

DSC-W5/W7/W15/W17

SERVICE MANUAL

LEVEL 2

Ver. 1.5 2007.09

Revision History

How to use
Acrobat Reader



Photo: DSC-W5/Silver

DSC-W5/W7

US Model
Canadian Model
Argentine Model
Brazilian Model
Japanese Model

DSC-W5/W7/W15/W17

AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Korea Model
Tourist Model

DSC-W5/W7/W15

Chinese Model

Link

SPECIFICATIONS	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAM	REPAIR PARTS LIST
DISASSEMBLY	SCHEMATIC DIAGRAMS	

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (9-876-856-51).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (9-876-856-41).
- This service manual contains information for Japanese model as well.
- Reference No. search on printed wiring boards is available.
- Table for Differences of Function of Each Model
- Note in Lens Frame Installation
- Method for Copying or Erasing the Data in Internal Memory.
- Exchange Method of Barrier Assy

On the CH-168 and SY-001 boards

This service manual provides the information that is premised the circuit board replacement service and not intended repair inside the CH-168 and SY-001 boards.

Therefore, schematic diagram, printed wiring board and electrical parts list of the CH-168 and SY-001 boards are not shown.

The following pages are not shown.

Schematic diagrams	Pages 4-11 to 4-30
Printed wiring boards	Pages 4-39 to 4-42
Waveforms	Pages 4-45 and 4-46
Mounted parts location	Pages 4-48
Electrical parts list	Pages 5-7 and 5-9 to 5-12

The above-described information is shown in service manual Level 3.

DIGITAL STILL CAMERA

SONY®



Cyber-shot



SPECIFICATIONS

Camera

[System]

Image device	DSC-W7/W17: 9.11 mm (1/1.8 type) color CCD, Primary color filter DSC-W5/W15: 9.04 mm (1/1.8 type) color CCD, Primary color filter
Total pixel number of camera	DSC-W7/W17: Approx. 7 410 000 pixels DSC-W5/W15: Approx. 5 255 000 pixels
Effective pixel number of camera	DSC-W7/W17: Approx. 7 201 000 pixels DSC-W5/W15: Approx. 5 090 000 pixels
Lens	Carl Zeiss Vario-Tessar 3 zoom lens f = 7.9 - 23.7 mm (38 - 114 mm when converted to a 35 mm still camera) F2.8 - 5.2
Exposure control	Automatic exposure, Manual exposure, Scene Selection (7 modes)
White balance	Automatic, Daylight, Cloudy, Fluorescent, Incandescent, Flash
File format (DCF compliant)	Still images: Exif Ver. 2.2 JPEG compliant, DPOF compatible Movies: MPEG1 compliant (Monaural)
Recording media	Internal memory 32 MB Memory Stick
Flash	Recommended distance (ISO set to Auto): 0.2 m to 4.5 m (7 7/8 inches to 14 feet 9 1/4 inches) (W)/0.3 m to 2.5 m (11 7/8 inches to 8 feet 2 1/2 inches) (T)

[Input and Output connectors]

A/V OUT (MONO) jack (Monaural)	Minijack Video: 1 Vp-p, 75 Ω , unbalanced, sync negative Audio: 327 mV (at a 47 k Ω load) Output impedance 2.2 k Ω
USB jack	mini-B
USB communication	Hi-Speed USB (USB 2.0 compliant)

[LCD screen]

LCD panel	6.2 cm (2.5 type) TFT drive
Total number of dots	115 200 (480×240) dots

[Power, general]

Power	HR 15/51:HR6 (size AA) Nickel-Metal Hydride batteries (2), 2.4 V R6 (size AA) Alkaline batteries (2, not supplied), 3 V AC-LS5K AC Aaptor (not supplied), 4.2 V
Power consumption (during shooting with the LCD screen on)	DSC-W7/W17: 1.2 W DSC-W5/W15: 1.1 W
Operating temperature	0°C to +40°C (+32°F to +104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions	91×60×37.1 mm (3 5/8×2 3/8×1 1/2 inches) (W/H/D, excluding maximum protrusions)
Mass	Approx. 253 g (8.9 oz) (including two batteries and wrist strap)
Microphone	Electret condenser microphone
Speaker	Dynamic speaker
Exif Print	Compatible
PRINT Image Matching III	Compatible
PictBridge	Compatible

BC-CS2A/CS2B Ni-MH battery charger

Power requirements	AC 100 to 240 V, 50/60 Hz, 3 W
Output voltage	AA: DC 1.4V 400 mA×2 AAA: DC 1.4 V 160 mA×2
Operating temperature	0°C to +40°C (+32°F to +104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions	Approx. 71×30×91 mm (2 7/8×1 3/16×3 5/8 inches) (W/H/D)
Mass	Approx. 90 g (3 oz)

Design and specifications are subject to change
without notice.

Table for differences of function

Model	DSC-W5	DSC-W7	DSC-W15	DSC-W17
Destination	US, CND, AEP, UK, E, AUS, HK, CH, KR, AR, BR, J, JE	US, CND, AEP, UK, E, AUS, HK, CH, KR, AR, BR, J, JE	AEP, UK, E, AUS, HK, CH, KR, JE	AEP, UK E, AUS, HK, KR, JE
CCD imager Total pixel (Effective pixel)	5 255 000 pixels (5 090 000 pixels)	7 410 000 pixels (7 201 000pixels)	5 255 000 pixels (5 090 000 pixels)	7 410 000 pixels (7 201 000pixels)
CD board	CD-545	CD-546	CD-545	CD-546

Note: DSC-W15/W17 are the same as DSC-W5/W7 except accessories and packing materials.

- Abbreviation
AR : Argentine model
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND: Canadian model
HK : Hong Kong model
J : Japanese model
JE : Tourist model
KR : Korea model

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE $\triangle$ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. FLEXIBLE Circuit Board Repairing
 - Keep the temperature of the 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.)



: 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.

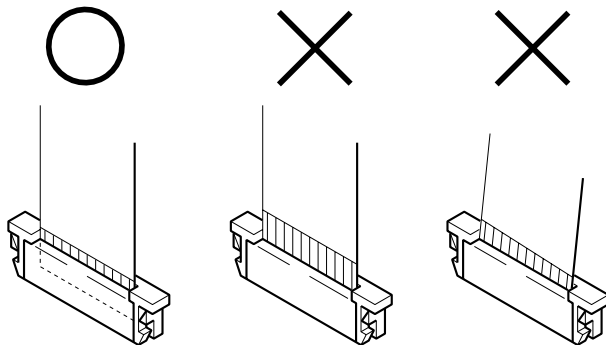
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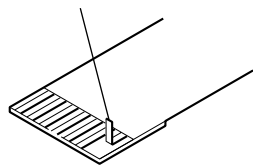
1. SERVICE NOTE

1-1. NOTE FOR REPAIR

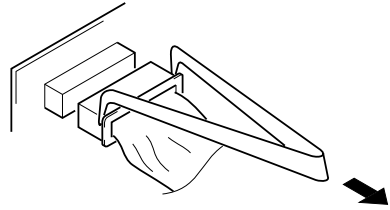
Make sure that the flat cable and flexible board are not cracked or bent at the terminal.
Do not insert the cable insufficiently nor crookedly.



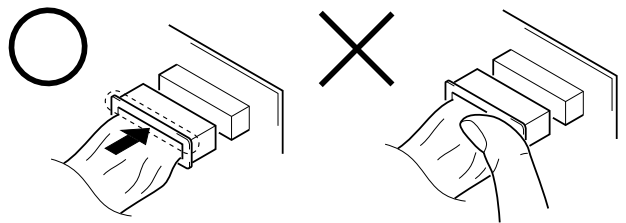
Cut and remove the part of gilt which comes off at the point.
(Be careful or some pieces of gilt may be left inside)



When remove a connector, don't pull at wire of connector.
It is possible that a wire is snapped.



When installing a connector, don't press down at wire of connector.
It is possible that a wire is snapped.



1-2. DISCHARGING OF THE SY-001 BOARD'S CHARGING CAPACITOR (C901)

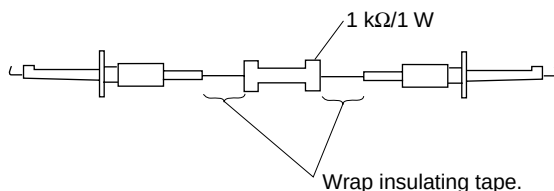
The charging capacitor (C901) of SY-001 board is charged up to the maximum 300 V potential.

There is a danger of electric shock by this high voltage when the capacitor is handled by hand. The electric shock is caused by the charged voltage which is kept without discharging when the main power of the unit is simply turned off. Therefore, the remaining voltage must be discharged as described below.

Preparing the Short Jig

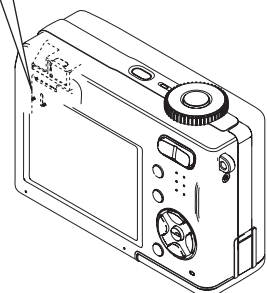
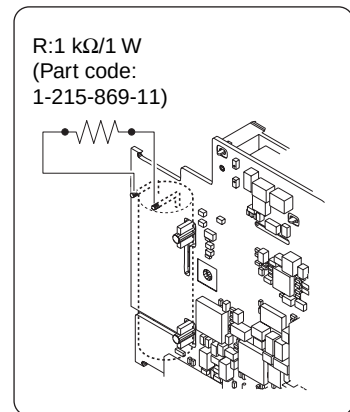
To preparing the short jig, a small clip is attached to each end of a resistor of 1 k Ω / 1 W (1-215-869-11).

Wrap insulating tape fully around the leads of the resistor to prevent electrical shock.



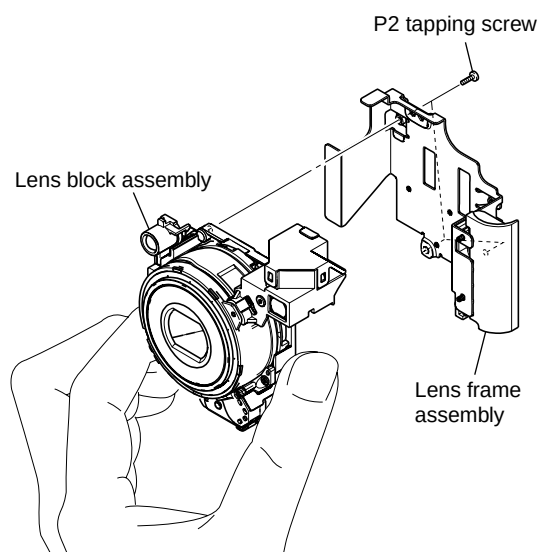
Discharging the Capacitor

Short-circuit between the positive and the negative terminals of charged capacitor with the short jig about 10 seconds.



1-3. NOTE IN LENS FRAME INSTALLATION

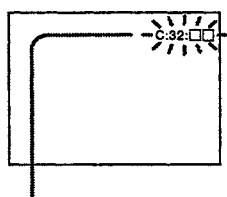
When tightening a screw, have both sides of the lens block assembly so as not for the load to depend.



1-4. DESCRIPTION ON SELF-DIAGNOSIS DISPLAY

Self-diagnosis display

The camera has a self-diagnosis display. This function displays the camera condition with five-digits (a combination of a letter and figures) on the LCD screen. If this occurs check the following code chart. The five-digits display informs you of the camera's current condition. The last two digits (indicated by □□) will differ depending on the state of the camera.



Self-diagnosis display

- C: □□: □□

You can reverse the camera malfunction yourself. (However, contact your Sony dealer or local authorized Sony service facility when you cannot recover from the camera malfunction.)

- E: □□: □□

Contact your Sony dealer or local authorized Sony service facility.

Display Code	Countermeasure	Cause	Caution Display During Error
C:32:□□	Turn the power off and on again.	Trouble with hardware.	SYSTEM ERROR
C:13:□□	Format the "Memory Stick" or internal memory.	"Memory Stick" or internal memory is unformatted.	FORMAT ERROR
	Insert a new "Memory Stick".	"Memory Stick" is broken.	MEMORY STICK ERROR
	Turn the power off and on again.	Trouble with internal memory.	INTERNAL MEMORY ERROR
E:61:□□	Checking of lens drive circuit.	When failed in the focus and zoom initialization.	—
E:91:□□	Checking of flash unit or replacement of flash unit. (Note)	Abnormality when flash is being charged.	
E:92:□□	Insert batteries correctly.	Batteries are not inserted correctly.	

Note: After repair, be sure to perform "1-6. PROCESS AFTER FIXING FLASH ERROR".

1-5. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY

The data can be copied/erased by the operations on the Setup screen. (When erasing the data, execute formatting the internal memory.)

Note: 1 When replacing the SY-001 board, erase the data in internal memory of the board before replacement.

Note: 2 When replacing the SY-001 board or the IC381 on the SY-001 board, execute formatting and initialize the internal memory after replacement.

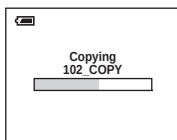
Method for Copying the Data in Internal Memory

Copy

Copies all images in the internal memory to a "Memory Stick".

	OK	See the following procedure.
✓	Cancel	Cancels the copying.

- ① Insert a "Memory Stick" having 32 MB or larger capacity.
- ② Select [OK] with ▲ on the control button, then press ●.
The message "All data in internal memory will be copied Ready?" appears.
- ③ Select [OK] with ▲, then ●.
Copying starts.



- Use fully charged Nickel-Metal Hydride batteries or the AC Adaptor (not supplied). If you attempt to copy image files using batteries with little remaining charge, the batteries may run out, causing copying to fail or possibly corrupting the data.
- You cannot copy individual images.
- The original images in the internal memory are retained even after copying. To delete the contents of the internal memory, remove the "Memory Stick" after copying, then execute the [Format] command in [Internal Memory Tool].
- You cannot select a folder copied on a "Memory Stick".
- A  (Print order) mark added to an image is deleted when you copy data.

Method for Formatting the Internal Memory

Format

Formats the internal memory.

- Note that formatting irrevocably erases all data in the internal memory, including even protected images.

	OK	See the following procedure.
✓	Cancel	Cancels the formatting.

- ① Select [OK] with ▲ on the control button, then press ●.
The message "All data in internal memory will be erased Ready?" appears.
- ② Select [OK] with ▲, then press ●.
The format is complete.

1-6. PROCESS AFTER FIXING FLASH ERROR

When “FLASH error” (Self-diagnosis Code E : 91 : **) occurs, to prevent any abnormal situation caused by high voltage, setting of the flash is changed automatically to disabling charge and flash setting.
After fixing, this setting needs to be deactivated. Flash error code can be initialized by the operations on the Setup screen.

Method for Initializing the Flash Error Code

Initialize

Initializes the setting to the default setting.

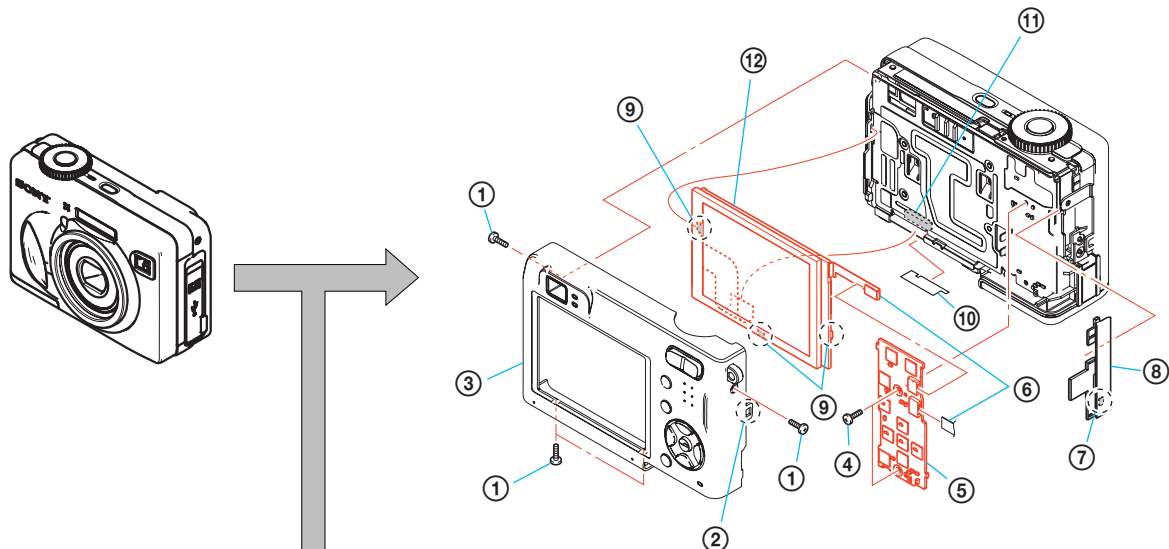
	OK	See the following procedure.
✓	Cancel	Cancels the resetting.

- ① Select [OK] with ▲ on the control button, then press ●.
The message “Initialize all settings Ready?” appears.
- ② Select [OK] with ▲, then press ●.
The settings are reset to the default setting.
- Make sure that the power is not disconnected during resetting.

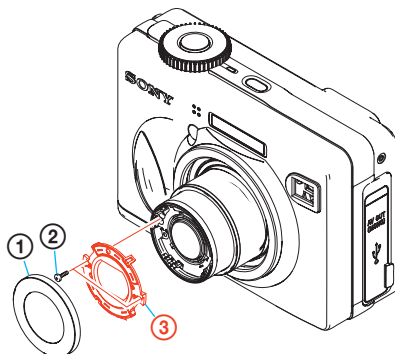
2. DISASSEMBLY

The following flow chart shows the disassembly procedure.

2-1. DISASSEMBLY

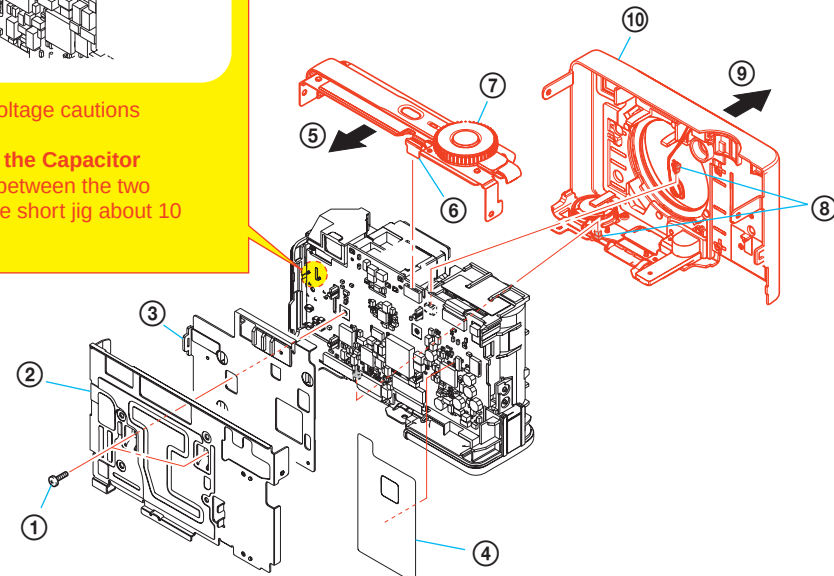
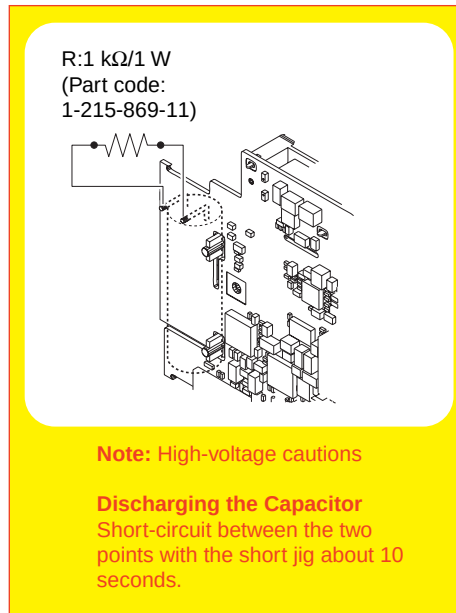


- | | |
|---------------------------------|-----------------------|
| ① P2 torasuta screw (M1.7) x4 | ⑦ Claw x1 |
| ② Claw x1 | ⑧ BT side cabinet (C) |
| ③ Cabinet (rear) block assembly | ⑨ Claw x3 |
| ④ Screw (M1.7) x2 | ⑩ SP sheet |
| ⑤ SW-001 board | ⑪ Connector: CN601 |
| ⑥ Flexible board x2: CN451, 452 | ⑫ D901, LCD901 |

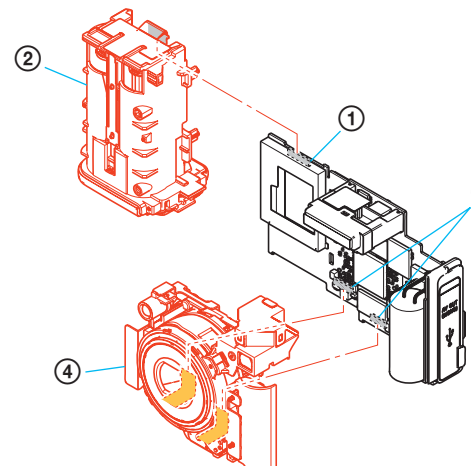


- ① Ornamental ring A
- ② Tapping screw x2
- ③ Barrier assy

Note: When you exchange rings, be sure to follow the procedure carried on "2-3. Exchange Method of Barrier Assy" (2-5 page).

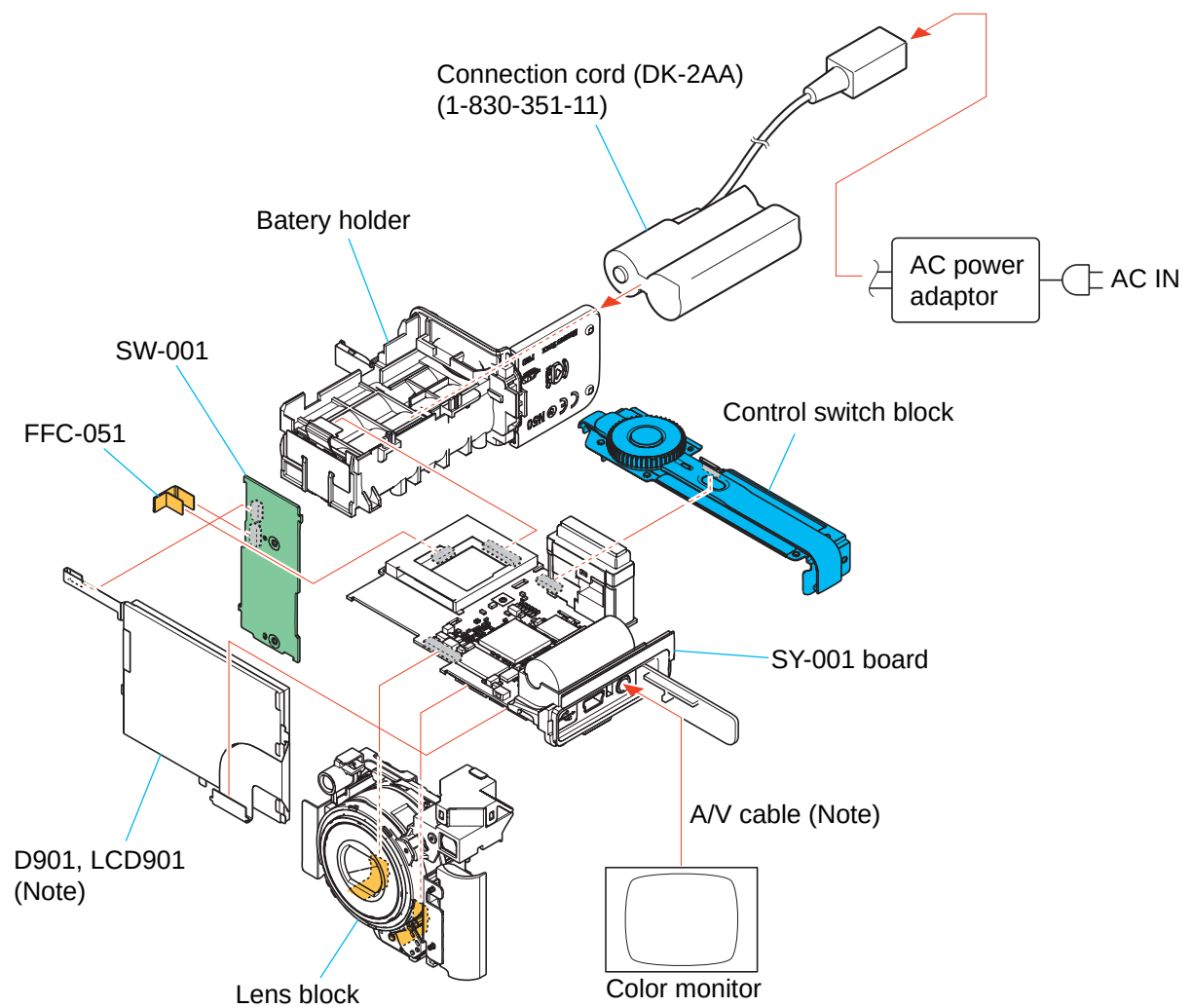
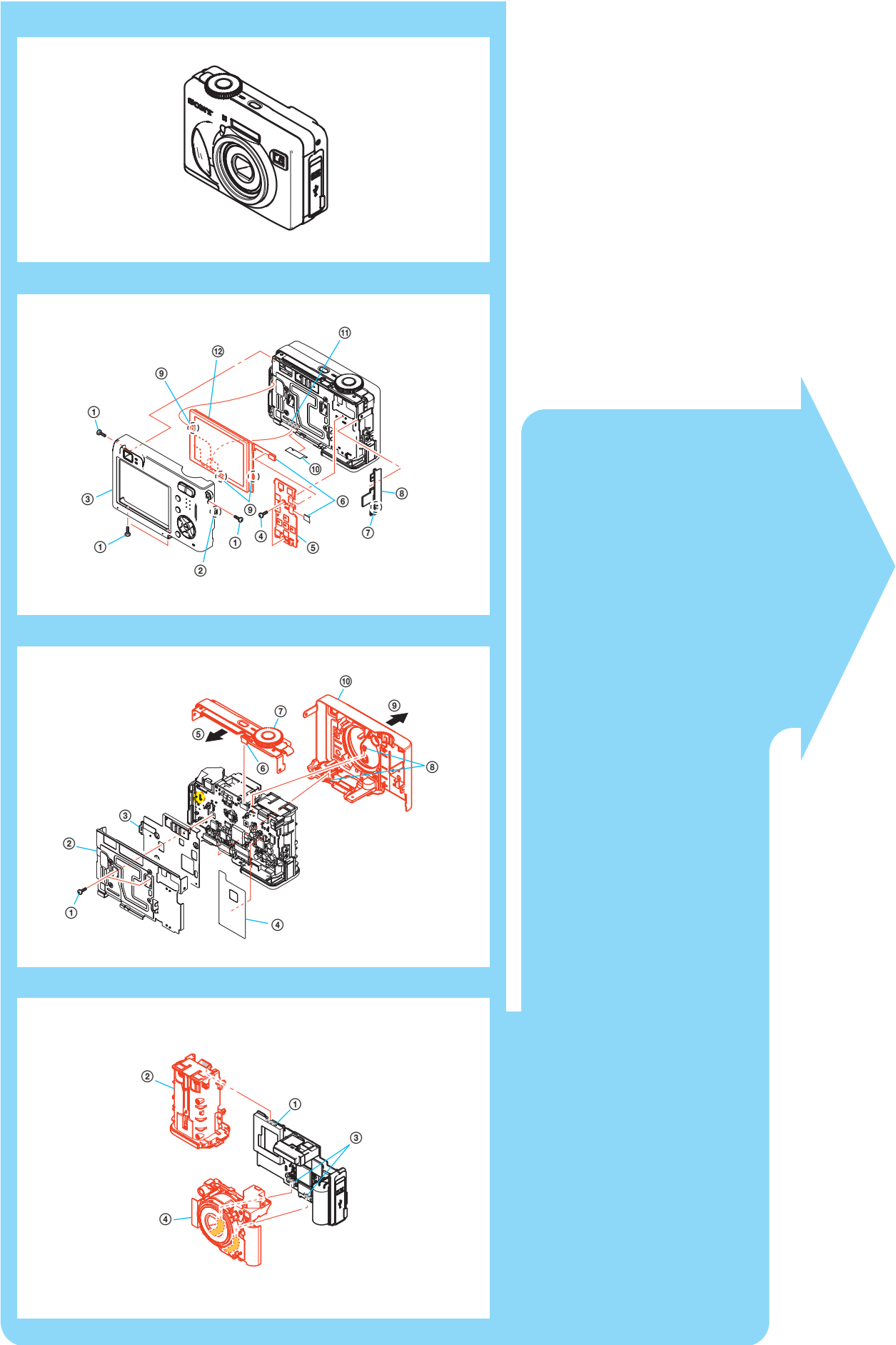


- ① Screw (M1.7) x2
- ② LCD frame
- ③ Terminal guard
- ④ Fuse label
- ⑤ Remove the control switch block.
- ⑥ Connector: CN753
- ⑦ Control switch block
- ⑧ Connector x2: CN801, 802
- ⑨ Remove the cabinet (front) block.
- ⑩ Cabinet (front) block



- ① Connector: CN001
- ② Battery holder
- ③ Connector x2: CN201, 401
- ④ Lens block

2-2. SY-001 BOARD SERVICE POSITION



Note: If the A/V cable is connected to the AV OUT (MONO) jack of SY-001 board, the image can not appear on the LCD screen.
If you want to confirm the circuit of LCD drive or LCD, disconnect the A/V cable.

2-3. EXCHANGE METHOD OF BARRIER ASSY

Service parts

	Part Number	Part Name	Quantity
1	3-091-427-01	Ring (A), Ornamental	1
2	X-3954-476-1	Barrier Assy	1
3	3-086-156-31	Tapping screw (P2)	2

Tools used

Torque driver

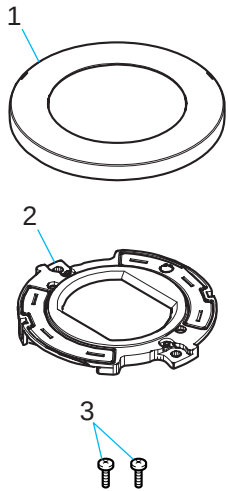
Soldering iron

Weight about 60g

Adhesive (Super X) (Note)

Note: Use adhesive (Super X) or an equivalent article.

Don't use what becomes white after drying like a quick-drying glue.



2-3-1. PEEL OFF OLD ORNAMENTAL RING A

The Ornamental Ring A has adhered to the Barrier Assy strongly and accordingly, use a soldering iron to weaken the adhesive force.

Heat four circled portions with the soldering iron.

Heating temperature is about 300°C.

Beware of a burn since the entire Ornamental Ring becomes hot.

* As the adhesive force of Ornamental Ring A is considerably large, the forced peeling will damage the group-1 frame.

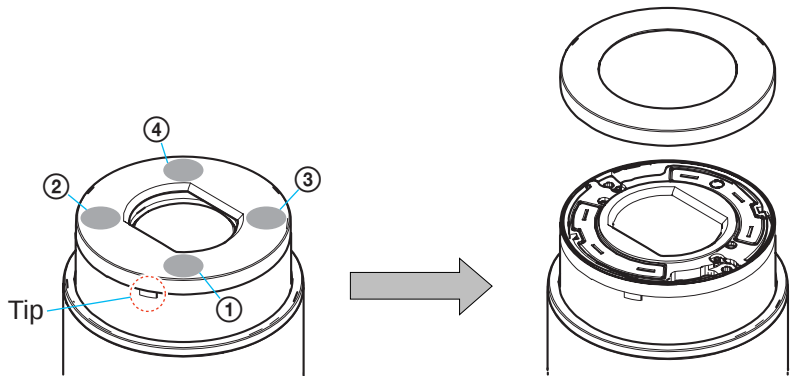
Insert the tip of tweezers, etc. into a notch of the group-1 frame and prize the ring.

* Take extreme care so as not to damage the coated surface of the group-1 frame.

In case of difficult peeling, heat the ring again with the soldering iron.

If this re-heating failed, it may be advisable that the ring be peeled while heating the portions ① → ② → ③ → ④ in the under figure one by one sequentially.

* Discard the removed Ornamental Ring A.



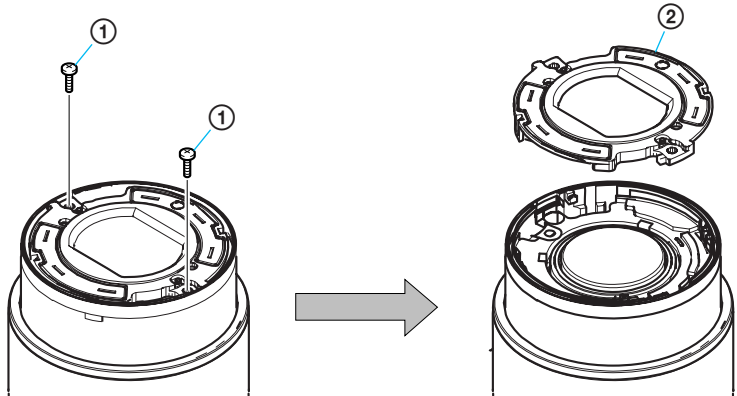
2-3-2. REMOVE OLD BARRIER ASSY

① Remove two screws.

* Discard the removed screws.

② Remove the Barrier Assy.

* Discard the removed Barrier Assy.



* After removing the Barrier Assy, if the "G1 Dust-Proof Ring" was removed, it must be returned to the home position.

In returning the ring, adjust the location of a projection to the lens direction.

This is an important part to prevent the dust and light from coming in.

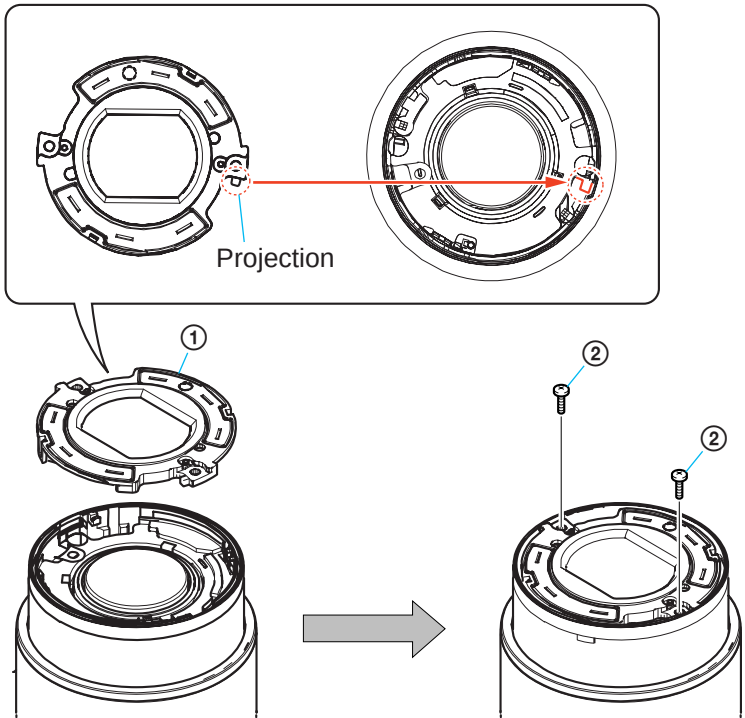
* After removing the Barrier Assy, take extreme care not to drop dust or foreign substances in the lens barrel.

2-3-3. INSTALL NEW BARRIER ASSY

① Install new Barrier Assy by paying attention to the projection of the Barrier Assy in relation to the position shown in the under figure.

② Tighten two screws.

* Tightening torque = 0.5 kgf (4.9 N)



2-3-4. ADHERE THE ORNAMENTAL RING A

Apply an adhesive to four recesses on the top surface of the Barrier Assy.

* Do not apply too much adhesive. (Make quantity of adhesives into the quantity in which a groove hides.)

Meeting a “notch” of the Ornamental Ring A with a “projection” of the group-1 frame, push the Ornamental Ring A into the group-1 frame.

* The projection of the spring for preventing static electricity must be tilted.

Put the 60g weight on the Ornamental Ring A so that the Ornamental Ring A does not float up until the adhesive hardens.

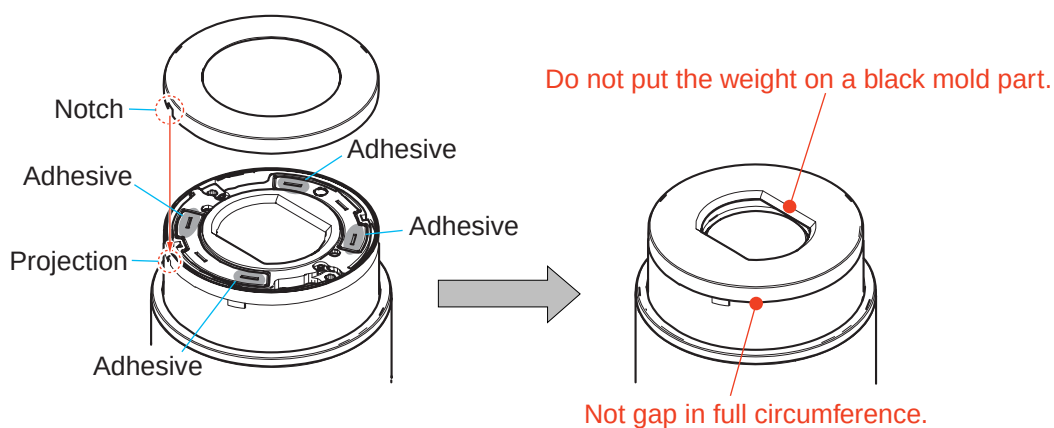
Note: Be careful not to give a shock.

* After the weight was put, no gap must be present in full circumference between Ornamental Ring A and group-1 frame.

A gap, if present, causes the crackle sound NG.

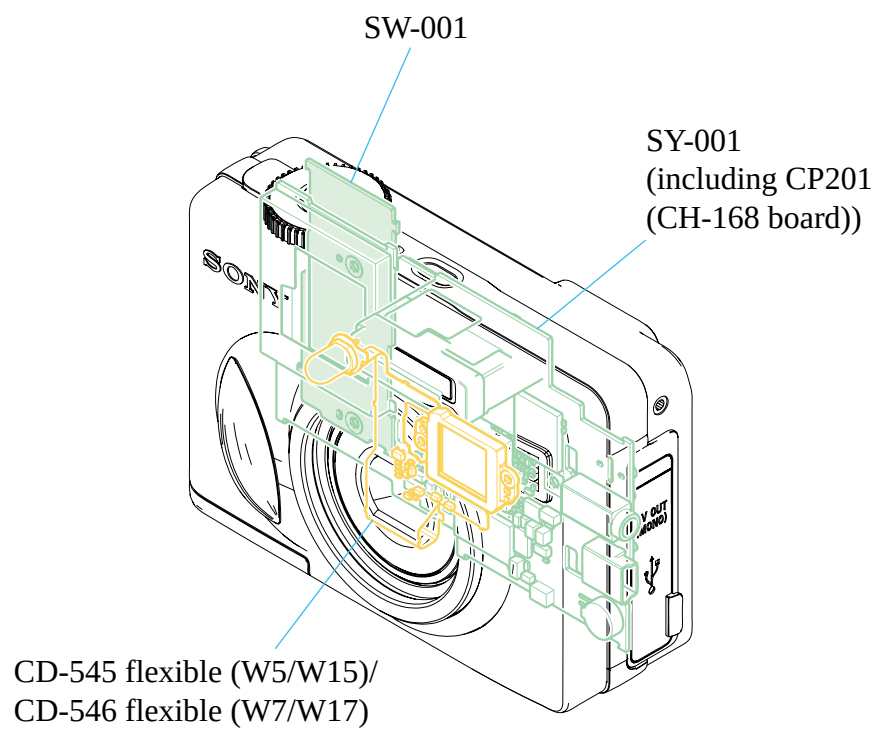
* The weight must push in the Ornamental Ring A only.

If the weight is put on the mold part of the Barrier Assy, the Ornamental Ring A will float up.



Completion after 30 minutes.

2-4. CIRCUIT BOARDS LOCATION



Board Name	Function
CD-545 flexible	CCD IMAGER
CD-546 flexible	CCD IMAGER
CH-168 (included in SY-001)	CCD SIGNAL PROCESS
SW-001	CONTROL SWITCH
SY-001 (including CP-201 (CH-168 board))	CAMERA MODULE, CAMERA DSP, CPU, LENS DRIVE, BURST FLASH, SDRAM, AND FLASH, LCD DRIVE, AUDIO, VIDEO, DC/DC CONVERTER, FLASH DRIVE, CONNECTOR

3. BLOCK DIAGRAMS

Link

• OVERALL BLOCK DIAGRAM (1/2)

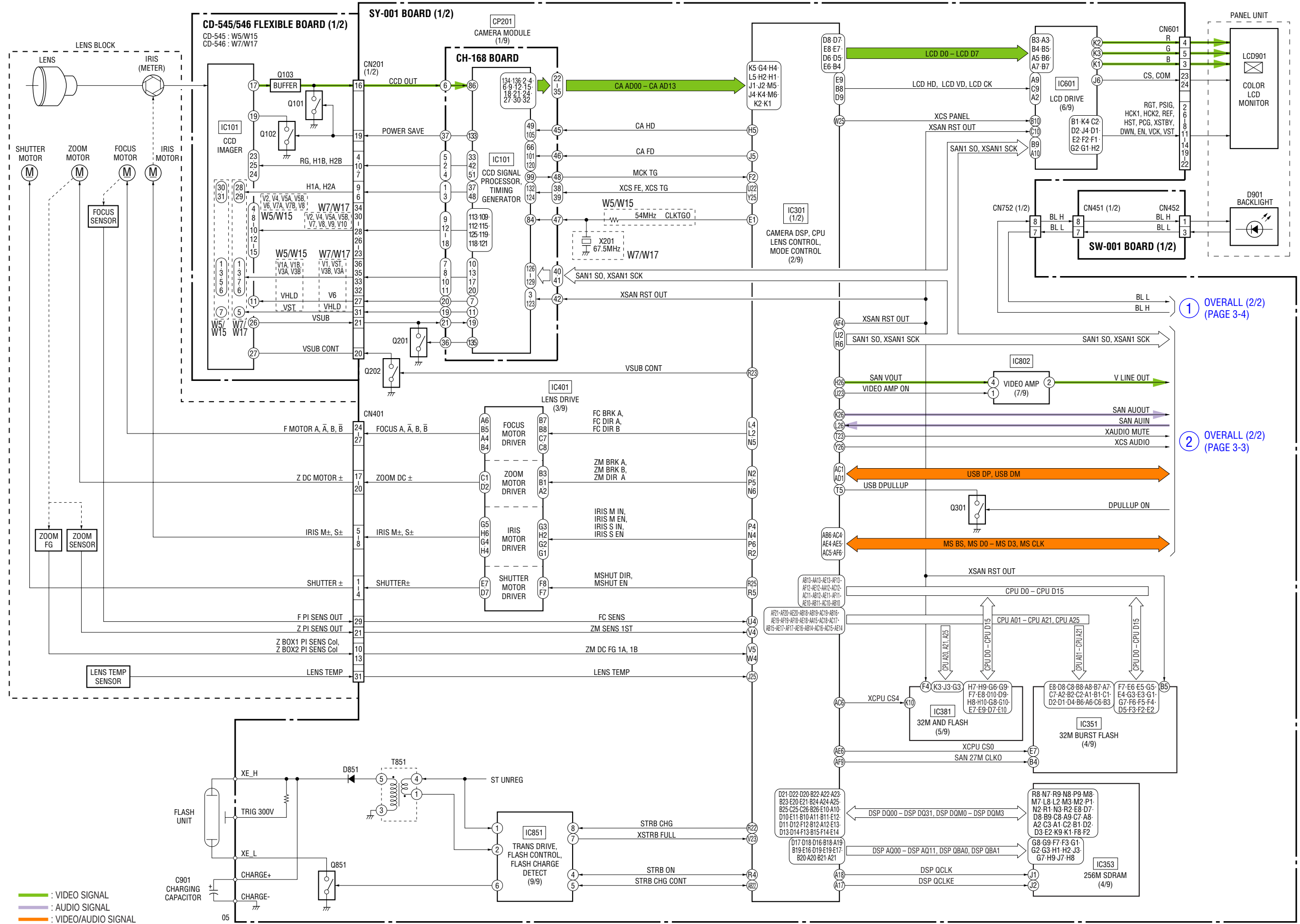
• POWER BLOCK DIAGRAM

• OVERALL BLOCK DIAGRAM (2/2)

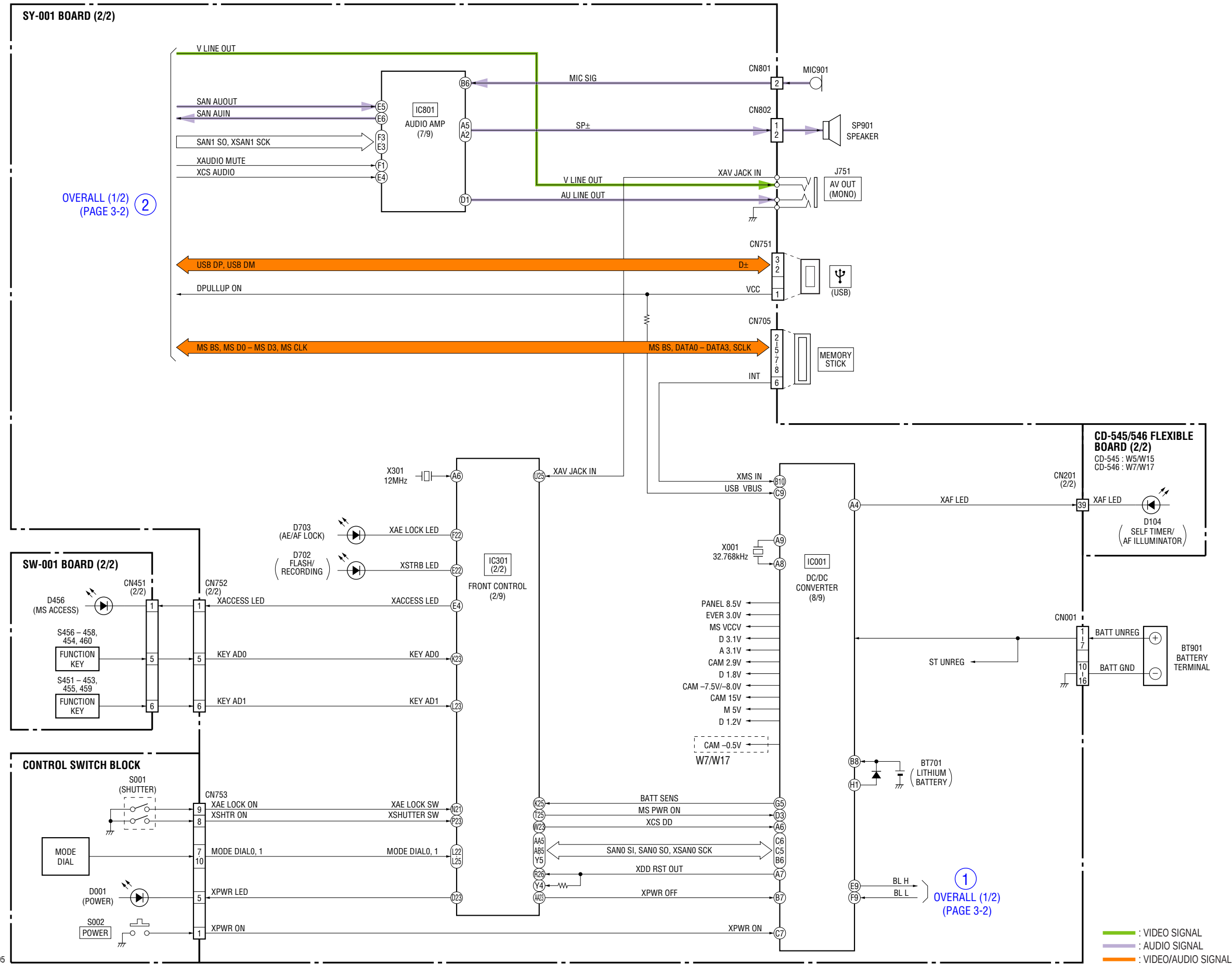
3. BLOCK DIAGRAMS

3-1. OVERALL BLOCK DIAGRAM (1/2)

() : Number in parenthesis () indicates the division number of schematic diagram where the component is located.

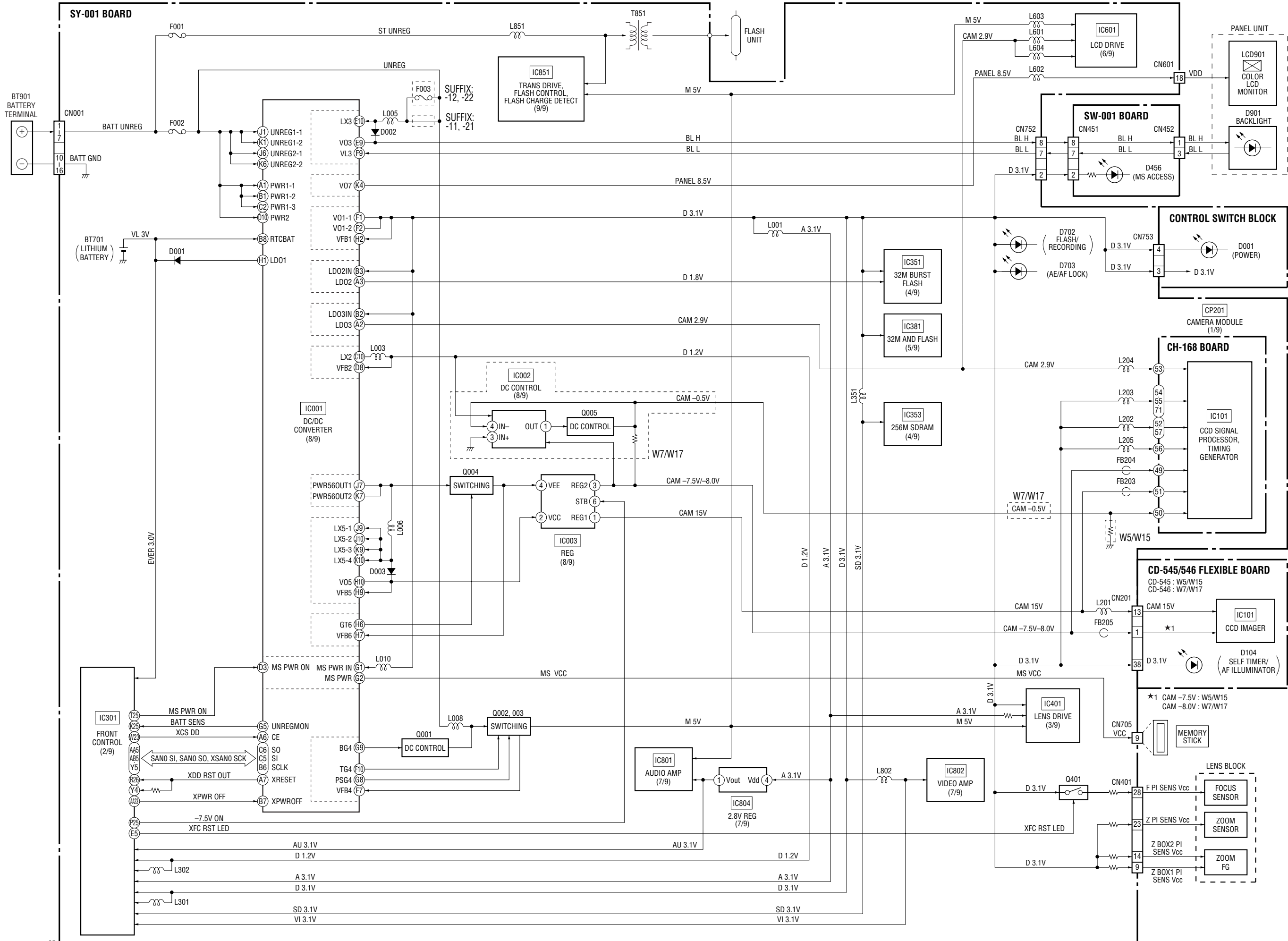


3-2. OVERALL BLOCK DIAGRAM (2/2) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



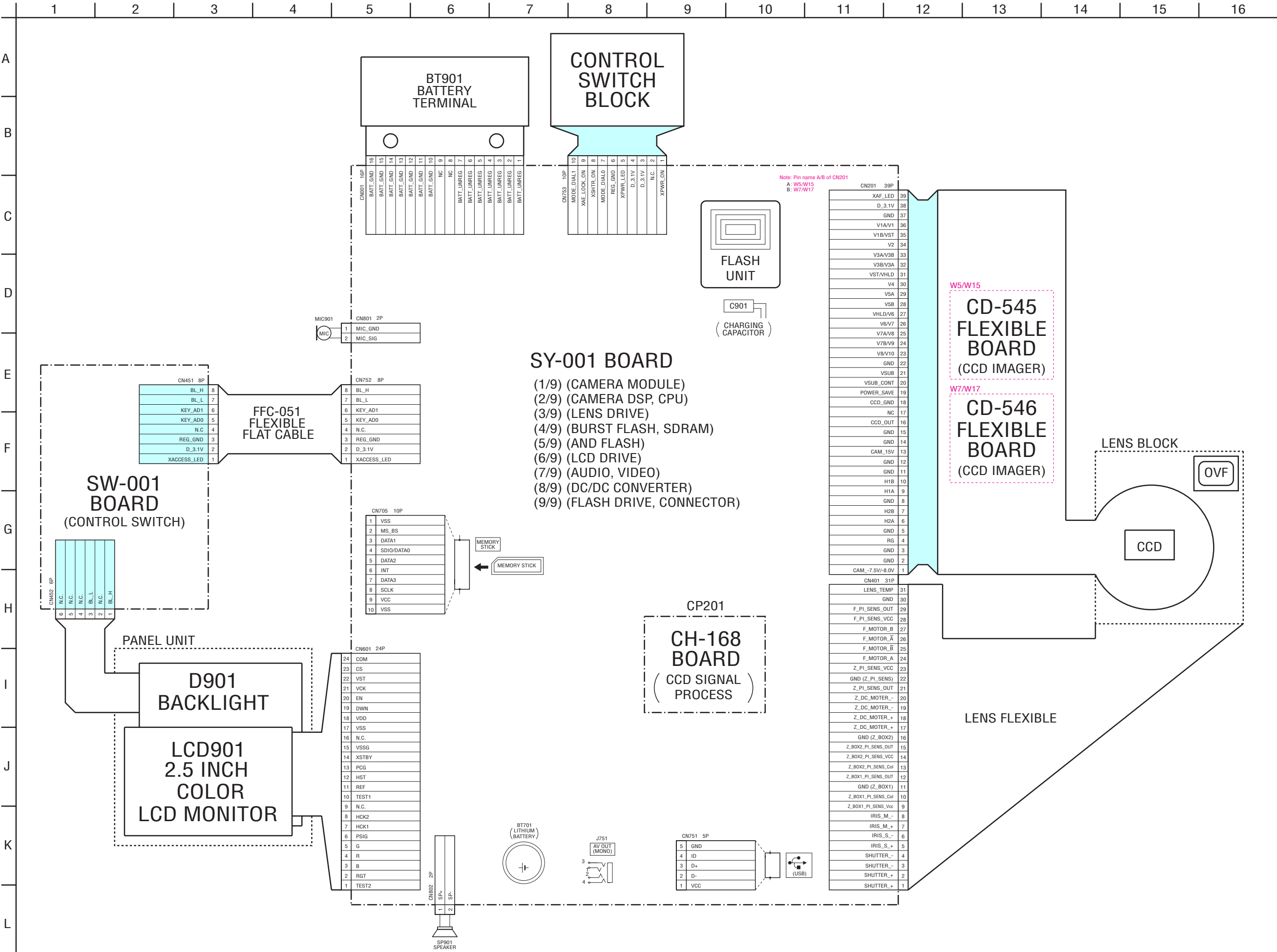
3-3. POWER BLOCK DIAGRAM

() : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



4-2. SCHEMATIC DIAGRAMS

Link

- CD-545 FLEXIBLE BOARD: W5/W15 (CCD IMAGER)

- SW-001 BOARD (CONTROL SWITCH)

- CD-546 FLEXIBLE BOARD: W7/W17 (CCD IMAGER)

- CONTROL SWITCH BLCOK

- COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

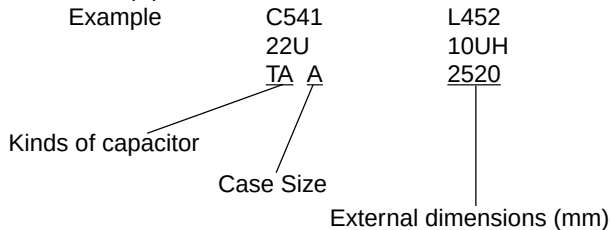
4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS

(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μ μF . 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. $\text{k}\Omega=1000 \Omega$, $\text{M}\Omega=1000 \text{k}\Omega$.
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.



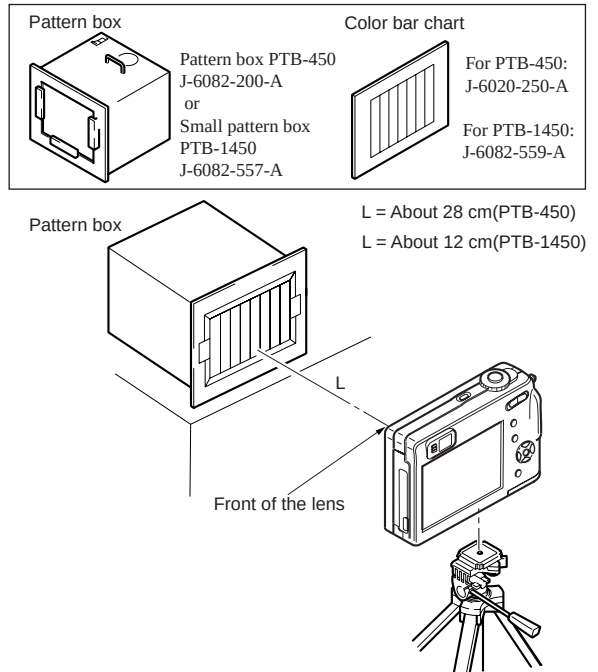
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination.
Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
XEDIT → EDIT PB/XREC → PB/REC
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : not use circuit
- Circled numbers refer to waveforms.

(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
(VOM of DC 10 $\text{M}\Omega$ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

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

1. Connection



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

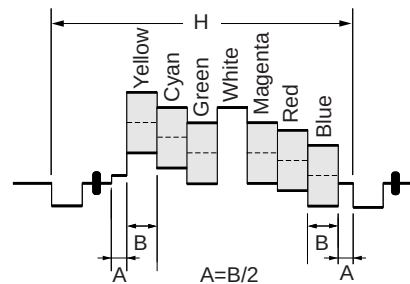


Fig. a (Video output terminal output waveform)

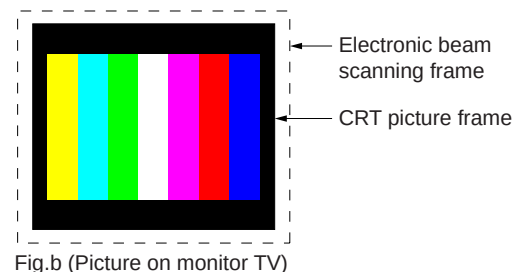
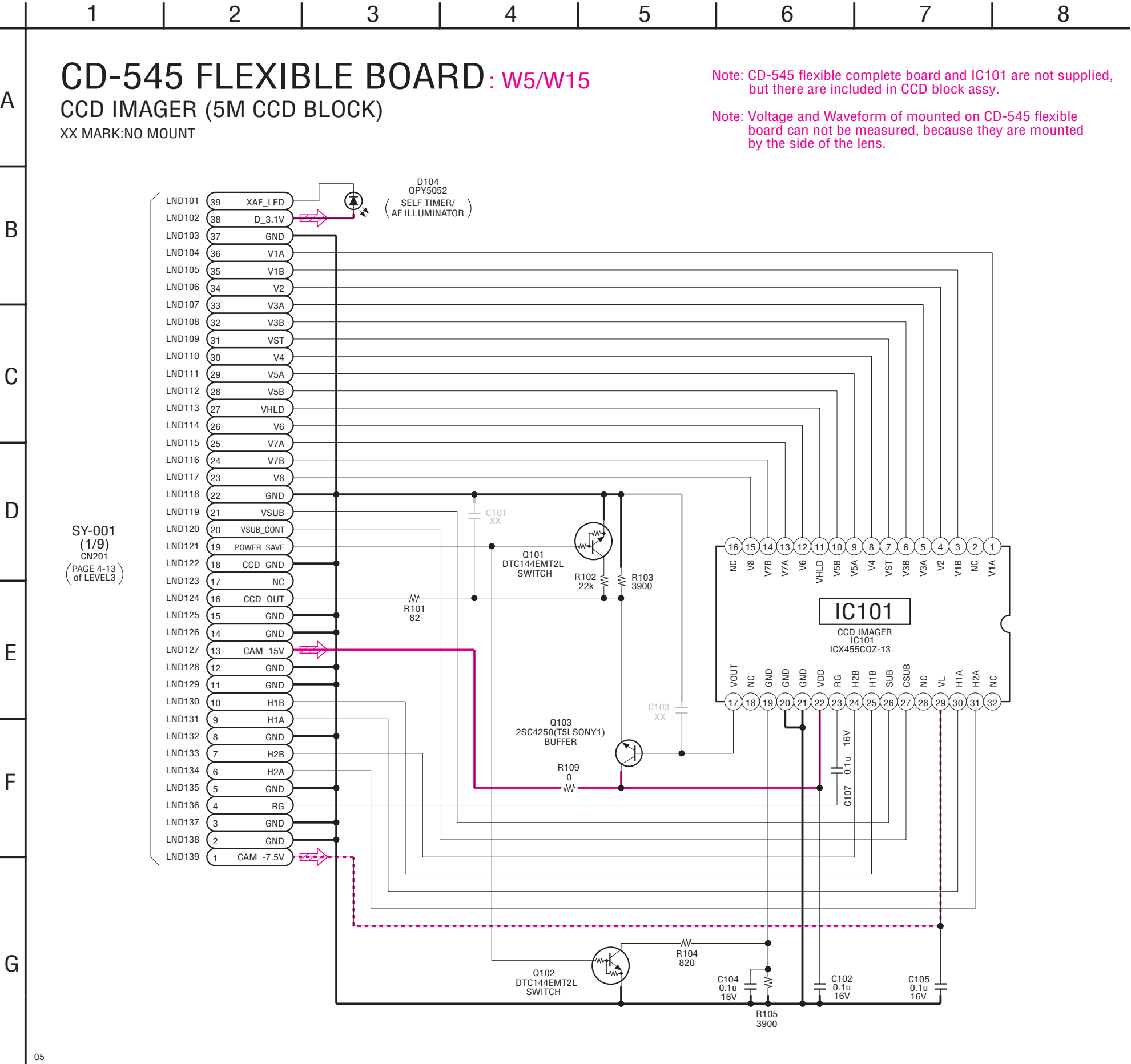


Fig.b (Picture on monitor TV)

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

Note : Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

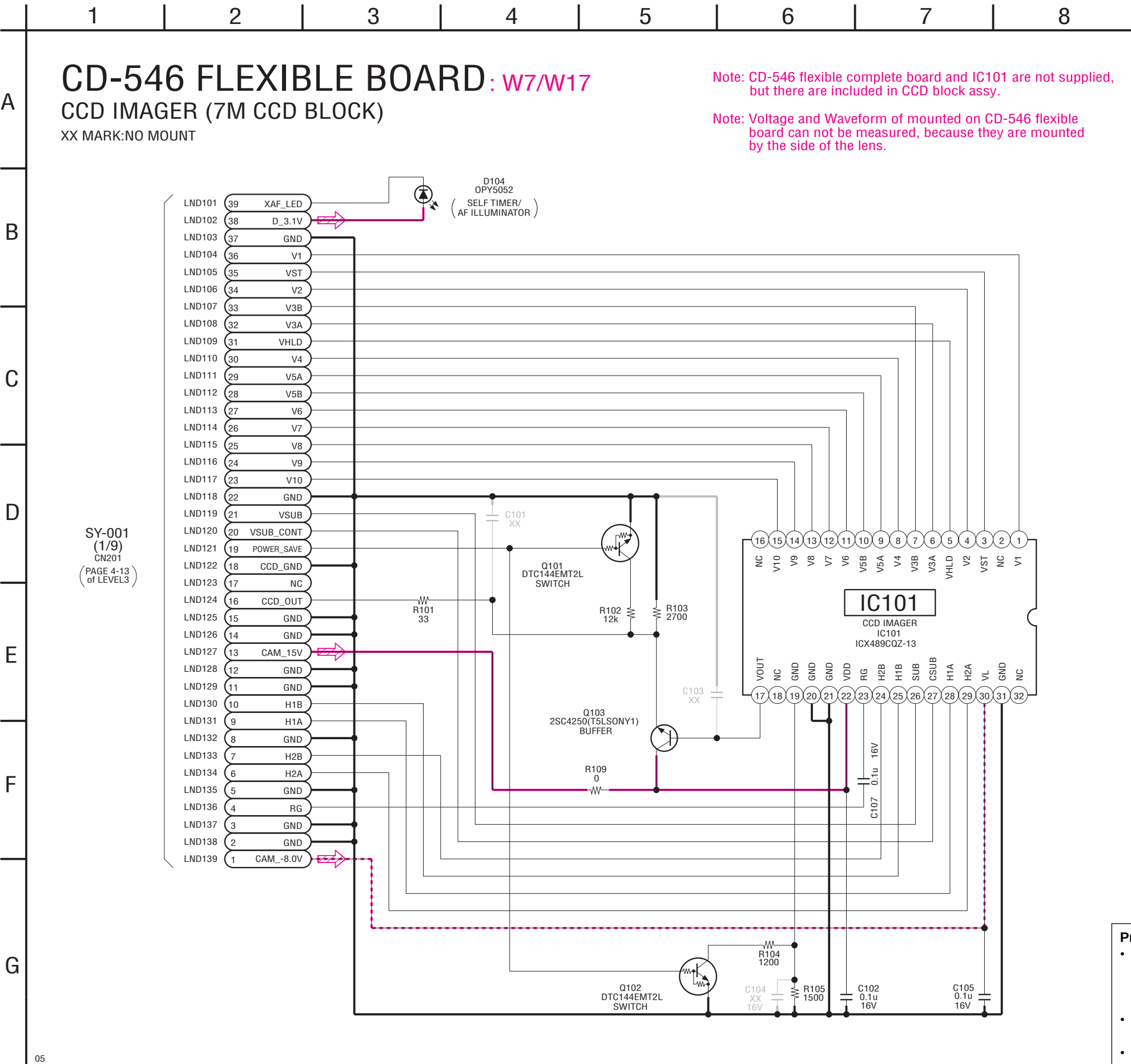
For Schematic Diagram
• Refer to page 4-37 for printed wiring board.



Precautions for Replacement of CCD Imager

- The CD-545 flexible board mounted as a repair part is not equipped with a CCD imager.
When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

For Schematic Diagram
• Refer to page 4-38 for printed wiring board.



Note: CD-546 flexible complete board and IC101 are not supplied, but there are included in CCD block assy.

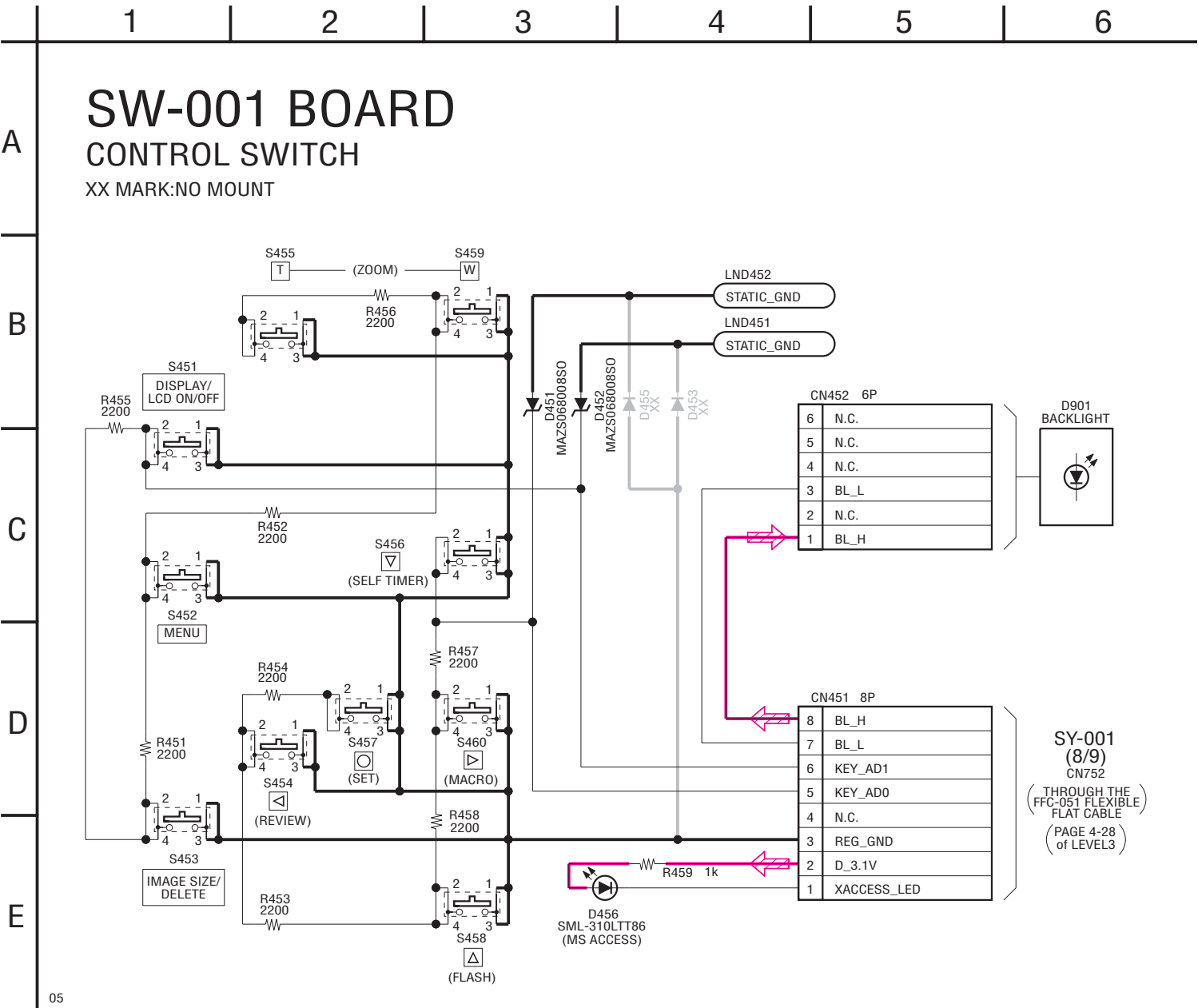
Note: Voltage and Waveform of mounted on CD-546 flexible board can not be measured, because they are mounted by the side of the lens.

Precautions for Replacement of CCD Imager

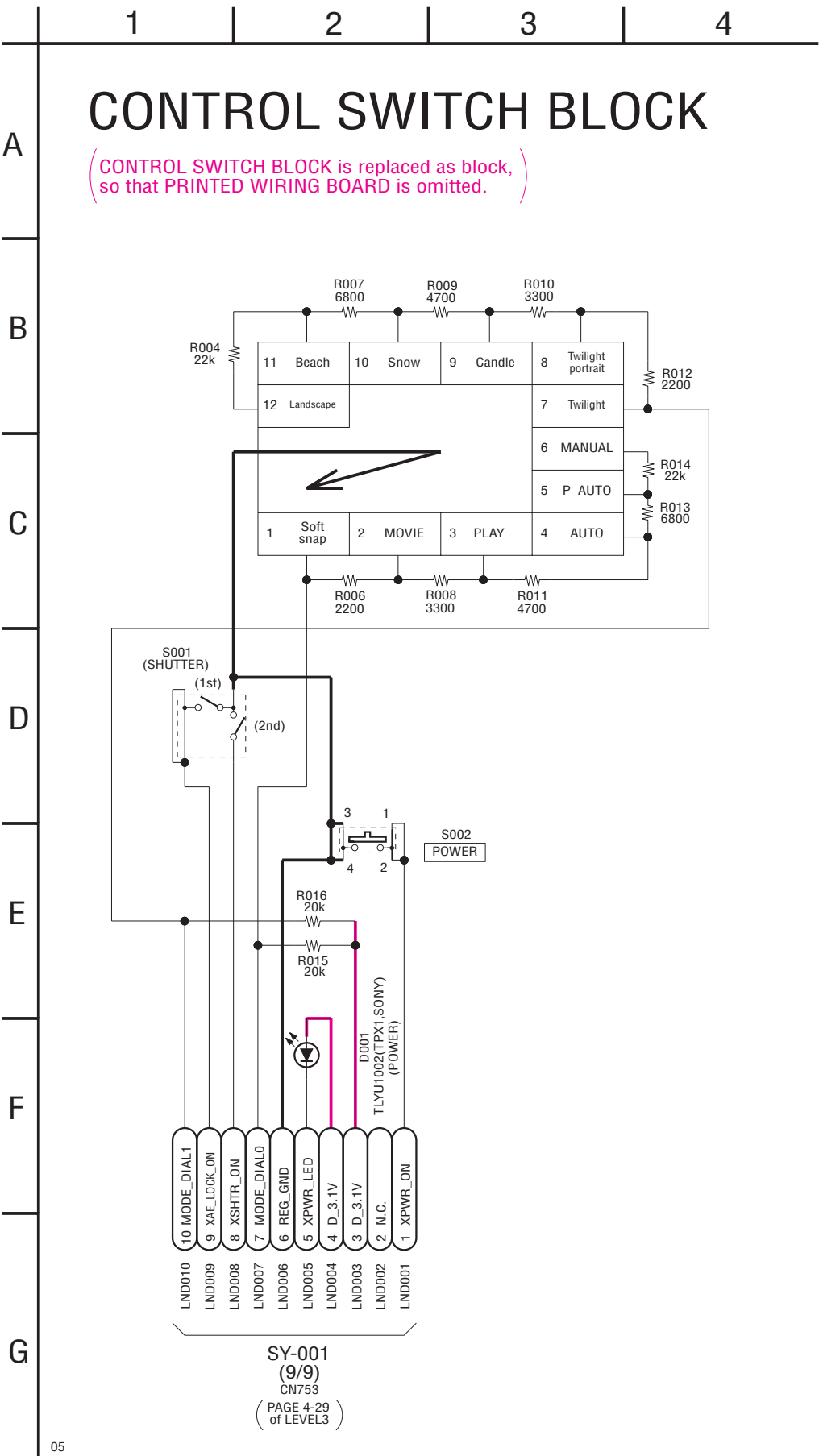
- The CD-546 flexible board mounted as a repair part is not equipped with a CCD imager.
When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

Schematic diagrams of the CH-168 and SY-001 boards are not shown.
Pages from 4-11 to 4-30 are not shown.

For Schematic Diagram
• Refer to page 4-44 for printed wiring board.



05



4-3. PRINTED WIRING BOARDS

Link

• CD-545 FLEXIBLE BOARD: W5/W15	• SW-001 BOARD
• CD-546 FLEXIBLE BOARD: W7/W17	

• COMMON NOTE FOR PRINTED WIRING BOARDS		
• MOUNTED PARTS LOCATION	• CIRCUIT BOARDS LOCATION	

Board Name	Function
CD-545 FLEXIBLE	CCD IMAGER
CD-546 FLEXIBLE	CCD IMAGER
SW-001	CONTROL SWITCH

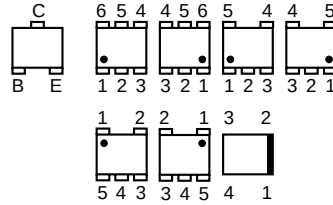
4-3. PRINTED WIRING BOARDS

4-3. PRINTED WIRING BOARDS

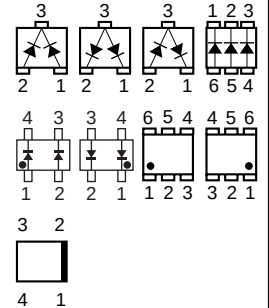
THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

-  : Uses unleaded solder.
-  : Circuit board
-  : Flexible board
-  : Pattern from the side which enables seeing.
-  : pattern of the rear side
(The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
-  : panel designation

- Chip parts.
Transistor



- Diode

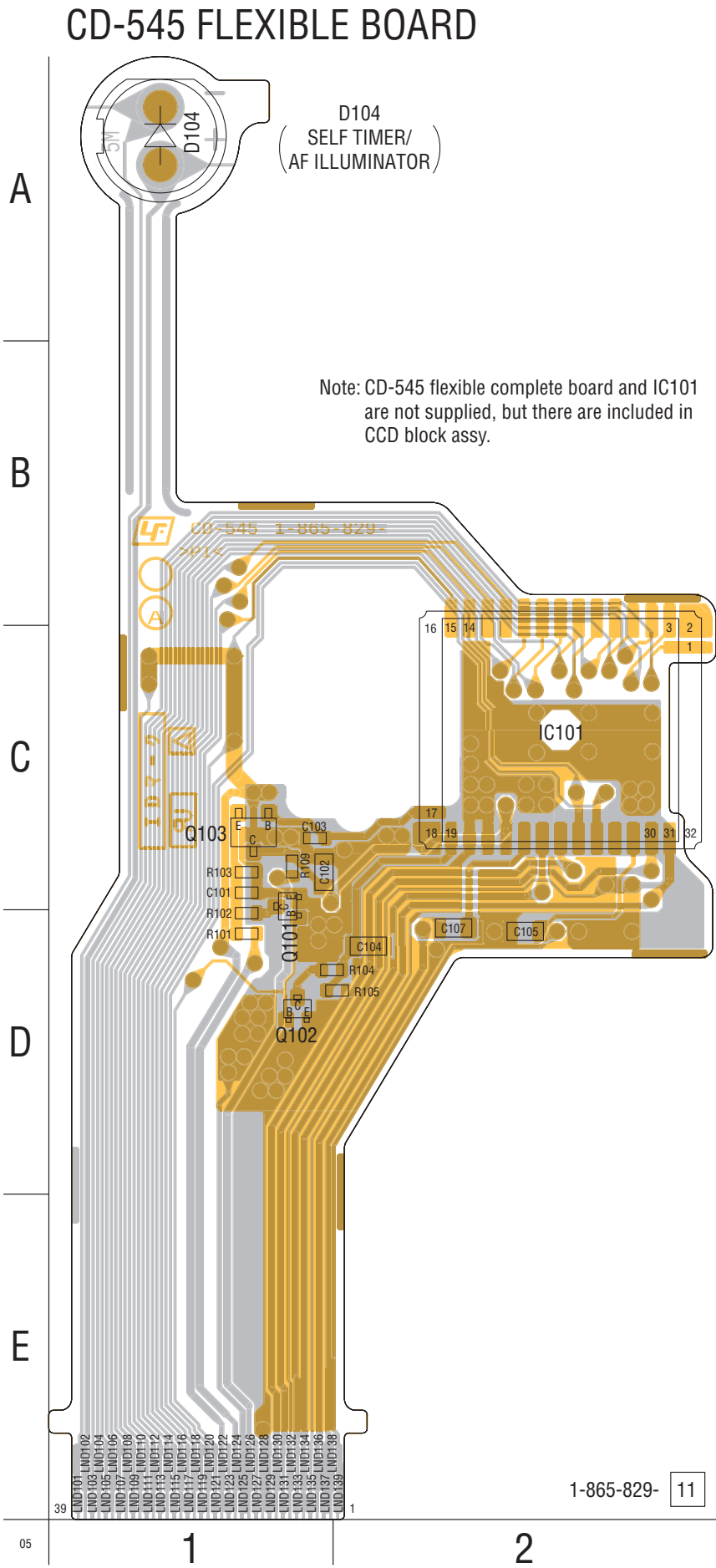


Board Name	Parts Location (Shown on Page)	Pattern	
		Total Number of Layers	Layers Not Indicated
CD-545 flexible	4-47	2 layers	—
CD-546 flexible	4-47	2 layers	—
SW-001	4-49	2 layers	—

CD-545 FLEXIBLE: W5/W15

Note for Printed Wiring Board (See page 4-35).

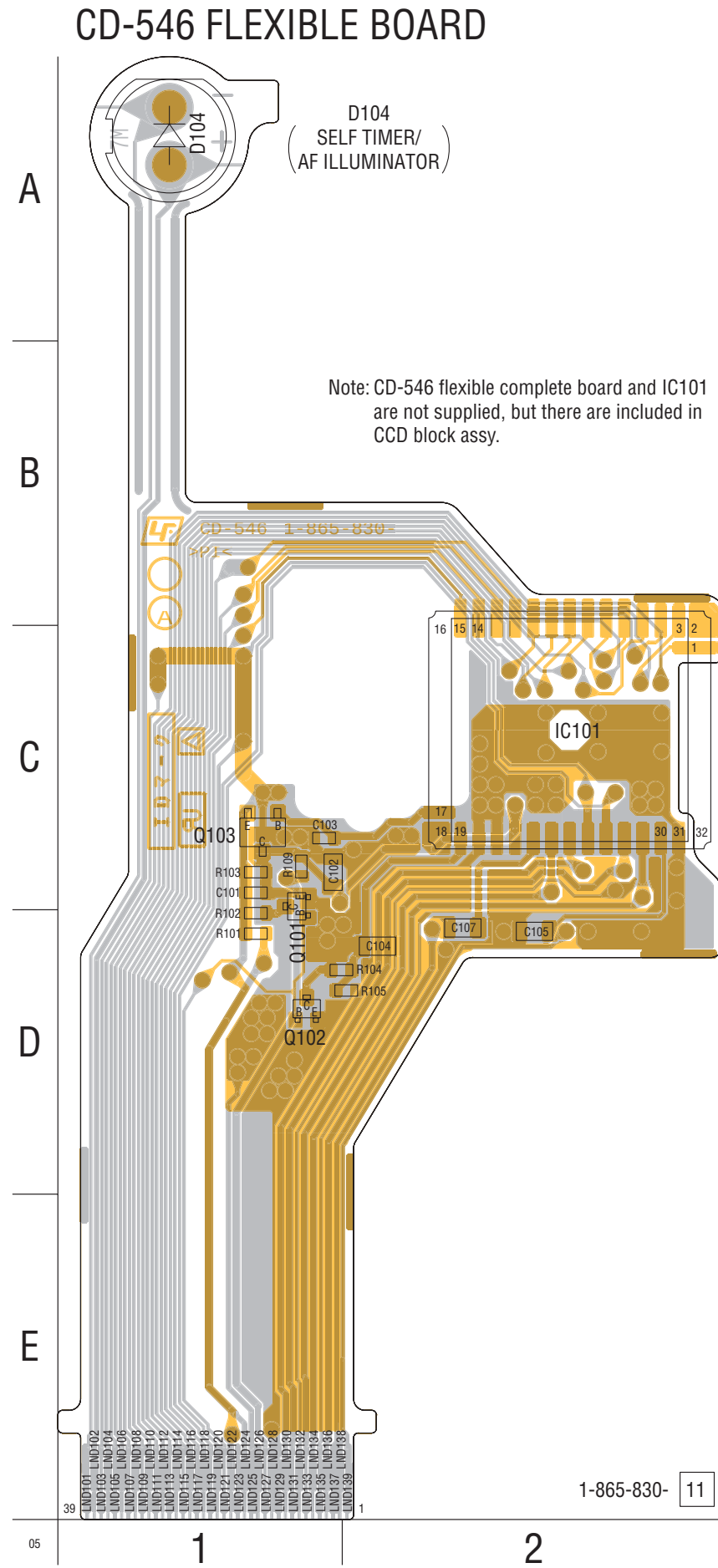
 : Uses unleaded solder.



CD-546 FLEXIBLE: W7/W17

Note for Printed Wiring Board (See page 4-35).

 : Uses unleaded solder.

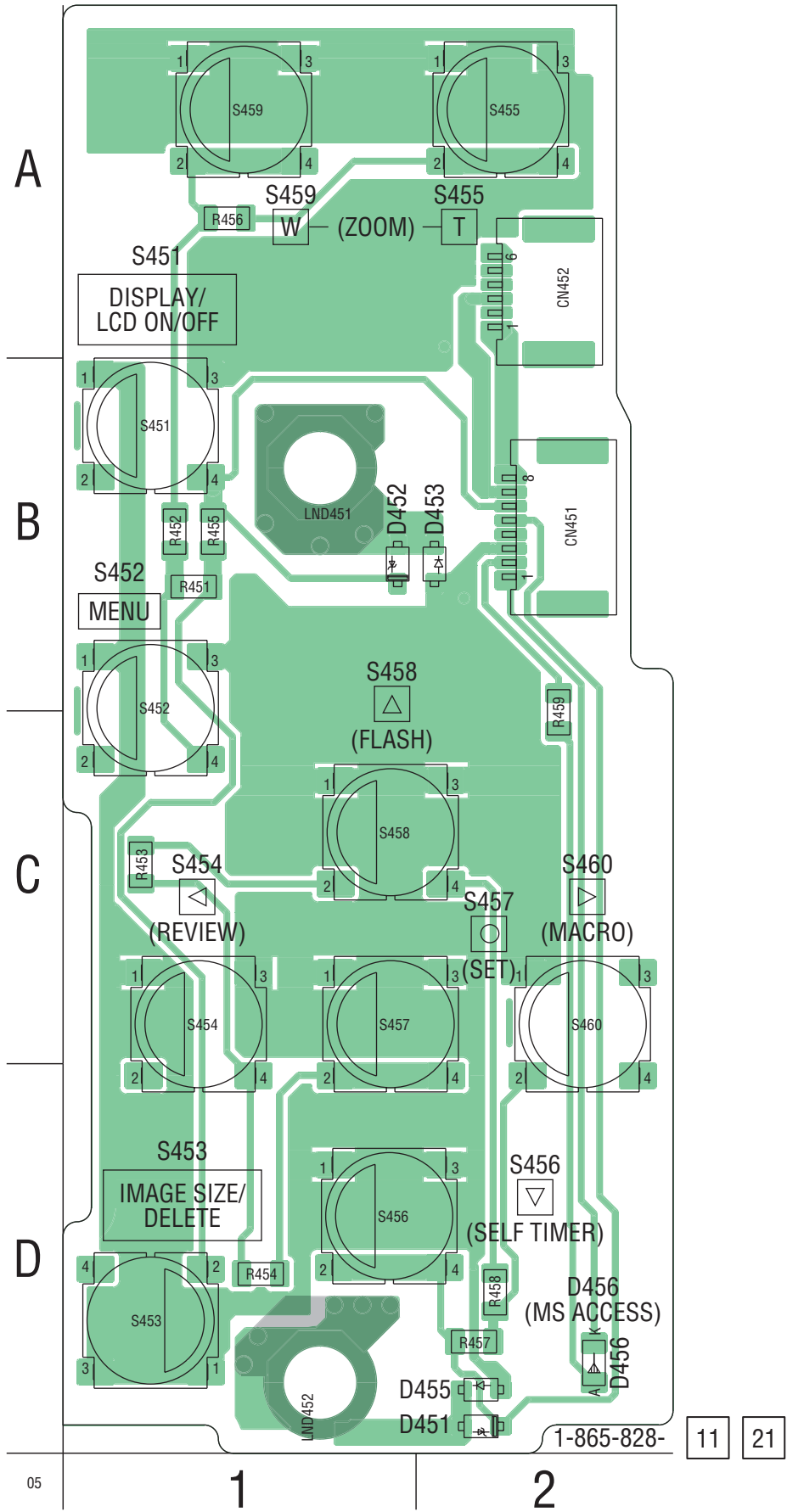


Printed wiring boards of the CH-168 and SW-001 boards are not shown.
Pages from 4-39 to 4-42 are not shown.

Note for Printed Wiring Board (See page 4-35).

 : Uses unleaded solder.

SW-001 BOARD



Waveforms of the SW-001 board are not shown.
Pages 4-45 and 4-46 are not shown.

4-5. MOUNTED PARTS LOCATION

no mark : side A
 * mark : side B

CD-545 FLEXIBLE BOARD

C101	C-1
C102	C-1
C103	C-1
C104	D-2
C105	D-2
C107	D-2
D104	A-1
IC101	C-2
Q101	D-1
Q102	D-1
Q103	C-1
R101	D-1
R102	D-1
R103	C-1
R104	D-2
R105	D-2
R109	C-1

CD-546 FLEXIBLE BOARD

C101	C-1
C102	C-1
C103	C-1
C104	D-2
C105	D-2
C107	D-2
D104	A-1
IC101	C-2
Q101	D-1
Q102	D-1
Q103	C-1
R101	D-1
R102	D-1
R103	C-1
R104	D-2
R105	D-2
R109	C-1

Mounted parts location of the SY-001 board is not shown.
Pages 4-48 is not shown.

4-3. PRINTED WIRING BOARDS

no mark : side A
* mark : side B

SW-001 BOARD

CN451 B-2
CN452 A-2

D451 D-2
D452 B-1
D453 B-2
D455 D-2
D456 D-2

R451 B-1
R452 B-1
R453 C-1
R454 D-1
R455 B-1
R456 A-1
R457 D-2
R458 D-2
R459 C-2

S451 B-1
S452 B-1
S453 D-1
S454 C-1
S455 A-2
S456 D-1
S457 C-1
S458 C-1
S459 A-1
S460 C-2

5. REPAIR PARTS LIST

NOTE: Characters **A** to **Z** of the electrical parts list indicate location of exploded views in which the desired part is shown.

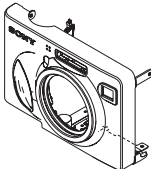
Link

EXPLODED VIEWS



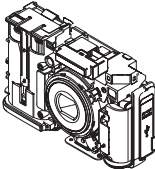
A

OVERALL ASSEMBLY



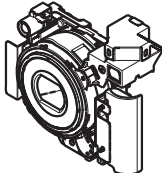
B

CABINET (FRONT) BLOCK



C

MAIN BLOCK ASSEMBLY



D

LENS BLOCK ASSEMBLY

Link

ELECTRICAL PARTS LIST

ACCESSORIES

• CD-545 FLEXIBLE BOARD **D**

• CD-546 FLEXIBLE BOARD **D**

• SW-001 BOARD **A**

5. REPAIR PARTS LIST

5. REPAIR PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences 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.
- 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.
- CAPACITORS:
uF: μ F
- COILS
uH: μ H
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A... , uPA... , μ PA... ,
uPB... , μ PB... , μ PC... , μ PC... ,
uPD..., μ PD...
- Abbreviation
AR : Argentine model
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND: Canadian model
HK : Hong Kong model
J : Jpanese model
JE : Tourist model
KR : Korean model

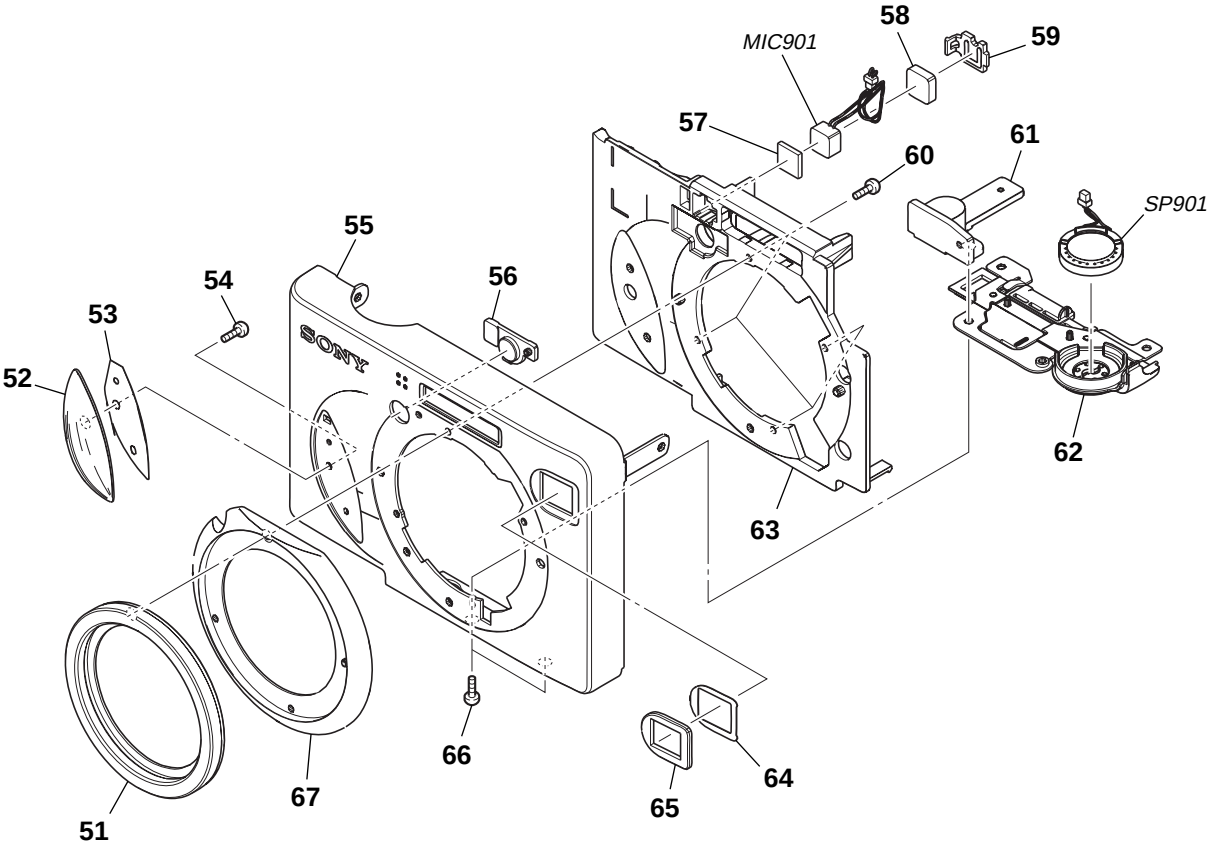
When indicating parts by reference number, please include the board name.

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

Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5. REPAIR PARTS LIST

5-1-2. CABINET (FRONT) BLOCK

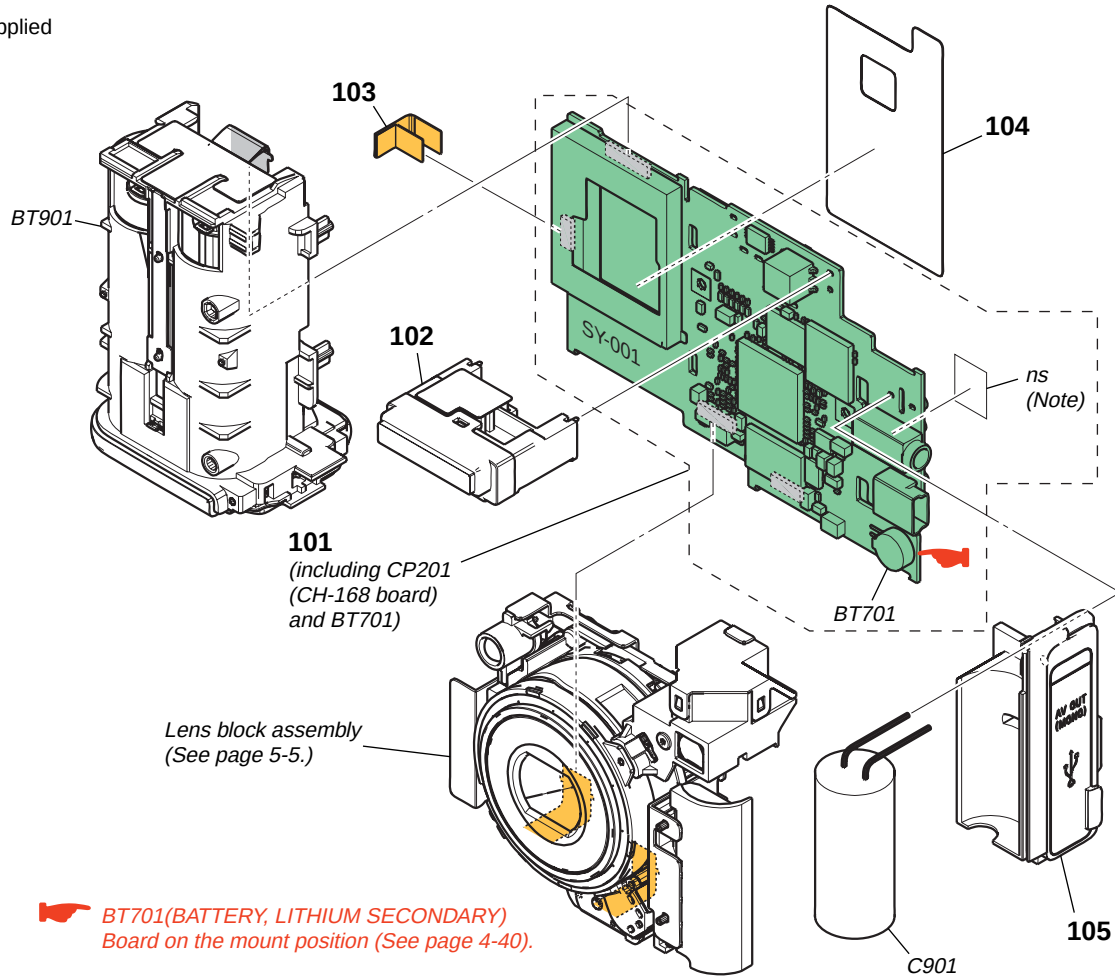


Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
51	2-348-157-01	RING, LENS (W5/W7: SILVER/W15)	61	2-348-163-01	SCREW, TRIPOD
51	2-348-157-11	RING, LENS (W7: BLACK/W17)	62	X-2024-644-1	BOTTOM ASSY (40), CABINET (SILVER)
52	2-348-158-01	GRIP (40) (W5: SILVER)	62	X-2025-148-1	BOTTOM ASSY (B (40)), CABINET (BLACK)
52	2-348-158-11	GRIP (40) (W5: BLACK/W15)	63	2-348-160-01	INNER HOLDER (FRONT)
52	2-348-293-01	GRIP (50) (W7/W17)	64	2-348-164-01	SHEET (OVF), ADHESIVE
53	2-515-716-01	SHEET, GRIP ADHESIVE	65	2-348-162-01	WINDOW, OVF (SILVER)
54	3-348-998-51	SCREW (M1.4X3.5), TAPPING, PAN	65	2-348-162-11	WINDOW, OVF (BLACK)
55	2-348-156-01	CABINET (FRONT) (W5: SILVER)	66	2-515-756-21	SCREW (M1.7), TORASUTA, P2 (SILVER)
55	2-348-156-11	CABINET (FRONT) (BLACK)	66	2-515-756-71	SCREW (M1.7), TORASUTA, P2 (BLACK)
55	2-348-156-21	CABINET (FRONT) (W7: SILVER)	67	2-348-159-01	RING (40), ORNAMENTAL (W5/W15)
56	2-348-161-01	WINDOW, AF	67	2-348-294-01	RING (50), ORNAMENTAL (SILVER) (W7)
57	2-348-166-01	CUSHION, MICROPHONE	67	2-348-294-11	RING (50), ORNAMENTAL (BLACK) (W7/W17)
58	2-348-185-01	CUSHION, MICROPHONE (B)	MIC901	1-542-600-11	MICROPHONE UNIT
59	2-348-198-01	COVER, MIC	SP901	1-825-923-21	LOUDSPEAKER (1.3CM)
60	2-108-698-01	SCREW (M1.4)			

5. REPAIR PARTS LIST

5-1-3. MAIN BLOCK ASSEMBLY

ns: not supplied



Note: Included in SY-001 board (suffix: -11).

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

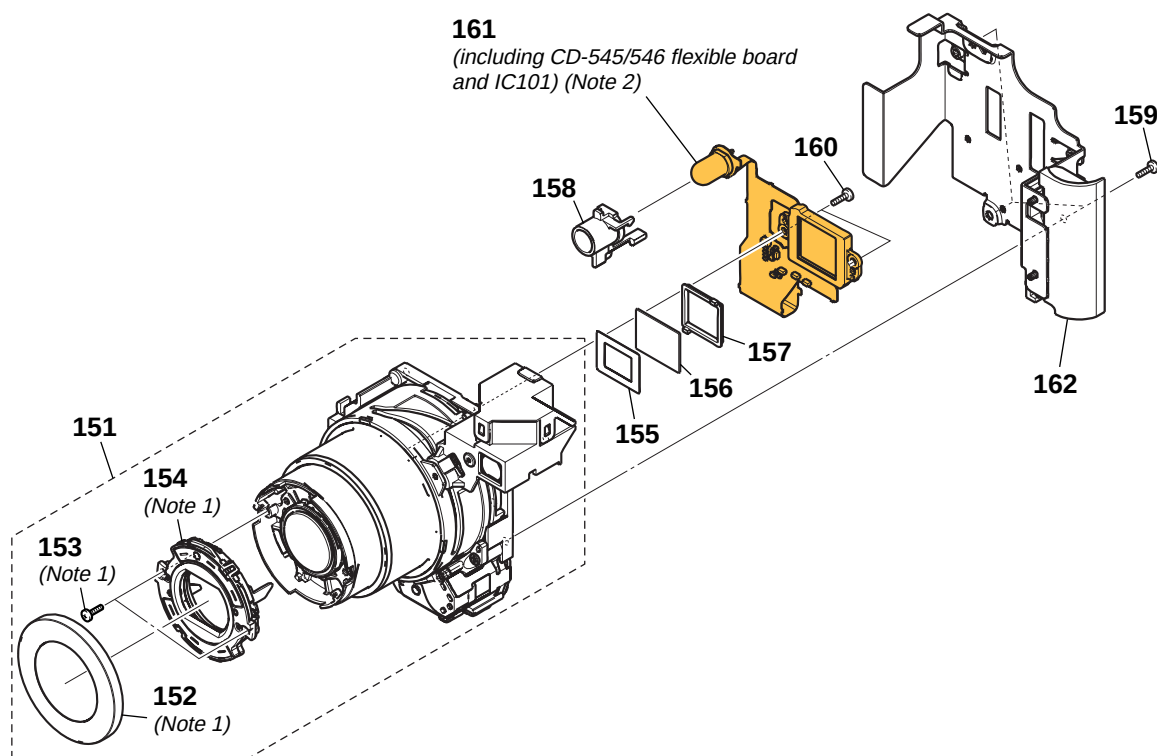
The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
101	A-1096-995-A	SY-001 BOARD, COMPLETE (SERVICE) (GP1) (W5: J)	101	A-1097-365-A	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W7: AR, BR, E/W17: E)
101	A-1096-996-A	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W5: US, CND, AUS/W15: AUS)	101	A-1097-366-A	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W7: CH, HK, KR, JE/W17: HK, KR, JE)
101	A-1096-997-A	SY-001 BOARD, COMPLETE (SERVICE) (GP1) (W7: J)	$\triangle$ 102	1-479-039-11	FLASH UNIT
101	A-1096-998-A	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W7: US, CND, AUS/W17: AUS)	103	1-963-591-11	CABLE, FLEXIBLE FLAT (FFC-051)
101	A-1097-361-A	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W5: AEP, UK/W15: AEP, UK)	104	2-348-515-01	LABEL, FUSE REPLACEMENT CAUTION
101	A-1097-362-A	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W5: AR, BR, E/W15: E)	$\triangle$ 105	X-2024-645-1	HOLDER ASSY (40), JACK (SILVER)
101	A-1097-363-A	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W5: CH, HK, KR, JE/W15: CH, HK, KR, JE)	$\triangle$ 105	X-2025-151-1	HOLDER ASSY (B (40)), JACK (BLACK)
101	A-1097-364-A	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W7: AEP, UK/W17: AEP, UK)	$\triangle$ BT701	1-528-999-61	BATTERY, LITHIUM SECONDARY
			$\triangle$ BT901	1-756-527-11	HOLDER, BATTERY (WITH TERMINAL) (W5: SILVER)
			$\triangle$ BT901	1-756-527-21	HOLDER, BATTERY (WITH TERMINAL) (BLACK)
			$\triangle$ BT901	1-756-527-31	HOLDER, BATTERY (WITH TERMINAL) (W7: SILVER)
			$\triangle$ C901	1-112-169-11	CAP, ELECT 135uF

5. REPAIR PARTS LIST

5-1-4. LENS BLOCK ASSEMBLY



Note 1: Be sure to read "2-3. Exchange Method of Barrier Assy" on page 2-5 when change Ref. No. 152, 153 and 154.

Note 2: Be sure to read "Precautions for Replacement of CCD Imager" on page 4-8 or 4-10 when changing the CCD imager.

Ref. No.	Part No.	Description
151	A-1105-719-A	LENS BLOCK ASSY (890C (J1))
152	3-091-427-01	RING (A), ORNAMENTAL (Note 1)
153	3-086-156-31	SCREW, TAPPING (P2) (Note 1)
154	X-3954-476-1	BARRIER ASSY (Note 1)
155	2-021-317-01	MASK, LPF
156	1-788-104-11	OPTICAL FILTER BLOCK (W5/W15)
156	1-788-176-11	OPTICAL FILTERBLOCK (OFB-02-21) (W7/W17)
157	2-021-318-01	SEALGOM 890
158	2-348-196-01	HOLDER, AF

Ref. No.	Part No.	Description
159	3-080-222-01	SCREW (M1.7), TAPPING, P2
160	3-348-998-61	SCREW (M1.4X4), TAPPING, PAN
161	A-1087-313-A	CCD BLOCK ASSY (including CD-545 flexible board and IC101 (CCD IMAGER)) (W5/W15) (Note 2)
161	A-1087-314-A	CCD BLOCK ASSY (including CD-546 flexible board and IC101 (CCD IMAGER)) (W7/W17) (Note 2)
162	X-2024-646-1	FRAME ASSY, LENS

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
	A-1087-313-A	CCD BLOCK ASSY (W5/W15)
	(Not supplied)	CD-545 FLEXIBLE BOARD, COMPLETE

(CCD block assy is including CD-545 flexible board and IC101 (CCD imager).)		

< CAPACITOR >

C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

< DIODE >

D104	6-500-505-01	DIODE	OPY5052	(SELF TIMER/AF ILLUMINATOR)	
------	--------------	-------	---------	-----------------------------	--

< IC >

IC101	(Not supplied)	CCD IMAGER (Note)
-------	----------------	-------------------

< TRANSISTOR >

Q101	6-550-119-01	TRANSISTOR	DTC144EMT2L
Q102	6-550-119-01	TRANSISTOR	DTC144EMT2L
Q103	8-729-050-22	TRANSISTOR	2SC4250 (T5LSONY1)

< RESISTOR >

R101	1-218-940-11	RES-CHIP	82	5%	1/16W
R102	1-218-969-11	RES-CHIP	22K	5%	1/16W
R103	1-218-960-11	RES-CHIP	3.9K	5%	1/16W
R104	1-218-952-11	RES-CHIP	820	5%	1/16W
R105	1-218-960-11	RES-CHIP	3.9K	5%	1/16W
R109	1-218-990-11	SHORT CHIP	0		

A-1087-314-A CCD BLOCK ASSY (W7/W17)
(Not supplied) CD-546 FLEXIBLE BOARD, COMPLETE

(CCD block assy is including CD-546 flexible board and IC101 (CCD imager).)

< CAPACITOR >

C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

< DIODE >

D104	6-500-505-01	DIODE	OPY5052	(SELF TIMER/AF ILLUMINATOR)	
------	--------------	-------	---------	-----------------------------	--

< IC >

IC101	(Not supplied)	CCD IMAGER (Note)
-------	----------------	-------------------

< TRANSISTOR >

Q101	6-550-119-01	TRANSISTOR	DTC144EMT2L
Q102	6-550-119-01	TRANSISTOR	DTC144EMT2L
Q103	8-729-050-22	TRANSISTOR	2SC4250 (T5LSONY1)

< RESISTOR >

R101	1-218-935-11	RES-CHIP	33	5%	1/16W
R102	1-218-966-11	RES-CHIP	12K	5%	1/16W

Ref. No.	Part No.	Description				
R103	1-218-958-11	RES-CHIP	2.7K	5%	1/16W	
R104	1-218-954-11	RES-CHIP	1.2K	5%	1/16W	
R105	1-218-955-11	RES-CHIP	1.5K	5%	1/16W	
R109	1-218-990-11	SHORT CHIP	0			

Electrical parts list of the CH-168 board is not shown.
Page 5-7 is not shown.

SW-001

Ref. No.	Part No.	Description
	A-1096-987-A	SW-001 BOARD, COMPLETE *****
< CONNECTOR >		
CN451	1-817-549-11	CONNECTOR, FPC (LIF (NON-ZIF)) 8P
CN452	1-816-654-31	FFC/FPC CONNECTOR (LIF) 6P
< DIODE >		
D451	8-719-056-54	DIODE MAZS068008SO
D452	8-719-056-54	DIODE MAZS068008SO
D456	8-719-064-07	DIODE SML-310LTT86 (MS ACCESS)
< RESISTOR >		
R451	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R452	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R453	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R454	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R455	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R456	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R457	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R458	1-216-825-11	METAL CHIP 2.2K 5% 1/10W
R459	1-216-821-11	METAL CHIP 1K 5% 1/10W
< SWITCH >		
S451	1-786-157-11	SWITCH, TACTILE (DISPLAY / LCD ON/OFF)
S452	1-786-157-11	SWITCH, TACTILE (MENU)
S453	1-786-157-11	SWITCH, TACTILE (IMAGE SIZE/DELETE)
S454	1-786-157-11	SWITCH, TACTILE (<(REVIEW))
S455	1-786-157-11	SWITCH, TACTILE (T(ZOOM))
S456	1-786-157-11	SWITCH, TACTILE (▽(SELF TIMER))
S457	1-786-157-11	SWITCH, TACTILE (○(SET))
S458	1-786-157-11	SWITCH, TACTILE (△(FLASH))
S459	1-786-157-11	SWITCH, TACTILE (W(ZOOM))
S460	1-786-157-11	SWITCH, TACTILE (▷(MACRO))

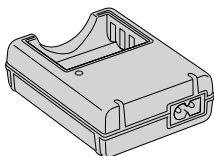
Electrical parts list of the SY-001 board is not shown.
Pages 5-9 to 5-12 are not shown.

Ver. 1.5 2007.09

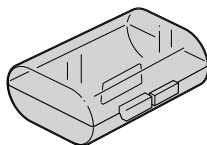
The changed portions from
Ver. 1.4 are shown in blue.

Checking supplied accessories.

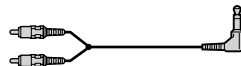
Note: This item is supplied with the unit as an accessory,
but is not prepared as a service part.



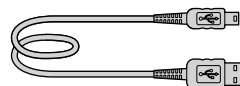
Battery charger
(BC-CS2A/CS2B) (1)
▲ 1-477-814-41 (US, CND, JE, J)
▲ 1-477-814-51 (AEP, UK, E, AR, HK, AUS)
▲ 1-477-814-61 (KR, CH)



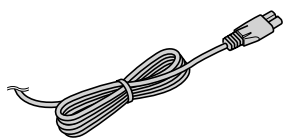
Battery case (1)
3-074-757-01



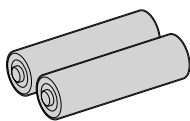
A/V connecting cable (1)
1-824-519-11



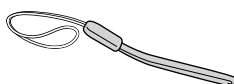
USB cable (1)
1-827-038-11



Power cord (1)
▲ 1-823-946-12 (AEP, E)
▲ 1-782-476-51 (CH)
▲ 1-783-374-11 (UK, HK)
▲ 1-783-952-21 (AR)
▲ 1-790-107-42 (US, CND)
▲ 1-790-732-12 (JE, J)
▲ 1-776-985-12 (KR)
▲ 1-827-945-11 (AUS)



HR6 (size AA)
Ni-MH batteries (2)
(Note)



Wrist strap (1)
2-050-981-01 (Silver)
2-050-981-11 (Black)



Conversion 2P adaptor (1)
▲ 1-569-008-21 (E)



Conversion 2P adaptor (1)
▲ 1-569-007-12 (JE)



Soft carrying case
(W15/W17 only) (1)
2-055-904-01



CD-ROM
(Cyber-shot application
software) (1)
2-583-852-31 (US, J)
2-583-853-01 (EXCEPT US, J)

Other accessories

- 2-586-553-01 INSTRUCTION (READ THIS FIRST) (JAPANESE) (J)
2-586-553-11 INSTRUCTION (READ THIS FIRST) (ENGLISH)
(EXCEPT AR, KR, CH, J)
2-586-553-21 INSTRUCTION (READ THIS FIRST) (FRENCH, ITALIAN)
(AEP, CND)
2-586-553-31 INSTRUCTION (READ THIS FIRST) (SPANISH,
PORTUGUESE) (AEP, E, AR, JE)
2-586-553-41 INSTRUCTION (READ THIS FIRST) (GERMAN, DUTCH)
(AEP)
2-586-553-51 INSTRUCTION (READ THIS FIRST) (TRADITIONAL
CHINESE, SIMPLIFIED CHINESE) (E, HK, CH, JE)
2-586-553-61 INSTRUCTION (READ THIS FIRST) (RUSSIAN,
SWEDISH) (AEP)
2-586-553-71 INSTRUCTION (READ THIS FIRST) (ARABIC, PERSIAN)
(E)
2-586-553-81 INSTRUCTION (READ THIS FIRST) (KOREAN) (KR, JE)
2-586-553-91 INSTRUCTION (READ THIS FIRST) (POLISH, CZECH)
(AEP)
2-586-555-11 INSTRUCTION (READ THIS FIRST) (HUNGARIAN,
SLOVAK) (AEP)
2-586-561-01 INSTRUCTION (USER'S GUIDE) (JAPANESE) (J)
2-586-561-11 INSTRUCTION (USER'S GUIDE) (ENGLISH) (EXCEPT AR,
KR, CH, J)
2-586-561-21 INSTRUCTION (USER'S GUIDE) (FRENCH, ITALIAN) (AEP,
CND)
2-586-561-31 INSTRUCTION (USER'S GUIDE) (SPANISH,
PORTUGUESE) (AEP, E, AR, JE)
2-586-561-41 INSTRUCTION (USER'S GUIDE) (GERMAN, DUTCH)
(AEP)
2-586-561-51 INSTRUCTION (USER'S GUIDE) (TRADITIONAL CHINESE,
SIMPLIFIED CHINESE) (E, HK, CH, JE)
2-586-561-61 INSTRUCTION (USER'S GUIDE) (RUSSIAN, SWEDISH)
(AEP)
2-586-561-71 INSTRUCTION (USER'S GUIDE) (ARABIC, PERSIAN) (E)
2-586-561-81 INSTRUCTION (USER'S GUIDE) (KOREAN) (KR, JE)
2-586-561-91 INSTRUCTION (USER'S GUIDE) (POLISH, CZECH) (AEP)
2-586-563-11 INSTRUCTION (USER'S GUIDE) (HUNGARIAN, SLOVAK)
(AEP)

The components identified by
mark ▲ or dotted line with
mark ▲ are critical for safety.
Replace only with part num-
ber specified.

Les composants identifiés par une
marque ▲ sont critiques pour la
sécurité.
Ne les remplacer que par une pièce
portant le numéro spécifié.

DSC-W5/W7/W15/W17

SONY®

LEVEL 2

SERVICE MANUAL

Ver 1.1 2005.07

DSC-W5/W7

US Model
Canadian Model
Argentine Model
Brazilian Model
Japanese Model

DSC-W5/W7/W15/W17

AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Korea Model
Tourist Model

DSC-W5/W7/W15

Chinese Model

SUPPLEMENT-1

File this supplement with the service manual.
(PV05-033)

- Precaution on Replacing the SY-001 Board

1. SERVICE NOTE

1-7. PRECAUTION ON REPLACING THE SY-001 BOARD

When you replace to the repairing board, the written data of repairing board also might be changed to original setting.
When the data has changed because of board replacing etc, check the data setting (VIDEO OUT Default Data, Exif Model Data) is right. If not, rewrite to the right value.

VIDEO OUT Default Data

Page	Address	Data	
		NTSC	PAL
4F	8D	00	01
4F	A2	00	01

Exif Model Data

Page	Address	Data			
		DSC-W5	DSC-W7	DSC-W15	DSC-W17
8F	E5	35	37	31	31
8F	E6	00	00	35	37

Writing Method:

- 1) Select page: 00, address: 01 and set data: 01.
- 2) Select page: 4F, address: 8D and A2, and set the VIDEO OUT Default Data.
- 3) Select page: 8F, address: E5 and E6, and set the Exif Model Data.
- 4) Click **[Save]** on the SEUS screen.
- 5) Wait for more than 3 sec.
- 6) Select page: 80, address: 30, and check that the data is "00".
- 7) Select page: 00, address: 01, and set data: 00.

DSC-W5/W7/W15/W17

SONY®

LEVEL 2

SERVICE MANUAL

Ver 1.3 2005.12

DSC-W5/W7

*US Model
Canadian Model
Argentine Model
Brazilian Model
Japanese Model*

DSC-W5/W7/W15/W17

*AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Korea Model
Tourist Model*

DSC-W5/W7/W15

Chinese Model

SUPPLEMENT-2

File this supplement with the service manual.
(PV05-071)

• Addition of SERVICE NOTE

- SY-001 BOARD TYPE CHECK (DSC-W7/W17)

1. SERVICE NOTE

1-8. SY-001 BOARD TYPE CHECK (DSC-W7/W17)

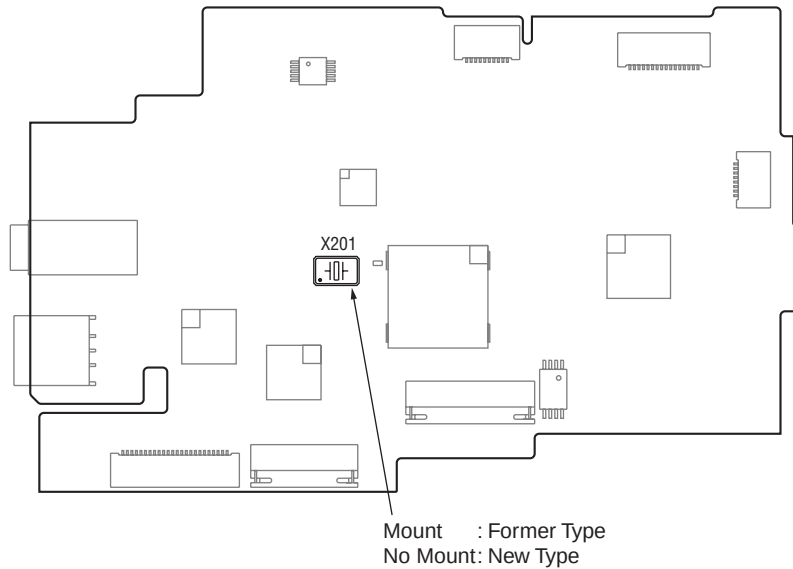
The SY-001 board type can be discriminated with the mounted parts.

Note: When the data has changed because of board replacing etc., check the data setting is right. If not, rewrite to the right value.

Checking Method:

- 1) Refer to “SECTION 2 DISASSEMBLY” to remove the SY-001 board.
- 2) Referring the following figure, each type is discriminated with the mounted parts on the SY-001 board.

SY-001 BOARD (SIDE B)



• Differences of mounted parts on the SY-001 board

Ref. No.	Former Type	New Type
R238	XX	0
R305	XX	0
R306	0	XX
R309	XX	0
R349	0	XX
X201	67.5MHz	XX

• Differences of data

Page	Address	Former Type	New Type
7D	E2	00	FF

Writing Method:

- 1) Select page: 00, address: 01 and set data: 01.
- 2) Select page: 7D, address: E2, and set data: 00 (Former type) or data: FF (New type).
- 3) Click **[Save]** on the SEUS screen.
- 4) Wait for more than 3 sec.
- 5) Select page: 80, address: 30, and check that the data is “00”.
- 6) Select page: 00, address: 01, and set data: 00.

DSC-W5/W7/W15/W17

SONY®

LEVEL 2

SERVICE MANUAL

Ver. 1.4 2007.04

DSC-W5/W7

US Model
Canadian Model
Argentine Model
Brazilian Model
Japanese Model

DSC-W5/W7/W15/W17

AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Korea Model
Tourist Model

DSC-W5/W7/W15

Chinese Model

SUPPLEMENT-3

File this supplement with the service manual.
(DI06-187)

• Addition of Language Group Table

5. REPAIR PARTS LIST

• Language that can be selected about SY-001 board

	Area	Japanese	English	French	German	Spanish	Italian	Portugal	Simplified Chinese	Traditional Chinese	Arabic	Dutch	Russian	Swedish	Korean
GP1	J	●													
GP2	US CND AUS Vietnam		●	●		●	●		●	●					
GP3	AEP UK		●	●	●	●	●	●				●	●	●	
GP4	E AR BR TW		●			●		●	●	●	●				
GP5	JE HK CH KR		●			●		●	●	●					●

• Abbreviation

AR : Argentine model
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND : Canadian model
HK : Hong Kong model
J : Japanese model
JE : Tourist model
KR : Korean model

DSC-W5/W7/W15/W17

SONY®

LEVEL 2

SERVICE MANUAL

Ver. 1.5 2007.09

DSC-W5/W7

US Model
Canadian Model
Argentine Model
Brazilian Model
Japanese Model

DSC-W5/W7/W15/W17

AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Korea Model
Tourist Model

DSC-W5/W7/W15

Chinese Model

SUPPLEMENT-4

File this supplement with the service manual.
(DI07-147)

- Change of Board's Suffix No.
- Change of Repair Parts
- Revision of Accessories

Note: Please refer to Ver.1.5 of SERVICE MANUAL (9-876-856-31) for the revision of accessories.

- Suffix No. of CD-545 flexible board and CD-546 flexible board have been changed from **11** into **12**.
About suffix No. **11** and **12**, there are no changes of schematic diagram and printed wiring board.

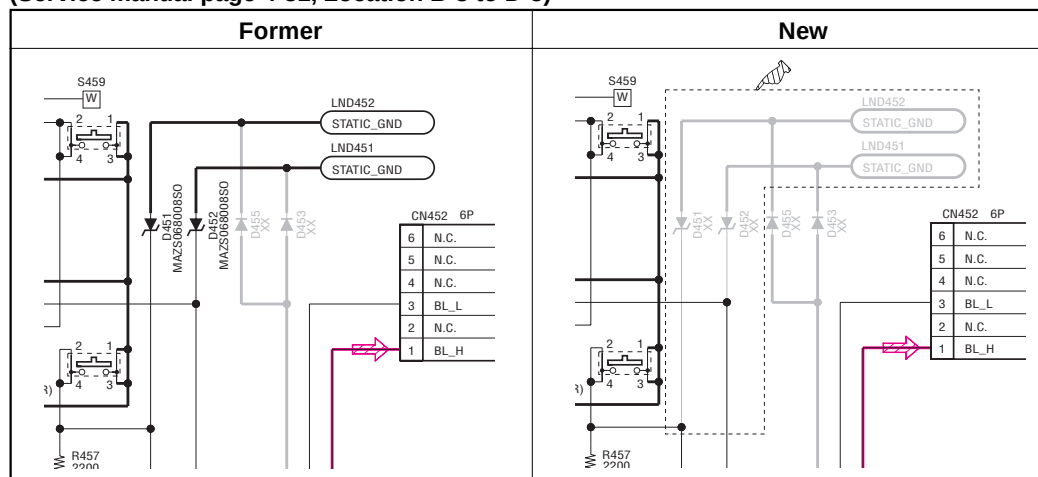
 : Points changed portion.

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

SW-001 BOARD (CONTROL SWITCH)

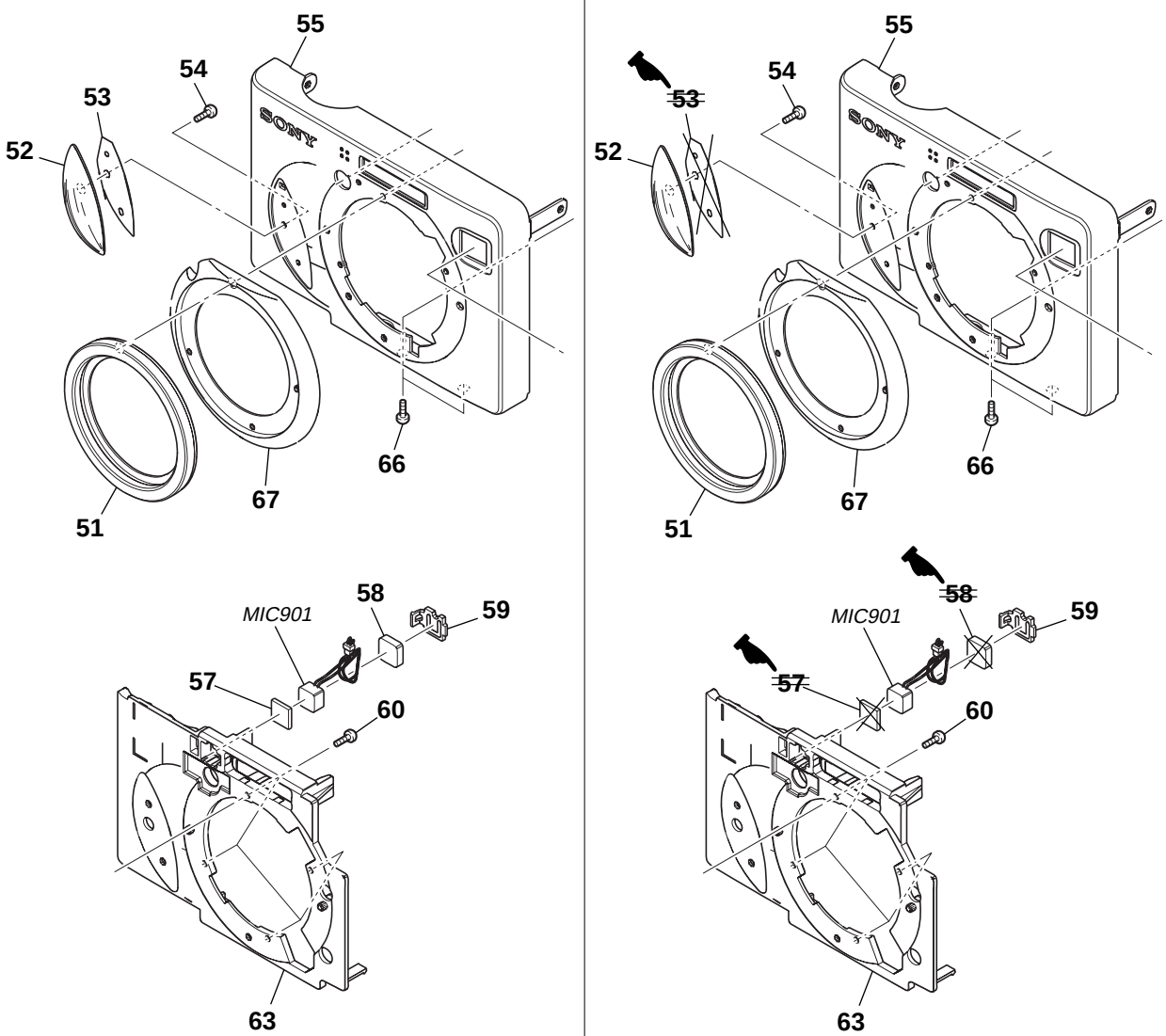
(Service manual page 4-31, Location B-3 to D-5)



 : Points deleted portion.

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

Page	Former			New		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
5-2	1	1-479-037-11	SWITCH BLOCK, CONTROL (SILVER) (W5)	1	1-479-037-13	SWITCH BLOCK, CONTROL (SILVER) (W5)
	1	1-479-037-21	SWITCH BLOCK, CONTROL (SILVER) (W7)	1	1-479-037-23	SWITCH BLOCK, CONTROL (SILVER) (W7)
	1	1-479-037-31	SWITCH BLOCK, CONTROL (BLACK) (W15)	1	1-479-037-33	SWITCH BLOCK, CONTROL (BLACK) (W15)
	1	1-479-037-41	SWITCH BLOCK, CONTROL (BLACK) (W7)	1	1-479-037-43	SWITCH BLOCK, CONTROL (BLACK) (W7)
	1	1-479-037-51	SWITCH BLOCK, CONTROL (BLACK) (W17)	1	1-479-037-53	SWITCH BLOCK, CONTROL (BLACK) (W17)
	1	1-479-037-61	SWITCH BLOCK, CONTROL (BLACK) (W5)	1	1-479-037-63	SWITCH BLOCK, CONTROL (BLACK) (W5)
5-3						
	53	2-515-716-01	SHEET, GRIP ADHESIVE			
	57	2-348-166-01	CUSHION, MICROPHONE			
	58	2-348-185-01	CUSHION, MICROPHONE (B)			

Page	Former			New		
5-4	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	101	A-1096-995-A	SY-001 BOARD, COMPLETE (SERVICE) (GP1) (W5: J)	101	A-1096-995-C	SY-001 BOARD, COMPLETE (SERVICE) (GP1)(W5: J)
	101	A-1096-996-A	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W5: US, CND, AUS/W15: AUS)	101	A-1096-996-C	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W5: US, CND, AUS/W15: AUS)
	101	A-1096-997-A	SY-001 BOARD, COMPLETE (SERVICE) (GP1) (W7: J)	101	A-1096-997-C	SY-001 BOARD, COMPLETE (SERVICE) (GP1) (W7: J)
	101	A-1096-998-A	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W7: US, CND, AUS/W17: AUS)	101	A-1096-998-C	SY-001 BOARD, COMPLETE (SERVICE) (GP2) (W7: US, CND, AUS/W17: AUS)
	101	A-1097-361-A	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W5: AEP, UK/W15: AEP, UK)	101	A-1097-361-C	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W5: AEP, UK/W15: AEP, UK)
	101	A-1097-362-A	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W5: AR, BR, E/W15: E)	101	A-1097-362-C	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W5: AR, BR, E/W15: E)
	101	A-1097-363-A	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W5: CH, HK, KR, JE/ W15: CH, HK, KR, JE)	101	A-1097-363-C	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W5: CH, HK, KR, JE/ W15: CH, HK, KR, JE)
	101	A-1097-364-A	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W7: AEP, UK/W17: AEP, UK)	101	A-1097-364-C	SY-001 BOARD, COMPLETE (SERVICE) (GP3) (W7: AEP, UK/W17: AEP, UK)
	101	A-1097-365-A	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W7: AR, BR, E/W17: E)	101	A-1097-365-C	SY-001 BOARD, COMPLETE (SERVICE) (GP4) (W7: AR, BR, E/W17: E)
	101	A-1097-366-A	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W7: CH, HK, KR, JE/ W17: HK, KR, JE)	101	A-1097-366-C	SY-001 BOARD, COMPLETE (SERVICE) (GP5) (W7: CH, HK, KR, JE/ W17: HK, KR, JE)
	△ BT901	1-756-527-31	HOLDER, BATTERY (WITH TERMINAL) (W7: SILVER)	△ BT901	1-756-534-31	BATTERY HOLDER (TERMINAL) (W7: SILVER)
5-5	156	1-788-176-11	OPTICAL FILTERBLOCK (OFB-02-21) (W7/W17)	156	1-788-306-11	OPTICAL FILTERBLOCK (OFB-02-26) (W7/W17)

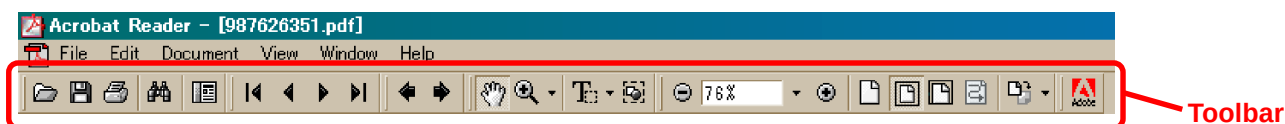
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-2. ELECTRICAL PARTS LIST

Page	Former			New		
5-8	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
		A-1096-987-A	SW-001 BOARD, COMPLETE *****		A-1096-987-A	SW-001 BOARD, COMPLETE *****
			< CONNECTOR >			< CONNECTOR >
	CN451	1-817-549-11	CONNECTOR, FPC (LIF (NON-ZIF)) 8P	* CN451	1-816-655-51	FFC/FPC CONNECTOR (LIF) 8P
	CN452	1-816-654-31	FFC/FPC CONNECTOR (LIF) 6P	* CN452	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P
			< DIODE >			< DIODE >
	D451	8-719-056-54	DIODE MAZS068008SO			
	D452	8-719-056-54	DIODE MAZS068008SO			
			< SWITCH >			< SWITCH >
	S454	1-786-157-11	SWITCH, TACTILE (<(REVIEW))	S454	1-771-138-21	SWITCH, KEY BOARD (<(REVIEW))
	S456	1-786-157-11	SWITCH, TACTILE (▽(SELF TIMER))	S456	1-771-138-21	SWITCH, KEY BOARD (▽(SELF TIMER))
	S457	1-786-157-11	SWITCH, TACTILE (○(SET))	S457	1-771-138-21	SWITCH, KEY BOARD (○(SET))
	S458	1-786-157-11	SWITCH, TACTILE (△(FLASH))	S458	1-771-138-21	SWITCH, KEY BOARD (△(FLASH))
	S460	1-786-157-11	SWITCH, TACTILE (▷(MACRO))	S460	1-771-138-21	SWITCH, KEY BOARD (▷(MACRO))

[Description of main button functions on toolbar of the Adobe Acrobat Reader Ver5.0 (for Windows)]



Printing a text

1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

Application of printing:

To set a range to be printed within a page, select the graphic selection tool  and drag on the page to enclose a range to be printed, and then click the Print button.

Reversing the screens displayed once

- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

Application to the Service Manual:

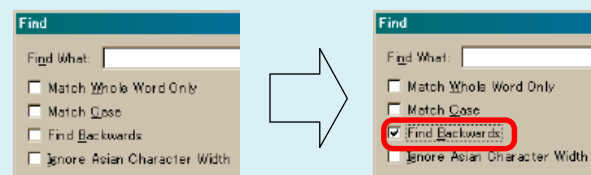
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

Finding a text

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

Application to the Service Manual:

To execute "find" from current page toward the previous pages, select the check box "Find Backward" and then click the "Find".



3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

Application to the Service Manual:

The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.

Note: The find function may not be applied to the Service Manual depending on the date of issue.

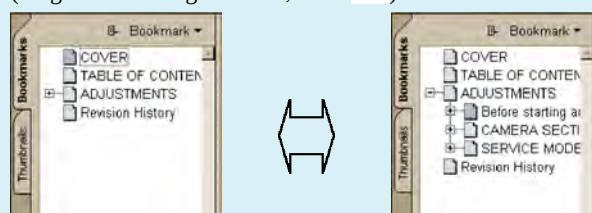
Moving with link

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

Moving with bookmark:

Click an item (text) on the bookmark pallet. and you can move to the link destination. Also, clicking  can display the hidden items.

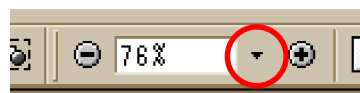
(To go back to original state, click )



Zooming or rotating the screen display

"Zoom in/out"

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click  or  for zooming in or out.



"Rotate"

- Click rotate tool , and the page then rotates 90 degrees each.

Application to the Service Manual:

The printed circuit board diagram you see now can be changed to the same direction as the set.

Switching a page

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

