

# HCD-TZ100/TZ200/TZ300

## SERVICE MANUAL



Ver. 1.1 2009.08

*E Model*  
*Australian Model*  
 HCD-TZ200  
*Mexican Model*  
 HCD-TZ100/TZ200/TZ300



Photo: HCD-TZ200

- HCD-TZ100/TZ200/TZ300 are the amplifier, DVD/CD and tuner section in DAV-TZ100/TZ200/TZ300.

This system incorporates with Dolby\* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS\*\* Digital Surround System.

\* Manufactured under license from Dolby Laboratories.

Dolby, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories.

\*\* Manufactured under license under U.S. Patent #'s:

5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS and DTS Digital Surround are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2008 DTS, Inc. All Rights Reserved.

Model Name Using Similar Mechanism	HCD-DZ290K/DZ590K
Mechanism Type	CDM85-DVBU102
Optical Pick-up Name	KHM-313CAA

### SPECIFICATIONS

#### Amplifier Section

Stereo mode (rated) 65 W + 65 W (at 3 ohms, 1 kHz, 1% THD)  
 Surround mode (reference) RMS output power  
 FL/FR/C/SL/SR\*: 83 watts (per channel at 3 ohms, 1 kHz, 10% THD)  
 Subwoofer\*: 85 watts (at 3 ohms, 80 Hz, 10% THD)

\* Depending on the decoding mode settings and the source, there may be no sound output.

Inputs (Analog)

TV/VIDEO (AUDIO IN) Sensitivity: 450/250 mV

#### Super Audio CD/DVD System

Laser Diode Properties Emission Duration: Continuous  
 Laser Output: Less than 44.6µW

\* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.

Signal format system

Mexican and Latin American models:

NTSC

Other models:

NTSC/PAL

#### USB Section

• (USB) port:  
 Maximum current: 500 mA

#### Tuner Section

System PLL quartz-locked digital synthesizer

FM Tuner section

Tuning range

North American models: 87.5 MHz - 108.0 MHz (100 kHz step)

Other models: 87.5 MHz - 108.0 MHz (50 kHz step)

Antenna (aerial) FM wire antenna (aerial)

Antenna (aerial) terminals 75 ohms, unbalanced

Intermediate frequency 10.7 MHz

#### Video Section

Outputs

VIDEO: 1 V<sub>p-p</sub> 75 ohms

HDMI OUT: Type A (19 pin)

#### General

Power requirements

North American and Mexican models:

120 V AC, 60 Hz

Argentine models: 220 V - 240 V AC,

50/60 Hz

Latin American models: 110 V - 240 V AC, 50/60 Hz

Other models: 220 V - 240 V AC, 50/60 Hz

Power consumption On: 100 W  
 Standby: 0.3 W (at the Power Saving mode)

Dimensions (approx.) 430 mm × 67 mm × 335 mm (w/h/d) incl. projecting parts

Mass (approx.) 3.5 kg

#### Supported file format

##### MP3 (MPEG 1 Audio Layer-3)

File Extension: mp3

Bitrate: 32 kbps - 320 kbps

Sampling frequencies: 32/44.1/48 kHz

##### WMA (USB device only)

File Extension: wma

Bitrate: 48 kbps - 192 kbps

Sampling frequencies: 44.1 kHz

– Continued on next page –

## DVD RECEIVER

9-889-531-02

2009H04-1

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**Sony Corporation**

Audio&Video Business Group

Published by Sony Techno Create Corporation

# SONY®

# HCD-TZ100/TZ200/TZ300

Ver. 1.1

## AAC (USB device only)

File Extension: m4a  
Bitrate: 48 kbps - 320 kbps  
Sampling frequencies: 44.1 kHz

## DivX

File Extension: avi/divx  
Video codec: DivX video  
Bitrate: 8 Mbps (MAX)  
Frame rate: 30 fps  
Resolution: 720 x 576  
Audio codec: MP3

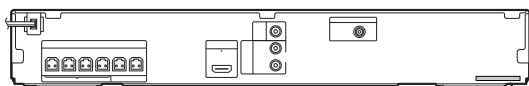
## MPEG4

File format: MP4 File Format  
File Extension: mp4/m4v  
Video codec: MPEG4 Simple Profile  
(AVC is not compatible.)  
Bitrate: 4 Mbps  
Frame rate: 30 fps  
Resolution: 720 x 576  
Audio codec: AAC-LC (HE-AAC is not compatible.)  
DRM: Not compatible

Design and specifications are subject to change without notice.

## MODEL IDENTIFICATION

### – Back Panel –



Parts No.

Model	Part No.
TZ200: E12 model	4-121-420-0□
TZ200: E3, SAF model	4-121-420-1□
TZ200: SP model	4-121-420-2□
TZ200: PH model	4-121-420-3□
TZ200: TH model	4-121-420-4□
TZ200: E32 model	4-121-420-5□
TZ200: MX model	4-121-420-7□
TZ200: AUS model	4-121-420-8□
TZ200: EA model	4-121-420-9□
TZ300: MX model	4-121-421-2□
TZ100: MX model	4-121-421-4□
TZ200: AR model	4-121-421-6□

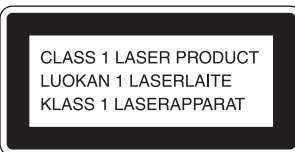
### • Abbreviation

AR : Argentina model  
AUS : Australian model  
E3 : 240V AC area in E model  
E12 : 220 – 240V AC area in E model  
E32 : 110 – 240V AC area in E model  
EA : Saudi Arabia model  
MX : Mexican model  
PH : Philippines model  
SAF : South African model  
SP : Singapore model  
TH : Thai model

## SAFETY-RELATED COMPONENT WARNING!

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

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear or bottom exterior.

## CAUTION

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

## NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

## FLEXIBLE CIRCUIT BOARD REPAIRING

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

## UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size)

## **LF** : LEAD FREE MARK

Unleaded solder has the following characteristics.

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

## SPECIAL COMPONENT NOTICE

The components identified by mark  $\square$  contain confidential information.

Strictly follow the instructions whenever the components are repaired and/or replaced.

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## SECTION 1 SERVICING NOTES

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

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

### LASER DIODE AND FOCUS SEARCH

1. Open the case and turn POWER on with no disc inserted.
2. Confirm that the following operation is performed while observing the objecting lens from the clearance of DVD mechanism deck.
  - 1) Confirm that laser beam is spread.
  - 2) Up and down motion of the objective lens. (2 times)

### DISC TRAY LOCK

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

#### Setting Procedure :

1. Press the [I/⏻] button to turn the set on.
2. Press the [FUNCTION] button to set DVD function.
3. Insert a disc.
4. Press the [■] button and the [▲] button simultaneously for five seconds.
5. The message "LOCKED" is displayed and the tray is locked.

#### Releasing Procedure :

1. Press the [■] button and the [▲] button simultaneously for five seconds again.
2. The message "UNLOCKED" is displayed and the tray is unlocked.

**Note:** When "LOCKED" is displayed, the tray lock is not released by turning power on/off with the [I/⏻] button.

### On cleaning discs, disc/lens cleaners

- Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.

### IMPORTANT NOTICE

Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

### Attention when transported

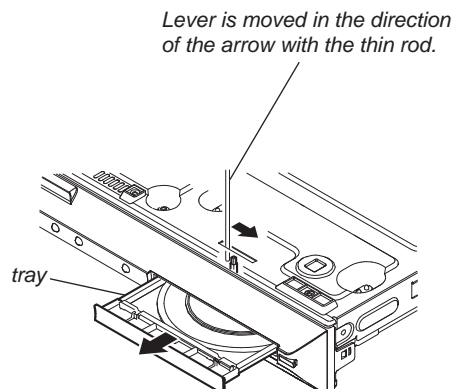
Use this mode when returning the set to the customer after repair.

#### Procedure:

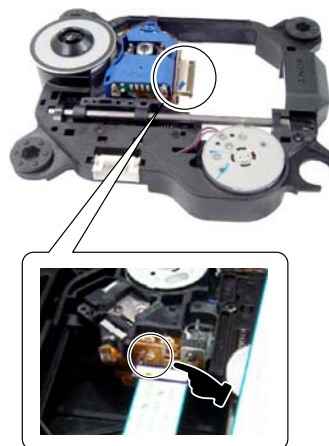
1. Press the [I/⏻] button to turn the set on.
2. Press the [FUNCTION] button to set the function "DVD".
3. Remove all discs, and then press two buttons [▶] and [I/⏻] simultaneously.
4. After a message "MECHA LOCK" is displayed on the fluorescent indicator tube, pull out the AC plug.
5. To exit from this mode, press the [I/⏻] button to turn the set on.

### How to open the disc table when power switch turns off

Insert a tapering driver into the aperture of the unit bottom, and slide it in the direction of the arrow.



### Precaution when installing a new OP unit/ Precaution before unsoldering the static electricity prevention solder bridge



When installing a new OP unit, be sure to connect the flexible printed circuit board first of all before removing the static electricity prevention solder bridge by unsoldering.

Remove the static electricity prevention solder bridge by unsoldering after the flexible printed circuit board has already been connected.

(Do not remove nor unsolder the solder bridge as long as the OP unit is kept standalone.)

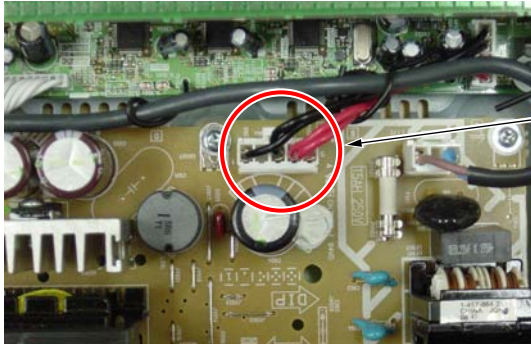
## Discharge the charged electricity in capacitors to prevent electric shock as follows

When disassembling the machine, be sure to discharge the charged electricity in the following capacitors.  
Use a resistor of 800 ohms, 2 Watts for discharging the following capacitors.

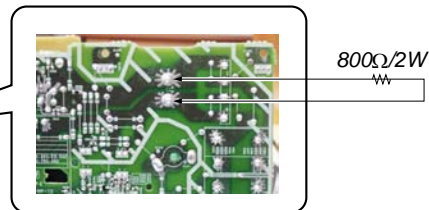
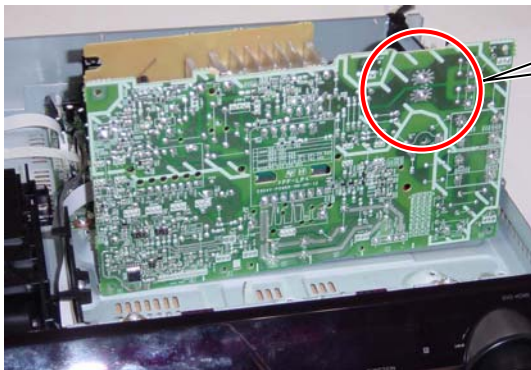
POWER board

C903: 390V

C932, C933, C934, CN904: 30V



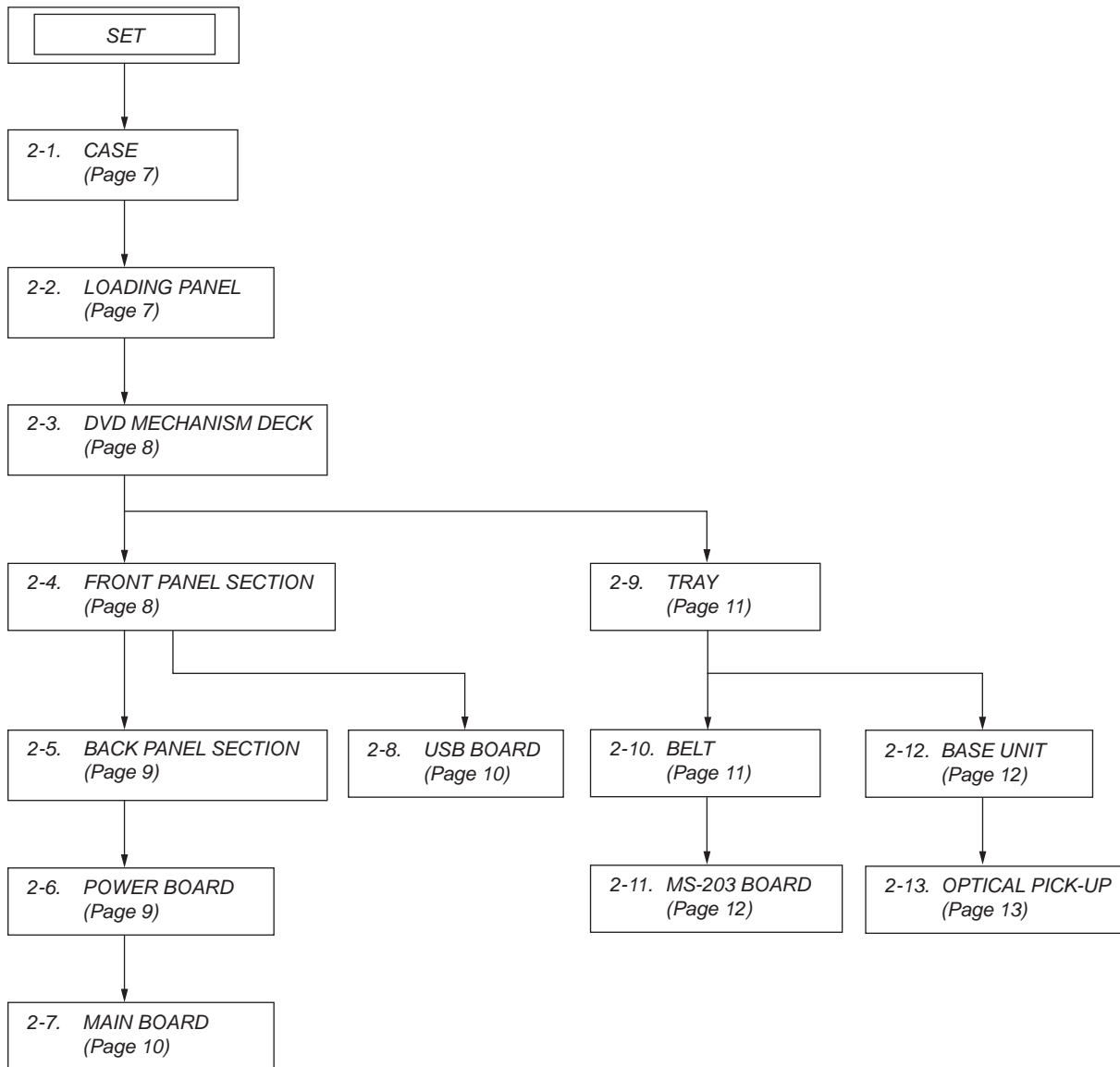
Point of capacitor discharge for C932, C933, C934:  
Connect to the red and black wire of CN904.



Point of capacitor discharge for C903:  
Connect to the foot of C903.

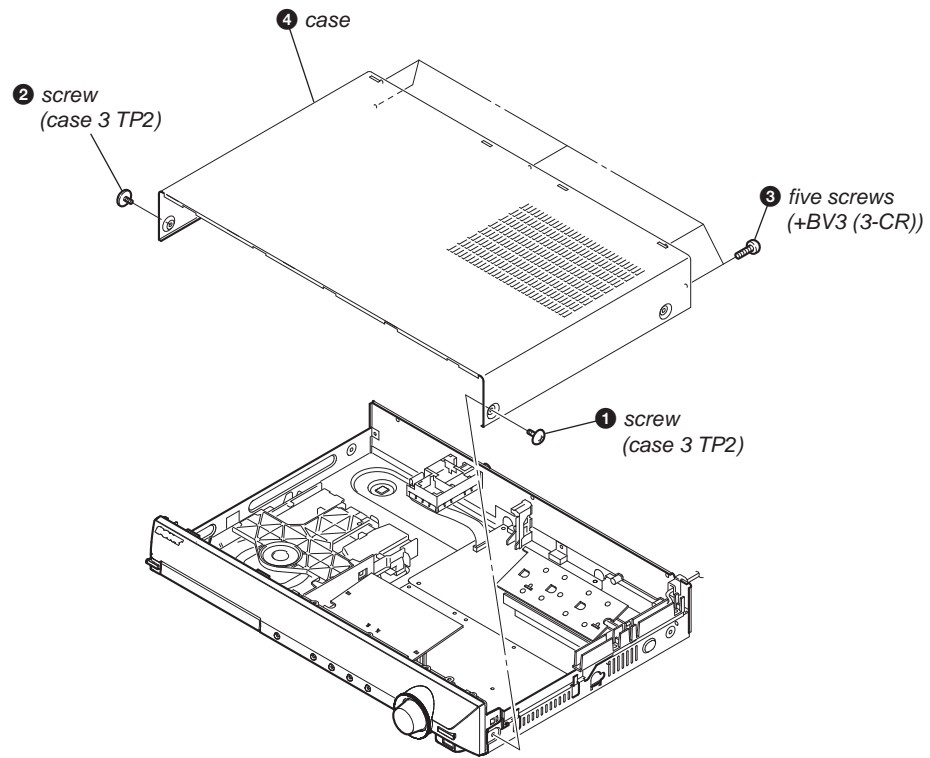
## SECTION 2 DISASSEMBLY

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

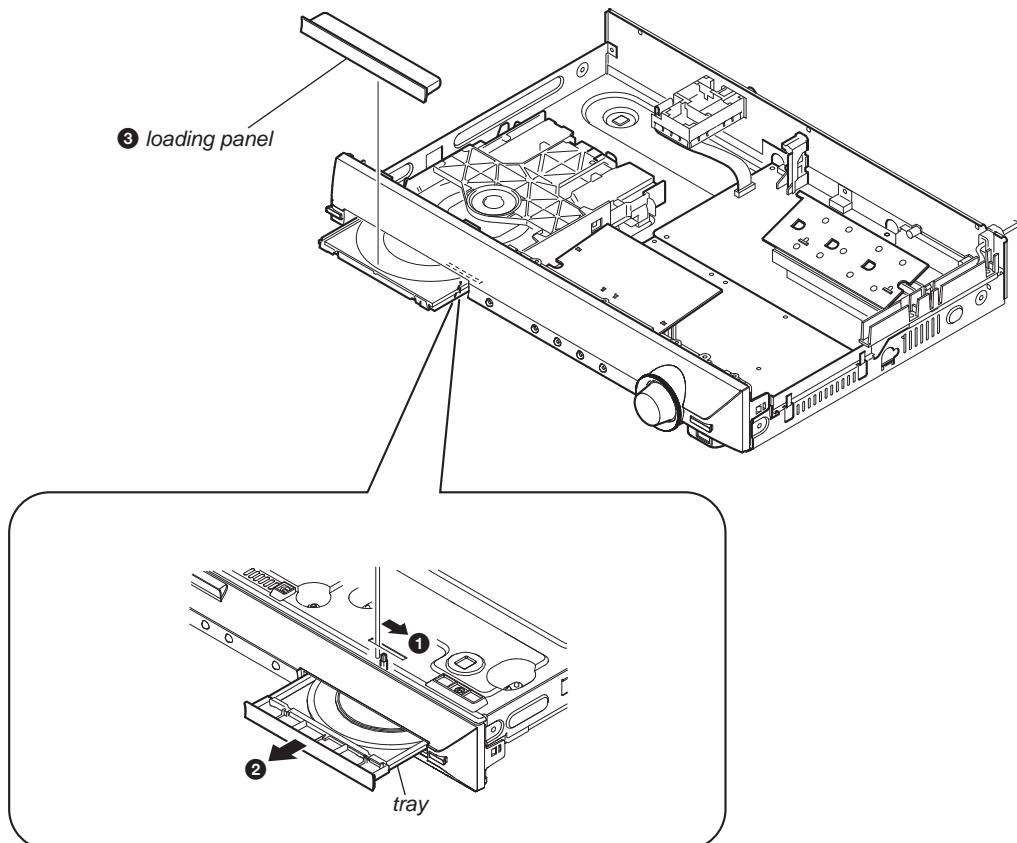


**Note:** Follow the disassembly procedure in the numerical order given.

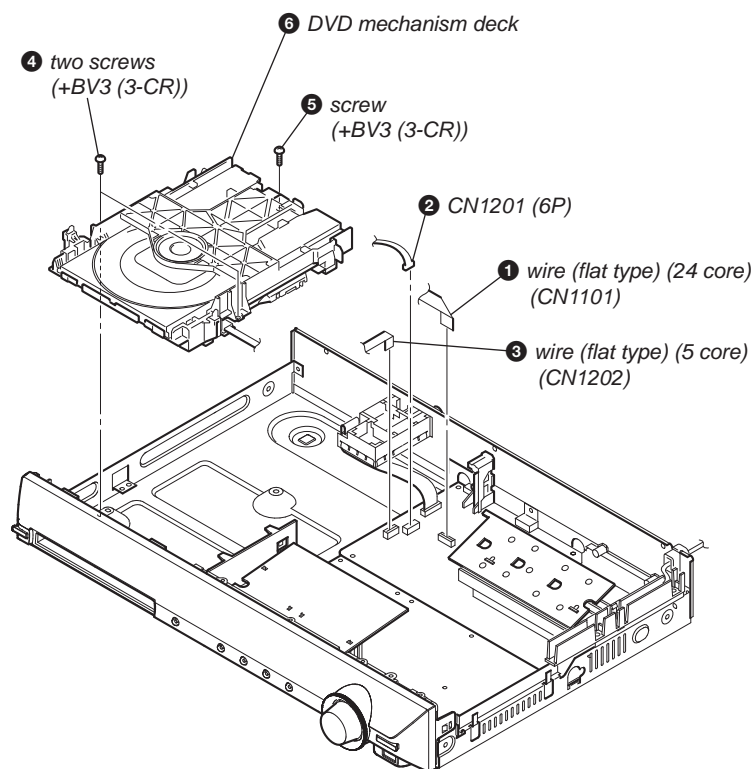
### 2-1. CASE



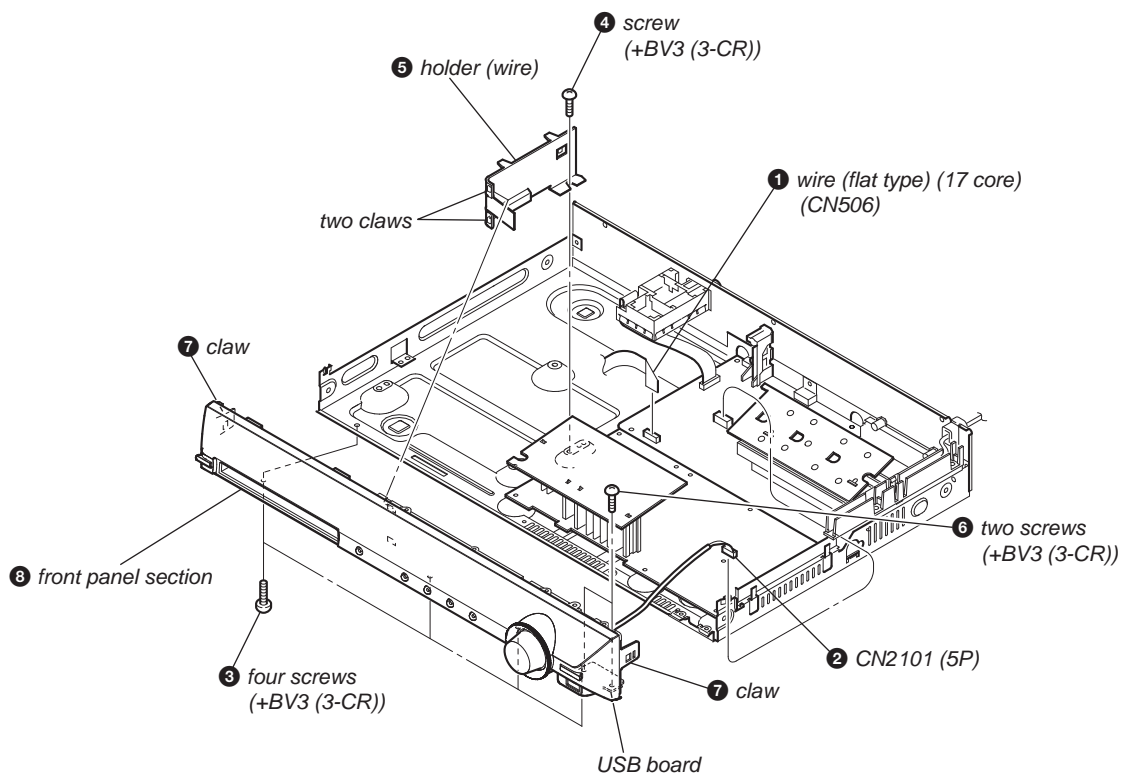
### 2-2. LOADING PANEL



## 2-3. DVD MECHANISM DECK

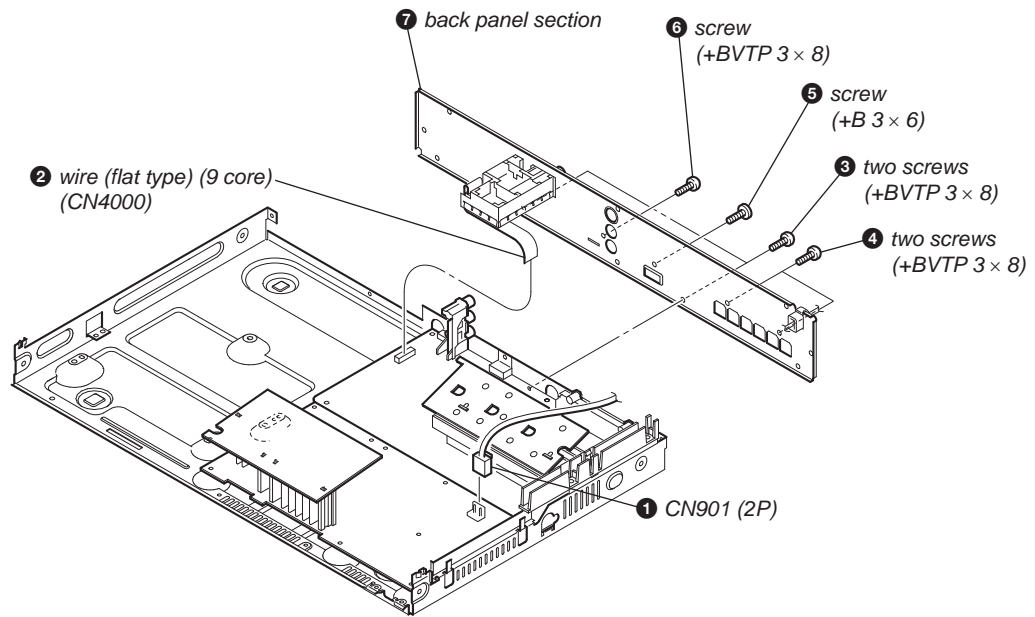


## 2-4. FRONT PANEL SECTION

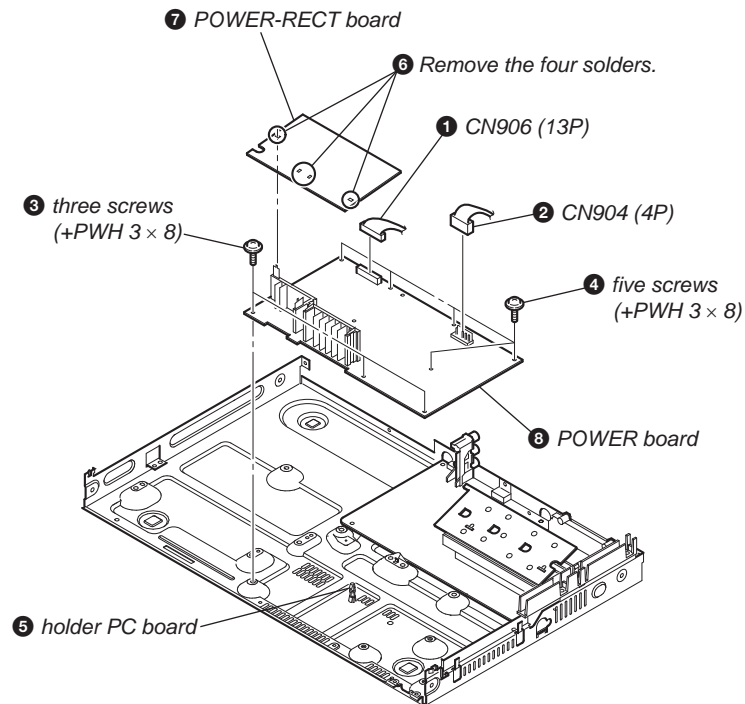




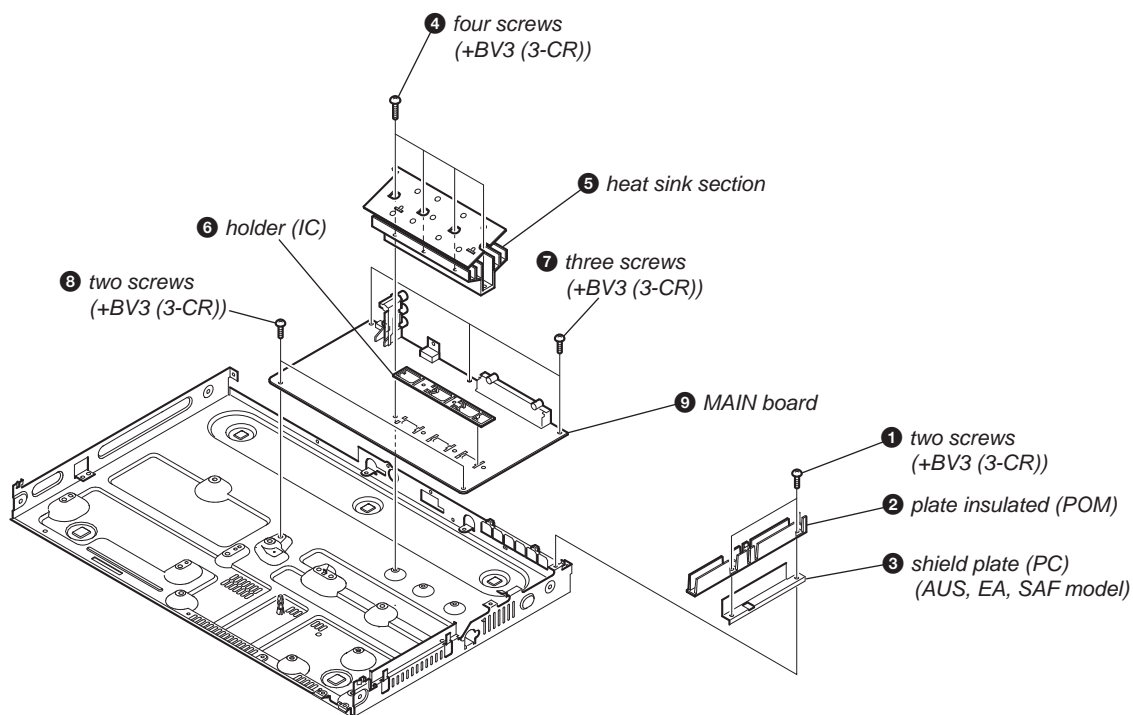
2-5. BACK PANEL SECTION



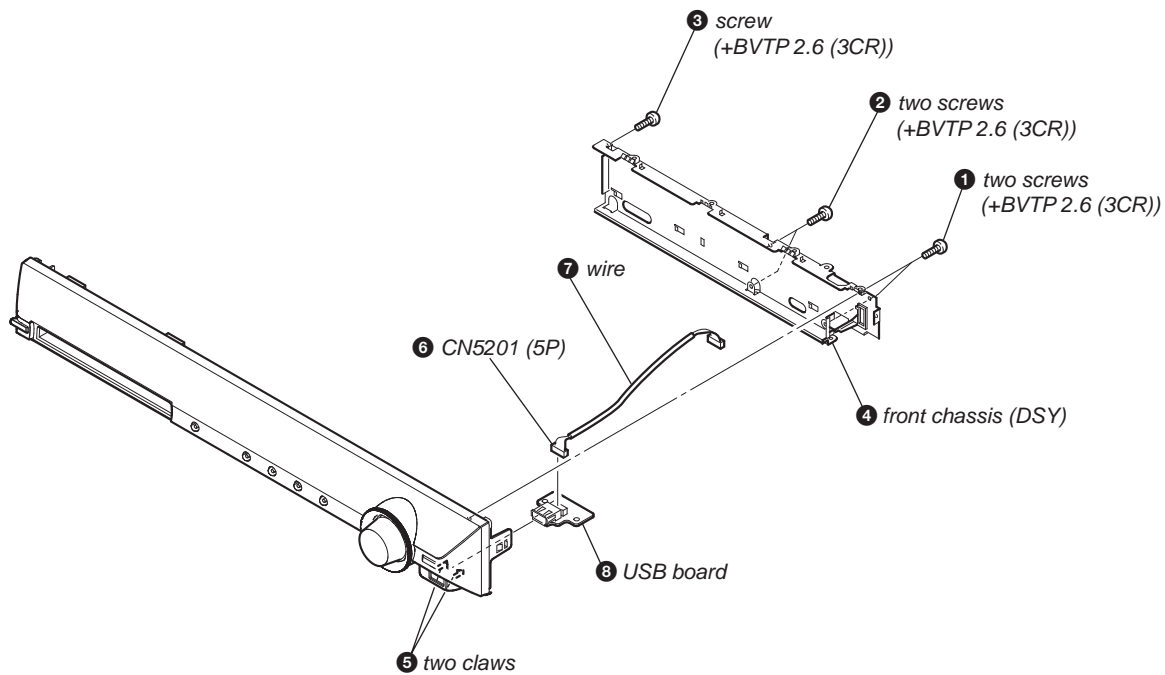
2-6. POWER BOARD



## 2-7. MAIN BOARD

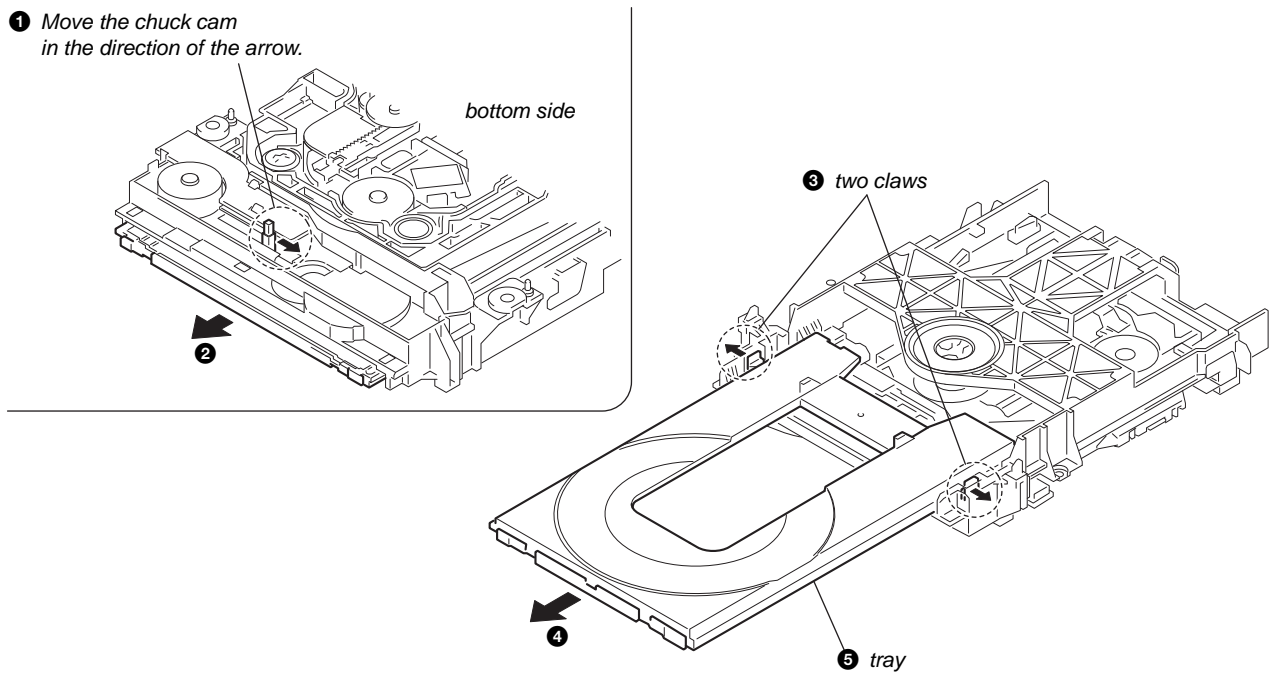


## 2-8. USB BOARD

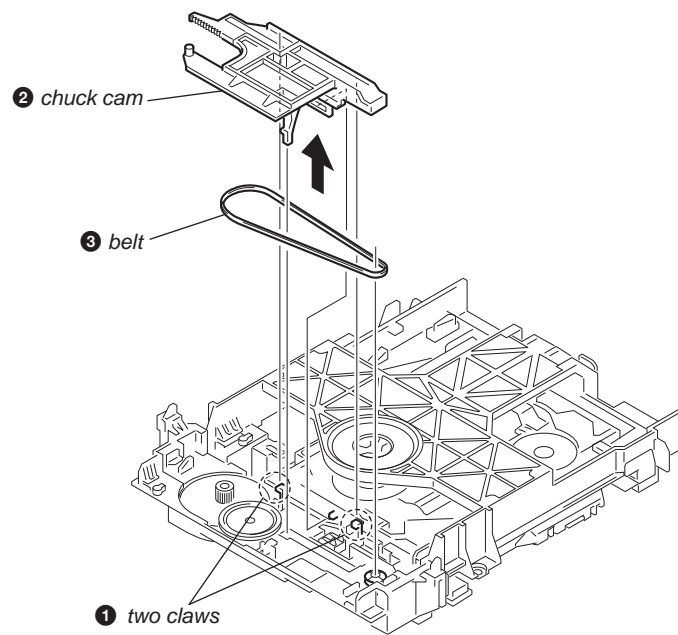


2-9. TRAY

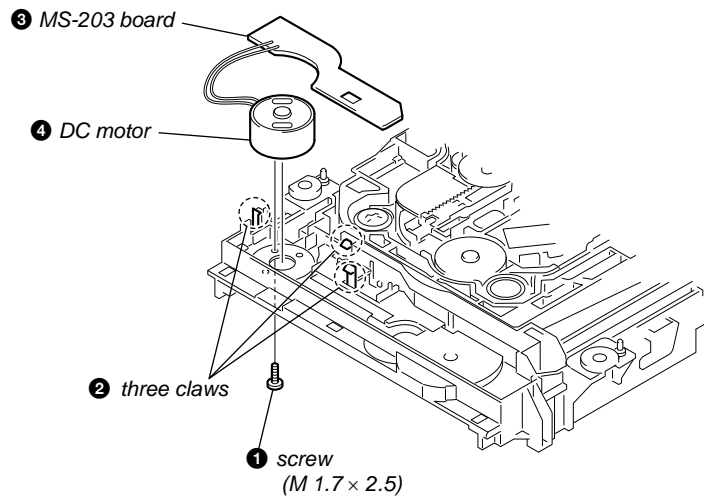
① Move the chuck cam in the direction of the arrow.



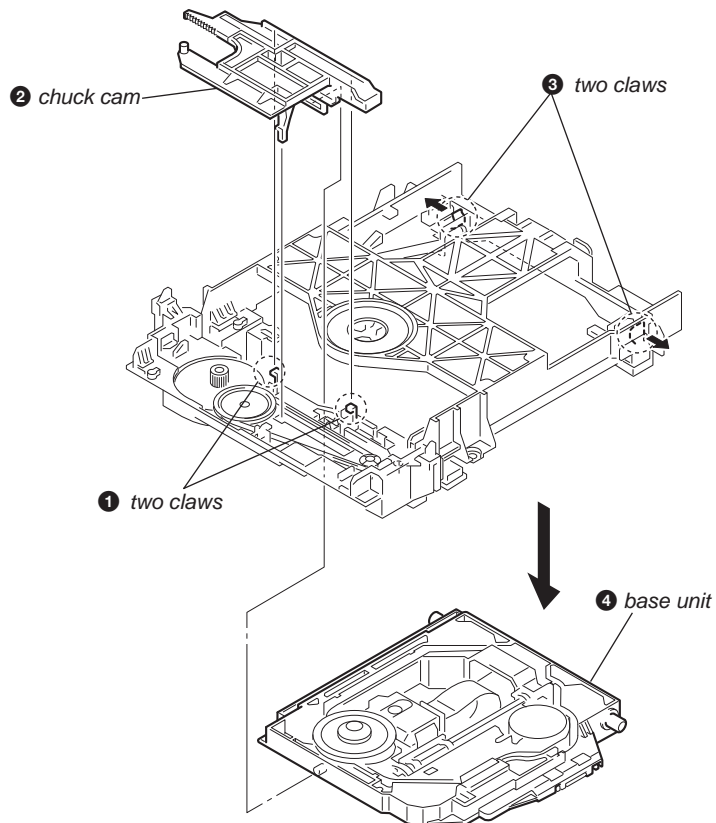
2-10. BELT



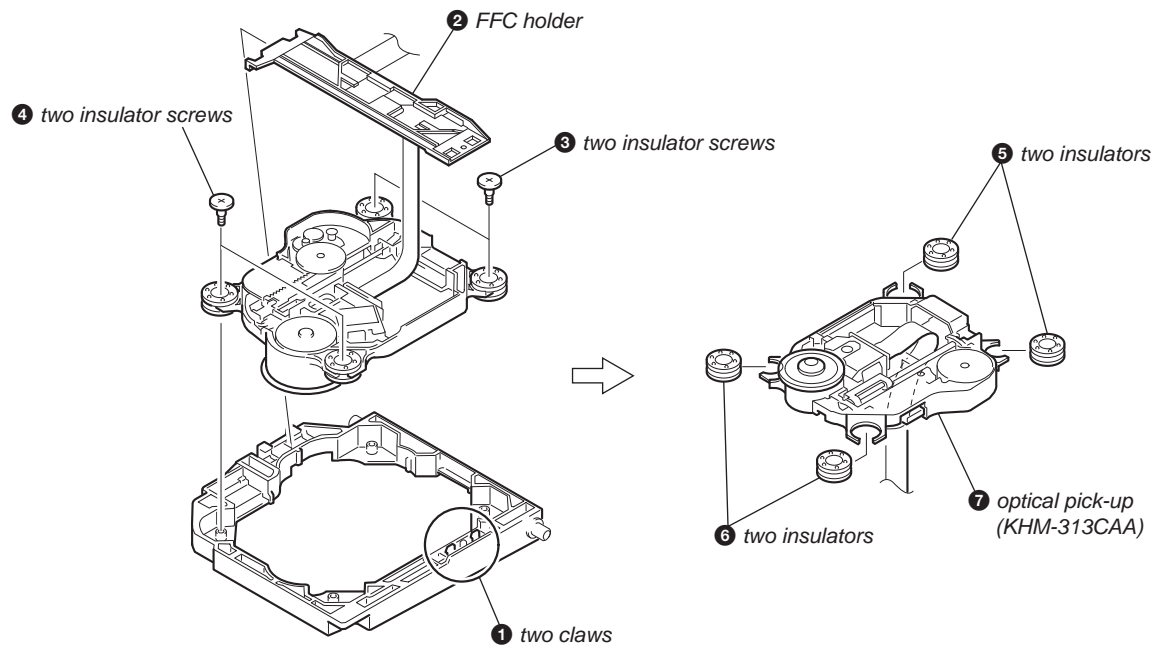
## 2-11. MS-203 BOARD



## 2-12. BASE UNIT



2-13. OPTICAL PICK-UP



## SECTION 3 TEST MODE

**Note:** Incorrect operations may be performed if the test mode is not entered properly.  
In this case, press the [I/⏻] button to turn the power off, and retry to enter the test mode.

### 1. Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customers.

#### Procedure:

- Press the [I/⏻] button to turn the power on.
- Press three buttons [■], [▶] and [I/⏻] simultaneously.
- When this button is operated, display as "COLD RESET" for a while and all of the settings are reset.

### 2. Panel Test Mode

- This mode is used to check the software version, FL and KEY.

#### 2-1. Display Test Mode

##### Procedure:

- Press the [I/⏻] button to turn the power on.
- Press three buttons [■], [◀◀] and [FUNCTION] simultaneously.
- When the display test mode is activated, all segments are turned on. When the mode in, lamps of "MOVIE", "MUSIC" and "i-ENHANCER" are turn off.
- To exit from this mode, press three buttons [■], [◀◀] and [FUNCTION] simultaneously.

#### 2-2. Version Test Mode

##### Procedure:

- When the display test mode is activated, press the [◀◀] button and the message "KY0" (TZ100), "KY0" (TZ200), "KY1" (TZ300) are displayed, the version test mode is activated.
- Whenever the [◀◀] button is pressed, the display changes in the following order.

→ "KY0" (Model name) → "ASIA2\*1" (Destination) → MC Version →

\*1: ASIA2 changes depending on destination.

- Press the [▶▶] button and the date of the software production is displayed.
- Press the [▶▶] button again and the version is displayed.
- To exit from this mode, press three buttons [■], [◀◀] and [FUNCTION] simultaneously.

#### 2-3. FL Pattern Test Mode

##### Procedure:

- When the display test mode is activated, press the [■] button, to select the FL pattern test mode. When the FL pattern test mode, half segments of FL display.
- Press the [■] button, half segments of FL display.
- Next press the [■] button, all segments of FL display is turn on.
- To exit from this mode, press three buttons [■], [◀◀] and [FUNCTION] simultaneously.

### 2-4. Key Test Mode

#### Procedure:

- When the display test mode is activated, press the [▶] button, to select the key test mode.
- To enter the KEY test mode, the fluorescent indicator displays "K0 V0". Each time an another button is pressed, "KEY" value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, "K9 V0" is displayed.
- When the [VOLUME] control is turned in the direction of (+), "V0" is changed to "V1", then ... "V9".  
When the [VOLUME] control is turned in the direction of (-), "V0" is changed to "V9", then ... "V1".
- To exit from this mode, press three buttons [■], [◀◀] and [FUNCTION] simultaneously.

### 3. Disc Tray Lock

- The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

#### Setting Procedure :

- Press the [I/⏻] button to turn the set on.
- Press the [FUNCTION] button to set DVD function.
- Insert a disc.
- Press the [■] button and the [▲] button simultaneously for five seconds.
- The message "LOCKED" is displayed and the tray is locked.

#### Releasing Procedure :

- Press the [■] button and the [▲] button simultaneously for five seconds again.
- The message "UNLOCKED" is displayed and the tray is unlocked.

**Note:** When "LOCKED" is displayed, the tray lock is not released by turning power on/off with the [I/⏻] button.

### 4. DVD Ship Mode

- Use this mode when returning the set to the customer after repair.

#### Procedure:

- Press the [I/⏻] button to turn the set on.
- Press the [FUNCTION] button to set the function "DVD".
- Remove all discs, and then press two buttons [▶] and [I/⏻] simultaneously.
- After a message "MECHA LOCK" ⇔ "UNPLUG" is displayed on the fluorescent indicator tube, pull out the AC plug.
- To exit from this mode, press the [I/⏻] button to turn the set on.

## 5. Product Out

- This mode moves the optical pick-up to the position durable to vibration and clears all data including preset data stored in the RAM to initial conditions. Use this mode when returning the set to the customer after repair.

### Procedure:

- Press the [I/⏻] button to turn the power on.
- Press the [FUNCTION] button to set the function "DVD".
- Remove all discs, and then press three buttons [■], [▲] and [VOLUME+] simultaneously.
- Displayed to message "initialize all data ..." on the fluorescent indicator tube when pressing in turn the [4] → [DVD MENU] → [CLEAR] buttons on the remote commander.
- After the "STANDBY" blinking display finishes, the message "MECHA LOCK" ⇔ "UNPLUG" is displayed on the fluorescent indicator tube disconnect the AC power plug, then the product out mode is set.

## 6. Color System Change (Except E32 model)

- Color system change to video signal format (NTSC/PAL).

### Procedure:

- Press the [I/⏻] button to turn the set on.
- Press the [FUNCTION] button to set the function "DVD".
- Press the [I/⏻] button to turn the set OFF.
- Press two buttons [◀◀] and [I/⏻] simultaneously, and the display of fluorescent indicator tube changes to "COLOR PAL" or "COLOR NTSC".

## DVD SECTION

### 7-1. GENERAL DESCRIPTION

- The IOP measurement allows you to make diagnosis and adjustment simply by using the remote commander and monitor TV. The instructions, diagnosis results, etc. are given on the on-screen display (OSD).

Be sure to execute the IOP measurement when a BU (Base Unit) is replaced.

### 7-2. HOW TO ENTER TEST MODE

While pressing the [■] and [▲] buttons simultaneously, turn [VOLUME] control in the direction of (+) with the DVD player in power on.

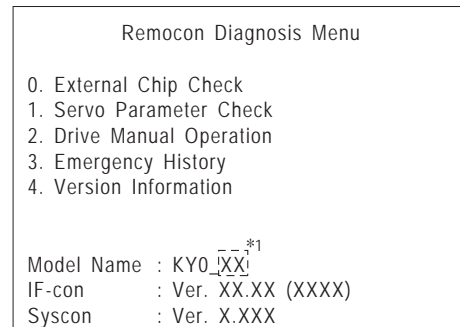
The Test Mode starts, displayed "SERVICE IN" on this model display then the menu shown below will be displayed on the TV screen.

- \* The display of the "Model Name" of the "Remocon Diagnosis Menu" change with the model and the destination. Refer to below on the model name.

TZ100 : KY0

TZ200 : KY0

TZ300 : KY1



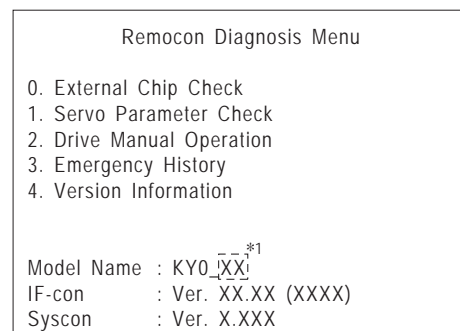
\*1: Changes depending on destination

The menu above is the Remocon Diagnosis Menu screen which consists of five main functions. At the bottom of the menu screen, the model name and IF-con version. To exit from the Test Mode, press the [I/⏻] button on the remote commander.

### 7-3. EXECUTING IOP MEASUREMENT

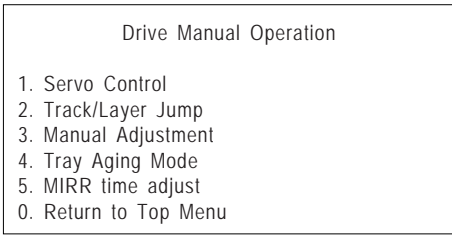
In order to execute IOP measurement, the following standard procedures must be followed.

- (1) In power on, while pressing the [■] and [▲] buttons simultaneously, turn the [VOLUME] control in the direction of (+).

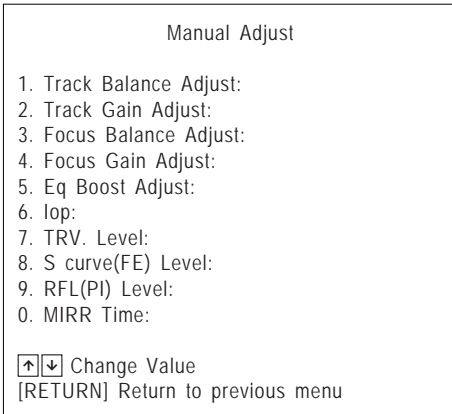


\*1: Changes depending on destination

- (2) Select "2. Drive Manual Operation" by pressing the [2] button on the remote commander. The screen will appear as shown.

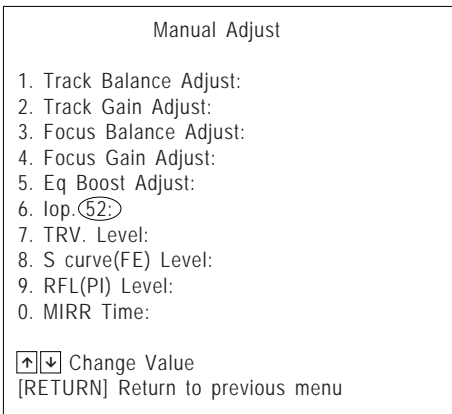


- (3) Select "3. Manual Adjustment" by pressing the [3] button on the remote commander. The screen will appear as shown.



- (4) Select "6. IOP" by pressing the [6] button on the remote commander.

- (5) Wait until a hexadecimal number appear.



- (6) Convert each data from hexadecimal to decimal using conversion table.

- (7) Please find the label on the rear of the BU (Base Unit). The default IOP value is written in the label.

- (8) Subtract between these two values.

- (9) If the remainder is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then the BU is defective and need to be change.

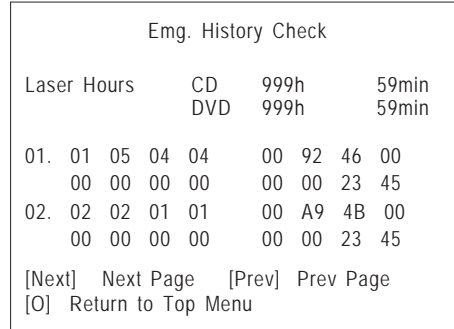
- (10) Press the [RETURN] button on the remote commander to return back to previous menu.

- (11) Press the [0] button on the remote commander to return to Top Menu.

## 7-4. EMERGENCY HISTORY

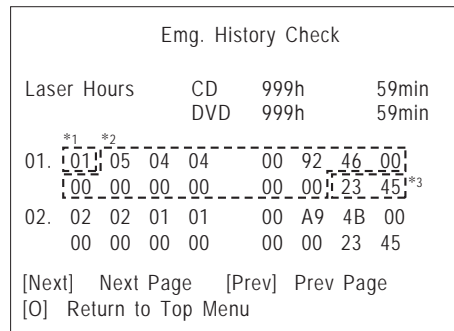
To check the emergency history, please follow the following procedure.

- (1) From the Top Menu of Remocon Diagnosis Menu, select "3. Emergency History Check" by pressing the [3] button on the remote commander. The following screen appears on the on-screen display.



- (2) You can check the total time when the laser is turned on during playback of DVD and CD from the above menu. The maximum time, which can be displayed are 999h 59min.
- (3) You can check the error code of latest 10 emergency history from the above menu. To view the previous or next page of emergency history, press [Left Arrow] or [Right Arrow] button on the remote commander. The error code consists of the following three blocks. The first block indicates the error code. The second block indicates the parameter and the third block indicates the time of error code as shown below.

### • Error Code



\*1 : Error Code

\*2 : Parameter of error code

\*3 : Time of error code

### The meaning of error code is as below:

- 01: Communication error (No reply from syscon)
- 02: Syscon hung up
- 03: Power OFF request when syscon hung up
- 19: Thermal shutdown
- 24: MoveSledHome error
- 25: Mechanical move error (5 Changer)
- 26: Mechanical move stack error
- 30: DC motor adjustment error
- 31: DPD offset adjustment error
- 32: TE balance adjustment error
- 33: TE sensor adjustment error
- 34: TE loop gain adjustment error
- 35: FE loop gain adjustment error
- 36: Bad jitter after adjustment
- 40: Focus NG
- 42: Focus layer jump NG
- 51: Spindle stop error
- 52: Open kick spindle error



- 60: Focus on error
- 61: Seek fail error
- 62: Read Q data/ID error
- 70: Lead in data read fail
- 71: TOC read time out (CD)
- 80: Can't buffering
- 81: Unknown media type

**7-4-1. Clear the Laser Hour**

Press [DISPLAY] button and then press [CLEAR] button on the remote commander. The data for both CD and DVD data are reset.

Emg. History Check									
Laser Hours	CD		0h		0min				
	DVD		0h		0min				
01.	01	05	04	04	00	92	46	00	
	00	00	00	00	00	00	23	45	
02.	02	02	01	01	00	A9	4B	00	
	00	00	00	00	00	00	23	45	
[Next] Next Page [Prev] Prev Page									
[0] Return to Top Menu									

**7-4-2. Clear the Emergency History**

Press [DVD TOP MENU] button and then press [CLEAR] button on the remote commander. The error code for all emergency history would be reset.

Emg. History Check									
Laser Hours	CD		999h		59min				
	DVD		999h		59min				
01.	00	00	00	00	00	00	00	00	
	00	00	00	00	00	00	00	00	
02.	00	00	00	00	00	00	00	00	
	00	00	00	00	00	00	00	00	
[Next] Next Page [Prev] Prev Page									
[0] Return to Top Menu									

**7-4-3. Clear the Initialize Setup Data**

Press [DVD MENU] button and then press [CLEAR] button on the remote commander.

Emg. History Check									
Laser Hours	CD		999h		59min				
	DVD		999h		59min				
initialize setup data...									
[Next] Next Page [Prev] Prev Page									
[0] Return to Top Menu									

**7-4-4. Return to the Top Menu of Remocon Diagnosis Menu**

Press [0] button on the remote commander.

**7-5. CHECK VERSION INFORMATION**

To check the version information, please follow the following procedure.

- (1) From the Top Menu of Remocon Diagnosis Menu, select "4. Version Information" by pressing the [4] button on the remote commander. The following screen appears on the on-screen display.

Version information									
Firm (Main) : Ver. xxxxx									
Firm (Sub) : xxxxx									
RISC : xxxxx									
8032 : xxxxx									
Audio DSP : xxxxx									
Servo DSP : xxxxx									
Phy,Adr, : F,F,F,F,									
[0] Return to Top Menu									

To return to the Top Menu of Remocon Diagnosis Menu, press [0] button on the remote commander.

**8. AMP TEST MODE**

- This mode is used to measurement and test of the AMP connection.

**Procedure:**

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons [■], [▶] and [▲] simultaneously. When the this mode, blink to segments ("SA-CD" and "CAT") on FL display.
3. Press [DISPLAY] button of the remote commander. When the this mode is displayed as "MEASURE" on FL display. Whenever the [DISPLAY] button is pressed, the AMP test mode changes in the following order.

→ MEASURE → SAFETY →

MEASURE: AMP measurement mode

SAFETY: AMP regulations, temperature, character mode

4. Press [MUTING] button on the remote commander. When the this mode is displayed as "VOL N" on FL display. Whenever the [MUTING] button is pressed, the VOL test mode changes in the following order.

→ VOL N → VOL M/M →

VOL N: Turn the [VOLUME] control, the display is change in succession (MIN ↔ MAX)

VOL M/M: Turn the [VOLUME] control in the direction of (+) is change to "MIN", turn the direction of (-) is change to "MAX".

5. To exit from this mode, press the [I/⏻] button to "COLD RESET" and turn the power off.

## 9. DEMO PLAY MODE OUT

It is a mode to release the demonstration reproduct by the dedicated demonstration disc.

1. During playback the DEMO Disc, press the [■] and [▶] buttons for five seconds simultaneously.
2. The message “DEMO OFF” is displayed, a mode to reproduct the demonstration is released.

## 10. PROTECTION FACTOR (SD DETECTION/ DC DETECTION) IDENTIFICATION TEST MODE

When an error is detected, the FL tube alternately displays “PROTECTOR ⇔ PUSH POWER”.

↓ Press the [I/⏻] button.

\* Buttons other than the [I/⏻] button are invalid.

“STANDBY” blinks three times on the FL tube.

↓

The protection release state (POWER OFF) is established.

(No FL tube display)

↓ Press the [I/⏻] button two times.

The power to the system turns on, and the normal operation is established. (Restore)

### During the protection state:

1. If the AC plug is connected or disconnected during the protection state, the protection state is released, and the normal operation is established. (The protection state is not maintained.)
2. The protection factor is displayed by pressing the [RETURN] → [3] → [2] → [0] → [0] → [ANGLE] buttons of the remote commander.  
(during the “PROTECTOR ⇔ PUSH POWER” display).  
⇒ When SD is detected: Repeats  
“SD DETECT ⇔ PROTECTOR”.  
⇒ When DC is detected: Repeats  
“DC DETECT ⇔ PROTECTOR”.

### PL: SD detection

When the “L” output from the SD (shutdown) port on the S-MASTER POWER Driver Shutdown and voltage descent (15V or less) of 30V power supply (PVDD) are detected.

### DC detection

When the “L” output from the power/speaker error detection circuit (DC detection port) is detected for two seconds continually, the power system other than that of the FL tube is turned off, and the protection state is established.

## SECTION 4 ELECTRICAL ADJUSTMENTS

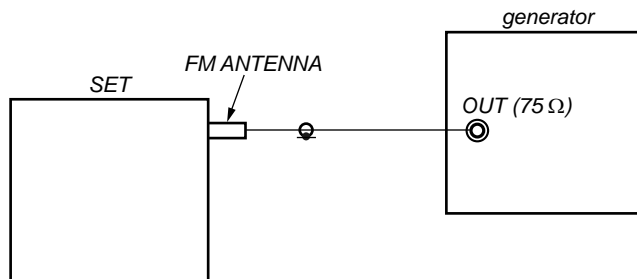
### DVD SECTION

When the optical pick-up assy is replaced, perform the "EXECUTING IOP MEASUREMENT".

EXECUTING IOP MEASUREMENT (See page 15)

### TUNER SECTION

#### [FM Tune Level Check]



#### Procedure:

1. Turn the power on.
2. Input the following signal from Signal Generator to FM antenna input directly.

\* Carrier Freq : A = 87.5 MHz, B = 98 MHz, C = 108 MHz  
 Deviation : 75 kHz  
 Modulation : 1 kHz  
 ANT input : 35 dBu (EMF)

**Note:** Please use 75 ohm "coaxial cable" to connect SG and the set. You cannot use video cable for checking.  
 Please use SG whose output impedance is 75 ohm.

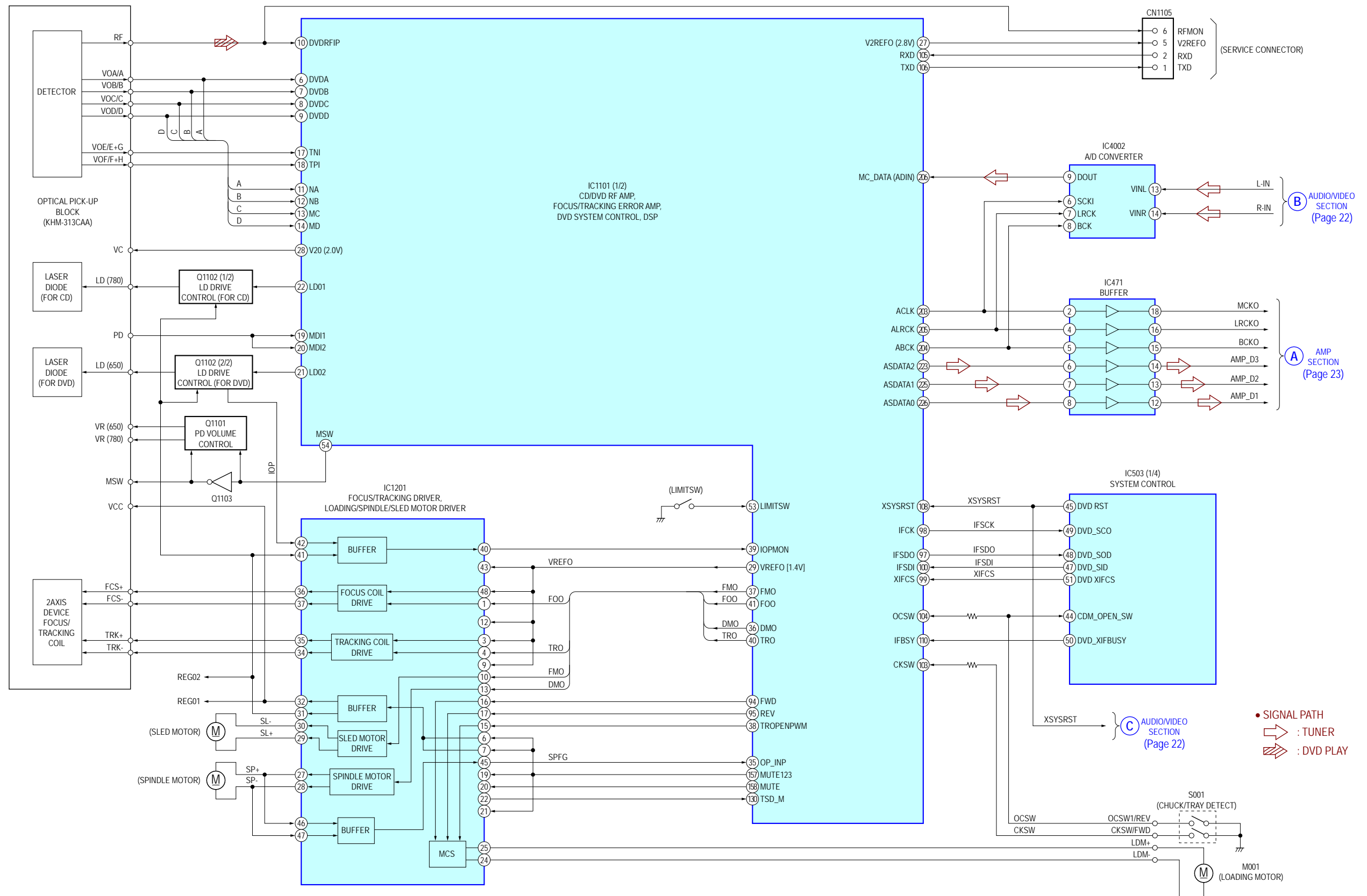
3. Set to FM tuner function and tune A, B and C signals.
4. Confirm "TUNED" is lit on the display for A, B and C signals.

The mark of "TUNED" means "The selected station signal is received in good condition."

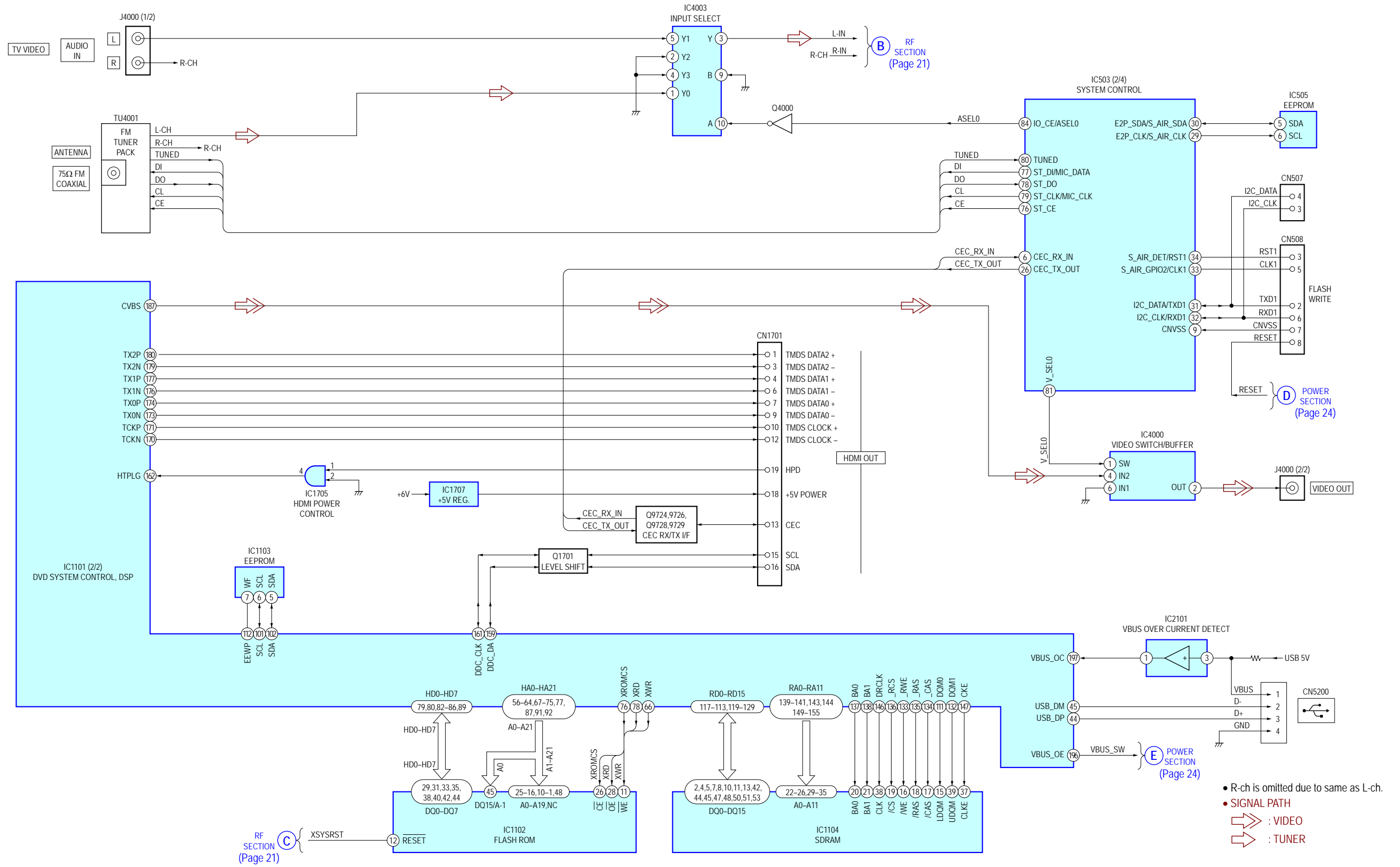
MEMO

SECTION 5  
DIAGRAMS

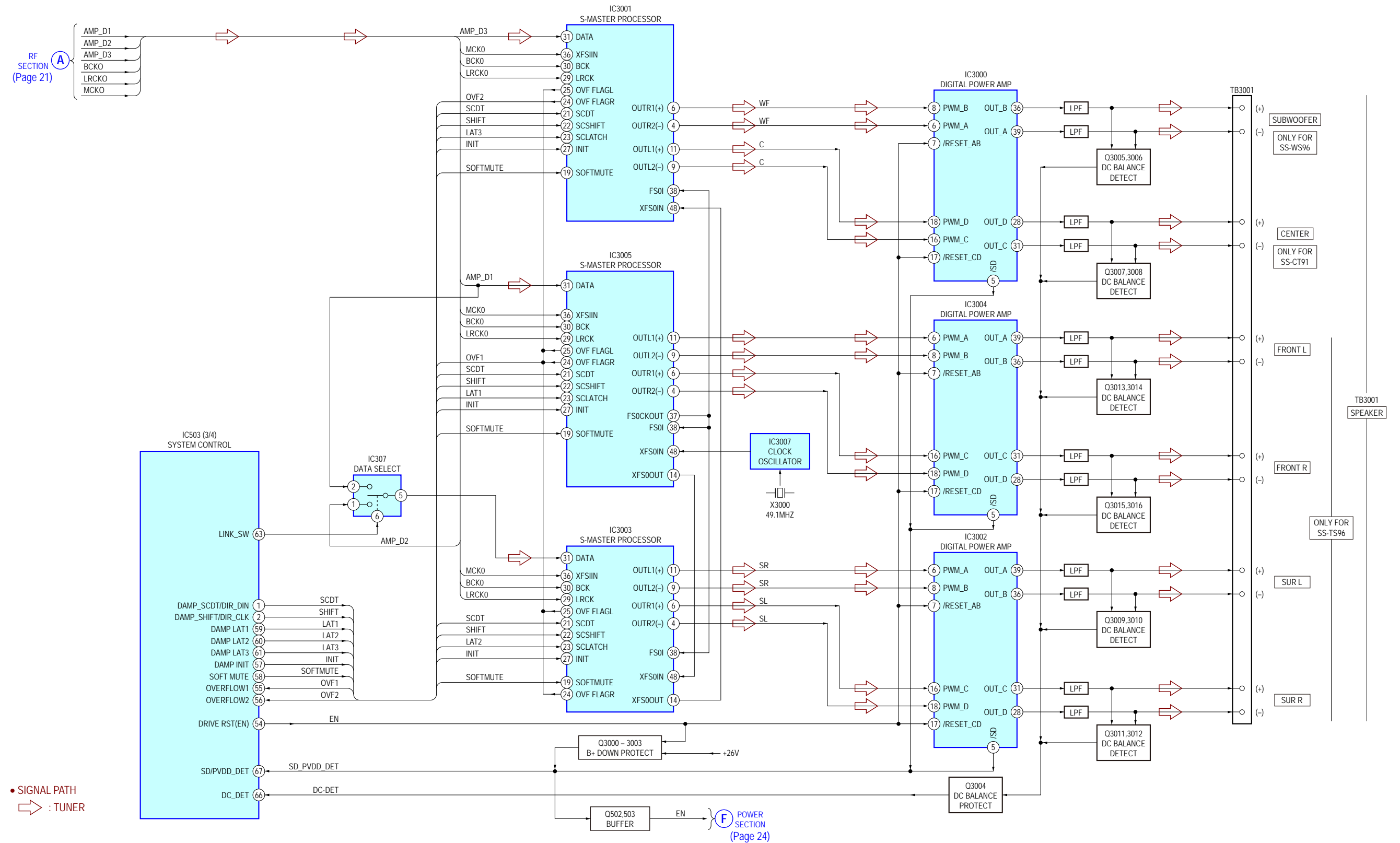
5-1. BLOCK DIAGRAM – RF Section –



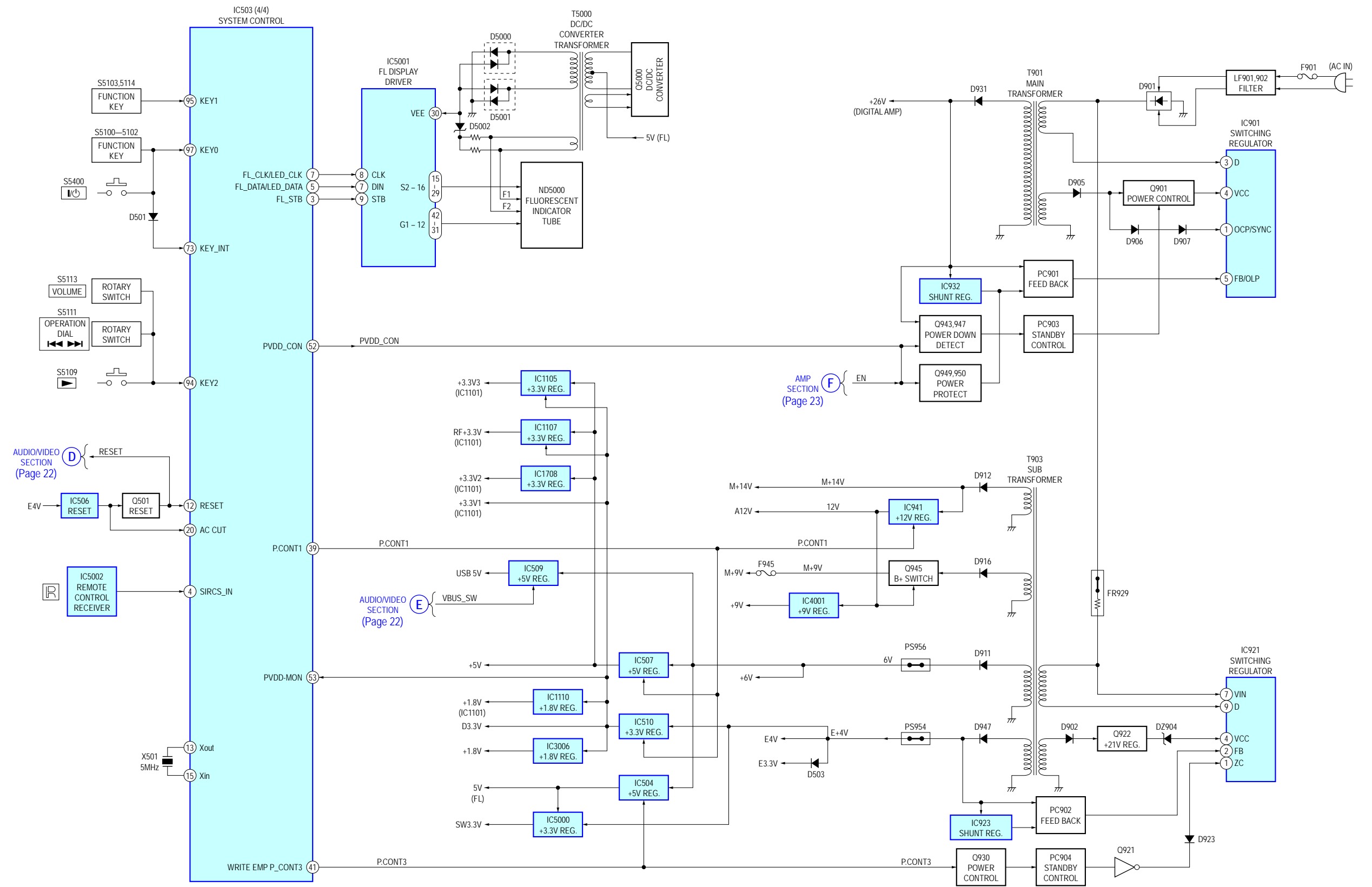
5-2. BLOCK DIAGRAM – AUDIO/VIDEO Section –



5-3. BLOCK DIAGRAM – AMP Section –



5-4. BLOCK DIAGRAM – POWER Section –





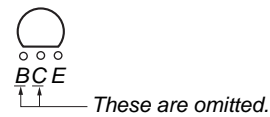
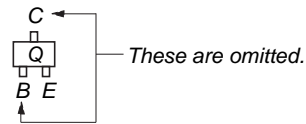
**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
(In addition to this, the necessary note is printed in each block.)

**For Printed Wiring Boards.**

- Note:**
- : Parts extracted from the component side.
  - : Through hole.
  - : Pattern from the side which enables seeing.  
(The other layers' patterns are not indicated.)

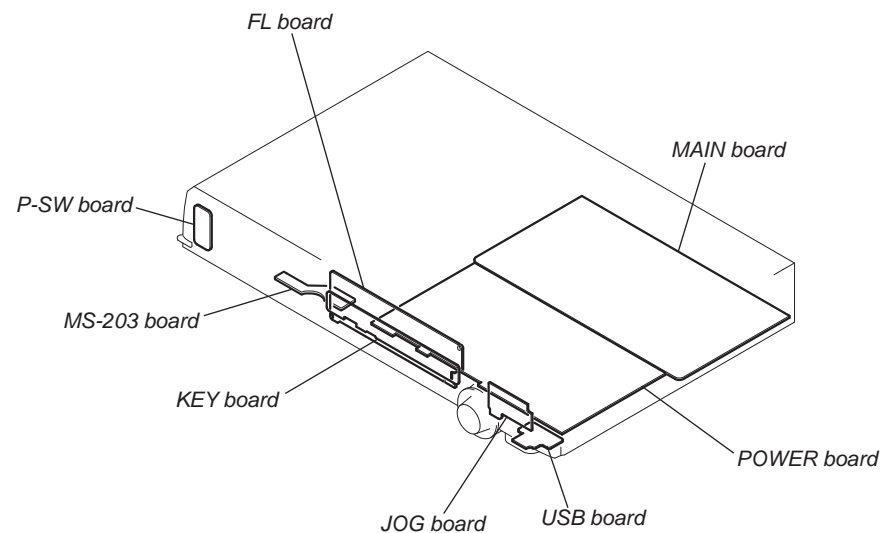
**Caution:**  
Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.  
(SIDE B)  
Parts face side: Parts on the parts face side seen from the parts face are indicated.  
(SIDE A)

- Indication of transistor.



- Abbreviation
- AR : Argentina model
- AUS : Australian model
- E3 : 240V AC area in E model
- E12 : 220 – 240V AC area in E model
- E32 : 110 – 240V AC area in E model
- EA : Saudi Arabia model
- MX : Mexican model
- PH : Philippines model
- SAF : South African model
- SP : Singapore model
- TH : Thai model

**• Circuit Boards Location**



**For Schematic Diagrams.**

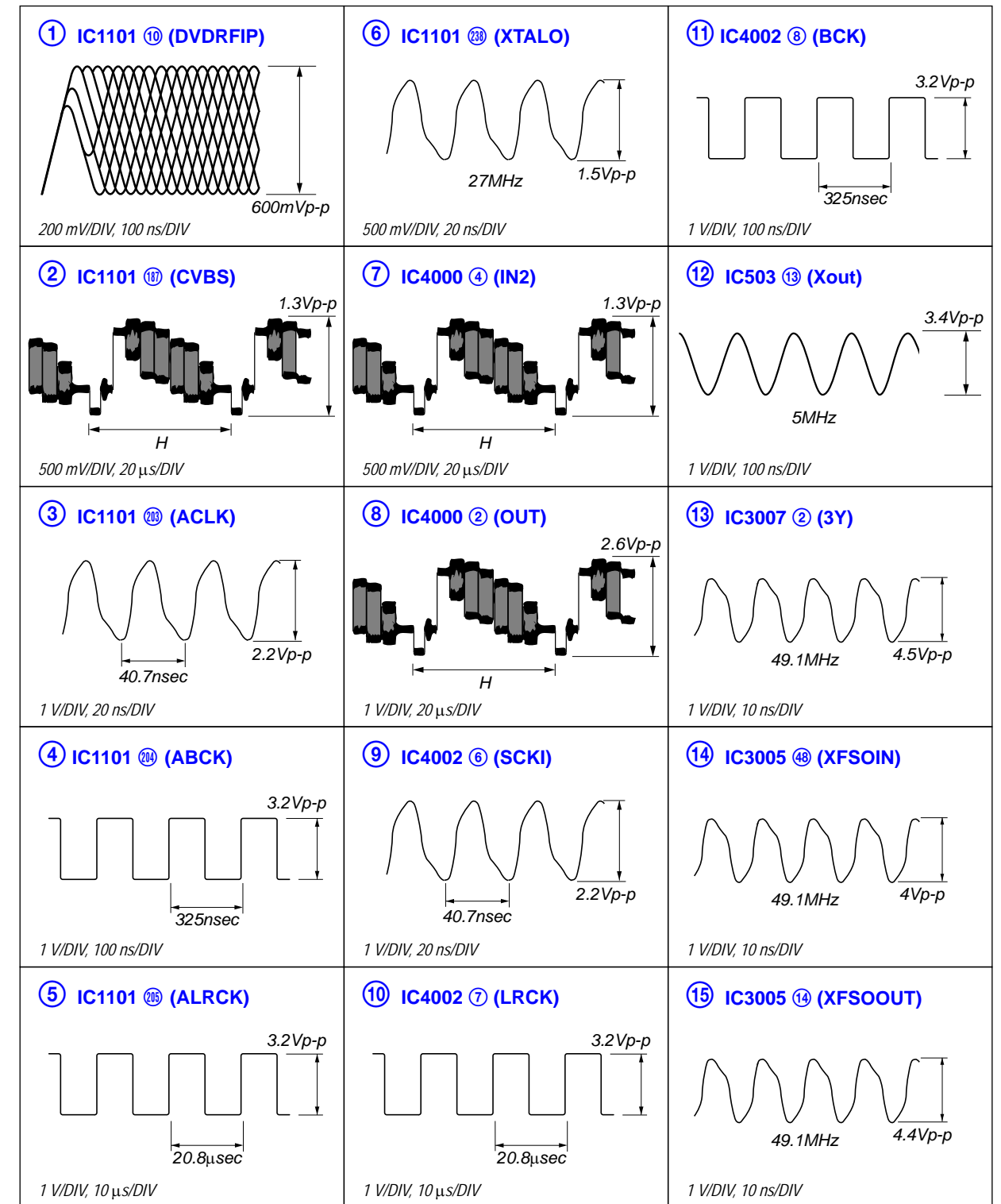
- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.
  - $\Delta$  : Internal component.
  - $\square$  : Panel designation.

**Note:** The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

- — : B+ Line.
- - - - : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages and waveforms are dc with respect to ground in service mode.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- no mark: TUNER
- < > : DVD PLAY
- \* : Impossible to measure
- Voltages are taken with VOM (Input impedance 10 M $\Omega$ ).
- Circled numbers refer to waveforms.
- Signal path.
- $\Rightarrow$  : TUNER
- $\Rightarrow$  : DVD PLAY
- $\Rightarrow$  : VIDEO
- Abbreviation
- AR : Argentina model
- AUS : Australian model
- E3 : 240V AC area in E model
- E12 : 220 – 240V AC area in E model
- E32 : 110 – 240V AC area in E model
- EA : Saudi Arabia model
- MX : Mexican model
- PH : Philippines model
- SAF : South African model
- SP : Singapore model
- TH : Thai model

**• Waveforms**

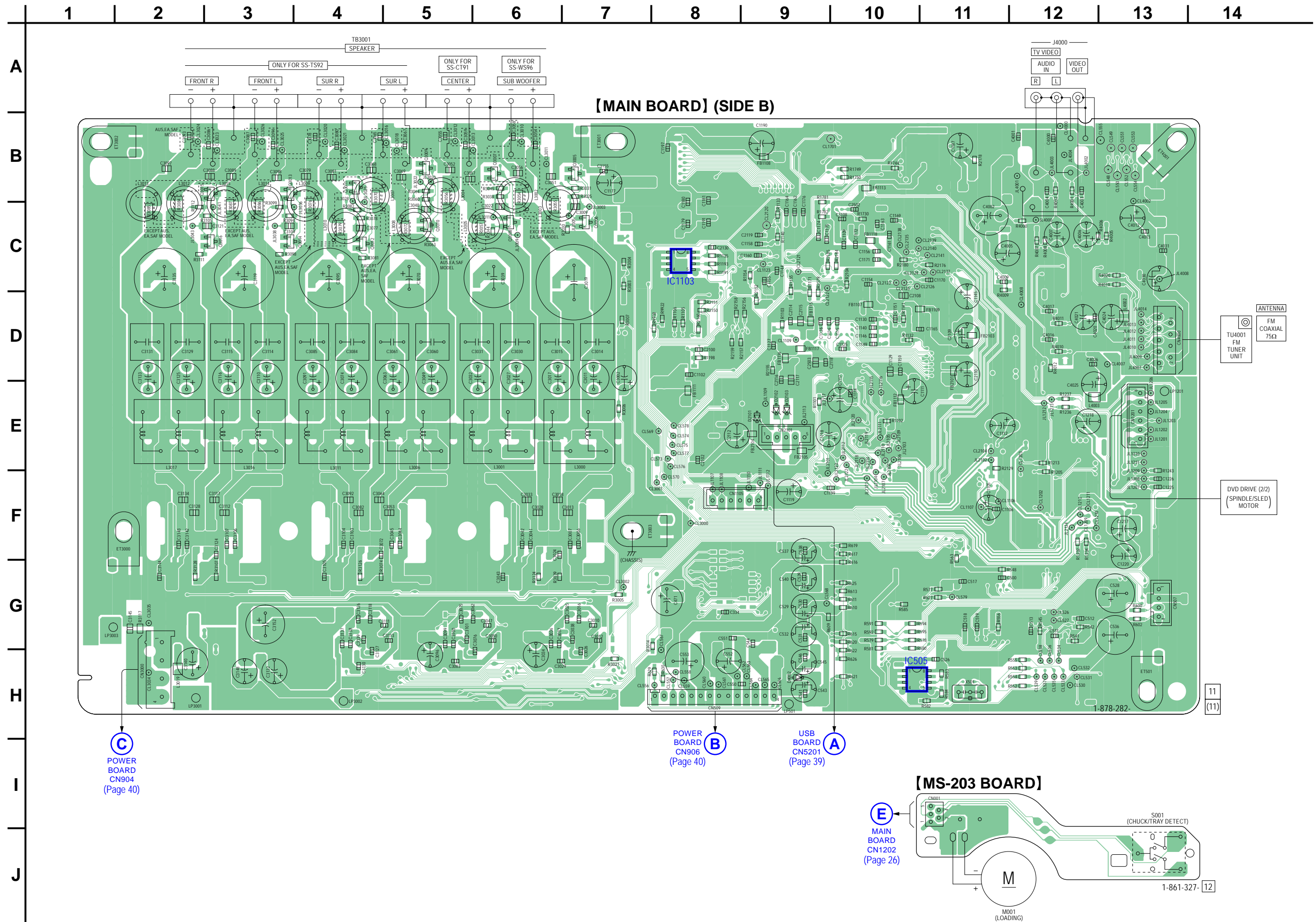
**– MAIN Board –**





5-6. PRINTED WIRING BOARDS – MAIN Section (2/2) – • See page 25 for Circuit Boards Location. • **LF** : Uses unleaded solder.

When IC1103 on the Main board is damaged, exchange the new Main board for the Main board which IC damaged.



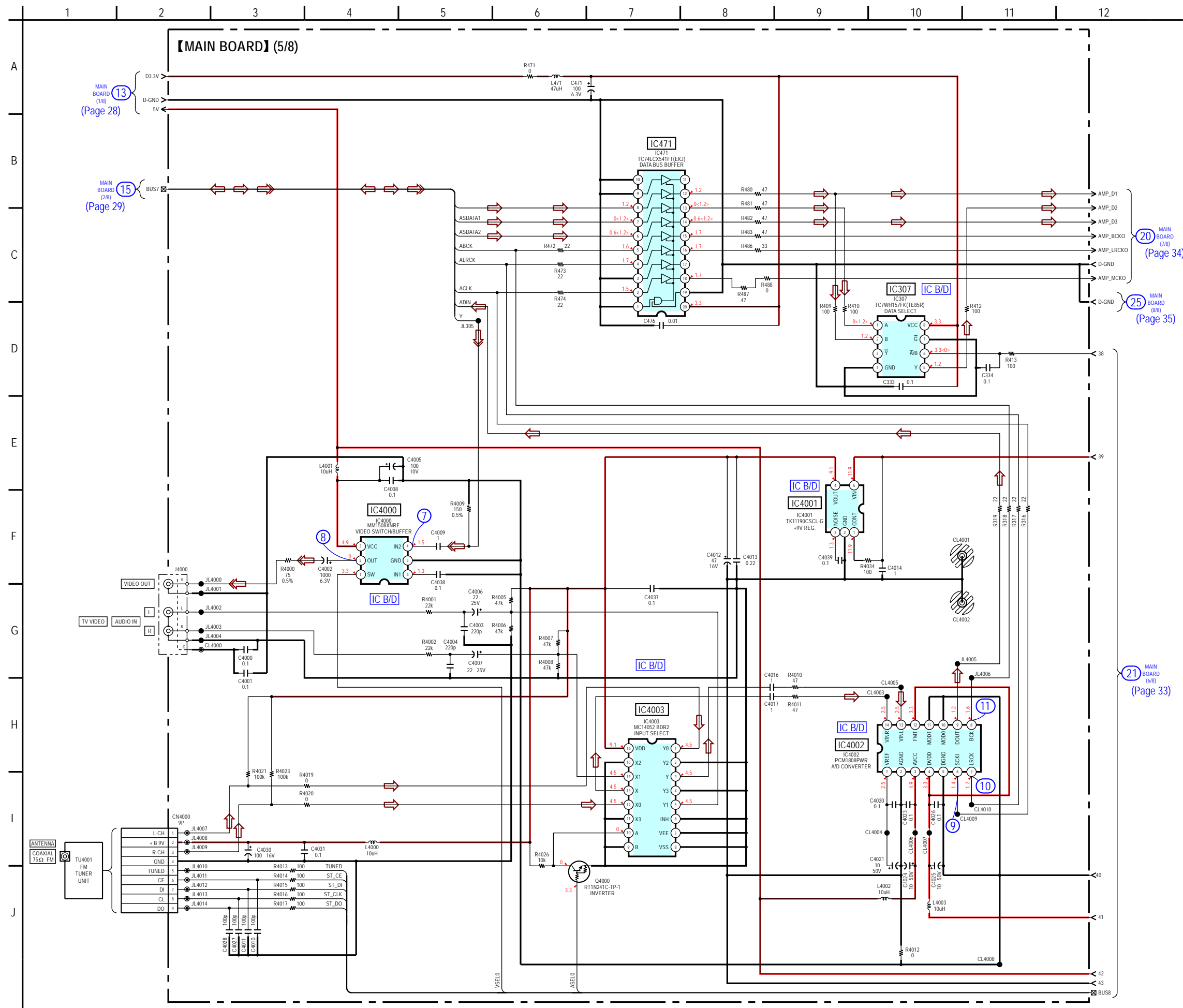








5-11. SCHEMATIC DIAGRAM – MAIN Section (5/8) – • See page 25 for waveforms. • See page 42 for IC Block Diagrams.



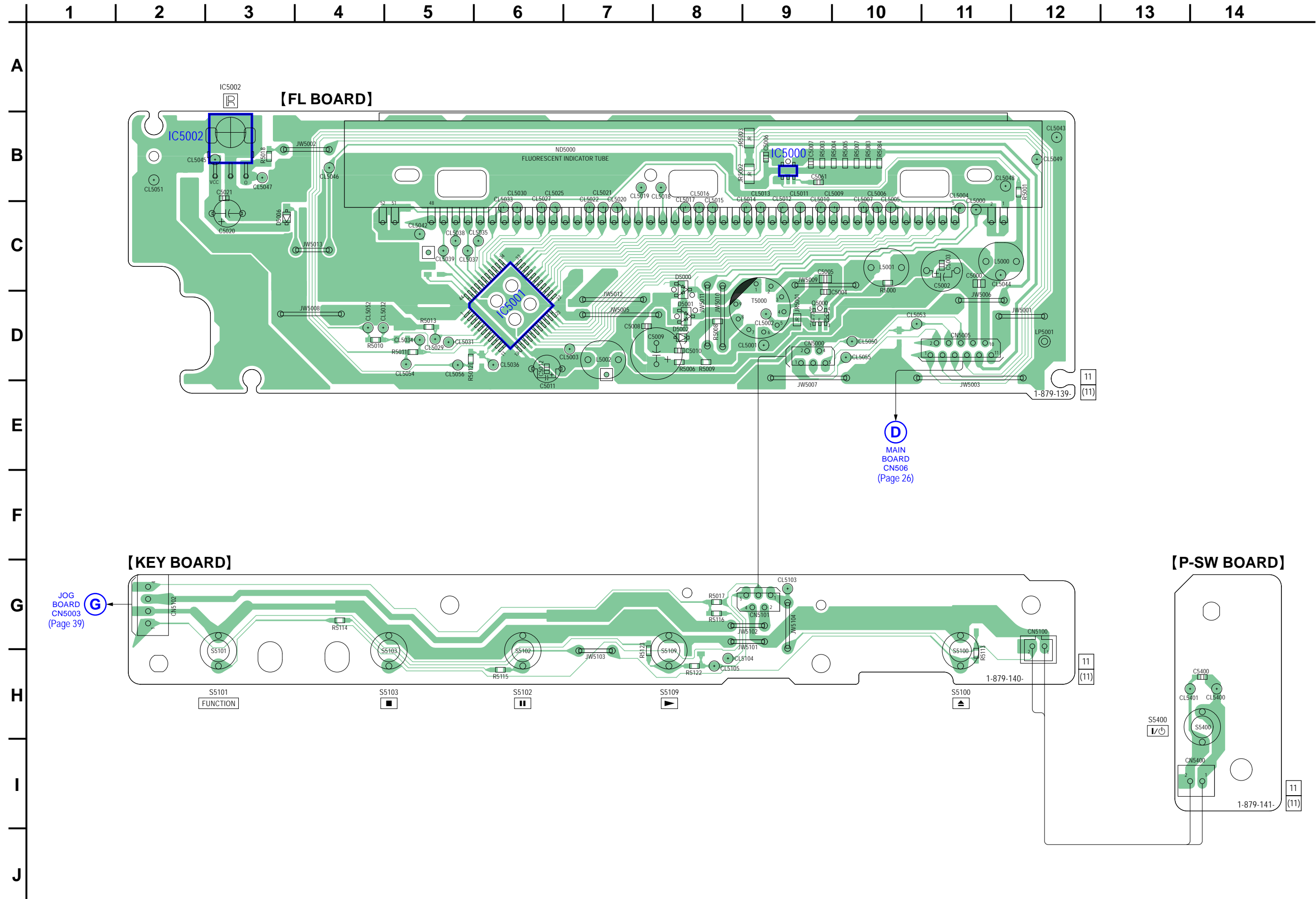




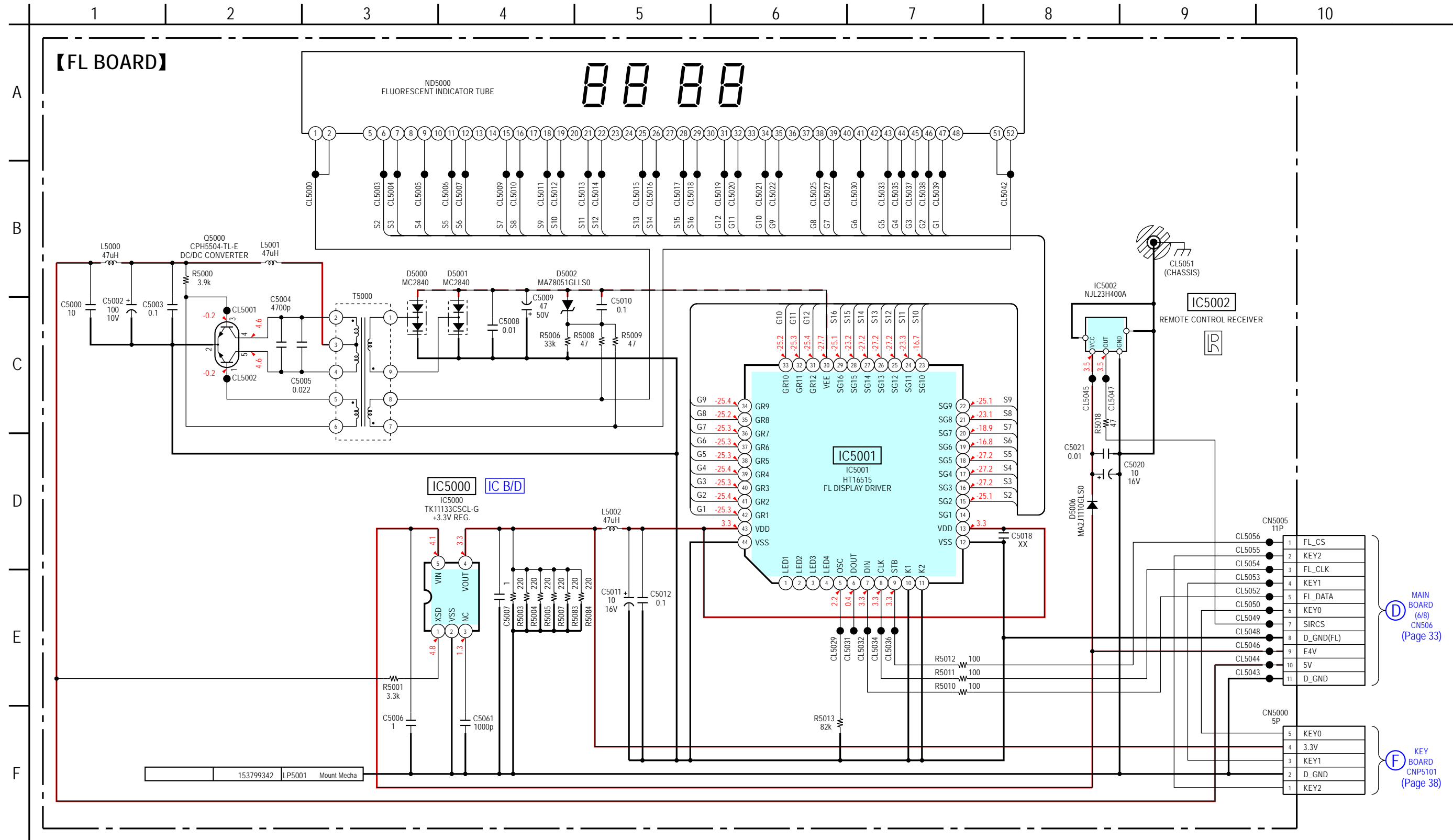




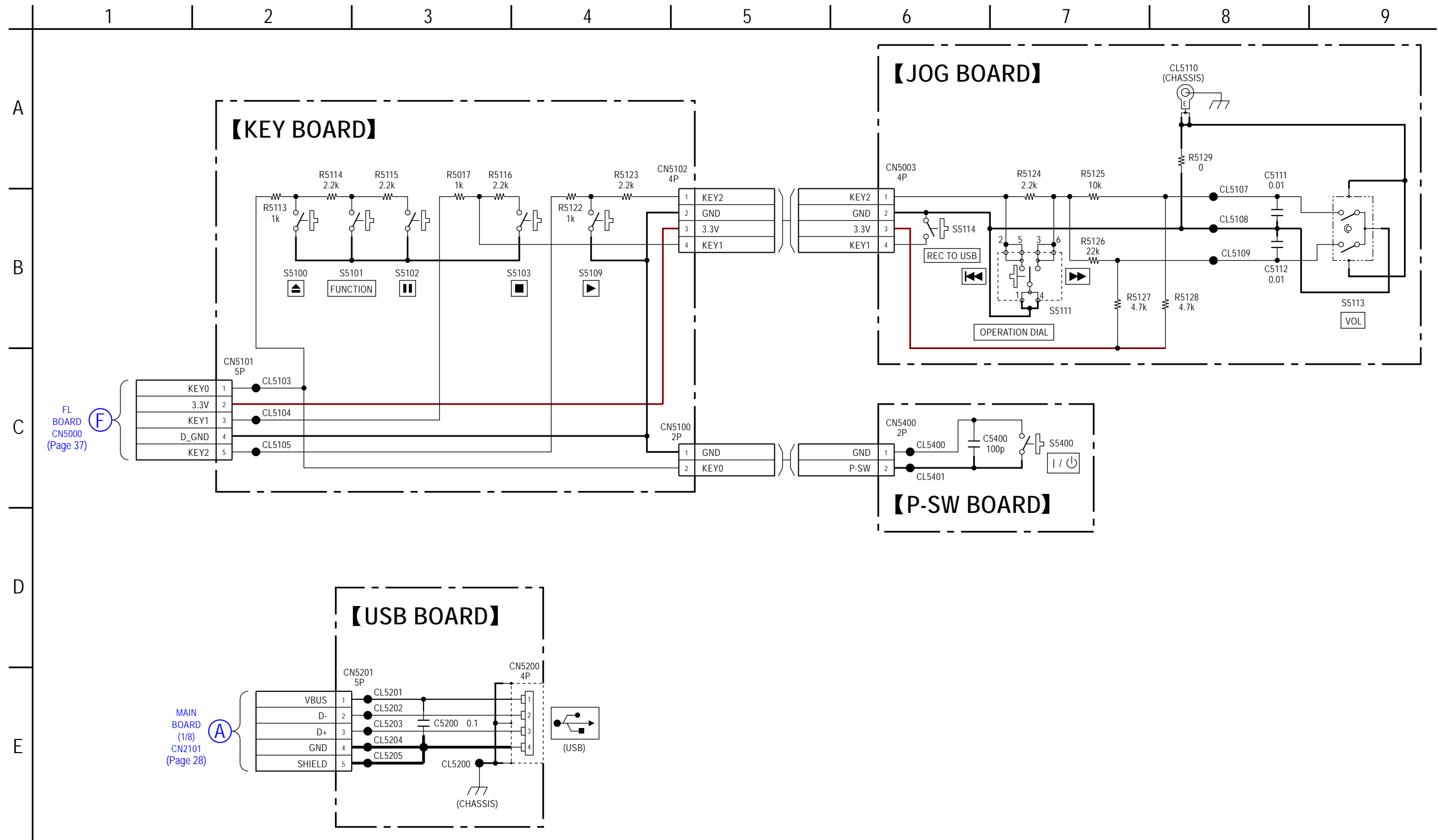
5-15. PRINTED WIRING BOARDS – FL, SWITCH Section – • See page 25 for Circuit Boards Location. •  : Uses unleaded solder.



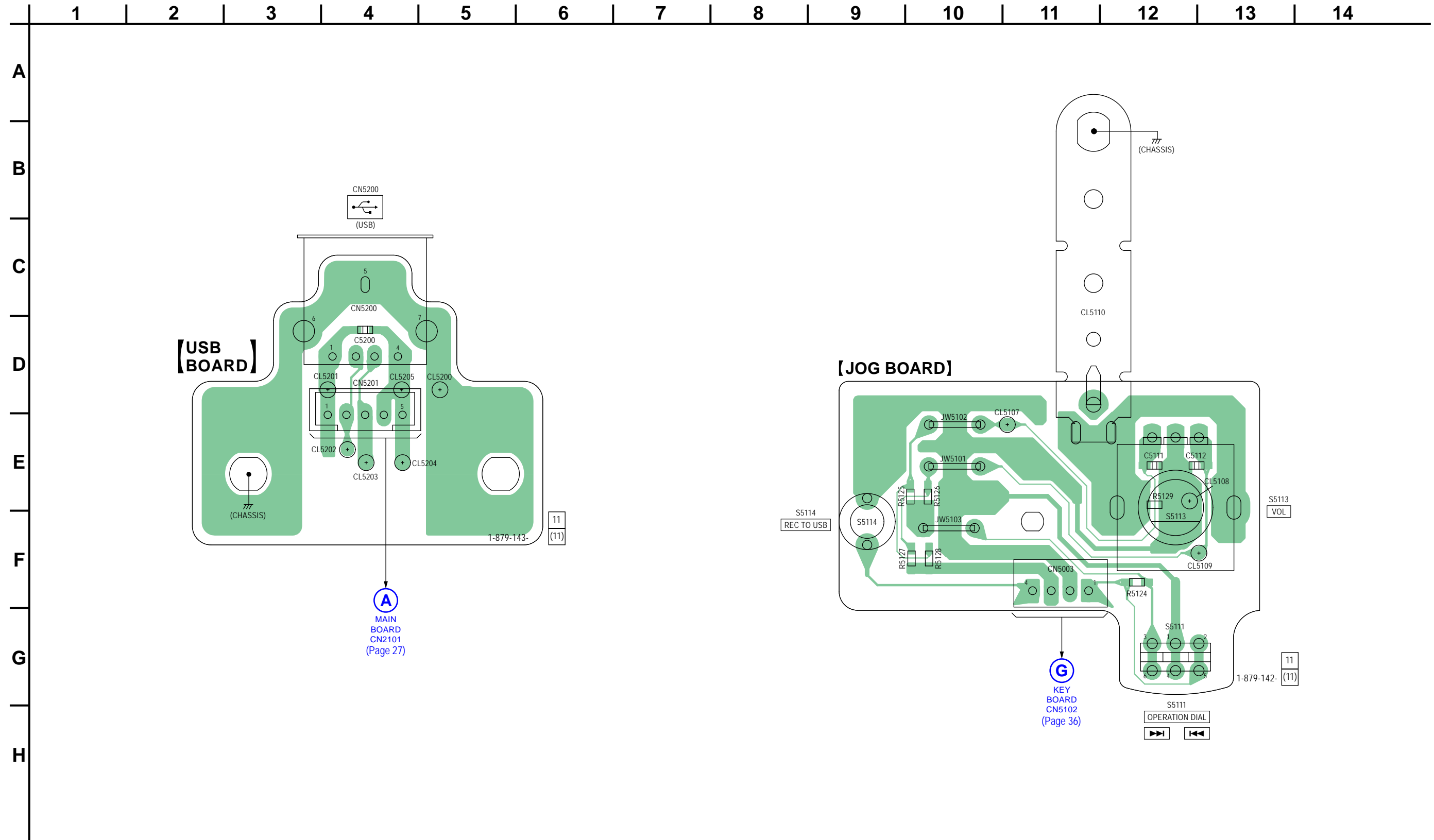
5-16. SCHEMATIC DIAGRAM – FL Section – • See page 42 for IC Block Diagram.



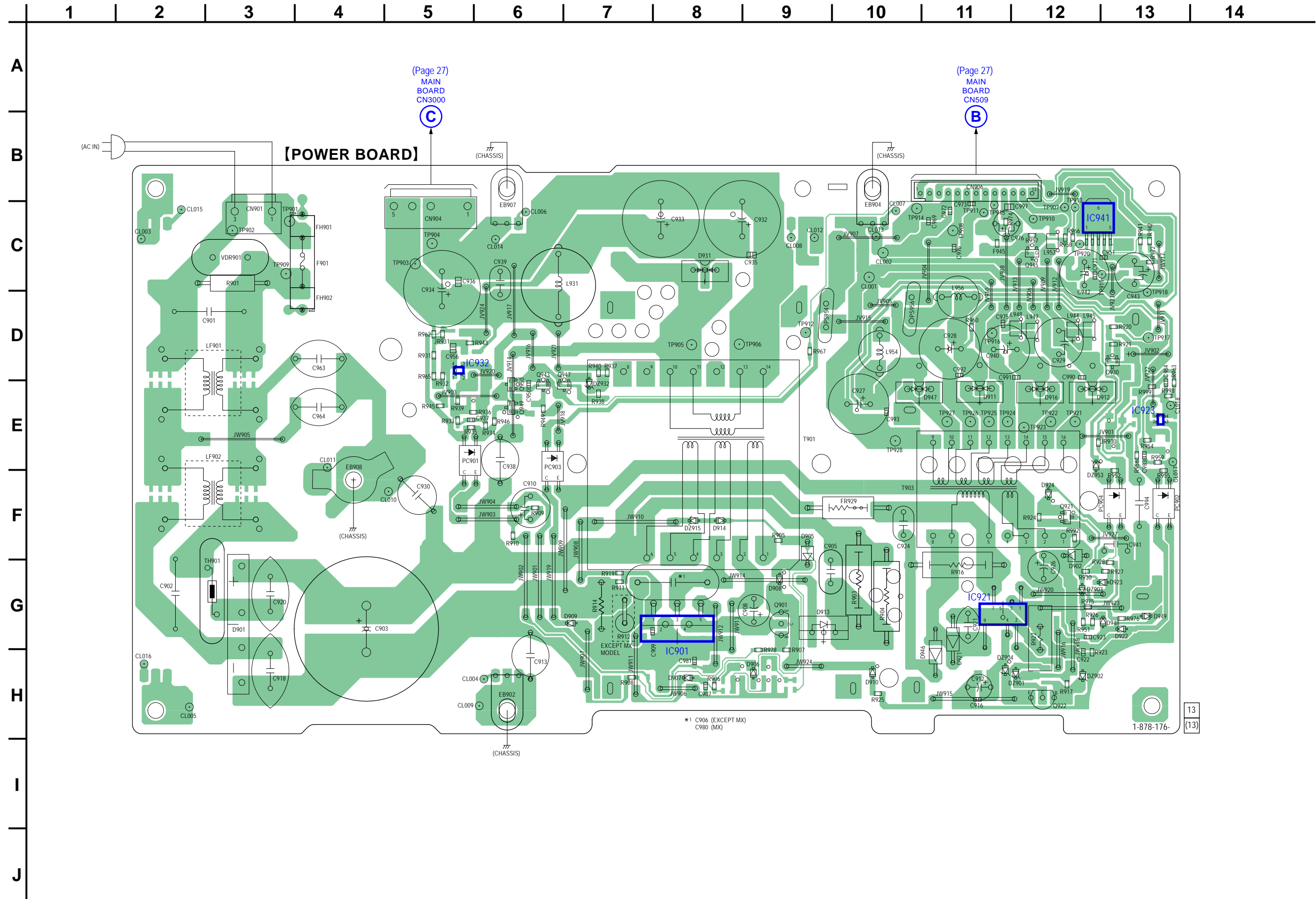
5-17. SCHEMATIC DIAGRAM – SWITCH Section –



5-18. PRINTED WIRING BOARDS – USB, JOG Section – • See page 25 for Circuit Boards Location. •  : Uses unleaded solder.

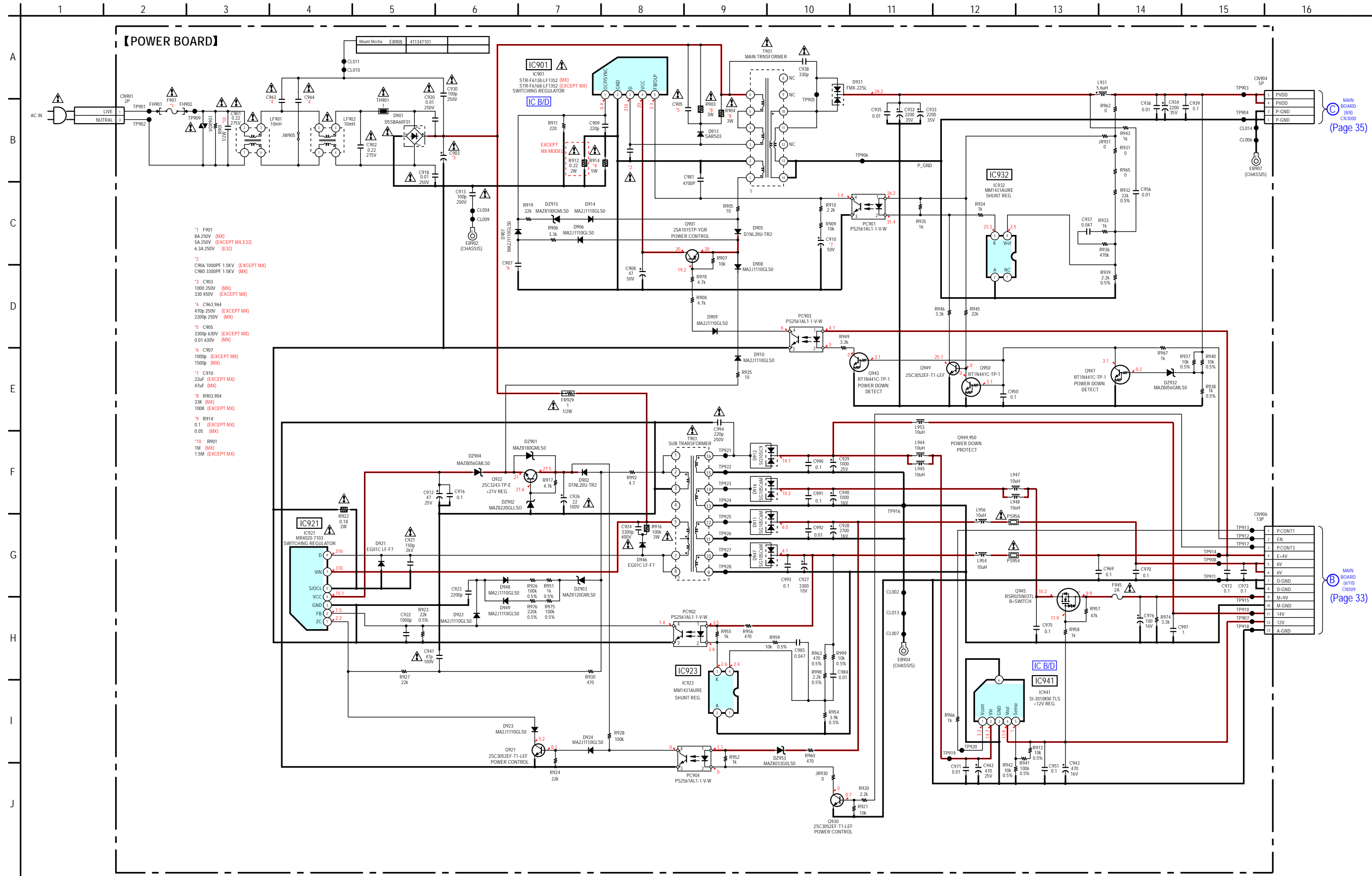


5-19. PRINTED WIRING BOARD – POWER Section – • See page 25 for Circuit Boards Location. •  : Uses unleaded solder.





5-20. SCHEMATIC DIAGRAM – POWER Section – • See page 43 for IC Block Diagrams.



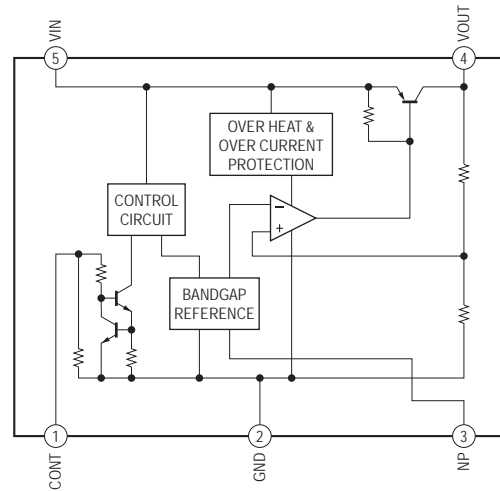
- \*1 F901  
8A 250V (MX)  
5A 250V (EXCEPT MX,E32)  
4.3A 250V (E32)
- \*2 C906 1000PF 1.5KV (EXCEPT MX)  
C980 3300PF 1.5KV (MX)
- \*3 C903  
1000 250V (MX)  
330 450V (EXCEPT MX)
- \*4 C963,964  
470p 250V (EXCEPT MX)  
2200p 250V (MX)
- \*5 C905  
3300p 630V (EXCEPT MX)  
0.01 630V (MX)
- \*6 C907  
1000p (EXCEPT MX)  
1500p (MX)
- \*7 C910  
22uF (EXCEPT MX)  
47uF (MX)
- \*8 R903,904  
33K (MX)  
100K (EXCEPT MX)
- \*9 R914  
0.1 (EXCEPT MX)  
0.05 (MX)
- \*10 R901  
1M (MX)  
1.5M (EXCEPT MX)

MAIN BOARD (B) CN3000 (Page 35)

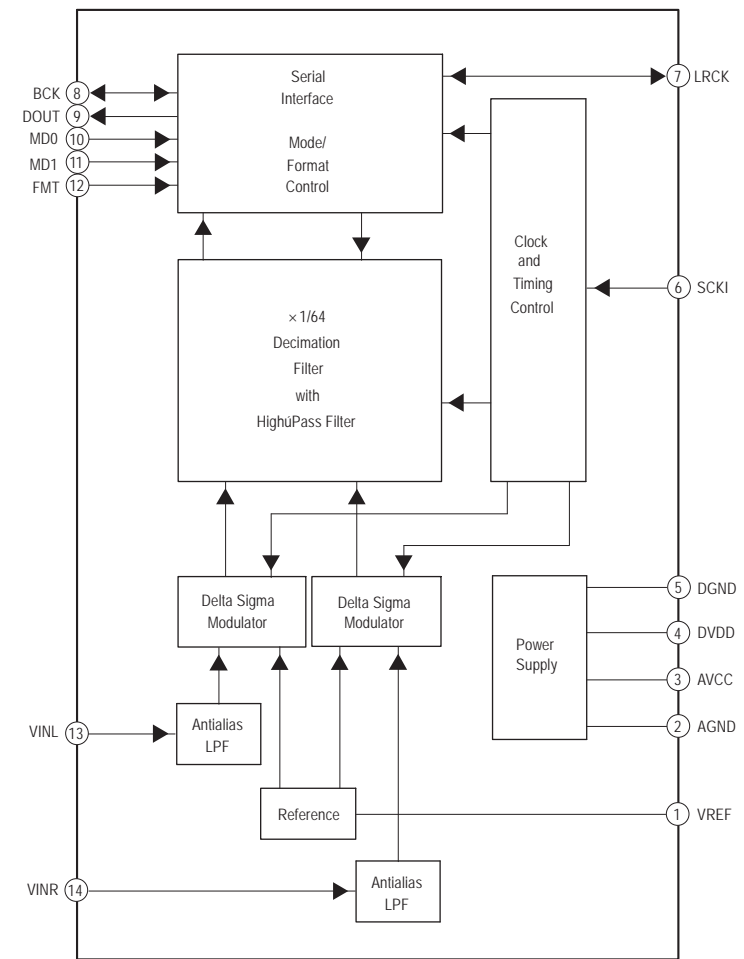
MAIN BOARD (B) CN3000 (Page 33)

• IC Block Diagrams

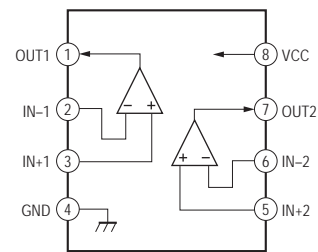
- IC1105 TK11133CSCL-G (MAIN Board (1/8))
- IC1107 TK11133CSCL-G (MAIN Board (1/8))
- IC1707 TK11150CSCL-G (MAIN Board (3/8))
- IC1708 TK11133CSCL-G (MAIN Board (3/8))
- IC4001 TK11190CSCL-G (MAIN Board (5/8))
- IC3006 TK11118CSCL-G (MAIN Board (8/8))
- IC5000 TK11133CSCL-G (FL Board)



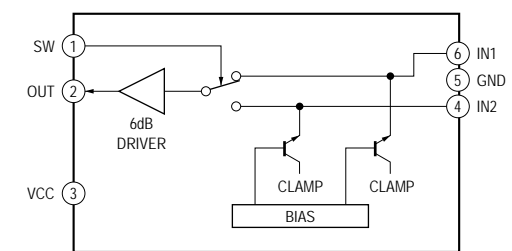
IC4002 PCM1808PWR (MAIN Board (5/8))



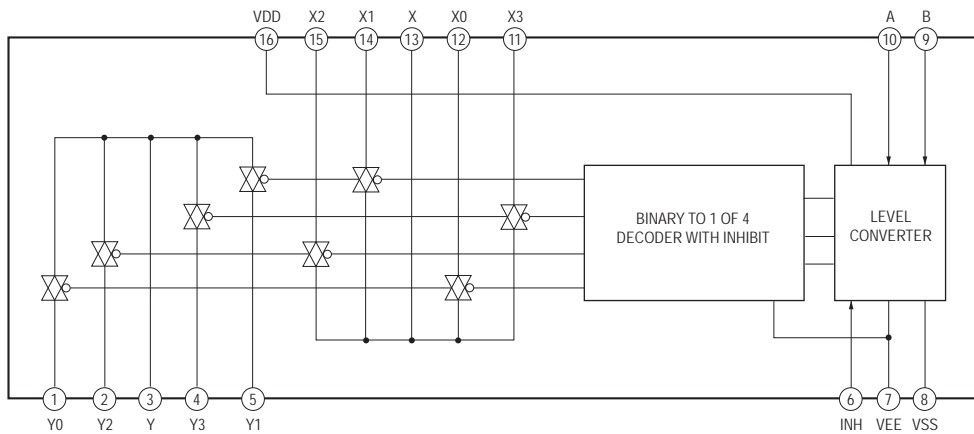
IC2101 NJM2903M-TE2 (MAIN Board (1/8))



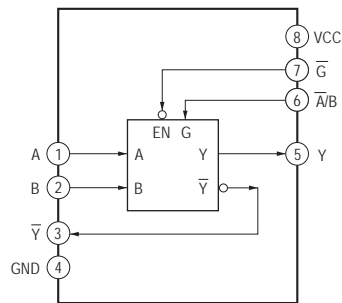
IC4000 MM1508XNRE (MAIN Board (5/8))



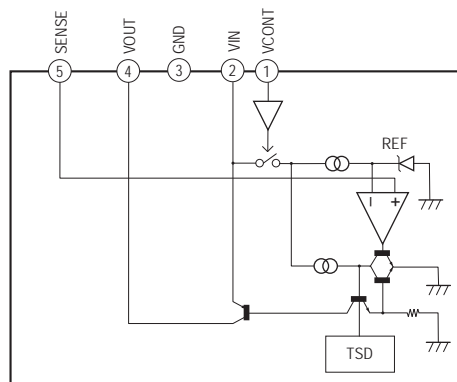
**IC4003 MC14052BDR2 (MAIN Board (5/8))**



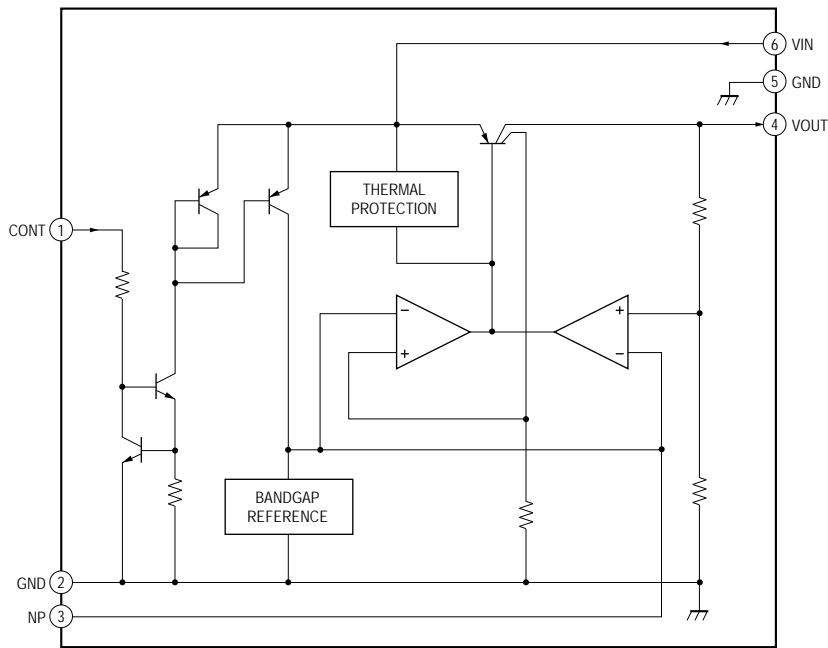
**IC307 TC7WH157FK(TE85R)  
(MAIN Board (5/8))**



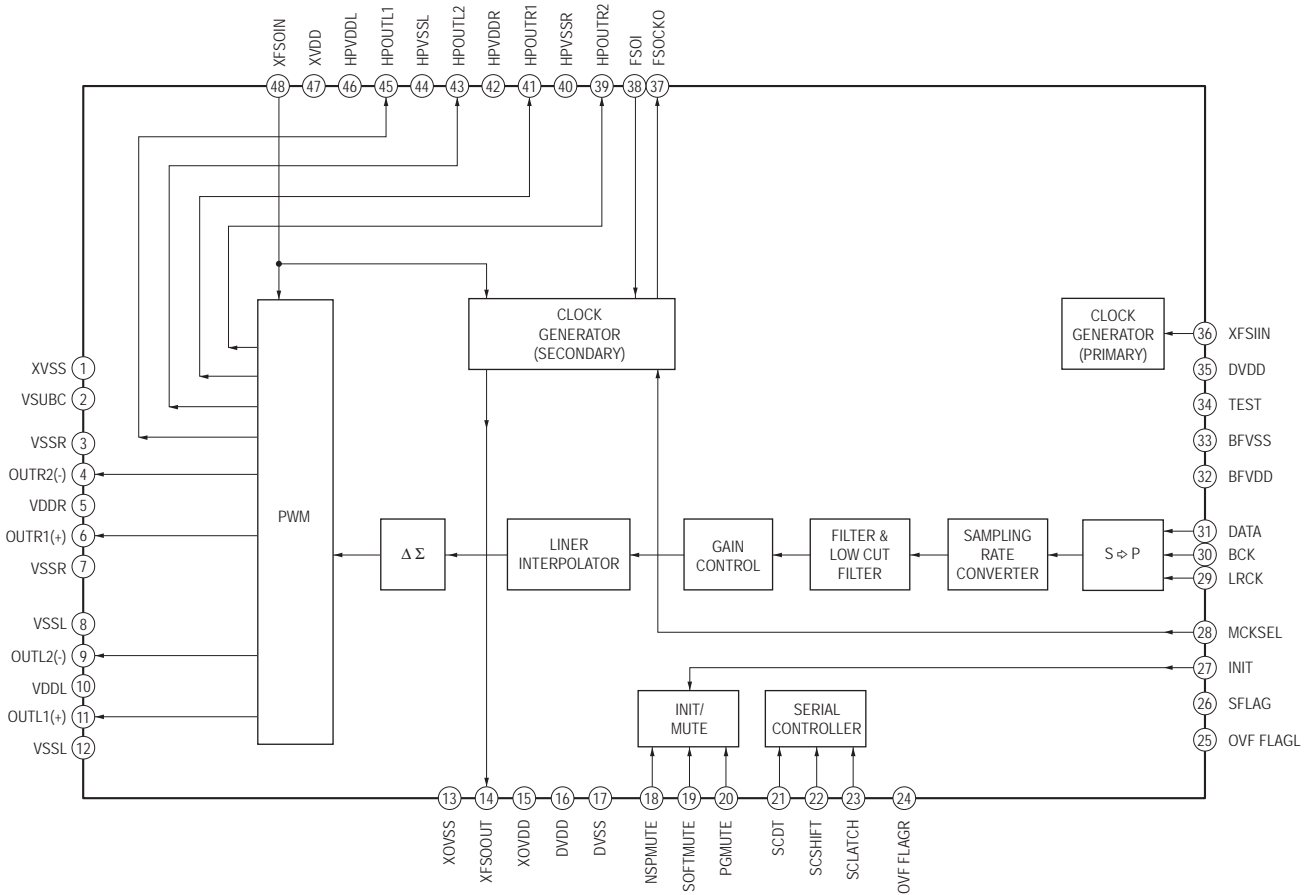
- IC507 SI-3010KM-TLS (MAIN Board (6/8))**
- IC509 SI-3010KM-TLS (MAIN Board (6/8))**
- IC510 SI-3010KM-TLS (MAIN Board (6/8))**
- IC941 SI-3010KM-TLS (POWER Board)**



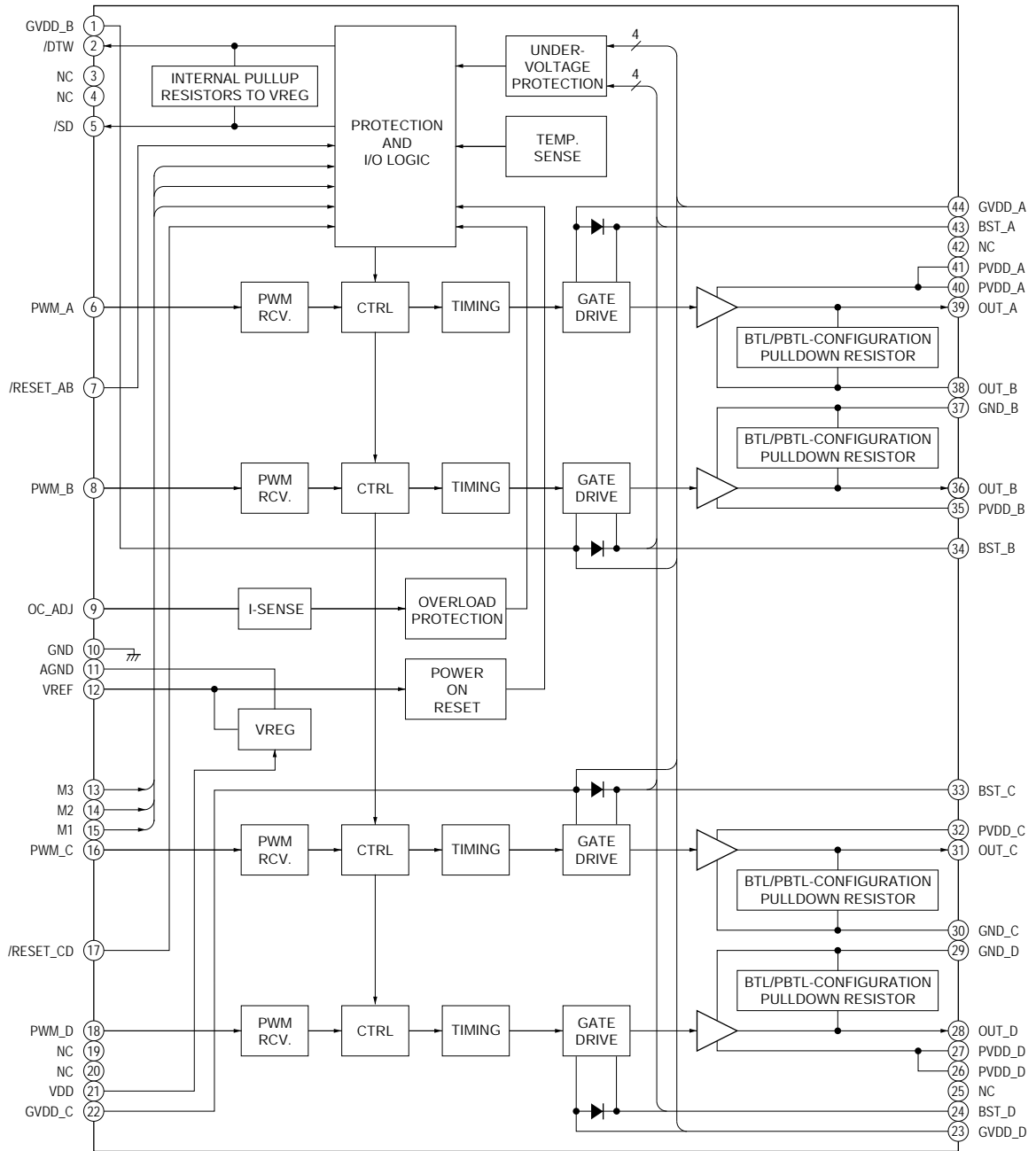
IC504 TK11250CMCL-G (MAIN Board (6/8))



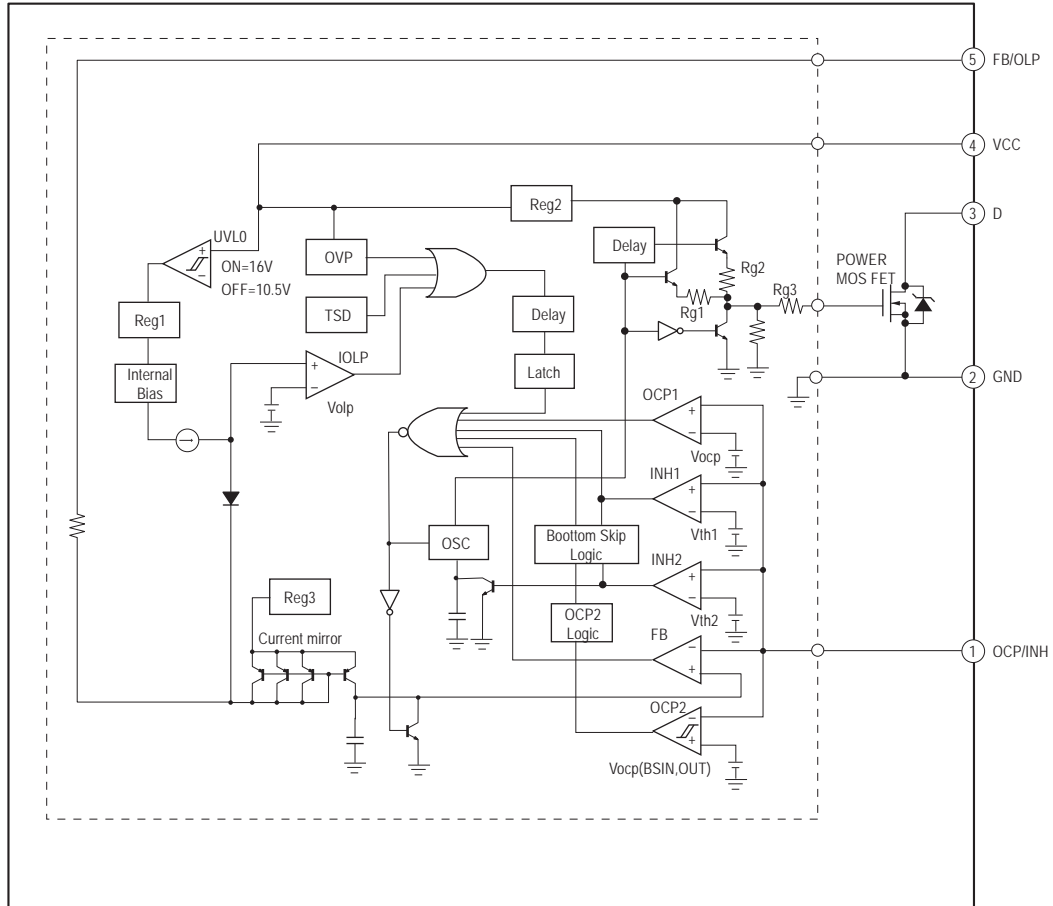
IC3001 CXD9843AR (MAIN Board (7/8))  
 IC3003 CXD9843AR (MAIN Board (7/8))  
 IC3005 CXD9843AR (MAIN Board (8/8))



**IC3000 CXD9965TN (MAIN Board (7/8))**  
**IC3002 CXD9965TN (MAIN Board (7/8))**  
**IC3004 CXD9965TN (MAIN Board (8/8))**



IC901 STR-F6138-LF1352 (POWER Board) (MX model)  
 IC901 STR-F6168-LF1352 (POWER Board) (EXCEPT MX model)



- IC Pin Function Description

**MAIN BOARD (2/8) IC1101 CXD9917R-A**
**(CD/DVD RF AMP, FOCUS/TRACKING ERROR AMP, DVD SYSTEM CONTROL, DPS, USB CONTROL)**

Pin No.	Pin Name	I/O	Description
1	OSN	—	RF offset cancellation capacitor connecting terminal
2	RFGC	I	RF AGC loop capacitor connecting terminal
3	IREF	I	Current reference setting terminal
4	AVDD3	—	Power supply (VDD3.3V)
5	AGND	—	Ground
6	DVDA	I	AC coupled input path A
7	DVDB	I	AC coupled input path B
8	DVDC	I	AC coupled input path C
9	DVDD	I	AC coupled input path D
10	DVDRFIP	I	DC coupled DVD RF signal input RFIP
11	MA	I	DC coupled main-beam RF signal input A
12	MB	I	DC coupled main-beam RF signal input B
13	MC	I	DC coupled main-beam RF signal input C
14	MD	I	DC coupled main-beam RF signal input D
15	SA	—	Not used (Open)
16	SB	—	Not used (Open)
17	TNI	I	DC coupled main-beam RF signal input E
18	TPI	I	DC coupled main-beam RF signal input F
19	MDI1	I	Laser power monitor input
20	MDI2	I	Laser power monitor input
21	LDO2	O	Laser diode (DVD) drive signal output
22	LDO1	O	Laser diode (CD) drive signal output
23	SVDD3	—	Power supply (RF+3.3V)
24	CSO	O	Not used (Open)
25	RFLVL	O	RFRP low pass output
26	SGND	—	Ground
27	V2REFO (2.8V)	O	Reference voltage (2.8V) output
28	V20 (2.0V)	O	Reference voltage (2.0V) output
29	VREFO (1.4V)	O	Reference voltage (1.4V) output
30	FEO	O	Focus error monitor output
31	TEO	O	Tracking error monitor output
32	TEZISLV	O	TE Slicing Level input
33	OP_OUT	O	Op amp output
34	OP_INN	I	Op amp negative input
35	OP_INP	I	Spindle feedback signal input
36	DMO	O	Spindle motor control PWM signal output
37	FMO	O	Sled motor control PWM signal output
38	TROPENPWM	O	Tray Loading motor PWM signal output
39	IOPMON	I	Iop Monitor input
40	TRO	O	Tracking servo control signal output
41	FOO	O	Focus servo control signal output
42	AGND18	—	Ground
43	AVDD18	—	Power supply (+1.8V)
44	USB_DP	I/O	USB port serial data input/output
45	USB_DM	I/O	USB port serial data input/output
46	USB_VDD3	—	USB power supply (+3.3V)
47	USB_VSS	—	USB ground
48	PAD_VRT	—	Not used
49	USB_VDD18	—	Power supply (+1.8V)
50	USB_VSS	I	Ground
51	DIR_ERROR/NC	I	DIR PLL error signal input
52	DIR_AUDIO/NC	I	DIR audio signal input
53	LIMITSW	I	LIMIT SW signal input
54	MSW	O	DVD/CD PD –VR select signal output
55	DVDD18	—	Power supply (+1.8V)
56 to 62	HA2 to HA8	O	Flash ROM address bus A2 to A8 output

# HCD-TZ100/TZ200/TZ300

Pin No.	Pin Name	I/O	Description
63, 64	HA18, HA19	O	Flash ROM address bus A18, A19 output
65	DVDD3	—	Power supply (+3.3V)
66	XWR	O	Flash ROM write signal output
67 to 74	HA16 to HA9	O	Flash ROM address bus A16 to A9 output
75	HA20	O	Flash ROM address bus A20 output
76	XROMCS	O	Flash ROM chip select signal output
77	HA1	O	Flash ROM address bus A1 output
78	XRD	O	Flash ROM read signal output
79, 80	HD0, HD1	I/O	Flash ROM data bus D0, D1 input/output
81	DVSS	—	Ground
82 to 86	HD2 to HD6	I/O	Flash ROM data bus D2 to D6 input/output
87	HA21	I/O	Flash ROM data bus D21 input/output
88	RESERVED	—	Not used (Open)
89	HD7	I/O	Flash ROM data bus D7 input/output
90	DVSS	—	Ground
91, 92	HA17, HA0	O	Flash ROM address bus A17, A0 output
93	DVDD18	O	Flash ROM data bus D18 input/output
94	FWD	O	Tray loading motor control (FWR) signal output
95	REV	O	Tray loading motor control (REV) signal output
96	DVDD3	—	Power supply (+3.3V)
97	IFSDO	O	CPU I/F serial data output
98	IFCK	O	CPU I/F serial clock output
99	xIFCS	O	CPU I/F chip select output
100	IFSDI	I	CPU I/F serial data input
101	SCL	O	EEPROM serial clock output
102	SDA	I/O	EEPROM serial data input/output
103	CKSW	I	Chuck/Tray detect switch signal input
104	OCSW	I	Chuck/Tray detect switch signal input
105	RXD	I	RXD signal input from service connector
106	TXD	O	TXD signal output to service connector
107	ICE	O	Not used (Open)
108	xSYRST	I	System reset signal input
109	RESERVED	I	Not used (Open)
110	xIFBSY	I	Busy signal input from CPU I/F
111	DQM0	O	SDRAM lower byte mask signal output
112	EEWP	O	EEPROM ready/Busy wake up signal output
113 to 117	RD7 to RD3	I/O	SDROM data bus D7 to D3 input/output
118	DVDD3	—	Power supply (+3.3V)
119 to 121	RD2 to RD0	I/O	SDROM data bus D2 to D0 input/output
122 to 129	RD15 to RD8	I/O	SDROM data bus D15 to D8 input/output
130	TSD_M	I	TSD signal input
131	DVDD3	—	Power supply (+3.3V)
132	DQM1	O	SDRAM lower byte mask signal output
133	_RWE	O	SDRAM write enable signal output
134	_CAS	O	SDRAM column address strobe signal output
135	_RAS	O	SDRAM row address strobe signal output
136	_RCS	O	SDRAM chip select signal output
137, 138	BA0, BA1	O	SDRAM bank address 0, 1 output
139	RA10	O	SDRAM address bus A10 output
140, 141	RA0, RA1	O	SDRAM address bus A0, A1 output
142	DVDD18	—	Power supply (+1.8V)
143, 144	RA2, RA3	O	SDRAM address bus A0, A3 output
145	DVDD3	—	Power supply (+3.3V)
146	DRCLK	O	SDRAM clock output
147	CKE	O	SDRAM clock enable signal output
148	DVSS	—	Ground
149	RA11	O	SDRAM address bus A11 output
150 to 155	RA9 to RA4	O	SDRAM address bus A9 to A4 output
156	DVDD3	—	Power supply (+3.3V)



Pin No.	Pin Name	I/O	Description
157	MUTE123	O	Mute signal output for Focus/Tracking/Sledding
158	MUTE	O	Mute signal output for Spindle motor
159	DDC_DA	I/O	HDMI DDC line data input/output
160	DVDD18	—	Power supply (+1.8V)
161	DDC_CLK	I/O	HDMI DDC line clock input/output
162	HTPLG	I	HDMI HPD signal input
163	AGND3	—	Ground
164	EXT_RES	I	Ext. resistor connected terminal
165, 166	AVDD3	—	Power supply (+3.3V)
167	EXT_CAP	I	Ext. capacitor connected terminal
168, 169	AGND3, AGND18	—	Ground
170	TXCN	O	HDMI TXD-clock output
171	TXCP	O	HDMI TXD-clock output
172	AVDD18	—	Power supply (+1.8V)
173	TX0N	O	HDMI TXD-0 output
174	TX0P	O	HDMI TXD-0 output
175	AGND18	—	Power supply (+1.8V)
176	TX1N	O	HDMI TXD-1 output
177	TX1P	O	HDMI TXD-1 output
178	AVDD18	—	Power supply (+1.8V)
179	TX2N	O	HDMI TXD-2 output
180	TX2P	O	HDMI TXD-2 output
181	AGND18	—	Power supply (+1.8V)
182	R/Cr/Pr	—	Not used (Open)
183	B/Cb/Pb	—	Not used (Open)
184	DACVSSA	—	Ground
185	Y/G	—	Not used (Open)
186	DACVDDA	—	Power supply (+3.3V)
187	CVBS	O	Video Composite signal output
188	DACVSSB	—	Ground
189	C	—	Not used (Open)
190	DACVddb	—	Power supply (+3.3V)
191	Y	—	Not used (Open)
192	DACVSSC	—	Ground
193	FS	I	Full Scale Adjustment setting terminal
194	VREF	I	Reference Voltage input terminal
195	DACVDDC	—	Power supply (+3.3V)
196	VBUS_OE	O	VBUS power control signal output
197	VBUS_OC	I	VBUS over current detect signal input
198	SCORE/DIR_XSTATE	—	Not used (Connected to ground)
199	SPMCK	—	Not used (Connected to ground)
200	SPBCK	—	Not used (Connected to ground)
201	SPLRCK	—	Not used (Connected to ground)
202	ADIN (SPDATA)	—	Not used (Connected to ground)
203	ACLK	O	A/D converter and DAMP clock output
204	ABCK	O	A/D converter and DAMP BCK clock output
205	ALRCK	O	A/D converter and DAMP LRCK clock output
206	MC_DATA (ADIN)	I	A/D converter data input
207	DVDD3	—	Power supply (+3.3V)
208	MIC	—	Not used (Connected to ground)
209	WIDE	—	Not used (Open)
210	RGB_SEL/DSEL	—	Not used (Open)
211	TRG_SW	—	Not used (Pull up)
212	DVDD18	—	Power supply (+3.3V)
213	KMOD	O	Not used (Pull down)
214	XVOICE/DIR_CSFLAG	—	Not used (Connected to ground)
215	SPDIF	O	Not used (Open)
216	APLLVDD3	—	Power supply (+3.3V)
217	APLLCAP	—	Ext capacitor connected terminal

# HCD-TZ100/TZ200/TZ300

Pin No.	Pin Name	I/O	Description
218	APLLVSS	—	Ground
219	ADACVSS2	—	Ground
220	ADACVSS1	—	Ground
221	DIR_CE	—	Not used (Open)
222	ASDATA3	—	Not used (Open)
223	ASDATA2	O	Audio digital signal output to D-AMP
224	AVCM	—	Ext capacitor connected terminal
225	ASDATA1	O	Audio digital signal output to D-AMP
226	ASDATA0	O	Audio digital signal output to D-AMP
227	DIR_CL	—	Not used (Open)
228	ADACVDD1	—	Power supply (+3.3V)
229	ADACVDD2	—	Power supply (+3.3V)
230	Rt/DIR_DI	—	Not used (Open)
231	Lt/DIR_DO	—	Not used (Pull down)
232	ADACVSS1	—	Ground
233	ADACVDD1	—	Power supply (+3.3V)
234	SADCVDD18	—	Power supply (+1.8V)
235	SADCVSS18	—	Ground
236	RFGND18	—	Ground
237	RFVDD18	—	Power supply (+1.8V)
238	XTALO	O	Crystal output for main clock (27MHz)
239	XTALI	I	Crystal input for main clock (27MHz)
240	JITFO	O	The output terminal of RF jitter meter
241	JITFN	I	The input terminal of RF jitter meter
242	PLLVSS	—	Ground
243	PLLVDD3	—	Power supply (+3.3V)
244	LPFON	O	The negative output of loop filter amplifier
245	LPFIP	I	The positive input terminal of loop filter amplifier
246	LPFIN	I	The negative input terminal of loop filter amplifier
247	LPFOP	O	The positive output of loop filter amplifier
248	ADCVDD3	—	Power supply (+3.3V)
249	ADCVSS	—	Ground
250	RFVDD3	—	Power supply (+3.3V)
251	RFRPDC	O	RF ripple detect output
252	RFRPAC	I	RF ripple detect input (through AC-coupling)
253	HRFZC	I	High frequency RF ripple zero crossing
254	CRTPLP	O	Defect level filter capacitor connected terminal
255	RFGND18	—	Power supply (+3.3V)
256	OSP	O	RF offset cancellation capacitor connecting terminal

## MAIN BOARD (6/8) IC503 R5F3640DDFAR (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	DAMP_SCDT/DIR_DIN	O	DAMP processor data signal output
2	DAMP_SHIFT/DIR_CLK	O	DAMP processor clock signal output
3	FL_CS	O	FL driver chip select signal output
4	SIRCS_IN	I	Sircs signal input
5	FL_DATA/LED_DATA	O	FL driver data output
6	CEC_RX_IN	I	CEC data input
7	FL_CLK/LED_CLK	O	FL driver clock output
8	BYTE	I	External data bus input. (Connected to ground)
9	CNVSS	I	Change processor mode input
10	DIR_ERROR	—	Not used (Connected to ground)
11	DIR_RST	—	Not used (Open)
12	RESET	I	System reset signal input
13	XOUT	O	Crystal output for main clock (5MHz)
14	VSS	—	Ground
15	XIN	I	Crystal input for main clock (5MHz)
16	VCC	—	Power supply (+3.3V)
17	DIR_XSTATE	—	Not used (Connected to ground)
18	DIR_ZERO	—	Not used (Connected to ground)
19	DIR_CSFLAG	—	Not used (Connected to ground)
20	AC_CUT	I	AC-CUT detect signal input
21	DSP_SF_CE	—	Not used (Open)
22	DSP_MISO	—	Not used (Connected to ground)
23	DSP_SPICLK	—	Not used (Open)
24	DSP_MOSI	—	Not used (Open)
25	DSP_SPIDS	—	Not used (Open)
26	CEC_TX_OUT	O	CEC data output
27	DSP_RESET	—	Not used (Open)
28	DIR_HCE	—	Not used (Open)
29	E2P_CLK/S-AIR_CLK	I/O	EEPROM serial clock input/output
30	E2P_SDA/S-AIR_SDA	I/O	EEPROM serial data input/output
31	I2C_DATA/TXD1	I/O	Flash Write TXD data input/output
32	I2C_CLK/RXD1	I/O	Flash Write RXD data input/output
33	S-AIR_GPIO2/CLK1	I	Flash Write CLK signal input
34	S-AIR_DET/RST1	I	Flash Write RST signal input
35	DMP_TX_OUT	—	Not used (Open)
36	DMP_RX_IN	—	Not used (Connected to ground)
37	S-AIR_RST/ C_SWR_SEL	—	Not used (Open)
38	S-AIR_ADC_SEL DRIVER_C_EN	—	Not used (Open)
39	P_CONT1	O	Power control signal output
40	P_CONT2	O	Power control signal output (Not used in this set)
41	WRITE EMP P_CONT3	O	Power control signal output
42	DC_CONT	—	Not used (Open)
43	MIC_GAIN	—	Not used (Open)
44	CDM_OPEN_SW	I	CDM open switch signal input
45	DVD_RST	O	Reset signal output
46	WRITE CE	I	Flash Write CE (Connected to ground)
47	DVD_SDI	O	Serial data output to CDX9917R
48	DVD_SDO	I	Serial data input from CDX9917R
49	DVD_SCO	I	Serial clock input from CDX9917R
50	DVD_XIFBUSY	O	Busy request signal output to CDX9917R
51	DVD XIFCS	I	Chip select signal input
52	PVDD_CON	O	DAMP power (PVDD) control signal output
53	PVDD-MON	I	Power supply (D3.3V) monitor input
54	DRIVER_RST(EN)	O	DAMP driver reset signal output
55	OVERFLOW1	I	DAMP processor F/C/S over flow detect signal input
56	OVERFLOW2	I	DAMP processor SW over flow detect signal input
57	DAMP_INIT	O	DAMP processor reset signal output

# HCD-TZ100/TZ200/TZ300

Pin No.	Pin Name	I/O	Description
58	SOFT MUTE	O	DAMP processor soft muting signal output
59	DAMP LAT1	O	DAMP processor latch-1 signal output
60	DAMP LAT2	O	DAMP processor latch-2 signal output
61	DAMP LAT3	O	DAMP processor latch-3 signal output
62	VCC	—	Power supply (BUP+3.3V)
63	LINK_SW	O	LINK control signal output
64	VSS	—	Ground
65	JACK1/JACK2/DMP_DET	—	Not used (Connected to ground)
66	DC_DET	I	Speaker DC balance protect signal input
67	SD/PVDD_DET	I	D-AMP driver shut down signal and PVDD detect signal input
68	A.CAL_OUT/DSP_INTR	—	Not used (Connected to ground)
69	SACD_SEL/NSPMUTE	—	Not used (Open)
70	EHDMI_SEL	—	Not used (Open)
71	S_AIR_Rcv_SEL	—	Not used (Open)
72	HDMI_PCONT	—	Not used (Open)
73	KEY_INT	I	Wakeup signal input from function key
74	RDS-DATA	—	Not used (Connected to ground)
75	RDS_CLK	—	Not used (Connected to ground)
76	ST_CE	O	TUNER chip enable signal output
77	ST_DI/MIC_DATA	O	TUNER serial data output
78	ST_DO	I	TUNER serial data input
79	ST_CLK/MIC_CLK	O	TUNER serial clock output
80	TUNED	I	TUNER TUNED signal input
81	V_SEL0	O	Video select signal output
82	V_SEL1	O	Video select signal output (Not used in this set)
83	VSEL_2	O	Video select signal output (Not used in this set)
84	IO_CE/ASEL0	O	Audio select signal output
85	IO_RESET/ASEL1	O	Audio select signal output (Not used in this set)
86	IO_DI/ASEL2	O	Audio select signal output (Not used in this set)
87	IO_DO/ASEL3	O	Audio select signal output (Not used in this set)
88	IO_CLK/ASEL4	O	Audio select signal output (Not used in this set)
89	ASEL5	O	Audio select signal output (Not used in this set)
90	MONO/ST_DET	I	Not used (Connected to ground)
91	A.CAL MIC LEVEL/ DSP_MASTER	I	Not used (Connected to ground)
92	DESTINATION	I	Destination select input
93	MODEL	I	Model select input
94	KEY2	I	Key 2 input
95	KEY1	I	Key 1 input
96	VSS	—	Ground
97	KEY0	I	Key 0 input
98	Vref	—	Reference voltage (3.3V)
99	VCC	—	Power supply (+3.3V)
100	DIR_HDOUT	O	Not used (Pull up)

## SECTION 6 EXPLODED VIEWS

**Note:**

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

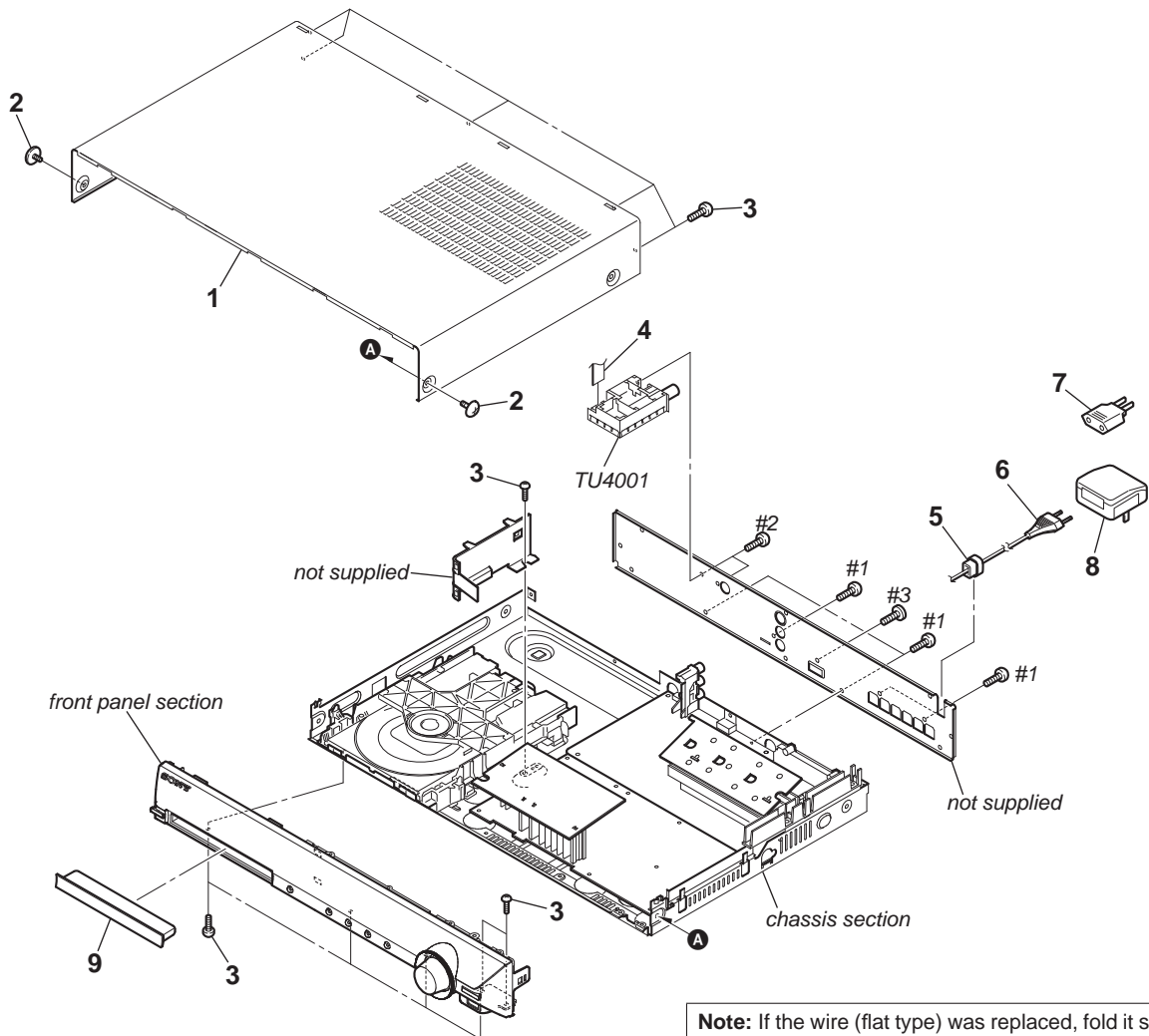
• Abbreviation

- AR : Argentina model
- AUS : Australian model
- E3 : 240V AC area in E model
- E12 : 220 – 240V AC area in E model
- E32 : 110 – 240V AC area in E model
- EA : Saudi Arabia model
- MX : Mexican model
- PH : Philippines model
- SAF : South African model
- SP : Singapore model
- TH : Thai model

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

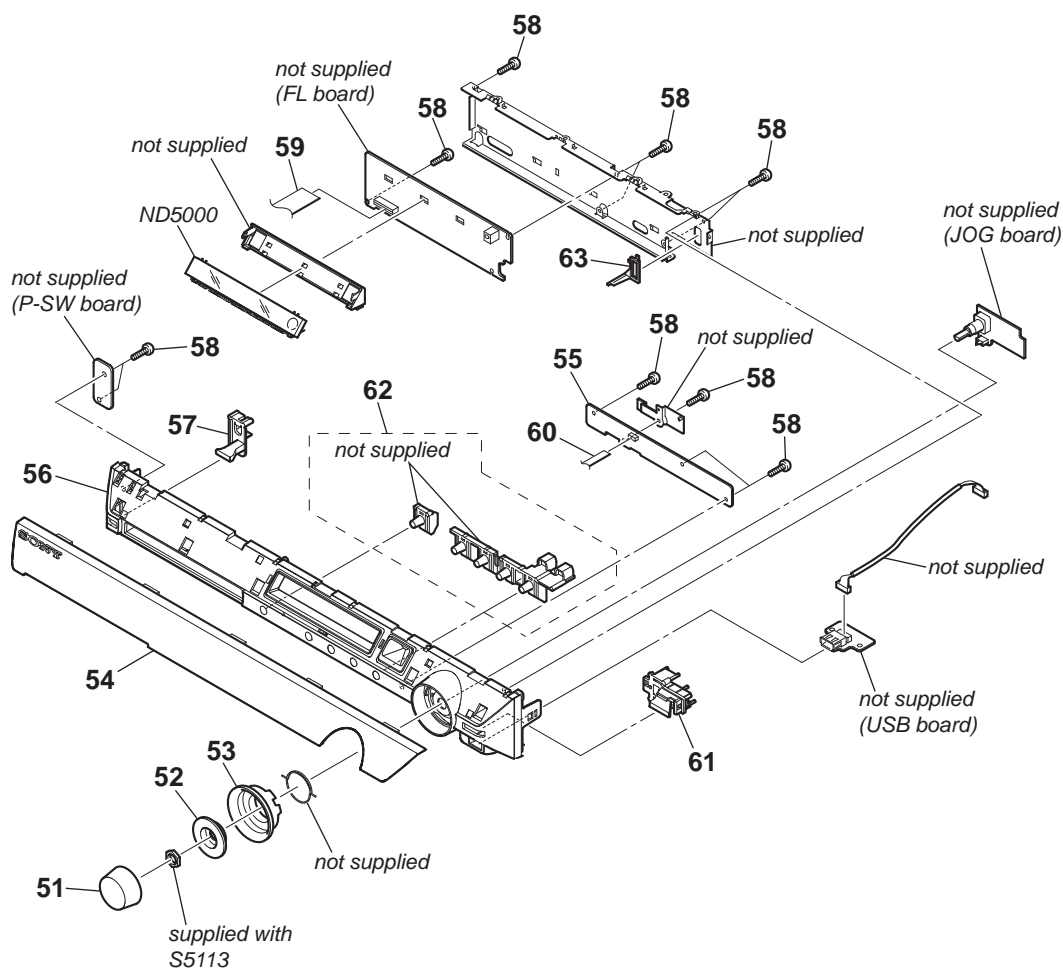
The components identified by mark  $\square$  contain confidential information.  
Strictly follow the instructions whenever the components are repaired and/or replaced.

### 6-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-121-419-01	CASE (KY)		$\triangle$ 6	1-835-068-21	CORD, POWER (AUS)	
2	3-363-099-22	SCREW (CASE 3 TP2)		$\triangle$ 6	1-835-080-21	CORD, POWER (MX)	
3	3-077-331-21	+BV3 (3-CR)		$\triangle$ 7	1-569-008-33	ADAPTOR, CONVERSION (E32,AR)	
4	1-828-955-11	WIRE (FLAT TYPE) (9 CORE)		$\triangle$ 8	1-770-019-71	ADAPTOR, CONVERSION PLUG 3P (EA)	
5	3-703-244-00	BUSHING, CORD (2104) (EXCEPT MX,TH)		9	4-113-420-11	PANEL, LOADING (DSY)	
5	3-703-571-11	BUSHING, CORD (4516) (MX)		TU4001	1-693-771-22	TUNER (FM) (ANTENNA) (SAF)	
5	4-916-783-01	BUSHING, CORD (TH)		TU4001	1-693-780-21	TUNER (FM) (ANTENNA) (EXCEPT SAF)	
$\triangle$ 6	1-829-387-11	CORD, POWER (AR)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
$\triangle$ 6	1-834-288-11	CORD, POWER (TH)		#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
$\triangle$ 6	1-834-966-41	POWER-SUPPLY CORD	(EXCEPT MX,AUS,AR,TH)	#3	7-682-547-04	SCREW +B 3X6	

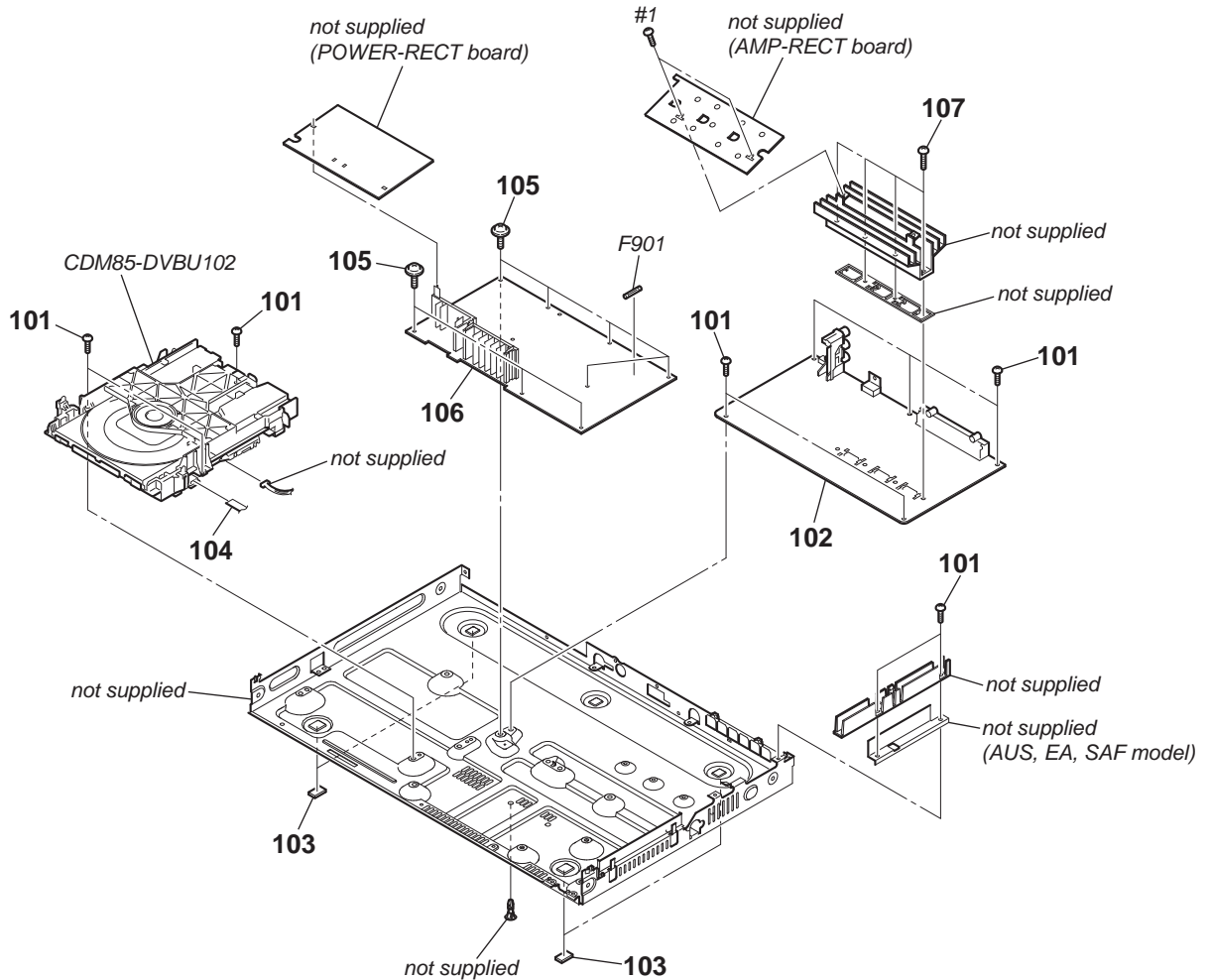
## 6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-113-417-21	KNOB (DSY)		57	4-121-416-11	BUTTON (USB)	
52	4-113-419-01	KNOB BASE (SHUTTLE-DSY)		58	3-087-053-01	+BVTP2.6 (3CR)	
53	4-113-418-11	KNOB (SHUTTLE-DSY)		59	1-828-322-11	WIRE (FLAT TYPE) (11 CORE)	
54	4-121-413-01	WINDOW, INDICATION (KY) (TZ200)		60	1-828-287-11	WIRE (FLAT TYPE) (5 CORE)	
54	4-121-413-11	WINDOW, INDICATION (KY) (TZ300)		61	4-121-416-21	BUTTON (USB)	
54	4-121-413-21	WINDOW, INDICATION (KY) (TZ100)		62	4-113-422-11	BUTTON (PLAY-DSY)	
55	A-1671-518-A	KEY BOARD, COMPLETE		63	4-121-416-41	BUTTON (USB)	
56	4-121-412-01	PANEL, FRONT (KY)		ND5000	1-483-087-11	INDICATOR TUBE, FLUORESCENT	

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

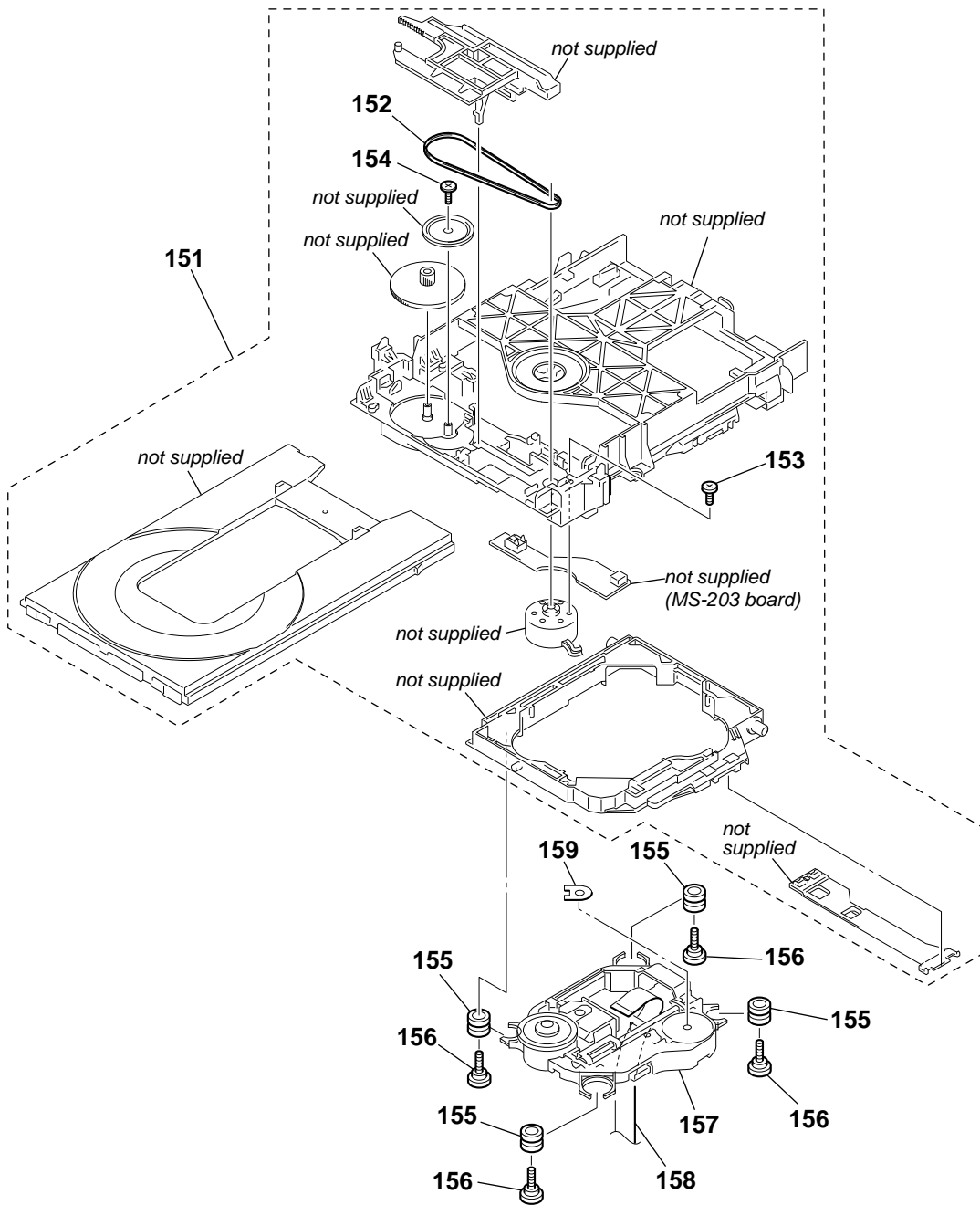
6-3. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	101	3-077-331-21	+BV3 (3-CR)		105	2-677-839-01	+PWH 3X8 (SUMITITE)
Ⓒ	102	A-1671-523-A	MAIN BOARD, COMPLETE (TZ200:E12)		106	A-1650-284-A	POWER BOARD, COMPLETE (EXCEPT MX,E32)
Ⓒ	102	A-1671-531-A	MAIN BOARD, COMPLETE (TZ200:E3)		106	A-1650-286-A	POWER BOARD, COMPLETE (MX)
Ⓒ	102	A-1671-539-A	MAIN BOARD, COMPLETE (TZ200:PH,SP,TH)		106	A-1650-288-A	POWER BOARD, COMPLETE (E32)
Ⓒ	102	A-1671-555-A	MAIN BOARD, COMPLETE (TZ200:E32,AR)		107	3-077-331-11	+BV3 (3-CR)
Ⓒ	102	A-1671-563-A	MAIN BOARD, COMPLETE (TZ100/TZ200:MX)	△	F901	1-533-311-12	FUSE, GLASS CYLINDRICAL (DIA. 5) (8A/250V) (MX)
Ⓒ	102	A-1671-580-A	MAIN BOARD, COMPLETE (TZ300)	△	F901	1-576-232-51	FUSE (H.B.C.) (T5AH/250V) (EXCEPT MX,E32)
Ⓒ	102	A-1726-949-A	MAIN BOARD, COMPLETE (TZ200:EA,SAF)	△	F901	1-576-233-51	FUSE (H.B.C.) (T6.3AH/250V) (E32)
Ⓒ	102	A-1726-961-A	MAIN BOARD, COMPLETE (TZ200:AUS)	#1	#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
	103	4-151-413-01	CUSHION (EGD)				
	104	1-828-291-11	WIRE (FLAT TYPE) (5 CORE)				

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

## 6-4. DVD MECHANISM DECK SECTION (CDM85-DVBU102)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	A-6071-669-A	LOADING ASSY (M)		156	3-087-599-01	SCREW, INSULATOR	
152	3-088-371-01	BELT		△ 157	8-820-321-12	OPTICAL PICK-UP (KHM-313CAA/C2RP1)	
153	4-974-725-11	SCREW (M1.7X2.5), P		158	1-828-773-51	WIRE (FLAT TYPE) (24 CORE)	
154	4-674-137-11	SCREW (PTP2X5)		159	3-113-851-01	SHEET	
155	2-634-618-01	INSULATOR					

**Note:** If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.



## SECTION 7 ELECTRICAL PARTS LIST

**Note:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA. . . :  $\mu$ A. . . , uPA. . . ,  $\mu$ PA. . . ,  
uPB. . . :  $\mu$ PB. . . , uPC. . . ,  $\mu$ PC. . . ,  
uPD. . . :  $\mu$ PD. . .
- Abbreviation  
AR : Argentina model  
AUS : Australian model  
E3 : 240V AC area in E model  
E12 : 220 – 240V AC area in E model  
E32 : 110 – 240V AC area in E model  
EA : Saudi Arabia model  
MX : Mexican model  
PH : Philippines model  
SAF : South African model  
SP : Singapore model  
TH : Thai model

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

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

The components identified by mark  $\hat{\triangle}$  contain confidential information.  
Strictly follow the instructions whenever the components are repaired and/or replaced.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		FL BOARD *****				< FLUORESCENT INDICATOR TUBE >	
		< CAPACITOR >					
C5000	1-165-989-11	CERAMIC CHIP	10uF 10%				6.3V
C5002	1-126-382-11	ELECT	100uF 20%				16V
C5003	1-107-826-11	CERAMIC CHIP	0.1uF 10%				16V
C5004	1-162-968-11	CERAMIC CHIP	0.0047uF 10%				50V
C5005	1-163-037-11	CERAMIC CHIP	0.022uF 10%				50V
C5006	1-165-908-11	CERAMIC CHIP	1uF 10%				10V
C5007	1-165-908-11	CERAMIC CHIP	1uF 10%				10V
C5008	1-162-974-11	CERAMIC CHIP	0.01uF				50V
C5009	1-119-943-11	ELECT	47uF 20%				50V
C5010	1-107-826-11	CERAMIC CHIP	0.1uF 10%				16V
C5011	1-126-157-11	ELECT	10uF 20%				16V
C5012	1-107-826-11	CERAMIC CHIP	0.1uF 10%				16V
C5020	1-126-157-11	ELECT	10uF 20%				16V
C5021	1-162-970-11	CERAMIC CHIP	0.01uF 10%				25V
C5061	1-162-964-11	CERAMIC CHIP	0.001uF 10%				50V
		< CONNECTOR >					
CN5000	1-779-273-11	CONNECTOR, FFC (LIF(NON-ZIF))	5P				
CN5005	1-779-279-11	CONNECTOR, FFC (LIF(NON-ZIF))	11P				
		< DIODE >					
D5000	6-500-848-01	DIODE	MC2840-T112-1				
D5001	6-500-848-01	DIODE	MC2840-T112-1				
D5002	6-501-729-01	DIODE	MAZ8051GLLS0				
D5006	6-501-817-01	DIODE	MA2J1110GLS0				
		< IC >					
IC5000	6-702-302-01	IC	TK11133CSCL-G				
IC5001	6-713-497-01	IC	HT16515				
IC5002	6-600-349-21	IC	NJL23H400A (IR)				
		< JUMPER RESISTOR >					
JR5001	1-216-295-11	SHORT CHIP	0				
JR5002	1-216-296-11	SHORT CHIP	0				
JR5003	1-216-296-11	SHORT CHIP	0				
		< COIL >					
L5000	1-410-671-31	INDUCTOR	47uH				
L5001	1-410-671-31	INDUCTOR	47uH				
L5002	1-410-671-31	INDUCTOR	47uH				
		< TRANSISTOR >					
ND5000	1-483-087-11	INDICATOR TUBE, FLUORESCENT					
		< RESISTOR >					
Q5000	6-550-065-01	TRANSISTOR	CPH5504-TL-E				
R5000	1-216-828-11	METAL CHIP	3.9K 5%				1/10W
R5001	1-216-827-11	METAL CHIP	3.3K 5%				1/10W
R5003	1-216-813-11	METAL CHIP	220 5%				1/10W
R5004	1-216-813-11	METAL CHIP	220 5%				1/10W
R5005	1-216-813-11	METAL CHIP	220 5%				1/10W
R5006	1-216-839-11	METAL CHIP	33K 5%				1/10W
R5007	1-216-813-11	METAL CHIP	220 5%				1/10W
R5008	1-216-805-11	METAL CHIP	47 5%				1/10W
R5009	1-216-805-11	METAL CHIP	47 5%				1/10W
R5010	1-216-809-11	METAL CHIP	100 5%				1/10W
R5011	1-216-809-11	METAL CHIP	100 5%				1/10W
R5012	1-216-809-11	METAL CHIP	100 5%				1/10W
R5013	1-216-844-11	METAL CHIP	82K 5%				1/10W
R5018	1-216-805-11	METAL CHIP	47 5%				1/10W
R5083	1-216-813-11	METAL CHIP	220 5%				1/10W
R5084	1-216-813-11	METAL CHIP	220 5%				1/10W
		< TRANSFORMER >					
T5000	1-443-645-11	TRANSFORMER, DC CONVERTER					
*****							
		JOG BOARD *****					
		< CAPACITOR >					
C5111	1-162-970-11	CERAMIC CHIP	0.01uF 10%				25V
C5112	1-162-970-11	CERAMIC CHIP	0.01uF 10%				25V
		< RESISTOR >					
R5124	1-216-825-11	METAL CHIP	2.2K 5%				1/10W
R5125	1-216-833-11	METAL CHIP	10K 5%				1/10W
R5126	1-216-837-11	METAL CHIP	22K 5%				1/10W
R5127	1-216-829-11	METAL CHIP	4.7K 5%				1/10W
R5128	1-216-829-11	METAL CHIP	4.7K 5%				1/10W
R5129	1-216-864-11	SHORT CHIP	0				

# HCD-TZ100/TZ200/TZ300

Ver. 1.1

**JOG** **KEY** **MAIN**

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S5111	1-786-289-11	SWITCH, DETECTION (OPERATION DIAL, ►►/◄◄)	
S5113	1-480-136-11	ENCODER, ROTARY (12 TYPE) (VOL)	
S5114	1-762-875-21	SWITCH, KEYBOARD (REC TO USB)	
*****			
	A-1671-518-A	KEY BOARD, COMPLETE *****	
		< CONNECTOR >	
CN5100	1-564-704-41	PIN, CONNECTOR (SMALL TYPE) 2P	
CN5101	1-779-273-11	CONNECTOR, FFC (LIF(NON-ZIF)) 5P	
		< RESISTOR >	
R5017	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R5113	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R5114	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R5115	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R5116	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R5122	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R5123	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
		< SWITCH >	
S5100	1-762-875-21	SWITCH, KEYBOARD (▲)	
S5101	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)	
S5102	1-762-875-21	SWITCH, KEYBOARD (■)	
S5103	1-762-875-21	SWITCH, KEYBOARD (■)	
S5109	1-762-875-21	SWITCH, KEYBOARD (▶)	
*****			
☐	A-1671-523-A	MAIN BOARD, COMPLETE (TZ200:E12)	
☐	A-1671-531-A	MAIN BOARD, COMPLETE (TZ200:E3)	
☐	A-1671-539-A	MAIN BOARD, COMPLETE (TZ200:PH,SP,TH)	
☐	A-1671-555-A	MAIN BOARD, COMPLETE (TZ200:E32,AR)	
☐	A-1671-563-A	MAIN BOARD, COMPLETE (TZ100/TZ200:MX)	
☐	A-1671-580-A	MAIN BOARD, COMPLETE (TZ300)	
☐	A-1726-949-A	MAIN BOARD, COMPLETE (TZ200:EA,SAF)	
☐	A-1726-961-A	MAIN BOARD, COMPLETE (TZ200:AUS) *****	
		< CAPACITOR >	
C333	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C334	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C471	1-124-584-00	ELECT 100uF 20% 6.3V	
C476	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C500	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C511	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C512	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C513	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C514	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C515	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C516	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C517	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C518	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C519	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C520	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C521	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C522	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C523	1-127-715-11	CERAMIC CHIP 0.22uF 10% 16V	
C524	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C525	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	

Ref. No.	Part No.	Description	Remark
C526	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C527	1-164-227-11	CERAMIC CHIP 0.022uF 10% 25V	
C528	1-126-916-11	ELECT 1000uF 20% 6.3V	
C529	1-104-658-11	ELECT 100uF 20% 10V	
C530	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C531	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C532	1-126-933-11	ELECT 100uF 20% 16V	
C536	1-126-916-11	ELECT 1000uF 20% 6.3V	
C537	1-104-658-11	ELECT 100uF 20% 10V	
C538	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C539	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C540	1-126-933-11	ELECT 100uF 20% 16V	
C541	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C543	1-126-965-11	ELECT 22uF 20% 50V	
C544	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C545	1-104-658-11	ELECT 100uF 20% 10V	
C546	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C550	1-100-566-11	CERAMIC CHIP 0.1uF 10% 25V	
C551	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C552	1-126-933-11	ELECT 100uF 20% 16V	
C553	1-126-935-11	ELECT 470uF 20% 16V	
C1101	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1102	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1105	1-126-947-11	ELECT 47uF 20% 35V	
C1106	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1108	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1109	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1110	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1111	1-104-658-11	ELECT 100uF 20% 10V	
C1112	1-126-947-11	ELECT 47uF 20% 35V	
C1113	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1114	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1115	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1116	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1117	1-126-947-11	ELECT 47uF 20% 35V	
C1118	1-126-947-11	ELECT 47uF 20% 35V	
C1119	1-126-947-11	ELECT 47uF 20% 35V	
C1120	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1121	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1122	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1123	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1124	1-165-908-11	CERAMIC CHIP 1uF 10% 10V	
C1125	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1126	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1127	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1129	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V	
C1130	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1132	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1133	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1135	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C1136	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1137	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1138	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C1139	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C1140	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1144	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C1145	1-126-964-11	ELECT 10uF 20% 50V	
C1146	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1147	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
C1148	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C1149	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C1233	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C1151	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C1725	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1152	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C1727	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1153	1-162-916-11	CERAMIC CHIP	12PF	5%	50V	C1729	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C1730	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C1731	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C1732	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1158	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C1733	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1159	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C1734	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2100	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1161	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2101	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1162	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1163	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1164	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2108	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1165	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2109	1-104-658-11	ELECT	100uF	20%	10V
C1169	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2110	1-104-658-11	ELECT	100uF	20%	10V
C1170	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V	C2112	1-126-923-11	ELECT	220uF	20%	10V
C1171	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1172	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2115	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C1174	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1175	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2117	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C1176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C2118	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1177	1-126-947-11	ELECT	47uF	20%	35V	C2119	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1179	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2130	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2502	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C1181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C2503	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1182	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V	C3000	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1183	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V	C3001	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1184	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3002	1-126-947-11	ELECT	47uF	20%	35V
C1186	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V	C3003	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1187	1-126-947-11	ELECT	47uF	20%	35V	C3006	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1190	1-104-658-11	ELECT	100uF	20%	10V	C3007	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3008	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C1192	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3009	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C1193	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V	C3010	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1195	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V	C3011	1-112-246-11	ELECT	100uF	20%	35V
C1197	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3012	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1198	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	C3013	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1199	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C3014	1-114-885-51	FILM	1uF	5%	50V
C1203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3015	1-114-885-51	FILM	1uF	5%	50V
C1205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V	C3016	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V	C3017	1-112-246-11	ELECT	100uF	20%	35V
C1208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3018	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V	C3019	1-126-953-11	ELECT	2200uF	20%	35V
C1210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3021	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C1211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V	C3022	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C1212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3023	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C1213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3024	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3026	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1217	1-126-947-11	ELECT	47uF	20%	35V	C3027	1-112-246-11	ELECT	100uF	20%	35V
C1218	1-126-964-11	ELECT	10uF	20%	50V	C3028	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3029	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1220	1-126-964-11	ELECT	10uF	20%	50V	C3030	1-114-885-51	FILM	1uF	5%	50V
C1221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3031	1-114-885-51	FILM	1uF	5%	50V
C1222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3032	1-112-246-11	ELECT	100uF	20%	35V
C1223	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3033	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C3034	1-126-947-11	ELECT	47uF	20%	35V
C1225	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3036	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1226	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3037	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

# HCD-TZ100/TZ200/TZ300

## MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C3038	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3092	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3039	1-126-952-11	ELECT	1000uF	20%	35V	C3093	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3040	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V						(AUS,EA,SAF)
C3041	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3094	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C3042	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						(AUS,EA,SAF)
C3043	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3095	1-126-952-11	ELECT	1000uF	20%	35V
C3044	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3096	1-126-947-11	ELECT	47uF	20%	35V
C3045	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3097	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C3046	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3098	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C3047	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3099	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3048	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V	C3100	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3049	1-112-246-11	ELECT	100uF	20%	35V	C3101	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3050	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3102	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3051	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3052	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3053	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C3105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3054	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
					(AUS,EA,SAF)	C3107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3055	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3108	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
					(AUS,EA,SAF)	C3109	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C3056	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3110	1-112-246-11	ELECT	100uF	20%	35V
C3057	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3111	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3058	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3112	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
					(AUS,EA,SAF)	C3113	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3059	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3114	1-114-885-51	FILM	1uF	5%	50V
					(AUS,EA,SAF)	C3115	1-114-885-51	FILM	1uF	5%	50V
C3060	1-114-885-51	FILM	1uF	5%	50V	C3116	1-112-246-11	ELECT	100uF	20%	35V
C3061	1-114-885-51	FILM	1uF	5%	50V	C3117	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3062	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3118	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3063	1-112-246-11	ELECT	100uF	20%	35V	C3119	1-126-952-11	ELECT	1000uF	20%	35V
C3064	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C3120	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3065	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3121	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
					(AUS,EA,SAF)	C3122	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3066	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3124	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3067	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3125	1-112-246-11	ELECT	100uF	20%	35V
					(AUS,EA,SAF)	C3126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3068	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3127	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3069	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3128	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3070	1-126-952-11	ELECT	1000uF	20%	35V	C3129	1-114-885-51	FILM	1uF	5%	50V
C3071	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V	C3130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3072	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3131	1-114-885-51	FILM	1uF	5%	50V
C3074	1-112-246-11	ELECT	100uF	20%	35V	C3132	1-126-947-11	ELECT	47uF	20%	35V
C3075	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3133	1-112-246-11	ELECT	100uF	20%	35V
C3076	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3134	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3077	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V	C3135	1-126-952-11	ELECT	1000uF	20%	35V
C3078	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3137	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
					(AUS,EA,SAF)	C3138	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3079	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3139	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3080	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3140	1-126-934-11	ELECT	220uF	20%	16V
					(AUS,EA,SAF)	C3141	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C3081	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3082	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C3143	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3083	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C3144	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3084	1-114-885-51	FILM	1uF	5%	50V	C3145	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C3085	1-114-885-51	FILM	1uF	5%	50V	C3146	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C3086	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C3147	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
					(AUS,EA,SAF)	C3148	1-126-933-11	ELECT	100uF	20%	16V
C3087	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V						(AUS,EA,SAF)
					(AUS,EA,SAF)	C3149	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3088	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3150	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C3089	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	C3151	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3091	1-112-246-11	ELECT	100uF	20%	35V	C3152	1-126-176-11	ELECT	220uF	20%	10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C3153	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	FB1109	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C3154	1-162-910-11	CERAMIC CHIP 5PF 0.25PF	50V	FB1111	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C3155	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	FB1112	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4000	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	FB1113	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4001	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	FB1115	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4002	1-126-916-11	ELECT 1000uF 20%	6.3V	FB1116	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4003	1-162-960-11	CERAMIC CHIP 220PF 10%	50V	FB1117	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4004	1-162-960-11	CERAMIC CHIP 220PF 10%	50V	FB1118	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C4005	1-104-658-11	ELECT 100uF 20%	10V	FB2101	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C4006	1-104-662-11	ELECT 22uF 20%	25V	FB2102	1-469-379-11	FERRITE, EMI (SMD) (2012)	
C4007	1-104-662-11	ELECT 22uF 20%	25V	FB2103	1-469-324-21	FERRITE, EMI (SMD) (2012)	
C4008	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	FB2104	1-469-379-11	FERRITE, EMI (SMD) (2012)	
C4009	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	FB2105	1-469-379-11	FERRITE, EMI (SMD) (2012)	
C4010	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	FB2125	1-469-118-21	FERRITE, EMI (SMD) (1608)	
C4011	1-162-927-11	CERAMIC CHIP 100PF 5%	50V			< IC >	
C4012	1-126-947-11	ELECT 47uF 20%	35V	IC307	8-759-680-48	IC TC7WH157FK(TE85R)	
C4013	1-127-715-11	CERAMIC CHIP 0.22uF 10%	16V	IC471	6-707-853-01	IC TC74LCX541FT(EKJ)	
C4014	1-127-573-11	CERAMIC CHIP 1uF 10%	16V	IC503	A-1665-216-A	IC R5F3640DDFAR (for SERVICE)	
C4016	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	IC504	6-705-338-01	IC TK11250CMCL-G	
C4017	1-165-908-11	CERAMIC CHIP 1uF 10%	10V	IC505	6-713-500-01	IC BR24S16F-WE2	
C4020	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC506	6-705-203-01	IC S-80935CNMC-G85T2G	
C4021	1-126-964-11	ELECT 10uF 20%	50V	IC507	6-712-613-01	IC SI-3010KM-TLS	
C4023	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC509	6-712-613-01	IC SI-3010KM-TLS	
C4024	1-126-964-11	ELECT 10uF 20%	50V	IC510	6-712-613-01	IC SI-3010KM-TLS	
C4025	1-126-964-11	ELECT 10uF 20%	50V	IC1101	6-713-716-01	IC CXD9917R-A	
C4026	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1102	6-808-752-01	IC MX29LV320DBTI-70-OHI-0906UC (MX,E32,AR)	
C4027	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	IC1102	6-808-753-01	IC MX29LV320DBTI-70-OHI-0906CE (E3,E12,AUS,EA,SAF)	
C4028	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	IC1102	6-808-754-01	IC MX29LV320DBTI-70-OHI-0906GA (PH,SP,TH)	
C4030	1-126-933-11	ELECT 100uF 20%	16V	IC1103	(Not supplied)	IC BR24S64F-WE2	
C4031	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1104	6-713-754-01	IC W9864G6IH-6J-ER10	
C4037	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1105	6-702-302-01	IC TK11133CSCL-G	
C4038	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1107	6-702-302-01	IC TK11133CSCL-G	
C4039	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1110	6-707-739-01	IC MM1661JTRE	
C9972	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V	IC1201	6-704-524-01	IC FAN8036L	
		< CONNECTOR >		IC1705	8-759-592-47	IC TC7S208FU(TE85R)	
CN506	1-820-113-41	CONNECTOR, FFC/FPC 11P		IC1707	6-705-337-01	IC TK11150CSCL-G	
CN507	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		IC1708	6-702-302-01	IC TK11133CSCL-G	
CN508	1-784-861-51	CONNECTOR, FFC (LIF(NON-ZIF)) 9P		IC2101	8-759-700-07	IC NJM2903M	
CN1101	1-815-763-32	CONNECTOR, FFC/FPC 24P		IC3000	6-713-634-01	IC CXD9965TN	
CN1105	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P		IC3001	6-707-939-01	IC CXD9843AR	
CN1201	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P		IC3002	6-713-634-01	IC CXD9965TN	
CN1202	1-784-365-51	CONNECTOR, FFC/FPC 5P		IC3003	6-707-939-01	IC CXD9843AR	
CN1701	1-821-755-11	CONNECTOR, HDMI 19P (HDMI OUT)		IC3004	6-713-634-01	IC CXD9965TN	
CN2101	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		IC3005	6-707-939-01	IC CXD9843AR	
CN4000	1-784-770-11	CONNECTOR, FFC 9P		IC3006	6-702-300-01	IC TK11118CSCL-G	
		< DIODE >		IC3007	6-709-888-01	IC TC7WHU04FK(T5RSOYF)	
D501	6-501-817-01	DIODE MA2J1110GLSO		IC4000	6-703-622-01	IC MM1508XNRE	
D502	6-501-817-01	DIODE MA2J1110GLSO		IC4001	6-712-744-01	IC TK11190CSCL-G	
D503	6-501-817-01	DIODE MA2J1110GLSO		IC4002	6-710-554-01	IC PCM1808PWR	
D2101	6-501-749-01	DIODE MAZ8082GOLSO		IC4003	8-759-385-76	IC MC14052 BDR2	
D2102	6-501-740-01	DIODE MAZ8068GOLSO				< JACK >	
D2103	6-501-740-01	DIODE MAZ8068GOLSO		J4000	1-822-338-11	JACK, PIN 3P (VIDEO OUT,TV VIDEO (AUDIO IN))	
D4002	6-501-817-01	DIODE MA2J1110GLSO				< COIL >	
D9712	6-501-817-01	DIODE MA2J1110GLSO		L471	1-469-527-91	INDUCTOR 47uH	
		< FERRITE BEAD >		L1701	1-457-374-21	COIL, COMMON MODE CHOKE	
FB1106	1-469-324-21	FERRITE, EMI (SMD) (2012)		L1702	1-457-374-21	COIL, COMMON MODE CHOKE	
FB1107	1-469-324-21	FERRITE, EMI (SMD) (2012)		L1703	1-457-374-21	COIL, COMMON MODE CHOKE	
FB1108	1-469-324-21	FERRITE, EMI (SMD) (2012)					

When IC1103 on the Main board is damaged, exchange the new Main board for the Main board which IC damaged.

# HCD-TZ100/TZ200/TZ300

Ver. 1.1

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
L1704	1-457-374-21	COIL, COMMON MODE CHOKE				< RESISTOR >	
L2101	1-457-374-21	COIL, COMMON MODE CHOKE					
L3000	1-457-579-11	COIL, CHOKE 10uH		R316	1-216-801-11	METAL CHIP 22 5%	1/10W
L3001	1-457-579-11	COIL, CHOKE 10uH		R317	1-216-801-11	METAL CHIP 22 5%	1/10W
L3002	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)		R318	1-216-801-11	METAL CHIP 22 5%	1/10W
				R319	1-216-801-11	METAL CHIP 22 5%	1/10W
L3003	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)		R409	1-216-809-11	METAL CHIP 100 5%	1/10W
L3004	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)					
L3005	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)		R410	1-216-809-11	METAL CHIP 100 5%	1/10W
L3006	1-457-579-11	COIL, CHOKE 10uH		R412	1-216-809-11	METAL CHIP 100 5%	1/10W
L3007	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)		R413	1-216-809-11	METAL CHIP 100 5%	1/10W
				R471	1-216-864-11	SHORT CHIP 0	
L3008	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)		R472	1-216-801-11	METAL CHIP 22 5%	1/10W
L3009	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)					
L3010	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)		R473	1-216-801-11	METAL CHIP 22 5%	1/10W
L3011	1-457-579-11	COIL, CHOKE 10uH		R474	1-216-801-11	METAL CHIP 22 5%	1/10W
L3012	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)		R480	1-216-805-11	METAL CHIP 47 5%	1/10W
				R481	1-216-805-11	METAL CHIP 47 5%	1/10W
L3013	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)		R482	1-216-805-11	METAL CHIP 47 5%	1/10W
L3014	1-457-078-11	COIL, AIR-CORE (AUS,EA,SAF)					
L3015	1-457-077-11	COIL, AIR-CORE (AUS,EA,SAF)		R483	1-216-805-11	METAL CHIP 47 5%	1/10W
L3016	1-457-579-11	COIL, CHOKE 10uH		R486	1-216-803-11	METAL CHIP 33 5%	1/10W
L3017	1-457-579-11	COIL, CHOKE 10uH		R487	1-216-805-11	METAL CHIP 47 5%	1/10W
				R488	1-216-864-11	SHORT CHIP 0	
L3018	1-469-525-91	INDUCTOR 10uH		R531	1-216-821-11	METAL CHIP 1K 5%	1/10W (PH,SP,TH)
L3019	1-469-525-91	INDUCTOR 10uH					
L3020	1-469-525-91	INDUCTOR 10uH					
L3021	1-412-939-11	INDUCTOR 1uH		R531	1-216-827-11	METAL CHIP 3.3K 5%	1/10W (E3)
L4000	1-469-525-91	INDUCTOR 10uH					
				R531	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W (E12)
L4001	1-469-525-91	INDUCTOR 10uH					
L4002	1-469-525-91	INDUCTOR 10uH		R531	1-216-833-11	METAL CHIP 10K 5%	1/10W (EA,SAF)
L4003	1-469-525-91	INDUCTOR 10uH					
		< TRANSISTOR >		R531	1-216-835-11	METAL CHIP 15K 5%	1/10W (AUS)
Q501	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		R531	1-216-841-11	METAL CHIP 47K 5%	1/10W (MX,E32,AR)
Q502	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF					
Q503	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		R532	1-218-867-11	METAL CHIP 6.8K 0.5%	1/10W (MX)
Q1101	6-552-279-01	FET RT3K66M-T111-1					
Q1102	6-550-653-01	TRANSISTOR QST8TR		R532	1-216-833-11	METAL CHIP 10K 5%	1/10W (E32,AR)
Q1103	8-729-027-52	TRANSISTOR DTC124EKA-T146		R532	1-216-841-11	METAL CHIP 47K 5%	1/10W (E3,E12,AUS,EA,SAF)
Q1701	6-552-279-01	FET RT3K66M-T111-1					
Q3000	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		R535	1-216-821-11	METAL CHIP 1K 5%	1/10W (TZ100/TZ200)
Q3001	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF					
Q3002	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		R535	1-216-827-11	METAL CHIP 3.3K 5%	1/10W (TZ300)
Q3003	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF					
Q3004	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		R536	1-216-841-11	METAL CHIP 47K 5%	1/10W (TZ300)
Q3005	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF					
Q3006	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R537	1-216-857-11	METAL CHIP 1M 5%	1/10W
Q3007	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R540	1-216-821-11	METAL CHIP 1K 5%	1/10W
				R541	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q3008	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R542	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q3009	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF					
Q3010	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R543	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q3011	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R544	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q3012	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R545	1-216-833-11	METAL CHIP 10K 5%	1/10W
				R548	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q3013	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R552	1-216-809-11	METAL CHIP 100 5%	1/10W
Q3014	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF					
Q3015	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R553	1-216-809-11	METAL CHIP 100 5%	1/10W
Q3016	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF		R554	1-216-809-11	METAL CHIP 100 5%	1/10W
Q4000	8-729-027-52	TRANSISTOR DTC124EKA-T146		R555	1-216-821-11	METAL CHIP 1K 5%	1/10W
				R556	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q9724	6-551-699-01	TRANSISTOR ISA1602AM1TP-1EF		R563	1-216-833-11	METAL CHIP 10K 5%	1/10W
Q9726	8-729-620-13	TRANSISTOR 2SC4154TP-1EF					
Q9728	8-729-620-13	TRANSISTOR 2SC4154TP-1EF		R564	1-216-864-11	SHORT CHIP 0	
Q9729	8-729-027-43	TRANSISTOR DTC114EKA-T146		R569	1-216-821-11	METAL CHIP 1K 5%	1/10W
				R577	1-216-833-11	METAL CHIP 10K 5%	1/10W
				R578	1-216-864-11	SHORT CHIP 0	

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R579	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R1124	1-216-841-11	METAL CHIP	47K	5%	1/10W
R580	1-216-864-11	SHORT CHIP	0			R1125	1-216-805-11	METAL CHIP	47	5%	1/10W
R581	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R1132	1-216-845-11	METAL CHIP	100K	5%	1/10W
R582	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1133	1-216-864-11	SHORT CHIP	0		
R583	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1135	1-216-821-11	METAL CHIP	1K	5%	1/10W
R584	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1136	1-216-835-11	METAL CHIP	15K	5%	1/10W
R585	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1140	1-216-821-11	METAL CHIP	1K	5%	1/10W
R591	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1141	1-216-855-11	METAL CHIP	680K	5%	1/10W
R592	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1142	1-216-845-11	METAL CHIP	100K	5%	1/10W
R594	1-216-864-11	SHORT CHIP	0			R1151	1-216-833-11	METAL CHIP	10K	5%	1/10W
R595	1-216-864-11	SHORT CHIP	0			R1154	1-216-809-11	METAL CHIP	100	5%	1/10W
R596	1-216-845-11	METAL CHIP	100K	5%	1/10W	R1155	1-216-809-11	METAL CHIP	100	5%	1/10W
R597	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1156	1-216-809-11	METAL CHIP	100	5%	1/10W
R598	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1159	1-216-805-11	METAL CHIP	47	5%	1/10W
R599	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1160	1-216-805-11	METAL CHIP	47	5%	1/10W
R600	1-216-809-11	METAL CHIP	100	5%	1/10W	R1161	1-216-805-11	METAL CHIP	47	5%	1/10W
R602	1-216-809-11	METAL CHIP	100	5%	1/10W	R1171	1-216-809-11	METAL CHIP	100	5%	1/10W
R603	1-216-809-11	METAL CHIP	100	5%	1/10W	R1183	1-216-805-11	METAL CHIP	47	5%	1/10W
R604	1-216-809-11	METAL CHIP	100	5%	1/10W	R1184	1-216-805-11	METAL CHIP	47	5%	1/10W
R605	1-216-809-11	METAL CHIP	100	5%	1/10W	R1185	1-216-805-11	METAL CHIP	47	5%	1/10W
R606	1-216-809-11	METAL CHIP	100	5%	1/10W	R1191	1-216-821-11	METAL CHIP	1K	5%	1/10W
R607	1-216-809-11	METAL CHIP	100	5%	1/10W	R1193	1-216-821-11	METAL CHIP	1K	5%	1/10W
R609	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1198	1-216-809-11	METAL CHIP	100	5%	1/10W
R610	1-218-847-11	METAL CHIP	1K	0.5%	1/10W	R1204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R611	1-218-885-11	METAL CHIP	39K	0.5%	1/10W	R1205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R613	1-218-871-11	METAL CHIP	10K	0.5%	1/10W	R1206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R614	1-216-809-11	METAL CHIP	100	5%	1/10W	R1207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R615	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1208	1-216-839-11	METAL CHIP	33K	5%	1/10W
R616	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W	R1209	1-216-839-11	METAL CHIP	33K	5%	1/10W
R617	1-218-879-11	METAL CHIP	22K	0.5%	1/10W	R1210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R619	1-218-871-11	METAL CHIP	10K	0.5%	1/10W	R1212	1-216-833-11	METAL CHIP	10K	5%	1/10W
R620	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W	R1213	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R621	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1214	1-216-835-11	METAL CHIP	15K	5%	1/10W
R622	1-218-885-11	METAL CHIP	39K	0.5%	1/10W	R1215	1-216-834-11	METAL CHIP	12K	5%	1/10W
R623	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1216	1-216-834-11	METAL CHIP	12K	5%	1/10W
R624	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1219	1-216-838-11	METAL CHIP	27K	5%	1/10W
R625	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R626	1-218-871-11	METAL CHIP	10K	0.5%	1/10W	R1221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R627	1-216-809-11	METAL CHIP	100	5%	1/10W	R1222	1-216-839-11	METAL CHIP	33K	5%	1/10W
R628	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R629	1-216-809-11	METAL CHIP	100	5%	1/10W	R1224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R630	1-216-809-11	METAL CHIP	100	5%	1/10W	R1225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R1101	1-216-809-11	METAL CHIP	100	5%	1/10W	R1226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R1102	1-216-864-11	SHORT CHIP	0			R1230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R1103	1-218-864-11	METAL CHIP	5.1K	0.5%	1/10W	R1231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R1106	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R1107	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1234	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1108	1-216-857-11	METAL CHIP	1M	5%	1/10W	R1236	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1110	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1237	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1111	1-216-809-11	METAL CHIP	100	5%	1/10W	R1238	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1112	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R1239	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1113	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R1243	1-216-805-11	METAL CHIP	47	5%	1/10W
R1114	1-216-845-11	METAL CHIP	100K	5%	1/10W	R1246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1115	1-211-977-11	METAL CHIP	22	0.5%	1/10W	R1247	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1116	1-216-821-11	METAL CHIP	1K	5%	1/10W	R1730	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R1117	1-216-841-11	METAL CHIP	47K	5%	1/10W	R1742	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1118	1-216-801-11	METAL CHIP	22	5%	1/10W	R1744	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1120	1-216-801-11	METAL CHIP	22	5%	1/10W	R1749	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R1121	1-216-801-11	METAL CHIP	22	5%	1/10W	R1750	1-216-824-11	METAL CHIP	1.8K	5%	1/10W

# HCD-TZ100/TZ200/TZ300

## MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R1752	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3035	1-216-805-11	METAL CHIP	47	5%	1/10W
R1781	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3036	1-216-801-11	METAL CHIP	22	5%	1/10W
R1782	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3037	1-216-809-11	METAL CHIP	100	5%	1/10W
R2101	1-218-841-11	METAL CHIP	560	0.5%	1/10W	R3038	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2104	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3039	1-216-791-11	METAL CHIP	3.3	5%	1/10W
R2110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R3040	1-216-805-11	METAL CHIP	47	5%	1/10W
R2114	1-216-801-11	METAL CHIP	22	5%	1/10W	R3041	1-216-805-11	METAL CHIP	47	5%	1/10W
R2115	1-216-864-11	SHORT CHIP	0			R3042	1-216-805-11	METAL CHIP	47	5%	1/10W
R2127	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3043	1-216-805-11	METAL CHIP	47	5%	1/10W
R2129	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3044	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3045	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3046	1-216-805-11	METAL CHIP	47	5%	1/10W
R2152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R3047	1-216-864-11	SHORT CHIP	0		
R2155	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3048	1-216-809-11	METAL CHIP	100	5%	1/10W
R2156	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3054	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2157	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3055	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2158	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3056	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2159	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3057	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2160	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3058	1-216-817-11	METAL CHIP	470	5%	1/10W
R2167	1-216-864-11	SHORT CHIP	0			R3059	1-216-864-11	SHORT CHIP	0		
R2168	1-216-815-11	METAL CHIP	330	5%	1/10W	R3060	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2169	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3061	1-216-864-11	SHORT CHIP	0		
R2176	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3062	1-216-805-11	METAL CHIP	47	5%	1/10W
R2178	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3063	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2179	1-216-809-11	METAL CHIP	100	5%	1/10W	R3064	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2180	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3065	1-216-817-11	METAL CHIP	470	5%	1/10W
R2184	1-216-809-11	METAL CHIP	100	5%	1/10W	R3066	1-216-837-11	METAL CHIP	22K	5%	1/10W
R2185	1-216-809-11	METAL CHIP	100	5%	1/10W	R3067	1-216-805-11	METAL CHIP	47	5%	1/10W
R2191	1-245-287-11	METAL CHIP	0.1	1%	1W	R3069	1-216-805-11	METAL CHIP	47	5%	1/10W
R2192	1-218-835-11	METAL CHIP	330	0.5%	1/10W	R3070	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2193	1-218-883-11	METAL CHIP	33K	0.5%	1/10W	R3071	1-216-801-11	METAL CHIP	22	5%	1/10W
R2194	1-218-883-11	METAL CHIP	33K	0.5%	1/10W	R3072	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R2195	1-216-809-11	METAL CHIP	100	5%	1/10W	R3073	1-216-809-11	METAL CHIP	100	5%	1/10W
R3000	1-216-864-11	SHORT CHIP	0			R3074	1-216-791-11	METAL CHIP	3.3	5%	1/10W
R3001	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3075	1-216-805-11	METAL CHIP	47	5%	1/10W
R3002	1-216-809-11	METAL CHIP	100	5%	1/10W	R3076	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3003	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3077	1-216-805-11	METAL CHIP	47	5%	1/10W
R3004	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R3078	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3005	1-216-809-11	METAL CHIP	100	5%	1/10W	R3079	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3006	1-216-841-11	METAL CHIP	47K	5%	1/10W	R3080	1-216-809-11	METAL CHIP	100	5%	1/10W
R3007	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3081	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3008	1-218-903-11	METAL CHIP	220K	0.5%	1/10W	R3082	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3009	1-218-871-11	METAL CHIP	10K	0.5%	1/10W	R3083	1-216-864-11	SHORT CHIP	0		
R3012	1-216-864-11	SHORT CHIP	0			R3084	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3013	1-216-864-11	SHORT CHIP	0			R3085	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3014	1-216-864-11	SHORT CHIP	0			R3086	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3015	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3087	1-216-296-11	SHORT CHIP	0 (EXCEPT AUS,EA,SAF)		
R3017	1-216-864-11	SHORT CHIP	0			R3093	1-216-864-11	SHORT CHIP	0		
R3021	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3094	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3022	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3095	1-216-817-11	METAL CHIP	470	5%	1/10W
R3025	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3096	1-216-864-11	SHORT CHIP	0		
R3026	1-216-817-11	METAL CHIP	470	5%	1/10W	R3097	1-216-805-11	METAL CHIP	47	5%	1/10W
R3027	1-216-864-11	SHORT CHIP	0			R3098	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3028	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3099	1-216-845-11	METAL CHIP	100K	5%	1/10W
R3029	1-216-864-11	SHORT CHIP	0			R3100	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3030	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3101	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3031	1-216-845-11	METAL CHIP	100K	5%	1/10W	R3102	1-216-817-11	METAL CHIP	470	5%	1/10W
R3032	1-216-805-11	METAL CHIP	47	5%	1/10W	R3103	1-216-805-11	METAL CHIP	47	5%	1/10W
R3033	1-216-817-11	METAL CHIP	470	5%	1/10W	R3104	1-216-805-11	METAL CHIP	47	5%	1/10W
R3034	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3105	1-216-845-11	METAL CHIP	100K	5%	1/10W



Ref. No.	Part No.	Description	Quantity	Tolerance	Remark	Ref. No.	Part No.	Description	Quantity	Tolerance	Remark
R3106	1-216-801-11	METAL CHIP	22	5%	1/10W	RB1111	1-234-944-21	RES, NETWORK 47X4 (1005)			
R3107	1-216-791-11	METAL CHIP	3.3	5%	1/10W	RB1112	1-234-400-21	CONDUCTOR, NETWORK 0X4 (1005)			
R3108	1-216-809-11	METAL CHIP	100	5%	1/10W	RB1113	1-234-400-21	CONDUCTOR, NETWORK 0X4 (1005)			
R3109	1-216-805-11	METAL CHIP	47	5%	1/10W	RB1114	1-234-944-21	RES, NETWORK 47X4 (1005)			
R3110	1-216-805-11	METAL CHIP	47	5%	1/10W	RB1115	1-234-944-21	RES, NETWORK 47X4 (1005)			
R3111	1-216-845-11	METAL CHIP	100K	5%	1/10W			< TERMINAL BOARD >			
R3112	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R3113	1-216-809-11	METAL CHIP	100	5%	1/10W	TB3001	1-780-681-11	TERMINAL BOARD (SPEAKER) 6P (SPEAKER FRONT L/R,SUR L/R,CENTER,SUBWOOFER)			
R3114	1-216-864-11	SHORT CHIP	0					< VIBRATOR >			
R3117	1-216-097-11	METAL CHIP	100K	5%	1/10W						
R3119	1-216-809-11	METAL CHIP	100	5%	1/10W						
R3120	1-216-864-11	SHORT CHIP	0			X501	1-795-058-21	VIBRATOR, CERAMIC (5MHz)			
R3121	1-216-857-11	METAL CHIP	1M	5%	1/10W	X1101	1-814-103-21	VIBRATOR, CRYSTAL (27MHz)			
R3122	1-216-809-11	METAL CHIP	100	5%	1/10W	X3000	1-814-108-21	VIBRATOR, CRYSTAL (49.1MHz)			
R3124	1-216-864-11	SHORT CHIP	0					*****			
R3126	1-216-864-11	SHORT CHIP	0					MS-203 BOARD			
R3128	1-216-864-11	SHORT CHIP	0					*****			
R3142	1-216-864-11	SHORT CHIP	0					< CONNECTOR >			
R3143	1-216-864-11	SHORT CHIP	0								
R3144	1-216-864-11	SHORT CHIP	0			CN001	1-815-412-11	CONNECTOR, FFC/FPC 5P			
R3145	1-216-864-11	SHORT CHIP	0					< SWITCH >			
R4000	1-211-990-11	METAL CHIP	75	0.5%	1/10W						
R4001	1-216-837-11	METAL CHIP	22K	5%	1/10W						
R4002	1-216-837-11	METAL CHIP	22K	5%	1/10W	S001	1-786-693-11	SWITCH, DETECTION (CHUCK/TRAY DETECT)			
R4005	1-216-841-11	METAL CHIP	47K	5%	1/10W			*****			
R4006	1-216-841-11	METAL CHIP	47K	5%	1/10W			P-SW BOARD			
R4007	1-216-841-11	METAL CHIP	47K	5%	1/10W			*****			
R4008	1-216-841-11	METAL CHIP	47K	5%	1/10W			< CAPACITOR >			
R4009	1-218-827-11	METAL CHIP	150	0.5%	1/10W						
R4010	1-216-805-11	METAL CHIP	47	5%	1/10W	C5400	1-162-927-11	CERAMIC CHIP 100PF 5% 50V			
R4011	1-216-805-11	METAL CHIP	47	5%	1/10W			< SWITCH >			
R4012	1-216-864-11	SHORT CHIP	0								
R4013	1-216-809-11	METAL CHIP	100	5%	1/10W						
R4014	1-216-809-11	METAL CHIP	100	5%	1/10W	S5400	1-762-875-21	SWITCH, KEYBOARD (I/O)			
R4015	1-216-809-11	METAL CHIP	100	5%	1/10W			*****			
R4016	1-216-809-11	METAL CHIP	100	5%	1/10W			A-1650-284-A	POWER BOARD, COMPLETE (EXCEPT MX,E32)		
R4017	1-216-809-11	METAL CHIP	100	5%	1/10W			A-1650-286-A	POWER BOARD, COMPLETE (MX)		
R4019	1-216-864-11	SHORT CHIP	0					A-1650-288-A	POWER BOARD, COMPLETE (E32)		
R4020	1-216-864-11	SHORT CHIP	0					*****			
R4021	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R4023	1-216-845-11	METAL CHIP	100K	5%	1/10W			1-533-217-41	HOLDER, FUSE		
R4026	1-216-833-11	METAL CHIP	10K	5%	1/10W			7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3		
R4030	1-216-833-11	METAL CHIP	10K	5%	1/10W			7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3		
R4034	1-216-809-11	METAL CHIP	100	5%	1/10W			< CAPACITOR >			
R9918	1-216-821-11	METAL CHIP	1K	5%	1/10W						
R9922	1-216-833-11	METAL CHIP	10K	5%	1/10W	△ C901	1-165-529-11	MYLAR 0.22uF 10% 275V			
R9924	1-216-821-11	METAL CHIP	1K	5%	1/10W	△ C902	1-165-529-11	MYLAR 0.22uF 10% 275V			
R9928	1-216-837-11	METAL CHIP	22K	5%	1/10W	△ C903	1-114-344-11	ELECT(BLOCK) 1000uF 20% 250V			(MX)
R9929	1-216-837-11	METAL CHIP	22K	5%	1/10W	△ C903	1-114-347-11	ELECT(BLOCK) 330uF 20% 450V			(EXCEPT MX)
R9934	1-216-833-11	METAL CHIP	10K	5%	1/10W	△ C905	1-136-557-11	FILM 0.0033uF 5% 630V			(EXCEPT MX)
R9941	1-216-838-11	METAL CHIP	27K	5%	1/10W	△ C905	1-136-601-11	FILM 0.01uF 5% 630V			(MX)
R9945	1-216-813-11	METAL CHIP	220	5%	1/10W	△ C906	1-117-815-11	FILM 0.001uF 3% 1.5KV			(EXCEPT MX)
		< NETWORK RESISTOR >				C907	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V			(EXCEPT MX)
RB1103	1-234-944-21	RES, NETWORK 47X4 (1005)				C907	1-162-965-11	CERAMIC CHIP 0.0015uF 10% 50V			(MX)
RB1104	1-234-944-21	RES, NETWORK 47X4 (1005)				C908	1-107-909-11	ELECT 47uF 20% 50V			
RB1105	1-234-944-21	RES, NETWORK 47X4 (1005)									
RB1106	1-234-944-21	RES, NETWORK 47X4 (1005)									
RB1109	1-234-944-21	RES, NETWORK 47X4 (1005)									
RB1110	1-234-944-21	RES, NETWORK 47X4 (1005)									

# HCD-TZ100/TZ200/TZ300

## POWER

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C909	1-162-960-11	CERAMIC CHIP	220PF	10%	50V			< CONNECTOR >			
C910	1-126-965-11	ELECT	22uF	20%	50V						
					(EXCEPT E32)						
C910	1-126-967-11	ELECT	47uF	20%	50V						
					(E32)						
C912	1-126-947-11	ELECT	47uF	20%	35V			< DIODE >			
△ C913	1-112-866-51	CERAMIC	100PF	10%	250V						
C916	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	△ D901	8-719-082-57	DIODE	D5SBA60F01		
△ C918	1-112-887-51	CERAMIC	0.01uF	20%	250V	D902	8-719-063-74	DIODE	D1NL20U-TR2		
△ C920	1-112-887-51	CERAMIC	0.01uF	20%	250V	D905	8-719-063-74	DIODE	D1NL20U-TR2		
△ C921	1-117-220-81	CERAMIC	150PF	5%	2KV	D906	6-501-817-01	DIODE	MA2J1110GLS0		
C922	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	D907	6-501-817-01	DIODE	MA2J1110GLS0		
C923	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	D908	6-501-817-01	DIODE	MA2J1110GLS0		
△ C924	1-136-557-11	FILM	0.0033uF	5%	630V	D909	6-501-817-01	DIODE	MA2J1110GLS0		
△ C926	1-107-930-11	ELECT	22uF	20%	100V	D910	6-501-817-01	DIODE	MA2J1110GLS0		
C927	1-112-223-11	ELECT	3300uF	20%	10V	D911	6-502-484-21	DIODE	SG10SC6M-5600		
C928	1-112-232-11	ELECT	2700uF	20%	16V	D912	6-501-917-11	DIODE	SG10SC9-5600		
C929	1-112-241-11	ELECT	1000uF	20%	25V	D913	6-500-241-01	DIODE	SARS03		
△ C930	1-112-866-51	CERAMIC	100PF	10%	250V	D914	6-501-817-01	DIODE	MA2J1110GLS0		
C932	1-114-994-11	ELECT	2200uF	20%	35V	D916	6-502-484-21	DIODE	SG10SC6M-5600		
C933	1-114-994-11	ELECT	2200uF	20%	35V	D921	6-502-234-01	DIODE	EG01C LF-F7		
C934	1-126-953-11	ELECT	2200uF	20%	35V	D922	6-501-817-01	DIODE	MA2J1110GLS0		
C935	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	D923	6-501-817-01	DIODE	MA2J1110GLS0		
C936	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	D924	6-501-817-01	DIODE	MA2J1110GLS0		
C937	1-100-756-11	CERAMIC CHIP	0.047uF	10%	50V	D931	6-501-849-01	DIODE	FMX-22SL		
△ C938	1-112-869-51	CERAMIC	470PF	10%	250V	D946	6-502-234-01	DIODE	EG01C LF-F7		
C939	1-136-165-00	FILM	0.1uF	5%	50V	D947	6-502-484-21	DIODE	SG10SC6M-5600		
C940	1-112-228-21	ELECT	1000uF	20%	16V	D948	6-501-817-01	DIODE	MA2J1110GLS0		
△ C941	1-114-128-11	CERAMIC CHIP	47PF	5%	100V	D949	6-501-817-01	DIODE	MA2J1110GLS0		
C942	1-126-941-11	ELECT	470uF	20%	25V	DZ901	6-501-782-01	DIODE	MAZ8180GMLS0		
C943	1-126-934-11	ELECT	220uF	20%	16V	DZ902	6-502-231-01	DIODE	MAZ8220GLLS0		
C950	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	DZ903	6-501-768-01	DIODE	MAZ8120GMLS0		
C951	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	DZ904	6-501-734-01	DIODE	MAZ8056GMLS0		
C956	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V	DZ915	6-501-760-01	DIODE	MAZ8100GMLS0		
△ C963	1-112-869-51	CERAMIC	470PF	10%	250V	DZ932	6-501-734-01	DIODE	MAZ8056GMLS0		
					(EXCEPT MX)	DZ953	6-501-713-01	DIODE	MAZ8033G0LS0		
△ C963	1-112-871-51	CERAMIC	0.0022uF	20%	250V						
					(MX)						
△ C964	1-112-869-51	CERAMIC	470PF	10%	250V						
					(EXCEPT MX)						
△ C964	1-112-871-51	CERAMIC	0.0022uF	20%	250V						
					(MX)						
C969	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V						
C970	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V						
C971	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V						
C972	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	△ F945	1-576-794-11	FUSE, MICRO	(1608) 2A		
C973	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V						
C975	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V						
C976	1-126-933-11	ELECT	100uF	20%	16V						
△ C980	1-117-828-11	FILM	0.0033uF	3%	1.5KV						
					(MX)						
C981	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	△ IC901	6-707-741-01	IC	STR-F6138-LF1352 (MX)		
C983	1-100-756-11	CERAMIC CHIP	0.047uF	10%	50V	△ IC901	6-707-742-01	IC	STR-F6168-LF1352 (EXCEPT MX)		
C984	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	△ IC921	6-711-790-01	IC	MR4020-7103		
C990	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	IC923	6-711-947-01	IC	MM1431CURE		
C991	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V	IC932	6-711-947-01	IC	MM1431CURE		
C992	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	IC941	6-712-613-01	IC	SI-3010KM-TLS		
C993	1-100-566-11	CERAMIC CHIP	0.1uF	10%	25V						
△ C994	1-112-869-51	CERAMIC	470PF	10%	250V						
					(E32)						
C997	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	JR930	1-216-864-11	SHORT CHIP	0		
						JR931	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< COIL >					
L931	1-457-438-11	COIL, CHOKE	5.6uH	△ R914	1-248-180-11	METAL	0.034 5% 5W F (MX)
L944	1-414-398-11	INDUCTOR	10uH	△ R916	1-215-929-11	METAL OXIDE	100K 5% 3W F
L945	1-414-398-11	INDUCTOR	10uH	R917	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
L947	1-414-398-11	INDUCTOR	10uH	R919	1-216-837-11	METAL CHIP	22K 5% 1/10W
L948	1-414-398-11	INDUCTOR	10uH	R920	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
L953	1-414-398-11	INDUCTOR	10uH	R921	1-216-833-11	METAL CHIP	10K 5% 1/10W
L954	1-457-578-11	COIL, CHOKE	10uH	△ R922	1-246-384-41	METAL	0.18 5% 2W F
L956	1-457-578-11	COIL, CHOKE	10uH	R923	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
		< LINE FILTER >		R924	1-216-837-11	METAL CHIP	22K 5% 1/10W
△ LF901	1-457-054-21	COIL, LINE FILTER (EXCEPT MX,E32)		R925	1-216-797-11	METAL CHIP	10 5% 1/10W
△ LF901	1-457-449-11	COIL, LINE FILTER (MX,E32)		R926	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
△ LF902	1-457-054-21	COIL, LINE FILTER (EXCEPT MX,E32)		R927	1-216-837-11	METAL CHIP	22K 5% 1/10W
△ LF902	1-457-449-11	COIL, LINE FILTER (MX,E32)		R928	1-216-845-11	METAL CHIP	100K 5% 1/10W
		< PHOTO COUPLER >		R930	1-216-817-11	METAL CHIP	470 5% 1/10W
PC901	6-600-276-01	PHOTO COUPLER	PS2561AL1-1-V-W	R931	1-216-864-11	SHORT CHIP	0
PC902	6-600-276-01	PHOTO COUPLER	PS2561AL1-1-V-W	R932	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
PC903	6-600-276-01	PHOTO COUPLER	PS2561AL1-1-V-W	R933	1-216-821-11	METAL CHIP	1K 5% 1/10W
PC904	6-600-276-01	PHOTO COUPLER	PS2561AL1-1-V-W	R934	1-216-821-11	METAL CHIP	1K 5% 1/10W
		< THERMISTOR (POSITIVE) >		R935	1-216-821-11	METAL CHIP	1K 5% 1/10W
△ PS954	1-802-595-11	THERMISTOR, POSITIVE MF-R250		R936	1-216-853-11	METAL CHIP	470K 5% 1/10W
△ PS956	1-802-596-11	THERMISTOR, POSITIVE MF-R300		R937	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
		< TRANSISTOR >		R938	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
Q901	8-729-201-53	TRANSISTOR	2SA1015-GR	R939	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W
Q921	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R940	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
Q922	6-550-702-01	TRANSISTOR	2SC3243-TP-E	R941	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
Q930	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R942	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
Q943	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R943	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q945	6-550-718-01	TRANSISTOR	RSR025N03TL	R945	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q947	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R946	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
Q949	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF	R949	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
Q950	8-729-038-28	TRANSISTOR	RT1N441C-TP-1	R951	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
		< RESISTOR >		R952	1-216-821-11	METAL CHIP	1K 5% 1/10W
△ R901	1-219-759-11	METAL	1M 5% 1/2W F (MX)	R954	1-218-861-11	METAL CHIP	3.9K 0.5% 1/10W
△ R901	1-240-938-11	METAL	1.5M 5% 1/2W F (EXCEPT MX)	R955	1-216-821-11	METAL CHIP	1K 5% 1/10W
△ R903	1-215-926-00	METAL OXIDE	33K 5% 3W F (MX)	R956	1-216-817-11	METAL CHIP	470 5% 1/10W
△ R903	1-215-929-11	METAL OXIDE	100K 5% 3W F (EXCEPT MX)	R957	1-216-841-11	METAL CHIP	47K 5% 1/10W
△ R904	1-215-926-00	METAL OXIDE	33K 5% 3W F (MX)	R958	1-216-821-11	METAL CHIP	1K 5% 1/10W
△ R904	1-215-929-11	METAL OXIDE	100K 5% 3W F (EXCEPT MX)	R959	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R905	1-216-797-11	METAL CHIP	10 5% 1/10W	R960	1-216-817-11	METAL CHIP	470 5% 1/10W
R906	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R962	1-216-864-11	SHORT CHIP	0
R907	1-216-833-11	METAL CHIP	10K 5% 1/10W	R963	1-218-839-11	METAL CHIP	470 0.5% 1/10W
R908	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R965	1-216-864-11	SHORT CHIP	0
R909	1-216-833-11	METAL CHIP	10K 5% 1/10W	R966	1-216-821-11	METAL CHIP	1K 5% 1/10W
R910	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R967	1-216-821-11	METAL CHIP	1K 5% 1/10W
R911	1-216-813-11	METAL CHIP	220 5% 1/10W	R972	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
△ R912	1-216-363-00	METAL OXIDE	0.33 5% 2W F (EXCEPT MX)	R974	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
△ R914	1-220-891-11	METAL	0.1 10% 5W F (EXCEPT MX)	R975	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
				R976	1-218-903-11	METAL CHIP	220K 0.5% 1/10W
				R978	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
				R992	1-216-793-11	METAL CHIP	4.7 5% 1/10W
				R998	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W
				R999	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
						< TRANSFORMER >	
				△ T901	1-443-649-11	TRANSFORMER, CONVERTER (MX)	
				△ T901	1-443-874-11	TRANSFORMER, CONVERTER (EXCEPT MX)	
				△ T903	1-445-320-11	TRANSFORMER, CONVERTER	

# HCD-TZ100/TZ200/TZ300

Ver. 1.1

**POWER** **USB**

Ref. No.	Part No.	Description	Remark
		< THERMISTOR >	
△ TH901	1-805-841-21	THERMISTOR, NTC 3.0 (MX,E32)	
△ TH901	1-805-842-21	THERMISTOR, NTC 6.0 (EXCEPT MX,E32)	
		< VARISTOR >	
△ VDR901	1-802-839-11	VARISTOR	
*****			
		USB BOARD	
		*****	
		< CAPACITOR >	
C5200	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
		< CONNECTOR >	
CN5200	1-822-423-11	CONNECTOR, USB (A) 4P (USB)	
CN5201	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
*****			
		MISCELLANEOUS	
		*****	
4	1-828-955-11	WIRE (FLAT TYPE) (9 CORE)	
△ 6	1-829-387-11	CORD, POWER (AR)	
△ 6	1-834-288-11	CORD, POWER (TH)	
△ 6	1-834-966-41	POWER-SUPPLY CORD (EXCEPT MX,AUS,AR,TH)	
△ 6	1-835-068-21	CORD, POWER (AUS)	
△ 6	1-835-080-21	CORD, POWER (MX)	
△ 7	1-569-008-33	ADAPTOR, CONVERSION (E32,AR)	
△ 8	1-770-019-71	ADAPTOR, CONVERSION PLUG 3P (EA)	
59	1-828-322-11	WIRE (FLAT TYPE) (11 CORE)	
60	1-828-287-11	WIRE (FLAT TYPE) (5 CORE)	
104	1-828-291-11	WIRE (FLAT TYPE) (5 CORE)	
△ 157	8-820-321-12	OPTICAL PICK-UP (KHM-313CAA/C2RP1)	
158	1-828-773-51	WIRE (FLAT TYPE) (24 CORE)	
△ F901	1-533-311-12	FUSE, GLASS CYLINDRICAL (DIA. 5) (8A/250V) (MX)	
△ F901	1-576-232-51	FUSE (H.B.C.) (T5AH/250V) (EXCEPT MX,E32)	
△ F901	1-576-233-51	FUSE (H.B.C.) (T6.3AH/250V) (E32)	
TU4001	1-693-771-22	TUNER (FM) (ANTENNA) (SAF)	
TU4001	1-693-780-21	TUNER (FM) (ANTENNA) (EXCEPT SAF)	

MEMO

