MEX-M71BT/N5200BT

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

Ver. 1.0 2016.12

Photo: MEX-N5200BT

The service manual of the mechanism deck, used in this model, has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.

- The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	MEX-N5100BT/N5150BT
Mechanism Type	MG-101CF-188
Optical Pick-up Name	DAX-25A

SPECIFICATIONS

(M71BT/N5200BT : US, CND)

FOR THE CUSTOMERS IN THE USA. NOT APPLICABLE IN CANADA, INCLUDING IN THE PROVINCE OF QUEBEC.

POUR LES CLIENTS AUX ÉTATS-UNIS. NON APPLICABLE AU CANADA, Y COMPRIS LA PROVINCE DE QUÉBEC.

AUDIO POWER SPECIFICATIONS

CTA2006 Standard
Power Output: 20 Watts RMS × 4 at 4 Ohms < 1% THD+N
SN Ratio: 80 dBA
(reference: 1 Watt into 4 Ohms)

Tuner section

(N5200BT : US, CND)

FM

Tuning range: 87.5 MHz – 107.9 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
FM CCIR: -1,956.5 kHz to -487.3 kHz and +500.0 kHz to +2,095.4 kHz
Usable sensitivity: 8 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 73 dB
Separation: 50 dB at 1 kHz
Frequency response: 20 Hz – 15,000 Hz

AM

Tuning range: 530 kHz – 1,710 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Sensitivity: 26 µV

(N5200BT : AEP, UK)

FM

Tuning range:
When [AREA] is set to [EUROPE]:
87.5 MHz – 108.0 MHz
When [AREA] is set to [RUSSIA]:
FM1/FM2: 87.5 MHz – 108.0 MHz (at 50 kHz step)
FM3: 65 MHz – 74 MHz (at 30 kHz step)
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
When [AREA] is set to [EUROPE]:
FM CCIR: -1,956.5 kHz to -487.3 kHz and +500.0 kHz to +2,095.4 kHz
When [AREA] is set to [RUSSIA]:
FM CCIR: -1,956.5 kHz to -487.3 kHz and +500.0 kHz to +2,095.4 kHz
FM OIRT: -1,815.6 kHz to -943.7 kHz and +996.6 kHz to +1,776.6 kHz
Usable sensitivity: 8 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 73 dB
Separation: 50 dB at 1 kHz
Frequency response: 20 Hz – 15,000 Hz

MW/LW

Tuning range:
MW: 531 kHz – 1,602 kHz
LW: 153 kHz – 279 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Sensitivity: MW: 26 µV, LW: 50 µV

(M71BT/N5200BT : E, AUS)

FM

Tuning range:
87.5 – 108.0 MHz (at 50 kHz step)
87.5 – 108.0 MHz (at 100 kHz step)
87.5 – 107.9 MHz (at 200 kHz step)
FM tuning step:
50 kHz/100 kHz/200 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
FM CCIR: -1,956.5 kHz to -487.3 kHz and +500.0 kHz to +2,095.4 kHz
Usable sensitivity: 8 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 73 dB
Separation: 50 dB at 1 kHz
Frequency response: 20 Hz – 15,000 Hz

AM

Tuning range:
531 – 1,602 kHz (at 9 kHz step)
530 – 1,710 kHz (at 10 kHz step)
AM tuning step:
9 kHz/10 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Sensitivity: 26 µV

CD Player section

Signal-to-noise ratio: 120 dB
Frequency response: 10 Hz – 20,000 Hz
Wow and flutter: Below measurable limit
The maximum number of: (CD-R/CD-RW only)
–folders (albums): 150 (including root folder)
–files (tracks) and folders: 300 (may less than 300 if folder/file names contain many characters)
–displayable characters for a folder/file name: 32 (Joliet)/64 (Romeo)
Corresponding codec: MP3 (.mp3) and WMA (.wma)

USB Player section

Interface: USB (Full-speed)
Maximum current: 1 A
The maximum number of recognizable tracks:
–folders (albums): 256
–files (tracks) per folder: 256
Compatible Android Open Accessory protocol (AOA): 2.0
Corresponding codec:
MP3 (.mp3)
Bit rate: 8 kbps – 320 kbps (Supports VBR (Variable Bit Rate))
Sampling rate: 16 kHz – 48 kHz
WMA (.wma)
Bit rate: 32 kbps – 192 kbps (Supports VBR (Variable Bit Rate))
Sampling rate: 32 kHz, 44.1 kHz, 48 kHz
FLAC (.flac)
Bit depth: 16 bit, 24 bit
Sampling rate: 44.1 kHz, 48 kHz

Wireless Communication

Communication System:
BLUETOOTH Standard version 3.0
Output:
BLUETOOTH Standard Power Class 2 (Max. +4 dBm)
Maximum communication range:
Line of sight approx. 10 m (33 ft)*1
Frequency band:
2.4 GHz band (2.4000 GHz – 2.4835 GHz)
Modulation method: FHSS
Compatible BLUETOOTH Profiles*2:
A2DP (Advanced Audio Distribution Profile) 1.3
AVRCP (Audio Video Remote Control Profile) 1.3
HFP (Handsfree Profile) 1.6
PBAP (Phone Book Access Profile)
SPP (Serial Port Profile)
Corresponding codec:
SBC (.sbc), ACC (.m4a)

*1The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna (aerial)'s performance, operating system, software application, etc.
*2BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

Power amplifier section

Output: Speaker outputs
Speaker impedance: 4 Ω – 8 Ω
Maximum power output: 55 W × 4 (at 4 Ω)

General

Outputs:
Audio outputs terminal:
FRONT, REAR, SUB
Power antenna (aerial)/Power amplifier control terminal (REM OUT)
Inputs:
SiriusXM input terminal
(M71BT/N5200BT : US, CND only)
Remote controller input terminal
Antenna (aerial) input terminal
MIC input (terminal)
AUX input jack (stereo mini jack)
USB port
Power requirements: 12 V DC car battery (negative ground (earth))
Rated current consumption: 10 A
Dimensions:
Approx. 178 mm × 50 mm × 177 mm (7 1/8 in × 2 in × 7 in) (w/h/d)
Mounting dimensions:
Approx. 182 mm × 53 mm × 160 mm (7 1/4 in × 2 1/8 in × 6 5/16 in) (w/h/d)
Mass: Approx. 1.2 kg (2 lb 11 oz)
Package contents:
Main unit (1)
Remote commander (1): RM-X231
(M71BT/N5200BT : US, CND, E only)
Microphone (1)
Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

Bluetooth® AUDIO SYSTEM

9-896-349-01
2016L33-1

Sony Video & Sound Products Inc.

SONY®

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Accessories are given in the last of the electrical parts list.

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.

FLEXIBLE CIRCUIT BOARD REPAIRING

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

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

• M71BT/N5200BT (US, CND):

CAUTION
The use of optical instruments with this product will increase eye hazard.

SAFETY-RELATED COMPONENT WARNING!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

SECTION 1
SERVICING NOTES

The SERVICING NOTES contains important information for servicing. Be sure to read this section before repairing the unit.

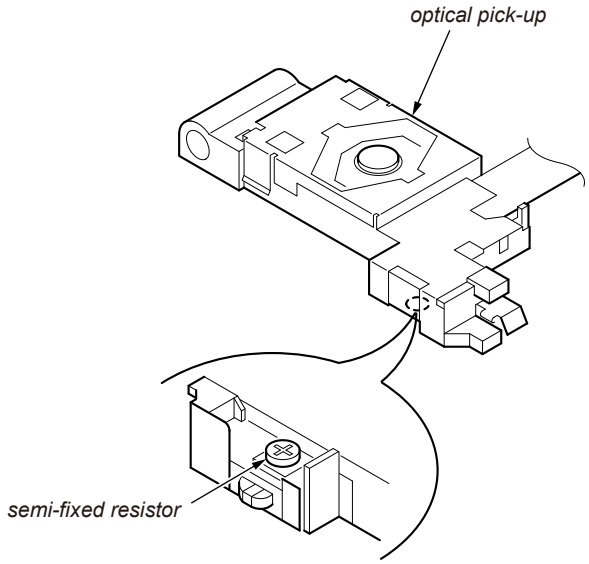
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electro-static break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down 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

Never look into the laser diode emission from right above when checking it for adjustment. It is feared that you will lose your sight.

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.



UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

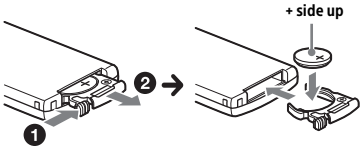
Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

REPLACING THE LITHIUM BATTERY OF THE REMOTE COMMANDER (M71BT/N5200BT: US, CND, E models)

Under normal conditions, the battery will last approximately 1 year. (The service life may be shorter, depending on the conditions of use.)
When the battery becomes weak, the range of the remote commander becomes shorter.

CAUTION
Danger of explosion if battery is incorrectly replaced. Replaced only with the same or equivalent type.



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

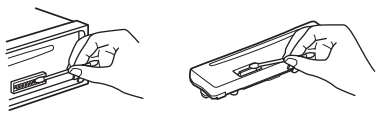
CANCELING THE DEMO MODE

You can cancel the demonstration display which appears when the source is off and the clock is displayed.

1. **Press MENU, rotate the control dial to select [GENERAL], then press it.**
2. **Rotate the control dial to select [SET DEMO], then press it.**
3. **Rotate the control dial to select [SET DEMO-OFF], then press it.**
   The setting is complete.
4. **Press ⮌ (back) twice.**
   The display returns to normal reception/play mode.

CLEANING THE CONNECTORS

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, detach the front panel and clean the connectors with a cotton swab. Do not apply too much force. Otherwise, the connectors may be damaged.

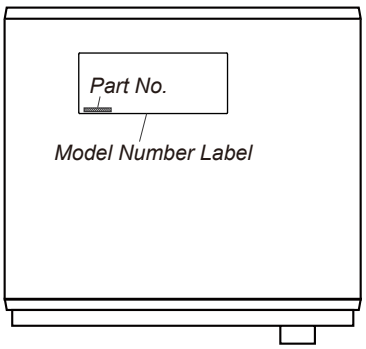


Notes
- For safety, turn off the ignition before cleaning the connectors, and remove the key from the ignition switch.
- Never touch the connectors directly with your fingers or with any metal device.

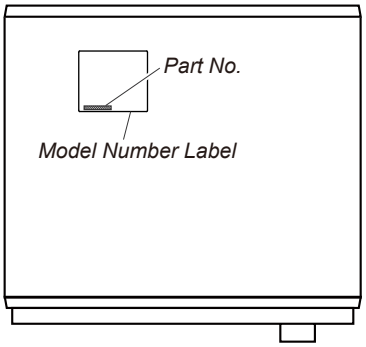
MODEL IDENTIFICATION

Distinguish by Part No. on the bottom side of the main unit.

– Bottom view –
(M71BT/N5200BT: US, CND, AEP, UK models)



– Bottom view –
(N5200BT: E, AUS models)



Part No.	Destination
4-686-074-0□	N5200BT: US, CND models (UC)
4-686-075-0□	N5200BT: AEP, UK models (EUR)
4-686-076-0□	N5200BT: E model (E)
4-686-077-0□	N5200BT: AUS model (ET4)
4-688-375-0□	M71BT: All models (UC)

DESTINATION ABBREVIATIONS

The following abbreviations for model destinations are used in this service manual.

- Abbreviations
  AUS : Australian and New Zealand models
  CND : Canadian model

DESTINATION SETTING METHOD

When the complete MAIN board or system controller (IC501) is replaced, the destination setting is necessary.

1. Destination Setting

Set destination according to the procedure below.

1-1. Setting the Destination Code

1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] → [MIC 5] → [▶II 6] (press only the [▶II 6] button for two seconds).

Clock display

Note 1: There is not displayed "AM", depending on the destination.

2. In the state in which the software main version is displayed on the liquid crystal display (refer to the following figure), enter the destination setting mode by pressing the buttons in order of the [▶▶I ▶▶] → [I◀◀ I◀◀] → [PUSH ENTER/MENU/ ➡ VOICE] or pressing the buttons on the remote commander in order of the [➡] → [⬅] → [ENTER].
   (Displayed characters/values in the following figure are example)

Software main version

MEX-M71BT and MEX-N5200BT (US, CND) : "1031" or higher
MEX-N5200BT (AEP, UK, E, AUS) : "1030" or higher

3. Input the alphanumeric character of 6 digits displayed on the liquid crystal display, and execute the destination setting.

Note 2: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

Note 3: Refer to "1-3. Entering the Destination Code" on page 5 for operation method.

Destination code

4. The resetting operation is executed by pressing the [➡ OFF SRC] button for 1 second after the setting ends, and the unit returns to the normal condition.

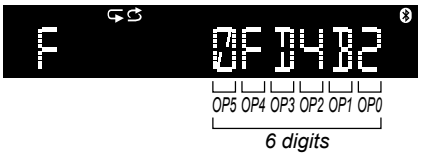
Display after reset

Note 4: There is not displayed "AM", depending on the destination.

1-2. Display in Destination Setting Mode

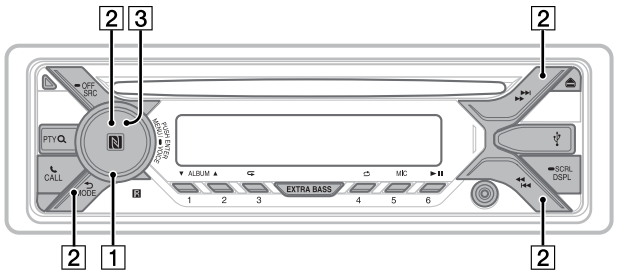
Note: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

Destination code



1-3. Entering the Destination Code

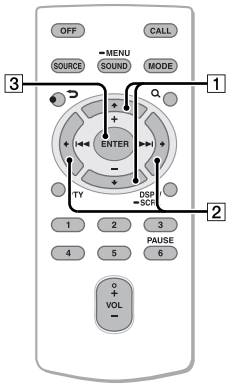
- **Method of operation by main unit**



1. Rotate the control dial, and select the alphanumeric character of "0 to F".
2. The digit advances by pressing the [PUSH ENTER/MENU/ ➡ VOICE] or [▶▶I ▶▶] button.
   The digit returns by pressing the [⮌ MODE] or [I◀◀ ◀◀] button.
3. The setting is completed by pressing the [PUSH ENTER/ MENU/ ➡VOICE] button at the state of cursor position of "OP0", then the display turns off, the initialization operation is done, and the display returns to the clock display.

- **Method of operation by remote commander (M71BT/N5200BT: US, CND, E models)**

Note: The model to which the remote commander is not attached can also be operated by using the remote commander.



1. Press the [▲] or [▼] button, and select the alphanumeric character of "0 to F".
2. The digit advances by pressing the [➡] or [ENTER] button.
   The digit returns by pressing the [⬅] button.
3. The setting is completed by pressing the [ENTER] button at the state of cursor position of "OP0", then the display turns off, the initialization operation is done, and the display returns to the clock display.

1-4. Destination Code

Model	Destination	OP5	OP4	OP3	OP2	OP1	OP0
MEX-M71BT	All	0	F	D	6	D	0
MEX-N5200BT	US, CND	0	F	D	4	B	2
	AEP, UK	0	C	D	4	A	1
	E	3	C	F	C	A	0
	AUS	0	E	D	C	C	0

2. Confirmation After Destination Setting

Execute the following operation after completing the destination setting, and confirm a correct destination was set.

Destination setting checking method:

1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [⮌ 4] ⟶ [MIC 5] ⟶ [▶II 6] (press only the [▶II 6] button for two seconds).

Clock display

Note 1: There is not displayed "AM", depending on the destination.

2. In the state in which the software main version is displayed on the liquid crystal display (refer to the following figure), enter the destination setting value display mode by pressing the [➡ SCRL DSPL] button three times (software main version ⟶ software DSP version ⟶ Bluetooth address ⟶ destination code).
   (Displayed characters/values in the following figure are example)

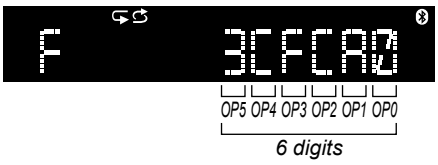
Software main version

MEX-M71BT and MEX-N5200BT (US, CND) : "1031" or higher
MEX-N5200BT (AEP, UK, E, AUS) : "1030" or higher

3. Confirm the alphanumeric character of 6 digits on the liquid crystal display is a value correctly input.

Note 2: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

Destination code



4. The resetting operation is executed by pressing the [➡ OFF SRC] button for 1 second after the confirming ends, and the unit returns to the normal condition.

Display after reset

Note 3: There is not displayed "AM", depending on the destination.

NOTE OF REPLACING THE ANT001, CP001, IC001, IC602 AND IC1301 ON THE MAIN BOARD

ANT001, CP001, IC001, IC602 and IC1301 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

NOTE OF REPLACING THE KEY BOARD

When the KEY board is defective, replace the front panel assy (Ref. No. FP1).

OPERATION CHECK OF THE USB

Connect a USB device to this unit for checking the USB operation of this unit.

Refer to the support site written in the operating instructions for the details about the compatibility of a USB device.

OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS

After completing the repairs of this unit, follow the procedure below to check normal operation of the NFC.

Note: After checking of NFC operation, be sure to delete the pairing information before returning this unit to the customer.

Connecting with a Smartphone by One touch (NFC)

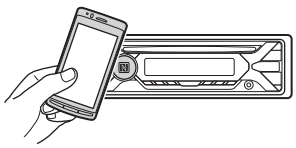
By touching the control dial on the unit with an NFC* compatible smartphone, the unit is paired and connected with the smartphone automatically.

* NFC (Near Field Communication) is a technology enabling short-range wireless communication between various devices, such as mobile phones and IC tags. Thanks to the NFC function, data communication can be achieved easily just by touching the relevant symbol or designated location on NFC compatible devices.

For a smartphone with Android OS 4.0 or lower installed, downloading the app "NFC Easy Connect" available at Google Play™ is required. The app may not be downloadable in some countries/regions.

1 Activate the NFC function on the smartphone.
For details, refer to the operating instructions supplied with the smartphone.

2 Touch the N-Mark part of the unit with the N-Mark part of the smartphone.



Make sure that lights up on the display of the unit.

To disconnect by One touch

Touch the N-Mark part of the unit with the N-Mark part of the smartphone again.

Notes

- When making the connection, handle the smartphone carefully to prevent scratches.
- One touch connection is not possible when the unit is already connected to two NFC compatible devices. In this case, disconnect either device, and make connection with the smartphone again.

IMPORTANT NOTE OF INITIALIZING

The purpose of "Bluetooth Initialize" is to initialize the Bluetooth connection history (HF/Audio Streaming). (To delete the device information for the devices that you connected to when searching, etc.)

When the complete MAIN board is replaced, it is necessary to initialize this unit.

Refer to the following, initialize this unit.

Note: Phonebook data and dialed/received call history can be deleted by executing "Bluetooth Initialize".

Procedure:

1. In the state of source off (the clock is displayed on the liquid crystal display), press the [PUSH ENTER/MENU/ ➥VOICE] button.
2. Rotate the control dial, and select the "BLUETOOTH".
3. Press the [PUSH ENTER/MENU/ ➥VOICE] button.
4. Rotate the control dial, and select the "SET BT INIT".
5. Press the [PUSH ENTER/MENU/ ➥VOICE] button, and the message "SET INIT-NO" is displayed on the liquid crystal display.
6. Rotate the control dial clockwise, and the message "SET INIT-YES" is displayed on the liquid crystal display.
7. Press the [PUSH ENTER/MENU/ ➥VOICE] button.
8. When "Bluetooth Initialize" is completed, the message "COMPLETE" is displayed on the liquid crystal display for a moment.
9. Press the [⮌ MODE] button twice, and return to the state of source off (the clock is displayed on the liquid crystal display).

TEST DISCS

Use following TEST DISC (for CD) when this unit confirms the operation and checks it.

Part No.	Description
3-702-101-01	DISC (YEDS-18), TEST
4-225-203-01	DISC (PATD-012), TEST

FLEXIBLE FLAT CABLE FOR THE MECHANISM DECK CONNECTION

When performing the operation check in the state that is removed the mechanism deck from the main unit, it is necessary to use a long flexible flat cable.

When performing the operation check, use following flexible flat cable.

Part No.	Description
1-846-819-31	CABLE FLEXIBLE FLAT (27 CORE) (Length: 150 mm)

BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE

1. Required Equipment

- This unit to be tested
- Bluetooth compatible smartphone or cellular phone
- Bluetooth audio devices (SONY NWZ-A826, or select from connectable smartphone, cellular phones or audio devices list)
- Speaker connection (at least Front L/R ch)
- DC power supply (12 V)

2. Preparation

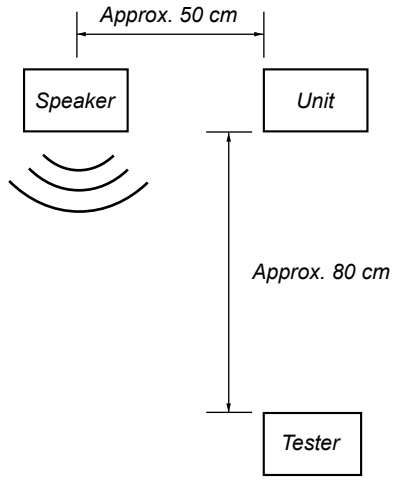
- Confirm the setting of this unit and note down it.
- Press the [PUSH ENTER/MENU/ VOICE] button, rotate the control dial to select, and determine in the following order, then confirm that the Bluetooth signal icon ( ) is flashing.
  "BLUETOOTH" → "SET PAIRING" → "SET DEVICE 1" (or "SET DEVICE 2")
- Turn on the Bluetooth function of the smartphone or cellular phone.

3. Test Environment

- No other Bluetooth device is making a communication in the periphery (within 20 m).
- No other this unit are supplied with electric power.
- There are no two or more wireless LAN access points in the periphery (with 50 m) (one is OK).
- The set should be tested in a place such as a meeting room, free from ambient noise.
- The speaker at the far end should be in a place such as another meeting room separated acoustically.

4. Setting

Install this unit on the desktop.



5. Precautions

Beware of the following points when conducting the talking test:

- There is no fault if a talking can be made by adjusting appropriately the volume of the telephone of the other party and the smartphone or cellular phone connected through the Bluetooth, besides the setup of this unit.
- The speaker's voice will become loud naturally if the periphery is noisy, or become low if quiet (even though the speaker intents to talk on the same volume level).
- The speaker's voice will become loud naturally if the other party's voice is loud.

6. Bluetooth Phone (Hands Free) Function Check

1. Search for this unit from the Bluetooth device (smartphone or cellular phone), and confirm whether this unit (model name) is displayed.
2. Search for the distance of this unit and the Bluetooth device (smartphone or cellular phone) about 5 m apart.
   Confirm whether the this unit is displayed after it searches.
3. Do the pairing of the smartphone or cellular phone and this unit.
   (If the input of the passkey is required, to enter the "0000")
4. Connect the smartphone or cellular phone with this unit, and confirm the "HF" icon ( ) is lights.
5. Confirm the connection continues even if the distance of the smartphone or cellular phone and this unit is separated by about 5 m.
6. Set this unit except the "BT PHONE" source, and call the smartphone or cellular phone connected with this unit.
   Confirm the automatic change of this unit into "BT PHONE" source, and the change into the screen for incoming calls.
   Confirm the ring tone is heard from the front speaker.
7. Take a phone call (press the [CALL] button), and start a conversation.
   Confirm the other person voice is heard from the speaker.
   Speak toward an external microphone at the following condition, and confirm the other party hears its voice.
   Compare the sound quality with a normal set. Confirm that there is no big difference.
8. Turn on ACC from off, and confirm whether this unit connects Bluetooth with the smartphone or cellular phone again.

Note: Depending on the smartphone or cellular phone, it might not reconnect automatically when ACC is turned on.

7. Bluetooth Audio Function Check

Note 1: Depending on the connecting BT Audio device, track information (e.g. track name, playback time) can be on display.
If the device doesn't support AVRCP1.3, or, if AVRCP1.3 feature of the device has not been validated with this unit, the track information won't be shown.
Even if there is no track information on display during playback of an AVRCP1.3 device, it is not a failure of this unit.

1. Connect the Bluetooth audio device (or smartphone, cellular phone with Bluetooth audio function) with this unit, and confirm the "Audio Streaming" icon ( ) is lights.
2. Playback the Bluetooth audio. Confirm the sound is emitted from this unit when this unit is switched to "BT AUDIO" source.
3. Confirm whether Bluetooth audio can be controlled by operating this unit (the [▶▶I ▶▶], [◀◀ I◀◀] and [▶II 6] buttons operation).

Note 2: Varies depending on the connected Bluetooth audio device.

8. What to Do after Checking

- After checking, this unit to execute initialization (refer to "IMPORTANT NOTE OF INITIALIZING" on page 6).
  (Connected device information is deleted)

BLUETOOTH INFORMATION WRITING METHOD

When the complete MAIN board, knob (VOL) assy (Ref. No. NFC1) or front panel assy (Ref. No. FP1) is replaced, the writing of Bluetooth information is necessary.
Write the Bluetooth information according to the procedure below.

Preparation:

- Windows PC
- NFC compatible smartphone that installed the file manager application (ASTRO File Manager, File Expert, etc.)
- USB cable for the smartphone
- NFC Tag Data Writing Application
  (Application name: ePF_NFCtagWriter_gm.apk)

Note: Confirm the method of obtaining the NFC Tag Data Writing Application and its latest version with the each service headquarters.

Notes on the use of the NFC Tag Data Writing Application

- The NFC Tag Data Writing Application is updated on an irregular basis.
  Always use the latest version of the NFC Tag Data Writing Application.
  To confirm the version of the NFC Tag Data Writing Application, refer to "Checking the Version of the NFC Tag Data Writing Application" on page 9.
- Be sure to uninstall older versions of the NFC Tag Data Writing Application before installing the latest version.
- There are multiple types of the NFC Tag Data Writing Application. If multiple NFC Tag Data Writing Applications are installed on a smartphone, do not launch more than one at the same time.
- The NFC Tag Data Writing Application varies depending on your model.
  Be sure to use the NFC Tag Data Writing Application that supports your model.
  Use of NFC Tag Data Writing Applications that do not support your model is strictly prohibited.

1. Installing the NFC Tag Data Writing Application for the Servicing

Install the NFC Tag Data Writing Application on the smartphone for writing of Bluetooth information.

If the NFC Tag Data Writing Application is already installed, confirm the following.

- Be absolutely sure that the NFC Tag Data Writing Application supports your model.
- Confirm that the NFC Tag Data Writing Application is the latest version.
  (Refer to "Checking the Version of the NFC Tag Data Writing Application" on page 9)

Procedure:

1. Prepare the NFC Tag Data Writing Application on the PC.

Note: Be absolutely sure that the NFC Tag Data Writing Application supports your model.

2. Connect the smartphone to the PC with the USB cable.
3. Transfer the NFC Tag Data Writing Application to the smartphone.
4. When tapping the "Settings" → "Security" on the screen of the smartphone, check the box "Unknown sources".

5. Disconnect the smartphone from the PC.
6. Use the file manager application to explore the NFC Tag Data Writing Application on the smartphone.
7. Click on the NFC Tag Data Writing Application to open it, and install the NFC Tag Data Writing Application to the smartphone.
8. When tapping the "Settings" → "Security" on the screen of the smartphone, uncheck the box "Unknown sources".

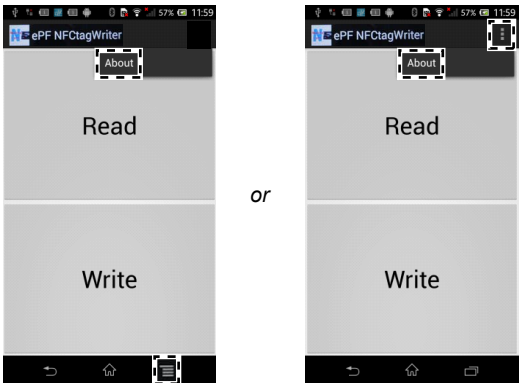
– Screen after the installation for reference –

9. Refer to "Checking the Version of the NFC Tag Data Writing Application" on page 9, and confirm that the NFC Tag Data Writing Application is the latest version.

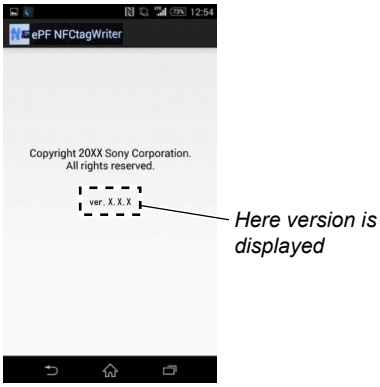
- **Checking the Version of the NFC Tag Data Writing Application**

Procedure:

1. Start the NFC Tag Data Writing Application on the smartphone.
2. Tap the " ☰ " (menu button) or " ⋮ " of the screen of the smartphone, then tap the "About" that is displayed on the screen of the smartphone.



3. Check that version of the NFC Tag Data Writing Application for the servicing is displayed on the screen of the smartphone.



2. Writing the NFC Tag Data

Write the NFC tag data (Bluetooth information) to the NFC module in the knob (VOL) assy (Ref. No. NFC1).

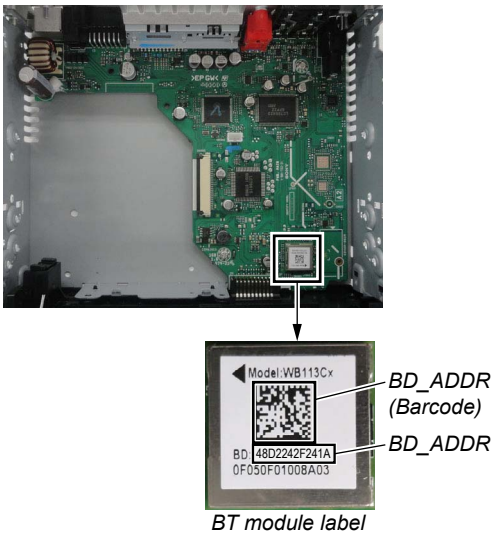
Procedure:

1. Check the Bluetooth address (BD_ADDR).
   There are following two checking methods.
   - How to read from the BT module label
   - How to display on the liquid crystal display by the test mode

How to read from the BT module label:

Set the unit to the state where the BT module on the MAIN board can be seen.
(Refer to "3. DISASSEMBLY" on page 25 and after)

– MAIN Board (Component Side) –



– Continued on next page –

How to display on the liquid crystal display by the test mode:

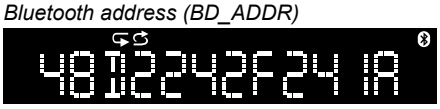
① In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] → [MIC 5] → [▶II 6] (press only the [▶II 6] button for two seconds).
(Displayed characters/values in the following figure are example)

Software main version

MEX-M71BT and MEX-N5200BT (US, CND) : "1031" or higher
MEX-N5200BT (AEP, UK, E, AUS) : "1030" or higher

② In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [⏤SCRL DSPL] button twice (software main version → software DSP version → Bluetooth address).
(Displayed characters/values in the following figure are example)

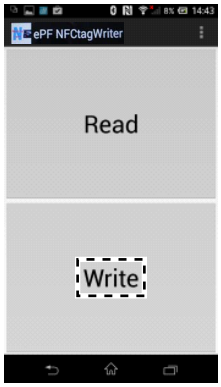
Bluetooth address (BD_ADDR)



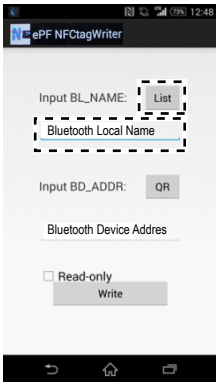
Note 1: When pressing the [⏤SCRL DSPL] button again, the destination code is displayed on the liquid crystal display, but it is not necessary to display in this step.

③ The resetting operation is executed by pressing the [⏤ OFF SRC] button for 1 second after the confirming ends, and the unit returns to the normal condition.

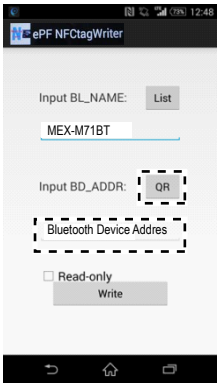
2. Turn on the NFC function of the smartphone.
3. Start the NFC Tag Data Writing Application on the smartphone.
4. Tap the "Write" on the screen of the smartphone.



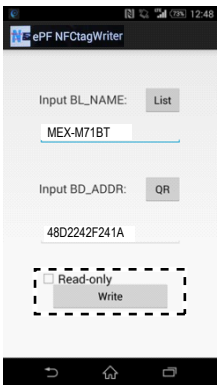
5. Input the Bluetooth Local Name (BL_NAME).
Tap the "List" on the screen of the smartphone and select the model name of the this unit. If there is not model name of the this unit on the list, please input the model name with the keyboard on the smartphone.



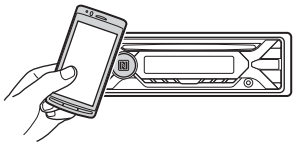
6. Input the Bluetooth address (BD_ADDR).
Input the Bluetooth address (BD_ADDR) that was checked by step 1 with the keyboard on the smartphone, or tap the "QR" on the screen of the smartphone and read the barcode with the camera of the smartphone.



7. Tap the "Write" on the screen of the smartphone, in the state that unchecked the box "Read-only".



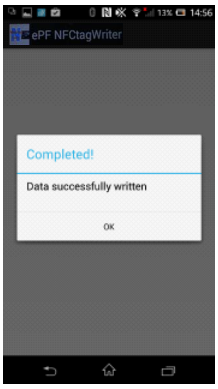
8. Touch the N-mark part of the smartphone to the N-mark part of the unit.



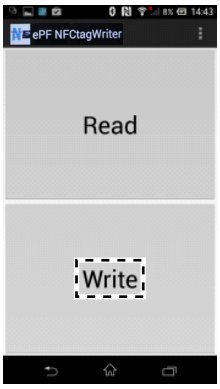
– Continued on next page –

9. Check that “Completed!” is displayed on the screen of the smartphone.

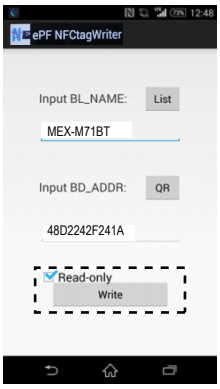
Note 2: When “Completed!” is not displayed on the screen of the smartphone, refer to “3. Error Display” on page 12.



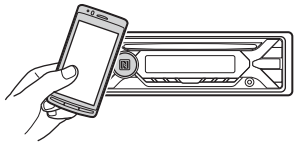
10. End the NFC Tag Data Writing Application on the smartphone.
11. Check the operation of connecting with the smartphone by one touch (NFC).
    (Refer to “OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS” on page 6)
12. Start the NFC Tag Data Writing Application on the smartphone.
13. Tap the “Write” on the screen of the smartphone.



14. Check the box “Read-only” on the screen of the smartphone, and tap the “Write” on the screen of the smartphone.

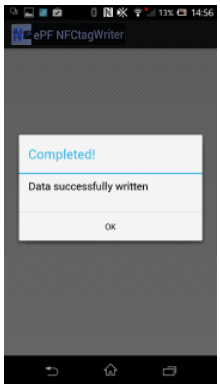


15. Touch the N-mark part of the smartphone to the N-mark part of the unit.

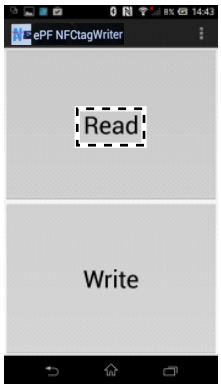


16. Check that “Completed!” is displayed on the screen of the smartphone.

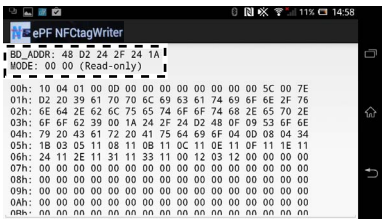
Note 3: When “Completed!” is not displayed on the screen of the smartphone, refer to “3. Error Display” on page 12.



17. Tap the “Read” on the screen of the smartphone.



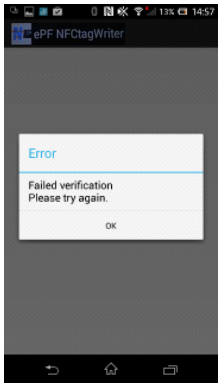
18. Check that “BD_ADDR” on the screen of the smartphone accords with BD_ADDR written on the BT module label and “MODE” on the screen of the smartphone is “00 00 (Read-only)”.



19. End the NFC Tag Data Writing Application on the smartphone.
20. Check the operation of connecting with the smartphone by one touch (NFC).
    (Refer to “OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS” on page 6)

3. Error Display

When the writing of the NFC tag data has failed, “Error” is displayed on the screen of the smartphone.
When “Error” is displayed on the screen of the smartphone, operate according to the procedure below.



Procedure:

1. Tap the “Write” on the screen of the smartphone to write of the NFC tag data again.
2. When “Error” is displayed on the screen of the smartphone again, tap the “Read” on the screen of the smartphone.
3. Check that “MODE” on the screen of the smartphone is not “00 00 (Read-only)”.
4. When “MODE” on the screen of the smartphone is “00 00 (Read-only)”, execute the writing of the NFC tag data again after replacing the knob (VOL) assy (Ref. No. NFC1).
   (When “MODE” on the screen of the smartphone is “00 00 (Read-only)”, the writing of the NFC tag data cannot execute)

4. Check Method of the NFC Tag Data

Check the NFC tag data according to the procedure below.

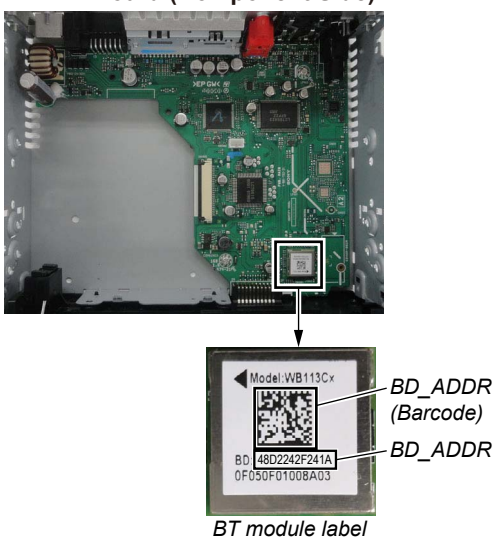
Procedure:

1. Check the Bluetooth address (BD_ADDR).
   There are following two checking methods.
   - How to read from the BT module label
   - How to display on the liquid crystal display by the test mode

How to read from the BT module label:

Set the unit to the state where the BT module on the MAIN board can be seen.
(Refer to “3. DISASSEMBLY” on page 25 and after)

– MAIN Board (Component Side) –



BT module label

How to display on the liquid crystal display by the test mode:

① In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] → [MIC 5] → [▶II 6] (press only the [▶II 6] button for two seconds).
(Displayed characters/values in the following figure are example)

Software main version

MEX-M71BT and MEX-N5200BT (US, CND) : “1031” or higher
MEX-N5200BT (AEP, UK, E, AUS) : “1030” or higher

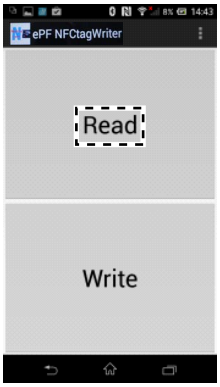
② In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [⬅SCRL DSPL] button twice (software main version → software DSP version → Bluetooth address).
(Displayed characters/values in the following figure are example)

Bluetooth address (BD_ADDR)

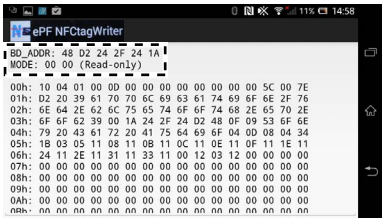
Note: When pressing the [⬅SCRL DSPL] button again, the destination code is displayed on the liquid crystal display, but it is not necessary to display in this step.

③ The resetting operation is executed by pressing the [⬅ OFF SRC] button for 1 second after the confirming ends, and the unit returns to the normal condition.

2. Turn on the NFC function of the smartphone.
3. Start the NFC Tag Data Writing Application on the smartphone.
4. Tap the “Read” on the screen of the smartphone.



5. Check that “BD_ADDR” on the screen of the smartphone accords with BD_ADDR written on the BT module label and “MODE” on the screen of the smartphone is “00 00 (Read-only)”.



6. End the NFC Tag Data Writing Application on the smartphone.

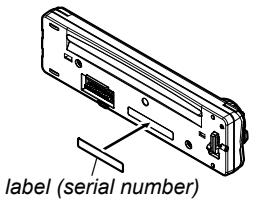
5. The Factor that One Touch Connection is Impossible

The four following factors are considered as the factor that one touch connection is impossible.
Guess and check the defective factor by each checking result.
Note: The four following factors are examples.

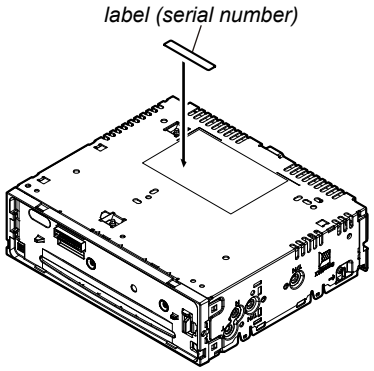
	Factor	Bluetooth manual connection check by user	NFC tag data check	Bluetooth manual connection check by servicing	NFC one touch connection check with smartphone
1	BT module defect	NG	—	NG	NG
2	knob (VOL) assy defect	OK	NG	OK	NG
3	NFC tag data writing failure	OK	NG	OK	NG
4	Smartphone	OK	OK	OK	NG

AFFIXING OF LABEL (SERIAL NUMBER)

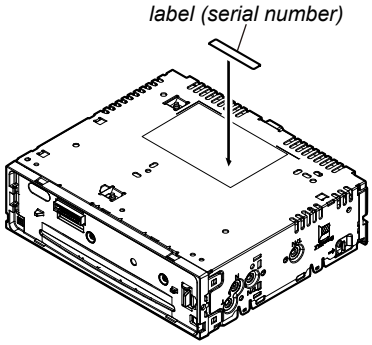
When the front panel assy (Ref. No. FP1) is replaced, it is necessary to affix the label (serial number).
2 labels (serial number) are included with a new front panel assy (Ref. No. FP1). Affix 1 label to the rear side of the front panel assy (Ref. No. FP1). Affix the other one to the bottom side of main unit.
Be sure to perform this procedure, as Bluetooth will not operate correctly if the serial number of the front panel assy (Ref. No. FP1) and main unit do not match.
Also, since the serial number has changed, print page 15 and hand the tear-off with the product to the customer when returning the product after repairs are complete.



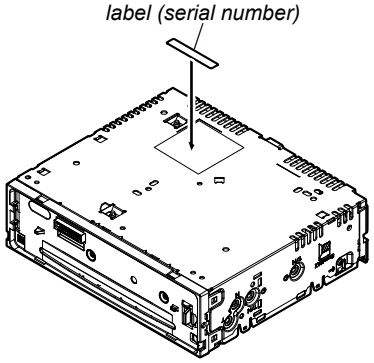
– Front panel assy rear view –



– Main unit bottom view –
(MEX-M71BT/ N5200BT: US, CND models)



– Main unit bottom view –
(N5200BT: AEP, UK models)



– Main unit bottom view –
(MEX-N5200BT: E, AUS models)

MEMO

- Please cut out along the dotted line and use it.

Notice about the serial number change on the back side of the front panel:
The serial number on the back of the front panel has changed due to repairs.
For details, refer to the “Detaching the Front Panel” section of “Getting Started” in the operating instruction.

Notice about the serial number change on the back side of the front panel:
The serial number on the back of the front panel has changed due to repairs.
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Notice about the serial number change on the back side of the front panel:
The serial number on the back of the front panel has changed due to repairs.
For details, refer to the “Detaching the Front Panel” section of “Getting Started” in the operating instruction.

Notice about the serial number change on the back side of the front panel:
The serial number on the back of the front panel has changed due to repairs.
For details, refer to the “Detaching the Front Panel” section of “Getting Started” in the operating instruction.

MEMO

SECTION 2
GENERAL

This section is extracted from operating instruction.

(M71BT)

Connection/Installation

Cautions

- **Run all ground (earth) leads to a common ground (earth) point.**
- Do not get the leads trapped under a screw, or caught in moving parts (e.g., seat railing).
- Before making connections, turn the boat's ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

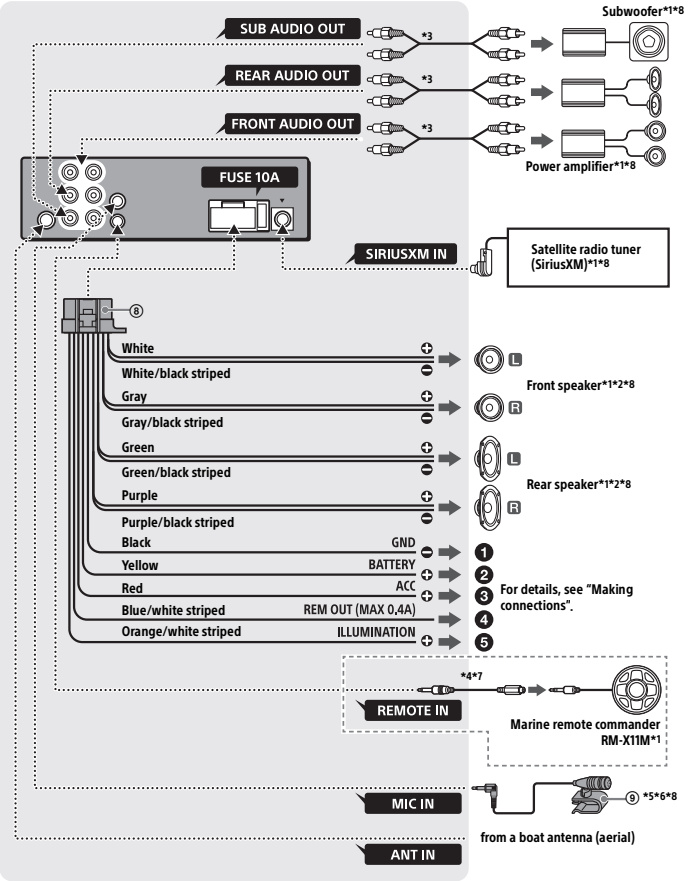
Precautions

- Choose the installation location carefully so that the unit will not interfere with normal boating or car driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Select carefully the mounting location to avoid internal damage by water entering the unit. Areas subject to water splashes should be avoided. The Waterproof Car Stereo Cover (not supplied) is recommended.
- Use only the supplied mounting hardware for a safe and secure installation.

Note on the power supply lead (yellow)
When connecting this unit in combination with other stereo components, the amperage rating of the boat circuit to which the unit is connected must be higher than the sum of each component's fuse amperage rating.

Mounting angle adjustment
Adjust the mounting angle to less than 45°.

Connection



*1 Not supplied
*2 Speaker impedance: 4 Ω – 8 Ω × 4
*3 RCA pin cord (not supplied)
*4 Depending on the type of boat, use an adaptor for a wired remote control (not supplied).
*5 Whether in use or not, route the microphone input cord such that it does not interfere with driving operations. Secure the cord with a clamp, etc., if it is installed around your feet.
*6 For details on installing the microphone, see "Installing the microphone".
*7 Supplied with the marine remote commander.
*8 Not waterproof

Making connections

❶ **To a common ground (earth) point**
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ **To the +12 V power terminal which is energized at all times**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

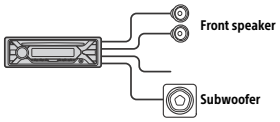
❸ **To the +12 V power terminal which is energized when the ignition switch is set to the accessory position**
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

❹ **To the power antenna (aerial) control lead or the power supply lead of the antenna (aerial) booster**
It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).
To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers and a power antenna (aerial). Connecting any other system may damage the unit.

❺ **To a boat's illumination signal**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

Subwoofer Easy Connection

You can use a subwoofer without a power amplifier when it is connected to a rear speaker cord.



Note
Use a subwoofer with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Memory hold connection

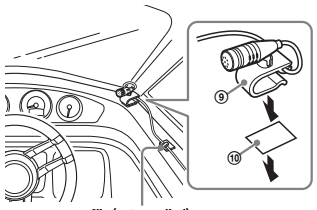
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Installing the microphone

To capture your voice during handsfree calling, you need to install the microphone ⑨.



Clip (not supplied)

Cautions

- It is extremely dangerous if the cord becomes wound around the steering column or gearstick. Be sure to keep it and other parts from interfering with your driving operations.
- If any shock-absorbing equipment is in your boat, contact the store where you purchased this unit, or the boat dealer, before installation.

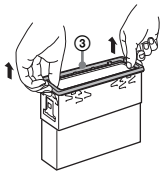
Note
Before attaching the double-sided tape ⑩, clean the surface of the dashboard with a dry cloth.

Installation

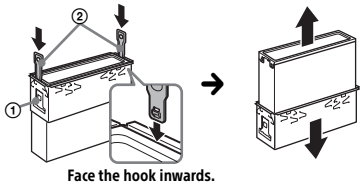
Removing the protection collar and the bracket

Before installing the unit, remove the protection collar ③ and the bracket ① from the unit.

1 Pinch both edges of the protection collar ③, then pull it out.



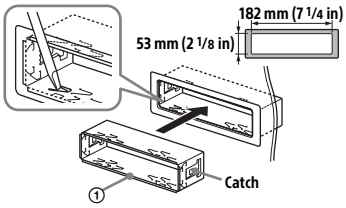
2 Insert both release keys ② until they click, and pull down the bracket ①, then pull up the unit to separate.



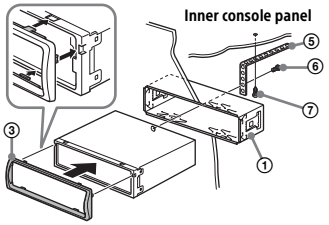
Mounting the unit in the dashboard or the cutout hole on boat

- Before installing, make sure the catches on both sides of the bracket ① are bent inwards 2 mm (3/32 in).
- For Japanese cars, see "Mounting the unit in a Japanese car".

1 Position the bracket ① inside the dashboard, then bend the claws outward for a tight fit.



2 Mount the unit onto the bracket ①, then attach the protection collar ③.



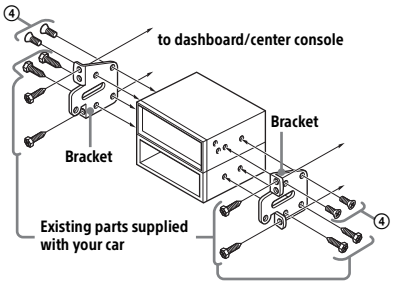
Notes

- If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.
- Make sure the 4 catches on the protection collar ③ are properly engaged in the slots of the unit.

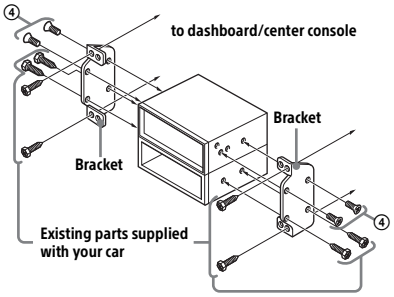
Mounting the unit in a Japanese car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

TOYOTA



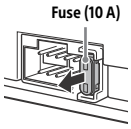
NISSAN



Note

To prevent malfunction, install only with the supplied screws ④.

Fuse replacement



When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

(N5200BT: US, CND)

Connection/Installation

Cautions

- **Run all ground (earth) leads to a common ground (earth) point.**
- Do not get the leads trapped under a screw, or caught in moving parts (e.g., seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

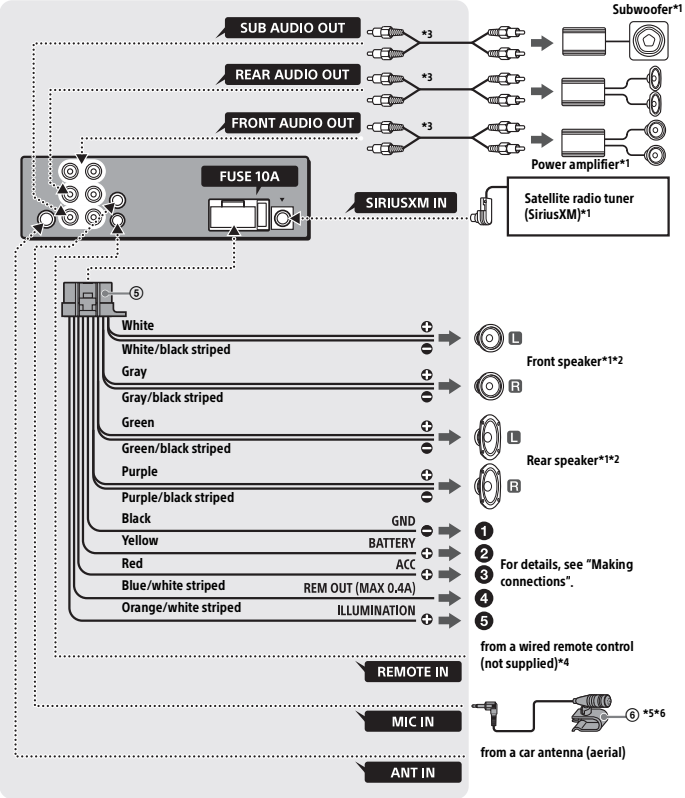
Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Note on the power supply lead (yellow)
When connecting this unit in combination with other stereo components, the amperage rating of the car circuit to which the unit is connected must be higher than the sum of each component's fuse amperage rating.

Mounting angle adjustment
Adjust the mounting angle to less than 45°.

Connection



*1 Not supplied
*2 Speaker impedance: 4 Ω – 8 Ω × 4
*3 RCA pin cord (not supplied)
*4 Depending on the type of car, use an adaptor for a wired remote control (not supplied). For details on using the wired remote control, see "Using the wired remote control".
*5 Whether in use or not, route the microphone input cord such that it does not interfere with driving operations. Secure the cord with a clamp, etc., if it is installed around your feet.
*6 For details on installing the microphone, see "Installing the microphone".

Making connections

❶ **To a common ground (earth) point**
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ **To the +12 V power terminal which is energized at all times**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

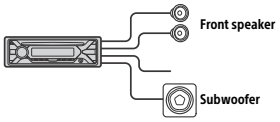
❸ **To the +12 V power terminal which is energized when the ignition switch is set to the accessory position**
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

❹ **To the power antenna (aerial) control lead or the power supply lead of the antenna (aerial) booster**
It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).
To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers and a power antenna (aerial). Connecting any other system may damage the unit.

❺ **To a car's illumination signal**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

Subwoofer Easy Connection

You can use a subwoofer without a power amplifier when it is connected to a rear speaker cord.



Note
Use a subwoofer with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Memory hold connection

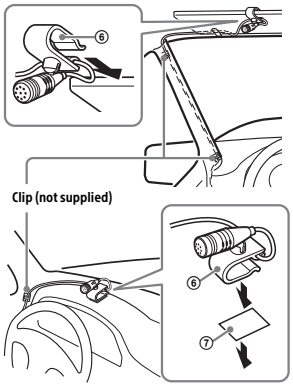
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Installing the microphone

To capture your voice during handsfree calling, you need to install the microphone ⑥.



Cautions
- It is extremely dangerous if the cord becomes wound around the steering column or gearstick. Be sure to keep it and other parts from interfering with your driving operations.
- If airbags or any other shock-absorbing equipment is in your car, contact the store where you purchased this unit, or the car dealer, before installation.

Note
Before attaching the double-sided tape ⑦, clean the surface of the dashboard with a dry cloth.

Using the wired remote control

When using the steering wheel remote control

Installation of the connection cable RC-SR1 (not supplied) is required before use.

1 To enable the steering wheel remote control, select [SET STEERING] → [EDIT CUSTOM] to make the registration.
When the registration completes, the steering wheel remote control becomes available.

Notes on installing the connection cable RC-SR1 (not supplied)

- Refer to the support sites on the back cover for details, then connect each lead properly to the appropriate leads. Making an improper connection may damage the unit.
- Depending on the type of car, be sure to insulate the unused leads with electrical tape for safety.
- Do not connect this cable when the steering wheel remote control is not used.
- Consulting the dealer or an experienced technician for help is recommended.

When using the wired remote control

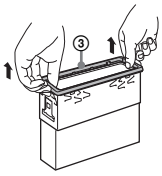
1 To enable the wired remote control, set [STR CONTROL] in [SET STEERING] to [PRESET].

Installation

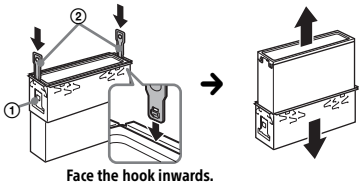
Removing the protection collar and the bracket

Before installing the unit, remove the protection collar ③ and the bracket ① from the unit.

1 Pinch both edges of the protection collar ③, then pull it out.



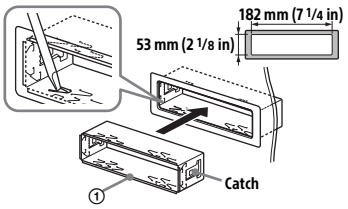
2 Insert both release keys ② until they click, and pull down the bracket ①, then pull up the unit to separate.



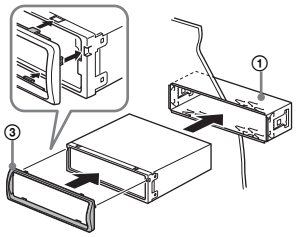
Mounting the unit in the dashboard

- Before installing, make sure the catches on both sides of the bracket ① are bent inwards 2 mm (3/32 in).
- For Japanese cars, see "Mounting the unit in a Japanese car".

1 Position the bracket ① inside the dashboard, then bend the claws outward for a tight fit.



2 Mount the unit onto the bracket ①, then attach the protection collar ③.



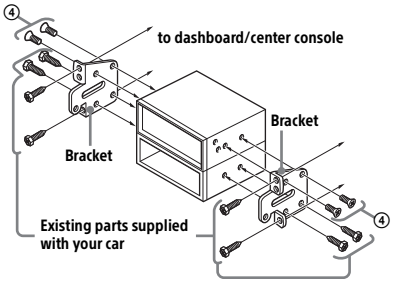
Notes

- If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.
- Make sure the 4 catches on the protection collar ③ are properly engaged in the slots of the unit.

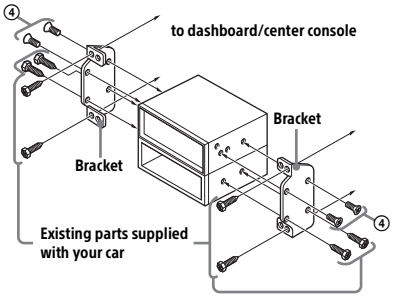
Mounting the unit in a Japanese car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

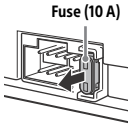
TOYOTA



NISSAN



Fuse replacement



When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

(N5200BT: AEP, UK)

Connection/Installation

Cautions

- **Run all ground (earth) leads to a common ground (earth) point.**
- Do not get the leads trapped under a screw, or caught in moving parts (e.g., seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power supply lead ⑥ to the unit and speakers before connecting it to the auxiliary power connector.
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

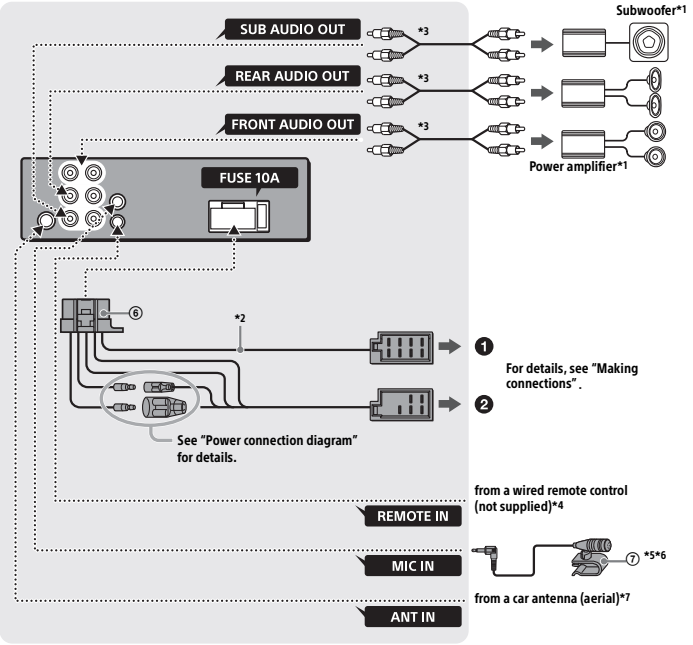
Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Note on the power supply lead (yellow)
When connecting this unit in combination with other stereo components, the amperage rating of the car circuit to which the unit is connected must be higher than the sum of each component's fuse amperage rating.

Mounting angle adjustment
Adjust the mounting angle to less than 45°.

Connection

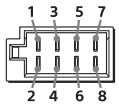


*1 Not supplied
*2 Speaker impedance: 4 Ω – 8 Ω × 4
*3 RCA pin cord (not supplied)
*4 Depending on the type of car, use an adaptor for a wired remote control (not supplied). For details on using the wired remote control, see "Using the wired remote control".
*5 Whether in use or not, route the microphone input cord such that it does not interfere with driving operations. Secure the cord with a clamp, etc., if it is installed around your feet.
*6 For details on installing the microphone, see "Installing the microphone.
*7 Depending on the type of car, use an adaptor (not supplied) if the antenna connector does not fit.

Making connections

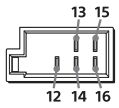
If you have a power antenna (aerial) without a relay box, connecting this unit with the supplied power supply lead ⑥ may damage the antenna (aerial).

❶ To the car's speaker connector



1	Rear speaker (right)	⊕	Purple
2		⊖	Purple/black striped
3	Front speaker (right)	⊕	Gray
4		⊖	Gray/black striped
5	Front speaker (left)	⊕	White
6		⊖	White/black striped
7	Rear speaker (left)	⊕	Green
8		⊖	Green/black striped

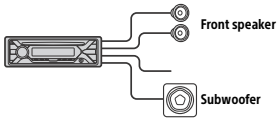
❷ To the car's power connector



12	continuous power supply	Yellow
13	power antenna (aerial) /power amplifier control (REM OUT)	Blue/white striped
14	switched illumination power supply	Orange/ white striped
15	switched power supply	Red
16	ground (earth)	Black

Subwoofer Easy Connection

You can use a subwoofer without a power amplifier when it is connected to a rear speaker cord.



Notes
- Preparation of the rear speaker cords is required.
- Use a subwoofer with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Memory hold connection

When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

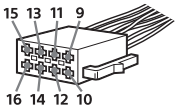
Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

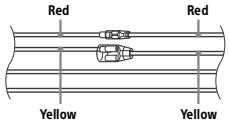
Power connection diagram

Check your car's auxiliary power connector, and match the connections of cords correctly depending on the car.

Auxiliary power connector

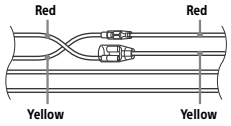


Common connection



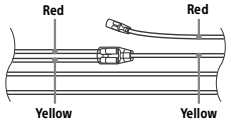
12	continuous power supply	Yellow
15	switched power supply	Red

When the positions of the red and yellow leads are inverted



12	switched power supply	Yellow
15	continuous power supply	Red

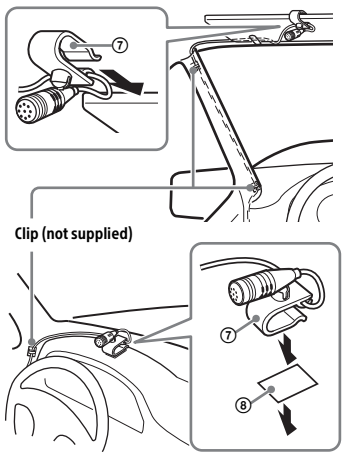
When the car without ACC position



After matching the connections and switching power supply leads correctly, connect the unit to the car's power supply. If you have any questions and problems connecting your unit that are not covered in this manual, consult the car dealer.

Installing the microphone

To capture your voice during handsfree calling, you need to install the microphone ⑦.



Cautions

- It is extremely dangerous if the cord becomes wound around the steering column or gearstick. Be sure to keep it and other parts from interfering with your driving operations.
- If airbags or any other shock-absorbing equipment is in your car, contact the store where you purchased this unit, or the car dealer, before installation.

Note

Before attaching the double-sided tape ⑧, clean the surface of the dashboard with a dry cloth.

Using the wired remote control

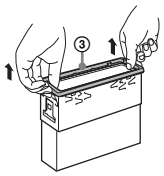
1 To enable the wired remote control, set [STR CONTROL] in [SET STEERING] to [PRESET].

Installation

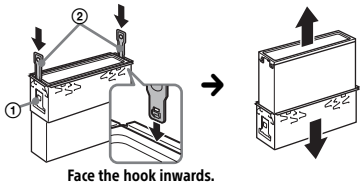
Removing the protection collar and the bracket

Before installing the unit, remove the protection collar ③ and the bracket ① from the unit.

1 Pinch both edges of the protection collar ③, then pull it out.



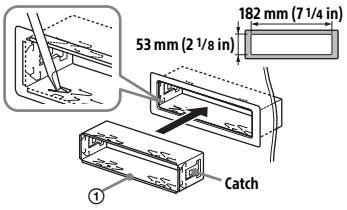
2 Insert both release keys ② until they click, and pull down the bracket ①, then pull up the unit to separate.



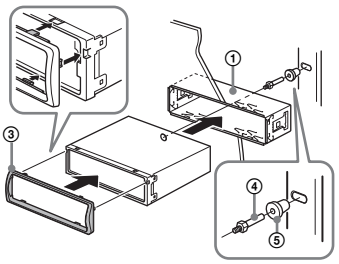
Mounting the unit in the dashboard

Before installing, make sure the catches on both sides of the bracket ① are bent inwards 2 mm (3/32 in).

1 Position the bracket ① inside the dashboard, then bend the claws outward for a tight fit.



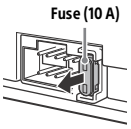
2 Mount the unit onto the bracket ①, then attach the protection collar ③.



Notes

- If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.
- Make sure the 4 catches on the protection collar ③ are properly engaged in the slots of the unit.

Fuse replacement



When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

(N5200BT: E, AUS)

Connection/Installation

Cautions

- **Run all ground (earth) leads to a common ground (earth) point.**
- Do not get the leads trapped under a screw, or caught in moving parts (e.g., seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

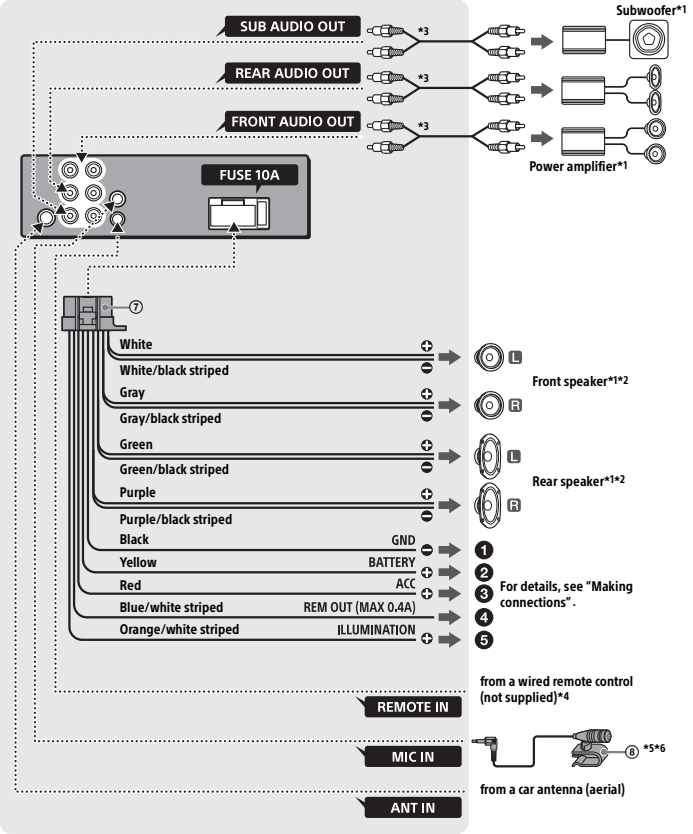
Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Note on the power supply lead (yellow)
When connecting this unit in combination with other stereo components, the amperage rating of the car circuit to which the unit is connected must be higher than the sum of each component's fuse amperage rating.

Mounting angle adjustment
Adjust the mounting angle to less than 45°.

Connection



*1 Not supplied
*2 Speaker impedance: 4 Ω – 8 Ω × 4
*3 RCA pin cord (not supplied)
*4 Depending on the type of car, use an adaptor for a wired remote control (not supplied). For details on using the wired remote control, see "Using the wired remote control".
*5 Whether in use or not, route the microphone input cord such that it does not interfere with driving operations. Secure the cord with a clamp, etc., if it is installed around your feet.
*6 For details on installing the microphone, see "Installing the microphone.

Making connections

❶ **To a common ground (earth) point**
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ **To the +12 V power terminal which is energized at all times**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

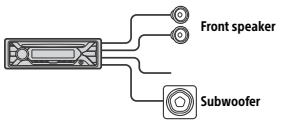
❸ **To the +12 V power terminal which is energized when the ignition switch is set to the accessory position**
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

❹ **To the power antenna (aerial) control lead or the power supply lead of the antenna (aerial) booster**
It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).
To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers and a power antenna (aerial). Connecting any other system may damage the unit.

❺ **To a car's illumination signal**
Be sure to first connect the black ground (earth) lead to a common ground (earth) point.

Subwoofer Easy Connection

You can use a subwoofer without a power amplifier when it is connected to a rear speaker cord.



Note
Use a subwoofer with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Memory hold connection

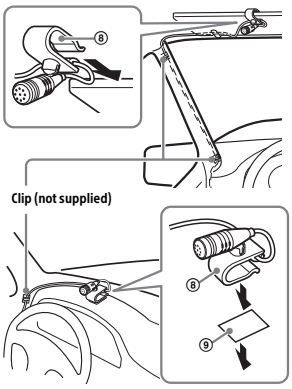
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 Ω to 8 Ω, and with adequate power handling capacities to avoid damage.

Installing the microphone

To capture your voice during handsfree calling, you need to install the microphone ⑧.



Cautions
- It is extremely dangerous if the cord becomes wound around the steering column or gearstick. Be sure to keep it and other parts from interfering with your driving operations.
- If airbags or any other shock-absorbing equipment is in your car, contact the store where you purchased this unit, or the car dealer, before installation.

Note
Before attaching the double-sided tape ⑨, clean the surface of the dashboard with a dry cloth.

Using the wired remote control

When using the steering wheel remote control (AUS only)

Installation of the connection cable RC-SR1 (not supplied) is required before use.

1 To enable the steering wheel remote control, select [SET STEERING] → [EDIT CUSTOM] to make the registration . When the registration completes, the steering wheel remote control becomes available.

Notes on installing the connection cable RC-SR1 (not supplied)

- Refer to the support sites on the back cover for details, then connect each lead properly to the appropriate leads. Making an improper connection may damage the unit.
- Depending on the type of car, be sure to insulate the unused leads with electrical tape for safety.
- Do not connect this cable when the steering wheel remote control is not used.
- Consulting the dealer or an experienced technician for help is recommended.

When using the wired remote control

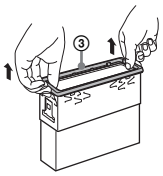
1 To enable the wired remote control, set [STR CONTROL] in [SET STEERING] to [PRESET] .

Installation

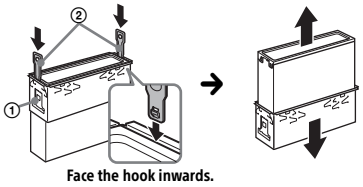
Removing the protection collar and the bracket

Before installing the unit, remove the protection collar ③ and the bracket ① from the unit.

1 Pinch both edges of the protection collar ③, then pull it out.



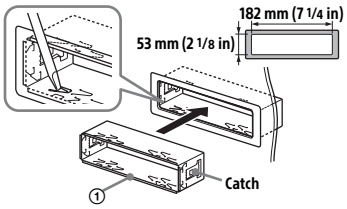
2 Insert both release keys ② until they click, and pull down the bracket ①, then pull up the unit to separate.



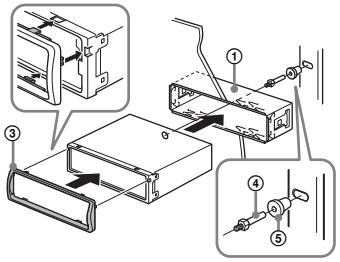
Mounting the unit in the dashboard

- Before installing, make sure the catches on both sides of the bracket ① are bent inwards 2 mm (3/32 in).
- For Japanese cars, see "Mounting the unit in a Japanese car".

1 Position the bracket ① inside the dashboard, then bend the claws outward for a tight fit.



2 Mount the unit onto the bracket ①, then attach the protection collar ③.



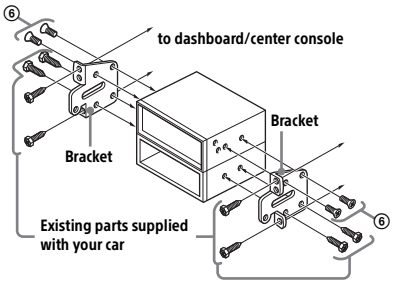
Notes

- If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.
- Make sure the 4 catches on the protection collar ③ are properly engaged in the slots of the unit.

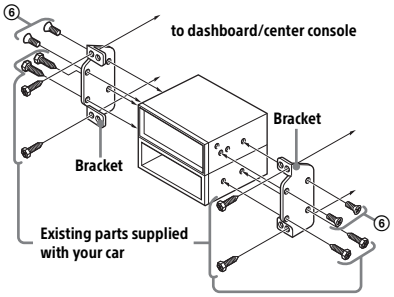
Mounting the unit in a Japanese car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

TOYOTA



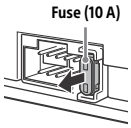
NISSAN



Note

To prevent malfunction, install only with the supplied screws ⑥.

Fuse replacement

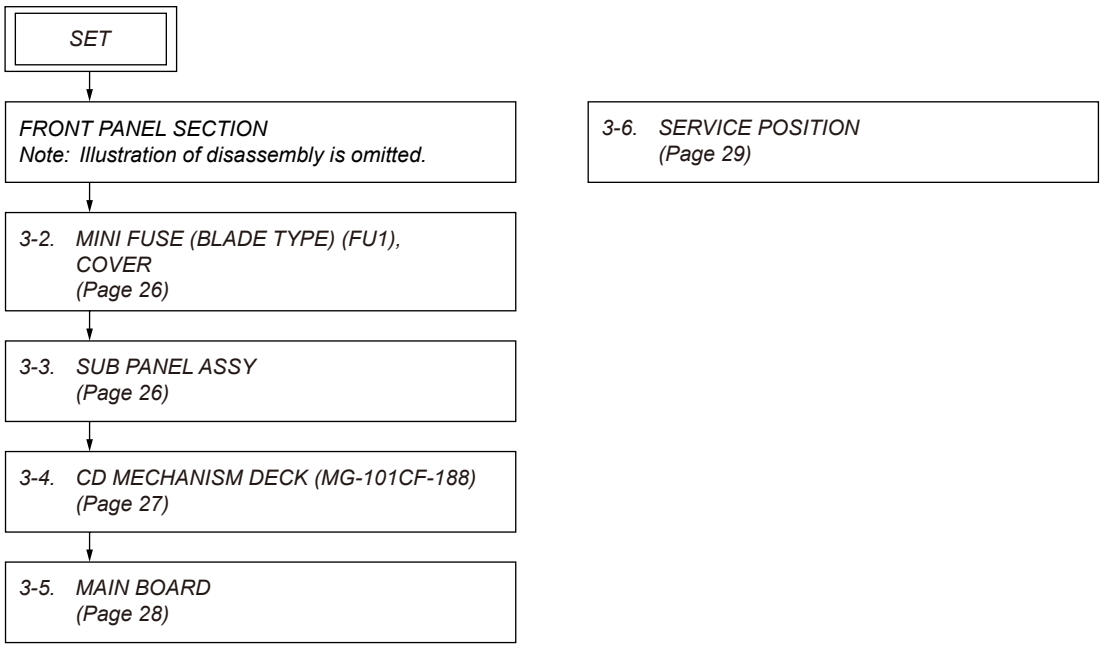


When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

SECTION 3
DISASSEMBLY

- This set can be disassembled in the order shown below.

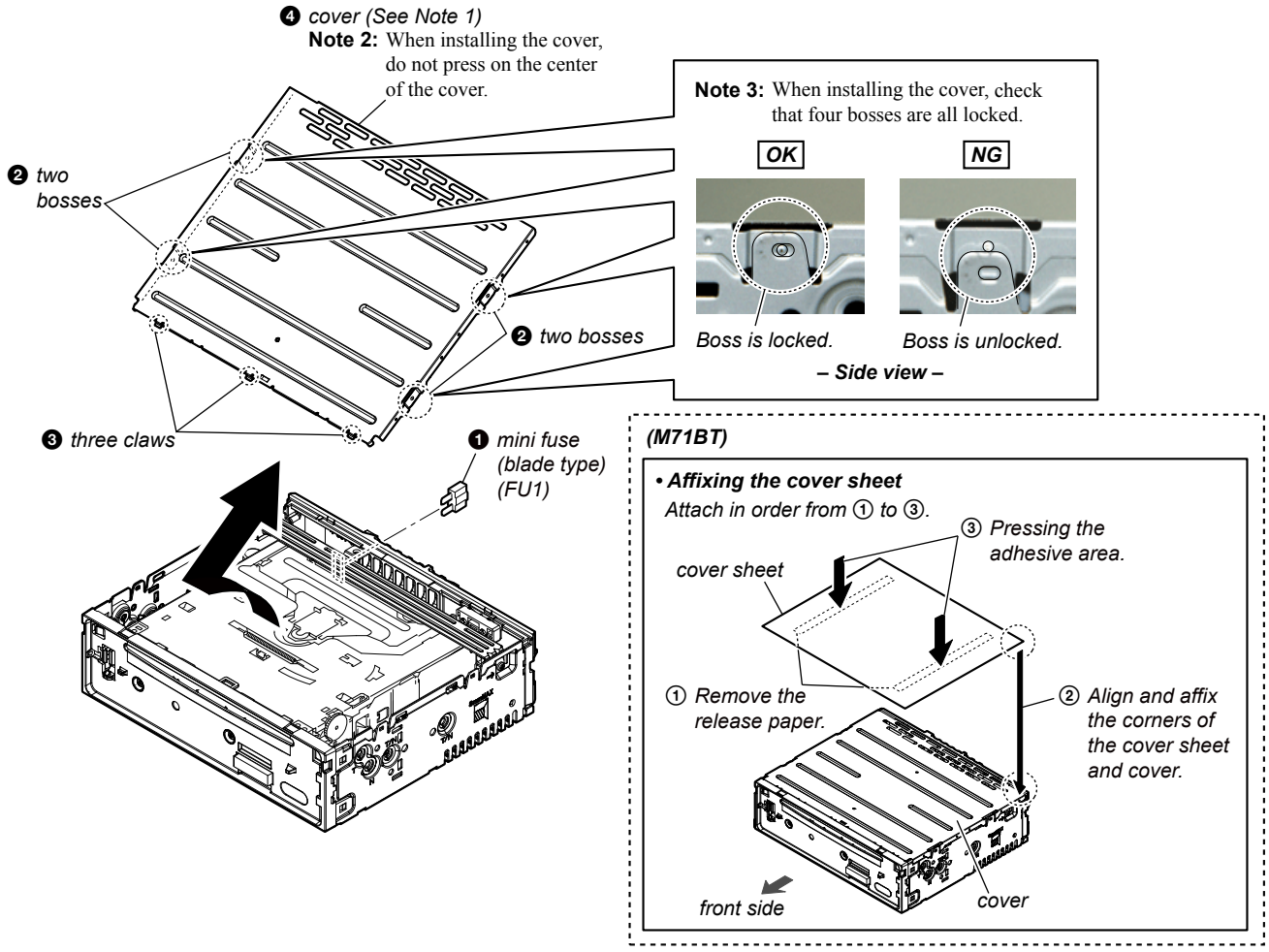
3-1. DISASSEMBLY FLOW



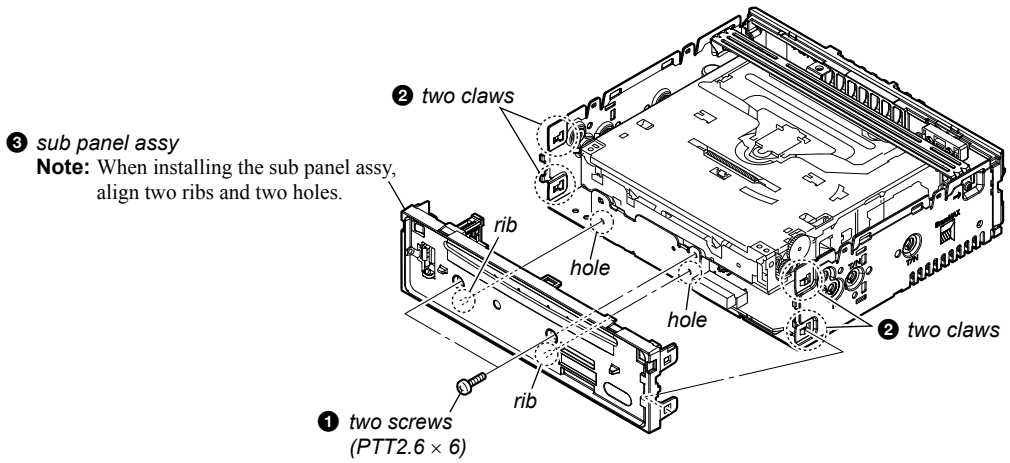
Note: Follow the disassembly procedure in the numerical order given.

3-2. MINI FUSE (BLADE TYPE) (FU1), COVER

Note 1: For the MEX-M71BT, a cover sheet is attached to the cover. Remove the cover block without peeling off the cover sheet. The illustration depicts the MEX-N5200BT.

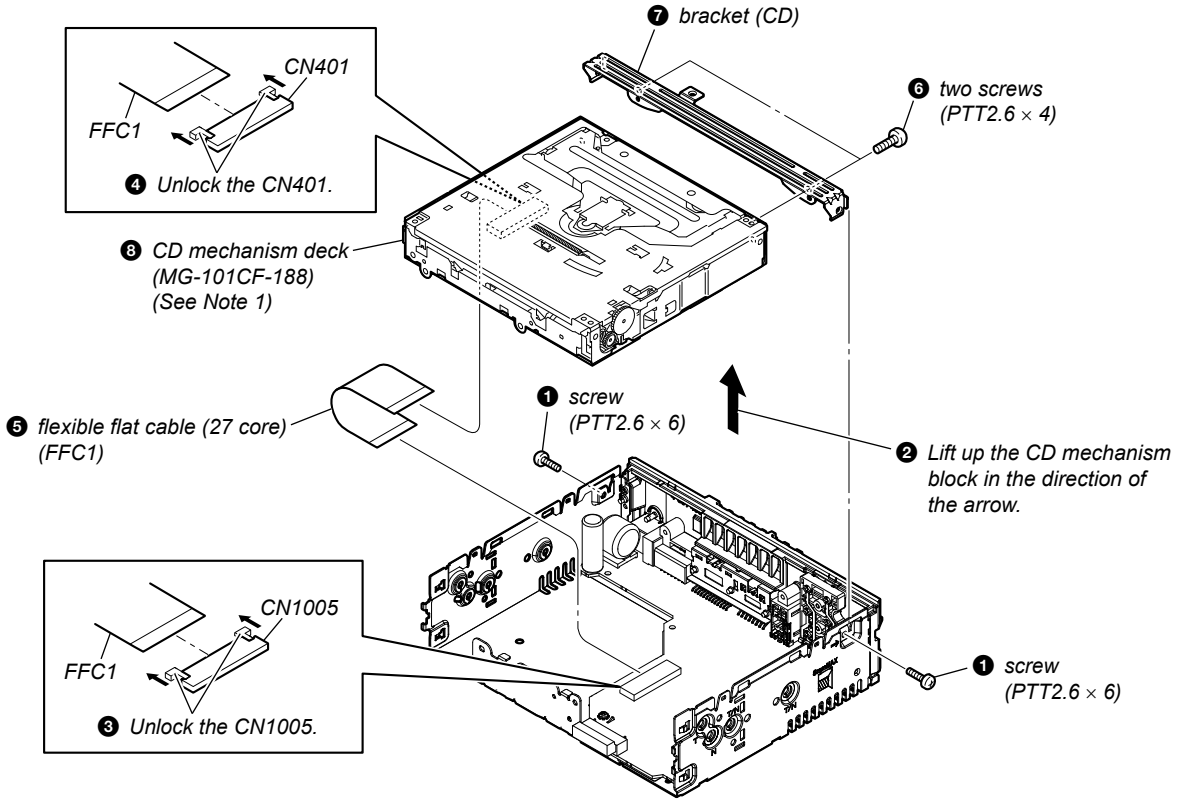


3-3. SUB PANEL ASSY



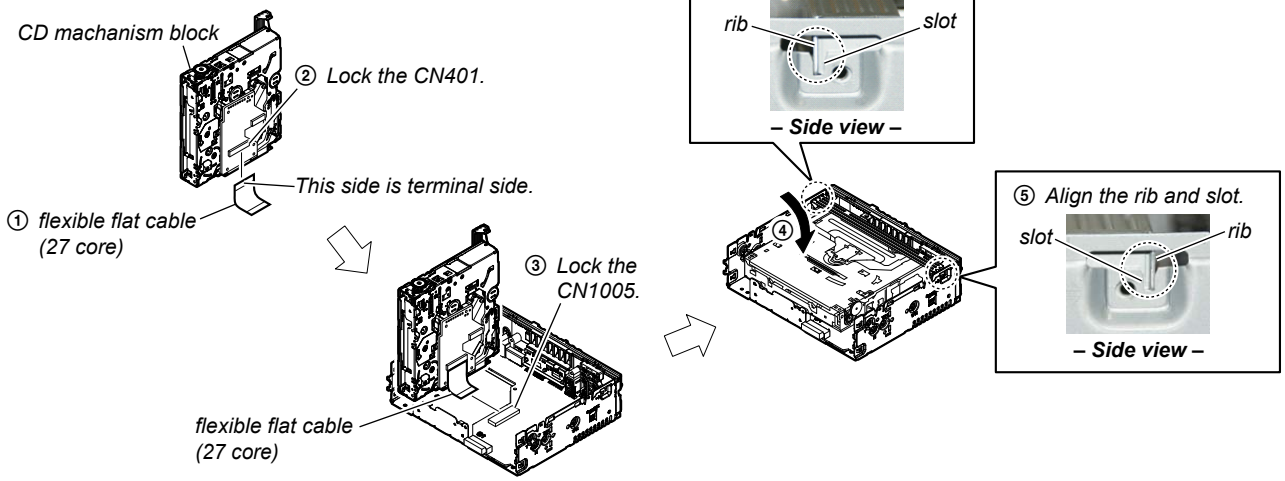
3-4. CD MECHANISM DECK (MG-101CF-188)

Note 1: The service manual of the mechanism deck, used in this model has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.

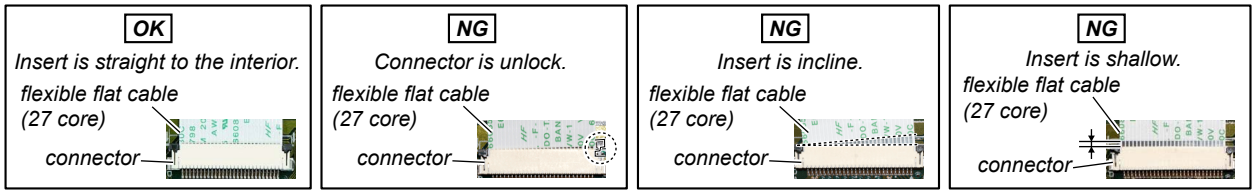


• How to install the CD mechanism block

Attach in order from ① to ⑤.

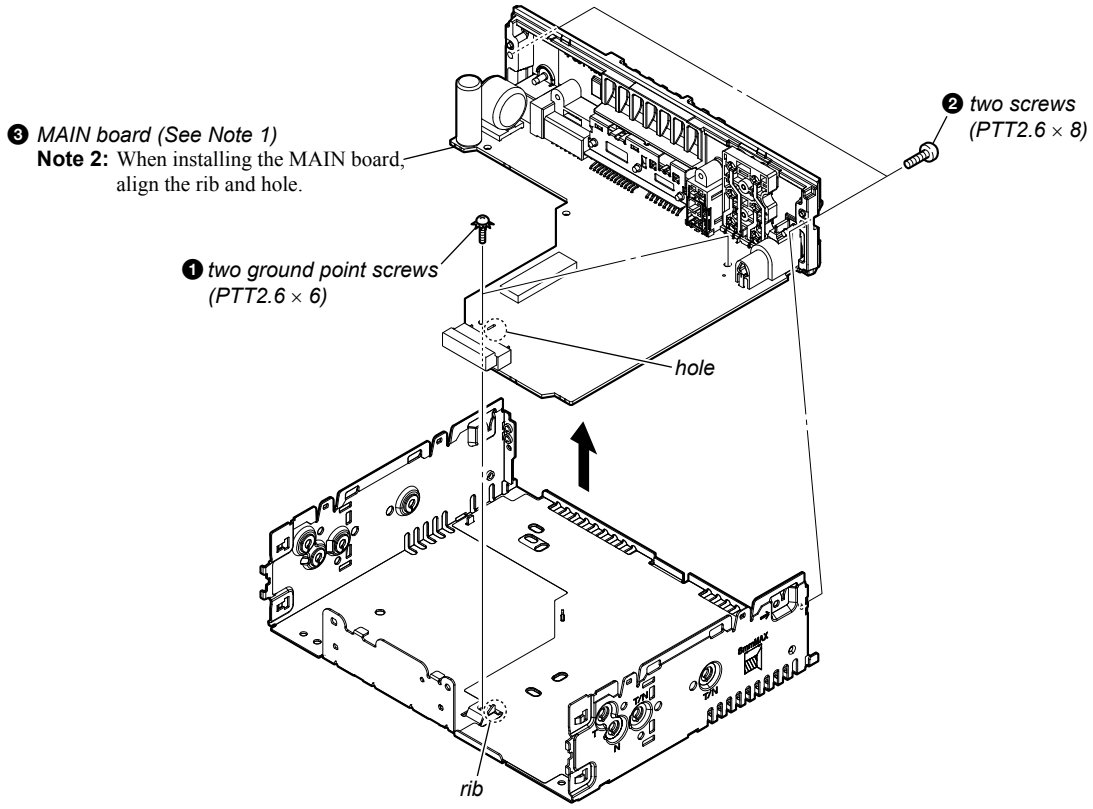


Note 2: When installing the flexible flat cable (27 core), insert straight to the connector and lock a connector completely.
No slanting after insertion.



3-5. MAIN BOARD

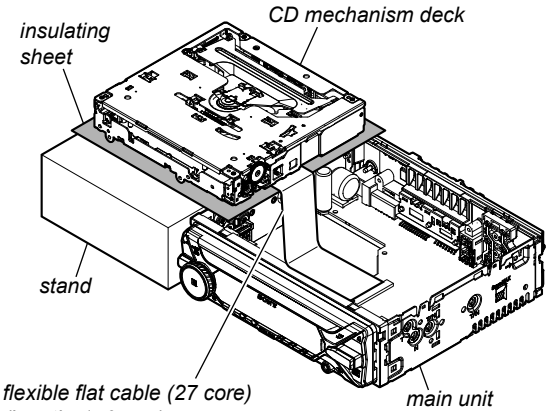
Note 1: When the MAIN board is replaced, it is necessary to replace knob (VOL) assy (Ref. No. NFC1) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 4, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 7 and "BLUETOOTH INFORMATION WRITING METHOD" on page 8.



3-6. SERVICE POSITION

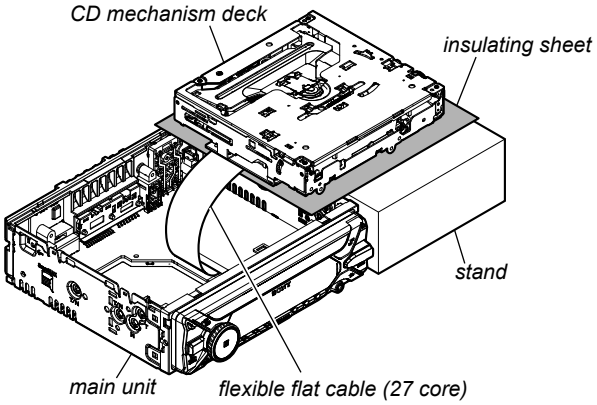
Note 1: The service position below cannot be performed with the flexible flat cable (length: 90 mm) used with the unit. Refer to "FLEXIBLE FLAT CABLE FOR THE MECHANISM DECK CONNECTION" on page 6, and use a long flexible flat cable (length: 150 mm).

OK



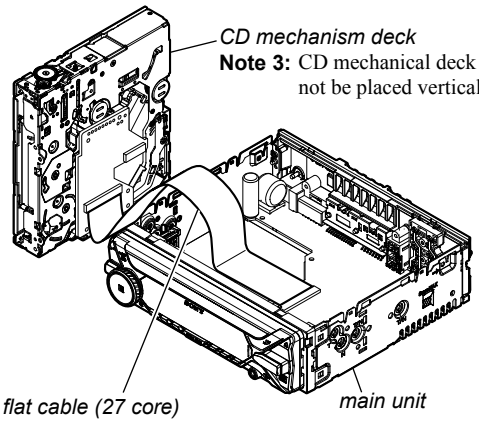
Note 2: Do not flexible flat cable (27 core) is damaged by the edge of the chassis.

OK



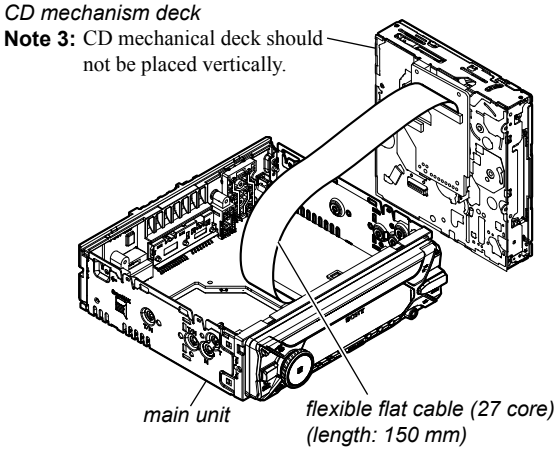
Note 2: Do not flexible flat cable (27 core) is damaged by the edge of the chassis.

NG



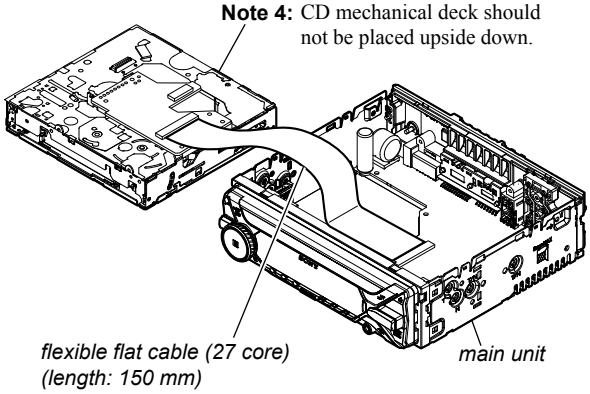
Note 3: CD mechanical deck should not be placed vertically.

NG



Note 3: CD mechanical deck should not be placed vertically.

NG



Note 4: CD mechanical deck should not be placed upside down.

SECTION 4
TEST MODE

SETTING THE TEST MODE

Setting method:

1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] → [MIC 5] → [▼ ALBUM 1] (press only the [▼ ALBUM 1] button for two seconds).
2. It is set to the test mode, and all segments of the liquid crystal display light.

Releasing method:

Press the [⏏ OFF SRC] button for 1 second.

MICROPHONE AUDIO LOOPBACK

To confirm the state of the external microphone used when a handsfree function is used, the microphone audio is output from the speaker.
The breakdown judgment of the microphone can be done without connecting H/F with the smartphone or cellular phone.

Procedure:

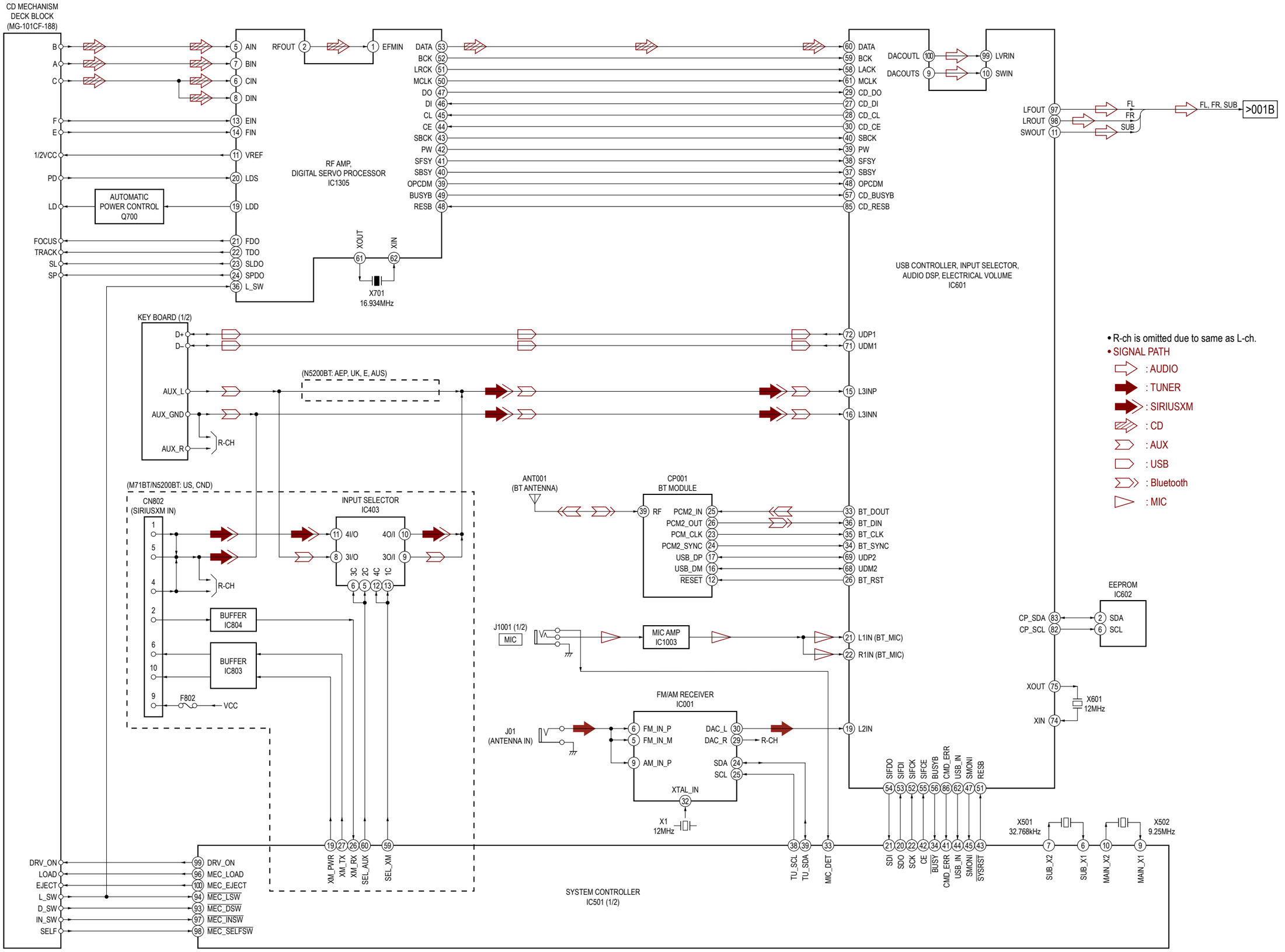
1. Enter the test mode.
2. Press the [⏏ OFF SRC] button to select the "BT PHONE" function.
3. On/off of the microphone audio loopback function changes whenever the [ALBUM ▲ 2] button is pressed ("↻" (repeat mark) is displayed on the liquid crystal display).

Screen display

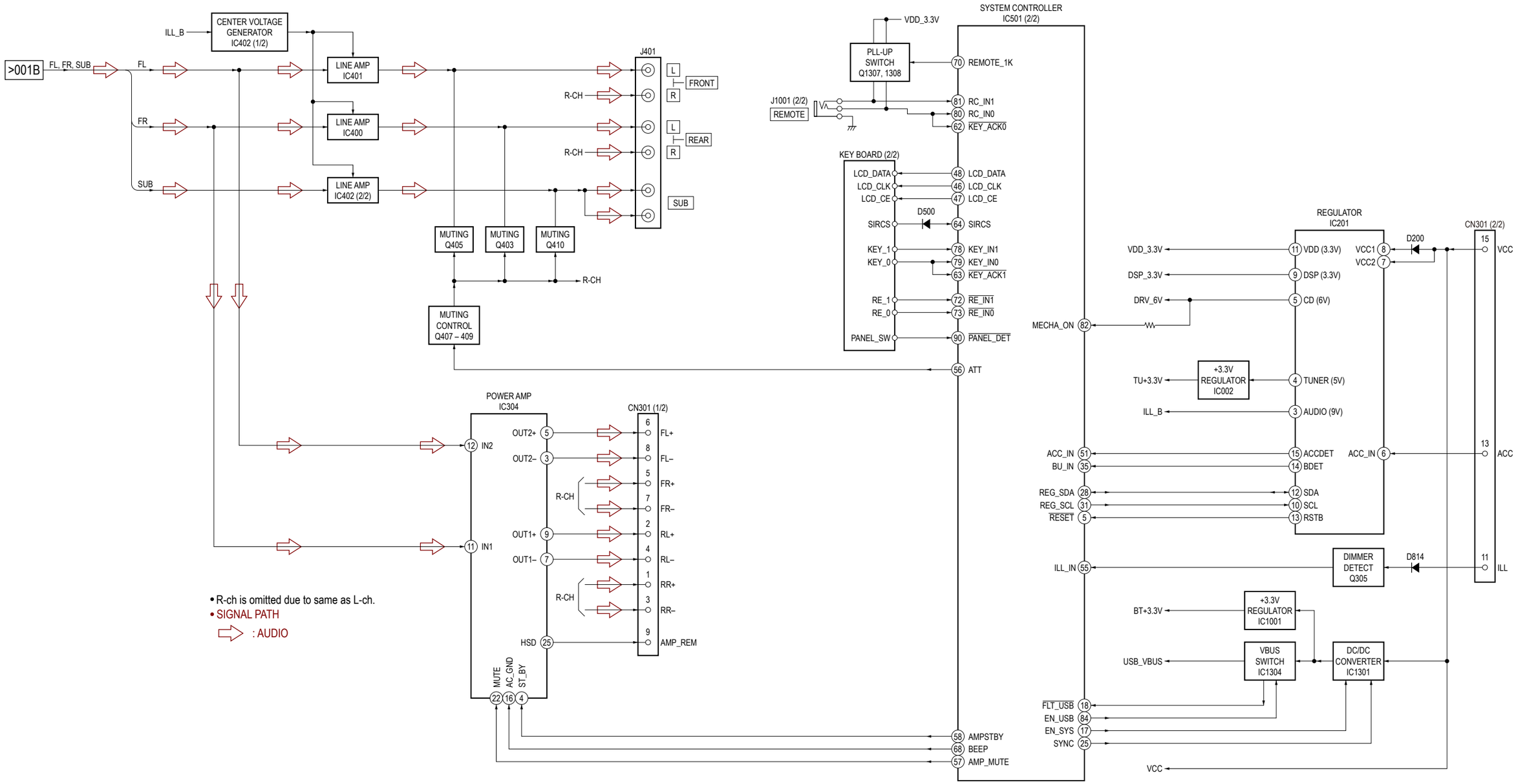
LOOPBACK	↻ (repeat mark)
ON	Lit
OFF	None

SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM - MAIN Section -



5-2. BLOCK DIAGRAM - AUDIO OUTPUT/PANEL/POWER SUPPLY Section -



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

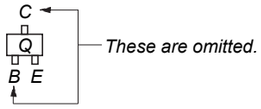
For Printed Wiring Boards.

Note:

- o——: Parts extracted from the component side.
- ——: Parts extracted from the conductor side.
- △ : Internal component.
- ▭ : Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

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

- Indication of transistor.



Note: When the complete MAIN board is replaced, it is necessary to replace the knob (VOL) assy (Ref. No. NFC1) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 4, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 7 and "BLUETOOTH INFORMATION WRITING METHOD" on page 8.

For Schematic Diagrams.

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : Internal component.
- ▭: Panel designation.

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

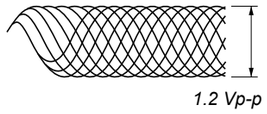
- ▬: B+ Line.
- Power voltages is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: TUNER (FM)
  [ ]: TUNER (AM)
  ( ): CD PLAY
  { }: SIRIUSXM
  < >: AUX
- Voltages are taken with VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO
  ➡ : TUNER
  ⇛ : SIRIUSXM
  ⇨ : CD
  ⇨ : AUX
  ⇨ : USB
  ⇨ : Bluetooth
  ▷ : MIC

Note: When the complete MAIN board is replaced, it is necessary to replace the knob (VOL) assy (Ref. No. NFC1) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 4, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 7 and "BLUETOOTH INFORMATION WRITING METHOD" on page 8.

- **Waveforms**

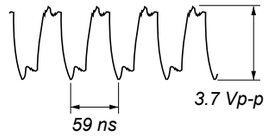
– MAIN Board –

① IC1305 ② (RFOUT) (CD play mode)



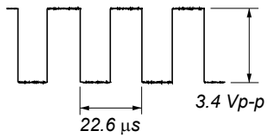
500 mV/DIV, 500 ns/DIV

② IC1305 ⑤⓪ (MCLK)



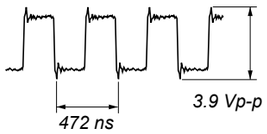
1 V/DIV, 50 ns/DIV

③ IC1305 ⑤① (LRCK)



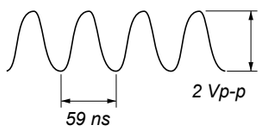
1 V/DIV, 10 µs/DIV

④ IC1305 ⑤② (BCK)



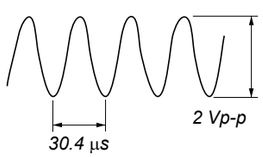
1 V/DIV, 200 ns/DIV

⑤ IC1305 ⑥① (XOUT)



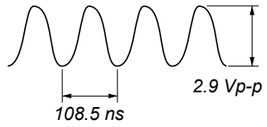
1 V/DIV, 50 ns/DIV

⑥ IC501 ⑦ (SUB_X2)



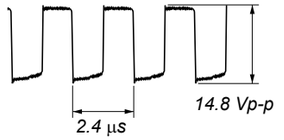
500 mV/DIV, 20 µs/DIV

⑦ IC501 ⑩ (MAIN_X2)



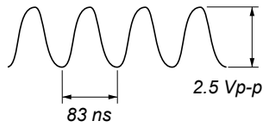
1 V/DIV, 50 ns/DIV

⑧ IC1301 ① (LX)



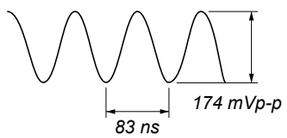
5 V/DIV, 2 µs/DIV

⑨ IC601 ⑮ (XOUT)



1 V/DIV, 50 ns/DIV

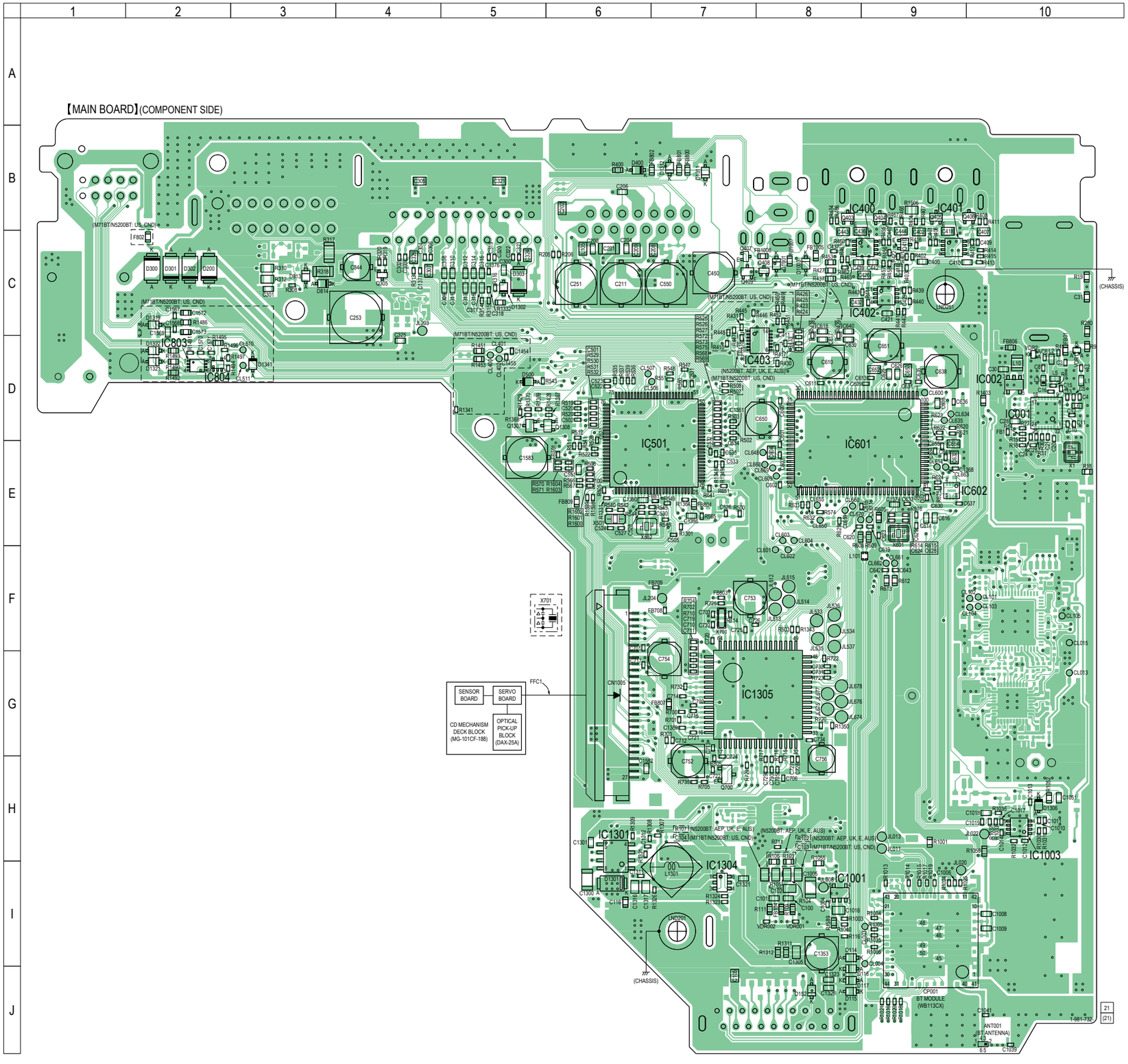
⑩ IC001 ㉜ (XTAL_IN)



50 mV/DIV, 50 ns/DIV

5-3. PRINTED WIRING BOARDS - MAIN Section (1/2) - • : Uses unleaded solder.

【MAIN BOARD】(COMPONENT SIDE)



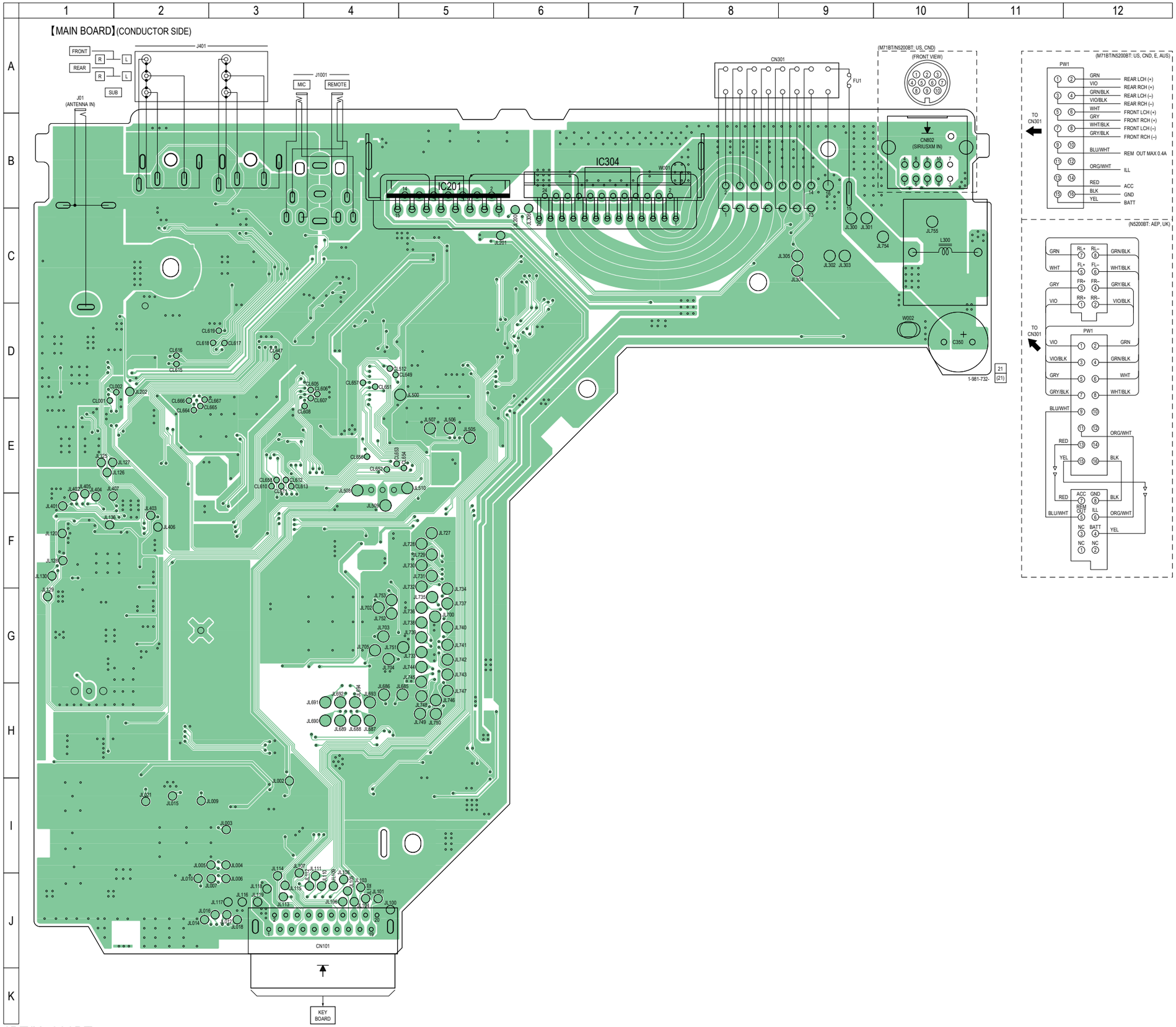
Note 1: When the IC501 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 4.

Note 2: ANT001, CP001, IC001, IC602 and IC1301 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

Note 3: The service manual of the mechanism deck, used in this model, has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.

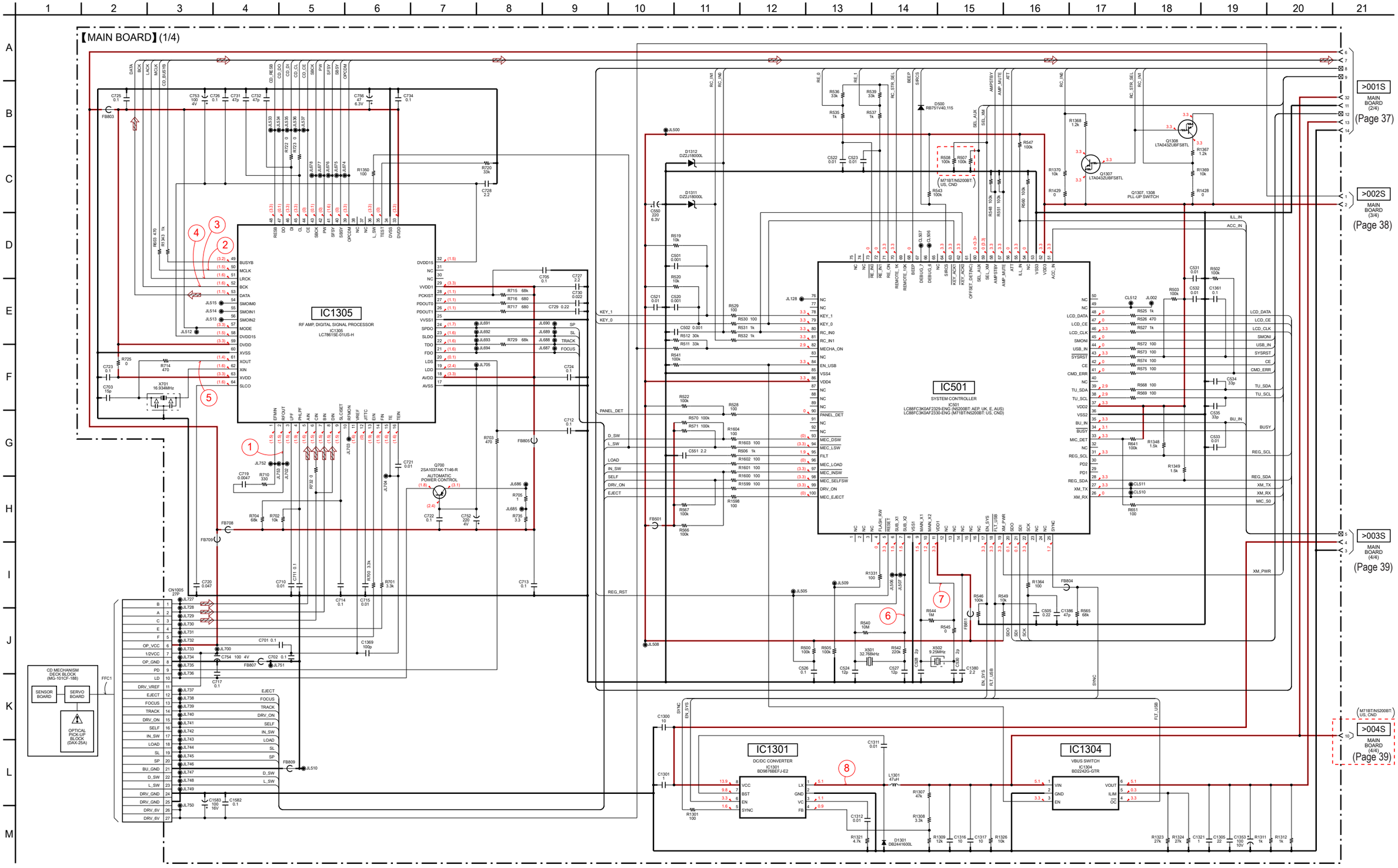
5-4. PRINTED WIRING BOARDS - MAIN Section (2/2) - • : Uses unleaded solder.

【MAIN BOARD】(CONDUCTOR SIDE)



Note: When the KEY board is defective, replace the front panel assy (Ref. No. FP1).

5-5. SCHEMATIC DIAGRAM - MAIN Section (1/4) - • See page 33 for Waveforms. • See page 40 for IC Block Diagrams. • See page 41 for IC Pin Function Description.

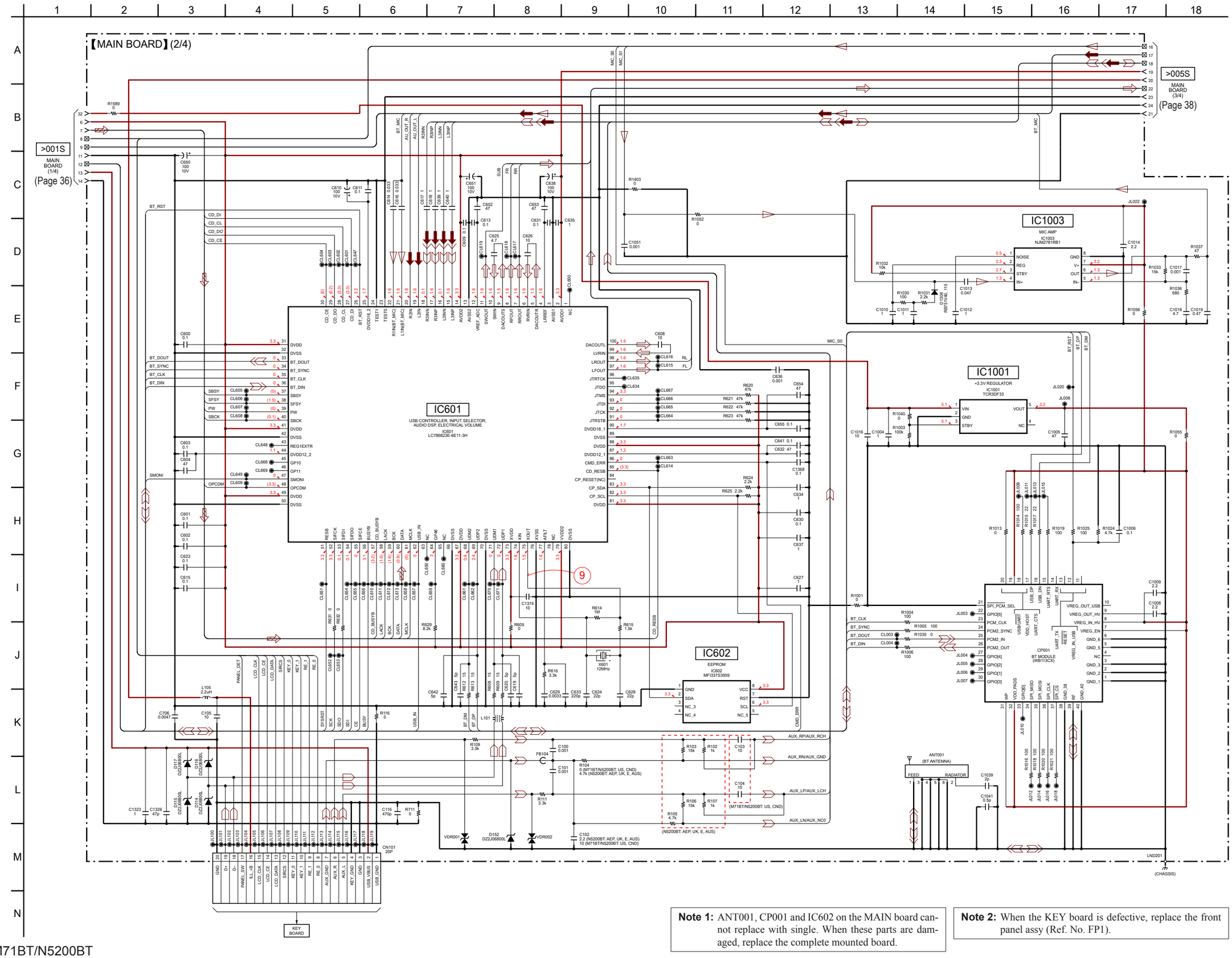


Note 1: When the IC501 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 4.

Note 2: IC1301 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

Note 3: The service manual of the mechanism deck, used in this model, has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.

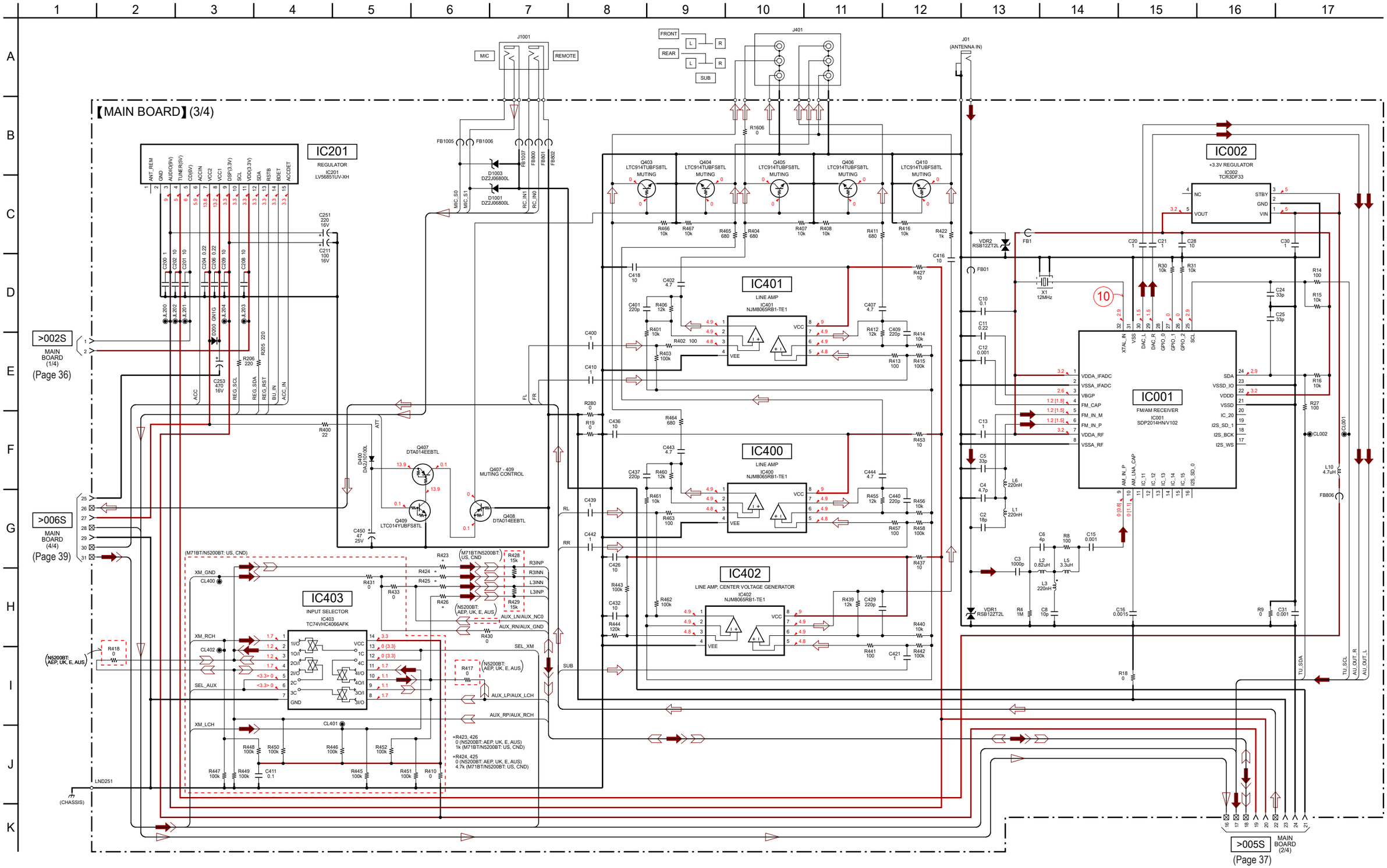
5-6. SCHEMATIC DIAGRAM - MAIN Section (2/4) - • See page 33 for Waveforms. • See page 40 for IC Block Diagrams. • See page 41 for IC Pin Function Description.



Note 1: ANT001, CP001 and IC602 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

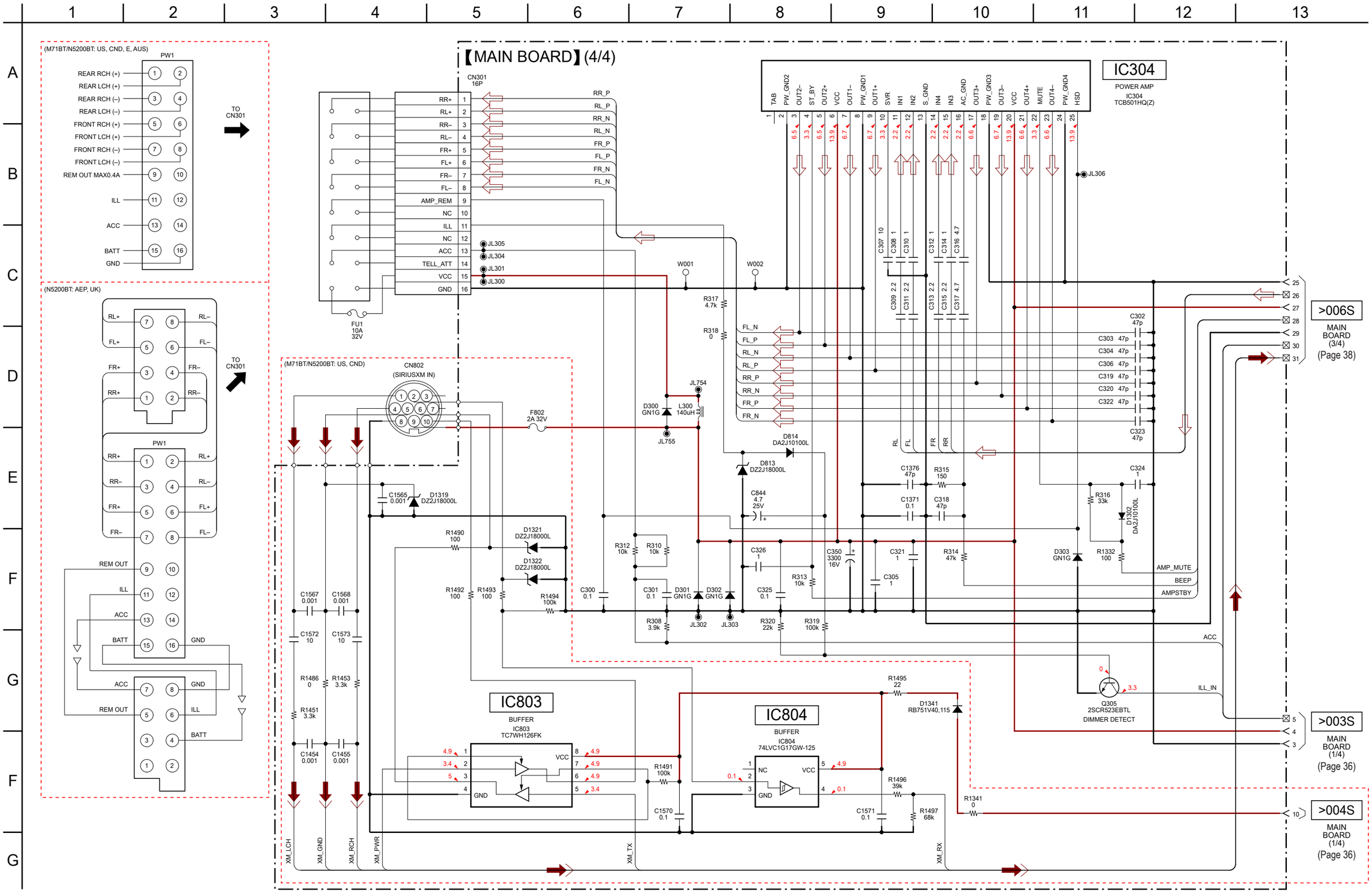
Note 2: When the KEY board is defective, replace the front panel assy (Ref. No. FP1).

5-7. SCHEMATIC DIAGRAM - MAIN Section (3/4) - • See page 33 for Waveforms. • See page 40 for IC Block Diagrams.



Note: IC001 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

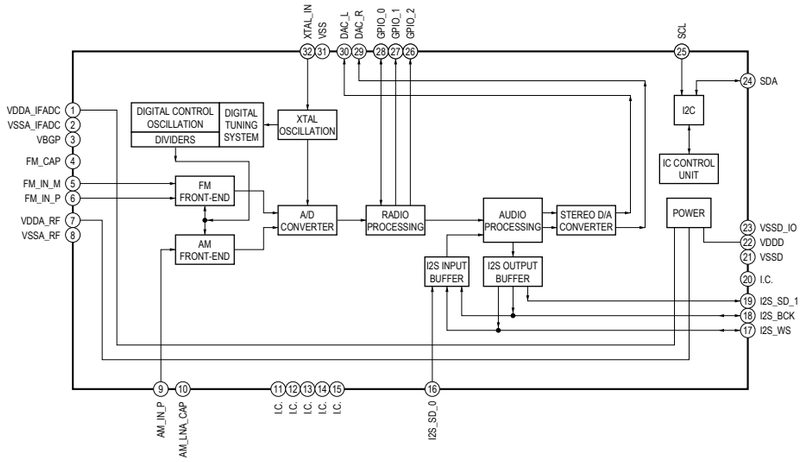
5-8. SCHEMATIC DIAGRAM - MAIN Section (4/4) - • See page 40 for IC Block Diagrams.



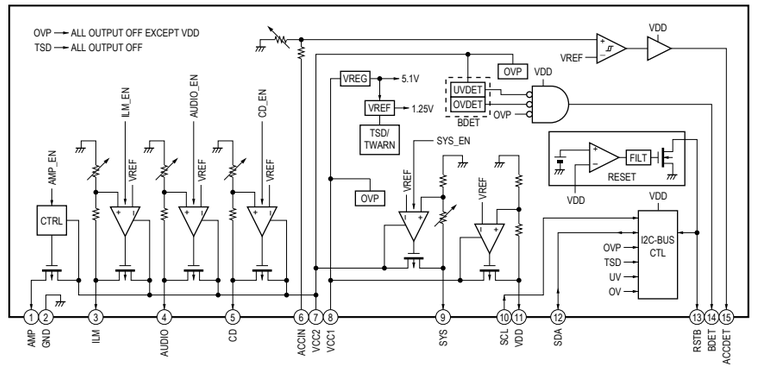
- **IC Block Diagrams**

– MAIN Board –

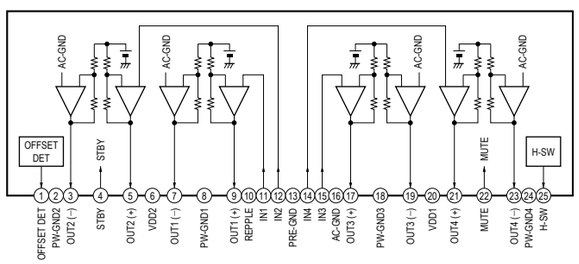
IC001 SDP2014HN/V102



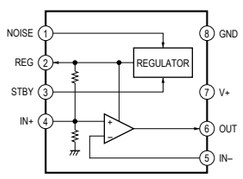
IC201 LV56851UV-XH



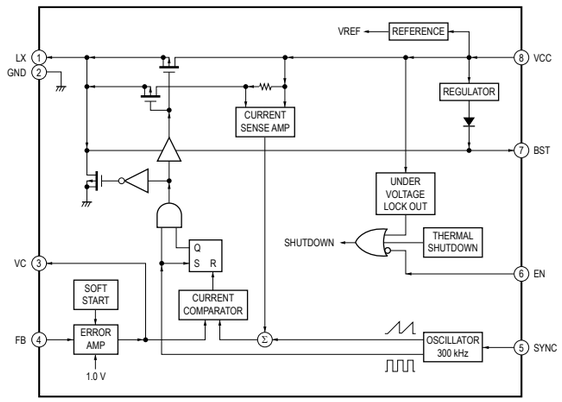
IC304 TCB501HQ (Z)



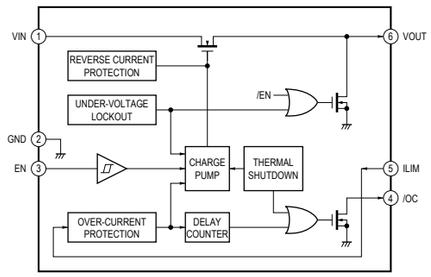
IC1003 NJM2781RB1



IC1301 BD9876BEFJ-E2



IC1304 BD2242G-GTR



• **IC Pin Function Description**

MAIN BOARD IC501 LC88FC3K0AF2329-ENG (SYSTEM CONTROLLER) (N5200BT: AEP, UK, E, AUS)
LC88FC3K0AF2330-ENG (SYSTEM CONTROLLER) (M71BT/N5200BT: US, CND)

Pin No.	Pin Name	I/O	Description
1 to 3	NC	O	Not used
4	FLASH_RW	I/O	Debug communication terminal Not used
5	$\overline{\text{RESET}}$	I	System reset signal input terminal "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it change to "H"
6	SUB_X1	I	Low-speed clock input terminal (32.768 kHz)
7	SUB_X2	O	Low-speed clock output terminal (32.768 kHz)
8	VSS1	-	Ground terminal
9	MAIN_X1	I	High-speed clock input terminal (9.25 MHz)
10	MAIN_X2	O	High-speed clock output terminal (9.25 MHz)
11	VDD1	-	Power supply terminal (+3.3V)
12 to 16	NC	O	Debug test terminal Not used
17	EN_SYS	O	Power on/off control signal output to the DC/DC converter "H": power on
18	$\overline{\text{FLT\_USB}}$	I	USB power fault status signal input from the VBUS switch "L": power fault
19	XM_PWR	O	SIRIUSXM power supply on/off control signal output to the SIRIUSXM in connector "H": power on (M71BT/N5200BT: US, CND models only)
20	SDO	O	Serial data output to the audio DSP
21	SDI	I	Serial data input from the audio DSP
22	SCK	O	Serial data transfer clock signal output to the audio DSP
23, 24	NC	O	Not used
25	SYNC	O	Frequency control signal output to the DC/DC converter
26	XM_RX	I	Serial data input from the SIRIUSXM in connector (M71BT/N5200BT: US, CND models only)
27	XM_TX	O	Serial data output to the SIRIUSXM in connector (M71BT/N5200BT: US, CND models only)
28	REG_SDA	I/O	Two-way data bus with the regulator
29, 30	PD1, PD2	O	Not used
31	REG_SCL	O	Serial data transfer clock signal output to the regulator
32	NC	-	Not used
33	MIC_DET	I	Microphone detection signal input from the MIC jack "L": microphone is connected, "H": microphone is disconnected
34	$\overline{\text{BUSY}}$	I	Busy signal input from the audio DSP "L": busy
35	BU_IN	I	Back-up power detection signal input from the regulator
36	VSS2	-	Ground terminal
37	VDD2	-	Power supply terminal (+3.3V)
38	TU_SCL	O	Serial data transfer clock signal output to the FM/AM receiver
39	TU_SDA	I/O	Two-way serial data bus with the FM/AM receiver
40	NC	O	Not used
41	CMD_ERR	I	Command error signal input from the audio DSP "H": error
42	CE	O	Chip enable signal output to the audio DSP
43	$\overline{\text{SYSRST}}$	O	Reset signal output to the audio DSP "L": reset
44	USB_IN	I	USB device detection signal input from the audio DSP "L": USB device is connected
45	SMONI	I	Watch-dog timer status monitor input from the audio DSP
46	LCD_CLK	O	Serial data transfer clock signal output to the front panel block
47	LCD_CE	O	Chip enable signal output to the front panel block
48	LCD_DATA	O	Serial data output to the front panel block
49, 50	NC	O	Not used
51	ACC_IN	I	Accessory power detection signal input from the regulator "L": accessory power on
52	VDD3	-	Power supply terminal (+3.3V)
53	VSS3	-	Ground terminal
54	NC	O	Not used
55	ILL_IN	I	Auto dimmer function detection signal input terminal
56	ATT	O	Audio muting on/off control signal output terminal "H": muting on
57	AMP_MUTE	O	Amplifier muting on/off control signal output to the power amplifier "L": muting on
58	AMPSTBY	O	Standby signal output to the power amplifier "L": standby
59	SEL_XM	O	SIRIUSXM mode selection signal output to the input selector "H": SIRIUSXM mode (M71BT/N5200BT: US, CND models only)
60	SEL_AUX	O	AUX mode selection signal output to the input selector "H": AUX mode (M71BT/N5200BT: US, CND models only)

Pin No.	Pin Name	I/O	Description
61	OFFSET_DET (NC)	O	Not used
62	$\overline{\text{KEY\_ACK0}}$	I	Key acknowledge signal (wake up signal) input from the rotary commander
63	$\overline{\text{KEY\_ACK1}}$	I	Key acknowledge signal (wake up signal) input from the front panel block
64	SIRCS	I	Remote control signal input from the front panel block
65	NC	O	Not used
66, 67	DEBUG_6, DEBUG_7	O	Debug test terminal Not used
68	BEEP	O	Beep sound output to the power amplifier
69	REMOTE_10K	O	Pull-up resistor (10K) selection signal output terminal (for rotary commander) Not used
70	REMOTE_1K	O	Pull-up resistor (1K) selection signal output terminal (for steering control)
71	RE_ON	O	Jog dial pulse pull-up signal output terminal
72	$\overline{\text{RE\_IN1}}$	I	Jog dial pulse signal input from the rotary encoder (B phase input)
73	$\overline{\text{RE\_IN0}}$	I	Jog dial pulse signal input from the rotary encoder (A phase input)
74 to 77	NC	-	Not used
78, 79	KEY_1, KEY_0	I	Front panel key input terminal
80	RC_IN0	I	Rotary commander key input terminal
81	RC_IN1	I	Rotary commander shift key input terminal
82	MECHA_ON	I	Power detection signal input terminal for CD mechanism section “H”: CD mechanism power on
83	NC	O	Not used
84	EN_USB	O	USB power on/off control signal output to the VBUS switch “H”: power on
85	VSS4	-	Ground terminal
86	VDD4	-	Power supply terminal (+3.3V)
87 to 89	NC	O	Not used
90	$\overline{\text{PANEL\_DET}}$	I	Front panel detach/attach detection signal input terminal “L”: front panel is attached
91, 92	NC	O	Not used
93	$\overline{\text{MEC\_DSW}}$	I	Chucking end detection switch input from the CD mechanism deck block
94	$\overline{\text{MEC\_LSW}}$	I	Limit in detection switch input from the CD mechanism deck block
95	FILT	I	Filter terminal for PLL
96	MEC_LOAD	O	Loading motor drive signal (loading direction) output to the CD mechanism deck block “H”: motor on
97	$\overline{\text{MEC\_INSW}}$	I	Disc insert detection switch input from the CD mechanism deck block
98	$\overline{\text{MEC\_SELFSW}}$	I	Self loading position detection switch input from the CD mechanism deck block
99	DRV_ON	O	Driver control signal output to the CD mechanism deck block
100	MEC_EJECT	O	Loading motor drive signal (eject direction) output to the CD mechanism deck block “H”: motor on

MAIN BOARD IC601 LC786823E-6E11-3H (USB CONTROLLER, INPUT SELECTOR, AUDIO DSP, ELECTRICAL VOLUME)

Pin No.	Pin Name	I/O	Description
1	NC	-	Not used
2	AVDD1	-	Power supply terminal (+3.3V) (for analog system)
3	AVSS1	-	Ground terminal (for analog system)
4	LRREF	-	External capacitor connection terminal for audio D/A converter and electrical volume reference voltage
5	DACOUTR	O	Audio signal (R-ch) output terminal
6	RVRIN	I	Audio signal (R-ch) input terminal
7	RROUT	O	Audio signal (rear R-ch) output to the power amplifier and REAR audio out jack
8	RFOUT	O	Audio signal (front R-ch) output to the power amplifier and FRONT audio out jack
9	DACOUTS	O	Audio signal (subwoofer) output terminal
10	SWIN	I	Audio signal (subwoofer) input terminal
11	SWOUT	O	Audio signal (subwoofer) output to the SUB audio out jack
12	VREF_ADC	-	External capacitor connection terminal for audio A/D converter reference voltage
13	AVSS2	-	Ground terminal (analog system)
14	AVDD2	-	Power supply terminal (+3.3V) (analog system)
15	L3INP	I	Audio signal (AUX L-ch) input terminal (positive) (N5200BT: AEP, UK, E, AUS models) Audio signal (AUX/SIRIUSXM L-ch) input terminal (positive) (M71BT/N5200BT: US, CND models)
16	L3INN	I	Audio signal (AUX L-ch) input terminal (negative) (N5200BT: AEP, UK, E, AUS models) Audio signal (AUX/SIRIUSXM L-ch) input terminal (negative) (M71BT/N5200BT: US, CND models)
17	R3INP	I	Audio signal (AUX R-ch) input terminal (positive) (N5200BT: AEP, UK, E, AUS models) Audio signal (AUX/SIRIUSXM R-ch) input terminal (positive) (M71BT/N5200BT: US, CND models)
18	R3INN	I	Audio signal (AUX R-ch) input terminal (negative) (N5200BT: AEP, UK, E, AUS models) Audio signal (AUX/SIRIUSXM R-ch) input terminal (negative) (M71BT/N5200BT: US, CND models)
19	L2IN	I	Audio signal (tuner L-ch) input from the FM/AM receiver
20	R2IN	I	Audio signal (tuner R-ch) input from the FM/AM receiver
21	L1IN (BT_MIC)	I	Microphone audio signal input from the MIC jack
22	R1IN (BT_MIC)	I	Microphone audio signal input from the MIC jack
23, 24	TEST0, TEST1	I	Test terminal Not used
25	DVDD18_2	-	External capacitor connection terminal for internal regulator
26	BT_RST	O	Reset signal output to the BT module "L": reset
27	CD_DI	O	Serial data output to the digital servo processor
28	CD_CL	O	Serial data transfer clock signal output to the digital servo processor
29	CD_DO	I	Serial data input from the digital servo processor
30	CD_CE	O	Chip enable signal output to the digital servo processor
31	DVDD	-	Power supply terminal (+3.3V) (for digital system)
32	DVSS	-	Ground terminal (for digital system)
33	BT_DOUT	O	Audio data output to the BT module
34	BT_SYNC	I	Sync signal input from the BT module
35	BT_CLK	I	Serial data transfer clock signal input from the BT module
36	BT_DIN	I	Audio data input from the BT module
37	SBSY	I	CD sub-code block sync signal input from the digital servo processor
38	SFSY	I	CD sub-code flame sync signal input from the digital servo processor
39	PW	I	CD sub-code PW data input from the digital servo processor
40	SBCK	I	CD sub-code data transfer clock signal input from the digital servo processor
41	DVDD	-	Power supply terminal (+3.3V) (for digital system)
42	DVSS	-	Ground terminal (for digital system)
43	REG1EXTR	O	Reserve terminal for internal regulator Not used
44	DVDD12_2	-	External capacitor connection terminal for internal regulator
45, 46	GP10, GP11	I/O	Not used
47	SMONI	O	Watch-dog timer status monitor output to the system controller
48	OPCDM	I	External decode permission signal input from the digital servo processor
49	DVDD	-	Power supply terminal (+3.3V) (for digital system)
50	DVSS	-	Ground terminal (for digital system)
51	RESB	I	Reset signal input from the system controller "L": reset
52	SIFCK	I	Serial data transfer clock signal input from the system controller
53	SIFDI	I	Serial data input from the system controller

Pin No.	Pin Name	I/O	Description
54	SIFDO	O	Serial data output to the system controller
55	SIFCE	I	Chip enable signal input from the system controller
56	BUSYB	O	Busy signal output to the system controller "L": busy
57	CD_BUSYB	I	Busy signal input from the digital servo processor "L": busy
58	LACK	I	L/R sampling clock signal input from the digital servo processor
59	BCK	I	Bit clock signal input from the digital servo processor
60	DATA	I	Audio data input from the digital servo processor
61	MCLK	I	Master clock signal input from the digital servo processor
62	USB_IN	O	USB device detection signal output to the system controller "L": USB device is connected
63	NC	I/O	Not used
64	GP46	I/O	Not used
65	NC	I/O	Not used
66	DVSS	-	Ground terminal (for digital system)
67	DVDD	-	Power supply terminal (+3.3V) (for digital system)
68	UDM2	I/O	Two-way Bluetooth data (–) bus with the BT module
69	UDP2	I/O	Two-way Bluetooth data (+) bus with the BT module
70	DVSS	-	Ground terminal (for digital system)
71	UDM1	I/O	Two-way USB data (–) bus with the USB connector
72	UDP1	I/O	Two-way USB data (+) bus with the USB connector
73	XVDD	-	Power supply terminal (+3.3V) (for oscillator)
74	XIN	I	System clock input terminal (12 MHz)
75	XOUT	O	System clock output terminal (12 MHz)
76	XVSS	-	Ground terminal (for oscillator)
77	AFILT	O	Charge pump output terminal (for PLL)
78	NC	-	Not used
79	VVDD2	-	Power supply terminal (+3.3V) (for PLL)
80	DVSS	-	Ground terminal (for digital system)
81	DVDD	-	Power supply terminal (+3.3V) (for digital system)
82	CP_SCL	O	Serial data transfer clock signal output to the EEPROM
83	CP_SDA	I/O	Two-way data bus with the EEPROM
84	CP_RESET (NC)	O	Reset signal output terminal Not used
85	CD_RESB	O	Reset signal output to the digital servo processor "L": reset
86	CMD_ERR	O	Command error signal output to the system controller "H": error
87	DVDD12_1	-	External capacitor connection terminal for internal regulator
88	DVDD	-	Power supply terminal (+3.3V) (for digital system)
89	DVSS	-	Ground terminal (for digital system)
90	DVDD18_1	-	External capacitor connection terminal for internal regulator
91	JTRSTB	I	Reset signal input terminal (for JTAG) Normally: fixed at "L"
92	JTCK	I	Clock signal input terminal (for JTAG) Normally: fixed at "L"
93	JTDI	I	Data input terminal (for JTAG) Normally: fixed at "L"
94	JTMS	I	Mode selection signal input terminal (for JTAG) Normally: fixed at "H"
95	JTDO	O	Data output terminal (for JTAG) Normally: open
96	JTRTCK	O	Return clock signal output terminal (for JTAG) Normally: open
97	LFOUT	O	Audio signal (front L-ch) output to the power amplifier and FRONT audio out jack
98	LROUT	O	Audio signal (rear L-ch) output to the power amplifier and REAR audio out jack
99	LVRIN	I	Audio signal (L-ch) input terminal
100	DACOUTL	O	Audio signal (L-ch) output terminal

MAIN BOARD IC1305 LC78615E-01US-H (RF AMP, DIGITAL SERVO PROCESSOR)

Pin No.	Pin Name	I/O	Description
1	EFMIN	I	RF signal input terminal
2	RFOUT	O	RF signal output terminal
3	LPF	-	External low-pass filter capacitor connection terminal for DC level detection of RF signal
4	PHLPF	-	External low-pass filter capacitor connection terminal for defect detection
5	AIN	I	Main beam (B) input from the CD mechanism deck block
6	CIN	I	Main beam (C) input from the CD mechanism deck block
7	BIN	I	Main beam (A) input from the CD mechanism deck block
8	DIN	I	Main beam (C) input from the CD mechanism deck block
9	SLCISET	-	External resistor connection terminal for current setting of SLCO output
10	RFMON	O	Internal analog signal monitor terminal of LSI Not used
11	VREF	O	Reference voltage (+1.65V) output terminal for RF
12	JITTC	-	External capacitor connection terminal for jitter detection
13	EIN	I	Sub beam (F) input from the CD mechanism deck block
14	FIN	I	Sub beam (E) input from the CD mechanism deck block
15	TE	O	Tracking error signal output terminal
16	TEIN	I	Tracking error signal input terminal
17	AVSS	-	Ground terminal (analog system)
18	AVDD	-	Power supply terminal (+3.3V) (analog system)
19	LDD	O	Laser power control signal output to the CD mechanism deck block
20	LDS	I	Laser power detection signal input from the CD mechanism deck block
21	FDO	O	Focus coil control signal output to the CD mechanism deck block
22	TDO	O	Tracking coil control signal output to the CD mechanism deck block
23	SLDO	O	Sled motor control signal output to the CD mechanism deck block
24	SPDO	O	Spindle motor control signal output to the CD mechanism deck block
25	VVSS1	-	Ground terminal (for EFMPLL)
26, 27	PDOUT1, PDOUT0	O	Charge pump output terminal for EFMPLL
28	PCKIST	-	External resistor connection terminal for charge pump current setting for EFMPLL
29	VVDD1	-	Power supply terminal (+3.3V) (for EFMPLL)
30, 31	NC	-	Not used
32	DVDD15	-	External power capacitor connection terminal for digital system power
33	DVDD	-	Power supply terminal (+3.3V) (digital system)
34	DVSS	-	Ground terminal (digital system)
35	TEST	I	Test mode setting terminal Fixed at “L”
36	L_SW	I	Limit in detection switch input terminal
37, 38	NC	-	Not used
39	OPCDM	O	External decode permission signal output to the audio DSP
40	SBSY	O	CD sub-code block sync signal output to the audio DSP
41	SFSY	O	CD sub-code flame sync signal output to the audio DSP
42	PW	O	CD sub-code PW data output to the audio DSP
43	SBCK	O	CD sub-code data transfer clock signal output to the audio DSP
44	CE	I	Chip enable signal input from the audio DSP
45	CL	I	Serial data transfer clock signal input from the audio DSP
46	DI	I	Serial data input from the audio DSP
47	DO	O	Serial data output to the audio DSP
48	RESB	I	Reset signal input from the audio DSP “L”: reset
49	BUSYB	O	Busy signal output to the audio DSP “L”: busy
50	MCLK	O	Master clock signal output to the audio DSP
51	LRCK	O	L/R sampling clock signal output to the audio DSP
52	BCK	O	Bit clock signal output to the audio DSP
53	DATA	O	Audio data output to the audio DSP
54 to 56	SMOIN0 to SMOIN2	O	Servo internal signal monitor output terminal Not used
57	MODE	I	LSI operation mode setting terminal Fixed at “H”
58	DVDD15	-	External power capacitor connection terminal for digital system power
59	DVDD	-	Power supply terminal (+3.3V) (digital system)
60	XVSS	-	Ground terminal (for oscillation circuit)
61	XOUT	O	System clock output terminal (16.934 MHz)
62	XIN	I	System clock input terminal (16.934 MHz)
63	XVDD	-	Power supply terminal (+3.3V) (for oscillation circuit)
64	SLCO	O	Slice level control signal output terminal

SECTION 6
EXPLODED VIEWS

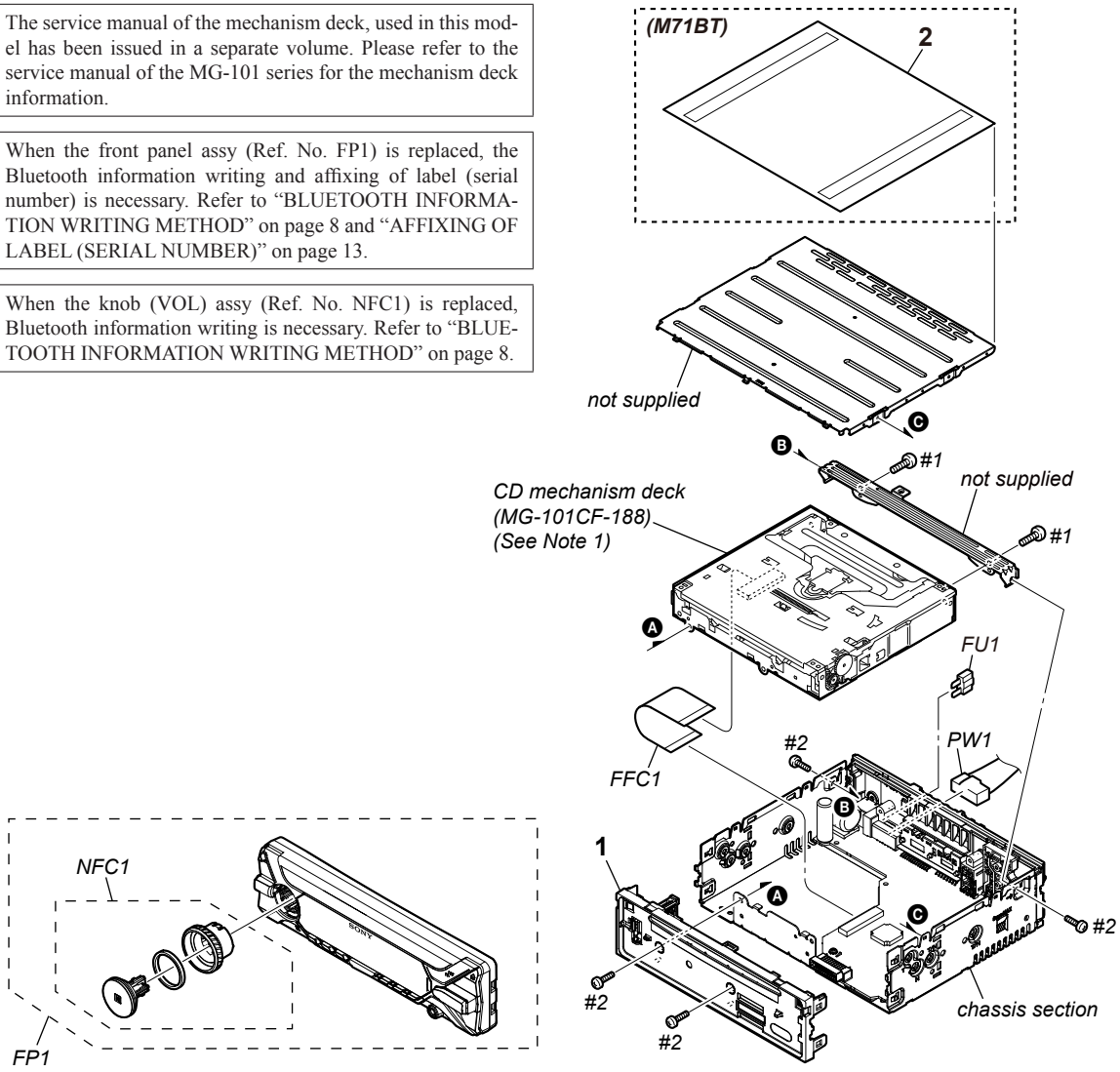
Note:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts Color ↑ Cabinet's Color

6-1. SUB PANEL SECTION

Note 1: The service manual of the mechanism deck, used in this model has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.

Note 2: When the front panel assy (Ref. No. FP1) is replaced, the Bluetooth information writing and affixing of label (serial number) is necessary. Refer to "BLUETOOTH INFORMATION WRITING METHOD" on page 8 and "AFFIXING OF LABEL (SERIAL NUMBER)" on page 13.

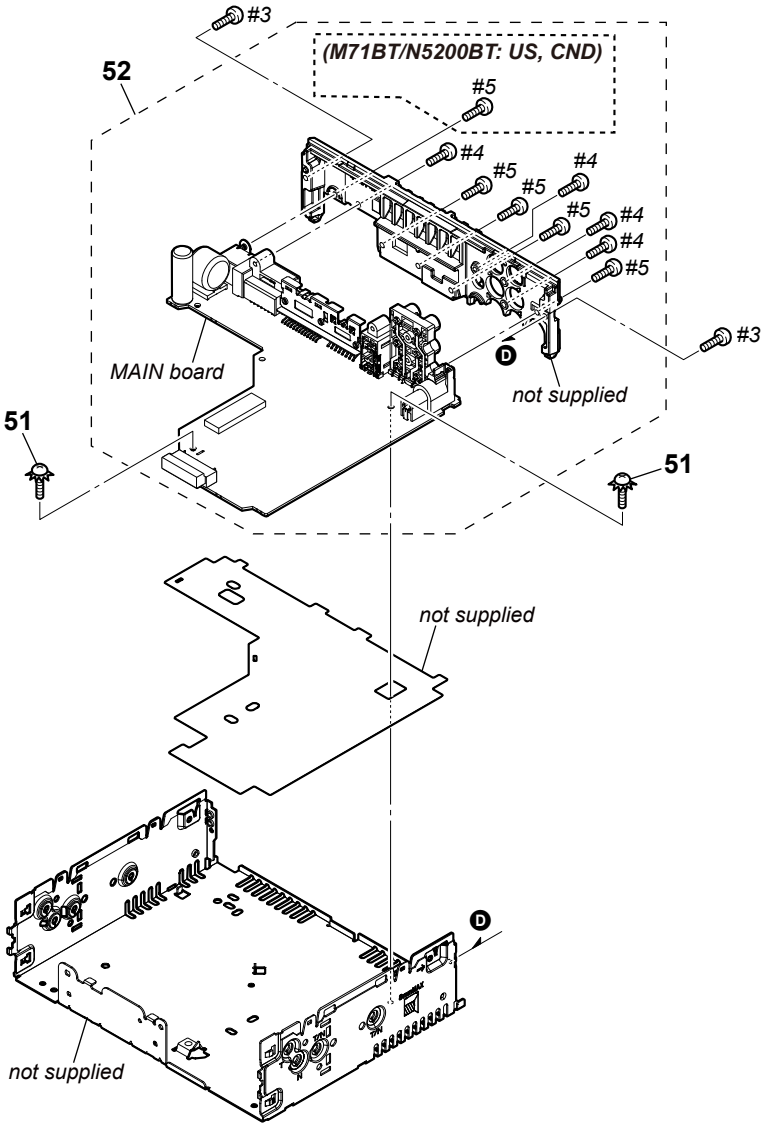
Note 3: When the knob (VOL) assy (Ref. No. NFC1) is replaced, Bluetooth information writing is necessary. Refer to "BLUETOOTH INFORMATION WRITING METHOD" on page 8.



Ref. No.	Part No.	Description	Remark
1	X-2593-171-1	PANEL ASSY, SUB	
2	2-590-307-03	SHEET, COVER (M71BT)	
FFC1	1-846-819-61	CABLE FLEXIBLE FLAT (27 CORE) (Length: 80 mm)	
FP1	A-2181-296-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (N5200BT: US, CND) (See Note 2)	
FP1	A-2181-297-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (N5200BT: AEP, UK, E, AUS) (See Note 2)	
FP1	A-2181-298-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (M71BT) (See Note 2)	

Ref. No.	Part No.	Description	Remark
FU1	1-523-227-11	MINI FUSE (BLADE TYPE) (10 A/32 V)	
NFC1	X-2594-500-1	KNOB (VOL) (SV) ASSY (Including NFC module)	(See Note 3)
PW1	1-846-033-11	CONNECTION CABLE (ISO) (Power supply connection cable) (N5200BT: AEP, UK)	
PW1	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (Power supply connection cable) (M71BT/N5200BT: US, CND, E, AUS)	
#1	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)	

6-2. CHASSIS SECTION



Note: When the complete MAIN board (Ref. No. 52) is replaced, it is necessary to replace knob (VOL) assy (Ref. No. NFC1: page 46) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 4, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 7 and "BLUETOOTH INFORMATION WRITING METHOD" on page 8.

Ref. No.	Part No.	Description	Remark
51	4-410-504-01	SCREW (+PTT 2.6X6), GROUND POINT	
52	A-2166-549-A	MAIN BOARD, COMPLETE (N5200BT: US, CND)	(See Note)
52	A-2166-550-A	MAIN BOARD, COMPLETE (N5200BT: AEP, UK, E, AUS)	(See Note)
52	A-2166-551-A	MAIN BOARD, COMPLETE (M71BT)	(See Note)
#3	7-685-793-01	SCREW +PTT 2.6X8 (S)	
#4	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#5	7-685-794-01	SCREW +PTT 2.6X10 (S)	

KEY MAIN

SECTION 7
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.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . , uPA. . , µPA. . ,
  uPB. . : µPB. . , uPC. . , µPC. . ,
  uPD. . : µPD. .

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

Ref. No.	Part No.	Description				Remark
		KEY BOARD				
		**********				
When the KEY board is defective, replace the front panel assy (Ref. No. FP1).						
**********						
	A-2166-549-A	MAIN BOARD, COMPLETE (N5200BT: US, CND)				(See Note 1)
	A-2166-550-A	MAIN BOARD, COMPLETE (N5200BT: AEP, UK, E, AUS)				(See Note 1)
	A-2166-551-A	MAIN BOARD, COMPLETE (M71BT)				(See Note 1)
		**********				
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT				
	7-685-794-01	SCREW +PTT 2.6X10 (S)				
		< ANTENNA >				
ANT001	(Not supplied)	ANTENNA (CHIP MULTILYAER) (BT ANTENNA)				(See Note 2)
		< CAPACITOR >				
C2	1-116-153-11	CERAMIC CHIP	18PF	1%	50V	
C3	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V	
C4	1-116-385-81	CERAMIC CHIP	4.7PF	0.1PF	50V	
C5	1-116-194-81	CERAMIC CHIP	33PF	1%	50V	
C6	1-164-844-11	CERAMIC CHIP	4PF	0.25PF	50V	
C8	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V	
C10	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V	
C11	1-116-745-11	CERAMIC CHIP	0.22uF	10%	6.3V	
C12	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V	
C13	1-116-737-11	CERAMIC CHIP	1uF	20%	10V	
C15	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V	
* C16	1-118-401-11	CERAMIC CHIP	0.0015uF	10%	50V	
C20	1-116-737-11	CERAMIC CHIP	1uF	20%	10V	
C21	1-116-737-11	CERAMIC CHIP	1uF	20%	10V	
C24	1-164-862-81	CERAMIC CHIP	33PF	5%	50V	
C25	1-164-862-81	CERAMIC CHIP	33PF	5%	50V	
* C28	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V	
C30	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	
C31	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V	
C100	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V	
C101	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V	
C102	1-116-716-11	CERAMIC CHIP	10uF	10%	16V	(M71BT/N5200BT: US, CND)
C102	1-116-992-21	CERAMIC CHIP	2.2uF	10%	50V	(N5200BT: AEP, UK, E, AUS)
C103	1-100-966-91	CERAMIC CHIP	10uF	20%	10V	(M71BT/N5200BT: US, CND)
C104	1-100-966-91	CERAMIC CHIP	10uF	20%	10V	(M71BT/N5200BT: US, CND)
C105	1-116-716-11	CERAMIC CHIP	10uF	10%	16V	
C116	1-164-315-91	CERAMIC CHIP	470PF	5%	50V	
C200	1-118-039-11	CERAMIC CHIP	1uF	10%	25V	
C201	1-116-865-11	CERAMIC CHIP	10uF	10%	25V	
C202	1-100-966-91	CERAMIC CHIP	10uF	20%	10V	
C204	1-116-742-11	CERAMIC CHIP	0.22uF	10%	25V	
C206	1-116-742-11	CERAMIC CHIP	0.22uF	10%	25V	
C208	1-100-966-91	CERAMIC CHIP	10uF	20%	10V	
C209	1-100-966-91	CERAMIC CHIP	10uF	20%	10V	
C211	1-117-681-11	ELECT CHIP	100uF	20%	16V	
C251	1-100-767-21	ELECT CHIP	220uF	20%	16V	
C253	1-127-931-21	ELECT CHIP	470uF	20%	16V	
C300	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V	
C301	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V	
C302	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C303	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C304	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C305	1-116-733-11	CERAMIC CHIP	1uF	10%	25V	
C306	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C307	1-116-716-11	CERAMIC CHIP	10uF	10%	16V	
* C308	1-116-735-11	CERAMIC CHIP	1uF	10%	16V	
C309	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V	
* C310	1-116-735-11	CERAMIC CHIP	1uF	10%	16V	
C311	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V	
* C312	1-116-735-11	CERAMIC CHIP	1uF	10%	16V	
C313	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V	
* C314	1-116-735-11	CERAMIC CHIP	1uF	10%	16V	
C315	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V	
C316	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	
C317	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V	
C318	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C319	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C320	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C321	1-116-733-11	CERAMIC CHIP	1uF	10%	25V	
C322	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C323	1-164-866-11	CERAMIC CHIP	47PF	5%	50V	
C324	1-116-733-11	CERAMIC CHIP	1uF	10%	25V	
C325	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V	

Note 1: When the complete MAIN board is replaced, it is necessary to replace the knob (VOL) assy (Ref. No. NFC1) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 4, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 7 and "BLUETOOTH INFORMATION WRITING METHOD" on page 8.

Note 2: ANT001 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

Ref. No.	Part No.	Description			Remark
C326	1-116-733-11	CERAMIC CHIP	1uF	10%	25V
C350	1-118-997-11	ELECT	3300uF	20%	16V
C400	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
C401	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C402	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C407	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C409	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C410	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
C411	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
			(M71BT/N5200BT: US, CND)		
C416	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C418	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C421	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
C426	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C429	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C432	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C436	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C437	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C439	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
C440	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C442	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
C443	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C444	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C450	1-128-992-21	ELECT CHIP	47uF	20%	25V
C501	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
C502	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
C505	1-116-745-11	CERAMIC CHIP	0.22uF	10%	6.3V
C520	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
C521	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C522	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C523	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C524	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C526	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C527	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C528	1-164-842-11	CERAMIC CHIP	2PF	0.25PF	50V
C530	1-164-842-11	CERAMIC CHIP	2PF	0.25PF	50V
C531	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C532	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C533	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C534	1-164-862-81	CERAMIC CHIP	33PF	5%	50V
C535	1-164-862-81	CERAMIC CHIP	33PF	5%	50V
C550	1-114-612-21	ELECT CHIP	220uF	20%	6.3V
C551	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
C600	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C601	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C602	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C603	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C604	1-116-350-21	CERAMIC CHIP	47uF	20%	4V
* C608	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V
C609	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C610	1-165-492-21	ELECT CHIP	100uF	20%	10V
C611	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C613	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C614	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C615	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C616	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C617	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C618	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C619	1-164-845-11	CERAMIC CHIP	5PF	0.25PF	50V
C620	1-164-845-11	CERAMIC CHIP	5PF	0.25PF	50V

Ref. No.	Part No.	Description			Remark
C623	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C624	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C625	1-116-724-11	CERAMIC CHIP	4.7uF	20%	6.3V
* C626	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V
C627	1-116-737-11	CERAMIC CHIP	1uF	20%	10V
C628	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C629	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
C630	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C631	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C632	1-116-350-21	CERAMIC CHIP	47uF	20%	4V
C633	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C634	1-116-737-11	CERAMIC CHIP	1uF	20%	10V
C635	1-116-737-11	CERAMIC CHIP	1uF	20%	10V
C636	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
C637	1-112-717-91	CERAMIC CHIP	1uF	10%	6.3V
C638	1-165-492-21	ELECT CHIP	100uF	20%	10V
C639	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C640	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C641	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C642	1-164-845-11	CERAMIC CHIP	5PF	0.25PF	50V
C643	1-164-845-11	CERAMIC CHIP	5PF	0.25PF	50V
C650	1-165-492-21	ELECT CHIP	100uF	20%	10V
C651	1-165-492-21	ELECT CHIP	100uF	20%	10V
C652	1-116-350-21	CERAMIC CHIP	47uF	20%	4V
C653	1-116-350-21	CERAMIC CHIP	47uF	20%	4V
C654	1-116-350-21	CERAMIC CHIP	47uF	20%	4V
C655	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C701	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C702	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C703	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
C705	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C706	1-118-395-11	CERAMIC CHIP	0.0047uF	10%	50V
C710	1-118-391-11	CERAMIC CHIP	0.01uF	10%	50V
C711	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C712	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C713	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C714	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C715	1-118-391-11	CERAMIC CHIP	0.01uF	10%	50V
C717	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C719	1-118-395-11	CERAMIC CHIP	0.0047uF	10%	50V
C720	1-118-388-11	CERAMIC CHIP	0.047uF	10%	25V
C721	1-118-391-11	CERAMIC CHIP	0.01uF	10%	50V
C722	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C723	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C724	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C725	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C726	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C727	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
C728	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
C729	1-116-744-11	CERAMIC CHIP	0.22uF	10%	10V
C730	1-118-389-11	CERAMIC CHIP	0.022uF	10%	25V
C731	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C732	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C734	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C752	1-100-363-11	ELECT CHIP	220uF	20%	4V
C753	1-126-209-11	ELECT CHIP	100uF	20%	4V
C754	1-126-209-11	ELECT CHIP	100uF	20%	4V
C756	1-165-708-11	ELECT CHIP	47uF	20%	6.3V
C844	1-100-764-21	ELECT CHIP	4.7uF	20%	25V
C1004	1-116-737-11	CERAMIC CHIP	1uF	20%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C1005	1-116-707-11	CERAMIC CHIP	47uF	20%	10V
C1006	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C1008	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
C1009	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
* C1010	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
* C1011	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
* C1012	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
C1013	1-118-388-11	CERAMIC CHIP	0.047uF	10%	25V
C1014	1-116-732-11	CERAMIC CHIP	2.2uF	20%	6.3V
C1016	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
C1017	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
C1018	1-116-724-11	CERAMIC CHIP	4.7uF	20%	6.3V
C1019	1-116-741-11	CERAMIC CHIP	0.47uF	20%	10V
C1039	1-117-735-81	CERAMIC CHIP	2PF	0.1PF	16V
C1041	1-164-839-81	CERAMIC CHIP	0.5PF	0.25PF	50V
C1051	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
C1300	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
C1301	1-118-039-11	CERAMIC CHIP	1uF	10%	25V
C1305	1-118-418-11	CERAMIC CHIP	22uF	20%	6.3V
C1311	1-118-391-11	CERAMIC CHIP	0.01uF	10%	50V
C1312	1-118-391-11	CERAMIC CHIP	0.01uF	10%	50V
C1316	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C1317	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C1321	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1323	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1326	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1353	1-165-492-21	ELECT CHIP	100uF	20%	10V
C1361	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C1368	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C1369	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C1371	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
* C1374	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V
C1376	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C1380	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
C1386	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1454	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V (M71BT/N5200BT: US, CND)
C1455	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V (M71BT/N5200BT: US, CND)
C1565	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V (M71BT/N5200BT: US, CND)
C1567	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V (M71BT/N5200BT: US, CND)
C1568	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V (M71BT/N5200BT: US, CND)
C1570	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V (M71BT/N5200BT: US, CND)
C1571	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V (M71BT/N5200BT: US, CND)
* C1572	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V (M71BT/N5200BT: US, CND)
* C1573	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V (M71BT/N5200BT: US, CND)
C1582	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V
C1583	1-117-681-11	ELECT CHIP	100uF	20%	16V
		< CONNECTOR >			
CN101	1-842-266-22	SOCKET, CONNECTOR 20P			
CN301	1-843-330-31	PIN, CONNECTOR 16P			
CN802	1-779-886-11	SOCKET, MINIATURE DIN CONNECTOR (SIRIUSXM IN) (M71BT/N5200BT: US, CND)			
CN1005	1-843-775-11	CONNECTOR, FFC/FPC (ZIF) 27P			

Ref. No.	Part No.	Description	Remark
		< BT MODULE >	
CP001	(Not supplied)	BT MODULE (WB113CX) (See Note)	
		< DIODE >	
D114	6-502-969-01	DIODE DZ2J06800L	
D115	6-502-969-01	DIODE DZ2J06800L	
D116	6-502-969-01	DIODE DZ2J06800L	
D117	6-502-969-01	DIODE DZ2J06800L	
D152	6-502-969-01	DIODE DZ2J06800L	
D200	6-503-238-01	DIODE GN1G	
D300	6-503-238-01	DIODE GN1G	
D301	6-503-238-01	DIODE GN1G	
D302	6-503-238-01	DIODE GN1G	
D303	6-503-238-01	DIODE GN1G	
D400	6-502-961-01	DIODE DA2J10100L	
D500	6-503-759-01	DIODE RB751V40, 115	
D813	6-503-031-01	DIODE DZ2J18000L	
D814	6-502-961-01	DIODE DA2J10100L	
D1001	6-502-969-01	DIODE DZ2J06800L	
D1003	6-502-969-01	DIODE DZ2J06800L	
D1301	6-503-548-01	DIODE DB2441600L	
D1302	6-502-961-01	DIODE DA2J10100L	
D1306	6-503-759-01	DIODE RB751V40, 115	
D1311	6-503-031-01	DIODE DZ2J18000L	
D1312	6-503-031-01	DIODE DZ2J18000L	
D1319	6-503-031-01	DIODE DZ2J18000L (M71BT/N5200BT: US, CND)	
D1321	6-503-031-01	DIODE DZ2J18000L (M71BT/N5200BT: US, CND)	
D1322	6-503-031-01	DIODE DZ2J18000L (M71BT/N5200BT: US, CND)	
D1341	6-503-759-01	DIODE RB751V40, 115 (M71BT/N5200BT: US, CND)	
		< FUSE >	
F802	1-576-415-31	FUSE (2 A/32 V) (M71BT/N5200BT: US, CND)	
		< FERRITE BEAD >	
FB01	1-400-334-21	FERRITE, EMI (SMD) (1608)	
FB1	1-481-912-21	EMI FERRITE (SMD) (1005)	
FB104	1-400-334-21	FERRITE, EMI (SMD) (1608)	
FB501	1-481-912-21	EMI FERRITE (SMD) (1005)	
FB708	1-481-912-21	EMI FERRITE (SMD) (1005)	
FB709	1-481-912-21	EMI FERRITE (SMD) (1005)	
FB800	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB801	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB802	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB803	1-481-912-21	EMI FERRITE (SMD) (1005)	
FB804	1-481-396-21	FERRITE, EMI (SMD) (1608)	
FB805	1-469-084-21	INDUCTOR, FERRITE BEAD (1005)	
FB806	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB807	1-414-760-21	FERRITE, EMI (SMD) (1608)	
FB809	1-481-396-21	FERRITE, EMI (SMD) (1608)	
FB811	1-481-643-21	FERRITE, EMI (SMD)	
FB1005	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1006	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1007	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
		< IC >	
IC001	(Not supplied)	IC SDP2014HN/V102 (See Note)	
IC002	6-723-392-01	IC TCR3DF33	
IC201	6-723-094-01	IC LV56851UV-XH	
IC304	6-723-099-01	IC TCB501HQ (Z)	

Note: CP001 and IC001 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

Ref. No.	Part No.	Description	Remark
IC400	6-721-638-01	IC NJM8065RB1-TE1	
IC401	6-721-638-01	IC NJM8065RB1-TE1	
IC402	6-721-638-01	IC NJM8065RB1-TE1	
IC403	6-712-391-01	IC TC74VHC4066AFK (EK)	
		(M71BT/N5200BT: US, CND)	
IC501	6-723-483-01	IC LC88FC3K0AF2330-ENG (SV)	
		(M71BT/N5200BT: US, CND) (See Note 1)	
IC501	6-723-484-01	IC LC88FC3K0AF2329-ENG (SV)	
		(N5200BT: AEP, UK, E, AUS) (See Note 1)	
IC601	6-723-096-01	IC LC786823E-6E11-3H	
IC602	(Not supplied)	IC MFI337S3959 (See Note 2)	
IC803	6-722-609-01	IC TC7WH126FK, RSNJ (CT	
		(M71BT/N5200BT: US, CND)	
IC804	6-710-376-01	IC 74LVC1G17GW-125	
		(M71BT/N5200BT: US, CND)	
IC1001	6-723-392-01	IC TCR3DF33	
IC1003	6-703-863-01	IC NJM2781RB1	
IC1301	(Not supplied)	IC BD9876BEFJ-E2 (See Note 2)	
IC1304	6-720-899-01	IC BD2242G-GTR	
IC1305	6-720-790-01	IC LC78615E-01US-H	
		< JACK >	
J01	1-843-791-21	JACK (ANT) (ANTENNA IN)	
J401	1-844-649-11	JACK, PIN 6P (FRONT, REAR, SUB)	
J1001	1-844-655-11	JACK (MIC, REMOTE)	
		< COIL >	
L1	1-469-293-21	INDUCTOR 220nH	
L2	1-412-978-41	INDUCTOR 0.82uH	
L3	1-481-330-21	INDUCTOR 220nH	
L5	1-412-985-31	INDUCTOR 3.3uH	
L6	1-469-293-21	INDUCTOR 220nH	
L10	1-400-073-21	INDUCTOR 4.7uH	
* L101	1-457-443-22	COMMON MODE CHOKE COIL	
L105	1-469-844-11	INDUCTOR 2.2uH	
L300	1-460-443-11	CHOKE COIL 140uH	
L1301	1-481-904-11	INDUCTOR 47uH	
		< TRANSISTOR >	
Q305	6-552-890-01	TRANSISTOR 2SCR523EBTL	
Q403	6-552-856-01	TRANSISTOR LTC914TUBFS8TL	
Q404	6-552-856-01	TRANSISTOR LTC914TUBFS8TL	
Q405	6-552-856-01	TRANSISTOR LTC914TUBFS8TL	
Q406	6-552-856-01	TRANSISTOR LTC914TUBFS8TL	
Q407	6-552-895-01	TRANSISTOR DTA014EEBTL	
Q408	6-552-895-01	TRANSISTOR DTA014EEBTL	
* Q409	6-552-938-01	TRANSISTOR LTC014YUBFS8TL	
Q410	6-552-856-01	TRANSISTOR LTC914TUBFS8TL	
Q700	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q1307	6-552-933-01	TRANSISTOR LTA043ZUBFS8TL	
Q1308	6-552-933-01	TRANSISTOR LTA043ZUBFS8TL	
		< RESISTOR >	
R4	1-218-989-11	METAL CHIP 1M 5% 1/16W	
R8	1-218-941-81	METAL CHIP 100 5% 1/16W	
R9	1-216-864-91	SHORT CHIP 0	
R14	1-218-941-81	METAL CHIP 100 5% 1/16W	
R15	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R16	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R18	1-216-864-91	SHORT CHIP 0	
R19	1-216-864-91	SHORT CHIP 0	

Ref. No.	Part No.	Description	Remark
R27	1-218-941-81	METAL CHIP 100 5% 1/16W	
R30	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R31	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R102	1-216-049-11	METAL CHIP 1K 5% 1/8W	
		(N5200BT: AEP, UK, E, AUS)	
R103	1-216-835-11	METAL CHIP 15K 5% 1/10W	
		(N5200BT: AEP, UK, E, AUS)	
R104	1-216-065-91	METAL CHIP 4.7K 5% 1/8W	
		(N5200BT: AEP, UK, E, AUS)	
R104	1-216-295-91	SHORT CHIP 0 (M71BT/N5200BT: US, CND)	
R105	1-216-065-91	METAL CHIP 4.7K 5% 1/8W	
		(N5200BT: AEP, UK, E, AUS)	
R106	1-216-835-11	METAL CHIP 15K 5% 1/10W	
		(N5200BT: AEP, UK, E, AUS)	
R107	1-216-049-11	METAL CHIP 1K 5% 1/8W	
		(N5200BT: AEP, UK, E, AUS)	
R109	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
R111	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
R116	1-218-990-81	SHORT CHIP 0	
R205	1-218-945-11	METAL CHIP 220 5% 1/16W	
R206	1-218-945-11	METAL CHIP 220 5% 1/16W	
R280	1-216-864-91	SHORT CHIP 0	
R308	1-218-960-11	METAL CHIP 3.9K 5% 1/16W	
R310	1-216-073-91	METAL CHIP 10K 5% 1/8W	
R312	1-216-073-91	METAL CHIP 10K 5% 1/8W	
R313	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R314	1-218-973-11	METAL CHIP 47K 5% 1/16W	
R315	1-218-943-11	METAL CHIP 150 5% 1/16W	
R316	1-218-971-81	METAL CHIP 33K 5% 1/16W	
R317	1-216-214-00	METAL CHIP 4.7K 5% 1/4W	
R318	1-216-296-11	SHORT CHIP 0	
R319	1-218-977-11	METAL CHIP 100K 5% 1/16W	
R320	1-218-969-11	METAL CHIP 22K 5% 1/16W	
R400	1-216-801-11	METAL CHIP 22 5% 1/10W	
R401	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R402	1-218-941-81	METAL CHIP 100 5% 1/16W	
R403	1-218-977-11	METAL CHIP 100K 5% 1/16W	
R404	1-218-951-11	METAL CHIP 680 5% 1/16W	
R406	1-218-966-11	METAL CHIP 12K 5% 1/16W	
R407	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R408	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R410	1-218-990-81	SHORT CHIP 0 (M71BT/N5200BT: US, CND)	
R411	1-218-951-11	METAL CHIP 680 5% 1/16W	
R412	1-218-966-11	METAL CHIP 12K 5% 1/16W	
R413	1-218-941-81	METAL CHIP 100 5% 1/16W	
R414	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R415	1-218-977-11	METAL CHIP 100K 5% 1/16W	
R416	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R417	1-218-990-81	SHORT CHIP 0 (N5200BT: AEP, UK, E, AUS)	
R418	1-218-990-81	SHORT CHIP 0 (N5200BT: AEP, UK, E, AUS)	
R422	1-218-953-11	METAL CHIP 1K 5% 1/16W	
R423	1-218-953-11	METAL CHIP 1K 5% 1/16W	
		(M71BT/N5200BT: US, CND)	
R423	1-218-990-81	SHORT CHIP 0 (N5200BT: AEP, UK, E, AUS)	
R424	1-218-961-11	METAL CHIP 4.7K 5% 1/16W	
		(M71BT/N5200BT: US, CND)	
R424	1-218-990-81	SHORT CHIP 0 (N5200BT: AEP, UK, E, AUS)	
R425	1-218-961-11	METAL CHIP 4.7K 5% 1/16W	
		(M71BT/N5200BT: US, CND)	
R425	1-218-990-81	SHORT CHIP 0 (N5200BT: AEP, UK, E, AUS)	
R426	1-218-953-11	METAL CHIP 1K 5% 1/16W	
		(M71BT/N5200BT: US, CND)	

Note 1: When the IC501 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 4.

Note 2: IC602 and IC1301 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

MAIN

Ref. No.	Part No.	Description				Remark
R426	1-218-990-81	SHORT CHIP	0 (N5200BT: AEP, UK, E, AUS)			
R427	1-216-797-11	METAL CHIP	10	5%	1/10W	
R428	1-218-967-11	METAL CHIP	15K	5%	1/16W	(M71BT/N5200BT: US, CND)
R429	1-218-967-11	METAL CHIP	15K	5%	1/16W	(M71BT/N5200BT: US, CND)
R430	1-218-990-81	SHORT CHIP	0			
R431	1-218-990-81	SHORT CHIP	0 (M71BT/N5200BT: US, CND)			
R433	1-218-990-81	SHORT CHIP	0 (M71BT/N5200BT: US, CND)			
R437	1-216-797-11	METAL CHIP	10	5%	1/10W	
R439	1-218-966-11	METAL CHIP	12K	5%	1/16W	
R440	1-218-965-11	METAL CHIP	10K	5%	1/16W	
R441	1-218-941-81	METAL CHIP	100	5%	1/16W	
R442	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R443	1-218-977-11	METAL CHIP	100K	5%	1/16W	
* R444	1-250-545-11	METAL CHIP	120K	1%	1/16W	
R445	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R446	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R447	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R448	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R449	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R450	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R451	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R452	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R453	1-216-797-11	METAL CHIP	10	5%	1/10W	
R455	1-218-966-11	METAL CHIP	12K	5%	1/16W	
R456	1-218-965-11	METAL CHIP	10K	5%	1/16W	
R457	1-218-941-81	METAL CHIP	100	5%	1/16W	
R458	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R460	1-218-966-11	METAL CHIP	12K	5%	1/16W	
R461	1-218-965-11	METAL CHIP	10K	5%	1/16W	
R462	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R463	1-218-941-81	METAL CHIP	100	5%	1/16W	
R464	1-218-951-11	METAL CHIP	680	5%	1/16W	
R465	1-218-951-11	METAL CHIP	680	5%	1/16W	
R466	1-218-965-11	METAL CHIP	10K	5%	1/16W	
R467	1-218-965-11	METAL CHIP	10K	5%	1/16W	
R500	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R502	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R503	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R505	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R506	1-218-953-11	METAL CHIP	1K	5%	1/16W	
R507	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R508	1-218-977-11	METAL CHIP	100K	5%	1/16W	(M71BT/N5200BT: US, CND)
R511	1-218-971-81	METAL CHIP	33K	5%	1/16W	
R512	1-220-200-81	METAL CHIP	30K	5%	1/16W	
R519	1-250-519-11	METAL CHIP	10K	1%	1/16W	
R520	1-250-519-11	METAL CHIP	10K	1%	1/16W	
R522	1-218-977-11	METAL CHIP	100K	5%	1/16W	
R525	1-218-953-11	METAL CHIP	1K	5%	1/16W	
R526	1-218-949-11	METAL CHIP	470	5%	1/16W	
R527	1-218-953-11	METAL CHIP	1K	5%	1/16W	

Ref. No.	Part No.	Description			Remark
R528	1-218-941-81	METAL CHIP	100	5%	1/16W
R529	1-218-941-81	METAL CHIP	100	5%	1/16W
R530	1-218-941-81	METAL CHIP	100	5%	1/16W
R531	1-218-953-11	METAL CHIP	1K	5%	1/16W
R532	1-218-953-11	METAL CHIP	1K	5%	1/16W
R535	1-218-953-11	METAL CHIP	1K	5%	1/16W
R536	1-218-971-81	METAL CHIP	33K	5%	1/16W
R537	1-218-953-11	METAL CHIP	1K	5%	1/16W
R539	1-218-971-81	METAL CHIP	33K	5%	1/16W
R540	1-245-604-11	METAL CHIP	10M	5%	1/16W
R541	1-218-977-11	METAL CHIP	100K	5%	1/16W
R542	1-218-981-81	METAL CHIP	220K	5%	1/16W
R543	1-218-977-11	METAL CHIP	100K	5%	1/16W
R544	1-218-989-11	METAL CHIP	1M	5%	1/16W
R545	1-218-990-81	SHORT CHIP	0		
R546	1-218-977-11	METAL CHIP	100K	5%	1/16W
R547	1-218-977-11	METAL CHIP	100K	5%	1/16W
R548	1-218-977-11	METAL CHIP	100K	5%	1/16W
R549	1-218-965-11	METAL CHIP	10K	5%	1/16W
R551	1-218-977-11	METAL CHIP	100K	5%	1/16W
R560	1-218-977-11	METAL CHIP	100K	5%	1/16W
R565	1-218-975-11	METAL CHIP	68K	5%	1/16W
R566	1-218-977-11	METAL CHIP	100K	5%	1/16W
R567	1-218-977-11	METAL CHIP	100K	5%	1/16W
R568	1-218-941-81	METAL CHIP	100	5%	1/16W
R569	1-218-941-81	METAL CHIP	100	5%	1/16W
R570	1-218-977-11	METAL CHIP	100K	5%	1/16W
R571	1-218-977-11	METAL CHIP	100K	5%	1/16W
R572	1-218-941-81	METAL CHIP	100	5%	1/16W
R573	1-218-941-81	METAL CHIP	100	5%	1/16W
R574	1-218-941-81	METAL CHIP	100	5%	1/16W
R575	1-218-941-81	METAL CHIP	100	5%	1/16W
R603	1-218-949-11	METAL CHIP	470	5%	1/16W
R605	1-216-864-91	SHORT CHIP	0		
R608	1-216-799-11	METAL CHIP	15	5%	1/10W
R609	1-216-799-11	METAL CHIP	15	5%	1/10W
R612	1-216-799-11	METAL CHIP	15	5%	1/10W
R613	1-216-799-11	METAL CHIP	15	5%	1/10W
R614	1-218-989-11	METAL CHIP	1M	5%	1/16W
R615	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R616	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R620	1-218-973-11	METAL CHIP	47K	5%	1/16W
R621	1-218-973-11	METAL CHIP	47K	5%	1/16W
R622	1-218-973-11	METAL CHIP	47K	5%	1/16W
R623	1-218-973-11	METAL CHIP	47K	5%	1/16W
R624	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R625	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R629	1-218-964-81	METAL CHIP	8.2K	5%	1/16W
R631	1-218-990-81	SHORT CHIP	0		
R632	1-218-990-81	SHORT CHIP	0		
R641	1-218-977-11	METAL CHIP	100K	5%	1/16W
R651	1-218-941-81	METAL CHIP	100	5%	1/16W
R700	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R701	1-218-959-11	METAL CHIP	3.3K	5%	1/16W
R702	1-218-965-11	METAL CHIP	10K	5%	1/16W
R703	1-218-949-11	METAL CHIP	470	5%	1/16W
R704	1-218-975-11	METAL CHIP	68K	5%	1/16W
R705	1-242-967-11	METAL CHIP	1	5%	1/16W
R710	1-218-947-11	METAL CHIP	330	5%	1/16W
R711	1-218-990-81	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R714	1-218-949-11	METAL CHIP	470	5%	1/16W
R715	1-218-975-11	METAL CHIP	68K	5%	1/16W
R716	1-218-951-11	METAL CHIP	680	5%	1/16W
R717	1-218-951-11	METAL CHIP	680	5%	1/16W
R720	1-218-971-81	METAL CHIP	33K	5%	1/16W
R722	1-218-990-81	SHORT CHIP	0		
R723	1-218-990-81	SHORT CHIP	0		
R725	1-218-990-81	SHORT CHIP	0		
R729	1-218-975-11	METAL CHIP	68K	5%	1/16W
R732	1-218-990-81	SHORT CHIP	0		
R735	1-220-802-11	METAL CHIP	3.3	5%	1/16W
R1001	1-216-864-91	SHORT CHIP	0		
R1003	1-218-977-11	METAL CHIP	100K	5%	1/16W
R1004	1-218-941-81	METAL CHIP	100	5%	1/16W
R1005	1-218-941-81	METAL CHIP	100	5%	1/16W
R1006	1-218-941-81	METAL CHIP	100	5%	1/16W
R1013	1-218-990-81	SHORT CHIP	0		
R1014	1-218-941-81	METAL CHIP	100	5%	1/16W
R1015	1-218-933-11	METAL CHIP	22	5%	1/16W
R1016	1-218-941-81	METAL CHIP	100	5%	1/16W
R1017	1-218-933-11	METAL CHIP	22	5%	1/16W
R1018	1-218-941-81	METAL CHIP	100	5%	1/16W
R1019	1-218-941-81	METAL CHIP	100	5%	1/16W
R1020	1-218-941-81	METAL CHIP	100	5%	1/16W
R1021	1-218-941-81	METAL CHIP	100	5%	1/16W
R1024	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
R1025	1-218-941-81	METAL CHIP	100	5%	1/16W
R1030	1-218-941-81	METAL CHIP	100	5%	1/16W
R1031	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R1032	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1033	1-218-967-11	METAL CHIP	15K	5%	1/16W
R1035	1-218-990-81	SHORT CHIP	0		
R1036	1-218-951-11	METAL CHIP	680	5%	1/16W
R1037	1-218-937-11	METAL CHIP	47	5%	1/16W
R1040	1-218-990-81	SHORT CHIP	0		
R1052	1-216-864-91	SHORT CHIP	0		
R1055	1-216-864-91	SHORT CHIP	0		
R1056	1-216-864-91	SHORT CHIP	0		
R1301	1-218-941-81	METAL CHIP	100	5%	1/16W
R1307	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1308	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R1309	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R1311	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1321	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
R1323	1-218-970-11	METAL CHIP	27K	5%	1/16W
R1324	1-218-970-11	METAL CHIP	27K	5%	1/16W
R1326	1-218-965-11	METAL CHIP	10K	5%	1/16W
R1331	1-218-941-81	METAL CHIP	100	5%	1/16W
R1332	1-216-809-11	METAL CHIP	100	5%	1/10W
R1341	1-218-990-81	SHORT CHIP	0 (M71BT/N5200BT: US, CND)		
R1343	1-218-953-11	METAL CHIP	1K	5%	1/16W
R1348	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R1349	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R1350	1-218-941-81	METAL CHIP	100	5%	1/16W
R1364	1-218-941-81	METAL CHIP	100	5%	1/16W
R1367	1-250-497-11	METAL CHIP	1.2K	1%	1/16W
R1368	1-250-497-11	METAL CHIP	1.2K	1%	1/16W
R1369	1-250-519-11	METAL CHIP	10K	1%	1/16W
R1370	1-250-519-11	METAL CHIP	10K	1%	1/16W

Ref. No.	Part No.	Description			Remark
R1403	1-216-864-91	SHORT CHIP	0		
R1428	1-218-990-81	SHORT CHIP	0		
R1429	1-218-990-81	SHORT CHIP	0		
R1451	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (M71BT/N5200BT: US, CND)
R1453	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (M71BT/N5200BT: US, CND)
R1486	1-216-864-91	SHORT CHIP	0 (M71BT/N5200BT: US, CND)		
R1490	1-216-809-11	METAL CHIP	100	5%	1/10W (M71BT/N5200BT: US, CND)
R1491	1-218-977-11	METAL CHIP	100K	5%	1/16W (M71BT/N5200BT: US, CND)
R1492	1-216-809-11	METAL CHIP	100	5%	1/10W (M71BT/N5200BT: US, CND)
R1493	1-216-809-11	METAL CHIP	100	5%	1/10W (M71BT/N5200BT: US, CND)
R1494	1-218-977-11	METAL CHIP	100K	5%	1/16W (M71BT/N5200BT: US, CND)
R1495	1-216-801-11	METAL CHIP	22	5%	1/10W (M71BT/N5200BT: US, CND)
R1496	1-218-972-11	METAL CHIP	39K	5%	1/16W (M71BT/N5200BT: US, CND)
R1497	1-218-975-11	METAL CHIP	68K	5%	1/16W (M71BT/N5200BT: US, CND)
R1589	1-216-864-91	SHORT CHIP	0		
R1598	1-218-941-81	METAL CHIP	100	5%	1/16W
R1599	1-218-941-81	METAL CHIP	100	5%	1/16W
R1600	1-218-941-81	METAL CHIP	100	5%	1/16W
R1601	1-218-941-81	METAL CHIP	100	5%	1/16W
R1602	1-218-941-81	METAL CHIP	100	5%	1/16W
R1603	1-218-941-81	METAL CHIP	100	5%	1/16W
R1604	1-218-941-81	METAL CHIP	100	5%	1/16W
R1606	1-216-295-91	SHORT CHIP	0		

< VARISTOR/DIODE >

VDR001	1-811-852-11	ESD SUPPRESSOR
VDR1	6-504-046-01	DIODE RSB12ZT2L
VDR002	1-811-852-11	ESD SUPPRESSOR
VDR2	6-504-046-01	DIODE RSB12ZT2L

< VIBRATOR >

X1	1-814-824-11	QUARTZ CRYSTAL UNIT (12 MHz)
X501	1-814-777-11	QUARTZ CRYSTAL UNITS (32.768 kHz)
X502	1-814-714-11	QUARTZ CRYSTAL UNIT (9.25 MHz)
X601	1-814-906-11	QUARTZ CRYSTAL UNIT (12 MHz)
X701	1-795-561-21	VIBRATOR, CERAMIC (16.934 MHz)

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MISCELLANEOUS

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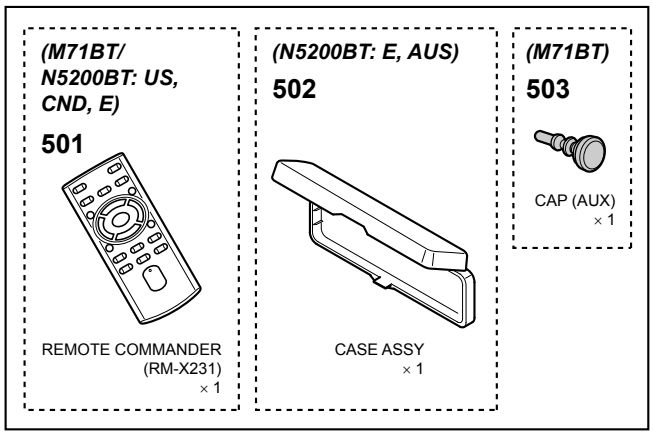
FFC1	1-846-819-61	CABLE FLEXIBLE FLAT (27 CORE) (Length: 80 mm)
FP1	A-2181-296-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (N5200BT: US, CND) (See Note 1)
FP1	A-2181-297-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (N5200BT: AEP, UK, E, AUS) (See Note 1)
FP1	A-2181-298-A	PANEL (SV) ASSY, FRONT (Including Serial number label) (M71BT) (See Note 1)
FU1	1-523-227-11	MINI FUSE (BLADE TYPE) (10 A/32 V)
NFC1	X-2594-500-1	KNOB (VOL) (SV) ASSY (Including NFC module) (See Note 2)

Note 1: When the front panel assy (Ref. No. FP1) is replaced, the Bluetooth information writing and affixing of label (serial number) is necessary. Refer to "BLUETOOTH INFORMATION WRITING METHOD" on page 8 and "AFFIXING OF LABEL (SERIAL NUMBER)" on page 13.

Note 2: When the knob (VOL) assy (Ref. No. NFC1) is replaced, Bluetooth information writing is necessary. Refer to "BLUETOOTH INFORMATION WRITING METHOD" on page 8.

Ref. No.	Part No.	Description	Remark
PW1	1-846-033-11	CONNECTION CABLE (ISO) (Power supply connection cable)	(N5200BT: AEP, UK)
PW1	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (Power supply connection cable)	(M71BT/N5200BT: US, CND, E, AUS)
**********			
		ACCESSORIES **********	
	4-597-143-21	OPERATING INSTRUCTION (ENGLISH, FRENCH, GERMAN, DUTCH, ITALIAN, RUSSIAN, UKRAINIAN)	(N5200BT: AEP, UK)
	4-597-143-31	OPERATING INSTRUCTION (ENGLISH, SPANISH)	(N5200BT: E)
	4-597-143-41	OPERATING INSTRUCTION (ENGLISH)	(N5200BT: AUS)
	4-597-143-61	OPERATING INSTRUCTION (ENGLISH, FRENCH)	(N5200BT: US, CND)
	4-597-144-11	OPERATING INSTRUCTION (ENGLISH, FRENCH, SPANISH)	(M71BT)
501	1-489-810-42	REMOTE COMMANDER (RM-X231)	(M71BT/N5200BT: US, CND, E)
502	X-2187-544-5	CASE ASSY (for Front panel assy)	(N5200BT: E, AUS)
503	2-683-516-01	CAP (AUX) (M71BT)	



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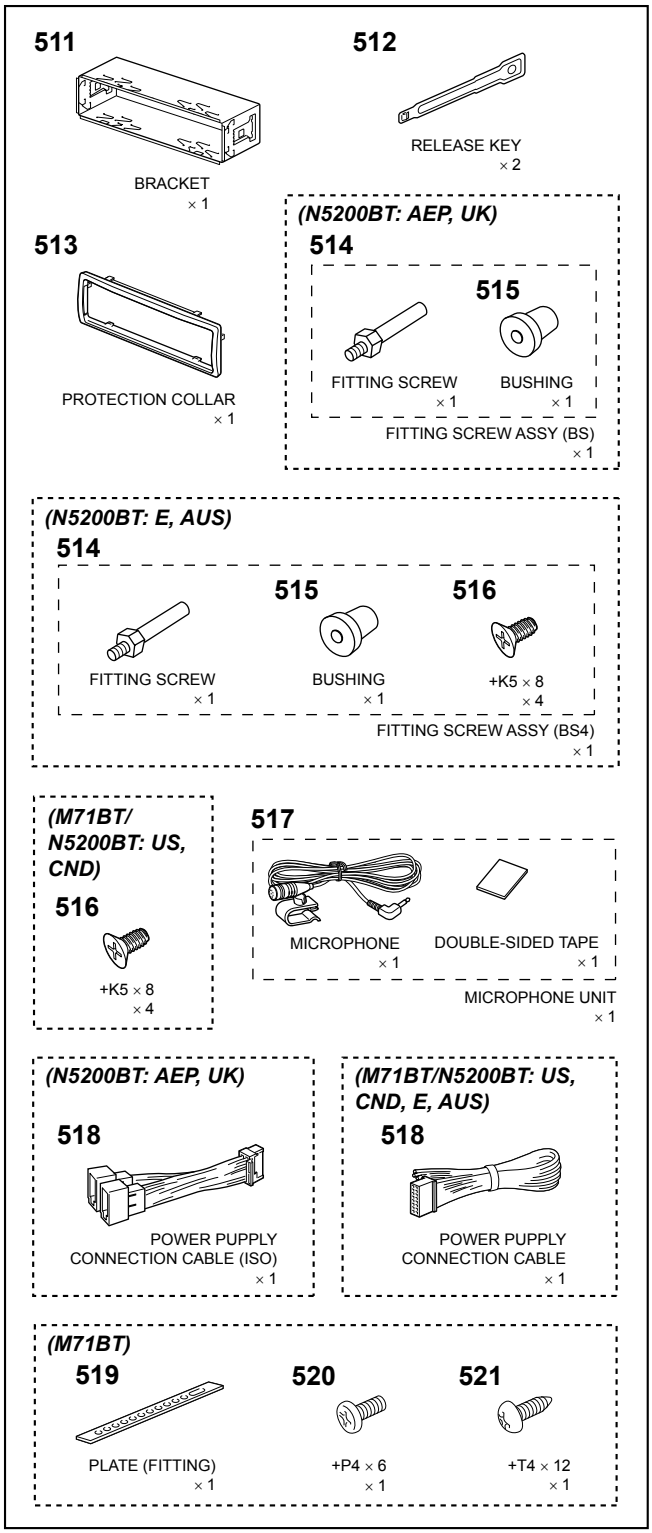
PARTS FOR INSTALLATION AND CONNECTIONS **********

511	X-2583-962-1	FRAME ASSY, FITTING (Bracket)	
512	4-276-003-03	KEY (FRAME) (Release key) (1 piece)	
513	4-461-753-01	COLLAR (Protection collar)	
514	X-2584-360-1	SCREW ASSY (BS), FITTING	(N5200BT: AEP, UK)
514	X-2587-114-1	SCREW ASSY (BS4), FITTING	(N5200BT: E, AUS)
515	3-349-410-11	BUSHING	(N5200BT: AEP, UK, E, AUS)
516	3-934-325-21	SCREW, +K (5X8) TAPPING (1 piece)	(M71BT/N5200BT: US, CND, E, AUS)
517	1-542-986-21	MICROPHONE UNIT (Including Double-sided tape)	
518	1-846-033-11	CONNECTION CABLE (ISO) (Power supply connection cable)	(N5200BT: AEP, UK)
518	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (Power supply connection cable)	(M71BT/N5200BT: US, CND, E, AUS)
519	2-889-508-01	PLATE (FITTING) (M71BT)	
520	7-682-160-01	SCREW +P 4X6 (M71BT)	
521	3-915-917-01	SCREW, +T 4X12 (M71BT)	



MEMO

REVISION HISTORY

Ver.	Date	Description of Revision
1.0	2016.12	New

How to search for a contact point of signal lines or the like in DIAGRAMS SECTION

If a contact point of a BLOCK DIAGRAM, PRINTED WIRING BOARD or SCHEMATIC DIAGRAM is shown in a different page, use the PDF file search function to find one.

e.g.) If a contact point is shown as >001Z, follow the procedure below.

Procedure:

1. Press the [F] key while pressing the [Ctrl] key.
2. Input ">001Z" in the search box and press the [Enter] key.
3. The relevant part (page), where the contact point is shown, appears.

Note: If you still see the original page, press the [Enter] key again.