WX-850BT/900BT/ 900BTM

SERVICE MANUAL

Ver. 1.1 2016.02

Photo: WX-900BT

US Model
Canadian Model
WX-850BT/900BT
AEP Model
UK Model
E Model
Australian Model
WX-900BT
Indian Model
WX-900BT/900BTM

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-N4100BT/N4150BT
Mechanism Type	MG-101CF-188
Optical Pick-up Name	DAX-25A

SPECIFICATIONS

(US and Canadian models only)
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
CEA2006 Standard
Power Output: 17 Watts RMS × 4 at 4 Ohms < 1% THD+N
SN Ratio: 80 dBA
(reference: 1 Watt into 4 Ohms)

Tuner section (US and Canadian models)

FM
Tuning range: 87.5 – 107.9 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
FM CCIR: -1,956.5 to -487.3 kHz and +500.0 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 – 15,000 Hz

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

Tuner section (AEP and UK models)

FM
Tuning range: 87.5 – 108.0 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency:
FM CCIR: -1,956.5 to -487.3 kHz and +500.0 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 – 15,000 Hz

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

Tuner section (E, Indian and Australian models)

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 to -487.3 kHz and +500.0 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 – 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 – 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), WMA (.wma) and AAC (.m4a)

USB Player section

Interface: USB (High-speed)
Maximum current: 1 A
The maximum number of recognizable tracks: 10,000
Corresponding codec:
MP3 (.mp3)
Bit rate: 8 - 320 kbps (Supports VBR (Variable Bit Rate))
Sampling rate: 16 - 48 kHz
WMA (.wma)
Bit rate: 32 - 192 kbps (Supports VBR (Variable Bit Rate))
Sampling rate: 32 kHz, 44.1 kHz, 48 kHz
AAC (.m4a, .mp4)
Bit rate: 8 - 320 kbps
Sampling rate: 11.025 - 48 kHz
WAV (.wav)
Bit depth: 16 bit
Sampling rate: 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 – 2.4835 GHz)
Modulation method: FHSS
Compatible BLUETOOTH Profiles*2:
A2DP (Advanced Audio Distribution Profile) 1.3
AVRCP (Audio Video Remote Control Profile) 1.5
HFP (Handsfree Profile) 1.6
PBAP (Phone Book Access Profile)
SPP (Serial Port Profile)
MAP (Message Access Profile)
HID (Human Interface Device Profile)
Corresponding codec:
SBC (.sbc) and AAC (.m4a)

*1 The 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.
*2 BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

Power amplifier section

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

– Continued on next page –

Bluetooth® AUDIO SYSTEM

9-896-191-02
2016B33-1

Sony Video & Sound Products Inc.
Published by Sony Techno Create Corporation

SONY®

General

Outputs:
- Audio outputs terminal: front, rear, sub
- Power antenna (aerial)/Power amplifier control terminal (REM OUT)

Inputs:
- SiriusXM input terminal (900BT: US and Canadian models 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 × 100 mm × 178 mm (7 1/8 in × 4 in × 7 1/8 in) (w/h/d)

Mounting dimensions:
- Approx. 182 mm × 111 mm × 159 mm (7 1/4 in × 4 3/8 in × 6 3/8 in) (w/h/d)

Mass: Approx. 1.4 kg (3 lb 2 oz)
Package contents:
- Main unit (1)
- Remote commander (1): RM-X231 (US, Canadian, E, Indian and Australian models only)
- Microphone (1)
- Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

Copyrights

SiriusXM Connect Vehicle Tuner and Subscription sold separately.
www.siriusxm.com
Sirius, XM and all related marks and logos are trademarks of Sirius XM Radio Inc. All rights reserved.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sony Corporation is under license. Other trademarks and trade names are those of their respective owners.

The N-Mark is a trademark or registered trademark of NFC Forum, Inc. in the United States and in other countries.

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary.

iPhone, iPod, iPod classic, iPod nano, iPod touch, and Siri are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

Pandora®, the Pandora® logo, and the Pandora® trade dress are trademarks or registered trademarks of Pandora Media, Inc., used with permission.

Google, Google Play and Android are trademarks of Google Inc.

libFLAC

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.

• US and Canadian models:

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

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

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

TABLE OF CONTENTS

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

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

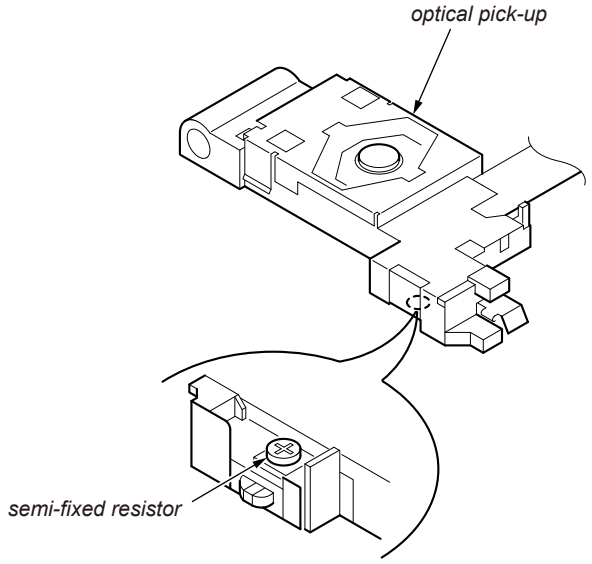
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic 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

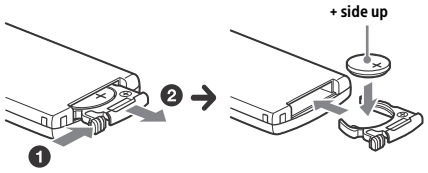
Unleaded solder has the following characteristics.

- 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 (850BT, 900BT: US, Canadian, E, Indian, Australian models and 900BTM only)

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

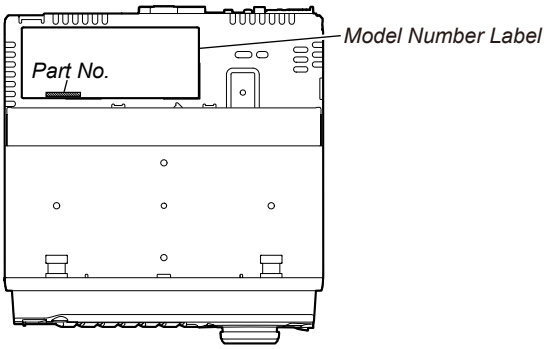
- Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.
- Wipe the battery with a dry cloth to ensure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers,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

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

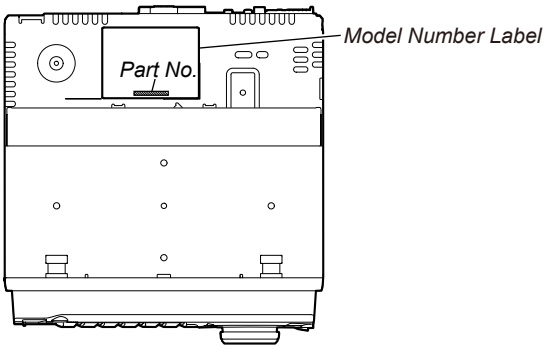
MODEL IDENTIFICATION

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

– Bottom view –
(US, Canadinan, AEP and UK models)



– Bottom view –
(E, Indian and Australian models)



Part No.	Model
4-575-528-0□	WX-900BT: US and Canadian models (UC)
4-575-529-0□	WX-900BT: AEP and UK models (EUR)
4-575-530-0□	WX-900BT: E and Australian models (E)
4-575-531-0□	WX-900BT: Indian model (IN)
4-575-532-0□	WX-900BTM: Indian model (MARUTI SUZUKI model) (IN)
4-588-101-0□	WX-850BT: US and Canadian models (Wal-Mart model) (UC)

DESTINATION ABBREVIATIONS

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

- Abbreviations
  AUS : Australian model
  CND : Canadian model
  IND : Indian model

DESTINATION SETTING METHOD

When the complete MAIN board or serial flash (IC502) is replaced, the destination setting is necessary.

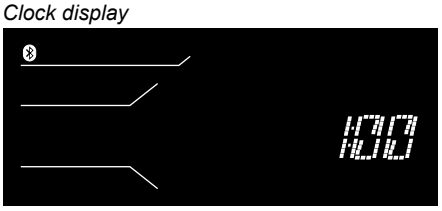
1. Destination Setting

Set destination according to the procedure below.

1-1. Setting the Destination Code

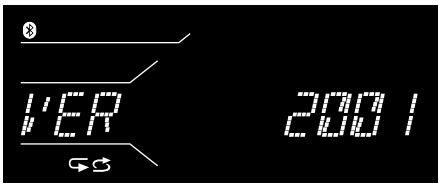
1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] ⟶ [MIC 5] ⟶ [PAUSE 6] (press only the [PAUSE 6] button for two seconds).
   (Displayed characters/values in the following figure are example)

Clock display



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 SEEK+] ⟶ [SEEK– I◀◀ ◀◀] ⟶ [▲ PUSH ENTER/MENU/ ➡VOICE].
   (Displayed characters/values in the following figure are example)

Software main version

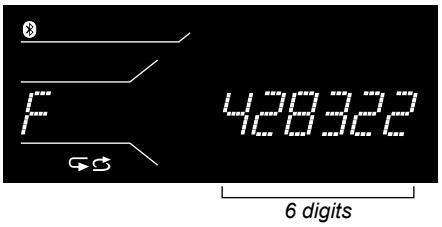


3. Input the alphanumeric character of 6 digits displayed on the liquid crystal display, and execute the destination setting.

Note 1: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

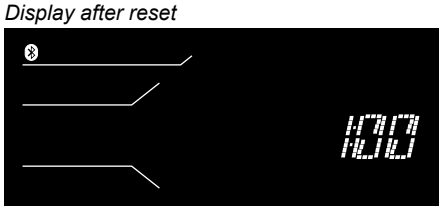
Note 2: Refer to the following "1-3. Entering the Destination Code" for operation method.

Destination code



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

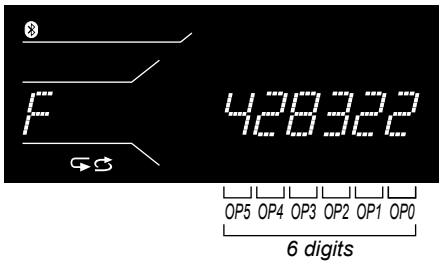
Display after reset



1-2. Display in Destination Setting Mode

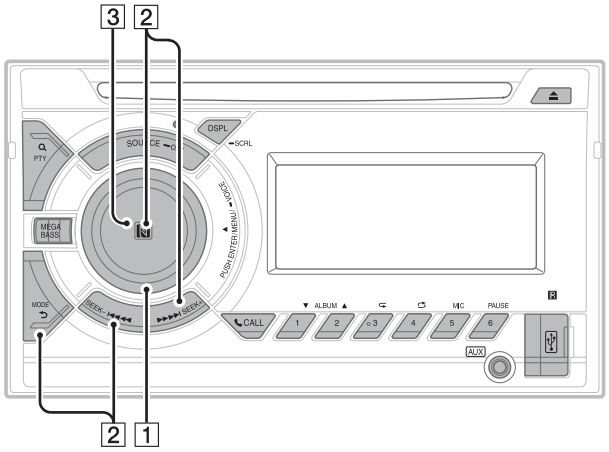
Note: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

Destination code



1-3. Entering the Destination Code

- **Method of operation by main unit**

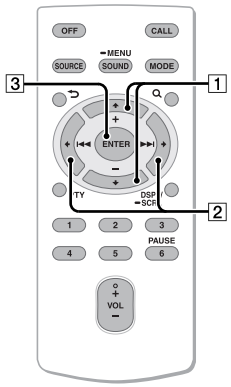


1. Rotate the control dial, and select the alphanumeric character of "0 to F".
2. The digit advances by pressing the [▲ PUSH ENTER/MENU/ ➡VOICE] or [▶▶▶▶I SEEK+] button.
   The digit returns by pressing the [MODE ⮌] or [SEEK– I◀◀ ◀◀] button.
3. The setting is completed by pressing the [▲ PUSH ENTER/ 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.

– Continued on next page –

- **Method of operation by remote commander (850BT, 900BT: US, Canadian, E, Indian, Australian models and 900BTM only)**

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
WX-850BT	US, Canadian	4	2	8	1	4	2
WX-900BT	US, Canadian	4	2	8	3	2	2
	AEP, UK	0	2	8	1	2	1
	E, Australian	0	6	B	1	2	0
	Indian	0	6	9	1	2	0
WX-900BTM	Indian	0	6	9	1	3	0

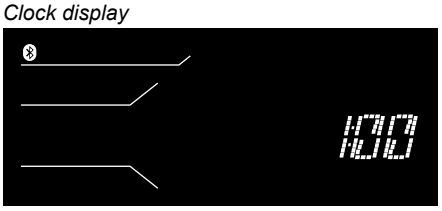
2. Confirmation After Destination Setting

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

Destination setting checking method:

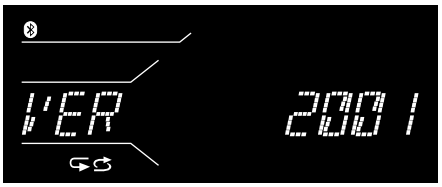
1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [↻ 4] ⟶ [MIC 5] ⟶ [PAUSE 6] (press only the [PAUSE 6] button for two seconds).
   (Displayed characters/values in the following figure are example)

Clock display



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 [DSPL ➖SCRL] button twice (software main version ⟶ Bluetooth address ⟶ destination code).
   (Displayed characters/values in the following figure are example)

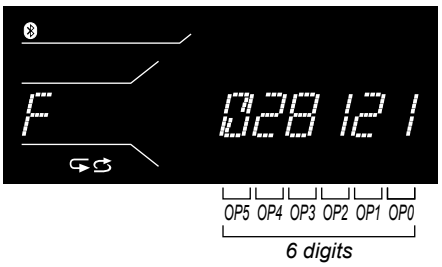
Software main version



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

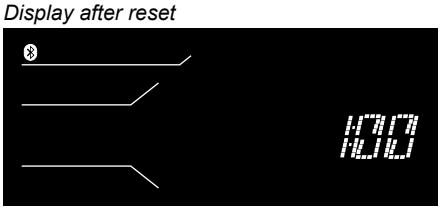
Note: The displayed contents of the following figure is an example. The destination code is different depending on the destination of the product.

Destination code



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

Display after reset



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

NOTE OF PERFORMING THE OPERATION CHECK

When performing the operation check in the state that is removed the CD 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)

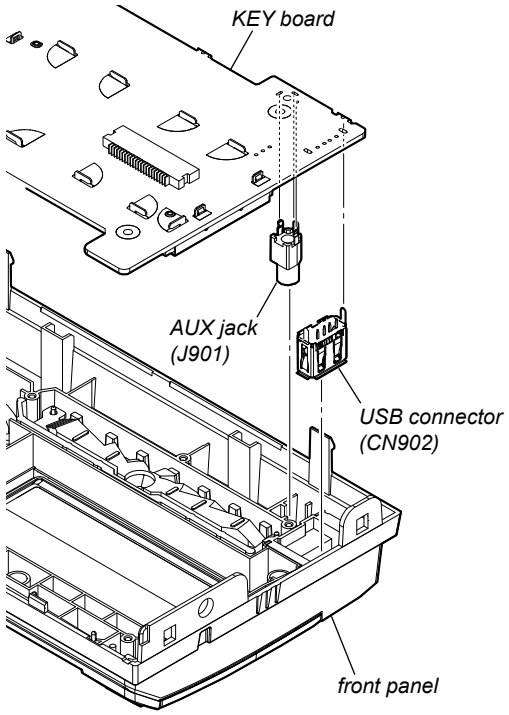
NOTE OF REPLACING THE ANT001, IC001, IC503, IC804, IC1002 AND IC1009 ON THE MAIN BOARD

ANT001, IC001, IC503, IC804, IC1002 and IC1009 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

NOTE FOR REPLACING OF THE USB CONNECTOR (CN902) AND THE AUX JACK (J901)

To replace the USB connector and AUX jack requires alignment.

1. Insert the USB connector and AUX jack into the front panel.
2. Place the KEY board on the front panel and align the terminals of the USB connector and AUX jack with the holes in the KEY board.
3. Solder six terminals of the USB connector and three terminals of the AUX jack.



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 [SET 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.

BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE

1. Required Equipment

- This unit to be tested, external microphone of attachment
- 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

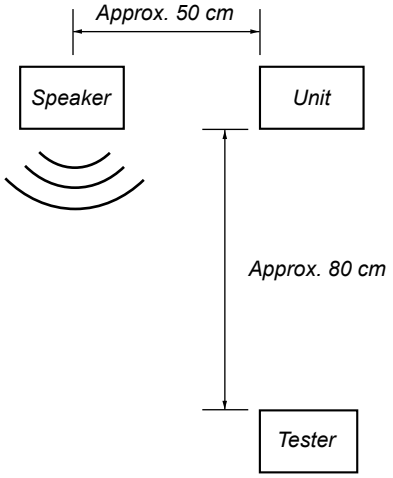
- Confirm the setting of this unit and note down it.
- Press the [CALL] button and rotate the control dial until "SET PAIRING" appears, then press it, confirm that the Bluetooth signal icon ( ) is flashing.
- Turn on the Bluetooth function of the smartphone or cellular phone.

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 (An external microphone is connected).
   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 [▶▶ ▶▶| SEEK+], [SEEK– |◀◀ ◀◀] and [PAUSE 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 15).
  (Connected device information is deleted)

BLUETOOTH INFORMATION WRITING METHOD

When the complete MAIN board or knob (VOL) assy (Ref. No. NFC1) 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: 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 10.
- 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.

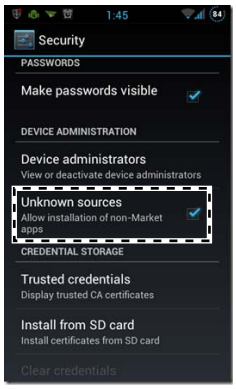
- Be absolutely sure that the NFC Tag Data Writing Application supports your model.
- Confirm that the NFC Tag Data Writing Application is the latest version.
  (Refer to "Checking the Version of the NFC Tag Data Writing Application" on page 10)

Procedure:

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

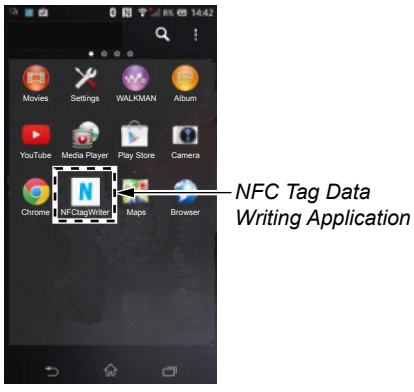
Note: Be absolutely sure that the NFC Tag Data Writing Application supports your model.

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 –

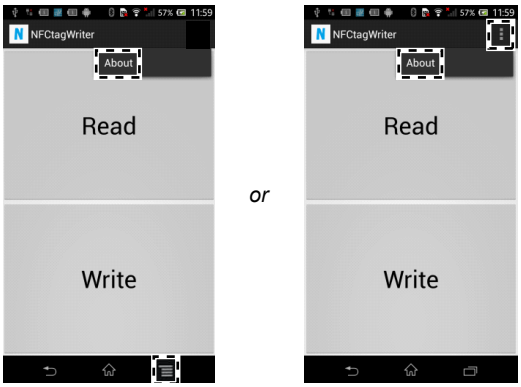


9. Refer to "Checking the Version of the NFC Tag Data Writing Application" on page 10, and confirm that the NFC Tag Data Writing Application is the latest version.

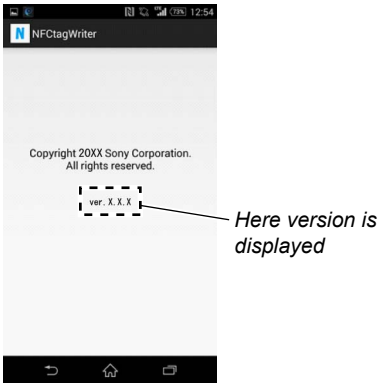
- **Checking the Version of the NFC Tag Data Writing Application**

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).

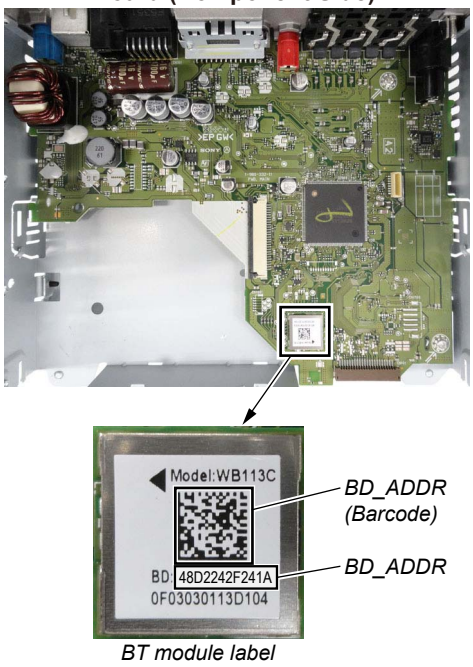
Procedure:

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 22 and after)

– MAIN Board (Component Side) –

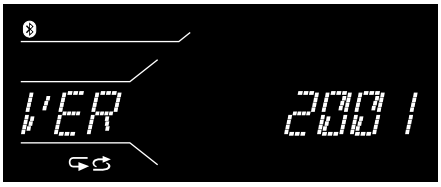


– Continued on next page –

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] → [PAUSE 6] (press only the [PAUSE 6] button for two seconds).
(Displayed characters/values in the following figure are example)

Software main version



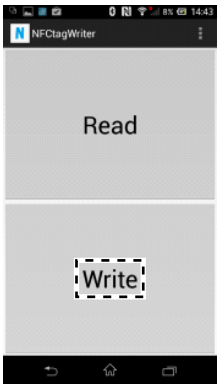
② In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [DSPL ━ SCRL] button.
(Displayed characters/values in the following figure are example)

Bluetooth address (BD_ADDR)

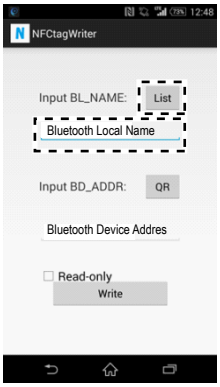
Note 1: When pressing the [DSPL ━SCRL] button again, the destination code is displayed on the liquid crystal display, but it is not necessary to display in this step.

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

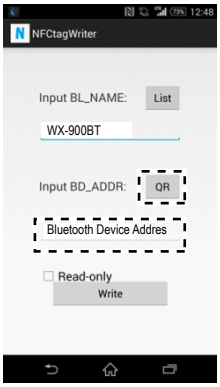
2. Turn on the NFC function of the smartphone.
3. Start the NFC Tag Data Writing Application on the smartphone.
4. Tap the "Write" on the screen of the smartphone.



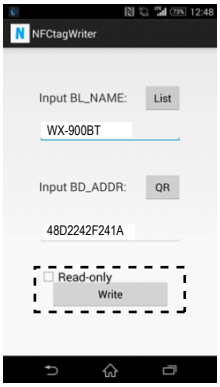
5. Input the Bluetooth Local Name (BL_NAME).
Tap the "List" on the screen of the smartphone and select the model name of the this unit. If there is not model name of the this unit on the list, please input the model name with the keyboard on the smartphone.



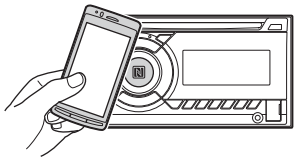
6. Input the Bluetooth address (BD_ADDR).
Input the Bluetooth address (BD_ADDR) that was checked by step 1 with the keyboard on the smartphone, or tap the "QR" on the screen of the smartphone and read the barcode with the camera of the smartphone.



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



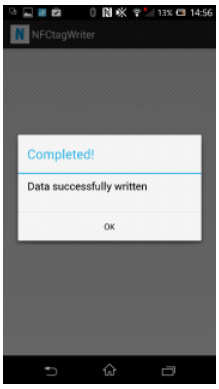
8. Touch the N-mark part of the smartphone to the N-mark part of the unit.



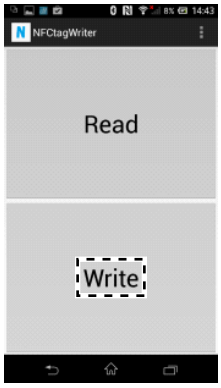
– Continued on next page –

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

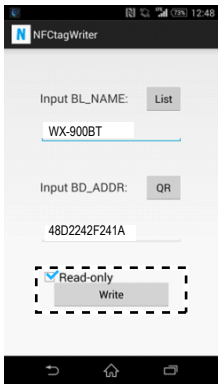
Note 2: When “Completed!” is not displayed on the screen of the smartphone, refer to “3. Error Display” on page 13.



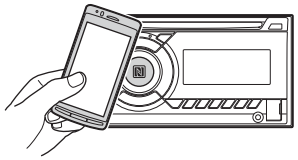
10. End the NFC Tag Data Writing Application on the smartphone.
11. Check the operation of connecting with the smartphone by one touch (NFC).
    (Refer to “OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS” on page 15)
12. Start the NFC Tag Data Writing Application on the smartphone.
13. Tap the “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.

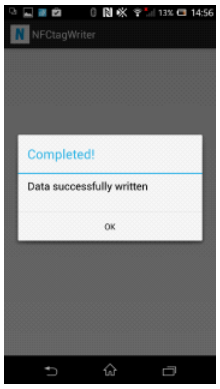


15. Touch the N-mark part of the smartphone to the N-mark part of the unit.

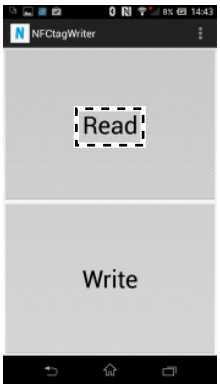


16. Check that “Completed!” is displayed on the screen of the smartphone.

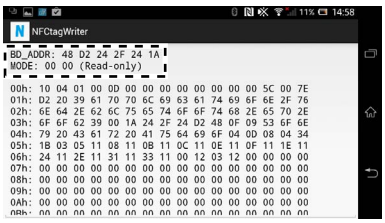
Note 3: When “Completed!” is not displayed on the screen of the smartphone, refer to “3. Error Display” on page 13.



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



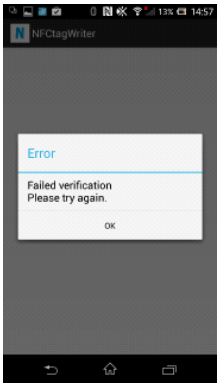
18. Check that “BD_ADDR” on the screen of the smartphone accords with BD_ADDR written on the BT module label and “MODE” on the screen of the smartphone is “00 00 (Read-only)”.



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 15)

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.

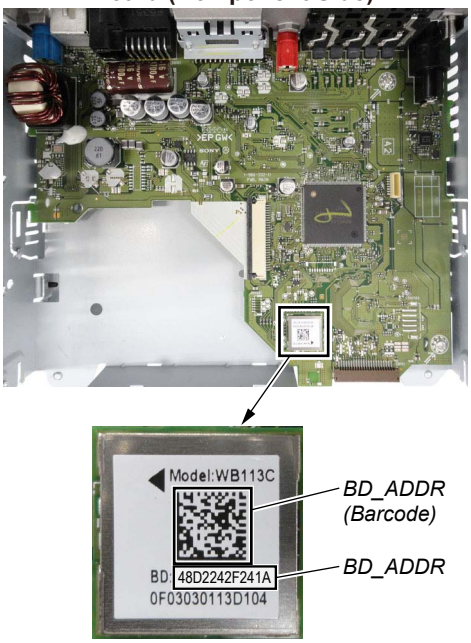
Procedure:

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 22 and after)

– MAIN Board (Component Side) –



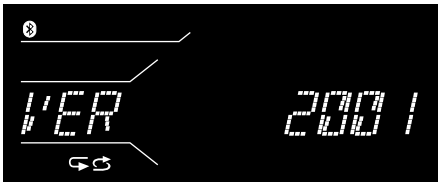
BT module label

– 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] ⟶ [PAUSE 6] (press only the [PAUSE 6] button for two seconds).
(Displayed characters/values in the following figure are example)

Software main version



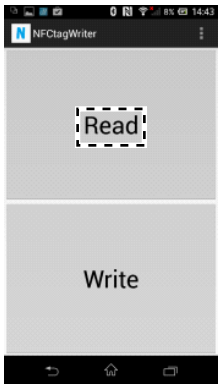
② In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [DSPL ➖ SCRL] button.
(Displayed characters/values in the following figure are example)

Bluetooth address (BD_ADDR)

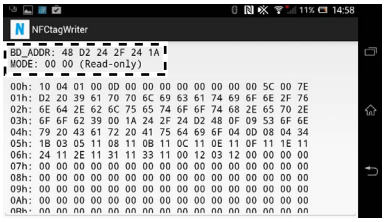
Note: When pressing the [DSPL ➖SCRL] button again, the destination code is displayed on the liquid crystal display, but it is not necessary to display in this step.

③ The resetting operation is executed by pressing the [SOURCE ➖OFF] 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

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 "SET BT".
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).

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)

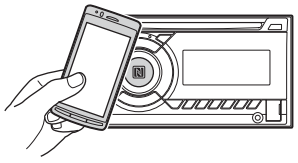
By touching the control dial on the unit with an NFC* compatible smartphone, the unit is paired and connected with the smartphone automatically.

* 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 ᛒ 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 another NFC compatible device. In this case, disconnect the other device, and make connection with the smartphone again.

(US and Canadian models)

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.

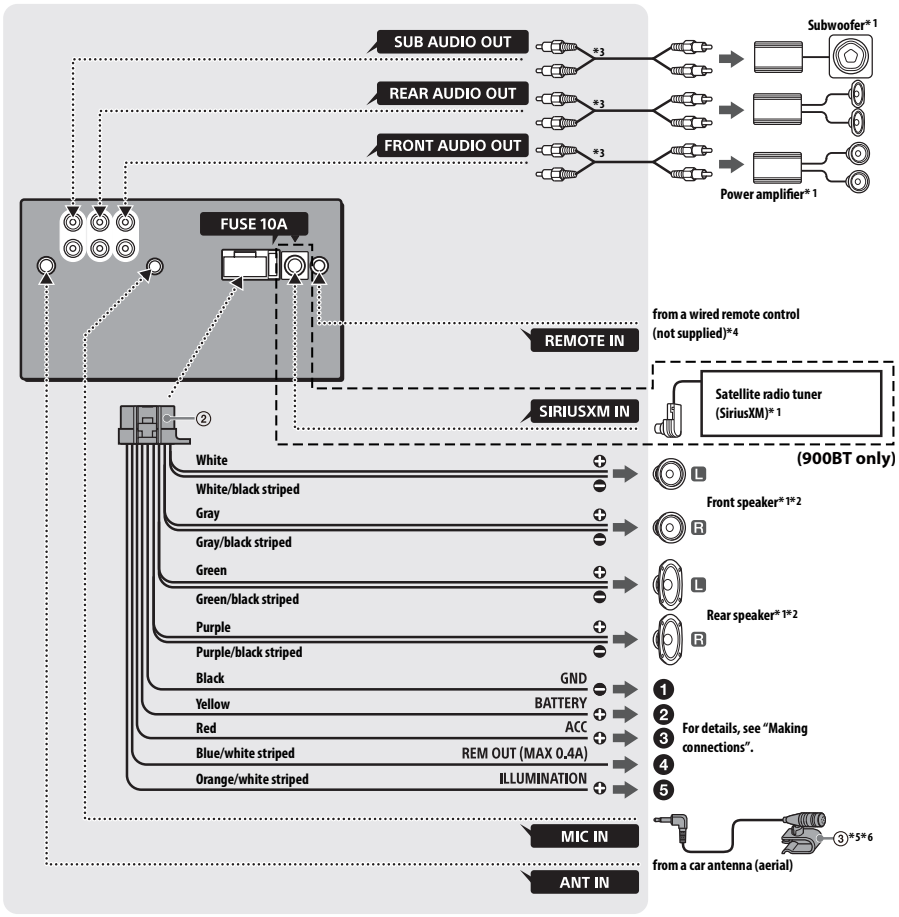
Precautions

- 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 – 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).
*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.

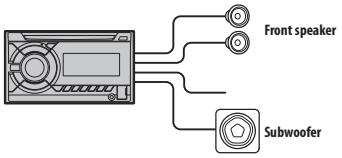
❸ **To the +12 V power terminal which is energized when the ignition switch is set to the accessory position**
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to first connect the black ground (earth) lead to a common ground (earth) 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 to 8 ohms, and with adequate power handling capacities to avoid damage.

Memory hold connection

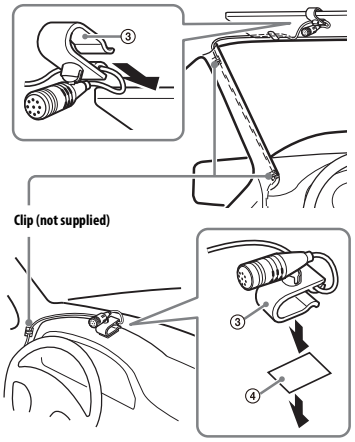
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, 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 ③.



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 ④, 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.

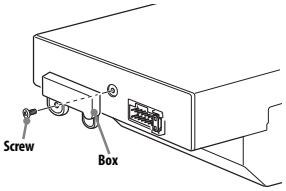
When using the wired remote control

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

Installation

(850BT only)

Before installing this unit, remove the screw and box on the back of the unit. Do not use the previous parts you removed when installing the unit.



Mounting the unit in the dashboard

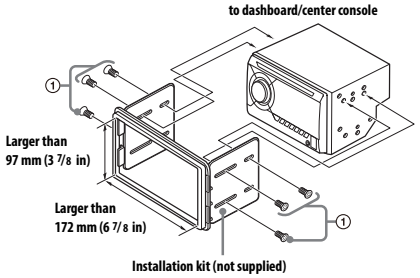
When mounting in a Japanese car, see "Mounting the unit in a Japanese car".

Mounting the unit with an installation kit (not supplied)

You can use a commercially available double DIN installation kit. Choose an installation kit with the following panel frame size.
Larger than 172 × 97 mm (6 7/8 × 3 7/8 in) (w/h), with an inner corner radius of less than 0.5 mm (1/32 in).

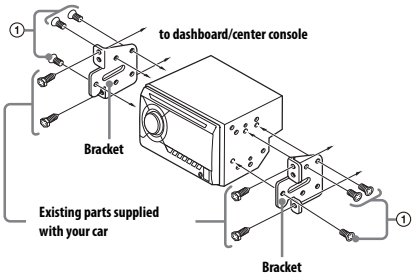
Note

Be sure to use the supplied screws ①.

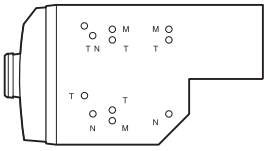


Mounting the unit in a Japanese car

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



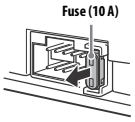
When mounting this unit to the preinstalled brackets of your car, use the supplied screws ① in the appropriate screw holes, based on your car: T for TOYOTA, M for MITSUBISHI and N for NISSAN.



Note

To prevent malfunction, install only with the supplied screws ①.

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.

(AEP and UK models)

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 ⑤ 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.

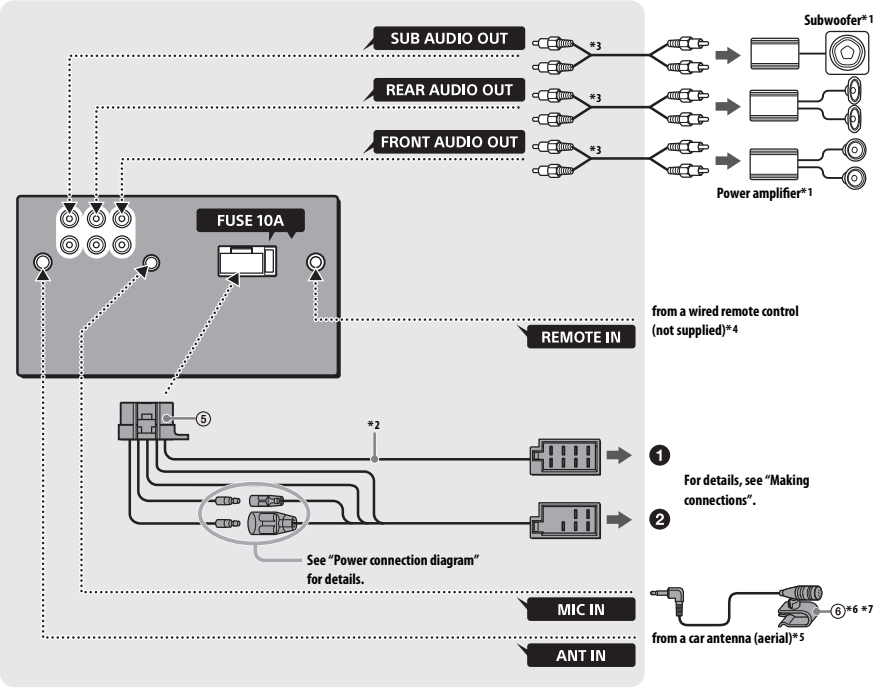
Precautions

- 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

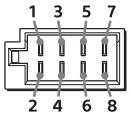


*1 Not supplied
*2 Speaker impedance: 4 – 8 Ω × 4
*3 RCA pin cord (not supplied)
*4 Depending on the type of car, use an adaptor for a wired remote control (not supplied).
*5 Depending on the type of car, use an adaptor (not supplied) if the antenna (aerial) connector does not fit.
*6 Whether in use 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.
*7 For details on installing the microphone, see "Installing the microphone".

Making connections

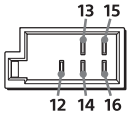
If you have a power antenna (aerial) without a relay box, connecting this unit with the supplied power supply lead ⑤ may damage the antenna (aerial).

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

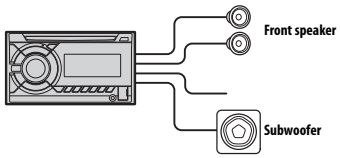
❷ To the car's power connector



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 suppl	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 to 8 ohms, 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.

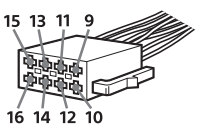
Speaker connection

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

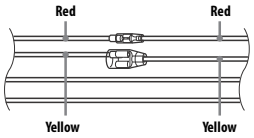
Power connection diagram

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

Auxiliary power connector

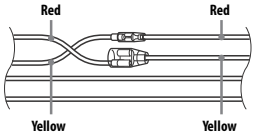


Common connection



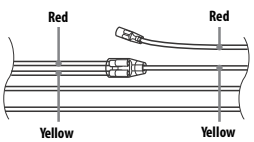
12	continuous power supply	Yellow
15	switched power supply	Red

When the positions of the red and yellow leads are inverted



12	switched power supply	Yellow
15	continuous power supply	Red

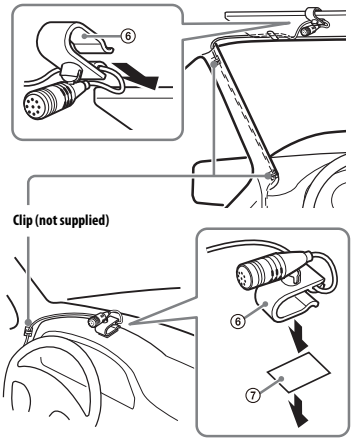
When the car without ACC position



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 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

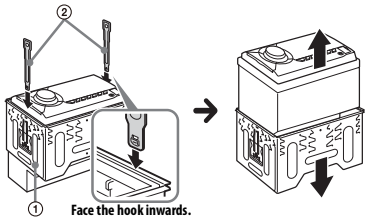
1 To enable the wired remote control, set [STR CONTROL] in [SET STEERING] to [PRESET].

Installation

Removing the bracket

Before installing the unit, remove the bracket ① from the unit.

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



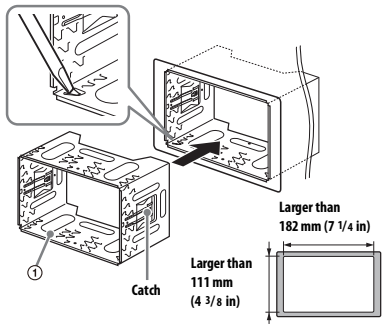
Mounting the unit in the dashboard

When mounting in a Japanese car, see "Mounting the unit in a Japanese car".

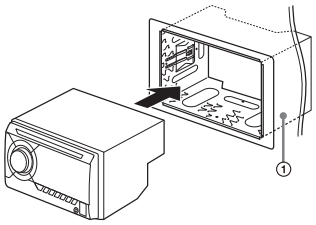
Mounting the unit with the supplied bracket

Before installing, make sure the catches on both sides of the bracket ① are bent inwards 3.5 mm (5/32 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.

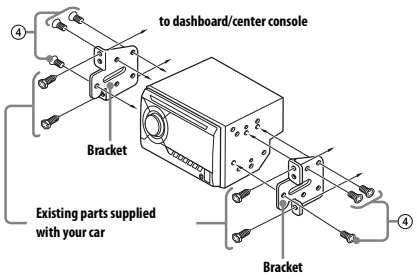


Note

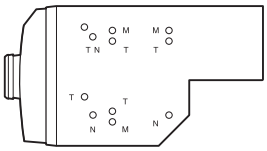
If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.

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.



When mounting this unit to the preinstalled brackets of your car, use the supplied screws ④ in the appropriate screw holes, based on your car: T for TOYOTA, M for MITSUBISHI and N for NISSAN.

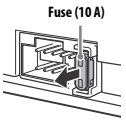


Note

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.



(E, Indian and Australian models)

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

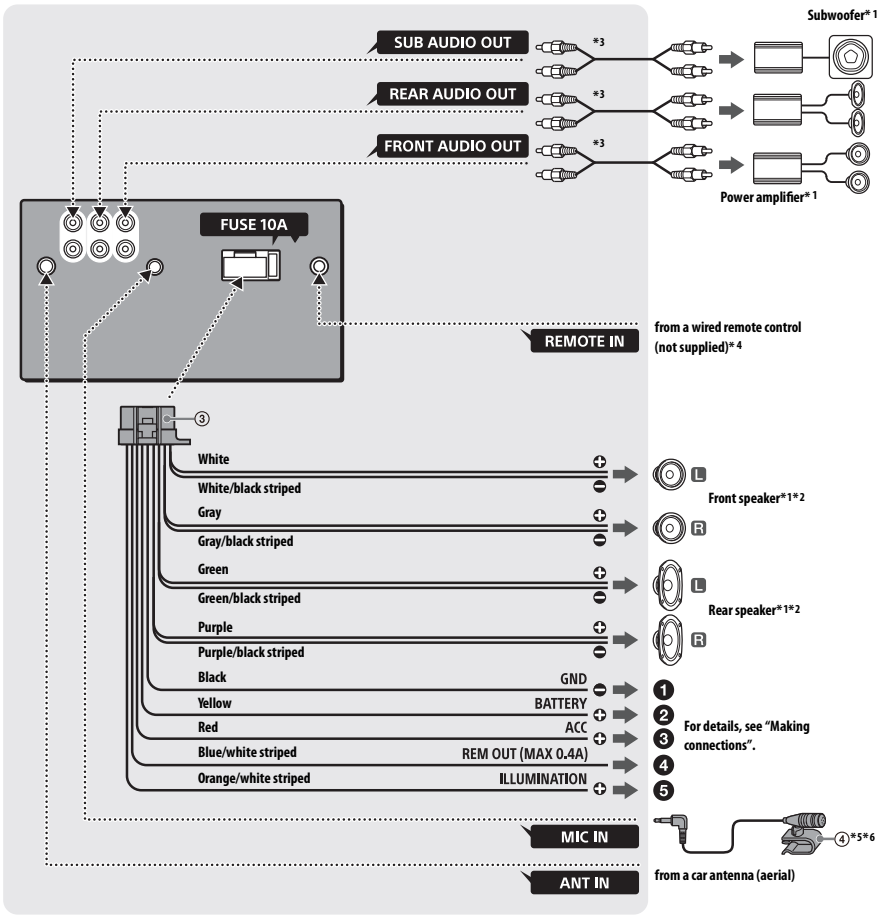
- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware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

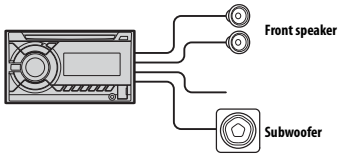
❸ **To the +12 V power terminal which is energized when the ignition switch is set to the accessory position**
If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
Be sure to first connect the black ground (earth) lead to a common ground (earth) 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 to 8 ohms, and with adequate power handling capacities to avoid damage.

Memory hold connection

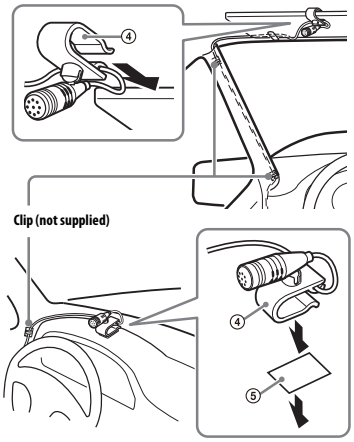
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, 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 ④.



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 ⑤, 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

Mounting the unit in the dashboard

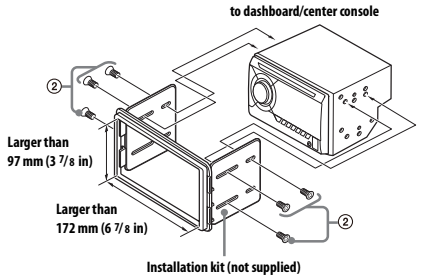
When mounting in a Japanese car, see "Mounting the unit in a Japanese car".

Mounting the unit with an installation kit (not supplied)

You can use a commercially available double DIN installation kit. Choose an installation kit with the following panel frame size.
Larger than 172 × 97 mm (6 7/8 × 3 7/8 in) (w/h), with an inner corner radius of less than 0.5 mm (1/32 in).

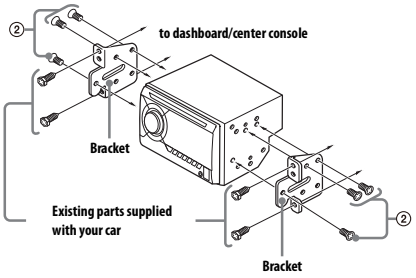
Note

Be sure to use the supplied screws ②.

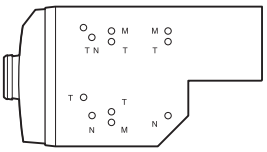


Mounting the unit in a Japanese car

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



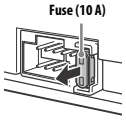
When mounting this unit to the preinstalled brackets of your car, use the supplied screws ② in the appropriate screw holes, based on your car: T for TOYOTA, M for MITSUBISHI and N for NISSAN.



Note

To prevent malfunction, install only with the supplied screws ②.

Fuse replacement

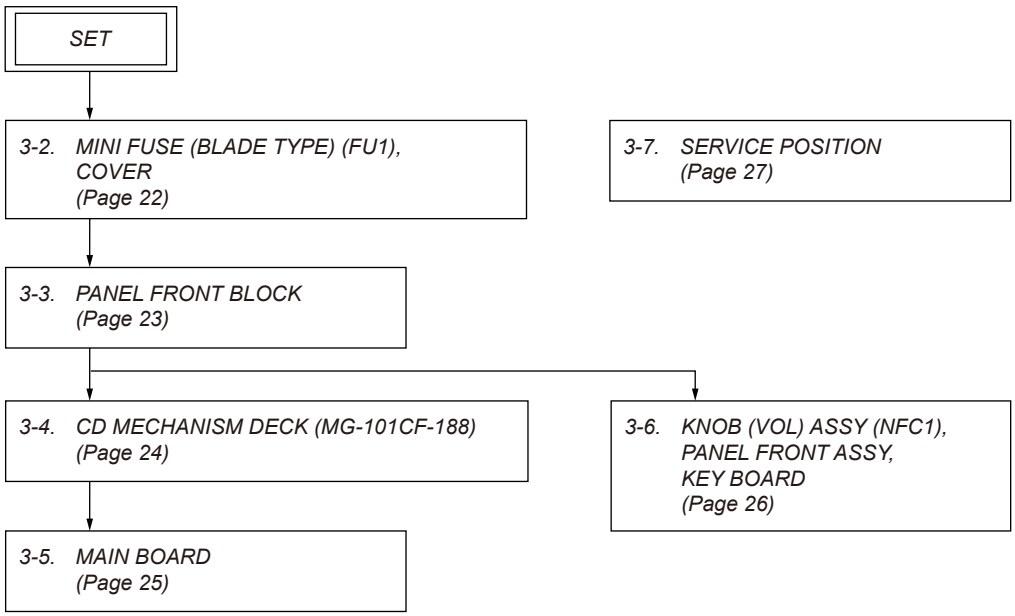


When replacing the fuse, be sure to use one matching the amperage rating stated on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

SECTION 3
DISASSEMBLY

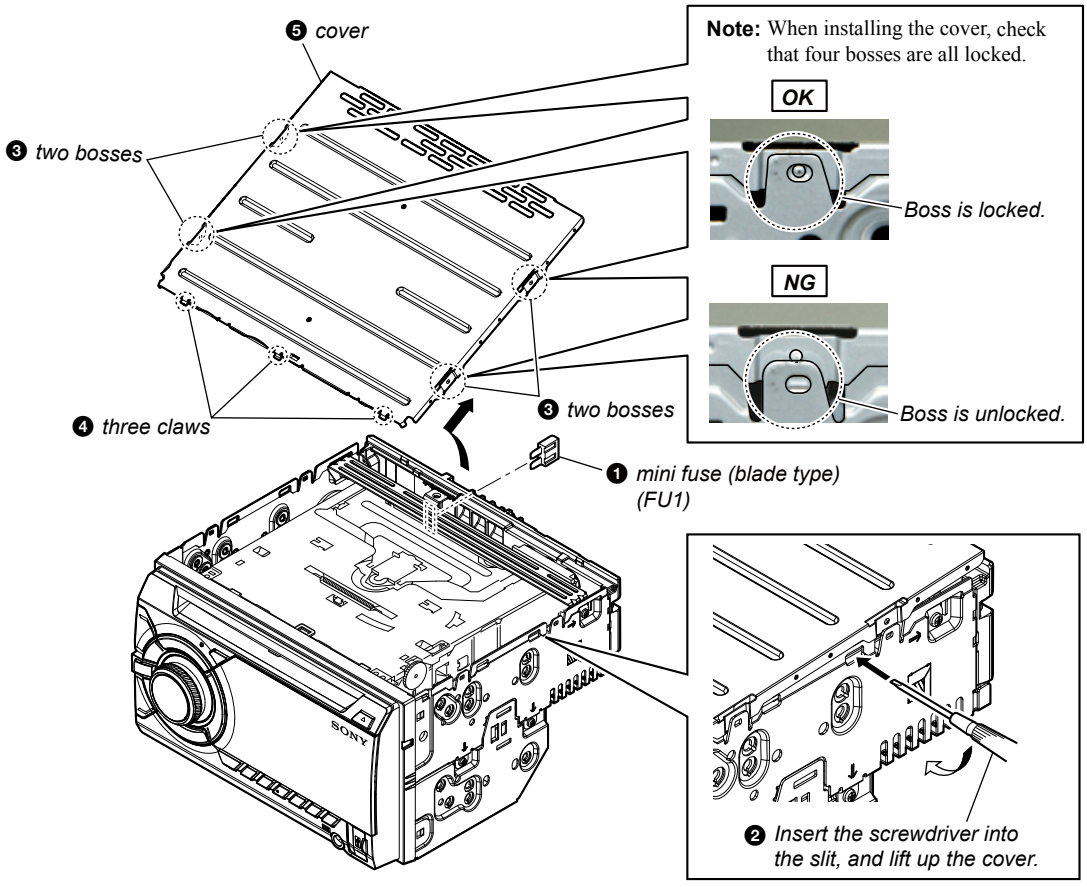
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

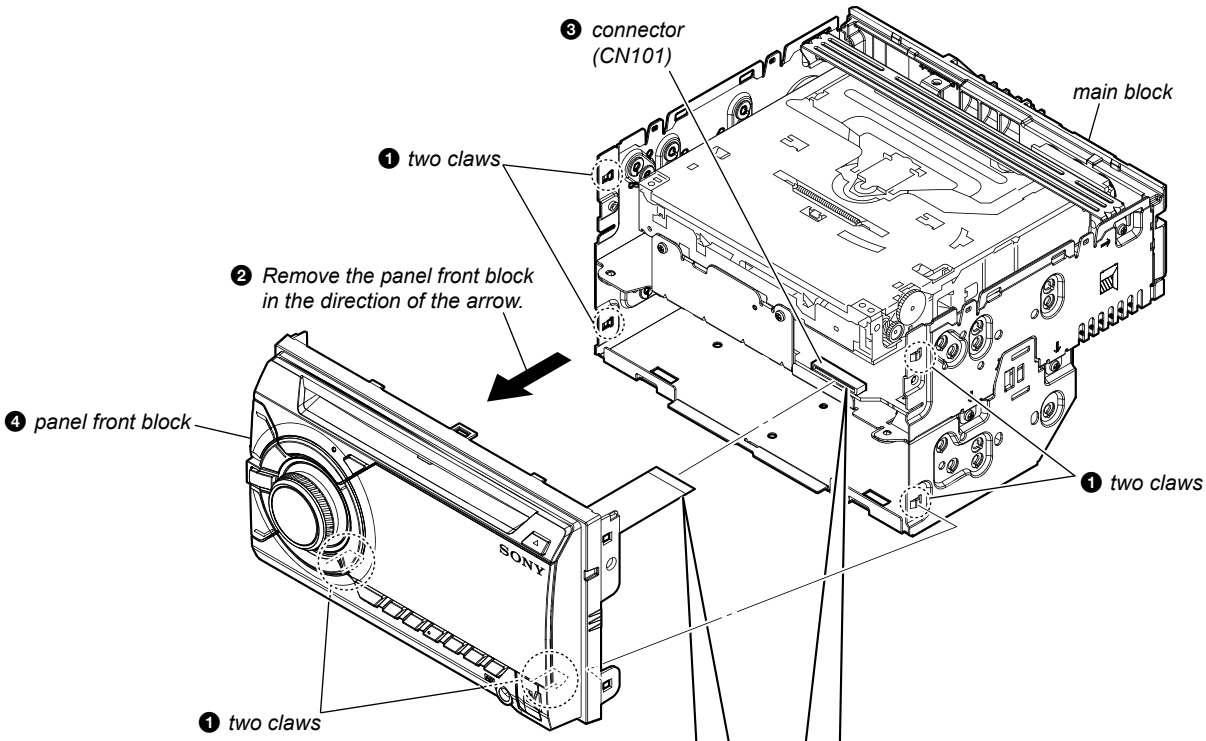


Note: Follow the disassembly procedure in the numerical order given.

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



3-3. PANEL FRONT BLOCK

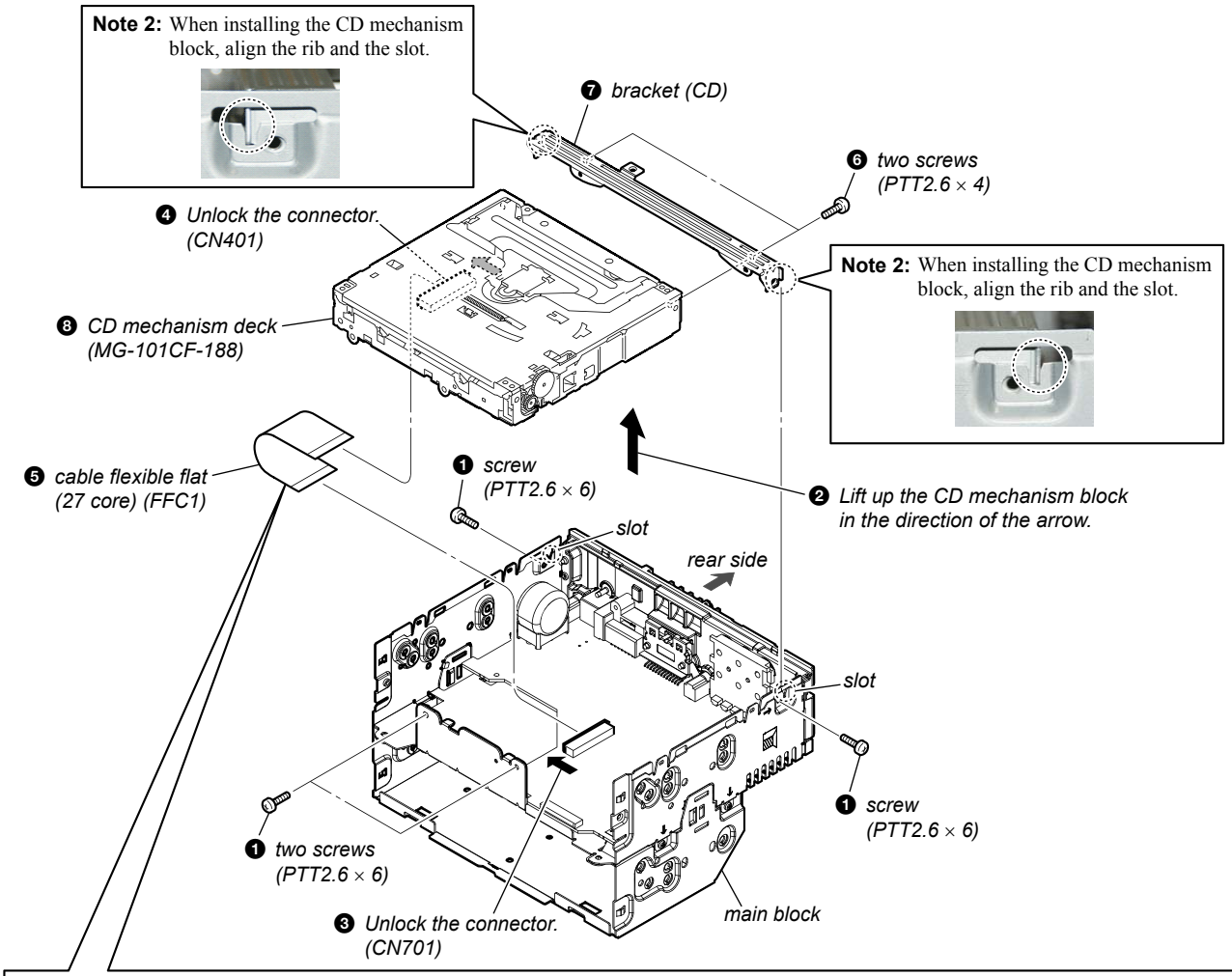


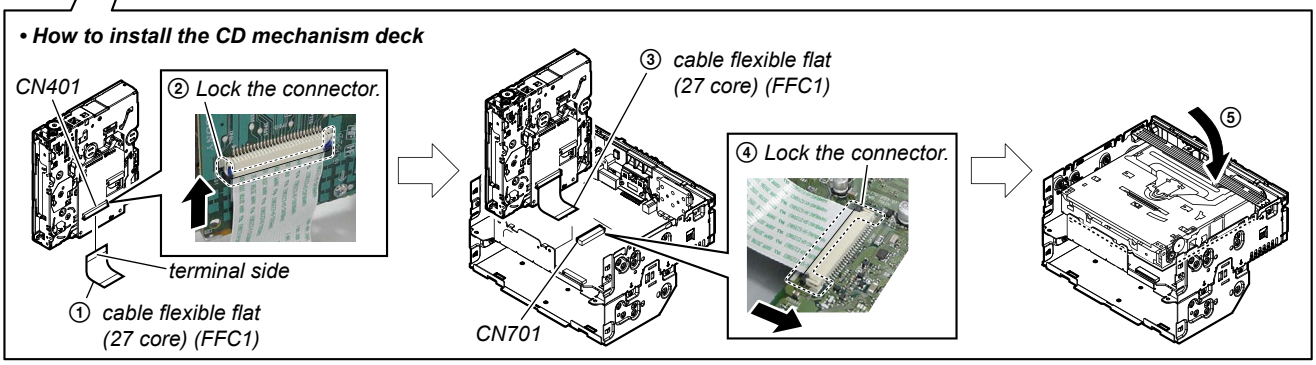
Note: When installing the cable flexible flat (22 core) to the connector (CN101) on the MAIN board, insert straight to the connector and lock a connector completely. No slanting after insertion.

OK	NG
Insert is straight to the interior.	Insert is incline.
connector cable flexible flat (22 core)	connector cable flexible flat (22 core)

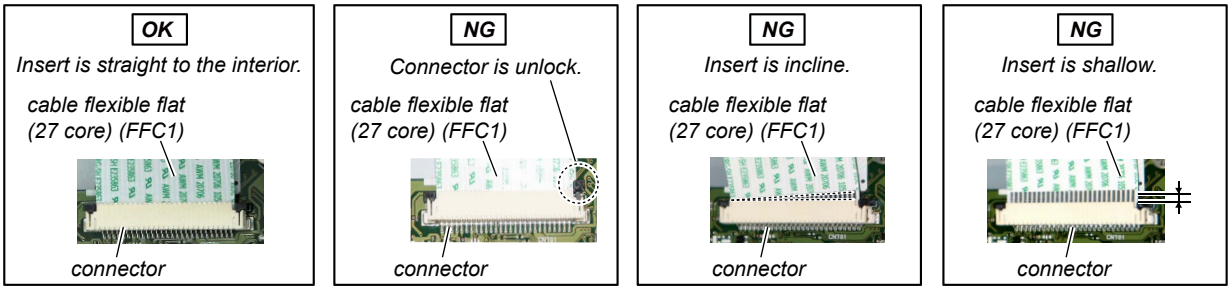
3-4. CD MECHANISM DECK (MG-101CF-188)

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.



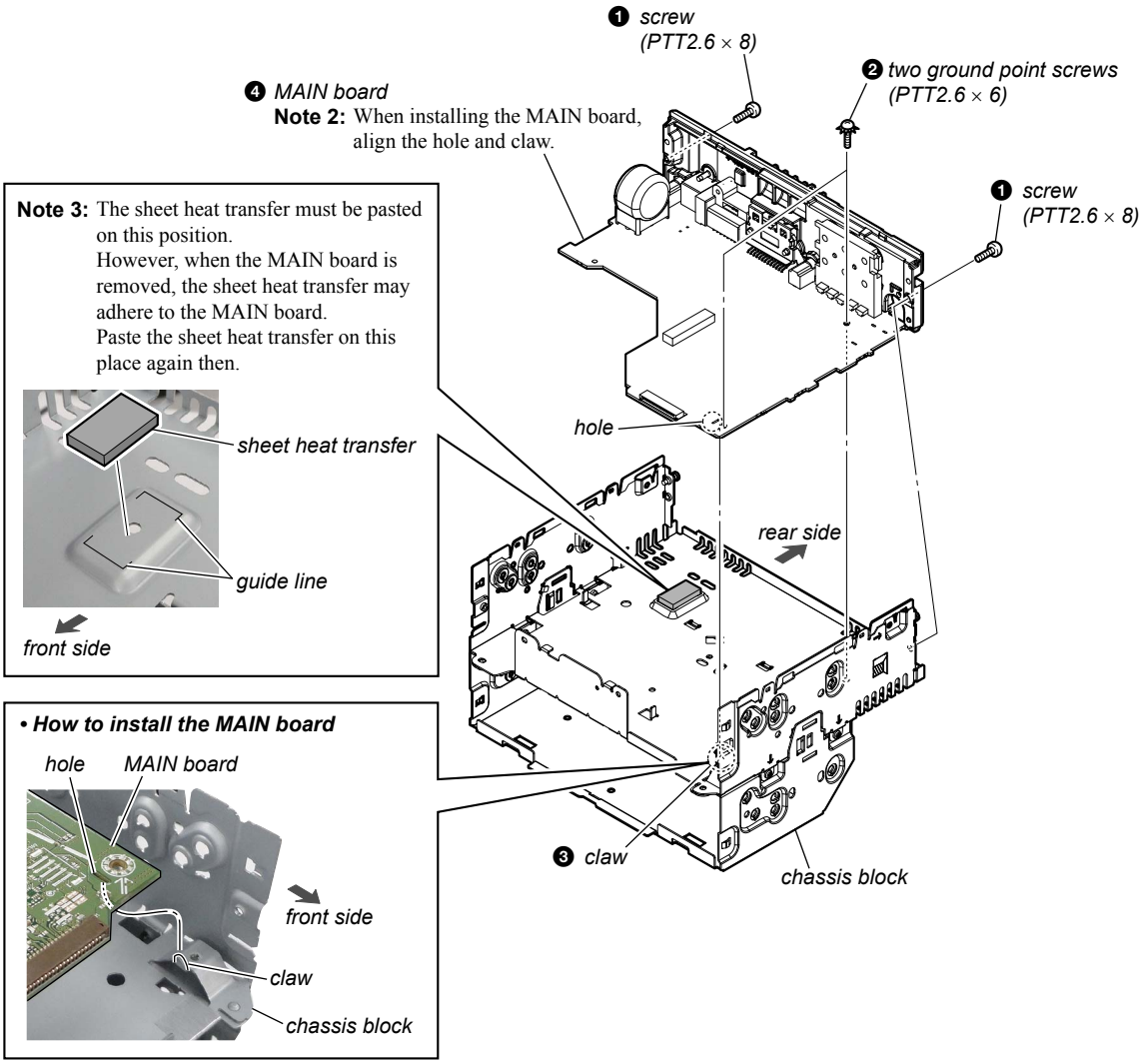


Note 3: When installing the cable flexible flat (27 core) (FFC1), insert straight to the connector and lock a connector completely. No slanting after insertion.



3-5. MAIN BOARD

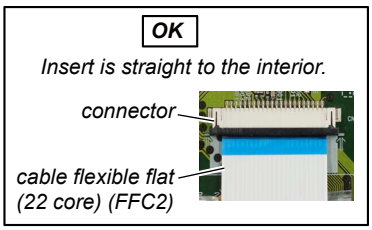
Note 1: When the complete MAIN board is replaced, it is necessary to replace knob (VOL) assy (Ref. No. NFC1) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 5, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 8 and "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

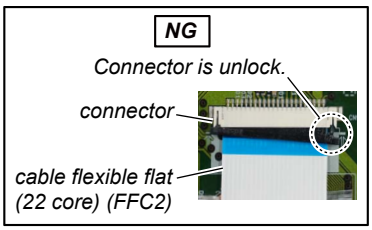


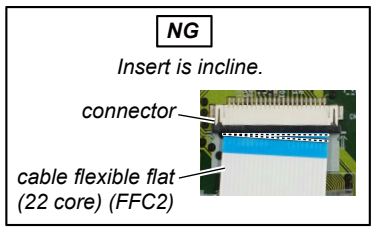
3-6. KNOB (VOL) ASSY (NFC1), PANEL FRONT ASSY, KEY BOARD

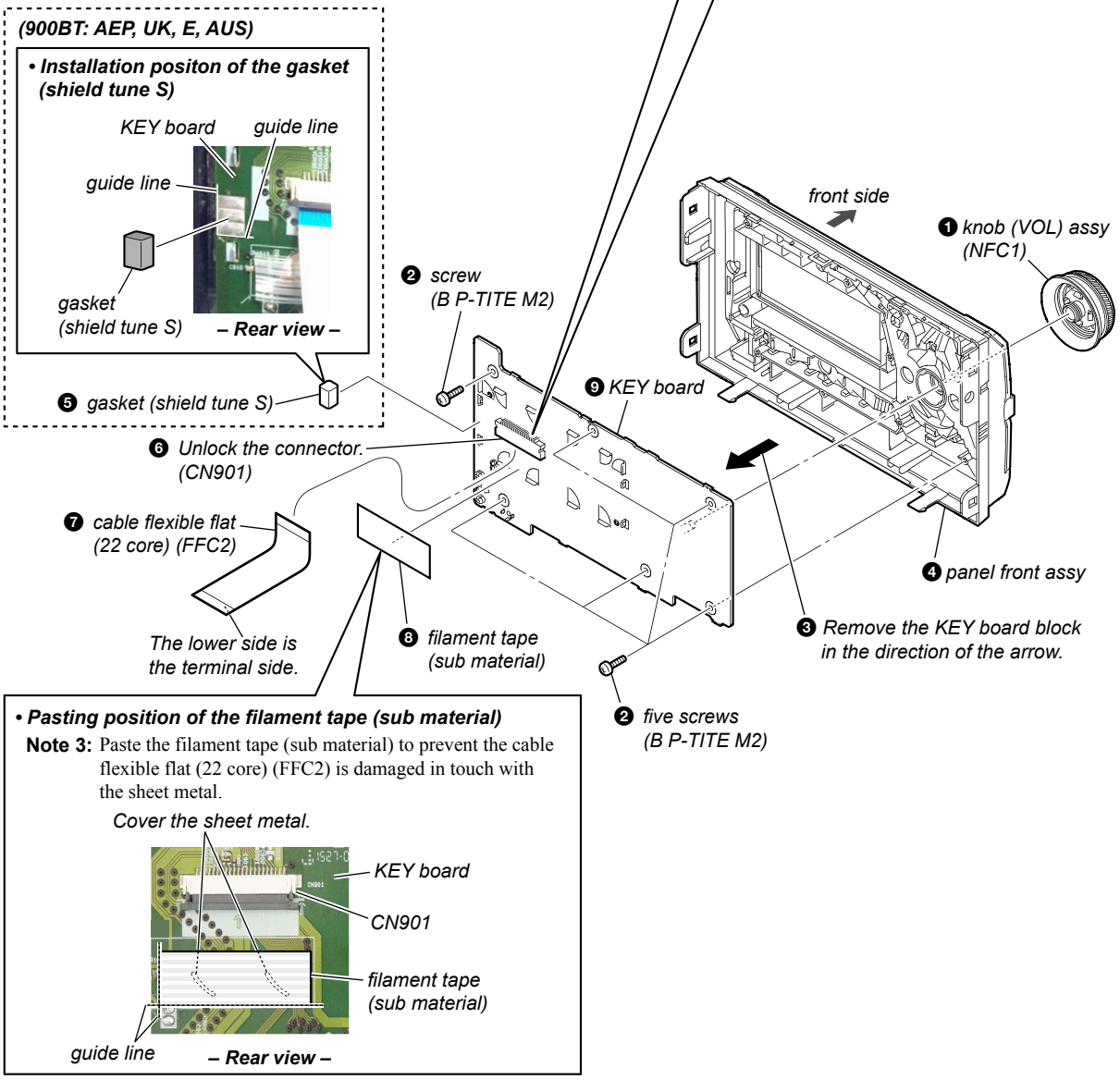
Note 1: When the knob (VOL) assy (Ref. No. NFC1) is replaced, Bluetooth information writing is necessary. Refer to "BLUE-TOOTH INFORMATION WRITING METHOD" on page 9.

Note 2: When installing the cable flexible flat (22 core) (FFC2) to the connector (CN901) on the KEY board, insert straight to the connector and lock a connector completely. No slanting after insertion.









• ***Pasting position of the filament tape (sub material)***

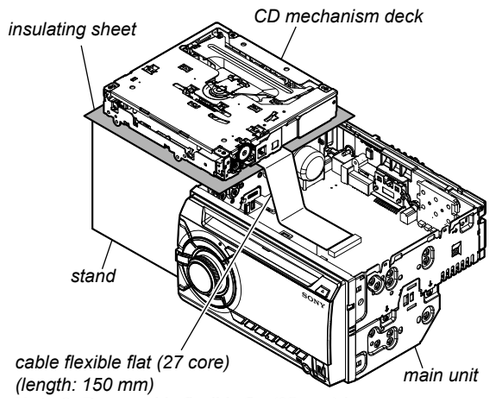
Note 3: Paste the filament tape (sub material) to prevent the cable flexible flat (22 core) (FFC2) is damaged in touch with the sheet metal.

SECTION 4
TEST MODE

3-7. SERVICE POSITION

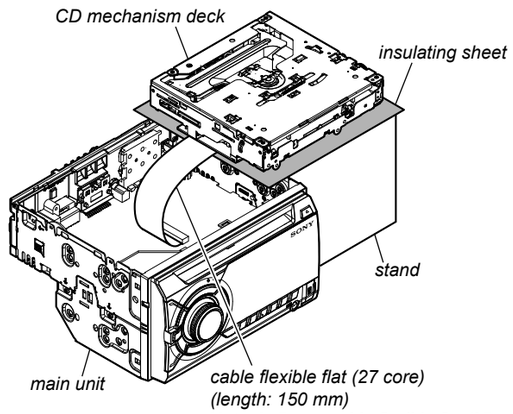
Note 1: The service position below cannot be performed with the flexible flat cable (length: 80 mm) used with the unit. Refer to "NOTE OF PERFORMING THE OPERATION CHECK" in the servicing notes, and use a long flexible flat cable (length: 150 mm).

OK



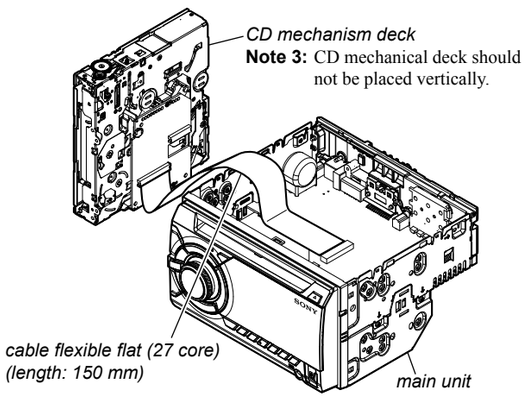
Note 2: Do not cable flexible flat (27 core) is damaged by the edge of the chassis.

OK



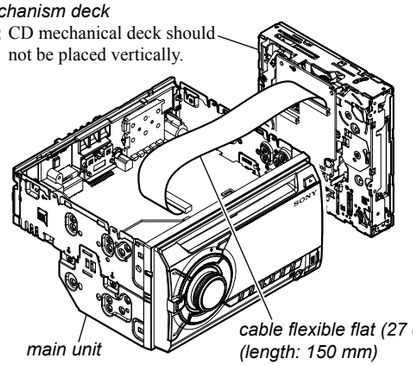
Note 2: Do not cable flexible flat (27 core) is damaged by the edge of the chassis.

NG



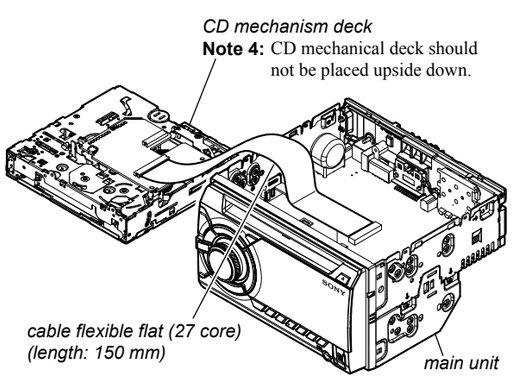
Note 3: CD mechanical deck should not be placed vertically.

NG



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

NG



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

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 [SOURCE ⏻ OFF] 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:

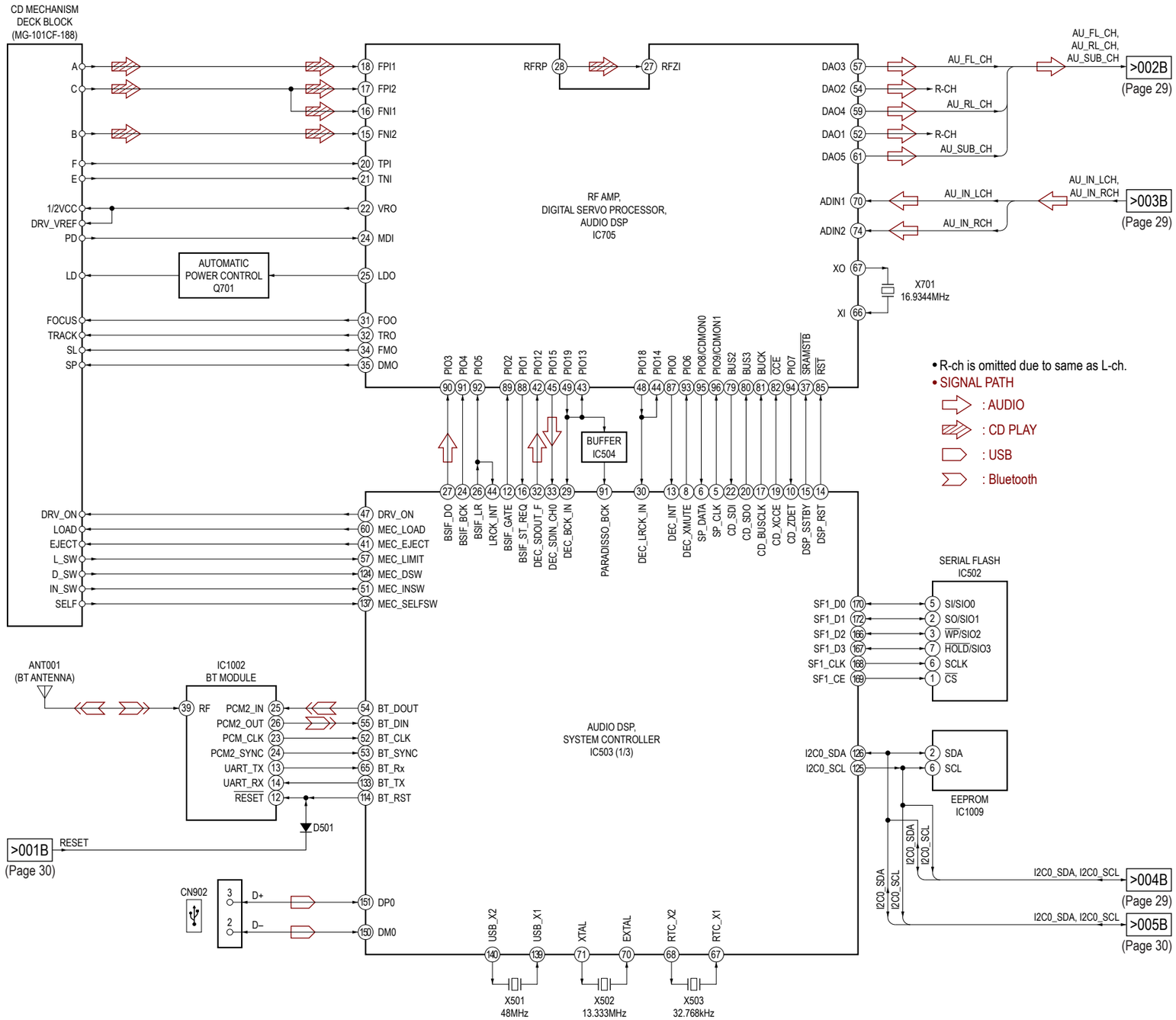
1. Enter the test mode.
2. Press the [SOURCE ⏻ OFF] button to select the "BT PHONE" function.
3. On/off of the microphone audio loopback function changes whenever the [ALBUM ▲ 2] button is pressed ("**O**" (album mark) is displayed on the liquid crystal display).

Screen display

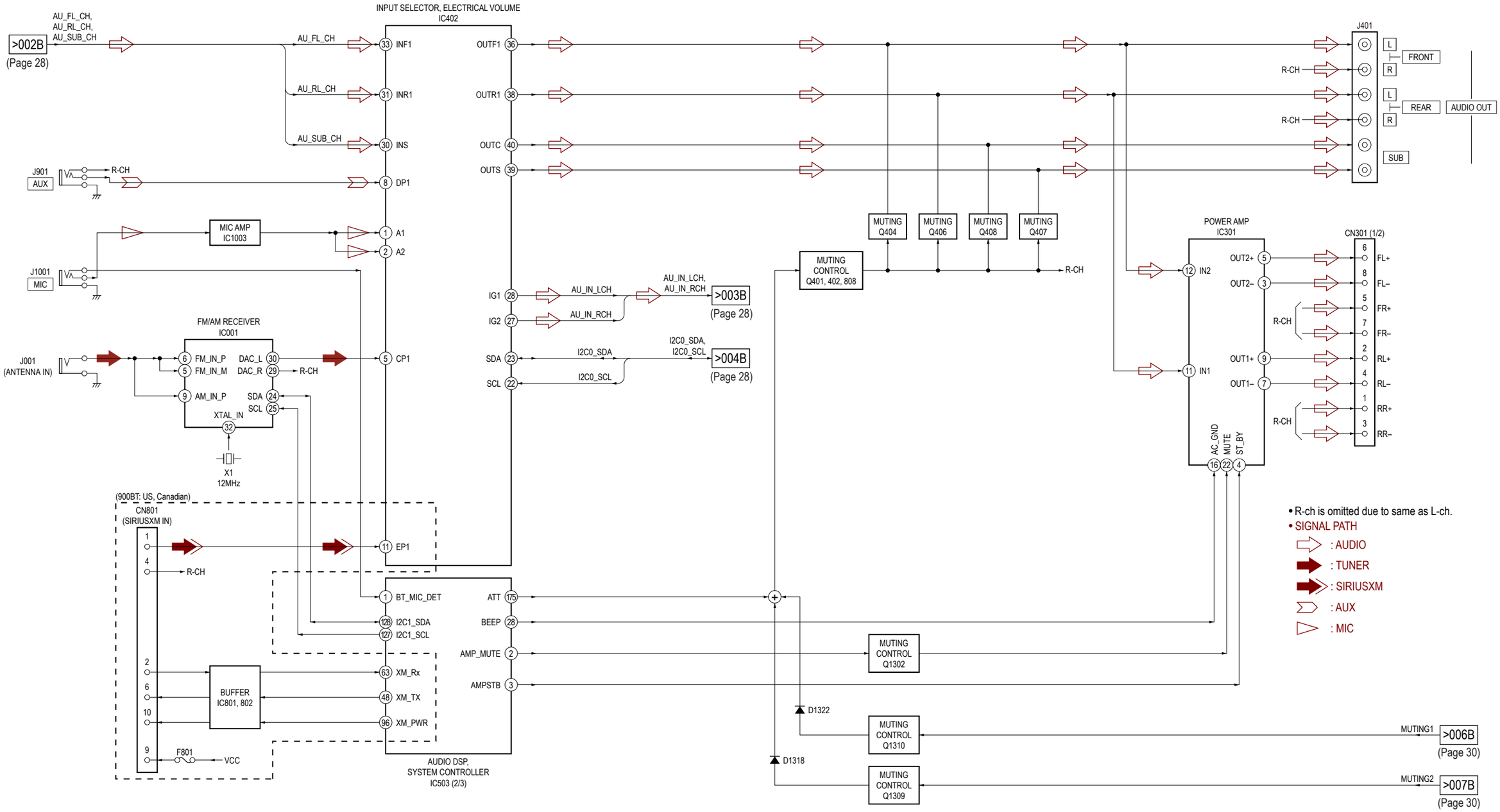
LOOPBACK	**O** (album mark)
ON	Lit
OFF	None

SECTION 5
DIAGRAMS

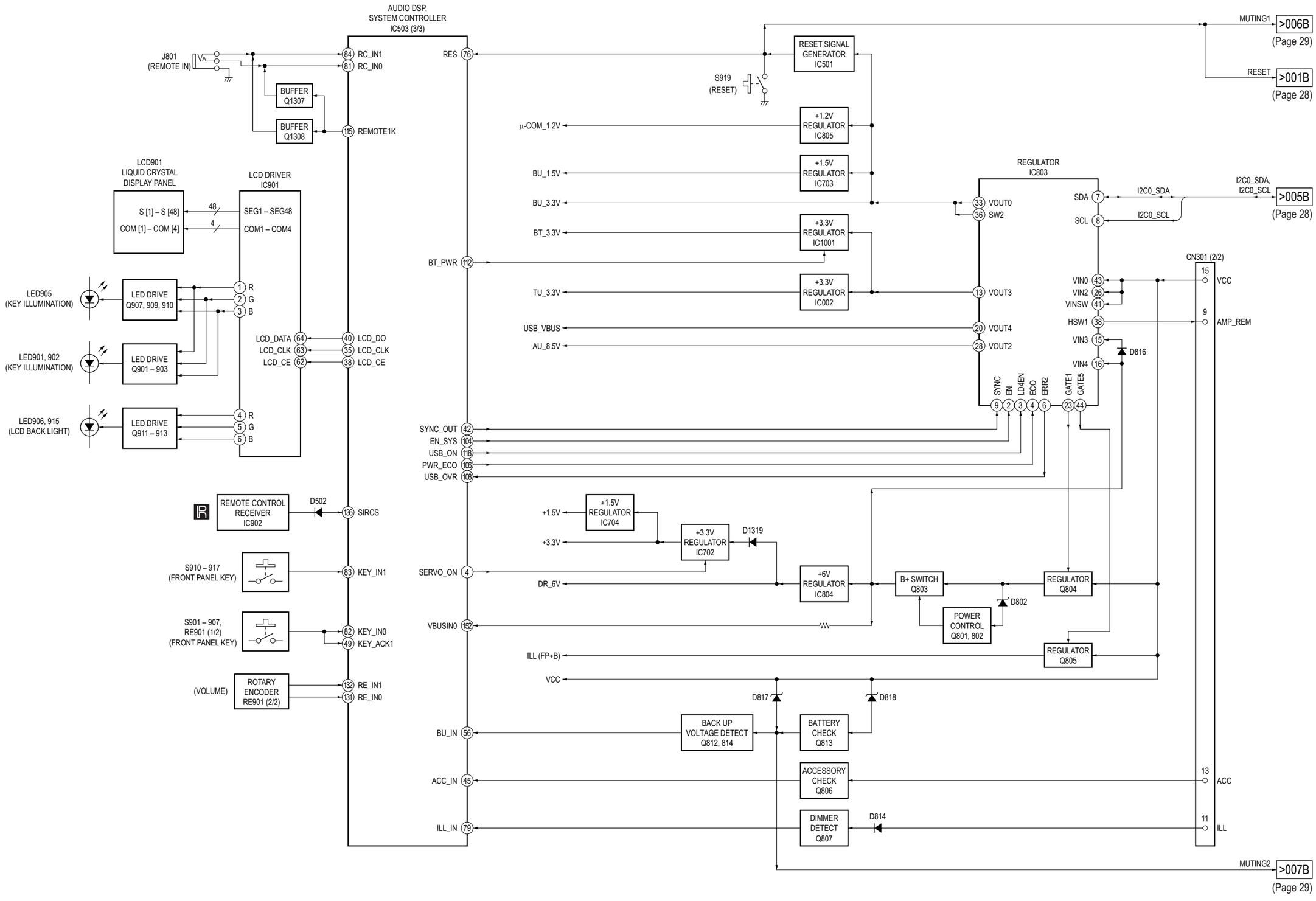
5-1. BLOCK DIAGRAM - SERVO/USB/Bluetooth Section -



5-2. BLOCK DIAGRAM - MAIN Section -



5-3. BLOCK DIAGRAM - 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.)

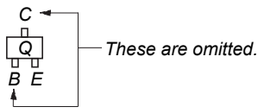
For Printed Wiring Boards.

Note:

- o——: Parts extracted from the component side.
- ——: Parts extracted from the conductor side.
- ▬: 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 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 5, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 8 and "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

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.
- ▭: 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.

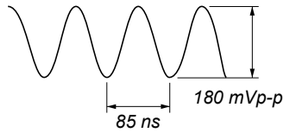
- ▬: B+ Line.
- Power voltages is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark: TUNER (FM)
  [ ]: TUNER (AM)
  ( ): CD PLAY
  ＊ : Impossible to measure
- Voltages are taken 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 PALY
  ⇨ : USB
  ⇨ : AUX
  ⇨ : Bluetooth
  ▷ : MIC

Note: When the complete 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 5, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 8 and "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

- **Waveforms**

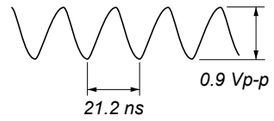
– MAIN Board –

① IC001 ㉜ (XTAL_IN)



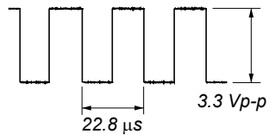
50 mV/DIV, 50 ns/DIV

⑦ IC503 ⑭⓪ (USB_X2)



500 mV/DIV, 10 ns/DIV

② IC705 ㊽ (PIO18)

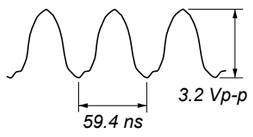


1 V/DIV, 10 µs/DIV

③ IC705 ㊾ (PIO19)

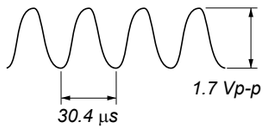
1 V/DIV, 200 ns/DIV

④ IC705 ⑥⑦ (XO)



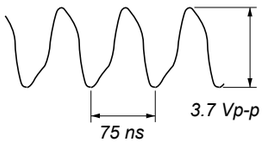
1 V/DIV, 20 ns/DIV

⑤ IC503 ⑥⑧ (RTC_X2)



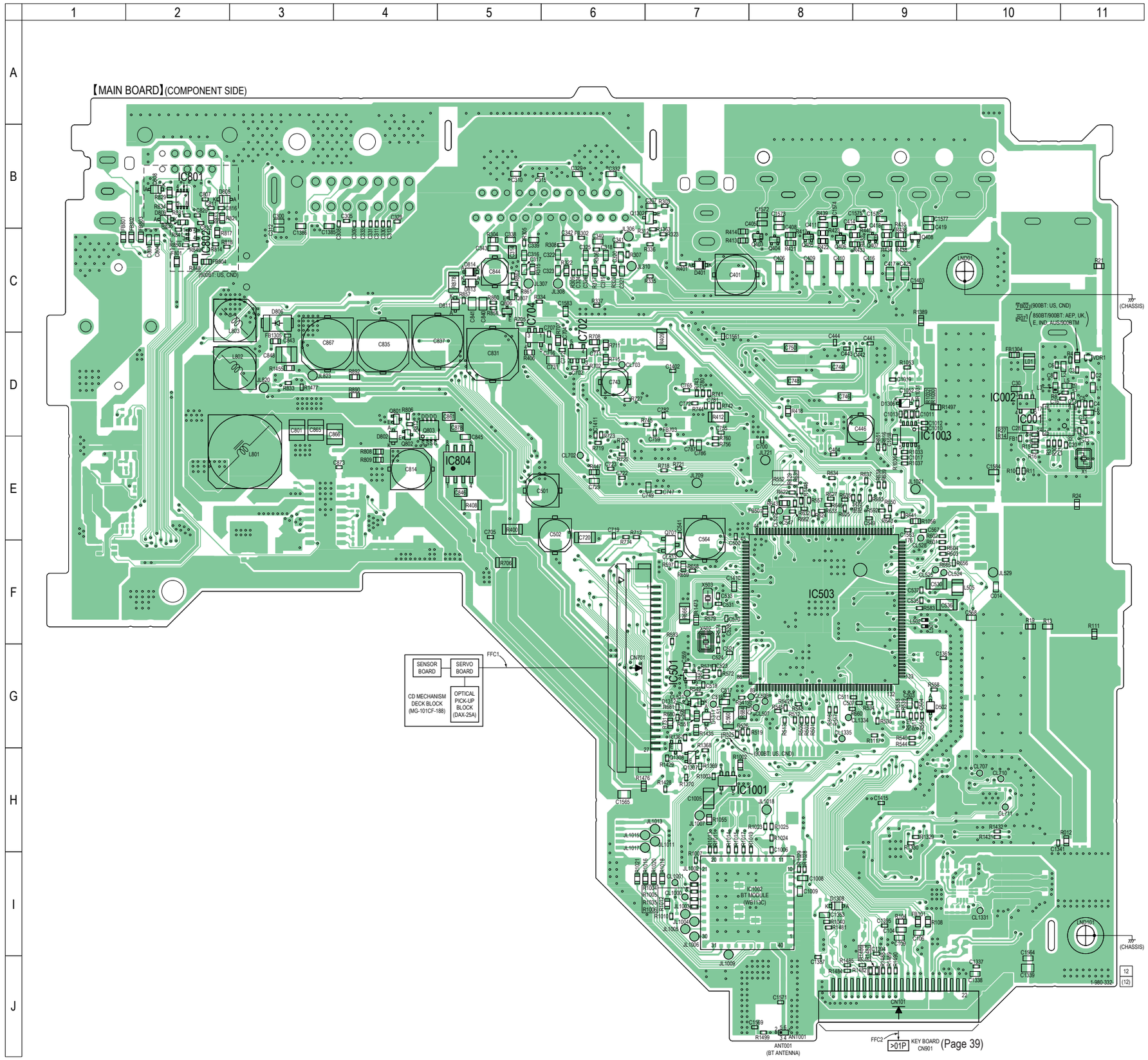
1 V/DIV, 20 µs/DIV

⑥ IC503 ⑦① (XTAL)



2 V/DIV, 50 ns/DIV

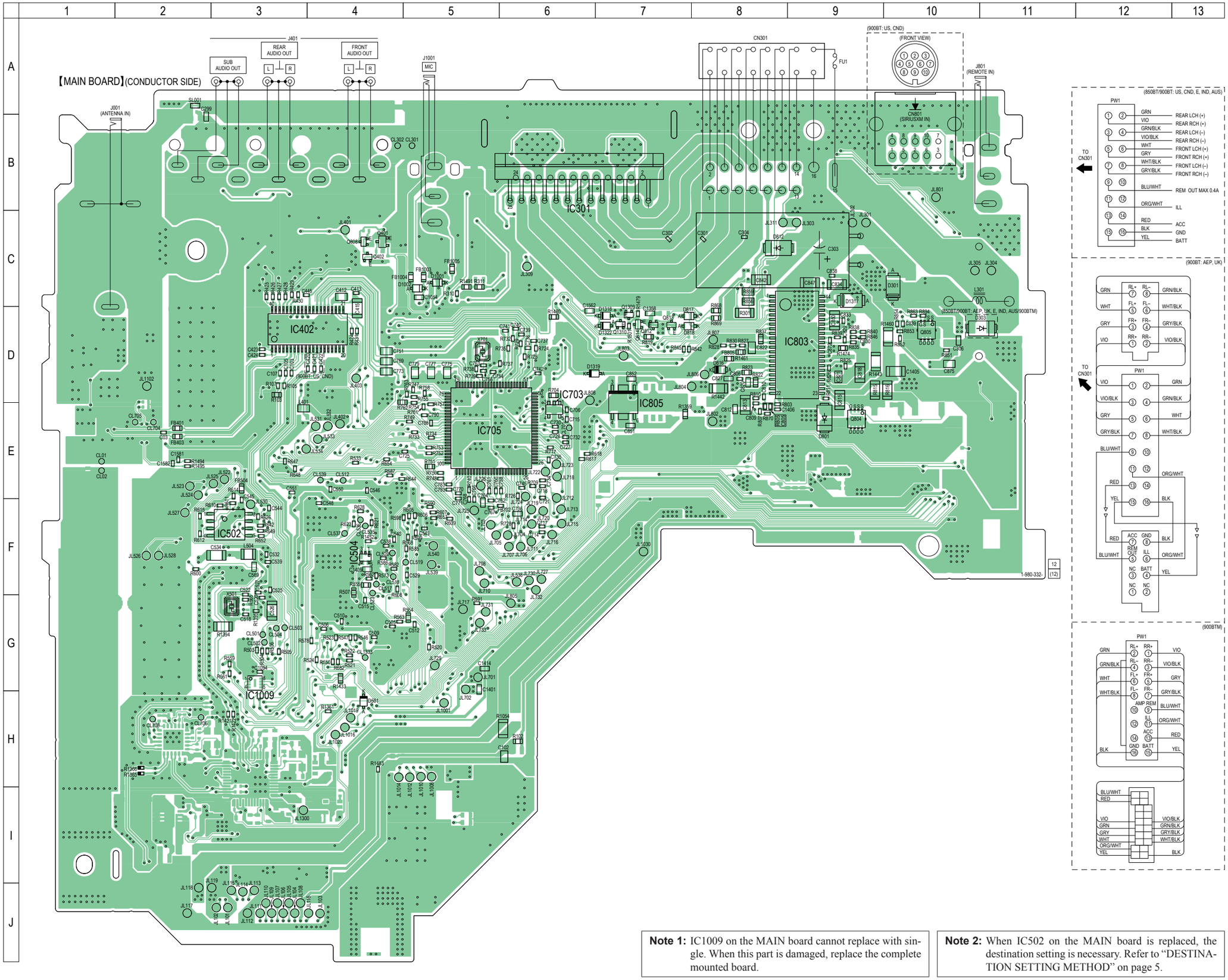
5-4. PRINTED WIRING BOARDS - MAIN Section (1/2) - • : Uses unleaded solder.



Note 1: ANT001, IC001, IC503, IC804 and IC1002 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

Note 2: 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.

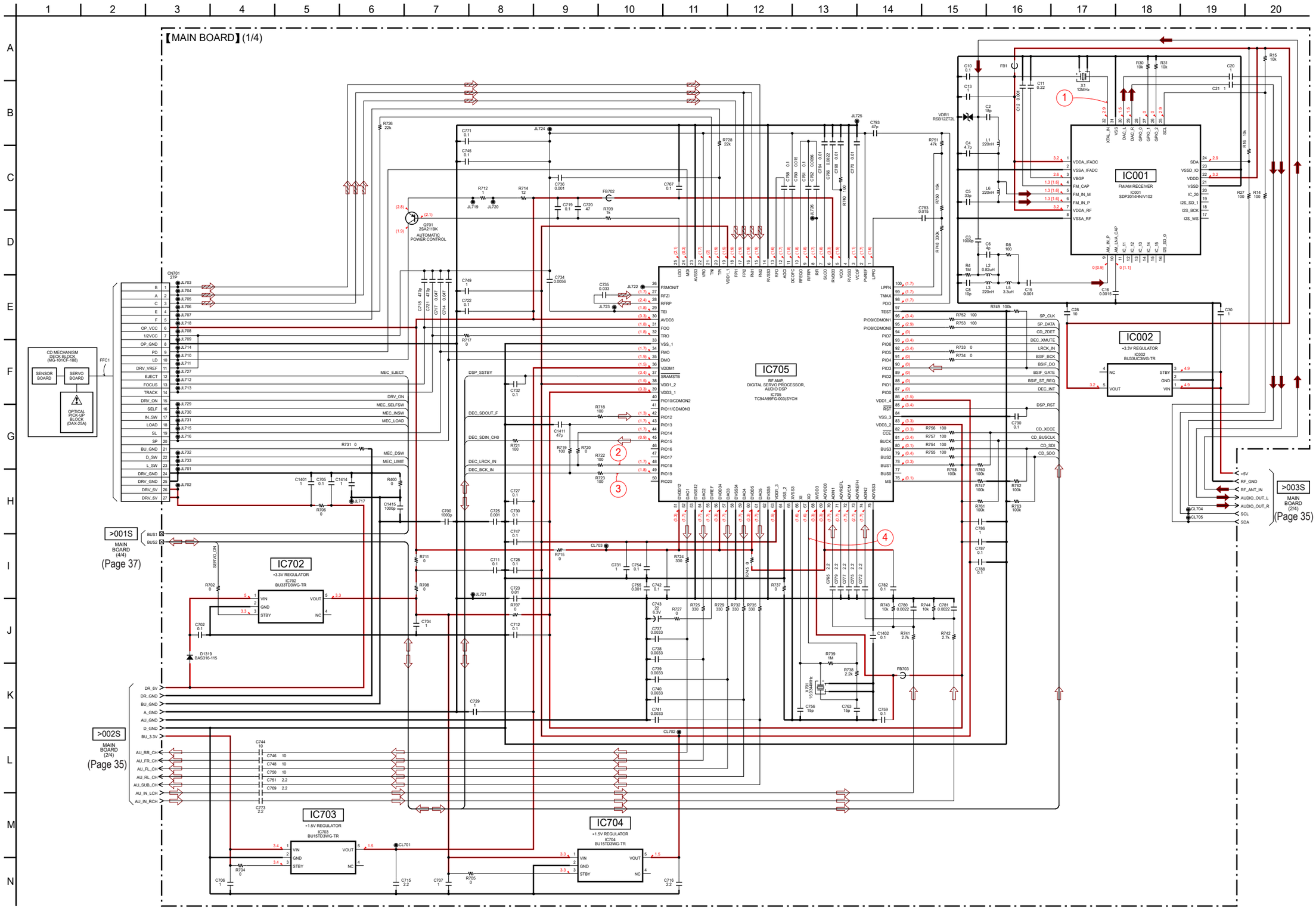
5-5. PRINTED WIRING BOARD - MAIN Section (2/2) - • : Uses unleaded solder.



Note 1: IC1009 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

Note 2: When IC502 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 5.

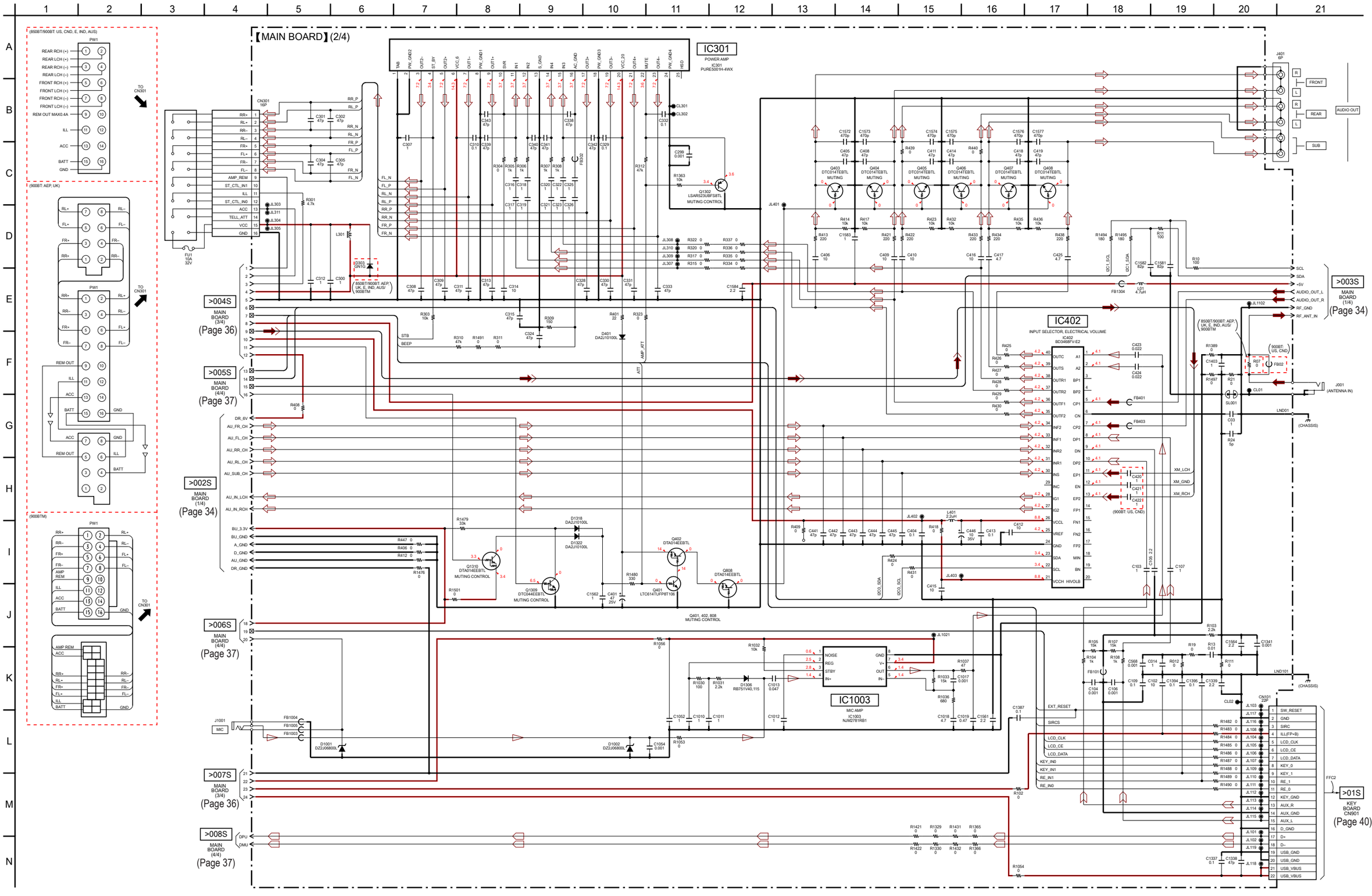
5-6. SCHEMATIC DIAGRAM - MAIN Section (1/4) - • See page 31 for Waveforms. • See page 41 for IC Block Diagrams. • See page 44 for IC Pin Function Description.



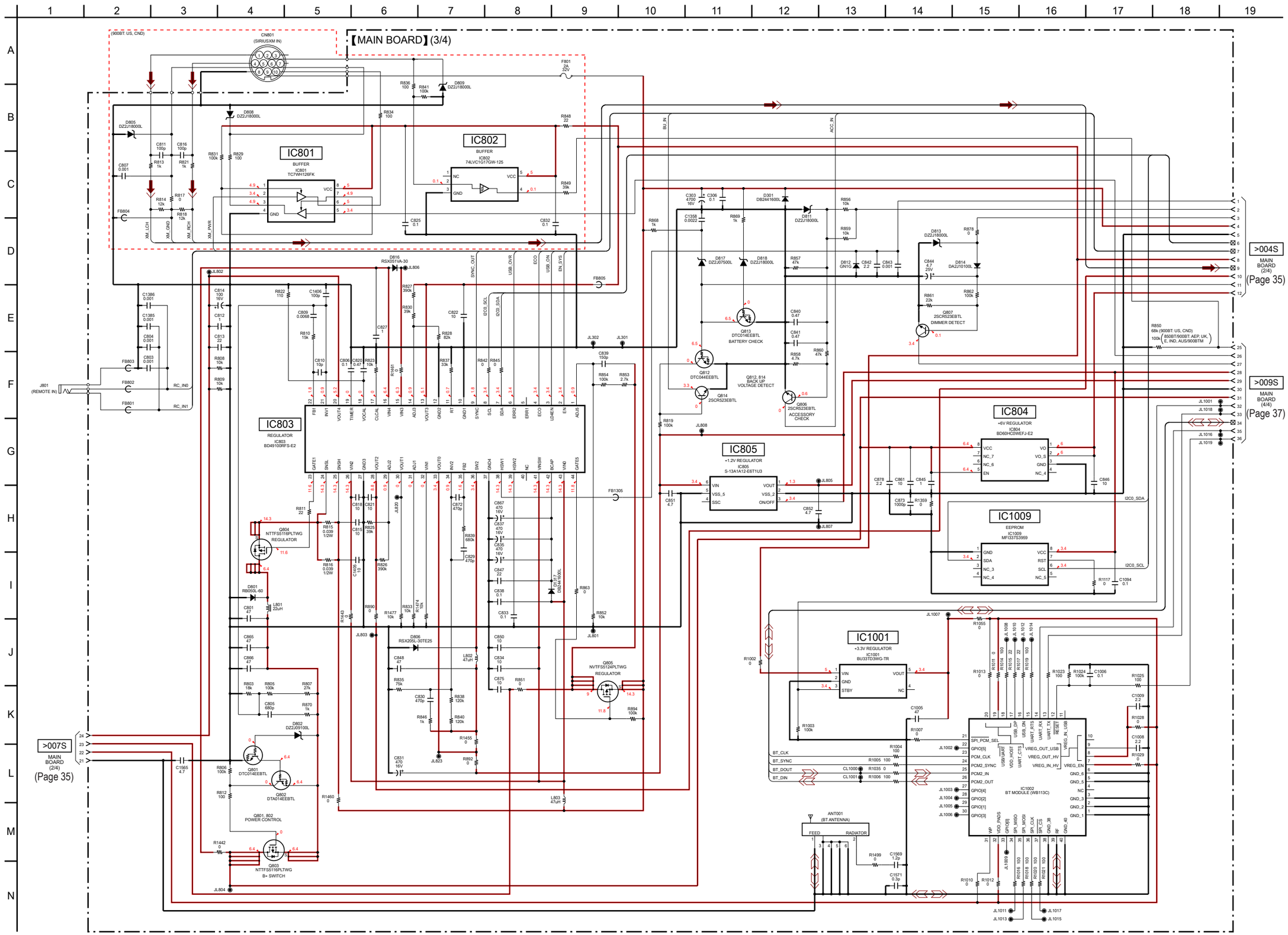
Note 1: IC001 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

Note 2: 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.

5-7. SCHEMATIC DIAGRAM - MAIN Section (2/4) - • See page 41 for IC Block Diagrams.

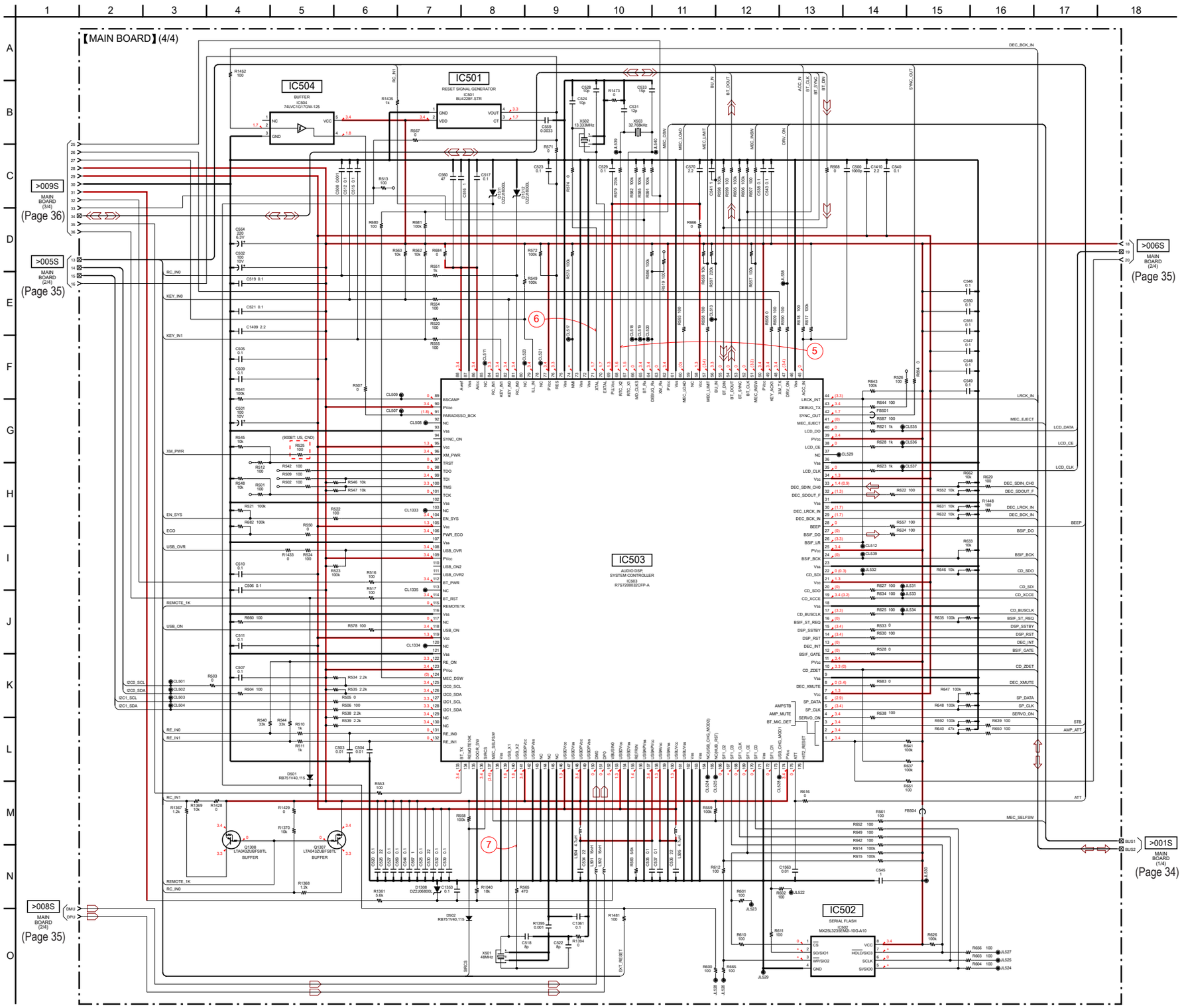


5-8. SCHEMATIC DIAGRAM - MAIN Section (3/4) - • See page 41 for IC Block Diagrams.



Note: ANT001, IC804, IC1002 and IC1009 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

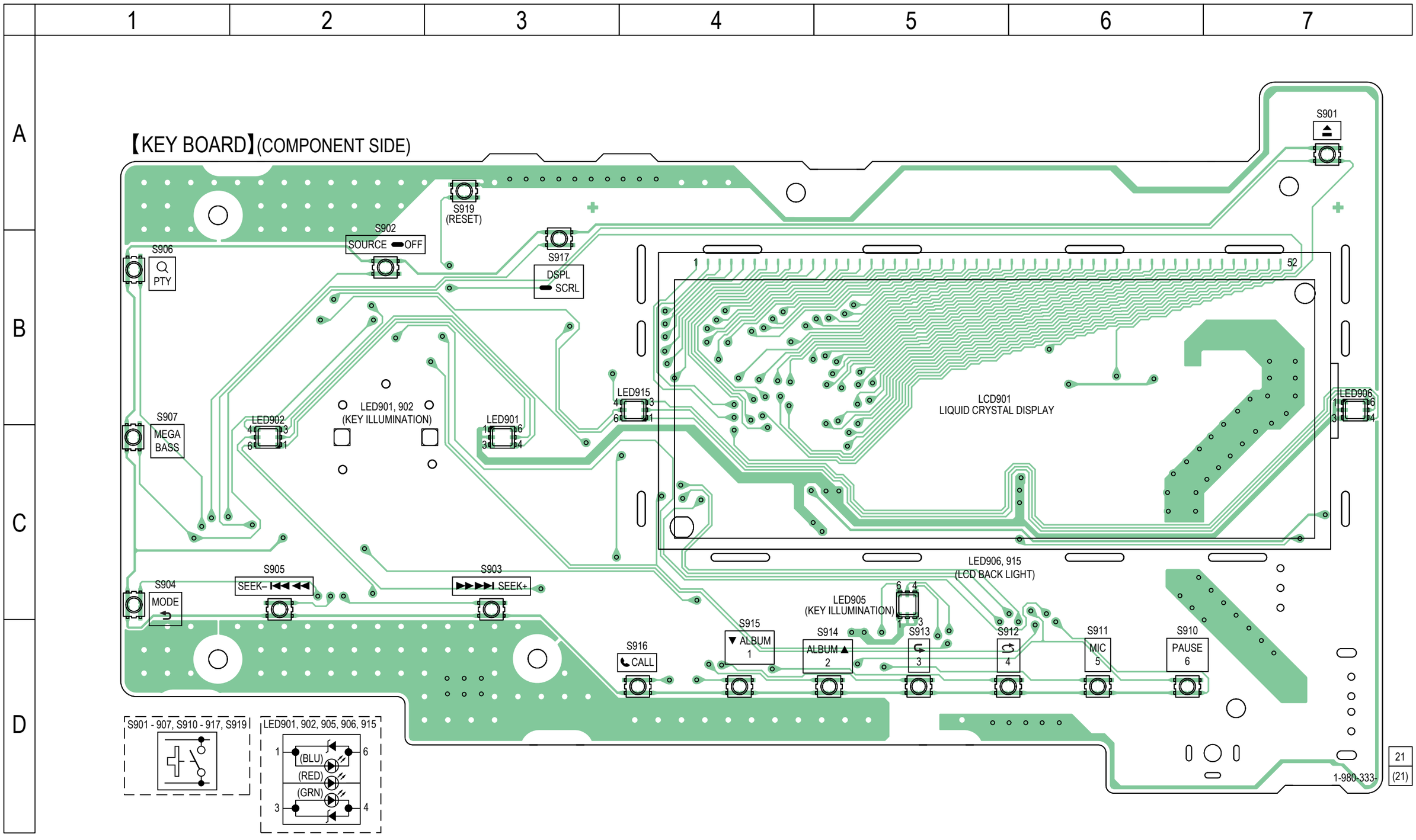
5-9. SCHEMATIC DIAGRAM - MAIN Section (4/4) - • See page 31 for Waveforms. • See page 41 for IC Block Diagrams. • See page 44 for IC Pin Function Description.



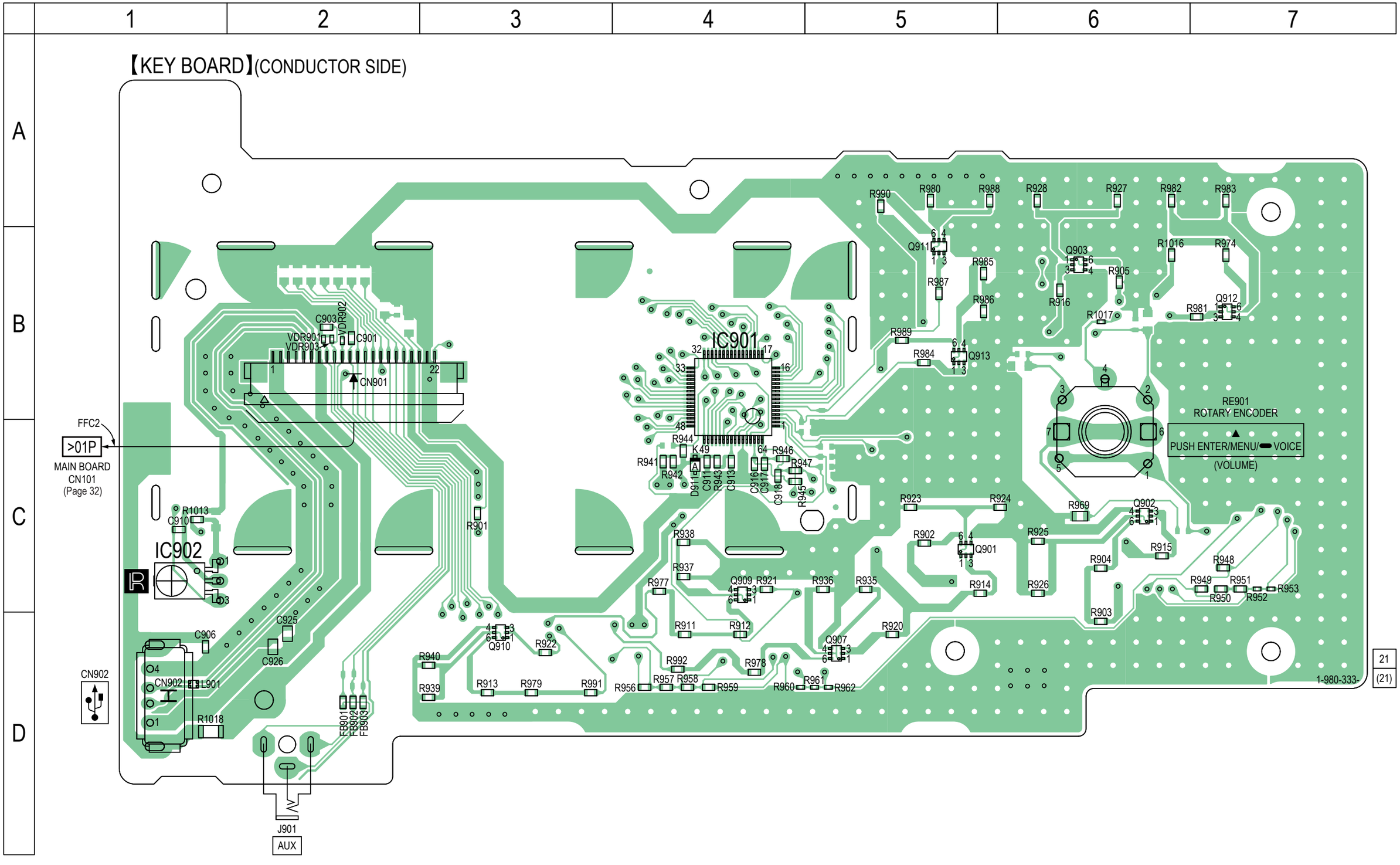
Note 1: IC503 on the MAIN board cannot replace with single. When this part is damaged, replace the complete mounted board.

Note 2: When IC502 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 5.

5-10. PRINTED WIRING BOARD - KEY Board (Component Side) - • : Uses unleaded solder.

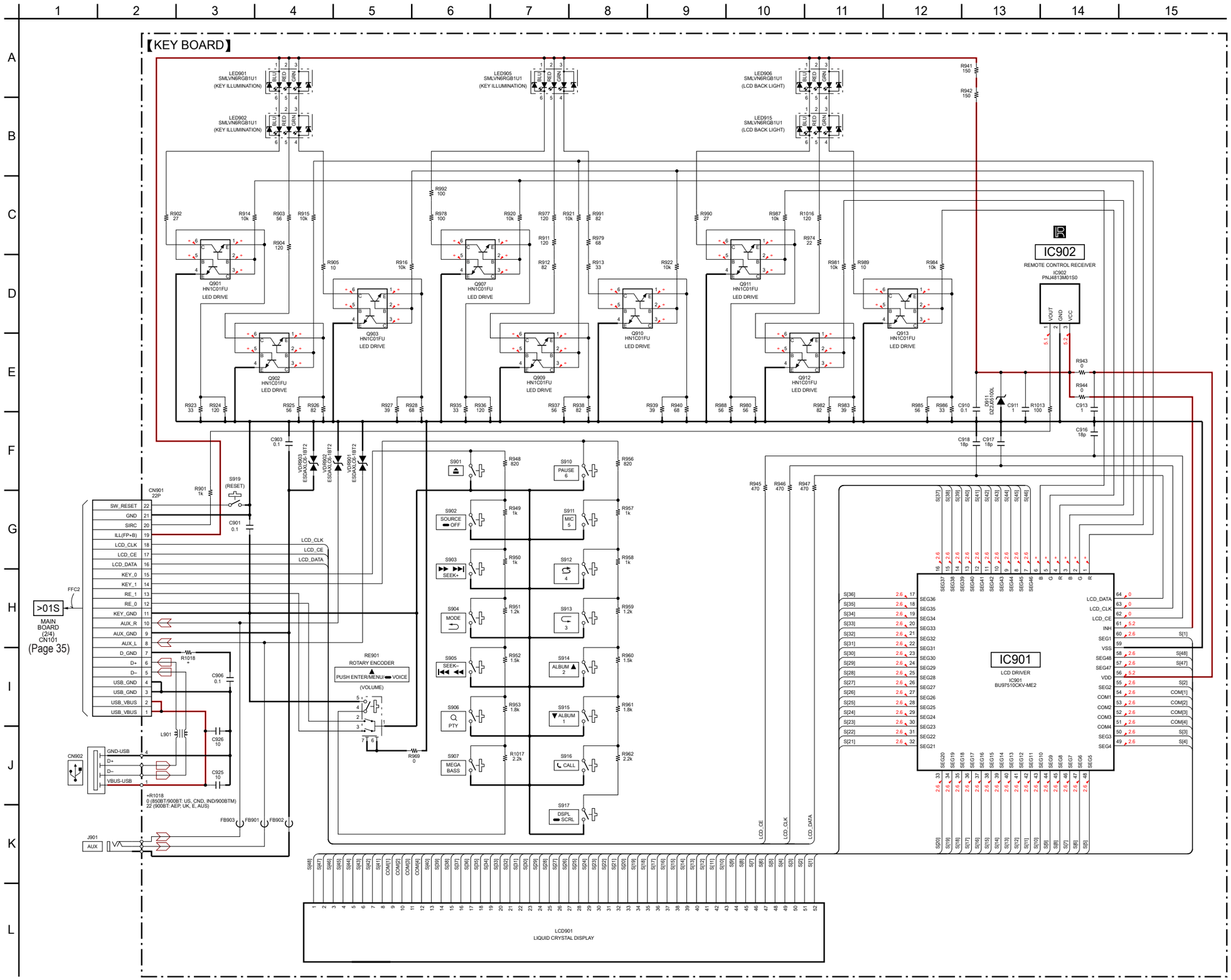


5-11. PRINTED WIRING BOARD - KEY Board (Conductor Side) - • : Uses unleaded solder.



Note: When the CN902 and J901 are replaced, refer to "NOTE FOR REPLACING OF THE USB CONNECTOR (CN902) AND THE AUX JACK (J901)" on page 7.

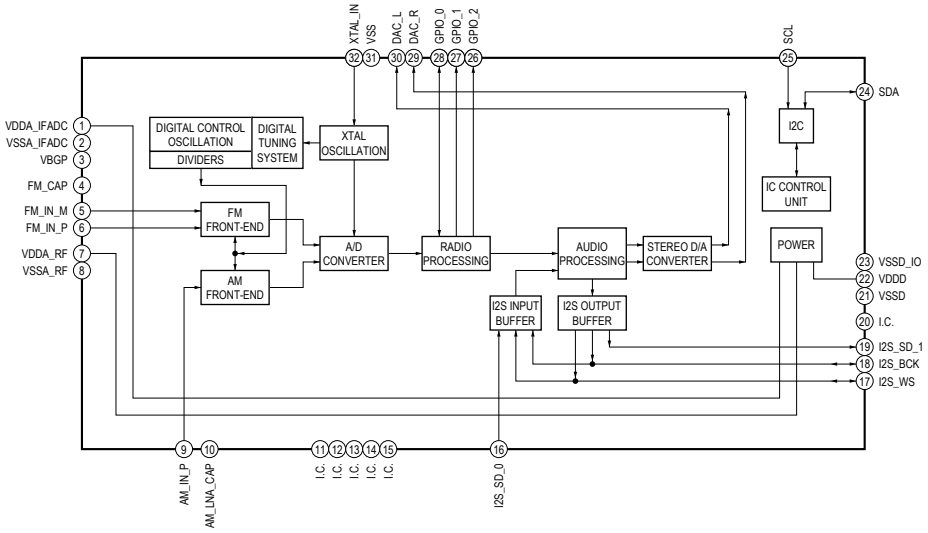
5-12. SCHEMATIC DIAGRAM - KEY Board - • See page 41 for IC Block Diagrams.



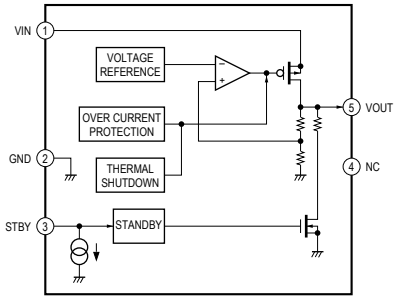
Note: When the CN902 and J901 are replaced, refer to "NOTE FOR REPLACING OF THE USB CONNECTOR (CN902) AND THE AUX JACK (J901)" on page 7.

- **IC Block Diagrams**

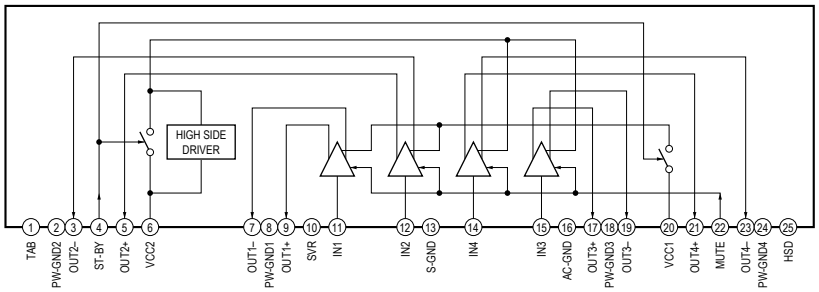
– MAIN Board –
IC001 SDP2014HN/V102



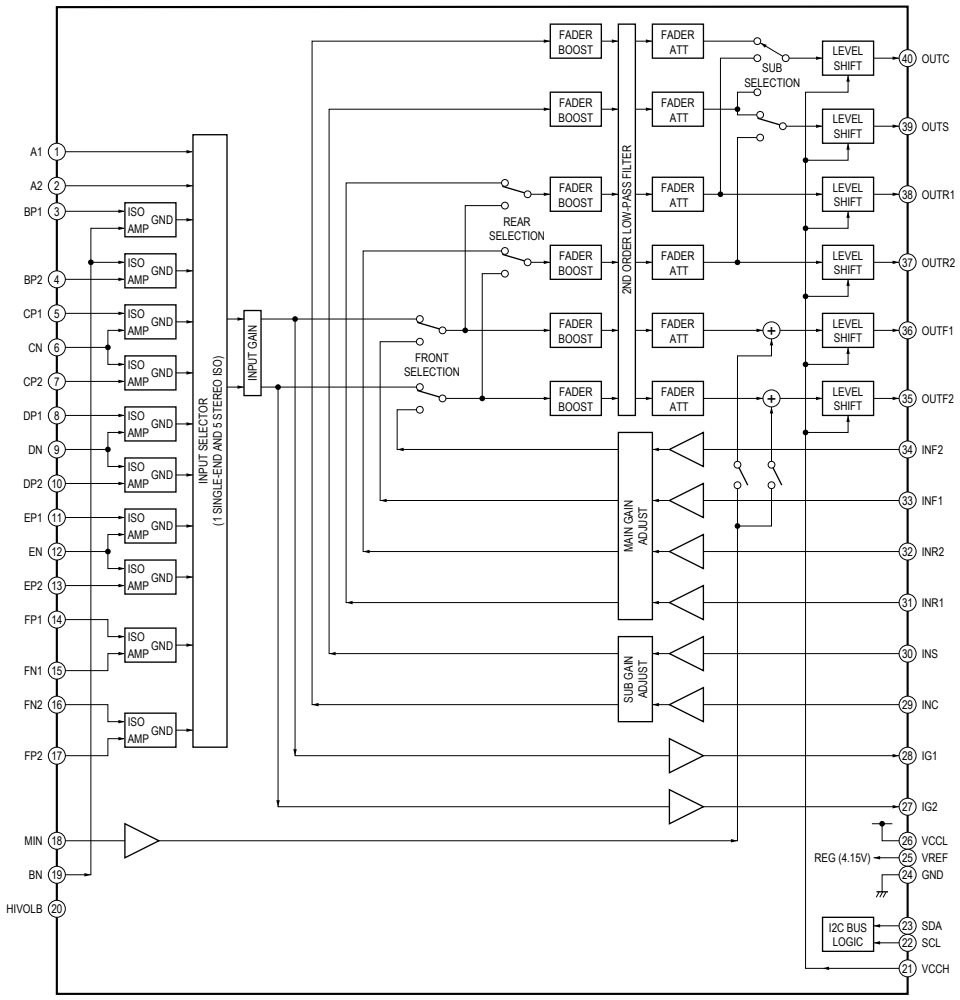
IC002 BU33UC3WG-TR
IC702, 1001 BU33TD3WG-TR
IC703, 704 BU15TD3WG-TR



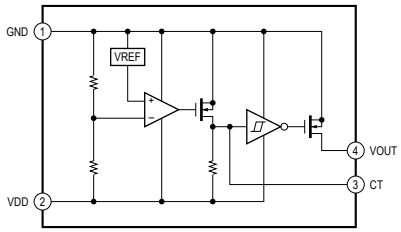
IC301 PURE5001H-4WX



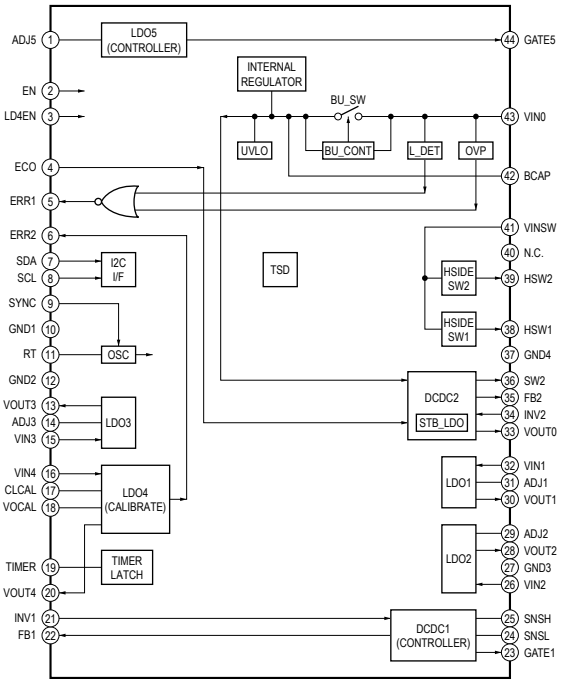
IC402 BD3468FV-E2



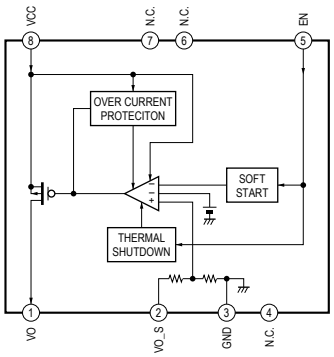
IC501 BU4228F-STR



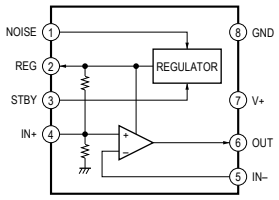
IC803 BD49100RFS-E2



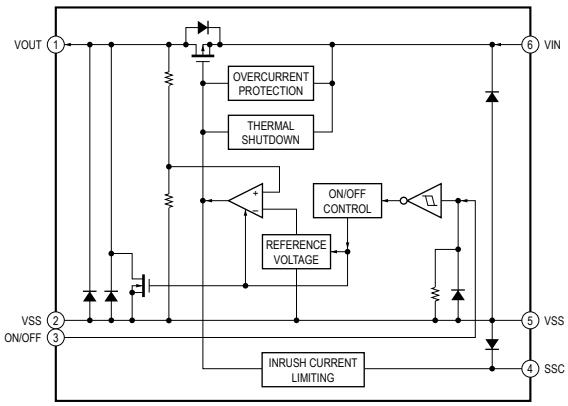
IC804 BD60HC0WEFJ-E2



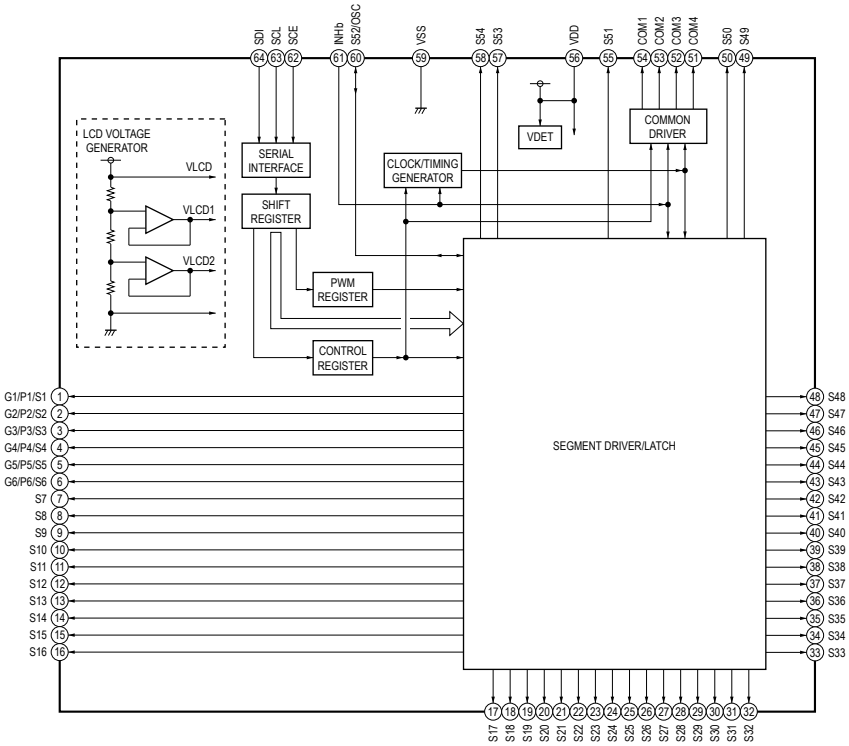
IC1003 NJM2781RB1



IC805 S-13A1A12-E6T1U3



– KEY Board –
IC901 BU97510CKV-ME2



• **IC Pin Function Description**

MAIN BOARD IC503 R7S7200032CFP-A (AUDIO DSP, SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	BT_MIC_DET	I	External microphone plug insert detection signal input terminal for the Bluetooth "L": external microphone plug is inserted
2	AMP_MUTE	O	Amplifier muting on/off control signal output to the power amplifier "L": muting on
3	AMPSTB	O	Standby signal output to the power amplifier "L": standby
4	SERVO_ON	O	Power on/off control signal output to the servo section "H": power on
5	SP_CLK	O	Serial data transfer clock signal output to the audio DSP
6	SP_DATA	I	Serial data input from the audio DSP
7	Vcc	-	Power supply terminal (+1.18V) (for internal)
8	DEC_XMUTE	O	Muting on/off control signal output to the audio DSP "L": muting on
9	Vss	-	Ground terminal
10	CD_ZDET	I	Zero data detection signal input from the audio DSP
11	PVcc	-	Power supply terminal (+3.3V) (for I/O)
12	BSIF_GATE	O	Gate signal output to the audio DSP
13	DEC_INT	I	Interrupt signal input from the audio DSP
14	DSP_RST	O	Reset signal output to the audio DSP "L": reset
15	DSP_SSTBY	O	Standby signal output to the audio DSP "L": standby
16	BSIF_ST_REQ	I	Request signal input from the audio DSP
17	CD_BUSCLK	O	Serial data transfer clock signal output to the audio DSP
18	Vss	-	Ground terminal
19	CD_XCCE	O	Chip enable signal output to the audio DSP
20	CD_SDO	O	Serial data output to the audio DSP
21	Vcc	-	Power supply terminal (+1.18V) (for internal)
22	CD_SDI	I	Serial data input from the audio DSP
23	Vss	-	Ground terminal
24	BSIF_BCK	O	Bit clock signal output to the audio DSP
25	PVcc	-	Power supply terminal (+3.3V) (for I/O)
26	BSIF_LR	O	L/R sampling clock signal output to the audio DSP
27	BSIF_DO	O	Audio data output to the audio DSP
28	BEEP	O	Beep sound drive signal output to the power amplifier
29	DEC_BCK_IN	I	Bit clock signal input from the audio DSP
30	DEC_LRCK_IN	I	L/R sampling clock signal input from the audio DSP
31	Vss	-	Ground terminal
32	DEC_SDOUT_F	O	Audio data output to the audio DSP
33	DEC_SDIN_CH0	I	Audio data input from the audio DSP
34	Vcc	-	Power supply terminal (+1.18V) (for internal)
35	LCD_CLK	O	Serial data transfer clock signal output to the LCD driver
36	Vss	-	Ground terminal
37	NC	-	Not used
38	LCD_CE	O	Chip enable signal output to the LCD driver
39	PVcc	-	Power supply terminal (+3.3V) (for I/O)
40	LCD_DO	O	Serial data output to the LCD driver
41	MEC_EJECT	O	Loading motor drive signal (eject direction) output terminal "H": motor on
42	SYNC_OUT	O	Frequency control signal output to the regulator
43	DEBUG_TX	O	Transmit data output terminal for the debug Not used
44	LRCK_INT	I	L/R sampling clock signal input from the pin 26 (BSIF_LR)
45	ACC_IN	I	Accessory power detection signal input terminal "L": accessory power on
46	Vss	-	Ground terminal
47	DRV_ON	O	Driver control signal output to the CD mechanism deck block
48	XM_TX	O	Serial data output to the SIRIUSXM in connector (US and Canadian models only)
49	KEY_ACK1	I	Key acknowledge signal (wake up signal) input from the front panel key
50	PVcc	-	Power supply terminal (+3.3V) (for I/O)
51	MEC_INSW	I	Disc insert detection switch input terminal "H": disc insert detected
52	BT_CLK	I	Serial data transfer clock signal input from the BT module
53	BT_SYNC	I	Sync signal input from the BT module
54	BT_DOUT	O	Audio data output to the BT module
55	BT_DIN	I	Audio data input from the BT module

Pin No.	Pin Name	I/O	Description
56	BU_IN	I	Back-up power detection signal input terminal "L" is input at low voltage
57	MEC_LIMIT	I	Limit in detection switch input terminal
58	Vcc	-	Power supply terminal (+1.18V) (for internal)
59	NC	-	Not used
60	MEC_LOAD	O	Loading motor drive signal (loading direction) output terminal "H": motor on
61	Vss	-	Ground terminal
62	PVcc	-	Power supply terminal (+3.3V) (for I/O)
63	XM_Rx	I	Serial data input from the SIRIUSXM in connector (US and Canadian models only)
64	DEBUG_Rx	I	Receive data input terminal for the debug Not used
65	BT_Rx	I	Serial data input from the BT module
66	MD_CLKS	I	Fixed at "L" in this unit
67	RTC_X1	I	System clock input terminal (32.768 kHz)
68	RTC_X2	O	System clock output terminal (32.768 kHz)
69	PLLVcc	-	Power supply terminal (+1.18V) (for PLL)
70	EXTAL	I	System clock input terminal (13.333 MHz)
71	XTAL	O	System clock output terminal (13.333 MHz)
72, 73	Vss	-	Ground terminal
74	NMI	I	Fixed at "H" in this unit
75	Vss	-	Ground terminal
76	RES	I	System reset signal input from the reset signal generator and RESET switch "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it change to "H"
77	PVcc	-	Power supply terminal (+3.3V) (for I/O)
78	NC	-	Not used
79	ILL_IN	I	Illuminate line detection signal input terminal
80	NC	-	Not used
81	RC_IN0	I	Rotary commander key input terminal
82, 83	KEY_IN0, KEY_IN1	I	Front panel key input terminal
84	RC_IN1	I	Rotary commander shift key input terminal
85	NC	-	Not used
86	AVcc	-	Power supply terminal (+3.3V) (analog system)
87	Vss	-	Ground terminal
88	Avref	-	Reference power supply (+3.3V) terminal (analog system)
89	BSCANP	I	Fixed at "L" in this unit
90	PVcc	-	Power supply terminal (+3.3V) (for I/O)
91	PARADISSO_BCK	I	Audio clock signal input terminal
92	NC	-	Not used
93	Vss	-	Ground terminal
94	SYNC_ON	O	Not used
95	Vcc	-	Power supply terminal (+1.18V) (for internal)
96	XM_PWR	O	Power supply on/off control signal output to the SIRIUSXM in connector "H": power on (US and Canadian models only)
97	TRST	I	Reset signal input terminal for the JTAG Not used
98	TDO	O	Data output terminal for the JTAG Not used
99	TDI	I	Data input terminal for the JTAG Not used
100	TMS	I	Mode selection signal input terminal for the JTAG Not used
101	TCK	I	Clock signal input terminal for the JTAG Not used
102	Vss	-	Ground terminal
103	NC	-	Not used
104	EN_SYS	O	Power on/off control signal output to the regulator "H": power on
105	Vcc	-	Power supply terminal (+1.18V) (for internal)
106	PWR_ECO	O	Low power mode selection signal output to the regulator "L": low power mode
107	Vss	-	Ground terminal
108	USB_OVR	I	USB over current detection signal input from the regulator "L": over current
109	PVcc	-	Power supply terminal (+3.3V) (for I/O)
110	USB_ON2	O	USB power on/off control signal output terminal Not used
111	USB_OVR2	I	USB over current detection signal input terminal Not used
112	BT_PWR	O	Power on/off control signal output terminal for the Bluetooth section "H": power on
113	NC	-	Not used
114	BT_RST	O	Reset signal output to the BT module "L": reset
115	REMOTE1K	O	Rotary commander key control signal output terminal

Pin No.	Pin Name	I/O	Description
116	Vss	-	Ground terminal
117	NC	-	Not used
118	USB_ON	O	USB power on/off control signal output to the regulator "H": power on
119	Vcc	-	Power supply terminal (+1.18V) (for internal)
120	NC	-	Not used
121	Vss	-	Ground terminal
122	RE_ON	O	Jog dial pulse pull-up signal output terminal
123	PVcc	-	Power supply terminal (+3.3V) (for I/O)
124	MEC_DSW	I	Chucking end detection switch input terminal "L": chucking end detected
125	I2C0_SCL	O	Serial data transfer clock signal output to the electrical volume, regulator and EEPROM
126	I2C0_SDA	I/O	Two-way data bus with the electrical volume, regulator and EEPROM
127	I2C1_SCL	O	Serial data transfer clock signal output to the FM/AM receiver
128	I2C1_SDA	I/O	Two-way data bus with the FM/AM receiver
129, 130	NC	-	Not used
131, 132	RE_IN0, RE_IN1	I	Jog dial pulse input from the rotary encoder
133	BT_TX	O	Serial data output to the BT module
134	REMOTE10K	O	Rotary commander key control signal output terminal Not used
135	DOOR_SW	I	Front panel remove/attach detection signal input terminal "L": front panel is attached Fixed at "L" in this unit
136	SIRCS	I	Remote control signal input from the remote control receiver
137	MEC_SELFSW	I	Self loading position detection switch input terminal "L": self loading position detected
138	Vss	-	Ground terminal
139	USB_X1	I	System clock input terminal (48 MHz)
140	USB_X2	O	System clock output terminal (48 MHz)
141	USBDPVcc	-	Power supply terminal (+3.3V) (for USB digital)
142	USBDPVss	-	Ground terminal (for USB digital)
143 to 145	NC	-	Not used
146	USBDVcc	-	Power supply terminal (+1.18V) (for USB digital)
147	USBDVss	-	Ground terminal (for USB digital)
148	USBDPVcc	-	Power supply terminal (+3.3V) (for USB digital)
149	USBDPVss	-	Ground terminal (for USB digital)
150	DM0	I/O	Two-way USB data (–) bus with the USB connector
151	DP0	I/O	Two-way USB data (+) bus with the USB connector
152	VBUSIN0	I	VBUS power detection signal input terminal "H": VBUS power is detected
153	USBDVcc	-	Power supply terminal (+1.18V) (for USB digital)
154	USBDVss	-	Ground terminal (for USB digital)
155	REFRIN	I	External resistor connection terminal
156	USBAPVss	-	Ground terminal (for USB analog)
157	USBAPVcc	-	Power supply terminal (+3.3V) (for USB analog)
158	USBAVcc	-	Power supply terminal (+1.18V) (for USB analog)
159	USBAVss	-	Ground terminal (for USB analog)
160	USBUVcc	-	Power supply terminal (+1.18V) (for USB 48 MHz)
161	USBUVss	-	Ground terminal (for USB 48 MHz)
162, 163	Vss	-	Ground terminal
164	NC (USB_CHG_MOD2)	-	Not used
165	NC (HUB_RST)	-	Not used
166, 167	SF1_D2, SF1_D3	I/O	Two-way serial data with the serial flash
168	SF1_CLK	O	Serial data transfer clock signal output to the serial flash
169	SF1_CE	O	Chip select signal output to the serial flash
170	SF1_D0	I/O	Two-way serial data with the serial flash
171	Vss	-	Ground terminal
172	SF1_D1	I/O	Two-way serial data with the serial flash
173	USB_CHG_MOD1	O	USB charge control signal output terminal Not used
174	PVcc	-	Power supply terminal (+3.3V) (for I/O)
175	ATT	O	Audio muting on/off control signal output terminal "H": muting on
176	HIT2_RESET	O	Reset signal output terminal Not used

MAIN BOARD IC705 TC94A99FG-003 (SYCH (RF AMP, DIGITAL SERVO PROCESSOR, AUDIO DSP)

Pin No.	Pin Name	I/O	Description
1	LPFO	O	PLL circuit low-pass filter amplifier output terminal
2	PVREF	-	PLL circuit reference voltage (+1.65V) terminal
3	VCOF	O	VCO filter terminal
4	RVSS3	-	Ground terminal
5	VCOI	I	DSP VCO control voltage input terminal
6	RVDD3	-	Power supply terminal (+3.3V)
7	SLCO	O	EFM slice level output terminal
8	RFI	I	RF signal input terminal
9	RFRPI	I	RF ripple signal input terminal
10	RFEQO	O	RF equalizer circuit output terminal
11	DCOFC	O	RF equalizer offset compensation low-pass filter output terminal
12	AGCI	I	RF signal auto gain control amplifier input terminal
13	RFO	O	RF signal generation amplifier output terminal
14	RVSS3	-	Ground terminal
15	FNI2	I	Main beam (B) input from the CD mechanism deck block
16, 17	FNI1, FPI2	I	Main beam (C) input from the CD mechanism deck block
18	FPI1	I	Main beam (A) input from the CD mechanism deck block
19	VDD1_1	-	Power supply terminal (+1.5V)
20	TPI	I	Sub beam (F) input from the CD mechanism deck block
21	TNI	I	Sub beam (E) input from the CD mechanism deck block
22	VRO	O	Reference voltage (+1.65V) output to the CD mechanism deck block
23	AVSS3	-	Ground terminal
24	MDI	I	Laser power detection signal input from the CD mechanism deck block
25	LDO	O	Laser power control signal output to the CD mechanism deck block
26	FSMONIT	O	Not used
27	RFZI	I	RF ripple zero-cross signal input terminal
28	RFRP	O	RF ripple signal output terminal
29	TEI	O	Tracking error signal output terminal
30	AVDD3	-	Power supply terminal (+3.3V)
31	FOO	O	Focus coil control signal output to the CD mechanism deck block
32	TRO	O	Tracking coil control signal output to the CD mechanism deck block
33	VSS_1	-	Ground terminal
34	FMO	O	Sled motor control signal output to the CD mechanism deck block
35	DMO	O	Spindle motor control signal output to the CD mechanism deck block
36	VDDM1	-	Power supply terminal (+1.5V)
37	$\overline{\text{SRAMSTB}}$	I	Standby signal input from the system controller “L”: standby
38	VDD1_2	-	Power supply terminal (+1.5V)
39	VDD3_1	-	Power supply terminal (+3.3V)
40, 41	PIO10/CDMON2, PIO11/CDMON3	I/O	Not used
42	PIO12	I	Audio data input from the system controller
43	PIO13	I	Bit clock signal input from the pin 49 (PIO19)
44	PIO14	I	L/R sampling clock signal input from the pin 48 (PIO18)
45	PIO15	O	Audio data output to the system controller
46, 47	PIO16, PIO17	I/O	Not used
48	PIO18	O	L/R sampling clock signal output to the system controller
49	PIO19	O	Bit clock signal output to the system controller
50	PIO20	I/O	Not used
51	DVDD12	-	Power supply terminal (+3.3V)
52	DAO1	O	Audio signal (rear R-ch) output to the electrical volume
53	DVSS12	-	Ground terminal
54	DAO2	O	Audio signal (front R-ch) output to the electrical volume
55	DVREF	-	Reference voltage terminal
56	DVDD34	-	Power supply terminal (+3.3V)
57	DAO3	O	Audio signal (front L-ch) output to the electrical volume
58	DVSS34	-	Ground terminal
59	DAO4	O	Audio signal (rear L-ch) output to the electrical volume
60	DVDD5	-	Power supply terminal (+3.3V)

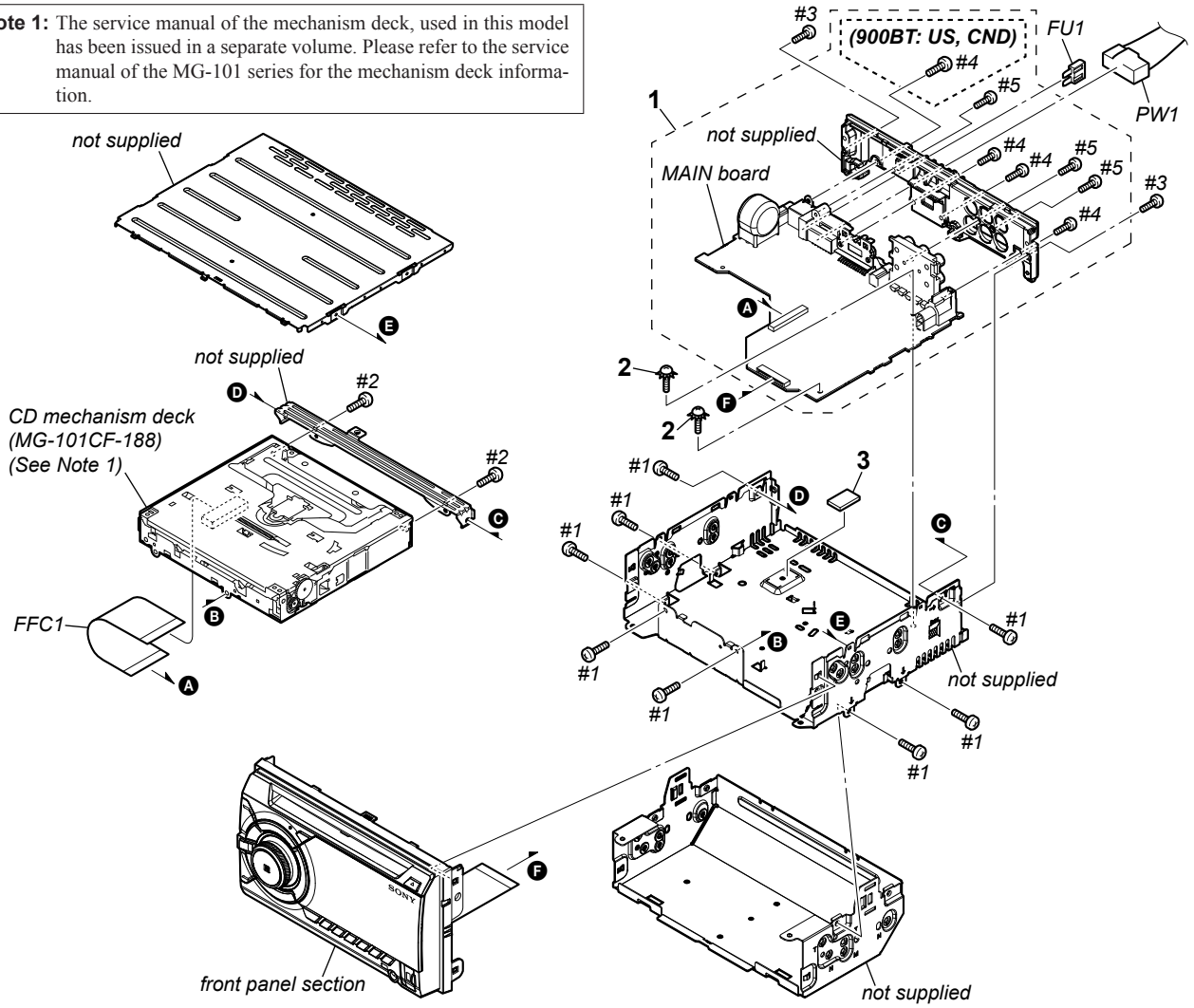
Pin No.	Pin Name	I/O	Description
61	DAO5	O	Audio signal (sub-ch) output to the electrical volume
62	DVSS5	-	Ground terminal
63	VDD1_3	-	Power supply terminal (+1.5V)
64	VSS_2	-	Ground terminal
65	XVSS3	-	Ground terminal
66	XI	I	System clock input terminal (16.9344 MHz)
67	XO	O	System clock output terminal (16.9344 MHz)
68	XVDD3	-	Power supply terminal (+3.3V)
69	ADVDD3	-	Power supply terminal (+3.3V)
70	ADIN1	I	Audio signal (L-ch) input from the electrical volume
71	ADVREFL	O	Reference voltage output terminal
72	ADVCM	O	Reference voltage output terminal
73	ADVREFH	O	Reference voltage output terminal
74	ADIN2	I	Audio signal (R-ch) input from the electrical volume
75	ADVSS3	-	Ground terminal
76	MS	I	Microprocessor interface mode selection signal input terminal “L”: serial interface, “H”: parallel interface Fixed at “L” in this unit
77, 78	BUS0, BUS1	I/O	Serial data input/output terminal Not used
79	BUS2	O	Serial data output to the system controller
80	BUS3	I	Serial data input from the system controller
81	BUCK	I	Serial data transfer clock signal input from the system controller
82	$\overline{CCE}$	I	Chip enable signal input from the system controller
83	VDD3_2	-	Power supply terminal (+3.3V)
84	VSS_3	-	Ground terminal
85	$\overline{RST}$	I	Reset signal input from the system controller “L”: reset
86	VDD1_4	-	Power supply terminal (+1.5V)
87	PIO0	O	Interrupt signal output to the system controller
88	PIO1	O	Request signal output to the system controller
89	PIO2	I	Gate signal input from the system controller
90	PIO3	I	Audio data input from the system controller
91	PIO4	I	Bit clock signal input from the system controller
92	PIO5	I	L/R sampling clock signal input from the system controller
93	PIO6	I	Muting on/off control signal input from the system controller “L”: muting on
94	PIO7	O	Zero data detection signal output to the system controller
95	PIO8/CDMON0	O	Serial data output to the system controller
96	PIO9/CDMON1	I	Serial data transfer clock signal input from the system controller
97	TEST	I	Test mode setting terminal Normally fixed at “L”
98	PDO	O	EFM and PLCK phase difference signal output terminal
99	TMAX	O	TMAX detection result output terminal
100	LPFN	I	PLL circuit low-pass filter amplifier inversion input 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. MAIN SECTION

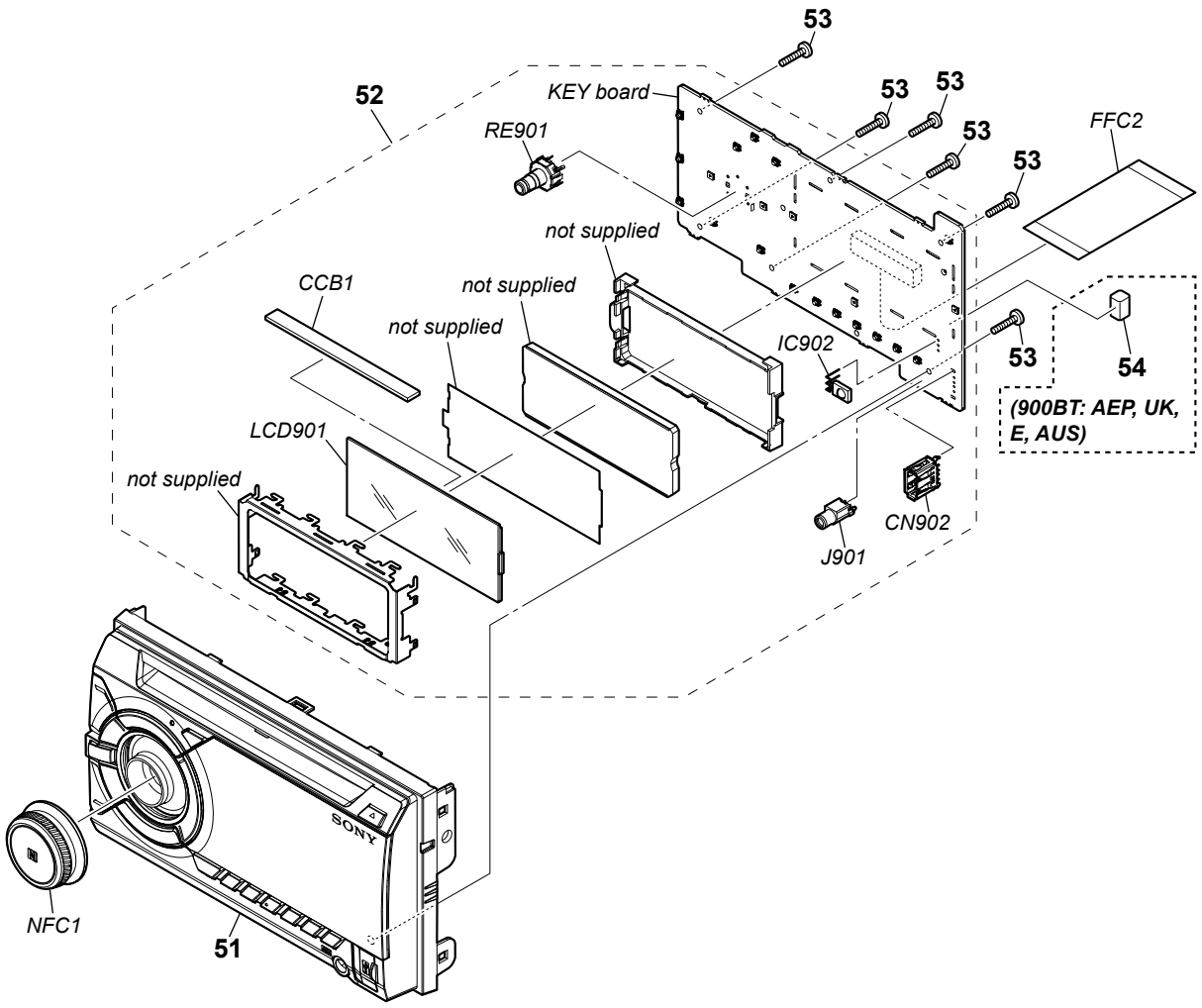
Note 1: The service manual of the mechanism deck, used in this model has been issued in a separate volume. Please refer to the service manual of the MG-101 series for the mechanism deck information.



Note 2: When the complete MAIN board (Ref. No. 1) is replaced, it is necessary to replace knob (VOL) assy (Ref. No. NFC1: page 50) simultaneously. Also, the destination setting, Bluetooth operation check and Bluetooth information writing is necessary. Refer to "DESTINATION SETTING METHOD" on page 5, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 8 and "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

Ref. No.	Part No.	Description	Remark
1	A-2081-290-A	MAIN BOARD, COMPLETE (900BT: US, CND)	(See Note 2)
1	A-2081-291-A	MAIN BOARD, COMPLETE (850BT/900BT: AEP, UK, E, IND, AUS/900BTM)	(See Note 2)
2	4-410-504-01	SCREW (+PTT 2.6X6), GROUND POINT	
3	4-548-823-01	SHEET HEAT TRANSFER	
FFC1	1-846-819-61	CABLE FLEXIBLE FLAT (27 CORE)	(Length: 80 mm)
FU1	1-523-227-11	MINI FUSE (BLADE TYPE) (10 A/32 V)	
PW1	1-846-033-11	CONNECTION CABLE (ISO) (POWER)	(900BT: AEP, UK)
PW1	1-846-129-11	CONNECTION CABLE FOR AUTOMOBILE (POWER)	(900BTM)
PW1	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (POWER)	(850BT/900BT: US, CND, E, IND, AUS)
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#3	7-685-793-01	SCREW +PTT 2.6X8 (S)	
#4	7-685-794-01	SCREW +PTT 2.6X10 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

6-2. FRONT PANEL SECTION



Note 1: When the CN902 and J901 are replaced, refer to "NOTE FOR REPLACING OF THE USB CONNECTOR (CN902) AND THE AUX JACK (J901)" on page 7.

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 9.

Ref. No.	Part No.	Description	Remark
51	X-2592-286-1	PANEL FRONT (SV) ASSY (900BT: E, IND, AUS)	
51	X-2592-287-1	PANEL FRONT (SV) ASSY (900BT: US, CND)	
51	X-2592-288-1	PANEL FRONT (SV) ASSY (900BT: AEP, UK)	
51	X-2592-289-1	PANEL FRONT (SV) ASSY (900BTM)	
51	X-2592-950-1	PANEL FRONT (SV) ASSY (850BT)	
52	A-2081-310-A	KEY BOARD, COMPLETE (850BT/900BT: US, CND, IND/900BTM)	
52	A-2107-179-A	KEY BOARD, COMPLETE (900BT: AEP, UK, E, AUS)	
53	3-250-543-02	SCREW (+B P-TITE M2)	
54	4-143-400-01	GASKET (SHIELD TUNE S) (900BT: AEP, UK, E, AUS)	

Ref. No.	Part No.	Description	Remark
CCB1	1-780-968-11	CONDUCTIVE BOARD, CONNECTION	
CN902	1-843-918-12	CONNECTOR, USB (♆) (See Note 1)	
FFC2	1-849-150-11	CABLE FLEXIBLE FLAT (22 CORE)	
IC902	6-600-806-01	IC PNJ4813M01S0 (R)	
J901	1-844-363-11	JACK (SMALL TYPE) (DIA. 3.5) (AUX) (See Note 1)	
LCD901	1-812-182-11	DISPLAY PANEL, LIQUID CRYSTAL	
NFC1	X-2592-163-1	KNOB (VOL) (SV) ASSY (Including NFC module) (See Note 2)	
RE901	1-490-863-11	ROTARY ENCODER (▲ PUSH ENTER/MENU/➖ VOICE, (VOLUME))	

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
	A-2081-310-A	KEY BOARD, COMPLETE (850BT/900BT: US, CND, IND/900BTM)	
	A-2107-179-A	KEY BOARD, COMPLETE (900BT: AEP, UK, E, AUS)	
		**********	
		< CAPACITOR >	
C901	1-118-347-11	CERAMIC CHIP 0.1uF 10% 25V	
C903	1-118-289-11	CERAMIC CHIP 0.1uF 10% 16V	
C906	1-118-289-11	CERAMIC CHIP 0.1uF 10% 16V	
C910	1-118-347-11	CERAMIC CHIP 0.1uF 10% 25V	
C911	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C913	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C916	1-162-918-11	CERAMIC CHIP 18PF 5% 50V	
C917	1-162-918-11	CERAMIC CHIP 18PF 5% 50V	
C918	1-162-918-11	CERAMIC CHIP 18PF 5% 50V	
C925	1-116-716-11	CERAMIC CHIP 10uF 10% 16V	
C926	1-116-716-11	CERAMIC CHIP 10uF 10% 16V	
		< CONNECTION CONDUCTIVE BOARD >	
CCB1	1-780-968-11	CONDUCTIVE BOARD, CONNECTION	
		< CONNECTOR >	
CN901	1-844-392-11	CONNECTOR, FFC/FPC (ZIF) 22P	
CN902	1-843-918-12	CONNECTOR, USB (ψ) (See Note)	
		< DIODE >	
D911	6-503-014-01	DIODE DZ2J05100L	
		< FERRITE BEAD >	
FB901	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB902	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB903	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
		< IC >	
IC901	6-721-644-01	IC BU97510CKV-ME2	
IC902	6-600-806-01	IC PNJ4813M01S0 (R)	
		< JACK >	
J901	1-844-363-11	JACK (SMALL TYPE) (DIA. 3.5) (AUX) (See Note)	
		< COIL >	
* L901	1-457-443-22	COMMON MODE CHOKE COIL	

Note: When the CN902 and J901 are replaced, refer to "NOTE FOR REPLACING OF THE USB CONNECTOR (CN902) AND THE AUX JACK (J901)" on page 7.

Ref. No.	Part No.	Description	Remark
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-812-182-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< LED >	
LED901	6-503-871-01	LED SMLVN6RGB1U1 (KEY ILLUMINATION)	
LED902	6-503-871-01	LED SMLVN6RGB1U1 (KEY ILLUMINATION)	
LED905	6-503-871-01	LED SMLVN6RGB1U1 (KEY ILLUMINATION)	
LED906	6-503-871-01	LED SMLVN6RGB1U1 (LCD BACK LIGHT)	
LED915	6-503-871-01	LED SMLVN6RGB1U1 (LCD BACK LIGHT)	
		< TRANSISTOR >	
Q901	8-729-427-72	TRANSISTOR XP4501	
Q902	8-729-427-72	TRANSISTOR XP4501	
Q903	8-729-427-72	TRANSISTOR XP4501	
Q907	8-729-427-72	TRANSISTOR XP4501	
Q909	8-729-427-72	TRANSISTOR XP4501	
Q910	8-729-427-72	TRANSISTOR XP4501	
Q911	8-729-427-72	TRANSISTOR XP4501	
Q912	8-729-427-72	TRANSISTOR XP4501	
Q913	8-729-427-72	TRANSISTOR XP4501	
		< RESISTOR >	
R901	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R902	1-216-802-11	METAL CHIP 27 5% 1/10W	
R903	1-216-806-11	METAL CHIP 56 5% 1/10W	
R904	1-216-810-11	METAL CHIP 120 5% 1/10W	
R905	1-216-797-11	METAL CHIP 10 5% 1/10W	
R911	1-216-810-11	METAL CHIP 120 5% 1/10W	
R912	1-216-808-11	METAL CHIP 82 5% 1/10W	
R913	1-216-803-11	METAL CHIP 33 5% 1/10W	
R914	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R915	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R916	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R920	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R921	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R922	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R923	1-216-803-11	METAL CHIP 33 5% 1/10W	
R924	1-216-810-11	METAL CHIP 120 5% 1/10W	
R925	1-216-806-11	METAL CHIP 56 5% 1/10W	
R926	1-216-808-11	METAL CHIP 82 5% 1/10W	
R927	1-216-804-11	METAL CHIP 39 5% 1/10W	
R928	1-216-807-11	METAL CHIP 68 5% 1/10W	
R935	1-216-803-11	METAL CHIP 33 5% 1/10W	
R936	1-216-810-11	METAL CHIP 120 5% 1/10W	
R937	1-216-806-11	METAL CHIP 56 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R938	1-216-808-11	METAL CHIP	82	5%	1/10W
R939	1-216-804-11	METAL CHIP	39	5%	1/10W
R940	1-216-807-11	METAL CHIP	68	5%	1/10W
R941	1-216-811-11	METAL CHIP	150	5%	1/10W
R942	1-216-811-11	METAL CHIP	150	5%	1/10W
R943	1-216-864-91	SHORT CHIP	0		
R944	1-216-864-91	SHORT CHIP	0		
R945	1-216-817-11	METAL CHIP	470	5%	1/10W
R946	1-216-817-11	METAL CHIP	470	5%	1/10W
R947	1-216-817-11	METAL CHIP	470	5%	1/10W
R948	1-216-820-11	METAL CHIP	820	5%	1/10W
R949	1-216-821-11	METAL CHIP	1K	5%	1/10W
R950	1-216-821-11	METAL CHIP	1K	5%	1/10W
R951	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R952	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R953	1-218-956-11	METAL CHIP	1.8K	5%	1/16W
R956	1-216-820-11	METAL CHIP	820	5%	1/10W
R957	1-216-821-11	METAL CHIP	1K	5%	1/10W
R958	1-216-821-11	METAL CHIP	1K	5%	1/10W
R959	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R960	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R961	1-218-956-11	METAL CHIP	1.8K	5%	1/16W
R962	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R969	1-216-295-91	SHORT CHIP	0		
R974	1-216-801-11	METAL CHIP	22	5%	1/10W
R977	1-216-810-11	METAL CHIP	120	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-807-11	METAL CHIP	68	5%	1/10W
R980	1-216-806-11	METAL CHIP	56	5%	1/10W
R981	1-216-833-11	METAL CHIP	10K	5%	1/10W
R982	1-216-808-11	METAL CHIP	82	5%	1/10W
R983	1-216-804-11	METAL CHIP	39	5%	1/10W
R984	1-216-833-11	METAL CHIP	10K	5%	1/10W
R985	1-216-806-11	METAL CHIP	56	5%	1/10W
R986	1-216-803-11	METAL CHIP	33	5%	1/10W
R987	1-216-833-11	METAL CHIP	10K	5%	1/10W
R988	1-216-806-11	METAL CHIP	56	5%	1/10W
R989	1-216-797-11	METAL CHIP	10	5%	1/10W
R990	1-216-802-11	METAL CHIP	27	5%	1/10W
R991	1-216-808-11	METAL CHIP	82	5%	1/10W
R992	1-216-809-11	METAL CHIP	100	5%	1/10W
R1013	1-216-809-11	METAL CHIP	100	5%	1/10W
R1016	1-216-810-11	METAL CHIP	120	5%	1/10W
R1017	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R1018	1-216-158-00	METAL CHIP	22	5%	1/4W (900BT: AEP, UK, E, AUS)
R1018	1-216-296-11	SHORT CHIP	0		(850BT/900BT: US, CND, IND/900BTM)
		< ROTARY ENCODER >			
RE901	1-490-863-11	ROTARY ENCODER (▲ PUSH ENTER/MENU/ ➡VOICE, (VOLUME))			
		< SWITCH >			
S901	1-798-448-11	TACTILE SWITCH (⏏)			
S902	1-798-448-11	TACTILE SWITCH (SOURCE ➡OFF)			
S903	1-798-448-11	TACTILE SWITCH (▶▶▶▶I SEEK +)			
S904	1-798-448-11	TACTILE SWITCH (MODE ⮌)			
S905	1-798-448-11	TACTILE SWITCH (SEEK − I◀◀ ◀◀)			
S906	1-798-448-11	TACTILE SWITCH (🔍 PTY)			
S907	1-798-448-11	TACTILE SWITCH (MEGA BASS)			
S910	1-798-448-11	TACTILE SWITCH (PAUSE 6)			
S911	1-798-448-11	TACTILE SWITCH (MIC 5)			
S912	1-798-448-11	TACTILE SWITCH (🔁 4)			
S913	1-798-448-11	TACTILE SWITCH (🔂 3)			
S914	1-798-448-11	TACTILE SWITCH (ALBUM ▲ 2)			
S915	1-798-448-11	TACTILE SWITCH (▼ ALBUM 1)			
S916	1-798-448-11	TACTILE SWITCH (📞 CALL)			
S917	1-798-448-11	TACTILE SWITCH (DSPL ➡SCRL)			
S919	1-798-448-11	TACTILE SWITCH (RESET)			
		< DIODE >			
VDR901	6-504-257-01	DIODE ESDAXLC6-1BT2			
VDR902	6-504-257-01	DIODE ESDAXLC6-1BT2			
VDR903	6-504-257-01	DIODE ESDAXLC6-1BT2			
**********					
	A-2081-290-A	MAIN BOARD, COMPLETE (900BT: US, CND) (See Note 1)			
	A-2081-291-A	MAIN BOARD, COMPLETE (850BT/900BT: AEP, UK, E, IND, AUS/900BTM) (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
* C03	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
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
* C014	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
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
* C28	1-116-720-11	CERAMIC CHIP	10uF	20%	6.3V
C30	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C102	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
* C103	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
C104	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
C105	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
C106	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
* C107	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
C109	1-118-347-11	CERAMIC CHIP	0.1uF	10%	25V
C299	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V

Note 1: When the complete 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 5, "BLUETOOTH FUNCTION CHECKING METHOD USING A SMARTPHONE OR CELLULAR PHONE" on page 8 and "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

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
C300	1-118-039-11	CERAMIC CHIP	1uF	10%	25V
C301	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C302	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C303	1-112-839-11	ELECT	4700uF	20%	16V
C304	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C305	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C306	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V
* C307	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
C308	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C309	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C310	1-118-347-11	CERAMIC CHIP	0.1uF	10%	25V
C311	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C312	1-118-039-11	CERAMIC CHIP	1uF	10%	25V
C313	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C314	1-118-930-11	CERAMIC CHIP	10uF	10%	10V
C315	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
* C316	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C317	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C318	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C319	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C320	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C321	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C322	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C323	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
C324	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
* C325	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
* C326	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
C328	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C329	1-118-347-11	CERAMIC CHIP	0.1uF	10%	25V
C330	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C331	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C332	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V
C333	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C338	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C339	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C340	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C341	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C342	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C343	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C401	1-128-992-21	ELECT CHIP	47uF	20%	25V
C404	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C405	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C406	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C408	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C409	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C410	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C411	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C412	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C413	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C414	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C415	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
C416	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
C417	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C418	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C419	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
* C420	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V (900BT: US, CND)
* C421	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V (900BT: US, CND)
* C422	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V (900BT: US, CND)

Ref. No.	Part No.	Description			Remark
C423	1-118-389-11	CERAMIC CHIP	0.022uF	10%	25V
C424	1-118-389-11	CERAMIC CHIP	0.022uF	10%	25V
C425	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
C441	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C442	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C443	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C444	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C445	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
C446	1-114-599-21	ELECT CHIP	10uF	20%	35V
C500	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V
C501	1-165-492-21	ELECT CHIP	100uF	20%	10V
C502	1-165-492-21	ELECT CHIP	100uF	20%	10V
C503	1-118-345-11	CERAMIC CHIP	0.01uF	10%	25V
C504	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
C505	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C506	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C507	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C508	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C510	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C511	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C512	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C515	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C516	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C517	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C518	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C519	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C520	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C521	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C522	1-164-848-11	CERAMIC CHIP	8PF	0.5PF	50V
C523	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C524	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C525	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C526	1-116-711-11	CERAMIC CHIP	22uF	20%	16V
C527	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C528	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C529	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C530	1-116-711-11	CERAMIC CHIP	22uF	20%	16V
C531	1-164-852-11	CERAMIC CHIP	12PF	5%	50V
C532	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C533	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
C534	1-116-711-11	CERAMIC CHIP	22uF	20%	16V
C535	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C536	1-116-711-11	CERAMIC CHIP	22uF	20%	16V
C537	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C538	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C539	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C540	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C541	1-116-737-11	CERAMIC CHIP	1uF	20%	10V
C543	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C544	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C545	1-116-737-11	CERAMIC CHIP	1uF	20%	10V
C546	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C547	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C548	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C549	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C550	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C551	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
C559	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C560	1-116-707-11	CERAMIC CHIP	47uF	20%	10V

MAIN

	Ref. No.	Part No.	Description			Remark
	C564	1-100-354-21	ELECT CHIP	220uF	20%	6.3V
*	C567	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
	C568	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
	C569	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V
	C570	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
	C700	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V
	C702	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
*	C704	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
	C705	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
*	C706	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
*	C707	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
	C711	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C712	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C714	1-118-388-11	CERAMIC CHIP	0.047uF	10%	25V
	C715	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
	C716	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
	C717	1-118-388-11	CERAMIC CHIP	0.047uF	10%	25V
*	C718	1-118-407-11	CERAMIC CHIP	470PF	10%	50V
	C719	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C720	1-116-707-11	CERAMIC CHIP	47uF	20%	10V
*	C721	1-118-407-11	CERAMIC CHIP	470PF	10%	50V
	C722	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C723	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
	C725	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
	C727	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C728	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C729	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
	C730	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C731	1-116-733-11	CERAMIC CHIP	1uF	10%	25V
	C732	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C734	1-118-394-11	CERAMIC CHIP	0.0056uF	10%	50V
	C735	1-127-772-81	CERAMIC CHIP	0.033uF	10%	10V
	C736	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
	C737	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
	C738	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
	C739	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
	C740	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
	C741	1-118-397-11	CERAMIC CHIP	0.0033uF	10%	50V
	C742	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C743	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
	C744	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
	C745	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C746	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
	C747	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C748	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
	C749	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
	C750	1-118-047-11	CERAMIC CHIP	10uF	10%	16V
	C751	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C754	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C755	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
	C756	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
	C758	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C759	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C760	1-127-988-81	CERAMIC CHIP	0.015uF	10%	16V
	C761	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C762	1-100-579-81	CERAMIC CHIP	0.0056uF	10%	25V
	C763	1-164-854-11	CERAMIC CHIP	15PF	5%	50V
	C764	1-118-345-11	CERAMIC CHIP	0.01uF	10%	25V
	C765	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
	C766	1-118-399-11	CERAMIC CHIP	0.0022uF	10%	50V
	C767	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C768	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
	C769	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C770	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
	C771	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C772	1-118-477-11	CERAMIC CHIP	2.2uF	10%	6.3V
	C773	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C775	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C777	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C779	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	C780	1-118-399-11	CERAMIC CHIP	0.0022uF	10%	50V
	C781	1-118-399-11	CERAMIC CHIP	0.0022uF	10%	50V
	C782	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C783	1-127-988-81	CERAMIC CHIP	0.015uF	10%	16V
	C786	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
	C787	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C788	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C790	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C793	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
	C801	1-116-705-11	CERAMIC CHIP	47uF	20%	16V
	C803	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
	C804	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
	C805	1-118-405-11	CERAMIC CHIP	680PF	10%	50V
	C806	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C807	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
						(900BT: US, CND)
	C809	1-118-393-11	CERAMIC CHIP	0.0068uF	10%	50V
	C810	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
	C811	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
						(900BT: US, CND)
*	C812	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C813	1-116-711-11	CERAMIC CHIP	22uF	20%	16V
	C814	1-117-681-11	ELECT CHIP	100uF	20%	16V
	C815	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
	C816	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
						(900BT: US, CND)
	C818	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
	C820	1-116-740-11	CERAMIC CHIP	0.47uF	10%	16V
	C821	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
	C822	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
	C825	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
						(900BT: US, CND)
	C827	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
*	C829	1-118-407-11	CERAMIC CHIP	470PF	10%	50V
*	C830	1-118-407-11	CERAMIC CHIP	470PF	10%	50V
	C831	1-100-769-21	ELECT CHIP	470uF	20%	16V
	C832	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
						(900BT: US, CND)
*	C833	1-118-035-11	CERAMIC CHIP	0.1uF	10%	25V
	C834	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
	C835	1-100-769-21	ELECT CHIP	470uF	20%	16V
	C837	1-100-769-21	ELECT CHIP	470uF	20%	16V
*	C838	1-118-035-11	CERAMIC CHIP	0.1uF	10%	25V
	C839	1-164-878-11	CERAMIC CHIP	150PF	5%	50V
	C840	1-116-739-11	CERAMIC CHIP	0.47uF	10%	50V
	C841	1-116-739-11	CERAMIC CHIP	0.47uF	10%	50V
	C842	1-114-817-11	CERAMIC CHIP	2.2uF	10%	50V
	C843	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
	C844	1-100-764-21	ELECT CHIP	4.7uF	20%	25V
	C845	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
	C846	1-116-716-11	CERAMIC CHIP	10uF	10%	16V

	Ref. No.	Part No.	Description			Remark
	C847	1-118-955-11	CERAMIC CHIP	22uF	20%	16V
	C848	1-116-705-11	CERAMIC CHIP	47uF	20%	16V
	C850	1-116-865-11	CERAMIC CHIP	10uF	10%	25V
	C851	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
	C852	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
	C861	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
	C865	1-116-705-11	CERAMIC CHIP	47uF	20%	16V
	C866	1-116-705-11	CERAMIC CHIP	47uF	20%	16V
	C867	1-100-769-21	ELECT CHIP	470uF	20%	16V
*	C872	1-118-407-11	CERAMIC CHIP	470PF	10%	50V
	C873	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V
	C875	1-116-716-11	CERAMIC CHIP	10uF	10%	16V
	C878	1-116-728-11	CERAMIC CHIP	2.2uF	10%	10V
	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
	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
*	C1052	1-116-738-11	CERAMIC CHIP	1uF	10%	6.3V
	C1054	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
	C1094	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C1337	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C1338	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
	C1339	1-118-045-11	CERAMIC CHIP	2.2uF	10%	25V
	C1341	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
	C1353	1-118-361-11	CERAMIC CHIP	0.1uF	10%	50V
	C1358	1-162-966-91	CERAMIC CHIP	0.0022uF	10%	50V
	C1361	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C1385	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
	C1386	1-118-290-11	CERAMIC CHIP	0.001uF	10%	50V
	C1387	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C1394	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
	C1395	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
*	C1401	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C1402	1-118-386-11	CERAMIC CHIP	0.1uF	10%	16V
*	C1403	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C1405	1-118-359-11	CERAMIC CHIP	10uF	10%	16V
	C1406	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
	C1409	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
	C1410	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
	C1411	1-164-866-11	CERAMIC CHIP	47PF	5%	50V
*	C1414	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C1415	1-112-692-11	CERAMIC CHIP	1000PF	5%	50V
	C1561	1-116-732-11	CERAMIC CHIP	2.2uF	20%	6.3V
*	C1562	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C1563	1-118-459-11	CERAMIC CHIP	0.01uF	10%	25V
	C1564	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
	C1565	1-116-722-11	CERAMIC CHIP	4.7uF	10%	16V
	C1569	1-117-730-81	CERAMIC CHIP	1.2PF	0.1PF	16V
*	C1571	1-100-207-81	CERAMIC CHIP	0.3PF	0.1PF	50V
	C1572	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1573	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1574	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1575	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1576	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1577	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C1581	1-164-872-11	CERAMIC CHIP	82PF	5%	50V
	C1582	1-164-872-11	CERAMIC CHIP	82PF	5%	50V
*	C1583	1-116-735-11	CERAMIC CHIP	1uF	10%	16V
	C1584	1-118-040-11	CERAMIC CHIP	2.2uF	10%	16V
			< CONNECTOR >			
	CN101	1-794-555-51	CONNECTOR, FFC/FPC 22P			
	CN301	1-843-330-31	PIN, CONNECTOR 16P			
	CN701	1-843-775-11	CONNECTOR, FFC/FPC (ZIF) 27P			
	CN801	1-779-886-11	SOCKET, MINIATURE DIN CONNECTOR (SIRIUSXM IN) (900BT: US, CND)			
			< DIODE >			
	D301	6-503-548-01	DIODE DB2441600L			
	D303	6-503-238-01	DIODE GN1G (850BT/900BT: AEP, UK, E, IND, AUS/900BTM)			
	D401	6-502-961-01	DIODE DA2J10100L			
	D501	6-503-759-01	DIODE RB751V40, 115			
	D502	6-503-759-01	DIODE RB751V40, 115			
	D801	6-504-041-01	DIODE RB050L-60			
	D802	6-502-972-01	DIODE DZ2J09100L			
	D805	6-503-031-01	DIODE DZ2J18000L (900BT: US, CND)			
*	D806	6-503-973-01	DIODE RSX205L-30TE25			
	D808	6-503-031-01	DIODE DZ2J18000L (900BT: US, CND)			
	D809	6-503-031-01	DIODE DZ2J18000L (900BT: US, CND)			
	D811	6-503-031-01	DIODE DZ2J18000L			
	D812	6-503-238-01	DIODE GN1G			
	D813	6-503-031-01	DIODE DZ2J18000L			
	D814	6-502-961-01	DIODE DA2J10100L			
	D816	6-504-047-01	DIODE RSX051VA-30			
	D817	6-503-016-01	DIODE DZ2J07500L			
	D818	6-503-031-01	DIODE DZ2J18000L			
	D1001	6-502-969-01	DIODE DZ2J06800L			
	D1002	6-502-969-01	DIODE DZ2J06800L			
	D1306	6-503-759-01	DIODE RB751V40, 115			
	D1308	6-502-969-01	DIODE DZ2J06800L			
	D1311	6-503-031-01	DIODE DZ2J18000L			
	D1312	6-503-031-01	DIODE DZ2J18000L			
	D1317	6-503-548-01	DIODE DB2441600L			
	D1318	6-502-961-01	DIODE DA2J10100L			
	D1319	8-719-074-43	DIODE BAS316-115			
	D1322	6-502-961-01	DIODE DA2J10100L			
			< FUSE >			
	F801	1-576-415-11	FUSE (2 A/32 V) (900BT: US, CND)			
			< FERRITE BEAD >			
	FB1	1-481-912-21	EMI FERRITE (SMD) (1005)			
	FB02	1-400-334-21	FERRITE, EMI (SMD) (1608) (900BT: US, CND)			
	FB101	1-500-113-22	BEAD, FERRITE (CHIP) (1608)			
	FB302	1-481-746-11	SDM EMI FERRITE			
	FB401	1-400-334-21	FERRITE, EMI (SMD) (1608)			
	FB403	1-400-334-21	FERRITE, EMI (SMD) (1608)			
	FB501	1-500-113-22	BEAD, FERRITE (CHIP) (1608)			
	FB504	1-500-113-22	BEAD, FERRITE (CHIP) (1608)			
	FB702	1-469-084-21	INDUCTOR, FERRITE BEAD (1005)			
	FB703	1-469-084-21	INDUCTOR, FERRITE BEAD (1005)			
	FB801	1-500-113-22	BEAD, FERRITE (CHIP) (1608)			

Ref. No.	Part No.	Description	Remark
FB802	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB803	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB804	1-500-113-22	BEAD, FERRITE (CHIP) (1608) (900BT: US, CND)	
FB805	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1003	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1004	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1005	1-500-113-22	BEAD, FERRITE (CHIP) (1608)	
FB1304	1-469-094-21	FERRITE, EMI (SMD) (1608)	
FB1305	1-481-396-21	FERRITE, EMI (SMD) (1608)	
		< IC/BT MODULE >	
IC001	(Not supplied)	IC SDP2014HN/V102 (See Note 1)	
IC002	6-721-116-01	IC BU33UC3WG-TR	
IC301	6-720-774-01	IC PURE5001H-4WX	
IC402	6-721-168-01	IC BD3468FV-E2	
IC501	6-719-855-01	IC BU4228F-STR	
IC502	6-722-784-01	IC MX25L3235EM2I-10G-A10 (SV) (See Note 2)	
IC503	(Not supplied)	IC R7S7200032CFP-A (See Note 1)	
IC504	6-710-376-01	IC 74LVC1G17GW-125	
IC702	6-717-694-01	IC BU33TD3WG-TR	
IC703	6-716-355-01	IC BU15TD3WG-TR	
IC704	6-716-355-01	IC BU15TD3WG-TR	
IC705	6-715-712-11	IC TC94A99FG-003 (SYCH	
IC801	6-709-182-01	IC TC7WH126FK (900BT: US, CND)	
IC802	6-710-376-01	IC 74LVC1G17GW-125 (900BT: US, CND)	
IC803	6-721-184-01	IC BD49100RFS-E2	
IC804	(Not supplied)	IC BD60HC0WEFJ-E2 (See Note 1)	
IC805	6-719-012-01	IC S-13A1A12-E6T1U3	
IC1001	6-717-694-01	IC BU33TD3WG-TR	
IC1002	(Not supplied)	BT MODULE (WB113C) (See Note 1)	
IC1003	6-703-863-01	IC NJM2781RB1	
IC1009	(Not supplied)	IC MFI337S3959 (See Note 1)	
		< JACK >	
J001	1-843-791-11	JACK (ANT) (ANTENNA IN)	
J401	1-822-714-21	JACK, PIN 6P (FRONT/REAR/SUB AUDIO OUT)	
J801	1-566-822-81	JACK (REMOTE IN)	
J1001	1-566-822-91	JACK (MIC)	
		< COIL >	
L01	1-400-073-21	INDUCTOR 4.7uH	
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	
L301	1-456-617-11	COIL, CHOKE	
L401	1-469-844-11	INDUCTOR 2.2uH	
L501	1-414-842-21	INDUCTOR 15nH	
L502	1-414-842-21	INDUCTOR 15nH	
L504	1-400-073-21	INDUCTOR 4.7uH	
L505	1-400-073-21	INDUCTOR 4.7uH	
L801	1-460-704-11	COIL, CHOKE 22uH	
L802	1-481-904-11	INDUCTOR 47uH	
L803	1-481-904-11	INDUCTOR 47uH	
		< TRANSISTOR >	
Q401	6-551-970-01	TRANSISTOR LTC614TUFP8T106	
Q402	6-552-895-01	TRANSISTOR DTA014EEBTL	
Q403	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q404	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q405	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q406	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q407	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q408	6-552-905-01	TRANSISTOR DTC014TEBTL	
Q701	6-551-120-01	TRANSISTOR 2SA2119K	
Q801	6-552-904-01	TRANSISTOR DTC014EEBTL	
Q802	6-552-895-01	TRANSISTOR DTA014EEBTL	
Q803	6-553-498-01	FET NTTFS5116PLTWG	
Q804	6-553-498-01	FET NTTFS5116PLTWG	
Q805	6-553-497-01	FET NVTFS5124PLTWG	
Q806	6-552-890-01	TRANSISTOR 2SCR523EBTL	
Q807	6-552-890-01	TRANSISTOR 2SCR523EBTL	
Q808	6-552-895-01	TRANSISTOR DTA014EEBTL	
Q812	6-552-915-01	TRANSISTOR DTC044EEBTL	
Q813	6-552-904-01	TRANSISTOR DTC014EEBTL	
Q814	6-552-890-01	TRANSISTOR 2SCR523EBTL	
Q1302	6-552-891-01	TRANSISTOR LSAR523UBFS8TL	
Q1307	6-552-933-01	TRANSISTOR LTA043ZUBFS8TL	
Q1308	6-552-933-01	TRANSISTOR LTA043ZUBFS8TL	
Q1309	6-552-915-01	TRANSISTOR DTC044EEBTL	
Q1310	6-552-895-01	TRANSISTOR DTA014EEBTL	
		< RESISTOR/CAPACITOR >	
R4	1-218-989-11	METAL CHIP 1M 5% 1/16W	
R07	1-216-864-91	SHORT CHIP 0 (850BT/900BT: AEP, UK, E, IND, AUS/900BTM)	
R8	1-218-941-81	METAL CHIP 100 5% 1/16W	
R10	1-218-941-81	METAL CHIP 100 5% 1/16W	
R11	1-218-941-81	METAL CHIP 100 5% 1/16W	
R012	1-216-864-91	SHORT CHIP 0	
R13	1-118-345-11	CERAMIC CHIP 0.01uF 10% 25V	
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	
R19	1-216-864-91	SHORT CHIP 0	
R21	1-216-864-91	SHORT CHIP 0	
R24	1-162-910-11	CERAMIC CHIP 5PF 0.25PF 50V	
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	1-216-864-91	SHORT CHIP 0	
R103	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R104	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R105	1-218-967-11	METAL CHIP 15K 5% 1/16W	
R107	1-218-967-11	METAL CHIP 15K 5% 1/16W	
R108	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R111	1-216-864-91	SHORT CHIP 0	
R301	1-216-214-00	METAL CHIP 4.7K 5% 1/4W	
R303	1-218-965-11	METAL CHIP 10K 5% 1/16W	
R304	1-216-864-91	SHORT CHIP 0	
R305	1-218-953-11	METAL CHIP 1K 5% 1/16W	
R306	1-218-953-11	METAL CHIP 1K 5% 1/16W	
R307	1-218-953-11	METAL CHIP 1K 5% 1/16W	
R308	1-218-953-11	METAL CHIP 1K 5% 1/16W	
R309	1-218-943-11	METAL CHIP 150 5% 1/16W	
R310	1-218-973-11	METAL CHIP 47K 5% 1/16W	
R311	1-216-864-91	SHORT CHIP 0	
R312	1-218-973-11	METAL CHIP 47K 5% 1/16W	
R315	1-216-864-91	SHORT CHIP 0	
R317	1-216-864-91	SHORT CHIP 0	

Note 1: IC001, IC503, IC804, IC1002 and IC1009 on the MAIN board cannot replace with single. When these parts are damaged, replace the complete mounted board.

Note 2: When the IC502 on the MAIN board is replaced, the destination setting is necessary. Refer to "DESTINATION SETTING METHOD" on page 5.

Ref. No.	Part No.	Description			Remark
R320	1-216-864-91	SHORT CHIP	0		
R322	1-216-864-91	SHORT CHIP	0		
R323	1-218-990-81	SHORT CHIP	0		
R334	1-218-990-81	SHORT CHIP	0		
R335	1-218-990-81	SHORT CHIP	0		
R336	1-218-990-81	SHORT CHIP	0		
R337	1-218-990-81	SHORT CHIP	0		
R400	1-216-296-11	SHORT CHIP	0		
R401	1-218-933-11	METAL CHIP	22	5%	1/16W
R406	1-216-864-91	SHORT CHIP	0		
R408	1-216-296-11	SHORT CHIP	0		
R409	1-216-296-11	SHORT CHIP	0		
R412	1-216-296-11	SHORT CHIP	0		
R413	1-250-600-11	METAL CHIP	220	1%	1/10W
R414	1-250-640-11	METAL CHIP	10K	1%	1/10W
R417	1-250-640-11	METAL CHIP	10K	1%	1/10W
R418	1-216-864-91	SHORT CHIP	0		
R421	1-250-600-11	METAL CHIP	220	1%	1/10W
R422	1-250-600-11	METAL CHIP	220	1%	1/10W
R423	1-250-640-11	METAL CHIP	10K	1%	1/10W
R424	1-218-990-81	SHORT CHIP	0		
R425	1-218-990-81	SHORT CHIP	0		
R426	1-218-990-81	SHORT CHIP	0		
R427	1-218-990-81	SHORT CHIP	0		
R428	1-218-990-81	SHORT CHIP	0		
R429	1-218-990-81	SHORT CHIP	0		
R430	1-218-990-81	SHORT CHIP	0		
R431	1-218-990-81	SHORT CHIP	0		
R432	1-250-640-11	METAL CHIP	10K	1%	1/10W
R433	1-250-600-11	METAL CHIP	220	1%	1/10W
R434	1-250-600-11	METAL CHIP	220	1%	1/10W
R435	1-250-640-11	METAL CHIP	10K	1%	1/10W
R436	1-250-640-11	METAL CHIP	10K	1%	1/10W
R438	1-250-600-11	METAL CHIP	220	1%	1/10W
R439	1-218-990-81	SHORT CHIP	0		
R440	1-218-990-81	SHORT CHIP	0		
R447	1-216-864-91	SHORT CHIP	0		
R501	1-218-941-81	METAL CHIP	100	5%	1/16W
R502	1-218-941-81	METAL CHIP	100	5%	1/16W
R503	1-218-990-81	SHORT CHIP	0		
R504	1-218-941-81	METAL CHIP	100	5%	1/16W
R505	1-218-990-81	SHORT CHIP	0		
R506	1-218-941-81	METAL CHIP	100	5%	1/16W
R507	1-216-864-91	SHORT CHIP	0		
R509	1-218-941-81	METAL CHIP	100	5%	1/16W
R510	1-218-953-11	METAL CHIP	1K	5%	1/16W
R511	1-218-953-11	METAL CHIP	1K	5%	1/16W
R512	1-218-941-81	METAL CHIP	100	5%	1/16W
R513	1-218-941-81	METAL CHIP	100	5%	1/16W
R516	1-218-941-81	METAL CHIP	100	5%	1/16W
R517	1-218-941-81	METAL CHIP	100	5%	1/16W
R519	1-218-941-81	METAL CHIP	100	5%	1/16W
R520	1-218-941-81	METAL CHIP	100	5%	1/16W
R521	1-218-977-11	METAL CHIP	100K	5%	1/16W
R522	1-218-941-81	METAL CHIP	100	5%	1/16W
R523	1-218-977-11	METAL CHIP	100K	5%	1/16W
R524	1-218-941-81	METAL CHIP	100	5%	1/16W
R525	1-218-941-81	METAL CHIP	100	5%	1/16W (900BT: US, CND)
R526	1-218-941-81	METAL CHIP	100	5%	1/16W

Ref. No.	Part No.	Description			Remark
R528	1-218-990-81	SHORT CHIP	0		
R533	1-218-990-81	SHORT CHIP	0		
R534	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R535	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R538	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R539	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R540	1-218-971-81	METAL CHIP	33K	5%	1/16W
R541	1-218-977-11	METAL CHIP	100K	5%	1/16W
R542	1-218-941-81	METAL CHIP	100	5%	1/16W
R544	1-218-971-81	METAL CHIP	33K	5%	1/16W
R545	1-218-965-11	METAL CHIP	10K	5%	1/16W
R546	1-218-965-11	METAL CHIP	10K	5%	1/16W
R547	1-218-965-11	METAL CHIP	10K	5%	1/16W
R548	1-218-965-11	METAL CHIP	10K	5%	1/16W
R549	1-218-977-11	METAL CHIP	100K	5%	1/16W
R550	1-218-990-81	SHORT CHIP	0		
R551	1-216-821-11	METAL CHIP	1K	5%	1/10W
R552	1-216-833-11	METAL CHIP	10K	5%	1/10W
R553	1-218-941-81	METAL CHIP	100	5%	1/16W
R554	1-216-809-11	METAL CHIP	100	5%	1/10W
R555	1-216-809-11	METAL CHIP	100	5%	1/10W
R557	1-218-941-81	METAL CHIP	100	5%	1/16W
R558	1-218-977-11	METAL CHIP	100K	5%	1/16W
R559	1-218-977-11	METAL CHIP	100K	5%	1/16W
R561	1-218-941-81	METAL CHIP	100	5%	1/16W
R562	1-250-519-11	METAL CHIP	10K	1%	1/16W
R563	1-250-519-11	METAL CHIP	10K	1%	1/16W
R565	1-218-949-11	METAL CHIP	470	5%	1/16W
R567	1-218-990-81	SHORT CHIP	0		
R568	1-218-990-81	SHORT CHIP	0		
R571	1-218-990-81	SHORT CHIP	0		
R572	1-218-977-11	METAL CHIP	100K	5%	1/16W
R573	1-218-977-11	METAL CHIP	100K	5%	1/16W
R574	1-218-990-81	SHORT CHIP	0		
R578	1-218-941-81	METAL CHIP	100	5%	1/16W
R579	1-250-553-11	METAL CHIP	270K	1%	1/16W
R582	1-218-977-11	METAL CHIP	100K	5%	1/16W
* R583	1-250-513-11	METAL CHIP	5.6K	1%	1/16W
R585	1-218-977-11	METAL CHIP	100K	5%	1/16W
R586	1-218-977-11	METAL CHIP	100K	5%	1/16W
R587	1-218-941-81	METAL CHIP	100	5%	1/16W
R590	1-218-941-81	METAL CHIP	100	5%	1/16W
R591	1-218-977-11	METAL CHIP	100K	5%	1/16W
R592	1-218-977-11	METAL CHIP	100K	5%	1/16W
R593	1-218-941-81	METAL CHIP	100	5%	1/16W
R597	1-218-981-81	METAL CHIP	220K	5%	1/16W
R598	1-218-977-11	METAL CHIP	100K	5%	1/16W
R599	1-218-941-81	METAL CHIP	100	5%	1/16W
R600	1-218-941-81	METAL CHIP	100	5%	1/16W
R601	1-218-941-81	METAL CHIP	100	5%	1/16W
R602	1-218-941-81	METAL CHIP	100	5%	1/16W
R603	1-218-941-81	METAL CHIP	100	5%	1/16W
R604	1-218-941-81	METAL CHIP	100	5%	1/16W
R605	1-218-977-11	METAL CHIP	100K	5%	1/16W
R606	1-218-977-11	METAL CHIP	100K	5%	1/16W
R607	1-218-941-81	METAL CHIP	100	5%	1/16W
R608	1-218-990-81	SHORT CHIP	0		
R609	1-218-941-81	METAL CHIP	100	5%	1/16W
R610	1-218-941-81	METAL CHIP	100	5%	1/16W
R611	1-218-941-81	METAL CHIP	100	5%	1/16W

MAIN

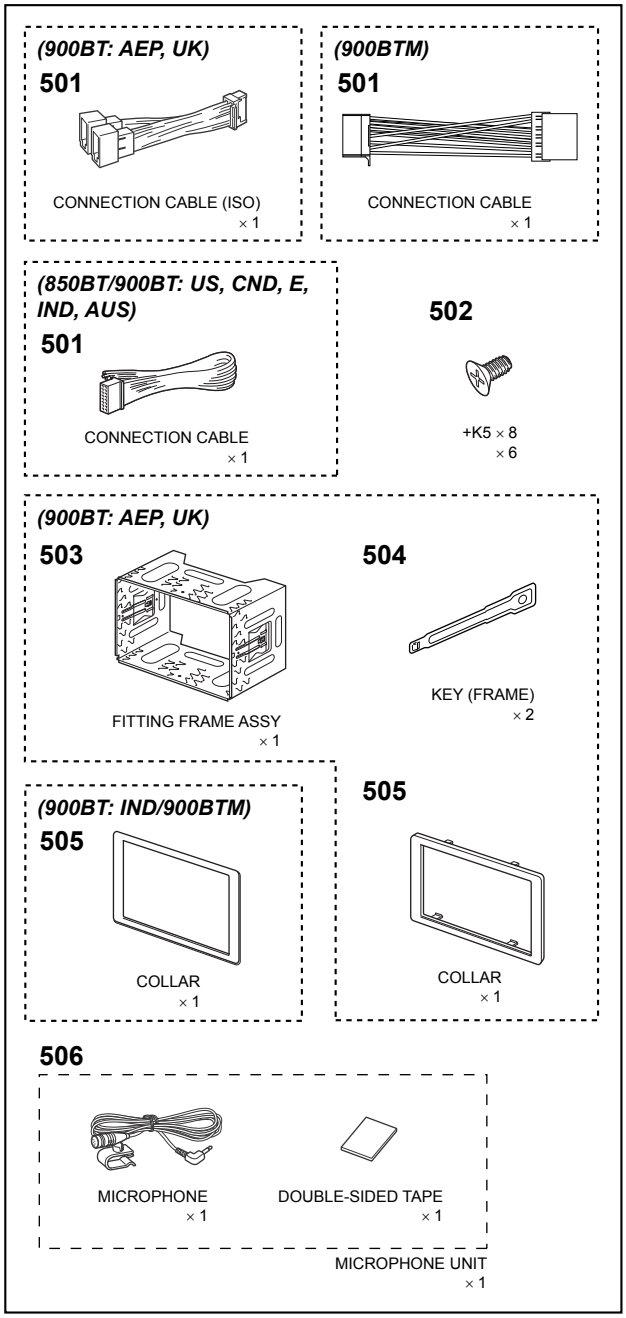
Ref. No.	Part No.	Description			Remark
R612	1-218-941-81	METAL CHIP	100	5%	1/16W
R614	1-218-977-11	METAL CHIP	100K	5%	1/16W
R615	1-218-977-11	METAL CHIP	100K	5%	1/16W
R616	1-218-990-81	SHORT CHIP	0		
R617	1-218-977-11	METAL CHIP	100K	5%	1/16W
R618	1-218-941-81	METAL CHIP	100	5%	1/16W
R621	1-218-953-11	METAL CHIP	1K	5%	1/16W
R622	1-218-941-81	METAL CHIP	100	5%	1/16W
R623	1-218-953-11	METAL CHIP	1K	5%	1/16W
R624	1-218-941-81	METAL CHIP	100	5%	1/16W
R625	1-218-941-81	METAL CHIP	100	5%	1/16W
R626	1-218-977-11	METAL CHIP	100K	5%	1/16W
R627	1-218-941-81	METAL CHIP	100	5%	1/16W
R628	1-218-953-11	METAL CHIP	1K	5%	1/16W
R629	1-218-941-81	METAL CHIP	100	5%	1/16W
R630	1-218-941-81	METAL CHIP	100	5%	1/16W
R631	1-218-965-11	METAL CHIP	10K	5%	1/16W
R632	1-218-965-11	METAL CHIP	10K	5%	1/16W
R633	1-218-965-11	METAL CHIP	10K	5%	1/16W
R634	1-218-941-81	METAL CHIP	100	5%	1/16W
R635	1-218-977-11	METAL CHIP	100K	5%	1/16W
R637	1-218-977-11	METAL CHIP	100K	5%	1/16W
R638	1-218-941-81	METAL CHIP	100	5%	1/16W
R639	1-218-941-81	METAL CHIP	100	5%	1/16W
R640	1-218-973-11	METAL CHIP	47K	5%	1/16W
R641	1-218-977-11	METAL CHIP	100K	5%	1/16W
R642	1-218-941-81	METAL CHIP	100	5%	1/16W
R643	1-218-977-11	METAL CHIP	100K	5%	1/16W
R644	1-218-941-81	METAL CHIP	100	5%	1/16W
R646	1-218-965-11	METAL CHIP	10K	5%	1/16W
R647	1-218-977-11	METAL CHIP	100K	5%	1/16W
R648	1-218-977-11	METAL CHIP	100K	5%	1/16W
R649	1-218-941-81	METAL CHIP	100	5%	1/16W
R650	1-218-941-81	METAL CHIP	100	5%	1/16W
R651	1-218-941-81	METAL CHIP	100	5%	1/16W
R652	1-218-941-81	METAL CHIP	100	5%	1/16W
R654	1-218-990-81	SHORT CHIP	0		
R656	1-218-941-81	METAL CHIP	100	5%	1/16W
R657	1-218-977-11	METAL CHIP	100K	5%	1/16W
R658	1-218-941-81	METAL CHIP	100	5%	1/16W
R659	1-216-833-11	METAL CHIP	10K	5%	1/10W
R660	1-218-941-81	METAL CHIP	100	5%	1/16W
R662	1-218-965-11	METAL CHIP	10K	5%	1/16W
R665	1-218-941-81	METAL CHIP	100	5%	1/16W
R666	1-216-296-11	SHORT CHIP	0		
R680	1-218-941-81	METAL CHIP	100	5%	1/16W
R681	1-218-977-11	METAL CHIP	100K	5%	1/16W
R682	1-218-977-11	METAL CHIP	100K	5%	1/16W
R683	1-218-990-81	SHORT CHIP	0		
R684	1-216-295-91	SHORT CHIP	0		
R702	1-218-990-81	SHORT CHIP	0		
R704	1-216-864-91	SHORT CHIP	0		
R705	1-218-990-81	SHORT CHIP	0		
R706	1-216-296-11	SHORT CHIP	0		
R707	1-216-864-91	SHORT CHIP	0		
R708	1-216-864-91	SHORT CHIP	0		
R709	1-218-953-11	METAL CHIP	1K	5%	1/16W
R711	1-216-864-91	SHORT CHIP	0		
R712	1-242-967-11	METAL CHIP	1	5%	1/16W
R714	1-208-637-11	METAL CHIP	12	0.5%	1/16W

Ref. No.	Part No.	Description			Remark
R715	1-216-864-91	SHORT CHIP	0		
R717	1-218-990-81	SHORT CHIP	0		
R718	1-218-941-81	METAL CHIP	100	5%	1/16W
R719	1-218-941-81	METAL CHIP	100	5%	1/16W
R720	1-218-990-81	SHORT CHIP	0		
R721	1-218-941-81	METAL CHIP	100	5%	1/16W
R722	1-218-941-81	METAL CHIP	100	5%	1/16W
R723	1-218-941-81	METAL CHIP	100	5%	1/16W
R724	1-218-947-11	METAL CHIP	330	5%	1/16W
R725	1-218-947-11	METAL CHIP	330	5%	1/16W
R726	1-218-969-11	METAL CHIP	22K	5%	1/16W
R727	1-218-990-81	SHORT CHIP	0		
R728	1-218-969-11	METAL CHIP	22K	5%	1/16W
R729	1-218-947-11	METAL CHIP	330	5%	1/16W
R731	1-216-864-91	SHORT CHIP	0		
R732	1-218-947-11	METAL CHIP	330	5%	1/16W
R733	1-218-990-81	SHORT CHIP	0		
R734	1-218-990-81	SHORT CHIP	0		
R735	1-218-947-11	METAL CHIP	330	5%	1/16W
R737	1-218-990-81	SHORT CHIP	0		
* R738	1-250-503-11	METAL CHIP	2.2K	1%	1/16W
R739	1-218-989-11	METAL CHIP	1M	5%	1/16W
R740	1-218-941-81	METAL CHIP	100	5%	1/16W
R741	1-218-958-11	METAL CHIP	2.7K	5%	1/16W
R742	1-218-958-11	METAL CHIP	2.7K	5%	1/16W
R743	1-218-965-11	METAL CHIP	10K	5%	1/16W
R744	1-218-965-11	METAL CHIP	10K	5%	1/16W
R745	1-218-990-81	SHORT CHIP	0		
R747	1-218-977-11	METAL CHIP	100K	5%	1/16W
R748	1-218-983-11	METAL CHIP	330K	5%	1/16W
R749	1-218-977-11	METAL CHIP	100K	5%	1/16W
R750	1-218-967-11	METAL CHIP	15K	5%	1/16W
R751	1-216-841-11	METAL CHIP	47K	5%	1/10W
R752	1-218-941-81	METAL CHIP	100	5%	1/16W
R753	1-218-941-81	METAL CHIP	100	5%	1/16W
R754	1-218-941-81	METAL CHIP	100	5%	1/16W
R755	1-218-941-81	METAL CHIP	100	5%	1/16W
R756	1-218-941-81	METAL CHIP	100	5%	1/16W
R757	1-218-941-81	METAL CHIP	100	5%	1/16W
R758	1-218-977-11	METAL CHIP	100K	5%	1/16W
R760	1-218-977-11	METAL CHIP	100K	5%	1/16W
R761	1-218-977-11	METAL CHIP	100K	5%	1/16W
R762	1-216-845-11	METAL CHIP	100K	5%	1/10W
R763	1-218-977-11	METAL CHIP	100K	5%	1/16W
R803	1-250-525-11	METAL CHIP	18K	1%	1/16W
* R805	1-250-543-11	METAL CHIP	100K	1%	1/16W
R806	1-218-977-11	METAL CHIP	100K	5%	1/16W
* R807	1-250-529-11	METAL CHIP	27K	1%	1/16W
R808	1-250-640-11	METAL CHIP	10K	1%	1/10W
R809	1-250-640-11	METAL CHIP	10K	1%	1/10W
* R810	1-250-523-11	METAL CHIP	15K	1%	1/16W
R811	1-218-933-11	METAL CHIP	22	5%	1/16W
R812	1-218-941-81	METAL CHIP	100	5%	1/16W
R813	1-216-821-11	METAL CHIP	1K	5%	1/10W (900BT: US, CND)
R814	1-218-966-11	METAL CHIP	12K	5%	1/16W (900BT: US, CND)
R815	1-257-321-11	METAL CHIP	0.039	1%	1/2W
R816	1-257-321-11	METAL CHIP	0.039	1%	1/2W
R817	1-216-864-91	SHORT CHIP	0 (900BT: US, CND)		

	Ref. No.	Part No.	Description			Remark
	R818	1-218-966-11	METAL CHIP	12K	5%	1/16W
						(900BT: US, CND)
	R819	1-216-845-11	METAL CHIP	100K	5%	1/10W
	R821	1-216-821-11	METAL CHIP	1K	5%	1/10W
						(900BT: US, CND)
	R822	1-250-593-11	METAL CHIP	110	1%	1/10W
	R823	1-250-640-11	METAL CHIP	10K	1%	1/10W
	R825	1-250-533-11	METAL CHIP	39K	1%	1/16W
	R826	1-250-557-11	METAL CHIP	390K	1%	1/16W
	R827	1-250-557-11	METAL CHIP	390K	1%	1/16W
	R828	1-250-541-11	METAL CHIP	82K	1%	1/16W
	R829	1-216-809-11	METAL CHIP	100	5%	1/10W
						(900BT: US, CND)
	R830	1-250-533-11	METAL CHIP	39K	1%	1/16W
	R831	1-218-977-11	METAL CHIP	100K	5%	1/16W
						(900BT: US, CND)
	R833	1-250-519-11	METAL CHIP	10K	1%	1/16W
	R834	1-216-809-11	METAL CHIP	100	5%	1/10W
						(900BT: US, CND)
*	R835	1-250-540-11	METAL CHIP	75K	1%	1/16W
	R836	1-216-809-11	METAL CHIP	100	5%	1/10W
						(900BT: US, CND)
	R837	1-216-839-11	METAL CHIP	33K	5%	1/10W
*	R838	1-250-545-11	METAL CHIP	120K	1%	1/16W
	R839	1-250-563-11	METAL CHIP	680K	1%	1/16W
*	R840	1-250-545-11	METAL CHIP	120K	1%	1/16W
	R841	1-218-977-11	METAL CHIP	100K	5%	1/16W
						(900BT: US, CND)
	R842	1-218-990-81	SHORT CHIP	0		
	R845	1-218-990-81	SHORT CHIP	0		
	R846	1-250-495-11	METAL CHIP	1K	1%	1/16W
	R848	1-216-801-11	METAL CHIP	22	5%	1/10W
						(900BT: US, CND)
	R849	1-218-972-11	METAL CHIP	39K	5%	1/16W
						(900BT: US, CND)
	R850	1-218-975-11	METAL CHIP	68K	5%	1/16W
						(900BT: US, CND)
	R850	1-218-977-11	METAL CHIP	100K	5%	1/16W
						(850BT/900BT: AEP, UK, E, IND, AUS/900BTM)
	R851	1-218-990-81	SHORT CHIP	0		
	R852	1-250-519-11	METAL CHIP	10K	1%	1/16W
	R853	1-218-958-11	METAL CHIP	2.7K	5%	1/16W
*	R854	1-250-543-11	METAL CHIP	100K	1%	1/16W
	R856	1-216-073-91	METAL CHIP	10K	5%	1/8W
	R857	1-218-973-11	METAL CHIP	47K	5%	1/16W
	R858	1-218-961-11	METAL CHIP	4.7K	5%	1/16W
	R859	1-216-073-91	METAL CHIP	10K	5%	1/8W
	R860	1-218-973-11	METAL CHIP	47K	5%	1/16W
	R861	1-218-969-11	METAL CHIP	22K	5%	1/16W
	R862	1-218-977-11	METAL CHIP	100K	5%	1/16W
	R863	1-218-990-81	SHORT CHIP	0		
	R868	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R869	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R870	1-250-495-11	METAL CHIP	1K	1%	1/16W
	R878	1-216-296-11	SHORT CHIP	0		
	R890	1-216-864-91	SHORT CHIP	0		
	R892	1-216-864-91	SHORT CHIP	0		
	R894	1-218-977-11	METAL CHIP	100K	5%	1/16W
	R1002	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
	R1007	1-218-990-81	SHORT CHIP	0		
	R1010	1-218-990-81	SHORT CHIP	0		
	R1011	1-218-990-81	SHORT CHIP	0		
	R1012	1-216-864-91	SHORT CHIP	0		
	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	1-216-809-11	METAL CHIP	100	5%	1/10W
	R1017	1-218-933-11	METAL CHIP	22	5%	1/16W
	R1018	1-216-809-11	METAL CHIP	100	5%	1/10W
	R1019	1-218-941-81	METAL CHIP	100	5%	1/16W
	R1020	1-216-809-11	METAL CHIP	100	5%	1/10W
	R1021	1-216-809-11	METAL CHIP	100	5%	1/10W
	R1023	1-218-941-81	METAL CHIP	100	5%	1/16W
	R1024	1-218-977-11	METAL CHIP	100K	5%	1/16W
	R1025	1-218-941-81	METAL CHIP	100	5%	1/16W
	R1028	1-218-990-81	SHORT CHIP	0		
	R1029	1-218-990-81	SHORT CHIP	0		
	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	1-250-525-11	METAL CHIP	18K	1%	1/16W
	R1053	1-218-990-81	SHORT CHIP	0		
	R1054	1-216-296-11	SHORT CHIP	0		
	R1055	1-216-864-91	SHORT CHIP	0		
	R1056	1-216-864-91	SHORT CHIP	0		
	R1117	1-218-990-81	SHORT CHIP	0		
	R1329	1-218-990-81	SHORT CHIP	0		
	R1330	1-218-990-81	SHORT CHIP	0		
	R1359	1-216-864-91	SHORT CHIP	0		
*	R1361	1-250-513-11	METAL CHIP	5.6K	1%	1/16W
	R1363	1-218-965-11	METAL CHIP	10K	5%	1/16W
	R1365	1-218-990-81	SHORT CHIP	0		
	R1366	1-218-990-81	SHORT CHIP	0		
	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
	R1389	1-216-864-91	SHORT CHIP	0		
	R1394	1-216-296-11	SHORT CHIP	0		
	R1395	1-118-403-11	CERAMIC CHIP	0.001uF	10%	50V
	R1421	1-218-990-81	SHORT CHIP	0		
	R1422	1-218-990-81	SHORT CHIP	0		
	R1428	1-218-990-81	SHORT CHIP	0		
	R1429	1-218-990-81	SHORT CHIP	0		
	R1431	1-218-990-81	SHORT CHIP	0		
	R1432	1-218-990-81	SHORT CHIP	0		
	R1433	1-216-864-91	SHORT CHIP	0		
	R1435	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R1442	1-216-296-11	SHORT CHIP	0		
	R1443	1-216-296-11	SHORT CHIP	0		
	R1448	1-218-941-81	METAL CHIP	100	5%	1/16W
	R1452	1-218-941-81	METAL CHIP	100	5%	1/16W
	R1455	1-216-864-91	SHORT CHIP	0		
	R1460	1-216-296-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R1461	1-216-864-91	SHORT CHIP	0		
R1473	1-216-864-91	SHORT CHIP	0		
R1474	1-250-640-11	METAL CHIP	10K	1%	1/10W
R1476	1-216-864-91	SHORT CHIP	0		
R1477	1-250-519-11	METAL CHIP	10K	1%	1/16W
R1479	1-218-971-81	METAL CHIP	33K	5%	1/16W
R1480	1-216-815-11	METAL CHIP	330	5%	1/10W
R1481	1-218-941-81	METAL CHIP	100	5%	1/16W
R1482	1-218-990-81	SHORT CHIP	0		
R1483	1-218-990-81	SHORT CHIP	0		
R1484	1-218-990-81	SHORT CHIP	0		
R1485	1-218-990-81	SHORT CHIP	0		
R1486	1-218-990-81	SHORT CHIP	0		
R1487	1-218-990-81	SHORT CHIP	0		
R1488	1-218-990-81	SHORT CHIP	0		
R1489	1-218-990-81	SHORT CHIP	0		
R1490	1-218-990-81	SHORT CHIP	0		
R1491	1-216-864-91	SHORT CHIP	0		
* R1494	1-250-477-11	METAL CHIP	180	1%	1/16W
* R1495	1-250-477-11	METAL CHIP	180	1%	1/16W
R1497	1-216-864-91	SHORT CHIP	0		
R1499	1-218-990-81	SHORT CHIP	0		
R1501	1-218-990-81	SHORT CHIP	0		
		< DIODE >			
VDR1	6-504-046-01	DIODE RSB12ZT2L			
		< VIBRATOR >			
X1	1-814-824-11	QUARTZ CRYSTAL UNIT (12 MHz)			
X501	1-814-485-11	QUARTZ CRYSTAL UNIT (48 MHz)			
X502	1-814-767-11	QUARTZ CRYSTAL UNITS (13.333 MHz)			
X503	1-814-777-11	QUARTZ CRYSTAL UNITS (32.768 kHz)			
X701	1-814-778-11	QUARTZ CRYSTAL UNITS (16.9344 MHz)			
**********					
		MISCELLANEOUS			
		**********			
FFC1	1-846-819-61	CABLE FLEXIBLE FLAT (27 CORE) (Length: 80 mm)			
FFC2	1-849-150-11	CABLE FLEXIBLE FLAT (22 CORE)			
FU1	1-523-227-11	MINI FUSE (BLADE TYPE) (10 A/32 V)			
NFC1	X-2592-163-1	KNOB (VOL) (SV) ASSY (Including NFC module) (See Note)			
PW1	1-846-033-11	CONNECTION CABLE (ISO) (POWER) (900BT: AEP, UK)			
PW1	1-846-129-11	CONNECTION CABLE FOR AUTOMOBILE (POWER) (900BTM)			
PW1	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (POWER) (850BT/900BT: US, CND, E, IND, AUS)			
**********					
		ACCESSORIES			
		**********			
	1-489-810-42	REMOTE COMMANDER (RM-X231) (850BT/900BT: US, CND, E, IND, AUS/900BTM)			
	4-575-513-11	OPERATING INSTRUCTION (ENGLISH, FRENCH) (900BT: US, CND)			
	4-575-513-21	OPERATING INSTRUCTION (ENGLISH, FRENCH, GERMAN, DUTCH, ITALIAN) (900BT: AEP, UK)			
	4-575-513-31	OPERATING INSTRUCTION (ENGLISH, SPANISH) (900BT: E, IND, AUS/900BTM)			
	4-575-513-51	OPERATING INSTRUCTION (ENGLISH, FRENCH, SPANISH) (850BT)			
**********					

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	1-846-033-11	CONNECTION CABLE (ISO) (POWER) (900BT: AEP, UK)	
501	1-846-129-11	CONNECTION CABLE FOR AUTOMOBILE (POWER) (900BTM)	
501	1-846-979-11	CONNECTION CABLE, AUTOMOBILE (POWER) (850BT/900BT: US, CND, E, IND, AUS)	
502	3-934-325-21	SCREW, +K (5X8) TAPPING (1 piece)	
503	X-2514-519-3	FRAME, FITTING ASSY (900BT: AEP, UK)	
504	3-876-675-01	KEY (FRAME) (1 piece) (900BT: AEP, UK)	
505	4-148-662-01	COLLAR (900BT: IND/900BTM)	
505	4-413-144-01	COLLAR (900BT: AEP, UK)	
506	1-542-986-21	MICROPHONE UNIT (Including Double-sided tape)	



Note: When the knob (VOL) assy (Ref. No. NFC1) is replaced, Bluetooth information writing is necessary. Refer to "BLUETOOTH INFORMATION WRITING METHOD" on page 9.

MEMO

REVISION HISTORY

Ver.	Date	Description of Revision
1.0	2015.12	New
1.1	2016.02	Addition of WX-850BT

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.