

CDX-M770

SERVICE MANUAL

Ver 1.0 2001. 03

US Model
AEP Model
UK Model
E Model



- The tuner and CD sections have no adjustments.

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US MODEL)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

CD player section

Signal-to-noise ratio 90 dB
Frequency response 10 – 20,000 Hz
Wow and flutter Below measurable limit
Laser Diode Properties (US model)
Material GaAlAs
Wavelength 780 nm
Emission Duration Continuous
Laser output power Less than 44.6 μ W*

* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Tuner section

FM
Tuning range 87.5 – 107.9 MHz (US model)
87.5 – 108.0 MHz (AEP, UK, E model)
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz/450 kHz
Usable sensitivity 8 dBf
Selectivity 75 dB at 400 kHz
Signal-to-noise ratio 66 dB (stereo),
72 dB (mono)
Harmonic distortion at 1 kHz
0.6% (stereo),
0.3% (mono)
Separation 35 dB at 1 kHz
Frequency response 30 – 15,000 Hz

AM (US model)

Tuning range 530 – 1,710 kHz
Antenna terminal External antenna connector
Intermediate frequency 10.7 MHz/450 kHz
Sensitivity 30 μ V

Model Name Using Similar Mechanism	CDX-M700R/M750
CD Drive Mechanism Type	MG-383V-121//K
Optical Pick-up Name	KSS-720A

MW/LW (AEP, UK, E model)

Tuning range MW: 531 – 1,602 kHz
LW: 153 – 279 kHz
Aerial terminal External aerial connector
Intermediate frequency 10.7 MHz/450 kHz
Sensitivity MW: 30 μ V
LW: 40 μ V

Power amplifier section

Outputs Speaker outputs (sure seal connectors)
Speaker impedance 4 – 8 ohms
Maximum power output 52 W \times 4 (at 4 ohms)

General

Outputs Audio outputs (front/rear)
Subwoofer output (mono)
Power antenna relay
control lead (US model)
Power aerial relay
control lead (AEP, UK, E model)
Power amplifier control
lead

– Continued on next page –

FM/AM COMPACT DISC PLAYER

US Model

FM/MW/LW COMPACT DISC PLAYER

AEP, UK, E Model

9-873-504-11
2001C0400-1
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Sony Corporation
Audio Entertainment Group
General Engineering Dept.

SONY®

CDX-M770

Inputs	Telephone ATT control lead Illumination control lead BUS control input connector BUS audio input connector Antenna input connector (US model) Aerial input connector (AEP, UK, E model) AUX IN connector
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 182 mm (7 1/8 × 2 × 7 1/4 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 160 mm (7 1/4 × 2 1/8 × 6 3/8 in.) (w/h/d)
Mass	Approx. 1.5 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Card remote commander RM-X110 (US model) RM-X111 (AEP, UK, E model) Rotary commander RM-X5S

Note

This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

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.

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.

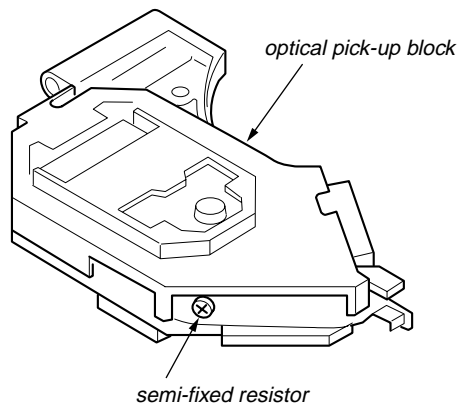
US model:

CAUTION

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

If the optical pick-up block is defective, please replace the whole optical pick-up block.

Never turn the semi-fixed resistor located at the side of optical pick-up block.



AEP/UK model:

**CLASS 1
LASER PRODUCT**

This label is located on the bottom of the chassis.

**CAUTION—INVISIBLE LASER RADIATION WHEN OPEN
DO NOT STARE INTO BEAM OR
VIEW DIRECTLY WITH OPTICAL INSTRUMENTS**

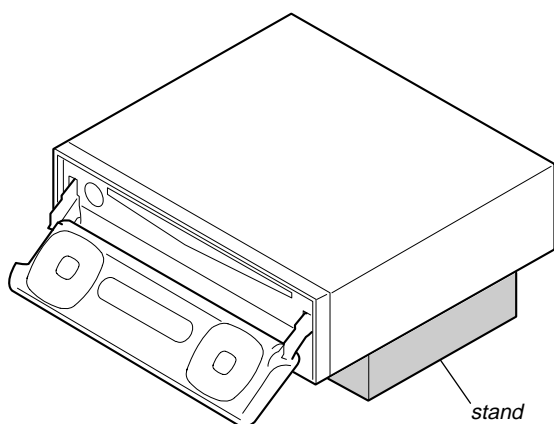
This label is located on the drive unit's internal chassis.

When replacing the chassis (T) of mechanism deck which have the "CAUTION LABEL" attached, please be sure to put a new CAUTION LABEL (3-223-913-11) to the chassis (T).

NOTE FOR THE OPENING OF THE FRONT PANEL

In this set, the front panel is lowered to below the bottom face when it is opened.

When servicing the set, place it on a stand having a height of about 2 cm.

**TEST MODE**

1. Turn on the power.
2. Push "4" on the card remote control for 2 sec.
3. Push "5" on the control for 2 sec.
4. Push "1" on the control for 2 sec.
(The TEST MODE is entered.)
5. Push the "OPEN/CLOSE" switch on the control for 2 sec.
6. The front panel detouch position is set.
(No display appears at this time.)
7. Turn off the power and disassemble the set.

TABLE OF CONTENTS

1. GENERAL	4
2. DISASSEMBLY	
2-1. Front Panel Assy (Normal)	16
2-2. Front Panel Assy (Inoperative)	16
2-3. CD Mechanism Block, Flexible Board	16
2-4. Sub Panel (CD) Sub Assy	17
2-5. Motor Block Assy, Cam (R) Assy	17
2-6. Main Board	18
2-7. Heat Sink	18
2-8. Chassis (T) Sub Assy	19
2-9. Lever Section	19
2-10. Servo Board	20
2-11. Shaft Roller Assy	20
2-12. Floating Block Assy	21
2-13. Optical Pick-up Block	21
3. PHASE ALIGNMENT	
3-1. Arm (A-L) Assy, Arm (B-L) Assy	22
3-2. Cam (L)	22
3-3. Motor Block	23
3-4. Alignment between Arm (A-L) Assy and Arm (B-L) Assy	23
3-5. Arm (A-R) Assy, Arm (B-R) Assy	24
3-6. Cam (R)	24
4. DIAGRAMS	
4-1. IC Pin Descriptions	25
4-2. Circuit Boards Location	35
4-3. Block Diagram –CD Section–	36
4-4. Block Diagram –Tuner Section–	37
4-5. Block Diagram –Display Section–	38
4-6. Printed Wiring Boards –CD Mechanism Section–	40
4-7. Schematic Diagram –CD Mechanism Section (1/2)–	42
4-8. Schematic Diagram –CD Mechanism Section (2/2)–	43
4-9. Printed Wiring Boards –Main Section–	44
4-10. Schematic Diagram –Main Section (1/4)–	46
4-11. Schematic Diagram –Main Section (2/4)–	47
4-12. Schematic Diagram –Main Section (3/4)–	48
4-13. Schematic Diagram –Main Section (4/4)–	49
4-14. Printed Wiring Board –Sub (CD) Section–	50
4-15. Schematic Diagram –Sub (CD) Section–	51
4-16. Printed Wiring Board –Key Section–	52
4-17. Schematic Diagram –Key Section–	53
4-18. Printed Wiring Board –Display Section–	54
4-19. Schematic Diagram –Display Section–	55
5. EXPLODED VIEWS	
5-1. Chassis Section	58
5-2. Cam Section	59
5-3. Main Board Section	60
5-4. Front Panel (Key) Assy Section	61
5-5. Front Panel (Dspl) Assy Section	62
5-6. CD Mechanism Section (1)	63
5-7. CD Mechanism Section (2)	64
5-8. CD Mechanism Section (3)	65
6. ELECTRICAL PARTS LIST	66

This section is extracted from instruction manual.

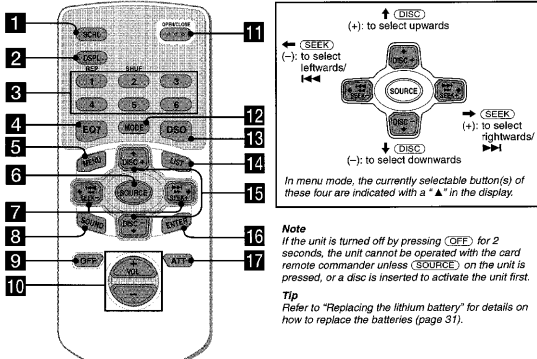
US MODEL

Location of controls

Card remote commander RM-X110

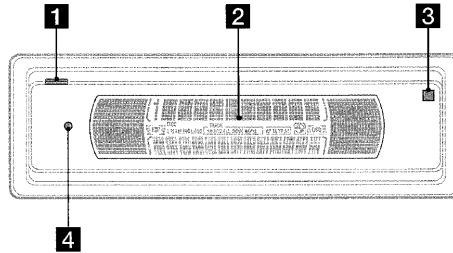
Refer to the pages listed for details.

CD/MD: During Playback RADIO: During radio reception MENU: During menu mode

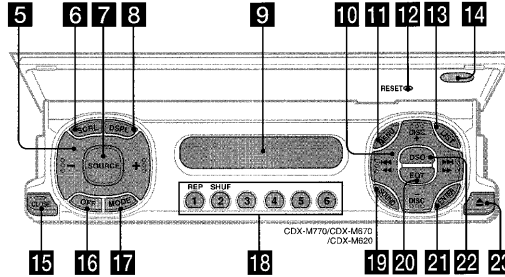


- 1 SCRL (scroll) button 10
- 2 DSPL (display mode change) button 10, 12, 27
- 3 Number buttons
CD/MD: 10, 12
RADIO: 14, 15
TV: 28, 29
- 4 EQ7 button 17
- 5 MENU button 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 28, 30
- 6 SOURCE (Power on/Radio/CD/MD) button 9, 10, 12, 14, 15, 17, 18, 20, 21, 22, 25, 26, 27, 28, 30
- 7 ←/→ SEEK +/- buttons 19, 20, 21, 22
CD/MD: 10, 14, 15
RADIO: 14, 15
TV: 28, 30
- 8 SOUND button 19, 20, 21, 22
- 9 OFF (Stop/Power off) button 10, 27, 30
- 10 VOL +/- buttons
- 11 OPEN/CLOSE button 10, 32
- 12 MODE button
CD/MD: 10, 12
RADIO: 14, 15
TV: 28
- 13 DSO button 18
- 14 LIST button
CD/MD: 12
RADIO: 16
TV: 28, 29
- 15 +/- DISC +/- buttons
CD/MD: 10, 12
RADIO: 14, 15, 16
TV: 30
- 16 ENTER button
CD/MD: 12
RADIO: 15, 16
MENU: 9, 11, 12, 13, 14, 16, 17, 18, 21, 22, 23, 25, 26, 27, 28
- 17 ATT button 25

Main display panel



Operation side



- The corresponding buttons of the unit control the same functions as those on the card remote commander.
- 1 OPEN button 8, 10, 32
 - 2 Main display window
 - 3 Receptor for the card remote commander
 - 4 12 Reset button 8
 - 5 Volume adjust buttons
 - 6 SCRL (scroll) button
 - 7 SOURCE button
 - 8 DSPL (display mode change) button
 - 9 Sub display window
 - 10 DISC +/- (cursor up/down) buttons
 - 11 SEEK +/- (cursor left/right) buttons
 - 12 MENU button
 - 13 LIST button
 - 14 CLOSE (front panel close) button 8, 10
 - 15 OFF (Stop/Power off) button*
 - 16 MODE button
 - 17 Number buttons
 - 18 SOUND button
 - 19 EQ7 button
 - 20 ENTER button
 - 21 DSO button
 - 22 ▲ (eject) button 10, 30

continue to next page → 5

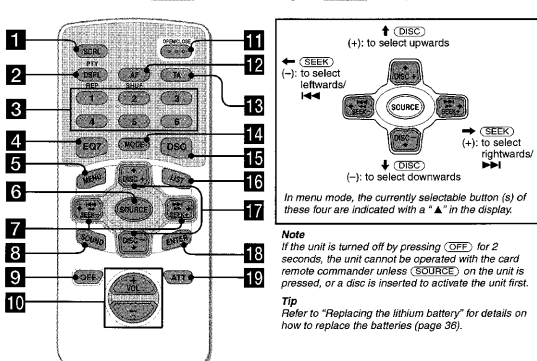
AEP, UK, E MODEL

Location of controls

Card remote commander RM-X111

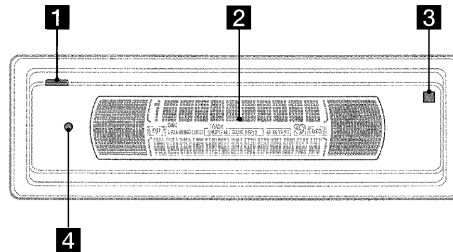
Refer to the pages listed for details.

CD/MD: During Playback RADIO: During radio reception MENU: During menu mode

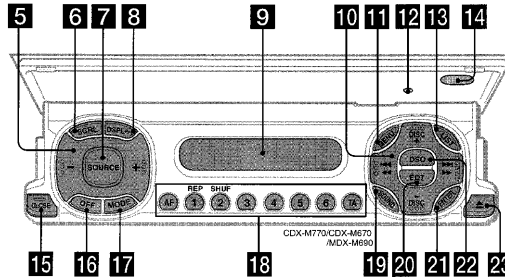


- 1 SCRL (scroll) button 12
- 2 DSPL/PTY (display mode change/ programme type) button 12, 13, 17, 20, 25, 35
- 3 Number buttons
CD/MD: 11, 12
RADIO: 15, 16, 18, 19, 22, 24
- 4 EQ7 button 26
- 5 MENU button 10, 13, 14, 15, 19, 21, 23, 25, 26, 27, 28, 30, 31, 33, 34, 35
- 6 SOURCE (Power on/Radio/CD/MD) button 10, 11, 13, 15, 16, 19, 22, 26, 27, 29, 30, 31, 33, 35
- 7 ←/→ SEEK +/- buttons 10, 28, 29, 30, 31
CD/MD: 11
RADIO: 16, 18, 22
MENU: 10, 13, 14, 15, 21, 23, 25, 26, 27, 28, 30, 31, 33, 34, 35
- 8 SOUND button 28, 29, 30, 31
- 9 OFF (Stop/Power off) button 11, 35
- 10 VOL +/- buttons 19
- 11 OPEN/CLOSE button 11, 37
- 12 AF button 18, 19
- 13 TA button 19
- 14 MODE button
CD/MD: 11, 13
RADIO: 15, 16, 19, 22
- 15 DSO button 27
- 16 LIST button
CD/MD: 13, 14
RADIO: 17, 24
- 17 +/- DISC +/- buttons
CD/MD: 11, 14
RADIO: 16, 17, 20, 22, 23, 24, 25
MENU: 10, 13, 14, 15, 19, 21, 23, 25, 26, 27, 28, 30, 31, 33, 34, 35
- 18 ENTER button
CD/MD: 14
RADIO: 17, 20, 23, 24, 25
MENU: 10, 13, 14, 15, 19, 21, 23, 25, 26, 27, 30, 31, 33, 34, 35
- 19 ATT button 33

Main display panel



Operation side



- The corresponding buttons of the unit control the same functions as those on the card remote commander.
- 1 OPEN button 9, 11, 37
 - 2 Main display window
 - 3 Receptor for the card remote commander
 - 4 12 Reset button 9
 - 5 Volume adjust buttons
 - 6 SCRL (scroll) button
 - 7 SOURCE button
 - 8 DSPL/PTY (display mode change/ programme type) button
 - 9 Sub display window
 - 10 DISC +/- (cursor up/down) buttons
 - 11 SEEK +/- (cursor left/right) buttons
 - 12 MENU button
 - 13 LIST button
 - 14 CLOSE (front panel close) button 9, 11
 - 15 OFF (Stop/Power off) button*
 - 16 MODE button
 - 17 Number buttons
 - 18 SOUND button
 - 19 EQ7 button
 - 20 ENTER button
 - 21 DSO button
 - 22 ▲ (eject) button 11

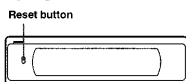
continue to next page → 5

US, AEP, UK, E MODEL

Getting Started

Resetting the unit

Before operating the unit for the first time, or after replacing the car battery or changing the connections, you must reset the unit. Press the reset button with a pointed object, such as a ball-point pen.

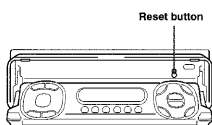


Notes

- After resetting the unit in the closed position, be sure to press (OPEN) once before operating further. If a disc is in the unit, the disc will be ejected automatically. Insert the disc again.
- Pressing the reset button will erase the clock setting and some stored contents.

Resetting the unit during use in sub display-position

Reset button by the disc-slot with a pointed object, such as a ball-point pen.



8

Detaching the main display window

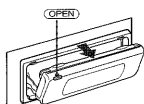
You can detach the main display window of this unit to protect the unit from being stolen.

Caution alarm

If you turn the ignition switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds.

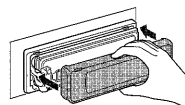
1 Press (OPEN) on the unit for 2 seconds.

CD/MD playback or radio reception stops, and the front panel automatically tilts at an angle of 30°.



Attaching the main display window panel

Place the main display window on the front side of the unit as illustrated, then lightly push the front panel into position until it clicks. Press (SOURCE) (or insert a disc) to operate the unit.

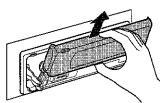


Note

Do not put anything on the inner surface of the main display window.

2 Detach the main display window as illustrated.

After the main display window detaching is complete, the front panel closes automatically.



Notes

- If you detach the main display window while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.
- Do not drop or put excessive pressure on the display window.
- Do not subject the main display window to heat/high temperature or moisture. Avoid leaving it in parked cars or on dashboards/rear trays.

Tips

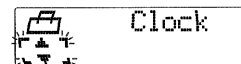
- If you want to detach the main display window, when the front panel is in the sub-display position, press (CLOSE) for 2 seconds. If a disc is partially inserted, load the disc correctly or remove the disc from the unit.
- When carrying the main display window with you, use the supplied front panel case.

Setting the clock

The clock uses a 12-hour digital indication.

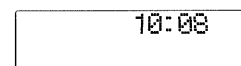
Example: To set the clock to 10:08

- 1 Press (MENU), then press ↑ or ↓ (the either (+/-) side of (DISC)) repeatedly until "Clock" appears.



- 1 Press (ENTER). The hour indication flashes.
- 2 Press ↑ or ↓ to set the hour.
- 3 Press → (the (+) side of (SEEK)). The minute indication flashes.
- 4 Press ↑ or ↓ to set the minute.

2 Press (ENTER).



The clock starts. After the clock setting is completed, the display returns to normal play mode.

Tip

When D.Info mode is set to on, the time is always displayed (page 26).

9

CD Player CD/MD Unit (optional)

In addition to playing a CD with this unit, you can also control external CD/MD units.

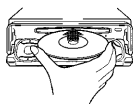
Note

If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play a CD TEXT disc.

Playing a disc

(With this unit)

- 1 Press (OPEN/CLOSE) or (OPEN) on the unit and insert the disc (labeled side up). Playback starts automatically.



- 2 Press (OPEN/CLOSE) or (CLOSE) on the unit to close the front panel.

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

To	Press
Stop playback	(OFF)
Eject the disc	(OPEN/CLOSE) or (OPEN) then ▲
Skip tracks - Automatic - Music Sensor	◀▶ (SEEK) (◀▶▶) [once for each track]
Fast-forward/ reverse	◀▶▶ (SEEK) (◀▶▶▶) [hold to desired point]
Manual Search	◀▶▶▶ (SEEK) (◀▶▶▶▶) [hold to desired point]

Notes

- When the last track on the disc is over, playback restarts from the first track of the disc.
- With optional unit connected, playback of the same source will continue on to the optional CD/MD unit.

10

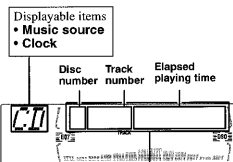
(With optional unit)

- 1 Press (SOURCE) repeatedly to select "CD" or "MD."
- 2 Press (MODE) repeatedly until the desired unit appears. Playback starts.

To	Press
Skip discs - Disc selection	↑↓ (DISC) (+/-)

Display items

When the disc/track changes, any prerecorded title*1 of the new disc/track is automatically displayed (if the Auto Scroll function is set to "on," names exceeding 9 characters will be scrolled (page 26)).



Displayable items
• Disc name**1/artist name**2
• Track title**1

To	Press
Switch display item	(DSPL)
Scroll display item	(SCRL)

*1 When pressing (DSPL), "NO D.Name" or "NO T.Name" indicates that there is no Disc Memo (page 11) or prerecorded name to display.
*2 Only for CD TEXT discs with the artist name.

Notes

- Some characters cannot be displayed.
- For some CD TEXT discs with very many characters, information may not scroll.
- This unit cannot display the artist name for each track of a CD TEXT disc.

Tip

When Auto scroll is set to off, and the disc/track is changed, the disc/track name does not scroll.

Playing tracks repeatedly

— Repeat Play

The disc in the main unit will repeat a track or the entire disc when it reaches the end. For repeat play, you can select:

- Repeat 1 — to repeat a track.
- Repeat 2* — to repeat a disc.

* Available only when one or more optional CD/MD units are connected.

During playback, press (REP) repeatedly until the desired setting appears in the display. Repeat Play starts.

To return to normal play mode, select "Repeat off."

Playing tracks in random order

— Shuffle Play

You can select:

- Shuf 1 — to play the tracks on the current disc in random order.
- Shuf 2*1 — to play the tracks in the current optional CD (MD) unit in random order.
- Shuf All*2 — to play all the tracks in all the connected CD (MD) units (including this unit) in random order.

*1 Available only when one or more optional CD (MD) units are connected.

*2 Available only when one or more optional CD units, or two or more optional MD units are connected.

During playback, press (SHUF) repeatedly until the desired setting appears in the display. Shuffle Play starts.

To return to normal play mode, select "Shuf off."

Note

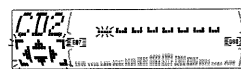
"Shuf All" will not shuffle tracks between CD units and MD units.

Labeling a CD

— Disc Memo (For a CD unit with the CUSTOM FILE function)

You can label each disc with a custom name (Disc Memo). You can enter up to 8 characters for a disc. If you label a CD, you can locate the disc by name (page 12).

- 1 Start playing the disc you want to label in a CD unit with the CUSTOM FILE function.
- 2 Press (MENU), then press ↑ or ↓ repeatedly until "Name Edit" appears.
- 3 Press (ENTER).



The unit will repeat the disc during the labeling procedure.

4 Enter the characters.

1 Press ↑*1 repeatedly to select the desired character.

A → B → C → ... → 0 → 1 → 2 → ... → * → ... → *2 → A

*1 For reverse order, press ↓.
*2 (blank space)

2 Press → after locating the desired character.



If you press ← (the (-) side of (SEEK)), you can move back to the left.

3 Repeat steps 1 and 2 to enter the entire name.

- 5 To return to normal CD play mode, press (ENTER).

continue to next page →

11

- Tip**
- Simply overwrite or enter " " to correct or erase a name.
 - There is another way to start labeling a CD: Press (LIST) for 2 seconds instead of performing steps 2 and 3. You can also complete the operation by pressing (LIST) for 2 seconds instead of step 5.
 - You can label CDs on a unit without the CUSTOM FILE function if that unit is connected along with a CD unit that has the function. The Disc Memo will be stored in the memory of the CD unit with the CUSTOM FILE function.

Note
Repeat/shuffle play is suspended until the Name Edit is complete.

Viewing the Disc Memo

As a display item, the Disc Memo always takes priority over any original CD TEXT information.

To	Press
View	(BSPL) during CD/CD TEXT disc playback

Tip
To find out about other items that can be displayed, see page 10.

Erasing the Disc Memo

- Press (SOURCE) repeatedly to select "CD."
- Press (MODE) repeatedly to select the CD unit storing the Disc Memo.
- Press (MENU), then press ↑ or ↓ repeatedly until "Name Del" appears.
- Press (ENTER). The stored names will appear.
- Press ↑ or ↓ repeatedly to select the disc name you want to erase. The stored names will appear.
- Press (ENTER) for 2 seconds. The name is erased. Repeat steps 5 and 6 if you want to erase other names.
- Press (ENTER). The unit returns to normal CD play mode.

Notes

- When the Disc Memo for a CD TEXT disc is erased, the original CD TEXT information is displayed.
- If you cannot find the Disc Memo you want to erase, try selecting a different CD unit in step 2.

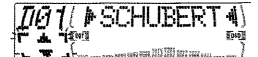
Locating a disc by name

— List-up (For a CD unit with the CD TEXT/ CUSTOM FILE function, or an MD unit)

You can use this function for discs that have been assigned custom names*1 or for CD TEXT discs*2.

- *1 Locating a disc by its custom name: when you assign a name for a CD (page 11) or an MD.
- *2 Locating discs by the CD TEXT information: when you play a CD TEXT disc on a CD unit with the CD TEXT function.

- Press (LIST). The name assigned to the current disc appears in the display.



- Press ↑ or ↓ repeatedly until you find the desired disc.
- Press (ENTER) to play the disc.

Notes

- Some letters cannot be displayed (exception: Disc Memo).
- If the optional TV monitor is connected, the list appears on the TV monitor instead of the display on the unit.

Selecting specific tracks for playback

— Bank (For a CD unit with the CUSTOM FILE function)

If you label the disc, you can set the unit to skip or play the tracks of your choice.

- Start playing the disc you want to label.
- Press (MENU), then press ↑ or ↓ repeatedly until "Bank Sel" appears.
- Press (ENTER).



- Label the tracks.
 - Press ← or → repeatedly to select the track you want to label.
 - Press (ENTER) repeatedly to select "Play" or "Skip."
- Repeat step 4 to set "Play" or "Skip" for all the tracks.

- Press (ENTER). The unit returns to normal CD play mode.

Notes

- You can set "Play" and "Skip" for up to 24 tracks.
- You cannot set "Skip" for all the tracks on a CD.

Playing specific tracks only

You can select:

- Bank on — to play the tracks with the "Play" setting.
- Bank inv (Inverse) — to play the tracks with the "Skip" setting.

- During playback, press (MENU), then press ↑ or ↓ repeatedly until "Bank on," "Bank inv," or "Bank off" appears.
- Press → repeatedly until the desired setting appears.



- Press (ENTER). Playback starts from the track following the current one.

To return to normal play mode, select "Bank off" in step 2.

US MODEL

Radio

The unit can store up to 6 stations per band (FM1, FM2, FM3, AM1, and AM2).

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

Storing stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals within the selected band, and stores them in the order of their frequency.

- Press (SOURCE) repeatedly to select the radio.
- Press (MODE) repeatedly to select the band.
- Press (MENU), then press ↑ or ↓ repeatedly until "BTM" appears.
- Press (ENTER). A beep sounds when the setting is stored.

Notes

- If only a few stations can be received due to weak signals, some number buttons will retain their former settings.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.

Receiving the stored stations

- Press (SOURCE) repeatedly to select the radio.
- Press (MODE) repeatedly to select the band.
- Press the number button (1 to 6) on which the desired station is stored.

Tip
Press ↑ or ↓ to receive the stations in the order they are stored in the memory (Preset Search function).

If preset tuning does not work

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

- Tips**
- If automatic tuning stops too frequently, turn on the Local Seek to limit seek to stations with stronger signals (see "Changing the sound and display settings" on page 26).
 - If you know the frequency of the station you want to listen to, press and hold either side of (SEEK) to locate the approximate frequency, then press (SEEK) repeatedly to fine adjust to the desired frequency (manual tuning).

If FM stereo reception is poor

Select monaural reception mode (see "Changing the sound and display settings" on page 26). The sound improves, but becomes monaural ("ST" disappears).

Note
If interference occurs, this unit will automatically narrow the reception frequency to eliminate noise (IF Auto function). In such cases, some FM stereo broadcasts may become monaural while in the stereo reception mode.

Tip
To always hear FM stereo broadcasts in stereo, you can change the IF Auto setting and widen the frequency signal reception (see "Changing the sound and display settings" on page 26). Note that some interference may occur in this setting.

Storing only the desired stations

You can manually preset the desired stations on any chosen number button.

- Press (SOURCE) repeatedly to select the radio.
- Press (MODE) repeatedly to select the band.
- Press either side of (SEEK) to tune in the station that you want to store.
- Press the desired number button (1 to 6) for 2 seconds 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.

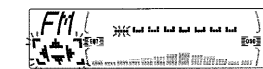
Storing station names

— Station Memo

You can assign a name to each radio station and store it in memory. The name of the station currently tuned in appears in the display. You can assign a name using up to 8 characters for a station.

Storing the station names

- Tune in a station whose name you want to store.
- Press (MENU), then press ↑ or ↓ repeatedly until "Name Edit" appears.
- Press (ENTER).

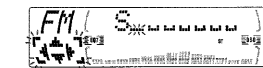


- Enter the characters.
 - Press ↑ repeatedly to select the desired character.

A → B → C ... 0 → 1 → 2 ... → +
→ → * ... → ← → A

- *1 For reverse order, press ↓.
- *2 (blank space)

- Press → after locating the desired character.



If you press ←, you can move back to the left.

- Repeat steps 1 and 2 to enter the entire name.
- Press (ENTER).

continue to next page →

AEP, UK, E MODEL

Tips

- Simply overwrite or enter " " to correct or erase a name.
- There is another way to start storing station names: Press (LIST) for 2 seconds instead of performing steps 2 and 3. You can also complete the operation by pressing (LIST) for 2 seconds instead of step 5.

Erasing the station name

- 1 During radio reception, press (MENU), then press ↑ or ↓ repeatedly until "Name Del" appears.
- 2 Press (ENTER).
- 3 Press ↑ or ↓ repeatedly to select the station whose name you want to erase.
- 4 Press (ENTER) for 2 seconds. The name is erased. Repeat steps 3 to 4 if you want to erase other names.
- 5 Press (ENTER). The unit returns to normal radio reception mode.

Note
If you have already erased all of the station names, "NO Data" appears in step 4.

Tuning in a station through a list

— List-up

- 1 During radio reception, press (LIST) momentarily. The frequency or the name assigned to the current station appears in the display.



- 2 Press ↑ or ↓ repeatedly until you find the desired station. If no name is assigned to the selected station, the frequency appears in the display.

- 3 Press (ENTER) to tune in the desired station.

Note
If the optional TV monitor is connected, and if the monitor responds to this function, the list appears on the TV monitor instead of the display on the unit.

Playing specific tracks only

- You can select:
- Bank on — to play the tracks with the "Play" setting.
 - Bank inv (Inverse) — to play the tracks with the "Skip" setting.

- 1 During playback, press (MENU), then press ↑ or ↓ repeatedly until "Bank on," "Bank inv," or "Bank off" appears.
- 2 Press → repeatedly until the desired setting appears.



- 3 Press (ENTER). Playback starts from the track following the current one.

To return to normal play mode, select "Bank off" in step 2.

Radio

The unit can store up to 6 stations per band (FM1, FM2, FM3, MW, and LW).

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

Storing stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals within the selected band, and stores them in the order of their frequency.

- 1 Press (SOURCE) repeatedly to select the radio.
- 2 Press (MODE) repeatedly to select the band.
- 3 Press (MENU), then press ↑ or ↓ repeatedly until "BTM" appears.
- 4 Press (ENTER). A beep sounds when the setting is stored.

Notes

- If only a few stations can be received due to weak signals, some number buttons will retain their former settings.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.

Receiving the stored stations

- 1 Press (SOURCE) repeatedly to select the radio.
- 2 Press (MODE) repeatedly to select the band.
- 3 Press the number button (1 to 6) on which the desired station is stored.

Tip
Press ↑ or ↓ to receive the stations in the order they are stored in the memory (Preset Search function).

If preset tuning does not work

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

Tips

- If automatic tuning stops too frequently, turn on the Local Seek to limit seek to stations with stronger signals (see "Changing the sound and display settings" on page 34).
- If you know the frequency of the station you want to listen to, press and hold either side of (SEEK) to locate the approximate frequency, then press (SEEK) repeatedly to fine adjust to the desired frequency (manual tuning).

If FM stereo reception is poor

Select monaural reception mode (see "Changing the sound and display settings" on page 34). The sound improves, but becomes monaural ("ST" disappears).

Storing only the desired stations

You can manually preset the desired stations on any chosen number button.

- 1 Press (SOURCE) repeatedly to select the radio.
- 2 Press (MODE) repeatedly to select the band.
- 3 Press either side of (SEEK) to tune in the station that you want to store.
- 4 Press the desired number button (1 to 6) for 2 seconds 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.

Tuning in a station through a list

— List-up

- 1 During radio reception, press (LIST) momentarily. The frequency or the name assigned to the current station appears in the display.



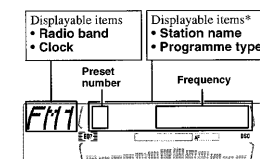
- 2 Press ↑ or ↓ repeatedly until you find the desired station. If no name is assigned to the selected station, the frequency appears in the display.

- 3 Press (ENTER) to tune in the desired station.

RDS

Overview of RDS

FM stations with Radio Data System (RDS) service send inaudible digital information along with the regular radio programme signal. For example, one of the following will be displayed upon receiving a station with RDS capability.



* see "Tuning in stations by programme type" on page 20.

To	Press
Switch display item	(DSP/PTY)

RDS services

- RDS data offers you other conveniences, such as:
- Automatic retuning of a programme, helpful during long-distance drives. — AF → page 18
 - Receiving traffic announcements, even when enjoying another programme/source. — TA → page 19
 - Selecting stations by the type of programme it broadcasts. — PTY → page 20
 - Automatic clock time setting. — CT → page 21

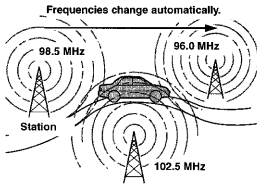
Notes

- Depending on the country or region, not all of the RDS functions are available.
- RDS may not work properly if the signal strength is weak or if the station you are tuned to is not transmitting RDS data.

Automatic retuning for best reception results

— AF function

The alternative frequencies (AF) function allows the radio to always tune into the area's strongest signal for the station you are listening to.



- 1 Select an FM station (page 15).
- 2 Press **(AF)** repeatedly until "AF on" appears. The unit starts searching for an alternative frequency with a stronger signal in the same network. If "NO AF" flashes, the currently tuned into station does not have an alternative frequency.

Note
When there is no alternative frequency in the area or when you do not need to search for one, turn the AF function off by selecting "AF off."

For stations without alternative frequencies

Press either side of **(SEEK)** while the station name is flashing (within 8 seconds). The unit starts searching for another frequency with the same PI (Programme Identification) data ("PI Seek" appears). If the unit cannot find the same PI, the unit returns to the previously selected frequency.

Staying with one regional programme

When AF function is on: this unit's factory-set setting restricts reception to a specific region, so you won't be switched to another regional station with a stronger frequency. If you leave this regional programme's reception area or would like to take advantage of the whole AF function, select "REG off" from the MENU (page 34).

Note
This function does not work in the United Kingdom and in some other areas.

Local Link function (United Kingdom only)

This function enables you to select other local stations in the area, even if they are not stored on your number buttons.

- 1 Press a number button **(1)** to **(6)** that has a local station stored on it.
- 2 Within 5 seconds, press the number button of the local station again.
- 3 Repeat this procedure until the desired local station is received.

Receiving traffic announcements

— TA/TP

By activating the Traffic Announcement (TA) and Traffic Programme (TP), you can automatically tune in an FM station broadcasting traffic announcements. These settings function regardless of the current FM programme/source, CD/MD; the unit switches back to the original source when the bulletin is over.

Press **(TA)** repeatedly until "TA on" appears. The unit starts searching for traffic information stations. "TP" indicates reception of such stations, and "TA" flashes during an actual traffic announcement. The unit will continue searching for stations available with TP if "NO TP" is indicated.

To cancel all traffic announcements, select "TA off."

To	Press
Cancel current announcement	(TA)

Tip
You can also cancel the current announcement by pressing **(SOURCE)** or **(MODE)**.

Presetting the volume of traffic announcements

You can preset the volume level of the traffic announcements so you won't miss hearing them.

- 1 Press **(VOL)** to adjust the desired volume level.
- 2 Press **(TA)** for 2 seconds. "TA" appears and the setting is stored.

Receiving emergency announcements

If either AF or TA is on, the unit will switch to emergency announcements, if one comes in while listening to an FM station or CD/MD.

Presetting RDS stations with AF and TA setting

When you preset RDS stations, the unit stores each station's AF/TA setting (on/off) as well as its frequency. You can select a different setting (for AF, TA, or both) for individual preset stations, or the same setting for all preset stations. If you preset stations with "AF on," the unit automatically stores stations with the strongest radio signal.

Presetting the same setting for all preset stations

- 1 Select an FM band (page 15).
- 2 Press **(AF)** and/or **(TA)** to select "AF on" and/or "TA on." Note that selecting "AF off" or "TA off" stores not only RDS stations, but also non-RDS stations.
- 3 Press **(MENU)**, then press **↑** or **↓** repeatedly until "BTM" appears.
- 4 Press **(ENTER)** until "BTM" flashes.

Presetting different settings for each preset station

- 1 Select an FM band, and tune in the desired station (page 16).
- 2 Press **(AF)** and/or **(TA)** to select "AF on" and/or "TA on."
- 3 Press the desired number button **(1)** to **(6)** until "MEM" appears.

Repeat from step 1 to preset other stations.

Tuning in stations by programme type

— PTY

You can tune in a station by selecting the type of programme you would like to listen to.

Programme types	Display
News	News
Current Affairs	Affairs
Information	Info
Sports	Sport
Education	Educate
Drama	Drama
Culture	Culture
Science	Science
Varied	Varied
Popular Music	Pop M
Rock Music	Rock M
Easy Listening	Easy M
Light Classical	Light M
Classical	Classics
Other Music Type	Other M
Weather	Weather
Finance	Finance
Children's Programmes	Children
Social Affairs	Social A
Religion	Religion
Phone In	Phone In
Travel	Travel
Leisure	Leisure
Jazz Music	Jazz
Country Music	Country
National Music	Nation M
Oldies Music	Oldies
Folk Music	Folk M
Documentary	Document

Note
You cannot use this function in some countries where no PTY (Programme Type selection) data is available.

- 1 Press **(DSPLPTY)** during FM reception until "PTY" appears.



The current programme type name appears if the station is transmitting the PTY data. "-----" appears if the received station is not an RDS station, or if the RDS data is not received.

- 2 Press **↑** or **↓** repeatedly until the desired programme type appears. The programme types appear in the order shown in the table. "-----" appears if the programme type is not specified in the RDS data.
- 3 Press **(ENTER)**. The unit starts searching for a station broadcasting the selected programme type.

Setting the clock automatically

— CT

The CT (Clock Time) data from the RDS transmission sets the clock automatically.

- 1 During radio reception, press **(MENU)**, then press **↑** or **↓** repeatedly until "CT off" appears.



- 2 Press **→** repeatedly until "CT on" appears. The clock is set.
- 3 Press **(ENTER)** to return to the normal display.

To cancel the CT function, select "CT off" in step 2.

Notes
• The CT function may not work even though an RDS station is being received.
• There might be a difference between the time set by the CT function and the actual time.

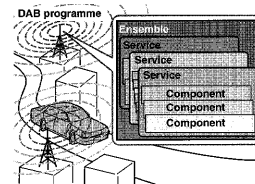
DAB (optional)

You can connect an optional DAB tuner to this unit.

Overview of DAB

DAB (Digital Audio Broadcasting) is a new multimedia broadcasting system that transmits audio programmes with a quality comparable to that of CDs. This is made possible by the use of a microcomputer in the DAB tuner which uses the radio signals sent from multiple aerials and multi-path signals (reflected radio waves) to boost the strength of the main signal. This makes DAB almost immune to radio interference even in a moving object such as a car.

Each DAB station bundles radio programmes (services) into an ensemble which it then broadcasts. Each service contains one or more components. All ensembles, services, and components are identified by name, so you can access any of them without having to know their frequencies.



Notes
• The DAB system is still in a testing phase. Some services have not been sufficiently defined or are presently being tested. At present, such services are not supported by the optional DAB tuner unit XT-100DAB.
• DAB programmes are broadcast in Band-III (174 to 240 MHz) and L-Band (1,452 to 1,492 MHz), with each band divided into channels (41 in Band-III and 23 in L-Band). One ensemble is broadcast per channel by each DAB station.

Basic operations of DAB

Searching for the ensemble and service

— Automatic Tuning

- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select "DAB."
- 3 Press and hold either side of **(SEEK)** until "Seek +" or "Seek -" appears.



The unit will stop seeking when an ensemble is located. The unit will then automatically select the first service and display its name, and the display indicator will change from "Seek +"/"Seek -" to the service name.

- 4 Press either side of **(SEEK)** to select the desired service.

Selecting the ensemble

— Manual Tuning

If you know the channel number of ensemble, follow the procedure below to tune in.

- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select "DAB."
- 3 Press **↑** or **↓** until "Ch. XXX" appears.



- 4 Press **↑** or **↓** repeatedly until the desired channel number appears.

Receiving the preset services

Following procedure is available after presetting the service. For details on presetting the services, refer to "Presetting DAB services automatically," (page 23) and "Presetting DAB services manually" (page 23).

- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select "DAB."
- 3 Press **↑** or **↓** repeatedly to select the preset service.

Tip
There is another way to receive the preset service (preset on numbers 1 to 6). Press the number button (1 to 6) on which the desired service is stored.

Refer to the level indication to check the receiving condition of the DAB programme. The level indication increases as the strength of the receiving signal increases.

level 0 level 1 level 2 level 3 level 4
A A A A A

"A" will flash in the display if the reception is poor.

Note
To display the level indication, select the spectrum analyzer pattern A-1 or A-2 (page 33).

Presetting DAB services automatically

— BTM

The BTM (Best Tuning Memory) function picks out DAB ensembles and automatically assigns the services within the ensembles to preset service numbers. The unit can preset up to 40 services.

If services have been previously set, the BTM function operates under the following conditions:

- If you activate the BTM function while listening to a preset service, the unit will store detected services (by overwriting) only to preset numbers higher than that of the current preset service.
- If you activate the function while listening to a service that is not preset, the unit will replace the contents of all preset numbers.
- In both cases above, if the unit detects a service that is identical to one already preset, the previously stored service remains unchanged and the newly detected service is not preset.

- 1 While listening to a DAB programme, press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly until "BTM" appears.

- 3 Press **(ENTER)**.
A beep sounds when the service is stored. After activating the BTM function, the unit tunes the service assigned in the last smallest preset memory No. automatically.

Note
If the unit can only tune in a few services, the BTM function may not assign services to all the preset service numbers.

Presetting DAB services manually

— Preset Edit

You can also preset DAB services manually or delete a service which is already preset. Note that up to 40 services (preset either by the BTM function or manually) can be preset to the unit's memory.

- 1 While listening to a DAB programme, press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly until "PRS Edit" appears, then press **(ENTER)**.

- 3 Select the service and the preset number you want to preset.

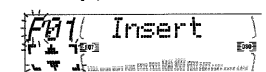
① Press either side of **(SEEK)** to select the service.

② Press **↑** or **↓** to select the preset number.



③ Press **(ENTER)**.

The Preset Edit commands will appear in the display.



- 4 Press **↑** or **↓** to select the desired command.

- 5 Press **(ENTER)**.
To edit other services, repeat steps 3 and 4.

continue to next page →

Replacing the services in preset memories

Press **↑** or **↓** to select "Over Wrt" in step 4, then press **(ENTER)**.

Tip
There is another way to preset the service (on numbers 1 to 6). After receiving the service, press the desired number button (1 to 6) until a beep sounds.

Adding the services in preset memories

Press **↑** or **↓** to select "Insert" in step 4, then press **(ENTER)**.

Note
"Insert" does not appear if the maximum number of services (40) is already preset in memory.

Erasing the services in preset memories

Press **↑** or **↓** to select "Delete" in step 4, then press **(ENTER)**.

Tuning in DAB progra through a list

Follow the procedure below to tune in a DAB programme manually.

- 1 While listening to a DAB programme, press **(LIST)** repeatedly until "E" (ensemble list) appears.

E: ensemble list
S: service list
C: component list
P: preset list



All available ensembles will be listed.

- 2 Press **↑** or **↓** until the desired ensemble appears, then press **(ENTER)**.

The first service for the ensemble is selected automatically.

- 3 Press **(LIST)** repeatedly until "S" (service list) appears.

All services available for the ensemble will be listed.

- 4 Press **↑** or **↓** repeatedly until the desired service appears, then press **(ENTER)**.

The first component for the service is selected automatically.

- 5 Press **(LIST)** repeatedly until "C" (component list) appears.

All components available for the service will be listed.

- 6 Press **↑** or **↓** until the desired component appears, then press **(ENTER)**.

Automatic updating of the ensemble list

When you perform the BTM function for the first time, all the ensembles available in your area are automatically stored. When you perform the BTM function again, the contents of these lists are updated in accordance with the conditions described on page 23.

An ensemble is added to the respective list when it is received during Automatic Tuning or Manual Tuning but is unlisted.

- An ensemble is also deleted from the respective list when:
- you select an ensemble from the list, but it cannot be received.
 - you perform Automatic Tuning or Manual Tuning to receive a listed ensemble, service, or the component, but it cannot be received.

Switching multi-channel audio and DRC

DAB can contain multi-channel audio. You can select main or sub-channel for reception. Also, if you turn on the DRC (Dynamic Range Control) function, the dynamic range on the service which supports DRC can automatically be extended.

- The following items can be set:
- **BLGL** — to select the channel from either "Main" (main-channel) or "Sub" (sub-channel).
 - **DRC** — to turn on or off the function.

- 1 While listening to a DAB programme, press **(MENU)**.

- 2 Press **↑** or **↓** repeatedly until "DRC" or "BLGL" appears.

- 3 Press either side of **(SEEK)** to select the desired setting (Example: "on" or "off").

- 4 Press **(ENTER)**.

Note
"BLGL" appears in the menu only when the unit is receiving a multi-channel programme.

Locating a DAB service by programme type (PTY)

You can use the PTY (Programme type selection) function to tune in the programme you want.

- 1 While listening to a DAB programme, press **(DISP/PTY)**.
- 2 Press **↑** or **↓** repeatedly to select the programme type.



The programme types appear in the order shown on page 20.

- 3 Press **(ENTER)**.
Searching for a service of the selected programme type begins automatically.

US, AEP, UK, E MODEL

Tuning up for your best sound

The unit provides the various functions to adjust the sound so that you can enjoy the best sounding music.

Setting the equalizer (EQ7)

You can select an equalizer curve for 7 music types (Vocal, Club, Jazz, New Age, Rock, Custom, and Xplod). You can store and adjust the equalizer settings for frequency and level.

Selecting the equalizer curve

- 1 Press **(SOURCE)** to select a source (radio, CD, or MD).
- 2 Press **(EQ7)** repeatedly until the desired equalizer curve.



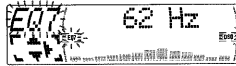
To cancel the equalizing effect, select "off." After 3 seconds, the display returns to the normal playback mode.

Adjusting the equalizer curve

- 1 Press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly until "EQ7 Tune" appears, then press **(ENTER)**.
- 3 Press **←** or **→** to select the desired equalizer curve, then press **(ENTER)**. Each time you press **(SEEK)**, the item changes.
- 4 Select the desired frequency and level.

- 1 Press **←** or **→** to select the desired frequency.
- Each time you press **←** or **→**, the frequency changes as follows:

62 Hz ↔ 157 Hz ↔ 396 Hz ↔ 1.0 kHz
↔ 2.5 kHz ↔ 6.3 kHz ↔ 16 kHz



- 2 Press **↑** or **↓** to adjust the desired volume level. (CDX-M770)
The volume level is adjustable by 1 dB steps from -12 dB to +12 dB. (CDX-M670/M620)
The volume level is adjustable by 1 dB steps from -10 dB to +10 dB.



To restore the factory-set equalizer curve, press **(ENTER)** for 2 seconds.

- 5 Press **(ENTER)**.
After the effect setting is complete, the display returns to the normal playback mode.

Setting the soundstage menu — Dynamic Soundstage Organizer (DSO)

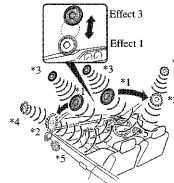
If your speakers are installed into the lower part of the doors, the sound will come from below and may not be clear. The DSO (Dynamic Soundstage Organizer) function creates a more ambient sound as if there were speakers in the dashboard (virtual speakers).

Selecting the DSO mode (CDX-M770)

DSO mode of CDX-M770

Display window	Meaning
STD	Virtual speakers (Standard)
WIDE	Virtual speakers (Wide)
STD-SP	Standard+depth
WIDE-SP	Wide+depth
off	Cancel

Image of virtual speakers



- *1 STD
- *2 Wide
- *3 STD+depth
- *4 Wide+depth
- *5 Actual speakers position (lower part of the front doors)

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(DSO)** repeatedly to select the desired DSO mode.



To cancel the DSO mode, select "off." After 3 seconds, the display returns to the normal playback mode.

Tips

- * The DSO effect may be hard to discern depending on the type of car you are driving and the music you are listening to.
- * When DSO setting is "WIDE," the FM reception is inaudible. In this case, reset the DSO setting to "STD."

Turning the DSO mode on (off) (CDX-M670/M620)

DSO mode of CDX-M670/M620	Memory presets	Meaning
on	Virtual speakers	
off	Cancel	

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(DSO)** to select "on" or "off."



To cancel the DSO mode, select "DSO off." After 3 seconds, the display returns to the normal playback mode.

Adjusting the DSO mode (CDX-M770)

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(MENU)**.
- 3 Press **↑** or **↓** repeatedly until "DSO tune" appears, then press **(ENTER)**.
- 4 Press **←** or **→** to select the desired DSO mode, then press **(ENTER)**.
- 5 Select the effect level.

You can select the desired effect from 3 effect levels for each DSO mode. Press **↑** or **↓** repeatedly to select desired effect.



To restore the effect, press **(ENTER)** for 2 seconds.

- 6 Press **(ENTER)**.

If the sound from the tweeter is too shrill (CDX-M770)

- 1 While the unit is operating, press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly until "DSO norm" appears.
- 3 Press **→** to select "DSO soft."



- 4 Press **(MENU)**.

To restore the sound, select "DSO norm."

Listening to each programme source in its registered DSO

— Source Sound Memory (SSM)

Each time you return to the same source, you can hear the same DSO menu and equalizer curve registered for that source, even after changing the programme source or turning the unit off and then on again.

Adjusting the sound characteristics

You can adjust the sound characteristics. The bass and treble levels and subwoofer volume can be stored independently for each source.

- 1 Select the item you want to adjust by pressing **(SOUND)** repeatedly. Each time you press **(SOUND)**, the item changes as follows:

(CDX-M770)
POS (position) → BAL (left-right)
→ F (front volume) → R (rear volume) → SUB (subwoofer volume)

(CDX-M670/M620)
BAS (bass) → TRE (treble)
→ BAL (left-right) → FAD (front-rear)
→ SUB (subwoofer volume)

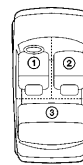
- 2 Adjust the selected item by pressing **←** or **→**.

When adjusting with the rotary commander, press **(SOUND)** and rotate the VOL control.

Note
Adjust within 3 seconds after selecting the item.

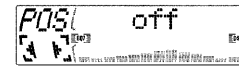
Selecting the listening position (CDX-M770 only)

You can set a delayed time for the sound to reach the listeners from the speakers. In this way, the unit can simulate a natural sound field so that you feel as if you are in the center of the sound field no matter where you sit in the car.



Display window	Centre of sound field
POS ALL	Normal setting (① + ② + ③)
POS Front	Front part (① + ②)
POS Front-R	Right front (②)
POS Front-L	Left front (①)
POS Rear	Rear part (③)
POS off	Cancel

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "POS" appears.



- 3 Press **←** or **→** to select the desired listening position.
All ↔ Front ↔ Front-R ↔ Front-L ↔ Rear ↔ off ↔ All

The listening positions appear in the order shown above.

To cancel the POS mode, select "off." After three seconds, the display returns to the normal playback mode.

Adjusting the balance (BAL)

You can adjust the sound balance from the left and right speakers.

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "BAL" appears.



- 3 Press **←** or **→** to adjust the balance. After 3 seconds, the display returns to the normal playback mode.

Adjusting the bass (CDX-M670/M620 only)

You can adjust the bass from the speakers.

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "BAS" appears.



- 3 Press **←** or **→** to adjust the balance. After 3 seconds, the display returns to the normal playback mode.

Adjusting the treble (CDX-M670/M620 only)

You can adjust the treble from the speakers.

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "TRE" appears.



- 3 Press **←** or **→** to adjust the balance. After 3 seconds, the display returns to the normal playback mode.

Adjusting the balance (FAD) (CDX-M670/M620 only)

You can adjust the sound balance from the front and rear speakers.

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "FAD" appears.



- 3 Press **←** or **→** to adjust the balance. After 3 seconds, the display returns to the normal playback mode.

Adjusting the front and rear volume (CDX-M770 only)

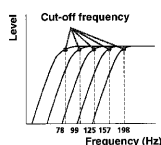
- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly to select the "F" for the front speakers or "R" for the rear speakers.



- 3 Press **←** or **→** to adjust the volume of front/rear speakers. After 3 seconds, the display returns to the normal playback mode.

Adjusting the cut-off frequency and the output volume level for the front/rear speakers

To match the characteristics of the installed speaker system, you can adjust the output volume level and select the cut-off frequency of the speakers.



- 1 Press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly to select "Front HPF" or "Rear HPF."
- 3 Press **(ENTER)**.



continue to next page →

21

- 4 Press **←** or **→** to select the cut-off frequency. Each time you press **←** or **→**, the frequency changes as follows:
off ↔ 78 Hz ↔ 99 Hz ↔ 125 Hz ↔ 157 Hz ↔ 198 Hz
- 5 Press **↑** or **↓** to adjust the volume level. The volume level is adjustable by 1 dB steps from -12 dB to +12 dB.
Tip
When you lower the volume all the way down, "∞dB" appears and the cut-off frequency is disabled.
- 6 Press **(ENTER)**. After the effect is complete, the display returns to the normal playback mode.

Adjusting the volume of the subwoofer(s)

- 1 Press **(SOURCE)** to select a source (tuner, CD, or MD).
- 2 Press **(SOUND)** repeatedly until "SUB" appears.

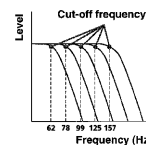


- 3 Press **←** or **→** to adjust the volume. After 3 seconds, the display returns to the normal playback mode.

Tip
When you press **←** repeatedly to adjust the volume all the way down, "∞dB" appears and the cut-off frequency of the subwoofer is disabled.

Adjusting the frequency of the subwoofer(s) (CDX-M770 only)

To match the characteristics of the connected subwoofer(s), you can cut out the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency (see the diagram below), the subwoofer(s) will output only low frequency signals so you can get a clearer sound image.



- 1 Press **(MENU)**.
- 2 Press **↑** or **↓** repeatedly until "SUB LPF" appears.
- 3 Press **(ENTER)**.



- 4 Press **←** or **→** to select the desired cut-off frequency. Each time you press **←** or **→**, the frequency changes as follows:
62 Hz ↔ 78 Hz ↔ 99 Hz ↔ 125 Hz ↔ 157 Hz ↔ off

- 5 Press **↑** or **↓** to adjust the volume. The volume level is adjustable by 1 dB steps from -12 dB to +12 dB.

Tip
When you lower the volume all the way down, "∞dB" appears and the cut-off frequency is disabled.

- 6 Press **(ENTER)**. After the frequency setting is complete, the display returns to the normal playback mode.

22

Other adjustable items (CDX-M670/M620 only)

The following items can be adjusted:

- HPF (High pass filter) — to select the cut-off frequency to "off," "78 Hz," or "125 Hz."
- LPF (Low pass filter) — to select the cut-off frequency to "78 Hz," "125 Hz," or "off."
- Loud (Loudness) — to enjoy bass and treble even at low volumes. The bass and treble will be reinforced.

- 1 Press **(MENU)**. To set A.Src, press **(MENU)** during CD/MD playback.
- 2 Press **↑** or **↓** repeatedly until the desired item appears.
- 3 Press **→** to select the desired setting (Example: "on" or "off").
- 4 Press **(ENTER)**. After the mode setting is completed, the display returns to normal play mode.

Note
The displayed item will differ depending on the source.

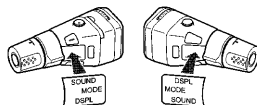
Tip
You can easily switch among categories by pressing **↑** or **↓** for 2 seconds.

Other Functions

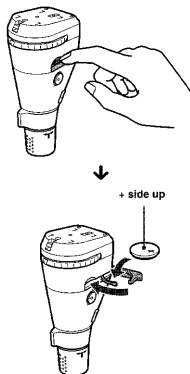
You can also control the unit (and optional CD/MD units) with an optional rotary commander. RM-XS5 (supplied with CDX-M770 only)

Using the rotary commander

First, attach the appropriate label depending on how you want to mount the rotary commander. The rotary commander works by pressing buttons and/or rotating controls.



Inserting the supplied lithium battery








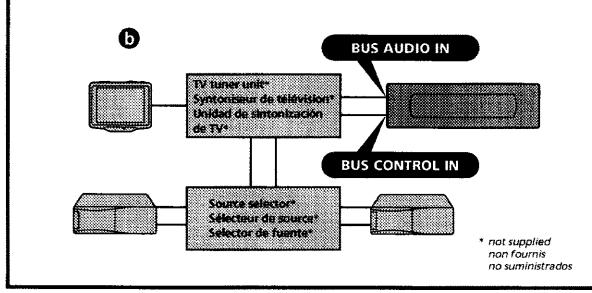
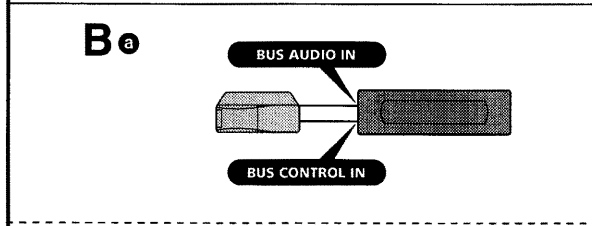
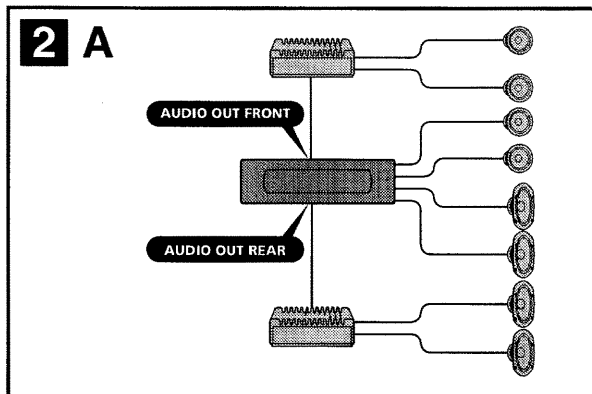
Tip
For information on lithium battery, refer to "Notes on lithium battery" (page 31).

continue to next page → 23

US MODEL
Connection

Equipment used in illustrations (not supplied)
Appareils utilisés dans les illustrations (non fournis)
Equipos utilizados en las ilustraciones (no suministrados)

 Front speaker Haut-parleur avant Altavoz delantero	 CD/MD changer Changeur de CD/MD Cambiador de CD/MD
 Rear speaker Haut-parleur arrière Altavoz trasero	 TV monitor Moniteur de la télévision Monitor de TV
 Power amplifier Amplificateur de puissance Amplificador de potencia	



Cautions

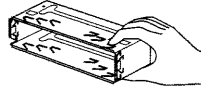
- This unit is designed for negative ground 12 V DC operation only.
 - Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
 - Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
 - Connect the yellow and red power input leads only after all other leads have been connected.
 - Run all ground wires to a common ground point.
 - Be sure to insulate any loose unconnected wires with electrical tape for safety.
 - The use of optical instruments with this product will increase eye hazard.
- Notes on the power supply cord (yellow)**
- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
 - When no car circuits are rated high enough, connect the unit directly to the battery.

Parts list (1)

The numbers in the list are keyed to those in the instructions.
 For the use of release key (2), see the supplied operating instructions.

Caution

Handle the bracket (1) carefully to avoid injuring your fingers.



Connection example (2)

Notes (2-A)

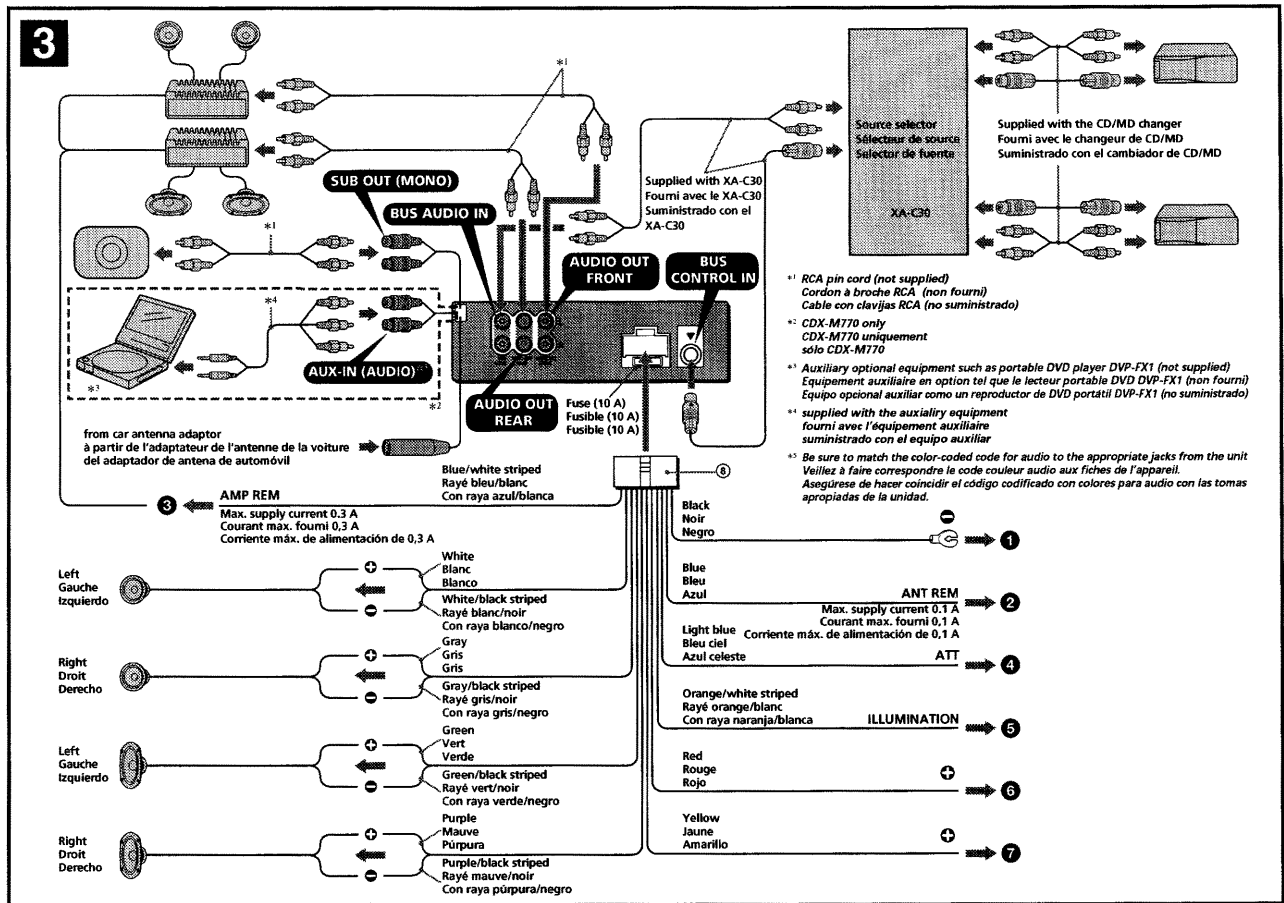
Be sure to connect the ground cord before connecting the amplifier.

Tip (2-B-C)

For connecting two or more changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

- To a metal surface of the car**
First connect the black ground lead, then connect the yellow and red power input leads.
 - To the power antenna control lead or power supply lead of antenna booster amplifier**
Notes
 - It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.
 - When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."
 - To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.
 - To the interface cable of a car telephone**
 - To a car's illumination signal**
Be sure to connect the black ground lead to it first.
 - To the +12 V power terminal which is energized in the accessory position of the ignition key switch**
Notes
 - If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
 - Be sure to connect the black ground lead to it first.
 - When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."
 - To the +12 V power terminal which is energized at all times**
Be sure to connect the black ground lead to it first.
- Notes on the control and power supply leads**
- The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.
 - When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the necessary power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.
 - A power antenna 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 to avoid its damage.
 - Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.
 - Do not connect the ground lead of this unit to the negative (-) terminal of the speaker.
 - Do not attempt to connect the speakers in parallel.
 - Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.
 - To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (-) lead for the right and left speakers.
 - Do not connect the unit's speaker cords to each other.



Précautions

- Cet appareil est exclusivement conçu pour fonctionner sur une tension de 12 V CC avec masse négative.
- Évitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer les raccordements, débranchez la borne de terre de la batterie du véhicule pour éviter tout court-circuit.
- Raccordez les fils d'entrée d'alimentation **jaune** et autres raccordements.
- Rassemblez tous les fils de terre en un point de masse commun.
- Veillez à isoler avec du châtignon tout fil lâche non raccordé.

Remarques sur le cordon d'alimentation (jaune)

- Lorsque cet appareil est raccordé à d'autres éléments stéréo, la valeur nominale des circuits de la voiture raccordée doit être supérieure à la somme des fusibles de chaque élément.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

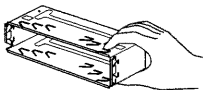
Liste des composants (1)

Les numéros de l'illustration correspondent à ceux des instructions.

Pour l'utilisation de la clé de déblocage (2), reportez-vous au mode d'emploi.

Attention

Manipulez précautionneusement le support (3) pour éviter de vous blesser aux doigts.



Exemple de raccordement (2)

Remarques (2-A)
Raccordez d'abord le fil de masse avant de raccorder l'amplificateur.

Conseil (2-B, 2-C)
Dans le cas du raccordement de deux changeurs ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Schéma de raccordement (3)

- A un point métallique de la voiture
- Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

2 Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne

- Remarques**
- Il n'y a pas nécessairement de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.
 - Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/laterale, voir "Remarques sur les fils de commande et d'alimentation".
- 3** Au niveau du AMP REMOTE IN de l'amplificateur de puissance en option
- Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.
- 4** Vers le cordon de liaison d'un téléphone de voiture
- 5** Au signal d'éclairage de la voiture
- Raccordez d'abord le fil de masse noir.
- 6** À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires

Remarques

- Si il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence. Raccordez d'abord le fil de masse noir.
- Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/laterale, voir "Remarques sur les fils de commande et d'alimentation".

7 À la borne +12 V qui est alimentée en permanence

Raccordez d'abord le fil de masse noir.

Remarques sur les fils de commande et d'alimentation

- Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de +12 V CC lorsque vous mettez l'appareil sous tension.
- Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/laterale, raccordez la sortie de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au bornier de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.
- Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.

Raccordement pour la conservation de la mémoire

Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs

- Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.
- Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité de manipulation adéquate pour éviter de les endommager.
- Ne raccordez pas les bornes du système de haut-parleur au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.
- Ne raccordez pas le câble de masse de cet appareil à la borne négative (-) de l'enceinte.
- N'essayez pas de raccorder les haut-parleurs en parallèle.
- Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (-) pour les haut-parleurs droit et gauche.
- Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- No coloque los cables debajo de ningún tornillo, ni los aprisione con partes móviles (p.ej. los ratles del asiento).
- 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 de entrada de alimentación amarillo y rojo solamente después de haber conectado los demás.
- Conecte todos los conductores de puesta a masa a un punto común.
- Por razones de seguridad, asegúrese de aislar con cinta eléctrica los cables sueltos que no estén conectados.

Notas sobre el cable de suministro de alimentación (amarillo)

- Cuando conecte esta unidad en combinación con otros componentes estéreo, la capacidad nominal del circuito conectado del automóvil debe ser superior a la suma del fusible de cada componente.
- Si no hay circuitos del automóvil con capacidad nominal suficientemente alta, conecte la unidad directamente a la batería.

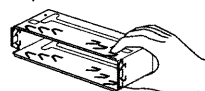
Lista de componentes (1)

Los números de la lista corresponden a los de las instrucciones.

Con respecto al uso de la llave de liberación (2), consulte el manual de instrucciones suministrado.

Precaución

Tenga mucho cuidado al manipular el soporte (3) para evitar posibles lesiones en los dedos.



Ejemplo de conexiones (2)

Notas (2-A)
Asegúrese de conectar primero el cable de puesta a masa antes de realizar la conexión al amplificador.

Consejo (2-B, 2-C)
Si desea conectar dos o más cambiadores, necesitará el selector de fuente XA-C30 (opcional).

Diagramas de conexión (3)

- A una superficie metálica del automóvil
- Conecte primero el cable de masa negro, y después los cables amarillo y rojo de entrada de alimentación.

3 Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de antena

- Notas**
- Si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.
 - Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".
- 3** Para conectar a AMP REMOTE IN del amplificador de potencia opcional
- Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.
- 4** Al cable de interfaz de un teléfono para automóvil
- 5** A una señal de iluminación del automóvil
- Asegúrese de conectar primero el cable de masa negro.
- 6** Al terminal de alimentación de +12 V que recibe energía en la posición de accesorios del interruptor de la llave de encendido

Notas

- Si no hay posición de accesorios, conecte al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción. Asegúrese de conectar primero el cable de masa negro.
- Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".

7 Al terminal de alimentación de +12 V que recibe energía sin interrupción

Asegúrese de conectar primero el cable de masa negro.

Notas sobre los cables de control y de fuente de alimentación

- El conductor de control de la antena motorizada (azul) suministrará +12 V CC cuando conecte la alimentación del sintonizador.
- Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero/lateral, conecte el cable de control de antena motorizada (azul) o el cable de entrada de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener información detallada, consulte a su proveedor.
- Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.

Conexión para protección de la memoria







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

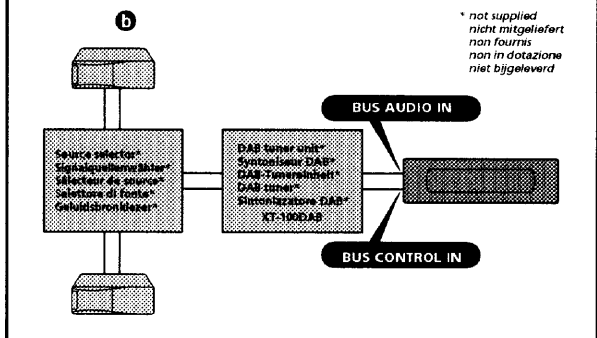
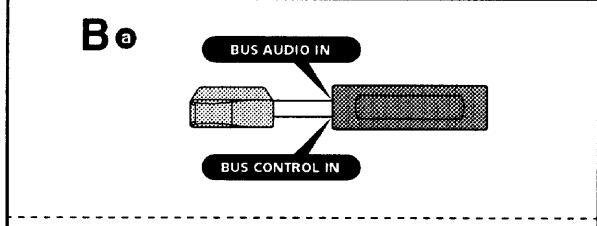
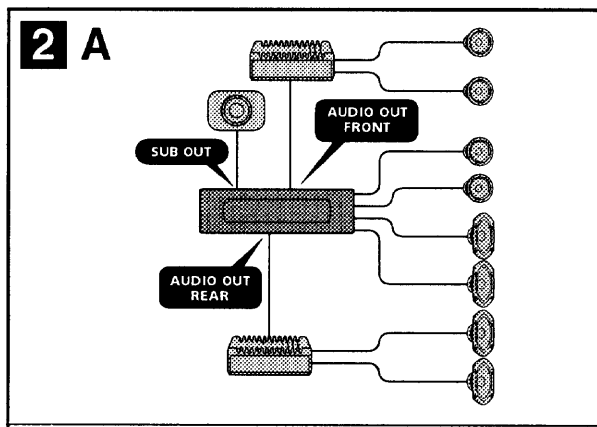
Notas sobre la conexión de los altavoces

- Antes de conectar los altavoces, desconecte la alimentación de la unidad.
- Utilice altavoces con una impedancia de 4 a 8 ohmios con la capacidad de potencia adecuada para evitar que se dañen.
- No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.
- No conecte el cable de puesta a tierra de esta unidad al terminal negativo (-) del altavoz.
- No intente conectar los altavoces en paralelo.
- Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.
- Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (-) para los altavoces derecho e izquierdo.
- No conecte los cables de altavoz de la unidad entre sí.

AEP, UK, E MODEL
Connection

Equipment used in illustrations (not supplied)
In Abbildungen dargestellte Geräte (nicht mitgeliefert)
Appareils utilisés dans les illustrations (non fournis)
Apparecchiatura utilizzata nelle illustrazioni (non in dotazione)
Apparatuur gebruikt voor illustratiedoeleinden (niet meegeleverd)

	Front speaker Frontlautsprecher Haut-parleur avant Diffusori anteriori Voorluidspreker		Power amplifier Endverstärker Amplificateur de puissance Amplificatore di potenza Eindverstärker
	Rear speaker Haut-parleur arrière Diffusori posteriori Achterluidspreker		CD/MD changer CD/MD-Wechsler Changeur de CD/MD Cambia CD/MD CD/MD-wisselaar
	Active subwoofer Haut-parleur d'extrêmes-graves actif Aktiver Tiefstörer Active subwoofer Subwoofer attivo		Rotary commander RM-X45 Joystick RM-X45 Satellite de commande RM-X45 Telecomando a rotazione RM-X45 Bedieningsatelliet RM-X45



Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat raiting).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power connecting cord ③ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

Notes on the power supply cord (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

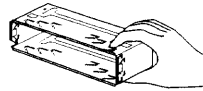
Parts list (1)

The numbers in the list are keyed to those in the instructions.

For the use of release key ②, see the supplied operating instructions.

Caution

Handle the bracket ① carefully to avoid injuring your fingers.



Connection example (2)

Notes (2-A)

- 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.

Tip (2-B-1)

For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

A AMP REMOTE IN of an optional power amplifier

This connection is only for amplifiers. Connecting any other system may damage the unit.

B To the interface cable of a car telephone

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord ③ may damage the aerial.

Notes on the control leads

- The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.
- When your car has built-in FM/MW/LW aerial in the rear/side glass, 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 a 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 switch is turned off.

Notes on speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms and with adequate power handling capacities to avoid its damage.
- Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.
- Do not connect the earth lead of this unit to the negative (-) terminal of the speaker.
- Do not attempt to connect the speakers in parallel.
- Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.
- To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (-) lead for the right and left speakers.
- Do not connect the unit's speaker cords to each other.

Vorsicht

- Dieses Gerät ist ausschließlich für den Betrieb bei 12 V Gleichstrom (negative Erdung) bestimmt.
- Achten Sie darauf, daß die Kabel nicht unter einer Schraube oder zwischen beweglichen Teilen wie z. B. in einer Sitzschiene eingeklemmt werden.
- Schalten Sie, bevor Sie irgendwelche Anschlüsse vornehmen, die Zündung des Fahrzeuges aus, um Kurzschlüsse zu vermeiden.
- Verbinden Sie das Stromversorgungskabel ③ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluß verbinden.
- **Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.**
- Aus Sicherheitsgründen müssen alle losen, nicht angeschlossenen Drähte mit Isolierband absichert werden.

Hinweise zum Stromversorgungskabel (3)

- Wenn Sie dieses Gerät zusammen mit anderen Stereokomponenten anschließen, muß der Autostromkreis, an den die Geräte angeschlossen sind, eine höhere Leistung aufweisen als die Summe der Sicherungen der einzelnen Komponenten.
- Wenn kein Autostromkreis eine so hohe Leistung aufweist, schließen Sie das Gerät direkt an die Batterie an.

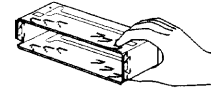
Teilleiste (1)

Die Nummern in der Liste sind dieselben wie im Erläuterungsteil.

Wie Sie den Löseschlüssel ② verwenden, schlagen Sie bitte in der mitgelieferten Bedienungsanleitung nach.

Vorsicht

Seien Sie beim Umgang mit der Halterung ① vorsichtig, damit Sie sich nicht die Hände verletzen.



Anschlußbeispiel (2)

Hinweise (2-A)

- Schließen Sie unbedingt zuerst das Massekabel an, bevor Sie den Verstärker anschließen.
- Wenn Sie einen gesondert erhältlichen Endverstärker anschließen und den integrierten Verstärker nicht benutzen, wird der Signaltön deaktiviert.

Tip (2-B-1)

Zum Anschließen von zwei oder mehr CD/MD-Wechslern wird der gesondert erhältliche Signalquellenwähler XA-C30 benötigt.

Anschlußdiagramm (3)

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers

Dieser Anschluß ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

B An Schnittstellenkabel eines Autotelefons

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ③ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen

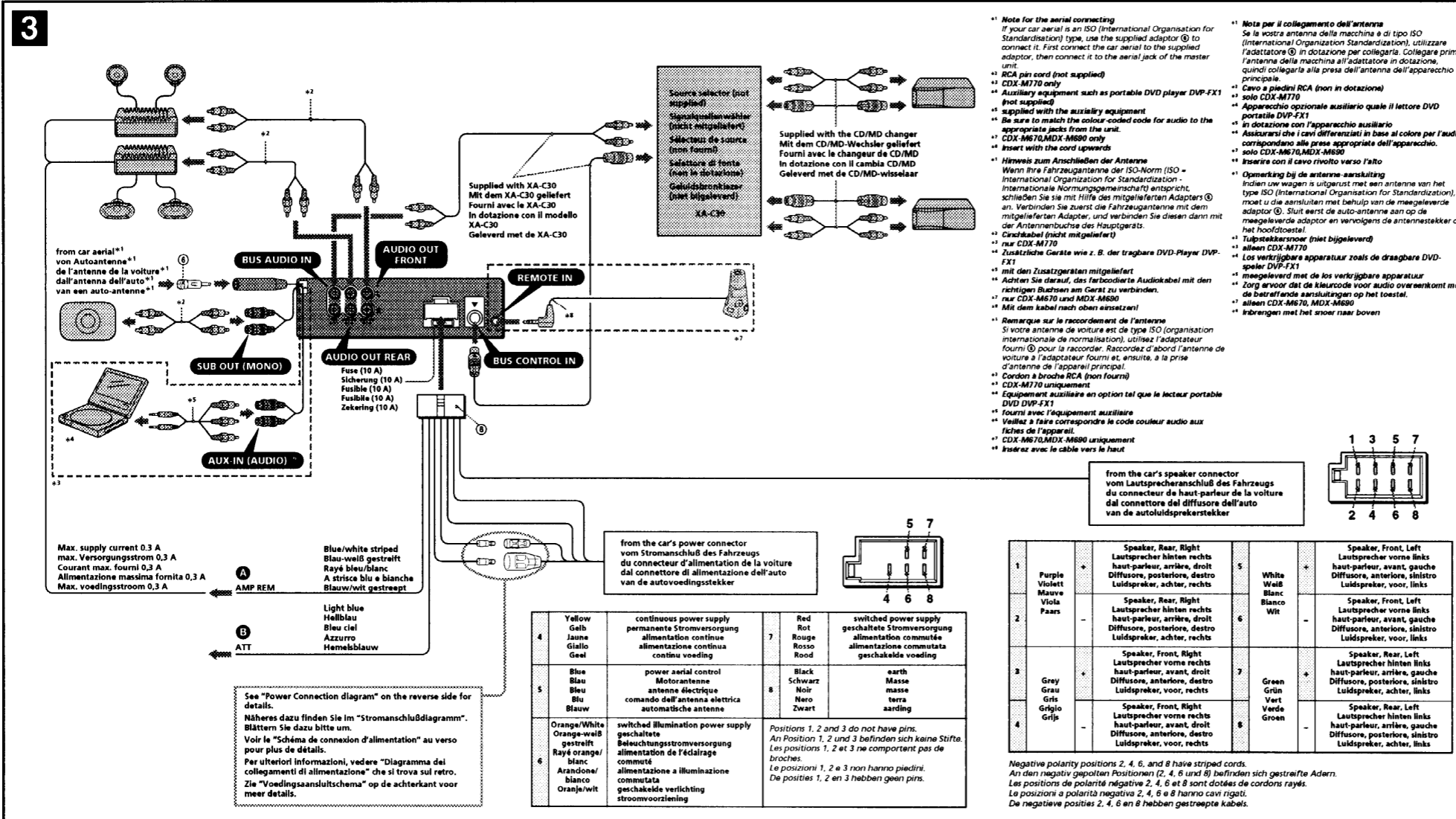
- Die Motorantennen-Steuereleitung (blau) liefert +12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsrufsuche) aktivieren.
- Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuereleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluß des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.
- Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.

Stromversorgung des Speichers

Wenn das gelbe Stromversorgungskabel angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluß

- Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.
- Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.
- Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenschassis, und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautspechers.
- Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (-) Lautsprecheranschluß.
- Versuchen Sie nicht, Lautsprecher parallel anzuschließen.
- An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da diese sonst beschädigt werden können.
- Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (-) Leitung für den rechten und den linken Lautsprecher verwendet wird.
- Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.



Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Évitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer des raccordements, éteignez le moteur pour éviter les courts-circuits.
- Branchez le cordon d'alimentation ① sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- Rassemblez tous les fils de terre en un point de masse commun.
- Veuillez isoler avec du chattering tout fil lâche non raccordé.

Remarques sur le cordon d'alimentation (jaune)

- Lorsque cet appareil est raccordé à d'autres éléments-stéréo, la valeur nominale des circuits de la voiture raccordés doit être supérieure à la somme des fusibles de chaque élément.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

Schéma de raccordement (3)

A Au niveau du AMP REMOTE IN d'un amplificateur de puissance facultatif
De raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

B Vers le cordon de liaison d'un téléphone de voiture

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni ① risque d'endommager l'antenne.

Remarques sur les fils de contrôle

- Le fil de commande (bleu) de l'antenne électrique assure une alimentation de +12 V CC lorsque vous mettez le système sous tension ou lorsque vous activez la fonction AF (fréquence secondaire) ou TA (informations routières).
- Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière latérale, raccordez la sortie de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) au bornier de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.
- Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.

Raccordement pour la conservation de la mémoire

Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs

- Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.
- Utilisez des haut-parleurs ayant une impédance de 4 à 8 Ohms avec une capacité de manipulation adéquate pour éviter de les endommager.
- Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.
- Ne raccordez pas le câble de masse de cet appareil à la borne négative (-) de l'enceinte.
- N'essayez pas de raccorder les haut-parleurs en parallèle.
- Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.
- Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (-) pour les haut-parleurs droit et gauche.
- Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.

Liste des composants (1)

Les numéros de l'illustration correspondent à ceux des instructions.

Pour l'utilisation de la clé de déblocage ②, reportez-vous au mode d'emploi.

Attention

Manipulez précautionneusement le support ① pour éviter de vous blesser aux doigts.

Exemple de raccordement (2)

Remarques (A)

- Raccordez d'abord le fil de masse avant de raccorder l'amplificateur.
- Si vous raccordez un amplificateur de puissance indépendant et que vous n'utilisez pas l'amplificateur intégré, le bip sonore est désactivé.

Conseil (B-D)

Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Attenzione

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Evitare che i cavi rimangano bloccati da una vite o montati nelle parti mobili (ad esempio nelle guide scorrevoli dei sedili).
- Prima di effettuare i collegamenti, spegnere il motore dell'automobile onde evitare di causare cortocircuiti.
- Collegare il cavo di alimentazione dell'alimentazione ① all'apparechio e ai diffusori prima di collegarlo al connettore di alimentazione ausiliario.
- Portare tutti i cavi di massa a un punto di massa comune.
- Per sicurezza, assicurarsi di isolare qualsiasi cavo non collegato mediante apposito nastro.

Note sul cavo di alimentazione (giallo)

- Se questo apparecchio viene collegato con altri componenti stereo, la potenza nominale dei circuiti dell'automobile deve essere superiore a quella provvista dalla somma dei fusibili di ciascun componente.
- Se la potenza nominale dei circuiti dell'automobile non è sufficiente, collegare l'apparechio direttamente alla batteria.

Elenco dei componenti (1)

I numeri nella lista corrispondono a quelli riportati nelle istruzioni.

Per informazioni sull'utilizzo del tasto di rilascio ②, vedere le istruzioni per l'uso in dotazione.

Attenzione

Maneggiare la staffa ① con cautela per evitare di ferirsi le mani.

Esempi di collegamento (2)

Note (A)

- Assicurarsi di collegare il cavo di terra prima di collegare l'apparechio all'amplificatore.
- Se si collega un amplificatore di potenza opzionale e non si utilizza l'amplificatore incorporato, il segnale acustico verrà disattivato.

Suggerimento (B-D)

Per collegare due o più cambi CD/MD, si deve utilizzare il selettore di fonte XA-C30 (opzionale) nodig.

Schema di collegamento (3)

A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparechio.

B Al cavo interfaccia di un telefono per auto

Avvertenza

Quando si collega l'apparechio con il cavo di alimentazione in dotazione ①, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola di rete.

Note sul collegamento dell'antenna elettrica (blu)

- Il cavo di controllo dell'antenna elettrica (blu) fornisce corrente continua +12 V CC quando si accende il sintonizzatore o quando si attiva la funzione AF (frequenza alternativa) o TA (notiziario sui traffici).
- Se l'automobile è dotata di antenne FM/MW/LW incorporate nel vetro posteriore laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.
- Non è possibile usare un'antenna elettrica senza scatola a rete con questo apparecchio.

Collegamento per la conservazione della memoria

Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando la chiavetta a accensione è spenta.

Note sul collegamento dei diffusori

- Prima di collegare i diffusori spegnere l'apparechio.
- Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata.
- Alimentare i diffusori potrebbero venir danneggiati.
- Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.
- Non collegare il cavo di terra di questo apparecchio al terminale negativo (-) del diffusore.
- Non collegare i diffusori in parallelo.
- Non collegare alcun diffusore attivo (con amplificatore incorporato) ai terminali dei diffusori dell'apparechio perché si potrebbero danneggiare i diffusori attivi. Assicurarsi di collegare diffusori passivi a questi terminali.
- Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se il terminale dell'apparechio condivide un cavo comune negativo (-) per i diffusori destro e sinistro.
- Non collegare fra loro i cavi dei diffusori dell'apparechio.

Let op!

- Dit apparaat is ontworpen voor gebruik op gelijkstroom van een 12V-accu, negatief geaard.
- Zorg ervoor dat de draden niet onder een schroef of tussen bewegende onderdelen (bv. zetelrill) terechtkomen.
- Alvorens aansluitingen te verrichten moet u het contact afzetten om kortsluiting te vermijden.
- Sluit het netsnoer ① aan op het toestel en de luidsprekers voelers u het op de hulpvoedingsaansluiting aansluit.
- Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.
- Voorzie niet aangesloten draden om veiligheidsredenen altijd van isolatietape.

Opmerkingen bij de voedingskabel (geel)

- Wanneer u dit toestel aansluit samen met andere componenten, moet het vermogen van de aangesloten auto-stroomkring groter zijn dan de som van de zekeringen van elke component afzonderlijk.
- Wanneer het vermogen ontoereikend is, moet u het toestel rechtstreeks aansluiten op de batterij.

Onderdelenlijst (1)

De nummers in de afbeelding verwijzen naar die in de montage-aanwijzingen.

Raadpleeg de meegeleverde gebruiksaanwijzing om de speciale sleutel te bedienen ②.

Voorzichtig

Houd de beugel ① voorzichtig vast zodat u uw vingers niet verwondt.

Voorbeeldaansluitingen (2)

Opmerkingen (A)

- Sluit eerst de massakabel aan alvorens de versterker aan te sluiten.
- Als u een los verkrijgbare vermogensversterker aansluit en de ingebouwde versterker niet gebruikt, is de pieptoon uitgeschakeld.

Tip (B-D)

Om twee of meer CD/MD-wisselaars te laten sluiten, hebt u de luidsprekerbron XA-C30 (optioneel) nodig.

Aansluitschema (3)

A Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

B Naar het interface-snoer van een autotelefoon

Opgelet

Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer ① de antenne beschadigen.

Opmerking betreffende de aansluitingen

- De voedingskabel (blauw) van de elektrisch bediende antenne levert +12V gelijkstroom wanneer u de tuner aanschakelt of de functie AF (Alternative Frequency) of TA (Traffic Announcement) activeert.
- Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruitvoorzuit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.
- Met dit apparaat is het niet mogelijk een automatische antenne zonder relaiskast te gebruiken.

Instandhouden van het gehuigen

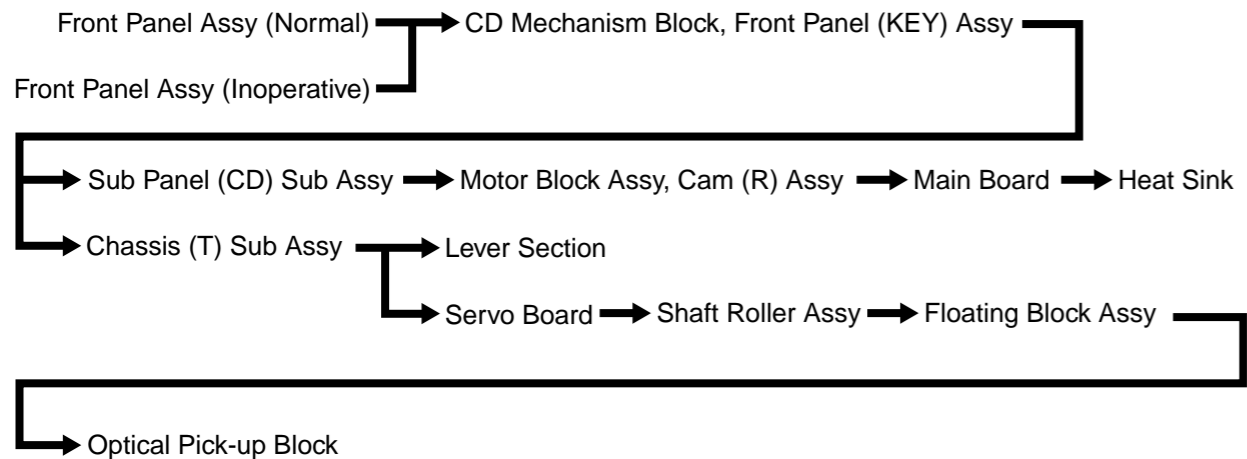
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het gehuigen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers

- Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.
- Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en niet op dat die het vermogen van de versterker kunnen overtreffen. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.
- Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.
- Verbind de massakabel van dit toestel niet met de negatieve (-) aansluiting van de luidspreker.
- Probeer nooit de luidsprekers parallel aan te sluiten.
- Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.
- Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (-) draad is voor de rechter en linker luidsprekers.
- Verbind de luidsprekerdraden niet met elkaar.

**SECTION 2
DISASSEMBLY**

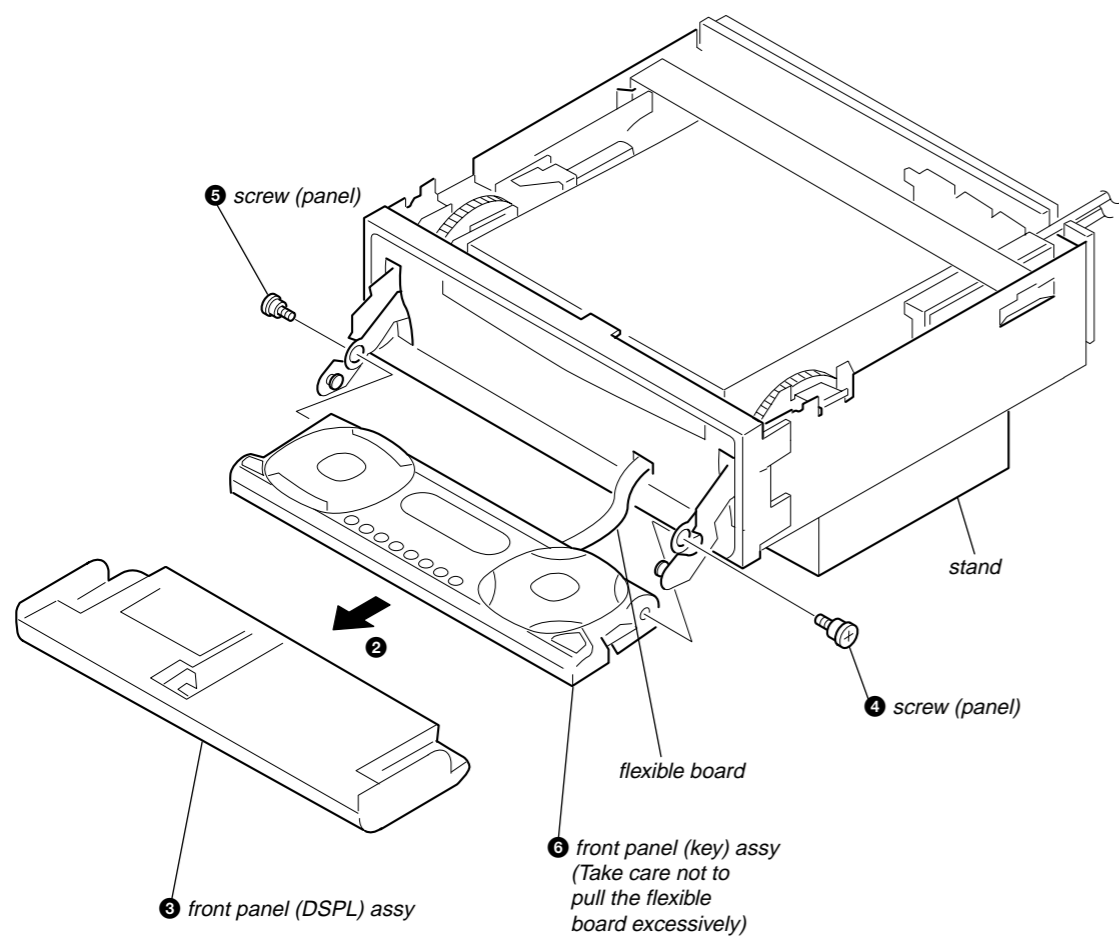
Note : This set can be disassemble according to the following sequence.



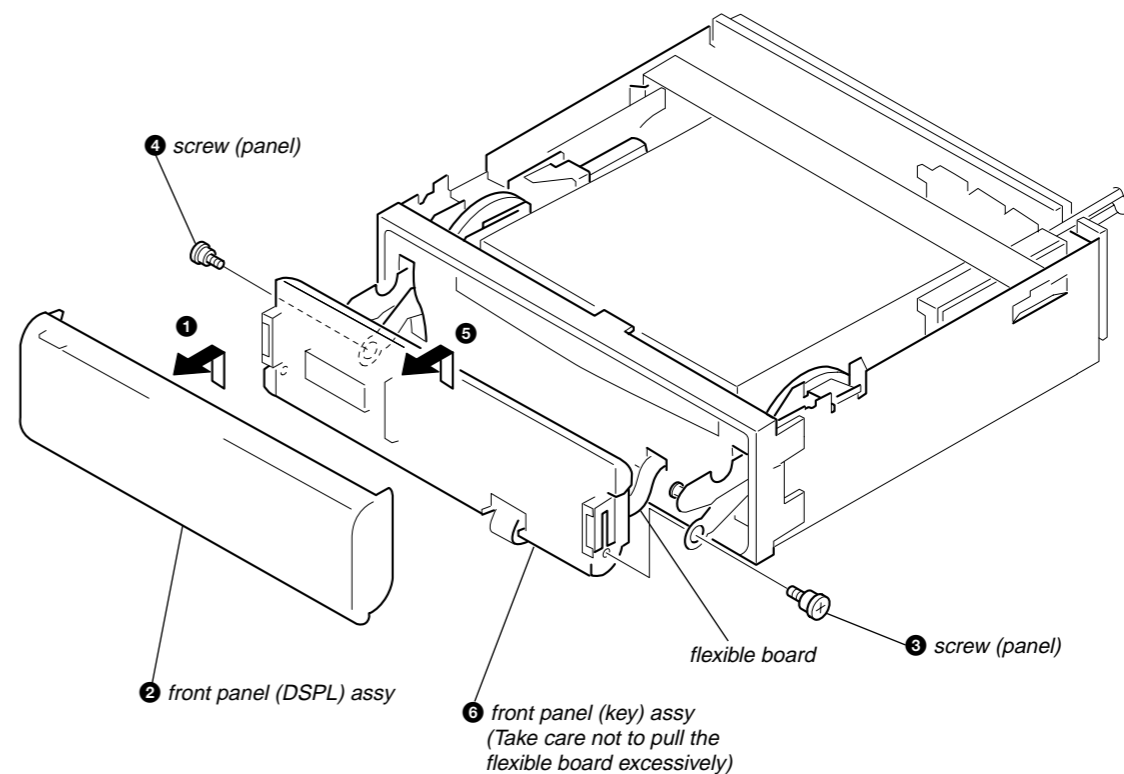
Note : Follow the disassembly procedure in the numerical order given.

2-1. FRONT PANEL ASSY (NORMAL)

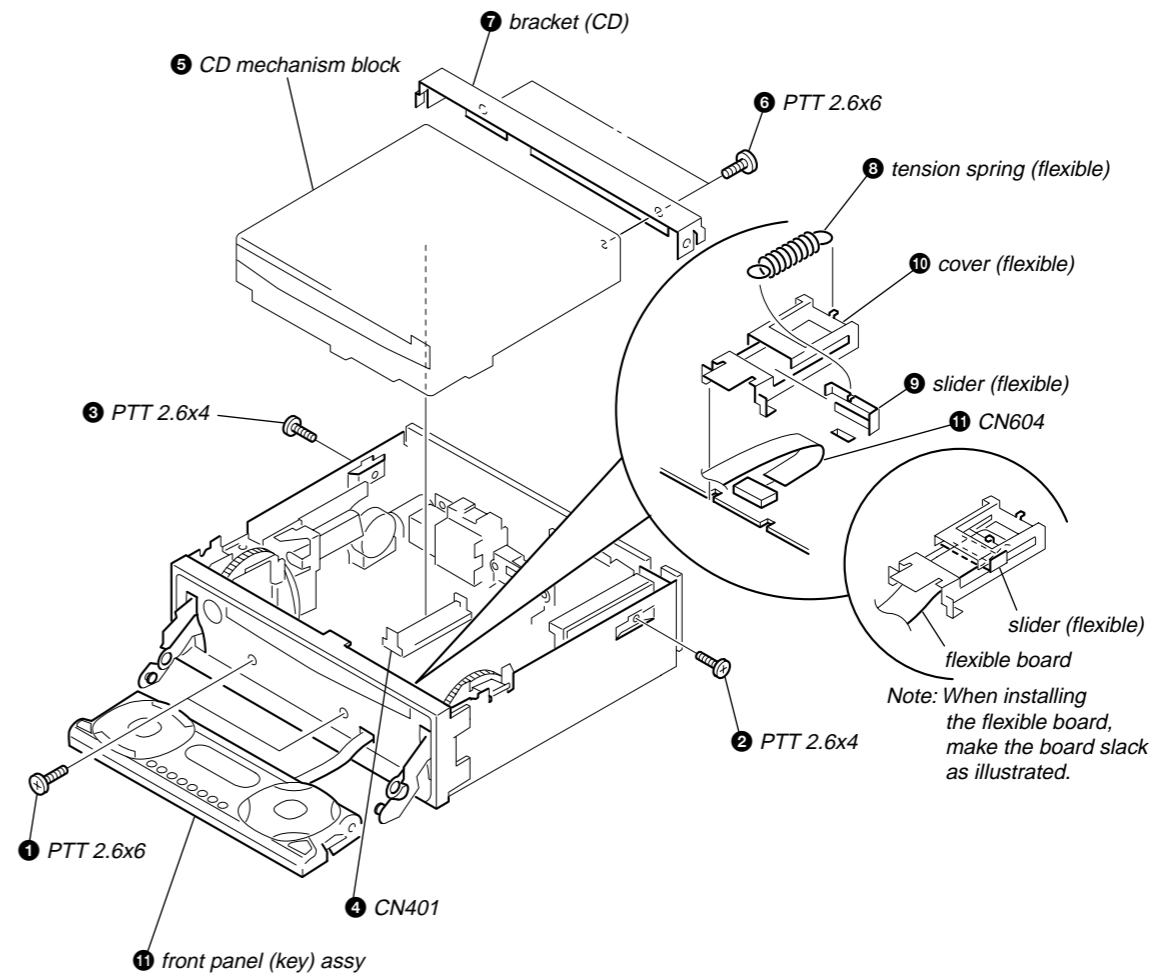
1 Turn on the power and open the front panel.



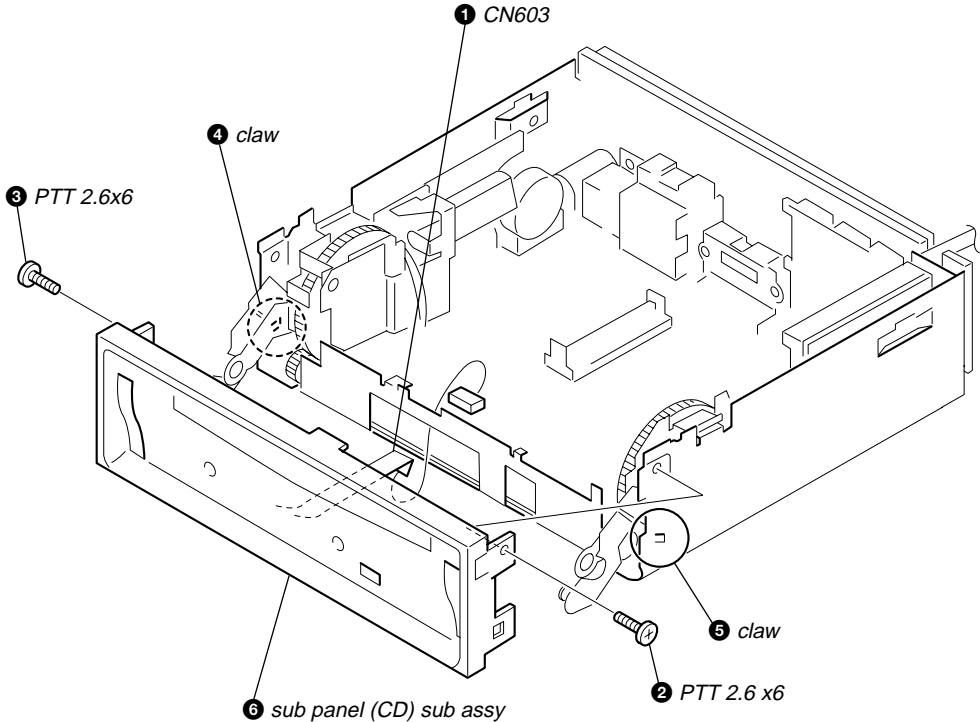
2-2. FRONT PANEL ASSY (INOPERATIVE)



2-3. CD MECHANISM BLOCK, FRONT PANEL (KEY) ASSY

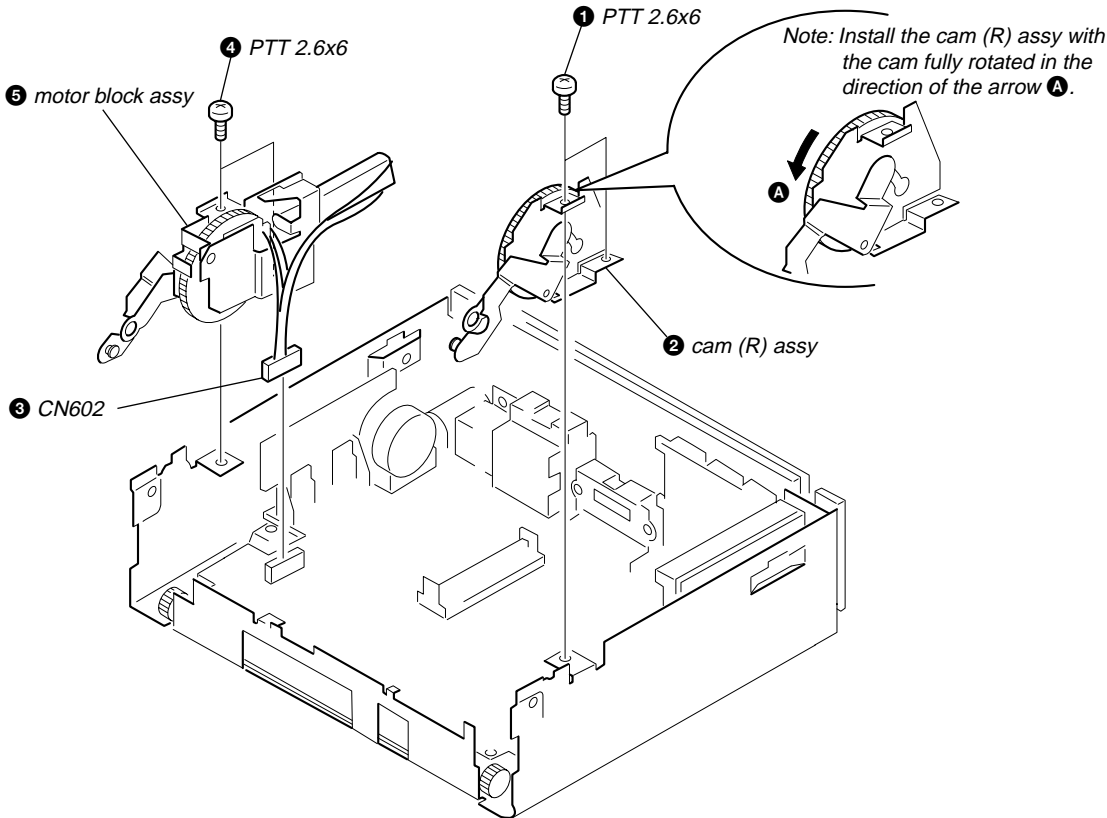


2-4. SUB PANEL (CD) SUB ASSY

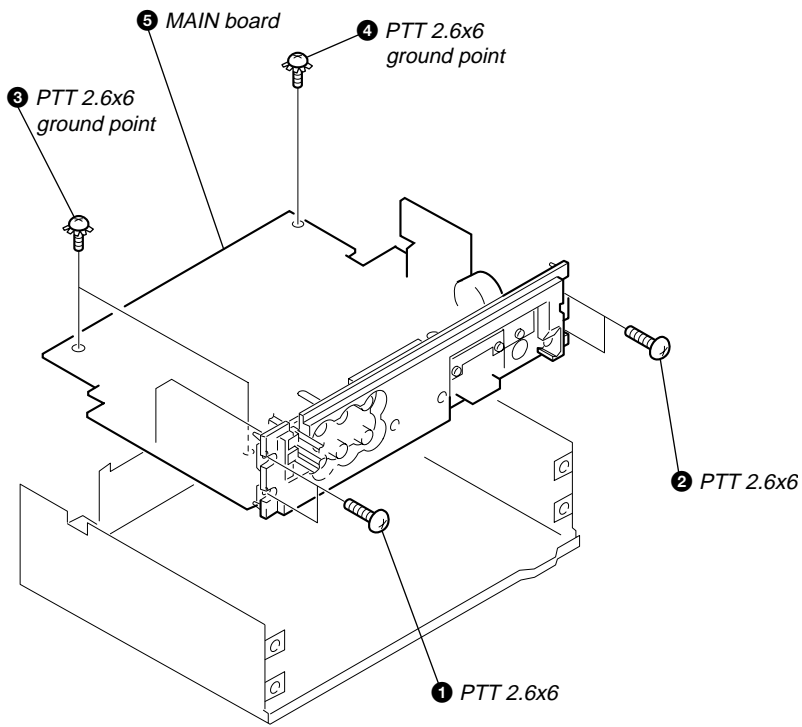


2-5. MOTOR BLOCK ASSY, CAM (R) ASSY

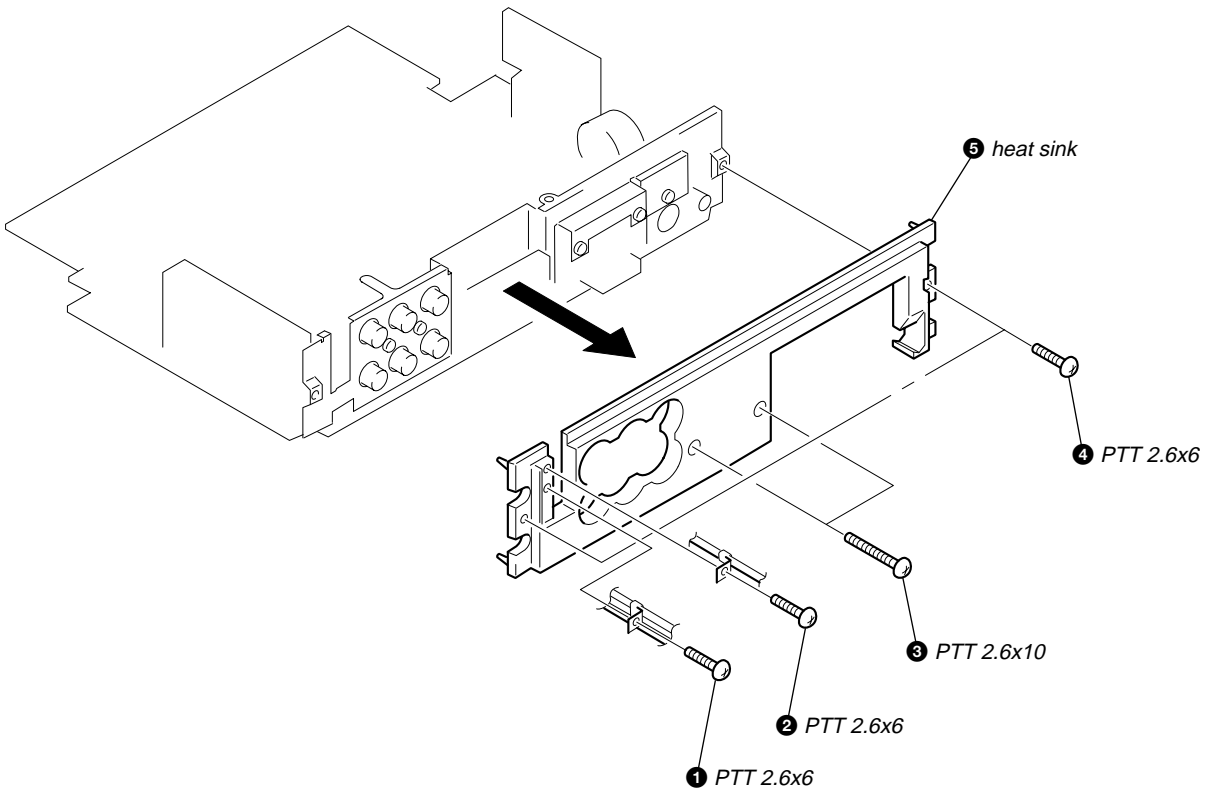
Note : Install the motor block assy and cam (R) assy in this roder.
For phase alignment between cams (L) and (R), see page 22 and 24.



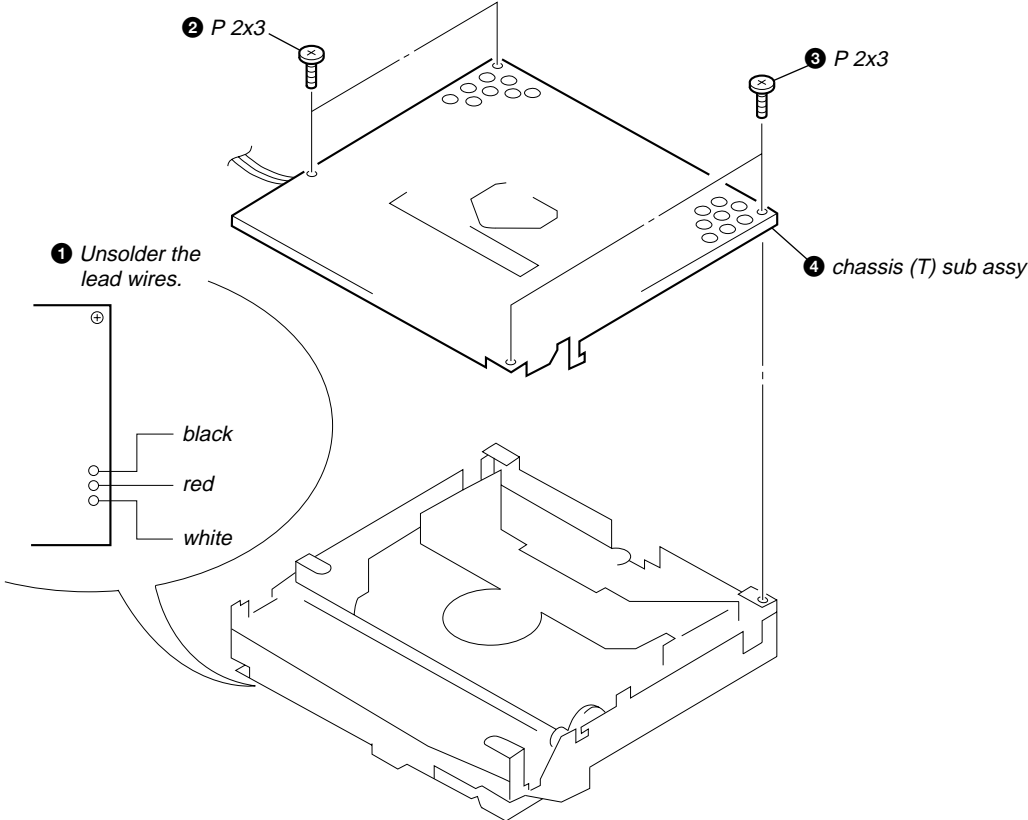
2-6. MAIN BOARD



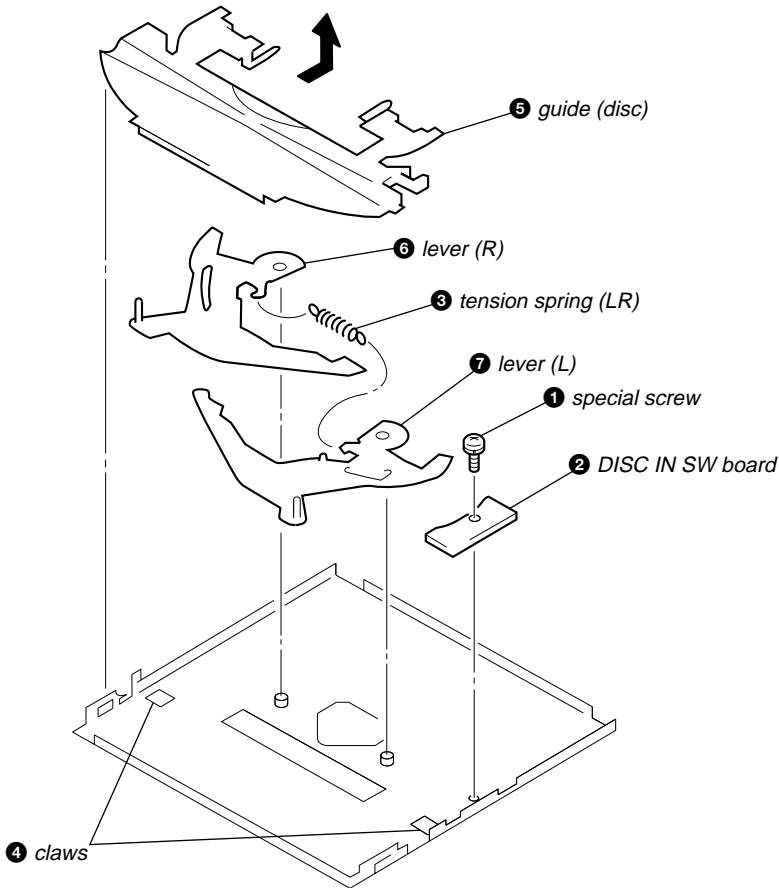
2-7. HEAT SINK



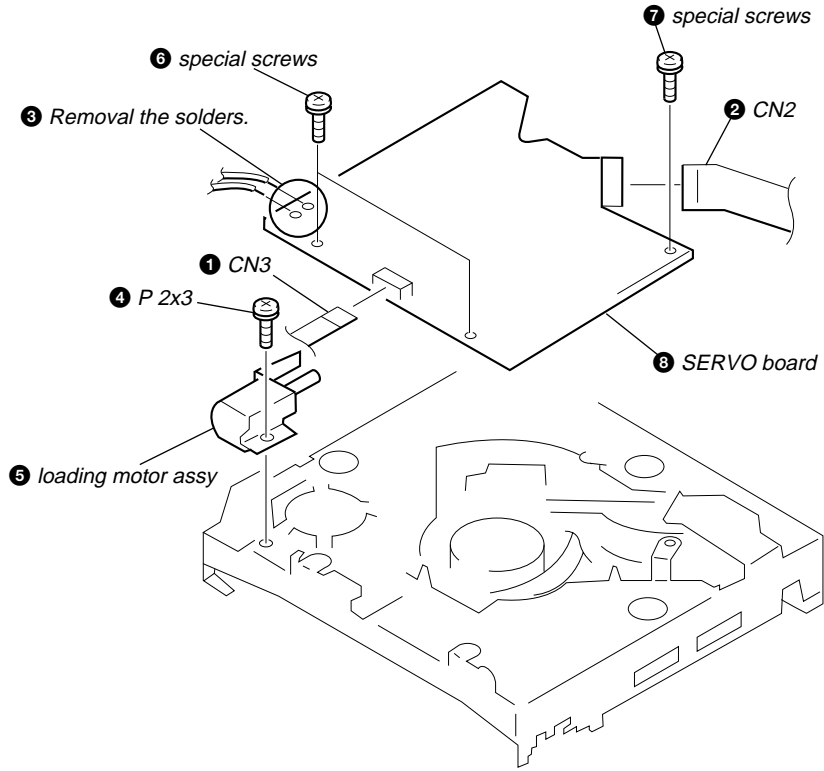
2-8. CHASSIS (T) SUB ASSY



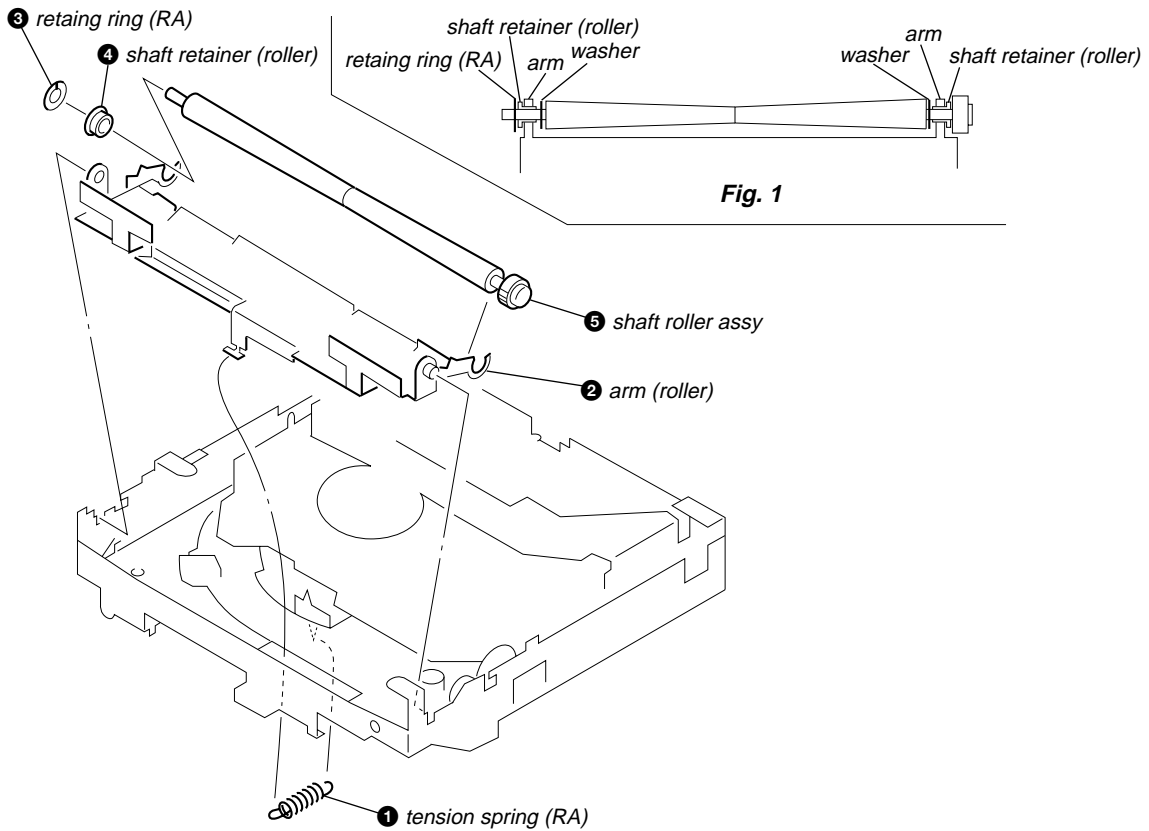
2-9. LEVER SECTION



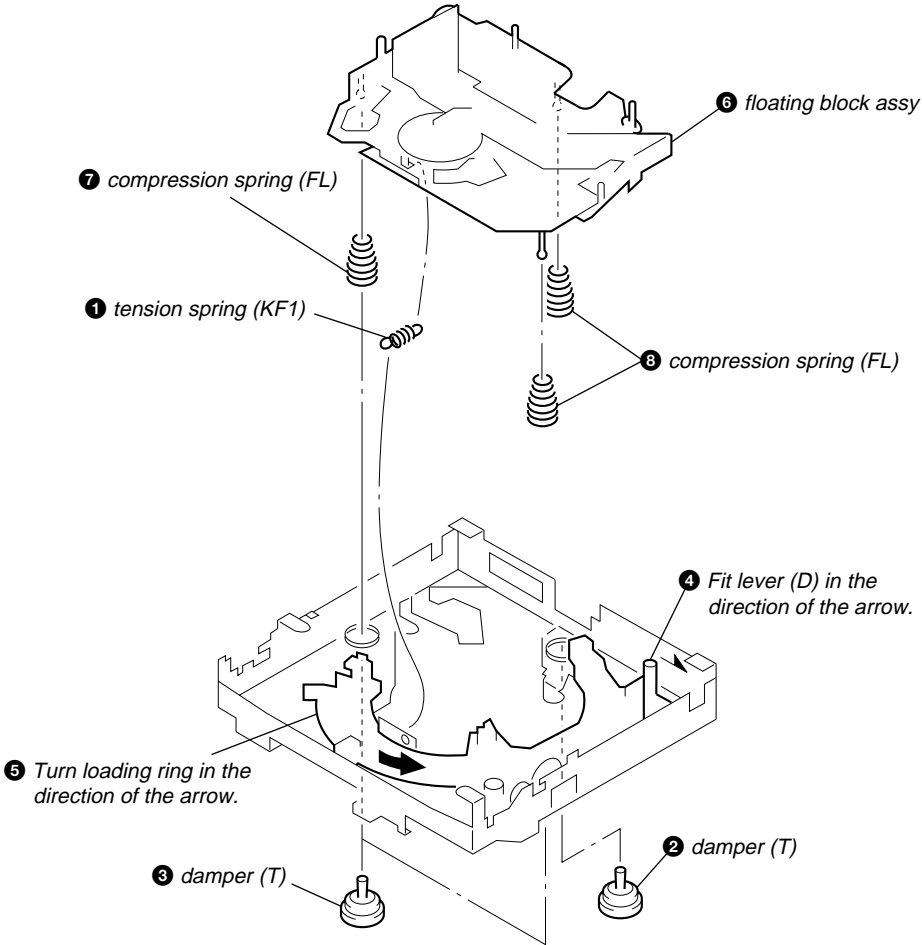
2-10. SERVO BOARD



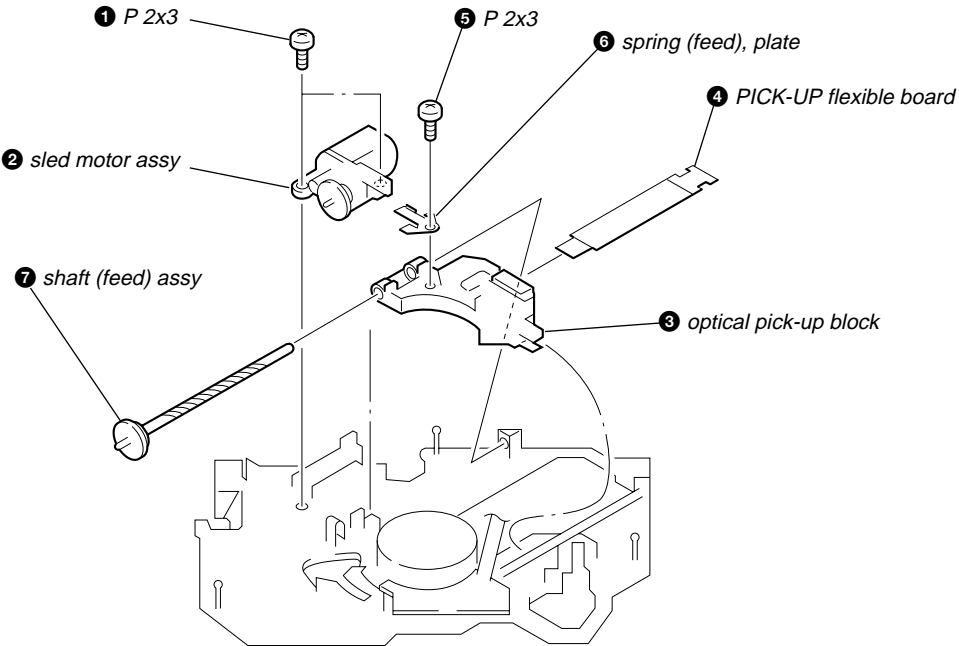
2-11. SHAFT ROLLER ASSY



2-12. FLOATING BLOCK ASSY

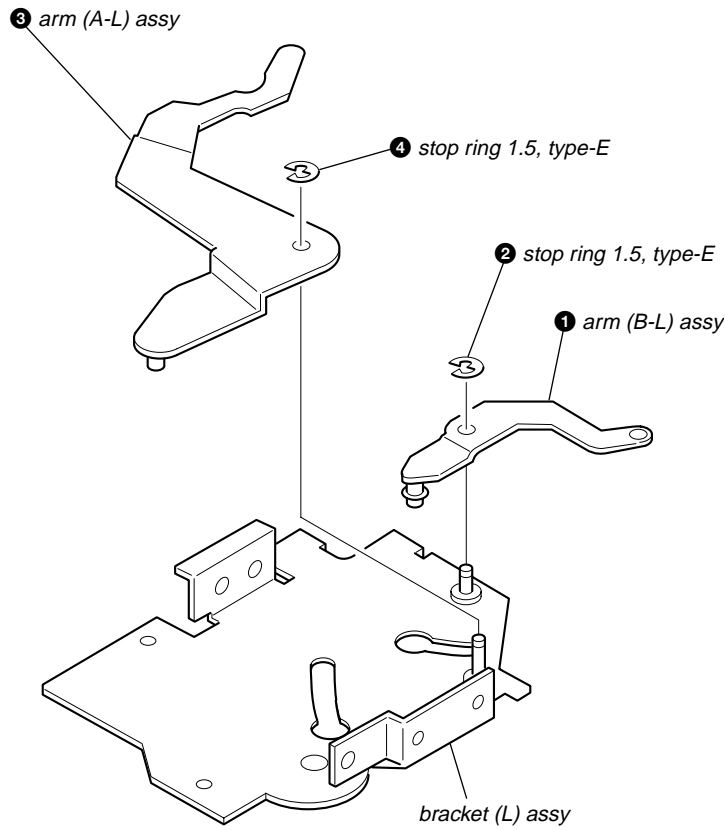


2-13. OPTICAL PICK-UP BLOCK



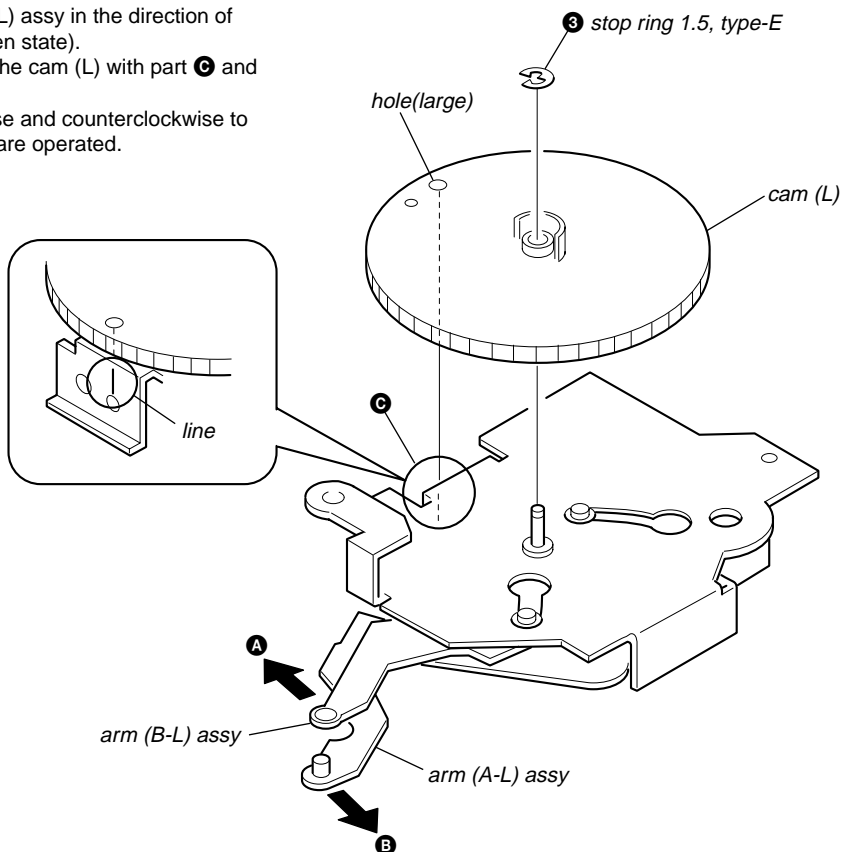
SECTION 3 PHASE ALIGNMENT

3-1. ARM (A-L) ASSY, ARM (B-L) ASSY



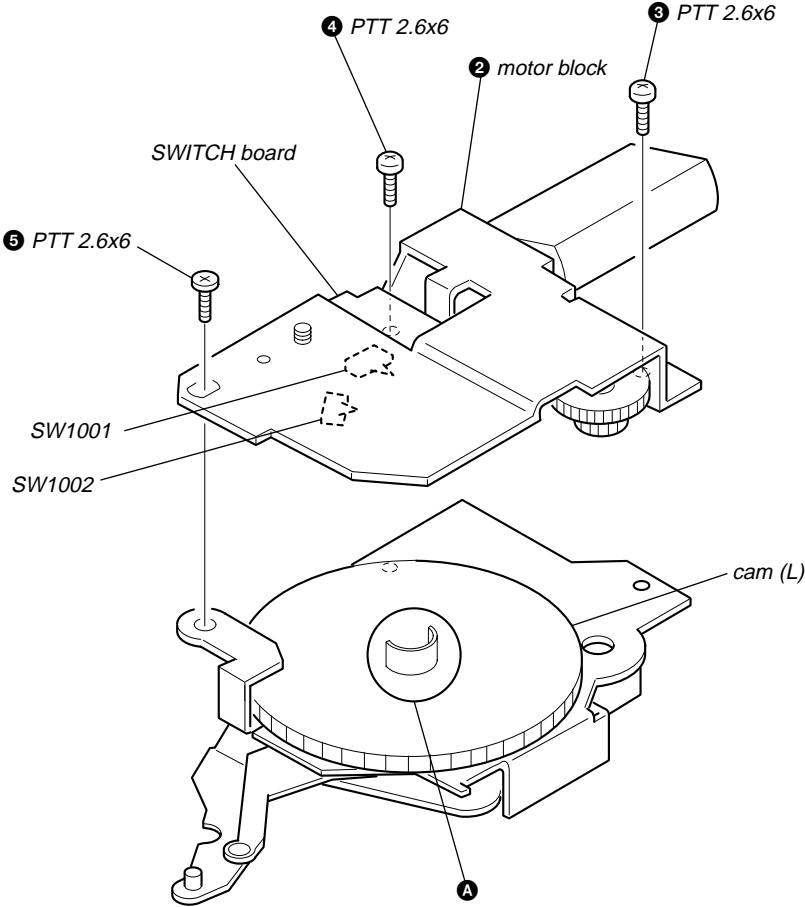
3-2. CAM (L)

- 1 Move the arm (B-L) assy in the direction of the arrow **A** and the arm (A-L) assy in the direction of the arrow **B** fully (full open state).
- 2 Align the hole (large) on the cam (L) with part **C** and install the cam.
- 4 Turn the cam (L) clockwise and counterclockwise to verify that both the arms are operated.



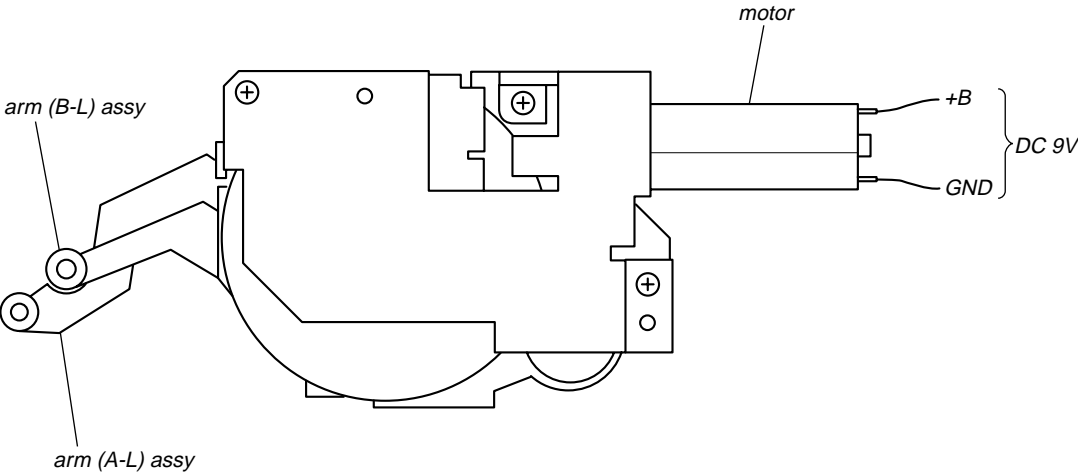
3-3. MOTOR BLOCK

- 1 Turn the cam (L) and position the cam so that part A does not touch the SWITCH board SW900.

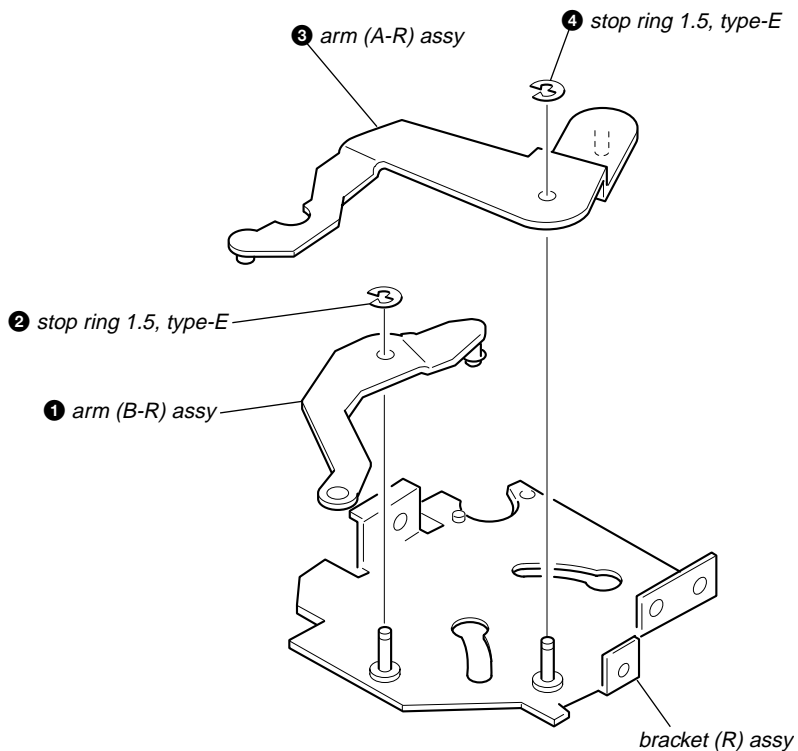


3-4. ALIGNMENT BETWEEN ARM (A-L) ASSY AND ARM (B-L) ASSY

- 1 Input 9V DC to the motor terminal until the cam (L) stops rotating. Take care to avoid overload of the motor.
- 2 Verify that the arm (A-L) assy and arm (B-L) assy are positioned as shown below (full open).

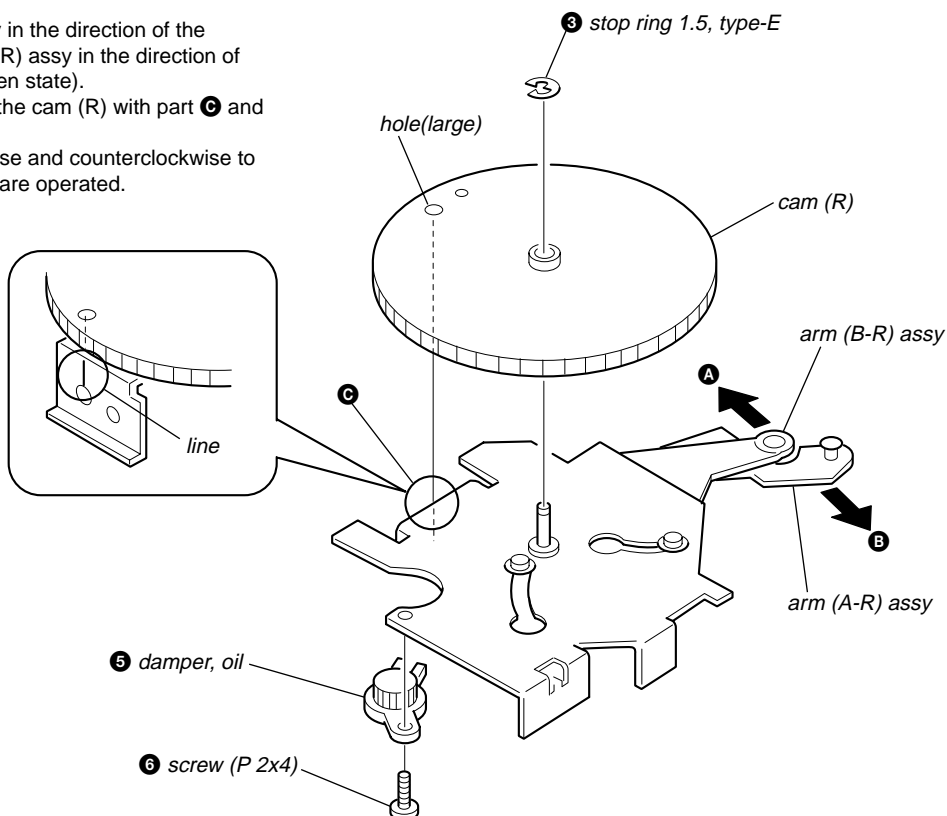


3-5. ARM (A-R) ASSY, ARM (B-R) ASSY



3-6. CAM (R)

- 1 Move the arm (B-R) assy in the direction of the arrow **A** and the arm (A-R) assy in the direction of the arrow **B** fully (full open state).
- 2 Align the hole (large) on the cam (R) with part **C** and install the cam.
- 4 Turn the cam (R) clockwise and counterclockwise to verify that both the arms are operated.



SECTION 4 DIAGRAMS

4-1. IC PIN DESCRIPTIONS

• IC501 CXD2598Q (DIGITAL SERVO, DIGITAL SIGNAL PROCESSOR) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	DVDD	—	Digital power supply pin
2	DVSS	—	Digital ground
3	SOUT	O	Servo brock serial data output (Not used.)
4	SOCK	O	Servo brock serial data read clock output (Not used.)
5	XOLT	O	Servo brock serial data latch output (Not used.)
6	SQSO	O	Sub Q 80 bit, PCM peak and level data output. CD TEXT data output
7	SQCK	I	Clock input from SQSO read out.
8	SCSY	I	Fixed at “L”.
9	SBSO	O	Serial output of sub-P to W. (Not used.)
10	EXCK	I	Clock input from SBSO read out. (Fixed at “L”)
11	XRST	I	System reset (“L”: Reset)
12	STSM	I	System mute input (Fixed at “L”)
13	DATA	I	Serial data input from CPU.
14	XLAT	I	Latch input from CPU. Latch serial data at the falling edge.
15	CLOK	I	Serial data transfer clock input from CPU.
16	SENS	O	SENS output for CPU.
17	SCLK	I	Clock input from SENS serial data read.
18	ATSK	I/O	Input/output for anti-shock.
19	WFCK	O	WFCK (Write Flame Clock) output (Not used.)
20	XUGF	O	XUGF output (Not used.)
21	XPCK	O	XPCK output (Not used.)
22	GFS	O	GFS output
23	C2PO	O	C2PO output (Not used.)
24	SCOR	O	“H” output at either detection, sub code sync S0 or S1.
25	C4M	O	4.2336 MHz output (Not used.)
26	WDCK	O	Word clock output $f=2Fs$ (Not used.)
27	COUT	I/O	Track number count signal input/output (Not used.)
28	MIRR	I/O	Mirror signal input/output (Not used.)
29	DVSS	—	Digital ground
30	DVDD	—	Digital power supply pin
31	DFCT	I/O	Diffect signal input/output (Not used.)
32	FOK	I/O	Focus OK signal input/output
33	PWM1	I	External control input of spindle motor.
34	LOCK	I/O	Lock signal input/output
35	MDP	O	Servo control output of spindle motor.
36	SSTP	I	Disc most inner track detection signal input
37	FSTIO	I/O	2/3 frequency division input/output of pins ⑥⑥ and ⑥⑦. (Not used.)
38	SFDR	O	Sled drive output
39	SRDR	O	Sled drive output
40	TFDR	O	Tracking drive output
41	TRDR	O	Tracking drive output
42	FFDR	O	Focus drive output
43	FRDR	O	Focus drive output
44	DVDD	—	Digital power supply pin
45	DVSS	—	Digital ground
46	TEST	I	Test pin (Fixed at “L”).
47	TES1	I	Test pin (Fixed at “L”).
48	XTSL	I	X’tal select input (“L”: 16.9344 MHz, “H”: 33.8688 MHz)
49	VC	I	Center voltage input
50	FE	I	Focus error signal input
51	SE	I	Sled error signal input

Pin No.	Pin Name	I/O	Pin Description
52	TE	I	Tracking error signal input
53	CE	I	Center servo analog input
54	RFDC	I	RF signal input
55	ADIO	O	Test pin (Not used.)
56	AVSSO	—	Analog ground
57	IGEN	I	Constant current input from OP amplifier.
58	AVDDO	—	Analog ground
59	ASYO	O	EFM full-swing output (“L”: VSS, “H”: VDD)
60	ASYI	I	Asymmetry compare voltage input
61	RFAC	I	EFM signal input
62	AVSS3	—	Analog ground
63	CLTV	I	VCO control voltage input from master.
64	FILO	O	Filter output for master PLL. (slave=digital PLL)
65	FILI	I	Filter input from master PLL.
66	PCO	O	Charge pump output for master PLL.
67	AVDD3	—	Analog power supply pin
68	BIAS	I	Asymmetry circuit constant current input
69	VCTL	I	VCO2 control input from wideband EFM PLL.
70	V16M	O	VCO2 oscillator output for wideband EFM PLL. (Not used.)
71	VPCO	O	Charge pump output for wideband EFM PLL. (Not used.)
72	DVSS	—	Digital ground
73	MD2	I	Digital out ON/OFF control input (“L”: OFF, “H”: ON)
74	DOUT	O	Digital out output
75	ASYE	I	Asymmetry circuit ON/OFF input (“L”: OFF, “H”: ON)
76	DVDD	—	Digital power supply pin
77	LRCK	O	D/A interface LR clock output (f=Fs)
78	LRCKI	I	D/A interface LR clock input
79	PCMD	O	D/A interface serial data output (2’s COMP, MSB fast)
80	PCMD	I	D/A interface serial data input (2’s COMP, MSB fast)
81	BCK	O	D/A interface bit clock output
82	BCKI	I	D/A interface bit clock input
83	EMPH	O	Emphasis ON/OFF signal output
84	EMPHI	I	Emphasis ON/OFF signal input (“H”: ON, “L”: OFF)
85	XVDD	—	Power supply for master clock.
86	XTAI	I	X’tal oscillator input from master clock (16.9344 MHz).
87	XTAO	O	X’tal oscillator output for master clock (16.9344 MHz). (Not used.)
88	XVSS	—	Ground pin for master clock.
89	AVDD1	—	Analog power supply pin
90	AOUT1	O	Lch analog output (Not used.)
91	AIN1	I	Lch OP amplifier input (Not used.)
92	LOUT1	O	Lch LINE output (Not used.)
93	AVSS1	—	Analog ground
94	AVSS2	—	Analog ground
95	LOUT2	O	Rch LINE output (Not used.)
96	AIN2	I	Rch OP amplifier input (Not used.)
97	AOUT2	O	Rch analog output (Not used.)
98	AVDD2	—	Analog power supply pin
99	RMUT	O	Rch “0” detect Flug (Not used.)
100	LMUT	O	Lch “0” detect Flug (Not used.)

• IC5 CXP84640-072Q (CD SYSTEM CONTROL) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	ITRPT	—	Not used in this set.
2, 3	—	—	Not used in this set.
4, 5	NCO	—	Not used in this set.
6	OPEN	I	Front panel open detection input
7	CLOSE	O	Front panel close control output
8	LINKOFF	I	Bus interface link input
9	NCO	—	Not used in this set.
10	$\overline{D\ SW}$	I	Down switch input (SW1)
11	SSTP	I	Limit switch input (SW4)
12, 13	NCO	—	Not used in this set.
14, 15	—	—	Not used in this set.
16	EMPH O	O	De-emphasis ON/OFF control output
17	CDMON	O	CD mechanism deck power control output
18	CD ON	O	CD power control output
19	A MUT	O	System attenuate control output
20	$\overline{LD\ ON}$	O	Laser power ON/OFF control output
21	$\overline{CD\ RST}$	O	CD system reset output
22	HOLD	O	Hold switch output
23	AGC CONT	O	AGC control output
24	—	—	Not used in this set.
25	PH3	I	Not used in this set.
26	$\overline{TSTIN0}$	I	Not used in this set.
27	$\overline{TSTIN1}$	I	Not used in this set.
28	$\overline{TST.CLV}$	I	Not used in this set.
29	NCO	—	Not used in this set.
30	\overline{RESET}	I	System reset input (“L”=Reset)
31	X IN	I	X’tal oscillator input from system clock. (10 MHz)
32	$\overline{X\ OUT}$	O	X’tal oscillator output for system clock. (10 MHz)
33	GND	—	Analog ground
34	$\overline{XT\ OUT}$	O	Not used in this set.
35	XT IN	I	Not used in this set.
36	AVSS	—	A/D converter ground
37	AVREF	I	A/D converter reference voltage input
38	TEP L	I	Not used in this set.
39	TEP H	I	Not used in this set.
40	SLED-	I	Sled drive input
41	PH2	I	Not used in this set.
42	SEK/SMET	I	Fixed at “H” in this set.
43	GFS/MNT2 SEL	I	Fixed at “H” in this set.
44	SC-JIG ON/OFF	I	Fixed at “H” in this set.
45	SCLK	O	CD-TEXT data read clock output
46	LOCK	I/O	Lock signal input/output
47	—	—	Not used in this set.
48	SCK2	O	Sub Q read clock output
49	SI2	I	Sub Q 80 bit, PCM peak and level data 16 bit input.
50	—	—	Not used in this set.
51	BUS CLK	I/O	Bus system serial clock input/output
52	BUS SI	I	Bus system serial interface input
53	BUS SO	O	Bus system serial interface output
54	F OK	I	Focus OK signal input
55	GFS	I	GFS signal detection input
56	TEST MODE	I	Fixed at “H” in this set.

Pin No.	Pin Name	I/O	Pin Description
57	SENS	I	SENS signal input
58	—	—	Not used in this set.
59	—	—	Not used in this set.
60	BU.IN	I	Back-up power detection input
61	$\overline{\text{BUSON}}$	I	Bus on control input
62	$\overline{\text{IN SW}}$	I	Disc in switch input (SW3)
63	$\overline{\text{SELF SW}}$	I	Self switch input (SW2)
64	SCOR	O	Sub-code sync output
65	CD-CKO	O	CD signal process serial clock output
66	LM LOD	O	Loading motor control output
67	CD DATA	O	CD signal process serial data output
68	CD-XLAT	O	CD signal process serial data latch output
69	LM-EJ	O	Loading motor control output
70	DRV-OE	O	Focus/tracking coil/sled motor control output
71	MD2	O	Digital out ON/OFF control output (“L”: OFF, “H”: ON)
72	VDD	—	Power supply pin
73	NIH	I	Fixed at “H” in this set.
74	V/Z	I	Fixed at “H” in this set.
75	PH1	I	Not used in this set.
76	—	—	Not used in this set.
77	DOUT-SEL	I	Fixed at “H” in this set.
78 – 80	—	—	Not used in this set.

• IC901 CXD2727Q-4 (DIGITAL SIGNAL PROCESSOR, DIGITAL FILTER, D/A CONVERTER) (MAIN BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	DGND	—	Ground terminal (digital system)
2 – 21	NIL	I	Input terminal for the test (fixed at “L”)
22 – 24	JPE1 – JPE3	I	External condition jump terminal “H”: condition jump (fixed at “L”)
25	DVDD	—	Power supply terminal (+3.3 V) (digital system)
26	DA1GND	—	Ground terminal (for D/A converter 1) (analog system)
27	DA1LO	O	D/A converter 1 (L-ch side) output terminal Analog signal output for front side (L-ch side) output in this set
28	DA1VDD	—	Power supply terminal (+3.3 V) (for D/A converter 1) (analog system)
29	DA1RO	O	D/A converter 1 (R-ch side) output terminal Analog signal output for rear side (L-ch side) output in this set
30	DA1VDD	—	Power supply terminal (+3.3 V) (for D/A converter 1) (analog system)
31	DA1GND	—	Ground terminal (for D/A converter 1) (analog system)
32	ADLVDD	—	Power supply terminal (+3.3 V) (for L-ch side A/D converter) (analog system)
33	ADLGND	—	Ground terminal (for L-ch side A/D converter) (analog system)
34	ADLREF	O	Connected to the bus control for A/D converter (for L-ch side)
35	ADLIN	I	A/D converter (L-ch side) analog input terminal Tuner and bus audio input signal (L-ch side) in this set
36	DA2GND	—	Ground terminal (for D/A converter 2) (analog system)
37	DA2VDD	—	Power supply terminal (+3.3 V) (for D/A converter 2) (analog system)
38	DA2LO	O	D/A converter 2 (L-ch side) output terminal (Not used.)
39	MCKVDD	—	Power supply terminal (+3.3 V) (for master clock) (analog system)
40	MCKO	O	System clock output terminal (16.9344 MHz)
41	MCKI	I	System clock input terminal (16.9344 MHz)
42	MCKGND	—	Ground terminal (for master clock) (analog system)
43	DA2RO	O	D/A converter 2 (R-ch side) output terminal Analog signal output for sub woofer output in this set
44	DA2VDD	—	Power supply terminal (+3.3 V) (for D/A converter 2) (analog system)
45	DA2GND	—	Ground terminal (for D/A converter 2) (analog system)
46	ADRIN	I	A/D converter (R-ch side) analog input terminal Tuner and bus audio input signal (R-ch side) in this set
47	ADRREF	O	Connected to the bus control for A/D converter (for R-ch side)
48	ADRGND	—	Ground terminal (for R-ch side A/D converter) (analog system)
49	ADRVDD	—	Power supply terminal (+3.3 V) (for R-ch side A/D converter) (analog system)
50	DA3GND	—	Ground terminal (for D/A converter 3) (analog system)
51	DA3VDD	—	Power supply terminal (+3.3 V) (for D/A converter 3) (analog system)
52	DA3LO	O	D/A converter 3 (L-ch side) output terminal Analog signal output for rear side (R-ch side) output in this set
53	DA3VDD	—	Power supply terminal (+3.3 V) (for D/A converter 3) (analog system)
54	DA3RO	O	D/A converter 3 (R-ch side) output terminal Analog signal output for front side (R-ch side) output in this set
55	DA3GND	—	Ground terminal (for D/A converter 3) (analog system)
56	DGND	—	Ground terminal (digital system)
57	SYS RST	I	System reset signal input from the master controller (IC501) “L”: reset
58	BFOT	O	Master clock signal output terminal
59	SCK	I	Serial data transfer clock signal input from the master controller (IC501)
60	REDY	O	Transfer enable signal output to the master controller (IC501) “L”: transfer prohibition
61	TRDT	O	Serial data output to the master controller (IC501)
62	XLAT	I	Serial data latch pulse input from the master controller (IC501)
63	RVDT	I	Serial data input from the master controller (IC501)
64	24/32BIT (NIH)	I	Serial data 24/32 bit slot selection signal input terminal “L”: 24 bit slot, “H”: 32 bit slot (validity at slave mode) (fixed at “L” in this set)

Pin No.	Pin Name	I/O	Pin Description
65	DVDD	—	Power supply terminal (+3.3 V) (digital system)
66	DVSS	—	Ground terminal (digital system)
67 – 69	SO1 – SO3	O	Serial data output terminal (Not used.)
70	SOUT	O	Serial data output terminal (Not used.)
71	SI1	I	Serial data input terminal
72, 73	SI2, SI3	I	Serial data input terminal Not used (fixed at “L”)
74	SIN	I	Serial data input terminal Not used (fixed at “L”)
75	BCK	I	Bit clock signal (2.8224 MHz) input terminal
76	LRCK	I	L/R sampling clock signal (44.1 kHz) input terminal
77	MST/SLV	I	Bit clock (BCK) and L/R sampling clock (LRCK) signal master/slave mode selection signal input from the master controller (IC501) “L”: master mode, “H”: slave mode
78	DVDD	—	Power supply terminal (+3.3 V) (digital system)
79	PLLGND	—	Ground terminal (PLL system)
80	PLENA	I	PLL enable signal input terminal Normally: fixed at “L”
81	22 MHz	O	PLL clock signal output terminal (22.5792 MHz) (Not used.)
82	PLLCNT	I	PLL clock output control signal input from the master controller (IC801) At “L” is input: fixed at “L” is PLCLK (pin ⑧) At “H” is input: PLL clock signal output from the PLCLK (pin ⑧)
83	PLLVDD	—	Power supply terminal (+3.3 V) (PLL system)
84	DGND	—	Ground terminal (digital system)
85 – 94	NIL	I	Input terminal for the test Normally: fixed at “L”
95	DVDD	—	Power supply terminal (+3.3 V) (digital system)
96	DRAMGND	—	Ground terminal (for D-RAM)
97 – 99	NIL	I	Input terminal for the test Normally: fixed at “L”
100	DRAMVDD	—	Power supply terminal (+3.3 V) (for D-RAM)

- IC501 MB90574BPMT-G-319-BND (SYSTEM CONTROL) (MAIN BOARD) (US MODEL)
- IC501 MB90574BPMT-G-320-BND (SYSTEM CONTROL) (MAIN BOARD) (AEP, UK, E MODEL)

Pin No.	Pin Name	I/O	Pin Description
1 – 3	(NCO)	O	Not used. (Open)
4	SP LATCH	O	Spectrum analyzer data latch signal
5	ATT	O	System mute signal
6	SYS RST	O	System reset signal
7	(NCO)	O	Not used. (Open)
8	VCC	—	Power supply pin (+5 V)
9	(NCO)	O	Not used. (Open)
10	E2P SIO	I/O	Tuner unit EEPROM BUS serial data input/output
11	E2P CKO	I/O	Tuner unit EEPROM BUS serial clock input/output
12	FLS SI	I	Flash CPU write-in data input
13	FLS SO	O	Flash CPU write-in data output
14	BUS ON	O	BUS ON signal
15	BEEP	O	Beep signal
16	TEL ATT	I	Telephone mute signal
17	UNI SI	I	SONY BUS serial data input
18	UNI SO	O	SONY BUS serial data output
19	UNI CKO	O	SONY BUS serial clock output
20 – 23	(NCO)	O	Not used. (Open)
24	SIRCS	I	Wireless remote data input
25	DSP SI	I	DSP serial data input
26	DSP SO	O	DSP serial data output
27	DSP CKO	O	DSP serial clock output
28	DSP PLL	O	DSP PLL clock control signal
29	DSP MST	O	DSP master/slave control signal
30	(NCO)	O	Not used. (Open)
31	VOL ATT	O	Electronic volume mute signal
32	TU ATT	O	Not used. (Open)
33	VSS	—	Ground
34	C	—	Not used. (Open)
35	DSP LAT	O	DSP latch signal
36	DSP RST	O	DSP reset signal
37	SHIFT	O	OSC frequency shift signal for DC/DC conv.
38	DVCC	—	Power supply pin (+5 V)
39	DVSS	—	Ground
40	FP CTRL	O	OPEN/CLOSE motor voltage control signal
41	(NCO)	O	Not used. (Open)
42	AVCC	—	Power supply pin (+5 V)
43	AVRH	—	Power supply pin (+5 V)
44	AVRL	—	Ground
45	AVSS	—	Ground
46	KEY IN0	I	Key input 0
47	KEY IN1	I	Key input 1
48	RC IN0	I	Rotary commander input 0
49	(NCO)	O	Not used. (Open)
50	QUALITY	I	Noise detection signal
51	(NCO)	O	Not used. (Open)
52	MPTH	I	Tuner multi path detection signal
53	VSM	I	S-meter voltage detection signal
54	VCC	—	Power supply pin (+5 V)
55	STBY	O	Power amplifier drive signal
56	NS MASK	O	Noise detection ON/OFF control signal

Pin No.	Pin Name	I/O	Pin Description
57	DDC ON	O	DC/DC converter power control signal
58	CD EJECT OK	O	CD eject control signal
59	CD OPEN REQ	I	Front panel open request signal
60	(NCO)	O	Not used. (Open)
61	OPEN KEY	I	OPEN key detection signal
62	NOSE SW	I	Nose SW detection signal
63	VSS	—	Ground
64	DETACH SW	I	Detach SW detection signal
65	PWM	I	Oscillation frequency count input
66 – 68	(NCO)	O	Not used. (Open)
69	FLASH W	I	Flash write-in signal
70	I2C SIO	I/O	I2C serial data input/output
71	I2C CKO	I/O	I2C serial clock input/output
72	RC IN1	I	Rotary commander input 1
73	X1A	—	Crystal oscillator (32.768 kHz)
74	X0A	—	Crystal oscillator (32.768 kHz)
75	DAVN	I	RDS data acquisition detect signal
76	CDON IN	I	CD mechanism power control signal
77	BU IN	I	Back-up power detection signal
78	DSP READY	I	DSP ready signal
79	KEY ACK	I	Key acknowledge signal
80	AD ON	O	A/D converter power control signal
81	ACC IN	I	Accessory key ON signal
82	FLS PWON	O	Flash power ON control signal
83	PW ON	O	Audio circuit power ON control signal
84	TEST IN	I	Test mode initial setting detection signal
85	RAM BU	I	RAM reset detection signal
86	HSTX	I	Hardware standby input
87	MD2	I	Connecting to ground in this set.
88	MD1	I	Connecting to VCC in this set.
89	MD0	I	Connecting to VCC in this set.
90	RSTX	I	Reset input
91	VSS	—	Ground
92	X0	—	Crystal oscillator (3.68 MHz)
93	X1	—	Crystal oscillator (3.68 MHz)
94	VCC	—	Power supply pin (+5 V)
95	ILL IN	I	Illumination dimmer control signal
96	I DET	I	OPEN/CLOSE motor abnormal current detection
97	MOT –	O	OPEN/CLOSE motor control signal
98	MOT +	O	OPEN/CLOSE motor control signal
99	CLOSE SW	I	Close SW detection signal
100	OPEN SW	I	Open SW detection signal
101	CENT SW	I	Cent SW detection signal
102	(NCO)	O	Not used. (Open)
103	CDMD SEL	I	CD/MD selector signal
104	DEST SEL1	I	Destination selector signal 1
105	DEST SEL2	I	Destination selector signal 2
106	BOOT	O	Display CPU write-in control signal
107	(NCO)	O	Not used. (Open)
108	DSP ON	O	DSP power control signal
109	SENS ON	O	Not used. (Open)
110	EMPH IN	I	Emphasis input
111	PACK IN	I	Pack detection signal

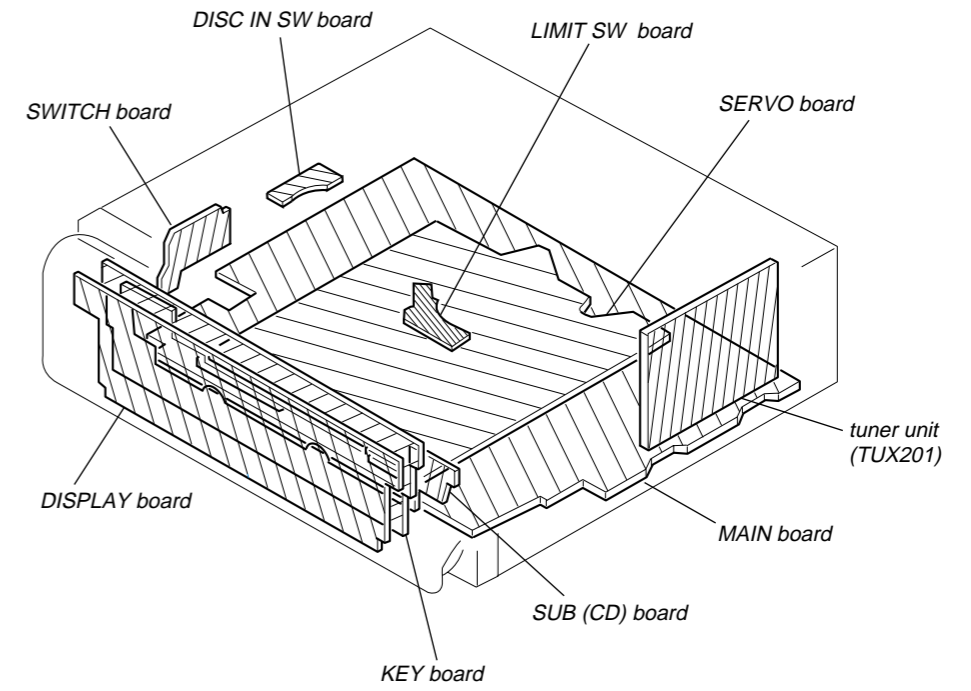
Pin No.	Pin Name	I/O	Pin Description
112	4V SEL	I	4V select control signal
113	(NCO)	O	Not used. (Open)
114	TUN ON	O	Tuner power control signal
115	LED SW1	O	Illumination select control signal 1
116	LED SW2	O	Illumination select control signal 2
117	(NCO)	O	Not used. (Open)
118	(NCO)	O	Not used. (Open)
119	VSS	—	Ground
120	(NCO)	O	Not used. (Open)

• IC702 HD643255A36F (SUB SYSTEM CONTROL)

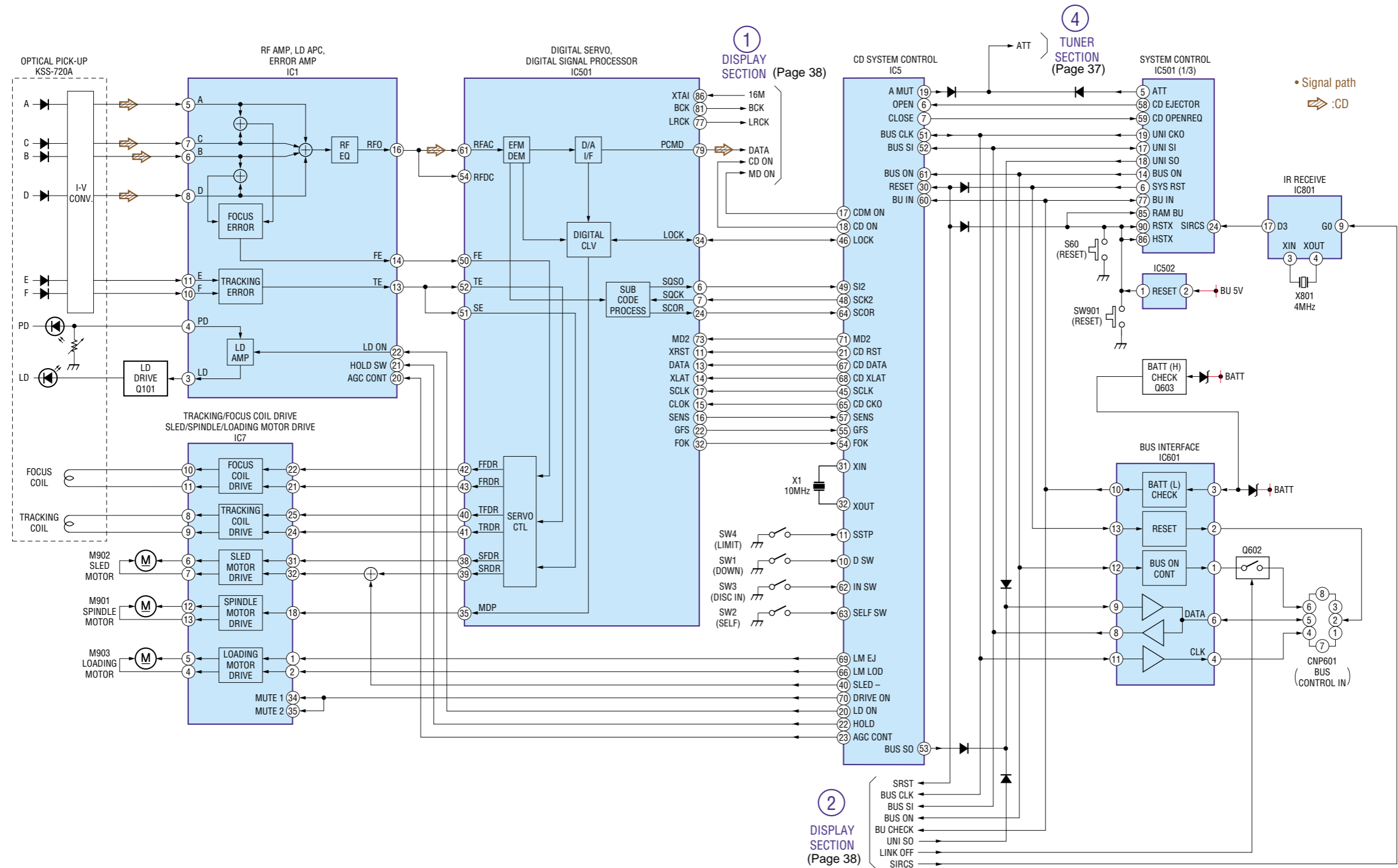
Pin No.	Pin Name	I/O	Pin Description
1	SA CLK	O	Not used. (Open)
2	PG4	O	Not used. (Open)
3	VSS	—	Ground
4	NC	—	Not used. (Open)
5	VCC	—	Power supply pin (+ 5V)
6 – 9	PC0 – PC3	O	Not used. (Open)
10	VSS	—	Ground
11 – 14	PC4 – PC7	O	Not used. (Open)
15 – 18	PB0 – PB3	O	Not used. (Open)
19	VSS	—	Ground
20 – 23	PB4 – PB7	O	Not used. (Open)
24 – 27	PA0 – PA3	O	Not used. (Open)
28	VSS	—	Ground
29 – 31	PA4 – PA6	O	Not used. (Open)
32	SA EN IN	I	Connecting to ground in this set.
33	SPE LAT	I	Spectrum analyzer data latch signal
34	BU IN	I	Back-up power detection signal
35, 36	VSS	—	Ground
37	P65	O	Not used. (Open)
38	BUS ON	I	BUS ON signal
39	VCC	—	Power supply pin (+5 V)
40 – 43	PE0 – PE3	O	Not used. (Open)
44	VSS	—	Ground
45	DSP SEL	I	Spectrum analyzer data select signal
46	LED SW1	I	Illumination select control signal 1
47	LED SW2	I	Illumination select control signal 2
48	PE7	O	Not used. (Open)
49	BU IN	O	Not used. (Open)
50	LINK OFF	O	Link OFF control signal
51	PD2	O	Not used. (Open)
52	ILL ON	O	Illumination power control signal
53	VSS	—	Ground
54 – 56	PD4 – PD6	O	Not used. (Open)
57	BOOT	I	Display CPU write-in control signal
58	VCC	—	Power supply pin (+5 V)
59	P30	O	Not used. (Open)
60	LCD SO/TX	O	LCD driver serial data output
61	SP SI	I	Spectrum analyzer data input
62	RX	I	Flash CPU write-in data input
63	SP CKI	I	Spectrum analyzer clock input
64	LCD CKO	O	LCD driver serial clock output
65	VSS	—	Ground
66	LCD CEO	O	LCD driver chip enable output
67, 68	VSS	—	Ground
69	LCD INH	O	LCD driver inhibit control signal
70	LCD CE1	O	LCD driver chip enable output
71	LCD CE2	O	LCD driver chip enable output
72 – 78	P27 – P21	O	Not used. (Open)
79	FL W	O	Flash write control signal
80	FW E	I	Flash write enable signal
81	SYS RST	I	System reset signal
82	NMI	I	Non maskable interrupt signal

Pin No.	Pin Name	I/O	Pin Description
83	STBY	I	Hardware standby signal
84	VCC	—	Power supply pin (+5 V)
85	XTAL	—	Crystal oscillator (18.432 MHz)
86	EXTAL	—	Crystal oscillator (18.432 MHz)
87	VSS	—	Ground
88	PF7	O	Not used. (Open)
89	VCC	—	Power supply pin (+5 V)
90 – 96	PF6 – PF0	O	Not used. (Open)
97	UNI SO	O	SONY BUS serial data output
98	UNI SI	I	SONY BUS serial data input
99, 100	VSS	—	Ground
101	UNI CKI	I	SONY BUS serial clock input
102	P53	O	Not used. (Open)
103	AVCC	—	Power supply pin (+5 V)
104	VREF	—	Power supply pin (+5 V)
105 – 112	P40 – P47	I	Connecting to ground in this set.
113	AVSS	—	Ground
114	VSS	—	Ground
115 – 122	P17 – P10	O	Not used. (Open)
123	MD0	I	Mode setting 0
124	MD1	I	Mode setting 1
125	MD2	I	Mode setting 2
126 – 128	PG0 – PG2	O	Not used. (Open)

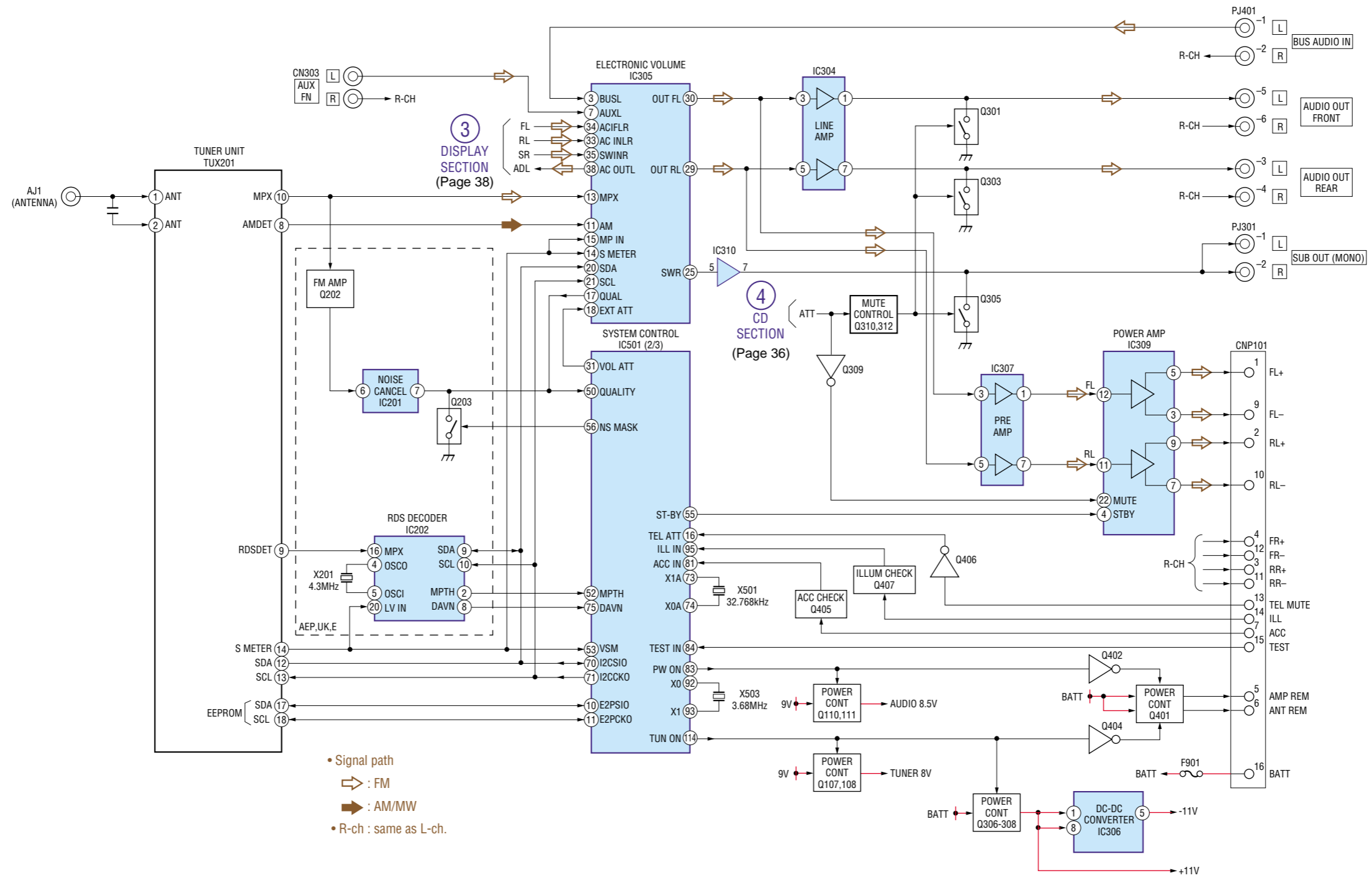
4-2. CIRCUIT BOARDS LOCATION



4-3. BLOCK DIAGRAM — CD SECTION —



4-4. BLOCK DIAGRAM — TUNER SECTION —



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

Note: The components identified by mark Δ or dotted line with mark Δ 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 Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - \rightarrow : FM
 - \rightarrow : AM/MW
 - \rightarrow : CD

for printed wiring boards:

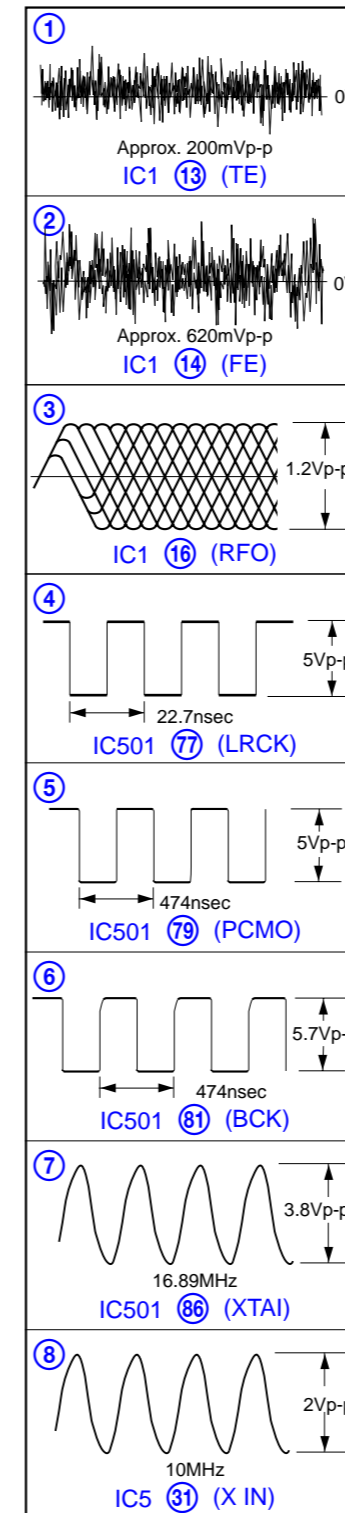
- \circ : parts extracted from the component side.
- \square : parts extracted from the conductor side.
- \circ : Through hole.
- : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

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 —

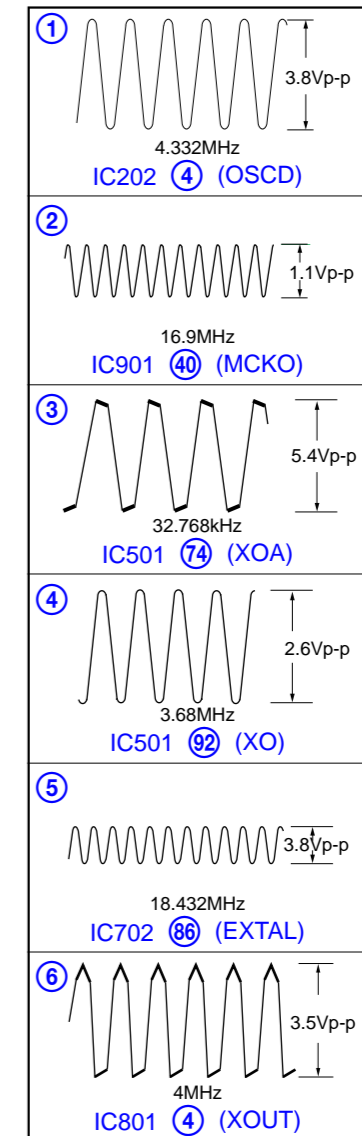
(MODE: CD PLAY)



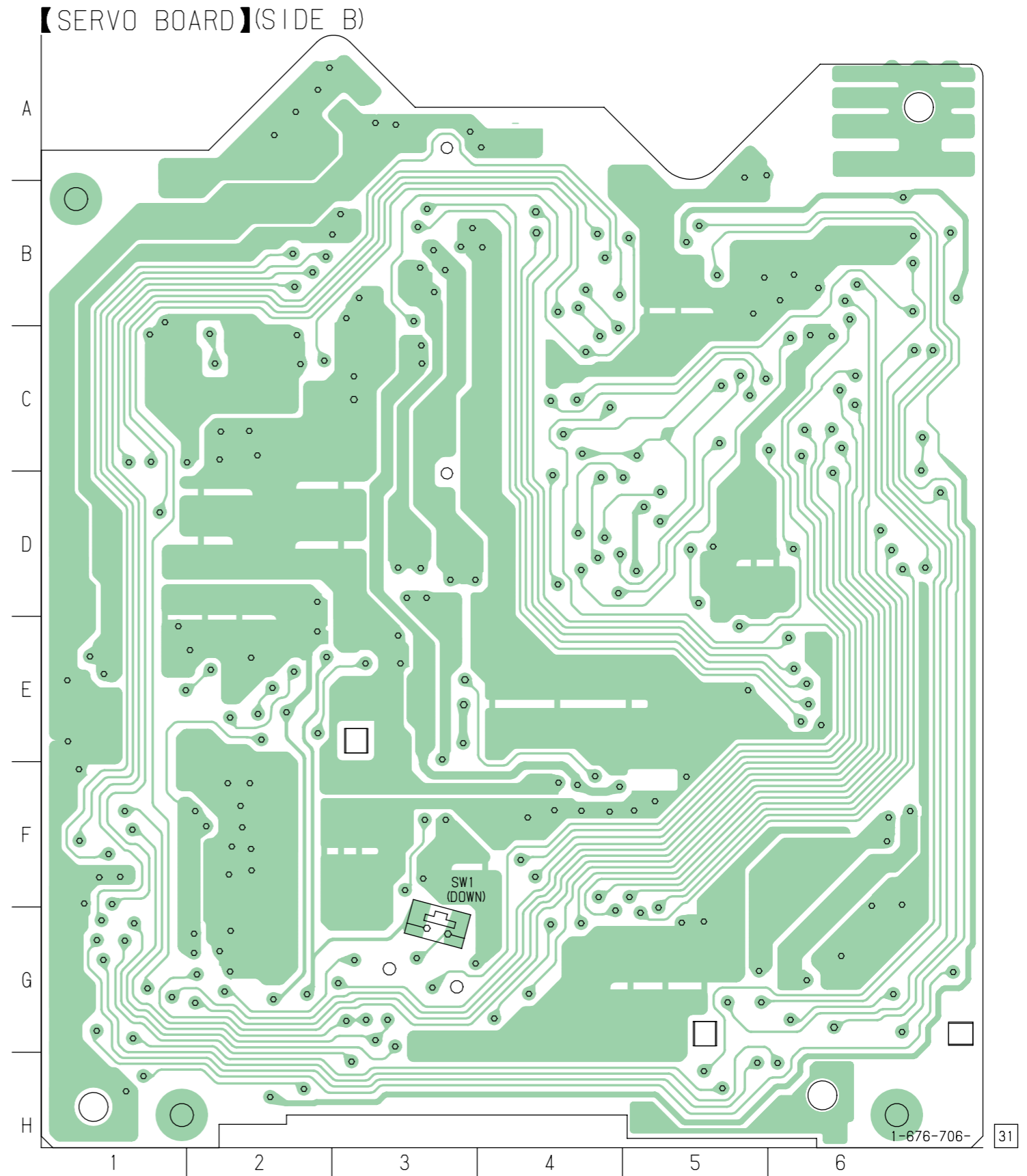
• Waveforms

— Main Board —

(MODE: FM)



4-6. PRINTED WIRING BOARDS — CD MECHANISM SECTION —



【SERVO BOARD】(SIDE A)

【PICK-UP FLEXIBLE BOARD】

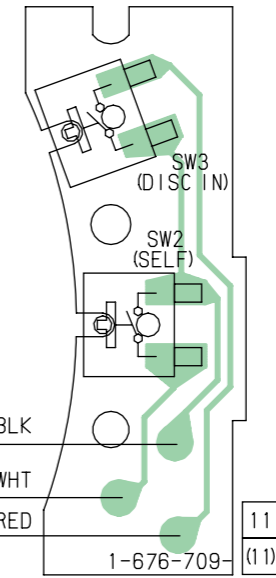
1-676-707- 21

OPTICAL PICK-UP
KSS-720A

• Semiconductor Location

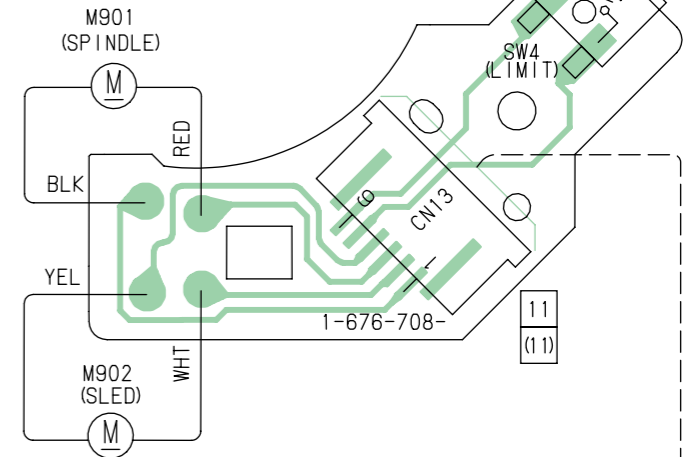
Ref. No.	Location
IC1	C-2
IC5	C-6
IC7	F-2
IC501	F-5
Q101	B-2

【DISC IN SW BOARD】

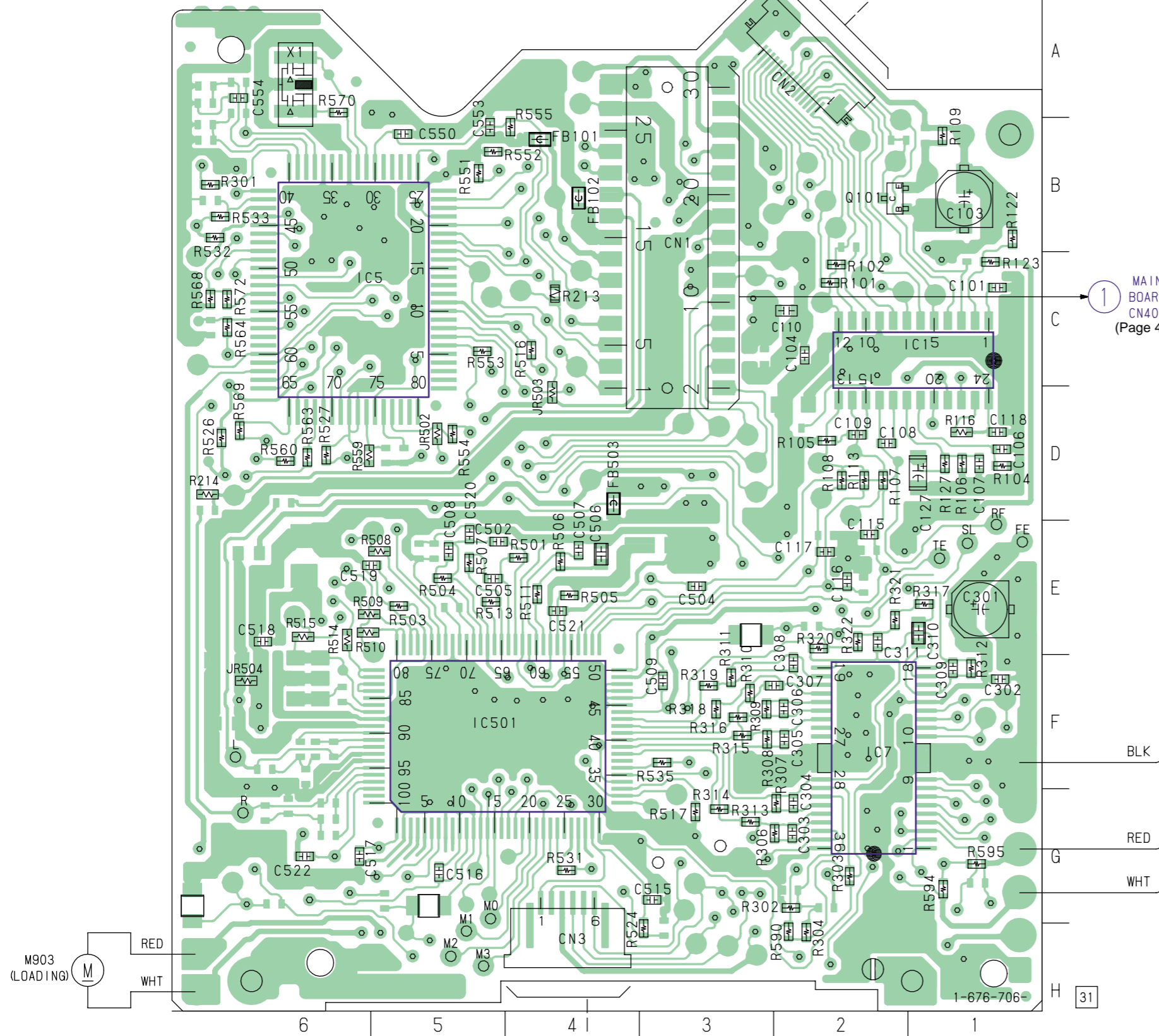


① MAIN BOARD
CN401
(Page 45)

【LIMIT SW BOARD】

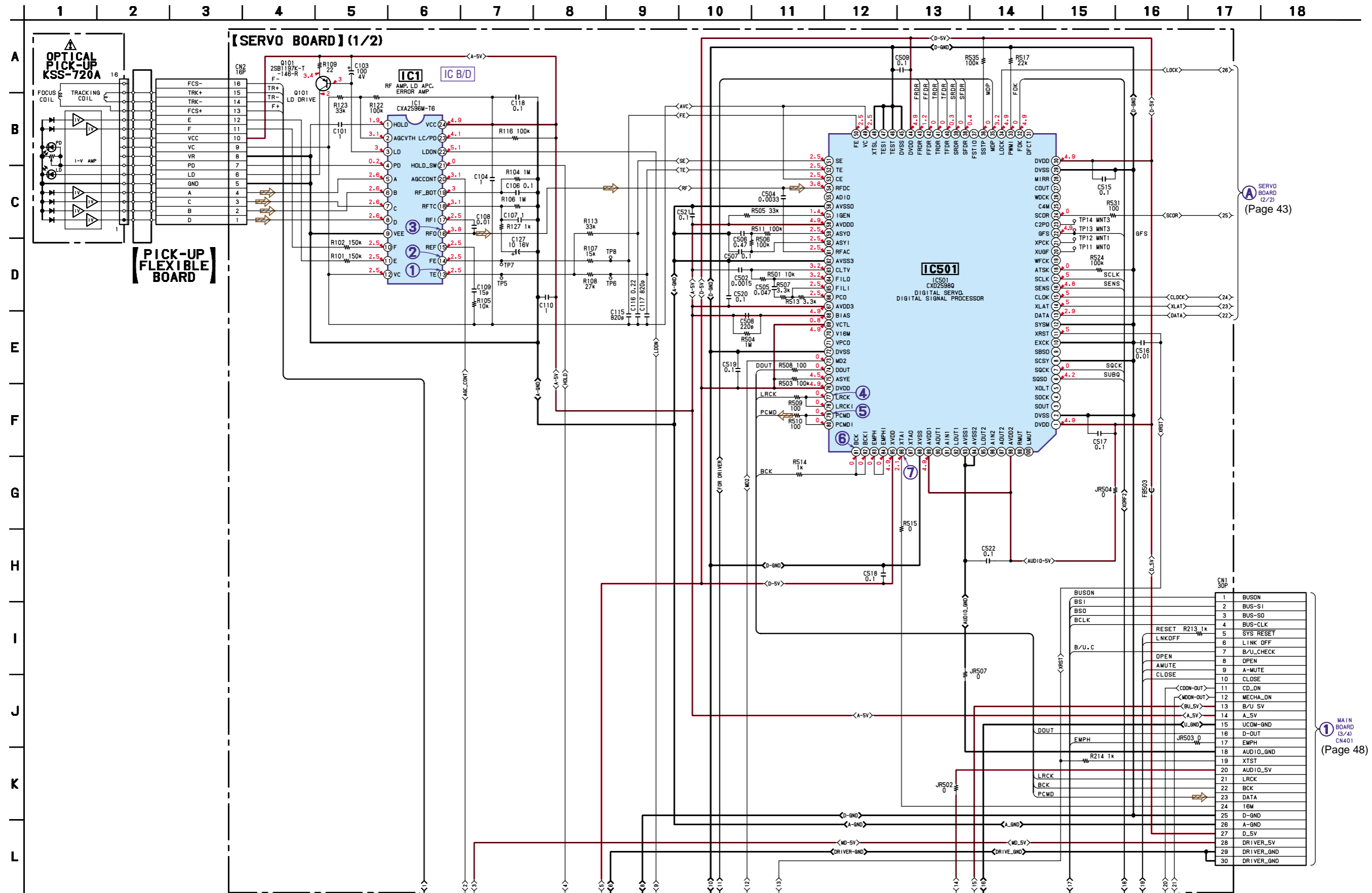


【MOTOR FLEXIBLE BOARD】 1-677-182- 11



• Refer to page 39 for Waveforms.

4-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) — • Refer to page 56 for IC Block Diagrams.



SERVO BOARD (2/2) (Page 43)

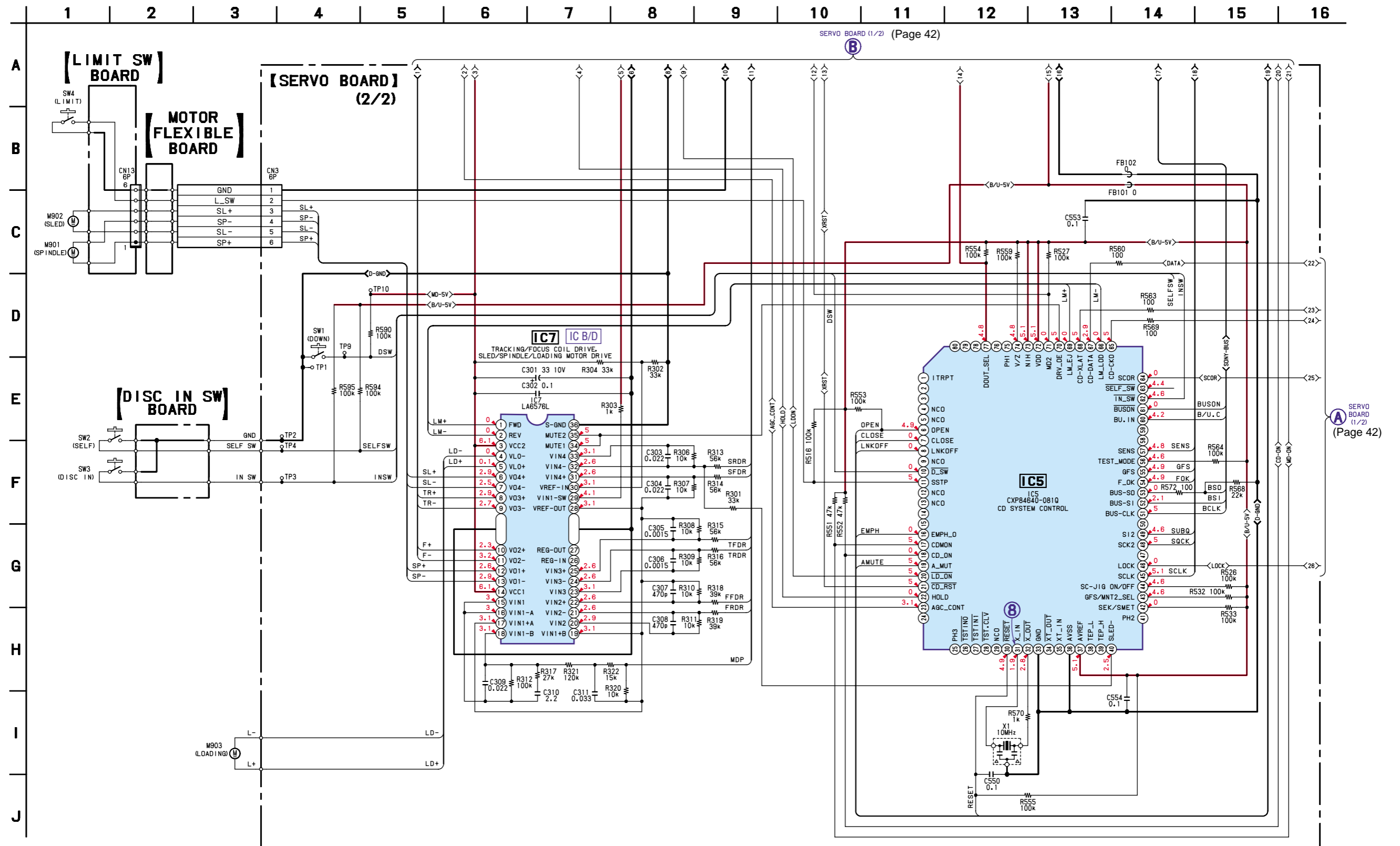
MAIN BOARD (3/4) CN401 (Page 48)

SERVO BOARD (2/2) (Page 43)

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

• Refer to page 39 for Waveforms.

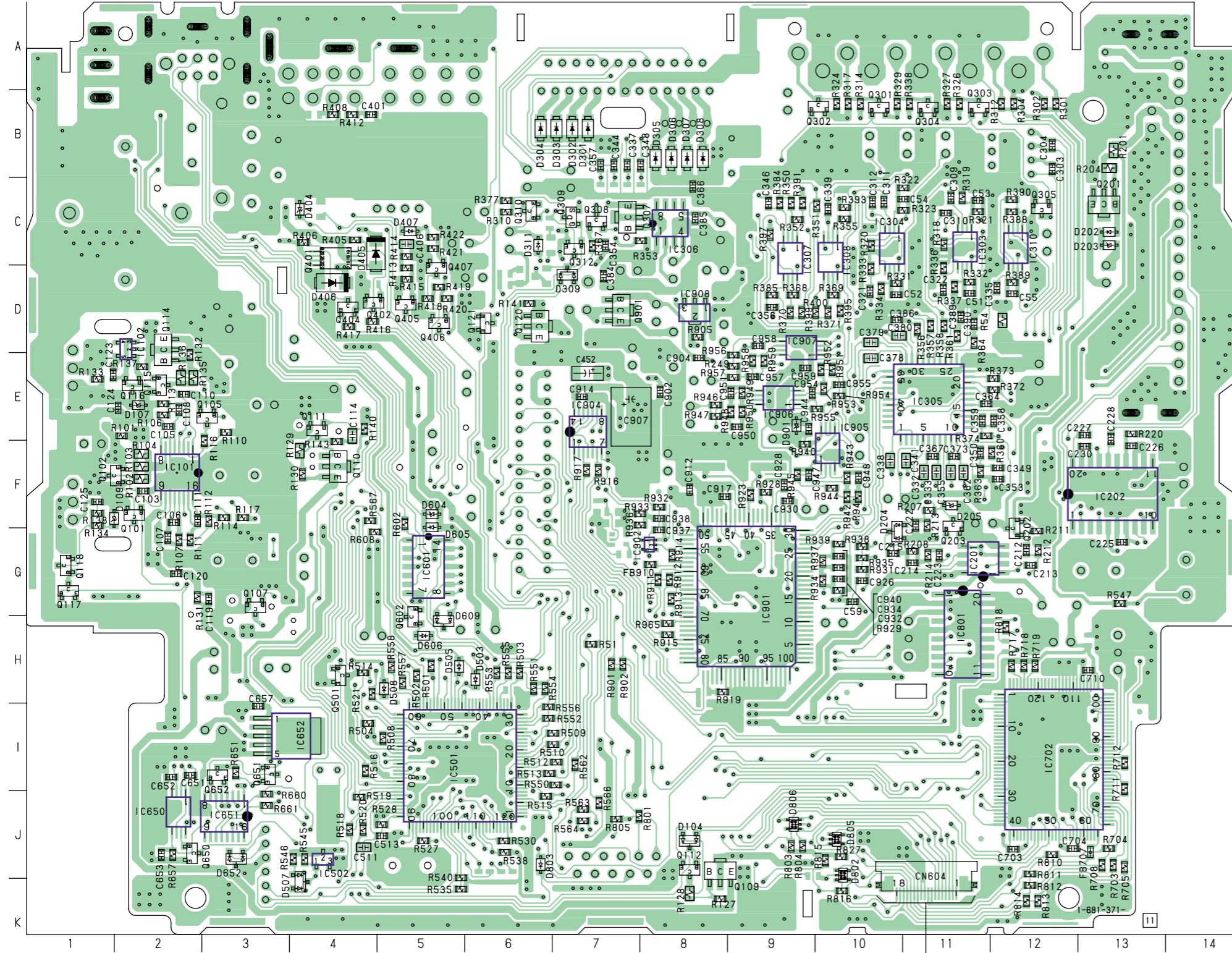
4-8. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) — • Refer to page 56 for IC Block Diagrams.



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

4-9. PRINTED WIRING BOARDS — MAIN SECTION —

【MAIN BOARD】(SIDE A)

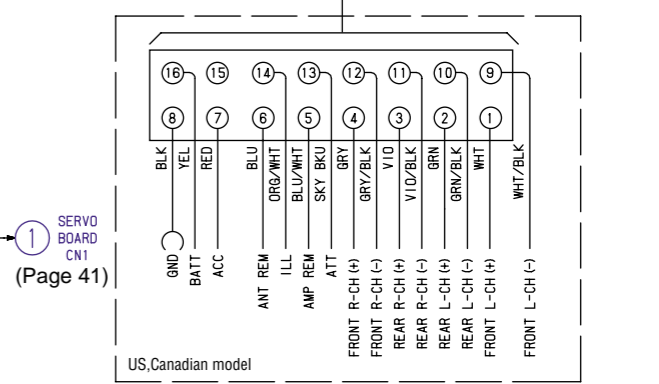
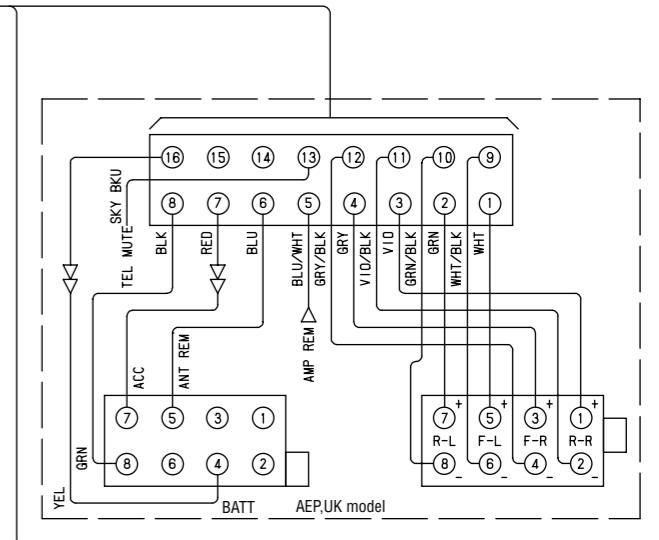
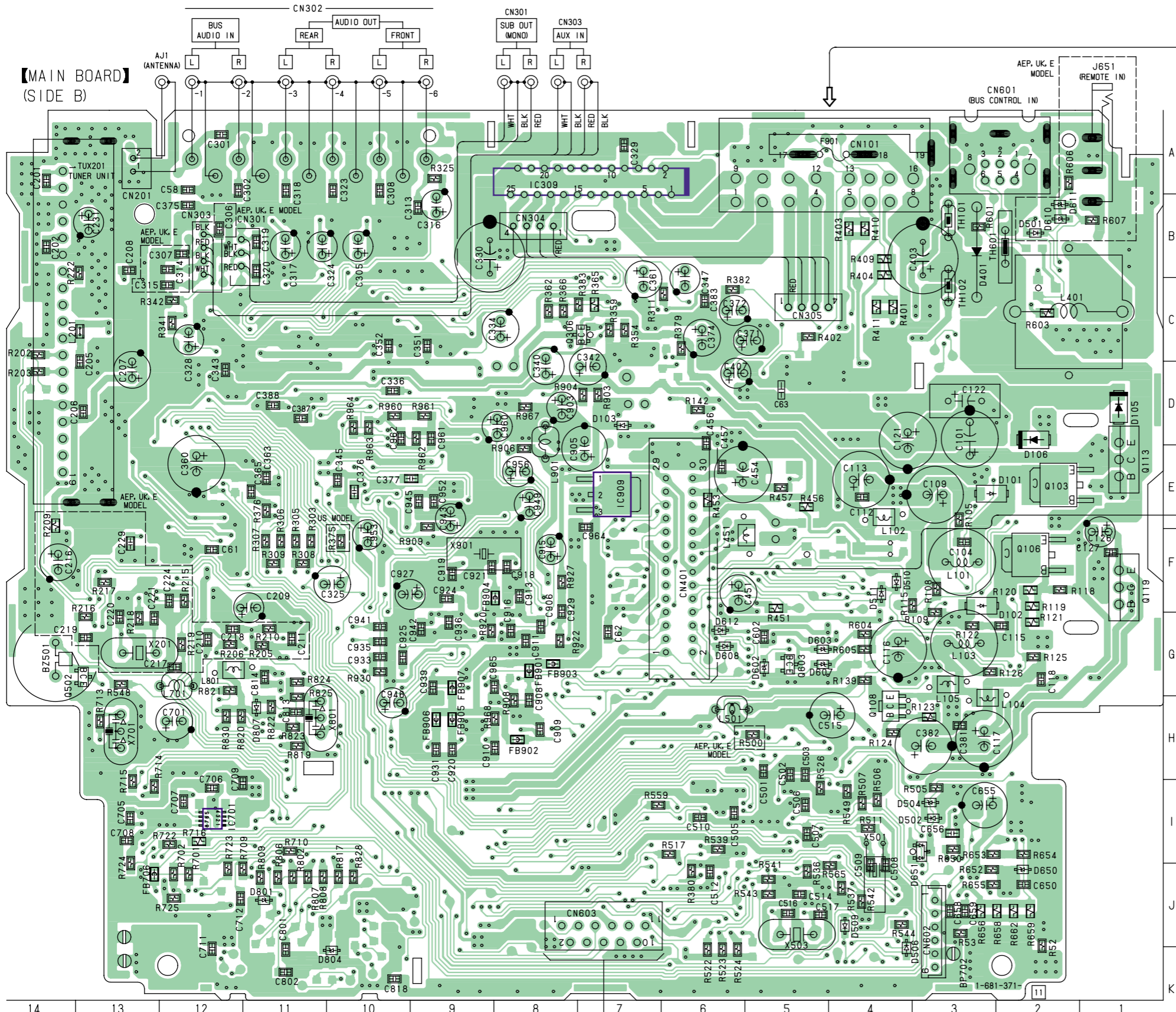


②
KEY BOARD
CNI
(Page 52)

• Semiconductor Location

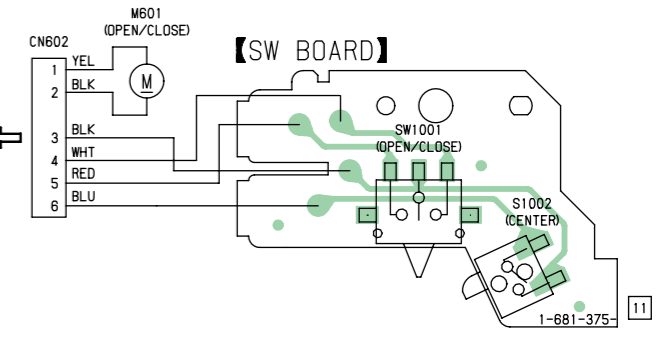
Ref. No.	Location	Ref. No.	Location
D104	J-8	IC652	I-4
D107	E-2	IC702	I-12
D109	F-2	IC801	H-11
D202	C-13	IC901	G-9
D203	C-13	IC902	G-8
D204	G-10	IC904	E-7
D205	F-11	IC905	F-10
D301	B-7	IC906	E-9
D302	B-7	IC907	D-9
D303	B-7	IC908	D-8
D304	B-6		
D305	B-8	Q101	F-2
D306	B-8	Q102	F-2
D307	B-8	Q105	E-3
D308	B-8	Q107	G-3
D309	D-7	Q109	J-8
D311	C-6	Q110	F-4
D404	C-4	Q111	E-4
D405	C-4	Q112	J-8
D406	D-4	Q114	D-2
D407	C-5	Q115	E-2
D503	H-6	Q116	E-2
D505	H-5	Q117	G-1
D507	J-4	Q118	G-1
D508	H-5	Q120	D-6
D604	F-5	Q121	D-6
D605	F-5	Q201	C-13
D606	H-5	Q202	G-12
D609	H-5	Q203	G-11
D652	J-3	Q301	B-10
D802	J-10	Q302	B-10
D803	J-6	Q303	B-11
D805	J-10	Q304	B-11
D806	J-9	Q305	C-12
D901	E-9	Q307	C-7
		Q308	C-7
		Q309	C-7
IC101	F-2	Q310	C-6
IC102	D-2	Q312	C-7
IC201	G-11	Q401	C-4
IC202	F-12	Q402	D-4
IC303	C-11	Q404	D-4
IC304	C-10	Q405	D-5
IC305	E-11	Q406	D-5
IC306	C-8	Q407	C-5
IC307	C-9	Q501	H-4
IC308	C-10	Q602	H-5
IC310	C-12	Q650	J-2
IC501	I-5	Q651	I-3
IC502	J-4	Q652	I-3
IC601	G-5	Q901	D-7
IC650	J-2		
IC651	J-3		

**【MAIN BOARD】
(SIDE B)**



• Semiconductor Location

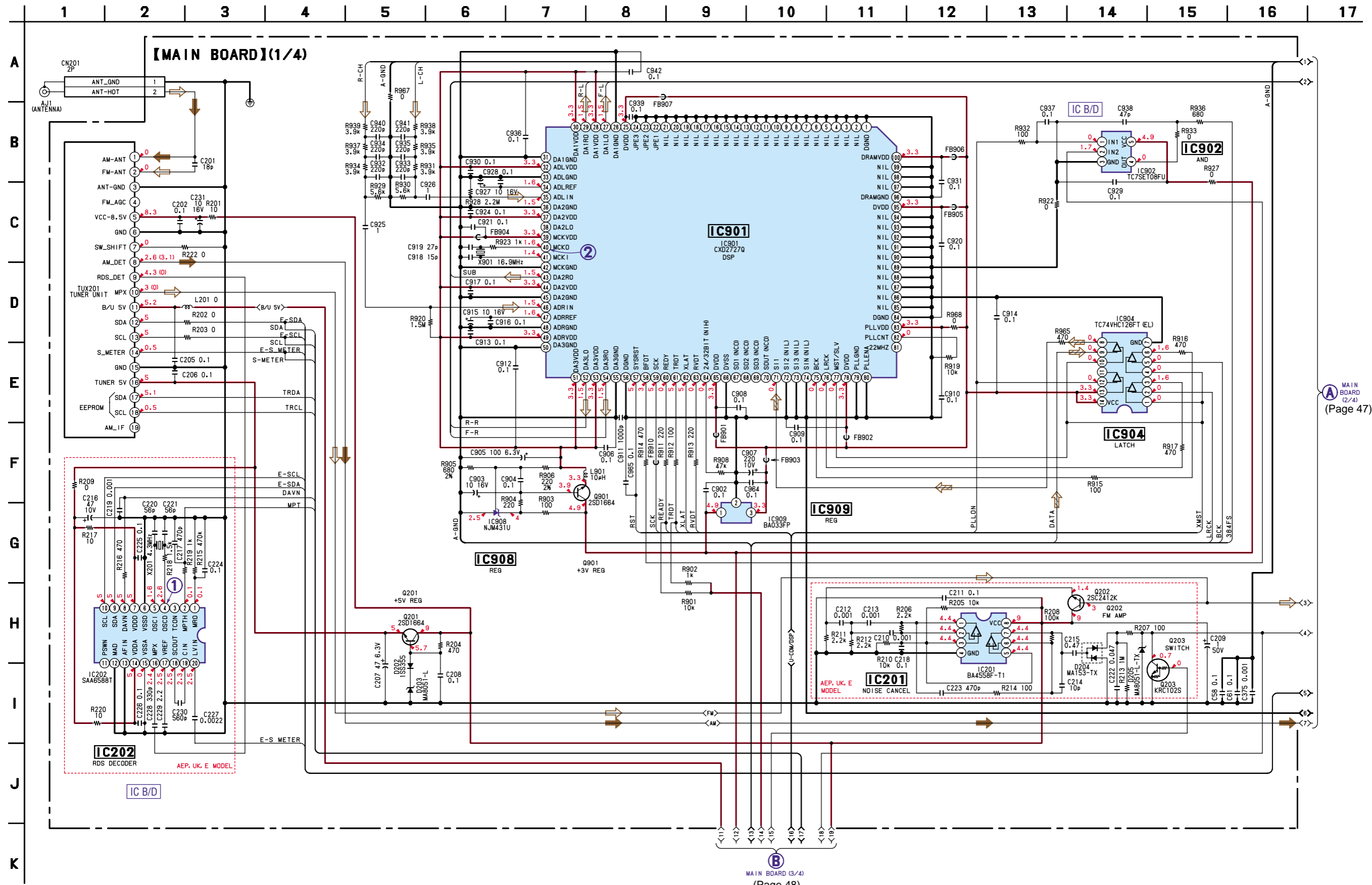
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	F-3	D602	G-5	IC309	A-8
D102	F-3	D603	G-5	IC701	I-12
D103	D-7	D607	G-5	IC909	E-7
D105	D-1	D608	G-6		
D106	E-2	D610	B-2	Q103	E-2
D401	B-3	D611	B-2	Q106	F-2
D501	B-2	D612	G-6	Q108	H-4
D502	I-3	D650	J-2	Q113	E-1
D504	I-3	D651	I-3	Q119	F-1
D506	K-4	D801	J-11	Q306	C-7
D509	J-4	D804	J-10	Q502	G-14
D510	F-4	D807	H-11	Q603	G-5
D511	F-4				



RD SUB (CD) BOARD
CN901
(Page 50)

• Refer to page 39 for Waveforms.

4-10. SCHEMATIC DIAGRAM — MAIN SECTION (1/4) — • Refer to page 56 for IC Block Diagrams.

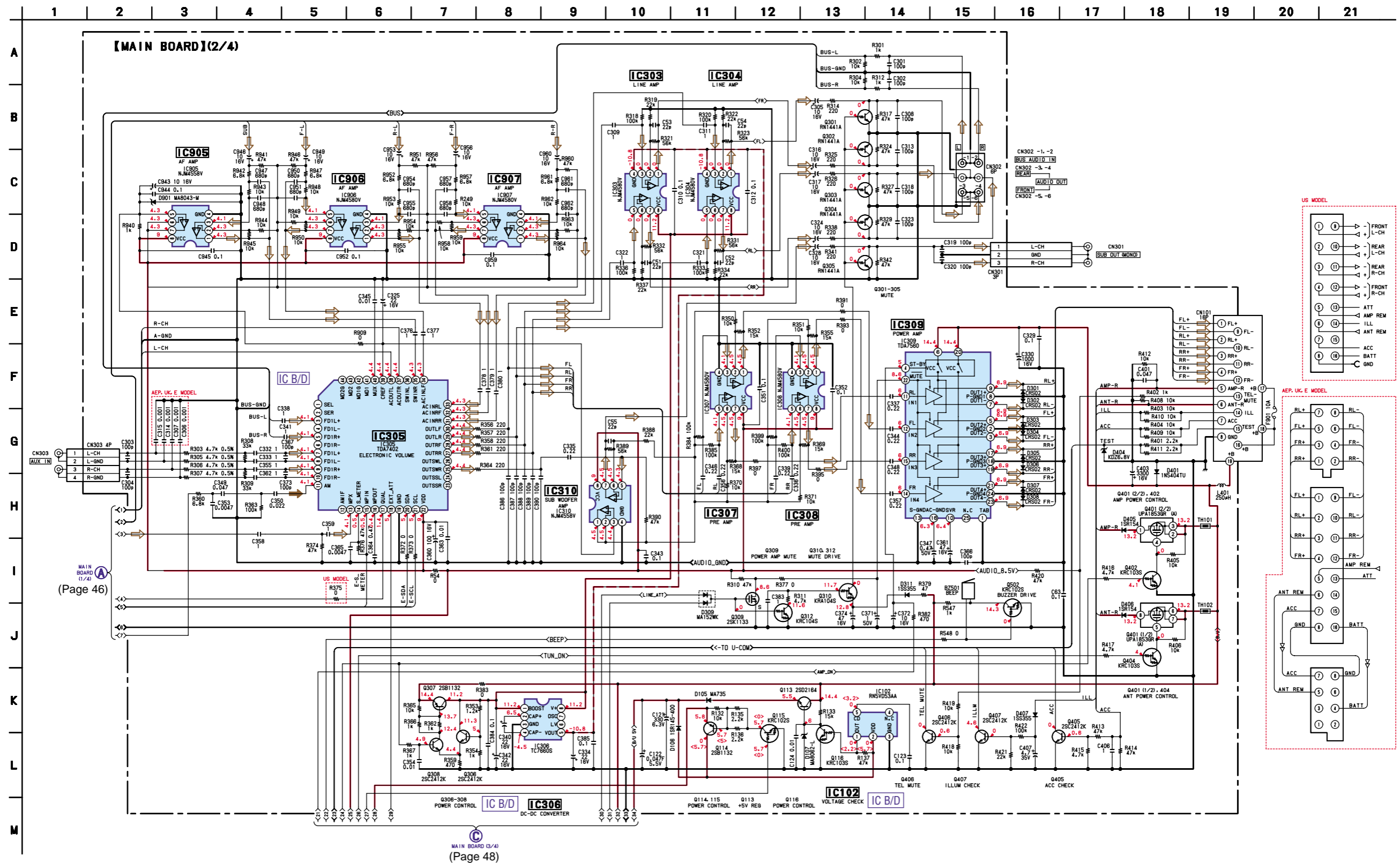


MAIN BOARD (2/4)
(Page 47)

MAIN BOARD (3/4)
(Page 48)

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

4-11. SCHEMATIC DIAGRAM — MAIN SECTION (2/4) — • Refer to page 56 for IC Block Diagrams.



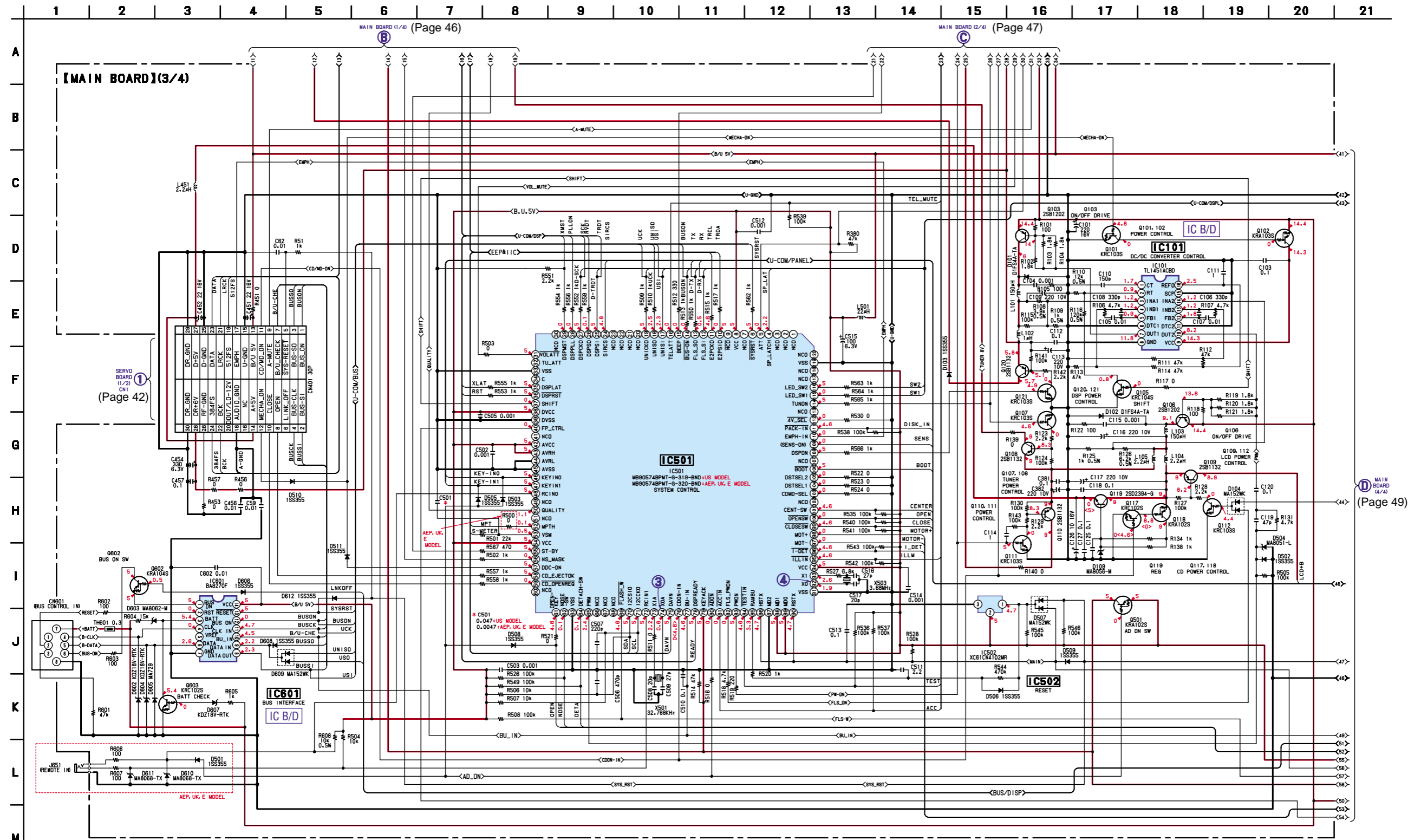
MAIN BOARD (1/4) (Page 46)

MAIN BOARD (3/4) (Page 48)

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

• Refer to page 39 for Waveforms.

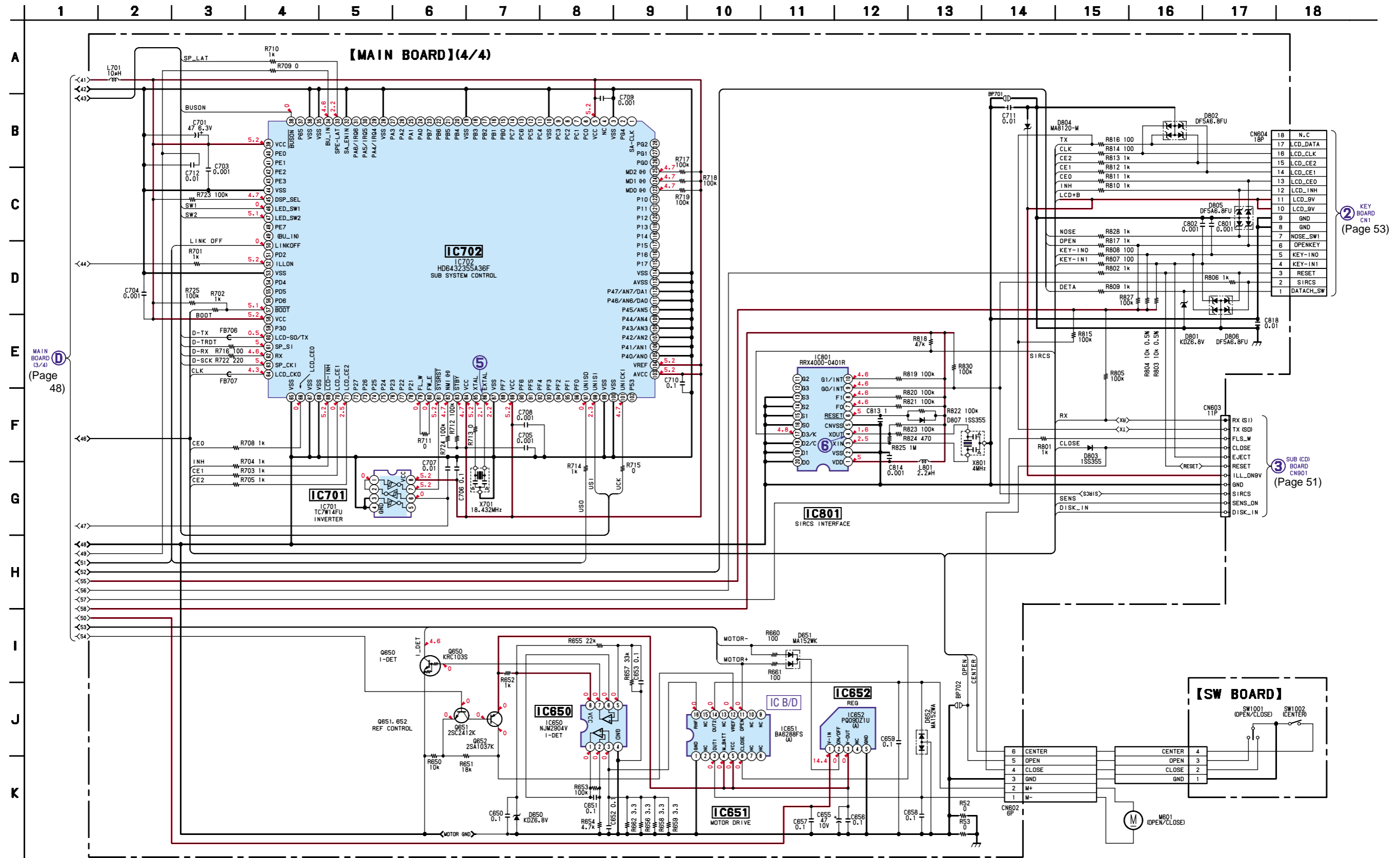
4-12. SCHEMATIC DIAGRAM — MAIN SECTION (3/4) — • Refer to page 56 for IC Block Diagrams.



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

• Refer to page 39 for Waveforms.

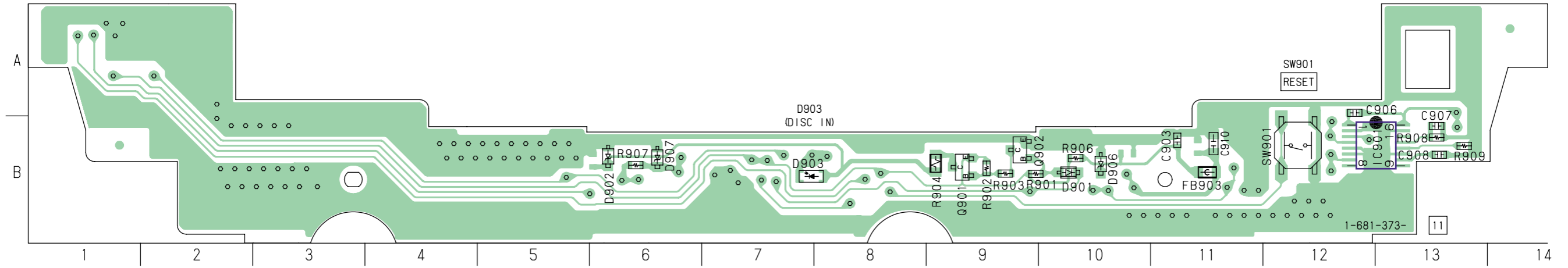
4-13. SCHEMATIC DIAGRAM — MAIN SECTION (4/4) — • Refer to page 56 for IC Block Diagrams.



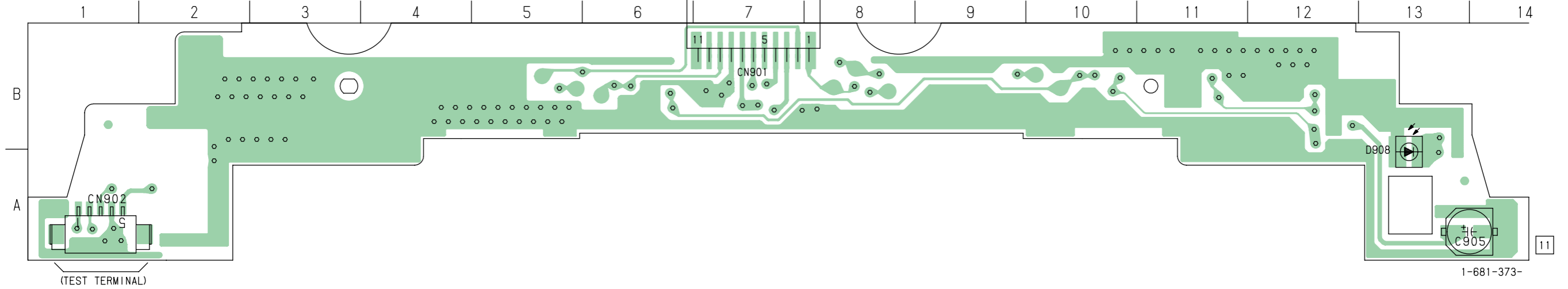
Note:
• Voltage is dc with respect to ground under no-signal (detuned) condition.
no mark : FM

4-14. PRINTED WIRING BOARD — SUB (CD) SECTION —

【SUB (CD) BOARD】(SIDE A)



【SUB (CD) BOARD】(SIDE B)

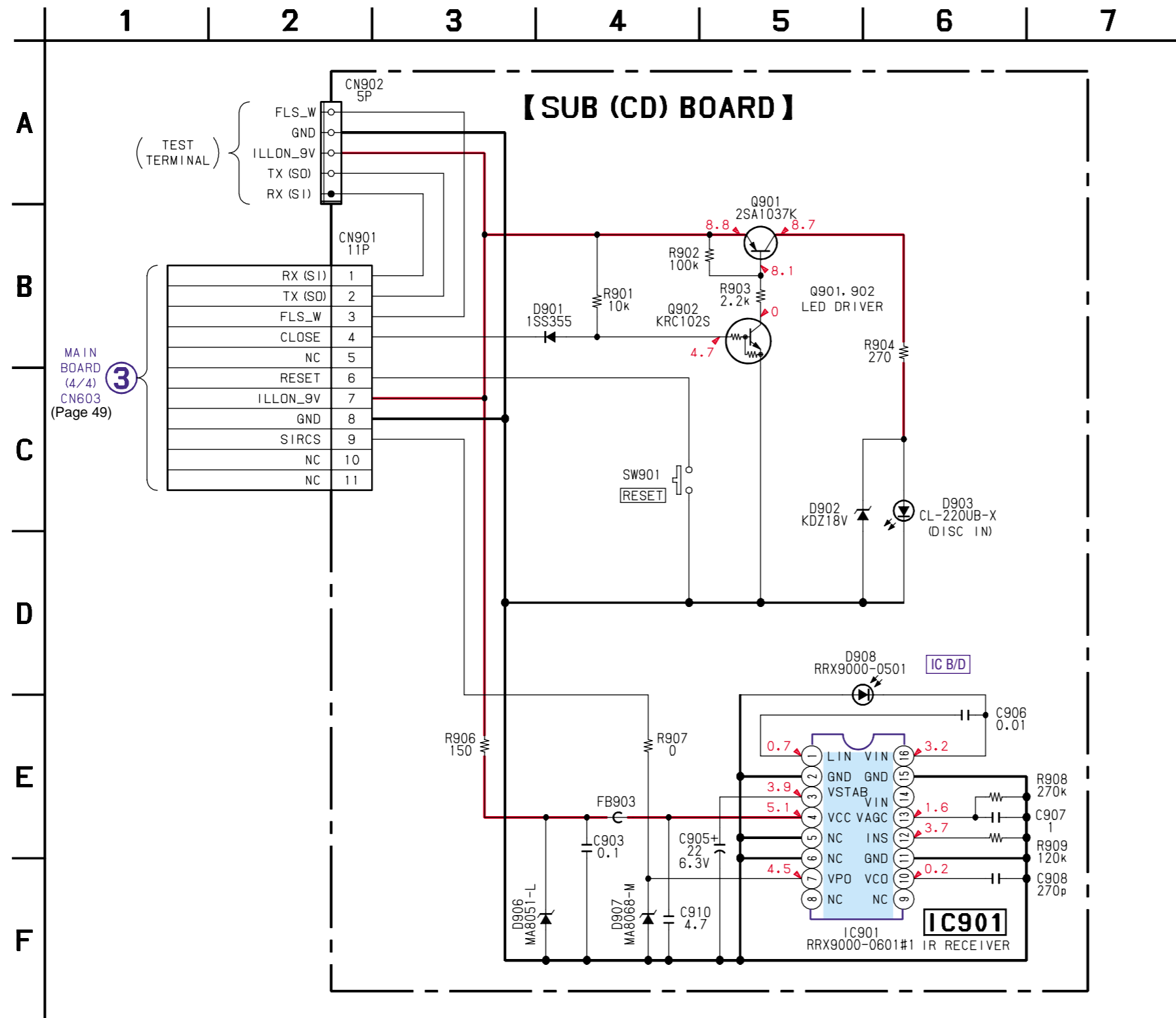


• Semiconductor Location

Ref. No.	Location
D901	B-10
D902	B-6
D903	B-7
D906	B-10
D907	B-6
(D908)	B-13
IC901	B-13
Q901	B-9
Q902	B-9

() : SIDE B

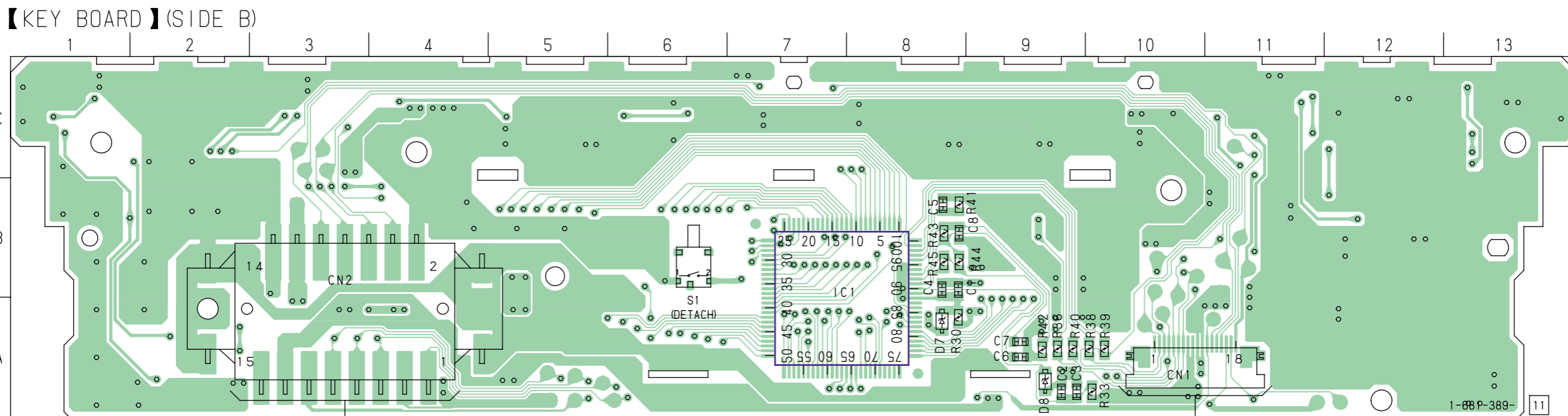
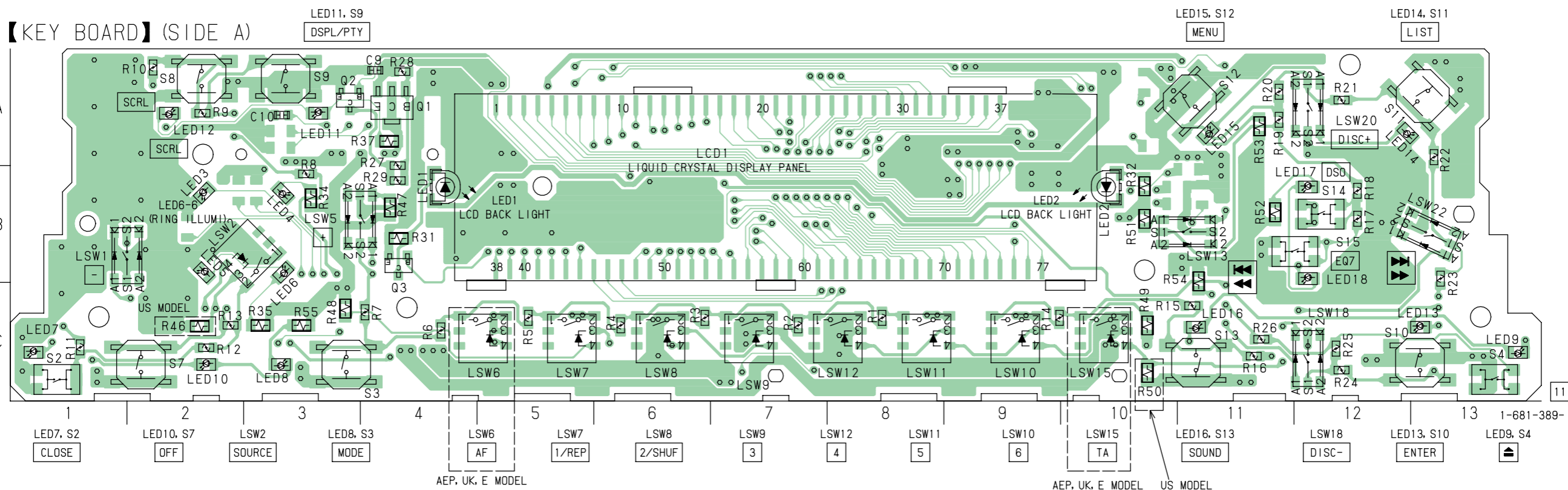
4-15. SCHEMATIC DIAGRAM — SUB (CD) SECTION — • Refer to page 57 for IC Block Diagram.



Note:

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

4-16. PRINTED WIRING BOARD — KEY SECTION —



④
DISPLAY BOARD
CN60
(Page 54)

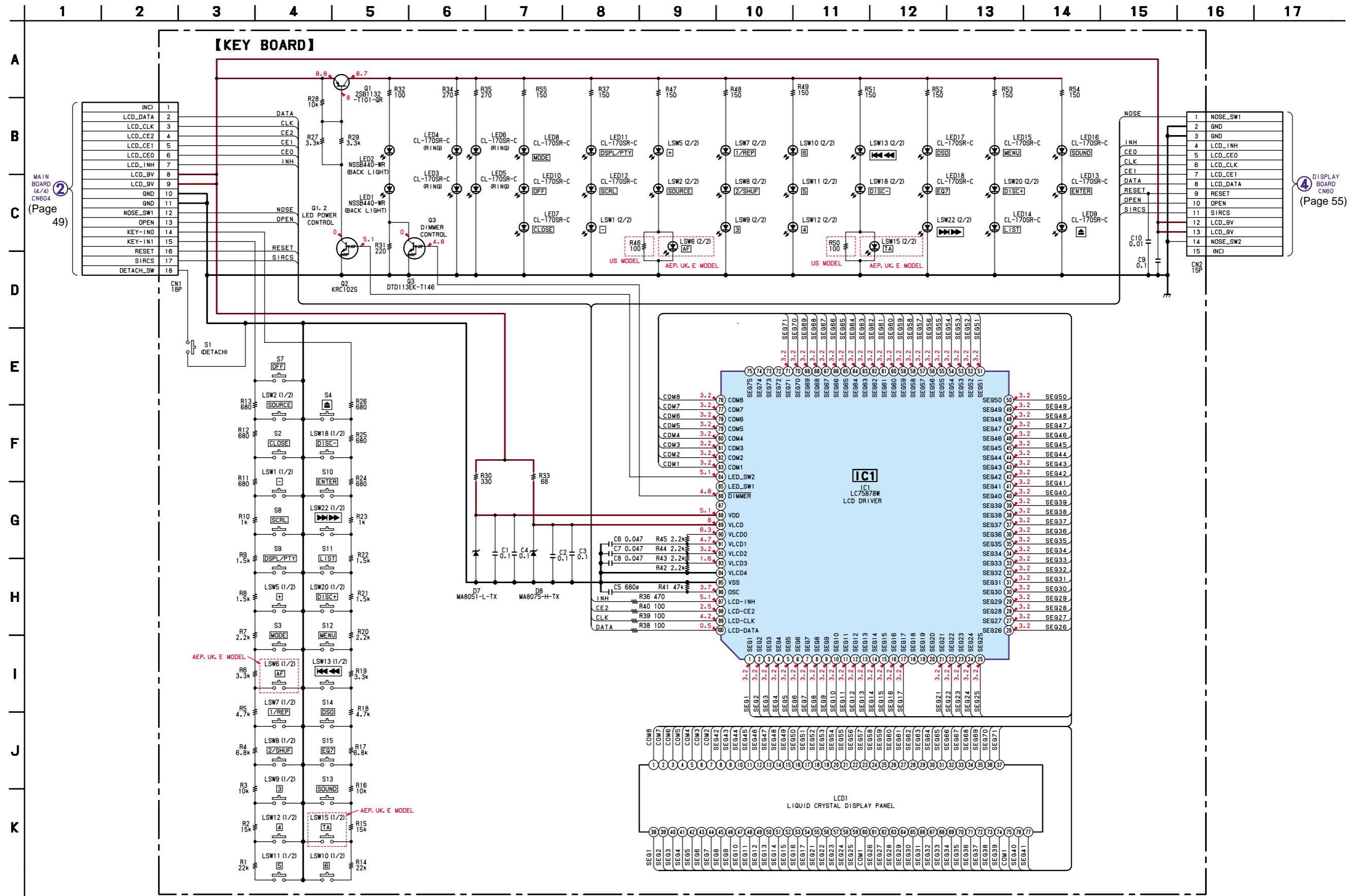
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
(D7)	A-8	LED5	B-2	LED14	A-13
(D8)	A-9	LED6	B-3	LED15	A-11
		LED7	C-1	LED16	C-11
(IC1)	B-7	LED8	C-3	LED17	B-12
		LED9	C-13	LED18	B-12
LED1	B-4	LED10	C-2		
LED2	B-10	LED11	A-3	Q1	A-4
LED3	B-2	LED12	A-2	Q2	A-3
LED4	B-3	LED13	C-13	Q3	B-4

(): SIDE B

②
MAIN BOARD
CN604
(Page 44)

4-17. SCHEMATIC DIAGRAM — KEY SECTION —



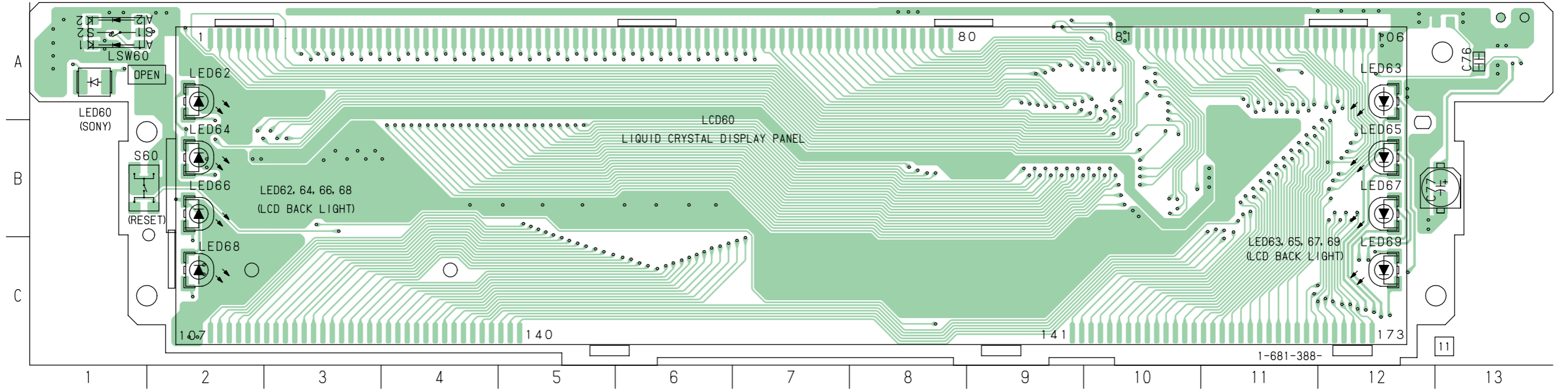
MAIN BOARD (4/4) CN04 (Page 49)

DISPLAY BOARD CN60 (Page 55)

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

4-18. PRINTED WIRING BOARD — DISPLAY SECTION —

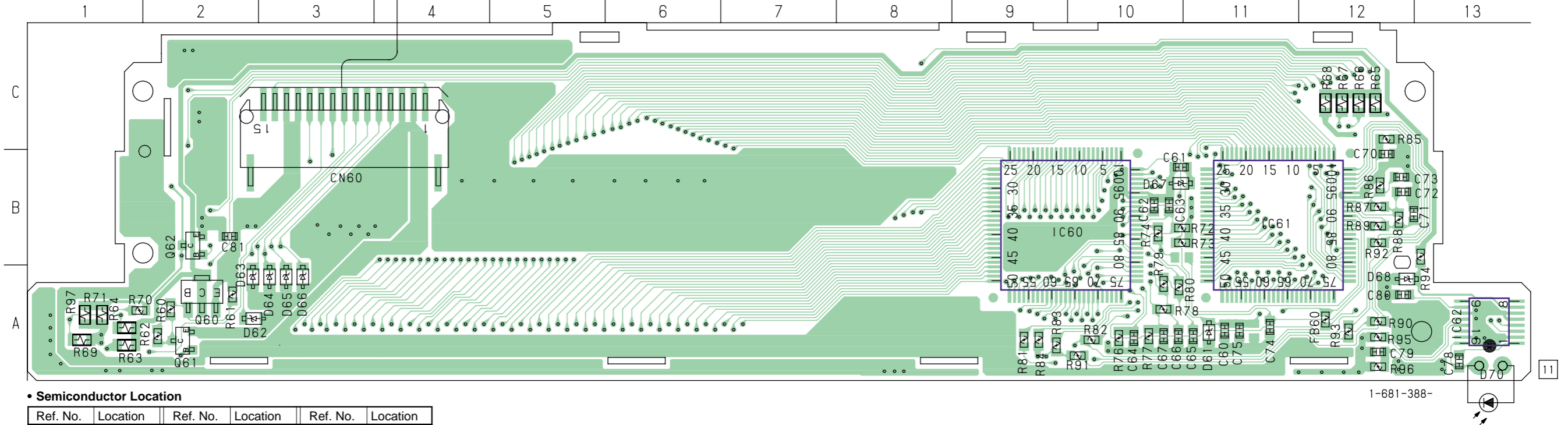
【DISPLAY BOARD】(SIDE A)



KEY BOARD (Page 52)
CN2

④

【DISPLAY BOARD】(SIDE B)

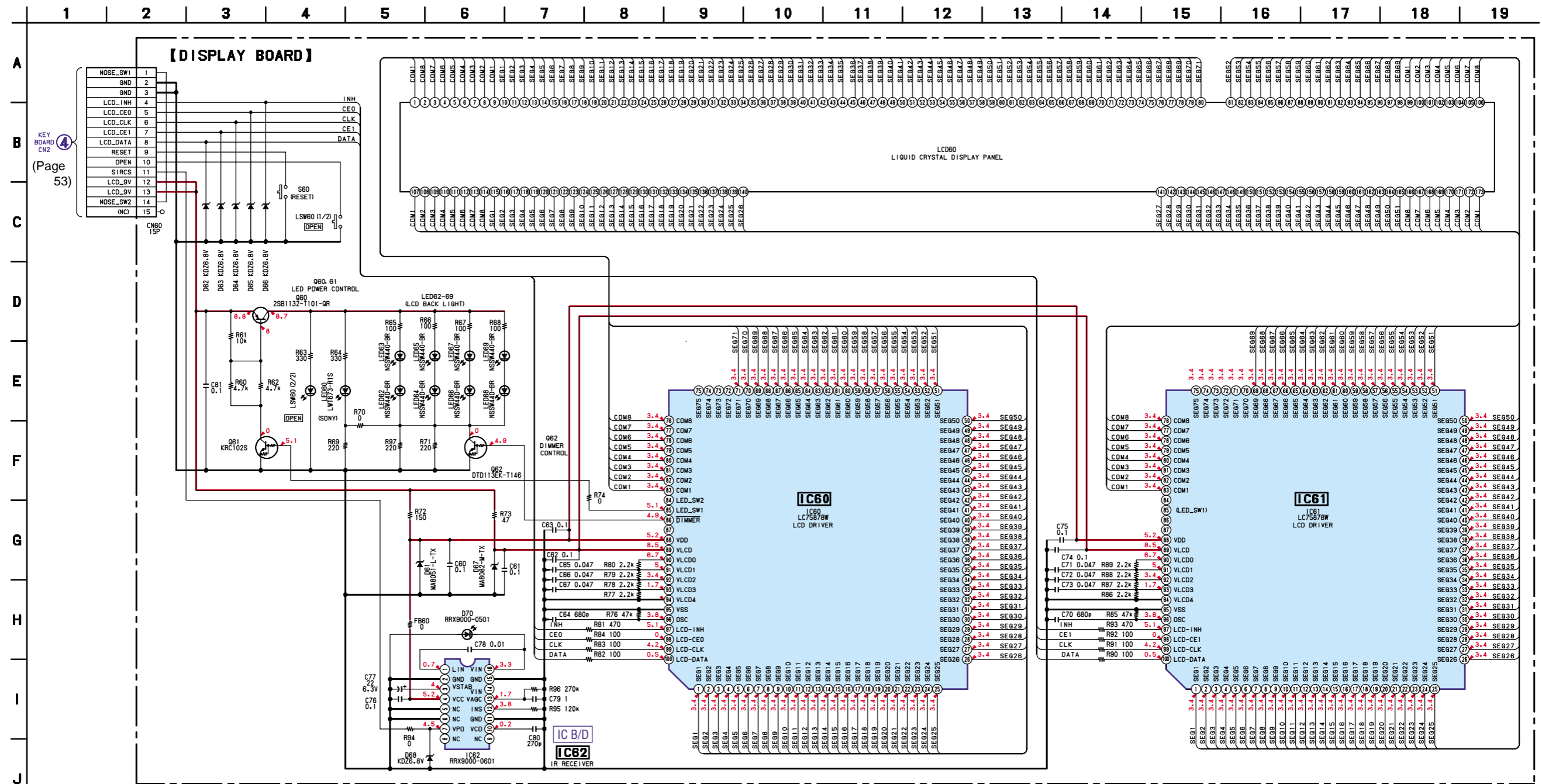


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
(D61)	A-11	(IC60)	B-9	LED66	B-2
(D62)	A-2	(IC61)	B-11	LED67	B-12
(D63)	A-2	(IC62)	A-13	LED68	C-2
(D64)	A-3			LED69	C-12
(D65)	A-3	LED60	A-1	(Q60)	A-2
(D66)	A-3	LED62	A-2	(Q61)	A-2
(D67)	B-10	LED63	A-12	(Q62)	B-2
(D68)	A-12	LED64	B-2		
(D70)	A-13	LED65	B-12		

() : SIDE B

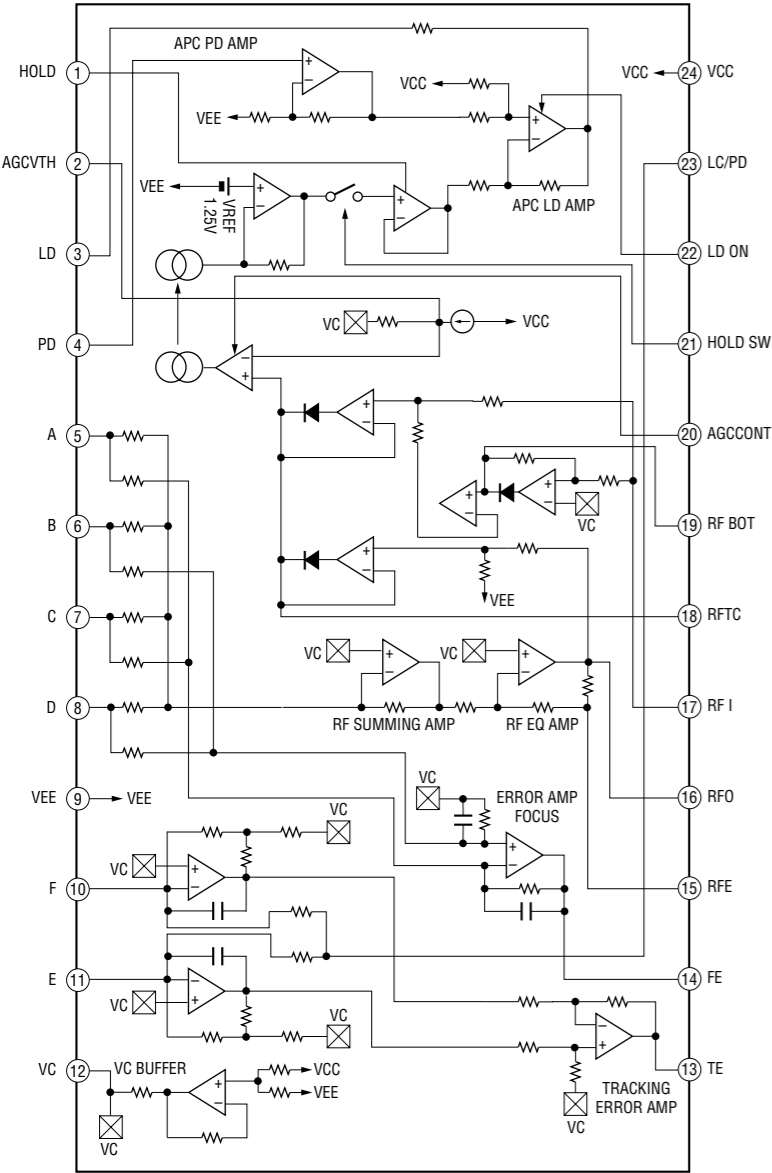
4-19. SCHEMATIC DIAGRAM — DISPLAY SECTION — • Refer to page 57 for IC Block Diagrams.



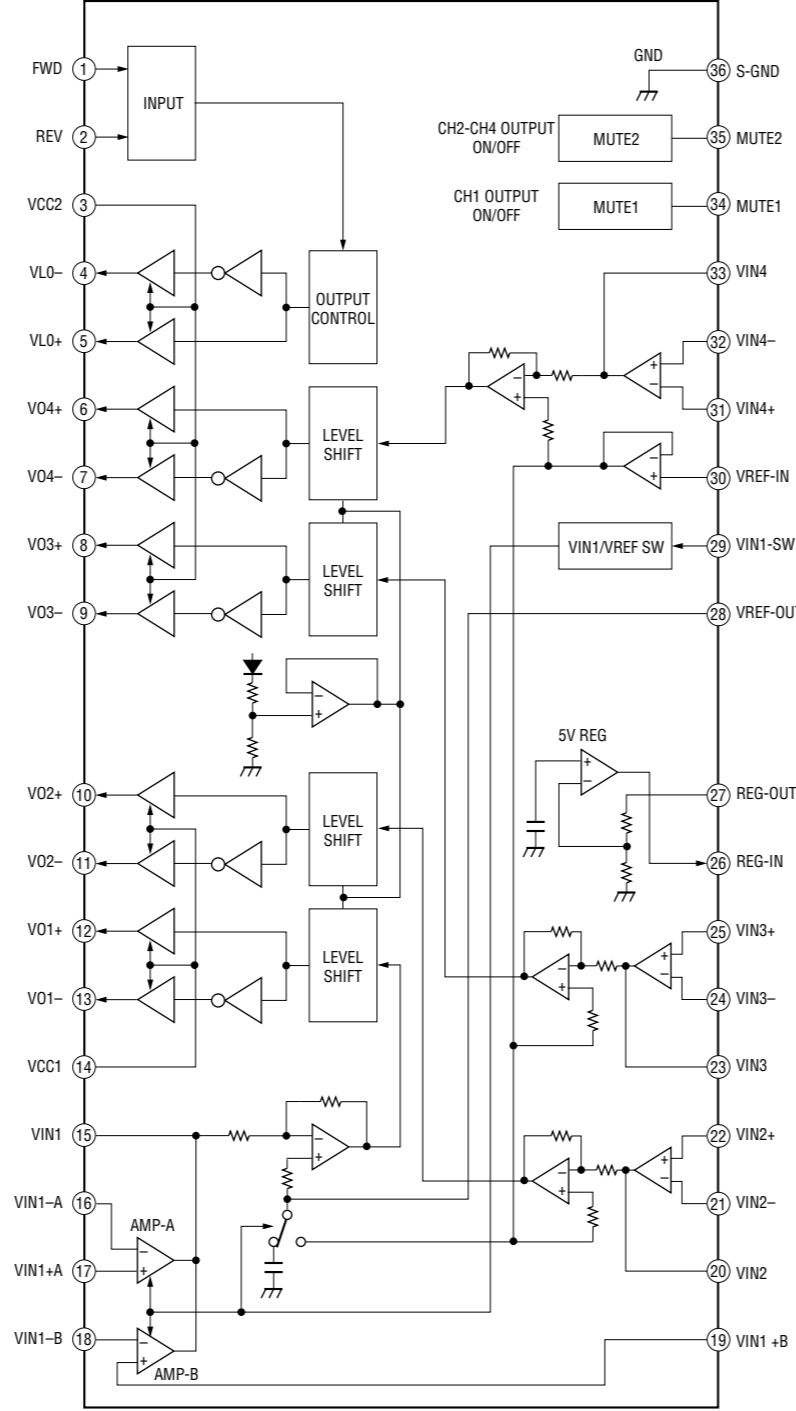
Note:
 • Voltage is dc with respect to ground under no-signal (detuned) condition.
 no mark : FM

• IC BLOCK DIAGRAMS

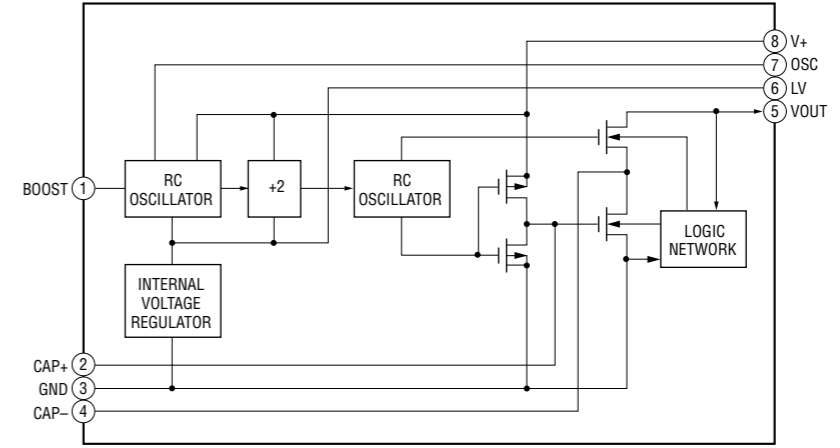
IC1 CXA2596M



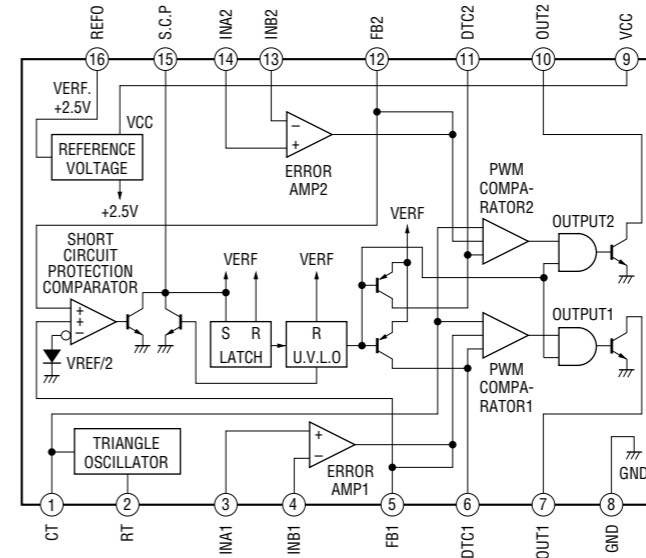
IC7 LA6576L-TE-L



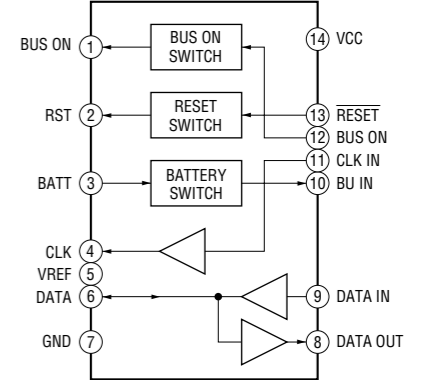
IC306 TC7660SE0A713



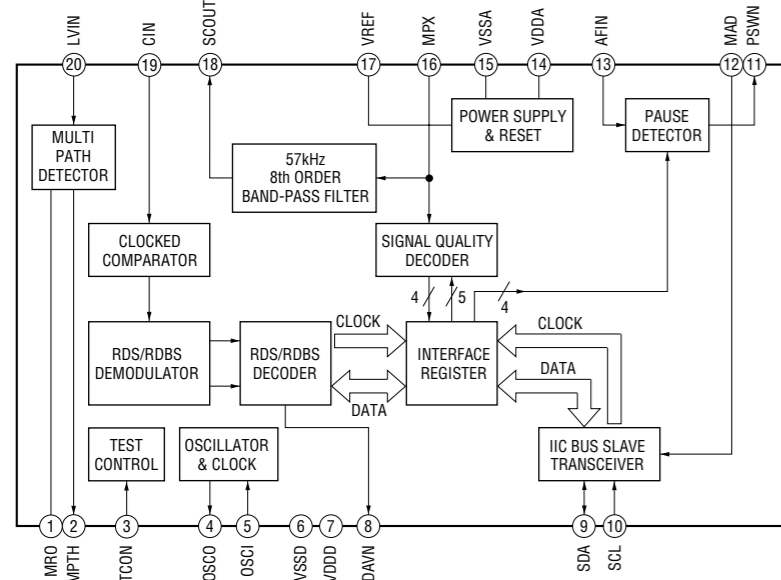
IC101 TL1451ACDB-E20



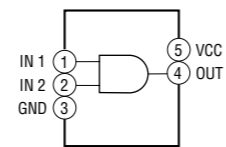
IC601 BA8270F-E2



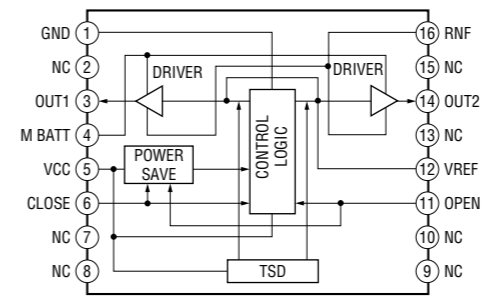
IC202 SAA6588T-V2-118



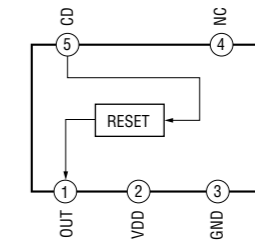
IC902 TC7SET08FU (TE85R)



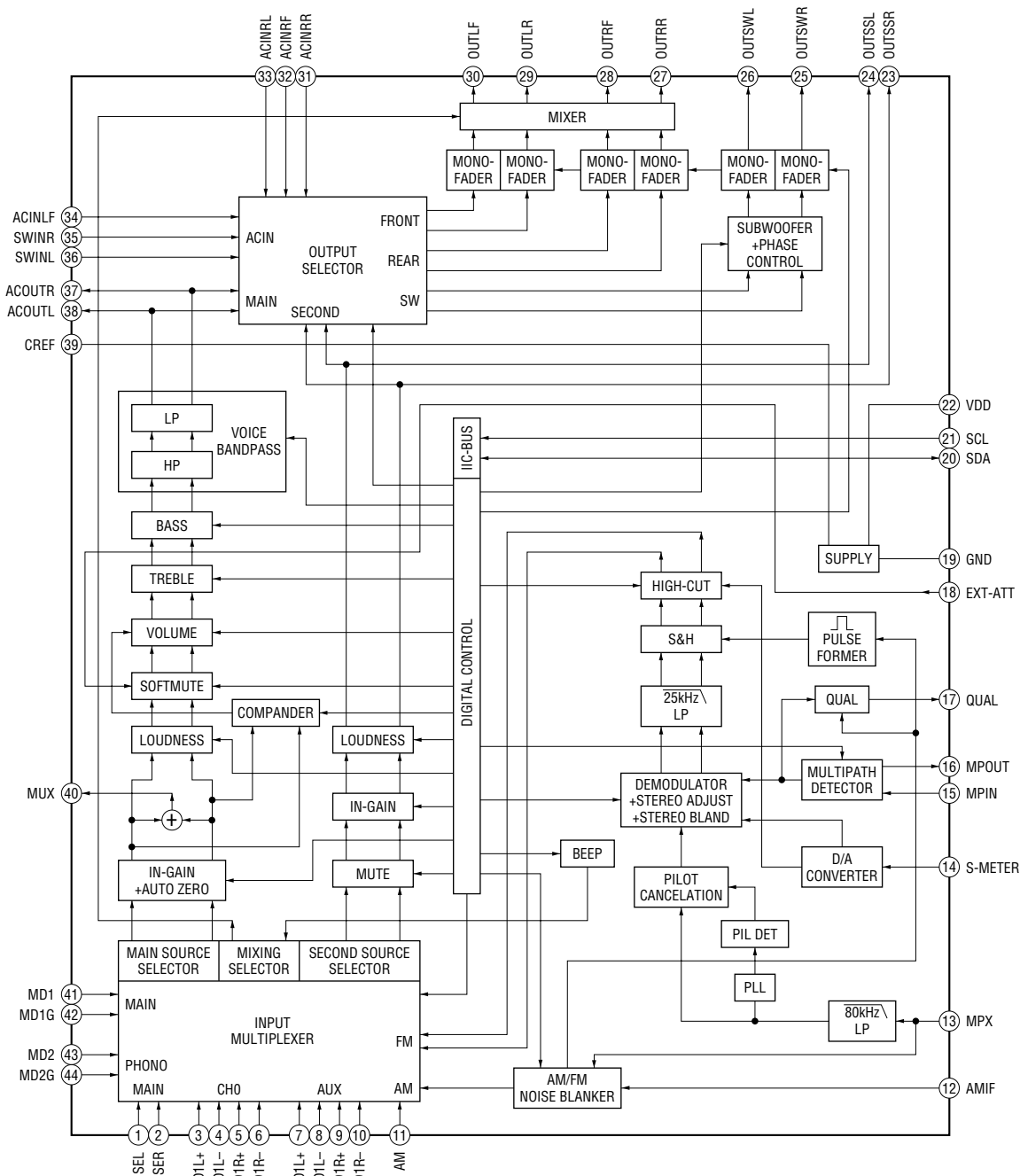
IC651 BA6288FS-E2



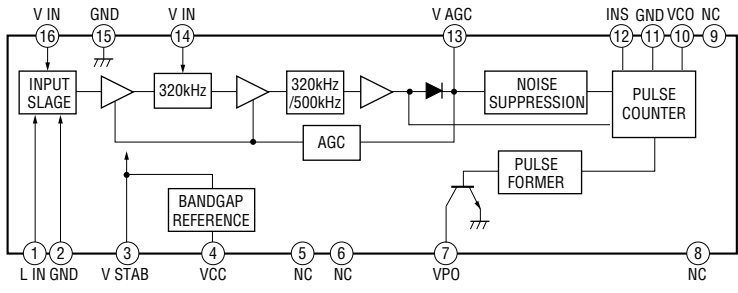
IC102 RN5VD53AA-TL



IC305 TDA7402TR



IC62, 901 RRX9000-0601



SECTION 5 EXPLODED VIEWS

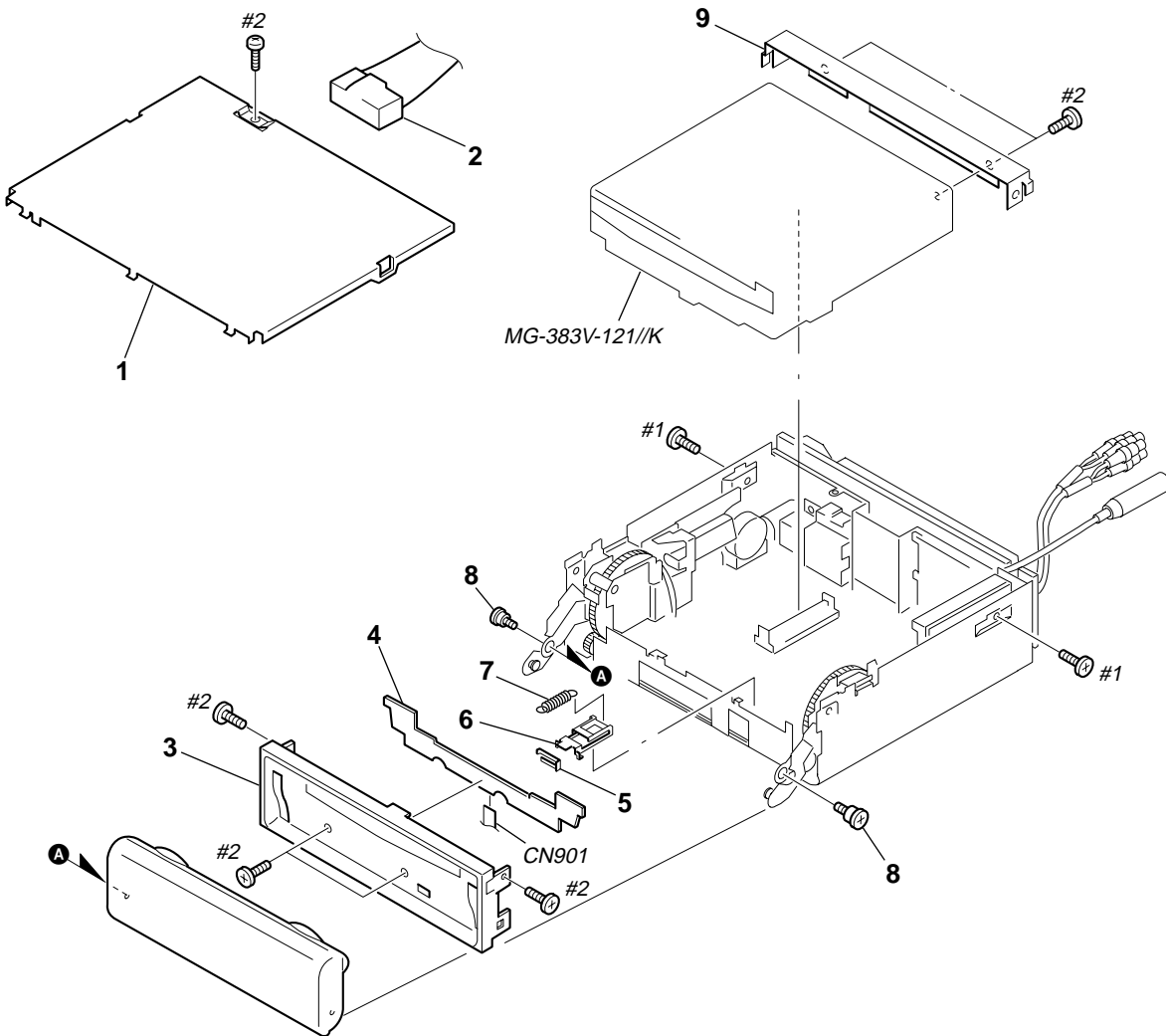
NOTE:

- 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.

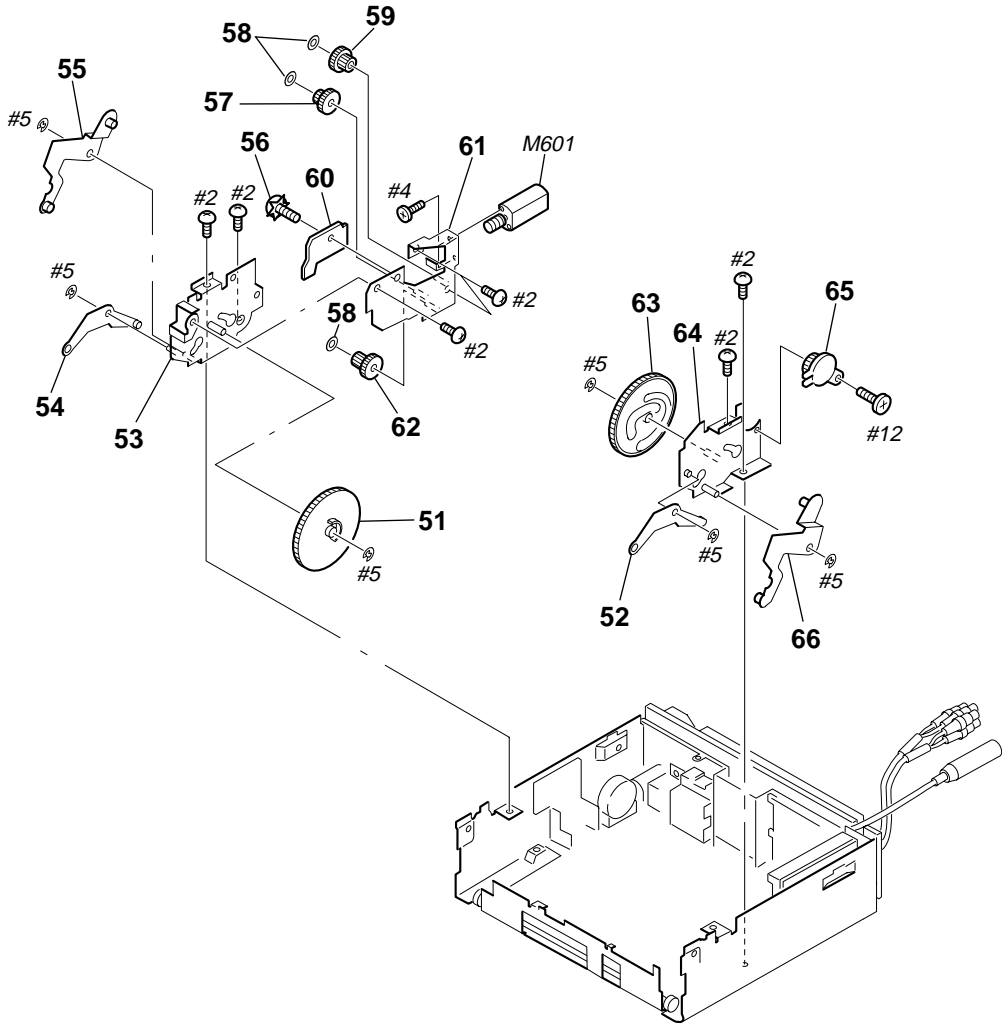
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

5-1. CHASSIS SECTION



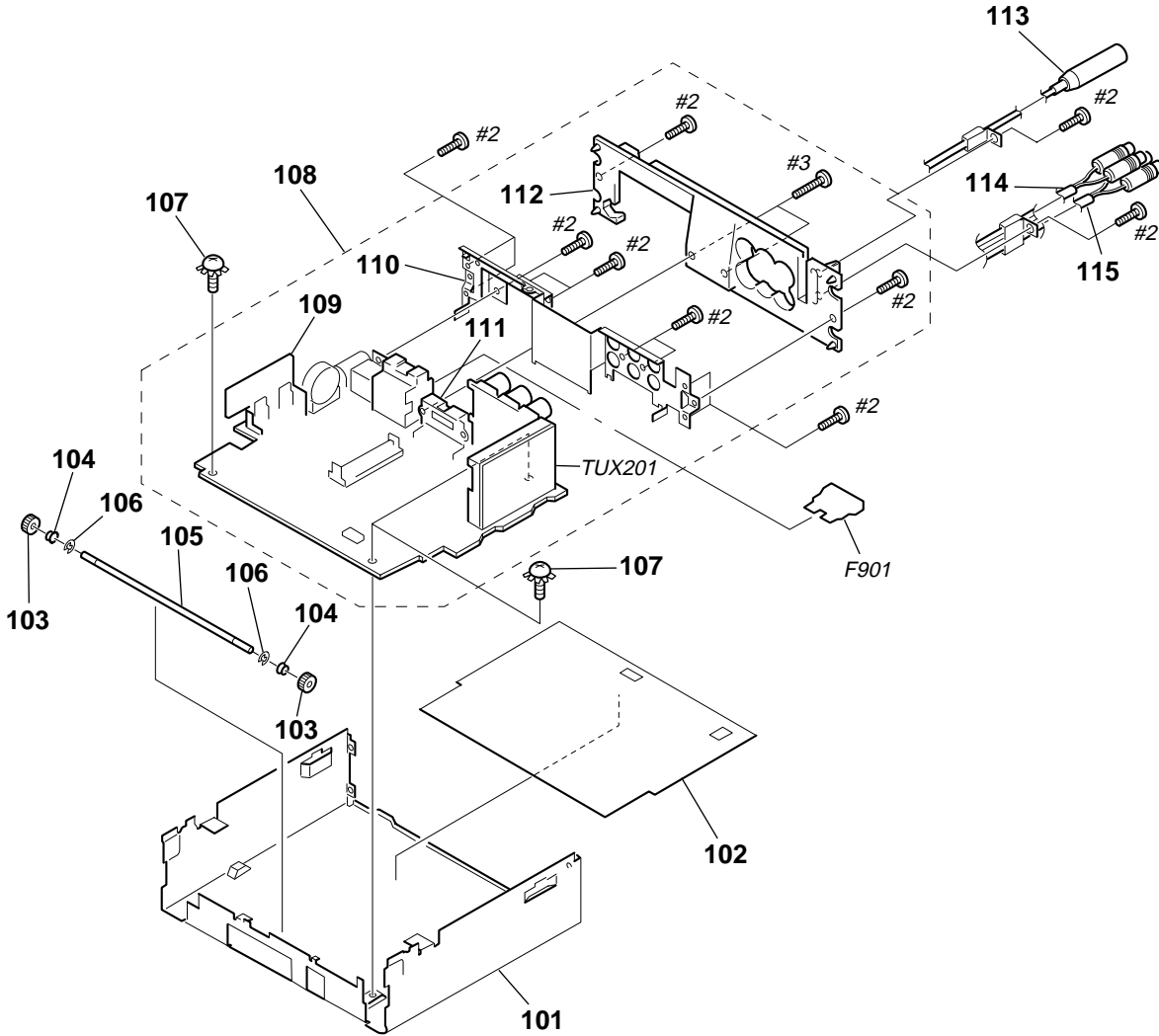
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	3-230-511-01	COVER		5	3-230-515-01	SLIDER (FLEXIBLE)	
2	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US)		6	3-230-514-01	COVER (FLEXIBLE)	
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK,E)	7	3-230-516-01	SPRING (FLEXIBLE), TENSION	
3	X-3380-550-1	PANEL (CD) SUB ASSY, SUB (US)		8	3-045-756-01	SCREW (PANEL)	
3	X-3380-553-1	PANEL (CD) SUB ASSY, SUB (AEP,UK,E)		* 9	3-045-743-01	BRACKET (CD)	
* 4	1-681-373-11	SUB (CD) BOARD		CN901	1-783-268-11	CABLE, FLAT 11P	

5-2. CAM SECTION



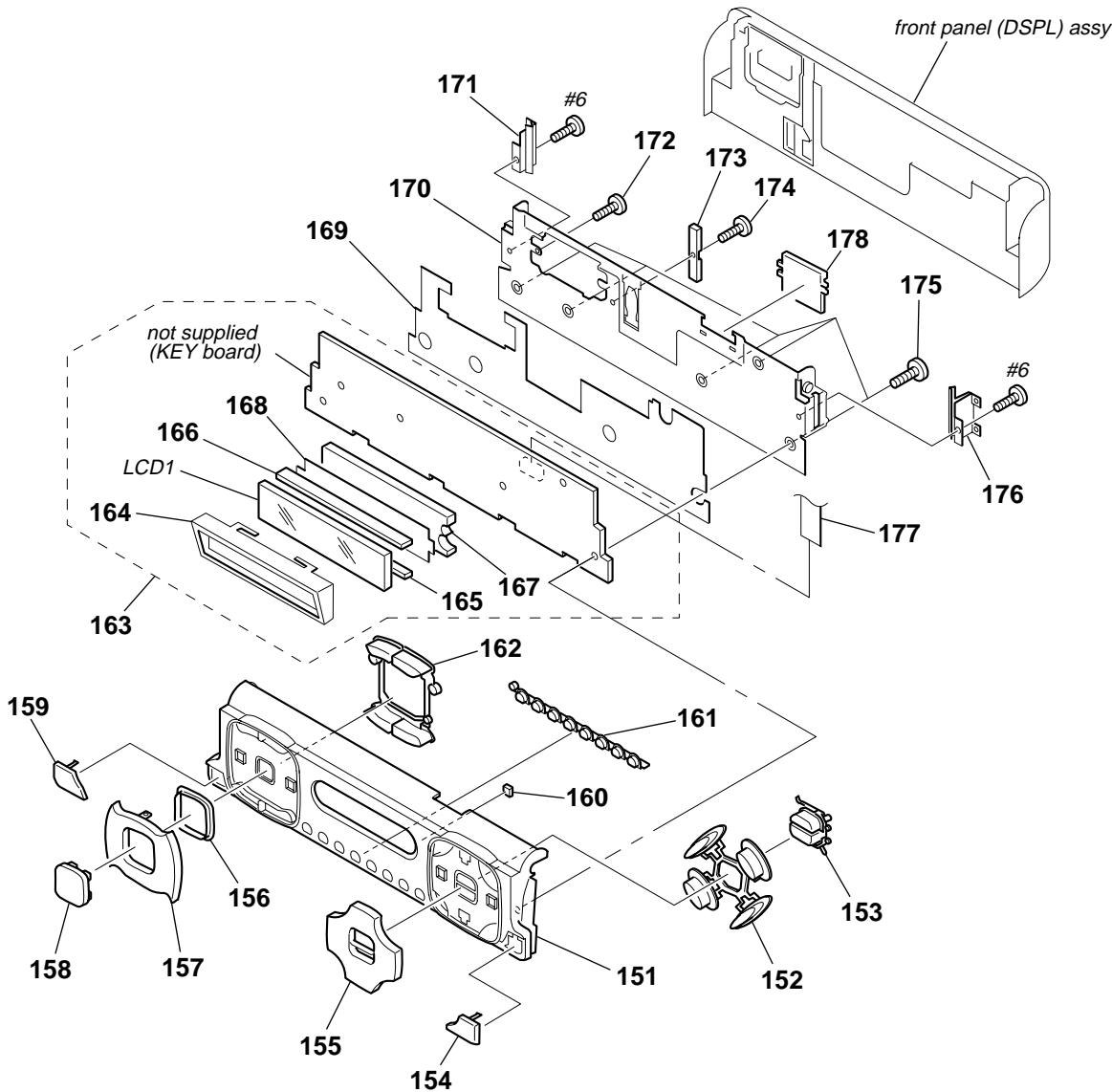
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-230-495-01	CAM (L)		* 60	1-681-375-11	SW BOARD	
52	X-3380-549-1	ARM (B-R) ASSY		* 61	X-3378-711-1	BRACKET (MOTOR) ASSY	
53	X-3380-544-1	BRACKET (L) ASSY		62	3-230-494-01	GEAR (C)	
54	X-3380-548-1	ARM (B-L) ASSY		63	3-230-496-01	CAM (R)	
55	X-3380-546-1	ARM (A-L) ASSY		64	X-3380-545-1	BRACKET (R) ASSY	
56	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT		65	3-030-909-11	DAMPER, OIL	
57	3-045-714-01	GEAR (B)		66	X-3380-547-1	ARM (A-R) ASSY	
58	3-342-940-01	WASHER (M)		M601	X-3378-769-1	MOTOR ASSY (OPEN/CLOSE)	
59	3-045-713-01	GEAR (A)					

5-3. MAIN BOARD SECTION



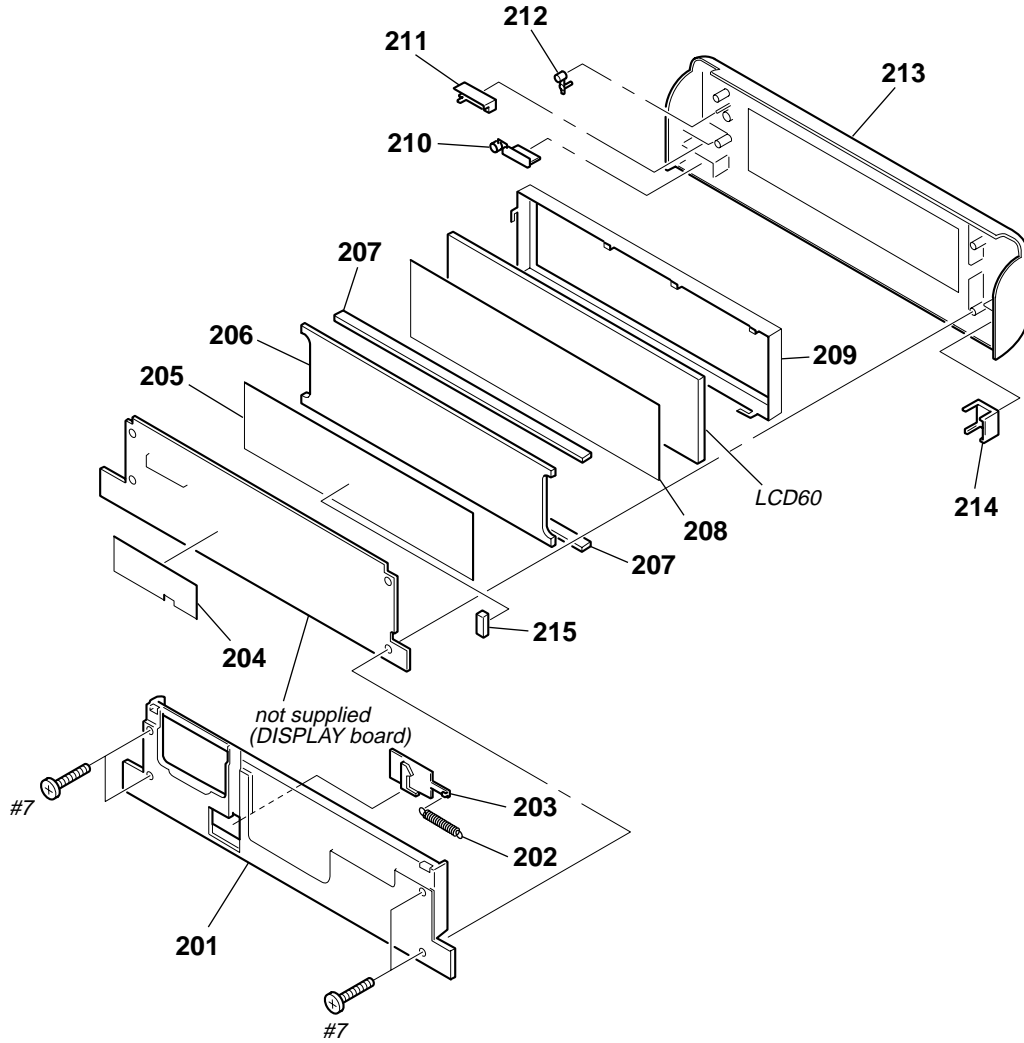
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-3380-558-1	CHASSIS (CD) ASSY		* 110	3-230-509-01	CHASSIS, BACK	
* 102	3-230-417-01	SHEET, INSULATING		* 111	3-019-565-01	BRACKET (IC)	
103	3-230-493-01	GEAR (DRIVE SHAFT)		* 112	3-230-510-01	HEAT SINK (US)	
104	3-230-444-01	GUIDE (DRIVE SHAFT)		* 112	3-230-510-11	HEAT SINK (AEP,UK,E)	
105	3-045-721-01	SHAFT, DRIVE		113	1-777-246-41	CORD (WITH CONNECTOR) (ANT)	
106	3-040-692-01	RING, CE TYPE RETAINING		114	1-790-375-21	CORD (WITH CONNECTOR) (SUB OUT (MONO))	
107	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT		115	1-757-775-11	CORD (WITH CONNECTOR) (AUX-IN (AUDIO))	
* 108	A-3283-163-A	MAIN BOARD, COMPLETE (US)		F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
* 108	A-3283-177-A	MAIN BOARD, COMPLETE (AEP,UK,E)		TUX201	A-3220-813-A	TUNER UNIT (TUX-020)	
* 109	3-230-513-01	HEAT SINK (REG)					

5-4. FRONT PANEL (KEY) ASSY SECTION



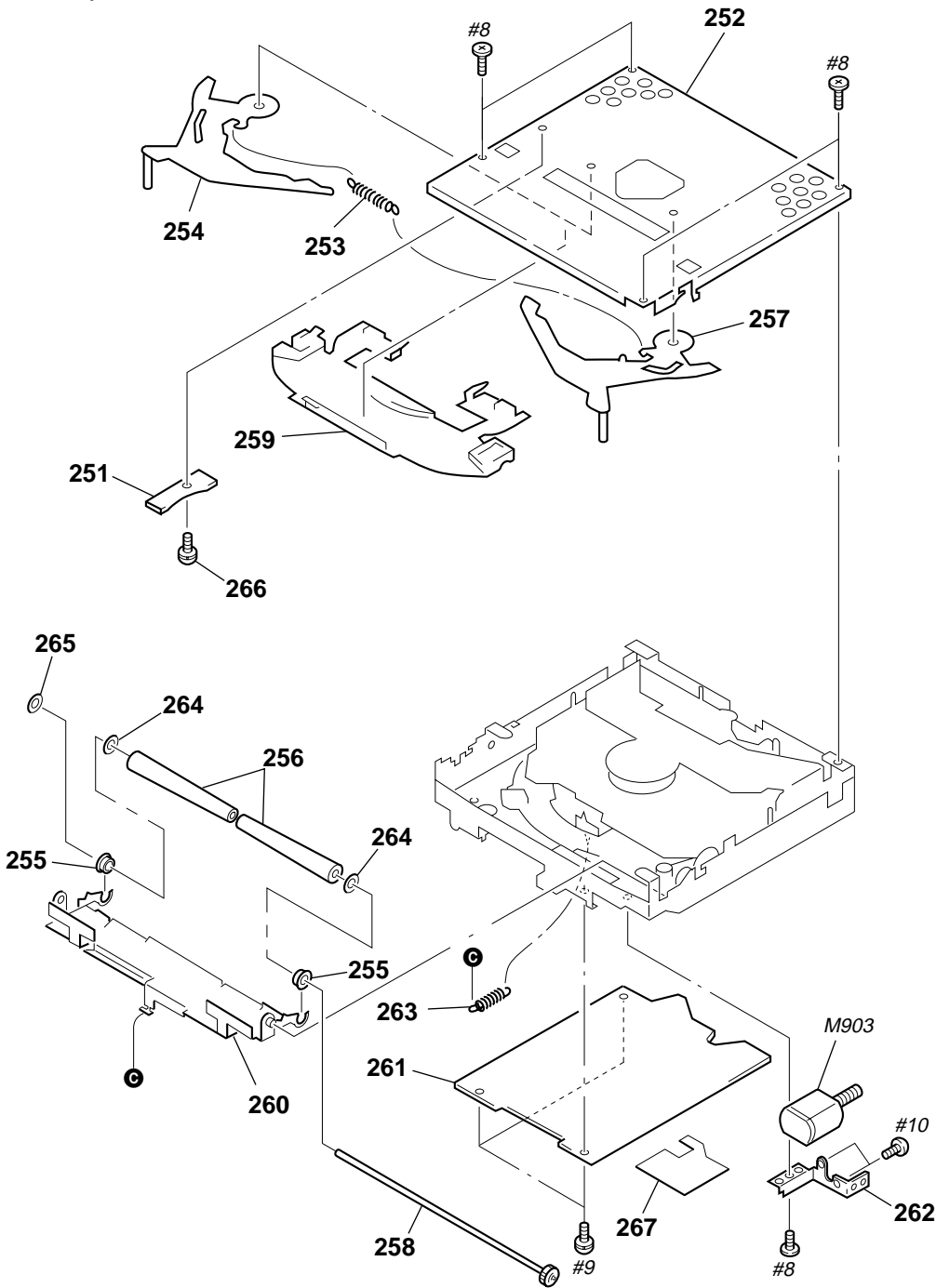
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-3380-535-1	PANEL (KEY) SUB ASSY, FRONT (US)		* 164	3-230-486-01	HOLDER (LCD-KEY)	
151	X-3380-538-1	PANEL (KEY) SUB ASSY, FRONT (AEP,UK,E)		165	1-694-808-21	CONDUCTIVE BOARD, CONNECTION	
152	3-230-483-01	BUTTON (ENTER)		166	1-694-807-21	CONDUCTIVE BOARD, CONNECTION	
153	3-230-482-01	BUTTON (EQ7)		* 167	3-230-487-01	PLATE (LCD-KEY), LIGHT GUIDE	
154	3-230-480-01	BUTTON (EJECT)		* 168	3-230-488-01	SHEET (LCD-KEY), DIFFUSION	
155	3-230-481-01	BUTTON (SEEK)		* 169	3-230-415-01	SHEET (KEY), INSULATING	
156	3-230-485-01	PLATE (RING), LIGHT GUIDE		170	X-3380-543-1	PANEL ASSY, BASE	
157	3-230-477-01	BUTTON (+/-)		171	X-3380-560-1	SPRING (DETTOUCH L) ASSY	
158	3-230-478-01	BUTTON (SOURCE)		172	3-063-745-11	SCREW (+P M2 B TITE)	
159	3-230-484-01	BUTTON (CLOSE)		173	3-230-490-01	GUIDE (DETTOUCH)	
160	3-231-433-01	CUSHION (ELECTROSTATIC)		174	2-134-636-31	SCREW (M1.7X2.5)	
161	3-230-398-01	BUTTON (6 KEY) (US)		175	3-230-416-01	SCREW	
161	3-230-398-11	BUTTON (6 KEY) (AEP,UK,E)		176	X-3380-561-1	SPRING (DETTOUCH R) ASSY	
162	3-230-479-01	BUTTON (MODE) (US)		177	1-681-390-11	FLEXIBLE BOARD	
162	3-230-479-11	BUTTON (MODE) (AEP,UK,E)		178	3-230-491-01	GUIDE (FLEXIBLE)	
* 163	A-3283-164-A	KEY BOARD, COMPLETE (US)		LCD1	1-804-349-11	DISPLAY PANEL, LIQUID CRYSTAL	
* 163	A-3283-176-A	KEY BOARD, COMPLETE (AEP,UK,E)					

5-5. FRONT PANEL (DSPL) ASSY SECTION



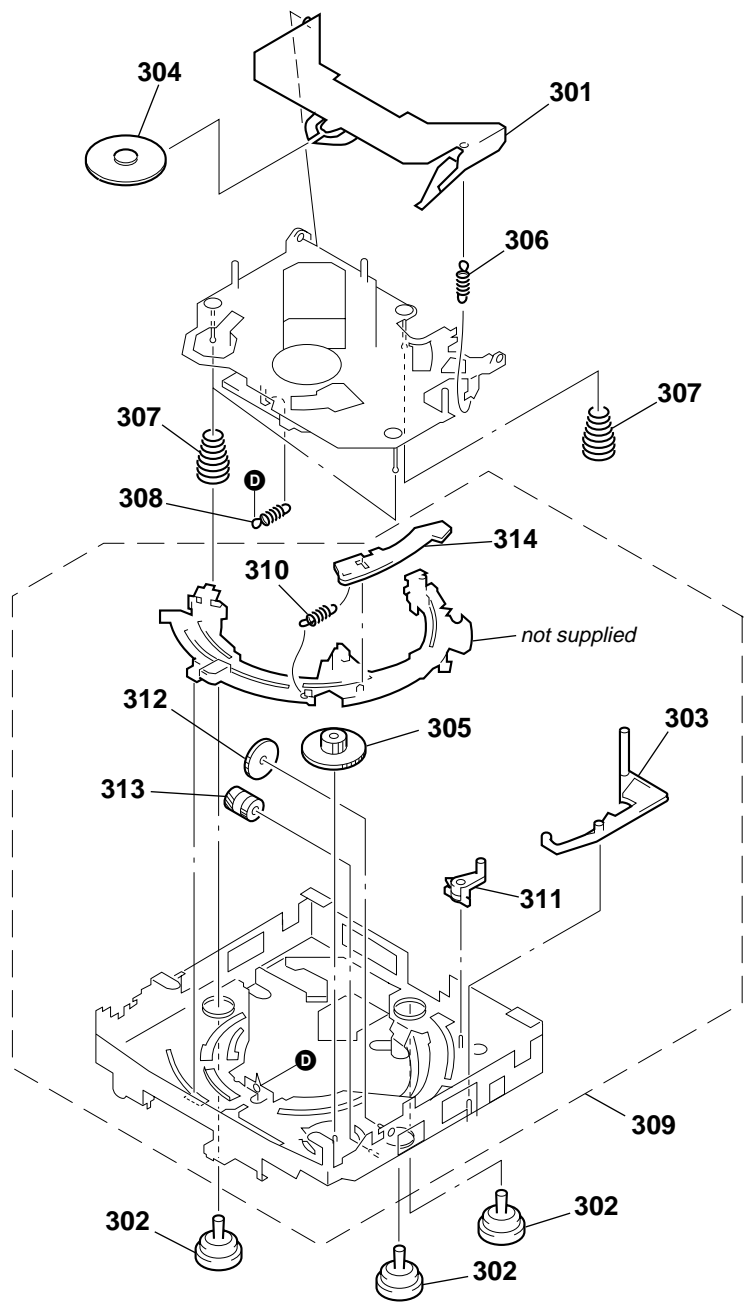
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-230-470-01	PANEL (FRONT BACK)		* 209	3-230-466-01	HOLDER (LCD-DSPL)	
202	3-230-472-01	SPRING (LOCK), TENSION		210	3-230-426-01	BUTTON (OPEN)	
203	3-230-471-01	LOCK (DETOUCH)		211	3-230-422-01	PLATE (LOGO), LIGHT GUIDE	
204	3-230-378-01	SHEET, INSULATING		212	3-230-427-01	BUTTON (RESET-DSPL)	
* 205	3-230-469-01	SHEET (DSPL), REFLECTION		213	A-3380-903-1	PANEL SUB (DSPL) ASSY, FRONT	
* 206	3-230-467-01	PLATE (LCD-DSPL), LIGHT GUIDE		214	3-230-423-01	FILTER (IR-DSPL)	
207	1-694-806-21	CONDUCTIVE BOARD, CONNECTION		215	3-232-858-01	CUSHION (LIGHT GUIDE PLATE)	
* 208	3-230-468-01	SHEET (DSPL), DIFFUSION		LCD60	1-804-348-11	DISPLAY PANEL, LIQUID CRYSTAL	

5-6. CD MECHANISM SECTION (1)
(MG-383V-121//K)



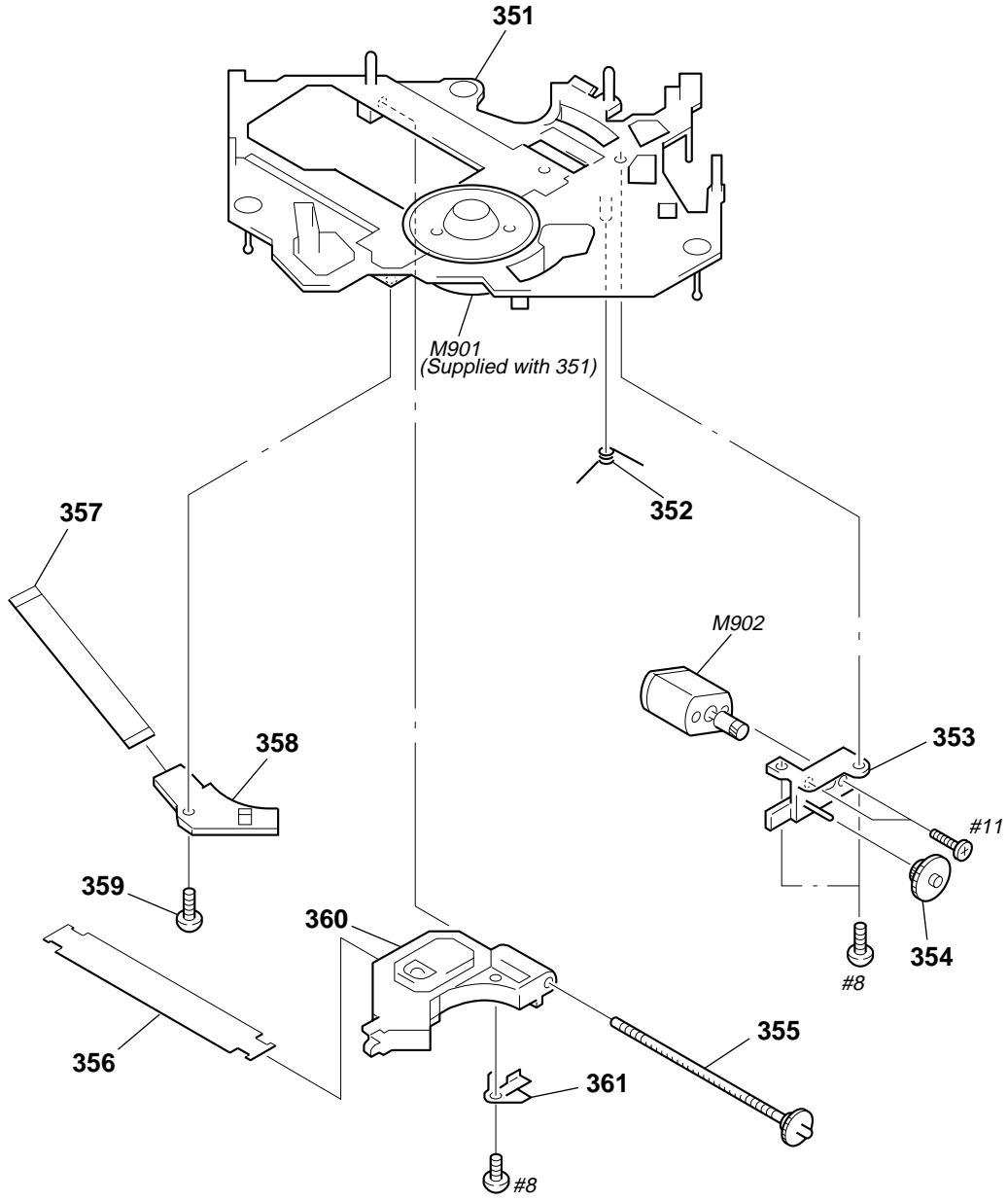
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 251	1-676-709-11	IN SELF SW BOARD		260	3-040-040-01	ARM (ROLLER)	
252	3-040-039-01	CHASSIS (T)		* 261	A-3294-808-A	SERVO BOARD, COMPLETE	
253	3-040-038-01	SPRING (LR), TENSION		262	3-221-779-01	BRACKET (MOTOR)	
254	3-040-050-01	LEVER (L)		263	3-040-034-01	SPRING (RA), TENSION	
255	3-040-022-01	RETAINER (ROLLER), SHAFT		264	3-040-042-01	WASHER	
256	3-040-044-01	ROLLER (S)		265	3-043-880-01	RING (RA), RETAINING	
257	3-040-067-01	LEVER (R)		266	3-044-206-11	SCREW, SPECIAL	
258	A-3301-980-A	SHAFT ROLLER ASSY		267	3-231-392-01	PLATE (CD), SHIELD	
259	3-040-037-01	GUIDE (DISC)		M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)	

5-7. CD MECHANISM SECTION (2)
(MG-383V-121//K)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	3-040-025-01	ARM, CHUCKING		308	3-040-033-01	SPRING (KF1), TENSION	
302	3-040-031-01	DAMPER (T)		309	A-3307-422-A	CHASSIS (M) COMPLETE ASSY	
303	3-040-056-01	LEVER (D)		310	3-040-059-01	SPRING (TR), TENSION	
304	3-040-024-01	RETAINER (DISC)		311	3-040-057-01	LEVER (LOCK)	
305	3-040-054-01	WHEEL (LW), WORM		312	3-040-058-01	GEAR (MDL)	
306	3-040-026-01	SPRING (CH), TENSION		313	3-040-052-01	WHEEL (U), WORM	
307	3-040-032-01	SPRING (FL), COMPRESSION		314	3-040-051-01	LEVER (TR)	

5-8. CD MECHANISM SECTION (3)
(MG-383V-121//K)



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	X-3378-480-1	CHASSIS (OP) ASSY (including M901)		357	1-677-182-11	MOTOR FLEXIBLE BOARD	
352	3-040-029-01	SPRING (SL), TORSION		* 358	1-676-708-11	LIMIT SW BOARD	
353	3-040-045-01	BASE (DRIVING)		359	3-909-607-01	SCREW	
354	3-040-194-01	GEAR (MIDWAY)		\triangle 360	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP	
355	A-3301-983-A	SHAFT (FEED) ASSY		361	3-040-030-01	SPRING (FEED), PLATE	
356	1-676-707-11	PICK-UP FLEXIBLE BOARD		M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)	

DISPLAY

**SECTION 6
ELECTRICAL PARTS LIST**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "***" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example:
uA.. : μ A.. uPA.. : μ PA..
uPB.. : μ PB.. uPC.. : μ PC.. uPD.. : μ PD..
- CAPACITORS
uF : μ F
- COILS
uH : μ H

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		DISPLAY BOARD *****				< FERRITE BEAD >	
	1-694-806-21	CONDUCTIVE BOARD, CONNECTION		FB60	1-500-329-21	INDUCTOR, FERRITE BEAD	
	3-230-378-01	SHEET, INSULATING				< IC >	
*	3-230-466-01	HOLDER (LCD-DSPL)		IC60	8-759-653-26	IC LC75878W	
*	3-230-467-01	PLATE (LCD-DSPL), LIGHT GUIDE		IC61	8-759-653-26	IC LC75878W	
*	3-230-468-01	SHEET (DSPL), DIFFUSION		IC62	8-759-830-18	IC RRX9000-0601#1	
	3-230-469-01	SHEET (DSPL), REFLECTION				< LIQUID CRYSTAL DISPLAY >	
		< CAPACITOR >		LCD60	1-804-348-11	DISPLAY PANEL, LIQUID CRYSTAL	
C60	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< DIODE >	
C61	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V				
C62	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V				
C63	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	LED60	8-719-079-49	LED LWT673-R1S2-34 (SONY)	
C64	1-115-412-11	CERAMIC CHIP	680PF 5% 25V	LED62	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
				LED63	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C65	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	LED64	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C66	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	LED65	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C67	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V				
C70	1-115-412-11	CERAMIC CHIP	680PF 5% 25V	LED66	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C71	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	LED67	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
				LED68	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C72	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	LED69	8-719-076-58	LED NSSW440-BRS (LCD BACK LIGHT)	
C73	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V			< SWITCH >	
C74	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V				
C75	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	LSW60	1-771-883-11	SWITCH, TACTILE (WITH LED) (OPEN)	
C76	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< TRANSISTOR >	
C77	1-124-778-00	ELECT CHIP	22uF 20% 6.3V				
C78	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	Q60	8-729-106-60	TRANSISTOR 2SB1132-T101-QR	
C79	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	Q61	8-729-038-67	TRANSISTOR KRC102S	
C80	1-164-388-11	CERAMIC CHIP	270PF 5% 50V	Q62	8-729-904-66	TRANSISTOR DTD113EK-T-146	
C81	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< RESISTOR >	
		< CONNECTOR >		R60	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
CN60	1-815-500-21	PLUG, CONNECTOR 15P		R61	1-216-833-11	METAL CHIP 10K 5% 1/16W	
		< DIODE >		R62	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
D61	8-719-422-41	DIODE MA8051-L-TX		R63	1-216-037-00	METAL CHIP 330 5% 1/10W	
D62	8-719-977-12	DIODE KDZ6.8V		R64	1-216-037-00	METAL CHIP 330 5% 1/10W	
D63	8-719-977-12	DIODE KDZ6.8V					
D64	8-719-977-12	DIODE KDZ6.8V		R65	1-216-025-11	RES-CHIP 100 5% 1/10W	
D65	8-719-977-12	DIODE KDZ6.8V		R66	1-216-025-11	RES-CHIP 100 5% 1/10W	
				R67	1-216-025-11	RES-CHIP 100 5% 1/10W	
D66	8-719-977-12	DIODE KDZ6.8V		R68	1-216-025-11	RES-CHIP 100 5% 1/10W	
D67	8-719-420-14	DIODE MA8082-M(TX)		R69	1-216-033-00	METAL CHIP 220 5% 1/10W	
D68	8-719-977-12	DIODE KDZ6.8V					
D70	8-719-083-14	DIODE RRX9000-0501		R70	1-216-864-11	SHORT 0	
				R71	1-216-033-00	METAL CHIP 220 5% 1/10W	

DISPLAY	DISC IN SW	KEY
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R72	1-216-811-11	METAL CHIP	150 5% 1/16W	C7	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
R73	1-216-805-11	METAL CHIP	47 5% 1/16W	C8	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
R74	1-216-864-11	SHORT	0	C9	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
R76	1-216-841-11	METAL CHIP	47K 5% 1/16W	C10	1-162-974-11	CERAMIC CHIP 0.01uF 50V	
R77	1-216-825-11	METAL CHIP	2.2K 5% 1/16W			< CONNECTOR >	
R78	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	CN1	1-815-499-21	CONNECTOR, FPC (ZIF) 18P	
R79	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	CN2	1-815-501-11	SOCKET, CONNECTOR 15P	
R80	1-216-825-11	METAL CHIP	2.2K 5% 1/16W			< DIODE >	
R81	1-216-817-11	METAL CHIP	470 5% 1/16W	D7	8-719-422-41	DIODE MA8051-L-TX	
R82	1-216-809-11	METAL CHIP	100 5% 1/16W	D8	8-719-422-80	DIODE MA8075-H-TX	
R83	1-216-809-11	METAL CHIP	100 5% 1/16W			< IC >	
R84	1-216-809-11	METAL CHIP	100 5% 1/16W	IC1	8-759-653-26	IC LC75878W	
R85	1-216-841-11	METAL CHIP	47K 5% 1/16W			< LIQUID CRYSTAL DISPLAY >	
R86	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	LCD1	1-804-349-11	DISPLAY PANEL, LIQUID CRYSTAL	
R87	1-216-825-11	METAL CHIP	2.2K 5% 1/16W			< DIODE >	
R88	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	LED1	8-719-079-26	LED NSSB440-WRST-THR (LCD BACK LIGHT)	
R89	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	LED2	8-719-079-26	LED NSSB440-WRST-THR (LCD BACK LIGHT)	
R90	1-216-809-11	METAL CHIP	100 5% 1/16W	LED3	8-719-078-39	LED CL-170SR-CD-T (RING ILLUMINATION)	
R91	1-216-809-11	METAL CHIP	100 5% 1/16W	LED4	8-719-078-39	LED CL-170SR-CD-T (RING ILLUMINATION)	
R92	1-216-809-11	METAL CHIP	100 5% 1/16W	LED5	8-719-078-39	LED CL-170SR-CD-T (RING ILLUMINATION)	
R93	1-216-817-11	METAL CHIP	470 5% 1/16W	LED6	8-719-078-39	LED CL-170SR-CD-T (RING ILLUMINATION)	
R94	1-216-864-11	SHORT	0	LED7	8-719-078-39	LED CL-170SR-CD-T (CLOSE)	
R95	1-216-846-11	METAL CHIP	120K 5% 1/16W	LED8	8-719-078-39	LED CL-170SR-CD-T (MODE)	
R96	1-216-850-11	METAL CHIP	270K 5% 1/16W	LED9	8-719-078-39	LED CL-170SR-CD-T (▲)	
R97	1-216-033-00	METAL CHIP	220 5% 1/10W	LED10	8-719-078-39	LED CL-170SR-CD-T (OFF)	
		< SWITCH >		LED11	8-719-078-39	LED CL-170SR-CD-T (DSPL/PTY)	
S60	1-771-884-11	SWITCH, TACTILE (WITH LED) (RESET)		LED12	8-719-078-39	LED CL-170SR-CD-T (SCRL)	
*****				LED13	8-719-078-39	LED CL-170SR-CD-T (ENTER)	
*	1-676-709-11	DISC IN SW BOARD		LED14	8-719-078-39	LED CL-170SR-CD-T (LIST)	
		*****		LED15	8-719-078-39	LED CL-170SR-CD-T (MENU)	
		< SWITCH >		LED16	8-719-078-39	LED CL-170SR-CD-T (SOUND)	
SW2	1-529-566-21	SWITCH, PUSH (1 KEY) (SELF)		LED17	8-719-078-39	LED CL-170SR-CD-T (DSO)	
SW3	1-529-566-21	SWITCH, PUSH (1 KEY) (DISC IN)		LED18	8-719-078-39	LED CL-170SR-CD-T (EQ7)	
*****						< SWITCH >	
*	A-3283-164-A	KEY BOARD, COMPLETE (US)		LSW1	1-771-883-11	SWITCH, TACTILE (WITH LED) (-)	
*	A-3283-176-A	KEY BOARD, COMPLETE (AEP,UK,E)		LSW2	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SOURCE)	
		*****		LSW5	1-771-883-11	SWITCH, TACTILE (WITH LED) (+)	
	1-694-807-21	CONDUCTIVE BOARD, CONNECTION		LSW6	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (AF)	
*	1-694-808-21	CONDUCTIVE BOARD, CONNECTION				(AEP,UK,E)	
*	3-230-486-01	HOLDER (LCD-KEY)		LSW7	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (1/REP)	
*	3-230-487-01	PLATE (LCD-KEY), LIGHT GUIDE		LSW8	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (2/SHUF)	
*	3-230-488-01	SHEET (LCD-KEY), DIFFUSION		LSW9	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (3)	
		< CAPACITOR >		LSW10	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (6)	
C1	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	LSW11	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (5)	
C2	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	LSW12	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (4)	
C3	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V				
C4	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	LSW13	1-771-883-11	SWITCH, TACTILE (WITH LED) (◀◀ ▶▶)	
C5	1-115-412-11	CERAMIC CHIP	680PF 5% 25V				
C6	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V				

CDX-M770

KEY **LIMIT SW**

Ref. No.	Part No.	Description	Remark		
LSW15	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (TA)	(AEP,UK,E)		
LSW18	1-771-883-11	SWITCH, TACTILE (WITH LED) (DISC -)			
LSW20	1-771-883-11	SWITCH, TACTILE (WITH LED) (DISC +)			
LSW22	1-771-883-11	SWITCH, TACTILE (WITH LED) (▶▶▶ ▶▶▶)			
< TRANSISTOR >					
Q1	8-729-106-60	TRANSISTOR 2SB1132-T101-QR			
Q2	8-729-038-67	TRANSISTOR KRC102S			
Q3	8-729-904-66	TRANSISTOR DTD113EK-T-146			
< RESISTOR >					
R1	1-216-837-11	METAL CHIP	22K	5%	1/16W
R2	1-216-835-11	METAL CHIP	15K	5%	1/16W
R3	1-216-833-11	METAL CHIP	10K	5%	1/16W
R4	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R5	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R6	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R7	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R8	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R9	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R10	1-216-821-11	METAL CHIP	1K	5%	1/16W
R11	1-216-819-11	METAL CHIP	680	5%	1/16W
R12	1-216-819-11	METAL CHIP	680	5%	1/16W
R13	1-216-819-11	METAL CHIP	680	5%	1/16W
R14	1-216-837-11	METAL CHIP	22K	5%	1/16W
R15	1-216-835-11	METAL CHIP	15K	5%	1/16W
R16	1-216-833-11	METAL CHIP	10K	5%	1/16W
R17	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R18	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R19	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R20	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R21	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R22	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R23	1-216-821-11	METAL CHIP	1K	5%	1/16W
R24	1-216-819-11	METAL CHIP	680	5%	1/16W
R25	1-216-819-11	METAL CHIP	680	5%	1/16W
R26	1-216-819-11	METAL CHIP	680	5%	1/16W
R27	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R28	1-216-833-11	METAL CHIP	10K	5%	1/16W
R29	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R30	1-216-815-11	METAL CHIP	330	5%	1/16W
R31	1-216-033-00	METAL CHIP	220	5%	1/10W
R32	1-216-025-11	RES-CHIP	100	5%	1/10W
R33	1-216-807-11	METAL CHIP	68	5%	1/16W
R34	1-216-035-00	METAL CHIP	270	5%	1/10W
R35	1-216-035-00	METAL CHIP	270	5%	1/10W
R36	1-216-817-11	METAL CHIP	470	5%	1/16W
R37	1-216-029-00	METAL CHIP	150	5%	1/10W
R38	1-216-809-11	METAL CHIP	100	5%	1/16W
R39	1-216-809-11	METAL CHIP	100	5%	1/16W
R40	1-216-809-11	METAL CHIP	100	5%	1/16W
R41	1-216-841-11	METAL CHIP	47K	5%	1/16W

Ref. No.	Part No.	Description	Remark		
R42	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R43	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R44	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R45	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R46	1-216-025-11	RES-CHIP	100	5%	1/10W (US)
R47	1-216-029-00	METAL CHIP	150	5%	1/10W
R48	1-216-029-00	METAL CHIP	150	5%	1/10W
R49	1-216-029-00	METAL CHIP	150	5%	1/10W
R50	1-216-025-11	RES-CHIP	100	5%	1/10W (US)
R51	1-216-029-00	METAL CHIP	150	5%	1/10W
R52	1-216-029-00	METAL CHIP	150	5%	1/10W
R53	1-216-029-00	METAL CHIP	150	5%	1/10W
R54	1-216-029-00	METAL CHIP	150	5%	1/10W
R55	1-216-029-00	METAL CHIP	150	5%	1/10W
< SWITCH >					
S1	1-786-101-11	SWITCH, DETECTION (DETOUCH)			
S2	1-771-884-11	SWITCH, TACTILE (WITH LED) (CLOSE)			
S3	1-692-135-21	SWITCH, KEYBOARD (MODE)			
S4	1-771-884-11	SWITCH, TACTILE (WITH LED) (▲)			
S7	1-692-135-21	SWITCH, KEYBOARD (OFF)			
S8	1-692-135-21	SWITCH, KEYBOARD (SCRL)			
S9	1-692-135-21	SWITCH, KEYBOARD (DSPL/PTY)			
S10	1-692-135-21	SWITCH, KEYBOARD (ENTER)			
S11	1-692-135-21	SWITCH, KEYBOARD (LIST)			
S12	1-692-135-21	SWITCH, KEYBOARD (MENU)			
S13	1-692-135-21	SWITCH, KEYBOARD (SOUND)			
S14	1-771-884-11	SWITCH, TACTILE (WITH LED) (DSO)			
S15	1-771-884-11	SWITCH, TACTILE (WITH LED) (EQ7)			

*	1-676-708-11	LIMIT SW BOARD	*****		
< CONNECTOR >					
CN13	1-770-347-21	CONNECTOR, FPC 6P			
< SWITCH >					
SW4	1-529-565-11	SWITCH, PUSH (1 KEY) (LIMIT)			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3283-163-A	MAIN BOARD, COMPLETE (US)		C202	1-164-156-11	CERAMIC CHIP 0.1uF	25V
*	A-3283-177-A	MAIN BOARD, COMPLETE (AEP,UK,E) *****		C205	1-164-156-11	CERAMIC CHIP 0.1uF	25V
				C206	1-164-156-11	CERAMIC CHIP 0.1uF	25V
				C207	1-124-589-11	ELECT 47uF	20% 16V
				C208	1-164-156-11	CERAMIC CHIP 0.1uF	25V
*	3-019-565-01	BRACKET (IC)		C209	1-104-942-11	ELECT 1uF	20% 50V
*	3-230-509-01	CHASSIS, BACK		C210	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V (AEP,UK,E)
*	3-230-510-01	HEAT SINK (US)		C211	1-164-360-11	CERAMIC CHIP 0.1uF	16V (AEP,UK,E)
*	3-230-510-11	HEAT SINK (AEP,UK,E)		C212	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V (AEP,UK,E)
*	3-230-513-01	HEAT SINK (REG)		C213	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V (AEP,UK,E)
	7-685-792-09	SCREW +PTT 2.6X6 (S)		C214	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V (AEP,UK,E)
	7-685-794-09	SCREW +PTT 2.6X10 (S)		C215	1-125-891-11	CERAMIC CHIP 0.47uF	10% 10V (AEP,UK,E)
		< BUZZER >		C216	1-104-664-11	ELECT 47uF	20% 10V (AEP,UK,E)
BZ501	1-504-920-11	BUZZER		C217	1-164-315-11	CERAMIC CHIP 470PF	5% 50V (AEP,UK,E)
		< CAPACITOR >		C218	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V (AEP,UK,E)
C51	1-162-919-11	CERAMIC CHIP 22PF	5% 50V	C219	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V (AEP,UK,E)
C52	1-162-919-11	CERAMIC CHIP 22PF	5% 50V	C220	1-162-924-11	CERAMIC CHIP 56PF	5% 50V (AEP,UK,E)
C53	1-162-919-11	CERAMIC CHIP 22PF	5% 50V	C221	1-162-924-11	CERAMIC CHIP 56PF	5% 50V (AEP,UK,E)
C54	1-162-919-11	CERAMIC CHIP 22PF	5% 50V	C222	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V (AEP,UK,E)
C55	1-162-919-11	CERAMIC CHIP 22PF	5% 50V	C223	1-164-315-11	CERAMIC CHIP 470PF	5% 50V (AEP,UK,E)
C58	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C224	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V (AEP,UK,E)
C59	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C225	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V (AEP,UK,E)
C61	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C226	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V (AEP,UK,E)
C62	1-162-974-11	CERAMIC CHIP 0.01uF	50V	C227	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V (AEP,UK,E)
C63	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C228	1-162-959-11	CERAMIC CHIP 330PF	5% 50V (AEP,UK,E)
C101	1-124-570-11	ELECT 220uF	20% 16V	C229	1-125-838-11	CERAMIC CHIP 2.2uF	10% 6.3V (AEP,UK,E)
C103	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C230	1-164-739-11	CERAMIC CHIP 560PF	5% 50V (AEP,UK,E)
C104	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	C231	1-124-233-11	ELECT 10uF	20% 16V
C105	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C301	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C106	1-162-959-11	CERAMIC CHIP 330PF	5% 50V	C302	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C107	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C303	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C108	1-162-959-11	CERAMIC CHIP 330PF	5% 50V	C304	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C109	1-126-176-11	ELECT 220uF	20% 10V	C305	1-124-233-11	ELECT 10uF	20% 16V
C110	1-164-217-11	CERAMIC CHIP 150PF	5% 50V	C306	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V (AEP,UK,E)
C111	1-115-156-11	CERAMIC CHIP 1uF	10V				
C112	1-164-156-11	CERAMIC CHIP 0.1uF	25V				
C113	1-126-176-11	ELECT 220uF	20% 10V				
C114	1-127-573-11	CERAMIC CHIP 1uF	10% 16V				
C115	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V				
C116	1-126-176-11	ELECT 220uF	20% 10V				
C117	1-126-176-11	ELECT 220uF	20% 10V				
C118	1-164-156-11	CERAMIC CHIP 0.1uF	25V				
C119	1-162-923-11	CERAMIC CHIP 47PF	5% 50V				
C120	1-164-156-11	CERAMIC CHIP 0.1uF	25V				
C121	1-128-057-11	ELECT 330uF	20% 6.3V				
C122	1-110-654-11	DOUBLE LAYERS 0.047F	5.5V				
C123	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V				
C124	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V				
C125	1-164-156-11	CERAMIC CHIP 0.1uF	25V				
C126	1-124-937-11	ELECT 10uF	20% 16V				
C127	1-164-156-11	CERAMIC CHIP 0.1uF	25V				
C201	1-162-918-11	CERAMIC CHIP 18PF	5% 50V				

CDX-M770

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C307	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (AEP,UK,E)	C360	1-126-382-11	ELECT	100uF 20% 16V
C308	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C361	1-126-786-11	ELECT	47uF 20% 16V
C309	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C362	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C310	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C363	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C311	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C364	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V
C312	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C365	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C313	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C366	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C314	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (AEP,UK,E)	C367	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C315	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (AEP,UK,E)	C371	1-104-942-11	ELECT	1uF 20% 50V
C316	1-124-937-11	ELECT	10uF 20% 16V	C372	1-124-233-11	ELECT	10uF 20% 16V
C317	1-124-233-11	ELECT	10uF 20% 16V	C373	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C318	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C374	1-126-786-11	ELECT	47uF 20% 16V
C319	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C375	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C320	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C376	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C321	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C377	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C322	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C378	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C323	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	C379	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C324	1-124-233-11	ELECT	10uF 20% 16V	C380	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C325	1-124-234-00	ELECT	22uF 20% 16V	C381	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C328	1-124-233-11	ELECT	10uF 20% 16V	C382	1-126-176-11	ELECT	220uF 20% 10V
C329	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C383	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C330	1-126-767-11	ELECT	1000uF 20% 16V	C384	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C332	1-127-573-11	CERAMIC CHIP	1uF 10% 16V	C385	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C333	1-127-573-11	CERAMIC CHIP	1uF 10% 16V	C386	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C334	1-124-234-00	ELECT	22uF 20% 16V	C387	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C335	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C388	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C336	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C389	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C337	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C390	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C338	1-127-573-11	CERAMIC CHIP	1uF 10% 16V	C401	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C339	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C403	1-135-473-21	ELECT	3300uF 20% 16V
C340	1-124-234-00	ELECT	22uF 20% 16V	C406	1-127-573-11	CERAMIC CHIP	1uF 10% 16V
C341	1-127-573-11	CERAMIC CHIP	1uF 10% 16V	C407	1-126-572-11	ELECT	4.7uF 20% 35V
C342	1-124-234-00	ELECT	22uF 20% 16V	C451	1-124-234-00	ELECT	22uF 20% 16V
C343	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C452	1-124-234-00	ELECT	22uF 20% 16V
C344	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C454	1-128-057-11	ELECT	330uF 20% 6.3V
C345	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C456	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C346	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C457	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C347	1-124-465-00	ELECT	0.47uF 20% 50V	C501	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V (AEP,UK,E)
C348	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C501	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V (US)
C349	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C502	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C350	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C503	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C351	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C505	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C352	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C506	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
C353	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C507	1-164-230-11	CERAMIC CHIP	220PF 5% 50V
C354	1-162-974-11	CERAMIC CHIP	0.01uF 50V	C508	1-164-160-11	CERAMIC CHIP	20PF 5% 50V
C355	1-127-573-11	CERAMIC CHIP	1uF 10% 16V	C509	1-162-920-11	CERAMIC CHIP	27PF 5% 50V
C356	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C510	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C357	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V	C511	1-125-838-11	CERAMIC CHIP	2.2uF 10% 6.3V
C358	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C512	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C359	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C513	1-164-156-11	CERAMIC CHIP	0.1uF 25V
				C514	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C515	1-124-584-00	ELECT	100uF 20% 10V	C928	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C516	1-162-920-11	CERAMIC CHIP	27PF 5% 50V	C929	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C517	1-164-160-11	CERAMIC CHIP	20PF 5% 50V	C930	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C602	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C931	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C650	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C932	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C651	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C933	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C652	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C934	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C653	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C935	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C655	1-124-589-11	ELECT	47uF 20% 16V	C936	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C656	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C937	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C657	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C938	1-162-923-11	CERAMIC CHIP 47PF 5%	50V
C658	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C939	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C659	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C940	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C701	1-124-589-11	ELECT	47uF 20% 16V	C941	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C703	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C942	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C704	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C943	1-126-157-11	ELECT 10uF 20%	16V
C705	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C944	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C706	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C945	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C707	1-162-974-11	CERAMIC CHIP	0.01uF 50V	C946	1-126-157-11	ELECT 10uF 20%	16V
C708	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C947	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C709	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C948	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C710	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C949	1-126-157-11	ELECT 10uF 20%	16V
C711	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C950	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C712	1-162-974-11	CERAMIC CHIP	0.01uF 50V	C951	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C801	1-162-971-11	CERAMIC CHIP	0.001uF 10% 50V	C952	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C802	1-162-971-11	CERAMIC CHIP	0.001uF 10% 50V	C953	1-126-157-11	ELECT 10uF 20%	16V
C813	1-115-156-11	CERAMIC CHIP	1uF 10V	C954	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C814	1-162-971-11	CERAMIC CHIP	0.001uF 10% 50V	C955	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C818	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C956	1-126-157-11	ELECT 10uF 20%	16V
C902	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C957	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C903	1-126-157-11	ELECT	10uF 20% 16V	C958	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C904	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C959	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C905	1-124-584-00	ELECT	100uF 20% 10V	C960	1-126-157-11	ELECT 10uF 20%	16V
C906	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C961	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C907	1-126-934-11	ELECT	220uF 20% 10V	C962	1-115-412-11	CERAMIC CHIP 680PF 5%	25V
C908	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C964	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C909	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C965	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C910	1-164-156-11	CERAMIC CHIP	0.1uF 25V			< CONNECTOR >	
C911	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	CN101	1-774-701-11	PIN, CONNECTOR 16P	
C912	1-164-156-11	CERAMIC CHIP	0.1uF 25V	* CN201	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P	
C913	1-164-156-11	CERAMIC CHIP	0.1uF 25V	* CN301	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P	
C914	1-164-156-11	CERAMIC CHIP	0.1uF 25V	* CN303	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
C915	1-126-157-11	ELECT	10uF 20% 16V	CN401	1-764-617-12	PIN, CONNECTOR (PC BOARD) 30P	
C916	1-164-156-11	CERAMIC CHIP	0.1uF 25V				
C917	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN601	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)	
C918	1-162-917-11	CERAMIC CHIP	15PF 5% 50V	CN602	1-568-955-11	PIN, CONNECTOR 6P	
C919	1-162-920-11	CERAMIC CHIP	27PF 5% 50V	CN603	1-563-614-31	CONNECTOR, FLEXIBLE 11P	
C920	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN604	1-815-499-21	CONNECTOR, FPC (ZIF) 18P	
C921	1-164-156-11	CERAMIC CHIP	0.1uF 25V			< JACK >	
C924	1-164-156-11	CERAMIC CHIP	0.1uF 25V	CN302	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN, AUDIO OUT REAR/FRONT)	
C925	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V				
C926	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V				
C927	1-126-157-11	ELECT	10uF 20% 16V				

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< DIODE >					
D101	8-719-055-30	DIODE D1FS4A-TA		D652	8-719-820-05	DIODE 1SS181	
D102	8-719-055-30	DIODE D1FS4A-TA		D801	8-719-977-12	DIODE DTZ6.8B	
D103	8-719-988-61	DIODE 1SS355TE-17		D802	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D104	8-719-801-78	DIODE 1SS184		D803	8-719-988-61	DIODE 1SS355TE-17	
D105	8-719-060-81	DIODE MA735-TX		D804	8-719-423-32	DIODE MA8120-M	
D106	8-719-053-18	DIODE 1SR154-400TE-25		D805	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D107	8-719-422-62	DIODE MA8062-L-TX		D806	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D109	8-719-977-03	DIODE DTZ5.6B		D807	8-719-988-61	DIODE 1SS355TE-17	
D202	8-719-988-61	DIODE 1SS355TE-17		D901	8-719-421-82	DIODE MA8043-M	
D203	8-719-422-41	DIODE MA8051-L-TX				< FERRITE BEAD >	
D204	8-719-800-76	DIODE MA153-TX (AEP,UK,E)		FB706	1-414-760-21	FERRITE, EMI (SMD)	
D205	8-719-422-41	DIODE MA8051-L-TX (AEP,UK,E)		FB707	1-414-760-21	FERRITE, EMI (SMD)	
D301	8-719-074-47	DIODE CRS02(TE85L)		FB901	1-414-235-22	INDUCTOR, FERRITE BEAD	
D302	8-719-074-47	DIODE CRS02(TE85L)		FB902	1-414-235-22	INDUCTOR, FERRITE BEAD	
D303	8-719-074-47	DIODE CRS02(TE85L)		FB903	1-414-235-22	INDUCTOR, FERRITE BEAD	
D304	8-719-074-47	DIODE CRS02(TE85L)		FB904	1-414-235-22	INDUCTOR, FERRITE BEAD	
D305	8-719-074-47	DIODE CRS02(TE85L)		FB905	1-414-235-22	INDUCTOR, FERRITE BEAD	
D306	8-719-074-47	DIODE CRS02(TE85L)		FB906	1-414-235-22	INDUCTOR, FERRITE BEAD	
D307	8-719-074-47	DIODE CRS02(TE85L)		FB907	1-414-235-22	INDUCTOR, FERRITE BEAD	
D308	8-719-074-47	DIODE CRS02(TE85L)		FB910	1-414-760-21	FERRITE, EMI (SMD)	
D309	8-719-801-78	DIODE 1SS184				< IC >	
D311	8-719-988-61	DIODE 1SS355TE-17		IC101	8-759-990-43	IC TL1451ACDB-E20	
D401	8-719-049-38	DIODE 1N5404TU		IC102	8-759-836-78	IC RN5VD53AA-TL	
D404	8-719-977-12	DIODE DTZ6.8B		IC201	8-759-909-71	IC BA4558F-T1 (AEP,UK,E)	
D405	8-719-053-18	DIODE 1SR154-400TE-25		IC202	8-759-492-59	IC SAA6588T/V2-118 (AEP,UK,E)	
D406	8-719-053-18	DIODE 1SR154-400TE-25		IC303	8-759-422-21	IC NJM4580V(TE2)	
D407	8-719-988-61	DIODE 1SS355TE-17		IC304	8-759-422-21	IC NJM4580V(TE2)	
D501	8-719-988-61	DIODE 1SS355TE-17 (AEP,UK,E)		IC305	8-759-653-27	IC TDA7402TR	
D502	8-719-988-61	DIODE 1SS355TE-17		IC306	8-759-363-28	IC TC7660SEOA713	
D503	8-719-988-61	DIODE 1SS355TE-17		IC307	8-759-422-21	IC NJM4580V(TE2)	
D504	8-719-422-41	DIODE MA8051-L-TX		IC308	8-759-422-21	IC NJM4580V(TE2)	
D505	8-719-988-61	DIODE 1SS355TE-17		IC309	8-759-660-96	IC TDA7560	
D506	8-719-988-61	DIODE 1SS355TE-17		IC310	8-759-278-58	IC NJM4558V-TE2	
D507	8-719-801-78	DIODE 1SS184		IC501	6-700-180-01	IC MB90574BPMT-G-319-BND (US)	
D508	8-719-988-61	DIODE 1SS355TE-17		IC501	6-700-181-01	IC MB90574BPMT-G-320-BND (AEP,UK,E)	
D509	8-719-988-61	DIODE 1SS355TE-17		IC502	8-759-828-22	IC XC61CN4102MR	
D510	8-719-988-61	DIODE 1SS355TE-17		IC601	8-759-449-89	IC BA8270F-E2	
D511	8-719-988-61	DIODE 1SS355TE-17		IC650	8-759-337-40	IC NJM2904V(TE2)	
D602	8-719-017-95	DIODE MA8180-TX		IC651	8-759-580-33	IC BA6288FS-E2	
D603	8-719-422-64	DIODE MA8062-M		IC652	8-759-668-14	IC PQ09DZ1U	
D604	8-719-017-95	DIODE MA8180-TX		IC701	8-759-277-63	IC TC7W14FU(TE12R)	
D605	8-719-420-51	DIODE MA729		IC702	6-700-210-01	IC HD6432355A36F	
D606	8-719-988-61	DIODE 1SS355TE-17		IC801	8-759-830-17	IC RRX9000-0401R#01	
D607	8-719-017-95	DIODE MA8180-TX		IC901	8-752-402-48	IC CXD2727Q	
D608	8-719-988-61	DIODE 1SS355TE-17		IC902	8-759-485-79	IC TC7SET08FU(TE85R)	
D609	8-719-801-78	DIODE 1SS184		IC904	8-759-524-05	IC TC74VHC126FT(EL)	
D610	8-719-017-58	DIODE MA8068-TX (AEP,UK,E)		IC905	8-759-278-58	IC NJM4558V-TE2	
D611	8-719-017-58	DIODE MA8068-TX (AEP,UK,E)		IC906	8-759-422-21	IC NJM4580V(TE2)	
D612	8-719-988-61	DIODE 1SS355TE-17		IC907	8-759-422-21	IC NJM4580V(TE2)	
D650	8-719-977-12	DIODE DTZ6.8B		IC908	8-759-710-88	IC NJM431U-TE2	
D651	8-719-801-78	DIODE 1SS184		IC909	8-759-460-72	IC BA033FP-E2	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< JACK >					
J651	1-566-822-41	JACK (REMOTE IN) (AEP,UK,E)		Q401	8-729-049-13	TRANSISTOR UPA1853GR-9JG-E1	
		< COIL >		Q402	8-729-038-68	TRANSISTOR KRC103S	
L101	1-419-506-11	INDUCTOR 150uH		Q404	8-729-038-68	TRANSISTOR KRC103S	
L102	1-414-392-41	INDUCTOR 1uH		Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L103	1-419-506-11	INDUCTOR 150uH		Q406	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L104	1-414-394-41	INDUCTOR 2.2uH		Q407	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L105	1-414-394-41	INDUCTOR 2.2uH		Q501	8-759-068-54	IC WS57C291B-RE20A	
L201	1-216-295-11	SHORT 0		Q502	8-729-038-67	TRANSISTOR KRC102S	
L401	1-419-476-31	COIL, CHOKE 250uH		Q602	8-729-038-56	TRANSISTOR KRA104S	
L451	1-414-394-41	INDUCTOR 2.2uH		Q603	8-729-038-67	TRANSISTOR KRC102S	
L501	1-414-185-51	INDUCTOR 22uH		Q650	8-729-038-68	TRANSISTOR KRC103S	
L701	1-414-856-51	INDUCTOR 10uH		Q651	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L801	1-414-394-41	INDUCTOR 2.2uH		Q652	8-729-216-22	TRANSISTOR 2SA1162-G	
L901	1-414-856-51	INDUCTOR 10uH		Q901	8-729-920-85	TRANSISTOR 2SD1664-QR	
		< TRANSISTOR >				< RESISTOR >	
Q101	8-729-038-68	TRANSISTOR KRC103S		R51	1-216-821-11	METAL CHIP 1K 5% 1/16W	
Q102	8-729-038-55	TRANSISTOR KRA103S		R52	1-216-864-11	SHORT 0	
Q103	8-729-820-46	TRANSISTOR 2SB1202FAS		R53	1-216-864-11	SHORT 0	
Q105	8-729-034-49	TRANSISTOR KRC104S		R54	1-216-295-00	SHORT 0	
Q106	8-729-820-46	TRANSISTOR 2SB1202FAS		R101	1-216-809-11	METAL CHIP 100 5% 1/16W	
Q107	8-729-038-68	TRANSISTOR KRC103S		R102	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q108	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R103	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q109	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R104	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q110	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R105	1-216-809-11	METAL CHIP 100 5% 1/16W	
Q111	8-729-038-68	TRANSISTOR KRC103S		R106	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
Q112	8-729-038-68	TRANSISTOR KRC103S		R107	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
Q113	8-729-040-17	TRANSISTOR 2SD2164-K		R108	1-218-861-11	METAL CHIP 3.9K 0.5% 1/16W	
Q114	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R109	1-218-847-11	METAL CHIP 1K 0.5% 1/16W	
Q115	8-729-038-67	TRANSISTOR KRC102S		R110	1-218-873-11	METAL CHIP 12K 0.5% 1/16W	
Q116	8-729-038-68	TRANSISTOR KRC103S		R111	1-216-841-11	METAL CHIP 47K 5% 1/16W	
Q117	8-729-038-67	TRANSISTOR KRC102S		R112	1-216-841-11	METAL CHIP 47K 5% 1/16W	
Q118	8-759-068-54	IC WS57C291B-RE20A		R113	1-216-841-11	METAL CHIP 47K 5% 1/16W	
Q119	8-729-019-00	TRANSISTOR 2SD2394-G		R114	1-216-841-11	METAL CHIP 47K 5% 1/16W	
Q120	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R115	1-216-845-11	METAL CHIP 100K 5% 1/16W	
Q121	8-729-038-68	TRANSISTOR KRC103S		R116	1-218-897-11	METAL CHIP 120K 0.5% 1/16W	
Q201	8-729-920-85	TRANSISTOR 2SD1664-QR		R117	1-216-864-11	SHORT 0	
Q202	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R (AEP,UK,E)		R118	1-216-809-11	METAL CHIP 100 5% 1/16W	
Q203	8-729-038-67	TRANSISTOR KRC102S (AEP,UK,E)		R119	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q301	8-729-021-95	TRANSISTOR RN1441-A(TE85L)		R120	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q302	8-729-021-95	TRANSISTOR RN1441-A(TE85L)		R121	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
Q303	8-729-021-95	TRANSISTOR RN1441-A(TE85L)		R122	1-216-809-11	METAL CHIP 100 5% 1/16W	
Q304	8-729-021-95	TRANSISTOR RN1441-A(TE85L)		R123	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q305	8-729-021-95	TRANSISTOR RN1441-A(TE85L)		R124	1-216-845-11	METAL CHIP 100K 5% 1/16W	
Q306	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R125	1-218-847-11	METAL CHIP 1K 0.5% 1/16W	
Q307	8-729-106-60	TRANSISTOR 2SB1115A-YQ		R126	1-218-866-11	METAL CHIP 6.2K 0.5% 1/16W	
Q308	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R127	1-216-845-11	METAL CHIP 100K 5% 1/16W	
Q309	8-729-144-85	FET 2SK1133		R128	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q310	8-729-038-56	TRANSISTOR KRA104S		R129	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
Q312	8-729-034-49	TRANSISTOR KRC104S		R130	1-216-845-11	METAL CHIP 100K 5% 1/16W	
				R131	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
				R132	1-216-833-11	METAL CHIP 10K 5% 1/16W	
				R133	1-216-835-11	METAL CHIP 15K 5% 1/16W	

CDX-M770

MAIN

Ref. No.	Part No.	Description	Quantity	Unit	Remark	Ref. No.	Part No.	Description	Quantity	Unit	Remark
R134	1-216-821-11	METAL CHIP	1K	5%	1/16W	R309	1-216-839-11	METAL CHIP	33K	5%	1/16W
R135	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R310	1-216-841-11	METAL CHIP	47K	5%	1/16W
R136	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R311	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R137	1-216-841-11	METAL CHIP	47K	5%	1/16W	R312	1-216-821-11	METAL CHIP	1K	5%	1/16W
R138	1-216-821-11	METAL CHIP	1K	5%	1/16W	R314	1-216-813-11	METAL CHIP	220	5%	1/16W
R139	1-216-864-11	SHORT	0			R317	1-216-841-11	METAL CHIP	47K	5%	1/16W
R140	1-216-864-11	SHORT	0			R318	1-216-845-11	METAL CHIP	100K	5%	1/16W
R141	1-216-845-11	METAL CHIP	100K	5%	1/16W	R319	1-216-837-11	METAL CHIP	22K	5%	1/16W
R142	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R320	1-216-845-11	METAL CHIP	100K	5%	1/16W
R143	1-216-845-11	METAL CHIP	100K	5%	1/16W	R321	1-216-842-11	METAL CHIP	56K	5%	1/16W
R201	1-216-001-00	METAL CHIP	10	5%	1/10W	R322	1-216-837-11	METAL CHIP	22K	5%	1/16W
R202	1-216-864-11	SHORT	0			R323	1-216-842-11	METAL CHIP	56K	5%	1/16W
R203	1-216-864-11	SHORT	0			R324	1-216-841-11	METAL CHIP	47K	5%	1/16W
R204	1-216-817-11	METAL CHIP	470	5%	1/16W	R325	1-216-813-11	METAL CHIP	220	5%	1/16W
R205	1-216-833-11	METAL CHIP	10K	5%	1/16W (AEP,UK,E)	R326	1-216-813-11	METAL CHIP	220	5%	1/16W
R206	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK,E)	R327	1-216-841-11	METAL CHIP	47K	5%	1/16W
R207	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK,E)	R329	1-216-841-11	METAL CHIP	47K	5%	1/16W
R208	1-216-845-11	METAL CHIP	100K	5%	1/16W (AEP,UK,E)	R331	1-216-842-11	METAL CHIP	56K	5%	1/16W
R209	1-216-295-11	SHORT	0		(AEP,UK,E)	R332	1-216-842-11	METAL CHIP	56K	5%	1/16W
R210	1-216-833-11	METAL CHIP	10K	5%	1/16W (AEP,UK,E)	R333	1-216-845-11	METAL CHIP	100K	5%	1/16W
R211	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK,E)	R334	1-216-837-11	METAL CHIP	22K	5%	1/16W
R212	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK,E)	R336	1-216-845-11	METAL CHIP	100K	5%	1/16W
R213	1-216-857-11	METAL CHIP	1M	5%	1/16W (AEP,UK,E)	R337	1-216-837-11	METAL CHIP	22K	5%	1/16W
R214	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK,E)	R338	1-216-813-11	METAL CHIP	220	5%	1/16W
R215	1-216-853-11	METAL CHIP	470K	5%	1/16W (AEP,UK,E)	R341	1-216-813-11	METAL CHIP	220	5%	1/16W
R216	1-216-817-11	METAL CHIP	470	5%	1/16W (AEP,UK,E)	R342	1-216-841-11	METAL CHIP	47K	5%	1/16W
R217	1-216-797-11	METAL CHIP	10	5%	1/16W (AEP,UK,E)	R350	1-216-833-11	METAL CHIP	10K	5%	1/16W
R218	1-216-823-11	METAL CHIP	1.5K	5%	1/16W (AEP,UK,E)	R351	1-216-833-11	METAL CHIP	10K	5%	1/16W
R219	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP,UK,E)	R352	1-216-835-11	METAL CHIP	15K	5%	1/16W
R220	1-216-797-11	METAL CHIP	10	5%	1/16W (AEP,UK,E)	R353	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R222	1-216-864-11	SHORT	0			R354	1-216-821-11	METAL CHIP	1K	5%	1/16W
R249	1-216-833-11	METAL CHIP	10K	5%	1/16W	R355	1-216-835-11	METAL CHIP	15K	5%	1/16W
R301	1-216-821-11	METAL CHIP	1K	5%	1/16W	R356	1-216-813-11	METAL CHIP	220	5%	1/16W
R302	1-216-833-11	METAL CHIP	10K	5%	1/16W	R357	1-216-813-11	METAL CHIP	220	5%	1/16W
R303	1-218-863-11	METAL CHIP	4.7K	0.5%	1/16W	R358	1-216-813-11	METAL CHIP	220	5%	1/16W
R304	1-216-833-11	METAL CHIP	10K	5%	1/16W	R359	1-216-817-11	METAL CHIP	470	5%	1/16W
R305	1-218-863-11	METAL CHIP	4.7K	0.5%	1/16W	R360	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R306	1-218-863-11	METAL CHIP	4.7K	0.5%	1/16W	R361	1-216-813-11	METAL CHIP	220	5%	1/16W
R307	1-218-863-11	METAL CHIP	4.7K	0.5%	1/16W	R362	1-216-821-11	METAL CHIP	1K	5%	1/16W
R308	1-216-839-11	METAL CHIP	33K	5%	1/16W	R363	1-216-845-11	METAL CHIP	100K	5%	1/16W
						R364	1-216-813-11	METAL CHIP	220	5%	1/16W
						R365	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R366	1-216-821-11	METAL CHIP	1K	5%	1/16W
						R367	1-216-821-11	METAL CHIP	1K	5%	1/16W
						R368	1-216-835-11	METAL CHIP	15K	5%	1/16W
						R369	1-216-835-11	METAL CHIP	15K	5%	1/16W
						R370	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R371	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R372	1-216-864-11	SHORT	0		
						R373	1-216-864-11	SHORT	0		
						R374	1-216-841-11	METAL CHIP	47K	5%	1/16W
						R375	1-216-864-11	SHORT	0		(US)
						R376	1-216-841-11	METAL CHIP	47K	5%	1/16W

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R377	1-216-864-11	SHORT	0		R512	1-216-815-11	METAL CHIP	330	5% 1/16W
R379	1-216-805-11	METAL CHIP	47	5% 1/16W	R513	1-216-821-11	METAL CHIP	1K	5% 1/16W
R380	1-216-841-11	METAL CHIP	47K	5% 1/16W	R514	1-216-841-11	METAL CHIP	47K	5% 1/16W
R382	1-216-817-11	METAL CHIP	470	5% 1/16W	R515	1-216-821-11	METAL CHIP	1K	5% 1/16W
R383	1-216-295-11	SHORT	0		R516	1-216-864-11	SHORT	0	
R384	1-216-845-11	METAL CHIP	100K	5% 1/16W	R517	1-216-821-11	METAL CHIP	1K	5% 1/16W
R385	1-216-845-11	METAL CHIP	100K	5% 1/16W	R518	1-216-829-11	METAL CHIP	4.7K	5% 1/16W
R388	1-216-837-11	METAL CHIP	22K	5% 1/16W	R519	1-216-813-11	METAL CHIP	220	5% 1/16W
R389	1-216-842-11	METAL CHIP	56K	5% 1/16W	R520	1-216-821-11	METAL CHIP	1K	5% 1/16W
R390	1-216-841-11	METAL CHIP	47K	5% 1/16W	R521	1-216-864-11	SHORT	0	
R391	1-216-864-11	SHORT	0		R522	1-216-864-11	SHORT	0	
R393	1-216-864-11	SHORT	0		R523	1-216-864-11	SHORT	0	
R395	1-216-864-11	SHORT	0		R524	1-216-864-11	SHORT	0	
R397	1-216-864-11	SHORT	0		R526	1-216-845-11	METAL CHIP	100K	5% 1/16W
R399	1-216-845-11	METAL CHIP	100K	5% 1/16W	R527	1-216-831-11	METAL CHIP	6.8K	5% 1/16W
R400	1-216-845-11	METAL CHIP	100K	5% 1/16W	R528	1-216-845-11	METAL CHIP	100K	5% 1/16W
R401	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	R530	1-216-864-11	SHORT	0	
R402	1-216-821-11	METAL CHIP	1K	5% 1/16W	R535	1-216-845-11	METAL CHIP	100K	5% 1/16W
R403	1-216-073-00	METAL CHIP	10K	5% 1/10W	R536	1-216-845-11	METAL CHIP	100K	5% 1/16W
R404	1-216-073-00	METAL CHIP	10K	5% 1/10W	R537	1-216-845-11	METAL CHIP	100K	5% 1/16W
R405	1-216-833-11	METAL CHIP	10K	5% 1/16W	R538	1-216-845-11	METAL CHIP	100K	5% 1/16W
R406	1-216-833-11	METAL CHIP	10K	5% 1/16W	R539	1-216-845-11	METAL CHIP	100K	5% 1/16W
R408	1-216-833-11	METAL CHIP	10K	5% 1/16W	R540	1-216-845-11	METAL CHIP	100K	5% 1/16W
R409	1-216-073-00	METAL CHIP	10K	5% 1/10W	R541	1-216-845-11	METAL CHIP	100K	5% 1/16W
R410	1-216-073-00	METAL CHIP	10K	5% 1/10W	R542	1-216-845-11	METAL CHIP	100K	5% 1/16W
R411	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	R543	1-216-845-11	METAL CHIP	100K	5% 1/16W
R412	1-216-833-11	METAL CHIP	10K	5% 1/16W	R544	1-216-853-11	METAL CHIP	470K	5% 1/16W
R413	1-216-841-11	METAL CHIP	47K	5% 1/16W	R545	1-216-845-11	METAL CHIP	100K	5% 1/16W
R414	1-216-841-11	METAL CHIP	47K	5% 1/16W	R546	1-216-845-11	METAL CHIP	100K	5% 1/16W
R415	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	R547	1-216-821-11	METAL CHIP	1K	5% 1/16W
R416	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	R548	1-216-864-11	SHORT	0	
R417	1-216-829-11	METAL CHIP	4.7K	5% 1/16W	R549	1-216-845-11	METAL CHIP	100K	5% 1/16W
R418	1-216-833-11	METAL CHIP	10K	5% 1/16W	R550	1-216-821-11	METAL CHIP	1K	5% 1/16W
R419	1-216-833-11	METAL CHIP	10K	5% 1/16W	R551	1-216-825-11	METAL CHIP	2.2K	5% 1/16W
R420	1-216-841-11	METAL CHIP	47K	5% 1/16W	R552	1-216-821-11	METAL CHIP	1K	5% 1/16W
R421	1-216-837-11	METAL CHIP	22K	5% 1/16W	R553	1-216-821-11	METAL CHIP	1K	5% 1/16W
R422	1-216-845-11	METAL CHIP	100K	5% 1/16W	R554	1-216-821-11	METAL CHIP	1K	5% 1/16W
R451	1-216-864-11	SHORT	0		R555	1-216-821-11	METAL CHIP	1K	5% 1/16W
R453	1-216-864-11	SHORT	0		R556	1-216-821-11	METAL CHIP	1K	5% 1/16W
R456	1-216-864-11	SHORT	0		R557	1-216-821-11	METAL CHIP	1K	5% 1/16W
R457	1-216-864-11	SHORT	0		R558	1-216-821-11	METAL CHIP	1K	5% 1/16W
R500	1-216-864-11	SHORT	0	(AEP,UK,E)	R559	1-216-821-11	METAL CHIP	1K	5% 1/16W
R501	1-216-837-11	METAL CHIP	22K	5% 1/16W	R562	1-216-821-11	METAL CHIP	1K	5% 1/16W
R502	1-216-821-11	METAL CHIP	1K	5% 1/16W	R563	1-216-821-11	METAL CHIP	1K	5% 1/16W
R503	1-216-864-11	SHORT	0		R564	1-216-821-11	METAL CHIP	1K	5% 1/16W
R504	1-216-833-11	METAL CHIP	10K	5% 1/16W	R565	1-216-821-11	METAL CHIP	1K	5% 1/16W
R505	1-216-845-11	METAL CHIP	100K	5% 1/16W	R566	1-216-821-11	METAL CHIP	1K	5% 1/16W
R506	1-216-833-11	METAL CHIP	10K	5% 1/16W	R567	1-216-817-11	METAL CHIP	470	5% 1/16W
R507	1-216-833-11	METAL CHIP	10K	5% 1/16W	R601	1-216-841-11	METAL CHIP	47K	5% 1/16W
R508	1-216-845-11	METAL CHIP	100K	5% 1/16W	R602	1-216-809-11	METAL CHIP	100	5% 1/16W
R509	1-216-821-11	METAL CHIP	1K	5% 1/16W	R603	1-216-809-11	METAL CHIP	100	5% 1/16W
R510	1-216-821-11	METAL CHIP	1K	5% 1/16W	R604	1-216-835-11	METAL CHIP	15K	5% 1/16W
R511	1-216-864-11	SHORT	0		R605	1-216-821-11	METAL CHIP	1K	5% 1/16W

MAIN

Ref. No.	Part No.	Description	Quantity	Percentage	Remark	Ref. No.	Part No.	Description	Quantity	Percentage	Remark
R606	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK,E)	R815	1-216-845-11	METAL CHIP	100K	5%	1/16W
R607	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK,E)	R816	1-216-809-11	METAL CHIP	100	5%	1/16W
R608	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R817	1-216-821-11	METAL CHIP	1K	5%	1/16W
R650	1-216-833-11	METAL CHIP	10K	5%	1/16W	R818	1-216-841-11	METAL CHIP	47K	5%	1/16W
R651	1-216-836-11	METAL CHIP	18K	5%	1/16W	R819	1-216-845-11	METAL CHIP	100K	5%	1/16W
R652	1-216-821-11	METAL CHIP	1K	5%	1/16W	R820	1-216-845-11	METAL CHIP	100K	5%	1/16W
R653	1-216-845-11	METAL CHIP	100K	5%	1/16W	R821	1-216-845-11	METAL CHIP	100K	5%	1/16W
R654	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R822	1-216-845-11	METAL CHIP	100K	5%	1/16W
R655	1-216-837-11	METAL CHIP	22K	5%	1/16W	R823	1-216-845-11	METAL CHIP	100K	5%	1/16W
R656	1-216-304-11	METAL CHIP	3.3	5%	1/10W	R824	1-216-817-11	METAL CHIP	470	5%	1/16W
R657	1-216-839-11	METAL CHIP	33K	5%	1/16W	R825	1-216-857-11	METAL CHIP	1M	5%	1/16W
R658	1-216-304-11	METAL CHIP	3.3	5%	1/10W	R827	1-216-845-11	METAL CHIP	100K	5%	1/16W
R659	1-216-304-11	METAL CHIP	3.3	5%	1/10W	R828	1-216-821-11	METAL CHIP	1K	5%	1/16W
R660	1-216-809-11	METAL CHIP	100	5%	1/16W	R830	1-216-845-11	METAL CHIP	100K	5%	1/16W
R661	1-216-809-11	METAL CHIP	100	5%	1/16W	R901	1-216-833-11	METAL CHIP	10K	5%	1/16W
R662	1-216-304-11	METAL CHIP	3.3	5%	1/10W	R902	1-216-821-11	METAL CHIP	1K	5%	1/16W
R701	1-216-821-11	METAL CHIP	1K	5%	1/16W	R903	1-216-809-11	METAL CHIP	100	5%	1/16W
R702	1-216-821-11	METAL CHIP	1K	5%	1/16W	R904	1-216-813-11	METAL CHIP	220	5%	1/16W
R703	1-216-821-11	METAL CHIP	1K	5%	1/16W	R905	1-219-286-11	RES-CHIP	680	2%	1/16W
R704	1-216-821-11	METAL CHIP	1K	5%	1/16W	R906	1-219-274-11	RES-CHIP	220	2%	1/16W
R705	1-216-821-11	METAL CHIP	1K	5%	1/16W	R908	1-216-841-11	METAL CHIP	47K	5%	1/16W
R708	1-216-821-11	METAL CHIP	1K	5%	1/16W	R909	1-216-864-11	SHORT	0		
R709	1-216-864-11	SHORT	0			R911	1-216-813-11	METAL CHIP	220	5%	1/16W
R710	1-216-821-11	METAL CHIP	1K	5%	1/16W	R912	1-216-809-11	METAL CHIP	100	5%	1/16W
R711	1-216-864-11	SHORT	0			R913	1-216-813-11	METAL CHIP	220	5%	1/16W
R712	1-216-845-11	METAL CHIP	100K	5%	1/16W	R914	1-216-817-11	METAL CHIP	470	5%	1/16W
R713	1-216-864-11	SHORT	0			R915	1-216-809-11	METAL CHIP	100	5%	1/16W
R714	1-216-821-11	METAL CHIP	1K	5%	1/16W	R916	1-216-817-11	METAL CHIP	470	5%	1/16W
R715	1-216-864-11	SHORT	0			R917	1-216-817-11	METAL CHIP	470	5%	1/16W
R716	1-216-025-11	RES-CHIP	100	5%	1/10W	R919	1-216-833-11	METAL CHIP	10K	5%	1/16W
R717	1-216-845-11	METAL CHIP	100K	5%	1/16W	R920	1-216-859-11	RES-CHIP	1.5M	5%	1/16W
R718	1-216-845-11	METAL CHIP	100K	5%	1/16W	R922	1-216-864-11	SHORT	0		
R719	1-216-845-11	METAL CHIP	100K	5%	1/16W	R923	1-216-821-11	METAL CHIP	1K	5%	1/16W
R722	1-216-813-11	METAL CHIP	220	5%	1/16W	R927	1-216-864-11	SHORT	0		
R723	1-216-845-11	METAL CHIP	100K	5%	1/16W	R928	1-216-861-11	METAL CHIP	2.2M	5%	1/16W
R724	1-216-845-11	METAL CHIP	100K	5%	1/16W	R929	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R725	1-216-845-11	METAL CHIP	100K	5%	1/16W	R930	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R801	1-216-821-11	METAL CHIP	1K	5%	1/16W	R931	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R802	1-216-821-11	METAL CHIP	1K	5%	1/16W	R932	1-216-809-11	METAL CHIP	100	5%	1/16W
R803	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R933	1-414-595-11	INDUCTOR, FERRITE BEAD			
R804	1-218-716-11	METAL CHIP	10K	0.5%	1/16W	R934	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R805	1-216-845-11	METAL CHIP	100K	5%	1/16W	R935	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R806	1-216-821-11	METAL CHIP	1K	5%	1/16W	R936	1-216-819-11	METAL CHIP	680	5%	1/16W
R807	1-216-809-11	METAL CHIP	100	5%	1/16W	R937	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R808	1-216-809-11	METAL CHIP	100	5%	1/16W	R938	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R809	1-216-821-11	METAL CHIP	1K	5%	1/16W	R939	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R810	1-216-821-11	METAL CHIP	1K	5%	1/16W	R940	1-216-821-11	METAL CHIP	1K	5%	1/16W
R811	1-216-821-11	METAL CHIP	1K	5%	1/16W	R941	1-216-841-11	METAL CHIP	47K	5%	1/16W
R812	1-216-821-11	METAL CHIP	1K	5%	1/16W	R942	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R813	1-216-821-11	METAL CHIP	1K	5%	1/16W	R943	1-216-833-11	METAL CHIP	10K	5%	1/16W
R814	1-216-809-11	METAL CHIP	100	5%	1/16W	R944	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R945	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R946	1-216-841-11	METAL CHIP	47K	5%	1/16W

MAIN

SERVO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R947	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	C117	1-164-733-11	CERAMIC CHIP 820PF 10%	50V
R948	1-216-833-11	METAL CHIP	10K 5% 1/16W	C118	1-164-360-11	CERAMIC CHIP 0.1uF	16V
R949	1-216-833-11	METAL CHIP	10K 5% 1/16W	C127	1-124-779-00	ELECT CHIP 10uF 20%	16V
R950	1-216-833-11	METAL CHIP	10K 5% 1/16W	C301	1-126-393-11	ELECT CHIP 33uF 20%	10V
R951	1-216-841-11	METAL CHIP	47K 5% 1/16W	C302	1-164-360-11	CERAMIC CHIP 0.1uF	16V
R952	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	C303	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V
R953	1-216-833-11	METAL CHIP	10K 5% 1/16W	C304	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V
R954	1-216-833-11	METAL CHIP	10K 5% 1/16W	C305	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
R955	1-216-833-11	METAL CHIP	10K 5% 1/16W	C306	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
R956	1-216-841-11	METAL CHIP	47K 5% 1/16W	C307	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
R957	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	C308	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
R958	1-216-833-11	METAL CHIP	10K 5% 1/16W	C309	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
R959	1-216-833-11	METAL CHIP	10K 5% 1/16W	C310	1-125-838-11	CERAMIC CHIP 2.2uF 10%	6.3V
R960	1-216-841-11	METAL CHIP	47K 5% 1/16W	C311	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V
R961	1-216-831-11	METAL CHIP	6.8K 5% 1/16W	C502	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
R962	1-216-833-11	METAL CHIP	10K 5% 1/16W	C504	1-162-967-11	CERAMIC CHIP 0.0033uF 10%	50V
R963	1-216-833-11	METAL CHIP	10K 5% 1/16W	C505	1-165-176-11	CERAMIC CHIP 0.04uF 10%	16V
R964	1-216-833-11	METAL CHIP	10K 5% 1/16W	C506	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
R965	1-216-817-11	METAL CHIP	470 5% 1/16W	C507	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
R967	1-216-864-11	SHORT	0	C508	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
R968	1-216-864-11	SHORT	0	C509	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		< THERMISTOR (POSITIVE) >		C515	1-164-360-11	CERAMIC CHIP 0.1uF	16V
TH101	1-810-940-11	THERMISTOR, POSITIVE		C516	1-162-974-11	CERAMIC CHIP 0.01uF	50V
TH102	1-810-940-11	THERMISTOR, POSITIVE		C517	1-164-360-11	CERAMIC CHIP 0.1uF	16V
TH601	1-801-792-21	THERMISTOR, POSITIVE		C518	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		< TUNER >		C519	1-164-360-11	CERAMIC CHIP 0.1uF	16V
TUX201	A-3220-813-A	TUNER UNIT (TUX-020)		C520	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		< VIBRATOR >		C521	1-164-360-11	CERAMIC CHIP 0.1uF	16V
X201	1-579-900-21	VIBRATOR, CRYSTAL (4.3MHz) (AEP,UK,E)		C522	1-164-360-11	CERAMIC CHIP 0.1uF	16V
X501	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)		C550	1-164-360-11	CERAMIC CHIP 0.1uF	16V
X503	1-767-993-31	VIBRATOR, CRYSTAL (3.68MHz)		C553	1-164-360-11	CERAMIC CHIP 0.1uF	16V
X701	1-781-822-21	VIBRATOR, CERAMIC (18.43MHz)		C554	1-164-360-11	CERAMIC CHIP 0.1uF	16V
X801	1-781-282-11	VIBRATOR, CERAMIC (4MHz)				< CONNECTOR >	
X901	1-767-408-21	VIBRATOR, CRYSTAL (16.9MHz)		CN1	1-764-616-12	HOUSING, CONNECTOR (PC BOARD) 30P	
		*****		CN2	1-794-153-21	CONNECTOR, FPC (ZIF) 16P	
		*****		CN3	1-770-347-21	CONNECTOR, FPC 6P	
		*****				< FERRITE BEAD >	
*	A-3294-808-A	SERVO BOARD, COMPLETE		FB101	1-469-710-21	INDUCTOR, FERRITE BEAD	
		*****		FB102	1-469-710-21	INDUCTOR, FERRITE BEAD	
		*****		FB503	1-469-730-11	INDUCTOR, FERRITE BEAD	
		< CAPACITOR >				< IC >	
C101	1-115-156-11	CERAMIC CHIP	1uF 10V	IC1	8-752-095-36	IC CXA2596M-T6	
C103	1-104-609-11	ELECT CHIP	100uF 20% 4V	IC5	8-752-920-24	IC CXP84640-081Q	
C104	1-115-156-11	CERAMIC CHIP	1uF 10V	IC7	8-759-832-99	IC LA6576L-TE-L	
C106	1-164-360-11	CERAMIC CHIP	0.1uF 16V	IC501	8-752-392-04	IC CXD2598Q	
C107	1-115-156-11	CERAMIC CHIP	1uF 10V			< JUMPER RESISTOR >	
C108	1-162-974-11	CERAMIC CHIP	0.01uF 50V	JR502	1-216-864-11	SHORT	0
C109	1-162-917-11	CERAMIC CHIP	15PF 5% 50V	JR503	1-216-864-11	SHORT	0
C110	1-115-156-11	CERAMIC CHIP	1uF 10V	JR504	1-216-864-11	SHORT	0
C115	1-164-733-11	CERAMIC CHIP	820PF 10% 50V				
C116	1-165-128-11	CERAMIC CHIP	0.22uF 16V				

SERVO **SUB (CD)**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >					
Q101	8-729-904-87	TRANSISTOR 2SB1197K-T-146-R		R515	1-216-864-11	SHORT 0	
		< RESISTOR >		R516	1-216-845-11	METAL CHIP 100K 5%	1/16W
R101	1-216-847-11	METAL CHIP 150K 5%	1/16W	R517	1-216-837-11	METAL CHIP 22K 5%	1/16W
R102	1-216-847-11	METAL CHIP 150K 5%	1/16W	R524	1-216-845-11	METAL CHIP 100K 5%	1/16W
R104	1-216-857-11	METAL CHIP 1M 5%	1/16W	R526	1-216-845-11	METAL CHIP 100K 5%	1/16W
R105	1-216-833-11	METAL CHIP 10K 5%	1/16W	R527	1-216-845-11	METAL CHIP 100K 5%	1/16W
R106	1-216-857-11	METAL CHIP 1M 5%	1/16W	R531	1-216-809-11	METAL CHIP 100 5%	1/16W
R107	1-216-835-11	METAL CHIP 15K 5%	1/16W	R532	1-216-845-11	METAL CHIP 100K 5%	1/16W
R108	1-216-838-11	METAL CHIP 27K 5%	1/16W	R533	1-216-845-11	METAL CHIP 100K 5%	1/16W
R109	1-216-801-11	METAL CHIP 22 5%	1/16W	R535	1-216-845-11	METAL CHIP 100K 5%	1/16W
R113	1-216-839-11	METAL CHIP 33K 5%	1/16W	R551	1-216-841-11	METAL CHIP 47K 5%	1/16W
R116	1-216-845-11	METAL CHIP 100K 5%	1/16W	R552	1-216-841-11	METAL CHIP 47K 5%	1/16W
R122	1-216-845-11	METAL CHIP 100K 5%	1/16W	R553	1-216-845-11	METAL CHIP 100K 5%	1/16W
R123	1-216-839-11	METAL CHIP 33K 5%	1/16W	R554	1-216-845-11	METAL CHIP 100K 5%	1/16W
R127	1-216-821-11	METAL CHIP 1K 5%	1/16W	R555	1-216-845-11	METAL CHIP 100K 5%	1/16W
R213	1-216-821-11	METAL CHIP 1K 5%	1/16W	R559	1-216-845-11	METAL CHIP 100K 5%	1/16W
R214	1-216-821-11	METAL CHIP 1K 5%	1/16W	R560	1-216-809-11	METAL CHIP 100 5%	1/16W
R301	1-216-839-11	METAL CHIP 33K 5%	1/16W	R563	1-216-809-11	METAL CHIP 100 5%	1/16W
R302	1-216-839-11	METAL CHIP 33K 5%	1/16W	R564	1-216-845-11	METAL CHIP 100K 5%	1/16W
R303	1-216-821-11	METAL CHIP 1K 5%	1/16W	R568	1-216-837-11	METAL CHIP 22K 5%	1/16W
R304	1-216-839-11	METAL CHIP 33K 5%	1/16W	R569	1-216-809-11	METAL CHIP 100 5%	1/16W
R306	1-216-833-11	METAL CHIP 10K 5%	1/16W	R570	1-216-821-11	METAL CHIP 1K 5%	1/16W
R307	1-216-833-11	METAL CHIP 10K 5%	1/16W	R572	1-216-809-11	METAL CHIP 100 5%	1/16W
R308	1-216-833-11	METAL CHIP 10K 5%	1/16W	R590	1-216-845-11	METAL CHIP 100K 5%	1/16W
R309	1-216-833-11	METAL CHIP 10K 5%	1/16W	R594	1-216-845-11	METAL CHIP 100K 5%	1/16W
R310	1-216-833-11	METAL CHIP 10K 5%	1/16W	R595	1-216-845-11	METAL CHIP 100K 5%	1/16W
R311	1-216-833-11	METAL CHIP 10K 5%	1/16W			< SWITCH >	
R312	1-216-845-11	METAL CHIP 100K 5%	1/16W	SW1	1-762-944-12	SWITCH, DETECTION (SMALL TYPE) (DOWN)	
R313	1-216-842-11	METAL CHIP 56K 5%	1/16W			< VIBRATOR >	
R314	1-216-842-11	METAL CHIP 56K 5%	1/16W	X1	1-781-758-21	VIBRATOR, CERAMIC (CHIP TYPE) (10MHz)	
R315	1-216-842-11	METAL CHIP 56K 5%	1/16W	*****			
R316	1-216-842-11	METAL CHIP 56K 5%	1/16W	*	1-681-373-11	SUB (CD) BOARD	
R317	1-216-838-11	METAL CHIP 27K 5%	1/16W	*****			
R318	1-216-840-11	METAL CHIP 39K 5%	1/16W			< CAPACITOR >	
R319	1-216-840-11	METAL CHIP 39K 5%	1/16W	C903	1-164-156-11	CERAMIC CHIP 0.1uF 25V	
R320	1-216-833-11	METAL CHIP 10K 5%	1/16W	C905	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
R321	1-216-846-11	METAL CHIP 120K 5%	1/16W	C906	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
R322	1-216-835-11	METAL CHIP 15K 5%	1/16W	C907	1-125-837-11	CERAMIC CHIP 1uF 10% 6.3V	
R501	1-216-833-11	METAL CHIP 10K 5%	1/16W	C908	1-164-388-11	CERAMIC CHIP 270PF 5% 50V	
R503	1-216-845-11	METAL CHIP 100K 5%	1/16W	C910	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V	
R504	1-216-857-11	METAL CHIP 1M 5%	1/16W			< CABLE >	
R505	1-216-839-11	METAL CHIP 33K 5%	1/16W	CN901	1-783-268-11	CABLE, FLAT 11P	
R506	1-216-845-11	METAL CHIP 100K 5%	1/16W			< DIODE >	
R507	1-216-827-11	METAL CHIP 3.3K 5%	1/16W	D901	8-719-988-61	DIODE 1SS355TE-17	
R508	1-216-809-11	METAL CHIP 100 5%	1/16W	D902	8-719-017-95	DIODE KDZ18V	
R509	1-216-809-11	METAL CHIP 100 5%	1/16W	D903	8-719-079-10	LED CL-220UB-X-TS (DISC IN)	
R510	1-216-809-11	METAL CHIP 100 5%	1/16W				
R511	1-216-845-11	METAL CHIP 100K 5%	1/16W				
R513	1-216-827-11	METAL CHIP 3.3K 5%	1/16W				
R514	1-216-821-11	METAL CHIP 1K 5%	1/16W				

SUB (CD)	SW
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D906	8-719-422-41	DIODE MA8051-L-TX				ACCESSORIES & PACKING MATERIALS	
D907	8-719-977-12	DIODE MA8068-M-TX				*****	
D908	8-719-083-14	DIODE RRX9000-0501					
		< FERRITE BEAD >					
FB903	1-500-329-21	INDUCTOR, FERRITE BEAD				1-476-546-11 REMOTE COMMANDER (RM-X111) (AEP,UK,E)	
		< IC >				1-476-546-21 REMOTE COMMANDER (RM-X110) (US)	
IC901	8-759-830-18	IC RRX9000-0601#1				1-476-589-11 REMOTE COMMANDER (RM-X5S)	
		< TRANSISTOR >				3-020-953-01 LABEL (MODE) (for RM-X5S)	
Q901	8-729-216-22	TRANSISTOR 2SA1037K-T-146-S				3-230-446-11 MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH) (US)	
Q902	8-729-038-67	TRANSISTOR KRC102S				3-230-447-11 MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,SPANISH) (US)	
		< RESISTOR >				3-230-448-11 MANUAL, INSTRUCTION (ENGLISH,SPANISH, SWEDISH,PORTUGUESE,GREEK, RUSSIAN) (AEP,UK,E)	
R901	1-216-833-11	METAL CHIP 10K 5% 1/16W				3-230-449-11 MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN,FRENCH,ITALIAN, DUTCH) (AEP,UK,E)	
R902	1-216-845-11	METAL CHIP 100K 5% 1/16W				3-230-549-01 LID, BATTERY CASE (for RM-X110/X111)	
R903	1-216-825-11	METAL CHIP 2.2K 5% 1/16W				X-3378-390-2 CASE ASSY (for FRONT PANEL)	
R904	1-216-035-00	METAL CHIP 270 5% 1/10W				*****	
R906	1-216-811-11	METAL CHIP 150 5% 1/16W				HARDWARE LIST	

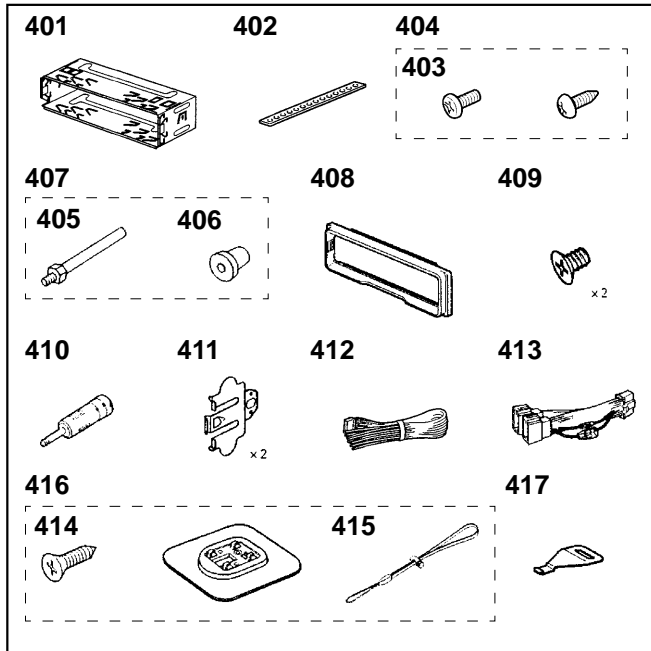
R907	1-216-864-11	SHORT 0					
R908	1-216-850-11	METAL CHIP 270K 5% 1/16W				#1 7-685-790-09 SCREW +PTT 2.6X4 (S)	
R909	1-216-846-11	METAL CHIP 120K 5% 1/16W				#2 7-685-792-09 SCREW +PTT 2.6X6 (S)	
		< SWITCH >				#3 7-685-794-09 SCREW +PTT 2.6X10 (S)	
SW901	1-692-135-21	SWITCH, KEYBOARD (RESET)				#4 7-627-553-28 SCREW, PRECISION +P 2X2.5	
		*****				#5 7-624-102-04 STOP RING 1.5, TYPE -E	
*	1-681-375-11	SW BOARD				#6 7-627-552-88 SCREW, PRECISION +P 1.7X2.2	
		*****				#7 7-685-105-19 SCREW +P 2X8 TYPE2 NON-SLIT	
		< SWITCH >				#8 7-627-553-37 SCREW, PRECISION +P 2X3 TYPE3	
SW1001	1-771-937-21	SWITCH, DETECTION (OPEN/CLOSE)				#9 7-628-253-00 SCREW, SPECIAL	
SW1002	1-529-566-31	SWITCH, PUSH (1 KEY) (CENTER)				#10 7-627-553-17 SCREW, PRECISION +P 2X2 TYPE3	
		*****				#11 7-627-850-28 SCREW, PRECISION +P 1.4X3	
		MISCELLANEOUS				#12 7-621-255-25 SCREW +P 2X4	
		*****				*****	
2	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US)					
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)					
		(AEP,UK,E)					
113	1-777-246-41	CORD (WITH CONNECTOR) (ANT)					
114	1-790-375-21	CORD (WITH CONNECTOR) (SUB OUT (MONO))					
115	1-757-775-11	CORD (WITH CONNECTOR) (AUX-IN (AUDIO))					
177	1-681-390-11	FLEXIBLE BOARD					
351	X-3378-480-1	CHASSIS (OP) ASSY (including M901)					
356	1-676-707-11	PICK-UP FLEXIBLE BOARD					
357	1-677-182-11	MOTOR FLEXIBLE BOARD					
△360	8-820-103-03	PICK-UP, OPTICAL KSS-720A/K1RP					
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A					
M601	X-3378-769-1	MOTOR ASSY (OPEN/CLOSE)					
M902	A-3301-985-A	MOTOR ASSY, SLED (SLED)					
M903	A-3315-039-A	MOTOR SUB ASSY, LO (LOADING)					

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

CDX-M770

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

401	3-014-370-21	FRAME, FITTING	
402	3-916-012-01	BRACKET (ND), FITTING ASSIST (US)	
403	7-682-160-01	SCREW +P 4X6 (US)	
404	X-3368-725-1	SCREW ASSY, FITTING (US)	
405	3-386-828-01	SCREW, FITTING (AEP,UK,E)	
406	3-349-410-01	BUSHING (AEP,UK,E)	
407	X-3366-405-1	SCREW ASSY (EXP), FITTING (AEP,UK,E)	
408	3-230-445-01	COLLAR	
409	3-934-325-01	SCREW (+K 5X8 TP)	
410	1-465-459-21	ADAPTOR, ANTENNA (AEP,UK,E)	
411	3-030-929-01	SPRING, FITTING	
412	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US)	
413	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK,E)
414	7-685-248-14	SCREW +KTP 3X12 TYPE4 (for RM-X5S)	
415	3-231-381-01	STRAP (ROTARY COMMANDER) (for RM-X5S)	
416	X-3373-432-1	BRACKET ASSY (for RM-X5S)	
417	3-231-993-01	KEY (01)	



MEMO

