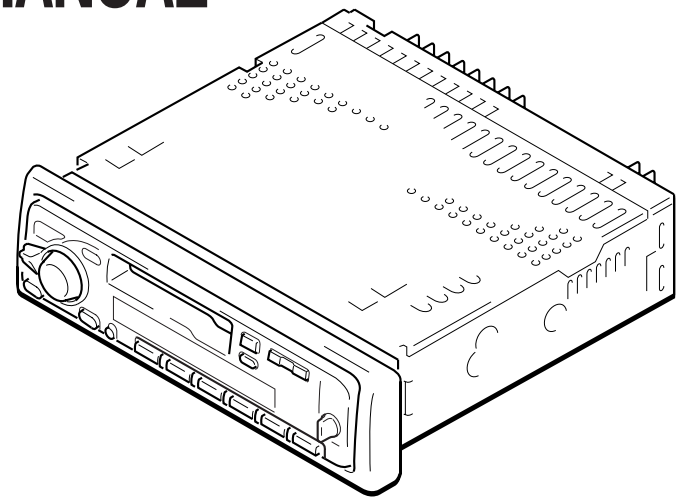
XR-C4120

SERVICE MANUAL

AEP Model
UK Model



Model Name Using Similar Mechanism	XR-C4100
Tape Transport Mechanism Type	MG-25Y-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 18,000 Hz
Signal-to-noise ratio	

Cassette type	
TYPE II, IV	61 dB
TYPE I	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	
	0.7 % (stereo), 0.4 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	40 W × 4 (at 4 ohms)

General

Outputs	Audio output Power aerial relay control lead Power amplifier control lead Telephone ATT control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 188 × 58 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Rotary commander (1) Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

TABLE OF CONTENTS

Flexible Circuit Board Repairing

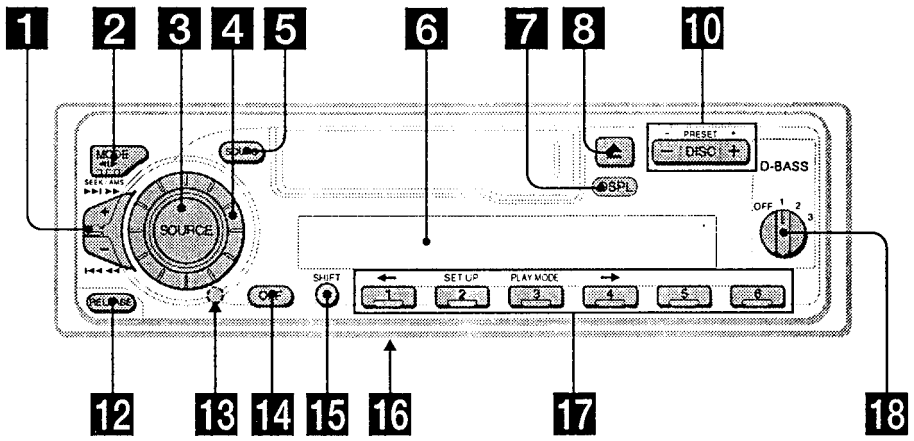
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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.

This section is extracted from instruction manual.

Location of controls



Refer to the pages listed for details.

1 SEEK/AMS (seek/Automatic Music Sensor/manual search) control 6, 8, 10, 13, 19

2 MODE (◄II►)button

During tape playback:
Playback direction change 6

During radio reception:
BAND select 7, 8

During CD or MD playback:
CD/MD unit select 18

3 SOURCE (TAPE/TUNER/CD/MD) button 6, 7, 8, 11, 18

4 Dial (volume/bass/treble/left-right/rear-front control) 5, 16

5 SOUND button 16

6 Display window

7 DSPL (display mode change) button 6, 8, 9, 18

8 ⏏ (eject) button 6

10 PRESET/DISC button

During radio reception:
Preset stations select 8

During CD/MD playback:
Disc change 19

12 RELEASE (front panel release) button 4, 21

13 Reset button (located on the front side of the unit behind the front panel) 4

14 OFF button 4, 6

15 SHIFT button
PLAY MODE 7, 8, 10, 12, 19
SET UP 5, 13, 16, 18

16 POWER SELECT switch (located on the bottom of the unit)
See "POWER SELECT switch" in the Installation/Connections manual.

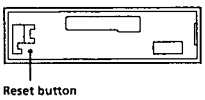
17 Number buttons 8, 10, 12

18 D-BASS control 17

Getting Started

Resetting the unit

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



Reset button

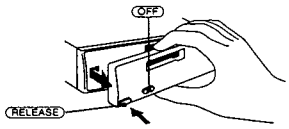
Note
Pressing the reset button will erase the clock setting and some memorized functions.

Detaching the front panel

You can detach the front panel of this unit to protect the unit from being stolen.

1 Press (OFF).

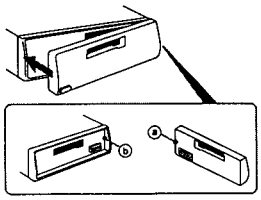
2 Press (RELEASE), then slide the front panel a little to the left, and pull it off towards you.



Notes
- *Be sure not to drop the panel when detaching it from the unit.*
- *If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.*
- *When carrying the front panel with you, use the supplied front panel case.*

Attaching the front panel

Attach part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push the left side into position until it clicks.



Notes
- *Be sure not to attach the front panel upside down.*
- *Do not press the front panel too hard against the unit when attaching it.*
- *Do not press too hard or put excessive pressure on the display window of the front panel.*
- *Do not expose the front panel to direct sunlight or heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight or where there may be a considerable rise in temperature.*

Caution alarm

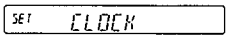
If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch on the bottom of the unit is set to the Ⓐ position).
If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

Setting the clock

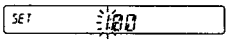
The clock uses a 24-hour digital indication.

Example: To set the clock to 10:08

1 Press (SHIFT), then press (2) (SET UP) repeatedly until "CLOCK" appears.



❶ Press (4) (→).



The hour indication flashes.

❷ Set the hour.

to go backward

to go forward

❸ Press (4) (→).

The minute indication flashes.

❹ Set the minute.

to go backward

to go forward

2 Press (SHIFT).

The clock starts.

3 Press (SHIFT).
After the clock setting is complete, the display returns to normal playback mode.

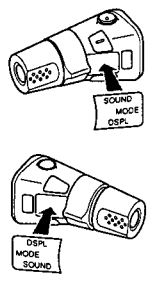
Note
If the POWER SELECT switch on the bottom of the unit is set to the Ⓑ position, turn the power on first, then set the clock.

Other Functions

You can also control the optional CD or MD units with the rotary commander*.

Labelling the rotary commander

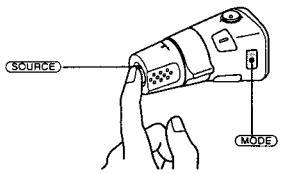
Depending on how you mount the rotary commander, attach the appropriate label as shown in the illustration below.



Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls.

By pressing buttons (the SOURCE and MODE buttons)



Each time you press (SOURCE), the source changes as follows:
TUNER → CD* → MD* → TAPE

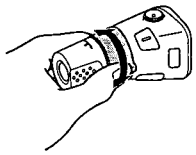
Pressing (MODE) changes the operation in the following ways;

- Tape : playback direction
- Tuner : FM1 → FM2 → FM3 → MW → LW
- CD unit* : CD1 → CD2 → ...
- MD unit* : MD1 → MD2 → ...

- *If the corresponding optional equipment is not connected, the item will not appear.*

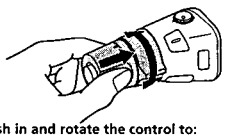
Tip
When the POWER SELECT switch is set to position Ⓑ, you can turn on this unit by pressing (SOURCE) on the rotary commander.

By rotating the control (the SEEK/AMS control)



Rotate the control and release it to:
- Locate the beginnings of tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To start playback while fast-winding the tape, press (MODE).
- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.
- Tune in stations automatically. Rotate and hold the control to find a specific station.

By pushing in and rotating the control (the PRESET/DISC control)

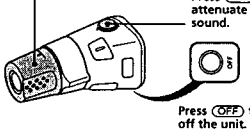


Push in and rotate the control to:
- Receive the stations memorized on the number buttons.
- Change the disc.

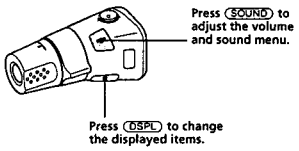
Other operations

Rotate the VOL control to adjust the volume.

Press (ATT) to attenuate the sound.



Press (OFF) to turn off the unit.

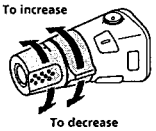


Press (SOUND) to adjust the volume and sound menu.

Press (DSPL) to change the displayed items.

Changing the operative direction

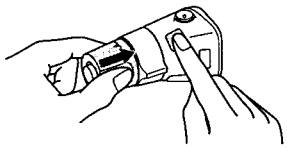
The operative direction of controls is factory-set as shown below.



To increase

To decrease

If you need to mount the rotary commander on the right hand side of the steering column, you can reverse the operative direction.



Press (SOUND) for two seconds while pushing the VOL control.

Tip
You can also change the operative direction of these controls with the unit (see "Changing the sound and display settings" on page 16).

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 normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a 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.

A To detach

Before detaching the front panel, be sure to press (OFF). Press (RELEASE), then slide the front panel a little to the left, and pull it off towards you.

B To attach

Attach part ⓐ of the front panel to part ⓑ of the unit as illustrated and push the left side into position 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.

A Para extraerlo

Antes de extraer el panel frontal, asegúrese de pulsar (OFF). Pulse (RELEASE), deslice el panel ligeramente hacia la izquierda y tire de él hacia fuera.

B Para instalarlo

Fije la parte ⓐ del panel frontal a la parte ⓑ de la unidad tal como muestra la ilustración y ejerza presión sobre el lado izquierdo hasta oír un chasquido.

Montering

Säkerhetsföreskrifter

- 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 monteringstillbehören 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.

A Ta loss frontpanelen

Se till att enheten är avstängd innan du tar bort Frontpanelen. Tryck på (OFF). Tryck sedan på (RELEASE) och skjut frontpanelen lite åt vänster medan du drar den emot dig.

B Fästa frontpanelen

Sätt fast del ⓐ på frontpanelen på del ⓑ på enheten enligt bilden och tryck på den vänstra sidan tills det klickar till.

Instalação

Precauções

- Não toque nos quatro orifícios da superfície da parte superior do aparelho. Estes servem para regulações do sintonizador que devem ser efectuadas somente por técnicos qualificados.
- Escolha com cuidado um local apropriado para a montagem do aparelho, para que este não interfira com as manobras necessárias à condução do veículo.
- Evite instalar o aparelho onde possa estar sujeito a altas temperaturas, 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 material de montagem fornecido.

Ajuste do ângulo de montagem

Ajuste o ângulo de montagem a menos de 20°.

Para retirar e colocar o painel frontal

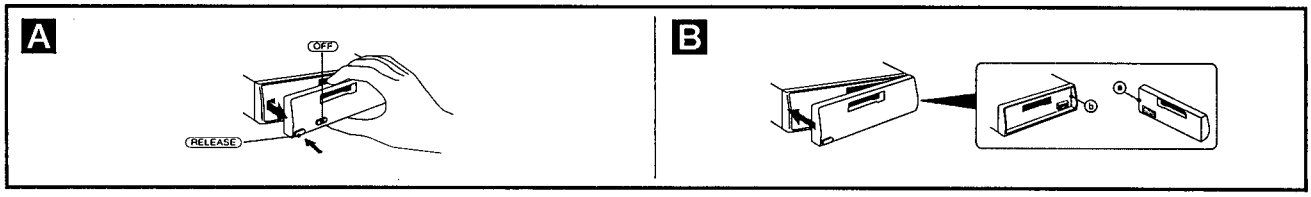
Retire o painel frontal antes de iniciar a instalação do aparelho.

A Para retirar

Antes de retirar o painel frontal, tem de carregar em (OFF). Carregue em (RELEASE), faça deslizar o painel um pouco para a esquerda e puxe-o para si.

B Para colocar

Encaixe a parte ⓐ do painel frontal na parte ⓑ do aparelho, como se mostra na figura, fazendo pressão sobre o painel até ouvir um estalido.

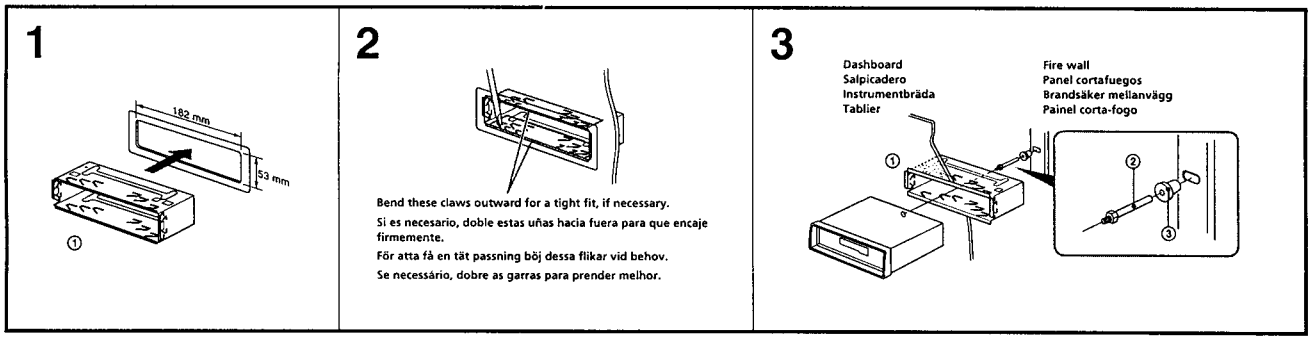


Installation in the dashboard

Instalación en el salpicadero

Montera på instrumentbrädan

Instalação no tablier



Reset button

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

Botón de restauración

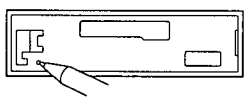
Cuando finalice la instalación y las conexiones, cerciórese de pulsar el botón de restauración con un bolígrafo, etc.

Återställningsknappen

När du har installerat enheten och alla anslutningar är klara, återställer du den genom att trycka på återställningsknappen med t ex en kulspetspenna.

Botão de reinicialização

Depois de completar a instalação e as ligações, tem de carregar no botão de reinicialização com uma esferográfica ou um objecto semelhante.



Connections

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Be careful not to pinch any wires between a screw and the body of the car or this unit or between any moving parts such as the seat railing, etc.
- Connect the power connecting cord ⑥ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Connect the yellow cord 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 directly to the battery. If no car circuits are available for connecting this unit, 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 front panel illumination is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery to 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 bottom of the unit to the ⒷⒷ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Notes

- *The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ⒷⒷ position.*
- *Do not use excessive force when changing the POWER SELECT switch.*

Notes of connection example

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) function.*
- *A power aerial without a relay box cannot be used with this unit.*

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord ⑥ may damage the aerial.

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch 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. Be sure to connect passive speakers to these terminals.*

Conexiones

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Tenga cuidado de no atrapar ningún cable entre algún tornillo y la carrocería del automóvil o esta unidad o entre las partes móviles, como por ejemplo los raíles del asiento, etc.
- Conecte el cable de conexión de alimentación ⑥ a la unidad y los altavoces antes de conectarlo al conector de alimentación auxiliar.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el cable amarillo a un circuito libre del automóvil de potencia nominal superior a la del fusible de la unidad. Si conecta esta unidad en combinación con otros componentes estéreo, la potencia nominal del circuito del automóvil a los que dichos componentes estén conectados debe ser superior a la suma de la potencia nominal del fusible de los componentes. Si no existen circuitos de automóvil de potencia nominal tan alta como la del fusible de la unidad, conecte ésta directamente a la batería. Si no hay circuitos de automóvil disponibles para conectar esta unidad, conecte la misma a un circuito de automóvil de potencia nominal superior a la del fusible de la unidad de forma que no se desactiven otros circuitos si el fusible de dicha unidad se funde.

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 funcionamiento. 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 base de la unidad, en la posición ⒷⒷ y, después, pulse el botón de restauración.** La iluminación estará desactivada cuando la unidad no se encuentre en funcionamiento.

Notas

- *La alarma de precaución para el panel frontal no se activará si el selector POWER SELECT está ajustado en la posición ⒷⒷ.*
- *No emplee excesiva fuerza al cambiar el selector POWER SELECT.*

Notas de ejemplo de conexiones

Notas sobre conductores de control

- *El conductor de control (azul) de la antena motorizada suministra + 12 V CC al activar el sintonizador o la función ATA (activación automática del sintonizador).*
- *Con esta unidad no podrá utilizarse una antena motorizada sin caja de relés.*

Advertencia

Si dispone de una antena motorizada sin dispositivo de relé, la conexión de esta unidad con el cable de conexión de alimentación ⑥ suministrado puede dañar la antena.

Conexión para protección de la memoria

Si conecta el conductor de entrada de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque ponga la llave de encendido en la posición de apagado.

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 hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

Anslutning

Säkerhetsföreskrifter

- Denna bilstereo är endast avsedd för anslutning till ett negativt jordat, 12 V bilbatteri.
- Var noga med att inga kablar kläms mellan någon skruv eller att de blir klämda mellan rörliga delar som t.ex. bilsätet.
- Anslut strömkabeln ⑥ till enheten och högtalarna innan du ansluter den till den yttre strömanslutningen.
- **Dra samtliga jordledningar till en och samma jordningspunkt.**
- Anslut den gula kabeln till en ledig bilkrets med ett högre amperetal än enhetens. Om du kopplar både denna enhet och andra stereokomponenter till en och samma bilkrets, måste den bilkrets de kopplas till ha en högre ampere än summan av de enskilda delarnas amperestyrka. Om det inte finns några bilkretsar med en så hög amperestyrka som enhetens ska du ansluta enheten direkt till batteriet. Om inga bilkretsar finns för anslutning till enheten ska du ansluta enheten till en bilkrets med ett högre amperetal än enhetens säkring, så att det är denna som går i stället för bilens.

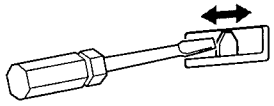
Montera bilstereon i en bil vars tändlås inte har något strömläge

— Omkopplaren POWER SELECT

Belysningen i teckenfönstret är förinställd så att den även lyser då enheten 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 undersida till läge ⒷⒷ, och tryck sedan på återställningsknappen** för att undvika att bilbatteriet laddas ur. Nu lyser inte längre belysningen i teckenfönstret när bilstereon inte används.

Obsevera

- *Varningssignalen för frontpanelen ljuder inte när omkopplaren POWER SELECT står i läge ⒷⒷ.*
- *Ta inte i för mycket när du ställer om POWER SELECT-omkopplaren.*



Att observera angående anslutningsexemplen

Att observera angående de olika styrkablarna

- *Motorantennens styrkabel (blå) leder +12 volts ström när du slår på tunern, liksom när du aktiverar någon av funktionerna ATA (mottagningsautomatik).*
- *En motorantenn utan styrreläd̈osa kan inte anslutas till denna bilstereo.*

Varning

Om du har en motorantenn utan reläd̈osa kan antennen skadas om du ansluter enheten med den medföljande strömkabeln ⑥.

Anslutning för minnesstöd

När du anslutit den gula, ingående strömkabeln försörjs minneskretsen med ström hela tiden, även när tändläset slås ifrån.

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 tillräcklig effekthanteringskapacitet för att skydda högtalarna mot skador.*
- *Anslut inte något av högtalaruttagen 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 högtalaruttag, eftersom de kan skada de aktiva högtalarna. Var noga med att bara ansluta passiva högtalare till dessa uttag.*

Ligações

Cuidado

- Este aparelho foi concebido para funcionar somente com corrente contínua de 12 V com negativo à massa.
- Tenha cuidado para que os fios não fiquem entalados entre os parafusos e a carroçaria do automóvel ou a caixa do aparelho nem entre as peças móveis, por exemplo, as calhas dos bancos, etc.
- Ligue o cabo de alimentação de corrente ⑥ ao aparelho e aos altifalantes antes de o ligar ao conector de corrente auxiliar.
- **Ligue todos os fios de terra num ponto de massa comum.**
- Ligue o cabo amarelo a um circuito eléctrico livre do automóvel, cuja tensão seja superior à dos fusíveis do aparelho. Se ligar este aparelho em série com outros componentes estéreo, a potência nominal do circuito eléctrico do automóvel onde os ligar tem de ser superior à soma das tensões dos fusíveis de todos os componentes individuais. Se não houver nenhum circuito eléctrico do automóvel com uma tensão tão elevada como a dos fusíveis do aparelho, ligue-o directamente à bateria. Se não estiver disponível nenhum circuito eléctrico do automóvel para ligação deste aparelho, ligue-o a um circuito eléctrico do automóvel com uma potência nominal superior à dos fusíveis do aparelho, de tal modo que, se o aparelho rebentar os fusíveis respectivos, nenhum outro circuito seja cortado.

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 base do aparelho, para a posição ⒷⒷ. Em seguida, carregue no botão de reinicialização.** A iluminação é regulada para ficar apagada enquanto o aparelho estiver desligado.

Notas

- *O alarme de aviso do painel frontal não é activado se o selector POWER SELECT estiver colocado na posição ⒷⒷ.*
- *Não faça demasiada força quando mudar a posição do selector POWER SELECT.*

Notas sobre o exemplo de ligação

Notas sobre os fios de controlo

- *O fio de controlo da antena eléctrica (azul) fornece +12 V CC quando ligar o sintonizador ou quando activar as funções ATA (Activação automática do sintonizador).*
- *Não pode utilizar uma antena eléctrica sem caixa de relé com este aparelho.*

Advertência

Se a antena eléctrica não tiver uma caixa de relé, o facto de ligar este aparelho com o cabo de alimentação ⑥ fornecido, pode provocar danos na antena.

Ligação para alimentação contínua da memória

Quando, o fio amarelo de entrada de alimentação for ligado, os circuitos de memória ficarão com alimentação contínua, mesmo se a chave de ignição estiver desligada.

Notas sobre a ligação dos altifalantes

- *Antes de ligar os altifalantes, desligue o aparelho.*
- *Utilize altifalantes com impedância de 4 a 8 ohm, e com capacidade admissível de potência 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, não se esqueça de ligar altifalantes passivos a estes terminais.*

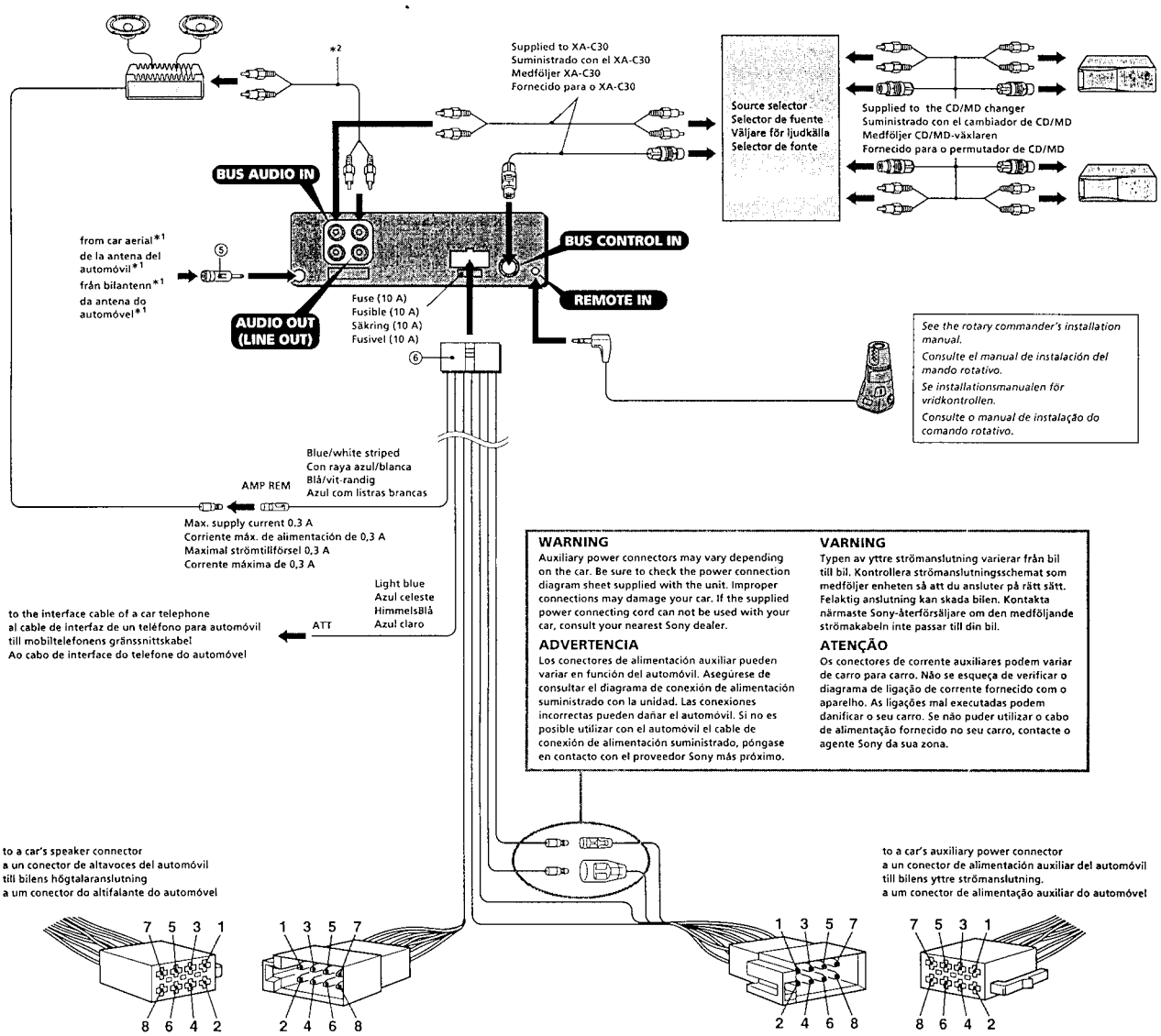
Connection example
Ejemplo de conexiones
Anslutningarna enligt exemplet
Exemplo de ligações

*1 *Note for the aerial connecting*
If your car aerial is an ISO (International Organization for Standardization) type, use the supplied adapter ⑤ to connect it. First connect the car aerial to the supplied adapter, then connect it to the aerial jack of the master unit.
*2 *RCA pin cord (not supplied)*

*1 *Nota sobre la conexión de la antena*
Si la antena del automóvil es del tipo ISO (International Organization for Standardization), emplee el adaptador suministrado ⑤ para conectarla. En primer lugar, conecte la antena del automóvil al adaptador suministrado y, a continuación, a la toma de antena de la unidad principal.
*2 *Cable con clavijas RCA (no suministrado)*

*1 *Angående antennanslutning*
Om motorantennen är av ISO-typ (International Organization for Standardization), använder du medföljande adapter ⑤ för att ansluta den. Anslut först motorantennen till medföljande adapter och därefter till antennuttaget på huvudenheten.
*2 *Kabel med RCA-kontakter (medföljer inte)*

*1 *Nota referente à ligação da antena*
Se a antena do automóvel for uma antena de tipo ISO (International Organization for Standardization), utilize o adaptador fornecido ⑤ para fazer a ligação respectiva. Ligue primeiro a antena do automóvel ao adaptador fornecido e depois à ficha tipo jack de antena do sistema principal.
*2 *Cabo de terminais RCA (não fornecido)*



WARNING
Auxiliary power connectors may vary depending on the car. Be sure to check the power connection diagram sheet supplied with the unit. Improper connections may damage your car. If the supplied power connecting cord can not be used with your car, consult your nearest Sony dealer.

ADVERTENCIA
Los conectores de alimentación auxiliar pueden variar en función del automóvil. Asegúrese de consultar el diagrama de conexión de alimentación suministrado con la unidad. Las conexiones incorrectas pueden dañar el automóvil. Si no es posible utilizar con el automóvil el cable de conexión de alimentación suministrado, póngase en contacto con el proveedor Sony más próximo.

VARNING
Typen av yttre strömanslutning varierar från bil till bil. Kontrollera strömanslutningsschemat som medföljer enheten så att du ansluter på rätt sätt. Felaktig anslutning kan skada bilen. Kontakta närmaste Sony-återförsäljare om den medföljande strömkabeln inte passar till din bil.

ATENÇÃO
Os conectores de corrente auxiliares podem variar de carro para carro. Não se esqueça de verificar o diagrama de ligação de corrente fornecido com o aparelho. As ligações mal executadas podem danificar o seu carro. Se não puder utilizar o cabo de alimentação fornecido no seu carro, contacte o agente Sony da sua zona.

1	Purple Púrpura Violett Violeta	+	Speaker, Rear, Right Altavoz, parte posterior, derecho Högtalare, bakre, höger Altifalante, Parte de trás, Direito	5	White Blanco Vit Branco	+	Speaker, Front, Left Altavoz, parte frontal, izquierdo Högtalare, främre, vänster Altifalante, Parte da frente, Esquerdo
2		–	Speaker, Rear, Right Altavoz, parte posterior, derecho Högtalare, bakre, höger Altifalante, Parte de trás, Direito	6		–	Speaker, Front, Left Altavoz, parte frontal, izquierdo Högtalare, främre, vänster Altifalante, Parte da frente, Esquerdo
3	Grey Gris Grå Cinza	+	Speaker, Front, Right Altavoz, parte frontal, derecho Högtalare, främre, höger Altifalante, Parte da frente, Direito	7	Green Verde Grön Verde	+	Speaker, Rear, Left Altavoz, parte posterior, izquierdo Högtalare, bakre, vänster Altifalante, Parte de trás, Esquerdo
4		–	Speaker, Front, Right Altavoz, parte frontal, derecho Högtalare, främre, höger Altifalante, Parte da frente, Direito	8		–	Speaker, Rear, Left Altavoz, parte posterior, izquierdo Högtalare, bakre, vänster Altifalante, Parte de trás, Esquerdo

Negative polarity positions 2, 4, 6, and 8 have striped cords.
Las posiciones de polaridad negativa 2, 4, 6 y 8 tienen cables con raya.
De negativa polpositionerna 2, 4, 6 och 8 har randiga kablar.
As posições 2, 4, 6 e 8 (polaridade negativa) têm cabos às riscas.

4	Yellow Amarillo Gul Amarelo	continuous power supply suministro de alimentación continua kontinuerlig strömförsörjning alimentação de corrente continua		7	Red Rojo Röd Vermelho	switched power supply suministro conmutado de alimentación switchad strömförsörjning alimentação de corrente comutada	
5	Blue Azul Blå Azul	power aerial control control de antena motorizada motorantenn antena eléctrica		8	Black Negro Svart Preto	earth toma de tierra jord Terra	

Positions 1, 2, 3, and 6 do not have pins.
Las posiciones 1, 2, 3 y 6 no disponen de pines.
Positionerna 1, 2, 3 och 6 saknar stift.
As posições 1, 2, 3 e 6 não têm pinos.

Connection diagram
Diagrama de conexiones
Kopplingsschema
Diagrama de ligações

Equipment used in illustrations (not supplied)
Equipo utilizado en las ilustraciones (no suministrado)
Utrustning som visas i illustrationer (medföljer inte)
Equipamento utilizado nas ilustrações (não fornecido)

Front speaker
Altavoz delantero
Främre högtalare
Altifalante dianteiro

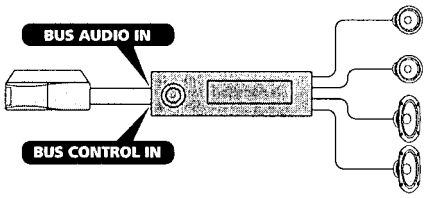
Rear speaker
Altavoz trasero
Bakre högtalare
Altifalantes traseiro

Power amplifier
Amplificador de potencia
Effektförstärkare
Amplificador de potência

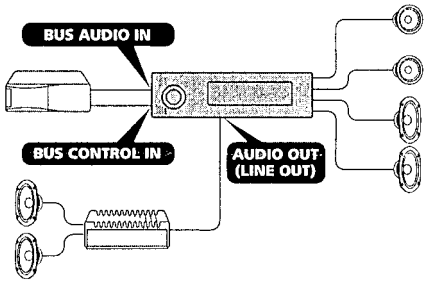
CD/MD changer
Cambiador de CD/MD
CD/MD-skivväxlare
Permutador CD/MD

For connecting two or more changers, the source selector XA-C30 (optional) is necessary.
Si desea conectar dos o más cambiadores, necesitará el selector de fuente XA-C30 (opcional).
För anslutning av två eller flera växlare krävs väljaren XA-C30 (tillval).
Para ligar um ou mais permutadores, é necessário o selector de fonte XA-C30 (opcional).

A



B



Notes
- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

Notas
- *Asegúrese de conectar primero el cable de puesta a masa antes de realizar la conexión al amplificador.*
- *Si conecta un amplificador de potencia opcional y no utiliza el incorporado, los pitidos se desactivarán.*

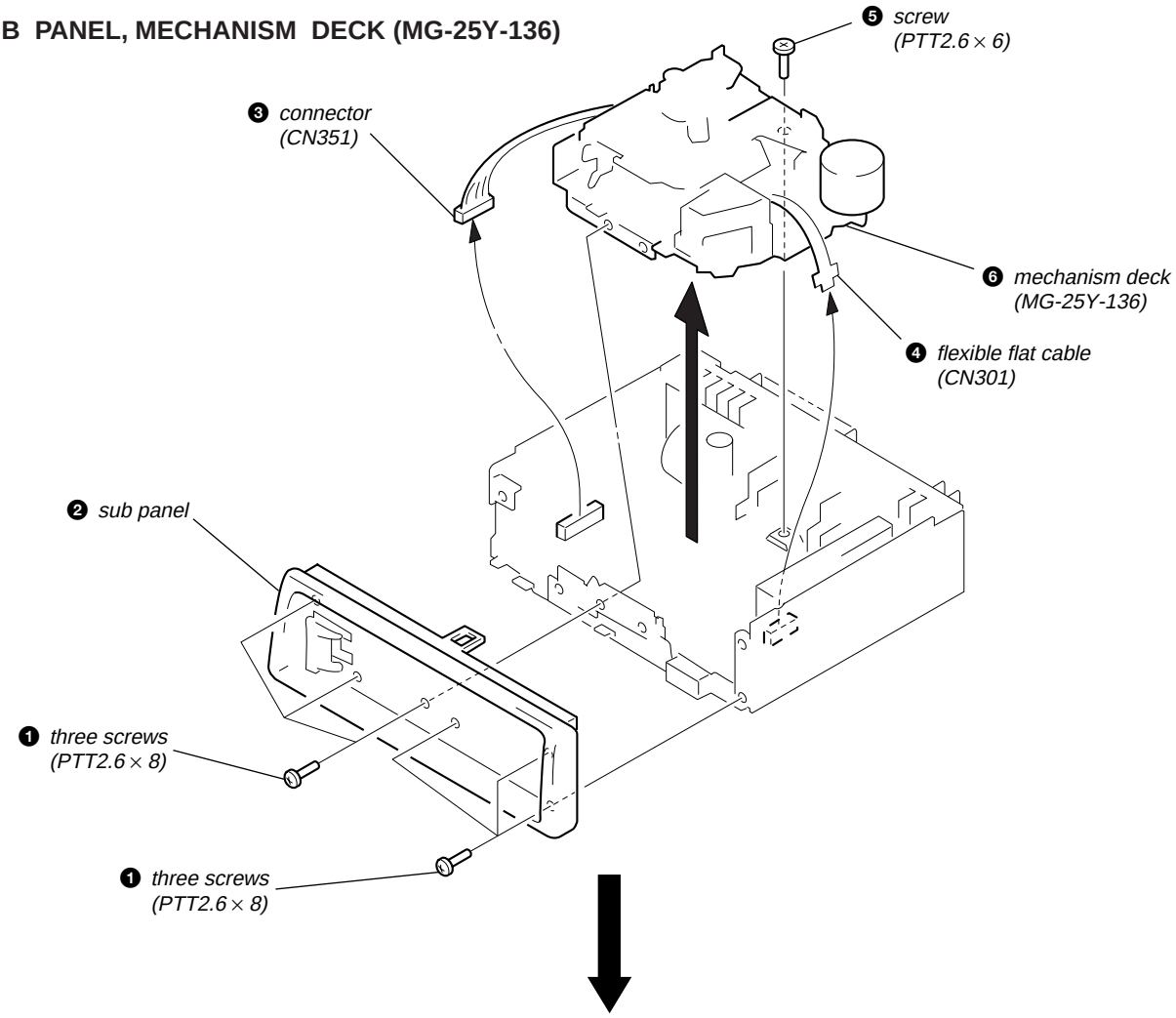
Observera
- *Var noga med att först ansluta jorden, innan du ansluter förstärkaren.*
- *Om du väljer att använda en annan förstärkare i stället för den inbyggda, kommer ljudsignalen att avaktiveras.*

Notas
- *Antes de fazer a ligação ao amplificador tem de ligar primeiro o cabo de ligação à massa.*
- *Se ligar um amplificador de potência opcional e não utilizar o amplificador integrado, desactiva o sinal sonoro.*

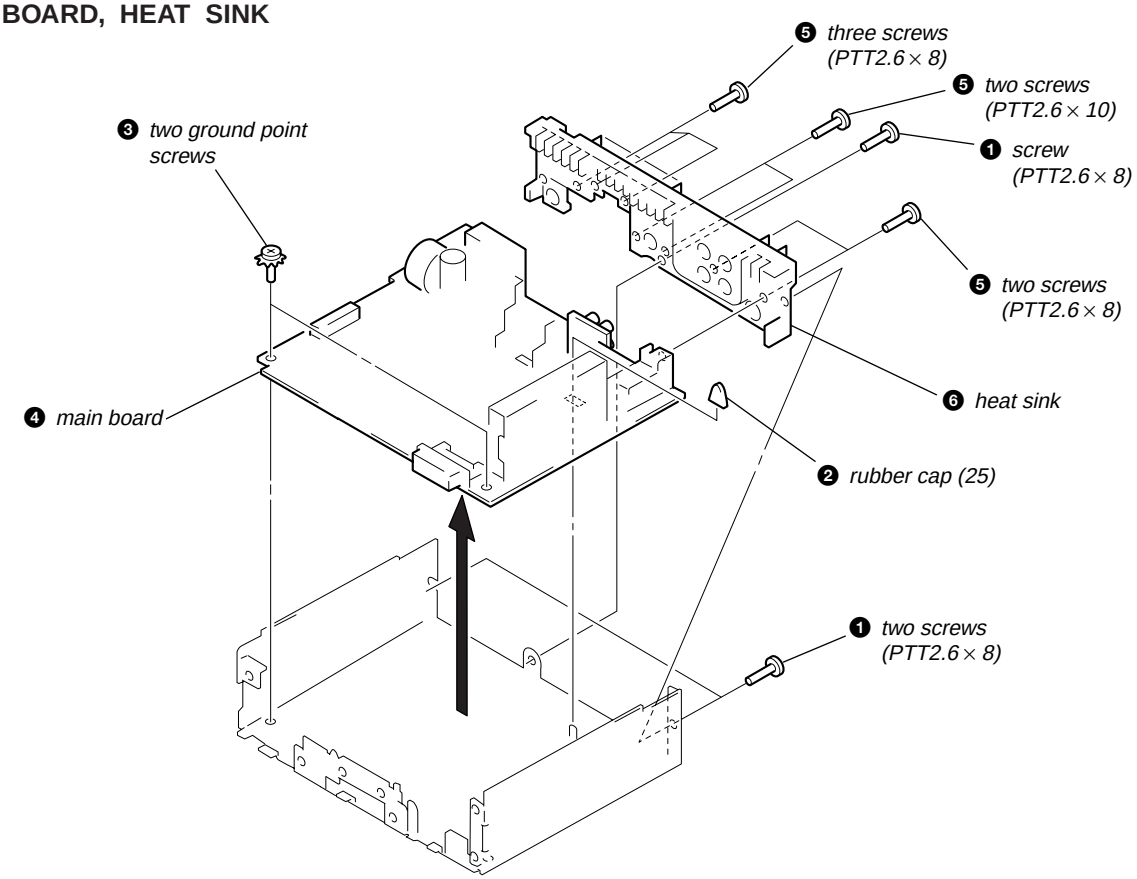
SECTION 2
DISASSEMBLY

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

SUB PANEL, MECHANISM DECK (MG-25Y-136)



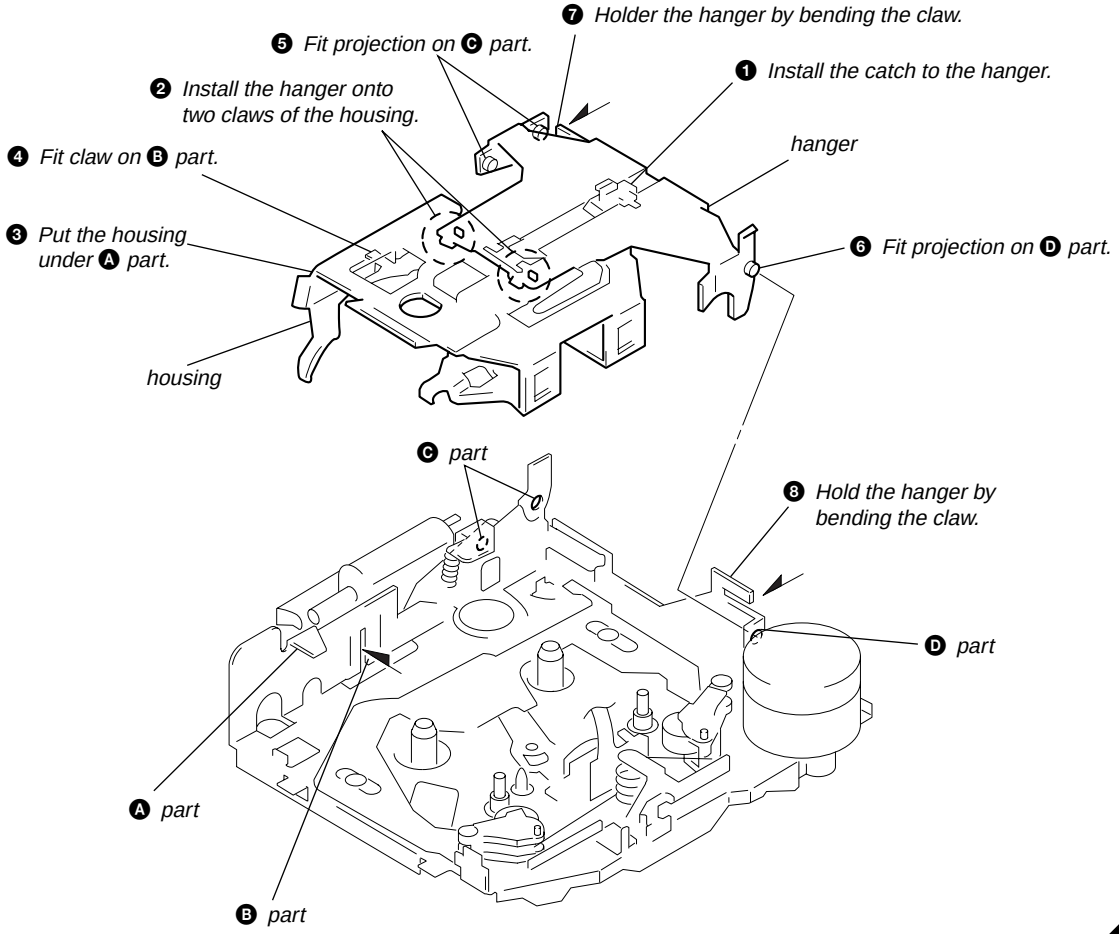
MAIN BOARD, HEAT SINK



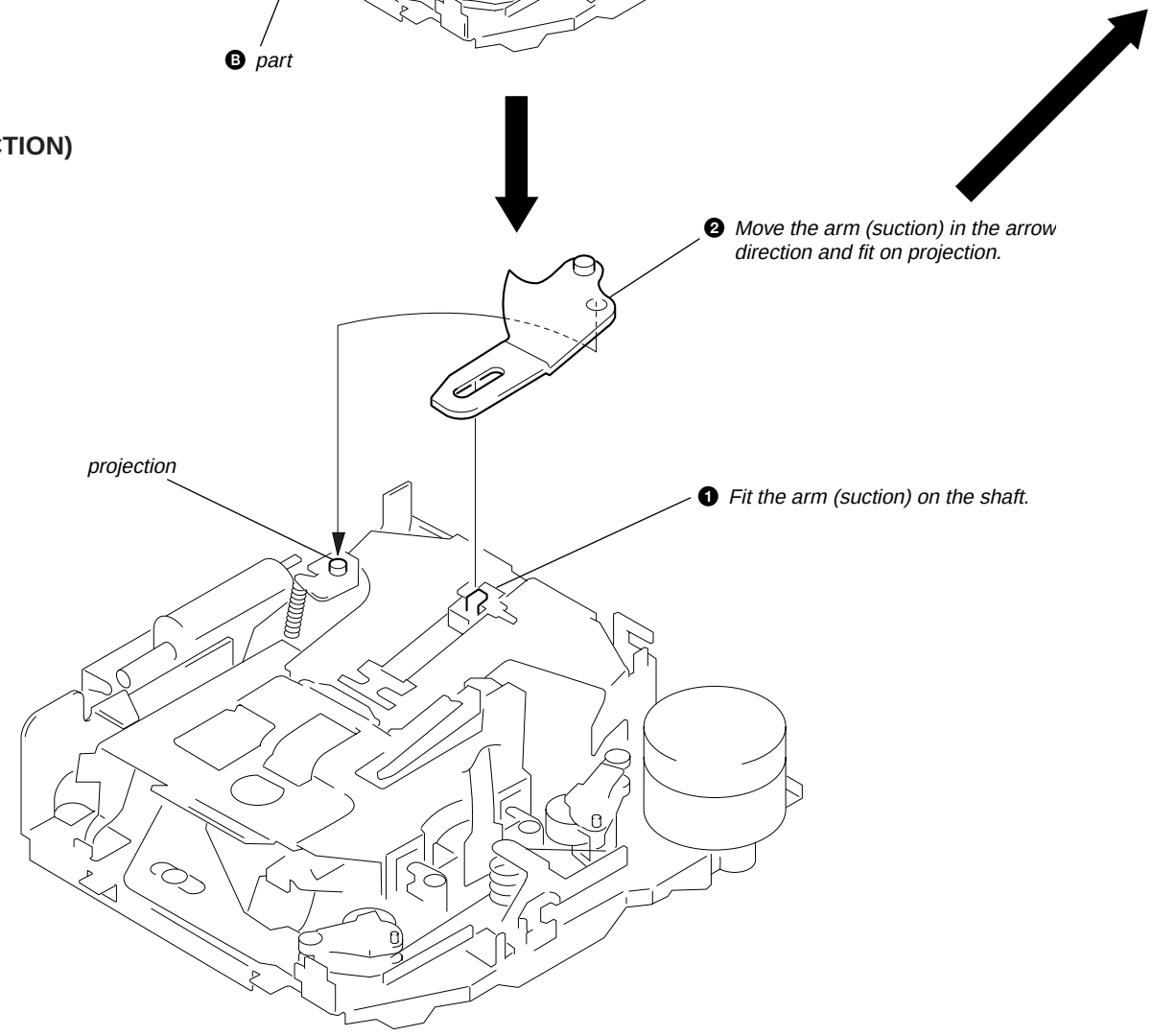
SECTION 3
ASSEMBLY OF MECHANISM DECK

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

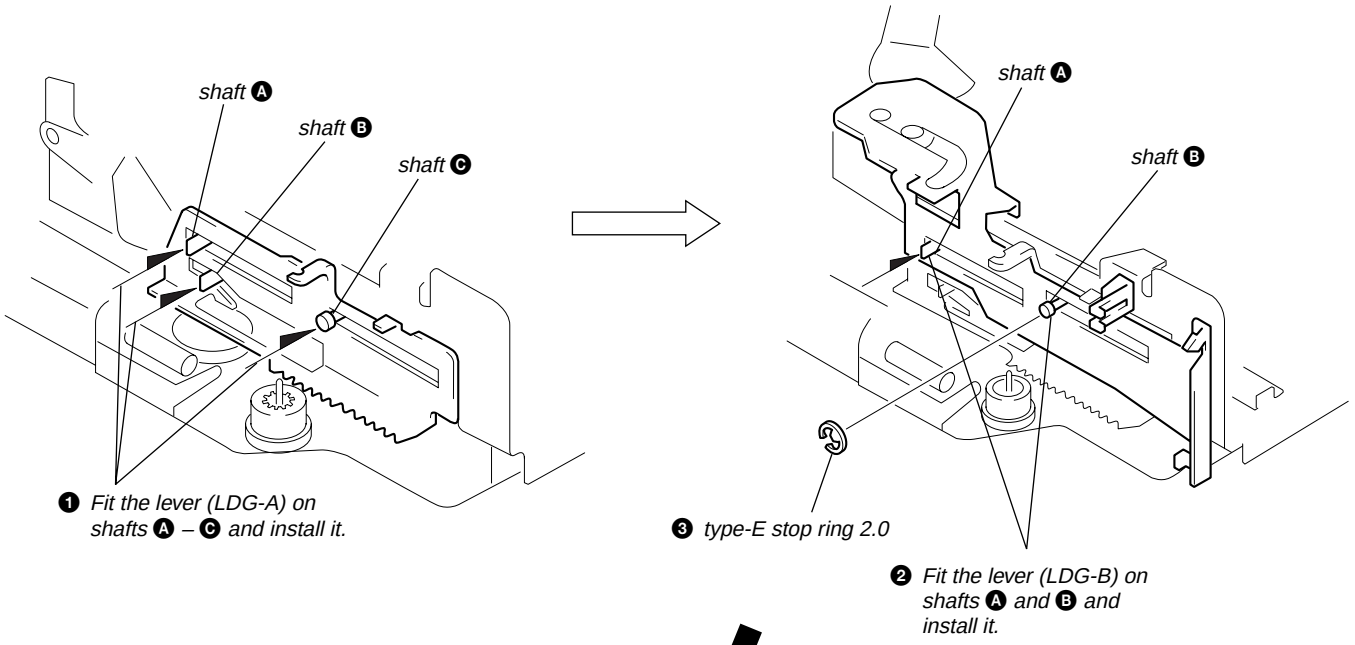
HOUSING



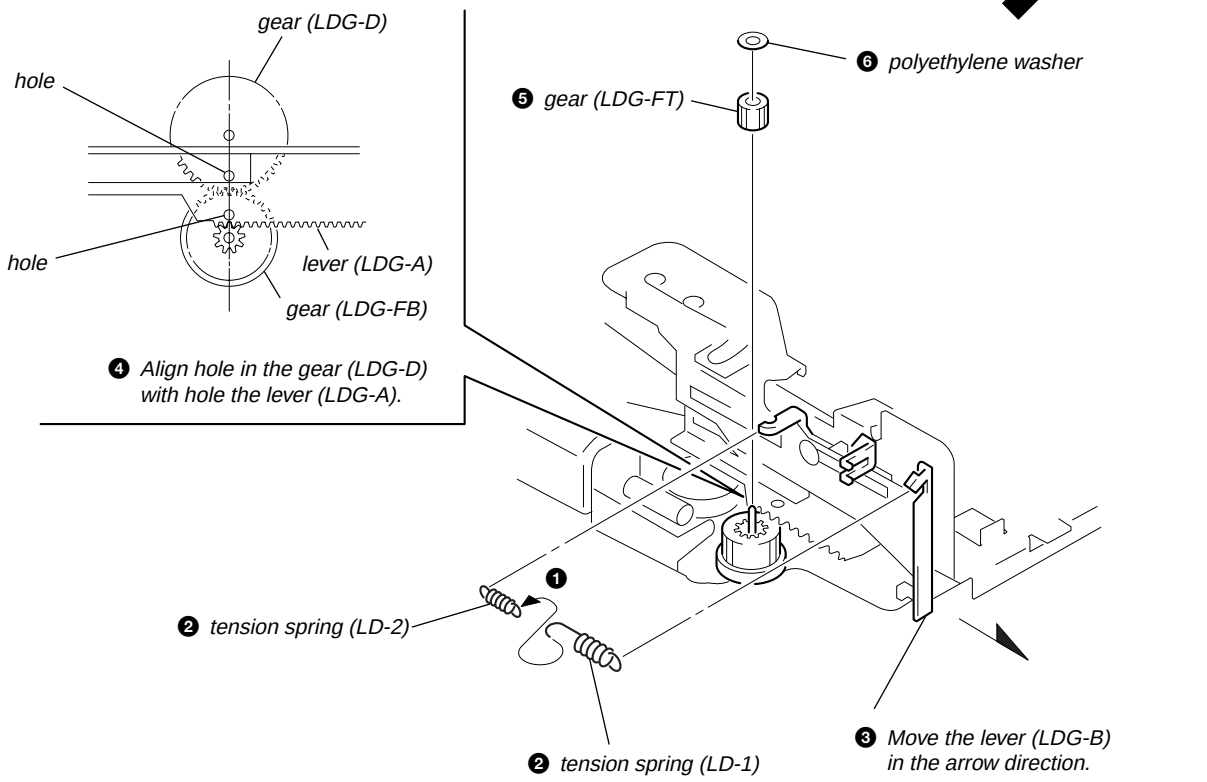
ARM (SUCTION)



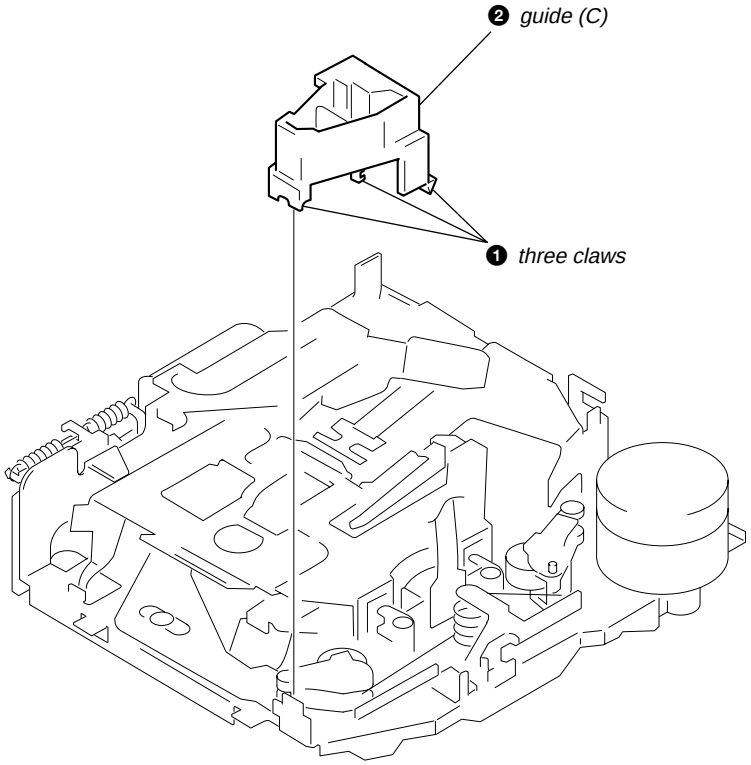
LEVER (LDG-A)/(LDG-B)



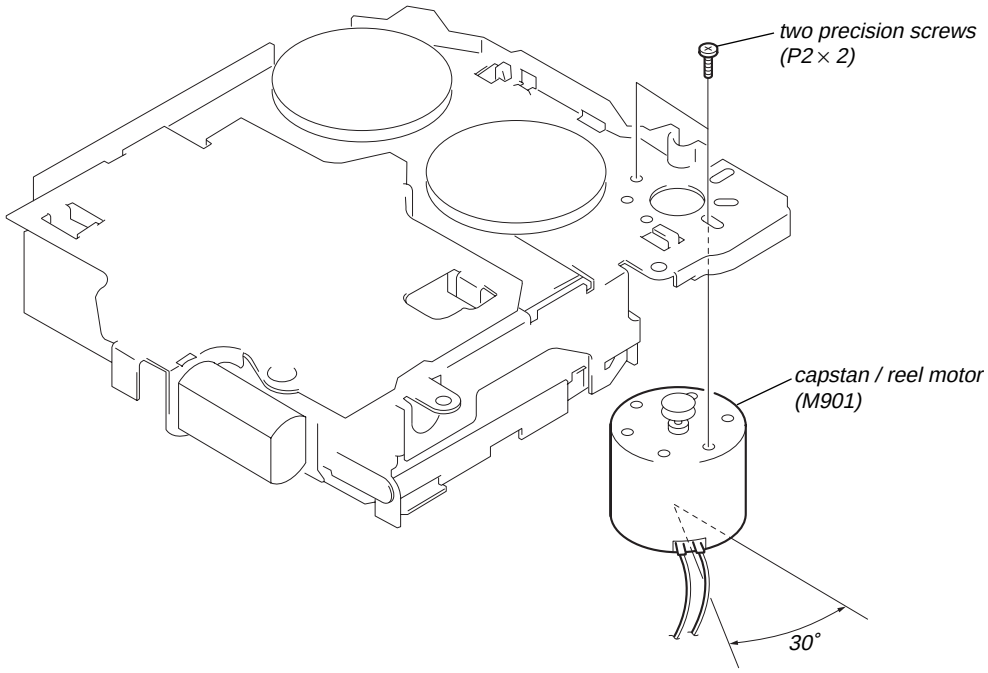
GEAR (LDG-FT)



GUIDE (C)



MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idlers
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 – 4.5 g•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 – 4.5 g•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.

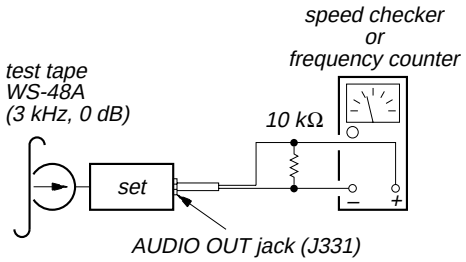
<Set the Test Mode>
1. Set the "power select" switch (S501) is "A (ON)" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
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 (S501) to initially set position.

See the adjustment location from on page 16 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 16.

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.

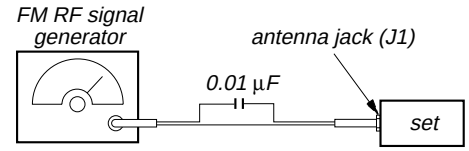
1. FM Auto Scan/Stop Level Adjustment
2. FM Stereo Separation Adjustment
3. AM (MW) Auto Scan/Stop Level Adjustment

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button: FM

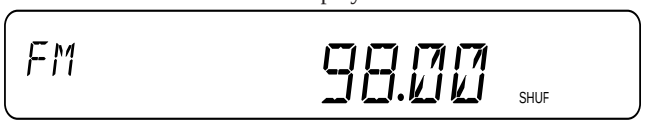
Procedure:



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

1. Set to the test mode. (See page 13)
2. Push the SOURCE button and set to FM.

Display



3. Adjust with the volume RV2 on TU1 so that the “FM” indication turns to “FM0” indication on the display window.
   But, in case of already indicated “FM0”, turn the RV2 so that put out light “0” indication and adjustment.

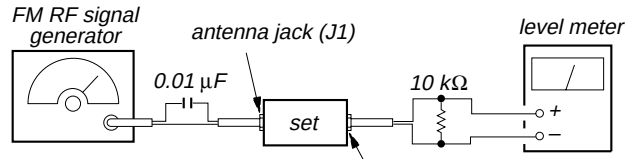
Display

Adjustment Location: See page 16.

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 (26.7%)
sub: 1 kHz, 20 kHz deviation (26.7%)
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 30 dB

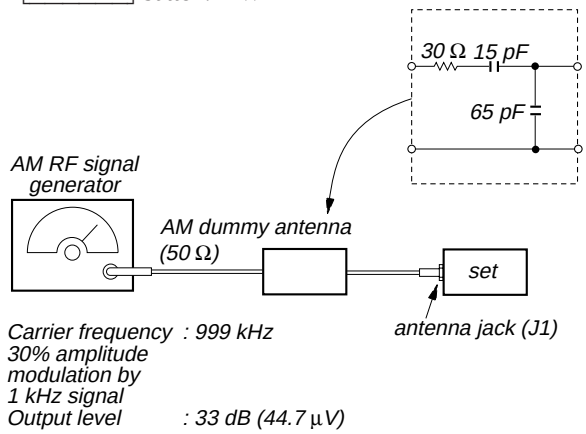
Adjustment Location: See page 16.

AM (MW) Auto Scan/Stop Level Adjustment

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

Setting:

SOURCE button: MW



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

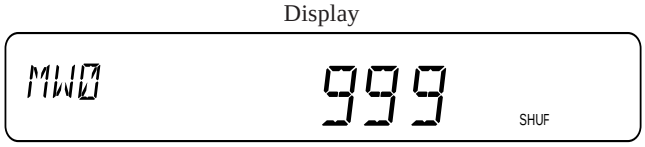
Procedure:

1. Set to the test mode. (See page 13)
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 “MW0” indication on the display window. But, in case of already indicated “MW0”, turn the RV1 so that put out light “0” indication and adjustment.

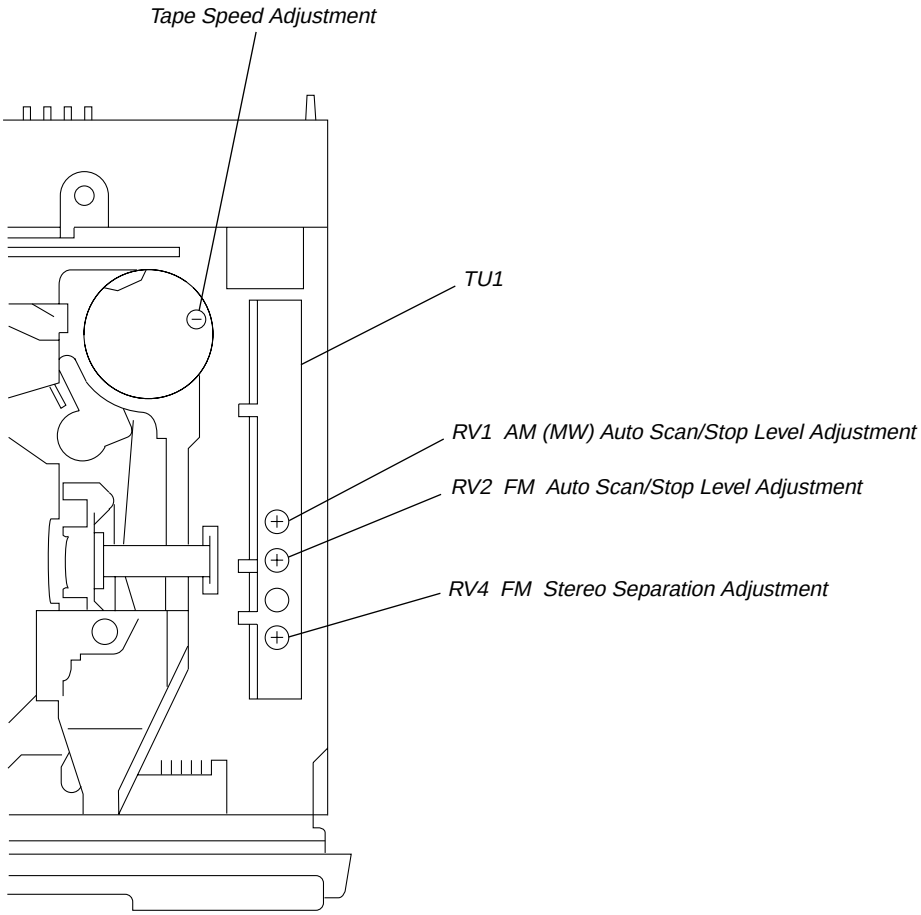
Display



Adjustment Location: See page 16.

Adjustment Location:

– SET UPPER VIEW –



SECTION 6
DIAGRAMS

6-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- ⚬——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

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

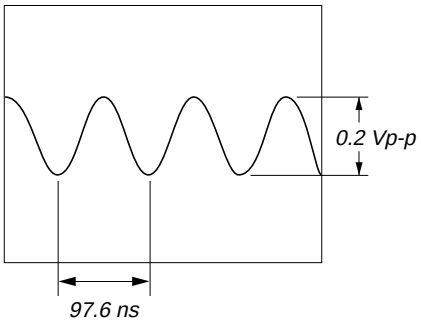
Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- 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
  ∗ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW (LW)
  Σ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN

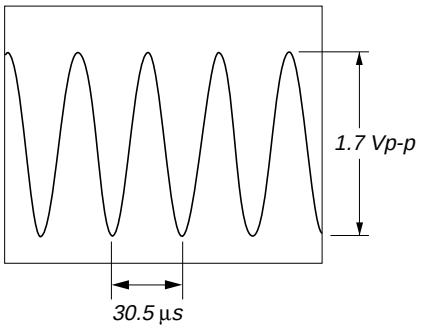
• **Waveforms**

– MAIN Board –

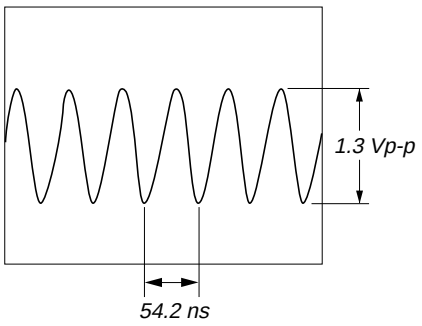
❶ IC21 ① (XT OUT)



❷ IC501 ⑮ (XT IN)

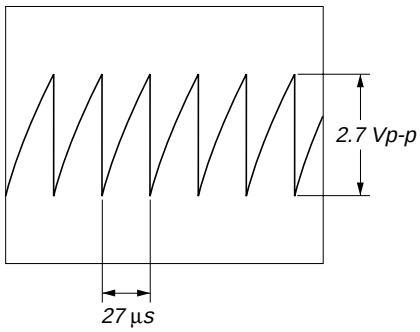


❸ IC501 ⑬ (OSC IN)

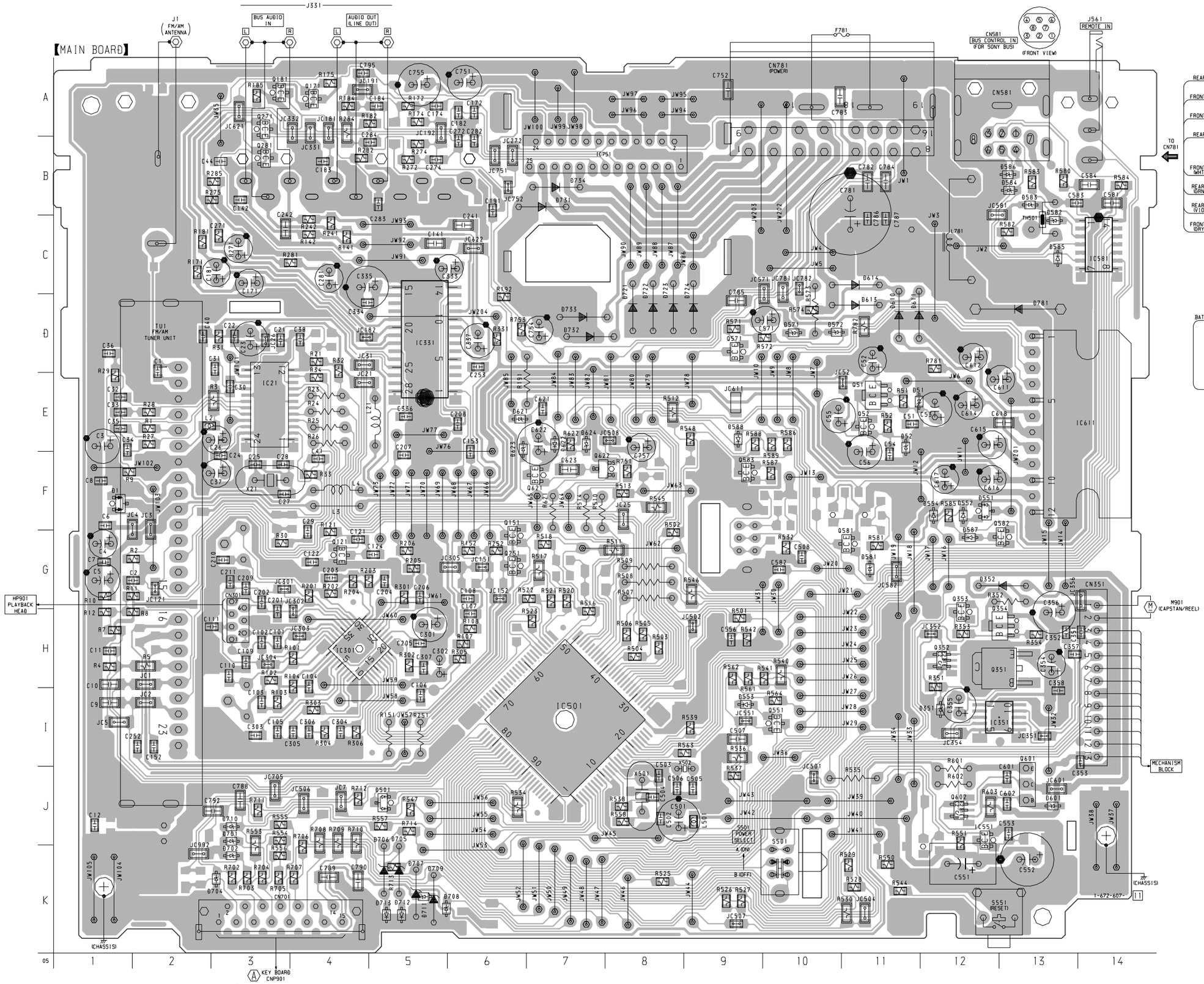


– KEY Board –

❶ IC901 ⑥⓪ OSC



6-2. PRINTED WIRING BOARD – MAIN Board –

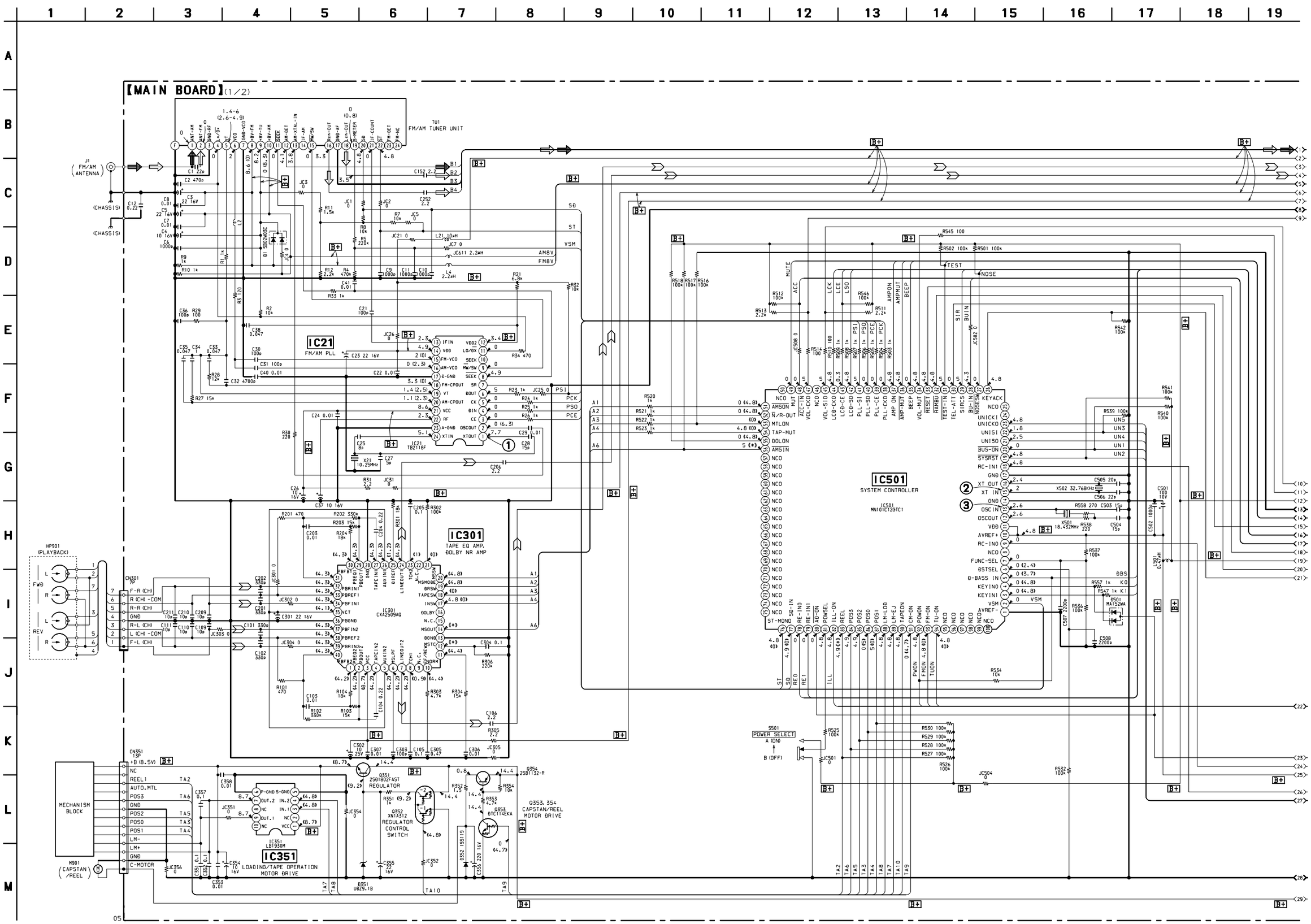


- **Semiconductor Location**

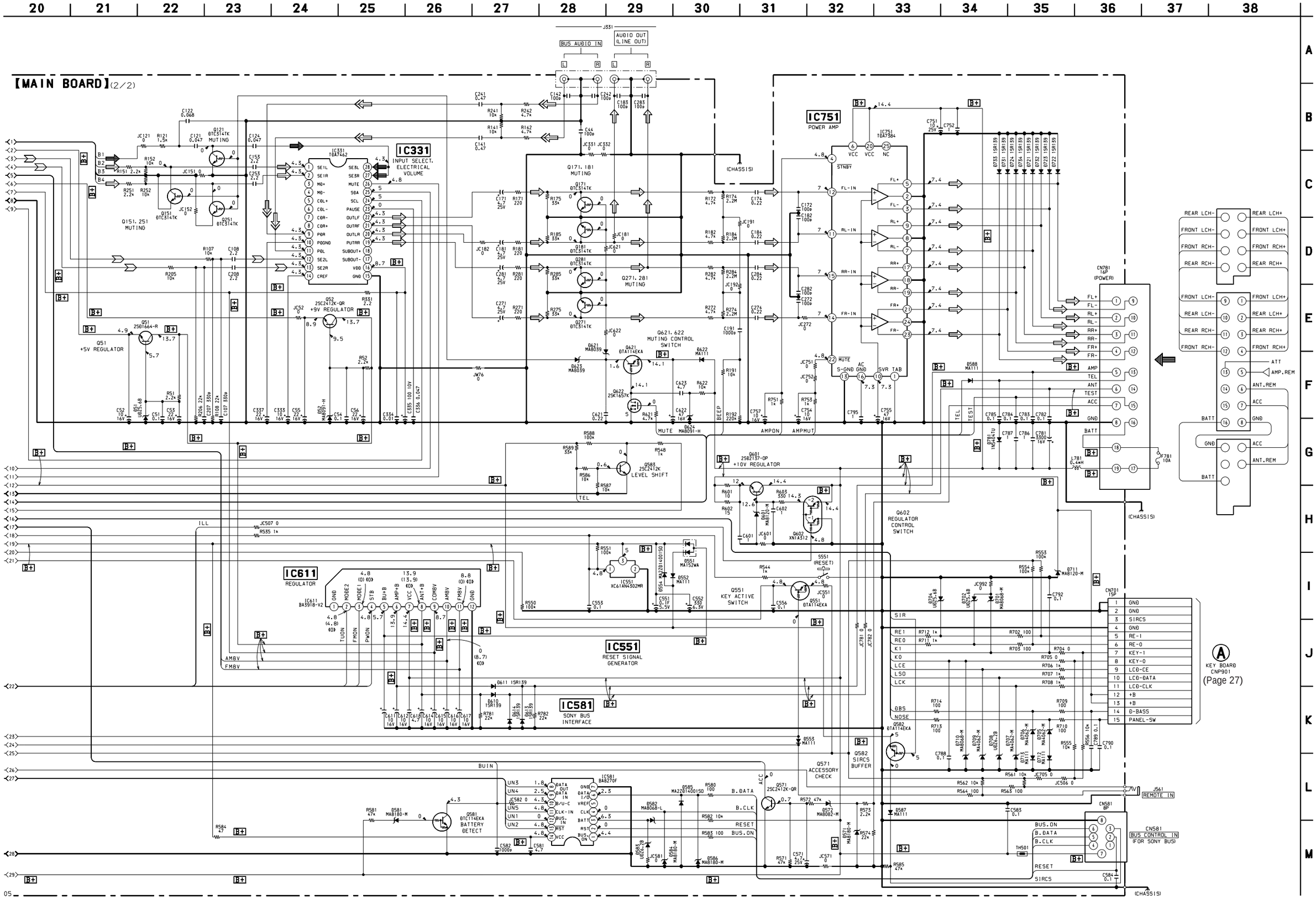
Ref. No.	Location	Ref. No.	Location
D1	F-1	D722	D-8
D51	E-11	D723	D-8
D52	E-11	D724	D-9
D351	I-12	D731	B-7
D352	G-13	D732	D-7
D501	J-5	D733	D-7
D551	F-12	D734	B-7
D552	F-12	D781	D-13
D553	I-9		
D554	F-12	IC21	E-3
D571	D-10	IC301	H-4
D572	D-10	IC331	D-5
D581	G-11	IC351	I-12
D582	C-13	IC501	I-7
D583	B-13	IC551	J-12
D584	B-13	IC581	C-14
D585	C-13	IC611	E-13
D586	B-13	IC751	B-8
D587	G-12		
D588	E-9	Q51	E-11
D601	J-13	Q52	E-11
D610	D-11	Q121	G-4
D611	D-11	Q151	G-6
D613	D-11	Q171	A-4
D614	C-11	Q181	A-3
D621	E-6	Q251	G-6
D622	E-7	Q271	A-3
D623	E-6	Q281	B-3
D624	E-7	Q351	H-12
D701	J-3	Q352	H-12
D702	K-3	Q353	H-12
D704	K-3	Q354	H-13
D705	K-5	Q551	I-10
D706	K-5	Q571	D-9
D707	K-5	Q581	G-11
D708	K-5	Q582	G-13
D709	K-5	Q583	F-9
D710	J-3	Q601	J-13
D711	K-5	Q602	J-12
D712	K-5	Q621	F-7
D713	K-5	Q622	F-7
D721	D-8		

6-3. SCHEMATIC DIAGRAM – MAIN Board (1/2) –

• See page 18 for Waveforms. • See page 29 for IC Block Diagrams.



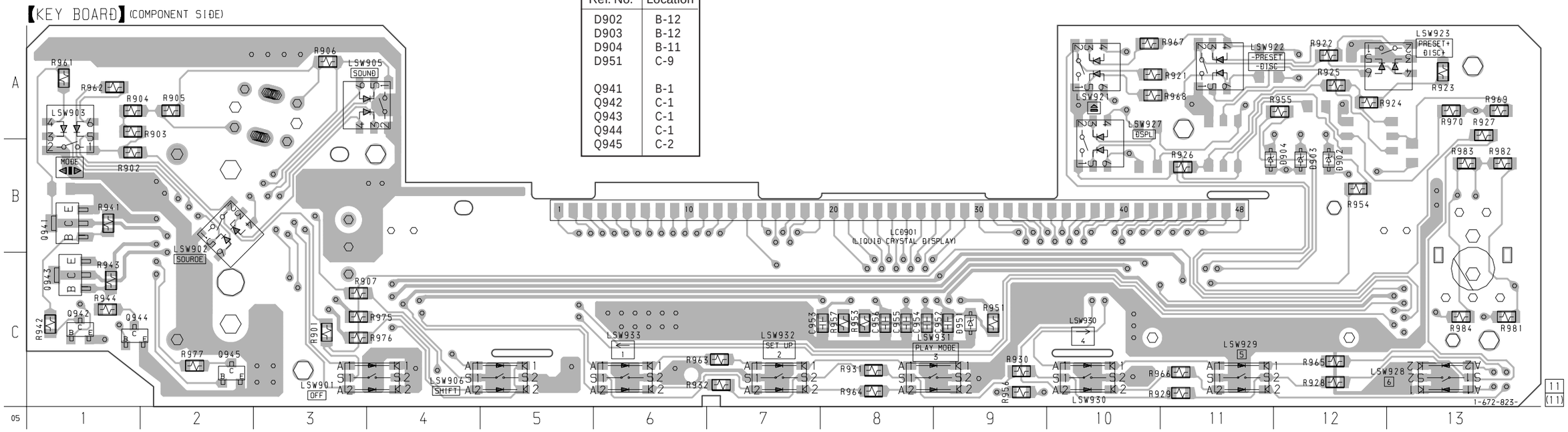
6-4. SCHEMATIC DIAGRAM – MAIN Board (2/2) – • See page 30 for IC Block Diagrams.

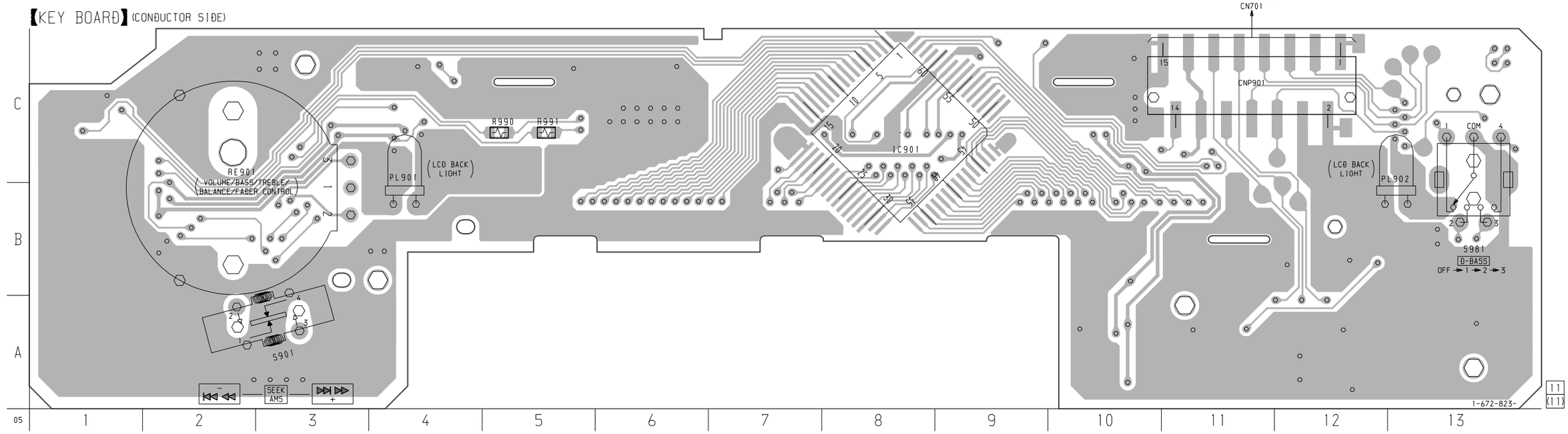


6-5. PRINTED WIRING BOARD – KEY Board –

- **Semiconductor Location (Component Side)**

Ref. No.	Location
D902	B-12
D903	B-12
D904	B-11
D951	C-9
Q941	B-1
Q942	C-1
Q943	C-1
Q944	C-1
Q945	C-2

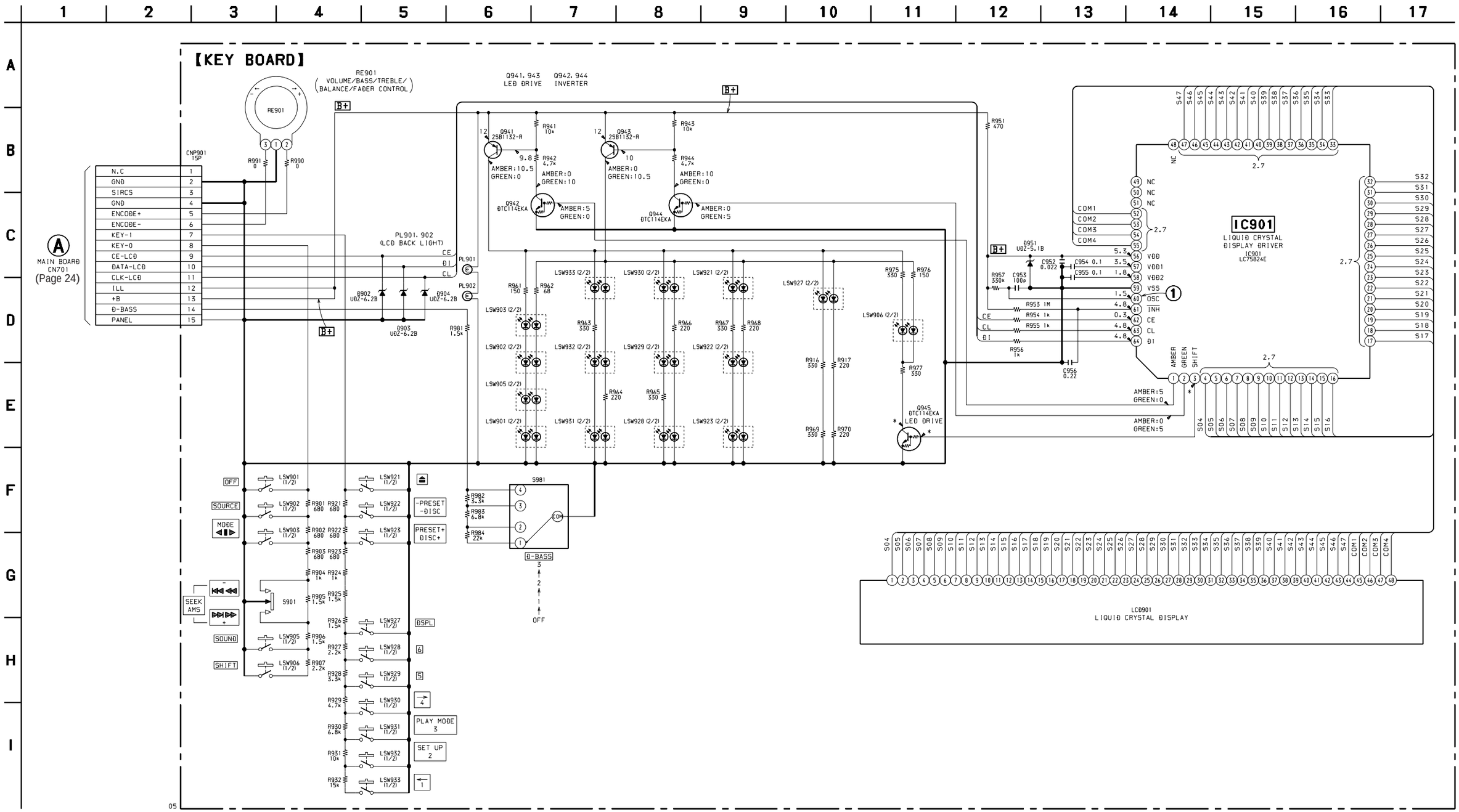




- **Semiconductor Location (Conductor Side)**

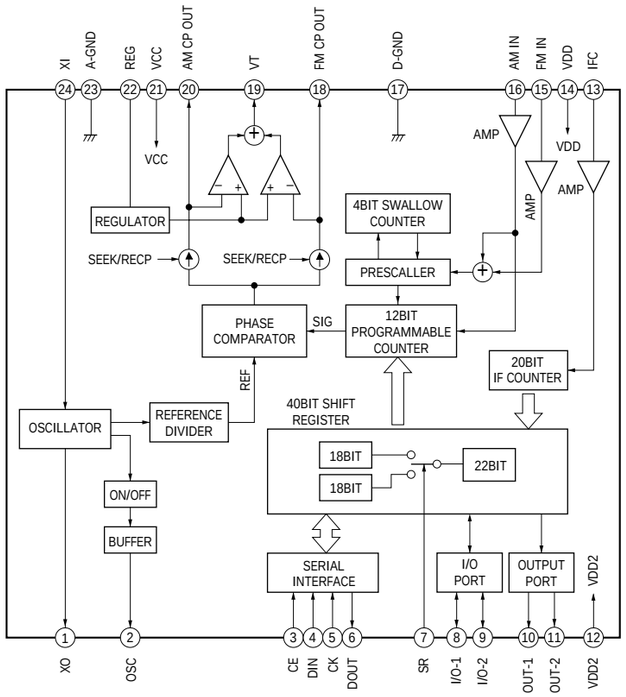
Ref. No.	Location
IC901	C-8

6-6. SCHEMATIC DIAGRAM – KEY Board – • See page 18 for Waveform.

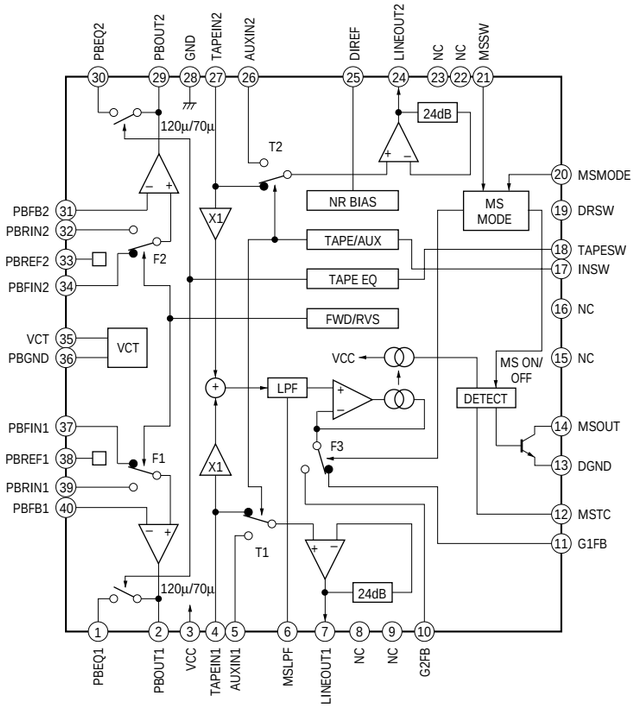


• **IC Block Diagrams**
– MAIN Board –

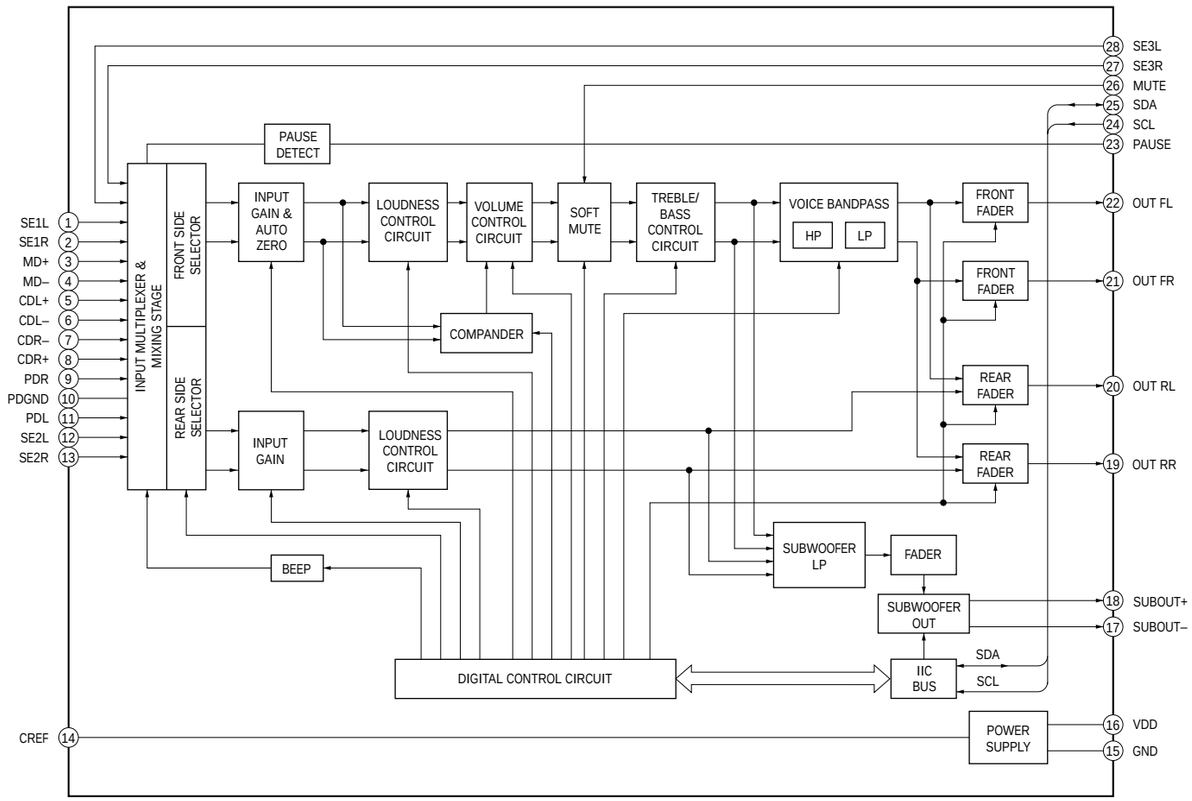
IC21 TB2118F-EL-S



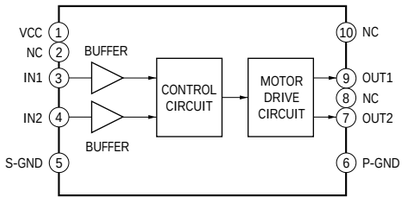
IC301 CXA2509AQ-T4



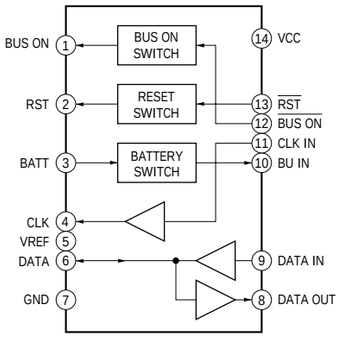
IC331 TDA7462D



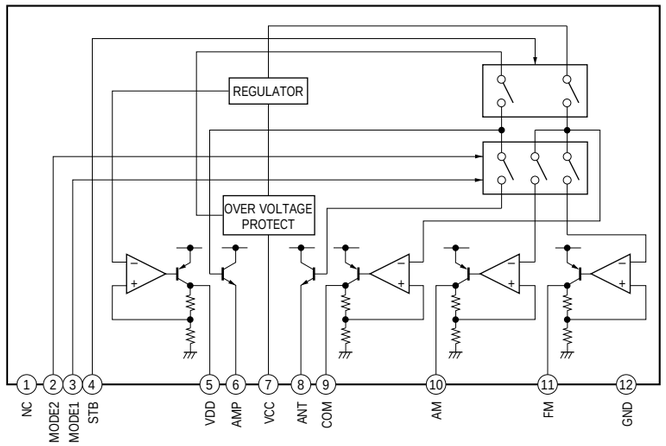
IC351 LB1930M-TLM



IC581 BA8270F-E2



IC611 BA3918-V2



6-7. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 MN101C12GTC1 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	AVREF–	I	Reference voltage (0V) input terminal (for A/D converter)
2	VSM	I	FM and AM signal meter voltage detection input from the FM/AM tuner unit (TU1) (A/D input)
3	KEYIN1	I	Key input terminal (A/D input) (LSW921 to LSW923, LSW927 to LSW933) ⏏, PRESET DISC –/+, DSPL, 6, 5, 4 →, 3 PLAY MODE, 2 SET UP, 1 ← keys input
4	KEYIN0	I	Key input terminal (A/D input) (LSW901 to LSW903, S901, LSW905, LSW906) OFF, SOURCE, MODE ◀II▶, SEEK/AMS I◀◀ ◀◀ – ▶▶I ▶▶ +, SOUND, SHIFT keys input
5	D-BASS IN	I	D-BASS switch (S981) input terminal (A/D input)
6	DSTSEL	I	Destination setting terminal (fixed at "L" in this set)
7	FUNC-SEL	I	Setting terminal for the function select (fixed at center voltage in this set)
8	NCO	O	Not used (open)
9	RC-IN0	I	Rotary remote commander key input terminal (A/D input)
10	AVREF+	I	Reference voltage (+5V) input terminal (for A/D converter)
11	VDD	—	Power supply terminal (+5V)
12	OSC OUT	O	Main system clock output terminal (18.432 MHz)
13	OSC IN	I	Main system clock input terminal (18.432 MHz)
14	GND	—	Ground terminal
15	XT IN	I	Sub system clock input terminal (32.768 kHz)
16	XT OUT	O	Sub system clock output terminal (32.768 kHz)
17	GND	—	Ground terminal
18	RC-IN1	I	Rotary remote commander shift key input terminal "L": shift
19	$\overline{\text{SYSRST}}$	O	Reset signal output to the SONY bus interface (IC581) "L": reset
20	$\overline{\text{BUS-ON}}$	O	Bus on/off control signal output to the SONY bus interface (IC581) "L": bus on
21	UNISO	O	Serial data output to the SONY bus interface (IC581)
22	UNISI	I	Serial data input from the SONY bus interface (IC581)
23	UNICKO	O	Serial data transfer clock signal output to the SONY bus interface (IC581)
24	UNICKI	I	Serial data reading clock signal input for the SONY bus interface Not used (open)
25	NCO	O	Not used (open)
26	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 "H"
27	$\overline{\text{NOSESW}}$	I	Front panel block remove/attach detection signal input terminal "L": front panel is attached
28	BU-IN	I	Battery detect signal input from the SONY bus interface (IC581) and battery detect circuit "L" is input at low voltage
29	SIRCS	I	Sircs remote control signal input terminal Not used (fixed at "L")
30	TEL-ATT	I	Telephone muting signal input terminal At input of "H", the signal is attenuated by –20 dB
31	$\overline{\text{TEST-IN}}$	I	Setting terminal for the test mode "L": test mode, Normally: fixed at "H"
32	$\overline{\text{RAMBU}}$	I	Internal RAM reset detection signal input terminal Input terminal to check that RAM data are not destroyed due to low voltage This checking is made within 100 msec after reset Fixed at "L" in this set
33	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC551) and reset switch (S551) "L": reset "L" is input for several 100 msec after power on, then it changes to "H"
34	VOL-MUT	O	Muting control signal output to the electrical volume (IC331) Volume minimum: "∞" output ("H" active)
35	BEEP	O	Beep sound drive signal output terminal
36	$\overline{\text{AMP-MUT}}$	O	Muting on/off control signal output to the power amplifier (IC751) "L": muting on

Pin No.	Pin Name	I/O	Function
37	AMP ON	O	Standby on/off control signal output to the power amplifier (IC751) "L": standby mode, "H": amp on
38	PLL-CKO	O	PLL serial data transfer clock signal output to the FM/AM PLL (IC21)
39	PLL-CE	O	PLL chip enable signal output to the FM/AM PLL (IC21) "H" active
40	PLL-SO	O	PLL serial data output to the FM/AM PLL (IC21)
41	PLL-SI	I	PLL serial data input from the FM/AM PLL (IC21)
42	LCD-SO	O	Serial data output to the liquid crystal display driver (IC901)
43	LCD-CE	O	Chip enable signal output to the liquid crystal display driver (IC901) "H" active
44	LCD-CKO	O	Serial data transfer clock signal output to the liquid crystal display driver (IC901)
45	VOL-SIO	I/O	Two-way data bus with the electrical volume (IC331)
46	NCO	O	Not used (open)
47	VOL-CKO	O	Bus clock signal output to the electrical volume (IC331)
48	$\overline{\text{ACC-IN}}$	I	Accessory detect signal input terminal "L": accessory on
49	MUT	O	Audio line muting on/off control signal output terminal "H": muting on
50	NCO	O	Not used (open)
51	$\overline{\text{AMSON}}$	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 mode
52	$\overline{\text{N}}$/R-OUT	O	Forward/reverse direction control signal output to the CXA2509AQ (IC301) "L": forward direction, "H": reverse direction
53	MTLON	I/O	METAL control in/out terminal At initial mode: valid/invalid selection input of METAL function (valid at "L" input) At normal mode: METAL on/off control signal output to the CXA2509AQ (IC301) (METAL on at "H" output)
54	TAPE-MUT	O	Tape muting on/off control signal output to the CXA2509AQ (IC301) "H": muting on Active at ATA, FF/REW mode
55	DOLON	I/O	Dolby control in/out terminal At initial mode: valid/invalid selection input of dolby function (valid at "L" input) At normal mode: dolby on/off control signal output terminal (dolby on at "H" output) Not used this function (fixed at "H")
56	$\overline{\text{AMSIN}}$	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
57 to 75	NCO	O	Not used (open)
76	ST-MONO	I/O	FM stereo broadcasting detection signal input from the FM/AM tuner unit (TU1), or forced monaural control signal output to the FM/AM tuner unit (TU1) "L" is input in the FM stereo mode, or "L" is output in the forced monaural mode
77	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"
78	RE-IN0	I	Dial pulse input of the rotary encoder (RE900) (for VOLUME/BASS/TREBLE/BALANCE/FADER control)
79	RE-IN1	I	
80	$\overline{\text{AD-ON}}$	O	A/D converter power control signal output terminal When the KEYACK (pin ㉖) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input
81	POWSEL	I	Power select switch (S501) input terminal "L": off (halt mode), "H": on (operation mode)
82	ILL-ON	O	Power on/off control signal output of the illumination LED and liquid crystal display driver (IC901) "H": power on Depends on initial setting of power select switch (S501) Power select switch (S501) on: "H" output at the accessory on Power select switch (S501) off: "H" output at the power on
83	REEL	I	Rotation detect signal input from supply reel sensor and take-up reel sensor on the deck mechanism

Pin No.	Pin Name	I/O	Function
84	POS3	I	Tape position (EJECT/FF/REW/ REV/FWD mode) detect input from the tape operation switch on the deck mechanism POS3: "L": REV and EJECT mode, "H": others mode POS2: "L": REW mode, "H": others mode POS0: "L": EJECT mode, "H": others mode POS1: "L": FF and FWD mode, "H": others mode
85	POS2	I	
86	POS0	I	
87	POS1	I	
88	LM-LOD	O	Motor drive signal output to the loading/tape operation motor drive (IC351) "H" active (For the loading direction and forward side operation) *1
89	LM-EJ	O	Motor drive signal output to the loading/tape operation motor drive (IC351) "H" active (For the eject direction and reverse side operation) *1
90	TAPEON	O	Tape system power supply on/off control signal output terminal "H": tape on
91	CM-ON	O	Capstan/reel motor (M901) drive signal output terminal "H": motor on
92	POWON	O	Main system power supply on/off control signal output to the BA3918 (IC611) "H": power on
93	FM-ON	O	FM system power supply on/off control signal output to the BA3918 (IC611) "L": AM power on, "H": FM power on
94	TU-ON	O	Tuner system power supply on/off control signal output to the BA3918 (IC611) "H": tuner power on
95 to 100	NCO	O	Not used (open)

*1 Loading/tape operation motor control

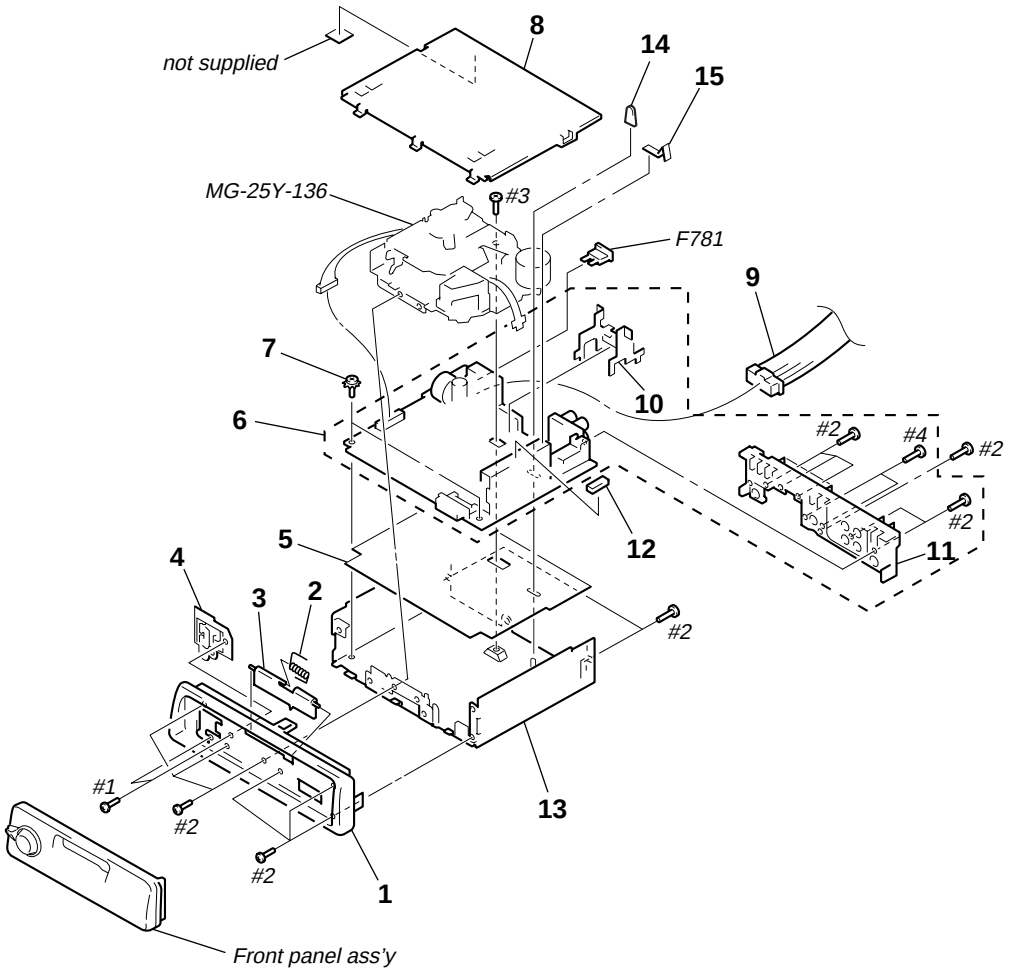
Terminal \ Mode	STOP	LOADING/ FORWARD	EJECT/ REVERSE	BRAKE
LM-LOD (pin ⑧⑧)	"L"	"H"	"L"	"H"
LM-EJ (pin ⑧⑨)	"L"	"L"	"H"	"H"

SECTION 7
EXPLODED VIEWS

NOTE:

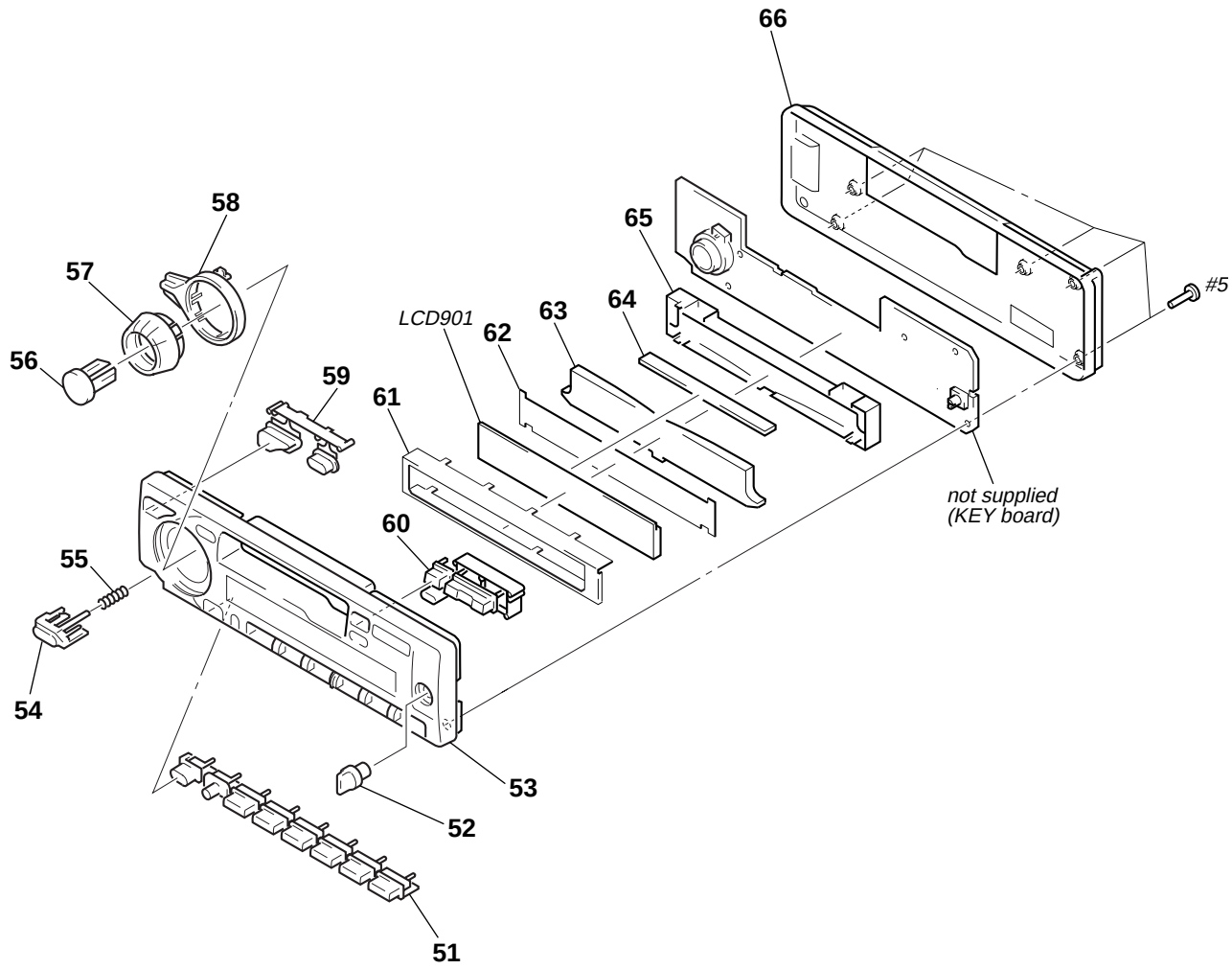
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. 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
1	3-030-828-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-027-437-41	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
* 5	3-033-846-01	INSULATED PLATE	
* 6	A-3317-388-A	MAIN BOARD, COMPLETE	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-270-1	COVER ASSY	
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
* 10	3-018-390-01	BRACKET (IC)	
* 11	3-031-023-11	HEAT SINK	
12	3-935-014-01	CUSHION (U)	
* 13	3-009-813-41	CHASSIS	
14	3-012-859-01	CAP (25), RUBBER	
15	3-937-650-01	PLATE (C), GROUND	
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

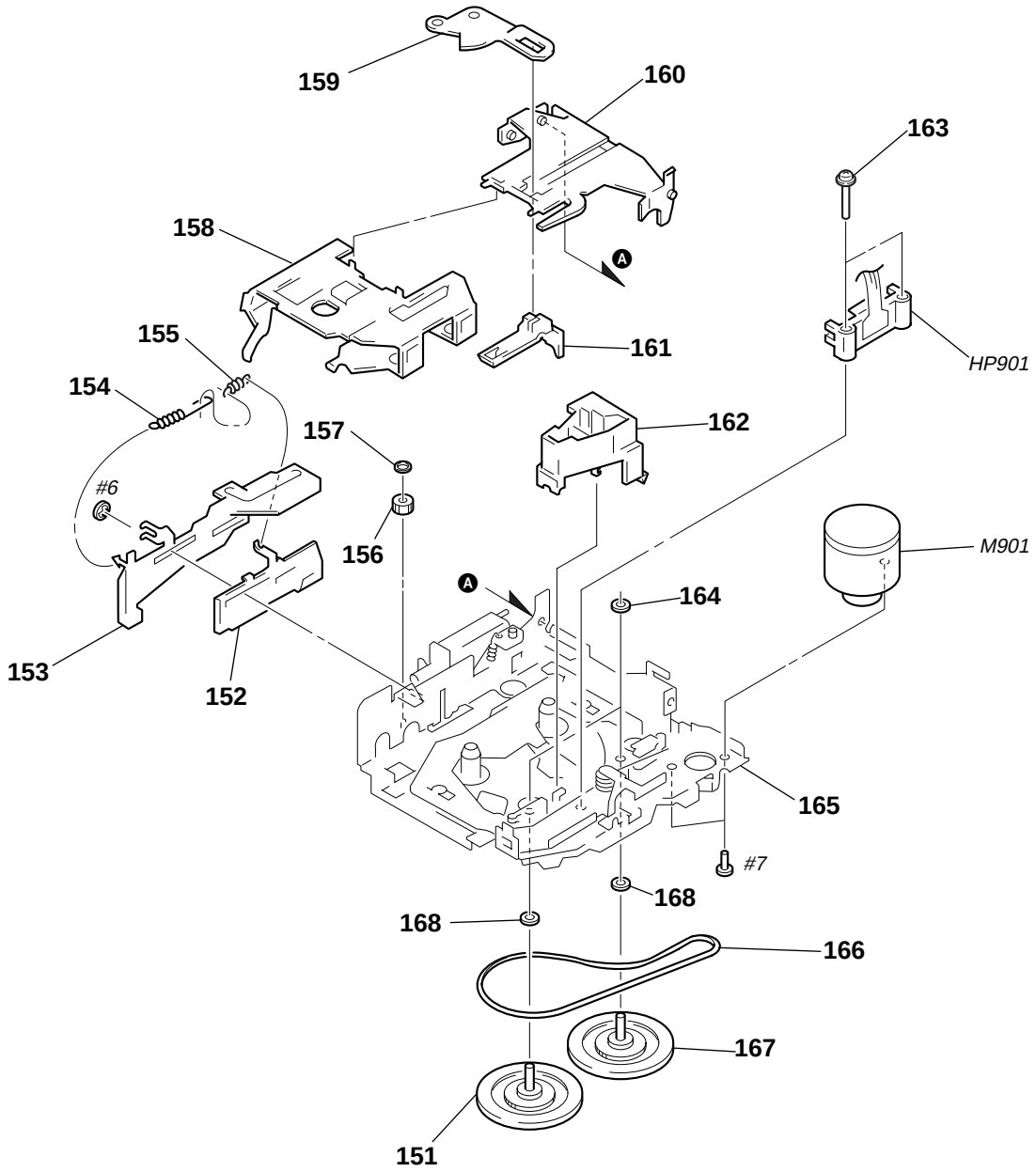
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-030-835-01	BUTTON (1-6) (OFF. SHIFT. 1. 2. 3. 4. 5. 6)	
52	3-030-837-01	BUTTON (D-BASS)	
53	X-3377-053-1	PANEL SUB ASSY	
54	3-030-838-01	BUTTON (RELEASE)	
55	3-932-475-01	SPRING (RELEASE)	
56	3-030-831-01	BUTTON (SOURCE)	
57	3-030-830-01	KNOB (VOL)	
58	3-030-832-01	LEVER (S/A) (+. –)	

Ref. No.	Part No.	Description	Remark
59	3-030-834-01	BUTTON (M/S) (MODE ◀I▶. SOUND)	
60	3-030-836-11	BUTTON (D/P/A) (⏏. – DISC +. DSPL)	
* 61	3-030-840-01	PLATE (B), GROUND	
* 62	3-030-839-01	SHEET (REFLECTOR)	
* 63	3-030-824-01	PLATE, LIGHT GUIDE	
64	1-694-508-11	CONDUCTIVE BOARD, CONNECTION	
* 65	3-030-825-01	HOLDER (LCD)	
66	3-030-827-01	PANEL, FRONT BACK	
LCD901	1-803-322-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) MECHANISM DECK SECTION (MG-25Y-136)



Ref. No.	Part No.	Description	Remark
151	X-3375-691-1	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	

Ref. No.	Part No.	Description	Remark
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3301-267-F	CHASSIS ASSY (G)	
166	3-017-302-01	BELT (25)	
167	3-936-853-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

SECTION 8
ELECTRICAL PARTS LIST

KEY

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

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

Ref. No.	Part No.	Description	Remark
		KEY BOARD	
		*********	
	1-694-508-11	CONDUCTIVE BOARD, CONNECTION	
*	3-030-824-01	PLATE, LIGHT GUIDE	
*	3-030-825-01	HOLDER (LCD)	
*	3-030-839-01	SHEET (REFLECTOR)	
*	3-030-840-01	PLATE (B), GROUND	
		< CAPACITOR >	
C952	1-163-033-00	CERAMIC CHIP 0.022uF	50V
C953	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C954	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C955	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C956	1-164-222-11	CERAMIC CHIP 0.22uF	25V
		< CONNECTOR >	
CNP901	1-785-775-11	PIN, CONNECTOR 15P	
		< DIODE >	
D902	8-719-105-99	DIODE RD6.2M-B1	
D903	8-719-105-99	DIODE RD6.2M-B1	
D904	8-719-105-99	DIODE RD6.2M-B1	
D951	8-719-976-99	DIODE DTZ5.1B	
		< IC >	
IC901	8-759-366-34	IC LC75824E	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-803-322-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
LSW901	1-771-610-11	SWITCH, TACTILE (WITH LED) (OFF)	
LSW902	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (SOURCE)	
LSW903	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (MODE ◄II►)	
LSW905	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (SOUND)	
LSW906	1-771-610-11	SWITCH, TACTILE (WITH LED) (SHIFT)	
LSW921	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (⏏)	
LSW922	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (– DISC, – PRESET)	
LSW923	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (+ DISC, + PRESET)	
LSW927	1-762-620-21	SWITCH, KEY BOARD (WITH LED) (DSPL)	
LSW928	1-771-610-11	SWITCH, TACTILE (WITH LED) (6)	
LSW929	1-771-610-11	SWITCH, TACTILE (WITH LED) (5)	
LSW930	1-771-610-11	SWITCH, TACTILE (WITH LED) (4, →)	
LSW931	1-771-610-11	SWITCH, TACTILE (WITH LED) (3, PLAY MODE)	
LSW932	1-771-610-11	SWITCH, TACTILE (WITH LED) (2, SET UP)	
LSW933	1-771-610-11	SWITCH, TACTILE (WITH LED) (1, ←)	
		< PILOT LAMP >	
PL901	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	
PL902	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	
		< TRANSISTOR >	
Q941	8-729-106-60	TRANSISTOR 2SB1115A	
Q942	8-729-900-53	TRANSISTOR DTC114EK	
Q943	8-729-106-60	TRANSISTOR 2SB1115A	
Q944	8-729-900-53	TRANSISTOR DTC114EK	
Q945	8-729-900-53	TRANSISTOR DTC114EK	
		< RESISTOR >	
R901	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R902	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R903	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R904	1-216-651-11	METAL CHIP 1K 0.5%	1/10W
R905	1-216-655-11	METAL CHIP 1.5K 0.5%	1/10W
R906	1-216-655-11	METAL CHIP 1.5K 0.5%	1/10W
R907	1-216-659-11	METAL CHIP 2.2K 0.5%	1/10W
R916	1-216-037-00	METAL CHIP 330 5%	1/10W
R917	1-216-033-00	METAL CHIP 220 5%	1/10W
R921	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R922	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R923	1-216-647-11	METAL CHIP 680 0.5%	1/10W
R924	1-216-651-11	METAL CHIP 1K 0.5%	1/10W
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
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
R929	1-216-667-11	METAL CHIP 4.7K 0.5%	1/10W
R930	1-216-671-11	METAL CHIP 6.8K 0.5%	1/10W
R931	1-208-806-11	RES, CHIP 10K 2%	1/10W
R932	1-208-810-11	RES, CHIP 15K 2%	1/10W
R941	1-216-073-00	METAL CHIP 10K 5%	1/10W
R942	1-216-065-00	RES, CHIP 4.7K 5%	1/10W
R943	1-216-073-00	METAL CHIP 10K 5%	1/10W
R944	1-216-065-00	RES, CHIP 4.7K 5%	1/10W

KEY **MAIN**

Ref. No.	Part No.	Description			Remark
R951	1-216-041-00	METAL CHIP	470	5%	1/10W
R953	1-216-121-00	RES, CHIP	1M	5%	1/10W
R954	1-216-049-11	RES, CHIP	1K	5%	1/10W
R955	1-216-049-11	RES, CHIP	1K	5%	1/10W
R956	1-216-049-11	RES, CHIP	1K	5%	1/10W
R957	1-216-109-00	METAL CHIP	330K	5%	1/10W
R961	1-216-029-00	METAL CHIP	150	5%	1/10W
R962	1-216-021-00	METAL CHIP	68	5%	1/10W
R963	1-216-037-00	METAL CHIP	330	5%	1/10W
R964	1-216-033-00	METAL CHIP	220	5%	1/10W
R965	1-216-037-00	METAL CHIP	330	5%	1/10W
R966	1-216-033-00	METAL CHIP	220	5%	1/10W
R967	1-216-037-00	METAL CHIP	330	5%	1/10W
R968	1-216-033-00	METAL CHIP	220	5%	1/10W
R969	1-216-037-00	METAL CHIP	330	5%	1/10W
R970	1-216-033-00	METAL CHIP	220	5%	1/10W
R975	1-216-037-00	METAL CHIP	330	5%	1/10W
R976	1-216-029-00	METAL CHIP	150	5%	1/10W
R977	1-216-037-00	METAL CHIP	330	5%	1/10W
R981	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R982	1-216-663-11	METAL CHIP	3.3K	0.5%	1/10W
R983	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W
R984	1-216-081-00	METAL CHIP	22K	5%	1/10W
R990	1-216-295-00	SHORT	0		
R991	1-216-295-00	SHORT	0		
		< ROTARY ENCODER >			
RE901	1-475-014-11	ENCODER, ROTARY (VOLUME/BASS/TREBLE/ BALANCE/FADER CONTROL)			
		< SWITCH >			
S901	1-771-290-11	SWITCH, SLIDE (SEEK AMS + ▶▶I ▶▶ , – I◀◀ ◀◀)			
S981	1-762-937-11	SWITCH, ROTARY (D-BASS)			
**********					
*	A-3317-388-A	MAIN BOARD, COMPLETE **********			
*	3-018-390-01	BRACKET (IC)			
*	3-031-023-11	HEAT SINK			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3	1-124-234-00	ELECT	22uF	20%	16V
C4	1-124-233-11	ELECT	10uF	20%	16V
C5	1-124-234-00	ELECT	22uF	20%	16V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C7	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C8	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C9	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C10	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C11	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C12	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C21	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C22	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V

Ref. No.	Part No.	Description			Remark
C23	1-124-234-00	ELECT	22uF	20%	16V
C24	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C25	1-163-091-00	CERAMIC CHIP	8PF		50V
C26	1-124-233-11	ELECT	10uF	20%	16V
C27	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C28	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C29	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C30	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C31	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C32	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C33	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C34	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C35	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C36	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C37	1-124-233-11	ELECT	10uF	20%	16V
C38	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C40	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C41	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C44	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C51	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C52	1-124-233-11	ELECT	10uF	20%	16V
C53	1-124-234-00	ELECT	22uF	20%	16V
C54	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C55	1-124-234-00	ELECT	22uF	20%	16V
C56	1-124-234-00	ELECT	22uF	20%	16V
C101	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C102	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C103	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C104	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C105	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C106	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C107	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C108	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C109	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C110	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C111	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C121	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C122	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C124	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C141	1-165-320-11	CERAMIC CHIP	0.47uF	10%	16V
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C152	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C153	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C171	1-126-163-11	ELECT	4.7uF	20%	50V
C172	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C174	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C181	1-126-163-11	ELECT	4.7uF	20%	50V
C182	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C183	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C184	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C191	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C201	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C202	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C203	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C204	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C205	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C206	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C207	1-163-263-11	CERAMIC CHIP	330PF	5%	50V

Ref. No.	Part No.	Description			Remark
C208	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C209	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C210	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C211	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C241	1-165-320-11	CERAMIC CHIP	0.47uF	10%	16V
C242	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C252	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C253	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C271	1-126-163-11	ELECT	4.7uF	20%	50V
C272	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C274	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C281	1-126-163-11	ELECT	4.7uF	20%	50V
C282	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C283	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C284	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C301	1-124-234-00	ELECT	22uF	20%	16V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C304	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C305	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C306	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C307	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C333	1-124-233-11	ELECT	10uF	20%	16V
C334	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C335	1-124-584-00	ELECT	100uF	20%	10V
C336	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C337	1-124-234-00	ELECT	22uF	20%	16V
C351	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C352	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C353	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C354	1-124-233-11	ELECT	10uF	20%	16V
C355	1-124-234-00	ELECT	22uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C357	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C358	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C501	1-124-584-00	ELECT	100uF	20%	10V
C502	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C503	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C504	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C505	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C506	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C507	1-163-213-00	CERAMIC CHIP	0.0022uF	5%	50V
C508	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C551	1-125-710-11	DOUBLE LAYER	0.1F	0	5.5V
C552	1-128-057-11	ELECT	330uF	20%	6.3V
C553	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C556	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C571	1-126-163-11	ELECT	4.7uF	20%	50V
C581	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C582	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C583	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C584	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C601	1-164-346-11	CERAMIC CHIP	1uF		16V
C602	1-164-346-11	CERAMIC CHIP	1uF		16V
C611	1-124-233-11	ELECT	10uF	20%	16V
C612	1-124-233-11	ELECT	10uF	20%	16V
C614	1-124-233-11	ELECT	10uF	20%	16V
C615	1-124-233-11	ELECT	10uF	20%	16V
C616	1-124-233-11	ELECT	10uF	20%	16V
C617	1-124-233-11	ELECT	10uF	20%	16V
C618	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C621	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C622	1-124-589-11	ELECT	47uF	20%	16V
C623	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C751	1-128-076-11	ELECT	10uF	20%	25V
C752	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C754	1-124-233-11	ELECT	10uF	20%	16V
C755	1-124-589-11	ELECT	47uF	20%	16V
C757	1-124-233-11	ELECT	10uF	20%	16V
C781	1-126-936-11	ELECT	3300uF	20%	16V
C782	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C783	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C784	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C785	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C786	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C787	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C788	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C789	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C790	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C792	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C795	1-109-982-11	CERAMIC CHIP	1uF	10%	10V

< CONNECTOR >

CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P	
* CN351	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P	
CN581	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)	
CN701	1-785-774-11	PLUG, CONNECTOR 15P	
CN781	1-774-701-11	PIN, CONNECTOR 16P (POWER)	

< DIODE >

D1	8-719-991-65	DIODE	SB02W03C
D51	8-719-158-15	DIODE	RD5.6S-B
D52	8-719-422-97	DIODE	MA8091-M
D351	8-719-977-22	DIODE	DTZ9.1
D352	8-719-911-19	DIODE	1SS119
D501	8-719-400-20	DIODE	MA152WA
D551	8-719-400-20	DIODE	MA152WA
D552	8-719-404-50	DIODE	MA111-TX
D553	8-719-404-50	DIODE	MA111-TX
D554	8-719-072-70	DIODE	MA2ZD14001S0
D571	8-719-057-80	DIODE	MA8160-M-TX
D572	8-719-420-14	DIODE	MA8082-M
D581	8-719-057-80	DIODE	MA8160-M-TX
D582	8-719-017-62	DIODE	MA8068-L-TX
D583	8-719-105-99	DIODE	RD6.2M-B1
D584	8-719-057-80	DIODE	MA8160-M-TX
D585	8-719-072-70	DIODE	MA2ZD14001S0
D586	8-719-057-80	DIODE	MA8160-M-TX
D587	8-719-404-50	DIODE	MA111-TX
D588	8-719-404-50	DIODE	MA111-TX
D601	8-719-423-32	DIODE	MA8120-M
D610	8-719-970-02	DIODE	1SR139-400
D611	8-719-970-02	DIODE	1SR139-400
D613	8-719-970-02	DIODE	1SR139-400
D614	8-719-970-02	DIODE	1SR139-400
D621	8-719-422-12	DIODE	MA8039

MAIN

Ref. No.	Part No.	Description	Remark
D622	8-719-404-50	DIODE MA111-TX	
D623	8-719-422-12	DIODE MA8039	
D624	8-719-422-97	DIODE MA8091-M	
D701	8-719-977-12	DIODE DTZ6.8B	
D702	8-719-158-15	DIODE RD5.6S-B	
D704	8-719-158-15	DIODE RD5.6S-B	
D705	8-719-035-74	DIODE MA4062-M (TA)	
D706	8-719-035-74	DIODE MA4062-M (TA)	
D707	8-719-035-74	DIODE MA4062-M (TA)	
D708	8-719-105-99	DIODE RD6.2M-B1	
D709	8-719-035-74	DIODE MA4062-M (TA)	
D710	8-719-977-12	DIODE DTZ6.8B	
D711	8-719-423-32	DIODE MA8120-M	
D712	8-719-404-50	DIODE MA111-TX	
D713	8-719-404-50	DIODE MA111-TX	
D721	8-719-970-02	DIODE 1SR139-400	
D722	8-719-970-02	DIODE 1SR139-400	
D723	8-719-970-02	DIODE 1SR139-400	
D724	8-719-970-02	DIODE 1SR139-400	
D731	8-719-970-02	DIODE 1SR139-400	
D732	8-719-970-02	DIODE 1SR139-400	
D733	8-719-970-02	DIODE 1SR139-400	
D734	8-719-970-02	DIODE 1SR139-400	
D781	8-719-049-38	DIODE 1N5404TU	
		< IC >	
IC21	8-759-586-59	IC TB2118F-EL-S	
IC301	8-752-079-78	IC CXA2509AQ-T4	
IC331	8-759-572-10	IC TDA7462D013TR	
IC351	8-759-527-33	IC LB1930M-TLM	
IC501	8-759-585-89	IC MN101C12GTC1	
IC551	8-759-574-61	IC XC61AN4302MR	
IC581	8-759-449-89	IC BA8270F-E2	
IC611	8-759-347-49	IC BA3918-V2	
IC751	8-759-490-74	IC TDA7384	
		< JACK >	
J1	1-764-808-21	JACK (ANT) (FM/AM ANTENNA)	
J331	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN, AUDIO OUT (LINE OUT))	
J561	1-566-822-41	JACK (REMOTE IN)	
		< SHORT >	
JC1	1-216-296-00	SHORT 0	
JC2	1-216-296-00	SHORT 0	
JC3	1-216-296-00	SHORT 0	
JC4	1-216-296-00	SHORT 0	
JC5	1-216-296-00	SHORT 0	
JC7	1-216-296-00	SHORT 0	
JC21	1-216-296-00	SHORT 0	
JC25	1-216-296-00	SHORT 0	
JC26	1-216-295-00	SHORT 0	
JC31	1-216-296-00	SHORT 0	
JC52	1-216-295-00	SHORT 0	
JC121	1-216-295-00	SHORT 0	
JC151	1-216-295-00	SHORT 0	
JC152	1-216-295-00	SHORT 0	
JC181	1-216-296-00	SHORT 0	

Ref. No.	Part No.	Description	Remark
JC182	1-216-295-00	SHORT 0	
JC191	1-216-296-00	SHORT 0	
JC192	1-216-296-00	SHORT 0	
JC272	1-216-296-00	SHORT 0	
JC301	1-216-295-00	SHORT 0	
JC302	1-216-295-00	SHORT 0	
JC303	1-216-295-00	SHORT 0	
JC304	1-216-295-00	SHORT 0	
JC305	1-216-296-00	SHORT 0	
JC331	1-216-296-00	SHORT 0	
JC332	1-216-296-00	SHORT 0	
JC351	1-216-295-00	SHORT 0	
JC352	1-216-295-00	SHORT 0	
JC354	1-216-296-00	SHORT 0	
JC356	1-216-296-00	SHORT 0	
JC501	1-216-295-00	SHORT 0	
JC502	1-216-295-00	SHORT 0	
JC504	1-216-296-00	SHORT 0	
JC506	1-216-296-00	SHORT 0	
JC507	1-216-295-00	SHORT 0	
JC508	1-216-295-00	SHORT 0	
JC551	1-216-295-00	SHORT 0	
JC571	1-216-296-00	SHORT 0	
JC581	1-216-296-00	SHORT 0	
JC582	1-216-296-00	SHORT 0	
JC601	1-216-296-00	SHORT 0	
JC611	1-410-196-11	INDUCTOR CHIP 2.2uH	
JC621	1-216-296-00	SHORT 0	
JC622	1-216-296-00	SHORT 0	
JC705	1-216-296-00	SHORT 0	
JC751	1-216-296-00	SHORT 0	
JC752	1-216-295-00	SHORT 0	
JC781	1-216-296-00	SHORT 0	
JC782	1-216-295-00	SHORT 0	
JC992	1-216-296-00	SHORT 0	
		< COIL >	
L2	1-469-129-21	FERRITE 0uH	
L4	1-410-501-11	INDUCTOR 2.2uH	
L21	1-410-509-11	INDUCTOR 10uH	
L501	1-410-989-11	INDUCTOR CHIP 0.47uH	
L781	1-411-669-12	CHOKE COIL	
		< TRANSISTOR >	
Q51	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q52	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q121	8-729-920-21	TRANSISTOR DTC314TKH04	
Q151	8-729-920-21	TRANSISTOR DTC314TKH04	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q181	8-729-920-21	TRANSISTOR DTC314TKH04	
Q251	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q281	8-729-920-21	TRANSISTOR DTC314TKH04	
Q351	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q352	8-729-020-67	TRANSISTOR XN1A312-TX	
Q353	8-729-900-53	TRANSISTOR DTC114EK	
Q354	8-729-106-60	TRANSISTOR 2SB1115A	
Q551	8-729-027-23	TRANSISTOR DTA114EKA-T146	

Ref. No.	Part No.	Description			Remark
Q571	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q581	8-729-900-53	TRANSISTOR DTC114EK			
Q582	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q583	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q601	8-729-423-99	TRANSISTOR 2SD2137-OP			
Q602	8-729-020-67	TRANSISTOR XN1A312-TX			
Q621	8-729-027-23	TRANSISTOR DTA114EKA-T146			
Q622	8-729-021-94	FET 2SK1657-T1B			
		< RESISTOR >			
R1	1-216-049-11	RES, CHIP	1K	5%	1/10W
R2	1-216-073-00	METAL CHIP	10K	5%	1/10W
R3	1-216-176-11	RES, CHIP	120	5%	1/8W
R4	1-216-113-00	METAL CHIP	470K	5%	1/10W
R5	1-216-254-00	RES, CHIP	220K	5%	1/8W
R7	1-216-073-00	METAL CHIP	10K	5%	1/10W
R8	1-216-073-00	METAL CHIP	10K	5%	1/10W
R9	1-216-049-11	RES, CHIP	1K	5%	1/10W
R10	1-216-049-11	RES, CHIP	1K	5%	1/10W
R11	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R12	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R21	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R23	1-249-417-11	CARBON	1K	5%	1/4W
R24	1-249-417-11	CARBON	1K	5%	1/4W
R25	1-249-417-11	CARBON	1K	5%	1/4W
R26	1-249-417-11	CARBON	1K	5%	1/4W
R27	1-216-077-00	METAL CHIP	15K	5%	1/10W
R28	1-216-075-00	METAL CHIP	12K	5%	1/10W
R29	1-216-025-00	RES, CHIP	100	5%	1/10W
R30	1-216-033-00	METAL CHIP	220	5%	1/10W
R31	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R32	1-216-073-00	METAL CHIP	10K	5%	1/10W
R33	1-216-049-11	RES, CHIP	1K	5%	1/10W
R34	1-216-041-00	METAL CHIP	470	5%	1/10W
R51	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R52	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R101	1-216-041-00	METAL CHIP	470	5%	1/10W
R102	1-216-109-00	METAL CHIP	330K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-079-00	METAL CHIP	18K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-081-00	METAL CHIP	22K	5%	1/10W
R121	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R141	1-216-073-00	METAL CHIP	10K	5%	1/10W
R142	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R151	1-249-421-11	CARBON	2.2K	5%	1/4W
R152	1-216-073-00	METAL CHIP	10K	5%	1/10W
R171	1-216-033-00	METAL CHIP	220	5%	1/10W
R172	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R174	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R175	1-216-085-00	METAL CHIP	33K	5%	1/10W
R181	1-216-033-00	METAL CHIP	220	5%	1/10W
R182	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R184	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R185	1-216-085-00	METAL CHIP	33K	5%	1/10W
R191	1-249-429-11	CARBON	10K	5%	1/4W
R192	1-216-105-00	RES, CHIP	220K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R201	1-216-041-00	METAL CHIP	470	5%	1/10W
R202	1-216-109-00	METAL CHIP	330K	5%	1/10W
R203	1-216-077-00	METAL CHIP	15K	5%	1/10W
R204	1-216-079-00	METAL CHIP	18K	5%	1/10W
R205	1-216-073-00	METAL CHIP	10K	5%	1/10W
R206	1-216-081-00	METAL CHIP	22K	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W
R242	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R251	1-249-421-11	CARBON	2.2K	5%	1/4W
R252	1-216-073-00	METAL CHIP	10K	5%	1/10W
R271	1-216-033-00	METAL CHIP	220	5%	1/10W
R272	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R274	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R275	1-216-085-00	METAL CHIP	33K	5%	1/10W
R281	1-216-033-00	METAL CHIP	220	5%	1/10W
R282	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R284	1-216-278-11	RES, CHIP	2.2M	5%	1/8W
R285	1-216-085-00	METAL CHIP	33K	5%	1/10W
R301	1-208-812-11	RES, CHIP	18K	2%	1/10W
R302	1-216-097-00	RES, CHIP	100K	5%	1/10W
R303	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R304	1-216-077-00	METAL CHIP	15K	5%	1/10W
R305	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R306	1-216-105-00	RES, CHIP	220K	5%	1/10W
R331	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R351	1-216-049-11	RES, CHIP	1K	5%	1/10W
R352	1-249-383-11	CARBON	1.5	5%	1/6W
R353	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R354	1-216-073-00	METAL CHIP	10K	5%	1/10W
R501	1-216-097-00	RES, CHIP	100K	5%	1/10W
R502	1-216-097-00	RES, CHIP	100K	5%	1/10W
R503	1-216-049-11	RES, CHIP	1K	5%	1/10W
R504	1-216-049-11	RES, CHIP	1K	5%	1/10W
R505	1-216-049-11	RES, CHIP	1K	5%	1/10W
R506	1-216-049-11	RES, CHIP	1K	5%	1/10W
R507	1-249-417-11	CARBON	1K	5%	1/4W
R508	1-249-417-11	CARBON	1K	5%	1/4W
R509	1-249-417-11	CARBON	1K	5%	1/4W
R510	1-247-807-31	CARBON	100	5%	1/4W
R511	1-216-206-00	RES, CHIP	2.2K	5%	1/8W
R512	1-216-246-00	RES, CHIP	100K	5%	1/8W
R513	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R514	1-247-807-31	CARBON	100	5%	1/4W
R516	1-216-097-00	RES, CHIP	100K	5%	1/10W
R517	1-216-246-00	RES, CHIP	100K	5%	1/8W
R518	1-216-097-00	RES, CHIP	100K	5%	1/10W
R520	1-216-049-11	RES, CHIP	1K	5%	1/10W
R521	1-216-049-11	RES, CHIP	1K	5%	1/10W
R522	1-216-049-11	RES, CHIP	1K	5%	1/10W
R523	1-216-049-11	RES, CHIP	1K	5%	1/10W
R525	1-216-097-00	RES, CHIP	100K	5%	1/10W
R526	1-216-097-00	RES, CHIP	100K	5%	1/10W
R527	1-216-097-00	RES, CHIP	100K	5%	1/10W
R528	1-216-097-00	RES, CHIP	100K	5%	1/10W
R529	1-216-097-00	RES, CHIP	100K	5%	1/10W
R530	1-216-246-00	RES, CHIP	100K	5%	1/8W
R532	1-216-097-00	RES, CHIP	100K	5%	1/10W
R534	1-216-222-00	RES, CHIP	10K	5%	1/8W

MAIN

Ref. No.	Part No.	Description			Remark
R535	1-249-417-11	CARBON	1K	5%	1/4W
R536	1-216-246-00	RES, CHIP	100K	5%	1/8W
R537	1-216-097-00	RES, CHIP	100K	5%	1/10W
R538	1-216-033-00	METAL CHIP	220	5%	1/10W
R539	1-216-097-00	RES, CHIP	100K	5%	1/10W
R540	1-216-246-00	RES, CHIP	100K	5%	1/8W
R541	1-216-097-00	RES, CHIP	100K	5%	1/10W
R542	1-216-097-00	RES, CHIP	100K	5%	1/10W
R544	1-216-049-11	RES, CHIP	1K	5%	1/10W
R545	1-216-174-00	RES, CHIP	100	5%	1/8W
R546	1-216-246-00	RES, CHIP	100K	5%	1/8W
R547	1-216-049-11	RES, CHIP	1K	5%	1/10W
R548	1-216-049-11	RES, CHIP	1K	5%	1/10W
R550	1-216-097-00	RES, CHIP	100K	5%	1/10W
R551	1-216-097-00	RES, CHIP	100K	5%	1/10W
R553	1-216-246-00	RES, CHIP	100K	5%	1/8W
R554	1-216-097-00	RES, CHIP	100K	5%	1/10W
R555	1-208-806-11	RES, CHIP	10K	0.5%	1/10W
R556	1-208-806-11	RES, CHIP	10K	0.5%	1/10W
R557	1-216-049-11	RES, CHIP	1K	5%	1/10W
R558	1-216-035-00	METAL CHIP	270	5%	1/10W
R561	1-216-073-00	METAL CHIP	10K	5%	1/10W
R562	1-208-806-11	RES, CHIP	10K	0.5%	1/10W
R563	1-216-025-00	RES, CHIP	100	5%	1/10W
R564	1-216-025-00	RES, CHIP	100	5%	1/10W
R571	1-216-089-00	RES, CHIP	47K	5%	1/10W
R572	1-216-089-00	RES, CHIP	47K	5%	1/10W
R573	1-249-421-11	CARBON	2.2K	5%	1/4W
R574	1-216-081-00	METAL CHIP	22K	5%	1/10W
R580	1-216-025-00	RES, CHIP	100	5%	1/10W
R581	1-216-089-00	RES, CHIP	47K	5%	1/10W
R582	1-216-073-00	METAL CHIP	10K	5%	1/10W
R583	1-216-025-00	RES, CHIP	100	5%	1/10W
R584	1-216-017-00	RES, CHIP	47	5%	1/10W
R585	1-216-089-00	RES, CHIP	47K	5%	1/10W
R586	1-216-073-00	METAL CHIP	10K	5%	1/10W
R587	1-216-073-00	METAL CHIP	10K	5%	1/10W
R588	1-216-097-00	RES, CHIP	100K	5%	1/10W
R589	1-216-085-00	METAL CHIP	33K	5%	1/10W
R601	1-249-393-11	CARBON	10	5%	1/4W
R602	1-249-395-11	CARBON	15	5%	1/4W
R603	1-216-186-00	RES, CHIP	330	5%	1/8W
R621	1-249-425-11	CARBON	4.7K	5%	1/4W
R622	1-216-073-00	METAL CHIP	10K	5%	1/10W
R702	1-216-025-00	RES, CHIP	100	5%	1/10W
R703	1-216-025-00	RES, CHIP	100	5%	1/10W
R704	1-216-295-00	SHORT	0		
R705	1-216-295-00	SHORT	0		
R706	1-216-049-11	RES, CHIP	1K	5%	1/10W
R707	1-216-049-11	RES, CHIP	1K	5%	1/10W
R708	1-216-198-00	RES, CHIP	1K	5%	1/8W
R709	1-216-174-00	RES, CHIP	100	5%	1/8W
R710	1-216-174-00	RES, CHIP	100	5%	1/8W
R711	1-216-049-11	RES, CHIP	1K	5%	1/10W
R713	1-216-025-00	RES, CHIP	100	5%	1/10W
R714	1-216-025-00	RES, CHIP	100	5%	1/10W
R703	1-216-025-00	RES, CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R751	1-216-049-11	RES, CHIP	1K	5%	1/10W
R753	1-216-049-11	RES, CHIP	1K	5%	1/10W
R781	1-216-081-00	METAL CHIP	22K	5%	1/10W
R782	1-216-230-00	RES, CHIP	22K	5%	1/8W
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S551	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR >			
TH501	1-801-792-21	THERMISTOR, POSITIVE			
		< TUNER UNIT >			
TU1	1-693-440-21	FM/AM TUNER UNIT			
		< VIBRATOR >			
X21	1-781-246-21	VIBRATOR, CRYSTAL (10.25MHz)			
X501	1-781-294-11	VIBRATOR, CRYSTAL (18.432MHz)			
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
		MISCELLANEOUS			
		**********			
9	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)			
F781	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)			
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)			
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)			
**********					
		**********			
		HARDWARE LIST			
		**********			
#1	7-621-772-10	SCREW +B 2X4			
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)			
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)			
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)			
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT			
#6	7-624-104-04	STOP RING 2.0, TYPE-E			
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3			
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		ACCESSORIES & PACKING MATERIALS			
		**********			
	1-473-067-71	WIRED REMOTE COMMANDER (RM-X4S)			
	3-034-360-01	LABEL (DSPL) (2) (for RM-X4S)			
	3-865-674-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)			
	3-865-674-21	MANUAL, INSTRUCTION (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)			
	3-865-674-41	MANUAL, INSTRUCTION (ENGLISH, CZECH, POLISH, TURKISH, GREEK) (South European)			
	3-865-820-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)			
	3-865-820-21	MANUAL, INSTRUCTION, INSTALL (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)			
	3-865-820-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, CZECH, POLISH, TURKISH, GREEK) (South European)			

Ref. No.	Part No.	Description	Remark
	3-865-823-11	MANUAL, INSTRUCTION (COMMANDER) (for RM-X4S) (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
	3-865-823-21	MANUAL, INSTRUCTION (COMMANDER) (for RM-X4S)(ENGLISH, FRENCH, GERMAN, DUTCH,ITALIAN, RUSSIAN, GREEK, POLISH, CZECH,TURKISH) (AEP, South European)	
	X-3373-412-1	CASE (PANEL) ASSY (for FRONT PANEL)	

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PARTS FOR INSTALLATION AND CONNECTIONS

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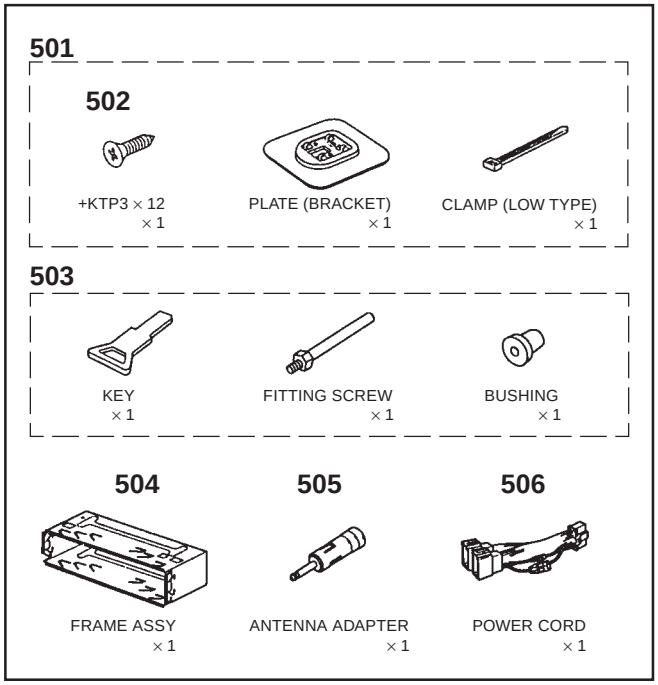
501	X-3369-817-1	BRACKET ASSY (for RM-X4S)(AEP, UK)	
501	X-3373-432-1	BRACKET ASSY (for RM-X4S) (AEP, South European)	
502	7-685-248-14	SCREW +KTP 3X12 TYPE4	
503	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING	
504	3-916-161-31	FRAME ASSY	
505	1-465-459-21	ADAPTER, ANTENNA	
506	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	



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