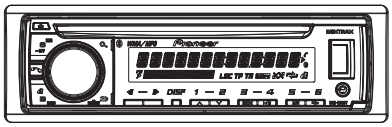
Pioneer

Service Manual



DEH-X66BT/XNUC

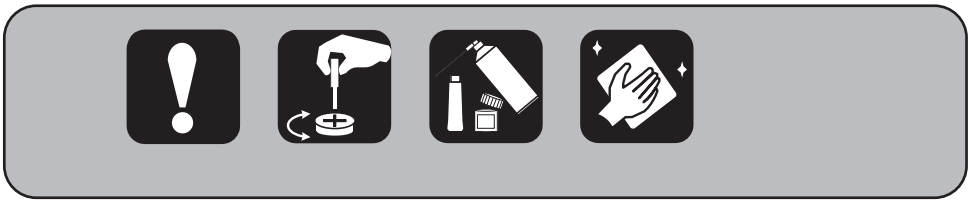
ORDER NO.
CRT5368

CD RDS RECEIVER

DEH-X66BT /XNUC
DEH-X6600BT /XNUC
DEH-X6650BT /XNGS
DEH-X6650BT /XNCS
DEH-X6690BT /XNID

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech. Module	Remarks
CX-3287	CRT4759	S11.6STD	CD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly



PIONEER CORPORATION 1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

K-ZZZ JULY 2013 Printed in Japan

SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

Where in a manufacturer's service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:

⚠

● **Safety Precautions for those who Service this Unit.**
When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.

Caution:

1. **During repair or tests, minimum distance of 13 cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

CAUTION:
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION
This product is a class 1 laser product classified under the Safety of laser products, IEC 60825-1:2007.

CLASS 1 LASER PRODUCT

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics
Wave length : 785 nm to 814 nm
Maximum output : 1 190 μW(Emitting period : unlimited)

Additional Laser Caution

Transistors Q101 in PCB drive the laser diodes.
When Q101 is shorted between their terminals, the laser diodes will radiate beam.
If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacturer.
Discord used batteries according to the manufacturer's instructions.

CONTENTS

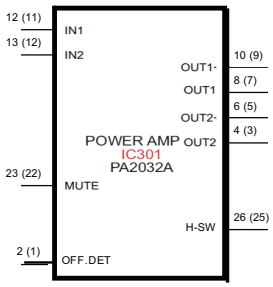
1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
3. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY".
4. After replacing the pickup unit, be sure to check the grating.
5. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
6. Notes about installation and pin number description of Power IC (IC301: PA2032A)
   The Power IC, PA2032A used on tha Tuner Amp Unit is a 25 pin IC.
   The same PCB of the Tuner Amp Unit is used for other models that use a 27 pin IC, too.
   So, the PCB has lands for a 27 pin IC.
   When you replace the Power IC, install the Power IC onto 25 pins (2- 26 pin) located in the center of 27 pins for IC301.

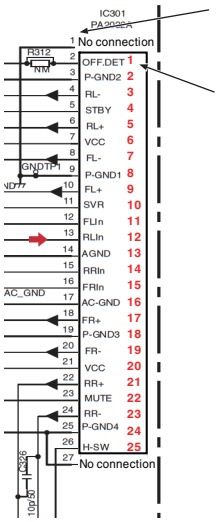
   Therefore, when you check the Power IC on the block diagram, the schematic diagram and the PCB connection diagram, you have to pay attention as follows.

BLOCK DIAGRAM



The pin number is a number on the PCB (silk printing).
The number in parentheses means the pin number of IC itself.

SCHEMATIC DIAGRAM



The pin number of left side is a number on the PCB (silk printing).

The pin number of right side (in the IC frame) means the pin number of IC itself.

1.2 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40°C.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373°C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

2. SPECIFICATIONS
2.1 SPECIFICATIONS

• **DEH-X66BT/XNUC, DEH-X6600BT/XNUC**

General

Power source .....14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system.....Negative type
Maximum current consumption
.....10.0 A
Backup current..... 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis..... 178 mm × 50 mm × 165 mm (7 in. × 2 in. × 6-1/2 in.)
Nose ..... 188 mm × 58 mm × 15 mm (7-3/8 in.× 2-1/4 in.× 5/8 in.)
D
Chassis..... 178 mm × 50 mm × 165 mm (7 in.× 2 in.× 6-1/2 in.)
Nose ..... 170 mm × 46 mm × 15 mm (6-3/4 in.× 1-3/4 in.× 5/8 in.)
Weight ..... 1 kg (2.2 lbs)

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
..... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
..... 2.0 V
Loudness contour ..... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency..... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range ..... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency..... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .....–12 dB/oct,–24 dB/oct
Gain ..... +6 dB to –24 dB
Phase ..... Normal/Reverse

CD player

System .....Compact disc audio system
Usable discs .....Compact disc
Signal-to-noise ratio..... 94 dB (1 kHz) (IHF-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .....Linear PCM & MS ADPCM
(Non-compressed)

USB

USB standard specification
..... USB 2.0 full speed
Maximum current supply
..... 1 A
USB Class ..... MSC (Mass Storage Class)
File system..... FAT12, FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .....Linear PCM & MS ADPCM
(Non-compressed)

FM tuner

Frequency range .....87.9 MHz to 107.9 MHz
Usable sensitivity ..... 9 dBf (0.8 µV/75Ω, mono, S/N: 30 dB)
Signal-to-noise ratio ..... 72 dB (IHF-A network)

AM tuner

Frequency range ..... 530 kHz to 1 710 kHz
Usable sensitivity ..... 25 µV (S/N: 20 dB)
Signal-to-noise ratio ..... 62 dB (IHF-A network)

Bluetooth

Version .....Bluetooth 3.0 certified
Output power ..... +4 dBm Maximum
(Power class 2)

CEA2006 Specifications

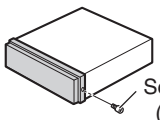
Power output ..... 14 W RMS × 4 Channels (4 Ω and ≦ 1 % THD+N)
S/N ratio ..... 91 dBA(reference: 1 W into 4 Ω)

Note

Specifications and the design are subject to modifications without notice.

Securing the front panel

The front panel can be secured with the supplied screw.



Screw
(BPZ20P060FTC) (UC)
(XXX7020) (Except UC)

• **DEH-X6650BT/XNGS**

General

Rated power source .....14.4 V DC
(allowable voltage range:
12.0 V to 14.4 V DC)
Grounding system.....Negative type
Maximum current consumption
.....10.0 A
Backup current..... 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis..... 178 mm × 50 mm × 165 mm
Nose ..... 188 mm × 58 mm × 15 mm
D
Chassis..... 178 mm × 50 mm × 165 mm
Nose ..... 170 mm × 46 mm × 15 mm
Weight ..... 1 kg

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
..... 22 W × 4 (50 Hz to 15 000 Hz,
5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
..... 2.0 V
Loudness contour ..... +10 dB (100 Hz), +6.5 dB
(10 kHz) (volume: –30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency..... 80 Hz/250 Hz/800 Hz/2.5 kHz/
8 kHz
Equalization range ..... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency..... 50 Hz/63 Hz/80 Hz/100 Hz/
125 Hz/160 Hz/200 Hz
Slope .....–12 dB/oct, –24 dB/oct
Gain ..... +6 dB to –24 dB
Phase ..... Normal/Reverse

CD player

System .....Compact disc audio system
Usable discs .....Compact disc
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .....Linear PCM & MS ADPCM
(Non-compressed)

USB

USB standard specification
..... USB 2.0 full speed
Maximum current supply
..... 1 A
USB Class ..... MSC (Mass Storage Class)
File system..... FAT12, FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format ..... Linear PCM & MS ADPCM
(Non-compressed)

FM tuner

Frequency range .....87.5 MHz to 108.0 MHz
Usable sensitivity ..... 9 dBf (0.8 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio ..... 72 dB (IEC-A network)

MW tuner

Frequency range ..... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity ..... 25 µV (S/N: 20 dB)
Signal-to-noise ratio ..... 62 dB (IEC-A network)

SW tuner

Frequency range ..... 2 300 kHz to 7 735 kHz
(2 300 kHz to 2 495 kHz,
2 940 kHz to 4 215 kHz,
4 540 kHz to 5 175 kHz,
5 820 kHz to 6 455 kHz,
7 100 kHz to 7 735 kHz)
9 500 kHz to 21 975 kHz
(9 500 kHz to 10 135 kHz,
11 580 kHz to 12 215 kHz,
13 570 kHz to 13 870 kHz,
15 100 kHz to 15 735 kHz,
17 500 kHz to 17 985 kHz,
18 015 kHz to 18 135 kHz,
21 340 kHz to 21 975 kHz)
Usable sensitivity ..... 28 µV (S/N: 20 dB)
Signal-to-noise ratio ..... 62 dB (IEC-A network)

Bluetooth

Version .....Bluetooth 3.0 certified
Output power ..... +4 dBm Maximum
(Power class 2)

Note

Specifications and the design are subject to modifications without notice.

• **DEH-X6690BT/XNID**

General

Rated power source .....14.4 V DC
(allowable voltage range:
12.0 V to 14.4 V DC)
Grounding system.....Negative type
Maximum current consumption
.....10.0 A
Backup current..... 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis..... 178 mm × 50 mm × 165 mm
Nose ..... 188 mm × 58 mm × 15 mm
D
Chassis..... 178 mm × 50 mm × 165 mm
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Weight ..... 1 kg

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Maximum power output ... 50 W × 4
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Continuous power output
..... 22 W × 4 (50 Hz to 15 000 Hz,
5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
..... 2.0 V
Loudness contour ..... +10 dB (100 Hz), +6.5 dB
(10 kHz) (volume: –30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency..... 80 Hz/250 Hz/800 Hz/2.5 kHz/
8 kHz
Equalization range ..... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency..... 50 Hz/63 Hz/80 Hz/100 Hz/
125 Hz/160 Hz/200 Hz
Slope ..... –12 dB/oct, –24 dB/oct
Gain ..... +6 dB to –24 dB
Phase ..... Normal/Reverse

CD player

System .....Compact disc audio system
Usable discs .....Compact disc
Signal-to-noise ratio..... 94 dB (1 kHz) (IEC-A network)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .....Linear PCM & MS ADPCM
(Non-compressed)

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USB standard specification
..... USB 2.0 full speed
Maximum current supply
..... 1 A
USB Class ..... MSC (Mass Storage Class)
File system..... FAT12, FAT16, FAT32
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .....Linear PCM & MS ADPCM
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FM tuner

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Usable sensitivity ..... 9 dBf (0.8 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio..... 72 dB (IEC-A network)

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(2 300 kHz to 2 495 kHz,
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9 500 kHz to 21 975 kHz
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17 500 kHz to 17 985 kHz,
18 015 kHz to 18 135 kHz,
21 340 kHz to 21 975 kHz)
Usable sensitivity ..... 28 µV (S/N: 20 dB)
Signal-to-noise ratio..... 62 dB (IEC-A network)

Bluetooth

Version .....Bluetooth 3.0 certified
Output power ..... +4 dBm Maximum
(Power class 2)

Note

Specifications and the design are subject to modifications without notice.

• **DEH-X6650BT/XNCS**

General

Rated power source .....14.4 V DC
(allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system.....Negative type
Maximum current consumption
.....10.0 A
Backup current..... 4.0 mA or less
Dimensions (W × H × D):
DIN
Chassis..... 178 mm × 50 mm × 165 mm
Nose ..... 188 mm × 58 mm × 15 mm
D
Chassis..... 178 mm × 50 mm × 165 mm
Nose ..... 170 mm × 46 mm × 15 mm
Weight ..... 1 kg

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
..... 22 W × 4 (50 Hz to 15 000 Hz, 5 % THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout maximum output level
..... 2.0 V
Loudness contour ..... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency..... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range ..... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency..... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .....–12 dB/oct, –24 dB/oct
Gain ..... +6 dB to –24 dB
Phase ..... Normal/Reverse

CD player

System .....Compact disc audio system
Usable discs .....Compact disc
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
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Signal-to-noise ratio ..... 62 dB (IEC-A network)

Bluetooth

Version .....Bluetooth 3.0 certified
Output power ..... +4 dBm Maximum
(Power class 2)

Note

Specifications and the design are subject to modifications without notice.

2.2 DISC/CONTENT FORMAT

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

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

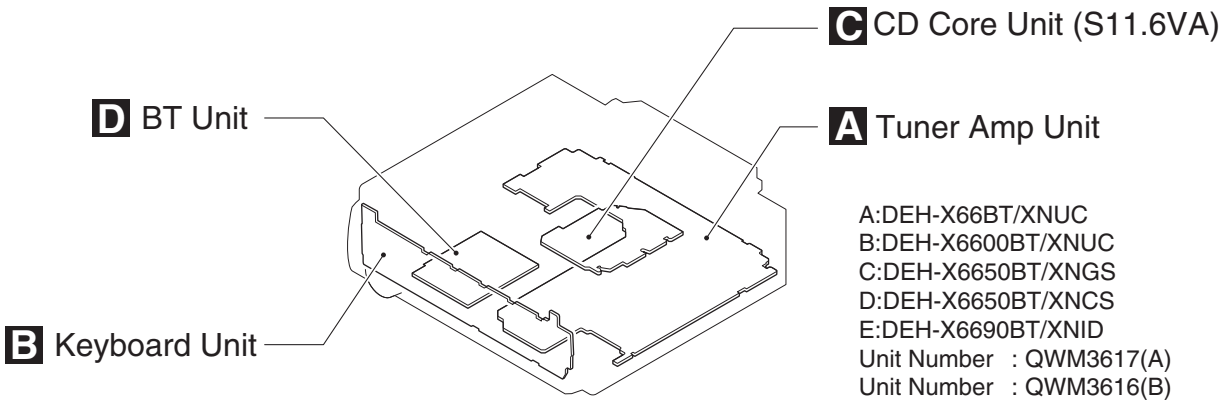
To keep the product quality after servicing, please confirm following check points.

No.		Procedures	Item to be confirmed
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, audio and operations must be normal.
2	CD	Play back a CD. (Track search)	No malfunction on display, audio and operation.
3	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.
4		Check whether no disc is inside the product.	The media used for the operating check must be ejected.
5		Appearance check	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio:

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

3.2 PCB LOCATIONS



A:DEH-X66BT/XNUC
B:DEH-X6600BT/XNUC
C:DEH-X6650BT/XNGS
D:DEH-X6650BT/XNCS
E:DEH-X6690BT/XNID
Unit Number : QWM3617(A)
Unit Number : QWM3616(B)
Unit Number : QWM3619(C)
Unit Number : QWM3618(D)
Unit Number : QWM3620(E)
Unit Name : Tuner Amp Unit
Unit Number :
Unit Name : Keyboard Unit
Unit Number : CWX4269
Unit Name : CD Core Unit(S11.6VA)
Unit Number : QWM3750
Unit Name : BT Unit

3.3 JIGS LIST

● **Jigs List**

Name	Jig No.	Remarks
16P FFC	GGD1310	Tuner Amp Unit - CD Core Unit
Test Disc	TCD-782	Checking the grating
L.P.F.		Checking the grating (Two pieces)

● **Grease List**

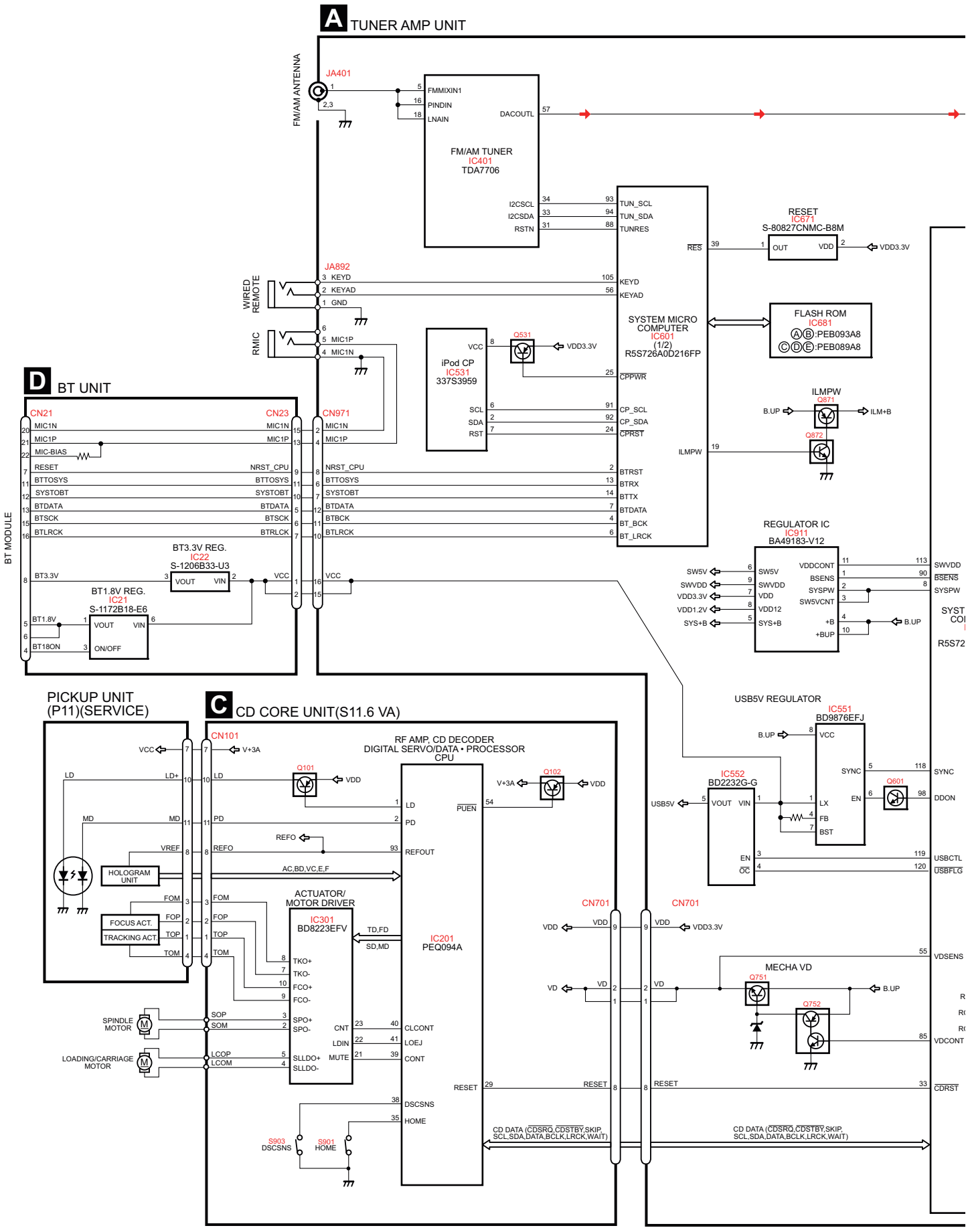
Name	Grease No.	Remarks
Grease	GEM1024	CD Mechanism Module
Grease	GEM1043	CD Mechanism Module

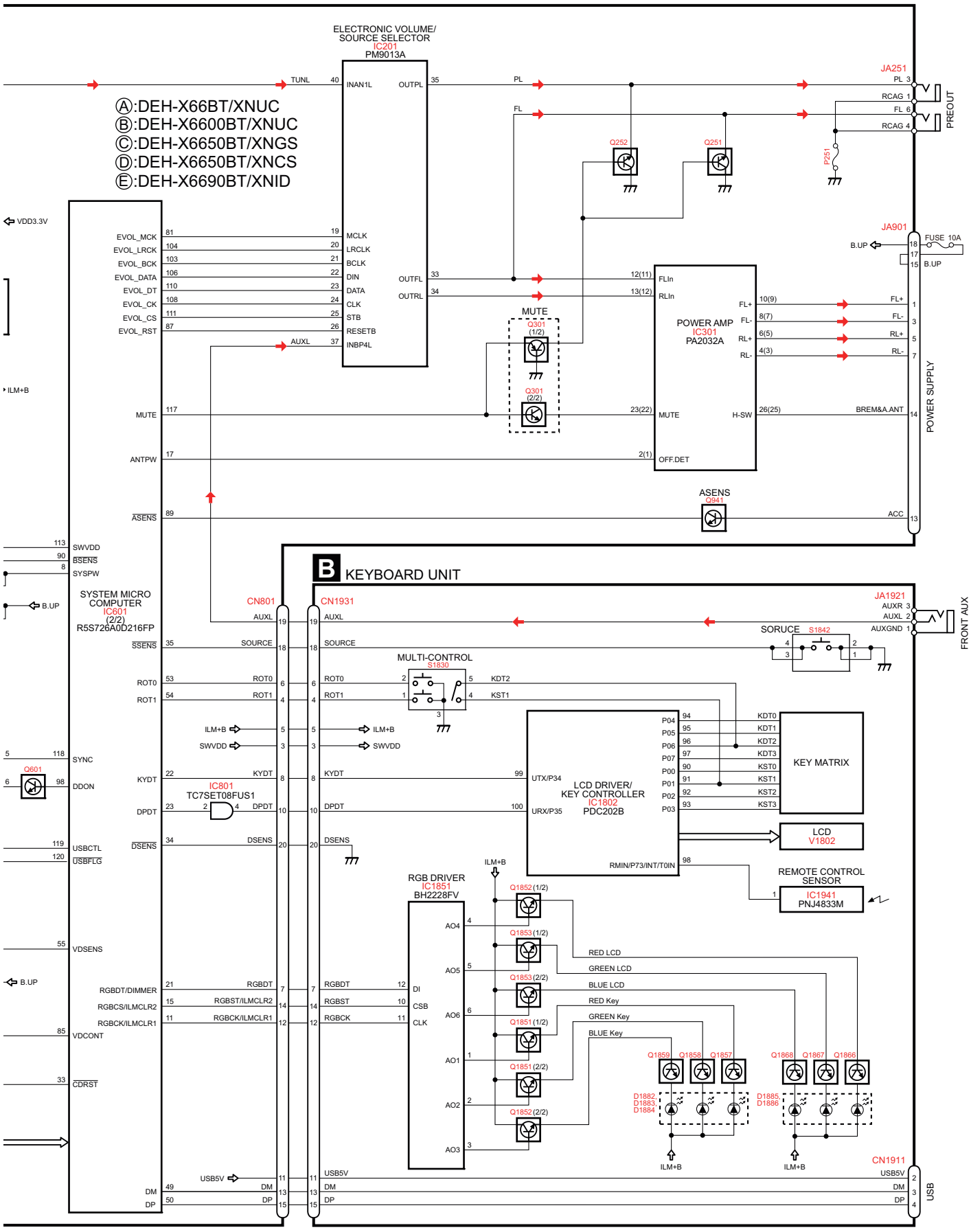
3.4 CLEANING

Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

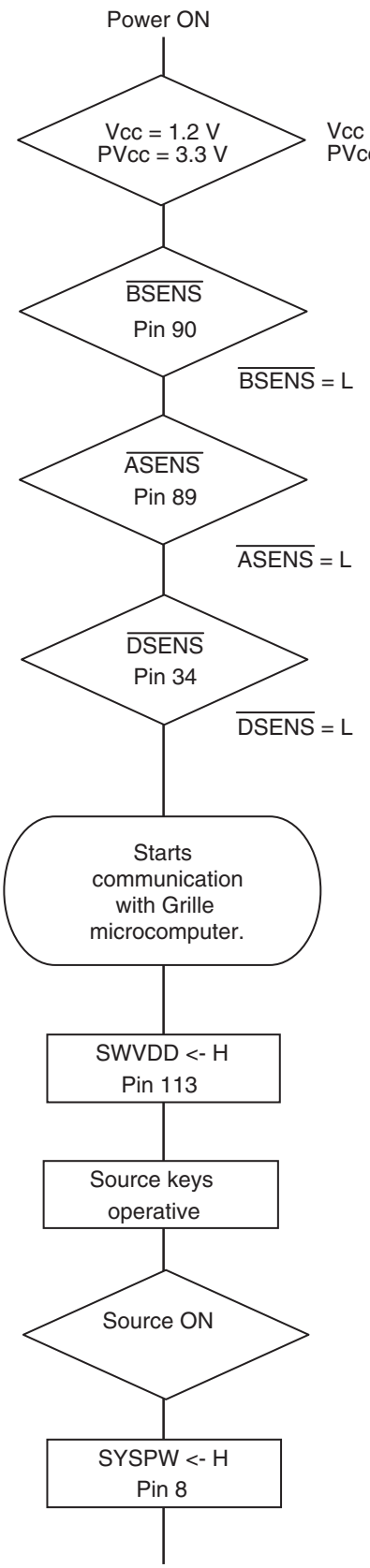
Portions to be cleaned	Cleaning tools
CD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

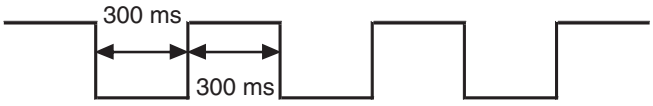
4. BLOCK DIAGRAM




Ⓐ:DEH-X66BT/XNUC
Ⓑ:DEH-X6600BT/XNUC
Ⓒ:DEH-X6650BT/XNGS
Ⓓ:DEH-X6650BT/XNCS
Ⓔ:DEH-X6690BT/XNID
ELECTRONIC VOLUME/ SOURCE SELECTOR
IC201
PM9013A
JA251
PREOUT
POWER AMP
IC301
PA2032A
JA901
POWER SUPPLY
MUTE
ASENS
B KEYBOARD UNIT
SYSTEM MICRO COMPUTER
IC601
(2/2)
R5S726A0D216FP
CN801
CN1931
JA1921
FRONT AUX
SORUCE
S1842
MULTI-CONTROL
S1830
IC801
TC7SET08FUS1
LCD DRIVER/ KEY CONTROLLER
IC1802
PDC202B
KEY MATRIX
LCD
V1802
REMOTE CONTROL SENSOR
IC1941
PNJ4833M
RGB DRIVER
IC1851
BH2228FV
CN1911
USB

5. DIAGNOSIS
5.1 OPERATIONAL FLOWCHART





In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300 msec, the oscillator may be defective.

5.2 ERROR CODE LIST

● ERROR CODES

If a CD memory device is inoperable, or operation of such media is stopped by an error, the error mode is established and a cause of the error is displayed by an error code. Indication of error codes is intended to reduce the number of calls from customers and facilitate failure analysis and repair work in servicing.

(1) DISPLAY METHOD

If “0xFD” error mode is displayed in CD MODE (CD MODE area for display), an error code will be displayed in the MIN (minute display) and SEC (second display) areas.

The same code is displayed in the MIN and SEC areas.
The TNO area is blank (#0FFH), as it conventionally was.

- Display example of the head unit
  Depending on the display capability of LCDs, the display format varies, as shown below. XX denotes an error number.
  Note: In a case of an OEM product, the error display format is subject to the specifications used by the equipment manufacturer.

8-digit display	6-digit display	4-digit display
ERROR-xx	ERR-xx	E-xx

(2) LIST OF CD ERROR CODES (Error Mode: 0xFD)

Code	Classification	Error code to be displayed	Details and possible causes
07	Servo	TOC reading NG	TOC information cannot be read. --> The partial disk or TOC content is illegal.
10	Servo	Carriage Home NG	The pickup cannot move toward the inner track. The CRG cannot move from the inner track. --> Defective HOME SW; Failure in CRG movement.
11	Servo	Focus NG	Focusing not available --> Disc placed upside-down; Stains on the disc; excessive vibration.
12	Servo	Spindle Lock NG Subcode NG RF-amp NG	Spindle not locked. Subcode not readable. Proper RF AMP gain not obtained. --> Defective spindle; Scratches or stains on the disc; excessive vibration. --> A CD-R/RW disc that does not contain data loaded, or in a rare case, disc placed upside-down. --> RF signal error.
15	Servo	RF NG	The digital signal from the disc cannot be detected. --> A CD-R/RW disc that does not contain data loaded.
17	Servo	Setup NG	The laser output cannot be adjusted. Focus can be easily lost. --> Scratches or stains on the disc; excessive vibration.
30	Servo	Search Time Out	Failed to reach a target address. And, the search became a timeout. --> Carriage/Tracking error; Scratches on the disc; Stains on the disc
50	Mechanism	Load NG Eject NG	Disc loading/ejection not completed --> A foreign object inserted in the mechanism; Disc jammed.
51	Mechanism	Failure in retried turning for ejection	Disc could not be ejected even after disc turning had been retried. --> A foreign object inserted in the mechanism; Disc jammed.

NOTES

- Indications of error codes are available only during disc operations, because CD operations are unavailable if a mechanical error is generated.
- If the TOC cannot be read, It stops because of error 07.
- If you design a new head unit, be sure to use one of the display formats indicated in “Display example of the head unit.”
- The 2 high-order digits of an error code denote the main classification, shown below.

code	classification
0x	Servo-related errors
1x	
3x	
5x	Mechanism-related errors

- How to restore from each error is shown below.

Servo-related errors(0X, 1X, 3X) : Servo-related errors CD Off, Eject, ACC Off, Back-up Off, Communication reset, Reset
Load NG/Eject NG(50) : Reload, Eject, ACC Off, Back-up Off, Communication reset, Reset
Failure in retried turning for ejection : CD On, Eject, ACC Off, Back-up Off, Communication reset, Reset

Symptoms are written in bold and causes in regular, non-indented text. Regular, indented text is used to indicate actions to be taken.

Common

AMP ERROR

This unit fails to operate or the speaker connection is incorrect; the protective circuit is activated.

Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

CD player

ERROR-07, 11, 12, 17, 30

The disc is dirty.

Clean the disc.

The disc is scratched.

Replace the disc.

ERROR-07, 10, 11, 12, 15, 17, 30, A0

There is an electrical or mechanical error.

Turn the ignition switch OFF and back ON, or switch to a different source, then back to the CD player.

ERROR-15

The inserted disc is blank.

Replace the disc.

ERROR-23

Unsupported CD format.

Replace the disc.

FORMAT READ

Sometimes there is a delay between the start of playback and when you start to hear any sound.

Wait until the message disappears and you hear sound.

NO AUDIO

The inserted disc does not contain any playable files.

Replace the disc.

SKIPPED

The inserted disc contains DRM protected files.

The protected files are skipped.

PROTECT

All the files on the inserted disc are embedded with DRM.

Replace the disc.

USB storage device/iPod

FORMAT READ

Sometimes there is a delay between the start of playback and when you start to hear any sound.

Wait until the message disappears and you hear sound.

NO AUDIO

There are no songs.

Transfer the audio files to the USB storage device and connect.

The connected USB storage device has security enabled.

Follow the USB storage device instructions to disable the security.

SKIPPED

The connected USB storage device contains DRM protected files.

The protected files are skipped.

PROTECT

All the files on the connected USB storage device are embedded with DRM.

Replace the USB storage device.

N/A USB

The connected USB device is not supported by this unit.

- Connect a USB Mass Storage Class compliant device.
- Disconnect your device and replace it with a compatible USB storage device.

CHECK USB

The USB connector or USB cable has short-circuited.

Check that the USB connector or USB cable is not caught in something or damaged.

CHECK USB

The connected USB storage device consumes more than maximum allowable current.

Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect only compliant USB storage devices.

CHECK USB

The iPod operates correctly but does not charge.

Make sure the connection cable for the iPod has not shorted out (e.g., not caught in metal objects). After checking, turn the ignition switch OFF and back ON, or disconnect the iPod and reconnect.

ERROR-19

Communication failed.
Perform one of the following operations.
–Turn the ignition switch OFF and back ON.
–Disconnect the USB storage device.
–Change to a different source.
Then, return to the USB source.

iPod failure.
Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

ERROR-23

USB storage device was not formatted with FAT12, FAT16 or FAT32.
USB storage device should be formatted with FAT12, FAT16 or FAT32.

ERROR-16

The iPod firmware version is old.
Update the iPod version.

iPod failure.
Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

STOP

There are no songs in the current list.
Select a list that contains songs.

NOT FOUND

No related songs.
Transfer songs to the iPod.

Bluetooth device

ERROR-10

The power failed for the Bluetooth module of this unit.
Turn the ignition switch OFF and then to ACC or ON.
If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Pandora

ERROR-19

Communication failed.
Disconnect the cable from the device. Once the device's main menu is displayed, reconnect the device and reset it.

START UP APP

The Pandora application has not started running yet.
Start up the Pandora application.

INOPERABLE

The operation was disabled.
Run the same command for another track.

TRY AGAIN

Unable to save thumb rating.
Unable to save BookMark.
Unable to add station.
Try again later.

MAINTENANCE

Pandora system is undergoing maintenance.
Try again later.

SKIP LIMIT

Skip limit reached.
- Do not exceed the skip limit.
- Due to music licensing restrictions, Pandora limits the total number of skips per hour.

CHECK APP

This version of the Pandora application is not supported.
Connect a device that has a compatible version of the Pandora application installed.

CHECK DEVICE

Device error message displayed in Pandora application.
Unable to play music from Pandora.
Please check your connected device.

NO STATION

No station found.
Create a station in the Pandora application on your connected device.

NO ACTIVE ST

No station selected.
Select a station.

NO BT DEVICE GO TO BT MENU TO REGISTER

No Bluetooth device found.
Follow the instructions that appear on the screen.

CONN. FAILED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

CHECK APP PRESS BAND KEY TO RETRAY

Connection to the Pandora application failed.
Follow the instructions that appear on the screen.

DISCONNECTED PRESS BAND KEY TO RETRAY

Bluetooth connection lost.
Follow the instructions that appear on the screen.

STATION FULL

A new station cannot be added.
Delete an old station to open a spot for a new one.

CAN.T DELETE

The station could not be deleted.
Run the same command for another station.

NO NETWORK

The connected device is out of area.
Connect the connected device to a network.

NO SERVICE

The connected device is out of area.
Connect the connected device to a network.

CAN.T PLAY

The operation was disabled.
Run the same command for another station.

Apps

NO BT DEVICE GO TO BT MENU TO REGISTER

No Bluetooth device found.
Follow the instructions that appear on the screen.

CONN. FAILED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

DISCONNECTED PRESS BAND KEY TO RETRAY

Bluetooth connection failed.
Follow the instructions that appear on the screen.

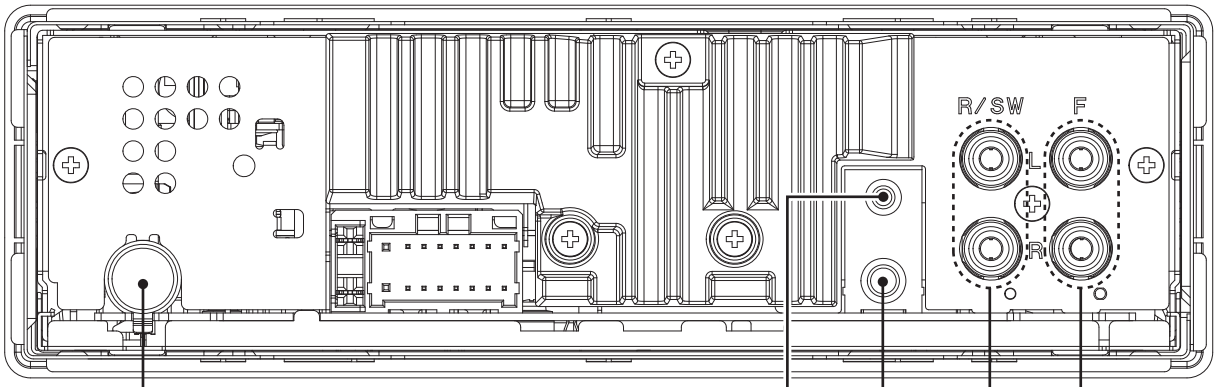
CHECK APP

Connection to the application failed.
Follow the instructions that appear on the screen.

START UP APP

The application has not started running yet.
Follow the instructions that appear on the screen.

5.3 CONNECTOR FUNCTION DESCRIPTION



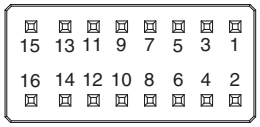
ANTENNA INPUT

MICROPHONE INPUT

WIRED REMOTE CONTROL

FRONT OUTPUT

REAR OUTPUT or SUBWOOFER OUTPUT

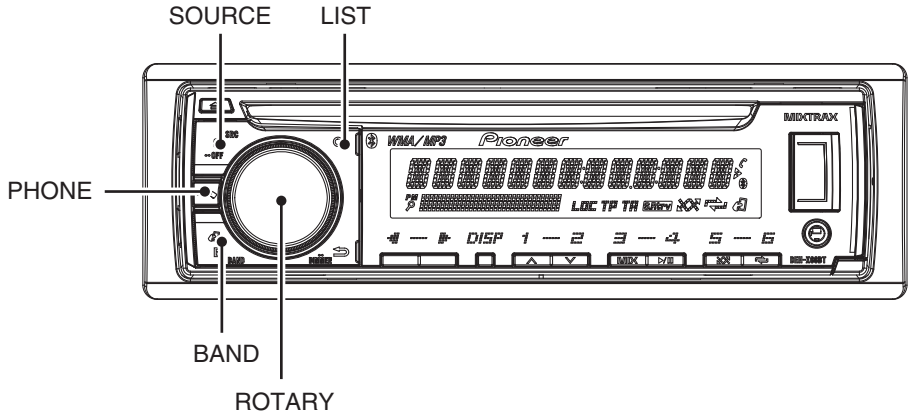


1	FL+	9	NC
2	FR+	10	NC
3	FL-	11	NC
4	FR-	12	NC
5	RL+	13	ACC
6	RR+	14	B.REM
7	RL-	15	B.UP
8	RR-	16	GND

6. SERVICE MODE
6.1 DISPLAY TEST MODE 1

[How to enter Test mode]

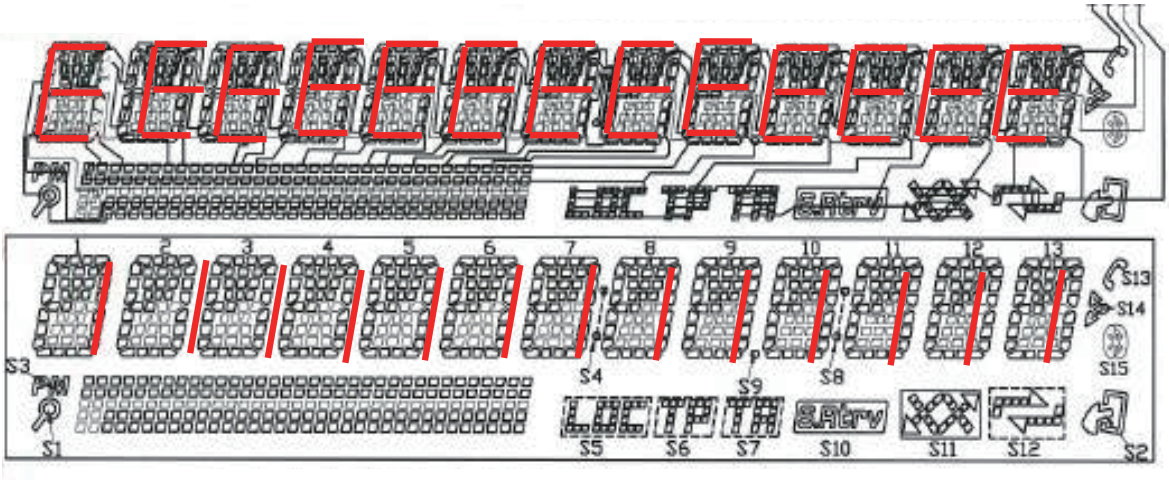
Press and hold "PHONE" and "LIST" buttons together, and turn BUP and ACC on.



		Grille condition	
Conf. item	Operate	Show LCD	RGB
All light up	PHONE + LIST	Draw 1	White
All light off	SOURCE	No light Draw2	No light
Conf. LCD pattern 1 (* And change ILM color)	BAND	Draw 3	Red
Conf. LCD pattern 2	ROTARY center	Draw 4	Green

Drawings Style

Draw1 ALL light up
Draw2 ALL light off
Draw3



Draw4

6.2 DISPLAY TEST MODE 2

The information such as the system microcomputer version is checked.

[How to enter Test mode]

Press and hold "1" and "3" buttons together, and turn BUP and ACC on.

[Operation key]

Operation key	Processing	Remarks
① + ③	Enter display test mode Switch to next test mode	

[Test items]

Start display test mode.
Press and hold "1" and "3" buttons together, and turn BUP and ACC on.

	Key Illumination	Icon
* Initial condition	Off	All off
	On (an initial value)	All off
System Version information is displayed.	On (an initial value or setting value of default menu)	All off
Display is normally updated	On (an initial value or setting value of default menu)	On (lighting condition of normal times)
Display update is stopped	On (an initial value or setting value of default menu)	On (state when entering test mode)

S $ $ $ $ # # #

$ PD number — For PEA010A, "010A" is displayed

System microcomputer version — For Ver.7.01, "701" is displayed

Switching to next display by pressing " ① " + " ③ " buttons together.

Product operation is performed as usual, in appearance.

Switching to next display by pressing " ① " + " ③ " buttons together.

The screen gets still when entering this item.

Switching to next display by pressing " ① " + " ③ " buttons together.

6.3 SOFTWARE VERSION UP METHOD

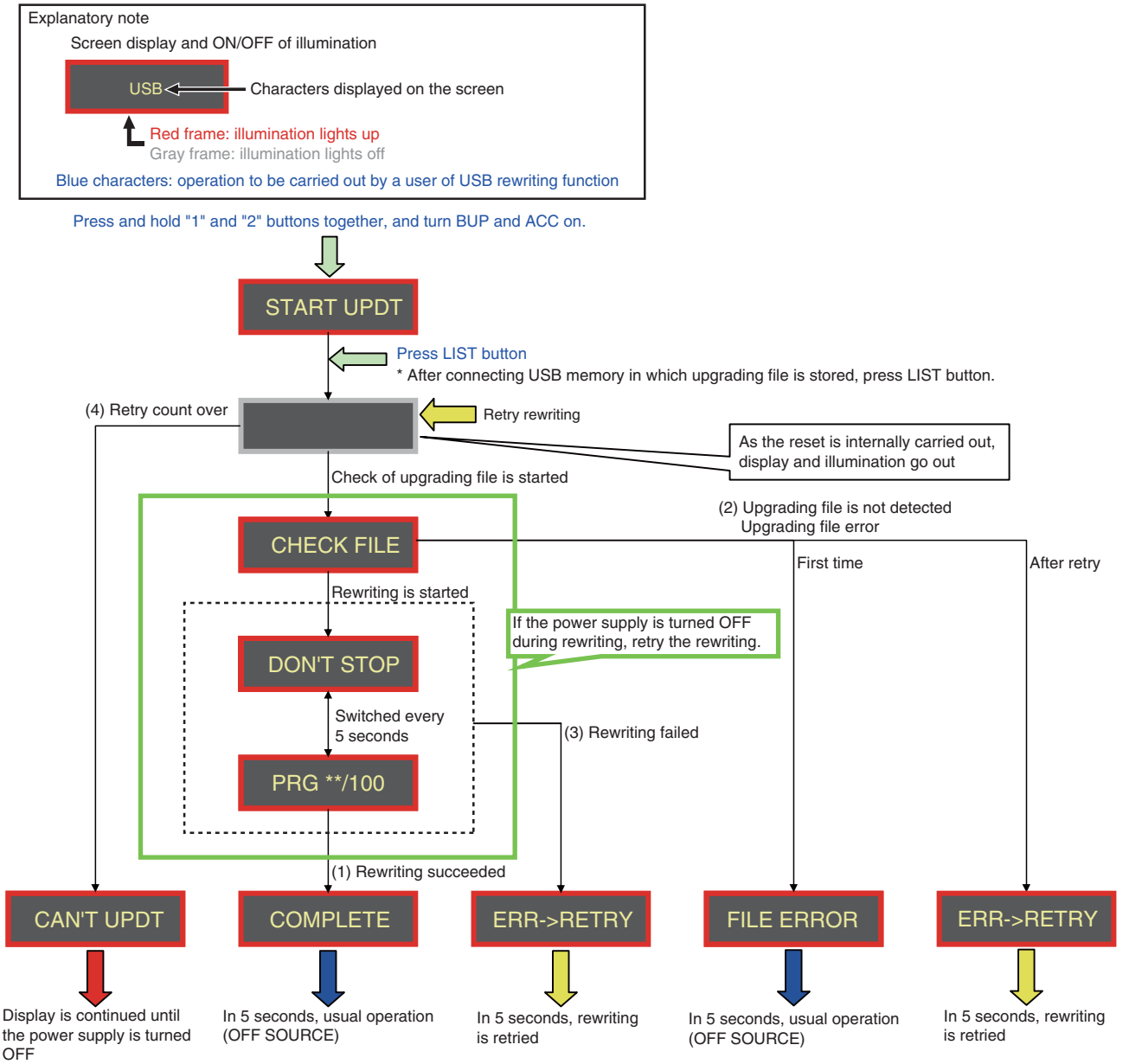
Overview

This mode is used for upgrading the MCU software of system using USB memory.

How to enter in USB rewriting mode

Press and hold "1" and "2" buttons together, and turn BUP and ACC on.

USB rewriting operation flow



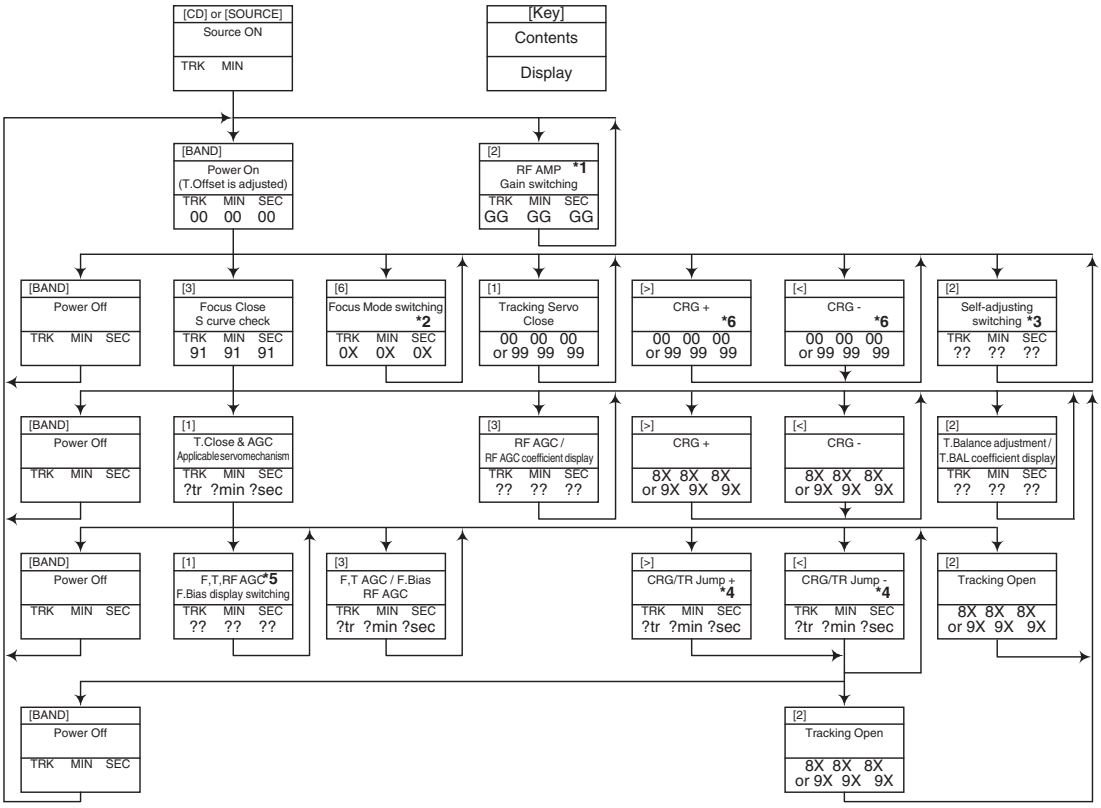
Result of rewriting

(1) Rewriting succeeded	Displayed when USB rewriting is normally terminated. In 5 seconds, usual operation (OFF SOURCE) is started.
(2) Upgrading file error Upgrading file is not detected	Displayed when there is no upgrading file in USB memory or the data of upgrading file is different. In 5 seconds, usual operation (OFF SOURCE) is started. If the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried, the rewriting is failed. In 5 seconds, rewriting is retried.
(3) Rewriting failed	Displayed when the writing of upgrading file in serial Flash is not normally terminated. Or, displayed if the upgrading file error is detected or the upgrading file is not detected after the rewriting is retried. In 5 seconds, rewriting is retried.
(4) Retry count over	Displayed when the retry becomes unavailable because the retry count is exceeded. The display is continued until the power supply is turned OFF. If the power supply is turned ON again, the display is not changed. The upgrading using USB is disabled, so it is necessary to write programs in serial Flash using E10A.

6.4 CD TEST MODE

● Flow Chart

To enter the test mode: [4] + [6] -> BUP + ACC ON



*1) TYP → + 6 dB → + 12 dB

TRK MIN SEC — $^{TRK}06^{MIN}06^{SEC}06$ — $^{TRK}12^{MIN}12^{SEC}12$

*2) Focus Close → S. Curve → F EQ measurement setting

$^{TRK}00^{MIN}00^{SEC}00$ ($^{TRK}99^{MIN}99^{SEC}99$) — $^{TRK}01^{MIN}01^{SEC}01$ — $^{TRK}02^{MIN}02^{SEC}02$

*3) F.Offset Display → RF.Offset → T.Offset Display → Switch to the order of the original display

*4) 100TR Jump

*5) TRK/MIN/SEC → F.AGC → T.AGC Gain → F.Bias → RF AGC

*6) CRG motor voltage = 2 [V]

[Key]	Operation Test Mode
[BAND]	Power On/Off
[>]	CRG + / TR Jump + (Direction of the external surface)
[<]	CRG - / TR Jump - (Direction of the internal surface)
[1]	T. CLS & AGC & Applicable servomechanism / AGC,AGC display setting
[2]	RF Gain switching / Offset adjustment display / T.Balance adjustment / T. Open
[3]	F. Close,S. Curve / Rough Servo and RF AGC / F,T,RF AGC
[6]	F. Mode switching / Tracking Close

- After the [EJECT] key is pressed keys other than the [EJECT] key should not be pressed, until disc ejection is complete.
- When the key [2] or [3] is pressed during the Focus Search, the power supply should be immediately turned off (otherwise the lens sticks to Wall, causing the actuator to be damaged).
- In the case of 100TR Jump, the mechanism shall be set to the Tracking Close mode when the key is released.
- When the power is turned on/off the gain of the RFAMP is reset to 0 dB. At the same time all the self-adjusting values shall return to the default setting.
- Do not do Tracking Servo Close before doing Focus Servo Close. (Because the overcurrent flows)

7. DISASSEMBLY

While the photograph shown is slightly different from this model in shape, the disassembly procedure is the same.

●Removing the Panel Assy (Fig.1)

1 Release the two latches.

2 Release the two latches and then remove the Panel Assy.

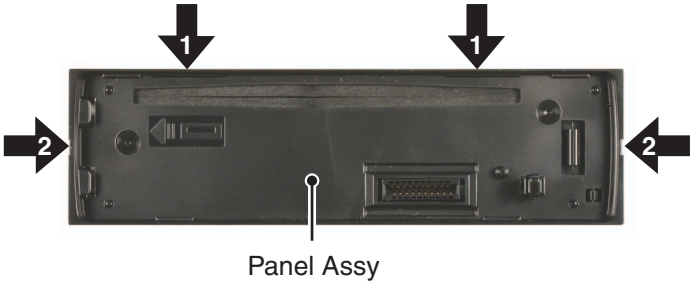
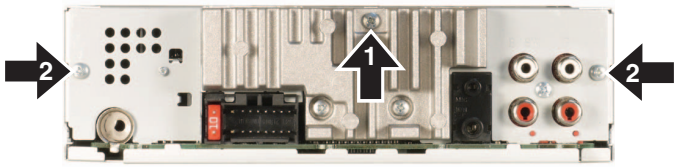


Fig.1

●Removing the CD Mechanism Module (Fig.2)

1 Remove the screw.

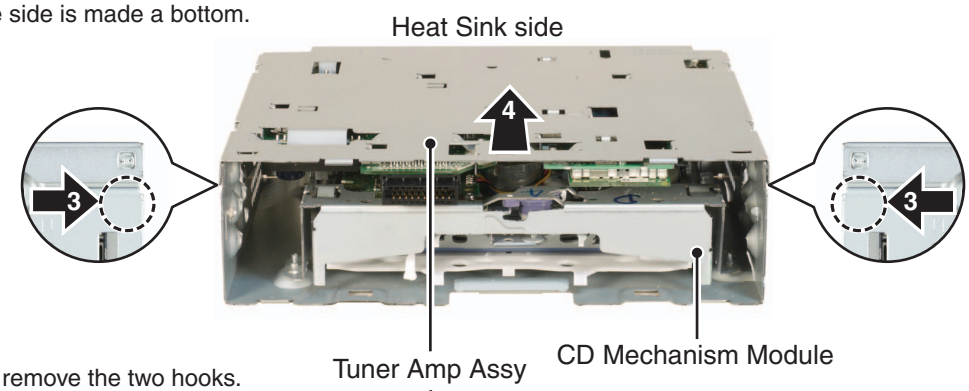
2 Remove the two screws.



The CD Mechanism Module side is made a bottom.

3 Push the area and remove the two hooks.

4 Slide the Tuner Amp Assy in the direction of the arrow.



Lift off the Tuner Amp Assy from the Heat Sink side.

5 The Tuner Amp Assy is fixed into the ditch.

6 Disconnect the FFC and then remove the CD Mechanism Module.

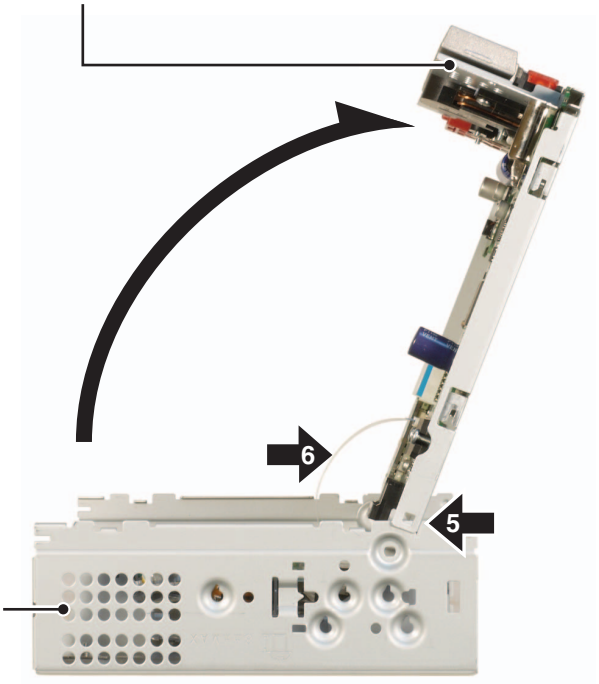


Fig.2

● Removing the Tuner Amp Unit and the BT Unit (Fig.3)

1 Disconnect the connector.

2 Remove the two screws.

3 Remove the two screws and then remove the Tuner Amp Unit.

4 Remove the screw and then remove the BT Unit.

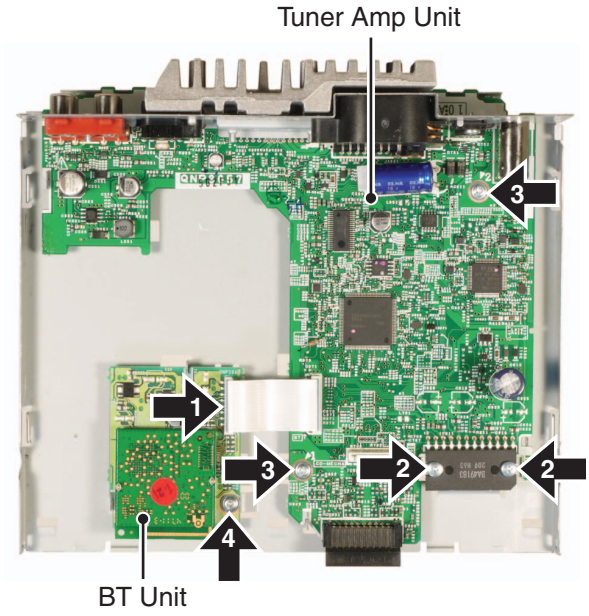


Fig.3

● Attention of removing (Fig.4)

Don't remove this screws excluding the dismantlement of the CD Mechanism Module.

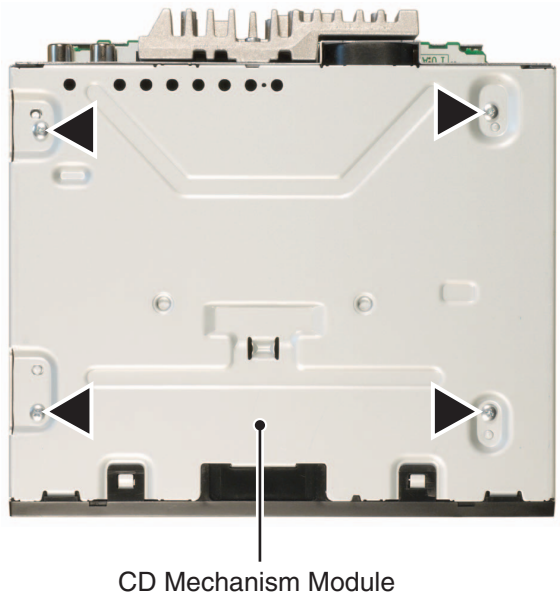


Fig.4

● Disassembling the Panel Part (Fig.5, 6)

1. Remove the arm while bending the rib of the panel upward.

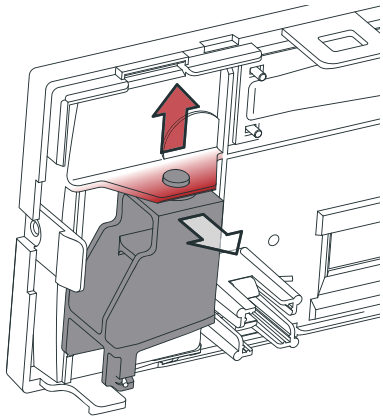


Fig.5

2. Press the upside hook and the bottom side hook of the button at the same time, and pull out the button.

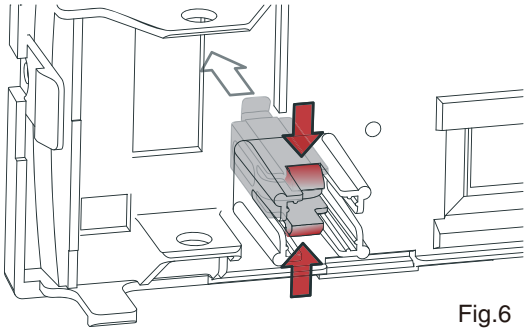


Fig.6

● Assembling the Panel Part (Fig.7, 8, 9)

1. Attach the button from the front side of the panel.

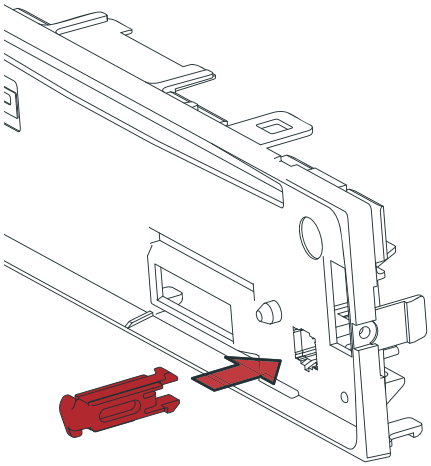


Fig.7

2. Attach the spring to the arm as shown in the figure.

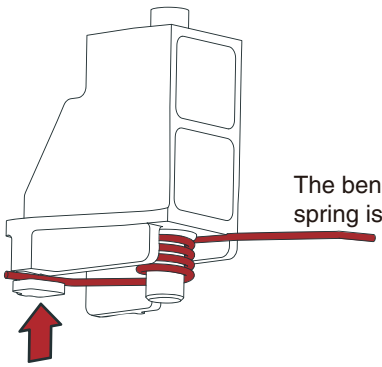


Fig.8

3. Fit the spring in the groove at the position shown in the figure.
4. Fit the boss on the lower side of the arm in the lower hole of the panel, and then warp the rib on the panel in the direction shown in the figure and fit the boss of the arm in the panel.

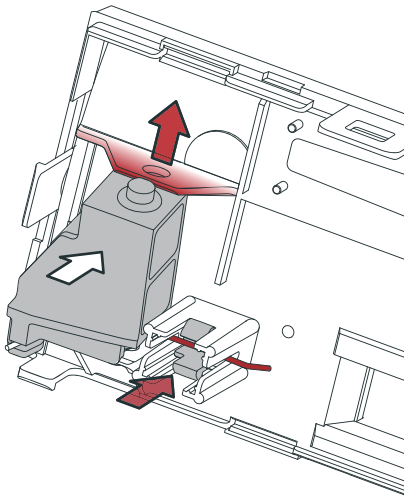
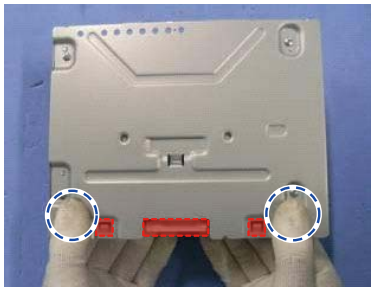


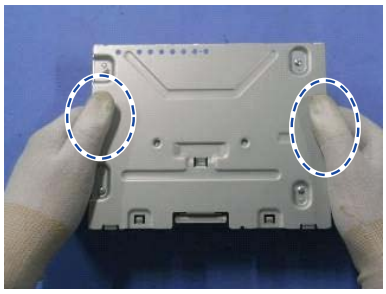
Fig.9

● How to carry the mecha unit

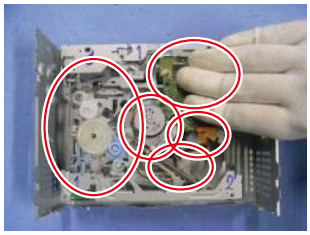
1. Hold the designated points (shown with dashed lines) of the upper chassis and the front/rear bracket.
2. Be careful not to hold the solid line portions or the CRG mecha part or insert foreign substances, to prevent distortion.
3. When holding the sides of the upper chassis, do not apply excessive force to prevent distortion. (Approx. 8N or less)

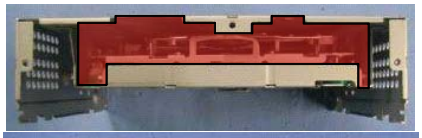
Handling OK

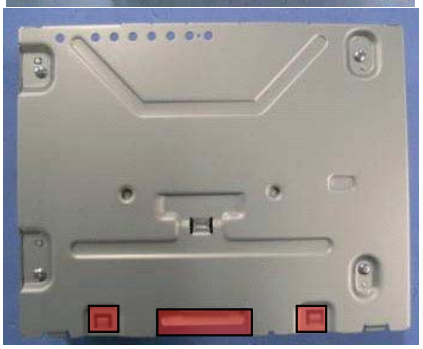


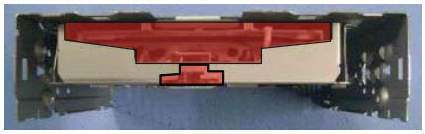


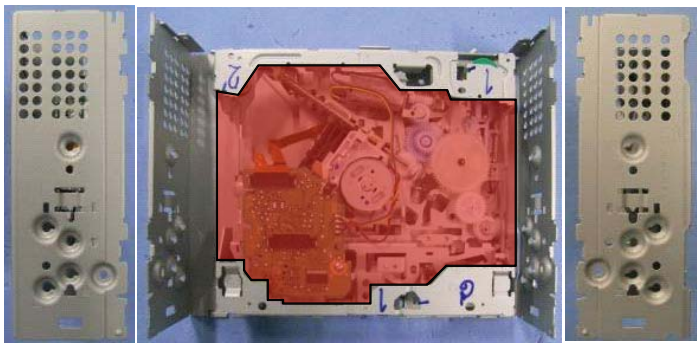
Handling NG











● How to remove the PU unit

1. Create an empty-clamp state according to “How to create empty clamp state (motor drive)”.
2. Hook the feeding screw biasing spring to a tentative hooking portion (Fig 2b). Be careful not to get injured by the spring edge.
3. Hold the PU at the position A as shown in Fig 1. Slide the PU as far as possible toward the holder in the feeding screw so that a joint on the outer end of the feeding screw is loosened.
4. As shown in Fig 3, move the rear end of the feeding screw laterally and then upward, to remove it from the outer holder.
5. Lift the PU unit to disengage it from Part B of the chassis (Fig 4), and remove the PU unit.

(Cautions) When re-installing the PU, be sure to first nip the chassis and the PU unit (Fig 4) at the position B.
Also, make sure to fully hook the feeding screw biasing spring (Fig 2a).
Please follow the service manual for adjustment of the PU unit after the re-installation.

Fig 1

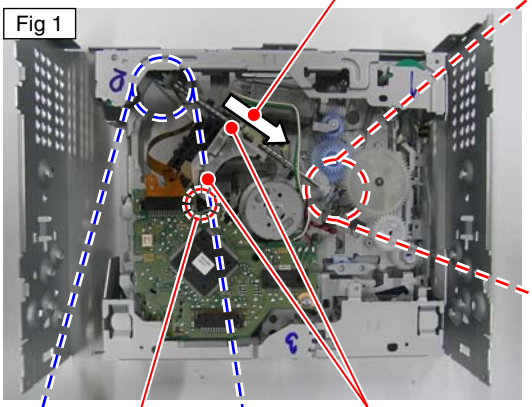
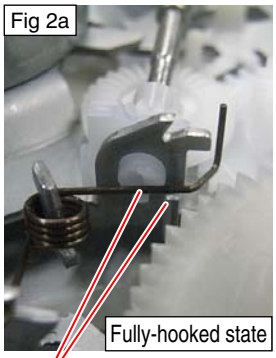


Fig 2a



The spring is below a resin flange and is built inside the sheet metal bending.

Fig 2b

Fig 3

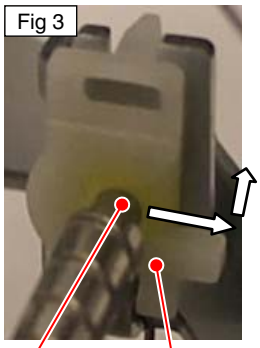
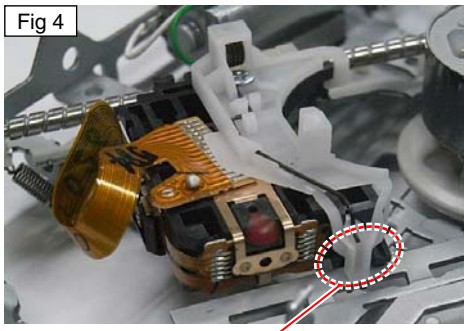


Fig 4



[Incorrect built-in state]
The chassis is not nipped between the PU case and the PU rack.

8. EACH SETTING AND ADJUSTMENT

8.1 CD ADJUSTMENT

1) Cautions on adjustments

• In this product the single voltage (3.3 V) is used for the regulator. The reference voltage is the REFO1 (1.65 V) instead of the GND.
If you should mistakenly short the REFO1 with the GND during adjustment, accurate voltage will not be obtained, and the servo's misoperation will apply excessive shock to the pickup. To avoid such problems:
a. Do not mix up the REFO1 with the GND when connecting the (-) probe of measuring instruments. Especially on an oscilloscope, avoid connecting the (-) probe for CH1 to the GND.
b. In many cases, measuring instruments have the same potential as that for the (-) probe. Be sure to set the measuring instruments to the floating state.
c. If you have mistakenly connected the REFO1 to the GND, turn off the regulator or the power immediately.

• Before mounting and removing filters or leads for adjustment, be sure to turn off the regulator.

• For stable circuit operation, keep the mechanism operating for about one minute or more after the regulator is turned on.

• In the test mode, any software protections will not work. Avoid applying any mechanical or electrical shock to the mechanism during adjustment.

• The RFAGC and RFO signals with a wide frequency range are easy to oscillate. When observing the signals, insert a resistor of 1k ohms in series.

• The load and eject operation is not guarantied with the mechanism upside down. If the mechanism is blocked due to mistaken eject operation, reset the product or turn off and on the ACC to restore it.

2) Test mode

This mode is used to adjust the CD mechanism module.

• To enter the test mode.
[4] + [6] -> BUP + ACC ON
CD Source ON

• To exit from the test mode.
Turn off the ACC and back up.

Notes:
a. During ejection, do not press any other keys than the EJECT key until the loaded disc is ejected.
b. If you have pressed the [2] key or [3] key during focus search, turn off the power immediately to protect the actuator from damage caused by the lens stuck.
c. For the TR jump modes except 100TR, the track jump operation will continue even if the key is released.
d. For the CRG move and 100TR jump modes, the tracking loop will be closed at the same time when the key is released.
e. When the power is turned off and on, the jump mode is reset to the single TR (91), the RF amp gain is set to 0 dB, and the auto-adjustment values are reset to the default settings.

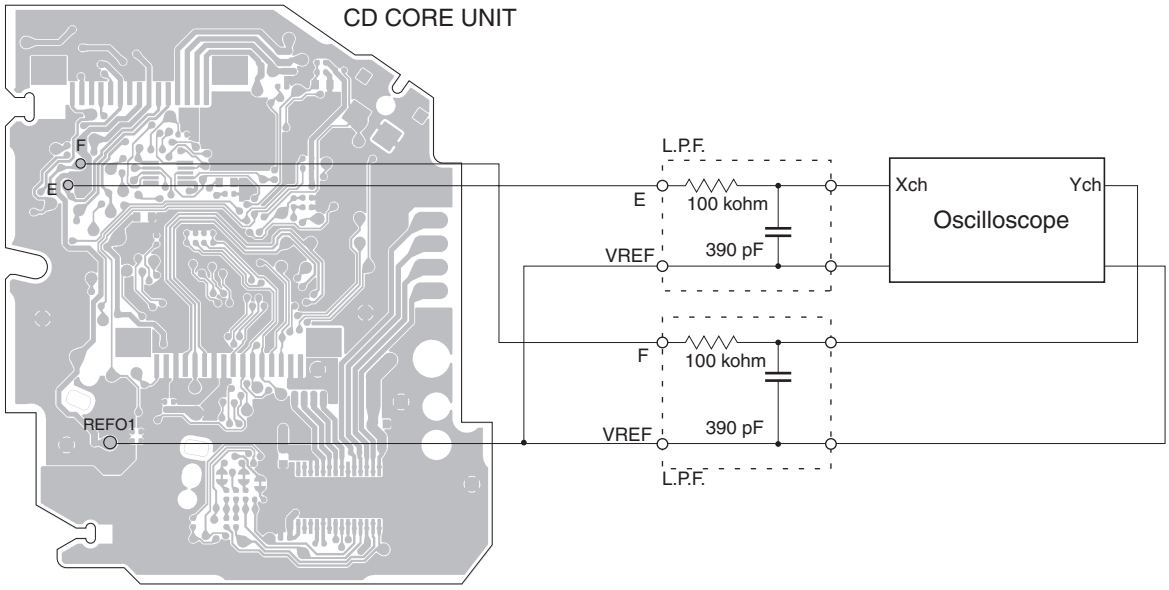
8.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT

- **Note :**
  The grating angle of the PU unit cannot be adjusted after the PU unit is changed. The PU unit in the CD mechanism module is adjusted on the production line to match the CD mechanism module and is thus the best adjusted PU unit for the CD mechanism module. Changing the PU unit is thus best considered as a last resort. However, if the PU unit must be changed, the grating should be checked using the procedure below.

- **Purpose :**
  To check that the grating is within an acceptable range when the PU unit is changed.

- **Symptoms of Mal-adjustment :**
  If the grating is off by a large amount symptoms such as being unable to close tracking, being unable to perform track search operations, or taking a long time for track searching.

- **Method :**
  - Measuring Equipment • Oscilloscope, Two L.P.F.
  - Measuring Points • E, F, REFO1
  - Disc • TCD-782
  - Mode • TEST MODE

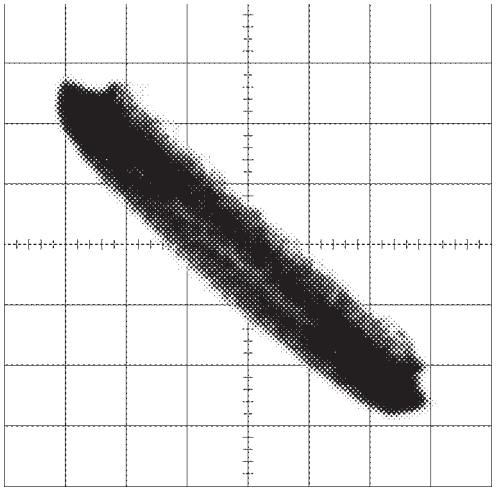


- **Checking Procedure**
  1. In test mode, load the disc and switch the 3 V regulator on.
  2. Using the **>** and **<** buttons, move the PU unit to the innermost track.
  3. Press key **3** to close focus, the display should read "91". Press key **2** to implement the tracking balance adjustment the display should now read "81". Press key **3**. The display will change, returning to "81" on the fourth press.
  4. As shown in the diagram above, monitor the LPF outputs using the oscilloscope and check that the phase difference is within 75°. Refer to the photographs supplied to determine the phase angle.
  5. If the phase difference is determined to be greater than 75° try changing the PU unit to see if there is any improvement. If, after trying this a number of times, the grating angle does not become less than 75° then the mechanism should be judged to be at fault.
- **Note**
  Because of eccentricity in the disc and a slight misalignment of the clamping center the grating waveform may be seen to "wobble" (the phase difference changes as the disc rotates). The angle specified above indicates the average angle.
- **Hint**
  Reloading the disc changes the clamp position and may decrease the "wobble".

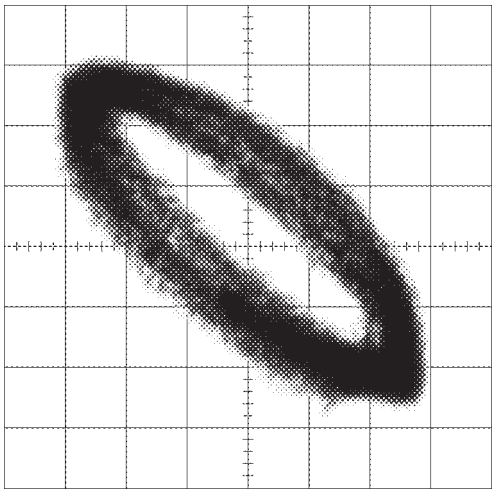
Grating waveform

Ech -> Xch 20 mV/div, AC
Fch -> Ych 20 mV/div, AC

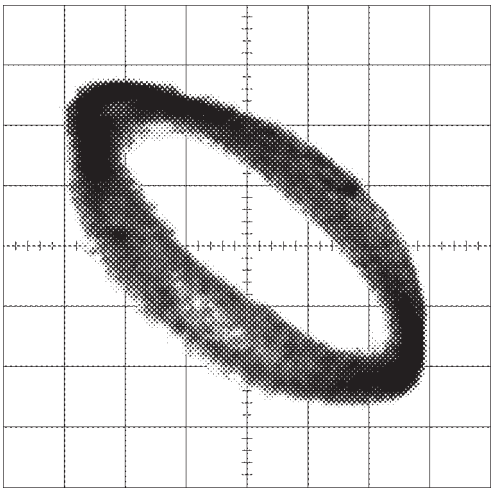
0 degrees



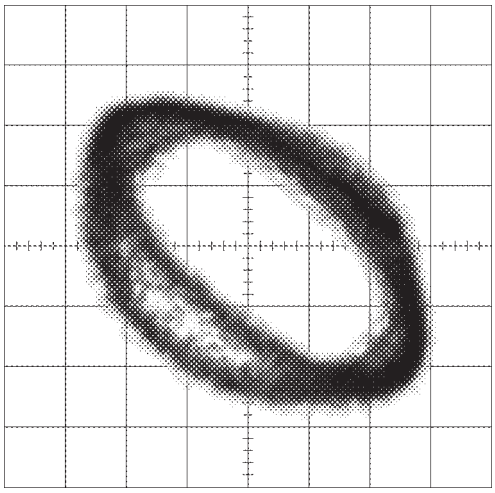
30 degrees



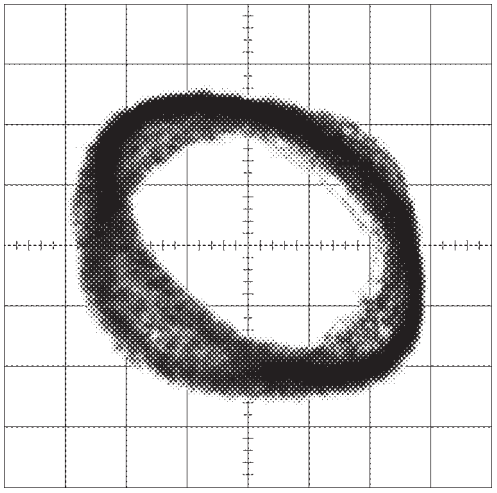
45 degrees



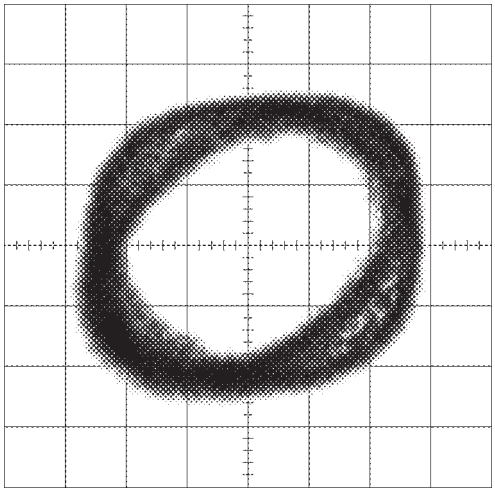
60 degrees



75 degrees



90 degrees



8.3 PCL OUTPUT CONFIRMATION

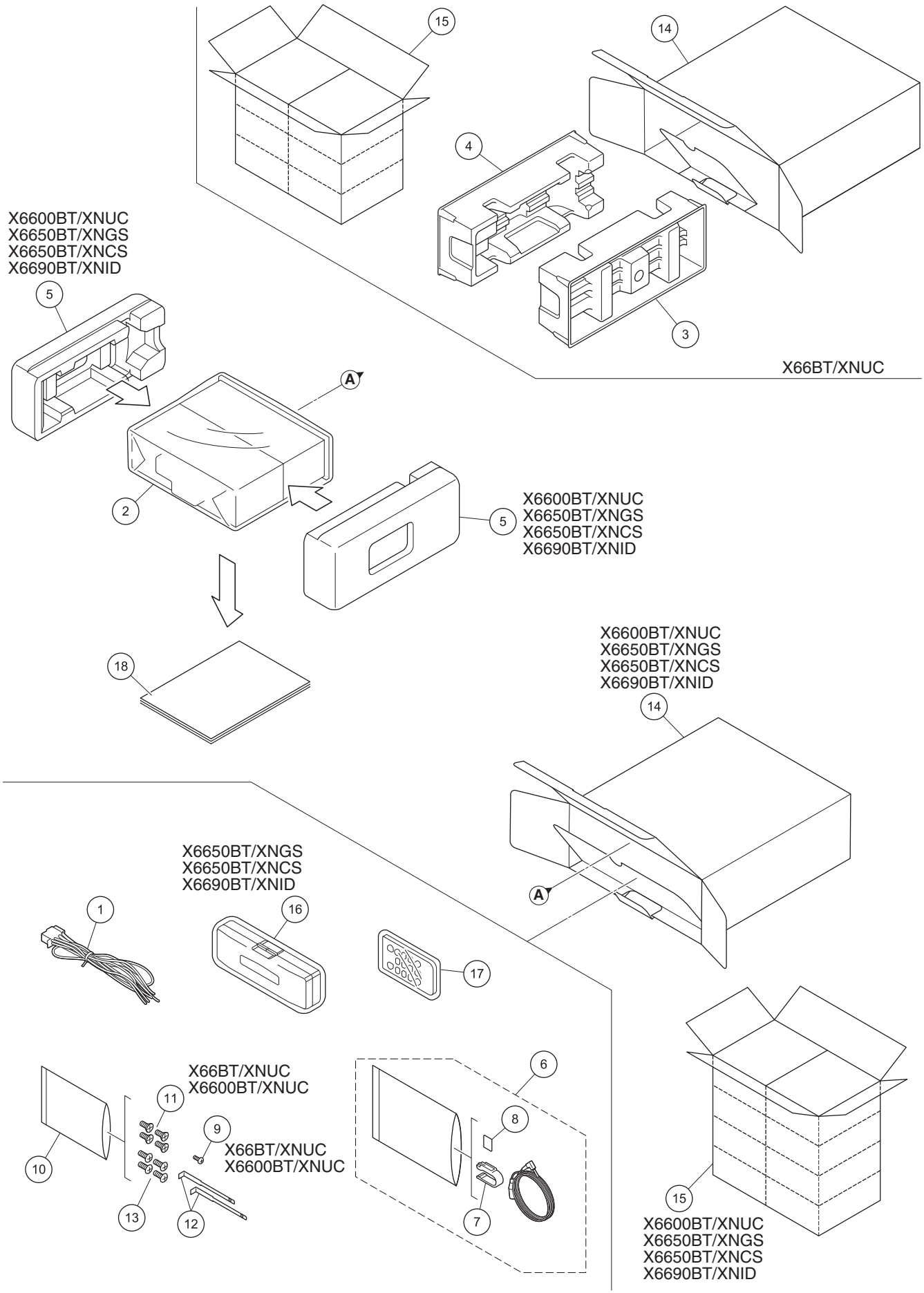
● PCL Output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN IC601(Pin 99) terminal to H.
The clock signal is output from the PCL terminal IC601(Pin115).
The frequency of the clock signal is 600 kHz that is divided by 20th of the oscillation frequency of X601 (12MHz).
The clock signal should be 600 kHz(- 25 Hz, + 25 Hz).
If the clock signal is out of the range, the X'tal (X601) should be replaced with new one.

9. EXPLODED VIEWS AND PARTS LIST

NOTES : • *Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
• *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
• *Screw adjacent to▽ mark on the product are used for disassembly.*
• *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)*

9.1 PACKING


15
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X66BT/XNUC
X6600BT/XNUC
X6650BT/XNGS
X6650BT/XNCS
X6690BT/XNID
5
A
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5
X6600BT/XNUC
X6650BT/XNGS
X6650BT/XNCS
X6690BT/XNID
18
X6600BT/XNUC
X6650BT/XNGS
X6650BT/XNCS
X6690BT/XNID
14
A
X6650BT/XNGS
X6650BT/XNCS
X6690BT/XNID
1
16
17
X66BT/XNUC
X6600BT/XNUC
11
9
X66BT/XNUC
X6600BT/XNUC
10
13
12
6
8
7
15
X6600BT/XNUC
X6650BT/XNGS
X6650BT/XNCS
X6690BT/XNID

(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDP1480
	2	Polyethylene Bag	See Contrast table (2)
	3	Protector	See Contrast table (2)
	4	Protector	See Contrast table (2)
	5	Protector	See Contrast table (2)
	6	Microphone Assy	CPM1083
	7	Holder	CZN7192
	8	Cushion	CZN7193
	9	Screw	See Contrast table (2)
	10	Polyethylene Bag	CEG1160
	11	Screw	See Contrast table (2)
	12	Handle	QNC3021
	13	Screw	TRZ50P080FTC
	14	Unit Box	See Contrast table (2)
	15	Contain Box	See Contrast table (2)
	16	Case Assy	See Contrast table (2)
	17	Card Remote Control Unit	QXE1044
	18-1	Owner's Manual	See Contrast table (2)
*	18-2	Warranty Card	See Contrast table (2)
*	18-3	Service Network	See Contrast table (2)

(2) CONTRAST TABLE

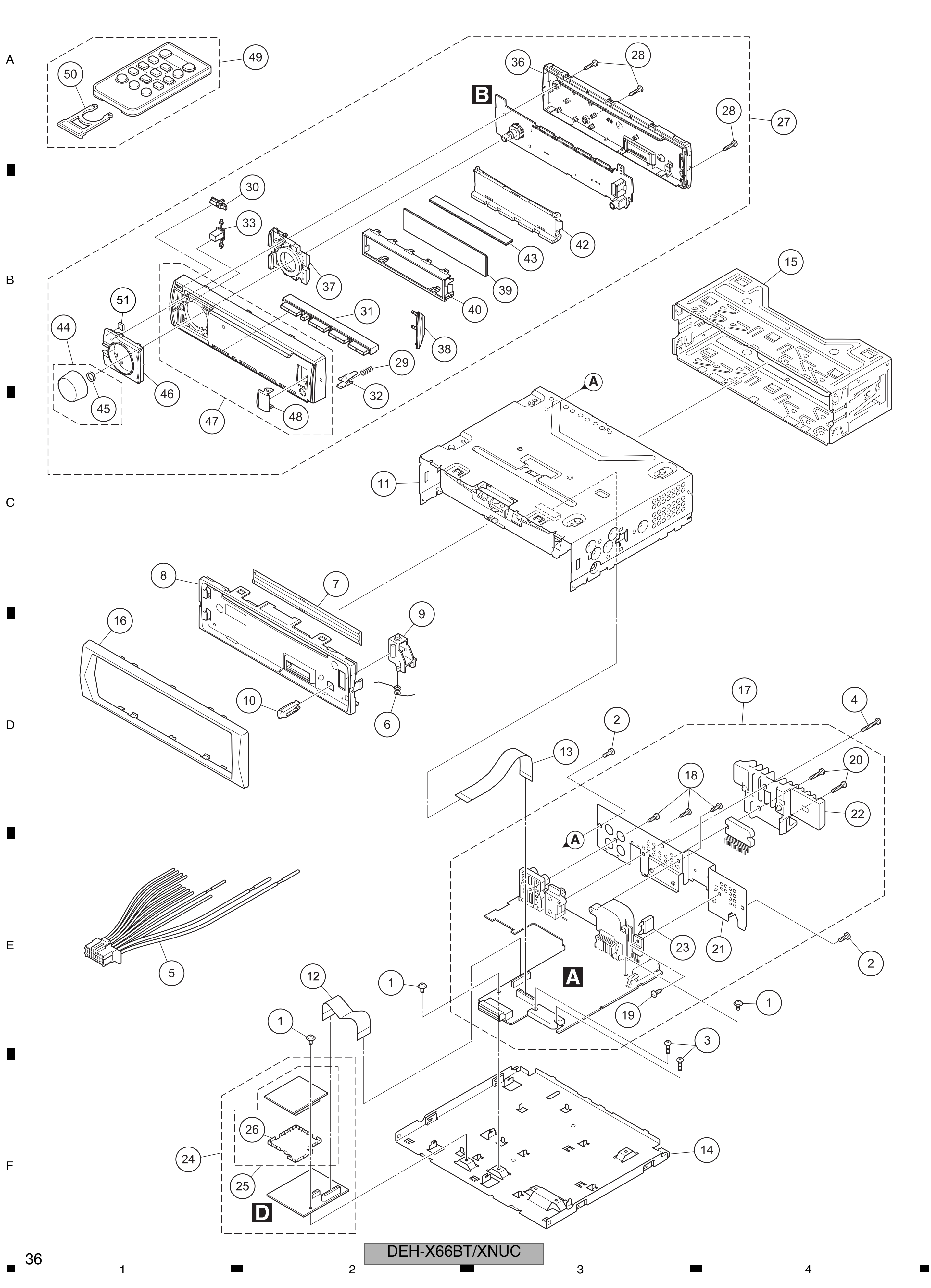
DEH-X66BT/XNUC, DEH-X6600BT/XNUC, DEH-X6650BT/XNGS, DEH-X6650BT/XNCS and DEH-X6690BT/XNID are constructed the same except for the following:

Mark	No.	Description	DEH-X66BT/ XNUC	DEH-X6600BT/ XNUC	DEH-X6650BT/ XNGS	DEH-X6650BT/ XNCS	DEH-X6690BT/ XNID
	2	Polyethylene Bag	CEG1173	CEG1173	QEG3001	QEG3001	QEG3001
	3	Protector	CHP4103	Not used	Not used	Not used	Not used
	4	Protector	CHP4104	Not used	Not used	Not used	Not used
	5	Protector	Not used	CHP4594	CHP4594	CHP4594	CHP4594
	9	Screw	BPZ20P060FTC	BPZ20P060FTC	Not used	Not used	Not used
	11	Screw	CRZ50P090FTC	CRZ50P090FTC	Not used	Not used	Not used
	14	Unit Box	QHG3471	QHG3470	QHG3473	QHG3472	QHG3474
	15	Contain Box	QHL3471	QHL3470	QHL3473	QHL3472	QHL3474
	16	Case Assy	Not used	Not used	QXA3129	QXA3129	QXA3129
	18-1	Owner's Manual	QRD3195	QRD3195	QRD3197	QRD3196	QRB3341
*	18-2	Warranty Card	QRY3001	QRY3001	Not used	Not used	CRY1304
*	18-3	Service Network	Not used	Not used	Not used	Not used	CRY1305

Owner's Manual,Installation Manual

Part No.	Language
QRD3195	English, French, Spanish(Espanol)
QRD3196	English, Spanish(Espanol), Portuguese(B)
QRD3197	English, Traditional Chinese, Arabic, Persian
QRB3341	English

9.2 EXTERIOR



A
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(1) EXTERIOR SECTION PARTS LIST

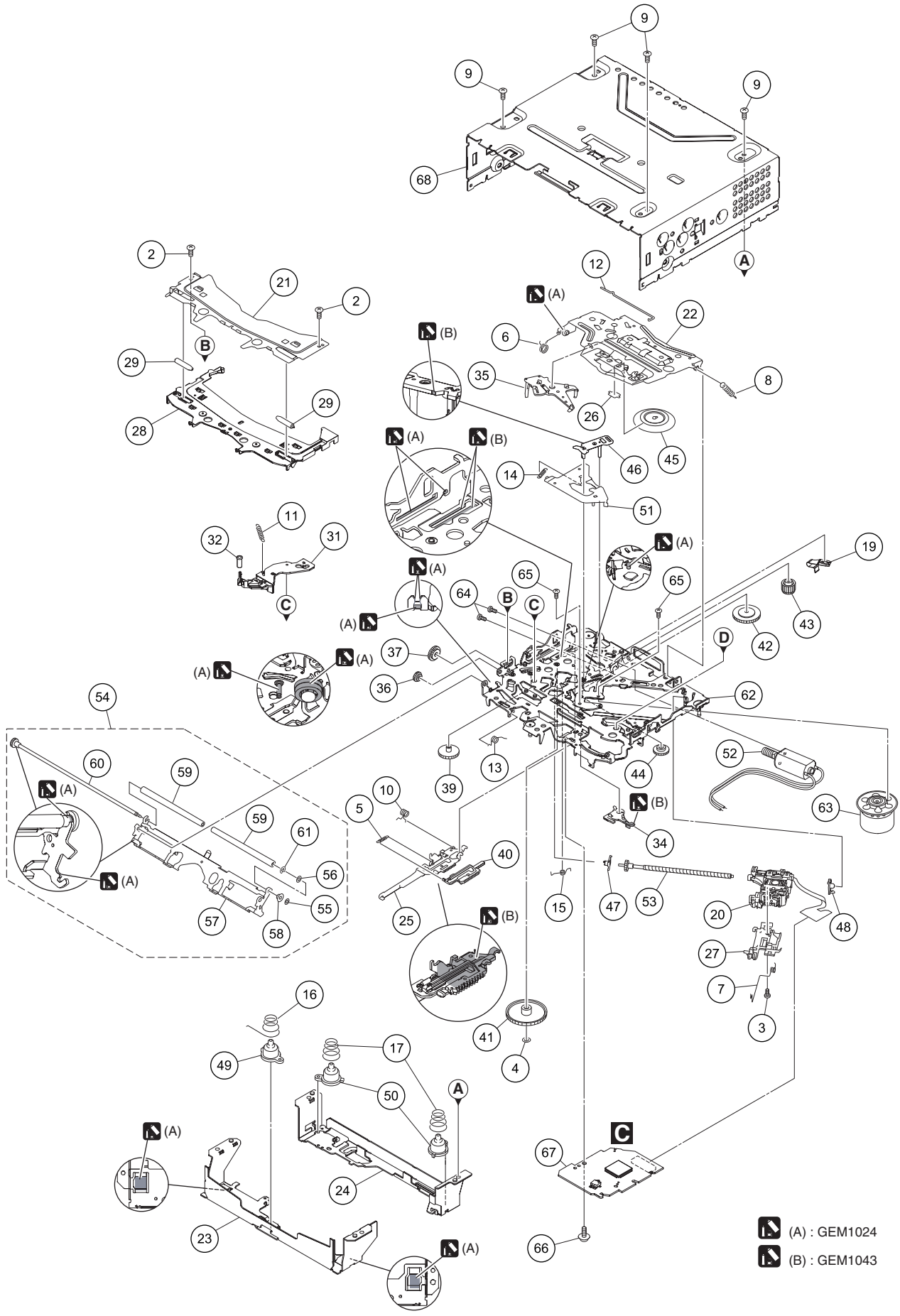
Mark	No.	Description	Part No.
	1	Screw	ASZ26P050FTC
	2	Screw	BSZ26P060FTC
	3	Screw	BSZ26P080FTC
	4	Screw	BSZ26P120FTC
	5	Cord Assy	CDP1480
	6	Spring	QBH3001
	7	Cover	QNM3029
	8	Panel	QNS3126
	9	Arm	QNV3025
	10	Button	QNV3026
	11	CD Mechanism Module (S11.6VA)	CXK5805
	12	FFC	QDE3028
	13	FFC	QDE3029
	14	Case	QNB3014
	15	Holder	QNC3020
	16	Panel	QNS3576
	17	Tuner Amp Unit	See Contrast table (2)
	18	Screw	BPZ26P080FTC
	19	Screw	BSZ26P060FTC
	20	Screw	BSZ26P120FTC
	21	Holder	QNC3053
	22	Heat Sink	See Contrast table (2)
⚠	23	Fuse (10 A)	YEK5001
	24	BT Unit	QWM3750
	25	BT Module	YWX5044
	26	Shield Case	YNC5123
	27	Detachable Grille Assy	See Contrast table (2)
	28	Screw	BPZ20P100FTC
	29	Spring	CBH2210
	30	Button (EJECT)	QAC3131
	31	Button (1-6)	QAC3136
	32	Button (DETACH)	QAC3137
	33	Button (PHONE)	QAC3139
	34	•••••	
	35	•••••	
	36	Cover	QNS3615
	37	Lighting Conductor	QNV3074
	38	Lighting Conductor	QNV3075
	39	Segment LCD (V1802)	CAW2041
	40	Holder	QNC3068
	41	•••••	
	42	Lighting Conductor	QNV3073
	43	Rubber Connector	QNV3079
	44	Knob Unit	QXA3670
	45	Spring	YBL5010
	46	Button Unit	QXA3945
	47	Grille Unit	See Contrast table (2)
	48	Door	QAT3012
	49	Card Remote Control Unit	QXE1044
	50	Cover	CNS7068
	51	Cushion	QNM3097

(2) CONTRAST TABLE

DEH-X66BT/XNUC, DEH-X6600BT/XNUC, DEH-X6650BT/XNGS, DEH-X6650BT/XNCS and DEH-X6690BT/XNID are constructed the same except for the following:

Mark	No.	Description	DEH-X66BT/XNUC	DEH-X6600BT/XNUC	DEH-X6650BT/XNGS	DEH-X6650BT/XNCS	DEH-X6690BT/XNID
	17	Tuner Amp Unit	QWM3617	QWM3616	QWM3619	QWM3618	QWM3620
	22	Heat Sink	QNR3010	QNR3010	QNR3002	QNR3010	QNR3002
	27	Detachable Grille Assy	QXA3904	QXA3922	QXA3906	QXA3923	QXA3907
	47	Grille Unit	QXA3949	QXA3948	QXA3951	QXA3950	QXA3952

9.3 CD MECHANISM MODULE



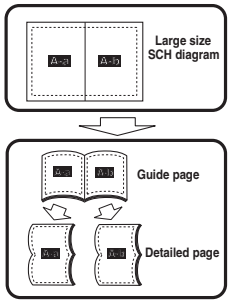
CD MECHANISM MODULE SECTION PARTS LIST

Mark No.	Description	Part No.
1	.....	
2	Screw	BSZ20P040FTC
3	Screw(M2 x 4)	CBA1835
4	Washer	CBF1038
5	Spring	CBH3010
6	Spring	CBH2855
7	Spring	CBH2856
8	Spring	CBH2860
9	Screw	BSZ26P060FTC
10	Spring	CBH3011
11	Coil Spring	CBH3095
12	Spring	CBH3014
13	Spring	CBH3015
14	Spring	CBH3016
15	Spring	CBH3017
16	Spring	CBH3086
17	Spring	CBH3019
18	.....	
19	Leaf Spring	CBL1824
20	PU Unit(P11)(Service)	CXX4754
21	Bracket	CND4553
22	Arm	CND6406
23	Bracket	CND6127
24	Bracket	CND5710
25	Lever	CND5398
26	Sheet	CNN3678
27	Rack	CNV8342
28	Guide	CNW2240
29	Roller	CNW1172
30	.....	
31	Arm	CNW2241
32	Roller	CNW1175
33	.....	
34	Arm	CNW1177
35	Arm	CNW1178
36	Gear	CNW1180
37	Gear	CNW1181
38	.....	
39	Gear	CNW1183
40	Rack	CNW1184
41	Gear	CNW1185
42	Gear	CNW1186
43	Gear	CNW1187
44	Gear	CNW2287
45	Clamper	CNW1190
46	Arm	CNW1192
47	Holder	CNW1193
48	Holder	CNW1194
49	Damper	CNW1197
50	Damper	CNW1198
51	Arm	CNW1726
52	Motor Unit(M2)(LOAD/CRG)	CXC4026
53	Screw Unit	CXC8894
54	Arm Assy	CXE6232
55	Washer	CBF1037
56	Washer	CBF1038
57	Arm	CND6242
58	Collar	CNW2444
59	Roller	CNW2500
60	Gear Unit	CXE6225
61	Washer	YE15FTC
62	Chassis Unit	CXE4528
63	Motor Unit(M1)(SPDL)	CXE2273
64	Screw	JFZ20P025FTC
65	Screw	JGZ17P022FTC
66	Screw	EBA1028
67	CD Core Unit (S11.6VA)	CWX4269
68	Chassis	CNA3181

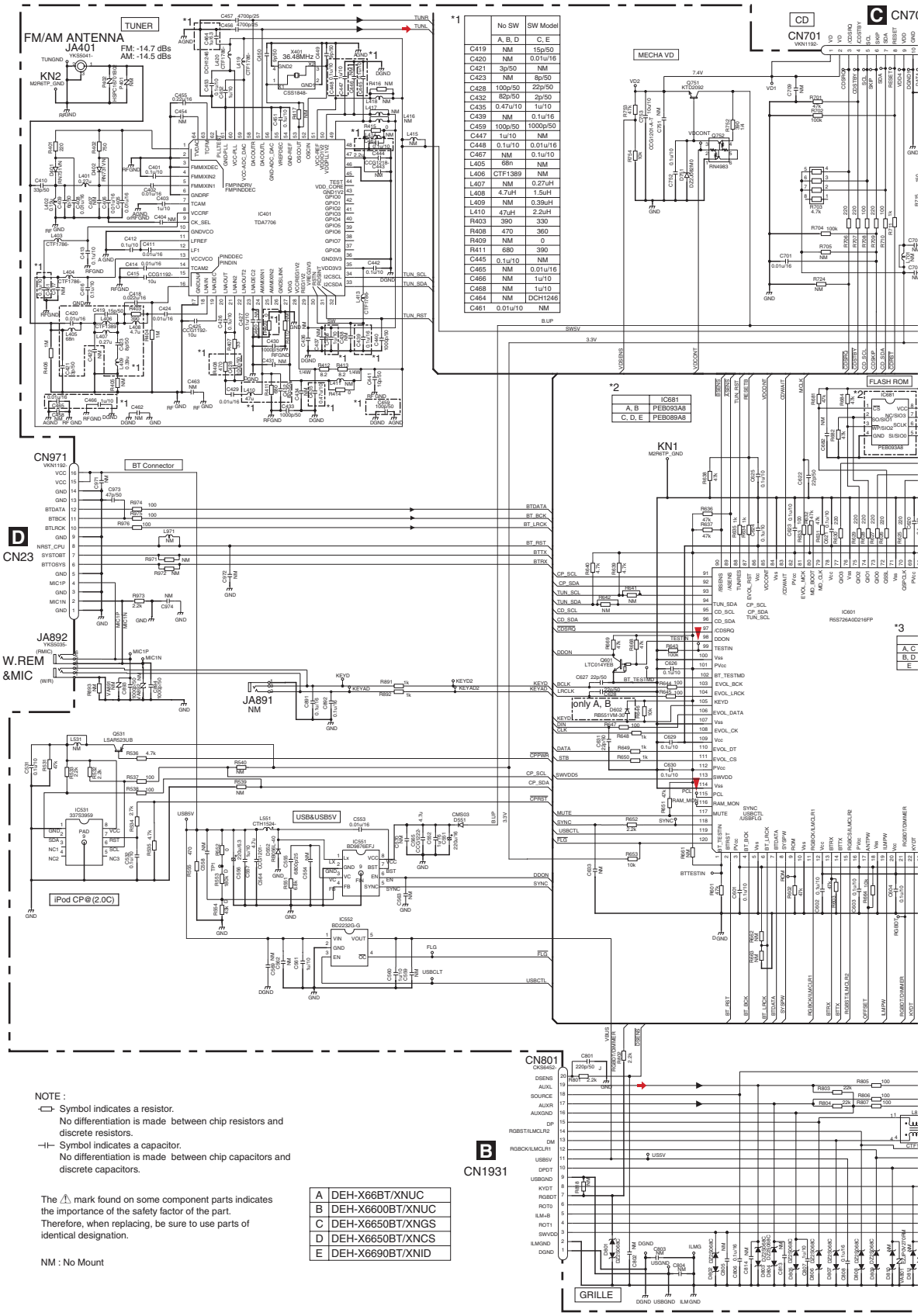
10. SCHEMATIC DIAGRAM

10.1 TUNER AMP UNIT (GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



A-a



	No SW	SW Model
	A, B, D	C, E
C419	NM	15p/50
C420	NM	0.01u/16
C421	3p/50	NM
C423	NM	8p/50
C428	100p/50	22p/50
C432	82p/50	2p/50
C435	0.47u/10	1u/10
C439	NM	0.1u/16
C459	100p/50	1000p/50
C447	1u/10	NM
C448	0.1u/10	0.01u/16
C467	NM	0.1u/10
L405	68n	NM
L406	CTF1389	NM
L407	NM	0.27uH
L408	4.7uH	1.5uH
L409	NM	0.39uH
L410	47uH	2.2uH
R403	390	330
R408	470	360
R409	NM	0
R411	680	390
C445	0.1u/10	NM
C465	NM	0.01u/16
C466	NM	1u/10
C468	NM	1u/10
C464	NM	DCH1246
C461	0.01u/10	NM

	IC681
A, B	PEB093A8
C, D, E	PEB089A8

NOTE :

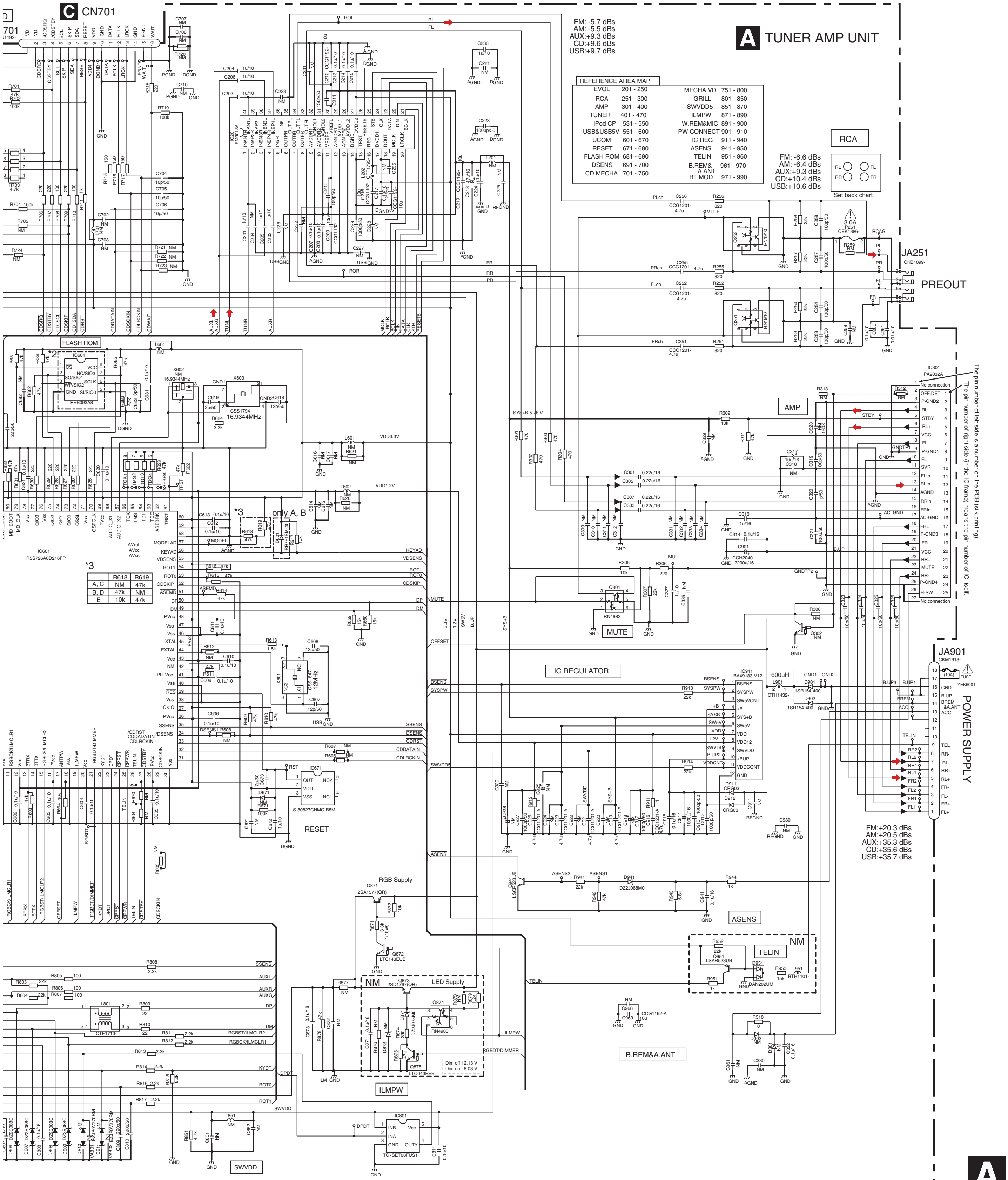
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

NM : No Mount

A	DEH-X66BT/XNUC
B	DEH-X6600BT/XNUC
C	DEH-X6650BT/XNGS
D	DEH-X6650BT/XNCS
E	DEH-X6690BT/XNID

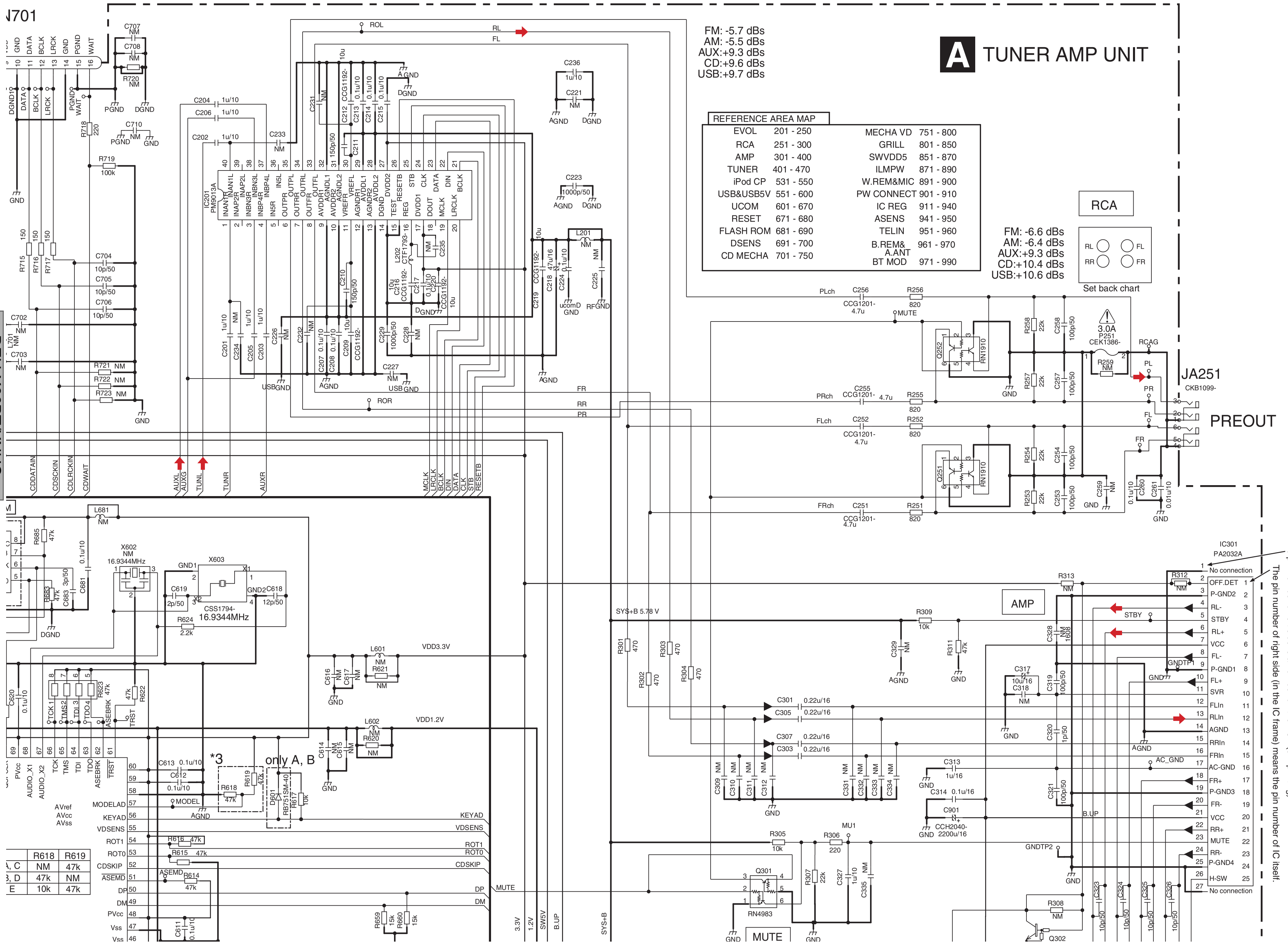
A-b



REFERENCE AREA MAP			
EVOL	201 - 250	MECHA VD	751 - 800
RCA	251 - 300	GRILL	801 - 850
AMP	301 - 400	SWVDD5	851 - 870
TUNER	401 - 470	ILMPW	871 - 890
iPod CP	531 - 550	W.REM&MIC	891 - 900
USB&USB5V	551 - 600	PW CONNECT	901 - 910
UCOM	601 - 670	IC REG	911 - 940
RESET	671 - 680	ASENS	941 - 950
FLASH ROM	681 - 690	TELIN	951 - 960
DSENS	691 - 700	B.REM& A.ANT	961 - 970
CD MECHA	701 - 750	BT MOD	971 - 990

*3	R618	R619
A, C	NM	47k
B, D	47k	NM
E	10k	47k

A


A-a A-b
A TUNER AMP UNIT
FM: -5.7 dBs
AM: -5.5 dBs
AUX:+9.3 dBs
CD:+9.6 dBs
USB:+9.7 dBs
REFERENCE AREA MAP
EVOL 201 - 250
RCA 251 - 300
AMP 301 - 400
TUNER 401 - 470
iPod CP 531 - 550
USB&USB5V 551 - 600
UCOM 601 - 670
RESET 671 - 680
FLASH ROM 681 - 690
DSENS 691 - 700
CD MECHA 701 - 750
MECHA VD 751 - 800
GRILL 801 - 850
SWVDD5 851 - 870
ILMPW 871 - 890
W.REM&MIC 891 - 900
PW CONNECT 901 - 910
IC REG 911 - 940
ASENS 941 - 950
TELIN 951 - 960
B.REM& A.ANT 961 - 970
BT MOD 971 - 990
FM: -6.6 dBs
AM: -6.4 dBs
AUX:+9.3 dBs
CD:+10.4 dBs
USB:+10.6 dBs
RCA
Set back chart
JA251
CKB1099-
PREOUT
IC201
PM9013A
IC301
PA2032A
The pin number of left side is a number on the PCB (silk printing).
The pin number of right side (in the IC frame) means the pin number of IC itself.
AMP
MUTE
X603
CSS1794-
16.9344MHz
X602
NM
16.9344MHz
only A, B
*3
VDD3.3V
VDD1.2V
SYS+B 5.78 V
R618 R619
A, C NM 47k
B, D 47k NM
E 10k 47k

A

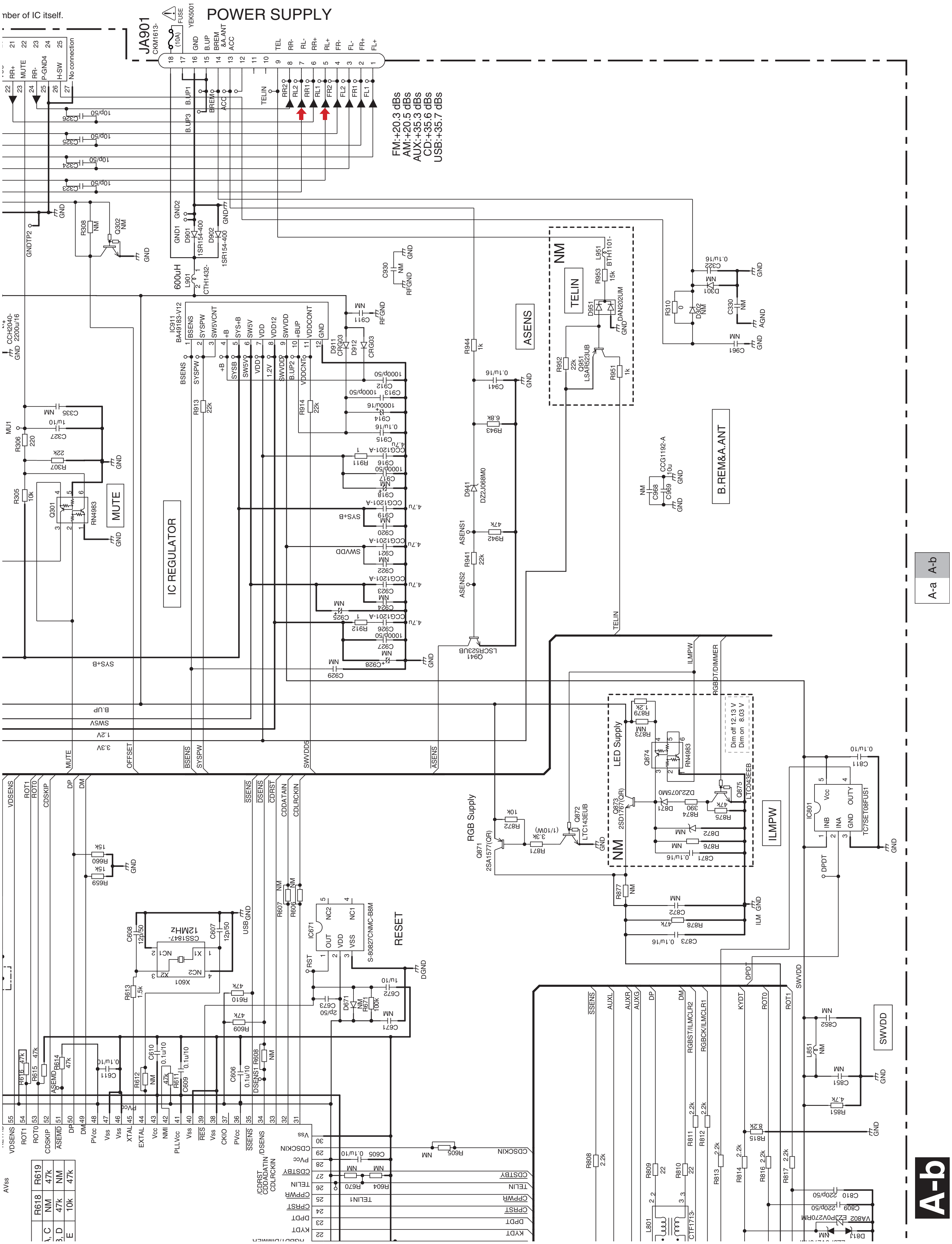
B

C

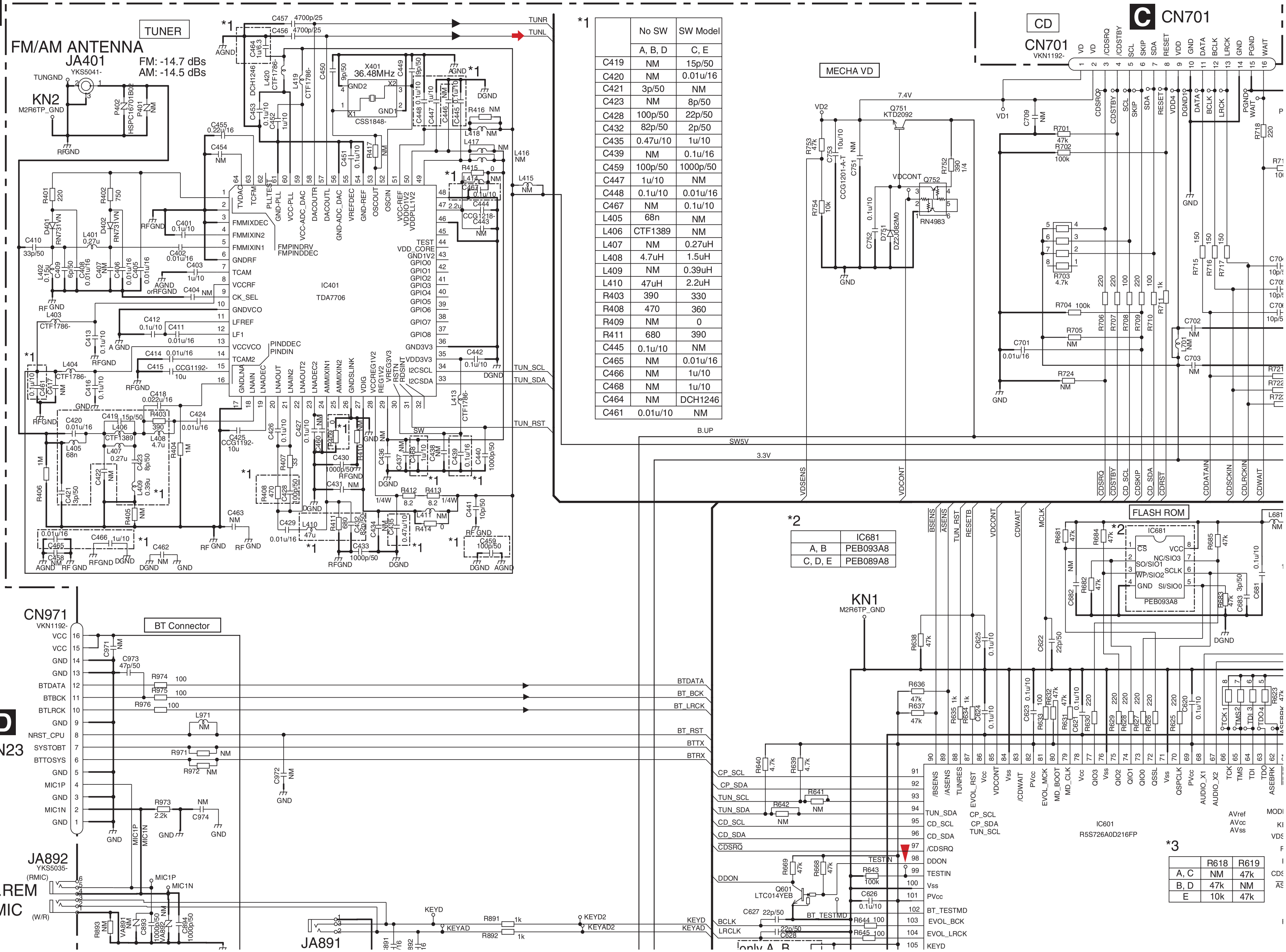
D

E

F


POWER SUPPLY
JA901
CKM1613-
FUSE
YEK5001
FM:+20.3 dBs
AM:+20.5 dBs
AUX:+35.3 dBs
CD:+35.6 dBs
USB:+35.7 dBs
IC REGULATOR
IC911
BA49183-V12
MUTE
NM
TELIN
ASENS
B.REM&A.ANT
LED Supply
RGB Supply
ILMPW
Dim off 12.13 V
Dim on 8.03 V
IC801
TC7SET08FUS1
RESET
IC671
S-80827CNMC-B8M
X601
CSS1847-
12MHz
SWVDD
A-a
A-b

A-b



*1

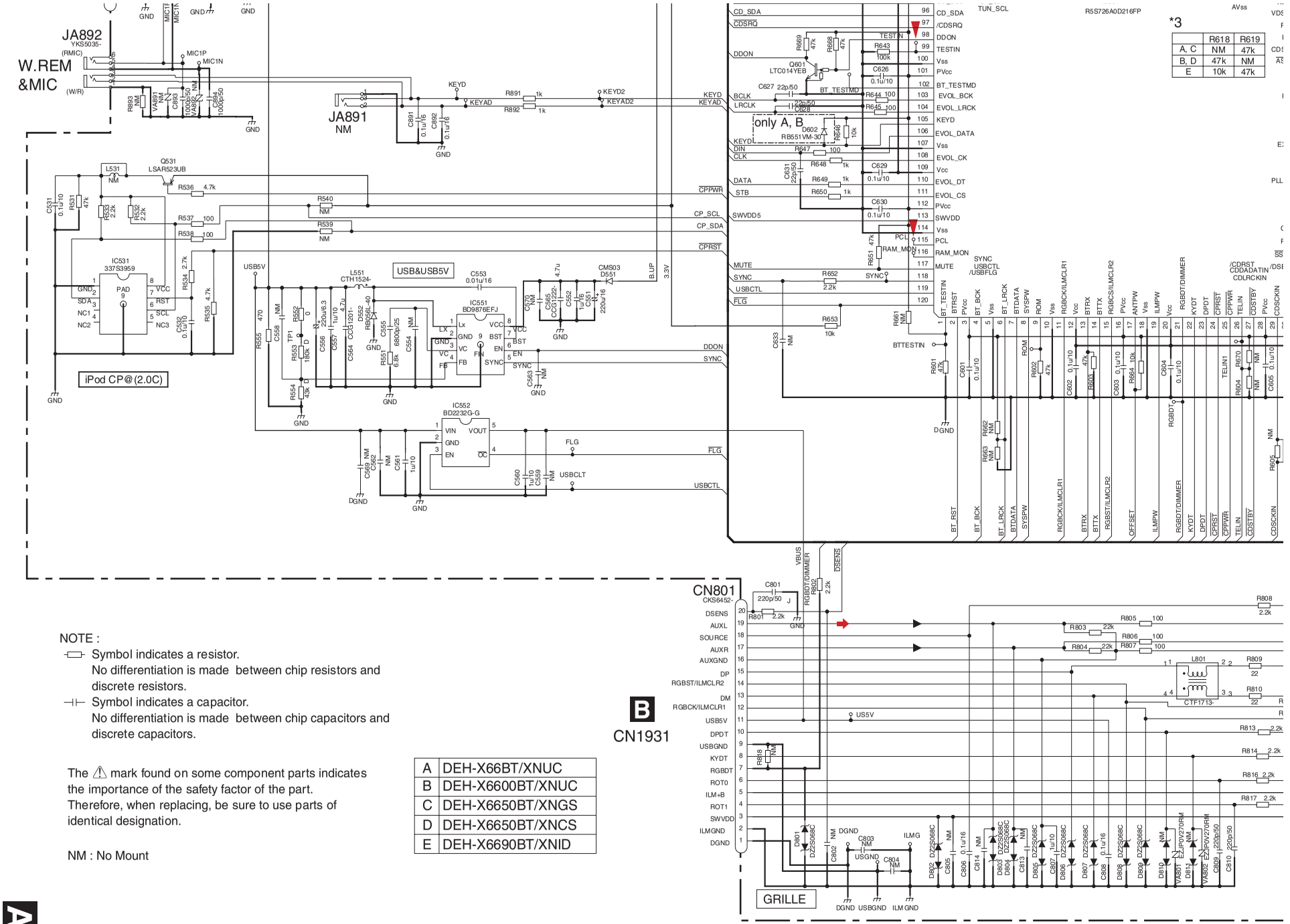
	No SW	SW Model
	A, B, D	C, E
C419	NM	15p/50
C420	NM	0.01u/16
C421	3p/50	NM
C423	NM	8p/50
C428	100p/50	22p/50
C432	82p/50	2p/50
C435	0.47u/10	1u/10
C439	NM	0.1u/16
C459	100p/50	1000p/50
C447	1u/10	NM
C448	0.1u/10	0.01u/16
C467	NM	0.1u/10
L405	68n	NM
L406	CTF1389	NM
L407	NM	0.27uH
L408	4.7uH	1.5uH
L409	NM	0.39uH
L410	47uH	2.2uH
R403	390	330
R408	470	360
R409	NM	0
R411	680	390
C445	0.1u/10	NM
C465	NM	0.01u/16
C466	NM	1u/10
C468	NM	1u/10
C464	NM	DCH1246
C461	0.01u/10	NM

*2

	IC681
A, B	PEB093A8
C, D, E	PEB089A8

*3

	R618	R619
A, C	NM	47k
B, D	47k	NM
E	10k	47k



	R618	R619
A, C	NM	47k
B, D	47k	NM
E	10k	47k

NOTE :

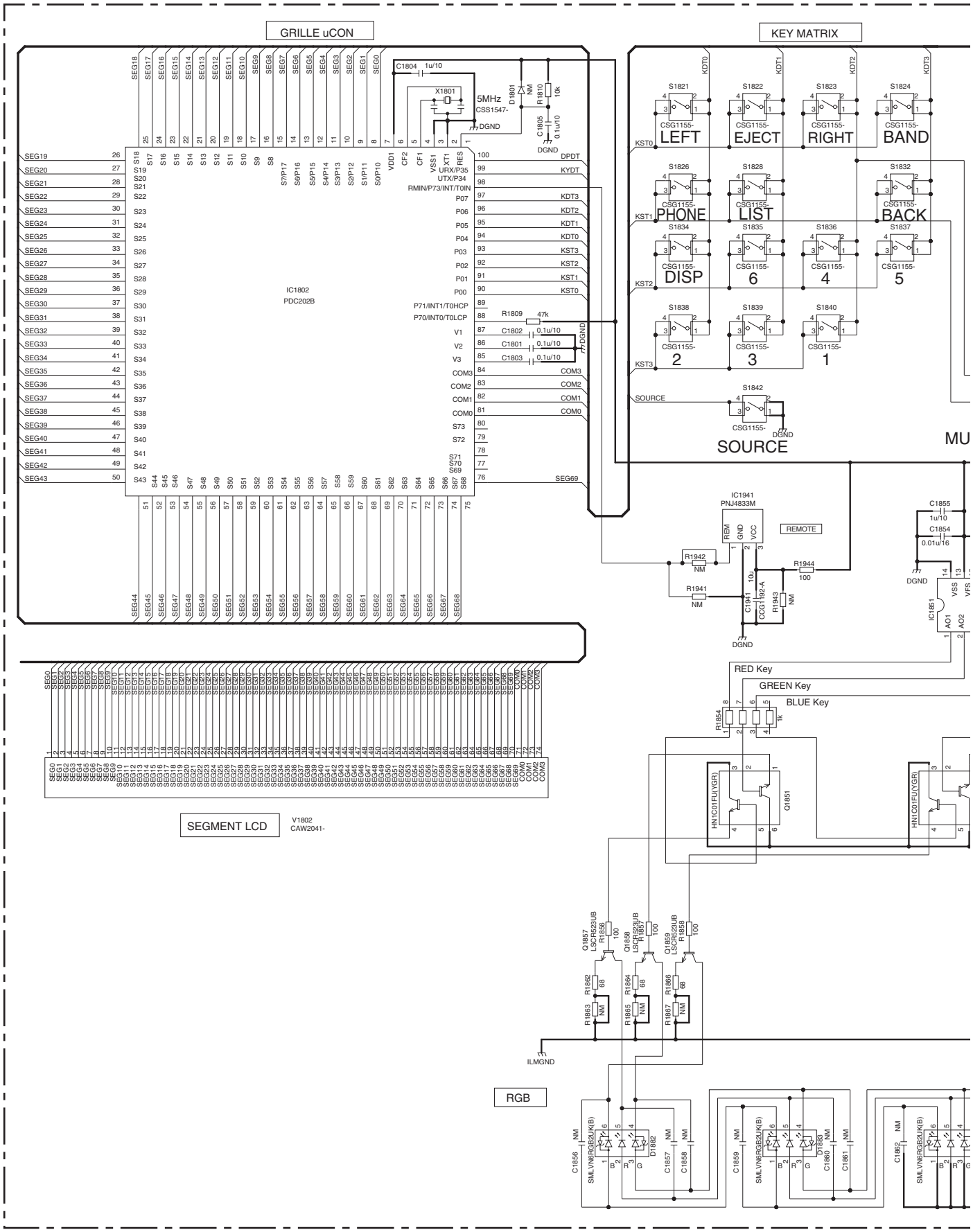
- Symbol indicates a resistor.
  No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor.
  No differentiation is made between chip capacitors and discrete capacitors.

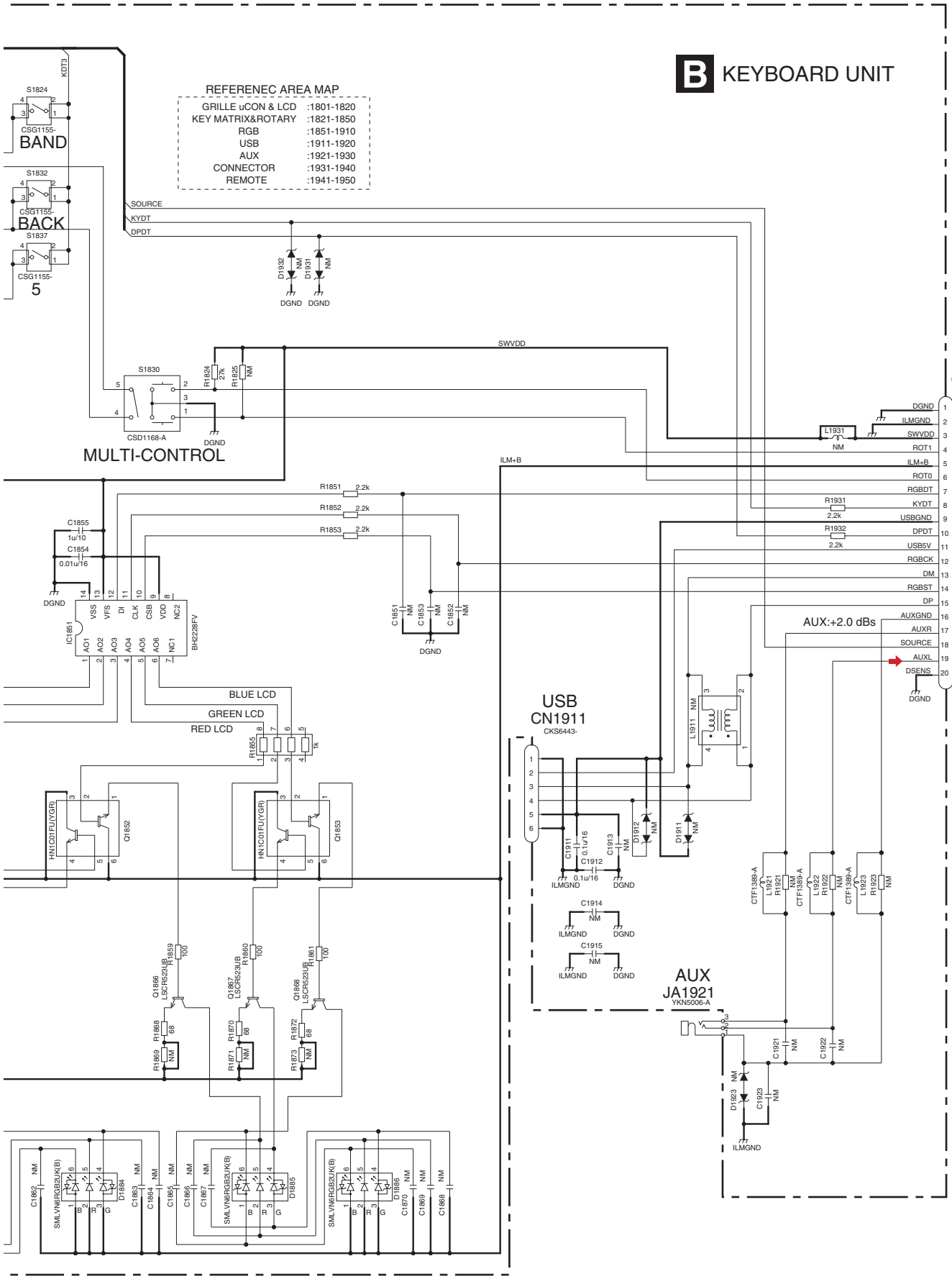
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

NM : No Mount

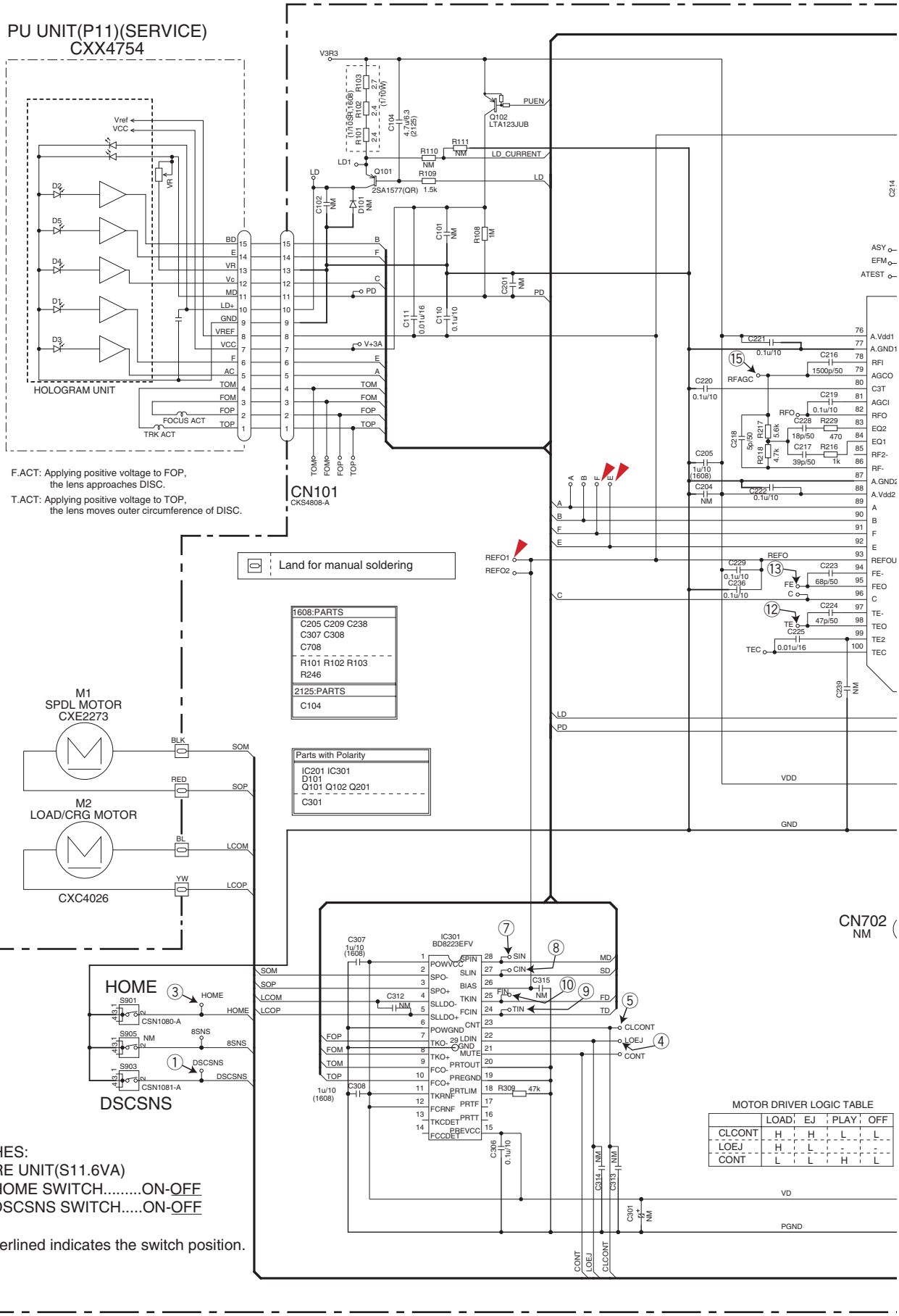
A	DEH-X66BT/XNUC
B	DEH-X6600BT/XNUC
C	DEH-X6650BT/XNGS
D	DEH-X6650BT/XNCS
E	DEH-X6690BT/XNID

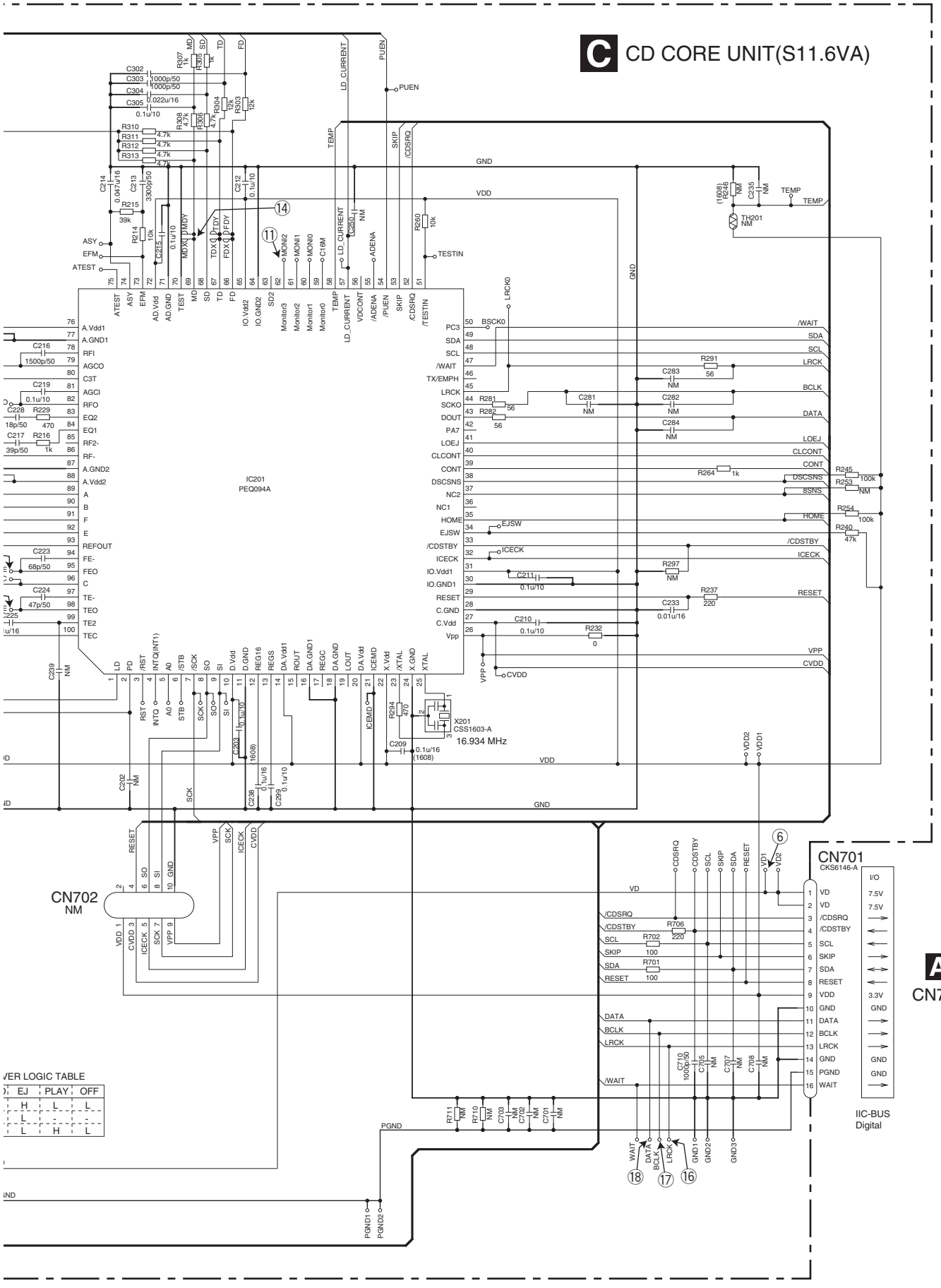
10.2 KEYBOARD UNIT



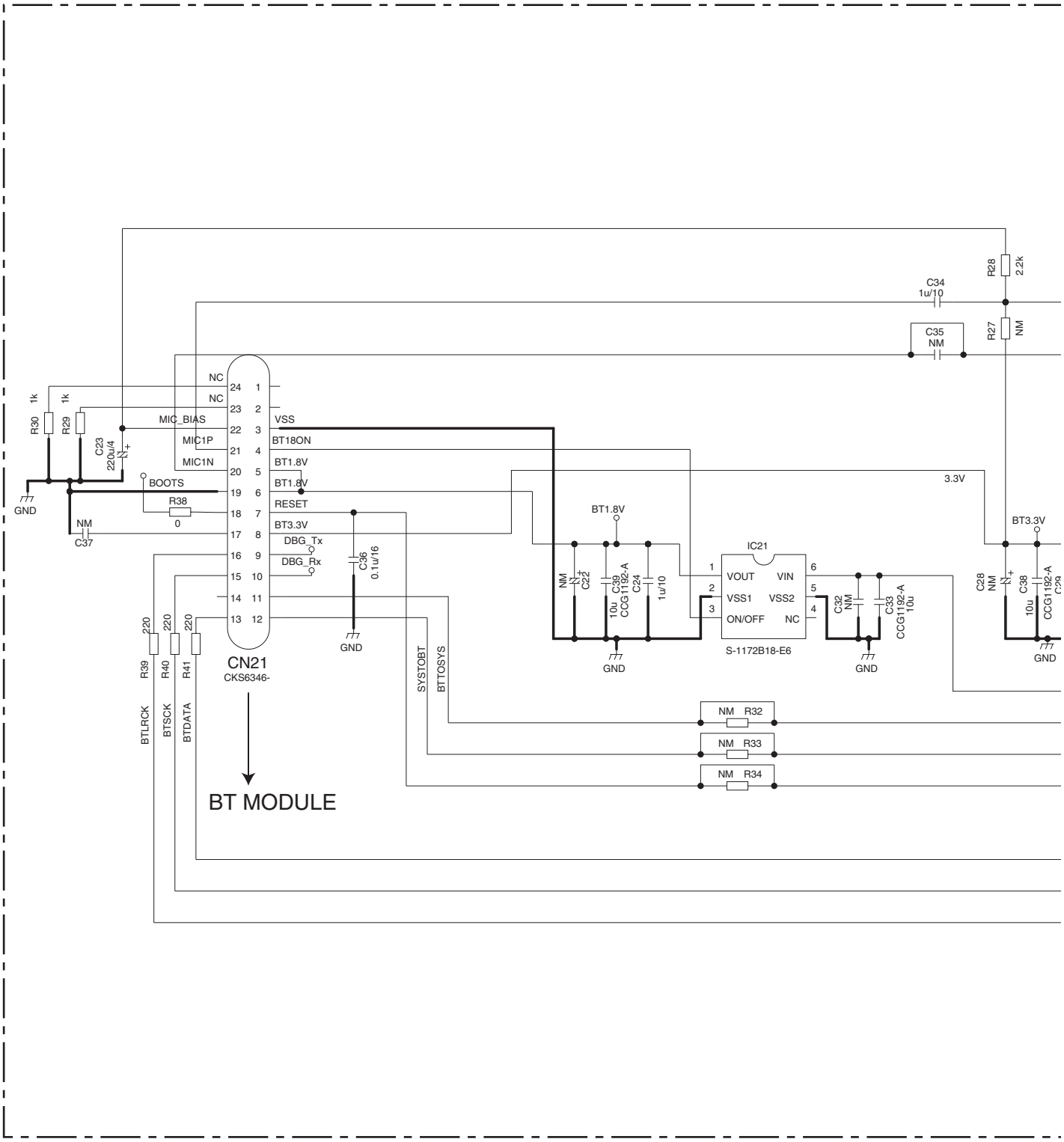

B KEYBOARD UNIT
REFERENEC AREA MAP
GRILLE uCON & LCD :1801-1820
KEY MATRIX&ROTARY :1821-1850
RGB :1851-1910
USB :1911-1920
AUX :1921-1930
CONNECTOR :1931-1940
REMOTE :1941-1950
S1824
CSG1155-
BAND
S1832
CSG1155-
BACK
S1837
CSG1155-
5
S1830
CSD1168-A
MULTI-CONTROL
SOURCE
KYDT
DPDT
SWVDD
ILM+B
BLUE LCD
GREEN LCD
RED LCD
AUX:+2.0 dBs
CN1931
CKS6451
A
CN801
USB
CN1911
CKS6443-
AUX
JA1921
YKN5006-A
IC1851
BH2228FV
Q1852
Q1853
Q1866
Q1867
Q1868
SML-VN6RGB2U-K(B)
DGND
ILMGND

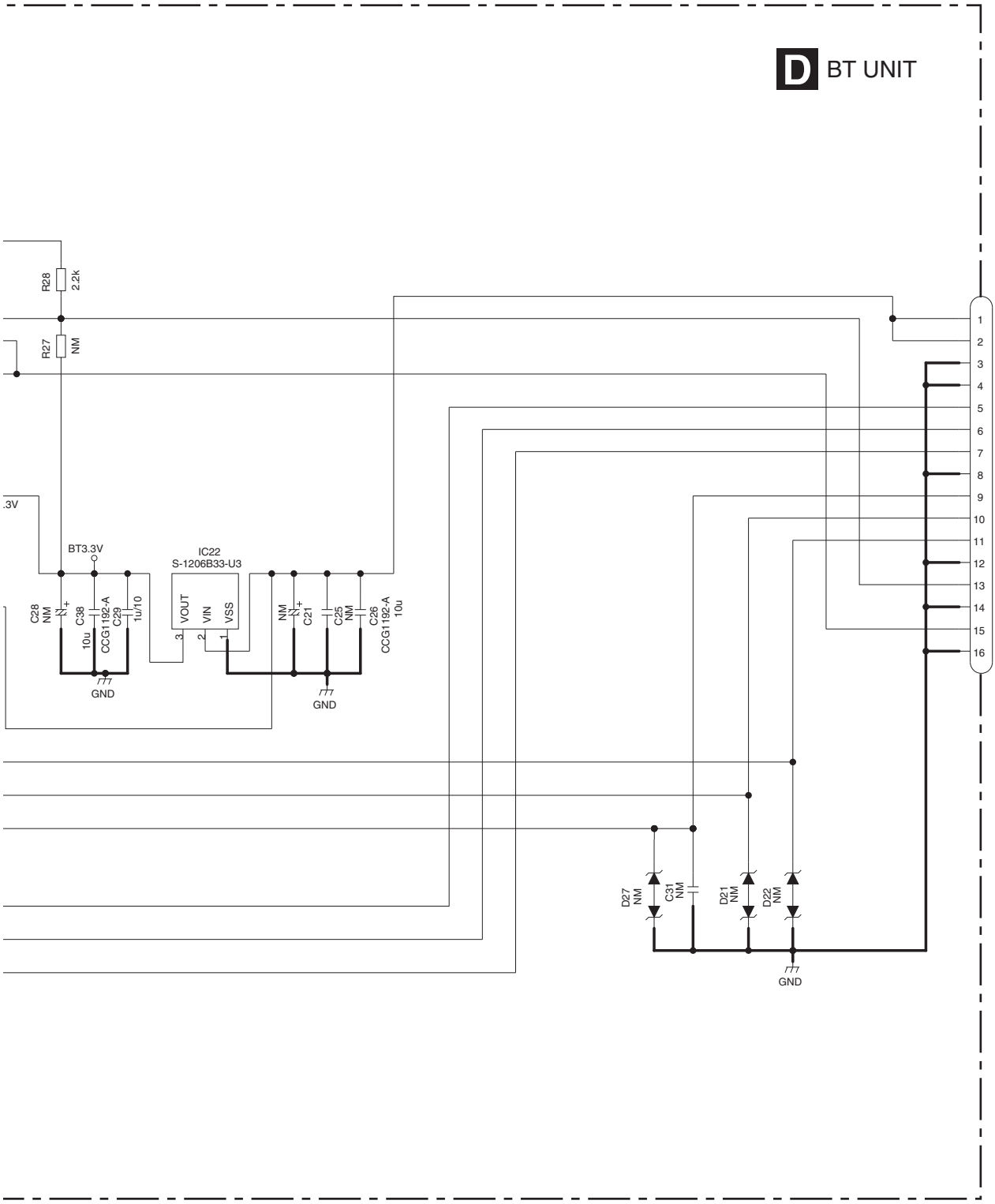
10.3 CD CORE UNIT (S11.6VA)




C CD CORE UNIT(S11.6VA)
IC201
PEQ094A
X201
CSS1603-A
16.934 MHz
CN702
NM
CN701
CKS6146-A
A
CN701
IIC-BUS
Digital
VER LOGIC TABLE
EJ
PLAY
OFF

10.4 BT UNIT


NC
NC
MIC_BIAS
MIC1P
MIC1N
BOOTS
RESET
BT3.3V
DBG_Tx
DBG_Rx
VSS
BT18ON
BT1.8V
BT1.8V
R30 1k
R29 1k
C23 220u/4
R38 0
NM C37
GND
CN21
CKS6346-
R39 220
R40 220
R41 220
BTLRCK
BTSCK
BTDATA
C36 0.1u/16
SYSTOBT
BTTOSYS
BT MODULE
R28 2.2k
C34 1u/10
C35 NM
R27 NM
3.3V
BT1.8V
NM C22
C39 10u CCG1192-A
C24 1u/10
IC21
VOUT
VIN
VSS1
VSS2
ON/OFF
NC
S-1172B18-E6
C32 NM
C33 10u CCG1192-A
BT3.3V
C28 NM
C38 10u CCG1192-A
NM R32
NM R33
NM R34


D BT UNIT
CN23
CKS3857-A
1 VCC
2 VCC
3 GND
4 GND
5 BTDATA
6 BTSCK
7 BTRLCK
8 GND
9 NRST_CPU
10 SYSTOBT
11 BTTOSYS
12 GND
13 MIC1P
14 GND
15 MIC1N
16 GND
A
CN971
R28 2.2k
R27 NM
BT3.3V
IC22
S-1206B33-U3
VOUT
VIN
VSS
C28 NM
C38 10u
CCG1192-A
C29 1u/10
NM C21
C25 NM
C26 CCG1192-A 10u
GND
D27 NM
C31 NM
D21 NM
D22 NM

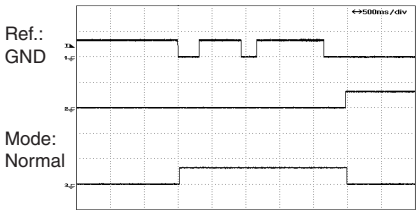
10.5 WAVEFORMS

● CD CORE UNIT(S11.6VA)

Note : 1. The encircled numbers denote measuring points in the circuit diagram.
2. Reference voltage REFO1(1.65 V)

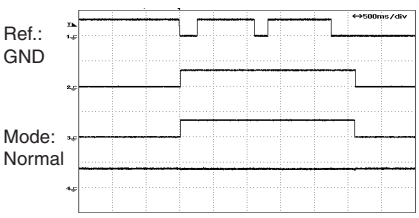
①DSCSNS	5 V/div	500 ms/div
③HOME	5 V/div	
④LOEJ	5 V/div	

12 cm CD Loading operation



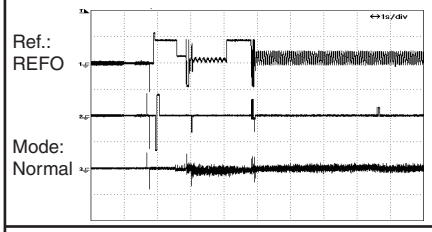
①DSCSNS	5 V/div	500 ms/div
⑤CLCONT	5 V/div	
④LOEJ	5 V/div	
⑥VD1	10 V/div	

12 cm CD Loading operation



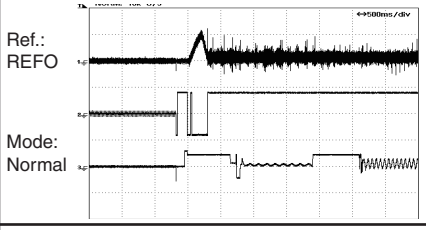
⑦SIN	1 V/div	1 s/div
⑧CIN	500 mV/div	
⑨TIN	500 mV/div	

12 cm CD-DA setup operation after loading



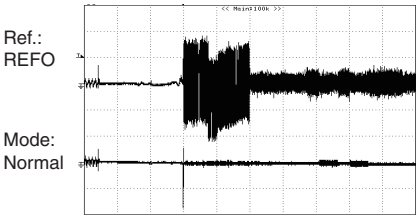
⑩FIN	200 mV/div	500 ms/div
⑪RFOK(MONI_2)	2 V/div	
⑦SIN	2 V/div	

12 cm CD-DA Source On setup operation



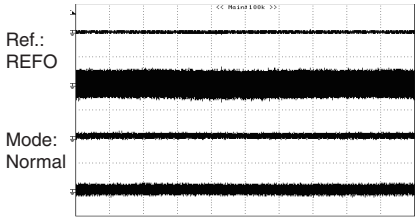
⑫TE	500 mV/div	200 ms/div
⑬FE	500 mV/div	

Source On setup operation



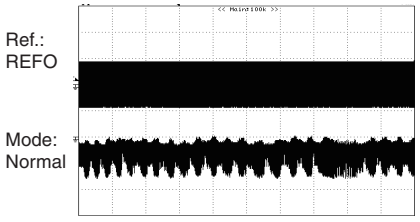
⑬FE	500 mV/div	20 ms/div
⑩FIN	500 mV/div	
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

CD-DA Play operation



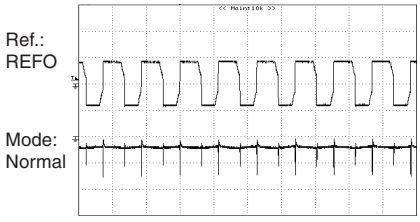
⑭MDX	2 V/div	50 ms/div
⑦SIN	500 mV/div	

Spindle waveform during play operation



⑭MDX	2 V/div	5 μs/div
⑦SIN	500 mV/div	

Spindle waveform during play operation (Wider)

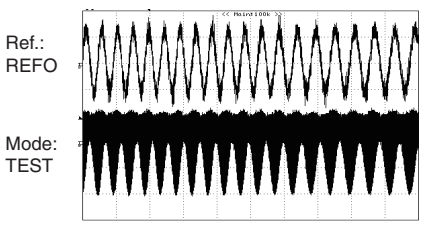


⑩FIN	500 mV/div	200 ms/div
⑬FE	500 mV/div	

Focus Search waveform

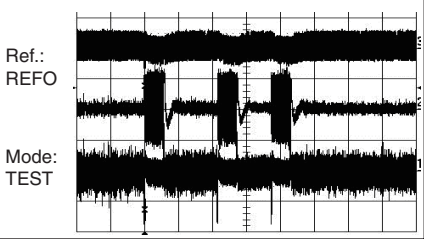
⑫TE	500 mV/div	2 ms/div
⑮RFAGC	500 mV/div	

Track Open waveform



⑮RFAGC	1 V/div	500 μs/div
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

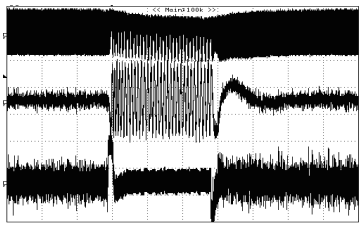
100 Track Jump waveform (32 Track Jump x 3)



⑮RFAGC	1 V/div	2 ms/div
⑫TE	500 mV/div	
⑨TIN	500 mV/div	

32 Tracks Jump waveform
(Zoom of 100 Track Jump waveform)

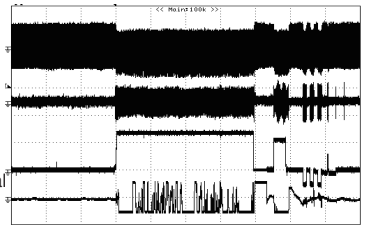
Ref.: REFO
Mode: TEST



⑮RFAGC	1 V/div	200 ms/div
⑫TE	1 V/div	
⑧CIN	500 mV/div	
⑦SIN	2 V/div	

Search operation(Outter to Inner)

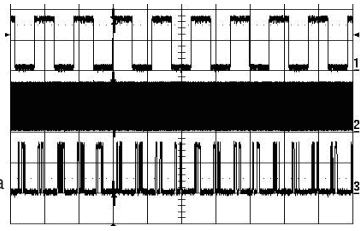
Ref.: REFO
Mode: Normal



⑯LRCK	2 V/div	10 us/div
⑰BCLK	2 V/div	
⑱DOUT(DATA)	2 V/div	

Digital Out waveform

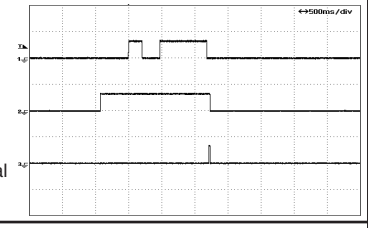
Ref.: GND
Mode: Norma



①DSCSNS	5 V/div	500 ms/div
⑤CLCONT	5 V/div	
④LOEJ	5 V/div	

12 cm CD Eject operation

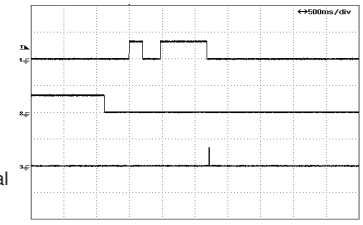
Ref.: GND
Mode: Normal



①DSCSNS	5 V/div	500 ms/div
③HOME	5 V/div	
④LOEJ	5 V/div	

12 cm CD Eject operation

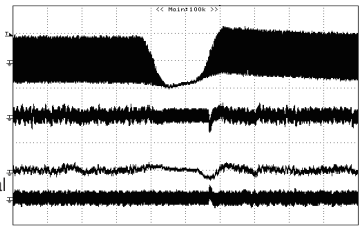
Ref.: GND
Mode: Normal



⑮RFAGC	1 V/div	500 μs/div
⑨TIN	1 V/div	
⑫TE	1 V/div	
⑩FIN	1 V/div	

Black Dot (800 μm) during play

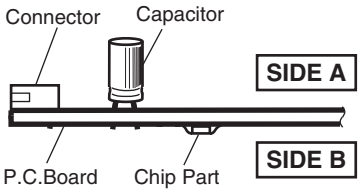
Ref.: REFO
Mode: Normal



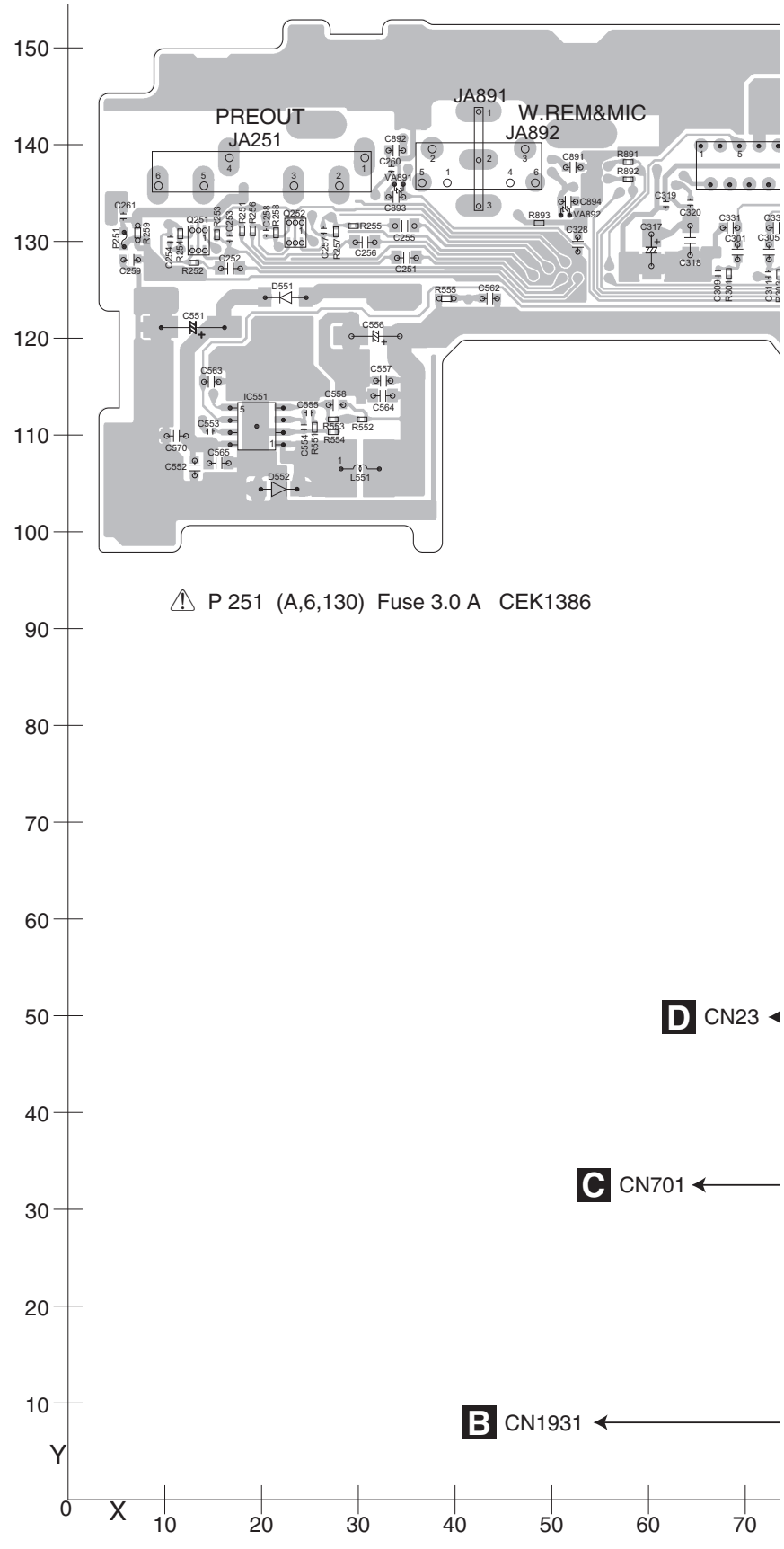
11. PCB CONNECTION DIAGRAM
11.1 TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams

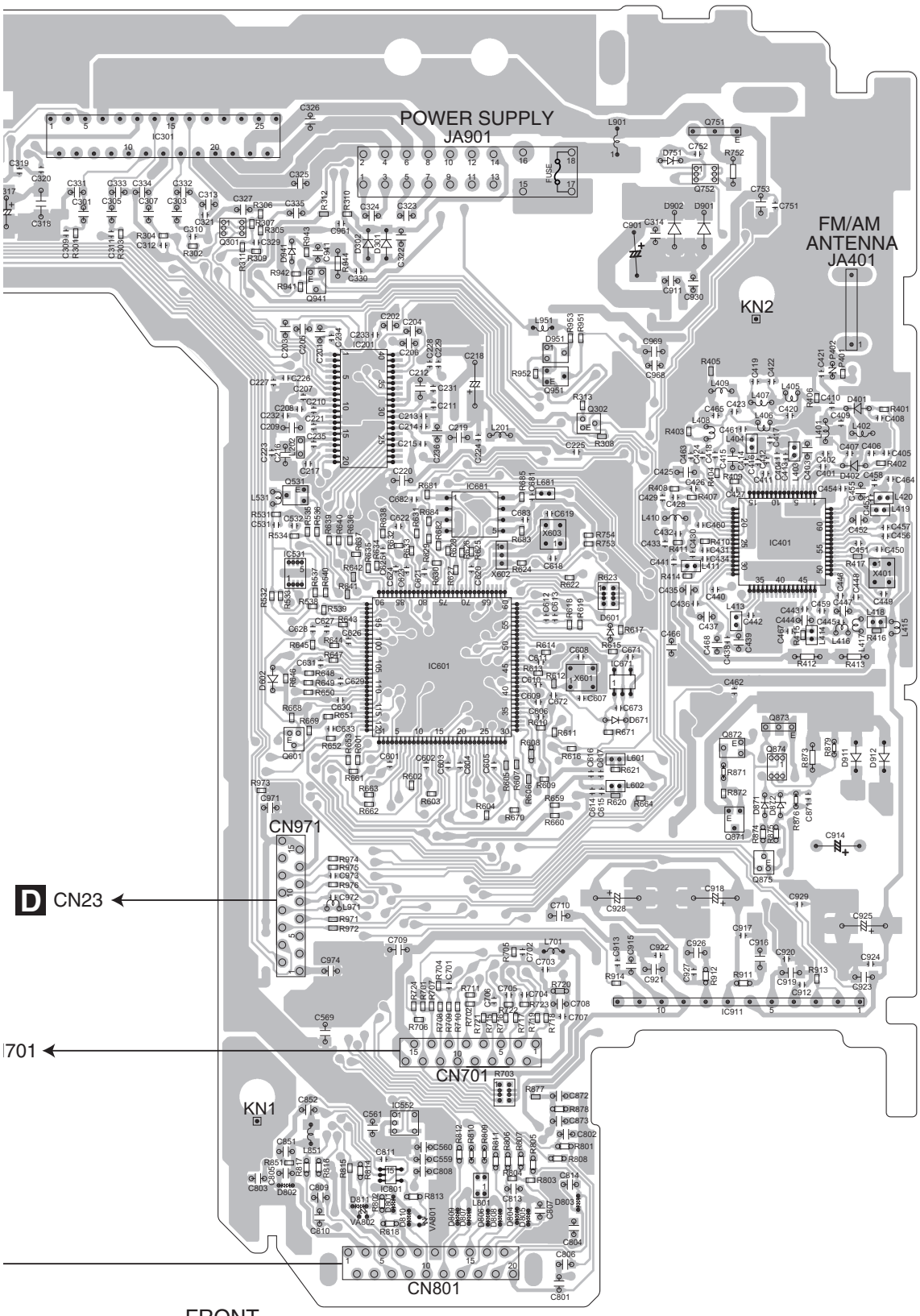


A TUNER AMP UNIT

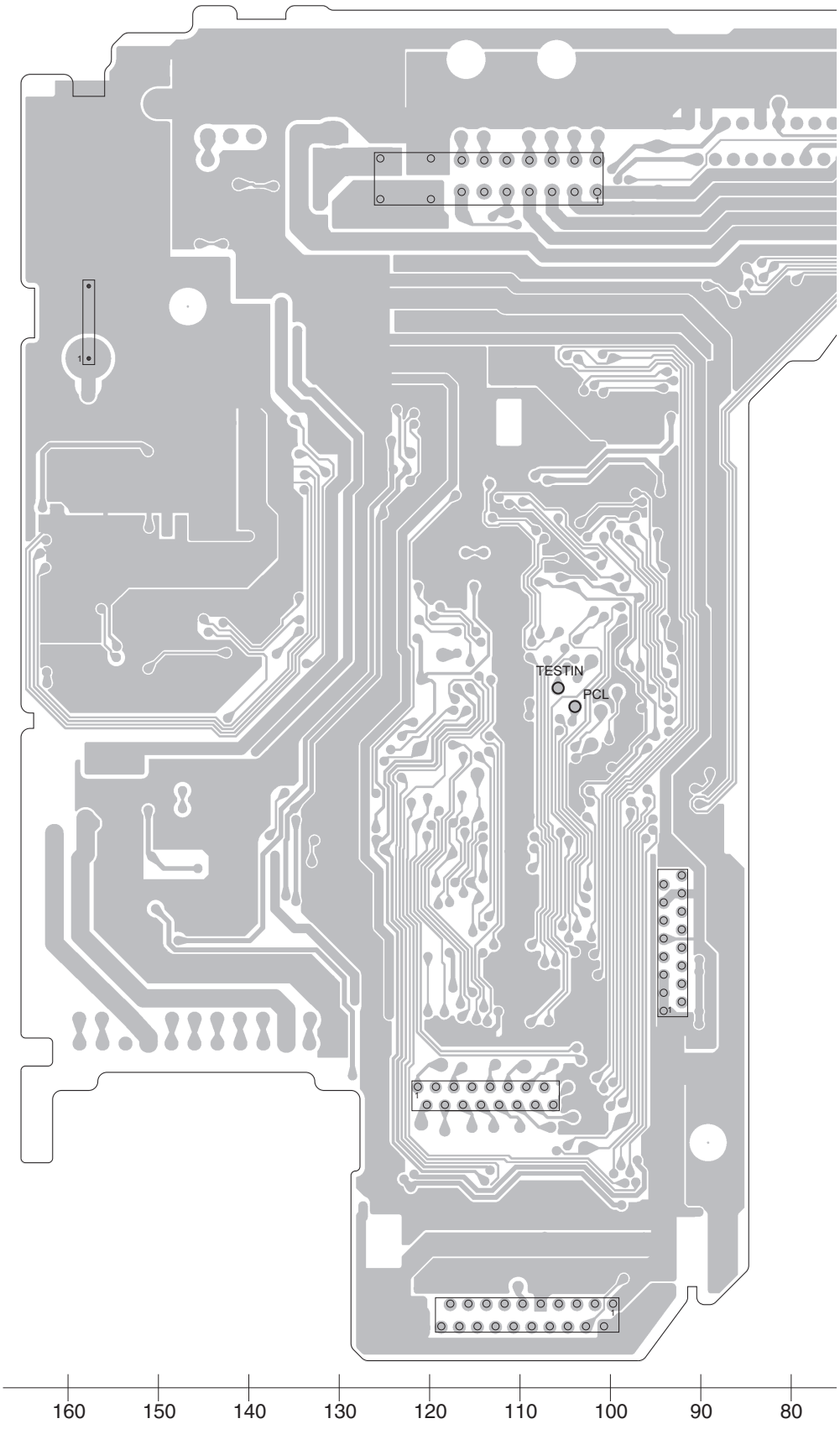


⚠ P 251 (A,6,130) Fuse 3.0 A CEK1386

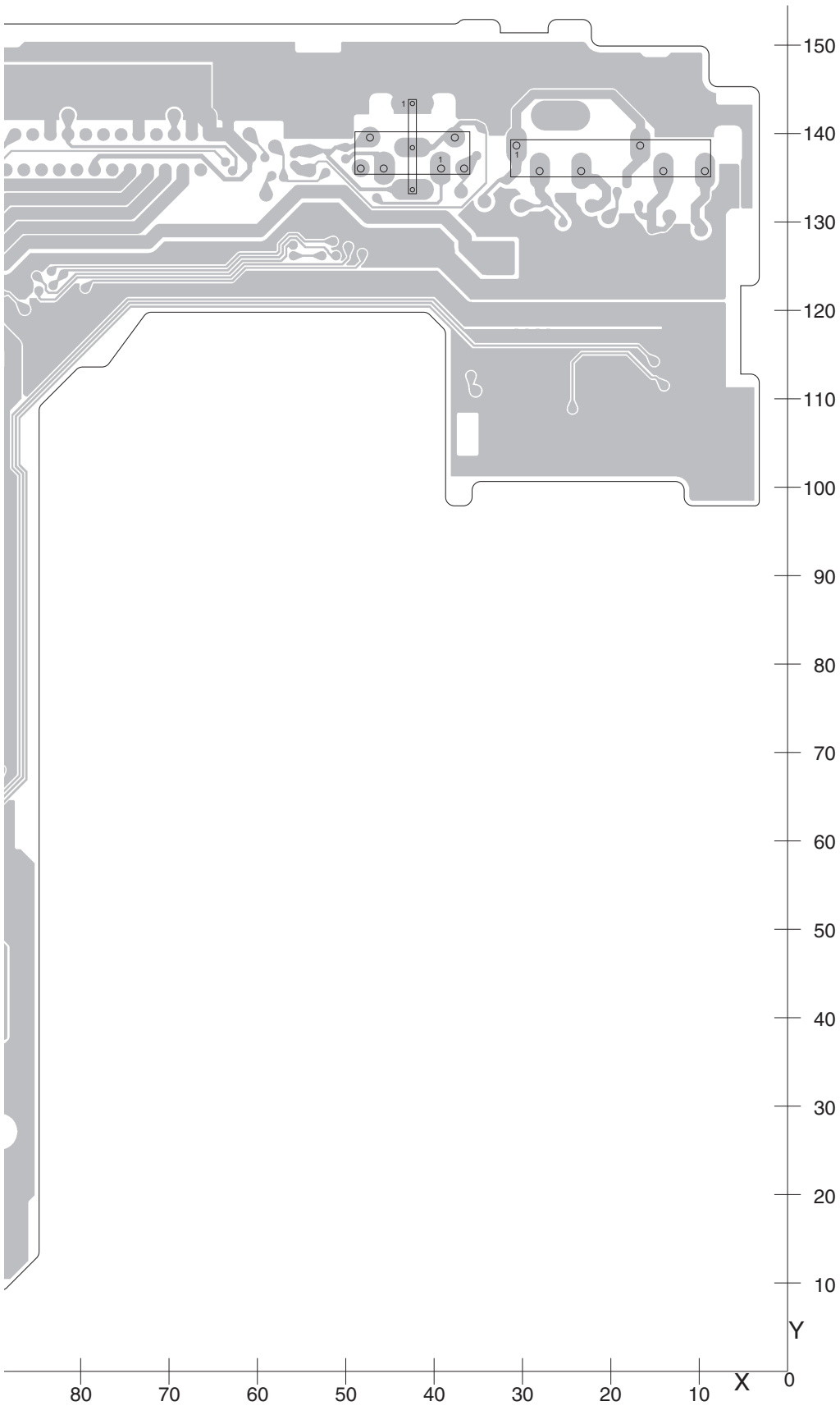
SIDE A


POWER SUPPLY
JA901
FM/AM
ANTENNA
JA401
KN2
KN1
IC301
IC201
IC681
IC531
IC601
IC401
IC911
IC552
IC801
CN971
CN23
CN701
CN801
FRONT
0
70
80
90
100
110
120
130
140
150
160

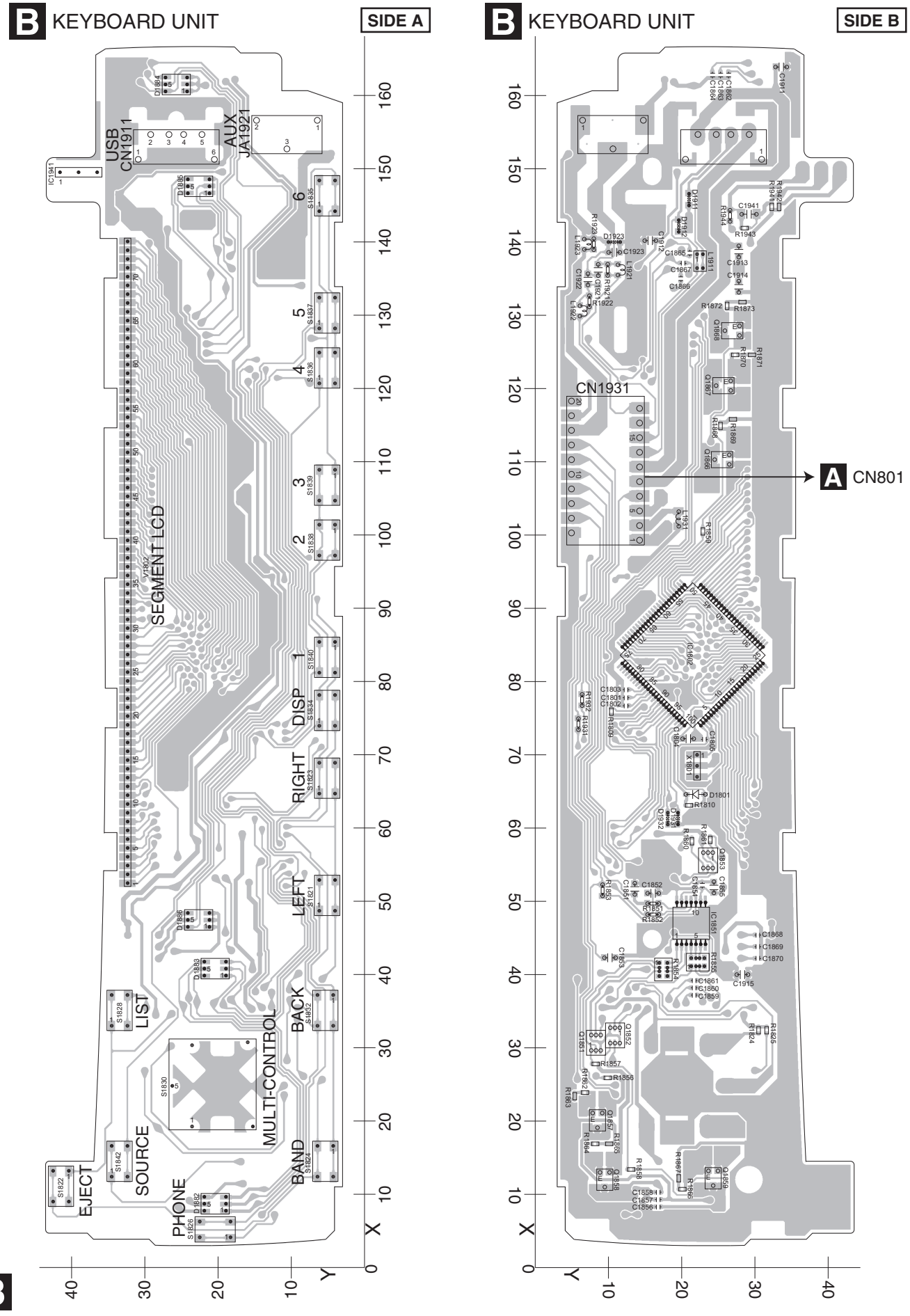
A TUNER AMP UNIT



SIDE B


150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Y
0
80
70
60
50
40
30
20
10
X

11.2 KEYBOARD UNIT



A

B

C

D

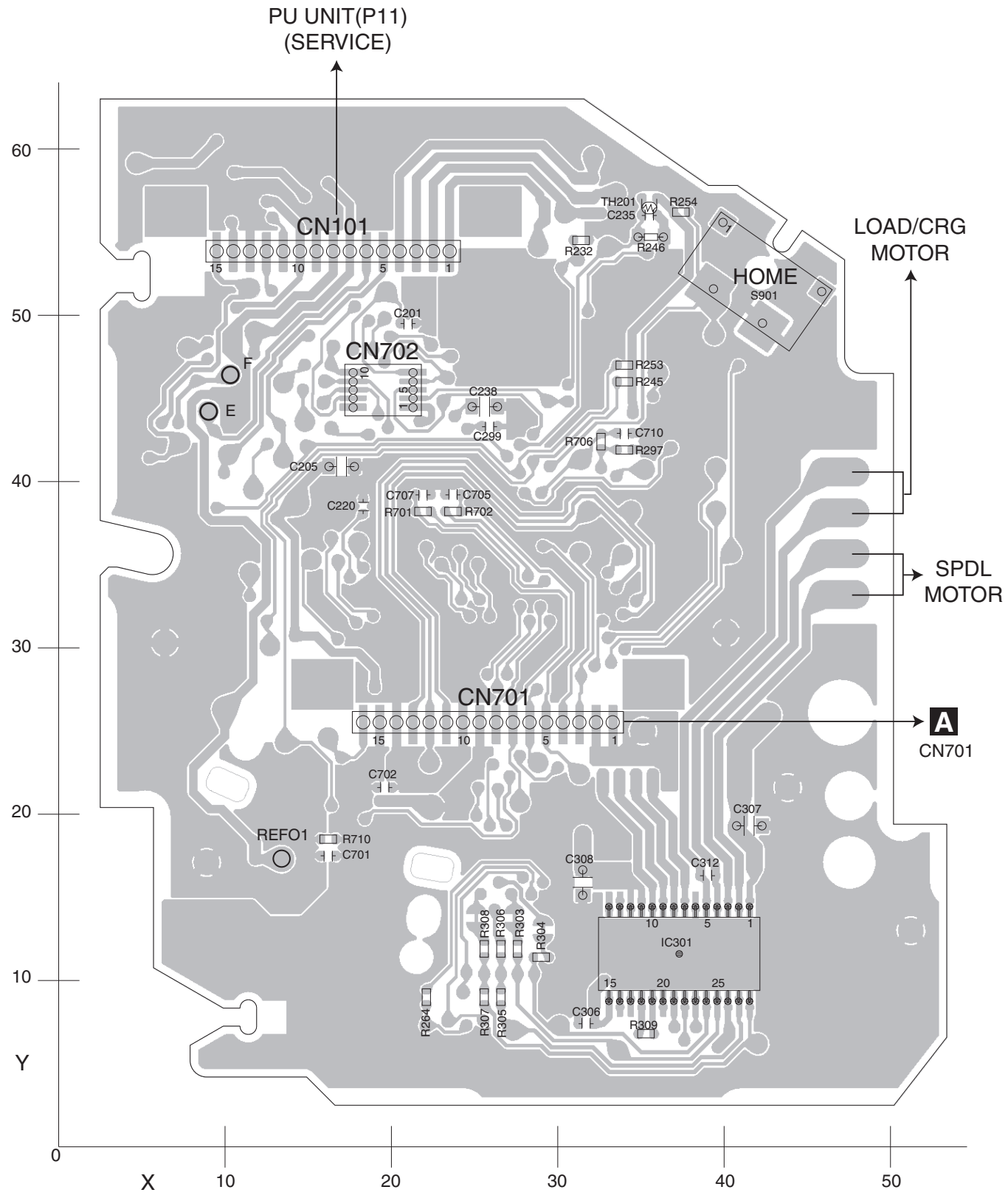
E

F

11.3 CD CORE UNIT (S11.6VA)

C CD CORE UNIT(S11.6VA)

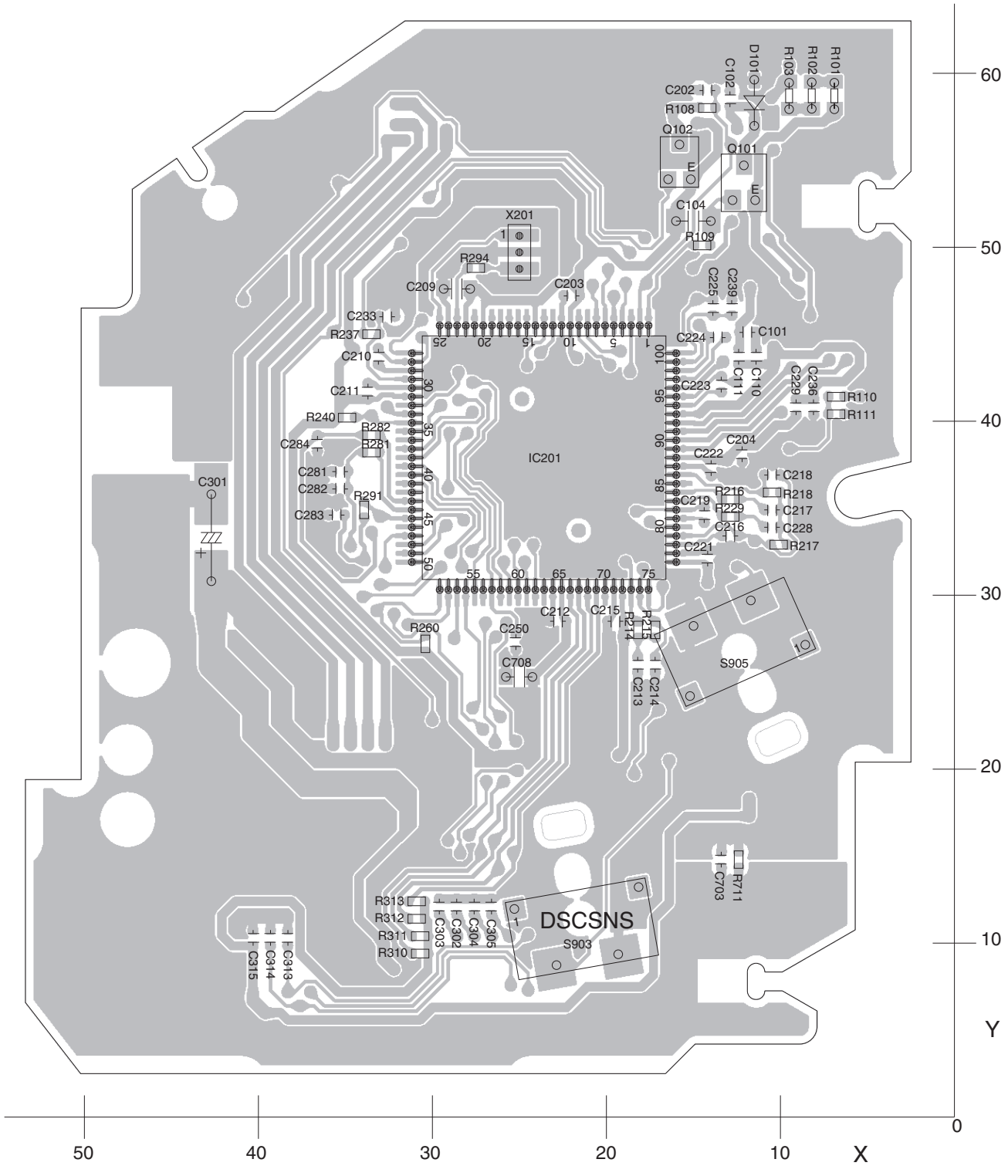
SIDE A



C

C CD CORE UNIT(S11.6VA)

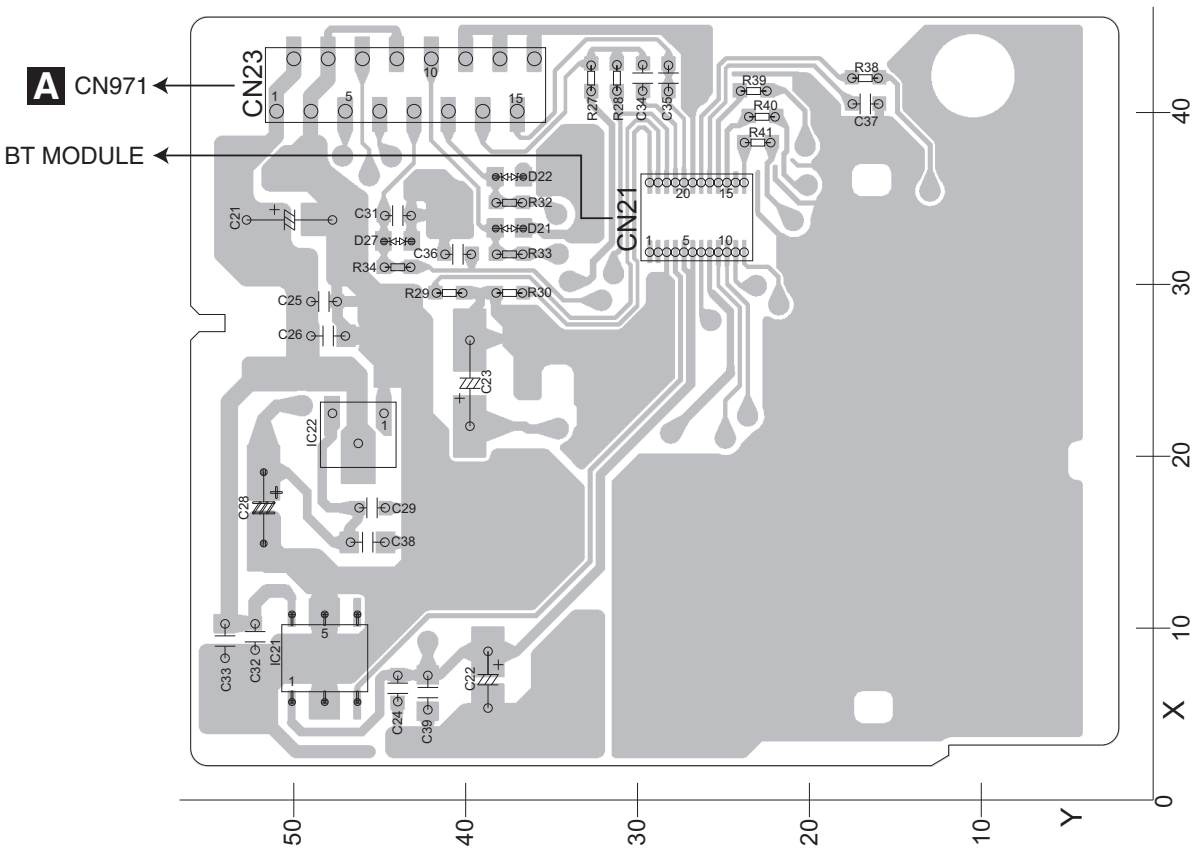
SIDE B



11.4 BT UNIT

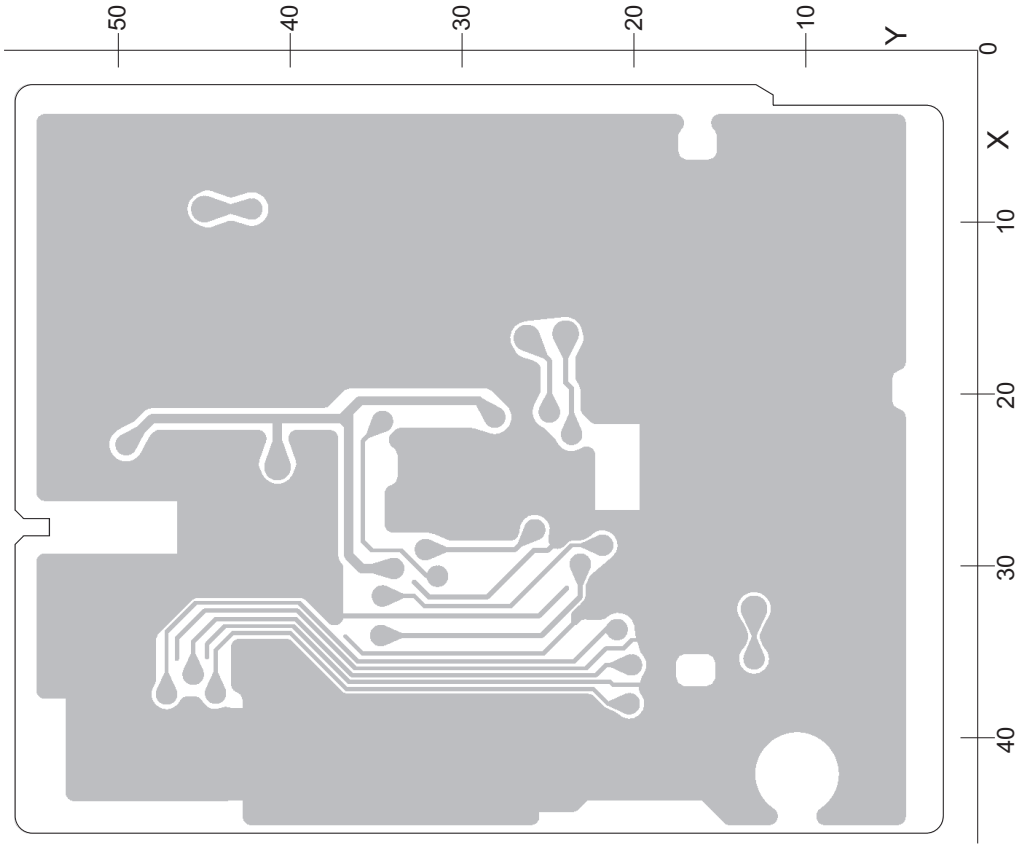
D BT UNIT

SIDE A



D BT UNIT

SIDE B



D

12. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

  Chip Resistor

  RS1/◯S◯◯◯J,RS1/◯◯S◯◯◯J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*

  Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

  IC 301 (A, 91, 111) IC NJM2068V
- *The expression of the unit in this manual is shown by u instead of μ. Please do not make a mistake.*

A:DEH-X66BT/XNUC
B:DEH-X6600BT/XNUC
C:DEH-X6650BT/XNGS
D:DEH-X6650BT/XNCS
E:DEH-X6690BT/XNID

Unit Number : QWM3617(A)
Unit Number : QWM3616(B)
Unit Number : QWM3619(C)
Unit Number : QWM3618(D)
Unit Number : QWM3620(E)
Unit Name : Tuner Amp Unit
Unit Number :
Unit Name : Keyboard Unit
Unit Number : CWX4269
Unit Name : CD Core Unit(S11.6VA)
Unit Number : QWM3750
Unit Name : BT Unit

A

Unit Number : QWM3617(A)
Unit Number : QWM3616(B)
Unit Number : QWM3619(C)
Unit Number : QWM3618(D)
Unit Number : QWM3620(E)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 201	(A,102,107) LSI	PM9013A

Circuit Symbol and No.		Part No.
IC 301	(A,78,142) IC	PA2032A
IC 401	(A,150,91) IC	TDA7706
IC 531	(A,94,88) IC	337S3959
IC 551	(A,20,111) Regulator IC	BD9876EFJ
IC 552	(A,106,24) IC	BD2232G-G
IC 601	(A,111,77) IC	R5S726A0D216FP
IC 671	(A,131,75) IC	S-80827CNMC-B8M
IC 681	(A,114,94) Flash ROM Unit(A,B)	PEB093A8
	(A,114,94) Flash ROM Unit(C,D,E)	PEB089A8
IC 801	(A,105,18) L-MOS And Gate	TC7SET08FUS1
IC 911	(A,145,28) Regulator IC	BA49183-V12
Q 251	(A,14,130) Chip Transistor	RN1910
Q 252	(A,24,131) Chip Transistor	RN1910
Q 301	(A,86,127) Chip Transistor	RN4983
Q 531	(A,94,97) Transistor	LSAR523UB
Q 601	(A,93,68) Transistor	LTC014YEB
Q 751	(A,142,139) Transistor	KTD2092
Q 752	(A,141,134) Chip Transistor	RN4983
Q 871	(A,144,59) Transistor	2SA1577
Q 872	(A,144,67) Transistor	LTC143EUB
Q 941	(A,96,121) Transistor	LSCR523UB
D 401	(A,158,107) Diode	RN731VN
D 402	(A,158,100) Diode	RN731VN
D 551	(A,23,124) Diode	CMS03
D 552	(A,22,104) Diode	RB056L-40
D 601	(A,130,81) Diode(A,B)	RB751SM-40
D 602	(A,91,75) Diode(A,B)	RB551VM-30
D 751	(A,137,135) Diode	DZ2J082M0
D 801	(A,105,15) Diode	DZ2S068C
D 802	(A,93,17) Diode	DZ2S068C
D 803	(A,126,15) Diode	DZ2S068C
D 804	(A,119,14) Diode	DZ2S068C
D 805	(A,120,13) Diode	DZ2S068C
D 806	(A,116,13) Diode	DZ2S068C
D 807	(A,114,13) Diode	DZ2S068C
D 808	(A,117,13) Diode	DZ2S068C
D 809	(A,112,13) Diode	DZ2S068C
D 901	(A,141,127) Diode	1SR154-400
D 902	(A,137,127) Diode	1SR154-400
D 911	(A,158,66) Diode	CRG03

Circuit Symbol and No.		Part No.
D 912	(A,161,66) Diode	CRG03
D 941	(A,93,125) Diode	DZ2J068M0
L 202	(A,94,102) Inductor	CTF1793
L 401	(A,155,104) Chip Coil	LCTAWR27J2520
L 402	(A,159,104) Chip Coil	LCTAWR15J2520
L 403	(A,151,102) Inductor	CTF1786
L 404	(A,146,102) Inductor	CTF1786
L 405	(A,151,108) Inductor(A,B,D)	LCYB68NJ1608
L 406	(A,148,105) Inductor(A,B,D)	CTF1389
L 407	(A,147,107) Chip Coil(C,E)	LCTAWR27J2520
L 408	(A,141,104) Inductor(A,B,D)	LCTC4R7K1608
	(A,141,104) Inductor(C,E)	LCTC1R5K1608
L 409	(A,143,109) Chip Coil(C,E)	LCTAWR39J2520
L 410	(A,137,94) Chip Coil(A,B,D)	LCTAW470J2520
	(A,137,94) Inductor(C,E)	LCTAW2R2J2520
L 413	(A,144,82) Inductor	CTF1786
L 419	(A,161,95) Inductor	CTF1786
L 420	(A,161,96) Inductor	CTF1786
L 551	(A,30,107) Inductor	CTH1524
L 801	(A,115,17) Inductor	CTF1713
L 901	(A,112,141) Choke Coil 600 uH	CTH1432
X 401	(A,161,88) Crystal Resonator 36.48 MHz	CSS1848
X 601	(A,127,76) Crystal Resonator 12 MHz	CSS1847
X 603	(A,123,92) Resonator 16.93 MHz	CSS1794
⚠ P251	(A,6,130) Fuse 3.0 A	CEK1386
P 402	(A,156,111) Surge Absorber	HSPC16701B02
VA801	(A,108,13) SMD Varistor	MLV0402ES012V0010N
VA802	(A,101,13) SMD Varistor	MLV0402ES012V0010N
CN701	(A,114,32) Connector	VKN1192
CN801	(A,109,4) Connector	CKS6452
CN971	(A,93,49) Connector	VKN1192
JA251	(A,19,138) Pin Jack	CKB1099
JA401	(A,158,129) Antenna Jack	YKS5041
JA892	(A,42,141) Jack	YKS5035
JA901	(A,114,141) Connector	CKM1613
⚠	Fuse 10 A	YEK5001

RESISTORS

R 251	(A,18,131)	RS1/16SS821J
R 252	(A,13,128)	RS1/16SS821J
R 253	(A,15,131)	RS1/16SS223J
R 254	(A,12,131)	RS1/16SS223J
R 255	(A,30,132)	RS1/16SS821J
R 256	(A,19,131)	RS1/16SS821J
R 257	(A,28,131)	RS1/16SS223J
R 258	(A,22,131)	RS1/16SS223J
R 301	(A,68,127)	RS1/16SS471J
R 302	(A,82,125)	RS1/16SS471J
R 303	(A,74,127)	RS1/16SS471J
R 304	(A,78,126)	RS1/16SS471J
R 305	(A,90,127)	RS1/16SS103J
R 306	(A,90,129)	RS1/16SS221J
R 307	(A,89,128)	RS1/16SS223J
R 309	(A,89,125)	RS1/16SS103J
R 310	(A,100,129)	RS1/16SS0R0J
R 311	(A,88,125)	RS1/16SS473J
R 401	(A,161,106)	RS1/16SS221J
R 402	(A,161,100)	RS1/16SS751J
R 403	(A,139,104) (A,B,D)	RS1/16SS391J
	(A,139,104) (C,E)	RS1/16SS331J
R 404	(A,142,99)	RS1/16SS105J
R 406	(A,154,108)	RS1/16SS105J
R 407	(A,139,96)	RS1/16SS330J
R 408	(A,137,97) (A,B,D)	RS1/16SS471J
	(A,137,97) (C,E)	RS1/16SS361J
R 409	(A,144,98) (C,E)	RS1/16SS0R0J
R 411	(A,138,91) (A,B,D)	RS1/16SS681J
	(A,138,91) (C,E)	RS1/16SS391J
R 412	(A,153,78)	RS1/4SA8R2J
R 413	(A,158,78)	RS1/4SA8R2J
R 414	(A,139,87)	RS1/16SS0R0J
R 415	(A,152,80)	RS1/16SS0R0J
R 531	(A,91,94)	RS1/16SS473J
R 532	(A,91,85)	RS1/16SS222J
R 533	(A,92,85)	RS1/16SS222J
R 534	(A,94,92)	RS1/16SS272J
R 535	(A,95,92)	RS1/16SS472J
R 536	(A,96,92)	RS1/16SS472J
R 537	(A,96,85)	RS1/16SS101J
R 538	(A,96,84)	RS1/16SS101J
R 551	(A,26,111)	RS1/16SS682J
R 552	(A,30,112)	RS1/16SS0R0J
R 553	(A,27,112)	RS1/16SS1803D
R 554	(A,27,110)	RS1/16SS4302D
R 555	(A,39,124)	RS1/10SR471J
R 601	(A,101,66)	RS1/16SS473J
R 602	(A,107,63)	RS1/16SS473J
R 603	(A,109,62)	RS1/16SS473J
R 609	(A,122,64)	RS1/16SS473J
R 610	(A,122,70)	RS1/16SS473J
R 611	(A,123,69)	RS1/16SS473J
R 613	(A,122,76)	RS1/16SS152J
R 614	(A,123,78)	RS1/16SS473J
R 615	(A,130,79)	RS1/16SS473J
R 616	(A,125,67)	RS1/16SS473J
R 617	(A,131,81)	RS1/16SS103J
R 618	(A,125,82) (B,D)	RS1/16SS473J
	(A,125,82) (E)	RS1/16SS103J
R 619	(A,126,82) (A,C,E)	RS1/16SS473J
R 622	(A,125,87)	RS1/16SS473J
R 623	(A,130,85)	RAB4CQ473J
R 624	(A,120,89)	RS1/16SS222J
R 625	(A,114,90)	RS1/16SS221J
R 626	(A,113,90)	RS1/16SS221J
R 627	(A,112,88)	RS1/16SS221J
R 628	(A,111,90)	RS1/16SS221J
R 629	(A,109,92)	RS1/16SS221J
R 630	(A,110,89)	RS1/16SS221J
R 631	(A,108,92)	RS1/16SS473J
R 632	(A,106,91)	RS1/16SS473J
R 633	(A,107,90)	RS1/16SS101J
R 634	(A,103,88)	RS1/16SS102J
R 635	(A,102,88)	RS1/16SS102J
R 636	(A,100,91)	RS1/16SS473J
R 637	(A,101,90)	RS1/16SS473J
R 638	(A,104,92)	RS1/16SS473J
R 639	(A,98,91)	RS1/16SS472J
R 640	(A,99,91)	RS1/16SS472J
R 643	(A,99,82)	RS1/16SS104J

Circuit Symbol and No.		Part No.
R 644	(A,98,79)	RS1/16SS101J
R 645	(A,96,79)	RS1/16SS101J
R 646	(A,93,75)	RS1/16SS103J
R 647	(A,98,78)	RS1/16SS101J
R 648	(A,95,76)	RS1/16SS102J
R 649	(A,95,75)	RS1/16SS102J
R 650	(A,95,74)	RS1/16SS102J
R 651	(A,97,71)	RS1/16SS473J
R 652	(A,98,69)	RS1/16SS222J
R 653	(A,100,66)	RS1/16SS103J
R 659	(A,124,61)	RS1/16SS153J
R 660	(A,124,60)	RS1/16SS153J
R 664	(A,133,62)	RS1/16SS103J
R 668	(A,93,71)	RS1/16SS473J
R 669	(A,95,69)	RS1/16SS473J
R 671	(A,130,69)	RS1/16SS104J
R 681	(A,109,97)	RS1/16SS473J
R 682	(A,110,91)	RS1/16SS473J
R 683	(A,120,92)	RS1/16SS473J
R 684	(A,109,94)	RS1/16SS473J
R 685	(A,120,96)	RS1/16SS473J
R 701	(A,108,38)	RS1/16SS473J
R 702	(A,114,38)	RS1/16SS104J
R 703	(A,118,28)	RAB4CQ472J
R 704	(A,110,40)	RS1/16SS104J
R 706	(A,108,36)	RS1/16SS221J
R 707	(A,109,38)	RS1/16SS221J
R 708	(A,110,38)	RS1/16SS101J
R 709	(A,111,38)	RS1/16SS221J
R 710	(A,112,38)	RS1/16SS101J
R 711	(A,114,39)	RS1/16SS102J
R 715	(A,117,36)	RS1/16SS151J
R 716	(A,118,36)	RS1/16SS151J
R 717	(A,119,36)	RS1/16SS151J
R 718	(A,123,36)	RS1/16SS221J
R 719	(A,122,36)	RS1/16SS104J
R 752	(A,144,134)	RS1/4SA391J
R 753	(A,127,91)	RS1/16SS473J
R 754	(A,127,92)	RS1/16SS103J
R 801	(A,125,22)	RS1/10SR222J
R 802	(A,104,15)	RS1/10SR222J
R 803	(A,121,18)	RS1/16SS223J
R 804	(A,119,18)	RS1/16SS223J
R 805	(A,121,19)	RS1/10SR101J
R 806	(A,118,20)	RS1/10SR101J
R 807	(A,120,20)	RS1/10SR101J
R 808	(A,124,20)	RS1/10SR222J
R 809	(A,115,21)	RS1/10SR220J
R 810	(A,114,21)	RS1/10SR220J
R 811	(A,117,20)	RS1/10SR222J
R 812	(A,113,21)	RS1/10SR222J
R 813	(A,107,16)	RS1/10SR222J
R 814	(A,101,19)	RS1/10SR222J
R 815	(A,100,19)	RS1/16SS822J
R 816	(A,96,19)	RS1/10SR222J
R 817	(A,95,19)	RS1/10SR222J
R 851	(A,93,20)	RS1/16SS472J
R 871	(A,143,65)	RS1/10SR332J
R 872	(A,143,62)	RS1/16SS103J
R 878	(A,124,26)	RS1/10SR473J

Circuit Symbol and No.		Part No.
R 891	(A,58,138)	RS1/16SS102J
R 892	(A,58,136)	RS1/16SS102J
R 911	(A,145,40)	RS1/10SR1R0J
R 912	(A,141,41)	RS1/10SR1R0J
R 913	(A,154,41)	RS1/16SS223J
R 914	(A,131,40)	RS1/16SS223J
R 941	(A,94,121)	RS1/16SS223J
R 942	(A,94,122)	RS1/16SS473J
R 943	(A,95,125)	RS1/16SS682J
R 944	(A,99,123)	RS1/4SA102J
R 973	(A,90,63)	RS1/16SS222J
R 974	(A,98,55)	RS1/16SS101J
R 975	(A,98,54)	RS1/16SS101J
R 976	(A,98,52)	RS1/16SS101J

CAPACITORS

C 201	(A,96,115)	CKSRYB105K10
C 202	(A,105,116)	CKSRYB105K10
C 203	(A,92,116)	CKSRYB105K10
C 204	(A,107,115)	CKSRYB105K10
C 205	(A,94,116)	CKSRYB105K10
C 206	(A,107,114)	CKSRYB105K10
C 207	(A,95,108)	CKSSYB104K10
C 208	(A,94,106)	CKSSYB104K10
C 209	(A,93,104) 10 uF	CCG1192
C 210	(A,96,106)	CCSSCH151J50
C 211	(A,110,107)	CCSSCH151J50
C 212	(A,108,109) 10 uF	CCG1192
C 213	(A,108,106)	CKSSYB104K10
C 214	(A,108,104)	CKSSYB104K10
C 215	(A,108,102)	CKSSYB104K10
C 216	(A,92,101) 10 uF	CCG1192
C 217	(A,95,100)	CKSSYB104K10
C 218	(A,114,109)	XCEVW470M16
C 219	(A,112,103) 10 uF	CCG1192
C 220	(A,106,98) 10 uF	CCG1192
C 223	(A,91,101)	CKSSYB102K50
C 224	(A,115,103)	CKSSYB104K10
C 229	(A,110,112)	CKSSYB102K50
C 236	(A,110,104)	CKSRYB105K10
C 251	(A,35,128) 4.7 uF	CCG1201
C 252	(A,17,127) 4.7 uF	CCG1201
C 253	(A,17,130)	CCSSCH101J50
C 254	(A,11,130)	CCSSCH101J50
C 255	(A,35,132) 4.7 uF	CCG1201
C 256	(A,31,130) 4.7 uF	CCG1201
C 257	(A,26,131)	CCSSCH101J50
C 258	(A,21,131)	CCSSCH101J50
C 260	(A,33,138)	CKSSYB104K10
C 261	(A,6,133)	CKSSYB103K16
C 301	(A,69,129)	CKSRYB224K16
C 303	(A,80,129)	CKSRYB224K16
C 305	(A,72,129)	CKSRYB224K16
C 307	(A,77,129)	CKSRYB224K16
C 313	(A,84,130)	CKSRYB105K16
C 314	(A,135,126)	CKSRYB104K16
C 317	(A,60,129)	XCEVW100M16
C 319	(A,62,134)	CCSSCH101J50
C 320	(A,64,134)	CCSSCK1R0C50
C 321	(A,83,129)	CCSSCH101J50

Circuit Symbol and No.		Part No.
C 322	(A,106,126)	CKSRYB104K16
C 323	(A,106,129)	CCSRCH100D50
C 324	(A,102,129)	CCSRCH100D50
C 325	(A,94,132)	CCSRCH100D50
C 326	(A,95,140)	CCSRCH100D50
C 327	(A,88,129)	CKSRYB105K10
C 401	(A,154,100)	CKSSYB104K10
C 402	(A,155,101)	CKSSYB103K16
C 403	(A,153,102)	CKSRYB105K10
C 405	(A,162,101)	CKSSYB103K16
C 406	(A,160,101)	CKSSYB103K16
C 408	(A,161,105)	CKSSYB103K16
C 409	(A,157,105)	CCSSCH6R0D50
C 410	(A,155,107)	CCSSCH330J50
C 411	(A,148,99)	CKSSYB103K16
C 412	(A,148,101)	CKSSYB104K10
C 413	(A,150,101)	CKSSYB104K10
C 414	(A,146,100)	CKSSYB103K16
C 415	(A,144,101) 10 uF	CCG1192
C 416	(A,147,100)	CKSSYB104K10
C 418	(A,142,101)	CKSSYB223K16
C 419	(A,147,110) (C,E)	CCSSCH150J50
C 420	(A,151,106) (C,E)	CKSSYB103K16
C 421	(A,154,111) (A,B,D)	CCSSCJ3R0C50
C 423	(A,144,106) (C,E)	CCSSCH8R0D50
C 424	(A,141,101)	CKSSYB103K16
C 425	(A,139,99) 10 uF	CCG1192
C 426	(A,140,97)	CKSSYB104K10
C 427	(A,144,97)	CKSSYB104K10
C 428	(A,137,96) (A,B,D)	CCSSCH101J50
	(A,137,96) (C,E)	CCSSCH220J50
C 429	(A,136,96)	CKSSYB103K16
C 430	(A,139,90)	CKSSYB102K50
C 432	(A,138,92) (A,B,D)	CCSSCH820J50
	(A,138,92) (C,E)	CCSSCK2R0C50
C 433	(A,136,91)	CKSSYB102K50
C 435	(A,139,86) (A,B,D)	CKSRYB474K10
	(A,139,86) (C,E)	CKSRYB105K10
C 439	(A,145,80) (C,E)	CKSRYB104K16
C 440	(A,142,86)	CKSSYB102K50
C 441	(A,137,89)	CCSSCH100D50
C 442	(A,146,83)	CKSSYB104K10
C 444	(A,152,82) 2.2 uF	CCG1218
C 445	(A,157,82) (A,B,D)	CKSSYB104K10
C 447	(A,157,83) (A,B,D)	CKSRYB105K10
C 448	(A,158,85) (A,B,D)	CKSSYB104K10
	(A,158,85) (C,E)	CKSSYB103K16
C 449	(A,161,85)	CCSSCH9R0D50
C 450	(A,161,90)	CCSSCH9R0D50
C 451	(A,159,91)	CKSSYB104K10
C 452	(A,159,94)	CKSRYB105K10
C 453	(A,160,96)	CKSSYB104K10
C 455	(A,159,97)	CKSRYB224K16
C 456	(A,162,92)	CKSSYB472K25
C 457	(A,162,93)	CKSSYB472K25
C 459	(A,154,83) (A,B,D)	CCSSCH101J50
	(A,154,83) (C,E)	CKSSYB102K50
C 461	(A,145,104) (A,B,D)	CKSSYB104K10
C 464	(A,162,98) 1 uF(C,E)	DCH1246
C 465	(A,142,106) (C,E)	CKSSYB103K16
C 466	(A,137,79) (C,E)	CKSRYB105K10

Circuit Symbol and No.		Part No.
C 467	(A,151,81) (C,E)	CKSSYB104K10
C 468	(A,142,79) (C,E)	CKSRYB105K10
C 531	(A,91,93)	CKSSYB104K10
C 532	(A,94,93)	CKSSYB104K10
C 551	(A,13,121)	XCEVW221M16
C 552	(A,13,107)	CKSRYB105K16
C 553	(A,15,110)	CKSSYB103K16
C 555	(A,25,112)	CKSSYB682K25
C 556	(A,32,120)	CEVQW221M6R3
C 557	(A,33,116)	CKSRYB105K10
C 560	(A,108,21)	CKSRYB105K10
C 561	(A,103,24)	CKSRYB105K10
C 564	(A,33,114) 4.7 uF	CCG1201
C 565	(A,16,107) 4.7 uF	CCG1222
C 601	(A,105,66)	CKSSYB104K10
C 602	(A,109,65)	CKSSYB104K10
C 603	(A,111,65)	CKSSYB104K10
C 604	(A,113,65)	CKSSYB104K10
C 605	(A,117,65)	CKSSYB104K10
C 606	(A,122,71)	CKSSYB104K10
C 607	(A,127,73)	CCSSCH120J50
C 608	(A,127,78)	CCSSCH120J50
C 609	(A,122,73)	CKSSYB104K10
C 610	(A,122,75)	CKSSYB104K10
C 611	(A,122,77)	CKSSYB104K10
C 612	(A,123,82)	CKSSYB104K10
C 613	(A,124,82)	CKSSYB104K10
C 618	(A,123,89)	CCSSCH120J50
C 619	(A,123,94)	CCSSCH120J50
C 620	(A,114,88)	CKSSYB104K10
C 621	(A,109,88)	CKSSYB104K10
C 622	(A,106,93)	CCSSCH220J50
C 623	(A,106,88)	CKSSYB104K10
C 624	(A,105,88)	CKSSYB104K10
C 625	(A,104,90)	CKSSYB104K10
C 626	(A,100,80)	CKSSYB104K10
C 627	(A,97,81)	CCSSCH220J50
C 628	(A,96,81)	CCSSCH220J50
C 629	(A,99,75)	CKSSYB104K10
C 630	(A,99,73)	CKSSYB104K10
C 631	(A,97,77)	CCSSCH220J50
C 672	(A,123,73) 1 uF	DCH1246
C 681	(A,121,96)	CKSSYB104K10
C 683	(A,120,94)	CCSSCJ3R0C50
C 701	(A,111,40)	CKSSYB103K16
C 704	(A,120,39)	CCSSCH100D50
C 705	(A,118,39)	CCSSCH100D50
C 706	(A,117,38)	CCSSCH100D50
C 752	(A,140,136)	CKSSYB104K10
C 753	(A,147,130) 4.7 uF	CCG1201
C 801	(A,124,6)	CCSRCH221J50
C 806	(A,125,8)	CKSRYB104K16
C 807	(A,122,14)	CKSRYB105K10
C 808	(A,108,19)	CKSRYB104K16
C 809	(A,97,16)	CCSRCH221J50
C 810	(A,96,13)	CCSRCH221J50
C 811	(A,104,20)	CKSSYB104K10
C 873	(A,124,24)	CKSRYB104K16
C 891	(A,52,138)	CKSRYB104K16
C 892	(A,34,139)	CKSRYB104K16

Circuit Symbol and No.		Part No.
C 893	(A,34,135)	CKSRYB102K50
C 894	(A,52,134)	CKSRYB102K50
C 901	(A,133,124) 2 200 uF/16 V	CCH2040
C 912	(A,152,40)	CKSSYB102K50
C 913	(A,131,43)	CKSSYB102K50
C 914	(A,156,56)	XCEAT102M16
C 915	(A,132,42)	CKSRYB104K16
C 916	(A,147,43) 4.7 uF	CCG1201
C 917	(A,145,46)	CKSSYB102K50
C 919	(A,151,42) 4.7 uF	CCG1201
C 921	(A,135,42) 4.7 uF	CCG1201
C 923	(A,159,41) 4.7 uF	CCG1201
C 926	(A,140,44) 4.7 uF	CCG1201
C 927	(A,140,42)	CKSSYB102K50
C 941	(A,96,124)	CKSRYB104K16
C 969	(A,135,113) 10 uF	CCG1192
C 973	(A,98,53)	CCSSCH470J50

B

Unit Number :
Unit Name : Keyboard Unit

MISCELLANEOUS

IC 1802	(B,84,22) IC	PDC202B
IC 1851	(B,47,21) IC	BH2228FV
IC 1941	(A,155,39) IR RC REC Module	PNJ4833M
Q 1851	(B,31,8) Chip Transistor	HN1C01FU
Q 1852	(B,32,11) Chip Transistor	HN1C01FU
Q 1853	(B,56,24) Chip Transistor	HN1C01FU
Q 1857	(B,20,9) Transistor	LSCR523UB
Q 1858	(B,12,10) Transistor	LSCR523UB
Q 1859	(B,12,24) Transistor	LSCR523UB
Q 1866	(B,110,26) Transistor	LSCR523UB
Q 1867	(B,120,26) Transistor	LSCR523UB
Q 1868	(B,128,27) Transistor	LSCR523UB
D 1882	(A,9,20) LED	SMLVN6RGB2UK(B)
D 1883	(A,41,20) LED	SMLVN6RGB2UK(B)
D 1884	(A,162,26) LED	SMLVN6RGB2UK(B)
D 1885	(A,148,23) LED	SMLVN6RGB2UK(B)
D 1886	(A,47,23) LED	SMLVN6RGB2UK(B)
L 1921	(B,136,11) Inductor	CTF1389
L 1922	(B,131,6) Inductor	CTF1389
L 1923	(B,140,7) Inductor	CTF1389
X 1801	(B,69,22) Ceramic Resonator 5.00 MHz	CSS1547
S 1821	(A,51,5) Push Switch	CSG1155
S 1822	(A,11,41) Push Switch	CSG1155
S 1823	(A,67,5) Push Switch	CSG1155
S 1824	(A,15,5) Push Switch	CSG1155
S 1826	(A,5,20) Push Switch	CSG1155
S 1828	(A,35,33) Push Switch	CSG1155
S 1830	(A,25,19) Encoder(MULTI-CONTROL)	CSD1168
S 1832	(A,35,5) Push Switch	CSG1155
S 1834	(A,76,5) Push Switch	CSG1155
S 1835	(A,146,5) Push Switch	CSG1155
S 1836	(A,123,5) Push Switch	CSG1155
S 1837	(A,130,5) Push Switch	CSG1155
S 1838	(A,99,5) Push Switch	CSG1155
S 1839	(A,107,5) Push Switch	CSG1155
S 1840	(A,83,5) Push Switch	CSG1155
S 1842	(A,15,33) Push Switch	CSG1155
CN1911	(A,155,26) Connector	CKS6443
CN1931	(B,109,10) Connector	CKS6451
JA1921	(A,156,11) Jack	YKN5006
V 1802	(A,53,32) Segment LCD	CAW2041

RESISTORS

R 1809	(B,76,10)	RS1/16SS473J
R 1810	(B,63,21)	RS1/16SS103J
R 1824	(B,32,31)	RS1/16SS273J
R 1851	(B,50,16)	RS1/10SR222J
R 1852	(B,48,16)	RS1/10SR222J
R 1853	(B,52,9)	RS1/10SR222J
R 1854	(B,41,18)	RAB4CQ102J
R 1855	(B,42,22)	RAB4CQ102J
R 1856	(B,26,10)	RS1/16SS101J
R 1857	(B,28,8)	RS1/16SS101J
R 1858	(B,13,13)	RS1/16SS101J
R 1859	(B,101,23)	RS1/16SS101J
R 1860	(B,58,21)	RS1/16SS101J
R 1861	(B,58,24)	RS1/16SS101J
R 1862	(B,24,7)	RS1/16SS680J
R 1864	(B,17,8)	RS1/16SS680J
R 1866	(B,11,20)	RS1/16SS680J
R 1868	(B,115,25)	RS1/16SS680J
R 1870	(B,125,27)	RS1/16SS680J
R 1872	(B,131,26)	RS1/16SS680J
R 1931	(B,74,6)	RS1/10SR222J
R 1932	(B,78,6)	RS1/10SR222J
R 1944	(B,144,27)	RS1/10SR101J

CAPACITORS

C 1801	(B,78,12)	CKSSYB104K10
C 1802	(B,77,12)	CKSSYB104K10
C 1803	(B,79,12)	CKSSYB104K10
C 1804	(B,72,21)	CKSRYB105K10
C 1805	(B,72,23)	CKSSYB104K10
C 1854	(B,52,23)	CKSSYB103K16
C 1855	(B,52,24)	CKSRYB105K10
C 1911	(B,164,34)	CKSRYB104K16
C 1912	(B,140,16)	CKSRYB104K16
C 1941	(B,144,29) 10 uF	CCG1192

C

Unit Number : CWX4269
Unit Name : CD Core Unit(S11.6VA)

MISCELLANEOUS

IC 201	(B,24,38) IC	PEQ094A
IC 301	(A,37,12) IC	BD8223EFV
Q 101	(B,12,54) Transistor	2SA1577
Q 102	(B,16,55) Chip Digital Transistor	LTA123JUB
X 201	(B,25,50)Ceramic Resonator 16.934 MHz	CSS1603
S 901	(A,43,54) Spring Switch(HOME)	CSN1080
S 903	(B,22,13) Spring Switch(DSCSNS)	CSN1081
CN101	(A,17,58) Connector	CKS4808
CN701	(A,26,30) Connector	CKS6146

Circuit Symbol and No.		Part No.
RESISTORS		
R 101	(B,7,59)	RS1/10SR2R4J
R 102	(B,8,59)	RS1/10SR2R4J
R 103	(B,10,59)	RS1/10SR2R7J
R 108	(B,14,58)	RS1/16SS105J
R 109	(B,15,50)	RS1/16SS152J
R 214	(B,18,28)	RS1/16SS103J
R 215	(B,17,28)	RS1/16SS393J
R 216	(B,13,36)	RS1/16SS102J
R 217	(B,10,33)	RS1/16SS562J
R 218	(B,10,36)	RS1/16SS472J
R 229	(B,13,35)	RS1/16SS471J
R 232	(A,31,55)	RS1/16SS0R0J
R 237	(B,34,45)	RS1/16SS221J
R 240	(B,35,40)	RS1/16SS473J
R 245	(A,34,46)	RS1/16SS104J
R 254	(A,37,56)	RS1/16SS104J
R 260	(B,30,27)	RS1/16SS103J
R 264	(A,22,9)	RS1/16SS102J
R 281	(B,34,38)	RS1/16SS560J
R 282	(B,34,39)	RS1/16SS560J
R 291	(B,34,35)	RS1/16SS560J
R 294	(B,28,49)	RS1/16SS471J
R 303	(A,28,12)	RS1/16SS123J
R 304	(A,29,11)	RS1/16SS123J
R 305	(A,27,9)	RS1/16SS102J
R 306	(A,27,12)	RS1/16SS472J
R 307	(A,26,9)	RS1/16SS102J
R 308	(A,26,12)	RS1/16SS472J
R 309	(A,35,7)	RS1/16SS473J
R 310	(B,31,9)	RS1/16SS472J
R 311	(B,31,10)	RS1/16SS472J
R 312	(B,31,11)	RS1/16SS472J
R 313	(B,31,12)	RS1/16SS472J
R 701	(A,22,38)	RS1/16SS101J
R 702	(A,24,38)	RS1/16SS101J
R 706	(A,33,42)	RS1/16SS221J
CAPACITORS		
C 104	(B,15,52)	CKSQYB475K6R3
C 110	(B,11,44)	CKSSYB104K10
C 111	(B,12,44)	CKSSYB103K16
C 203	(B,22,47)	CKSSYB104K10
C 205	(A,17,41)	CKSRYB105K10
C 209	(B,29,48)	CKSRYB104K16
C 210	(B,33,44)	CKSSYB104K10
C 211	(B,34,42)	CKSSYB104K10
C 212	(B,23,29)	CKSSYB104K10
C 213	(B,18,26)	CKSSYB332K50
C 214	(B,17,26)	CKSSYB473K16
C 215	(B,19,29)	CKSSYB104K10
C 216	(B,13,33)	CKSSYB152K50
C 217	(B,10,35)	CCSSCH390J50
C 218	(B,10,37)	CCSSCH5R0C50
C 219	(B,14,35)	CKSSYB104K10
C 220	(A,18,39)	CKSSYB104K10
C 221	(B,14,32)	CKSSYB104K10
C 222	(B,14,37)	CKSSYB104K10
C 223	(B,13,42)	CCSSCH680J50

Circuit Symbol and No.		Part No.
C 224	(B,14,45)	CCSSCH470J50
C 225	(B,14,47)	CKSSYB103K16
C 228	(B,10,34)	CCSSCH180J50
C 229	(B,9,41)	CKSSYB104K10
C 233	(B,33,46)	CKSSYB103K16
C 236	(B,8,41)	CKSSYB104K10
C 238	(A,26,45)	CKSRYB104K16
C 299	(A,26,43)	CKSSYB104K10
C 302	(B,29,12)	CKSSYB102K50
C 303	(B,30,12)	CKSSYB102K50
C 304	(B,28,12)	CKSSYB223K16
C 305	(B,27,12)	CKSSYB104K10
C 306	(A,32,7)	CKSSYB104K10
C 307	(A,42,19)	CKSRYB105K10
C 308	(A,32,16)	CKSRYB105K10
C 710	(A,34,43)	CKSSYB102K50

D

Unit Number : QWM3750
Unit Name : BT Unit

MISCELLANEOUS		
IC 21	(A,8,48) Regulator IC	S-1172B18-E6
IC 22	(A,21,46) IC	S-1206B33-U3
CN21	(A,34,27) Connector	CKS6346
CN23	(A,42,44) Connector	CKS3857
RESISTORS		
R 28	(A,42,31)	RS1/10SR222J
R 29	(A,30,41)	RS1/10SR102J
R 30	(A,30,37)	RS1/10SR102J
R 38	(A,42,17)	RS1/10SR0R0J
R 39	(A,41,23)	RS1/10SR221J
R 40	(A,40,23)	RS1/10SR221J
R 41	(A,38,23)	RS1/10SR221J
CAPACITORS		
C 23	(A,24,40)	XCEVW221M4
C 24	(A,7,44)	CKSRYB105K10
C 26	(A,27,48) 10 uF	CCG1192
C 29	(A,17,45)	CKSRYB105K10
C 33	(A,9,54) 10 uF	CCG1192
C 34	(A,42,30)	CKSRYB105K10
C 36	(A,32,40)	CKSRYB104K16
C 38	(A,15,46) 10 uF	CCG1192
C 39	(A,6,42) 10 uF	CCG1192