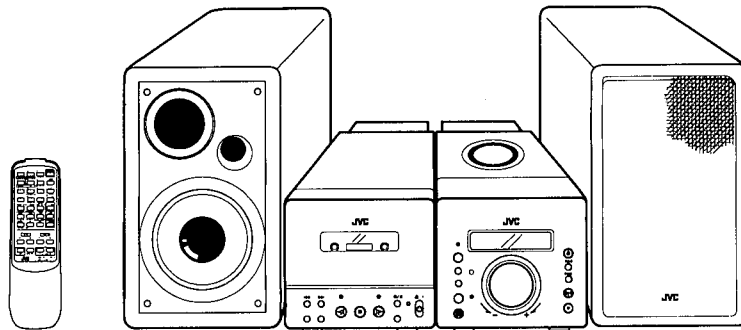


# JVC

## SERVICE MANUAL

### MICRO COMPONENT SYSTEM

## UX-D88GD UB/US/UT/U



COMPACT  
disc  
DIGITAL AUDIO

#### Area Suffix

UB .....	Hong Kong
US .....	Singapore
UT .....	Formosa
U .....	Other Area

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# 1. Safety Precautions

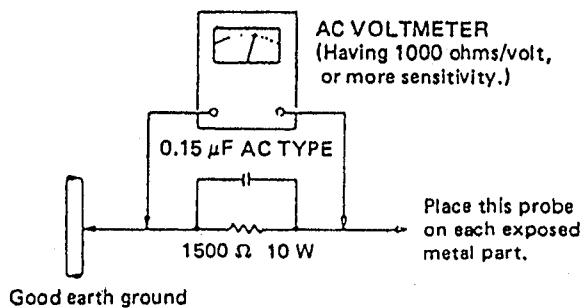
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original 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 (  $\Delta$  ) on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps , tubings, barriers and the like to be separated from live parts, high temperature parts, 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 exposeed 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  $\mu$  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



## Warning (For Singapore only)

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

### CAUTION

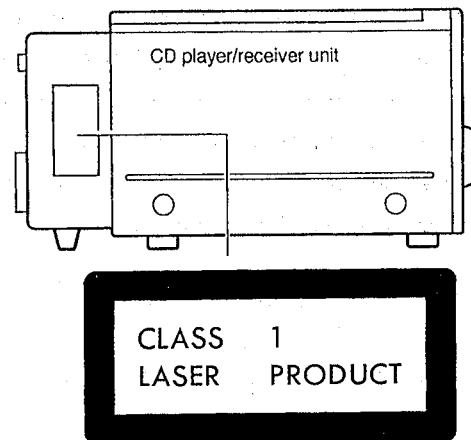
Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

## 2. Safety Precaution about UX– D88

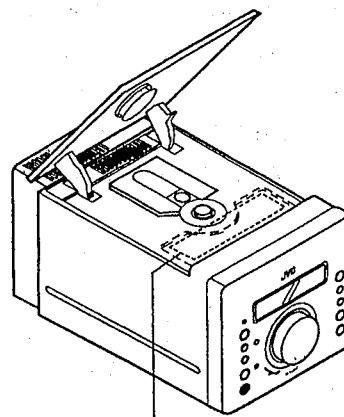
### IMPORTANT FOR LASER PRODUCTS PRECAUTIONS (For Singapore only)

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.
6. **CAUTION:** The laser is able to function, if safety switches out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

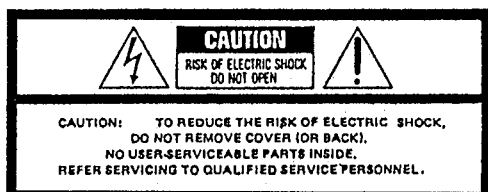
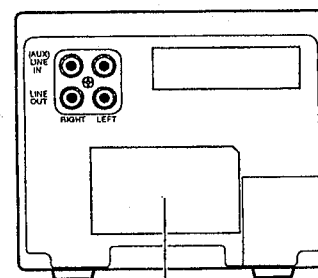
### REPRODUCTION OF LABELS AND THEIR LOCATION



Caution:  
This production contains a laser component of higher laser class than Class1.



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. Undgåudsætelse for stråling. (d)	WARNING: Osynlig laserstråling när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)	VARO: Avattaessa ja suo- jalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)
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The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

**■ Important management points regarding safety(Item demanding special safety precautions)**

1. Power transformer marking : VTP09G2- 12B

The torque of the screw driver for the power transformer 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 ..... HSC0528

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.

REF.NO	Capacity and mark	Indication on P.C.board
F1901	1.25A	1.25A
F1902	T8A	T8A

5. Wires must be clamped or secured at the locations shown in the figure so that the wire do not touch to live parts, moving part , hot part, or sharp edges.

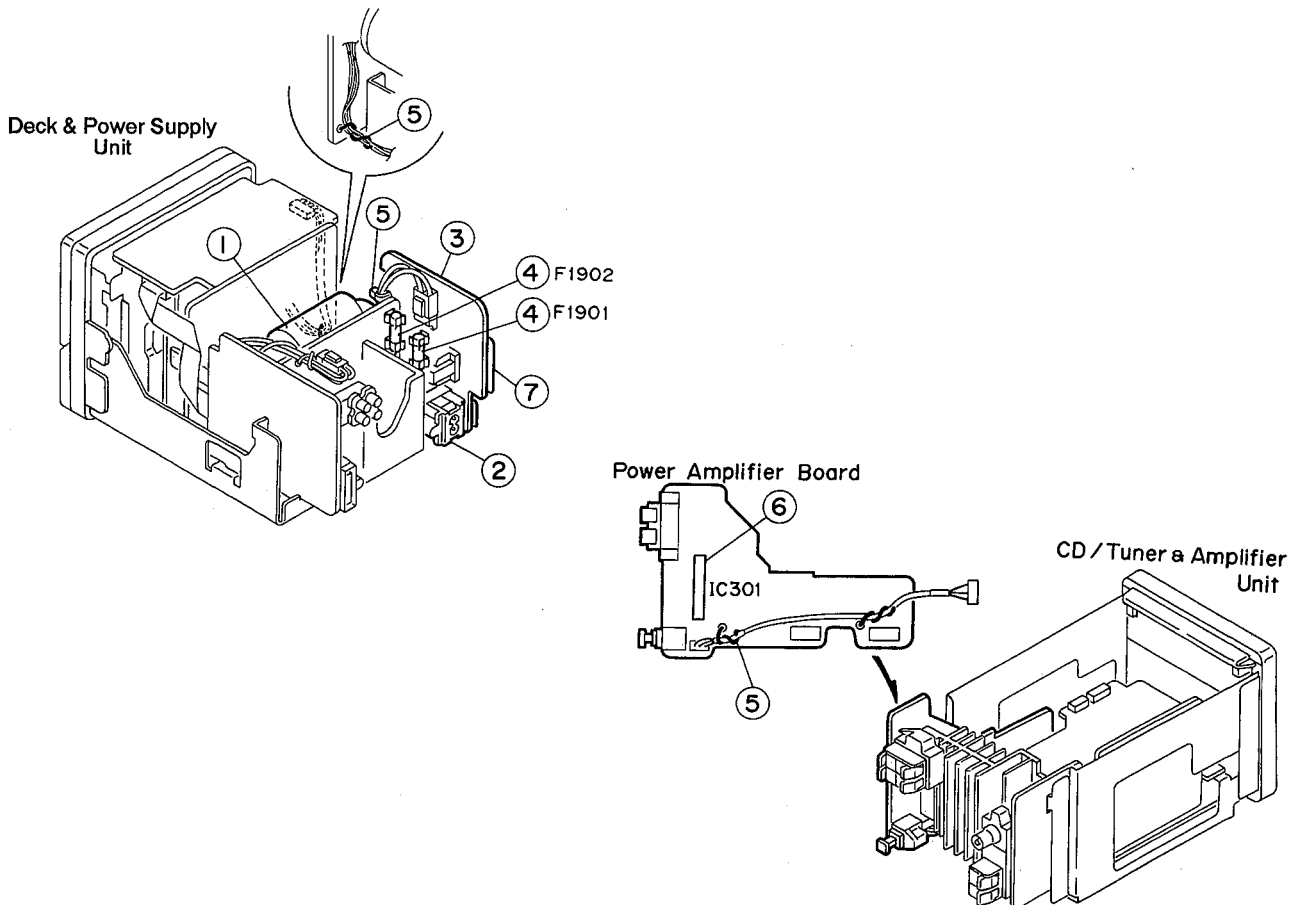
6. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up

• IC : (IC301), Transistor : Q7901 , Resistor : R3104, R3204, R3105, R3205, R1909, R355, R356

7. Primary pattern must be covered by barrier.

8. Confirm following EMC (Electromagnetic Compatibility )control matter.

Control parts , and Control work ( Symbol number ) ..... TU1 , CF1, CF2 (Tuner board)



# 3. Instructions

**ENGLISH**

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

**ESPAÑOL**

Le agradecemos la adquisición de este producto de JVC. Por favor lea cuidadosamente estas instrucciones antes de comenzar la operación para obtener de esta unidad un rendimiento óptimo y una vida de servicio más larga.

**中文**

承蒙您選購 JVC 公司的產品，謹致感謝。在使用之前，請仔細閱讀本使用說明書，以獲得理想的使用效果和更長的壽命。



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

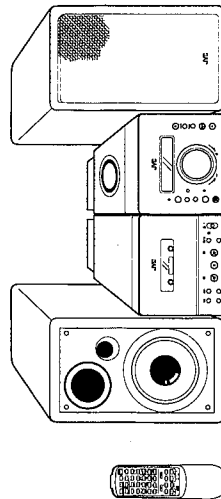
**ADVERTENCIA:**  
 PARA REDUCIR EL RIESGO DE INCENDIO O DE CHOQUES ELECTRICOS, NO EXPONGA ESTE APARATO A LA LLUVIA O A LA HUMEDAD.

**警告:**  
 為了防止火災以及觸電，請勿讓本機淋雨受潮。

**COMPACT disc**  
 DIGITAL AUDIO

**INSTRUCTIONS**

INSTRUCCIONES  
 使用說明書



The lightning flash with arrowhead symbol, when 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.



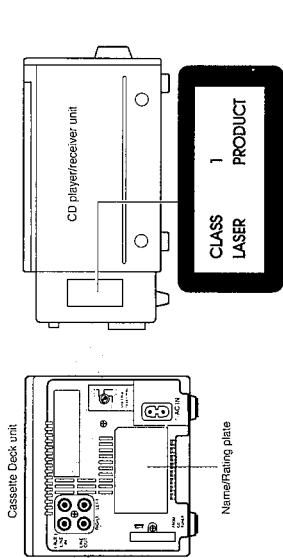
The exclamation point within an equilateral triangle is a warning symbol that indicates that instructions should be read before operating and maintenance (servicing) instructions in order to avoid dangerous situations.

**CAUTION**  
 TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). REFER TO QUALIFIED SERVICE PERSONNEL.

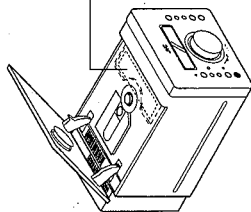
**IMPORTANT FOR LASER PRODUCTS (For Singapore only)**

- PRECAUTIONS**
1. CLASS 1 LASER PRODUCT
  2. Do not stare into the laser beam or direct exposure to beam.
  3. CAUTION: Do not open the rear cover. There are no user serviceable parts inside the unit, leave all servicing to qualified service personnel.
  4. CAUTION: The CD player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder or CD tray is open. It is dangerous to defeat the safety switches.
  5. CAUTION: Use of controls for adjustments and the performance of procedures other than those specified may result in exposure to hazardous radiation.

**REPRODUCTION OF LABELS AND THEIR LOCATION**



Caution: This production contains a laser component of higher laser class than Class 1.



<p><b>REPRODUCTION OF LABELS AND THEIR LOCATION</b></p> <p>Diagram showing the internal components of the CD player, including the cassette deck unit, CD player/receiver unit, and the laser assembly. Labels indicate the 'Cassette Deck unit', 'CD player/receiver unit', and 'Name/Raining plate'.</p>	<p><b>CLASS 1 LASER PRODUCT</b></p>
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**FEATURES**

- CD-size micro component system consisting of 4 units
- Active Hyper-Bass PRO circuit for low-frequency sound reproduction
- Dynamic axial-drive woofer
- One-touch remote control (COMPU PLAY)
- 36-key remote control unit operates all CD, cassette deck and tuner functions
- Multi-function CD player
- Programmed play of up to 20 tracks
- Repeat play
- Full auto-reverse full logic mechanism with Dolby® B NR
- U-Turn auto-reverse full logic mechanism with Auto tape select mechanism
- Metal (Type IV) and CrO2 (type II) tapes can be played back for superior tone quality
- CrO2 (type II) tapes recording capability

**CARACTERISTICAS**

- Sistema de microcomponentes del tamaño de un CD, consistente de 4 unidades.
- Circuito Active Hyper-Bass PRO para reproducción de sonidos de baja frecuencia.
- Altimov. de graves con excitador axial dinámico
- Operación de un solo toque (COMPU PLAY)
- Unidad de control remoto con 36 teclas para funciones del CD, pletina de cassette y reproducción de cintas.
- Reproducción programada de hasta 20 pistas
- Repetición de reproducción.
- Reproducción aleatoria
- Mecanismo de lógica completa Inversión automática en U con Dolby® B NR
- Mecanismo de selección automática de cinta es posible utilizar cintas de metal (tipo IV) y de CrO2 (tipo II)
- Capacidad para grabación de cintas de CrO2 (tipo II)

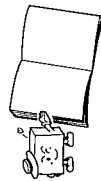
**特點介紹**

- CD 尺寸小型組合音響設備由 4 個部分組成
- 用於產生低頻音響的有源式超低音 (Active Hyper-Bass PRO) 產生電路
- 動態軸向驅動揚聲器
- 36 鍵遙控器操作所有的 CD、錄音帶和調諧器功能
- 多功能 CD 唱機
- 最多 20 曲的編程播放
- 重複播放
- 隨機播放
- 帶杜比® 降噪 (DOLBY B, NR) 功能的 U-轉錄自動反轉全邏輯機構
- 自動錄音帶選擇機構
- 播放磁盤 (IV 類) 和 CrO2 (II 類) 錄音帶可以獲得超級的音質
- 可以進行 CrO2 (II 類) 錄音帶的錄音

**SAFETY PRECAUTIONS**

Prevention of Electric Shocks, Fire Hazards

1. Even when the  $\phi$ /I 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 power 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. Do not touch the unit, unplug the power cord from the outlet and consult your dealer.
11. Do not block the units ventilation holes that allow heat to escape.
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.



**PRECAUCIONES DE SEGURIDAD**

Prevenção de choques eléctricos, peligro de incendio y daños

1. Aunque el botón  $\phi$ /I esté en posición de espera STANDBY, sigue una pequeña corriente eléctrica. Para ahorrar energía y por seguridad cuando no utiliza esta unidad durante un largo periodo, desconecte el cordón eléctrico del tomacorriente de CA.
2. No manipule el cordón eléctrico con las manos mojadas.
3. Cuando lo desenchufe del tomacorriente de la pared, sujételo siempre por el enchufe, no por el cable.
4. Consulte a su agente más cercano, o al departamento de servicio al cliente, si el cable del cordón está afectado por daños, desconexión o tallo contacto.
5. No doble en ángulo agudo el cordón, no jale del mismo ni lo retuerza.
6. No modifique el cordón eléctrico de ninguna manera.
7. Para evitar accidentes, no extraiga los tornillos para desarmar la unidad y no toque nada dentro de la misma.
8. No toque la unidad, desenchufe el cordón eléctrico de la unidad.
9. Desenchufe el cordón eléctrico cuando haya posibilidad de caída de rayos.
10. Si se introduce agua dentro de la unidad, desconchule el cordón eléctrico del tomacorriente y consulte a su agente.
11. No bloquee los orificios de ventilación de la unidad que permitan el escape de calor.
12. No instale la unidad en un lugar mal ventilado.
13. Como esta unidad utiliza un portacdiscos o una bandeja de CD motorizado, asegúrese de que su mano u otro objeto no obstruya el movimiento del mismo.

- Busqueda de músicas hacia adelante o hacia atrás
- Sintonizador sintetizador digital de 3 bandas con capacidad para presintonización de 45 estaciones (15 de FM, 15 de AM y 15 de SW)
- Sintonización busqueda/manual
- Función de temporización (relj)
- Control de volumen pesausado con función de temporización
- El temporizador desactivador puede ser programado hasta un máximo de 120 minutos
- Salida digital óptica
- Facilidad para mezcla de micrófonos
- Reductor de ruido Dolby fabricado bajo licencia de Dolby Laboratories Licensing Corporation. "Dolby" y el símbolo de la doble D DD son marcas de Dolby Laboratories Licensing Corporation.

- 具有正反兩個方向的樂曲搜索功能
  - 具有預設 45 個電台 (15 個 FM, 15 個 AM 和 15 個 SW) 能力的 3 波段數字合成調諧器
  - 搜尋/手動調諧
  - 自動預設調諧
  - 定時器/手動調諧
  - 帶預設音量功能的定時器開/關
  - 睡眠定時器可以擴大設定到 120 分鐘
  - 光學數字輸出
  - 麥克風混聲裝置
- \* 杜比降噪低底器係經杜比實驗室公司授權製造。杜比, DOLBY, 及雙 D 標章 DD 為杜比實驗室公司之註冊商標。

**安全須知**

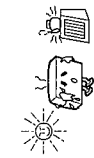
為了預防觸電、火災以及故障

1. 即便將  $\phi$ /I 鍵設於 STANDBY (待機) 位置, 仍然會有極微弱的電流, 因此, 為了省電及安全起見, 當您長時間不使用時, 請將電源線從牆上的交流電源插座上拔下來。
2. 切勿用濕手拔電源線。
3. 當您將電源線從牆上的電源插座上拔下來時, 務請拿住插頭, 切勿拿住電源線。
4. 如果發現電源線有損壞, 或者或者接觸不良, 請與附近的經銷商聯絡。
5. 切勿過分彎折, 或者拉扯, 扭曲電源線。
6. 切勿以任何方式變更電源線。
7. 切勿卸下插頭或拆卸裝置, 也不要接觸裝置內部任何部件, 以免發生事故。
8. 切勿將任何金屬物件塞入裝置內。
9. 如果有雷電閃光的可能, 請拔下電源線。
10. 萬一有水滲入了裝置內, 請將電源插頭從牆上的電源插座上拔下來, 並且與經銷商聯絡。
11. 不要堵塞裝置的通氣孔, 此通氣孔用於裝置的排熱。切勿將本裝置置於排熱條件差的地方。
12. 由於本裝置使用的是電動 CD 托架或 CD 托盤, 所以請小心別讓手指或其它東西妨礙托架或托盤的運動。

使用須知

PRECAUCIONES DE MANIPULACION

HANDLING PRECAUTIONS



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

1. Avoid installing in the following places
  - Where it could be subject to vibrations.
  - Where it is excessively humid, such as in a bathroom.
  - Where it could be magnetized by a magnet or speaker.

2. Pay attention to dust  
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 place.

4. Volume setting  
In these cases, set the  $\Delta$ /I button to STANDBY and wait 1 or 2 hours before use.

5. Mechanism of safety  
This unit incorporates a safety interlock mechanism which switches the laser beam on and off, so that when the CD holder or CD tray is open, the laser beam stops automatically.

6. Do not place cassette tapes, etc. near the speakers  
Since there are magnets in the speakers, do not place tapes or magnetic cards on them.

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

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

9. Do not listen at high volumes as this could damage your hearing.



No utilice esta unidad bajo la luz directa del sol donde podría quedar expuesta a temperaturas superiores a 40°C.

1. Evite instalar en los siguientes lugares
  - Donde pueda ser sujeta a vibraciones.
  - Donde haya humedad excesiva, tal como en un cuarto de baño.
  - Donde pueda ser magnetizada por un imán o altavoz.

2. Preste atención al polvo  
Asegúrese de que el lector de discos o el bandeja de discos no se ensucie con el polvo o se ensucie demasiado lentamente. No toque la lente.

3. Condensación  
En los siguientes casos, puede producirse condensación dentro de la unidad y en consecuencia la unidad no funcionará correctamente.

- En una sala donde haya un calentador encendido.
- En un lugar donde haya humo o gran humedad.
- Cuando se traslada rápidamente la unidad de una sala fría a una templada.

4. Ajuste del volumen  
Los productos de CD producen muy poco ruido comparados con las fuentes analógicas. Si ajusta el nivel de volumen para estas fuentes, es posible que los altavoces produzcan un ruido excesivo. Busque el nivel de salida. Por ello, reduzca el volumen antes de la operación y ajústelo como desee durante la reproducción.

5. Mecanismo de seguridad  
Esta unidad posee un mecanismo de enclavamiento de seguridad que activa y enciende el rayo láser de tal manera que cuando se abre el portadisco o compartimiento de CD, el rayo láser se desactiva automáticamente.

6. No coloque cassettes de cinta, etc., próximos a los altavoces  
Como hay imanes en los altavoces, no coloque cintas o tarjetas magnéticas sobre los mismos, ya que los datos grabados pueden ser borrados.

7. Mantenga esta unidad lejos de su TV  
Cuando se usa esta unidad próxima a un TV, la imagen de este puede ser distorsionada. Si esto ocurre, mueva esta unidad lejos del TV. Si esto no corrige el problema, evite usar esta unidad cuando el TV está encendido.

8. Limpieza del gabinete  
Si el gabinete se ensucia límpielo con un paño suave y seco. Nunca utilice bencina o solventes ya que estos pueden dañar la terminación de la superficie.

9. No escuche con auriculares porque podrían dañarse sus oídos.

**小心**  
當電源線連接至家用交流電插座上時，電源指示燈點亮呈紅色，表示本裝置處於 STANDBY (待機) 狀態。當按壓  $\Delta$ /I 鍵時，電源指示燈熄滅，顯示燈點亮。

一旦將裝電的電源插頭插入市電交流電源插座，即使  $\Delta$ /I 鍵處於 STANDBY (待機) 狀態，仍然會有少量的電流流入，以作為遙控器操作以及定時器、微型電腦記憶裝置的記憶之用。

**Botón  $\Delta$ /I**  
Cuando se conecta el cordón eléctrico al tomacorriente de CA, el indicador de alimentación se enciende en rojo indicando el modo STANDBY. Cuando presiona el botón  $\Delta$ /I, el indicador se apaga y se enciende la ventanilla de indicación.

Esta unidad consume una pequeña cantidad de corriente cuando se conecta al tomacorriente de CA para hacer funcionar el controlador remoto y el temporizador o para apoyo de la memoria del microprocesador, aun cuando se haya colocado el botón  $\Delta$ /I en STANDBY.

**$\Delta$ /I button**  
When the power cord is connected to a household AC outlet, the power indicator lights in red indicating the STANDBY mode. When the  $\Delta$ /I button is pressed, the power indicator goes out and the display window lights.

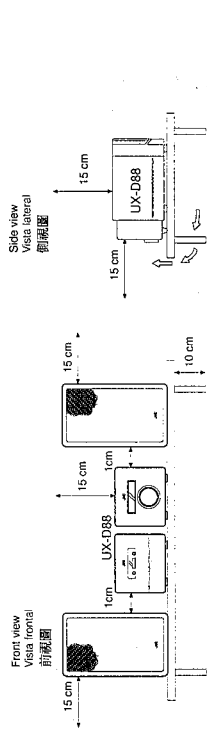
When this unit is plugged into an AC outlet, it consumes a small current to operate the remote control and timer, or to back up the memory of the microprocessor, even when the  $\Delta$ /I button is set to STANDBY.

**注意：**  
良好的通風  
為了避免電擊和火災的危險，而且為了防止本裝置受損，請將其放置於如下場所：

1. 前方：無障礙物並有開闊的空間。
2. 側面/頂部/背部：請勿在如下所示的尺寸範圍內放置障礙物。
3. 底部：請置於平坦表面，並置於高於 10 cm 的桌子上，以保持空氣流動暢通。

**Precaución:**  
Para evitar el riesgo de descargas eléctricas e incendio y prevenir posibles daños, instale el equipo en un lugar que cumpla los siguientes requisitos:

1. Parte frontal: Sin obstrucciones, espacio abierto.
2. No debe haber obstáculos en las áreas mostradas por las dimensiones de la siguiente figura.
3. Parte inferior: Sitúe el equipo sobre una superficie nivelada. Mantenga un espacio adecuado para permitir el paso del aire y una correcta ventilación, situando el equipo sobre una mesa de 10 o más cm de altura.



切勿在直射陽光下使用本機，或放在溫度高達 40°C 以上的場所中使用。

1. 避免放置於下列場所
  - 有強勁之處。
  - 有潮氣之處，諸如浴室之類。
  - 接近磁盤、揚聲器等有磁場之處。

2. 注意灰塵  
務請讓上 CD 托架或 CD 托盤，不要讓灰塵沉澱了鏡頭。

3. 結露  
於下列情況，機內有可能結露。這時裝置有可能不能正常工作。

- 剛打開取暖器的開關。
- 有煙霧，或者處於潮濕的場所。
- 從寒冷的房間直接移至溫暖的房間。

4. 音響的調節  
與傳統音源相比，CD 唱片的聲音極小。如果根據這些傳統音源來調節音量的話，那麼揚聲器可能會因突然增大的音量而被損壞。因此在進行操作之前先降低音量，在放音期間根據需要進行調節。

5. 安全機構  
裝置內裝有安全內鎖裝置機構，用於打開和切斷雷射光束，從而當 CD 托架或 CD 托盤打開時，自動停止雷射光束。

6. 請勿將卡式錄音帶等物件放置於揚聲器附近  
由於揚聲器內有磁體，所以切勿將錄音帶，或者磁卡放置於揚聲器之上，否則所記錄的資料將被損壞。

7. 不要讓本機接近電視機  
如果在電視機附近使用本機，電視機的畫面會失真。如果發生這種情況，請將本機離電視機。如果仍不能改善畫面，則在觀看電視時不要使用本機的遙控器。

8. 機殼的清潔工作  
如果機殼上有污痕，請用柔軟的、乾燥的布擦拭。切勿使用汽油和稀釋劑、這些液體會損壞表面的精加工。

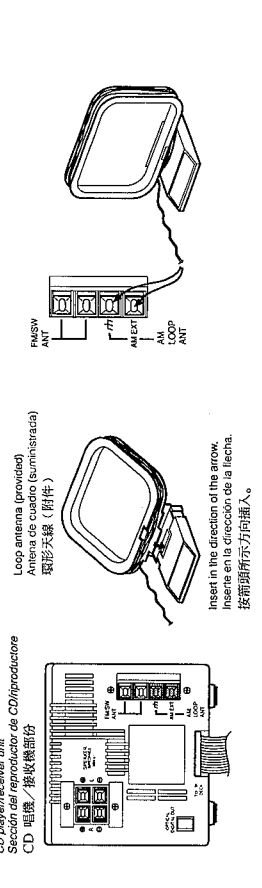
9. 當使用耳機收聽的時候  
• 請勿用高音量聽，這將會損壞您的聽覺功能。

CONNECTIONS 連接

Do not switch the power on until all connections are completed. 在所有連接完成之後，請勿接通電源。

Antenna connection and adjustment 天線的連接與調節

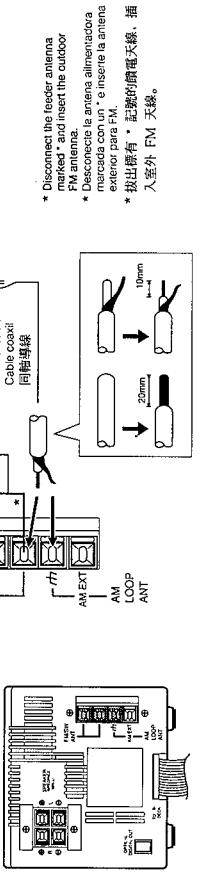
- AM/SW (2.3-6.995 MHz) loop antenna adjustment



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. 將環形天線放置於離開裝置地方，這樣可以獲得最好的接收效果。請勿將天線的導線捆扎起來。

FM/SW (7.21-85 MHz) antenna connections and adjustments

- FM/SW (7.21-85 MHz) antenna connections and adjustments



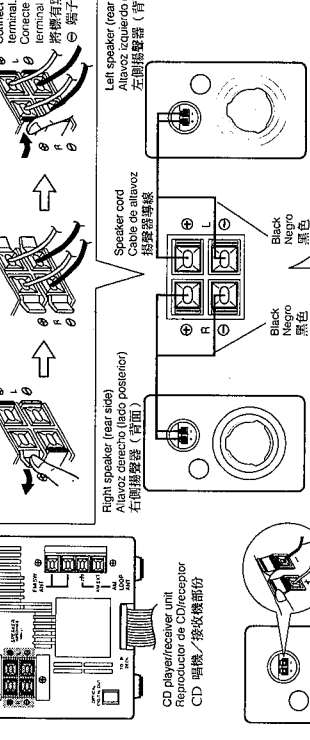
Use an outdoor antenna when stable reception cannot be obtained with the provided antenna. 如來配圖的天線不能獲得穩定的接收效果，請使用室外天線。

Notes: Do not place the loop antenna on a metal desk or behind a computer. Install it on a wooden desk. 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.

Notes: No coloque la antena de cuadro sobre un escritorio de metal o cerca de un TV o computadora. Instale la antena en un escritorio de madera. Consulte a un experto en audio. Instale el cable de la antena lejos de los cables de alimentación y de los altavoces ya que estos pueden generar interferencia. Cuando instale la antena de cuadro no permita que entre en contacto con la parte trasera de la unidad.

Speaker cord connection 揚聲器導線的連接

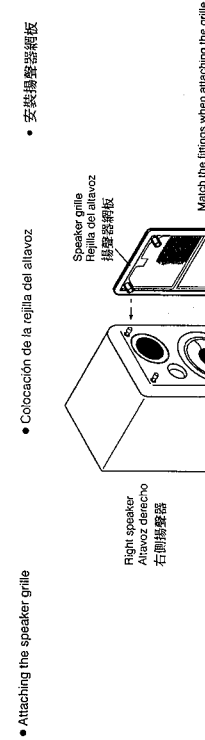
- Right speaker (rear side) / Altavoz derecho (lado posterior)



Connect the black cord to the terminal. 將帶有黑色導線的導線連接到端子。

Left speaker (rear side) / Altavoz izquierdo (lado posterior)

- Left speaker (rear side) / Altavoz izquierdo (lado posterior)

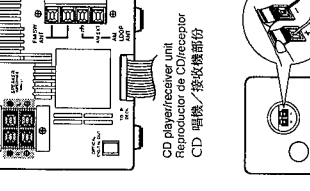


Strip vinyl shield from cut line, twist wire core. 從剪斷的導線上剝去乙烯皮包層，並扭出線心。

Connect the cord from the speaker on the left to the (L) terminal and the cord from the speaker on the right to the (R) terminals. 將左側揚聲器的導線連接到 (L) 端子，將右側揚聲器的導線連接到 (R) 端子。

Attaching the speaker grille 安裝揚聲器網板

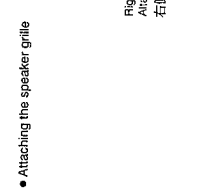
- Right speaker / Altavoz derecho



Match the fittings when attaching the grille. 安裝網板時請對準圖示標記。

Left speaker / Altavoz izquierdo

- Left speaker (rear side) / Altavoz izquierdo (lado posterior)



The speaker grilles can be removed. 揚聲器網板可以取下。

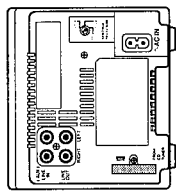
When removing, insert your fingers at the top and pull towards you. 取下時：1. 將手指插入頂部並向外拉。2. 也將底部向外拉。



- Notes:**
- The polarity of the two connected speakers will be the same if the black speaker cords are connected to the terminals marked with the same polarity. If the polarity is 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 TV's picture more than 20 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 main unit, make sure the main unit is placed on the insulating cover. If connected to the speaker terminal. Otherwise, sound cannot be heard.

**System connection**

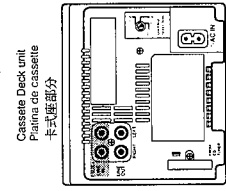
- Connect the flat cable to the CD player/receiver unit to the cassette deck unit.



Cassette Deck unit  
Platina de cassette  
卡式座部分

**Connection of external audio units**

- Connection with a turntable (or MD player)

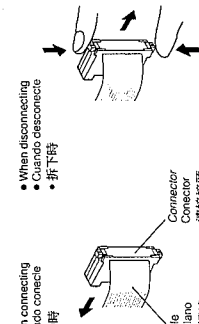


Cassette Deck unit  
Platina de cassette  
卡式座部分

- Notes:**
- The polarity of the two speakers connected to the terminals will be the same if the black speaker cords are connected to the terminals marked with the same polarity. If the polarity is 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 TV's picture more than 20 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 main unit, make sure the main unit is placed on the insulating cover. If connected to the speaker terminal. Otherwise, sound cannot be heard.

**Conexión del sistema**

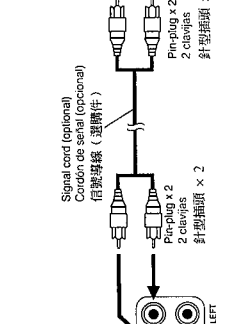
- Conecte el cable plano que está conectado a la unidad de CD/Reproductor a la platina de cassette.



Connector  
Conector  
連接接頭

**Conexión de unidades externas de audio**

- Conexión con un tocadiscos (o reproductor de MD)

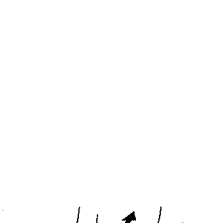


Cassette Deck unit  
Platina de cassette  
卡式座部分

- 註:**
- 如果黑色揚聲器線被連接到 ⊖ 端子上，兩個連接好的揚聲器的極性相同。若兩個揚聲器的極性相反了，立體聲效果和音調將會降低。
  - 本機的話筒揚聲器都沒有作磁保護。因此，如果直接放置於電視機上，或者接近電視機，都會使電視圖像失真。揚聲器應該放置於離開電視機至少 20 cm 之處。
  - 如果要將揚聲器與主機分離放置，請從音響商店購買匹配的揚聲器線。
  - 當您連接揚聲器的線時，請確認是導線芯而不是絕緣層被連接在揚聲器的端子上，否則將聽不見聲音。

**系統的連接**

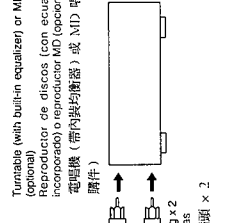
- 將連接於 CD 唱機 / 接收機上的扁平電纜連接至卡式座部分。



Connector  
Conector  
連接接頭

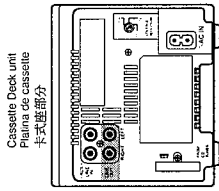
**外音響裝置的連接**

- 與電唱機 (或 MD 唱機) 連接



Cassette Deck unit  
Platina de cassette  
卡式座部分

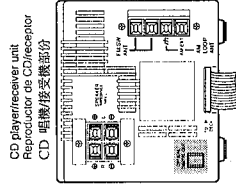
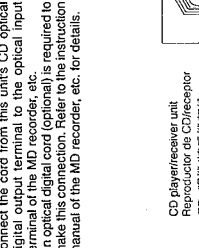
- Connection with an MD recorder, etc. (salida analógica)
- When using the MD recorder, etc. (optional) from this unit's CD player, cassette deck or radio to an external MD recorder, etc. connect the cord from this unit's line out terminals to the analog input terminals of the MD recorder, etc.



Cassette Deck unit  
Platina de cassette  
卡式座部分

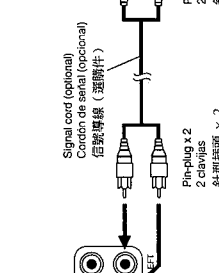
**Conexión con un grabador MD, etc. (salida digital)**

- Es posible transmitir una señal de sonido digital desde el reproductor de CD a esta unidad directamente a un grabador MD externo, etc. que esté equipado con un conector de entrada óptica para el terminal digital óptico de esta unidad de CD al terminal de entrada óptica del grabador MD, etc.



CD player/receiver unit  
Reproductor de CD/receptor  
CD 唱機/接收機部分

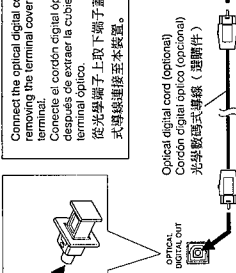
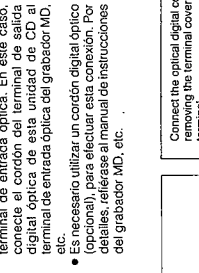
- Conexión con un grabador MD, etc. (salida analógica)
- Cuando se utiliza el grabador MD, etc. (opcional) de esta unidad, conecte el cable de esta unidad a los terminales de entrada analógica del grabador MD, etc.



Cassette Deck unit  
Platina de cassette  
卡式座部分

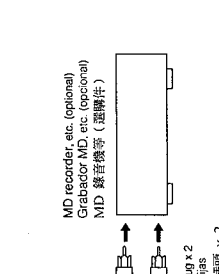
**Conexión con un grabador MD, etc. (salida digital)**

- Es posible transmitir una señal de sonido digital desde el reproductor de CD a esta unidad directamente a un grabador MD externo, etc. que esté equipado con un conector de entrada óptica para el terminal digital óptico de esta unidad de CD al terminal de entrada óptica del grabador MD, etc.



CD player/receiver unit  
Reproductor de CD/receptor  
CD 唱機/接收機部分

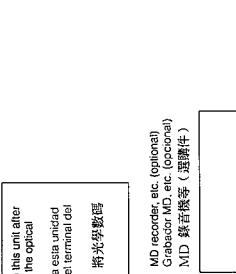
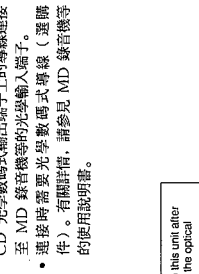
- 與 MD 錄音機等連接 (模擬輸出)
- 當從本裝置的 CD 唱機、卡式座或收音機線送至外部 MD 錄音機等時，將本裝置線路輸出端子的導線連接至 MD 錄音機等的模擬輸入端子。



Cassette Deck unit  
Platina de cassette  
卡式座部分

**與 MD 錄音機等連接 (數碼輸出)**

- 可以將本裝置的 CD 唱機的數碼聲音信號送至外部 MD 錄音機等 (設有光學輸入端子)。這時，將本裝置的 CD 光學數碼輸出端子上的導線連接至 MD 錄音機等的光學輸入端子。
- 連接時需要光學數碼式導線 (選購件)。有關詳情，請參見 MD 錄音機等的說明書。



CD player/receiver unit  
Reproductor de CD/receptor  
CD 唱機/接收機部分

**Note:**  
Regarding the connection with external units and their operations, refer to the instructions provided with those units.

**Note:**  
En relación a la conexión de unidades externas y sus operaciones, refiérase a las instrucciones suministradas con esas unidades.

**註:**  
有關外部裝置的連接及其操作，請參見這些裝置所附帶的使用說明書。







有關 CD

HANDLING CDS

Como los CD sucios, dañados o ablastados pueden dañar la unidad, tome precauciones en relación a lo siguiente:

- 1. CD utilizables**  
Utilice CD with the marca indicada.
- 2. Notas sobre manipulación de CD**
  - No toque la superficie grabada directamente.
  - No adhiera ni escriba nada sobre el lado de la etiqueta.
  - No doble los CD.
- 3. Almacenamiento**
  - Después de extraer un CD de la unidad, asegúrese de colocarlo otra vez en su caja.
  - No exponga los CD a la luz directa del sol, altas temperaturas provenientes de un calentador, etc., alta humedad, o polvo.
- 4. Limpieza de CD**
  - Use un paño suave para limpiar el CD, limpie el polvo, sudor, huellas digitales, etc.
  - 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.

由於污穢的、損壞的、變曲的唱片會損壞唱機，因此必須注意下列事項：

- 1. 可用的 CD 唱片**  
請使用有所標記的 CD 唱片。
- 2. 關於使用 CD 唱片的注意事項**
  - 切勿觸摸如明鏡般反光的、錄有聲音的一面。
  - 切勿在有標籤的一面張貼簽者書寫任何東西。
  - 切勿彎曲 CD 唱片。
- 3. CD 唱片的保管**
  - 將 CD 唱片從唱機的唱片盒取出來以後，務必放回唱片盒。
  - 切勿讓唱片暴露在陽光下、取暖器等的高溫、濕氣以及灰塵之中。
- 4. CD 唱片的清潔**
  - 在將 CD 唱片裝入唱機之前，請用柔軟的布拭去灰塵、污穢以及指印。應該由中心往邊緣方向擦拭。

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.

電腦控制的音 (COMPU PLAY)

即使電腦處於 STANDBY (待機) 方式，按壓下列按鈕可接通電源並選擇聲源。

Function mode / Modo de funcionamiento / 各規功能	Operaciones / Operaciones / 操作
CD (雷射唱片)	When this button is pressed with a CD loaded, CD playback begins. Quando se presiona este botón habiendo un CD colocado, comienza la reproducción del mismo. 按壓此鍵時，CD 唱片的收音便開始。
TAPE (錄音帶)	When this button is pressed with a tape loaded, tape playback begins. Quando se presiona este botón habiendo una cinta colocada, comienza la reproducción de la misma. 按壓此鍵時，錄音帶的收音便開始。
TUNER (調諧器)	When this button is pressed, the tuner is engaged. Cuando se presiona este botón, se activa el sintonizador. 按壓此鍵時，調諧器便接洽。
AUX (輔助)	A sound source connected to the AUX terminal can be engaged. Es posible activar una fuente de sonido que esté conectada al terminal AUX. 選擇至 AUX (輔助) 聲源的聲源便接洽。

當按壓 (▲) OPEN/CLOSE (打開/關閉) 鍵時，音源不切換，但是 CD 托架可以打開或關閉。

- 註：
- 當切斷電源時，務必按壓  $\Delta$  鍵。
  - 遙控器上的 COMPU PLAY (電腦控制收音) 鍵與主機上的該鍵功能相同。

One touch operation (COMPU PLAY)

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

Function mode / Modo de funcionamiento / 各規功能	Operaciones / Operaciones / 操作
CD (雷射唱片)	When this button is pressed with a CD loaded, CD playback begins. Quando se presiona este botón habiendo un CD colocado, comienza la reproducción del mismo. 按壓此鍵時，CD 唱片的收音便開始。
TAPE (錄音帶)	When this button is pressed with a tape loaded, tape playback begins. Quando se presiona este botón habiendo una cinta colocada, comienza la reproducción de la misma. 按壓此鍵時，錄音帶的收音便開始。
TUNER (調諧器)	When this button is pressed, the tuner is engaged. Cuando se presiona este botón, se activa el sintonizador. 按壓此鍵時，調諧器便接洽。
AUX (輔助)	A sound source connected to the AUX terminal can be engaged. Es posible activar una fuente de sonido que esté conectada al terminal AUX. 選擇至 AUX (輔助) 聲源的聲源便接洽。

When the (▲) OPEN/CLOSE button is pressed, the sound source does not switch, but the CD holder can open or close.

- Notes:
- When switching off the power, be sure to press the  $\Delta$ /I button.
  - The COMPU PLAY button on the remote control has the same function as that on the main unit.

VOLUME, TONE AND OTHER CONTROLS

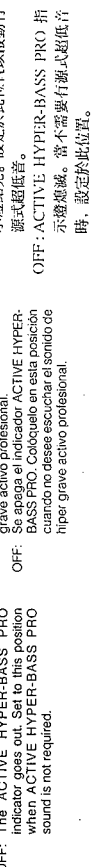
Botones VOLUME (utilizando la unidad de control remoto)  
+: Use to increase the volume.  
-: Use to decrease the volume.  
(Control range from VOL 0 to VOL 50.)



Botones BASS/TREBLE (utilizando la unidad de control remoto)  
Para ajustar el nivel de grave o agudo, presione el botón correspondiente. El ajuste de nivel va de -6 a 6.

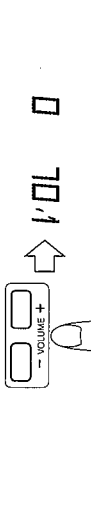


Botón de hiper graves activos profesionales (ACTIVE HYPER-BASS PRO)  
ON: Se enciende el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición para activar el sonido hiper grave activo profesional.  
OFF: Se apaga el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición cuando desee reducir el sonido de hiper grave activo profesional.

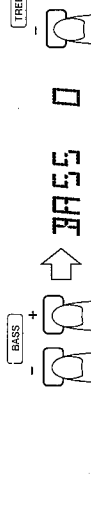


VOLUMEN, TONO Y OTROS CONTROLES

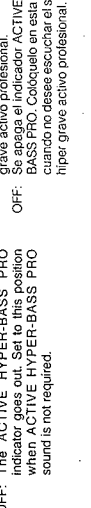
Botones VOLUME (utilizando la unidad de control remoto)  
+: Useo para aumentar el volumen.  
-: Useo para reducir el volumen.  
(Los límites de control van de VOL 0 a VOL 50.)



Botones BASS/TREBLE (utilizando la unidad de control remoto)  
Para ajustar el nivel de grave o agudo, presione el botón correspondiente. El ajuste de nivel va de -6 a 6.



Botón de hiper graves activos profesionales (ACTIVE HYPER-BASS PRO)  
ON: Se enciende el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición para activar el sonido hiper grave activo profesional.  
OFF: Se apaga el indicador ACTIVE HYPER-BASS PRO. Colóquelo en esta posición cuando desee reducir el sonido de hiper grave activo profesional.



COMPACT DIGITAL AUDIO

- Removing the CD from its storage case and loading it.
- Extracción del CD de su caja y colocación del mismo.
- 從 CD 唱片盒中把唱片取出來，裝入唱機的唱片盒中。

Press the center and lift out.  
Presione el centro y levántelo.  
按壓中心部位並且將它取出來。

- Handling / Manipulación / 持拿
- Cleaning / Limpieza / 擦拭

Correct / Correcto / 正確

Incorrect / Incorrecto / 不正確

PLAYING CDS

REPRODUCCION DE CD

CD 唱片的放音

Playing an entire CD

The following example of playing an entire CD assumes a CD with 12 tracks and a total playing time of 48 minutes 57 seconds.

Reproducción de un CD completo

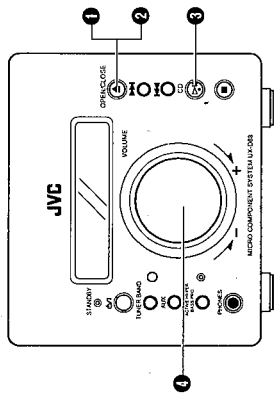
El siguiente ejemplo de reproducción de un CD completo supone que se ha colocado un CD con 12 pistas y un tiempo total de reproducción de 48 minutos y 57 segundos.

播放整盤 CD

以下是播放整盤 CD 的例子。此 CD 有 12 首樂曲，總播放時間為 48 分 57 秒。

Operate in the order shown

Operar en el orden mostrado



- 1 Press to open the CD holder. (The power is switched on.)
- 2 Load a CD with the label side facing up and close the CD holder.
- 3 Press to start play.
- 4 Adjust.

Note: When the CD holder is closed by pressing the >II< button, the CD starts as soon as the CD holder is closed.

8-cm (3") CDs can be used in this unit without an adapter.

- Para abrir el compartimiento del CD, presione el botón >II<. Una vez que se cierra el compartimiento del CD, la reproducción comienza tan pronto como se cierra el compartimiento del CD.

Los CD de 8-cm. pueden ser usados con esta unidad sin necesidad de adaptador.

- 若要暫時停止播放 CD 時，停止播放。在播放期間，按壓停止/清除 (■) 鍵來停止播放。



12 48:57

- To stop a CD temporarily Press the >II< button to stop play temporarily (The "II" indicator lights). When pressed again, play resumes from the point where it was paused.

Caution:

- To change CDs, press the stop/clear (■) button; check that the CD has stopped rotating completely before unloading it.

Para parar un CD temporalmente Presione el botón >II< para detener temporalmente la reproducción. (El indicador "II" se enciende). Si lo presiona otra vez, la reproducción continúa desde el punto donde se efectuó la pausa.

Precaución:

- Para cambiar CD, presione el botón (■) de parada/borrado; compruebe que el CD haya parado de girar antes de extraerlo.

Notes:

- When no CD is loaded, "NO DISC" is indicated in the display window. This indication may also appear when a CD is loaded upside down.
- 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.

- 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).
- Do not play, unload the CD, or attempt to load a CD if mistaking 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 >II< button once to skip to the beginning of the next track.

To listen to the previous track... Press the <II< 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 last-forward or reverse search while playing a CD.

Keep pressing for fast-reverse search.

Mantenga presionado para la búsqueda regresiva rápida.

若要倒帶搜尋，可按壓此鍵。

- 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.

註:

- 若未裝入 CD，顯示窗上出現 "NO DISC" 字樣。當 CD 面裝反時，此顯示也會出現。
- 當 CD 裝緊或刮傷時，或 CD 面朝上時，將會出現下面的指示。
- 當發生這種情況時，先清潔 CD，或將其反面朝上，重新裝入 CD 并再次播放。

- 請勿在過高或過低的溫度下使用本機。推薦的溫度範圍為 5°C 到 35°C。
- 播放結束後，請取出 CD 唱片。
- 若發生錯誤，請取出 CD 唱片。
- 若在播放期間發生尋曲錯誤，請降音量。

Reproducción con salto

- Durante la reproducción es posible saltar hacia adelante hasta el principio de la próxima pista o hacia atrás hasta el principio de la pista que está siendo reproducida o de la pista anterior; cuando haya localizado el principio de la pista deseada, la reproducción se inicia automáticamente.

Para escuchar la próxima pista... Presione el botón >II< para saltar al principio de la próxima pista.

Para escuchar la pista anterior... Presione el botón <II< para saltar al principio de la pista que está siendo reproducida. Presiónelo dos veces rápidamente para saltar al principio de la pista anterior.

Reproducción con búsqueda (para localizar la posición deseada en el CD)

- La posición deseada puede ser ubicada utilizando la búsqueda de avance rápido o inversa mientras reproduce un CD.



Keep pressing for fast-forward search.

Mantenga presionado para la búsqueda progresiva rápida.

若要快進搜尋，可按壓此鍵。

- Mantenga presionado el botón; la búsqueda aumenta gradualmente y luego se vuelve a la velocidad normal.
- Como en el modo de búsqueda es posible escuchar el sonido a bajo volumen (aproximadamente a un cuarto del nivel normal), monitoree el sonido y suelte el botón cuando haya localizado la posición deseada.

跳越放音

- 在放音中，可以往前跳越至下一樂曲的曲頭或者往後跳越至放音中樂曲的曲頭。或者您已經放音的曲頭前一樂曲的曲頭。當您要選聽的樂曲的曲頭被找到後，就會自動開始播放。

聽下一支樂曲... 若要聽下一支樂曲，按壓一下 >II< 鍵。

若要聽前一支樂曲，按壓一下 <II< 鍵。

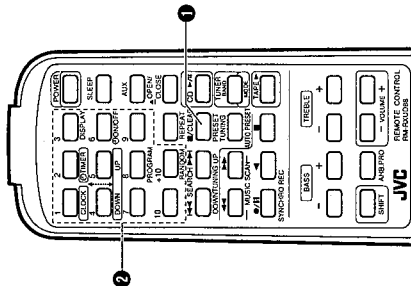
- 若要聽前一支樂曲，按壓一下 <II< 鍵便可跳越至放音中樂曲的曲頭；如果快速按壓兩次便可跳越至前一支樂曲的曲頭。

搜尋放音 (在 CD 唱片中搜尋您所需要的某個位置)

- 若要在 CD 唱片中搜尋您所需要的某個位置，可以在放音中，用快進搜尋或者倒帶搜尋來進行。

**Direct access play (using the remote control unit)**

- Pressing any of the track number buttons will start play from the beginning of the designated track without you having to press the ►/II button. (This function cannot be used during programmed play)

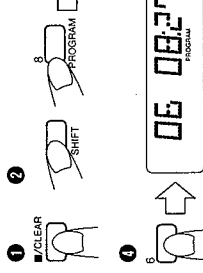


**Reproducción por acceso directo (utilizando la unidad de control remoto)**

- Si presiona cualquiera de los botones de número de pista la reproducción se iniciará desde el principio de la pista escogida sin que tenga que presionar el botón ►/II (esta función no puede usarse durante la reproducción programada.)

**Programmed play (using the remote control unit)**

- Up to 20 tracks can be programmed to be played in any required order. The total playing time of programmed tracks is displayed (up to 99 minutes, 59 seconds). (Example: When programming the 2nd track (Example: Cuando programa la 2ª pista para que sea reproducida en un orden determinado, se muestra el tiempo total de reproducción a continuación, y luego la pista 12ª, etc.)



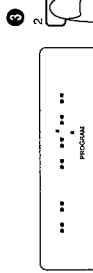
To designate the 12th track.  
Para seleccionar la 12ª pista  
指定第 12 號樂曲。



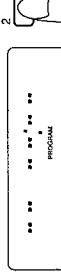
The total playback time of programmed tracks is displayed.  
Se visualiza el tiempo total de reproducción total de las pistas programadas.  
顯示編程樂曲的總播放時間。

**Reproducción programada (utilizando la unidad de control remoto)**

- Es posible programar un máximo de 20 pistas para reproducción en el orden deseado. La unidad indicará el tiempo total de reproducción de las pistas programadas (máximo de 99 minutos, 59 segundos). (Ejemplo: Cuando programa la 2ª pista para que sea reproducida en un orden determinado, se muestra el tiempo total de reproducción a continuación, y luego la pista 12ª, etc.)



To designate the 2nd track.  
Para seleccionar la 2ª pista  
指定第 2 號樂曲。



The total playback time of programmed tracks is displayed.  
Se visualiza el tiempo total de reproducción total de las pistas programadas.  
顯示編程樂曲的總播放時間。



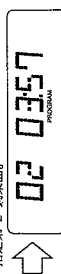
The 12th track  
La 12ª pista  
第 12 號樂曲

**編程收音 (使用遙控器)**

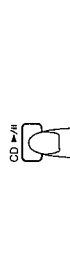
- 最多可對 20 首樂曲進行編程, 使其按所需的順序播放。  
顯示編程樂曲的總播放時間 (最長可達 99 分 59 秒)。  
(例: 將第 2 號樂曲編程為最先播放, 然後播放第 6 號樂曲, 然後第 12 號, 等)。



To designate the 2nd track.  
Para seleccionar la 2ª pista  
指定第 2 號樂曲。



The total playback time of programmed tracks is displayed.  
Se visualiza el tiempo total de reproducción total de las pistas programadas.  
顯示編程樂曲的總播放時間。



The 12th track  
La 12ª pista  
第 12 號樂曲

**直接進入播放 (使用遙控器)**

- 按壓任意的樂曲號碼鍵將從指定樂曲的起點處開始播放, 而無需按壓 ►/II 鍵。  
(在編程播放中不能使此功能。)

**按壓 ■/CLEAR (停止/清除) 鍵設定 CD 方式。**

- 用樂曲號碼鍵指定所需的樂曲。
- 若要指定樂曲號碼 1 至 10, 按壓對應該樂曲號碼的樂曲號碼鍵。
- 若要指定 11 以上的樂曲號碼, 根據所需的號碼設定按壓 +10 鍵的次數, 然後再按樂曲號碼鍵。(例如: 要指定第 20 號樂曲, 先按壓 +10 鍵 2 次, 然後按樂曲號碼鍵 10。)
- 每按壓一次此鍵, 號碼增加 10。先按壓此鍵設定十位數, 然後按樂曲號碼鍵設定個位數。
- 若要按播放中跳到另一首樂曲  
當按壓所需的樂曲號碼鍵時, 顯示窗上出現指定樂曲的號碼並從指定樂曲的起點處開始播放。

**Reproducción programada (utilizando la unidad de control remoto)**

- Up to 20 tracks can be programmed to be played in any required order. The total playing time of programmed tracks is displayed (up to 99 minutes, 59 seconds). (Example: When programming the 2nd track (Example: Cuando programa la 2ª pista para que sea reproducida en un orden determinado, se muestra el tiempo total de reproducción a continuación, y luego la pista 12ª, etc.)



To designate the 2nd track.  
Para seleccionar la 2ª pista  
指定第 2 號樂曲。



The total playback time of programmed tracks is displayed.  
Se visualiza el tiempo total de reproducción total de las pistas programadas.  
顯示編程樂曲的總播放時間。

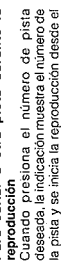


The 12th track  
La 12ª pista  
第 12 號樂曲

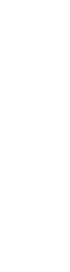
**Reproducción programada (utilizando la unidad de control remoto)**

- Es posible programar un máximo de 20 pistas para reproducción en el orden deseado. La unidad indicará el tiempo total de reproducción de las pistas programadas (máximo de 99 minutos, 59 segundos). (Ejemplo: Cuando programa la 2ª pista para que sea reproducida en un orden determinado, se muestra el tiempo total de reproducción a continuación, y luego la pista 12ª, etc.)

To designate the 2nd track.  
Para seleccionar la 2ª pista  
指定第 2 號樂曲。



The total playback time of programmed tracks is displayed.  
Se visualiza el tiempo total de reproducción total de las pistas programadas.  
顯示編程樂曲的總播放時間。

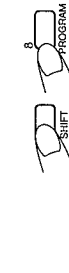
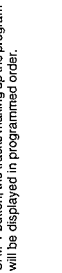


The 12th track  
La 12ª pista  
第 12 號樂曲

**按壓 ■/CLEAR (停止/清除) 鍵設定 CD 方式。**

- 用樂曲號碼鍵指定所需的樂曲。
- 若要指定樂曲號碼 1 至 10, 按壓對應該樂曲號碼的樂曲號碼鍵。
- 若要指定 11 以上的樂曲號碼, 根據所需的號碼設定按壓 +10 鍵的次數, 然後再按樂曲號碼鍵。(例如: 要指定第 20 號樂曲, 先按壓 +10 鍵 2 次, 然後按樂曲號碼鍵 10。)
- 每按壓一次此鍵, 號碼增加 10。先按壓此鍵設定十位數, 然後按樂曲號碼鍵設定個位數。
- 若要按播放中跳到另一首樂曲  
當按壓所需的樂曲號碼鍵時, 顯示窗上出現指定樂曲的號碼並從指定樂曲的起點處開始播放。

To confirm the details of a program...  
Presione el botón PROGRAM conjuntamente con el botón SHIFT, las pistas que componen el programa se irán indicando en el orden programado.



Track number  
Número de pista  
樂曲號碼

Program order number  
Número de orden de programa  
編程順序號碼

The 12th track  
La 12ª pista  
第 12 號樂曲

**HANDLING CASSETTE TAPES**  
**MANIPULACION DE CASSETTES**  
**DE CINTA**

**有關卡式錄音帶**

**Cassette tapes**

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

**卡式錄音帶**

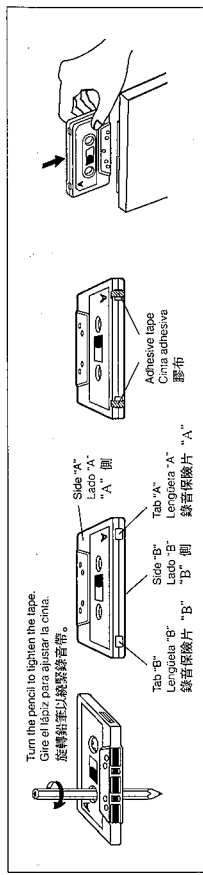
- 鬆散的錄音帶會引起麻煩的事情。用鉛筆或類似物品，如圖所示輕微地調整錄音帶。
- 為預防意外地抹消您所需要的錄音內容，請用螺絲刀將錄音帶保險片拆掉。當錄音保險片拆掉以後，若要抹消錄音內容或者重新錄音，可用膠布將開孔封住。
- 我們建議您不要使用 C-120 的錄音帶，因為這容易造成故障。

**Cassette loading**

- Press the EJECT (▲) button to open the cassette holder.
- Load a cassette as shown.
- Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.

**Colocación de cassettes**

- Presione el botón EJECT (▲) para abrir el portacassetes.
- Extraiga el cassette como se muestra.
- Cierre el portacassetes presionándolo suavemente. Cuando oiga un "click", ello indica que el portacassetes está correctamente cerrado.



**Nota:**

If the power is switched off while the 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.

**Nota:**

Si se desconecta la alimentación durante el transporte de cinta, puede que sea imposible extraer el cassette. Si ello ocurre, conecte la alimentación otra vez antes de intentar extraer el cassette.

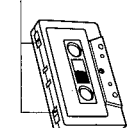
**Auto tape select mechanism**

This unit has an Auto Tape Select mechanism which distinguishes between different types of tape using the bias of the tape. The bias and equalization suitable for the tape are set.

**Mecanismo de selección automática de la cinta**

Esta unidad posee un mecanismo de selección automática de la cinta que distingue los tipos de cinta por medio de orificios de detección en el cassette. Después de haber detectado el tipo de cinta, la unidad establece la polarización y ecualización adecuadas para la cinta.

- Cassettes with detection holes: Metal tape (EQ: 70 µs) ..... Type IV CrO<sub>2</sub> (chrome) tape (EQ: 70 µs) ..... Tipo II Normal tape (EQ: 120 µs) ..... Tipo I
- Cassettes without detection holes: Metal tape (EQ: 70 µs) ..... Tipo IV CrO<sub>2</sub> (cromo) (EQ: 70 µs) ..... Tipo II Cinta normal (EQ: 120 µs) ..... Tipo I



**To clear the programmed tracks...**

Press the CLEAR button before playing a CD. During programmed play, press this button twice. When the CD holder is opened, programmed tracks are cleared automatically.

- Notes:**
- The total playing time of the programmed tracks is 99 minutes.
  - When programming a track number higher than 21 on a disc containing more than 21 tracks, the total playback time of all the programmed tracks will not be displayed.

**消除被編程的樂曲...**

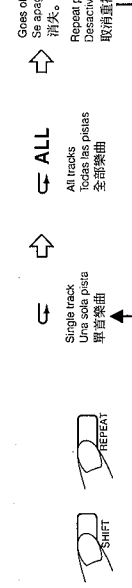
在開始播放 CD 之前按壓 CLEAR 鍵。當 CD 托架打開時，編程樂曲自動清除。

- 註：**
- 如果編程樂曲的總播放時間超過 99 分 59 秒，則總播放時間將顯示 99 分。
  - 當在一張包含 21 首以上樂曲的唱片上編程一首號碼大於 21 的樂曲時，所有編程樂曲的總播放時間將不顯示。

**Repeat play (using the remote control unit)**

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

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

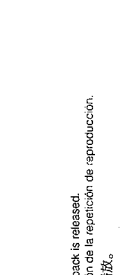


- Single track repeat (≡)**  
The current or specified track will be played repeatedly.
- All tracks of one CD repeat (≡ ALL)**  
All tracks on the current or specified CD will be played repeatedly.

**重複播放 (使用遙控器)**

在播放之前或播放中按住 SHIFT (換檔) 鍵的同時按壓 REPEAT (重複) 鍵，方式將以單首樂曲 (≡) 至全部樂曲 (≡ ALL)，再至清除方式的順序變化。

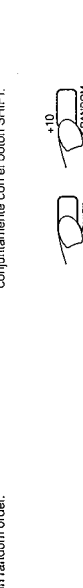
可以指定是重複播放單首樂曲還是全部樂曲。在按住 SHIFT (換檔) 鍵的同時每按壓一次 REPEAT (重複) 鍵，方式將以單首樂曲 (≡) 至全部樂曲 (≡ ALL)，再至清除方式的順序變化。



- 單首樂曲重複 (≡)**  
重複播放單首樂曲或指定的樂曲。
- 重複播放一盤 CD 中的全部樂曲 (≡ ALL)**  
重複播放現 CD 或指定 CD 上的全部樂曲。

**Random play (using the remote control unit)**

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



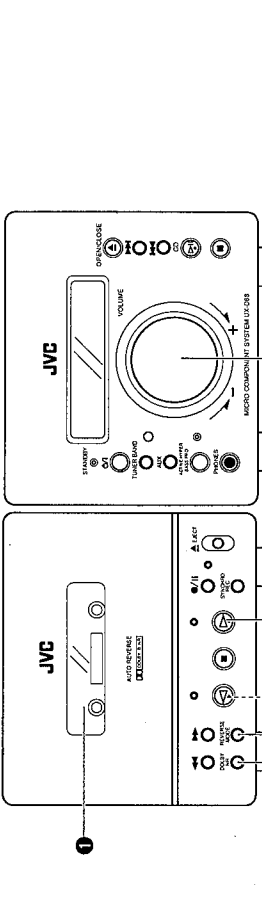
**隨機播放 (使用遙控器)**

在按住 SHIFT (換檔) 鍵的同時按壓 RANDOM (隨機) 鍵，將 CD 上的全部樂曲以隨機的順序播放一次。



CASSETTE PLAYBACK 卡式錄音帶的播放

Operate in the order shown 按照下列順序操作



- 1 Load a cassette tape with side A facing out.
- 2 Press to start playback. (The power is switched on and the TAPE mode is engaged to start tape playback).
- 3 Press to start tape playback.
- 4 Set the DOLBY NR switch as required.
- 5 Adjust.

- After loading a cassette tape, simply press the > or < button. The power is switched on and the tape starts playback.
- When the tape plays back, with the reverse mode set to < (single side play) or <> (both sides) 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.

Music Scan 音樂搜尋

- The beginning of the current tune or the next tune can be located using the music scan function.
- 1 Press the > or < button for tape playback.
- 2 Press the >> or << button for music scan.

Forward (>) direction playback (正向放音 (>))	▶ ◀	▶ ◀	▶ ◀
Reverse (< or <>) direction playback (反向放音 (< or <>))	◀ ▶	◀ ▶	◀ ▶

- To the start of the next tune played back.
- Hacia el comienzo de la próxima melodía.
- 下一曲的曲頭

- Para reproducir la cinta presione el botón > o <.
- Para buscar una música presione el botón >> o <<.

- The tape direction indicator blinks twice, repeatedly, during music scanning.
- El indicador de dirección de la cinta parpadeará dos veces, repetidamente, en la búsqueda de la melodía.
- 在樂曲編號時，走帶方向指示燈閃爍兩次。

Notes: 注意

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.

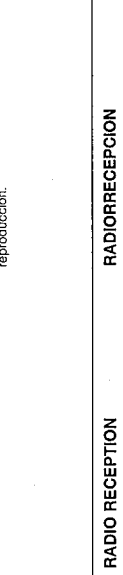
- Tapes with tunes having long plantissimo portions during tape (parts) or non-recorded sections.
- Tapes with sibilant non-recorded sections.
- Tapes with high-level noise or hum between tunes.

DOLBY NR system 杜比降噪系統

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

Radio Reception 無線電廣播的接收

Operate in the order shown 按照下列順序操作



- Press the TUNER/BAND button.
- The power is switched on and a band and radio frequency will be shown in the display.
- 2 Select the band.
- 3 Tune to the required station.
- 4 Adjust.

Music Scan 音樂搜尋

- The beginning of the current tune or the next tune can be located using the music scan function.
- 1 Press the > or < button for tape playback.
- 2 Press the >> or << button for music scan.

Forward (>) direction playback (正向放音 (>))	▶ ◀	▶ ◀	▶ ◀
Reverse (< or <>) direction playback (反向放音 (< or <>))	◀ ▶	◀ ▶	◀ ▶

- To the start of the next tune played back.
- Hacia el comienzo de la próxima melodía.
- 下一曲的曲頭

- Para reproducir la cinta presione el botón > o <.
- Para buscar una música presione el botón >> o <<.

- The tape direction indicator blinks twice, repeatedly, during music scanning.
- El indicador de dirección de la cinta parpadeará dos veces, repetidamente, en la búsqueda de la melodía.
- 在樂曲編號時，走帶方向指示燈閃爍兩次。

- La reproducción se inicia automáticamente cuando localiza la canción deseada.
- Para seleccionar o más músicas repita los pasos ① y ② de arriba.

- After loading a cassette tape, simply press the > or < button. The power is switched on and the tape starts playback.
- When the tape plays back, with the reverse mode set to < (single side play) or <> (both sides) 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.

Notes: 注意

Con los siguientes tipos de cinta el mecanismo de búsqueda de música puede no funcionar correctamente. Esto no es una falla; utilice la función de búsqueda de música solo con las cintas adecuadas.

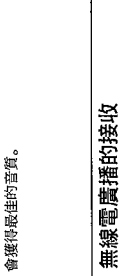
- Cintas con melodías que tienen largos pasajes portentos durante la cinta (partes) o no grabadas.
- Cintas con secciones con ruidos sin grabar.
- Cintas con alto nivel de ruido o zumbido entre melodías.

DOLBY NR system 杜比降噪系統

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

Radio Reception 無線電廣播的接收

Operate in the order shown 按照下列順序操作



- Press the TUNER/BAND button.
- The power is switched on and a band and radio frequency will be shown in the display.
- 2 Select the band.
- 3 Tune to the required station.
- 4 Adjust.

Music Scan 音樂搜尋

- The beginning of the current tune or the next tune can be located using the music scan function.
- 1 Press the > or < button for tape playback.
- 2 Press the >> or << button for music scan.

Forward (>) direction playback (正向放音 (>))	▶ ◀	▶ ◀	▶ ◀
Reverse (< or <>) direction playback (反向放音 (< or <>))	◀ ▶	◀ ▶	◀ ▶

- To the start of the next tune played back.
- Hacia el comienzo de la próxima melodía.
- 下一曲的曲頭

- Para reproducir la cinta presione el botón > o <.
- Para buscar una música presione el botón >> o <<.

- The tape direction indicator blinks twice, repeatedly, during music scanning.
- El indicador de dirección de la cinta parpadeará dos veces, repetidamente, en la búsqueda de la melodía.
- 在樂曲編號時，走帶方向指示燈閃爍兩次。

- La reproducción se inicia automáticamente cuando localiza la canción deseada.
- Para seleccionar o más músicas repita los pasos ① y ② de arriba.

- After loading a cassette tape, simply press the > or < button. The power is switched on and the tape starts playback.
- When the tape plays back, with the reverse mode set to < (single side play) or <> (both sides) 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.

**FM MODE 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 to tune in the nearest station automatically, so the broadcast can be heard.
- **Manual tuning**  
Each time the ◀ or ▶ button is pressed, the unit steps through the current frequency band. Tuning is done in steps of 50 kHz/100 kHz for FM and 9 kHz/10 kHz for AM and 5 kHz for SW.

Press to move to lower frequencies.  
Presione para disminuir la frecuencia.  
按左鍵以朝低的頻率方向移動

**Notes:**

- When seek tuning to the required station is not possible because the broadcast signal is weak, the unit will return to the previous station 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.

**Botón MODE FM (utilizando la unidad de control remoto)**

**Modo automático:**  
Coloquelo en esta posición cuando escucha o graba un programa de radio FM estereofónico. El indicador STEREO se enciende cuando se recibe una radiodifusión estereofónica de FM. MONO:  
Coloquelo en esta posición cuando la recepción estereofónica de FM tenga ruido. Si se sintoniza otra estación en el modo MONO, la unidad ingresa automáticamente en el modo automático.

- **Búsqueda de sintonía**  
Presione el ◀ o ▶ botón durante un segundo o más. La unidad ingresa en el modo de búsqueda de sintonía sintonizando automáticamente la estación más próxima por la que se escucha la radiodifusión.
- **Sintonización manual**  
Cada vez que se presiona el botón ◀ o ▶ la unidad pasa a través de la banda de frecuencia actual. La sintonización es hecha en pasos de 50 kHz/100 kHz para FM, de 9 kHz/10 kHz para AM y 5 kHz para OC.

Press to move to higher frequency.  
Presione para aumentar la frecuencia.  
按右鍵以朝高的頻率方向移動

**註:**

- 當由於廣播電臺的信號太弱不能找到希望的電臺時，請暫時按壓 ◀ 或 ▶ 鍵來進行手動調諧。
- 當將電源鍵設於 STANDBY (待機) 方式，或設於其他方式 (TAPE, CD 或 AUX) 時，最後所收聽的電臺的頻率會被儲存於記憶體裝置中。當再次接通電源，和按壓 TUNER/BAND 鍵時，將會收聽到同一電臺。

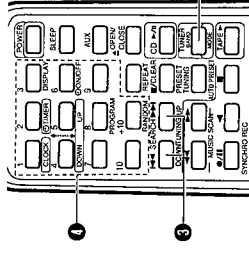
**FM MODE (調頻方式) 鍵 (使用遙控器)**

**自動方式:**  
若要收聽或者收錄 FM 立體聲廣播，可設於此位置。當收到 FM 立體聲廣播時，STEREO 指示燈便會點亮。  
**MONO:**  
FM 立體聲接收機音過大時，請設定於此位置，當用單聲道方式 (MONO) 調入其它的電臺時，本機則自動轉入自動方式。

- **搜尋調諧**  
按壓 ◀ 或 ▶ 鍵一秒鐘或一秒鐘以上。裝置便進入選定調諧方式並自動調諧到最近的一個電臺上，這樣便能聽到廣播。
- **手動調諧**  
每按壓一次 ◀ 或 ▶ 鍵，便會跳過正在收聽的頻率波段。FM, AM, SW 的跳頻頻寬分別為 50 kHz/100 kHz, 9 kHz/10 kHz, 5 kHz。

**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")



- 1 Press the TUNER/BAND button.
- 2 Set the FM band using the TUNER/BAND button.
- 3 Tune to the required station.
- 4 Press preset button "+10", then "5" for more than 2 sec.

- 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 4 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 broadcast, noise may be heard if the remote control unit is used.

**Presintonización de estaciones (utilizando la unidad de control remoto)**

Es posible presintonizar 15 estaciones en cada banda de siguiente forma:  
Ejemplo: (Presintonización de la radiodifusión de una estación de FM en 103.5 MHz en el botón "15" de presintonización)



- 1 Presione el botón TUNER/BAND.
- 2 Seleccione la banda de FM utilizando el botón TUNER/BAND.
- 3 Sintonice la estación deseada.
- 4 Presione el botón "+10" de presintonización y luego el "5" durante más de 2 segundos. (Cuando el "15" parpadea en la indicación de estación presintonizada, ésta ha sido registrada).

- Repita el procedimiento de arriba para cada una de las otras estaciones, utilizando un botón de presintonización diferente para cada estación.
- Repita el procedimiento de arriba para la otra banda.

- **Cambio de estaciones presintonizadas**  
Ejecute el paso 4 de arriba después de sintonizar la estación deseada.

**Notes:**

- La estación previamente almacenada se borra cuando se almacena otra estación, ya que la frecuencia de la nueva estación reemplaza la frecuencia anterior en memoria.
- Cuando escucha una radiodifusión de AM, es posible que se escuche ruido si se utiliza la unidad de control remoto.

**預設電臺 (使用遙控器)**

按照下面所述的順序，各波段可以預設 15 個電臺。  
● 例 (將 FM 103.5 MHz 電臺預設於號碼 "15")

- 1 按壓 TUNER/BAND 鍵。
- 2 用 TUNER/BAND 鍵選擇 FM 波段。
- 3 調諧出您所喜愛的電臺。
- 4 按壓號碼鍵 "+10"，然後按號碼 "5" 2 秒鐘以上。  
(如果預設電臺的顯示器中有 "15" 在閃爍，便說明該電臺已經被存儲完畢)。

- 重複上述步驟，預設其它各個電臺。
- 其它波段的預設也與上述步驟相同。
- 若要更改預設電臺  
調諧出所需要的電臺以後，作上述第 4 步的操作。

**註:**

- 因為新電臺的頻率將會在記憶體內取代以前的電臺頻率，所以當存儲新的電臺時，以前存儲的電臺將會被清除。
- 在收聽 AM 廣播時，如果使用遙控器，那麼，有可能會有噪音。

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.

● Todos las estaciones presintonizadas se borrarán cuando se desconecte el cable de alimentación u ocurra un corte de energía de más de 24 horas. En tales casos almacene las estaciones otra vez.

When listening to an AM broadcast, noise may be heard if the remote control unit is used.

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When listening to

RECORDING

GRABACION

錄音

- Durante la grabación, el circuito ALC (control automático de nivel), optimiza automáticamente los niveles de ganancia de la grabación. No es necesario el ajuste de los niveles de ganancia de la grabación. (Ver página 22)
- Verifique que la lengüeta de seguridad del cassette de cinta no está rota.

**Note:**  
Esta unidad posee características de grabación adecuadas para cintas normales y de CrO<sub>2</sub>. Las cintas normales y CrO<sub>2</sub> tienen características diferentes que las cintas de metal.

**Grabación sincronizada con el reproductor de CD**

- En este sistema el reproductor de CD inicia la reproducción cuando la palina de cassette ingresa en el modo de grabación.

**Synchronized recording with the CD player**

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

- 在錄音期間，ALC (自動電平控制) 電路會將錄音電平調整到最佳水平，因此不需要進行手動錄音電平調節。
- 檢查卡式錄音帶上的錄音保護片是否完好。

**註：**  
本機具有適用於普通錄音帶和 CrO<sub>2</sub> 錄音帶的錄音特性。普通錄音帶和 CrO<sub>2</sub> 錄音帶的錄音特性與金屬帶是不同的。

**用 CD 唱機進行同步錄音**

- 在該系統中，當卡式帶進入錄音狀態時，CD 唱機便開始錄音。

RECORDER

RECORDING

錄音

- 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<sub>2</sub> tapes. Normal and CrO<sub>2</sub> tapes have different characteristics from metal tapes.

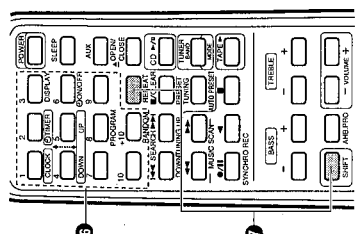
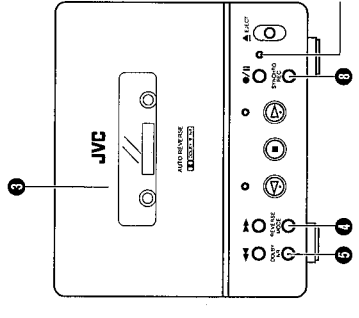
**Synchronized recording with the CD player**

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

**Operate in the order shown**

**Operate in the order shown**

**按照下列順序操作**



- 1 Load a CD and close the CD holder. (The power is switched on).
- 2 Set to the CD mode.
- 3 Load a cassette with side A facing out. (Mind the tape leader before starting recording).
- 4 Select the required reverse mode (← or →).
- 5 Set the DOLBY NR switch as required.
- 6 When programmed play is required, program the required tracks using the remote control. (See page 22).
- 7 Select tracks with a total playing time which does not exceed the tape length.
- 8 When recording a CD in repeat play mode, as required.
- 9 Press the SYNCHRO REC button; the recording starts. (The recording indicator lights up).

- 1 裝入 CD 並關上 CD 托架。(電源接通。)
- 2 設定於 CD 模式。
- 3 裝入一盤卡式錄音帶，讓其 A 面朝外(在開始錄音之前，將錄音帶導入部份繞捲過去)。
- 4 選擇您需要的反向功能(←或→)。
- 5 根據需要設定 DOLBY NR (杜比降噪) 開關。
- 6 根據需要設定 DOLBY NR (杜比降噪) 開關。
- 7 若需要重複錄音，請使用遙控器編排所需的播放時間。
- 8 根據不超過錄音帶長度的總播放時間來選擇曲目。
- 9 在重複播放方式下對 CD 進行錄音，按照要求進行設定。
- 10 按 SYNCHRO REC 鍵，開始同步錄音。(錄音指示燈點亮。)

- La grabación se inicia hacia adelante y se inicia automáticamente la reproducción del CD.

- 錄音以正向走帶開始，並且自動開始 CD 放音。

**Presintonización (Utilizando la unidad de control remoto)**

- Las estaciones deben ser presintonizadas antes de que se pueda ejecutar esta operación.

- 1 Presione el botón TUNER/BAND.
- 2 Seleccione la banda utilizando el botón TUNER/BAND.
- 3 Presione el botón PRESET TUNING para seleccionar la estación presintonizada deseada.
- 4 (o) Presione los botones (No. 1 - No. 10 y +10) de la estación presintonizada deseada.

En el visor, aparecen el número de estación y la frecuencia correspondiente al botón presionado.

**Utilización de antenas (Ver página 7)**

FM/OC: Conecte la balada de antena suministrada.  
AM: Ajuste la posición de la antena de cuatro de AM.

**改變頻道間隔**

本機在出廠的時候，聲道位置功能被設於 (AM-9 kHz)。  
如果在北美洲或南美洲使用本機，請將其設於 (AM-10 kHz) (這可以使 AM 波段的頻率增加 10 kHz, FM 波段的頻率增加 100 kHz)。

**如何更改 (使用主機)**

按壓  $\Delta/\nabla$  鍵將電源  $\Delta/\nabla$  鍵設定於 ON 的位置。(AM-10 kHz) 將會出現在顯示窗里。

- 若要變換回原來的方式，請按壓  $\Delta/\nabla$  鍵將電源  $\Delta/\nabla$  鍵設定到 ON。(AM-9 kHz) 將會出現在顯示窗里。

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**Utilización de antenas (Ver página 7)**

FM/OC: Conecte la balada de antena suministrada.  
AM: Ajuste la posición de la antena de cuatro de AM.

**Cambio de intervalo entre canales**

Cuando esta unidad fue embarcada, el modo de intervalo de canal está ajustado en (AM-9 kHz).  
Coloque en (AM-10 kHz), si la unidad va a ser usada en América del Norte o del Sur. Esto permite incrementos de 10 kHz entre las estaciones AM y incrementos de 100 kHz en frecuencias de FM.

**Operación (utilizando la unidad principal)**

Coloque el botón  $\Delta/\nabla$  en ON presionando conjuntamente el botón  $\Delta/\nabla$  del cassette. (AM-10 kHz) aparece en el visor de indicación.

- Para regresar al modo original, coloque el botón  $\Delta/\nabla$  en ON presionando conjuntamente el botón  $\Delta/\nabla$  del cassette. (AM-9 kHz) aparece en el visor de indicación.

**Pres tuning (Using the remote control unit)**

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

- 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.
- 4 (or) 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 (See page 7)**

FM/OC: Connect the provided leader antenna.  
AM: Adjust the position of AM loop antenna.

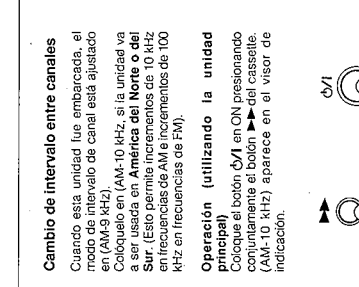
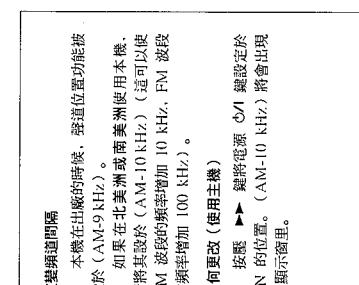
**To change the interval between channels**

When this unit is shipped, the channel interval is set to (AM-9 kHz).  
Set it to (AM-10 kHz) if the unit is to be used in North or South America. This allows 10 kHz increments steps in AM frequencies and 100 kHz increments steps in FM frequencies.

**How to operate (using the main unit)**

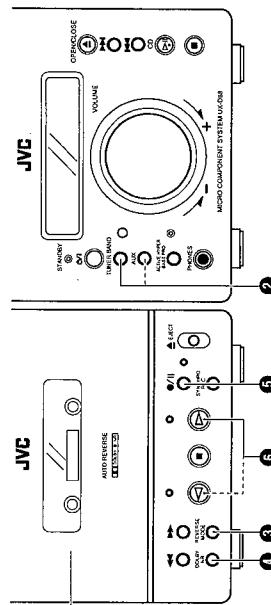
Set the  $\Delta/\nabla$  button to ON while pressing the  $\Delta/\nabla$  button of the deck. (AM-10 kHz) is shown in the display window.

- To change back to the original mode, set the  $\Delta/\nabla$  button to ON while pressing the  $\Delta/\nabla$  button of the deck. (AM-9 kHz) is shown in the display window.



無線電廣播或 (連接於輔助 (AUX) 端子的) 外部聲源的錄音  
按照下列順序操作

Grabación desde el radio o de un external source connected to the AUX terminals  
Operate in the order shown



Recording from the radio or an external source connected to the AUX terminals  
Operate in the order shown

- CD 唱碟播放了 CD 上的全部樂曲或編程樂曲後，卡式帶機構自動停止。
- 在樂曲之間自動留有約 4 秒鐘的不錄音段。
- 若要在中途停止錄音，按壓 CD 唱碟的停止/消除 (■) 鍵。卡式帶機構將在 4 秒鐘後停止。

註：

- 在 CD 同步錄音中，▷ II 和 SEARCH (◀◀◀) 鍵不工作。

當不需要樂曲之間的空白感時...  
① 按幾次 CD 唱碟的 ▷ II 鍵，CD 唱碟進入暫停狀態。  
② 按 SYNCHRO REC 鍵以開始錄音。

註：

- 根據使用的唱片，樂曲之間可能留有一定的間隔。

- CD 完整錄音功能 (僅於同步錄音方式) 如果，在 CD 唱片放置中錄音帶換了面，那麼，樂曲將按照下述情況與方法被製成在另一面上：  
• 如果，第一面上所錄的最後樂曲所錄不滿 12 秒鐘，那麼，第二面上的錄音將從前一首樂曲的曲頭開始。  
• 如果，第一面上所錄的最後樂曲所錄超過 12 秒鐘，那麼，第二面上的錄音將從該樂曲的曲頭開始。

- 按照 CD 上的樂曲順序錄製整盤 CD 唱片  
按以上步驟 ① 至 ⑤ 操作後，在按壓了 ● II 和 ▷ 鍵後按壓 CD 唱碟的 ▷ II 鍵。

- 錄製一首樂曲  
播放要錄音的樂曲。然後按壓 SYNCHRO REC (同步錄音) 鍵尋找樂曲的起始處，並進入單首樂曲錄音方式。錄音結束後，CD 唱碟和卡式帶機構均將停止。

- Después de que el reproductor de CD terminara de reproducir todo el CD o las pistas programadas, la platina se detiene automáticamente. La cinta se detiene automáticamente.
- En los espacios entre canciones, se graba automáticamente sin sonido.
- Para parar la grabación en la mitad, presione el botón (■) paraca/borrado del reproductor de CD. La platina de cassette también para después de transcurridos 4 segundos.

Note:

- Durante la grabación sincronizada de CD, los botones ▷ II y SEARCH (◀◀◀) no funcionan.

Quando non es necesario dejar espacios sin grabar entre músicas...  
① Presione dos veces el botón ▷ II del reproductor de CD. El reproductor ingresará en el modo de pausa.  
② Para iniciar la grabación presione el botón SYNCHRO REC.

Note:

- Dependiendo del CD, utilizado es posible que entre músicas secciones sin grabar de diferentes longitudes.

- Función de grabación del CD completo (modo de grabación sincronizada exclusivamente) Si la cinta es invertida mientras el CD está siendo reproducido, la grabación se efectuara en el lado opuesto de la cinta, de la siguiente manera:  
• Si el tiempo grabado mesos de 12 segundos de la última música en el lado frontal de la cinta, la grabación del otro lado se iniciará desde el principio de la pista anterior.  
• Cuando se hayan grabado más de 12 segundos de la última pista en el lado frontal de la cinta, la grabación del otro lado se iniciará desde el principio de la pista actual.

- Para grabar todas las canciones en el mismo orden que están en el CD Después de finalizar los procedimientos de los pasos ①-⑤ mencionados, presione el botón ▷ II del reproductor de CD luego de presionar los botones ● II y ▷.

- Grabación de una sólo pista Reproduzca la pista a ser grabada. Luego presione el botón (■) paraca/borrado del reproductor de CD y active el modo de grabación de una sólo pista. Después de terminar la grabación, el reproductor de CD y la platina de cassette paran.

- After the CD player has played the entire CD or programmed tracks, the deck stops automatically. The tape stops automatically.
- In the spaces between tunes, no recording is made.
- To stop recording in the middle, press the ■ (stop) button of the CD player. The cassette deck also stops after 4 seconds.

Note:

- During CD synchro recording, the ▷ II and SEARCH (◀◀◀) buttons do not function.

When non-recorded section between tunes is not required...  
① Press the ▷ II button of the CD player twice.  
② Press the 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 12 seconds of the last tune recorded, recording on the other side of the tape will start from the beginning of the previous track.  
• When more than 12 seconds of the last tune 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 ①-⑤ above, press the ▷ II button of the CD player after the ● II and ▷ buttons have been pressed.
- To record one track Play the track to be recorded. Then pressing the SYNCHRO REC button, locates the beginning of the track and enter the recording mode. After the recording is finished, the CD player and cassette deck both stop.

- ① 裝入一盤卡式錄音帶，使其 A 面朝外。  
(在開始錄音之前，將錄音帶的引導部分卷繞過去。)
- ② 選擇錄音的樂源。  
TUNER：按壓 TUNER/BAND (調諧器/波段) 鍵。調入所需電台。

- AUX：按壓 AUX (輔助) 鍵。
- ③ 選擇所需的反向方式 (二或三)。
- ④ 根據所需設定比率噪聲關閉。
- ⑤ 按壓 ● II 鍵 (錄音暫停方式)。
- 錄音帶方向的指示燈閃爍。  
• 功能開關鎖定而且其位置無法改變。
- ⑥ 按壓該鍵開始錄音。

- 若要暫停錄音，按壓 ● II 鍵。要恢復錄音時，對應閃爍著的錄音帶方向指示燈按壓 ▷ 或 ◁ 鍵。

抹音

已錄音的錄音帶可以通過在其上面錄製新的內容來抹消以前的錄音。

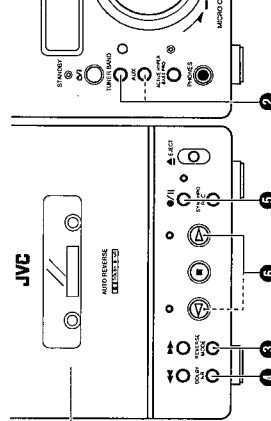
- 若不錄音而抹消原來的內容... 按壓 ■ (停止) 鍵設定於 TAPE (錄音帶) 方式，然後進行錄音。  
(按壓 ● II 鍵後，按壓 ◁ 或 ▷ 鍵。)

註：

抹消錄音帶時，請關閉 DOLBY NR (杜比降噪) 功能。

未經版權所有者的許可而錄製或播放受版權保護的音響資料，可能會觸犯法例。

Operate in the order shown



- ① Coloque un cassette con el lado A apuntado hacia afuera.  
(Bobine hasta pasar extremo no grabable de la cinta antes de iniciar la grabación).
- ② Seleccione la fuente a ser grabada. TUNER: Presione el botón TUNER/BAND. Sintonice la estación deseada.

- AUX: Presione el botón AUX.
- ③ Seleccione el modo de inversión deseado (二 o 三).
- ④ Coloque el conmutador Dolby NR como lo indica el indicador de dirección de la grabación.
- ⑤ Presione el botón ● II (modo de pausa de grabación).
- El indicador de la dirección de la cinta parpadeará.
- El conmutador de función queda bloqueado y la posición del mismo no puede ser cambiada.
- ⑥ Presione para comenzar la grabación.

- Para detener temporalmente la grabación, presione el botón ● II. Para continuar con la grabación, presione el botón ▷ o ◁ correspondiente a la dirección de la cinta que está destellando.

Borrado

La cinta grabada puede ser borrada grabando otro material sobre el material anterior.

- Para borrar una cinta sin efectuar una nueva grabación... Presione el botón ■ (parad) para activar el modo TAPE, luego elctue la grabación. (Después de presionar el botón ● II presione el botón ◁ o ▷)

Note:

Cuando borra una cinta, desconecte el DOLBY NR.

Puede ser ilegal el grabar o reproducir material con derechos de autor, sin el consentimiento del dueño de los mismos.

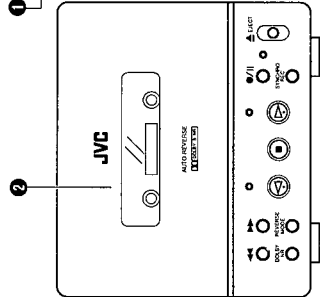




**Timer recording of broadcast**

- 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**



- Set the  $\odot$ /I button to ON.
- Load a cassette.
  - Insert the cassette with the side to be recorded facing out.
  - Set the reverse mode button to "R" or "L" and set the DOLBY NR button as required.
- Set the timer. (Refer to "Setting the timer" on page 35.)
- Tune to the station to be recorded. (Refer to page 26.)
- Set the  $\odot$ /I button to STANDBY.

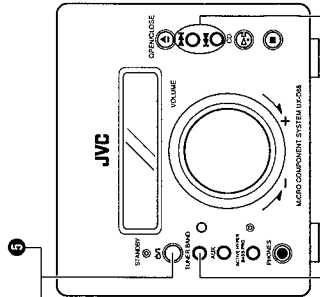
- Timer recording will start at timer start time and the power will be switched off at timer stop time. (The timer mode is then released)
- To cancel timer operation Press the timer  $\odot$ /I ON/OFF button while the mode indicator  $\odot$  goes out.

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

**Grabación por temporizador de una radiodifusión**

- Antes de utilizar el temporizador es necesario ajustar la hora actual.
- Asegúrese de que las lengüetas de seguridad del cassette no estén rotas.

**Operaciones**



- Coloque el botón  $\odot$ /I en ON.
- Coloque un cassette.
  - Insértese el cassette con el lado a ser grabado apuntando hacia afuera.
  - Coloque el botón de modo de inversión en "R" o en "L" y ajuste el botón DOLBY NR como desee.
- Ajuste el temporizador. (Referéase a "Ajuste el temporizador" en la página 35.)
- Sintonice la estación de radio que desea grabar. (Referéase a la página 26.)
- Coloque el botón  $\odot$ /I en STANDBY.

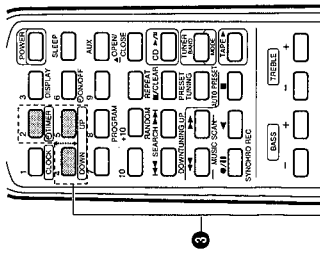
- La grabación por temporizador se iniciará a la hora de activación del temporizador y el poder será desactivado a la hora de parada del temporizador. (Luego se desactiva el modo de temporizador.)
- Cancelación de la operación por temporizador Presione el botón  $\odot$ /I ON/OFF al mismo tiempo que presiona el botón SHIFT para borrar el  $\odot$  indicador de modo de temporizador  $\odot$ .

Si usted hace esto, la grabación por temporizador no se iniciará a la hora de activación del temporizador.

**無線電廣播的定時錄音**

- 只有先設定了現在時間，定時器才可以使用。
- 確認一下錄音帶上的防護溝的錄音保險片是否在。

**操作**



- 按壓  $\odot$ /I 鍵，接通電源。
- 裝入錄音帶。
  - 裝入錄音帶時，讓要錄音的一面朝外。
  - 設定反向功能鍵為 "R" 或 "L"，並且根據需要按壓 DOLBY NR 鍵。
- 設定定時器。 (參見第 35 頁上的 "設定定時器"。)
- 將定時器設定得比要錄音的無線電廣播開始時間約早 1 分鐘。
- 調諧出要錄音的廣播電臺 (參見第 26 頁)。
- 按壓  $\odot$ /I 鍵，選擇 STANDBY (待機) 狀態。

- 定時錄音將於定時器開始時間開始，並且電源將於定時器停止時間關閉。(退出定時方式)
- 若要取消定時器操作 在按住 SHIFT (換檔) 鍵的同時按壓定時器  $\odot$  (ON/OFF (開/關) 鍵，使定時器方式指示燈  $\odot$ ) 消失。

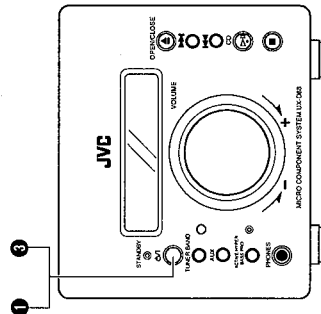
如果您作了這一項操作，那麼在定時開始的時間裡不會開始定時錄音。

- Notes:**
- Only 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.
  - Alter 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**



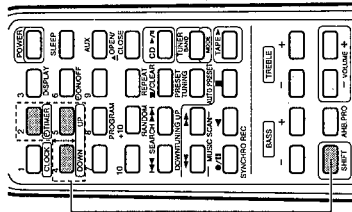
- Set the  $\odot$ /I button to ON.
- Set the timer. (Refer to "Setting the timer" on page 35.)

- Notes:**
- Una vez ajustado el temporizador, la hora de operación, etc. se almacenan en la memoria. Cuando se desee efectuar una grabación o reproducción por temporizador a horas diferentes, es necesario ajustar otra vez el temporizador.
  - Después de ajustar la hora de activación y verifique que el sintonizador está sintonizado en la frecuencia deseada.
  - Si se desconecta el cordón de alimentación o ocurre un corte de energía, los ajustes del temporizador se borrarán de la memoria. Si esto ocurre, ajuste la hora actual y ajuste al temporizador otra vez.

**Reproducción por temporizador**

- La reproducción por temporizador de cintas, radiodifusiones, y CD es posible.

**Operaciones**



- Coloque el botón  $\odot$ /I en ON.
- Ajuste el temporizador. (Referéase a "Ajuste el temporizador" en la página 35.)

- 註：**
- 一旦設定了定時器，開始時間、停止時間等便儲存在於記憶裝置中。如果欲在不同時間進行定時錄音或定時播放，那麼就需要重新設定定時器。
  - 待定時開始與定時停止的時間設定完畢以後，請檢查調諧器是否按設定在需要的廣播頻上。
  - 如果電源線從電源插座脫離或者發生停電，那麼，儲存在於記憶裝置中的定時設定將被抹消。如果發生這種情況，請重新設定現在時間並重新作定時設定。

**定時播放**

- 可以作錄音帶、無線電廣播以及 CD 唱片的定時播放。

**操作**

- 按壓  $\odot$ /I 鍵，接通電源。
- 設定定時器。(參見第 35 頁上的 "設定定時器"。)

Source saved Fuente de sonido 要錄的錄音	Timer mode Modo de temporizador 定時狀態	Operations Operaciones 操作
CD playback Reproducción de CD CD 收音	CD CD CD	Load a disc. 裝入唱片 Load a cassette tape. 裝入卡式錄音帶
Tape playback Reproducción de una cinta 錄音帶收音	TAPE TAPE TUNER	Coboque una cinta de cassette. 調到所需電臺
Broadcast Radiodifusión 電臺廣播	TUNER TUNER	Tune to the required station. Sintonice la estación deseada.

- Set the  $\odot$ /I button to STANDBY.
- Coloque el botón  $\odot$ /I en 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(s). If 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 (Ⓞ) ON/OFF button while pressing the SLEEP button so that the timer mode indicator (Ⓞ) goes out.

**Notes:**

- When the volume setting is set to "VOL -" (volume level is not specified), the timer playback volume is set to the level used before setting the timer.
- To stop during timer playback, press the Ⓞ/1 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.
- Press the Ⓞ/1 button to switch the power off or press the SLEEP button until the sleep time indicator disappears.

- La reproducción por temporizador se iniciará a la hora de activación del temporizador y la alimentación se desconecta a la hora de desactivación del temporizador.  
La unidad permanece en el mismo modo de temporizador aun después de desconectar la alimentación. La misma función se repite a la misma hora el día siguiente.  
• Cuando se conecta la alimentación es posible hacer que el sonido aumente gradualmente desde el volumen 0 (cero) a la volumen actual.

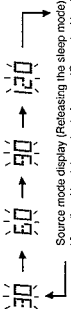
- Cancelación de la operación por temporizador  
Presione el botón (Ⓞ) ON/OFF al mismo tiempo que presione el botón SLEEP para borrar el indicador de modo de temporizador (Ⓞ).

**Notes:**

- Cuando se ajusta el volumen en "VOL -" (el nivel de volumen no está especificado), el volumen de reproducción por temporizador permanece en el nivel usado antes del ajuste del temporizador.
- Para parar durante la reproducción por temporizador, presione el botón Ⓞ/1 para desconectar la unidad.

**Operación del temporizador de desconexión (utilizando la unidad de control remoto)**

- A. Utilícelo cuando desee dormir mientras escucha una cinta, radiodifusión o CD.
- ① Ajuste la fuente deseada y sintonice (radiodifusión) o reproduzca (CD o cinta).
  - ② Presione el botón SLEEP para ajustar el tiempo que va a dormir.



- Los ajustes de tiempo para dormir pueden ser 30, 60, 90 o 120 minutos. Cuando usted suelta el botón SLEEP, la fuente se muestra después de que hayan transcurrido 5 segundos.

- Después de transcurrido el tiempo especificado se activa el temporizador de desconexión y la alimentación es desconectada.
- Verificación del tiempo para dormir  
Cuando presiona el botón SLEEP aparece la indicación del tiempo restante. Si lo presiona una vez más, puede establecer un nuevo período para dormir.
- Cancelación del temporizador de desconexión  
Presione el botón Ⓞ/1 para desconectar la alimentación o presione el botón SLEEP hasta que el indicador del tiempo para dormir desaparezca.

- 定時播放將於定時器開始時間開始，並且電源將於定時器停止時間斷開。  
即使電源斷開以後，該定時設定仍將被儲存於記憶裝置中，第二天將於同樣的時間重複同樣的定時功能。  
• 當接通電源時，聲音可能從音量電平漸次增強至預設的聲音。

- 若要取消定時器操作  
在按往 SHIFT (換檔) 鍵的同時按壓定時器 (Ⓞ) ON/OFF (開/關) 鍵，使定時器方式指示燈 (Ⓞ) 消失。

**註:**

- 當音量設於 "VOL -" (未指定音量電平) 時，定時播放的聲音為設定定時器之前的音量。(在這種情況下，淡入方式不起作用。)
- 若要在定時播放中停止播放，請按壓 Ⓞ/1 鍵，關閉設備。

**睡眠定時器的操作 (使用遙控器)**

- A. 當您欲邊聽錄音或者 CD 唱片、無線電廣播邊進入夢鄉時，可使用此功能。
- ① 設定您聽取的聲源和曲目或播音 (CD 或錄音帶)。
  - ② 按壓 SLEEP 鍵，以設定睡眠時間。

- 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 35.)
  - ② Press the required source (broadcast, tape or CD).
  - ③ Press the SLEEP button to set the sleep time.



Source mode display (Releasing the sleep mode)  
Visualización del modo de fuente (Cancelación del modo de desconexión)  
按源方式指示 (解除睡眠方式)

- Para las operaciones del temporizador de desconexión y para reproducción por cualquier fuente. Por ejemplo:
  - Reproducción de CD para la operación por temporizador de desconexión y recepción de radiodifusión para la reproducción por temporizador.
  - Reproducción de cinta para la operación del temporizador de desconexión y reproducción de CD para la reproducción por temporizador.

Sin embargo, cuando se selecciona la recepción de radiodifusión tanto para el temporizador de desconexión como para la reproducción por temporizador, la estación que usted escucha durante la noche será sintonizada a la mañana siguiente.

- B. Para dormir mientras escucha una cinta, radiodifusión, o CD y para efectuar la reproducción por temporizador la mañana siguiente
- ① Ajuste el temporizador. (Véase en "Ajuste del temporizador" en la página 35.)
  - ② Presione la fuente deseada (radiodifusión, cinta o CD).
  - ③ Presione el botón SLEEP para ajustar la hora de desconexión del temporizador.



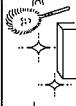
Source mode display (Releasing the sleep mode)  
Visualización del modo de fuente (Cancelación del modo de desconexión)  
按源方式指示 (解除睡眠方式)

- 睡眠定時以及定時播放的聲源可任意選擇。比如:
  - 定時播放 CD 唱片，定時播放電廣播。
  - 睡眠定時播放錄音，定時播放 CD 唱片。

但是，如果睡眠定時以及定時播放的聲源都選擇了電臺廣播，那麼，第二天早晨的電臺就是您前一天晚上所聽的電臺。

**MAINTENANCE**

**MANTENIMIENTO**



- 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 several hours of use for optimal recording conditions.

- La limpieza es importante!  
Cuando la cinta está girando, el polvo magnético y el polvo se acumulan naturalmente en las cabezas, cabrestante y rodillo de presión. Cuando están muy sucios...  
• La calidad de sonido se deteriora.  
• El nivel de salida de sonido se reduce.  
• Las cintas grabadas no se borran completamente.  
• La grabación no se realiza satisfactoriamente. Por lo tanto, usted debe limpiar las cabezas, etc. después de 0 horas de uso para obtener condiciones de grabación óptimas.

**保養**

- 清潔工作是極為重要的!  
當錄音帶走帶的時候，磁粉、灰塵自然會積蓄在磁頭、主導軸以及壓帶輪上。當這些部件太污穢時...  
• 音質低落  
• 音量下降  
• 以前錄制的錄音不能完全消去  
• 錄音不理想  
因此，每使用 10 個小時就該清洗磁頭等，這樣，您的錄音就會完美無憾。



**TROUBLESHOOTING**

**DETECCION DE PROBLEMAS**

**故障的檢查與排除**



**清洗磁頭、主導軸以及壓帶輪**

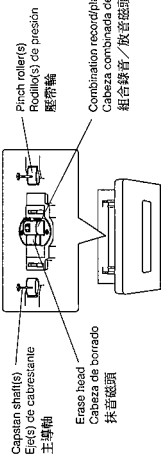
打開錄音帶箱。  
清洗磁頭、主導軸以及壓帶輪。  
音響設備商店有整套清洗工具出售。使用這種清洗工具便能清洗得乾淨。  
清洗以後，須待清洗液完全乾了才可放入錄音帶。

**Limpeza de las cabezas, cabrestante y rodillo de presión**

Abra el portacasete.  
Limpie las cabezas, el rodillo de presión y el cabrestante.  
Para una limpieza efectiva, utilice un conjunto de limpieza disponible en cualquier tienda de electrónica.  
Después de la limpieza, asegúrese de que el líquido para la misma se haya secado completamente antes de colocar un cassette.

**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 heat eraser (available from an audio store). (When demagnetizing the head, do not use anything other than alcohol for cleaning.)  
2. Thinners and benzene will damage the rubber pinch roller.

**Precauciones:**

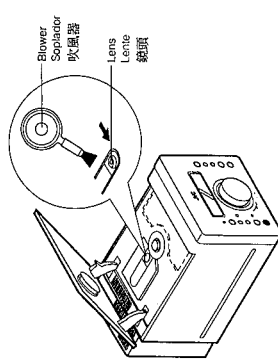
1. Mantenga los imanes y los objetos metálicos lejos de la cabeza.  
Si la cabeza se magnetiza, el ruido aumentará y el sonido se deteriorará. Desmagnetice la cabeza cada 20-30 horas de uso con un desmagnetizador de cabezas (disponible en cualquier tienda de audio). (Cuando desmagnetice la cabeza, no utilice nada más que alcohol para limpiar.)  
2. Para limpiar la bencina o cualquier otro producto que no sea alcohol.  
El diluyente y la bencina dañarán el rodillo de presión de goma.

**注意事項：**

1. 切勿讓磁鐵、金屬物接近磁頭。如果磁頭磁化了，聲音將會變差，錄音將會失真。每使用 20 至 30 小時以後，請用磁頭消磁器（於音響設備商店有售）給磁頭消磁。（給磁頭消磁的時候，必須按標 心/1 號將其認於 STANDBY（待機）的位置。）  
2. 清洗劑僅限於酒精，其它一概不可使用。如果應用稀釋劑、汽油，將會損壞橡膠製的壓帶輪。

**Cleaning the lens**

If the lens in the CD pickup is dirty, dropout, etc., occurs during sound recording, the lens as shown in the CD holder and clean the lens as shown.  
● Use a blower (available from a camera store) to blow dust off the lens.  
● If there are fingerprints, etc. on the lens, gently wipe clean with a cotton swab.



**清潔鏡頭**

如果在 CD 拾音器中的鏡頭斷了、脫落等，將會使音質變差。  
如圖所示打開 CD 托架並清潔鏡頭。  
● 用氣吹（在照相機商店可以買到）來吹掉鏡頭上的灰塵。  
● 如果鏡頭上有指印等，請用棉花棒輕輕其擦掉。

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

- 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?

**Cassette Deck Section**

- Playback sound is at a very low level.  
Is the head dirty?  
The tape 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 (C) displayed?

**Remote Control**

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

**Note:**

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

**Notes:**

Antes de eleccion una grabacion importante, aseguresse de hacer una grabacion de prueba para verificar que la platina, etc. este funcionando correctamente.

並非所有問題都是嚴重的。  
首先檢查一下...  
● 電源無法接通。  
● 電源線的插頭是否插好了？  
● 揚聲器發音聲音。  
● 是否有耳機插著？

**CD 唱機部分**

- CD 唱機沒有聲音。  
● 唱片應該朝上的一面是否朝下放了？  
● 唱片是否倒置了？  
● 唱片是否有污損？

**卡式磁帶部分**

- 收音的聲音極低。  
● 磁頭是否污損了？  
● 磁帶是否發霉了？  
● 磁帶的安全插片是否斷了？

**調諧部分**

- 收音有雜音。  
● 嘗試天線。

**定時器部分**

- 定時器不啟動。  
● 定時時間的設定是否正確？  
● 現在時間的設定是否正確？  
● 定時功能的指示 (C) 是否被顯示出來了？

**遙控器**

- 遙控器不靈。  
● 遙控器電池是否耗盡？  
● 遙控器電池是否受強光照射（直射陽光等）？

**註：**

若要作重要的錄音，在此之前請務必作一次試錄，以便檢查卡式磁帶的工作狀況是否良好。

**SPECIFICACIONES**

**規格**

**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
- Dynamic range : 90 dB
- Wow & flutter : Less than measurable limit

**Radio section**

- Frequency range : FM 87.5-108 MHz (with channel interval set to AM 9 kHz)
- AM 530-1,710 kHz (with channel interval set to SW 2,321.85 MHz)
- Loop antenna for AM/SW (2.3-6.995 MHz)
- External antenna terminal for AM (7.5-21.85 MHz)
- External antenna terminal for SW (21.85 MHz)

**Sección del reproductor de CD**

- Tipo : Reproductor de discos compactos
- Sistema de detección de señal :lector óptico sin contacto
- Número de canales : 2 canales
- Respuesta de frecuencia : 20 Hz - 20.000 Hz
- Relación señal-ruido : 90 dB
- Fluctuación y tembloración : Menor que el límite medible

**Sección de la radio**

- Sección de la radio : FM 87,5 - 108 MHz (con intervalo de canal de AM 9 kHz)
- AM 530-1.710 kHz (con intervalo de canal de AM 2.321.85 MHz)
- Antena en bucle para AM/SW (2.3-6.995 MHz)
- Terminal de antena externa para AM (7.5-21.85 MHz)
- Terminal de antena externa para SW (21.85 MHz)

**CD 唱機部分**

- 類型：小型雷射唱機
- 信號檢測：無接觸光學
- 聲道：雙聲道
- 頻率範圍：20 Hz ~ 20,000 Hz
- 信噪比：90 dB
- 失調度：小於可測限度

**無線電收音機部分**

- 頻率範圍：FM：87.5 ~ 108 MHz  
AM：531 ~ 1,602 kHz (頻道間隔設定於 AM 9 kHz)  
AM：530 ~ 1,710 kHz (頻道間隔設定於 AM 10 kHz)  
SW：2.3 ~ 21.85 MHz  
用於 AM/SW 的環形天線  
用於 FM (7.5 MHz/SW (7 ~ 21.85 MHz)) 的外接天線端子

UX-D88U/UB/US/UT MICRO COMPONENT SYSTEM  
SISTEMA DE MICROCOMPONENTES  
小型組合音響設備



VNN9306-111M

**JVC**  
VICTOR COMPANY OF JAPAN, LIMITED

**Tape deck section**  
Track system : 4-track, 2-channel stereo  
Motor : Electronic governor DC  
Heads : Hard permalloy head for recording/playback, 2 gap ferrite head for erasure (Combination head)  
Frequency response : 40~17,000 Hz (Wm C/Os)  
Wow & flutter : 0.15% (WRMS)  
Fast wind time : Approx. 130 sec. (C-60 cassette)

**Speaker Section (each unit)**  
Sensitivity (Impedance) : Dual: 10 cm (Woofer) (8 Ω), 5 cm (Tweeter) (4 Ω)  
Dimensions : 155 (W) x 258 (H) x 231 (D) mm  
Weight : Approx. 2.8 kg

**General**  
Power output : 50 W (25 W + 25 W) at 4 Ω (Max.)  
Input terminals : (Max.) 1 (500 mV/56 kΩ) MIXING MIC (3.5 mm dia, mini jack) (Matching impedance 4 Ω - 16 Ω) LINE OUT (600 mV/4.9 kΩ) (Impedance 16 Ω - 1 kΩ) SPEAKER (Matching impedance 4 Ω - 16 Ω) AC 110V/27230V, 50/60 Hz (UX-D88 U/UB/US) 90 W (with  $\Delta$ /button ON) 2.5 W (with  $\Delta$ /button STANDBY)  
Power requirements : 593 (W) x 258 (H) x 274 (D) mm, including knobs  
Weight : Approx. 10.2 kg  
Accessories provided : Remote control unit (RM-FXUB88) x 1 "R6/AA" (15F) batteries x 2 (included) (1.55 V) (1.55 V) (1.55 V) Loop antenna stand x 1 Speaker cord x 2 AC plug adapter x 1 (UX-D88 U/US/UT)

**Design and specifications are subject to change without notice.**

**Sección de la pila de cinta**  
Sistema de pistas : 4 pistas, 2 canales estéreo  
Motor : Gobernador electrónico DC  
Cabezas : Cabeza de aleación dura para grabación/reproducción, cabezas de ferrita de doble entrehierro para borrado (Cabeza combinada)  
Respuesta de frecuencia : 40-17.000 Hz (con cinta de C/O2)  
Fluctuación y tiempo de bobinado rápido : 0.15% (WRMS) 130 seg. aprox. (cassette C-60)

**Sección de altavoces (cada unidad)**  
Altavoces (impedancia) : Dos altavoces de graves de 10 cm (8 Ω), altavoz de agudos de 5 cm (4 Ω) (Max.) 1 (500 mV/56 kΩ) MIXING MIC (3.5 mm dia, mini jack) (Matching impedance 4 Ω - 16 Ω) LINE OUT (600 mV/4.9 kΩ) (Impedancia de 16 Ω - 1 kΩ) Salida de línea (LINE OUT) (500 mV/4.9 kΩ) (Impedancia de 16 Ω - 1 kΩ) Altavoz (SPEAKER) (Impedancia de 4 Ω - 16 Ω) Salida de línea (LINE OUT) (500 mV/4.9 kΩ) (Impedancia de 16 Ω - 1 kΩ) Soporte de antena de CA x 1 (UX-D88 U/US/UT)

**Requisitos de alimentación**  
Consumo de energía : 593 (W) x 258 (H) x 274 (D) mm, incluyendo los accesorios suministrados

**Dimensiones**  
Pulsos : 10.2 kg. aprox.  
Peso : 10.2 kg. aprox.  
Accesorios suministrados : Cable de corriente alterna x 1 "R6/AA" (15F) x 2 (para el controlador remoto) x 1 Soporte para la antena de cuadro x 1 Cordón de altavoz x 2 Adaptador de enchufe de CA x 1 (UX-D88 U/US/UT)

**Design y especificaciones sujetos a cambio sin aviso.**

**卡式磁帶部分**  
磁軌方式 : 4 軌軌, 雙聲道立體聲  
馬達 : 轉軸用電子式直流馬達  
磁頭 : 用於錄音/放音的硬質合金磁頭, 用於消音的 2 間隙磁頭  
頻率響應 : 40~17,000 Hz (C/O: 錄音帶)  
抖動度 : 0.15% (WRMS)  
快進時間 : 約 130 秒鐘 (C60 卡式錄音帶)

**揚聲器部分 (兩側相同)**  
揚聲器 : 雙 10 cm (低音) (8 Ω), 5 cm (高音) (4 Ω)  
尺寸 : 155 (寬) x 258 (高) x 231 (深) mm  
重量 : 約 2.8 kg

**總合**  
輸出功率 : 50 W (25 W + 25 W) 於 4 Ω (最大)  
輸入端子 : 輔助輸入 (AUX IN) (500 mV/56 kΩ) 麥克風 (MIXING MIC) (直徑 3.5 mm, 微型插頭) (匹配阻抗 200 Ω~2 kΩ) 耳機 (PHONES) (輸出電壓: 0~10 mV/插頭: 32 Ω, 匹配阻抗: 16 Ω~1 kΩ) 揚聲器 (匹配阻抗 4 Ω~16 Ω) LINE OUT (線路輸出) (500 mV/4.9 kΩ) OPTICAL DIGITAL OUT (光學數字輸出) 電源要求 : AC 110V/27230 V, 50/60 Hz 耗電量 : 40 W (於  $\Delta$ /鍵 ON 時) (UX-D88U/UB/US 型) 90 W (於  $\Delta$ /鍵 ON 時) (UX-D88UT 型) 2.5 W (於  $\Delta$ /鍵 STANDBY 時)

**體積** : 593 (寬) x 258 (高) x 274 (深) mm (包括殼)  
**重量** : 約 10.2 kg  
**附件** : 交流電源線 x 1 遙控器 (RM-FXUB88) x 1 電池 "R6/AA (15F)" x 2 (用於遙控器) 揚聲器線 x 1 環形天線座 x 2 插頭轉換器 x 2 AC 插頭轉換器 x 1 (UX-D88 U/US/UT 型)

設計以及規格若有變更, 恕不另行通知。

地區簡稱  
UB ..... 香港  
US ..... 新加坡  
UT ..... 檳城  
U ..... 其它地區

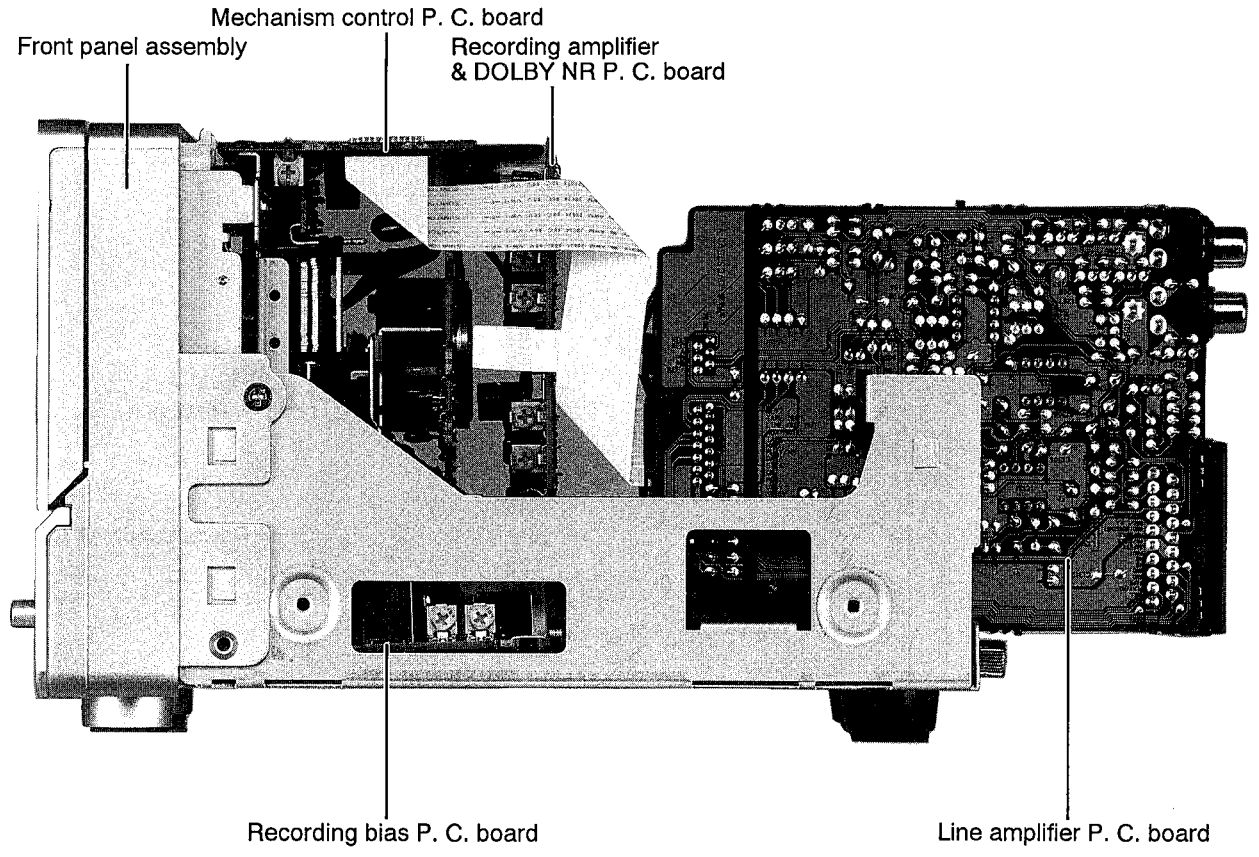
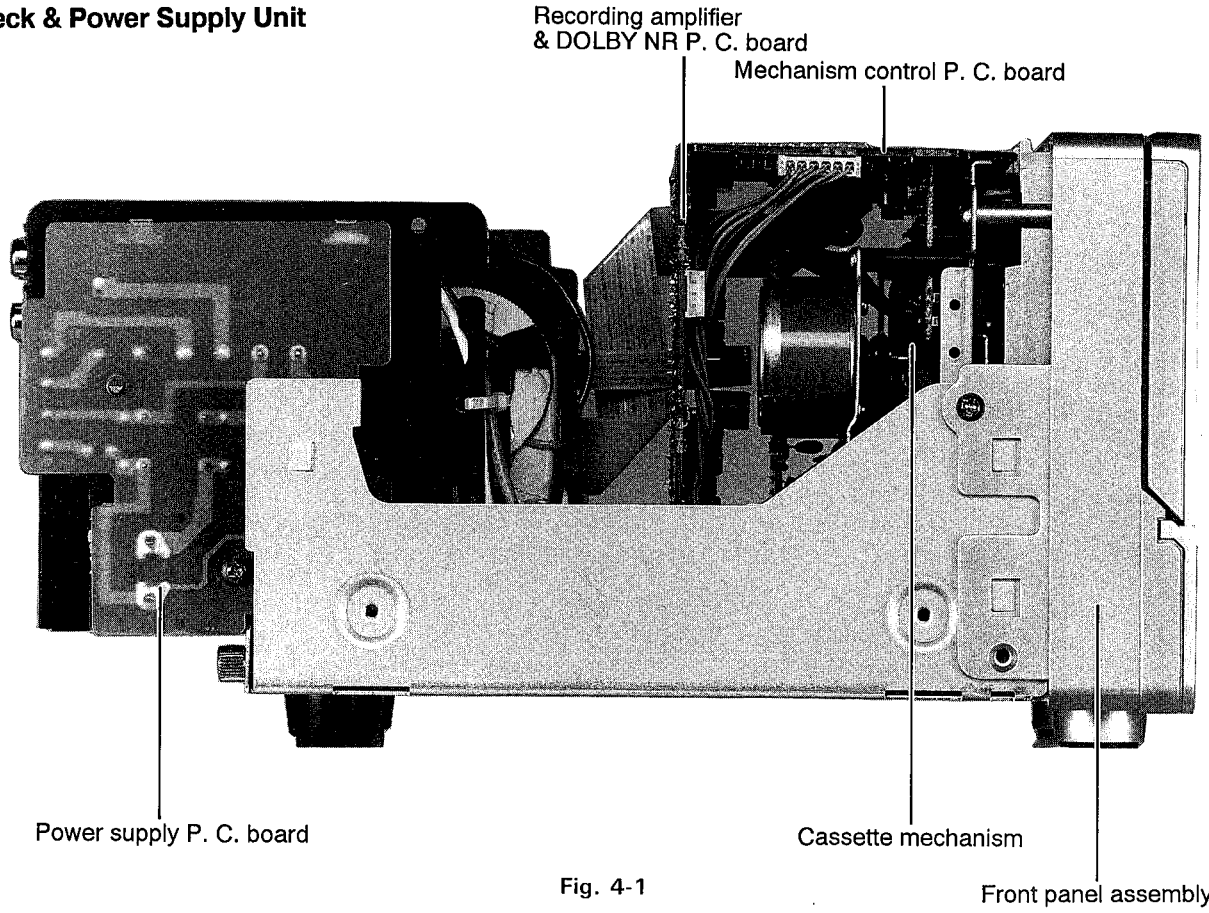
Surf de área  
UB ..... Hong Kong  
US ..... Singapore  
UT ..... Formosa  
U ..... Otros países

Area suffix  
UB ..... Hong Kong  
US ..... Singapore  
UT ..... Formosa  
U ..... Other areas

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# 4. Location of Main Parts

## ■ Deck & Power Supply Unit



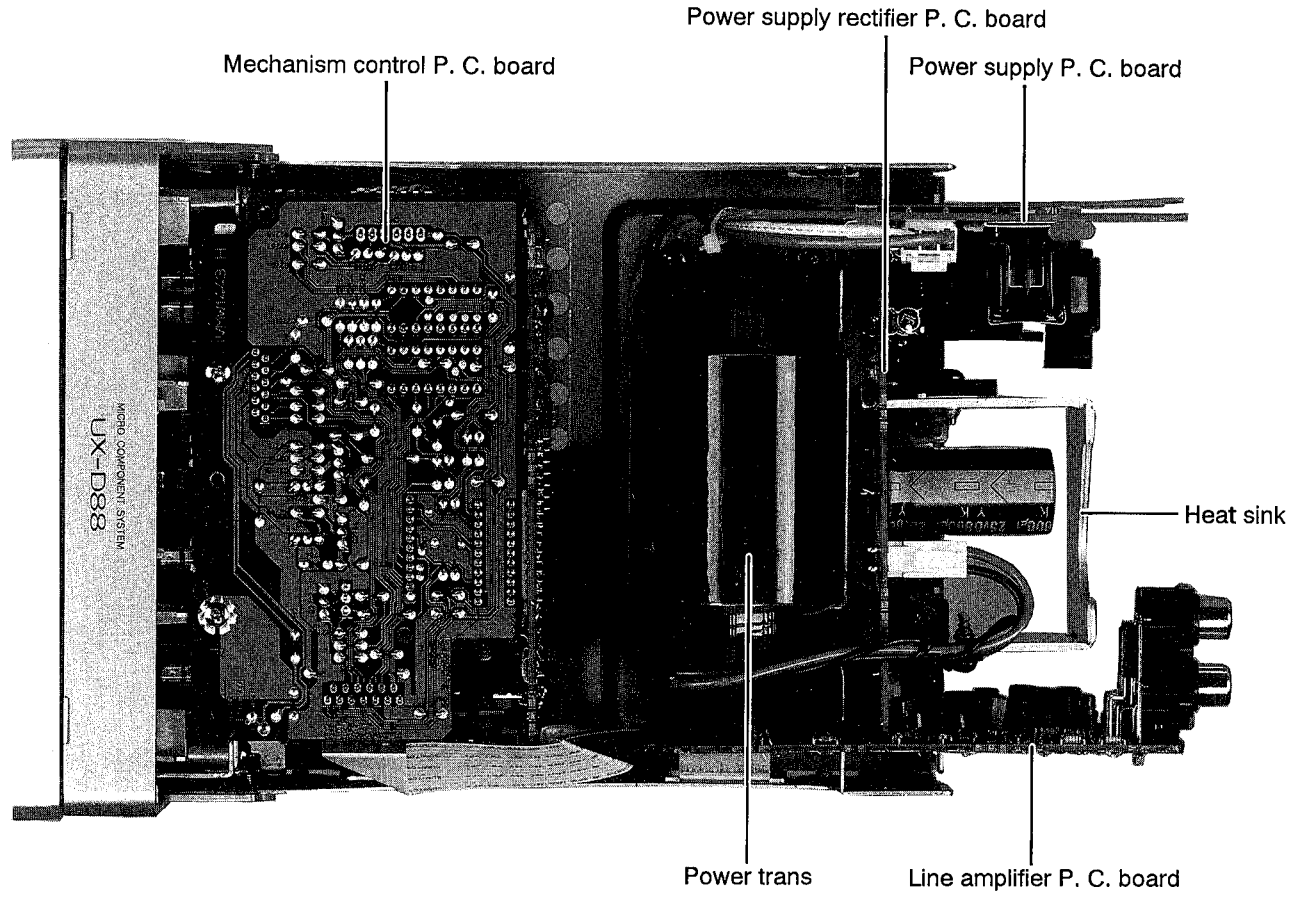


Fig. 4-3

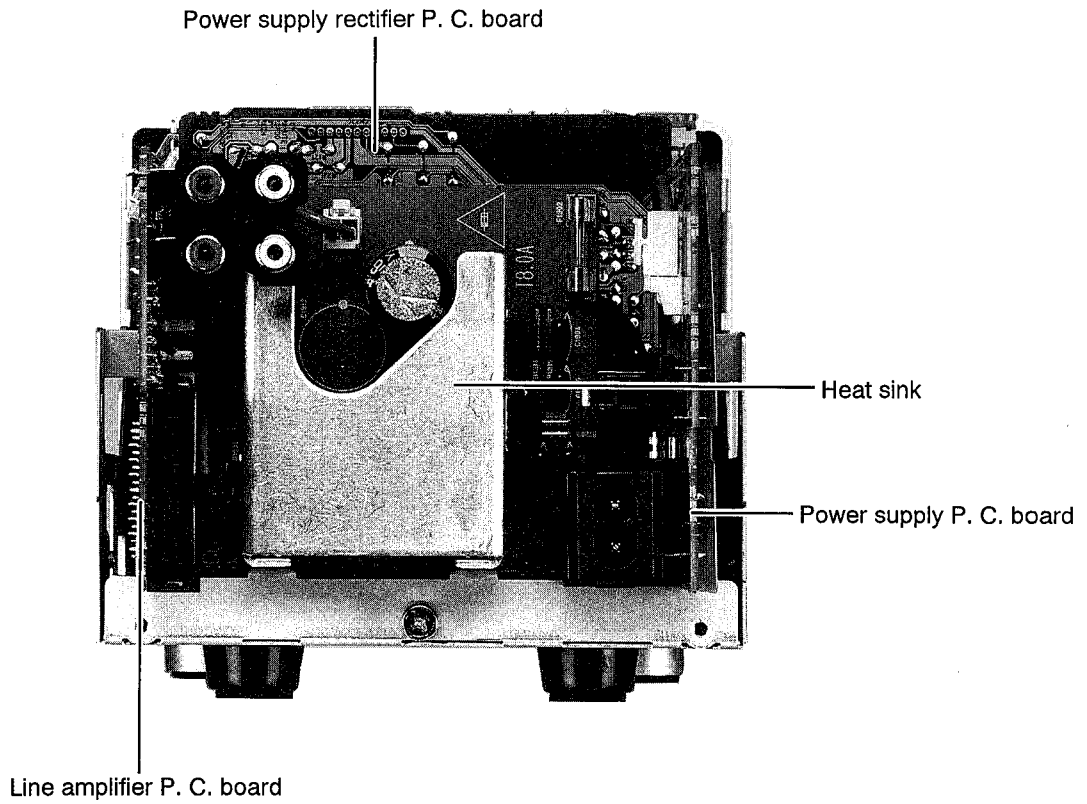
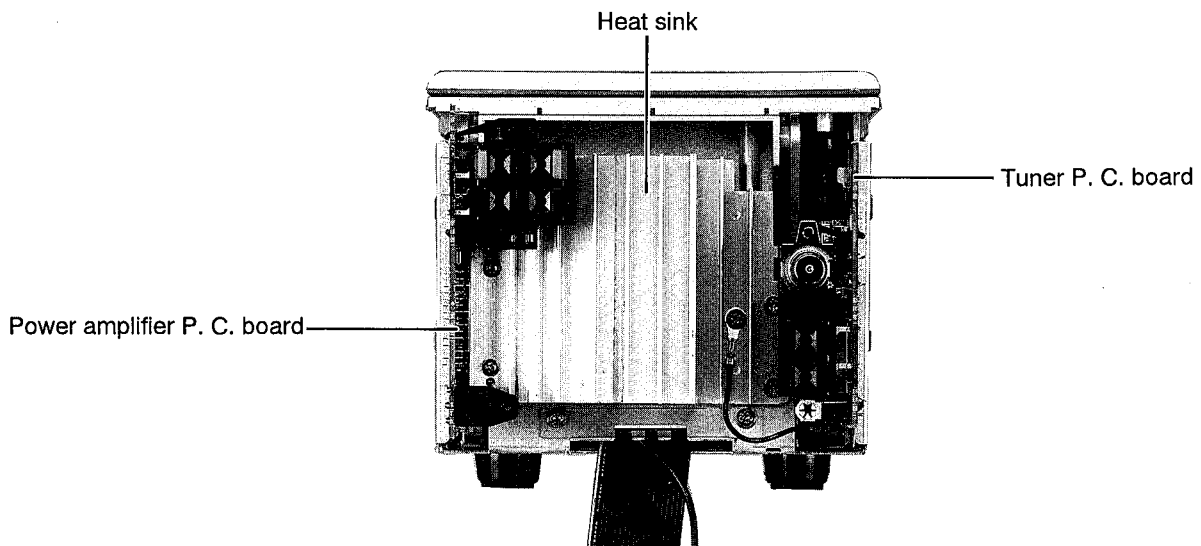
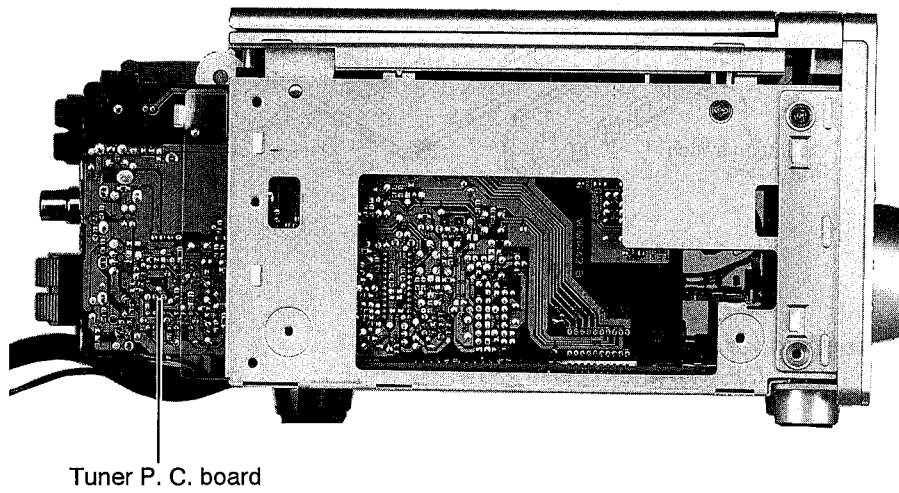
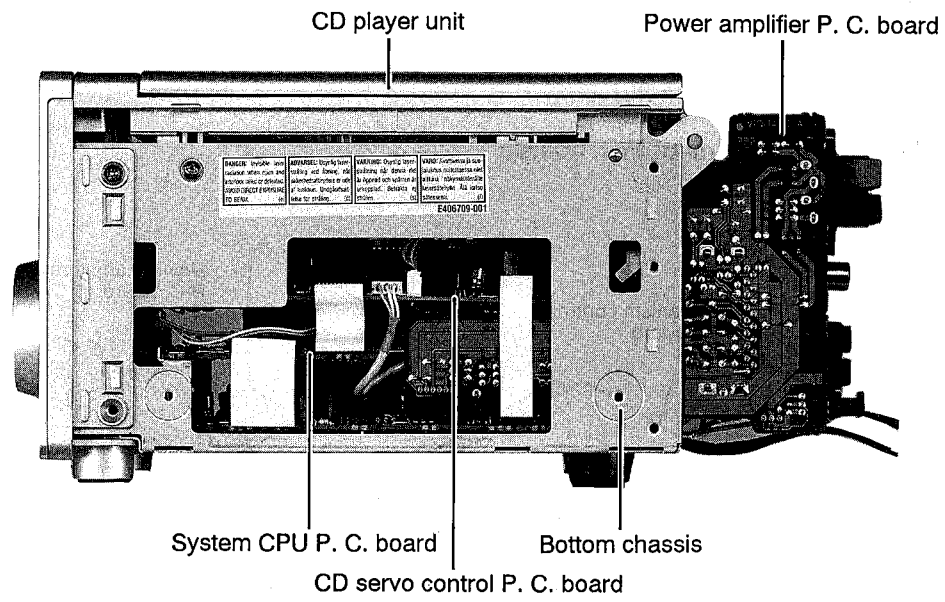


Fig. 4-4

■ CD/ Tuner & Amplifier Unit



# 5. Removal of Main Parts

## 《Deck and Power Supply Unit》

### ■ Arrangement and designations of P.C. boards

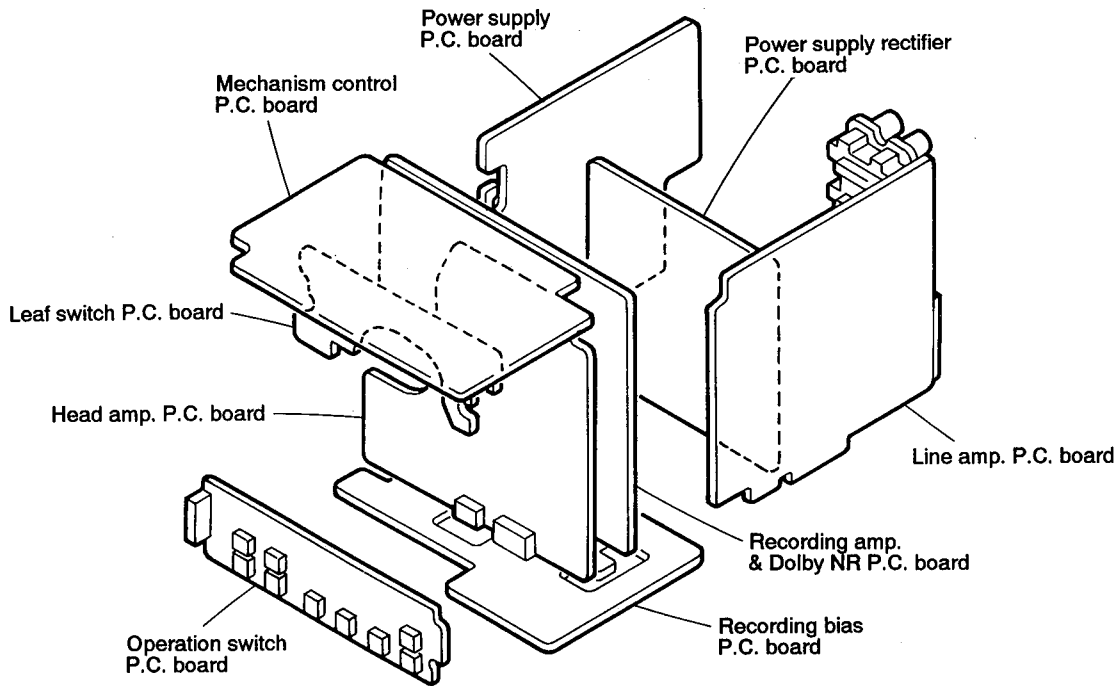


Fig. 5-1

### Armor Section

#### ■ Removing the cassette door cover (See Fig. 5-2)

1. While pressing down the [EJECT] lever, open the cassette door.
2. Remove the door cover while pulling it upward.

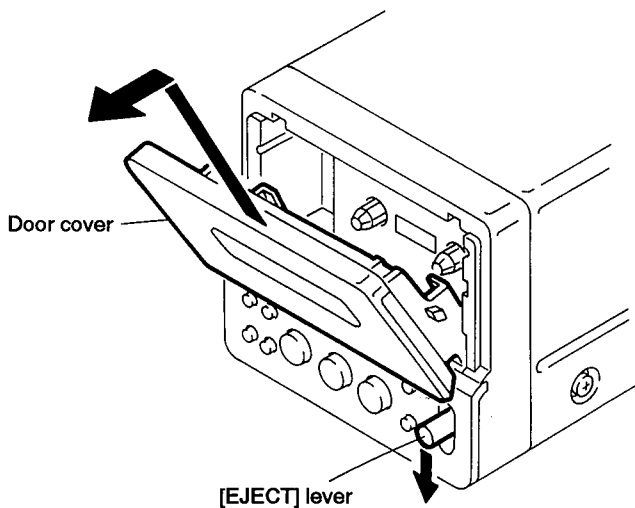


Fig. 5-2

### ■ Removing the front plate (See Figs. 5-3 and 5-4)

1. After turning over the body, remove the two screws ① retaining the front plate (See Fig. 5-3).
2. Open the cassette door, and while disengaging the two engagements ② retaining the front plate in the inner part of the cassette holder, remove the front plate by pulling it toward the front side (See Fig. 5-4).

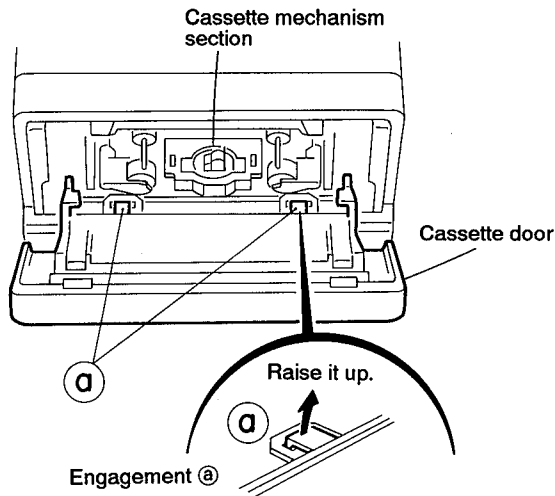


Fig. 5-4

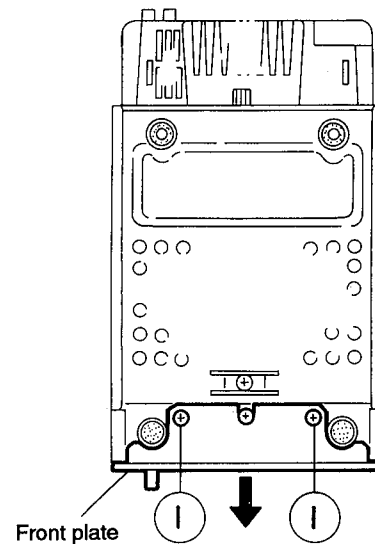


Fig. 5-3

### ■ Removing the top cover (See Figs. 5-5 and 5-6)

1. From both sides of the body, remove the four screws ② retaining the top cover (See Fig. 5-5).
2. From the back of the body, remove the two screws ③ retaining the top cover (See Fig. 5-6).
3. Remove the top cover toward the back of the body.

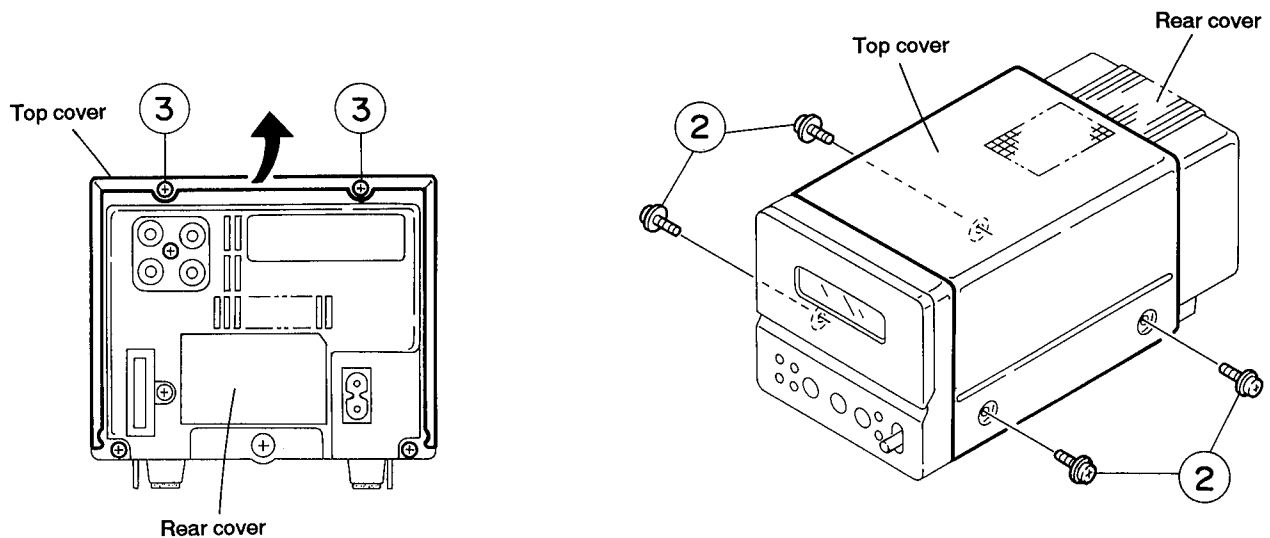


Fig. 5-6

Fig. 5-5

**Removing the rear cover** (See Figs. 5-7 and 5-8)

1. From the back of the body, remove the four screws ④ retaining the rear cover.
2. Disengage the two engagements ⑥ on both the right and left sides of the rear cover and chassis.

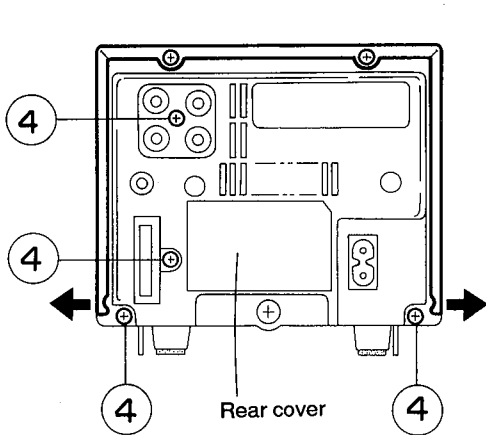


Fig. 5-7

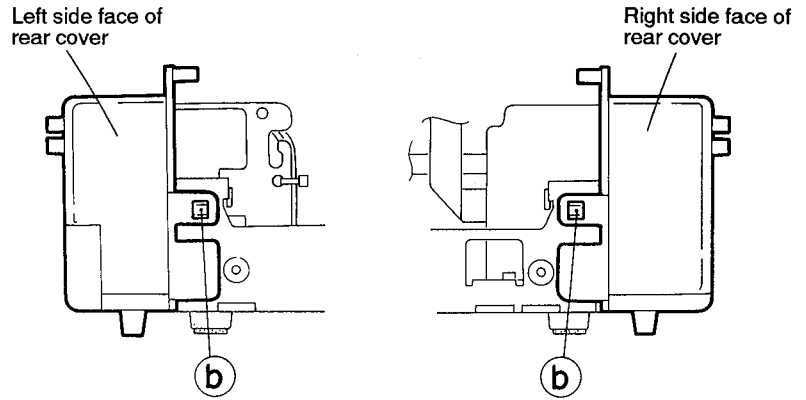


Fig. 5-8

**Removing the front panel assembly**

(See Figs. 5-9 and 5-10)

1. Remove the two flat head screws ⑤ retaining the front panel assembly.
2. After turning over the body, remove the one screw ⑥ retaining the front panel assembly.
3. Disengage the four engagements ③ between the front panel assembly and chassis.
4. Take out the front panel assembly from the front face of the body.

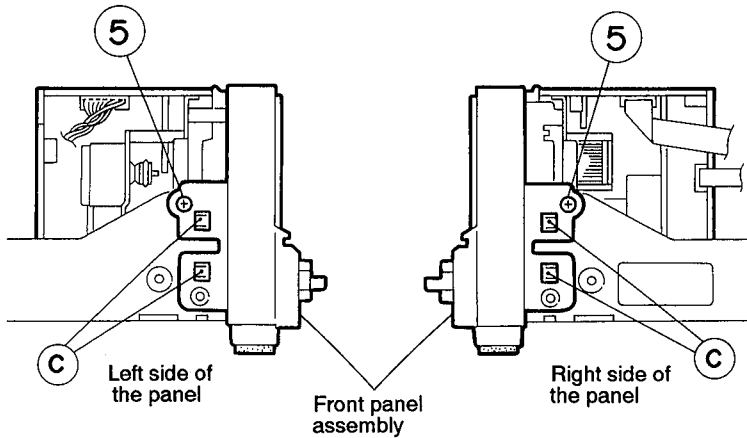


Fig. 5-9

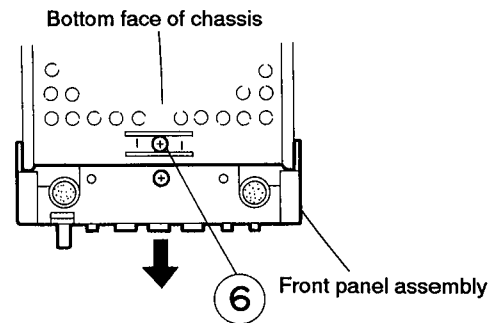


Fig. 5-10



### ■ Removing the cassette mechanism assembly

(See Fig. 5-11)

1. Disconnect the connector wire from the connector CN275 on the mechanism control P.C. board.
2. Remove the four screws ⑦ retaining the cassette mechanism assembly.
3. Take out the cassette mechanism assembly from the front face of the body.

### ■ Removing the recording amp. and Dolby NR P.C. board

(See Fig. 5-11)

1. Remove the two screws ⑧ retaining the recording amp. and Dolby NR P.C. board.
2. Remove the recording amp. and Dolby NR P.C. board and disconnect the connectors CN323 and CN324.

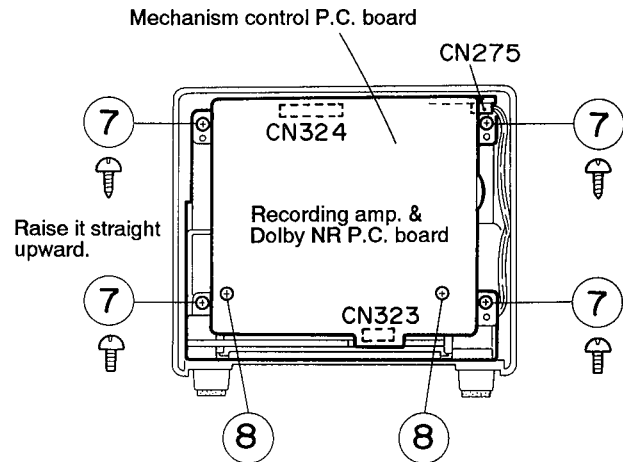


Fig. 5-11

### ■ Removing the mechanism control P.C. board

(See Fig. 5-12)

1. Remove the recording amp. and Dolby NR P.C. board.
2. Remove the two screws ⑨ retaining the mechanism control P.C. board.
3. While raising the mechanism control P.C. board straight upward, disconnect the connectors CN272 and 273 on the P.C. board.

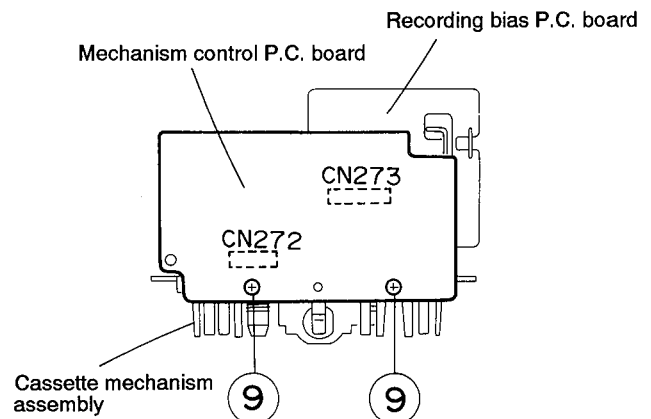


Fig. 5-12

### ■ Removing the head amp. P.C. board

(See Figs. 5-13 and 5-14)

1. Remove the recording amp. & Dolby NR P.C. board and mechanism control P.C. board.
2. After removing the FPC holder, disconnect the head flexible wire from the connector CN301 on head amp. P.C. board (See Fig. 5-13).
3. Remove the one screw ⑩ retaining the head amp. P.C. board (See Fig. 5-14).
4. After lowering the head amp. P.C. board in the arrow direction, disengage the engagement ④ and remove the P.C. board (See Fig. 5-14).

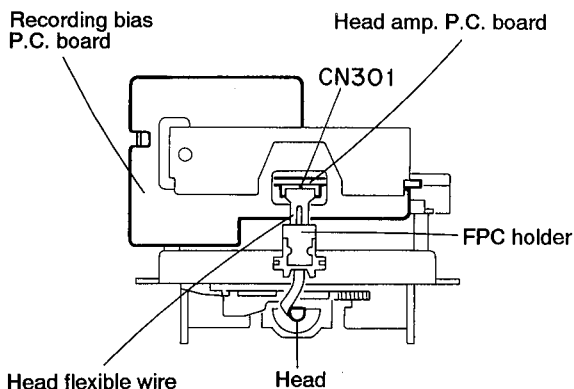


Fig. 5-13

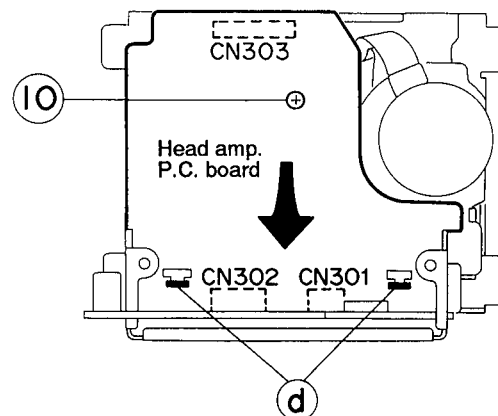


Fig. 5-14

**Removing the front panel** (See Figs. 5-15 ~ 5-17)

1. After turning over the body, remove the one screw ⑪ retaining the door holder from the front panel (See Fig. 5-15).
2. Open the door by pressing the [EJECT] button, and pull out the door holder in the arrow direction (See Fig. 5-16).
3. Remove the six screws ⑫ retaining the operation switch P.C. board (See Fig. 5-17).

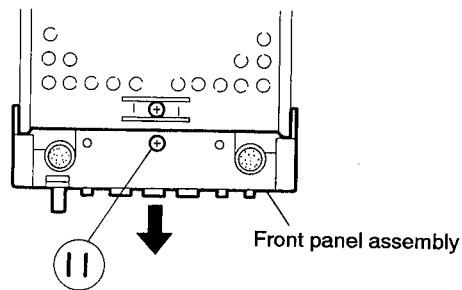


Fig. 5-15

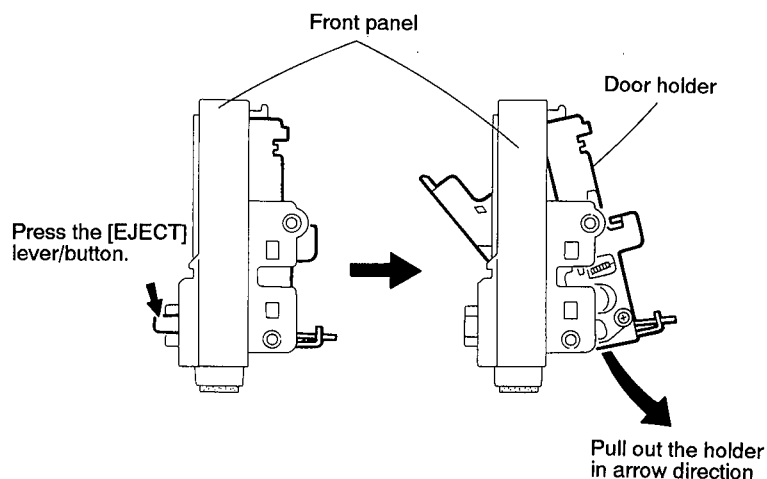


Fig. 5-16

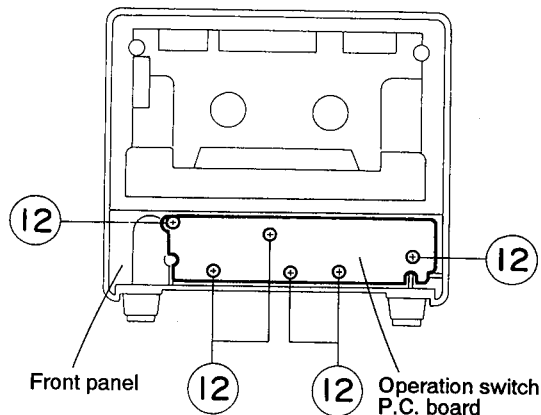


Fig. 5-17

**Removing the line amp. P.C. board and power supply P.C. board** (See Fig. 5-18)

1. Remove the two screws ⑬ retaining the heat sink.
2. After raising the line amp. P.C. board, disengage the two engagement ④ between the P.C. board and chassis.
3. Remove the one screw ⑭ retaining the AC jack holder.
4. After raising the power supply P.C. board, remove the engagement ⑤ between the P.C. board and chassis.

**Removing the power trans.** (See Fig. 5-18)

Remove the four screws ⑮ retaining the power trans.

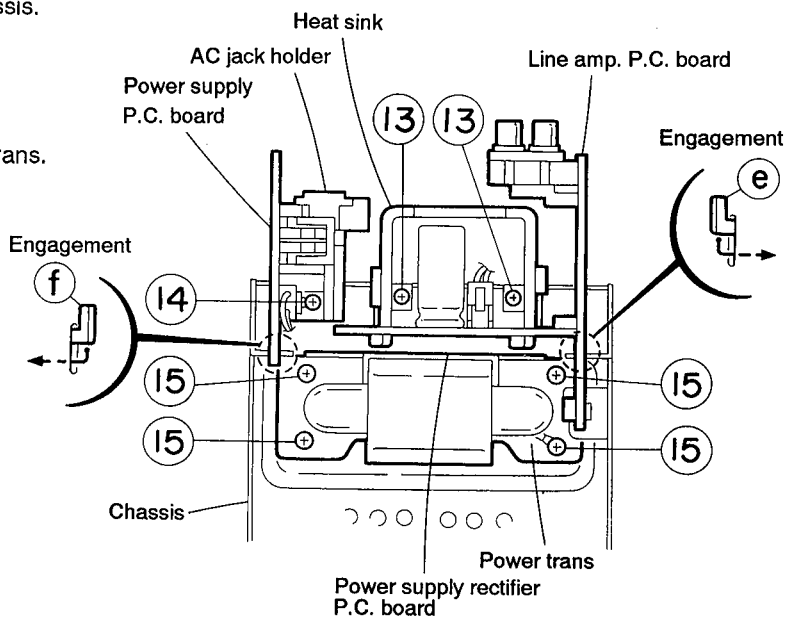


Fig. 5-18

## 《CD/Tuner & Amp. Unit》

### ■ Removing the side panels

(See Figs. 5-19 and 5-20)

Remove the four screws ① retaining both the right and left side panels.

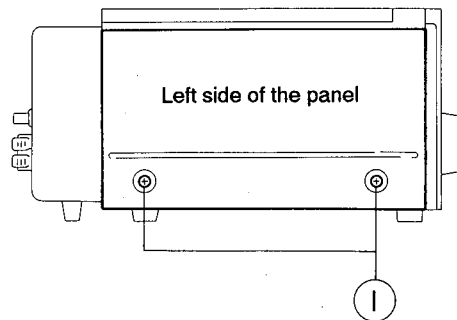


Fig. 5-19

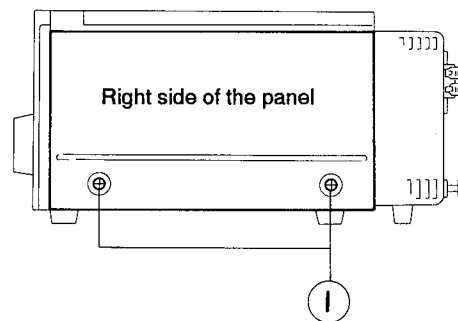


Fig. 5-20

### ■ Removing the rear cover (See Figs. 5-21-5-24)

1. While pressing the four pawls ① and ② for the wire holder with screw driver, etc., remove the holder by shifting it in the arrow direction.
2. Remove the two right and left side screws ② retaining the rear cover.
3. From the back face of the body, remove the five screws {③ x 2, ④ x 1 and ⑤ x 2} retaining the rear cover.
4. By disengaging the four engagements {③, ④, ⑤ and ⑥} between the right and left sides of the rear cover with screw driver, etc., remove the rear cover.

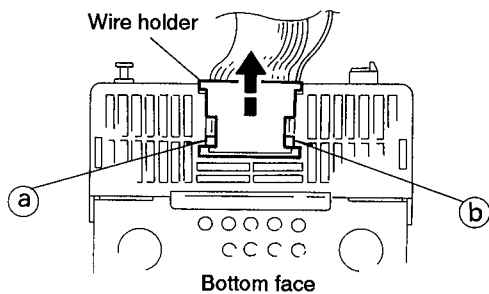


Fig. 5-21

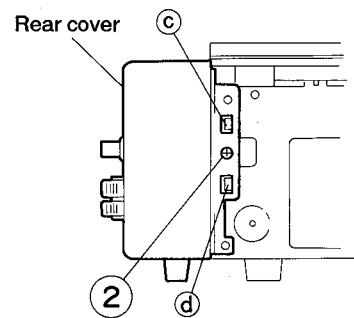


Fig. 5-22

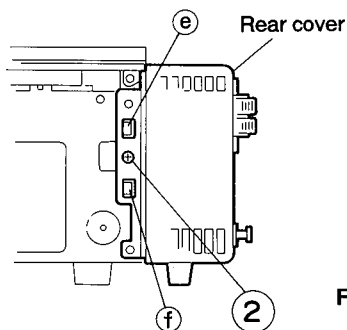


Fig. 5-23

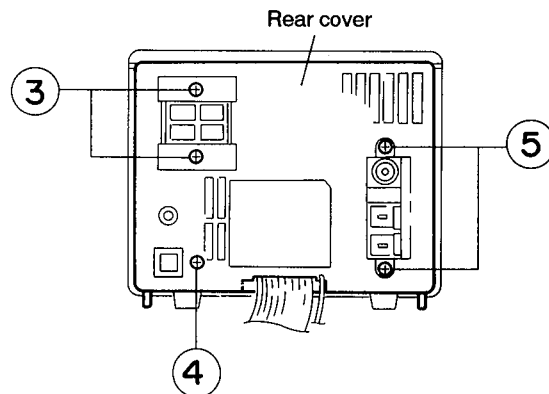


Fig. 5-24

### ■ Removing the CD player section

(See Figs. 5-25 and 5-26)

1. Remove the two screws ⑥ from the side of the body.
2. From the right side of the body, disconnect the card wires and 3pin connectors respectively from connectors CN602, CN604 and CN605 on the CD servo control P.C. board.
3. While spreading the engagements ⑨ and ⑩ between the right and left side of the CD player section, remove the CD player section upward from the chassis.
4. Disconnect the 4pin connector from the connector CN705 on the system CPU P.C. board (See Fig. 5-25).

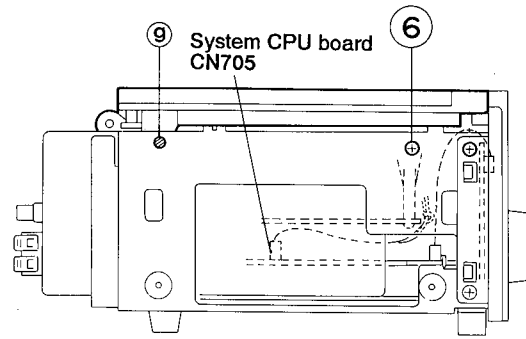


Fig. 5-25

### ■ Removing the front panel assembly

(See Figs. 5-25~5-28)

1. Remove the CD player.
2. Remove the volume control toward the front side so carefully as not cause any damage to the front panel assembly. When it is hard to remove the volume control, pass a string into the clearance between the volume control and front panel assembly, and slowly remove the control while hooking it between the clearance (See Fig. 5-27).
3. Remove the two screws ⑦ from the bottom face of the body (See Fig. 5-28).
4. Remove the two screws ⑧ from the right and left and right side faces of the body (See Fig. 5-27).
5. After disengaging the four engagements ①, ②, ③ and ④ between the front panel assembly and chassis, remove the front panel assembly toward the front side in the arrow direction (See Fig. 5-27).
6. Disconnect the card wires, connectors, etc. from the respective connectors CN602, CN604 and CN605 on the CD amp. P.C. board (See Fig. 5-26).
7. Remove the card wires respectively from the connectors CN701, CN702 and CN703 on the system CPU P.C. board (See Fig. 5-27/5-28).

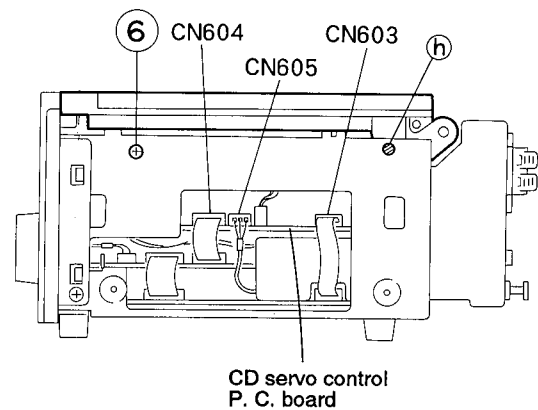


Fig. 5-26

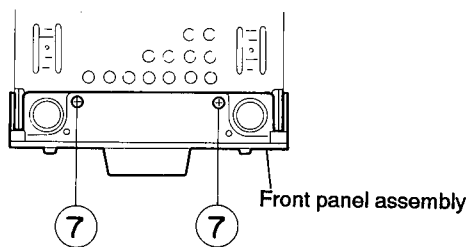


Fig. 5-28

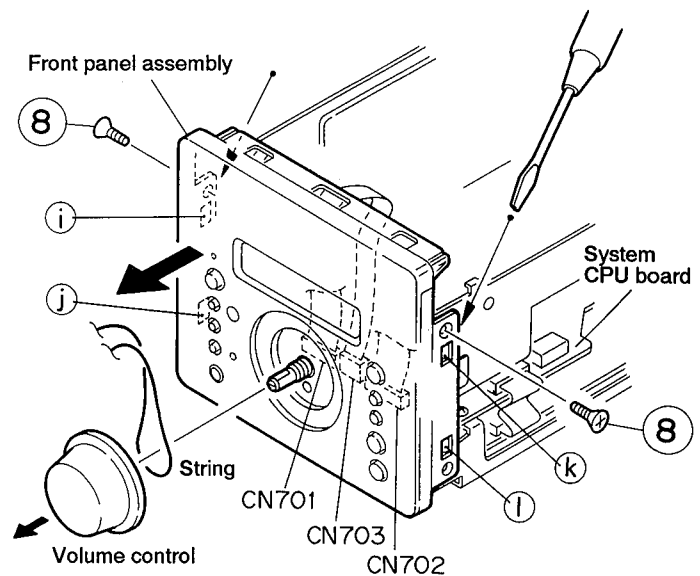


Fig. 5-27

## ■ Removing the front cover

(See Figs. 5-29 and 5-30)

1. While pressing the two engagements (m) and (o) at the upper part of the front panel, remove the front cover in the arrow direction.

**Caution:** Since the front cover and panel are bonded together with duplicated tape, remove the front cover while peeling off the duplicated tape.

2. From inside the front panel remove the six screws retaining the LCD & control switch P.C. board.

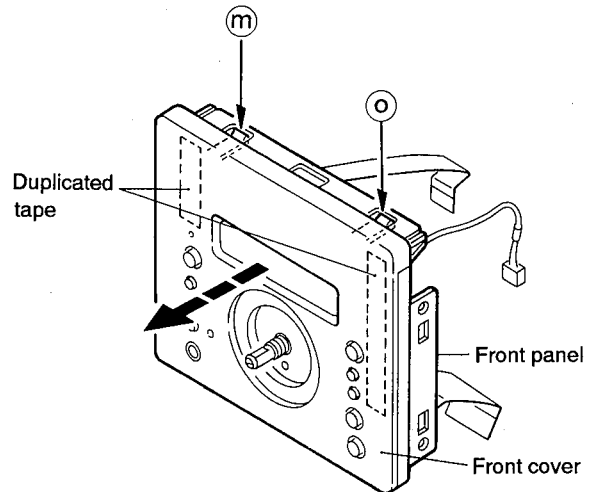


Fig. 5-29

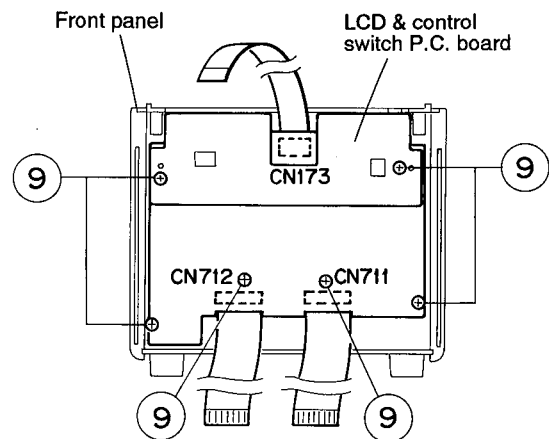


Fig. 5-30

## ■ Removing the system CPU P.C. board

(See Fig. 5-31)

1. Disconnect the card wires respectively from the connectors CN706 and CN707 on the system CPU P.C. board.
2. From the chassis, remove the three screws (10) retaining the system CPU P.C. board.
3. From the connector CN2 on the tuner P.C. board, remove the connector wire outgoing from W701 on the system CPU P.C. board.

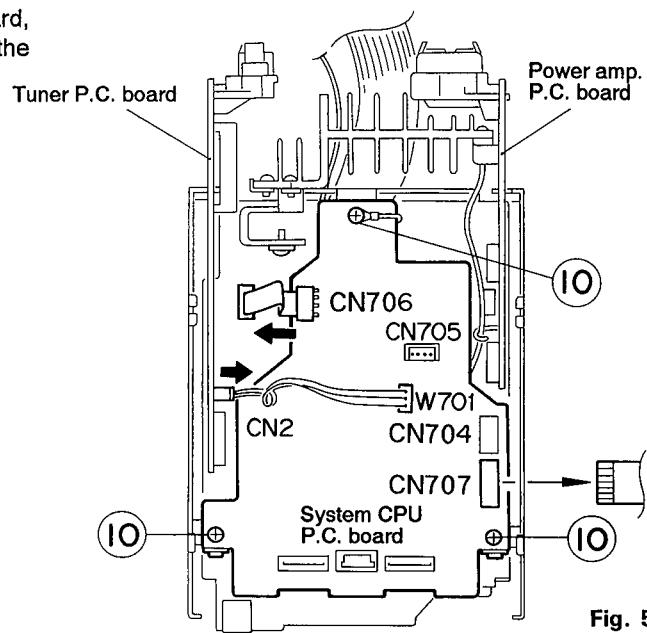


Fig. 5-31

**Removing the power amp. P.C. board and heat sink** (See Figs. 5-32 and 5-33)

1. From the back face of the body, remove the three screws { ① x 2 and ② x 1 } retaining the heat sink. For dismantling the heat sink alone, further remove the two screws ③ .
2. While disconnecting the connectors CN301 and CN308 on the power amp. P.C. board respectively from the function P.C. board, remove the power amp. P.C. board upward, and disengage the engagement ④ between the chassis and P.C. board in arrow direction.

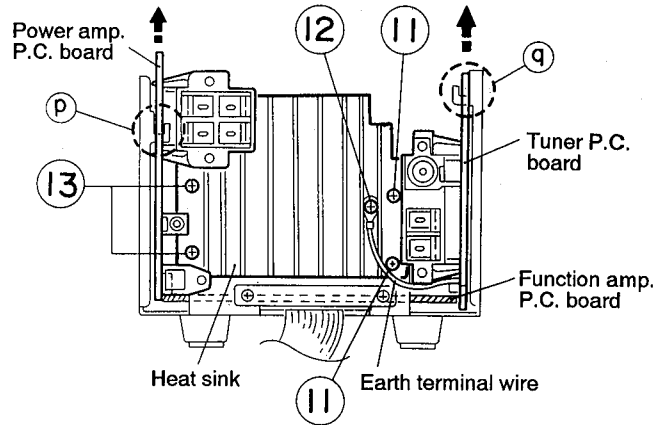


Fig. 5-32

**Removing the tuner P.C. board**

(See Figs. 5-32 and 5-33)

1. From the function amp. P.C. board, disconnect the connector CN1 on the tuner P.C. board in upward direction, and disengage the engagement ④ between the chassis and P.C. board in arrow direction.

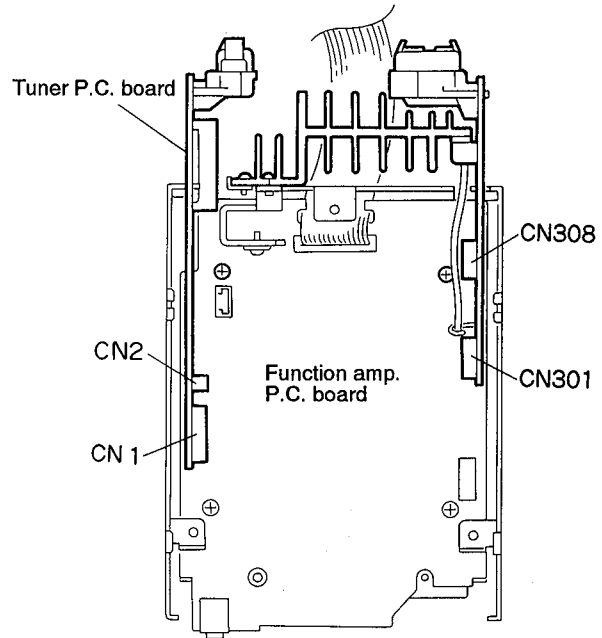


Fig. 5-33

**Removing the function amp. P.C. board**

(See Figs. 5-34 and 5-35)

Remove the four screws ④ retaining the function amp. P.C. board, and dismount the P.C. board from the chassis. In case of disconnecting the connector cable from the function amp. P.C. board, move the lock of the connector CN309 upward in the arrow direction, and pull out the cable.

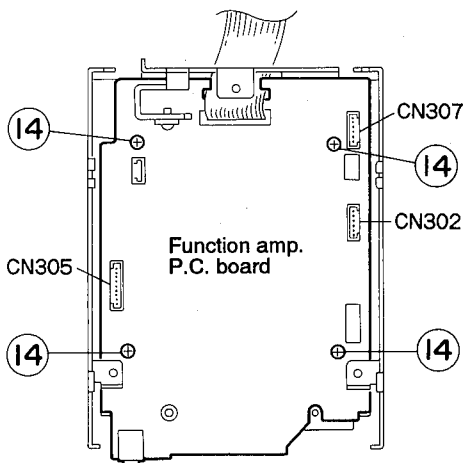


Fig. 5-34

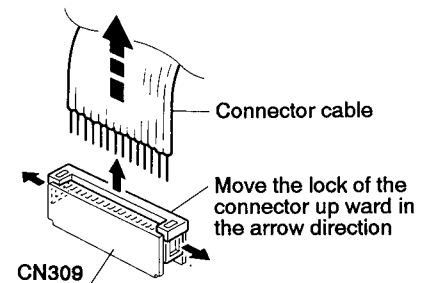


Fig. 5-35

### ■ Removing the CD servo control P.C. board

(See Fig. 5-36)

From inside the CD player section, remove the three screws ⑮ retaining the CD servo control P.C. board.

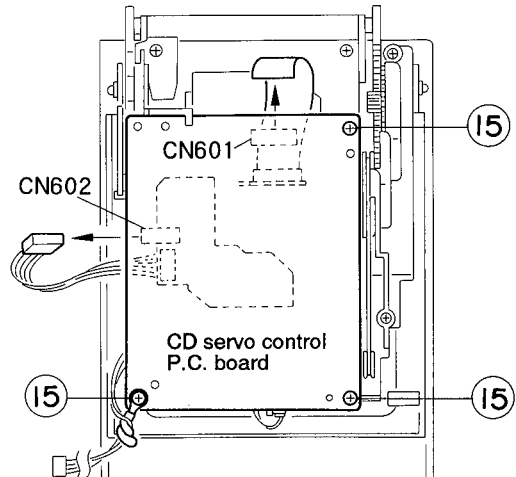


Fig. 5-36

### ■ Removing the CD mechanism (See Fig. 5-37)

1. Remove the two screws ⑯ retaining the CD mechanism.
2. Remove the CD mechanism holder and hook (Unhook the CD mechanism holder).
3. Remove the two screws ⑰ retaining the CD mechanism.
4. After moving the CD mechanism in the arrow direction, take out the turn table from the chassis.

### ■ Removing the door opening/closing detector switch P.C. board (See Fig. 5-37)

Remove the one screw ⑱ retaining the door opening/closing detector switch P.C. board.

### ■ Removing the CD door gear unit (See Fig. 5-37)

Remove the two screws ⑲ retaining the CD door gear unit.

### ■ Removing the door drive motor (See Fig. 5-38)

1. Remove the one screw ⑳ retaining the door drive motor.
2. Dismount the belt from the motor pulley.

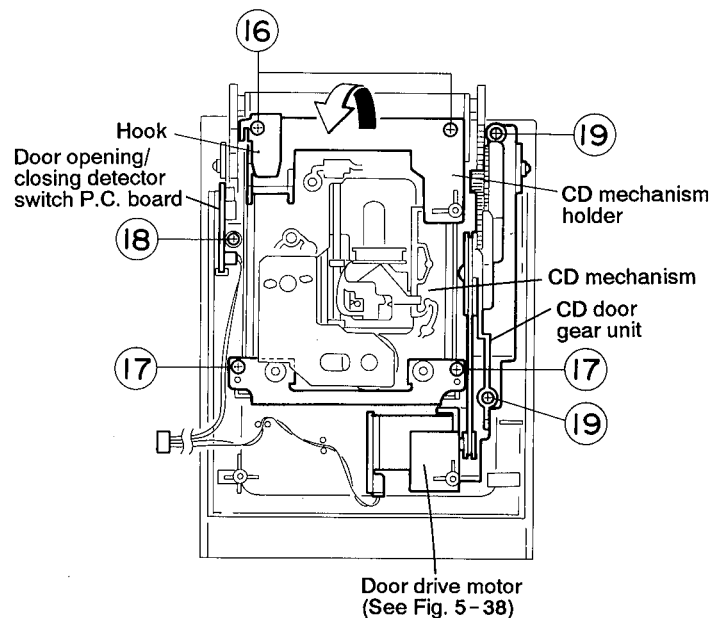


Fig. 5-37

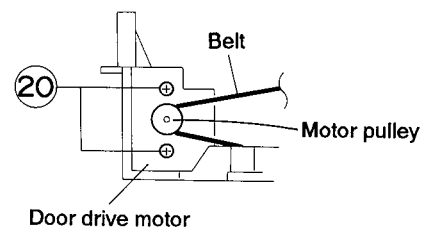


Fig. 5-38

## 《Cassette Mechanism Section》

### ■ Removing the head mount assembly

(See Figs. 5-39 and 5-40)

1. Remove the deck & power supply unit and cassette door cover.
2. Remove the front cover.
3. Remove the top cover.
4. Remove the front panel.
5. Remove the front panel assembly.
6. Remove the cassette mechanism assembly.
7. Remove the three screws ① retaining the head mount assembly (See Fig. 5-39).
8. After removing the FPC holder from the chassis, disconnect the head flexible wire from the connector CN301 on the head amp. P.C. board (See Fig. 5-13).

**Caution 1.** Whenever the head mount assembly has been changed, be sure to adjust the head azimuth.

**Caution 2.** The direction lever gear and head mount gear should be reassembled according to the methods in Fig. 5-40.

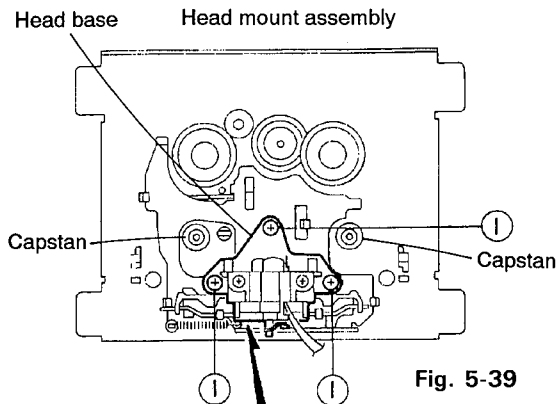
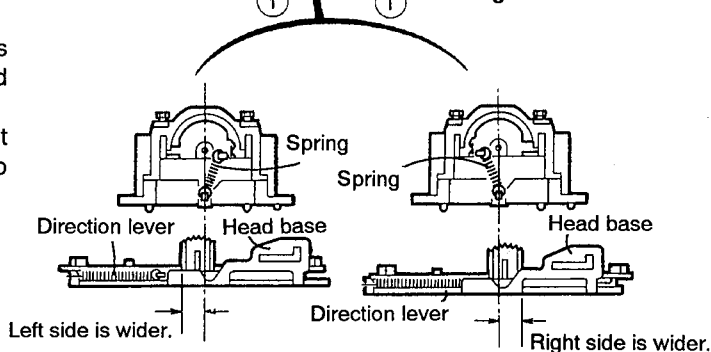


Fig. 5-39



In case the gear section is located on the left-hand side from the center, the head mount spring should be positioned on the right side as indicated above.

In case the gear section is located on the right-hand side from the center, the head mount spring should be positioned on the left side as indicated above.

Fig. 5-40

### ■ Removing the pinch roller assembly

(See Fig. 5-41)

After opening the pawl ① retaining the right side pinch roller assembly toward outside, pull out the pinch roller assembly. The left side pinch roller assembly should also be pulled out similarly according to the above step.

**Caution:** When assembling each pinch roller assembly, make sure that the stud is inserted between the direction lever and pinch roller spring.

When assembling this assembly, insert the stud into the direction level.

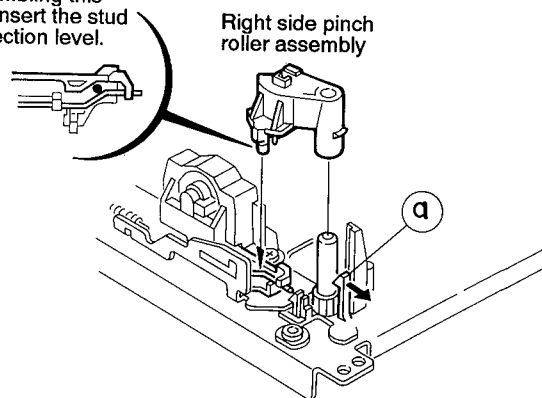


Fig. 5-41



### ■ Removing the FM bracket assembly

(See Figs. 5-42~5-44)

1. Remove the three screws ② retaining the FM bracket assembly (See Fig. 5-42).
2. While opening the two engagements ⑥ fixing the FM bracket assembly to outside, remove the bracket assembly (See Fig. 5-42).
3. While raising the FM bracket assembly, remove the capstan belt and flywheel.

**Caution:** In this case, the belt and flywheel should be removed so carefully as not to cause any damage to the reel belt.

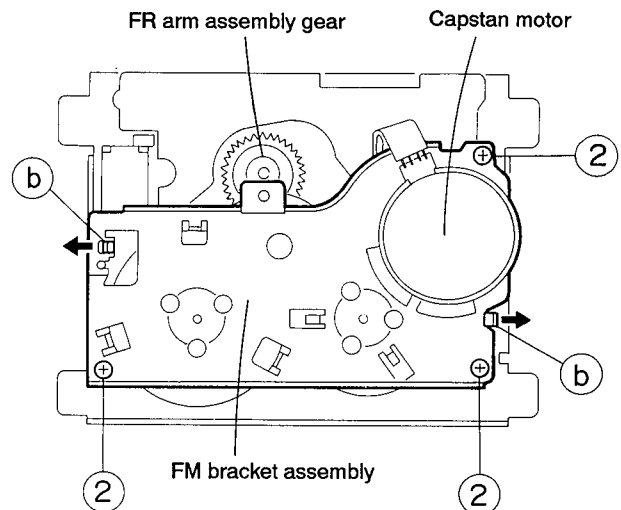


Fig. 5-42

### ● Method of reassembling the FM bracket assembly

(See Fig. 5-42~5-44)

1. First of all, attach the larger flywheel to the slide guide of the FM bracket assembly as shown in Fig. 5-43.
2. Set the FM bracket assembly to the two engagements ③ (See Fig. 5-43).
3. Pass the thrust guide of the flywheel through the notch ④ and turn the flywheel (See Fig. 5-43).
4. Next, set the smaller flywheel similarly according to the above steps (See Fig. 5-43).
5. Hang the capstan belt (See Fig. 5-44).
6. Hang the reel belt on the hook as shown in Fig. 5-44.
7. After turning the FM bracket assembly upside down, insert the flywheel capstan shaft into the bearing at first.
8. After making sure that the reel belt is not twisted, remove the belt from the stud and hang this belt onto the flywheel (See Fig. 5-44).
9. Mount the FM bracket assembly.

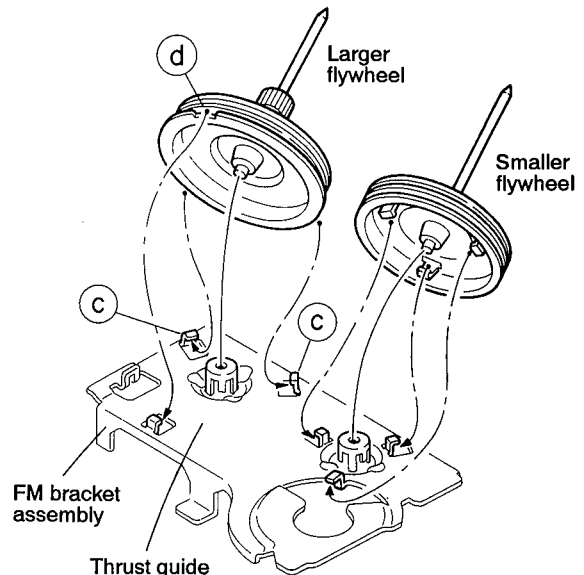


Fig. 5-43

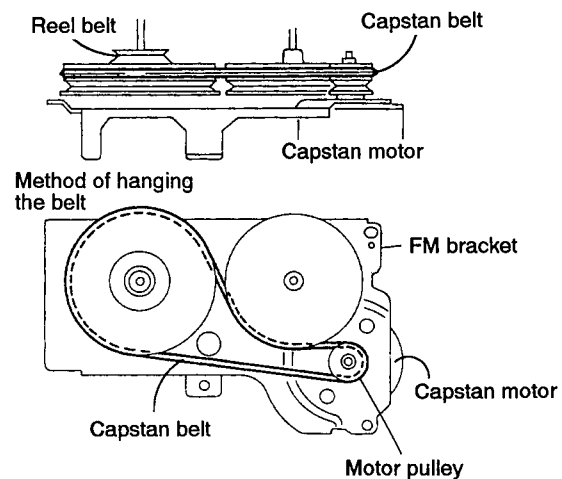


Fig. 5-44

**Removing the leaf switch P. C. board**

(See Fig. 5-45)

1. Remove the solenoid terminal soldering.
2. Remove the one screw ③ retaining the leaf switch P.C. board.
3. Disengage the four engagements ④ fixing the leaf switch P.C. board.

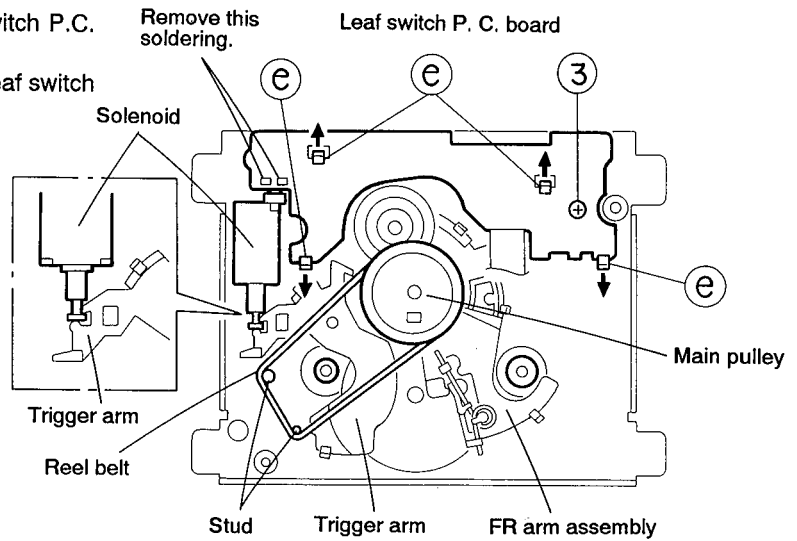


Fig. 5-45

**Removing the control cam**

(See Figs. 5-45~5-47)

1. Remove the FM bracket assembly and flywheel.
2. Dismount the reel belt and pull out the main pulley (See Fig. 5-45).
3. While opening the two pawls ⑥ fixing the trigger arm in the arrow direction, remove the arm from the clamp shaft (See Fig. 5-46).
4. Dismount the elevator ring (See Fig. 5-47).
5. Remove the FR arm spring, and while opening the four pawls ⑦ fixing the FR arm toward outside, pull out the FR arm assembly (See Fig. 5-46).
6. While aligning the engagement ⑧ of the control cam to the center of bearing hole, pull out the control cam (See Fig. 5-46).

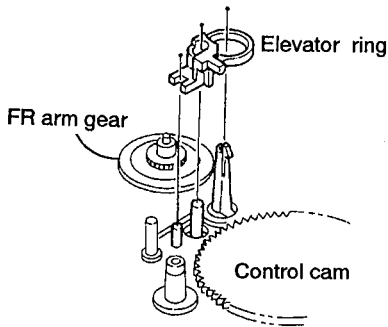


Fig. 5-47

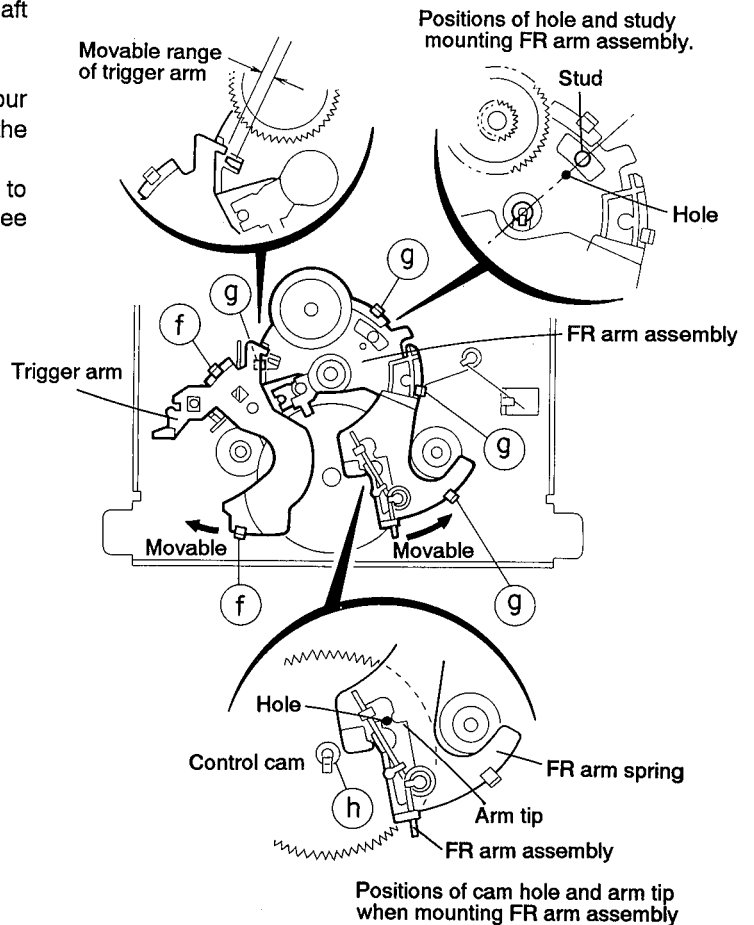


Fig. 5-46

● Reassembling the control cam

(See Figs. 5-46-5-51)

1. When assembling the control cam, pull the head base toward the front side while pressing the forward/reverse arm in the arrow direction.

2. Under the conditions in Step 1, the head base beneath the control cam and the position of the forward/reverse arm stud should be moved in the arrow direction (See Fig. 5-49).

**Caution 1:** Make sure that the cam is turned smoothly when turning it in counterclockwise direction.

**Caution 2:** The cam spring should be clicked due to the cross movement of the head base.

3. After attaching the control cam to the shaft, align the concave section ① of the control cam to the position as shown in Fig. 5-50 while moving the forward/reverse arm and head base.

4. For making it possible to mount the FR arm assembly, align the concave section ① of the control cam to the position as shown in Fig. 5-51 while turning the control cam.

**Caution 1:** The positions of the hole and stud in Fig. 5-46 should be aligned so carefully for mounting the FR arm assembly (See Fig. 5-46).

**Caution 2:** Confirm that the FR arm is reset to the initial position by moving the arm in the arrow direction.

5. Attach the elevator ring (See Fig. 5-47).

6. Attach the trigger arm.

**Caution:** Confirm that the trigger arm is reset to the initial position by moving the arm in the arrow direction.

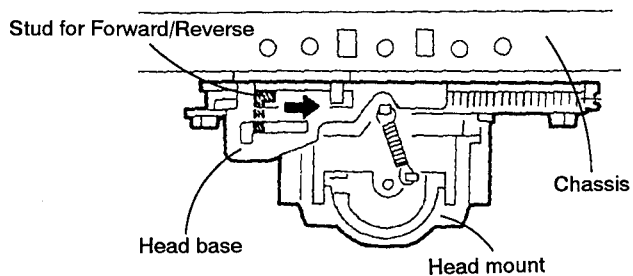


Fig. 5-48

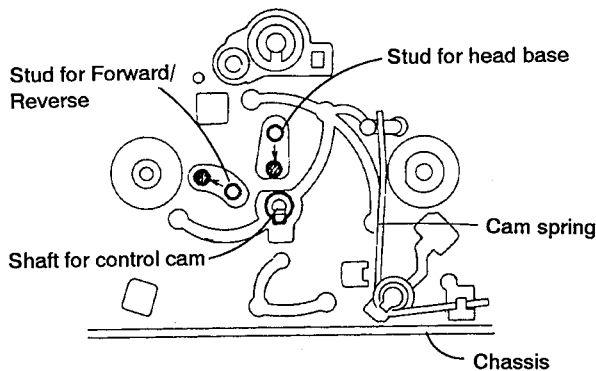


Fig. 5-49

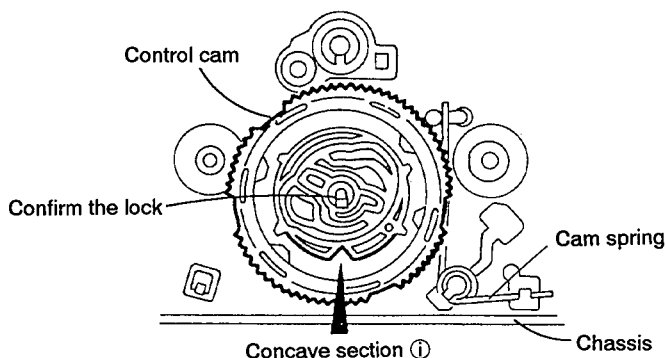


Fig. 5-50

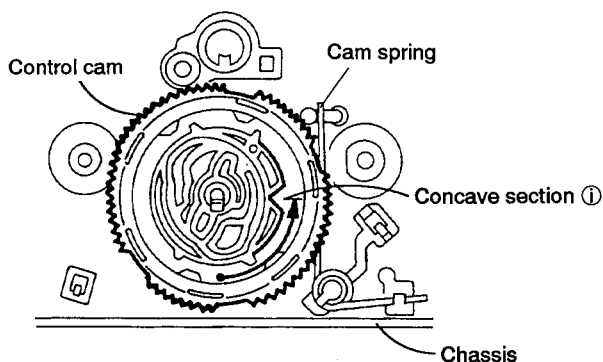


Fig. 5-51

# 6. Main Adjustment

## ■ Test Instruments required for adjustment

1. Low frequency oscillator  
(oscillation frequency: 50Hz to 20kHz)  
( Output : 0 dBs with 600 Ω terminator)
2. Attenuator( Impedance : 600 Ω )
3. Test Tapes  
VTT712 ..... Tape speed, wow & flutter 3kHz  
VTT727 ..... Playback reference level 400Hz  
TTT739 ..... Playback frequency response  
VTT704 ..... Head azimuth 12.5kHz
4. Electronic voltmeter, Distortion meter
5. Torque gauge..... Cassette type for CTG – N  
mechanism adjustment
6. Wow and Flutter meter , Frequency counter
7. CD test disc ..... CTS – 1000
8. Jitter meter(MJM631)
9. Blank tape : AC- 225(TYPE 1), AC- 514(TYPE 2)

## ■ Measuring conditions (Amplifier section)

Rating voltage

**AC110 – 127/220 – 240V (50/60Hz)**

Reference output : Speaker ..... 0 dBs (0.775V) / 4 Ω

: Headphone – 21 dBs (0.069V)/ 32 Ω

: Line out – 3.8dBs(0.5V)/47k Ω

Reference input : AUX IN – 3.8dBs

## ● Standard position of functionswitches

Function switch ..... TAPE

DOLBY NR , Active hyper bass switch ..... OFF

Timer switch ..... OFF

## ● Standard position of volume control

BASS, TREBLE ..... CENTER

Volume control ..... adjust to 0dBs output

## ● Test remarks

1. Negative side of the input and output on the testing set, that ought to be separately to each other, and then bear in mind there connection the testing set with 2 channeles Electronic voltmeter, the negative side never connect commonly.

2. Replaced output load with a dummy and that lead wire to be used as big as possible.

3. Attach top cover when measuring and connect filter shown below Fig. 1 to V. meter.

## ■ Measuring condition (Radio section)

Refer to rating source ..... Tuner+B : DC 12V

Reference output .....Speaker : 0dBs(0.775V) / 4 Ω

AM frequency .....400Hz modulation 30%

FM frequency .....400Hz modulation  
frequency deviation 22.5kHz

## ● Standard position of switches and controllers

Function..... RADIO

Active Hyper Bass ..... OFF

Bass/Treble ..... Center

## ● Careful points for adjustment

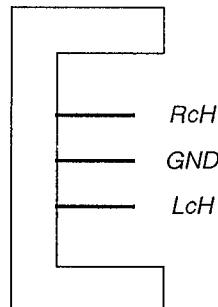
1. Connect 30 pF capacitor and 33 k Ω resistor to the output side of the IF sweeper in series while 0.082 μ F capacitor and 100k Ω resistor to the input side in series.

2. Set output level of the IF sweeper as minimum as adjustable.

3. RF Alignment order

Procedure of the steps of tracking should be kept.

Test point : DOLBY NR TP CN322



■ Arrangement of Adjusting & Test Points

《Cassette mechanism section》

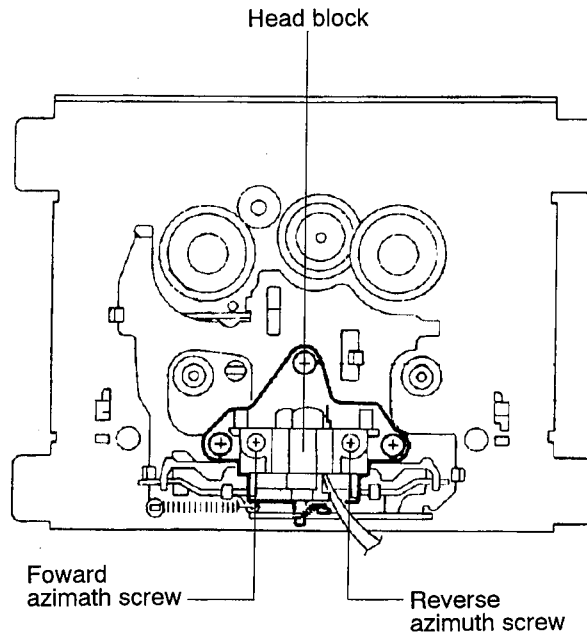


Fig. 6-1

《Deck & power supply unit section》

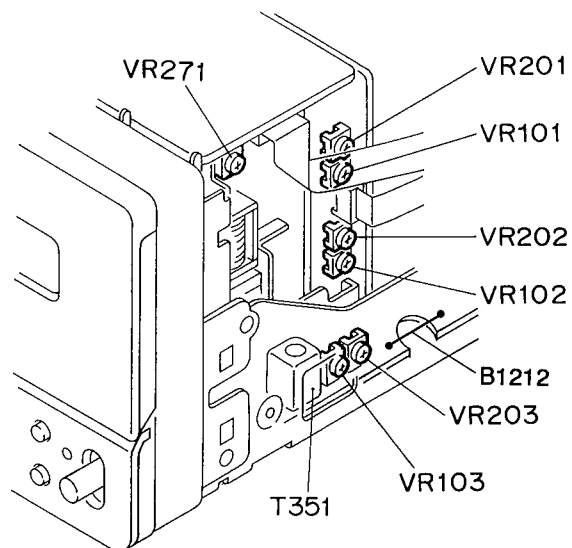


Fig. 6-2

**■ Mechanism & Amplifier Sections**

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape : VTT704(12.5kHz) Output terminal : : Line out	① Playback the Test tape VTT704 (12.5kHz). ② Adjust the head azimuth so that the phase difference is minimum .( Within 1dB of the peak level of play output. ) ③ After adjustment apply the screw locking adhesive to the head azimuth screw more than at half around the screw head. ※ Whenever the head is changed the azimuth should be readjusted.	Output : Within 1dB of the peak level  Phase difference : minimum	Head azimuth screw
Tape speed adjustment  Wow &Flutter check	Test tape : VTT712(3kHz) Output terminal : Line out	① Playback the Test tape VTT712 (3kHz) by near the end position, ② Check that the frequency counter reading is $3010 \pm 10\text{Hz}$ . If the reading is out of this range, adjust the VR271. ③ Wow &Flutter should be less than 0.25%(JIS WTD).	Tape speed : $3010 \pm 10\text{Hz}$  Wow &Flutter : less than 0.25%(JIS WTD).	VR271
Playback output level adjustment	Test tape : VTT727(400Hz) Output terminal : Line out	① Playback Test tape VTT727(400Hz) . ② Adjust VR101(Lch) and VR201(Rch) so that output level on Line out terminal( J171) to $-1\text{dB} \pm 0.5\text{dB}$ .	$-1\text{dB} \pm 0.5\text{dB}$	Lch : VR101 Rch : VR201
Playback frequency response check	Test tape : VTT739 : TMT735. Output terminal : Line out	① Playback Test tape VTT739 and TMT735. ② Frequency response should be $0\text{dB} \pm 4\text{dB}$ against 63Hz to 1kHz. ③ Frequency response should be $+1\text{dB} \pm 3\text{dB}$ against 1kHz to 12.5kHz.	1k / 63Hz : $0 \pm 4\text{dB}$ 1k / 12.5kHz : $+1 \pm 3\text{dB}$	—
Bias oscillation frequency adjustment	Test tape : AC-514 Output terminal : Bias TP B1212	① Connect the Bias TP B1212 with frequency counter. ② Insert the test tape AC-514. ③ Start the recording, make the state pause. ④ Confirm that the frequency counter reading is $100\text{kHz} \pm 0.2\text{kHz}$ . If the reading is out of this range, adjust T351.	$100\text{kHz} \pm 0.2\text{kHz}$	T351

### ■ Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Record &Playback frequency response adjustment	Test tape : AC-225 Reference frequency : 1.25k, 12.5kHz (Ref. - 20dB) Output terminal : Line out Input terminal : Line in	① Record &Playback the test tape AC-225 from Line in terminal at 1.25kHz and 12.5kHz reference frequency. ② Adjust the VR103 (Lch) and VR203 (Rch) so that the output deviation between the 1.25kHz and 12.5kHz signal $1\text{dB} \pm 3\text{dB}$ .	$1\text{dB} \pm 3\text{dB}$ .	Lch : VR103 Rch : VR203
Record &Playback sensitivity adjustment	Test tape : AC-225 Reference frequency : 400Hz (Ref. - 20dB) Output terminal : Line out Input terminal : Line in	① Record &Playback the test tape AC-225 from Line in terminal at 400Hz reference frequency. ② Adjust the VR102 (Lch) and VR202 (Rch) so that the output deviation between the - 24dB $\pm 1\text{dB}$ .	- 24dB $\pm 1\text{dB}$	Lch : VR102 Rch : VR202

# 7. Out Line of Main IC

## ◆ IC133 (BA15218) Mixing Amplifier

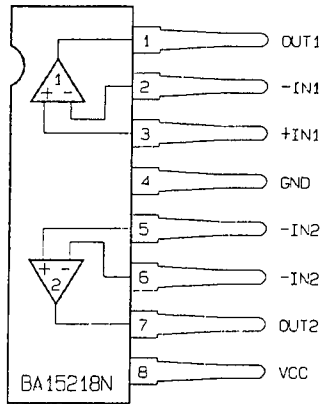


Fig. 7-1

## ◆ IC331 (UPC1228HA) Head Amplifier

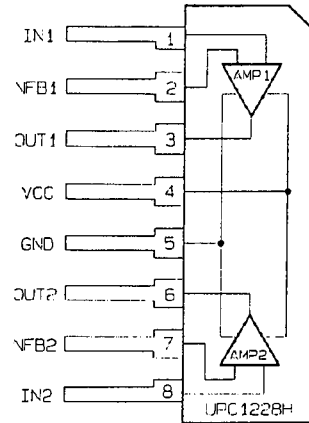


Fig. 7-2

## ◆ IC332 (UPC1330HA) Recording & Playback Selector

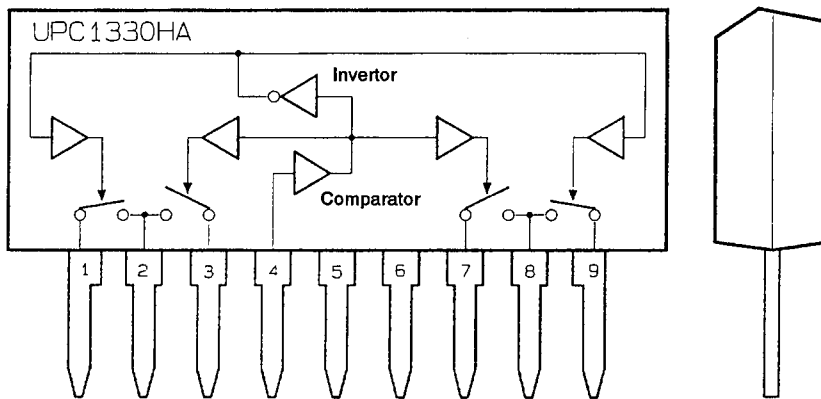


Fig. 7-3

## ◆ IC322 (LA3220) Recording Amplifier

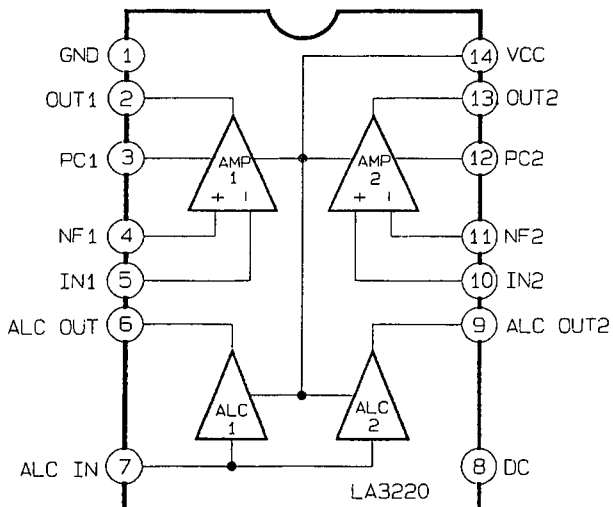


Fig. 7-4

## ◆ IC321 (HA12134A) Dolby NR

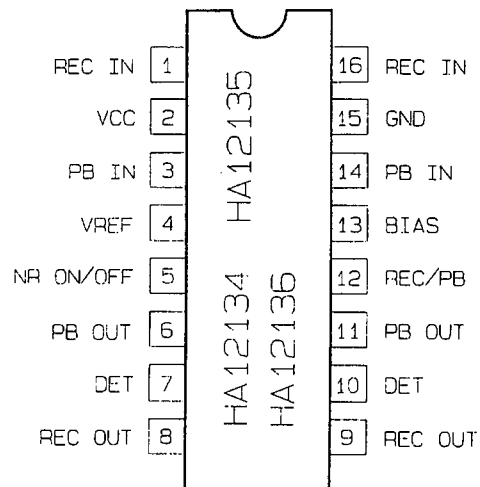


Fig. 7-5



■ IC701 : MN101C03AJA1 ( CPU ) Terminal's Function Table

Pin No.	Symbol	I/O	Function
1	COM3	0	LCD Common 3
2	COM2	0	LCD Common 2
3	COM1	0	LCD Common 1
4	COM0	0	LCD Common 0
5	VLC3		LCD power source
6	VLC2		LCD power source
7	VLC1		LCD power source
8	Vdd		Power source D
9	OSC2	0	Main clock 32kHz
10	OSC1	I	Sub clock 32kHz
11	Vss		Ground A
12	XI	I	Sub clock 32kHz
13	XO	0	Sub clock 32kHz
14	MMOD		Ground
15	Vref		Ground A
16	KEY1	I	Key in 1
17	KEY2	I	Key in 2
18	DOOR RESET	I	Detecting for Door & Reset
19	LOCK	I	Detecting for Door & Lock
20	TAPE	I	Detecting for tape
21	SAFETY	I	Detecting for Safety
22	CD SAFETY	I	Detecting for CD Safety
23	VERSION	I	Detecting for Version
24	Vref +		Power source
25	SO	0	Serial data out
26	SI	0	Serial data in
27	CK	0	Serial data clock
28	BEAT	0	Beat cut
29	QRIN	I	Data in for Subq/RDS
30	QRCK	0	SUBQ/RDS Clock
31	STTA	0	Strobe tape
32	RST	I	Reset
33	STSO	0	Strobe sound IC
34	PLAY/ MS	I	Play/MS
35	HALL	I	Tape end
36	NC		Non Connection
37	AHB	0	Active Hyper Bass
38	MPX	I	Tuner Stereo
39	REM	I	Remote control in
40	NC		Non Connection

Pin No.	Symbol	I/O	Function
41	STAT	0	CD Status
42	BUP	0	Detecting for backup
43	F.TU	0	Function Tuner
44	NC		Non Connection
45	F.CD	0	Function CD
46	POUT	0	Power control
47	MLD	0	CD Command load
48	MDATA	0	CD Command data
49	MCLK	0	CD Command clock
50	XRST	0	CD LSI reset
51	MTO	0	CD Door drive 0
52	MT1	0	CD Door drive 1
53	MTS	0	CD Door speed
54	PERIOD	0	Strobe Tuner
55	SMUTE	0	System mute
56	+ BCTRL	0	+ B control
57	VOL1	I	Volume encoder1
58	VOL2	I	Volume encoder2
59	NC		Non Connection
60	NC		Non Connection
61	NC		Non Connection
62	NC		Non Connection
63	NC		Non Connection
64	NC		Non Connection
65	SEG35	0	LCD Segment
66	SEG34	0	LCD Segment
67	SEG33	0	LCD Segment
68	SEG32	0	LCD Segment
69	SEG31	0	LCD Segment
70	SEG30	0	LCD Segment
71	SEG29	0	LCD Segment
72	SEG28	0	LCD Segment
73	SEG27	0	LCD Segment
74	SEG26	0	LCD Segment
75	SEG25	0	LCD Segment
76	SEG24	0	LCD Segment
77	SEG23	0	LCD Segment
78	SEG22	0	LCD Segment
79	SEG21	0	LCD Segment
80	SEG20	0	LCD Segment

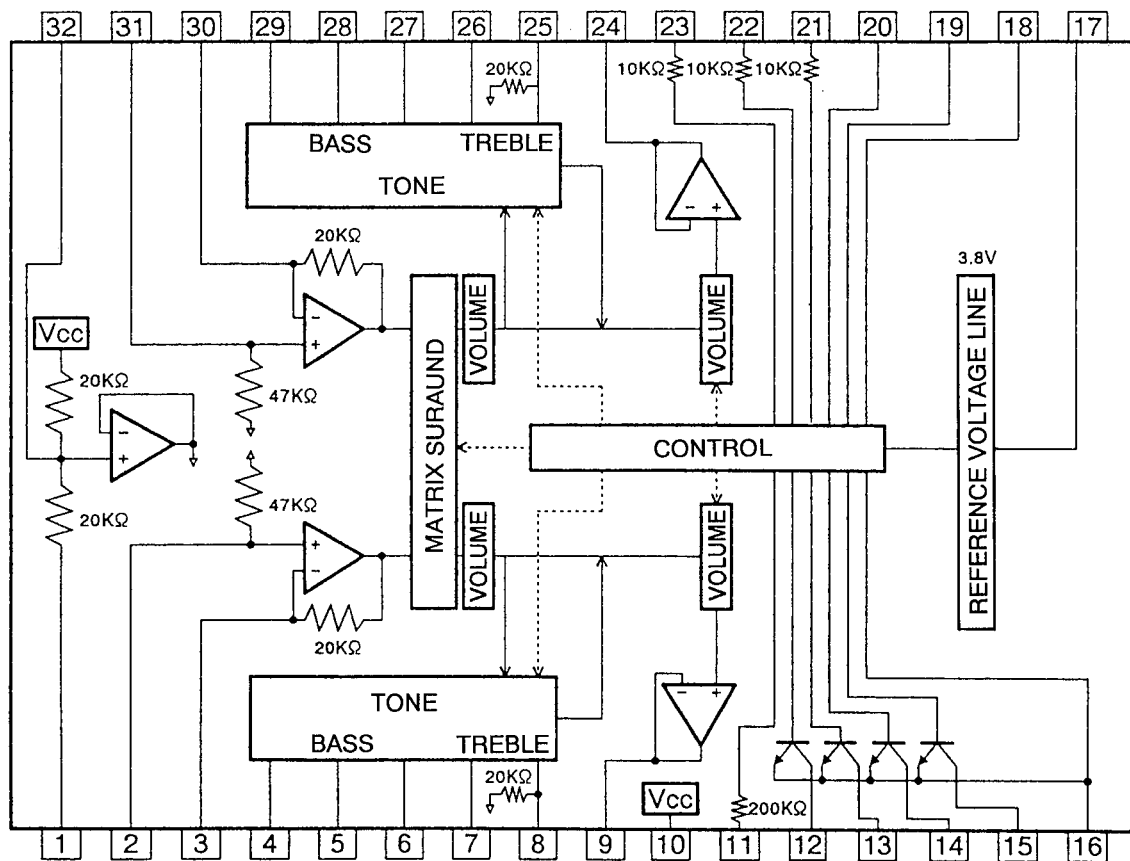
Pin No.	Symbol	I/O	Function
81	SEG19	0	LCD Segment
82	SEG18	0	LCD Segment
83	SEG17	0	LCD Segment
84	SEG16	0	LCD Segment
85	SEG15	0	LCD Segment
86	SEG14	0	LCD Segment
87	SEG13	0	LCD Segment
88	SEG12	0	LCD Segment
89	SEG11	0	LCD Segment
90	SEG10	0	LCD Segment
91	SEG9	0	LCD Segment
92	SEG8	0	LCD Segment
93	SEG7	0	LCD Segment
94	SEG6	0	LCD Segment
95	SEG5	0	LCD Segment
96	SEG4	0	LCD Segment
97	SEG3	0	LCD Segment
98	SEG2	0	LCD Segment
99	SEG1	0	LCD Segment
100	SEG0	0	LCD Segment

■ IC303 : Terminal Function Table of BH3854FS (Audio/Sound Control)

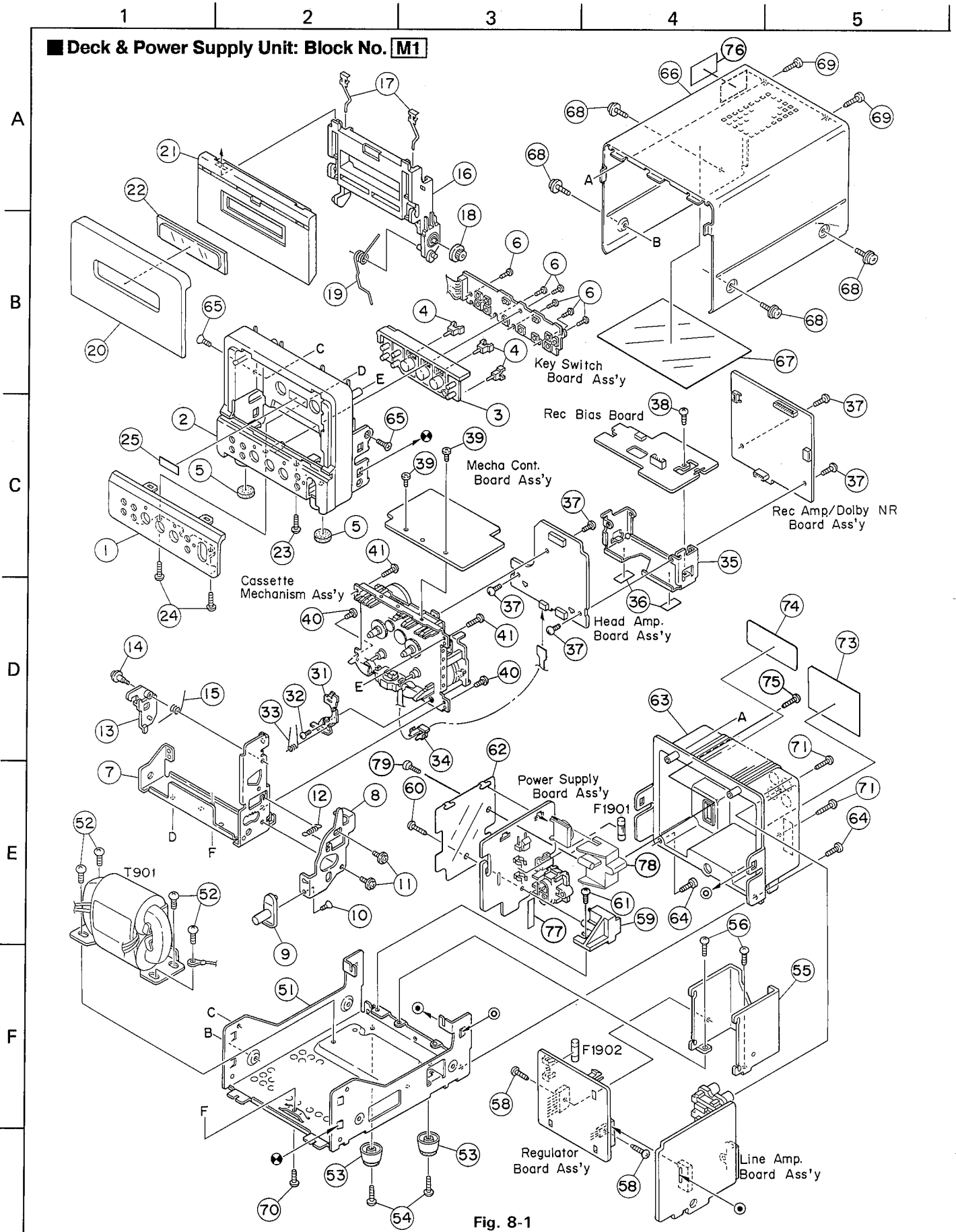
Pin No.	Symbol	I/O	Function
1	A_GND		Analog system gland
2	IN1		1ch volume input terminal
3	NF1		Input stage AMP. gain adjusting terminal
4	BVN1		1ch low pass filter connector terminal
5	BIN1		1ch low pass filter connector terminal
6	BV01		1ch low pass filter connector terminal
7	TIN1		1ch low pass filter connector terminal
8	TV01		1ch low pass filter connector terminal
9	OUT1		1ch volume output terminal
10	Vcc		Power supply terminal
11	SC		Mounting terminal for constant (used to prevent a shock by selector)
12	PORT1		Port output terminal
13	PORT2		Port output terminal
14	PORT3		Port output terminal
15	PORT4		Port output terminal
16	D_GND		Digital system gland

Pin No.	Symbol	I/O	Function
17	VREF		3.8V reference voltage output terminal
18	LATCH		Latch data input terminal
19	DATA		Data input terminal
20	CK		Clock input terminal
21	BC		Mounting terminal for constant (used to prevent a shock by selector)
22	TC		Mounting terminal for constant (used to prevent a shock by selector)
23	VC		Mounting terminal for constant (used to prevent a shock by selector)
24	OUT2		2ch volume output terminal
25	TV02		2ch high pass filter connector terminal
26	TIN2		2ch high pass filter connector terminal
27	BV02		2ch low pass filter connector terminal
28	BIN2		2ch low pass filter connector terminal
29	BVN2		2ch low pass filter connector terminal
30	NF2		Input stage AMP. gain adjusting terminal
31	IN2		2ch volume output terminal
32	FILTER		Filter terminal

■ IC303 Block diagram



# 8. Analytic Drawing and Parts List





■ Deck & Power Supply Unit Parts List

BLOCK NO. M1MM               

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	VJC2577-001	FRONT PLATE		1		
	2	VJG1438-002	FRONT PANEL		1		
	3	VXP3823-001	BUTTON(DECK)		1		
	4	VJK4485-001	LED LENS		3		
	5	VJF4003-001	FOOT	FOR F.PANEL	2		
	6	SBSF2608Z	SCREW	FOR PWB	6		
	7	VKL2770-001	DOOR HOLDER		1		
	8	VYH8110-001	EJECT LEVER		1		
	9	VXQ4124-001	EJECT KNOB		1		
	10	SBSF2608Z	SCREW	EJECT KNOB	1		
	11	VKZ4323-002	SCREW	EJECT LEVER	2		
	12	VKW3002-274	TENSION SPRING	EJECT LEVER	1		
	13	VYH7347-001	EJECT ARM		1		
	14	VKZ4341-001	SPECIAL SCREW	EJECT ARM	1		
	15	VKW4938-001	TORTION SPRING	EJECT ARM	1		
	16	VJT2263-006	CASS DOOR		1		
	17	VKY4180-001	CASSETTE SPRING		2		
	18	VYH5601-001	GEAR		1		
	19	VKW5217-002	DOOR SPRING		1		
	20	VJC2578-002	DOOR PLATE		1		
	21	VJT2377-002	DOOR PANEL		1		
	22	VJK4486-002	LCD LENS	ACRYLITE	1		
	23	SBST3006Z	SCREW	HOLDER+F.PANEL	1		
	24	SXST3008NW	SCREW	F.PLATE+D.HOLDE	2		
	25	VYTT699-001	REFRECTOR		1		
	31	VKL7777-002	EJECT SAFETY(R)		1		
	32	SBSF3010Z	SCREW	EJECT SAFTEY	1		
	33	VKW5224-001	TORSION SPRING	EJECT SAFTEY	1		
	34	VKS3655-002	F.P.C. HOLDER	FOR FLEX PWB	1		
	35	VYH7910-201	BOARD BRACKET	HOLDER+MECHA.	1		
	36	VYSS101-030	SPACER	FOR PWB BK	2		
	37	SBST3006Z	SCREW	BKT+CASS PWB	5		
	38	SBST3006Z	SCREW	BKT/PWB SA+MECH	1		
	39	SDST2604Z	SCREW	MECHA CON+MECHA	2		
	40	SBST3006Z	SCREW	HOLDER+MECHA	2		
	41	SBSF3010Z	SCREW	F.PANEL+MECHA	2		
	51	VKL1446-002	BOTTOM CHASSIS		1		
	52	SBST4006Z	SCREW	TRANS	4		
	53	E47227-039	FOOT ASSY		2		
	54	SBST3008Z	SCREW	SHIELD+T.BKT	2		
	55	VMH3020-001	HEAT SINK	AL T2 POWER IC	1		
	56	SBST3008Z	SCREW	HEAT SINK+BOTTO	2		
	58	SBSF3010Z	SCREW	IC+IC BKT	2		
	59	VYH8124-001	AC JACK HOLDER	AC JACK/VOL SEL	1		
	60	SBSF3008Z	SCREW	AC J.HOL+AC PWB	1		
	61	SBST3008Z	SCREW	J.HOLDER+BOTTOM	1		
	62	VMA4711-001	BARRIER	FOR AC/FUSE PWB	1		
	63	VJG1439-004	REAR PANEL		1		
	64	SDST3008M	SCREW	RAER PANEL+CHAS	2		
	65	SSST3006Z	SCREW	FRONT+BOTTOM	2		
	66	VJG1419-001	TOP COVER		1		
	67	VYSS1R3-059	SPACER		1		
	68	VKZ4614-002	SCREW	TOP.C+B.CHASS	4		
	69	SBSF3008M	SCREW	TOP.C+R.PANEL	2		
	70	SBST3006Z	SCREW	D.HOLDER+BOTTOM	1		



■ CD/Tuner & Amplifier Unit: Block No. M2

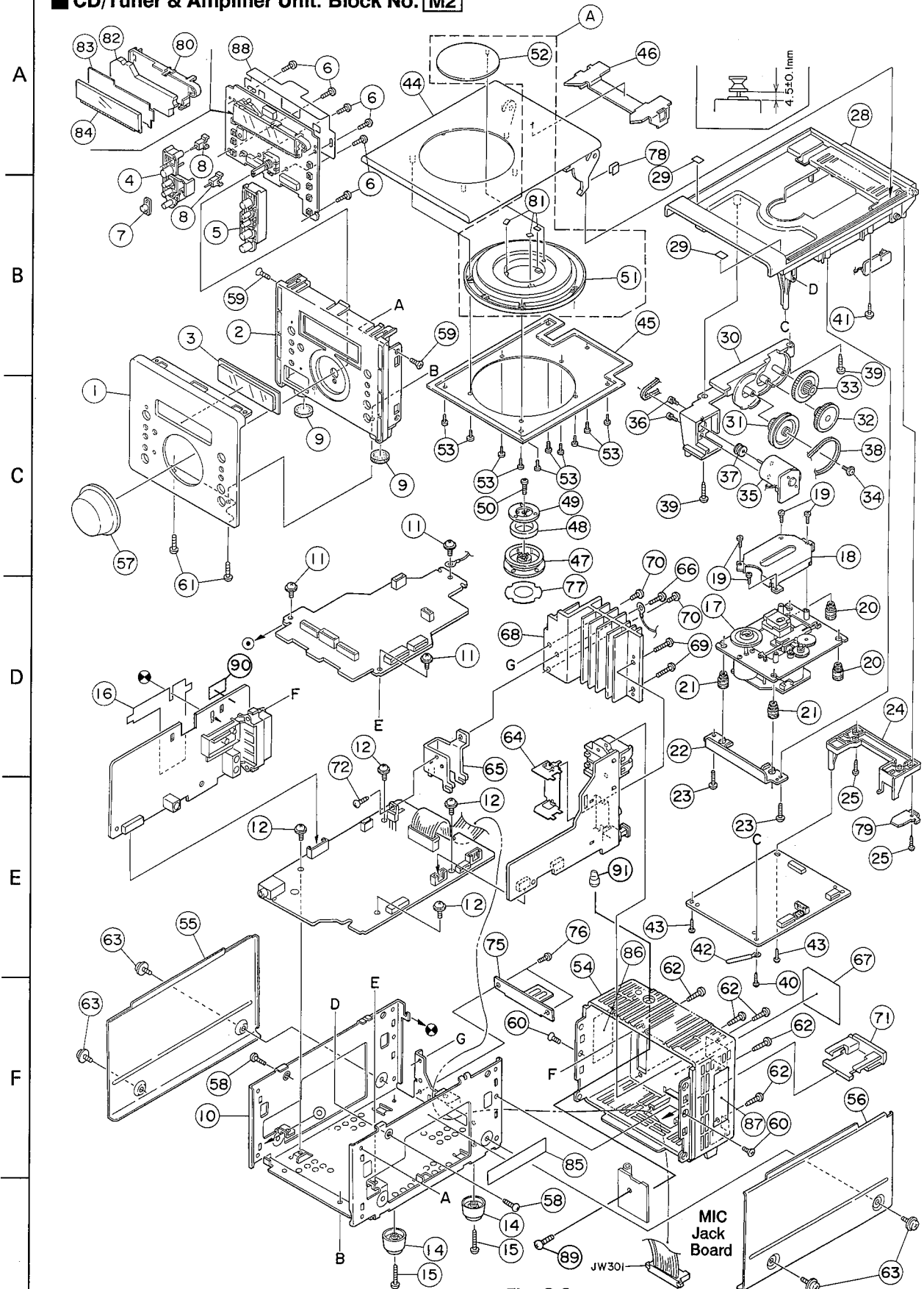


Fig. 8-2

(No. 10042) 54



■ CD/Tuner & Amplifier Unit Parts List

BLOCK NO. M2MM | | | |

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	VJK4496-00C	CD LENS	REF.51,52,81	1		
1	VJC2576-003	FRONT PLATE(CD)		1		
2	VJG1420-006	FRONT PANEL(CD)		1		
3	VJK4486-002	LCD LENS		1		
4	VXP3801-002	FUN. BUTTON	BUTTON(A)	1		
5	VXP3805-002	F.BUTTON 2		1		
6	SBSF2608Z	SCREW	F.P+BUT+PWB	6		
7	E408131-001	REMOTE LENS		1		
8	VJK4485-001	LED LENS		2		
9	VJF4003-001	FOOT	FOR F.PANEL	2		
10	VKL1443-001	BOTTOM CHASSIS		1		
11	GBST3006Z	SCREW	TU PWB+CHASSIS	3		
12	GBST3006Z	SCREW	FUNC PWB+CHASSI	4		
14	E47227-039	FOOT ASSY		2		
15	SBST3008Z	SCREW	F.ASSY+CHASSIS	2		
16	VMA4704-001	BARRIER		1		
17	-----	↑↑↑ C.D MECHA U	OPTIMA-6	1		
18	VJD5410-005	PICK COVER		1		
19	SDSF2006M	SCREW	CD MECHA+P.COVE	4		
20	E75609-001	INSULATOR		2		
21	E75609-002	INSULATOR		2		
22	VYH3937-001	CD MECHA HOLDER		1		
23	SBSF3010Z	SCREW	CASE+HOLDER	2		
24	VYH7815-001	CD MECHA HOLDER		1		
25	SBSF3010Z	SCREW	CASE+HOLDER	2		
28	VJD1208-009	CD CASE		1		
29	VYSR102-065	SPACER		2		
30	VYH3935-002	GEAR BKT		1		
31	VYH7356-201	PULLEY		1		
32	VYH7357-201	GEAR(A)		1		
33	VYH8076-001	GEAR(B)		1		
34	GBSG3008Z	TAP.SCREW	PULLEY+GEAR BKT	1		
35	MXN-13FB12F	DC MOTOR ASS'Y	CASSETTE DOOR	1		
36	SPSP3004Z	SCREW	FOR MOTOR	2		
37	VYH7699-001	PULLEY	MOTOR	1		
38	VKB3000-175	BELT		1		
39	SBSF3010Z	SCREW	CD CASE+GEAR BK	2		
40	SBSF3010Z	SCREW	FOR WIRE CLAMP	1		
41	GBSF3010Z	TAPPING SCREW	SW PWB+CD CASE	1		
42	VKZ4001-110	WIRE CLAMP		1		
43	SBSF3010Z	SCREW	CD AMP PWB+CD	2		
44	VJT2373-003UL	CD DOOR		1		
45	VJC3296-001	PLATE		1		
46	VYH3970-002	DOOR SUPORT		1		
47	VYH3726-002SS	IC		1		
48	VYH7313-003	MAGNET		1		
49	VYH7677-201	YOKE		1		
50	SDSF2606Z	SCREW	FOR CLAMPER	1		
51	-----	CD LENS		1		
52	-----	DOOR PLATE		1		
53	SDSF2006M	SCREW	DOOR+LENS	10		
54	VJG1421-004	REAR COVER		1		
55	VJC3293-001	SIDE PANEL(L)		1		
56	VJC3294-001	SIDE PANEL(R)		1		



BLOCK NO. M2MM      

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
57	VXL4447-002	VOLUME KNOB		1		
58	SBSF3010Z	SCREW	CD+CHASSIS UNIT	2		
59	SSST3006Z	SCREW	F.PANEL+CHASSIS	2		
60	SSST3006Z	SCREW	R.COVER+CHASSIS	2		
61	SXST3008NW	SCREW	F.PLATE+CHASSIS	2		
62	SBSF3008M	SCREW	R.COVER+JACK	5		
63	VKZ4614-002	SCREW	CHASSIS+S.PANEL	4		
64	VYH8103-002	IC HOLDER(A)		1		
65	VYH8085-001	IC HOLDER(B)		1		
66	SBSF3010Z	SCREW		1		
67	VYN9306-M103	NAME PLATE		1		
68	VMH4053-201	HEAT SINK		1		
69	SBST2612Z	SCREW	H.SINK+IC HOL(A)	2		
70	SBST3006Z	SCREW	HEAT SINK+CHASS	2		
71	VYH7991-003	WIRE HOLDER		1		
72	SBSF3010Z	SCREW	IC HOL(B)+HEAT	1		
75	VYH8125-001	WIRE SHIELD		1		
76	SBST3006Z	SCREW	FOR WIRE SHIELD	2		
77	VYH8127-001	PAD		1		
78	VYH8128-001	DOOR PAD		1		
79	VYH8123-001	HOOK		1		
80	VYH3980-001	LENS CASE		1		
81	-----	SHEET	T3500	1		
82	VJK4501-001	LENS		1		
83	VYH8166-001	SHEET		1		
84	VGL1216-001	LCD	DI711	1		
85	E70891-001	CLASS 1 LABEL		1	US	
87	LE40210-001A	CAUTION LABEL		1	UT	
	VND4118-004	CAUTION LABEL		1		
88	VMA4717-001	LAMP SHEET		1		
89	SBSF3010Z	TAPPING SCREW		1		
90	VYSS1R1-006	SPACER		1		
91	VXL4442-001	VOLUME KNOB		1		

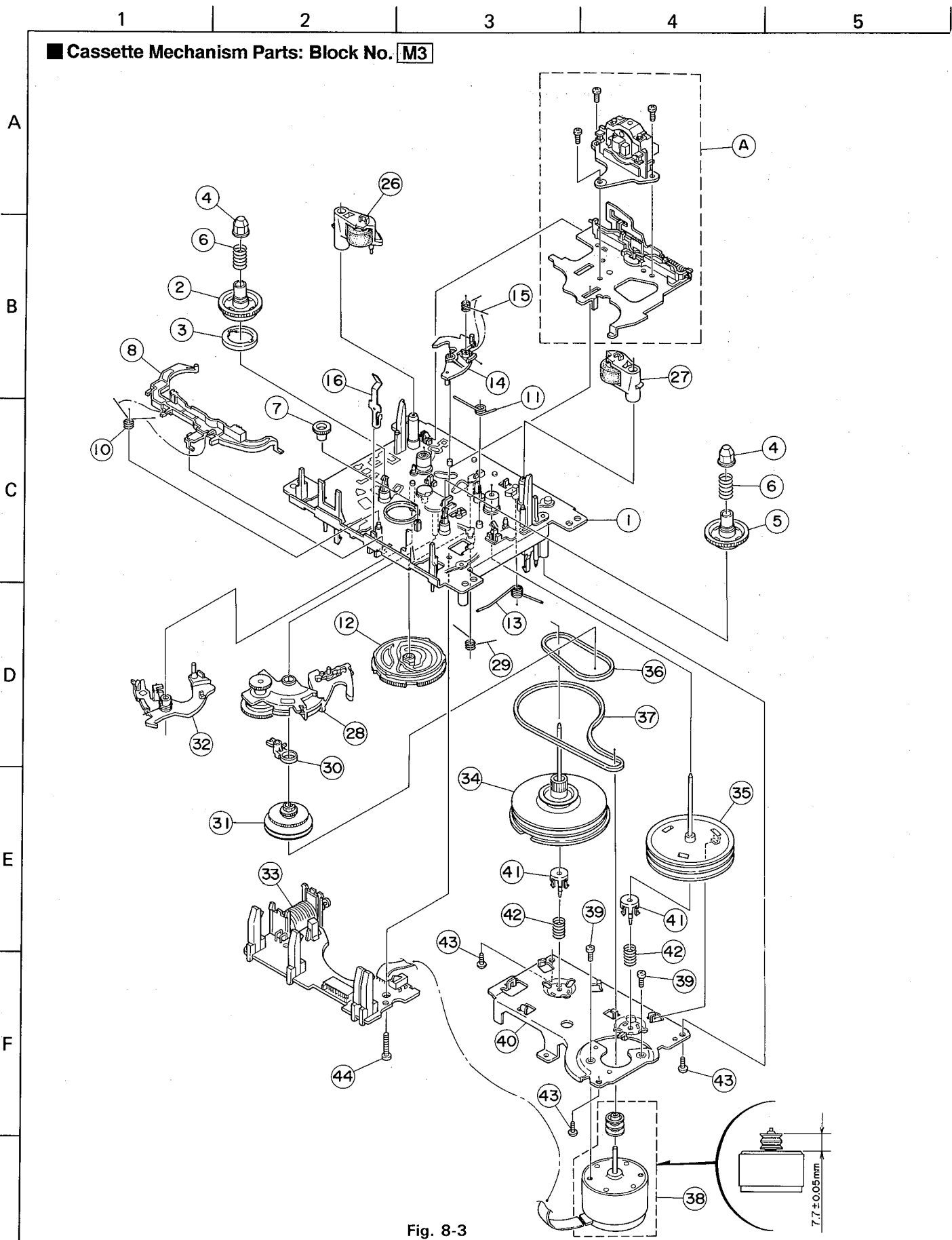


Fig. 8-3

### ■ Cassette Mechanism Parts List

BLOCK NO. M3MM111

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	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	VKZ3174-00A	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	MSI-5B2LW	D.C.MOTOR	CAPSTAN -SA4	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		

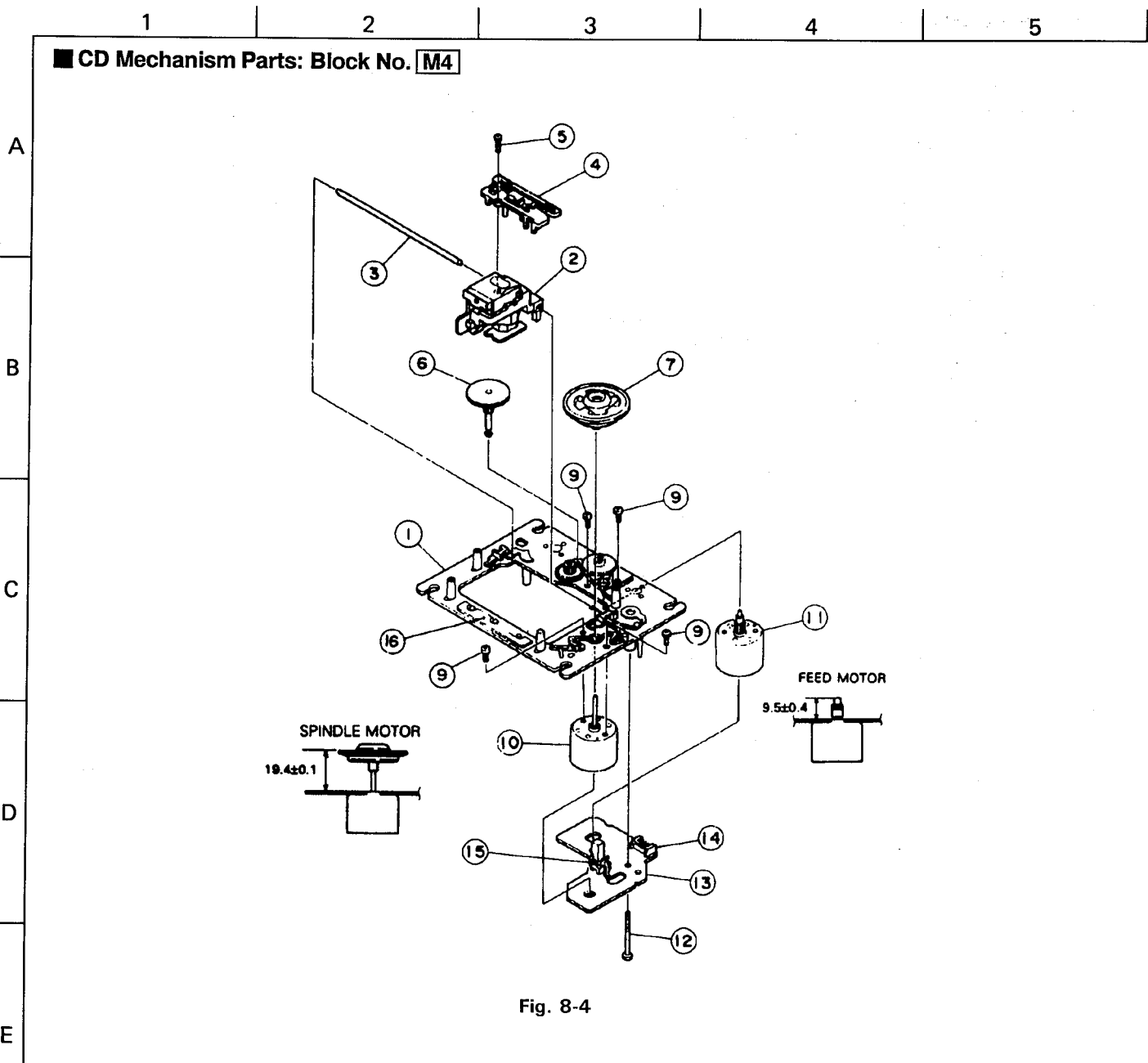


Fig. 8-4

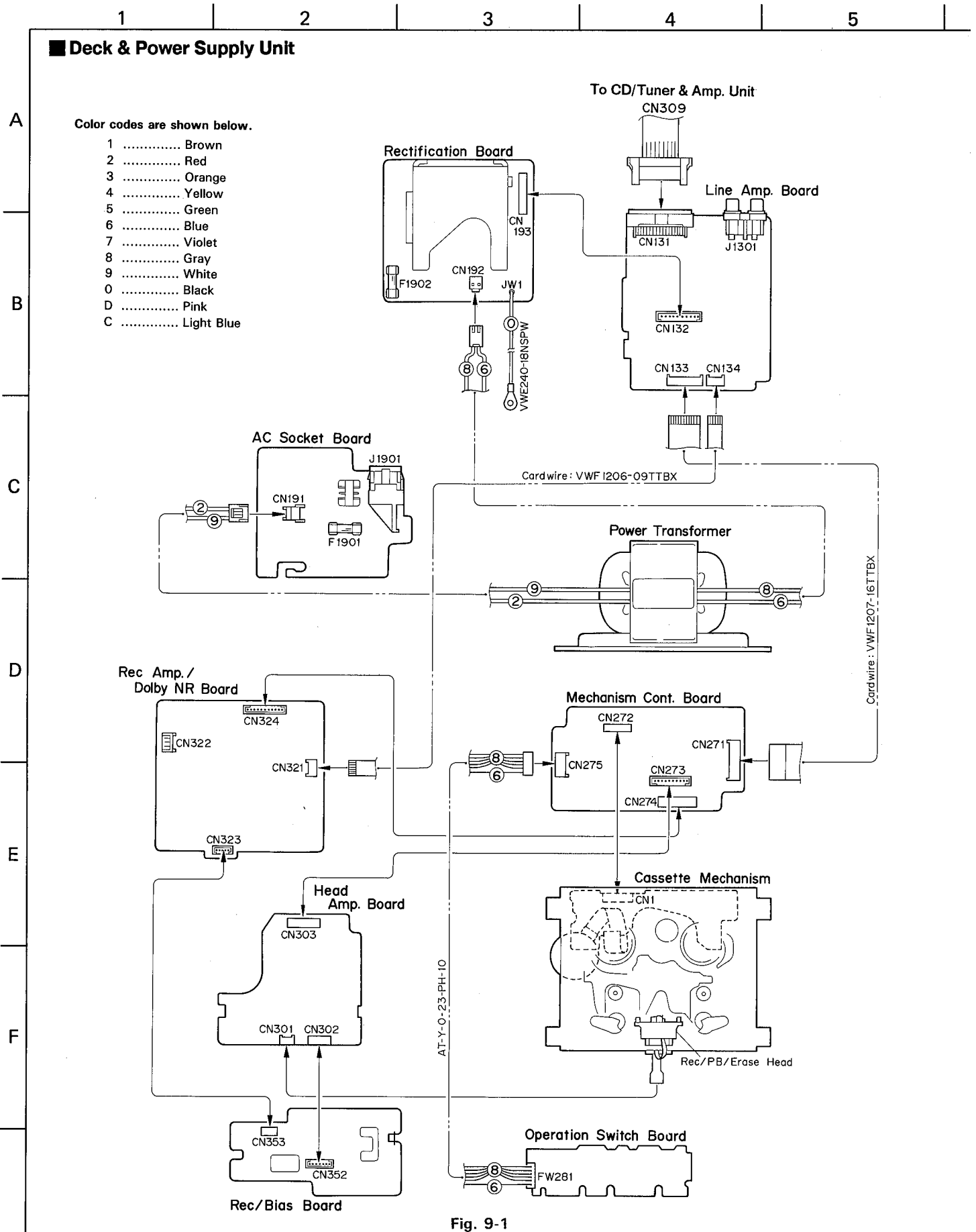
CD Mechanism Parts List

BLOCK NO. M4MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	EPB-002A	BASE ASS'Y		1		
2	OPTIMA-6S	PIC-UP		1		
3	E406777-001	GUIDE SHAFT		1		
4	E307746-001	CD RACK		1		
5	SDSF2006Z	SCREW	CD LACK ASS'Y	1		
6	EPB-003A	MECHA GIAR		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	DC MOTOR ASS'Y	FEED MOTOR	1		
12	E75832-001	S.SCREW	M.REAF SWITCH	1		
13	EMW10190-001	BOARD	LEAF SWITCH	1		
14	EMV5109-006B	6P PLUG ASSY		1		
15	ESB1100-005	LEAF SWITCH		1		
16	E407212-001	DAMPER		1		



# 9. Wiring Connections





6                      7                      8                      9                      10

■ CD/Tuner & Amplifier Unit

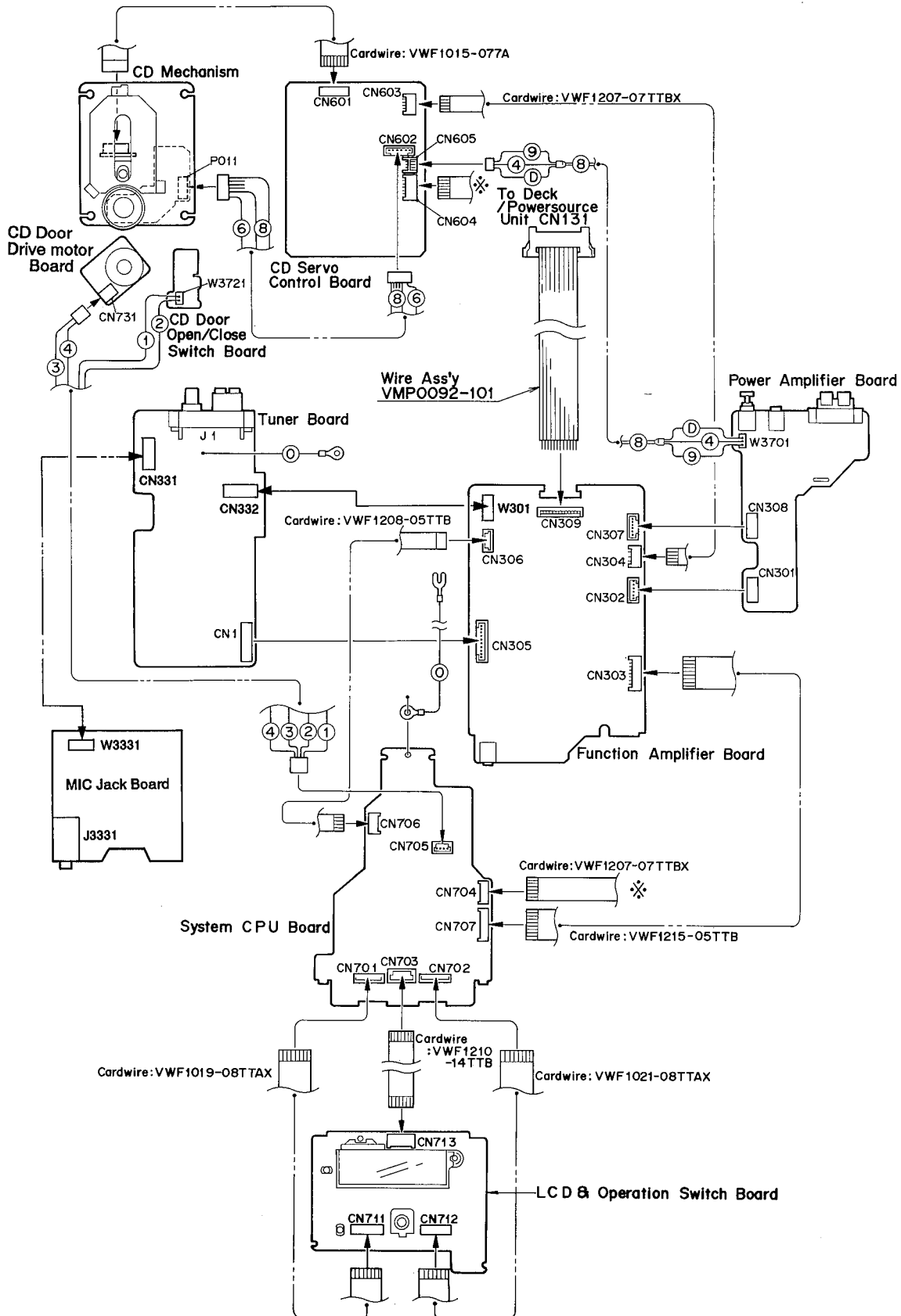


Fig. 9-2

# 10. Block Diagram

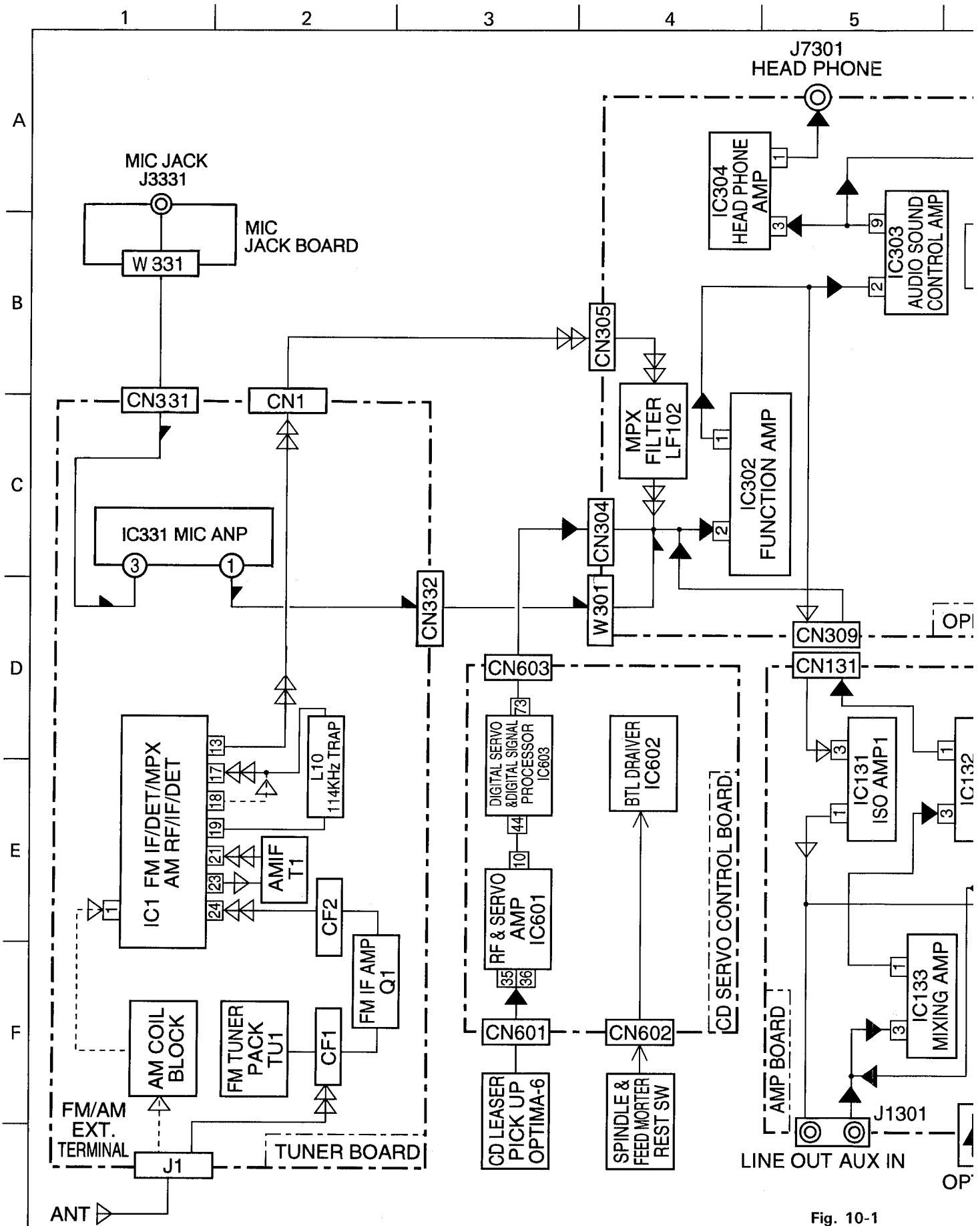
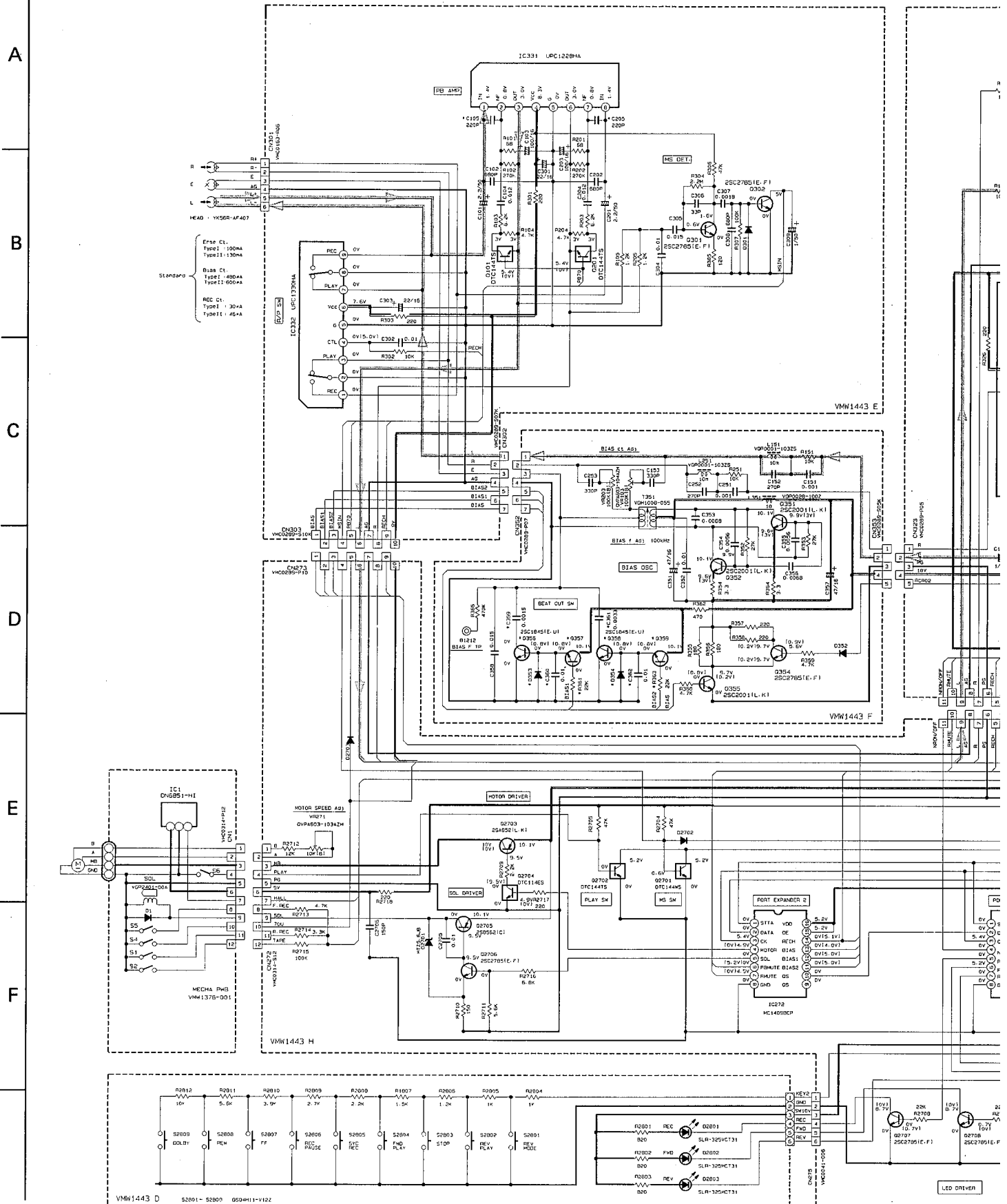


Fig. 10-1



# 11. Standard Schematic Diagrams

Head Amplifier & Mechanism Control Circuit: Drawing No. VDH9306-005PV



Note : VDH9306005PV(/s/G)

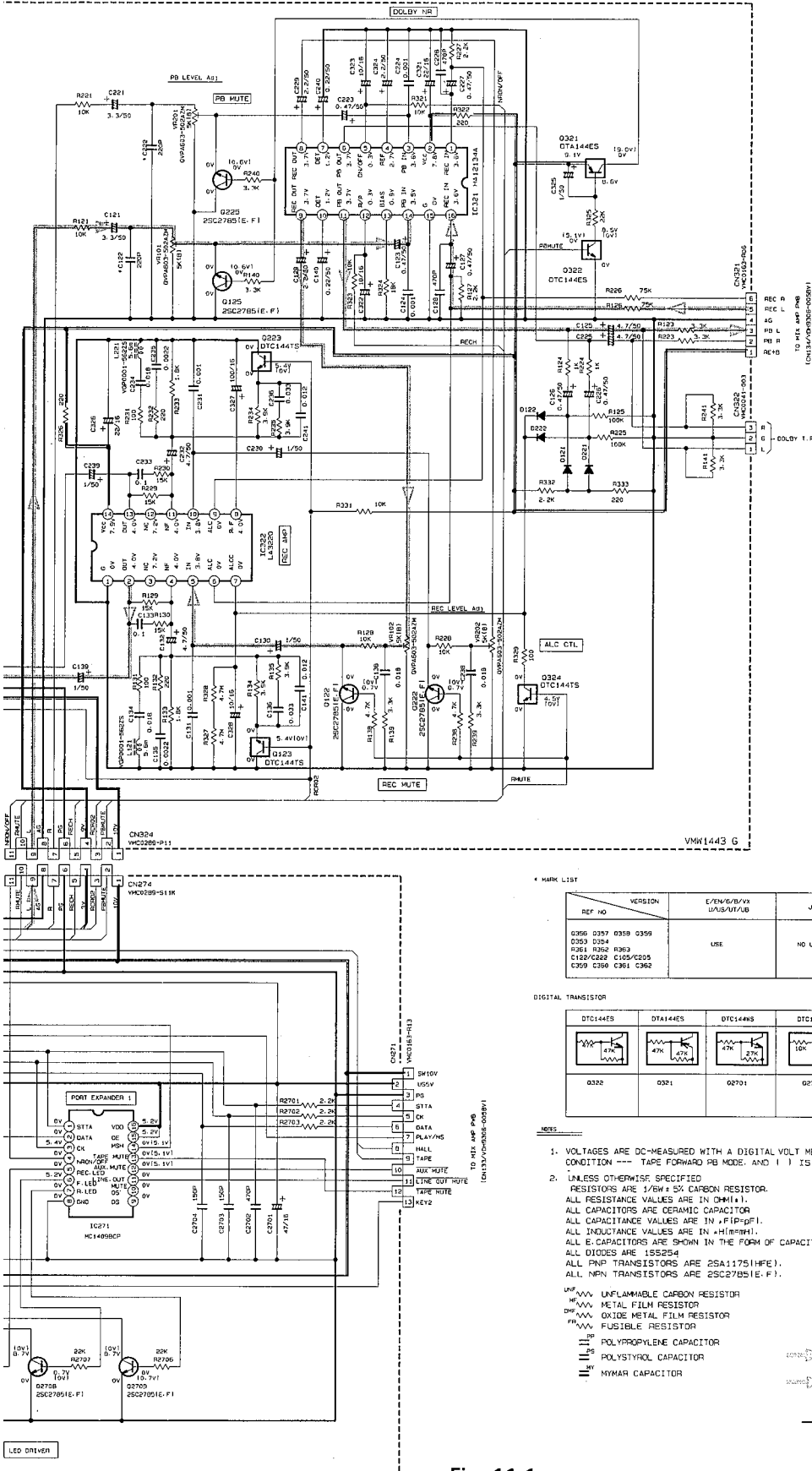
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7

8

9

10



MARK LIST

REF NO	VERSION	E/E/G/B/VX U/S/S/UT/UB	V/C	
Q356	Q357	Q358	Q359	
Q360	Q361	Q362	Q363	USE
C120/C220	C105/C205	C359	C360	NO USE

DIGITAL TRANSISTOR

DTC144ES	DTC144ES	DTC144NS	DTC144ES	DTC144TS
Q332	Q321	Q2701	Q2704	Q123/Q223 Q101/Q201 Q324 Q2762

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- TAPE FORWARD RB MODE AND I IS INVERT MODE
- UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/8W ± 5% CARBON RESISTOR. ALL CAPACITANCE VALUES ARE IN pF (µF).
- ALL CAPACITANCE VALUES ARE IN pF (µF).
- ALL INDUCTANCE VALUES ARE IN mH (µH).
- ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (µF)/RATED VOLTAGE (V).
- ALL DIODES ARE 1S254
- ALL PNP TRANSISTORS ARE 2SA1175 (HFE1).
- ALL NPN TRANSISTORS ARE 2SC2705 (E-F).

- UNFLAMMABLE CARBON RESISTOR
- METAL FILM RESISTOR
- OXIDE METAL FILM RESISTOR
- FUSIBLE RESISTOR
- POLYPROPYLENE CAPACITOR
- POLYSTYROL CAPACITOR
- MYMAR CAPACITOR

Tape P.B/Main signal  
REC/Main signal

⊕ B Line

Fig. 11-1

1 2 3 4 5

Function & Power Amplifier Circuit: Drawing No. VDH9306-005AV

A  
B  
C  
D  
E  
F

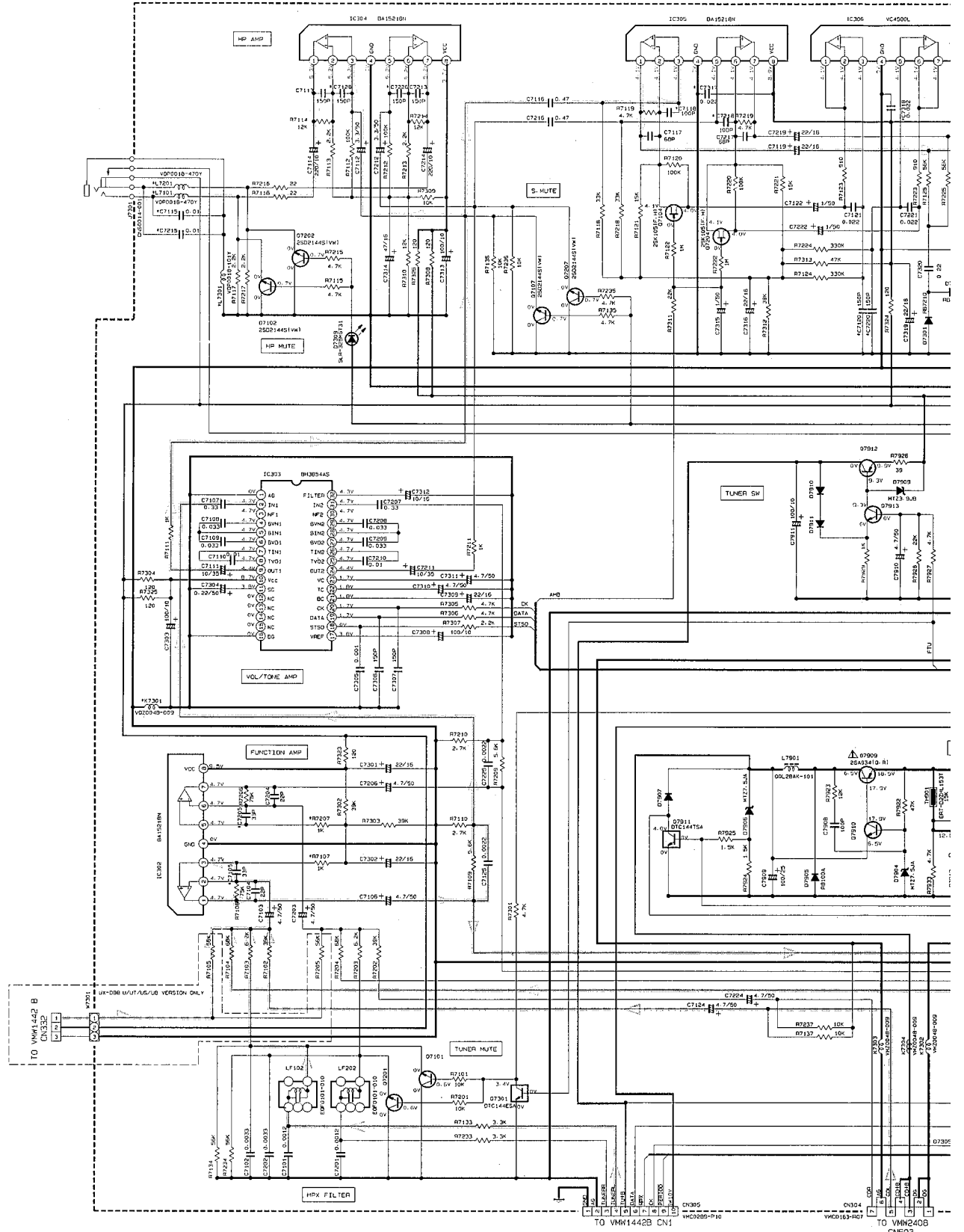


TABLE I DIGITAL TRANSISTOR

47K	47K	10K	4.7K	47K	47K

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- CD STOP MODE.
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/8W ±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR NYLON CAPACITOR. ALL CAPACITANCE VALUES ARE IN PICO(FP).
- ALL INDUCTANCE VALUE ALL E. CAPACITORS ARE OF CAPACITANCE 1, F. ALL DIODES ARE 1SS2. ALL NPN TRANSISTOR / ALL PNP TRANSISTOR /



**Line Amplifier & Power Source Circuit: Drawing No. VDH9306-005BV**

A

B

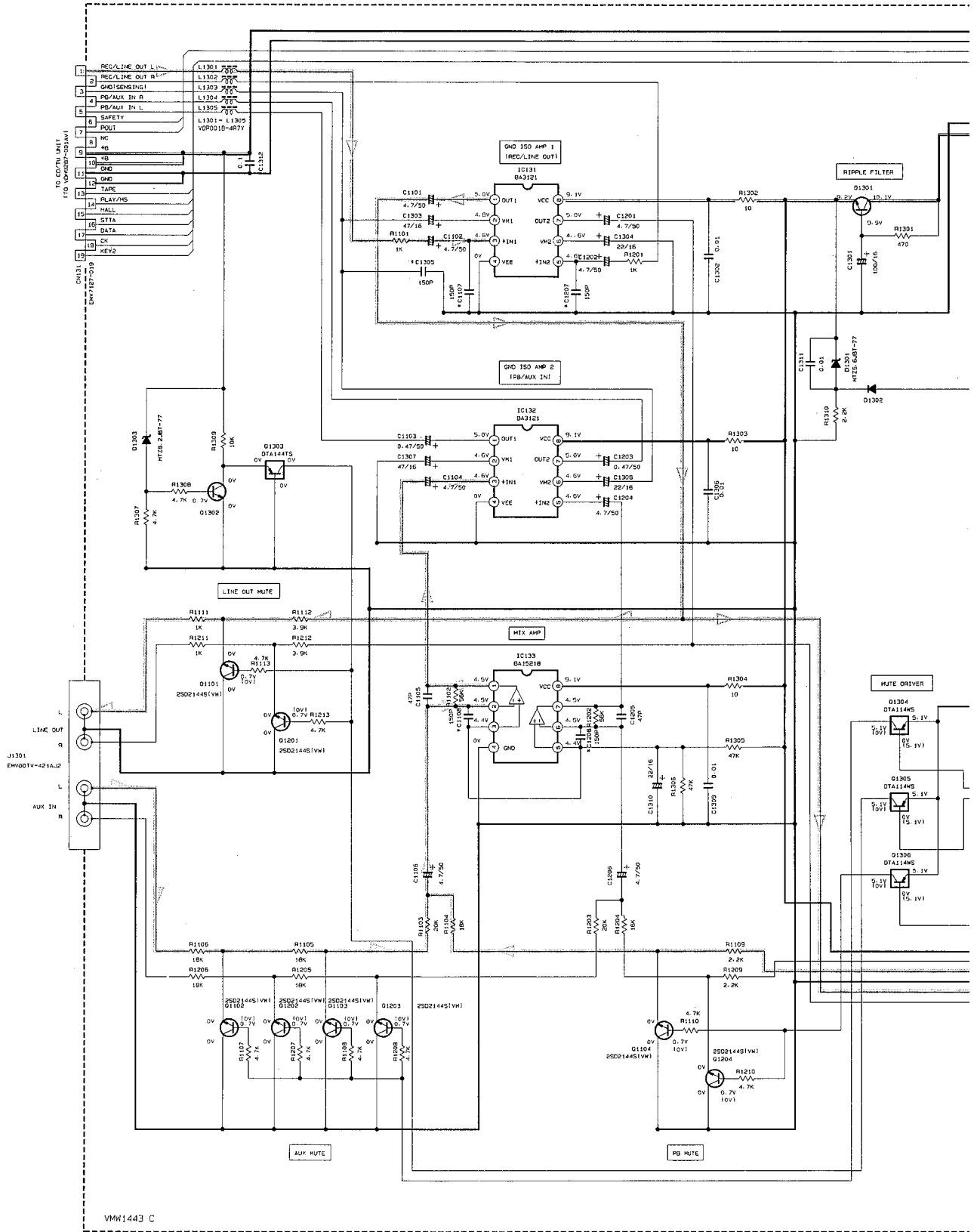
C

D

E

F

1 2 3 4 5



VMW1443 C

Note : VDH9306005BV(/s/G)

Fig.



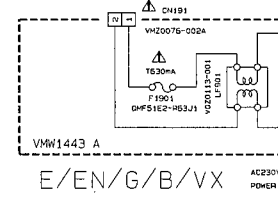
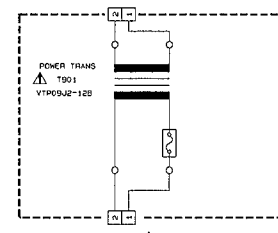
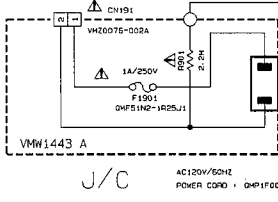
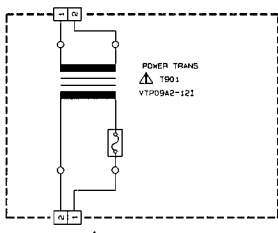
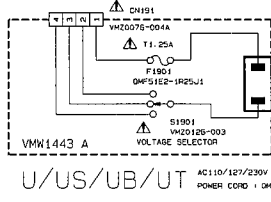
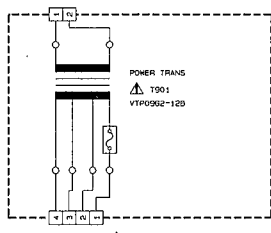
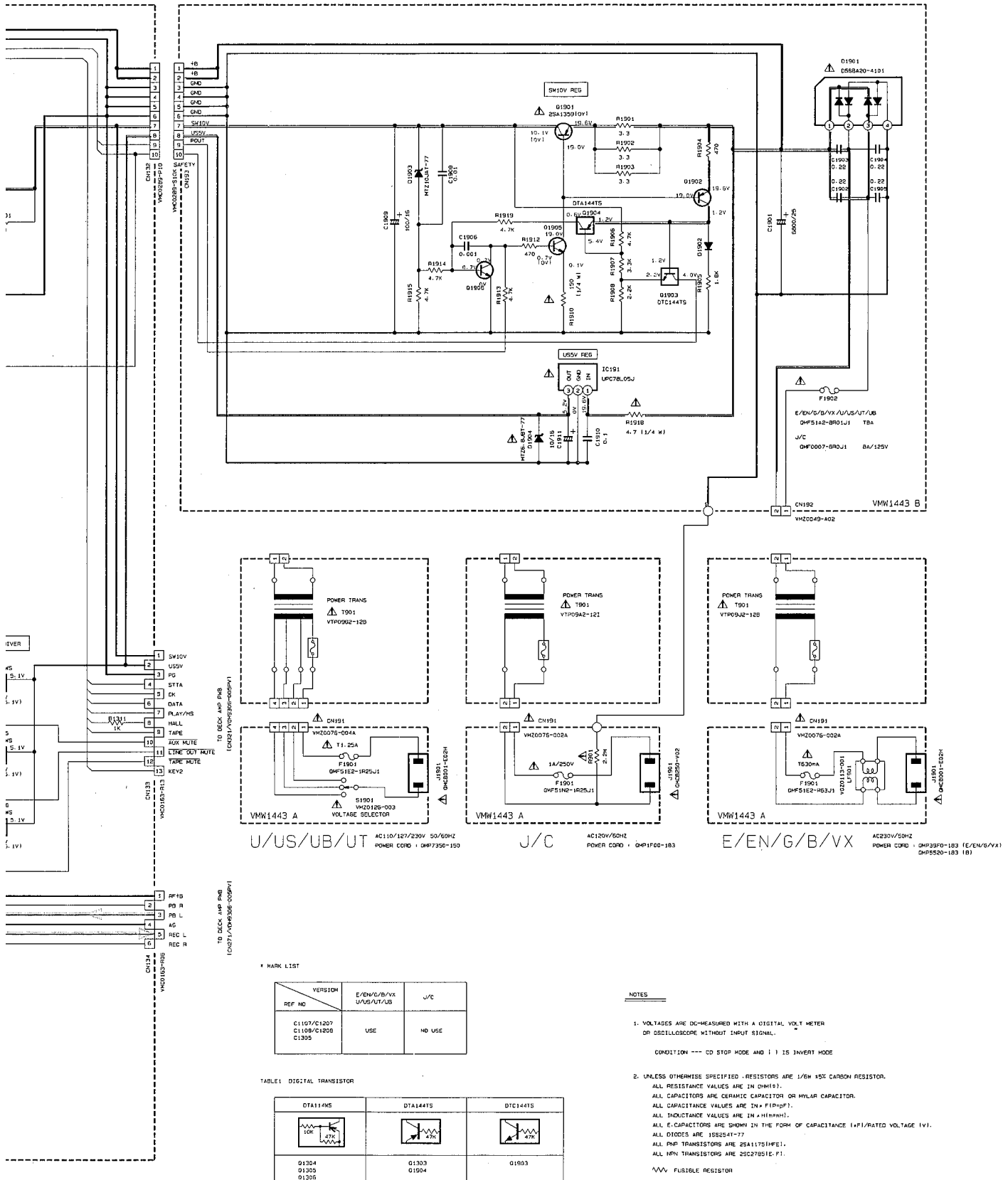
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10



U/US/UB/UT AC110/120/220V 50/60HZ POWER CORD + D9P7350-150

J/C AC120V/60HZ POWER CORD + D9P1F00-183

E/EN/G/B/VX AC230V/50HZ POWER CORD + D9P39F0-183 (E/EN/G/VX) D9P5520-183 (B)

\* MARK LIST

VERSION	E/EN/G/B/VX U/US/UT/UB	J/C
C1107/C1207 C1108/C1208 C1305	USE	NO USE

TABLE 1: DIGITAL TRANSISTOR

DTA14415	DTA14415	DTC14415
01304 01305 01306	01303 01904	01903

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.

CONDITION --- CD STOP MODE AND I I IS INVERT MODE

2. UNLESS OTHERWISE SPECIFIED -RESISTORS ARE 1/8W 5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHMS (Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN μF (μF) OR P (PF). ALL INDUCTANCE VALUES ARE IN μH (μH).

ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF/RATED VOLTAGE (V)). ALL DIODES ARE 1SS241-77

ALL PWR TRANSISTORS ARE 2SA1175HFE1.

ALL MPN TRANSISTORS ARE 2SC2752IE-F1.

⚡ FUSIBLE RESISTOR

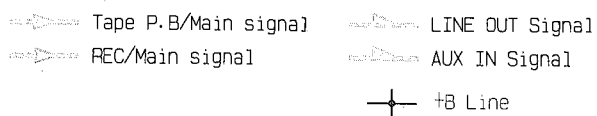
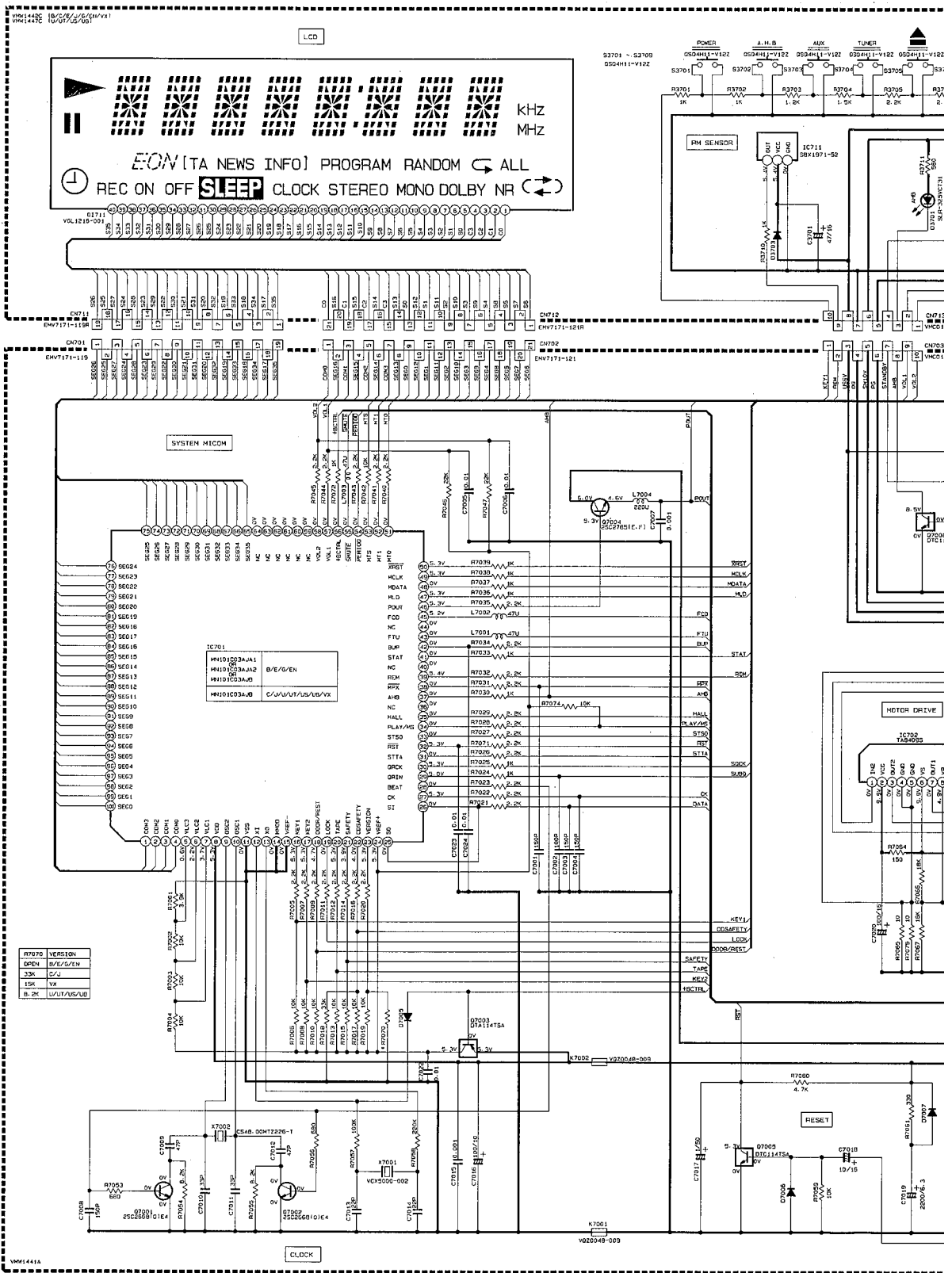


Fig. 11-3

**LCD & Operation Switch/System CPU Circuit: Drawing No. VDH9306-005SV**

A  
B  
C  
D  
E  
F

1 2 3 4 5



NOTE 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- CD STOP MODE

2. UNLESS OTHERWISE SPECIFIED  
RESISTORS ARE 1/8W ±5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHM(Ω).  
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN P(F)OR P(PF).  
ALL INDUCTANCE VALUES ARE IN M(H)OR MH(MH).  
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (V.F)/RATED VOLTAGE (V).  
ALL DIODES ARE 1SS254 (OR HSS104T) OR MA1651

TABLE 1. DIGITAL TRANSISTOR

DT114E3A	DT114T5A	DT114T5A

Note : VDH9306005SV(s/G)

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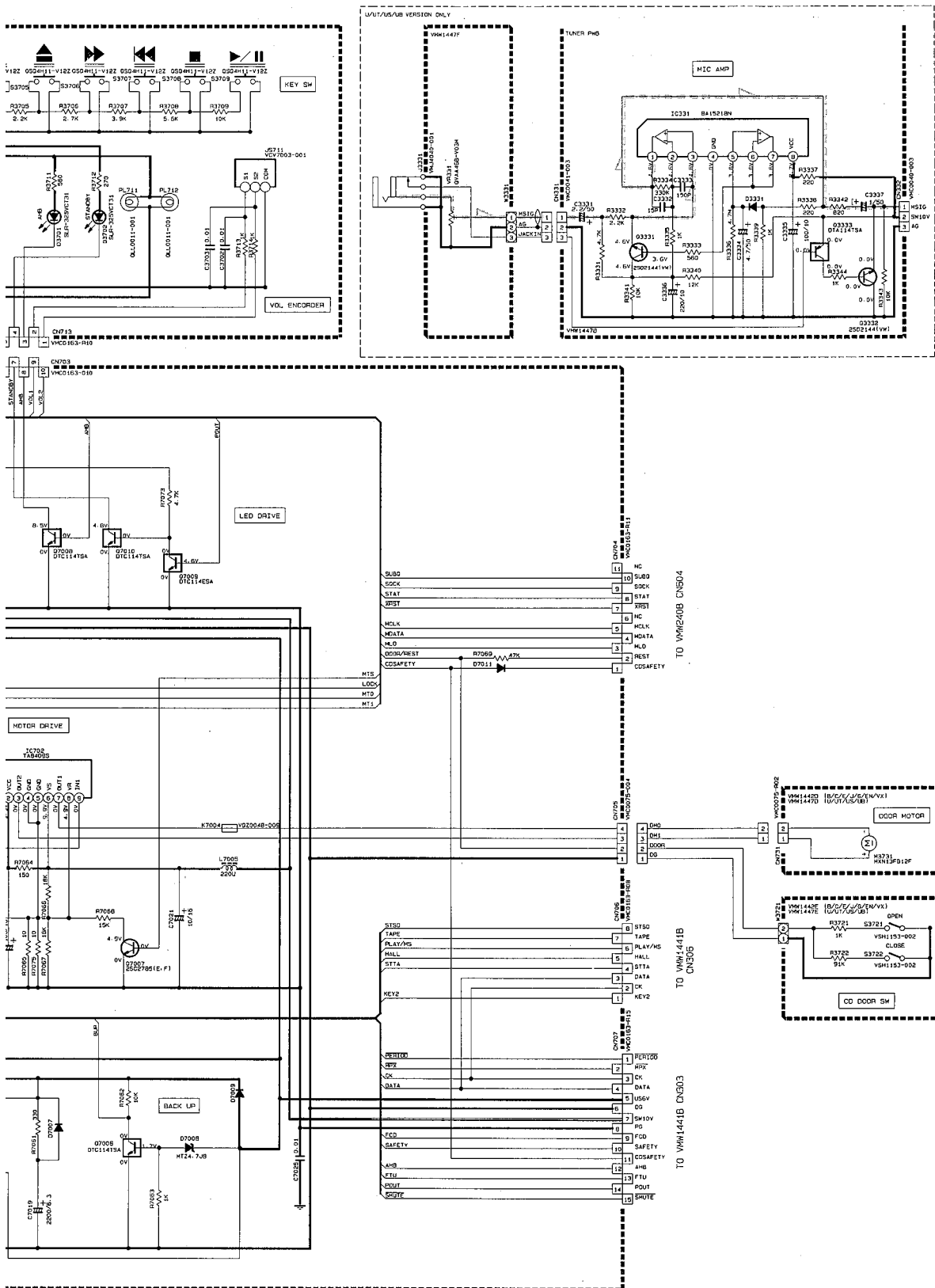


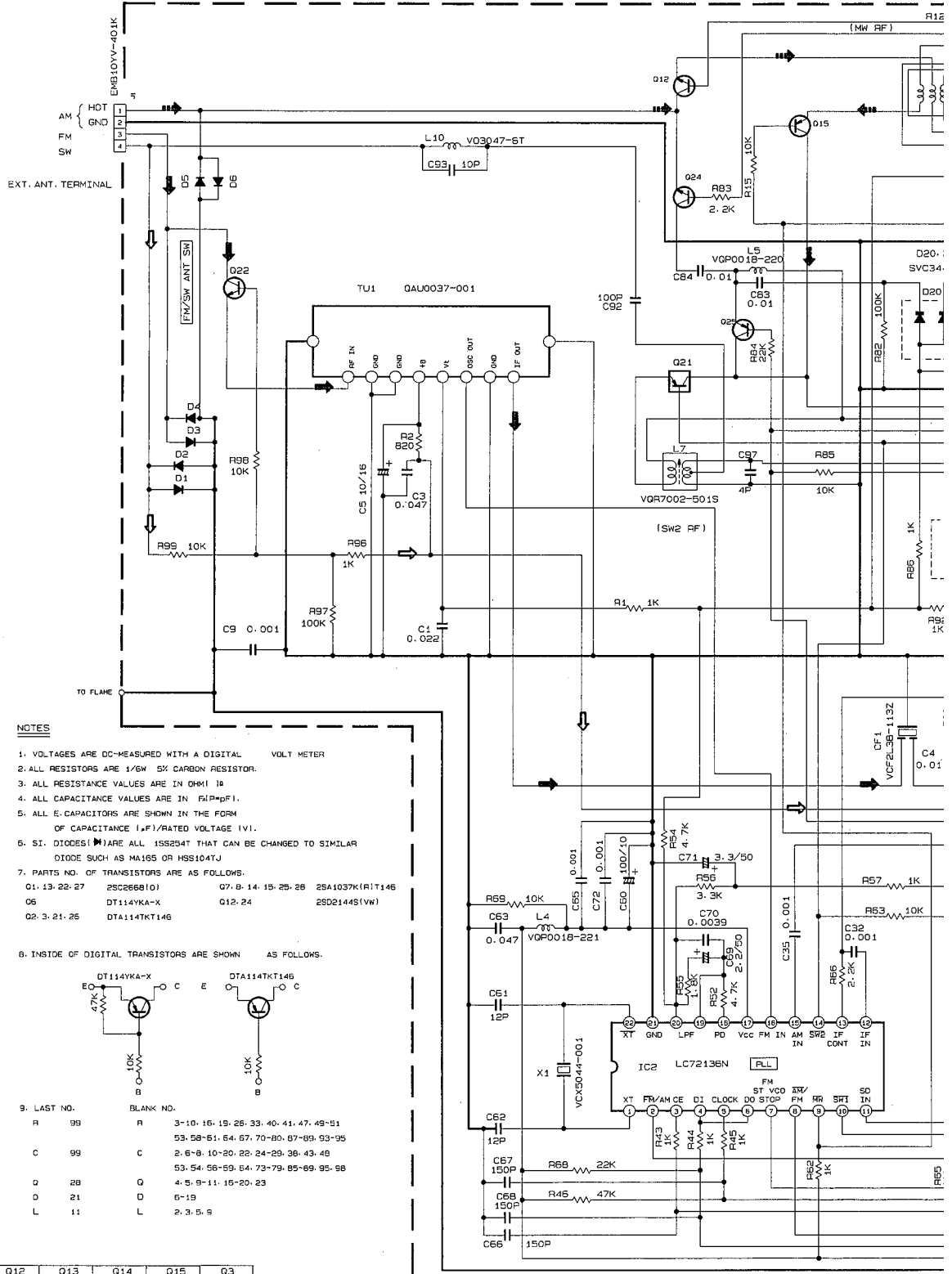
Fig. 11-4

MIC Input signal  
 +B Line

# Tuner Circuit: Drawing No. VDH9306-007TW

A  
B  
C  
D  
E  
F

1 2 3 4 5

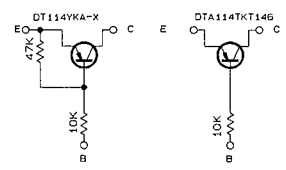


### NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
- ALL RESISTORS ARE 1/8W 5% CARBON RESISTOR.
- ALL RESISTANCE VALUES ARE IN OHM UNLESS OTHERWISE SPECIFIED.
- ALL CAPACITANCE VALUES ARE IN PICO/FEMTO (PF/F).
- ALL ELECTROLYTIC CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
- SI DIODES ARE ALL 1SS254T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104TJ
- PARTS NO. OF TRANSISTORS ARE AS FOLLOWS:
 

Q1: 13-22-27	2SC2668(O)	Q7: B: 14-19-25-28	2SA1037K1R1T146
Q6	DT114YKA-X	Q12: 24	2SD2144S1(V)
Q2: 3-21-25	DTA114TKT146		

### 6. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



9. LAST NO.		BLANK NO.	
R	99	R	3-10-15-19-26-33-40-41-47-49-51
C	99	C	53-58-61-64-67-70-80-87-89-93-95
Q	28	Q	2-6-8-10-20-22-24-29-36-43-48
D	21	D	53-54-56-59-64-73-79-85-89-95-98
L	11	L	4-5-9-11-15-20-23
			6-19
			2, 3, 5, 9

Tr No.	Q12	Q13	Q14	Q15	Q3
PIN NAME	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B
AM 531KHZ	0 0 0 7 0 0 0 0 2 2 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	0 0 0 7 0 0 0 0 2 2 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	0 0 0 7 0 0 0 0 2 2 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	0 0 0 7 0 0 0 0 2 2 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	0 0 0 7 0 0 0 0 2 2 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4
SW 2-3MHZ	0 0	0 0	0 0	0 0	0 0

Tr No.	Q1	Q6	Q22	Q7	Q8		
PIN NAME	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B		
FM 87.5MHZ	0 0 0 0 7 0 0 0 0 0 0 0 7 1 5 0 1 1 1 5 0 1 1 1 5 0	0 0 0 0 7 0 0 0 0 0 0 0 7 1 5 0 1 1 1 5 0 1 1 1 5 0	0 0 0 0 7 0 0 0 0 0 0 0 7 1 5 0 1 1 1 5 0 1 1 1 5 0	0 0 0 0 7 0 0 0 0 0 0 0 7 1 5 0 1 1 1 5 0 1 1 1 5 0	0 0 0 0 7 0 0 0 0 0 0 0 7 1 5 0 1 1 1 5 0 1 1 1 5 0		
AM 531KHZ	0 0	0 0	0 0	0 0	0 0		
Tr No.	Q21	Q24	Q25	Q26	Q27	Q28	Q2
PIN NAME	E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B	E C B E C B E C B E C B E C B E C B E C B E C B E C B
SW 2-3MHZ	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4	2 0 2 0 5 1 0 0 0 0 7 2 0 2 0 1 4 2 0 2 0 1 4 2 0 2 0 1 4
SW 7MHZ	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3	2 0 2 0 0 0 0 0 0 0 0 2 0 2 0 4 3 2 0 2 0 4 3 2 0 2 0 4 3

CONDITION	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13
IC1	FM NO SIGNAL	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1
	FM 60CB STEREO	2.0	0.5	0	2.0	5.1	5.1	1.1	1.1	0	0.3	0	0	1.1
IC2	AM NO SIGNAL	2.0	0.5	0	2.0	5.1	5.1	0	0	0.3	5.1	5.1	1.1	1.1
	FM NO SIGNAL	2.4	0	0	1.1	5.0	1.1	3.7	3.7	4.5	4.3	5.1	0	0

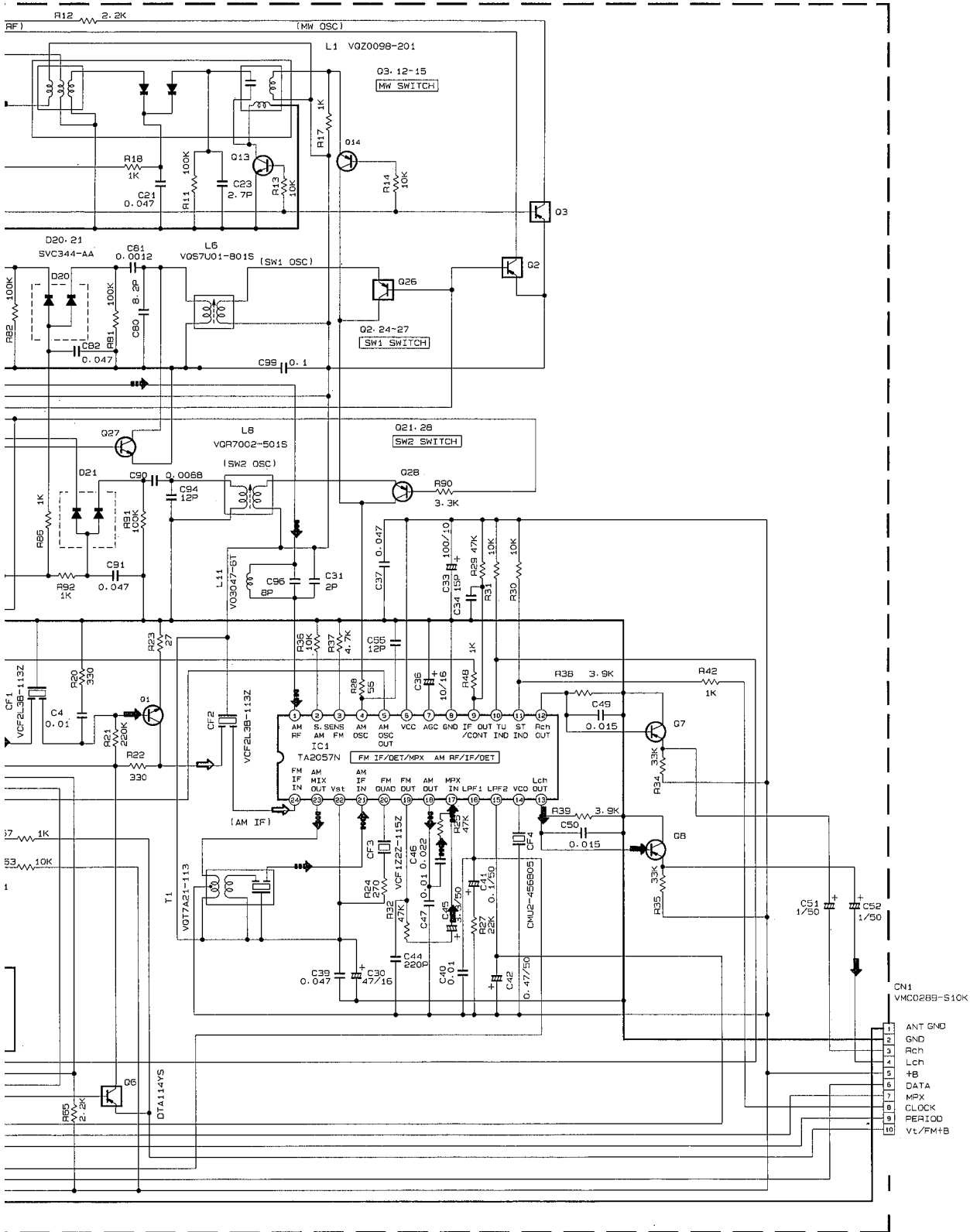
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10



1	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1.1	1.1	4.4	3.7	3.7	1.4	0	1.3	1.1	2.0	2.0	5.1	3.0
1	1.1	1.1	4.3	4.1	3.7	1.4	0	1.4	1.1	2.0	2.0	5.1	3.0
1	1.1	1.1	4.5	0.1	0	1.4	1.4	1.5	1.6	2.0	2.0	5.1	3.0
1	0	0	5.1	0	2.6	5.1	1.0	1.0	3.7	0	2.7		

- ➔ FM Radio signal
- ➔ AM Radio Signal
- ↕ SW Signal

Fig. 11-5

# 12. Location of P. C. Board Parts

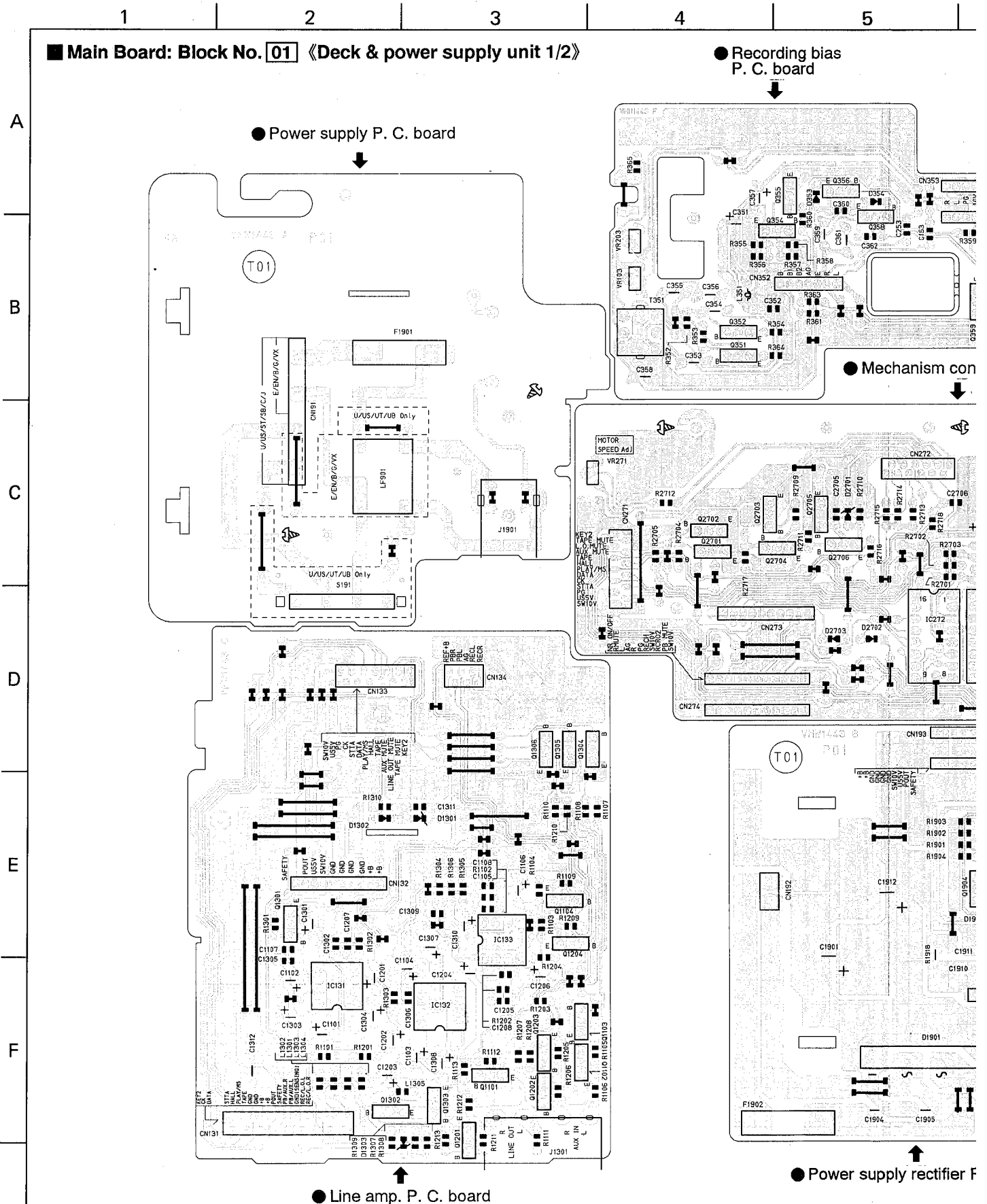


Fig. 12-1



1

2

3

4

5

■ Tuner & Operation Switch Board: Block No. 02 《CD/ Tuner & Amp. unit 1/3》

A

B

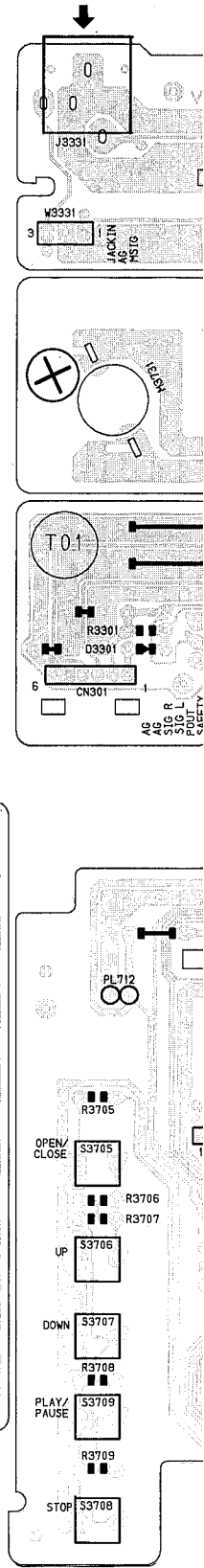
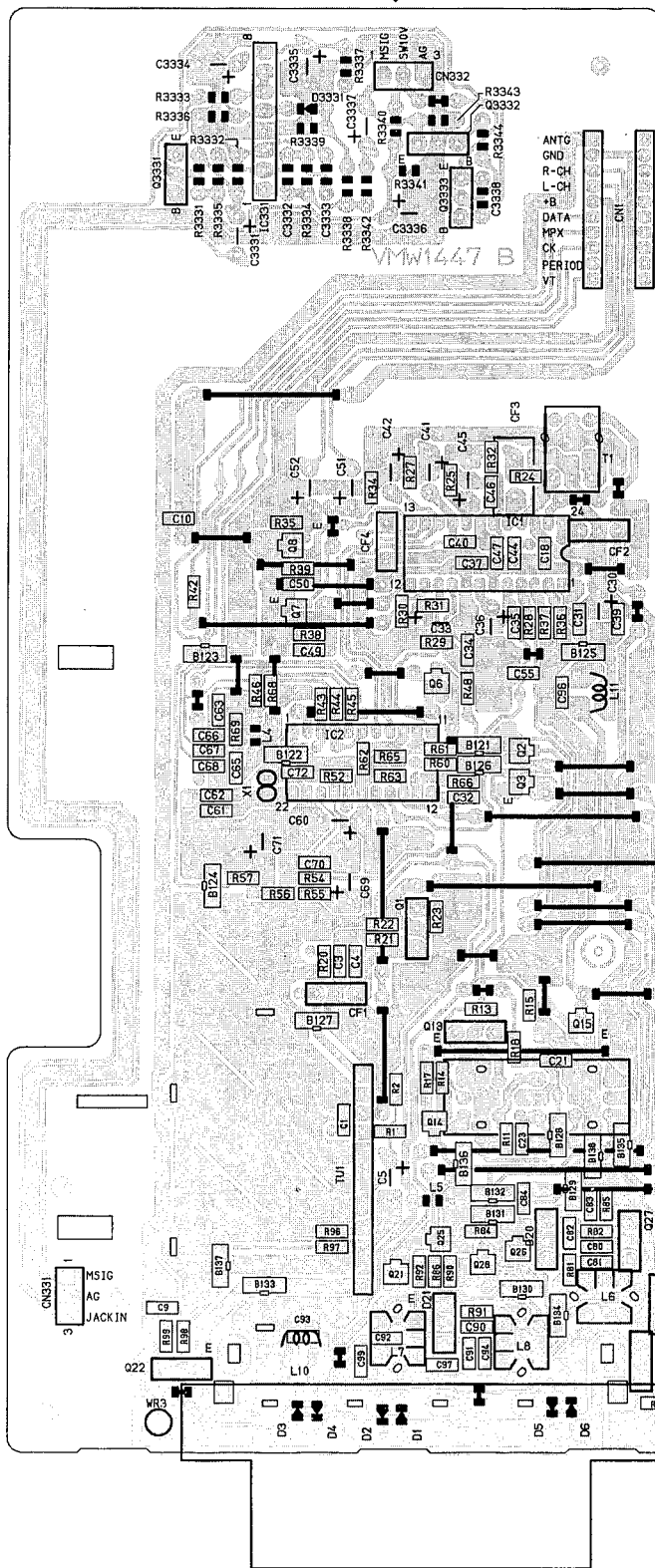
C

D

E

F

● Tuner P. C. board







1

2

3

4

5

■ System CPU & Function Board: Block No. 03 《CD/ Tuner & Amp. unit 2/3》

A

B

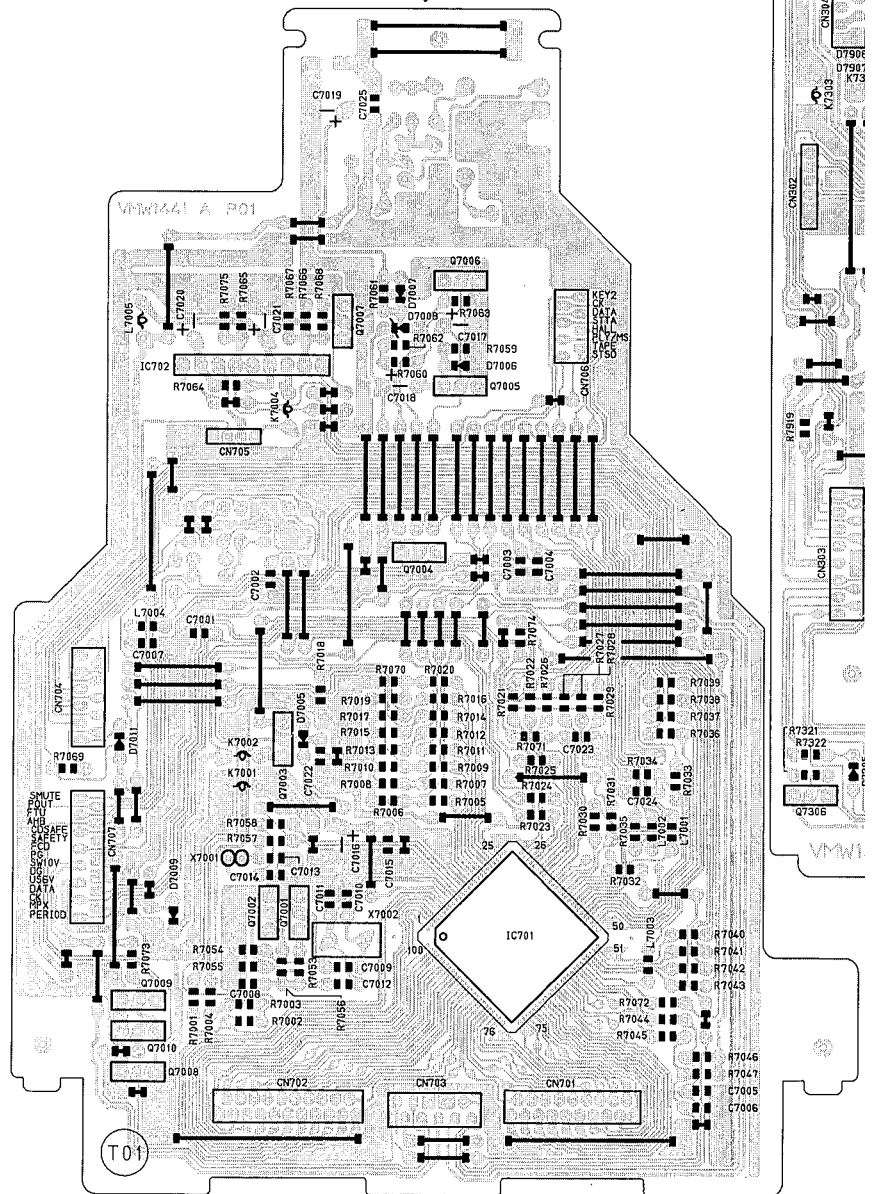
C

D

E

F

● System CPU P. C. board



F

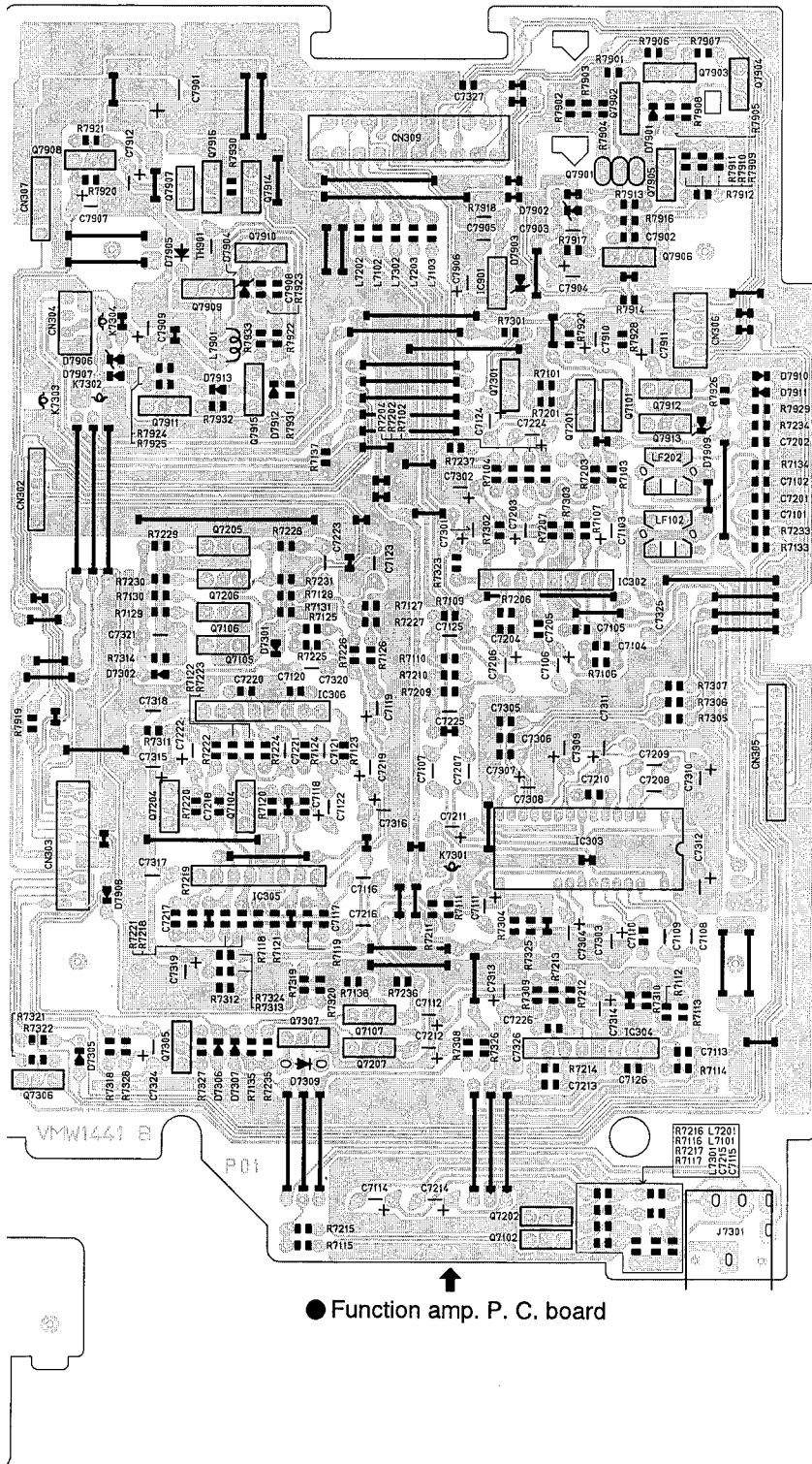


Fig. 12-3



CD Servo Control Board: Block No. 04 《CD/ Tuner & Amp. unit 3/3》

A  
B  
C  
D  
E  
F

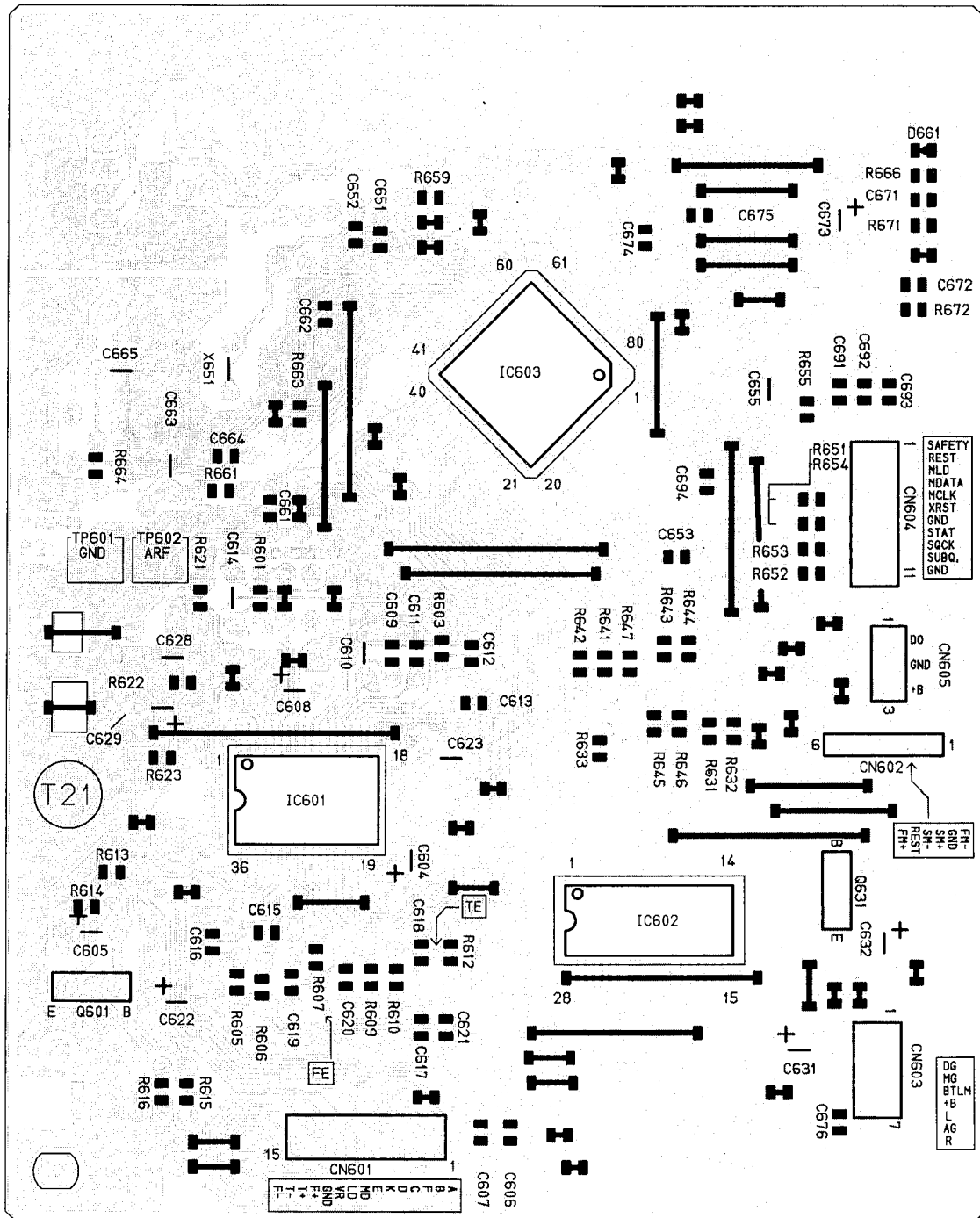


Fig. 12-4

1 2 3 4 5

■ **Cassette Mechanism Board: Block No. 05** 《Deck & power supply unit 2/2》

A

B

C

D

E

F

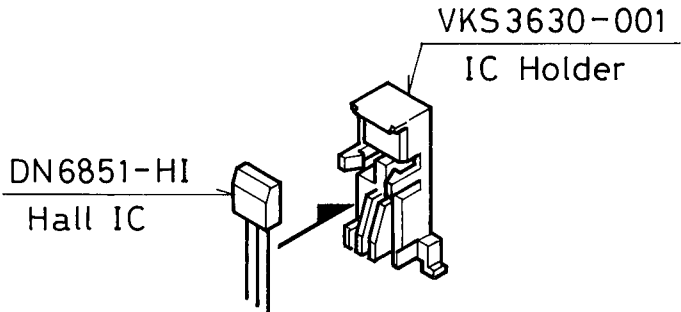
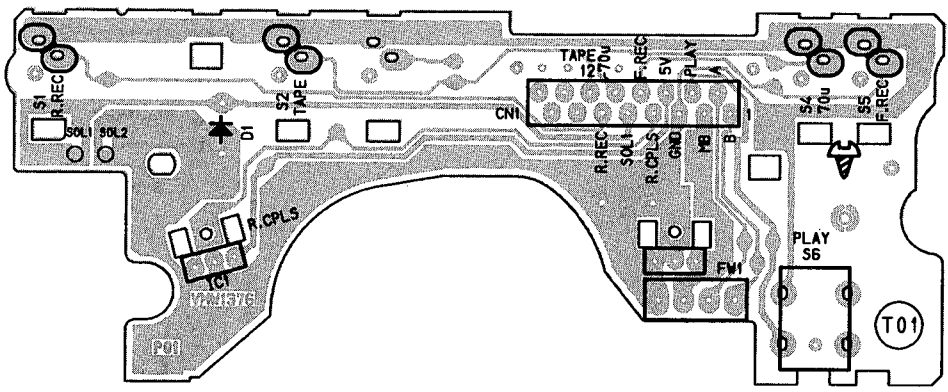


Fig. 12-5

# 13. Electrical Parts List

## Main Board

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 101	QEK41HM-225	E-CAPACITOR	PB AMP	
C 102	QGBB1HK-681Y	C-CAPACITOR	PB AMP	
C 103	QEK61CM-107ZN	E-CAPACITOR	PB AMP	
C 104	QFV41HJ-123ZM	FILM CAPACITOR	PB AMP	
C 105	QGBB1HK-221Y	C-CAPACITOR	PB AMP	
C 111	QFR61HM-335ZM	E-CAPACITOR	DOLBY AMP	
C 112	QGBB1HK-221Y	C-CAPACITOR	DOLBY AMP	
C 113	QEK41HM-474	E-CAPACITOR	DOLBY AMP	
C 114	QGBB1HK-102Y	C-CAPACITOR	DOLBY AMP	
C 115	QEK51HM-475	E-CAPACITOR	DOLBY AMP	
C 116	QEK41HM-474	E-CAPACITOR	DOLBY AMP	
C 117	QEK41HM-474	E-CAPACITOR	ALC	
C 118	QGBB1HK-471Y	C-CAPACITOR	DOLBY AMP	
C 119	QEK41HM-225	E-CAPACITOR	DOLBY AMP	
C 120	QEK41HM-105	E-CAPACITOR	REC AMP	
C 131	QGBB1HK-102Y	C-CAPACITOR	REC AMP	
C 132	QEK51HM-475	E-CAPACITOR	REC AMP	
C 133	QFV41HJ-104ZM	FILM CAPACITOR	REC AMP	
C 134	QFV81HJ-183	FILM CAPACITOR	REC AMP	
C 135	QGBB1HK-222Y	C-CAPACITOR	REC AMP	
C 136	QFV41HJ-333	FILM CAPACITOR	REC AMP	
C 138	QFV81HJ-183	FILM CAPACITOR	REC AMP	
C 139	QEK41HM-105	E-CAPACITOR	REC AMP	
C 140	QEK41HM-224	E-CAPACITOR	DOLBY AMP	
C 141	QFV41HJ-123ZM	FILM CAPACITOR	REC AMP	
C 151	QGBB1HK-102Y	C-CAPACITOR	BIAS OSC	
C 152	QGS11HJ-271	C-CAPACITOR	BIAS OSC	
C 153	QGBB1HK-331Y	C-CAPACITOR	BIAS OSC	
C 201	QEK41HM-225	E-CAPACITOR	PB AMP	
C 202	QGBB1HK-681Y	C-CAPACITOR	PB AMP	
C 203	QEK61CM-107ZN	E-CAPACITOR	PB AMP	
C 204	QFV41HJ-123ZM	FILM CAPACITOR	PB AMP	
C 205	QGBB1HK-221Y	C-CAPACITOR	PB AMP	
C 221	QFR61HM-335ZM	E-CAPACITOR	DOLBY AMP	
C 222	QGBB1HK-221Y	C-CAPACITOR	DOLBY AMP	
C 223	QEK41HM-474	E-CAPACITOR	DOLBY AMP	
C 224	QGBB1HK-102Y	C-CAPACITOR	DOLBY AMP	
C 225	QEK51HM-475	E-CAPACITOR	DOLBY AMP	
C 226	QEK41HM-474	E-CAPACITOR	DOLBY AMP	
C 227	QEK41HM-474	E-CAPACITOR	ALC	
C 228	QGBB1HK-471Y	C-CAPACITOR	DOLBY AMP	
C 229	QEK41HM-225	E-CAPACITOR	DOLBY AMP	
C 230	QEK41HM-105	E-CAPACITOR	REC AMP	
C 231	QGBB1HK-102Y	C-CAPACITOR	REC AMP	
C 232	QEK51HM-475	E-CAPACITOR	REC AMP	
C 233	QFV41HJ-104ZM	FILM CAPACITOR	REC AMP	
C 234	QFV81HJ-183	FILM CAPACITOR	REC AMP	
C 235	QGBB1HK-222Y	C-CAPACITOR	REC AMP	
C 236	QFV41HJ-333	FILM CAPACITOR	REC AMP	
C 238	QFV81HJ-183	FILM CAPACITOR	REC AMP	
C 239	QEK41HM-105	E-CAPACITOR	REC AMP	
C 240	QEK41HM-224	E-CAPACITOR	DOLBY AMP	
C 241	QFV41HJ-123ZM	FILM CAPACITOR	REC AMP	
C 251	QGBB1HK-102Y	C-CAPACITOR	BIAS OSC	
C 252	QGS11HJ-271	C-CAPACITOR	BIAS OSC	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 253	QGBB1HK-331Y	C-CAPACITOR	BIAS OSC	
C 301	QEK41CM-226	E-CAPACITOR	PB AMP	
C 302	QCVB1CM-103Y	E-CAPACITOR	R/P SW	
C 303	QEK41CM-226	E-CAPACITOR	R/P SW	
C 304	QFV71HJ-103	FILM CAPACITOR	MS DET	
C 305	QFV41HJ-153ZM	FILM CAPACITOR	MS DET	
C 306	QCS11HJ-530	C-CAPACITOR	MS DET	
C 307	QCVB1CM-182Y	C-CAPACITOR	MS DET	
C 308	QGBB1HK-681Y	C-CAPACITOR	MS DET	
C 309	QEK41HM-105	E-CAPACITOR	MS DET	
C 321	QEK41CM-226	E-CAPACITOR	DOLBY AMP	
C 322	QEK41CM-106	E-CAPACITOR	DOLBY AMP	
C 323	QEK41CM-106	E-CAPACITOR	DOLBY AMP	
C 324	QEK41HM-225	E-CAPACITOR	DOLBY AMP	
C 325	QCVB1CM-103Y	E-CAPACITOR	DOLBY AMP	
C 326	QEK41CM-226	E-CAPACITOR	REC AMP	
C 327	QEK61CM-107ZN	E-CAPACITOR	REC AMP	
C 328	QEK41CM-106	E-CAPACITOR	REC AMP	
C 351	QEK41CM-476	E-CAPACITOR	BIAS OSC	
C 352	QCVB1CM-103Y	C-CAPACITOR	BIAS OSC	
C 353	QFN41HJ-682	M-CAPACITOR	BIAS OSC	
C 354	QFN81HJ-562	M-CAPACITOR	BIAS OSC	
C 355	QFN81HJ-562	M-CAPACITOR	BIAS OSC	
C 356	QFN41HJ-682	M-CAPACITOR	BIAS OSC	
C 357	QEK41CM-476	E-CAPACITOR	BIAS OSC	
C 358	QFP32AJ-153ZM	PP-CAPACITOR	BEAT CUT	
C 360	QCVB1CM-103Y	C-CAPACITOR	BEAT CUT	
C 361	QFN41HJ-352	M-CAPACITOR	BEAT CUT	
C 362	QCVB1CM-103Y	C-CAPACITOR	BEAT CUT	
CN131	EMV7127-019	19P CONNECTOR		
CN132	VMC0289-P10	CONNECTOR		
CN133	VMC0163-R13	CONNECTOR		
CN134	VMC0163-R06	CONNECTOR		
CN191	VMZ0076-004A	CONNECTOR		
CN192	VMZ0049-A02	CONNECTOR		
CN193	VMC0289-S10K	CONNECTOR		
CN271	VMC0163-R13	CONNECTOR		
CN272	VMC0314-S12	CONNECTOR		
CN273	VMC0289-P10	CONNECTOR		
CN274	VMC0289-S11K	CONNECTOR		
CN275	VMC0041-006	CONNECTOR		
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		
C1101	QEK51HM-475	E-CAPACITOR	G-I-A1	
C1102	QEK51HM-475	E-CAPACITOR	G-I-A1	
C1103	QEK41HM-474	E-CAPACITOR	G-I-A2	
C1104	QEK51HM-475	E-CAPACITOR	G-I-A2	

BLOCK NO. 01111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
D2701	MTZ5.6JB	ZENER DIODE	SOL DRIVER	
D2702	1S5133	SI DIODE		
D2703	1S5133	SI DIODE		
D2801	SLR-325VCT31	LED	REC	
D2802	SLR-325MCT31	LED	FWD	
D2803	SLR-325MCT31	LED	REV	
IC131	BA3121	IC	G.I.-A1	
IC132	BA3121	IC	G.I.-A2	
IC133	BA15218	IC	MIX AMP	
IC191	UPC78L05J-T	I.C.(M)	US5V	
IC271	MC14094BCP	IC	PORT EXPANDER1	
IC272	MC14094BCP	IC	PORT EXPANDER2	
IC321	HA12134A	IC	DOLBY AMP	
IC322	LA3220	IC	REC AMP	
IC331	UPC1228HA	IC	PB AMP	
IC332	UPC1330HA	IC	R/P SW	
J1301	EMN00TV-421AJ2	PIN JACK	AUX/LINE-OUT	
J1901	QMCB001-E02H	AC SOCKET		
L 121	VQP0001-562ZS	INDUCTOR	REC AMP	
L 151	VQP0001-103S	INDUCTOR	AC AL	
L 231	VQP0001-562ZS	INDUCTOR	REC AMP	
L 251	VQP0001-103S	INDUCTOR	AC AL	
L 351	VGP0028-100Z	INDUCTOR	BIAS OSC	
L1301	VQP0018-4R7	INDUCTOR		
L1302	VQP0018-4R7	INDUCTOR		
L1303	VQP0018-4R7	INDUCTOR		
L1304	VQP0018-4R7	INDUCTOR		
L1305	VQP0018-4R7	INDUCTOR		
PP 1	VMZ0015-011	STYLE PIN		
PP 5	VMZ0015-011	STYLE PIN		
Q 101	DTC144TSA-T	D-TRANSISTOR	PB AMP	
Q 122	2SC2785	TRANSISTOR	REC MUTE	
Q 123	DTC144TSA-T	D-TRANSISTOR	REC AMP	
Q 125	2SC2785	TRANSISTOR	PB MUTE	
Q 201	DTC144TSA-T	D-TRANSISTOR	PB AMP	
Q 222	2SC2785	TRANSISTOR	REC MUTE	
Q 223	DTC144TSA-T	D-TRANSISTOR	REC AMP	
Q 225	2SC2785	TRANSISTOR	PB MUTE	
Q 301	2SC2785	TRANSISTOR	MS DET	
Q 302	2SC2785	TRANSISTOR	MS DET	
Q 321	D1A144ES	D-TRANSISTOR	PB MUTE	
Q 322	DTC144ESA-T	TRANSISTOR	PB MUTE	
Q 324	DTC144TSA-T	D-TRANSISTOR	ALC CTL	
Q 351	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 352	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 354	2SC2785	TRANSISTOR	BIAS OSC	
Q 355	2SC2001(L,K)	TRANSISTOR	BIAS OSC	
Q 356	2SC1845	TRANSISTOR	BEAT CUT	
Q 357	2SC2785	TRANSISTOR	BEAT CUT	
Q 358	2SC1845	TRANSISTOR	BEAT CUT	
Q 359	2SC2785	TRANSISTOR	BEAT CUT	
Q1101	2SD2144S(VW)	TRANSISTOR	LINE OUT MUTE	
Q1102	2SD2144S(VW)	TRANSISTOR	AUX MUTE	
Q1103	2SD2144S(VW)	TRANSISTOR	AUX MUTE	
Q1104	2SD2144S(VW)	TRANSISTOR	TAPE MUTE	

BLOCK NO. 01111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C1105	QC511HJ-470	C-CAPACITOR	MIX AMP	
C1106	QEK51HM-475	E-CAPACITOR	MIX AMP	
C1107	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C1108	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C1201	QEK51HM-475	E-CAPACITOR	G.I.-A1	
C1202	QEK51HM-475	E-CAPACITOR	G.I.-A1	
C1203	QEK41HM-474	E-CAPACITOR	G.I.-A2	
C1204	QEK51HM-475	E-CAPACITOR	G.I.-A2	
C1205	QC511HJ-470	C-CAPACITOR	MIX AMP	
C1206	QEK51HM-475	E-CAPACITOR	MIX AMP	
C1207	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C1208	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C1301	QEK51CM-107	E-CAPACITOR	RIPPLE FILTER	
C1302	QCVB1CM-103Y	C-CAPACITOR	G.I.-A1	
C1303	QEK41CM-476	E-CAPACITOR	G.I.-A1	
C1304	QEK41CM-226	E-CAPACITOR	G.I.-A1	
C1305	QCBB1HK-151Y	C-CAPACITOR	G.I.-A1	
C1306	QCVB1CM-103Y	C-CAPACITOR	G.I.-A2	
C1307	QEK41CM-476	E-CAPACITOR	G.I.-A2	
C1308	QEK41CM-226	E-CAPACITOR	G.I.-A2	
C1309	QCVB1CM-103Y	C-CAPACITOR	MIX AMP	
C1310	QEK41CM-226	E-CAPACITOR	MIX AMP	
C1311	QCVB1CM-103Y	C-CAPACITOR	.010MF 20% 25V	
C1312	QFV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
C1901	QETM1EM-688	E-CAPACITOR	6800MF 20% 25V	
C1902	QEC11EM-683V	C-CAPACITOR	.068MF 20% 25V	
C1903	QEC11EM-683V	C-CAPACITOR	.068MF 20% 25V	
C1904	QEC11EM-683V	C-CAPACITOR	.068MF 20% 25V	
C1905	QEC11EM-683V	C-CAPACITOR	.068MF 20% 25V	
C1906	QGBB1HK-102Y	C-CAPACITOR	SW10V	
C1908	QCVB1CM-103Y	C-CAPACITOR	SW10V	
C1909	QEK51CM-107	E-CAPACITOR	SW10V	
C1910	QFV41HJ-104ZM	FILM CAPACITOR	US5V	
C1911	QEK41CM-106	E-CAPACITOR	US5V	
C2701	QEK41CM-476	E-CAPACITOR	47MF 20% 16V	
C2702	QCBB1HK-471Y	C-CAPACITOR	470PF 10% 50V	
C2703	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C2704	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C2705	QCVB1CM-103Y	C-CAPACITOR	SOL DRIVER	
C2706	QCBB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
D 121	1S5133	SI DIODE	ALC	
D 122	1S5133	SI DIODE	ALC	
D 221	1S5133	SI DIODE	ALC	
D 222	1S5133	SI DIODE	ALC	
D 301	1S5133	SI DIODE		
D 322	1S5133	SI DIODE		
D 353	1S5133	SI DIODE		
D 354	1S5133	SI DIODE		
D1301	MTZ5.6JB	ZENER DIODE		
D1302	1S5133	SI DIODE		
D1303	MTZ8.2JB	ZENER DIODE		
D1901	DSSBA20-4101	SI DIODE		
D1902	1S5133	SI DIODE		
D1903	MTZ10JAT-77	ZENER DIODE		
D1904	MTZ6.8JB	ZENER DIODE		



BLOCK NO. 01111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUPPLX
R 223	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 224	QRD161J-102	CARBON RESISTOR	ALC	
R 225	QRD161J-104	CARBON RESISTOR	REC AMP	
R 226	QRD161J-753	CARBON RESISTOR	DOLBY AMP	
R 227	QRD161J-222	CARBON RESISTOR	DOLBY AMP	
R 228	QRD161J-103	CARBON RESISTOR	REC AMP	
R 229	QRD161J-153	CARBON RESISTOR	REC AMP	
R 230	QRD161J-153	CARBON RESISTOR	REC AMP	
R 231	QRD161J-101	CARBON RESISTOR	REC AMP	
R 232	QRD161J-221	CARBON RESISTOR	REC AMP	
R 233	QRD161J-182	CARBON RESISTOR	REC AMP	
R 234	QRD161J-392	CARBON RESISTOR	REC AMP	
R 235	QRD161J-392	CARBON RESISTOR	REC AMP	
R 238	QRD161J-472	CARBON RESISTOR	REC AMP	
R 239	QRD161J-332	CARBON RESISTOR	REC AMP	
R 240	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 241	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 251	QRD161J-103	CARBON RESISTOR	BIAS OSC	
R 301	QRD161J-221	CARBON RESISTOR	PB AMP	
R 302	QRD161J-103	CARBON RESISTOR	R/P SW	
R 303	QRD161J-221	CARBON RESISTOR	R/P SW	
R 304	QRD161J-225	CARBON RESISTOR	MS DET	
R 305	QRD161J-121	CARBON RESISTOR	MS DET	
R 306	QRD161J-473	CARBON RESISTOR	MS DET	
R 307	QRD161J-104	CARBON RESISTOR	MS DET	
R 321	QRD161J-103	CARBON RESISTOR	DOLBY AMP	
R 322	QRD161J-221	CARBON RESISTOR	DOLBY AMP	
R 323	QRD161J-103	CARBON RESISTOR	DOLBY AMP	
R 324	QRD161J-183	CARBON RESISTOR	DOLBY AMP	
R 325	QRD161J-223	CARBON RESISTOR	DOLBY AMP	
R 326	QRD161J-221	CARBON RESISTOR	REC AMP	
R 327	QRD161J-475	CARBON RESISTOR	REC AMP	
R 328	QRD161J-475	CARBON RESISTOR	REC AMP	
R 329	QRD161J-101	CARBON RESISTOR	REC AMP	
R 331	QRD161J-103	CARBON RESISTOR	REC AMP	
R 332	QRD161J-222	CARBON RESISTOR	REC AMP	
R 333	QRD161J-221	CARBON RESISTOR	REC AMP	
R 352	QRD161J-273	CARBON RESISTOR	BIAS OSC	
R 353	QRD161J-273	CARBON RESISTOR	BIAS OSC	
R 354	QRD161J-383	CARBON RESISTOR	BIAS OSC	
R 355	QRD161J-181	CARBON RESISTOR	BIAS OSC	
R 356	QRD161J-181	CARBON RESISTOR	BIAS OSC	
R 357	QRD161J-221	CARBON RESISTOR	BIAS OSC	
R 358	QRD161J-221	CARBON RESISTOR	BIAS OSC	
R 359	QRD161J-472	CARBON RESISTOR	BIAS OSC	
R 360	QRD161J-472	CARBON RESISTOR	BIAS OSC	
R 361	QRD161J-223	CARBON RESISTOR	BEAT CUT	
R 362	QRD161J-471	CARBON RESISTOR	BEAT CUT	
R 363	QRD161J-223	CARBON RESISTOR	BEAT CUT	
R 364	QRD161J-383	CARBON RESISTOR	BEAT CUT	
R 365	QRD161J-474	CARBON RESISTOR	BIAS T.P	
R1101	QRD161J-102	CARBON RESISTOR	G-I-A1	
R1102	QRD161J-583	CARBON RESISTOR	MIX AMP	
R1103	QRD161J-203	CARBON RESISTOR	MIX AMP	
R1104	QRD161J-183	CARBON RESISTOR	MIX AMP	

BLOCK NO. 01111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUPPLX
Q1201	2SD2144S(VW)	TRANSISTOR	LINE OUT MUTE	
Q1202	2SD2144S(VW)	TRANSISTOR	AUX MUTE	
Q1203	2SD2144S(VW)	TRANSISTOR	AUX MUTE	
Q1204	2SD2144S(VW)	TRANSISTOR	TAPE MUTE	
Q1301	2SC2785	TRANSISTOR	LIPPLE FILTER	
Q1302	2SC2785	TRANSISTOR		
Q1303	DTA144TSTP	TRANSISTOR		
Q1304	DTA114WS	D.TRANSISTOR	MUTE DRIVE	
Q1305	DTA114WS	D.TRANSISTOR	MUTE DRIVE	
Q1306	DTA114WS	D.TRANSISTOR	MUTE DRIVE	
Q1901	2SA1359(OV)	TRANSISTOR		
Q1902	2SA1175	TRANSISTOR		
Q1903	DTC144TSA-T	D.TRANSISTOR		
Q1904	DTA144TSTP	TRANSISTOR		
Q1905	2SC2785	TRANSISTOR		
Q1906	2SC2785	TRANSISTOR		
Q2701	DTC144WSTP	TRANSISTOR	MS SW	
Q2702	DTC144TSA-T	D.TRANSISTOR	PLAY SW	
Q2703	2SA952(L-K)	TRANSISTOR	MOT DRIVER	
Q2704	DTC114ESA-T	D.TRANSISTOR	MOT DRIVER	
Q2705	2SB562(C)	TRANSISTOR	SOL DRIVER	
Q2706	2SC2785	TRANSISTOR	SOL DRIVER	
Q2707	2SC2785	TRANSISTOR	LED DRIVER	
Q2708	2SC2785	TRANSISTOR	LED DRIVER	
Q2709	2SC2785	TRANSISTOR	LED DRIVER	
R 101	QRD161J-680	CARBON RESISTOR	PB AMP	
R 102	QRD161J-274	CARBON RESISTOR	PB AMP	
R 103	QRD161J-622	CARBON RESISTOR	PB AMP	
R 104	QRD161J-472	CARBON RESISTOR	PB AMP	
R 105	QRD161J-122	CARBON RESISTOR	MS DET	
R 121	QRD161J-103	CARBON RESISTOR	DOLBY AMP	
R 123	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 124	QRD161J-102	CARBON RESISTOR	ALC	
R 125	QRD161J-104	CARBON RESISTOR	ALC	
R 126	QRD161J-753	CARBON RESISTOR	DOLBY AMP	
R 127	QRD161J-222	CARBON RESISTOR	DOLBY AMP	
R 128	QRD161J-103	CARBON RESISTOR	REC AMP	
R 129	QRD161J-153	CARBON RESISTOR	REC AMP	
R 130	QRD161J-153	CARBON RESISTOR	REC AMP	
R 131	QRD161J-101	CARBON RESISTOR	REC AMP	
R 132	QRD161J-221	CARBON RESISTOR	REC AMP	
R 133	QRD161J-182	CARBON RESISTOR	REC AMP	
R 134	QRD161J-392	CARBON RESISTOR	REC AMP	
R 135	QRD161J-392	CARBON RESISTOR	REC AMP	
R 138	QRD161J-472	CARBON RESISTOR	REC AMP	
R 139	QRD167J-332	CARBON RESISTOR	REC AMP	
R 140	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 141	QRD167J-332	CARBON RESISTOR	DOLBY AMP	
R 151	QRD161J-103	CARBON RESISTOR	BIAS OSC	
R 201	QRD161J-680	CARBON RESISTOR	PB AMP	
R 202	QRD161J-274	CARBON RESISTOR	PB AMP	
R 203	QRD161J-622	CARBON RESISTOR	PB AMP	
R 204	QRD161J-472	CARBON RESISTOR	PB AMP	
R 205	QRD161J-122	CARBON RESISTOR	MS DET	
R 221	QRD161J-103	CARBON RESISTOR	DOLBY AMP	

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R2708	QRD161J-223	CARBON RESISTOR	LED DRIVER	
R2709	QRD161J-222	CARBON RESISTOR	SOL DRIVER	
R2710	QRD161J-151	CARBON RESISTOR	SOL DRIVER	
R2711	QRD161J-502	CARBON RESISTOR	SOL DRIVER	
R2712	QRD161J-123	CARBON RESISTOR	MOT SPEED ADJ	
R2713	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R2714	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R2715	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R2716	QRD161J-682	CARBON RESISTOR	SOL DRIVER	
R2717	QRD161J-221	CARBON RESISTOR	220 5% 1/6W	
R2718	QRD161J-21	CARBON RESISTOR	220 5% 1/6W	
R2801	QRD161J-821	CARBON RESISTOR	REC LED	
R2802	QRD161J-821	CARBON RESISTOR	FWD LED	
R2803	QRD161J-821	CARBON RESISTOR	REV LED	
R2804	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R2805	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R2806	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R2807	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R2808	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R2809	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R2810	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R2811	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R2812	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
S1901	VMZ0126-003	VOLTAGE SELECTOR		
S2801	QS04H11-V12Z	TACT SWITCH	REV MODE	
S2802	QS04H11-V12Z	TACT SWITCH	REV PLAY	
S2803	QS04H11-V12Z	TACT SWITCH	STOP	
S2804	QS04H11-V12Z	TACT SWITCH	FWD PLAY	
S2805	QS04H11-V12Z	TACT SWITCH	REC PAUSE	
S2806	QS04H11-V12Z	TACT SWITCH	FF	
S2807	QS04H11-V12Z	TACT SWITCH	REW	
S2808	QS04H11-V12Z	TACT SWITCH	DOLBY	
T 351	VQH1008-055	OSC COIL(BIAS)	BIAS COIL	
VR101	QVPA603-502AZM	SEMI.-V.RESISTOR	REC S.	
VR102	QVPA603-502AZM	SEMI.-V.RESISTOR	BIAS OSC	
VR201	QVPA603-502AZM	SEMI.-V.RESISTOR	PB S.	
VR202	QVPA603-502AZM	SEMI.-V.RESISTOR	REC S.	
VR203	QVPA603-104A	SEMI.-V.RESISTOR	BIAS OSC	
VR271	QVPA603-103M	SEMI.-V.RESISTOR	MOT SPEED ADJ	

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R1105	QRD161J-183	CARBON RESISTOR	AUX MUTE	
R1106	QRD161J-183	CARBON RESISTOR	AUX MUTE	
R1107	QRD161J-472	CARBON RESISTOR	AUX MUTE	
R1108	QRD161J-472	CARBON RESISTOR	AUX MUTE	
R1109	QRD161J-332	CARBON RESISTOR	TAPE MUTE	
R1110	QRD161J-472	CARBON RESISTOR	TAPE MUTE	
R1111	QRD161J-102	CARBON RESISTOR	LINE OUT MUTE	
R1112	QRD161J-392	CARBON RESISTOR	LINE OUT MUTE	
R1113	QRD161J-472	CARBON RESISTOR	LINE OUT MUTE	
R1201	QRD161J-102	CARBON RESISTOR	G.-I.-A1	
R1202	QRD161J-563	CARBON RESISTOR	MIX AMP	
R1203	QRD161J-203	CARBON RESISTOR	MIX AMP	
R1204	QRD161J-183	CARBON RESISTOR	MIX AMP	
R1205	QRD161J-183	CARBON RESISTOR	AUX MUTE	
R1206	QRD161J-183	CARBON RESISTOR	AUX MUTE	
R1207	QRD161J-472	CARBON RESISTOR	AUX MUTE	
R1208	QRD161J-472	CARBON RESISTOR	AUX MUTE	
R1209	QRD161J-332	CARBON RESISTOR	TAPE MUTE	
R1210	QRD161J-472	CARBON RESISTOR	TAPE MUTE	
R1211	QRD161J-102	CARBON RESISTOR	LINE OUT MUTE	
R1212	QRD161J-392	CARBON RESISTOR	LINE OUT MUTE	
R1213	QRD161J-472	CARBON RESISTOR	LINE OUT MUTE	
R1301	QRD161J-471	CARBON RESISTOR	RIPLLE FILTER	
R1302	QRD161J-100	CARBON RESISTOR	G.-I.-A1	
R1303	QRD161J-100	CARBON RESISTOR	G.-I.-A2	
R1304	QRD161J-100	CARBON RESISTOR	MIX AMP	
R1305	QRD161J-473	CARBON RESISTOR	MIX AMP	
R1306	QRD161J-473	CARBON RESISTOR	MIX AMP	
R1307	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R1308	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R1309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R1310	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R1311	QRD161J-102	CARBON RESISTOR	(B1030)	
R1901	QRD161J-3R3	CARBON RESISTOR	SW10V	
R1902	QRD161J-3R3	CARBON RESISTOR	SW10V	
R1903	QRD161J-3R3	CARBON RESISTOR	SW10V	
R1904	QRD161J-471	CARBON RESISTOR	SW10V	
R1905	QRD161J-182	CARBON RESISTOR	SW10V	
R1906	QRD161J-472	CARBON RESISTOR	SW10V	
R1907	QRD161J-332	CARBON RESISTOR	SW10V	
R1908	QRD161J-222	CARBON RESISTOR	SW10V	
R1910	QRZ0077-151X	F.RESISTOR	SW10V	
R1912	QRD161J-471	CARBON RESISTOR	SW10V	
R1913	QRD161J-472	CARBON RESISTOR	SW10V	
R1914	QRD161J-472	CARBON RESISTOR	SW10V	
R1915	QRD161J-472	CARBON RESISTOR	SW10V	
R1918	QRZ0077-477X	FUSE RESISTOR	US5V	
R1919	QRD161J-472	CARBON RESISTOR	SW10V	
R2701	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R2702	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R2703	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R2704	QRD161J-473	CARBON RESISTOR	MS SW	
R2705	QRD161J-473	CARBON RESISTOR	PLAY SW	
R2706	QRD161J-223	CARBON RESISTOR	LED DRIVER	
R2707	QRD161J-223	CARBON RESISTOR	LED DRIVER	

**Tuner & Operation Switch Board**

BLOCK NO. 02		BLOCK NO. 02		
A/REF.	PARTS NO.	PARTS NAME	REMARKS	SUPPLX
C 1	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 3	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 4	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 5	QEK41CM-106	E. CAPACITOR	10MF 20% 16V	
C 9	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 21	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 23	NCS21HC-3R0AY	C CAPACITOR	3.0PF 50V	
C 30	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
C 31	NCS21HC-2R0AY	C CAPACITOR	2.0PF 50V	
C 32	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 33	QEK61AM-107Z	E. CAPACITOR	100MF 20% 10V	
C 34	NCS21HJ-150AY	C CAPACITOR	15PF 5% 50V	
C 35	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 36	QEK41CM-106	E. CAPACITOR	10MF 20% 16V	
C 37	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 39	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 40	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 41	QEK41HM-104	E. CAPACITOR	.10MF 20% 50V	
C 42	QEK41HM-474	E. CAPACITOR	.47MF 20% 50V	
C 44	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
C 45	QEK61AM-355ZM	E. CAPACITOR	3.3MF 20% 50V	
C 46	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 47	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 49	NCB21HK-153AY	C CAPACITOR	.015MF 10% 50V	
C 50	NCB21HK-153AY	C CAPACITOR	.015MF 10% 50V	
C 51	QEK41HM-105	E. CAPACITOR	1.0MF 20% 50V	
C 52	QEK41HM-105	E. CAPACITOR	1.0MF 20% 50V	
C 55	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 60	QEK61AM-107Z	E. CAPACITOR	100MF 20% 10V	
C 61	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 62	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 63	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 65	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 66	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
C 67	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
C 68	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
C 69	QEK41HM-225	E. CAPACITOR	2.2MF 20% 50V	
C 70	NCB21HK-392AY	C CAPACITOR	3900PF 10% 50V	
C 71	QEK61AM-355ZM	E. CAPACITOR	3.3MF 20% 50V	
C 72	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 80	NCS21HJ-8R0AY	C CAPACITOR	8.0PF 5% 50V	
C 81	NCB21HK-122AY	C CAPACITOR	1200PF 10% 50V	
C 82	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 83	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 84	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 90	NCB21HK-682AY	C CAPACITOR	6800PF 10% 50V	
C 91	NCB21HK-473AY	C CAPACITOR	.047MF 10% 25V	
C 92	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
C 93	NCS21HJ-100AY	C CAPACITOR	10PF 5% 50V	
C 94	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C 96	NCS21HJ-8R0AY	C CAPACITOR	8.0PF 5% 50V	
C 97	NCS21HK-4R0AY	C CAPACITOR	4.0PF 50V	
C 99	NCB21HK-104	C CAPACITOR	.10MF 10% 16V	
CF 1	VCF2L3B-108Z	C FILTER	FM IF	
CF 2	VCF2L3B-108Z	C FILTER	FM IF	

BLOCK NO. 02		BLOCK NO. 02		
A/REF.	PARTS NO.	PARTS NAME	REMARKS	SUPPLX
CF 3	VCF1Z2-115Z	CERAMIC FILTER		
CF 4	CNU2-456B05	CERA LOCK		
CN 1	VMC0289-S10K	CONNECTOR		
CN301	VMC0288-S06	CONNECTOR		
CN308	VMC0289-S06K	CONNECTOR		
CN331	VMC0041-003	CONNECTOR	MIC	
CN332	VMC0040-003	CONNECTOR		
CN711	ENV7171-119R	CONNECTOR		
CN712	ENV7171-121R	CONNECTOR		
CN713	VMC0163-R10	CONNECTOR		
CN731	VMC0075-R02	CONNECTOR		
C3101	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C3102	QGBB1HK-561Y	C. CAPACITOR	560PF 10% 50V	
C3103	QTE1V06-106Z	E. CAPACITOR		
C3104	QCC11EM-104V	C. CAPACITOR	.10MF 20% 25V	
C3105	QCC11EM-104V	C. CAPACITOR	.10MF 20% 25V	
C3201	QFV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C3202	QGBB1HK-561Y	C. CAPACITOR	560PF 10% 50V	
C3203	QTE1V06-106Z	E. CAPACITOR		
C3204	QCC11EM-104V	C. CAPACITOR	.10MF 20% 25V	
C3205	QCC11EM-104V	C. CAPACITOR	.10MF 20% 25V	
C3301	QET41CM-227	E. CAPACITOR	220MF 20% 16V	
C3302	QEK41CM-106	E. CAPACITOR	10MF 20% 16V	
C3303	QFV71HJ-394ZM	FILM CAPACITOR	.39MF 5% 50V	
C3331	QEK41HM-225	E. CAPACITOR	MIC	
C3332	QCS11HJ-150	C. CAPACITOR	MIC	
C3333	QGBB1HK-151Y	C. CAPACITOR	MIC	
C3334	QEK51HM-475	E. CAPACITOR	MIC	
C3335	QEK61AM-107ZM	E. CAPACITOR	MIC	
C3336	QEK61AM-227ZM	E. CAPACITOR	MIC	
C3337	QEK41HM-105	E. CAPACITOR	MIC	
C3338	QGBB1HK-151Y	C. CAPACITOR	MIC	
C3701	QEK41CM-476	E. CAPACITOR	47MF 20% 16V	
C3702	QCVB1CM-103Y	C. CAPACITOR	.010MF 20% 16V	
C3703	QCVB1CM-103Y	C. CAPACITOR	.010MF 20% 16V	
D 1	1SS133	SI DIODE		
D 2	1SS133	SI DIODE		
D 3	1SS133	SI DIODE		
D 4	1SS133	SI DIODE		
D 5	1SS133	SI DIODE		
D 6	1SS133	SI DIODE		
D 20	SVC344-AA	VARI CAP		
D 21	SVC344-AA	VARI CAP		
D3301	1SS133	SI DIODE		
D3331	1SS133	SI DIODE	MIC	
D3701	SLR-325VCT31	LED		
D3702	SLR-325VCT31	LED		
D3703	1SS133	SI DIODE		
IC 1	TA2057N	IC		
IC 2	LC72136N	IC		
IC301	TA8233H	IC		
IC331	BA15218N	IC	MIC	
IC711	SBX1971-52	RM. RECEIVER		
J 1	FMMB10YV-401K	ANT TERMINAL	AM/FM ANT	
JS711	VCV7003-001	ENCODER		

BLOCK NO. 02111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 28	NRSA02J-560NY	MG RESISTOR	56 5% 1/10W	
R 29	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 30	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 31	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 32	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 34	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
R 35	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
R 36	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 37	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 38	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 39	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 42	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 43	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 44	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 45	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 46	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 48	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 52	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 54	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 55	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 56	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 57	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 60	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
R 61	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
R 62	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 63	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 65	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 66	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 68	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 69	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 81	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 82	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 83	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 84	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 85	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 86	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 90	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 91	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 92	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 96	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 97	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 98	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 99	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R3101	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3102	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3103	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3104	GRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3105	GRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3201	GRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3202	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3203	GRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3204	GRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3205	GRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R3301	GRD161J-224	CARBON RESISTOR	220K 5% 1/6W	
R3331	GRD161J-472	CARBON RESISTOR MIC		

BLOCK NO. 02111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
J3301	EMB90TV-404A	SPK TERMINAL		
J3331	VMJ4040-001	JACK	MIC	
J3702	GP1F32T	OPTICAL JACK	MW RF/OSC	
L 1	VQZ0098-201	COIL BLOCK		
L 4	VQP0018-221	INDUCTOR		
L 5	VQP0018-220	INDUCTOR		
L 6	VGS7U01-801	OSC COIL	SW1 OSC	
L 7	VQR7002-501	RF COIL	SW2 RF	
L 8	VQR7002-501	RF COIL	SW2 OSC	
L 10	VO3047-6	COIL		
L 11	VO3047-6	COIL		
P 1	VMZ0015-011	STYLE PIN		
P 2	VMZ0015-011	STYLE PIN		
P 3	VMZ0015-011	STYLE PIN		
PL711	QLL0011-001	LAMP		
PL712	QLL0011-001	LAMP		
Q 1	2SC2668(C)	TRANSISTOR	SW1 SWITCH	
Q 2	DTA114TK1	TRANSISTOR	MW SWITCH	
Q 3	DTA114TK1	TRANSISTOR	MW SWITCH	
Q 4	DTA114TKA-X	TRANSISTOR		
Q 7	2SA1037K(R)	TRANSISTOR		
Q 8	2SA1037K(R)	TRANSISTOR		
Q 12	2SD2144S(VW)	TRANSISTOR	MW SWITCH	
Q 13	2SC2668(C)	TRANSISTOR	MW SWITCH	
Q 14	2SA1037K(R)	TRANSISTOR	MW SWITCH	
Q 15	2SA1037K(R)	TRANSISTOR	MW SWITCH	
Q 21	DTA114TK1	TRANSISTOR	SW2 SWITCH	
Q 22	2SC2668(C)	TRANSISTOR	SW2 SWITCH	
Q 24	2SD2144S(VW)	TRANSISTOR	SW1 SWITCH	
Q 25	2SA1037K(R)	TRANSISTOR	SW1 SWITCH	
Q 26	DTA114TK1	TRANSISTOR	SW1 SWITCH	
Q 27	2SC2668(C)	TRANSISTOR	SW1 SWITCH	
Q 28	2SA1037K(R)	TRANSISTOR	SW2 SWITCH	
Q3101	2SD2144S(VW)	TRANSISTOR		
Q3201	2SD2144S(VW)	TRANSISTOR		
Q3303	DTA114TS	D-TRANSISTOR		
Q3331	2SD2144S(VW)	TRANSISTOR	MIC	
Q3332	2SD2144S(VW)	TRANSISTOR	MIC	
Q3333	DTA114WS	D-TRANSISTOR	MIC	
R 1	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 2	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
R 11	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 12	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 13	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 14	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 15	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 17	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 18	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 20	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
R 21	NRSA02J-224NY	MG RESISTOR	220K 5% 1/10W	
R 22	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
R 23	NRSA02J-270NY	MG RESISTOR	27 5% 1/10W	
R 24	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 25	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 27	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	

**System CPU & Function Board**

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R3332	QRD161J-222	CARBON RESISTOR	MIC	
R3333	QRD161J-561	CARBON RESISTOR	MIC	
R3334	QRD161J-334	CARBON RESISTOR	MIC	
R3335	QRD161J-102	CARBON RESISTOR	MIC	
R3336	QRD161J-475	CARBON RESISTOR	MIC	
R3337	QRD161J-221	CARBON RESISTOR	MIC	
R3338	QRD161J-221	CARBON RESISTOR	MIC	
R3339	QRD161J-102	CARBON RESISTOR	MIC	
R3340	QRD161J-123	CARBON RESISTOR	MIC	
R3341	QRD161J-103	CARBON RESISTOR	MIC	
R3342	QRD161J-821	CARBON RESISTOR	MIC	
R3343	QRD161J-103	CARBON RESISTOR	MIC	
R3344	QRD161J-102	CARBON RESISTOR	MIC	
R3701	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3702	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3703	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R3704	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R3705	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R3706	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R3707	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R3708	QRD161J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R3709	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R3710	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3711	QRD161J-561	CARBON RESISTOR	560 5% 1/6W	
R3712	QRD161J-271	CARBON RESISTOR	270 5% 1/6W	
R3713	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3714	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3721	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R3722	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
S3701	Q504H11-V12Z	TACT SWITCH		
S3702	Q504H11-V12Z	TACT SWITCH		
S3703	Q504H11-V12Z	TACT SWITCH		
S3704	Q504H11-V12Z	TACT SWITCH		
S3705	Q504H11-V12Z	TACT SWITCH		
S3706	Q504H11-V12Z	TACT SWITCH		
S3707	Q504H11-V12Z	TACT SWITCH		
S3708	Q504H11-V12Z	TACT SWITCH		
S3709	Q504H11-V12Z	TACT SWITCH		
S3721	VSH1153-002	SWITCH		
S3722	VSH1153-002	SWITCH		
T 1	V0T7A21-113	IFT		
TU 1	0AU0037-001	FRONT END	FM TU	
VR331	QVAA46B-V03M	V-RESISTOR	MIC	
X 1	VCK5044-001	CRYSTAL		

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CN302	VMC0288-P06	CONNECTOR		
CN303	VMC0163-R15	CONNECTOR		
CN304	VMC0163-R07	CONNECTOR		
CN305	VMC0289-P10	CONNECTOR		
CN306	VMC0163-008	CONNECTOR		
CN307	VMC0289-P06	CONNECTOR		
CN309	ERV7141-019M	F.WIRE SKT		
CN701	ERV7171-119	CONNECTOR		
CN702	ERV7171-121	CONNECTOR		
CN703	VMC0163-010	CONNECTOR		
CN704	VMC0163-R11	CONNECTOR		
CN705	VMC0075-004	CONNECTOR		
CN706	VMC0163-R08	CONNECTOR		
CN707	VMC0163-R15	CONNECTOR		
C7001	Q6BB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7002	Q6BB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C7003	Q6BB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7004	Q6BB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7005	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7006	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7007	Q6BB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C7008	Q6BB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7009	Q6S11HJ-470	C.CAPACITOR	47PF 5% 50V	
C7010	Q6S11HJ-330	C.CAPACITOR	33PF 5% 50V	
C7011	Q6S11HJ-330	C.CAPACITOR	33PF 5% 50V	
C7012	Q6S11HJ-470	C.CAPACITOR	47PF 5% 50V	
C7013	Q6S11HJ-220	C.CAPACITOR	22PF 5% 50V	
C7014	Q6S11HJ-220	C.CAPACITOR	22PF 5% 50V	
C7015	Q6BB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C7016	Q6K41AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C7017	Q6K41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C7018	Q6K41CM-106	E.CAPACITOR	10MF 20% 16V	
C7019	Q6TNOJM-228Z	E.CAPACITOR	2200MF 20% 6.3V	
C7020	Q6K51CM-107	E.CAPACITOR	100MF 20% 16V	
C7021	Q6K41CM-106	E.CAPACITOR	10MF 20% 16V	
C7022	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7023	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7024	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7101	Q6XB1CM-122Y	C.CAPACITOR	1200PF 20% 16V	
C7102	Q6XB1CM-332Y	C.CAPACITOR	3300PF 20% 16V	
C7103	Q6E1H06-475Z	E.CAPACITOR	22PF 5% 50V	
C7104	Q6S11HJ-220	C.CAPACITOR		
C7106	Q6E1H06-475Z	E.CAPACITOR		
C7107	Q6V71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
C7108	Q6V41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
C7109	Q6V41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
C7110	Q6VB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7111	Q6E1V06-106Z	E.CAPACITOR	3.3MF 20% 50V	
C7112	Q6K61HM-335ZM	E.CAPACITOR	150PF 10% 50V	
C7113	Q6BB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7114	Q6K61AM-227ZM	E.CAPACITOR	220MF 20% 10V	
C7116	Q6V41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C7117	Q6S11HJ-680	C.CAPACITOR	68PF 5% 50V	
C7119	Q6E1C06-226Z	E.CAPACITOR	.022MF 5% 50V	
C7121	Q6V81HJ-223	FILM CAPACITOR	.022MF 5% 50V	

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C7910	0EK61HM-475ZN	E.CAPACITOR	4.7MF 20% 50V	
C7911	0EK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C7912	0ET41EM-107	E.CAPACITOR	100MF 20% 25V	
D7005	1SS133	SI DIODE		
D7006	1SS133	SI DIODE		
D7007	1SS133	SI DIODE		
D7008	MT74.7JB	ZENER DIODE		
D7009	1SS133	SI DIODE		
D7011	1SS133	SI DIODE		
D7301	R8721Q	DIODE		
D7302	R8721Q	DIODE		
D7305	1SS133	SI DIODE		
D7306	1SS133	SI DIODE		
D7307	1SS133	SI DIODE		
D7309	SLR-325MCT31	LED		
D7901	1SS133	SI DIODE		
D7902	MTZ10JAT-77	ZENER DIODE		
D7903	MTZ8.2JB	ZENER DIODE		
D7904	MTZ7.5JA	Z.DIODE		
D7905	RB100A	DIODE		
D7906	MTZ7.5JA	Z.DIODE		
D7907	1SS133	SI DIODE		
D7908	1SS133	SI DIODE		
D7909	MTZ3.9JB	ZENER DIODE		
D7910	1SS133	SI DIODE		
D7911	1SS133	SI DIODE		
D7913	1SS133	SI DIODE		
IC302	BA15218N	IC		
IC303	BH3854AS	IC		
IC304	BA15218N	IC		
IC305	BA15218N	IC		
IC306	VC4580L	IC		
IC701	MN101C03AJB2	IC		
IC702	TA8409S	IC		
IC901	UPC78L06J	IC		
J7301	QNS0014-001	JACK		
K7001	VQZ0048-009	INDUCTOR		
K7002	VQZ0048-009	INDUCTOR		
K7004	VQZ0048-009	INDUCTOR		
K7302	VQZ0048-009	INDUCTOR		
K7303	VQZ0048-009	INDUCTOR		
K7304	VQZ0048-009	INDUCTOR		
L102	EQF0101-010	FILTER		
L202	EQF0101-010	FILTER		
L7001	VQP0018-470	INDUCTOR		
L7002	VQP0018-470	INDUCTOR		
L7003	VQP0018-470	INDUCTOR		
L7004	VQP0018-221	INDUCTOR		
L7005	VQP0028-221Z	INDUCTOR		
L7901	QGL28AK-101	CHOKE COIL		
Q7001	2SC2668(C)	TRANSISTOR		
Q7002	2SC2668(C)	TRANSISTOR		
Q7003	DTA1141TS	D.TRANSISTOR		
Q7004	2SC2785	TRANSISTOR		

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C7122	0EK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C7123	0EV81HJ-154	FILM CAPACITOR	.15MF 5% 50V	
C7124	0TE1H15-475Z	E.CAPACITOR	2200PF 5% 50V	
C7125	0FN41HJ-222	M.CAPACITOR	1200PF 20% 16V	
C7201	0QXB1CM-122Y	C.CAPACITOR	3300PF 20% 16V	
C7202	0QXB1CM-332Y	C.CAPACITOR		
C7203	0TE1H06-475Z	E.CAPACITOR	22PF 5% 50V	
C7204	0QS11HJ-220	C.CAPACITOR		
C7206	0TE1H06-475Z	E.CAPACITOR		
C7207	0EV71HJ-334ZM	FILM CAPACITOR		
C7208	0EV41HJ-333	FILM CAPACITOR	.33MF 5% 50V	
C7209	0EV41HJ-333	FILM CAPACITOR	.033MF 5% 50V	
C7210	0CVB1CM-103Y	C.CAPACITOR	.010MF 20% 16V	
C7211	0TE1V06-106Z	E.CAPACITOR		
C7212	0EK61HM-335ZN	E.CAPACITOR	3.3MF 20% 50V	
C7213	0QBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7214	0EK61AM-227ZN	E.CAPACITOR	220MF 20% 10V	
C7216	0EV41HJ-474	FILM CAPACITOR	.47MF 5% 50V	
C7217	0QS11HJ-680	C.CAPACITOR	68PF 5% 50V	
C7219	0TE1C06-226Z	E.CAPACITOR		
C7221	0EV81HJ-223	FILM CAPACITOR	.022MF 5% 50V	
C7222	0EK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C7223	0EV81HJ-154	FILM CAPACITOR	.15MF 5% 50V	
C7224	0TE1H15-475Z	E.CAPACITOR		
C7225	0FN41HJ-222	M.CAPACITOR	2200PF 5% 50V	
C7301	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7302	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7303	0EK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C7304	0EK41HM-224	E.CAPACITOR	.22MF 20% 50V	
C7305	0QBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	
C7306	0QBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7307	0QBB1HK-151Y	C.CAPACITOR	150PF 10% 50V	
C7308	0EK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C7309	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7310	0EK61HM-475ZN	E.CAPACITOR	4.7MF 20% 50V	
C7311	0EK61HM-475ZN	E.CAPACITOR	4.7MF 20% 50V	
C7312	0EK41CM-106	E.CAPACITOR	10MF 20% 16V	
C7313	0EK61AM-107ZM	E.CAPACITOR	100MF 20% 10V	
C7314	0EK41CM-476	E.CAPACITOR	47MF 20% 16V	
C7315	0EK41HM-105	E.CAPACITOR	1.0MF 20% 50V	
C7316	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7319	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7320	0EV41HJ-224	FILM CAPACITOR	.22MF 5% 50V	
C7321	0EV41HJ-104ZM	FILM CAPACITOR	.10MF 5% 50V	
C7324	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7327	0QBB1HK-471Y	C.CAPACITOR	470PF 10% 50V	
C7901	0QTM1EM-688	E.CAPACITOR	6800MF 20% 25V	
C7902	0QBB1HK-221Y	C.CAPACITOR	220PF 10% 50V	
C7903	0QC11EM-103Y	C.CAPACITOR	.010MF 20% 25V	
C7904	0EK41CM-226	E.CAPACITOR	22MF 20% 16V	
C7905	0QC11EM-104V	C.CAPACITOR	.10MF 20% 25V	
C7906	0EK41CM-106	E.CAPACITOR	10MF 20% 16V	
C7907	0EK61HM-475ZN	E.CAPACITOR	4.7MF 20% 50V	
C7908	0QBB1HK-101Y	C.CAPACITOR	100PF 10% 50V	
C7909	0ET41EM-107	E.CAPACITOR	100MF 20% 25V	



BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R7227	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R7228	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7229	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
R7230	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
R7231	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7233	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R7234	QRD161J-563	CARBON RESISTOR	56K 5% 1/6W	
R7235	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7236	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7237	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7301	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7302	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R7303	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R7304	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R7305	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7306	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7307	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7308	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R7309	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7310	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R7311	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R7312	QRD161J-393	CARBON RESISTOR	39K 5% 1/6W	
R7313	QRD161J-473	CARBON RESISTOR	4.7K 5% 1/6W	
R7314	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
R7318	QRD161J-822	CARBON RESISTOR	8.2K 5% 1/6W	
R7319	QRD167J-582	CARBON RESISTOR	6.8K 5% 1/6W	
R7320	QRD167J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R7321	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7322	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7323	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R7324	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R7326	QRD161J-121	CARBON RESISTOR	120 5% 1/6W	
R7327	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7328	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7901	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R7902	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
R7903	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
R7904	QRD161J-3R3	CARBON RESISTOR	3.3 5% 1/6W	
R7905	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R7906	QRD161J-822	CARBON RESISTOR	6.2K 5% 1/6W	
R7907	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R7908	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7909	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7910	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7911	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7912	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7913	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R7914	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7916	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7917	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7918	QRZ0077-4R7X	FUSE RESISTOR	4.7 1/0W	
R7919	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7920	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7921	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	

BLOCK NO. 05

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R7104	QRD161J-683	CARBON RESISTOR	68K 5% 1/6W	
R7105	QRD161J-563	CARBON RESISTOR	MIC	
R7106	QRD161J-753	CARBON RESISTOR	75K 5% 1/6W	
R7109	QRD167J-562	CARBON RESISTOR	5.6K 5% 1/6W	
R7110	QRD161J-272	CARBON RESISTOR	2.7K 5% 1/6W	
R7111	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7112	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7113	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7114	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R7115	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7116	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7117	QRD161J-222	CARBON RESISTOR	22 5% 1/6W	
R7118	QRD161J-333	CARBON RESISTOR	2.2K 5% 1/6W	
R7119	QRD161J-333	CARBON RESISTOR	33K 5% 1/6W	
R7120	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7121	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R7122	QRD161J-153	CARBON RESISTOR	15K 5% 1/6W	
R7123	QRD161J-105	CARBON RESISTOR	1.0M 5% 1/6W	
R7124	QRD161J-911	CARBON RESISTOR	910 5% 1/6W	
R7125	QRD161J-334	CARBON RESISTOR	330K 5% 1/6W	
R7126	QRD161J-583	CARBON RESISTOR	56K 5% 1/6W	
R7127	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7128	QRD161J-471	CARBON RESISTOR	470 5% 1/6W	
R7129	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7130	QRD161J-475	CARBON RESISTOR	4.7M 5% 1/6W	
R7131	QRD161J-104	CARBON RESISTOR	4.7M 5% 1/6W	
R7132	QRD167J-332	CARBON RESISTOR	100K 5% 1/6W	
R7133	QRD161J-563	CARBON RESISTOR	3.3K 5% 1/6W	
R7134	QRD161J-472	CARBON RESISTOR	56K 5% 1/6W	
R7135	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7136	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7137	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7202	QRD161J-393	CARBON RESISTOR	10K 5% 1/6W	
R7203	QRD161J-622	CARBON RESISTOR	39K 5% 1/6W	
R7204	QRD161J-683	CARBON RESISTOR	6.2K 5% 1/6W	
R7205	QRD161J-583	CARBON RESISTOR	68K 5% 1/6W	
R7206	QRD161J-753	CARBON RESISTOR	MIC	
R7209	QRD167J-582	CARBON RESISTOR	75K 5% 1/6W	
R7210	QRD161J-272	CARBON RESISTOR	5.8K 5% 1/6W	
R7211	QRD161J-102	CARBON RESISTOR	2.7K 5% 1/6W	
R7212	QRD161J-104	CARBON RESISTOR	1.0K 5% 1/6W	
R7213	QRD161J-222	CARBON RESISTOR	100K 5% 1/6W	
R7214	QRD161J-123	CARBON RESISTOR	2.2K 5% 1/6W	
R7215	QRD161J-472	CARBON RESISTOR	12K 5% 1/6W	
R7216	QRD161J-220	CARBON RESISTOR	4.7K 5% 1/6W	
R7217	QRD161J-222	CARBON RESISTOR	22 5% 1/6W	
R7218	QRD161J-333	CARBON RESISTOR	2.2K 5% 1/6W	
R7219	QRD161J-472	CARBON RESISTOR	33K 5% 1/6W	
R7220	QRD161J-104	CARBON RESISTOR	4.7K 5% 1/6W	
R7221	QRD161J-153	CARBON RESISTOR	100K 5% 1/6W	
R7222	QRD161J-105	CARBON RESISTOR	15K 5% 1/6W	
R7223	QRD161J-911	CARBON RESISTOR	1.0M 5% 1/6W	
R7224	QRD161J-334	CARBON RESISTOR	910 5% 1/6W	
R7225	QRD161J-563	CARBON RESISTOR	330K 5% 1/6W	
R7226	QRD161J-102	CARBON RESISTOR	56K 5% 1/6W	



**CD Servo Control Board**

BLOCK NO. 04

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
B6101	QWY124-5.0Y	BUS WIRE		
B6102	QWY124-5.0Y	BUS WIRE		
B6103	QWY124-5.0Y	BUS WIRE		
B6104	QWY124-5.0Y	BUS WIRE		
B6105	QWY124-5.0Y	BUS WIRE		
B6106	QWY124-5.0Y	BUS WIRE		
B6107	QWY124-5.0Y	BUS WIRE		
B6108	QWY124-5.0Y	BUS WIRE		
B6109	QWY124-5.0Y	BUS WIRE		
B6110	QWY124-5.0Y	BUS WIRE		
B6111	QWY124-5.0Y	BUS WIRE		
B6113	QWY124-5.0Y	BUS WIRE		
B6114	QWY124-5.0Y	BUS WIRE		
B6115	QWY124-5.0Y	BUS WIRE		
B6116	QWY124-5.0Y	BUS WIRE		
B6117	QWY124-5.0Y	BUS WIRE		
B6118	QWY124-5.0Y	BUS WIRE		
B6120	QWY124-5.0Y	BUS WIRE		
B6121	QWY124-5.0Y	BUS WIRE		
B6122	QWY124-5.0Y	BUS WIRE		
B6123	QWY124-5.0Y	BUS WIRE		
B6124	QWY124-5.0Y	BUS WIRE		
B6125	QWY124-5.0Y	BUS WIRE		
B6126	QWY124-5.0Y	BUS WIRE		
B6128	QWY124-5.0Y	BUS WIRE		
B6129	QWY124-5.0Y	BUS WIRE		
B6130	QWY124-5.0Y	BUS WIRE		
B6131	QWY124-5.0Y	BUS WIRE		
B6132	QWY124-5.0Y	BUS WIRE		
B6133	QWY124-5.0Y	BUS WIRE		
B6134	QWY124-5.0Y	BUS WIRE		
B6135	QWY124-5.0Y	BUS WIRE		
B6136	QWY124-5.0Y	BUS WIRE		
B6137	QWY124-5.0Y	BUS WIRE		
B6201	QWY123-7.5Y	BUS WIRE		
B6202	QWY123-7.5Y	BUS WIRE		
B6206	QWY123-7.5Y	BUS WIRE		
B6207	QWY123-7.5Y	BUS WIRE		
B6208	QWY123-7.5Y	BUS WIRE		
B6209	QWY123-7.5Y	BUS WIRE		
B6210	QWY123-7.5Y	BUS WIRE		
B6211	QWY123-7.5Y	BUS WIRE		
B6301	QWY123-10.0Y	BUS WIRE		
B6302	QWY123-10.0Y	BUS WIRE		
B6304	QWY123-10.0Y	BUS WIRE		
B6401	QWY123-12.5Y	BUS WIRE		
B6402	QWY123-12.5Y	BUS WIRE		
B6403	QWY123-12.5Y	BUS WIRE		
B6502	QWY123-15.0Y	BUS WIRE		
B6503	QWY123-15.0Y	BUS WIRE		
B6504	QWY123-15.0Y	BUS WIRE		
B6601	QWY123-17.5Y	BUS WIRE		
B6602	QWY123-17.5Y	BUS WIRE		
B6701	QWY123-20.0Y	BUS WIRE		
B6702	QWY123-20.0Y	BUS WIRE		

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R7922	QRD161J-473	CARBON RESISTOR	4.7K 5% 1/6W	
R7923	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R7924	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R7925	QRD161J-152	CARBON RESISTOR	1.5K 5% 1/6W	
R7926	QRD161J-390	CARBON RESISTOR	39 5% 1/6W	
R7927	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
R7928	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
R7929	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R7930	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R7931	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R7932	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R7933	QRD161J-472	CARBON RESISTOR	4.7K 5% 1/6W	
TH901	ERT-D2ZHL153T	THERMISTOR		
X7001	VCA5000-002	CRYSTAL		
X7002	CSA8.00MT2226-T	CERA LOCK		

BLOCK NO. 04111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
B6801	QWY123-22.5Y	BUS WIRE		
B6802	QWY123-22.5Y	BUS WIRE		
B6803	QWY123-22.5Y	BUS WIRE		
B6804	QWY123-22.5Y	BUS WIRE		
B6851	QWY123-25.0Y	BUS WIRE		
B6901	QWY123-27.5Y	BUS WIRE		
C 604	QEX51AM-107	E. CAPACITOR	100MF 20% 10V	
C 605	GET41EM-106	E. CAPACITOR	10MF 20% 25V	
C 606	QCB1HK-102Y	C. CAPACITOR	1000PF 10% 50V	
C 607	QCB1HK-102Y	C. CAPACITOR	1000PF 10% 50V	
C 608	GET41HM-105	E. CAPACITOR	1.0MF 20% 50V	
C 609	QCB1HK-101Y	C. CAPACITOR	100PF 10% 50V	
C 610	QFLC1HJ-273ZM	M. CAPACITOR	.027MF 5% 50V	
C 611	QCB1CM-222Y	C. CAPACITOR	2200PF 20% 16V	
C 612	QCB1CM-103Y	C. CAPACITOR	.010MF 20% 16V	
C 613	QCB1HK-331Y	C. CAPACITOR	330PF 10% 50V	
C 614	QFLC1HJ-104ZM	M. CAPACITOR	.10MF 5% 50V	
C 615	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 616	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 617	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 618	QCB1CM-222Y	C. CAPACITOR	2200PF 20% 16V	
C 619	QCB1HK-271Y	C. CAPACITOR	270PF 10% 50V	
C 620	QCS11HJ-470	C. CAPACITOR	47PF 5% 50V	
C 621	QCB1HK-821Y	C. CAPACITOR	820PF 10% 50V	
C 622	GET41AM-476	E. CAPACITOR	47MF 20% 10V	
C 623	QFLC1HJ-104ZM	M. CAPACITOR	.10MF 5% 50V	
C 628	QCS11EM-473V	C. CAPACITOR	.047MF 20% 25V	
C 629	GET41AM-107	E. CAPACITOR	100MF 20% 10V	
C 631	GET41AM-477	E. CAPACITOR	470MF 20% 10V	
C 632	QEX51AM-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	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 655	QCC11EM-473V	C. CAPACITOR	.047MF 20% 25V	
C 661	QCB1HK-471Y	C. CAPACITOR	470PF 10% 50V	
C 662	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 663	QFLC1HJ-223ZM	M. CAPACITOR	.022MF 5% 50V	
C 664	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 665	QFV71HJ-334ZM	FILM CAPACITOR	.33MF 5% 50V	
C 671	QCB1CM-222Y	C. CAPACITOR	2200PF 20% 16V	
C 672	QCB1CM-222Y	C. CAPACITOR	2200PF 20% 16V	
C 673	GET41AM-227	E. CAPACITOR	220MF 20% 10V	
C 674	QCB1E2-223	C. CAPACITOR	.022MF +80:-20%	
C 675	QCB1HK-102Y	C. CAPACITOR	AG-DG	
C 676	QCB1HK-102Y	C. CAPACITOR	AG-DG	
C 691	QCB1HK-151Y	C. CAPACITOR	DENGEN NOISE	
C 692	QCB1HK-151Y	C. CAPACITOR	DENGEN NOISE	
C 693	QCB1HK-151Y	C. CAPACITOR	DENGEN NOISE	
C 694	QCB1HK-151Y	C. CAPACITOR	DENGEN NOISE	
CN601	GGF1008F1-15	15PIN CONNECTOR	TO RF	
CN602	EMV5109-006A	6P PLUG ASSY	TO MOTOR	
CN603	VMC0163-007	CONNECTOR	TO AUDIO	
CN604	VMC0163-R11	CONNECTOR	TO MICON	
CN605	VMC0041-003	CONNECTOR	TO DIGITAL OUT	
D 661	1SS133	SI DIODE		

BLOCK NO. 04111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
A IC601	AN8806SB	IC		
A IC602	BA6897FP	IC		
Q 601	MM35510	IC		
Q 601	2SA952(L,K)	TRANSISTOR		
Q 631	2SA952(L,K)	TRANSISTOR		
R 601	QRD161J-123	CARBON RESISTOR	12K 5% 1/6W	
R 603	QRD161J-125	CARBON RESISTOR	1.2M 5% 1/6W	
R 605	QRD161J-134	C.RES. I-M	130K 5% 1/6W	
P 606	QRD161J-913	CARBON RESISTOR	91K 5% 1/6W	
R 607	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	
R 609	QRD161J-114	C.RES. I-M	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-330	CARBON RESISTOR	33 5% 1/6W	
R 622	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
R 623	QRD161J-330	CARBON RESISTOR	33 5% 1/6W	
R 631	QRD161J-331	CARBON RESISTOR	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-223	CARBON RESISTOR	22K 5% 1/6W	
R 646	QRD161J-182	CARBON RESISTOR	1.8K 5% 1/6W	
R 647	QRD161J-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 655	QRD161J-471	CARBON RESISTOR	470 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	
X 651	VXC5016-934V	CRYSTAL	16.9344MHZ	

**Reel Pulse Board**

BLOCK NO. 055MM111

A REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
CN 1	VMC0314-P12	CONNECTOR	CN1	1		
D 1	1SR139-100	SI DIODE	D1	1		
FW 1	VWSC04-11A13K	TM FLAT WIRE	FW1	1		
IC 1	DM6851-HI	HALL IC	IC1	1		
IC H	VXS3330-001MM	IC HOLDER		1		
S 1	MXS00220NVLO	CASSETTE SWITCH		1		
S 2	MXS00220NVLO	CASSETTE SWITCH		1		
S 3	MXS00220NVLO	CASSETTE SWITCH		1		
S 4	MXS00220NVLO	CASSETTE SWITCH		1		
S 5	MXS00220NVLO	CASSETTE SWITCH		1		
S 6	QSEC001-E03	SWITCH	S6	1		

**Cassette Mechanism Board**

BLOCK NO. 055MM111

A REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
CN 1	VMC0314-P12	CONNECTOR	CN1	1		
D 1	1SR139-100	SI DIODE	D1	1		
FW 1	VWSC04-11A13K	TM FLAT WIRE	FW1	1		
IC 1	DM6851-HI	HALL IC	IC1	1		
IC H	VXS3330-001MM	IC HOLDER		1		
S 1	MXS00220NVLO	CASSETTE SWITCH		1		
S 2	MXS00220NVLO	CASSETTE SWITCH		1		
S 3	MXS00220NVLO	CASSETTE SWITCH		1		
S 4	MXS00220NVLO	CASSETTE SWITCH		1		
S 5	MXS00220NVLO	CASSETTE SWITCH		1		
S 6	QSEC001-E03	SWITCH	S6	1		

# 14. Packing

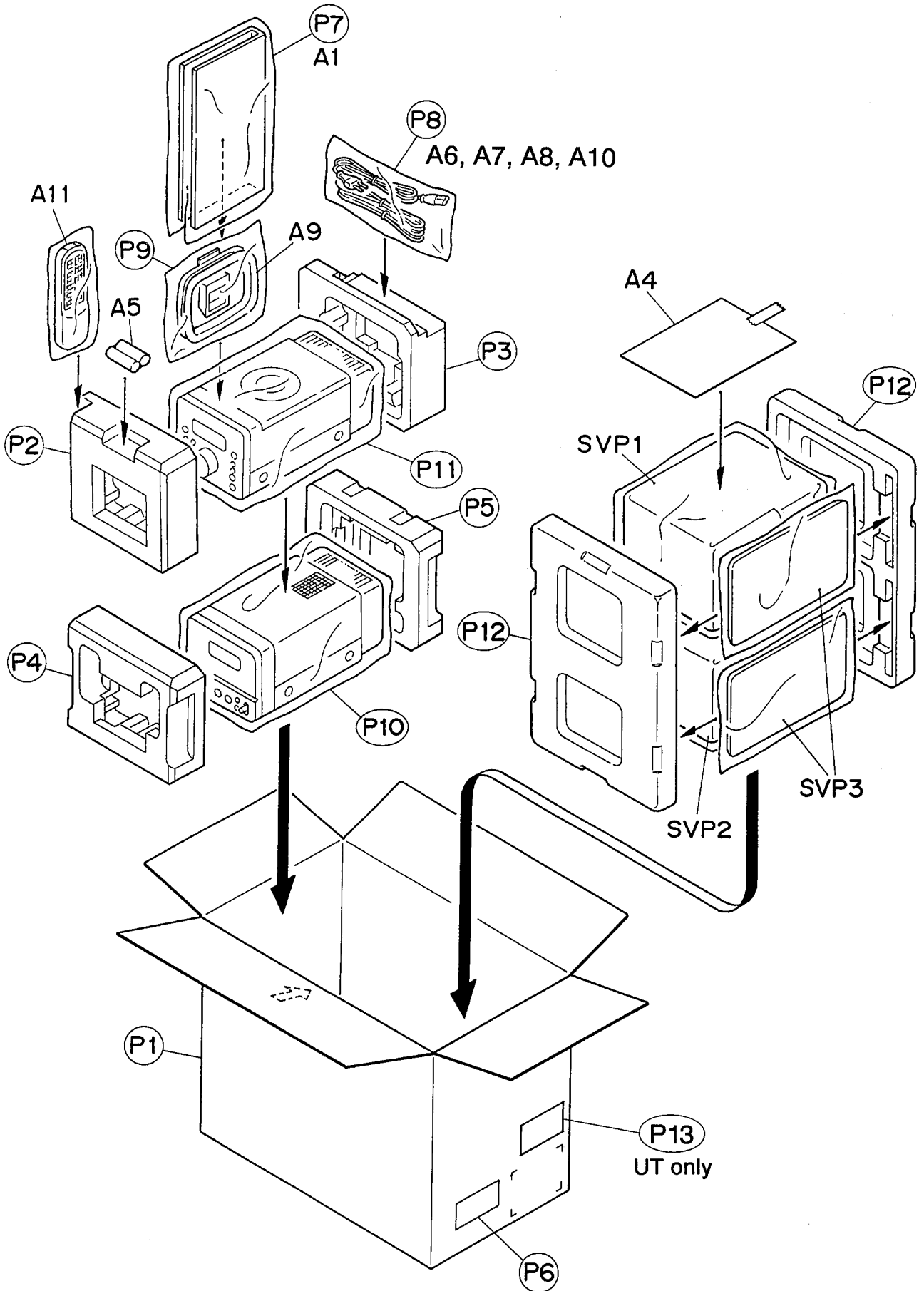


Fig. 14-1

### ■ Packing Parts List

BLOCK NO. M5MM III

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	VPC9306-001	CARTON		1		
	P 2	VPH1708-001	CUSHION(CD/F)	DECK:FRONT	1		
	P 3	VPH1708-002	CUSHION(CD/R)	DECK:REAR	1		
	P 4	VPH1708-004	CUSHION(DECK/R)		1		
	P 5	VPH1708-003	CUSHION(DECK/F)		1		
	P 6	-----	CARTON LABEL		1		
	P 7	VPE3005-007	POLY BAG	FOR INST BOOK	1		
	P 8	QPGA015-03503	POLY BAG	FOR POWER CORD	1		
	P 9	VPE3005-042	POLY BAG	AM LOOP ANT	1		
	P 10	VPE3026-007	POLY BAG	DECK/AC UNIT	1		
	P 11	VPE3026-007	POLY BAG	CD/TUNER UNIT	1		
	P 12	VPH3232-001	CUSHION(SPK)		1		
	P 13	VYN9306-410	NAME PLATE		1	UT	

### ■ Accessories

BLOCK NO. M6MM III

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	VNN9306-141M	INSTRUCTIONS		1	U	
		VNN9306-111M	INSTRUCTIONS		1	UB,US,UT,U	
	A 4	VND5138-M001	CAUTION SHEET		1		
	A 5	R6S-2S	BATTERY		2		
	A 6	QMP39F0-183	POWER CORD		1	US	
		QMP7350-150	POWER CORD		1	UT	
		QMP7350-150	POWER CORD		1	U	
		QMP5520-183BS	POWER CORD		1	UB	
		QMP7530-183	POWER CORD		1	U	
	A 7	EWP502-001	FM ANTENNA		1		
	A 8	VO4062-001	CONTI.PLUG		1	US,U	
	A 9	EQB4001-015	AM LOOP ANT		1		
	A 10	E407448-002	SPEAKER CORD		2		
	A 11	VGR0059-101	REMOCON UNIT	RM-RXUD88	1		
	SVP 1	UXD88K-SPBOX-L	SPEAKER BOX(L)	SERVICE PARTS	1		
	SVP 2	UXD88K-SPBOX-R	SPEAKER BOX(R)	SERVICE PARTS	1		
	SVP 3	VYTB432-001	SARAN NET ASSY	SERVICE PARTS	1		

# JVC

VICTOR COMPANY OF JAPAN, LIMITED  
AUDIO DIVISION 10-1, 1-chome, Ohwatari-machi, Maebashi-city, Japan

# JVC

## SERVICE MANUAL

### MICRO COMPONENT SYSTEM

# UX-D88GD

Supplement

This Service manual is the supplement edition for an omission of CD servo control circuit diagram.

Would you please use to conjoint with service manual for UX-D88GDUB/US/UT/U (Issue No.10042).

#### Area Suffix

UB	.....	Hong kong.
US	.....	Singapore
UT	.....	Formosa
U	.....	Other Area



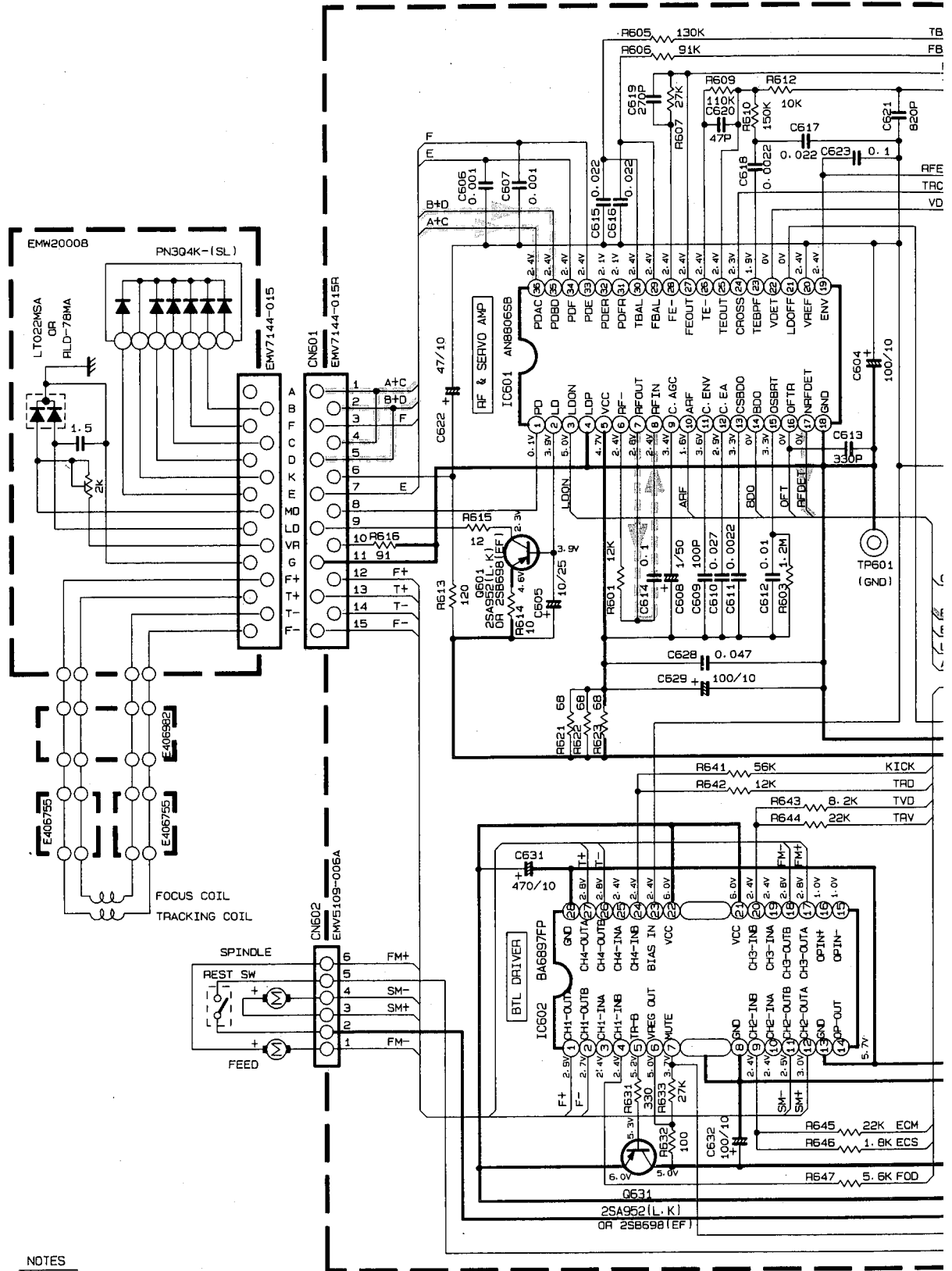




# CD Servo Control Circuit : Drawing No.VDH1010-001CW

A  
B  
C  
D  
E  
F

1 2 3 4 5



**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).
3. ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN #F(P=pF).
4. ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F1/RATED VOLTAGE (V)).

6 7 8 9 10

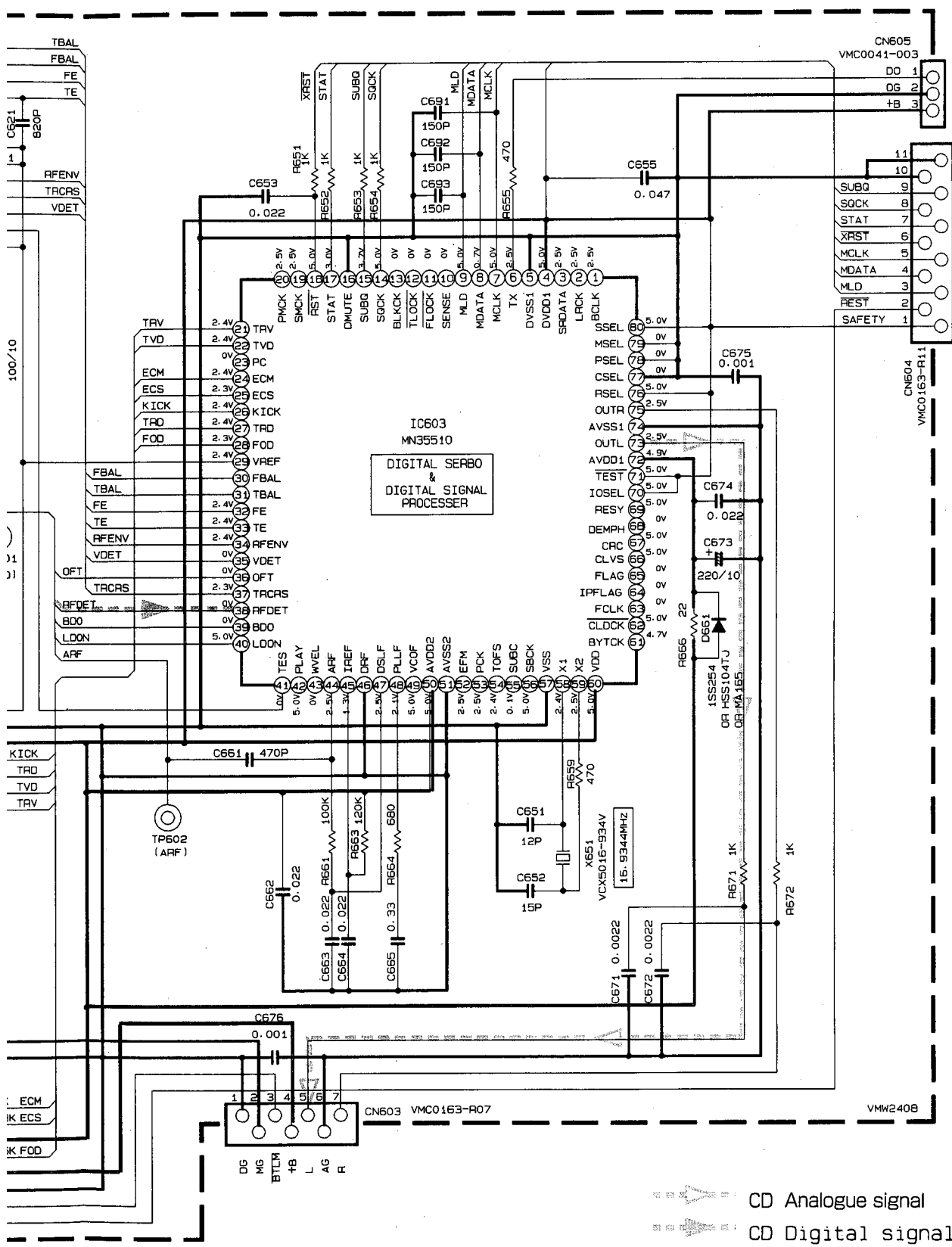


Fig.11-3

CD Analogue signal  
 CD Digital signal  
 +B Line





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