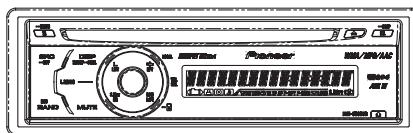


Service Manual



DEH-5000UB/XS/EW5

ORDER NO.
CRT4055

CD RDS RECEIVER

DEH-5000UB

/XS/EW5

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

Model No.	Order No.	Mech.Module	Remarks
CX-3240	CRT4050	S10.5COMP2-iPod/USB	CD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly



For details, refer to "Important Check Points for Good Servicing".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, 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

©PIONEER CORPORATION 2007

K-ZZA. DEC. 2007 Printed in Japan

SAFETY INFORMATION

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.

● 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 contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.

Refer all servicing to qualified personnel.

**CLASS 1
LASER PRODUCT**

En

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 W(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.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

A

B

C

D

E

F

CONTENTS

SAFETY INFORMATION	2
A 1. SERVICE PRECAUTIONS	5
1.1 SERVICE PRECAUTIONS	5
1.2 NOTES ON SOLDERING	5
2. SPECIFICATIONS	6
2.1 SPECIFICATIONS	6
2.2 DISC/CONTENT FORMAT	6
2.3 PANEL FACILITIES	7
2.4 CONNECTION DIAGRAM	10
3. BASIC ITEMS FOR SERVICE	11
3.1 CHECK POINTS AFTER SERVICING	11
3.2 PCB LOCATIONS	11
3.3 JIGS LIST	12
3.4 CLEANING	12
B 4. BLOCK DIAGRAM	14
4.1 BLOCK DIAGRAM	14
5. DIAGNOSIS	18
5.1 OPERATIONAL FLOWCHART	18
5.2 ERROR CODE LIST	19
5.3 CONNECTOR FUNCTION DESCRIPTION	21
6. SERVICE MODE	22
6.1 CD TEST MODE	22
6.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT	25
7. DISASSEMBLY	27
8. EACH SETTING AND ADJUSTMENT	32
8.1 PCL OUTPUT CONFIRMATION	32
C 9. EXPLODED VIEWS AND PARTS LIST	34
9.1 PACKING	34
9.2 EXTERIOR(1)	36
9.3 EXTERIOR(2)	38
9.4 CD MECHANISM MODULE	40
10. SCHEMATIC DIAGRAM	42
10.1 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)	42
10.2 KEYBOARD UNIT	48
10.3 CD MECHANISM MODULE(GUIDE PAGE)	50
10.4 WAVEFORMS	56
11. PCB CONNECTION DIAGRAM	60
11.1 TUNER AMP UNIT	60
11.2 KEYBOARD UNIT	64
11.3 CD CORE UNIT(S10.5COMP2-USB)	66
D 12. ELECTRICAL PARTS LIST	68

1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS

● Service Precaution



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.

A



B

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.

C

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).

D

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.

E

F

2. SPECIFICATIONS

2.1 SPECIFICATIONS

A

General

Power source 14.4 V DC (10.8 V to 15.1 V
allowable)

Grounding system Negative type

Max. current consumption 10.0 A

Backup current

..... 5 mA or less

Dimensions (W × H × D):

DIN

Chassis 178 mm × 50 mm × 162
mm

Nose 188 mm × 58 mm × 22 mm

D

Chassis 178 mm × 50 mm × 162
mm

Nose 170 mm × 48 mm × 22 mm

Weight 1.3 kg

Audio

Maximum power output 50 W × 4
50 W × 2/4 Ω + 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 to 8 Ω × 4
4 Ω to 8 Ω × 2 + 2 Ω × 1

Preout max output level 2.2 V

Equalizer (3-Band Parametric Equalizer):

Low

Frequency 40/80/100/160 Hz
Q Factor 0.35/0.59/0.95/1.15 (+6 dB
when boosted)

Gain ±12 dB

Mid

Frequency 200/500/1k/2k Hz
Q Factor 0.35/0.59/0.95/1.15 (+6 dB
when boosted)

Gain ±12 dB

High

Frequency 3.15k/8k/10k/12.5k Hz
Q Factor 0.35/0.59/0.95/1.15 (+6 dB
when boosted)

Gain ±12 dB

HPF:

Frequency 50/63/80/100/125 Hz
Slope -12 dB/oct

Subwoofer (mono):

Frequency 50/63/80/100/125 Hz
Slope -18 dB/oct

Gain +6 dB to -24 dB

Phase Normal/Reverse

Bass boost:

Gain +12 dB to 0 dB

CD player

System Compact disc audio system

Usable discs Compact disc

Signal-to-noise ratio 94 dB (1 kHz) (IEC-A net-
work)

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 (2ch
audio)

(Windows Media Player)

WAV signal format Linear PCM & MS ADPCM
(Non-compressed)

USB

Specification USB 2.0 full speed

Supply current 500 mA

Maximum amount of memory

..... 250 GB

File system FAT16, FAT32

MP3 decoding format MPEG-1 & 2 Audio Layer 3

WMA decoding format Ver. 7, 7.1, 8, 9, 10, 11 (2ch
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 8 dBf (0.7 μV/75 Ω, mono,
S/N: 30 dB)

Signal-to-noise ratio 75 dB (IEC-A network)

MW tuner

Frequency range 531 kHz to 1 602 kHz (9 kHz)

Usable sensitivity 18 μV (S/N: 20 dB)

Signal-to-noise ratio 65 dB (IEC-A network)

LW tuner

Frequency range 153 kHz to 281 kHz

Usable sensitivity 30 μV (S/N: 20 dB)

Signal-to-noise ratio 65 dB (IEC-A network)



Note

Specifications and the design are subject to mod-
ifications without notice due to improvements.

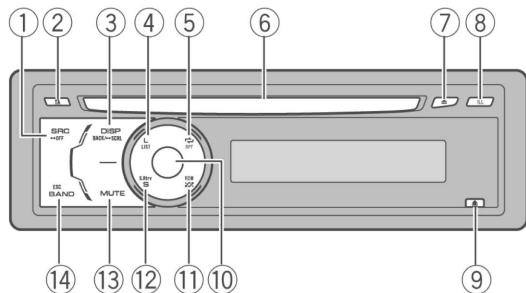
B



2.3 PANEL FACILITIES

What's What

Head unit



① SRC/OFF button

This unit is turned on by selecting a source.
Press to cycle through all the available sources.

② TA/NEWS button

Press to turn TA function on or off. Press and hold to turn NEWS function on or off.

③ DISP/BACK/SCRL button

Press to select different displays.
Press and hold to scroll the text information.
Press to return to the previous display when operating the menu.
Press and hold to return to the main menu when operating the menu.

④ LIST button

Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.

⑤ RPT/LOCAL button

Press to switch the repeat play range while using CD or USB.

Press to switch local settings while using tuner as the source.

⑥ Disc loading slot

Insert a disc to play.

⑦ EJECT button

Press to eject a disc.

⑧ ILL button

Press to select various color of button illumination.

Press and hold to switch to the display illumination color selection mode.

⑨ DETACH button

Press to remove the front panel from the head unit.

⑩ MULTI-CONTROL

Move to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.
Turn to increase or decrease the volume.

⑪ RDM button

Press to turn random function on or off while using CD or USB.

⑫ S.Rtrv button

Press to switch Sound Retriever settings.

⑬ MUTE button

Press to turn off the sound. To turn on the sound, press again.

⑭ BAND/ESC button

Press to select among three FM bands and MW/LW bands.
Press to return to the ordinary display when operating menu.

A

B

C

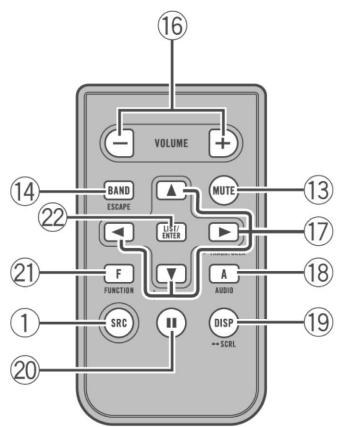
D

E

F

Optional remote control

The remote control CD-R320 is sold separately. Operation is the same as when using the buttons on the head unit.



⑯ VOLUME buttons

Press to increase or decrease the volume.

⑰ ▲/▼/◀/▶ buttons

Press to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

⑱ AUDIO button

Press to select an audio function.

⑲ DISP button

Press to select different displays.

Press and hold to scroll the text information.

⑳ II button

Press to turn pause on or off.

㉑ FUNCTION button

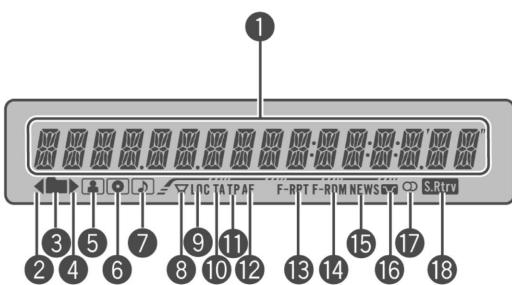
Press to select functions.

㉒ LIST/ENTER button

Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.

While in the operating menu, press to control functions.

Display indication



① Main display section

Displays band, frequency, elapsed playback time and other settings.

- Tuner
Band and frequency are displayed.
- RDS
Program service name, PTY information and other literal information are displayed.
- Built-in CD player and USB

Elapsed playback time and literal information are displayed.

② ◀ indicator

Appears when an upper tier of folder or menu exists.

③ └ (folder) indicator

Appears when operating list function.

④ ► indicator

Appears when a lower tier of folder or menu exists.

⑤ ┌ (artist) indicator

Appears when the disc (track) artist name is displayed on the main display section.

⑥ ┌ (disc) indicator

Appears when the disc (album) name is displayed on the main display section.

⑦  (song) indicator

Appears when the track (song) name is displayed on the main display section.

⑧  SW (subwoofer) indicator

Appears when subwoofer is on.

⑨ LOC indicator

Appears when local seek tuning is on.

⑩ TA indicator

Appears when TA (traffic announcement standby) function is on.

⑪ TP indicator

Appears when a TP station is tuned in.

⑫ AF indicator

Appears when AF (alternative frequencies search) function is on.

⑬ F-RPT indicator

Appears when folder repeat is on.

When repeat function is on, only **RPT** is displayed.

⑭ F-RDM indicator

Appears when folder random is on.

When random function is on, only **RDM** is displayed.

⑮ NEWS indicator

Appears when the set news program is received.

⑯  LOUD (loudness) indicator

Appears when loudness is on.

⑰  (stereo) indicator

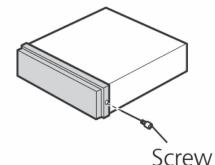
Appears when the selected frequency is being broadcast in stereo.

⑱  S.Rtrv (Sound Retriever) indicator

Appears when Sound Retriever function is on. ■

Fastening the front panel

If you do not plan to detach the front panel, the front panel can be fastened with supplied screw.



BPZ20P060FTC

A

B

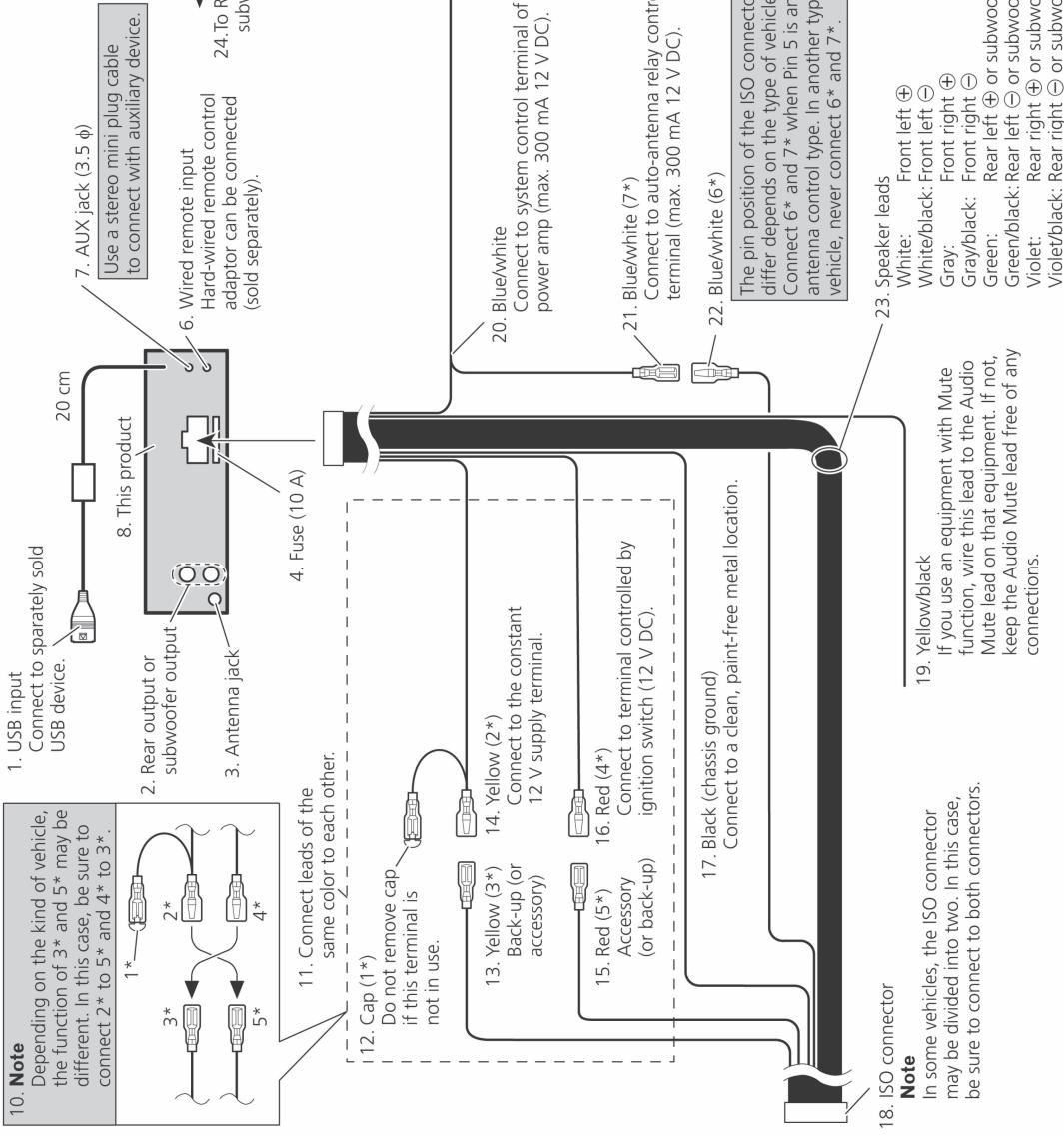
C

D

E

F

2.4 CONNECTION DIAGRAM



32. Notes

- Change the initial setting of this unit (refer to the operation manual). The subwoofer output of this unit is monaural.
- When using a subwoofer of 70 W (2 Ω), be sure to connect with Violet and Violet/black leads of this unit. Do not connect anything with Green and Green/black leads.

The pin position of the ISO connector will differ depending on the type of vehicle. Connect 6* and 7* when Pin 5 is an antenna control type. In another type of vehicle, never connect 6* and 7*.

33. Speaker leads
White:
Front left +
White/black:
Front left -
Front right +
Gray:
Front right -
Gray/black:
Rear left + or subwoofer +
Green:
Rear left - or subwoofer -
Violet:
Rear right + or subwoofer +
Violet/black:
Rear right - or subwoofer -

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

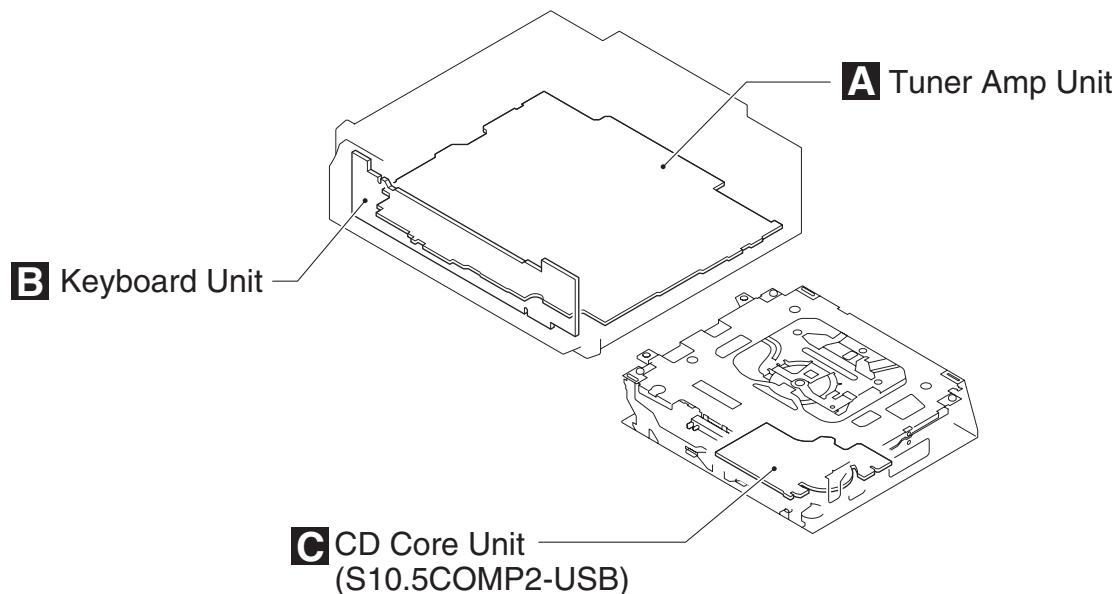
To keep the product quality after servicing, please confirm following check points.

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. Display, audio and operations must be normal.
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:

<u>Item to be checked regarding audio</u>
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

3.2 PCB LOCATIONS



Unit Number	:	YWM5183
Unit Name	:	Tuner Amp Unit
Unit Number	:	
Unit Name	:	Keyboard Unit
Unit Number	:	CWX3527
Unit Name	:	CD Core Unit(S10.5COMP2-USB)

3.3 JIGS LIST

● Jigs List

Name	Jig No.	Remarks
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	GEM1045	CD Mechanism Module

3.4 CLEANING



- C 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

D

E

F

■ 5

■ 6

■ 7

■ 8

A

B

C

D

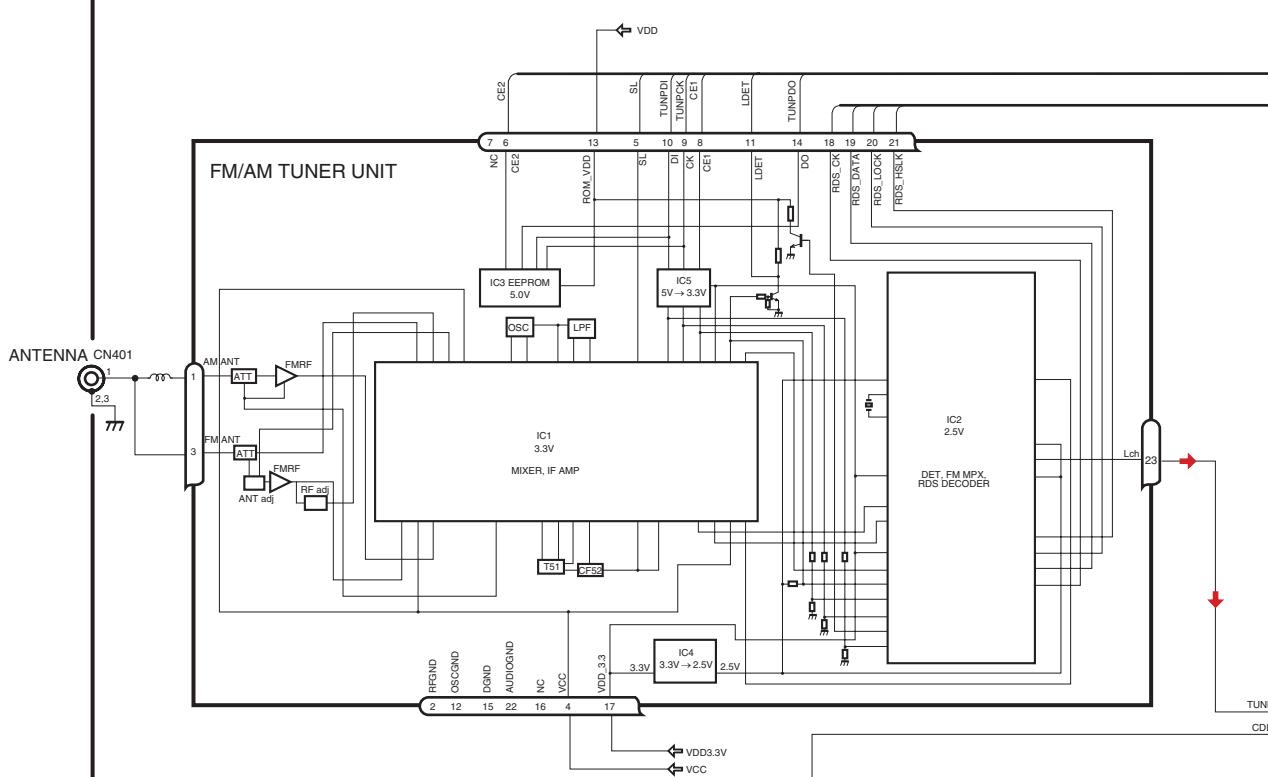
E

F

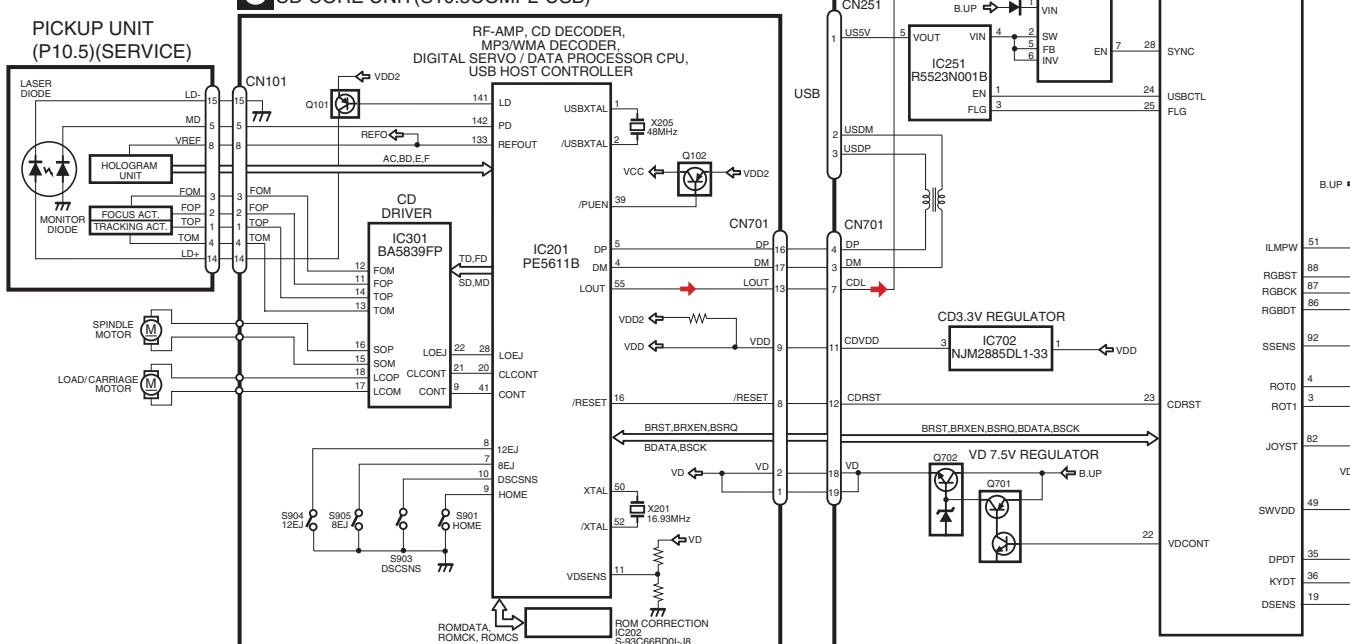
4. BLOCK DIAGRAM

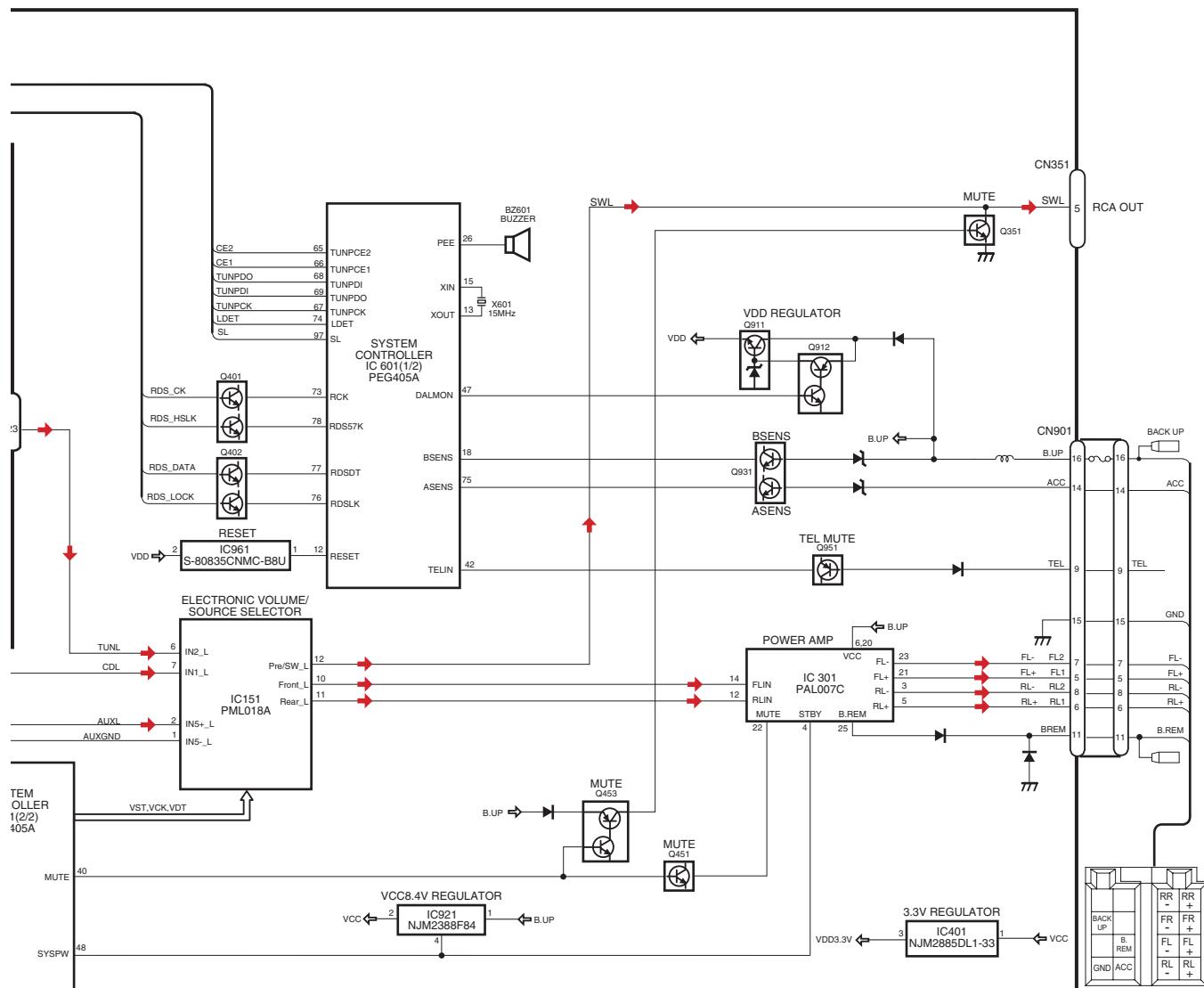
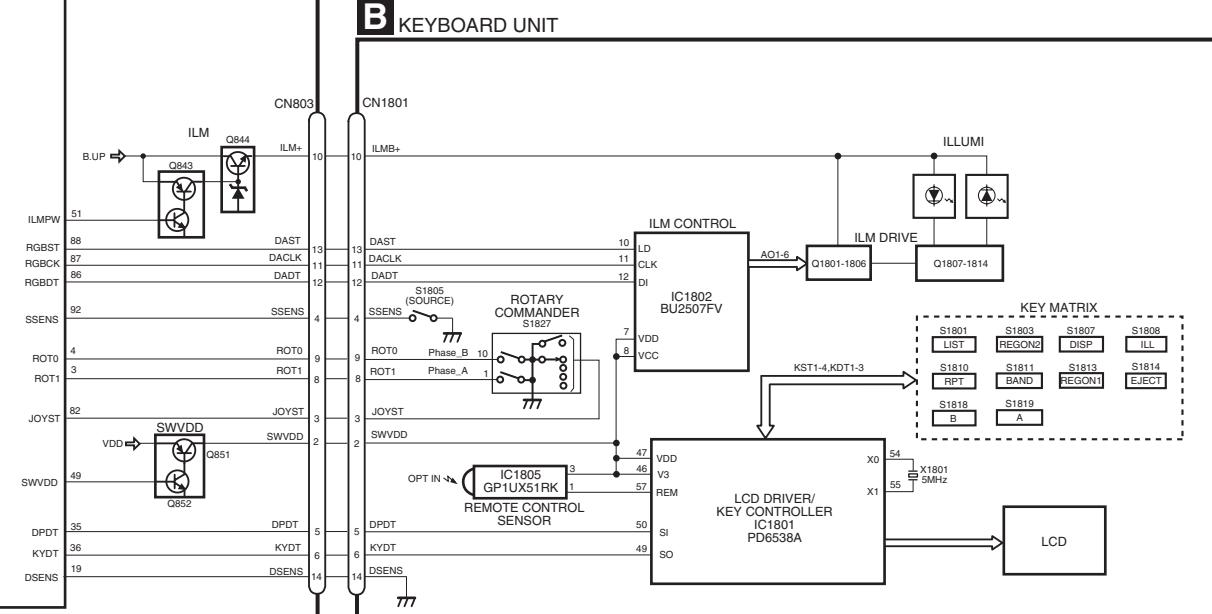
4.1 BLOCK DIAGRAM

A A TUNER AMP UNIT

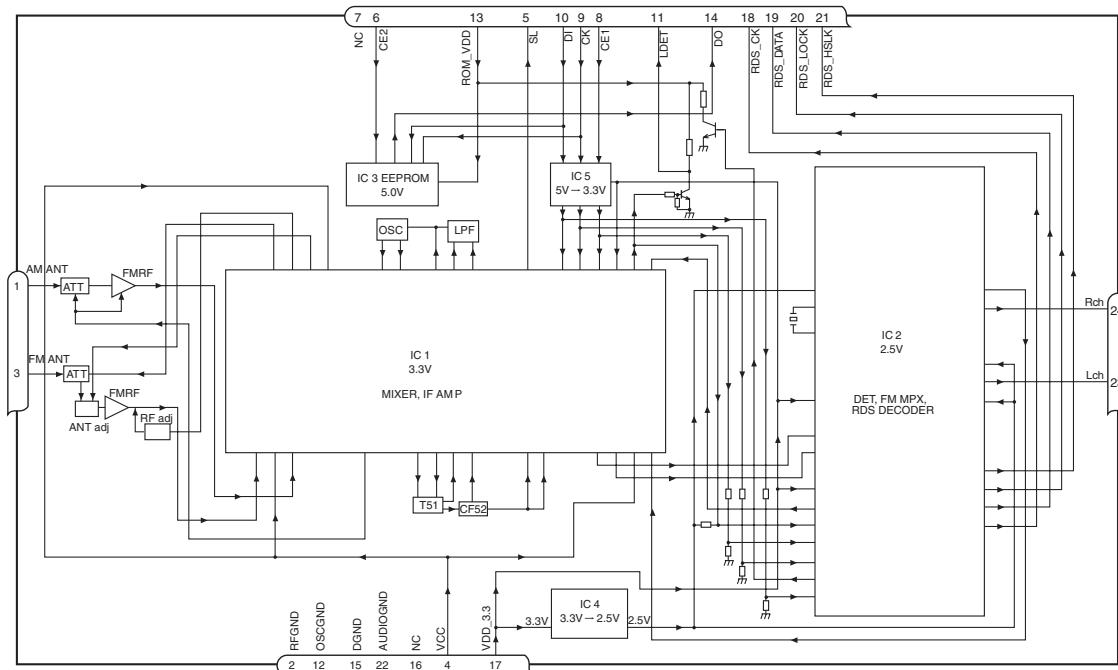


C CD CORE UNIT(S10.5COMP2-USB)



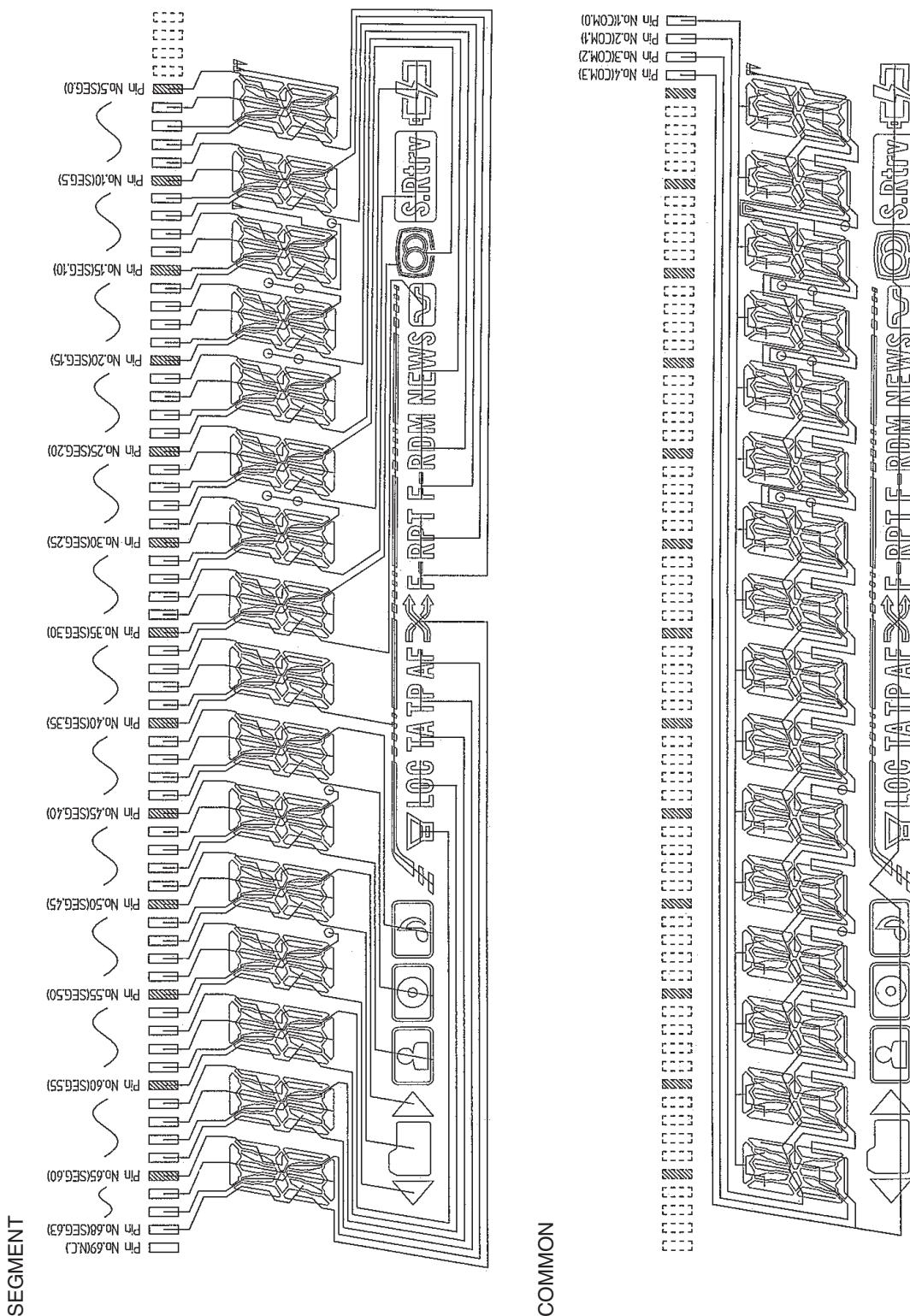
**B KEYBOARD UNIT**

● FM/AM Tuner Unit



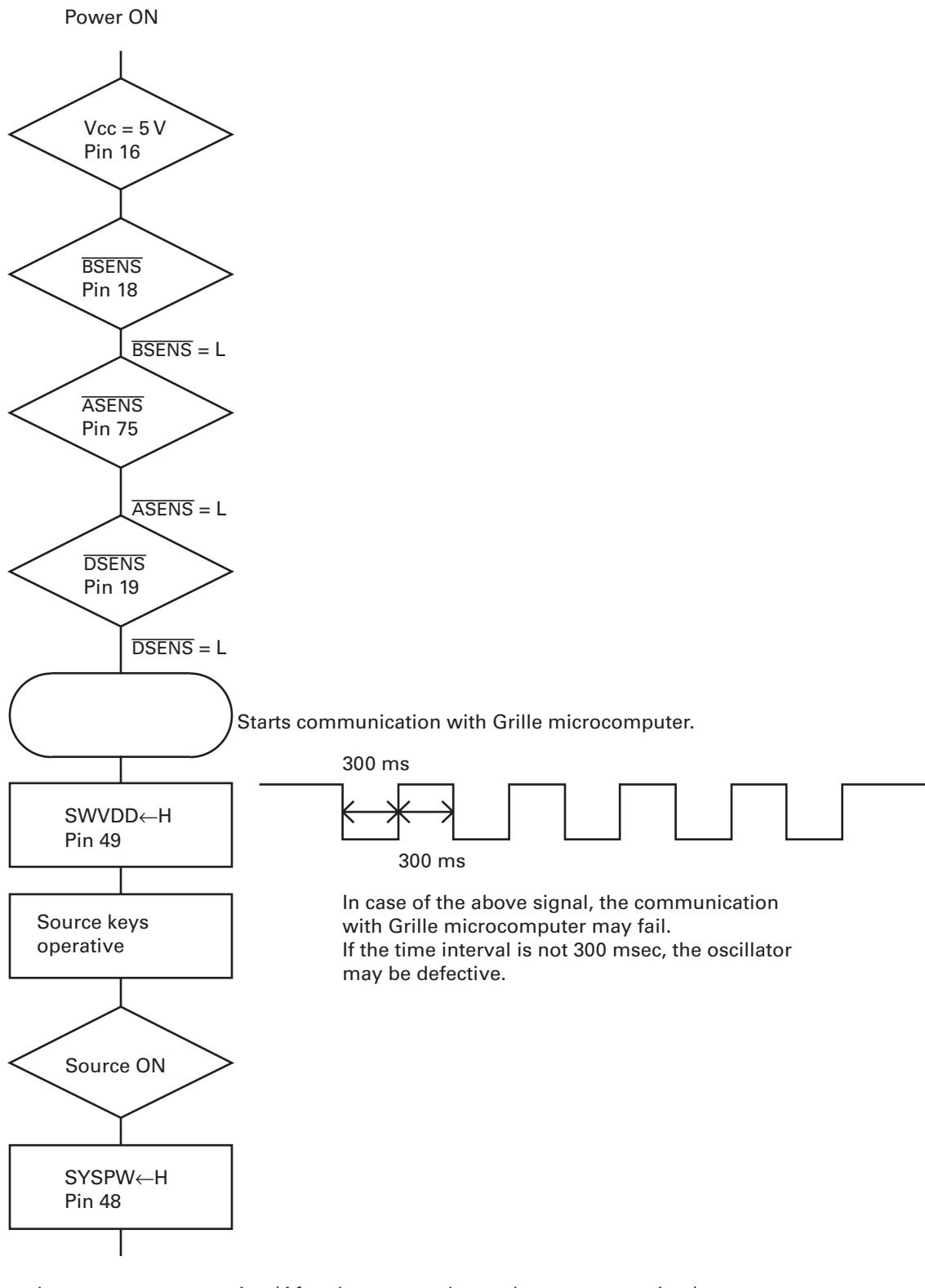
No.	Symbol	I/O	Explain
1	AMANT	I	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7 μ H. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the hum of power transmission line.
2	RFGND		RF ground
3	FMANT	I	FM antenna input Input of FM antenna 75 ohm Surge absorber(DSP-201M-S00B)is necessary.
4	VCC		power supply The power supply for analog block. D.C 8.4 V \pm 0.3 V
5	SL	O	signal level Output of FM/AM signals level
6	CE2	I	chip enable-2 Chip enable for EEPROM "Low" active
7	NC		non connection Not used
8	CE1	I	chip enable-1 Chip enable for AF•RF "High" active
9	CK	I	clock Clock
10	DI	I	data in Data input
11	LDET	O	lock detector "Low" active
12	OSCGND		osc ground Ground of oscillator block
13	ROM_VDD		power supply Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out Data output
15	DGND		digital ground Ground of digital block
16	NC		non connection Not used
17	VDD_3.3		power supply The power supply for digital block. 3.3 V \pm 0.2 V
18	RDS_CK	O	RDS clock Output of RDS clock(2.5 V)
19	RDS_DATA	O	RDS data Output of RDS data(2.5 V)
20	RDS_LOCK	O	RDS lock Output unit "High" active(2.5 V) (RDS_LOCK turns over by the external transistor. "Low" active)
21	RDS_HSLK	O	RDS high speed lock Output unit "High" active(2.5 V)(RDS_HSLK turns over by the external transistor. "Low" active)
22	AUDIOGND		audio ground Ground of audio block
23	L ch	O	L channel output FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output FM stereo "R-ch" signal output or AM audio output

LCD(YAW5090)



5. DIAGNOSIS

5.1 OPERATIONAL FLOWCHART



5.2 ERROR CODE LIST

● Error Messages

If a CD is not operative or stopped during operation due to an error, the error mode is turned on and cause(s) of the error is indicated with a corresponding number. This arrangement is intended at reducing nonsense calls from the users and also for facilitating trouble analysis and repair work in servicing.

(1) Basic Indication Method

1) When SERRORM is selected for the CSMOD (CD mode area for the system), error codes are written to DMIN (minutes display area) and DSEC (seconds display area). The same data is written to DMIN and DSEC. DTNO remains in blank as before.

2) Head unit display examples

Depending on display capability of LCD used, display will vary as shown below. xx contains the error number.

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

(2) Error Code List

Code	Class	Displayed error code	Description of the code and potential cause(s)
10	Electricity	Carriage Home NG SERVO LSI Communication Error	CRG can't be moved to inner diameter. CRG can't be moved from inner diameter. -> Failure on home switch or CRG move mechanism. Communication error between microcomputer and SERVO LSI.
11	Electricity	Focus Servo NG	Focusing not available. -> Stains on rear side of disc or excessive vibrations on REWRITABLE.
12	Electricity	Spindle Lock NG Subcode NG	Spindle not locked. Sub-code is strange (not readable). -> Failure on spindle, stains or damages on disc, or excessive vibrations. A disc not containing CD-R data is found. Turned over disc are found, though rarely. CD signal error.
17	Electricity	Setup NG	AGC protection doesn't work. Focus can be easily lost. -> Damages or stains on disc, or excessive vibrations on REWRITABLE.
30	Electricity	Search Time Out	Failed to reach target address. -> CRG tracking error or damages on disc.
44	Electricity	ALL Skip	Skip setting for all track. (CD-R/RW)
50	Mechanism	CD On Mech Error	Mechanical error during CD ON. -> Defective loading motor, mechanical lock and mechanical sensor.
A0	System	Power Supply NG	Power (VD) is ground faulted. -> Failure on SW transistor or power supply (failure on connector).

Remarks: Mechanical errors are not displayed (because a CD is turned off in these errors).

Unreadable TOC does not constitute an error. An intended operation continues in this case.

Upper digits of an error code are subdivided as shown below:

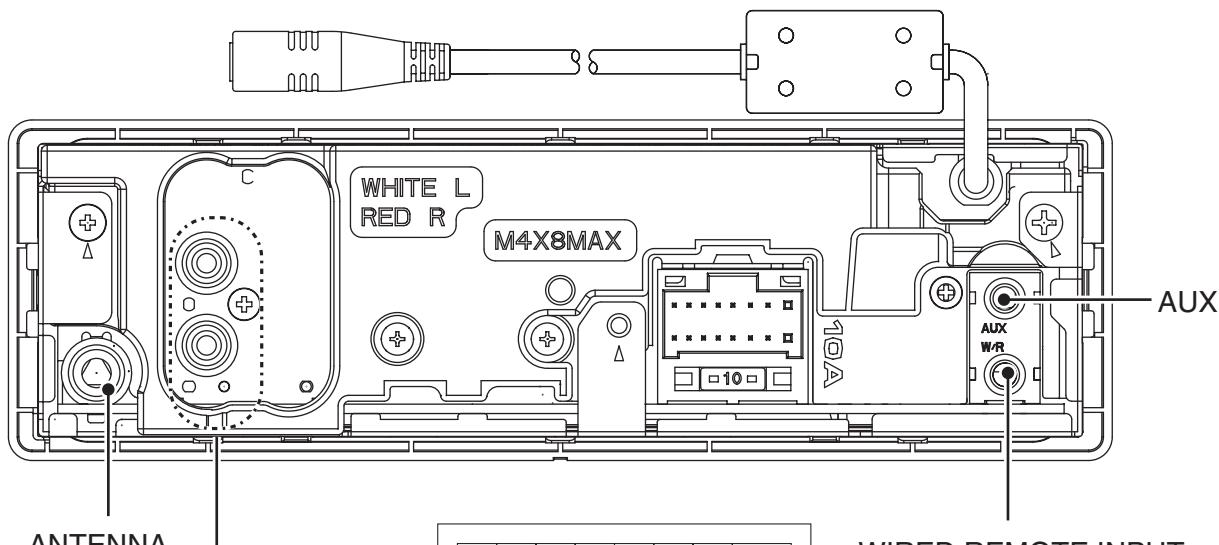
1x: Setup relevant errors, 3x: Search relevant errors, Ax: Other errors.

USB error

Message	Cause	Action
NO AUDIO	No songs in the USB device	Transfer the songs to the USB device.
	USB memory with security enabled is connected	Follow the USB memory instructions to disable the security.
TRK SKIPPED	The connected USB device contains WMA files that are protected by DRM	Play an audio file not protected by DRM.
PROTECT	All the files in the USB device are protected by DRM	Transfer the songs not protected by DRM to the USB device.
N/A USB	The connected USB device is not supported by this unit	Connect a USB device that is compliant as a Mass Storage Class.
CHK USB	The USB connector or the USB cable is short-circuited	Confirm the USB connector or the USB cable.
	The connected USB device consumes more than 500 mA (max. allowable current)	Confirm the USB device.
ERROR-19	Communication failure	Turn the ignition switch OFF and ON.
		Disconnect the USB device, and connect it again.
		Change to a different source. Then, return to the USB.
ERROR-23	USB device is not formatted with FAT16 or FAT32	Format the USB device with FAT16 or FAT32.

5.3 CONNECTOR FUNCTION DESCRIPTION

USB INPUT



WIRED REMOTE INPUT

POWER SUPPLY

REAR OUTPUT OR
SUBWOOFER OUTPUT

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

A

B

C

D

E

F

6. SERVICE MODE

6.1 CD TEST MODE

A

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 RFI 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.

E

F

2) Test mode

This mode is used to adjust the CD mechanism module.

- To enter the test mode.

While pressing the BAND and RDM keys at the same time, reset.

- 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 (->) key or (<->) 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 singleTR (91), the RF amp gain is set to 0 dB, and the auto-adjustment values are reset to the default settings.

- How to issue the 1 - 6 keys in the 08 model's slave test:

The specification of the 08 model does not include the 1 - 6 keys issuance function for H/U and the remote control unit. Therefore, in order to issue commands in a slave test, use the direct FUNCTION keys alternatively to enable the equal key command sending function to the existing models.

Outline) Use the direct FUNCTION keys to display, select, or issue the KEY 1 - 6.

<Direct FUNCTION keys and corresponding functions>

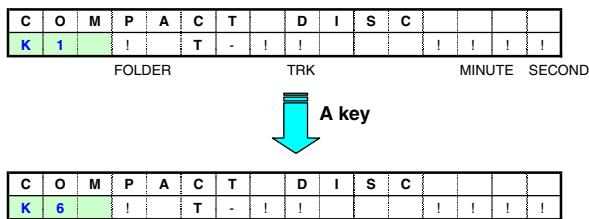
Direct FUNCTION key	Normal mode	Slave test mode
A	ASR/SAT/FUNC1	Selecting a key command
B	RDM/SHFL/FUNC2	Issuing a key command
C	LOCAL/RPT/FUNC3	Switching a screen

- For convenience, a name of each direct FUNCTION key is shown as "A", "B", and "C".

- How to issue the 1 - 6 keys for the CDS source:

(The  areas below are overwritten and displayed on character strings for the normal mode display.)

- ① During the slave test mode, the key name "K1" is shown at the left by default.
In this condition, press the A key to toggle K1 - K6, and select a command to be sent to the slave.



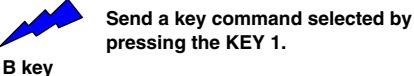
C	O	M	P	A	C	T	D	I	S	C				
K 1			!		T	-	!	!			!	!	!	!
FOLDER				TRK			MINUTE			SECOND				

A key

C	O	M	P	A	C	T	D	I	S	C				
K 6			!		T	-	!	!			!	!	!	!

- The one-line model shows only the bottom column.

- ② During the K1 - K6 key names are displayed, press the B key and issue the selected command.

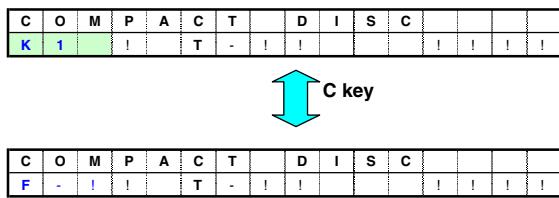


C	O	M	P	A	C	T	D	I	S	C				
K 1			!		T	-	!	!			!	!	!	!

B key

Send a key command selected by
pressing the KEY 1.

- ③ Press the C key to change display/non-display of key names.
When the non-display mode is selected for the K1 - K6 key names, "A key" and "B key" are invalid.



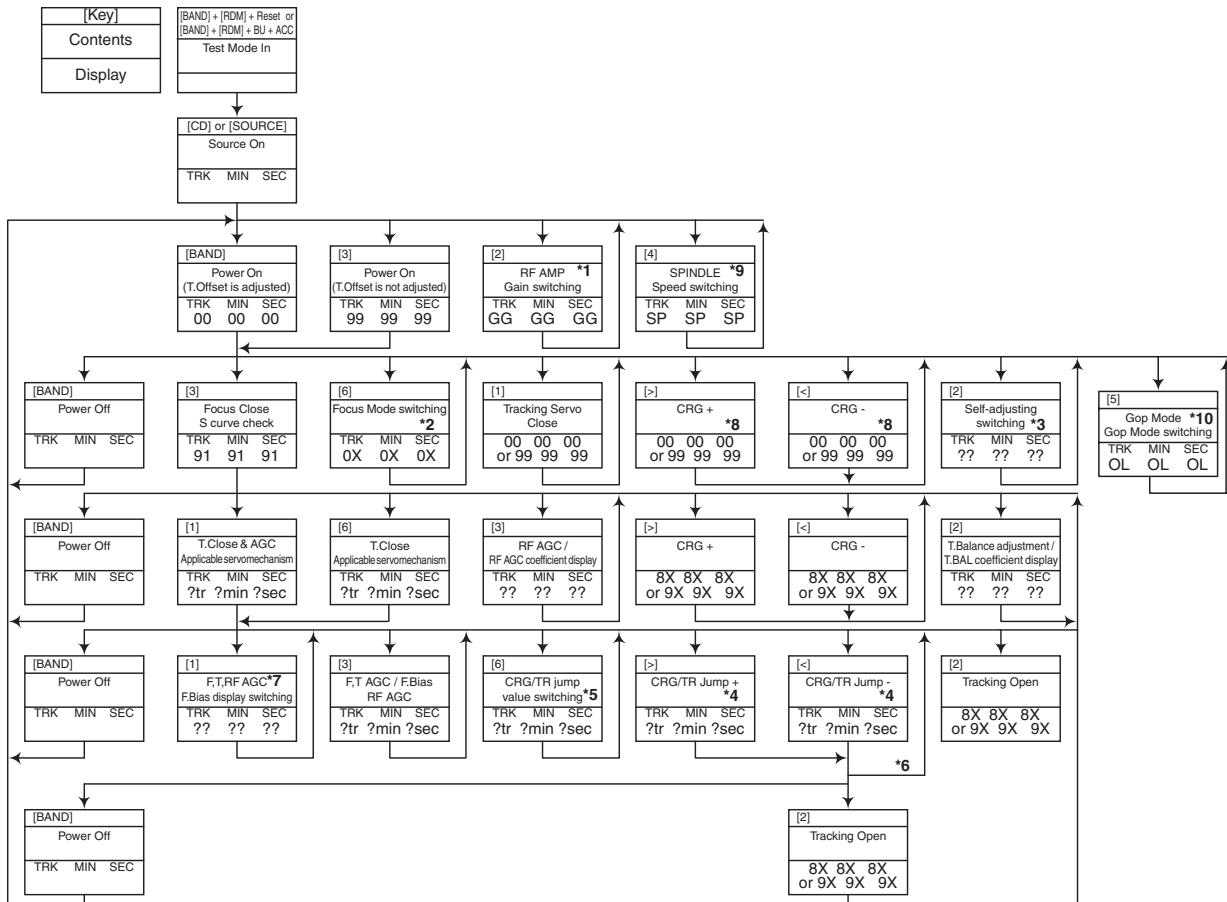
C	O	M	P	A	C	T	D	I	S	C				
K 1			!		T	-	!	!			!	!	!	!

C key

C	O	M	P	A	C	T	D	I	S	C				
F	-	!	!		T	-	!	!			!	!	!	!

- Pressing the A key or B key does not work.

● Flow Chart



*1) TYP TRK MIN SEC -> + 6 dB TRK 06 MIN 06 SEC 06 -> + 12 dB TRK 12 MIN 12 SEC 12

*2) Focus Close TRK 00 MIN 00 SEC 00 -> S.Curve TRK 01 MIN 01 SEC 01 -> F EQ measurement setting TRK 02 MIN 02 SEC 02
(TRK 99 MIN 99 SEC 99)

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

*4) 1TR/4TR/10TR/32TR/100TR

*5) Single -> 4TR -> 10TR -> 32TR -> 100TR -> CRG Move
9x(8x):91(81) 92(82) 93(83) 94(84) 95(85) 96(86)

*6) Only at the time of CRG move, 100TR jump

*7) TRK/MIN/SEC -> F.AGC -> T.AGC Gain -> F Bias -> RF AGC

*8) CRG motor voltage = 2 [V]

*9) TYP (1X) TRK MIN SEC -> 2X TRK 22 MIN 22 SEC 22 -> 1X TRK 11 MIN 1 SEC 11

[Key]	Operation
[BAND]	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
[4]	SPDL 1X/2X switching As for the double speed(2x), audio output <u>cannot</u> be supported.
[5]	Error Rate measurement ON : ERR 30 Counts Start BER display data[%]
[6]	F. Mode switching / Tracking Close / CRG•TR Jump Switching

*10) OFF(TYP) TRK MIN SEC -> FORCUS TRK 70 MIN 70 SEC 70 -> TRACKING TRK 71 MIN 71 SEC 71

- As for the double speed (2x), audio output cannot be supported
- 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 TR jump other than to 100TR, the function shall continue to be processed even if the TR jump key is released. As for the CRG Move and 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 jump mode is reset to the Single TR (91) while 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.

6.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT



A

- 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 :**

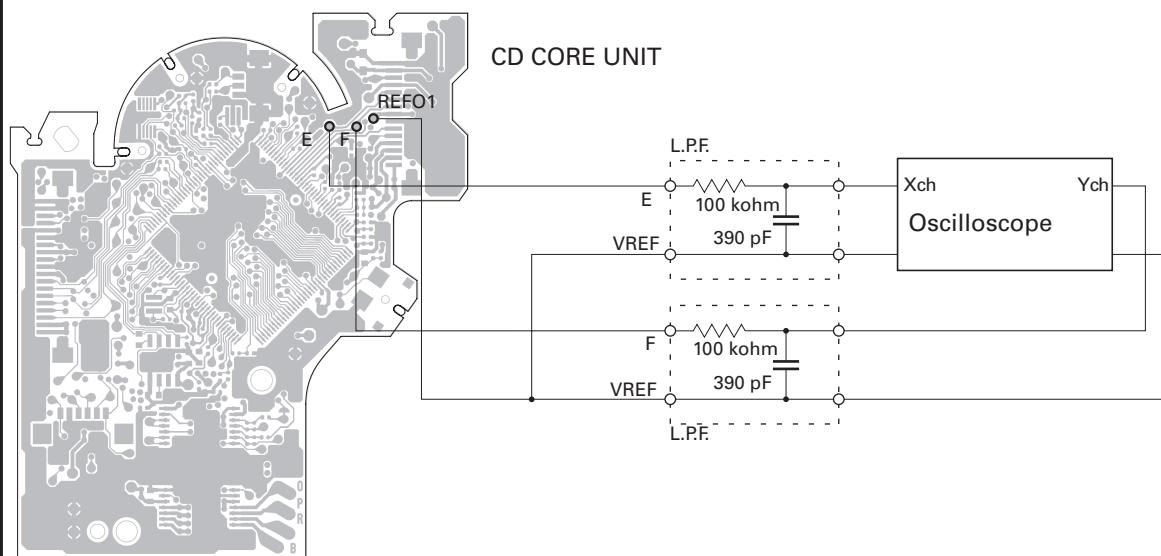
To check that the grating is within an acceptable range when the PU unit is changed.

- 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 3V 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 degrees. Refer to the photographs supplied to determine the phase angle.
5. If the phase difference is determined to be greater than 75 degrees 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 degrees 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".

F

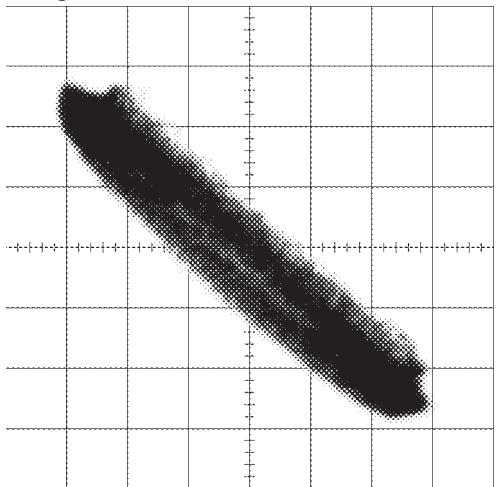
Grating waveform

Ech -> Xch 20 mV/div, AC

Fch -> Ych 20 mV/div, AC

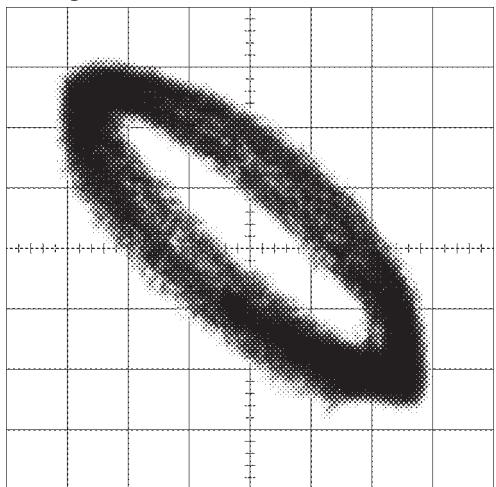
A

0 degrees



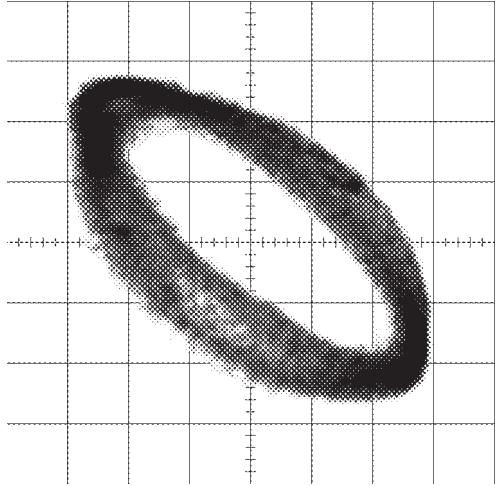
B

30 degrees

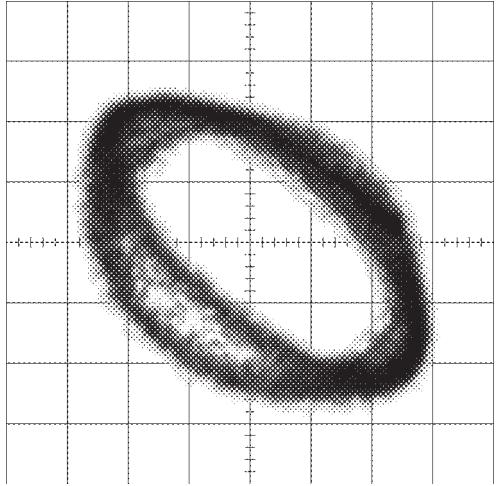


C

45 degrees

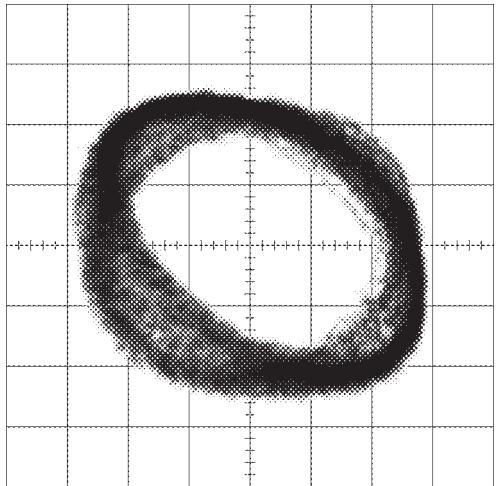


60 degrees



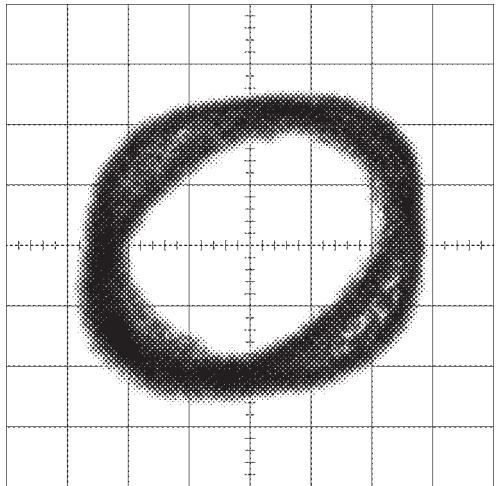
D

75 degrees



E

90 degrees



F

7. DISASSEMBLY

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

● Removing the Keyboard Unit (Fig.1)

 1 Remove the four screws.

Remove the Cover
and then remove the Keyboard Unit.



Fig.1

● Removing the Holder (Fig.2)

Take off the pick of left and right
and then a holder slide to the arrow course.

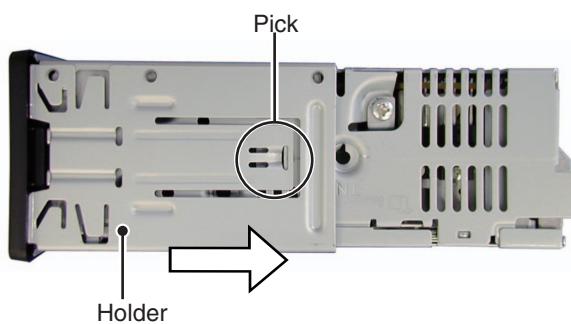


Fig.2

● Removing the Case and Panel (Fig.3,4)

Remove the Case.(Fig.3)

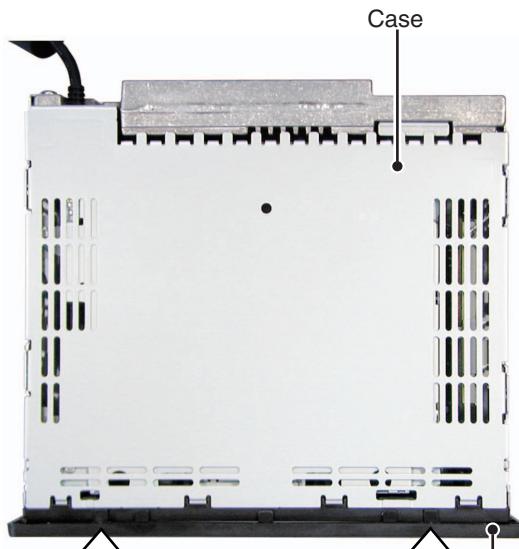


Fig.3

Take off four picks of the part of the arrow
and then remove the Panel.(Fig.4)



Fig.4

F

● Removing the Panel Assy (Fig.5,6)

A Push the place of the arrows and then remove the Panel Assy.



Fig.5

Panel Assy

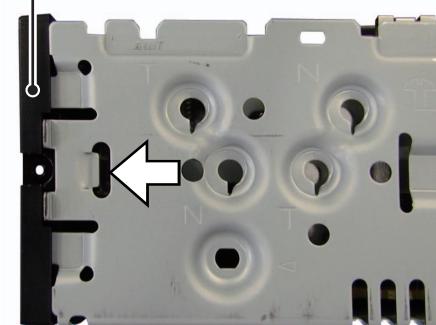


Fig.6

● Removing the CD Mechanism Module (Fig.7)

C 1 Remove the four screws.

D Disconnect the cable and then remove the CD Mechanism Module.

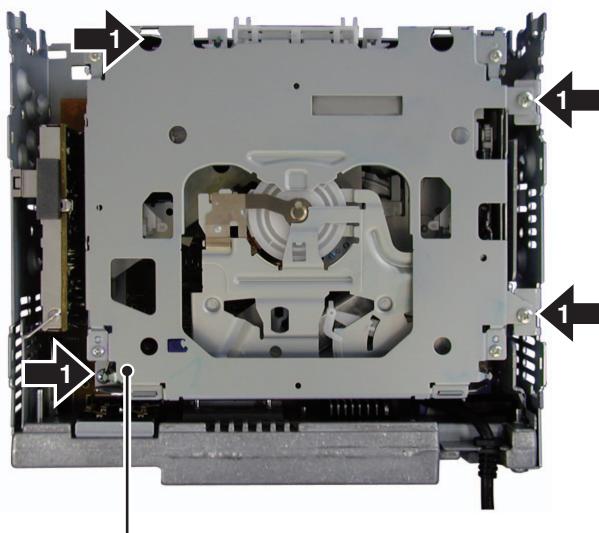


Fig.7

CD Mechanism Module

● Removing the Tuner Amp Unit (Fig.8,9)

- 1 Remove the three screws.(Fig.8)



Fig.8

- 2 Straighten the tabs at four locations indicated.(Fig.9)
- 3 Remove the screw and then remove the Tuner Amp Unit.(Fig.9)

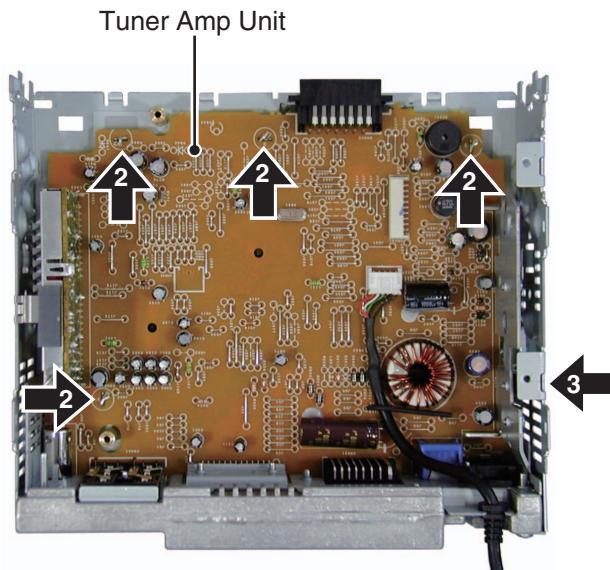
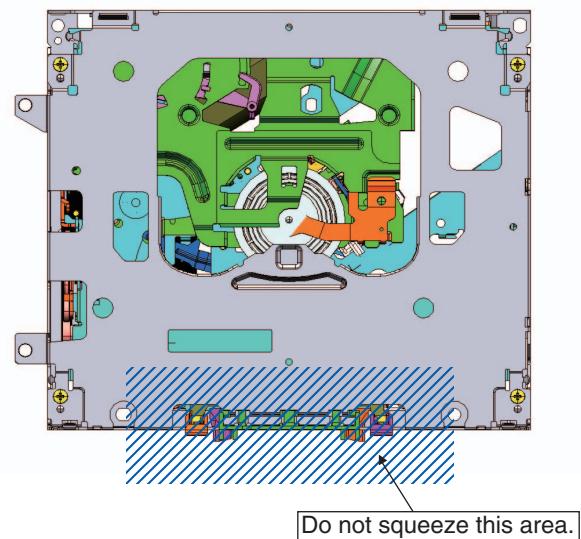


Fig.9

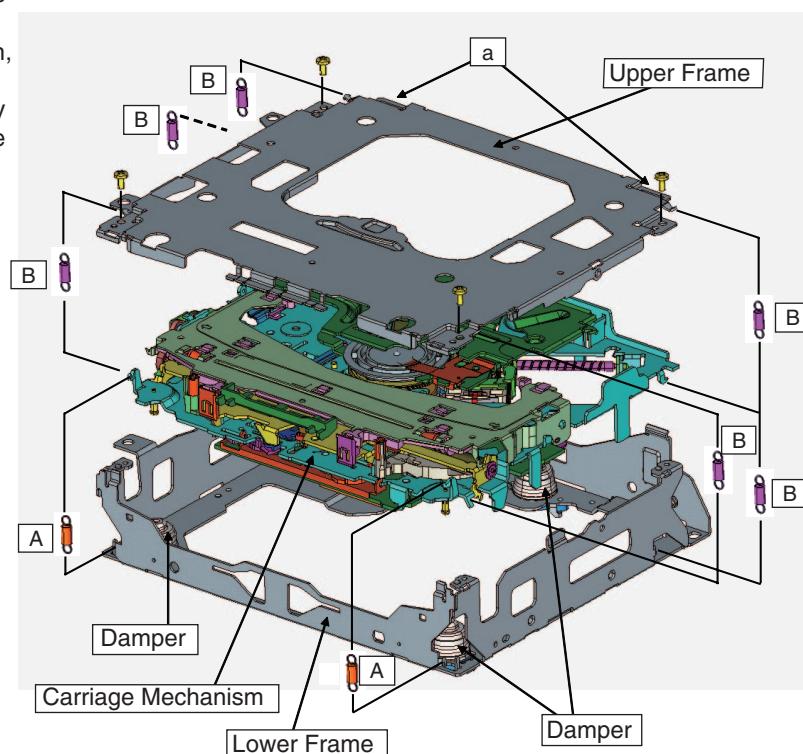
● How to hold the Mechanism Unit

1. Hold the Upper and Lower Frames.
2. Do not hold the front portion of the Upper Frame, because it is not very solid.



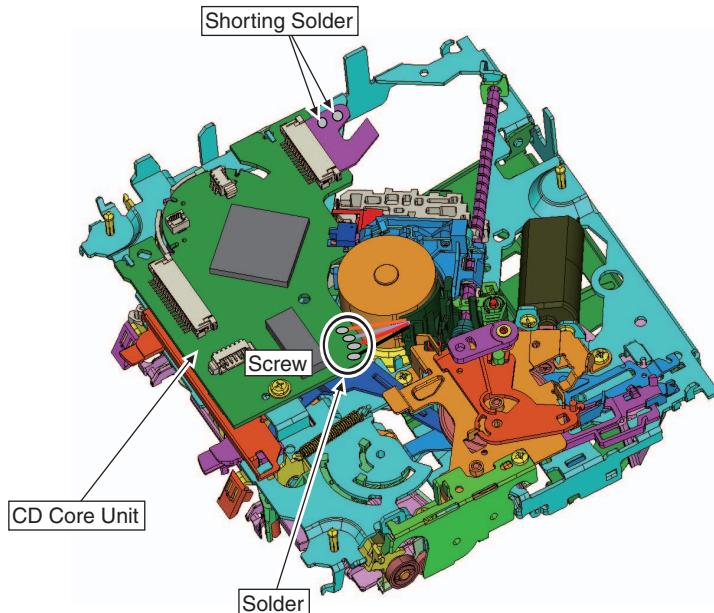
● Removing the Upper and Lower Frames

1. With a disc inserted and clamped in the mechanism, remove the two Springs (A), the six Springs (B), and the four Screws.
 2. Turn the Upper Frame using the part "a" as a pivot, and remove the Upper Frame.
 3. While lifting the Carriage Mechanism, remove it from the three Dampers.
- Caution: When assembling, be sure to apply some alcohol to the Dampers and assemble the mechanism in a clamped state.



● How to remove the CD Core Unit

1. Apply Shorting Solder to the flexible cable of the Pickup, and disconnect it from the connector.
2. Unsolder the four leads, and loosen the Screw.
3. Remove the CD Core Unit.
Caution: When assembling the CD Core Unit, assemble it with the SW in a clamped state so as not to damage it.

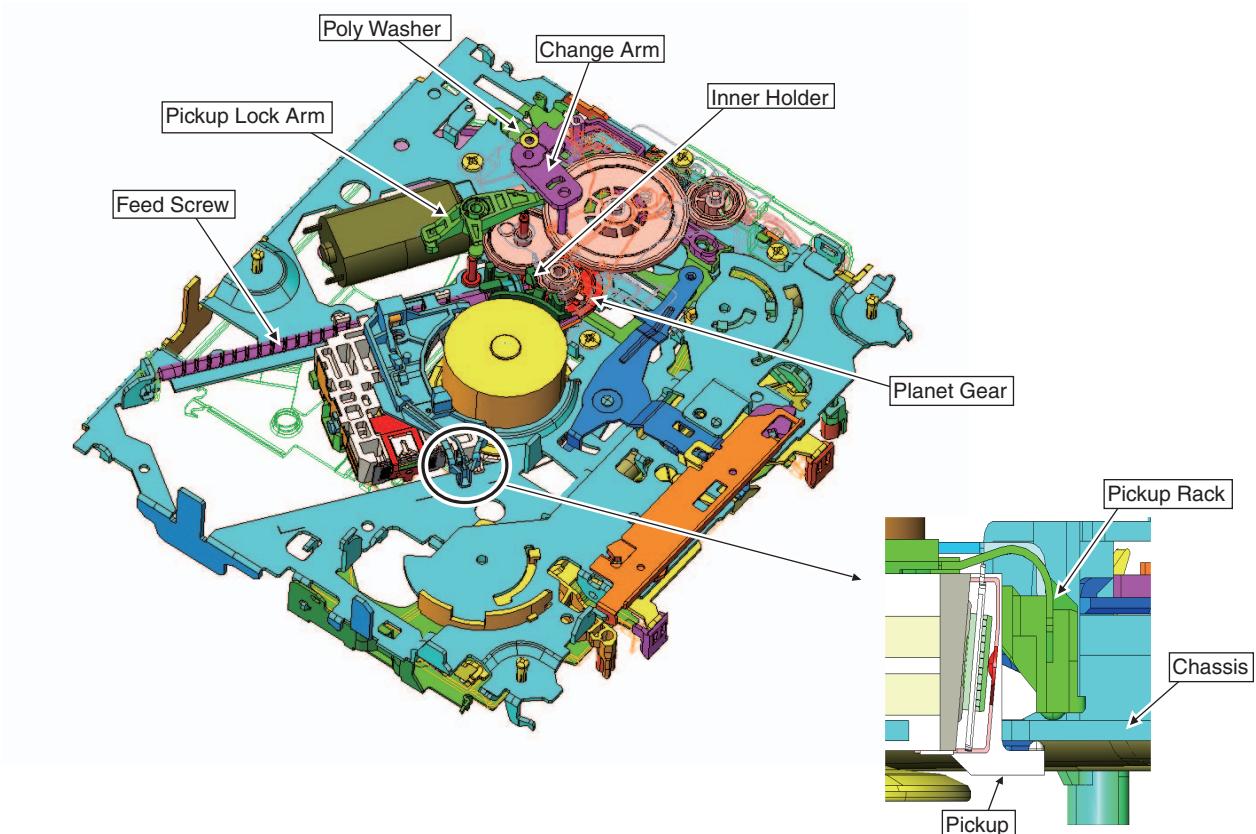


● How to remove the Pickup Unit

1. Make the system in the carriage mechanism mode, and have it clamped.
2. Remove the CD Core Unit and remove the leads from the Inner Holder.
3. Remove the Poly Washer, Change Arm, and Pickup Lock Arm.
4. While releasing from the hook of the Inner Holder, lift the end of the Feed Screw.

Caution: When assembling, move the Planet Gear to the load/eject position before setting the Feed Screw in the Inner Holder.

Assemble the sub unit side of the Pickup, taking the plate (Chassis) in-between. When treating the leads of the Load Carriage Motor Assy, do not make them loose over the Feed Screw.



8. EACH SETTING AND ADJUSTMENT

8.1 PCL OUTPUT CONFIRMATION

A



● 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 63) terminal to H.

The clock signal is output from the PCL terminal IC601(Pin 39).

The frequency of the clock signal is 468 750 Hz that is one 32th of the fundamental frequency.

The clock signal should be 468 750 Hz (-10 Hz, +15 Hz)

If the clock signal out of the range, the X'tal (X601) should be replaced with new one.

B

C

D

E

F

■ 5

■ 6

■ 7

■ 8

A

B

C

D

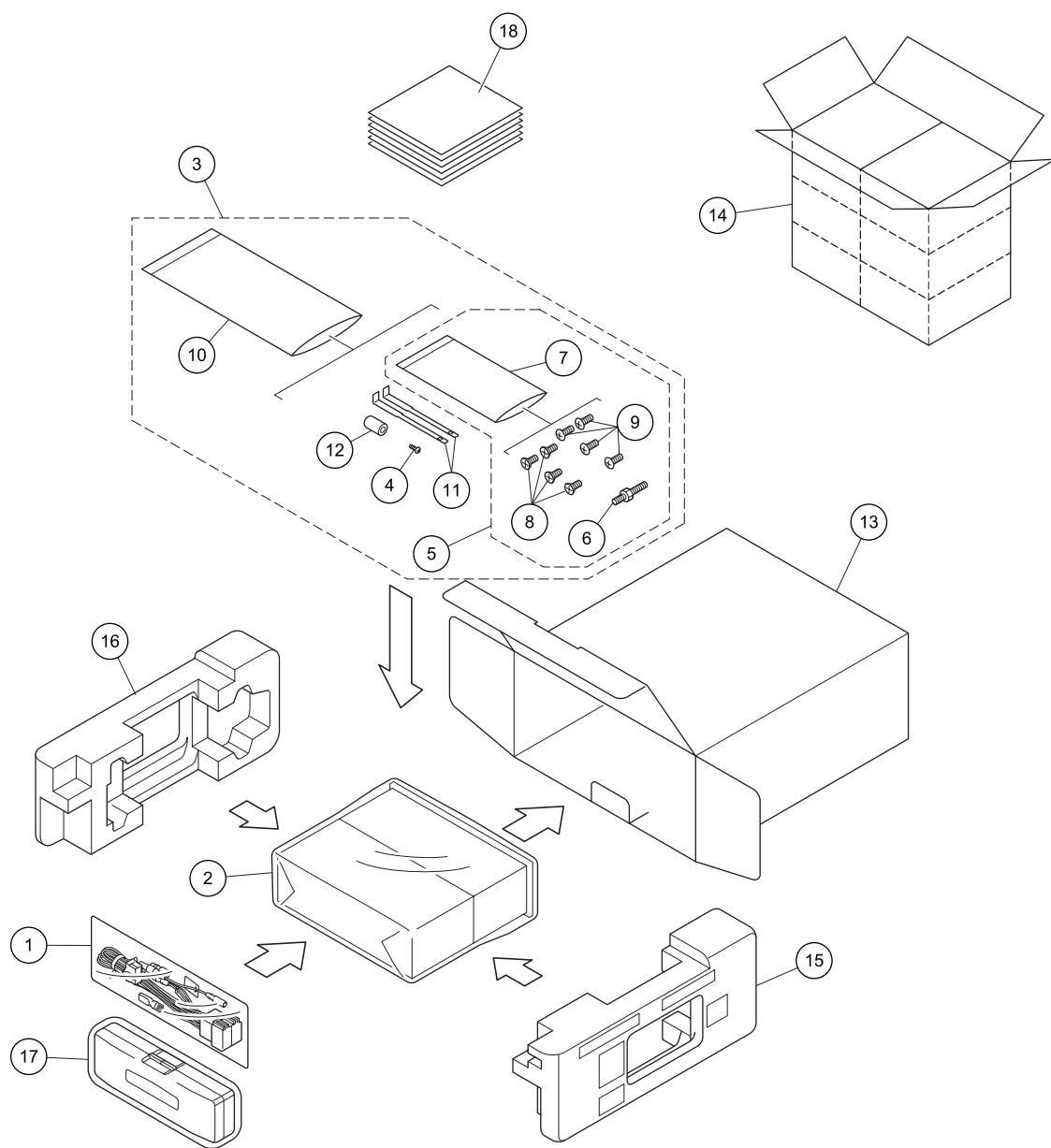
E

F

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



PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Cord Assy	CDP1015	13	Unit Box	YHG5396
2	Polyethylene Bag	CEG-162	14	Contain Box	YHL5396
*	Accessory Assy	YEA5029	15	Protector	YHP5039
4	Screw	BPZ20P060FTC			A
5	Screw Assy	CEA3849	16	Protector	YHP5040
			17	Case Assy	YXB5009
6	Screw	CBA1650	18-1	Owner's Manual	YRB5071
*	Polyethylene Bag	CEG-127	18-2	Owner's Manual	YRD5180
8	Screw	CRZ50P090FTC	18-3	Owner's Manual	YRD5181
9	Screw	TRZ50P080FTC	18-4	Owner's Manual	YRD5182
10	Polyethylene Bag	CEG1160	18-5	Installation Manual	YRD5189
11	Handle	CND3707	*	18-6 Warranty Card	CRY1265
12	Bush	CNV3930			B

Owner's Manual, Installation Manual

Part No.	Language
YRD5180	English, Spanish
YRD5181	German, French
YRD5182	Italian, Dutch
YRB5071	Russian
YRD5189	English, Spanish, German, French, Italian, Dutch, Russian

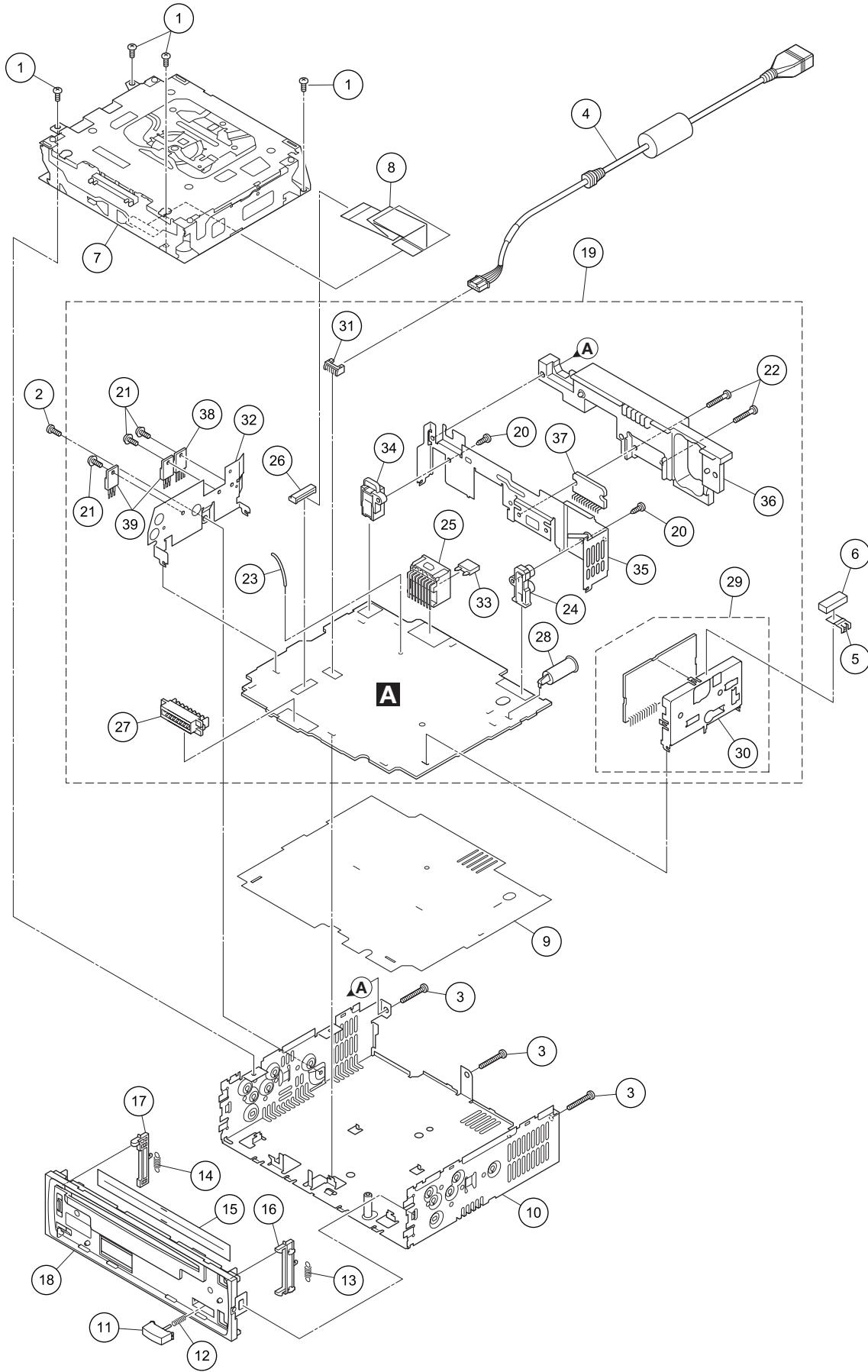
C

D

E

F

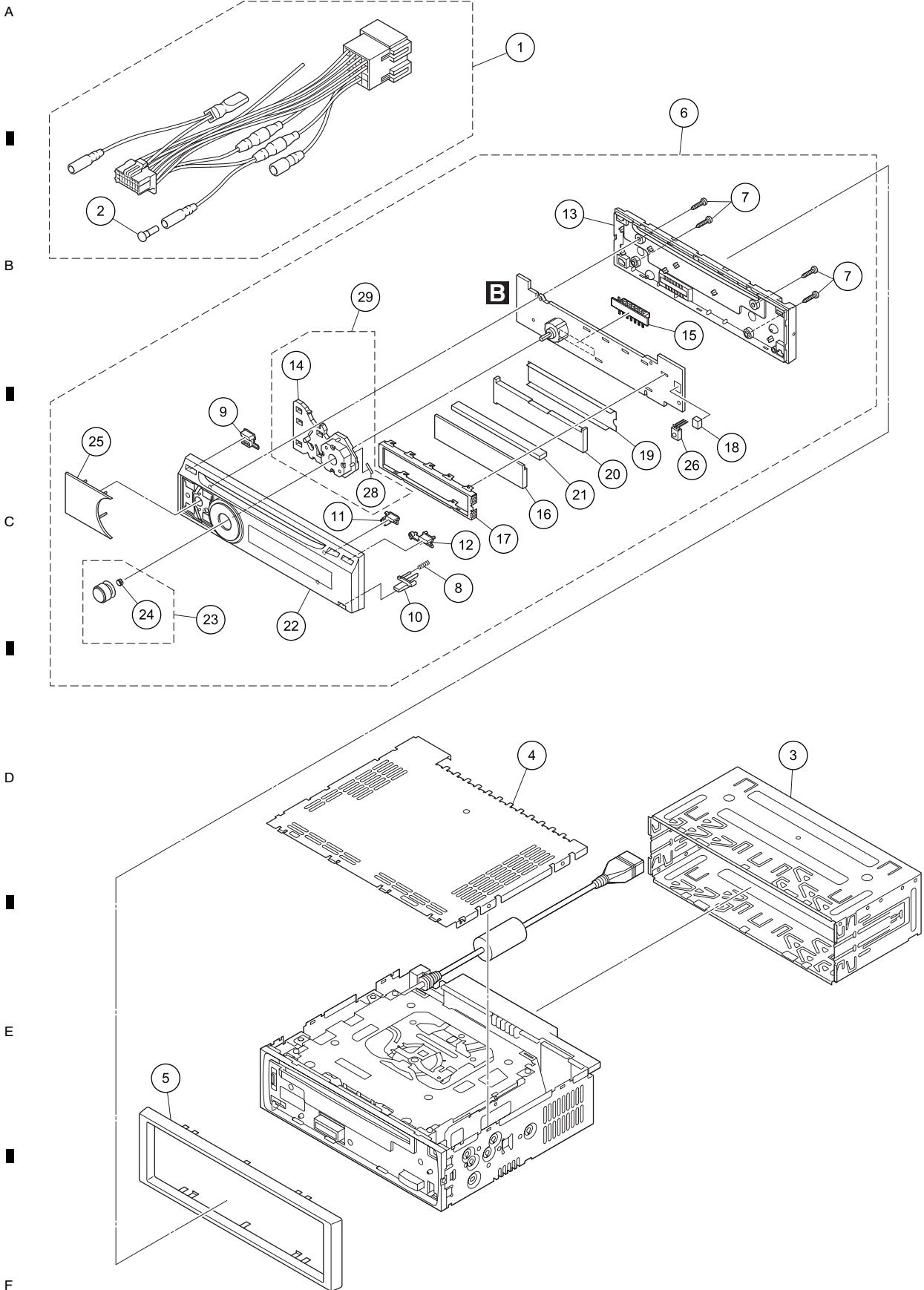
1 2 3 4
9.2 EXTERIOR(1)



EXTERIOR(1) SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	Screw	BSZ26P060FTC	
2	Screw	BSZ30P060FTC	A
3	Screw	BSZ30P200FTC	
4	Cord Assy	CDE8351	
5	Earth Plate	CNC8915	
6	Cushion	CNM8890	
7	CD Mechanism Module(S10.5)	CXK5771	
8	Cable	YDE5030	
9	Insulator	YNM5062	
10	Chassis Unit	YXA5358	
11	Button(DETACH)	CAC4836	B
12	Spring	CBH2367	
13	Spring	CBH2961	
14	Spring	CBH2962	
15	Cover	CNN1665	
16	Arm	CNV9311	
17	Arm	CNV9312	
18	Panel	YNS5305	
19	Tuner Amp Unit	YWM5183	
20	Screw	BPZ26P080FTC	C
21	Screw	BSZ26P060FTC	
22	Screw	BSZ26P200FTC	
23	Clamper	CEF1050	
24	Pin Jack(CN351)	CKB1059	
25	Plug(CN901)	CKM1376	
26	Connector(CN701)	CKS3833	
27	Connector(CN803)	CKS5664	
28	Antenna Jack(CN401)	CKX1056	
29	FM/AM Tuner Unit(Y401)	CWE2097	D
30	Holder	CND4324	
31	Plug(CN251)	KM200NA5L	
32	Holder	XNC7030	
△ 33	Fuse(10 A)	YEK5001	
34	Jack(CN621)	YKS5001	
35	Holder	YNC5052	
36	Heat Sink	YNR5031	
37	IC(IC301)	PAL007C	E
38	IC(IC921)	NJM2388F84	
39	Transistor(Q702, Q911)	2SD2396	

9.3 EXTERIOR(2)



EXTERIOR(2) SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Cord Assy	CDP1015
2	Cap	CKX-003
3	Holder	CND3598
4	Case	YNB5014
5	Panel	YNS5306
6	Detachable Assy	YXA5276
7	Screw	BPZ20P100FTB
8	Spring	CBH2210
9	Button(TA)	YAC5250
10	Button(Detach)	YAC5259
11	Button(EJECT)	YAC5315
12	Button(ILL)	YAC5316
13	Cover	YNS5304
14	Lighting Conductor	YNV5148
15	Connector(CN1801)	CKS5663
16	LCD(LCD1801)	YAW5090
17	Holder	YND5015
18	Cushion	YNM5029
19	Sheet	YNM5105
20	Lighting Conductor	YNV5136
21	Connector	YNV5140
22	Service Grille Assy	YXA5461
23	Knob Unit(MULTI-CONTROL)	YXA5350
24	Spring	YBL5013
25	Button Unit	YXA5362
(SRC, OFF, DISP, BACK/SCRL, BAND, ESC, MUTE, USB)		
26	IC(IC1805)	GP1UX51RK
27	*****	
28	Insulator	YNM5116
29	Lighting Conductor Unit	YXA5366

A

B

C

D

E

F

9.4 CD MECHANISM MODULE

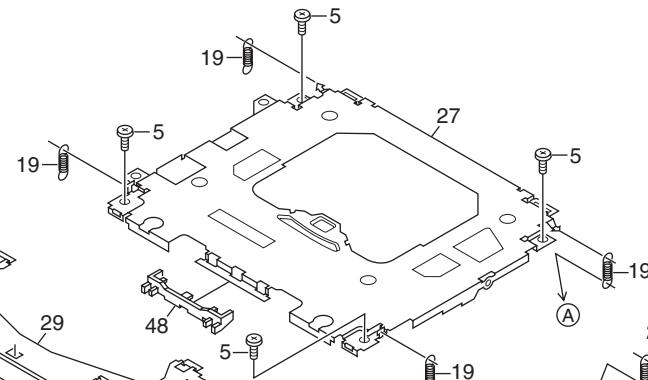
1

2

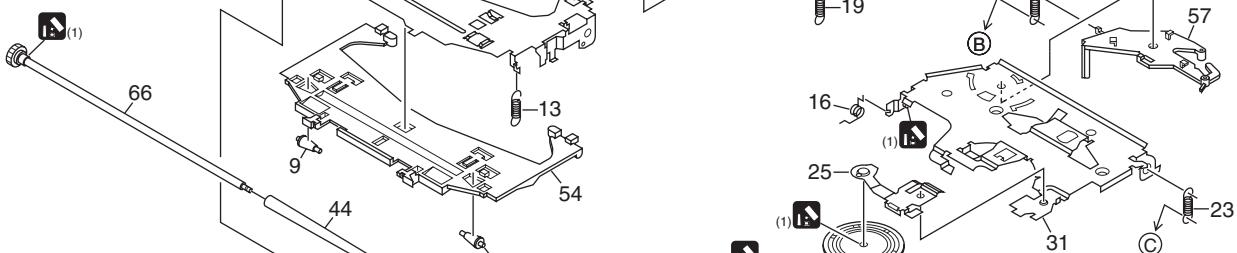
3

4

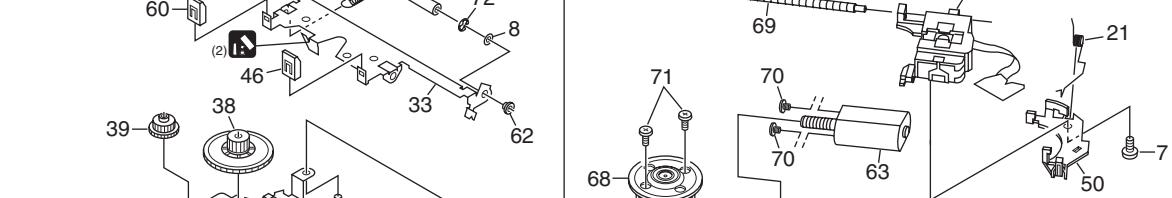
A



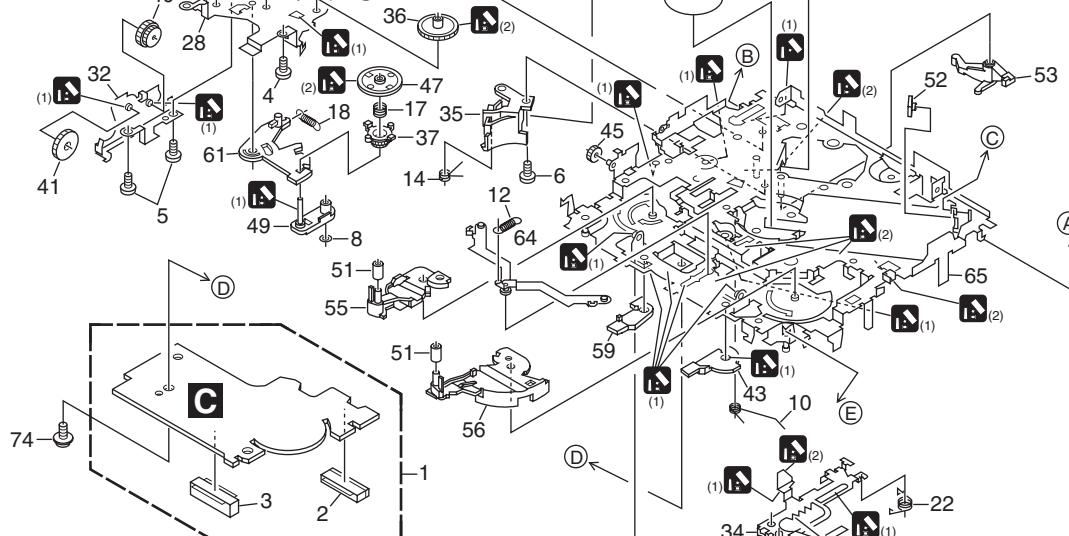
B



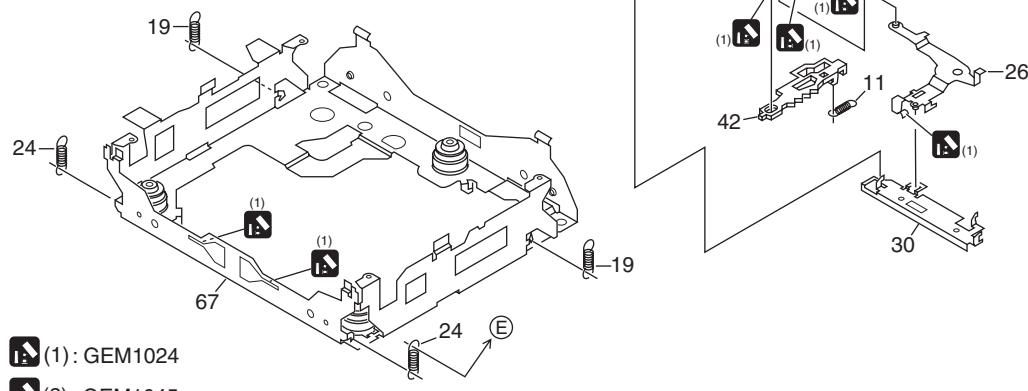
C



D



E



F

(1): GEM1024
 (2): GEM1045

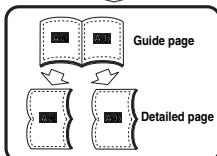
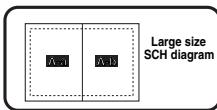
CD MECHANISM MODULE SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	CD Core Unit(S10.5COMP2-USB)	CWX3527	50	Rack	CNV8342
2	Connector(CN101)	CKS4911	51	Roller	CNV8343
3	Connector(CN701)	CKS4915	52	Holder	CNV8344
4	Screw	BMZ20P025FTC	53	Arm	CNV8345
5	Screw	BSZ20P040FTC	54	Guide	CNV9498
6	Screw(M2 x 3)	CBA1511	55	Arm	CNV8348
7	Screw(M2 x 4)	CBA1835	56	Arm	CNV8349
8	Washer	CBF1038	57	Arm	CNV8350
9	Roller	CNV9499	58	Clamper	CNV8365
10	Spring	CBH2609	59	Arm	CNV8386
11	Spring	CBH2612	60	Guide	CNV8396
12	Spring	CBH2614	61	Arm	CNV9521
13	Spring	CBH2616	62	Collar	CNV8447
14	Spring	CBH2617	63	Motor Unit(M2)	CXC4026
15	Spring	CBH2620	64	Arm Unit	CXC4027
16	Spring	CBH2855	65	Chassis Unit	CXC4028
17	Spring	CBH2937	66	Gear Unit	CXC4029
18	Spring	CBH2735	67	Frame Unit	CXC4031
19	Spring	CBH2854	68	Motor Unit(M1)	CXC7134
20	Spring	CBH2642	69	Screw Unit	CXC6359
21	Spring	CBH2856	70	Screw	JFZ20P025FTC
22	Spring	CBH2857	71	Screw	JGZ17P022FTC
23	Spring	CBH2860	72	Washer	YE20FTC
24	Spring	CBH2861	73	Pickup Unit(P10.5)(Service)	CXX1942
25	Spring	CBL1686	74	Screw	IMS26P030FTC
26	Arm	CND1909			
27	Frame	CND2582			
28	Bracket	CND2583			
29	Arm	CND3831			
30	Lever	CND2585			
31	Arm	CND2586			
32	Bracket	CND2587			
33	Arm	CND2588			
34	Lever	CND2589			
35	Holder	CNV9522			
36	Gear	CNV7207			
37	Gear	CNV9513			
38	Gear	CNV7209			
39	Gear	CNV9514			
40	Gear	CNV9515			
41	Gear	CNV9516			
42	Rack	CNV9517			
43	Arm	CNV7216			
44	Roller	CNV8189			
45	Gear	CNV9518			
46	Guide	CNV9519			
47	Gear	CNV7595			
48	Guide	CNV9520			
49	Arm	CNV7805			

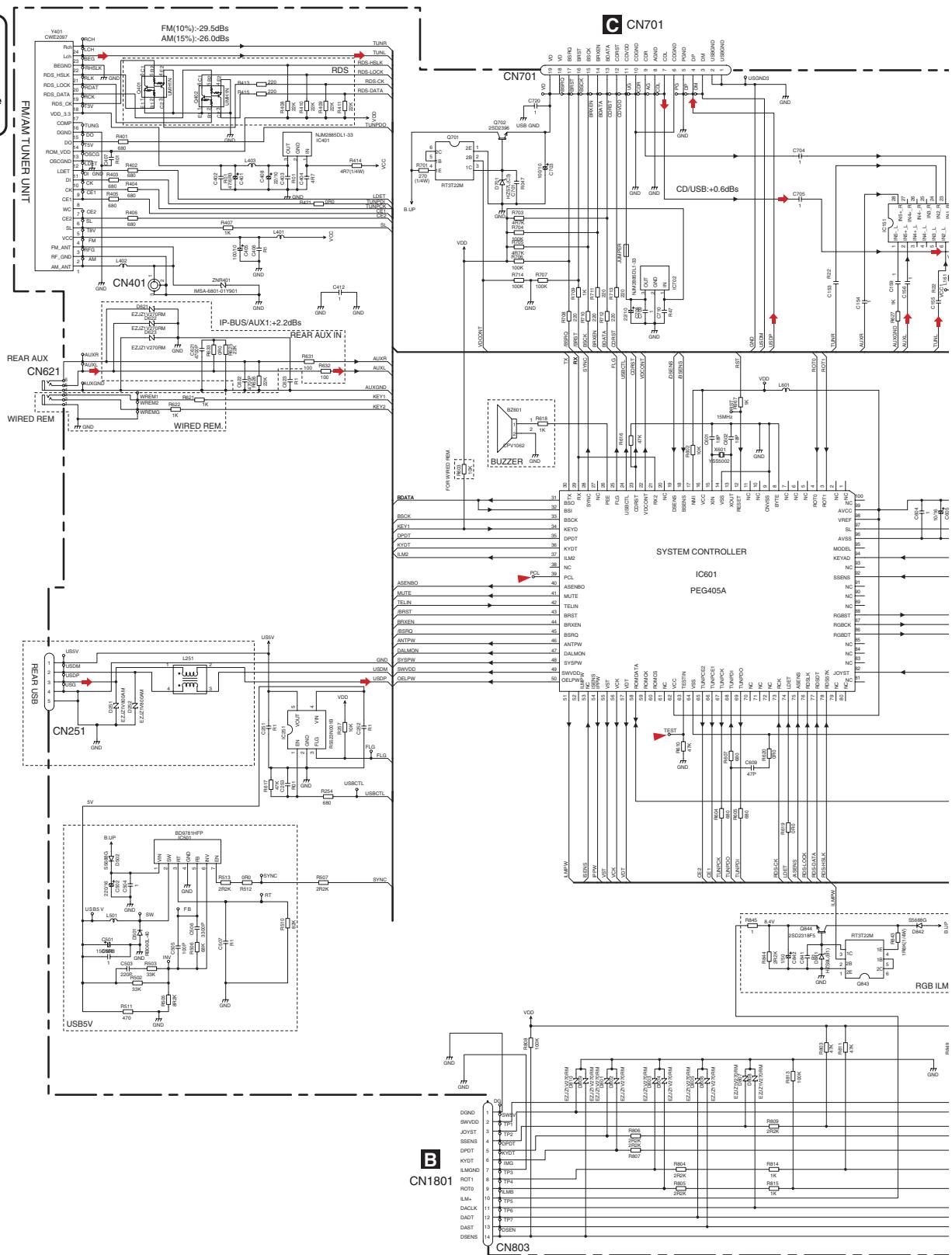
10. SCHEMATIC DIAGRAM

10.1 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

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

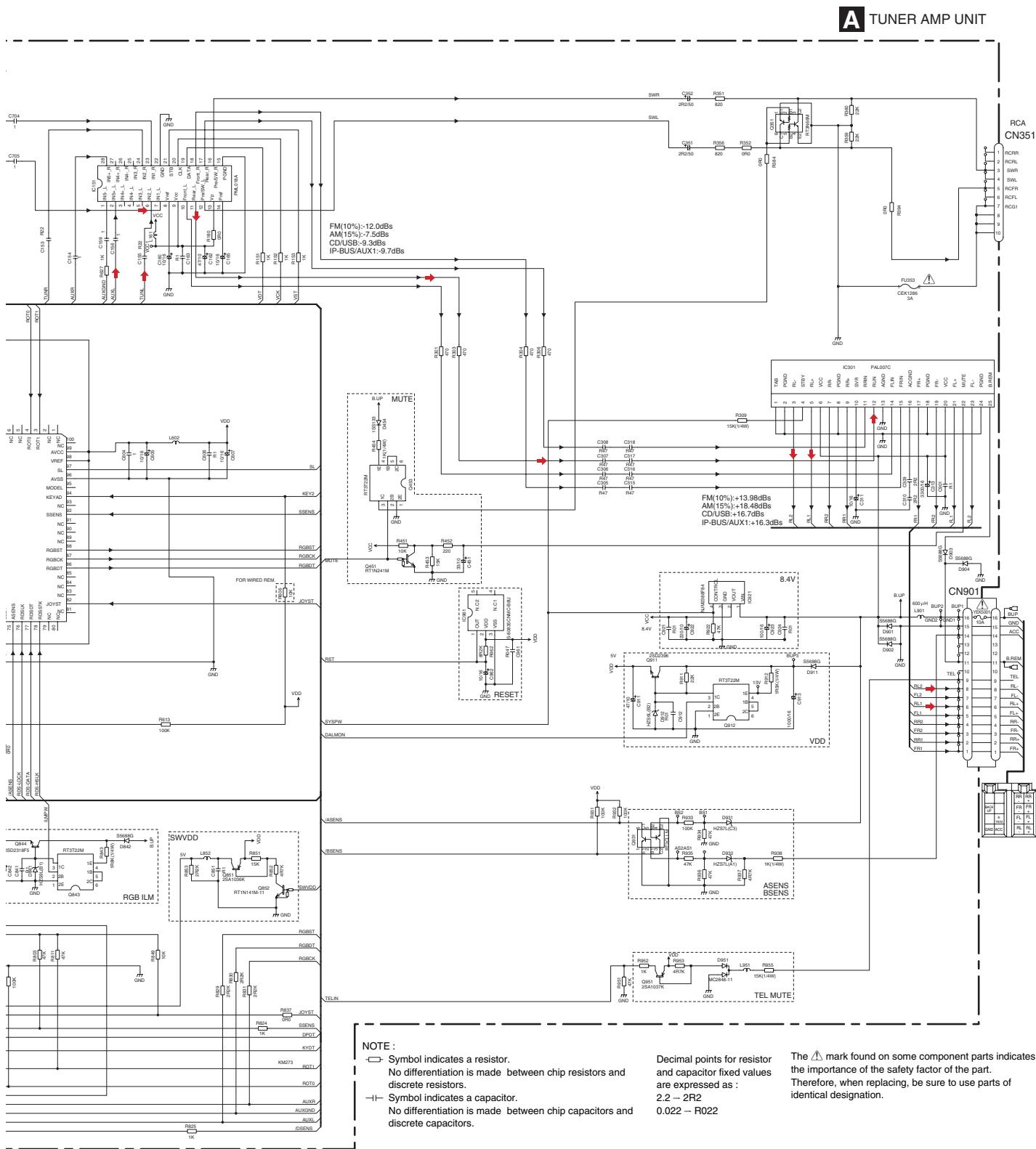


A-a



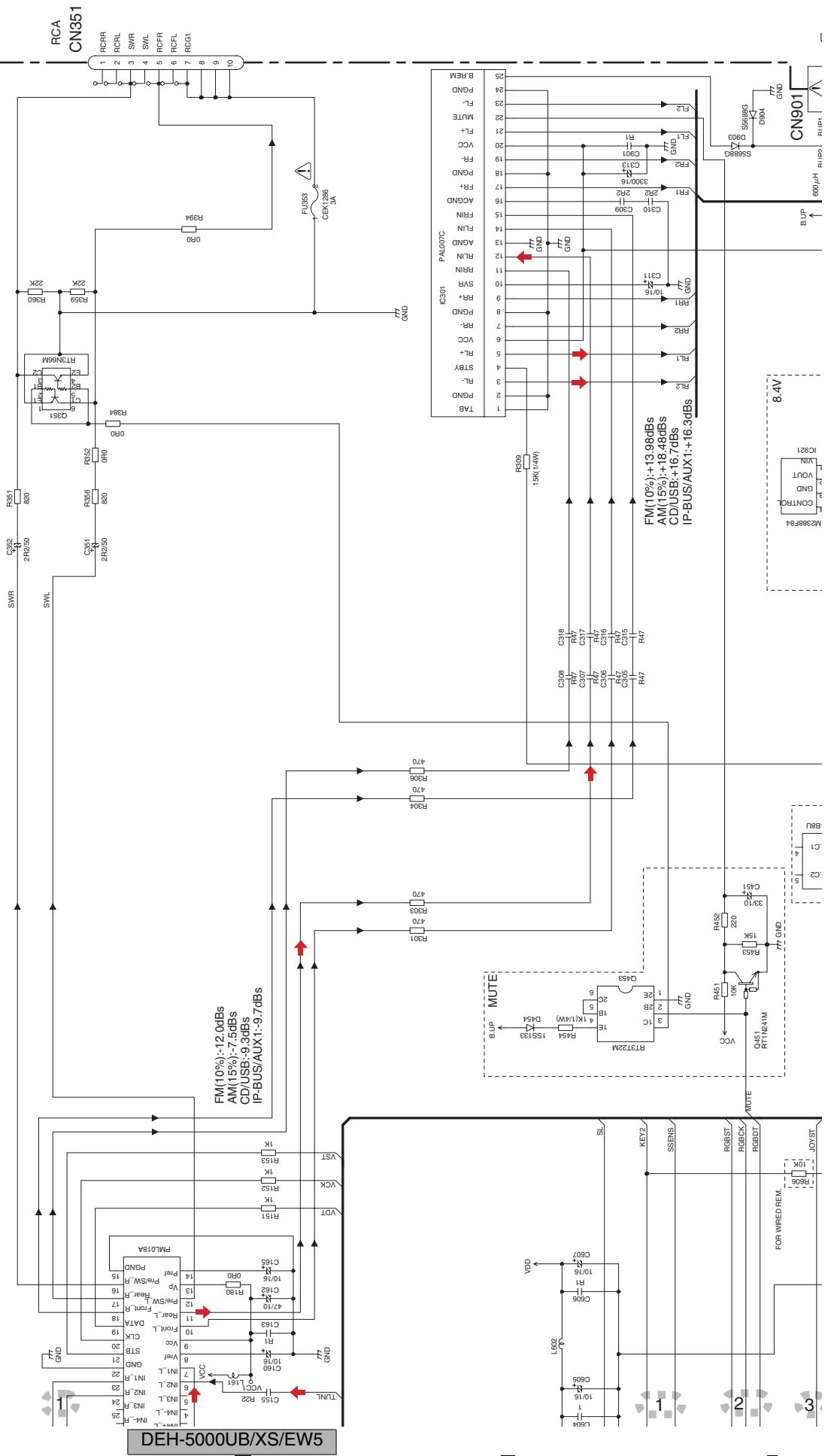
A

A-b

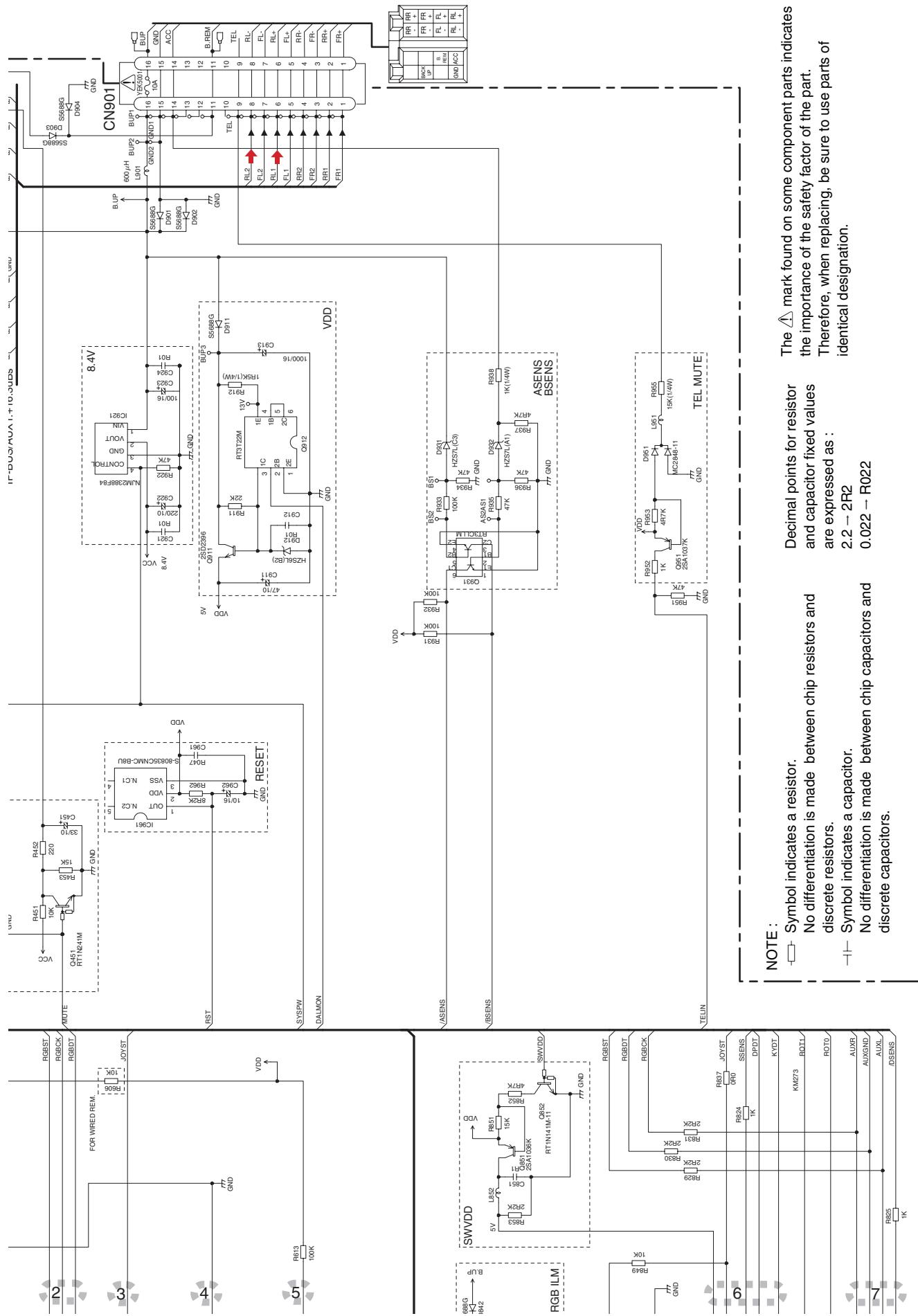


A TUNER AMP UNIT

A-a A-b



A-b



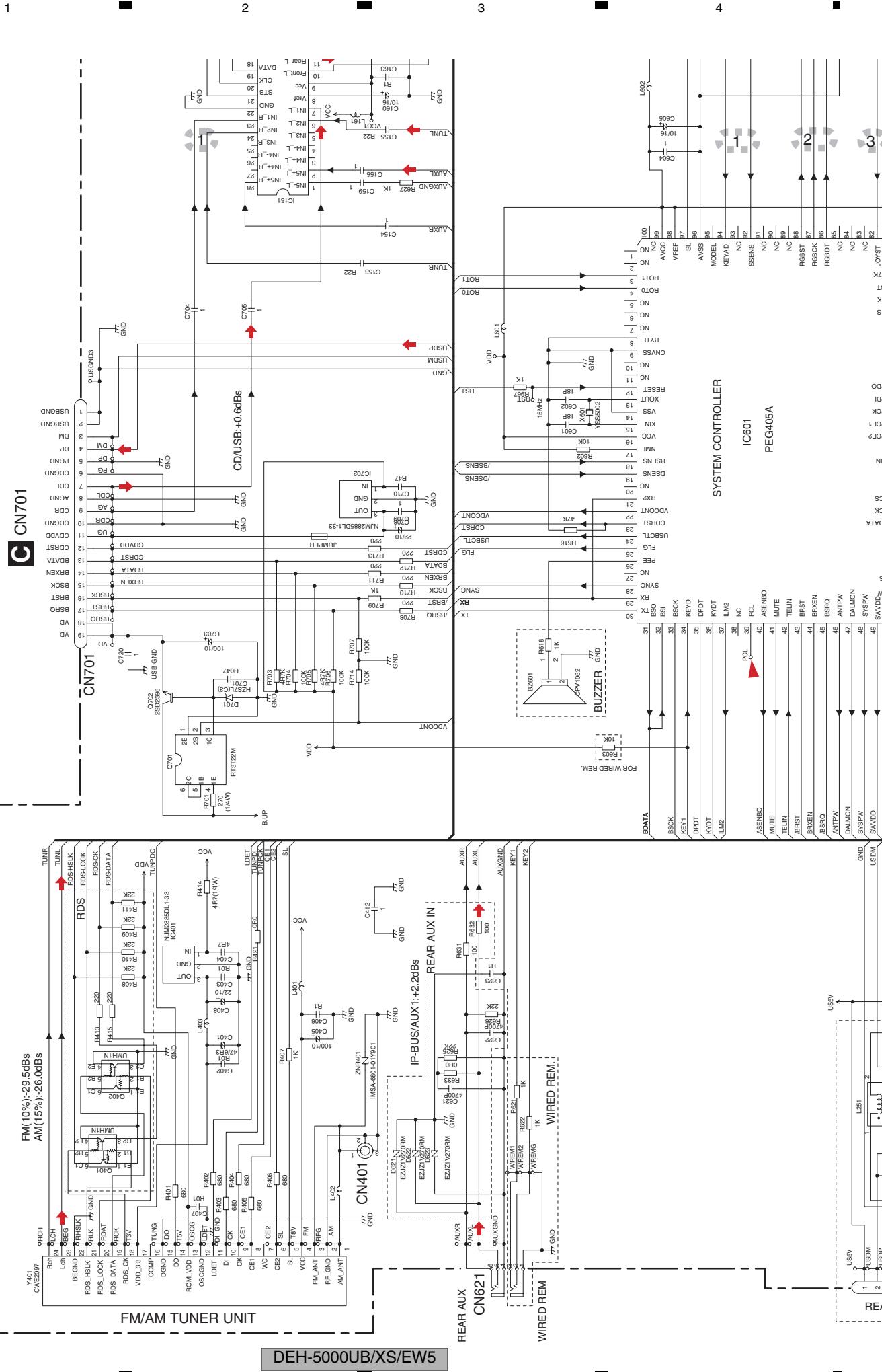
The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

NOTE :
Decimal points for resistor and capacitor fixed values are expressed as :
 $2.2 \rightarrow 2R2$

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.

A-a A-b

A-b



A-b

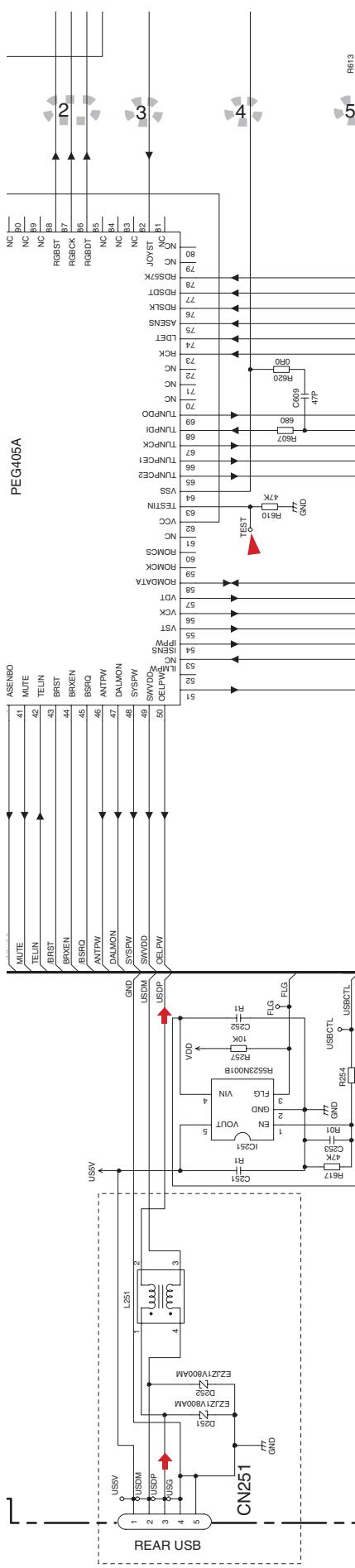
B

C

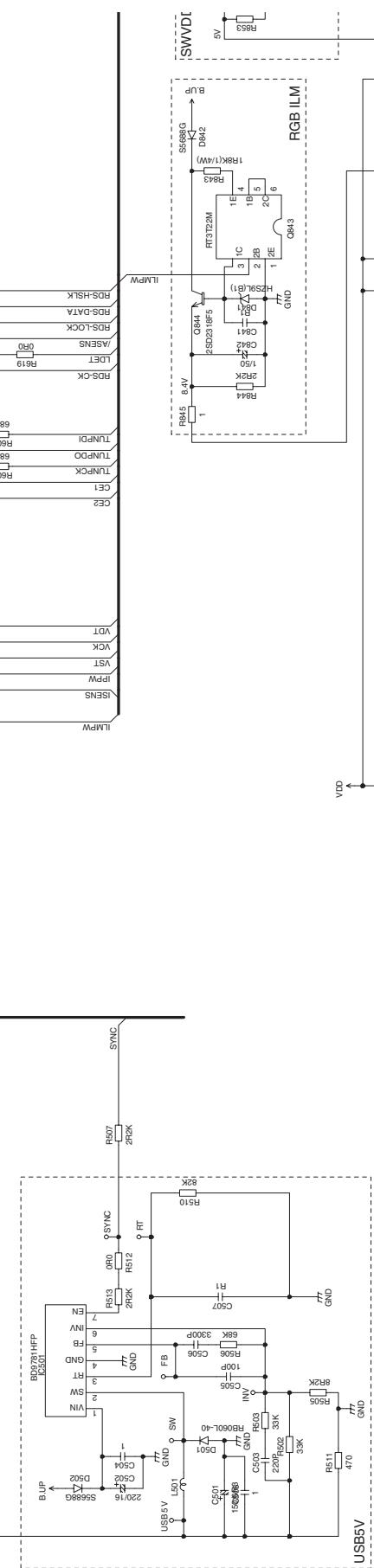
D

E

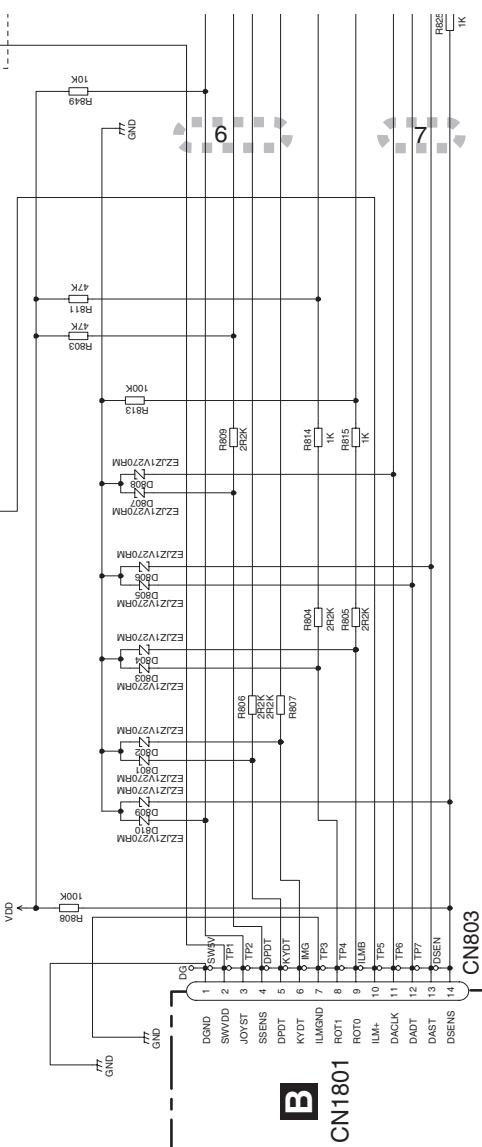
F



REAR USB



DEH-5000UB/XS/EW5



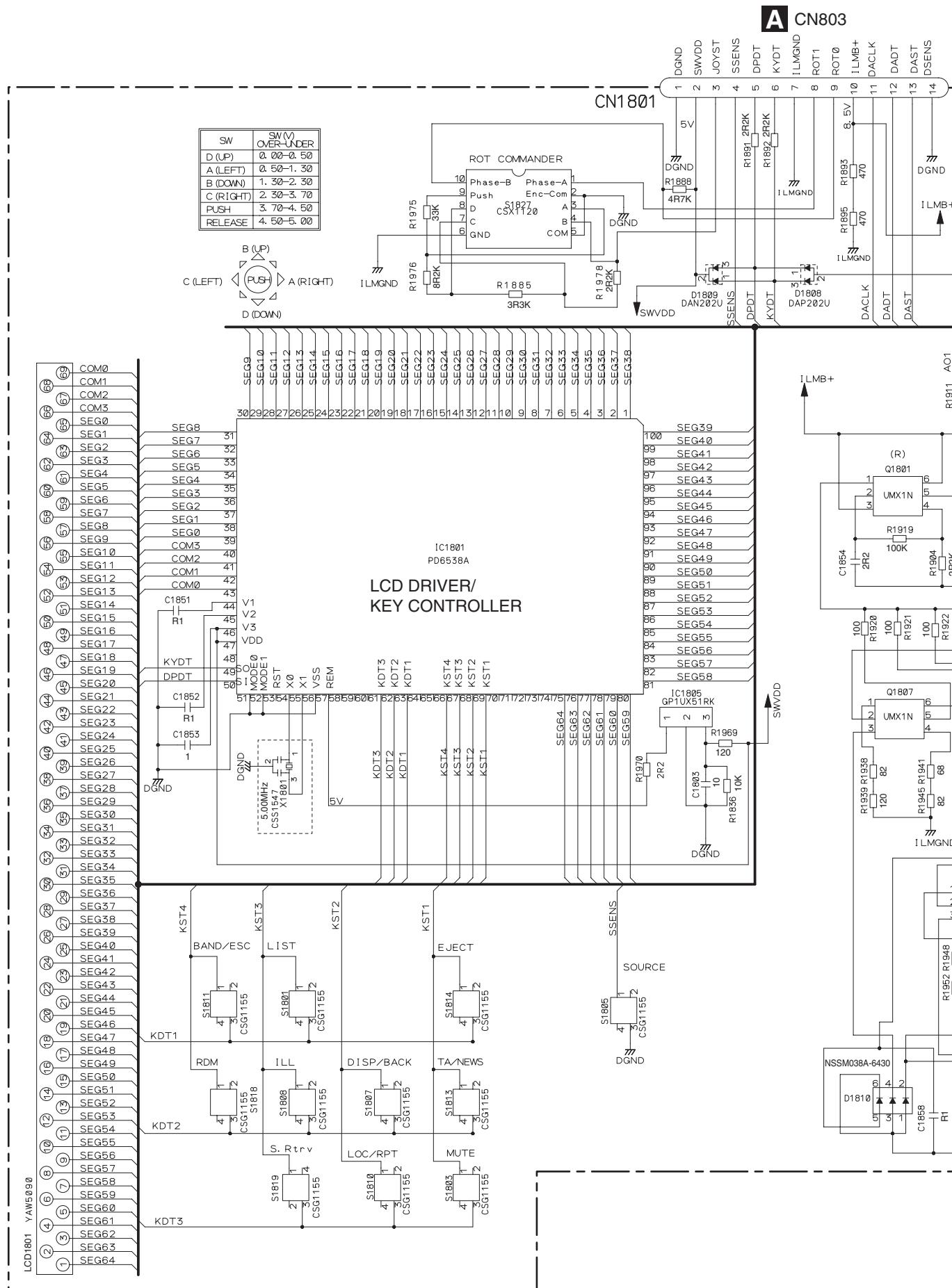
CN1801

A-a

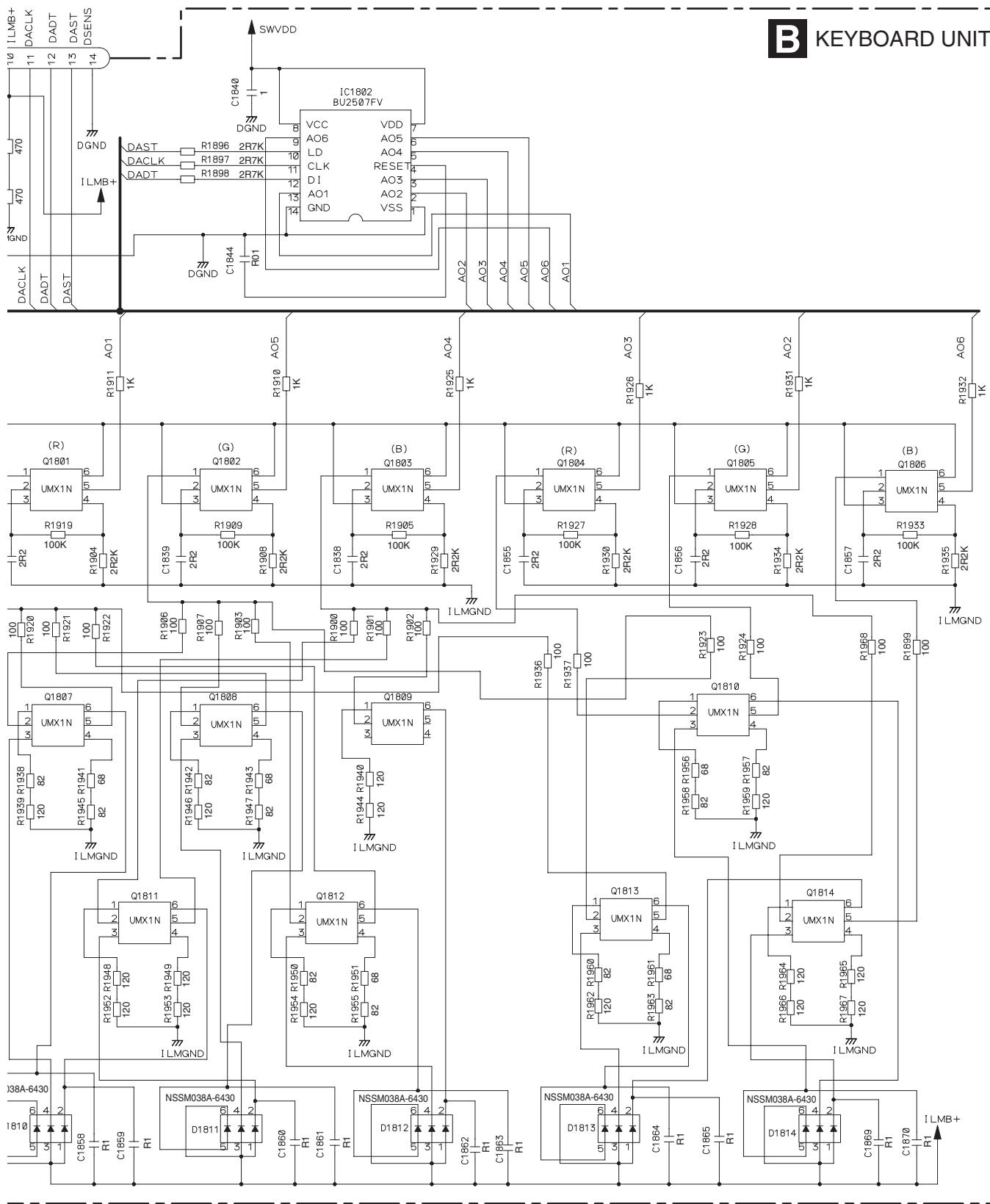
A-b

8

10.2 KEYBOARD UNIT



B KEYBOARD UNIT



10.3 CD MECHANISM MODULE(GUIDE PAGE)

1

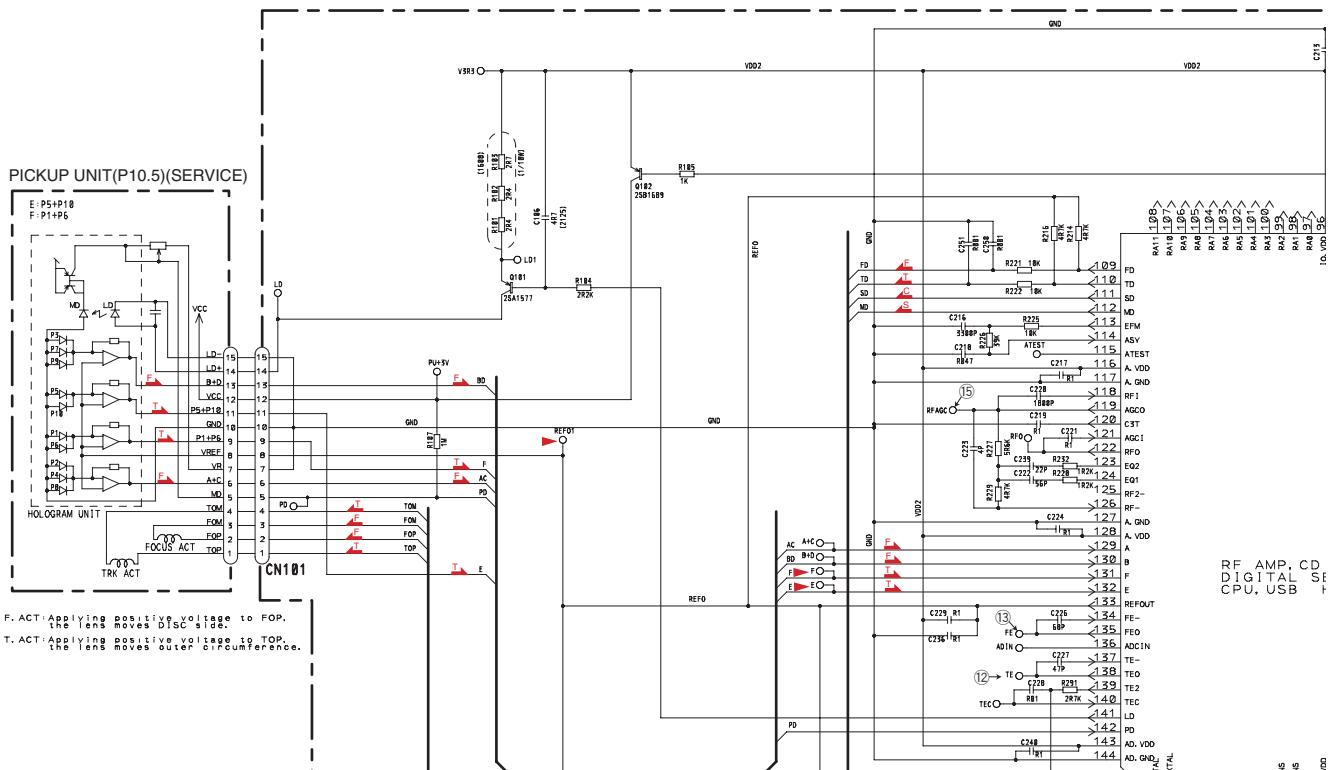
2

3

4

A

C-a



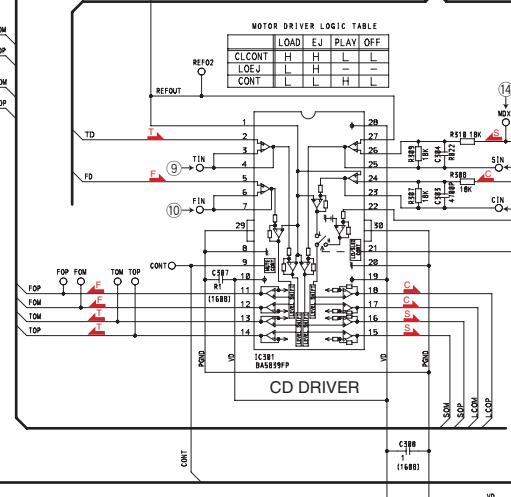
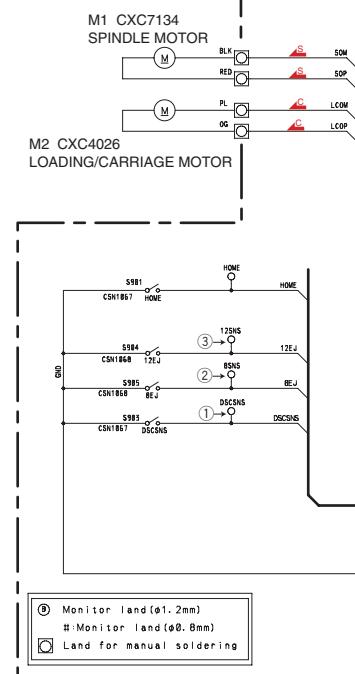
SWITCHES:
 CD CORE UNIT(S10.5COMP2-USB)
 S901:HOME SWITCH.....ON-OFF
 S903:DSCSNS SWITCH.....ON-OFF
 S904:12EJ SWITCH.....ON-OFF
 S905:8EJ SWITCH.....ON-OFF

The underlined indicates the switch position.

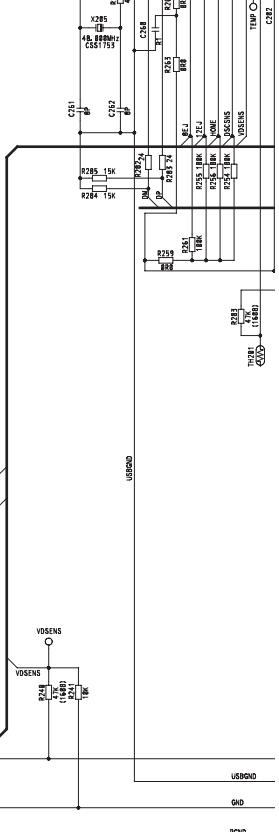
D

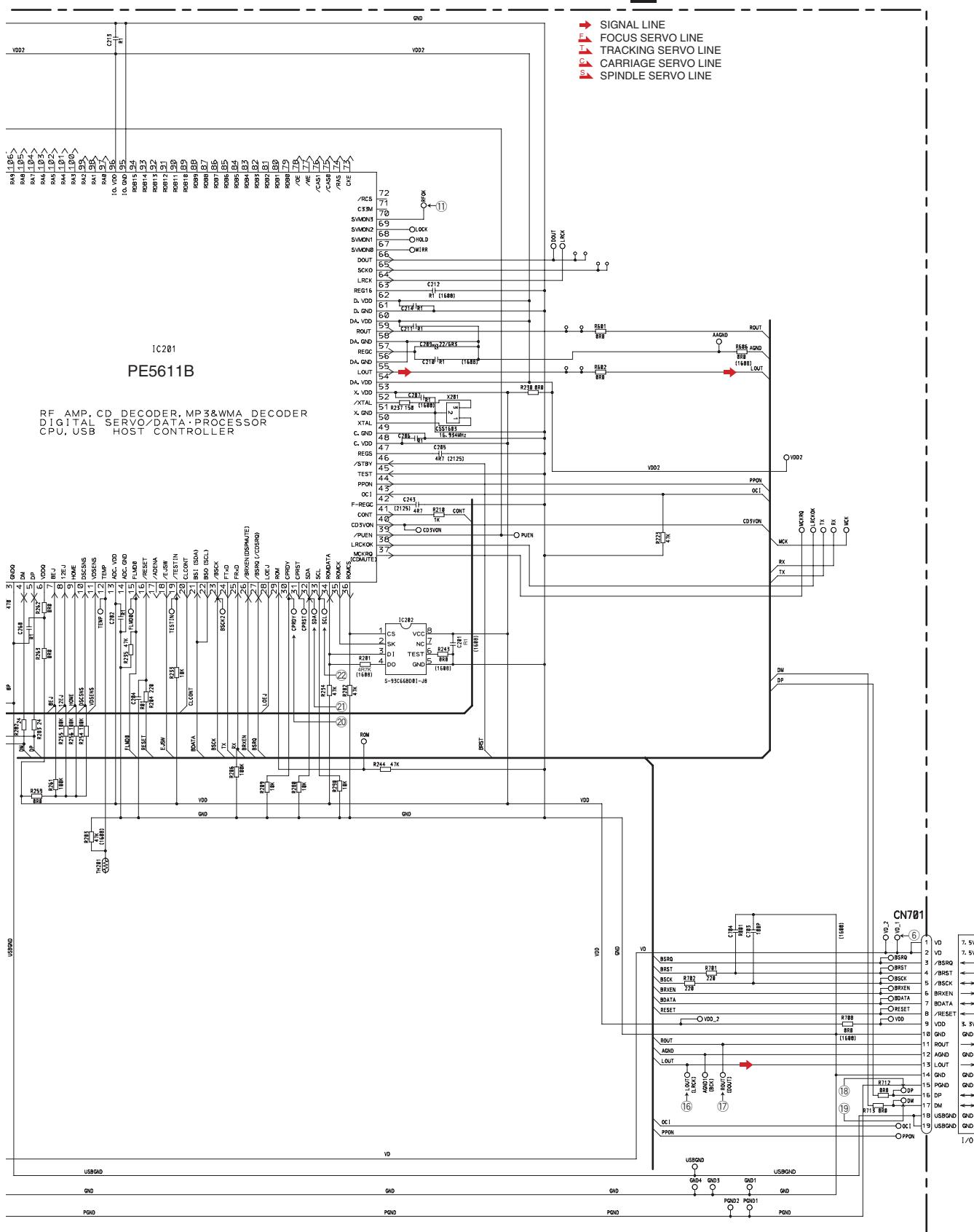
E

F



NOTE1) GND ... LGI, RFAMP, CPU
 AGND ... Actuator, Motor Driver
 AGND ... Audio
 These GND's are not connected to each other on PCB.
 PGND is connected to a floating mechanism part by a screw.



C-b**C CD CORE UNIT(S10.5COMP2-USB)****C**

A

C CD CORE UNIT(S10.5COMP2-USB)

SIGNAL LINE
 FOCUS SERVO LINE
 TRACKING SERVO LINE
 CARRIAGE SERVO LINE
 SPINDLE SERVO LINE

GND

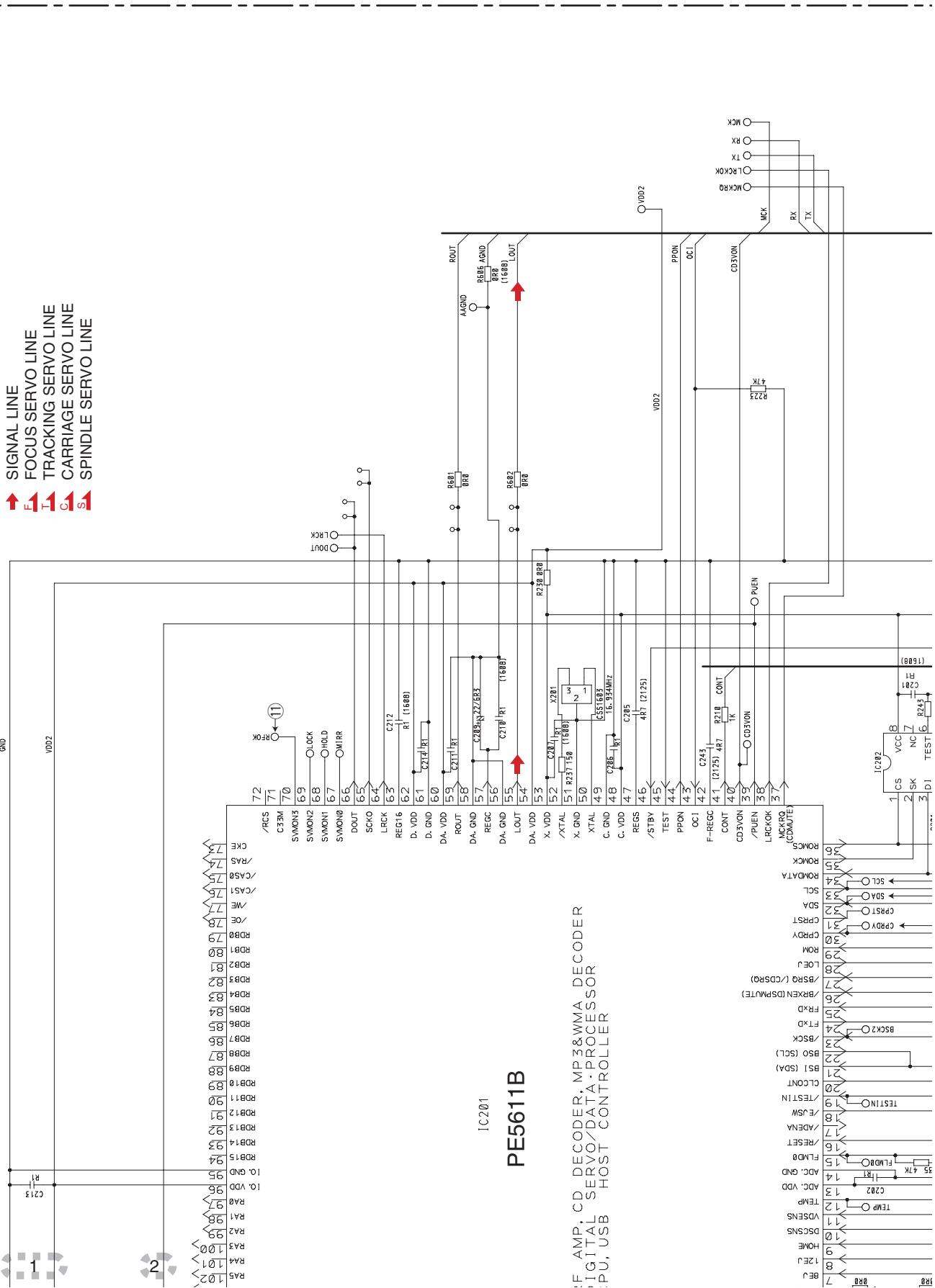
vdd2

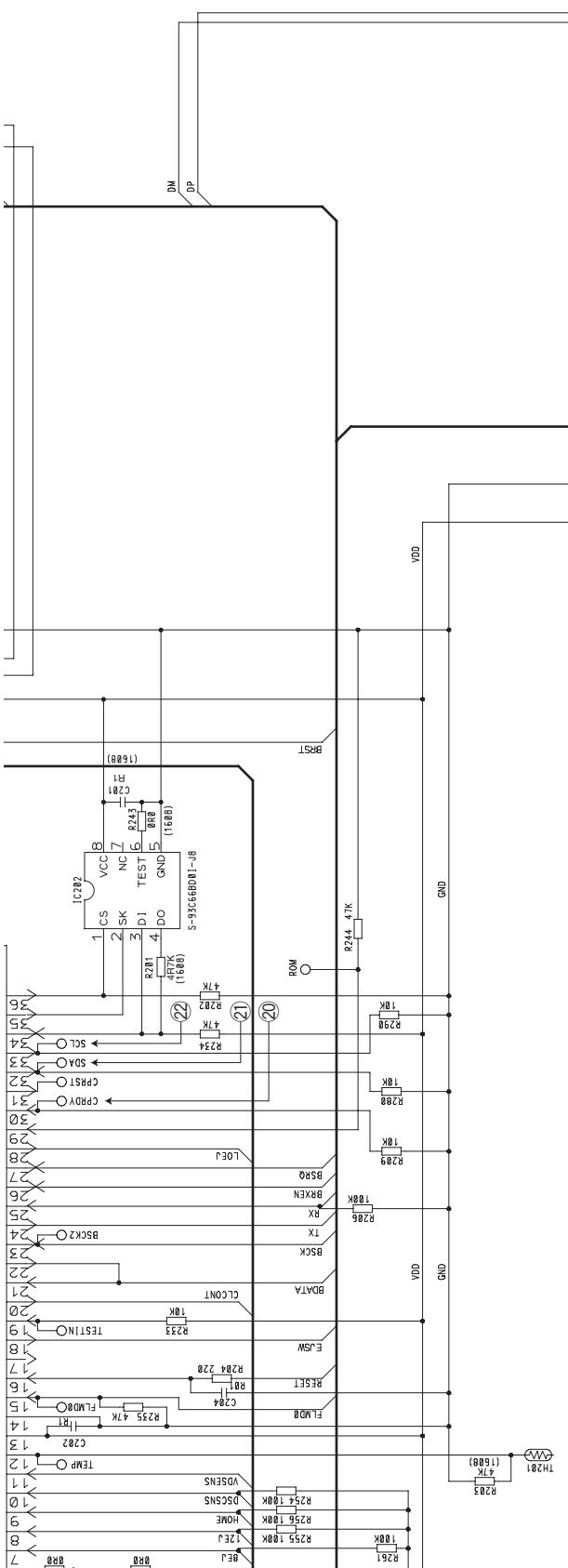
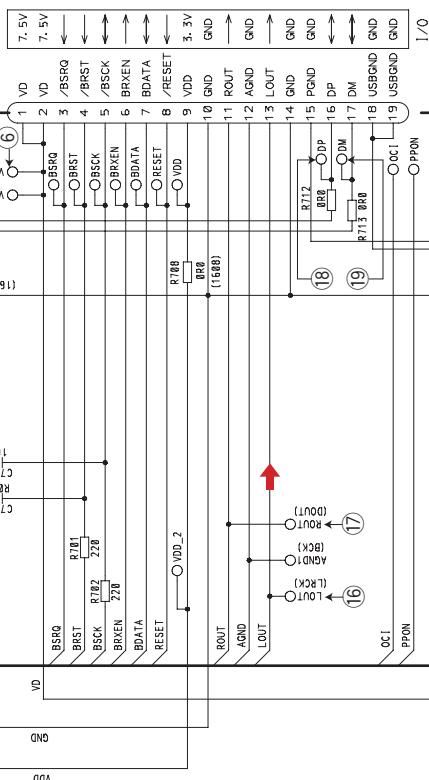
C-a C-b

2

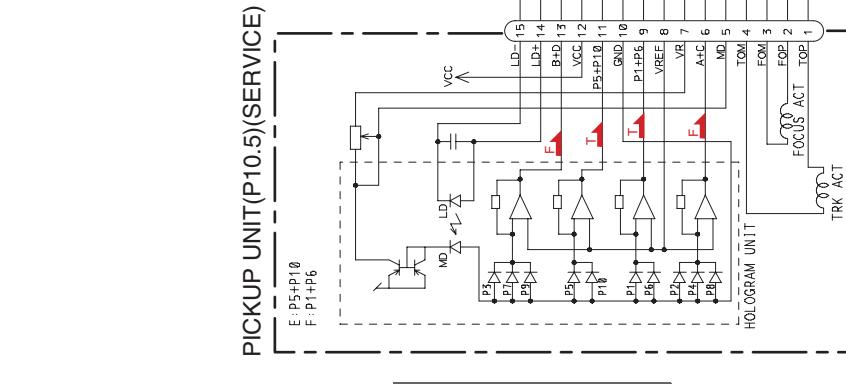
PE5611B

DEH-5000UB/XS/FW5

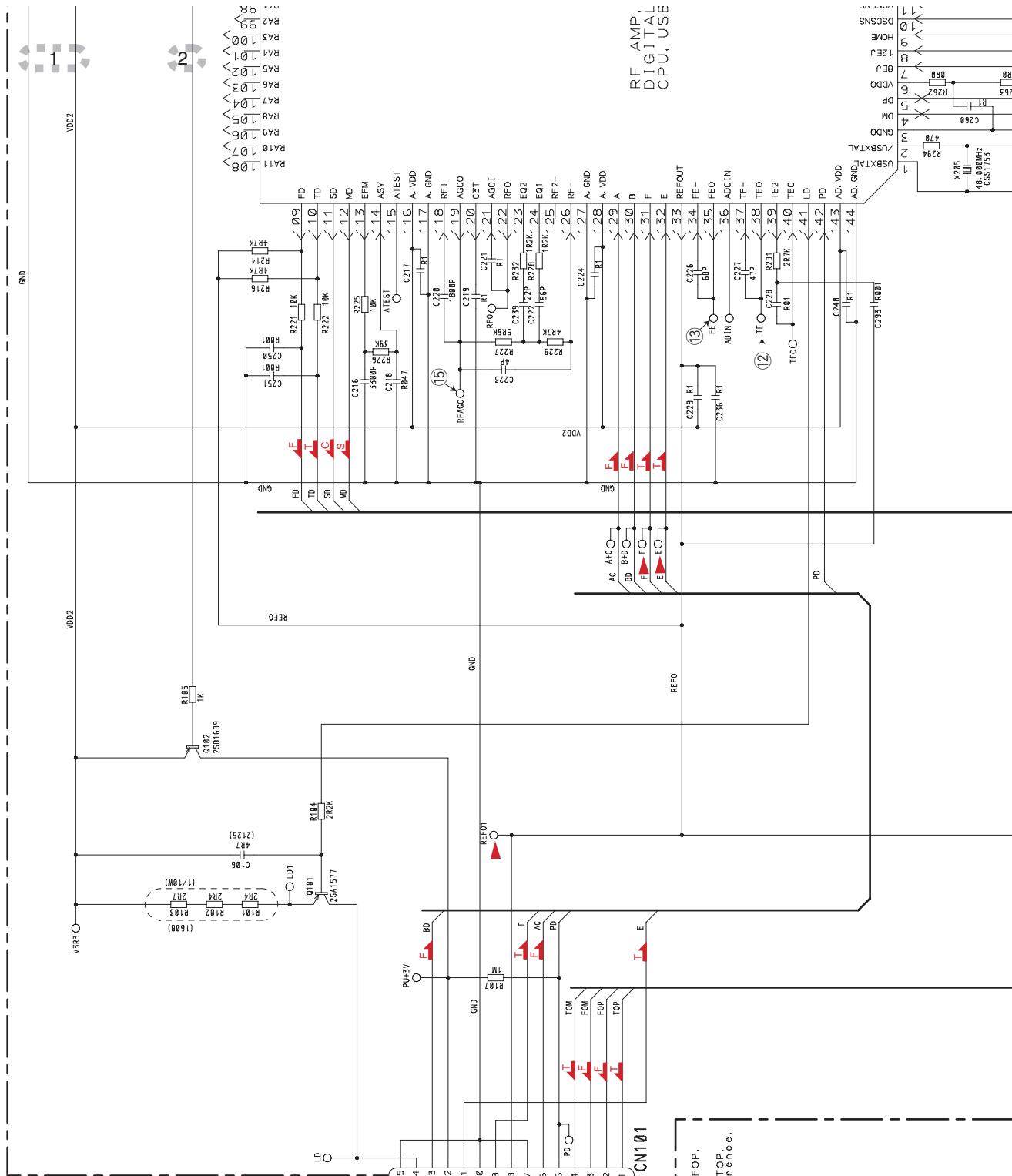


A CN701**DEH-5000UB/XS/EW5****A****B****C****D****E****F****C-b**

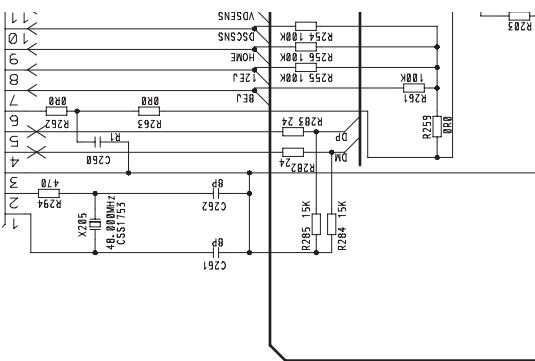
C-a



F. ACT : Applying positive voltage to FOP.
T. ACT : Applying positive voltage to TOM.
the lens moves circumference.



SWITCHES:
CD CORE UNIT(S10.5COMP2-USB)
S901:HOME SWITCH.....ON-OFF
S902:SCREEN SWITCH.....ON-OFF



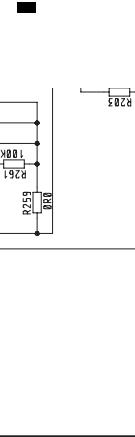
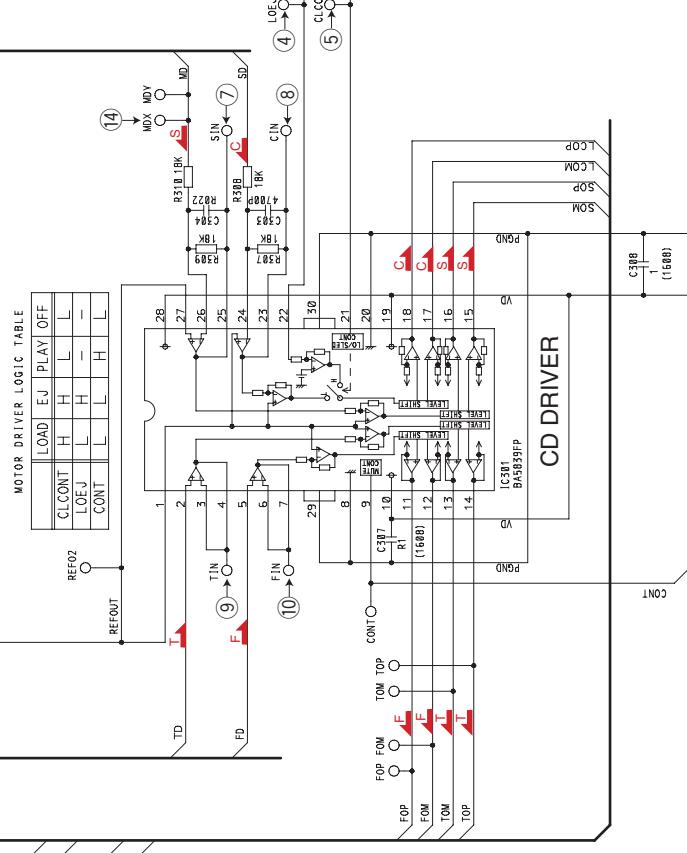
SWITCHES:
CD CORE UNIT(S10.5COMP2-USB)
S901:HOME SWITCH.....ON-OFF
S903:DSCSNS SWITCH.....ON-OFF
S904:12EJ SWITCH.....ON-OFF
S905:8EJ SWITCH.....ON-OFF

The underlined indicates the switch position.

5

M1 CXCT7134
SPINDLE MOTOR
BLK S SDM
RED S SOp
PL C LCON
OO C LCOP

M2 CXCT4026
LOADING/CARRIAGE MOTOR



6

6

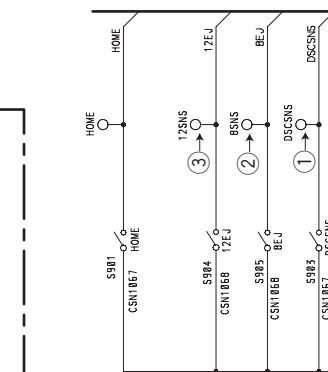
DEH-5000UB/XS/EW5

6

7

7

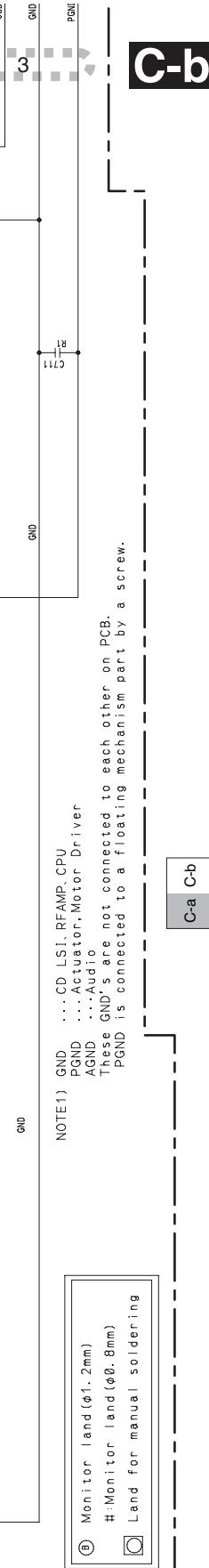
7



7

7

7



8

55

C-a

C

B

C

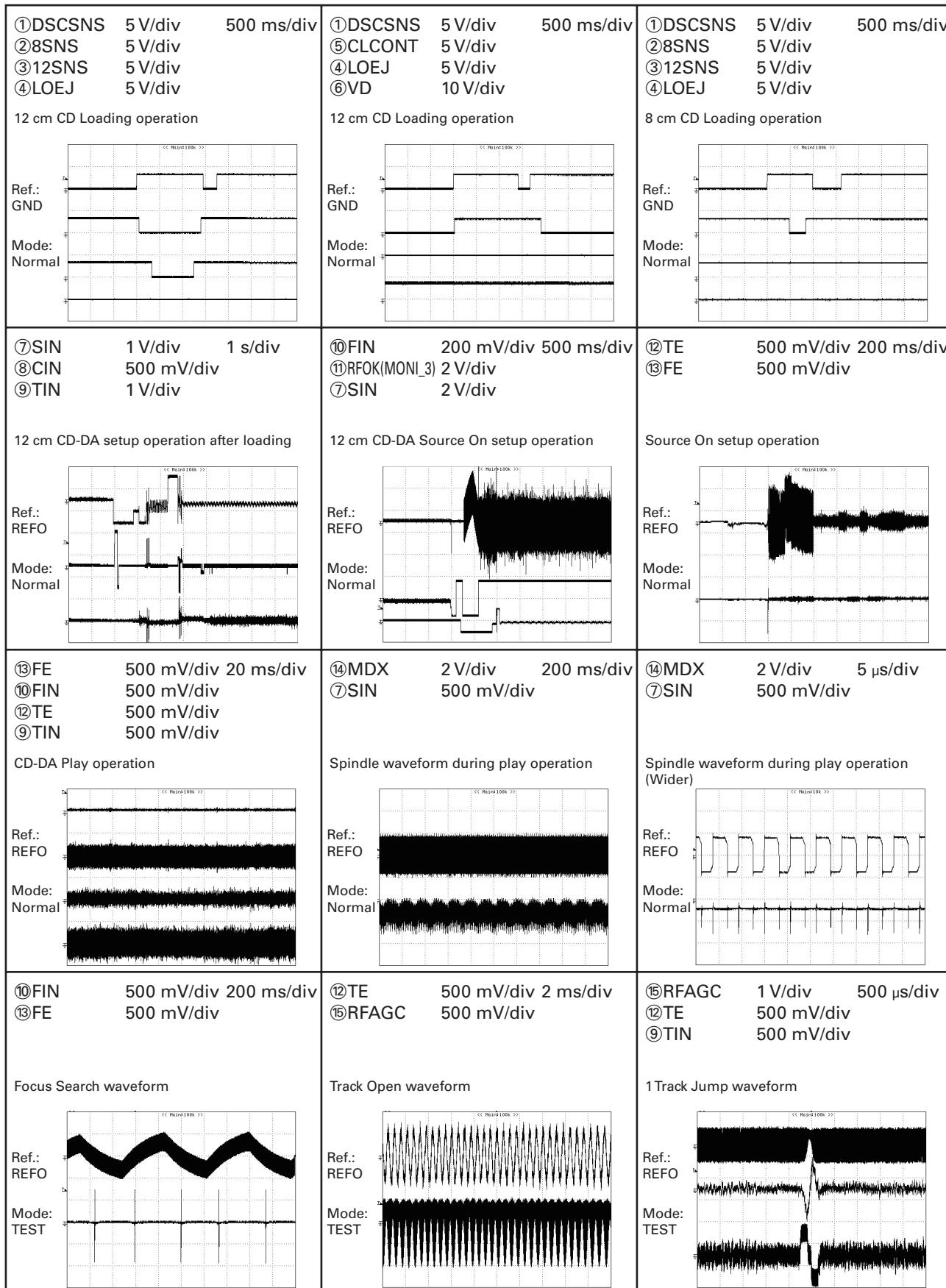
D

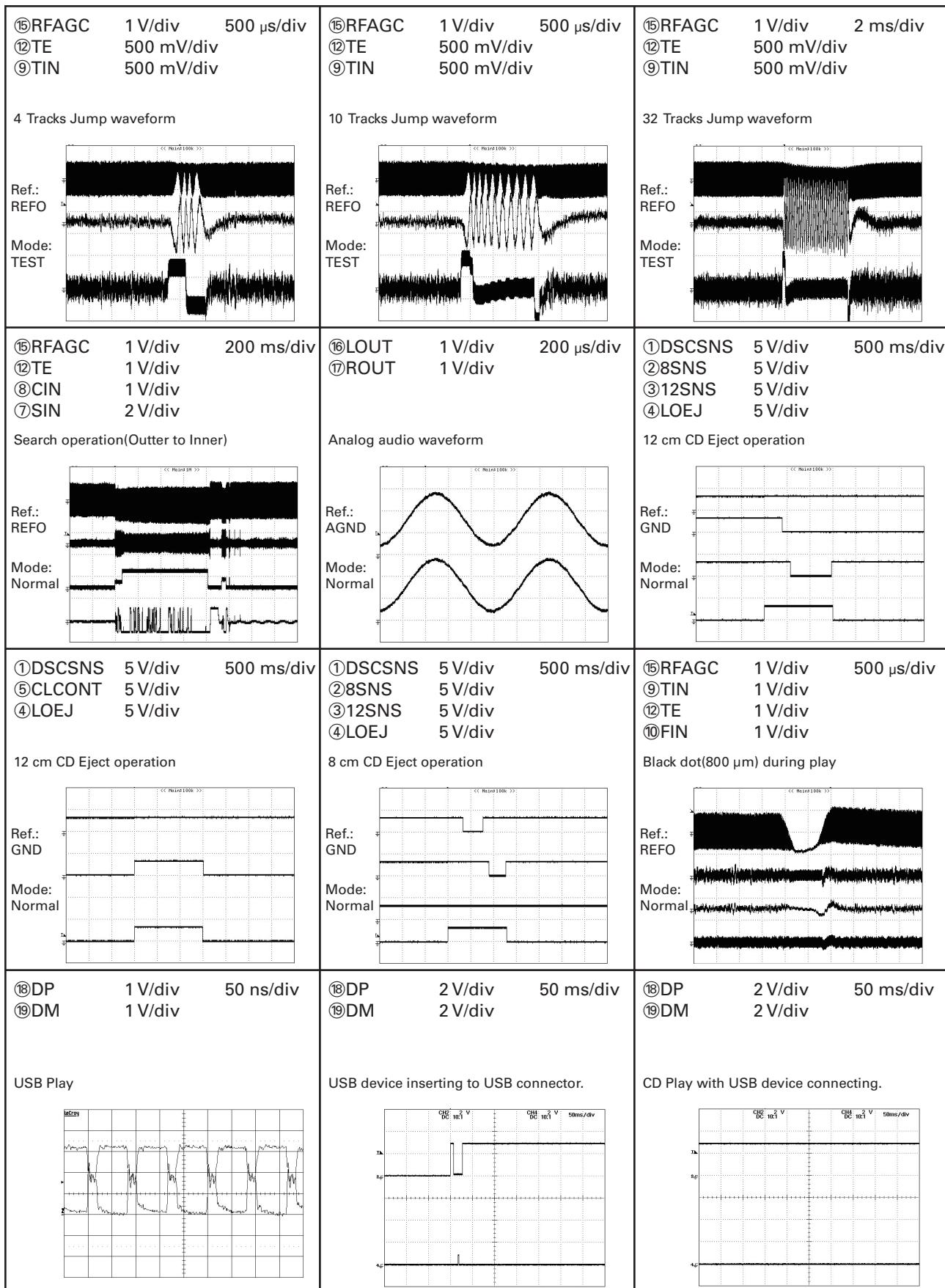
C

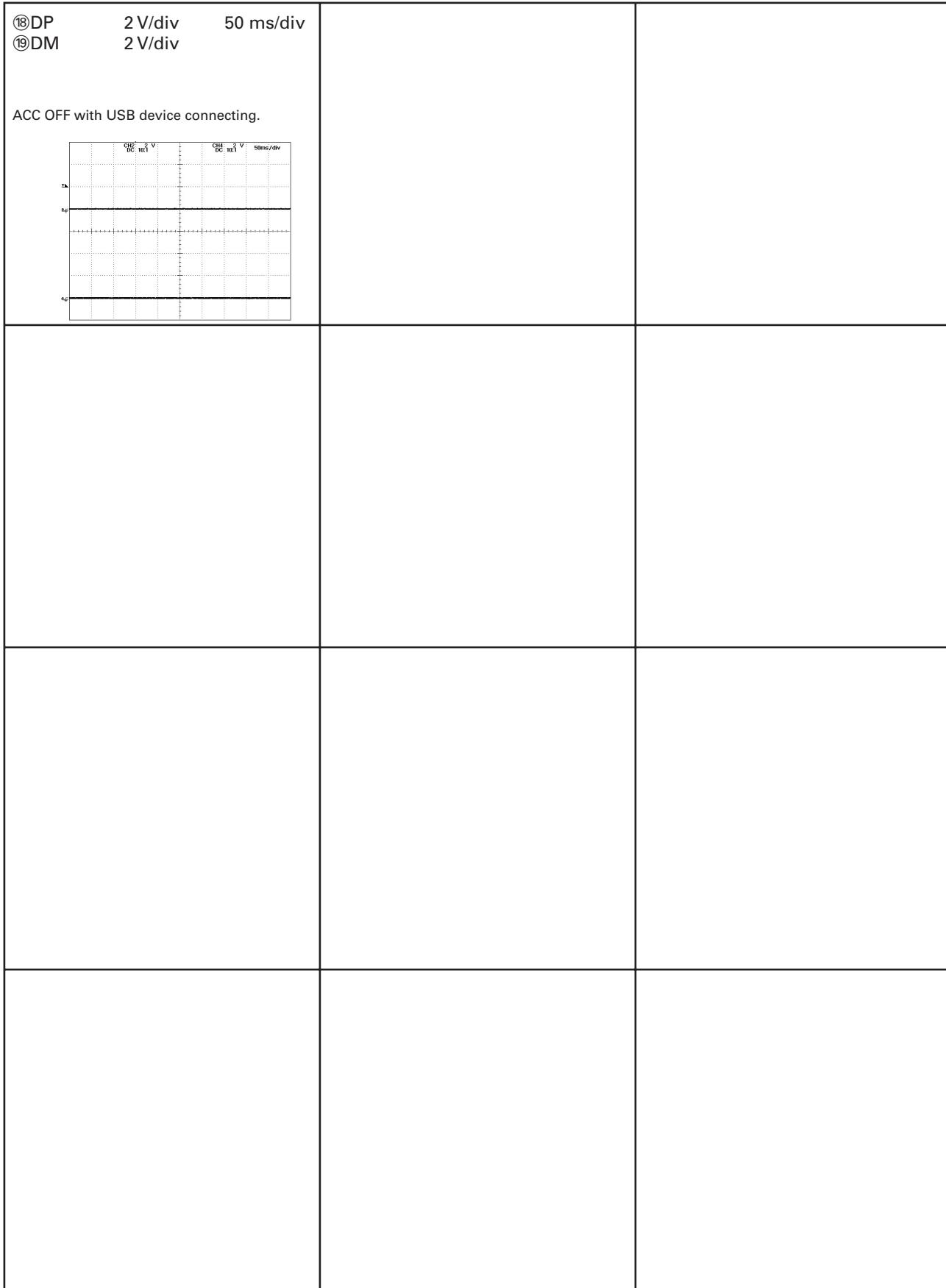
10.4 WAVEFORMS

● CD CORE UNIT

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







A

B

C

D

E

F

11. PCB CONNECTION DIAGRAM

11.1 TUNER AMP UNIT

1

2

3

4

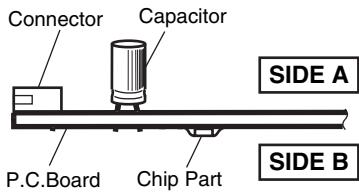
A

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



B

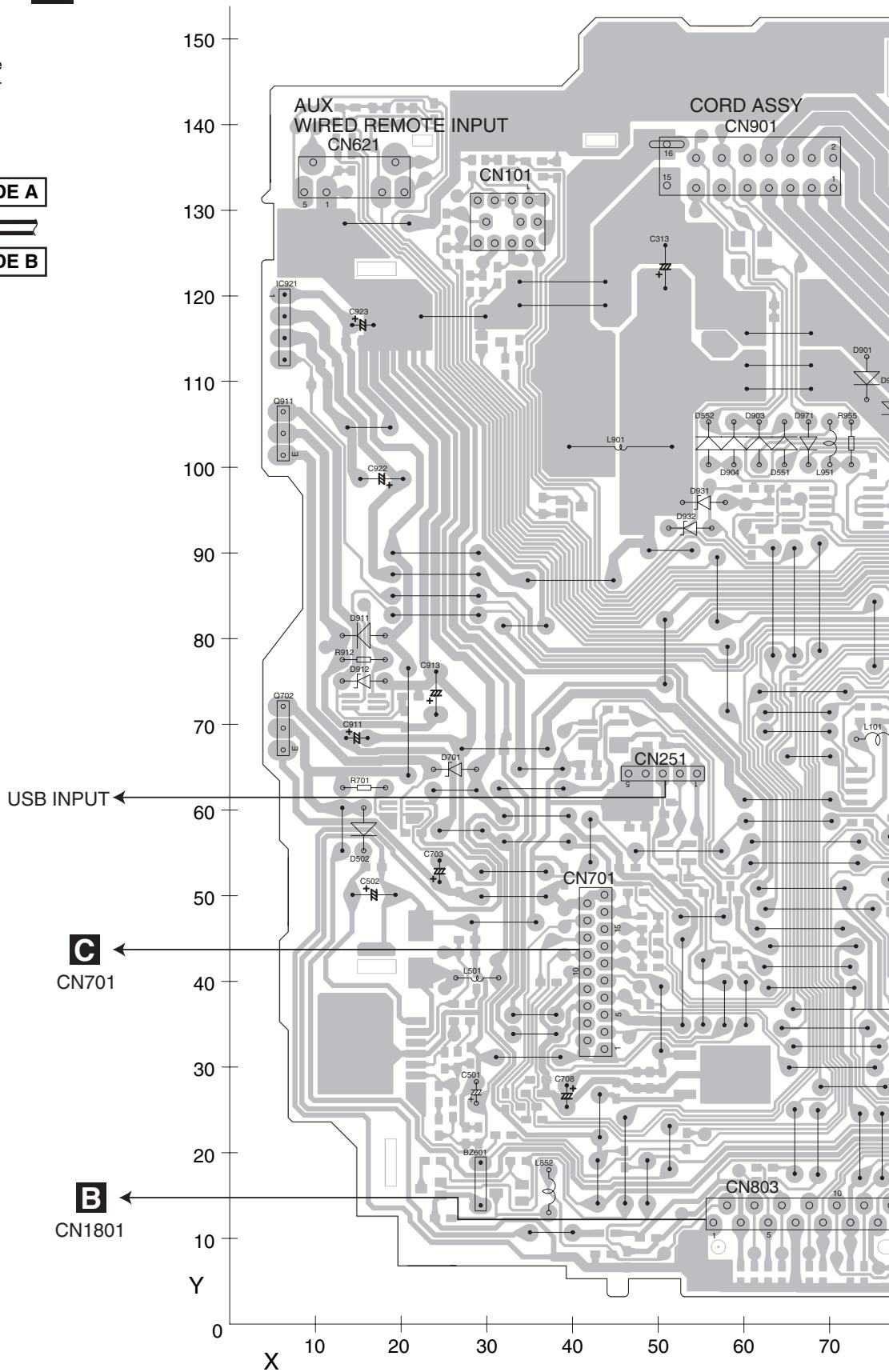
C

D

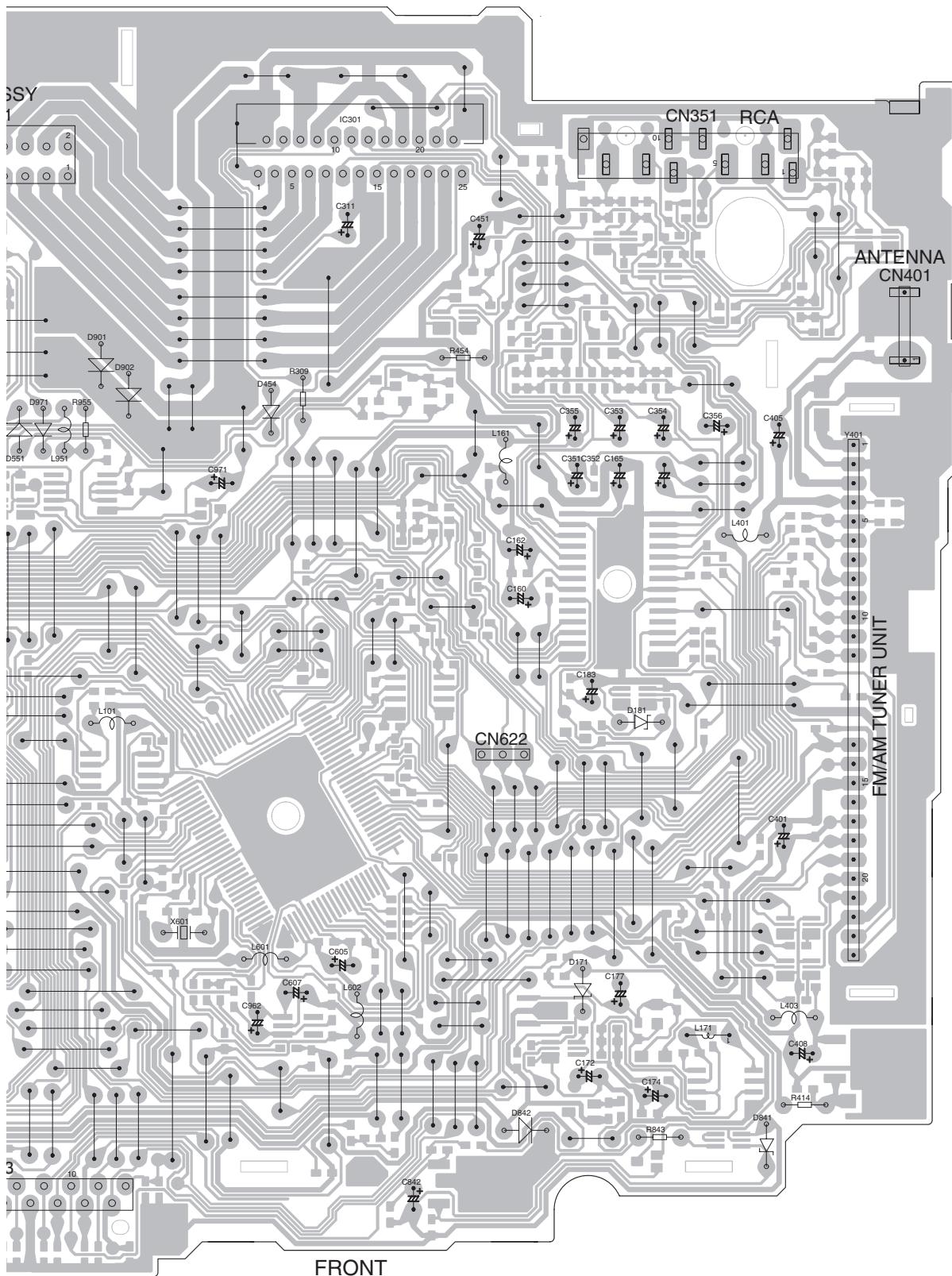
E

F

A TUNER AMP UNIT



SIDE A



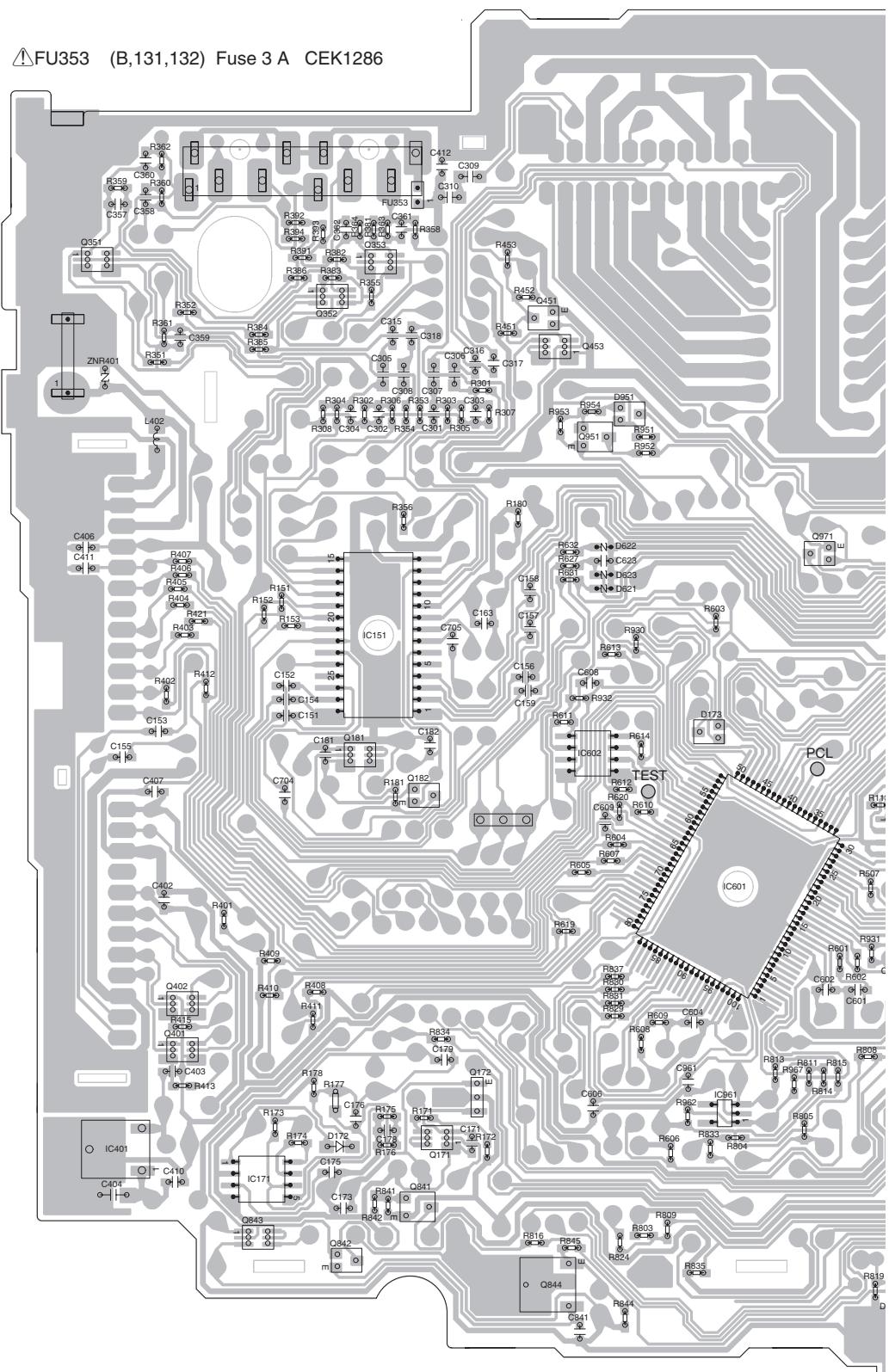
70 80 90 100 110 120 130 140 150 160 170

A

A

A TUNER AMP UNIT

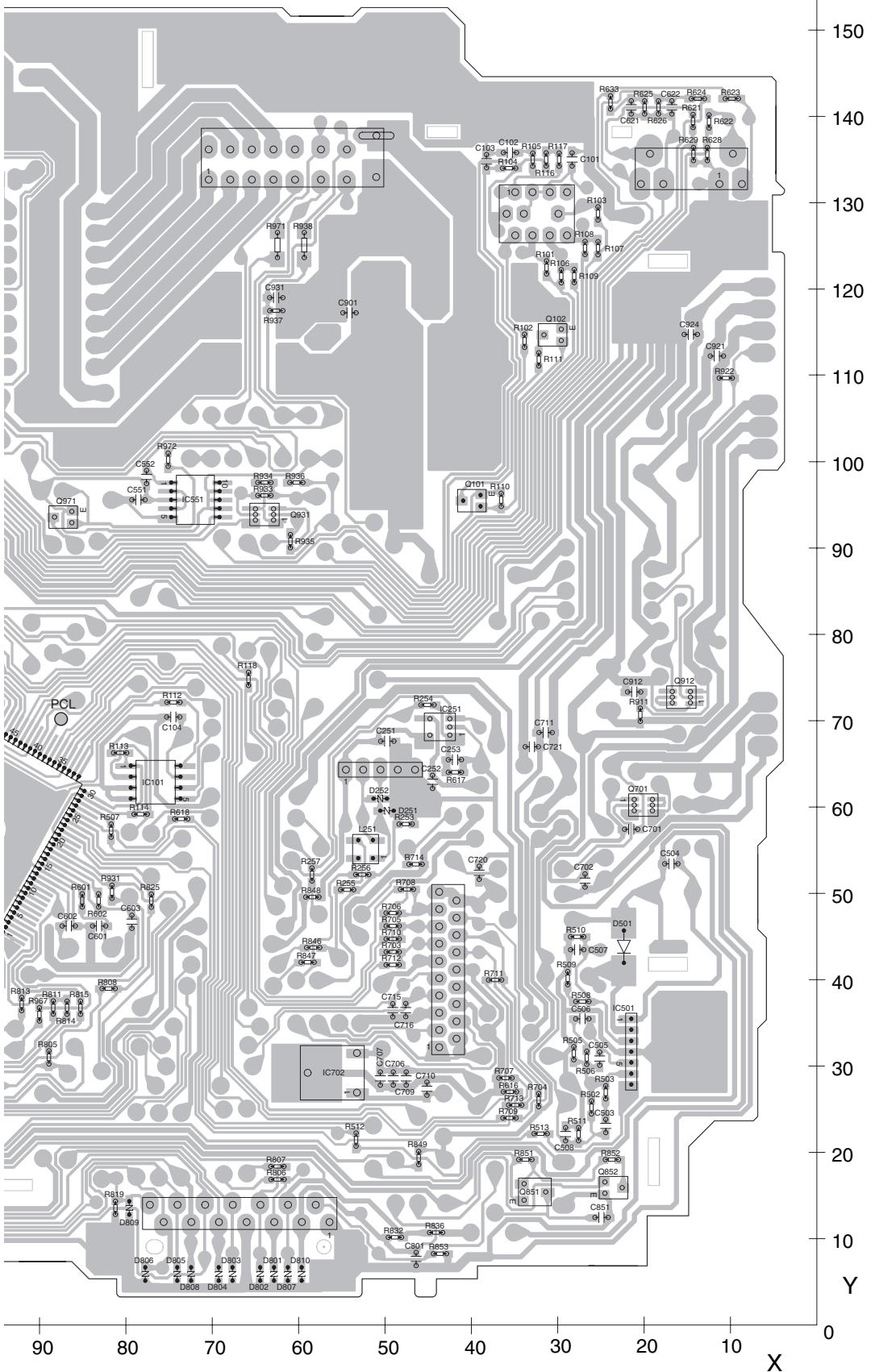
⚠ FU353 (B,131,132) Fuse 3 A CEK1286



DEH-5000UB/XS/EW5

F

SIDE B



B

C

D

E

F

A

11.2 KEYBOARD UNIT

B KEYBOARD UNIT

SIDE A

A

B

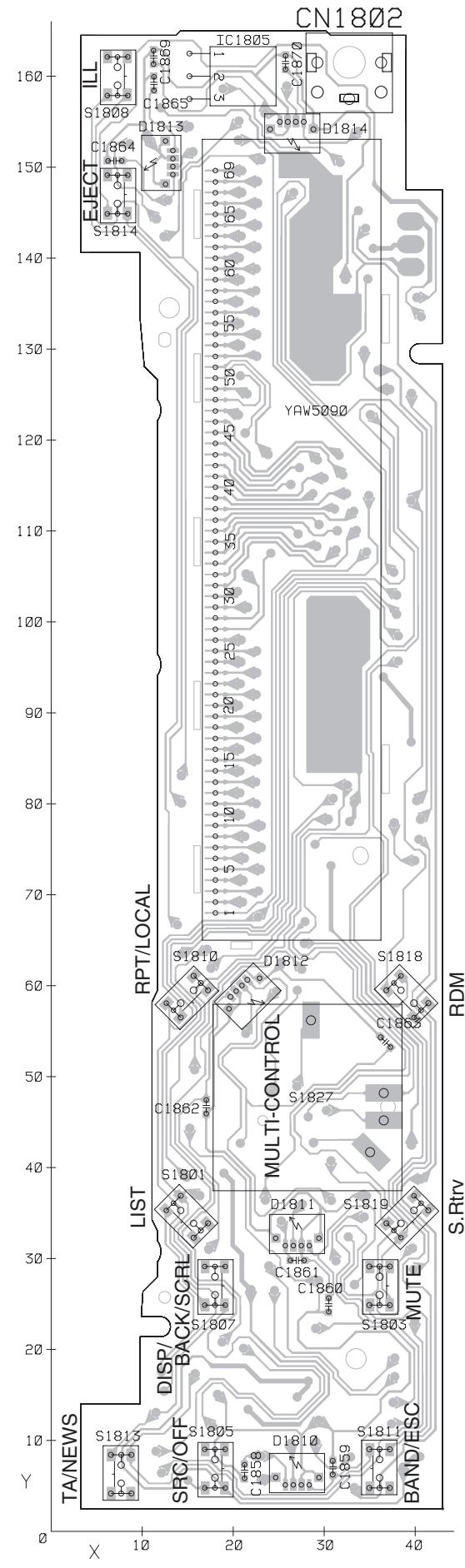
C

D

E

F

B

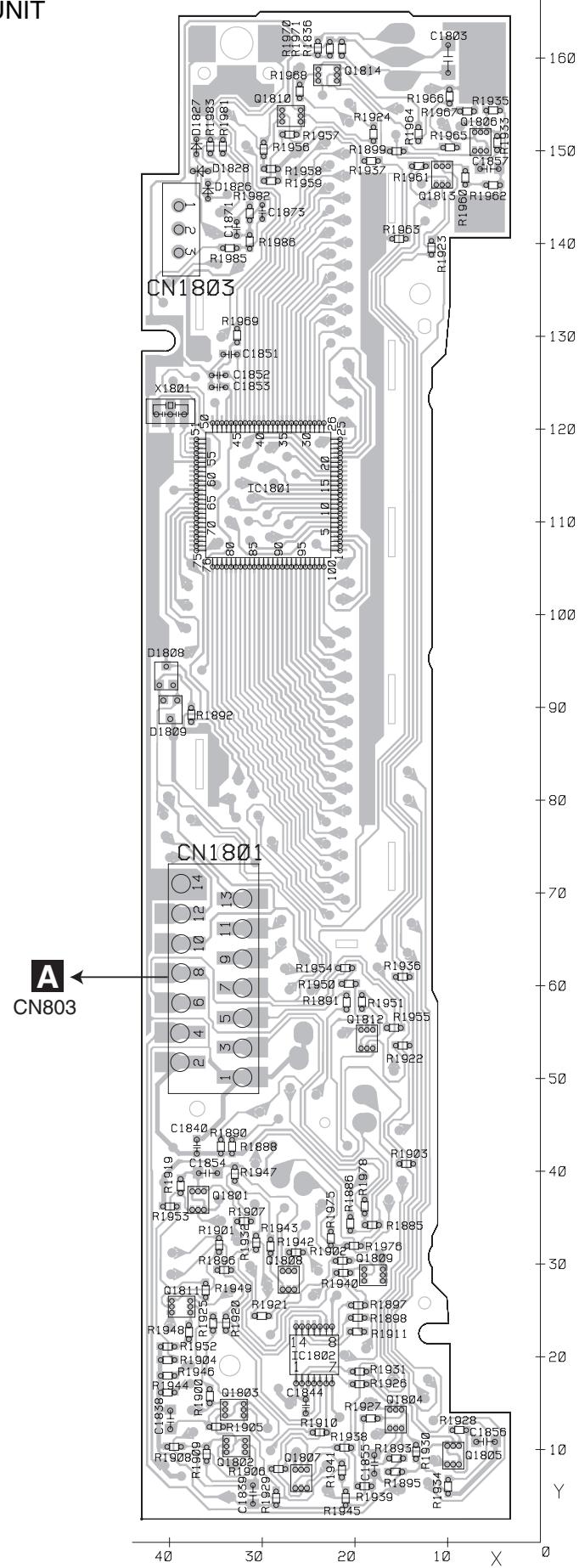


DEH-5000UB/XS/EW5

B KEYBOARD UNIT

SIDE B

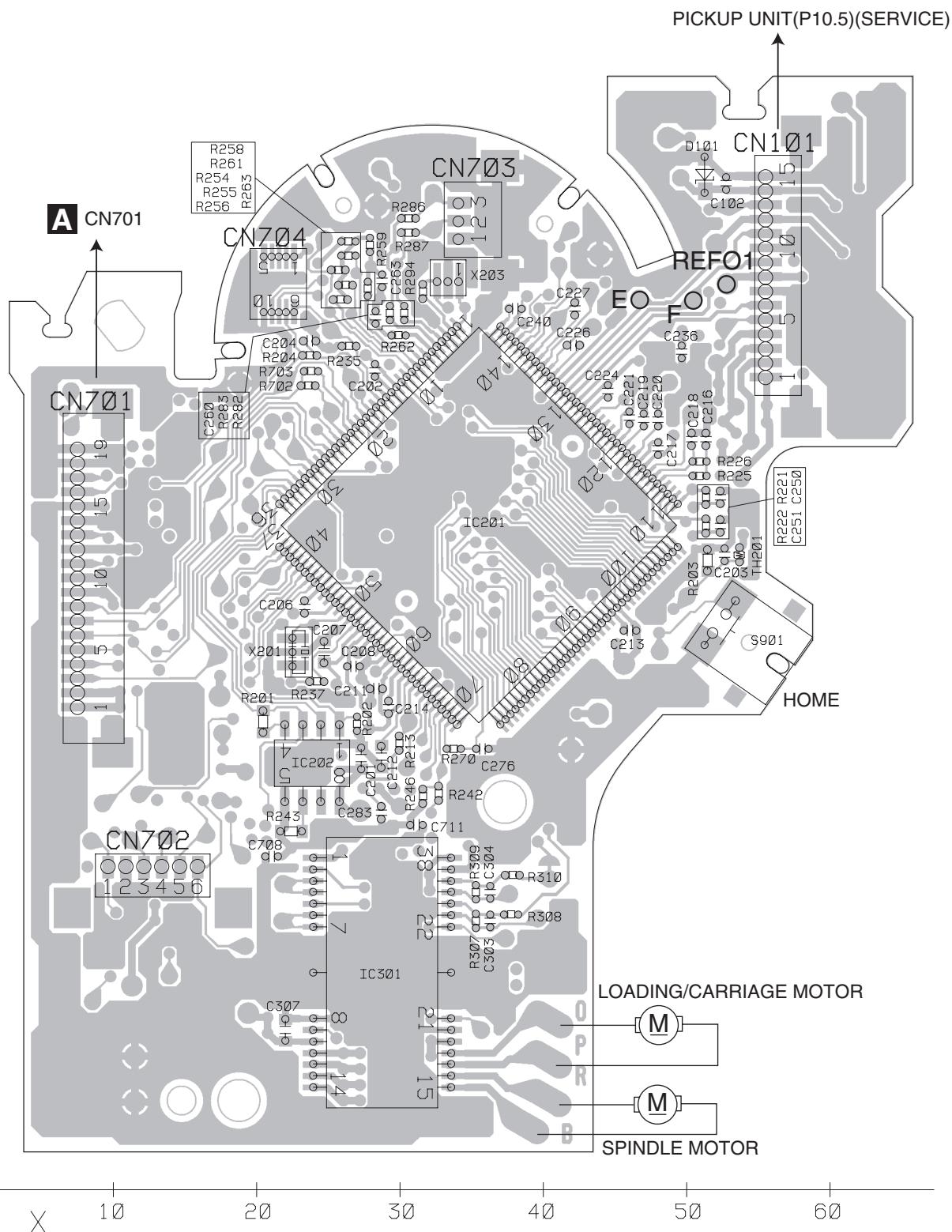
A



11.3 CD CORE UNIT(S10.5COMP2-USB)

C CD CORE UNIT(S10.5COMP2-USB)

SIDE A

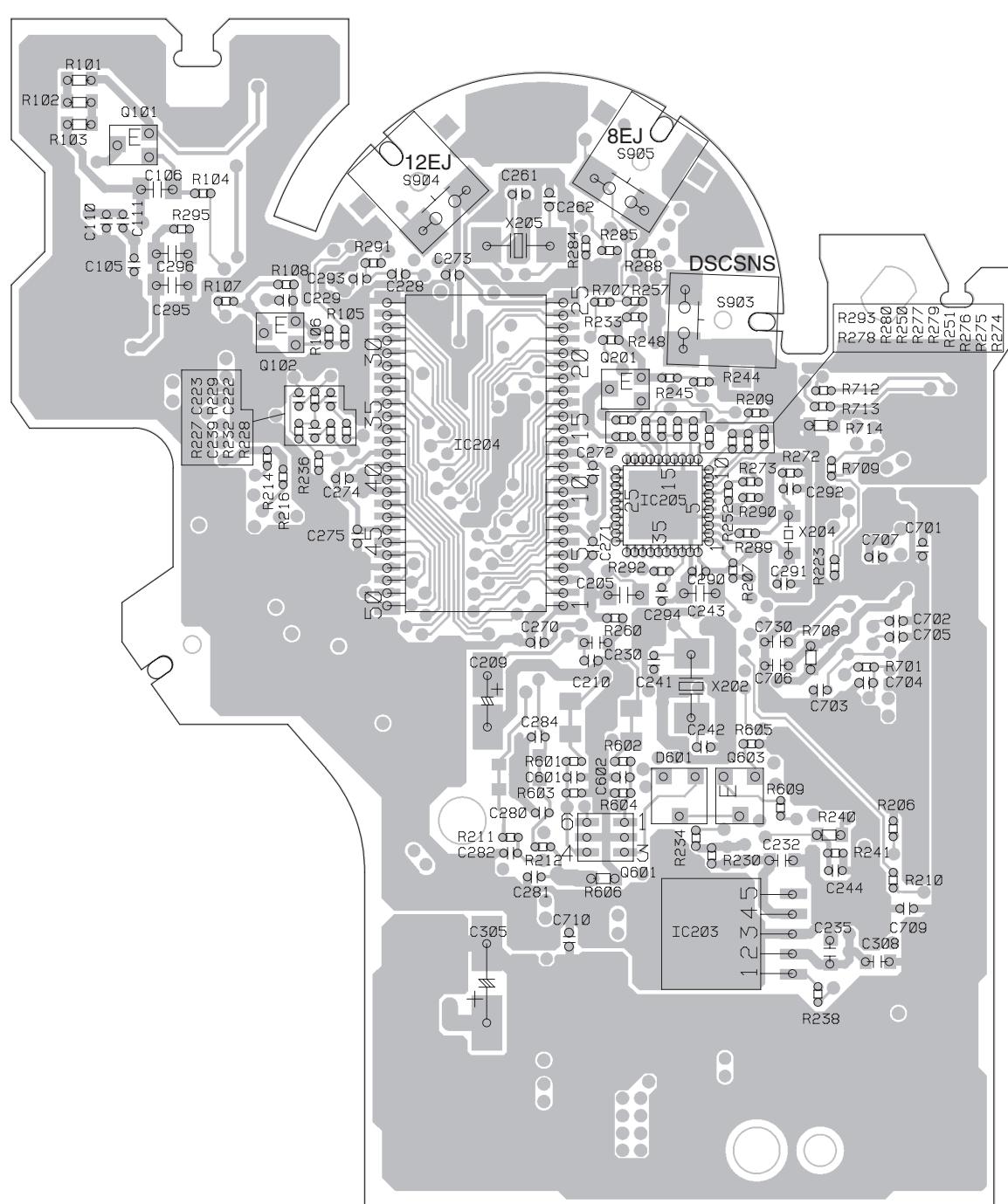


C

DEH-5000UB/XS/EW5

C CD CORE UNIT(S10.5COMP2-USB)

SIDE B



12. ELECTRICAL PARTS LIST

NOTE:

- A • 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.

B 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

Circuit Symbol and No.

Part No.

Circuit Symbol and No.

Part No.

Unit Number : YWM5183

Unit Name : Tuner Amp Unit

Unit Number :

Unit Name : Keyboard Unit

Unit Number : CWX3527

Unit Name : CD Core Unit

(S10.5COMP2-USB)

A

Unit Number : YWM5183

Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 151	(B,135,85) IC	PML018A	D 251	(B,50,60) Varistor	EZJZ1V800AM
IC 251	(B,44,69) IC	R5523N001B	D 252	(B,51,61) Varistor	EZJZ1V800AM
IC 301	(A,105,139) IC	PAL007C	D 454	(A,94,105) Diode	1SS133
IC 401	(B,165,29) IC	NJM2885DL1-33	D 501	(B,22,44) Diode	RB060L-40
IC 501	(B,16,32) Regulator IC	BD9781HFP	D 502	(A,16,58) Diode	S5688G
			D 621	(B,111,90) Varistor	EZJZ1V270RM
IC 601	(B,96,57) IC	PEG405A	D 622	(B,111,94) Varistor	EZJZ1V270RM
IC 702	(B,58,29) IC	NJM2885DL1-33	D 623	(B,111,91) Varistor	EZJZ1V270RM
IC 921	(A,6,120) IC	NJM2388F84	D 701	(A,26,65) Diode	HZS7L(C3)
IC 961	(B,98,33) IC	S-80835CNMC-B8U	D 801	(B,63,6) Varistor	EZJZ1V270RM
Q 351	(B,166,125) Transistor	RT3N66M	D 802	(B,64,6) Varistor	EZJZ1V270RM
Q 401	(B,156,40) Transistor	UMH1N	D 803	(B,68,6) Varistor	EZJZ1V270RM
Q 402	(B,156,45) Transistor	UMH1N	D 804	(B,69,6) Varistor	EZJZ1V270RM
Q 451	(B,117,119) Transistor	RT1N241M	D 805	(B,74,6) Varistor	EZJZ1V270RM
Q 453	(B,116,116) Transistor	RT3T22M	D 806	(B,78,6) Varistor	EZJZ1V270RM
Q 701	(B,20,60) Transistor	RT3T22M	D 807	(B,61,6) Varistor	EZJZ1V270RM
Q 702	(A,7,70) Transistor	2SD2396	D 808	(B,72,6) Varistor	EZJZ1V270RM
Q 843	(B,148,19) Transistor	RT3T22M	D 809	(B,80,14) Varistor	EZJZ1V270RM
Q 844	(B,119,14) Transistor	2SD2318F5	D 810	(B,60,6) Varistor	EZJZ1V270RM
Q 851	(B,33,15) Transistor	2SA1036K	D 841	(A,153,19) Diode	HZS9L(B1)
Q 852	(B,24,16) Transistor	RT1N141M-11	D 842	(A,124,20) Diode	S5688G
Q 911	(A,7,104) Transistor	2SD2396	D 901	(A,74,110) Diode	S5688G
Q 912	(B,16,73) Transistor	RT3T22M	D 902	(A,78,107) Diode	S5688G
Q 931	(B,64,94) Transistor	RT3CLLM	D 903	(A,62,103) Diode	S5688G
Q 951	(B,112,106) Transistor	2SA1037K	D 904	(A,59,103) Diode	S5688G
			D 911	(A,16,80) Diode	S5688G
			D 912	(A,16,75) Diode	HZS6L(B2)
			D 931	(A,55,96) Diode	HZS7L(C3)
			D 932	(A,54,93) Diode	HZS7L(A1)
			D 951	(B,108,109) Diode	MC2848-11
			ZNR401	(B,165,113) Surge Protector	IMSA-6801-01Y901
			L 161	(A,122,99) Inductor	LAU2R2K
			L 251	(B,52,55) Inductor	DTH1197
			L 401	(A,150,90) Inductor	LAU1R0K
			L 402	(B,159,106) Inductor	LCTAW220J2520
			L 403	(A,156,34) Inductor	LAU1R0K
			L 501	(A,29,40) Inductor	YTF5003
			L 601	(A,94,41) Ferri-Inductor	LAU100K
			L 602	(A,104,34) Inductor	LAU2R2K
			L 852	(A,37,16) Inductor	LAU2R2K
			L 901	(A,39,102) Choke Coil 600 μ H	CTH1280

<u>Circuit Symbol and No.</u>		<u>Part No.</u>	<u>Circuit Symbol and No.</u>		<u>Part No.</u>
L 951	(A,70,103)	Inductor LAU2R2K	R 606	(B,103,28)	RS1/16S103J
X 601	(A,84,44)	Oscillator 15.000 000 MHz YSS5002	R 607	(B,110,60)	RS1/16S681J
Y 401	(A,163,101)	FM/AM Tuner Unit CWE2097	R 610	(B,106,65)	RS1/16S473J
BZ601	(A,29,16)	Buzzer CPV1062	R 613	(B,110,83)	RS1/16S104J
△FU353	(B,131,132)	Fuse 3 A CEK1286	R 616	(B,36,27)	RS1/16S473J
△	Fuse 10 A	YEK5001	R 617	(B,42,64)	RS1/16S473J
RESISTORS			R 618	(B,74,59)	RS1/16S102J
			R 619	(B,115,53)	RS1/16S0R0J
			R 620	(B,109,66)	RS1/16S0R0J
			R 621	(B,14,139)	RS1/16S102J
R 151	(B,146,88)	RS1/16S102J	R 622	(B,12,139)	RS1/16S102J
R 152	(B,147,87)	RS1/16S102J	R 625	(B,20,141)	RS1/16S223J
R 153	(B,145,86)	RS1/16S102J	R 626	(B,18,141)	RS1/16S223J
R 180	(B,120,97)	RS1/16S0R0J	R 627	(B,114,92)	RS1/16S102J
R 254	(B,45,72)	RS1/16S681J	R 631	(B,114,91)	RS1/16S101J
R 257	(B,58,52)	RS1/16S103J	R 632	(B,114,94)	RS1/16S101J
R 301	(B,124,111)	RS1/16S471J	R 633	(B,24,142)	RS1/16S0R0J
R 303	(B,128,109)	RS1/16S471J	R 701	(A,16,63)	RD1/4PU271J
R 304	(B,140,109)	RS1/16S471J	R 703	(B,49,43)	RS1/16S472J
R 306	(B,134,109)	RS1/16S471J	R 704	(B,32,26)	RS1/16S104J
R 309	(A,98,106)	RD1/4PU153J	R 705	(B,49,46)	RS1/16S472J
R 351	(B,159,114)	RS1/16S821J	R 706	(B,49,48)	RS1/16S104J
R 352	(B,156,120)	RS1/16S0R0J	R 707	(B,36,29)	RS1/16S104J
R 356	(B,132,97)	RS1/16S821J	R 708	(B,47,50)	RS1/16S221J
R 359	(B,163,133)	RS1/16S223J	R 709	(B,36,24)	RS1/16S102J
R 360	(B,159,132)	RS1/16S223J	R 710	(B,49,45)	RS1/16S221J
R 384	(B,148,117)	RS1/16S0R0J	R 711	(B,37,40)	RS1/16S221J
R 394	(B,144,128)	RS1/16S0R0J	R 712	(B,49,42)	RS1/16S221J
R 401	(B,152,54)	RS1/16S681J	R 713	(B,35,25)	RS1/16S221J
R 402	(B,158,78)	RS1/16S681J	R 714	(B,46,53)	RS1/16S104J
R 403	(B,156,85)	RS1/16S681J	R 803	(B,106,20)	RS1/16S473J
R 404	(B,157,88)	RS1/16S681J	R 804	(B,96,30)	RS1/16S222J
R 405	(B,157,90)	RS1/16S681J	R 805	(B,89,31)	RS1/16S222J
R 406	(B,156,91)	RS1/16S681J	R 806	(B,62,17)	RS1/16S222J
R 407	(B,156,93)	RS1/16S102J	R 807	(B,62,18)	RS1/16S222J
R 408	(B,142,46)	RS1/16S223J	R 808	(B,82,39)	RS1/16S104J
R 409	(B,147,49)	RS1/16S223J	R 809	(B,104,20)	RS1/16S222J
R 410	(B,147,46)	RS1/16S223J	R 811	(B,88,37)	RS1/16S473J
R 411	(B,142,43)	RS1/16S223J	R 813	(B,92,37)	RS1/16S104J
R 413	(B,156,36)	RS1/16S221J	R 814	(B,87,37)	RS1/16S102J
R 414	(A,157,23)	RD1/4PU4R7J	R 815	(B,85,37)	RS1/16S102J
R 415	(B,156,42)	RS1/16S221J	R 824	(B,109,19)	RS1/16S102J
R 421	(B,155,86)	RS1/16S0R0J	R 825	(B,77,49)	RS1/16S102J
R 451	(B,121,117)	RS1/16S103J	R 829	(B,109,43)	RS1/16S222J
R 452	(B,119,121)	RS1/16S221J	R 830	(B,109,46)	RS1/16S222J
R 453	(B,121,125)	RS1/16S153J	R 831	(B,109,45)	RS1/16S222J
R 454	(A,117,111)	RD1/4PU102J	R 837	(B,109,48)	RS1/16S0R0J
R 502	(B,26,25)	RS1/16S3302F	R 843	(A,140,20)	RD1/4PU182J
R 503	(B,24,27)	RS1/16S333J	R 844	(B,108,11)	RS1/16S222J
R 505	(B,28,31)	RS1/16S8201F	R 845	(B,114,18)	RS1/16S1R0J
R 506	(B,27,31)	RS1/16S683J	R 849	(B,46,19)	RS1/16S103J
R 507	(B,82,57)	RS1/16S222J	R 851	(B,34,19)	RS1/16S153J
R 510	(B,28,45)	RS1/16S823J	R 852	(B,24,19)	RS1/16S472J
R 511	(B,28,22)	RS1/10SR471J	R 853	(B,44,8)	RS1/16S222J
R 512	(B,53,21)	RS1/16S0R0J	R 911	(B,20,71)	RS1/16S223J
R 513	(B,32,22)	RS1/16S222J	R 912	(A,16,78)	RD1/4PU152J
R 602	(B,83,49)	RS1/16S103J	R 922	(B,11,110)	RS1/16S473J
R 603	(B,98,86)	RS1/16S103J	R 931	(B,82,50)	RS1/16S104J
R 604	(B,109,62)	RS1/16S681J	R 932	(B,113,78)	RS1/16S104J
R 605	(B,113,59)	RS1/16S681J	R 933	(B,64,96)	RS1/16S104J

Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

A	R 934	(B,64,98)	RS1/16S473J	C 604	(B,101,43)	CKSRYB105K10
	R 935	(B,61,91)	RS1/16S473J	C 605	(A,103,40)	CEJQ100M16
	R 936	(B,60,98)	RS1/16S473J	C 606	(B,112,33)	CKSRYB104K25
	R 937	(B,63,117)	RS1/16S472J	C 607	(A,97,37)	CEJQ100M16
	R 938	(B,59,125)	RS1/4SA102J	C 609	(B,110,64)	CCSRCH470J50
	R 951	(B,106,106)	RS1/16S473J	C 621	(B,21,141)	CKSRYB472K50
	R 952	(B,106,104)	RS1/16S102J	C 622	(B,17,141)	CKSRYB472K50
	R 953	(B,115,107)	RS1/16S472J	C 623	(B,111,93)	CKSRYB104K25
	R 955	(A,73,103)	RD1/4PU153J	C 701	(B,21,57)	CKSRYB473K25
	R 962	(B,102,32)	RS1/16S822J	C 703	(A,24,53)	CEJQ101M10
	R 967	(B,90,36)	RS1/16S102J	C 704	(B,145,67)	CKSRYB105K10
				C 705	(B,127,84)	CKSRYB105K10
				C 708	(A,39,27)	CEJQ220M10
				C 709	(B,48,29)	CKSRYB105K10
<u>CAPACITORS</u>						
B	C 153	(B,159,74)	CKSRYB224K10	C 710	(B,45,27)	CKSRYB474K10
	C 154	(B,145,78)	CKSRYB105K10	C 720	(B,39,52)	CKSRYB105K10
	C 155	(B,163,71)	CKSRYB224K10	C 841	(B,113,9)	CKSRYB104K25
	C 156	(B,119,80)	CKSRYB105K10	C 842	(A,111,12)	CEJQ1R0M50
	C 159	(B,119,79)	CKSRYB105K10	C 851	(B,25,12)	CKSRYB104K25
	C 160	(A,124,83)	CEJQ100M16	C 901	(B,54,117)	CKSRYB104K25
	C 162	(A,124,89)	CEJQ470M10	C 911	(A,15,68)	CEJQ470M10
	C 163	(B,124,86)	CKSRYB104K25	C 912	(B,21,73)	CKSRYB103K50
	C 165	(A,135,97)	CEJQ100M16	C 913	(A,24,74)	CEAT102M16
	C 251	(B,50,68)	CKSRYB104K25	C 921	(B,12,112)	CKSRYB103K50
C	C 252	(B,44,63)	CKSRYB104K25	C 922	(A,18,99)	CEJQ221M10
	C 253	(B,42,65)	CKSRYB103K50	C 923	(A,16,117)	CEJQ101M16
	C 305	(B,135,113)	CKSQYB474K25	C 924	(B,15,115)	CKSRYB103K50
	C 306	(B,127,113)	CKSQYB474K25	C 961	(B,101,36)	CKSRYB473K25
	C 307	(B,129,113)	CKSQYB474K25	C 962	(A,93,33)	CEJQ100M16
	C 308	(B,132,113)	CKSQYB474K25			
	C 309	(B,125,134)	CKSQYB225K10			
	C 310	(B,127,132)	CKSQYB225K10			
	C 311	(A,103,127)	CEJQ100M16			
	C 313	(A,51,123) 3 300 μ F/16 V	CCH1494			
D	C 315	(B,134,117)	CKSRYB474K10			
	C 316	(B,125,114)	CKSRYB474K10			
	C 317	(B,123,114)	CKSRYB474K10			
	C 318	(B,131,117)	CKSRYB474K10			
	C 351	(A,130,97)	CEJQ2R2M50			
	C 352	(A,141,97)	CEJQ2R2M50			
	C 401	(A,155,55)	CEJQ470M6R3			
	C 402	(B,158,56)	CKSRYB103K50			
	C 403	(B,157,37)	CKSRYB103K50			
	C 404	(B,164,24)	CKSYB475K10			
E	C 405	(A,154,102)	CEJQ101M10			
	C 406	(B,167,94)	CKSRYB104K25			
	C 407	(B,159,68)	CKSRYB103K50			
	C 408	(A,157,29)	CEJQ220M10			
	C 412	(B,128,135)	CKSRYB105K10			
	C 451	(A,119,126)	CEJQ330M10			
	C 501	(A,29,27) 150 μ F/6.3 V	CCH1781			
	C 502	(A,17,50)	CEJQ221M16			
	C 503	(B,24,23)	CCSRCH221J50			
	C 504	(B,17,53)	CKSRYB105K16			
F	C 505	(B,25,31)	CCSRCH101J50			
	C 506	(B,27,35)	CKSRYB332K50			
	C 507	(B,28,43)	CKSRYB104K25			
	C 508	(B,29,22)	CKSRYB105K10			
	C 601	(B,83,46)	CCSRCH180J50			
	C 602	(B,87,46)	CCSRCH180J50			
				X 1801	(B,40,122) Ceramic Resonator 5.00 MHz	CSS1547

B**Unit Number :****Unit Name : Keyboard Unit****MISCELLANEOUS**

IC 1801	(B,29,113) IC	PD6538A
IC 1802	(B,24,20) DAC	BU2507FV
IC 1805	(A,15,160) Remote IC	GP1UX51RK
Q 1801	(B,37,37) Transistor	UMX1N
Q 1802	(B,33,10) Transistor	UMX1N
Q 1803	(B,33,14) Transistor	UMX1N
Q 1804	(B,16,13) Transistor	UMX1N
Q 1805	(B,9,9) Transistor	UMX1N
Q 1806	(B,6,151) Transistor	UMX1N
Q 1807	(B,26,7) Transistor	UMX1N
Q 1808	(B,27,28) Transistor	UMX1N
Q 1809	(B,18,29) Transistor	UMX1N
Q 1810	(B,27,154) Transistor	UMX1N
Q 1811	(B,39,25) Transistor	UMX1N
Q 1812	(B,19,54) Transistor	UMX1N
Q 1813	(B,11,147) Transistor	UMX1N
Q 1814	(B,23,158) Transistor	UMX1N
D 1808	(B,40,93) Diode	DAP202U
D 1809	(B,40,90) Diode	DAN202U
D 1810	(A,27,6) Chip LED	NSSM038A-6430
D 1811	(A,27,32) Chip LED	NSSM038A-6430
D 1812	(A,21,59) Chip LED	NSSM038A-6430
D 1813	(A,13,151) Chip LED	NSSM038A-6430
D 1814	(A,26,154) Chip LED	NSSM038A-6430
X 1801	(B,40,122) Ceramic Resonator 5.00 MHz	CSS1547

<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
S 1801 (A,15,35) Push Switch	CSG1155	R 1940 (B,21,29)	RS1/16S121J
S 1803 (A,36,27) Push Switch	CSG1155	R 1941 (B,21,8)	RS1/16S680J
S 1805 (A,18,7) Push Switch	CSG1155	R 1942 (B,26,31)	RS1/16S820J
S 1807 (A,18,27) Push Switch	CSG1155	R 1943 (B,29,32)	RS1/16S680J
S 1808 (A,7,160) Push Switch	CSG1155	R 1944 (B,40,16)	RS1/16S121J
		R 1945 (B,21,5)	RS1/16S820J
S 1810 (A,15,59) Push Switch	CSG1155	R 1946 (B,40,18)	RS1/16S121J
S 1811 (A,36,7) Push Switch	CSG1155	R 1947 (B,33,40)	RS1/16S820J
S 1813 (A,8,6) Push Switch	CSG1155	R 1948 (B,38,23)	RS1/16S121J
S 1814 (A,7,147) Push Switch	CSG1155	R 1949 (B,36,27)	RS1/16S121J
S 1818 (A,39,59) Push Switch	CSG1155	R 1950 (B,21,60)	RS1/16S820J
S 1819 (A,39,35) Push Switch	CSG1155	R 1951 (B,19,58)	RS1/16S680J
S 1827 (A,27,47) Switch(MULTI-CONTROL)	CSX1120	R 1952 (B,40,21)	RS1/16S121J
LCD1801 LCD	YAW5090	R 1953 (B,40,36)	RS1/16S121J
		R 1954 (B,21,62)	RS1/16S121J
		R 1955 (B,16,55)	RS1/16S820J
RESISTORS			
R 1836 (B,21,161)	RS1/16S103J	R 1956 (B,30,150)	RS1/16S680J
R 1885 (B,18,34)	RS1/16S332J	R 1957 (B,27,152)	RS1/16S820J
R 1888 (B,33,43)	RS1/16S472J	R 1958 (B,29,148)	RS1/16S820J
R 1891 (B,21,58)	RS1/16S222J	R 1959 (B,29,147)	RS1/16S121J
R 1892 (B,38,89)	RS1/16S222J	R 1960 (B,8,147)	RS1/16S820J
R 1893 (B,16,9)	RS1/16S471J	R 1961 (B,13,148)	RS1/16S680J
R 1895 (B,16,8)	RS1/16S471J	R 1962 (B,5,146)	RS1/16S121J
R 1896 (B,34,29)	RS1/16S272J	R 1963 (B,15,141)	RS1/16S820J
R 1897 (B,20,26)	RS1/16S272J	R 1964 (B,13,152)	RS1/16S121J
R 1898 (B,20,24)	RS1/16S272J	R 1965 (B,10,150)	RS1/16S121J
R 1899 (B,16,150)	RS1/16S101J	R 1966 (B,10,156)	RS1/16S121J
R 1900 (B,36,16)	RS1/16S101J	R 1967 (B,8,154)	RS1/16S121J
R 1901 (B,35,32)	RS1/16S101J	R 1968 (B,26,156)	RS1/16S101J
R 1902 (B,21,30)	RS1/16S101J	R 1969 (B,33,130)	RS1/16S121J
R 1903 (B,14,41)	RS1/16S101J	R 1970 (B,24,161)	RS1/16S2R2J
R 1904 (B,40,20)	RS1/16S222J	R 1975 (B,23,33)	RS1/16S333J
R 1905 (B,35,12)	RS1/16S104J	R 1976 (B,20,32)	RS1/16S822J
R 1906 (B,28,8)	RS1/16S101J	R 1978 (B,19,36)	RS1/16S222J
R 1908 (B,40,10)	RS1/16S222J		
CAPACITORS			
R 1909 (B,36,10)	RS1/16S104J	C 1803 (B,10,160)	CKSYF106Z10
R 1910 (B,24,12)	RS1/16S102J	C 1838 (B,40,13)	CKSQYB225K10
R 1911 (B,20,23)	RS1/16S102J	C 1839 (B,31,5)	CKSQYB225K10
R 1919 (B,39,38)	RS1/16S104J	C 1840 (B,37,43)	CKSRYB105K10
R 1920 (B,34,24)	RS1/16S101J	C 1844 (B,25,15)	CKSRYB103K50
R 1921 (B,30,24)	RS1/16S101J		
R 1922 (B,15,54)	RS1/16S101J	C 1851 (B,33,128)	CKSRYB104K25
R 1923 (B,12,140)	RS1/16S101J	C 1852 (B,35,126)	CKSRYB104K25
R 1924 (B,18,152)	RS1/16S101J	C 1853 (B,35,125)	CKSRYB105K10
R 1925 (B,35,24)	RS1/16S102J	C 1854 (B,36,40)	CKSQYB225K10
R 1926 (B,20,17)	RS1/16S102J	C 1855 (B,18,8)	CKSQYB225K10
R 1927 (B,18,13)	RS1/16S104J	C 1856 (B,6,11)	CKSQYB225K10
R 1928 (B,9,12)	RS1/16S104J	C 1857 (B,6,148)	CKSQYB225K10
R 1929 (B,29,5)	RS1/16S222J	C 1858 (A,21,7)	CKSRYB104K16
R 1930 (B,13,10)	RS1/16S222J	C 1859 (A,31,7)	CKSRYB104K16
R 1931 (B,20,18)	RS1/16S102J	C 1860 (A,31,25)	CKSRYB104K16
R 1932 (B,31,32)	RS1/16S102J	C 1861 (A,27,30)	CKSRYB104K16
R 1933 (B,5,151)	RS1/16S104J	C 1862 (A,17,47)	CKSRYB104K16
R 1934 (B,10,6)	RS1/16S222J	C 1863 (A,37,54)	CKSRYB104K16
R 1935 (B,5,154)	RS1/16S222J	C 1864 (A,7,151)	CKSRYB104K16
R 1936 (B,15,61)	RS1/16S101J	C 1865 (A,11,159)	CKSRYB104K16
R 1937 (B,18,149)	RS1/16S101J	C 1869 (A,11,162)	CKSRYB104K16
R 1938 (B,21,10)	RS1/16S820J	C 1870 (A,26,162)	CKSRYB104K16
R 1939 (B,19,6)	RS1/16S121J		

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.**C****Unit Number : CWX3527****Unit Name : CD Core Unit****(S10.5COMP2-USB)****MISCELLANEOUS**

IC 201	(A,36,46) IC	PE5611B
IC 202	(A,24,30) IC	S-93C66BD0I-J8
IC 301	(A,29,15) IC	BA5839FP
Q 101	(B,58,70) Transistor	2SA1577
Q 102	(B,49,58) Chip Transistor	2SB1689
X 201	(A,23,38) Ceramic Resonator	16.934 MHz CSS1603

R 294	(A,32,63)	RS1/16SS471J
R 280	(B,26,52)	RS1/16SS103J
R 282	(A,30,61)	RS1/16SS240J
R 283	(A,29,61)	RS1/16SS240J
R 284	(B,30,63)	RS1/16SS153J
R 285	(B,28,63)	RS1/16SS153J
R 290	(B,19,47)	RS1/16SS103J
R 291	(B,43,62)	RS1/16SS272J
R 294	(A,32,63)	RS1/16SS471J
R 307	(A,35,19)	RS1/16SS183J
R 308	(A,38,19)	RS1/16SS183J
R 309	(A,35,21)	RS1/16SS183J
R 310	(A,38,22)	RS1/16SS183J
R 601	(B,30,31)	RS1/16SS0R0J
R 602	(B,27,31)	RS1/16SS0R0J
R 606	(B,28,23)	RS1/16S0R0J
R 701	(B,12,37)	RS1/16SS221J
R 702	(A,24,56)	RS1/16SS221J
R 708	(B,15,37)	RS1/16S0R0J
R 712	(B,15,54)	RS1/16SS0R0J
R 713	(B,15,53)	RS1/16SS0R0J

RESISTORS

<u>CAPACITORS</u>		
C 106	(B,57,67)	CKSQYB475K6R3
C 201	(A,27,30)	CKSRYB104K16
C 202	(A,28,57)	CKSSYB104K10
C 204	(A,24,59)	CKSSYB103K16
C 205	(B,27,41)	CKSQYB475K6R3
C 206	(A,23,41)	CKSSYB104K10
C 207	(A,25,38)	CKSRYB104K16
C 209	(B,36,35)	CEVV220M6R3
C 210	(B,29,37)	CKSSYB104K10
C 211	(A,28,35)	CKSSYB104K10
C 212	(A,29,30)	CKSRYB104K16
C 213	(A,46,39)	CKSSYB104K10
C 214	(A,29,34)	CKSSYB104K10
C 216	(A,51,52)	CKSSYB332K50
C 217	(A,48,52)	CKSSYB104K10
C 218	(A,50,52)	CKSSYB473K10
C 219	(A,47,54)	CKSSYB104K10
C 220	(A,48,54)	CKSSYB182K50
C 221	(A,46,54)	CKSSYB104K10
C 222	(B,46,54)	CCSSCH560J50
C 223	(B,48,54)	CCSSCH4R0C50
C 224	(A,45,56)	CKSSYB104K10
C 226	(A,42,59)	CCSSCH680J50
C 227	(A,42,61)	CCSSCH470J50
C 228	(B,41,62)	CKSSYB103K16
C 229	(B,48,60)	CKSSYB104K10
C 236	(A,50,58)	CKSSYB104K10
C 239	(B,47,52)	CCSSCH220J50
C 240	(A,38,61)	CKSSYB104K10
C 243	(B,22,41)	CKSQYB475K6R3
C 250	(A,52,48)	CKSSYB102K50
C 251	(A,52,46)	CKSSYB102K50
C 260	(A,28,61)	CKSSYB104K10
C 261	(B,34,67)	CCSSCH8R0D50
C 262	(B,32,66)	CCSSCH8R0D50
C 293	(B,44,61)	CKSSYB102K50
C 303	(A,36,19)	CKSSYB472K25

<u>Circuit Symbol and No.</u>	<u>Part No.</u>
C 304 (A,36,21)	CKSSYB223K16
C 307 (A,22,11)	CKSRYB104K16
C 308 (B,11,18)	CKSRYB105K10
C 703 (B,15,35)	CCSSCH101J50
C 704 (B,12,36)	CKSSYB102K50
C 711 (A,31,25)	CKSSYB104K10

A

Miscellaneous Parts List

Pickup Unit(P10.5)(Service)	CXX1942
Motor Unit(SPINDLE)	CXC7134
Motor Unit(LOADING/CARRIAGE)	CXC4026

B

C

D

E

F