G	O		
6	2G	O		
7	1G	O		
8	VDD	O	VDD	
9	SCK1	O	SERIAL CLOCK0 (TUNER PLL, TAPE	
10	SDATA1	I	SERIAL DATA0 VOLUME, CHANGER)	
11	^SMUTE	O	SYSTEM MUTE	L
12	LEDAUX	O	LED DRIVE OUTPUT AUX	H
13	STTA	O	TAPE STLOVE	
14	SCK2	O	SERIAL CLOCK 1	
15	SDATA20	O	SERIAL DATA 1 OUTPUT RDS)	
16	SDATA21	I	SERIAL DATA 1 INPUT	
17	RESET	I	RESET	L
18	LEDTAPE	O	LED DRIVE TEPE	H
19	LEDTU	O	LED DRIVE TUNER	H
20	AVSS	–	A/D CONVERTER GND	
21	SAFETY2	I	SAFETY 2 (10V SYSTEM)	
22	SAFETY1	I	SAFETY 1 (8V SYSTEM)	
23	VERSION	I	VERSION (E/J/U/VX/DO)	
24	REST/REQ	I	REST SW/CHANGER REQ	
25	TAPESW	I	TAPESW (TAPE/F. REC/R. REC)	
26	KEY3	I	KEY 3	
27	KEY2	I	KEY 2	
28	KEY1	I	KEY 1	
29	AVDD	–	A/D CONVERTOR +B	
30	AVREF	–	A/D CONVERTOR REFERENCE VOLTAGE	
31	XT1	I	MAIN SYSTEM CLOCK	
32	XT2	O		
33	Vss	–	GND	
34	X1	I	SUB SYSTEM CLOCK	
35	X2	O		
36	BEAT1	O	MICON CLOCK SELECTOR 1	H
37	BEAT2	O	MICON CLOCK SELECTOR 2	H
38	LED5	O	INFRARED LED DRIVE REMOTE CONTROL CODE OUTPUT	H
39	^+BCTL	O	AD & REMOCON +B CONTROL	L
40	STATUS	I	CD STATUS CHECK	

NO.	NAME	I/O	DISCRIPTION	ACT.
41	^XRST	O	CD RESET OUTPUT	L
42	MLD	O	CD COMAND CONTROL SIGNAL OUTPUT	
43	MDATA	O	CD COMAND DATA OUTPUT	
44	MCLK	O	CD COMAND CLOCK OUTPUT	
45	CHST	O	CHANGER STROVE	H
46	RDSST		RDS STLOVE	
47	REM		REMOTE CONTROL CODE IN	↓
48	IC		VDD CONNECTIONS	
49	NRON/OFF	O	DOLBY ON/OFF	
50	PLAY	I	DETECT OF STAYING TAPE PLAY	
51	MS	I	DETECT OF STAYING TAPE MS	
52	VDD	–	VDD	
53	HALL	I	DETECT OF TAPE END	
54	BUP	I	DETECT OF BACKUP	H
55	MPX	I	TUNER DETECT OF STEREO SIGNAL	L
56	LEDCD	O	LED DRIVE OUTPUT	H
57	LATCH	O	VOLUME IC STLOVE	H
58	POUT	O	SYSTEM POWER SUPPLY CONTROL	H
59	PERIOD	O	TUNER STLOVE	H
60	S1		FL SEGMENT	
61	S2			
62	S3			
63	S4			
64	S5			
65	S6			
66	S7			
67	S8			
68	S9			
69	S10			
70	S11			
71	VLOAD			
72	S12			
73	S13			
74	S14			
75	S15			
76	S16			
77	11G		FL GRID	
78	10G			
79	9G			
80	8G			

10. Block Diagram

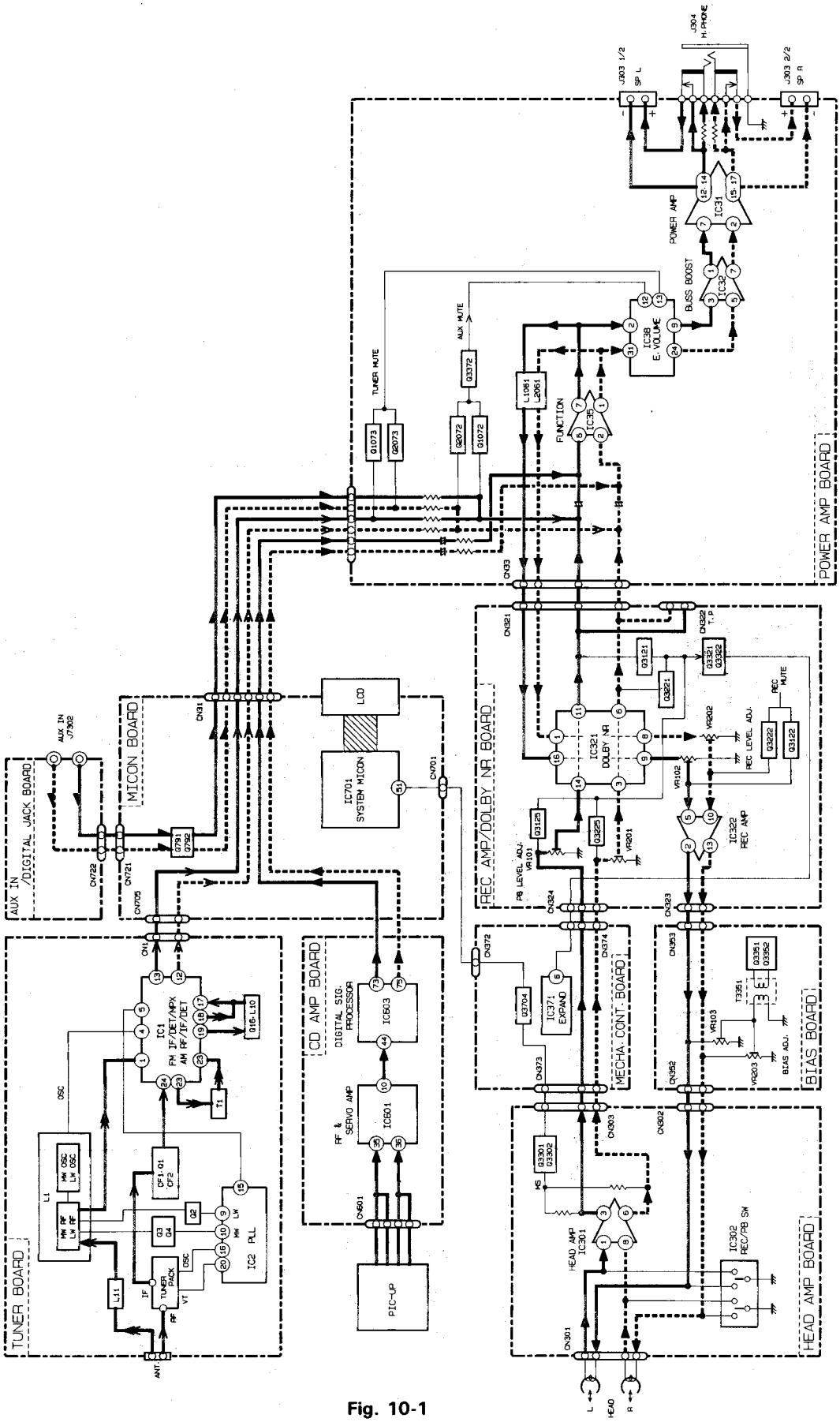
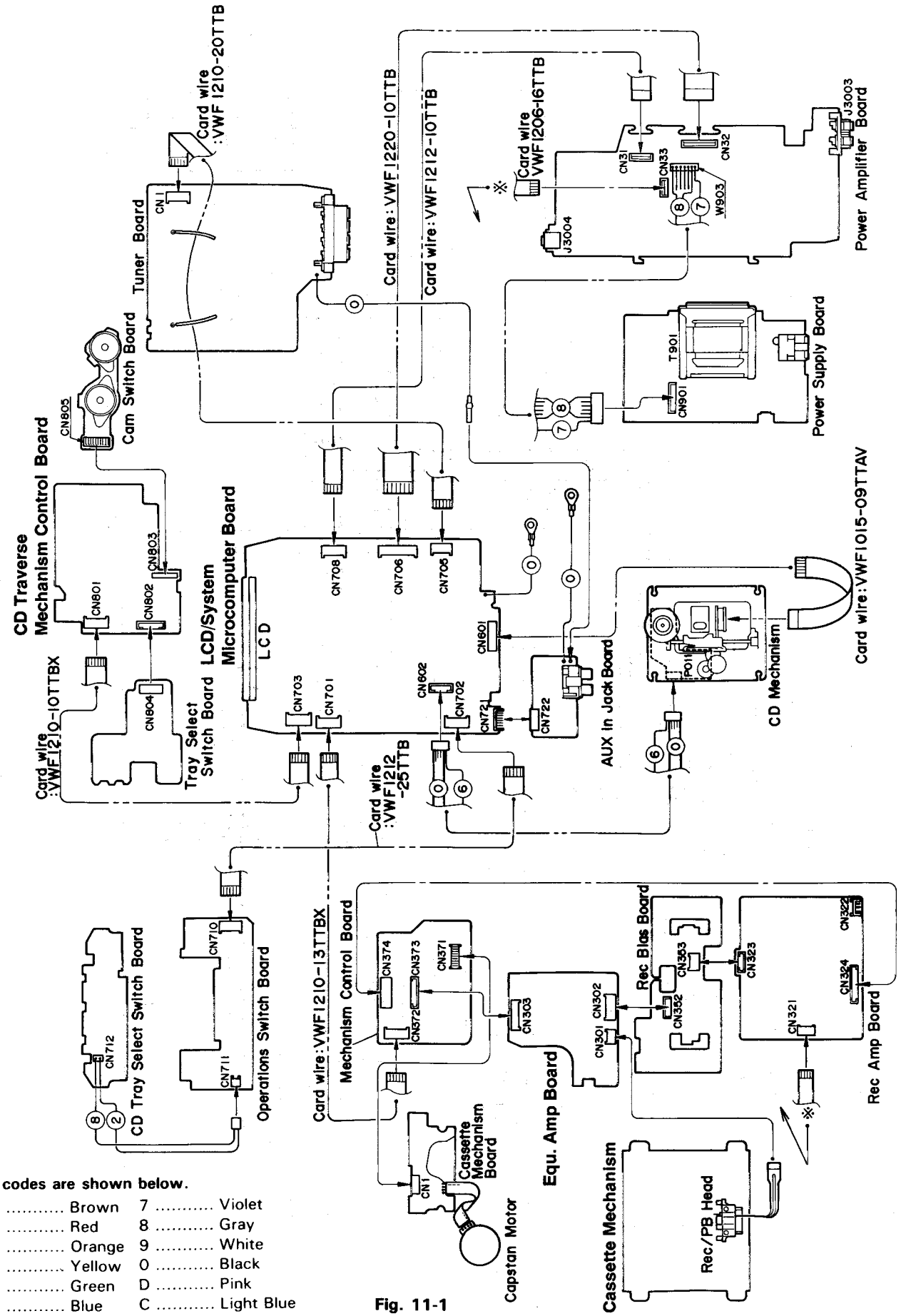


Fig. 10-1

11. Wiring Connections



Color codes are shown below.

1	Brown	7	Violet
2	Red	8	Gray
3	Orange	9	White
4	Yellow	0	Black
5	Green	D	Pink
6	Blue	C	Light Blue

Fig. 11-1

12. Standard Schematic Diagram

Head Amplifier & Power Mechanism Control Circuit

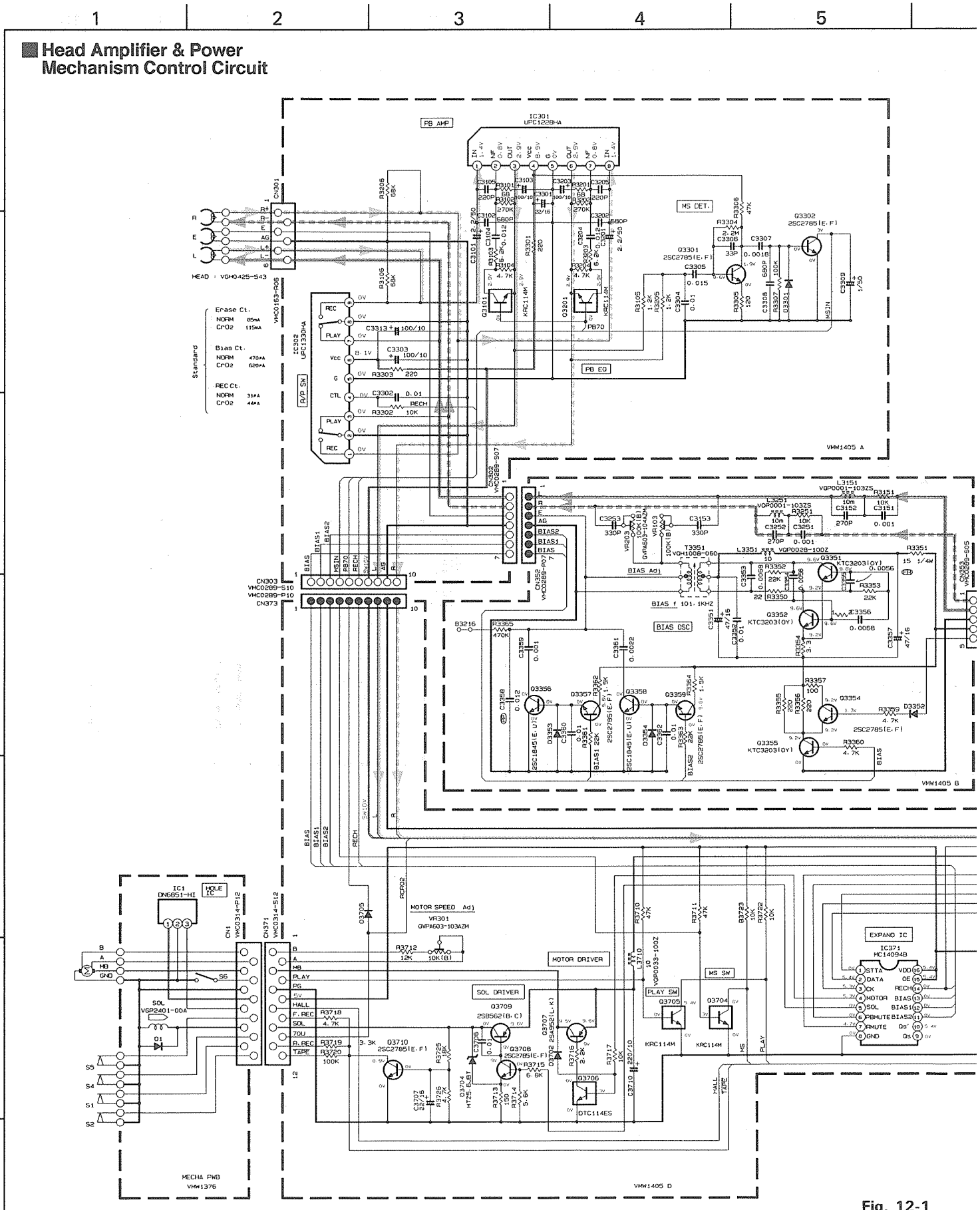


Fig. 12-1

Note : VDH9273001DV NEW

6 | 7 | 8 | 9 | 10

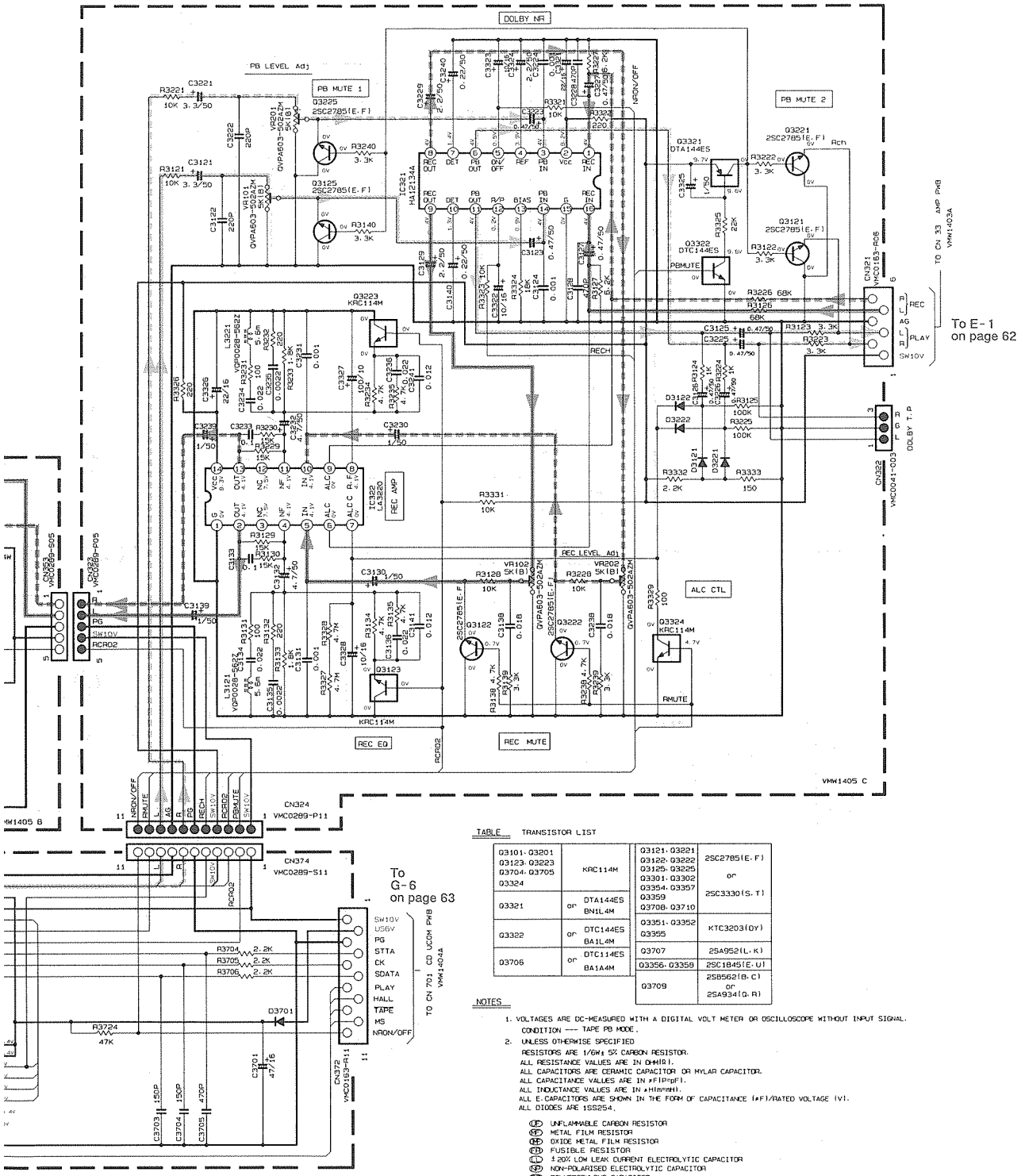


TABLE TRANSISTOR LIST

Q3101·Q3201 Q3123·Q3223 Q3704·Q3705 Q3324	KRC114M	Q3121·Q3221 Q3122·Q3222 Q3125·Q3225 Q3301·Q3302 Q3354·Q3357 Q3359 Q3708·Q3710	2SC2785(E·F) or 2SC3330(S·T)
Q3321	or DTA144ES BN1L4M	Q3351·Q3352 Q3355	KTC3203(OY)
Q3322	or DTC144ES BA1L4M	Q3707	2SA952(L·K)
Q3706	or DTC114ES BA1A4M	Q3356·Q3358	2SC1845(E·U)
		Q3709	2SB562(B·C) or 2SA934(Q·R)

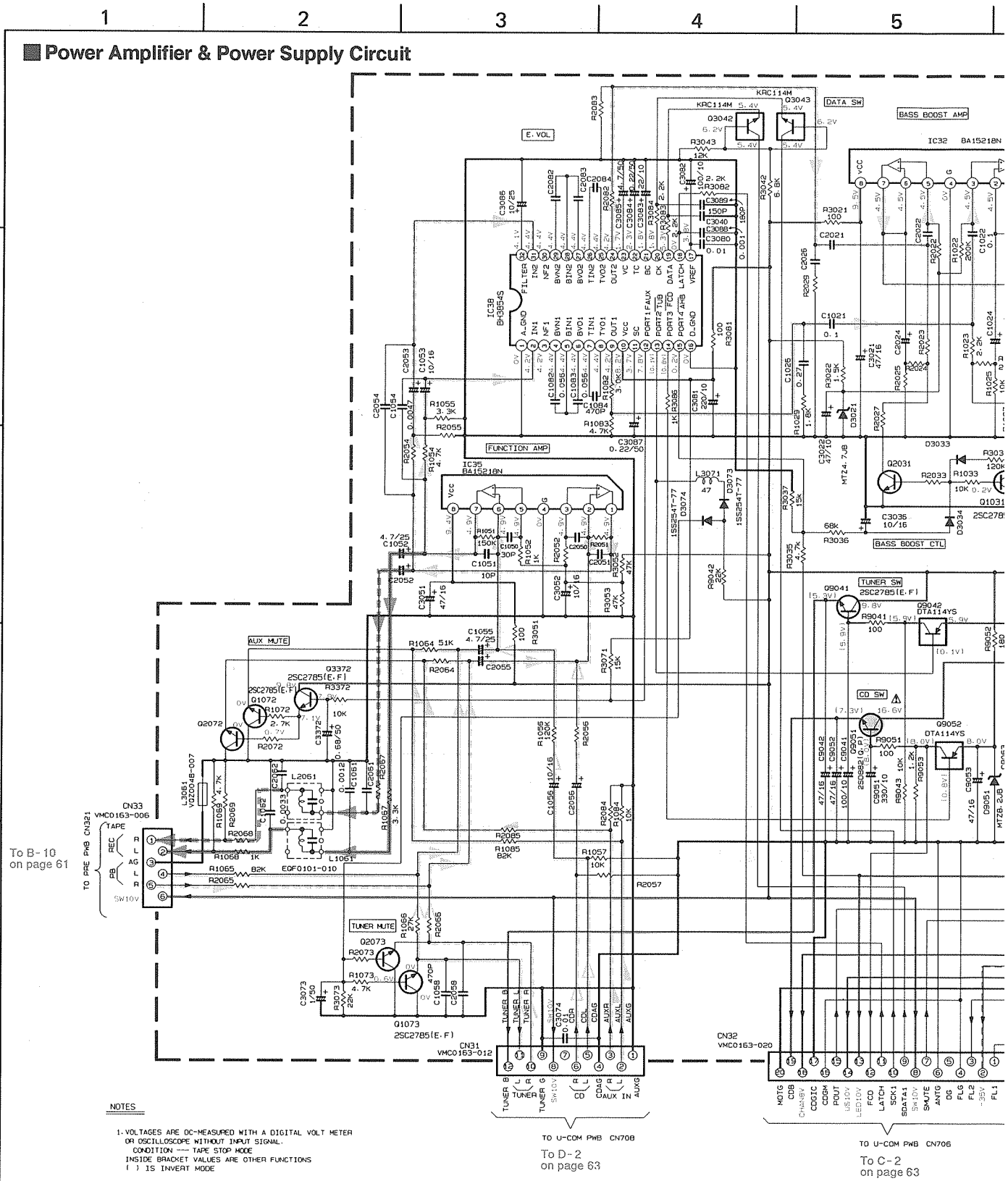
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- TAPE PB MODE.
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/6W, 5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(=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 1SS254.

(UC) UNFLAMMABLE CARBON RESISTOR
(MF) METAL FILM RESISTOR
(MF) OXIDE METAL FILM RESISTOR
(FR) FUSIBLE RESISTOR
(L) ±20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
(NP) NON-POLARISED ELECTROLYTIC CAPACITOR
(PP) POLYPROPYLENE CAPACITOR
(PS) POLYSTYROL CAPACITOR

L / R Recording signal line
L / R Playback signal line
+B Line

Power Amplifier & Power Supply Circuit



NOTES

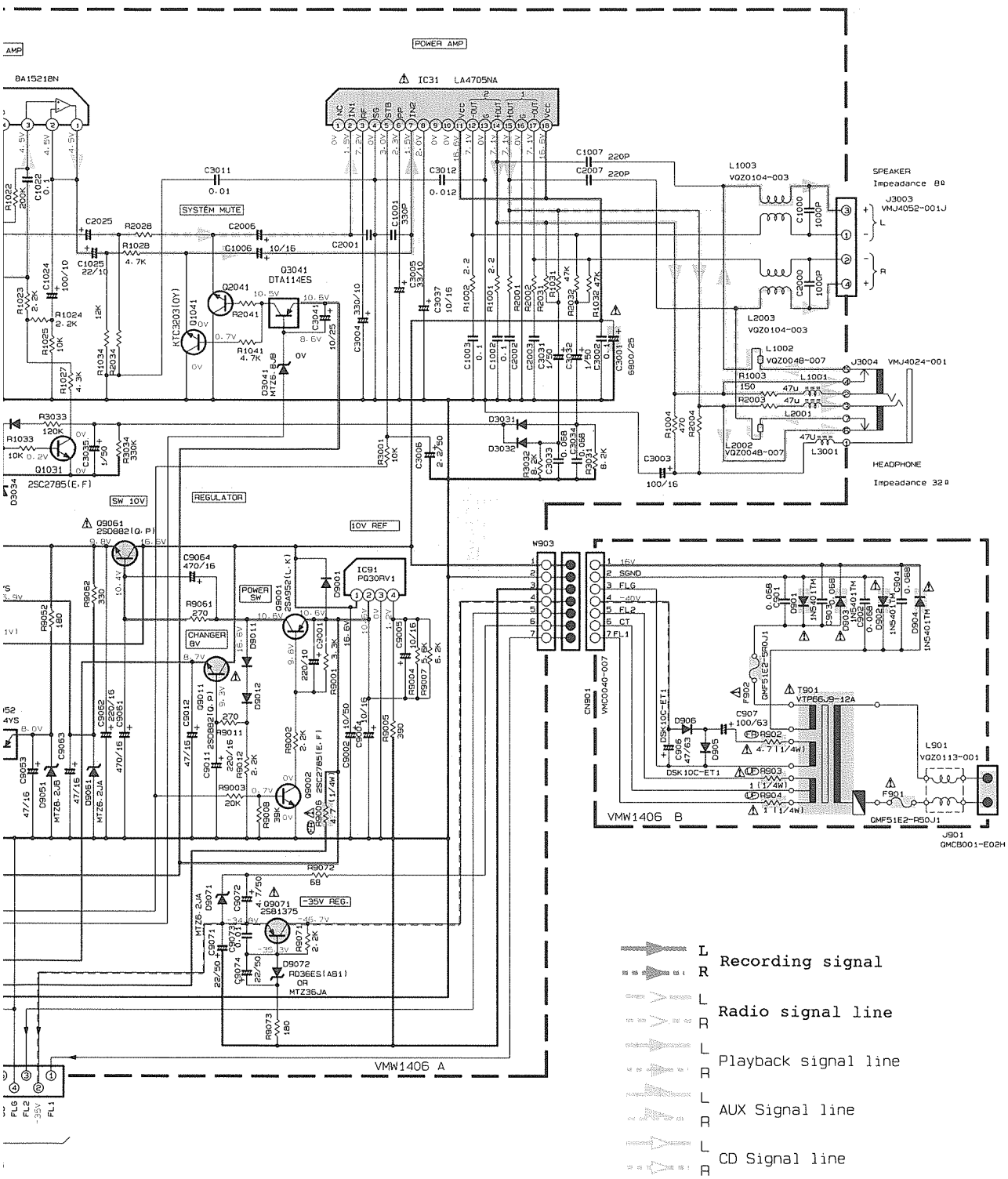
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- TAPE STOP MODE
   INSIDE BRACKET VALUES ARE OTHER FUNCTIONS
   ( ) IS INVERT MODE

2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E·CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS254T-77 OR HSS104TJ

   (FB) FUSEBLE RESISTOR
   (UP) UNFLAMMABLE CARBON RESISTOR
   (MF) METAL FILM RESISTOR
   (OMF) OXIDE METAL FILM RESISTOR
   (LC) ±20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
   (NP) NON-POLARISED ELECTROLYTIC CAPACITOR
   (PP) POLYPROPYLENE CAPACITOR
   (PS) POLYSTYROL CAPACITOR

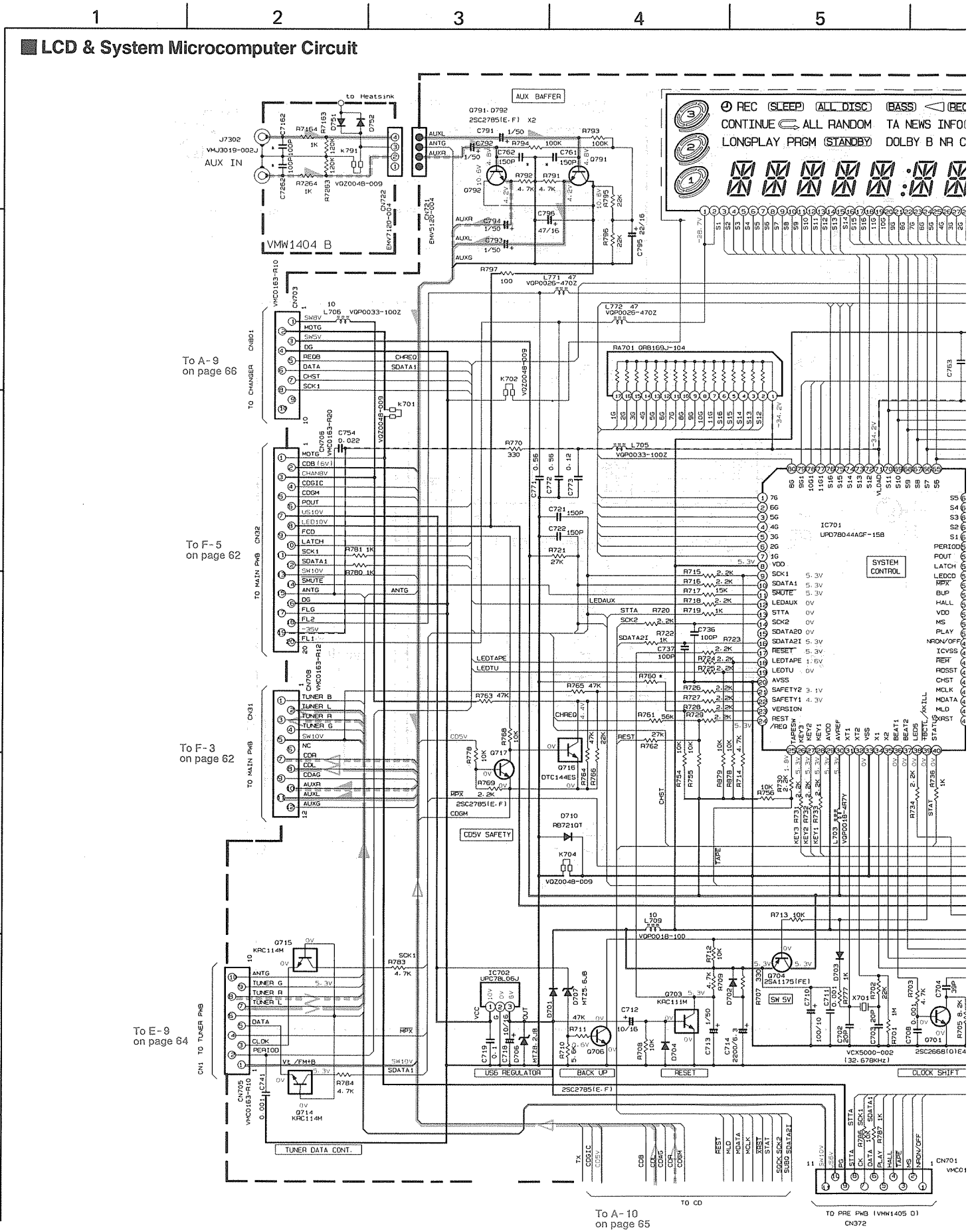
Fig. 12-2

6 7 8 9 10



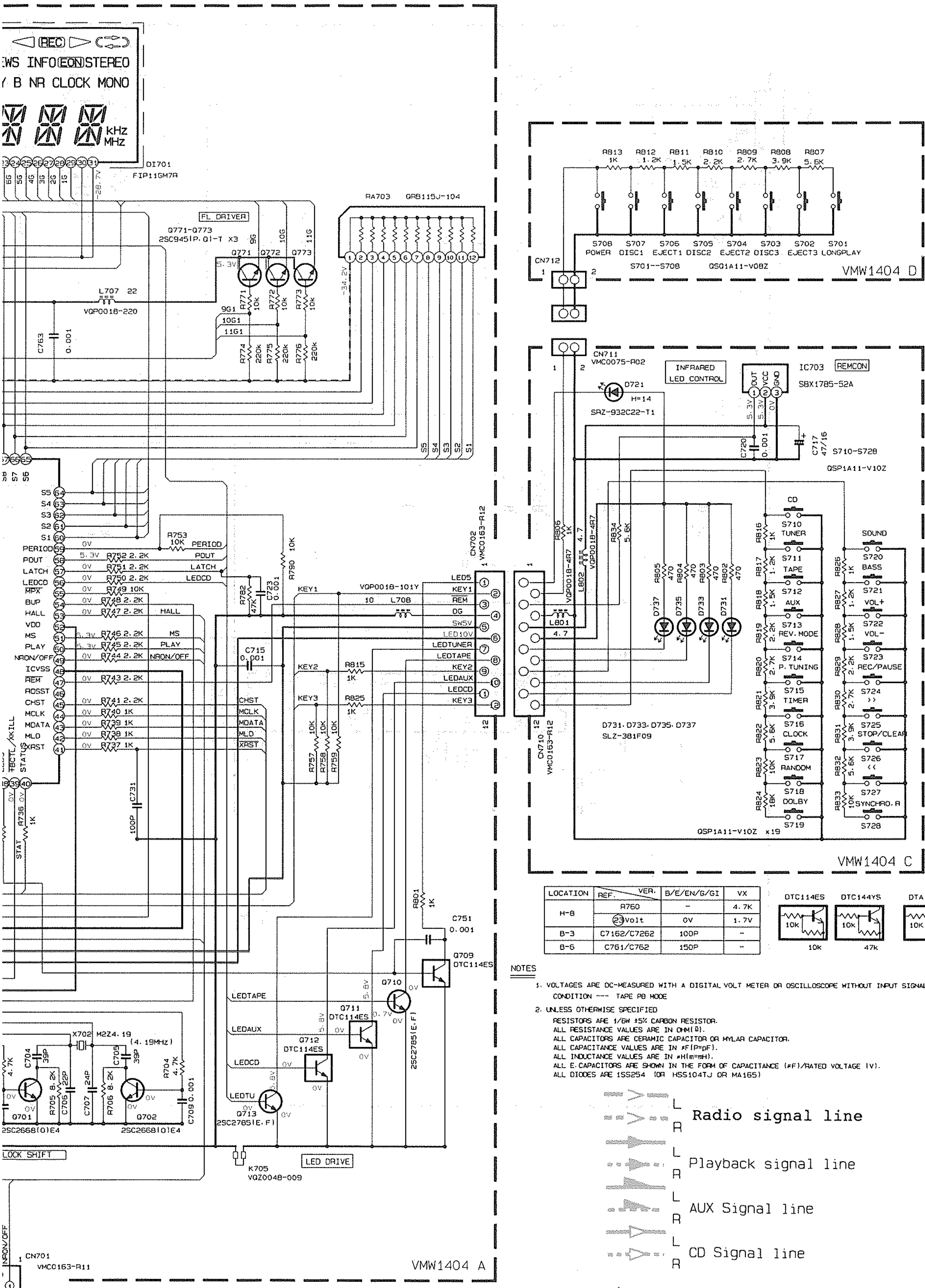
DTC144TS	DTA114YS	DTA114ES
R1	R2 R1	R2 R1
R1=47K	R1=10K R2=47K	R1=10K R2=10K

LCD & System Microcomputer Circuit

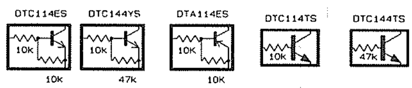


Note : VDH9273002SV

6	7	8	9	10



LOCATION	REF. / VER.	B/E/EN/G/GI	VX
H-8	R760	–	4.7K
	23 Volt	0V	1.7V
B-3	C7162/C7262	100P	–
B-6	C761/C762	150P	–



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- TAPE PB MODE
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS254 (OR HSS104TJ OR MA165)

L / R Radio signal line

L / R Playback signal line

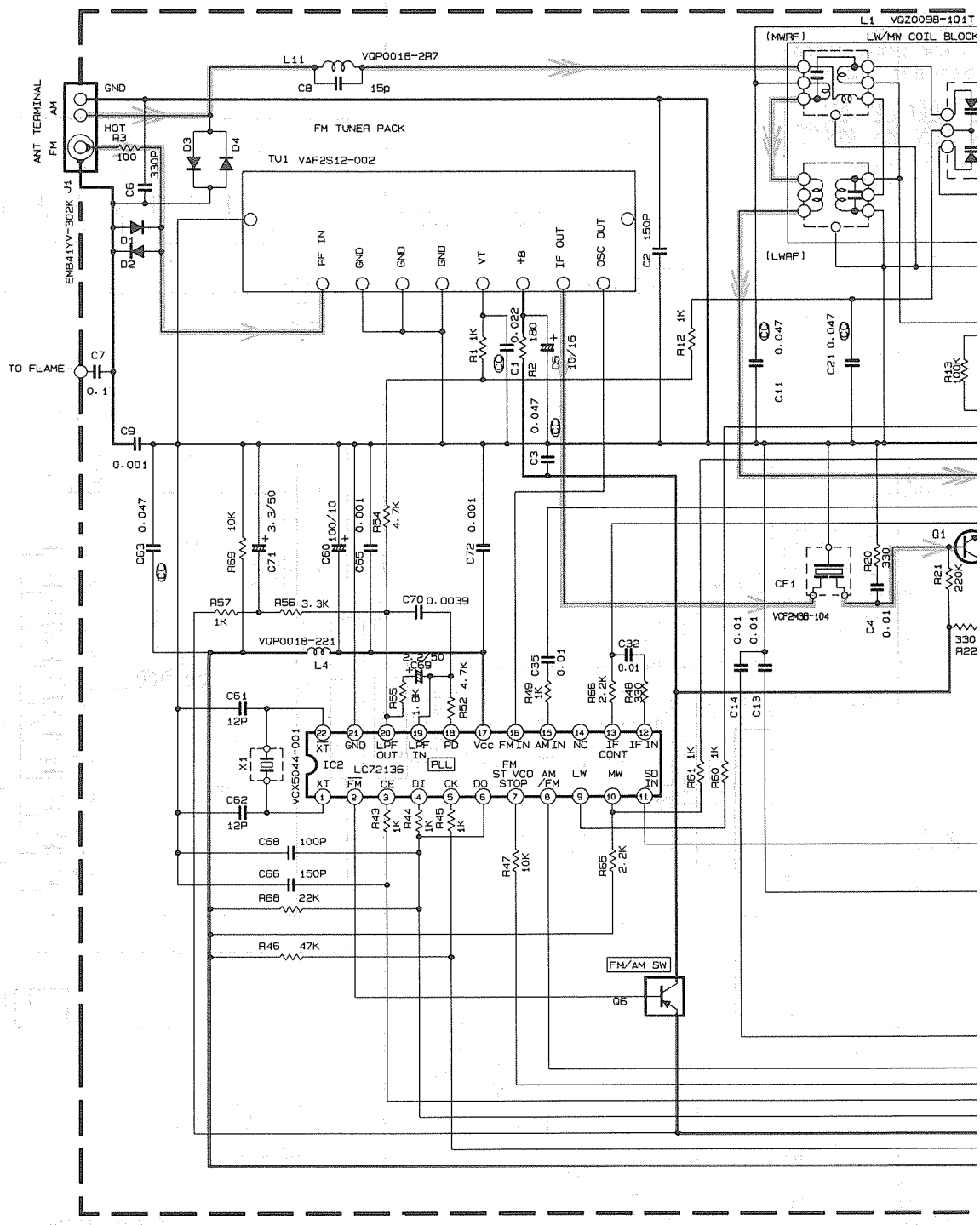
L / R AUX Signal line

L / R CD Signal line

+B Line — -B Line

Fig. 12-3

Tuner Circuit

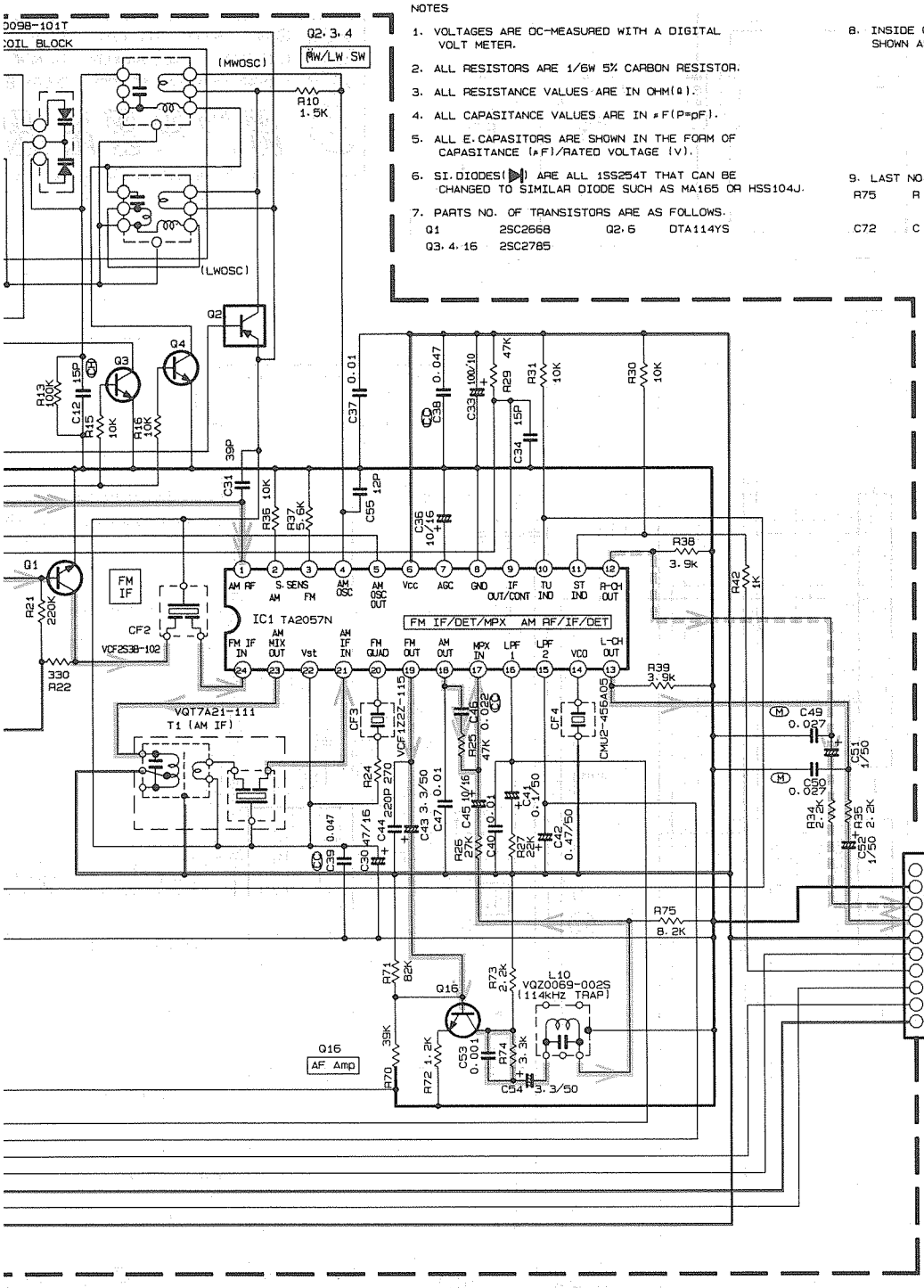


	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC1	FM NO SIGNAL	2.0	0.5	0	2.0	5.2	5.2	0	0	0.2	5.2	5.2	1.0	1.0	4.6	3.8	3.8	1.4	0	1.3	1.1	2.0	2.0	5.2	2.0
	FM 60dB STEREO	2.0	0.5	0	2.0	5.2	5.2	1.1	0	0.2	0	0	1.0	1.0	4.5	4.1	3.9	1.4	0	1.2	1.1	2.0	2.0	5.2	2.0
	AM NO SIGNAL	2.0	0.5	0	2.0	5.0	5.2	0	0	0.2	5.2	5.2	1.0	1.0	4.8	2.2	0	1.4	1.4	1.5	1.6	2.0	2.0	5.2	2.0
IC2	FM NO SIGNAL	2.7	0	0	4.9	4.9	4.9	3.8	3.8	2.0	4.1	5.2	0	0	0	0	2.6	5.2	1.0	1.0	3.7	0	2.7		

Note : VDH9273005TW

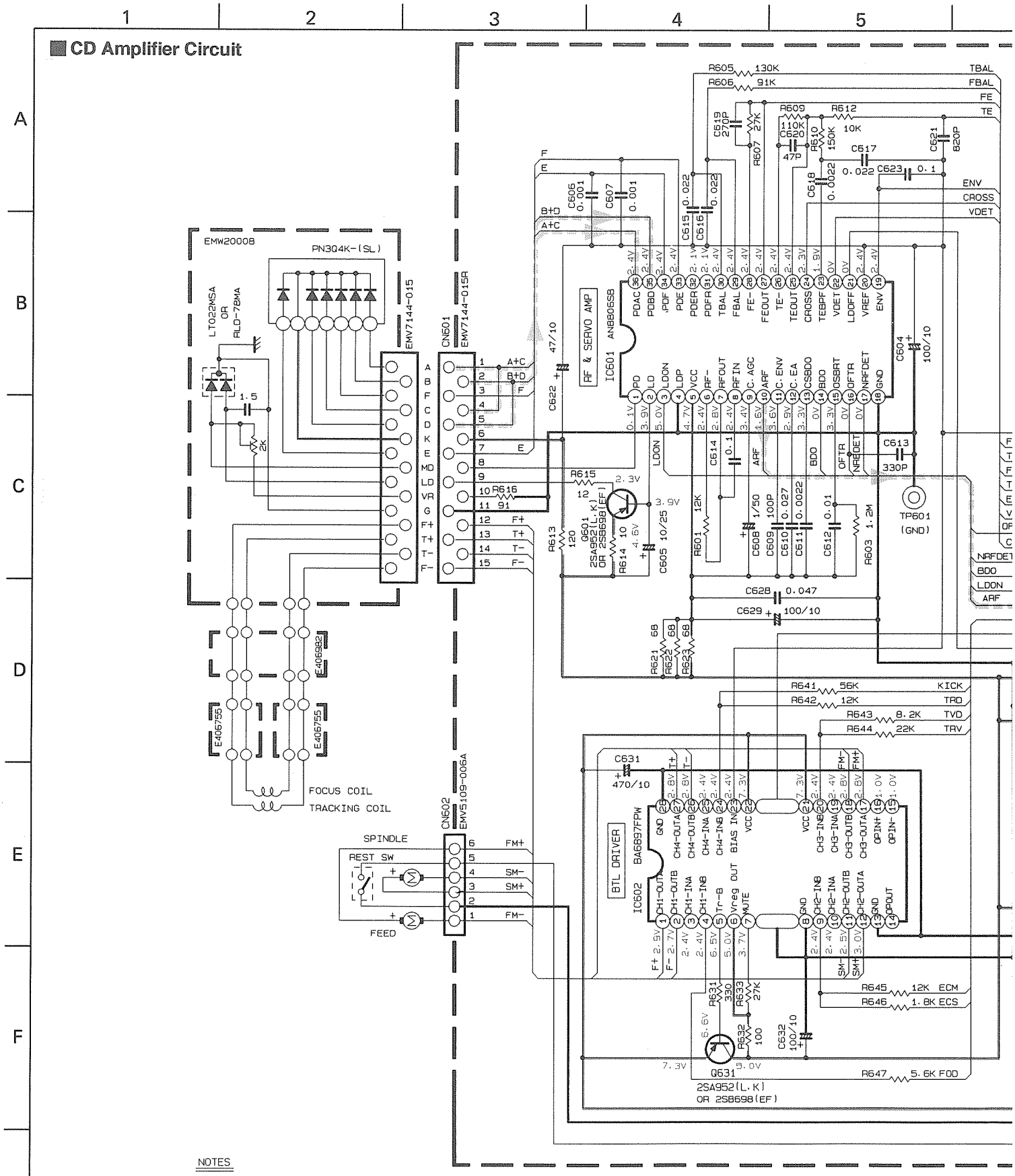
Fig. 12-4

6 | 7 | 8 | 9 | 10



Tr NO.	Q1			Q6			Q16		
PIN NO.	E	C	B	E	C	B	E	C	B
FM 87.5MHz NO SIGNAL	0	8.3	0.8	9.8	9.7	0	1.0	3.5	1.6
AM 522KHz NO SIGNAL	0	0	0	9.8	0	9.7	1.0	3.5	1.6
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	2.0	2.0	0.1	0	0	0.7	0	0	0.7
AM 144KHz NO SIGNAL	2.0	2.0	2.0	0	0	0.1	0	0	0.1

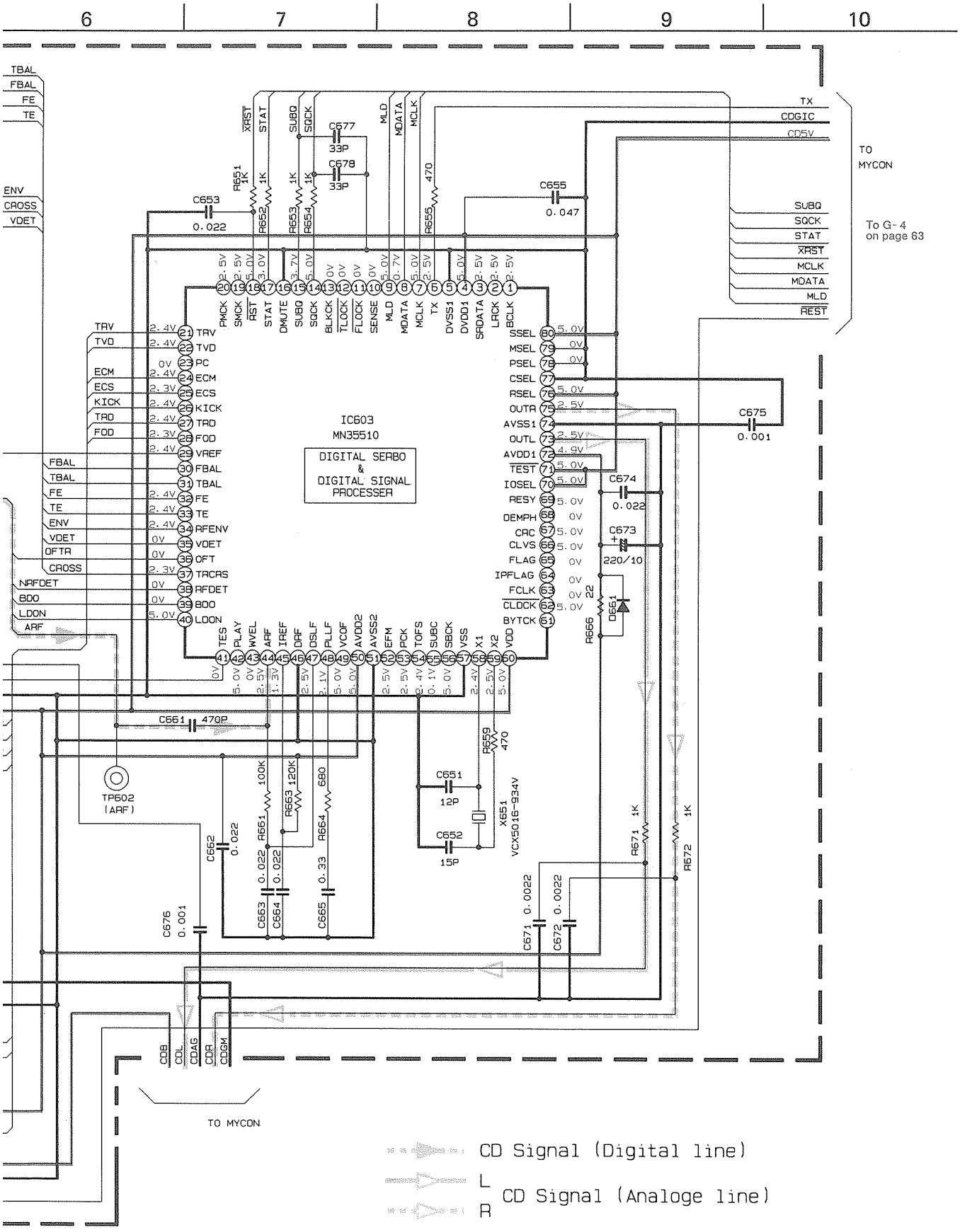
L
R
FM and Radio signal line
MW Signal line
+B Line



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

Fig. 12-5


6
7
8
9
10
IC603
MN35510
DIGITAL SERBO
&
DIGITAL SIGNAL
PROCESSER
TX
CDGIC
CD5V
TO
MYCON
SUBQ
SQCK
STAT
XRST
MCLK
MDATA
MLD
REST
To G-4
on page 63
C653
0.022
C677
33P
C678
33P
C655
0.047
C675
0.001
C674
0.022
C673
220/10
C661
470P
C662
0.022
C676
0.001
C663
0.022
C664
0.022
C665
0.33
C671
0.0022
C672
0.0022
C651
12P
C652
15P
X651
VCX5016-934V
R651
R652
R653
R654
R655
R659
R661
R663
R664
R666
R671
R672
D651
TP602
(ARF)
TO MYCON
CD Signal (Digital line)
L
R
CD Signal (Analoge line)
+B Line

CD Traverse Mechanism Control Circuit

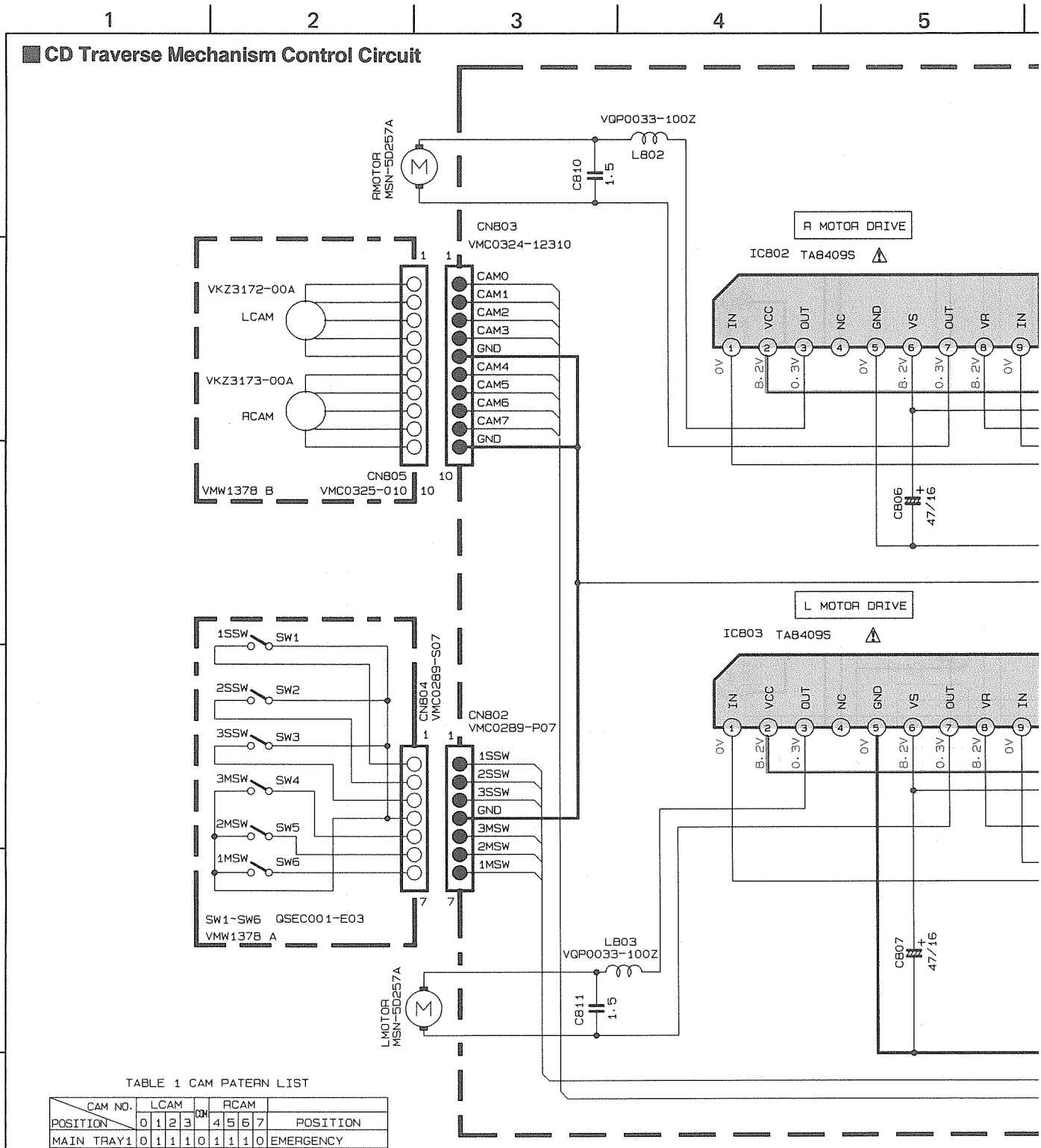


TABLE 1 CAM PATERN LIST

CAM NO. / POSITION	LCAM 0	1	2	3	COM	RCAM 4	5	6	7	POSITION
MAIN TRAY1	0	1	1	1	0	1	1	1	0	EMERGENCY
SUB TRAY1	0	0	1	1	0	1	1	0	0	TRAY1 STAND-BY
CAMR 1	0	1	0	1	0	1	0	1	0	TRAY1 CHACKING
MAIN TRAY2	1	0	0	1	0	1	0	0	1	TRAY2 STAND-BY
SUB TRAY2	1	1	1	0	0	0	1	1	1	TRAY2 CHACKING
CAMR 2	1	0	1	0	0	0	1	0	1	TRAY3 STAND-BY
MAIN TRAY3	1	1	0	0	0	0	0	1	1	TRAY3 CHACKING
SUB TRAY3	1	0	0	0	0					
OFF	1	1	1	1	0	1	1	1	1	OFF

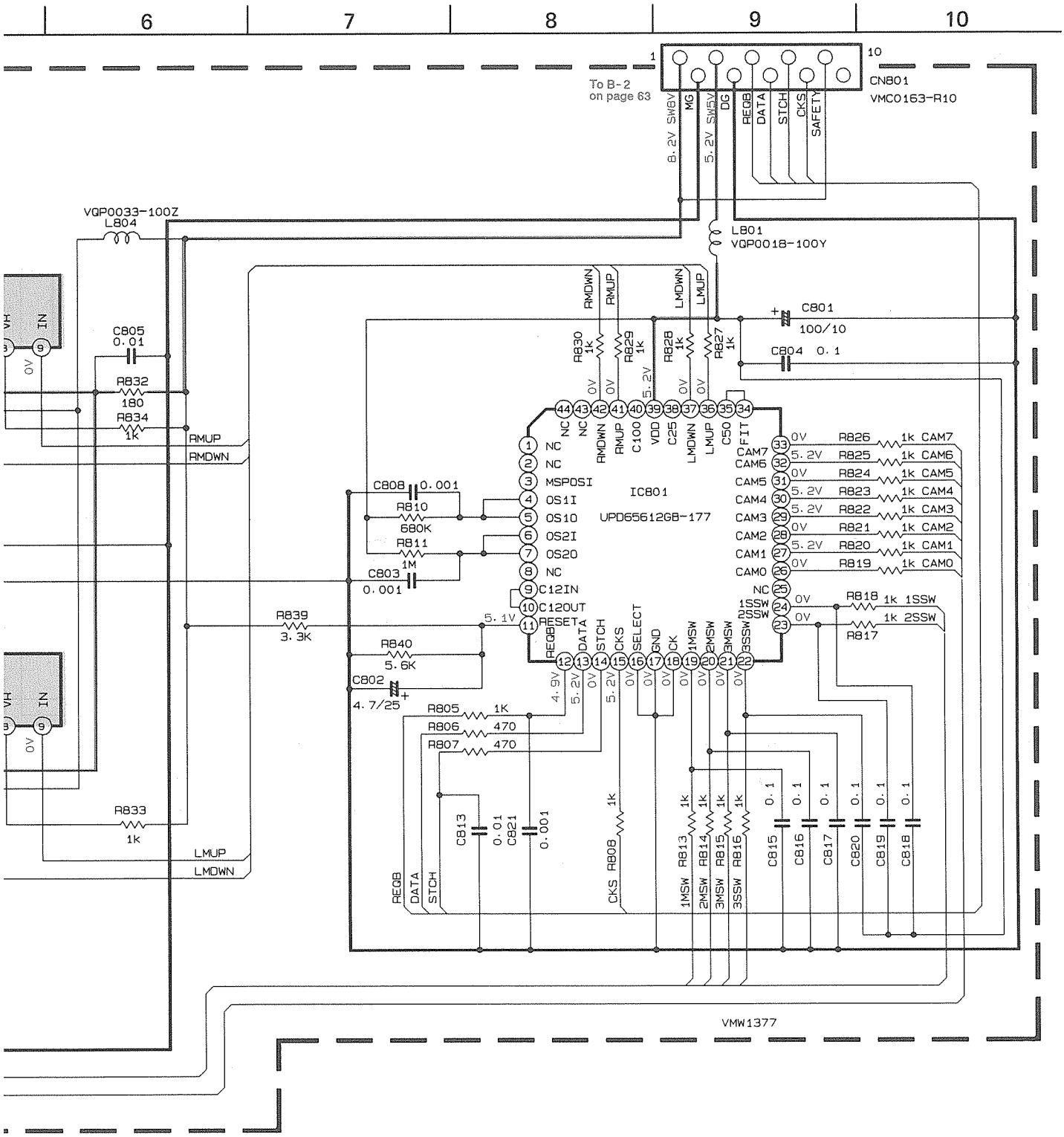
0=0V
1=5V

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION ---- DISC 1 CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLT.

Note : VDH1002001MW NEW

Fig. 12-6



TOR.

TED VOLTAGE (V).

- (UP) UNFLAMMABLE CARBON RESISTOR
- (MF) METAL FILM RESISTOR
- (OMF) OXIDE METAL FILM RESISTOR
- (LL) ±20% LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
- (NP) NON-POLARISED ELECTROLYTIC CAPACITOR
- (PP) POLYPROPYLENE CAPACITOR
- (PS) POLYSTYROL CAPACITOR

+B Line

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

13. Location of P. C. Board Parts

■ Main Board: Block No. 01

● Power supply board

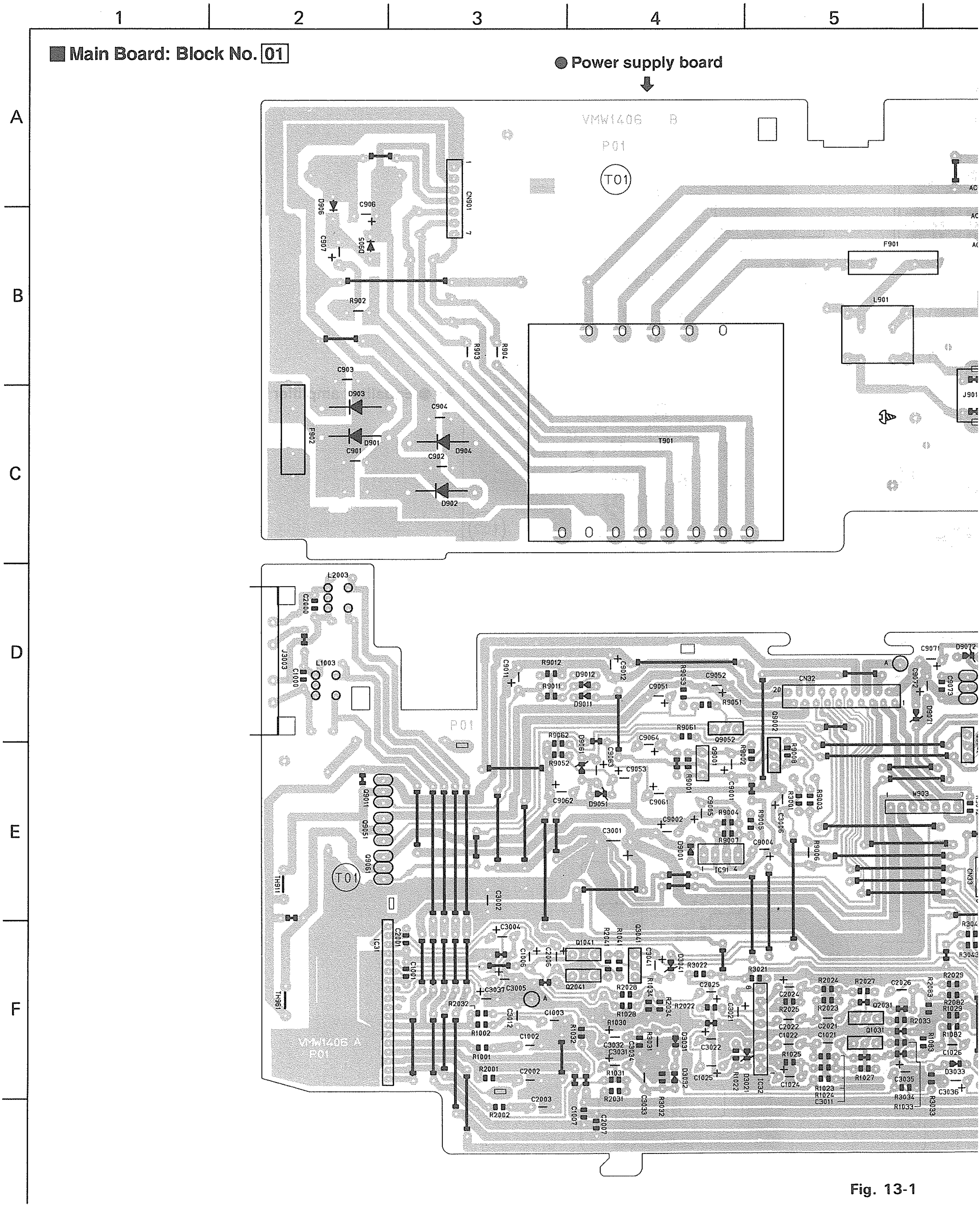
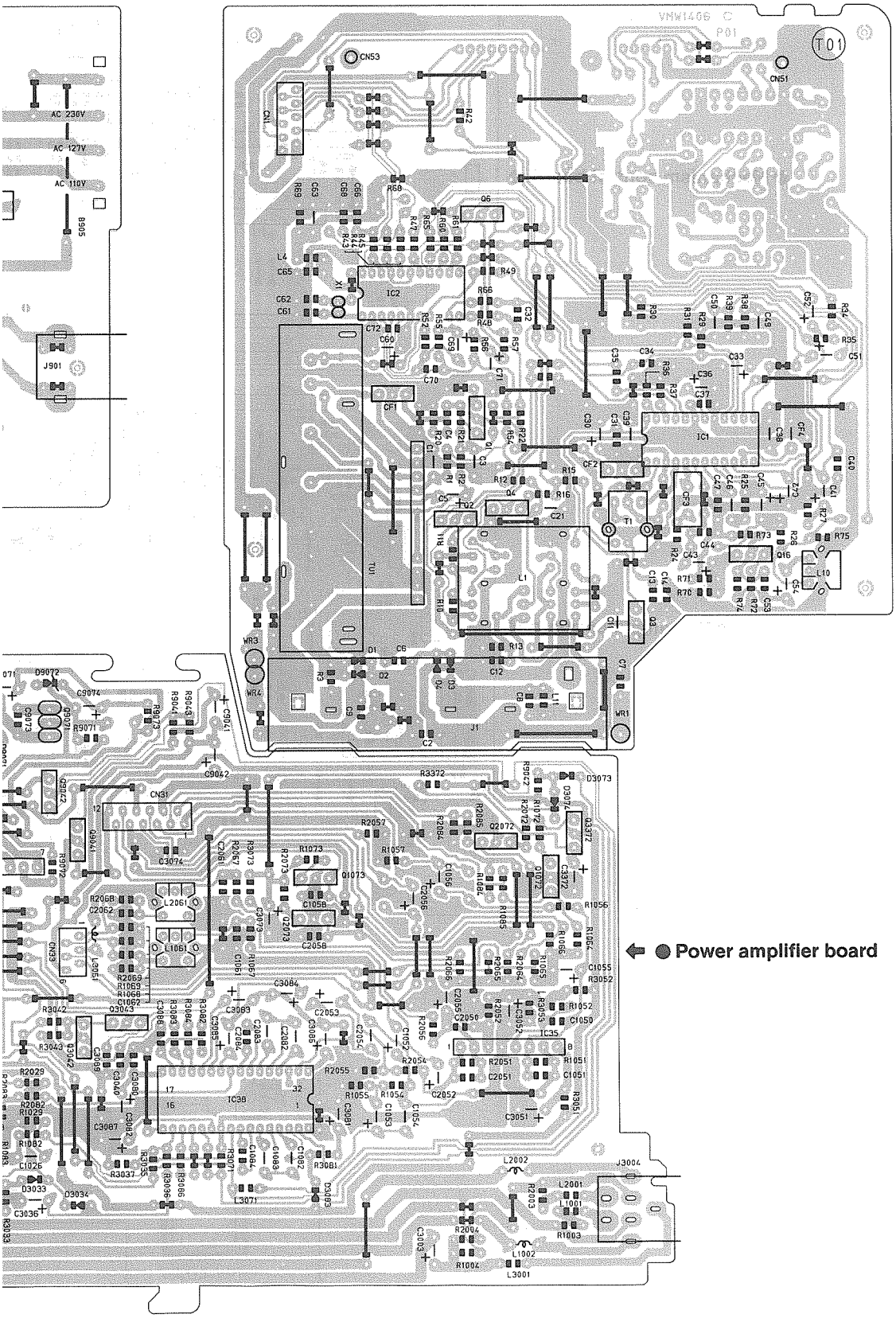


Fig. 13-1

6 | 7 | 8 | 9 | 10

● Tuner board



● Power amplifier board

1 2 3 4 5

A B C D E F

■ Head Amplifier Board: Block No. 02

● Mechanism control board ➡

● Rec amplifier board ➡

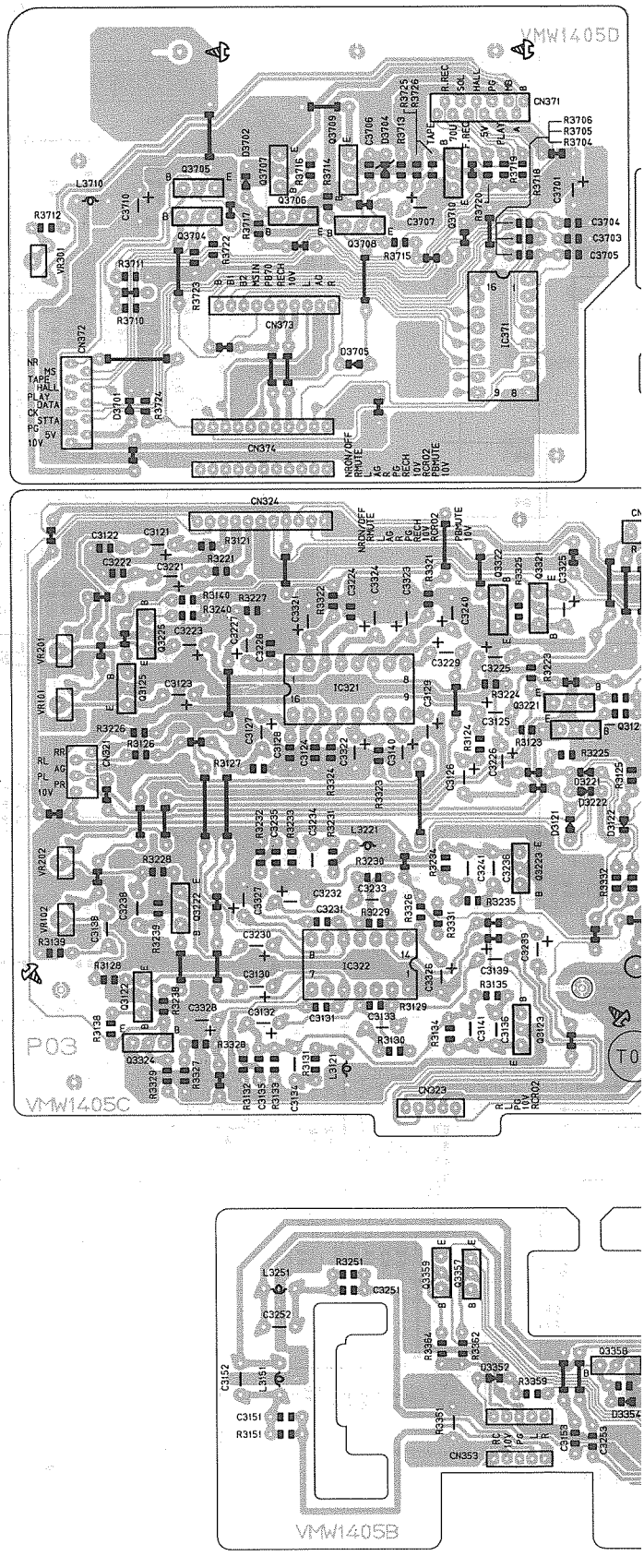


Fig. 1

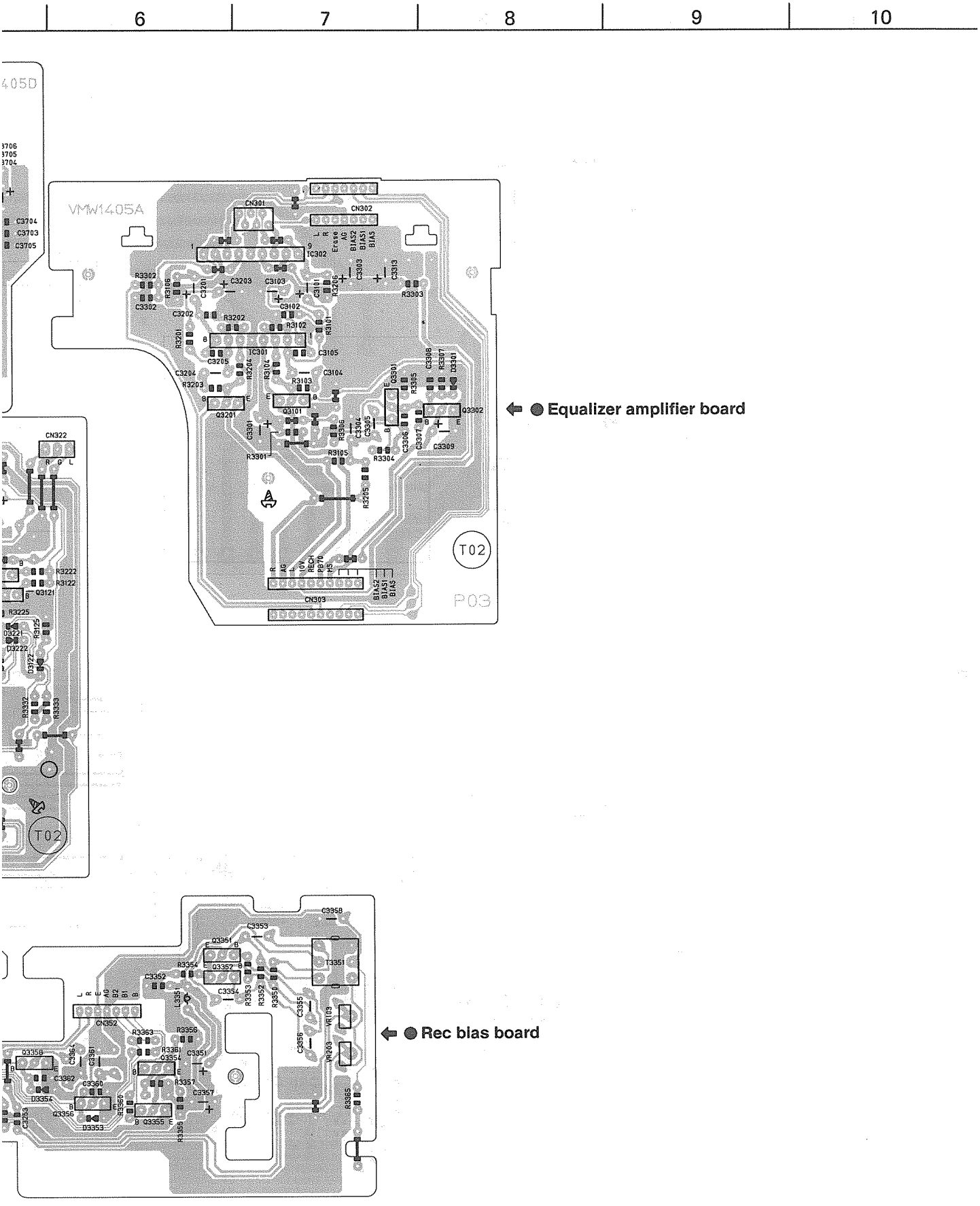

6
7
8
9
10
VMW1405A
CN301
CN302
TC302
CN303
CN322
CN352
T02
P03
Equalizer amplifier board
Rec bias board

Fig. 13-2

■ CD Amplifier & Function
: Block No. 03

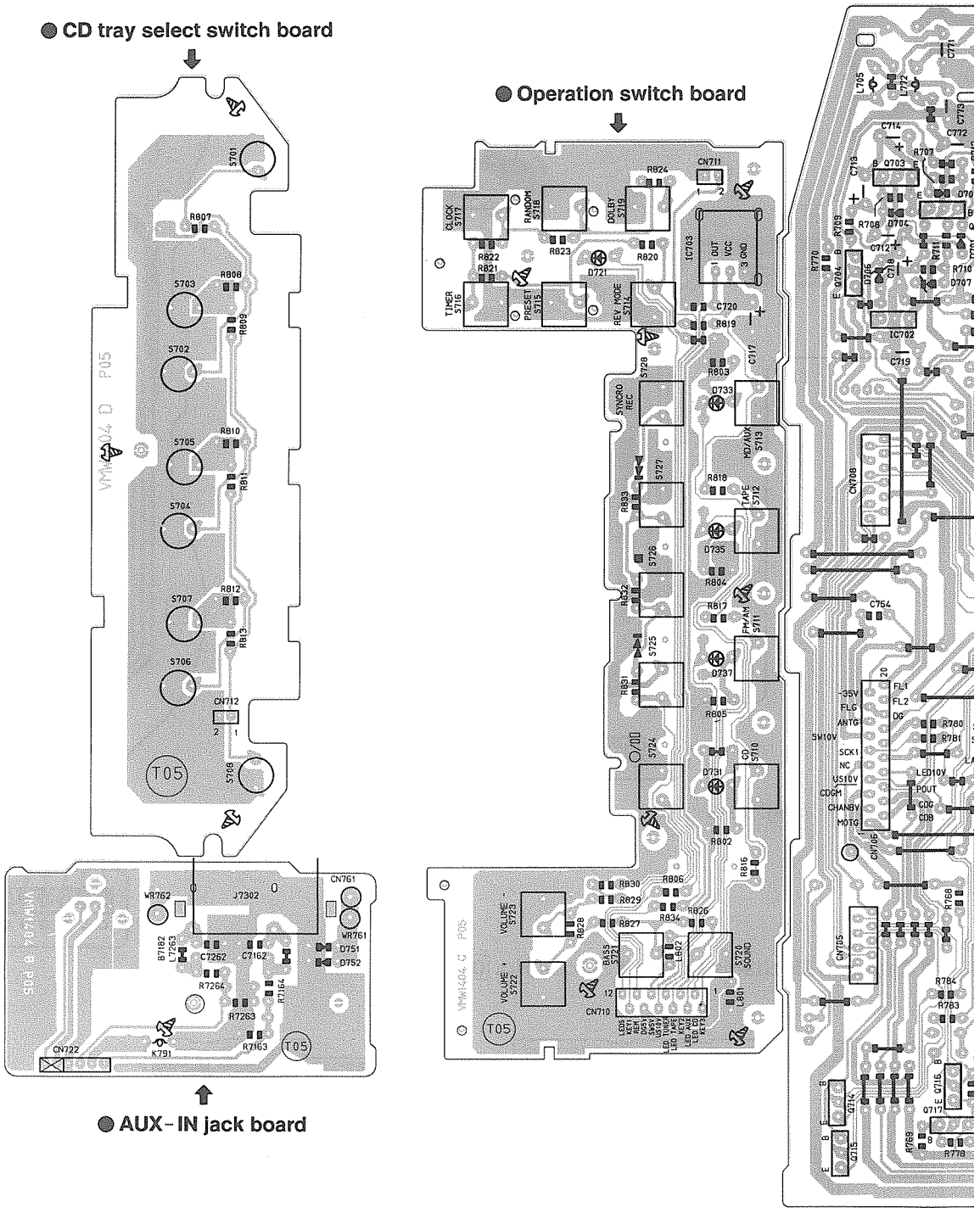
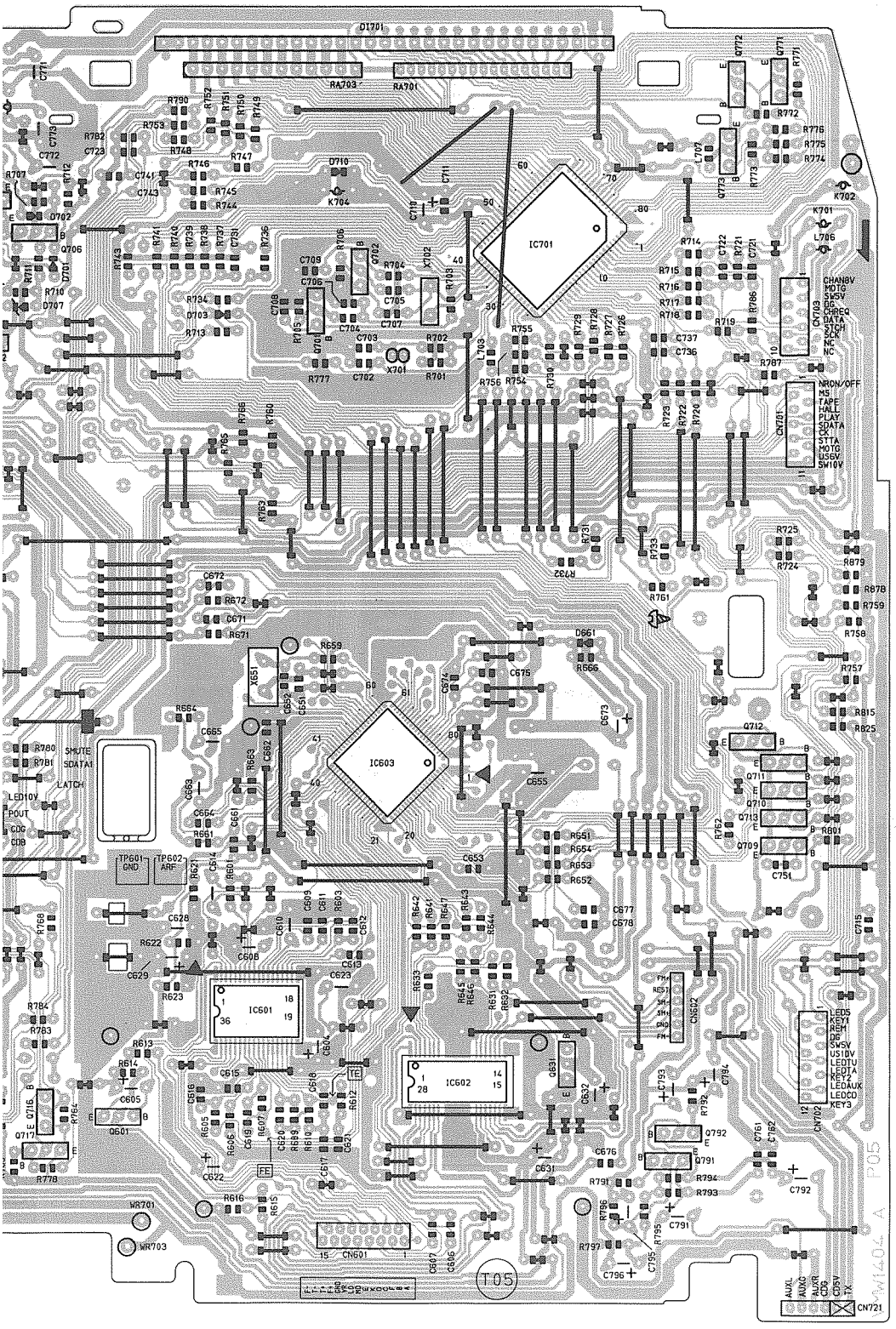


Fig. 13-3

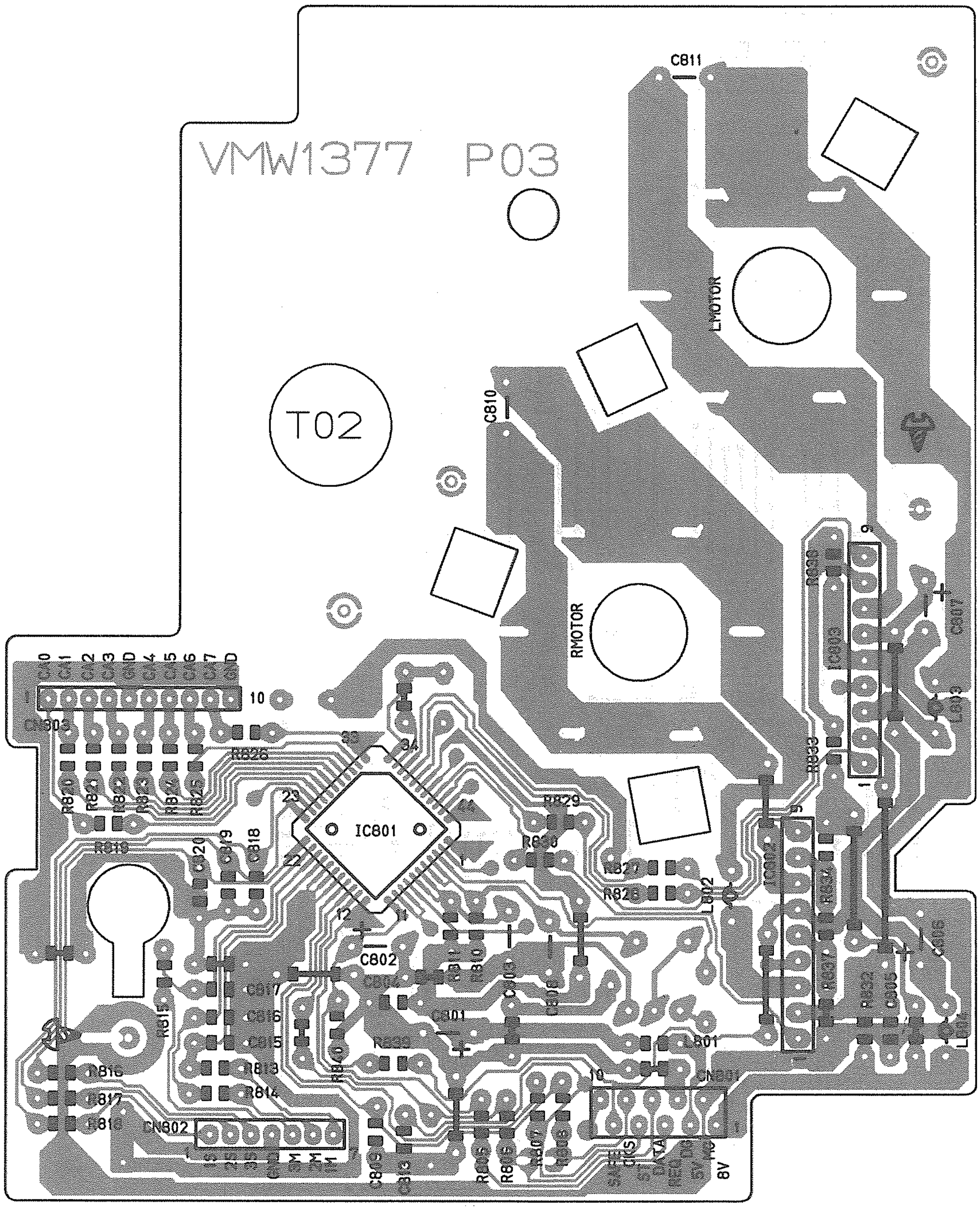
6 | 7 | 8 | 9 | 10

● LCD/System microcomputer

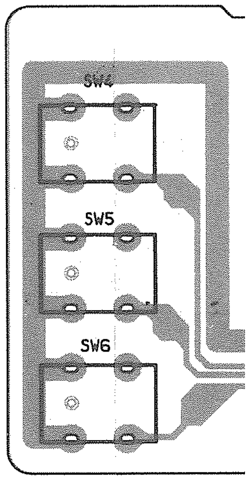


1 2 3 4 5

CD Traverse Mechanism Control Board: Block No. 04



Tray Select Switch Board: Block No. 05



Cassett

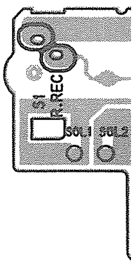


Fig. 13-4

6 | 7 | 8 | 9 | 10

t Switch Board:
05

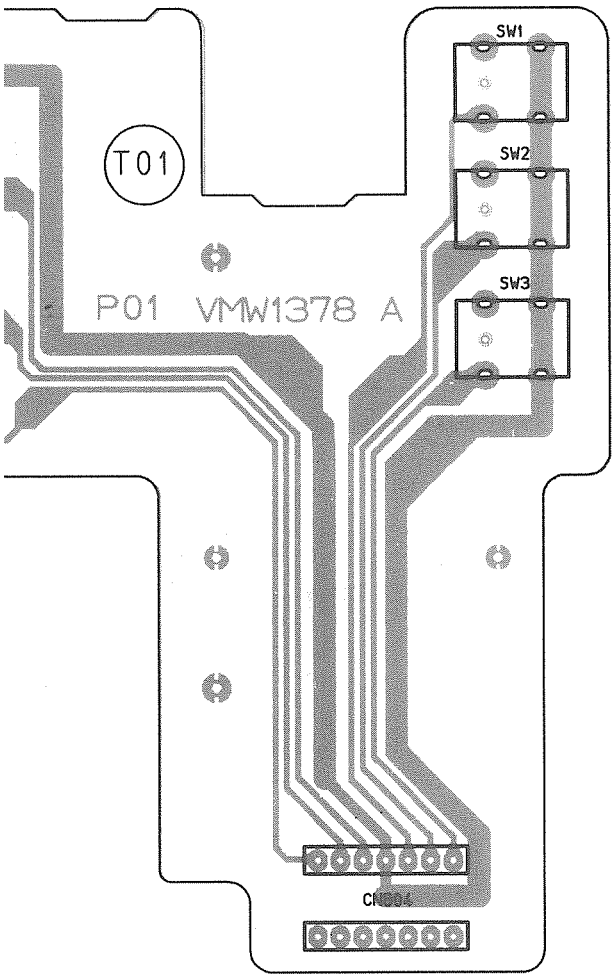


Fig. 13-5

■ Cam Switch Board : Block No. 06

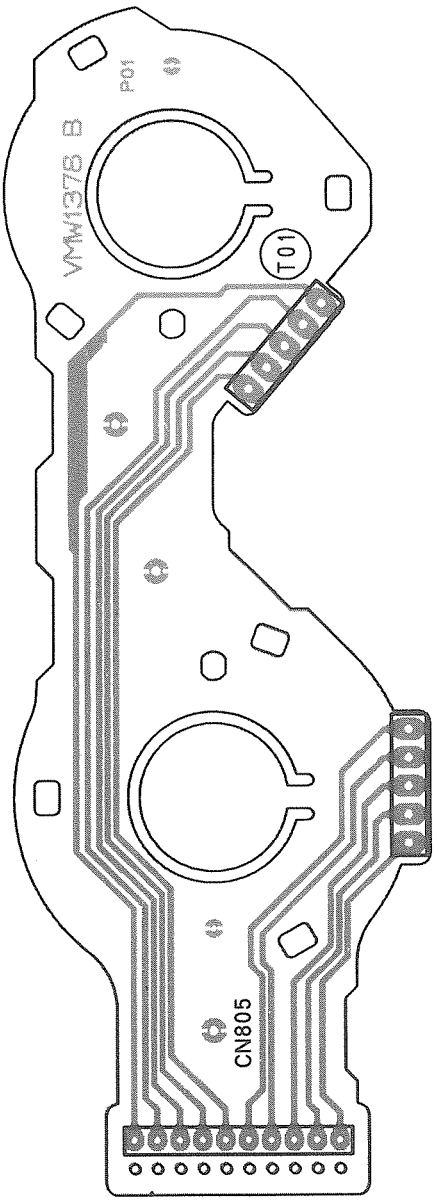


Fig. 13-6

assette Mechanism Board : Block No. 07

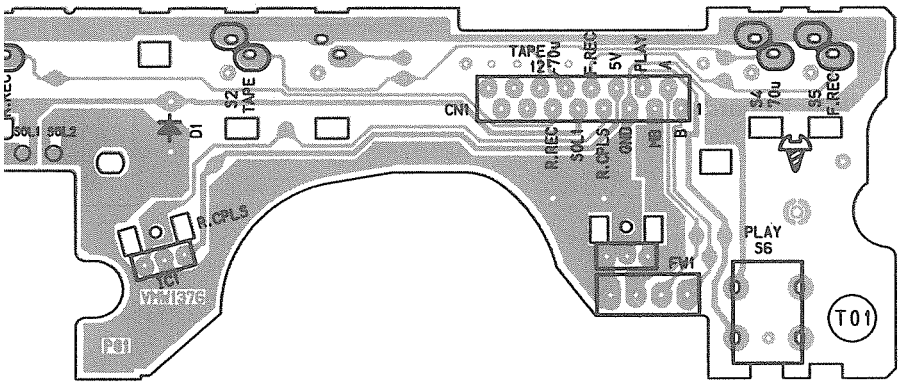
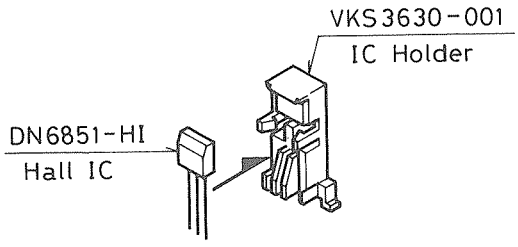


Fig. 13-7



14. Electrical Parts List

■ Main Board

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
⚠	C 901	QFLC1HJ-683	M.CAPACITOR	.068MF 5% 50V	
⚠	C 902	QFLC1HJ-683	M.CAPACITOR	.068MF 5% 50V	
⚠	C 903	QFLC1HJ-683	M.CAPACITOR	.068MF 5% 50V	
⚠	C 904	QFLC1HJ-683	M.CAPACITOR	.068MF 5% 50V	
⚠	C 906	QETB1JM-476	E.CAPA. I.M	47MF 20% 63V	
⚠	C 907	QETB1JM-107	E.CAPA. I.M	100MF 20% 63V	
	CN 31	VMC0163-012	CONNECTOR	U-COM	
	CN 32	VMC0163-020	CONNECTOR	U-COM	
	CN 33	VMC0163-006	CONNECTOR	TAPE	
	CN901	VMC0040-007	CONNECTOR	MAIN	
	C1000	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C1001	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C1002	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C1003	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C1006	EET2508-106ZE	E CAPACITOR		
	C1007	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C1021	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C1022	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C1024	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C1025	EET2508-226ZE	E CAPACITOR		
	C1026	QFV81HJ-274	M.M.CAPACITOR	.27MF 5% 50V	
	C1050	QCS11HJ-300	C.CAPACITOR	30PF 5% 50V	
	C1051	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
	C1052	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
	C1053	EET2508-106ZE	E CAPACITOR		
	C1054	QFLC1HJ-472ZM	M.CAPACITOR	4700PF 5% 50V	
	C1055	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
	C1056	EET2508-106ZE	E CAPACITOR		
	C1058	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C1061	QCXB1CM-122Y	C.CAPACITOR	1200PF 20% 16V	
	C1062	QCXB1CM-332Y	C.CAPACITOR	3300PF 20% 16V	
	C1082	QFLB1HJ-563	M.CAPACITOR	.056MF 5% 50V	
	C1083	QFLB1HJ-563	M.CAPACITOR	.056MF 5% 50V	
	C1084	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C2000	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C2001	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C2002	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C2003	QCC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
	C2006	EET2508-106ZE	E CAPACITOR		
	C2007	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C2021	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C2022	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C2024	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C2025	EET2508-226ZE	E CAPACITOR		
	C2026	QFV81HJ-274	M.M.CAPACITOR	.27MF 5% 50V	
	C2050	QCS11HJ-300	C.CAPACITOR	30PF 5% 50V	
	C2051	QCS11HJ-100	C.CAPACITOR	10PF 5% 50V	
	C2052	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
	C2053	EET2508-106ZE	E CAPACITOR		
	C2054	QFLC1HJ-472ZM	M.CAPACITOR	4700PF 5% 50V	
	C2055	QER41EM-475VM	E.CAPACITOR	4.7MF 20% 25V	
	C2056	EET2508-106ZE	E CAPACITOR		
	C2058	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C2061	QCXB1CM-122Y	C.CAPACITOR	1200PF 20% 16V	
	C2062	QCXB1CM-332Y	C.CAPACITOR	3300PF 20% 16V	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C2082	QFLB1HJ-563	M.CAPACITOR	.056MF 5% 50V	
	C2083	QFLB1HJ-563	M.CAPACITOR	.056MF 5% 50V	
	C2084	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C3001	QETM1EM-688	E.CAPACITOR	6800MF 20% 25V	
	C3002	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
	C3003	QET41CM-107	E.CAPACITOR	100MF 20% 16V	
	C3004	QETC1AM-337ZN	E.CAPACITOR	330MF 20% 10V	
	C3005	QETC1AM-336ZM	E.CAPACITOR	33MF 20% 10V	
	C3006	QETC1HM-225ZN	E.CAPACITOR	2.2MF 20% 50V	
	C3011	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3012	QCC11EM-123V	C.CAPACITOR	.012MF 20% 25V	
	C3021	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C3022	QET41AM-476	E.CAPACITOR	47MF 20% 10V	
	C3031	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3032	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3033	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C3034	QFV71HJ-683ZM	FILM CAPACITOR	.068MF 5% 50V	
	C3035	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3036	QER41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3037	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3040	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C3041	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C3051	QER41CM-476M	E.CAPACITOR	47MF 20% 16V	
	C3052	QER41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3073	QER41HM-105VM	E.CAPACITOR	1.0MF 20% 50V	
	C3074	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C3080	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3081	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C3082	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C3083	QET41AM-226	E.CAPACITOR	22MF 20% 10V	
	C3084	QETC1HM-224Z	E.CAPACITOR	.22MF 20% 50V	
	C3085	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C3086	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C3087	QETC1HM-224Z	E.CAPACITOR	.22MF 20% 50V	
	C3088	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3089	QCBB1HK-181Y	C.CAPACITOR	180PF 10% 50V	
	C3372	QER61HM-684ZM	E.CAPACITOR	.68MF 20% 50V	
	C9001	QET41AM-227	E.CAPACITOR	220MF 20% 10V	
	C9002	QETC1HM-106ZN	E.CAPACITOR	10MF 20% 50V	
	C9004	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
	C9005	QET41CM-106	E.CAPACITOR	10MF 20% 16V	
	C9011	QET41CM-227	E.CAPACITOR	220MF 20% 16V	
	C9012	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9041	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C9042	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9051	QETC1AM-337ZN	E.CAPACITOR	330MF 20% 10V	
	C9052	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9053	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9061	QET41CM-477	E.CAPACITOR	470MF 20% 16V	
	C9062	QET41CM-227	E.CAPACITOR	220MF 20% 16V	
	C9063	QET41CM-476	E.CAPACITOR	47MF 20% 16V	
	C9064	QET41CM-477	E.CAPACITOR	470MF 20% 16V	
	C9071	QET41HM-226	E.CAPACITOR	22MF 20% 50V	
	C9072	QET41HM-475	E.CAPACITOR	4.7MF 20% 50V	
	C9073	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C9074	QET41HM-226	E.CAPACITOR	22MF 20% 50V	
⚠	D 901	1N5401TM	SI DIODE		
⚠	D 902	1N5401TM	SI DIODE		
⚠	D 903	1N5401TM	SI DIODE		
⚠	D 904	1N5401TM	SI DIODE		
⚠	D 905	DSK10C-E	DIODE		
⚠	D 906	DSK10C-E	DIODE		
	D3021	MTZ4.7JB	ZENER DIODE		
	D3031	1SS133	SI DIODE		
	D3032	1SS133	SI DIODE		
	D3033	1SS133	SI DIODE		
	D3034	1SS133	SI DIODE		
	D3041	MTZ6.8JB	ZENER DIODE		
	D3073	1SS133	SI DIODE		
	D3074	1SS133	SI DIODE		
	D9001	1SS133	SI DIODE		
	D9011	1SS133	SI DIODE		
	D9012	1SS133	SI DIODE		
	D9051	MTZ8.2JB	ZENER DIODE		
	D9061	MTZ6.2JAT-77	Z.DIODE IDM		
	D9071	MTZ6.2JAT-77	Z.DIODE IDM		
	D9072	MTZ36JAT-77	Z.DIODE I.M		
	IC 31	LA4705NA	IC	POWER AMP	
	IC 32	BA15218N	IC	AHB AMP	
	IC 35	BA15218N	IC	FUNCTION	
	IC 38	BH3854S	IC		
	IC 91	PQ30RV1	IC	REG	
⚠	J 901	QMCB001-E02H	AC SOCKET		
	J3003	VMJ4052-001J	SPK TERM.SQUARE	SPEAKER	
	J3004	VMJ4024-001	JACK	HEADPHONE	
	L 901	VQZ0113-001	INDUCTOR		
	L1001	VQP0018-470	INDUCTOR		
	L1002	VQZ0048-007	INDUCTOR		
	L1003	VQZ0104-003	INDUCTOR		
	L1061	EQF0101-010	FILTER		
	L2002	VQZ0048-007	INDUCTOR		
	L2003	VQZ0104-003	INDUCTOR		
	L2061	EQF0101-010	FILTER		
	L3001	VQP0018-470	INDUCTOR		
	L3061	VQZ0048-007	INDUCTOR		
	L3071	VQP0018-470	INDUCTOR		
	Q1031	2SC2785	TRANSISTOR		
	Q1041	KTC3203(OY)-T	TRANSISTOR		
	Q1072	2SC2785	TRANSISTOR		
	Q1073	2SC2785	TRANSISTOR		
	Q2031	2SC2785	TRANSISTOR		
	Q2041	KTC3203(OY)-T	TRANSISTOR		
	Q2072	2SC2785	TRANSISTOR		
	Q2073	2SC2785	TRANSISTOR		
	Q3041	DTA114ES	TRANSISTOR		
	Q3042	KRC114M-T	TRANSISTOR		
	Q3043	KRC114M-T	TRANSISTOR		
	Q3372	2SC2785	TRANSISTOR		
	Q9001	2SA952(L,K)	TRANSISTOR		
	Q9002	2SC2785	TRANSISTOR		

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q9011	2SD882(P,Q)	TRANSISTOR		
	Q9041	2SC2785	TRANSISTOR		
	Q9042	DTA114YS	TRANSISTOR		
	Q9051	2SD882(P,Q)	TRANSISTOR		
	Q9052	DTA114YS	TRANSISTOR		
	Q9061	2SD882(P,Q)	TRANSISTOR		
	Q9071	2SB1375	TRANSISTOR		
⚠	R 902	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
⚠	R 903	QRD14CJ-1R0SX	CARBON RESISTOR	1.0 5% 1/4W	
⚠	R 904	QRD14CJ-1R0SX	CARBON RESISTOR	1.0 5% 1/4W	
	R1001	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R1002	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R1003	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R1004	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R1022	QRD161J-204	C.RES. I.M	200K 5% 1/6W	
	R1023	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R1024	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R1025	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R1027	QRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
	R1028	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1029	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R1031	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R1032	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R1033	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R1034	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R1041	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1051	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R1052	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R1054	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1055	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R1056	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R1057	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R1064	QRD161J-513	CARBON RESISTOR	51K 5% 1/6W	
	R1065	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	R1066	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R1067	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R1068	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R1069	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1072	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R1073	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1082	QRD161J-302	CARBON RESISTOR	3.0K 5% 1/6W	
	R1083	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R1084	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R1085	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	R2001	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R2002	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
	R2003	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R2004	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R2022	QRD161J-204	CARBON RESISTOR	200K 5% 1/6W	
	R2023	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2024	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R2025	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2027	QRD161J-432	CARBON RESISTOR	4.3K 5% 1/6W	
	R2028	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2029	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R2031	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R2032	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R2033	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2034	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R2041	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2051	QRD161J-154	CARBON RESISTOR	150K 5% 1/6W	
	R2052	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2054	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2055	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R2056	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R2057	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2064	QRD161J-513	CARBON RESISTOR	51K 5% 1/6W	
	R2065	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	R2066	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R2067	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R2068	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R2069	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2072	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R2073	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2082	QRD161J-302	CARBON RESISTOR	3.0K 5% 1/6W	
	R2083	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R2084	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R2085	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	R3001	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3021	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3022	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R3031	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R3032	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R3033	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R3034	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
	R3035	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3036	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R3037	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3042	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R3043	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R3051	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3052	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3053	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3071	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3073	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3081	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3082	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3083	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3084	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3086	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R3372	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R9001	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R9002	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R9003	QRD161J-203	CARBON RESISTOR	20K 5% 1/6W	
	R9004	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R9005	QRD161J-391	CARBON RESISTOR	390 5% 1/6W	
⚠	R9006	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
	R9007	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R9008	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R9011	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	

BLOCK NO. 01

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R9012	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R9041	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R9042	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R9043	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R9051	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R9052	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
	R9053	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R9061	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
	R9062	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R9071	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R9072	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
	R9073	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	

■ Head Amplifier Board

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN301	VMC0163-R06	CONNECTOR		
	CN302	VMC0289-S07	CONNECTOR		
	CN303	VMC0289-S10K	CONNECTOR		
	CN321	VMC0163-R06	CONNECTOR		
	CN322	VMC0041-003	CONNECTOR		
	CN323	VMC0289-P05	CONNECTOR		
	CN324	VMC0289-P11	CONNECTOR		
	CN352	VMC0289-P07	CONNECTOR		
	CN353	VMC0289-S05K	CONNECTOR		
	CN371	VMC0314-S12	CONNECTOR		
	CN372	VMC0163-R11	CONNECTOR		
	CN373	VMC0289-P10	CONNECTOR		
	CN374	VMC0289-S11K	CONNECTOR		
	C3101	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C3102	QCBB1HK-681Y	C.CAPACITOR	680PF 10% 50V	
	C3103	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C3104	QFV41HJ-123ZM	FILM CAPACITOR	.012MF 5% 50V	
	C3105	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C3121	QER61HM-335ZM	E.CAPACITOR	3.3MF 20% 50V	
	C3122	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C3123	QER61HM-474Z	E.CAPACITOR	.47MF 20% 50V	
	C3124	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3125	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3126	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3127	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3128	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C3129	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C3130	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3131	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3132	QEK61HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C3133	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C3134	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C3135	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C3136	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C3138	QFLC1HJ-183ZM	M.CAPACITOR	.018MF 5% 50V	
	C3139	QER41HM-105VM	E.CAPACITOR	1.0MF 20% 50V	
	C3140	QEK41HM-224	E.CAPACITOR	.22MF 20% 50V	
	C3141	QFLC1HJ-123ZM	M.CAPACITOR	.012MF 5% 50V	
	C3151	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3152	QCS11HJ-271	C.CAPACITOR	270PF 5% 50V	
	C3153	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C3201	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C3202	QCBB1HK-681Y	C.CAPACITOR	680PF 10% 50V	
	C3203	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C3204	QFV41HJ-123ZM	FILM CAPACITOR	.012MF 5% 50V	
	C3205	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C3221	QER61HM-335ZM	E.CAPACITOR	3.3MF 20% 50V	
	C3222	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C3223	QER61HM-474Z	E.CAPACITOR	.47MF 20% 50V	
	C3224	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3225	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3226	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3227	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C3228	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C3229	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C3230	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3231	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3232	QEK61HM-475Z	E.CAPACITOR	4.7MF 20% 50V	
	C3233	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C3234	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C3235	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C3236	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C3238	QFLC1HJ-183ZM	M.CAPACITOR	.018MF 5% 50V	
	C3239	QER41HM-105VM	E.CAPACITOR	1.0MF 20% 50V	
	C3240	QEK41HM-224	E.CAPACITOR	.22MF 20% 50V	
	C3241	QFLC1HJ-123ZM	M.CAPACITOR	.012MF 5% 50V	
	C3251	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C3252	QCS11HJ-271	C.CAPACITOR	270PF 5% 50V	
	C3253	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C3301	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C3302	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3303	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C3304	QFLC1HJ-103ZM	M.CAPACITOR	.010MF 5% 50V	
	C3305	QFLC1HJ-153ZM	M.CAPACITOR	.015MF 5% 50V	
	C3306	QCS11HJ-330	C.CAPACITOR	33PF 5% 50V	
	C3307	QCXB1CM-182Y	C.CAPACITOR	1800PF 20% 16V	
	C3308	QCBB1HK-681Y	C.CAPACITOR	680PF 10% 50V	
	C3309	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3313	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C3321	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C3322	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3323	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3324	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C3325	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C3326	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C3327	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C3328	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C3351	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C3352	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3353	QFLC1HJ-682ZM	M.CAPACITOR	6800PF 5% 50V	
	C3354	QFLC1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C3355	QFLC1HJ-562ZM	M.CAPACITOR	5600PF 5% 50V	
	C3356	QFLC1HJ-682ZM	M.CAPACITOR	6800PF 5% 50V	
	C3357	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C3358	QFP32AJ-123ZM	PP.CAPACITOR	.012MF 5% 100V	
	C3359	QFLB1HJ-102	M.CAPACITOR	1000PF 5% 50V	
	C3360	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3361	QFLB1HJ-222	M.CAPACITOR	2200PF 5% 50V	
	C3362	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3701	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C3703	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C3704	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C3705	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C3706	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C3707	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C3710	QET41AM-227	E.CAPACITOR	MOTOR +B	
	D3121	1SS133	SI DIODE		
	D3122	1SS133	SI DIODE		
	D3221	1SS133	SI DIODE		
	D3222	1SS133	SI DIODE		

BLOCK NO. 02□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D3301	1SS133	SI DIODE		
	D3352	1SS133	SI DIODE		
	D3353	1SS133	SI DIODE		
	D3354	1SS133	SI DIODE		
	D3701	1SS133	SI DIODE		
	D3702	1SS133	SI DIODE		
	D3704	MTZ5.6JB	ZENER DIODE		
	D3705	1SS133	SI DIODE		
	IC301	UPC1228HA	IC		
	IC302	UPC1330HA	IC		
	IC321	HA12134A	IC		
	IC322	LA3220	IC		
	IC371	BU4094BC	IC		
	L3121	VQP0028-562	INDUCTOR		
	L3151	VQP0001-103S	INDUCTOR		
	L3221	VQP0028-562	INDUCTOR		
	L3251	VQP0001-103S	INDUCTOR		
	L3351	VQP0028-100Z	INDUCTOR		
	L3710	VQP0033-100Z	INDUCTOR		
	Q3101	KRC114M-T	TRANSISTOR		
	Q3121	2SC2785	TRANSISTOR		
	Q3122	2SC2785	TRANSISTOR		
	Q3123	KRC114M-T	TRANSISTOR		
	Q3125	2SC2785	TRANSISTOR		
	Q3201	KRC114M-T	TRANSISTOR		
	Q3221	2SC2785	TRANSISTOR		
	Q3222	2SC2785	TRANSISTOR		
	Q3223	KRC114M-T	TRANSISTOR		
	Q3225	2SC2785	TRANSISTOR		
	Q3301	2SC2785	TRANSISTOR		
	Q3302	2SC2785	TRANSISTOR		
	Q3321	DTA144ES	TRANSISTOR		
	Q3322	DTC144ES	TRANSISTOR		
	Q3324	KRC114M-T	TRANSISTOR		
	Q3351	KTC3203(OY)-T	TRANSISTOR		
	Q3352	KTC3203(OY)-T	TRANSISTOR		
	Q3354	2SC2785	TRANSISTOR		
	Q3355	KTC3203(OY)-T	TRANSISTOR		
	Q3356	2SC1845	TRANSISTOR		
	Q3357	2SC2785	TRANSISTOR		
	Q3358	2SC1845	TRANSISTOR		
	Q3359	2SC2785	TRANSISTOR		
	Q3704	KRC114M-T	TRANSISTOR		
	Q3705	KRC114M-T	TRANSISTOR		
	Q3706	DTC114ESTP	TRANSISTOR		
	Q3707	2SA952(L/K)	TRANSISTOR		
	Q3708	2SC2785	TRANSISTOR		
	Q3709	2SA934(Q/R)	TRANSISTOR		
	Q3710	2SC2785	TRANSISTOR		
	R3101	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
	R3102	QRD161J-274	CARBON RESISTOR	270K 5% 1/6W	
	R3103	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R3104	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3105	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R3106	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	

BLOCK NO. 02□□□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R3121	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3122	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3123	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3124	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R3125	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3126	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R3127	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R3128	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3129	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3130	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3131	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3132	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3133	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R3134	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3135	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3138	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3139	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3140	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3151	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3201	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
	R3202	QRD161J-274	CARBON RESISTOR	270K 5% 1/6W	
	R3203	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R3204	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3205	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R3206	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R3221	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3222	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3223	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3224	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R3225	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3226	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
	R3227	QRD161J-622	CARBON RESISTOR	6.2K 5% 1/6W	
	R3228	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3229	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3230	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R3231	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3232	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3233	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R3234	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3235	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3238	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3239	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3240	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3251	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3301	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3302	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3303	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3304	QRD161J-225	CARBON RESISTOR	2.2M 5% 1/6W	
	R3305	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
	R3306	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3307	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3321	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3322	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3323	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3324	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	

BLOCK NO. 02

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R3325	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3326	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3327	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
	R3328	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
	R3329	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3331	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3332	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3333	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R3350	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
	R3351	QRZ0077-150X	F RESISTOR	15 1/0W	
	R3352	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3353	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3354	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
	R3355	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3356	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
	R3357	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R3359	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3360	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3361	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3362	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R3363	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R3364	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R3365	QRD161J-474	CARBON RESISTOR	BIAS TP	
	R3704	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3705	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3706	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3710	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3711	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3712	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R3713	QRD161J-151	CARBON RESISTOR	150 5% 1/6W	
	R3714	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R3715	QRD167J-682	CARBON RESISTOR	6.8K 5% 1/6W	
	R3716	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R3717	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3718	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R3719	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R3720	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R3722	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3723	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R3724	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R3725	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R3726	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	T3351	VQH1008-060	OSC COIL(BIAS)		
	VR101	QVPA603-502AZM	SEMI.V.RESISTOR		
	VR102	QVPA603-502AZM	SEMI.V.RESISTOR		
	VR103	QVPA603-104A	SEMI.V.RESISTOR		
	VR201	QVPA603-502AZM	SEMI.V.RESISTOR		
	VR202	QVPA603-502AZM	SEMI.V.RESISTOR		
	VR203	QVPA603-104A	SEMI.V.RESISTOR		
	VR301	QVPA603-103M	SEMI.V.RESISTOR		

■ LCD/Microcomputer Board

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 1	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
	C 2	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 3	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 4	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 5	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 6	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 7	QCFB1HZ-104Y	C.CAPACITOR	.10MF +80:-20%	
	C 8	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
	C 9	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 11	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 12	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
	C 13	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 14	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 21	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 30	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 31	QCS31HJ-390Z	C.CAPACITOR	39PF 5% 50V	
	C 32	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 33	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 34	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
	C 35	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 36	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 37	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 38	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 39	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 40	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	
	C 41	QEK41HM-104	E.CAPACITOR	.10MF 20% 50V	
	C 42	QEK41HM-474	E.CAPACITOR	.47MF 20% 50V	
	C 43	QEK61HM-335ZN	E.CAPACITOR	3.3MF 20% 50V	
	C 44	QCBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
	C 45	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 46	QCC11EM-223V	C.CAPACITOR	.022MF 20% 25V	
	C 47	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 49	QFLC1HJ-273ZM	M.CAPACITOR	.027MF 5% 50V	
	C 50	QFLC1HJ-273ZM	M.CAPACITOR	.027MF 5% 50V	
	C 51	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 52	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 53	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 54	QEK61HM-335ZN	E.CAPACITOR	3.3MF 20% 50V	
	C 55	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 60	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 61	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 62	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 63	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 65	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 66	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 68	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 69	QEK41HM-225	E.CAPACITOR	2.2MF 20% 50V	
	C 70	QCXB1CM-392Y	C.CAPACITOR	3900PF 20% 16V	
	C 71	QEK61HM-335ZN	E.CAPACITOR	3.3MF 20% 50V	
	C 72	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 604	QEK61AM-107Z	E.CAPACITOR	100MF 20% 10V	
	C 605	QET41EM-106	E.CAPACITOR	10MF 20% 25V	
	C 606	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 607	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 608	QET41HM-105	E.CAPACITOR	1.0MF 20% 50V	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 609	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 610	QFLC1HJ-273ZM	M.CAPACITOR	.027MF 5% 50V	
	C 611	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 612	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 613	QCBB1HK-331Y	C.CAPACITOR	330PF 10% 50V	
	C 614	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 615	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 616	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 617	QCHB1EZ-223	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	QCS11HJ-470	C.CAPACITOR	47PF 5% 50V	
	C 621	QCBB1HK-821Y	C.CAPACITOR	820PF 10% 50V	
	C 622	QET41AM-476	E.CAPACITOR	47MF 20% 10V	
	C 623	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 628	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 629	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 631	QET41AM-477	E.CAPACITOR	470MF 20% 10V	
	C 632	QET41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 651	QCS11HJ-120	C.CAPACITOR	12PF 5% 50V	
	C 652	QCS11HJ-150	C.CAPACITOR	15PF 5% 50V	
	C 653	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 655	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	
	C 661	QCBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
	C 662	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 663	QFLC1HJ-223ZM	M.CAPACITOR	.022MF 5% 50V	
	C 664	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 665	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
	C 671	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 672	QCXB1CM-222Y	C.CAPACITOR	2200PF 20% 16V	
	C 673	QER51AM-227	E.CAPA I.M	220MF 20% 10V	
	C 674	QCHB1EZ-223	C.CAPACITOR	.022MF +80:-20%	
	C 675	QCBB1HK-102Y	C.CAPACITOR	AG-DG	
	C 676	QCBB1HK-102Y	C.CAPACITOR	AG-DG	
	C 677	QCS11HJ-330	C.CAPACITOR	33PF 5% 50V	
	C 678	QCS11HJ-330	C.CAPACITOR	33PF 5% 50V	
	C 702	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
	C 703	QCS11HJ-200	C.CAPACITOR	20PF 5% 50V	
	C 704	QCS31HJ-390Z	C.CAPACITOR	39PF 5% 50V	
	C 705	QCS31HJ-390Z	C.CAPACITOR	39PF 5% 50V	
	C 706	QCS11HJ-220	C.CAPACITOR	22PF 5% 50V	
	C 707	QCS11HJ-240	C.CAPACITOR	24PF 5% 50V	
	C 708	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 709	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 710	QER41AM-107	E.CAPACITOR	100MF 20% 10V	
	C 711	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 712	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 713	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 714	QETMOJM-228	E CAPACITOR	2200MF 20% 6.3V	
	C 715	QCBB1HK-102Y	C.CAPACITOR	000	
	C 717	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 718	QEK41CM-106	E.CAPACITOR	10MF 20% 16V	
	C 719	QFLC1HJ-104ZM	M.CAPACITOR	.10MF 5% 50V	
	C 720	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 721	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 722	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 723	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 731	QCBB1HK-101Y	C.CAPACITOR	CD	
	C 736	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 737	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C 741	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 751	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 754	QCFB1EZ-223Y	C.CAPACITOR	.022MF +80:-20%	
	C 761	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 762	QCBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
	C 763	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	C 771	QFV81HJ-564	M.M.CAPACITOR	FL	
	C 772	QFV81HJ-564	M.M.CAPACITOR	FL	
	C 773	QFV71HJ-124ZM	FILM CAPACITOR	FL	
	C 791	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 792	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 793	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 794	QEK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
	C 795	QEK41CM-226	E.CAPACITOR	22MF 20% 16V	
	C 796	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	CF 1	VCF2M3B-104	CERAMIC FILTER	FM IF	
	CF 2	VCF2S3B-102	C FILTER	FM IF	
	CF 3	VCF1Z2Z-115Z	CERAMIC FILTER		
	CF 4	CMU2-456A05	CERA LOCK		
	CN 1	VMC0163-R10	CONNECTOR		
	CN 51	VMZ0015-005	POST PIN		
	CN 53	VMZ0015-005	POST PIN		
	CN601	EMV7144-015R	15PIN CONNECTOR	TO RF	
	CN602	EMV5109-006A	6P PLUG ASSY	TO MOTOR	
	CN701	VMC0163-R11	CONNECTOR	TO MECHA	
	CN702	VMC0163-R12	CONNECTOR	TO SW	
	CN703	VMC0163-R10	CONNECTOR	TO CHANGER	
	CN705	VMC0163-R10	CONNECTOR	TO TUNER	
	CN706	VMC0163-R20	CONNECTOR	TO AMP1	
	CN708	VMC0163-R12	CONNECTOR	TO AMP2	
	CN710	VMC0163-R12	CONNECTOR	TO MICON	
	CN711	VMC0075-R02	CONNECTOR	TO CONT.	
	CN721	EMV5120-004	CONNECTOR		
	CN722	EMV7120-004	CONNECTOR		
	C7162	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	C7262	QCBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
	D 1	1SS133	SI DIODE		
	D 2	1SS133	SI DIODE		
	D 3	1SS133	SI DIODE		
	D 4	1SS133	SI DIODE		
	D 661	1SS133	SI DIODE		
	D 701	1SS133	SI DIODE		
	D 702	1SS133	SI DIODE		
	D 703	1SS133	SI DIODE		
	D 704	1SS133	SI DIODE		
	D 706	MTZ8.2JB	ZENER DIODE	US6V	
	D 707	MTZ5.6JB	ZENER DIODE	BACK UP	
	D 710	RB721Q	DIODE		
	D 721	SRZ-932C22-T1	LED	SEKIGAI	
	D 731	SLZ-381F09-T6	LED	CD	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D 733	SLZ-381F09-T6	LED	TUNER	
	D 735	SLZ-381F09-T6	LED	TAPE	
	D 737	SLZ-381F09-T6	LED	AUX	
	D 751	1SS133	SI DIODE		
	D 752	1SS133	SI DIODE		
	DI701	FIP11GM7R	FL TUBE		
	IC 1	TA2057N	IC		
	IC 2	LC72136	IC		
	IC601	AN8806SB	IC	RF AMP	
⚠	IC602	BA6398FPX	IC	DRIVER	
	IC603	MN35510-S	IC	1CHIP PROCESSER	
	IC701	UPD78044AGF-182	IC		
⚠	IC702	UPC78L06J	IC	US6V REG	
	IC703	SBX1785-52A	RM RECIVER		
	J 1	EMB41YV-302K	ANT TERMINAL	AM/FM ANT	
	J7302	VMJ3019-002J	PIN JACK 2PHOL.		
	K 701	VQZ0048-009	INDUCTOR		
	K 702	VQZ0048-009	INDUCTOR		
	K 704	VQZ0048-009	INDUCTOR		
	K 705	VQZ0048-009	INDUCTOR		
	K 791	VQZ0048-009	INDUCTOR		
	L 1	VQZ0098-101	IL BLOCK	MW/LW RF/OSC	
	L 4	VQP0018-221	INDUCTOR		
	L 10	VQZ0069-002S	TRAP COIL	114KHZ TRAP	
	L 11	VQP0018-2R7	INDUCTOR		
	L 703	VQP0018-4R7	INDUCTOR		
	L 705	VQP0033-100Z	INDUCTOR		
	L 706	VQP0033-100Z	INDUCTOR		
	L 707	VQP0018-220	INDUCTOR		
	L 708	VQP0018-101	INDUCTOR		
	L 709	VQP0018-100	INDUCTOR		
	L 771	VQP0026-470Z	INDUCTOR	FL	
	L 772	VQP0026-470Z	INDUCTOR	FL	
	L 801	VQP0018-4R7	INDUCTOR		
	L 802	VQP0018-4R7	INDUCTOR		
	Q 1	2SC1923	TRANSISTOR		
	Q 2	DTA114YS	TRANSISTOR		
	Q 3	2SC3330	TRANSISTOR		
	Q 4	2SC3330	TRANSISTOR		
	Q 6	DTA114YS	TRANSISTOR		
	Q 16	2SC3330	TRANSISTOR		
	Q 601	2SA952(L,K)	TRANSISTOR		
⚠	Q 631	2SA952(L,K)	TRANSISTOR		
	Q 701	2SC1923	TRANSISTOR		
	Q 702	2SC1923	TRANSISTOR		
	Q 703	KRC111M-T	TRANSISTOR		
	Q 704	2SA1175	TRANSISTOR		
	Q 706	2SC2785	TRANSISTOR		
	Q 709	DTC114ESTP	TRANSISTOR	SEKIGAI	
	Q 710	2SC2785	TRANSISTOR		
	Q 711	DTC114ESTP	TRANSISTOR		
	Q 712	DTC114ESTP	TRANSISTOR		
	Q 713	2SC2785	TRANSISTOR		
	Q 714	KRC114M-T	TRANSISTOR	TUNER DATA SW	
	Q 715	KRC114M-T	TRANSISTOR	TUNER DATA SW	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q 716	DTC144ES	TRANSISTOR	CD5VSAFETY	
	Q 717	2SC2785	TRANSISTOR	CD5VSAFETY	
	Q 771	2SC945(P,Q)	TRANSISTOR	FL	
	Q 772	2SC945(P,Q)	TRANSISTOR	FL	
	Q 773	2SC945(P,Q)	TRANSISTOR	FL	
	Q 791	2SC2785	TRANSISTOR		
	Q 792	2SC2785	TRANSISTOR		
	R 1	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 2	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
	R 3	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 10	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R 12	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 13	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 15	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 16	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 20	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 21	QRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
	R 22	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 24	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
	R 25	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 26	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 27	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 29	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 30	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 31	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 34	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 35	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 36	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 37	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 38	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 39	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 42	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 43	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 44	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 45	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 47	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 48	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 49	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 52	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 54	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 55	QRD161J-182	CARBON RESISTOR	1.8K 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 60	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 61	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 65	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 66	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 69	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 70	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
	R 71	QRD161J-823	CARBON RESISTOR	82K 5% 1/6W	
	R 72	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R 73	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 74	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 75	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R 601	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 603	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
	R 605	QRD167J-134	CARBON RESISTOR	130K 5% 1/6W	
	R 606	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
	R 607	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 609	QRD161J-114	CARBON RESISTOR	110K 5% 1/6W	
	R 610	QRD161J-154	CARBON RESISTOR	150K 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-680	CARBON RESISTOR	68 5% 1/6W	
	R 622	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
	R 623	QRD161J-680	CARBON RESISTOR	68 5% 1/6W	
	R 631	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 632	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 633	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 641	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
	R 642	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R 643	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R 644	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 645	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
	R 646	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
	R 647	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 651	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 652	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 653	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 654	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 659	QRD161J-471	CARBON RESISTOR	470 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-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 672	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 701	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
	R 702	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 703	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 704	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 705	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R 706	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
	R 707	QRD161J-331	CARBON RESISTOE	330 5% 1/6W	
	R 708	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 709	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 710	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 711	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 712	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 713	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 714	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 715	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 716	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 717	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
	R 718	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 719	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 720	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 721	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 722	QRD161J-102	CARBON RESISTOR	1.0K 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-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 727	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 728	QRD161J-222	CARBON RESISTOR	2.2K 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-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 733	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 734	QRD161J-222	CARBON RESISTOR	SEKIGAI	
	R 736	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 737	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 738	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	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-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 743	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 744	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 745	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 746	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 747	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 748	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 749	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 750	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 751	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 752	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 753	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 754	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 755	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 756	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 757	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 758	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 759	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 761	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
	R 762	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
	R 763	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 764	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 765	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 766	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 768	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 769	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 770	QRD161J-331	CARBON RESISTOE	FL	
	R 771	QRD161J-103	CARBON RESISTOR	FL	
	R 772	QRD161J-103	CARBON RESISTOR	FL	
	R 773	QRD161J-103	CARBON RESISTOR	FL	
	R 774	QRD161J-224	CARBON RESISTOR	FL	
	R 775	QRD161J-224	CARBON RESISTOR	FL	
	R 776	QRD161J-224	CARBON RESISTOR	FL	
	R 777	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 778	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 780	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 781	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 782	QRD161J-473	CARBON RESISTOR	47K 5% 1/6W	
	R 783	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 784	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 786	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 787	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 790	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 791	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 792	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
	R 793	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 794	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
	R 795	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 796	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 797	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
	R 801	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 802	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 803	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 804	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 805	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 806	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 807	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 808	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 809	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R 810	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 811	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R 812	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R 813	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 815	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 816	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 817	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R 818	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R 819	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 820	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R 821	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 822	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 823	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 824	QRD161J-183	CARBON RESISTOR	18K 5% 1/6W	
	R 825	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 826	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 827	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
	R 828	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
	R 829	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
	R 830	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
	R 831	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
	R 832	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 833	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 834	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
	R 878	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	R 879	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
	RA701	QRB169J-104	R.NETWORK	100K 5% 1/6W	
	RA703	QRB115J-104	R.NETWORK	100K 5% 1/1W	
	R7163	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R7164	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R7263	QRD161J-124	CARBON RESISTOR	120K 5% 1/6W	
	R7264	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	

BLOCK NO. 03

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	S 701	QSQ1A11-V08Z	TACT SWITCH		
	S 702	QSQ1A11-V08Z	TACT SWITCH		
	S 703	QSQ1A11-V08Z	TACT SWITCH		
	S 704	QSQ1A11-V08Z	TACT SWITCH		
	S 705	QSQ1A11-V08Z	TACT SWITCH		
	S 706	QSQ1A11-V08Z	TACT SWITCH		
	S 707	QSQ1A11-V08Z	TACT SWITCH		
	S 708	QSQ1A11-V08Z	TACT SWITCH		
	S 710	QSP1A11-V10Z	TACT SWITCH		
	S 711	QSP1A11-V10Z	TACT SWITCH		
	S 712	QSP1A11-V10Z	TACT SWITCH		
	S 713	QSP1A11-V10Z	TACT SWITCH		
	S 714	QSP1A11-V10Z	TACT SWITCH		
	S 715	QSP1A11-V10Z	TACT SWITCH		
	S 716	QSP1A11-V10Z	TACT SWITCH		
	S 717	QSP1A11-V10Z	TACT SWITCH		
	S 718	QSP1A11-V10Z	TACT SWITCH		
	S 719	QSP1A11-V10Z	TACT SWITCH		
	S 720	QSP1A11-V10Z	TACT SWITCH		
	S 721	QSP1A11-V10Z	TACT SWITCH		
	S 722	QSP1A11-V10Z	TACT SWITCH		
	S 723	QSP1A11-V10Z	TACT SWITCH		
	S 724	QSP1A11-V10Z	TACT SWITCH		
	S 725	QSP1A11-V10Z	TACT SWITCH		
	S 726	QSP1A11-V10Z	TACT SWITCH		
	S 727	QSP1A11-V10Z	TACT SWITCH		
	S 728	QSP1A11-V10Z	TACT SWITCH		
	T 1	VQT7A21-111	IFT		
	TU 1	VAF2S12-002	FRONT END	FM TU	
	X 1	VCX5044-001	CRYSTAL		
	X 651	VCX5016-934V	CRYSTAL	16.9344MHZ	
	X 701	VCX5000-002	CRYSTAL		
	X 702	M2Z4.19	CERA LOCK		

■ CD Traverse Mechanism Control Board

BLOCK NO. 04

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 801	QEK51AM-107	E CAPACITOR	100MF 20% 10V	
	C 802	QEK41EM-475	E.CAPACITOR	4.7MF 20% 25V	
	C 803	QFLC1HJ-102ZM	M.CAPACITOR	1000PF 5% 50V	
	C 804	QCFB1HZ-104Y	C.CAPACITOR	.10MF +80:-20%	
	C 805	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 806	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 807	QEK41CM-476	E.CAPACITOR	47MF 20% 16V	
	C 808	QFLC1HJ-102ZM	M.CAPACITOR	1000PF 5% 50V	
	C 810	QCZ0205-155	ML.C.CAPACITOR	1.5MF	
	C 811	QCZ0205-155	ML.C.CAPACITOR	1.5MF	
	C 813	QCVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
	C 821	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
	CN801	VMC0163-R10	CONNECTOR	TO MICON	
	CN802	VMC0289-P07	CONNECTOR	TO SWITCH PWB	
	CN803	VMC0324-12310	CONNECTOR	TO CAM SW PWB	
	IC801	UPD65612GB-208	IC		
⚠	IC802	TA8409S	IC		
⚠	IC803	TA8409S	IC		
	L 801	VQP0018-100	INDUCTOR		
	L 802	VQP0033-100Z	INDUCTOR		
	L 803	VQP0033-100Z	INDUCTOR		
	L 804	VQP0033-100Z	INDUCTOR		
	R 805	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 806	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 807	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
	R 808	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 810	QRD161J-684	CARBON RESISTOR	680K 5% 1/6W	
	R 811	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
	R 813	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 814	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 815	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 816	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 817	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 818	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 819	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 820	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 821	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 822	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 823	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 824	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 825	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 826	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 827	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 828	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 829	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 830	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 832	QRD161J-181	CARBON RESISTOR	180 5% 1/6W	
	R 833	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 834	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
	R 839	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
	R 840	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	

■ CD Tray Select Switch Board

BLOCK NO. 05

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN804	VMC0289-S07	CONN.TERMINAL		
	SW 1	QSEC001-E03	SWITCH		
	SW 2	QSEC001-E03	SWITCH		
	SW 3	QSEC001-E03	SWITCH		
	SW 4	QSEC001-E03	SWITCH		
	SW 5	QSEC001-E03	SWITCH		
	SW 6	QSEC001-E03	SWITCH		

■ Cam Switch Board

BLOCK NO. 06

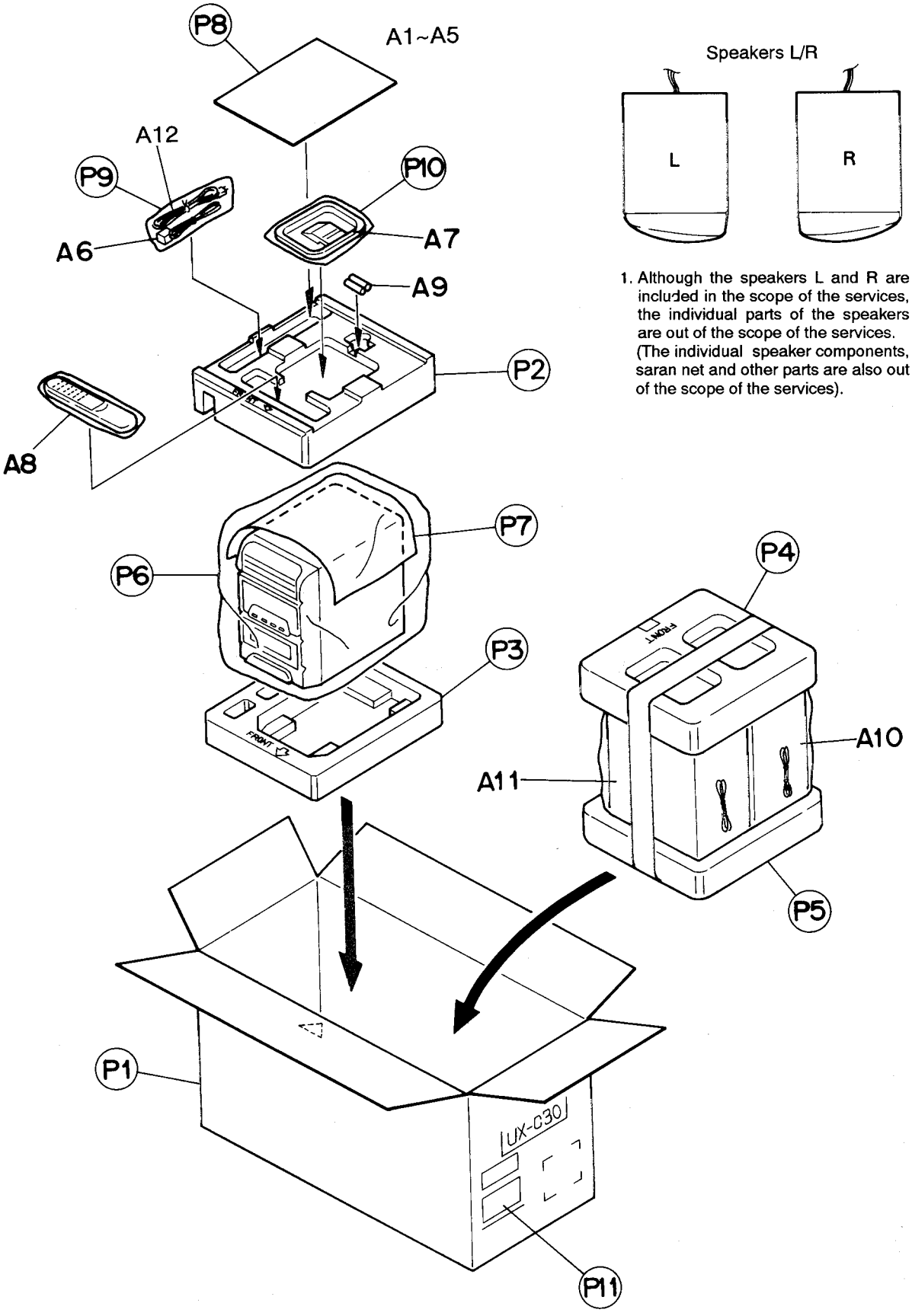
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN805	VMC0325-010	CONNECTOR		

■ Cassette Mechanism Moard

BLOCK NO. 07

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CN 1	VMC0314-P12	CONNECTOR	CN1	
	D 1	1SR139-100	SI DIODE	D1	
	FW 1	VWSC04-11A13K	TM FLAT WIRE	FW1	
	IC 1	DN6851-HI	HALL IC	IC1	
	ICH	VKS3630-001MM	IC HOLDER		
	S 1	MXS00220MVL0	CASSETTE SWITCH	S1	
	S 2	MXS00220MVL0	CASSETTE SWITCH	S2	
	S 4	MXS00220MVL0	CASSETTE SWITCH	S4	
	S 5	MXS00220MVL0	CASSETTE SWITCH	S5	
	S 6	QSEC001-E03	SWITCH	S6	

15. Packing Illustration and Parts List



1. Although the speakers L and R are included in the scope of the services, the individual parts of the speakers are out of the scope of the services. (The individual speaker components, saran net and other parts are also out of the scope of the services).

Fig. 15-1

■ Packing Parts List

BLOCK NO. M5MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	VPC9273-M002	CARTON		1		BK
		VPC9273-M003	CARTON		1		WT
	P 2	VPH1681-001	CUSHION(UPPER)		1		
	P 3	VPH1681-002	CUSHION(BOTTOM)		1		
	P 4	VPH1690-001	SP CUSHION(TOP)	SP TOP SIDE	1		
	P 5	VPH1690-002	SP CUSHION(BOTT	SP BOTTOM SIDE	1		
	P 6	VPE3026-002	POLY BAG		1		
	P 7	VPK4002-039	SHEET		1		
	P 8	VPE3005-007	POLY BAG	FOR INST	1		
	P 9	QPGA015-03503	POLY BAG		1		
	P 10	VPE3005-042	POLY BAG	FOR LOOP ANT.	1		
	P 11	----------	CARTON LABEL	4975769130731	1		BK
		----------	CARTON LABEL	4975769130748	1		WT

■ Accessories

BLOCK NO. M6MM□□□

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	VNN9273-671M	INSTRUCTIONS		1	B	
		VNN9273-271M	INSTRUCTIONS		1	EN	
		VNN9273-261M	INSTRUCTIONS		1	E,EN,G	
		VNN9273-251M	INSTRUCTIONS		1	E	
	A 2	BT-20135	WARRANTY CARD		1	G	
		BT-54003-1	WARRANTY CARD		1	B	
	A 3	BT-20066A	SVERCE CENTER		1	B	
	A 4	E43486-340B	SAFETY INST SHE		1	B	
	A 5	E43486-688A	CAUTION SHEET	FOR GI CAUTION	1	E	
	A 6	EWP503-001	ANT.WIRE	FM ANT	1		
	A 7	EQB4001-015	AM LOOP ANT		1		
	A 8	RM-RXUC30BK	REMOCON UNIT	VGR0048-006	1		BK
		RM-RXUC30WT	REMOCON UNIT	VGR0048-106	1		WT
	A 9	R6SPTT-2STSA	BATTERY	FOR REMOCON	1		
	A 10	UXC30K-SPBOX-L	SPEAKER BOX	FOR LEFT SIDE	1		BK
		UXC30K-SPBOX-LW	SPEAKER BOX	FOR LEFT SIDE	1		WT
	A 11	UXC30K-SPBOX-R	SPEAKER BOX	FOR RIGHT SIDE	1		BK
		UXC30K-SPBOX-RW	SPEAKER BOX	FOR RIGHT SIDE	1		WT
⚠	A 12	QMP5520-183BS	POWER CORD		1	B	
⚠		QMP39F0-183E	POWER CORD		1	E,EN,G	

UX – C30 B/E/G/EN/GI

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCT DIVISION 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

(No. 1960)

Printed in Japan
– H0803 – O –