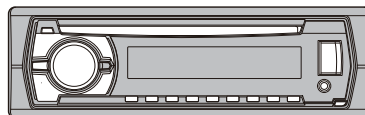


Service Manual



DEH-X35UI/XNUC

ORDER NO.
CRT5062

CD RDS RECEIVER

DEH-X35UI/XNUC

DEH-X3500UI/XNUC

DEH-X3500UI/XNEW5

DEH-X3550UI/XNES

DEH-X3550UI/XNES1

DEH-X3590UI/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



www.electronicrepair.net

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, and contains a class 1M laser module. 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

CAUTION—CLASS 1M INVISIBLE LASER
RADIATION WHEN OPEN, DO NOT VIEW
DIRECTLY WITH OPTICAL INSTRUMENTS.

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 μ W(Emitting period : unlimited)

A

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.

B

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.

C

D

E

F

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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.

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

- A
- DEH-X35UI/XNUC, DEH-X3500UI/XNUC

General

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

Grounding systemNegative type

Maximum current consumption

.....10.0 A

Backup current4.0 mA or less

Dimensions (W × H × D):

DIN

Chassis178 mm × 50 mm × 160 mm

(7 in. × 2 in. × 6-1/2 in.)

Nose188 mm × 58 mm × 15 mm

(7-3/8 in.× 2-1/4 in.× 5/8 in.)

D

Chassis178 mm × 50 mm × 165 mm

(7 in.× 2 in.× 6-1/2 in.)

Nose170 mm × 46 mm × 15 mm

(6-3/4 in.× 1-3/4 in.× 5/8 in.)

Weight1 kg (2.2 lbs)

Audio

Maximum power output50 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 impedance4 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.....-6 dB/oct, -12 dB/oct

Gain+6 dB to -24 dB

Phase.....Normal/Reverse
- B
- C
- D

- CD player
- System.....Compact disc audio system
- Usable discsCompact disc
- Signal-to-noise ratio.....94 dB (1 kHz) (IHF-A network)
- Number of channels2 (stereo)
- MP3 decoding formatMPEG-1 & 2 Audio Layer 3
- WMA decoding formatVer. 7, 7.1, 8, 9, 10, 11, 12
- (2 ch audio)
- (Windows Media Player)
- WAV signal formatLinear PCM & MS ADPCM
- (Non-compressed)

- USB
- USB standard specification
-USB 2.0 full speed
- Maximum current supply
-1A
- USB ClassMSC (Mass Storage Class)
- File systemFAT12, FAT16, FAT32
- MP3 decoding formatMPEG-1 & 2 Audio Layer 3
- WMA decoding formatVer. 7, 7.1, 8, 9, 10, 11, 12
- (2 ch audio)
- (Windows Media Player)
- WAV signal formatLinear PCM & MS ADPCM
- (Non-compressed)

- FM tuner
- Frequency range.....87.9 MHz to 107.9 MHz
- Usable sensitivity.....9 dBf (0.8 μV/75 Ω, 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)

CEA2006 Specifications



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

Note

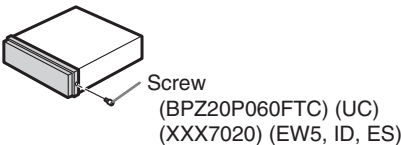
Specifications and the design are subject to

modifications without notice.

Securing the front panel

The front panel can be secured with the supplied

screw.



• DEH-X3500UI/XNEW5

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 × 160 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.....	-6 dB/oct, -12 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
Usable sensitivity.....	25 μV (S/N: 20 dB)
Signal-to-noise ratio.....	62 dB (IEC-A network)

LW tuner

Frequency range.....	153 kHz to 281 kHz
Usable sensitivity.....	28 μV (S/N: 20 dB)
Signal-to-noise ratio.....	62 dB (IEC-A network)

Note

Specifications and the design are subject to modifications without notice.

• DEH-X3550UI/XNES, DEH-X3550UI/XNES1

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	-6 dB/oct, -12 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	1A
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)

Note

Specifications and the design are subject to modifications without notice.

• DEH-X3590UI/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
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	-6 dB/oct, -12 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	1A
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)

Note

Specifications and the design are subject to modifications without notice.

2.2 DISC/CONTENT FORMAT



3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

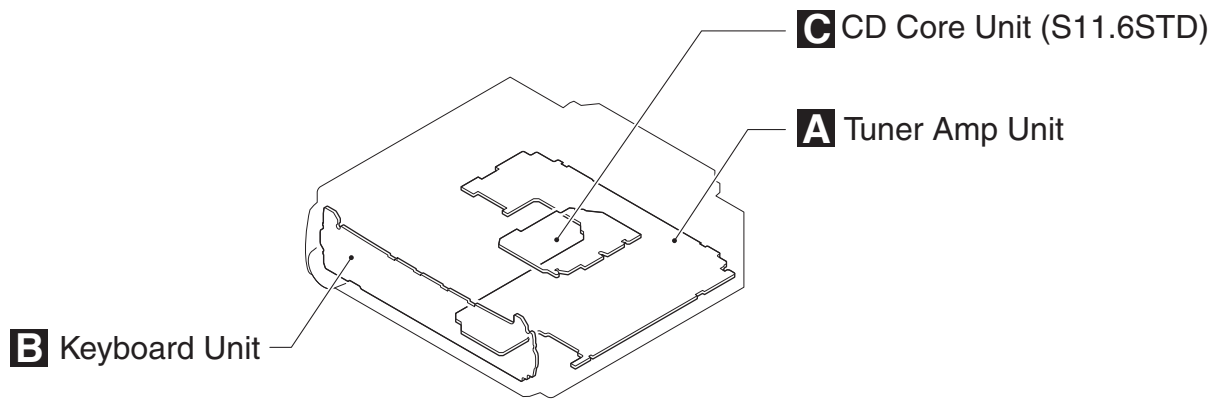
To keep the product quality after servicing, please confirm following check points.

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-X35UI/XNUC
 B:DEH-X3500UI/XNUC
 C:DEH-X3500UI/XNEW5
 D:DEH-X3550UI/XNES
 E:DEH-X3550UI/XNES1
 G:DEH-X3590UI/XNID

Unit Number	:	QWM3448(A)
Unit Number	:	QWM3447(B)
Unit Number	:	QWM3446(C)
Unit Number	:	QWM3449(D,E)
Unit Number	:	QWM3450(G)
Unit Name	:	Tuner Amp Unit
Unit Number	:	
Unit Name	:	Keyboard Unit
Unit Number	:	CWX4023
Unit Name	:	CD Core Unit (S11.6STD)

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)
Acetate Tape	GYH1026	Capacitor Bond Lock
Silicon Glue	GEM1017	Capacitor Bond Lock

● Grease List

Name	Grease No.	Remarks
Grease	GEM1024	CD Mechanism Module
Grease	GEM1038	CD Mechanism Module
Grease	GEM1043	CD Mechanism Module
Grease	GEM1045	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

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7

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8

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A

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B

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C

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D

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6

DEH-X35UI/XNUC

■

7

■

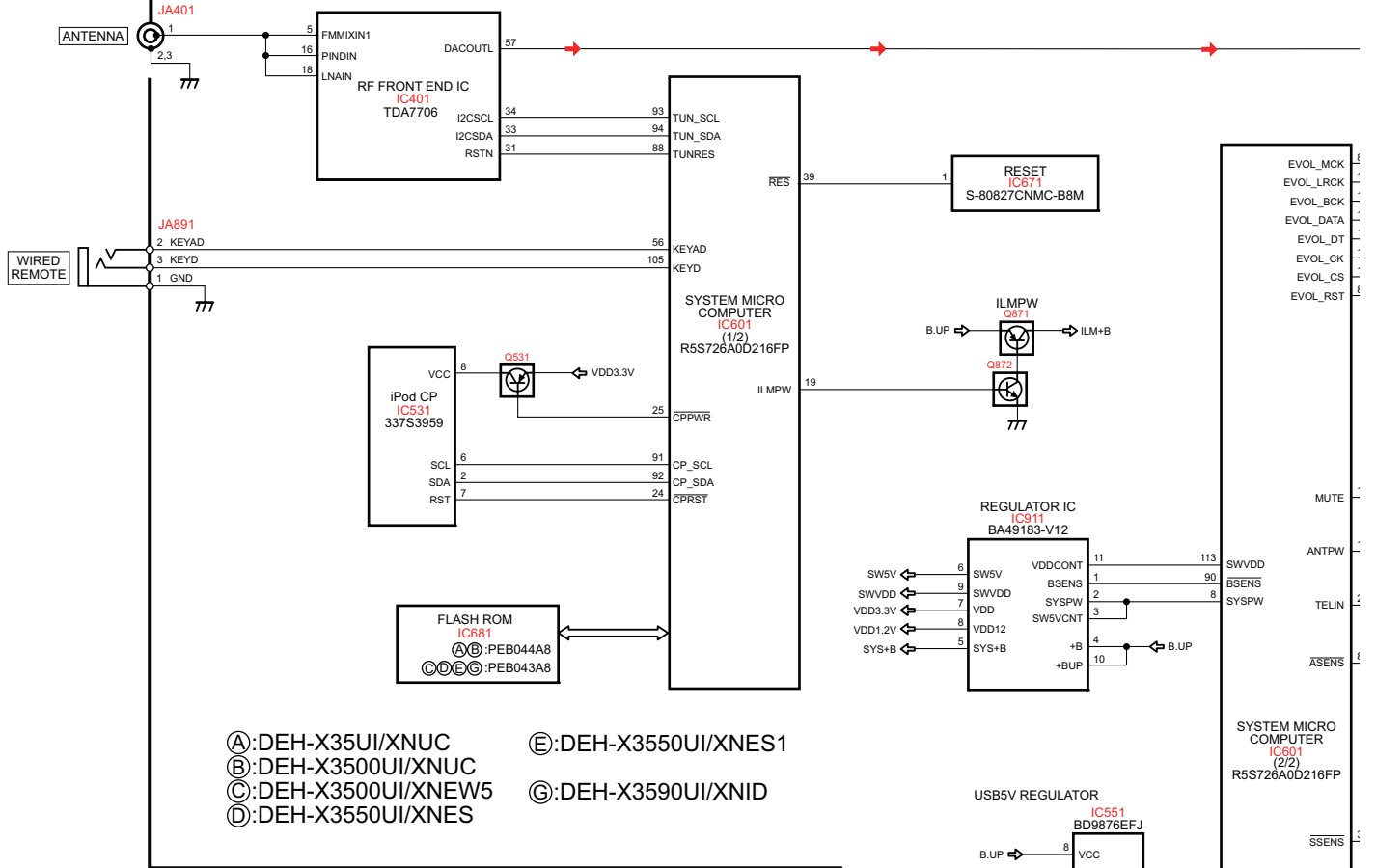
8

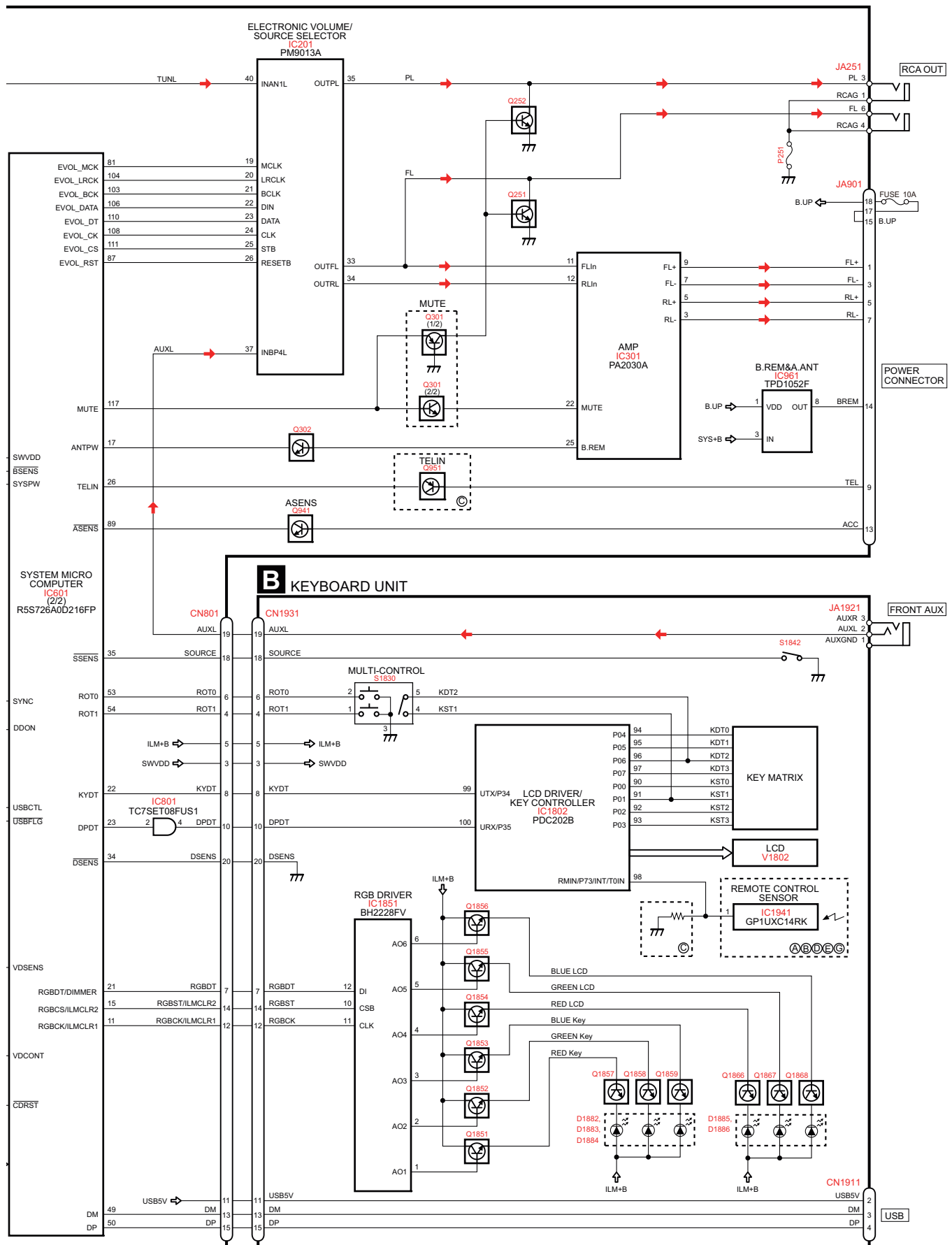
■

4. BLOCK DIAGRAM

A

A TUNER AMP UNIT





5. DIAGNOSIS

5.1 OPERATIONAL FLOWCHART

A

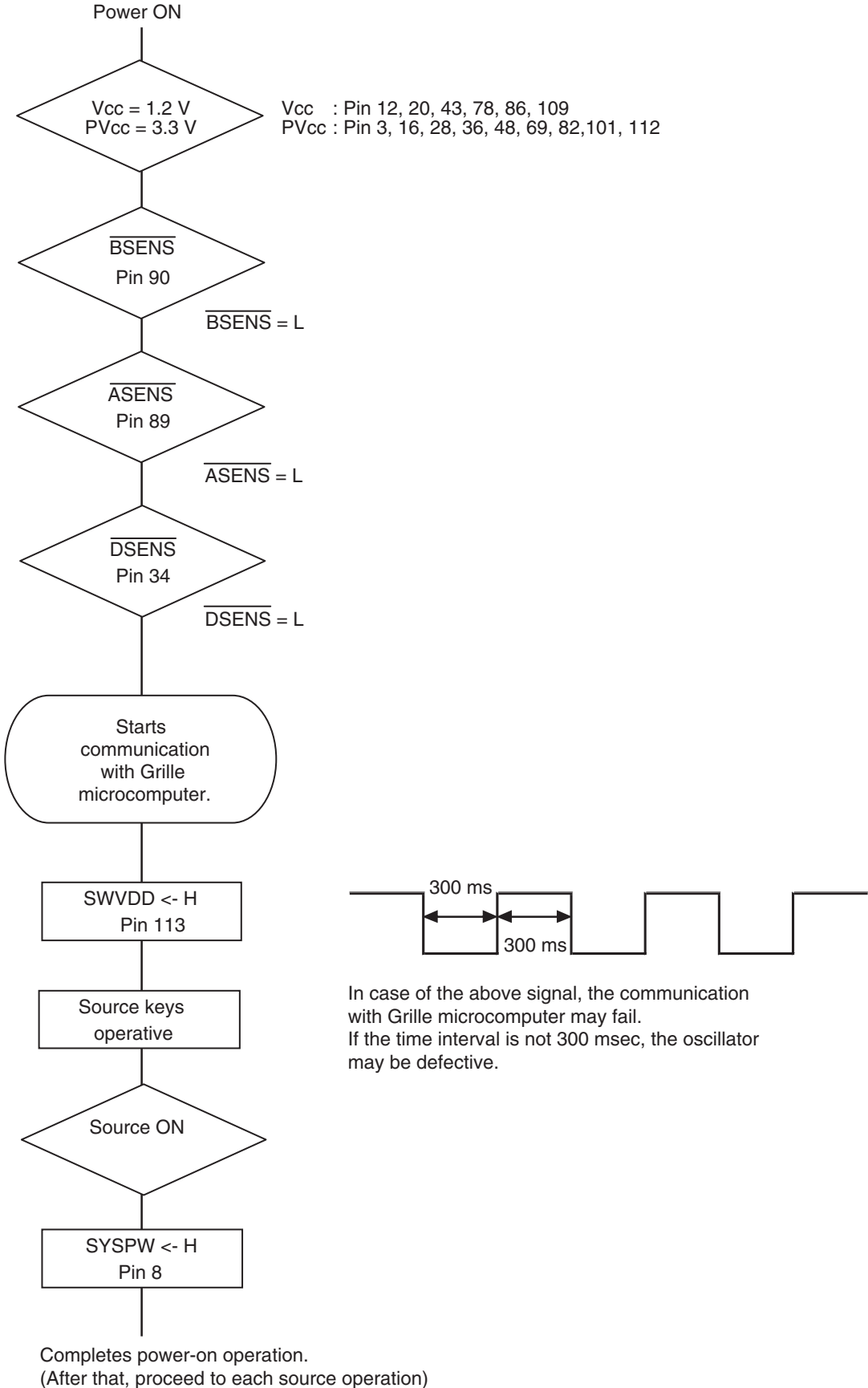
B

C

D

E

F



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

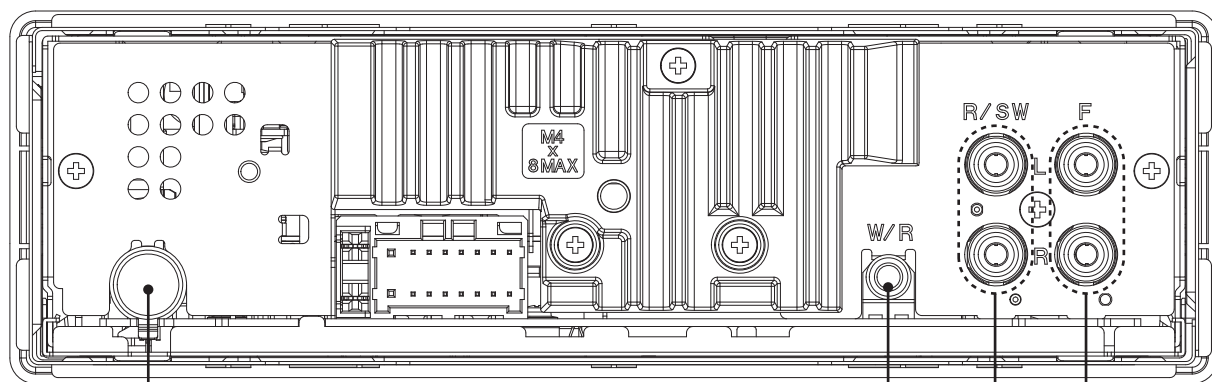
Failure in retried turning for ejection : CD On, Eject, ACC Off, Back-up Off, Communication reset, Reset

USB storage device / iPod

Message	Cause	Action
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 files embedded with Windows Media™DRM 9/10.	Play an audio file not embedded with Windows Media DRM 9/10.
PROTECT	All the files in the USB storage device are embedded with Windows Media DRM 9/10.	Transfer audio files not embedded with Windows Media DRM 9/10 to the USB storage device and connect.
N/A USB	The USB device connected to 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.

Message	Cause	Action
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.

5.3 CONNECTOR FUNCTION DESCRIPTION



ANTENNA

15	13	11	9	7	5	3	1
16	14	12	10	8	6	4	2

- | | |
|-------|---------------------|
| 1 FL+ | 9 NC |
| 2 FR+ | (DEH-X35UI/XNUC, |
| 3 FL- | DEH-X3500UI/XNUC, |
| 4 FR- | DEH-X3550UI/XNES, |
| 5 RL+ | DEH-X3550UI/XNES1, |
| 6 RR+ | DEH-X3590UI/XNID) |
| 7 RL- | MUTE |
| 8 RR- | (DEH-X3500UI/XNEW5) |
| | 10 NC |
| | 11 NC |
| | 12 NC |
| | 13 ACC |
| | 14 B.REM |
| | 15 B.UP |
| | 16 GND |

WIRED
REMOTE
CONTROL

FRONT
OUTPUT

REAR OUTPUT or
SUBWOOFER OUTPUT

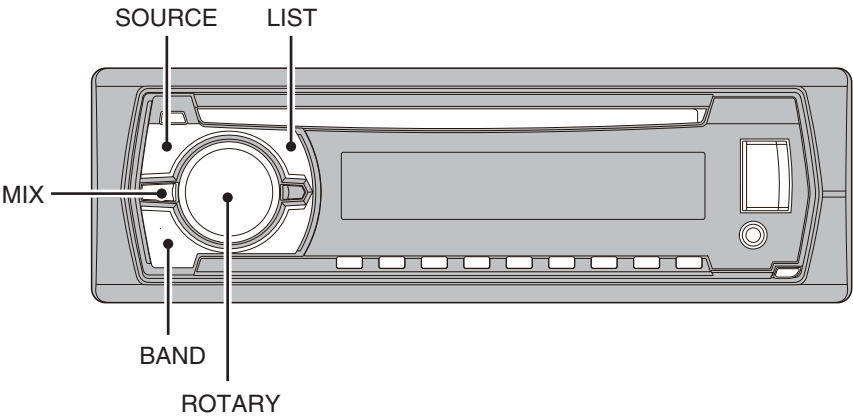
1 2 3 4

6. SERVICE MODE

6.1 DISPLAY TEST MODE 1

[How to enter Test mode]

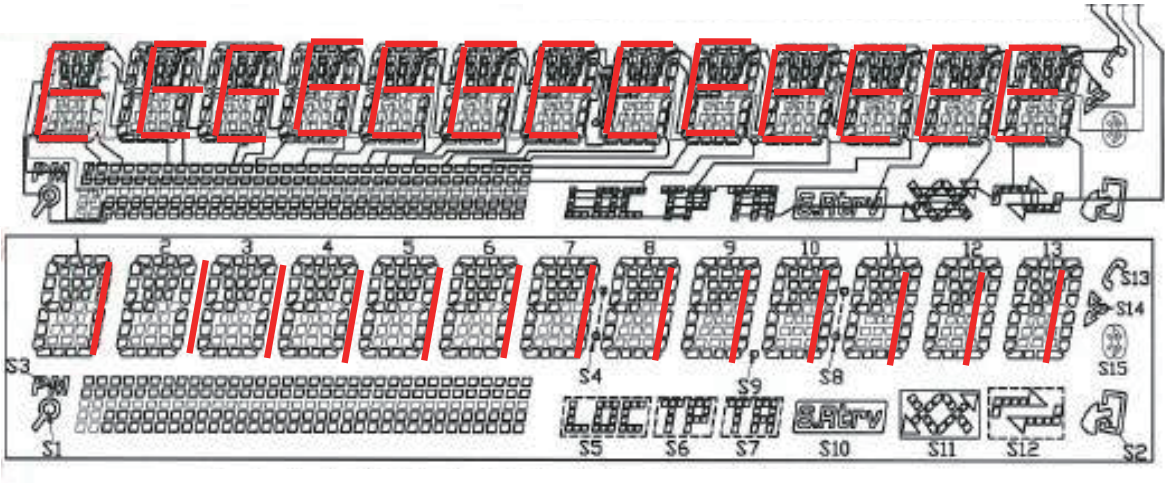
Press and hold "MIX" and "LIST" buttons together, and turn BUP and ACC on.



		Grille condition	
Conf. item	Operate	Show LCD	RGB
All light up	MIX + 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



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.

System Version information is displayed.

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.

Display is normally updated

Product operation is performed as usual, in appearance.

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

Display update is stopped

The screen gets still when entering this item.

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

Key Illumination	Icon
Off	All off
On (an initial value)	All off
On (an initial value or setting value of default menu)	All off
On (an initial value or setting value of default menu)	On (lighting condition of normal times)
On (an initial value or setting value of default menu)	On (state when entering test mode)

* Initial condition

1 2 3 4

6.3 SOFTWARE VERSION UP METHOD

A

Overview

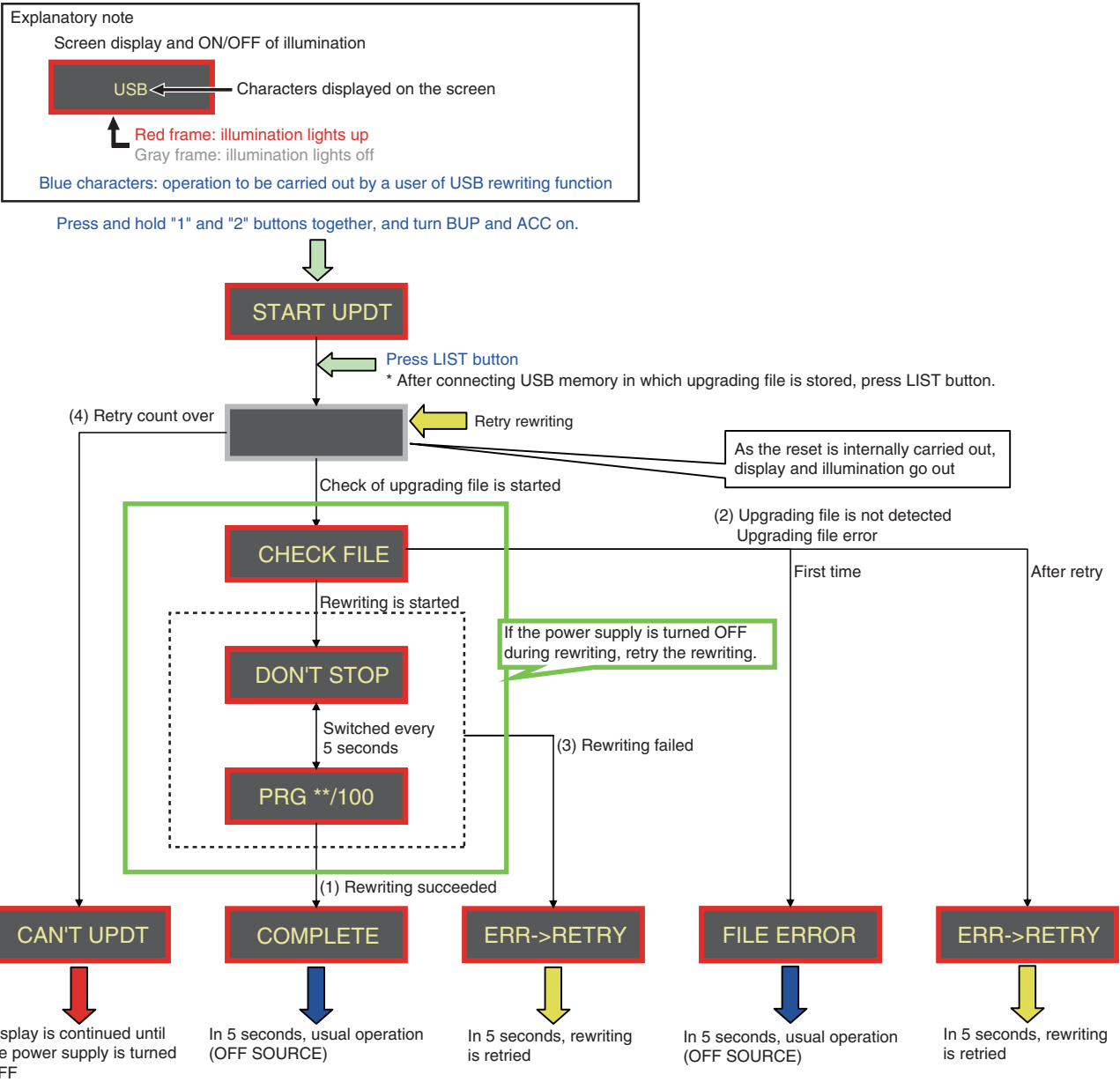
This mode is used for upgrading the MCU software of system using USB memory.

How to enter in USB rewriting mode

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

B

USB rewriting operation flow



D

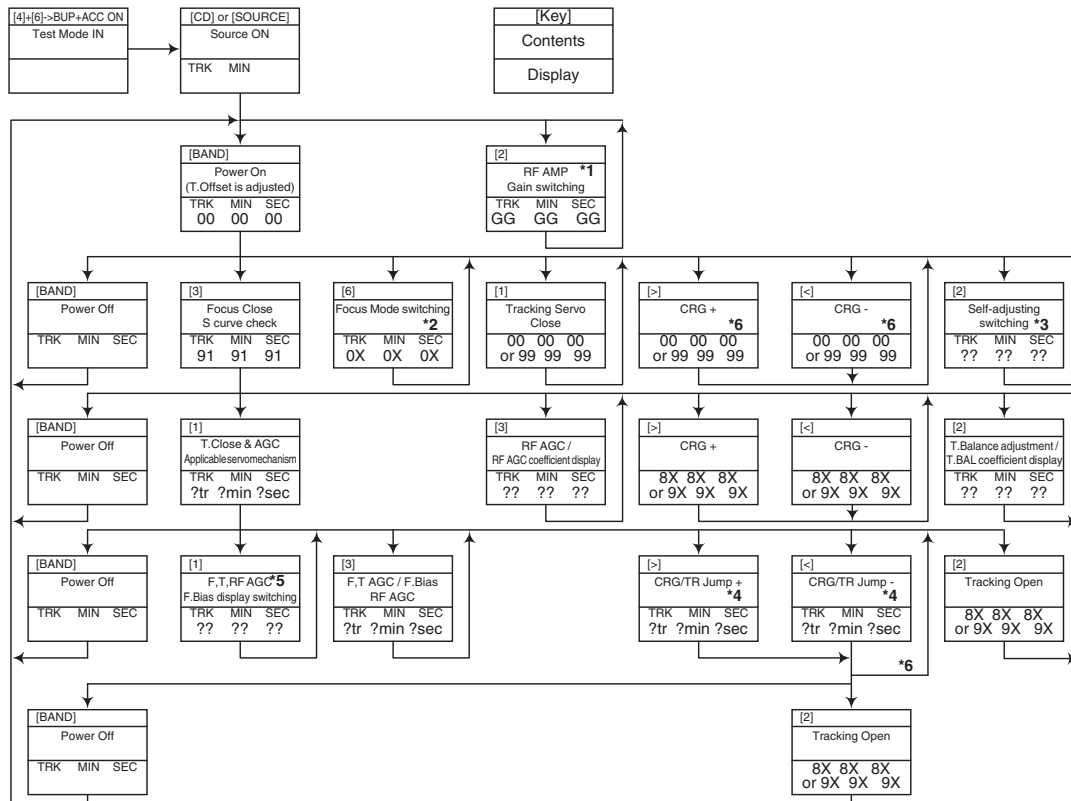
Result of rewriting

E

(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.

F

● Flow Chart



- *1) TYP — + 6 dB — + 12 dB
TRK MIN SEC TRK MIN SEC TRK MIN SEC
00 00 00 01 01 01 02 02 02
(TRK 99 MIN 99 SEC 99)
- *2) Focus Close — S. Curve — F EQ measurement setting
TRK 00 MIN 00 SEC 00 TRK 01 MIN 01 SEC 01 TRK 02 MIN 02 SEC 02
(TRK 99 MIN 99 SEC 99)
- *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.

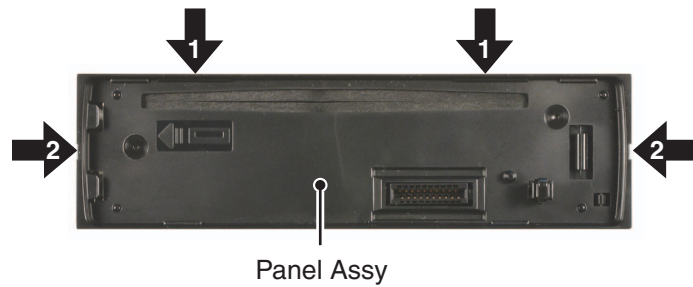
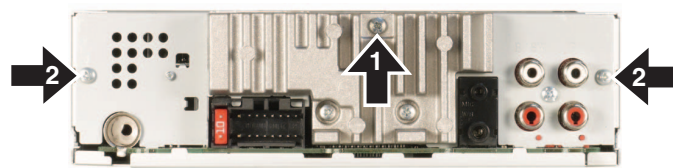


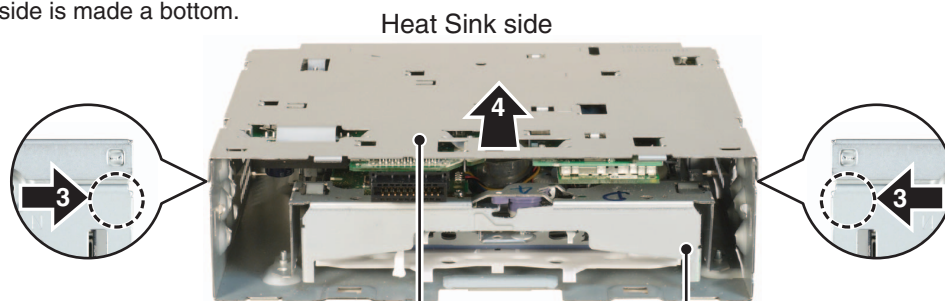
Fig.1

●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.

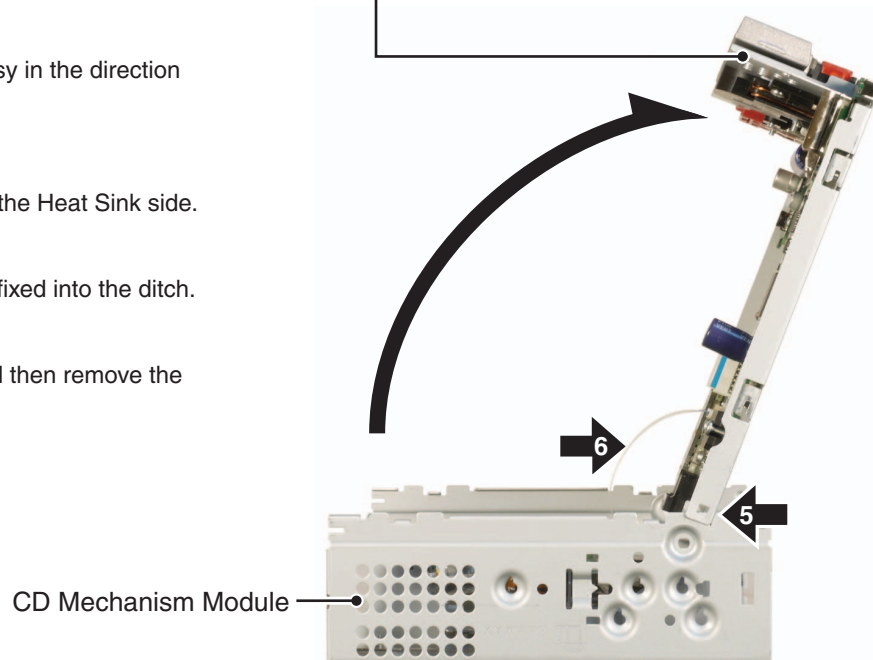


Fig.2

● Removing the Tuner Amp Unit (Fig.3)

- ➡ **1** Remove the two screws.
- ➡ **2** Remove the two screws and then remove the Tuner Amp Unit.

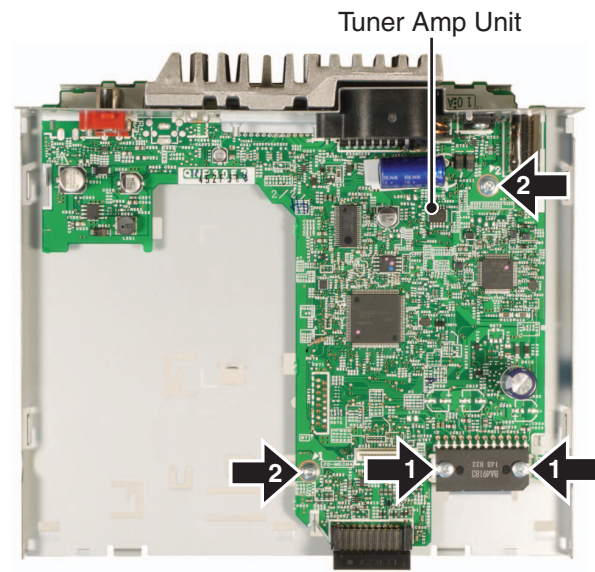


Fig.3

● Attention of removing (Fig.4)

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

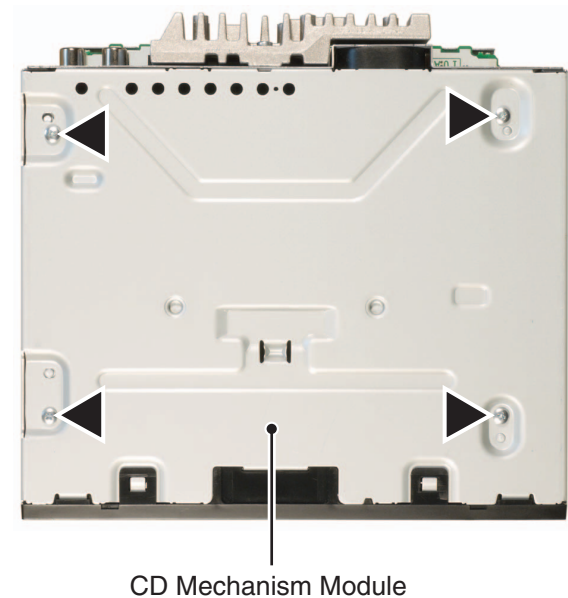


Fig.4

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

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

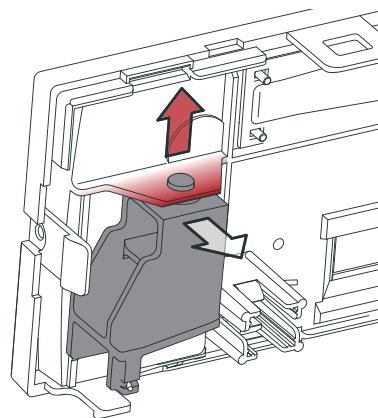


Fig.5

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

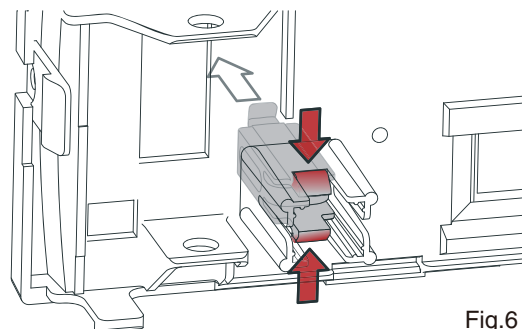


Fig.6

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

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

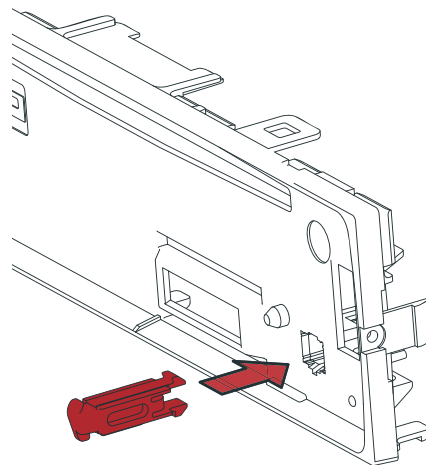


Fig.7

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

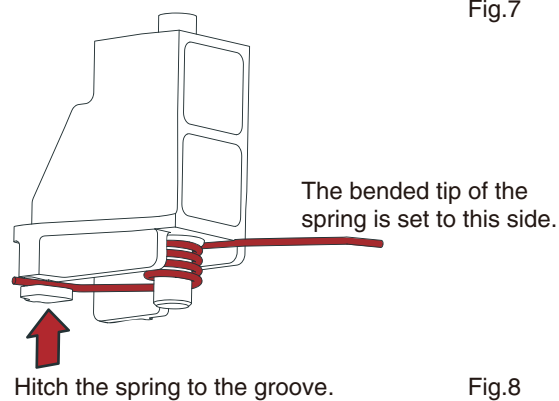


Fig.8

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.

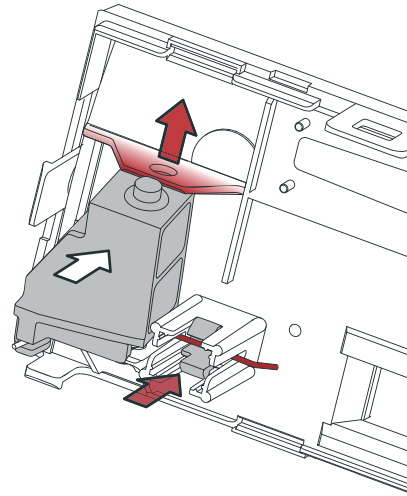
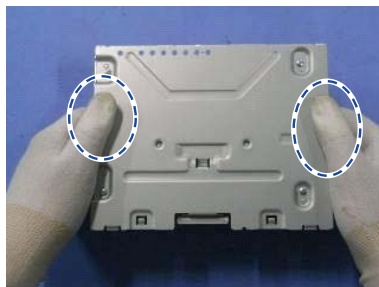


Fig.9

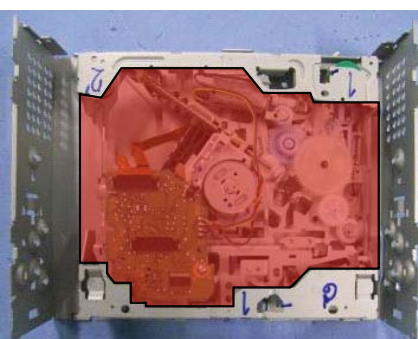
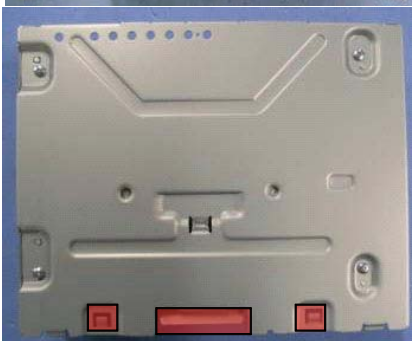
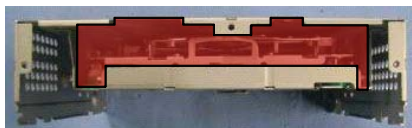
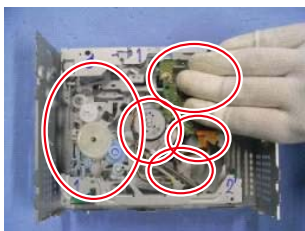
●How to carry the mecha unit

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



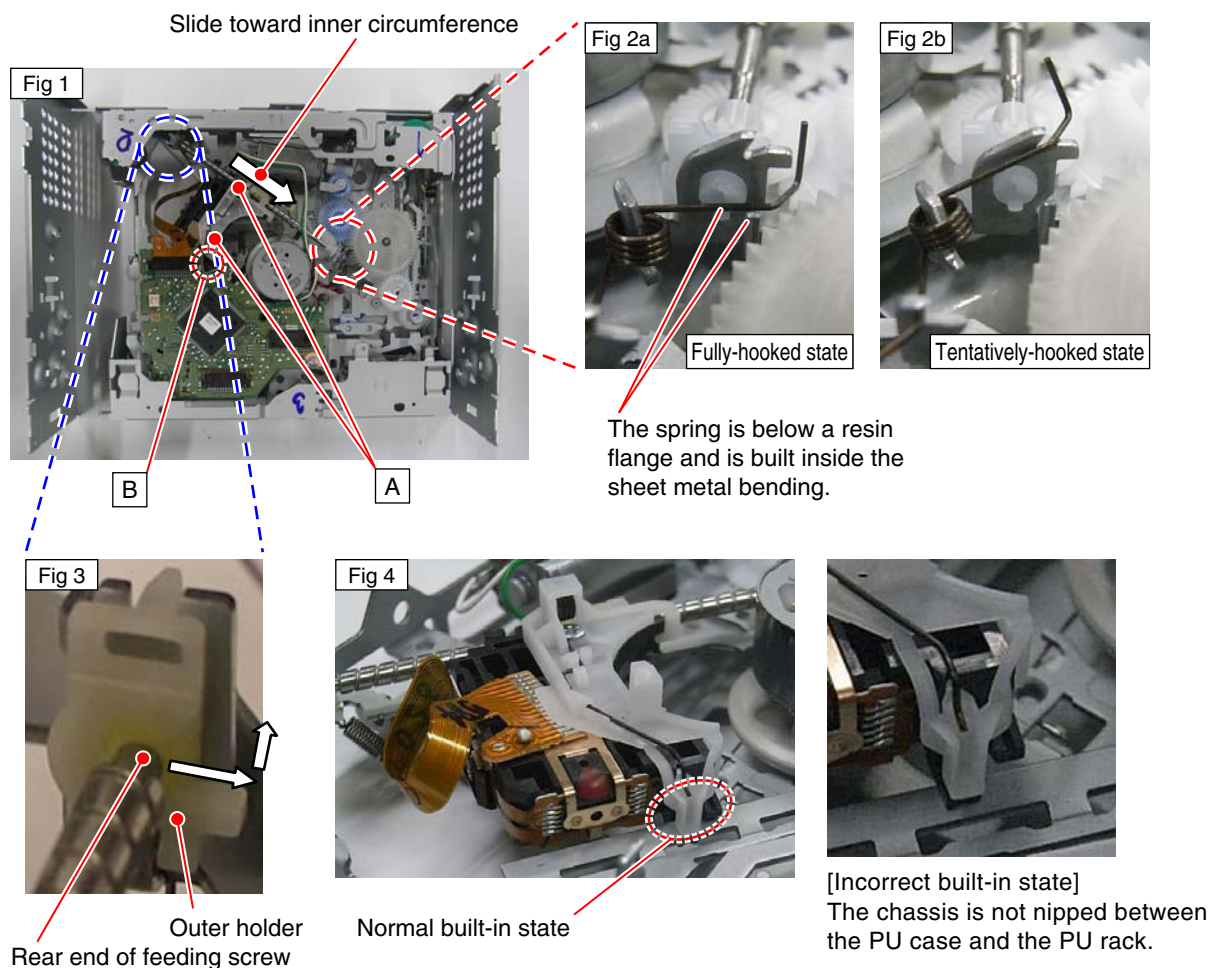
● How to remove the PU unit

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.



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 guaranteed 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

- 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 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 :

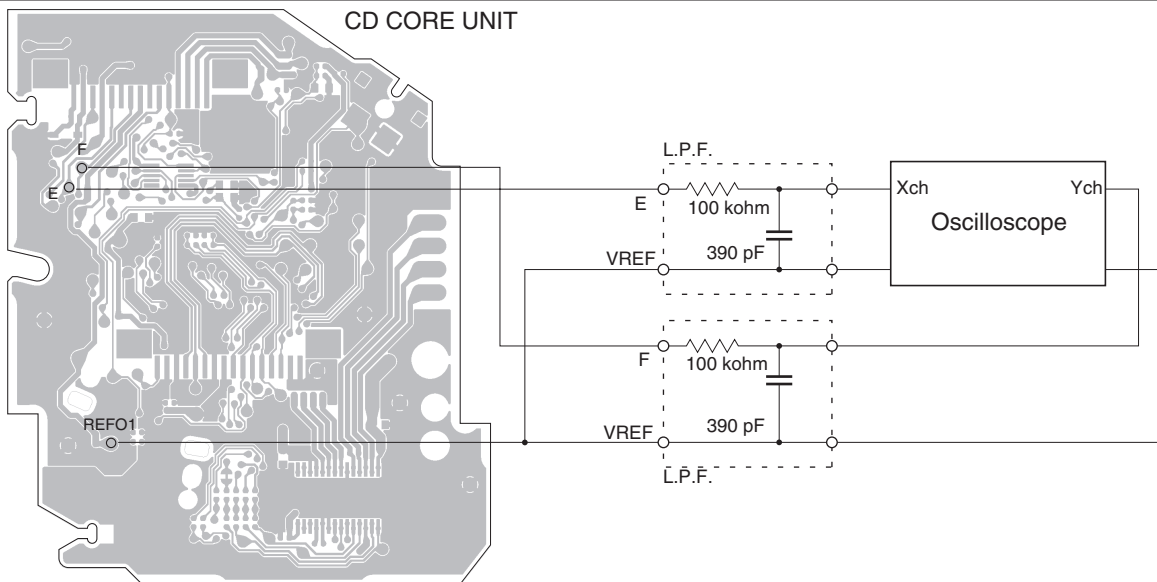
To check that the grating is within an acceptable range when the PU unit is changed.

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



• Checking Procedure

1. In test mode, load the disc and switch the 3 V regulator on.
2. Using the right and left 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".

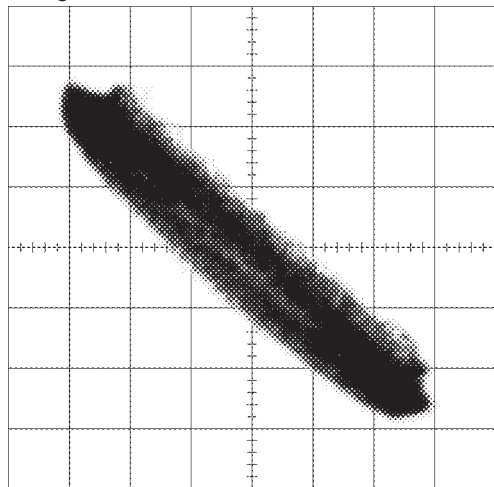
Grating waveform

Ech -> Xch 20 mV/div, AC

Fch -> Ych 20 mV/div, AC

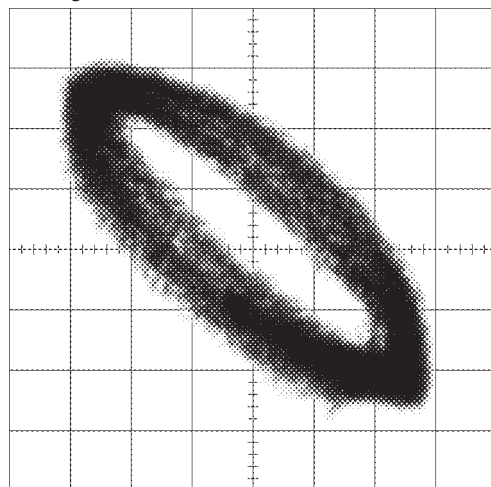
A

0 degrees



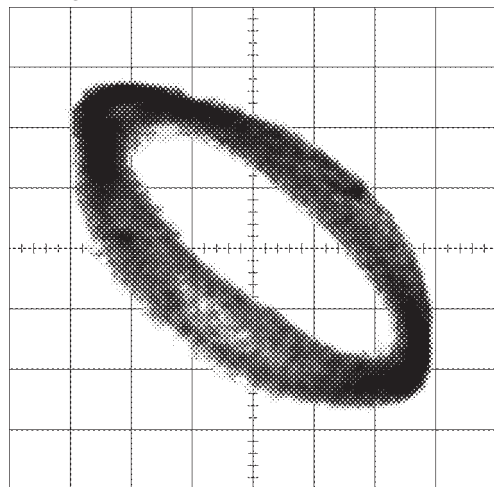
B

30 degrees



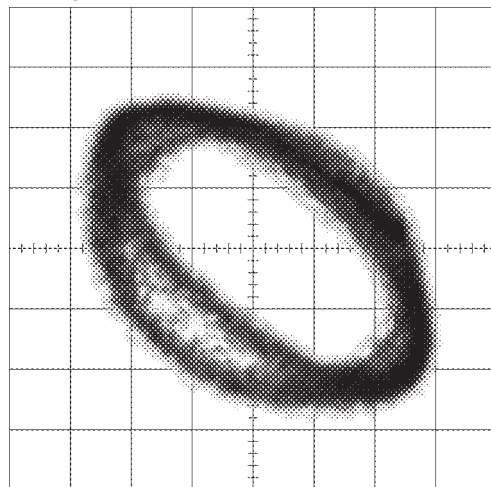
C

45 degrees



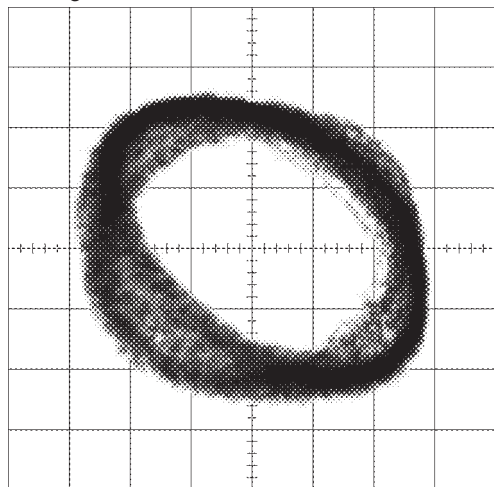
D

60 degrees



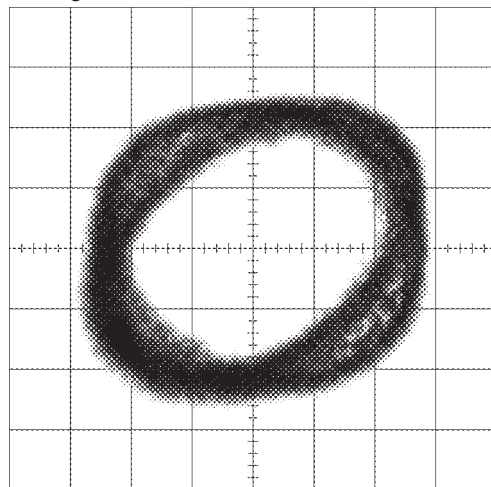
E

75 degrees



F

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).

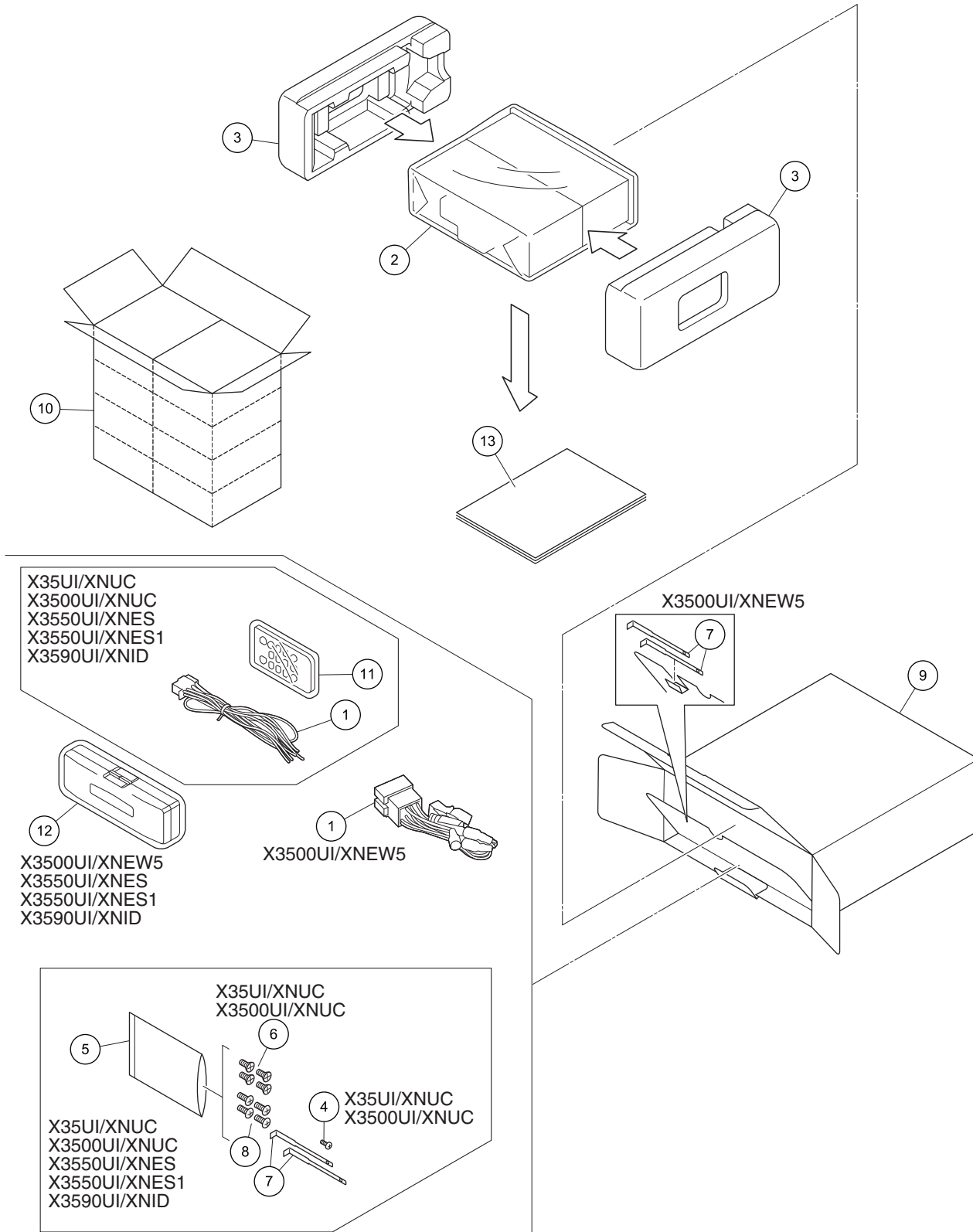
If the clock signal is out of the range, the X'tal (X601) should be replaced with new one.

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



(1) 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	See Contrast table (2)	9	Unit Box	See Contrast table (2)
2	Polyethylene Bag	See Contrast table (2)	10	Contain Box	See Contrast table (2)
3	Protector	CHP4594			
4	Screw	See Contrast table (2)	11	Card Remote Control Unit	See Contrast table (2)
5	Polyethylene Bag	See Contrast table (2)	12	Case Assy	See Contrast table (2)
			13-1	Owner's Manual	See Contrast table (2)
6	Screw	See Contrast table (2)	*	13-2 Warranty Card	See Contrast table (2)
7	Handle	QNC3021	*	13-3 Service Network	See Contrast table (2)
8	Screw	See Contrast table (2)			

(2) CONTRAST TABLE

DEH-X35UI/XNUC, DEH-X3500UI/XNUC, DEH-X3500UI/XNEW5, DEH-X3550UI/XNES, DEH-X3550UI/XNES1 and DEH-X3590UI/XNID are constructed the same except for the following:

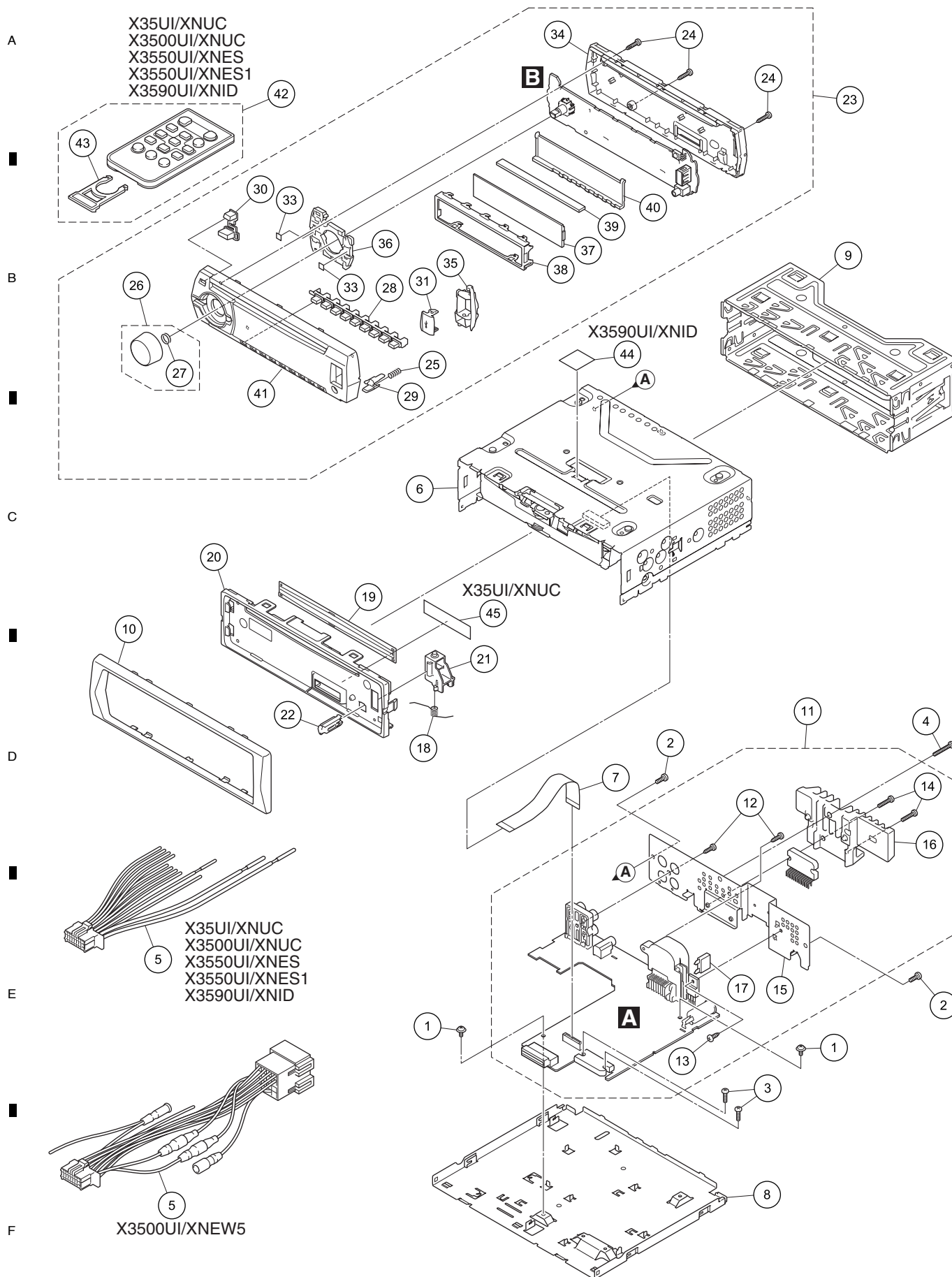
Mark	No.	Description	DEH-X35UI/XNUC	DEH-X3500UI/XNUC	DEH-X3500UI/XNEW5	DEH-X3550UI/XNES
	1	Cord Assy	CDP1480	CDP1480	QDP3012	CDP1480
	2	Polyethylene Bag	CEG1173	CEG1173	QEG3001	QEG3001
	4	Screw	BPZ20P060FTC	BPZ20P060FTC	Not used	Not used
	5	Polyethylene Bag	CEG1160	CEG1160	Not used	CEG1160
	6	Screw	CRZ50P090FTC	CRZ50P090FTC	Not used	Not used
	8	Screw	TRZ50P080FTC	TRZ50P080FTC	Not used	TRZ50P080FTC
	9	Unit Box	QHG3430	QHG3369	QHG3368	QHG3371
	10	Contain Box	QHL3430	QHL3369	QHL3368	QHL3371
	11	Card Remote Control Unit	QXE1047	QXE1047	Not used	QXE1047
	12	Case Assy	Not used	Not used	QXA3129	QXA3129
	13-1	Owner's Manual	QRD3128	QRD3128	QRD3127	QRD3129
*	13-2	Warranty Card	QRY3001	QRY3001	CRY1376	Not used
*	13-3	Service Network	Not used	Not used	Not used	Not used

Mark	No.	Description	DEH-X3550UI/XNES1	DEH-X3590UI/XNID
	1	Cord Assy	CDP1480	CDP1480
	2	Polyethylene Bag	QEG3001	QEG3001
	4	Screw	Not used	Not used
	5	Polyethylene Bag	CEG1160	CEG1160
	6	Screw	Not used	Not used
	8	Screw	TRZ50P080FTC	TRZ50P080FTC
	9	Unit Box	QHG3372	QHG3374
	10	Contain Box	QHL3372	QHL3374
	11	Card Remote Control Unit	QXE1047	QXE1047
	12	Case Assy	QXA3129	QXA3129
	13-1	Owner's Manual	QRD3129	QRB3248
*	13-2	Warranty Card	CRY1250	CRY1304
*	13-3	Service Network	CRY1251	CRY1305

Owner's Manual,Installation Manual

Part No.	Language
QRD3128	English, French, Spanish(Espanol)
QRD3127	English, French, Italian, Spanish(Espanol), German, Dutch, Russian
QRD3129	English, Spanish(Espanol), Portuguese(B), Traditional Chinese, Arabic, Persian
QRB3248	English

9.2 EXTERIOR



Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	ASZ26P050FTC	24	Screw	BPZ20P100FTC
2	Screw	BSZ26P060FTC	25	Spring	CBH2210
3	Screw	BSZ26P080FTC			
4	Screw	BSZ26P120FTC	26	Knob Unit	See Contrast table (2)
5	Cord Assy	See Contrast table (2)	27	Spring	YBL5010
			28	Button (1-6)	QAC3086
6	CD Mechanism Module (S11.6)	CXK5804	29	Button (DETACH)	QAC3087
7	FFC	QDE3029	30	Button (EJECT, MIX)	QAC3103
8	Case	QNB3005			
9	Holder	QNC3020	31	Door	QAT3007
10	Panel	QNS3417	32	•••••	
			33	Sheet	QNM3060
11	Tuner Amp Unit	See Contrast table (2)	34	Cover	QNS3415
12	Screw	BPZ26P080FTC	35	Lighting Conductor	QNV3057
13	Screw	BSZ26P060FTC			
14	Screw	BSZ26P120FTC	36	Lighting Conductor	QNV3058
15	Holder	QNC3049	37	Segment LCD (V1801)	CAW2025
			38	Holder	QNC3047
16	Heat Sink	See Contrast table (2)	39	Rubber Connector	QNV3053
⚠ 17	Fuse (10 A)	YEK5001	40	Lighting Conductor	QNV3054
18	Spring	QBH3001			
19	Cover	QNM3029	41	Grille Unit	See Contrast table (2)
20	Panel	QNS3416	42	Card Remote Control Unit	See Contrast table (2)
			43	Cover	See Contrast table (2)
21	Arm	QNV3025	44	Label	See Contrast table (2)
22	Button	QNV3026	* 45	Seal	See Contrast table (2)
23	Detachable Grille Assy	See Contrast table (2)			

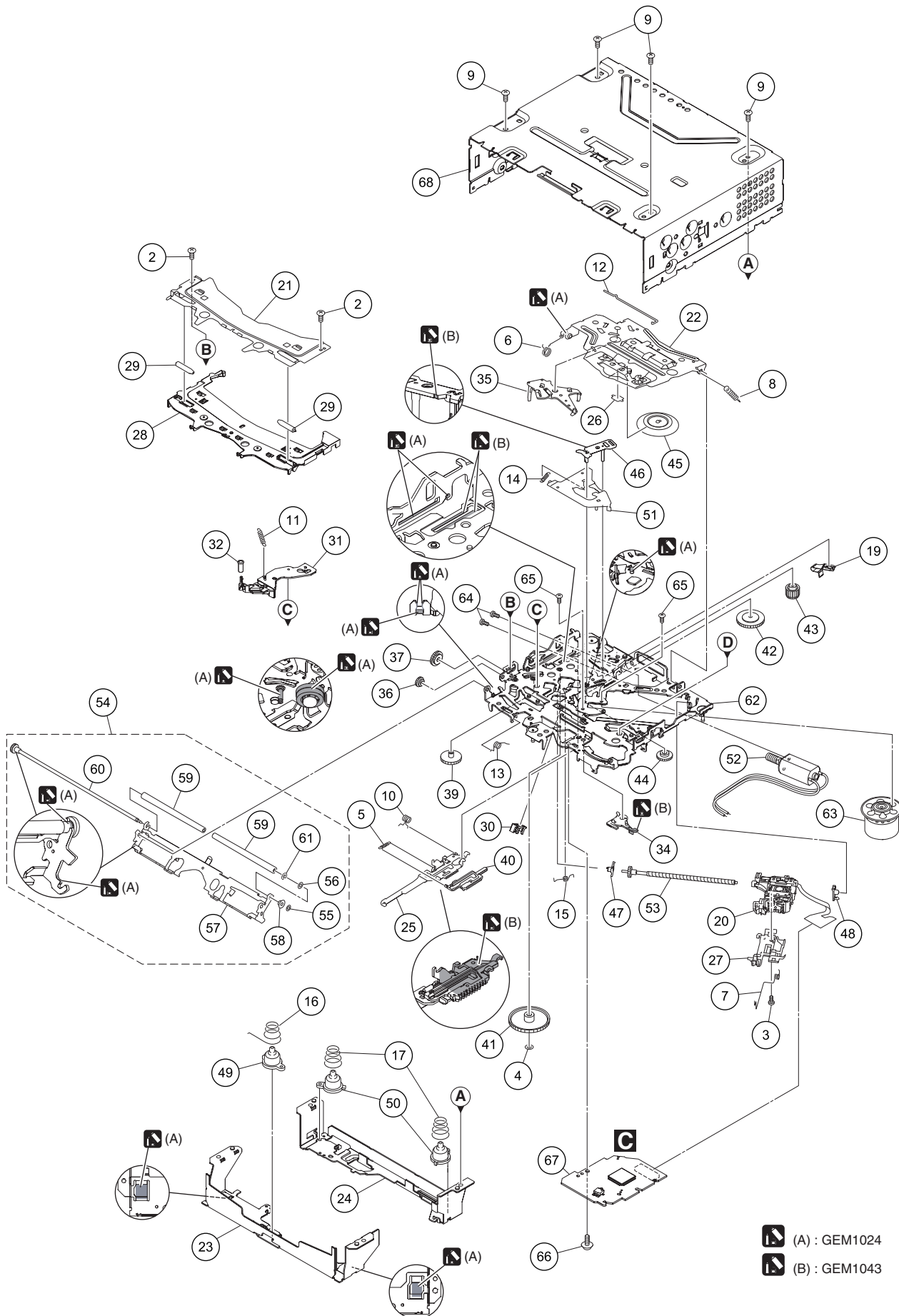
(2) CONTRAST TABLE

DEH-X35UI/XNUC, DEH-X3500UI/XNUC, DEH-X3500UI/XNEW5, DEH-X3550UI/XNES, DEH-X3550UI/XNES1 and DEH-X3590UI/XNID are constructed the same except for the following:

Mark	No.	Description	DEH-X35UI/XNUC	DEH-X3500UI/XNUC	DEH-X3500UI/XNEW5	DEH-X3550UI/XNES
	5	Cord Assy	CDP1480	CDP1480	QDP3012	CDP1480
	11	Tuner Amp Unit	QWM3448	QWM3447	QWM3446	QWM3449
	16	Heat Sink	QNR3010	QNR3010	QNR3010	QNR3002
	23	Detachable Grille Assy	QXA3711	QXA3710	QXA3709	QXA3712
	26	Knob Unit	CXE3692	CXE3692	QXA3694	CXE3692
	41	Grille Unit	QXA3685	QXA3684	QXA3683	QXA3686
	42	Card Remote Control Unit	QXE1047	QXE1047	Not used	QXE1047
	43	Cover	CNS7068	CNS7068	Not used	CNS7068
	44	Label	Not used	Not used	Not used	Not used
*	45	Seal	CAN3984	Not used	Not used	Not used

Mark	No.	Description	DEH-X3550UI/XNES1	DEH-X3590UI/XNID
	5	Cord Assy	CDP1480	CDP1480
	11	Tuner Amp Unit	QWM3449	QWM3450
	16	Heat Sink	QNR3002	QNR3002
	23	Detachable Grille Assy	QXA3712	QXA3713
	26	Knob Unit	CXE3692	CXE3692
	41	Grille Unit	QXA3686	QXA3687
	42	Card Remote Control Unit	QXE1047	QXE1047
	43	Cover	CNS7068	CNS7068
	44	Label	Not used	CNN3533
*	45	Seal	Not used	Not used

9.3 CD MECHANISM MODULE



DEH-X35UI/XNUC

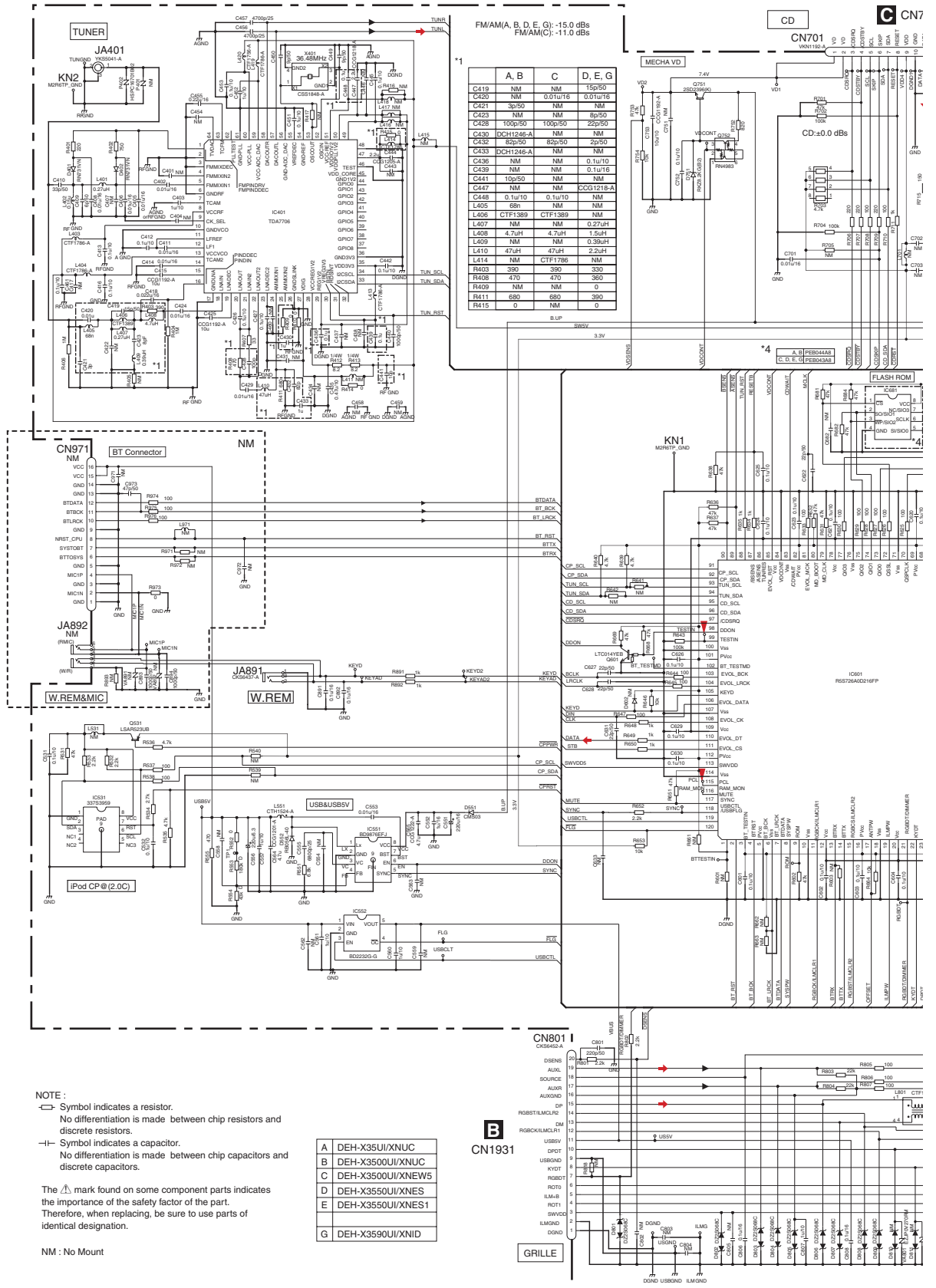
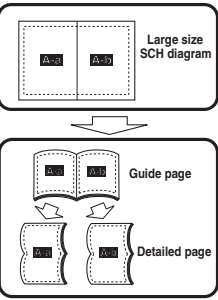
<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1			50	Damper	CNW1198	
2	Screw	BSZ20P040FTC	51	Arm	CNW1726	A
3	Screw(M2 x 4)	CBA1835	52	Motor Unit(M2)(LOAD/CRG)	CXC4026	
4	Washer	CBF1038	53	Screw Unit	CXC8894	
5	Spring	CBH3010	54	Arm Assy	CXE5027	
6	Spring	CBH2855	55	Washer	CBF1037	
7	Spring	CBH2856				
8	Spring	CBH2860	56	Washer	CBF1038	
9	Screw	BSZ26P060FTC	57	Arm	CND6242	
10	Spring	CBH3011	58	Collar	CNW2444	
11	Coil Spring	CBH3095	59	Roller	CNW1196	
12	Spring	CBH3014	60	Gear Unit	CXC8893	B
13	Spring	CBH3015	61	Washer	YE15FTC	
14	Spring	CBH3016	62	Chassis Unit	CXE4528	
15	Spring	CBH3017	63	Motor Unit(M1)(SPDL)	CXE2273	
16	Spring	CBH3086	64	Screw	JFZ20P025FTC	
17	Spring	CBH3019	65	Screw	JGZ17P022FTC	
18			66	Screw	EBA1028	
19	Leaf Spring	CBL1824	67	CD Core Unit (S11.6STD)	CWX4023	
20	Pickup Unit(P10.6)(Service)	CXX3556	68	Chassis	CNA3181	C
21	Bracket	CND4553				
22	Arm	CND4555				
23	Bracket	CND6127				
24	Bracket	CND5710				
25	Lever	CND5398				
26	Sheet	CNN3678				
27	Rack	CNV8342				
28	Guide	CNW2240				
29	Roller	CNW1172				
30	Holder	CNW1195				D
31	Arm	CNW2241				
32	Roller	CNW1175				
33						
34	Arm	CNW1177				
35	Arm	CNW1178				
36	Gear	CNW1180				
37	Gear	CNW1181				
38						E
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				F
48	Holder	CNW1194				
49	Damper	CNW1197				

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



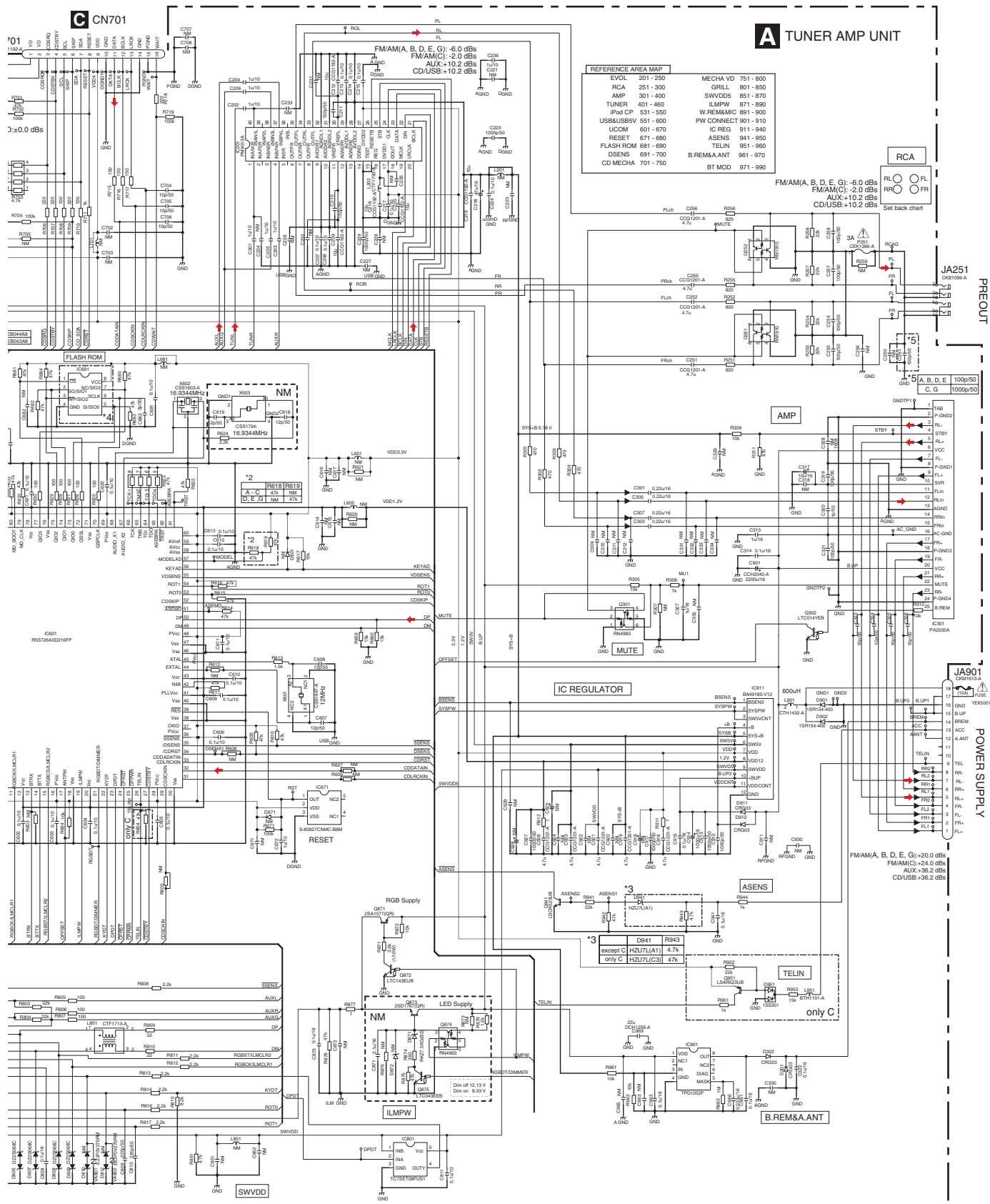
NOTE:
 — Symbol indicates a resistor.
 No differentiation is made between chip resistors and discrete resistors.
 — Symbol indicates a capacitor.
 No differentiation is made between chip capacitors and discrete capacitors.

The Δ 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.

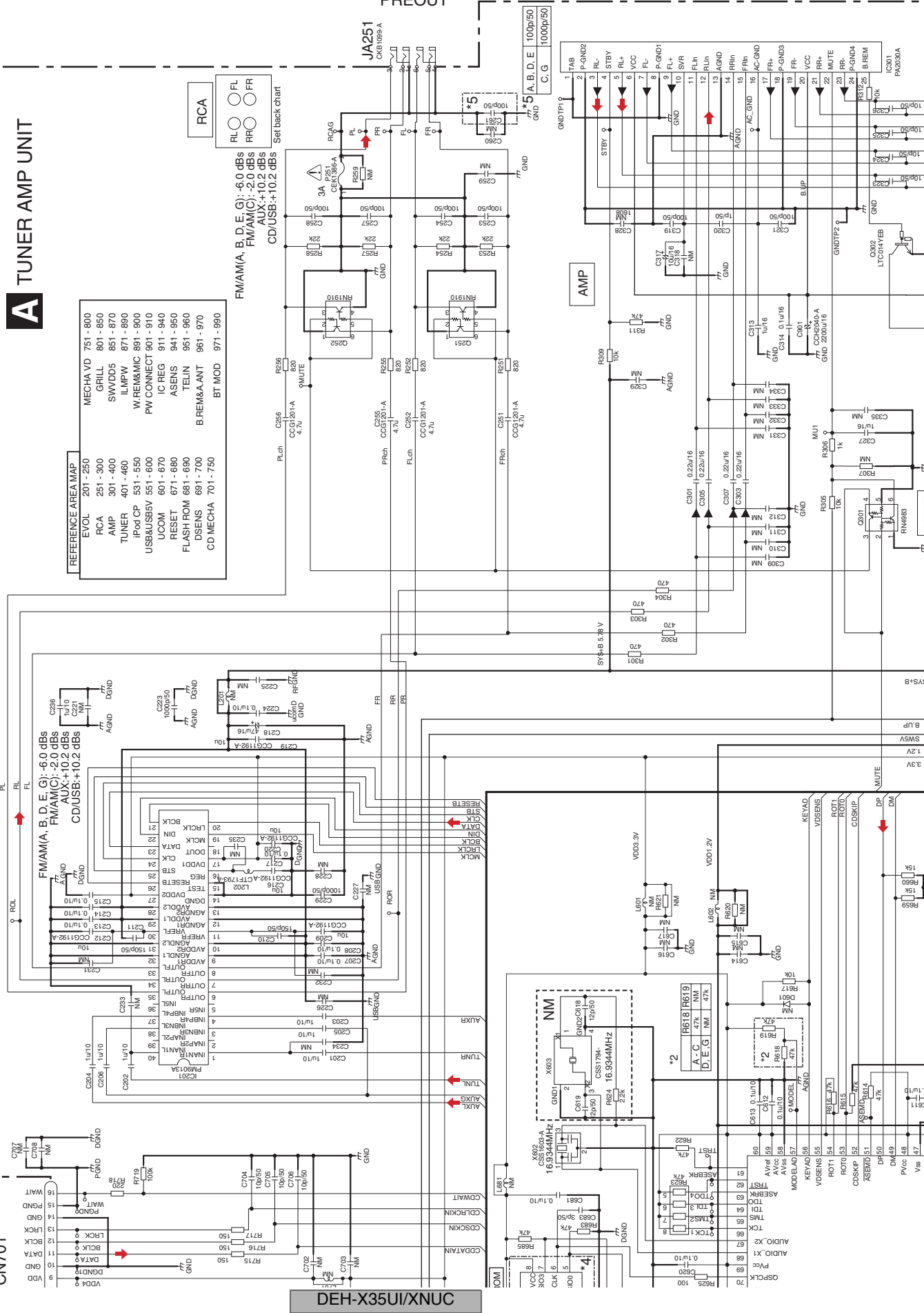
NM : No Mount

A	DEH-X35UI/XNUC
B	DEH-X3500UI/XNUC
C	DEH-X3500UI/XNEW5
D	DEH-X3550UI/XNES
E	DEH-X3550UI/XNES1
G	DEH-X3590UI/XNID

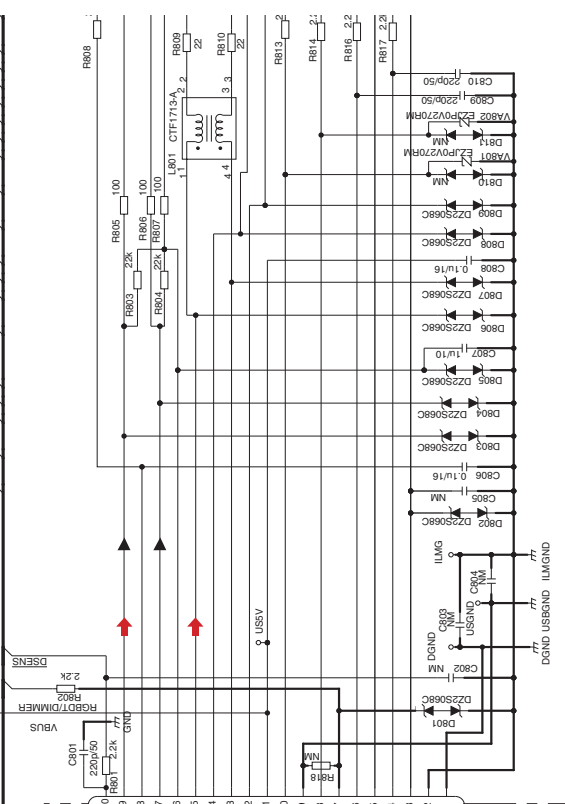
B
 CN931

A-b

PREOUT







CN801
CKS6452-A

CN801
CKS6452-A

A	DEH-X350UI/XNUC
B	DEH-X3500UI/XNUC
C	DEH-X3500UI/XNEW5
D	DEH-X3550UI/XNES
E	DEH-X3550UI/XNES1
G	DEH-X3590UI/XNID

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 $\triangle$ 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.

NM : No Mount

A-b

A

E

C

A-a A-b

D

E

F

A-a

DEH-X35UI/XNUC

10.2 KEYBOARD UNIT

A

B

C

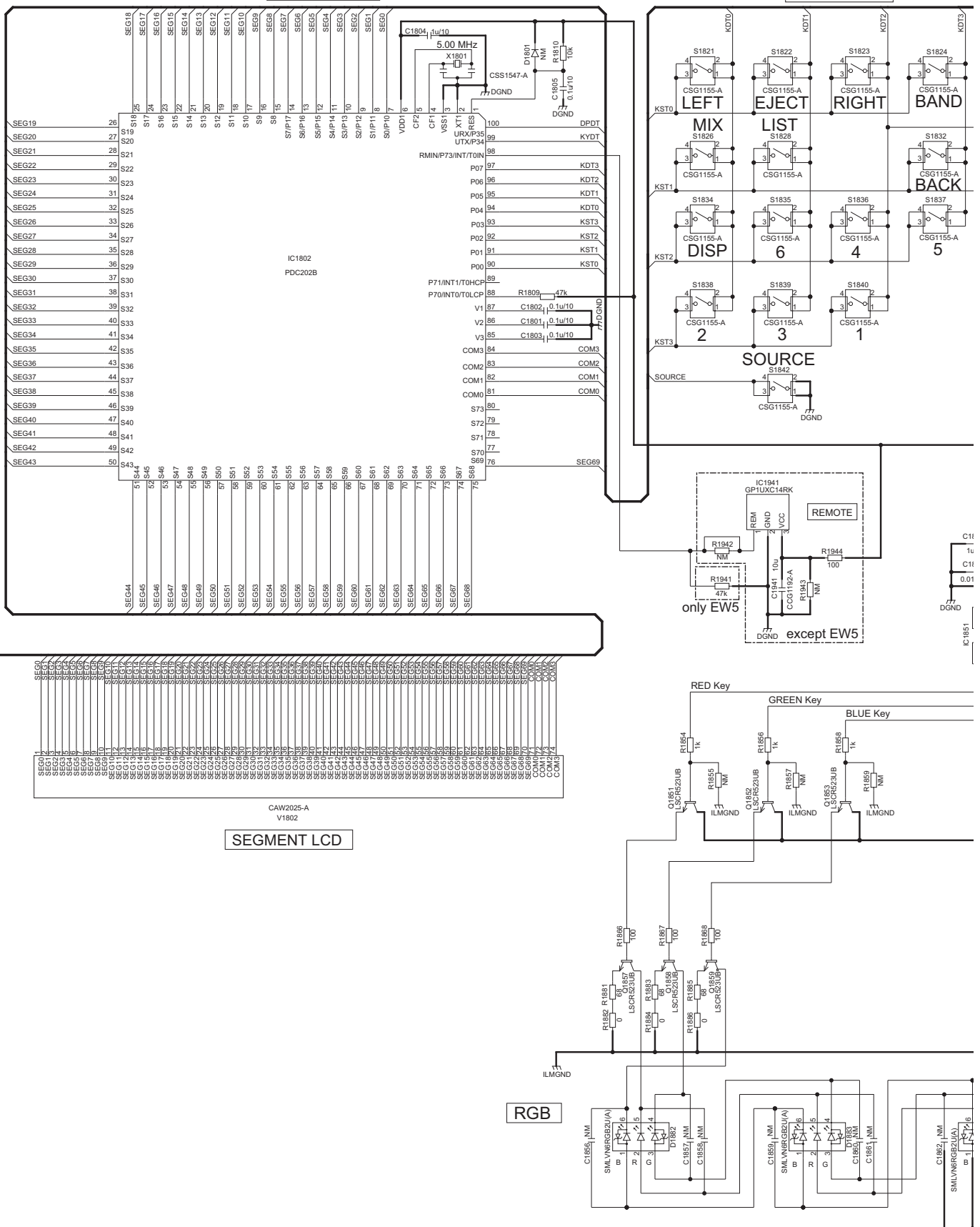
D

E

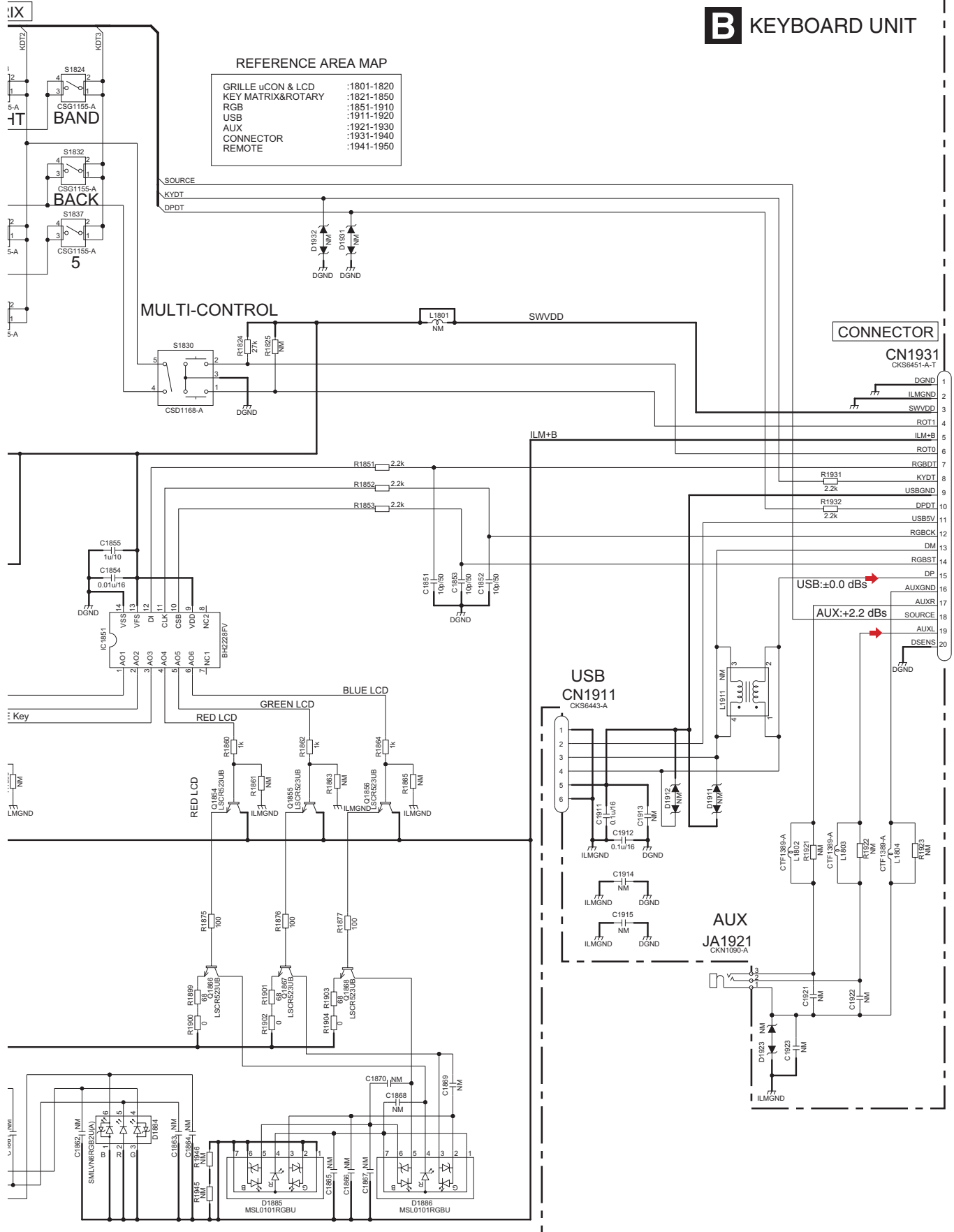
F

GRILLE uCON

KEY MATRIX



B KEYBOARD UNIT



A

B

C

D

E

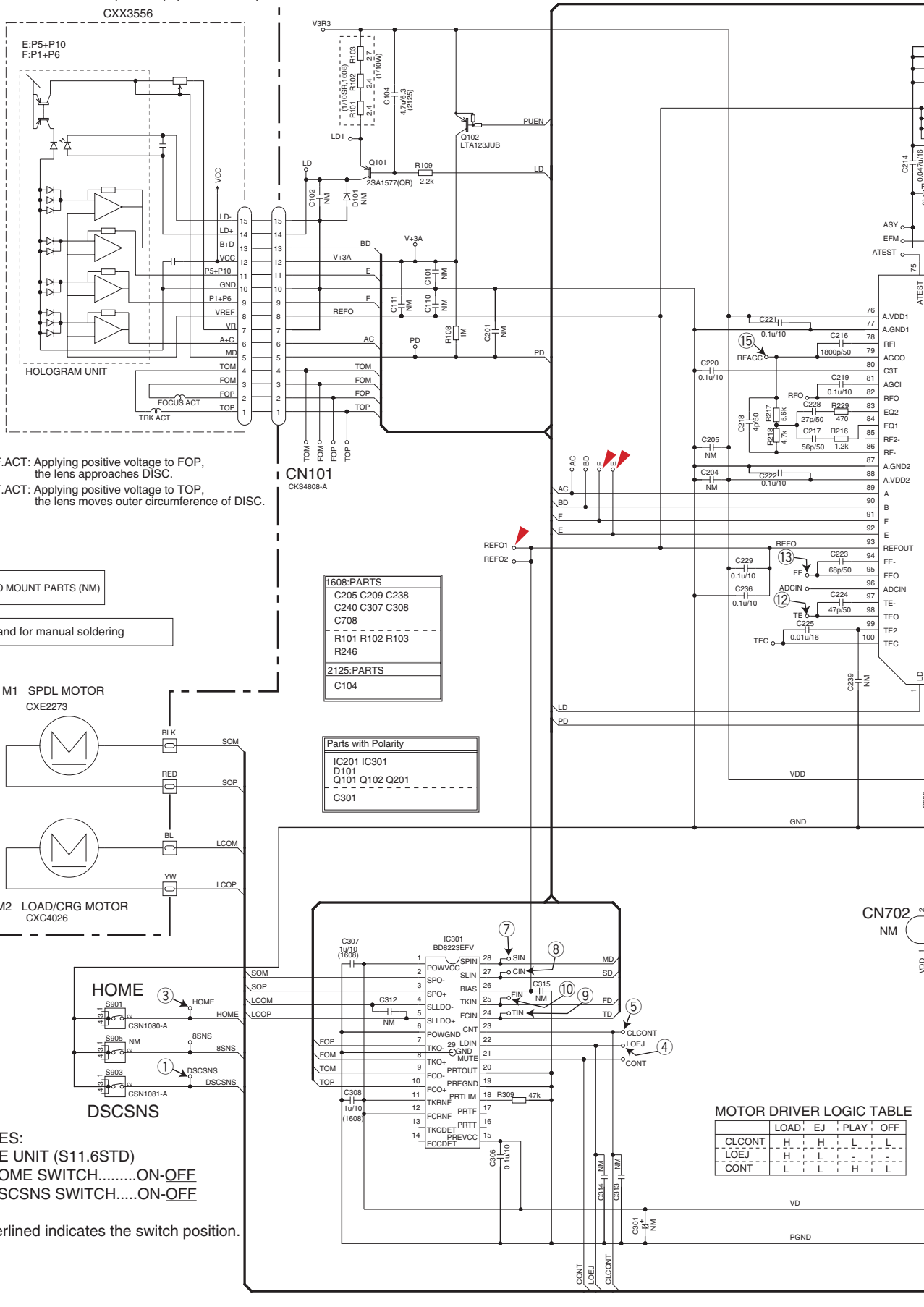
F

A

CN801

B

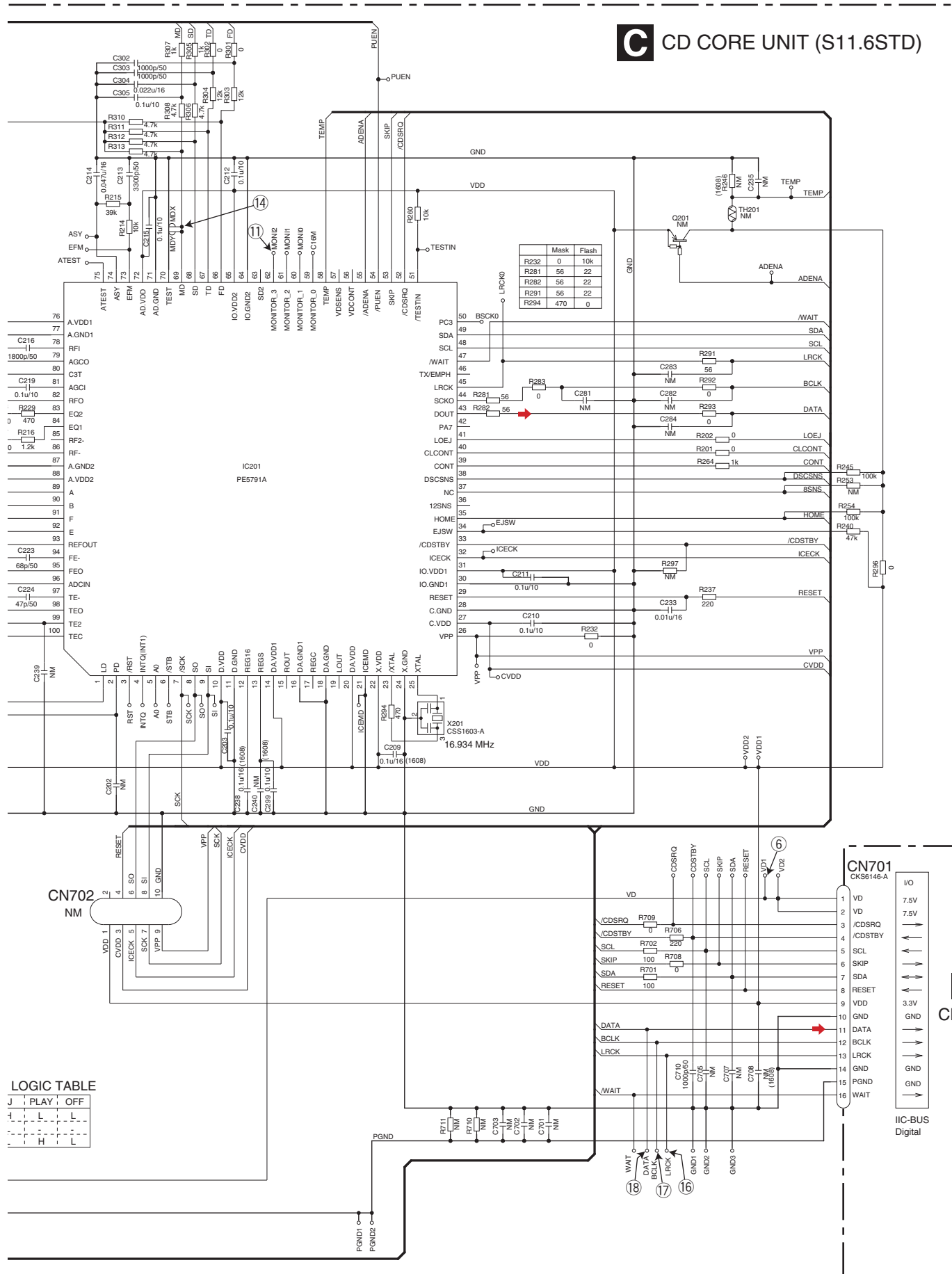
PICK UP UNIT(P10.6) (SERVICE)



SWITCHES:
CD CORE UNIT (S11.6STD)
S901:HOME SWITCH.....ON-OFF
S903:DSCSNS SWITCH.....ON-OFF

The underlined indicates the switch position.

C CD CORE UNIT (S11.6STD)



A

B

C

D

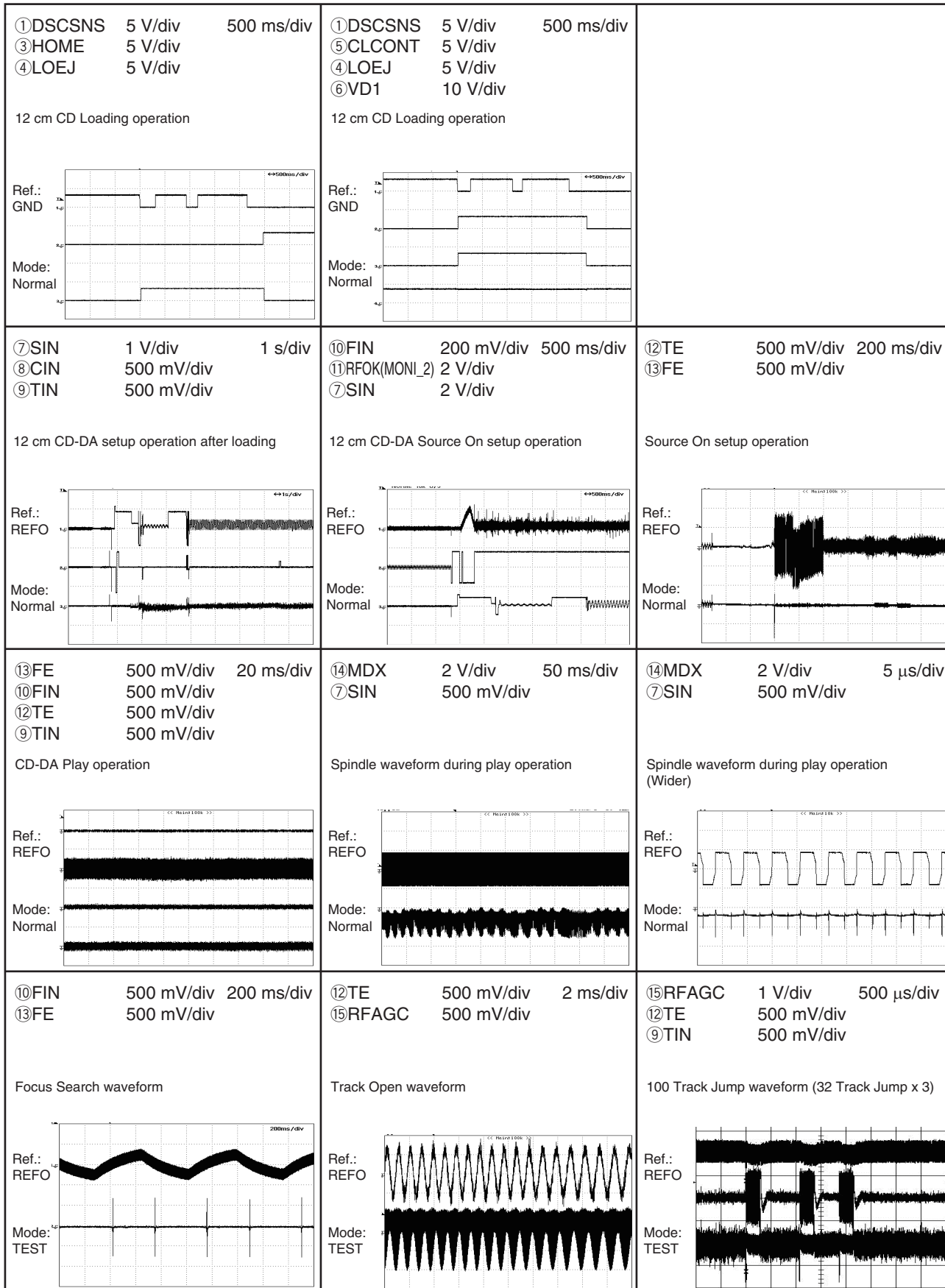
E

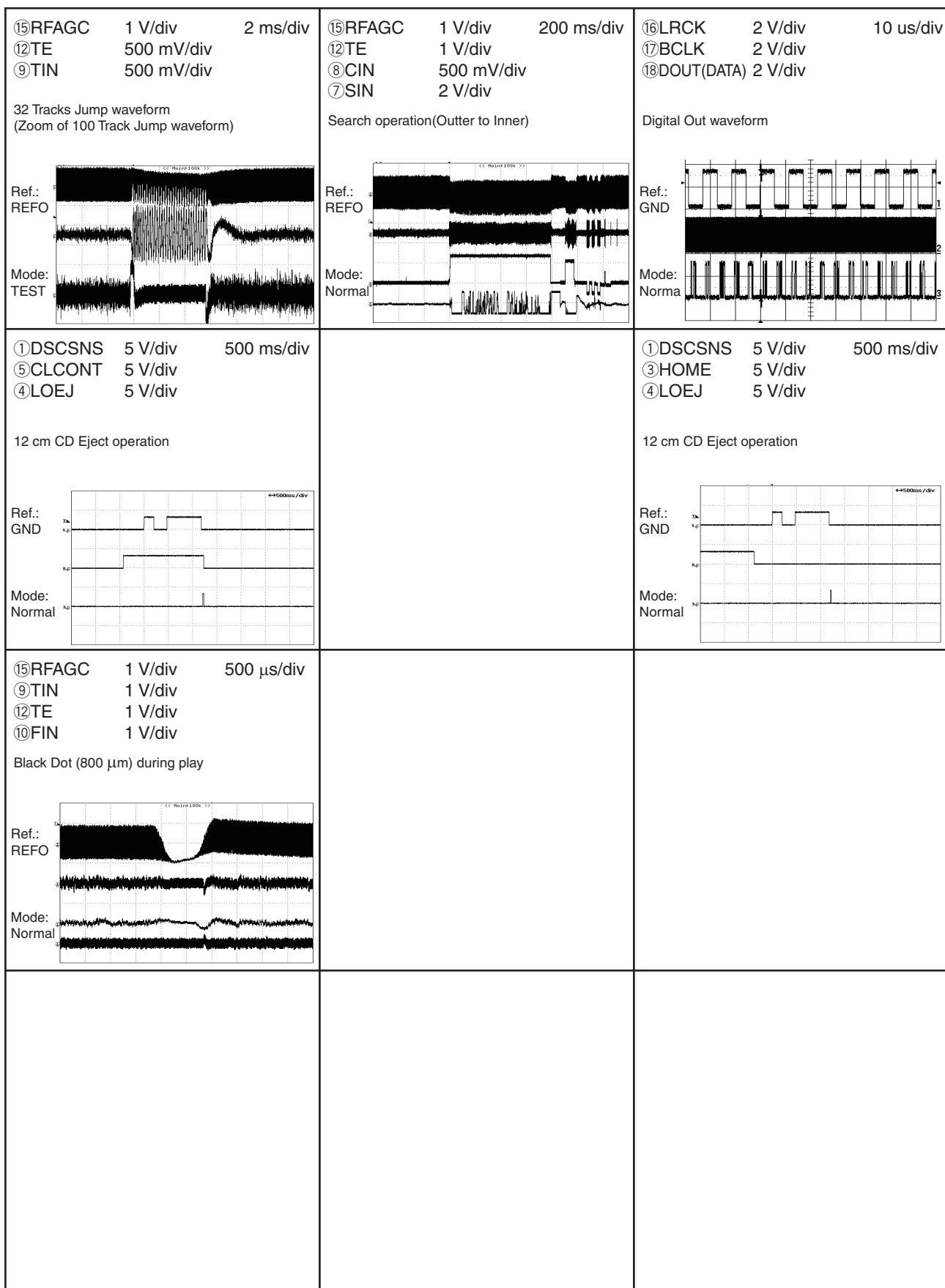
F

10.4 WAVEFORMS

● CD CORE UNIT(S11.6STD)

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

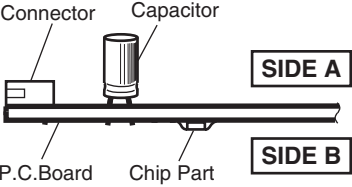




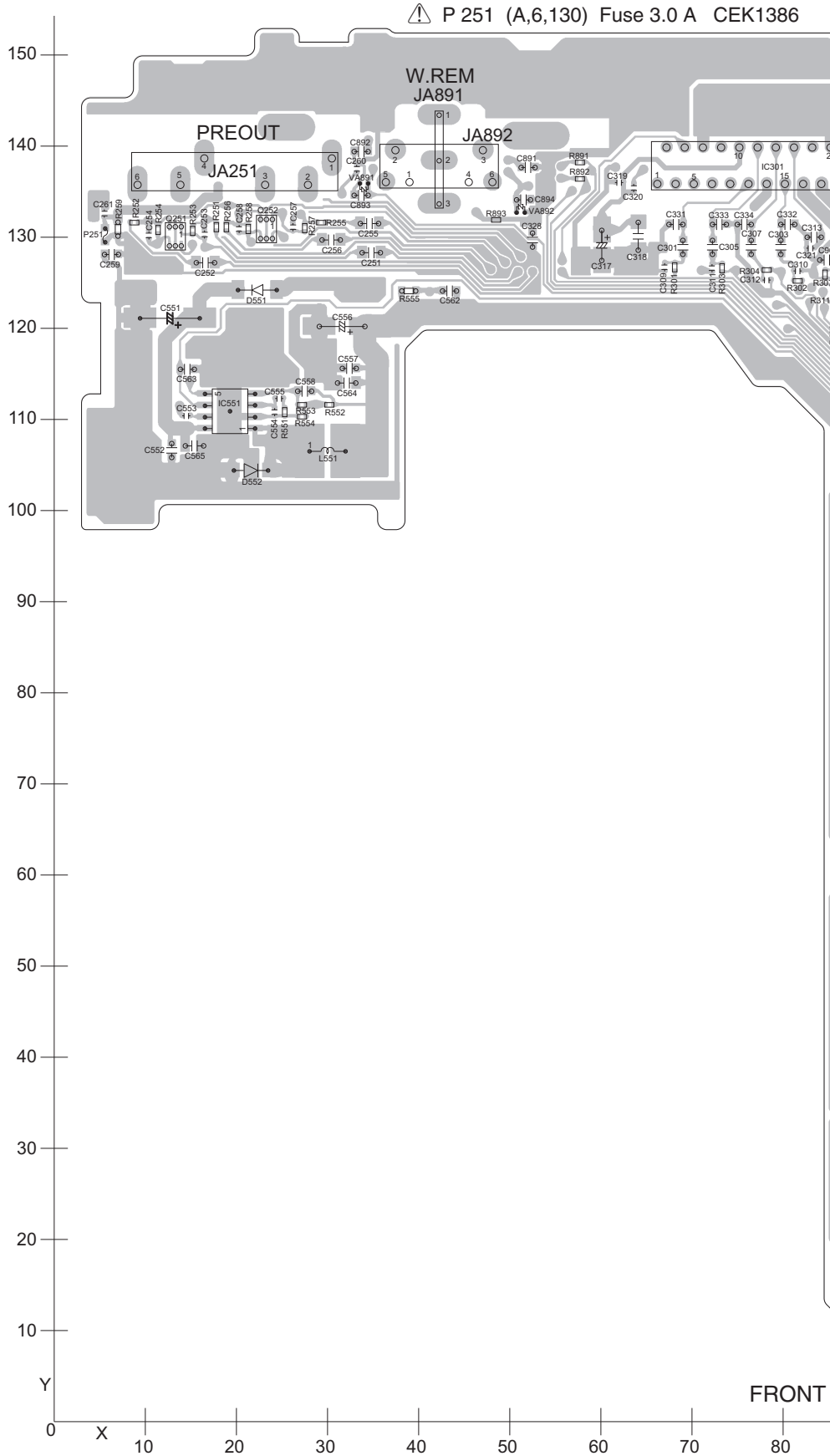
11. PCB CONNECTION DIAGRAM

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



TUNER AMP UNIT



DEH-X35UI/XNUC

1

2

3

4

A TUNER AMP UNIT

A

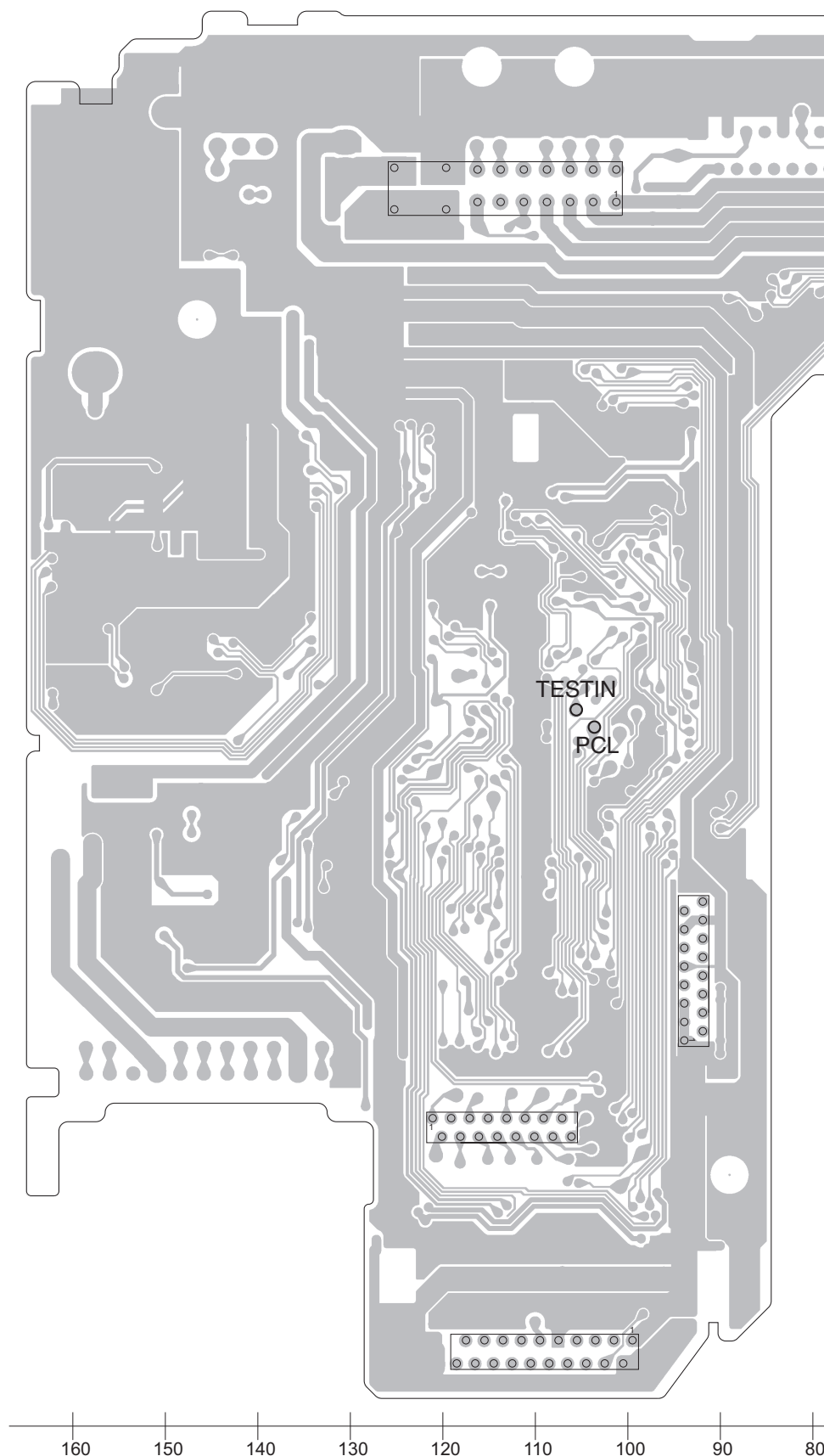
B

C

D

E

F



A

DEH-X35UI/XNUC

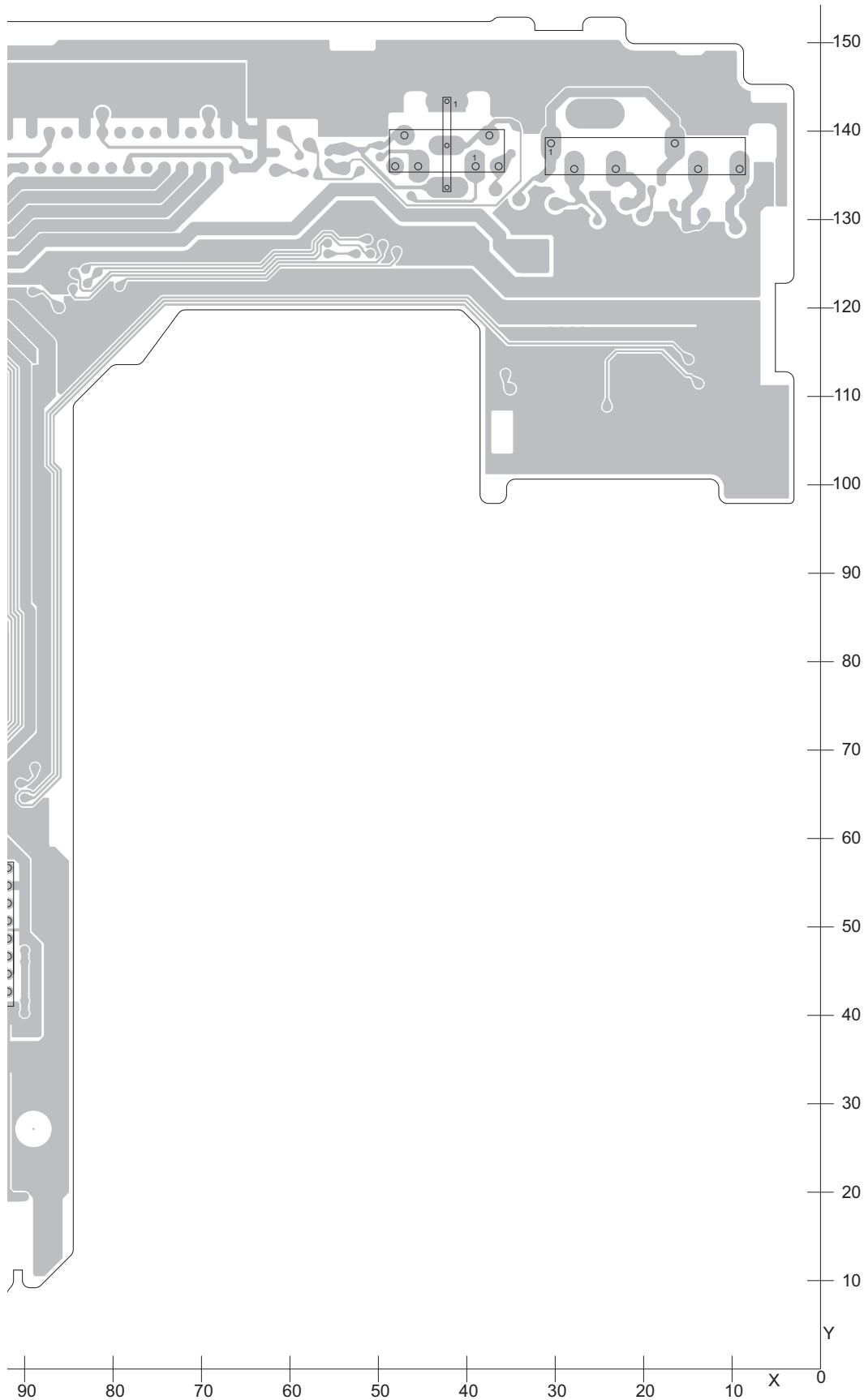
1

2

3

4

SIDE B



A

B

C

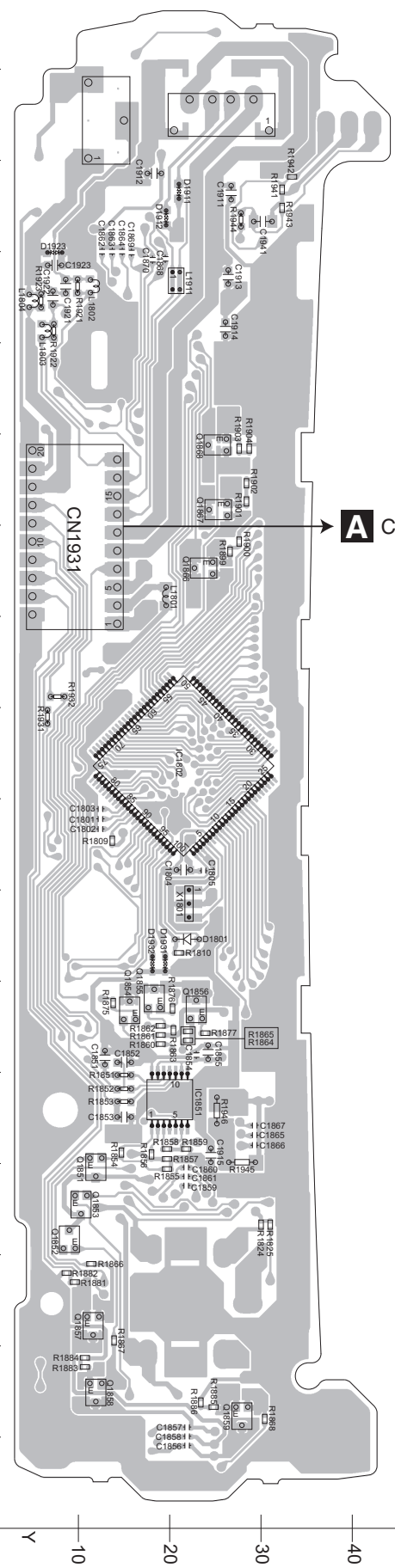
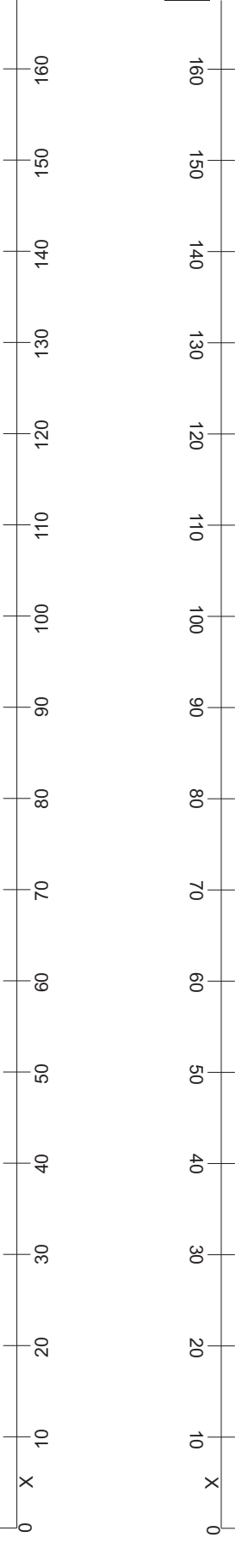
D

E

F

3 4

SIDE B



■

5

■

6

■

7

■

8

■

A

■

B

■

C

■

D

■

E

■

F

■

5

■

6

DEH-X35UI/XNUC

■

7

■

8

■

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/○○○○○J, RS1/○○○○○J

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

CKS....., CCS....., CSZS.....

- 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.
- 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.

	<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
A	A:DEH-X35UI/XNUC		IC 551 (A,19,111) IC	BD9876EFJ
	B:DEH-X3500UI/XNUC		IC 552 (A,106,24) IC	BD2232G-G
	C:DEH-X3500UI/XNEW5		IC 601 (A,110,77) IC	R5S726A0D216FP
C	D:DEH-X3550UI/XNES		IC 671 (A,131,75) IC	S-80827CNMC-B8M
	E:DEH-X3550UI/XNES1		IC 681 (A,114,94) Flash ROM Unit(A,B)	PEB044A8
	G:DEH-X3590UI/XNID		(A,114,94) Flash ROM Unit(C,D,E,G)	PEB043A8
	Unit Number : QWM3448(A)		IC 801 (A,104,18) L-MOS And Gate	TC7SET08FUS1
	Unit Number : QWM3447(B)		IC 911 (A,145,28) IC	BA49183-V12
	Unit Number : QWM3446(C)		IC 961 (A,131,110) IC	TPD1052F
	Unit Number : QWM3449(D,E)		Q 251 (A,13,130) Chip Transistor	RN1910
D	Unit Number : QWM3450(G)		Q 252 (A,23,131) Chip Transistor	RN1910
	Unit Name : Tuner Amp Unit		Q 301 (A,87,125) Chip Transistor	RN4983
	Unit Number :		Q 302 (A,127,104) Transistor	LTC014YEB
	Unit Name : Keyboard Unit		Q 531 (A,93,97) Transistor	LSAR523UB
	Unit Number : CWX4023		Q 601 (A,93,68) Transistor	LTC014YEB
	Unit Name : CD Core Unit (S11.6STD)		Q 751 (A,142,139) Transistor	2SD2396
			Q 752 (A,142,133) Chip Transistor	RN4983
			Q 871 (A,144,59) Transistor	2SA1577
			Q 872 (A,144,67) Transistor	LTC143EUB
			Q 941 (A,96,121) Transistor	LSCR523UB
			Q 951 (A,123,110) Transistor(C)	LSAR523UB
			D 301 (A,102,125) Diode	CRG03
			D 302 (A,90,121) Diode	CRG03
			D 401 (A,158,107) Diode	RN731VN
			D 402 (A,158,100) Diode	RN731VN
E	A		D 551 (A,22,124) Diode	CMS03
	Unit Number : QWM3448(A)		D 552 (A,22,104) Diode	RB056L-40
	Unit Number : QWM3447(B)		D 751 (A,138,135) Diode	RKZ8.2KG(B2)
	Unit Number : QWM3446(C)		D 801 (A,105,15) Diode	DZ2S068C
	Unit Number : QWM3449(D,E)		D 802 (A,92,17) Diode	DZ2S068C
	Unit Number : QWM3450(G)		D 803 (A,126,15) Diode	DZ2S068C
	Unit Name : Tuner Amp Unit		D 804 (A,119,14) Diode	DZ2S068C
			D 805 (A,120,14) Diode	DZ2S068C
			D 806 (A,116,13) Diode	DZ2S068C
			D 807 (A,113,13) Diode	DZ2S068C
			D 808 (A,117,13) Diode	DZ2S068C
			D 809 (A,112,13) Diode	DZ2S068C
F	IC 201 (A,101,107) LSI	PM9013A	D 901 (A,141,127) Diode	1SR154-400
	IC 301 (A,78,142) IC	PA2030A	D 902 (A,137,127) Diode	1SR154-400
	IC 401 (A,150,91) IC	TDA7706		
	IC 531 (A,93,88) IC	337S3959	D 911 (A,158,66) Diode	CRG03

MISCELLANEOUS

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
D 912	(A,161,66)	Diode	CRG03	R 403	(A,139,104) (A,B,C)	RS1/16SS391J	
D 941	(A,93,125)	Diode(A,B,D,E,F,G)	HZU7L(A1)A		(A,139,104) (D,E,G)	RS1/16SS331J	
	(A,93,125)	Diode(C)	HZU7L(C3)				
D 951	(A,123,113)	Diode(C)	1SS301	R 404	(A,142,99)	RS1/16SS105J	A
				R 406	(A,154,108)	RS1/16SS105J	
L 202	(A,94,102)	Inductor	CTF1793	R 407	(A,139,96)	RS1/16SS330J	
L 401	(A,155,104)	Chip Coil	LCTAWR27J2520	R 408	(A,137,97) (A,B,C)	RS1/16SS471J	
L 402	(A,159,104)	Chip Coil	LCTAWR15J2520		(A,137,97) (D,E,G)	RS1/16SS361J	
L 403	(A,151,102)	Inductor	CTF1786	R 409	(A,144,98) (D,E,G)	RS1/16SS0R0J	
L 404	(A,146,102)	Inductor	CTF1786	R 410	(A,141,91)	RS1/16SS0R0J	
L 405	(A,151,108)	Inductor(A,B)	LCYB68NJ1608	R 411	(A,138,91) (A,B,C)	RS1/16SS681J	
L 406	(A,147,105)	Inductor(A,B,C)	CTF1389		(A,138,91) (D,E,G)	RS1/16SS391J	
L 407	(A,147,107)	Chip Coil(D,E,G)	LCTAWR27J2520	R 412	(A,152,78)	RS1/4SA8R2J	
L 408	(A,141,104)	Inductor(A,B,C)	LCTAW4R7J2520	R 413	(A,158,78)	RS1/4SA8R2J	
	(A,141,104)	Chip Coil(D,E,G)	LCTAW1R5J2520	R 414	(A,139,87)	RS1/16SS0R0J	
L 409	(A,143,109)	Chip Coil(D,E,G)	LCTAWR39J2520	R 415	(A,152,80) (A,B,D,E,G)	RS1/16SS0R0J	B
L 410	(A,137,94)	Chip Coil(A,B,C)	LCTAW470J2520	R 531	(A,91,94)	RS1/16SS473J	
	(A,137,94)	Inductor(D,E,G)	LCTAW2R2J2520	R 532	(A,91,85)	RS1/16SS222J	
L 413	(A,144,82)	Inductor	CTF1786	R 533	(A,92,85)	RS1/16SS222J	
L 414	(A,153,80)	Inductor(C)	CTF1786	R 534	(A,93,92)	RS1/16SS272J	
L 419	(A,161,95)	Inductor	CTF1786	R 535	(A,95,92)	RS1/16SS472J	
L 420	(A,161,96)	Inductor	CTF1786				
L 551	(A,30,107)	Inductor	CTH1524	R 536	(A,96,92)	RS1/16SS472J	
				R 537	(A,96,85)	RS1/16SS101J	
L 801	(A,115,17)	Inductor	CTF1713	R 538	(A,95,84)	RS1/16SS101J	
L 901	(A,112,141)	Choke Coil 600 uH	CTH1432	R 551	(A,25,111)	RS1/16SS682J	
L 951	(A,122,116)	Chip Coil(C)	BTH1101	R 552	(A,30,112)	RS1/16SS0R0J	
X 401	(A,161,88)	Crystal Resonator 36.48 MHz	CSS1848				C
X 601	(A,126,76)	Crystal Resonator 12 MHz	CSS1847	R 553	(A,27,112)	RS1/16SS1803D	
X 602	(A,117,90)	Ceramic Resonator 16.934 MHz	CSS1603	R 554	(A,27,110)	RS1/16SS4302D	
				R 555	(A,39,124)	RS1/10SR471J	
△ P251	(A,6,130)	Fuse 3.0 A	CEK1386	R 602	(A,107,63)	RS1/16SS473J	
P 402	(A,155,111)	Surge Absorber	HSPC16701B02a	R 604	(A,116,59) (C)	RS1/16SS473J	
VA801	(A,108,13)	Varistor	EZJP0V270RM	R 609	(A,122,64)	RS1/16SS473J	
VA802	(A,101,13)	Varistor	EZJP0V270RM				
CN701	(A,114,32)	Connector	VKN1192	R 610	(A,122,70)	RS1/16SS473J	
				R 611	(A,124,72)	RS1/16SS473J	
CN801	(A,109,4)	Connector	CKS6452	R 613	(A,121,76)	RS1/16SS152J	
JA251	(A,19,138)	Pin Jack	CKB1099	R 614	(A,122,78)	RS1/16SS473J	
JA401	(A,158,129)	Antenna Jack	YKS5041	R 615	(A,130,79)	RS1/16SS473J	
JA891	(A,42,138)	Jack	CKS6437				D
JA901	(A,113,141)	Connector	CKM1613	R 616	(A,125,68)	RS1/16SS473J	
△	Fuse 10 A		YEK5001	R 617	(A,131,81)	RS1/16SS103J	
				R 618	(A,125,82) (A,B,C)	RS1/16SS473J	
				R 619	(A,126,82) (D,E,G)	RS1/16SS473J	
				R 622	(A,125,87)	RS1/16SS473J	
				R 623	(A,130,85)	RAB4CQ473J	
				R 625	(A,114,90)	RS1/16SS101J	
R 251	(A,18,131)		RS1/16SS821J	R 626	(A,113,90)	RS1/16SS101J	
R 252	(A,9,132)		RS1/16SS821J	R 627	(A,112,88)	RS1/16SS101J	
R 253	(A,15,131)		RS1/16SS223J	R 628	(A,111,90)	RS1/16SS101J	
R 254	(A,11,131)		RS1/16SS223J	R 629	(A,109,92)	RS1/16SS101J	
R 255	(A,29,132)		RS1/16SS821J				
							E
R 256	(A,19,131)		RS1/16SS821J	R 630	(A,110,89)	RS1/16SS101J	
R 257	(A,28,131)		RS1/16SS223J	R 631	(A,107,92)	RS1/16SS473J	
R 258	(A,21,131)		RS1/16SS223J	R 632	(A,105,91)	RS1/16SS473J	
R 301	(A,68,127)		RS1/16SS471J	R 633	(A,107,90)	RS1/16SS101J	
R 302	(A,82,125)		RS1/16SS471J	R 634	(A,103,88)	RS1/16SS102J	
R 303	(A,73,127)		RS1/16SS471J	R 635	(A,102,88)	RS1/16SS102J	
R 304	(A,78,126)		RS1/16SS471J	R 636	(A,100,91)	RS1/16SS473J	
R 305	(A,88,127)		RS1/16SS103J	R 637	(A,100,90)	RS1/16SS473J	
R 306	(A,89,129)		RS1/16SS102J	R 638	(A,104,92)	RS1/16SS473J	
R 309	(A,86,121)		RS1/16SS103J	R 639	(A,97,91)	RS1/16SS472J	
R 311	(A,86,123)		RS1/16SS473J				F
R 312	(A,99,129)		RS1/16SS103J	R 640	(A,98,91)	RS1/16SS472J	
R 401	(A,161,106)		RS1/16SS221J	R 643	(A,99,82)	RS1/16SS104J	
R 402	(A,161,100)		RS1/16SS751J	R 644	(A,98,79)	RS1/16SS101J	
				R 645	(A,95,79)	RS1/16SS101J	

RESISTORS

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

R 646	(A,92,75)	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,123,61)	RS1/16SS153J
R 660	(A,123,60)	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,128,70)	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,115,37)	RS1/16SS104J
R 703	(A,118,28)	RAB4CQ472J
R 704	(A,110,41)	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,116,36)	RS1/16SS151J
R 716	(A,117,36)	RS1/16SS151J
R 717	(A,119,36)	RS1/16SS151J
R 718	(A,122,36)	RS1/16SS221J
R 719	(A,121,36)	RS1/16SS104J
R 752	(A,145,135)	RS1/10SR821J
R 753	(A,127,91)	RS1/16SS473J
R 754	(A,127,92)	RS1/16SS103J
R 801	(A,124,22)	RS1/10SR222J
R 802	(A,103,15)	RS1/10SR222J
R 803	(A,121,17)	RS1/16SS223J
R 804	(A,118,17)	RS1/16SS223J
R 805	(A,121,19)	RS1/10SR101J
R 806	(A,118,20)	RS1/10SR101J
R 807	(A,119,20)	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,112,21)	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 877	(A,121,27)	RS1/16SS1R0J
R 878	(A,124,26)	RS1/10SR473J
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 941	(A,94,121)	RS1/16SS223J
R 942	(A,94,122)	RS1/16SS473J
R 943	(A,95,125) (A,B,D,E,G) (A,95,125) (C)	RS1/16SS472J RS1/16SS473J
R 944	(A,98,123)	RS1/4SA102J
R 951	(A,126,115) (C)	RS1/16SS102J
R 952	(A,121,111) (C)	RS1/16SS223J
R 953	(A,125,115) (C)	RS1/16SS153J
R 961	(A,127,112)	RS1/16SS103J
R 962	(A,130,113)	RS1/16SS103J
R 963	(A,129,112)	RS1/16SS105J

CAPACITORS

C 201	(A,96,115)	CKSRYB105K10
C 202	(A,104,116)	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,94,108)	CKSSYB104K10
C 208	(A,94,106)	CKSSYB104K10
C 209	(A,93,104) 10 uF	CCG1192
C 210	(A,96,106)	CCSSCH151J50
C 211	(A,109,107)	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,10,130)	CCSSCH101J50
C 255	(A,35,132) 4.7 uF	CCG1201
C 256	(A,30,130) 4.7 uF	CCG1201
C 257	(A,26,131)	CCSSCH101J50
C 258	(A,20,131)	CCSSCH101J50
C 261	(A,6,133) (A,B,D,E) (A,6,133) (C,G)	CCSSCH101J50 CKSSYB102K50
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,83,130)	CKSRYB105K16
C 314	(A,135,126)	CKSRYB104K16
C 317	(A,60,129)	XCEVW100M16
C 319	(A,62,136)	CCSSCH101J50

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<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 320	(A,64,135)	CCSSCK1R0C50		C 555	(A,25,112)	CKSSYB682K25	
C 321	(A,83,129)	CCSSCH101J50		C 556	(A,32,120)	CEVQW221M6R3	
C 322	(A,104,126)	CKSRYB104K16		C 557	(A,32,116)	CKSRYB105K10	
C 323	(A,106,129)	CCSRCH100D50					
C 324	(A,102,129)	CCSRCH100D50		C 560	(A,108,21)	CKSRYB105K10	A
				C 561	(A,102,23)	CKSRYB105K10	
C 325	(A,95,134)	CCSRCH100D50		C 564	(A,32,114) 4.7 uF	CCG1201	
C 326	(A,93,138)	CCSRCH100D50		C 565	(A,15,107) 4.7 uF	CCG1222	
C 327	(A,87,129)	CKSRYB105K16		C 601	(A,104,66)	CKSSYB104K10	
C 402	(A,155,101)	CKSSYB103K16					
C 403	(A,152,102)	CKSRYB105K10		C 602	(A,109,65)	CKSSYB104K10	
				C 603	(A,111,65)	CKSSYB104K10	
C 405	(A,162,101)	CKSSYB103K16		C 604	(A,112,65)	CKSSYB104K10	
C 406	(A,160,101)	CKSSYB103K16		C 605	(A,116,65)	CKSSYB104K10	
C 408	(A,161,105)	CKSSYB103K16		C 606	(A,122,71)	CKSSYB104K10	
C 409	(A,156,105)	CCSSCH6R0D50					
C 410	(A,155,107)	CCSSCH330J50		C 607	(A,126,73)	CCSSCH120J50	B
				C 608	(A,126,78)	CCSSCH120J50	
C 411	(A,148,99)	CKSSYB103K16		C 609	(A,121,73)	CKSSYB104K10	
C 412	(A,148,101)	CKSSYB104K10		C 610	(A,121,75)	CKSSYB104K10	
C 413	(A,150,101)	CKSSYB104K10		C 611	(A,122,77)	CKSSYB104K10	
C 414	(A,145,100)	CKSSYB103K16					
C 415	(A,144,101) 10 uF	CCG1192		C 612	(A,122,82)	CKSSYB104K10	
				C 613	(A,123,82)	CKSSYB104K10	
C 416	(A,147,100)	CKSSYB104K10		C 620	(A,114,88)	CKSSYB104K10	
C 418	(A,142,101)	CKSSYB223K16		C 621	(A,108,88)	CKSSYB104K10	
C 419	(A,146,110) (D,E,G)	CCSSCH150J50		C 622	(A,105,93)	CCSSCH220J50	
C 420	(A,150,106) (C,D,E,G)	CKSSYB103K16					
C 421	(A,154,111) (A,B)	CCSSCJ3R0C50		C 623	(A,106,88)	CKSSYB104K10	
				C 624	(A,105,88)	CKSSYB104K10	
C 423	(A,144,106) (D,E,G)	CCSSCH8R0D50		C 625	(A,104,90)	CKSSYB104K10	C
C 424	(A,140,101)	CKSSYB103K16		C 626	(A,100,80)	CKSSYB104K10	
C 425	(A,138,99) 10 uF	CCG1192		C 627	(A,97,81)	CCSSCH220J50	
C 426	(A,139,97)	CKSSYB104K10					
C 427	(A,144,97)	CKSSYB104K10		C 628	(A,95,81)	CCSSCH220J50	
				C 629	(A,99,75)	CKSSYB104K10	
C 428	(A,137,96) (A,B,C)	CCSSCH101J50		C 630	(A,99,73)	CKSSYB104K10	
	(A,137,96) (D,E,G)	CCSSCH220J50		C 631	(A,96,77)	CCSSCH220J50	
C 429	(A,136,96)	CKSSYB103K16		C 672	(A,132,71)	CKSRYB105K10	
C 430	(A,139,90) 1 uF(A,B)	DCH1246					
C 432	(A,138,92) (A,B,C)	CCSSCH820J50		C 681	(A,121,96)	CKSSYB104K10	
	(A,138,92) (D,E,G)	CCSSCK2R0C50		C 683	(A,120,94)	CCSSCJ3R0C50	
				C 701	(A,111,41)	CKSSYB103K16	D
C 433	(A,136,91) 1 uF(A,B)	DCH1246		C 704	(A,120,39)	CCSSCH100D50	
C 435	(A,139,86)	CKSRYB474K10		C 705	(A,118,38)	CCSSCH100D50	
C 436	(A,140,84) (D,E,G)	CKSSYB104K10					
C 439	(A,145,80) (D,E,G)	CKSRYB104K16		C 706	(A,116,38)	CCSSCH100D50	
C 440	(A,142,86)	CKSSYB102K50		C 752	(A,141,135)	CKSSYB104K10	
C 441	(A,137,89) (A,B)	CCSSCH100D50		C 753	(A,147,131) 10 uF	CCG1192	
				C 801	(A,124,6)	CKSRYB221K50	
C 442	(A,146,83)	CKSSYB104K10		C 806	(A,125,8)	CKSRYB104K16	
C 444	(A,152,82) 2.2 uF	CCG1218					
C 445	(A,156,82)	CKSSYB104K10		C 807	(A,122,14)	CKSRYB105K10	
C 447	(A,157,83) 2.2 uF(D,E,G)	CCG1218		C 808	(A,108,19)	CKSRYB104K16	
C 448	(A,158,85) (A,B,C)	CKSSYB104K10		C 809	(A,96,16)	CCSRCH221J50	
C 449	(A,161,85)	CCSSCH9R0D50		C 810	(A,96,13)	CCSRCH221J50	E
				C 811	(A,104,20)	CKSSYB104K10	
C 450	(A,161,90)	CCSSCH9R0D50					
C 451	(A,158,91)	CKSSYB104K10		C 873	(A,124,24)	CKSRYB104K16	
C 452	(A,158,94)	CKSRYB105K10		C 891	(A,52,138)	CKSRYB104K16	
C 453	(A,160,96)	CKSSYB104K10		C 892	(A,34,139)	CKSRYB104K16	
C 455	(A,158,97)	CKSRYB224K16		C 901	(A,133,124) 2 200 uF/16 V	CCH2040	
				C 912	(A,152,40)	CKSSYB102K50	
C 456	(A,161,92)	CKSSYB472K25					
C 457	(A,161,93)	CKSSYB472K25		C 913	(A,131,43)	CKSSYB102K50	
C 461	(A,145,104)	CKSSYB104K16		C 914	(A,156,56) 1 000 uF/16 V	CCH2024	
C 531	(A,91,93)	CKSSYB104K10		C 915	(A,132,42)	CKSRYB104K16	
C 532	(A,93,93)	CKSSYB104K10		C 916	(A,146,43) 4.7 uF	CCG1201	F
C 551	(A,13,121)	XCEVW221M16		C 917	(A,145,46)	CKSSYB102K50	
C 552	(A,13,107)	CKSRYB105K16		C 919	(A,151,42) 4.7 uF	CCG1201	
C 553	(A,15,110)	CKSSYB103K16		C 921	(A,135,42) 4.7 uF	CCG1201	

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

C 923	(A,159,41) 4.7 uF	CCG1201
C 926	(A,140,44) 4.7 uF	CCG1201
C 927	(A,139,42)	CKSSYB102K50
A C 941	(A,96,124)	CKSRYB104K16
C 961	(A,126,107)	CKSSYB104K16
C 962	(A,132,107)	CKSSYB104K16
C 966	(A,128,112)	CKSSYB333K16
C 969	(A,135,113) 22 uF	DCH1256

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

IC 1802	(B,84,22) IC	PDC202B
IC 1851	(B,47,20) IC	BH2228FV
IC 1941	(A,149,40) Remote IC(A,B,D,E,G)	GP1UXC14RK
Q 1851	(B,40,12) Transistor	LSCR523UB
Q 1852	(B,32,9) Transistor	LSCR523UB
Q 1853	(B,35,10) Transistor	LSCR523UB
Q 1854	(B,57,16) Transistor	LSCR523UB
Q 1855	(B,58,18) Transistor	LSCR523UB
Q 1856	(B,57,23) Transistor	LSCR523UB
Q 1857	(B,22,12) Transistor	LSCR523UB
Q 1858	(B,15,12) Transistor	LSCR523UB
Q 1859	(B,12,28) Transistor	LSCR523UB
Q 1866	(B,105,24) Transistor	LSCR523UB
Q 1867	(B,112,25) Transistor	LSCR523UB
Q 1868	(B,119,25) Transistor	LSCR523UB

D 1882	(A,10,22) LED	SMLVN6RGB2U(A)
D 1883	(A,40,22) LED	SMLVN6RGB2U(A)
D 1884	(A,164,22) LED	SMLVN6RGB2U(A)
D 1885	(A,48,23) LED	MSL0101RGBU

D 1886	(A,147,24) LED	MSL0101RGBU
L 1802	(B,136,11) Inductor	CTF1389
L 1803	(B,131,6) Inductor	CTF1389
L 1804	(B,135,5) Inductor	CTF1389

X 1801	(B,69,22) Ceramic Resonator 5.00 MHz	CSS1547
S 1821	(A,53,5) Push Switch	CSG1155
S 1822	(A,9,41) Push Switch	CSG1155
S 1823	(A,64,5) Push Switch	CSG1155
S 1824	(A,11,6) Push Switch	CSG1155

S 1826	(A,6,22) Push Switch	CSG1155
S 1828	(A,39,34) Push Switch	CSG1155
S 1830	(A,25,22) Encoder(MULTI-CONTROL)	CSD1168
S 1832	(A,39,10) Push Switch	CSG1155
S 1834	(A,137,5) Push Switch	CSG1155

S 1835	(A,127,5) Push Switch	CSG1155
S 1836	(A,106,5) Push Switch	CSG1155
S 1837	(A,116,5) Push Switch	CSG1155
S 1838	(A,85,5) Push Switch	CSG1155
S 1839	(A,95,5) Push Switch	CSG1155

S 1840	(A,74,5) Push Switch	CSG1155
S 1842	(A,10,36) Push Switch	CSG1155
CN1911	(A,157,26) Connector	CKS6443
CN1931	(B,109,10) Connector	CKS6451
JA1921	(A,154,12) Jack	CKN1094

V 1802	(A,53,33) Segment LCD	CAW2025
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Circuit Symbol and No.**Part No.****RESISTORS**

R 1809	(B,75,14)	RS1/16SS473J
R 1810	(B,63,21)	RS1/16SS103J
R 1824	(B,33,30)	RS1/16SS273J
R 1851	(B,50,15)	RS1/10SR222J
R 1852	(B,48,15)	RS1/10SR222J
R 1853	(B,47,15)	RS1/10SR222J
R 1854	(B,41,15)	RS1/16SS102J
R 1856	(B,41,18)	RS1/16SS102J
R 1858	(B,42,20)	RS1/16SS102J
R 1860	(B,53,19)	RS1/16SS102J
R 1862	(B,55,19)	RS1/16SS102J
R 1864	(B,54,22)	RS1/16SS102J
R 1866	(B,29,11)	RS1/16SS101J
R 1867	(B,21,14)	RS1/16SS101J
R 1868	(B,12,30)	RS1/16SS101J
R 1875	(B,58,14)	RS1/16SS101J
R 1876	(B,57,20)	RS1/16SS101J
R 1877	(B,54,24)	RS1/16SS101J
R 1881	(B,27,10)	RS1/16SS680J
R 1882	(B,28,9)	RS1/16SS0R0J
R 1883	(B,18,11)	RS1/16SS680J
R 1884	(B,19,11)	RS1/16SS0R0J
R 1885	(B,13,25)	RS1/16SS680J
R 1886	(B,14,23)	RS1/16SS0R0J
R 1899	(B,107,27)	RS1/16SS680J
R 1900	(B,108,28)	RS1/16SS0R0J
R 1901	(B,113,28)	RS1/16SS680J
R 1902	(B,115,28)	RS1/16SS0R0J
R 1903	(B,118,28)	RS1/16SS680J
R 1904	(B,118,29)	RS1/16SS0R0J
R 1931	(B,89,7)	RS1/10SR222J
R 1932	(B,91,8)	RS1/10SR222J
R 1941	(B,147,32) (C)	RS1/16SS473J
R 1944	(B,144,28) (A,B,D,E,G)	RS1/10SR101J

CAPACITORS

C 1801	(B,78,12)	CKSSYB104K10
C 1802	(B,77,12)	CKSSYB104K10
C 1803	(B,79,12)	CKSSYB104K10
C 1804	(B,72,22)	CKSRYB105K10
C 1805	(B,72,24)	CKSSYB104K10
C 1851	(B,52,13)	CCSRCH100D50
C 1852	(B,51,15)	CCSRCH100D50
C 1853	(B,45,15)	CCSRCH100D50
C 1854	(B,52,23)	CKSSYB103K16
C 1855	(B,52,24)	CKSRYB105K10
C 1911	(B,146,27)	CKSRYB104K16
C 1912	(B,149,18)	CKSRYB104K16
C 1941	(B,143,30) 10 uF(A,B,D,E,G)	CCG1192

C**Unit Number : CWX4023****Unit Name : CD Core Unit (S11.6STD)****MISCELLANEOUS**

IC 201	(B,23,37) IC	PE5791A
IC 301	(A,37,11) IC	BD8223EFV

5		6	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
Q 101	(B,11,53)	Transistor	2SA1577
Q 102	(B,15,54)	Transistor	LTA123JUB
X 201	(B,25,49)	Ceramic Resonator	16.934 MHz CSS1603
S 901	(A,42,53)	Spring Switch(HOME)	CSN1080
S 903	(B,21,12)	Spring Switch(DSCSNS)	CSN1081
CN101	(A,16,58)	Connector	CKS4808
CN701	(A,25,29)	Connector	CKS6146

RESISTORS

R 101	(B,6,57)	RS1/10SR2R4J
R 102	(B,8,57)	RS1/10SR2R4J
R 103	(B,9,57)	RS1/10SR2R7J
R 108	(B,18,55)	RS1/16SS105J
R 109	(B,12,50)	RS1/16SS222J
R 201	(A,24,11)	RS1/16SS0R0J
R 202	(A,23,9)	RS1/16SS0R0J
R 214	(B,18,28)	RS1/16SS103J
R 215	(B,17,28)	RS1/16SS393J
R 216	(B,12,35)	RS1/16SS122J
R 217	(B,10,32)	RS1/16SS562J
R 218	(B,10,35)	RS1/16SS472J
R 229	(B,12,34)	RS1/16SS471J
R 232	(A,31,54)	RS1/16SS0R0J
R 237	(B,33,45)	RS1/16SS221J
R 240	(B,34,40)	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,33,38)	RS1/16SS560J
R 282	(B,33,39)	RS1/16SS560J
R 283	(B,35,38)	RS1/16SS0R0J
R 291	(B,33,34)	RS1/16SS560J
R 292	(B,33,36)	RS1/16SS0R0J
R 293	(B,35,39)	RS1/16SS0R0J
R 294	(B,27,48)	RS1/16SS471J
R 296	(B,34,43)	RS1/16SS0R0J
R 301	(A,27,9)	RS1/16SS0R0J
R 302	(A,28,9)	RS1/16SS0R0J
R 303	(A,27,11)	RS1/16SS123J
R 304	(A,28,11)	RS1/16SS123J
R 305	(A,26,9)	RS1/16SS102J
R 306	(A,26,11)	RS1/16SS472J
R 307	(A,25,9)	RS1/16SS102J
R 308	(A,25,11)	RS1/16SS472J
R 309	(A,35,6)	RS1/16SS473J
R 310	(B,30,9)	RS1/16SS472J
R 311	(B,30,10)	RS1/16SS472J
R 312	(B,30,11)	RS1/16SS472J
R 313	(B,30,12)	RS1/16SS472J
R 701	(A,21,38)	RS1/16SS101J
R 702	(A,23,38)	RS1/16SS101J
R 706	(A,32,42)	RS1/16SS221J
R 708	(B,28,26)	RS1/16SS0R0J
R 709	(B,29,28)	RS1/16SS0R0J

CAPACITORS

C 104	(B,12,57)	CKSQYB475K6R3
C 203	(B,22,47)	CKSSYB104K10

7		8
<u>Circuit Symbol and No.</u>		<u>Part No.</u>
C 209	(B,28,47)	CKSRYB104K16
C 210	(B,33,43)	CKSSYB104K10
C 211	(B,33,41)	CKSSYB104K10
C 212	(B,22,28)	CKSSYB104K10
C 213	(B,18,26)	CKSSYB332K50
C 214	(B,17,26)	CKSSYB473K16
C 215	(B,19,28)	CKSSYB104K10
C 216	(B,12,33)	CKSSYB182K50
C 217	(B,10,34)	CCSSCH560J50
C 218	(B,10,36)	CCSSCH4R0C50
C 219	(B,14,34)	CKSSYB104K10
C 220	(A,18,38)	CKSSYB104K10
C 221	(B,14,32)	CKSSYB104K10
C 222	(B,13,37)	CKSSYB104K10
C 223	(B,12,42)	CCSSCH680J50
C 224	(B,13,45)	CCSSCH470J50
C 225	(B,13,46)	CKSSYB103K16
C 228	(B,10,33)	CCSSCH270J50
C 229	(B,9,40)	CKSSYB104K10
C 233	(B,32,46)	CKSSYB103K16
C 236	(B,8,40)	CKSSYB104K10
C 238	(A,25,44)	CKSRYB104K16
C 299	(A,26,41)	CKSSYB104K10
C 302	(B,28,12)	CKSSYB102K50
C 303	(B,29,12)	CKSSYB102K50
C 304	(B,27,12)	CKSSYB223K16
C 305	(B,26,12)	CKSSYB104K10
C 306	(A,31,7)	CKSSYB104K10
C 307	(A,41,19)	CKSRYB105K10
C 308	(A,31,15)	CKSRYB105K10
C 710	(A,34,42)	CKSSYB102K50

Miscellaneous Parts List

M 1	Pickup Unit(P10.6)(Service)	CXX3556
M 2	Motor Unit(SPDL)	CXE2273
	Motor Unit(LOAD/CRG)	CXC4026