

MDX-62

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



- Electrical adjustment of this set is automatically performed.

Model Name Using Similar Mechanism	NEW
Mini Disc Mechanism Type	MG-798K-133
Optical Pick-up Name	KMS-241A/J2N

SPECIFICATIONS

System	Mini disc digital audio system
Laser Diode Properties	Material: GaAlAs Wavelength: 780 nm Emission Duration: Continuous Laser output Power: Less than 44.6 μ W*
	* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Signal-to-noise ratio	95 dB
Outputs	Bus control output (8 PIN) Analog audio output (RCA PIN)
Current drain	300 mA (MD playback) 600 mA (during loading or ejecting a disc)
Dimensions	Approx. 176 × 83.5 × 130 mm (7 × 3 3/8 × 5 1/8 in.) (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.1 kg (2 lb. 7 oz.)
Power requirement	12 V DC car battery (negative ground)
Supplied accessories	Mounting hardware (1 set) Bus cable 5.5 m (1) RCA pin cord 5.5 m (1)

- U.S. and foreign patents licensed from Dolby Laboratories Licensing Corporation.
- Design and specifications subject to change without notice.

FEATURES

- Sony BUS system compatible with mobile **MD changers**.
- **Direct-in system** for inserting and removing MDs easily.
- **No waiting time to change discs** in continuous play.
- The MD changer compartment has a built in light for easy use even in the dark.
- 1 bit Digital/Analog converter for high quality sound reproduction.
- The Digital D-BASS function* creates an even sharper and more powerful sound than Analog D-BASS.

* This unit supports Digital D-BASS function if the master unit also has Digital D-BASS function.

MINIDISC CHANGER



SONY®

SERVICE NOTE

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

NOTES ON PICK-UP FLEXIBLE BOARD

The pick-up flexible board in this set is secured to the optical pick-up with an adhesive tape. Once the tape is removed, an adhering force becomes weak, and it cannot be reused.

Therefore, if the optical pick-up is replaced, replace also the pick-up flexible board with a new one.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

1. SERVICE NOTE

1-1. To Place the Set into Playback Mode	3
1-2. How to Check the Servo Board Waveforms	3

2. GENERAL

Installation	4
Connections	6

3. DISASSEMBLY

3-1. Panel (Rear) Assy	8
3-2. Case (Upper)	8
3-3. Panel (Front) Assy	9
3-4. MD Block	9
3-5. Main Board	10
3-6. Chassis (OP) Block	10
3-7. Servo Board	11
3-8. Optical Pick-up	11
3-9. Note on Assembly for the Chassis (OP) Block	12

4. DIAGRAMS

4-1. IC Pin Descriptions	13
4-2. Circuit Boards Location	16
4-3. Block Diagram	17
4-4. Printed Wiring Boards –Servo Section–	20
4-5. Schematic Diagram –Servo Section–	23
4-6. Schematic Diagram –Main Section–	26
4-7. Printed Wiring Boards –Main Section–	29
4-8. Printed Wiring Board –Power Section–	31
4-9. Schematic Diagram –Power Section–	33

5. EXPLODED VIEWS

5-1. Case Section	40
5-2. Main Board Section	41
5-3. MD Section (1)	42
5-4. MD Section (2)	43
5-5. MD Section (3)	44

6. ELECTRICAL PARTS LIST

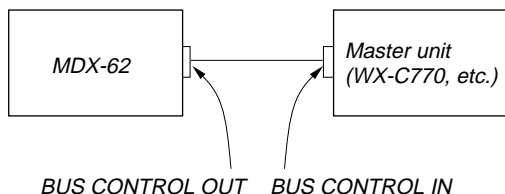
SECTION 1 SERVICE NOTE

1-1. TO PLACE THE SET INTO PLAYBACK MODE

The this set has no key control function and cannot be placed into the Playback mode alone.

For key control, the this set is controlled through serial communication with a master unit (car audio player, TV tuner or source selector compatible with the Sony BUS system.)

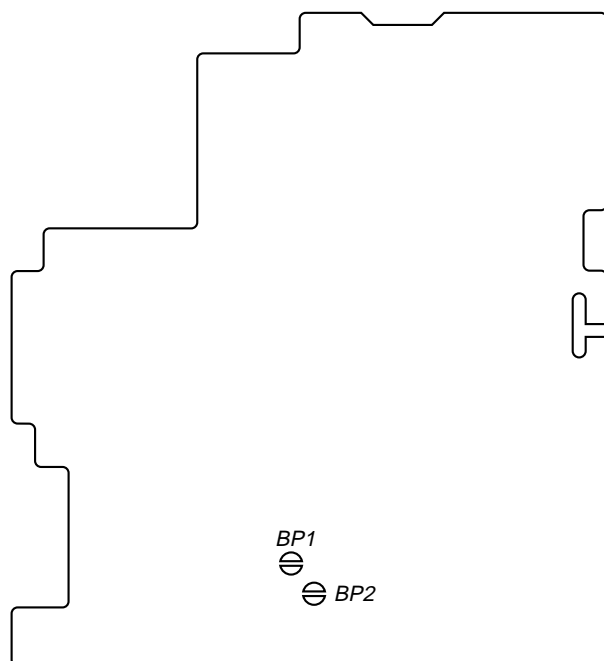
To service the this set, the set should be connected as given below:



1-2. HOW TO CHECK THE SERVO BOARD WAVEFORMS

1. Remove the panel (rear) assy, case (upper) and panel (front) assy. Then, remove the main board from the mechanism deck. (See page 8 of "SECTION 3. DISASSEMBLY".)
2. Remove the chassis (OP) block from the mechanism deck. (See page 10 of "SECTION 3. DISASSEMBLY".)
3. Short each bridge points BP1 and BP2 on the main board by solder bridge.

– main board (conductor side) –



4. Connect the power board with the main board by the main flexible board. Connect the main board with the servo board by the servo flexible board.
5. Connect to a master unit. With the master unit OFF, press the preset buttons **4** → **5** → **1** (2 seconds or more each) in this turn to enter the TEST mode.
6. Open the doors and insert a disc in the chassis (OP) assy. Use the **SOURCE** button on the master unit to select to MD to playback.
7. Check the waveforms at each point on the servo board.

Note: After this check is completed, remove solder between shorted bridge points BP1 and BP2 and open these points.

SECTION 2 GENERAL

This section extracted from US,
Canadian, E model's instruction manual.

Installation/Installation/ Instalación/安裝

Precautions

- Avoid installing the unit in a place
 - subject to temperatures exceeding 55°C (131°F) (such as in a car parked in direct sunlight)
 - subject to direct sunlight
 - near heat sources (such as heaters)
 - exposed to rain or moisture
 - exposed to excessive dust or dirt
 - subject to excessive vibration
- Choose the mounting location carefully, observing the following:
 - The fuel tank should not be damaged by the tapping screws.
 - There should be no wire harnesses or pipes under the place where you are going to install the unit.
 - The spare tire, tools or other equipment in or under the trunk should not be interfered with or damaged by the screws or the unit itself.
- Before installing in a glove box or on a console box, be sure the installation will not interfere with the master unit's cords and cables, and that the installation belt does not prevent the cover from opening.

Precauciones

- Evite instalar la unidad en los siguientes lugares
 - expuestos a temperaturas superiores a 55°C (como en un automóvil aparcado bajo la luz solar directa).
 - expuestos a la luz solar directa.
 - cercanos a fuentes térmicas (como calefactores).
 - expuestos a la lluvia o a la humedad.
 - expuestos a polvo o suciedad excesivos.
 - sujetos a vibraciones excesivas.
- Elija cuidadosamente el lugar de montaje, observando lo siguiente:
 - Los tornillos roscantes no deben dañar el depósito de combustible.
 - No debe haber colectores de cables ni conductos debajo del lugar de instalación de la unidad.
 - Los tornillos o la propia unidad no deben interferir ni dañar el neumático de repuesto, las herramientas u otros equipos que se encuentren dentro o debajo del maletero.
- Antes de realizar la instalación en la guantera o en la tapa de la consola, asegúrese de que dicha instalación no interfiera con los cables y conductores de la unidad principal y de que la correa de instalación no imposibilite la apertura de la cubierta.

Précautions

- Évitez d'installer l'appareil dans un endroit
 - soumis à des températures dépassant 55°C (131°F) (comme dans une voiture parkée en plein soleil).
 - soumis au rayonnement direct du soleil.
 - à proximité de sources de chaleur (comme des radiateurs).
 - exposé à la pluie ou à l'humidité.
 - exposé à de la poussière ou à des saletés en excès.
 - soumis à des vibrations excessives.
- Choisissez soigneusement l'endroit de montage en veillant aux précautions suivantes:
 - le réservoir à carburant ne peut risquer d'être endommagé par les vis taraudeuses.
 - il ne peut y avoir de faisceau de câbles ou de conduites sous l'endroit où vous prévoyez d'installer l'appareil.
 - la roue de secours, la trousse à outils et les autres équipements à l'intérieur ou sous la malle ne peuvent être en contact ni être endommagés par les vis ni par l'appareil lui-même.
- Avant d'installer l'appareil dans la boîte à gants ou sur un boîtier de console, assurez-vous que l'installation ne gêne pas les cordons et les câbles de l'appareil principal et que la sangle de montage n'empêchera pas l'ouverture du panneau frontal.

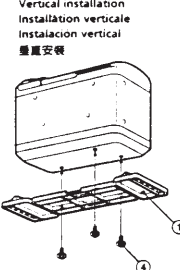
使用前須知事項

- 避免把主機放在下列地方:
 - 溫度超過 55°C 的地方 (如停放在陽光底下的汽車裏等)
 - 接受陽光直射的地方
 - 靠近發熱器之處 (如電暖爐等)
 - 雨中被潮濕的地方
 - 有過多灰塵或污垢之處
 - 接受震動的地方
- 安裝前請參照下列事項, 仔細選擇安裝位置:
 - 不可讓自攻螺絲釘傷及油箱。
 - 轉接器不可安裝在電線配線或儀表盒上面。
 - 轉接器安裝位置或螺絲釘等不可妨礙或破壞車上輪胎、汽車修理工具或其他裝置。
- 要安裝在小貯物箱裏或托架裏時, 須注意安裝時不可阻礙到主機的電線、電纜配線等, 安裝帶也不可妨礙到蓋子的開關。

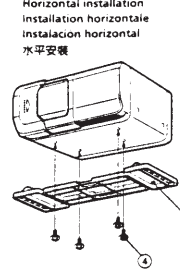
Under the passenger's seat or floor installation/Installation sous le siège du passager ou sur le plancher/ Instalación en el suelo o debajo del asiento del pasajero/要裝在乘客座位底下或地毯下面時

1 Attach part ① to the unit with the supplied screws ②. Fixez l'élément ① sur l'appareil à l'aide des vis ② fournies.

Vertical installation
Installation verticale
垂直安裝



Horizontal installation
Installation horizontale
水平安裝

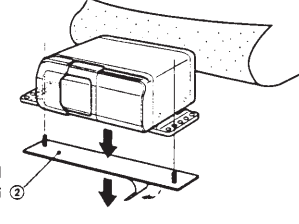


2 Decide on the installation position, and remove any dirt or stains from that surface. Place the changer onto the mounting pad ③, then peel the backing and stick ③ to the floor.

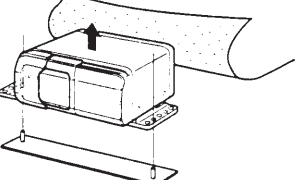
Choisissez la position d'installation et nettoyez la surface de montage de toute trace de poussière ou de souillures. Placez le changeur sur le support de montage ③, décollez-en la protection et fixez-le ③ sur le plancher.

Determine la posición de instalación y elimine la suciedad o las manchas de esa superficie. Coloque el cambiador sobre la almohadilla de montaje ③, despegue la tira de recubrimiento y adhiéralo ③ al suelo.

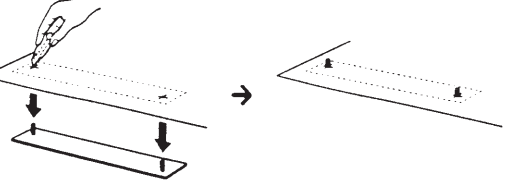
決定安裝位置, 並擦乾淨安裝面。把轉換器放在安裝用襯墊 ③ 上面, 把襯墊背後的紙張撕下, 然後把襯墊貼在汽車裏的地板上。



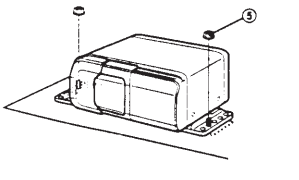
3 Remove the MD changer. Retirez le changeur de MD. Retire el cambiador de minidiscos. 取出微型磁碟的轉換器。



4 Make cuts in the carpet with a box knife. Decoupez le tapis de sol à l'aide d'un cutter. Realice cortes en la alfombra con una cuchilla. 以切刀按照襯墊大小切割地毯。

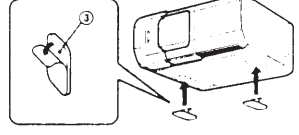


5 Mount firmly with the nuts ③. Fixez l'ensemble solidement au moyen des écrous ③. Realice el montaje firmemente con las tuercas ③. 牢固地擰緊螺母 ③。

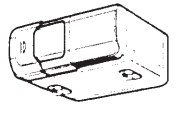


Glove box or console box installation/Installation dans une boîte à gants ou sur un boîtier de console/ Instalación en la guantera o en la tapa de la consola/要裝在貯物箱或托架箱裏時

1 Tear off the backing, and attach the double-sided adhesive tapes ① to the bottom of the unit. Décollez la protection et appliquez les bandes adhésives double face ① sur le fond de l'appareil. Despegue la tira de recubrimiento y fije las cintas adhesivas ① de doble cara a la base de la unidad. 把兩面黏着膠紙 ① 後面的紙張撕下, 然後把膠紙貼在主機機底。



2 Remove any dirt or stains from the surface you're going to mount the unit on, then attach the unit. Elimine la poussière ou les souillures de la surface de montage de l'appareil et fixez ensuite l'appareil dessus. Elimine la suciedad o las manchas de la superficie en la que va a montar la unidad y, a continuación, fijela. 要安裝以前, 必須先把黏着面擦乾淨。



Notes

- Before attaching the unit, be sure that nothing interferes with the operation of the unit, and that the unit does not interfere with the glove box or console box cover.
- When you install the main unit in a glove box, be sure to install the unit at a positive angle.

Remarques

- Avant de fixer l'appareil, assurez-vous que rien ne puisse gêner son fonctionnement et que l'appareil n'entraîne pas l'ouverture du couvercle de la boîte à gants ou du boîtier de console.
- Si vous installez l'appareil principal dans une boîte à gants, montez-le suivant un angle positif.

注意

- 安裝前請確認, 沒有任何裝置或零件會干擾到本機運作, 且本機不會妨礙貯物箱或托架蓋子的開關。
- 若把主機安裝在貯物箱內, 須將主機以正向角度安裝。

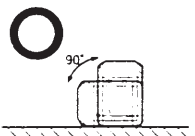
**Mounting angle adjustment/Reglage de l'angle de montage/
Ajuste del ángulo de montaje/安裝角度之調整**

You may install the unit at any positive angle as long as it is attached to a secure part of the car.

Vous pouvez installer l'appareil sous n'importe quel angle positif, pour peu qu'il soit fixé à un endroit sûr de la voiture.

Puede instalar la unidad en cualquier ángulo positivo siempre que la fije en una parte segura del automóvil.

本轉接器能安裝在汽車內任何安全之處, 但必須以正向角度安裝。

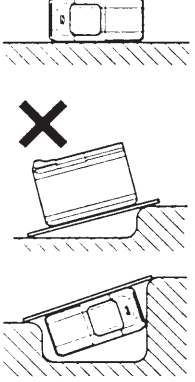


Do not install the unit on a detached mounting board for placement on uneven surfaces or upside down.

N'installez pas l'appareil sur une plaque de montage amovible en vue d'une installation sur un support inégal ou à l'envers.

No instale la unidad sobre un tablero de montaje sin fijación para colocarla sobre superficies irregulares o en posición invertida.

不可將主機裝在可拆卸的安裝板上, 或上下裝反了。



**Use the supplied screws/Utilisez les vis fournies/
Utilice los tornillos suministrados/附贈螺絲釘的用法須知**

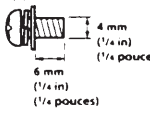
Be sure to install this unit with the supplied screws ①. If you have to find replacement screws, use screws with the following specifications.

Installez cet appareil à l'aide des vis fournies ①. Si vous étiez amené à utiliser des vis de remplacement, sélectionnez des vis satisfaisant aux spécifications suivantes.

Asegúrese de utilizar los tornillos suministrados ① para instalar la unidad. En caso de que necesite tornillos de repuesto, utilícelos con las siguientes características.

請以附贈的螺絲釘 ① 安裝。若要換新的螺絲釘時, 請使用下列規格的螺絲釘。

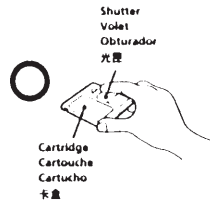
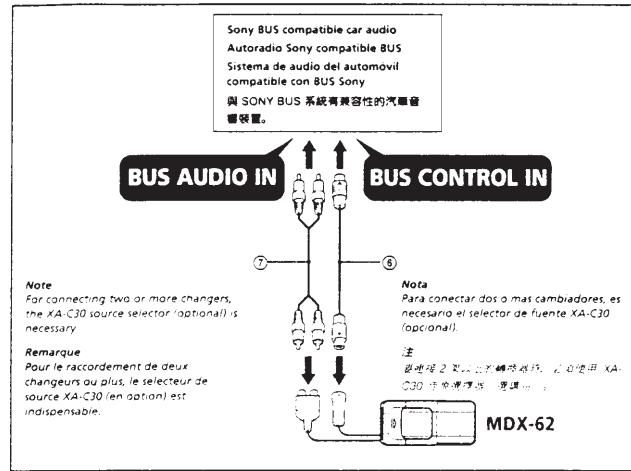
Replacement screw
max. size M4 x 6 mm
Tornillo de repuesto
Tamaño max. M4 x 6 mm
Vis de remplacement
Dimension max. M4 x 6 mm
備用螺絲釘
最大尺寸 M4 x 6 mm



To prevent damage to the unit, do not use screws longer than 6 mm (1/4 in).
Pour éviter d'endommager l'appareil, n'utilisez pas de vis d'une longueur supérieure à 6 mm (1/4 pouces).
Para evitar dañar la unidad, no utilice tornillos con una longitud superior a 6 mm.
為防止本機受損, 不可使用超過 6 mm 的螺絲釘。

Connections/Connexions/ Conexiones/線路之連接

For details, refer to the Installation/Connection manuals of each product. Pour plus de détails, consultez le manuel d'installation/raccordement fourni avec chaque appareil. Para obtener más información, consulte los manuales de instalación y de conexión de cada producto. 詳細請參看各機件的「安裝/線路之連接」使用說明書。



Notes on MiniDiscs

Since the MD itself is housed in a cartridge, free from accidental contact with your fingers and dust etc., it can withstand a certain degree of rough handling. However, dirt or dust on the surface of the cartridge or a warped cartridge may cause a malfunction in the unit. To enjoy optimum sound quality, observe the following:

Never touch the surface of the MD itself by deliberately opening the shutter on the cartridge.

Notes on mounting labels
Be sure to mount labels on cartridges correctly, as failing to do so may cause an MD to become stuck in the changer.

- Mount the label in a suitable position
- Remove old labels before putting new ones on
- Replace labels that are beginning to peel away from the MD

Do not expose the MD to direct sunlight or heat sources such as hot air-ducts. Do not leave it in a car parked in direct sunlight where there can be a considerable rise in temperature. Make sure that it is not left on the dashboard or the rear tray of a car etc. where the temperature can also be excessive.

Cleaning
Wipe the surface of the MD cartridge from time to time with a soft dry cloth.

Moisture condensation
On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit. Should this occur, the unit will not operate properly. In this case, remove the MD and wait for about an hour until the moisture evaporates.

Remarques sur les minidisques

Le minidisque proprement dit est logé dans une cartouche qui le protège des contacts accidentels avec les doigts, de la poussière, etc., et pouvant résister à des manipulations assez brusques. Cependant, la présence de poussière ou de saouliers sur la cartouche ou une déformation de la cartouche peuvent entraîner un dysfonctionnement de l'appareil.

Ne touchez jamais la surface sensible du minidisque en ouvrant délibérément le volet de la cartouche.

Remarques sur les étiquettes
Veuillez appliquer correctement les étiquettes sur les cartouches, faute de quoi un MD risque de rester coincé à l'intérieur du changeur.

- Appliquez l'étiquette dans une position appropriée
- Enlevez les anciennes étiquettes avant d'en appliquer de nouvelles.
- Remplacez les étiquettes lorsqu'elles commencent à se détacher du MD.

N'exposez pas les MD au rayonnement direct du soleil ni à des sources de chaleur telles que des conduits d'air chaud. Ne les laissez pas dans une voiture parquée en plein soleil, où la température peut augmenter considérablement à l'intérieur de l'habitacle. Veillez à ne pas en laisser sur le tableau de bord ni sur la lunette arrière d'une voiture, etc., là où la température risque également d'être excessive.

Nettoyage
Essuyez de temps à autre la surface des cartouches de MD à l'aide d'un chiffon doux et sec.

Condensation d'humidité
Les jours de pluie ou dans les régions très humides, de l'humidité risque de se condenser sur les lentilles à l'intérieur de l'appareil. Si cela se produit, l'appareil ne fonctionnera pas correctement. Dans ce cas, retirez le MD et attendez environ une heure que l'humidité se soit évaporée.

Notas sobre los minidisques

Puesto que el MD se encuentra alojado en un cartucho, que lo protege del contacto accidental con los dedos y el polvo, etc., dicho MD puede resistir hasta cierto grado movimientos bruscos. Sin embargo, la existencia de suciedad o polvo en la superficie del cartucho o la deformación del mismo pueden causar fallos de funcionamiento. Para disfrutar de una calidad de sonido óptima, observe lo siguiente:

No toque nunca la superficie del MD mediante la apertura deliberada del obturador del cartucho.

Notas sobre el montaje de las etiquetas
Asegúrese de montar las etiquetas sobre los cartuchos de forma correcta, ya que en caso contrario es posible que los minidisques se atasquen en el cambiador.

- Monte la etiqueta en una posición adecuada.
- Retire las etiquetas antiguas antes de montar otras nuevas.
- Sustituya las etiquetas que comienzan a desprenderse del MD.

No exponga el MD a la luz solar directa ni a fuentes térmicas como conductos de aire caliente. No lo deje en un automóvil aparcado bajo la luz solar directa, ya que puede producirse un considerable aumento de temperatura en su interior. Asegúrese de que no lo deja en el salpicadero ni en la bandeja trasera de un automóvil, etc., donde la temperatura puede igualmente ser excesiva.

Limpieza
Limpie periódicamente la superficie del cartucho del MD con un paño seco y suave.

Condensación de humedad
En días lluviosos o en zonas muy húmedas, es posible que se condense humedad en las lentes del interior de la unidad. Si esto ocurre, ésta no funcionará correctamente. En este caso, extraiga el MD y espere durante una hora aproximadamente hasta que se evapore la humedad.

使用微型磁碟時的注意事項

微型磁碟是裝在下盒裏使用的，故能防止不慎被手指觸摸或灰塵沾著，可以較隨便地拿取。然而，磁碟下盒表面若有塵埃或指印，或者扭曲磁碟下盒，仍可能會造成機器故障。因為要獲得極佳音響效果，請注意下列事項：

不可故意打開卡盒的小光幕並觸及微型磁碟表面。

貼標籤時的注意事項
在上下盒貼標籤時，位置必須準確，否則會使微型磁碟黏在轉換器。

- 請將標籤貼在適當的位置。
- 要貼新的標籤時，須先將舊的撕下來。
- 貼在微型磁碟上的標籤日久未黏著時，請撕下來，換新的貼上去。

不可將微型磁碟放在直射陽光底下，或靠近暖氣管等熱源之處，也不可將微型磁碟放在陽光直射下的汽車裏，因為車內溫度將會升高。又，若在車內時，不可放在溫度會升高的儀表板上或後座置物架上。

清潔
微型磁碟下盒時，請常用柔軟的布擦拭。

關於結露
在雨天或極其潮濕的地方使用主機時，機內的透視窗容易起水霧，致使主機不能正常工作。遇此情形，請將微型磁碟取出機殼約一小時左右，直到機內水霧蒸發，乾燥為止。

Listening to MDs

Operate the master unit. See the operating instructions of the master unit for details. When you select another disc to play, the volume of the MD that's playing goes down, and the discs change.

Master unit without an MD button
This unit is operated in the same way as when playing CDs. "CD" is displayed by the master unit, and MD play starts.

When you connect the master unit containing custom file function but no MD button to a CD changer
(If your master unit has the SOURCE button, see the master unit's manual Operating Instructions.)

- Even if you try to label the disc using the custom file function, "FULL" appears and you cannot label discs with personalized names.

Escucha de minidiscos
Emplee la unidad principal. Para obtener más información, consulte el manual de instrucciones de dicha unidad. Si selecciona la reproducción de otro disco, el volumen del MD en reproducción disminuirá y los discos cambiarán.

Unidad principal sin botón de MD
Esta unidad se emplea de la misma forma que para reproducir discos compactos. La unidad principal muestra "CD" y la reproducción del MD se inicia.

Cuando conecte la unidad principal que incluye la función de archivo personal sin botón de MD a un cambiador de CD (Si la unidad principal dispone del botón SOURCE, consulte el manual de instrucciones de dicha unidad.)
Aunque intente etiquetar el disco utilizando la función de archivo personal, aparece "FULL" y no es posible etiquetar los discos con nombres personalizados.

Ecoute d'un MD

Utilisez l'appareil principal. Pour plus de détails, consultez le mode d'emploi de l'appareil principal. Si vous sélectionnez la reproduction d'un autre disque, le volume du MD en cours de lecture baisse et les disques sont changés.

Si l'appareil n'a pas de touche MD
Cet appareil s'utilise de la même façon qu'un lecteur CD. L'indication "CD" est affichée sur l'appareil principal et la lecture du MD démarre.

Si votre appareil principal comporte une touche SOURCE, reportez-vous au mode d'emploi de l'appareil principal.

- Même si vous essayez d'identifier le disque à l'aide de la fonction de personnalisation de lecture, l'indication "FULL" s'affiche et vous ne pouvez pas attribuer de titre personnalisé aux disques.

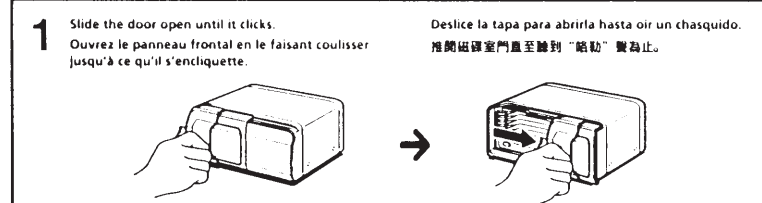
如何收聽微型磁碟
請操作主機。
詳細請參看主機的說明書。
當您選擇另一張要放的磁碟時，正在播放之中的磁碟音聲會降下來，然後磁碟便更換。

若使用沒具備微型磁碟操作作用按鍵的主機
您仍可按照播放音響指南說明書的方法操作。主機的螢幕上將出現 "CD"，然後微型磁碟便開始播放。

將具有檔案功能但不具備微型磁碟操作作用按鍵的主機連接到雷射碟片轉換器時 (若主機有 SOURCE 按鍵，請參看主機的說明書)
即使您試圖用檔案功能標示磁碟，"FULL" 會出現，而您也無法用自己的名稱標示磁碟。

- MDX-100 具有微型磁碟操作作用的按鍵，但 MDX-62 則有以雷射碟片轉換器。
- MDX-01 不能與本機連接使用。

Preparations/Préparation/ Preparativos/準備

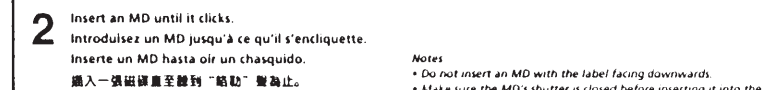


1 Slide the door open until it clicks.
Ouvrez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'enclicquette.

Deslice la tapa para abrirla hasta oír un chasquido.
推開磁碟室門直至聽到「喀嗒」聲為止。

About one minute after opening the door, the inside compartment will be lit.
Le compartiment intérieur s'éclaircira environ une minute après avoir ouvert le panneau frontal.
Trascurrido un minuto aproximadamente tras abrir la tapa, el compartimiento interior se iluminará.

- Cautionary notice for opening and closing the door**
If you press on the transparent window too hard, it may break or cause injury.
- Precaution pour de l'ouverture et la fermeture du panneau frontal**
Si vous appuyez trop fort sur la fenêtre transparente, vous risquez de la briser ou de vous blesser.
- Do not reach into the changer, you may get hurt.**
- N'introduisez pas les doigts à l'intérieur du changeur. Vous risqueriez de vous blesser.**
- No introduzca los dedos en el cambiador, ya que podría herirse.**
- 不可把手伸入轉換器裏，以免受傷。**



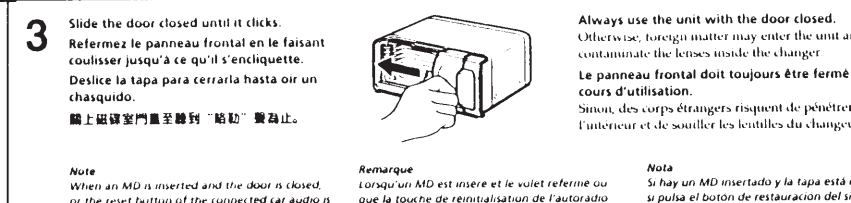
2 Insert an MD until it clicks.
Introduisez un MD jusqu'à ce qu'il s'enclicquette.
Inserte un MD hasta oír un chasquido.
插入一張磁碟直至聽到「喀嗒」聲為止。

Notes
• Do not insert an MD with the label facing downwards.
• Make sure the MD's shutter is closed before inserting it into the magazine.

Remarques
• N'introduisez pas un MD avec l'étiquette vers le bas.
• Assurez-vous que le volet du MD est fermé avant de l'introduire dans le magazine.

Notas
• No inserte el MD con la etiqueta orientada hacia abajo.
• Compruebe que el obturador del MD está cerrado antes de insertarlo en el cargador.

注
• 插入時，不可使磁碟有標籤之面向下。
• 在將磁碟放入磁碟室以前，必須確認磁碟上盒的光幕是關閉的。

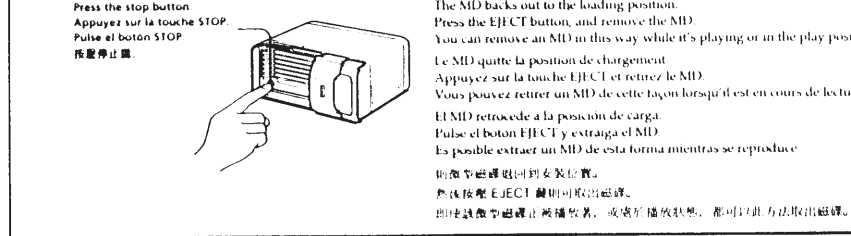


3 Slide the door closed until it clicks.
Refermez le panneau frontal en le faisant coulisser jusqu'à ce qu'il s'enclicquette.
Deslice la tapa para cerrarla hasta oír un chasquido.
關上磁碟室門直至聽到「喀嗒」聲為止。

Always use the unit with the door closed. Otherwise, foreign matter may enter the unit and contaminate the lenses inside the changer.
Le panneau frontal doit toujours être fermé en cours d'utilisation.
Siempre use la unidad con la tapa cerrada. De lo contrario, es posible que se introduzcan elementos extraños en la unidad y ensucien las lentes del interior del cambiador.

- Note**
When an MD is inserted and the door is closed, or the reset button of the connected car audio is pressed, the unit will be automatically activated and read the information on the MDs. After the information on all of the MDs has been read, the unit is ready to play.
- Remarque**
Lorsqu'un MD est inséré et le volet refermé ou le reset button of the connected car audio is pressed, l'appareil est automatiquement activé et entame la lecture des informations contenues sur les MD. Lorsque les informations de tous les MD ont été lues, l'appareil est prêt pour la lecture.
- Nota**
Si hay un MD insertado y la tapa está cerrada, o se pulsa el botón de restauración del sistema de audio de automóvil conectado, la unidad se activará de forma automática y leerá la información de los minidisques. Una vez leída la información de todos los minidisques, la unidad estará preparada para iniciar la reproducción.

To remove an MD/Pour retirer un MD/Para extraer un MD/如何取出微型磁碟



Press the EJECT button.
Appuyez sur la touche EJECT.
Pulse el botón EJECT.
按壓 EJECT 鍵。

You can remove MDs anytime except while one is playing.
Vous pouvez retirer des MD à tout moment sauf en cours de lecture.
Es posible extraer los minidisques en cualquier momento, excepto durante la reproducción.

Notes
• When removing two or more MDs, remove them in order from the upper tray.
• Never press the EJECT button for the MD which is in the play position.

Remarques
• Si vous retirez deux MD ou plus, commencez par le plateau supérieur.
• N'appuyez jamais sur la touche EJECT pour le MD qui se trouve en position de lecture.

Notas
• Si extrae dos o más minidisques, realice lo a partir de la bandeja superior.
• No pulse el botón EJECT del minidisco que esté en la posición de reproducción.

To remove the MD in the play position/Pour retirer le MD en position de lecture/Para extraer el MD que se encuentra en la posición de reproducción/要取出處於播放位置的微型磁碟時

Press the stop button.
Appuyez sur la touche STOP.
Pulse el botón STOP.
按壓停止鍵。

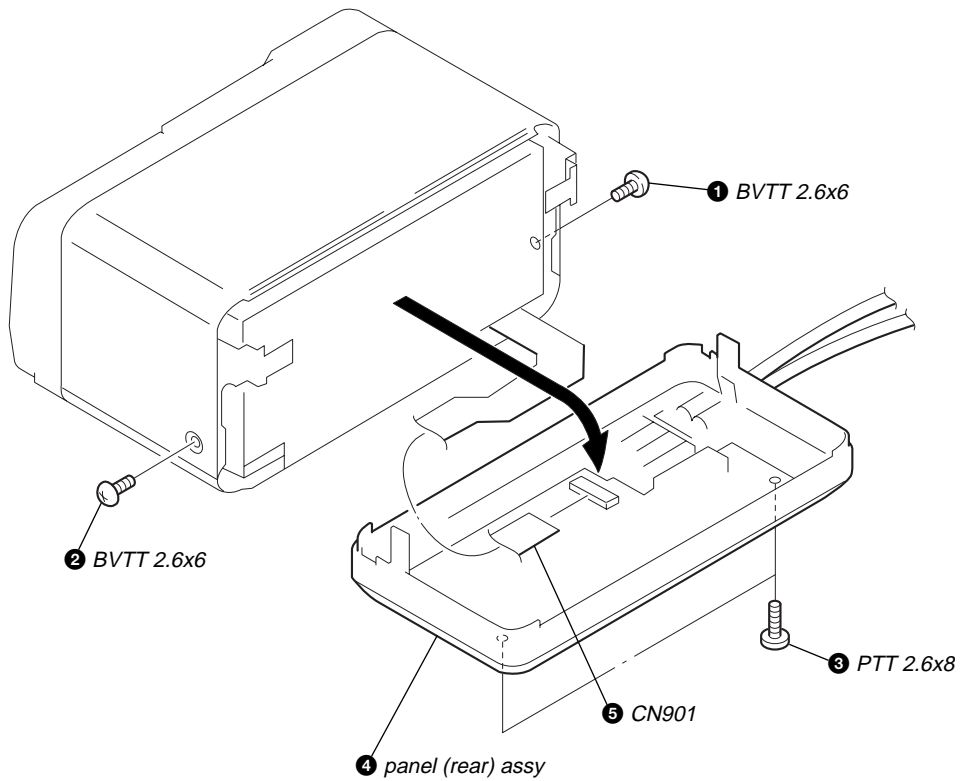
The MD backs out to the loading position.
Press the EJECT button, and remove the MD.
You can remove an MD in this way while it's playing or in the play position.
Le MD quitte la position de chargement.
Appuyez sur la touche EJECT et retirez le MD.
Vous pouvez retirer un MD de cette façon lorsqu'il est en cours de lecture ou dans la position de lecture.
El MD retrocede a la posición de carga.
Pulse el botón EJECT y extraiga el MD.
Es posible extraer un MD de esta forma mientras se reproduce.

微型磁碟退回安裝位置。
然後按壓 EJECT 鍵即可取出磁碟。
即使該微型磁碟正處於播放狀態，或處於播放狀態，都可以此方法取出磁碟。

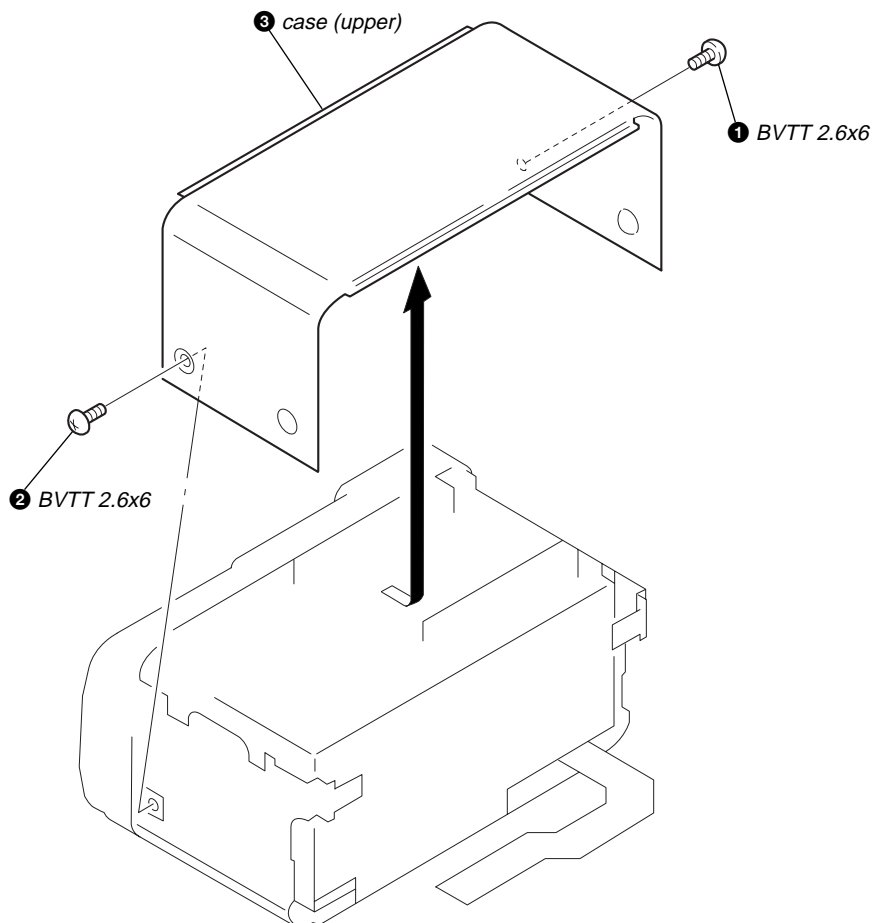
SECTION 3 DISASSEMBLY

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

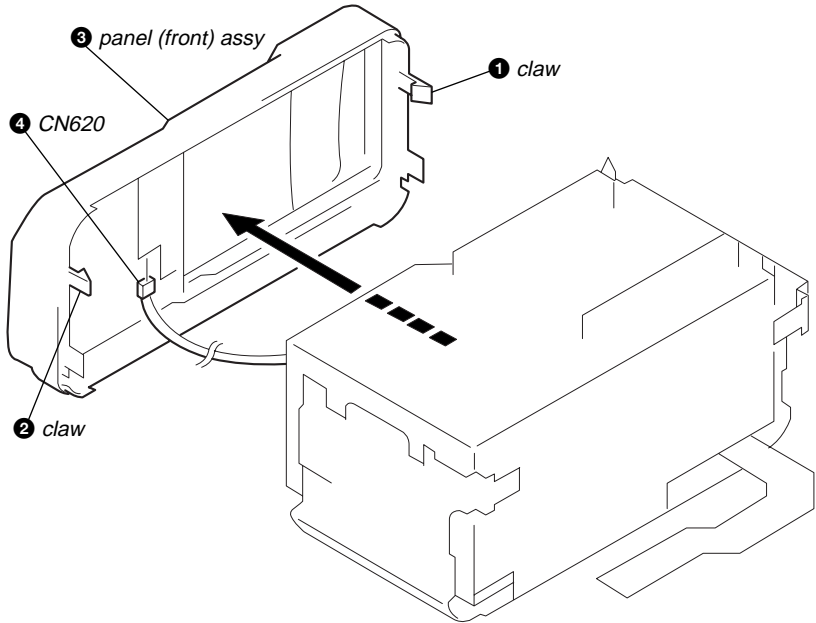
3-1. PANEL (REAR) ASSY



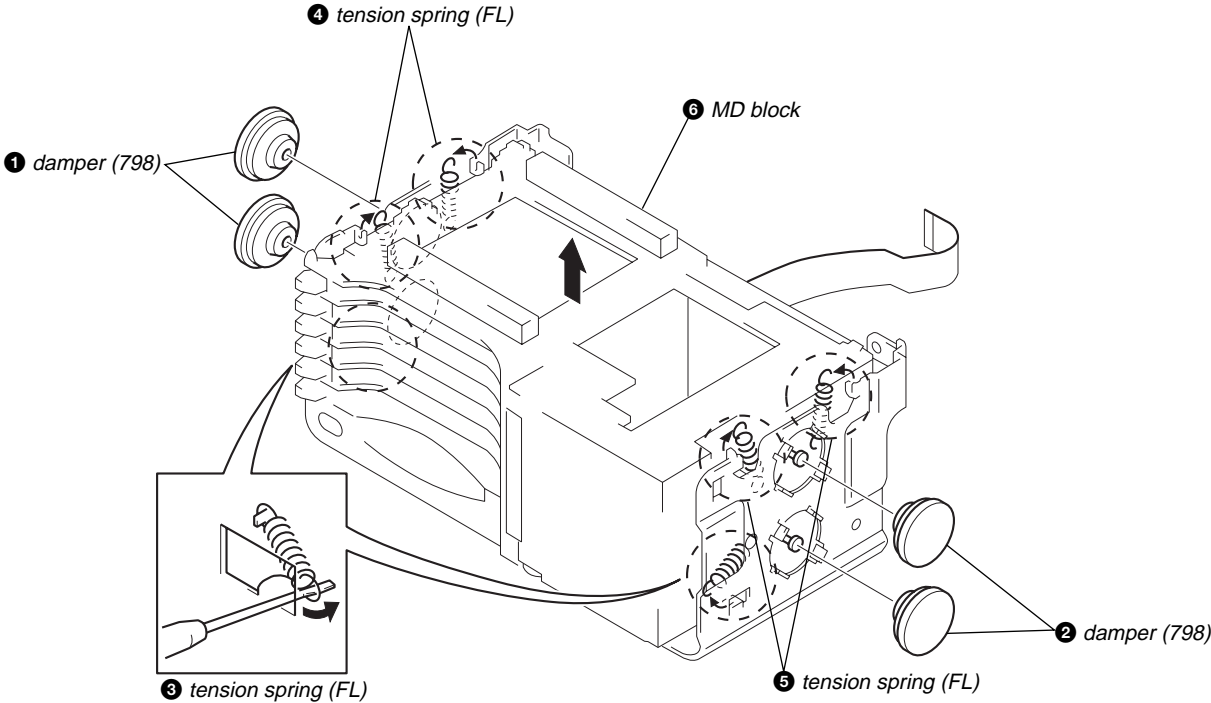
3-2. CASE (UPPER)



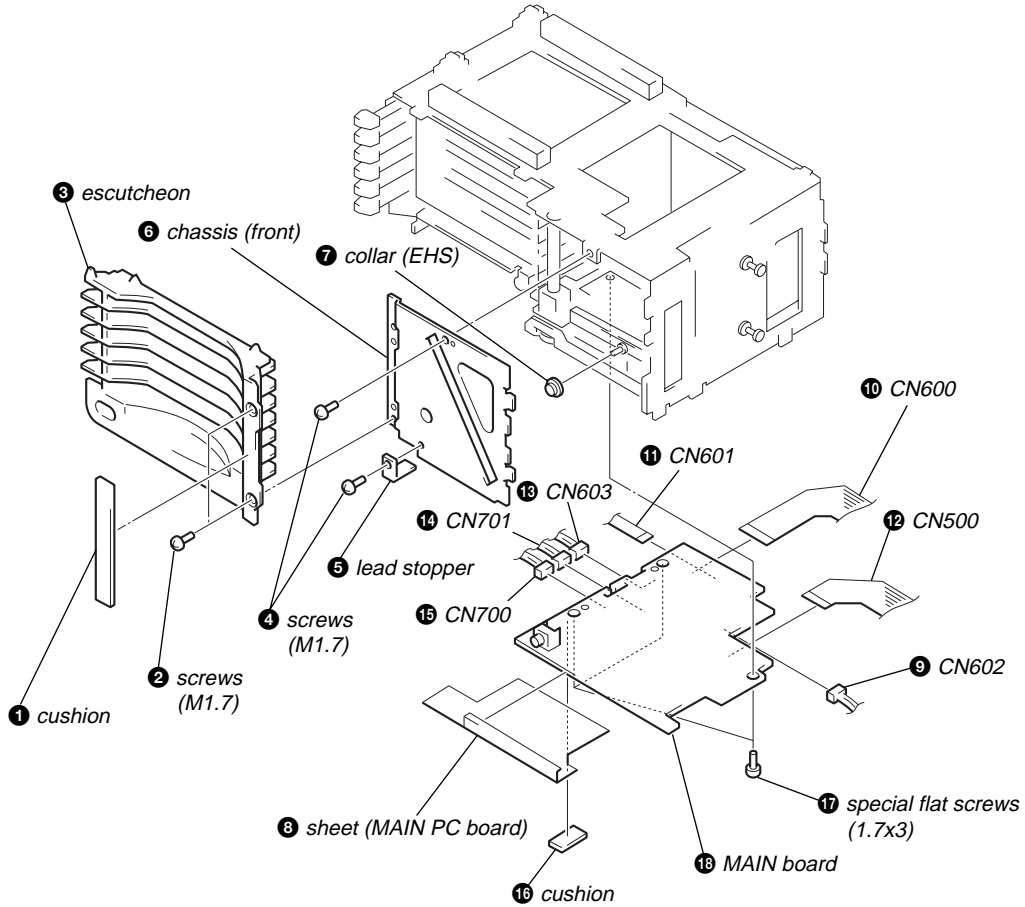
3-3. PANEL (FRONT) ASSY



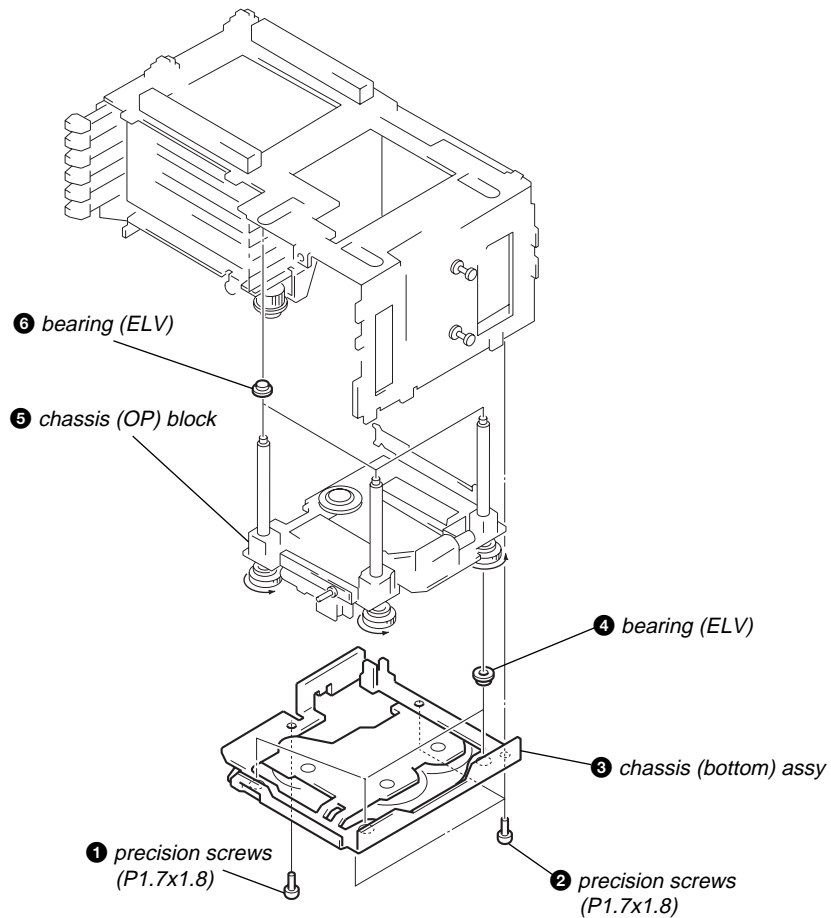
3-4. MD BLOCK



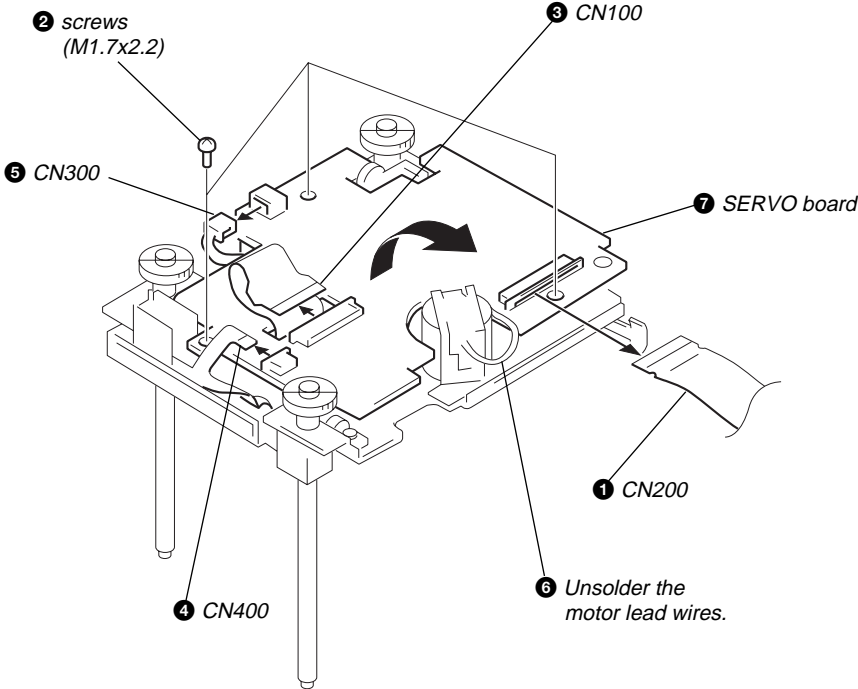
3-5. MAIN BOARD



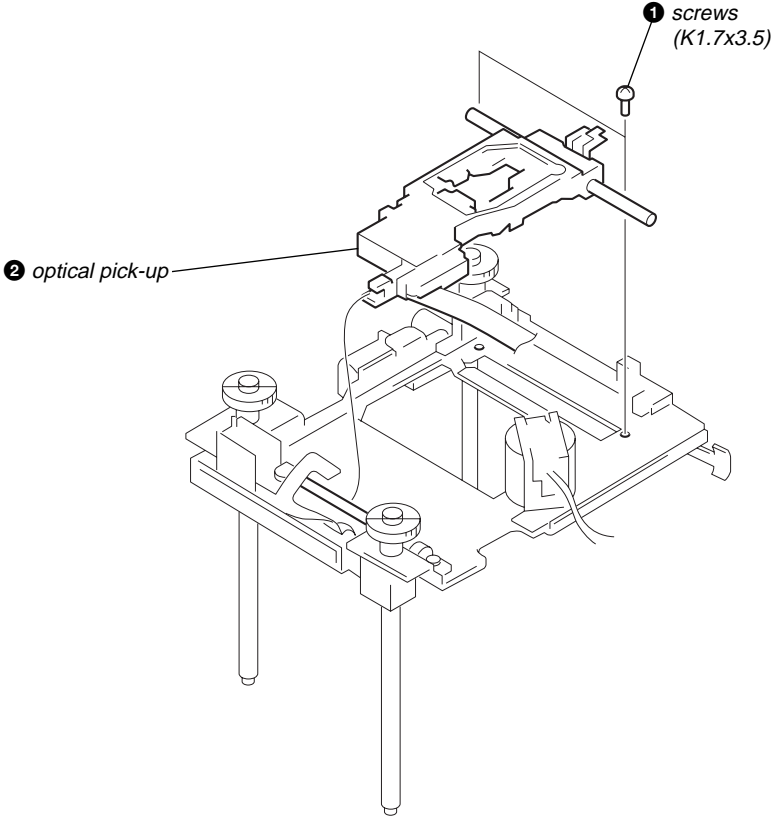
3-6. CHASSIS (OP) BLOCK



3-7. SERVO BOARD

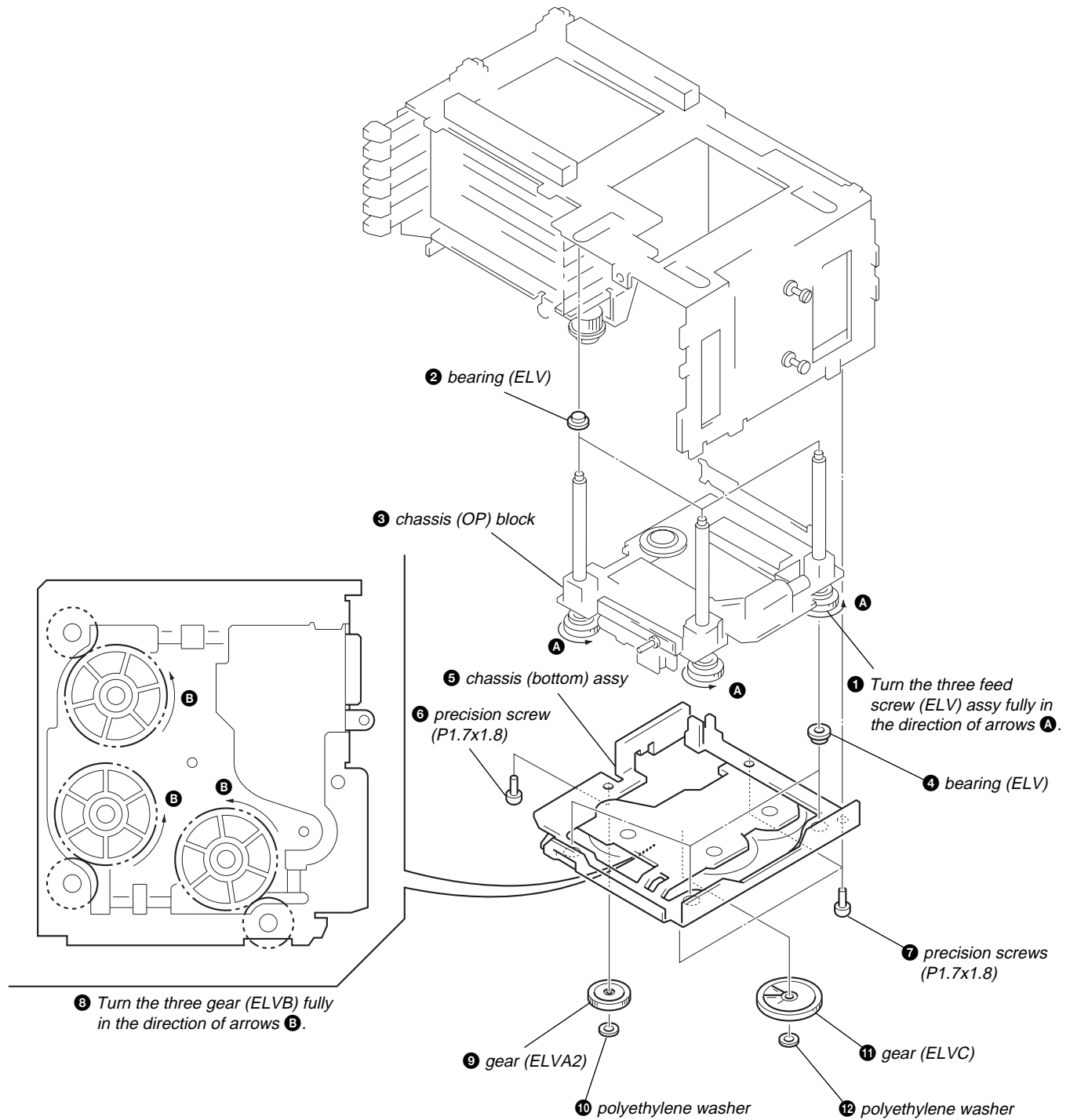


3-8. OPTICAL PICK-UP



3-9. NOTE ON ASSEMBLY FOR THE CHASSIS (OP) BLOCK

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



SECTION 4 DIAGRAMS

4-1. IC PIN DESCRIPTIONS

• IC100 CXA2523AR (RF AMP)

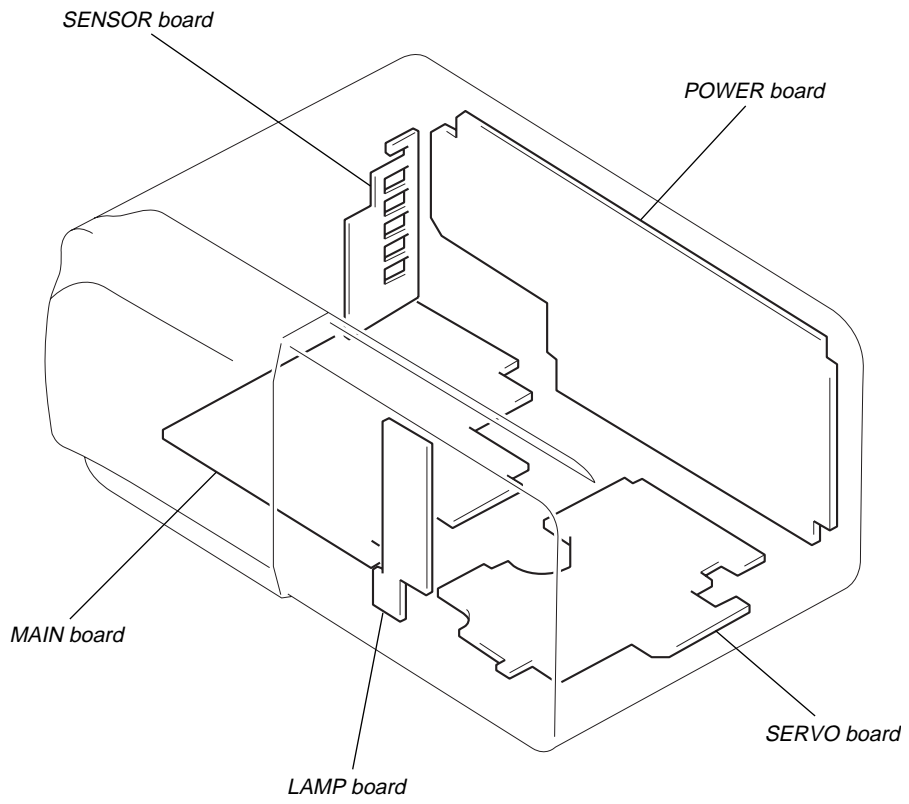
Pin No.	Pin Name	I/O	Pin Description
1	I	I	I-V converted RF signal input (I) from detector of optical pick-up.
2	J	I	I-V converted RF signal input (J) from detector of optical pick-up.
3	VC	O	Center voltage (+1.65 V) generation output
4 – 9	A – F	I	Signal input (A to F) from detector of optical pick-up.
10	PD	I	Quantity monitor input of light from laser diode of optical pick-up.
11	APC	O	Laser amplifier output to automatic power control circuit.
12	APCREF	I	Reference voltage input for laser power setting.
13	GND	—	GND
14	TEMPI	I	Temperature sensor connecting pin (Not used in this set.)
15	TEMPR	O	Reference voltage output for temperature sensor. (Not used in this set.)
16	SWDT	I	Write data signal input from System controller (IC600).
17	SCLK	I	Serial clock signal input from System controller (IC600).
18	XLAT	I	Serial latch signal input from System controller (IC600).
19	XSTBY	I	Standby signal input (“L” : Standby) (Fixed at “H” in this set.)
20	FOCNT	I	Center frequency control voltage input of internal circuit filter (BPF22, BPF3T and EQ).
21	VREF	O	Reference voltage output (Not used in this set.)
22	EQADJ	I	Center frequency setting input of internal circuit filter (EQ).
23	3TADJ	I	Center frequency setting input of internal circuit filter (BPF3T).
24	VCC	—	Power supply pin (+3.3 V)
25	WBLADJ	I	Center frequency setting input of internal circuit filter (BPF22).
26	TE	O	Tracking error signal output to CXD2652AR (IC200).
27	CSLED	I	Connecting pin for low pass filter condenser of sled error signal.
28	SE	O	Sled error signal output to CXD2652AR (IC200).
29	ADFM	O	FM signal output of ADIP.
30	ADIN	I	FM signal input of ADIP by AC combination.
31	ADAGC	I	External condenser connecting pin for AGC of ADIP.
32	ADFG	O	ADIP double FM signal output (22.05 kHz ± 1 kHz) to CXD2652AR (IC200).
33	AUX	O	Support signal (I3 signal/temperature signal) output (Not used in this set.)
34	FE	O	Focus error signal output to CXD2652AR (IC200).
35	ABCD	O	Quantity signal output of light to CXD2652AR (IC200).
36	BOTM	O	Bottom hold signal output of quantity signal (RF/ABCD) of light to CXD2652AR (IC200).
37	PEAK	O	Peak hold signal output of quantity signal (RF/ABCD) of light to CXD2652AR (IC200).
38	RF	O	Playback EFM RF signal output to CXD2652AR (IC200).
39	RFAGC	I	External condenser connecting pin of AGC circuit for RF.
40	AGCI	I	RF signal input by AC combination.
41	COMPO	O	User comparator output pin (Not used in this set.)
42	COMPP	I	User comparator input pin (Fixed at “L” in this set.)
43	ADDC	I	External condenser connecting pin for low frequency interception of ADIP amplifier.
44	OPO	O	External condenser connect pin for lower cut of ADIP amplifier.
45	OPN	I	User operational amplifier inversion input pin (Fixed at “L” in this set.)
46	RFO	O	RF signal output
47	MORFI	I	RF signal input of MO by AC combination.
48	MORFO	O	RF signal output of MO.

• IC600 μ PD784216GC-027-8EU (SYSTEM CONTROLLER)

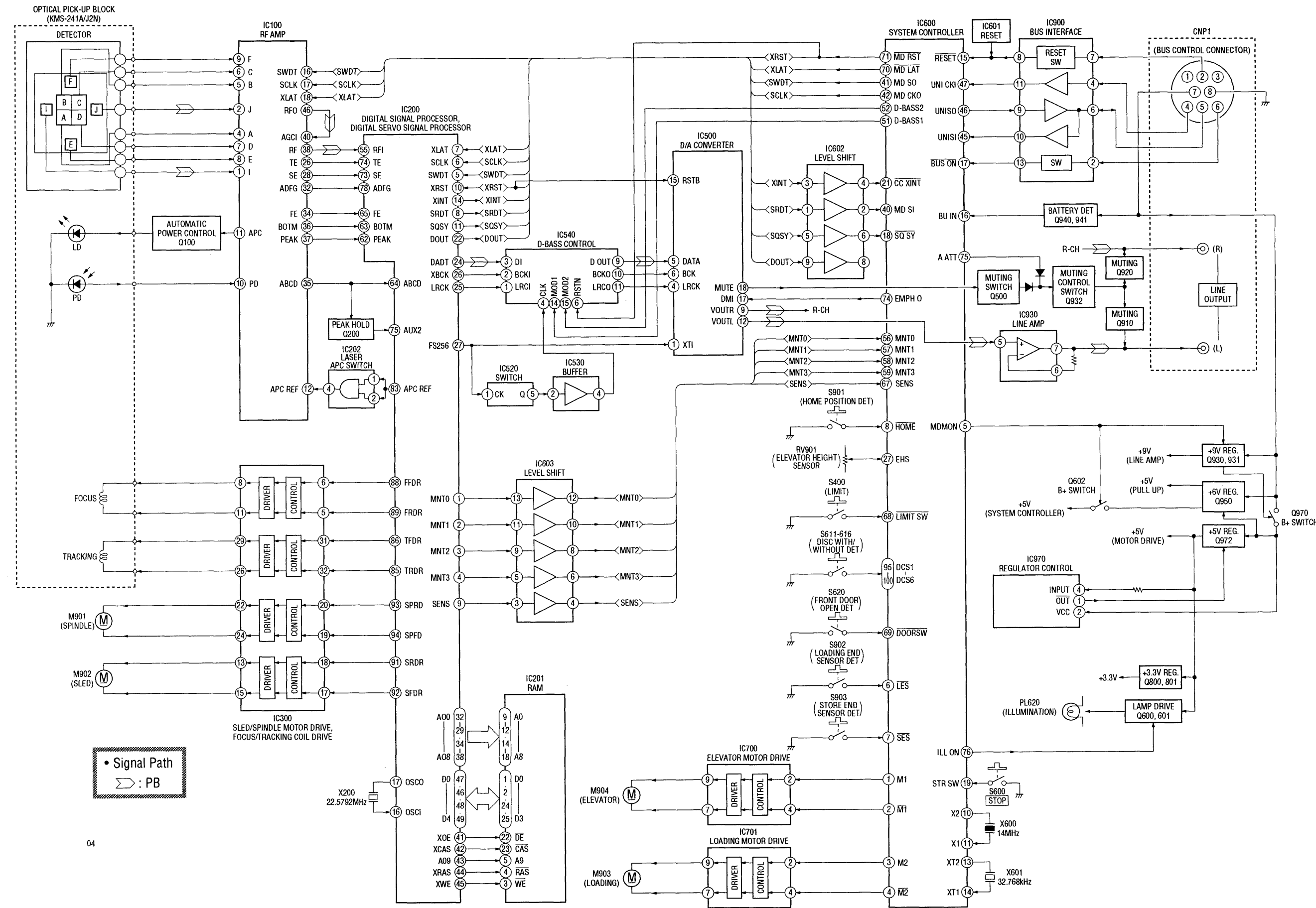
Pin No.	Pin Name	I/O	Pin Description
1	M1	O	Elevator motor (M904) drive signal output
2	$\overline{M1}$	O	Elevator motor (M904) drive signal output
3	M2	O	Loading motor (M903) drive signal output
4	$\overline{M2}$	O	Loading motor (M903) drive signal output
5	MDMON	O	Mechanism deck system power control output (“H” : Power ON)
6	\overline{LES}	I	Loading end sensor detection switch (S902) input
7	\overline{SES}	I	Store end sensor detection switch (S903) input
8	\overline{HOME}	I	Home position detection switch (S901) input (“L” : Home position)
9	VDD	—	Power supply pin (+5 V)
10	X2	—	Main system clock connecting pin (14 MHz)
11	X1	—	Main system clock connecting pin (14 MHz)
12	VSS	—	GND
13	XT2	—	Sub system clock connecting pin (32.768 kHz)
14	XT1	—	Sub system clock connecting pin (32.768 kHz)
15	\overline{RESET}	—	System reset input
16	BU IN	I	Backup OFF detection input (“L” : Backup OFF)
17	$\overline{BUS ON}$	I	BUS OFF detection of SONY BUS. (“H” : BUS OFF)
18	$\overline{SQ SY}$	I	Sub code Q sync input from CXD2652AR (IC200).
19	STR SW	I	STOP switch (S600) input
20	—	O	Not used.
21	$\overline{CC XINT}$	I	Interruption status input from CXD2652AR (IC200).
22	—	O	Not used.
23	AVDD	—	Power supply for A/D converter. (+5 V)
24	AVREF0	—	Reference voltage for A/D converter.
25	INIT	I	Initial input pin at reset.
26	TEMP	I	Thermistor connecting pin for temperature detection.
27	EHS	I	Elevator height position detection input
28, 29	—	I	Connect to GND.
30 – 32	—	O	Connect to GND.
33	AVSS	—	Analog GND
34	ERR PWM	O	Error data output (Not used in this set.)
35	—	O	Not used.
36	AVREF1	—	Reference voltage for D/A converter.
37, 38	—	O	Not used.
39	—	—	Not used.
40	MD SI	I	Read data signal input from CXD2652AR (IC200).
41	MD SO	O	Write data signal output to CXA2523AR (IC100) and CXD2652AR (IC200).
42	MD CKO	O	Serial clock signal output to CXA2523AR (IC100) and CXD2652AR (IC200).
43	—	O	Not used.
44	—	—	Not used.
45	UNISI	I	Serial data input for SONY BUS.
46	UNISO	O	Serial data output for SONY BUS.
47	UNI CKI	I	Serial clock input for SONY BUS.
48	LINKOFF	O	Link control signal output for SONY BUS. (“H” : Link OFF)
49	—	O	Not used.
50	—	I	Not used.
51, 52	D-BASS1, 2	O	Digital D-BASS select output 1, 2
53 – 55	—	O	Not used.
56 – 59	MNT0 – 3	O	Monitor 0 – 3 signal input from CXD2652AR (IC200).
60	AGING	O	Not used.
61	AGCHK	O	Not used.
62	TFTON	O	Not used.

Pin No.	Pin Name	I/O	Pin Description
63	—	O	Not used.
64	EE CS	O	Chip select output to EEPROM. (Not used in this set.)
65	EE CKO	O	Serial clock output to EEPROM. (Not used in this set.)
66	EE SIO	I/O	Data input from/output to EEPROM. (Not used in this set.)
67	SENS	I	Internal status input from CXD2652AR (IC200).
68	$\overline{\text{LIMIT SW}}$	I	Optical pick-up innermost track limit position detection switch (S400) input
69	$\overline{\text{DOORSW}}$	I	Front door open detection switch (S620) input (“L” : Open complete)
70	$\overline{\text{MD LAT}}$	O	Serial latch signal output to CXA2523AR (IC100) and CXD2652AR (IC200).
71	$\overline{\text{MD RST}}$	O	Reset signal output to CXD2652AR (IC200).
72	VSS	—	GND
73	MD ON	O	Servo system power control output (“H” : Power ON)
74	EMPH O	O	De-emphasis circuit control output (“H” : De-emphasis ON)
75	A ATT	I	Analog mute control input (“H” : Mute ON)
76	ILLON	O	Illumination lamp (PL620) light-up control output (“H” : Lamp light-up)
77	TSTSMD	I	Single mode setting pin (“L” : Single mode)
78	TSTCKO	O	Serial clock output to LED for TEST mode display. (Not used in this set.)
79	TSTSO	O	Serial data output to LED for TEST mode display. (Not used in this set.)
80	TSTMOD	I	TEST mode setting pin (“L” : TEST mode)
81	VDD	—	Power supply pin (+5 V)
82 – 85	TSTOUT0 – 3	O	TEST key output pin of 4 × 8 matrix. (Not used in this set.)
86 – 93	TSTIN0 – 7	I	TEST key input pin of 4 × 8 matrix. (Not used in this set.)
94	TEST/VPP	—	Fixed at “L” in this set.
95	DCS1	I	Disc with/without detection 1 switch (S611) input (“H” : with disc)
96	DCS2	I	Disc with/without detection 2 switch (S612) input (“H” : with disc)
97	DCS3	I	Disc with/without detection 3 switch (S613) input (“H” : with disc)
98	DCS4	I	Disc with/without detection 4 switch (S614) input (“H” : with disc)
99	DCS5	I	Disc with/without detection 5 switch (S615) input (“H” : with disc)
100	DCS6	I	Disc with/without detection 6 switch (S616) input (“H” : with disc)

4-2. CIRCUIT BOARDS LOCATION



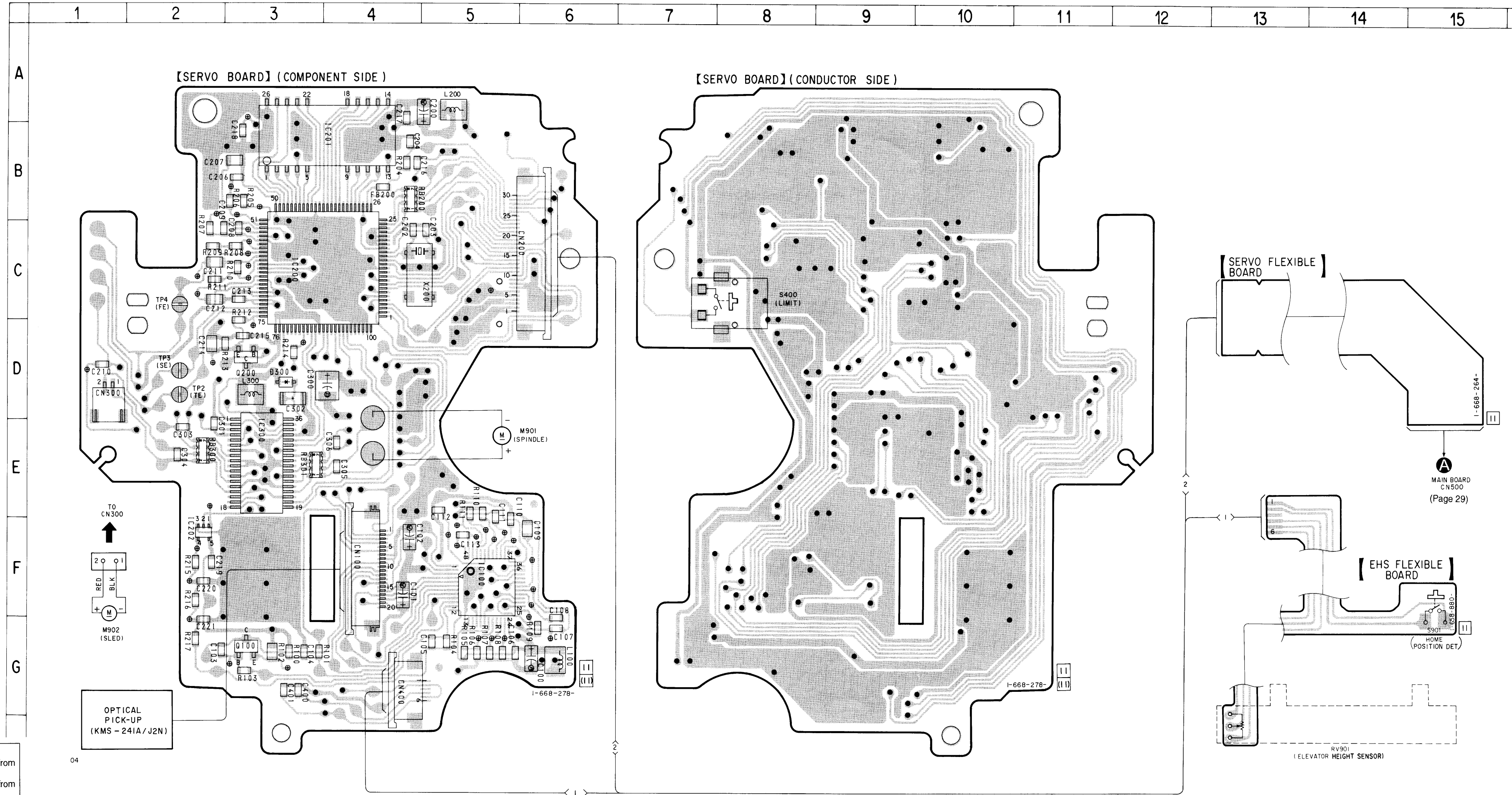
4-3. BLOCK DIAGRAM



4-4. PRINTED WIRING BOARDS — SERVO SECTION —

• Semiconductor Location

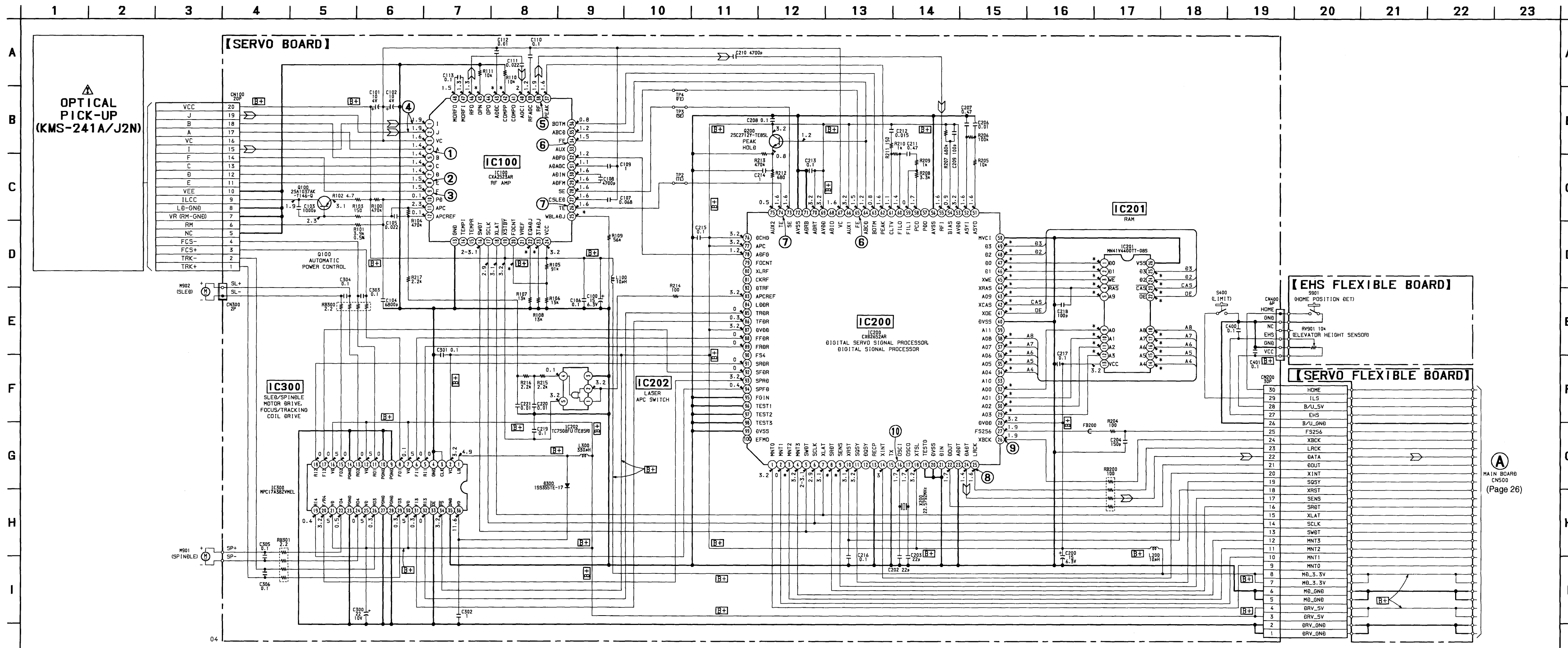
Ref. No.	Location
D300	D-3
IC100	F-5
IC200	C-3
IC201	B-4
IC202	F-2
IC300	E-3
Q100	G-3
Q200	D-3



Note:
 • — : parts extracted from the component side.
 • — : parts extracted from the conductor side.
 • ○ : Through hole.
 • — : Pattern from the side which enables seeing.
 (The other layer's patterns are not indicated.)

Caution:
 Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.
 Parts face side: Parts on the parts face side seen from the parts face are indicated.

4-5. SCHEMATIC DIAGRAM — SERVO SECTION — • Refer to page 35 for Waveforms and page 37 for IC Block Diagrams.



Note:
 • All capacitors are in μF unless otherwise noted. pF : μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 • All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 • % : indicates tolerance.

Note:
 The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

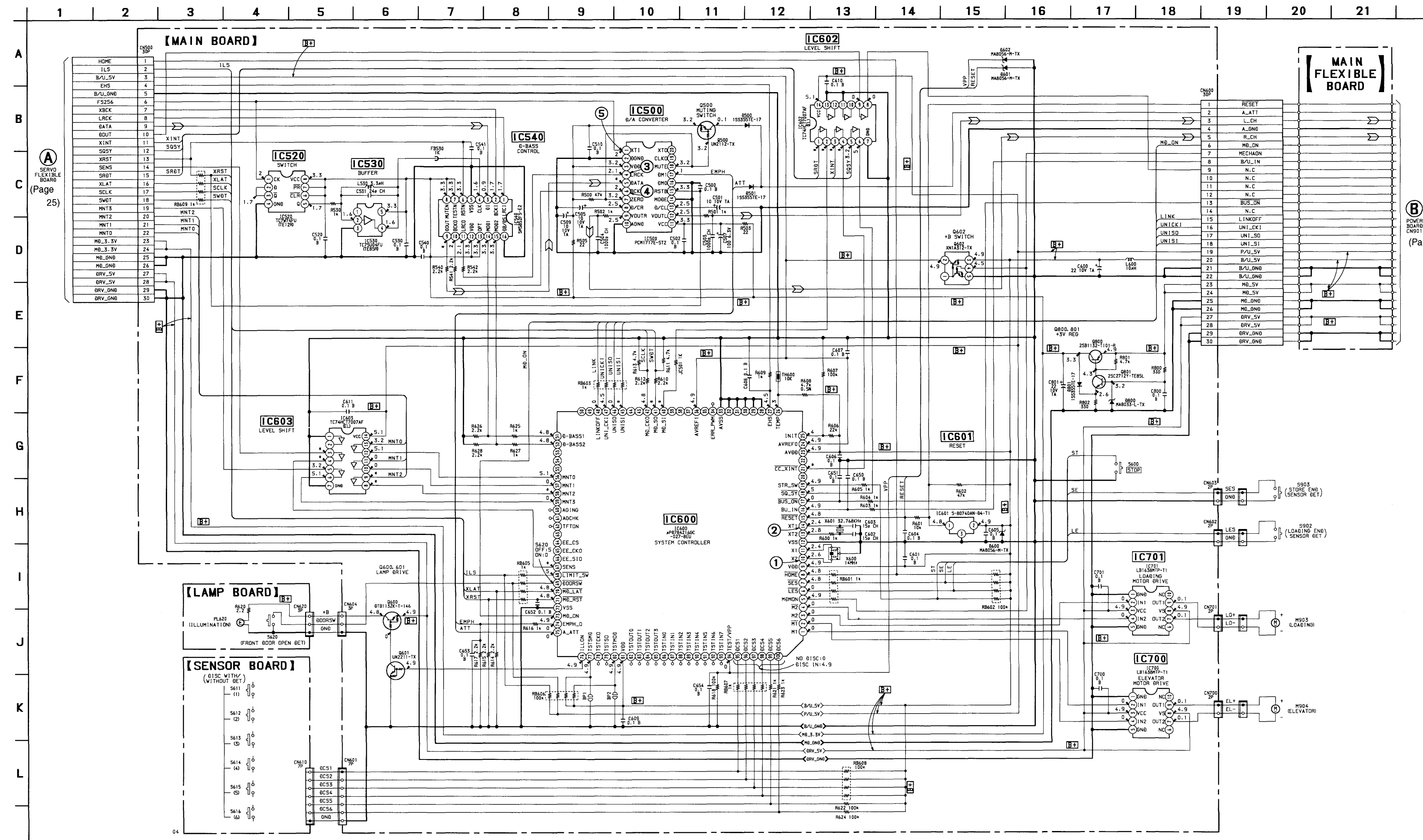
Note:
 Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• \square : B+ Line.
 • Power voltage is dc 14.4V and fed with regulated dc power supply from Master unit.
 • Voltage and waveforms are dc with respect to ground under no-signal conditions.
 no mark : PB
 * : Impossible to measure

• Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
 • Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 • Circled numbers refer to waveforms.
 • Signal path.
 Σ : PB

(A)
 MAIN BOARD
 CN500
 (Page 26)

4-6. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 36 for Waveforms and page 39 for IC Block Diagrams.

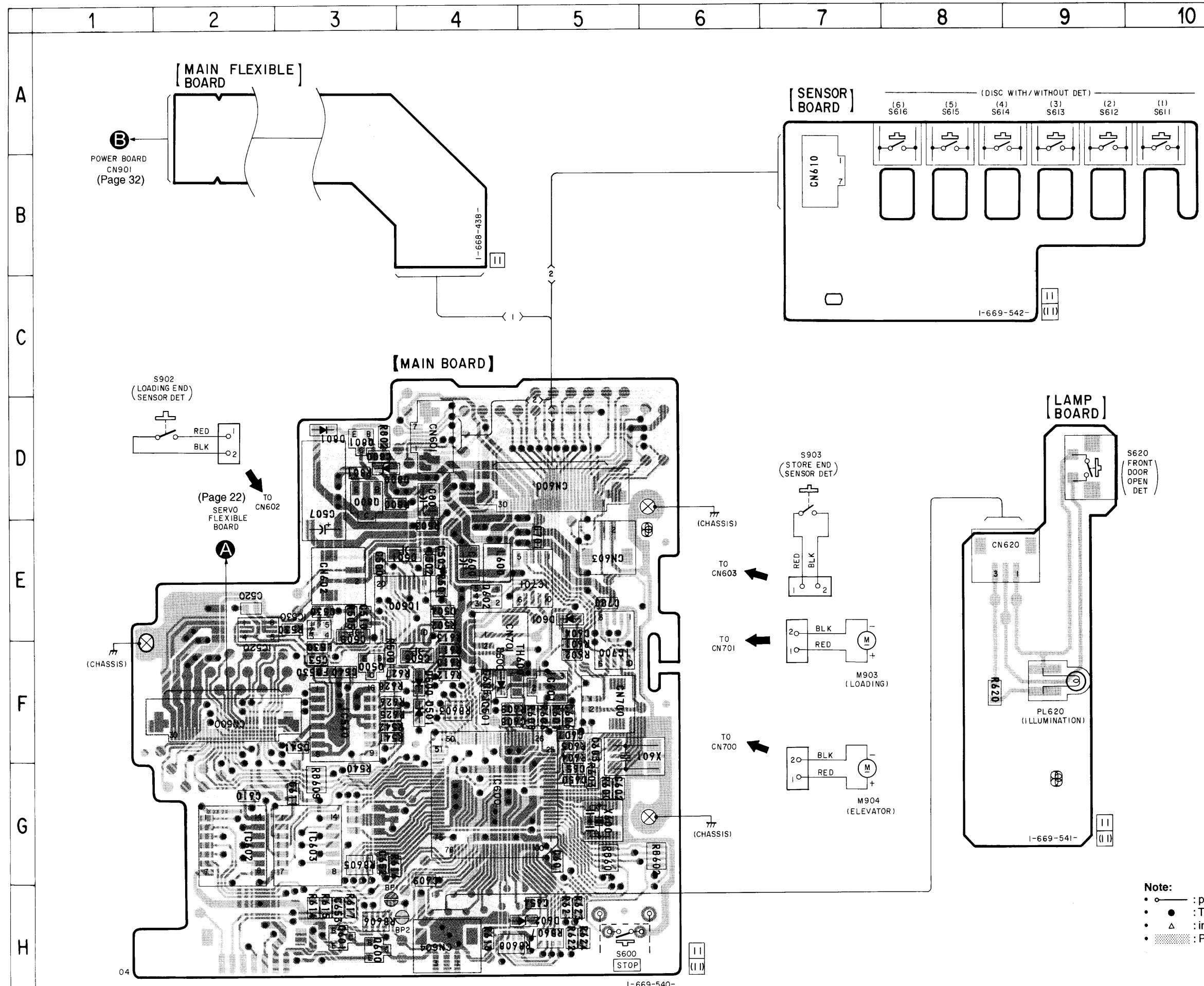


(A) SERVO FLEXIBLE BOARD (Page 25)

(B) POWER BOARD CN901 (Page 34)

- Note:**
- All capacitors are in μF unless otherwise noted. pF: μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{ W}$ or less unless otherwise specified.
 - % : indicates tolerance.
 - Δ : internal component.
 - [] : panel designation.
 - B+ : B+ Line.
 - Power voltage is dc 14.4V and fed with regulated dc power supply from Master unit.
 - Voltage and waveforms are dc with respect to ground under no-signal conditions.
 - no mark : PB
 - * : Impossible to measure
 - Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
 - Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 - Circled numbers refer to waveforms.
 - Signal path.
 - Σ : PB

4-7. PRINTED WIRING BOARDS — MAIN SECTION —



• Semiconductor Location

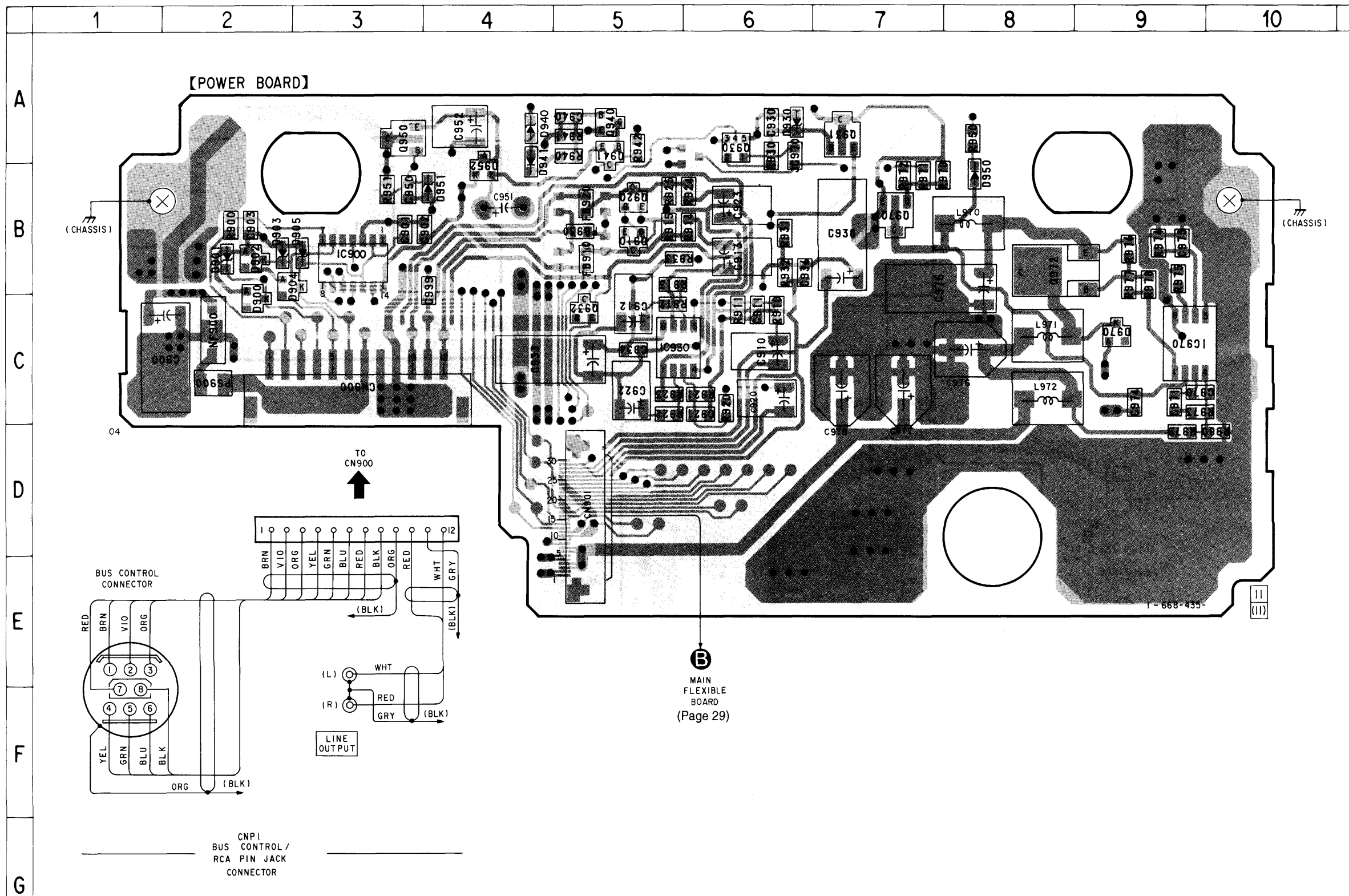
Ref. No.	Location
D500	F-4
D501	F-4
D600	F-4
D601	E-5
D602	H-5
D800	D-4
D801	D-3
IC500	E-4
IC520	F-2
IC530	F-3
IC540	F-3
IC600	G-4
IC601	F-5
IC602	G-2
IC603	G-3
IC700	F-5
IC701	E-5
Q500	F-3
Q600	H-3
Q601	H-3
Q602	E-4
Q800	D-3
Q801	D-3

Note:
 • : parts extracted from the component side.
 • : Through hole.
 • Δ : internal component.
 • : Pattern from the side which enables seeing.

4-8. PRINTED WIRING BOARD — POWER SECTION —

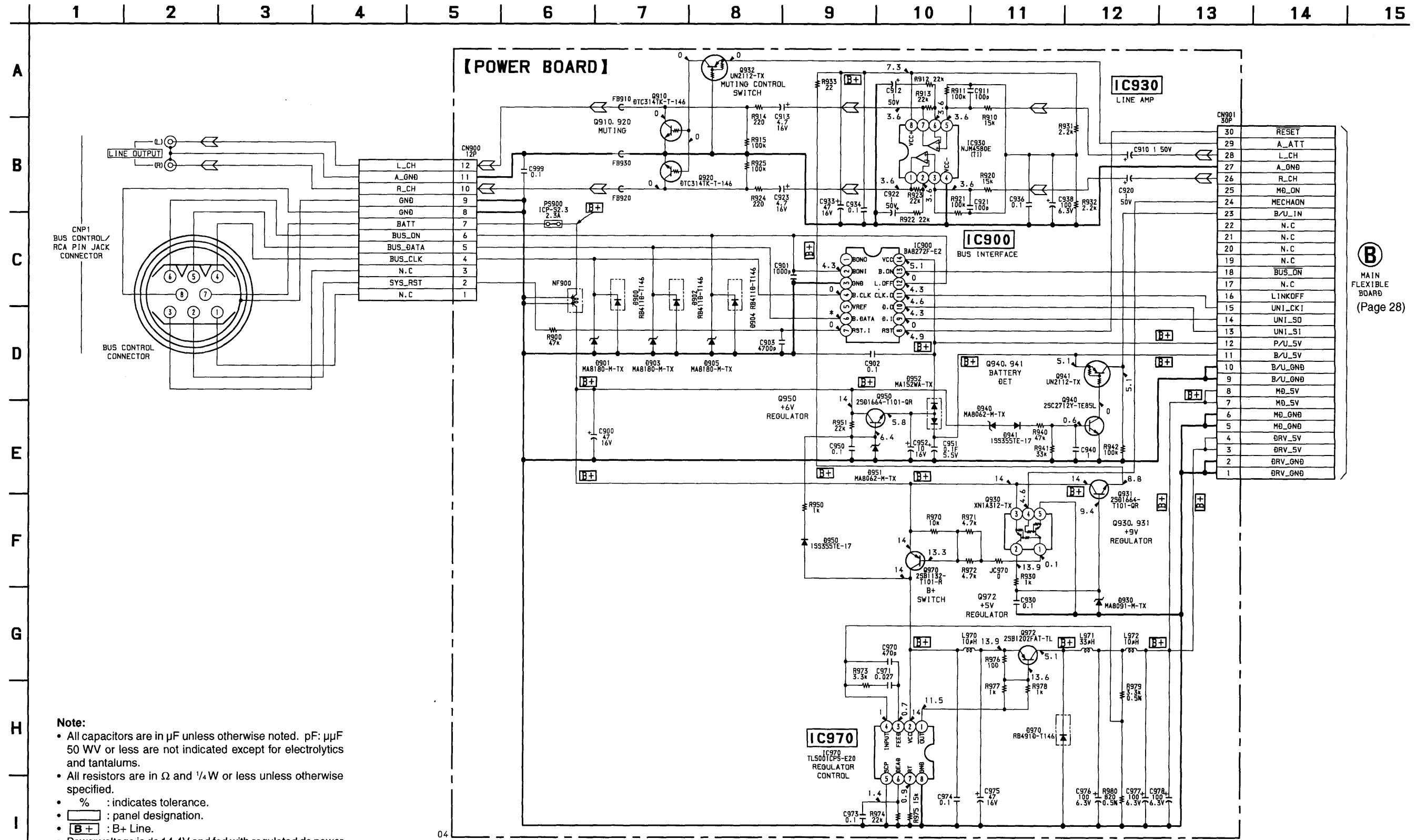
• Semiconductor Location

Ref. No.	Location
D900	C-2
D901	B-2
D902	B-2
D903	B-2
D904	B-2
D905	B-2
D930	A-6
D940	A-4
D941	A-4
D950	B-8
D951	B-3
D952	B-4
D970	C-9
IC900	B-3
IC930	C-5
IC970	C-9
Q910	B-5
Q920	B-5
Q930	A-6
Q931	A-7
Q932	C-5
Q940	A-5
Q941	A-5
Q950	A-3
Q970	B-7
Q972	B-8



Note:
 ○ — : parts extracted from the component side.
 ● : Through hole.
 ▨ : Pattern from the side which enables seeing.

4-9. SCHEMATIC DIAGRAM — POWER SECTION — • Refer to page 39 for IC Block Diagrams.



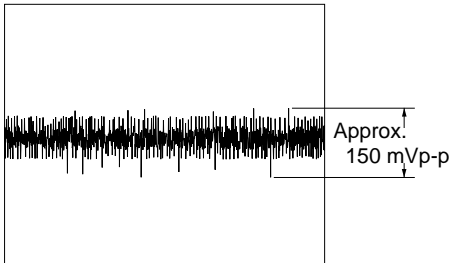
(B) MAIN FLEXIBLE BOARD (Page 28)

- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - % : indicates tolerance.
 - [] : panel designation.
 - [B+] : B+ Line.
 - Power voltage is dc 14.4V and fed with regulated dc power supply from Master unit.
 - Voltage is dc with respect to ground under no-signal condition.
 - no mark : PB
 - * : Impossible to measure
 - Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 - Σ : PB

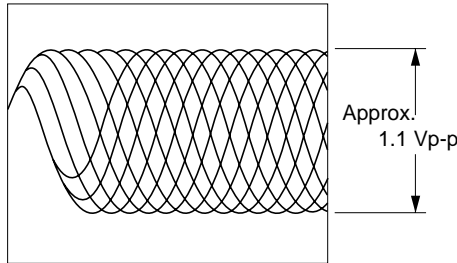
• Waveforms

– Servo Section –

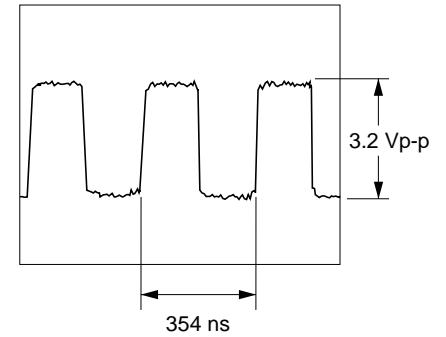
1 IC100 ④ (A) PLAY MODE
200 mV/DIV, 10 μ sec/DIV



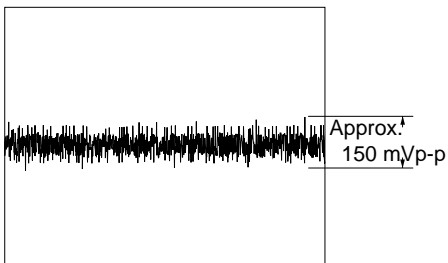
5 IC100 ③ (RF) PLAY MODE
500 mV/DIV, 1 μ sec/DIV



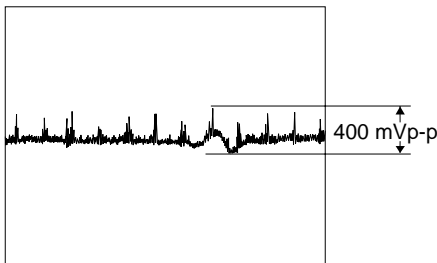
9 IC200 ② (XBCK)



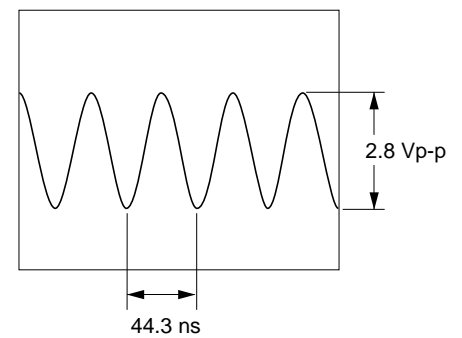
2 IC100 ⑧ (E) PLAY MODE
100 mV/DIV, 10 μ sec/DIV



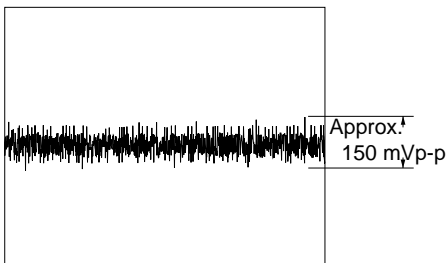
6 IC100 ③, IC200 ⑥ (FE) PLAY MODE
200 mV/DIV, 0.5 msec/DIV



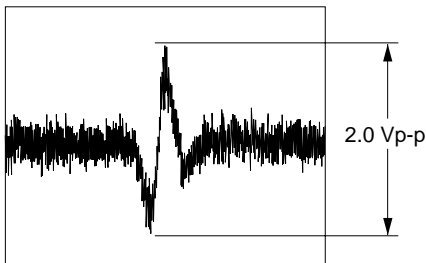
10 IC200 ① (OSCI)



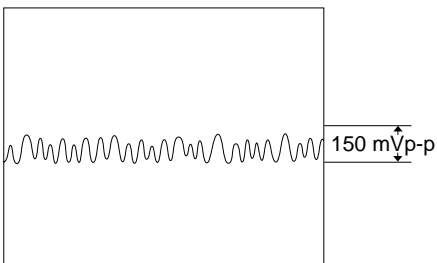
3 IC100 ⑨ (F) PLAY MODE
100 mV/DIV, 10 μ sec/DIV



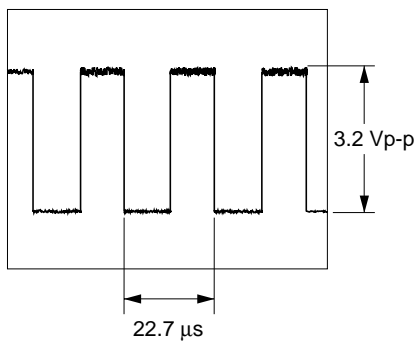
7 IC100 ②, IC200 ⑦ (TE) PLAY MODE
500 mV/DIV, 0.5 msec/DIV



4 IC100 ①, ② (I, J) PLAY MODE
100 mV/DIV, 10 μ sec/DIV

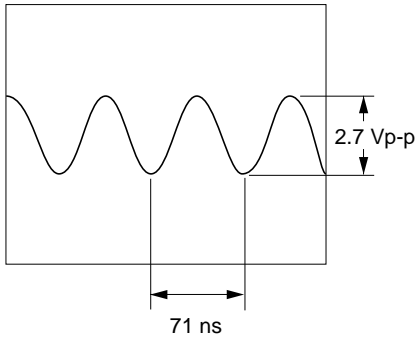


8 IC200 ② (LRCK)

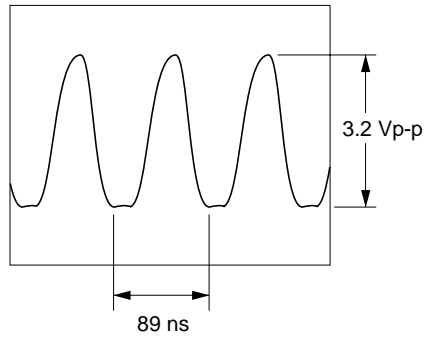


– Main Section –

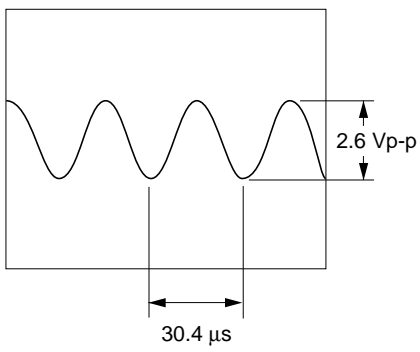
① IC600 ⑩ (X2)



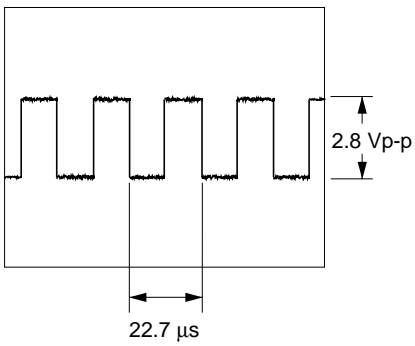
⑤ IC500 ① (XT1)



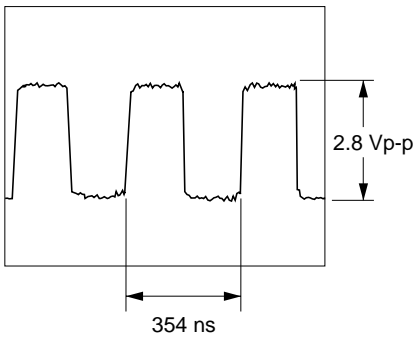
② IC600 ⑭ (XT1)



③ IC500 ④ (LRCK)



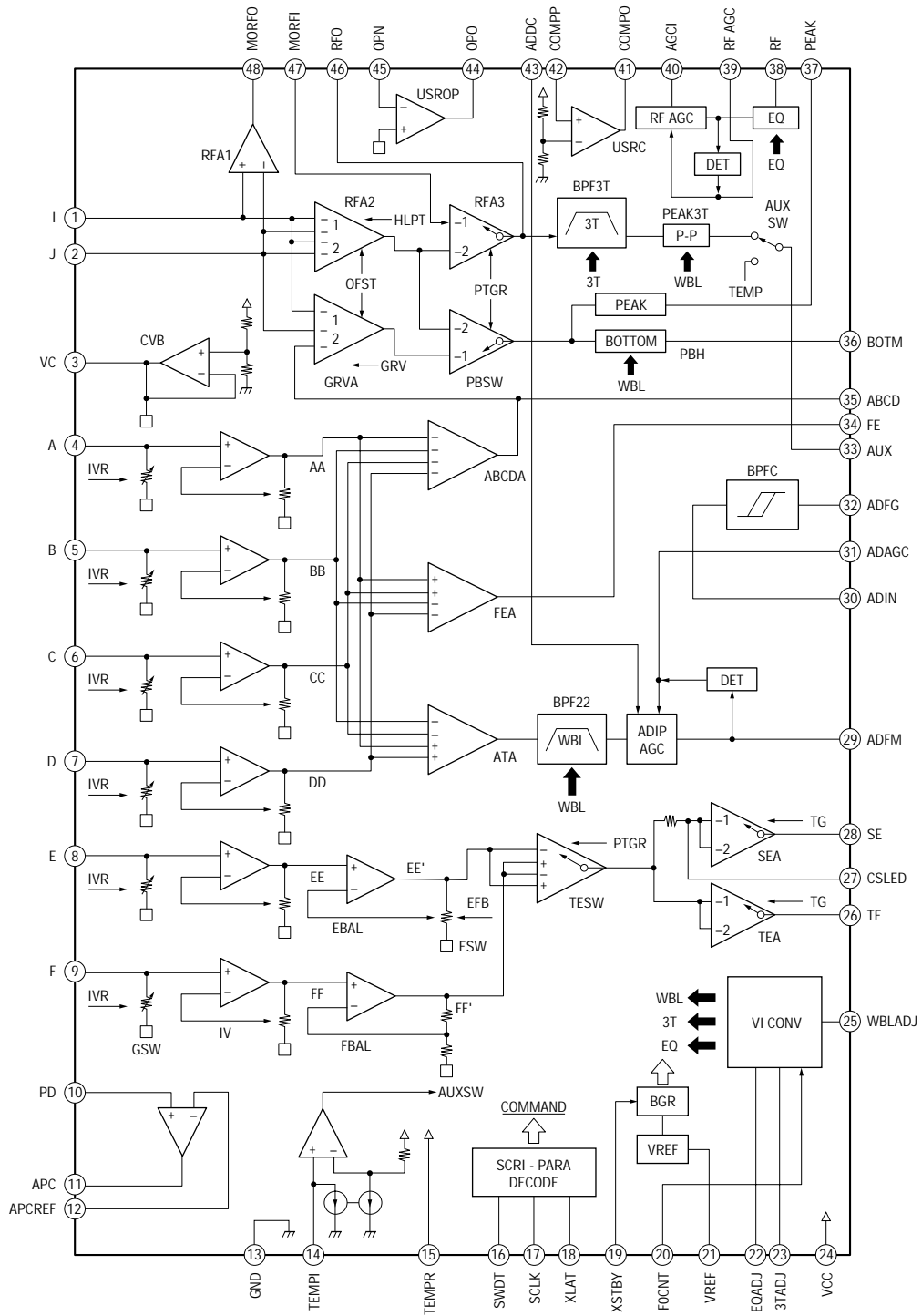
④ IC500 ⑥ (BCK)



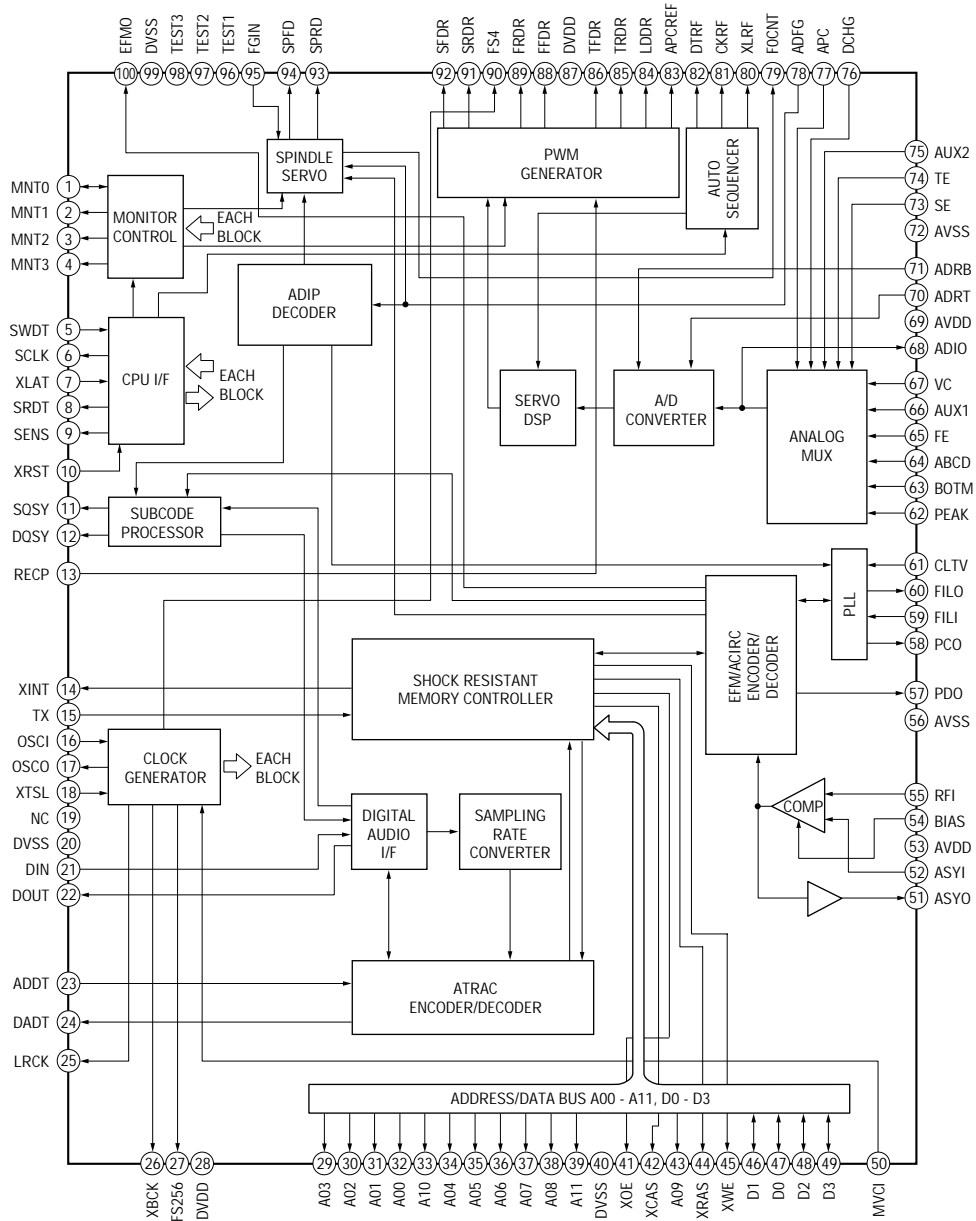
• IC Block Diagrams

– Servo Section –

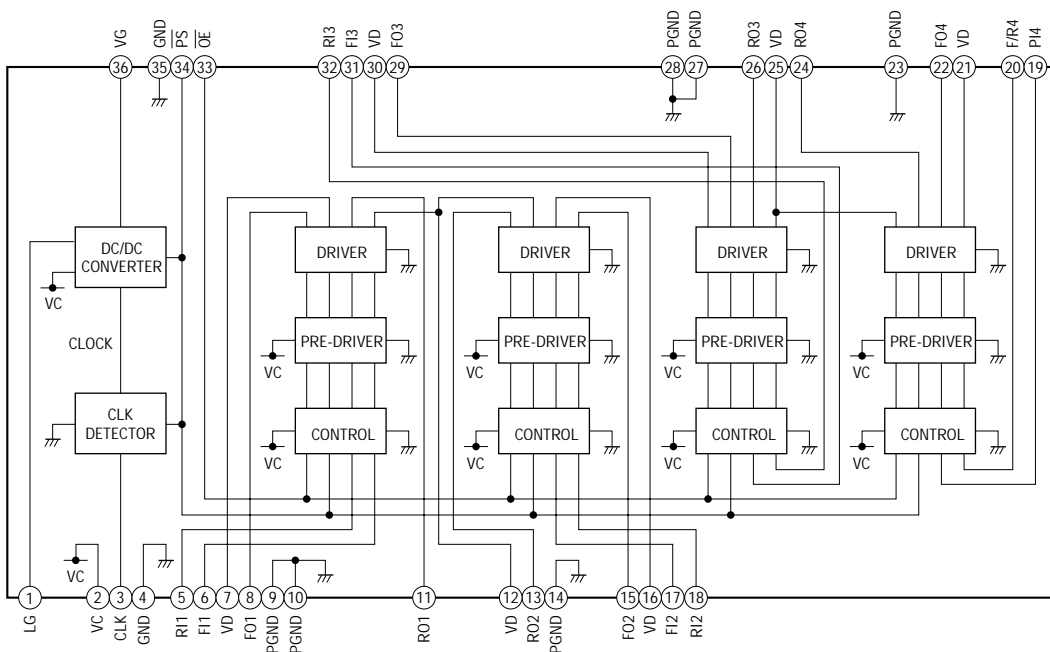
IC100 CXA2523AR



IC200 CXD2652AR

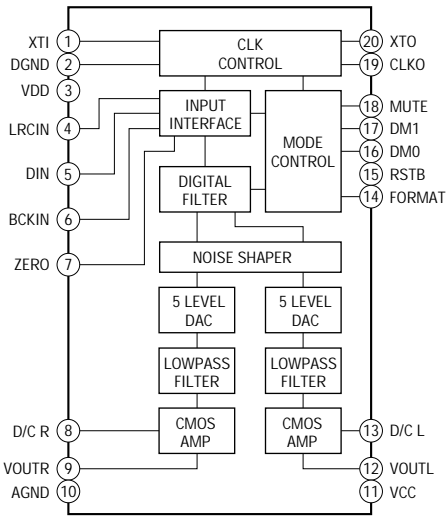


IC300 MPC17A38ZVMEL

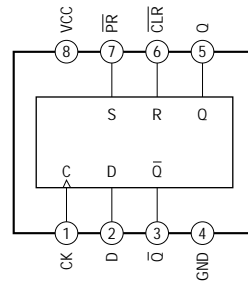


– Main Section –

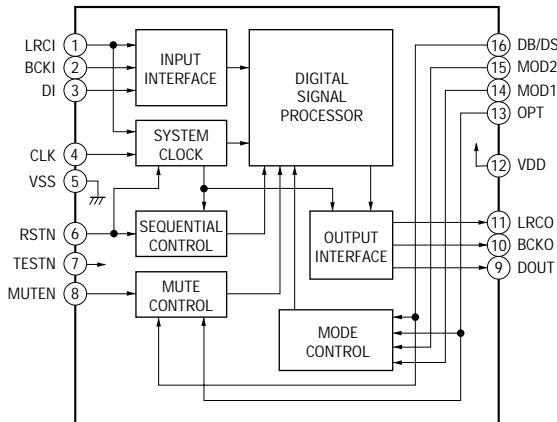
IC500 PCM1717E-ST2



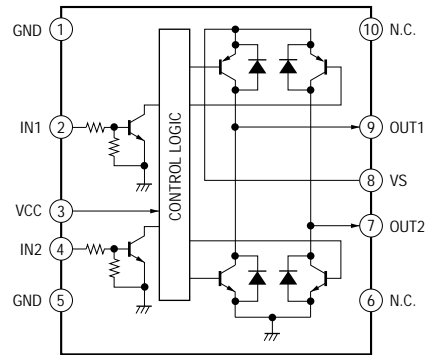
IC520 TC7W74FU (TE12R)



IC540 SM5852FS-E2

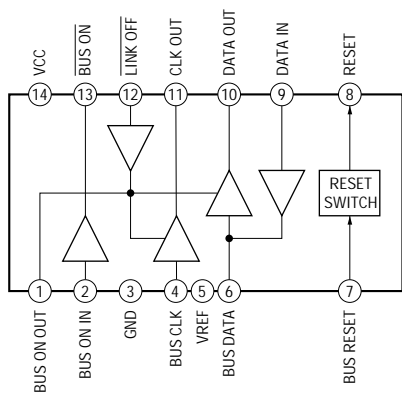


IC700, 701 LB1638MTP-T1

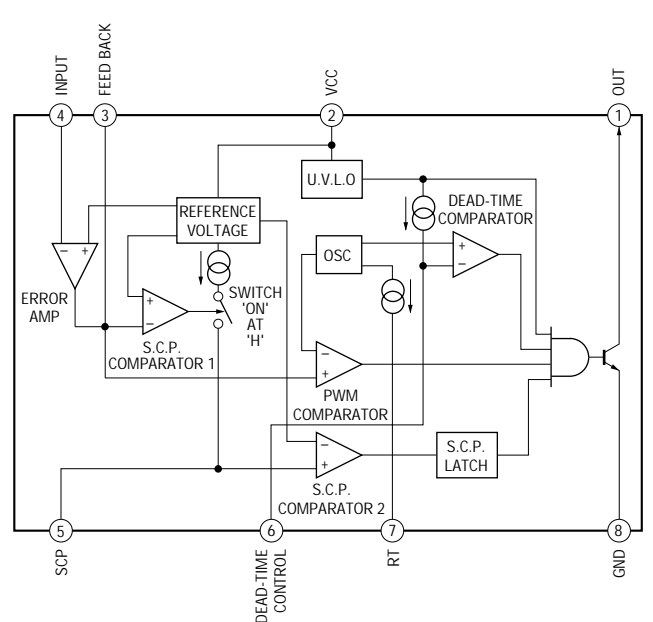


– Power Section –

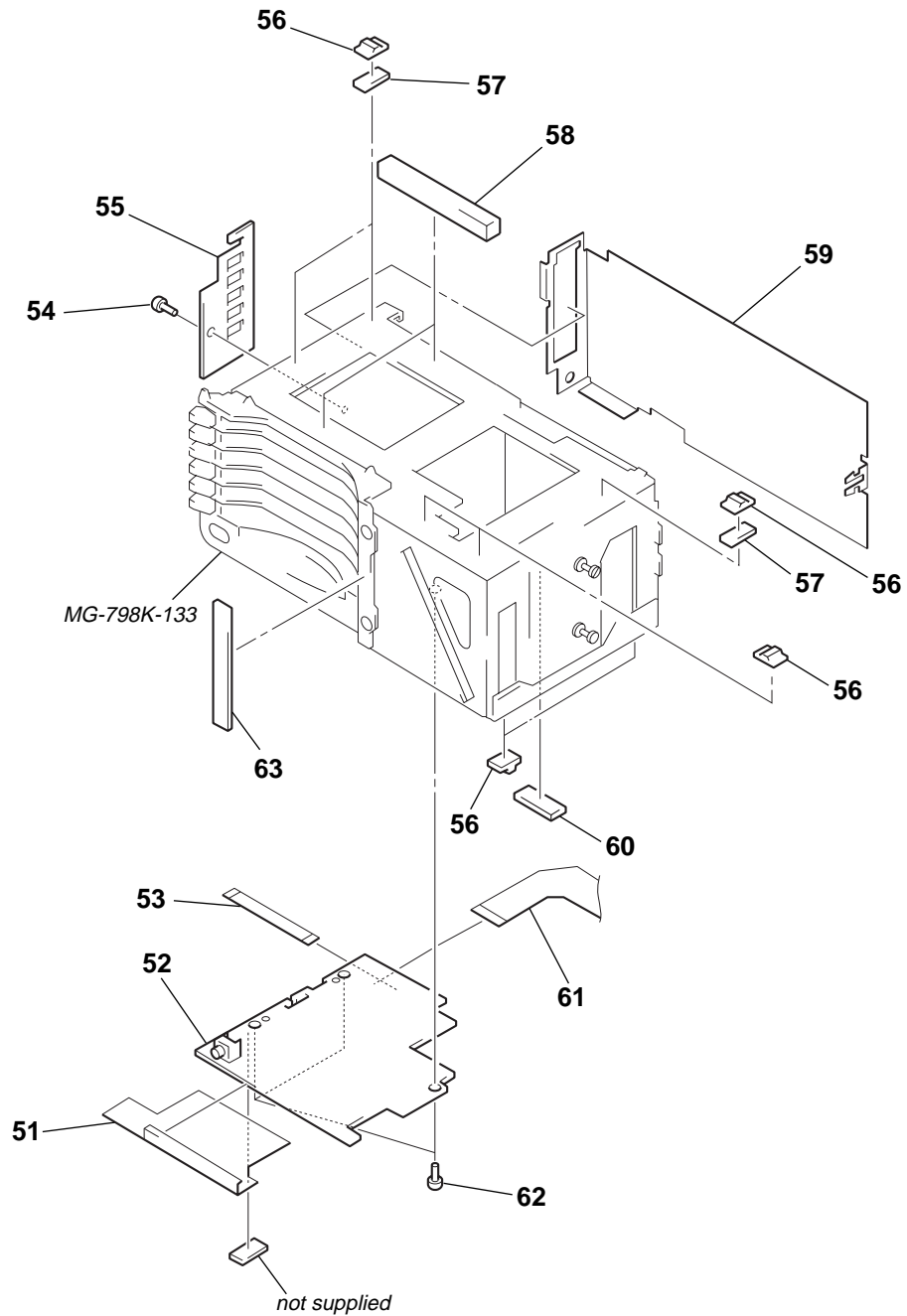
IC900 BA8272F-E2



IC970 TL5001CPS-E20

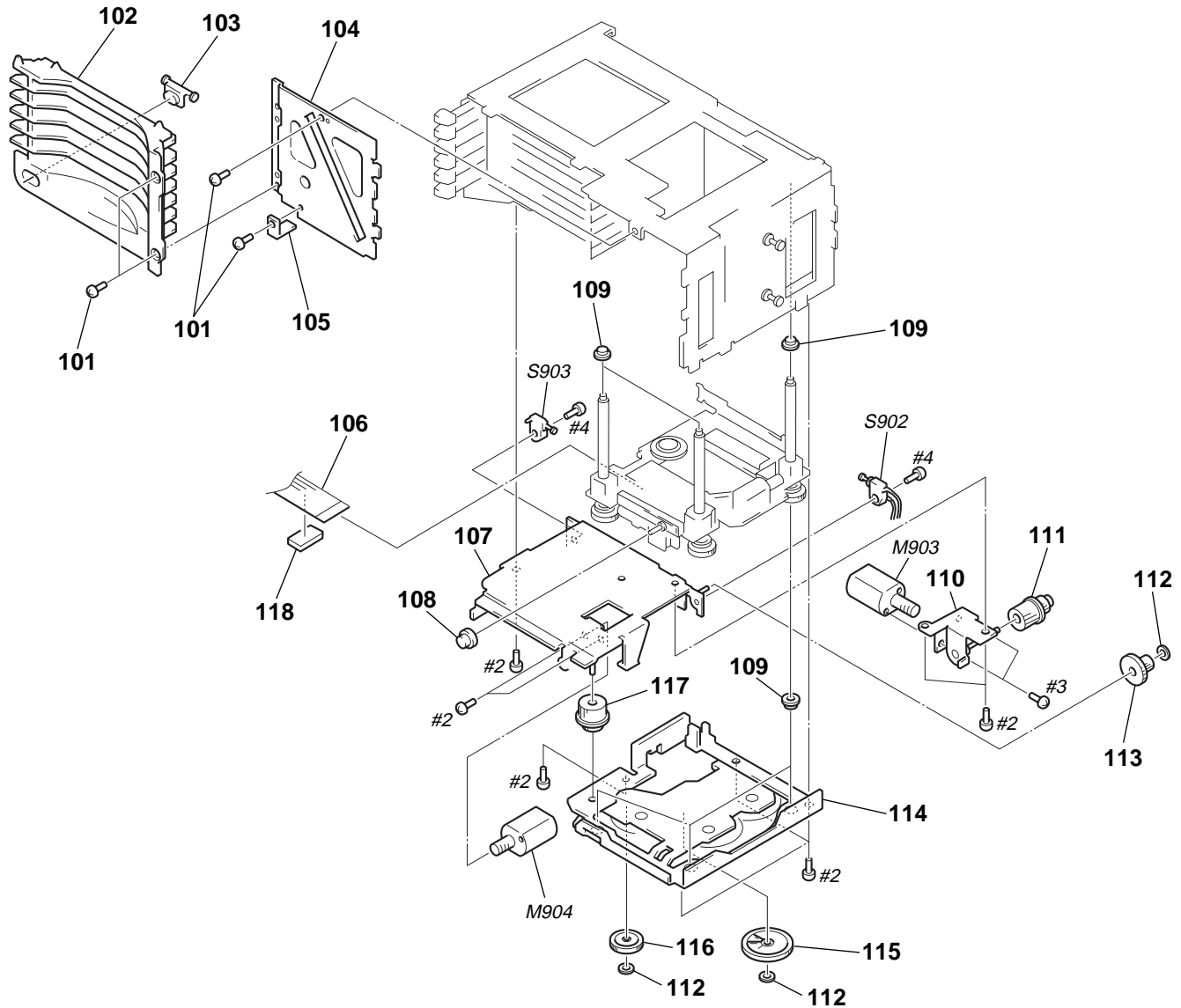


5-2. MAIN BOARD SECTION



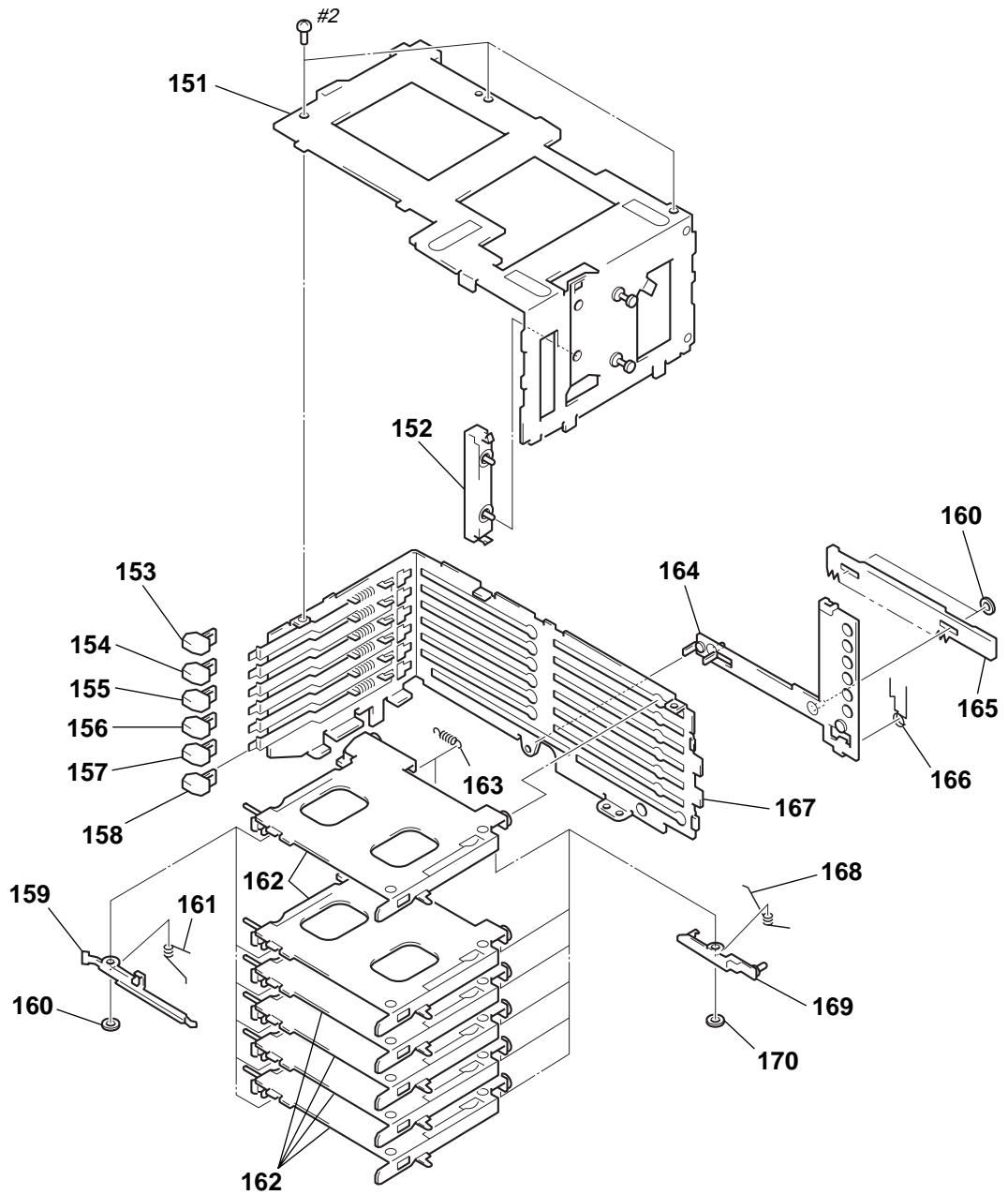
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	3-931-149-02	SHEET (MAIN PC BOARD)		58	3-931-699-01	CUSHION (ROLL H)	
* 52	A-3294-415-A	MAIN BOARD, COMPLETE		* 59	3-931-025-01	SHEET (MECHANISM DECK)	
53	1-776-474-11	CABLE, FLAT 7P		60	3-931-698-01	CUSHION (ROLL L)	
54	3-909-412-01	SCREW (+P) (1.7X2) (TYPE 3)		61	1-668-438-11	MAIN FLEXIBLE BOARD	
55	A-3313-712-A	SENSOR BOARD, COMPLETE		62	3-880-990-00	SCREW (1.7X3), FLAT, (+) SPECIAL	
56	3-348-750-01	CUSHION (DAMPER)		* 63	4-952-141-01	CUSHION (SPEAKER)	
* 57	3-715-973-01	CUSHION					

5-3. MD SECTION (1)
(MG-798K-133)



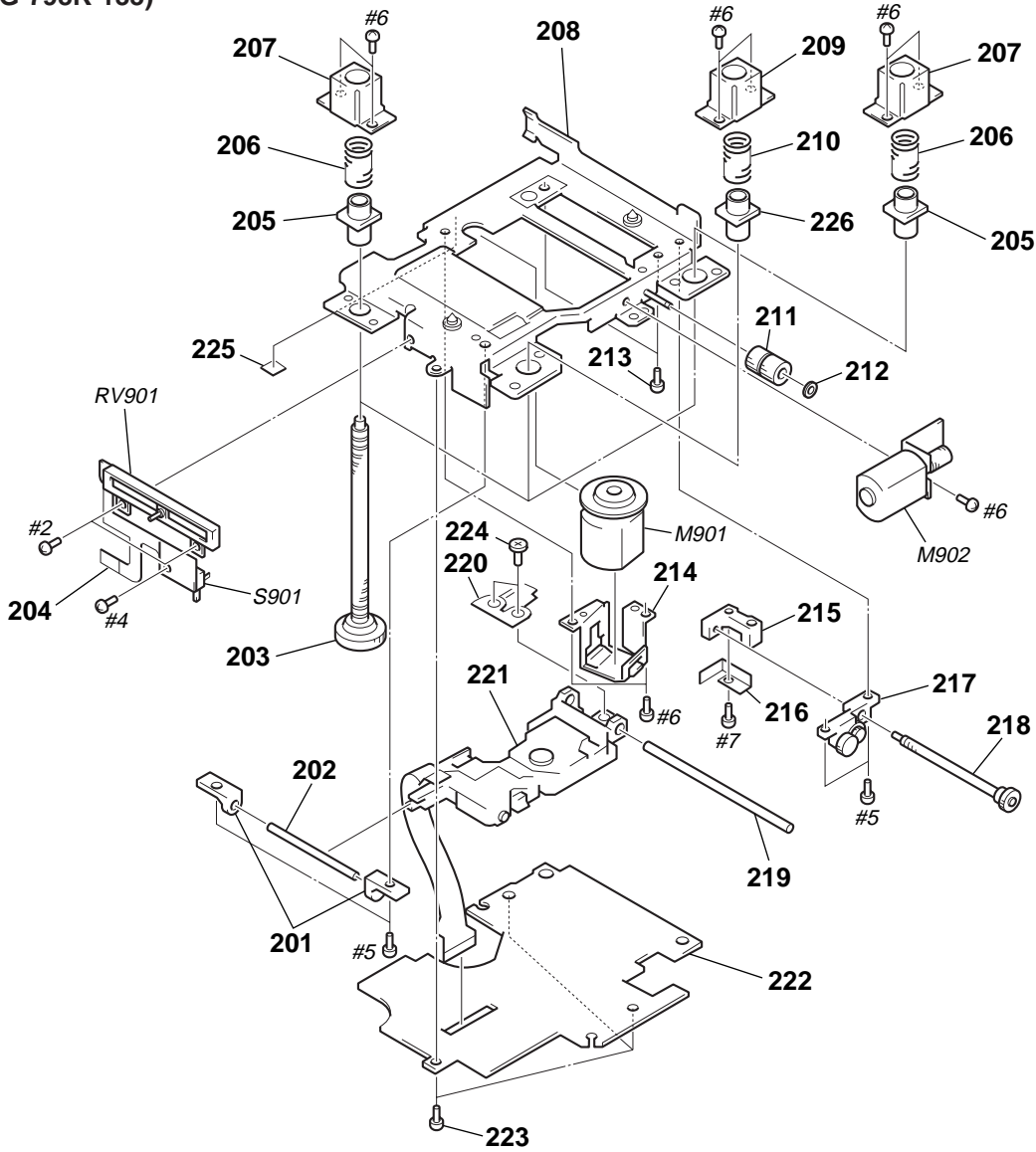
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-317-552-71	SCREW (M1.7)		112	3-377-719-11	WASHER, POLYETHYLENE	
102	3-930-314-01	ESCUTCHEON		113	3-930-317-01	GEAR (LD)	
103	3-930-319-01	BUTTON (STOP)		* 114	X-3374-670-1	CHASSIS (BOTTOM) ASSY	
* 104	3-930-320-01	CHASSIS (FRONT)		115	3-930-313-01	GEAR (ELVC)	
105	3-931-366-01	STOPPER, LEAD		116	3-020-386-01	GEAR (ELVA2)	
106	1-668-264-11	SERVO FLEXIBLE BOARD		117	3-020-363-01	WHEEL (ELV2), WORM	
* 107	X-3374-669-1	CHASSIS (MOTOR) ASSY		* 118	3-741-875-01	SHEET, RUBBER	
108	3-930-310-01	COLLAR (EHS)		M903	X-3371-508-2	MOTOR ASSY, LD (LOADING)	
109	3-930-312-02	BEARING (ELV)		M904	X-3374-812-1	MOTOR ASSY, ELV (ELEVATOR)	
110	X-3374-673-1	BRACKET (LD2) ASSY		S902	1-570-771-11	SWITCH (LOADING END SENSOR DET)	
111	3-930-365-01	WHEEL (LD), WORM		S903	1-570-771-21	SWITCH (STORE END SENSOR DET)	

5-4. MD SECTION (2)
(MG-798K-133)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 151	X-3371-209-3	CHASSIS (TOP) ASSY		161	3-930-350-01	SPRING (EJ), TORSION	
* 152	3-020-388-01	GUIDE (HOLDER 2)		162	X-3371-216-1	HOLDER (CADDIE) ASSY	
153	3-930-318-01	BUTTON (EJECT) (▲ 1)		163	3-930-352-01	SPRING (D LOCK), TENSION	
154	3-930-318-11	BUTTON (EJECT) (▲ 2)		* 164	X-3374-672-1	SLIDER (2) ASSY, LOADING	
155	3-930-318-21	BUTTON (EJECT) (▲ 3)		165	3-930-366-01	RACK (LOADING)	
156	3-930-318-31	BUTTON (EJECT) (▲ 4)		166	3-930-360-01	SPRING (LIMITER), TORSION	
157	3-930-318-41	BUTTON (EJECT) (▲ 5)		167	X-3374-671-1	CHASSIS (REAR 2) ASSY	
158	3-930-318-51	BUTTON (EJECT) (▲ 6)		168	3-930-349-01	SPRING (LOCK), TORSION	
159	3-930-354-01	LEVER, DISC EJECT		169	X-3371-219-5	PLATE (HOLDER) ASSY, LOCK	
160	3-377-719-11	WASHER, POLYETHYLENE		170	3-021-511-01	WASHER	

5-5. MD SECTION (3)
(MG-798K-133)



<p>The components identified by mark \triangle or dotted line with mark. \triangle are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
--	--

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-930-338-01	HOLDER (OP GUIDE B)		217	X-3371-213-1	HOLDER (SLA) ASSY	
202	3-930-332-01	GUIDE (OPB)		218	X-3371-214-1	SCREW (SL) ASSY, FEED	
203	X-3371-212-1	SCREW (ELV) ASSY, FEED		219	3-930-331-01	GUIDE (OPA)	
204	1-658-880-11	EHS FLEXIBLE BOARD		220	3-020-346-01	SPRING (SL OUTSERT 2), FEED	
205	3-020-351-01	SLEEVE (ELV2)		\triangle 221	8-583-037-02	PICK-UP, OPTICAL KMS-241A/J2N	
206	3-930-334-01	SPRING (ELV), COMPRESSION		* 222	A-3294-337-A	SERVO BOARD, COMPLETE	
207	3-930-345-01	PLATE (B), ELV LIMITER		223	3-932-755-01	SCREW (M1.7X2.2)	
* 208	X-3371-215-1	CHASSIS (OP) ASSY		224	3-703-816-32	SCREW (M1.4X1.6), SPECIAL HEAD	
209	3-930-344-01	PLATE (A), ELV LIMITER		* 225	3-018-070-01	SHEET (TT)	
210	3-930-711-01	SPRING (ELV2), COMPRESSION		226	3-930-333-01	SLEEVE (ELV)	
211	3-930-339-01	WHEEL (SL), WORM		M901	A-3291-507-A	MOTOR BLOCK ASSY, SP (SPINDLE)	
212	3-338-645-31	WASHER (0.8-2.5)		M902	A-3291-508-A	MOTOR BLOCK ASSY, SL (SLED)	
213	3-930-343-01	SCREW (K1.7X3.5)		RV901	1-223-817-11	RES, VAR, SLIDE 10K (ELEVATOR HEIGHT SENSOR)	
214	3-930-342-01	RETAINER (SP)		S901	1-570-771-21	SWITCH (HOME POSITION DET)	
215	3-930-336-01	HOLDER (SLB)					
216	3-930-335-01	DETENT, SL					

SECTION 6 ELECTRICAL PARTS LIST

LAMP

MAIN

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
- Abbreviation
G : German model

- 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.. : μ A.. uPA.. : μ PA..
uPB.. : μ PB.. uPC.. : μ PC.. uPD.. : μ PD..
- CAPACITORS
uF : μ F
- COILS
uH : μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-669-541-11	LAMP BOARD *****		C609	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
		< CONNECTOR >		C610	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
* CN620	1-580-056-21	PIN, CONNECTOR 3P < PILOT LAMP >		C611	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
PL620	1-517-630-41	LAMP, PILOT (ILLUMINATION) < RESISTOR >		C650	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
R620	1-216-298-00	METAL CHIP 2.2 5% 1/10W < SWITCH >		C651	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
S620	1-692-532-21	SWITCH, PUSH (1 KEY) (FRONT DOOR OPEN DET) *****		C652	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
*	A-3294-415-A	MAIN BOARD, COMPLETE ***** < CAPACITOR >		C653	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
				C654	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
				C700	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
				C701	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
				C800	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
				C801	1-104-852-11	TANTAL. CHIP 22uF 20% 10V	
						< CONNECTOR >	
				CN500	1-573-370-21	CONNECTOR, FFC/FPC 30P	
				* CN600	1-573-939-11	CONNECTOR, FFC/FPC (ZIF) 30P	
				CN601	1-573-916-11	CONNECTOR, FFC/FPC (ZIF) 7P	
				CN602	1-580-055-21	PIN, CONNECTOR 2P	
				CN603	1-580-055-21	PIN, CONNECTOR 2P	
				* CN604	1-580-056-21	PIN, CONNECTOR 3P	
				CN700	1-580-055-21	PIN, CONNECTOR 2P	
				CN701	1-580-055-21	PIN, CONNECTOR 2P	
						< DIODE >	
				D500	8-719-988-62	DIODE 1SS355	
				D501	8-719-988-62	DIODE 1SS355	
				D600	8-719-977-03	DIODE DTZ5.6B	
				D601	8-719-977-03	DIODE DTZ5.6B	
				D602	8-719-977-03	DIODE DTZ5.6B	
				D800	8-719-421-18	DIODE MA8033-L-TX	
				D801	8-719-988-62	DIODE 1SS355	
						< FERRITE BEAD >	
				FB530	1-500-113-11	FERRITE CHIP 1K	
						< IC >	
				IC500	8-759-464-81	IC PCM1717E-ST2	
				IC520	8-759-083-94	IC TC7W74FU	
				IC530	8-759-058-60	IC TC7SU04FU (TE85R)	
				IC540	8-759-473-70	IC SM5852FS-E2	
				IC600	8-759-531-54	IC uPD784216GC-027-8EU	
				IC601	8-759-503-60	IC S-80740AN-D4-S	
				IC602	8-759-238-47	IC TC74HCT7007AF(EL)	
				IC603	8-759-238-47	IC TC74HCT7007AF(EL)	

MAIN

POWER

Ref. No.	Part No.	Description	Remark
IC700	8-759-823-87	IC LB1638M	
IC701	8-759-823-87	IC LB1638M	
< RESISTOR >			
JC501	1-216-821-11	METAL CHIP 1K	5% 1/16W
< COIL >			
L530	1-412-985-31	INDUCTOR CHIP 3.3uH	
L600	1-412-058-11	INDUCTOR CHIP 10uH	
< TRANSISTOR >			
Q500	8-729-424-12	TRANSISTOR UN2112	
Q600	8-729-904-60	TRANSISTOR DTB113ZK	
Q601	8-729-421-22	TRANSISTOR UN2211	
Q602	8-729-020-67	TRANSISTOR XN1A312-TX	
Q800	8-729-106-60	TRANSISTOR 2SB1115A	
Q801	8-729-230-49	TRANSISTOR 2SC2712-YG	
< RESISTOR >			
R500	1-216-841-11	METAL CHIP 47K	5% 1/16W
R501	1-216-821-11	METAL CHIP 1K	5% 1/16W
R502	1-216-821-11	METAL CHIP 1K	5% 1/16W
R503	1-216-801-11	METAL CHIP 22	5% 1/16W
R505	1-216-801-11	METAL CHIP 22	5% 1/16W
R530	1-216-821-11	METAL CHIP 1K	5% 1/16W
R540	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R541	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R542	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R600	1-216-821-11	METAL CHIP 1K	5% 1/16W
R601	1-216-833-11	METAL CHIP 10K	5% 1/16W
R602	1-216-841-11	METAL CHIP 47K	5% 1/16W
R603	1-216-821-11	METAL CHIP 1K	5% 1/16W
R604	1-216-821-11	METAL CHIP 1K	5% 1/16W
R605	1-216-821-11	METAL CHIP 1K	5% 1/16W
R606	1-216-837-11	METAL CHIP 22K	5% 1/16W
R607	1-216-845-11	METAL CHIP 100K	5% 1/16W
R608	1-218-708-11	METAL CHIP 4.7K	0.50% 1/16W
R609	1-216-821-11	METAL CHIP 1K	5% 1/16W
R610	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R611	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R612	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R613	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R614	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R615	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R616	1-216-821-11	METAL CHIP 1K	5% 1/16W
R617	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R618	1-216-845-11	METAL CHIP 100K	5% 1/16W
R621	1-216-821-11	METAL CHIP 1K	5% 1/16W
R622	1-216-845-11	METAL CHIP 100K	5% 1/16W
R623	1-216-821-11	METAL CHIP 1K	5% 1/16W
R624	1-216-845-11	METAL CHIP 100K	5% 1/16W
R625	1-216-821-11	METAL CHIP 1K	5% 1/16W

Ref. No.	Part No.	Description	Remark
R626	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R627	1-216-821-11	METAL CHIP 1K	5% 1/16W
R628	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R800	1-216-815-11	METAL CHIP 330	5% 1/16W
R801	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R802	1-216-815-11	METAL CHIP 330	5% 1/16W
< NETWORK RESISTOR >			
RB601	1-233-412-11	RES, CHIP NETWORK 1.0K	(3216)
RB602	1-233-810-21	RES, CHIP NETWORK 100K	(3216)
RB603	1-233-412-11	RES, CHIP NETWORK 1.0K	(3216)
RB605	1-233-412-11	RES, CHIP NETWORK 1.0K	(3216)
RB606	1-233-810-21	RES, CHIP NETWORK 100K	(3216)
RB607	1-233-412-11	RES, CHIP NETWORK 1.0K	(3216)
RB608	1-233-810-21	RES, CHIP NETWORK 100K	(3216)
RB609	1-233-412-11	RES, CHIP NETWORK 1.0K	(3216)
< SWITCH >			
S600	1-571-914-21	SWITCH, KEYBOARD (STOP)	
< THERMISTOR >			
TH600	1-810-421-11	THERMISTOR NTH5G36B103K01TE	
< VIBRATOR >			
X600	1-760-607-11	VIBRATOR, CERAMIC (14MHz)	
X601	1-579-886-21	VIBRATOR, CRYSTAL (32.768kHz)	

*	A-3294-345-A	POWER BOARD, COMPLETE	*****
< CAPACITOR >			
C900	1-110-456-11	ELECT CHIP 47uF	20% 16V
C901	1-163-275-11	CERAMIC CHIP 0.001uF	5% 50V
C902	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C903	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V
C910	1-110-470-11	ELECT CHIP 1uF	20% 50V
C911	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C912	1-110-470-11	ELECT CHIP 1uF	20% 50V
C913	1-110-453-11	ELECT CHIP 4.7uF	20% 16V
C920	1-110-470-11	ELECT CHIP 1uF	20% 50V
C921	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C922	1-110-470-11	ELECT CHIP 1uF	20% 50V
C923	1-110-453-11	ELECT CHIP 4.7uF	20% 16V
C930	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C933	1-110-456-11	ELECT CHIP 47uF	20% 16V
C934	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C936	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C938	1-110-450-11	ELECT CHIP 100uF	20% 6.3V
C940	1-109-982-11	CERAMIC CHIP 1uF	10% 10V
C950	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C951	1-125-710-11	DOUBLE LAYERS 0.1F	5.5V

POWER

SENSOR

Ref. No.	Part No.	Description	Remark
C952	1-110-454-11	ELECT CHIP 10uF 20%	16V
C970	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C971	1-163-986-00	CERAMIC CHIP 0.027uF 10%	25V
C973	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C974	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C975	1-110-456-11	ELECT CHIP 47uF 20%	16V
C976	1-128-590-11	ELECT CHIP 100uF 20%	6.3V
C977	1-128-590-11	ELECT CHIP 100uF 20%	6.3V
C978	1-128-590-11	ELECT CHIP 100uF 20%	6.3V
C999	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
< CONNECTOR >			
CN900	1-764-585-11	PIN, CONNECTOR (PC BOARD) 12P	
* CN901	1-573-939-11	CONNECTOR, FFC/FPC (ZIF) 30P	
< DIODE >			
D900	8-719-975-40	DIODE RB411D	
D901	8-719-057-80	DIODE MA8160-M-TX	
D902	8-719-975-40	DIODE RB411D	
D903	8-719-057-80	DIODE MA8160-M-TX	
D904	8-719-975-40	DIODE RB411D	
D905	8-719-057-80	DIODE MA8160-M-TX	
D930	8-719-422-97	DIODE MA8091-M	
D940	8-719-422-64	DIODE MA8062-M	
D941	8-719-988-62	DIODE 1SS355	
D950	8-719-988-62	DIODE 1SS355	
D951	8-719-422-64	DIODE MA8062-M	
D952	8-719-400-20	DIODE MA152WA	
D970	8-719-066-16	DIODE RB491D-T146	
< FERRITE BEAD >			
FB910	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB920	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB930	1-414-235-11	INDUCTOR, FERRITE BEAD	
< IC >			
IC900	8-759-444-86	IC BA8272F-E2	
IC930	8-759-711-82	IC NJM4580E	
IC970	8-759-983-96	IC TL5001CPS	
< JUMPER RESISTOR >			
JC970	1-216-295-00	SHORT 0	
< COIL >			
L970	1-409-640-21	INDUCTOR 10uH	
L971	1-403-584-11	INDUCTOR 33uH	
L972	1-409-640-21	INDUCTOR 10uH	
< FILTER >			
NF900	1-239-466-21	FILTER, EMI	

Ref. No.	Part No.	Description	Remark
< IC LINK >			
PS900	1-533-397-11	LINK, CHIP IC (ICP-S2.3) (2.3A)	
< TRANSISTOR >			
Q910	8-729-920-21	TRANSISTOR DTC314TKH04	
Q920	8-729-920-21	TRANSISTOR DTC314TKH04	
Q930	8-729-020-67	TRANSISTOR XN1A312-TX	
Q931	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q932	8-729-424-12	TRANSISTOR UN2112	
Q940	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q941	8-729-424-12	TRANSISTOR UN2112	
Q950	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q970	8-729-106-60	TRANSISTOR 2SB1115A	
Q972	8-729-822-84	TRANSISTOR 2SB1202FAST	
< RESISTOR >			
R900	1-216-089-00	RES,CHIP 47K 5%	1/10W
R910	1-216-077-00	METAL CHIP 15K 5%	1/10W
R911	1-216-097-00	RES,CHIP 100K 5%	1/10W
R912	1-216-081-00	METAL CHIP 22K 5%	1/10W
R913	1-216-081-00	METAL CHIP 22K 5%	1/10W
R914	1-216-033-00	METAL CHIP 220 5%	1/10W
R915	1-216-097-00	RES,CHIP 100K 5%	1/10W
R920	1-216-077-00	METAL CHIP 15K 5%	1/10W
R921	1-216-097-00	RES,CHIP 100K 5%	1/10W
R922	1-216-081-00	METAL CHIP 22K 5%	1/10W
R923	1-216-081-00	METAL CHIP 22K 5%	1/10W
R924	1-216-033-00	METAL CHIP 220 5%	1/10W
R925	1-216-097-00	RES,CHIP 100K 5%	1/10W
R930	1-216-049-11	RES,CHIP 1K 5%	1/10W
R931	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R932	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R933	1-216-009-00	METAL CHIP 22 5%	1/10W
R940	1-216-089-00	RES,CHIP 47K 5%	1/10W
R941	1-216-085-00	METAL CHIP 33K 5%	1/10W
R942	1-216-097-00	RES,CHIP 100K 5%	1/10W
R950	1-216-049-11	RES,CHIP 1K 5%	1/10W
R951	1-216-081-00	METAL CHIP 22K 5%	1/10W
R970	1-216-073-00	METAL CHIP 10K 5%	1/10W
R971	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
R972	1-216-065-00	RES,CHIP 4.7K 5%	1/10W
R973	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R974	1-216-081-00	METAL CHIP 22K 5%	1/10W
R975	1-216-077-00	METAL CHIP 15K 5%	1/10W
R976	1-216-025-00	RES,CHIP 100 5%	1/10W
R977	1-216-049-11	RES,CHIP 1K 5%	1/10W
R978	1-216-049-11	RES,CHIP 1K 5%	1/10W
R979	1-216-663-11	METAL CHIP 3.3K 0.5%	1/10W
R980	1-216-649-11	METAL CHIP 820 0.5%	1/10W

A-3313-712-A SENSOR BOARD, COMPLETE

SERVO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3294-337-A	SERVO BOARD, COMPLETE *****				< DIODE >	
		< CAPACITOR >		D300	8-719-988-62	DIODE 1SS355	
C100	1-107-685-11	TANTAL. CHIP 15uF 20%	6.3V			< FERRITE BEAD >	
C101	1-135-201-11	TANTALUM CHIP 10uF 20%	4V	FB200	1-414-594-11	INDUCTOR, FERRITE BEAD	
C102	1-135-201-11	TANTALUM CHIP 10uF 20%	4V			< IC >	
C103	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	IC100	8-752-080-95	IC CXA2523AR	
C104	1-162-969-11	CERAMIC CHIP 0.0068uF 10%	25V	IC200	8-752-384-47	IC CXD2652AR	
C105	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	IC201	8-759-498-44	IC MSM51V4400-70TS-K	
C106	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC202	8-759-058-62	IC TC7S08FU(TE85R)	
C107	1-110-563-11	CERAMIC CHIP 0.068uF 10%	16V	IC300	8-759-442-80	IC MPC17A38ZVMEL	
C108	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V			< COIL >	
C109	1-109-982-11	CERAMIC CHIP 1uF 10%	10V	L100	1-412-058-11	INDUCTOR CHIP 10uH	
C110	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	L200	1-412-058-11	INDUCTOR CHIP 10uH	
C111	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	L300	1-412-034-11	INDUCTOR CHIP 330uH	
C112	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V			< TRANSISTOR >	
C113	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	Q100	8-729-216-22	TRANSISTOR 2SA1162-G	
C200	1-107-685-11	TANTAL. CHIP 15uF 20%	6.3V	Q200	8-729-422-27	TRANSISTOR 2SD601A-Q	
C202	1-162-919-11	CERAMIC CHIP 22PF 5%	50V			< RESISTOR >	
C203	1-162-919-11	CERAMIC CHIP 22PF 5%	50V	R100	1-216-853-11	METAL CHIP 470K 5% 1/16W	
C204	1-164-217-11	CERAMIC CHIP 150PF 5%	50V	R101	1-218-706-11	METAL CHIP 3.9K 0.50% 1/16W	
C206	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	R102	1-216-308-00	METAL CHIP 4.7 5% 1/10W	
C207	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V	R103	1-216-811-11	METAL CHIP 150 5% 1/16W	
C208	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R104	1-216-853-11	METAL CHIP 470K 5% 1/16W	
C209	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	R105	1-218-347-11	RES,CHIP 91K 5% 1/16W	
C210	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V	R106	1-216-994-11	RES,CHIP 13K 5% 1/16W	
C211	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V	R107	1-216-994-11	RES,CHIP 13K 5% 1/16W	
C212	1-163-023-00	CERAMIC CHIP 0.015uF 5%	50V	R108	1-216-994-11	RES,CHIP 13K 5% 1/16W	
C213	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R109	1-216-842-11	METAL CHIP 56K 5% 1/16W	
C214	1-109-982-11	CERAMIC CHIP 1uF 10%	10V	R110	1-216-833-11	METAL CHIP 10K 5% 1/16W	
C215	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R111	1-216-833-11	METAL CHIP 10K 5% 1/16W	
C216	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R204	1-216-809-11	METAL CHIP 100 5% 1/16W	
C217	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R205	1-216-833-11	METAL CHIP 10K 5% 1/16W	
C218	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	R206	1-216-845-11	METAL CHIP 100K 5% 1/16W	
C219	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R207	1-216-855-11	METAL CHIP 680K 5% 1/16W	
C220	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	R208	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
C221	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	R209	1-216-821-11	METAL CHIP 1K 5% 1/16W	
C300	1-104-852-11	TANTAL. CHIP 22uF 20%	10V	R210	1-216-821-11	METAL CHIP 1K 5% 1/16W	
C301	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R211	1-216-811-11	METAL CHIP 150 5% 1/16W	
C302	1-107-682-11	CERAMIC CHIP 1uF 10%	16V	R212	1-216-819-11	METAL CHIP 680 5% 1/16W	
C303	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R213	1-216-853-11	METAL CHIP 470K 5% 1/16W	
C304	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R214	1-216-809-11	METAL CHIP 100 5% 1/16W	
C305	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R215	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
C306	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R216	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
C400	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	R217	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
C401	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V				
		< CONNECTOR >					
CN100	1-573-929-11	CONNECTOR, FFC/FPC (ZIF) 20P					
CN200	1-573-370-21	CONNECTOR, FFC/FPC 30P					
* CN300	1-770-619-11	PIN, CONNECTOR 2P					
CN400	1-573-346-21	CONNECTOR, FFC/FPC 6P					

Ref. No.	Part No.	Description	Remark
		< NETWORK RESISTOR >	
RB200	1-233-576-11	RES, CHIP NETWORK 100	
RB300	1-233-600-11	RES, CHIP NETWORK 2.2	
RB301	1-233-600-11	RES, CHIP NETWORK 2.2	
		< SWITCH >	
S400	1-692-532-21	SWITCH, PUSH (1 KEY) (LIMIT)	
		< VIBRATOR >	
X200	1-767-429-21	VIBRATOR, CRYSTAL (22.5792MHz)	

		MISCELLANEOUS	

53	1-776-474-11	CABLE, FLAT 7P	
61	1-668-438-11	MAIN FLEXIBLE BOARD	
106	1-668-264-11	SERVO FLEXIBLE BOARD	
204	1-658-880-11	EHS FLEXIBLE BOARD	
△ 221	8-583-037-02	PICK-UP, OPTICAL KMS-241A/J2N	
CNP1	1-776-105-11	CORD (WITH CONNECTOR) (BUS CONTROL/ RCA PIN JACK)	
M901	A-3291-507-A	MOTOR BLOCK ASSY, SP (SPINDLE)	
M902	A-3291-508-A	MOTOR BLOCK ASSY, SL (SLED)	
M903	X-3371-508-2	MOTOR ASSY, LD (LOADING)	
M904	X-3374-812-1	MOTOR ASSY, ELV (ELEVATOR)	
RV901	1-223-817-11	RES, VAR, SLIDE 10K (ELEVATOR HEIGHT SENSOR)	
S901	1-570-771-21	SWITCH (HOME POSITION DET)	
S902	1-570-771-11	SWITCH (LOADING END SENSOR DET)	
S903	1-570-771-21	SWITCH (STORE END SENSOR DET)	

		ACCESSORIES & PACKING MATERIALS	

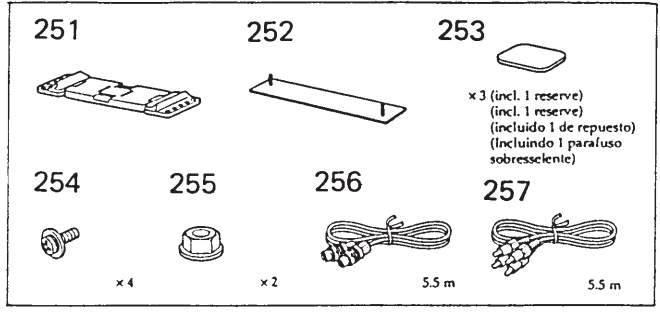
3-862-246-11		MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH,CHINESE) (US,Canadian,E)	
3-862-246-21		MANUAL, INSTRUCTION (ENGLISH,SPANISH, SWEDISH,PORTUGUESE) (AEP,UK)	
3-862-246-31		MANUAL, INSTRUCTION (FRENCH,GERMAN, DUTCH,ITALIAN) (AEP,UK,G)	

		HARDWARE LIST	

#1	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#2	7-627-852-37	SCREW, PRECISION +P 1.7X1.8 TYPE3	
#3	7-627-554-07	SCREW, PRECISION +P 2X2.2	
#4	7-627-855-07	SCREW, PRECISION +P 2X5.5 TYPE3	
#5	7-627-852-27	+P 1.7X3	
#6	7-627-552-18	SCREW, PRECISION +P 1.7X1.6	
#7	7-627-852-58	SCREW, PRECISION +P 1.7X5 TYPE3	

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

251	3-930-163-01	BASE (FITTING)	
252	X-3371-178-1	BRACKET ASSY	
253	3-930-166-01	CUSHION (FITTING)	
254	7-682-961-01	SCREW +PSW 4X8	
255	4-304-511-00	NUT (M5), FLANGE	
256	1-590-519-21	CORD (WITH CONNECTOR) (BUS CABLE) (5.5m)	
257	1-777-284-11	CORD, CONNECTION (RCA PIN CORD) (5.5m)	



The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

