CDX-1300/3800/3900

SERVICE MANUAL

US Model
Canadian Model
CDX-1300
E Model
CDX-3800/3900

Photo: CDX-3900

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	CDX-1150, CDX-3700
CD Drive Mechanism Type	MG-310-153

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US, Canadian model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
18 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

Other Specifications

CD player section

System	Compact disc digital audio system
Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Laser Diode Properties (US, Canadian model)	
Material	GaAs + GaAlAs
Wavelength	785 – 815 nm (Typ. 800 nm)
Emission Duration	Continuous
Laser output power	Less than 0.5 mW*

* *This output is the value measured at a distance of 0.7 mm from the objective lens surface on the Optical Pick-up Block.*

Tuner section

FM

Tuning range	
US, Canadian model:	87.5 – 107.9 MHz
E model:	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	
	0.7% (stereo), 0.5% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM

Tuning range	
US, Canadian model:	530 – 1,710 kHz
E model:	AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	45 W × 4 (at 4 ohms)

– Continued on next page –

FM/AM COMPACT DISC PLAYER

MICROFILM

SONY®

General

Outputs	Audio output Power amplifier control lead Power antenna relay control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 178 mm (7 1/8 × 2 × 7 1/8 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 162 mm (7 1/4 × 2 1/8 × 6 1/2 in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Card remote commander RM-X49 (CDX-3900)

Design and specifications are subject to change without notice.

SERVICE NOTE

CAUTION

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

Notes on Chip Component Replacement

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

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

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

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

TABLE OF CONTENTS

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ 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.

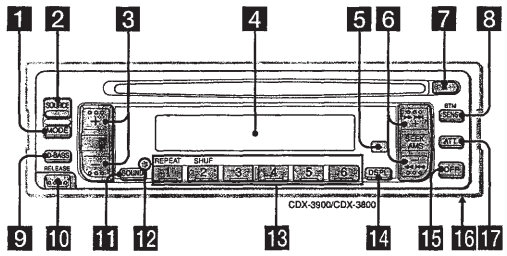
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ 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.

SECTION 1
GENERAL

This section is extracted from CDX-3800/3900's instruction manual.

Location of controls

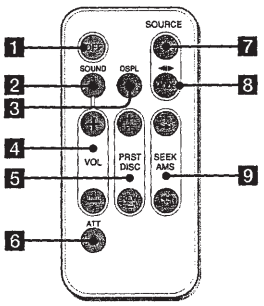


Refer to the pages for details.

1 MODE (band select) button 8, 9
2 SOURCE (source select) button 7, 8, 9
3 ⊕ ⊖ (volume/bass/treble/left-right/front-rear control) buttons 7, 10
4 Display window
5 Sensor for the card remote commander (CDX-3900 only)
6 SEEK/AMS (seek/Automatic Music Sensor/manual search) control 8, 9
7 ⏏ (eject) button 7
8 SENS/BTM (sensitivity adjust/Best Tuning Memory) button 8, 9
9 D-BASS button 10
10 RELEASE (front panel release) button 6, 11
11 SOUND button 7, 10
12 Reset button (located on the front side of the unit hidden by the front panel) 6
13 During radio reception:
Number buttons 9
During CD playback:
① REPEAT button 8
② SHUF button 8
14 DSPL (display mode change/time set) button 7, 9
15 OFF button* 6, 7
16 Frequency select switch (located on the bottom of the unit)
See "Frequency select switch" in the Installation/Connections manual.
17 ATT (attenuate) button 10

***Warning when installing in a car without ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.
When you press (OFF) momentarily, the clock display does not turn off and this causes battery wear.

Card remote commander RM-X49 (CDX-3900 only)

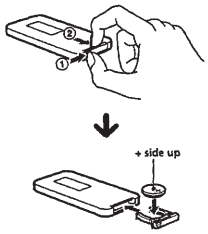


The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 OFF button
2 SOUND button
3 DSPL button
4 VOL (volume/bass/treble/left-right/front-rear control) button
5 PRST/DISC button
6 ATT button
7 SOURCE button
8 MODE button
9 SEEK/AMS button

Replacing the lithium battery

When the battery becomes weak, the range of the card remote commander becomes shorter. Replace the battery with a new CR2025 lithium battery.



Notes on lithium battery

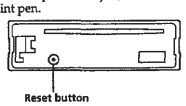
- Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.
- Wipe the battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

WARNING
The battery may explode if mistreated.
Do not recharge, disassemble, or dispose of in fire.

Getting Started

Resetting the unit

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



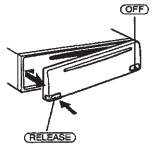
Notes
- *Pressing the reset button will erase the clock setting and some memorised functions.*
- *When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. If you insert a disc within these 10 seconds, the unit will not be reset, and you will have to press the reset button again.*

Detaching the front panel

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

1 Press (OFF).

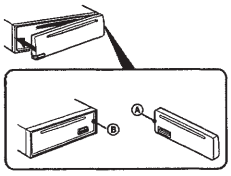
2 Press (RELEASE), then slide the front panel a little to the left, and pull it off towards you.



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

Attaching the front panel

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



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

Caution alarm

If you turn the car ignition off without removing the front panel, the caution alarm will beep for a few seconds.
If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

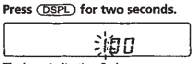
Setting the clock

The clock has a 12-hour digital indication.

Example: To set the clock to 10:08

1 Press (DSPL) during operation.

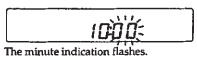
2 Press (DSPL) for two seconds.



The hour indication flashes.

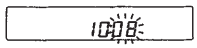
❶ Set the hour.

❷ Press (SOUND).

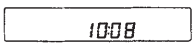


The minute indication flashes.

❸ Set the minute.



3 Press (DSPL).



The clock is starts.

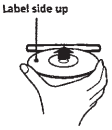
Note
If the car has no accessory position on the ignition key switch, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio, or started CD playback.

CD Player

Listening to a CD

Insert a CD.
Playback starts automatically.

Label side up



If a CD is already inserted, press (SOURCE) repeatedly until "CD" appears to start playback.

Elapsed playing time

Note
To play back an 8 cm CD, use the optional Sony compact disc single adapter (CSA-8).

To	Press
Stop playback	⏏ or (OFF)
Eject the CD	⏏

Changing the display item

Each time you press (DSPL) during CD playback, the item changes as follows:

Elapsed playing time → Track number → Clock

Locating a specific track
— Automatic Music Sensor (AMS)

During playback, press either side of (SEEK/AMS) for each track you want to skip.

To locate succeeding tracks

To locate preceding tracks

Locating a specific point in a track
— Manual Search

During playback, press and hold either side of (SEEK/AMS) for about two seconds. Release when you have found the desired point.

To search forward

To search backward

Note
If "└ └ └ └" or "┐ ┐ ┐ ┐" appears in the display, you have reached the beginning or the end of the disc and you cannot go any further.

Playing a CD in various modes

Playing tracks repeatedly
— Repeat Play

Press (1) during playback.
"REPEAT" appears in the display.

When the current track is over, it will play again from the beginning.

To return to normal mode, press again.

Playing tracks in random order
— Shuffle Play

Press (2) during playback.
"SHUF" appears in the display.

To return to normal mode, press again.

Radio

Memorising stations automatically
— Best Tuning Memory (BTM)

This unit selects the stations with the strongest signals and memorises them in the order of their frequencies. You can store up to 6 stations on each band (FM I, FM II, FM III, and AM).

Caution
When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

1 Press (SOURCE) repeatedly to select the tuner.
Each time you press (SOURCE), the mode changes as follows:
CD ⟷ TUNER

2 Press (MODE) repeatedly to select the band.
Each time you press (MODE), the band changes as follows:

→ FM I → FM II → FM III → AM →

3 Press (SENS/BTM) for two seconds.
The unit stores stations in the order of their frequencies on the number buttons.
A beep sounds when the setting is stored.

Notes
- *The unit does not store stations with weak signals. If only a few stations can be received, some number buttons will retain their former setting.*
- *When a number is indicated in the display, the unit starts storing stations from the one currently displayed.*
- *If a CD is not in the unit, only the tuner band appears even if you press (SOURCE).*

Memorising only the desired stations

You can store up to 6 stations on each band (a total of 18 for FM I, FM II, and FM III, and 6 for AM) in the order of your choice.

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band.

3 Press and hold either side of (SEEK/AMS) to tune in the station that you want to store on the number button.

4 Press and hold the desired number button ((1) to (6)) until "MEM" appears.
The number button indication appears in the display.

Note
If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorised stations

1 Press (SOURCE) repeatedly to select the tuner.

2 Press (MODE) repeatedly to select the band.

3 Press the number button ((1) to (6)) on which the desired station is stored.

If you cannot tune in a preset station

Press either side of (SEEK/AMS) to search for the station (automatic tuning).
Scanning stops when the unit receives a station. Press either side of (SEEK/AMS) repeatedly until the desired station is received.

Note
If the automatic tuning stops too frequently, press (SENS/BTM) repeatedly until "LOCAL" (local seek mode) is displayed. Only the stations with relatively strong signals will be tuned in.

Tip
If you know the frequency of the station you want to listen to, press and hold either side of (SEEK/AMS) until the desired frequency appears (manual tuning).

If FM stereo reception is poor
— Monaural Mode

Press (SENS/BTM) repeatedly until "MONO" appears.
The sound improves, but becomes monaural ("STEREO" disappears).

To return to normal mode, press again until "MONO" disappears.

Changing the display item
Each time you press (DSPL), the item changes as follows:
Frequency ⟷ Clock

Other Functions

Adjusting the sound characteristics

You can adjust the bass, treble, balance, and fader. You can store the bass and treble levels. Each source can store the bass and treble levels independently.

1 Select the item you want to adjust by pressing (SOUND) repeatedly.
BAS (bass) → TRE (treble) →
BALANCE (left-right) →
FADER (front-rear) → VOL (volume)

2 Adjust the selected item by pressing (+) or (−).
Adjust within three seconds after selecting the item. (After three seconds, the buttons function reverts to volume control.)

Cancel the beep sound

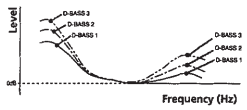
Press (6) while pressing (SOUND).

To obtain the beep sound again, press these buttons again.

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

Boosting the bass sound
— D-bass

You can enjoy a clear and powerful bass sound. The D-bass function boosts the low frequency and high frequency signal with a sharper curve than conventional bass boost. You can hear the bass line more clearly even while the vocal volume remains the same. You can emphasize and adjust the bass sound easily with the D-BASS control.



Adjusting the bass curve

Press (D-BASS) repeatedly to select the desired bass curve.
"D-BASS" appears in the display.
As the D-BASS number increases so does the effect.

D-BASS 1 → D-BASS 2 → D-BASS 3 →
D-BASS OFF

Note
The bass sound may distort at same volume. If the bass sound distorts, select less effective bass curve.

Attenuating the sound

Press (ATT).
"ATT" flashes.

To restore the previous volume level, press (ATT) again.

Connections

Caution

- This unit is designed for negative earth 12 V DC operation only.
- Before making connections, disconnect the earth terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all earth wires to a common earth point.**
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in series with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual component's fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turned off the engine.
When you press (OFF) momentarily, the clock display does not turn off and this causes battery wear.

Frequency select switch

The AM (FM) tuning interval is factory-set to the 9K (50k) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.

Reset button

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

Conexiones

Precauciones

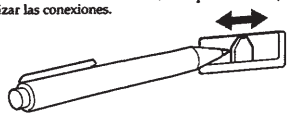
- Esta unidad ha sido diseñada para alimentarse solamente con 12 V CC, negativo a masa.
- Antes de realizar las conexiones, desconecte el terminal de puesta a masa de la batería del automóvil a fin de evitar cortocircuitos.
- Conecte los cables conectores de alimentación **amarrillo** y **rojo** solamente después de haber conectado los demás.
- Cerciórese de conectar el cable conector de alimentación rojo a un terminal de 12 V positivo que se energice al poner la llave de encendido en la posición para accesorios.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el cable amarillo a un circuito libre del automóvil que tenga una capacidad superior a la del fusible de la unidad. Si conecta esta unidad en serie con otros componentes estereofónicos, el circuito del automóvil al que se encuentran conectados debe tener una capacidad superior a la de la suma de las capacidades de los fusibles de cada componente. Si ningún circuito del automóvil tiene una capacidad tan alta como la del fusible de la unidad, conecte ésta directamente a la batería. Si el automóvil no dispone de ningún circuito para conectar esta unidad, conéctela a un circuito del automóvil con capacidad superior a la del fusible de la unidad, de forma que si se funde el fusible de ésta, no se interrumpa ningún otro circuito.

Advertencia sobre la instalación en un automóvil que no disponga de posición ACC (accesorios) en el interruptor de la llave de encendido

Asegúrese de pulsar (OFF) en la unidad durante dos segundos para desactivar la indicación del reloj una vez apagado el motor.
Si pulsa (OFF) momentáneamente, la indicación del reloj no se desactivará y esto causará el desgaste de la batería.

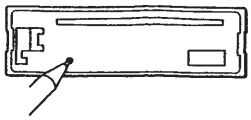
Selector de frecuencia

El intervalo de sintonía de AM (FM) ha sido ajustado en fábrica a la posición 9K (50K). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10 kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10K (200K) antes de realizar las conexiones.



Botón de restauración

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



連接

注意

- 本機專用於負接地 12 V DC 電源操作為限。
- 連接以前，先拆開汽車電池的接地線以防發生短路。
- 紅色和黃色電源輸入導線必須等所有電線都連接完畢以後才連接。
- 紅色電線輸入導線請連接到汽車發動機點火鑰匙被轉在輔助位置時才通電狀態的正 12 V 電源端子。
- 將所有接地線都接到普通接地點上。
- 將黃色導線連接到額定容量大於機器保險絲容量的未使用的汽車電路線上。如果把本機串連在連接有其他汽車立體聲組成機的汽車電路線上時，則須確認各組成音響系統的保險絲容量總和是否仍小於所連接的汽車電路的容量。如果沒有和機器保險絲的額定容量等值的汽車電路線，請把機器直接連接到汽車電池上。如果沒有適當的汽車電路線可用於連接本機，可將機器連接到大於機器保險絲容量的汽車電路線上。此時，須注意萬一機器燒斷了保險絲也沒有切斷別的使用電路的顧慮才好。

當在點火鑰匙開關沒具輔助位置的汽車里按裝時的警告

請確認在關閉發動機後按壓(OFF)鍵兩秒鐘以關閉時鐘顯示。
當您短暫按壓(OFF)鍵，時鐘顯示將不能關閉並且將引起電池消耗。

頻率選擇開關

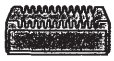
AM (FM) 調諧間隔的工廠設定是在 9K (50K) 位置，如果貴國的頻率分配系統是用 10 kHz (200 kHz) 間隔，請在連接機器之前即將機器底面上的切換開關設定於 10 K (200 K) 的位置。

復位鍵

安裝和連接完畢時，一定要用一支圓珠筆等尖頭工具按下重調按鈕。

Connection diagram / Diagrama de conexiones / 連接圖

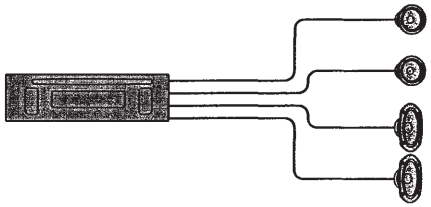
Equipment used in illustrations (not supplied)
Equipo utilizado en las ilustraciones (no suministrado)
插圖中的器材（無附帶）


Power amplifier
Amplificador de potencia
功率放大器

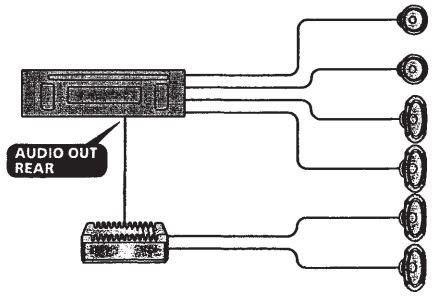

Front speaker
Altavoces delantero
前揚聲器


Rear speaker
Altavoces trasero
後揚聲器

I



II

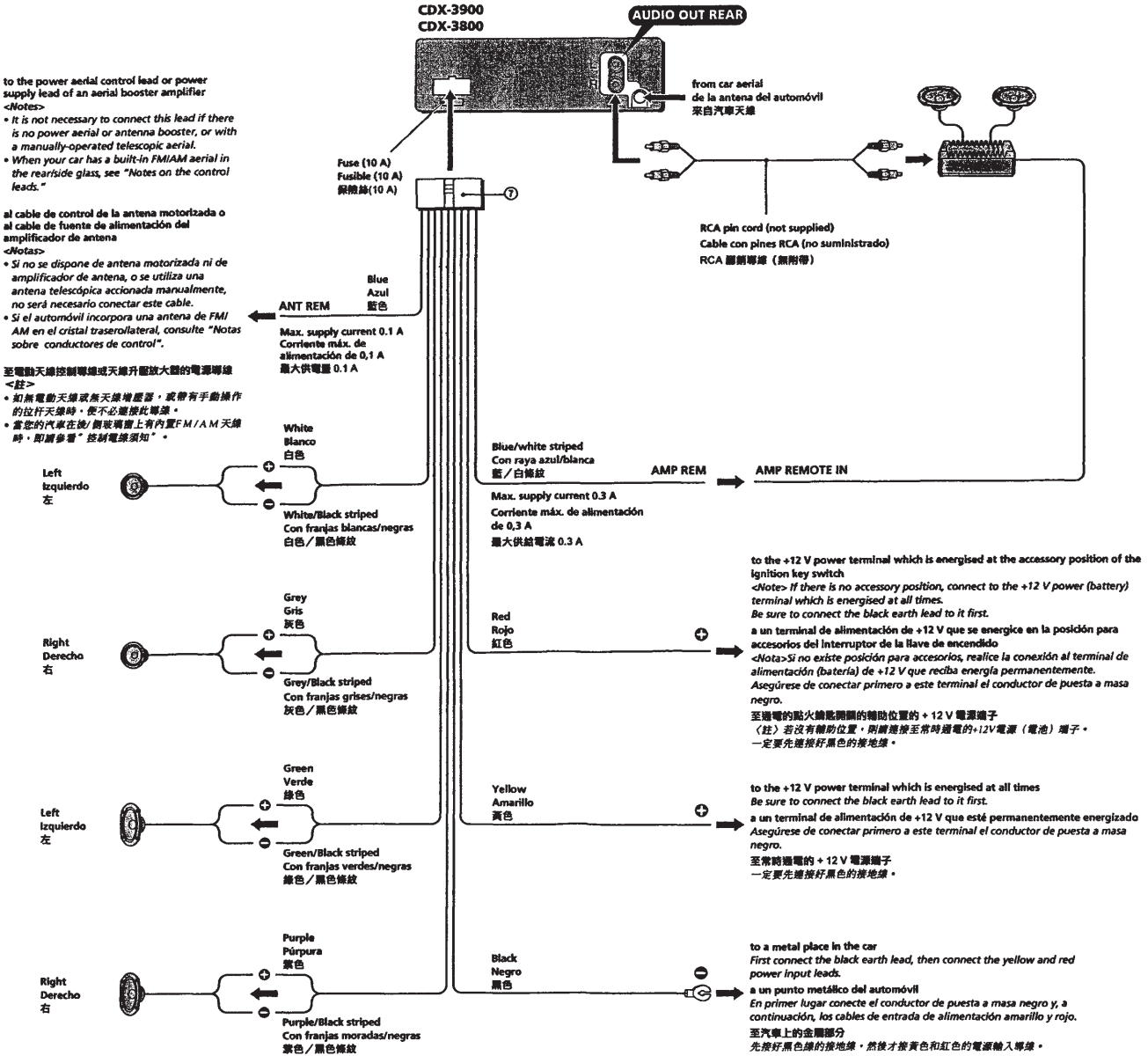


Notes
- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

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

註
- *務必在接放大器之前連接地線。*
- *如果您連接了選購件的功率放大器而不使用內裝的放大器，將無嗶聲功能。*

Connection example
Ejemplo de conexiones
連接舉例



Notes on the control leads
- *The ANT REM lead (blue) supplies +12 V DC when you turn on the unit.*
- *When your car has a built-in FM/AM aerial in the rear/side glass, it is necessary to connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

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

Notas sobre conductores de control
- *El conductor ANT REM (azul) suministra +12 V CC cuando conecte la alimentación de la unidad.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal traserolateral, será necesario conectar el cable de control de antena motorizada (azul) o el cable auxiliar de entrada de alimentación (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener información detallada, consulte a su proveedor.*
- *Con esta unidad no podrá emplearse una antena motorizada desprovista de caja de relé.*

Conexión para protección de la memoria
Si conecta el conductor de entrada de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque sitúe la llave de encendido en la posición de desactivacion.

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

控制電線須知
- *當打開機器電源時，ANT REM 電線（藍色）將供給 + 12 V DC 電流。*
- *當您的汽車在後/側玻璃窗上有內置FM/AM天線時，即請把電動天線控制導線（藍色）或附屬電源輸入導線（紅色）連接到現有的天線增壓器的電源端子上。詳細內容，請洽詢經銷商。*
- *不帶繼電器的電動天線是不能用於本機的。*

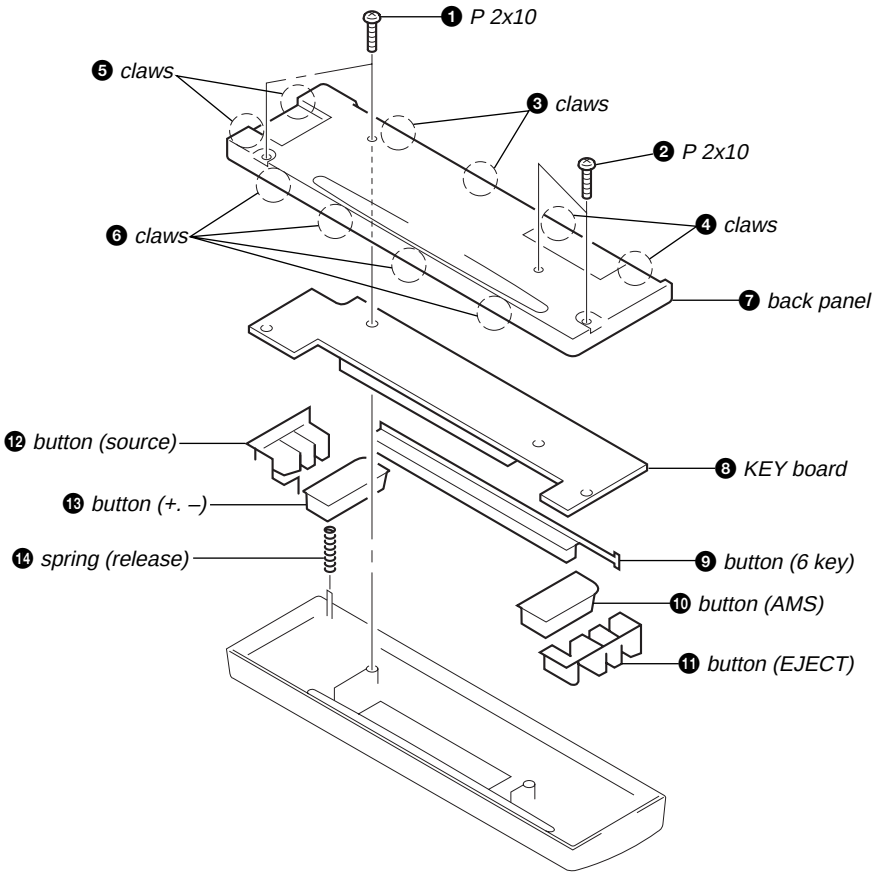
保持存儲的旗線
常連接著黃色電源輸入電線時，則即使關掉了點火鑰匙開關，仍可保持經常供給存儲電路的電源。

連接揚聲器須知
- *要連接揚聲器時，必須先關掉機器電源。*
- *請使用阻抗 4 到 8 歐和適當的功率使用容量的揚聲器。否則，揚聲器可能會被損壞。*
- *別將揚聲器系統的端子連接到汽車底盤，也不要把右揚聲器的端子連接左揚聲器的端子。*
- *不可試圖並連揚聲器。*
- *別將任何有源揚聲器（內裝有放大器的）連接到機器的揚聲器端子。那樣作了會損壞有源揚聲器的。請注意在這些端子上一定只能連接無源揚聲器使用。*

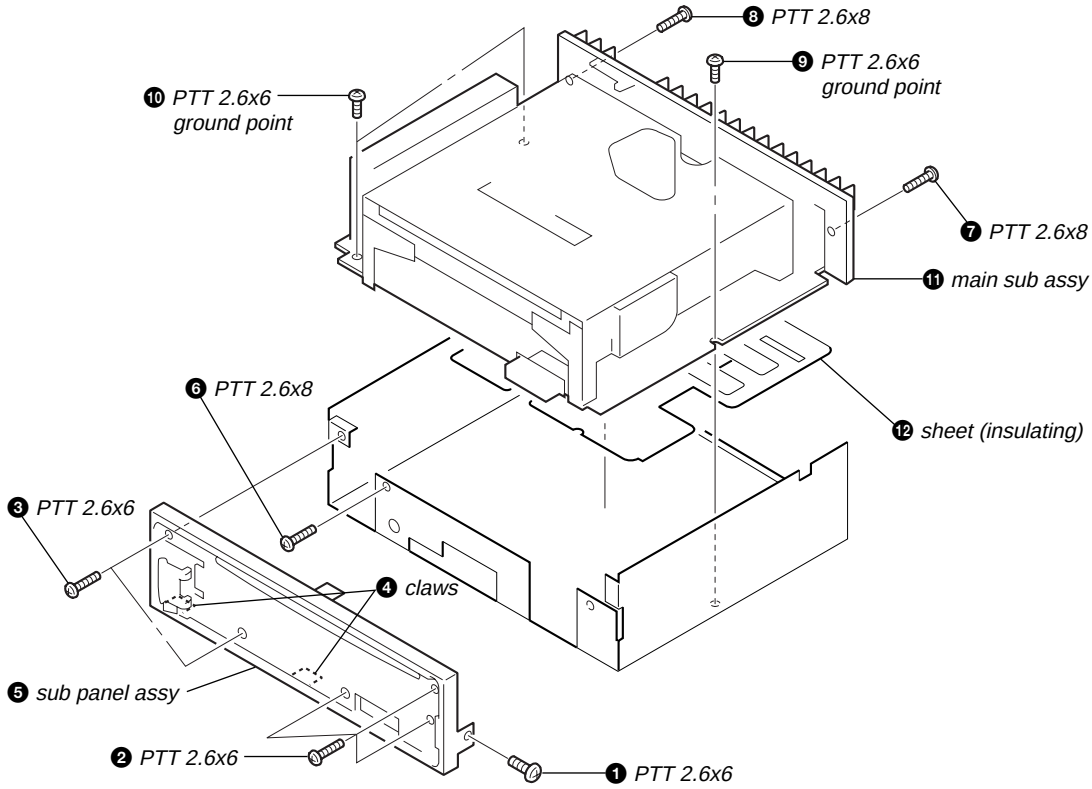
SECTION 2
DISASSEMBLY

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

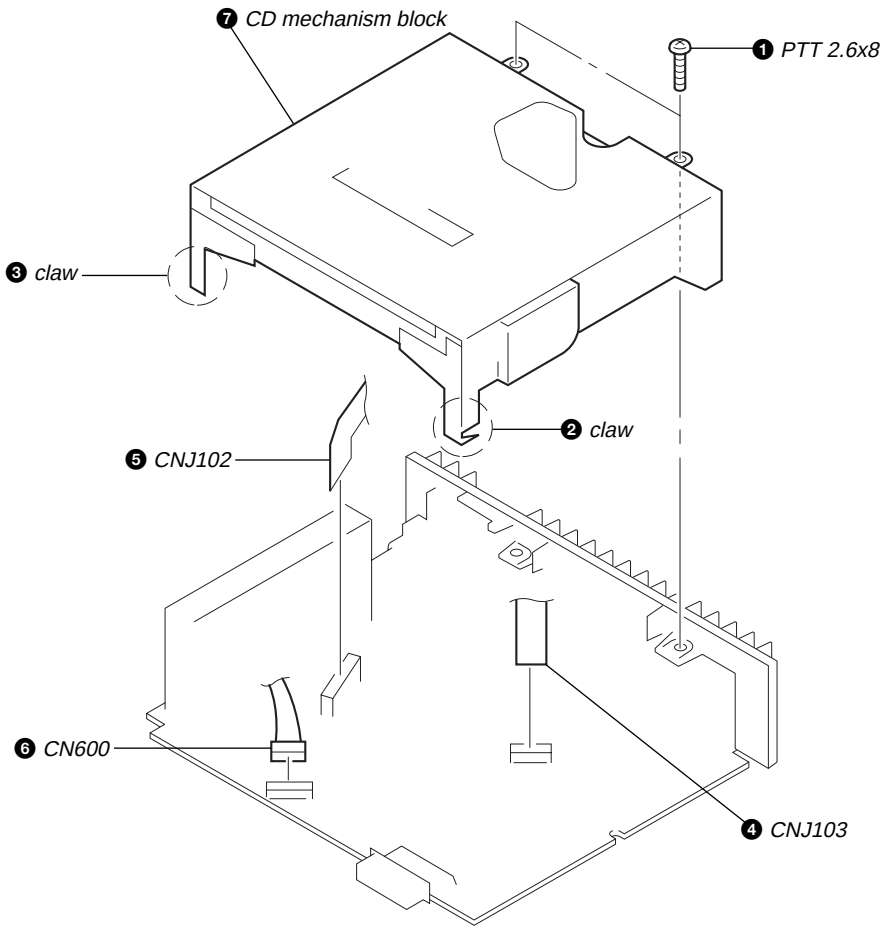
2-1. KEY BOARD



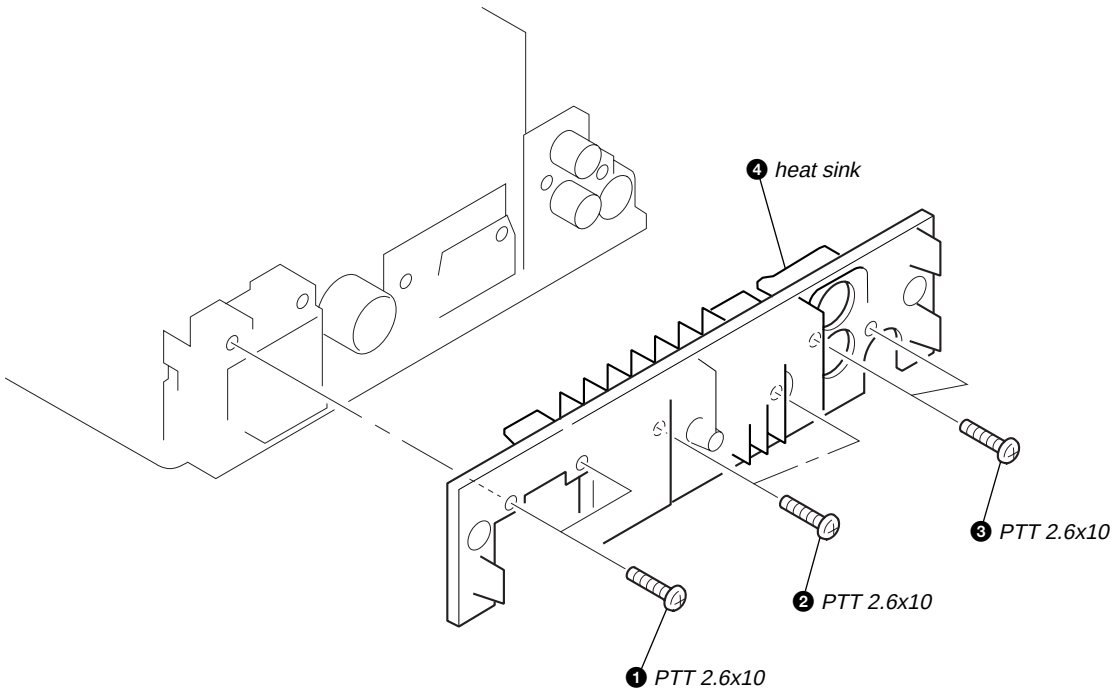
2-2. MAIN SUB ASSY



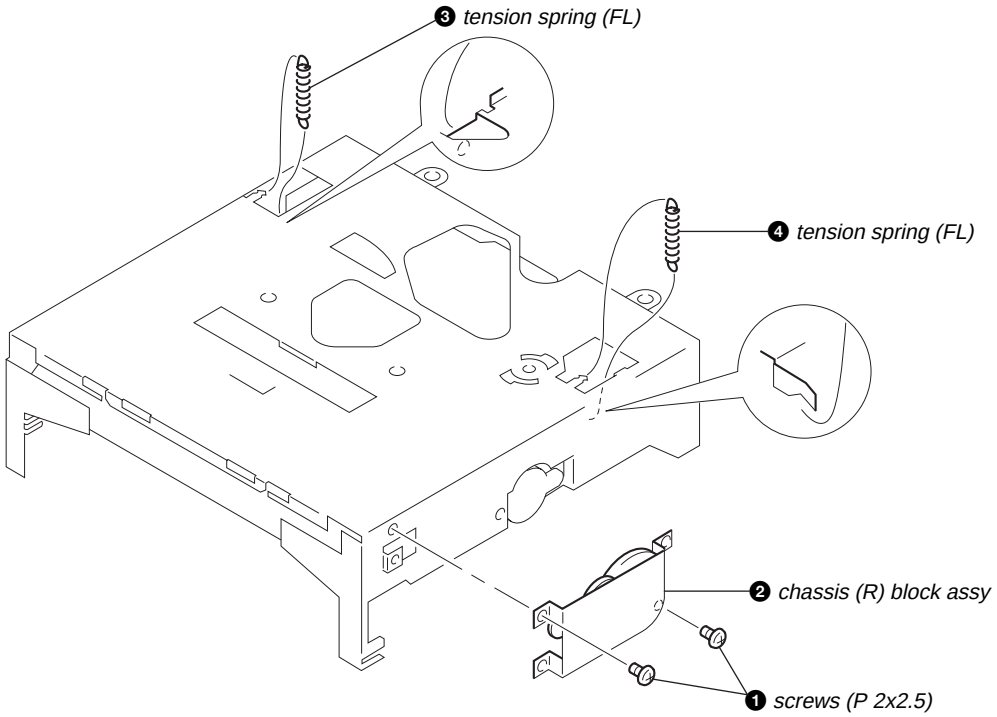
2-3. CD MECHANISM BLOCK



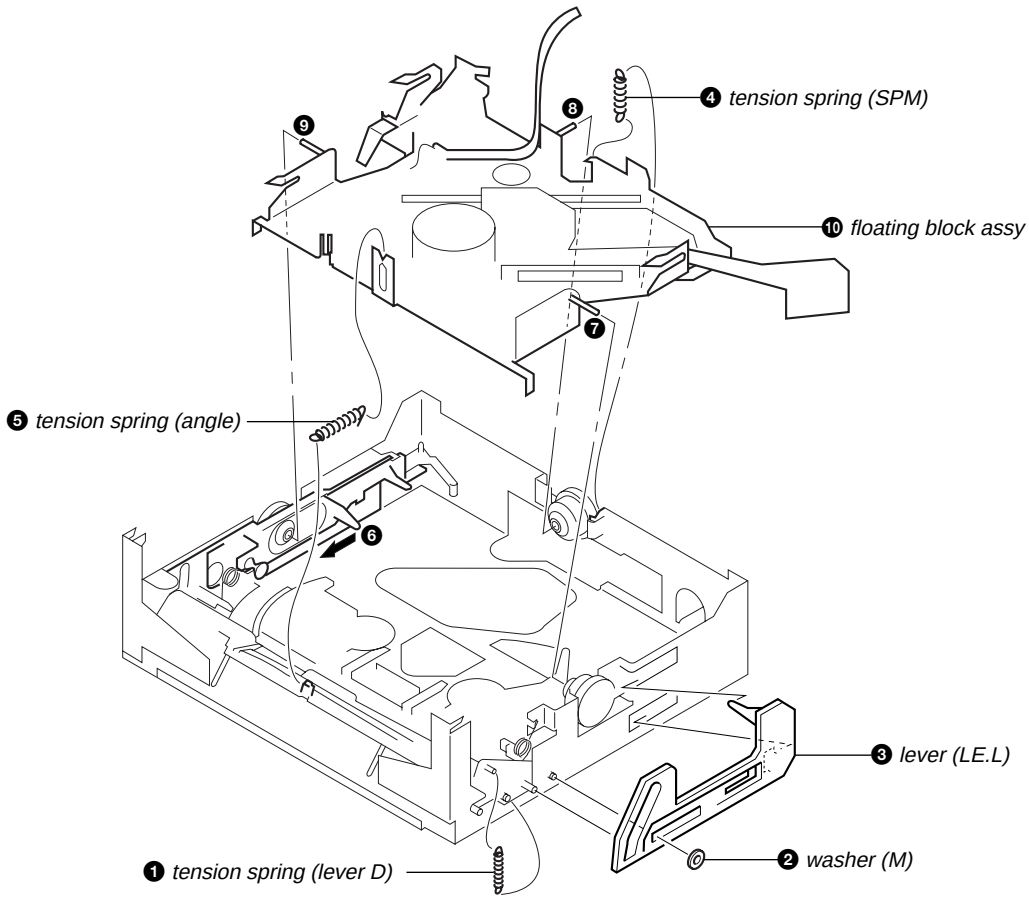
2-4. HEAT SINK



2-5. CHASSIS (R) BLOCK ASSY

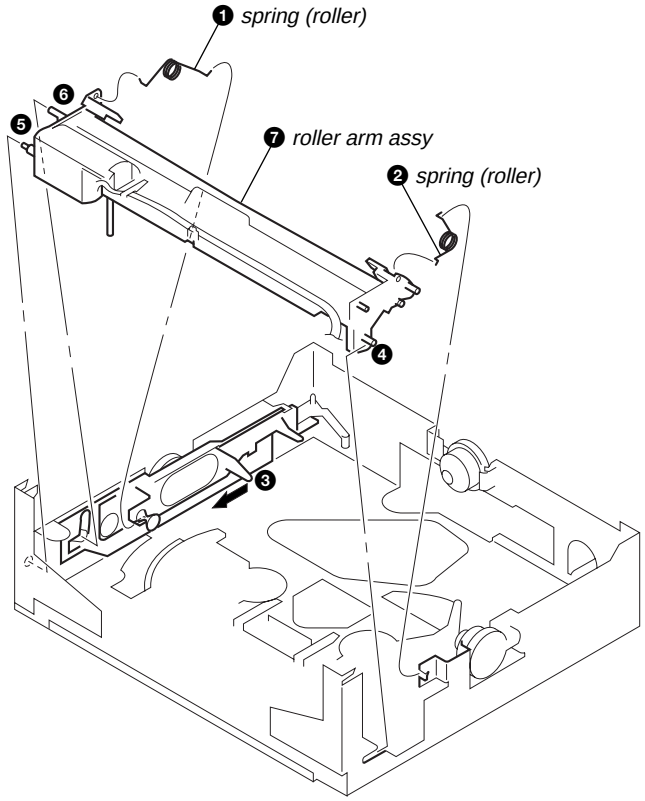


2-6. FLOATING BLOCK ASSY

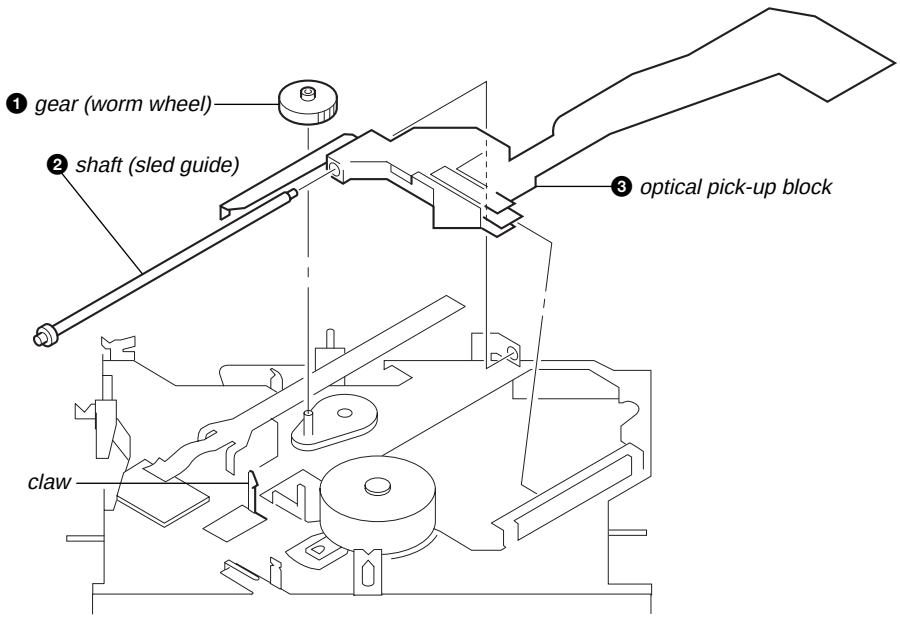


2-7. ROLLER ARM ASSY

Note : When replacing the spring roller, replace the rollers at the right and left ends at the same time.



2-8. OPTICAL PICK-UP BLOCK



SECTION 3
DIAGRAMS

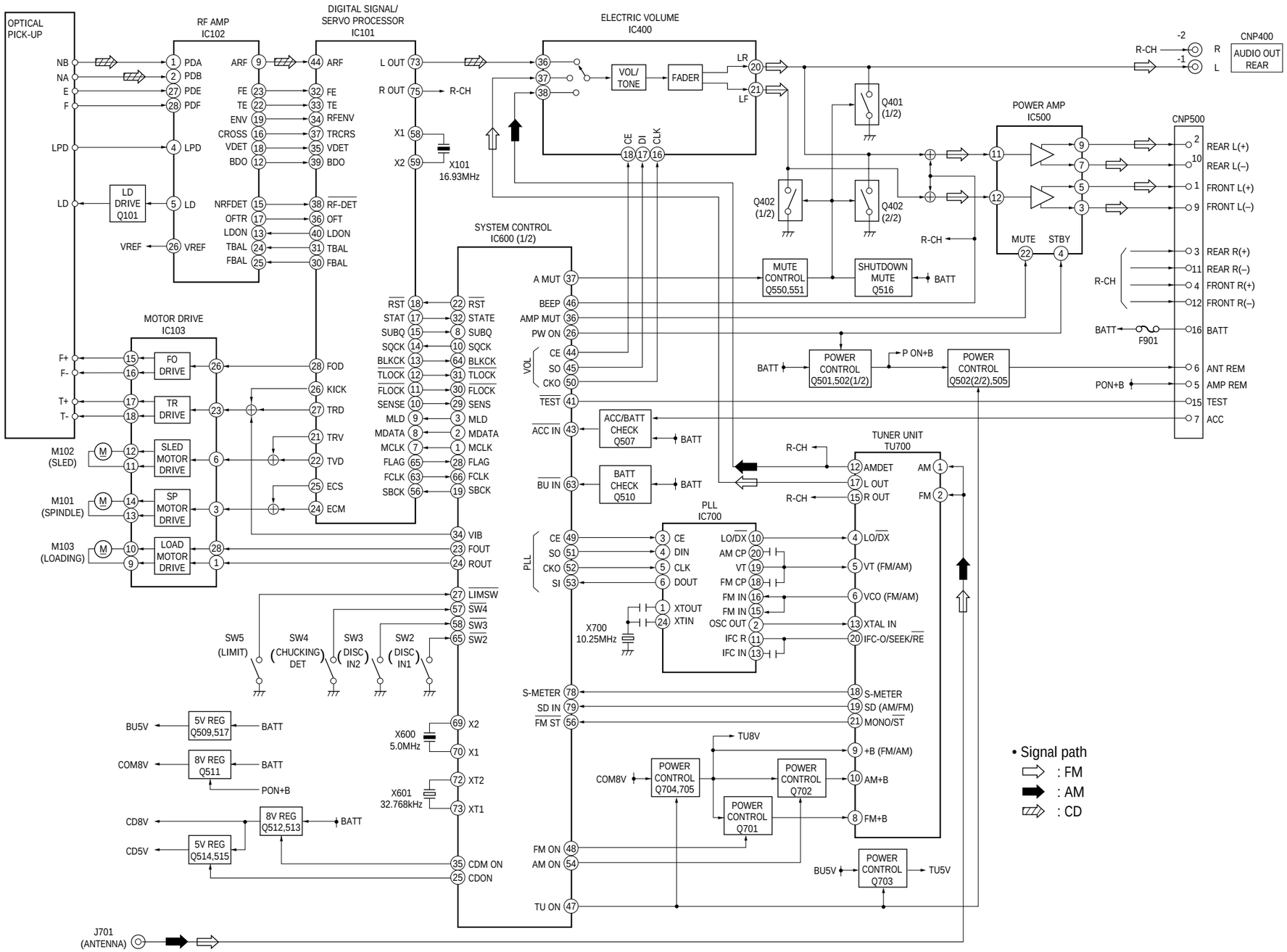
3-1. IC PIN DESCRIPTION

• IC600 µPD78005GC-133-8BT (SYSTEM CONTROL)

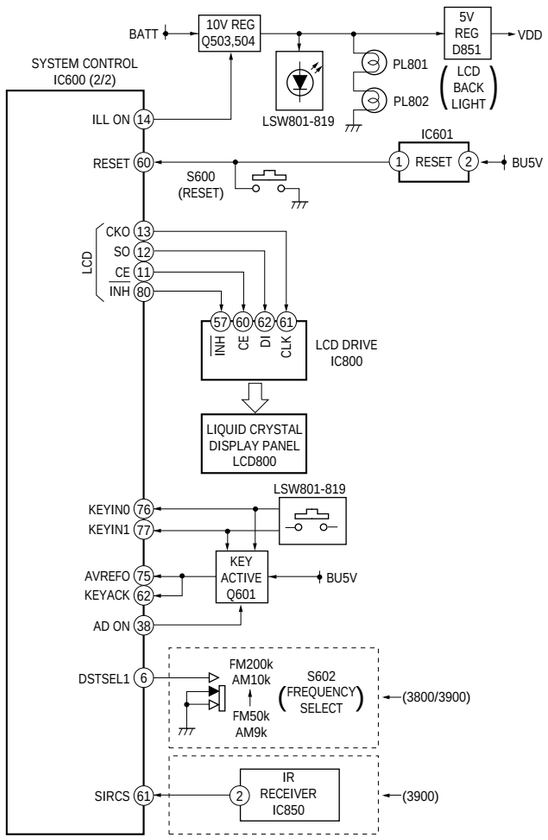
Pin No.	Pin Name	I/O	Pin Description
1	MCLK	O	Microcomputer command clock signal output (data latch on rising)
2	MDATA	O	Microcomputer command data signal output
3	MLD	O	Microcomputer command load signal output
4	AVSS	—	Analog ground
5	DSTSEL0	I	Destination select setting input (Connect to ground in this set.)
6	DSTSEL1	I	9k/10k select setting input (“L”: 9 kHz step, “H”: 10 kHz step)
7	AVREF1	I	Analog reference voltage input
8	SUBQ	I	Sub code Q data input
9	—	—	Not used.
10	SQCK	O	Clock output for sub code Q register.
11	LCDCE	O	LCD driver serial chip enable output
12	LCDSO	O	LCD driver serial data output
13	LCDCKO	O	LCD driver serial clock output
14	ILLON	O	Illumination power control output
15	UNICKI	I	SONY-BUS serial interface clock input
16	UNISI	I	SONY-BUS serial interface data input
17	UNISO	O	SONY-BUS serial interface data output
18	UNICKO	O	SONY-BUS serial interface clock output
19	SBCK	O	Clock output for error correction result read-in.
20	$\overline{\text{BUSON}}$	O	BUS ON control output
21	$\overline{\text{SYS RST}}$	O	System reset control output
22	$\overline{\text{RST}}$	O	DSP reset signal output (“L” active)
23	FOUT	O	Loading motor control output (Forward direction)
24	ROUT	O	Loading motor control output (Reverse direction)
25	CD-ON	O	CD power control output
26	PW-ON	O	System power control output
27	$\overline{\text{LIMSW}}$	I	LIMIT switch input (“L” active)
28	FLAG	I	Data input for error correction result read-in.
29	SENS	I	SENS signal input
30	$\overline{\text{FLOCK}}$	I	Focus servo pulling signal input (“L” active)
31	$\overline{\text{TLOCK}}$	I	Tracking servo pulling signal input (“L” active)
32	STATE	I	Status signal input
33	VSS1	—	Ground
34	VIB.	I/O	Vibration lens input/output
35	CDM-ON	O	CD machanism power control output
36	AMPMUT	O	Power amplifier mute control output
37	A-MUT	O	Audio mute control output
38	$\overline{\text{AD-ON}}$	O	Power control output for A/D conversion.
39	$\overline{\text{PW-SEL}}$	O	Not used in this set.
40	$\overline{\text{NOSESW}}$	I	Front panel attachment detection input
41	$\overline{\text{TEST}}$	I	Test mode direct setting input
42	$\overline{\text{TELMUT}}$	O	Not used in this set.
43	$\overline{\text{ACCIN}}$	I	Accessory power supply voltage detection input
44	VOLCE	O	Electric volume serial chip enable output
45	VOLSO	O	Electric volume serial data output
46	BEEP	O	Beep output
47	TUNON	O	Tuner ON output
48	FMON	O	FM ON output
49	PLLCE	O	PLL chip enable output
50	VOLCKO	O	Electric volume serial clock output
51	PLLSO	O	PLL data output
52	PLLCKO	O	PLL clock output
53	PLLSI	I	PLL data input
54	AMON	O	AM ON output
55	—	—	Not used in this set.
56	$\overline{\text{FMST}}$	I/O	ST-IND indication input/Forced Monaural output
57	$\overline{\text{SW4}}$	I	Switch 4 input (“L” active)
58	$\overline{\text{SW3}}$	I	Switch 3 input (“L” active)
59	$\overline{\text{SW1}}$	I	Switch 1 input (“L” active)
60	$\overline{\text{RESET}}$	I	System reset input
61	SIRCS	I	Remote commander input
62	KEYACK	I	Key input acknowledge
63	$\overline{\text{BUIN}}$	I	Backup power supply detection input
64	BLKCK	I	Sub code block clock signal input (interruption)
65	$\overline{\text{SW2}}$	I	Switch 2 input (“L” active)
66	FCLK	I	Latch input for error correction result read-in. (interruption)
67	VSS0	—	Ground
68	VDD1	—	Power supply pin (+5 V)
69	X2	—	Main system clock output (5 MHz)
70	X1	—	Main system clock input (5 MHz)
71	VPP	—	Internal connection
72	XT2	—	Sub system clock output (32.768 kHz)
73	XT1	—	Sub system clock input (32.768 kHz)
74	VDD0	—	Power supply pin (+5 V)
75	AVREF0	—	Analog reference voltage input
76	KEYIN0	I	Key input 0
77	KEYIN1	I	Key input 1
78	S-METER	I	AM/FM S-meter voltage detection input
79	SD-IN	I	Signal detector input
80	$\overline{\text{LCDINH}}$	O	LCD blank indication control output

11

3-2. BLOCK DIAGRAM — MAIN SECTION —



3-3. BLOCK DIAGRAM — DISPLAY SECTION —



04

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 diagrams

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

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

- B+ : 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 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM
  - ⇨ : CD

For printed wiring boards

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

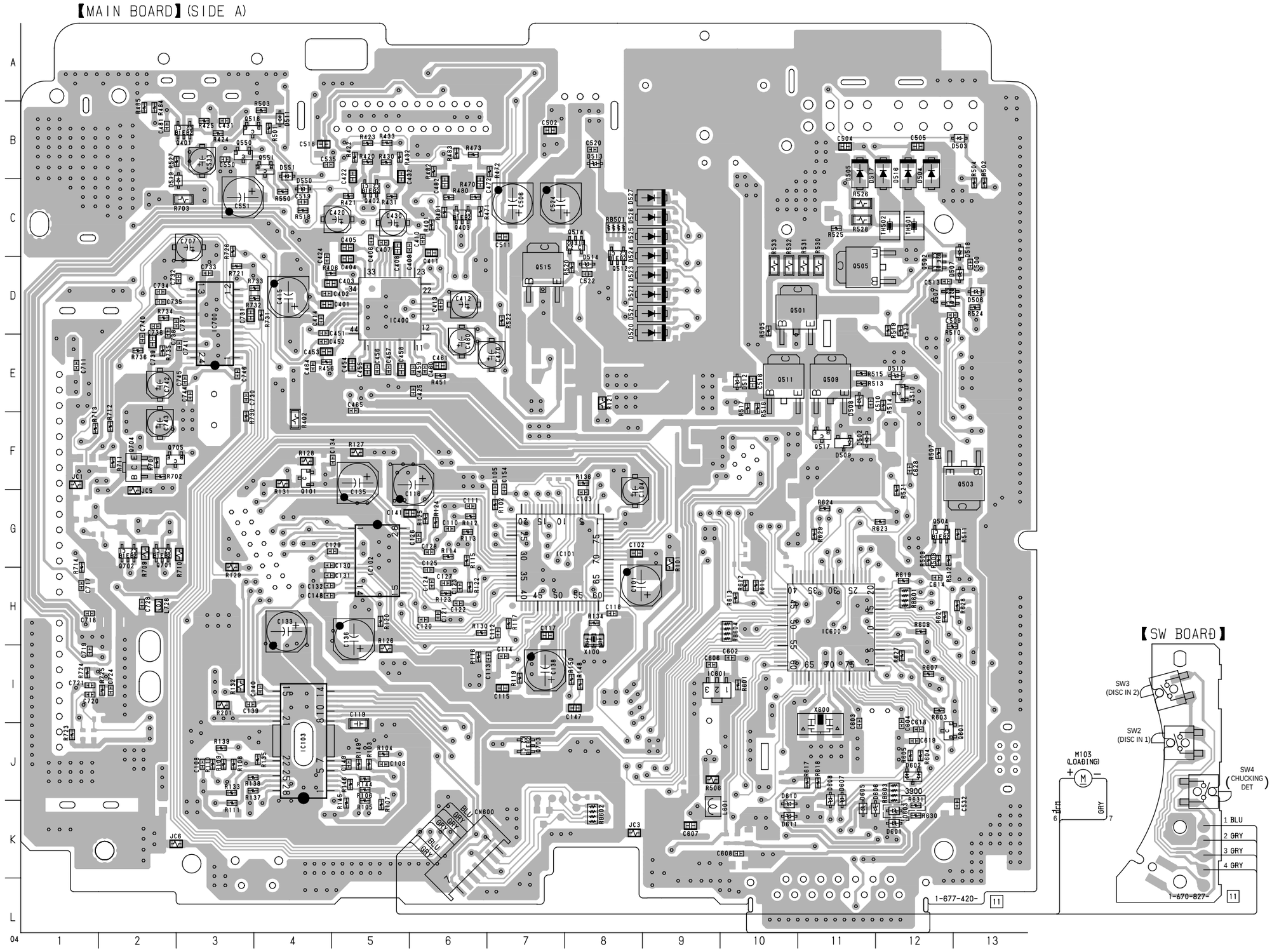
Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

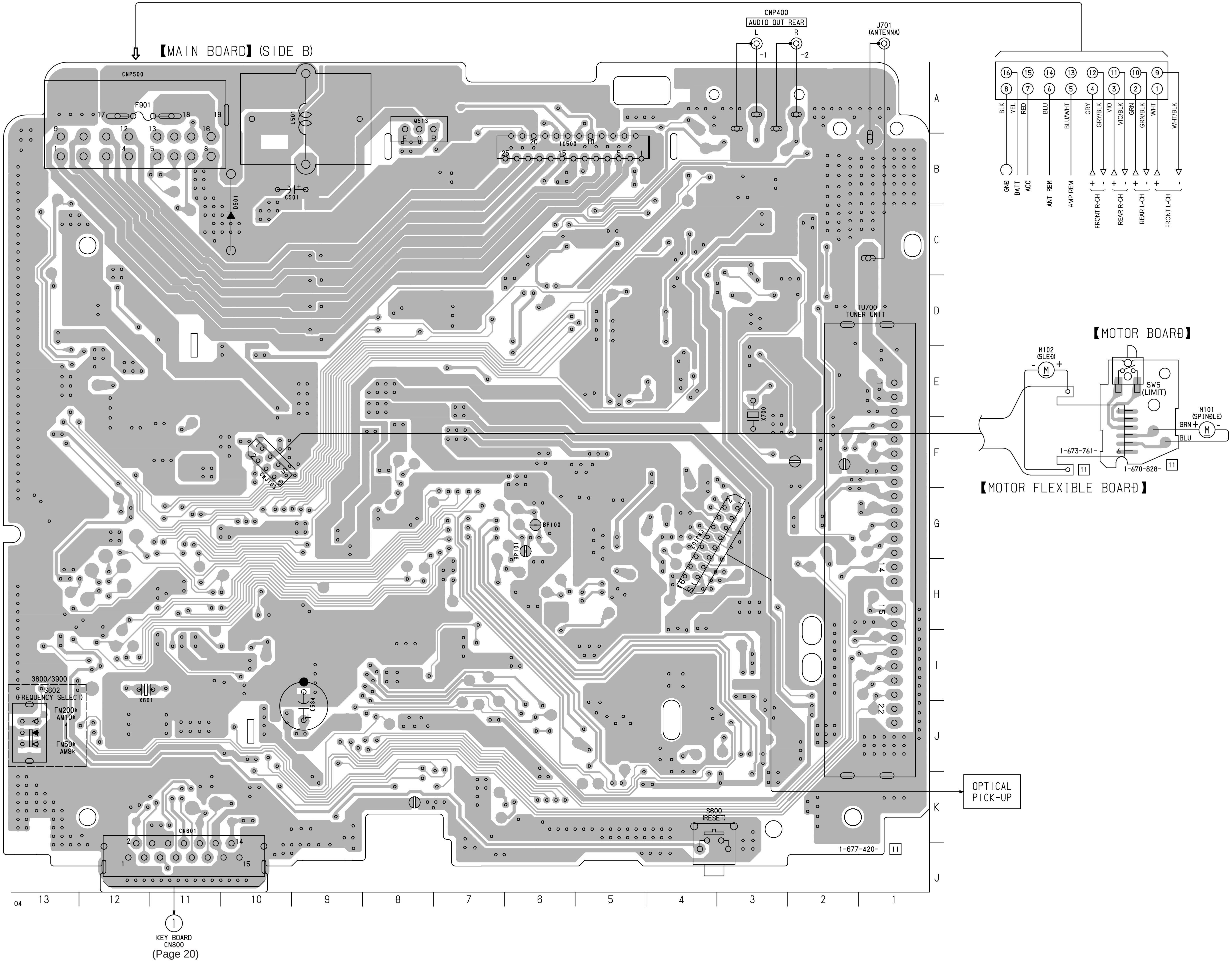
3-4. PRINTED WIRING BOARDS — MAIN SECTION —

• **Semiconductor Location**

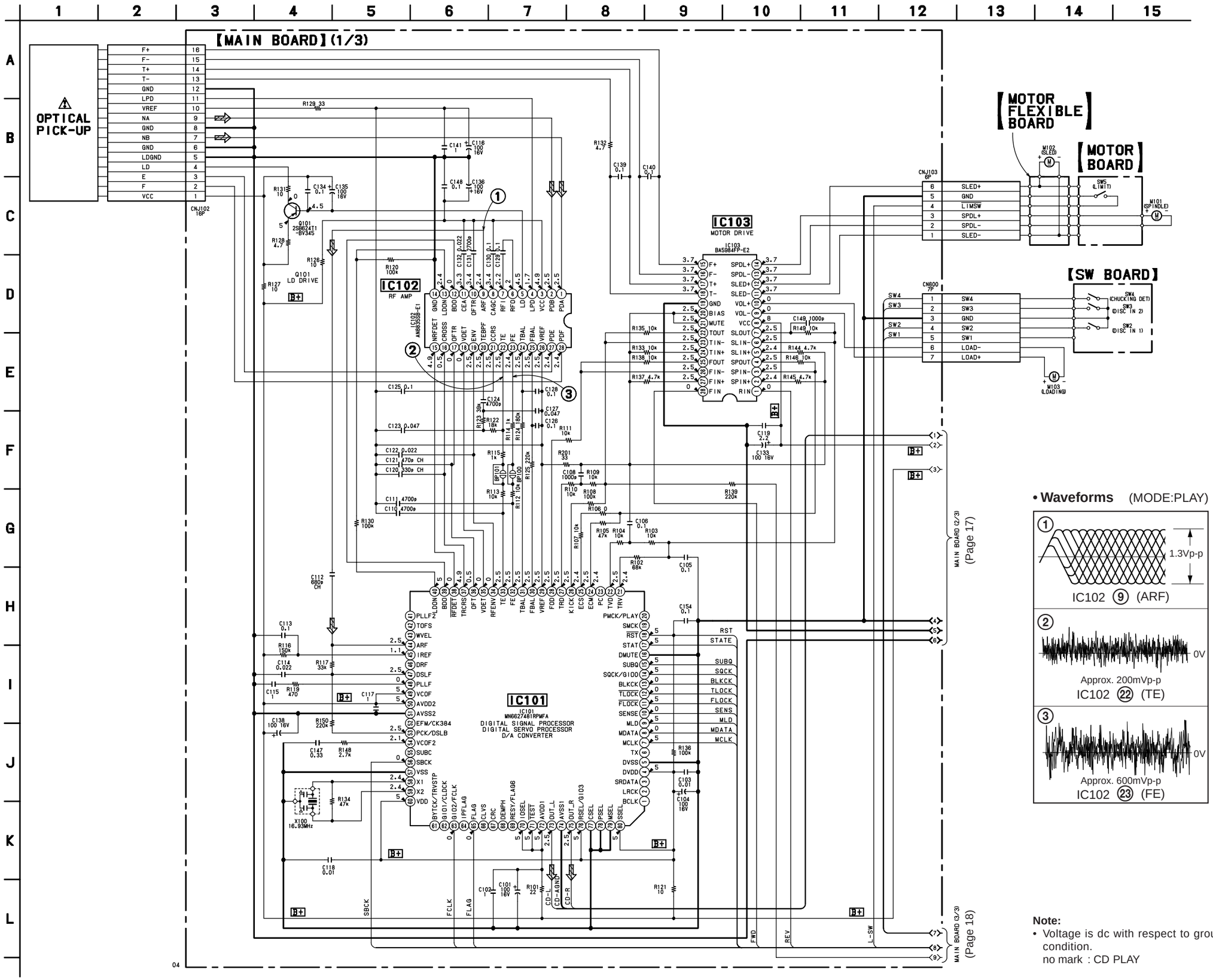
Ref. No.	Location
(D501)	B-6
D502	F-11
D503	B-13
D504	B-12
D505	B-11
D506	D-13
D507	D-13
D508	E-11
D509	F-11
D510	E-12
D511	B-4
D512	E-10
D513	B-8
D514	D-8
D516	B-12
D517	B-12
D518	D-13
D519	C-3
D520	D-9
D521	D-9
D522	D-9
D523	D-9
D524	C-9
D525	C-9
D526	C-9
D527	C-9
D550	C-4
D551	C-4
D601	K-12
D602	J-12
D603	K-12
D605	K-11
D606	K-11
D607	J-11
D608	J-11
D610	K-10
D611	K-10
IC101	G-8
IC102	H-5
IC103	J-4
IC400	D-5
(IC500)	B-6
IC600	H-11
IC601	I-9
IC700	E-3
Q101	F-4
Q401	B-3
Q402	C-5
Q403	C-6
Q501	D-10
Q502	D-12
Q503	F-13
Q504	G-12
Q505	D-11
Q507	D-12
Q509	E-11
Q510	E-12
Q511	E-10
Q512	C-8
(Q513)	B-7
Q514	C-8
Q515	D-7
Q516	B-3
Q517	F-11
Q550	B-3
Q551	B-4
Q601	J-12
Q701	G-2
Q702	G-2
Q703	J-7
Q704	F-2
Q705	F-3

( ) : SIDE B




【MAIN BOARD】(SIDE B)
CNP500
F901
CNP400
AUDIO OUT REAR
L
R
J701
(ANTENNA)
IC500
Q513
L501
C501
D501
TU700
TUNER UNIT
X700
BP100
BP101
X601
C534
3800/3900
S602
(FREQUENCY SELECT)
FM200k AM10k
FM50k AM9k
CN601
S600
(RESET)
1-677-420-
11
OPTICAL PICK-UP
KEY BOARD CN800
(Page 20)
【MOTOR BOARD】
M102
(SLED)
SW5
(LIMIT)
M101
(SPINDLE)
BRN
BLU
1-673-761-
1-670-828-
【MOTOR FLEXIBLE BOARD】
BLK
YEL
RED
BLU
BLU/WHT
GRY
GRY/BLK
VIO
VIO/BLK
GRN
GRN/BLK
WHT
WHT/BLK
GND
BATT
ACC
ANT REM
AMP REM
FRONT R-CH
REAR R-CH
REAR L-CH
FRONT L-CH

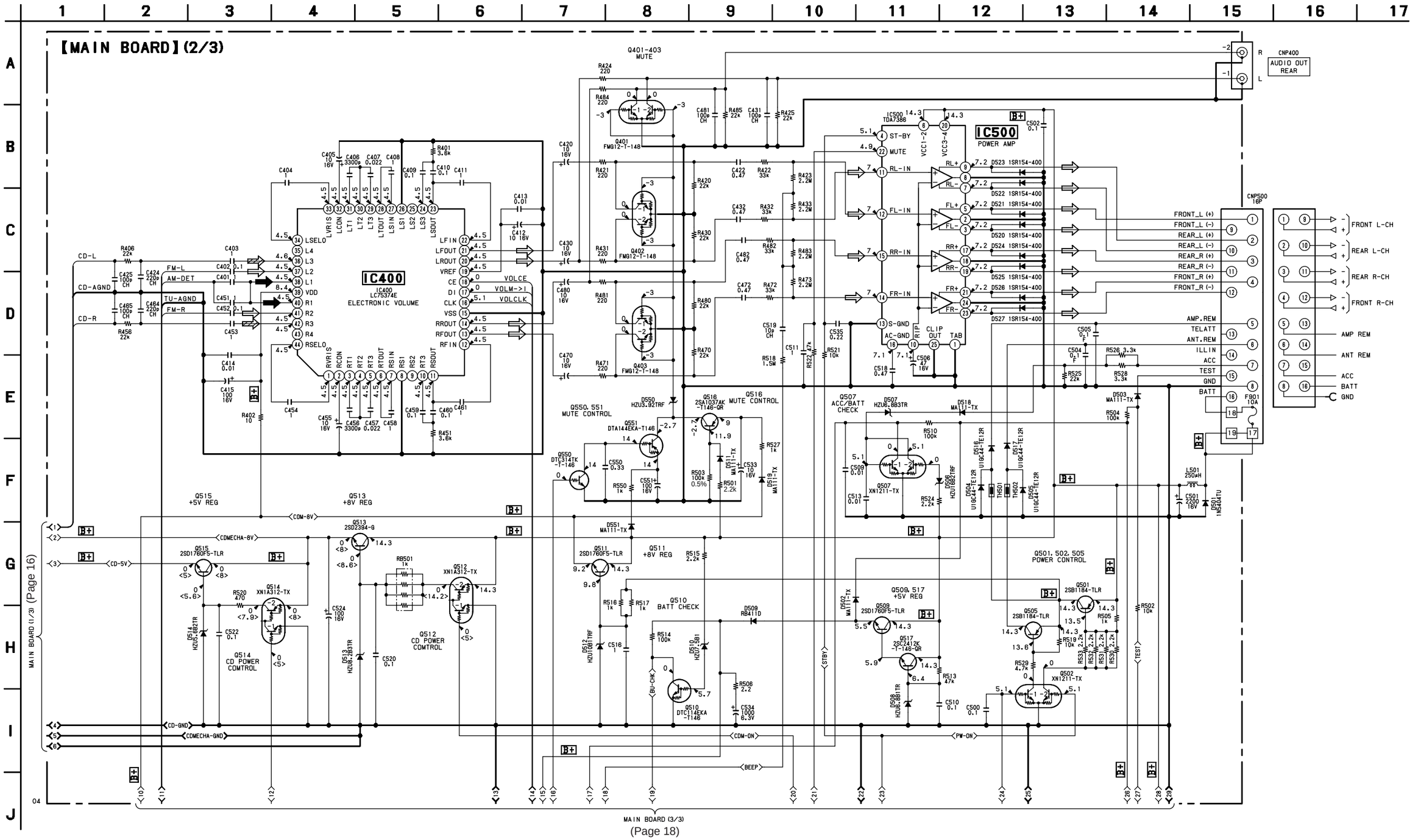
3-5. SCHEMATIC DIAGRAM — MAIN SECTION (1/3) — • Refer to page 21 for IC Block Diagrams.



• **Waveforms** (MODE:PLAY)

Note:
- Voltage is dc with respect to ground under no-signal condition.
  no mark : CD PLAY

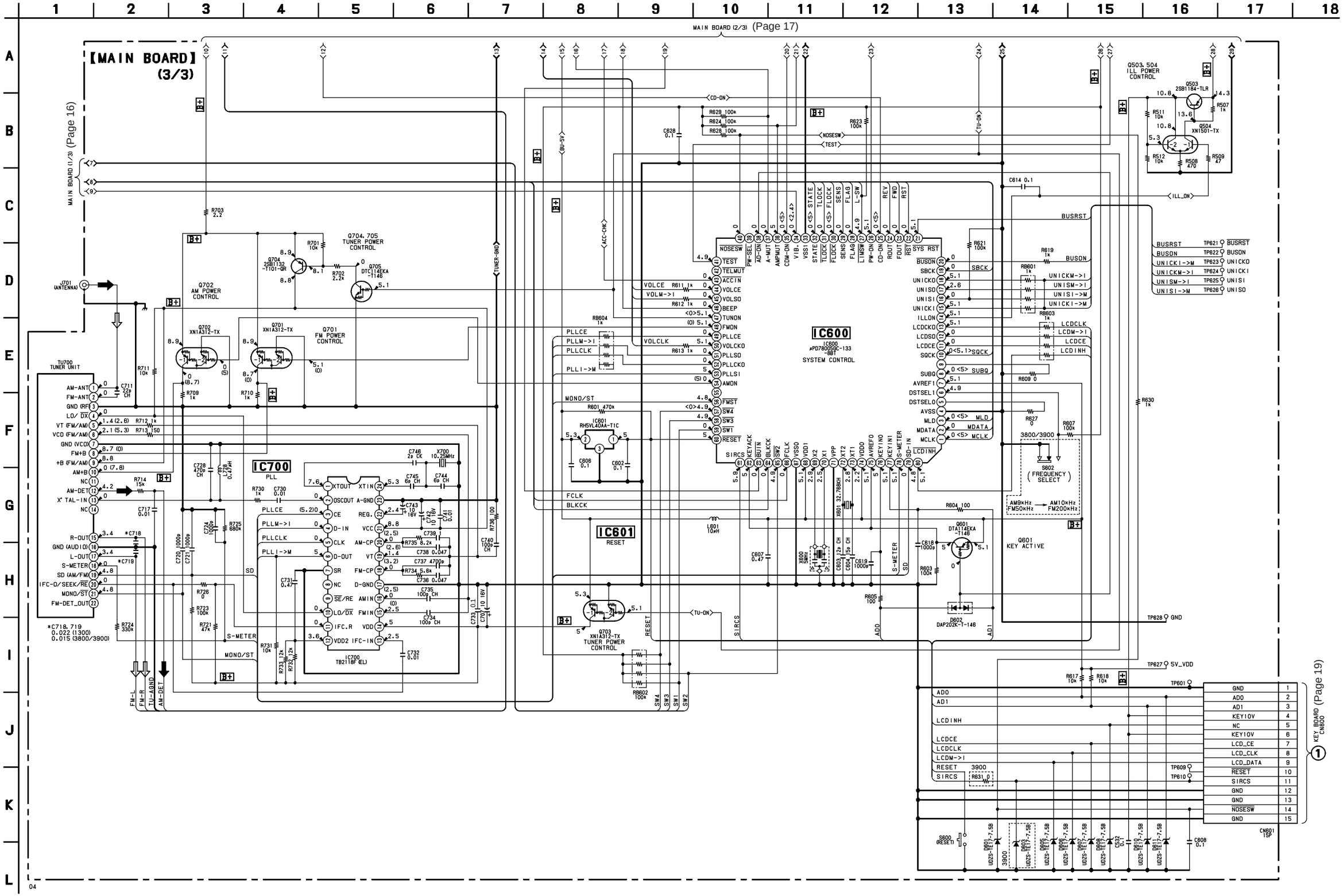
3-6. SCHEMATIC DIAGRAM — MAIN SECTION (2/3) — • Refer to page 22 for IC Block Diagrams.



Note:

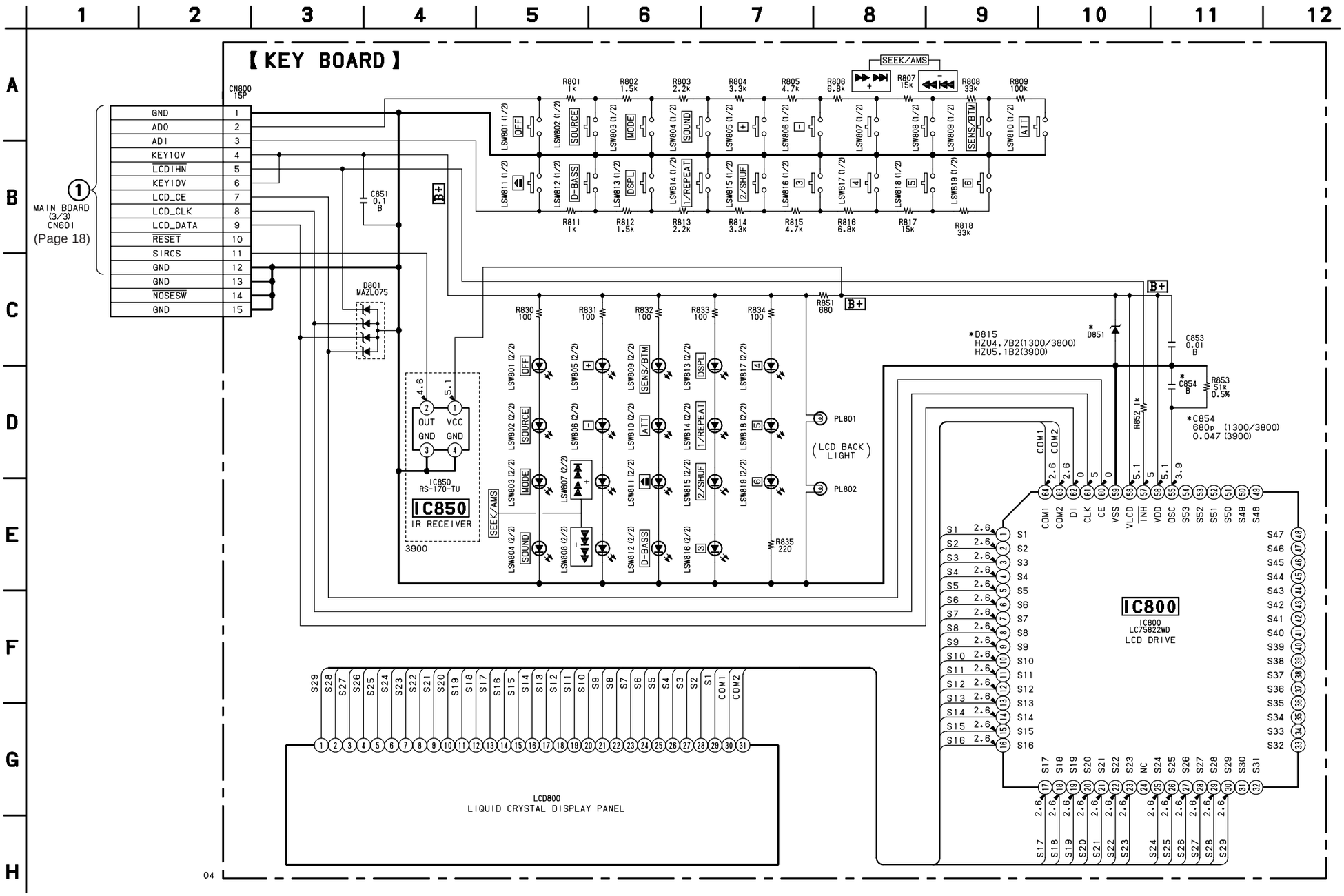
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

3-7. SCHEMATIC DIAGRAM — MAIN SECTION (3/3) — • Refer to page 22 for IC Block Diagrams.



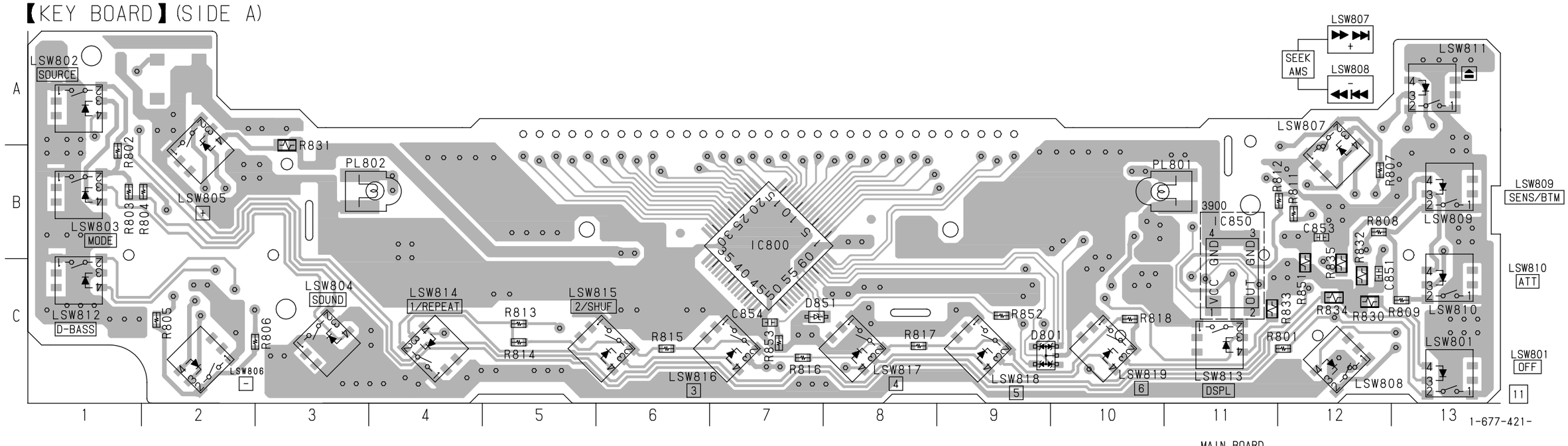
Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM
  < > : CD PLAY

3-8. SCHEMATIC DIAGRAM — DISPLAY SECTION —

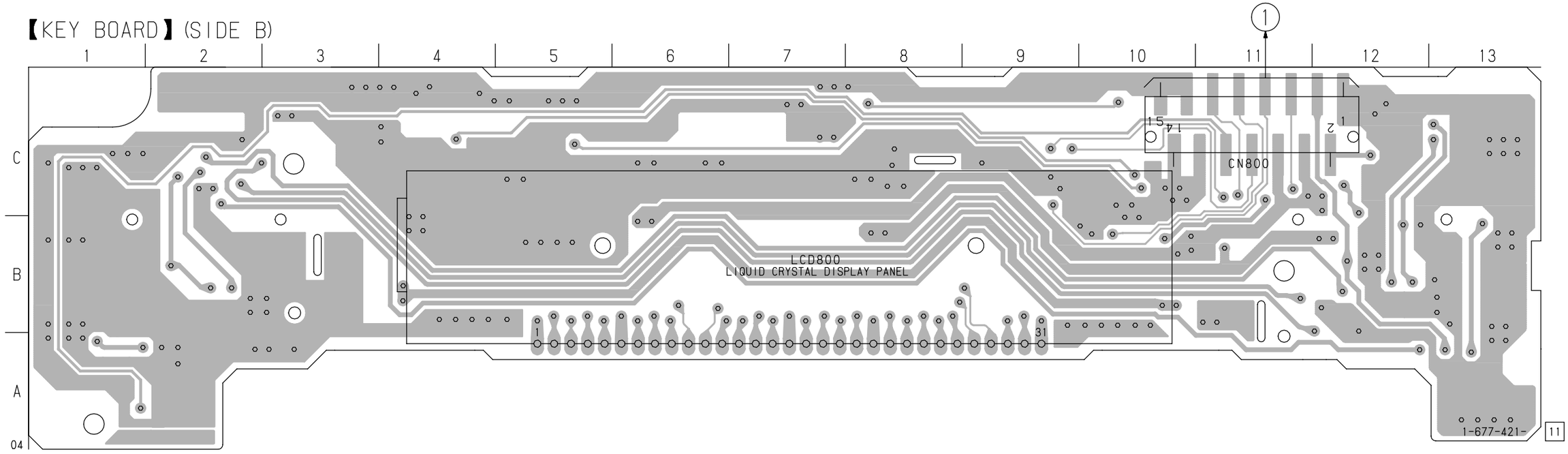


Note:
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

3-9. PRINTED WIRING BOARD — DISPLAY SECTION —

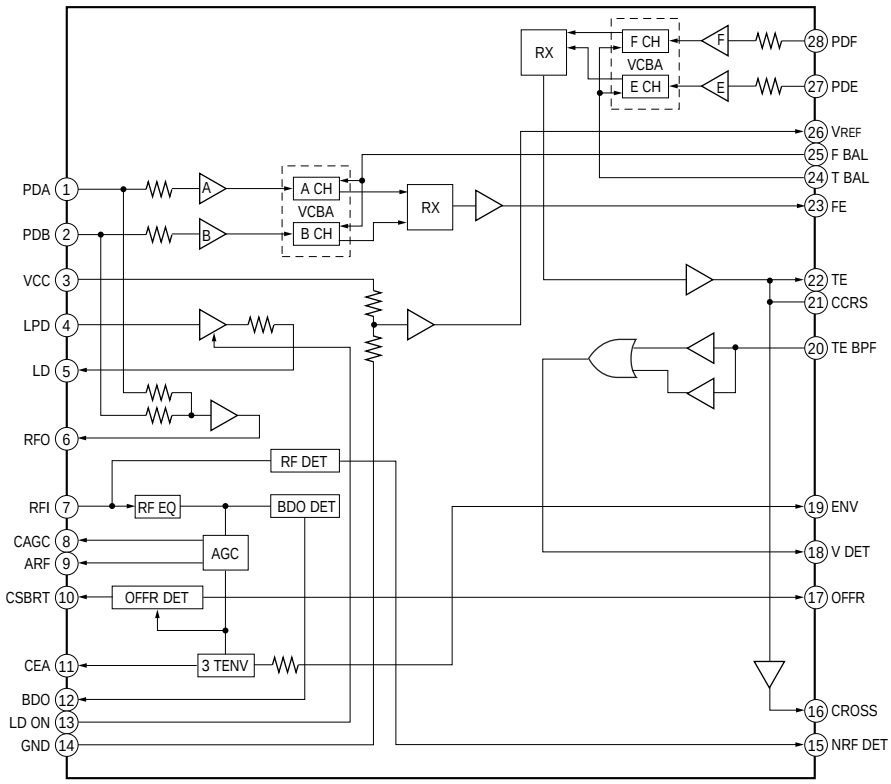


(Page 15)

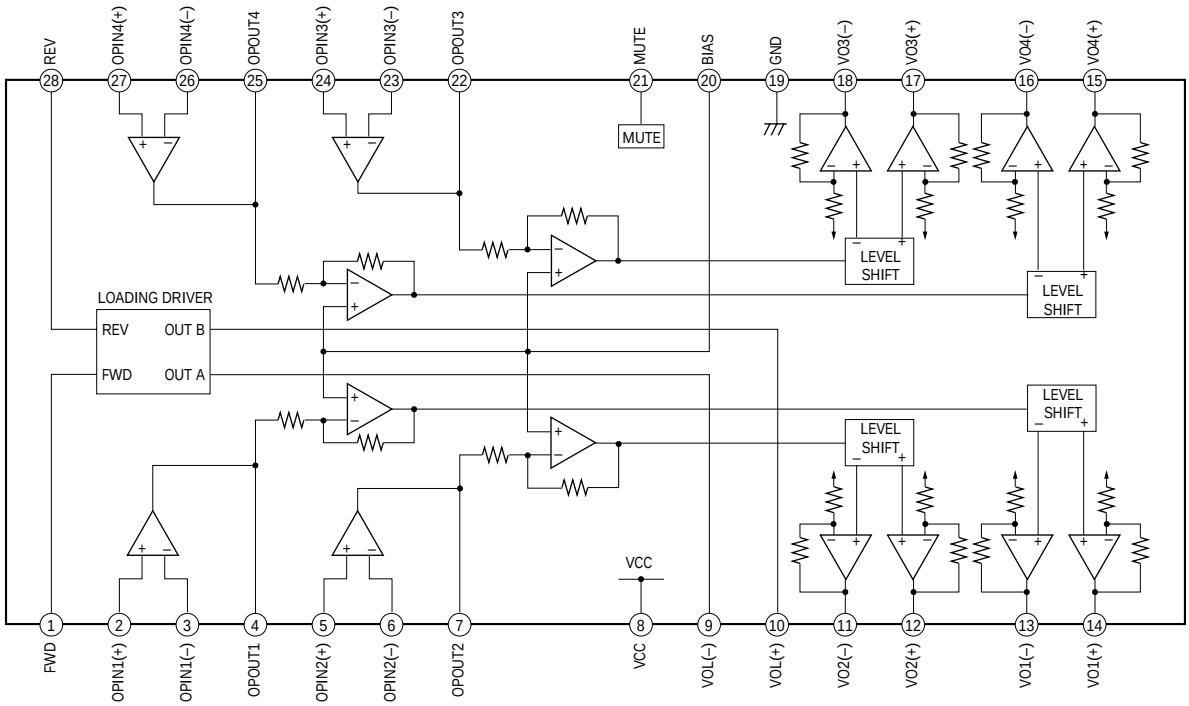


• **IC Block Diagrams**

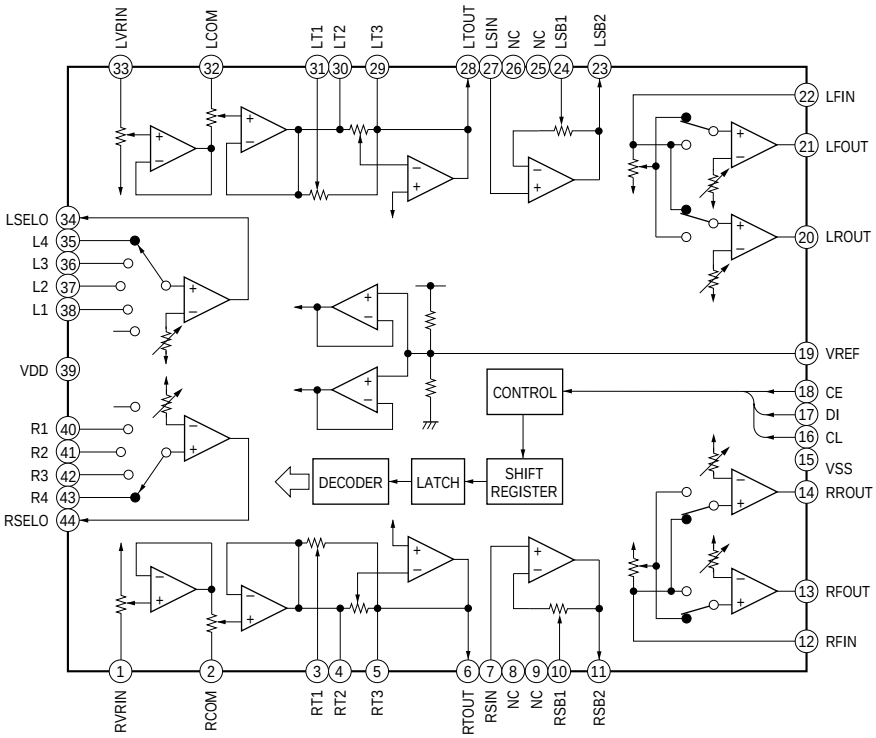
IC102 AN8835SB-E1



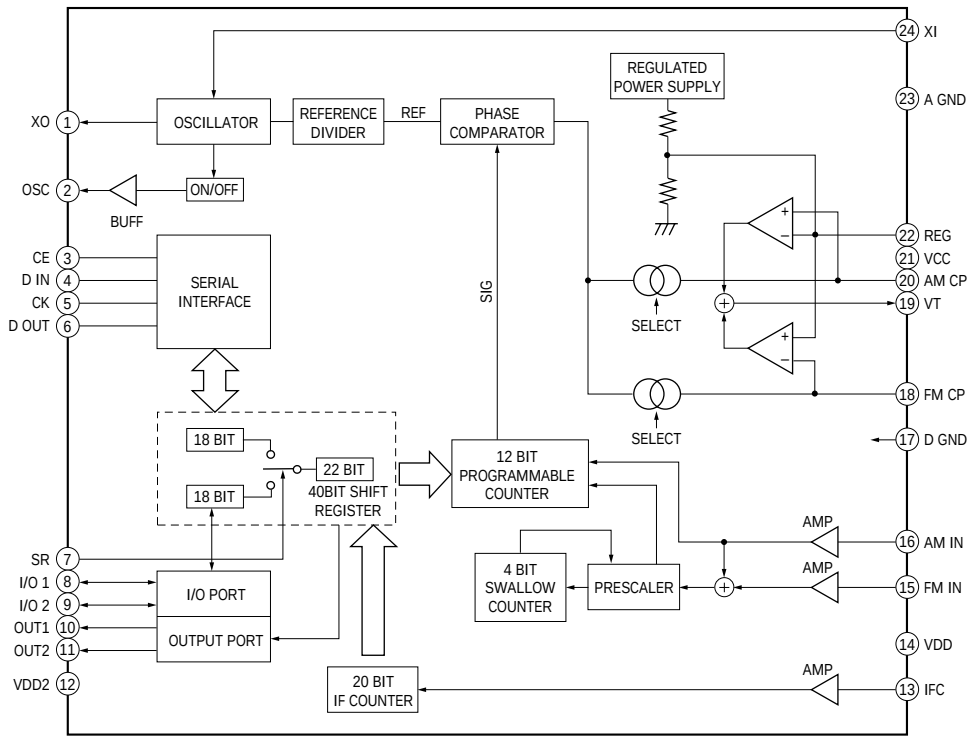
IC103 BA5984FP-E2



IC400 LC75374E



IC700 TB2118F (EL)



SECTION 4
EXPLODED VIEWS

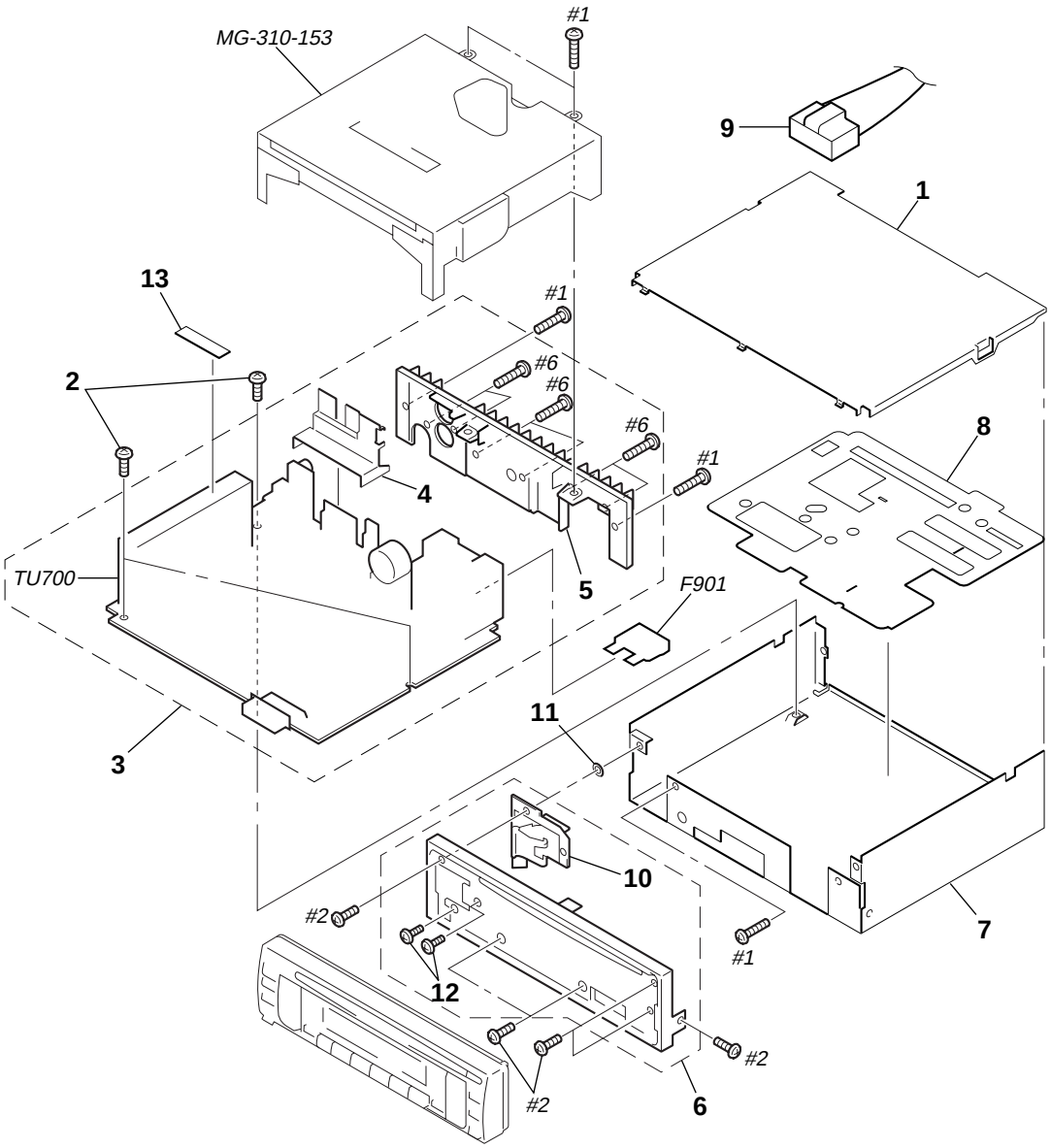
NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

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

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

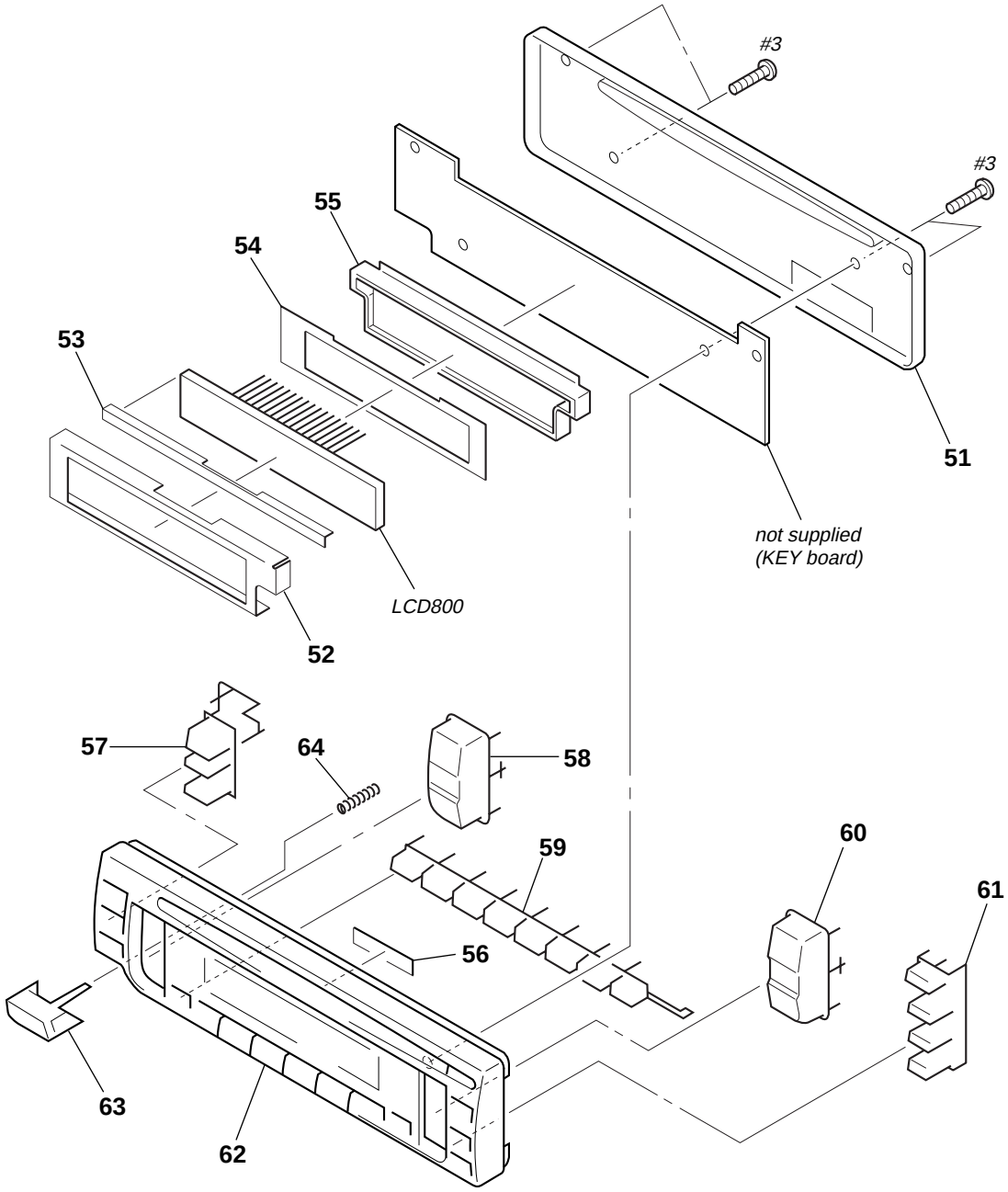
4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
* 1	3-034-437-02	COVER	
2	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
* 3	A-3294-815-A	MAIN BOARD, COMPLETE (3900)	
* 3	A-3294-817-A	MAIN BOARD, COMPLETE (1300)	
* 3	A-3294-819-A	MAIN BOARD, COMPLETE (3800)	
* 4	3-043-234-01	BRACKET (IC)	
* 5	3-043-233-01	HEAT SINK	
6	X-3377-240-4	PANEL ASSY, SUB	
* 7	3-034-436-03	CHASSIS	

Ref. No.	Part No.	Description	Remark
* 8	3-034-455-03	SHEET (INSULATING)	
9	1-792-194-31	CORD (WITH CONNECTOR) (POWER)	
10	X-3367-636-1	LOCK ASSY	
11	3-038-300-01	SPACER (WASHER)	
12	3-042-244-11	SCREW (T)	
13	3-360-123-01	PLATE (C), GROUND	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TU700	A-3220-689-A	TUNER UNIT (TUX-010/2(E))	

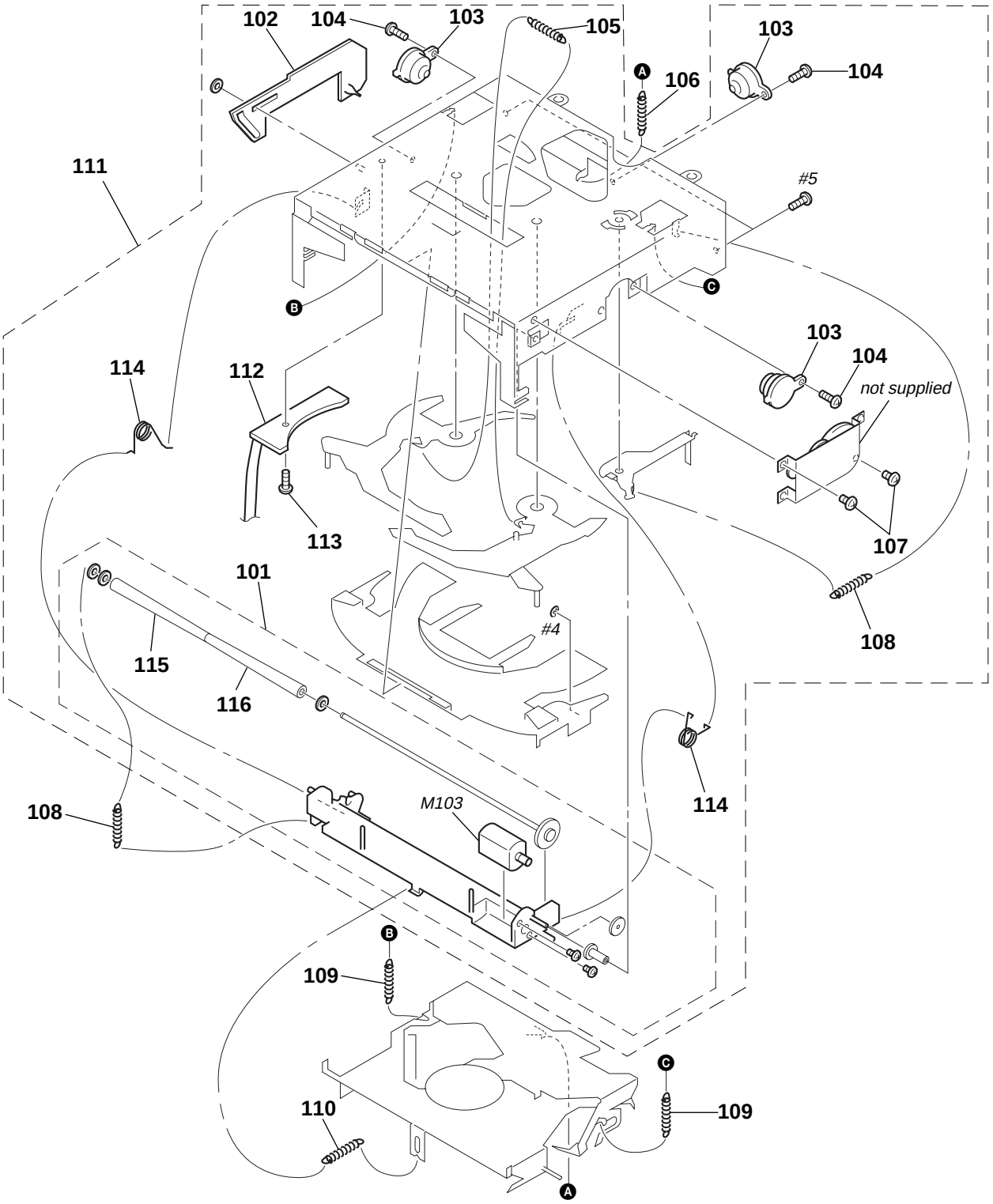
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	3-035-311-02	PANEL, BACK	
* 52	3-034-440-02	PLATE (LCD), GROUND	
* 53	3-034-454-01	SHEET (LCD)	
* 54	3-034-453-01	SHEET (DIFFUSION)	
* 55	X-3377-104-1	HOLDER (LCD) ASSY	
56	3-035-316-01	SHEET (GUIDE)	
57	3-045-627-11	BUTTON (SOURCE)	
58	3-034-450-04	BUTTON (+.–)	
59	3-034-443-02	BUTTON (6 KEY)	

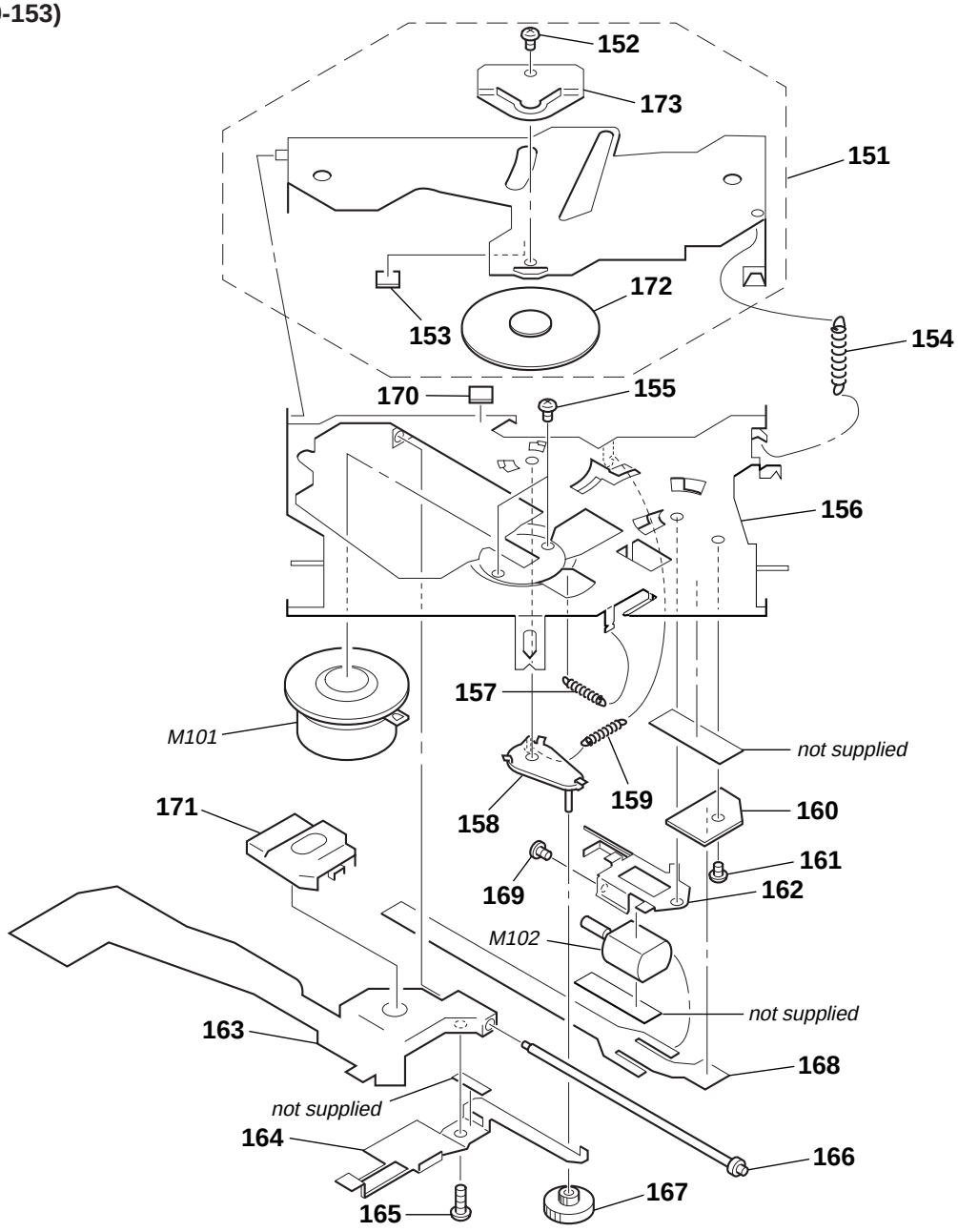
Ref. No.	Part No.	Description	Remark
60	3-034-451-04	BUTTON (AMS)	
61	3-034-445-11	BUTTON (EJECT)	
62	X-3378-996-1	PANEL ASSY, FRONT (1300)	
62	X-3378-998-1	PANEL ASSY, FRONT (3800)	
62	X-3378-999-1	PANEL ASSY, FRONT (3900)	
63	3-035-312-01	BUTTON (RELEASE)	
64	3-008-667-01	SPRING (RELEASE)	
LCD800	1-803-966-11	DISPLAY PANEL, LIQUID CRYSTAL	

4-3. CD MECHANISM SECTION (1)
(MG-310-153)



Ref. No.	Part No.	Description	Remark
101	X-3378-793-1	ARM ASSY, ROLLER	
* 102	3-032-327-02	LEVER (LE.L)	
103	3-037-492-01	DAMPER (P)	
104	3-033-808-01	SCREW (M2X4.0)	
105	3-042-644-01	SPRING (LEVER DLR)	
106	3-032-373-01	SPRING (SPM), TENSION	
107	3-033-806-01	SCREW (M2X2.5)	
108	3-042-642-01	SPRING (LEVER D)	
109	3-032-351-01	SPRING (FL), TENSION	
110	3-032-352-01	SPRING (ANGLE), TENSION	
111	X-3378-335-3	CHASSIS (M) COMPLETE ASSY	
* 112	1-670-827-11	SW BOARD	
113	3-033-807-01	SCREW (M2X3.0)	
114	3-032-359-01	SPRING (ROLLER)	
115	3-039-600-02	ROLLER (SS)	
116	3-933-152-02	ROLLER (S)	
M103	X-3378-888-1	MOTOR ASSY, LOADING (LOADING)	

4-4. CD MECHANISM SECTION (2)
(MG-310-153)



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

Ref. No.	Part No.	Description	Remark
151	A-3301-693-A	ARM ASSY, CHUCKING	
152	3-033-805-01	SCREW (M2X2.0)	
* 153	3-027-473-01	CUSHION (EJ2)	
154	3-032-353-01	SPRING (CH), TENSION	
155	3-033-803-01	SCREW (M1.7X2.5)	
* 156	X-3376-720-2	CHASSIS (OP) ASSY	
157	3-032-373-01	SPRING (SPM), TENSION	
* 158	X-3376-724-1	LEVER (WORM WHEEL) ASSY	
159	3-042-642-01	SPRING (LEVER D)	
* 160	1-670-828-11	MOTOR BOARD	
161	3-033-807-01	SCREW (M2X3.0)	
162	3-032-341-01	BRACKET (SL MOTOR)	
⚠163	X-3378-023-1	PICK-UP ASSY, OPTICAL	

Ref. No.	Part No.	Description	Remark
164	3-032-345-02	RACK (FEED)	
165	3-033-804-01	SCREW (+PTP 1.7X4)	
166	3-032-358-01	SHAFT (SLED GUIDE)	
167	3-032-344-01	GEAR (WORM WHEEL)	
168	1-673-761-11	MOTOR FLEXIBLE BOARD	
169	3-366-892-01	SCREW (M1.4X1.1)	
* 170	3-037-490-01	CUSHION (DH)	
171	3-042-739-01	COVER (P)	
* 172	3-384-918-01	RETAINER (DISC)	
173	3-931-894-01	BRACKET (CP)	
M101	X-3373-096-1	MOTOR ASSY, SPINDLE (SPINDLE)	
M102	X-3377-704-1	MOTOR ASSY, SLED (SLED)	

SECTION 5
ELECTRICAL PARTS LIST

KEY

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

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

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

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

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
*	3-034-440-02	PLATE (LCD), GROUND			
*	3-034-453-01	SHEET (DIFFUSION)			
*	3-034-454-01	SHEET (LCD)			
		< CAPACITOR >			
C851	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C853	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	
C854	1-115-412-11	CERAMIC CHIP	680PF	5% 25V	(1300/3800)
C854	1-162-847-11	CERAMIC CHIP	0.047uF	20% 16V	(3900)
		< CONNECTOR >			
CN800	1-785-773-21	PIN, CONNECTOR 15P			
		< DIODE >			
D801	8-719-068-84	DIODE MAZL075D0LS0-TX/L			
D851	8-719-044-91	DIODE HZU4.7B2 (3900)			
D851	8-719-976-99	DIODE HZU5.1B2TRF (1300/3800)			
		< IC >			
IC800	8-759-330-60	IC LC75822WD			
IC850	8-749-012-25	IC RS-170-TU (3900)			
		< LIQUID CRYSTAL DISPLAY >			
LCD800	1-803-966-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< SWITCH >			
LSW801	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (OFF)			
LSW802	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SOURCE)			
LSW803	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (MODE)			
LSW804	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SOUND)			
LSW805	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (+)			
LSW806	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (–)			
LSW807	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SEEK/AMS ▶▶ ▶▶I +)			
LSW808	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SEEK/AMS ◀◀ I◀◀ –)			
LSW809	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (SENS/BTM)			
LSW810	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (ATT)			
LSW811	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (⏏)			
LSW812	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (D-BASS)			

Ref. No.	Part No.	Description			Remark
LSW813	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (DSPL)			
LSW814	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (1/REPEAT)			
LSW815	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (2/SHUF)			
LSW816	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (3)			
LSW817	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (4)			
LSW818	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (5)			
LSW819	1-762-619-21	SWITCH, KEY BOARD (WITH LED) (6)			
		< PILOT LAMP >			
PL801	1-517-968-21	LAMP, PILOT			
PL802	1-517-968-21	LAMP, PILOT			
		< RESISTOR >			
R801	1-216-821-11	METAL CHIP	1K	5% 1/16W	
R802	1-216-823-11	METAL CHIP	1.5K	5% 1/16W	
R803	1-216-825-11	METAL CHIP	2.2K	5% 1/16W	
R804	1-216-827-11	METAL CHIP	3.3K	5% 1/16W	
R805	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	
R806	1-216-831-11	METAL CHIP	6.8K	5% 1/16W	
R807	1-216-835-11	METAL CHIP	15K	5% 1/16W	
R808	1-216-839-11	METAL CHIP	33K	5% 1/16W	
R809	1-216-845-11	METAL CHIP	100K	5% 1/16W	
R811	1-216-821-11	METAL CHIP	1K	5% 1/16W	
R812	1-216-823-11	METAL CHIP	1.5K	5% 1/16W	
R813	1-216-825-11	METAL CHIP	2.2K	5% 1/16W	
R814	1-216-827-11	METAL CHIP	3.3K	5% 1/16W	
R815	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	
R816	1-216-831-11	METAL CHIP	6.8K	5% 1/16W	
R817	1-216-835-11	METAL CHIP	15K	5% 1/16W	
R818	1-216-839-11	METAL CHIP	33K	5% 1/16W	
R830	1-216-025-11	RES-CHIP	100	5% 1/10W	
R831	1-216-025-11	RES-CHIP	100	5% 1/10W	
R832	1-216-025-11	RES-CHIP	100	5% 1/10W	
R833	1-216-025-11	RES-CHIP	100	5% 1/10W	
R834	1-216-025-11	RES-CHIP	100	5% 1/10W	
R835	1-216-033-00	METAL CHIP	220	5% 1/10W	
R851	1-216-045-00	METAL CHIP	680	5% 1/10W	
R852	1-216-821-11	METAL CHIP	1K	5% 1/16W	
R853	1-218-733-11	METAL CHIP	51K	0.5% 1/16W	

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MAIN

Ref. No.	Part No.	Description			Remark
*	A-3294-815-A	MAIN BOARD, COMPLETE (3900)			
*	A-3294-817-A	MAIN BOARD, COMPLETE (1300)			
*	A-3294-819-A	MAIN BOARD, COMPLETE (3800)			
		**********			
*	3-043-233-01	HEAT SINK			
*	3-043-234-01	BRACKET (IC)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C101	1-117-681-11	ELECT CHIP	100uF	20%	16V
C102	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C103	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C104	1-124-779-00	ELECT CHIP	100uF	20%	16V
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C108	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C111	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C112	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C113	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C114	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C115	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C116	1-117-681-11	ELECT CHIP	100uF	20%	16V
C117	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C118	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C119	1-115-565-11	CERAMIC CHIP	2.2uF	10%	10V
C120	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C121	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C122	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C123	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C124	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C127	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C128	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C129	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C131	1-162-979-11	CERAMIC CHIP	0.0027uF	10%	50V
C132	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-117-681-11	ELECT CHIP	100uF	20%	16V
C134	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C135	1-117-681-11	ELECT CHIP	100uF	20%	16V
C136	1-117-681-11	ELECT CHIP	100uF	20%	16V
C138	1-117-681-11	ELECT CHIP	100uF	20%	16V
C139	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C141	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C147	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C148	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C149	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C401	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C402	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C403	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C404	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C405	1-124-779-00	ELECT CHIP	10uF	20%	16V
C406	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C407	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C408	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C409	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C410	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C411	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C412	1-124-779-00	ELECT CHIP	10uF	20%	16V
C413	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C414	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C415	1-117-681-11	ELECT CHIP	100uF	20%	16V
C420	1-124-779-00	ELECT CHIP	10uF	20%	16V
C422	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C424	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C425	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C430	1-124-779-00	ELECT CHIP	10uF	20%	16V
C431	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C432	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C451	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C452	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C453	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C454	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C455	1-124-779-00	ELECT CHIP	10uF	20%	16V
C456	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C457	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C458	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C459	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C460	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C461	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C464	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C465	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C470	1-124-779-00	ELECT CHIP	10uF	20%	16V
C472	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C480	1-124-779-00	ELECT CHIP	10uF	20%	16V
C481	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C482	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C500	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C501	1-126-768-11	ELECT	2200uF	20%	16V
C502	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C504	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C505	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C506	1-126-204-11	ELECT CHIP	47uF	20%	16V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C511	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C516	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C518	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C519	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C520	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C522	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C524	1-117-681-11	ELECT CHIP	100uF	20%	16V
C532	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C533	1-124-779-00	ELECT CHIP	10uF	20%	16V
C534	1-126-916-11	ELECT	1000uF	20%	6.3V
C535	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C550	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C551	1-117-681-11	ELECT CHIP	100uF	20%	16V
C602	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C603	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C604	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C608	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C614	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C618	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C619	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C628	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C707	1-124-779-00	ELECT CHIP	10uF	20%	16V
C711	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C718	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (1300)
C718	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V (3800/3900)
C719	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (1300)
C719	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V (3800/3900)
C720	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C721	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C724	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C728	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C730	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C731	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C732	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C733	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C734	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C735	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C736	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C737	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C738	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C739	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C740	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C741	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C742	1-124-779-00	ELECT CHIP	10uF	20%	16V
C743	1-124-779-00	ELECT CHIP	10uF	20%	16V
C744	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C745	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V
C746	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
		< CONNECTOR >			
* CN600	1-580-756-21	PIN, CONNECTOR (SMD) 7P			
CN601	1-785-772-31	PLUG, CONNECTOR 15P			
CNJ102	1-770-646-11	CONNECTOR, FFC/FPC 16P			
CNJ103	1-770-637-11	CONNECTOR, FFC/FPC 6P			
CNP500	1-774-701-11	PIN, CONNECTOR 16P			
		< JACK >			
CNP400	1-774-698-11	JACK, PIN 2P (AUDIO OUT REAR)			
		< DIODE >			
D501	8-719-049-38	DIODE 1N5404TU			
D502	8-719-073-01	DIODE MA111-TX			
D503	8-719-073-01	DIODE MA111-TX			
D504	8-719-019-00	DIODE U1GC44-TE12R			
D505	8-719-019-00	DIODE U1GC44-TE12R			
D506	8-719-064-03	DIODE HZU16B2TRF			
D507	8-719-977-12	DIODE HZU6.8B3TRF			
D508	8-719-422-67	DIODE HZU6.8B1TRF			
D509	8-719-975-40	DIODE RB411D-T146			
D510	8-719-060-29	DIODE HZU7.5B1			
D511	8-719-073-01	DIODE MA111-TX			
D512	8-719-423-07	DIODE HZU10B1TRF			
D513	8-719-071-72	DIODE HZU8.2B3TRF			
D514	8-719-047-98	DIODE HZU5.6B2TRF			
D516	8-719-019-00	DIODE U1GC44-TE12R			
D517	8-719-019-00	DIODE U1GC44-TE12R			
D518	8-719-073-01	DIODE MA111-TX			
D519	8-719-073-01	DIODE MA111-TX			
D520	8-719-053-18	DIODE 1SR154-400			
D521	8-719-053-18	DIODE 1SR154-400			
D522	8-719-053-18	DIODE 1SR154-400			
D523	8-719-053-18	DIODE 1SR154-400			
D524	8-719-053-18	DIODE 1SR154-400			
D525	8-719-053-18	DIODE 1SR154-400			
D526	8-719-053-18	DIODE 1SR154-400			
D527	8-719-053-18	DIODE 1SR154-400			
D550	8-719-062-38	DIODE HZU3.92TRF			
D551	8-719-073-01	DIODE MA111-TX			
D601	8-719-069-58	DIODE UDZS-TE17-7.5B			
D602	8-719-914-44	DIODE DAP202K-T-146			
D603	8-719-069-58	DIODE UDZS-TE17-7.5B (3900)			
D605	8-719-069-58	DIODE UDZS-TE17-7.5B			
D606	8-719-069-58	DIODE UDZS-TE17-7.5B			
D607	8-719-069-58	DIODE UDZS-TE17-7.5B			
D608	8-719-069-58	DIODE UDZS-TE17-7.5B			
D610	8-719-069-58	DIODE UDZS-TE17-7.5B			
D611	8-719-069-58	DIODE UDZS-TE17-7.5B			
		< IC >			
IC101	8-759-574-26	IC MN6627481RPMFA			
IC102	8-759-574-25	IC AN8835SB-E1			
IC103	8-759-574-24	IC BA5984FP-E2			
IC400	8-759-487-82	IC LC75374E			
IC500	8-759-486-44	IC TDA7386			
IC600	8-759-661-44	IC uPD780058GC-133-8BT			

MAIN

Ref. No.	Part No.	Description			Remark
IC601	8-759-443-41	IC RH5VL40AA-T1C			
IC700	8-759-586-59	IC TB2118F(EL)			
		< JACK >			
J701	1-785-503-11	JACK (ANTENNA)			
		< JUMPER RESISTOR >			
JC1	1-216-295-00	SHORT	0		
JC3	1-216-295-00	SHORT	0		
JC5	1-216-295-00	SHORT	0		
JC6	1-216-295-00	SHORT	0		
		< COIL >			
L501	1-419-476-11	COIL, CHOKE	250uH		
L601	1-412-058-11	INDUCTOR	10uH		
L728	1-410-989-11	INDUCTOR CHIP	0.47uH		
		< TRANSISTOR >			
Q101	8-729-141-48	TRANSISTOR	2SB624T1-BV345		
Q401	8-729-047-71	TRANSISTOR	FMG12-T-148		
Q402	8-729-047-71	TRANSISTOR	FMG12-T-148		
Q403	8-729-047-71	TRANSISTOR	FMG12-T-148		
Q501	8-729-922-47	TRANSISTOR	2SB1184-TLR		
Q502	8-729-429-92	TRANSISTOR	XN1211-TX		
Q503	8-729-922-47	TRANSISTOR	2SB1184-TLR		
Q504	8-729-402-13	TRANSISTOR	XN1501-TX		
Q505	8-729-922-47	TRANSISTOR	2SB1184-TLR		
Q507	8-729-429-92	TRANSISTOR	XN1211-TX		
Q509	8-729-921-49	TRANSISTOR	2SD1760F5-TLR		
Q510	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q511	8-729-921-49	TRANSISTOR	2SD1760F5-TLR		
Q512	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q513	8-729-019-00	TRANSISTOR	2SD2394-G		
Q514	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q515	8-729-921-49	TRANSISTOR	2SD1760F5-TLR		
Q516	8-729-026-49	TRANSISTOR	2SA1037AK-T146-QR		
Q517	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR		
Q550	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q551	8-729-027-38	TRANSISTOR	DTA144EKA-T146		
Q601	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q701	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q702	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q703	8-729-020-67	TRANSISTOR	XN1A312-TX		
Q704	8-729-106-60	TRANSISTOR	2SB1132-T101-QR		
Q705	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
		< RESISTOR >			
R101	1-216-009-11	RES-CHIP	22	5%	1/10W
R102	1-216-843-11	METAL CHIP	68K	5%	1/16W
R103	1-216-833-11	RES-CHIP	10K	5%	1/16W
R104	1-216-833-11	RES-CHIP	10K	5%	1/16W
R105	1-216-841-11	METAL CHIP	47K	5%	1/16W
R106	1-216-864-11	METAL CHIP	0	5%	1/16W
R107	1-216-833-11	RES-CHIP	10K	5%	1/16W
R108	1-216-845-11	METAL CHIP	100K	5%	1/16W
R109	1-216-833-11	RES-CHIP	10K	5%	1/16W
R110	1-216-833-11	RES-CHIP	10K	5%	1/16W
R111	1-216-833-11	RES-CHIP	10K	5%	1/16W
R112	1-216-833-11	RES-CHIP	10K	5%	1/16W
R113	1-216-833-11	RES-CHIP	10K	5%	1/16W
R114	1-216-821-11	METAL CHIP	1K	5%	1/16W
R115	1-216-821-11	METAL CHIP	1K	5%	1/16W
R116	1-216-847-11	METAL CHIP	150K	5%	1/16W
R117	1-216-839-11	METAL CHIP	33K	5%	1/16W
R119	1-216-817-11	METAL CHIP	470	5%	1/16W
R120	1-216-845-11	METAL CHIP	100K	5%	1/16W
R121	1-216-001-00	METAL CHIP	10	5%	1/10W
R122	1-216-836-11	METAL CHIP	18K	5%	1/16W
R123	1-216-840-11	METAL CHIP	39K	5%	1/16W
R124	1-216-848-11	METAL CHIP	180K	5%	1/16W
R125	1-216-849-11	METAL CHIP	220K	5%	1/16W
R126	1-216-001-00	METAL CHIP	10	5%	1/10W
R127	1-216-001-00	METAL CHIP	10	5%	1/10W
R128	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R129	1-216-013-00	METAL CHIP	33	5%	1/10W
R130	1-216-845-11	METAL CHIP	100K	5%	1/16W
R131	1-216-001-00	METAL CHIP	10	5%	1/10W
R132	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R133	1-216-833-11	RES-CHIP	10K	5%	1/16W
R134	1-216-841-11	METAL CHIP	47K	5%	1/16W
R135	1-216-833-11	RES-CHIP	10K	5%	1/16W
R136	1-216-845-11	METAL CHIP	100K	5%	1/16W
R137	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R138	1-216-833-11	RES-CHIP	10K	5%	1/16W
R139	1-216-849-11	METAL CHIP	220K	5%	1/16W
R144	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R145	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R146	1-216-833-11	RES-CHIP	10K	5%	1/16W
R148	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R149	1-216-833-11	RES-CHIP	10K	5%	1/16W
R150	1-216-849-11	METAL CHIP	220K	5%	1/16W
R201	1-216-013-00	METAL CHIP	33	5%	1/10W
R401	1-220-158-11	RES-CHIP	3.6K	5%	1/16W
R402	1-216-150-11	RES-CHIP	10	5%	1/8W
R406	1-216-837-11	METAL CHIP	22K	5%	1/16W
R420	1-216-837-11	METAL CHIP	22K	5%	1/16W
R421	1-216-813-11	METAL CHIP	220	5%	1/16W
R422	1-216-839-11	METAL CHIP	33K	5%	1/16W
R423	1-216-861-11	METAL CHIP	2.2M	5%	1/16W
R424	1-216-813-11	METAL CHIP	220	5%	1/16W
R425	1-216-837-11	METAL CHIP	22K	5%	1/16W
R430	1-216-837-11	METAL CHIP	22K	5%	1/16W
R431	1-216-813-11	METAL CHIP	220	5%	1/16W
R432	1-216-839-11	METAL CHIP	33K	5%	1/16W
R433	1-216-861-11	METAL CHIP	2.2M	5%	1/16W

Ref. No.	Part No.	Description			Remark
R451	1-220-158-11	RES-CHIP	3.6K	5%	1/16W
R456	1-216-837-11	METAL CHIP	22K	5%	1/16W
R470	1-216-837-11	METAL CHIP	22K	5%	1/16W
R471	1-216-813-11	METAL CHIP	220	5%	1/16W
R472	1-216-839-11	METAL CHIP	33K	5%	1/16W
R473	1-216-861-11	METAL CHIP	2.2M	5%	1/16W
R480	1-216-837-11	METAL CHIP	22K	5%	1/16W
R481	1-216-813-11	METAL CHIP	220	5%	1/16W
R482	1-216-839-11	METAL CHIP	33K	5%	1/16W
R483	1-216-861-11	METAL CHIP	2.2M	5%	1/16W
R484	1-216-813-11	METAL CHIP	220	5%	1/16W
R485	1-216-837-11	METAL CHIP	22K	5%	1/16W
R501	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R502	1-216-833-11	RES-CHIP	10K	5%	1/16W
R503	1-218-740-11	METAL CHIP	100K	0.5%	1/16W
R504	1-216-845-11	METAL CHIP	100K	5%	1/16W
R505	1-216-821-11	METAL CHIP	1K	5%	1/16W
R506	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R507	1-216-821-11	METAL CHIP	1K	5%	1/16W
R508	1-216-817-11	METAL CHIP	470	5%	1/16W
R509	1-216-805-11	METAL CHIP	47	5%	1/16W
R510	1-216-845-11	METAL CHIP	100K	5%	1/16W
R511	1-216-833-11	RES-CHIP	10K	5%	1/16W
R512	1-216-833-11	RES-CHIP	10K	5%	1/16W
R513	1-216-841-11	METAL CHIP	47K	5%	1/16W
R514	1-216-845-11	METAL CHIP	100K	5%	1/16W
R515	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R516	1-216-821-11	METAL CHIP	1K	5%	1/16W
R517	1-216-821-11	METAL CHIP	1K	5%	1/16W
R518	1-216-859-11	METAL CHIP	1.5M	5%	1/16W
R519	1-216-833-11	RES-CHIP	10K	5%	1/16W
R520	1-216-817-11	METAL CHIP	470	5%	1/16W
R521	1-216-833-11	RES-CHIP	10K	5%	1/16W
R522	1-216-841-11	METAL CHIP	47K	5%	1/16W
R524	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R525	1-216-837-11	METAL CHIP	22K	5%	1/16W
R526	1-216-210-00	RES-CHIP	3.3K	5%	1/8W
R527	1-216-821-11	METAL CHIP	1K	5%	1/16W
R528	1-216-210-00	RES-CHIP	3.3K	5%	1/8W
R529	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R530	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R531	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R532	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R533	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R550	1-216-821-11	METAL CHIP	1K	5%	1/16W
R601	1-216-853-11	METAL CHIP	470K	5%	1/16W
R603	1-216-845-11	METAL CHIP	100K	5%	1/16W
R604	1-216-809-11	METAL CHIP	100	5%	1/16W
R605	1-216-809-11	METAL CHIP	100	5%	1/16W
R607	1-216-845-11	METAL CHIP	100K	5%	1/16W
R609	1-216-864-11	METAL CHIP	0	5%	1/16W
R611	1-216-821-11	METAL CHIP	1K	5%	1/16W
R612	1-216-821-11	METAL CHIP	1K	5%	1/16W

Ref. No.	Part No.	Description			Remark
R613	1-216-821-11	METAL CHIP	1K	5%	1/16W
R617	1-216-833-11	RES-CHIP	10K	5%	1/16W
R618	1-216-833-11	RES-CHIP	10K	5%	1/16W
R619	1-216-821-11	METAL CHIP	1K	5%	1/16W
R621	1-216-845-11	METAL CHIP	100K	5%	1/16W
R623	1-216-845-11	METAL CHIP	100K	5%	1/16W
R624	1-216-845-11	METAL CHIP	100K	5%	1/16W
R627	1-216-864-11	METAL CHIP	0	5%	1/16W
R628	1-216-845-11	METAL CHIP	100K	5%	1/16W
R629	1-216-845-11	METAL CHIP	100K	5%	1/16W
R630	1-216-821-11	METAL CHIP	1K	5%	1/16W
R631	1-216-864-11	METAL CHIP	0	5%	1/16W
					(3900)
R701	1-216-833-11	RES-CHIP	10K	5%	1/16W
R702	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R703	1-216-134-00	METAL CHIP	2.2	5%	1/8W
R709	1-216-049-11	RES-CHIP	1K	5%	1/10W
R710	1-216-049-11	RES-CHIP	1K	5%	1/10W
R711	1-216-833-11	RES-CHIP	10K	5%	1/16W
R712	1-216-821-11	METAL CHIP	1K	5%	1/16W
R713	1-216-811-11	METAL CHIP	150	5%	1/16W
R714	1-216-835-11	METAL CHIP	15K	5%	1/16W
R721	1-216-841-11	METAL CHIP	47K	5%	1/16W
R723	1-216-845-11	METAL CHIP	100K	5%	1/16W
R724	1-216-851-11	METAL CHIP	330K	5%	1/16W
R725	1-216-855-11	METAL CHIP	680K	5%	1/16W
R726	1-216-864-11	METAL CHIP	0	5%	1/16W
R730	1-216-821-11	METAL CHIP	1K	5%	1/16W
R731	1-216-833-11	RES-CHIP	10K	5%	1/16W
R732	1-216-834-11	METAL CHIP	12K	5%	1/16W
R733	1-216-834-11	METAL CHIP	12K	5%	1/16W
R734	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R735	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R736	1-216-809-11	METAL CHIP	100	5%	1/16W

< NETWORK RESISTOR >

RB501	1-233-412-11	RES, CHIP NETWORK	1.0K (3216)
RB601	1-233-412-11	RES, CHIP NETWORK	1.0K (3216)
RB602	1-233-810-21	RES, CHIP NETWORK	100K (3216)
RB603	1-233-412-11	RES, CHIP NETWORK	1.0K (3216)
RB604	1-233-412-11	RES, CHIP NETWORK	1.0K (3216)

< SWITCH >

S600	1-571-532-21	SWITCH, TACTILE (RESET)
S602	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (3800/3900)

< THERMISTOR (POSITIVE) >

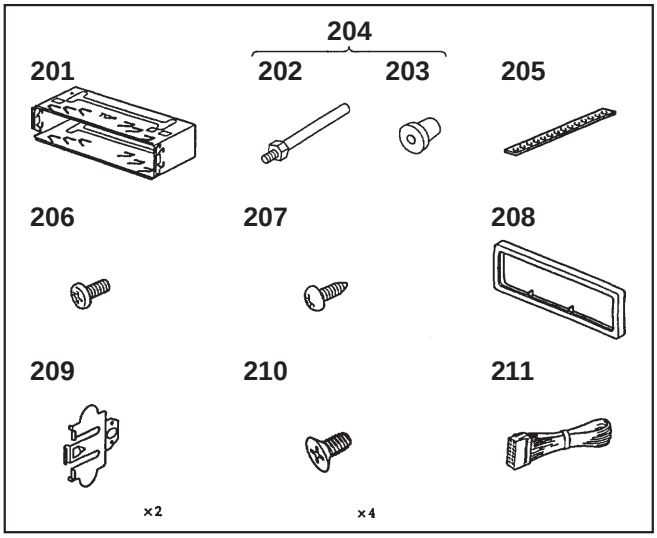
TH501	1-803-615-21	THERMISTOR, POSITIVE
TH502	1-803-615-21	THERMISTOR, POSITIVE

< TUNER >

TU700	A-3220-689-A	TUNER UNIT (TUX-010/2(E))

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X100	1-767-621-11	VIBRATOR, CERAMIC (16.93MHz)	
X600	1-781-383-21	VIBRATOR, CERAMIC (5MHz)	
X601	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
X700	1-781-258-11	VIBRATOR, CRYSTAL (10.25MHz)	
**********			
*	1-670-828-11	MOTOR BOARD	
		**********	
		< SWITCH >	
SW5	1-762-946-12	SWITCH, PUSH (1 KEY) (LIMIT)	
**********			
*	1-670-827-11	SW BOARD	
		**********	
		< SWITCH >	
SW2	1-762-946-12	SWITCH, PUSH (1 KEY) (DISC IN 1)	
SW3	1-762-946-12	SWITCH, PUSH (1 KEY) (DISC IN 2)	
SW4	1-762-946-12	SWITCH, PUSH (1 KEY) (CHUCKING DET)	
**********			
		MISCELLANEOUS	
		**********	
9	1-792-194-31	CORD (WITH CONNECTOR) (POWER)	
⚠163	X-3378-023-1	PICK-UP ASSY, OPTICAL	
168	1-673-761-11	MOTOR FLEXIBLE BOARD	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
M101	X-3373-096-1	MOTOR ASSY, SPINDLE (SPINDLE)	
M102	X-3377-704-1	MOTOR ASSY, SLED (SLED)	
M103	X-3378-888-1	MOTOR ASSY, LOADING (LOADING)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-418-280-22	REMOTE COMMANDER (RM-X49) (3900)	
	3-043-466-11	MANUAL, INSTRUCTION (ENGLISH) (1300)	
	3-043-466-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH, TRADITIONAL CHINESE) (3800/3900)	
	3-043-467-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH) (1300)	
	3-043-467-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,TRADITIONAL CHINESE) (3800/3900)	
	9-939-169-01	HOLDER, BATTERY (for RM-X49) (3900)	
	X-3373-926-1	CASE ASSY (XR) (for FRONT PANEL)	
**********			

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-685-106-19	SCREW +P 2X10 TYPE 2 NON-SLIT	
#4	7-624-101-04	STOP RING 1.2 (E TYPE)	
#5	7-685-780-01	SCREW +PTT 2X3 (S)	
#6	7-685-794-09	SCREW +PTT 2.6X10 (S)	
**********			
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
201	3-009-613-21	FRAME	
202	3-386-828-01	SCREW, FITTING (3800/3900)	
203	3-349-410-01	BUSHING (3800/3900)	
204	X-3366-405-1	SCREW ASSY (EXP), FITTING (3800/3900)	
205	3-924-961-01	SUPPORT (ND), FITTING (1300)	
206	7-682-160-01	SCREW +P 4X6 (1300)	
207	3-915-917-01	SCREW (4X12), +T (1300)	
208	3-034-435-01	COLLAR	
209	3-027-138-01	SPRING, FITTING	
210	3-934-325-01	SCREW, +K (5X8) TAPPING	
211	1-792-194-31	CORD (WITH CONNECTOR) (POWER)	



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

Sony Corporation
Mobile Electronics Division Company

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