

# XR-C4100

## SERVICE MANUAL

AEP Model  
UK Model



Model Name Using Similar Mechanism	XR-5800R
Tape Transport Mechanism Type	MG-25G-136

### SPECIFICATIONS

#### Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	20 - 18,000 Hz
Signal-to-noise ratio	58 dB (TYPE I) 61 dB (TYPE II, IV)

#### Tuner section

<b>FM</b>	
Tuning range	87.5 - 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 - 15,000 Hz
Capture ratio	2 dB

#### MW/LW

Tuning range	MW: 531 - 1,602 kHz LW: 153 - 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.71 MHz/450kHz
Sensitivity	MW: 30 $\mu$ V LW: 50 $\mu$ V

#### Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 - 8 ohms
Maximum power output	40 W $\times$ 4 (at 4 ohms)

#### General

Outputs	Power aerial relay control lead/Power amplifier control lead/Telephone ATT control lead Rear line out (1)
Tone controls	Bass $\pm$ 8 dB at 100 Hz Treble $\pm$ 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 $\times$ 58 $\times$ 181 mm (w/h/d)
Mounting dimensions	Approx. 182 $\times$ 53 $\times$ 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X4S

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

## FM/MW/LW CASSETTE CAR STEREO



# SONY®

## TABLE OF CONTENTS

<b>1. GENERAL</b>	
Location of Controls .....	3
Resetting the Unit .....	4
Detaching the Front Panel .....	4
Preparing the Rotary Commander .....	4
Setting the Clock .....	4
Installation .....	5
Connections .....	6
<b>2. DISASSEMBLY</b> .....	9
<b>3. ASSEMBLY OF MECHANISM DECK</b> .....	11
<b>4. MECHANICAL ADJUSTMENTS</b> .....	14
<b>5. ELECTRICAL ADJUSTMENTS</b>	
Test Mode .....	14
Tape Deck Section .....	14
Tuner Section .....	15
<b>6. DIAGRAMS</b>	
6-1. IC Pin Function Description .....	18
6-2. Printed Wiring Boards –MAIN Section– .....	21
6-3. Schematic Diagram –MAIN Section– .....	25
6-4. Printed Wiring Board –PANEL Section– .....	29
6-5. Schematic Diagram –PANEL Section– .....	31
<b>7. EXPLODED VIEWS</b> .....	35
<b>8. ELECTRICAL PARTS LIST</b> .....	38

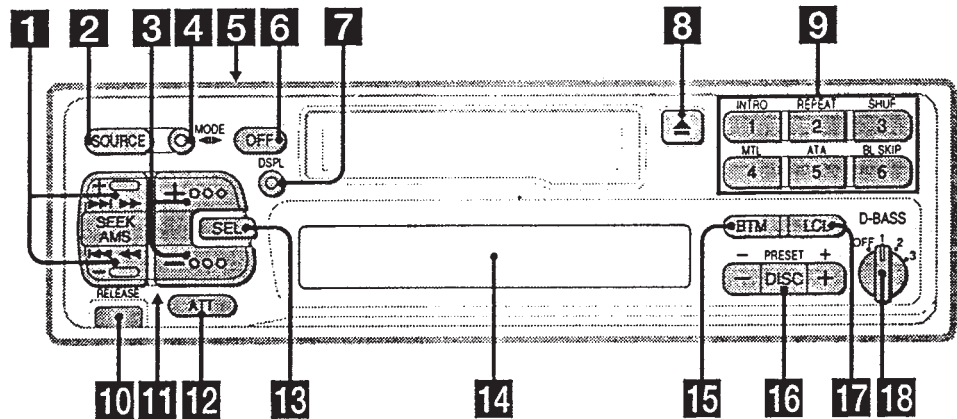
### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering

### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location of controls



EN

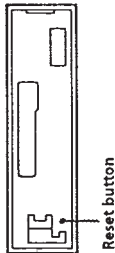
Refer to the pages for further details.

- 1** SEEK/AMS button 5, 6, 7, 8, 10, 11
- 2** SOURCE button (TAPE/TUNER/MD/CD) 5, 7, 10
- 3** (+) (-) (volume/bass/treble/left-right/front-rear control) button 5, 9
- 4** MODE (◀|▶) button  
During tuner reception:  
BAND select 7  
During tape playback:  
Transport direction change 5  
During MD/CD playback:  
MD/CD Unit select 10
- 5** POWER SELECT switch (located on the top of the unit)  
See "POWER SELECT Switch" in the Installation/Connections manual.
- 6** OFF button 4, 5
- 7** DSPL (display mode change/time set) button 5, 6, 8, 10
- 8** ▲ (eject) button 5
- 9** During radio reception:  
Preset number buttons 7  
During tape/MD/CD playback:  
① INTRO button 6, 11  
② REPEAT button 6, 11  
③ SHUF (Shuffle) button 11
- 4** MTL (Metal) button 6
- 5** ATA (Automatic Tuner Activation) button 6
- 6** BL SKIP (Blank Skip) button 6
- 10** RELEASE (front panel release) button 4, 13
- 11** Reset button (located on the front side of the unit hidden by the front panel)  
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.
- 12** ATT button 9
- 13** SEL (control mode select) button 5, 9, 10
- 14** Display window
- 15** BTM (Best tuning memory) button 7
- 16** PRESET/DISC button  
During tuner reception:  
Preset stations 7  
During MD/CD playback:  
Disc change 11
- 17** LCL button 8
- 18** D-BASS control 9

## Getting Started

### Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit. Press the reset button with a pointed object, such as a ballpoint pen.

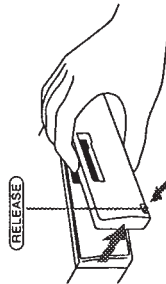


**Note**  
Pressing the reset button will erase all the memorised programme and memory functions.

### Detaching the front panel

The front panel of this unit can be detached to prevent the unit from being stolen.

- 1 Press **(OFF)**.
- 2 Press **(RELEASE)** to detach the front panel then gently pull it out.

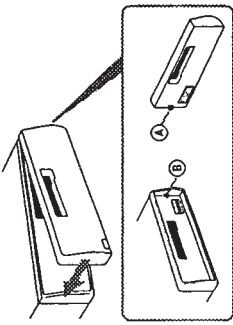


**Note**

- Be sure not to drop the panel when detaching it from the unit.
- If you press **(RELEASE)** to detach the panel while the unit is still turned on, the power will automatically turn off to protect the speakers from being damaged.

### Attaching the front panel

Attach part ④ of the front panel to part ③ of the unit as illustrated and push until it clicks.



#### Notes

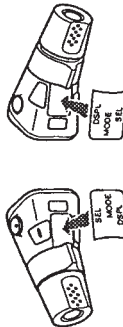
- Make sure the front panel is right side up when attaching it to the unit as it cannot be attached upside down.
- Do not press the front panel too hard when attaching it to the unit. It can easily be attached by pressing it lightly against the unit.
- When you carry the front panel with you, keep it in the supplied front panel case.
- Do not press hard or put excessive pressure on the display windows of the front panel.
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dashboard etc. of a car parked in direct sunlight where there may be a considerable rise in temperature inside the car.

### Caution alarm

If you turn the ignition key to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the ④ position). If you connect an optional power amplifier to the LINE OUT, and do not use the built-in amplifier, the beep tone will be disabled.

### Preparing the rotary commander

When you mount the rotary commander, attach the appropriate label, as in the illustration below.

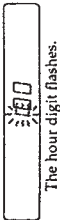


### Setting the clock

The clock has a 24-hour digital indication. For example, setting it to 10:08

- 1 Press **(OFF)** or **(DISP)** during operation.

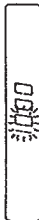
- 2 Press **(DISP)** for two seconds.



- 3 Set the hour digits.

To go forward

To go backward



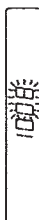
- 2 Press **(SEL)** momentarily.



- 3 Set the minute digits.

To go forward

To go backward



- 3 Press **(DISP)** momentarily.



#### Note

If the POWER SELECT switch on the top of the unit is set to the ④ position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio.

# Installation

## Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the installation location carefully so that the unit will not interfere with driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

## Mounting angle adjustment

Adjust the mounting angle to less than 20°.

## How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

### To detach

Press the **(RELEASE)** to detach the front panel then gently pull it out.

### To attach

Align parts **(A)** and **(B)**, and push the front panel in until it clicks.

# Instalación

## Precauciones

- No toque los cuatro orificios de la superficie superior de la unidad. Estos orificios son para ajustes del sintonizador que solamente deberán realizar técnicos de reparación.
- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como a la luz solar directa o al aire de calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, utilice solamente la ferretería de montaje suministrada.

## Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 20°.

## Forma de extraer e instalar el panel frontal

Antes de instalar la unidad, extraiga el panel frontal.

### Para extraerlo

Presione la tecla **(RELEASE)** para extraerlo y, a continuación, tire de él hacia fuera con suavidad.

### Para instalarlo

Alinee las partes **(A)** y **(B)**, y presione el panel frontal hasta que chasquee.

# Montering

## Sökerhetsföreskrifter

- Låt de fyra hålen på bilstereons ovansida vara. De är till för radiojusteringar som endast får utföras av fackkunniga tekniker.
- Var noga när du väljer var i bilen du monterar bilstereon, så att den inte sitter i vägen när du kör.
- Montera inte bilstereon där den utsätts för värme, t ex solsken eller varmluft, eller där den utsätts för damm, smuts och/eller vibrationer.
- Använd endast de medföljande monteringsstillbehören för att vara säker på att bilstereon monteras på ett säkert och korrekt sätt.

## Tillåten monteringsvinkel

Monteringsvinkeln får inte vara större än 20 grader.

## Ta loss/fästa frontpanelen

Ta loss frontpanelen innan du monterar bilstereon.

### Ta loss frontpanelen

Tryck på **(RELEASE)** för att ta loss frontpanelen. Dra den sedan försiktigt utåt.

### Fästa frontpanelen

Lägg **(A)** och **(B)** mot varandra, kant i kant, och tryck tills du hör ett klickljud.

# Instalação

## Precauções

- Não altere indevidamente os quatro orifícios da superfície da parte superior do aparelho. Estes servem para regulações do sintonizador que devem ser efectuadas somente por técnicos qualificados.
- Escolha cuidadosamente o local de instalação para que o aparelho não interfira com a condução.
- Evite instalar o aparelho onde possa estar sujeito a altas temperaturas, tais como em locais expostos directamente à luz do sol, ao ar quente dos aquecimentos, ou sujeitos a pó, sujidade ou vibração excessiva.
- Para efectuar uma instalação segura utilize unicamente o equipamento de montagem fornecido.

## Ajuste do ângulo de montagem

Ajuste o ângulo de montagem a menos de 20°.

## Para retirar e colocar o painel frontal

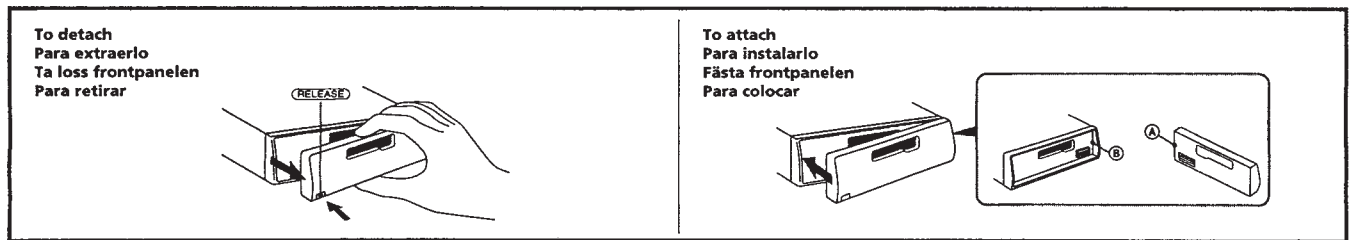
Retire o painel frontal antes de iniciar a instalação do aparelho.

### Para retirar

Carregue em **(RELEASE)** para soltar o painel frontal e, em seguida, puxe-o com cuidado.

### Para colocar

Alineie as partes **(A)** e **(B)**, e fixe o painel frontal pressionando-o até que encaixe.



## Mounting Example

Installation in the dashboard

## Ejemplo de montaje

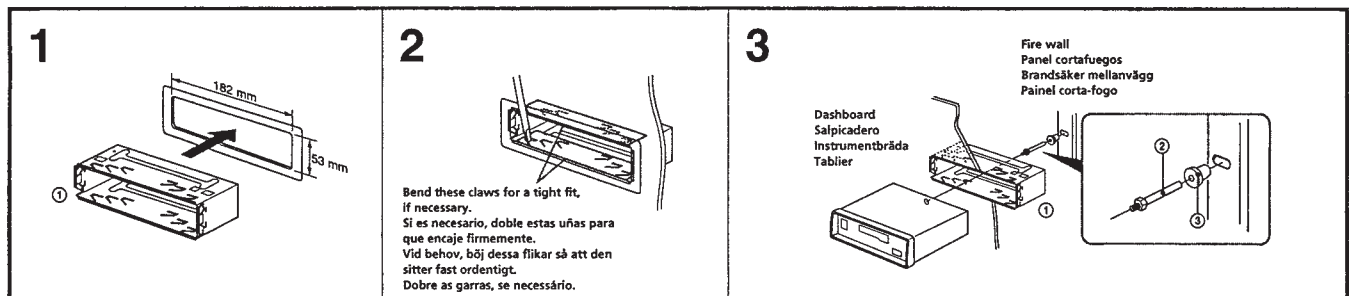
Instalación en el salpicadero

## Exempel på montering

Montera på instrumentbrådan

## Exemplo de montagem

Instalação no tablier



## Note for Connecting

If there is alternator noise (a whining sound when raising engine speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord **(5)**. Connect the ground cord to the master unit with part **(2)** as shown in the illustration.

## Nota sobre conexión

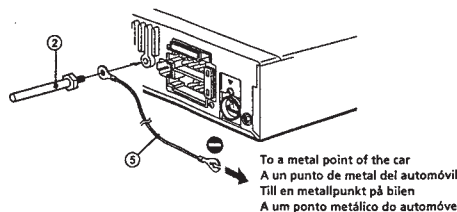
Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unidad principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis **(5)** suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza **(2)** como se muestra en la ilustración.

## Angående anslutningar

Om motorn ger störningar (ett vinande ljud när du gasar) bör du jorda huvudenheten till en metallpunkt på bilen med den medföljande chassijordkabeln **(5)**. Anslut jordkabeln till huvudenheten med jordkontakten **(2)** enligt bilden.

## Nota sobre a ligação

Se o alternador começar a produzir ruídos (um som agudo durante o aumento da velocidade do motor), ligue a unidade principal à terra. Para tal, ligue o cabo de terra do chassis **(5)** fornecido a um ponto metálico do automóvel. Ligue o cabo de ligação à terra ao aparelho principal com a peça **(2)**, como se mostra na ilustração.



To a metal point of the car  
A un punto de metal del automóvil  
Till en metallpunkt på bilen  
A um ponto metálico do automóvel



# Connections

## Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the unit to the power supply of the car after all other connections are complete.
- Run all ground wires to a common ground point.
- Connect pin 4 or pin 7 of the unit's power connector to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in combination with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual components' fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

## If Your Car has No Accessory Position on the Ignition Key Switch — POWER SELECT Switch

The illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear if your car has no accessory position on the ignition key switch. To avoid this battery wear, set the POWER SELECT switch located on the top of the unit to the ② position, then press the reset button. The illumination is reset to stay off while the unit is not in use.

**Note**  
The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ② position.

# Conexiones

## Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Conecte la unidad al suministro de alimentación del automóvil una vez realizadas todas las conexiones.
- Conecte todos los conductores de puesta a masa a un punto común.
- Conecte el terminal 4 o 7 del conector de alimentación de la unidad a un circuito libre del automóvil con una potencia nominal superior a la del fusible de la unidad. Si conecta ésta en combinación con otros componentes estereó, la potencia nominal del circuito del automóvil al que se conecta debe ser superior a la suma de la de los fusibles de los componentes individuales. Si no hay ningún circuito en el automóvil con una potencia nominal tan alta como la del fusible de la unidad, conecte ésta directamente a la batería. Si no hay circuitos en el automóvil disponibles para conectar esta unidad, conéctela a un circuito del automóvil con una potencia nominal superior a la del fusible de la unidad de forma que si dicho fusible se funde no se vean afectados otros circuitos.

## Si el automóvil no dispone de posición para accesorios en la llave de encendido — Selector POWER SELECT

La iluminación del panel frontal ha sido ajustada en fábrica para que esté activada aunque la unidad no se encuentre en reproducción. Sin embargo, este ajuste puede provocar cierta descarga de la batería del automóvil si éste no dispone de posición para accesorios en la llave de encendido. Para evitar esto, ponga el selector POWER SELECT, situado en la parte superior de la unidad, en la posición ② y, después, presione el botón de reposición. La iluminación estará desactivada cuando la unidad no se encuentre en reproducción.

**Nota**  
La alarma de precaución del panel frontal no se activará cuando el selector POWER SELECT se encuentre en la posición ②.

# Anslutning

## Sökerhetsföreskrifter

- Denna bilstereo är endast avsedd för anslutning till ett negativt jordat, 12 V bilbatteri.
- Anslut enheten till strömförsörjningen sedan alla andra anslutningar gjorts.
- Dra samtliga jordledningar till en och samma jordningspunkt.
- Anslut pol 4 eller pol 7 i enhetens strömanslutning till en fri krets med högre märkdata än enheten. Om du ansluter denna enhet i serie med andra stereokomponenter måste den strömkrets de är anslutna till ha högre märkdata än summan av de enskilda komponenternas märkdata. Om det inte finns någon strömkrets med lika höga märkdata som enhetens ansluter du enheten direkt till bilbatteriet. Om det inte finns några bilkretsar tillgängliga för enheten ansluter du den till en bilkrets med högre märkdata än enheten så att inga andra kretsar bryts om enhetens säkring skulle gå.

## Montera bilstereon i en bil vars tändlås inte har något strömläge — Omkopplaren POWER SELECT

Innan bilstereon levererades från fabriken ställdes belysningen i teckenfönstret in så att den lyser också när bilstereon inte används. Detta kan emellertid orsaka urladdning av batteriet när du använder bilstereon i en bil, vars tändlås saknar läget ACC (strömläge). Skjut omkopplaren POWER SELECT på bilstereons översida till läge ②, och tryck sedan på återställningsknappen för att undvika att bilbatteriet laddas ur. Nu lyser inte längre belysningen i teckenfönstret när bilstereon inte används.

**Observera**  
Varningssignalen, som varnar om du inte har tagit loss frontpanelen, ljuder inte när omkopplaren POWER SELECT står i läge ②.

# Connexions

## Advertência

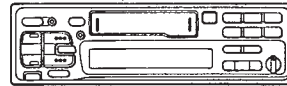
- Este aparelho foi projectado para funcionar somente com corrente contínua de 12 V com negativo à massa.
- Ligue o aparelho à fonte de alimentação do automóvel depois de completar todas as outras ligações.
- Ligue todos os fios de terra num ponto de massa comum.
- Ligue o pino 4 ou o pino 7 do conector de alimentação do aparelho a um circuito livre do automóvel com uma capacidade superior à do fusível do aparelho. Se ligar este aparelho em série com outros componentes estereó, o circuito do automóvel a que estiverem ligados deve ter uma capacidade superior à da soma dos fusíveis dos componentes individuais. Se nenhum circuito do automóvel tiver uma capacidade tão elevada como a do fusível do aparelho, ligue-o directamente à bateria. Se nenhum circuito do automóvel estiver disponível para ligação deste aparelho, ligue-o a um circuito do automóvel que tenha uma capacidade superior à do fusível do aparelho, de tal modo que, se o fusível rebentar, nenhum outro circuito seja afectado.

## Se o seu automóvel não estiver equipado com uma chave de ignição com posição acessórios — Interruptor POWER SELECT

A iluminação do painel frontal é regulada na fábrica para se manter acesa, mesmo quando o aparelho não estiver ligado. No entanto, esta regulação pode provocar a descarga da bateria se o aparelho for utilizado em automóveis sem chave de ignição com posição acessórios. Para evitar a descarga da bateria, regule o interruptor POWER SELECT, situado na parte superior do aparelho, para a posição ②. Em seguida, carregue no botão de reinitialização. A iluminação é regulada para ficar apagada enquanto o aparelho estiver desligado.

**Nota**  
O alarme de advertência do painel frontal não é activado se o interruptor POWER SELECT estiver regulado para a posição ②.

Change the position with a jeweler's screwdriver, etc. Cambie la posición con un destornillador de relojero, etc. Använd en skruvmejsel för finmekaniker eller ett liknande verktyg för att ändra på omkopplarfäget. Altere a posição do interruptor com uma chave de fendas de precisão, etc.



## Reset Button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc.

## Botón de reposición

Cuando finalice la instalación y las conexiones, cerciórese de presionar el botón de reposición con un bolígrafo, etc.

## Nollställningsknappen

Kom ihåg att använda en penna eller något annat spetsigt föremål för att trycka på nollställningsknappen när anslutningen och monteringen är klara.

## Botão de reinitialização

Quando terminar a instalação e as ligações, não se esqueça de carregar no botão de reinitialização com a ponta de uma caneta, etc.



Reset button  
Botón de reposición  
Nollställningsknapp  
Botão de reinitialização

**Note on the control function**  
Pin 5 of the unit's power connector supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) Function.

**Memory hold connection**  
When pin 4 or pin 7 of the unit's power connector is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

**Notes on speaker connection**

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
- Do not attempt to connect the speakers in parallel.
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.

**Nota sobre la función de control**  
El terminal 5 del conector de alimentación de la unidad suministra +12 V CC al activar el sintonizador o la función ATA (Activación automática del sintonizador).

**Conexión para protección de la memoria**  
Si se conecta el terminal 4 o 7 del conector de alimentación de la unidad, el circuito de memoria siempre recibirá alimentación aunque desactive la llave de encendido.

**Notas sobre la conexión de los altavoces**

- Antes de conectar los altavoces, desconecte la alimentación de la unidad.
- Utilice altavoces con una impedancia de 4 a 8 ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.
- No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.
- No intente conectar los altavoces en paralelo.
- No conecte altavoces activos (con amplificadores incorporados) a los terminales de altavoces de la unidad. Si lo hiciera, podría dañar los altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.

**Att observera angående kontrollfunktionen**  
Pol 5 i enhetens strömanslutning ger +12 V likström när du slår på radion eller aktiverar någon av funktionerna ATA (Automatic Tuner Activation).

**Anslutning för minnesstöd**  
När pol 4 eller pol 7 i enhetens strömanslutning är ansluten förses minneskretsen alltid med ström, även när tändningen slås av.

**Att observera angående högtalarnas anslutning**

- Slå av bilstereon innan du ansluter högtalarna.
- Anslut endast högtalare, vars impedans varierar från 4 till 8 ohm och som har tillräckligt effektivhanteringskapacitet för att skydda högtalarna mot skador.
- Anslut inte något av högtalarna till bilens chassi. Anslut inte heller uttagen på höger högtalare till uttagen på vänster högtalare.
- Anslut inte högtalarna parallellt.
- Anslut inte aktiva högtalare (med inbyggda slutsteg) till bilstereons högtalartuttag, eftersom de kan skada de aktiva högtalarna. Var noga med att bara ansluta passiva högtalare till dessa uttag.

**Nota sobre a função de controlo**  
O pino 5 do conector de alimentação do aparelho fornece +12 V CC quando se liga o sintonizador ou se activa a função ATA (Activação automática do sintonizador).

**Ligação para alimentação contínua da memória**  
Quando está ligado o pino 4 ou o pino 7 do conector de alimentação do aparelho, o circuito da memória recebe sempre alimentação, mesmo que não rode a chave da ignição.

**Nota sobre a ligação dos altifalantes**

- Antes de ligar os altifalantes, desligue o aparelho.
- Utilize altifalantes com impedância de 4 a 8 ohm, e com potência máxima admissível adequada. Caso contrário, os altifalantes poderão sofrer avarias.
- Não ligue os terminais do sistema de altifalantes ao chassis do automóvel, e não ligue os terminais do altifalante direito aos terminais do altifalante esquerdo.
- Não tente ligar os altifalantes em paralelo.
- Não ligue nenhum sistema de altifalantes activos (com amplificadores incorporados) aos terminais dos altifalantes do aparelho. Caso o faça, poderá avariar o sistema de altifalantes activos. Portanto, ligue apenas altifalantes passivos a estes terminais.

## Power Connection

Power connectors may vary depending on the car. Check your car's power connector diagram to make sure the connections match correctly. There are two basic types. You may need to switch the positions of the jump connector. Before connecting the unit to the car's power supply, be sure to match the position of the jump connector to the car's pin order. If the power connector of your car does not match the connector on the unit, use the supplied connector ①. If you have any questions or problems connecting your unit that are not covered in this manual, please consult the car dealer.

### WARNING

#### Jump connector

Check the pin position of the power connector of the car with the table on the right. If positions 4 and 7 are reversed, remove the jump connector and shift it to the rightmost position as shown in the illustration.

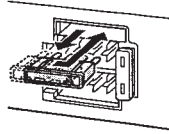
## Conexión de alimentación

Los conectores de alimentación pueden variar en función del automóvil. Consulte el diagrama del conector de alimentación del automóvil para comprobar que las conexiones coincidan correctamente. Existen dos tipos básicos. Es posible que sea necesario cambiar las posiciones del conector de empalme. Antes de conectar la unidad al suministro de alimentación del automóvil, asegúrese de que la posición del conector de empalme coincide con el orden de terminales de dicho automóvil. Si el conector de alimentación del automóvil no coincide con el de la unidad, emplee el conector ① suministrado. Si desea realizar alguna consulta o solucionar algún problema referentes a la conexión de la unidad que no aparezcan en este manual, póngase en contacto con el concesionario automovilístico.

### ADVERTENCIA

#### Conector de empalme

Compruebe la posición de terminal del conector de alimentación del automóvil con la tabla de la derecha. Si las posiciones 4 y 7 se invierten, retire el conector de empalme y desplácelo hasta la posición del extremo derecho como se muestra en la ilustración.



## Strömanslutningsschema

Strömanslutningarna kan variera beroende på vilken bil du har. Kontrollera bilens diagram över strömanslutningar för att kontrollera att anslutningarna passar ihop. Det finns två huvudtyper. Du kan behöva ändra positionerna på överkopplingen. Innan du ansluter enheten till bilens strömförsörjning bör du kontrollera att överkopplingens placering överensstämmer med bilens polordning. Om din bils strömanslutningar inte överensstämmer med anslutningen på enheten använder du den medföljande kontakten ①. Om du har några frågor eller problem när det gäller anslutningen av enheten som inte tas upp i denna bruksanvisning kan du kontakta bilaterförsäljaren.

### VARNING

#### Överkoppling

Jämför bilens strömanslutning med tabellen till höger. Om positionerna 4 och 7 är omkastade tar du bort överkopplingen och flyttar den till positionen längst till höger.

## Diagrama de ligação à corrente

Os conectores de alimentação podem variar de automóvel para automóvel. Verifique o diagrama do conector de alimentação do seu automóvel, para ter a certeza de que a correspondência das ligações está correcta. Há dois tipos básicos. Pode ter que trocar as posições do conector de cavalete. Antes de ligar o aparelho à fonte de alimentação do automóvel, não se esqueça de fazer a correspondência entre a posição do conector jump e a ordem dos pinos do automóvel. Se o conector de alimentação do seu automóvel não corresponder ao conector do aparelho, utilize o conector ① fornecido. Se tiver dúvidas ou problemas ao ligar o aparelho que não estejam referidos neste manual, consulte o vendedor do automóvel.

### AVISO

#### Conector de cavalete

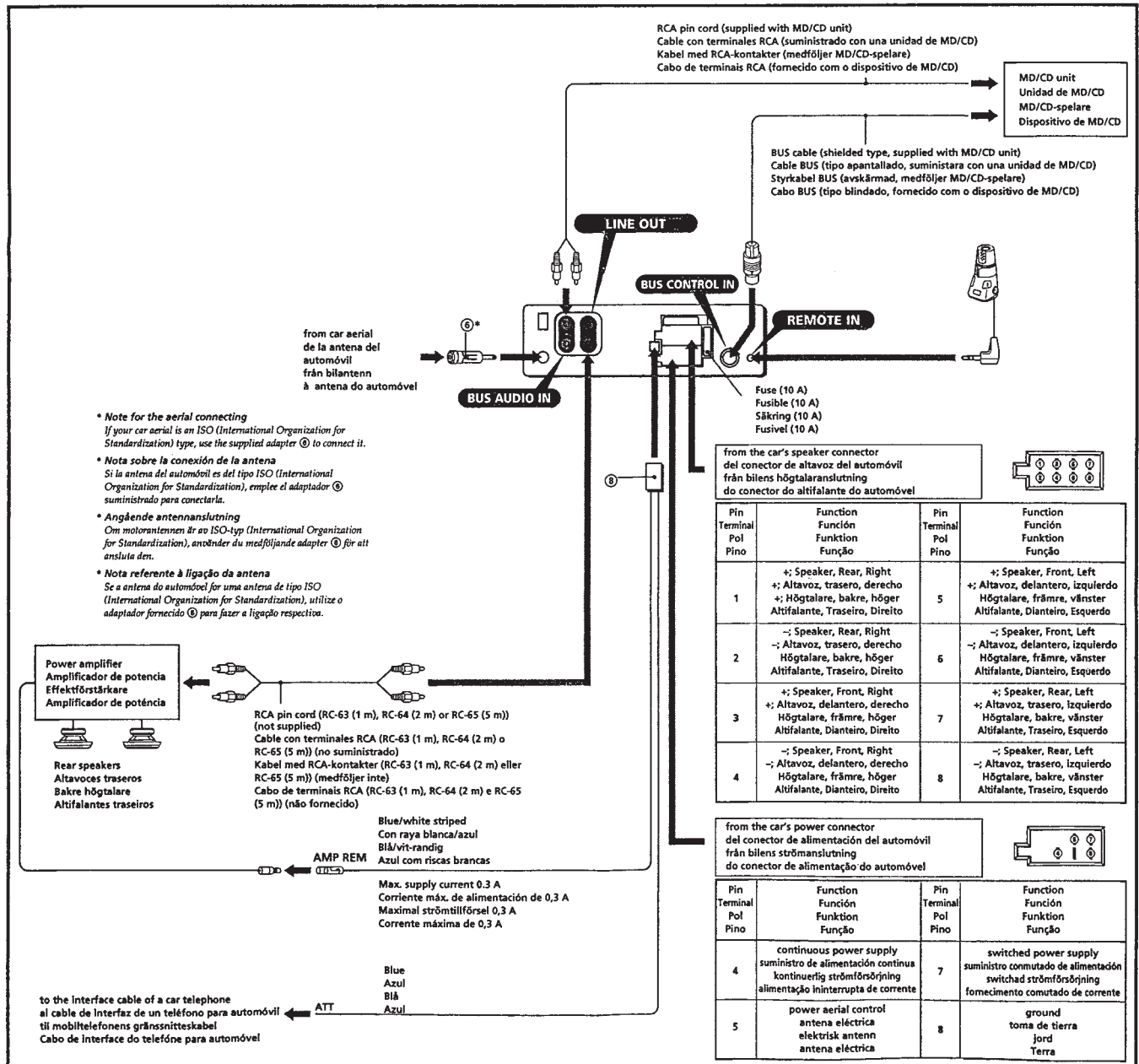
Verifique a posição dos pinos do conector de alimentação do automóvel na tabela à direita. Se as posições 4 e 7 estiverem invertidas, remova o conector jump e mude-o para a posição mais à direita, tal como se mostra na ilustração.

## Connection example

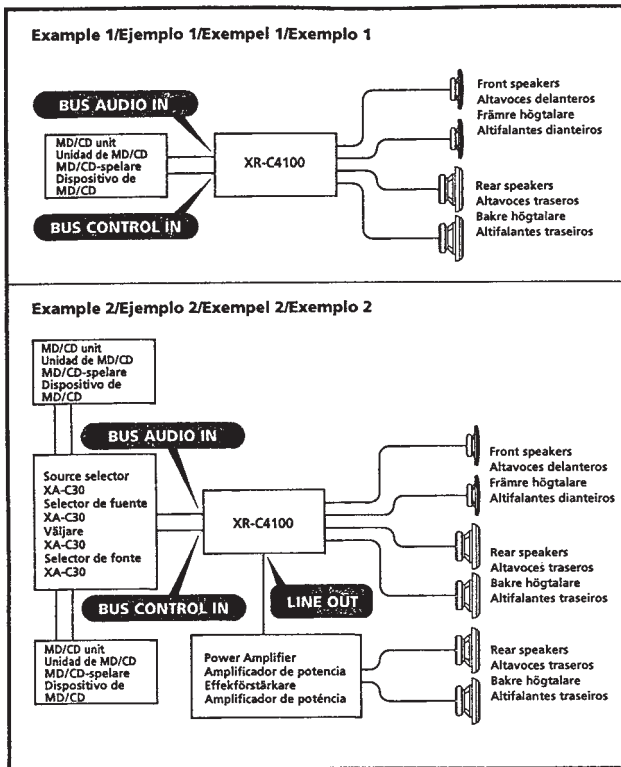
## Ejemplo de conexiones

## Anslutningarna enligt exemplet

## Exemplo de ligações



**Connection Diagram**  
**Diagrama de conexiones**  
**Kopplingschema**  
**Diagrama de ligações**



**Note**  
 If you connect an optional power amplifier to the LINE OUT and do not use the built-in amplifier, the beep-tone will be disabled.

**Nota**  
 Si conecta un amplificador opcional de potencia a LINE OUT y no utiliza el incorporado, los pitidos se desactivarán.

**Observera**  
 Varningssignalen avaktiveras om du inte använder den inbyggda förstärkaren, utan ansluter en annan förstärkare (till oss) till LINE OUT.

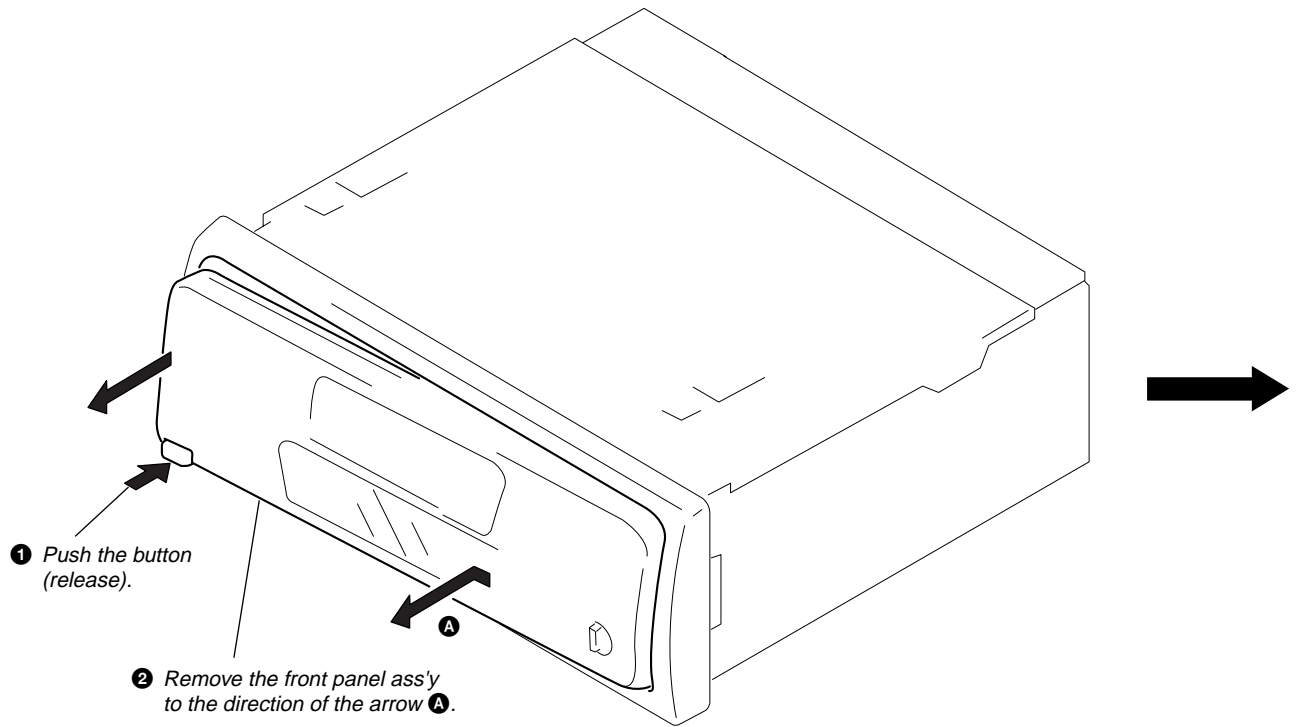
**Nota**  
 Se ligar um amplificador de potência opcional a LINE OUT e não utilizar o amplificador incorporado, o sinal sonoro será desactivado.



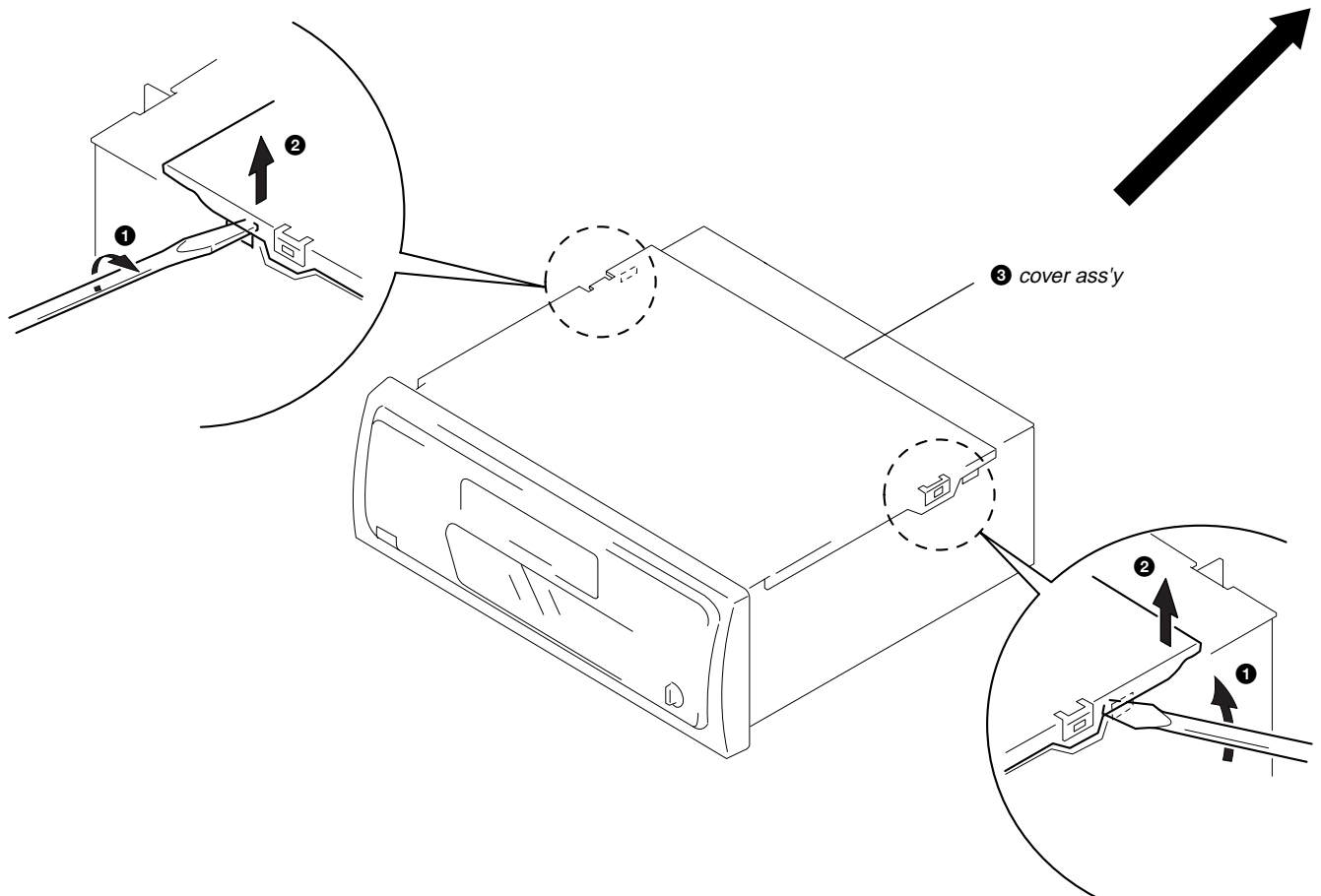
## SECTION 2 DISASSEMBLY

**Note:** Follow the disassembly procedure in the numerical order given.

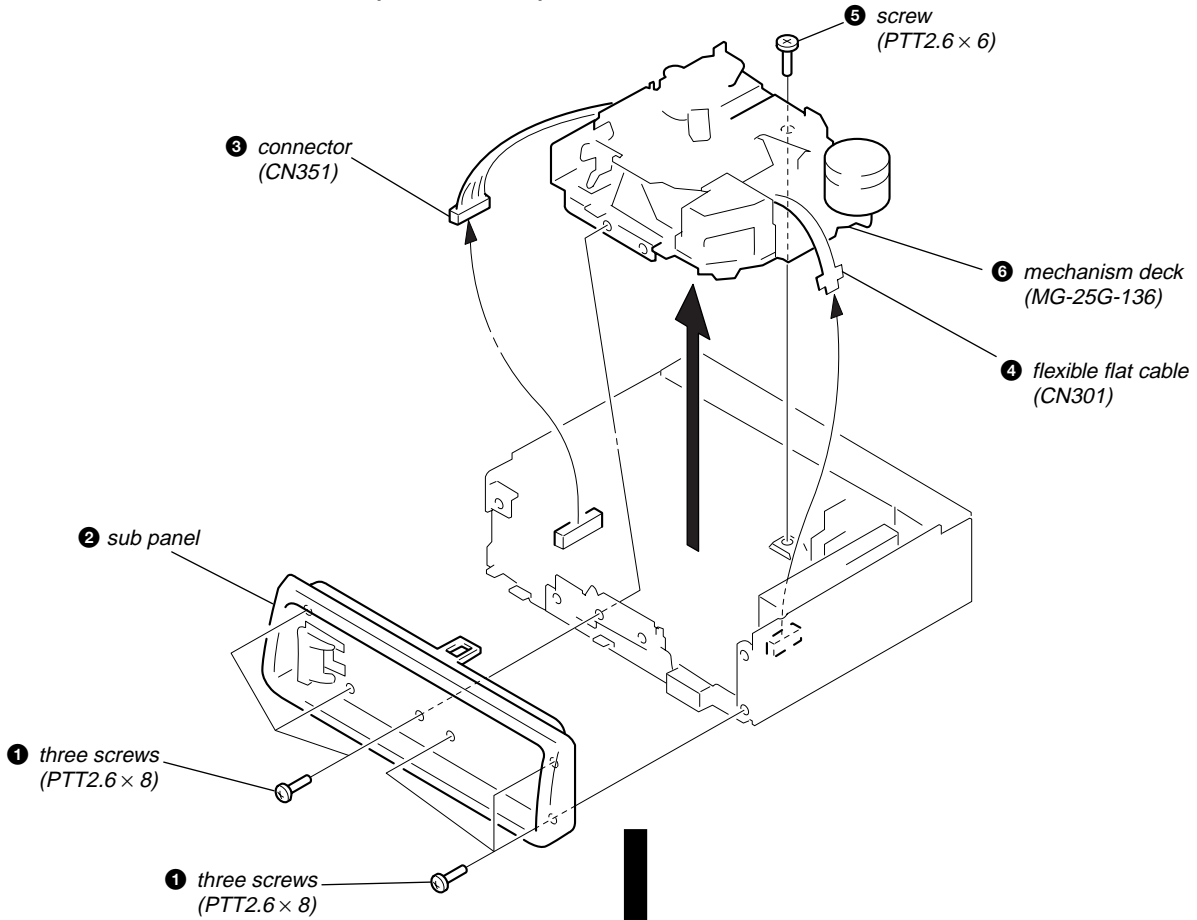
### FRONT PANEL ASS'Y



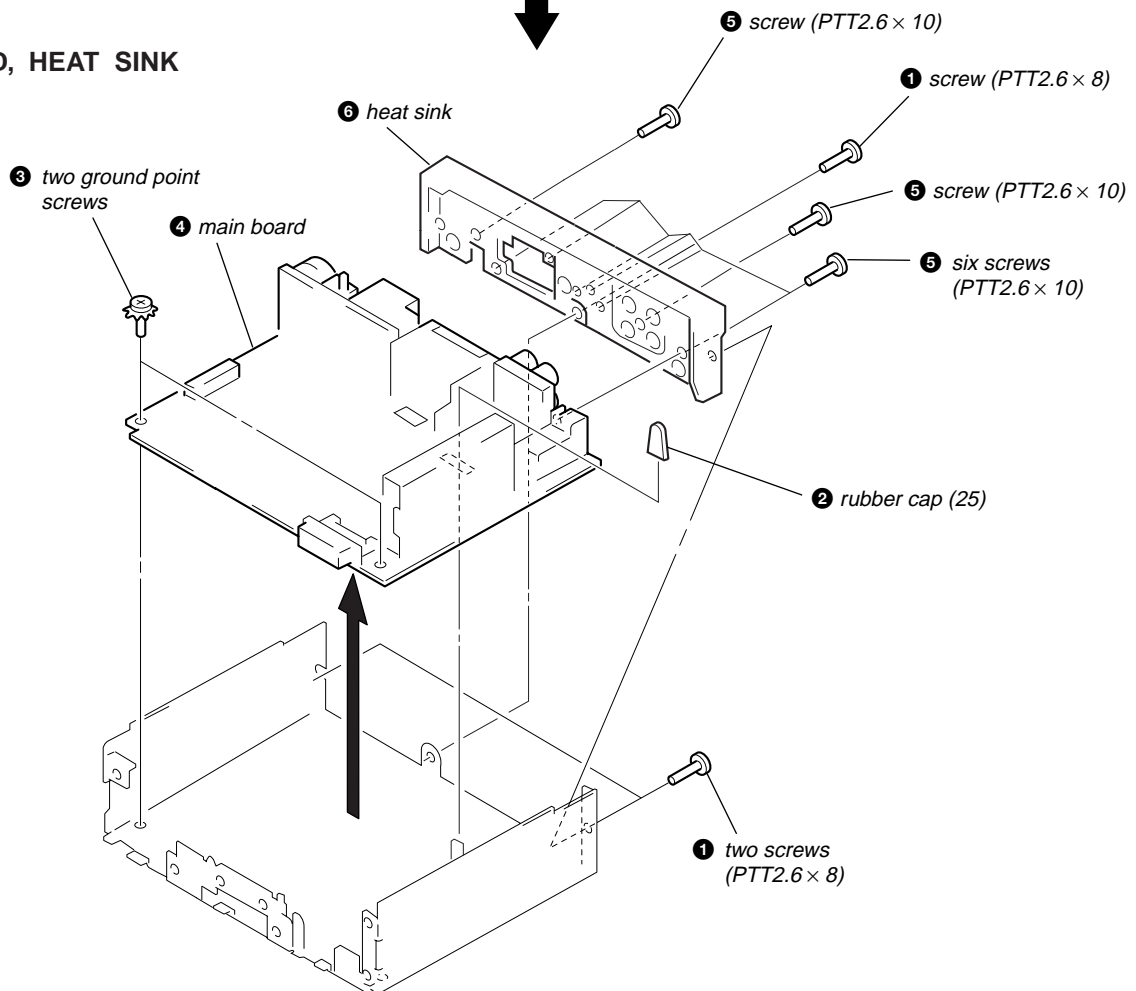
### COVER ASS'Y



## SUB PANEL, MECHANISM DECK (MG-25G-136)



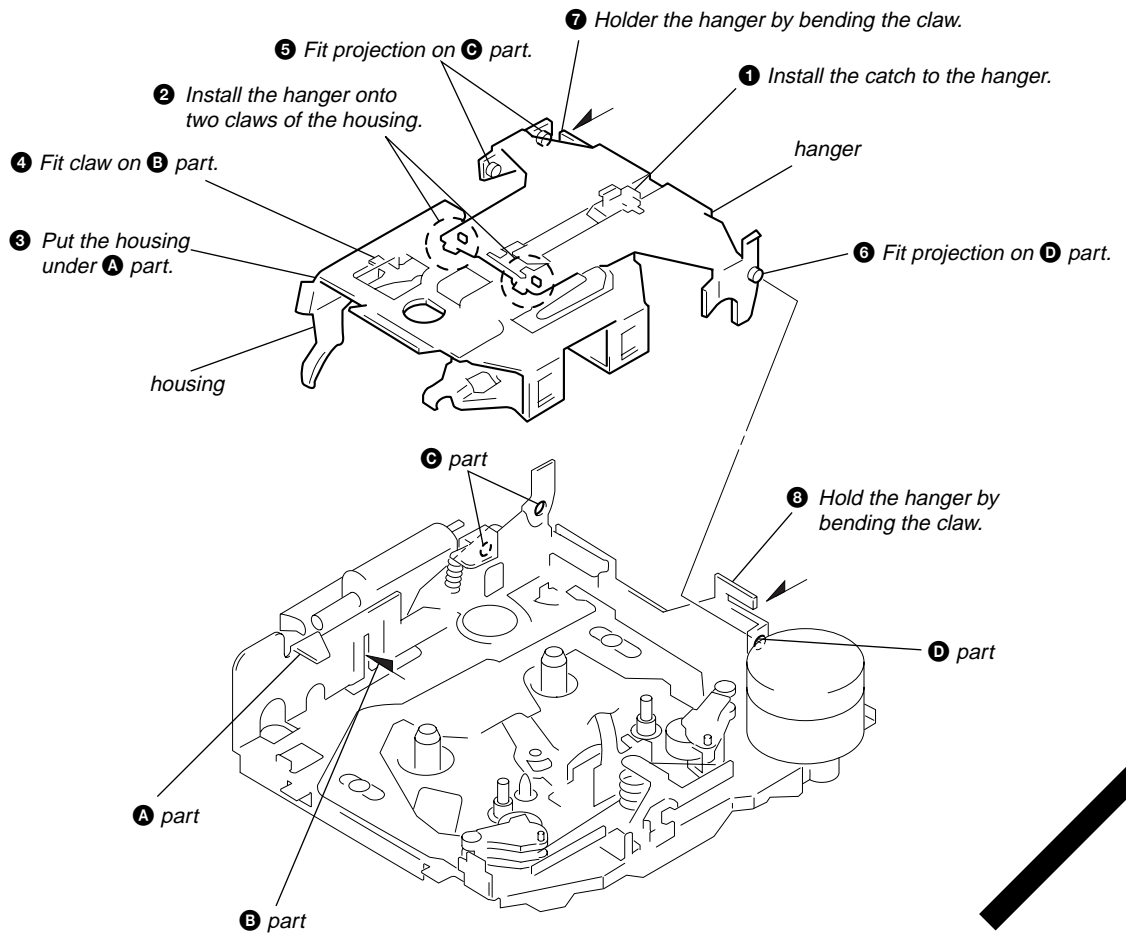
## MAIN BOARD, HEAT SINK



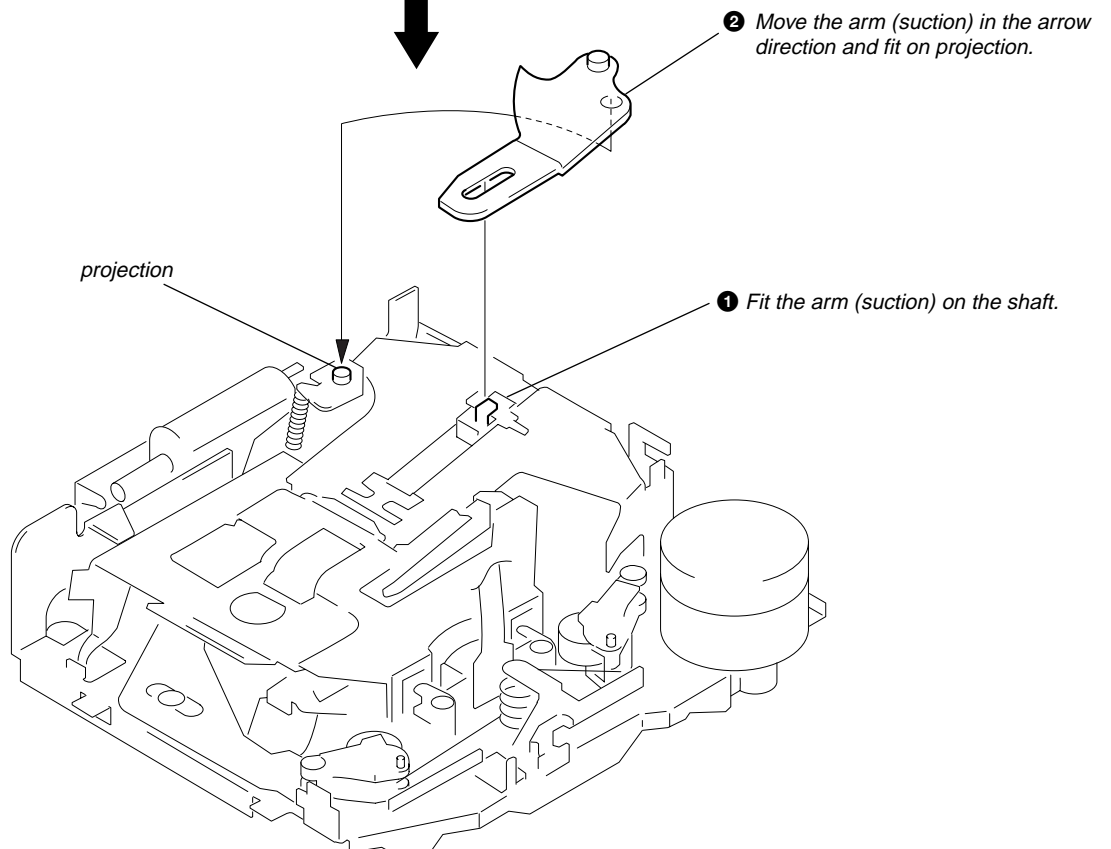
## SECTION 3 ASSEMBLY OF MECHANISM DECK

**Note:** Follow the assembly procedure in the numerical order given.

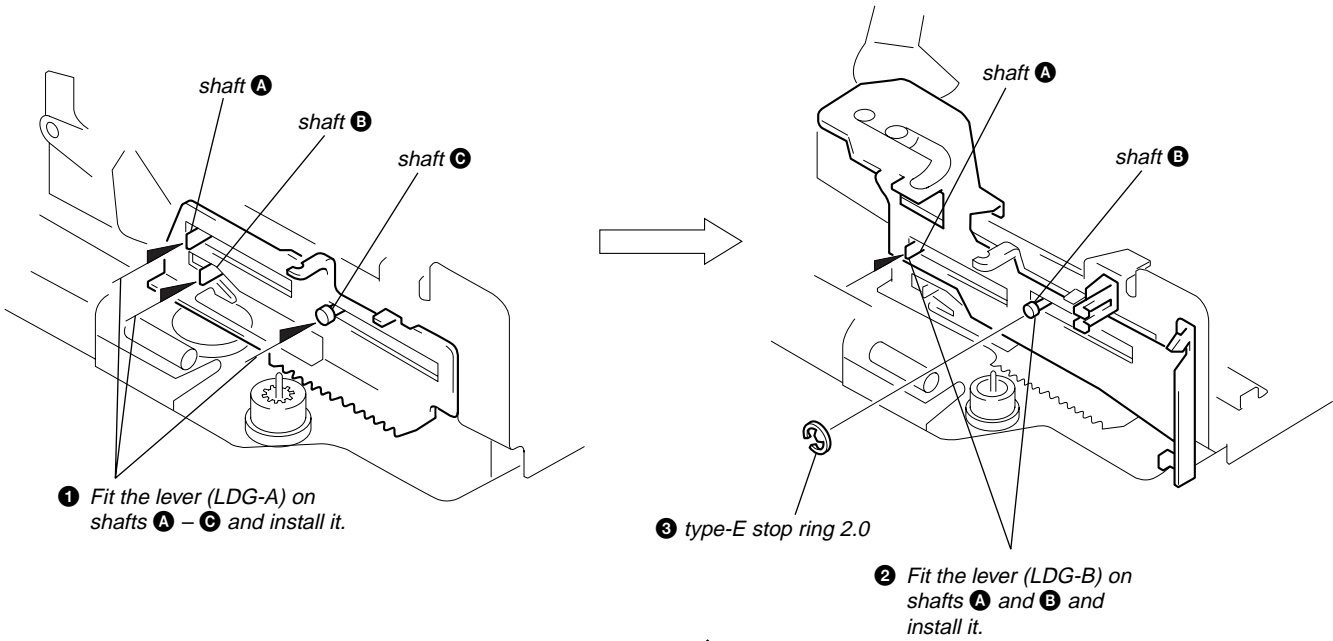
### HOUSING



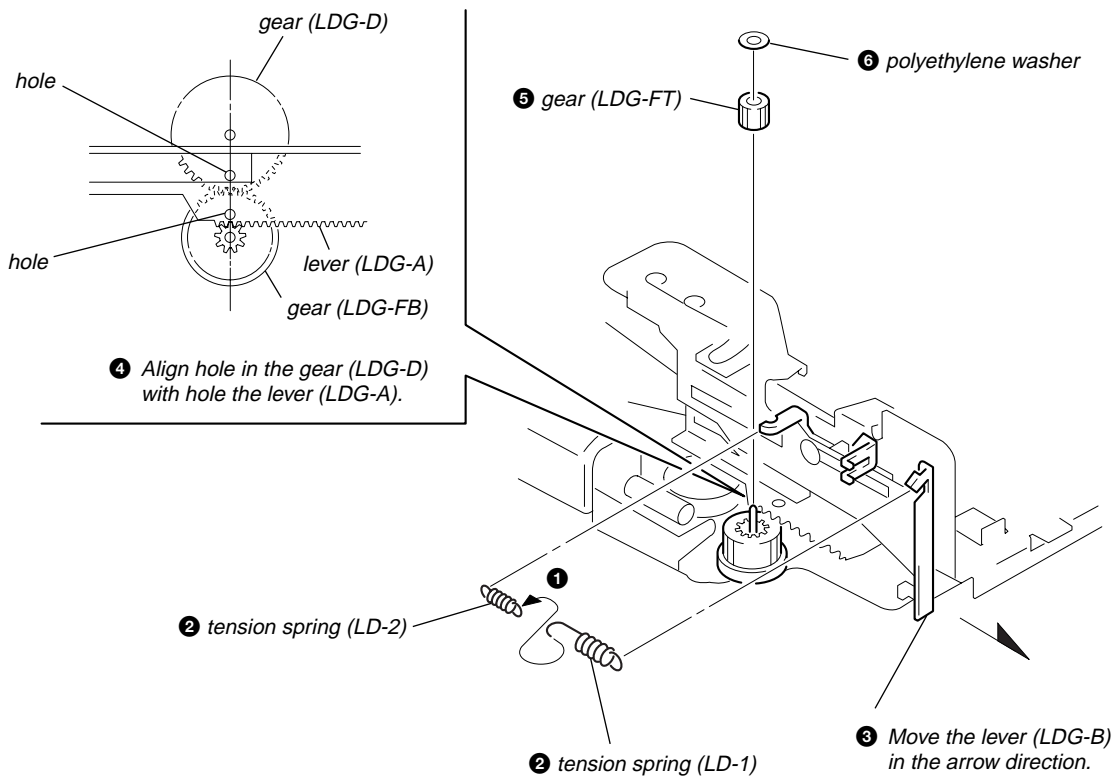
### ARM (SUCTION)



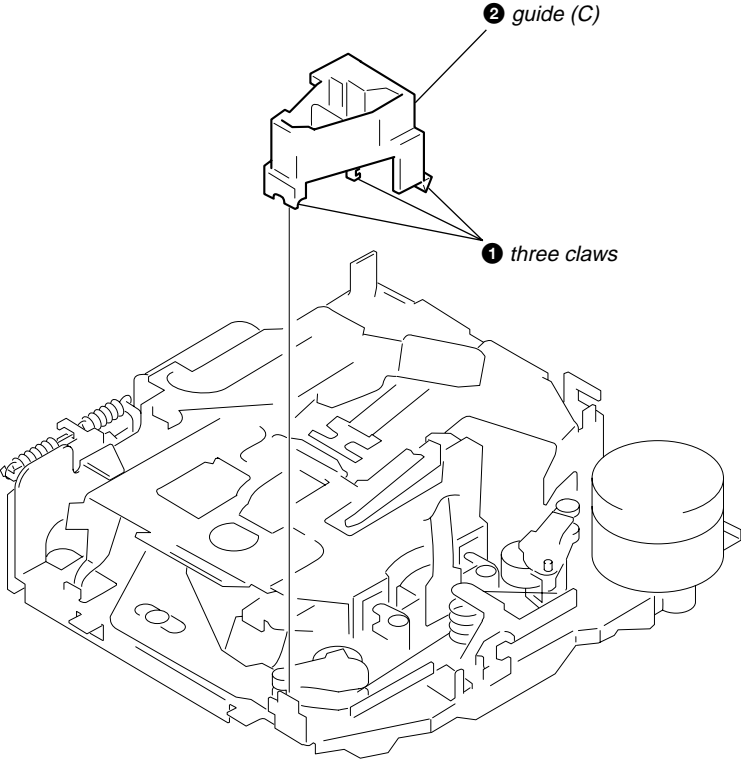
## LEVER (LDG-A) / (LDG-B)



## GEAR (LDG-FT)



**GUIDE (C)**





## SECTION 4 MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
 

playback head	pinch roller
rubber belt	capstan
idler	
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

### • Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
Reverse	CQ-102RC	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Reverse Back Tension	CQ-102RC	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
FF, REW	CQ-201B	60 - 200 g•cm (0.83 - 2.78 oz•inch)

### • Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

## SECTION 5 ELECTRICAL ADJUSTMENTS

### TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>

1. Set the "power select" switch (S801) is "A" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
 

**Note:** Press the **[OFF]** button, if the clock is not displayed.
3. Push the preset **[4]** button.
4. Push the preset **[5]** button.
5. Press the preset **[1]** button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

<Release the Test mode>

1. Push the **[OFF]** button.
2. Return the "power select" switch (S801) to initially set position.

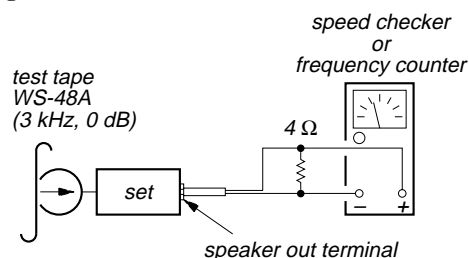
See the adjustment location from on page 17 for the adjustment.

### TAPE DECK SECTION

0 dB=0.775 V

### Tape Speed Adjustment

Setting:



### Procedure:

1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

### Specification: Constant speed

Speed checker	Frequency counter
-1.5 to +2.5%	2,955 to 3,075 Hz

**Adjustment Location:** See page 17.

**TUNER SECTION**

0 dB=1 μV

**Cautions during repair**

When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

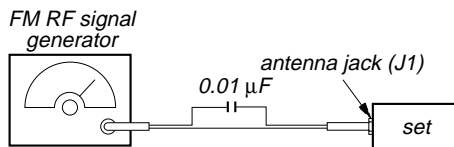
**Note:** Adjust the tuner section in the sequence shown below.

1. FM Auto Scan/Stop Level Adjustment.
2. FM Noise Focus Adjustment.
3. FM Stereo Separation Adjustment.
4. AM (MW) Auto Scan/Stop Level Adjustment.

**FM Auto Scan/Stop Level Adjustment**

**Setting:**

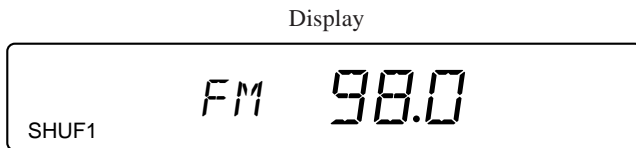
[SOURCE] button: FM



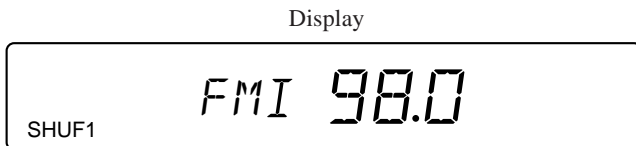
Carrier frequency : 98.0 MHz  
 Output level : 22 dB (12.6 μV)  
 Mode : mono  
 Modulation : 1 kHz, 22.5 kHz deviation (30%)

**Procedure:**

1. Set to the test mode. (See page 14.)
2. Push the [SOURCE] button and set to FM.



3. Adjust with the volume RV2 on TU1 so that the “FM” indication turns to “FMI” indication on the display window. But, in case of already indicated “FMI”, turn the RV2 so that put out light “I” indication and adjustment.

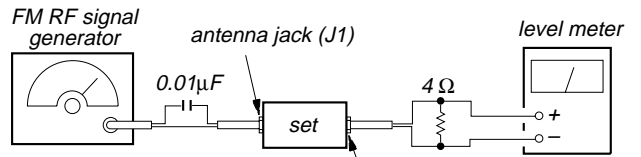


**Adjustment Location:** See page 17.

**FM Noise Focus Adjustment**

**Setting:**

[SOURCE] button: FM



Carrier frequency : 98.00 MHz  
 Output level : 60 dB (1 mV)  
 Mode : stereo  
 Modulation : 1 kHz, 75 kHz deviation (100%)

**Procedure:**

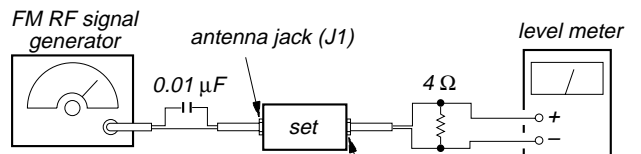
1. Tune the 98.00 MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (A) -32 ±2 dB then signal generator input set to -20 dB.

**Adjustment Location:** See page 17.

**FM Stereo Separation Adjustment**

**Setting:**

[SOURCE] button: FM



Carrier frequency : 98.0 MHz  
 Output level : 70 dB (3.2 mV)  
 Mode : stereo  
 Modulation : main: 1 kHz, 20 kHz deviation (22.6%)  
                   sub: 1 kHz, 20 kHz deviation (22.6%)  
                   19 kHz pilot: 7.5 kHz deviation (10%)

**Procedure:**

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation: Ⓐ-Ⓑ

R-CH Stereo separation: Ⓒ-Ⓓ

The separations of both channels should be equal.

**Specification:** Separation more than 28 dB

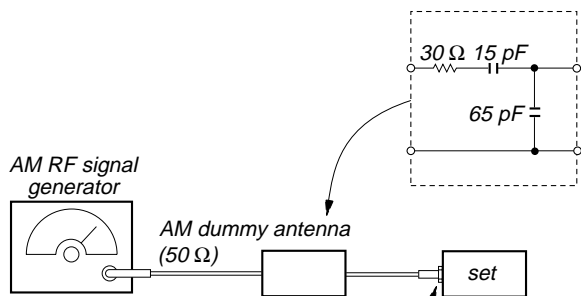
**Adjustment Location:** See page 17.

### AM (MW) Auto Scan/Stop Level Adjustment

Make this adjustment after "FM Auto Scan/Stop Level Adjustment".

#### Setting:

[SOURCE] and [MODE] button: MW



Carrier frequency : 999 kHz  
30% amplitude modulation by  
1 kHz signal  
Output level : 33 dB (44.7 μV)

#### Procedure:

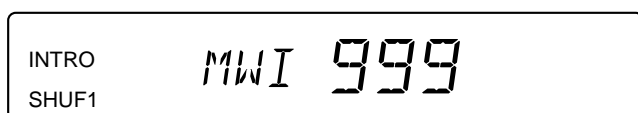
1. Set to the test mode. (See page 14.)
2. Push the [SOURCE] button and set to FM.
3. Push the [MODE] button and set to MW.

Display



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MWI" indication on the display window.  
But, in case of already indicated "MWI", turn the RV1 so that put out light "I" indication and adjustment.

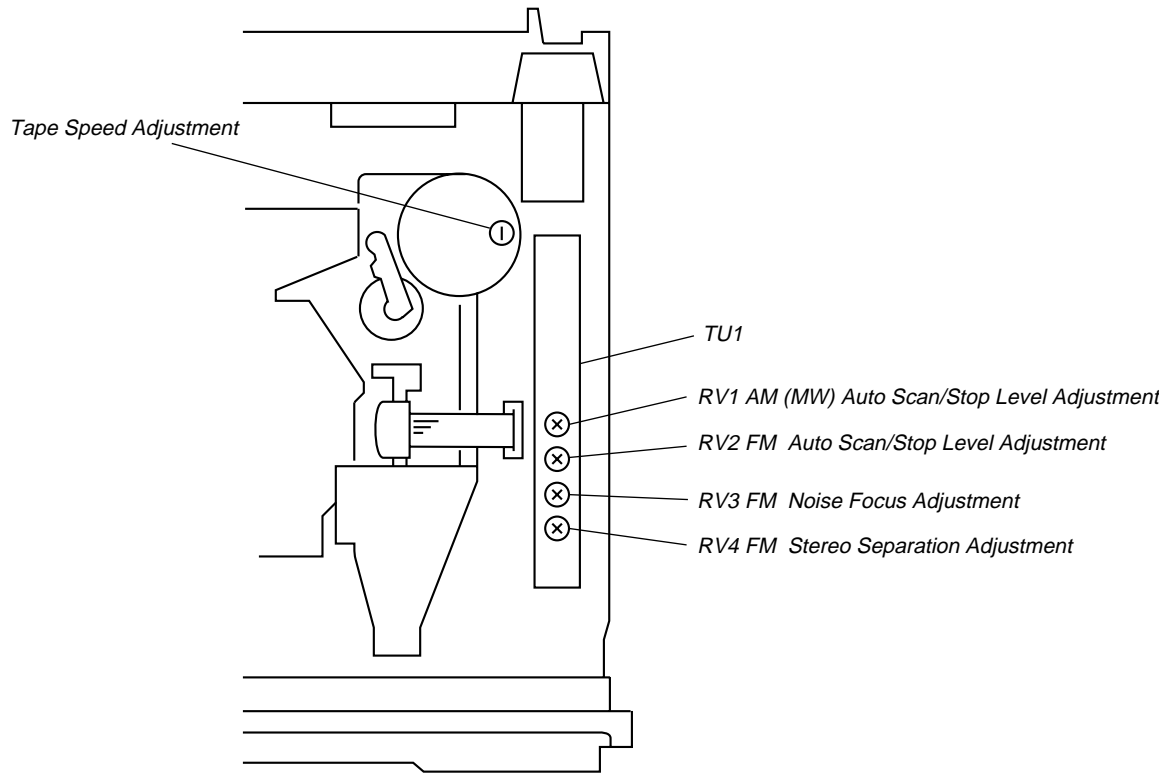
Display



**Adjustment Location:** See page 17.

**Adjustment Location:**

—SET UPPER VIEW—



## SECTION 6 DIAGRAMS

### 6-1. IC PIN FUNCTION DESCRIPTION

#### • MAIN BOARD IC501 $\mu$ PD17708GC-567-3B9 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	AMSSEL	I	Setting terminal for the AMS selection fixed at "L"
2	POS3	I	Tape position detect input from tape operation switch on the mechanism block
3	POS2	I	
4	POS0	I	
5	POS1	I	
6	TAPEON	O	Tape system power supply on/off control signal output terminal "H": tape on
7	CM ON	O	Capstan/reel motor (M901) drive signal output terminal "H": motor on
8	LM LOD	O	Loading/tape operation motor control signal output to the LB1638M (IC361) (For the loading direction and forward side operation) *1
9	LM EJ	O	Loading/tape operation motor control signal output to the LB1638M (IC361) (For the eject direction and reverse side operation) *1
10	TUNON	O	Tuner system power supply on/off control signal output to the BA3918 (IC601) "H": tuner on
11	FM ON	O	FM system power supply on/off control signal output to the BA3918 (IC601) "H": FM on
12	PW ON	O	Main system power supply on/off control signal output to the BA3918 (IC601) "H": power on
13	MUT	O	Line muting control signal output terminal "H": line muting on
14	VOLCE	O	Chip enable signal output to the electrical volume (IC401)
15	VOLCKO	O	Serial data transfer clock signal output to the electrical volume (IC401)
16	VOLSO	O	Serial data output to the electrical volume (IC401)
17	AMPON	O	Standby control signal output to the power amplifier (IC751) "L": standby
18	AMP MUT	O	Muting control signal output to the power amplifier (IC751) "L": muting on
19	DX/LO	O	Local/DX selection signal output to the FM/AM tuner unit (TU1) "L": DX, "H": local
20	AM MONO	O	AM forced monaural signal output terminal Not used (open)
21	GND	—	Ground terminal
22	DSTSEL	I	Destination setting terminal (fixed at center voltage)
23	D-BASS	I	D-BASS switch (SW951) input (A/D input)
24	KEYIN1	I	Key input terminal (A/D input) ▲, INTRO 1, REPEAT 2, SHUF 3, BL SKIP 6, ATA 5, MTL 4, PRESET DISC +/- keys input (LSW921 to LSW927, LSW929 and LSW930)
25	KEYIN0	I	Key input terminal (A/D input) OFF, SOURCE, MODE ◀▶, + ▶▶▶▶ SEEK AMS, - ◀◀◀◀ SEEK AMS, VOLUME -, SEL, VOLUME +, ATT, DSPL, BTM, LCL keys input (LSW901 to LSW912)
26	RC IN0	I	Rotary remote commander shift key A/D input terminal
27	VSM	I	FM and AM (MW/LW) signal meter voltage detection input from the FM/AM tuner unit (TU1)
28	AMIFIN	I	AM (MW/LW) intermediate frequency detection signal input from the FM/AM tuner unit (TU1)
29	FMIFIN	I	FM intermediate frequency detection signal input from the FM/AM tuner unit (TU1)
30	VDD2	—	Power supply terminal (+5V)
31	FM OSC	I	FM local oscillator detection signal input from the FM/AM tuner unit (TU1)
32	AM OSC	I	AM (MW/LW) local oscillator detection signal input from the FM/AM tuner unit (TU1)
33	GND	—	Ground terminal
34	NCO	O	Not used (open)
35	EO1	O	Main charge-pump control signal output terminal
36	TEST0	I	Setting terminal for the test (fixed at "L")
37	AM STIN	I	AM stereo detection signal input terminal Not used (fixed at "L")
38	SEKOUT	O	Seek control signal output to the FM/AM tuner unit (TU1)
39	MW/SW	O	MW/SW selection signal output terminal "L": MW, "H": SW Not used (open)
40	BEEP	O	Beep sound output terminal



Pin No.	Pin Name	I/O	Function
41	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to accept function and eject keys in the power off status On at input of "L"
42	BU IN	I	Battery detect signal input terminal "H": battery on
43	MTLSEL	I/O	METAL control in/out terminal At initial mode: auto/manual mode selection input of METAL function "L": manual mode At manual mode: METAL on/off control signal output to the CXA2509AQ (IC301) "H" output: METAL on At auto mode: input at MTLIN (pin 69)
44	DOLON	I/O	Dolby control in/out terminal At initial mode: valid/invalid selection input of dolby function ("L" input: valid) At normal mode: dolby on/off control signal output ("H" output : dolby on) Not used this function in this set (fixed at "H")
45	AMSIN	I	Whether a music is present or not from CXA2509AQ (IC301) is detected at auto music sensor "L": music is present, "H": music is not present
46	ST	I/O	Input of FM stereo detection signal from FM/AM tuner unit (TU1), and output of forced monaural control signal to FM/AM tuner unit (TU1) (Commonly used for stereo display input and forced monaural output) FM stereo detection at input of "L", forced monaural at output of "L"
47	AMS ON	O	Tape auto music sensor control signal output to the CXA2509AQ (IC301) "L" is output to lower the gain for audio level at FF/REW
48	N/R OUT	O	Forward/reverse direction control signal output to the CXA2509AQ (IC301) "L: forward direction, "H": reverse direction
49	TAPMUT	O	Tape muting on/off control signal output to the CXA2509AQ (IC301) "H": tape muting on
50	ILLON	O	Power supply on/off control signal output terminal at the illumination and liquid crystal display driver (IC901) "H": power on At power select switch (S801) on mode: "H" output at the accessory on At power select switch (S801) off mode: "H" output at the power on
51	SD IN	I	Station detector detect input from the FM/AM tuner unit (TU1) Stop level for SEEK, BTM, etc. is determined SD is present at input of "H"
52	NOSESW	I	Detects the removal of the attaching and removing type front panel block "L": attaching
53	TELMUT	I	Telephone muting signal input terminal At input of "L", the signal is attenuated by -20 dB
54	REL T	I	Reel table rotation detect signal input from the take-up and supply reel sensor
55	ACCIN	I	Accessory detect signal input terminal "L": accessory on
56	TESTIN	I	Setting terminal for the test mode "L": test mode (normally fixed at "H")
57	RC IN1	I	Rotary remote commander shift key A/D input terminal
58	PW SEL	I	Power select switch (S801) input terminal "L": position A (halt mode), "H": position B (operation mode)
59	MTLIN	I	Input terminal to set whether the auto metal function is present or not "L": auto metal function is present (fixed at "H")
60	ADON	O	Power supply on/off control signal output for the A/D conversion
61	KEYSEL	I	Setting terminal for the key (fixed at "H")
62	SEKOUTSEL	I	Active selection terminal for the SEKOUT (pin 68) (fixed at "L")
63	COLORSEL	I	Setting terminal for the illumination color "L": amber, "H": green
64	LCDCE	O	Chip enable output to the liquid crystal display driver (IC901)
65	LCDCO	O	Serial data transfer clock signal output to the liquid crystal display driver (IC901)
66	LCDSO	O	Serial data output to the liquid crystal display driver (IC901)
67	LCDINH	O	Blank indicate control signal output to the liquid crystal display driver (IC901) "L": no display
68	UNICKI	I	Serial data reading clock signal input terminal (for SONY bus)

Pin No.	Pin Name	I/O	Function
69	UNISO	O	Serial data output to the bus interface (IC701) (for SONY bus)
70	UNISI	I	Serial data input from the bus interface (IC701) (for SONY bus)
71	UNICKO	O	Serial data transfer clock signal output to the bus interface (IC701) (for SONY bus)
72	<u>BUSON</u>	O	Bus on/off control signal output to the bus interface (IC701) (for SONY bus) "L": bus on
73	<u>SYSRST</u>	O	Reset signal output to the bus interface (IC701) (for SONY bus) "L": reset
74	VREG	O	CPU regulator output terminal Connected to capacitor
75	GND	—	Ground terminal
76	X OUT	O	Main system clock output terminal (4.5 MHz)
77	X IN	I	Main system clock input terminal (4.5 MHz)
78	CE	I	CPU chip enable signal input (fixed at "H")
79	VDD1	—	Power supply terminal (+5V)
80	<u>RESET</u>	I	System reset signal input from the reset signal generator (IC502) and reset switch (S503) "L" is input for several 100 msec after power on, then it changes to "H"

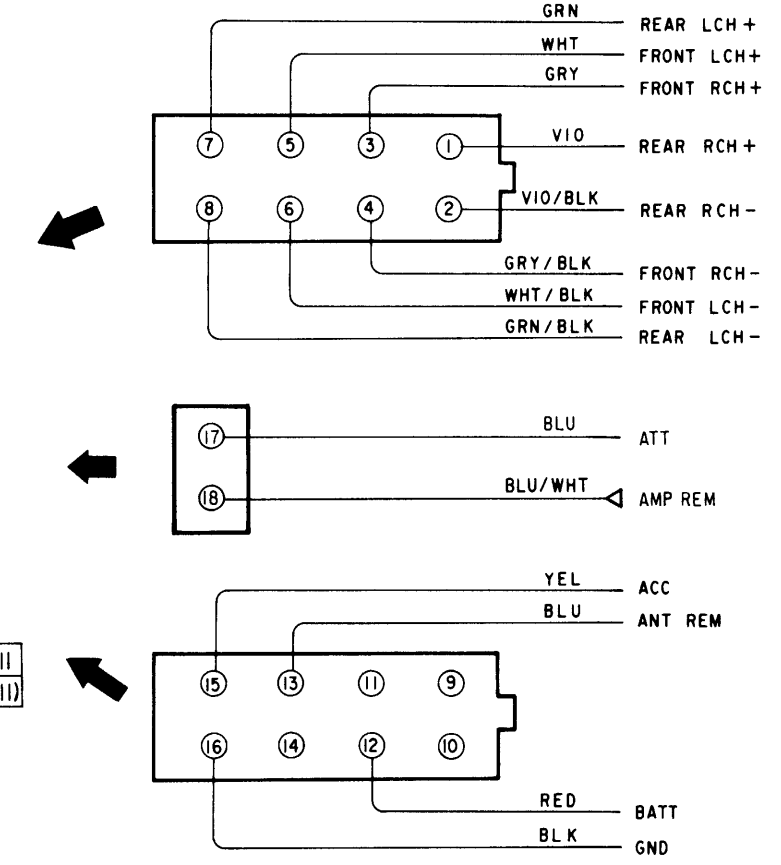
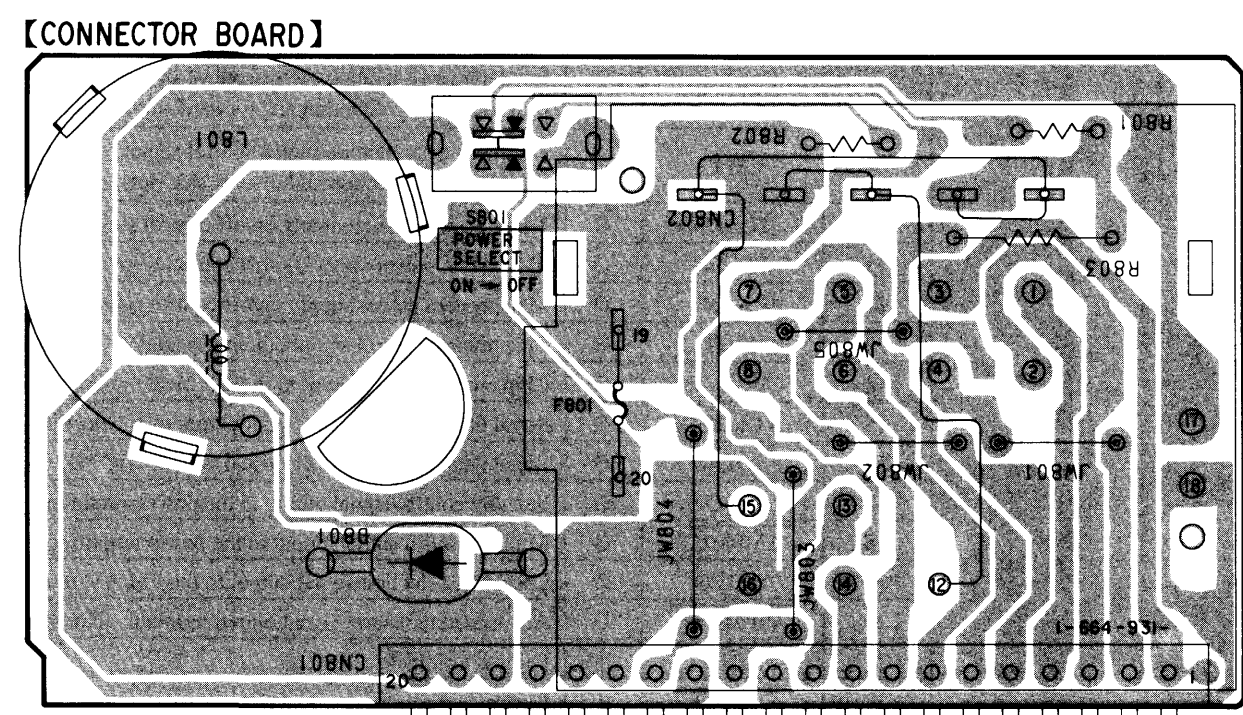
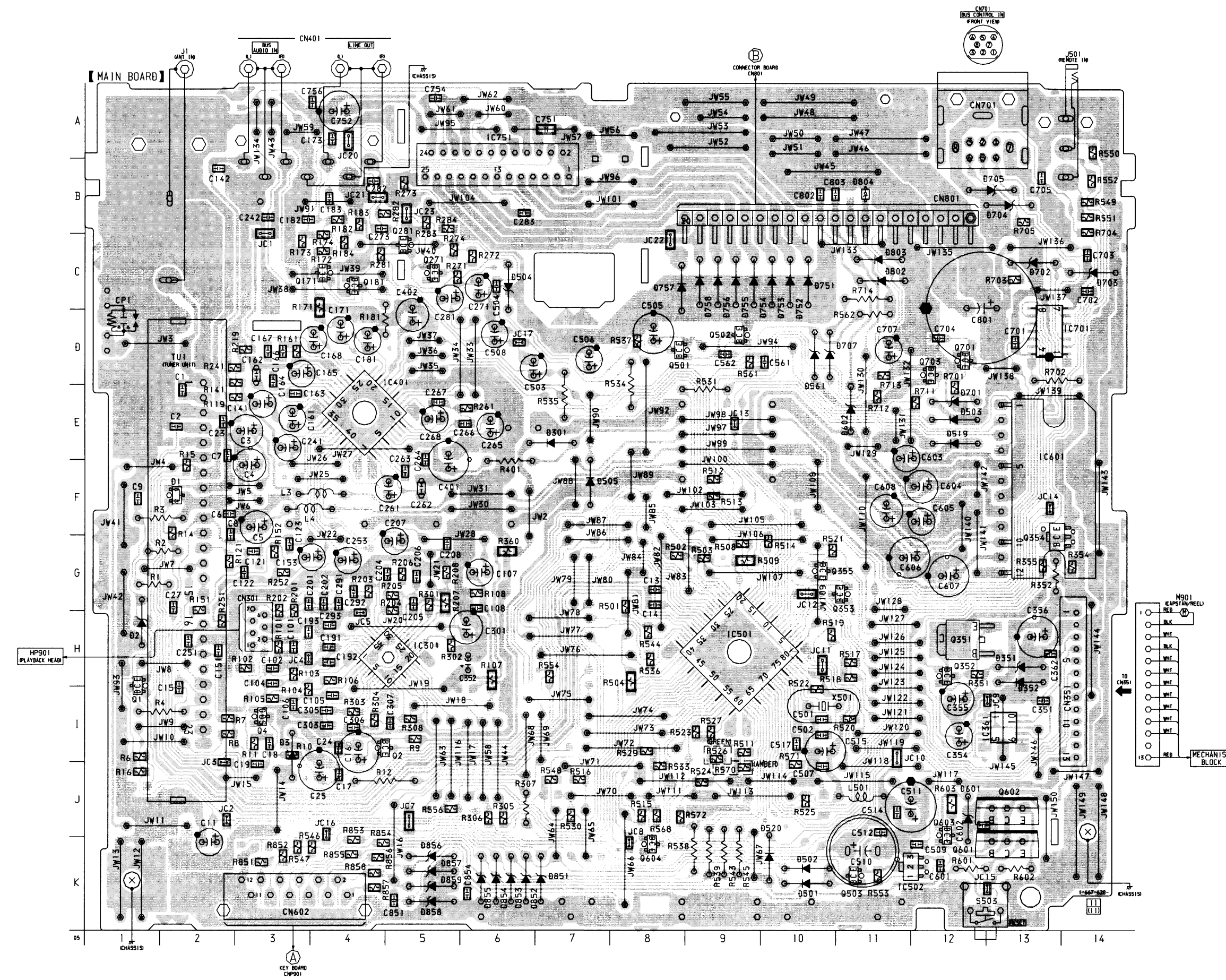
\*1 loading/tape operation motor control

MODE TERMINAL	STOP	LOADING/ FORWARD	EJECT/ REVERSE	BRAKE
LM LOD (pin ⑧)	"L"	"H"	"L"	"H"
LM EJ (pin ⑨)	"L"	"L"	"H"	"H"

• Semiconductor Location  
- MAIN Board -

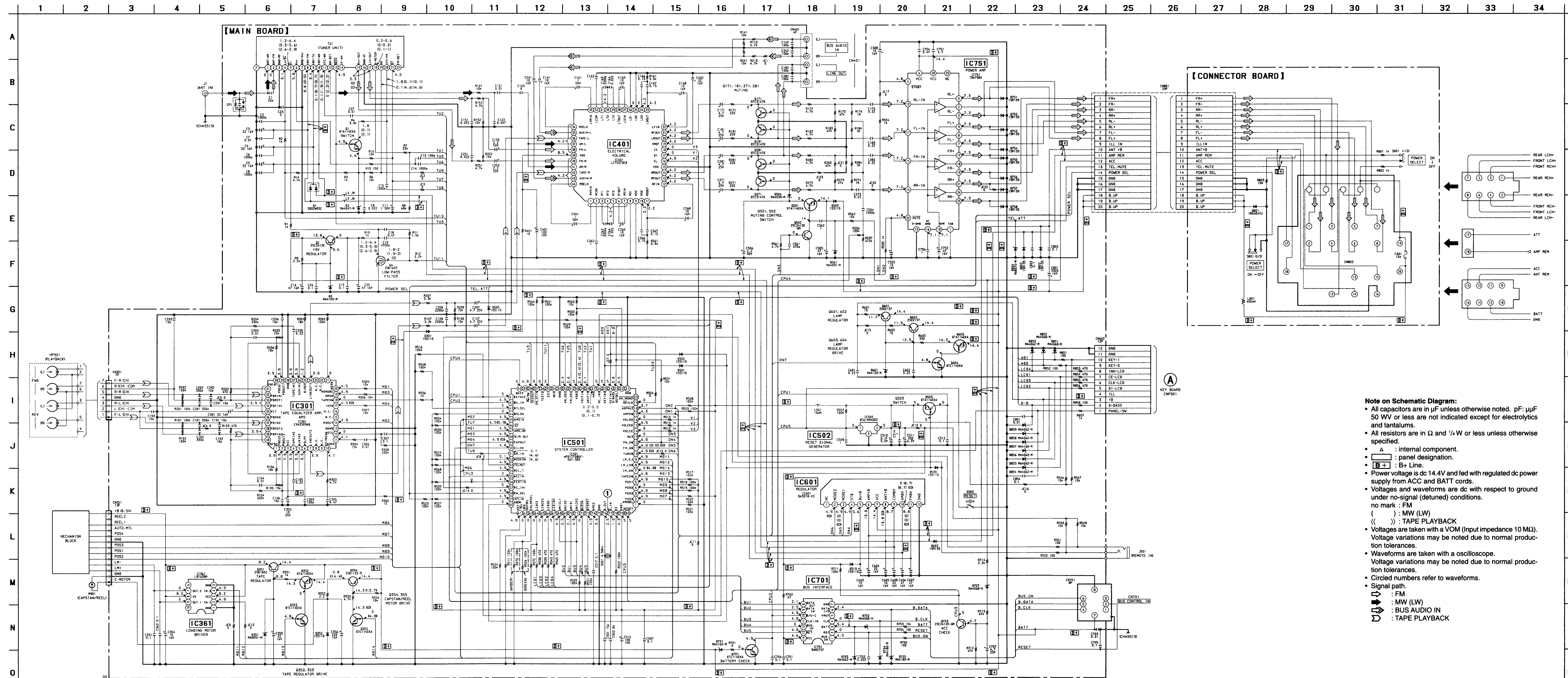
Ref. No.	Location
D1	F-2
D2	H-1
D3	I-3
D301	E-7
D351	H-13
D352	H-13
D501	K-10
D502	K-10
D503	E-12
D504	C-6
D505	F-7
D519	E-12
D520	K-10
D561	D-10
D601	J-12
D602	E-11
D701	E-12
D702	C-13
D703	C-14
D704	B-13
D705	B-13
D707	D-10
D751	C-10
D752	C-10
D753	C-10
D754	C-9
D755	C-9
D756	C-9
D757	C-8
D758	C-9
D802	C-11
D803	C-11
D804	B-11
D851	K-7
D852	K-6
D853	K-6
D854	K-6
D855	K-6
D856	K-5
D857	K-5
D858	K-5
D859	K-5
IC301	H-5
IC361	I-13
IC401	E-4
IC501	H-9
IC502	K-11
IC601	F-13
IC701	D-13
IC751	B-6
Q1	I-1
Q2	I-5
Q4	I-3
Q171	C-4
Q181	C-4
Q271	C-5
Q281	C-5
Q351	H-12
Q352	H-12
Q353	G-11
Q354	G-13
Q355	G-10
Q501	D-8
Q502	D-9
Q503	K-11
Q601	K-13
Q602	J-13
Q603	J-12
Q604	K-8
Q701	D-12
Q703	D-12

6-2. PRINTED WIRING BOARDS - MAIN Section -



Note on Printed Wiring Boards:  
 • : parts extracted from the component side.  
 • Δ : internal component.

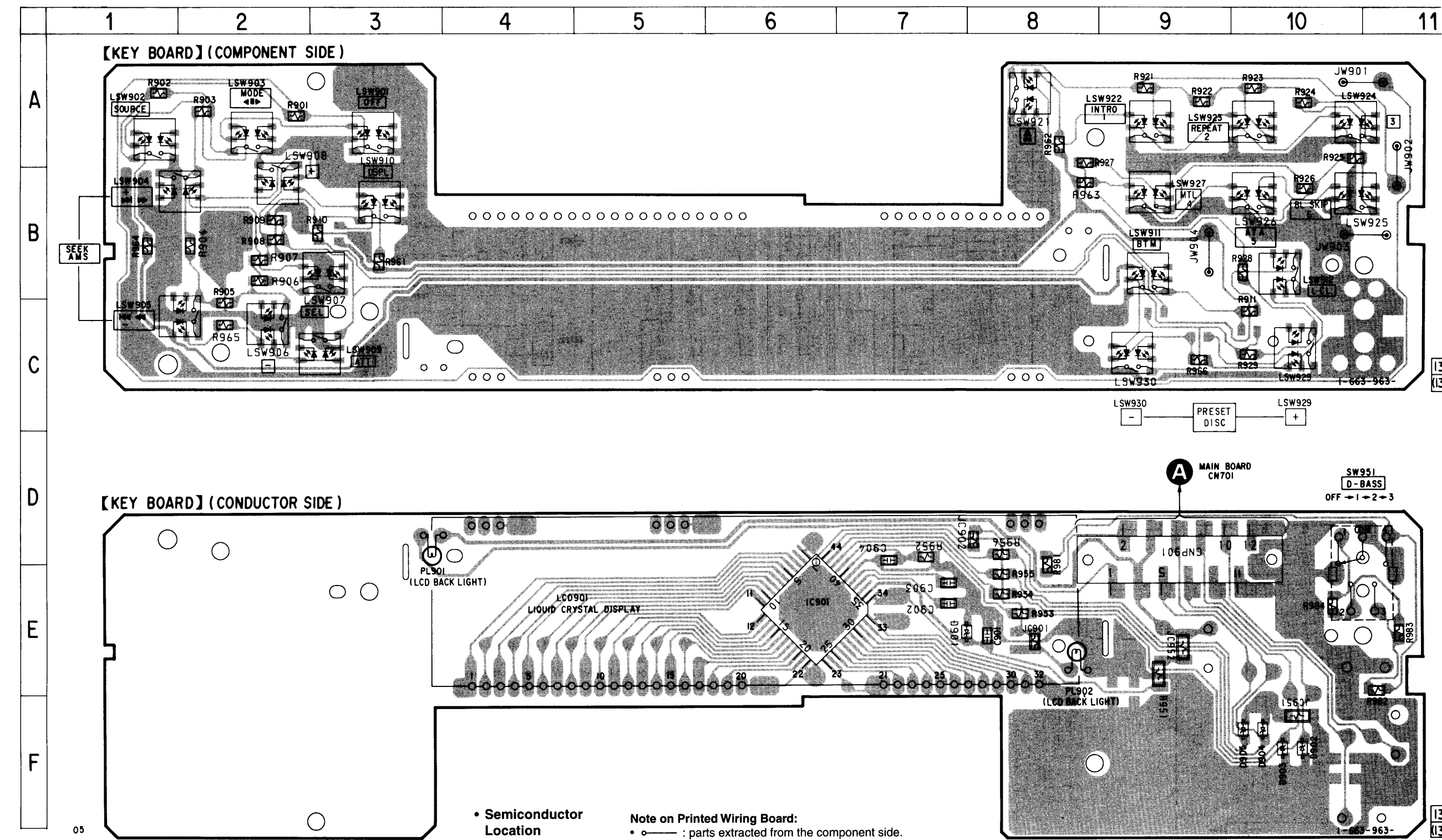




**Note on Schematic Diagram:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$ : internal component.
- $\square$ : panel designation.
- $\text{B}+$ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- ( ) : MW (LW)
- ( <> ) : TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\square$ : FM
- $\square$ : MW (LW)
- $\square$ : BUS AUDIO IN
- $\square$ : TAPE PLAYBACK

6-4. PRINTED WIRING BOARD - PANEL Section -



• Semiconductor Location

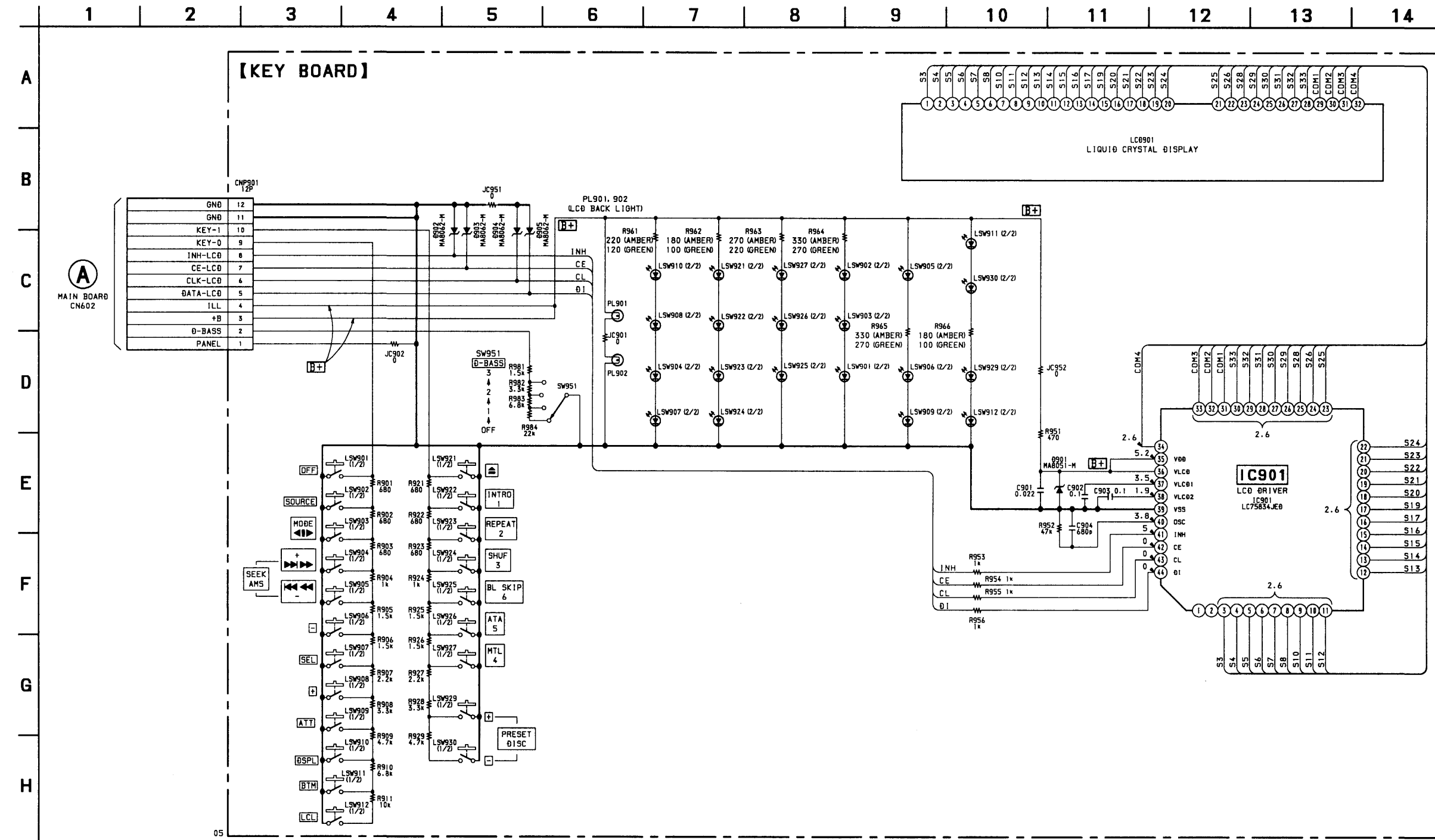
Ref. No.	Location
D901	E-7
D902	F-10
D903	F-10
D904	E-10
D905	E-9
IC901	E-6

Note on Printed Wiring Board:

- : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

Caution:  
 Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.  
 Parts face side: Parts on the parts face side seen from (Component Side) the parts face are indicated.

6-5. SCHEMATIC DIAGRAM - PANEL Section -



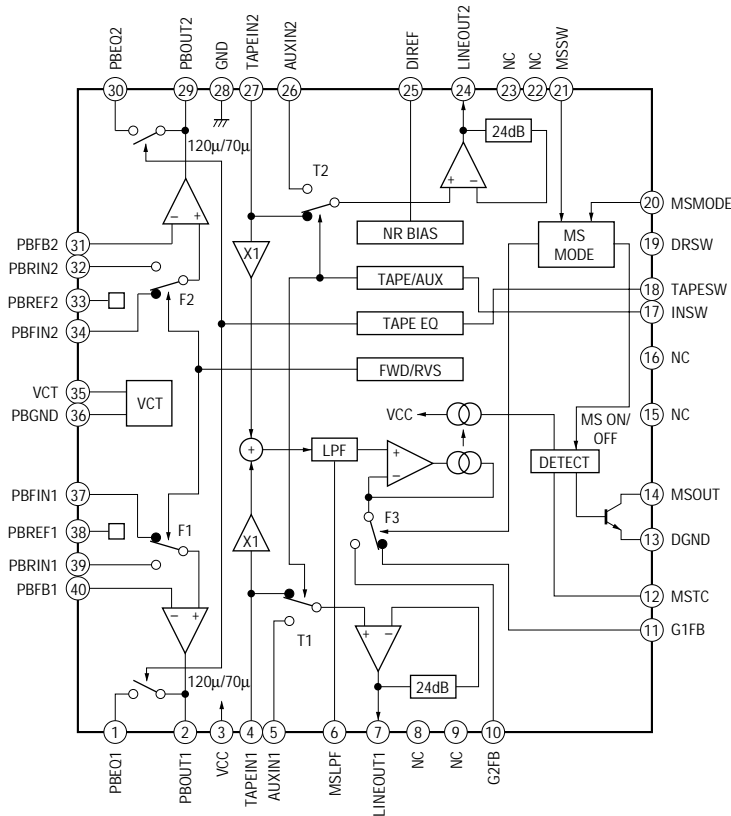
Note on Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- : panel designation.
- ⊕ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltagess are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- Voltagess are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

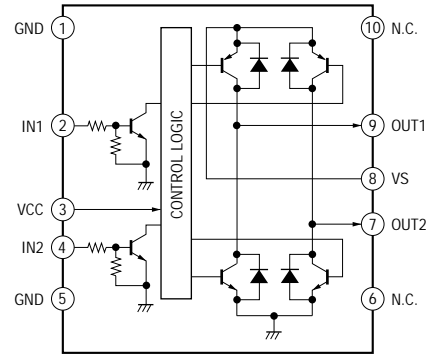


• IC Block Diagrams – MAIN Board –

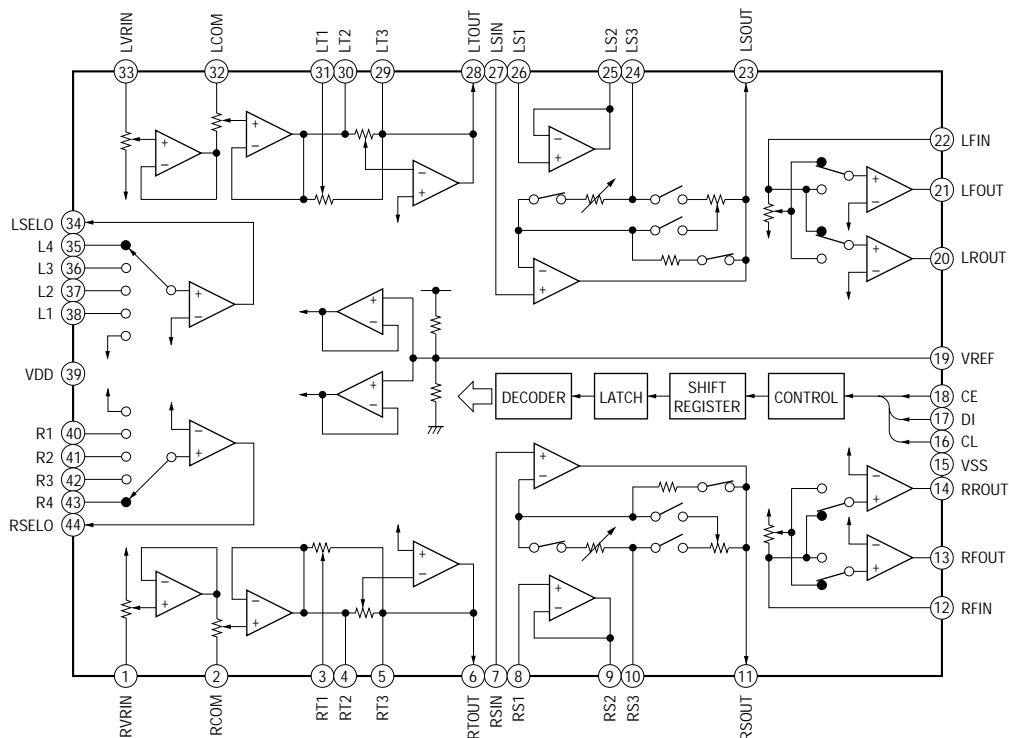
IC301 CXA2509AQ-T4



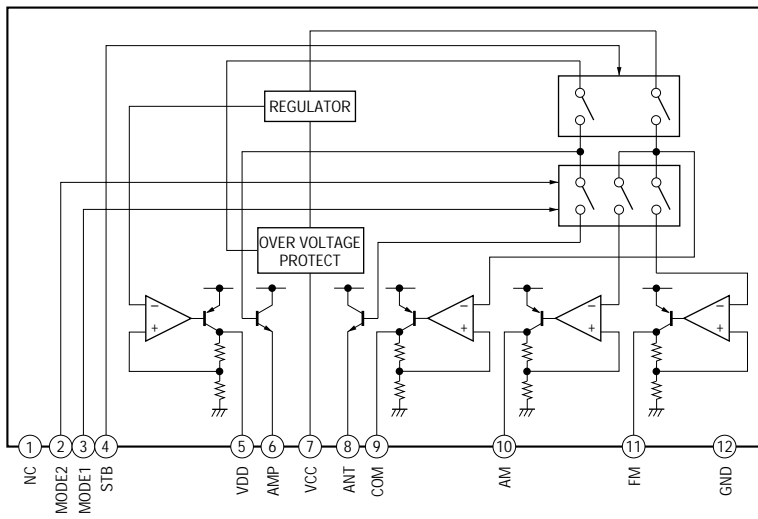
IC361 LB1638M



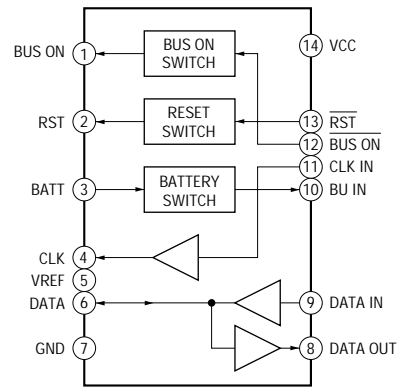
IC401 LC75373ED



**IC601 BA3918-V2**

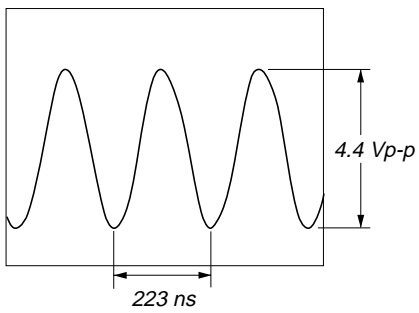


**IC701 BA8270F-E2**



**• Waveform**

① IC501 ⑰ (X\_IN)



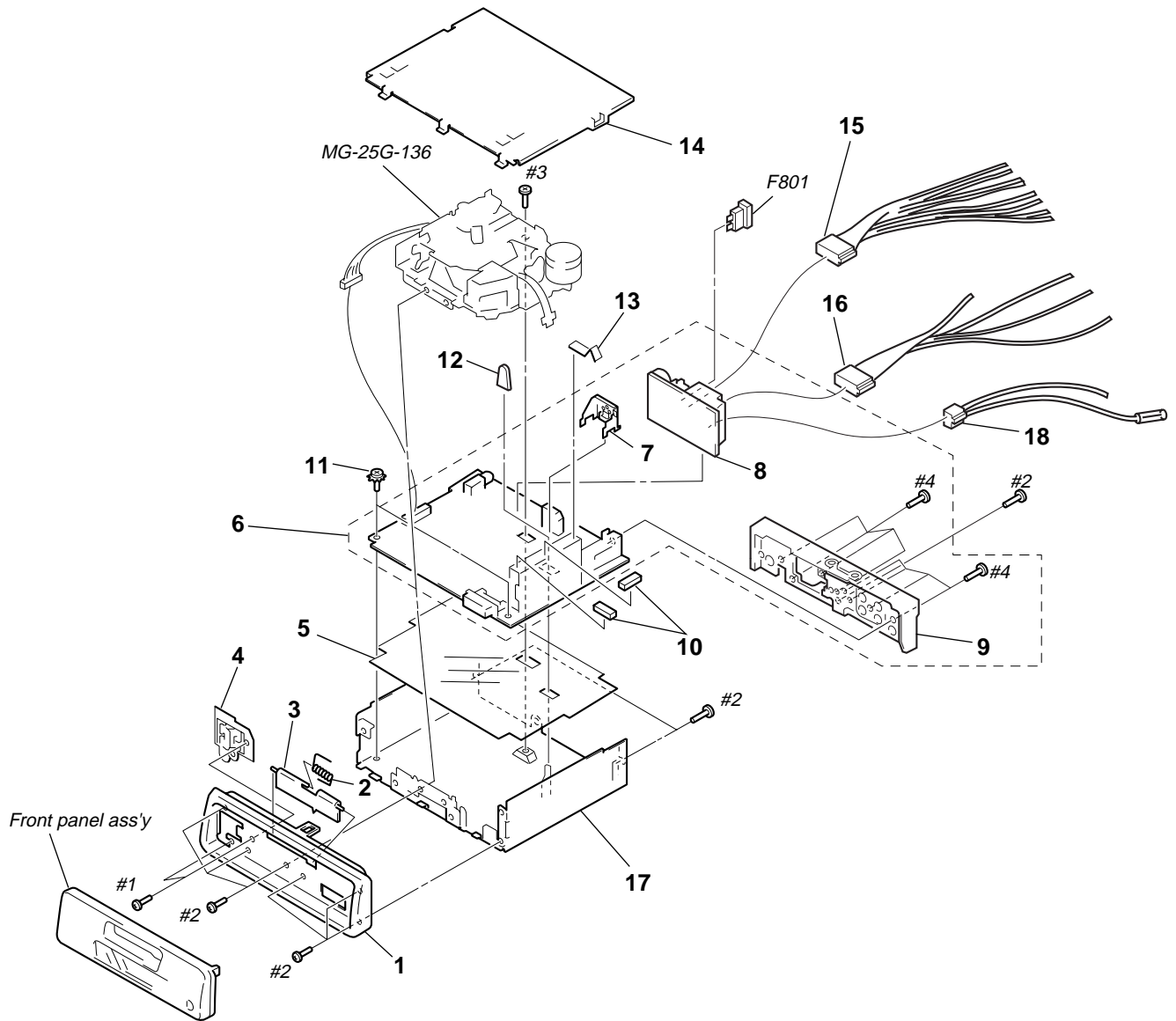
## SECTION 7 EXPLODED VIEWS

**NOTE:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts  
Example:  
KNOB, BALANCE (WHITE) . . . (RED)  
                                  ↑                                  ↑  
                                  Parts Color Cabinet's Color

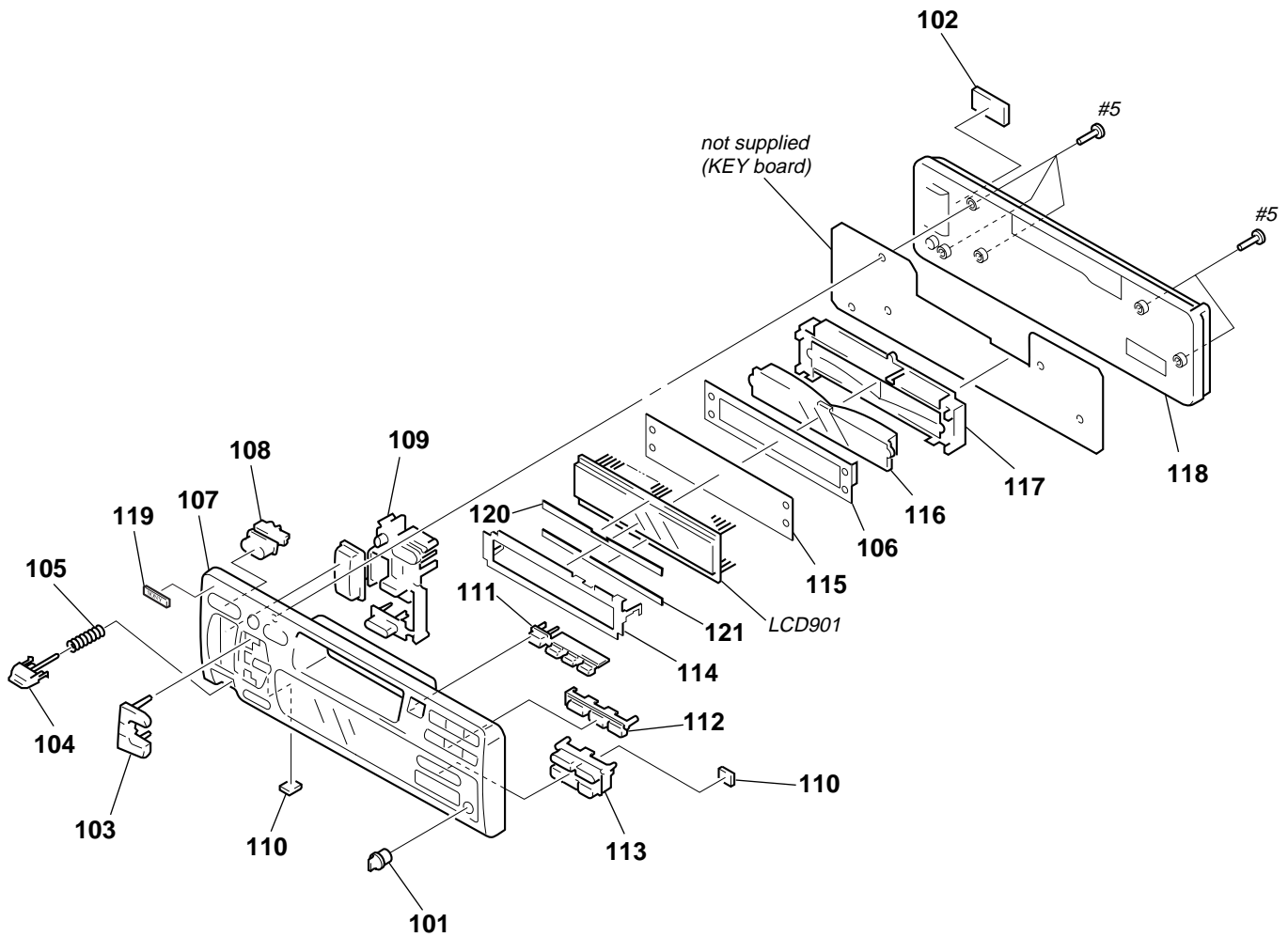
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

### (1) CHASSIS SECTION



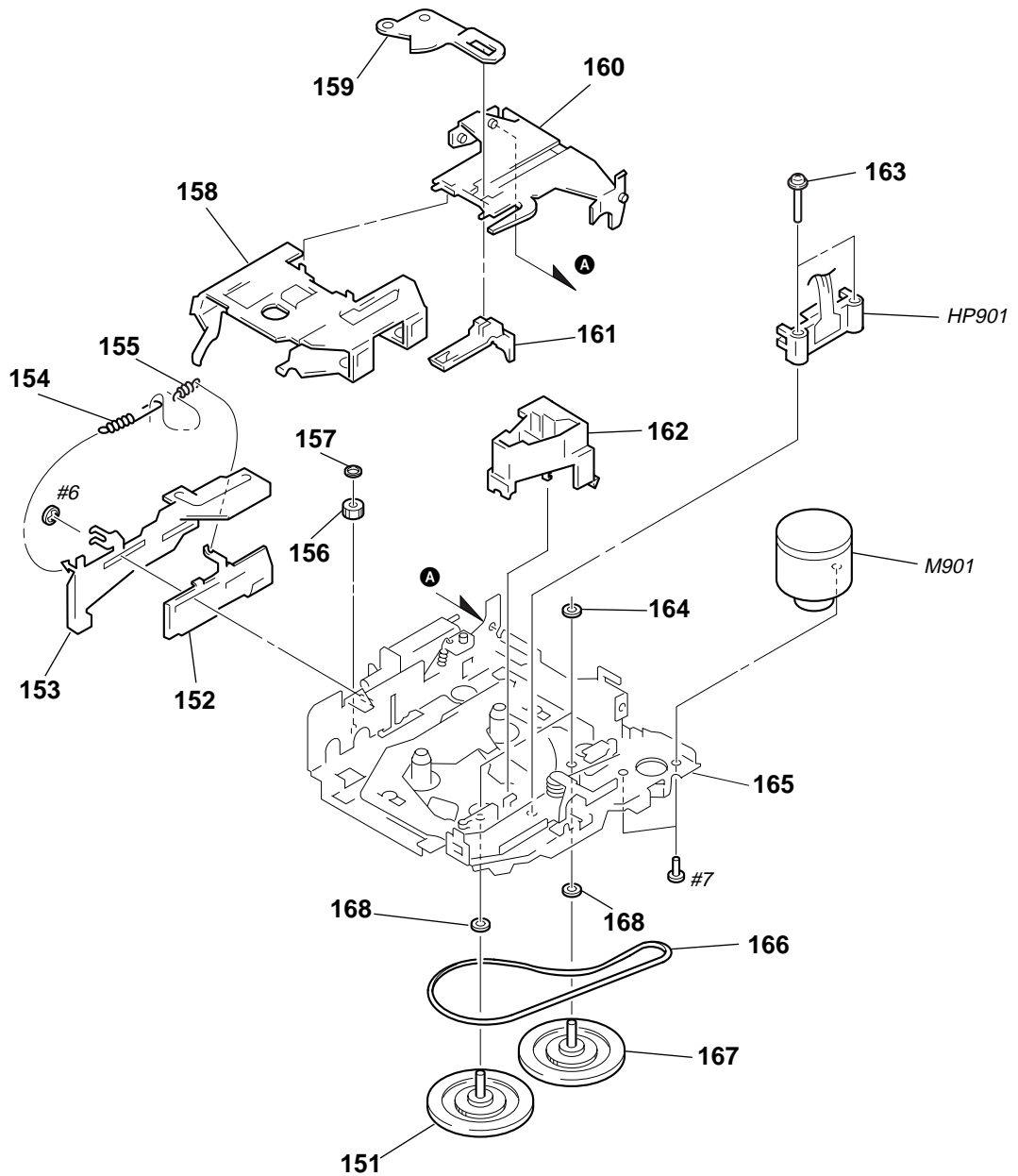
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB		10	3-935-014-01	CUSHION (U)	
2	3-935-003-01	SPRING, TORSION		11	3-915-923-01	SCREW, GROUND POINT	
3	3-932-205-21	DOOR, CASSETTE		12	3-012-859-01	CAP (25), RUBBER	
4	X-3367-636-1	LOCK ASSY		13	3-937-650-01	PLATE (C), GROUND	
5	3-016-595-01	INSULATOR		* 14	X-3373-269-1	COVER ASSY (ISO)	
* 6	A-3313-462-A	MAIN BOARD, COMPLETE (AMBER)		15	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S)(SPEAKER)	
* 6	A-3313-467-A	MAIN BOARD, COMPLETE (GREEN)		16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
* 7	3-019-147-01	BRACKET (IC) (M)		* 17	3-009-813-01	CHASSIS	
* 8	A-3309-913-A	CONNECTOR BOARD, COMPLETE		18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
* 9	3-018-613-01	HEAT SINK		F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

## (2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-018-799-01	BUTTON (D-BASS)		112	3-016-931-11	BUTTON (4-6) (4. 5. 6)	
102	3-015-036-01	CUSHION (BACK PANEL)		113	3-016-936-01	BUTTON (R) (B) (BTM. LCL. - DISC +)	
103	3-016-932-01	BUTTON (L) (2) (+. -)		* 114	3-019-151-01	PLATE (LCD), GROUND	
104	3-009-304-01	BUTTON (RELEASE)		* 115	3-019-150-01	SHEET (REFLECTOR)	
105	3-932-475-01	SPRING (RELEASE)		* 116	3-018-612-01	PLATE, LIGHT GUIDE	
* 106	3-019-149-01	PLATE, LCD		* 117	3-018-611-01	HOLDER (LCD)	
107	X-3374-683-1	PANEL SUB ASSY		118	3-009-295-01	PANEL, FRONT BACK	
108	3-009-300-01	BUTTON (SOURCE)		119	3-904-194-01	EMBLEM (NO. 2.5), SONY	
109	3-018-658-01	BUTTON (L) (●. OFF.+ ▶▶▶▶. SEEK AMS. ◀◀◀◀-. ●. SEL. ATT)		* 120	3-024-391-01	SHEET (LCD)	
* 110	3-014-602-01	SPACER (A)		* 121	3-024-846-01	SHEET (LCD) B	
111	3-016-933-01	BUTTON (1-3) (▲. 1. 2. 3)		LCD901	1-801-967-11	DISPLAY PANEL, LIQUID CRYSTAL	

**(3) MECHANISM DECK SECTION  
(MG-25G-136)**



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
151	A-3291-667-A	CLUTCH (FR) ASSY		161	3-933-346-01	CATCHER	
* 152	3-019-130-01	LEVER (LDG-A)		162	3-933-344-01	GUIDE (C)	
* 153	3-019-131-01	LEVER (LDG-B)		163	3-014-798-01	SCREW (HEAD), SPECIAL	
154	3-020-539-01	SPRING (LD-1), TENSION		164	3-364-151-01	WASHER	
155	3-020-540-01	SPRING (LD-2), TENSION		165	A-3301-267-A	CHASSIS ASSY (G)	
156	3-020-542-01	GEAR (LOADING FT)		166	3-017-302-01	BELT (25)	
157	3-341-753-11	WASHER, POLYETHYLENE		167	3-936-853-01	FLYWHEEL (F)	
158	3-020-533-01	HOUSING		168	3-701-437-21	WASHER	
* 159	3-020-532-01	ARM (SUCTION)		HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
160	3-020-534-01	HANGER		M901	A-3291-665-A	MOTOR ASSY, MAIN (REEL/CAPSTAN)	

**CONNECTOR**      **KEY**

**SECTION 8  
ELECTRICAL PARTS LIST**

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u: μ, for example:  
uA. . . : μA. . .    uPA. . . : μPA. . .  
uPB. . . : μPB. . .    uPC. . . : μPC. . .  
uPD. . . : μPD. . .
- CAPACITORS  
uF: μF
- COILS  
uH: μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark
*	A-3309-913-A	CONNECTOR BOARD, COMPLETE ***** (Included in MAIN BOARD, COMPLETE)	
		< CONNECTOR >	
CN801	1-778-984-11	PIN, CONNECTOR (PC BOARD) 20P	
CN802	1-778-985-11	PIN, CONNECTOR (ISO)	
		< DIODE >	
D801	8-719-049-38	DIODE 1N5404TU	
		< COIL >	
L801	1-416-046-11	COIL, CHOKE 400uH	
		< RESISTOR >	
R801	1-249-417-11	CARBON 1K 5% 1/4W	
R802	1-249-417-11	CARBON 1K 5% 1/4W	
R803	1-249-429-11	CARBON 10K 5% 1/4W	
		< SWITCH >	
S801	1-571-478-11	SWITCH, SLIDE (POWER SELECT)	
		***** KEY BOARD *****	
*	3-018-611-01	HOLDER (LCD)	
*	3-018-612-01	PLATE, LIGHT GUIDE	
*	3-019-149-01	PLATE, LCD	
*	3-019-150-01	SHEET (REFLECTOR)	
*	3-019-151-01	PLATE (LCD), GROUND	
		< CAPACITOR >	
C901	1-163-033-00	CERAMIC CHIP 0.022uF 50V	
C902	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C903	1-165-319-11	CERAMIC CHIP 0.1uF 50V	
C904	1-163-137-00	CERAMIC CHIP 680PF 5% 50V	
		< CONNECTOR >	
CNP901	1-764-423-11	PIN, CONNECTOR 12P	

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D901	8-719-420-90	DIODE MA8051-M	
D902	8-719-422-64	DIODE MA8062-M	
D903	8-719-422-64	DIODE MA8062-M	
D904	8-719-422-64	DIODE MA8062-M	
D905	8-719-422-64	DIODE MA8062-M	
		< IC >	
IC901	8-759-443-68	IC LC75834JED	
		< CHIP CONDUCTOR >	
JC901	1-216-295-00	SHORT 0	
JC902	1-216-295-00	SHORT 0	
JC951	1-216-296-00	SHORT 0	
JC952	1-216-296-00	SHORT 0	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-801-967-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
LSW901	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(OFF)(AMBER)	
LSW901	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(OFF)(GREEN)	
LSW902	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(SOURCE) (AMBER)	
LSW902	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(SOURCE) (GREEN)	
LSW903	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(MODE ◀▶) (AMBER)	
LSW903	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(MODE ◀▶) (GREEN)	
LSW904	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(+ ▶▶▶▶) (AMBER)	
LSW904	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(+ ▶▶▶▶) (GREEN)	
LSW905	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(◀◀◀◀ -) (AMBER)	
LSW905	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(◀◀◀◀ -) (GREEN)	
LSW906	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(-)(AMBER)	
LSW906	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(-)(GREEN)	
LSW907	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(SEL)(AMBER)	
LSW907	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(SEL)(GREEN)	
LSW908	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(+)(AMBER)	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
LSW908	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(+)(GREEN)		R906	1-216-655-11	METAL CHIP 1.5K	0.5% 1/10W
LSW909	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(ATT)(AMBER)		R907	1-216-659-11	METAL CHIP 2.2K	0.5% 1/10W
LSW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(ATT)(GREEN)		R908	1-216-663-11	METAL CHIP 3.3K	0.5% 1/10W
LSW910	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(DSPL) (AMBER)		R909	1-216-667-11	METAL CHIP 4.7K	0.5% 1/10W
LSW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(DSPL) (GREEN)		R910	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
				R911	1-208-806-11	RES, CHIP 10K	2% 1/10W
				R921	1-216-647-11	METAL CHIP 680	0.5% 1/10W
LSW911	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(BTM) (AMBER)		R922	1-216-647-11	METAL CHIP 680	0.5% 1/10W
LSW911	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(BTM) (GREEN)		R923	1-216-647-11	METAL CHIP 680	0.5% 1/10W
				R924	1-216-651-11	METAL CHIP 1K	0.5% 1/10W
LSW912	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(LCL) (AMBER)		R925	1-216-655-11	METAL CHIP 1.5K	0.5% 1/10W
				R926	1-216-655-11	METAL CHIP 1.5K	0.5% 1/10W
LSW912	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(LCL) (GREEN)		R927	1-216-659-11	METAL CHIP 2.2K	0.5% 1/10W
				R928	1-216-663-11	METAL CHIP 3.3K	0.5% 1/10W
LSW921	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(▲)(AMBER)		R929	1-216-667-11	METAL CHIP 4.7K	0.5% 1/10W
				R951	1-216-190-00	RES, CHIP 470	5% 1/8W
LSW921	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(▲)(GREEN)		R952	1-216-089-00	RES, CHIP 47K	5% 1/10W
LSW922	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(1/INTRO) (AMBER)		R953	1-216-049-11	RES, CHIP 1K	5% 1/10W
LSW922	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(1/INTRO) (GREEN)		R954	1-216-049-11	RES, CHIP 1K	5% 1/10W
				R955	1-216-049-11	RES, CHIP 1K	5% 1/10W
LSW923	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(2/REPEAT) (AMBER)		R956	1-216-049-11	RES, CHIP 1K	5% 1/10W
LSW923	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(2/REPEAT) (GREEN)		R961	1-216-027-00	METAL CHIP 120	5% 1/10W (GREEN)
				R961	1-216-033-00	METAL CHIP 220	5% 1/10W (AMBER)
LSW924	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(3/SHUF) (AMBER)		R962	1-216-025-00	RES, CHIP 100	5% 1/10W (GREEN)
LSW924	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(3/SHUF) (GREEN)		R962	1-216-031-00	METAL CHIP 180	5% 1/10W (AMBER)
LSW925	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(6/BL.SKIP) (AMBER)					
LSW925	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(6/BL.SKIP) (GREEN)		R963	1-216-033-00	METAL CHIP 220	5% 1/10W (GREEN)
LSW926	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(5/ATA) (AMBER)		R963	1-216-035-00	METAL CHIP 270	5% 1/10W (AMBER)
				R964	1-216-035-00	METAL CHIP 270	5% 1/10W (GREEN)
LSW926	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(5/ATA) (GREEN)		R964	1-216-037-00	METAL CHIP 330	5% 1/10W (AMBER)
LSW927	1-762-617-11	SWITCH, KEY BOARD (WITH LED)(4/MTL) (AMBER)		R965	1-216-035-00	METAL CHIP 270	5% 1/10W (GREEN)
LSW927	1-762-619-11	SWITCH, KEY BOARD (WITH LED)(4/MTL) (GREEN)					
LSW929	1-762-617-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET +)(AMBER)		R965	1-216-037-00	METAL CHIP 330	5% 1/10W (AMBER)
LSW929	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET +)(GREEN)		R966	1-216-025-00	RES, CHIP 100	5% 1/10W (GREEN)
				R966	1-216-031-00	METAL CHIP 180	5% 1/10W (AMBER)
LSW930	1-762-617-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET -)(AMBER)		R981	1-216-655-11	METAL CHIP 1.5K	0.5% 1/10W
LSW930	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DISC/PRESET -)(GREEN)		R982	1-216-663-11	METAL CHIP 3.3K	0.5% 1/10W
		< PILOT LAMP >		R983	1-216-671-11	METAL CHIP 6.8K	0.5% 1/10W
				R984	1-216-081-00	METAL CHIP 22K	5% 1/10W
PL901	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)					
PL902	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)					
		< RESISTOR >		SW951	1-762-937-11	SWITCH, ROTARY (D-BASS)	
				*****			
R901	1-216-647-11	METAL CHIP 680	0.5% 1/10W	*	A-3313-462-A	MAIN BOARD, COMPLETE (AMBER)	
R902	1-216-647-11	METAL CHIP 680	0.5% 1/10W	*	A-3313-467-A	MAIN BOARD, COMPLETE (GREEN)	
R903	1-216-647-11	METAL CHIP 680	0.5% 1/10W			*****	
R904	1-216-651-11	METAL CHIP 1K	0.5% 1/10W			(Including in CONNECTOR BOARD, COMPLETE)	
R905	1-216-655-11	METAL CHIP 1.5K	0.5% 1/10W				
				*	3-018-613-01	HEAT SINK	
				*	3-019-147-01	BRACKET (IC) (M)	



**MAIN**

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
	7-685-794-09	SCREW +PTT 2.6X10 (S)				C206	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
		< CAPACITOR >				C207	1-126-163-11	ELECT	4.7uF	20%	50V
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	C208	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C241	1-126-157-11	ELECT	10uF	20%	16V
C3	1-124-234-00	ELECT	22uF	20%	16V	C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C4	1-124-234-00	ELECT	22uF	20%	16V	C251	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C5	1-124-234-00	ELECT	22uF	20%	16V	C253	1-124-257-00	ELECT	2.2uF	20%	50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C261	1-126-160-11	ELECT	1uF	20%	50V
C7	1-164-232-11	CERAMIC CHIP	0.01uF		50V	C262	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C8	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C263	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C9	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	C264	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C11	1-126-160-11	ELECT	1uF	20%	50V	C265	1-126-157-11	ELECT	10uF	20%	16V
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C266	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C14	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C267	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C15	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C268	1-126-157-11	ELECT	10uF	20%	16V
C16	1-124-589-11	ELECT	47uF	20%	16V	C271	1-126-163-11	ELECT	4.7uF	20%	50V
C17	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	C273	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C18	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	C281	1-126-163-11	ELECT	4.7uF	20%	50V
C19	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	C282	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C23	1-216-295-00	SHORT	0			C283	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C24	1-165-319-11	CERAMIC CHIP	0.1uF		50V	C291	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C25	1-124-589-11	ELECT	47uF	20%	16V	C292	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C27	1-164-232-11	CERAMIC CHIP	0.01uF		50V	C293	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	C301	1-124-234-00	ELECT	22uF	20%	16V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C104	1-164-232-11	CERAMIC CHIP	0.01uF		50V	C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C105	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	C306	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C106	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	C307	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C107	1-126-163-11	ELECT	4.7uF	20%	50V	C351	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C108	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	C352	1-131-359-41	TANTALUM	10uF	10%	25V
C121	1-164-232-11	CERAMIC CHIP	0.01uF		50V	C354	1-126-157-11	ELECT	10uF	20%	16V
C122	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V	C355	1-124-234-00	ELECT	22uF	20%	16V
C123	1-216-295-00	SHORT	0			C356	1-126-934-11	ELECT	220uF	20%	16V
C141	1-126-157-11	ELECT	10uF	20%	16V	C362	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C401	1-124-584-00	ELECT	100uF	20%	10V
C151	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	C402	1-124-234-00	ELECT	22uF	20%	16V
C153	1-124-257-00	ELECT	2.2uF	20%	50V	C501	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C161	1-126-160-11	ELECT	1uF	20%	50V	C502	1-163-091-00	CERAMIC CHIP	8PF		50V
C162	1-109-982-11	CERAMIC CHIP	1uF	10%	10V	C503	1-126-157-11	ELECT	10uF	20%	16V
C163	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	C504	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C164	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	C505	1-124-589-11	ELECT	47uF	20%	16V
C165	1-126-157-11	ELECT	10uF	20%	16V	C506	1-124-257-00	ELECT	2.2uF	20%	50V
C166	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	C507	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C167	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	C508	1-126-157-11	ELECT	10uF	20%	16V
C168	1-126-157-11	ELECT	10uF	20%	16V	C509	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C171	1-126-163-11	ELECT	4.7uF	20%	50V	C510	1-119-776-11	DOUBLE LAYER	0.1F		5.5V
C173	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	C511	1-128-057-11	ELECT	330uF	20%	6.3V
C181	1-126-163-11	ELECT	4.7uF	20%	50V	C512	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C182	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	C514	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C183	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	C515	1-124-584-00	ELECT	100uF	20%	10V
C191	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	C517	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C192	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	C561	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C193	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V	C562	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	C601	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	C602	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C204	1-164-232-11	CERAMIC CHIP	0.01uF		50V	C603	1-126-157-11	ELECT	10uF	20%	16V
C205	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	C604	1-124-234-00	ELECT	22uF	20%	16V
						C605	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C606	1-124-589-11	ELECT	47uF 20% 16V	D756	8-719-970-02	DIODE 1SR139-400	
C607	1-124-589-11	ELECT	47uF 20% 16V	D757	8-719-970-02	DIODE 1SR139-400	
C608	1-124-234-00	ELECT	22uF 20% 16V	D758	8-719-970-02	DIODE 1SR139-400	
C701	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	D802	8-719-970-02	DIODE 1SR139-400	
C702	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V	D803	8-719-970-02	DIODE 1SR139-400	
C703	1-164-232-11	CERAMIC CHIP	0.01uF 50V	D804	8-719-422-76	DIODE MA8075-M	
C704	1-165-319-11	CERAMIC CHIP	0.1uF 50V	D851	8-719-109-97	DIODE RD6.8ES-B2	
C705	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V	D852	8-719-109-97	DIODE RD6.8ES-B2	
C707	1-126-163-11	ELECT	4.7uF 20% 50V	D853	8-719-035-74	DIODE MA4062-M(TA)	
C751	1-164-506-11	CERAMIC CHIP	4.7uF 16V	D854	8-719-035-74	DIODE MA4062-M(TA)	
C752	1-124-589-11	ELECT	47uF 20% 16V	D855	8-719-035-74	DIODE MA4062-M(TA)	
C754	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V	D856	8-719-035-74	DIODE MA4062-M(TA)	
C756	1-109-982-11	CERAMIC CHIP	1uF 10% 10V	D857	8-719-034-90	DIODE MA4160-M(QZ)	
C801	1-126-936-11	ELECT	3300uF 20% 16V	D858	8-719-035-74	DIODE MA4062-M(TA)	
C802	1-165-319-11	CERAMIC CHIP	0.1uF 50V	D859	8-719-035-74	DIODE MA4062-M(TA)	
C803	1-165-319-11	CERAMIC CHIP	0.1uF 50V			< IC >	
C851	1-164-232-11	CERAMIC CHIP	0.01uF 50V				
C854	1-165-319-11	CERAMIC CHIP	0.1uF 50V	IC301	8-752-079-78	IC CXA2509AQ-T4	
		< CONNECTOR >		IC361	8-759-823-87	IC LB1638M	
CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P		IC401	8-759-443-67	IC LC75373ED	
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P		IC501	8-759-493-98	IC uPD17708GC-567-3B9	
CN401	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT)		IC502	8-759-363-81	IC XC61AN4002PR	
CN602	1-764-422-11	PLUG, CONNECTOR 12P		IC601	8-759-347-49	IC BA3918-V2	
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)		IC701	8-759-449-89	IC BA8270F-E2	
		< CONPOSITION CIRCUIT BLOCK >		IC751	8-759-490-74	IC TDA7384	
						< JACK >	
* CP1	1-517-422-11	GAP, SPARK		J1	1-764-808-14	JACK (ANT)(ANT IN)	
		< DIODE >		J501	1-566-822-41	JACK (REMOTE IN)	
D1	8-719-991-65	DIODE SB02W03C				< CHIP CONDUCTOR >	
D2	8-719-035-62	DIODE MA4047-M(TA)		JC1	1-216-296-00	SHORT 0	
D3	8-719-035-94	DIODE MA4100-M(TA)		JC2	1-216-295-00	SHORT 0	
D301	8-719-911-19	DIODE 1SS119		JC3	1-216-295-00	SHORT 0	
D351	8-719-422-97	DIODE MA8091-M(TA)		JC4	1-216-295-00	SHORT 0	
D352	8-719-911-19	DIODE 1SS119		JC5	1-216-295-00	SHORT 0	
D501	8-719-911-19	DIODE 1SS119		JC7	1-216-296-00	SHORT 0	
D502	8-719-911-19	DIODE 1SS119		JC8	1-216-295-00	SHORT 0	
D503	8-719-911-19	DIODE 1SS119		JC9	1-216-295-00	SHORT 0	
D504	8-719-035-54	DIODE MA4039-M(TA)		JC10	1-216-296-00	SHORT 0	
D505	8-719-911-19	DIODE 1SS119		JC11	1-216-296-00	SHORT 0	
D519	8-719-911-19	DIODE 1SS119		JC12	1-216-296-00	SHORT 0	
D520	8-719-911-19	DIODE 1SS119		JC13	1-216-295-00	SHORT 0	
D561	8-749-035-90	DIODE MA4091-M(TA)		JC14	1-216-295-00	SHORT 0	
D601	8-719-034-74	DIODE MA4120-M(TA)		JC15	1-216-295-00	SHORT 0	
D602	8-719-970-02	DIODE 1SR139-400		JC16	1-216-295-00	SHORT 0	
D701	8-719-034-90	DIODE MA4160-M(QZ)		JC17	1-216-295-00	SHORT 0	
D702	8-719-035-79	DIODE MA4068-H(TA)		JC20	1-216-296-00	SHORT 0	
D703	8-719-035-74	DIODE MA4062-M(TA)		JC21	1-216-296-00	SHORT 0	
D704	8-719-034-94	DIODE MA4180-M(QZ)		JC22	1-216-296-00	SHORT 0	
D705	8-719-034-94	DIODE MA4180-M(QZ)		JC23	1-216-296-00	SHORT 0	
D707	8-719-035-79	DIODE MA4068-H(TA)				< COIL >	
D751	8-719-970-02	DIODE 1SR139-400		L501	1-410-509-11	INDUCTOR 10uH	
D752	8-719-970-02	DIODE 1SR139-400				< TRANSISTOR >	
D753	8-719-970-02	DIODE 1SR139-400		Q1	8-729-027-23	TRANSISTOR DTA114EKA-T146	
D754	8-719-970-02	DIODE 1SR139-400					
D755	8-719-970-02	DIODE 1SR139-400					

**MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R184	1-216-121-00	RES, CHIP 1M 5%	1/10W
Q4	8-729-021-94	TRANSISTOR 2SK1657-T1B		R201	1-216-097-00	RES, CHIP 100K 5%	1/10W
Q171	8-729-920-21	TRANSISTOR DTC314TKH04		R202	1-216-097-00	RES, CHIP 100K 5%	1/10W
Q181	8-729-920-21	TRANSISTOR DTC314TKH04		R203	1-216-041-00	METAL CHIP 470 5%	1/10W
Q271	8-729-920-21	TRANSISTOR DTC314TKH04		R204	1-216-109-00	METAL CHIP 330K 5%	1/10W
Q281	8-729-920-21	TRANSISTOR DTC314TKH04		R205	1-216-077-00	METAL CHIP 15K 5%	1/10W
Q351	8-729-015-11	TRANSISTOR 2SD1802FAST-TL		R206	1-216-079-00	METAL CHIP 18K 5%	1/10W
Q352	8-729-027-23	TRANSISTOR DTA114EKA-T146		R207	1-216-210-00	RES, CHIP 3.3K 5%	1/8W
Q353	8-729-900-53	TRANSISTOR DTC114EK		R208	1-216-077-00	METAL CHIP 15K 5%	1/10W
Q354	8-729-106-60	TRANSISTOR 2SB1115A		R219	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
Q355	8-729-900-53	TRANSISTOR DTC114EK		R241	1-216-073-00	METAL CHIP 10K 5%	1/10W
Q501	8-729-027-23	TRANSISTOR DTA114EKA-T146		R251	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R252	1-216-073-00	METAL CHIP 10K 5%	1/10W
Q503	8-729-027-23	TRANSISTOR DTA114EKA-T146		R261	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
Q601	8-729-423-99	TRANSISTOR 2SD2137-OP		R271	1-216-033-00	METAL CHIP 220 5%	1/10W
Q602	8-729-423-99	TRANSISTOR 2SD2137-OP		R272	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
Q603	8-729-027-23	TRANSISTOR DTA114EKA-T146		R273	1-216-089-00	RES, CHIP 47K 5%	1/10W
Q604	8-729-900-53	TRANSISTOR DTC114EK		R274	1-216-121-00	RES, CHIP 1M 5%	1/10W
Q701	8-729-900-53	TRANSISTOR DTC114EK		R281	1-216-033-00	METAL CHIP 220 5%	1/10W
Q703	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R282	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
		< RESISTOR >		R283	1-216-089-00	RES, CHIP 47K 5%	1/10W
R1	1-249-417-11	CARBON 1K 5%	1/4W	R284	1-216-121-00	RES, CHIP 1M 5%	1/10W
R2	1-249-417-11	CARBON 1K 5%	1/4W	R301	1-216-079-00	METAL CHIP 18K 5%	1/10W
R3	1-249-417-11	CARBON 1K 5%	1/4W	R302	1-216-097-00	RES, CHIP 100K 5%	1/10W
R4	1-247-843-11	CARBON 3.3K 5%	1/4W	R303	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R6	1-216-073-00	METAL CHIP 10K 5%	1/10W	R304	1-216-077-00	METAL CHIP 15K 5%	1/10W
R7	1-216-085-00	METAL CHIP 33K 5%	1/10W	R305	1-216-073-00	METAL CHIP 10K 5%	1/10W
R8	1-216-093-00	METAL CHIP 68K 5%	1/10W	R306	1-216-073-00	METAL CHIP 10K 5%	1/10W
R9	1-216-057-00	METAL CHIP 2.2K 5%	1/10W	R307	1-249-429-11	CARBON 10K 5%	1/4W
R10	1-216-049-11	RES, CHIP 1K 5%	1/10W	R308	1-216-105-00	RES, CHIP 220K 5%	1/10W
R11	1-216-053-00	METAL CHIP 1.5K 5%	1/10W	R351	1-216-049-11	RES, CHIP 1K 5%	1/10W
R12	1-249-421-11	CARBON 2.2K 5%	1/4W	R352	1-249-385-11	CARBON 2.2 5%	1/6W
R14	1-216-065-00	METAL CHIP 4.7K 5%	1/10W	R354	1-216-073-00	METAL CHIP 10K 5%	1/10W
R15	1-216-029-00	METAL CHIP 150 5%	1/10W	R355	1-216-065-00	METAL CHIP 4.7K 5%	1/10W
R16	1-216-073-00	METAL CHIP 10K 5%	1/10W	R360	1-216-150-00	RES, CHIP 10 5%	1/8W
R101	1-216-097-00	RES, CHIP 100K 5%	1/10W	R401	1-249-393-11	CARBON 10 5%	1/4W
R102	1-216-097-00	RES, CHIP 100K 5%	1/10W	R501	1-216-097-00	RES, CHIP 100K 5%	1/10W
R103	1-216-041-00	METAL CHIP 470 5%	1/10W	R502	1-216-073-00	METAL CHIP 10K 5%	1/10W
R104	1-216-109-00	METAL CHIP 330K 5%	1/10W	R503	1-216-097-00	RES, CHIP 100K 5%	1/10W
R105	1-216-077-00	METAL CHIP 15K 5%	1/10W	R504	1-216-246-00	RES, CHIP 100K 5%	1/8W
R106	1-216-079-00	METAL CHIP 18K 5%	1/10W	R508	1-216-097-00	RES, CHIP 100K 5%	1/10W
R107	1-216-210-00	RES, CHIP 3.3K 5%	1/8W	R509	1-216-246-00	RES, CHIP 100K 5%	1/8W
R108	1-216-077-00	METAL CHIP 15K 5%	1/10W	R511	1-216-097-00	RES, CHIP 100K 5%	1/10W
R119	1-216-065-00	METAL CHIP 4.7K 5%	1/10W	R512	1-216-049-11	RES, CHIP 1K 5%	1/10W
R121	1-216-073-00	METAL CHIP 10K 5%	1/10W	R513	1-216-049-11	RES, CHIP 1K 5%	1/10W
R141	1-216-073-00	METAL CHIP 10K 5%	1/10W	R514	1-216-049-11	RES, CHIP 1K 5%	1/10W
R151	1-216-065-00	METAL CHIP 4.7K 5%	1/10W	R515	1-216-097-00	RES, CHIP 100K 5%	1/10W
R152	1-216-073-00	METAL CHIP 10K 5%	1/10W	R516	1-216-097-00	RES, CHIP 100K 5%	1/10W
R161	1-216-061-00	METAL CHIP 3.3K 5%	1/10W	R517	1-216-097-00	RES, CHIP 100K 5%	1/10W
R171	1-216-182-00	RES, CHIP 220 5%	1/8W	R518	1-216-097-00	RES, CHIP 100K 5%	1/10W
R172	1-216-065-00	METAL CHIP 4.7K 5%	1/10W	R519	1-216-097-00	RES, CHIP 100K 5%	1/10W
R173	1-216-089-00	RES, CHIP 47K 5%	1/10W	R520	1-216-097-00	RES, CHIP 100K 5%	1/10W
R174	1-216-121-00	RES, CHIP 1M 5%	1/10W	R521	1-216-097-00	RES, CHIP 100K 5%	1/10W
R181	1-249-409-11	CARBON 220 5%	1/4W	R522	1-216-097-00	RES, CHIP 100K 5%	1/10W
R182	1-216-065-00	METAL CHIP 4.7K 5%	1/10W	R523	1-216-097-00	RES, CHIP 100K 5%	1/10W
R183	1-216-089-00	RES, CHIP 47K 5%	1/10W	R524	1-216-097-00	RES, CHIP 100K 5%	1/10W
				R525	1-216-097-00	RES, CHIP 100K 5%	1/10W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R526	1-216-097-00	RES, CHIP	100K 5% 1/10W (GREEN)			< TUNER >	
R527	1-216-097-00	RES, CHIP	100K 5% 1/10W	TU1	1-693-373-11	TUNER UNIT	
R529	1-216-097-00	RES, CHIP	100K 5% 1/10W			< VIBRATOR >	
R530	1-216-097-00	RES, CHIP	100K 5% 1/10W	X501	1-578-785-11	VIBRATOR, CRYSTAL (4.5MHz)	
R531	1-249-429-11	CARBON	10K 5% 1/4W	*****			
R533	1-216-097-00	RES, CHIP	100K 5% 1/10W			MISCELLANEOUS	
R534	1-249-417-11	CARBON	1K 5% 1/4W			*****	
R535	1-249-417-11	CARBON	1K 5% 1/4W				
R536	1-216-097-00	RES, CHIP	100K 5% 1/10W	15	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S)	
R537	1-216-113-00	METAL CHIP	470K 5% 1/10W			(SPEAKER)	
R538	1-249-413-11	CARBON	470 5% 1/4W	16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
R539	1-249-413-11	CARBON	470 5% 1/4W	18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
R543	1-249-413-11	CARBON	470 5% 1/4W	F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
R544	1-216-097-00	RES, CHIP	100K 5% 1/10W	HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
R545	1-249-413-11	CARBON	470 5% 1/4W	M901	A-3291-665-A	MOTOR ASSY, MAIN (REEL/CAPSTAN)	
R546	1-208-806-11	RES, CHIP	10K 0.50% 1/10W	*****			
R547	1-208-806-11	RES, CHIP	10K 0.50% 1/10W				
R548	1-216-097-00	RES, CHIP	100K 5% 1/10W				
R549	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R550	1-208-806-11	RES, CHIP	10K 0.50% 1/10W				
R551	1-216-025-00	RES, CHIP	100 5% 1/10W				
R552	1-216-025-00	RES, CHIP	100 5% 1/10W	#1	7-621-772-10	SCREW +B 2X4	
R553	1-216-097-00	RES, CHIP	100K 5% 1/10W	#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
R554	1-216-295-00	SHORT	0	#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
R556	1-216-049-11	RES, CHIP	1K 5% 1/10W	#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
R561	1-216-065-00	METAL CHIP	4.7K 5% 1/10W	#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
R562	1-249-429-11	CARBON	10K 5% 1/4W	#6	7-624-104-04	STOP RING 2.0, TYPE -E	
R568	1-216-097-00	RES, CHIP	100K 5% 1/10W	#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
R570	1-216-097-00	RES, CHIP	100K 5% 1/10W (AMBER)	*****			
R571	1-216-097-00	RES, CHIP	100K 5% 1/10W			ACCESSORIES & PACKING MATERIALS	
R572	1-216-097-00	RES, CHIP	100K 5% 1/10W			*****	
R601	1-249-393-11	CARBON	10 5% 1/4W	1-473-067-71		REMOTE COMMANDER (RM-X4S)	
R602	1-249-393-11	CARBON	10 5% 1/4W	3-861-731-11		MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
R603	1-216-186-00	RES, CHIP	330 5% 1/8W	3-861-731-21		MANUAL, INSTRUCTION (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)	
R701	1-216-295-00	SHORT	0	3-861-731-31		MANUAL, INSTRUCTION (CZECH, GREEK, POLISH, TURKISH, ENGLISH) (South European)	
R702	1-249-401-11	CARBON	47 5% 1/4W	3-861-732-11		MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
R703	1-216-073-00	METAL CHIP	10K 5% 1/10W	3-861-732-21		MANUAL, INSTRUCTION, INSTALL (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)	
R704	1-216-025-00	RES, CHIP	100 5% 1/10W	3-861-732-31		MANUAL, INSTRUCTION, INSTALL (CZECH, GREEK, POLISH, TURKISH, ENGLISH) (South European)	
R705	1-216-025-00	RES, CHIP	100 5% 1/10W	3-861-973-11		MANUAL, INSTRUCTION, INSTALL (for RM-X4S) (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, POLISH, CZECH, GREEK, TURKISH)	
R711	1-216-097-00	RES, CHIP	100K 5% 1/10W	3-921-278-01		LABEL (DSPL) (for RM-X4S)	
R712	1-216-089-00	RES, CHIP	47K 5% 1/10W	X-3373-412-1		CASE (PANEL) ASSY (for FRONT PANEL)	
R713	1-216-089-00	RES, CHIP	47K 5% 1/10W	*****			
R714	1-249-421-11	CARBON	2.2K 5% 1/4W				
R851	1-216-025-00	RES, CHIP	100 5% 1/10W				
R852	1-216-025-00	RES, CHIP	100 5% 1/10W				
R853	1-216-041-00	METAL CHIP	470 5% 1/10W				
R854	1-216-041-00	METAL CHIP	470 5% 1/10W				
R855	1-216-041-00	METAL CHIP	470 5% 1/10W				
R856	1-216-041-00	METAL CHIP	470 5% 1/10W				
R857	1-216-049-11	RES, CHIP	1K 5% 1/10W				
R858	1-216-025-00	RES, CHIP	100 5% 1/10W				
		< SWITCH >					
S503	1-692-431-21	SWITCH, TACTILE (RESET)					

# XR-C4100

Ref. No.	Part No.	Description	Remark
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PARTS FOR INSTALLATION AND CONNECTIONS

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501	3-916-161-31	FRAME ASSY	
502	X-3370-077-1	SCREW ASSY (AE.KEY), FITTING	
503	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
504	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S) (SPEAKER)	
505	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
506	1-775-543-11	CORD, GROUND	
507	X-3373-432-1	BRACKET ASSY (for RM-X4S)	
508	1-465-459-21	ADAPTER, ANTENNA	

