XR-C550RDS

SERVICE MANUAL

AEP Model
UK Model

For RM-X2S (Remote Commander), please refer to RM-X2S/X3S Service Manual (9-960-039-□□) previously issued.

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-25B-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	Dolby B NR	Dolby NR off
TYPE II, IV	67 dB	61 dB
TYPE I	64 dB	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	4 dB

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.71 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	35 W × 4 (at 4 ohms)

General

Outputs	Telephone mute control lead Power amplifier control lead Rear line out (1) Front line out (1)
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
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	Parts for installation and connections (1 set) Rotary commander RM-X2S Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

TABLE OF CONTENTS

SERVICING NOTES

Flexible Circuit Board Repairing

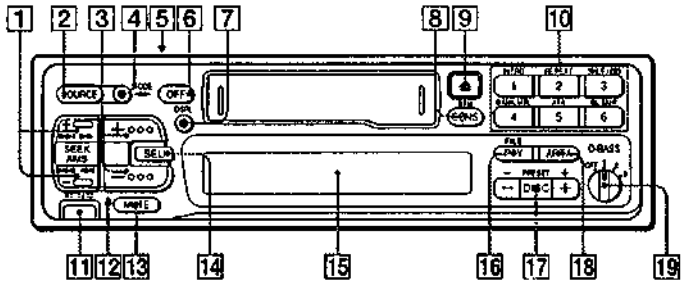
- Keep the temperature of the soldering iron around 270 ˚ C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering

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 for further details.

EN

1 SEEK/AMS button 5, 6, 7, 8, 9, 11, 14, 15, 17

2 SOURCE button (TAPE/TUNER/CD/MD) 5, 7, 14, 16

3 ⊕⊖ (volume/bass/treble/balance/fader control) button 5, 13, 16

4 MODE (◄II►) button
During Tuner reception:
BAND select 7

During Tape playback:
Transport direction change 5

During CD/MD playback:
Changer select 14

5 POWER SELECT switch (located on the top of the unit)
See "POWER SELECT Switch" in the Installation/Connections manual.

6 OFF button 4, 5

7 DSPL (display mode change/time set) button 5, 6, 8, 14, 16

8 SENS/BTM (sensitivity adjust/Best tuning memory function) button 7, 8, 10

9 ⏏ (eject) button 5

10 During radio reception:
Preset number buttons 7

During tape/CD/MD playback:
① INTRO button 6, 15
② REPEAT button 6, 15
③ SHUF/□□ (Shuffle/Dolby B NR) button 6, 15
④ BANK/MTL button 6, 17
⑤ ATA (Automatic Tuner Activation) button 6
⑥ BL.SKIP (Blank Skip) button 6

11 RELEASE (front panel release) button 4, 18

12 Reset button (located on the front side of the unit hidden by the front panel)
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

13 MUTE button 13

14 SEL (control mode select) button 5, 10, 11, 13, 14, 16, 17

15 Display window

16 PTY/FILE (programme type/custom file mode select•set) button 11, 16, 17

17 PRESET/DISC button 7, 15
During Tuner reception:
Preset stations select 7

During CD/MD playback:
Disc change 15

18 AF/TA (alternative frequency/traffic announcement) button 9, 10

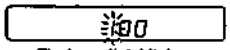
19 D-BASS control 13

Setting the clock

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

1 Press (OFF) or (DSPL) during operation.

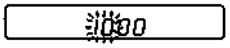
2 Press (DSPL) for two seconds.



The hour digit blinks.

❶ Set the hour digits.

to go forward
to go backward



❷ Press (SEL) momentarily.

The minute digit blinks.

❸ Set the minute digits.

to go forward
to go backward

3 Press (DSPL) momentarily.

The clock activates.

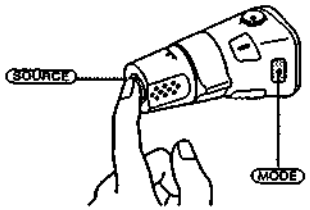
Note
If the POWER SELECT switch on the top of the unit is set to the ⓫ position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio.

Other Functions

Using the rotary remote

The rotary remote works by pressing buttons and/or rotating controls.
You can control the optional CD/MD changer by the rotary remote.

By pressing buttons (the SOURCE and the MODE buttons)



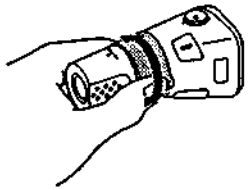
Every time you press (SOURCE), the source changes as follows:

TAPE → TUNER → CD/MD

Pressing (MODE) changes the operation in the following ways:
- *the tape transport.*
- *the band, FM1 → FM2 → FM3 → MW → LW.*
- *the CD/MD changer.*

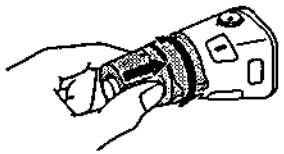
Tip
You can turn on this unit by pressing (SOURCE) on the rotary remote.

By rotating the control (the SEEK/AMS control)



Rotate the control momentarily and release it to:
- Locate the beginnings of the tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To playback, rotate and hold the control again, and release it.
- 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 the stations automatically. Rotate and hold the control to tune in the specific station.

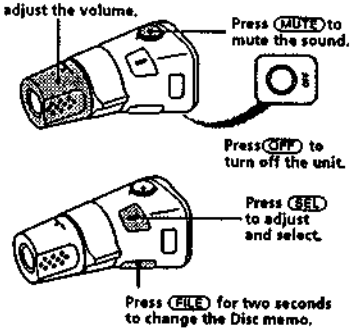
By rotating the control while pushing in (the PRESET/DISC control)



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

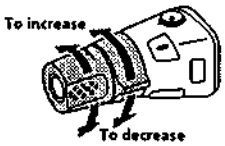
Other operations

Rotate the VOL control to adjust the volume.

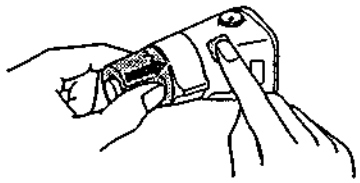


Changing the operative direction

The operative direction of controls is factory preset as in the illustration below.



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



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

Adjusting the sound characteristics

1 Select the item you want to adjust by pressing (SEL) repeatedly.
VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader)

2 Adjust the selected item by pressing either ⊕ or ⊖.

Adjust within three seconds after selecting. (After three seconds the button will again serve as the volume control button.)

Muting the sound

Press (MUTE).
The "MUTE" indication flashes.

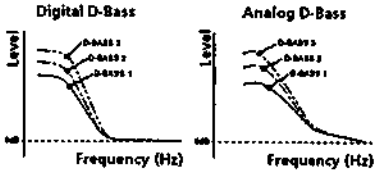
To restore the previous volume level, press again.

Tip
The unit decreases the volume automatically when a telephone call comes in (Telephone-mute function).

Changing the sound and beep tone

Boosting the bass sound — D-bass

You can enjoy clear and powerful bass sound. The D-bass function boosts the low frequency signal with a sharper curve than conventional bass boost.
You can hear the bass line more clearly even if the vocal sound is the same volume. You can emphasize and adjust the bass sound easily with the D-BASS control. This effect is similar to the one you get when you use an optional subwoofer system.
Moreover, the Digital D-bass* function creates even sharper and more powerful bass sound than Analog D-bass.



Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1, 2 or 3).
"D-BASS"* appears in the display.

To cancel, turn the control to the OFF position.

* *If the CD changer has the digital D-bass function, "DIGITAL D-BASS" appears on the display during CD playback.*

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 hamper the driver during driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

To detach

Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel, and detach the panel by pulling it towards you as illustrated.

To attach

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

Instalación

Precauciones

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

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 20°.

Forma de extraer e instalar el panel frontal

Antes de instalar la unidad, extraiga el panel frontal.

Para extraerlo

Antes de extraer el panel frontal, cerciórese de presionar la tecla OFF. Después presione la tecla RELEASE para abrir el panel frontal, y extraiga éste tirando de él hacia usted como se muestra en la ilustración.

Para instalarlo

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

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 bilstereón 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.

Ta loss frontpanelen

Tryck på OFF för att slå av strömmen innan du tar loss frontpanelen. Tryck därefter på RELEASE för att öppna frontpanelen. Ta loss frontpanelen genom att dra den utåt enligt illustrationen nedan:

Fästa frontpanelen

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

Instalação

Precauções

- Não altere indevidamente os quatro orifícios da superfície da parte superior do aparelho. Estes servem para regulações do sintonizador que devem ser efectuadas somente por técnicos qualificados.
- Escolha 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, tais como em locais expostos directamente à luz do sol, ao ar quente dos aquecimentos, ou sujeitos a pó, sujidade ou vibração excessiva.
- Para efectuar uma instalação segura utilize unicamente o montagem fornecido .

Ajuste do ângulo de montagem

Ajuste o ângulo de montagem a menos de 20°.

Para retirar e colocar o painel frontal

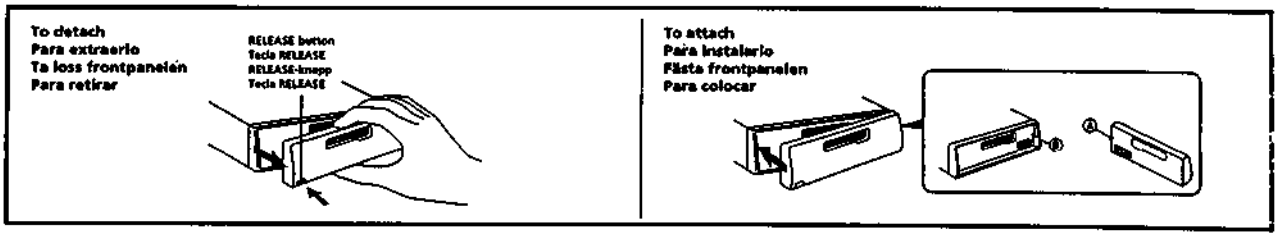
Retire o painel frontal antes de iniciar a instalação do aparelho.

Para retirar

Antes de retirar o painel frontal, carregue na tecla OFF. A seguir, carregue na tecla RELEASE para abrir o painel frontal e retire-o, puxando-o para fora como ilustrado.

Para colocar

Alinhe as partes Ⓐ e Ⓑ, e fixe o painel frontal pressionando-o até que encaixe.



Mounting Example

Installation in the dashboard

Ejemplo de montaje

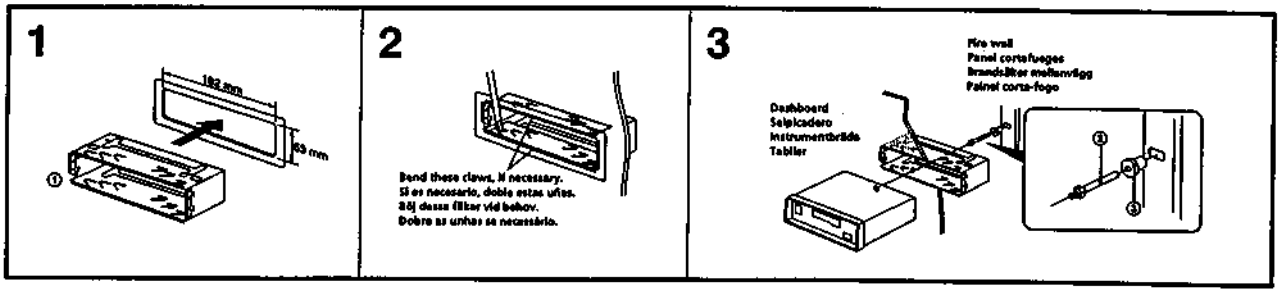
Instalación en el salpicadero

Exempel på montering

Montera på instrumentbrädan

Exemplo de montagem

Instalação no tabliér



Note for Connecting

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

Nota sobre conexión

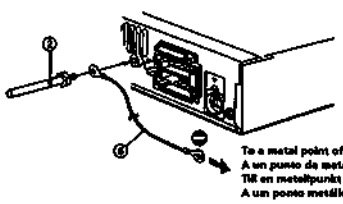
Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unida principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis Ⓑ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza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

Angående anslutningar

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

Nota sobre a ligação

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



Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the unit to the power supply of the car after all other connections are complete.
- Run all ground wires to a common ground point.
- Connect pin 4 or pin 7of the unit's power connector to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in series 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 illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear if your car has no accessory position on the ignition key switch. To avoid this battery wear, set the POWER SELECT switch located on the top of the unit to the ● position, then press the reset button. The illumination is reset to stay *off* while the unit is not in use.

Note

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

Reset Button

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

Note on the control function

Pin 5 of the unit's power connector supplies + 12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation), AF (Alternative Frequency) or the TA (Traffic Announcement) function.

Memory hold connection

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

Notes on speaker connection

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

Conexiones

Precauciones

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

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

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

Nota

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

Botón de reposición

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

Nota sobre la función de control

El terminal 5 del conector de alimentación de la unidad suministra + 12 V CC al activar el sintonizador o las funciones ATA (Activación automática del sintonizador), AF (Frecuencias alternativas) o TA (Anuncio de tráfico).

Conexión para protección de la memoria

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

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desactive 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 estos altavoces. Por lo tanto, asegúrese de conectar altavoces pasivos a estos terminales.*

Anslutning

Sökerhetsföreskrifter

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

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

Innan bilstereon levererades från fabriken ställdes belysningen i teckenfönstret in så att den lyser också när bilstereon inte används. Detta kan emellertid orsaka urladdning av batteriet när du använder bilstereon i en bil, vars tändlås saknar läget ACC (strömläge). Skjut omkopplaren POWER SELECT på bilstereons 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.

Observera

Varningssignalen, som hörsar om du inte har tagit loss frampanelen, ljuder inte när omkopplaren POWER SELECT står i läge ●.

Nollställningsknappen

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

Att observera angående kontrollfunktionen

Pol 5 i enhetens strömanslutning ger + 12 V likström när du slår på radion eller aktiverar någon av funktionerna ATA (Automatic Tuner Activation), AF (Alternative Frequency) eller TA (Traffic Announcement).

Anslutning för minnesstöd

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

Att observera angående högtalarnas anslutning

- *Slå av bilstereon innan du ansluter högtalarna.*
- *Använd endast högtalare, vars impedans motsvar från 4 till 8 ohm och som har tillräcklig effekthanteringskapacitet för att skydda högtalarna mot skador.*
- *Anslut inte några av högtalarutgångarna till bilens chassi. Anslut inte heller utgången på höger högtalare till utgången på vänster högtalare.*
- *Anslut inte högtalarna parallellt.*
- *Anslut inte aktiva högtalare (med inbyggda förstärkare) till bilstereens högtalarutgång, eftersom de kan skada de aktiva högtalarna. Var noga med att bara ansluta passiva högtalare till dessa utgång.*

Connexions

Advertência

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

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

A iluminação do painel frontal é regulada na fábrica para se manter acesa, mesmo quando o aparelho não estiver ligado. No entanto, esta regulação pode provocar a descarga da bateria se o aparelho for utilizado em automóveis sem chave de ignição com posição acessórios. Para evitar a descarga da bateria, regule o interruptor POWER SELECT, situado na 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.

Nota

O alarme de advertência do painel frontal não é activado quando o interruptor POWER SELECT estiver regulado para a posição ●.

Botão de reinicialização

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

Nota sobre a função do controlo

O pino 5 do conector de alimentação do aparelho fornece + 12 V CC quando se liga o sintonizador ou se activa a função ATA (Activação automática do sintonizador), AF (Frequência alternativa) ou TA (Informação sobre o trânsito).

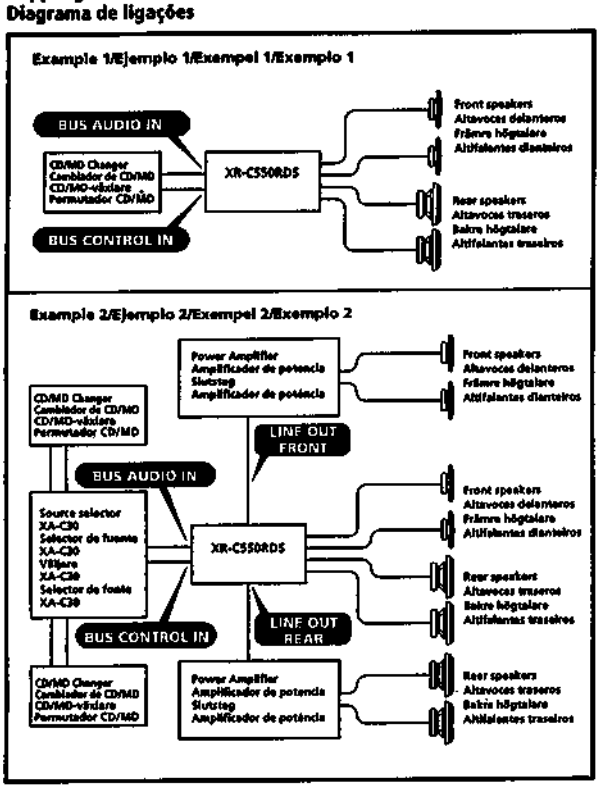
Ligação para alimentação contínua da memória

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

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 adequada de potência adequada. Caso contrário, os altifalantes poderão sofrer danos.*
- *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 danificar o sistema de altifalantes activos. Portanto, não se esqueça de ligar altifalantes passivos a estes terminais.*

Connection Diagram
Diagrama de conexiones
Kopplingsschema
Diagrama de ligações



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

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

Observera
Om du ansluter en effektförstärkare (tillval) och inte använder den inbyggda förstärkaren deaktiveras ljudsignalen.

Nota
Se ligar um amplificador de potência opcional e não utilizar o amplificador incorporado, desactiva o sinal sonoro.

Caution

Cautionary notice for handling the bracket ⓘ.
Handle the bracket carefully to avoid injuring your fingers.

Precaución

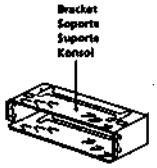
Advertencia sobre la manipulación del soporte ⓘ.
Tenga mucho cuidado al manipular el soporte para evitar posibles lesiones en los dedos.

Varning

Att observera angående konsolen ⓘ.
Hantera konsolen med största aktsamhet så att du inte skadar fingrarna.

Cuidado

Aviso sobre as precauções a tomar no manuseamento do suporte ⓘ.
Pegue no suporte com cuidado para não magoar os dedos.



Power Connection

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

WARNING

Jump connector

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

Diagrama de conexión de alimentación

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

ADVERTENCIA

Conector de empalme

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

Strömanslutningsschema

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

VARNING

Överkoppling

Jämför bilens hjälpströmanslutning med tabellen till höger. Om positionerna 4 och 7 är omkastade tar du bort överkopplingen och flyttar den till positionen längst till höger, så bilden till vänster.

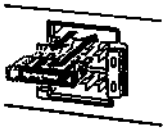
Diagrama de ligação de corrente

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

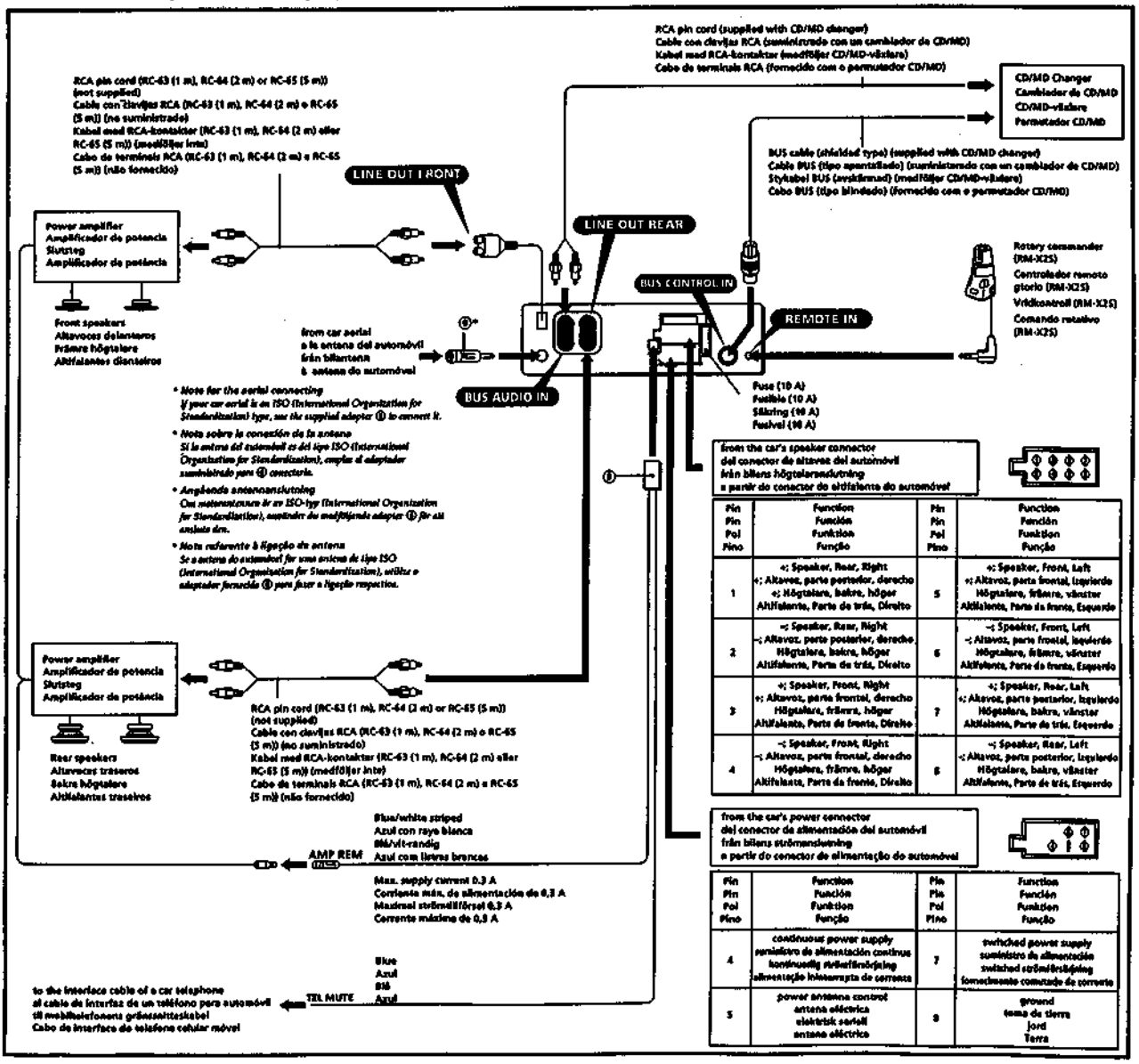
AVISO

Conector jump

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



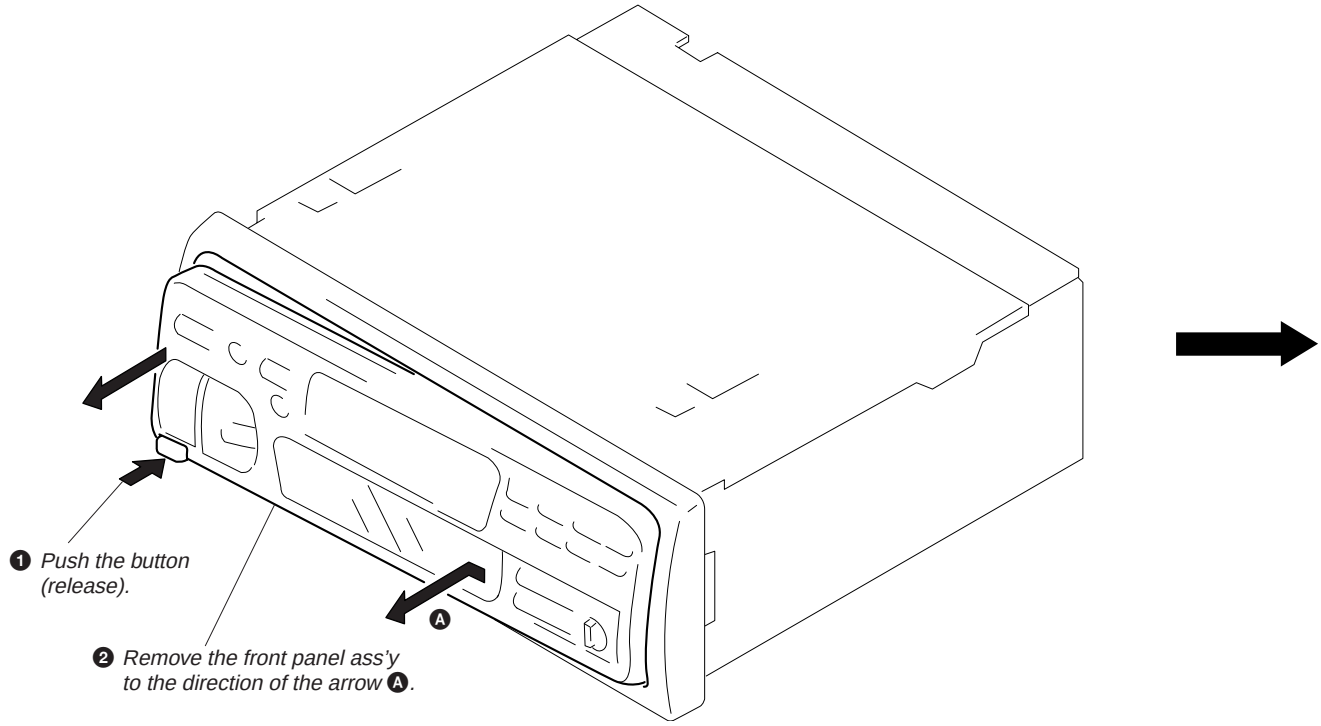
Connections of Example / Ejemplo de conexiones / Anslutningarna enligt exemplet / Exemplo de ligações



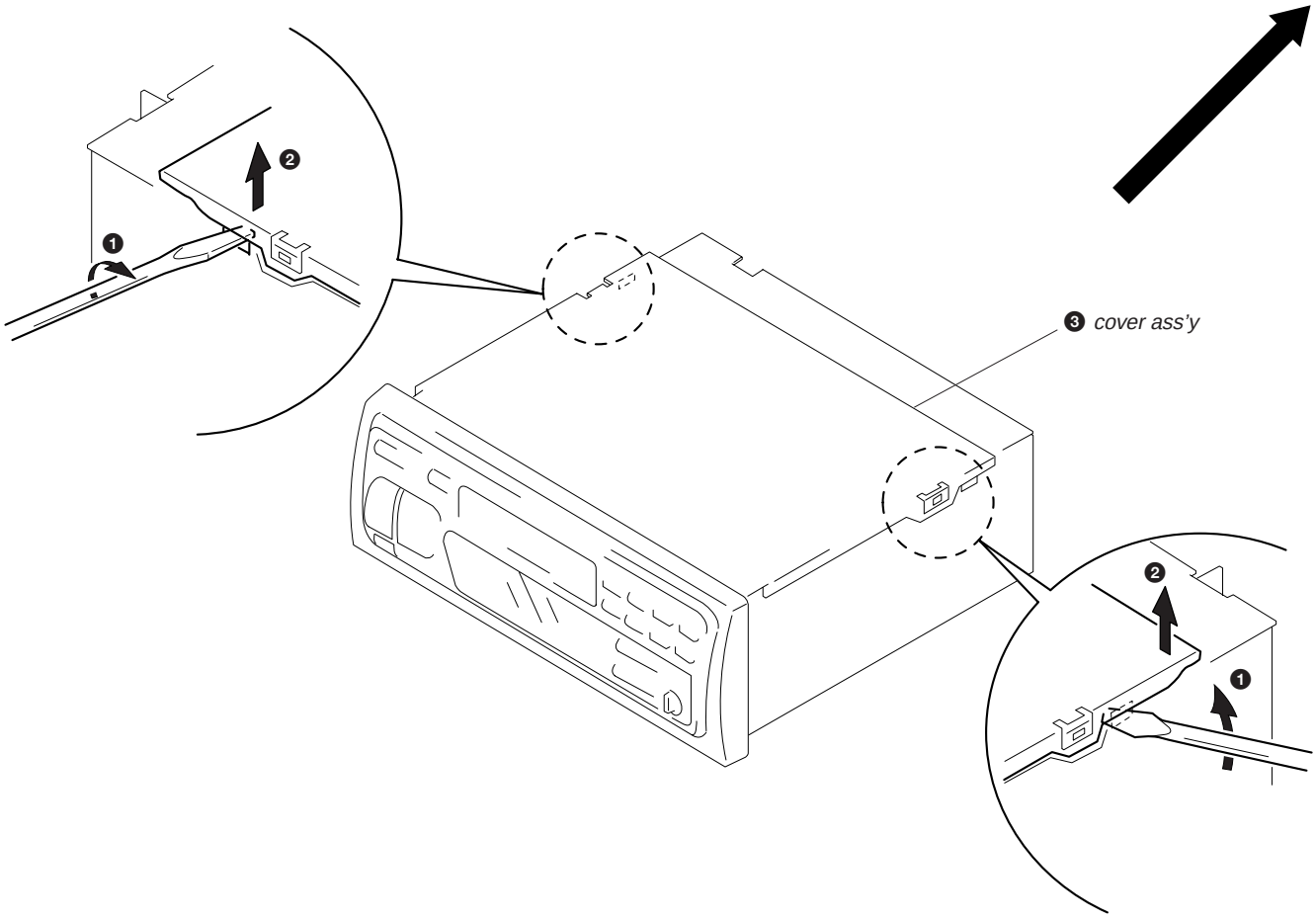
SECTION 2
DISASSEMBLY

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

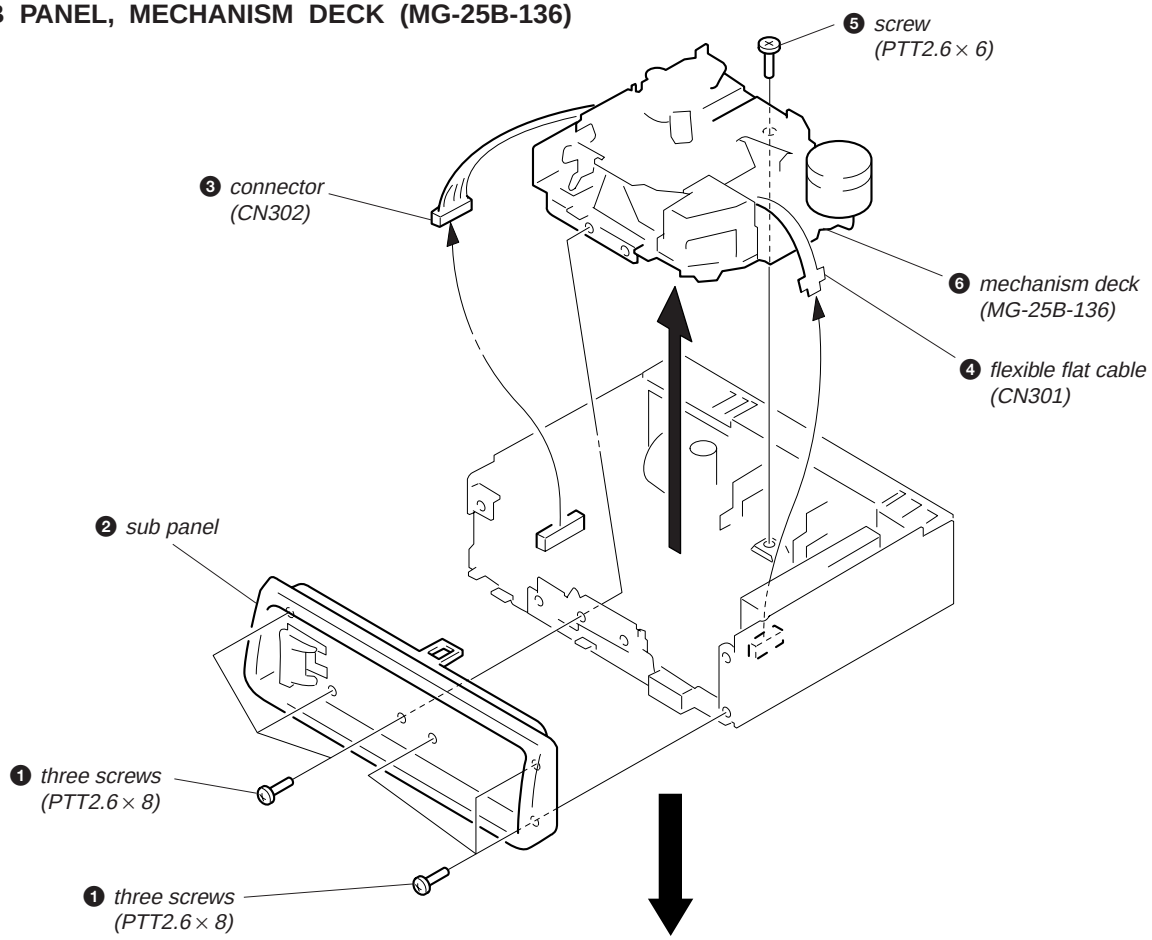
FRONT PANEL ASS'Y



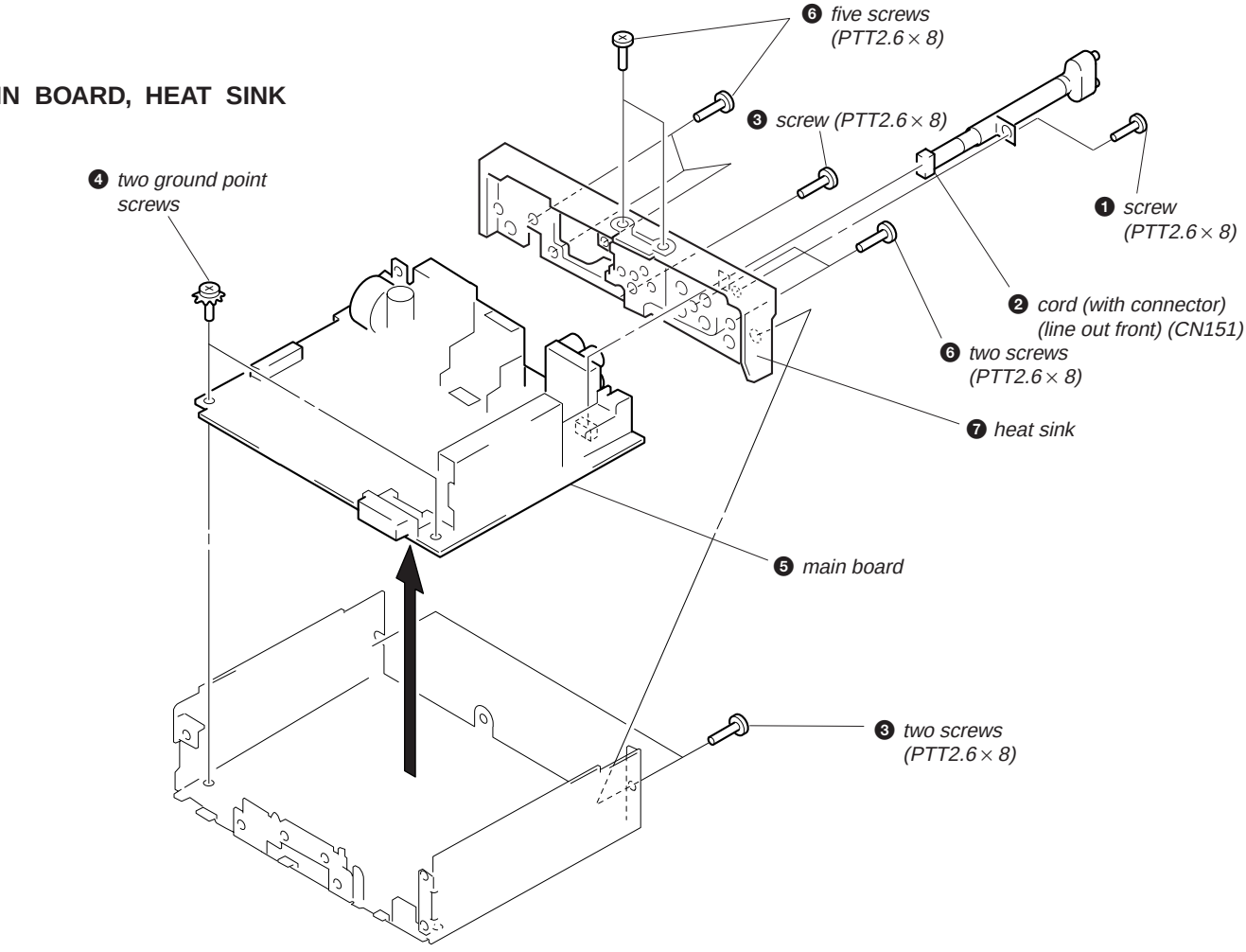
COVER ASS'Y



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



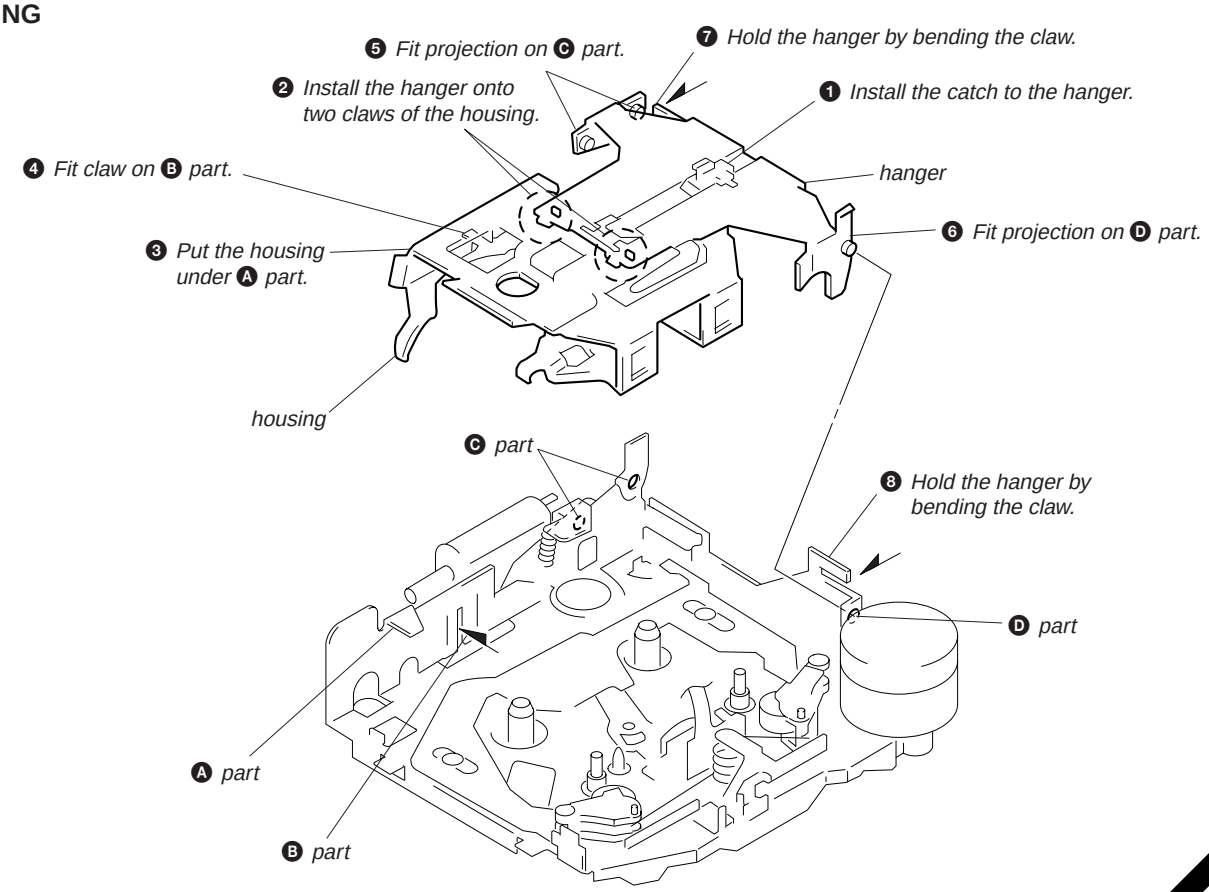
MAIN BOARD, HEAT SINK



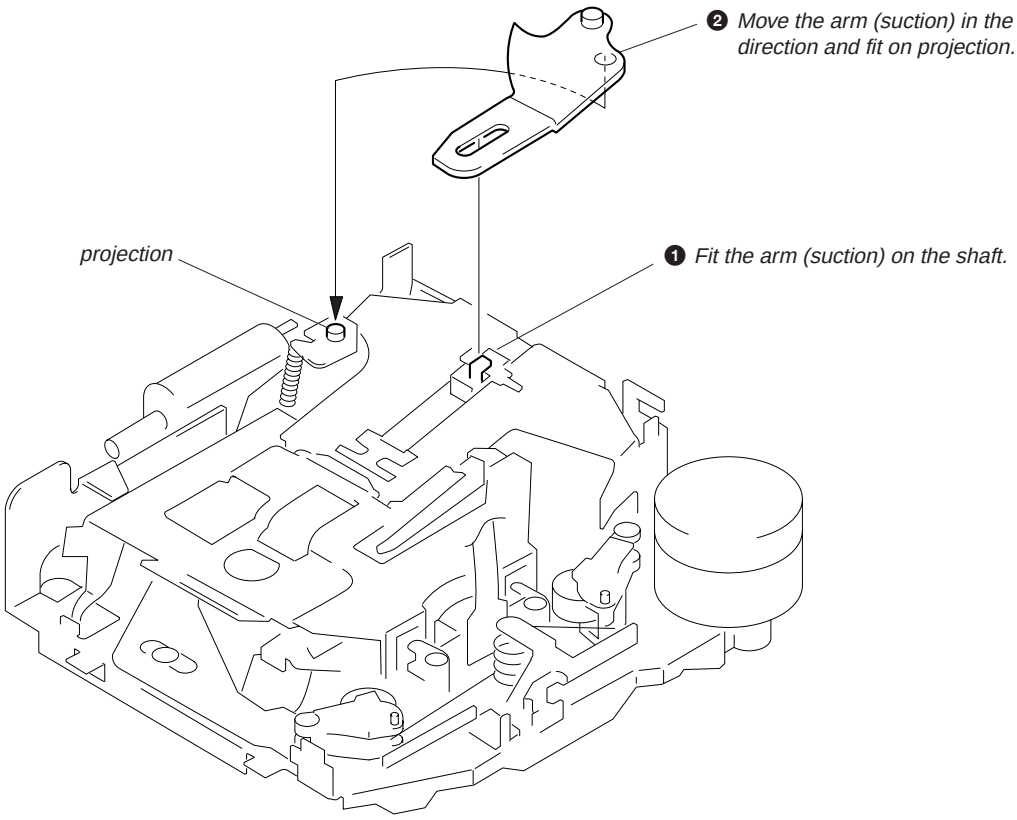
SECTION 3
ASSEMBLY OF MECHANISM DECK

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

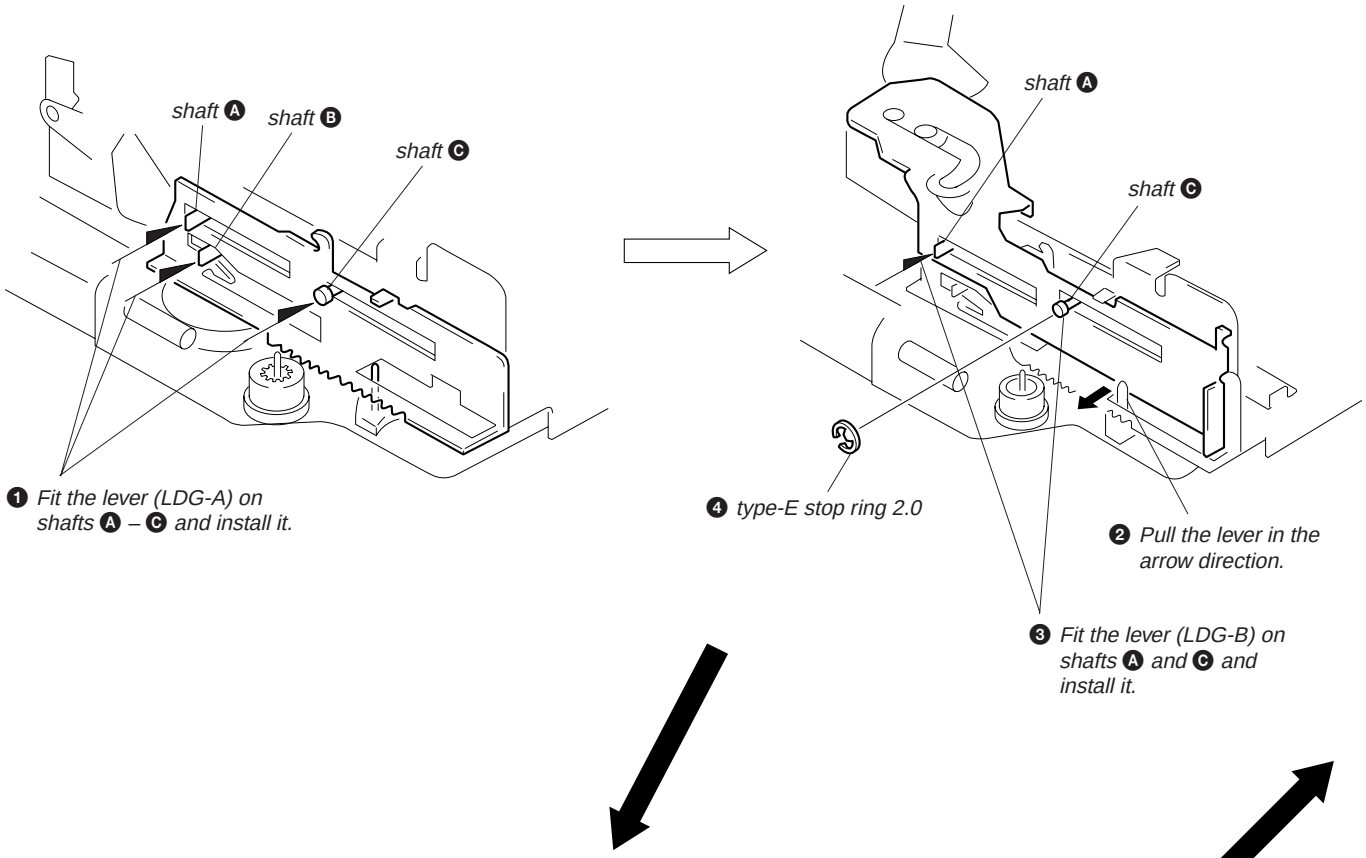
HOUSING



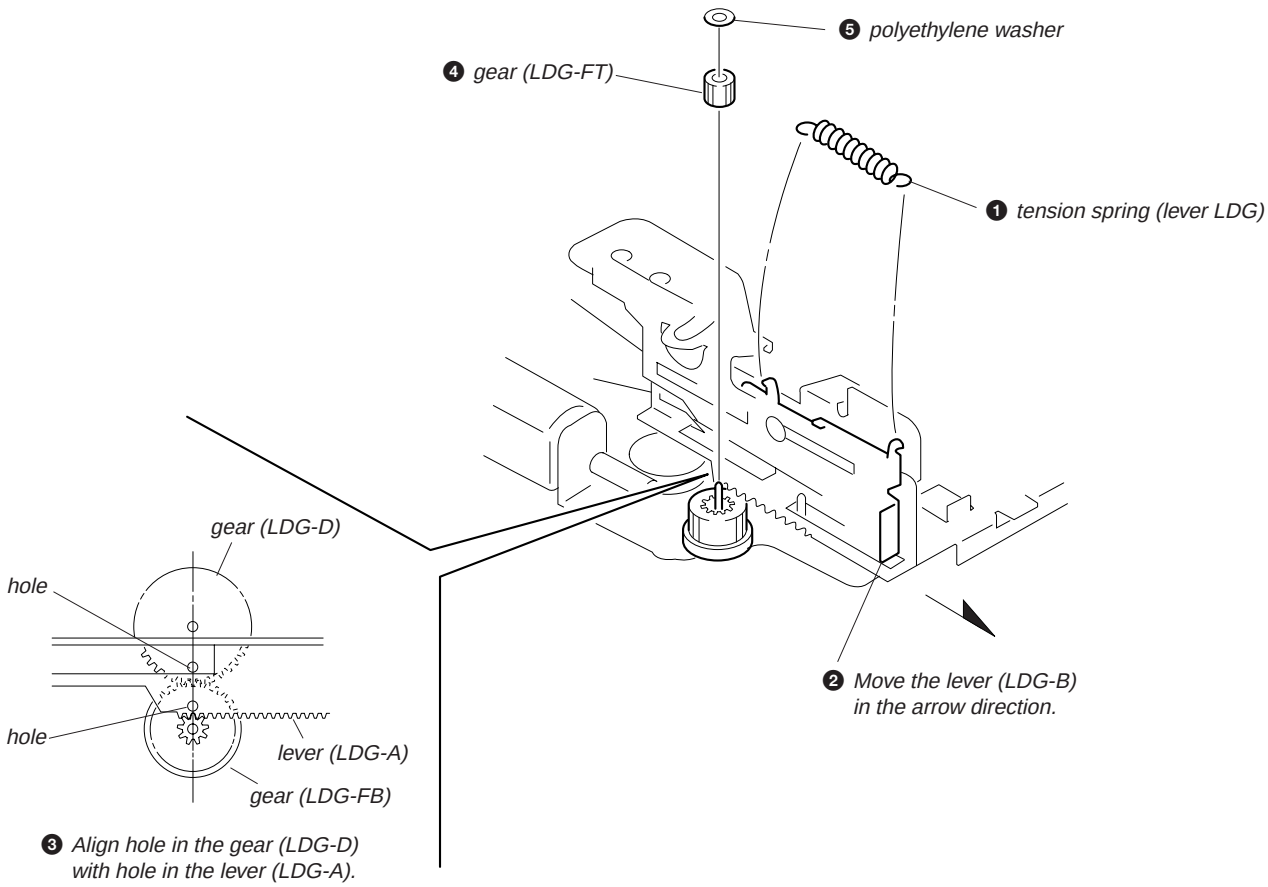
ARM (SUCTION)



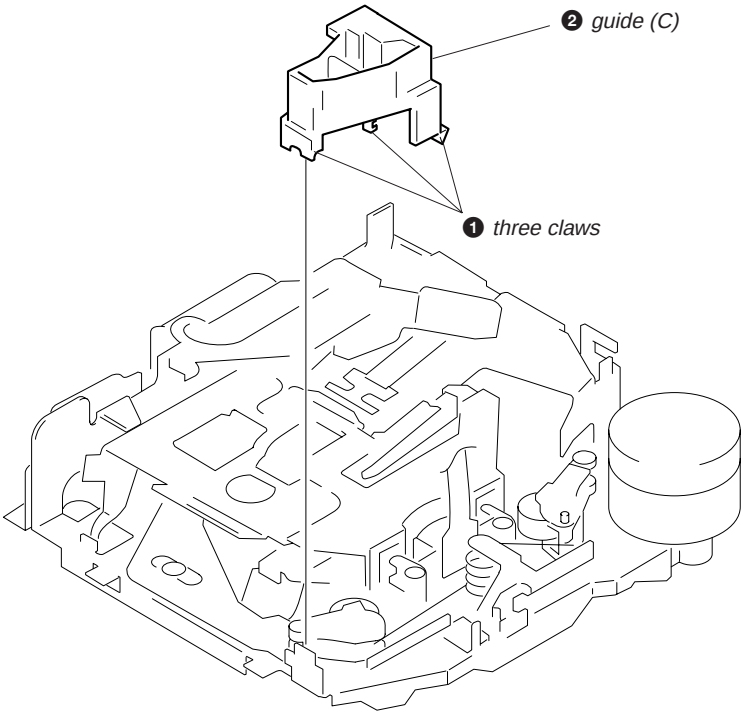
LEVER (LDG-A) / (LDG-B)



GEAR (LDG-FT)



GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   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	Torqu 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	CA-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 (S801) is “A” position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
5. Press the preset [1] button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

<Release the Test mode>

1. Push the [OFF] button.
2. Set the power select switch (S801) is “B” position.

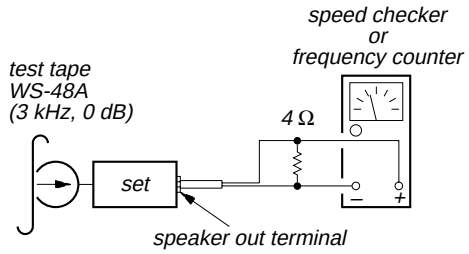
See the adjustment location from on page 18 for the adjustment.

TAPE DECK SECTION | **0 dB=0.775 V**

Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.



Specification: Constant speed

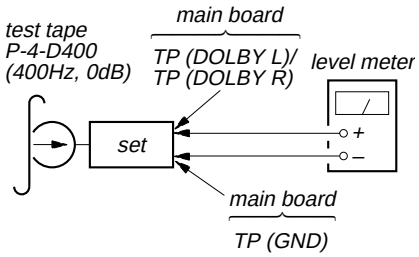
Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075 Hz

Adjustment Location: See page 18.

Dolby Level Adjustment

Setting:

Preset [3] (PLAY MODE) button: NR OFF
SEL (BAS) button : Center
SEL (TRE) button : Center
SEL (BAL) button : Center
SEL (FAD) button : Center
SEL (VOL) button : Maximum
D-BASS control : OFF



Procedure:

1. Put the set into the FWD PB mode.
2. Adjust RV401 (L-CH) and RV301 (R-CH) so that the level meter reading is –6±1 dBs (0.35 to 0.43 V).

Adjustment Location: See page 18.

TUNER SECTION | **0dB=1µV**

Cautions during repair

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

[Note]

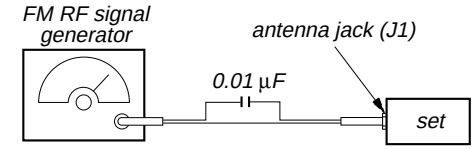
Adjust the tuner section in the sequence shown below.

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

FM Auto Scan/Stop Level Adjustment

Setting:

[SOURCE] button: FM



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

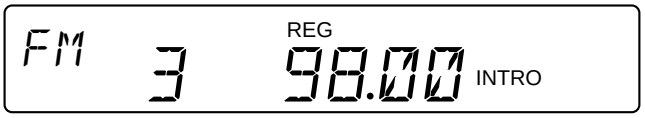
Procedure:

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

Display

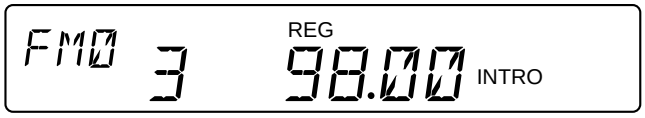
3. Push the preset [3] button.

Display



4. 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

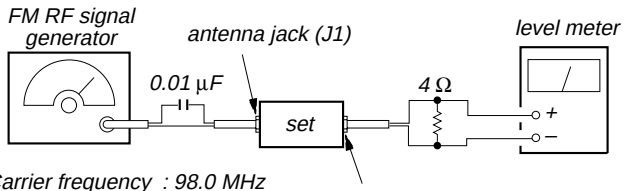


Adjustment Location: See page 18.

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%)

speaker out terminal

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.

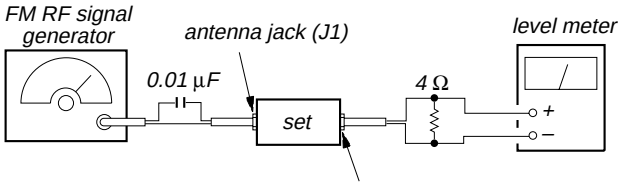
Specification: Separation more than 30 dB

Adjustment Location: See page 18.

FM Noise Focus Adjustment

Setting:

SOURCE button: FM



speaker out terminal

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

Procedure:

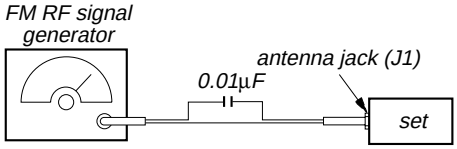
1. Tuner the 98.00 MHz.
2. The then output level is supposing that (B) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (B) –32 ± 2 dB then signal generator input set to –20 dB.

Adjustment Location: See page 18.

FM Signal Meter Adjustment

Setting:

SOURCE button: FM

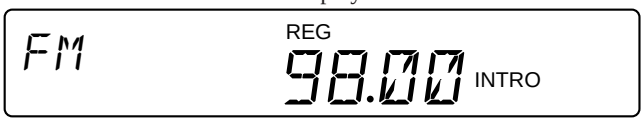


Carrier frequency : 98.00 MHz
Output level : 35 dB (56.2 µV)
Mode : mono
Modulation : no modulation

Procedure:

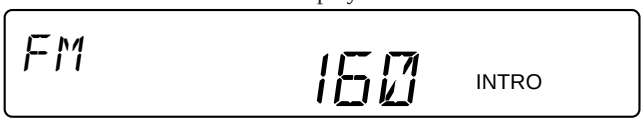
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.

Display



3. Push the 6 button.
4. Adjust RV1 so that the display indication is “160”.

Display



Specification: Display indication: 158 to 162

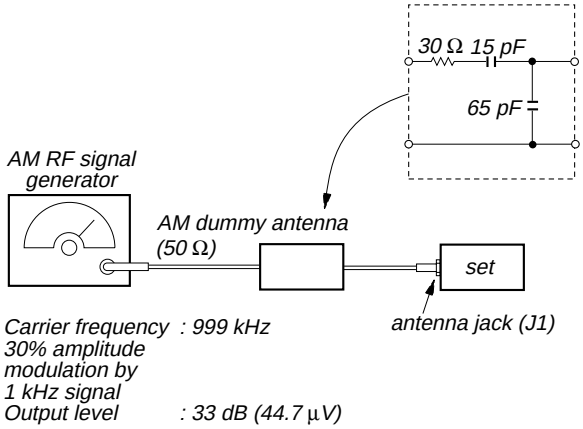
Adjustment Location: See page 18.

AM (MW) Auto Scan/Stop Level Adjustment

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

Setting:

SOURCE button: MW

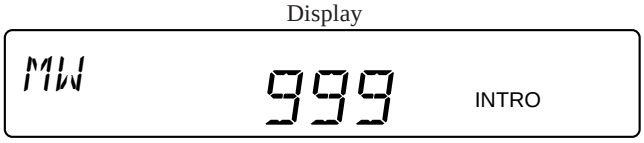


Carrier frequency : 999 kHz
30% amplitude modulation by 1 kHz signal
Output level : 33 dB (44.7 µV)

Procedure:

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

Display

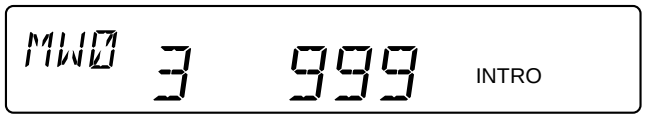


3. Push the preset 3 button.

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.

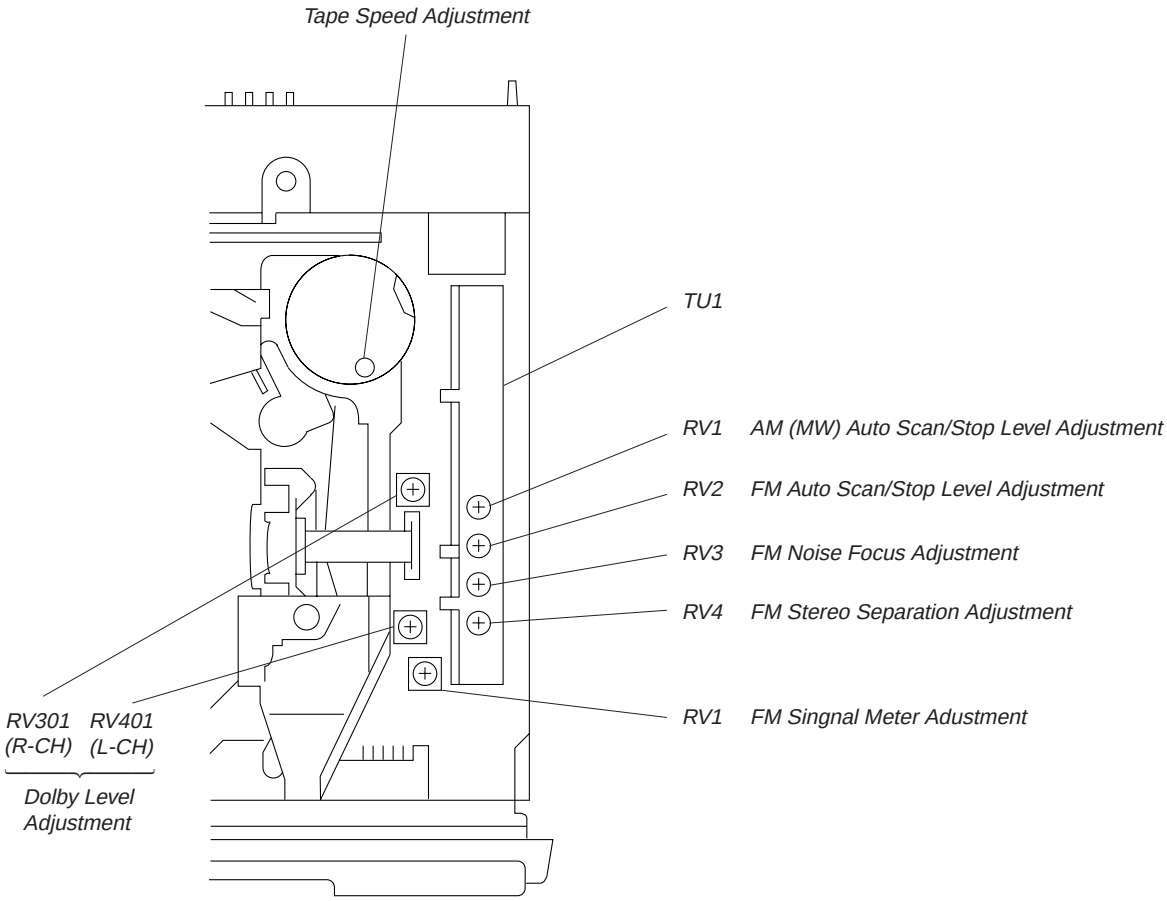
Display



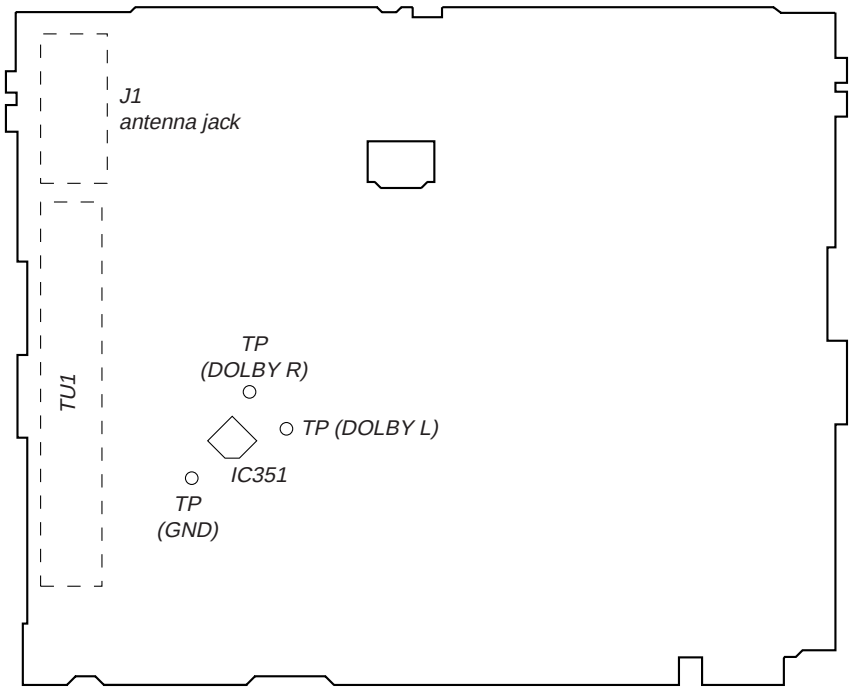
Adjustment Location: See page 18.

Adjustment Location:

– SET UPPER VIEW –

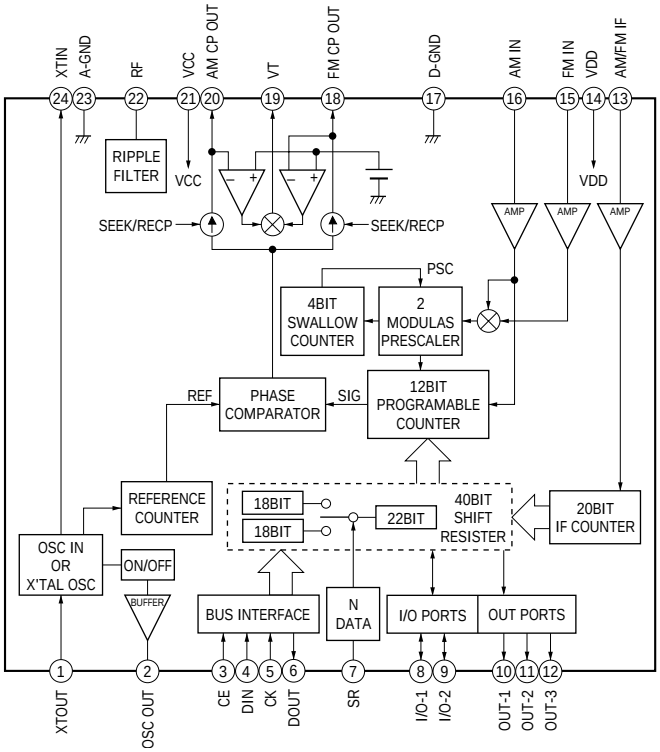


– MAIN BOARD –

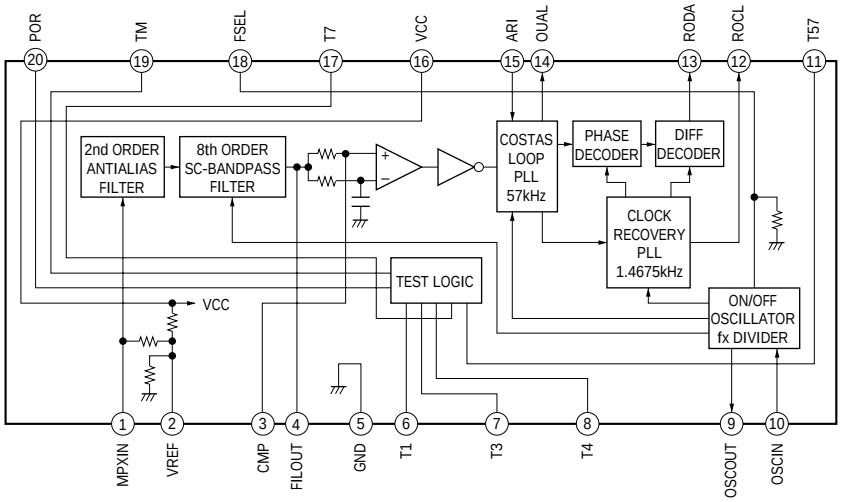


• IC Block Diagrams – MAIN SECTION –

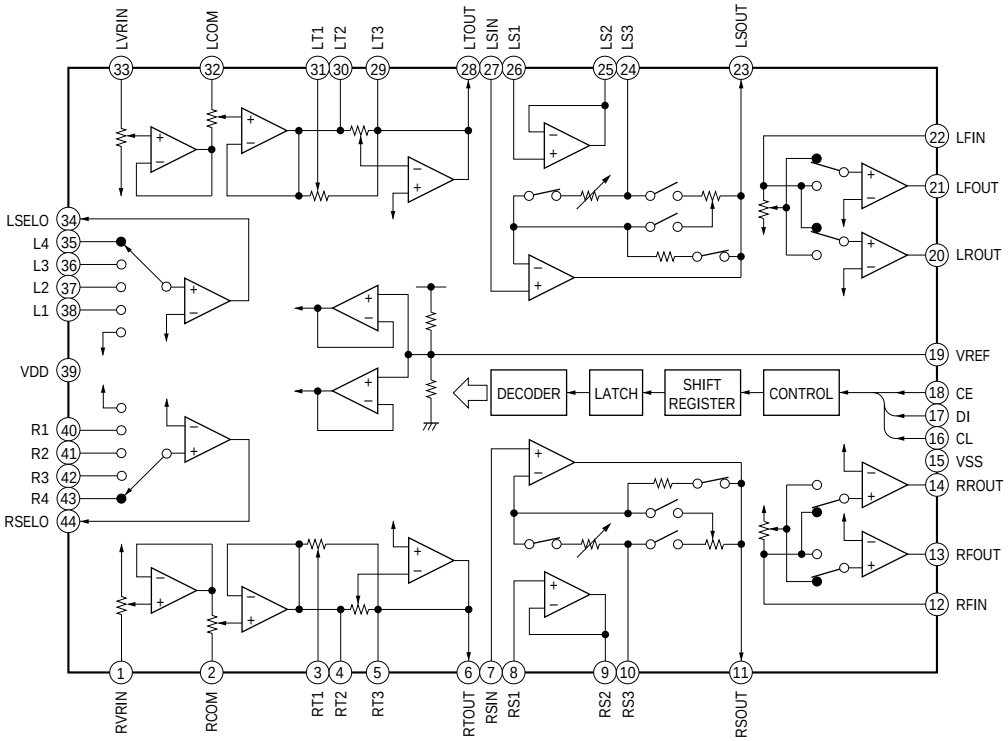
IC1 TB2114F (EL)



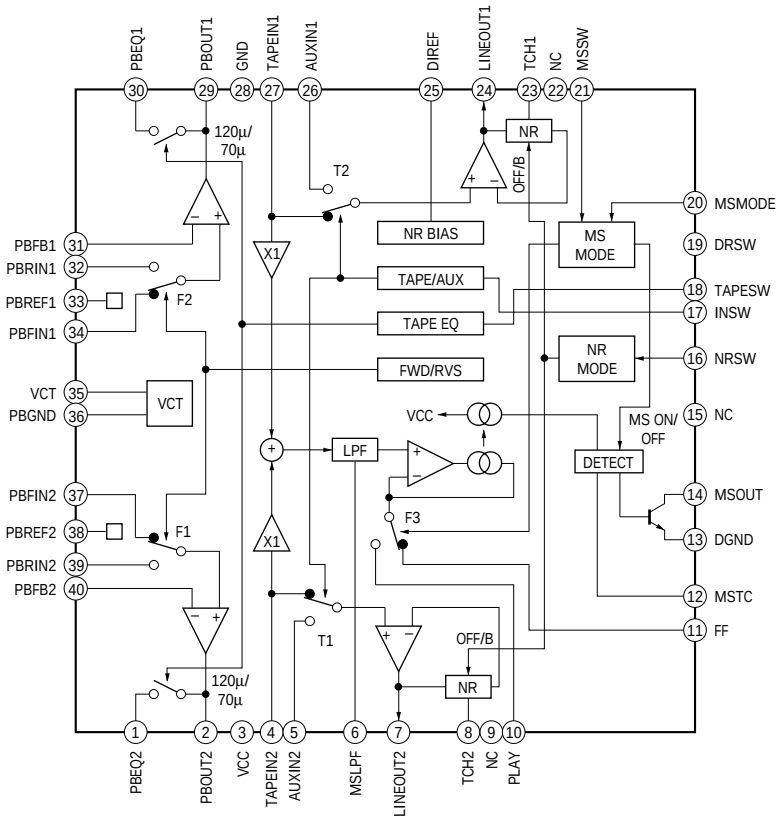
IC3 TDA7330BD-013TR



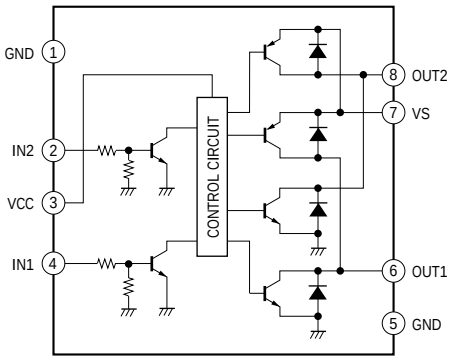
IC151 LC75373ED



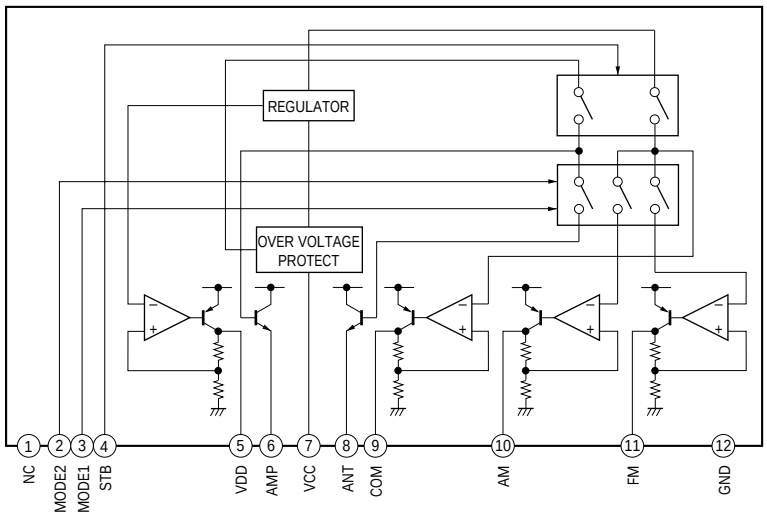
IC351 CXA2510AQ-T4



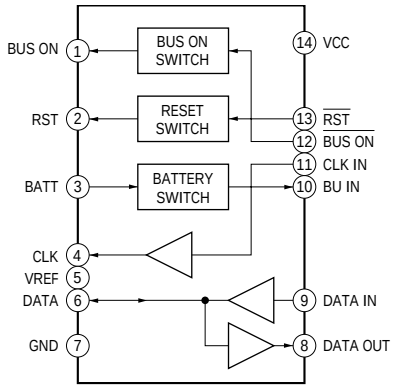
IC351 CXA2510AQ-T4



IC601 BA3918-V2

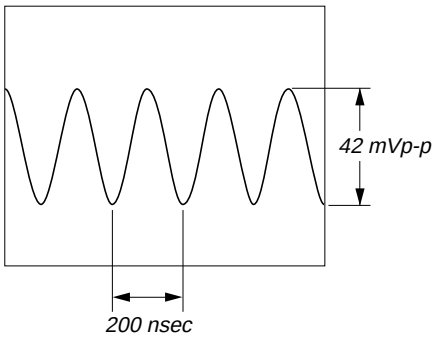


IC601 BA8270F-E2

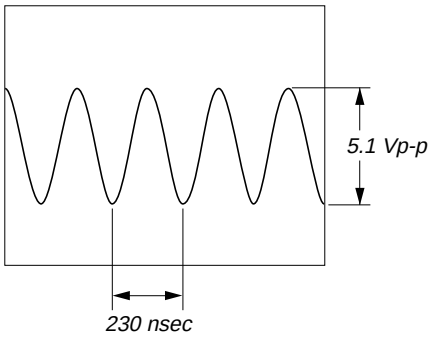


• **Waveforms**

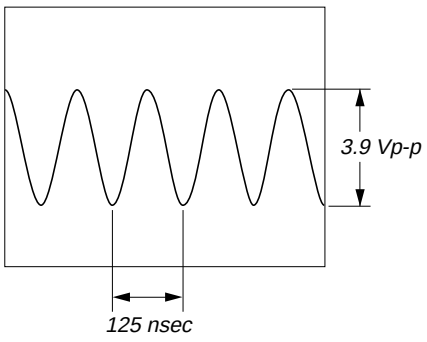
❶ IC1 ① XO



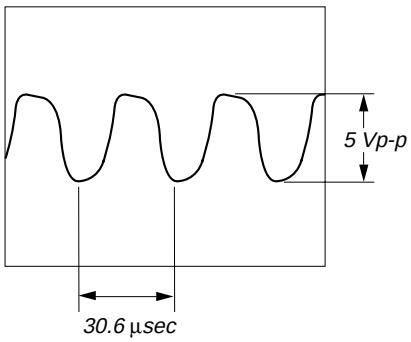
❷ IC3 ⑨ XO



❸ IC501 ⑨ X OUT



❸ IC501 ⑫ XT OUT



6-5. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 MN1886426S4H (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	TUNMUT	O	Tuner muting control pin At muting: “H”
2	AMPON	O	Power amp power supply control pin Illumination power supply control pin
3	ILLON	O	At PW SEL on: ACC on: “H” At PW SEL off: Power on: “H”
4	PW ON	O	System power supply control pin
5	$\overline{\text{AMPMUT}}$	O	Power amp muting control pin At muting: “L”
6	RC IN1	I	Rotary remote commander input pin (A/D input)
7	VDD	–	Power supply
8	X IN	I	Main system clock input pin (8 MHz)
9	X OUT	O	Main system clock output pin (8 MHz)
10	GND	–	GND
11	XT IN	I	Sub system clock input pin (32.768 kHz)
12	XT OUT	O	Sub system clock output pin (32.768 kHz)
13	EX2	–	Connected to GND
14	$\overline{\text{RESET}}$	I	Reset input pin
15	RDSCKI	I	RDS clock input pin
16	BU IN	I	Back up power supply detection pin
17	KEYACK	O	Key acknowledge signal input pin
18	VOLSO	O	Data output pin to electrical volume
19	VOLCKO	O	Clock output pin to electrical volume
20	VOLCE	O	Chip enable output pin to electrical volume
21	TAPMUT	O	Tape muting control pin At muting: “H”
22	LM LOD	O	Loading motor control pin (loadig direction)
23	LM EJ	O	Loading motor control pin (eject direction)
24	$\overline{\text{AMSON}}$	O	At AMS: “L”
25	$\overline{\text{N}}$ ROUT	O	Forward/reverse control pin
26	$\overline{\text{AMSIN}}$	I	Tape music with/without detection pin “L”: with music
27	PLLSO	O	PLL data output pin
28	PLLCKO	O	PLL clock output pin
29	PLLCE	O	PLL chip enable output pin
30	RDSSI	I	RDS data input pin
31	$\overline{\text{AD ON}}$	O	Power supply control pin for A/D conversion
32	DOLON	I/O	DOLBY control input/output pin At initial mode: valid/invalid selection input of DOLBY function At normal mode: DOLBY on/off output “H”: on
33	MTLON	I/O	METAL control input/output pin At initial mode: valid/invalid selection input of METAL function At normal mode: METAL on/off output “H”: on
34	CM ON	O	Capstan motor control pin
35	TAPON	O	Tape power supply control pin
36	$\overline{\text{ACCON}}$	I	Accessory voltage detection pin
37	PLLSI	I	PLL data input pin

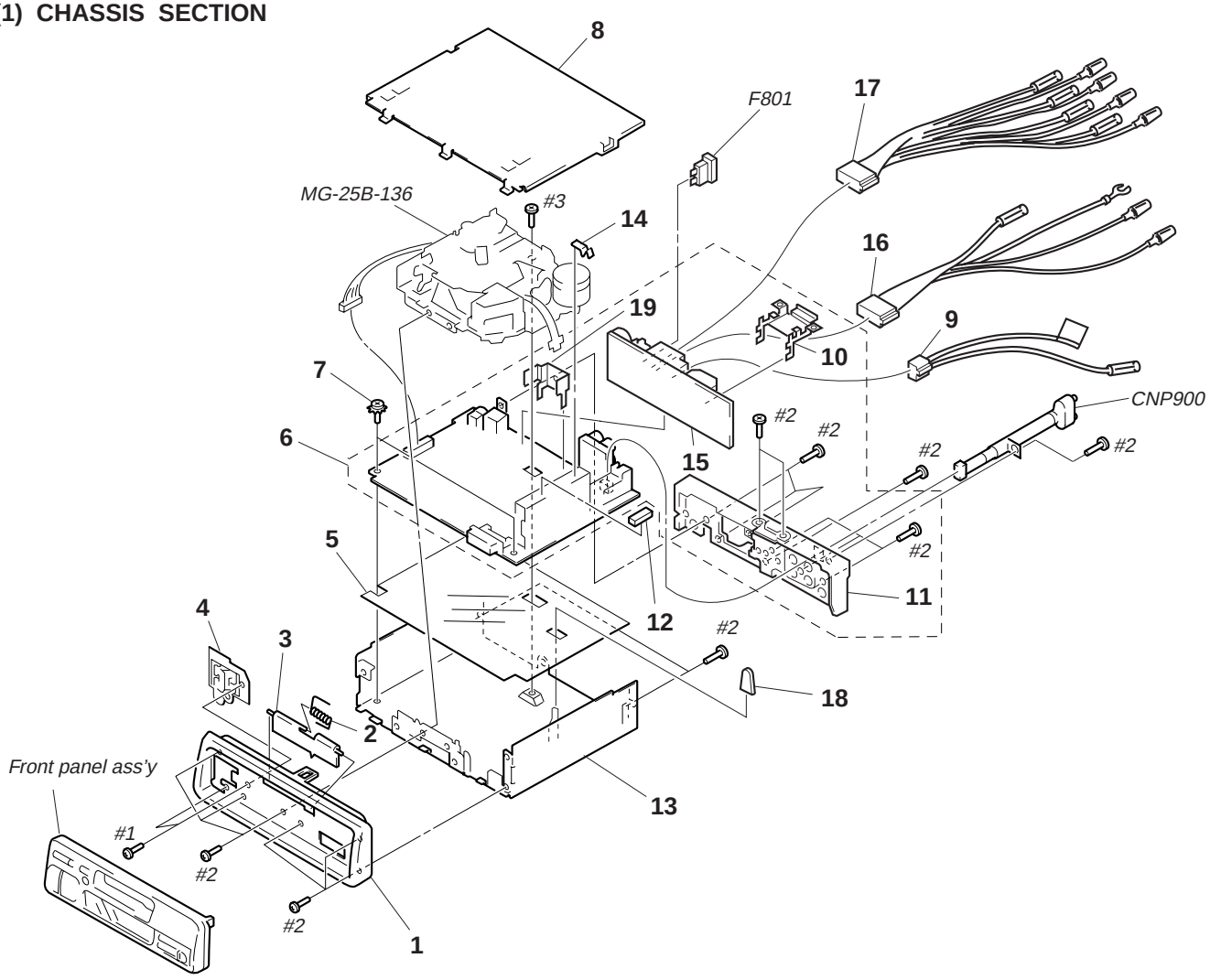
Pin No.	Pin Name	I/O	Function
38	BEEP	O	Beep sound output pin
39	LCDCKO	O	LCD clock output pin
40	LCDSO	O	LCD data output pin
41	$\overline{\text{LCDINH}}$	O	LCD brank indication control pin
42	LCDCE	O	LCD chip enable output pin
43	UNICKO	O	Clock output pin (for SONY BUS)
44	UNICKI	I	Clock input pin (for SONY BUS)
45	UNISI	I	Data input pin (for SONY BUS)
46	UNISO	O	Data output pin (for SONY BUS)
47	VDD	–	Power supply
48	AVDD	–	Power supply
49	AVREF+	–	A/D reference voltage input pin
50, 51	KEYIN1,KEYIN0	I	Key input pin (A/D input)
52	D-BASS	I	D-BASS switch input pin (A/D input)
53	KEYSEL	I	Key function setting pin (A/D input)
54	DSTSEL	I	Destination setting pin (A/D input)
55	RC IN0	I	Rotary remote commander input pin (A/D input)
56	VSM1	I	FM/AM multi-pass detection pin
57	VSM0	I	FM/AM signal meter voltage detection pin (A/D input)
58	AVREF–	–	A/D reference voltage input pin
59	AVSS	–	GND
60	GND	–	GND
61	BUSON	O	BUS ON control signai output pin (for SONY BUS)
62	$\overline{\text{SYSRST}}$	O	System reset signal output pin
63	$\overline{\text{SEKOUT}}$	O	SEEK control signal output pin
64	TUNON	O	Tuner power supply control pin
65	FM ON	O	FM power supply control pin
66	MUT	O	System muting control pin At muting: “H”
67	AF SEK	O	AF seek control signal output pin
68	COLOR	I	Illumination color setting pin “L”: amber, “H”: green
69	$\overline{\text{NOSESW}}$	I	Front panel removal or attaching detection pin
70	$\overline{\text{ST IN}}$	I/O	Stereo detection signal input and forced monaural signal output pin
71	SD IN	I	Station detection signal input pin
72	REL T	I	Reel table rotation detection pin
73-76	POS3-POS0	I	Tape position detection pin
77	PW SEL	I	Power select switch input pin
78	$\overline{\text{TELMUTE}}$	I	Telephone muting detection pin “L”: 20 dB audio muting
79	$\overline{\text{TEST}}$	I	Test mode setting pin
80	ILLIN	I	ILLIN signal detection pin

SECTION 7
EXPLODED VIEWS

NOTE:

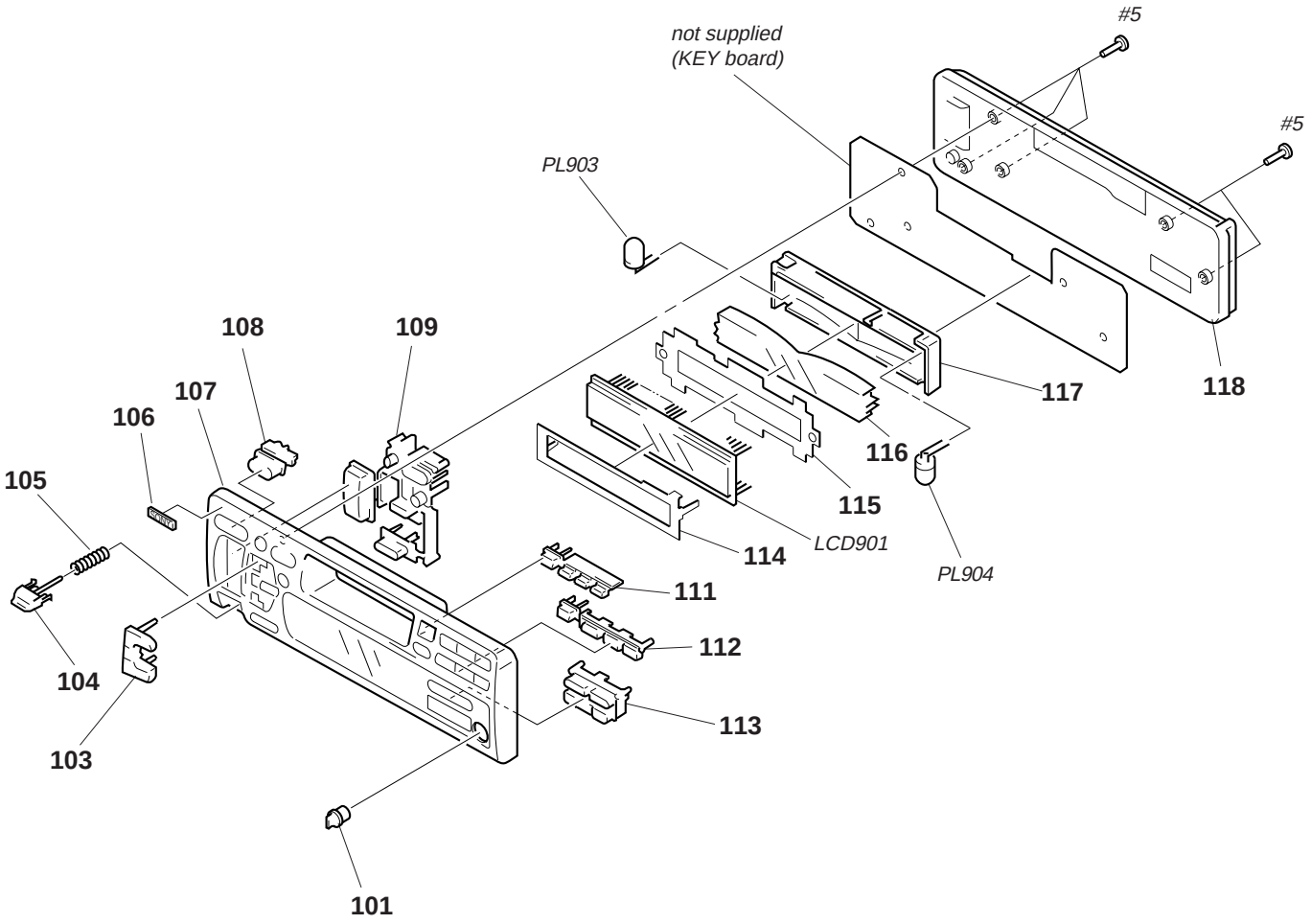
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. 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



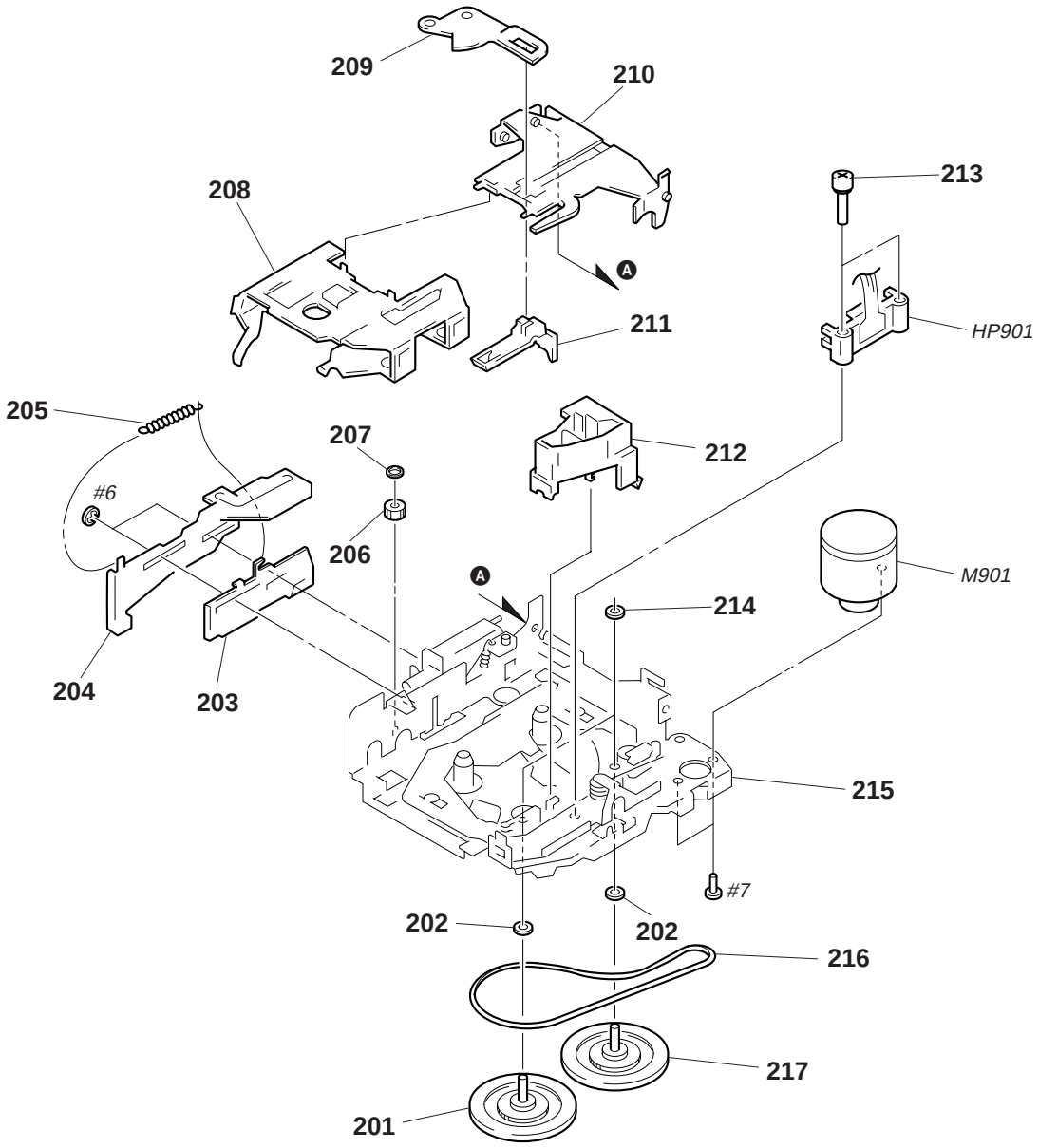
Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-932-205-11	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
* 5	3-009-306-01	SHEET, INSULATING	
* 6	A-3309-835-A	MAIN BOARD, COMPLETE (German)	
* 6	A-3309-836-A	MAIN BOARD, COMPLETE (AEP, UK)	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-269-1	COVER ASSY (ISO)	
9	1-777-989-11	CORD (WITH CONNECTOR) (AMP REM / TEL MUTE)	
* 10	3-009-307-01	BRACKET (IC)	
* 11	3-009-293-01	HEATSINK	
12	9-911-840-XX	CUSHION (U)	
* 13	3-009-813-01	CHASSIS	
14	3-937-650-01	PLATE (C), GROUND	
* 15	A-3309-740-A	POWER BOARD, COMPLETE	
16	1-782-092-11	CORD (WITH CONNECTOR) (POWER)	
17	1-782-093-11	CORD (WITH CONNECTOR) (SPEAKER)	
* 18	3-012-859-01	CAP, RUBBER (25)	
* 19	3-012-105-01	BRACKET (HS)	
CNP900	1-751-000-71	CORD (WITH CONNECTOR) (LINE OUT FRONT)	
F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	3-009-301-01	BUTTON (D-BASS)	
103	3-009-299-01	BUTTON (L2) (+. –)	
104	3-009-304-01	BUTTON (RELEASE)	
105	3-932-475-01	SPRING (RELEASE)	
106	3-904-194-01	EMBLEM (NO. 2.5), SONY	
107	X-3373-661-1	PANEL SUB ASSY	
108	3-009-300-01	BUTTON (SOURCE)	
109	3-009-297-01	BUTTON (L)	
		(+ ▶▶I ▶▶. SEEK AMS. I◀◀ ◀◀ –. ●. OFF. ●. SEL. MUTE)	
111	3-009-308-01	BUTTON (1-3) (⏏. 1. 2. 3)	
112	3-009-309-01	BUTTON (4-6) (SENS. 4. 5. 6)	
113	3-009-298-01	BUTTON (R) (PTY. AF / TA. – DISC +)	
* 114	3-010-282-01	PLATE (LCD), GROUND	
* 115	3-009-305-11	SHEET (REFLECTOR)	
* 116	3-009-302-01	PLATE (LCD), LIGHT GUIDE	
* 117	3-009-303-01	HOLDER (LCD)	
118	3-009-295-01	PANEL, FRONT BACK	
LCD901	1-801-587-11	DISPLAY PANEL, LIQUID CRYSTAL	
PL903	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	
PL904	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)	

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



Ref. No.	Part No.	Description	Remark
201	A-3291-667-A	CLUTCH (FR) ASSY	
202	3-701-437-21	WASHER	
* 203	3-008-883-01	LEVER (LDG-A)	
* 204	3-008-884-01	LEVER (LDG-B)	
205	3-008-890-01	SPRING (LEVER LDG), TENSION	
206	3-933-335-01	GEAR (LDG-FT)	
207	3-341-753-11	WASHER, POLYETHYLENE	
208	3-008-861-01	HOUSING	
* 209	3-008-882-01	ARM (SUCTION)	
210	3-008-860-01	HANGER	
211	3-008-874-02	CATCHER	
212	3-933-344-01	GUIDE (C)	
213	3-927-100-01	SCREW (+PS 2X10), SPECIAL	
214	3-364-151-01	WASHER	
215	A-3291-919-A	CHASSIS ASSY (A)	
216	3-928-675-01	BELT (52)	
217	3-936-853-01	FLYWHEEL (F)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN / REEL)	

KEY

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- Abbreviation
  G: German

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

Ref. No.	Part No.	Description			Remark
		KEYBOARD			
		*********			
*	3-009-302-01	PLATE(LCD),LIGHT GUIDE			
*	3-009-303-01	HOLDER(LCD)			
*	3-009-305-01	SHEET(REFLECTOR)			
*	3-010-282-01	PLATE(LCD),GROUND			
		<CAPACITOR>			
C901	1-163-033-11	CERAMIC CHIP	0.022uF		50V
C902	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C903	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C904	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		<CONNECTOR>			
CN901	1-764-423-11	PIN,CONNECTOR 12P			
		<DIODE>			
D901	8-719-420-90	DIODE MA8051-M			
D902	8-719-422-64	DIODE MA8062-M			
D903	8-719-422-64	DIODE MA8062-M			
D904	8-719-422-64	DIODE MA8062-M			
D905	8-719-422-64	DIODE MA8062-M			
		<IC>			
IC901	8-759-365-90	IC LC75824W			
		<CHIP CONDUCTOR>			
JC901	1-216-295-00	CONDUCTOR, CHIP (2012)			
		<LIQUID CRYSTAL DISPLAY>			
LCD901	1-801-587-11	DISPLAY PANEL,LIQUID CRYSTAL			
		<SWITCH>			
LSW901	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (OFF)			
LSW902	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (SOURCE)			
LSW903	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (MODE, ◀I▶)			
LSW904	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (+, ▶▶I ▶▶)			
LSW905	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (I◀◀ ◀◀, –)			
LSW906	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (–)			
LSW907	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (SEL)			
LSW908	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (+)			
LSW909	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (DSPL)			
LSW910	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (MUTE)			
LSW911	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (BTM, SENS)			
LSW921	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (⏏)			
LSW922	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (INTRO, 1)			
LSW923	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (REPEAT, 2)			
LSW924	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (SHUF / □□, 3)			
LSW925	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (BL. SKIP, 6)			
LSW926	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (ATA, 5)			
LSW927	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (BANK / MTL, 4)			
LSW928	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (FILE, PTY)			
LSW929	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (AF / TA)			
LSW930	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (DISC, +)			
LSW931	1-762-620-11	SWITCH,KEY BOARD (WITH LED) (DISC, –)			
		<PILOT LAMP>			
PL903	1-517-633-21	LAMP,PILOT (LCD BACK LIGHT)			
PL904	1-517-633-21	LAMP,PILOT (LCD BACK LIGHT)			
		<TRANSISTOR>			
Q901	8-729-106-60	TRANSISTOR 2SB1115A			
Q902	8-729-106-60	TRANSISTOR 2SB1115A			
Q903	8-729-900-53	TRANSISTOR DTC114EK			
Q904	8-729-900-53	TRANSISTOR DTC114EK			
		<RESISTOR / CHIP CONDUCTOR>			
R901	1-216-045-00	METAL CHIP	680	5%	1/10W
R902	1-216-045-00	METAL CHIP	680	5%	1/10W
R903	1-216-045-00	METAL CHIP	680	5%	1/10W
R904	1-216-049-00	METAL CHIP	1K	5%	1/10W
R905	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R906	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R907	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R908	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R909	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R910	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R921	1-216-045-00	METAL CHIP	680	5%	1/10W
R922	1-216-045-00	METAL CHIP	680	5%	1/10W
R923	1-216-045-00	METAL CHIP	680	5%	1/10W

Ref. No.	Part No.	Description			Remark
R924	1-216-049-00	METALCHIP	1K	5%	1/10W
R925	1-216-053-00	METALCHIP	1.5K	5%	1/10W
R926	1-216-053-00	METALCHIP	1.5K	5%	1/10W
R927	1-216-057-00	METALCHIP	2.2K	5%	1/10W
R928	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R929	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R930	1-216-295-00	CONDUCTOR,CHIP		(2012)	
R931	1-216-069-00	METALCHIP	6.8K	5%	1/10W
R932	1-216-073-00	METALCHIP	10K	5%	1/10W
R951	1-216-041-00	METALCHIP	470	5%	1/10W
R952	1-216-109-00	METALCHIP	330K	5%	1/10W
R953	1-216-049-00	METALCHIP	1K	5%	1/10W
R954	1-216-049-00	METALCHIP	1K	5%	1/10W
R955	1-216-049-00	METALCHIP	1K	5%	1/10W
R956	1-216-049-00	METALCHIP	1K	5%	1/10W
R957	1-216-073-00	METALCHIP	10K	5%	1/10W
R958	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R959	1-216-073-00	METALCHIP	10K	5%	1/10W
R960	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R961	1-216-037-00	METALCHIP	330	5%	1/10W
R962	1-216-033-00	METALCHIP	220	5%	1/10W
R963	1-216-029-00	METALCHIP	150	5%	1/10W
R964	1-216-025-00	METALCHIP	100	5%	1/10W
R965	1-216-037-00	METALCHIP	330	5%	1/10W
R966	1-216-033-00	METALCHIP	220	5%	1/10W
R967	1-216-029-00	METALCHIP	150	5%	1/10W
R968	1-216-021-00	METALCHIP	68	5%	1/10W
R969	1-216-029-00	METALCHIP	150	5%	1/10W
R970	1-216-021-00	METALCHIP	68	5%	1/10W
R971	1-216-029-00	METALCHIP	150	5%	1/10W
R972	1-216-021-00	METALCHIP	68	5%	1/10W
R981	1-216-053-00	METALCHIP	1.5K	5%	1/10W
R982	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R983	1-216-069-00	METALCHIP	6.8K	5%	1/10W
R984	1-216-081-00	METALCHIP	22K	5%	1/10W
		<SWITCH>			
SW951	1-762-937-11	SWITCH,ROTARY(D-BASS)			
**********					
*	A-3309-836-A	MAIN BOARD,COMPLETE(AEP,UK)			
*	A-3309-835-A	MAIN BOARD,COMPLETE(G)			
		**********			
*	3-009-293-01	HEATSINK			
*	3-009-307-01	BRACKET(IC)			
*	3-012-105-01	BRACKET(HS)			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
		<CAPACITOR>			
C1	1-163-235-11	CERAMICCHIP	22PF	5%	50V
C2	1-163-009-11	CERAMICCHIP	0.001uF	10%	50V
C3	1-126-157-11	ELECT	10uF	20%	16V
C4	1-126-157-11	ELECT	10uF	20%	16V
C5	1-126-157-11	ELECT	10uF	20%	16V
C6	1-164-232-11	CERAMICCHIP	0.01uF		50V
C9	1-163-009-11	CERAMICCHIP	0.001uF	10%	50V
C11	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C12	1-107-823-11	CERAMICCHIP	0.47uF	10%	16V
C13	1-163-037-11	CERAMICCHIP	0.0022uF	10%	50V

Ref. No.	Part No.	Description			Remark
C14	1-163-161-11	CERAMICCHIP	2200PF	5%	100V
C15	1-124-584-00	ELECT	100uF	20%	10V
C16	1-163-809-11	CERAMICCHIP	0.047uF	10%	25V
C17	1-124-463-00	ELECT	0.1uF	20%	50V
C18	1-164-232-11	CERAMICCHIP	0.01uF		50V
C19	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C20	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C21	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C22	1-163-077-00	CERAMICCHIP	0.1uF	10%	50V
C23	1-126-933-11	ELECT	100uF	20%	16V
C24	1-163-099-00	CERAMICCHIP	18PF	5%	50V
C25	1-163-099-00	CERAMICCHIP	18PF	5%	50V
C26	1-163-133-00	CERAMICCHIP	470PF	5%	50V
C28	1-126-157-11	ELECT	10uF	20%	16V
C29	1-164-232-11	CERAMICCHIP	0.01uF		50V
C30	1-163-231-11	CERAMICCHIP	15PF	5%	50V
C31	1-163-229-11	CERAMICCHIP	12PF	5%	50V
C32	1-126-160-11	ELECT	1uF	20%	50V
C34	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C35	1-164-232-11	CERAMICCHIP	0.01uF		50V
C36	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C101	1-163-037-11	CERAMICCHIP	0.022uF	10%	25V
C102	1-126-160-11	ELECT	1uF	20%	50V
C103	1-126-160-11	ELECT	1uF	20%	50V
C111	1-126-160-11	ELECT	1uF	20%	50V
C112	1-164-182-11	CERAMICCHIP	0.0033uF	10%	50V
C113	1-126-160-11	ELECT	1uF	20%	50V
C114	1-163-037-11	CERAMICCHIP	0.022uF	10%	25V
C115	1-164-492-11	CERAMICCHIP	0.15uF	10%	16V
C116	1-164-492-11	CERAMICCHIP	0.15uF	10%	16V
C118	1-126-157-11	ELECT	10uF	20%	16V
C119	1-126-157-11	ELECT	10uF	20%	16V
C120	1-126-157-11	ELECT	10uF	20%	16V
C121	1-126-157-11	ELECT	10uF	20%	16V
C122	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C123	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C124	1-126-096-11	ELECT	10uF	20%	35V
C128	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C151	1-107-823-11	CERAMICCHIP	0.47uF	10%	16V
C152	1-163-809-11	CERAMICCHIP	0.047uF	10%	25V
C153	1-163-037-11	CERAMICCHIP	0.022uF	10%	25V
C155	1-124-234-00	ELECT	22uF	20%	16V
C157	1-124-584-00	ELECT	100uF	20%	10V
C158	1-163-031-11	CERAMICCHIP	0.01uF		50V
C201	1-163-037-11	CERAMICCHIP	0.022uF	10%	25V
C202	1-126-160-11	ELECT	1uF	20%	50V
C203	1-126-160-11	ELECT	1uF	20%	50V
C211	1-126-160-11	ELECT	1uF	20%	50V
C212	1-164-182-11	CERAMICCHIP	0.0033uF	10%	50V
C213	1-126-160-11	ELECT	1uF	20%	50V
C214	1-163-037-11	CERAMICCHIP	0.022uF	10%	25V
C215	1-164-492-11	CERAMICCHIP	0.15uF	10%	16V
C216	1-164-492-11	CERAMICCHIP	0.15uF	10%	16V
C218	1-126-157-11	ELECT	10uF	20%	16V
C219	1-126-157-11	ELECT	10uF	20%	16V
C220	1-126-157-11	ELECT	10uF	20%	16V
C221	1-126-157-11	ELECT	10uF	20%	16V
C222	1-163-251-11	CERAMICCHIP	100PF	5%	50V
C223	1-163-251-11	CERAMICCHIP	100PF	5%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C224	1-126-096-11	ELECT	10uF	20%	35V
C228	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C301	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C303	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C304	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C305	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C306	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C308	1-126-160-11	ELECT	1uF	20%	50V
C309	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C310	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C350	1-124-234-00	ELECT	22uF	20%	16V
C351	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C353	1-124-465-00	ELECT	0.47uF	20%	50V
C354	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C356	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C357	1-124-584-00	ELECT	100uF	20%	10V
C362	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C363	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C365	1-126-157-11	ELECT	10uF	20%	16V
C366	1-126-157-11	ELECT	10uF	20%	16V
C367	1-126-934-11	ELECT	220uF	20%	16V
C401	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C402	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C403	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C404	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C405	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C406	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C408	1-126-160-11	ELECT	1uF	20%	50V
C409	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C410	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C501	1-124-584-00	ELECT	100uF	20%	10V
C502	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C503	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C504	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C505	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C506	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C507	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C582	1-124-257-00	ELECT	2.2uF	20%	50V
C583	1-124-589-11	ELECT	47uF	20%	16V
C584	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C601	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C603	1-125-710-11	DOUBLE LAYER	0.1F		5.5V
C605	1-126-157-11	ELECT	10uF	20%	16V
C606	1-126-157-11	ELECT	10uF	20%	16V
C607	1-126-157-11	ELECT	10uF	20%	16V
C609	1-124-589-11	ELECT	47uF	20%	16V
C610	1-124-234-00	ELECT	22uF	20%	16V
C612	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C614	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C615	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C617	1-126-157-11	ELECT	10uF	20%	16V
C618	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C650	1-126-936-11	ELECT	3300uF	20%	16V
C660	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C701	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C702	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C703	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V

Ref. No.	Part No.	Description			Remark
C704	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		<CONNECTOR/JACK>			
* CN151	1-750-241-21	PIN, CONNECTOR (PC BOARD) 3P			
CN351	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN352	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN602	1-764-422-11	PLUG, CONNECTOR 12P			
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
CNJ150	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT REAR)			
		<DISCHARGE GAP>			
* CP1	1-517-422-11	GAP, DISCHARGE			
		<DIODE>			
D2	8-719-991-65	DIODE SB02W03C			
D3	8-719-423-07	DIODE MA8100-L-TX			
D150	8-719-075-80	DIODE MA8180-M-TX			
D350	8-719-404-49	DIODE MA111			
D361	8-719-423-07	DIODE MA8100-L-TX			
D362	8-719-911-19	DIODE 1SS119			
D501	8-719-422-12	DIODE MA8039			
D504	8-719-400-20	DIODE MA152WA			
D506	8-719-911-19	DIODE 1SS119			
D583	8-719-404-49	DIODE MA111			
D584	8-719-422-12	DIODE MA8039			
D601	8-719-423-32	DIODE MA8120-M			
D605	8-719-977-03	DIODE DTZ5.6B			
D606	8-719-017-67	DIODE MA8068H			
D607	8-719-801-78	DIODE 1SS184			
D609	8-719-422-64	DIODE MA8062-M			
D610	8-719-422-64	DIODE MA8062-M			
D611	8-719-109-97	DIODE RD6.8ES-B2			
D612	8-719-109-97	DIODE RD6.8ES-B2			
D613	8-719-034-94	DIODE MA4180-M(QZ)			
D614	8-719-109-97	DIODE RD6.8ES-B2			
D615	8-719-109-97	DIODE RD6.8ES-B2			
D616	8-719-422-64	DIODE MA8062-M			
D617	8-719-422-64	DIODE MA8062-M			
D621	8-719-970-02	DIODE 1SR139-400			
D622	8-719-970-02	DIODE 1SR139-400			
D624	8-719-404-49	DIODE MA111			
D651	8-719-018-04	DIODE MA8240-TX			
D652	8-719-018-04	DIODE MA8240-TX			
D653	8-719-422-76	DIODE MA8075-M			
D660	8-719-422-64	DIODE MA8062-M			
D661	8-719-404-49	DIODE MA111			
D701	8-719-057-80	DIODE MA8160-M-TX			
D703	8-719-422-67	DIODE MA8062-H			
D704	8-719-422-64	DIODE MA8062-M			
D705	8-719-422-64	DIODE MA8062-M			
D706	8-719-422-64	DIODE MA8062-M			
		<IC>			
IC1	8-759-448-88	IC TB2114F(EL)			
IC3	8-759-163-63	IC TDA7330BD-013TR			
IC151	8-759-443-67	IC LC75373ED			
IC351	8-752-079-79	IC CXA2510AQ-T4			
IC360	8-759-395-97	IC MM1322XFBE			

Ref. No.	Part No.	Description	Remark
IC501	8-759-451-04	IC MN1886426S4H	
IC571	8-759-363-81	IC XC61AN4002PR	
IC601	8-759-347-49	IC BA3918-V2	
IC701	8-759-449-89	IC BA8270F-E2	
		<JACK>	
J1	1-764-808-14	JACK(FM/AMANTENNA)	
J501	1-566-822-41	JACK(REMOTEIN)	
		<CHIPCONDUCTOR>	
JC1	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC5	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC7	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC8	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC9	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC10	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC11	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC14	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC15	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC16	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC17	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC18	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC20	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC21	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC22	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC23	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC24	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC27	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC28	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC29	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC30	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC31	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC32	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC33	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC34	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC35	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC36	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC37	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC38	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC50	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC51	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC52	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC53	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC54	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC56	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC57	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC58	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC59	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC60	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC62	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC63	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC65	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC66	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC67	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC68	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC69	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC70	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC71	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC72	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC73	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC74	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC75	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC76	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC77	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC78	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC79	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC80	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC81	1-216-296-00	CONDUCTOR, CHIP (3216) (G)	
		<COIL>	
L1	1-412-006-31	INDUCTOR, CHIP 10uH	
L2	1-410-509-11	INDUCTOR, MICRO 10uH	
L4	1-410-509-11	INDUCTOR, MICRO 10uH	
L501	1-410-509-11	INDUCTOR 10uH	
		<TRANSISTOR>	
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q101	8-729-920-21	TRANSISTOR DTC314TKH04	
Q102	8-729-920-21	TRANSISTOR DTC314TKH04	
Q103	8-729-920-21	TRANSISTOR DTC314TKH04	
Q201	8-729-920-21	TRANSISTOR DTC314TKH04	
Q202	8-729-920-21	TRANSISTOR DTC314TKH04	
Q203	8-729-920-21	TRANSISTOR DTC314TKH04	
Q361	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q362	8-729-020-67	TRANSISTOR XN1A312-TX	
Q364	8-729-106-60	TRANSISTOR 2SB1115A	
Q365	8-729-900-53	TRANSISTOR DTC114EK	
Q501	8-729-020-67	TRANSISTOR XN1A312-TX	
Q503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q581	8-729-020-67	TRANSISTOR XN1A312-TX	
Q603	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q605	8-729-020-67	TRANSISTOR XN1A312-TX	
Q606	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q608	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q609	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q610	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q701	8-729-900-53	TRANSISTOR DTC114EK	
		<RESISTOR/CHIPCONDUCTOR>	
R1	1-216-049-00	METALCHIP 1K 5% 1/10W	
R2	1-216-065-00	METALCHIP 4.7K 5% 1/10W	
R3	1-216-073-00	METALCHIP 10K 5% 1/10W	
R4	1-216-097-00	METALCHIP 100K 5% 1/10W	
R5	1-216-017-00	METALCHIP 47 5% 1/10W	
R6	1-216-077-00	METALCHIP 15K 5% 1/10W	
R7	1-216-075-00	METALCHIP 12K 5% 1/10W	
R8	1-216-025-00	METALCHIP 100 5% 1/10W	
R9	1-216-057-00	METALCHIP 2.2K 5% 1/10W	
R11	1-216-049-00	METALCHIP 1K 5% 1/10W	
R14	1-216-057-00	METALCHIP 2.2K 5% 1/10W	
R15	1-216-073-00	METALCHIP 10K 5% 1/10W	
R16	1-216-071-00	METALCHIP 8.2K 5% 1/10W	
R17	1-216-129-00	METALCHIP 2.2M 5% 1/10W	
R18	1-216-049-00	METALCHIP 1K 5% 1/10W	
R19	1-216-073-00	METALCHIP 10K 5% 1/10W	
R101	1-216-065-00	METALCHIP 4.7K 5% 1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R102	1-216-085-00	METALCHIP	33K	5%	1/10W
R103	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R104	1-216-190-00	METALCHIP	470	5%	1/8W
R105	1-216-190-00	METALCHIP	470	5%	1/8W
R108	1-216-077-00	METALCHIP	15K	5%	1/10W
R109	1-216-077-00	METALCHIP	15K	5%	1/10W
R110	1-216-077-00	METALCHIP	15K	5%	1/10W
R111	1-216-077-00	METALCHIP	15K	5%	1/10W
R112	1-216-129-00	METALCHIP	2.2M	5%	1/10W
R113	1-216-129-00	METALCHIP	2.2M	5%	1/10W
R118	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R119	1-216-073-00	METALCHIP	10K	5%	1/10W
R151	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R201	1-216-214-00	METALCHIP	4.7K	5%	1/8W
R202	1-216-085-00	METALCHIP	33K	5%	1/10W
R203	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R204	1-216-041-00	METALCHIP	470	5%	1/10W
R205	1-216-041-00	METALCHIP	470	5%	1/10W
R208	1-216-077-00	METALCHIP	15K	5%	1/10W
R209	1-216-077-00	METALCHIP	15K	5%	1/10W
R210	1-216-077-00	METALCHIP	15K	5%	1/10W
R211	1-216-077-00	METALCHIP	15K	5%	1/10W
R212	1-216-129-00	METALCHIP	2.2M	5%	1/10W
R213	1-216-129-00	METALCHIP	2.2M	5%	1/10W
R218	1-216-061-00	METALCHIP	3.3K	5%	1/10W
R219	1-216-073-00	METALCHIP	10K	5%	1/10W
R303	1-216-077-00	METALCHIP	15K	5%	1/10W
R304	1-216-081-00	METALCHIP	22K	5%	1/10W
R305	1-216-109-00	METALCHIP	330K	5%	1/10W
R307	1-216-057-00	METALCHIP	2.2K	5%	1/10W
R308	1-216-073-00	METALCHIP	10K	5%	1/10W
R351	1-208-812-11	METALCHIP	18K	2%	1/10W
R352	1-216-105-00	METALCHIP	220K	5%	1/10W
R353	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R354	1-216-077-00	METALCHIP	15K	5%	1/10W
R355	1-216-009-00	METALCHIP	22	5%	1/10W
R361	1-216-049-00	METALCHIP	1K	5%	1/10W
R362	1-249-389-11	CARBON	4.7	5%	1/4W
R363	1-249-389-11	CARBON	4.7	5%	1/4W
R364	1-216-073-00	METALCHIP	10K	5%	1/10W
R365	1-216-065-00	METALCHIP	4.7K	5%	1/10W
R403	1-216-077-00	METALCHIP	15K	5%	1/10W
R404	1-216-081-00	METALCHIP	22K	5%	1/10W
R405	1-216-109-00	METALCHIP	330K	5%	1/10W
R407	1-216-057-00	METALCHIP	2.2K	5%	1/10W
R408	1-216-073-00	METALCHIP	10K	5%	1/10W
R501	1-216-097-00	METALCHIP	100K	5%	1/10W
R505	1-216-049-00	METALCHIP	1K	5%	1/10W
R506	1-216-109-00	METALCHIP	330K	5%	1/10W
R507	1-216-198-00	METALCHIP	1K	5%	1/8W
R508	1-216-206-00	METALCHIP	2.2K	5%	1/8W
R509	1-216-198-00	METALCHIP	1K	5%	1/8W
R510	1-216-097-00	METALCHIP	100K	5%	1/10W
R511	1-216-097-00	METALCHIP	100K	5%	1/10W
R512	1-216-097-00	METALCHIP	100K	5%	1/10W
R513	1-216-097-00	METALCHIP	100K	5%	1/10W
R514	1-216-198-00	METALCHIP	1K	5%	1/8W
R515	1-216-198-00	METALCHIP	1K	5%	1/8W
R516	1-216-198-00	METALCHIP	1K	5%	1/8W

Ref. No.	Part No.	Description			Remark
R517	1-216-198-00	METALCHIP	1K	5%	1/8W
R518	1-216-246-00	METALCHIP	100K	5%	1/8W
R521	1-216-246-00	METALCHIP	100K	5%	1/8W
R522	1-216-097-00	METALCHIP	100K	5%	1/10W
R523	1-216-097-00	METALCHIP	100K	5%	1/10W
R524	1-216-097-00	METALCHIP	100K	5%	1/10W
R525	1-216-097-00	METALCHIP	100K	5%	1/10W
R526	1-216-097-00	METALCHIP	100K	5%	1/10W
R528	1-216-097-00	METALCHIP	100K	5%	1/10W
R532	1-216-097-00	METALCHIP	100K	5%	1/10W
R533	1-216-246-00	METALCHIP	100K	5%	1/8W
R536	1-216-246-00	METALCHIP	100K	5%	1/8W
R537	1-216-097-00	METALCHIP	100K	5%	1/10W (G)
R538	1-216-246-00	METALCHIP	100K	5%	1/8W (AEP, UK)
R539	1-208-806-11	METALCHIP	10K	0.50%	1/10W
R540	1-216-097-00	METALCHIP	100K	5%	1/10W
R544	1-216-049-00	METALCHIP	1K	5%	1/10W
R545	1-216-097-00	METALCHIP	100K	5%	1/10W
R546	1-216-097-00	METALCHIP	100K	5%	1/10W
R548	1-216-222-00	METALCHIP	10K	5%	1/8W
R549	1-216-222-00	METALCHIP	10K	5%	1/8W
R550	1-216-073-00	METALCHIP	10K	5%	1/10W
R551	1-249-429-11	CARBON	10K	5%	1/4W
R552	1-216-073-00	METALCHIP	10K	5%	1/10W
R562	1-216-097-00	METALCHIP	100K	5%	1/10W
R582	1-216-198-00	METALCHIP	1K	5%	1/8W
R583	1-216-166-00	METALCHIP	47	5%	1/8W
R584	1-216-238-00	METALCHIP	47K	5%	1/8W
R585	1-216-097-00	METALCHIP	100K	5%	1/10W
R599	1-216-295-00	CONDUCTOR,CHIP		(2012)	
R601	1-216-057-00	METALCHIP	2.2K	5%	1/10W
R602	1-216-097-00	METALCHIP	100K	5%	1/10W
R603	1-216-089-00	METALCHIP	47K	5%	1/10W
R604	1-216-089-00	METALCHIP	47K	5%	1/10W
R606	1-216-206-00	METALCHIP	2.2K	5%	1/8W
R607	1-216-073-00	METALCHIP	10K	5%	1/10W
R608	1-216-097-00	METALCHIP	100K	5%	1/10W
R609	1-216-037-00	METALCHIP	330	5%	1/10W
R610	1-216-073-00	METALCHIP	10K	5%	1/10W
R612	1-216-025-00	METALCHIP	100	5%	1/10W
R613	1-216-025-00	METALCHIP	100	5%	1/10W
R614	1-208-806-11	METALCHIP	10K	0.50%	1/10W
R615	1-208-806-11	METALCHIP	10K	0.50%	1/10W
R616	1-216-295-00	CONDUCTOR,CHIP		(2012)	
R617	1-216-025-00	METALCHIP	100	5%	1/10W
R618	1-208-806-11	METALCHIP	10K	0.50%	1/10W
R619	1-208-806-11	METALCHIP	10K	0.50%	1/10W
R620	1-216-025-00	METALCHIP	100	5%	1/10W
R624	1-249-383-11	CARBON	1.5	5%	1/6W
R625	1-249-383-11	CARBON	1.5	5%	1/6W
R626	1-249-383-11	CARBON	1.5	5%	1/6W
R627	1-249-383-11	CARBON	1.5	5%	1/6W
R660	1-216-198-00	METALCHIP	1K	5%	1/8W
R661	1-216-129-00	METALCHIP	2.2M	5%	1/10W
R704	1-216-246-00	METALCHIP	100K	5%	1/8W
R705	1-216-073-00	METALCHIP	10K	5%	1/10W
R706	1-216-025-00	METALCHIP	100	5%	1/10W
R707	1-216-174-00	METALCHIP	100	5%	1/8W

Ref. No.	Part No.	Description			Remark
R708	1-216-017-00	METAL CHIP	47	5%	1/10W
		<VARIABLE RESISTOR>			
RV1	1-241-768-11	RES, ADJ, CARBON 220K			
RV301	1-238-597-11	RES, ADJ, CARBON 1K			
RV401	1-238-597-11	RES, ADJ, CARBON 1K			
		<SWITCH>			
S601	1-692-431-21	SWITCH, TACTILE (RESET)			
		<TUNER UNIT>			
TU1	1-693-373-11	TUNER UNIT (FM/AM)			
		<VIBRATOR>			
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)			
X2	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)			
X501	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	A-3309-740-A	POWER BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C801	1-126-157-11	ELECT	10uF	20%	16V
C802	1-126-157-11	ELECT	10uF	20%	16V
C803	1-126-157-11	ELECT	10uF	20%	16V
C804	1-124-589-11	ELECT	47uF	20%	16V
C805	1-136-165-00	FILM	0.1uF	5%	50V
C806	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C811	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C812	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C821	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C822	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		<CONNECTOR>			
CN801	1-778-985-11	PIN, CONNECTOR (ISO)			
CN802	1-778-983-11	CONNECTOR			
CN803	1-778-983-11	CONNECTOR			
		<DIODE>			
D801	8-719-049-38	DIODE 1N5404TU			
D813	8-719-970-02	DIODE 1SR139-400			
D814	8-719-970-02	DIODE 1SR139-400			
D815	8-719-970-02	DIODE 1SR139-400			
D816	8-719-970-02	DIODE 1SR139-400			
D823	8-719-970-02	DIODE 1SR139-400			
D824	8-719-970-02	DIODE 1SR139-400			
D825	8-719-970-02	DIODE 1SR139-400			
D826	8-719-970-02	DIODE 1SR139-400			
		<IC>			
IC801	8-759-448-48	IC HA13157			
		<CHIP CONDUCTOR>			
JC801	1-216-296-00	CONDUCTOR, CHIP	(3216)		

Ref. No.	Part No.	Description			Remark
		<COIL>			
L801	1-416-046-11	COIL, CHOKE			
		<RESISTOR>			
R801	1-216-198-00	METAL CHIP	1K	5%	1/8W
R802	1-216-198-00	METAL CHIP	1K	5%	1/8W
R803	1-216-049-00	METAL CHIP	1K	5%	1/10W
R804	1-216-049-00	METAL CHIP	1K	5%	1/10W
R811	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R812	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R813	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R814	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R821	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R822	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R823	1-216-296-00	CONDUCTOR, CHIP		(3216)	
R824	1-216-296-00	CONDUCTOR, CHIP		(3216)	
		<SWITCH>			
S801	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
**********					
		MISCELLANEOUS			
		**********			
9	1-777-989-11	CORD (WITH CONNECTOR) (AMP REM/TEL MUTE)			
16	1-782-092-11	CORD (WITH CONNECTOR) (POWER)			
17	1-782-093-11	CORD (WITH CONNECTOR) (SPEAKER)			
CNP900	1-751-000-71	CORD (WITH CONNECTOR) (LINE OUT FRONT)			
F801	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)			
#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			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
	1-473-067-31	REMOTE COMMANDER (RM-X2S)			
	3-859-481-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)			
	3-859-481-21	MANUAL, INSTRUCTION (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP)			
	3-859-481-31	MANUAL, INSTRUCTION (GERMAN) (G)			
	3-859-482-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)			
	3-859-482-21	MANUAL, INSTRUCTION, INSTALL (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP, G)			
	X-3373-371-1	CASE ASSY (for FRONT PANEL)			
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Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	3-916-161-31	FRAME ASSY	
502	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING	
503	3-386-828-01	SCREW, FITTING	
504	3-349-410-01	BUSHING	
505	3-388-078-01	KEY	
506	1-777-989-11	CORD (WITH CONNECTOR) (AMP REM / TEL MUTE)	
507	1-782-093-11	CORD (WITH CONNECTOR) (SPEAKER)	
508	1-782-092-11	CORD (WITH CONNECTOR) (POWER)	
509	1-775-543-11	CORD, GROUND	
510	X-3369-817-1	BRACKET ASSY	
511	1-465-459-21	ADAPTER, ANTENNA	
512	1-751-000-71	CORD (WITH CONNECTOR) (LINE OUT FRONT)