

# CDC-R937/X937

## SERVICE MANUAL

Ver 1.1 2004. 04

US Model  
Canadian Model  
CDC-X937

AEP Model  
UK Model  
CDC-R937



Photo: CDC-R937

- The CD section have no adjustment.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-930B-185
Optical Pick-up Name	OPTIMA-752B

### SPECIFICATIONS

#### RADIO SECTION

##### (FM)

Frequency Range: 87.5 MHz – 108 MHz  
Intermediate frequency: 10.7 MHz (CDC-R937)  
Usable Sensitivity: 12.7 dBf  
50 dB Quieting Sensitivity: 17.2 dBf  
IF Rejection: 100 dB  
Frequency Response: 30 Hz – 15,000 Hz  
S/N Ratio: 67 dB (CDC-R937)  
70 dB (CDC-X937)  
Stereo Separation: 35 dB at 1 kHz  
Alternate Channel Selectivity: 98 dB  
Capture Ratio: 3 dB

##### (AM) (CDC-X937)

Frequency Range: 530 kHz – 1,710 kHz  
Usable Sensitivity: 30  $\mu$ V (30 dB)

##### (MW) (CDC-R937)

Frequency Range: 531 kHz – 1,602 kHz  
Intermediate frequency: 10.71 MHz/450 kHz  
Usable Sensitivity: 30  $\mu$ V (30 dB)

##### (LW) (CDC-R937)

Frequency Range: 144 kHz – 288 kHz (1 kHz/9 kHz step)  
Intermediate frequency: 10.71 MHz/450 kHz  
Usable Sensitivity: 30  $\mu$ V (30 dB)

#### CD SECTION

Frequency Response: 17 Hz – 20 kHz  $\pm 0/-3$  dB  
Dynamic Range: More than 92 dB  
Channel Separation: More than 60 dB  
S/N Ratio: More than 90 dB  
Wow/Flutter: Unmeasurable

#### AUDIO SECTION

Max. Power Output: 45 W  $\times$  4 channels

#### AUX IN Input

Input sensitivity (load impedance) AUX IN: 300 mV (10 k $\Omega$ )

– Continued on next page –

## FM/AM COMPACT DISC PLAYER

CDC-X937

## FM/MW/LW COMPACT DISC PLAYER

CDC-R937

9-877-344-02

2004D04-1

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**Sony Corporation**

e Vehicle Company

Published by Sony Engineering Corporation



## GENERAL

Power-Supply Voltage: 14.4 V (11 to 16 V allowable),  
DC, negative ground

Load Impedance: 4  $\Omega$

Tone Control: Bass  $\pm 10$  dB at 100 Hz,  
Treble  $\pm 10$  dB at 10 kHz

Preamp Output Voltage (load impedance): 2.2 V (10 k $\Omega$ )

Installed size: 182 (W)  $\times$  53 (H)  $\times$  155 (D) mm  
(7 1/4 (W)  $\times$  2 1/8 (H)  $\times$  6 1/8 (D) inches)

Supplied Accessory: Carrying case (1)

## CARD REMOTE CONTROL

Dimensions: Approx 33 (W)  $\times$  85 (H)  $\times$  7.5 (D) mm  
(1 5/16 (W)  $\times$  3 3/8 (H)  $\times$  5/16 (D) inches)

Weight: Approx 20 g (0.7 oz.) (including battery)

• Specifications and external appearance are subject to change without notice due to product improvement.

## SERVICE NOTES

### 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 Chip Component Replacement

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

### CDC-X937:

#### CAUTION

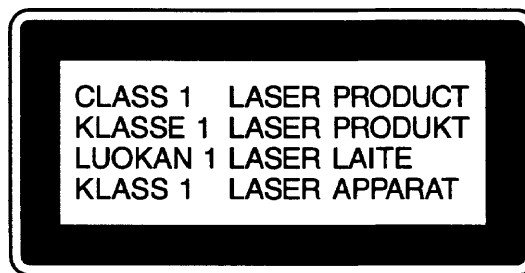
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### CDC-R937:

#### CAUTION

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

This compact disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the exterior.



### 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.

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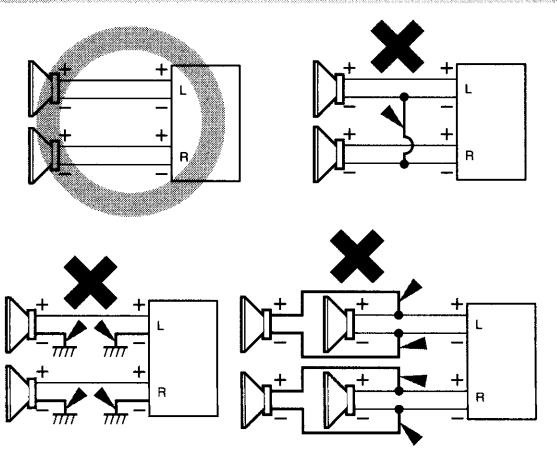
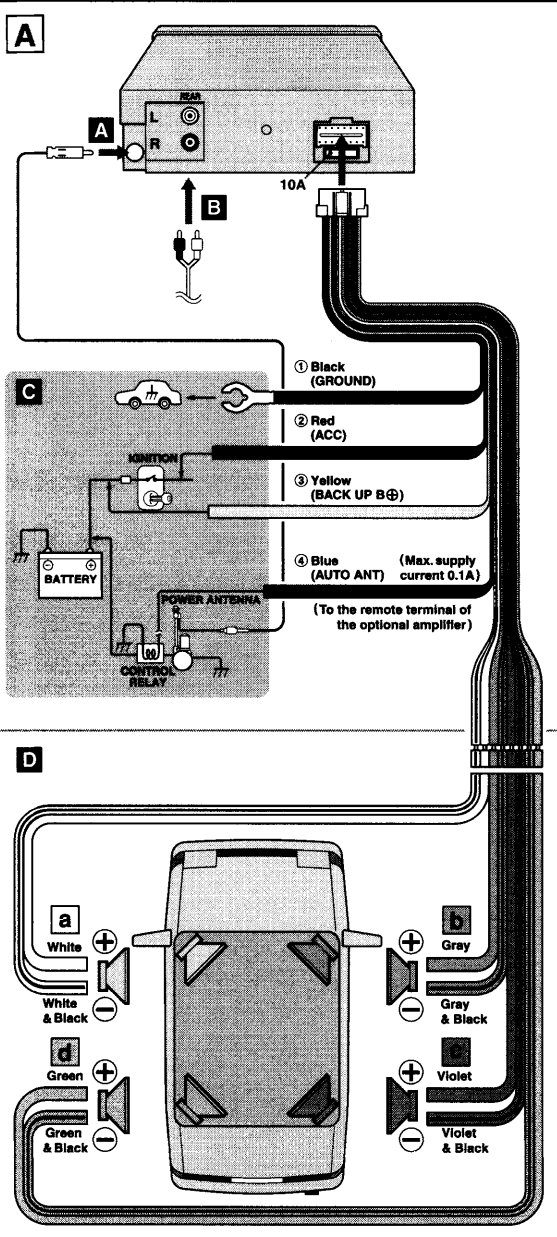
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This section is extracted from instruction manual.

CONNECTIONS (CDC-X937)



ENGLISH

CONNECTIONS

PRECAUTIONS

**Precaution on making connections**  
Before connecting, make sure that the ignition switch is set to OFF, and remove the ground terminal of the battery to protect the unit and your car from damage.

**Caution**  
Make the connections correctly, as illustrated in the connection diagram.  
Do not connect the negative (-) cord of each speaker wire to a common point. When replacing the fuse, be sure to use a fuse of the same rated amperage. Use of a fuse of a higher rating may cause serious damage to the unit.

CONNECTION DIAGRAM → A

- A From the car antenna
- B To the input jack of the optional power amplifier (for the rear channel)
- C To the wiring of the vehicle

Colors of leads

- Black (ground lead to be connected to vehicle [metal] body.)
- Red (ACC lead to be connected to the terminal from which power is supplied when the ignition switch is set to ACC.)
- Yellow (battery lead to be connected to the backup terminal from which power is always supplied.)
- Blue (power antenna lead to be connected to the terminal of the control relay switch for a vehicle equipped with a fully automatic power antenna. This lead is not used for a vehicle with a manual antenna or a switch-operated power antenna. If you will use the optional power amplifier with the unit, connect this lead to the remote terminal of the amplifier.)

(Max. supply current 0.1 A)

Speaker connections

Colors of leads

- White/White & Black: Front left ⊕/⊖
- Gray/Gray & Black: Front right ⊕/⊖
- Violet/Violet & Black: Rear right ⊕/⊖
- Green/Green & Black: Rear left ⊕/⊖

- 4-SPEAKER CONNECTIONS → [Diagram]
- 2-SPEAKER CONNECTIONS → [Diagram]

**Note**  
Insulate the end of the unused lead with a piece of tape.  
**Notes**  
• 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 speakers in parallel.  
• Do NOT connect the terminals of the speaker system to the car chassis.

ESPAÑOL

CONEXIONES

PRECAUCIONES

**Precauciones al hacer las conexiones**  
Antes de conectar, confirme que el interruptor de encendido está en OFF y desmonte el terminal a tierra de la batería para proteger el aparato y su coche contra daños.

**Precaución**  
Haga las conexiones correctamente, tal como se describe en el diagrama de conexiones.  
No conecte el cable negativo (-) de cada cable de altavoz a un punto común. Cuando cambie el fusible, utilice siempre uno de mismo amperaje nominal. El uso de un fusible de mayor régimen puede provocar daños importantes en el aparato.

DIAGRAMA DE CONEXIONES → A

- A De la antena del coche
- B A la toma de entrada del amplificador de potencia opcional (para el canal trasero)
- C Al cableado del vehículo

Colores de los cables

- Negro (cable a tierra a conectar a la carrocería del vehículo [metal].)
- Rojo (cable ACC a conectar al terminal que recibe eléctrica cuando el interruptor de encendido está en ACC.)
- Amarillo (cable de batería a conectar al terminal de reserva con un flujo permanente de electricidad.)
- Azul (cable de antena motriz a conectar al terminal del interruptor del relé de control para un vehículo equipado con antena motriz totalmente automática. Este cable no se debe utilizar en un vehículo con antena manual o antena motriz que funcione mediante interruptor. Si utiliza el amplificador de potencia opcional en esta unidad, conecte este cable al terminal remoto del amplificador.)

(Corriente máxima 0,1 A)

Conexiones de altavoces

Colores de los cables

- Blanco/Blanco y negro: parte frontal izquierda ⊕/⊖
- Gris/Gris y negro: parte frontal derecha ⊕/⊖
- Violeta/Violeta y negro: parte posterior derecha ⊕/⊖
- Verde/Verde y negro: parte posterior izquierda ⊕/⊖

- CONEXIONES PARA 4 ALTAVOCES → [Diagram]
- CONEXIONES PARA 2 ALTAVOCES → [Diagram]

**Note**  
Aísle la punta del conductor sin usar con cinta.  
**Notas**  
• Utilice altavoces con una impedancia de 4 a 8 ohmios y con suficiente capacidad eléctrica. De lo contrario puede dañar los altavoces.  
• NO conecte los altavoces en paralelo.  
• NO conecte los terminales del sistema de altavoces al chasis del coche.

FRANCAIS

CONNEXIONS

PRECAUTIONS

**Précautions pour les connexions**  
Avant le raccordement, vérifiez que la clé d'allumage est sur OFF, et débranchez la prise de masse de la batterie pour protéger l'appareil et votre voiture des dommages.

**Attention**  
Effectuez les connexions correctement, comme indiqué sur le diagramme de connexion.  
Ne raccordez pas le cordon négatif (-) de chaque fil de haut-parleur à un point commun. Au remplacement du fusible, utilisez un fusible à ampérage nominal identique. L'emploi d'un fusible à ampérage plus élevé peut sérieusement endommager l'appareil.

DIAGRAMME DE CONNEXION → A

- A De l'antenne du véhicule
- B A la prise d'entrée de l'amplificateur de puissance en option (pour le canal arrière)
- C Vers le câblage du véhicule

Couleurs des fils

- Noir (fil de mise à la terre à raccorder à la carrosserie [métal] du véhicule.)
- Rouge (fil ACC à raccorder à la prise à partir de laquelle la puissance est fournie quand la clé d'allumage est réglée sur ACC.)
- Jaune (fil de batterie à raccorder à la prise de secours de laquelle l'alimentation se fait toujours.)
- Bleu (fil d'antenne électrique à raccorder à la prise du commutateur de relais de commande pour un véhicule équipé d'une antenne électrique entièrement automatique. Ce fil n'est pas utilisé sur les véhicules à antenne manuelle ou antenne électrique opérée par commutateur. Si vous souhaitez utiliser l'amplificateur de puissance en option avec cet appareil, raccordez ce fil à la prise de télécommande de l'amplificateur.)

(Courant d'alimentation max. 0,1 A)

Raccordement des enceintes

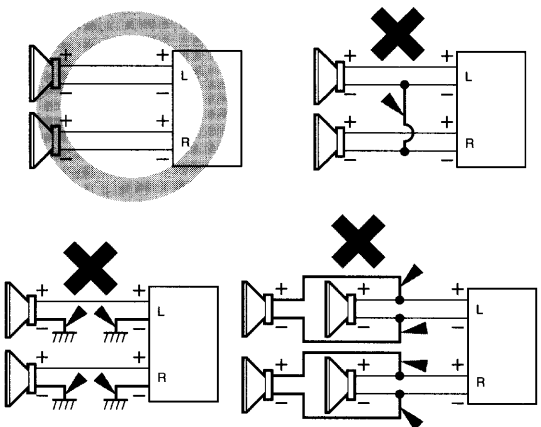
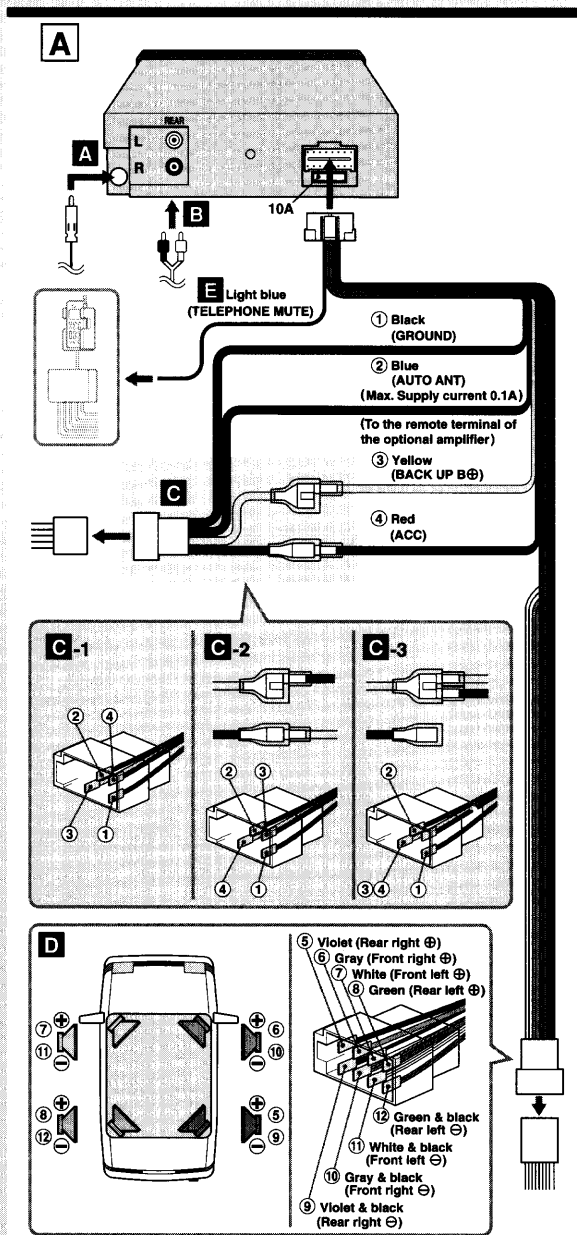
Couleurs des fils

- Blanc/Blanc et Noir: Avant gauche ⊕/⊖
- Gris/Gris et Noir: Avant droite ⊕/⊖
- Violet/Violet et Noir: Arrière droite ⊕/⊖
- Vert/Vert et Noir: Arrière gauche ⊕/⊖

- RACCORDEMENT A 4 ENCEINTES → [Diagram]
- RACCORDEMENT A 2 ENCEINTES → [Diagram]

**Remarque**  
Isoler l'extrémité du fil inutilisé avec du ruban.  
**Remarques**  
• Utilisez des enceintes à impédance de 4 à 8 ohms et puissance nominale adéquate. Sinon elles seront endommagées.  
• Ne raccordez PAS les enceintes en parallèle.  
• Ne raccordez PAS les prises du système d'enceintes au châssis de la voiture.

CONNECTIONS (CDC-R937)



ENGLISH

CONNECTIONS

PRECAUTIONS

**Precaution on making connections**  
Before connecting, make sure that the ignition switch is set to OFF, and remove the earth terminal of the battery to protect the unit and your car from damage.

**Caution**  
Make the connections correctly, as illustrated in the connection diagram.  
Do not connect the negative (-) cord of each speaker wire to a common point. When replacing the fuse, be sure to use a fuse of the same rated amperage. Use of a fuse of a higher rating may cause serious damage to the unit.

CONNECTION DIAGRAM → A

- A From the car antenna
- B To the input jack of the optional power amplifier (for the rear channel)
- C To the ISO connector of the vehicle (power supply)

**Note**  
If your car is not pre-fitted with ISO standard connectors, you should use an adaptor available from your retailer or any good automotive accessory shop.

Colors of leads

- 1 Black (ground lead to be connected to vehicle [metal] body.)
- 2 Blue (power antenna lead to be connected to the terminal of the control relay switch for a vehicle equipped with a fully automatic power antenna. This lead is not used for a vehicle with a manual antenna or a switch-operated power antenna. If you will use the optional power amplifier with the unit, connect this lead to the remote terminal of the amplifier.) (Max. supply current 0.1 A)
- 3 Yellow (battery lead to be connected to the backup terminal from which power is always supplied.)
- 4 Red (ACC lead to be connected to the terminal from which power is supplied when the ignition switch is set to ACC.) (Max. supply current 0.1 A)

To the ISO connector of the vehicle (speaker connection)

Colors of leads

- ①/② Violet/Violet & Black, Rear right ⊕/⊖
- ③/④ Gray/Gray & Black, Front right ⊕/⊖
- ⑤/⑥ White/White & Black, Front left ⊕/⊖
- ⑦/⑧ Green/Green & Black, Rear left ⊕/⊖

**Notes**  
• 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 speakers in parallel.  
• Do NOT connect the terminals of the speaker system to the car chassis.  
E To the radio mute lead of the cellular phone hands-free car kit, etc.  
When the telephone mute lead (light blue) is connected to a cellular phone hands-free car kit, etc., the unit mutes the sound from the speakers automatically during your conversation on the cellular phone. For details, refer to the instruction manual for the cellular phone hands-free car kit.  
**Note**  
This telephone mute lead supports connection only to the radio mute line. When connected to another type of output system, it will not work.

ESPAÑOL

CONEXIONES

PRECAUCIONES

**Precauciones al hacer las conexiones**  
Antes de conectar, confirme que el interruptor de encendido está en OFF y desmonte el terminal a tierra de la batería para proteger el aparato y su coche contra daños.

**Precaución**  
Haga las conexiones correctamente, tal como se describe en el diagrama de conexiones.  
No conecte el cable negativo (-) de cada cable de altavoz a un punto común. Cuando cambie el fusible, utilice siempre uno del mismo amperaje nominal. El uso de un fusible de mayor régimen puede provocar daños importantes en el aparato.

DIAGRAMA DE CONEXIONES → A

- A De la antena del coche
- B A la toma de entrada del amplificador de potencia opcional (para el canal trasero)
- C Al conector ISO del vehículo (alimentación eléctrica)

**Nota**  
Compruebe que la forma de patillas del conector de alimentación eléctrica de su coche es un conector que cumpla con la norma ISO ②-1.  
Algunos tipos de coche pueden tener otra forma de patillas diferentes. ②-2 ②-3. En este caso, cambie las conexiones de los cables rojo y amarillo como se indican en ②-2 o ②-3.

**Nota**  
Si su coche no tiene conectores que cumplan la norma ISO, debe utilizar un adaptador de venta en su distribuidor o cualquier tienda de accesorios para automóviles completa.

- 1 Negro (cable a tierra a conectar a la carrocería del vehículo [metal].)
- 2 Azul (cable de antena motriz a conectar al terminal del interruptor del relé de control para un vehículo equipado con antena motriz totalmente automática. Este cable no se debe utilizar en un vehículo con antena manual o antena motriz que funcione mediante interruptor. Si utiliza el amplificador de potencia opcional en esta unidad, conecte este cable al terminal remoto del amplificador.) (Corriente máxima 0.1 A)
- 3 Amarillo (cable de batería a conectar al terminal de reserva con un flujo permanente de electricidad.)
- 4 Rojo (cable ACC a conectar al terminal que recibe eléctrica cuando el interruptor de encendido está en ACC.)

Al conector ISO del vehículo (conexión de altavoces)

Colores de los cables

- ①/② Violeta/Violeta y negro; parte posterior derecha ⊕/⊖
- ③/④ Gris/Gris y negro; parte frontal derecha ⊕/⊖
- ⑤/⑥ Blanco/Blanco y negro; parte frontal izquierda ⊕/⊖
- ⑦/⑧ Verde/Verde y negro; parte posterior izquierda ⊕/⊖

**Notas**  
• Utilice altavoces con una impedancia de 4 a 8 ohmios y con suficiente capacidad eléctrica. De lo contrario puede dañar los altavoces.  
• NO conecte los altavoces en paralelo.  
• NO conecte los terminales del sistema de altavoces al chasis del coche.

E Al conductor de silenciamiento de radio del kit de manos libres para el teléfono celular de coche, etc.

Cuando el cable de silenciamiento (marrón) para teléfono está conectado al kit de manos libres para teléfono celular de coche, etc., la unidad silencia automáticamente los altavoces durante su conversación en el teléfono celular. Para más detalles, consulte el anual de instrucciones del kit de manos libres para teléfono celular de coche.

**Nota**  
Este cable de silenciamiento de teléfono sólo puede conectarse a la línea de silenciamiento de radio. No funcionará si lo conecta a otro tipo de sistema de salida.

FRANÇAIS

CONNEXIONS

PRECAUTIONS

**Précautions pour les connexions**  
Avant le raccordement, vérifiez que la clé d'allumage est sur OFF, et débranchez la prise de terre de la batterie pour protéger l'appareil et votre voiture des dommages.

**Attention**  
Effectuez les connexions correctement, comme indiqué sur le diagramme de connexion.  
Ne raccordez pas le cordon négatif (-) de chaque fil de haut-parleur à un point commun. Au remplacement du fusible, utilisez un fusible à ampérage nominal identique. L'emploi d'un fusible à ampérage plus élevé peut sérieusement endommager l'appareil.

DIAGRAMME DE CONNEXION → A

- A De l'antenne du véhicule
- B A la prise d'entrée de l'amplificateur de puissance en option (pour le canal arrière)
- C Au connecteur ISO du véhicule (alimentation)

**Remarque**  
Certains types de voitures peuvent avoir un agencement de broches différent. ②-2 ou ②-3. Dans ce cas, modifiez les connexions des fils rouge et jaune comme indiqué en ②-2 ou ②-3.

**Remarque**  
Si votre voiture n'est pas dotée d'un connecteur standard ISO, utilisez un adaptateur disponible chez votre revendeur ou dans tout bon magasin d'accessoires automobiles.

Couleurs des fils

- 1 Noir (fil de mise à la terre à raccorder à la carrosserie [métal] du véhicule.)
- 2 Bleu (fil d'antenne électrique à raccorder à la prise du commutateur de relais de commande pour un véhicule équipé d'une antenne électrique entièrement automatique. Ce fil n'est pas utilisé sur les véhicules à antenne manuelle ou antenne électrique opérée par commutateur. Si vous souhaitez utiliser l'amplificateur de puissance en option avec cet appareil, raccordez ce fil à la prise de télécommande de l'amplificateur.) (Courant d'alimentation maxi. 0.1 A)
- 3 Jaune (fil de batterie à raccorder à la prise de secours de laquelle l'alimentation se fait toujours.)
- 4 Rouge (fil ACC à raccorder à la prise à partir de laquelle la puissance est fournie quand la clé d'allumage est réglée sur ACC.)

Au connecteur ISO du véhicule (raccordement des enceintes)

Couleurs des fils

- ①/② Violet/Violet et Noir, Arrière droite ⊕/⊖
- ③/④ Gris/Gris et Noir, Avant droite ⊕/⊖
- ⑤/⑥ Blanc/Blanc et Noir, Avant gauche ⊕/⊖
- ⑦/⑧ Vert/Vert et Noir, Arrière gauche ⊕/⊖

**Remarques**  
• Utilisez des enceintes à impédance de 4 à 8 ohms et puissance nominale adéquate. Sinon elles seront endommagées.  
• Ne raccordez PAS les enceintes en parallèle.  
• Ne raccordez PAS les prises du système d'enceintes au châssis de la voiture.

E Au conducteur d'assourdissement radio du kit téléphone cellulaire auto mains libres

Quand le conducteur d'assourdissement radio (bleu ciel) est relié à un kit téléphone cellulaire auto mains libres, etc., l'appareil assure automatiquement le son des enceintes pendant la conversation au téléphone cellulaire. Pour les détails, consultez le mode d'emploi du kit téléphone cellulaire auto mains libres.

**Remarque**  
Le fil d'assourdissement pour téléphone automobile peut seulement être raccordé à la ligne d'assourdissement radio. Il sera sans effet s'il est raccordé à un autre type de système de sortie.

DEUTSCH

ANSCHLÜSSE

VORSICHTSMASSREGELN

**Vorsichtsmassregel zur Herstellung von Anschlüssen**  
Vor dem Herstellen von Anschlüssen sicherstellen, daß der Zündschalter auf OFF steht und die Masseklemme der Batterie entfernen, um das Gerät und das Fahrzeug vor Schäden zu schützen.

**Vorsicht**  
Die Verbindungen korrekt herstellen, wie im Anschlußdiagramm gezeigt.  
Nicht die negative (-) Leitung jedes Lautsprecherkabels an einen gemeinsamen Punkt anschließen. Beim Austauschen der Sicherung immer eine Sicherung der gleichen Stärke verwenden. Verwendung einer höheren Sicherung kann zu schweren Schäden am Gerät führen.

ANSCHLUSSDIAGRAMM → A

- A Von der Autoantenne
- B Verstärkerendstufe (für hinteren Kanal)
- C Zum ISO-Anschluß des Fahrzeug (Betriebsstromversorgung)

Stellen Sie sicher, daß die Pinordnung der Standard-ISO-Buchse ②-1 entspricht.  
Bestimmte Fahrzeugtypen können eine andere Pinordnung haben. ②-2 oder ②-3. In diesem Fall ändern Sie die Verbindungen der roten und gelben Leitungen wie in ②-2 oder ②-3 gezeigt.

**Hinweis**  
Wenn Ihr Fahrzeug nicht bereits mit ISO-Standardbuchsen ausgestattet ist, sollten Sie einen Adapter verwenden, der von Ihrem Fachhändler oder einem guten Automobilzubehörgeschäft erhältlich ist.

Leitungsfarben

- 1 Schwarz (Masseleitung zum Anschluß an die Fahrzeugkarosserie [Metall].)
- 2 Blau (Motorantennenleitung zum Anschluß an die Klemme des Relaischalters für ein Fahrzeug, das mit vollautomatischer Motorantenne ausgestattet ist. Diese Leitung wird nicht für ein Fahrzeug mit manueller Antenne oder einer schaltbetrieblenen Motorantenne verwendet. Wenn Sie die optionale Verstärkerendstufe mit dem Gerät verwenden wollen, diese Leitung an die Fernbedienungsklemme des Verstärker anschließen.) (Max. Versorgungsstrom 0,1 A)

- ③ Gelb (Batterieleitung zum Anschluss an die Reservierklemme von der immer Strom anliegt.)
- ④ Rot (ACC-Leitung zum Anschluss an die Klemme, von der Strom anliegt, wenn der Zündschlüssel auf ACC steht.)

**Zur ISO-Buchse des Fahrzeuges (Lautsprecherverbindung)**

- ⑥/⑧ Violet/Violet & Schwarz; hinten rechts ⊕/⊖
- ⑨/⑩ Grau/Grau & Schwarz; vorne rechts ⊕/⊖
- ⑪/⑫ Weiß/Weiß & Schwarz; vorne links ⊕/⊖
- ⑬/⑭ Grün/Grün & Schwarz; hinten links ⊕/⊖

**Hinweise**

- Verwenden Sie Lautsprecher mit einer Impedanz von 4 bis 8 Ohm und mit angemessener Belastbarkeit.
- Anschließern können die Lautsprecher beschädigt werden.
- Schließen Sie die Lautsprecher NICHT parallel an.
- Schließen Sie die Klemmen des Lautsprechersystems NICHT an die Fahrzeugbatterie an.

**Zur Radio-Stummschaltung bei Handy- Telefonaten**

Ist das Radio über das Stummschaltungskabel (hellblau) mit dem Handy-Freisprecheinbausatz verbunden, so wird bei Telefongesprächen mit dem Handy die Radiowiedergabe über die Lautsprecher automatisch stummschaltet. Näheres hierzu finden Sie in der Anleitung des Handy-Freisprecheinbausatzes.

**Hinweis**

Die Telefon-Stummschaltung unterstützt nur die Radio-Stummschaltung. Bei Anschluss an einen anderen Typ des Ausgabesystems ist sie wirkungslos.

**ITALIANO**

**COLLEGAMENTI PRECAUZIONI**

Prima di eseguire i collegamenti, assicurarsi che l'interruttore di ignizione sia impostato su OFF e rimuovere il terminale di terra della batteria per proteggere l'apparecchio e la vostra autovettura da eventuali danneggiamenti.

**Attenzione**

Eseguire i collegamenti correttamente come illustrato nei diagrammi dei collegamenti. Non collegare il cavo di ciascun diffusore ad un punto in comune. Quando sostituite il fusibile, assicurarsi di utilizzare un fusibile dello stesso amperaggio. L'uso di un fusibile di amperaggio superiore può essere causa di danneggiamenti dell'apparecchio.

**DIAGRAMMA DEI COLLEGAMENTI → A**

- A Dall'antenna dell'autovettura
- B Alla presa di entrata dell'amplificatore di potenza opzionale (per il canale posteriore)
- C Al connettore ISO dell'autovettura (alimentazione)

Assicurarsi che la disposizione dei pin del connettore di alimentazione della vostra autovettura sia conforme a quella del connettore ISO normale ①-1.

Alcuni tipi di autovettura possono avere una disposizione pin di tipo ② o ③. In tal caso, cambiare il colore dei conduttori isolati rossi e gialli come mostrato in ② o ③.

**Colori dei conduttori isolati**

- ① Nero (conduttore isolato di terra da collegare alla carrozzeria dell'autovettura [parte metallica].)
- ② Blu (conduttore isolato dell'antenna di potenza da collegare al terminale dell'interruttore di scorrimento dei comandi per veicoli con antenna di potenza completamente automatica. Questo conduttore isolato non viene utilizzato per veicoli con antenna manuale o con antenne di potenza ad interruttore. Se utilizzate l'amplificatore di potenza opzionale con questo apparecchio, collegate questo conduttore isolato al terminale a distanza dell'amplificatore.)
- ③ Giallo (conduttore isolato della batteria da collegare al terminale di backup dal quale viene sempre fornita l'alimentazione.)
- ④ Rosso (conduttore isolato ACC da collegare al terminale dal quale viene fornita l'alimentazione quando l'interruttore di ignizione è impostato su ACC.)

**Al connettore ISO del veicolo (collegamento diffusori)**

- Colori dei conduttori isolati
- ⑥/⑧ Viola/Viola e nero; posteriore destro ⊕/⊖
- ⑨/⑩ Grigio/Grigio e nero; anteriore destro ⊕/⊖
- ⑪/⑫ Bianco/Bianco e nero; anteriore sinistro ⊕/⊖
- ⑬/⑭ Verde/Verde e nero; posteriore sinistro ⊕/⊖

**Note**

- Utilizzare diffusori con una impedenza di 4 a 8 ohms e con una capacità di controllo alimentazione adeguata. Altrimenti, i diffusori potrebbero danneggiarsi.
- Non collegare i diffusori in parallelo.
- Non collegare i terminali del sistema diffusori all'autovettura.

**Al conduttore isolato di silenziamento radio del kit viva voce per il telefono cellulare, ecc.**

Quando il conduttore isolato di silenziamento del telefono (azzurro) viene collegato al kit viva voce per il telefono cellulare, ecc., l'unità interrompe automaticamente il suono proveniente dagli altoparlanti durante le conversazioni con il telefono cellulare. Per ulteriori dettagli, consultare il manuale di istruzioni del kit viva voce per il telefono cellulare.

**Note**

- Questo conduttore isolato per il mutolo del telefono sostiene solo la connessione alla linea di mutolo della radio. Quindi non funziona se collegato ad un altro tipo di sistema di uscita.

**NEDERLANDS**

**AANSLUITINGEN VOORZORGSMAATREGELEN**

Voor het apparaat gaat aansluiten, zet u het contact van de auto op OFF en nu de aardsleutel van de accu los, om kortsluiting te voorkomen.

**Voorzichtig**

Maak de aansluitingen zorgvuldig zoals aangegeven in het bijgaande aansluitschema. Sluit nooit de negatieve ⊖ polen van de beide luidsprekersnoeren op hetzelfde punt van een verzorgingszetsel uitsteking door één met hetzelfde ampère. Gebruik van een zekering met hoger ampère kan ernstige schade aan het apparaat veroorzaken.

**AANSLUITSCHEMA → A**

- A Vanaf de auto-antenne
- B Vanaf de ingangsaansluiting van de los verkrijgbare eindversterker (voor het achterkanaal)

**Naar de ISO aansluitstekker van de auto (voor de stroomvoorziening)**

Controleer of de stekkerpin-configuratie van de auto overeenstemt met de standaard ISO aansluitstekker ①-1. In sommige auto's is de stekkerpin-configuratie anders, zoals in ② of ③. In dat geval dient u de aansluitingen van de gele draad te veranderen, zoals getoond in ② of ③.

**Opmerking**

Als uw auto niet is voorzien van ISO standaard aansluitstekkers, zult u een aansluitkabel moeten aanschaffen bij uw dealer of een winkel in auto-accessoires.

**Kleuren van de stroomdraden**

- ① Zwart (massadraad, verbinden met een [metaal] carrosserieleed van de auto.)
- ② Blauw (automatische antenne draad, verbinden met de aansluiting van de bedieningsgreepschakelaar bij een auto voorzien van een volautomatische antenne. Deze draad niet gebruiken bij een auto met een handmatig bediende of halfautomatische antenne. Als u een los verkrijgbare eindversterker aansluit op dit apparaat, verbind deze draad dan met de inschakelaarsluiting van de versterker.)
- ③ Geel (accudraad, verbinden met de reserve-aansluiting die altijd stroom levert.)

**Roof (ACC aansluiting)**

De aansluiting die stroom levert wanneer het contact van de auto in de ACC stand staat.

**Naar de ISO aansluitstekker van de auto (Lautsprecher aansluiting)**

- ⑥/⑧ Paars/Paars en zwart; Rechtsachter ⊕/⊖
- ⑨/⑩ Grijs/Grijs en zwart; Rechtsvoor ⊕/⊖
- ⑪/⑫ Wit/Wit en zwart; Linksvoor ⊕/⊖
- ⑬/⑭ Groen/Groen en zwart; Linksachter ⊕/⊖

**Opmerkingen**

- Gebruik luidsprekers met een impedantie van 4 tot 8 ohm, die het geleverde uitgangsvermogen kunnen verwerken. Anders kunnen de luidsprekers beschadigd worden.
- NOOIT de luidsprekers parallel aansluiten.
- NOOIT de luidsprekersnoeren aansluiten op de carrosserie van de auto.

**Naar de radio-dempingsdraad van de hands-free autokit e.d. van een mobiele telefoon**

Als de radio-dempingsdraad (lichtblauw) op de hands-free autokit e.d. van een mobiele telefoon wordt aangesloten, zal de geleidingsweg via de luidsprekers automatisch gedempt worden wanneer u de mobiele telefoon gebruikt. Zie voor radere bijbehorende de handleiding van de hands-free autokit van de mobiele telefoon.

**Opmerking**

Deze draad is alleen geschikt voor aansluiting op een radio-dempingsdraad. Bij aansluiting op een ander type weergavesysteem zal de geleidingsweg niet werken.

**POLSKI**

**POŁĄCZENIA ŚRODKI OSTROŻNOŚCI**

ŚRODKI OSTROŻNOŚCI dotyczące połączeń Przed wykonaniem połączeń upewnij się, że kluczyk z przodu wyjechał ze stacyjki zapłonu, która ustawiona jest w pozycji OFF, po czym odczekaj przernę masę od uziemienia, bęgnąc ampułtatora ciekłym uożnaniem samochodu oraz odciążnik przed uszkodzeniem.

**Uwaga**

Połączenia wykonać poprawnie, jak pokazano na schemacie połączeń. Nie podłączaj ujemnych przewodów ⊖ głośnikowych do wspólny masę. W przypadku wymiany bezpiecznika pamiętaj o założeniu bezpiecznika o tej samej mocy. Założenie bezpiecznika o wyższych parametrach może spowodować uszkodzenie zestawu.

**SCHEMAT POŁĄCZEŃ → A**

- A Od anteny samochodowej
- B Do gniazda wejściowego opcjonalnego zmacznacza mocy (dla tylnego kanału)
- C Do złącza ISO pojazdu (źródło zasilania)

Upewnij się, że układ styków złącza zasilania pojazdu zgadza się z układem styków konektora w standardzie ISO ①-1. Pojazdy niektórych typów mogą być wyposażone w konektor o innym układzie styków, jak ② lub ③. W takim przypadku należy zmienić połączenia przewodu czerwonego oraz przewodu żółtego, jak pokazano na rysunku ② lub ③.

**Uwaga**

Nie jest wyposazony, w którym zestaw ma zasilac zmontowany, nie jest wyposazony w konektor odpowiadajacy standardowi ISO, nalezy uzyc odpowiedniej przelozki, która wspiera w artykulom instrukcyjnym.

**Kolory przewodów**

- ① Czarny (przewód na masę, który ma być podłączony do masy metalowej części pojazdu.)
- ② Niebieski (przewód anteny automatycznej, który ma być podłączony do złącza przekaźnika w pojazdach wyposażonych w pełni automatyczną antenę. Przewód ten nie jest wykorzystywany w pojazdach wyposażonych w antenę nieautomatyczną, czy antenę sterowaną ręcznie przekaźnikiem. W przypadku wykorzystania z niniejszym zestawem opcjonalnego zmacznacza mocy, podłącz ten przewód do złącza zdalnego sterowania zmacznacza.)
- ③ Żółty (przewód zasilania, który ma być podłączony do zapasowego złącza, od którego podawany będzie prąd do zasilania.)
- ④ Czerwony (przewód ACC, który ma być podłączony do złącza, od którego prąd jest podawany w czasie, kiedy stacyjka ustawiona jest w pozycji ACC.)

**Do złącza ISO pojazdu (połączenia głośników)**

- Colori przewodów
- ⑥/⑧ Fioletowy/Fioletowy-czarny; prawa strona tyłu ⊕/⊖
- ⑨/⑩ Szary/Szary-czarny; prawa strona przodu ⊕/⊖
- ⑪/⑫ Biały/Biało-czarny; lewa strona z przodu ⊕/⊖
- ⑬/⑭ Zielony/Zielono-czarny; lewa strona z tyłu ⊕/⊖

**Uwagi**

- Używać głośników o impedancji 4 lub 8 Ω oraz o odpowiedniej mocy. W przeciwnym wypadku głośniki mogą zostać uszkodzone.
- NIE podłączaj głośników równolegle.
- NIE podłączaj złączy zestawu głośnikowego do masy samochodu.

**Do przewodu wyciszającego radio zestawu głośnomówiącego telefonu komórkowego itp.**

Gdy podłączysz przewód wyciszający radio (niebieski) do zestawu głośnomówiącego telefonu komórkowego itp. zestaw automatycznie wycisza dźwięki z głośników podczas rozmowy z telefonem komórkowego. Szczegóły podane w instrukcji obsługi zestawu głośnomówiącego.

**Uwaga**

Niniejszy przewód wyciszania głośników funkcjonuje tylko w przypadku połączenia z przewodem wyciszania radio. Nie będzie on działał w przypadku połączenia z innym systemem wyciszającym.

**MAGYAR**

**CSATLAKOZTATÁSOK BIZTONSÁGI ÖVINTÉZKEDÉSEK**

**A csatlakoztatások elkészítésével kapcsolatos óvintézkedések**

A készülék beszerelése előtt feltétlenül állítsa az indítókulcs OFF pozícióba és a rövidzárlat elkerülése érdekében távolítsa el a gépjármű-akkumulátor (-) pólusának saruját.

**Figyelmeltetés**

A csatlakoztatásokat pontosan, a kapcsolási rajznak megfelelően végezze el. Soha ne használjon közös ⊕ kábelt az egyes hangszórókhoz. Biztonságkezesésként eseten csak az eredetivel azonos amperértékű biztosítékot használjon. Az eredetinel magasabb amperértékű biztosíték használata a készülék súlyos károsodását okozhatja.

**KAPCSOLÁSI RAJZ → A**

- A Gépkoocsiantennától
- B Az opcionális teljesítményerősítő bemeneti csatlakozójához (a hátsó csatona számára)
- C A gépkoocsal ISO konektorához (tápellátás)

Ellenőrizze, hogy a gépkoocs tápellátási csatlakozójának felosztása megfelel-e a szabvány ISO csatlakozójának ①-1.

Néhány gépkoocs eltérő felosztással rendelkezik ②-2) vagy ②-3), ilyen esetben az ②-2) vagy ②-3) ábrának megfelelően változtassa meg a piros és sárga vezeték bekötését.

**Megjegyzés**

Ha az Ön gépkoocsa nem rendelkezik ISO szabványú csatlakozóval, adaptort kell használnia, amelyet márkakereskedőnél vagy bármely jó gépkoocs felszerelés szaküzletben tud beszerezni.

**A vezeték színe**

- ① Fekete (több vezeték; a gépkoocs (fém) karosszékéhez van csatlakoztatva.)
- ② Kék (a motoros antenna vezeték; a motoros antennával ellátott gépkoocsok vezérlő relikvárszékéhez van csatlakoztatva. A vezetékhez és felületéhez antennával rendelkező gépkoocsok esetén nem használható. Ha a készülékhez opcionális teljesítményerősítőt használ, ezt a vezeték az erősítő tápellátás termáneléhez csatlakoztassa.) (Legnagyobb áramerősség 0,1 A)
- ③ Sárga (akkumulátor vezeték; amely az áramot folyamatosan biztosító backup terminálhoz van csatlakoztatva.)
- ④ Piros (ACC vezeték; ahhoz a terminálhoz van csatlakoztatva, amely az indítókulcs ACC állásban áramot szolgáltat.)

**A gépkoocsal ISO csatlakozójához (hangszórók csatlakoztatása)**

- A vezeték színe
- ⑥/⑧ Lila/Lila & Fekete; jobb hátsó ⊕/⊖
- ⑨/⑩ Szürke/Szürke & Fekete; jobb első ⊕/⊖
- ⑪/⑫ Fehér/Fehér & Fekete; bal első ⊕/⊖
- ⑬/⑭ Zöld/Zöld & Fekete; bal hátsó ⊕/⊖

**Megjegyzés**

- 4-8 ohmos impedanciájú és megfelelő teljesítményű hangszórókat használjon. Ellenkező esetben károsodhatnak a hangszórók.
- NÉKESSE RÁHATÁROZOTTAN a hangszórókat.
- NÉKESSE csatlakoztassa a hangszórórendszer terminálját a gépkoocs karosszékéhez.

**A mobiltelefon kihangosított autós kiegészítő, stb. rádióműködéséhez**

Ha a telefonműködéshez (híváskor) a mobiltelefon kihangosított autós kiegészítőt, stb. van csatlakoztatva, akkor az zsegszámjegyzéskor az autós kihangosított autós kiegészítő működését megakadályozhatja.

**Megjegyzés**

Ez a telefonműködés vezeték csak a rádióműködéshez való csatlakoztatást támogatja. Ha más kimenetű kóti össze, nem fog működni.

**CSEKY**

**PROPOJENÍ BEZPEČNOSTNÍ OPATŘENÍ**

Bezpečnostní opatření k provedení propojení Před propojením se přesvědčte, že spínač zapojování je nastaven na OFF a odtáhněte uzemňující terminál automobilové baterie, abyste ochránili přístroj a Váš automobil před poškozením.

**Upozornění**

Provede propojení správně tak, jak je zobrazeno na propojovacím diagramu. Nepropojujte negativní ⊖ šňůru jednotlivých reproduktorů vodičů do společného bodu. Pokud umístíte pojistku, přesvědčte se, že použijete pojistku stejného jmenovitého proudového zatížení. Použití pojistky o vyšším zatížení může způsobit vážné poškození přístroje.

**PROPOJOVACÍ DIAGRAM → A**

- A Od automobilové antény
- B Ke vstupní zídce volitelného výkonového zesilovače (pro zadní kanál)
- C Ke konektoru ISO vozidla (přívod napájení)

Přesvědčte se, že uspořádání mýřívodů odpovídá standardnímu ISO konektoru ①-1. Některé typy automobilů mohou mít jiné uspořádání mýřívodů, jak ② nebo ③. V tomto případě změňte propojení červených a žlutých vodičů tak, jak ukázáno na ②-2 nebo ②-3.

**Za poznámka**

Jestliže Váš automobil není předvybaven standardními ISO konektory, musíte použít adaptér dostupný od Vašeho prodejce nebo z terhoobchodu s automobilovými příslušenstvími.

**Barva vodičů**

- ① Černý (zemnicí vodič, který se propojí na kostru (kovovou) vozidla.)
- ② Modrý (vodič výkonové antény, který se propojí na terminál ovládacího reléového přepínače pro samochod.)
- ③ Žlutý (bateriový vodič, který se propojí na záložní terminál, ze kterého je vždy přiváděno napájení.)
- ④ Červený (ACC vodič, který se propojí na terminál, ze kterého je přiváděno napájení, pokud je přepínač zapojování nastaven na ACC.)

**K ISO konektoru automobilu (propojení reproduktorů)**

- Barva vodičů
- ⑥/⑧ Fialový/Fialový a černý; pravý zadní ⊕/⊖
- ⑨/⑩ Šedý/Šedý a černý; pravý přední ⊕/⊖
- ⑪/⑫ Bílý/Bílý a černý; levý přední ⊕/⊖
- ⑬/⑭ Zelený/Zelený a černý; levý zadní ⊕/⊖

**Poznámky**

- Používejte reproduktory s impedancí 4 až 8 ohmů a s patřičnou kapacitou pro zpracování výkonu. Jinak může dojít k poškození reproduktorů.
- NEZAPOJUJTE reproduktory paralelně.
- NEZAPOJUJTE terminál reproduktorového systému na šasi automobilu.

**K vodiči ztlšení telefonu z automobilové soupravy pro ovládání mobilního telefonu s volným rukama**

Pokud je vodič ztlšení telefonu (světle modrý) zapojen do automobilové soupravy pro ovládání mobilního telefonu s volným rukama apod., jednotka automaticky ztlší zvuk z reproduktorů během Vašeho rozhovoru na mobilním telefonu. Oheďné podrobnosti nahlédněte do návodu k obsluze pro automobilovou soupravu pro ovládání mobilního telefonu s volným rukama.

**Poznámka**

Tento vodič ztlšení telefonu podporuje zapojení pouze k line radiového ztlšení. Pokud je zapojen k jinému typu vstupního systému, nebude fungovat.

**РУССКИЙ**

**СОЕДИНЕНИЯ ПРЕДОСТРОЖЕНИЯ**

**Предосторожность относительно выполнения соединений**

Перед соединением убедитесь, что выключатель зажигания находится в положении OFF и снимите клеммы заземления с аккумуляторной батареи для защиты аппарата и Вашего автомобиля от повреждения.

**Предостережение**

Выполните соединения надлежащим образом, как показано на схеме соединений. Не подсоединяйте отрицательный шнур ⊖ к каждому акустической системы к общей точке. При замене плавкого предохранителя обязательно используйте плавкий предохранитель с такой же номинальной силой тока в амперах. Использование плавкого предохранителя с более высоким номинальным значением может вызвать серьезное повреждение аппарата.

**СХЕМА СОЕДИНЕНИЯ → A**

- A От автомобильной антенны
- B К входному гнезду отдельно приобретаемого усилителя мощности (для заднего канала)
- C К гнезду ISO на автомобиле (источник питания)

Убедитесь, что расположение штырьков на разъеме для подключения Вашего автомобиля соответствует тем, что у стандартного разъема ISO ①-1. Некоторые типы автомобилей могут иметь другое расположение штырьков, как например ② или ③. В таком случае измените соединения красного и желтого проводов как показано на рисунках ②-2 или ②-3.

**Примечание**

Если Ваш автомобиль предварительно не оснащен стандартными разъемами ISO, Вы должны использовать адаптер, имеющийся в наличии у Вашего дилера или в любом другом магазине автомобильных принадлежностей.

**Цвета проводов**

- ① Черный (провод заземления для подсоединения к кузову автомобиля [металлической части].)
- ② Синий (провод антенны с электроприводом для подсоединения к гнезду релеинтено выключателя управления для автомобиля, оснащенного антенной с автоматическим электроприводом. Данный провод не используется в автомобиле с ручной антенной или с антенной с управляемым электроприводом. Если Вы используете отдельно приобретенный усилитель мощности сданным аппаратом, подсоедините этот провод к гнезду дистанционного управления усилителя.)
- ③ Желтый (провод аккумуляторной батареи для подсоединения к гнезду резервного питания, от которого всегда подается питание.)
- ④ Красный (провод ACC для подсоединения к гнезду от которого питания подается тогда, когда выключатель зажигания установлен в положение ACC.)

**К разъему ISO на автомобиле (соединение акустической системы)**

- Цвета проводов
- ⑥/⑧ Фиолетовый/фиолетовый с черным; правый задний ⊕/⊖
- ⑨/⑩ Серый/серый с черным; правый передний ⊕/⊖
- ⑪/⑫ Белый/белый с черным; левый передний ⊕/⊖
- ⑬/⑭ Зеленый/зеленый с черным; левый задний ⊕/⊖

**Примечание**

- Используйте акустические системы с импедансом 4-8 Ом и адекватным рабочим сопротивлением. В противном случае акустические системы могут быть повреждены.
- НЕ соединяйте акустические системы параллельно.
- НЕ соединяйте разъемы акустической системы с разъемом ISO.

**К проводу для подавления звука радиоприемника, автомобильного комплекта сотового телефона и т.п. (такой комплект позволяет пользоваться сотовым телефоном в автомобиле без помощи рук)**

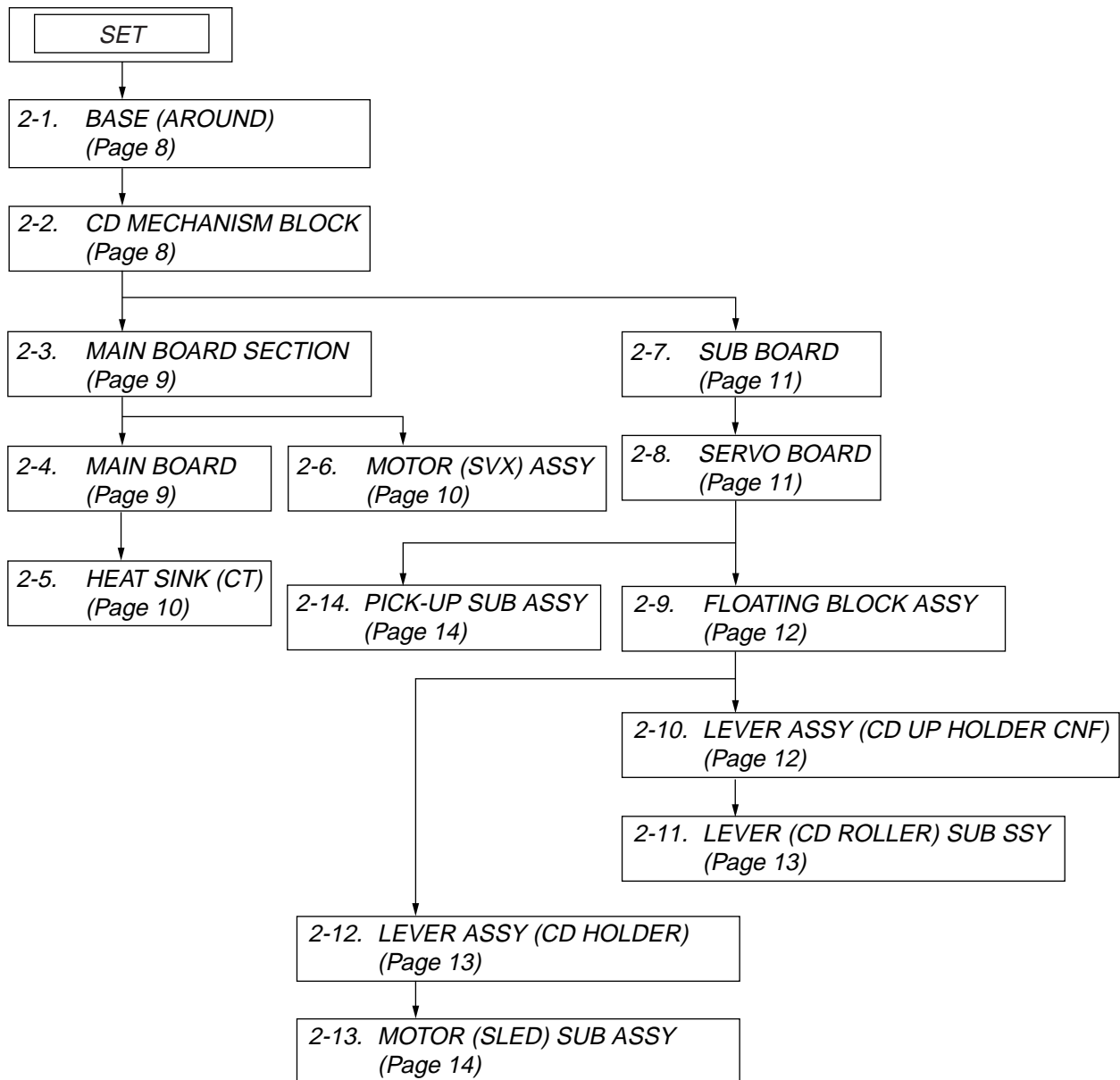
При подсоединении провода для подавления звука радиоприемника (голубой) к автомобильному комплекту сотового телефона и т.п., устройство автоматически подавляет звук радиоприемника на время Вашего разговора по сотовому телефону. Для более детальной информации обращайтесь к инструкции по использованию автомобильного комплекта сотового телефона.

**Примечание**

Данный провод автомобильного телефона работает при подсоединении только к линии приглушения радиоприемника. При подсоединении к другому типу системы выходного сигнала он не будет работать.

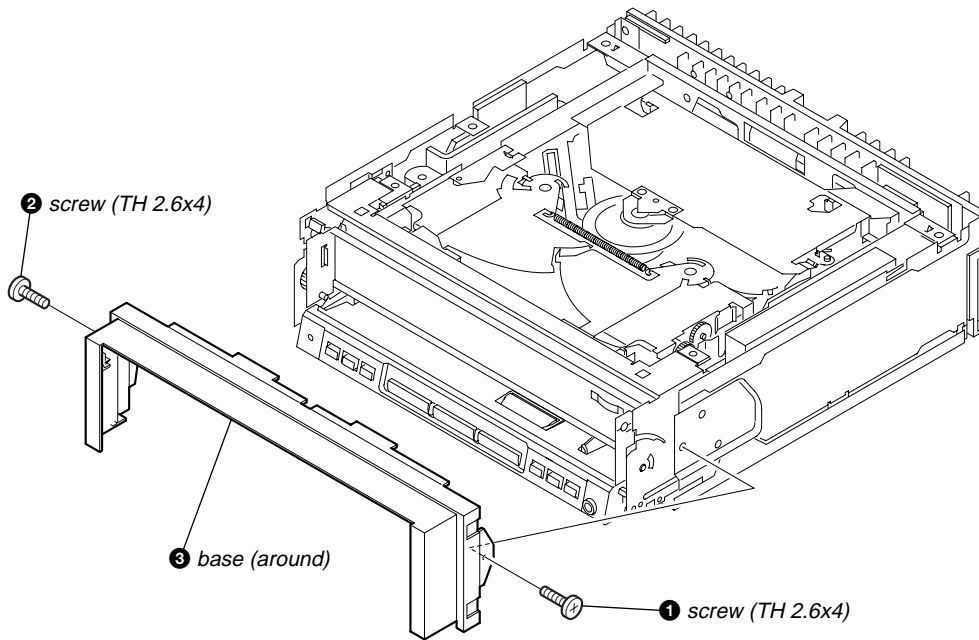
## SECTION 2 DISASSEMBLY

**Note :** This set can be disassemble according to the following sequence.

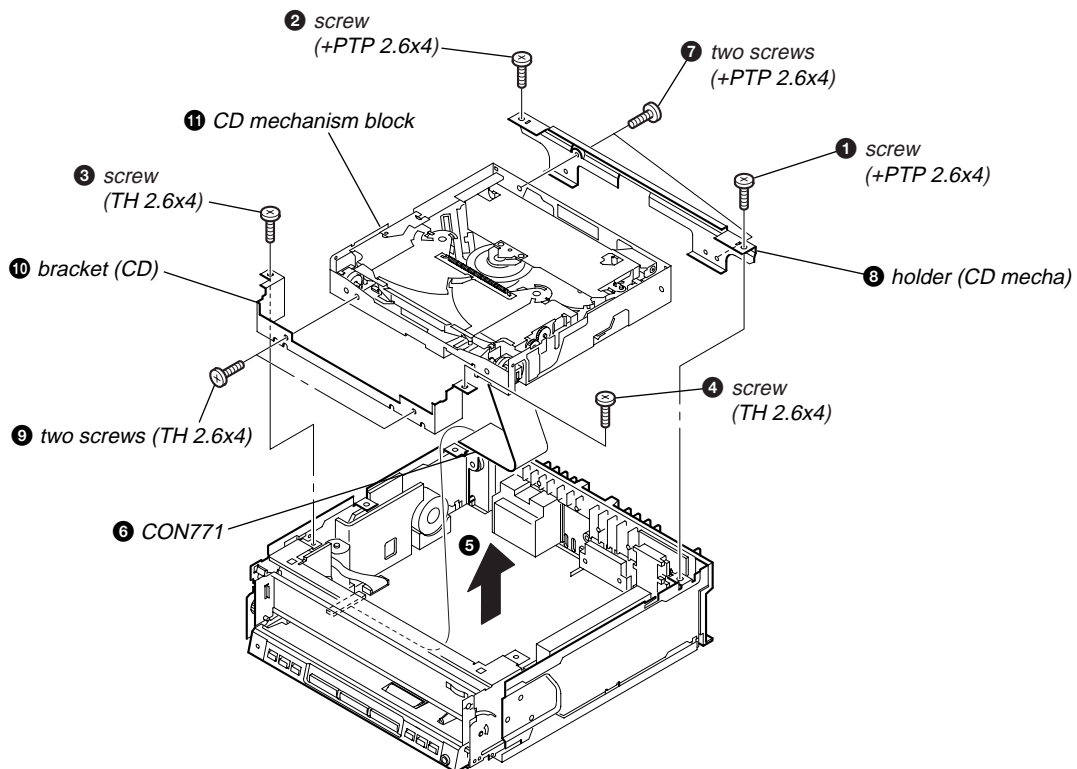


Note : Follow the disassembly procedure in the numerical order given.

**2-1. BASE (AROUND)**

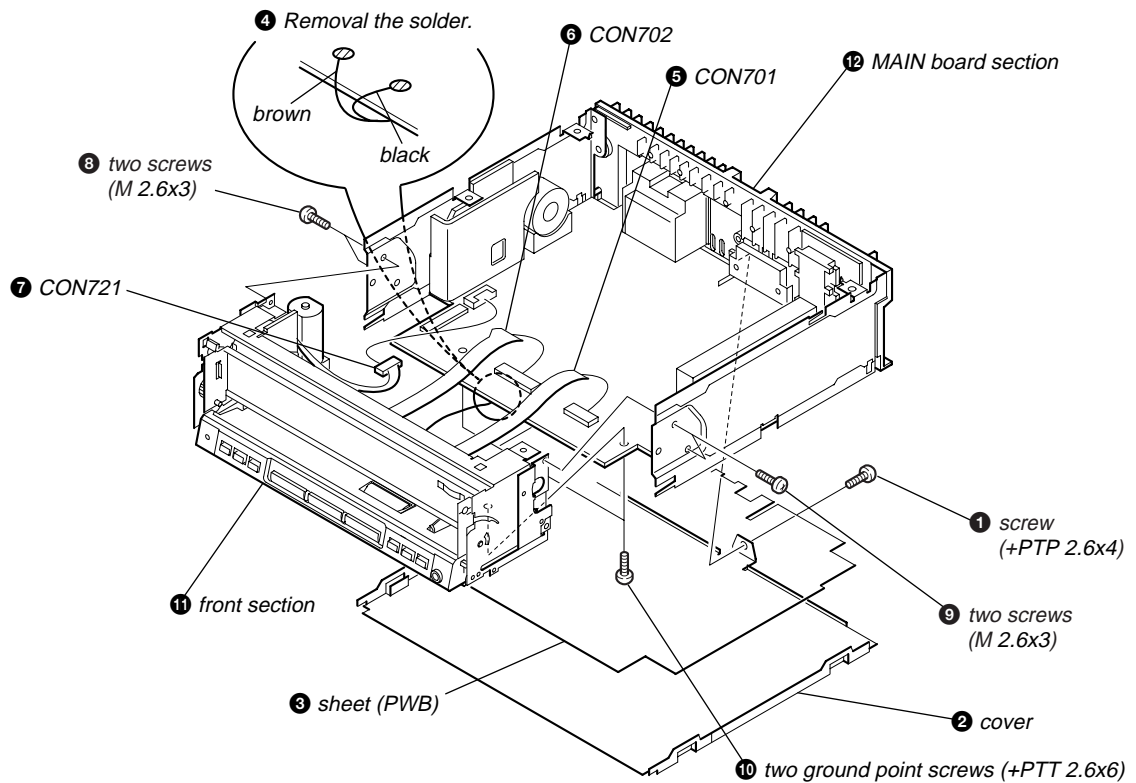


**2-2. CD MECHANISM BLOCK**

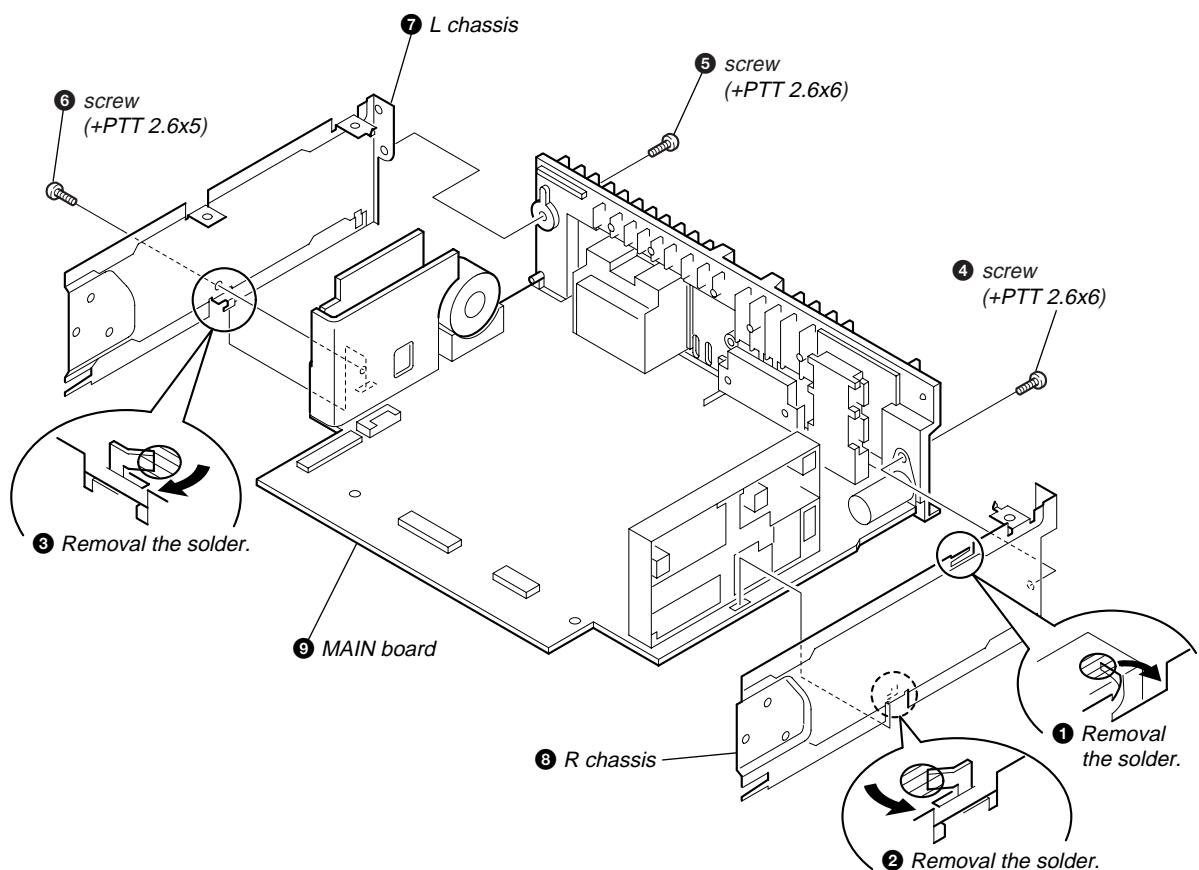




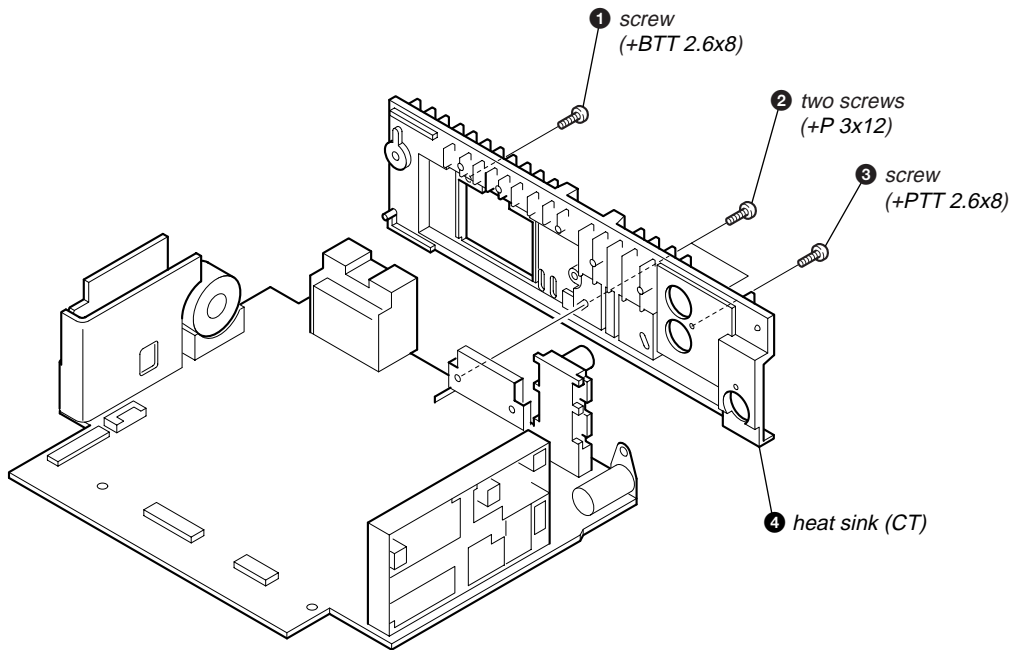
2-3. MAIN BOARD SECTION



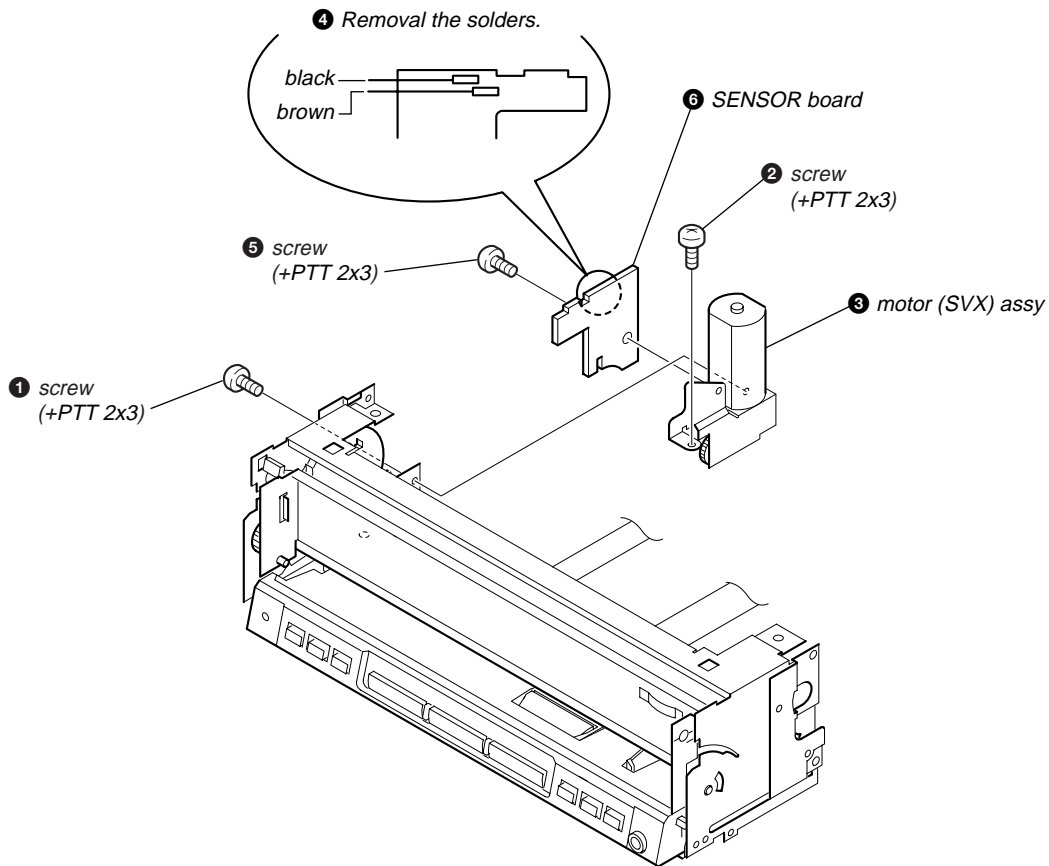
2-4. MAIN BOARD



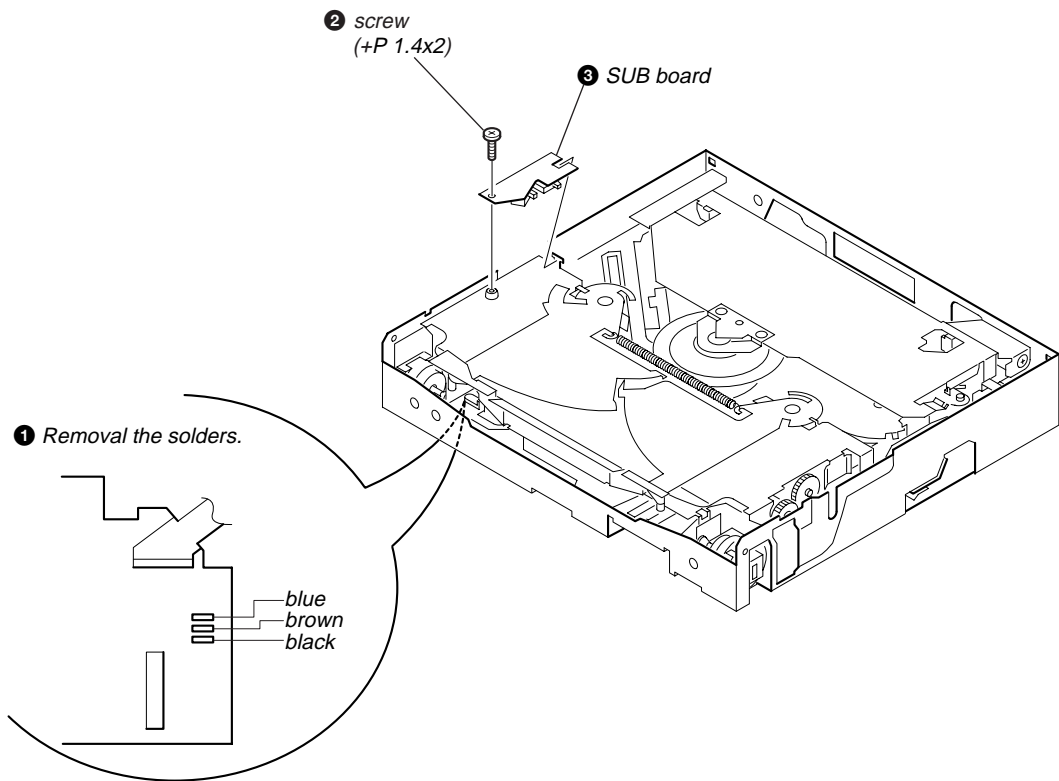
2-5. HEAT SINK (CT)



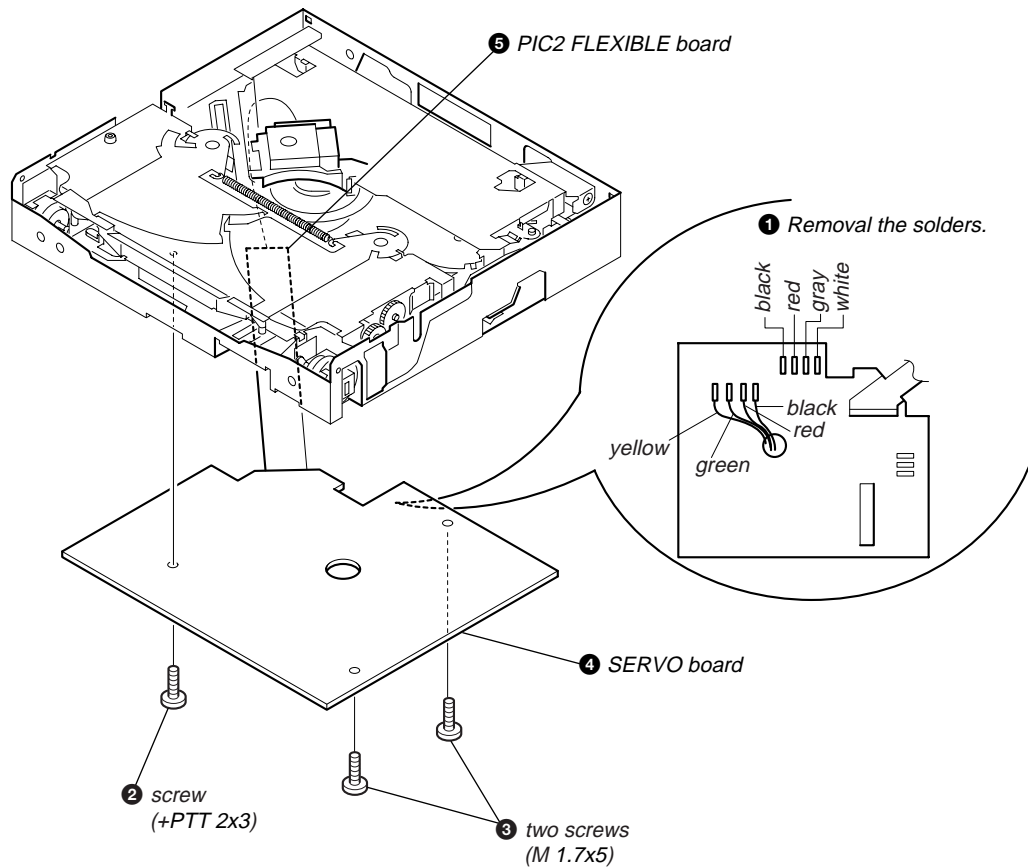
2-6. MOTOR (SVX) ASSY



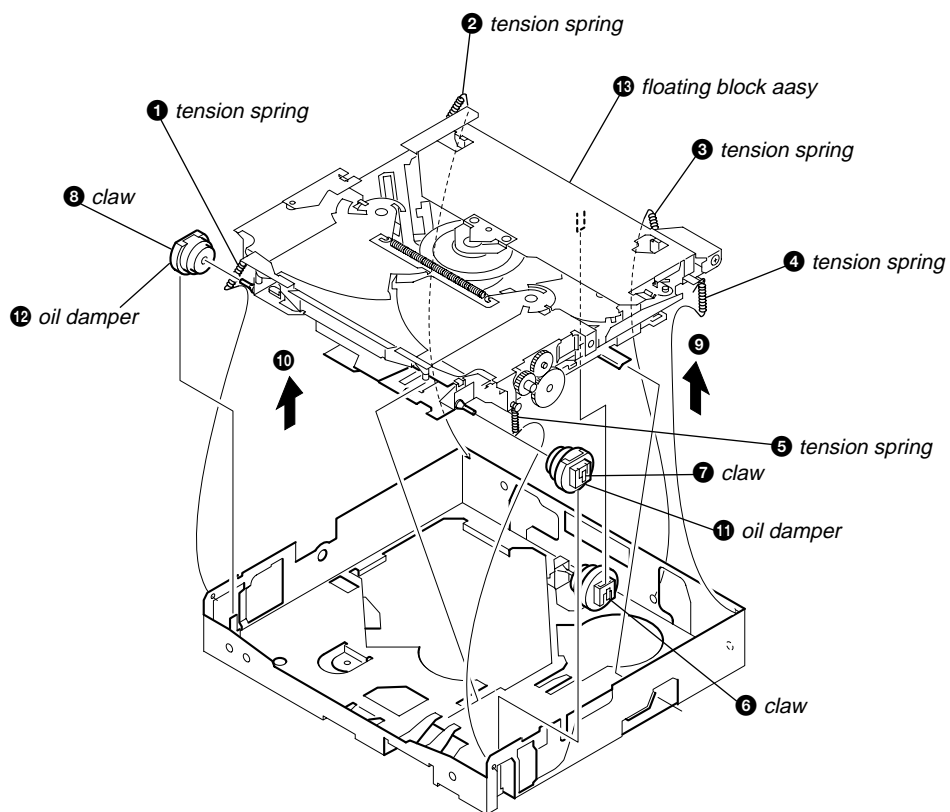
**2-7. SUB BOARD**



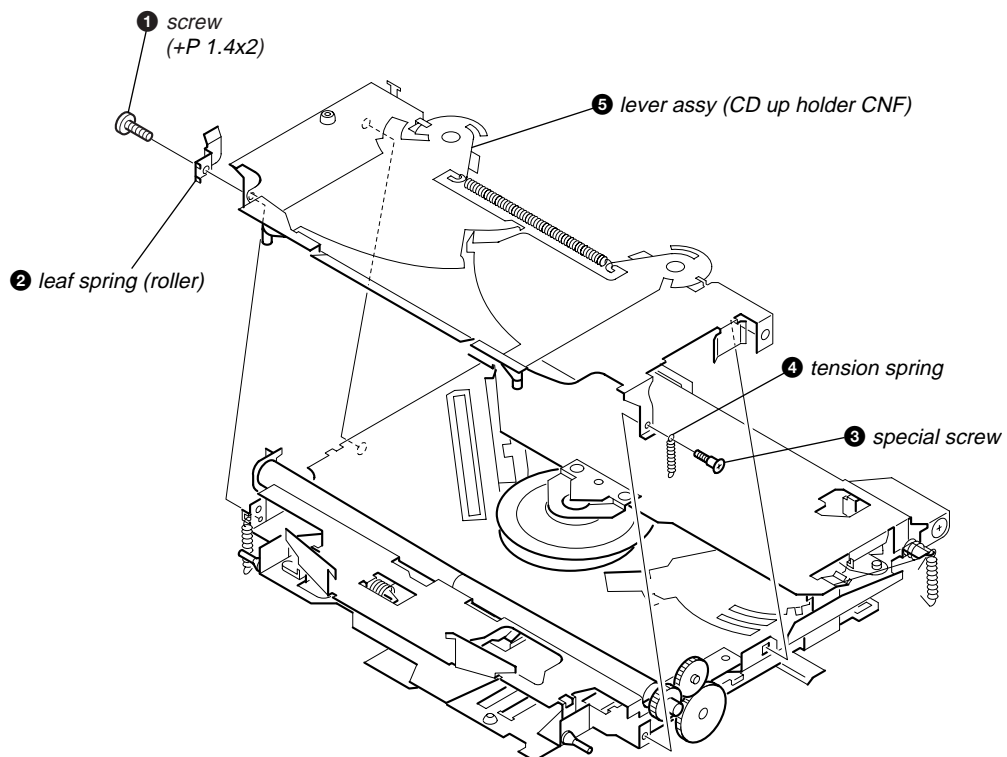
**2-8. SERVO BOARD**



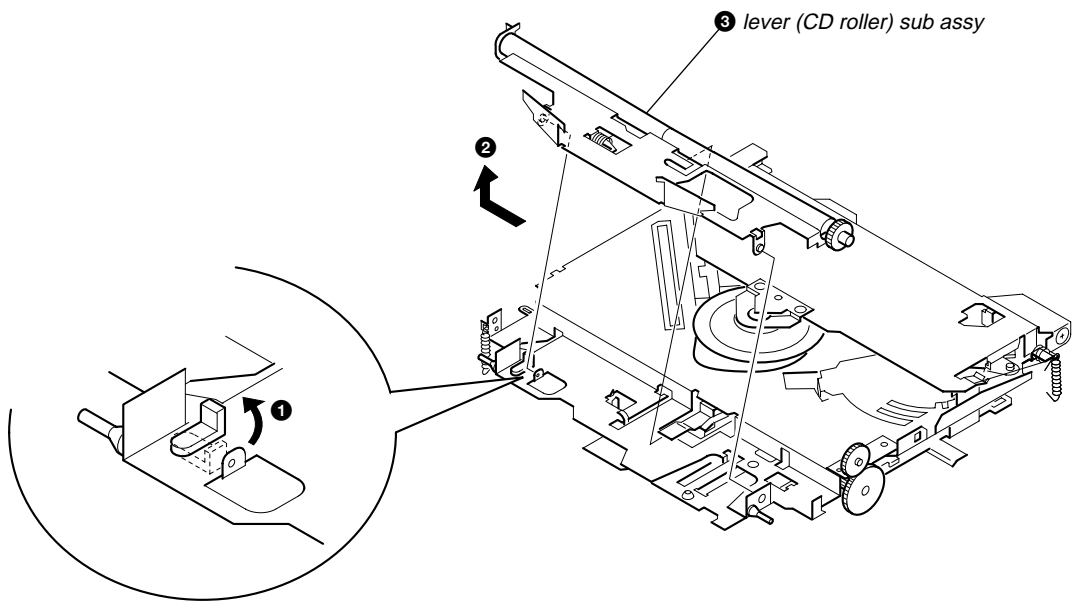
2-9. FLOATING BLOCK ASSY



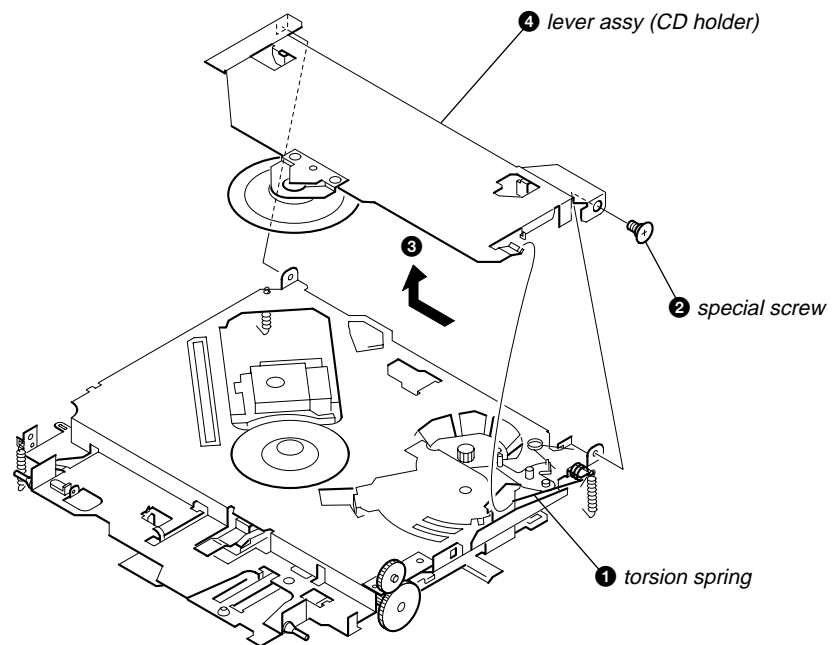
2-10. LEVER ASSY (CD UP HOLDER CNF)



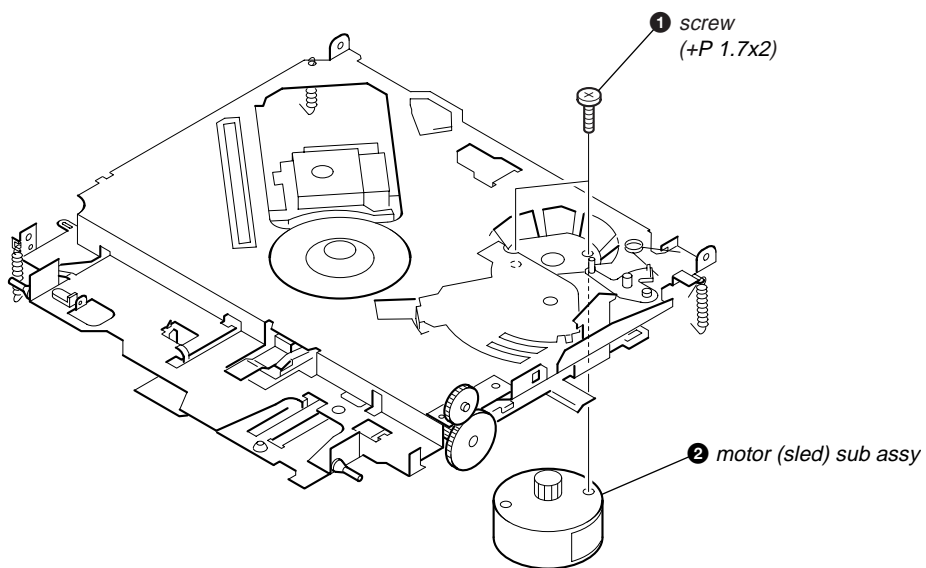
2-11. LEVER (CD ROLLER) SUB ASSY



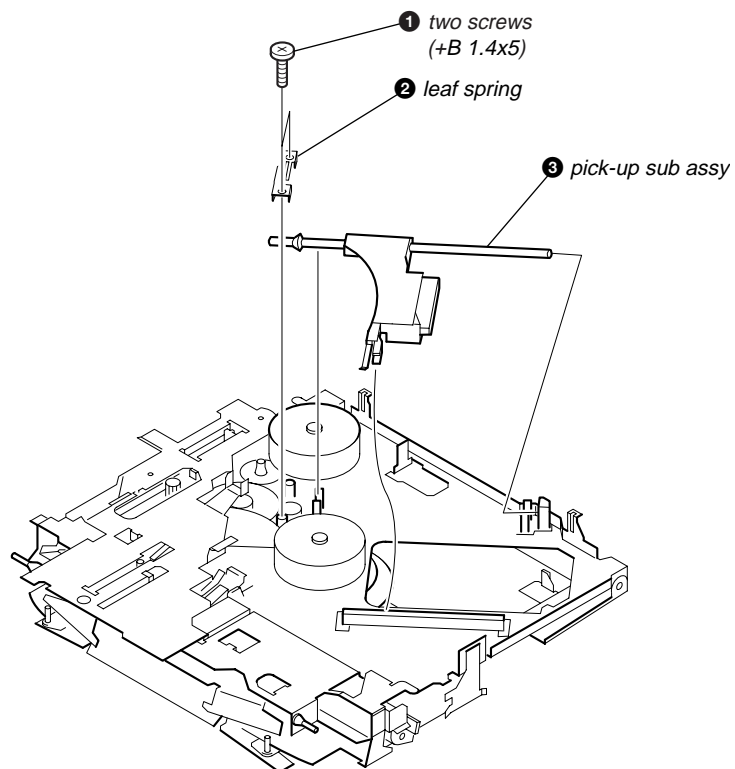
2-12. LEVER ASSY (CD HOLDER)



2-13. MOTOR (SLED) SUB ASSY



2-14. PICK-UP SUB ASSY



## SECTION 3 ELECTRICAL ADJUSTMENT

**RDS Adjustment (CDC-R937 only)**

**Setting:** 98 MHz

31 dB $\mu$ V (EMF)

1 kHz (Modulation Frequency)

45 kHz DEV

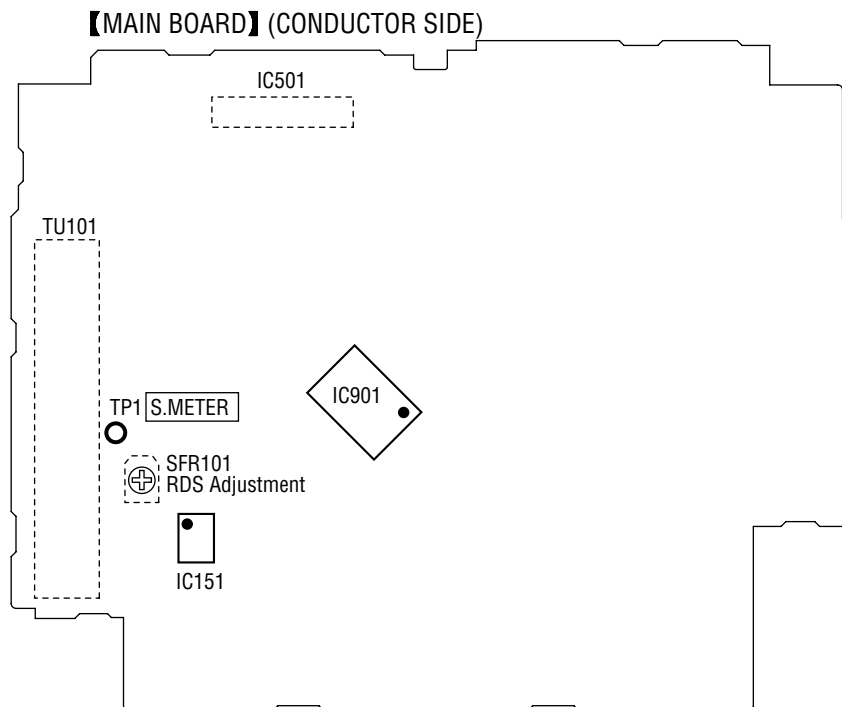
**Check point:** S.METER test point

**Adjustment location:** SFR101

**Specification:** 2.0 $\pm$ 0.1 V

**Procedure:** Set to FM98.0 MHz and adjust SFR101 so that the test point is 2.0 $\pm$ 0.2 V.

**Adjustment Location:**



## SECTION 4 DIAGRAMS

### 4-1. IC PIN DESCRIPTIONS

#### • IC241 TC94A09F-303 (DIGITAL SIGNAL SERVO PROCESSOR) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1 – 9	S1 – 9 (OT5 – 13)	O	LCD segment signal output/Output port Not used. (Open)
10	S10 (OT14/ZDET)	O	LCD segment signal output/Output port/CD signal Not used. (Open)
11	S11 (OT15/CLCK)	O	LCD segment signal output/Output port/CD signal Not used. (Open)
12	S12 (OT16/DATA)	O	LCD segment signal output/Output port/CD signal Not used. (Open)
13	S13 (OT17/SFSY)	O	LCD segment signal output/Output port/CD signal Not used. (Open)
14	S14 (DT18/LRCK)	O	LCD segment signal output/Output port/CD signal Not used. (Open)
15	P8-0 (S15/BCK)	I/O	I/O port/LCD segment signal output/CD signal Not used. (Open)
16	P8-1 (S16/AOUT)	I/O	I/O port/LCD segment signal output/CD signal Not used. (Open)
17	P8-2 (S17/MBOV)	I/O	I/O port/LCD segment signal output/CD signal Not used. (Open)
18	P8-3 (S18/IPF)	I/O	I/O port/LCD segment signal output/CD signal Not used. (Open)
19	MVDD1	—	Power supply pin (+5 V)
20	MVSS	—	Ground pin
21	LMT SW	I	Limit switch signal input
22	P1-1 (K1)	I	Key signal input
23	P1-2 (K2)	I	Key signal input
24	SW3	I	Key signal input
25	SRQ	I	CDS SRQ signal input
26	LM CONT	O	Loading motor speed control signal output
27	P3-2 (ADIN2)	I/O	I/O port/AD analog voltage signal input Not used. (Open)
28	P3-3 (ADIN3)	O	Mute signal output
29	P4-0 (BUZR/AD4)	I/O	I/O port/AD analog voltage signal input/buzzer signal output Not used. (Open)
30	DATA IN	I	CDS serial data signal input
31	DATA OUT	O	CDS serial data signal output
32	CLOCK	I/O	CDS serial clock signal input/output
33	P2-0/EMPH	I/O	Emphasis signal input/output
34	P2-1/HSO	I/O	I/O port/1 bit DAC input Not used. (Open)
35	P2-2/LRCK	I/O	I/O port/1 bit DAC input Not used. (Open)
36	P2-3/DATA	I/O	I/O port/1 bit DAC input Not used. (Open)
37	IN1/BCK	I	Input port/1 bit DAC input Connect to ground.
38	TESTC	I	Test mode control input Not used. (Open)
39	DT19 (/HSO)	O	Output port/CD control signal output Not used. (Open)
40	DT20 (SPCK)	O	Output port/CD control signal output Not used. (Open)
41	DT21 (SPDA)	O	Output port/CD control signal output Not used. (Open)
42	DT22 (COFS)	O	Output port/CD control signal output Not used. (Open)
43	DOUT	O	Digital out signal output Not used. (Open)
44	SBSY	O	Sub code block sync signal output Not used. (Open)
45	SBOK	O	Sub code Q data signal output Not used. (Open)
46	VDD1	—	Power supply pin (+5 V)
47	VSS1	—	Ground pin
48	P2VREF	—	PLL 2 voltage reference pin
49	PDO	I	EFM/PLCK signal difference error signal input
50	TMAX	I	TMAX detect signal input
51	LPFN	I	Inversion signal input of amplifier for lowpass filter
52	LPFO	O	Signal output of amplifier for lowpass filter
53	PVREF	I	PLL voltage reference input
54	VCOF	O	VCO filter signal output
55	AVSS	—	Ground pin
56	SLCO	O	DAC signal output
57	RFI	I	RF signal input
58	AVDD	—	Power supply pin (+5 V)
59	RFCT	I	RFRP signal center level input



Pin No.	Pin Name	I/O	Pin Description
60	RFZI	I	RFRP zero-cross signal input
61	RFRP	I	RFRP ripple signal input
62	FEI	I	Focus error signal input
63	SBAD	I	Sub beam addition signal input
64	TEI	I	Tracking error signal input
65	TEZI	I	Tracking error zero-cross signal input
66	FOO	O	Focus equalizer signal output
67	TRO	O	Tracking equalizer signal output
68	VREF	—	Analog reference power supply pin
69	RFGC	O	RF amplitude adjustment control signal output
70	TEBC	O	Tracking balance control signal output
71	FMO	O	Focus equalizer signal output
72	DMO	O	Disc equalizer signal output
73	2VREF	—	Analog reference power supply pin
74	SEL	O	APC circuit on/off signal output
75	VDD2	—	Power supply pin (+5 V)
76, 77	VSS2, XVSS	—	Ground pin
78	XI	I	Crystal oscillator input for CD
79	XO	O	Crystal oscillator output for CD
80	XVDD	—	Power supply pin (+5 V)
81	DVSR	—	Ground pin
82	RO	O	R channel data clock wise signal output
83	DVRR	—	R channel reference voltage pin
84	DVDD	—	Power supply pin
85	DVRL	—	L channel reference voltage pin
86	LO	O	L channel data clock wise signal output
87	DVSL	—	Ground pin
88	TESTM	I	Ground pin
89	IN2/(VPP)	I	Ground pin
90	RESET	I	System reset signal input
91	/HOLD	I	Hold mode control signal input
92	CS	I	External interruption signal input
93	MXO	O	Not used. (Open)
94	MXI	I	Ground pin
95	MVSS2	—	Ground pin
96	MVDD2	—	Power supply pin (+5 V)
97 – 100	COM1 – 4 (OT1 – 4)	O	Not used. (Open)

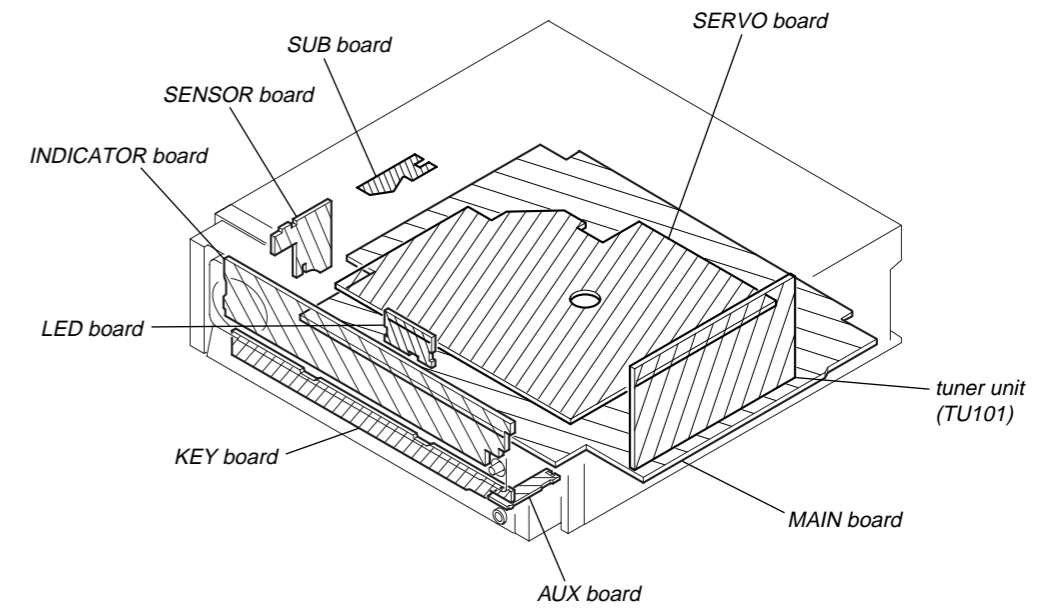
• IC901  $\mu$ PD178078GF-588-3BA (SYSTEM CONTROL) (MAIN BOARD) (CDC-R937)

• IC901  $\mu$ PD178076GF-571-3BA (SYSTEM CONTROL) (MAIN BOARD) (CDC-X937)

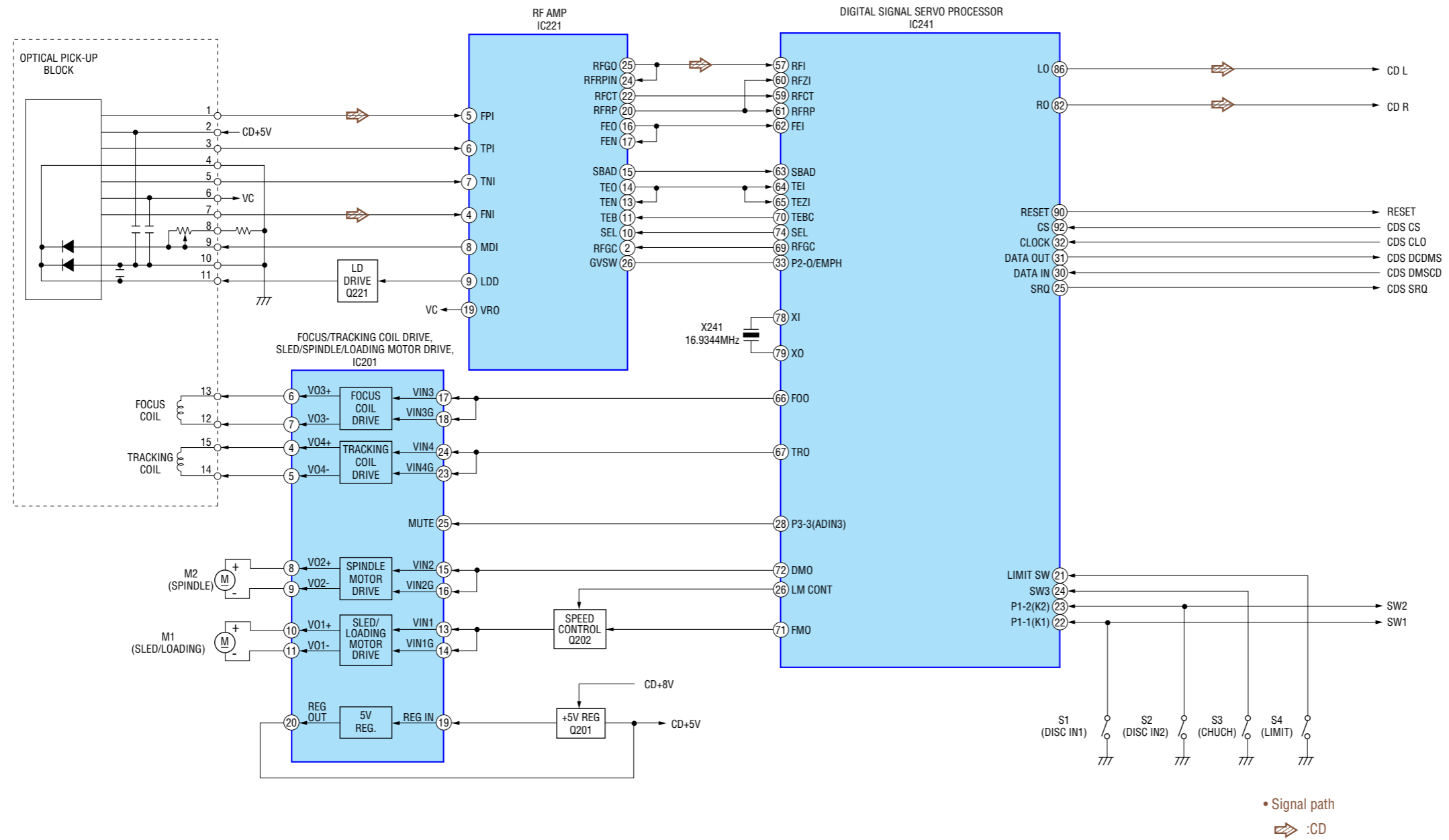
Pin No.	Pin Name	I/O	Pin Description
1	BATT IN	I	Battery signal input
2	DFP IN	I	Front panel with/without detect signal input
3	LCD DI	I	LCD serial data signal input
4	LCD DO	O	LCD serial data signal output
5	LCD CLO	O	LCD sync clock signal output
6	LCD CE	O	LCD driver CE signal output
7	BBE SW1	O	BBE on/off select signal output
8	CDS DI	I	CDS serial data signal input
9	CDS DO	O	CDS serial data signal output
10	CDS CLO	O	CDS sync clock signal output
11 – 15	NC	O	Not used. (Open)
16	BBE SW2	O	BBE effectiveness select signal output
17	NC	O	Not used. (Open)
18	EVOL CLO	O	Clock signal output to electronic volume
19	EVOL DO	O	Serial data signal output to electronic volume
20	EVOL CE	O	CE signal output to electronic volume
21	LOC/DX	O	LOC/DX select signal output
22	DSSA CONT	O	DSSA control signal output “H”: DSSA L/R
23	ACC DET	I	Power supply overvoltage detect signal input
24	PH MUTE	I	External mute control signal input
25	LEV.IND.	I	Level signal input
26	TEST	—	CDS test mode pin
27	AVDD	—	Power supply pin (+5 V)
28 – 30	KEY1 – KEY3	I	A/D key signal input
31	FM/AM S M	I	CDC-R937: RDS AF signal input CDC-X937: FM/AM S meter signal input
32	AVSS	—	Ground pin
33	REG CPU	—	Regulator for CPU power supply
34	VDD	—	Power supply pin (+5 V)
35	REG OSC	—	Regulator for oscillator circuit
36	X OUT	O	System clock oscillator output (6.3 MHz)
37	X IN	I	System clock oscillator input (6.3 MHz)
38	GND0	—	Ground pin
39	IF REQ	O	IF count signal request output
40	GND2	—	Ground pin
41	AM IF	I	AM IF count signal input
42	FM IF	I	FM IF count signal input
43	VDD PLL	—	Power supply pin for PLL (+5 V)
44	FM OSC	I	FM local oscillator signal input
45	AM OSC	I	AM local oscillator signal input
46	GND PLL	—	Ground pin for PLL
47	EO 0	O	Error out signal output from charge pump
48	EO 1	O	Error out signal output from charge pump
49	IC	—	Not used. (Connect to ground.)
50	RESET	I	System reset signal input
51	RDS CL IN	I	CDC-R937: RDS clock signal input CDC-X937: Not used. (Open)
52	ACC IN	I	ACC on/off detect signal input
53	RMT IN	I	Remote control signal input
54	ST IN/SD IN	I	FM receive stereo signal input
55	ST	O	CDC-X937: FM receive forced monaural change over signal output CDC-R937: Not used. (Open)
56	ST BY MUTE	O	ST-BY mute control signal output to power IC

Pin No.	Pin Name	I/O	Pin Description
57	POWER CONT	O	Power control signal output
58	RDS DI	I	CDC-R937: RDS serial data signal input CDC-X937: Not used. (Open)
59	BEEP	O	Beep signal output
60	MUTE	O	Audio mute control signal output
61	LED	O	LED on/off control signal output (for CD window LED)
62, 63	NC	O	Not used. (Open)
64	RDS MODE	O	RDS mode signal output "H": RDS AF
65	POWER MUTE	O	Mute control signal output to power IC
66	FM BAND	O	Band (FM) select signal output
67	AM BAND	O	Band (AM) select signal output
68	NC	O	Not used. (Open)
69	ILLUM CONT 1	O	Panel illumination color change over signal output "H": Blue, "L": Red
70	ILLUM CONT 2	O	Panel illumination color change over signal output "H": Red, "L": Blue
71	MI-1	I	Diode matrix input for initial setting
72	MI-2	I	Diode matrix input for initial setting
73	MI-3	I	Diode matrix input for initial setting Not used. (Open)
74	MO-1	O	Diode matrix output for initial setting Not used. (Open)
75	MO-2	O	Diode matrix output for initial setting
76	MO-3	O	Diode matrix output for initial setting
77	MO-4	O	Diode matrix output for initial setting
78	AUX SW	I	AUX detection signal input
79	CDS SREQ	I	CDS S-REQ signal input
80	LAMP CONT	O	Lamp control signal output
81	TEST CD	O	Not used. (Open)
82	GND1	—	Ground pin
83	TEST MF	O	Not used. (Open)
84, 85	PANCON 1, 2	O	Panel open/close control signal output
86	SW1	I	Disc detection switch 1 signal input
87	SW2	I	Disc detection switch 2 signal input
88	SW3	I	Not used. (Open)
89	PANEL SW	I	M-FLAP DFP open/close control signal input
90	MF CONT	O	Power supply control signal output for panel operation
91	SEN 1	I	Position detection (photo sens) signal input for panel open/close
92	SEN 2	I	Position detection (lilit sw) signal input for panel open/close
93	LMT SW	O	Not used. (Open)
94	CDS RESET	O	CDS reset signal output
95	CDS SLEEP	O	CDS sleep signal output
96	CDS CS	O	CDS CS signal output
97	(CDS STOP)	O	Not used. (Open)
98	RADIO CONT	O	Radio control signal output
99	VDD PORT	—	Power supply pin (+5 V)
100	GND PORT	—	Ground pin

4-2. CIRCUIT BOARDS LOCATION

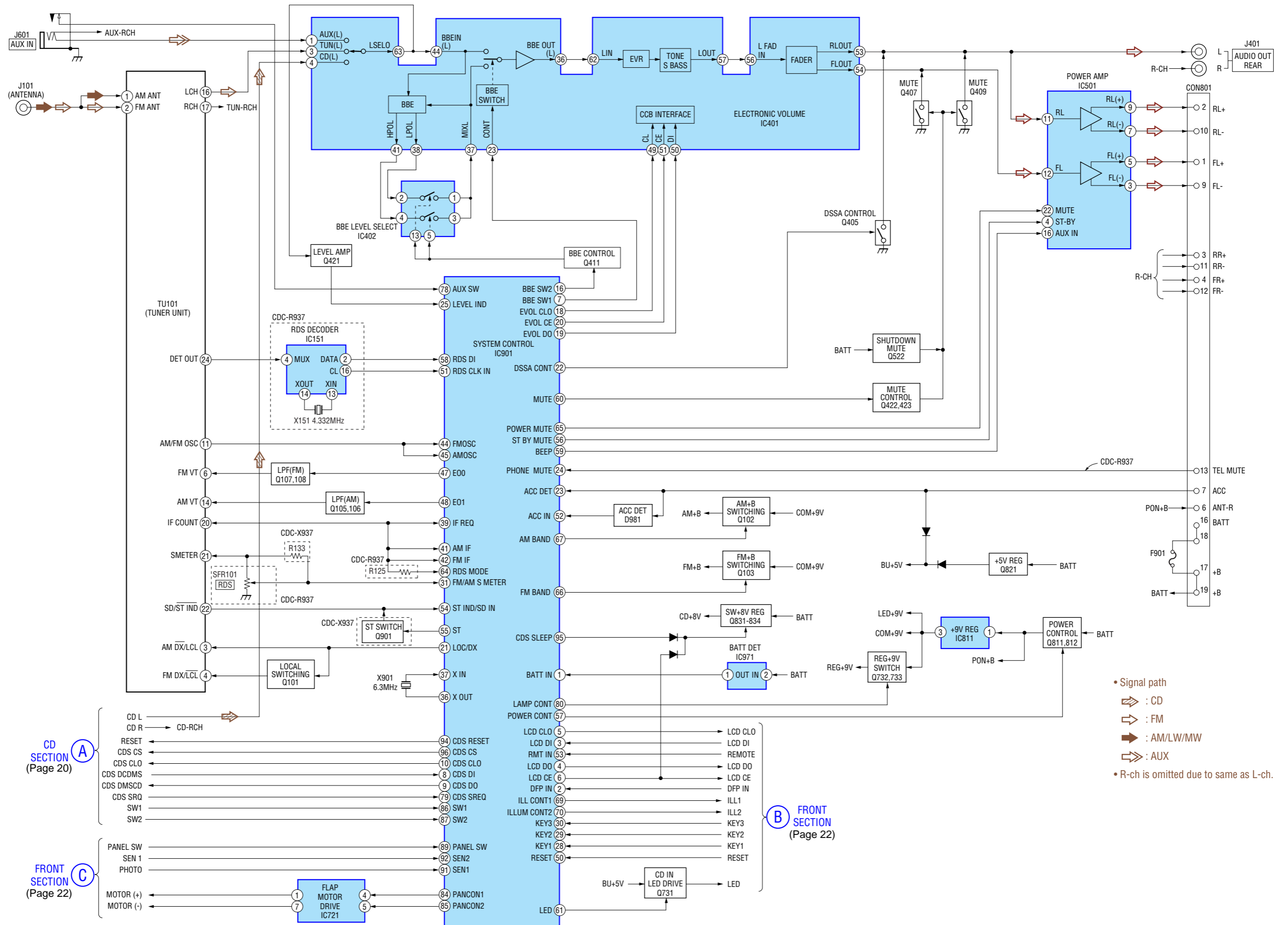


4-3. BLOCK DIAGRAM — CD SECTION —

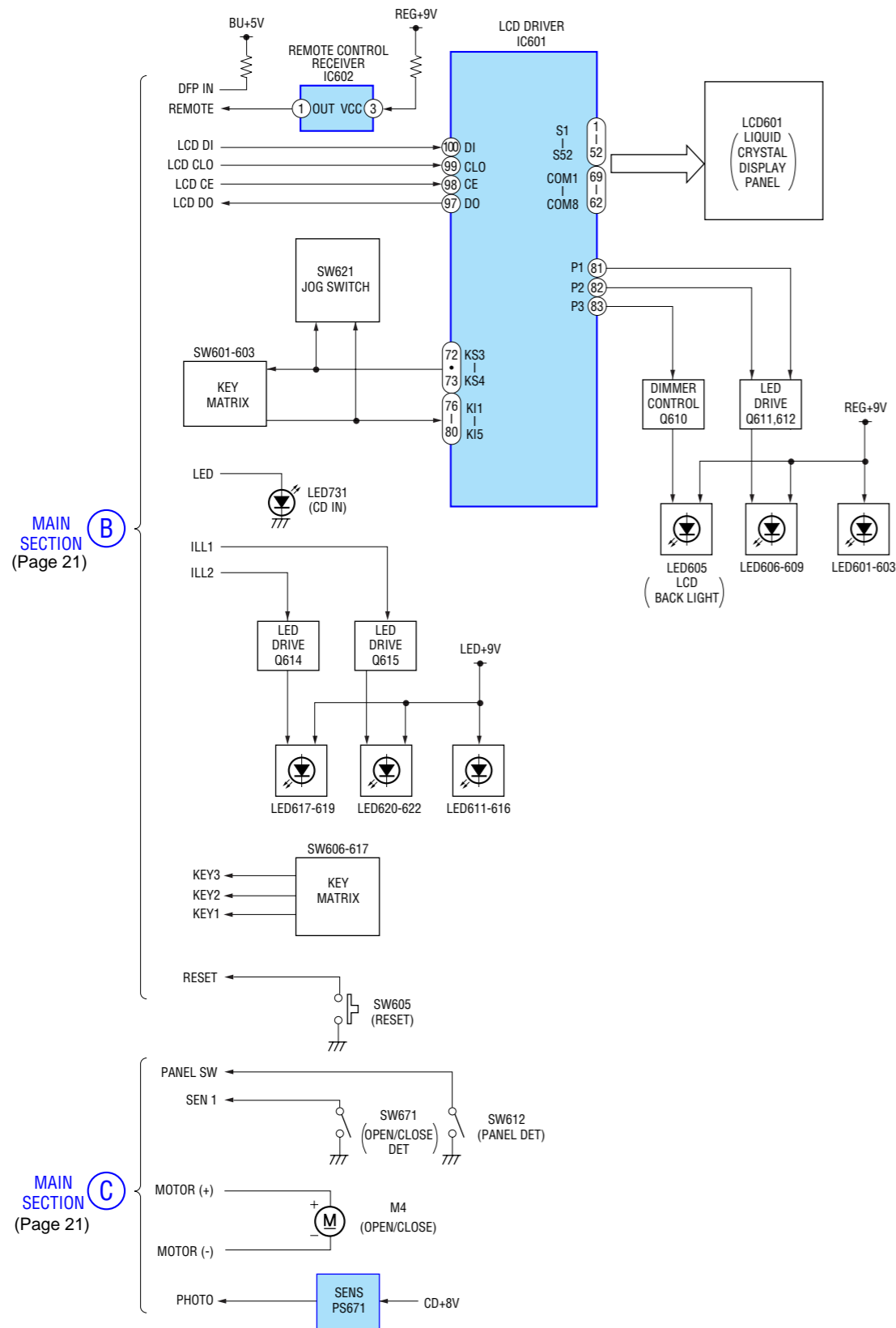


A MAIN SECTION (Page 21)

4-4. BLOCK DIAGRAM — MAIN SECTION —



4-5. BLOCK DIAGRAM — FRONT SECTION —



MAIN SECTION (B)  
(Page 21)

MAIN SECTION (C)  
(Page 21)

**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
(In addition to this, the necessary note is printed in each block.)

**for schematic diagram:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$
- 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{ W}$  or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
- $\square$  : panel designation.

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

- — : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - $\Rightarrow$  : FM
  - $\Rightarrow$  : AM/MW/LW
  - $\Rightarrow$  : CD

**for printed wiring boards:**

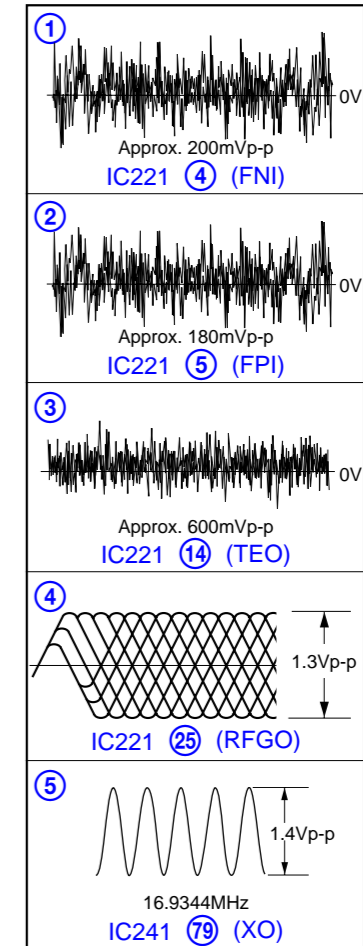
- $\circ$  : parts extracted from the component side.
- $\square$  : parts extracted from the conductor side.
- $\blacksquare$  : parts mounted on the conductor side.
- $\circ$  : Through hole.
- : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

**Caution:**  
Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.  
Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

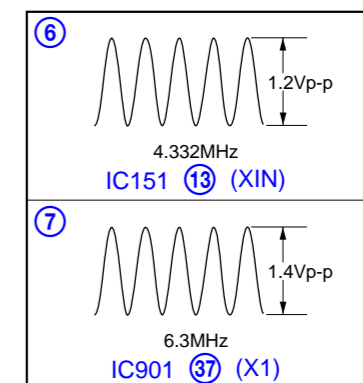
• Waveforms

— Servo Board —

(MODE: CD PLAY)

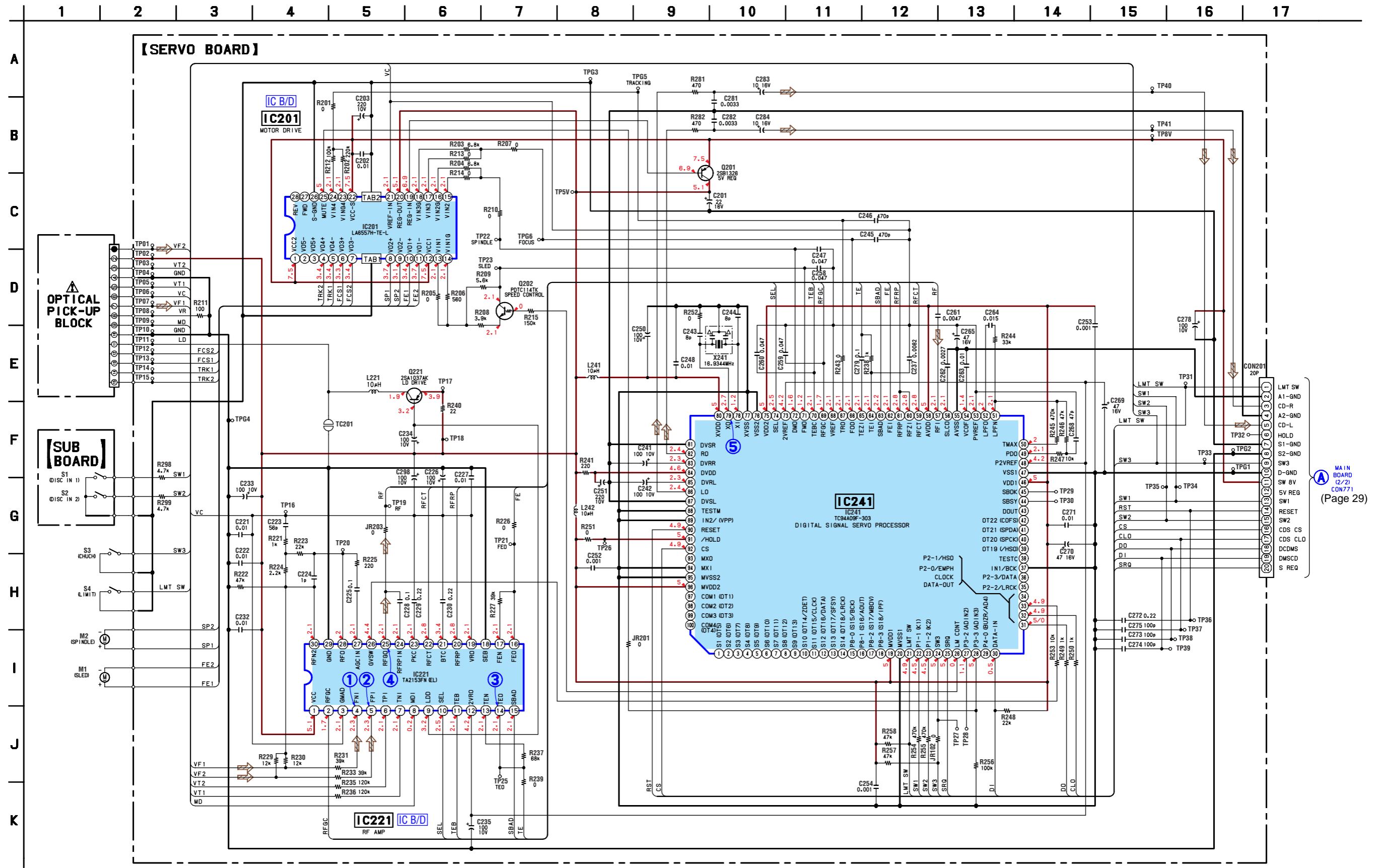


— Main Board —



• Refer to page 22 for Waveforms.

4-6. SCHEMATIC DIAGRAM — CD MECHANISM SECTION — • Refer to page 34 for IC Block Diagrams.



MAIN BOARD (2/2) CON771 (Page 29)

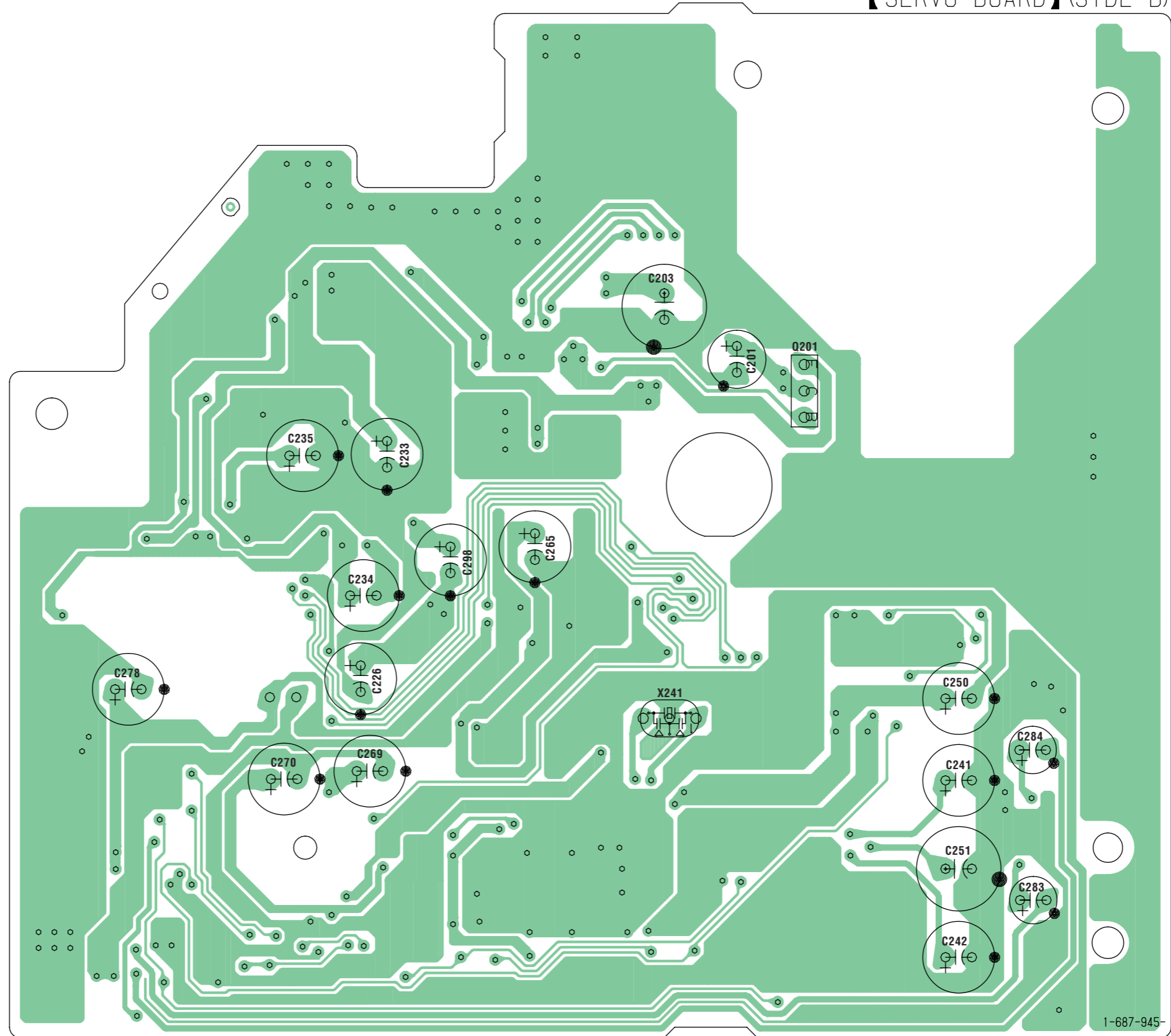
**Note:**  
 • Voltage is dc with respect to ground under no-signal conditions.  
 no mark : CD PLAY  
 \* : Impossible to measure

4-7. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 19 for Circuit Boards Location.

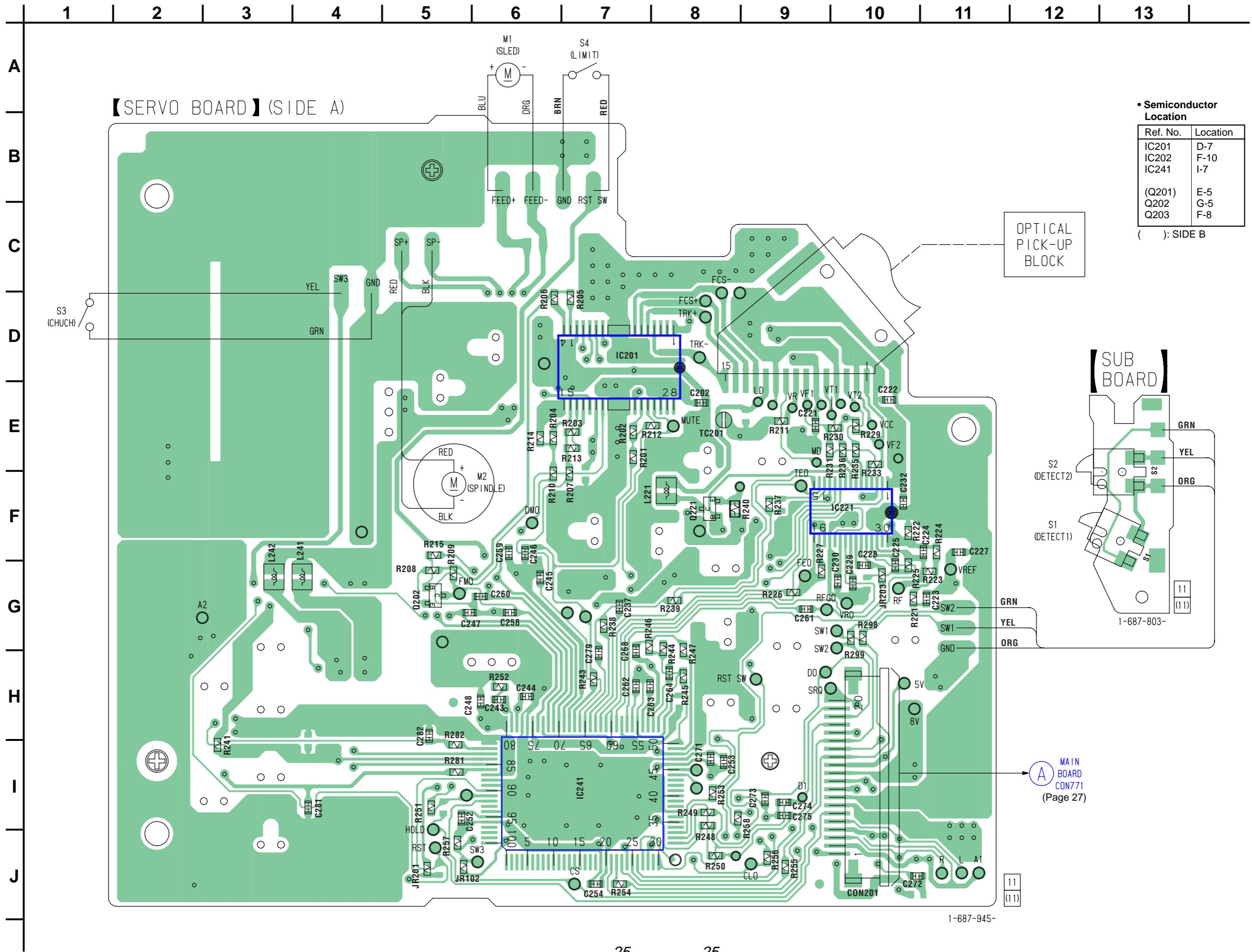
14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

A  
B  
C  
D  
E  
F  
G  
H  
I  
J

【SERVO BOARD】(SIDE B)





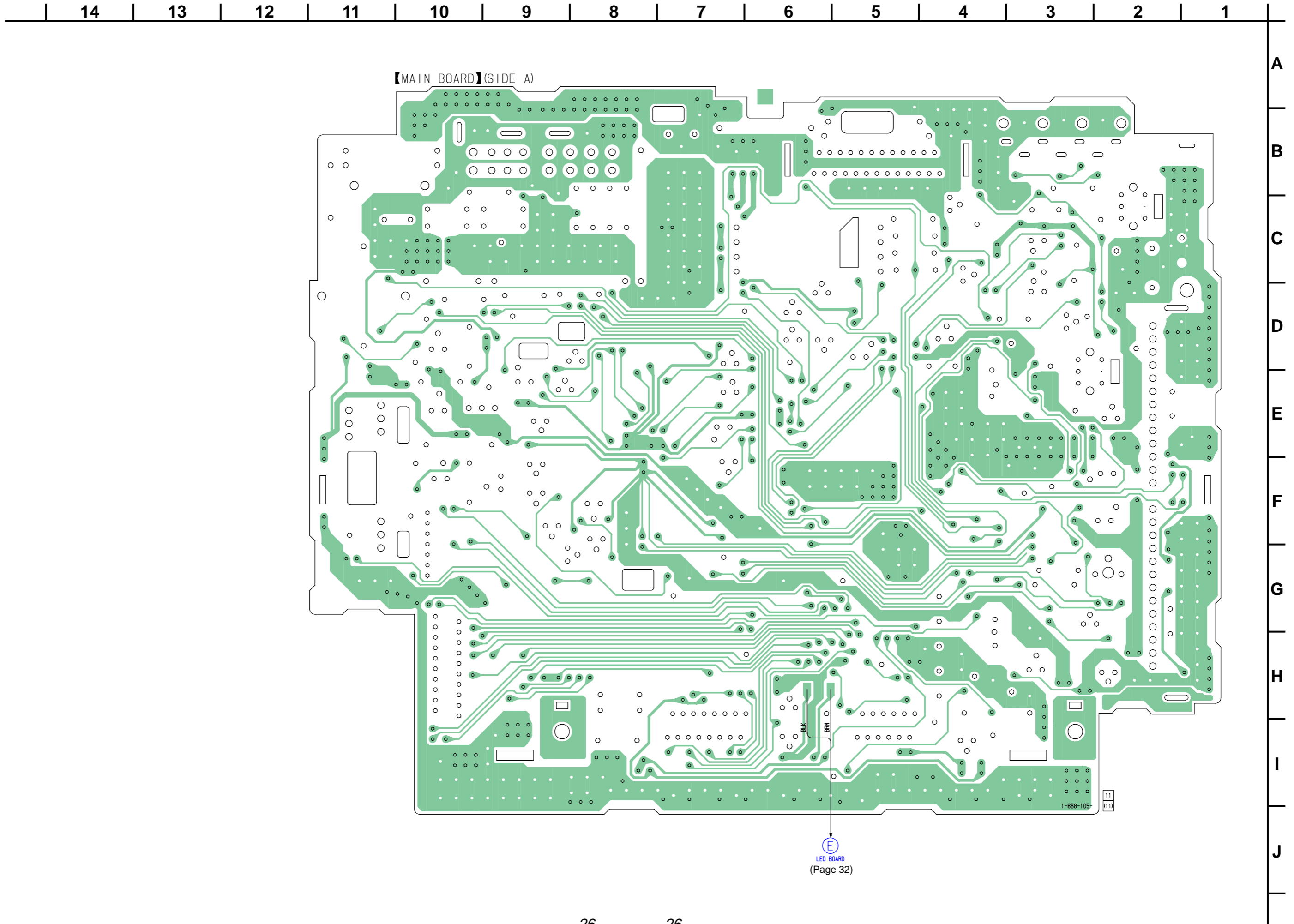


• Semiconductor Location

Ref. No.	Location
IC201	D-7
IC202	F-10
IC241	I-7
(Q201)	E-5
Q202	G-5
Q203	F-8

( ) : SIDE B

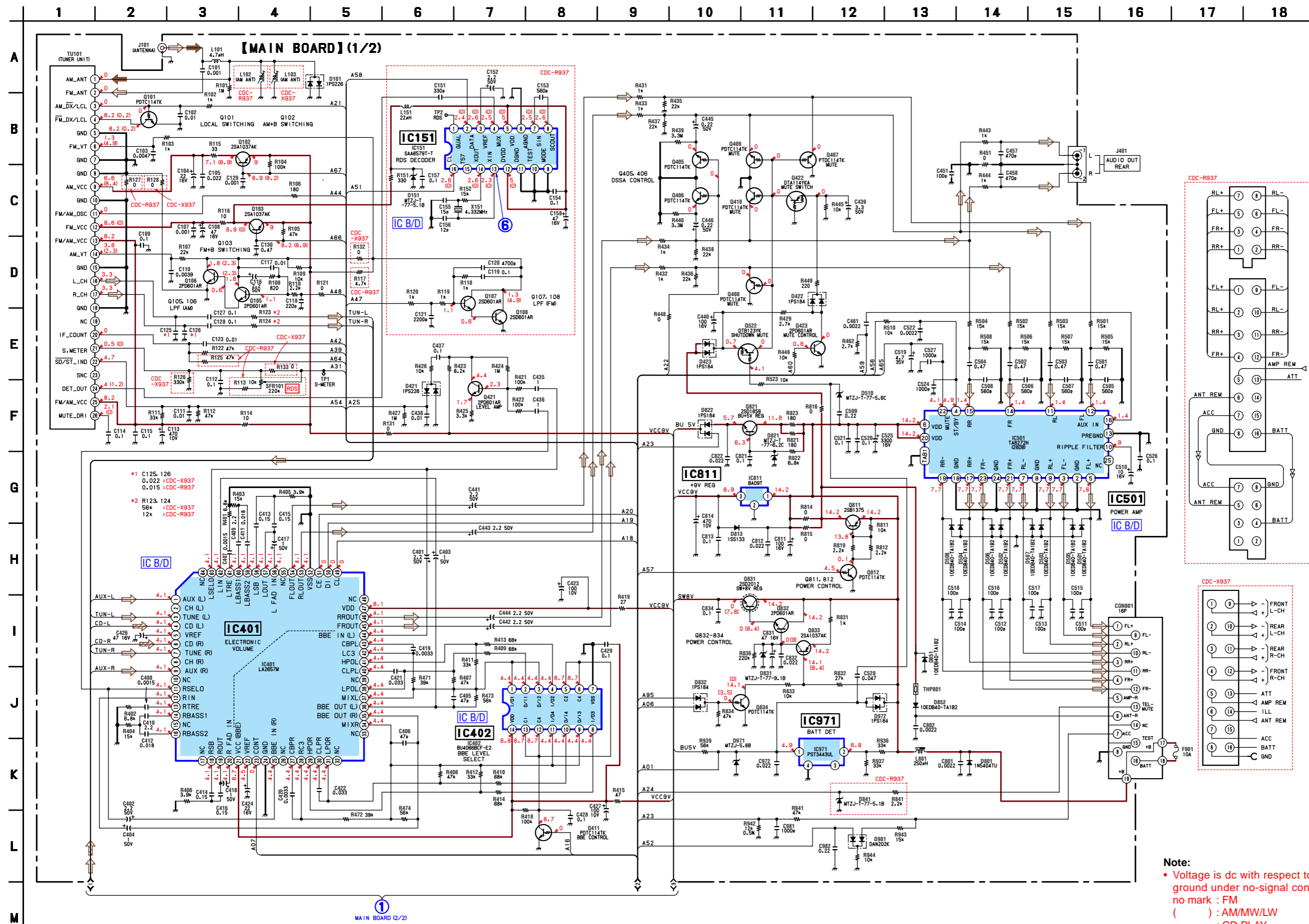
4-8. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 19 for Circuit Boards Location.





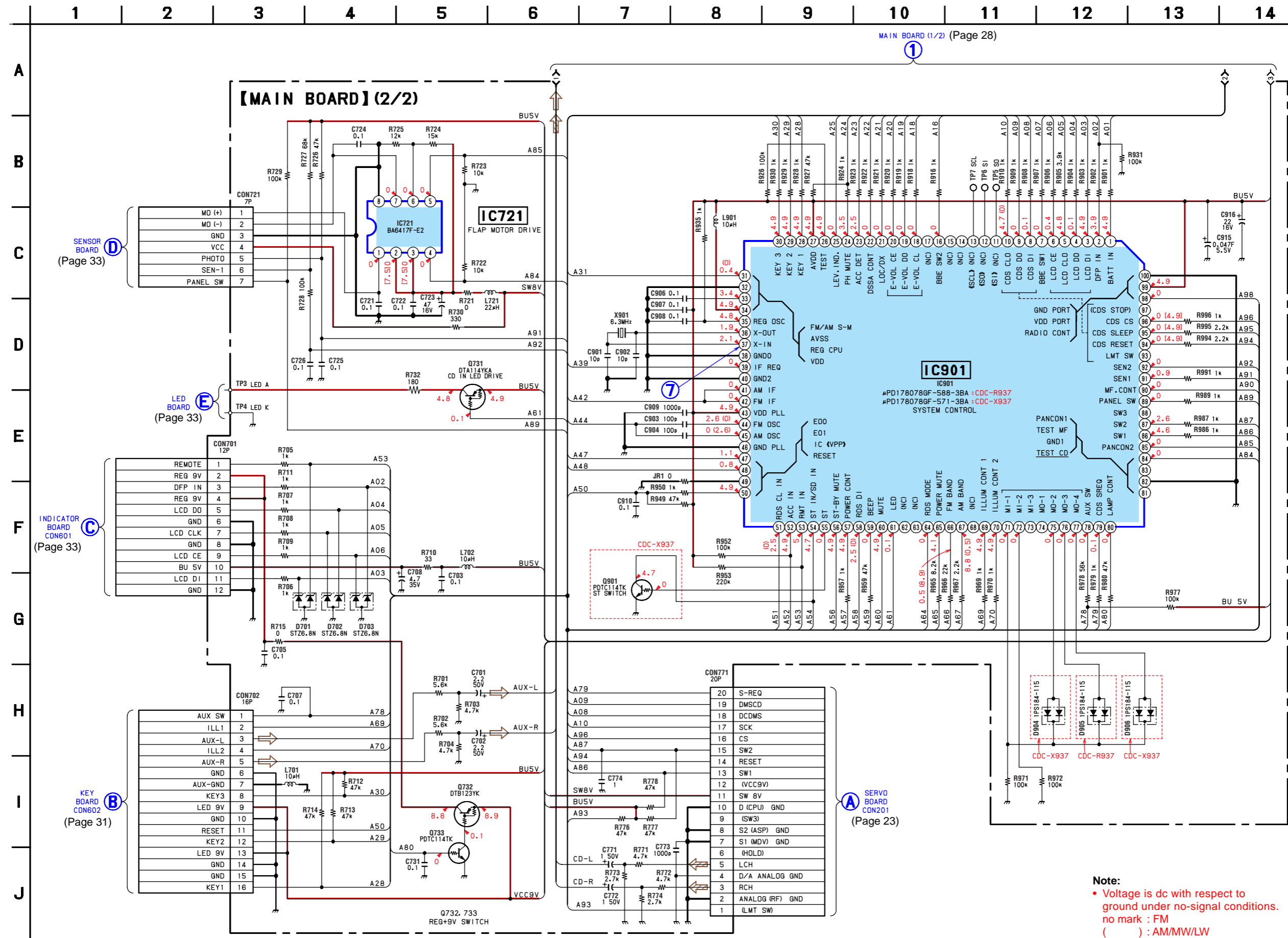
• Refer to page 22 for Waveform.

4-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 34 for IC Bond Diagrams.

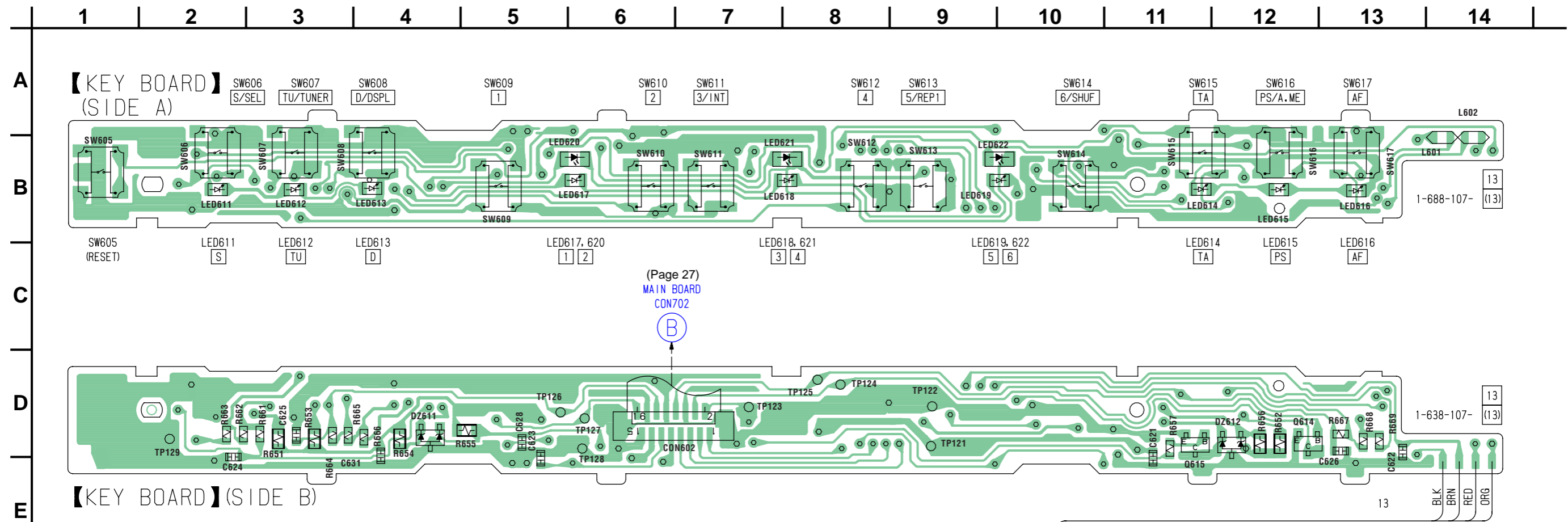


**Note:**  
 • Voltage is dc with respect to ground under no-signal conditions.  
 ( ) : AM/MW/LW  
 ( ) : AM/MW/LW  
 < > : CD PLAY  
 \* : Impossible to measure

4-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 22 for Waveform.

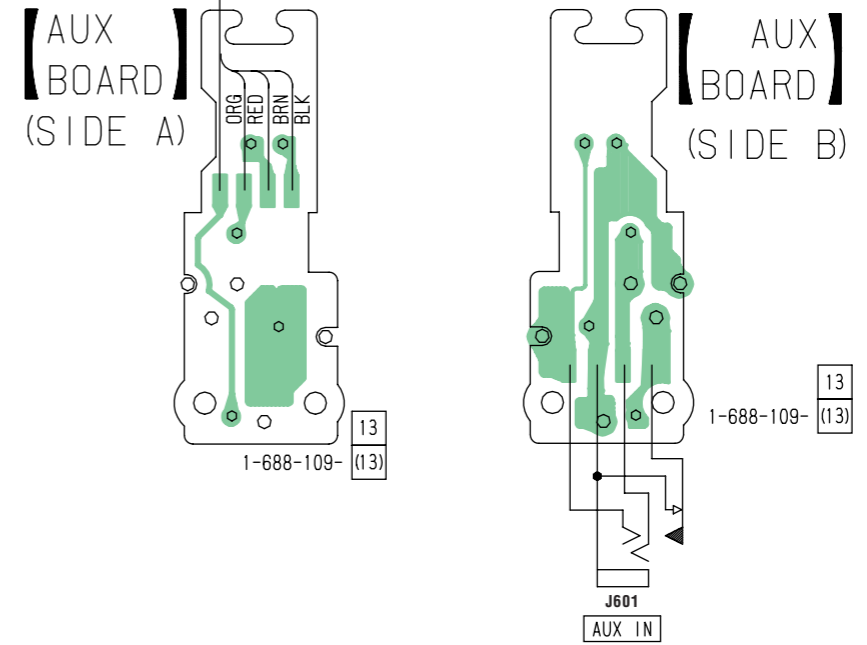


4-11. PRINTED WIRING BOARDS — KEY SECTION — • Refer to page 19 for Circuit Boards Location.

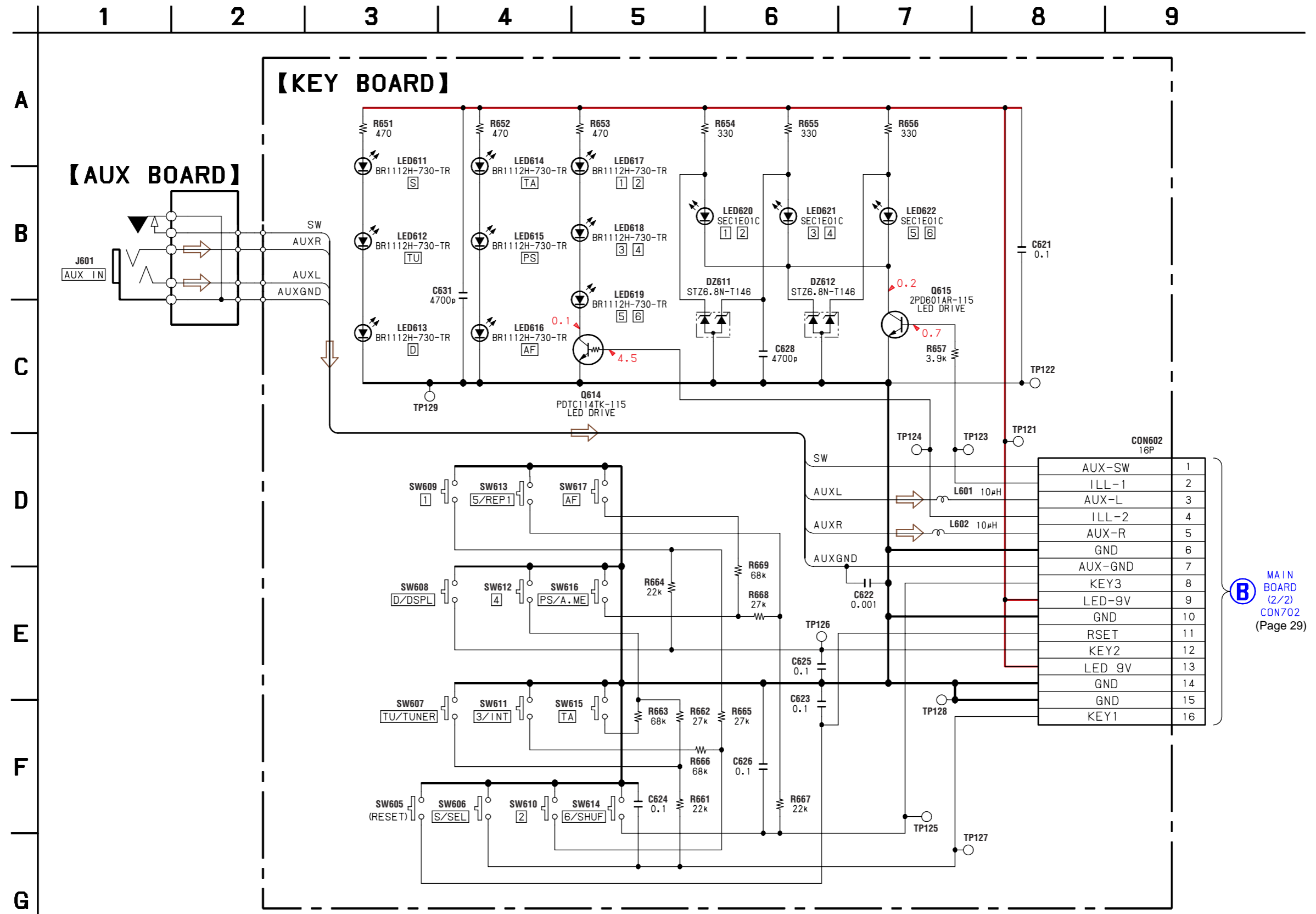


• Semiconductor Location

Ref. No.	Location
DZ611	D-4
DZ612	D-12
LED611	B-2
LED612	B-3
LED613	B-4
LED614	B-11
LED615	B-12
LED616	B-13
LED617	B-6
LED618	B-7
LED619	B-9
LED620	B-6
LED621	B-7
LED622	B-9
Q614	D-12
Q615	D-11



4-12. SCHEMATIC DIAGRAM — KEY SECTION —



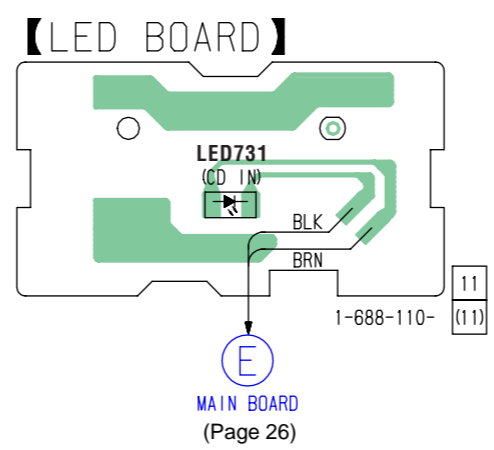
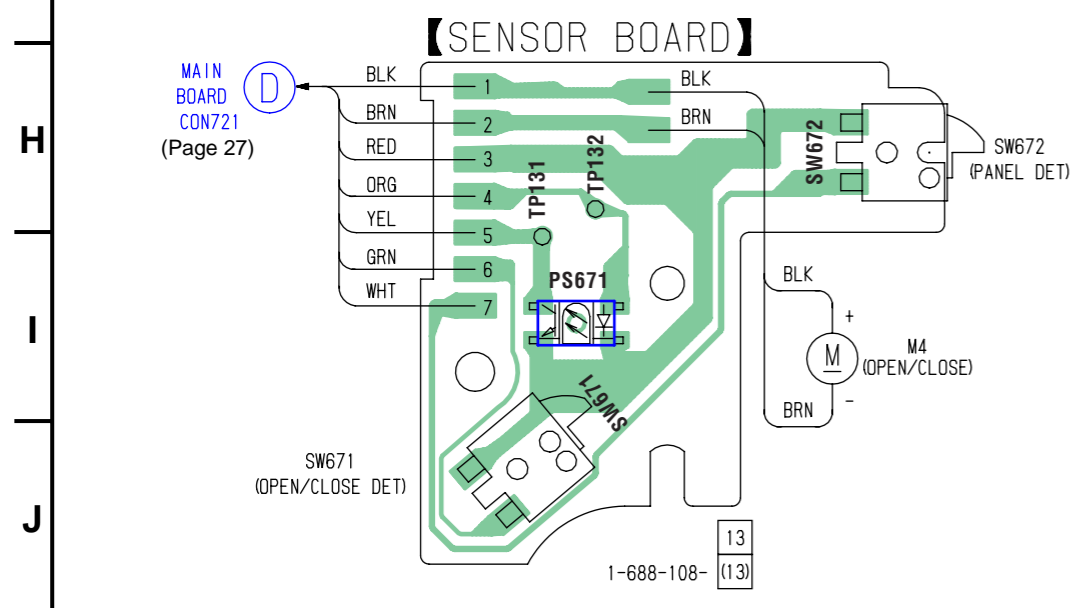
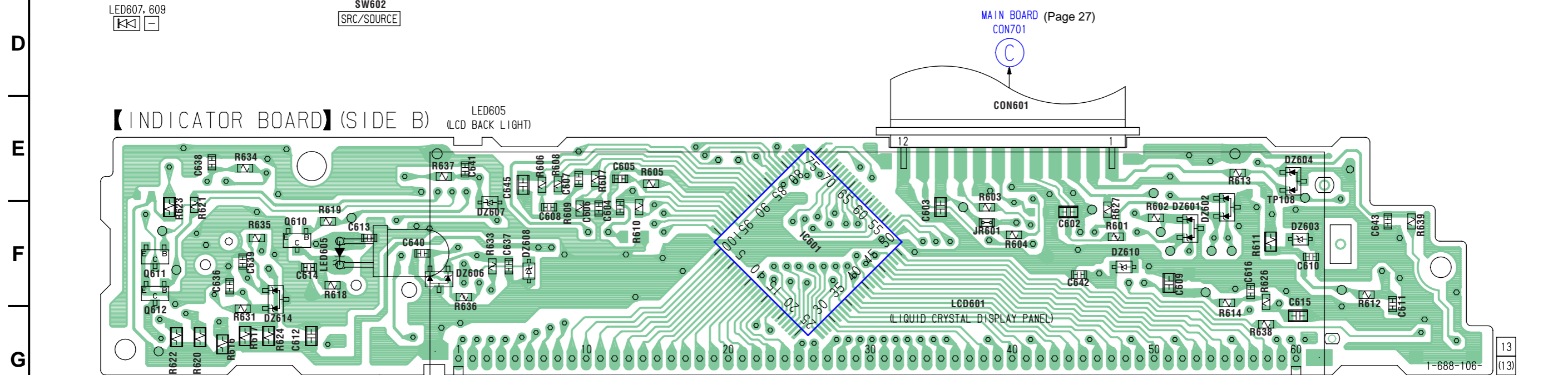
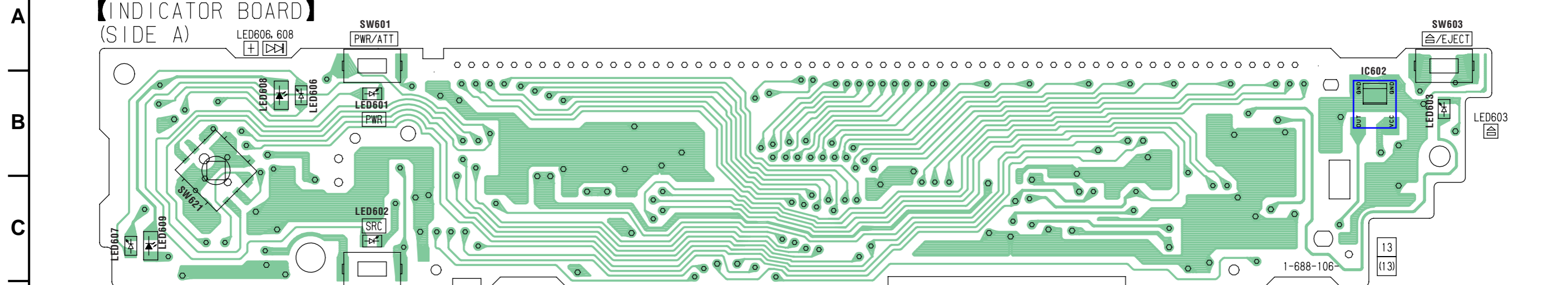
**B** MAIN BOARD (2/2) CON702 (Page 29)

**Note:**

- Voltage is dc with respect to ground under no-signal conditions.
- no mark : FM
- \* : Impossible to measure

4-13. PRINTED WIRING BOARDS — FRONT SECTION — • Refer to page 19 for Circuit Boards Location.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

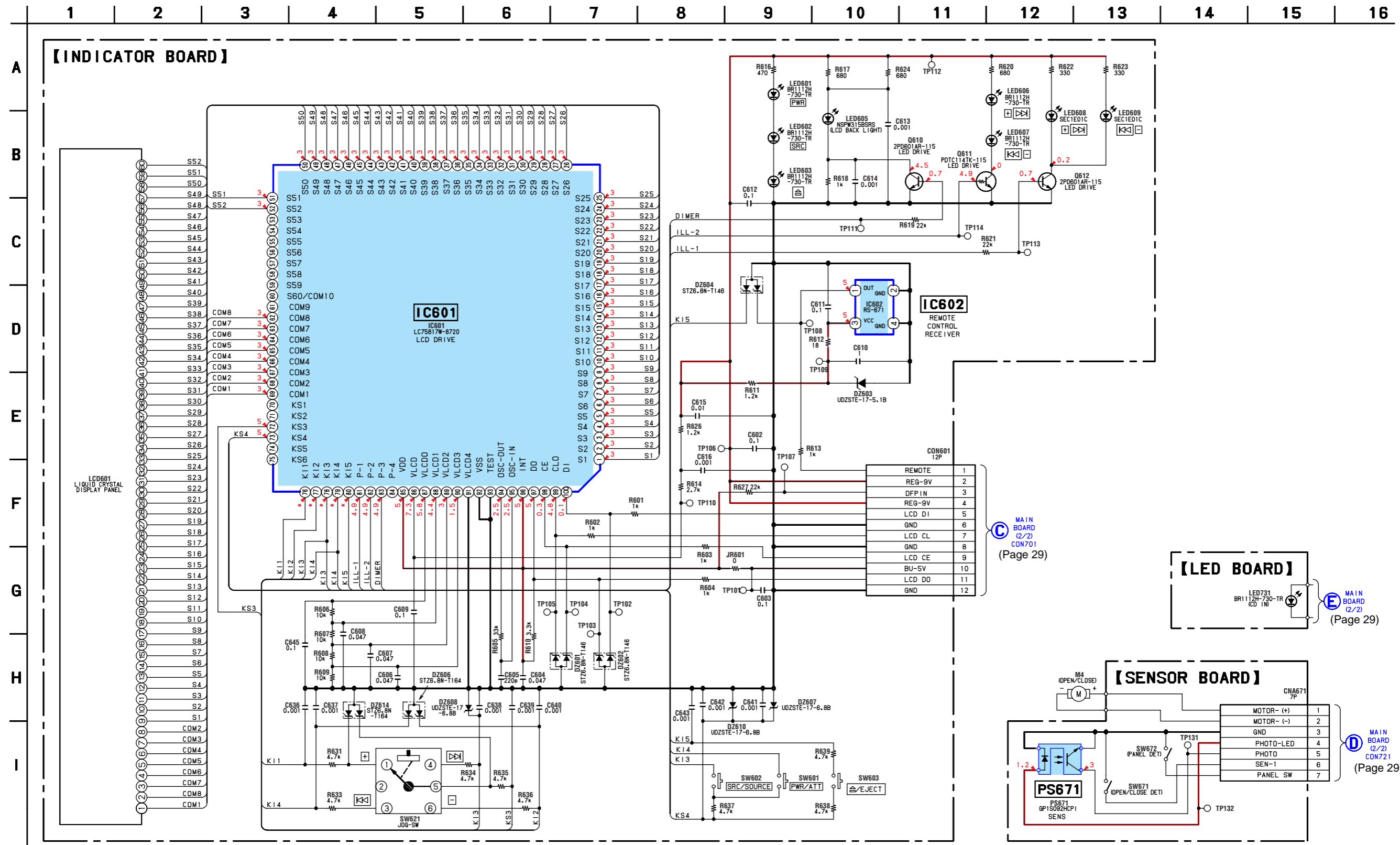


**• Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
DZ601	F-12	LED602	C-4
DZ602	E-12	LED603	B-14
DZ603	F-13	LED605	F-3
DZ604	E-12	LED606	B-3
DZ606	F-4	LED607	C-1
DZ607	F-5	LED608	B-3
DZ608	F-5	LED609	C-2
DZ610	F-11	LED731	H-8
DZ614	F-3	PS671	I-3
IC601	F-8	Q610	F-3
IC602	B-13	Q611	F-2
LED601	B-4	Q612	F-2



4-14. SCHEMATIC DIAGRAM — FRONT SECTION —

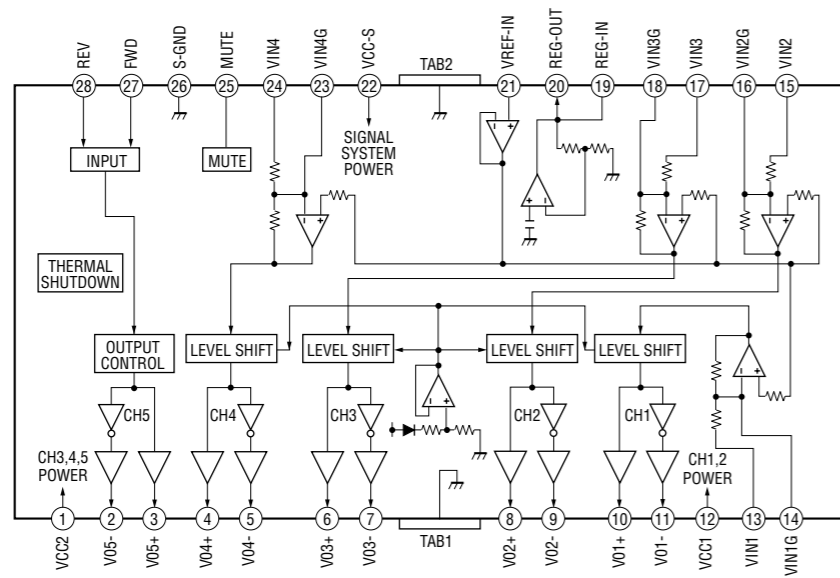


Note:

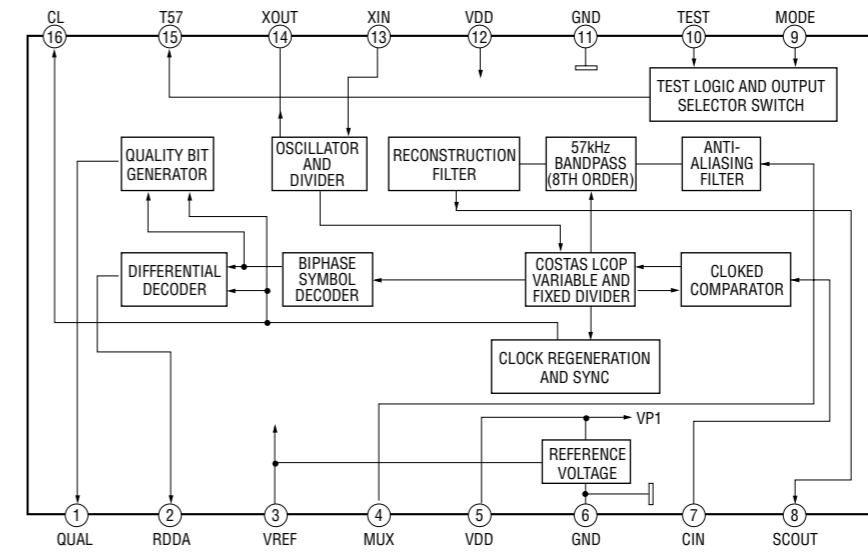
- Voltage is dc with respect to ground under no-signal conditions.
- no mark : FM
- \* : Impossible to measure

4-15. IC BLOCK DIAGRAMS

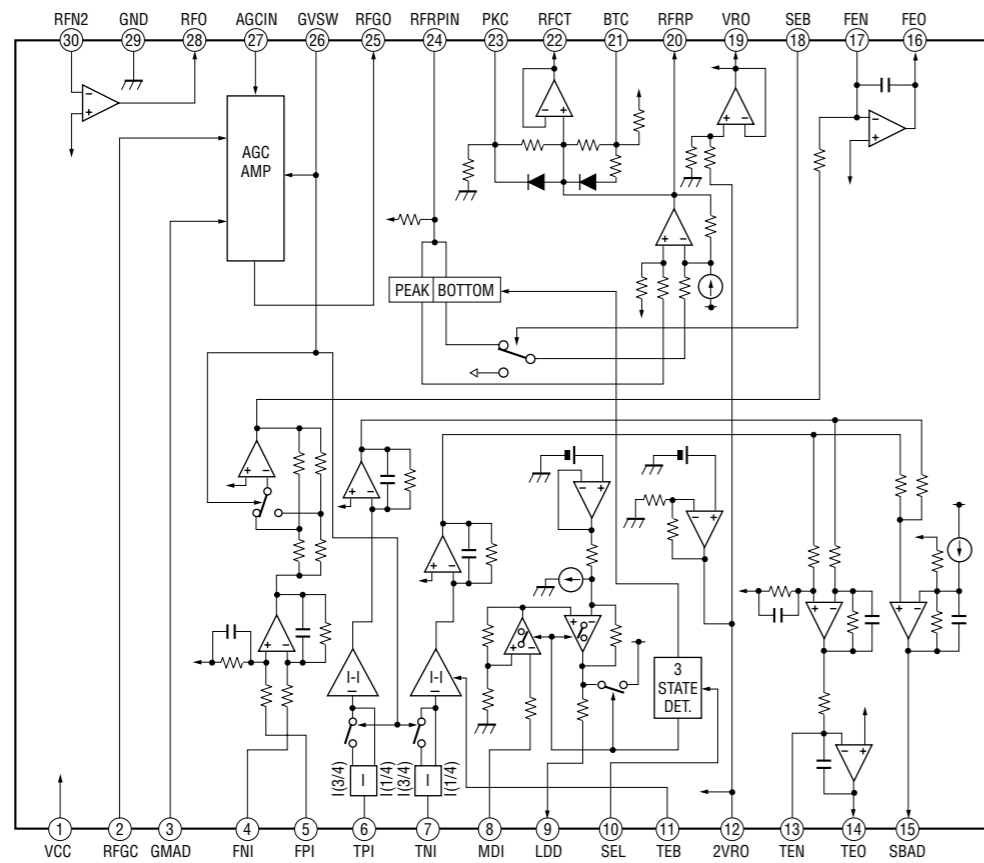
IC201 LA6557H-TE-L (SERVO Board)



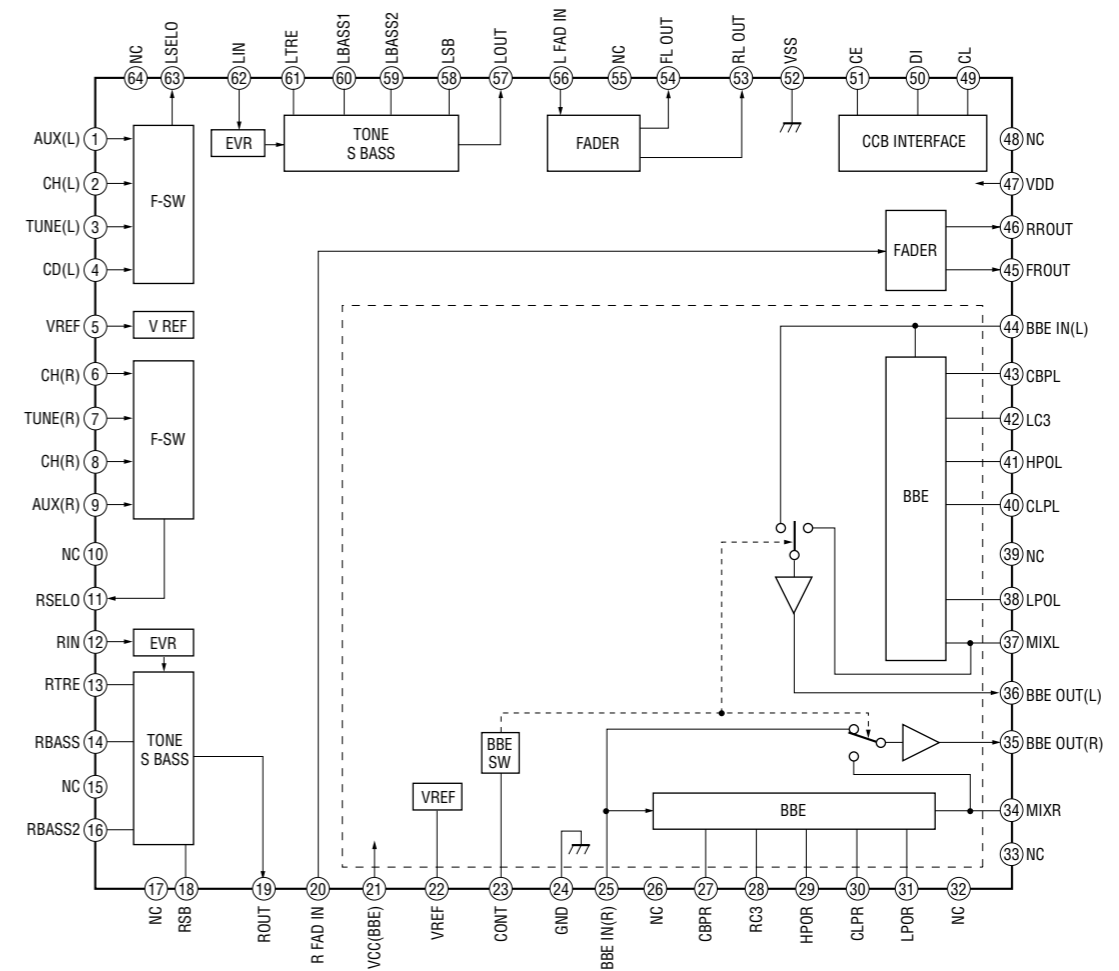
IC151 SAA6579T-T (MAIN Board)



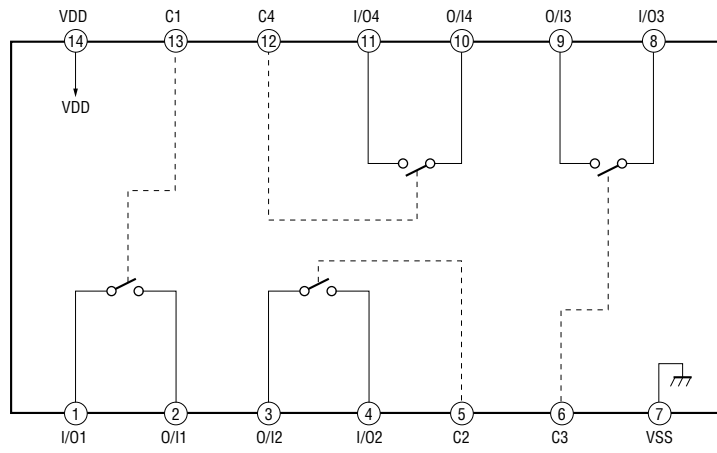
IC221 TA2153FN (SERVO Board)



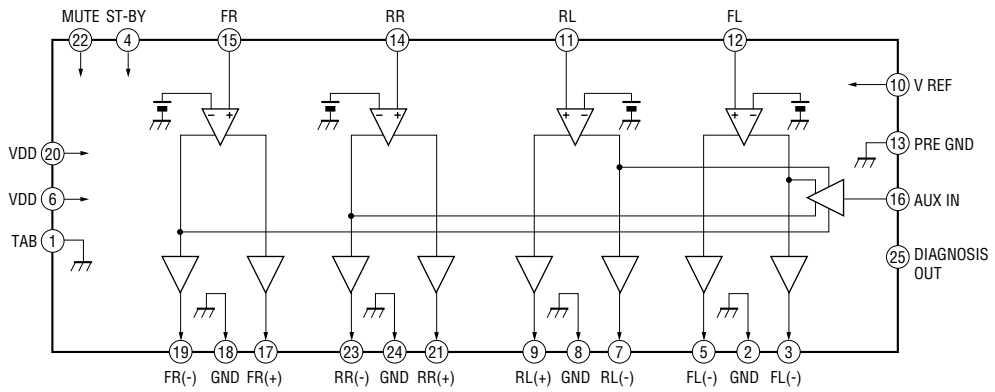
IC401 LA2657M (MAIN Board)



**IC402 BU4066BCF (MAIN Board)**

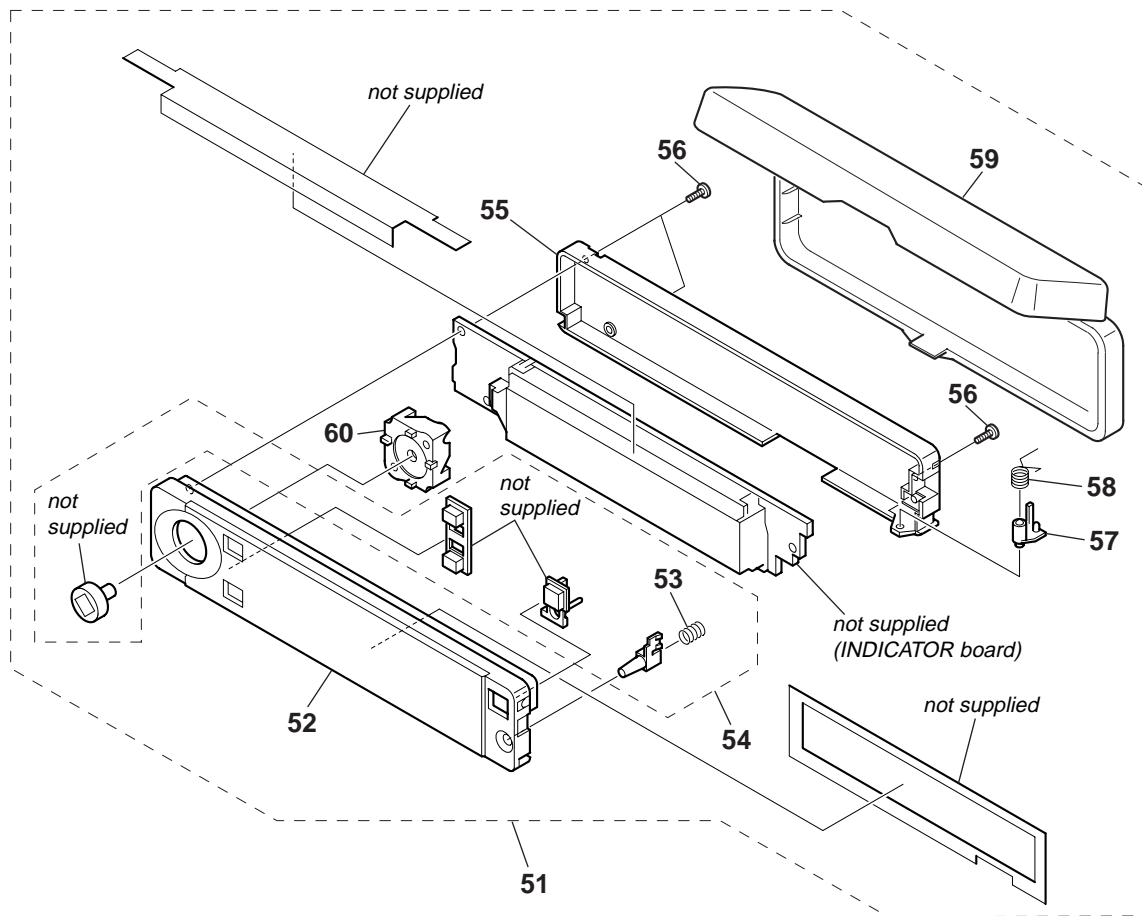


**IC501 TA8272H (MAIN Board)**



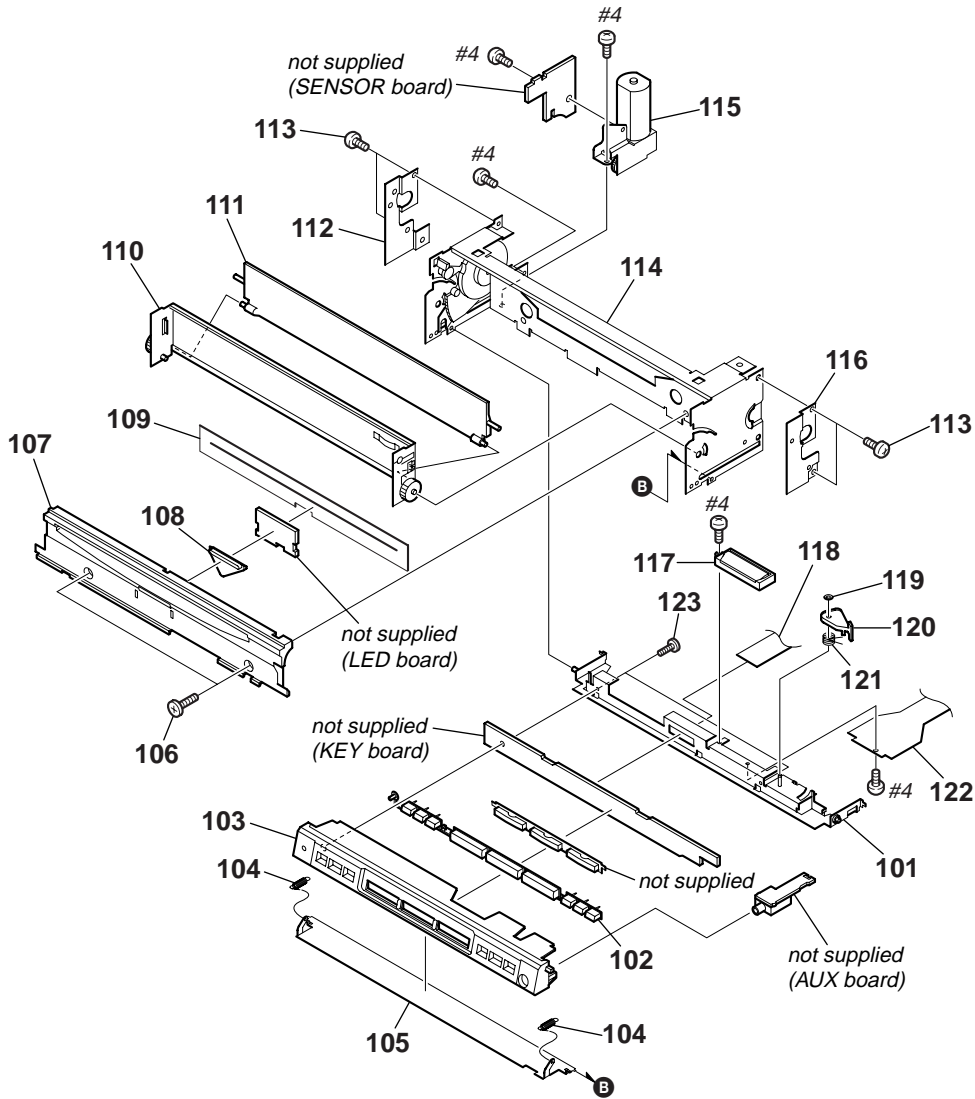


5-2. PANEL SECTION



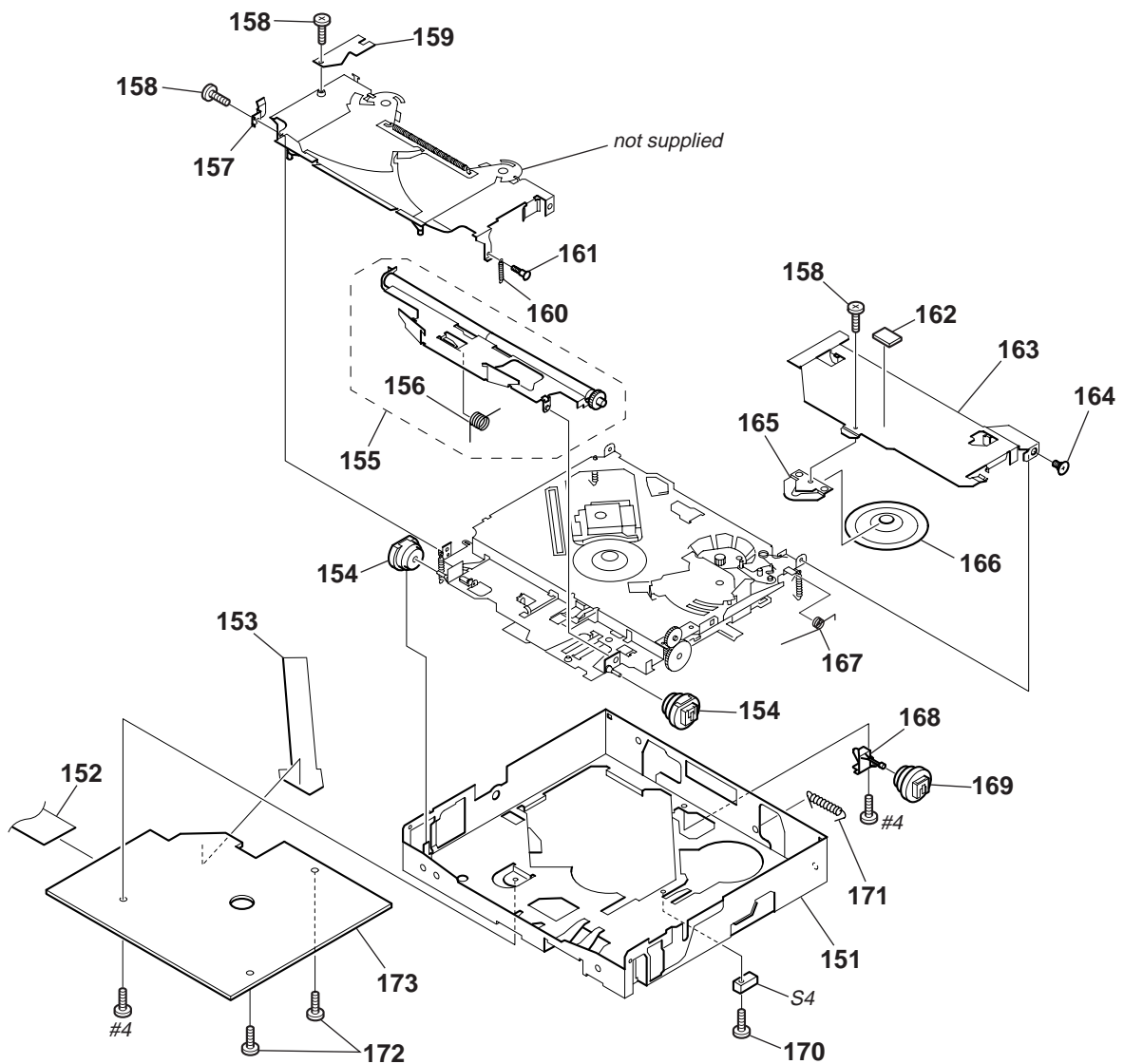
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-3337-567-A	PANEL ASSY, CASE (X937)		55	3-252-390-01	PANEL (REAR)	
51	A-3337-579-A	PANEL ASSY, CASE (R937)		56	3-250-543-01	SCREW (+PTP 2X8)	
52	X-3383-853-1	PANEL (SVX) ASSY (X937)		57	3-252-391-01	LEVER (STOPPER)	
52	X-3383-860-1	PANEL (SVX) ASSY (R937)		58	3-252-361-01	SPRING (STOPPER)	
53	3-251-090-01	SPRING (DETACH-C2)		59	X-3383-367-1	CASE ASSY (for FRONT PANEL)	
54	X-3383-854-1	BUTTON (SVX) ASSY		60	3-252-385-01	LENS (PANEL OVAL)	

5-3. FRONT SECTION



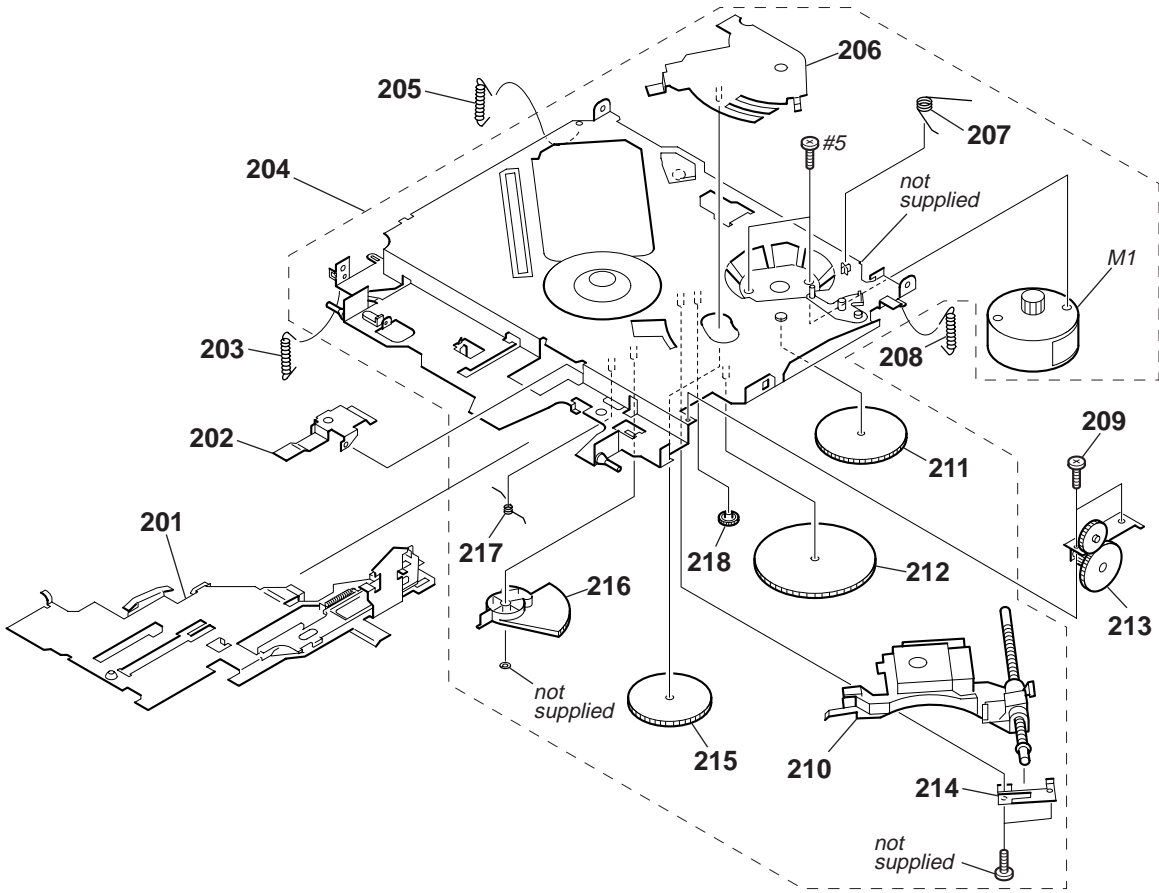
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3383-856-1	SLIDER (SVX) ASSY		113	3-253-025-01	SCREW (TH2.6X4)	
102	3-252-395-01	BUTTON (PRESET) (X937)		114	A-3337-796-A	FRAME ASSY	
102	3-252-395-11	BUTTON (PRESET) (R937)		115	X-3383-857-1	MOTOR (SVX) ASSY (OPEN/CLOSE)	(including M4)
103	3-252-394-01	PANEL (BUTTON)		116	3-252-408-01	SPACER (R)	
104	3-252-407-01	SPRING (DOOR)		117	1-817-397-11	SOCKET, CONNECTOR 12P	
105	3-252-406-01	DOOR (BUTTON)		118	1-687-723-11	KEY FLEXIBLE BOARD	
106	3-253-024-11	SCREW (M2.6X3)		119	3-250-875-01	WASHER, C-CUT (X937)	
107	3-252-398-01	CABINET (BASE)		120	3-252-412-01	LEVER (RELEASE)	
108	3-252-399-01	LENS (CD)		121	3-252-737-01	SPRING (LEVER RELEASE)	
109	3-252-365-01	COVER (DUST/FLP)		122	1-687-722-11	INDICATOR FLEXIBLE BOARD	
110	X-3383-859-1	BASE (SVX) ASSY		123	3-251-488-11	SCREW (1.4X3)	
111	X-3383-858-1	BOARD (SVX) ASSY		#4	7-685-780-01	SCREW +PTT 2X3 (S)	
112	3-250-928-01	BRACKET (L)					

5-4. CD MECHANISM SECTION (1)  
(MG-930B-185)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-3383-095-1	CHASSIS ASSY, HOLDER CNF		164	3-250-987-01	SCREW (CD HLDR), SPECIAL	
152	1-687-801-11	FF-CABLE BOARD		165	3-251-005-01	SPRING (CLAMP), LEAF	
153	1-687-802-11	PIC2 FLEXIBLE BOARD		166	3-251-004-01	CLAMP (BZG-3)	
154	3-250-985-01	DAMPER (BZG-3), OIL		167	3-250-994-01	SPRING (CLAMP), TORSION	
155	A-3337-432-A	LEVER (CD ROLLER) SUB ASSY		168	3-250-952-01	HOLDER (FLOAT REAR)	
156	3-250-996-01	SPRING (ROLLER), TORSION		169	3-250-988-01	DAMPER (BZG-3R), OIL	
157	3-251-001-01	SPRING (ROLLER), LEAF		170	3-250-899-01	SCREW +2X6 (SLOT)	
158	3-251-482-02	SCREW +P 1.4X2 NON-SLIT TYPE 2		171	3-251-050-01	SPRING (FLOAT RC), TENSION	
159	A-3274-733-A	SUB BOARD, COMPLETE		172	3-251-487-01	SCREW (M1.7X4)	
160	3-251-016-01	SPRING (FLOAT FR2), TENSION		173	A-3274-795-A	SERVO BOARD, COMPLETE	
161	3-251-002-01	SCREW (CD UP HLDR), SPECIAL		S4	1-762-952-11	SWITCH, PUSH (1 KEY) (LIMIT)	
162	3-250-990-01	SHEET (CLAMP)		#4	7-685-780-01	SCREW +PTT 2X3 (S)	
163	3-250-943-01	LEVER (CD HOLDER)					

5-5. CD MECHANISM SECTION (2)  
(MG-930B-185)



<p>The components identified by mark <math>\triangle</math> or dotted line with mark <math>\triangle</math> are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque <math>\triangle</math> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	A-3337-431-A	LEVER (DIRECTION) SUB ASSY		211	3-250-956-01	GEAR (CONNECT)	
202	3-250-936-01	LEVER (DIR DOWN)		212	3-250-963-01	GEAR (IDL DIR)	
203	3-251-017-01	SPRING (FLOAT FL2), TENSION		213	X-3383-088-1	LEVER ASSY, GEAR HOLDER	
204	A-3337-427-A	CHASSIS ASSY (including M1,M2)		214	3-251-006-01	SPRING (LEAD STOP2), LEAF	
205	3-251-049-01	SPRING (FLOAT RL2), TENSION		215	3-250-957-01	GEAR (3 DIR)	
206	X-3383-087-1	LEVER ASSY, MODE CH		216	3-250-973-01	GEAR (CAM)	
207	3-250-997-01	SPRING (CD SENSOR), TORSION		217	3-250-995-01	SPRING (CAM)	
208	3-251-018-01	SPRING (FLOAT RR2), TENSION		218	3-250-969-01	GEAR (WHL SLD)	
209	3-251-482-02	SCREW +P 1.4X2 NON-SLIT TYPE 2		M1	A-3337-430-A	MOTOR (SLED) SUB ASSY (SLED)	
$\triangle$ 210	A-3337-428-A	PICK-UP SUB ASSY (including OPTICAL PICK-UP)		#5	7-627-552-27	SCREW, PRECISION +P 1.7X2	



## SECTION 6 ELECTRICAL PARTS LIST

<b>AUX</b>	<b>INDICATOR</b>
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**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 :  $\mu$ , for example:  
uA.. :  $\mu$ A.. uPA.. :  $\mu$ PA..  
uPB.. :  $\mu$ PB.. uPC.. :  $\mu$ PC.. uPD.. :  $\mu$ PD..
- CAPACITORS  
uF :  $\mu$ F
- COILS  
uH :  $\mu$ H

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

Les composants identifiés par une marque  $\triangle$  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
		AUX BOARD *****		DZ607	8-719-978-33	DIODE DTZ-TT11-6.8B	
		< JACK >		DZ608	8-719-978-33	DIODE DTZ-TT11-6.8B	
J601	1-695-514-11	JACK (SMALL TYPE) 1P (AUX IN)		DZ610	8-719-978-33	DIODE DTZ-TT11-6.8B	
*****				DZ614	8-719-067-40	DIODE STZ6.8N-T146	
		INDICATOR BOARD *****				< IC >	
		< CAPACITOR >		IC601	6-703-686-01	IC LC75817W-8720	
				IC602	6-600-193-01	IC RS-671	
						< JUMPER RESISTOR >	
C602	1-165-319-11	CERAMIC CHIP 0.1uF	50V	JR601	1-216-864-11	METAL CHIP 0 5% 1/10W	
C603	1-165-319-11	CERAMIC CHIP 0.1uF	50V			< LIQUID CRYSTAL DISPLAY >	
C604	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	LCD601	1-805-162-11	DISPLAY PANEL, LIQUID CRYSTAL	
C605	1-164-230-11	CERAMIC CHIP 220PF	5% 50V			< DIODE >	
C606	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	LED601	8-719-075-89	LED BR1112H-730-TR (PWR)	
C607	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	LED602	8-719-075-89	LED BR1112H-730-TR (SRC)	
C608	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	LED603	8-719-075-89	LED BR1112H-730-TR ( $\triangle$ )	
C609	1-165-319-11	CERAMIC CHIP 0.1uF	50V	LED605	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)	
C610	1-115-156-11	CERAMIC CHIP 1uF	10V	LED606	8-719-075-89	LED BR1112H-730-TR (+, $\triangleright$ )	
C611	1-164-156-11	CERAMIC CHIP 0.1uF	25V	LED607	8-719-075-89	LED BR1112H-730-TR ( $\triangleleft$ , -)	
C612	1-165-319-11	CERAMIC CHIP 0.1uF	50V	LED608	6-500-526-01	LED SEC1E01C (+, $\triangleright$ )	
C613	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	LED609	6-500-526-01	LED SEC1E01C ( $\triangleleft$ , -)	
C614	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V			< TRANSISTOR >	
C615	1-163-031-11	CERAMIC CHIP 0.01uF	50V	Q610	8-729-422-33	TRANSISTOR 2SD601A-Q-TX	
C616	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	Q611	8-729-043-30	TRANSISTOR PDTC114TK-115	
C636	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	Q612	8-729-422-33	TRANSISTOR 2SD601A-Q-TX	
C637	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V			< RESISTOR >	
C638	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R601	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C639	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R602	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C640	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R603	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C641	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R604	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C642	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R605	1-216-839-11	METAL CHIP 33K 5% 1/10W	
C643	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R606	1-216-833-11	METAL CHIP 10K 5% 1/10W	
C645	1-165-319-11	CERAMIC CHIP 0.1uF	50V	R607	1-216-833-11	METAL CHIP 10K 5% 1/10W	
		< CONNECTOR >		R608	1-216-833-11	METAL CHIP 10K 5% 1/10W	
CON601	1-817-398-11	PLUG, CONNECTOR 12P		R609	1-216-833-11	METAL CHIP 10K 5% 1/10W	
		< DIODE >		R610	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
DZ601	8-719-067-40	DIODE STZ6.8N-T146		R611	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
DZ602	8-719-067-40	DIODE STZ6.8N-T146		R612	1-216-800-11	METAL CHIP 18 5% 1/10W	
DZ603	8-719-069-54	DIODE UDZS-TE17-5.1B		R613	1-216-821-11	METAL CHIP 1K 5% 1/10W	
DZ604	8-719-067-40	DIODE STZ6.8N-T146					
DZ606	8-719-067-40	DIODE STZ6.8N-T146					

CDC-R937/X937

INDICATOR	KEY	LED
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Ref. No.	Part No.	Description	Remark
R614	1-216-826-11	METAL CHIP	2.7K 5% 1/10W
R616	1-216-041-00	METAL CHIP	470 5% 1/10W
R617	1-216-045-00	METAL CHIP	680 5% 1/10W
R618	1-216-821-11	METAL CHIP	1K 5% 1/10W
R619	1-216-837-11	METAL CHIP	22K 5% 1/10W
R620	1-216-045-00	METAL CHIP	680 5% 1/10W
R621	1-216-837-11	METAL CHIP	22K 5% 1/10W
R622	1-216-037-00	METAL CHIP	330 5% 1/10W
R623	1-216-037-00	METAL CHIP	330 5% 1/10W
R624	1-216-045-00	METAL CHIP	680 5% 1/10W
R626	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
R627	1-216-837-11	METAL CHIP	22K 5% 1/10W
R631	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R633	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R634	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R635	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R636	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R637	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R638	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R639	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
< SWITCH >			
SW601	1-762-400-11	SWITCH (PWR/ATT)	
SW602	1-762-400-11	SWITCH (SRC/SOURCE)	
SW603	1-762-400-11	SWITCH (≡/EJECT)	
SW621	1-786-508-11	SWITCH, TACTILE (+, ≡, ≡, ≡, -)	
*****			
KEY BOARD			
*****			
< CAPACITOR >			
C621	1-165-621-11	CERAMIC CHIP	0.1uF 50V
C622	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C623	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C624	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C625	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C626	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C628	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C631	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
< CONNECTOR >			
CON602	1-750-630-11	CONNECTOR, FFC/FPC (ZIF) 16P	
< DIODE >			
DZ611	8-719-067-40	DIODE STZ6.8N-T146	
DZ612	8-719-067-40	DIODE STZ6.8N-T146	
< COIL >			
L601	1-412-006-31	INDUCTOR	10uH
L602	1-412-006-31	INDUCTOR	10uH
< DIODE >			
LED611	8-719-075-89	LED BR1112H-730-TR (S)	
LED612	8-719-075-89	LED BR1112H-730-TR (TU)	
LED613	8-719-075-89	LED BR1112H-730-TR (D)	
LED614	8-719-075-89	LED BR1112H-730-TR (TA)	
LED615	8-719-075-89	LED BR1112H-730-TR (PS)	

Ref. No.	Part No.	Description	Remark
LED616	8-719-075-89	LED BR1112H-730-TR (AF)	
LED617	8-719-075-89	LED BR1112H-730-TR (1,2)	
LED618	8-719-075-89	LED BR1112H-730-TR (3,4)	
LED619	8-719-075-89	LED BR1112H-730-TR (5,6)	
LED620	6-500-526-01	LED SEC1E01C (1,2)	
LED621	6-500-526-01	LED SEC1E01C (3,4)	
LED622	6-500-526-01	LED SEC1E01C (5,6)	
< TRANSISTOR >			
Q614	8-729-043-30	TRANSISTOR PDTC114TK-115	
Q615	8-729-422-33	TRANSISTOR 2SD601A-Q-TX	
< RESISTOR >			
R651	1-216-041-00	METAL CHIP	470 5% 1/10W
R652	1-216-041-00	METAL CHIP	470 5% 1/10W
R653	1-216-041-00	METAL CHIP	470 5% 1/10W
R654	1-216-037-00	METAL CHIP	330 5% 1/10W
R655	1-216-037-00	METAL CHIP	330 5% 1/10W
R656	1-216-037-00	METAL CHIP	330 5% 1/10W
R657	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R661	1-216-837-11	METAL CHIP	22K 5% 1/10W
R662	1-216-838-11	METAL CHIP	27K 5% 1/10W
R663	1-216-843-11	METAL CHIP	68K 5% 1/10W
R664	1-216-837-11	METAL CHIP	22K 5% 1/10W
R665	1-216-838-11	METAL CHIP	27K 5% 1/10W
R666	1-216-843-11	METAL CHIP	68K 5% 1/10W
R667	1-216-837-11	METAL CHIP	22K 5% 1/10W
R668	1-216-838-11	METAL CHIP	27K 5% 1/10W
R669	1-216-843-11	METAL CHIP	68K 5% 1/10W
< SWITCH >			
SW605	1-771-844-21	SWITCH, TACTILE (SMD) (RESET)	
SW606	1-771-844-21	SWITCH, TACTILE (SMD) (S/SEL)	
SW607	1-771-844-21	SWITCH, TACTILE (SMD) (TU/TUNER)	
SW608	1-771-844-21	SWITCH, TACTILE (SMD) (D/DSPL)	
SW609	1-771-844-21	SWITCH, TACTILE (SMD) (1)	
SW610	1-771-844-21	SWITCH, TACTILE (SMD) (2)	
SW611	1-771-844-21	SWITCH, TACTILE (SMD) (3/INT)	
SW612	1-771-844-21	SWITCH, TACTILE (SMD) (4)	
SW613	1-771-844-21	SWITCH, TACTILE (SMD) (5/REP1)	
SW614	1-771-844-21	SWITCH, TACTILE (SMD) (6/SHUF)	
SW615	1-771-844-21	SWITCH, TACTILE (SMD) (TA)	
SW616	1-771-844-21	SWITCH, TACTILE (SMD) (PS/A.ME)	
SW617	1-771-844-21	SWITCH, TACTILE (SMD) (AF)	
*****			
LED BOARD			
*****			
< DIODE >			
LED731	8-719-075-89	LED BR1112H-730-TR (CD IN)	
*****			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
A-3274-801-A		MAIN BOARD, COMPLETE (X937)		C401	1-124-257-00	ELECT 2.2uF 20%	50V
A-3274-807-A		MAIN BOARD, COMPLETE (R937)		C402	1-124-257-00	ELECT 2.2uF 20%	50V
		*****		C403	1-126-160-11	ELECT 1uF 20%	50V
				C404	1-126-160-11	ELECT 1uF 20%	50V
7-682-150-01		SCREW +P 3X12		C405	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
7-685-792-09		SCREW +PTT 2.6X6 (S)		C406	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
7-685-793-09		SCREW +PTT 2.6X8 (S)		C407	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
		< CAPACITOR >		C408	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
C101	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C409	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C102	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C410	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C103	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V	C411	1-104-509-11	CERAMIC CHIP 0.018uF 10%	16V
C104	1-124-234-00	ELECT 22uF 20%	16V	C412	1-104-509-11	CERAMIC CHIP 0.018uF 10%	16V
C105	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	C413	1-131-664-11	CERAMIC CHIP 0.15uF 10%	10V
C107	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C414	1-131-664-11	CERAMIC CHIP 0.15uF 10%	10V
C108	1-124-589-11	ELECT 47uF 20%	16V	C415	1-131-664-11	CERAMIC CHIP 0.15uF 10%	10V
C109	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C416	1-131-664-11	CERAMIC CHIP 0.15uF 10%	10V
C110	1-164-173-11	CERAMIC CHIP 0.0039uF 10%	50V	C417	1-126-160-11	ELECT 1uF 20%	50V
C111	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C418	1-126-160-11	ELECT 1uF 20%	50V
C112	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C419	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V
C113	1-126-935-11	ELECT 470uF 20%	10V	C420	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V
C114	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C421	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
C115	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C422	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
C116	1-124-257-00	ELECT 2.2uF 20%	50V	C423	1-124-584-00	ELECT 100uF 20%	10V
C117	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C424	1-124-234-00	ELECT 22uF 20%	16V
C118	1-162-960-11	CERAMIC CHIP 220PF 10%	50V	C426	1-124-589-11	ELECT 47uF 20%	16V
C119	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	C427	1-124-584-00	ELECT 100uF 20%	10V
			(R937)	C428	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C120	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V	C429	1-164-360-11	CERAMIC CHIP 0.1uF	16V
			(R937)	C435	1-164-346-11	CERAMIC CHIP 1uF	16V
C121	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V	C436	1-164-346-11	CERAMIC CHIP 1uF	16V
			(R937)	C437	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C123	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C438	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C125	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	C439	1-126-162-11	ELECT 3.3uF 20%	50V
			(X937)	C440	1-119-774-11	ELECT 100uF 20%	16V
C125	1-164-245-11	CERAMIC CHIP 0.015uF 10%	25V	C441	1-124-257-00	ELECT 2.2uF 20%	50V
			(R937)	C442	1-124-257-00	ELECT 2.2uF 20%	50V
C126	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	C443	1-124-257-00	ELECT 2.2uF 20%	50V
			(X937)	C444	1-124-257-00	ELECT 2.2uF 20%	50V
C126	1-164-245-11	CERAMIC CHIP 0.015uF 10%	25V	C445	1-124-464-11	ELECT 0.22uF 20%	50V
			(R937)	C446	1-124-464-11	ELECT 0.22uF 20%	50V
C127	1-115-339-11	CERAMIC CHIP 0.1uF 10%	50V	C451	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C128	1-115-339-11	CERAMIC CHIP 0.1uF 10%	50V	C457	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C129	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C458	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C130	1-113-619-11	CERAMIC CHIP 0.47uF	10V	C461	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C151	1-162-961-11	CERAMIC CHIP 330PF 10%	50V	C501	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
			(R937)	C502	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
C152	1-124-257-00	ELECT 2.2uF 20%	50V	C503	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
			(R937)	C504	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
C153	1-164-739-11	CERAMIC CHIP 560PF 5%	50V	C505	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
			(R937)	C506	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
C154	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C507	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
			(R937)	C508	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
C155	1-162-917-11	CERAMIC CHIP 15PF 5%	50V	C509	1-164-222-11	CERAMIC CHIP 0.22uF	25V
			(R937)	C510	1-124-233-11	ELECT 10uF 20%	16V
C156	1-162-916-11	CERAMIC CHIP 12PF 5%	50V	C511	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
			(R937)	C512	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C157	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C513	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
			(R937)	C514	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C158	1-124-589-11	ELECT 47uF 20%	16V				
			(R937)				

**MAIN**

Ref. No.	Part No.	Description	Remark
C515	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C516	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C517	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C518	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C519	1-124-259-11	ELECT 4.7uF 20%	35V
C520	1-165-621-11	CERAMIC CHIP 0.1uF	50V
C521	1-165-621-11	CERAMIC CHIP 0.1uF	50V
C522	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C524	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C525	1-135-473-21	ELECT 3300uF 20%	16V
C526	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C527	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C528	1-127-884-21	CERAMIC CHIP 0.047uF 10%	50V
C701	1-124-257-00	ELECT 2.2uF 20%	50V
C702	1-124-257-00	ELECT 2.2uF 20%	50V
C703	1-165-621-11	CERAMIC CHIP 0.1uF	50V
C705	1-165-621-11	CERAMIC CHIP 0.1uF	50V
C707	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C708	1-124-259-11	ELECT 4.7uF 20%	35V
C721	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C722	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C723	1-124-589-11	ELECT 47uF 20%	16V
C724	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C725	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C726	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C731	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C771	1-126-160-11	ELECT 1uF 20%	50V
C772	1-126-160-11	ELECT 1uF 20%	50V
C773	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C774	1-135-800-11	CERAMIC 1uF	50V
C801	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C802	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C811	1-125-972-61	ELECT 100uF 20%	16V
C812	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C813	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C814	1-126-925-11	ELECT 470uF 20%	10V
C821	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C822	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C831	1-124-589-11	ELECT 47uF 20%	16V
C832	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C834	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C901	1-162-915-11	CERAMIC CHIP 10PF 0.5PF	50V
C902	1-162-915-11	CERAMIC CHIP 10PF 0.5PF	50V
C903	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C904	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C906	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C907	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C908	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C909	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C910	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C915	1-125-701-11	DOUBLE LAYERS 0.047F	5.5V
C916	1-124-234-00	ELECT 22uF 20%	16V
C972	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C981	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C982	1-127-715-11	CERAMIC CHIP 0.22uF 10%	16V
< CONNECTOR >			
CON701	1-817-479-11	HOUSING, CONNECTOR 12P	

Ref. No.	Part No.	Description	Remark
CON702	1-779-836-11	HOUSING, CONNECTOR 16P	
CON721	1-564-723-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CON771	1-573-810-11	HOUSING, CONNECTOR 20P	
CON801	1-774-701-21	PIN, CONNECTOR 16P	
< DIODE >			
D101	8-719-062-51	DIODE 1PS226-115	
D151	8-719-109-85	DIODE RD5.1ES-B2 (R937)	
D421	8-719-062-51	DIODE 1PS226-115	
D422	8-719-066-11	DIODE 1PS184-115	
D423	8-719-066-11	DIODE 1PS184-115	
D501	6-500-522-01	DIODE 10EDB40-TA1B2	
D502	6-500-522-01	DIODE 10EDB40-TA1B2	
D503	6-500-522-01	DIODE 10EDB40-TA1B2	
D504	6-500-522-01	DIODE 10EDB40-TA1B2	
D505	6-500-522-01	DIODE 10EDB40-TA1B2	
D506	6-500-522-01	DIODE 10EDB40-TA1B2	
D507	6-500-522-01	DIODE 10EDB40-TA1B2	
D508	6-500-522-01	DIODE 10EDB40-TA1B2	
D510	8-719-109-89	DIODE RD5.6ES-B2	
D701	8-719-067-40	DIODE STZ6.8N-T146	
D702	8-719-067-40	DIODE STZ6.8N-T146	
D703	8-719-067-40	DIODE STZ6.8N-T146	
D801	8-719-049-38	DIODE 1N5404TU	
D813	8-719-991-33	DIODE 1SS133T-77	
D821	8-719-109-93	DIODE RD6.2ES-B2	
D822	8-719-066-11	DIODE 1PS184-115	
D831	8-719-929-15	DIODE HZS9.1N-B2	
D832	8-719-066-11	DIODE 1PS184-115	
D841	8-719-109-85	DIODE RD5.1ES-B2 (R937)	
D851	6-500-522-01	DIODE 10EDB40-TA1B2	
D852	6-500-522-01	DIODE 10EDB40-TA1B2	
D904	8-719-066-11	DIODE 1PS184-115 (X937)	
D905	8-719-066-11	DIODE 1PS184-115 (R937)	
D906	8-719-066-11	DIODE 1PS184-115 (X937)	
D971	8-719-109-89	DIODE RD5.6ES-B2	
D972	8-719-066-11	DIODE 1PS184-115	
D981	8-719-914-43	DIODE DAN202K	
< IC >			
IC151	8-759-065-98	IC SAA6579T (R937)	
IC401	6-703-687-01	IC LA2657M	
IC402	8-759-008-67	IC MC14066BF	
IC501	8-759-827-12	IC TA8272H	
IC721	8-759-586-26	IC BA6417F-E2	
IC811	8-759-394-36	IC BA09T	
IC901	6-802-746-01	IC uPD178078GF-588-3BA (R937)	
IC901	6-802-748-01	IC uPD178076GF-571-3BA (X937)	
IC971	6-701-405-01	IC PST3443UL	
< JACK >			
J101	1-817-334-11	JACK (ANTENNA)	
J401	1-774-698-11	JACK, PIN 2P (AUDIO OUT REAR)	
< JUMPER RESISTOR >			
JR1	1-216-864-11	METAL CHIP 0 5% 1/10W	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< COIL >		R115	1-216-803-11	METAL CHIP	33 5% 1/10W
L101	1-410-324-11	INDUCTOR 4.7uH		R116	1-216-797-11	METAL CHIP	10 5% 1/10W
L102	1-424-759-11	COIL (AM ANT) (R937)		R117	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (R937)
L103	1-424-759-11	COIL (AM ANT) (X937)		R118	1-216-821-11	METAL CHIP	1K 5% 1/10W (R937)
L151	1-410-513-11	INDUCTOR 22uH (R937)		R119	1-216-821-11	METAL CHIP	1K 5% 1/10W (R937)
L701	1-410-509-11	INDUCTOR 10uH		R120	1-216-821-11	METAL CHIP	1K 5% 1/10W (R937)
L702	1-412-006-31	INDUCTOR 10uH		R121	1-216-864-11	METAL CHIP	0 5% 1/10W
L721	1-408-121-00	INDUCTOR 22uH		R122	1-216-841-11	METAL CHIP	47K 5% 1/10W
L801	1-419-476-41	COIL, CHOKE 250uH		R123	1-216-834-11	METAL CHIP	12K 5% 1/10W (R937)
L901	1-412-006-31	INDUCTOR 10uH		R123	1-216-842-11	METAL CHIP	56K 5% 1/10W (X937)
		< TRANSISTOR >		R124	1-216-834-11	METAL CHIP	12K 5% 1/10W (R937)
Q101	8-729-043-30	TRANSISTOR PDTC114TK-115		R124	1-216-842-11	METAL CHIP	56K 5% 1/10W (X937)
Q102	8-729-026-48	TRANSISTOR 2SA1037AK-T146-Q		R125	1-216-841-11	METAL CHIP	47K 5% 1/10W (R937)
Q103	8-729-026-48	TRANSISTOR 2SA1037AK-T146-Q		R126	1-216-851-11	METAL CHIP	330K 5% 1/10W (X937)
Q105	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R127	1-216-864-11	METAL CHIP	0 5% 1/10W (R937)
Q106	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R128	1-216-864-11	METAL CHIP	0 5% 1/10W (X937)
Q107	8-729-422-33	TRANSISTOR 2SD601A-Q-TX (R937)		R131	1-216-295-11	SHORT CHIP	0 5% 1/10W (X937)
Q108	8-729-422-33	TRANSISTOR 2SD601A-Q-TX (R937)		R132	1-216-864-11	METAL CHIP	0 5% 1/10W (X937)
Q405	8-729-043-30	TRANSISTOR PDTC114TK-115		R133	1-216-864-11	METAL CHIP	0 5% 1/10W (X937)
Q406	8-729-043-30	TRANSISTOR PDTC114TK-115		R151	1-216-815-11	METAL CHIP	330 5% 1/10W (R937)
Q407	8-729-043-30	TRANSISTOR PDTC114TK-115		R152	1-216-835-11	METAL CHIP	15K 5% 1/10W (R937)
Q408	8-729-043-30	TRANSISTOR PDTC114TK-115		R401	1-218-867-11	METAL CHIP	6.8K 5% 1/10W
Q409	8-729-043-30	TRANSISTOR PDTC114TK-115		R402	1-218-867-11	METAL CHIP	6.8K 5% 1/10W
Q410	8-729-043-30	TRANSISTOR PDTC114TK-115		R403	1-216-835-11	METAL CHIP	15K 5% 1/10W
Q411	8-729-043-30	TRANSISTOR PDTC114TK-115		R404	1-216-835-11	METAL CHIP	15K 5% 1/10W
Q421	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R405	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
Q422	8-729-027-26	TRANSISTOR DTA114YKA-T146		R406	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
Q423	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R407	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q522	8-729-904-63	TRANSISTOR DTB123YK		R408	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q731	8-729-027-26	TRANSISTOR DTA114YKA-T146		R409	1-216-843-11	METAL CHIP	68K 5% 1/10W
Q732	8-729-904-63	TRANSISTOR DTB123YK		R410	1-216-843-11	METAL CHIP	68K 5% 1/10W
Q733	8-729-043-30	TRANSISTOR PDTC114TK-115		R411	1-216-839-11	METAL CHIP	33K 5% 1/10W
Q811	8-729-209-60	TRANSISTOR 2SB1375		R412	1-216-839-11	METAL CHIP	33K 5% 1/10W
Q812	8-729-043-30	TRANSISTOR PDTC114TK-115		R413	1-216-843-11	METAL CHIP	68K 5% 1/10W
Q821	8-729-039-83	TRANSISTOR 2SD1858-QR-TV2		R414	1-216-843-11	METAL CHIP	68K 5% 1/10W
Q831	8-729-209-15	TRANSISTOR 2SD2012		R415	1-216-017-11	RES-CHIP	47 5% 1/10W
Q832	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R418	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q833	8-729-026-48	TRANSISTOR 2SA1037AK-T146-Q		R419	1-216-011-00	METAL CHIP	27 5% 1/10W
Q834	8-729-043-30	TRANSISTOR PDTC114TK-115		R421	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q901	8-729-043-30	TRANSISTOR PDTC114TK-115 (R937)		R422	1-216-845-11	METAL CHIP	100K 5% 1/10W
		< RESISTOR >		R423	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
R101	1-216-857-11	METAL CHIP 1M	5% 1/10W	R424	1-216-857-11	METAL CHIP	1M 5% 1/10W
R102	1-216-821-11	METAL CHIP 1K	5% 1/10W	R425	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R103	1-216-821-11	METAL CHIP 1K	5% 1/10W	R426	1-216-833-11	METAL CHIP	10K 5% 1/10W
R104	1-216-845-11	METAL CHIP 100K	5% 1/10W	R427	1-216-857-11	METAL CHIP	1M 5% 1/10W
R105	1-216-841-11	METAL CHIP 47K	5% 1/10W				
R106	1-216-812-11	METAL CHIP 180	5% 1/10W				
R107	1-216-837-11	METAL CHIP 22K	5% 1/10W				
R108	1-216-820-11	METAL CHIP 820	5% 1/10W				
R109	1-216-833-11	METAL CHIP 10K	5% 1/10W				
R110	1-216-825-11	METAL CHIP 2.2K	5% 1/10W				
R111	1-216-839-11	METAL CHIP 33K	5% 1/10W				
R112	1-216-841-11	METAL CHIP 47K	5% 1/10W				
R113	1-216-845-11	METAL CHIP 100K	5% 1/10W (R937)				
R114	1-216-001-00	METAL CHIP 10	5% 1/10W				

**MAIN**

Ref. No.	Part No.	Description	Quantity	Unit	Remark	Ref. No.	Part No.	Description	Quantity	Unit	Remark
R429	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	R732	1-216-812-11	METAL CHIP	180	5%	1/10W
R431	1-216-821-11	METAL CHIP	1K	5%	1/10W	R771	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R432	1-216-821-11	METAL CHIP	1K	5%	1/10W	R772	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R433	1-216-821-11	METAL CHIP	1K	5%	1/10W	R773	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R434	1-216-821-11	METAL CHIP	1K	5%	1/10W	R774	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R435	1-216-837-11	METAL CHIP	22K	5%	1/10W	R776	1-216-841-11	METAL CHIP	47K	5%	1/10W
R436	1-216-837-11	METAL CHIP	22K	5%	1/10W	R777	1-216-841-11	METAL CHIP	47K	5%	1/10W
R437	1-216-837-11	METAL CHIP	22K	5%	1/10W	R778	1-216-841-11	METAL CHIP	47K	5%	1/10W
R438	1-216-837-11	METAL CHIP	22K	5%	1/10W	R811	1-216-833-11	METAL CHIP	10K	5%	1/10W
R439	1-216-863-11	METAL CHIP	3.3M	5%	1/10W	R812	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R440	1-216-863-11	METAL CHIP	3.3M	5%	1/10W	R814	1-216-295-11	SHORT CHIP	0		
R443	1-216-821-11	METAL CHIP	1K	5%	1/10W	R815	1-216-295-11	SHORT CHIP	0		
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W	R816	1-216-864-11	METAL CHIP	0	5%	1/10W
R445	1-216-833-11	METAL CHIP	10K	5%	1/10W	R819	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R446	1-216-833-11	METAL CHIP	10K	5%	1/10W	R821	1-216-180-00	RES-CHIP	180	5%	1/8W
R448	1-216-864-11	METAL CHIP	0	5%	1/10W	R822	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R449	1-216-813-11	METAL CHIP	220	5%	1/10W	R823	1-216-180-00	RES-CHIP	180	5%	1/8W
R451	1-216-864-11	METAL CHIP	0	5%	1/10W	R831	1-216-049-11	RES-CHIP	1K	5%	1/10W
R462	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R832	1-216-838-11	METAL CHIP	27K	5%	1/10W
R471	1-216-840-11	METAL CHIP	39K	5%	1/10W	R833	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-840-11	METAL CHIP	39K	5%	1/10W	R834	1-216-841-11	METAL CHIP	47K	5%	1/10W
R473	1-216-842-11	METAL CHIP	56K	5%	1/10W	R836	1-247-887-00	CARBON	220K	5%	1/4W
R474	1-216-842-11	METAL CHIP	56K	5%	1/10W	R841	1-249-421-11	CARBON	2.2K	5%	1/4W
R501	1-216-835-11	METAL CHIP	15K	5%	1/10W						(R937)
R502	1-216-835-11	METAL CHIP	15K	5%	1/10W	R901	1-216-821-11	METAL CHIP	1K	5%	1/10W
R503	1-216-835-11	METAL CHIP	15K	5%	1/10W	R902	1-216-821-11	METAL CHIP	1K	5%	1/10W
R504	1-216-835-11	METAL CHIP	15K	5%	1/10W	R903	1-216-821-11	METAL CHIP	1K	5%	1/10W
R505	1-216-835-11	METAL CHIP	15K	5%	1/10W	R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R506	1-216-835-11	METAL CHIP	15K	5%	1/10W	R905	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R507	1-216-835-11	METAL CHIP	15K	5%	1/10W	R906	1-216-821-11	METAL CHIP	1K	5%	1/10W
R508	1-216-835-11	METAL CHIP	15K	5%	1/10W	R907	1-216-821-11	METAL CHIP	1K	5%	1/10W
R510	1-216-833-11	METAL CHIP	10K	5%	1/10W	R908	1-216-821-11	METAL CHIP	1K	5%	1/10W
R523	1-216-833-11	METAL CHIP	10K	5%	1/10W	R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R701	1-249-426-11	CARBON	5.6K	5%	1/4W	R910	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-249-426-11	CARBON	5.6K	5%	1/4W	R916	1-216-821-11	METAL CHIP	1K	5%	1/10W
R703	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R918	1-216-821-11	METAL CHIP	1K	5%	1/10W
R704	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R919	1-216-821-11	METAL CHIP	1K	5%	1/10W
R705	1-216-821-11	METAL CHIP	1K	5%	1/10W	R920	1-216-821-11	METAL CHIP	1K	5%	1/10W
R706	1-216-821-11	METAL CHIP	1K	5%	1/10W	R921	1-216-821-11	METAL CHIP	1K	5%	1/10W
R707	1-216-821-11	METAL CHIP	1K	5%	1/10W	R922	1-216-821-11	METAL CHIP	1K	5%	1/10W
R708	1-216-821-11	METAL CHIP	1K	5%	1/10W	R923	1-216-821-11	METAL CHIP	1K	5%	1/10W
R709	1-216-821-11	METAL CHIP	1K	5%	1/10W	R924	1-216-821-11	METAL CHIP	1K	5%	1/10W
R710	1-216-013-00	METAL CHIP	33	5%	1/10W	R926	1-216-845-11	METAL CHIP	100K	5%	1/10W
R711	1-216-821-11	METAL CHIP	1K	5%	1/10W	R927	1-216-841-11	METAL CHIP	47K	5%	1/10W
R712	1-216-841-11	METAL CHIP	47K	5%	1/10W	R928	1-216-821-11	METAL CHIP	1K	5%	1/10W
R713	1-216-841-11	METAL CHIP	47K	5%	1/10W	R929	1-216-821-11	METAL CHIP	1K	5%	1/10W
R714	1-216-841-11	METAL CHIP	47K	5%	1/10W	R930	1-216-821-11	METAL CHIP	1K	5%	1/10W
R715	1-216-295-11	SHORT CHIP	0			R931	1-216-845-11	METAL CHIP	100K	5%	1/10W
R721	1-216-295-11	SHORT CHIP	0			R935	1-216-821-11	METAL CHIP	1K	5%	1/10W
R722	1-216-833-11	METAL CHIP	10K	5%	1/10W	R936	1-216-839-11	METAL CHIP	33K	5%	1/10W
R723	1-216-833-11	METAL CHIP	10K	5%	1/10W	R937	1-216-839-11	METAL CHIP	33K	5%	1/10W
R724	1-216-835-11	METAL CHIP	15K	5%	1/10W	R939	1-216-842-11	METAL CHIP	56K	5%	1/10W
R725	1-216-834-11	METAL CHIP	12K	5%	1/10W	R941	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-216-841-11	METAL CHIP	47K	5%	1/10W	R942	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R727	1-216-843-11	METAL CHIP	68K	5%	1/10W	R943	1-249-431-11	CARBON	15K	5%	1/4W
R728	1-216-845-11	METAL CHIP	100K	5%	1/10W	R944	1-216-833-11	METAL CHIP	10K	5%	1/10W
R729	1-216-845-11	METAL CHIP	100K	5%	1/10W	R949	1-216-841-11	METAL CHIP	47K	5%	1/10W
R730	1-216-037-00	METAL CHIP	330	5%	1/10W	R950	1-216-821-11	METAL CHIP	1K	5%	1/10W

MAIN

SENSOR

SERVO

Ref. No.	Part No.	Description	Remark
R952	1-216-845-11	METAL CHIP 100K 5%	1/10W
R953	1-216-849-11	METAL CHIP 220K 5%	1/10W
R957	1-216-821-11	METAL CHIP 1K 5%	1/10W
R959	1-216-841-11	METAL CHIP 47K 5%	1/10W
R965	1-216-832-11	METAL CHIP 8.2K 5%	1/10W
R966	1-216-837-11	METAL CHIP 22K 5%	1/10W
R967	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R969	1-216-821-11	METAL CHIP 1K 5%	1/10W
R970	1-216-821-11	METAL CHIP 1K 5%	1/10W
R971	1-216-845-11	METAL CHIP 100K 5%	1/10W
R972	1-216-845-11	METAL CHIP 100K 5%	1/10W
R977	1-216-845-11	METAL CHIP 100K 5%	1/10W
R978	1-216-842-11	METAL CHIP 56K 5%	1/10W
R979	1-216-821-11	METAL CHIP 1K 5%	1/10W
R980	1-216-841-11	METAL CHIP 47K 5%	1/10W
R986	1-216-821-11	METAL CHIP 1K 5%	1/10W
R987	1-216-821-11	METAL CHIP 1K 5%	1/10W
R989	1-216-821-11	METAL CHIP 1K 5%	1/10W
R991	1-216-821-11	METAL CHIP 1K 5%	1/10W
R994	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R995	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R996	1-216-821-11	METAL CHIP 1K 5%	1/10W
< VARIABLE RESISTOR >			
SFR101	1-241-768-11	RES, ADJ, CARBON 220K (R937)	
< THERMISTOR >			
THP801	1-809-148-11	THERMISTOR PTH8L07AR2R0M1B510	
< TUNER >			
TU101	1-693-609-11	TUNER UNIT (X937)	
TU101	1-693-611-11	TUNER UNIT (R937)	
< VIBRATOR >			
X151	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz) (R937)	
X901	1-795-863-11	VIBRATOR, CRYSTAL (6.3MHz)	
*****			
SENSOR BOARD			
*****			
< IC >			
PS671	8-749-016-83	IC GP1S092HCPI	
< SWITCH >			
* SW671	1-786-079-21	SWITCH, PUSH (1 KEY) (OPEN/CLOSE DET)	
* SW672	1-786-079-21	SWITCH, PUSH (1 KEY) (PANEL DET)	
*****			
A-3274-795-A	SERVO BOARD, COMPLETE		*****
< CAPACITOR >			
C201	1-124-234-00	ELECT 22uF 20%	16V
C202	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C203	1-126-176-11	ELECT 220uF 20%	10V
C221	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C222	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V

Ref. No.	Part No.	Description	Remark
C223	1-162-924-11	CERAMIC CHIP 56PF 5%	50V
C224	1-162-905-11	CERAMIC CHIP 1PF 0.25PF	50V
C225	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C226	1-124-584-00	ELECT 100uF 20%	10V
C227	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C228	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C229	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V
C230	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V
C232	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C233	1-124-584-00	ELECT 100uF 20%	10V
C234	1-124-584-00	ELECT 100uF 20%	10V
C235	1-124-584-00	ELECT 100uF 20%	10V
C237	1-164-174-11	CERAMIC CHIP 0.0082uF 10%	25V
C241	1-124-584-00	ELECT 100uF 20%	10V
C242	1-124-584-00	ELECT 100uF 20%	10V
C243	1-162-913-11	CERAMIC CHIP 8PF 0.5%	50V
C244	1-162-913-11	CERAMIC CHIP 8PF 0.5%	50V
C245	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C246	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C247	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C248	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C250	1-124-584-00	ELECT 100uF 20%	10V
C251	1-126-176-11	ELECT 220uF 20%	10V
C252	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C253	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C254	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C258	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C259	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C260	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C261	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V
C262	1-162-979-11	CERAMIC CHIP 0.0027uF 10%	50V
C263	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C264	1-164-245-11	CERAMIC CHIP 0.015uF 10%	25V
C265	1-124-589-11	ELECT 47uF 20%	16V
C268	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C269	1-124-589-11	ELECT 47uF 20%	16V
C270	1-124-589-11	ELECT 47uF 20%	16V
C271	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C272	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V
C273	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C274	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C275	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C278	1-124-584-00	ELECT 100uF 20%	10V
C279	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C281	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V
C282	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V
C283	1-124-233-11	ELECT 10uF 20%	16V
C284	1-124-233-11	ELECT 10uF 20%	16V
C298	1-124-584-00	ELECT 100uF 20%	10V
< CONNECTOR >			
* CON201	1-580-802-21	SOCKET, CONNECTOR 20P	
< IC >			
IC201	6-703-681-01	IC LA6557H-TE-L	
IC221	6-703-684-01	IC TA2153FN(EL)	
IC241	6-703-811-01	IC TC94A09F-303	

**SERVO**      **SUB**

Ref. No.	Part No.	Description	Remark
< JUMPER RESISTOR >			
JR102	1-216-864-11	METAL CHIP      0      5%	1/10W
JR201	1-216-864-11	METAL CHIP      0      5%	1/10W
JR203	1-216-864-11	METAL CHIP      0      5%	1/10W
< COIL >			
L221	1-414-410-21	INDUCTOR      10uH	
L241	1-414-410-21	INDUCTOR      10uH	
L242	1-414-410-21	INDUCTOR      10uH	
< TRANSISTOR >			
Q201	8-729-039-82	TRANSISTOR    2SB1326-QR-TV2	
Q202	8-729-043-30	TRANSISTOR    PDC114TK-115	
Q221	8-729-026-48	TRANSISTOR    2SA1037AK-T146-Q	
< RESISTOR >			
R201	1-216-864-11	METAL CHIP      0      5%	1/10W
R202	1-216-849-11	METAL CHIP      220K    5%	1/10W
R203	1-218-867-11	METAL CHIP      6.8K    5%	1/10W
R204	1-218-867-11	METAL CHIP      6.8K    5%	1/10W
R205	1-216-864-11	METAL CHIP      0      5%	1/10W
R206	1-216-818-11	METAL CHIP      560      5%	1/10W
R207	1-216-864-11	METAL CHIP      0      5%	1/10W
R208	1-216-828-11	METAL CHIP      3.9K    5%	1/10W
R209	1-216-830-11	METAL CHIP      5.6K    5%	1/10W
R210	1-216-864-11	METAL CHIP      0      5%	1/10W
R211	1-216-809-11	METAL CHIP      100      5%	1/10W
R212	1-216-845-11	METAL CHIP      100K    5%	1/10W
R213	1-216-864-11	METAL CHIP      0      5%	1/10W
R214	1-216-864-11	METAL CHIP      0      5%	1/10W
R215	1-216-847-11	METAL CHIP      150K    5%	1/10W
R221	1-216-821-11	METAL CHIP      1K      5%	1/10W
R222	1-216-841-11	METAL CHIP      47K      5%	1/10W
R223	1-216-837-11	METAL CHIP      22K      5%	1/10W
R224	1-216-825-11	METAL CHIP      2.2K    5%	1/10W
R225	1-216-813-11	METAL CHIP      220      5%	1/10W
R226	1-216-864-11	METAL CHIP      0      5%	1/10W
R227	1-216-840-11	METAL CHIP      39K      5%	1/10W
R229	1-216-834-11	METAL CHIP      12K      5%	1/10W
R230	1-216-834-11	METAL CHIP      12K      5%	1/10W
R231	1-216-840-11	METAL CHIP      39K      5%	1/10W
R233	1-216-840-11	METAL CHIP      39K      5%	1/10W
R235	1-216-846-11	METAL CHIP      120K    5%	1/10W
R236	1-216-846-11	METAL CHIP      120K    5%	1/10W
R237	1-216-843-11	METAL CHIP      68K      5%	1/10W
R238	1-216-821-11	METAL CHIP      1K      5%	1/10W
R239	1-216-864-11	METAL CHIP      0      5%	1/10W
R240	1-216-009-11	RES-CHIP      22      5%	1/10W
R241	1-216-813-11	METAL CHIP      220      5%	1/10W
R243	1-216-864-11	METAL CHIP      0      5%	1/10W
R244	1-216-839-11	METAL CHIP      33K      5%	1/10W
R245	1-216-853-11	METAL CHIP      470K    5%	1/10W
R246	1-216-841-11	METAL CHIP      47K      5%	1/10W
R247	1-216-833-11	METAL CHIP      10K      5%	1/10W
R248	1-216-837-11	METAL CHIP      22K      5%	1/10W
R249	1-216-821-11	METAL CHIP      1K      5%	1/10W
R250	1-216-821-11	METAL CHIP      1K      5%	1/10W

Ref. No.	Part No.	Description	Remark
R251	1-216-864-11	METAL CHIP      0      5%	1/10W
R252	1-216-864-11	METAL CHIP      0      5%	1/10W
R253	1-216-833-11	METAL CHIP      10K      5%	1/10W
R254	1-216-853-11	METAL CHIP      470K    5%	1/10W
R255	1-216-853-11	METAL CHIP      470K    5%	1/10W
R256	1-216-845-11	METAL CHIP      100K    5%	1/10W
R257	1-216-841-11	METAL CHIP      47K      5%	1/10W
R258	1-216-841-11	METAL CHIP      47K      5%	1/10W
R281	1-216-817-11	METAL CHIP      470      5%	1/10W
R282	1-216-817-11	METAL CHIP      470      5%	1/10W
R298	1-216-829-11	METAL CHIP      4.7K    5%	1/10W
R299	1-216-829-11	METAL CHIP      4.7K    5%	1/10W
< VIBRATOR >			
X241	1-795-563-21	VIBRATOR, CERAMIC (16.9344MHz)	
*****			
		A-3274-733-A	SUB BOARD, COMPLETE (including S1,S2)
*****			
*****			
		MISCELLANEOUS	
*****			
7	1-776-207-41	CORD (WITH CONNECTOR) (POWER) (X937)	
7	1-776-527-82	CORD (WITH CONNECTOR) (ISO) (POWER)	(R937)
115	X-3383-857-1	MOTOR (SVX) ASSY (OPEN/CLOSE)	(including M4)
117	1-817-397-11	SOCKET, CONNECTOR 12P	
118	1-687-723-11	KEY FLEXIBLE BOARD	
122	1-687-722-11	INDICATOR FLEXIBLE BOARD	
152	1-687-801-11	FF-CABLE BOARD	
153	1-687-802-11	PIC2 FLEXIBLE BOARD	
204	A-3337-427-A	CHASSIS ASSY (including M1,M2)	
△210	A-3337-428-A	PICK-UP SUB ASSY (including OPTICAL PICK-UP)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
M1	A-3337-430-A	MOTOR (SLED) SUB ASSY (SLED)	
S4	1-762-952-11	SWITCH, PUSH (1 KEY) (LIMIT)	
*****			
		ACCESSORIES	
*****			
		1-477-833-11	COMMANDER, CARD (RM-Z303)
		3-250-920-01	COLLAR
		3-251-494-12	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,FRENCH) (X937)
		3-252-883-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,FRENCH,GERMAN,ITALIAN,DUTCH, POLISH,HUNGARIAN,CZECH,RUSSIAN) (R937)
		3-253-037-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH, FRENCH) (X937)
		3-253-037-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH, FRENCH,GERMAN,ITALIAN,DUTCH,POLISH, HUNGARIAN,CZECH,RUSSIAN) (R937)
		3-255-074-01	LID, BATTERY CASE (for RM-Z303)
		X-3383-367-1	CASE ASSY (for FRONT PANEL)
*****			

<p>The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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Ref. No.	Part No.	Description	Remark
PARTS FOR INSTALLATION AND CONNECTIONS			
*****			
251	3-250-171-01	FRAME, FITTING	
252	3-251-083-01	HOLDER, REAR	
253	X-3383-233-2	SCREW ASSY (A)	
254	3-251-080-01	KEY, FRAME	

