

DSC-W100

SERVICE MANUAL

LEVEL 2

Ver 1.1 2006.07

Revision History

How to use
Acrobat Reader

Internal memory
ON BOARD



Photo: Silver

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Brazilian Model
Tourist Model

Link

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

• Precaution on Replacing the SY-154 Board

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.

DIGITAL STILL CAMERA

SONY®



Cyber-shot



SPECIFICATIONS

Camera

[System]

Image device	9.10 mm (1/1.8 type) color CCD, Primary color filter
Total pixel number of camera	Approx. 8 303 000 pixels
Effective pixel number of camera	Approx. 8 068 000 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 (6 modes)
White balance	Automatic, Daylight, Cloudy, Fluorescent, Incandescent, Flash
File format (DCF compliant)	Still images: Exif Ver. 2.21 JPEG compliant, DPOF compatible Movies: MPEG1 compliant (Monaural)
Recording media	Internal Memory (64 MB) “Memory Stick Duo”
Flash	Recommended distance (ISO set to Auto): approx. 0.2 m to 6 m (7 7/8 inches to 19 feet 8 7/8 inches) (W)/approx. 0.3 m to 3.2 m (11 7/8 inches to 10 feet 6 3/8 inches) (T)

[Input and Output connectors]

Multi connector	
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	Rechargeable battery pack NP-BG1, 3.6 V AC-LS5K AC Adaptor (not supplied), 4.2 V
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Power consumption (during shooting with the LCD screen on)	0.95 W
Operating temperature	0 to 40°C (32 to 104°F)
Storage temperature	–20 to +60°C (–4 to +140°F)
Dimensions	94.2 × 60.6 × 24.8 mm (3 3/4 inches × 2 1/2 inches × 1 inches) (W/H/D, excluding protrusions)
Mass	Approx. 192 g (6.8 oz) (including NP-BG1 battery pack and wrist strap, etc.)
Microphone	Electret condenser microphone
Speaker	Dynamic speaker
Exif Print	Compatible
PRINT Image Matching III	Compatible
PictBridge	Compatible

BC-CSG battery charger

Power requirements	AC 100 to 240 V, 50/60 Hz, 2 W
Output voltage	DC 4.2 V, 0.25 A
Operating temperature	0 to 40°C (32 to 104°F)
Storage temperature	–20 to +60°C (–4 to +140°F)
Dimensions	Approx. 62 × 24 × 91 mm (2 1/2 × 31/32 × 3 5/8 inches) (W/H/D)
Mass	Approx. 75 g (2.7 oz)

Rechargeable battery pack NP-BG1

Used battery	Lithium-ion battery
Maximum voltage	DC 4.2 V
Nominal voltage	DC 3.6 V
Capacity	3.6 Wh (960 mAh)

Design and specifications are subject to change without notice.

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 IDENTIFÉS 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 PIÈSES 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.)



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.

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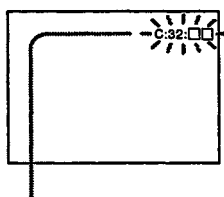
<u>Section</u>	<u>Title</u>	<u>Page</u>
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1. SERVICE NOTE

1-1. 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.	

Note: After repair, be sure to perform "1-2. PROCESS AFTER FIXING FLASH ERROR".

1-2. 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.

<input type="checkbox"/>	OK	See the following procedure.
<input checked="" type="checkbox"/>	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.

1-3. 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-154 board, erase the data in internal memory of the board before replacement.

Note 2: When replacing the SY-154 board or the IC202 on the SY-154 board, execute formatting and initialize the internal memory after replacement.

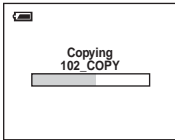
Method for Copying the Data in Internal Memory


Copy

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

<input type="checkbox"/>	OK	See the following procedure.
<input checked="" type="checkbox"/>	Cancel	Cancels the copying.

- ① Insert a "Memory Stick Duo" having 64 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 press ●.
Copying starts.



- Use a fully charged battery pack or the AC Adaptor (not supplied). If you attempt to copy image files using a battery pack with little remaining charge, the battery pack 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 Duo" after copying, then execute the [Format] command in the Internal Memory Tool (page 52).
- You cannot select a folder copied on a "Memory Stick Duo".
- Even if you copy data, a  (Print order) mark is not copied.

Method for Formatting the Internal Memory

This item does not appear when a "Memory Stick Duo" is inserted in the camera.
The default settings are marked with .

Format

Formats the internal memory.

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

<input type="checkbox"/>	OK	See the following procedure.
<input checked="" type="checkbox"/>	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.

1-4. PRECAUTION ON REPLACING THE SY-154 BOARD

VIDEO OUT Default Data Check

When you replace the repairing board, the written data of repairing board also might be changed to original setting because of broadcast system (NTSC/PAL).

When the data has changed because of board replacing etc., check the default data of VIDEO OUT if destination code is right. If not, rewrite to the right value.

VIDEO OUT Default Data

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

Writing Method:

- 1) Select page: 00, address: 01, and set data: 01.
- 2) Select page: 40, address: 70, and set data: 01.
- 3) Select page: 40, address: 98, and check that the data is "00".
- 4) Select page: 4F, address: A2, and set data: 00 (NTSC) or data: 01 (PAL).
- 5) Select page: 4F, address: 8D, and set data: 00 (NTSC) or data: 01 (PAL).
- 6) Click **Save** on the SEUS screen.
- 7) Select page: 80, address: 34, and check that the data is "00".
- 8) Select page: 80, address: 30, and check that the data is "00".
- 9) Select page: 00, address: 01, and set data: 00.

Initial Language Data Check

If the SY-154 board was replaced, initial language setting may be changed. Accordingly, change the following data so as to set same initial language as that of the set distributing in each region.

Initial language: Language displayed at the next starting if the setting of Setup menu was reset.

It is different from the language setting selectable with the menu.

Initial Language Data

Page	Address	Data	Language	GP2	GP3	GP4
4F	88, 8C	00	English	●	●	●
		04	Spanish		●	●
		06	Portugal			●
		08	Simplified Chinese			●
		0B	Russian		●	
		0D	Korean			●

Note: GP2 is fixed to English.

GP3 is either English, Spanish, or Russian.

GP4 is either English, Spanish, Portugal, Simplified Chinese, or Korean.

Writing Method:

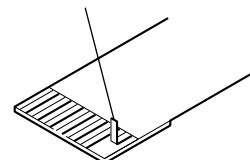
- 1) Select page: 00, address: 01 and set data: 01.
- 2) Select page: 40, address: 70, and set data: 01.
- 3) Select page: 40, address: 98, and check that the data is "00".
- 4) Select page: 4F, address: 88, and set the Initial Language Data.
- 5) Select page: 4F, address: 8C, and set the Initial Language Data.
- 6) Click **Save** on the SEUS screen.
- 7) Select page: 80, address: 34, and check that the data is "00".
- 8) Select page: 80, address: 30, and check that the data is "00".
- 9) Select page: 00, address: 01, and set data: 00.
- 10) Turn off the camera.
- 11) Turn on the camera. Execute "Initialize" of Setup screen.
- 12) Check the language displayed when the camera starts.

2. DISASSEMBLY

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.
- 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.

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



DISCHARGING OF THE ST-146 FLEXIBLE BOARD'S CHARGING CAPACITOR (C007)

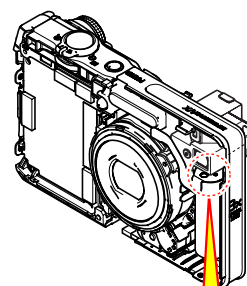
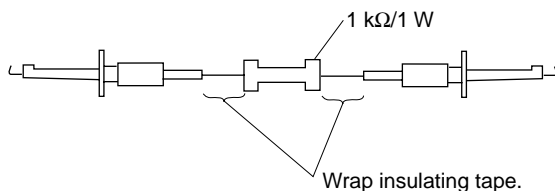
The charging capacitor (C007) of the ST-146 flexible board is charged up to the maximum 330 V potential.

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

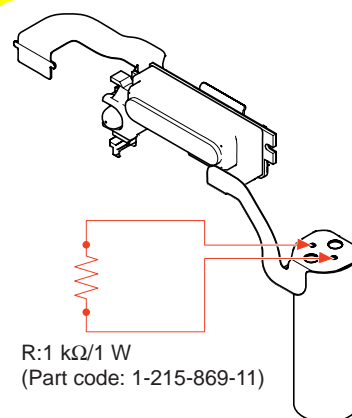
To preparing the short jig, a small clip is attached to each end of a resistor of 1 k Ω / 1 W (1-215-869-11).

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



Note: High-voltage cautions

Discharging the Capacitor
Short-circuit between the two points with the short jig about 10 seconds.



2-1. DISASSEMBLY

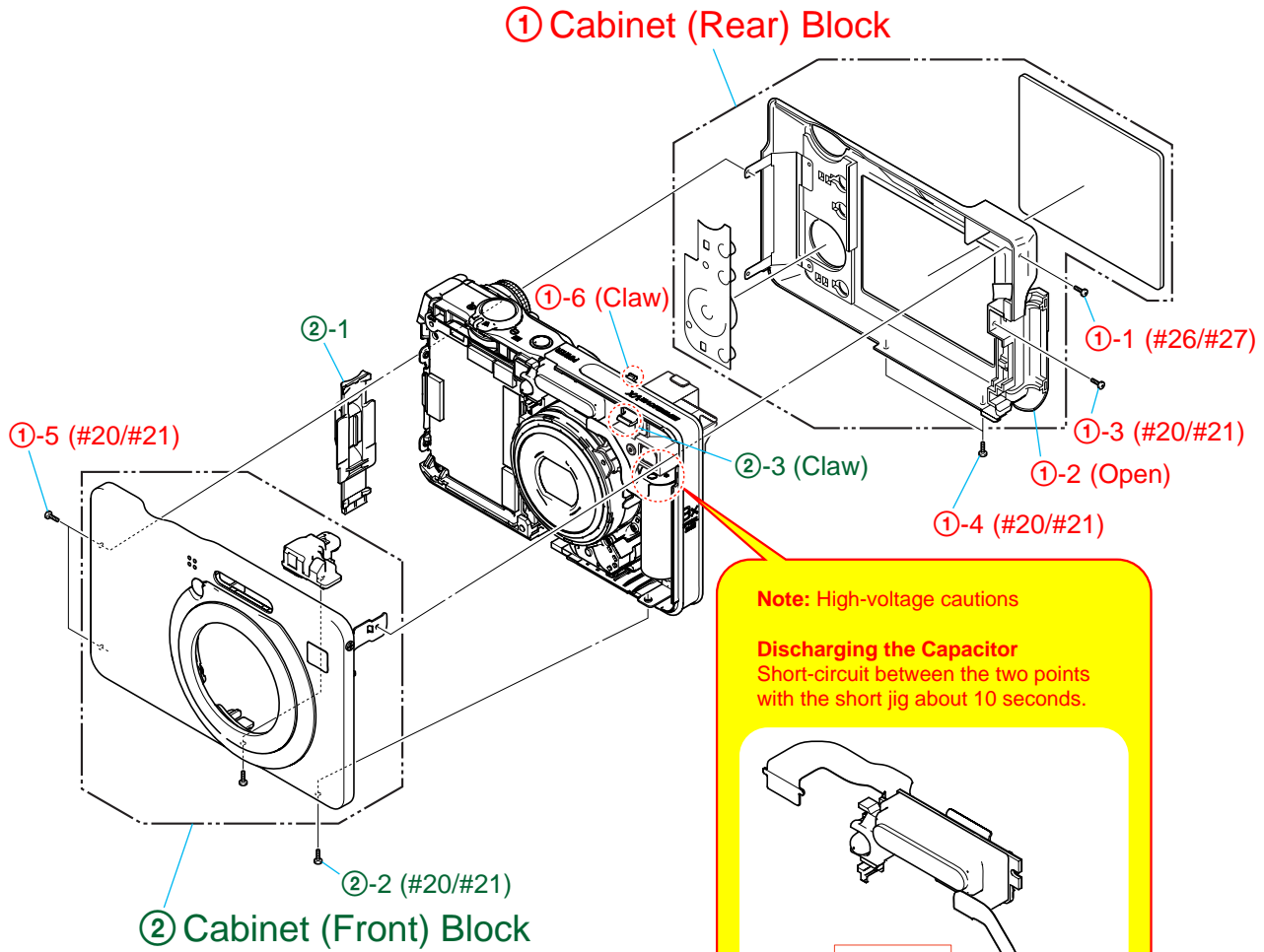
EXPLODED VIEW

HARDWARE LIST

2-1-1. CABINET SECTION

Follow the disassembly in the numerical order given.

- ① Cabinet (Rear) Block (①-1 to ①-6)
- ② Cabinet (Front) Block (②-1 to ②-3)



Note: High-voltage cautions

Discharging the Capacitor
Short-circuit between the two points with the short jig about 10 seconds.

R:1 k Ω /1 W
(Part code: 1-215-869-11)

2-1-2. LCD PANEL SECTION

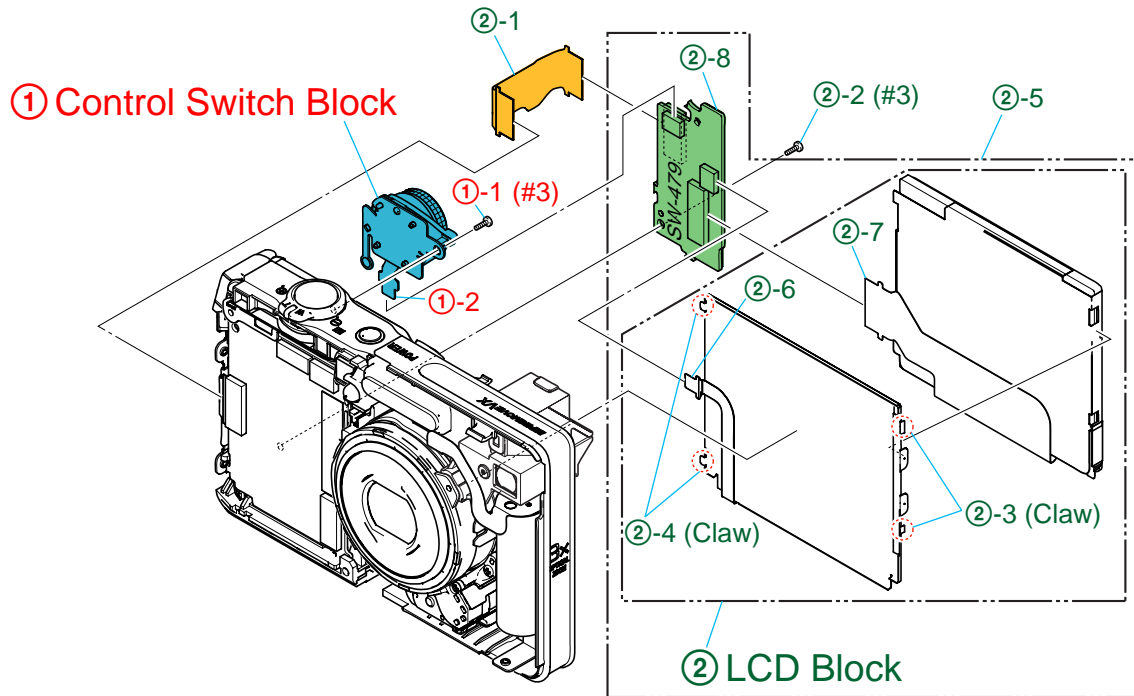
Follow the disassembly in the numerical order given.

① Control Switch Block (①-1 to ①-2)

② LCD Block (②-1 to ②-8)

EXPLODED VIEW

HARDWARE LIST

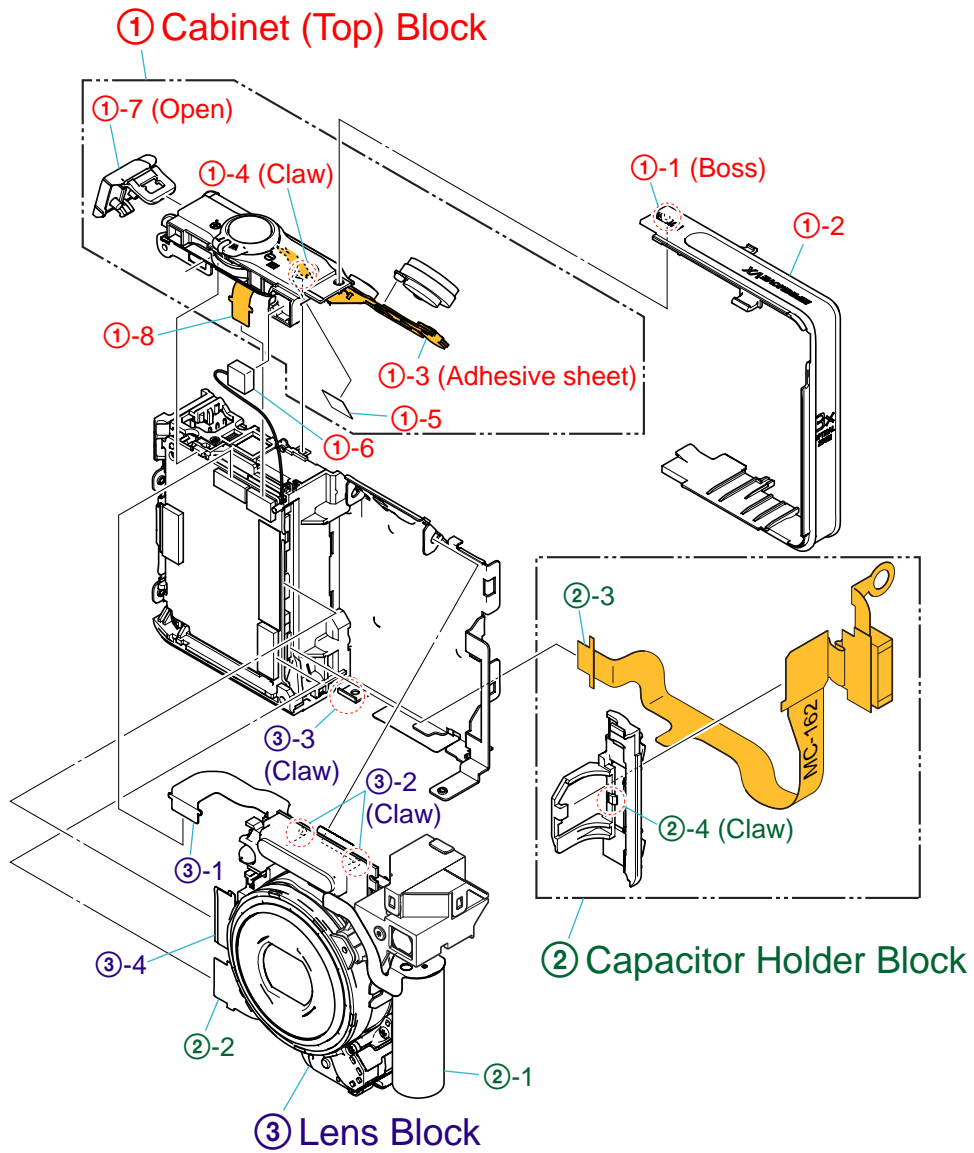


2-1-3. CABINET (TOP) SECTION

Follow the disassembly in the numerical order given.

- ① Cabinet (Top) Block (①-1 to ①-8)
- ② Capacitor Holder Block (②-1 to ②-4)
- ③ Lens Block (③-1 to ③-4)

EXPLODED VIEW



2-1-4. BT HOLDER SECTION

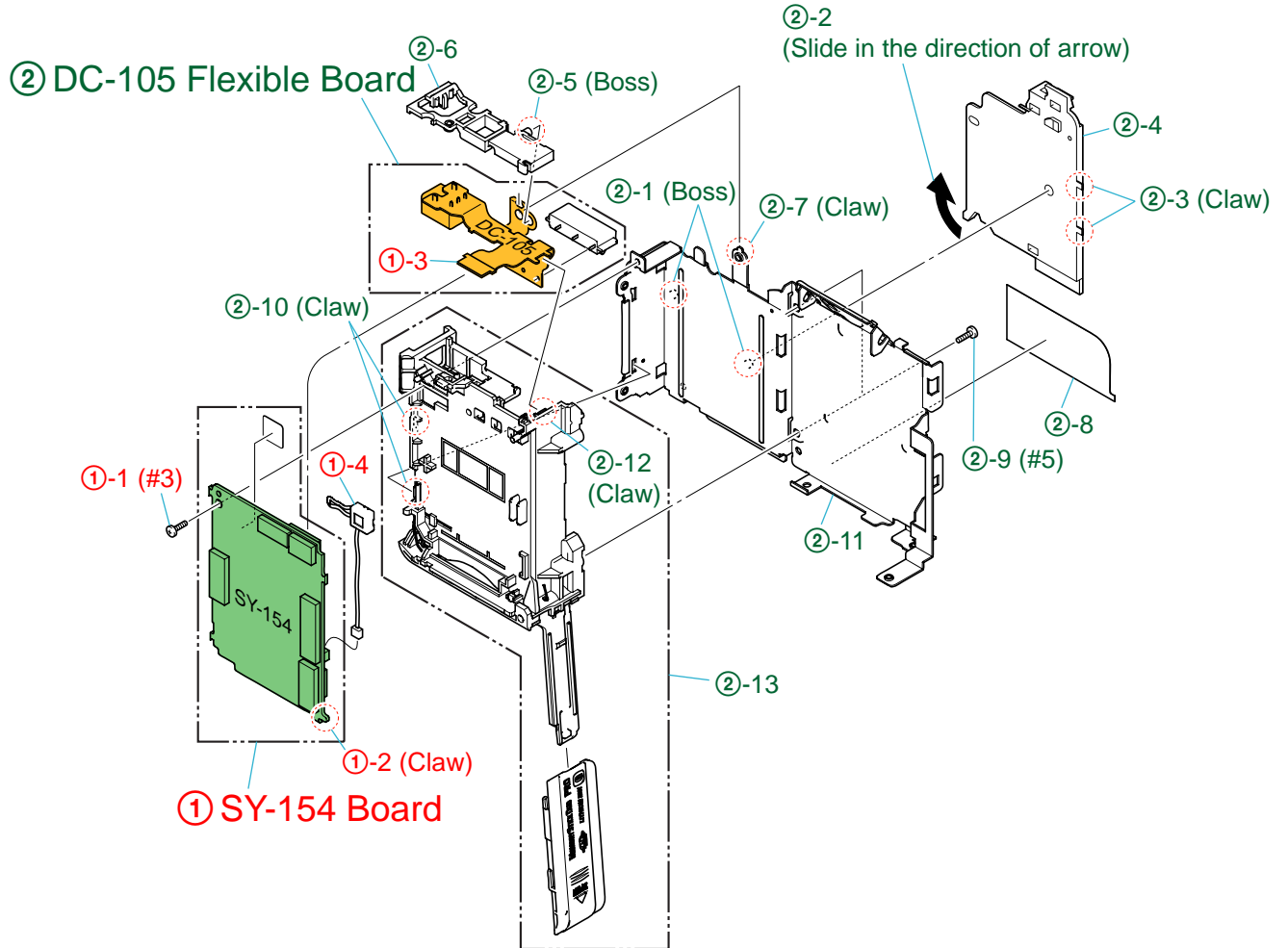
Follow the disassembly in the numerical order given.

① SY-154 Board (①-1 to ①-4)

② DC-105 Flexible Board (②-1 to ②-13)

EXPLODED VIEW

HARDWARE LIST



2-2. 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

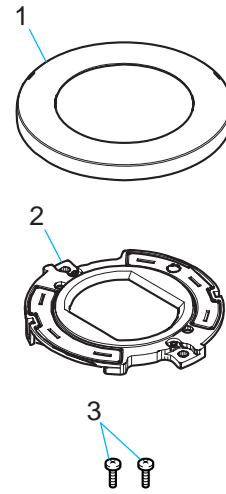
Soldering iron

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.



2-2-1. 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.

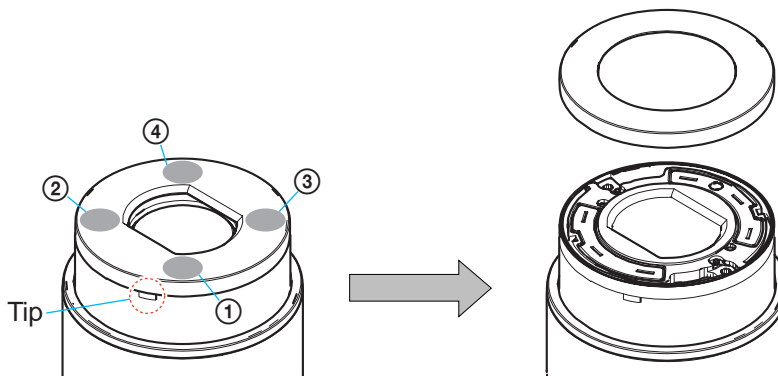
Insert the tip of tweezers, etc. into a notch of the group-1 frame and prize the ring.

* 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.

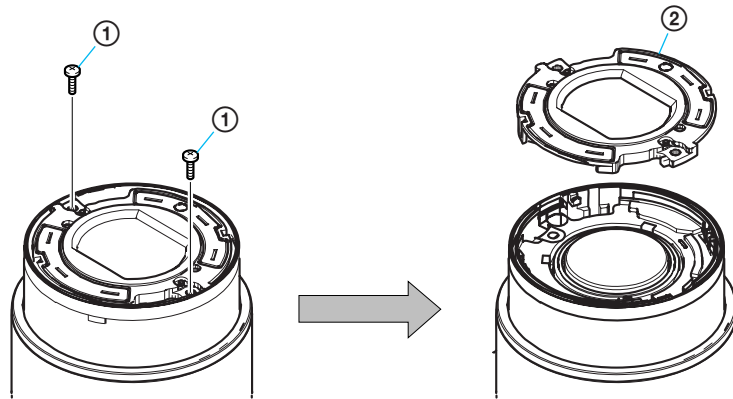
* Discard the removed Ornamental Ring A.



2-2-2. REMOVE OLD BARRIER ASSY

- ① Remove two screws.
* Discard the removed screws.

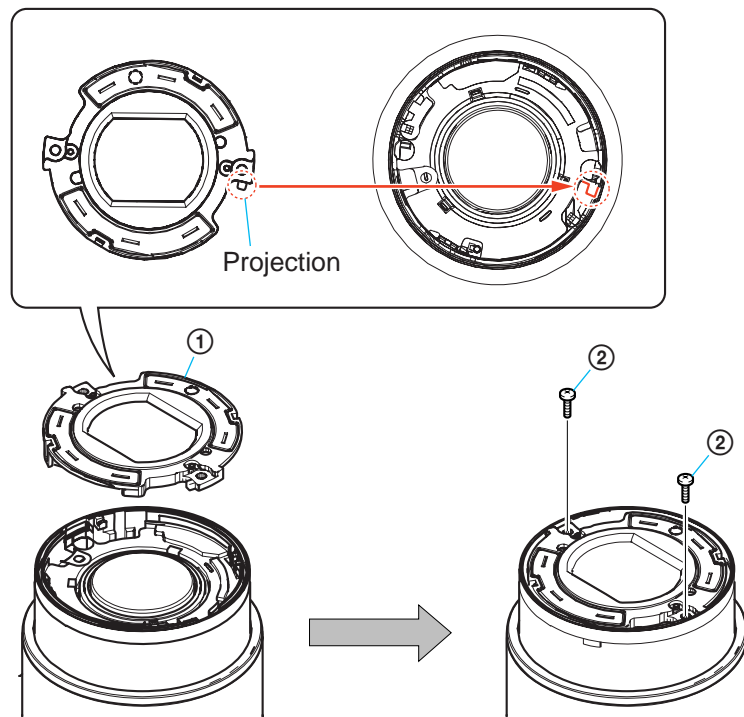
- ② Remove the Barrier Assy.
* Discard the removed Barrier Assy.



- * 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.

2-2-3. 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



2-2-4. 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.

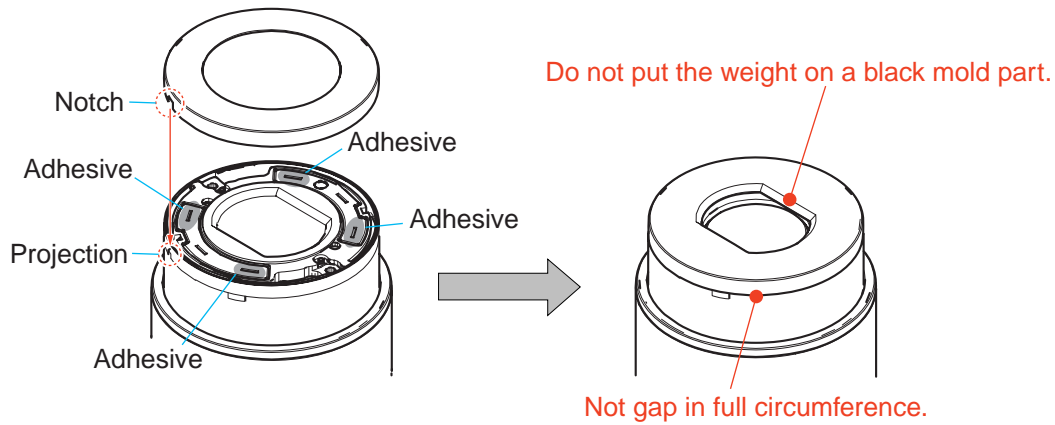
Note: Be careful not to give a shock.

* 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.

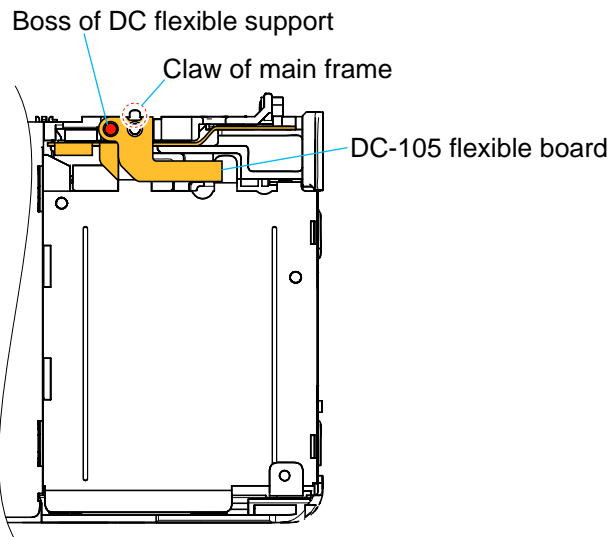
If the weight is put on the mold part of the Barrier Assy, the Ornamental Ring A will float up.



Completion after 30 minutes.

HELP

Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.



3. BLOCK DIAGRAMS

Link

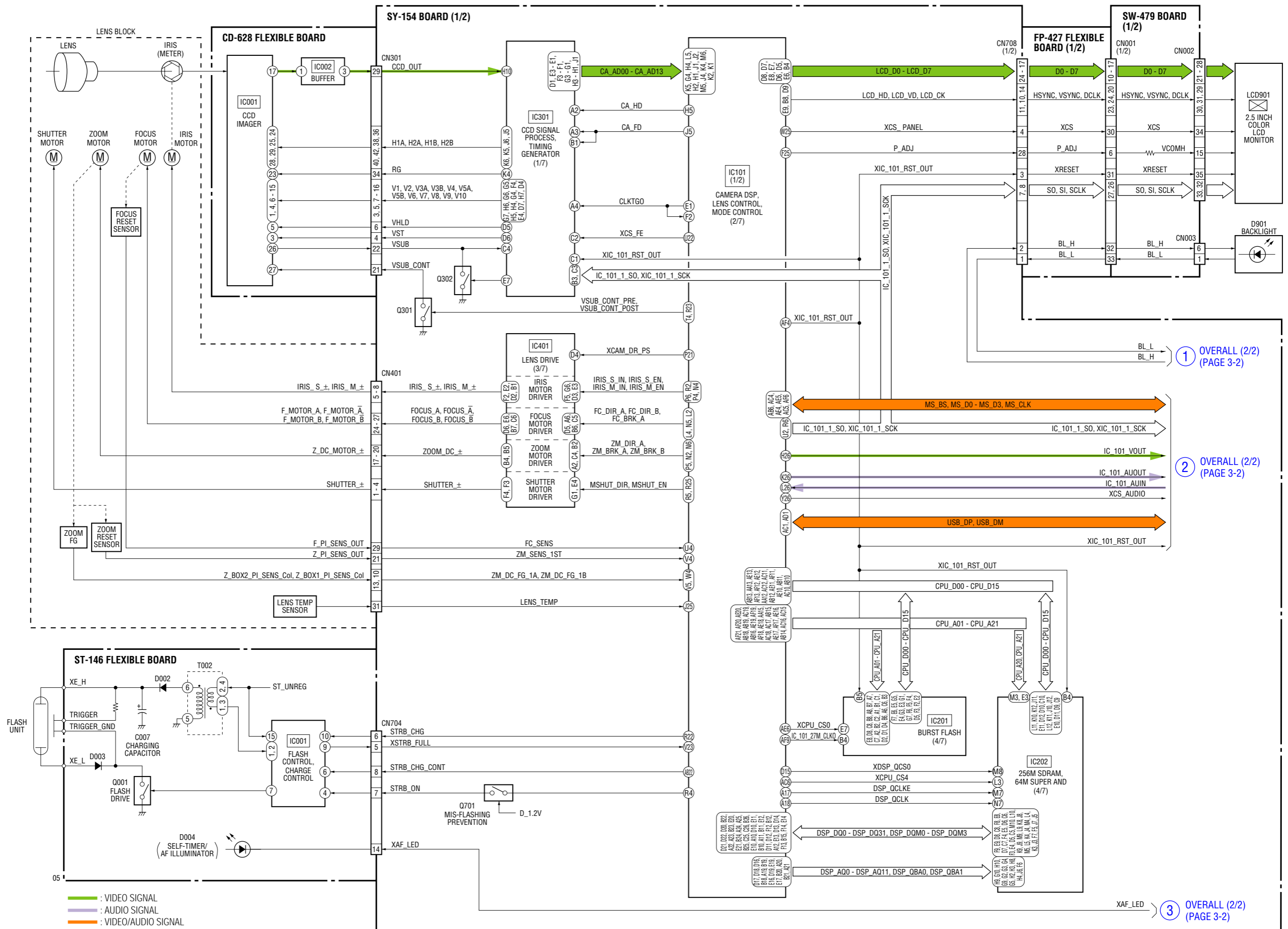
• [OVERALL BLOCK DIAGRAM \(1/2\)](#)

• [POWER BLOCK DIAGRAM](#)

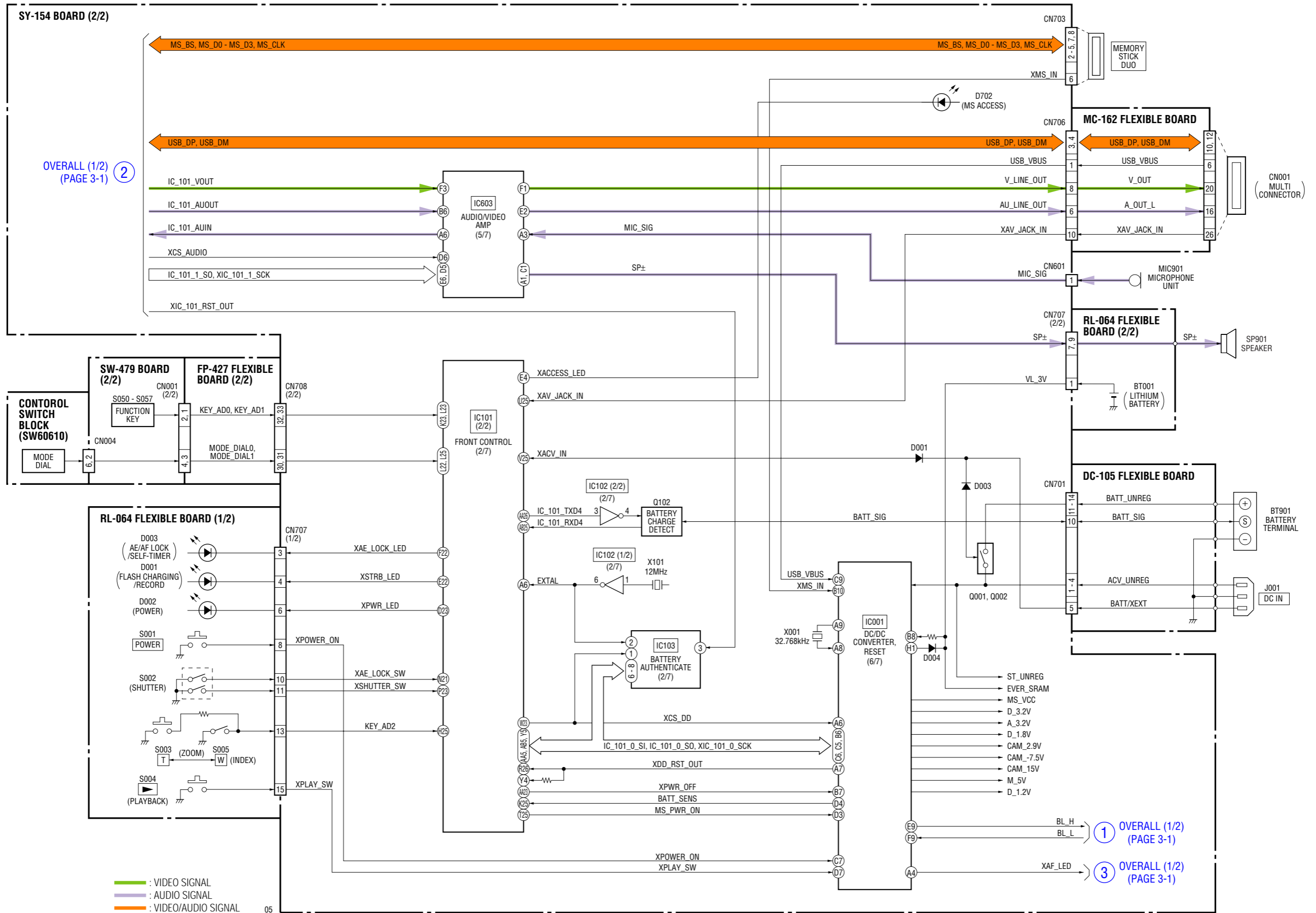
• [OVERALL BLOCK DIAGRAM \(2/2\)](#)

3. BLOCK DIAGRAMS

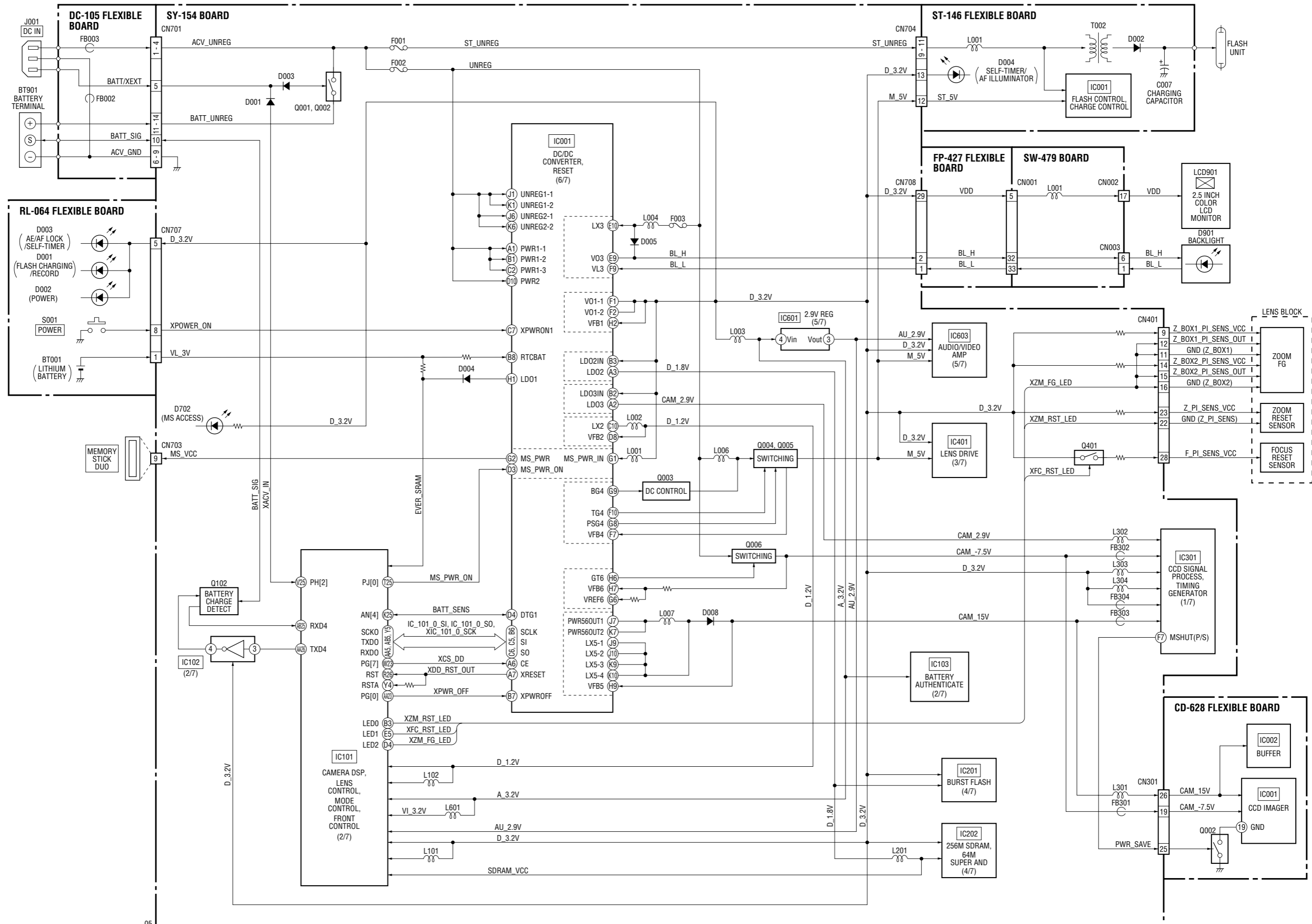
3-1. OVERALL BLOCK DIAGRAM (1/2) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



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

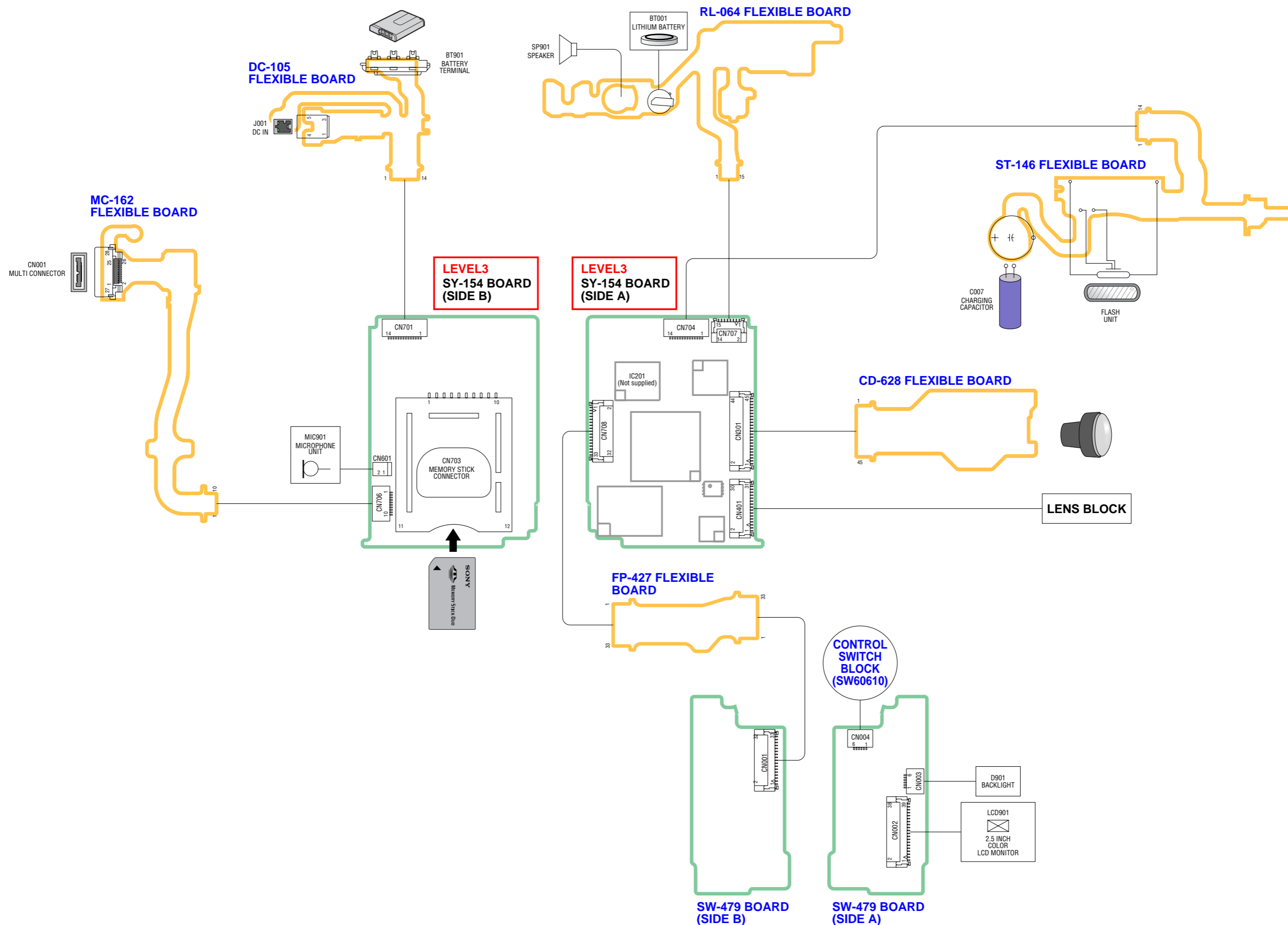


3-3. POWER BLOCK DIAGRAM () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



4-2. SCHEMATIC DIAGRAMS

Link

<ul style="list-style-type: none">• CD-628 FLEXIBLE BOARD (CCD IMAGER)	<ul style="list-style-type: none">• ST-146 FLEXIBLE BOARD (FLASH DRIVE)
<ul style="list-style-type: none">• SW-479 BOARD (LCD, CONTROL SWITCH)	<ul style="list-style-type: none">• MC-162 FLEXIBLE BOARD (MULTI CONNECTOR)
<ul style="list-style-type: none">• FP-427 FLEXIBLE BOARD	<ul style="list-style-type: none">• RL-064 FLEXIBLE BOARD (CONTROL SWITCH)
<ul style="list-style-type: none">• CONTROL SWITCH BLOCK (SW60610)	<ul style="list-style-type: none">• DC-105 FLEXIBLE BOARD (BATTERY IN, DC IN)

- COMMON NOTE FOR SCHEMATIC DIAGRAMS

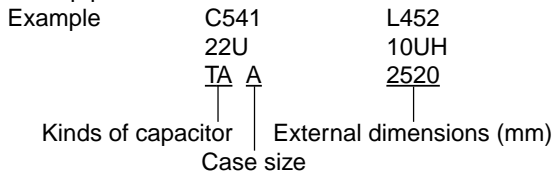
4-2. SCHEMATIC DIAGRAMS

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. $\text{pF} : \mu\text{F} : 50\text{V}$ or less are not indicated except for electrolytics and tantalums.
- Chip resistors are $1/10\text{W}$ 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 \star 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
 $\text{XEDIT} \rightarrow \overline{\text{EDIT}}$ $\text{PB/XREC} \rightarrow \overline{\text{PB/REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : not use circuit

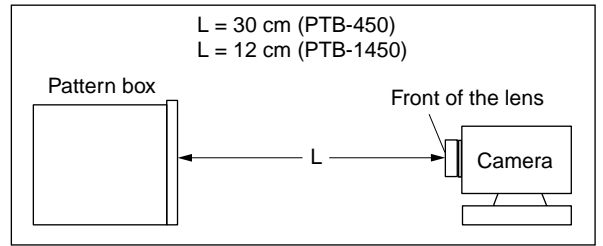
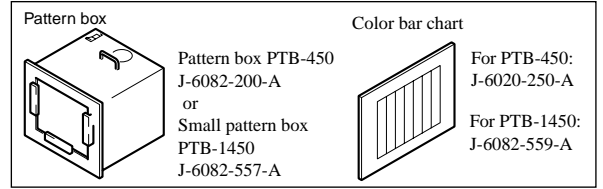
(Measuring conditions voltage and waveform)

- 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.)

Precautions for Replacement of Imager

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the 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.

1. Connection



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

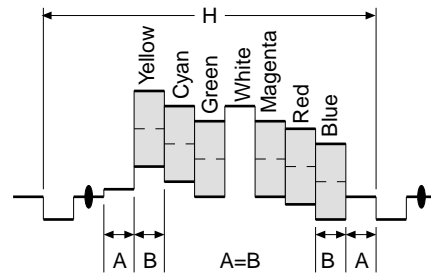


Fig. a (Video output terminal output waveform)

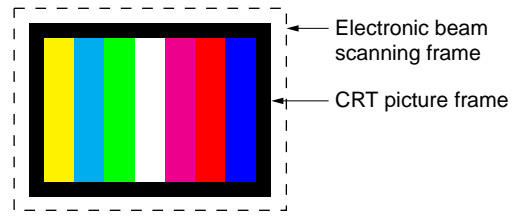


Fig.b (Picture on monitor TV)

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

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.

A
B
C
D
E
F
G
H

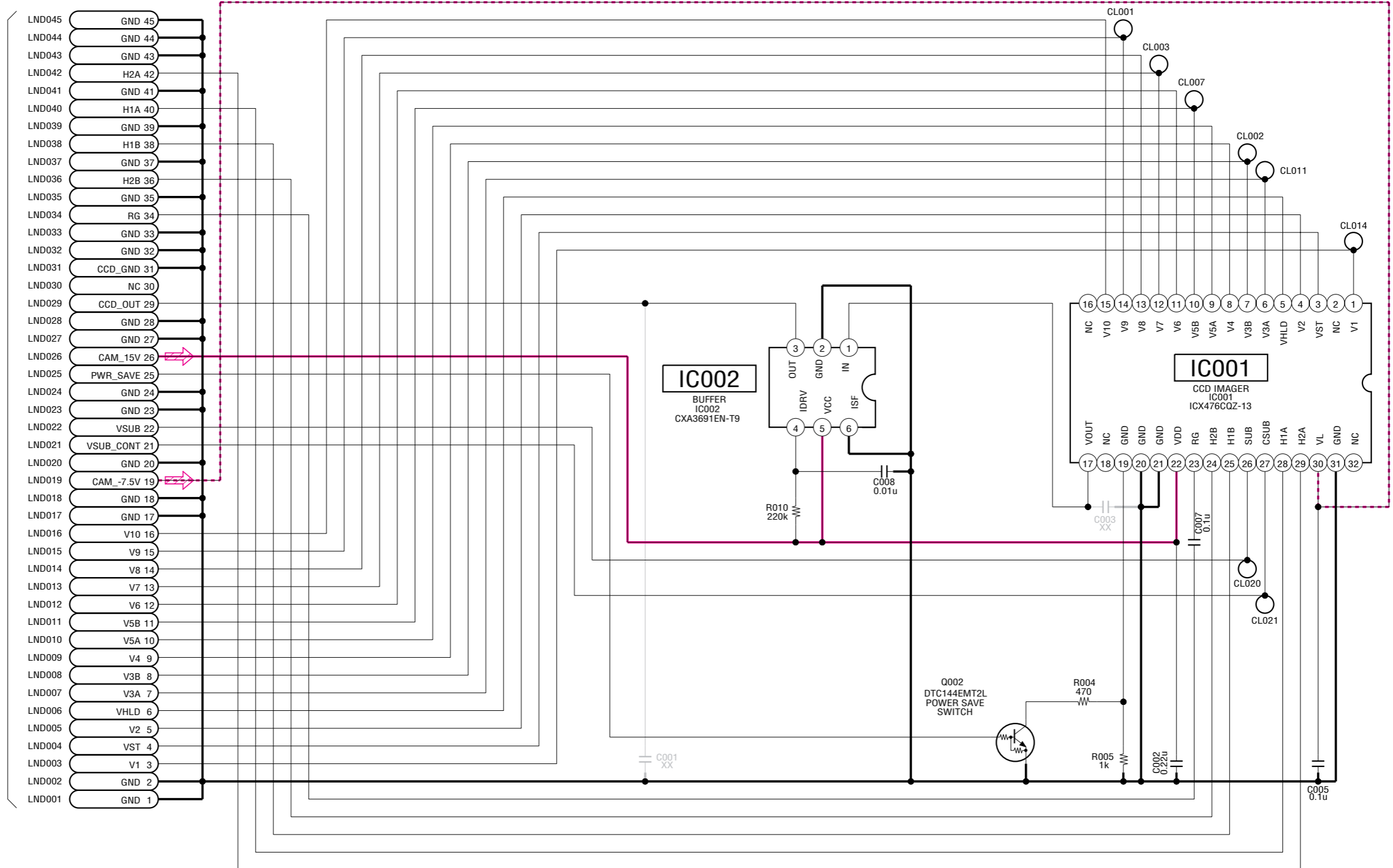
CD-628 FLEXIBLE BOARD

CCD IMAGER

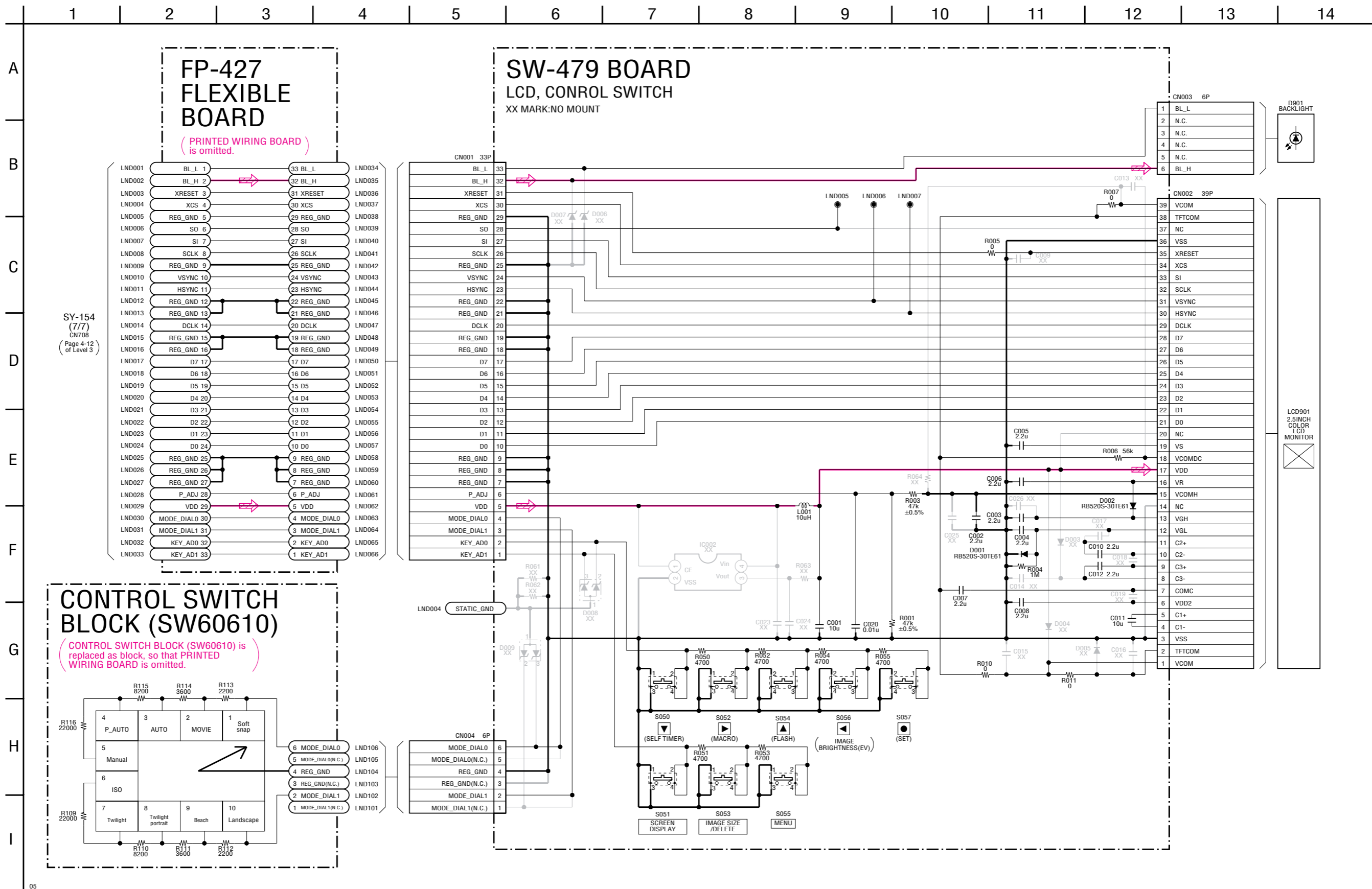
XX MARK:NO MOUNT

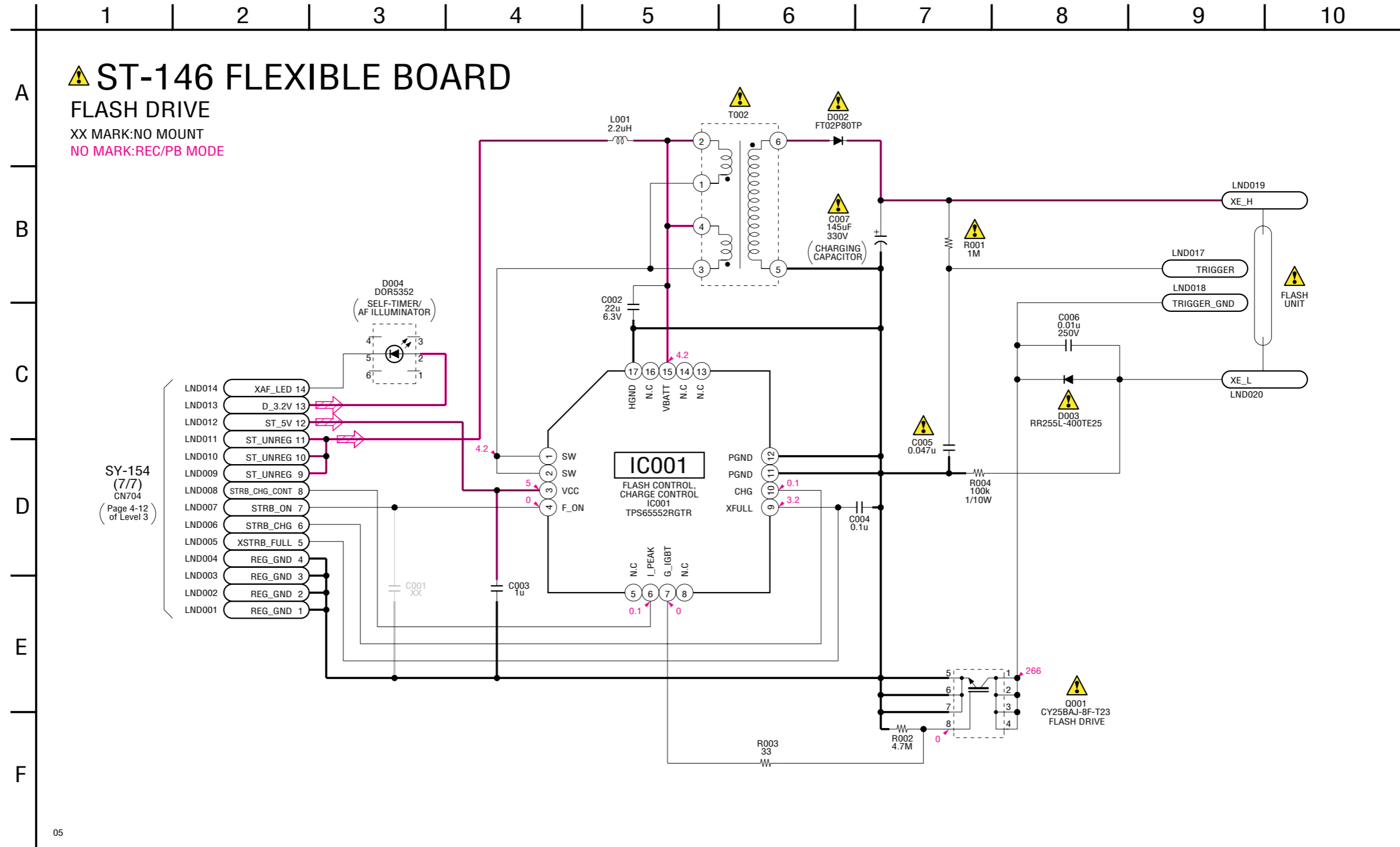
Note: CD-628 flexible complete board and IC001 are not supplied, but they are included in CCD block assy.
Note: Voltage of IC001, IC002 and Q002 can not be measured, because they are mounted by the side of lens.

SY-154
(1/7)
CN301
(Page 4-6
of Level 3)

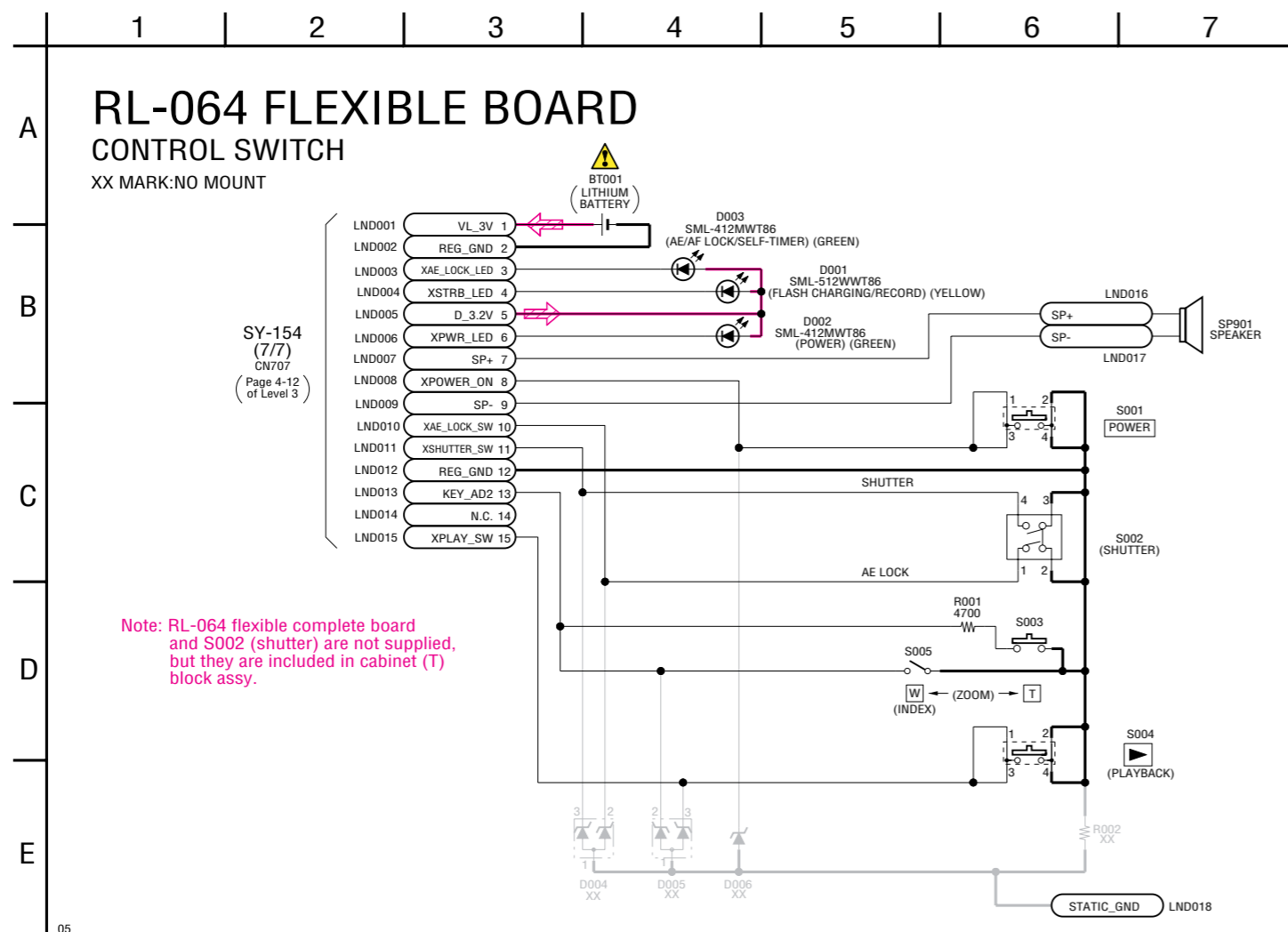
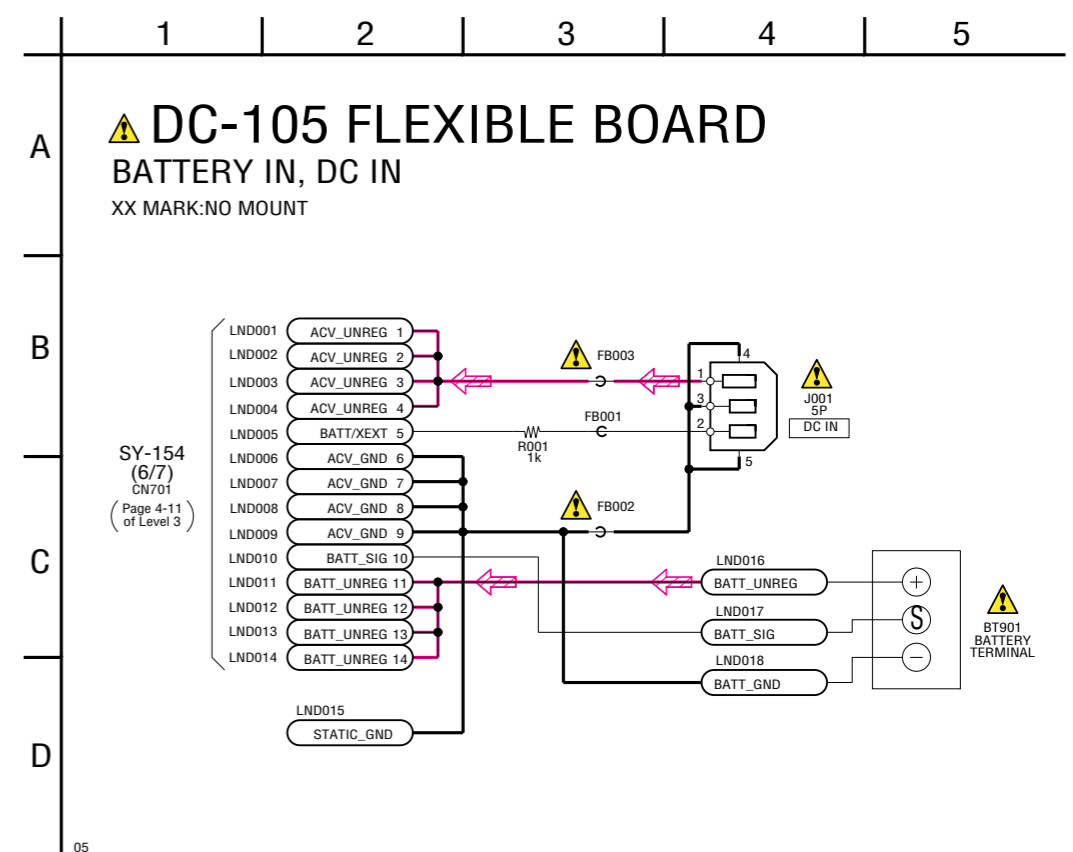
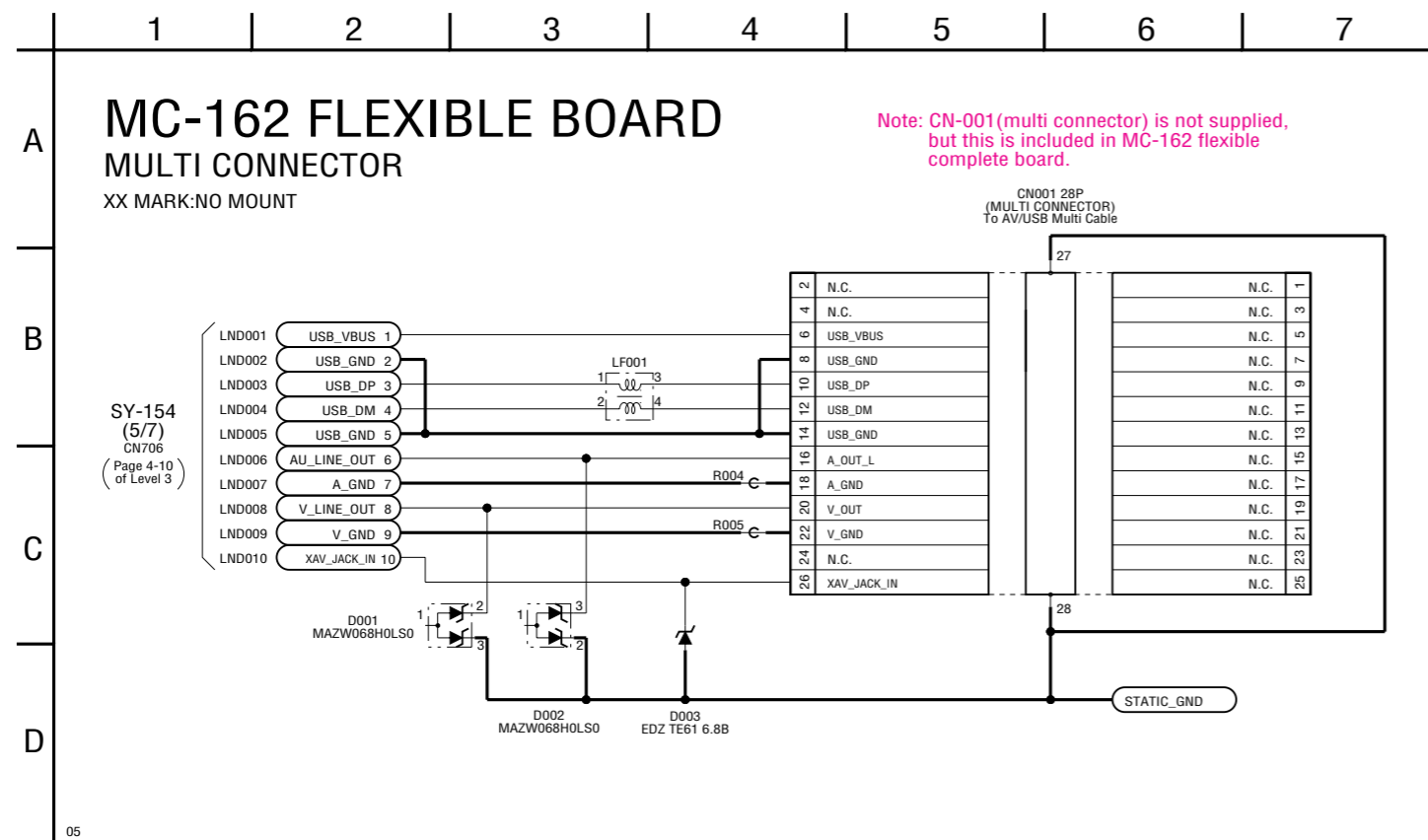


Schematic diagrams of the SY-154 board are not shown.
Pages from 4-6 to 4-12 are not shown.





05



4-3. PRINTED WIRING BOARDS

Link

• CD-628 FLEXIBLE BOARD	• MC-162 FLEXIBLE BOARD
• SW-479 BOARD	• RL-064 FLEXIBLE BOARD
• ST-146 FLEXIBLE BOARD	• DC-105 FLEXIBLE BOARD
• COMMON NOTE FOR PRINTED WIRING BOARDS	• MOUNTED PARTS LOCATION

4-3. PRINTED WIRING BOARDS

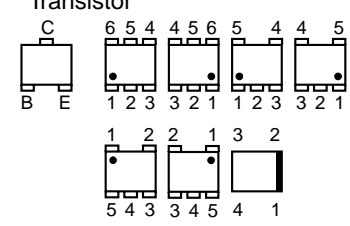
4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

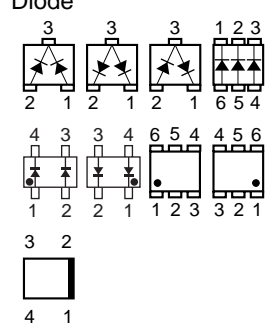
- : Uses unleaded solder.
- : Circuit board
- : Flexible board
- : Pattern from the side which enables seeing.
- : pattern of the rear side
(The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.
-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

- Chip parts.

Transistor

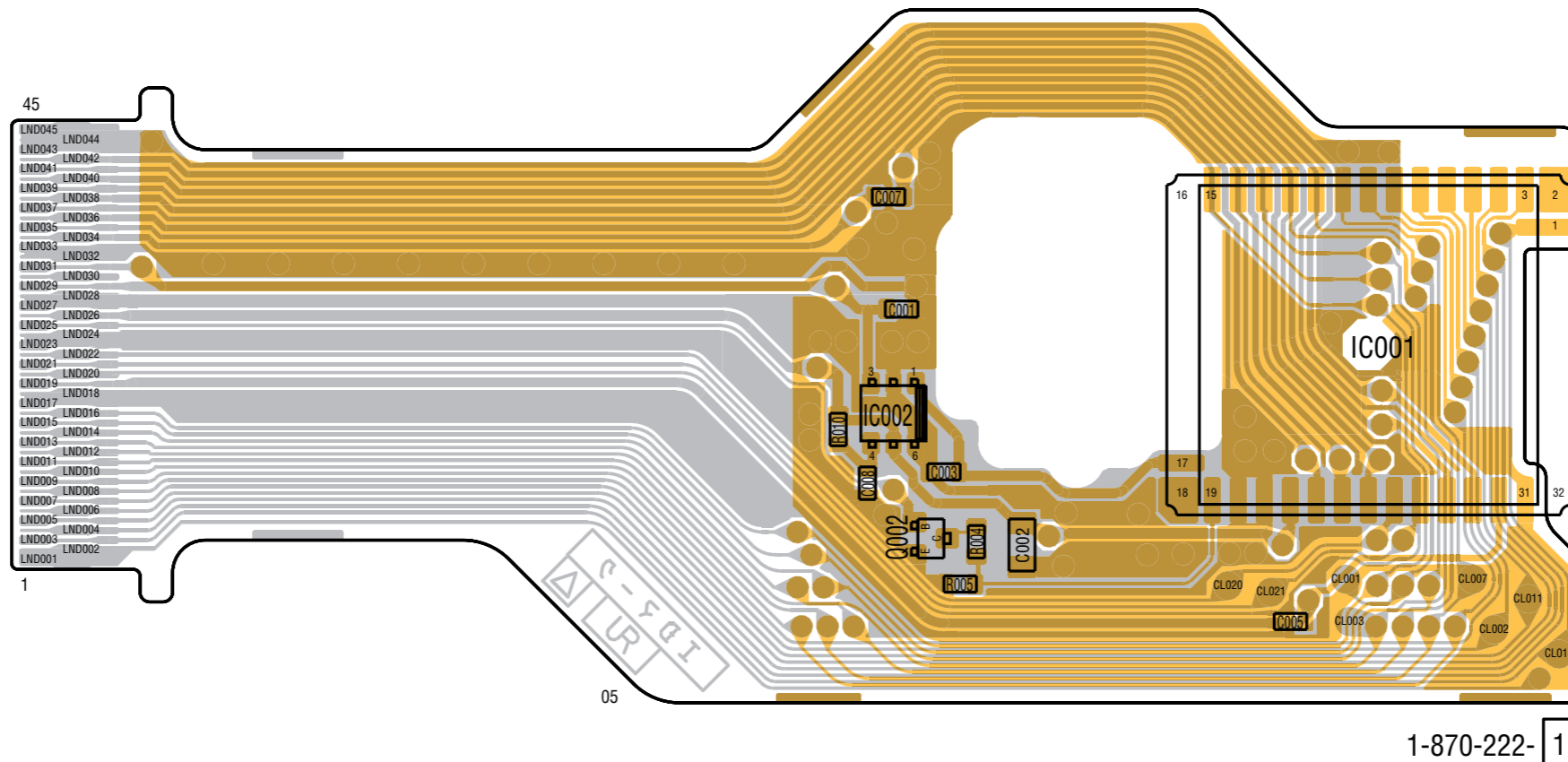


Diode




CD-628 FLEXIBLE BOARD

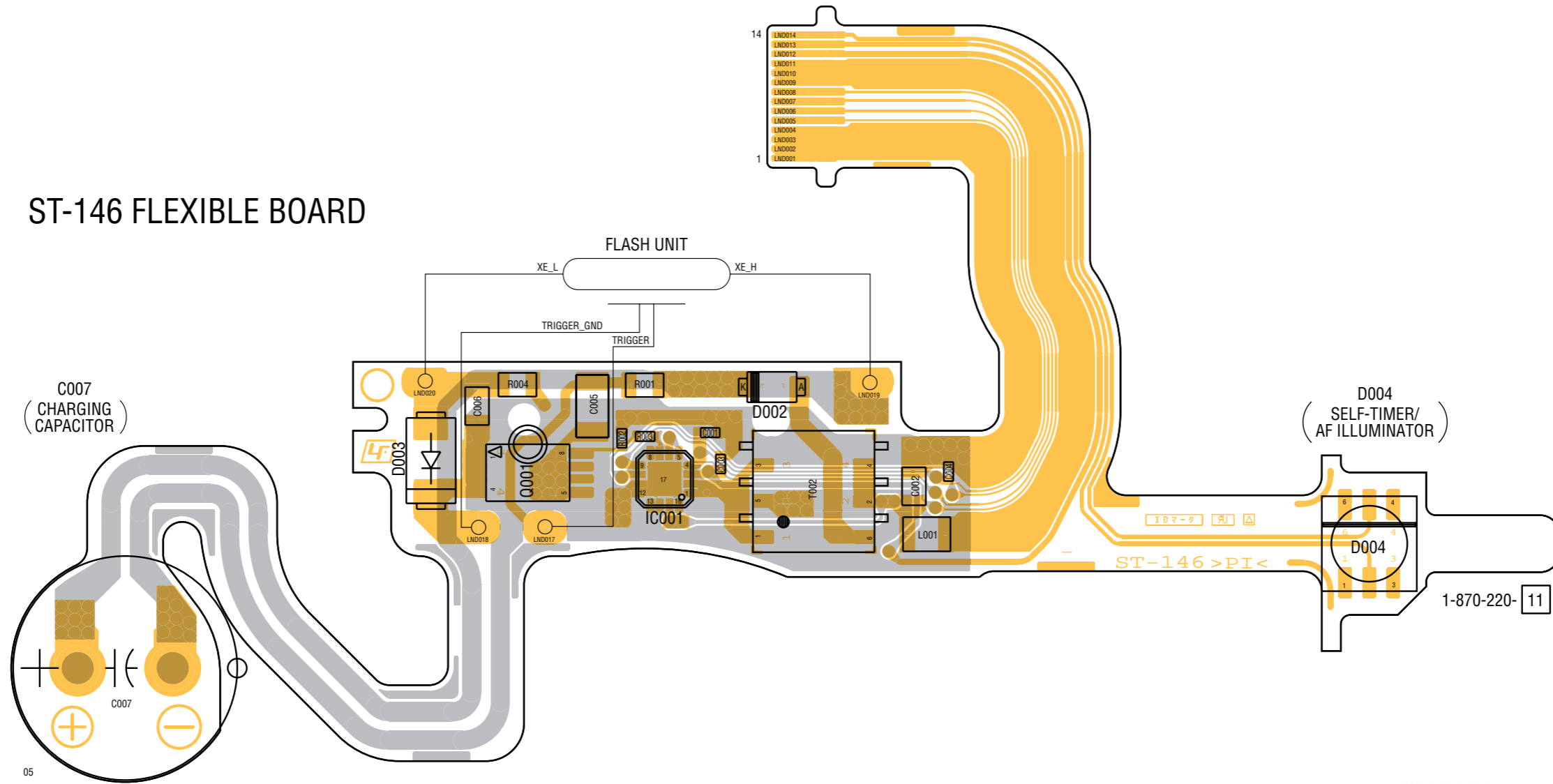
Note: CD-628 flexible complete board and IC001 are not supplied, but they are included in CCD block assy.



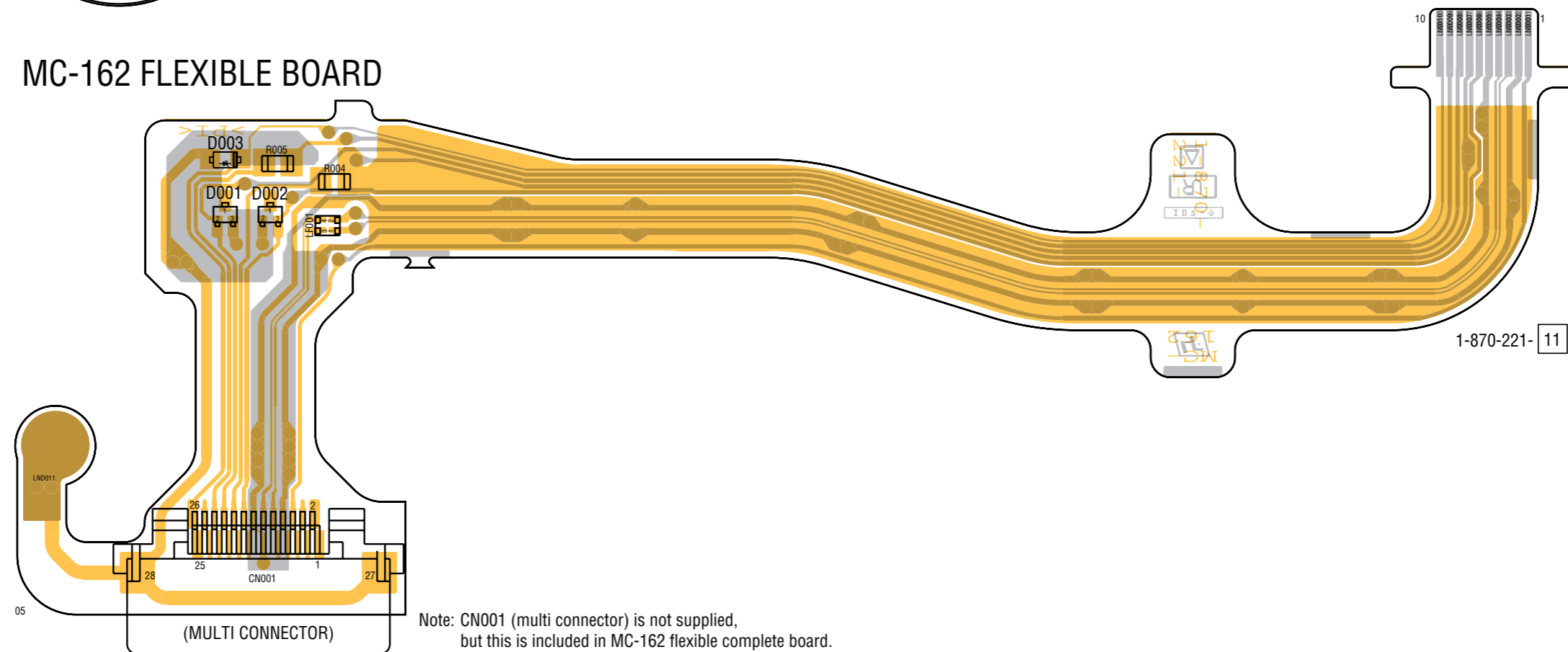
Printed wiring boards of the SY-154 board are not shown.
Page 4-20 is not shown.

 : Uses unleaded solder.

ST-146 FLEXIBLE BOARD



MC-162 FLEXIBLE BOARD

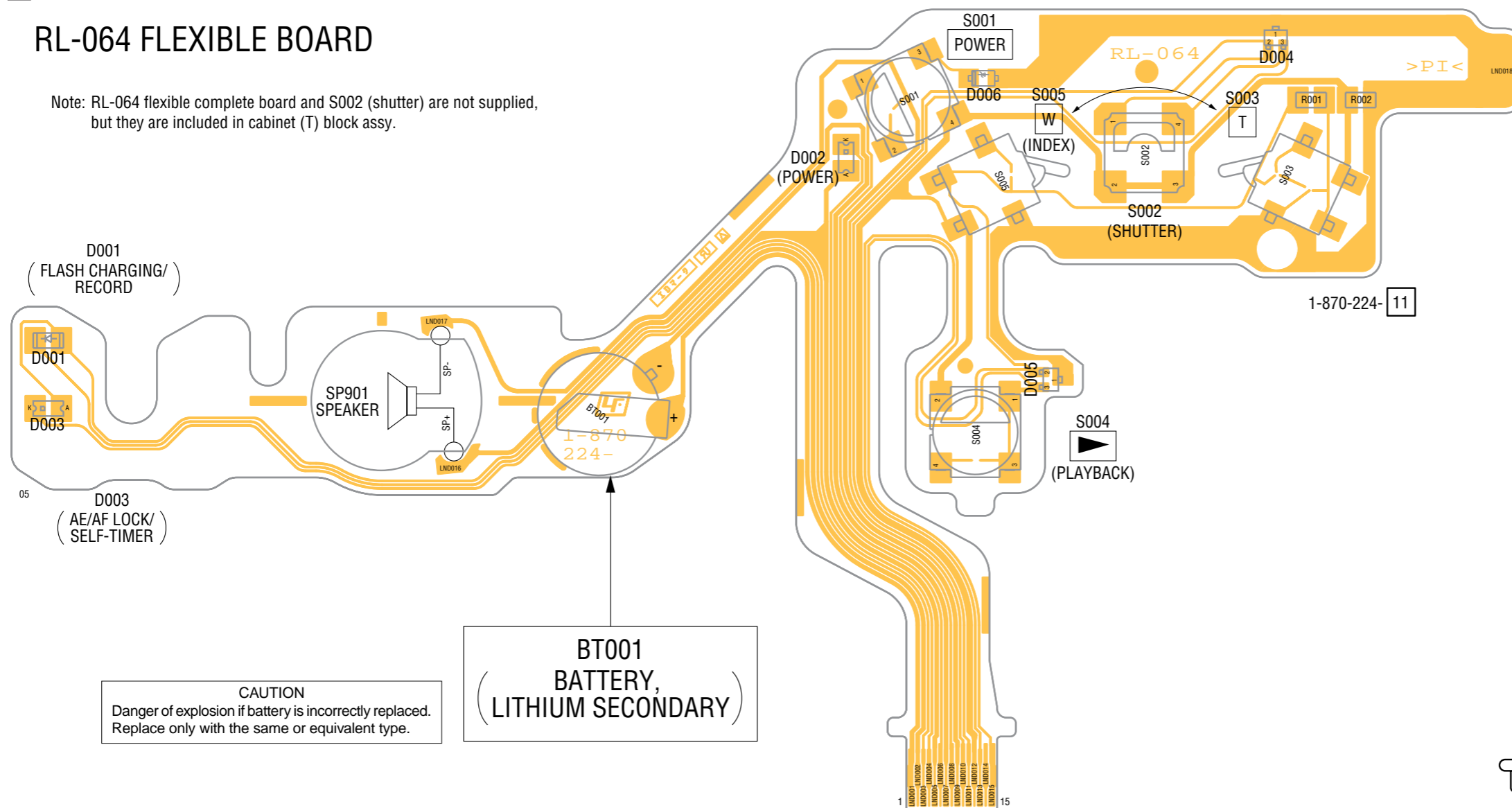


Note: CN001 (multi connector) is not supplied, but this is included in MC-162 flexible complete board.

 : Uses unleaded solder.

RL-064 FLEXIBLE BOARD

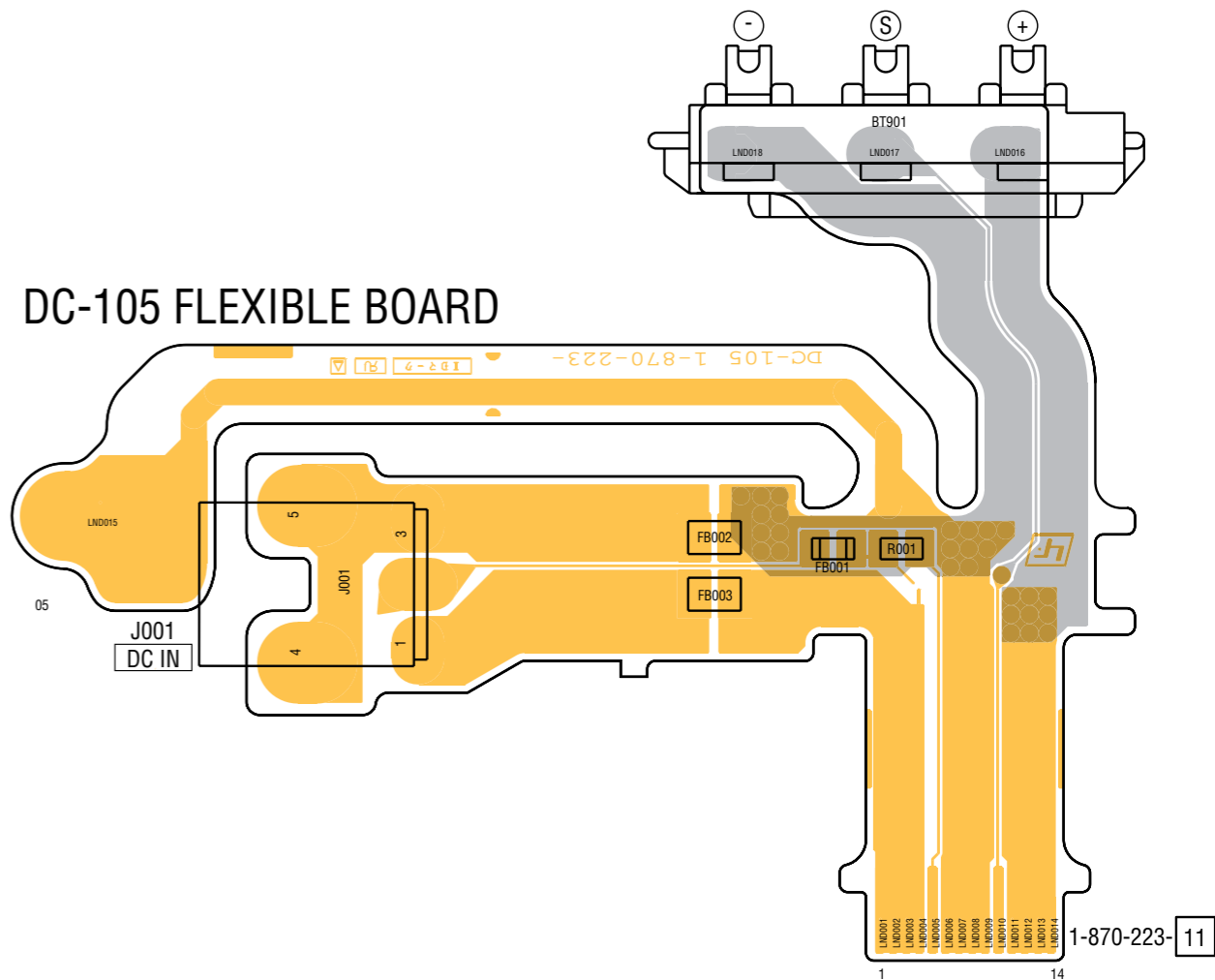
Note: RL-064 flexible complete board and S002 (shutter) are not supplied, but they are included in cabinet (T) block assy.



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

BT001
 BATTERY,
 LITHIUM SECONDARY

DC-105 FLEXIBLE BOARD



Mounted parts location of the SY-154 board are not shown.
Page 4-25 is not shown.

4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

no mark : side A

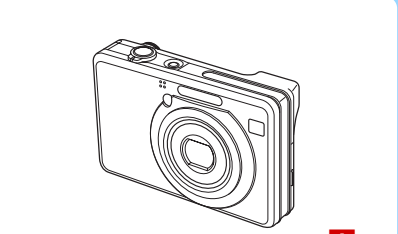
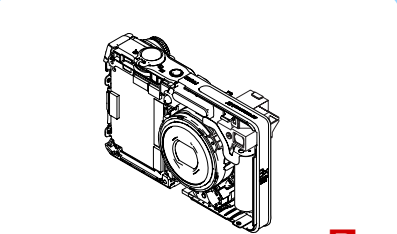
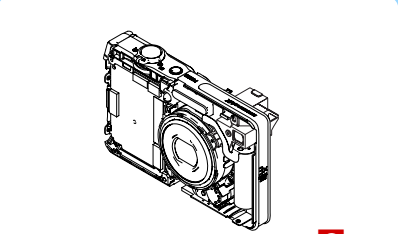
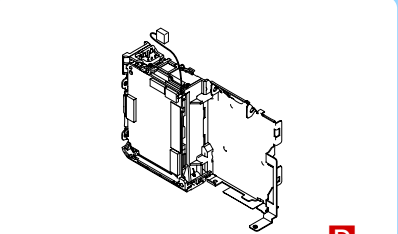
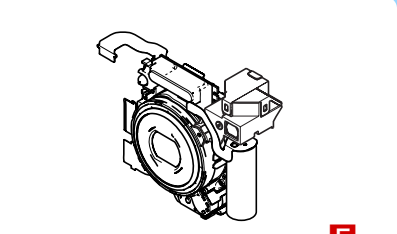
* mark : side B

SW-479 BOARD

* C001	C-1
* C002	C-2
C003	C-1
C004	C-1
* C005	C-1
C006	C-1
* C007	C-2
* C008	C-2
* C010	C-2
C011	C-1
C012	C-2
* C020	B-1
* CN001	B-1
CN002	C-2
CN003	B-2
CN004	A-1
D001	C-1
D002	C-1
* L001	C-1
* R001	C-2
* R003	C-2
R004	C-1
* R005	B-2
R006	B-1
R007	B-2
* R010	C-1
R011	C-1
* R050	C-1
* R051	C-2
* R052	C-1
* R053	B-2
* R054	B-2
* R055	B-2
* S050	C-1
* S051	A-2
* S052	B-1
* S053	C-2
* S054	B-1
* S055	A-2
* S056	B-2
* S057	B-1

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	
		
CABINET SECTION A	LCD PANEL SECTION B	CABINET (TOP) SECTION C
		
BT HOLDER SECTION D	LENS BLOCK SECTION E	

Link	ELECTRICAL PARTS LIST		ACCESSORIES
• CD-628 FLEXIBLE BOARD E	• MC-162 FLEXIBLE BOARD C	• ST-146 BOARD E	
• DC-105 FLEXIBLE BOARD D	• RL-064 FLEXIBLE BOARD C	• SW-479 BOARD B	

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
EE : East European model
HK : Hong Kong model
J : Japanese model
JE : Tourist model
KR : Korea model
NE : North European model
TW : Taiwan 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.

- Color Indication of Appearance Parts
Example:
(SILVER) : Cabinet's Color
(Silver) : Parts Color

• Language that can be selected about SY-154 board

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

5. REPAIR PARTS LIST

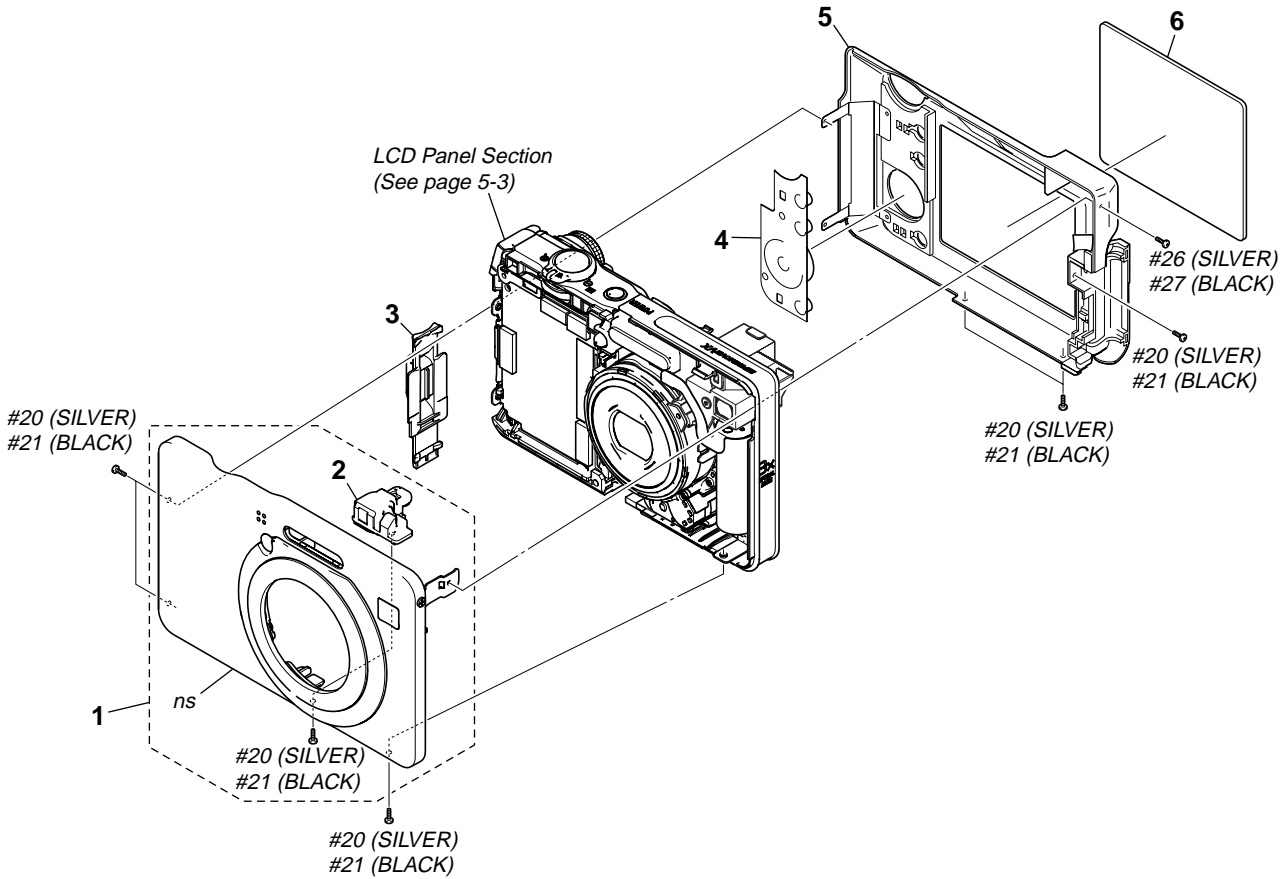
DISASSEMBLY

HARDWARE LIST

5-1. EXPLODED VIEWS

5-1-1. CABINET SECTION

ns: not supplied



Ref. No.	Part No.	Description
1	X-2109-132-1	CABINET (F) ASSY (S) (SILVER)
1	X-2109-133-1	CABINET (F) ASSY (B) (BLACK)
2	2-676-233-01	SCREW, TRIPOD
3	2-676-269-01	CABINET (L) (SILVER)
3	2-676-269-11	CABINET (L) (BLACK)
4	2-671-731-01	KEY, CURSOR (SILVER)
4	2-671-731-11	KEY, CURSOR (BLACK)

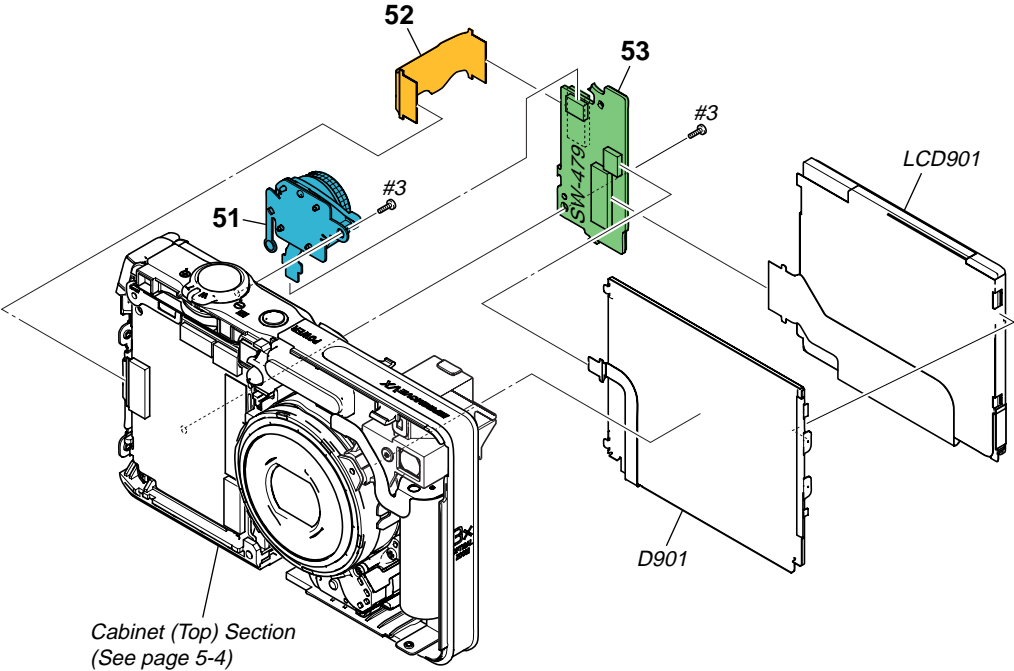
Ref. No.	Part No.	Description
5	X-2109-134-1	CABINET (B) ASSY (S) (SILVER)
5	X-2109-135-1	CABINET (B) ASSY (B) (BLACK)
6	2-676-274-01	WINDOW, LCD
#20	2-635-591-31	SCREW (M1.4), NEW TRUSTAR P2 (Silver)
#21	2-662-396-21	SCREW (M1.4), NEW TRUSTAR, P2 (Black)
#26	2-635-591-11	SCREW (M1.4), NEW TRUSTAR P2 (Silver)
#27	2-662-396-11	SCREW (M1.4), NEW TRUSTAR, P2 (Black)

5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-2. LCD PANEL SECTION



Ref. No.	Part No.	Description
51	1-479-668-11	CONTROL SW BLOCK (SW60610) (SILVER)
51	1-479-668-21	CONTROL SW BLOCK (SW60610) (BLACK)
* 52	1-870-217-11	FP-427 FLEXIBLE BOARD
53	A-1178-792-A	SW-479 BOARD, COMPLETE

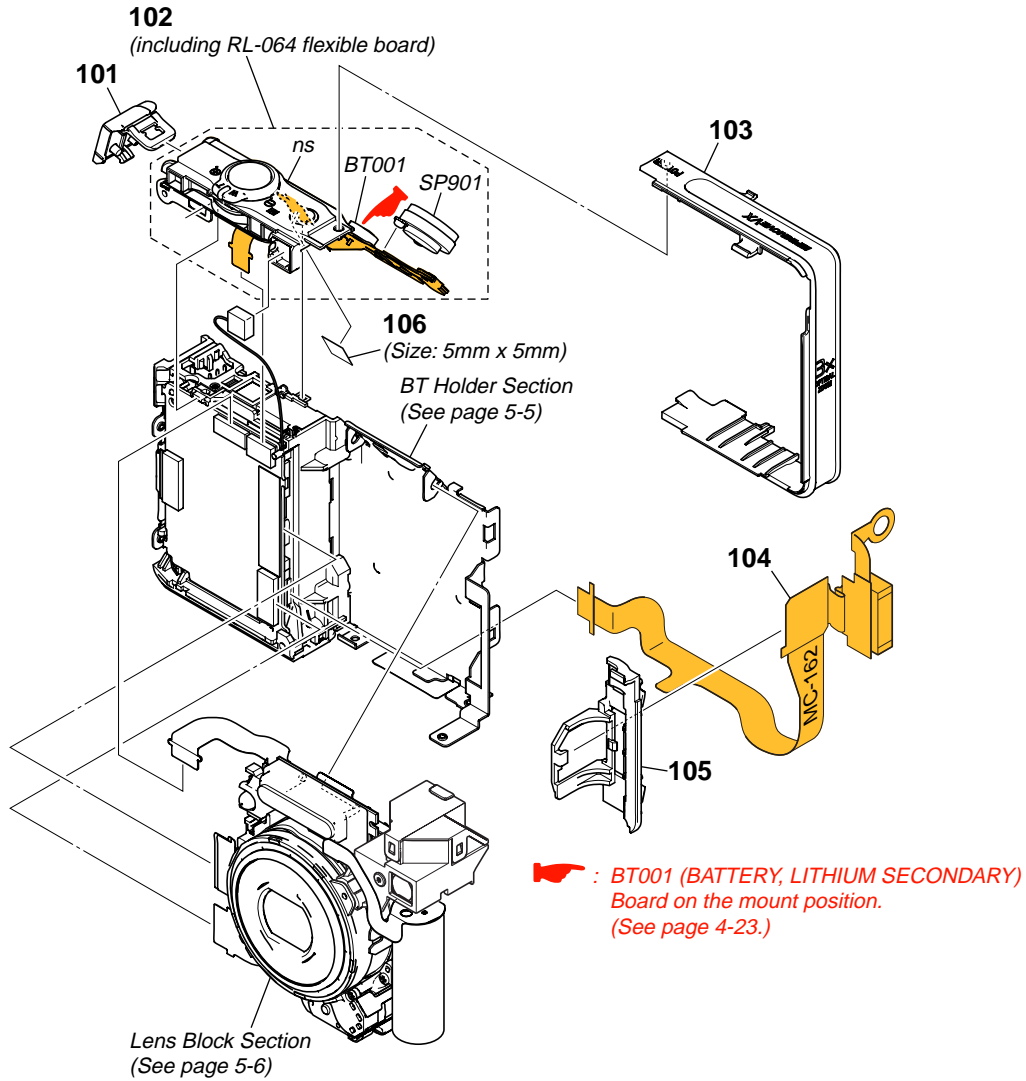
Ref. No.	Part No.	Description
D901	1-479-623-11	BLOCK, LIGHT GUIDE PLATE (2.5)
LCD901	A-1185-814-A	LCD SUB BLOCK ASSY
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)

5. REPAIR PARTS LIST

DISASSEMBLY

5-1-3. CABINET (TOP) SECTION

ns: not supplied



: BT001 (BATTERY, LITHIUM SECONDARY)
Board on the mount position.
(See page 4-23.)

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

Note: For the part of 106: SHEET (55), ADHESIVE (2-685-267-01), cut SHEET, ADHESIVE (2-649-300-01) into the desired length and use it.

• Refer to page 5-1 for mark \triangle .

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
101	X-2109-136-1	LID ASSY (S), DC (SILVER)	104	A-1178-824-A	MC-162 FLEXIBLE BOARD, COMPLETE
101	X-2109-137-1	LID ASSY (B), DC (BLACK)	* 105	2-676-273-01	HOLDER, CAPACITOR (SILVER)
102	A-1178-698-A	CABINET (T) BLOCK ASSY (S) (including RL-064 flexible board) (SILVER)	* 105	2-676-273-11	HOLDER, CAPACITOR (BLACK)
102	A-1178-699-A	CABINET (T) BLOCK ASSY (B) (including RL-064 flexible board) (BLACK)	106	Note	SHEET, ADHESIVE
103	2-676-268-01	CABINET (R) (SILVER)	\triangle BT001	1-756-539-11	BATTERY, LITHIUM SECONDARY
103	2-676-268-11	CABINET (R) (BLACK)	SP901	1-826-403-11	LOUD SPEAKER (1.0CM)

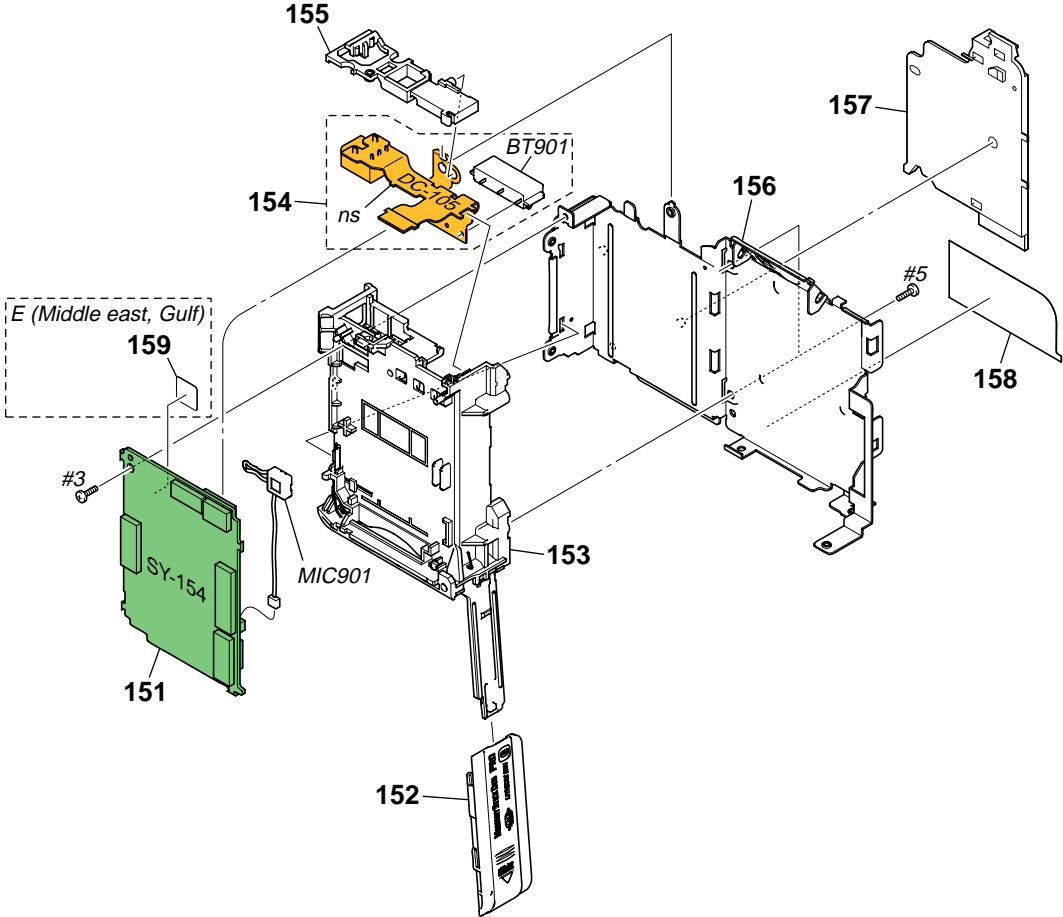
5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-4. BT HOLDER SECTION

ns: not supplied



* Refer to the table of page 5-1 about language of SY-154 board.

• Refer to page 5-1 for mark \triangle .

Ref. No.	Part No.	Description
151	A-1185-818-A	SY-154 BOARD, COMPLETE (SERVICE) (GP2)
151	A-1187-402-A	SY-154 BOARD, COMPLETE (SERVICE) (GP3)
151	A-1187-403-A	SY-154 BOARD, COMPLETE (SERVICE) (GP4)
152	2-676-216-01	LID, BT (SILVER)
152	2-676-216-11	LID, BT (BLACK)
153	X-2109-613-1	ASSY, BTH PRE
\triangle 154	A-1178-825-A	DC-105 FLEXIBLE BOARD, COMPLETE
* 155	2-676-266-01	SUPPORT, DC FLEXIBLE
* 156	2-676-267-01	FRAME, MAIN

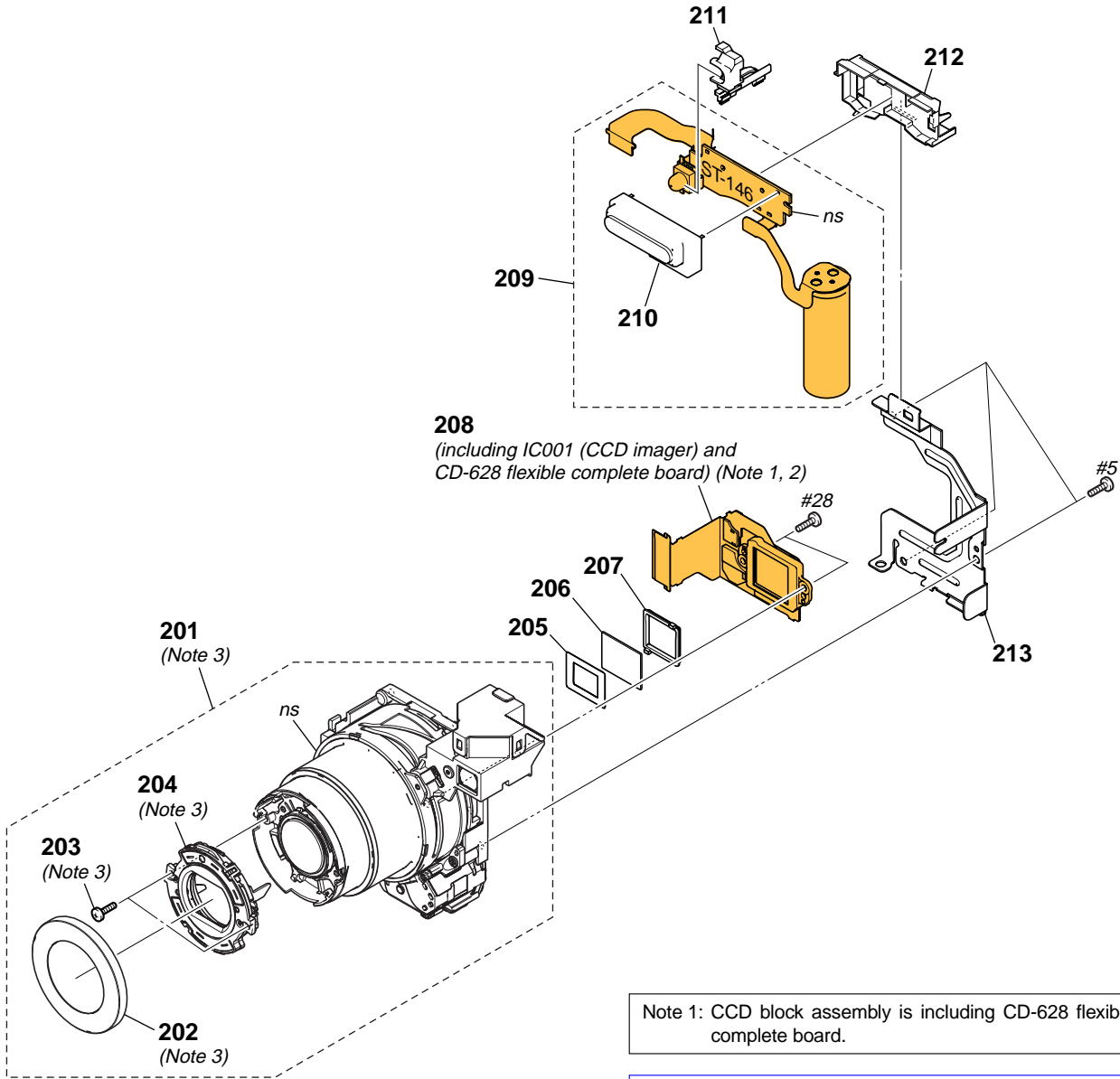
Ref. No.	Part No.	Description
* 157	2-676-272-01	SUPPORT, SW
* 158	2-676-276-01	SHEET, LCD INSULATING
* 159	2-687-368-01	LABEL, FUSE RATING
\triangle BT901	1-780-061-21	BATTERY TERMINAL BOARD
MIC901	1-542-691-11	MICROPHONE BLOCK
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#5	3-080-204-01	SCREW, TAPPING, P2 (Black)

5. REPAIR PARTS LIST

HARDWARE LIST

5-1-5. LENS BLOCK SECTION

ns: not supplied



Note 1: CCD block assembly is including CD-628 flexible complete board.

Note 2: Be sure to read "Precautions for Replacement of Imager" on page 4-3.

Note 3: Be sure to read "Exchange method of barrier assy" on page 2-6.

• Refer to page 5-1 for mark Δ .

Ref. No.	Part No.	Description
201	A-1060-696-A	LENS BLOCK ASSY 890 (J1) (Note 3)
202	3-091-427-01	RING (A), ORNAMENTAL (Note 3)
203	X-3954-476-1	BARRIER ASSY (Note 3)
204	3-086-156-31	TAPPING SCREW (P2) (Note 3)
205	2-021-317-01	MASK, LPF
206	1-788-391-11	OPTICAL FILTER BLOCK (OFB-02-27)
207	2-021-318-01	SEALGOM 890
208	A-1178-700-A	CCD BLOCK ASSY (including IC001 (CCD IMAGER) and CD-628 flexible complete board) (Note 1, 2)

Ref. No.	Part No.	Description
Δ 209	A-1178-823-A	ST-146 FLEXIBLE BOARD, COMPLETE
Δ 210	1-479-690-11	FLASH UNIT
* 211	2-676-271-01	HOLDER, AF
* 212	2-676-270-01	HOLDER, ST
* 213	X-2109-138-1	FRAME ASSY, LENS
#5	3-080-204-01	SCREW, TAPPING, P2 (Black)
#28	3-348-998-61	SCREW (M1.4X4), TAPPING, PAN (Dark Silver)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
	A-1178-700-A (Not supplied)	CCD BLOCK ASSY (Note 1) CD-628 FLEXIBLE BOARD, COMPLETE ***** (CD-628 flexible complete board and IC001 are not supplied, but they are included in CCD block assy.)
		< CAPACITOR >
C002	1-127-715-91	CERAMIC CHIP 0.22uF 10% 16V
C005	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C007	1-100-505-91	CERAMIC CHIP 0.1uF 20% 16V
C008	1-164-943-81	CERAMIC CHIP 0.01uF 10% 16V
		< IC >
IC001	(Not supplied)	ICX476CQZ-13 (Note 1)
IC002	8-753-230-85	IC CXA3691EN-T9
		< TRANSISTOR >
Q002	6-550-119-01	TRANSISTOR DTC144EMT2L
		< RESISTOR >
R004	1-218-949-11	RES-CHIP 470 5% 1/16W
R005	1-218-953-11	RES-CHIP 1K 5% 1/16W
R010	1-218-981-11	RES-CHIP 220K 5% 1/16W
△	A-1178-825-A	DC-105 FLEXIBLE BOARD, COMPLETE *****
		< BATTERY TERMINAL >
△ BT901	1-780-061-21	BATTERY TERMINAL BOARD
		< FERRITE BEAD >
FB001	1-414-228-11	INDUCTOR, FERRITE BEAD
△ FB002	1-469-324-21	FERRITE, EMI (SMD) (2012)
△ FB003	1-469-324-21	FERRITE, EMI (SMD) (2012)
		< JACK >
△ J001	1-817-331-11	DC JACK 5P (DC IN)
		< RESISTOR >
R001	1-216-821-11	METAL CHIP 1K 5% 1/10W
	A-1178-824-A	MC-162 FLEXIBLE BOARD, COMPLETE ***** (CN001 (multi connector) is not supplied, but this is included in MC-162 flexible complete board.)
		< CONNECTOR >
CN001	(Not supplied)	CONNECTOR, MULTIPLE (SOCKET)
		< DIODE >
D001	6-500-776-01	DIODE MAZW068H0LS0
D002	6-500-776-01	DIODE MAZW068H0LS0
D003	8-719-083-91	DIODE EDZ TE61 6.8B

• Refer to page 5-1 for mark △.

Ref. No.	Part No.	Description
		< LINE FILTER >
LF001	1-456-583-21	COMMON MODE CHOKE COIL
		< RESISTOR >
R004	1-500-283-11	INDUCTOR, FERRITE BEAD (Note 2)
R005	1-500-283-11	INDUCTOR, FERRITE BEAD (Note 2)
	A-1178-698-A	CABINET (T) BLOCK ASSY (S) (SILVER)
	A-1178-699-A	CABINET (T) BLOCK ASSY (B) (BLACK)
	(Not supplied)	RL-064 FLEXIBLE BOARD, COMPLETE ***** (RL-064 flexible complete board and S002 (shutter) are not supplied, but they are included in cabinet (T) block assy.)
		< SPEAKER >
SP901	1-826-403-11	LOUD SPEAKER (1.0CM)
		< BATTERY >
△ BT001	1-756-539-11	BATTERY, LITHIUM SECONDARY
		< DIODE >
D001	6-500-252-01	DIODE SML-512WWT86 (FLASH CHARGING/RECORD)
D002	6-501-030-01	DIODE SML-412MWT86 (POWER)
D003	6-501-030-01	DIODE SML-412MWT86 (AE/AF LOCK/SELF-TIMER)
		< RESISTOR >
R001	1-216-829-11	METAL CHIP 4.7K 5% 1/10W
		< SWITCH >
S001	1-786-157-31	TACTILE SWITCH (POWER)
S002	(Not supplied)	TACTILE SWITCH (SHUTTER)
S003	1-786-179-31	SWITCH, PUSH (1KEY) (T (ZOOM))
S004	1-786-157-11	SWITCH, TACTILE (▶ (PLAYBACK))
S005	1-786-180-31	SWITCH, PUSH (1KEY) (W (ZOOM)/INDEX)
△	A-1178-823-A	ST-146 FLEXIBLE BOARD, COMPLETE *****
△	1-479-690-11	FLASH UNIT
		< CAPACITOR >
C002	1-100-611-91	CERAMIC CHIP 22uF 20% 6.3V
C003	1-100-506-91	CERAMIC CHIP 1uF 20% 6.3V
C004	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
△ C005	1-100-758-11	CERAMIC CHIP 0.047uF 10% 250V

CAUTION

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

Note 1: Be sure to read "Precautions for Replacement of Imager" on page 4-3 when changing the imager.

Note 2: Ferrite beads are mounted to the location where R004 and R005 are printed.

ST-146

SW-479

Ref. No.	Part No.	Description			
C006	1-100-761-21	CERAMIC CHIP	0.01uF	10%	250V
△* C007	1-114-120-11	CAP, ELECT	145uF		330V
		< DIODE >			
△ D002	6-501-141-01	DIODE FT02P80TP			
△ D003	6-500-811-01	DIODE RR255L-400TE25			
* D004	6-501-364-01	DIODE DOR5352 (SELF-TIMER/AF ILLUMINATOR)			
		< IC >			
IC001	6-707-555-01	IC TPS65552RGTR			
		< COIL >			
* L001	1-400-820-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
△ Q001	6-550-656-01	TRANSISTOR	CY25BAJ-8F-T23		
		< RESISTOR >			
△ R001	1-216-121-11	RES-CHIP	1M	5%	1/10W
R002	1-243-975-11	METAL CHIP	4.7M	5%	1/16W
R003	1-218-935-11	RES-CHIP	33	5%	1/16W
R004	1-216-097-11	RES-CHIP	100K	5%	1/10W
		< TRANSFORMER >			
△ T002	1-443-568-21	TRANSFORMER, D.C.-D.C.CONVERTER			

A-1178-792-A SW-479 BOARD, COMPLETE

Ref. No.	Part No.	Description			
		< CAPACITOR >			
C001	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C002	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C003	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C004	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C005	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C006	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C007	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C008	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C010	1-100-743-91	CERAMIC CHIP	2.2uF	20%	16V
C011	1-137-710-11	CERAMIC CHIP	10uF	20%	6.3V
C012	1-112-021-91	CERAMIC CHIP	2.2uF	20%	16V
C020	1-164-943-81	CERAMIC CHIP	0.01uF	10%	16V
		< CONNECTOR >			
* CN001	1-817-564-51	CONNECTOR, FPC (ZIF) 33P			
CN002	1-817-544-51	CONNECTOR, FPC (ZIF) 39P			
* CN003	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P			
* CN004	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P			
		< DIODE >			
D001	8-719-069-29	DIODE RB520S-30TE61			
D002	8-719-069-29	DIODE RB520S-30TE61			
		< COIL >			
L001	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		

Ref. No.	Part No.	Description			
		< RESISTOR >			
R001	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R003	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R004	1-218-989-11	RES-CHIP	1M	5%	1/16W
R005	1-218-990-81	SHORT CHIP	0		
R006	1-218-974-11	RES-CHIP	56K	5%	1/16W
R007	1-218-990-81	SHORT CHIP	0		
R010	1-218-990-81	SHORT CHIP	0		
R011	1-218-990-81	SHORT CHIP	0		
R050	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R051	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R052	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R053	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R054	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R055	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
		< SWITCH >			
S050	1-786-157-31	TACTILE SWITCH (▼ (SELF-TIMER))			
S051	1-786-157-31	TACTILE SWITCH (SCREEN DISPLAY)			
S052	1-786-157-31	TACTILE SWITCH (► (MACRO))			
S053	1-786-157-31	TACTILE SWITCH (IMAGE SIZE/DELETE)			
S054	1-786-157-31	TACTILE SWITCH (▲ (FLASH))			
S055	1-786-157-31	TACTILE SWITCH (MENU)			
S056	1-786-157-31	TACTILE SWITCH (◀ (IMAGE BRIGHTNESS (EV)))			
S057	1-786-157-31	TACTILE SWITCH (● (SET))			

Electrical parts list of the SY-154 board is not shown.
Pages 5-9 to 5-11 are not shown.

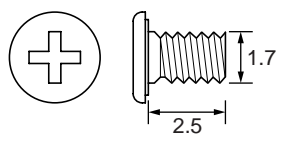
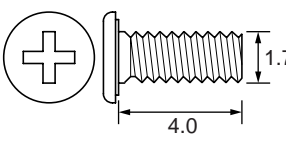
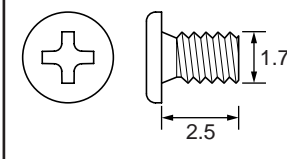
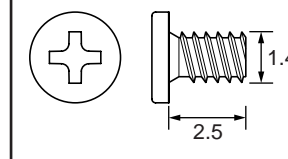
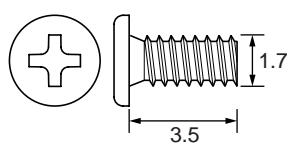
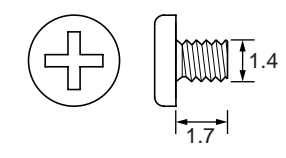
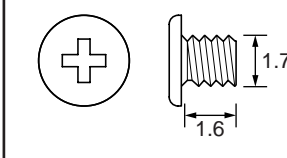
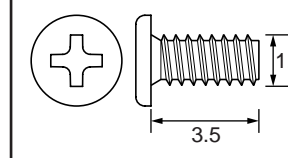
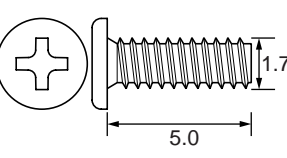
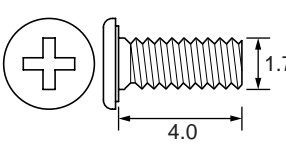
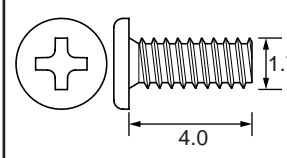
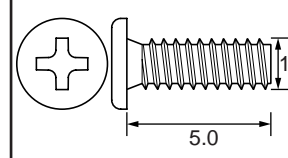
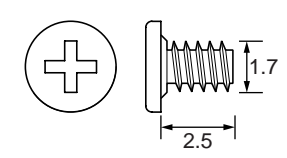
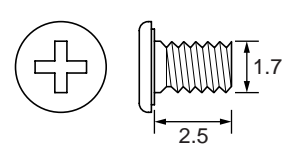
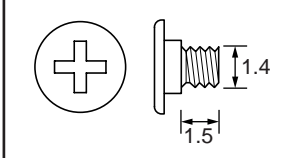
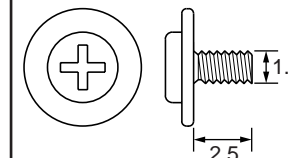
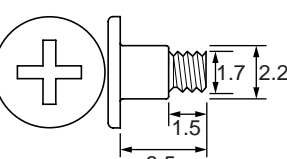
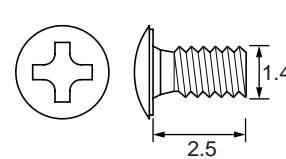
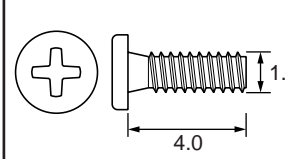
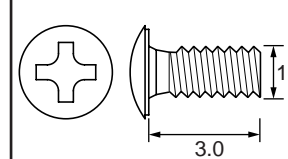
• Refer to page 5-1 for mark △.

Checking supplied accessories.

		Other accessories	
Battery Charger BC-CSG ▲ 1-479-583-21 (US, CND)	Battery Charger BC-CSG ▲ 1-479-583-31 (EXCEPT US, CND)	2-674-774-11 INSTRUCTION (READ THIS FIRST) (ENGLISH) (AEP, UK, E, HK, AUS, JE)	
		2-674-774-21 INSTRUCTION (READ THIS FIRST) (FRENCH, ITALIAN) (AEP)	
USB, A/V Cable for Multiuse Terminal 1-829-866-41	Power Cord ▲ 1-555-074-71 (AUS) ▲ 1-782-476-41 (CH) ▲ 1-783-374-22 (HK) ▲ 1-792-549-31 (JE) ▲ 1-823-947-51 (KR) ▲ 1-824-910-31 (AEP, E) ▲ 1-827-269-22 (UK)	2-674-774-31 INSTRUCTION (READ THIS FIRST) (SPANISH, PORTUGUESE) (AEP, E, JE)	
		2-674-774-41 INSTRUCTION (READ THIS FIRST) (GERMAN, DUTCH) (AEP)	
Rechargeable Battery Pack NP-BG1 (not supplied)	Battery Case (not supplied)	2-674-774-51 INSTRUCTION (READ THIS FIRST) (TRADITIONAL CHINESE, SIMPLIFIED CHINESE) (E, HK, CH, JE)	
		2-674-774-61 INSTRUCTION (READ THIS FIRST) (RUSSIAN) (AEP)	
Wrist Strap 2-050-981-01	CD-ROM (Cyber-shot Application Software) 2-666-673-01	2-674-774-71 INSTRUCTION (READ THIS FIRST) (ARABIC, PERSIAN) (E)	
		2-674-774-81 INSTRUCTION (READ THIS FIRST) (KOREAN) (KR, JE)	
Conversion (2P) Adaptor ▲ 1-569-007-12 (JE)	Conversion (2P) Adaptor ▲ 1-569-008-12 (E)	2-674-774-91 INSTRUCTION (READ THIS FIRST) (CZECH, POLISH) (AEP)	
		2-674-775-11 INSTRUCTION (READ THIS FIRST) (HUNGARIAN, SLOVAK) (AEP)	
		2-674-775-21 INSTRUCTION (READ THIS FIRST) (SWEDISH, FINNISH) (AEP)	
		2-674-775-31 INSTRUCTION (READ THIS FIRST) (NORWEGIAN, DANISH) (AEP)	
		2-674-776-11 INSTRUCTION (READ THIS FIRST) (ENGLISH) (US, CND)	
		2-674-776-21 INSTRUCTION (READ THIS FIRST) (FRENCH, ITALIAN) (CND)	
		2-674-788-11 INSTRUCTION (USER'S GUIDE) (ENGLISH) (EXCEPT KR, CH)	
		2-674-788-21 INSTRUCTION (USER'S GUIDE) (FRENCH, ITALIAN) (CND, AEP)	
		2-674-788-31 INSTRUCTION (USER'S GUIDE) (SPANISH, PORTUGUESE) (AEP, E, JE)	
		2-674-788-41 INSTRUCTION (USER'S GUIDE) (GERMAN, DUTCH) (AEP)	
		2-674-788-51 INSTRUCTION (USER'S GUIDE) (TRADITIONAL CHINESE, SIMPLIFIED CHINESE) (E, HK, CH, JE)	
		2-674-788-61 INSTRUCTION (USER'S GUIDE) (RUSSIAN) (AEP)	
		2-674-788-71 INSTRUCTION (USER'S GUIDE) (ARABIC, PERSIAN) (E)	
		2-674-788-81 INSTRUCTION (USER'S GUIDE) (KOREAN) (KR, JE)	
		2-674-788-91 INSTRUCTION (USER'S GUIDE) (CZECH, POLISH) (AEP)	
		2-674-790-11 INSTRUCTION (USER'S GUIDE) (HUNGARIAN, SLOVAK) (AEP)	
		2-674-790-21 INSTRUCTION (USER'S GUIDE) (SWEDISH, FINNISH) (AEP)	
		2-674-790-31 INSTRUCTION (USER'S GUIDE) (NORWEGIAN, DANISH) (AEP)	

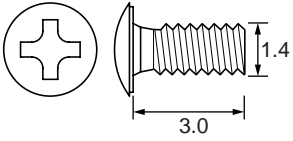
• Refer to the page 5-1 for mark ▲.

HARDWARE LIST (1/2)

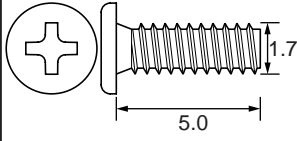
<p>#1: M1.7 X 2.5 (Black) 2-635-562-11</p> 	<p>#2: M1.7 X 4.0 (Black) 2-635-562-31</p> 	<p>#3: M1.7 X 2.5 (Red) 2-660-401-01</p> 	<p>#4: M1.4 X 2.5 (Tapping) (Dark Silver) 3-348-998-81</p> 
<p>#5: M1.7 X 3.5 (Tapping) (Black) 3-080-204-01</p> 	<p>#6: M1.4 X 1.7 (Silver) 2-598-474-01</p> 	<p>#7: M1.7 X 1.6 (Black) 7-627-552-18</p> 	<p>#8: M1.7 X 3.5 (Tapping) (Silver) 3-078-890-01</p> 
<p>#9: M1.7 X 5.0 (Tapping) (Silver) 3-078-890-21</p> 	<p>#10: M1.7 X 4.0 (Silver) 2-599-475-31</p> 	<p>#11: M1.7 X 4.0 (Tapping) (Silver) 3-078-890-11</p> 	<p>#12: M1.7 X 5.0 (Tapping) (Black) 3-080-204-21</p> 
<p>#13: M1.7 X 2.5 (Tapping) (Silver) 3-085-397-01</p> 	<p>#14: M1.7 X 2.5 (Silver) 2-599-475-11</p> 	<p>#15: M1.4 X 1.5 (Silver) 3-062-214-01</p> 	<p>#16: M1.4 X 2.5 (Silver) 2-586-337-01</p> 
<p>#17: M1.7 X 1.5 (Silver) 2-586-389-01</p> 	<p>#18: M1.4 X 2.5 (Silver) 2-635-591-21</p> 	<p>#19: M1.2 X 4.0 (Tapping) (Red) 3-086-156-21</p> 	<p>#20: M1.4 X 3.0 (Silver) 2-635-591-31</p> 

HARDWARE LIST (2/2)

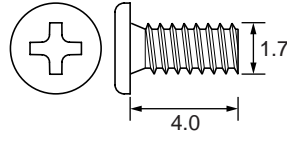
#21: M1.4 X 3.0
(Black)
2-662-396-21



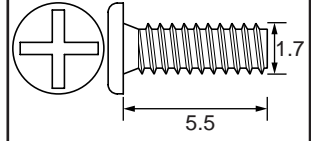
#22: M1.7 X 5.0 (Tapping)
(Silver)
3-083-261-01



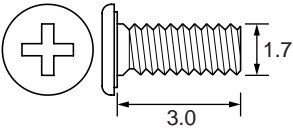
#23: M1.7 X 4.0 (Tapping)
(Black)
3-080-204-11



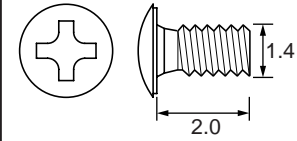
#24: B1.7 X 5.5 (Tapping)
(Black)
4-679-805-11



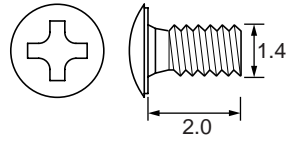
#25: M1.7 X 3.0
(Black)
2-635-562-21



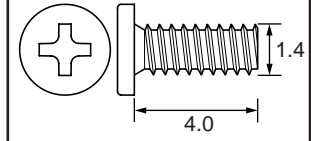
#26: M1.4 X 2.0
(Silver)
2-635-591-11



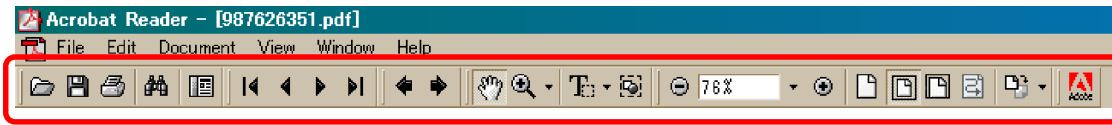
#27: M1.4 X 2.0
(Black)
2-662-396-11



#28: M1.4 X 4.0 (Tapping)
(Dark Silver)
3-348-998-61




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




Toolbar



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:

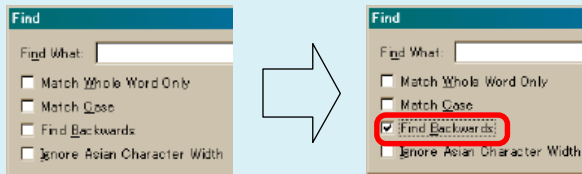
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

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.

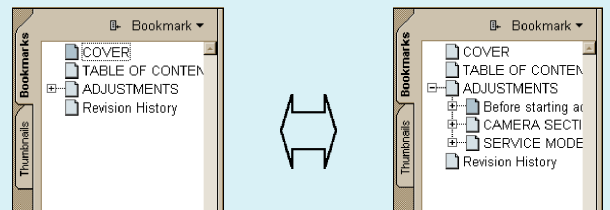
Moving with link

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.

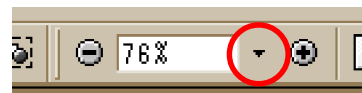
(To go back to original state, click )




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 .

DSC-W100

SONY®

LEVEL 2

SERVICE MANUAL

Ver 1.1 2006.07

*US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Brazilian Model
Tourist Model*

SUPPLEMENT-1

File this supplement with the service manual.
(DI06-024)

- Addition of LCD Type (TYPE SA)
- Addition and Change of Repair Parts

Link

SERVICE NOTE	SCHEMATIC DIAGRAMS	REPAIR PARTS LIST
BLOCK DIAGRAMS		

- Along with TYPE SH, TYPE SA is added at type of LCD.
- For ADJUSTMENTS of LCD, refer to the SERVICE MANUAL, ADJ SUPPLEMENT-1 (9-876-941-82).
- [When the machine needs to be repaired, make sure to follow the item of "LCD TYPE CHECK"](#).
- A combination of LCD (LCD901) and SW-479 board varies depending on the type of LCD panel (see the following table).
Normal display will not be attained unless correct LCD (LCD901), SW-479 board, and adjustment data are combined respectively.
Readjustment is required if LCD (LCD901) or SW-479 board is changed.

Combination table

LCD TYPE	LCD (LCD901)	SW-479 board
TYPE SA	A-1185-813-A	A-1178-826-A
TYPE SH	A-1185-814-A	A-1178-792-A

1. SERVICE NOTE

1-5. LCD TYPE CHECK

• Discrimination method by SEUS

Preparations:

- 1) Connect the equipment for adjustments according to Fig. 1.
- 2) Start up the application for adjustment (SEUS).

Checking method:

- 1) Select page:80, and address:7E.
- 2) By checking the data value of display data, the type of LCD can be discriminated.

Data	LCD type
01	TYPE SH
14	TYPE SA

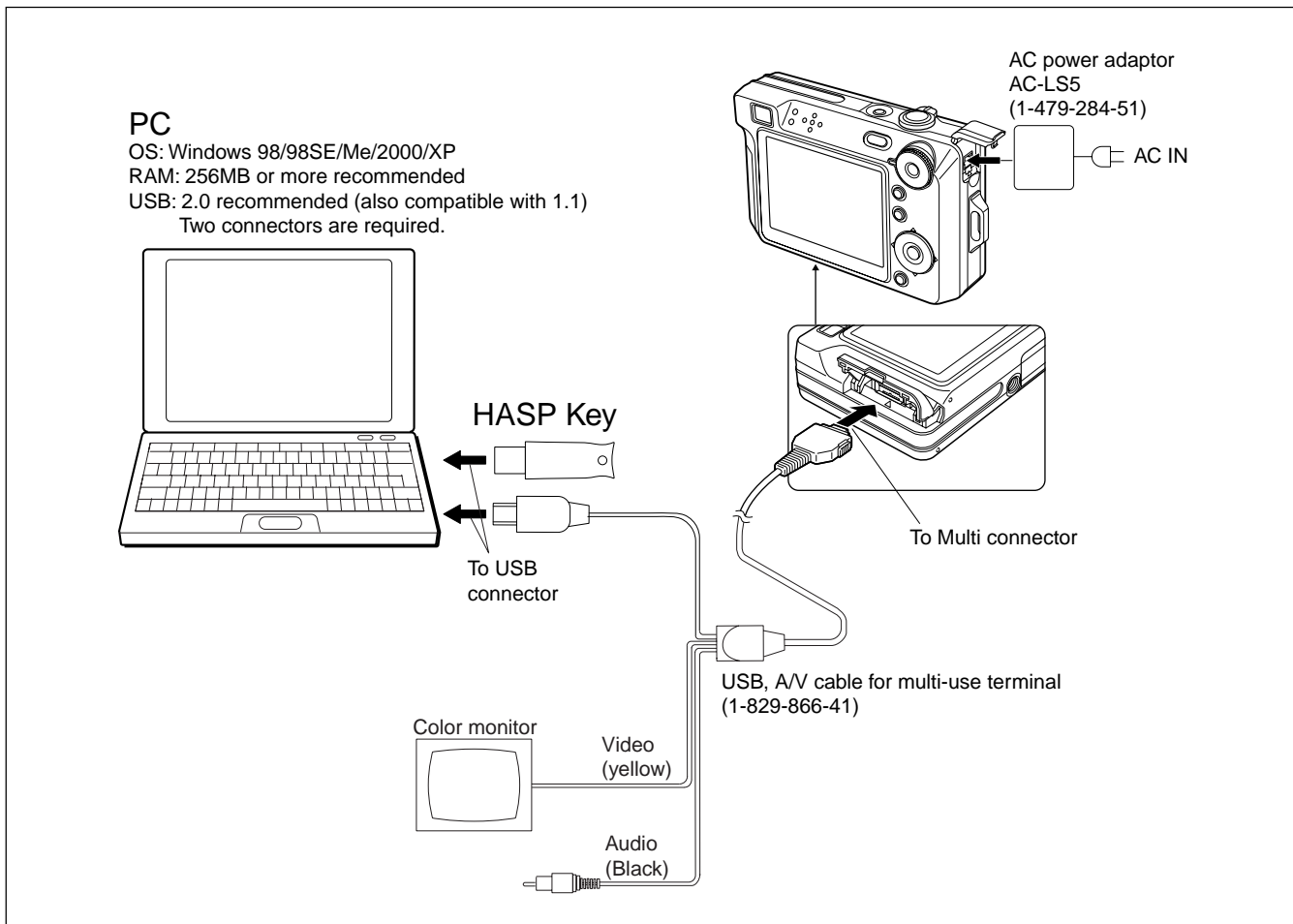
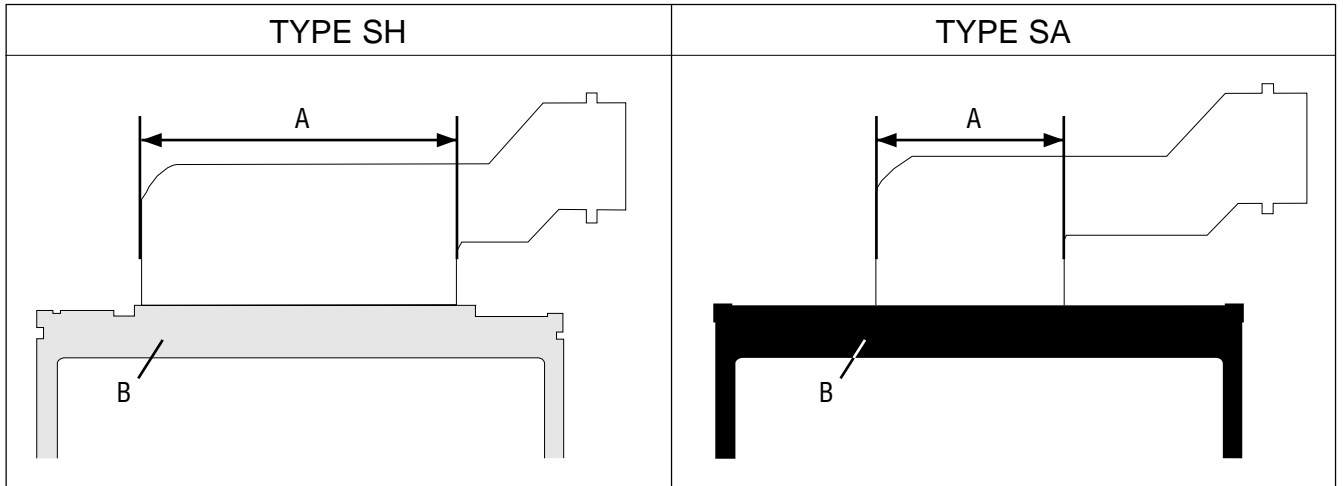


Fig.1

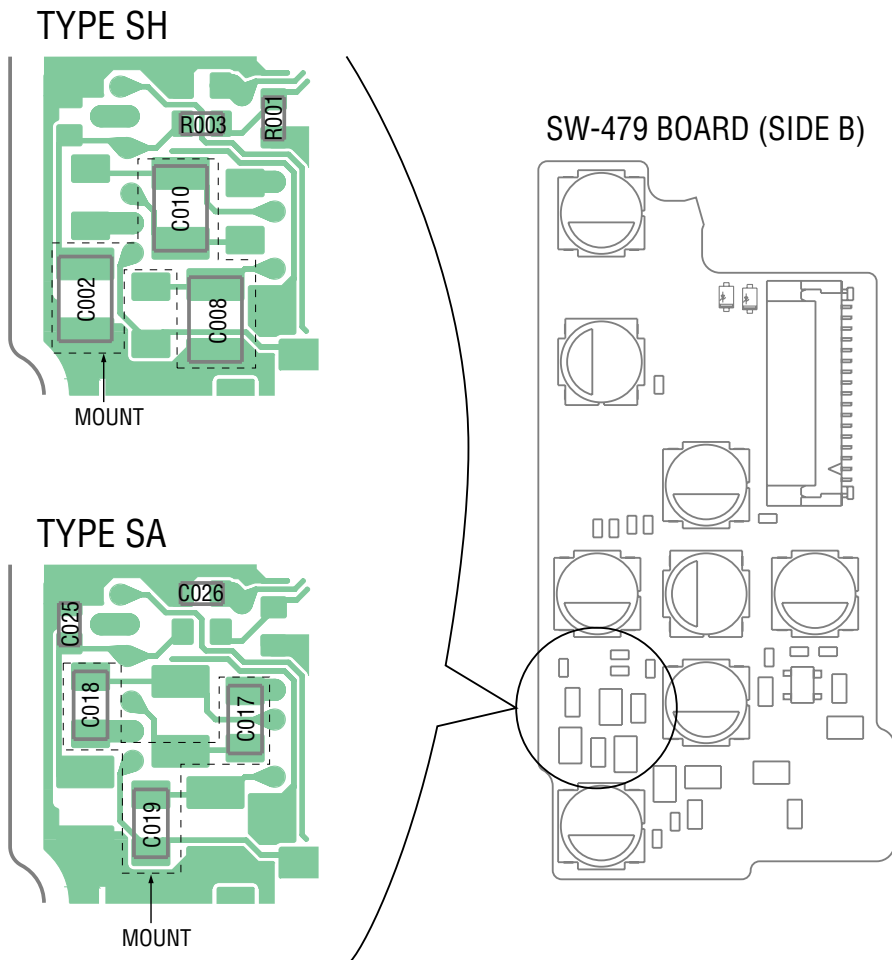
• Discrimination method by LCD panel



A:
 TYPE SH The width of flexible PWB near LCD is wide.
 TYPE SA The width of flexible PWB near LCD is narrow.

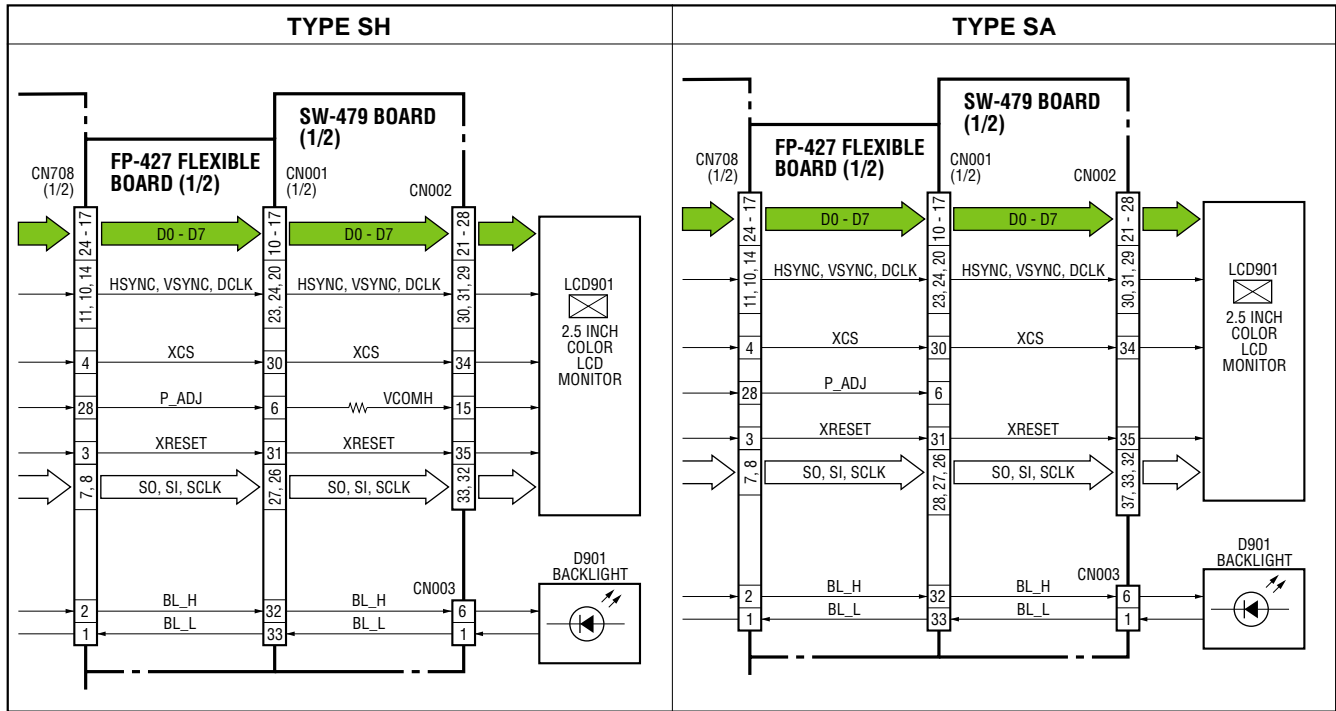
B:
 TYPE SH Exterior on the back side of LCD is made of metal. (Silver)
 TYPE SA Exterior on the back side of LCD is made of mold. (Black)

• Discrimination method by SW-479 board

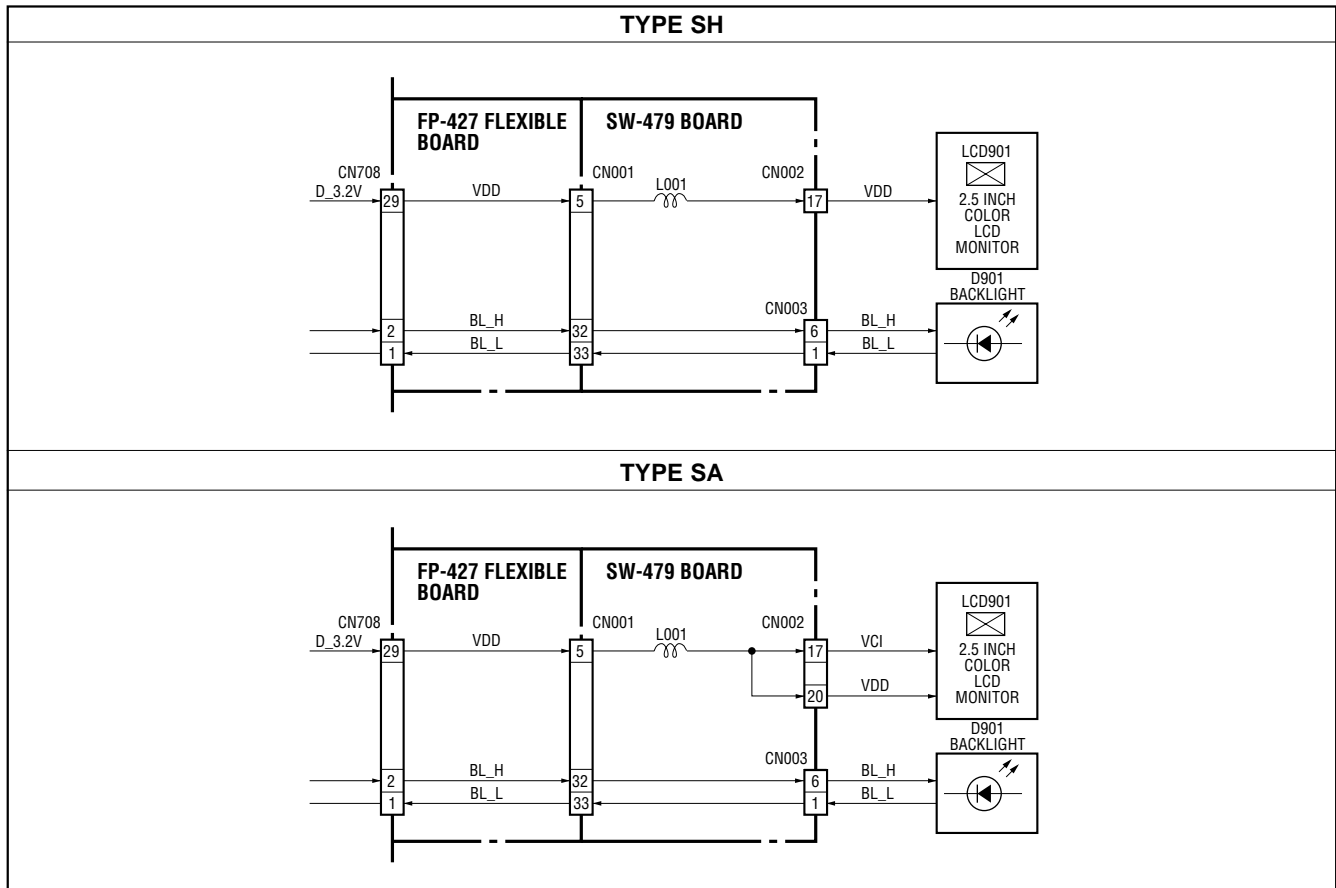


3. BLOCK DIAGRAMS

3-1. OVERALL BLOCK DIAGRAM (1/2) (Service manual page 3-1)



3-3. POWER BLOCK DIAGRAM (Service manual page 3-3)

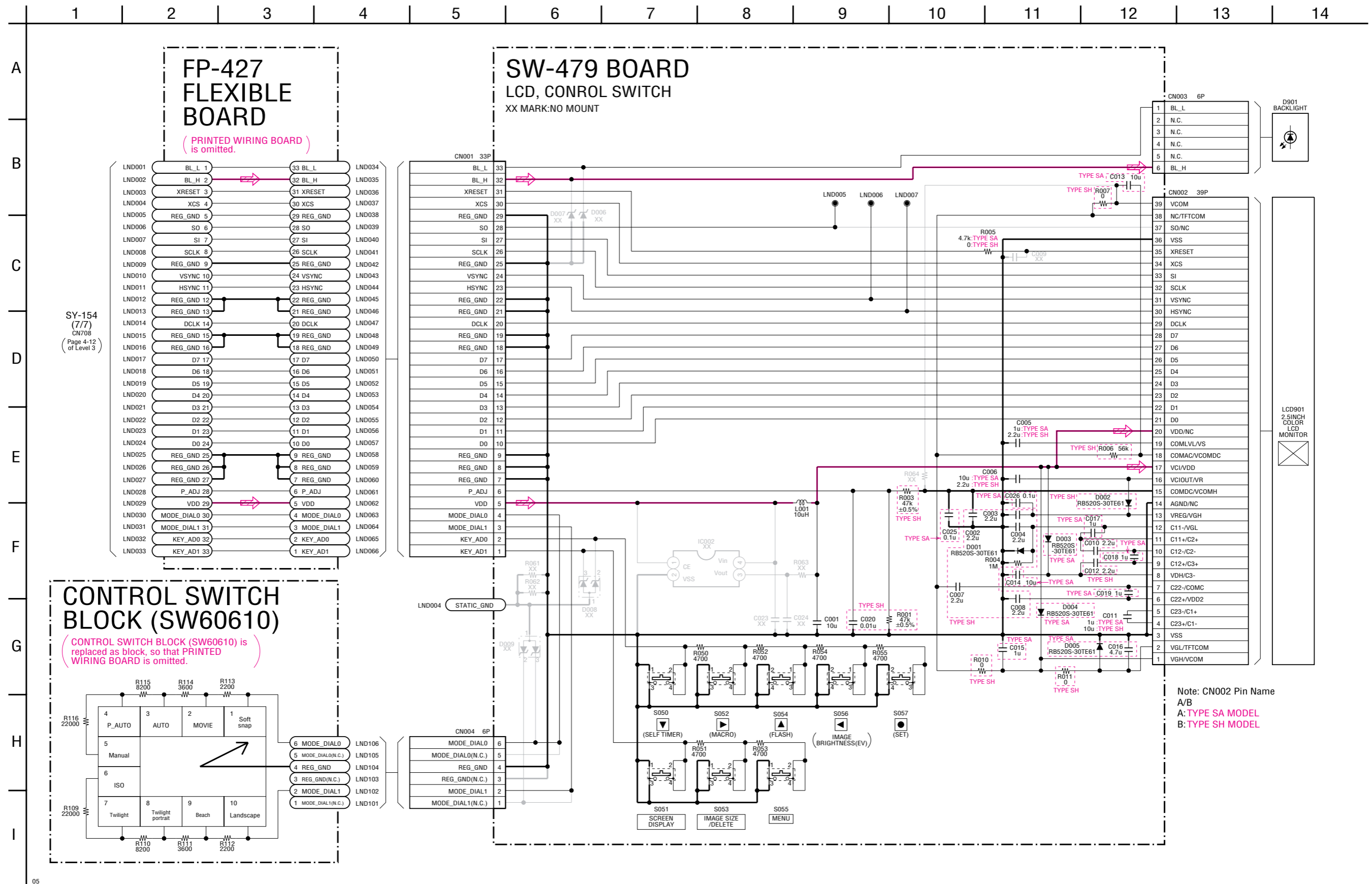


4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAM

For Schematic Diagram

- Refer to original service manual page 4-21 for printed wiring board.



4-4. MOUNTED PARTS LOCATION

no mark : side A

* mark : side B

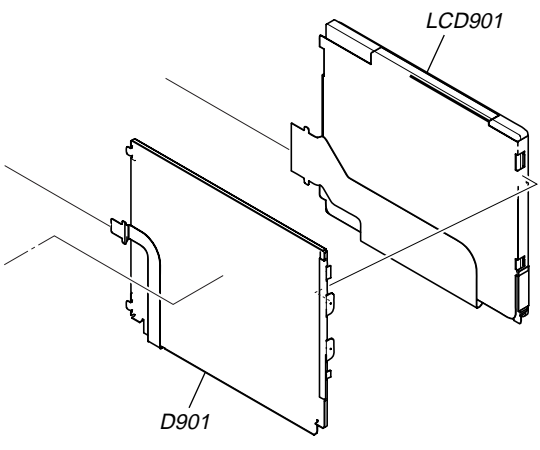
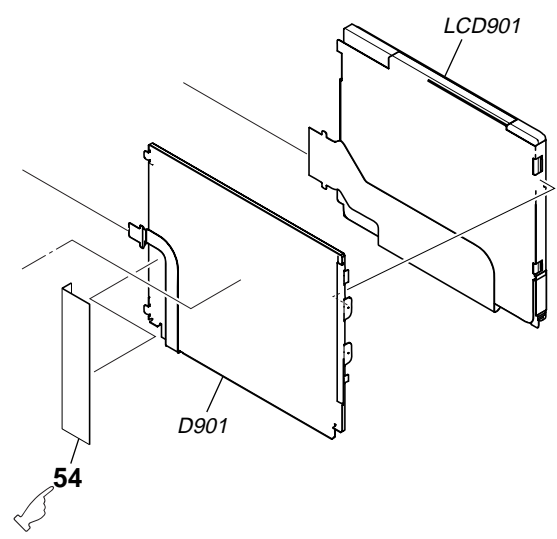
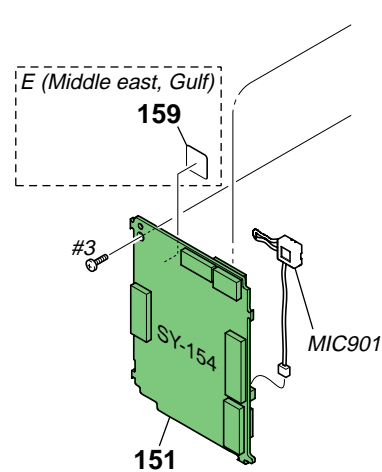
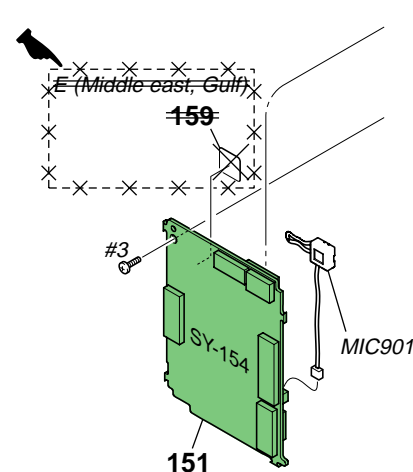
SW-479 BOARD

* C001	C-1
* C002	C-2 (TYPE SH)
C003	C-1 (TYPE SH)
C004	C-1 (TYPE SH)
* C005	C-1
C006	C-1
* C007	C-2 (TYPE SH)
* C008	C-2 (TYPE SH)
* C010	C-2 (TYPE SH)
C011	C-1
C012	C-2 (TYPE SH)
C013	B-2 (TYPE SA)
C014	C-1 (TYPE SA)
* C015	C-1 (TYPE SA)
C016	C-1 (TYPE SA)
* C017	C-2 (TYPE SA)
* C018	C-2 (TYPE SA)
* C019	C-2 (TYPE SA)
* C020	B-1 (TYPE SH)
* C025	C-2 (TYPE SA)
* C026	C-2 (TYPE SA)
* CN001	B-1
CN002	C-2
CN003	B-2
CN004	A-1
D001	C-1 (TYPE SH)
D002	C-1 (TYPE SH)
D003	C-1 (TYPE SA)
D004	C-1 (TYPE SA)
D005	C-1 (TYPE SA)
* L001	C-1
* R001	C-2 (TYPE SH)
* R003	C-2 (TYPE SH)
R004	C-1 (TYPE SH)
* R005	B-2
R006	B-1 (TYPE SH)
R007	B-2 (TYPE SH)
* R010	C-1 (TYPE SH)
R011	C-1 (TYPE SH)
* R050	C-1
* R051	C-2
* R052	C-1
* R053	B-2
* R054	B-2
* R055	B-2
* S050	C-1
* S051	A-2
* S052	B-1
* S053	C-2
* S054	B-1
* S055	A-2
* S056	B-2
* S057	B-1

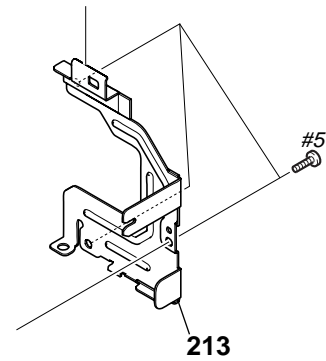
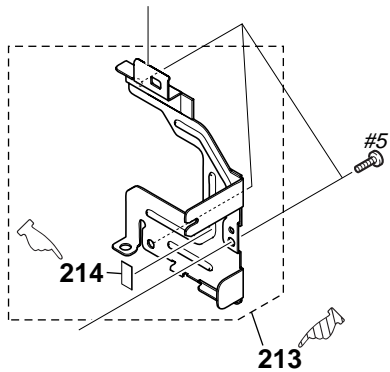
5. REPAIR PARTS LIST

 : Points added portion.
 : Points deleted portion.

5-1. EXPLODED VIEWS

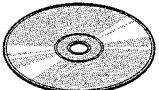
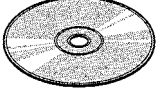
Page	Former	New																																				
5-3	 <p style="text-align: center;">LCD901</p> <p style="text-align: center;">D901</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <thead> <tr> <th style="text-align: left;">Ref. No.</th> <th style="text-align: left;">Part No.</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>53</td> <td>A-1178-792-A</td> <td>SW-479 BOARD, COMPLETE</td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> </tr> <tr> <td>LCD901</td> <td>A-1185-814-A</td> <td>LCD SUB BLOCK ASSY</td> </tr> <tr> <td>—</td> <td>—</td> <td>—</td> </tr> </tbody> </table>	Ref. No.	Part No.	Description	53	A-1178-792-A	SW-479 BOARD, COMPLETE	—	—	—	—	—	—	LCD901	A-1185-814-A	LCD SUB BLOCK ASSY	—	—	—	 <p style="text-align: center;">LCD901</p> <p style="text-align: center;">D901</p> <p style="text-align: center;">54</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <thead> <tr> <th style="text-align: left;">Ref. No.</th> <th style="text-align: left;">Part No.</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>53</td> <td>A-1178-792-A</td> <td>SW-479 BOARD, COMPLETE (TYPE SH)</td> </tr> <tr> <td>53</td> <td>A-1178-826-A</td> <td>SW-479 BOARD, COMPLETE (TYPE SA)</td> </tr> <tr> <td>* 54</td> <td>2-887-640-01</td> <td>SHEET (BL), PROTECTION</td> </tr> <tr> <td>LCD901</td> <td>A-1185-814-A</td> <td>LCD SUB BLOCK ASSY (TYPE SH)</td> </tr> <tr> <td>LCD901</td> <td>A-1185-813-A</td> <td>LCD SUB BLOCK ASSY (TYPE SA)</td> </tr> </tbody> </table>	Ref. No.	Part No.	Description	53	A-1178-792-A	SW-479 BOARD, COMPLETE (TYPE SH)	53	A-1178-826-A	SW-479 BOARD, COMPLETE (TYPE SA)	* 54	2-887-640-01	SHEET (BL), PROTECTION	LCD901	A-1185-814-A	LCD SUB BLOCK ASSY (TYPE SH)	LCD901	A-1185-813-A	LCD SUB BLOCK ASSY (TYPE SA)
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—	—	—																																				
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LCD901	A-1185-813-A	LCD SUB BLOCK ASSY (TYPE SA)																																				
5-5	 <p style="text-align: center;">E (Middle east, Gulf)</p> <p style="text-align: center;">159</p> <p style="text-align: center;">#3</p> <p style="text-align: center;">SY-154</p> <p style="text-align: center;">MIC901</p> <p style="text-align: center;">151</p> <p style="margin-top: 20px;">* 159 2-687-368-01 LABEL, FUSE RATING</p>	 <p style="text-align: center;">E (Middle east, Gulf)</p> <p style="text-align: center;">159</p> <p style="text-align: center;">#3</p> <p style="text-align: center;">SY-154</p> <p style="text-align: center;">MIC901</p> <p style="text-align: center;">151</p>																																				

 : Points added portion.
 : Points changed portion.

Page	Former	New
5-6	 <p>Ref. No. Part No. Description</p> <hr/>	 <p>Ref. No. Part No. Description</p> <p>* 214 2-696-160-01 LF, SHEET</p>

 : Points added portion.

Checking supplied accessories.

Page	Former	New
5-12	 <p>CD-ROM (Cyber-shot Application Software) 2-666-673-01</p>	 <p>CD-ROM (Cyber-shot Application Software) 2-666-673-01 (EXCEPT US) <u>2-699-461-01 (US)</u></p>

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	A-1178-792-A	SW-479 BOARD, COMPLETE (TYPE SH)	D003	8-719-069-29	DIODE RB520S-30TE61 (TYPE SA)
	A-1178-826-A	SW-479 BOARD, COMPLETE (TYPE SA)	D004	8-719-069-29	DIODE RB520S-30TE61 (TYPE SA)
		*****	D005	8-719-069-29	DIODE RB520S-30TE61 (TYPE SA)
		< CAPACITOR >			< COIL >
C001	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V	L001	1-400-588-11	INDUCTOR 10uH
C002	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)			< RESISTOR >
C003	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R001	1-208-927-11	METAL CHIP 47K 0.5% 1/16W (TYPE SH)
C004	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R003	1-208-927-11	METAL CHIP 47K 0.5% 1/16W (TYPE SH)
C005	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R004	1-218-989-11	RES-CHIP 1M 5% 1/16W (TYPE SH)
C005	1-109-982-11	CERAMIC CHIP 1uF 10% 10V (TYPE SA)	R005	1-218-961-11	RES-CHIP 4.7K 5% 1/16W (TYPE SA)
C006	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R005	1-218-990-81	SHORT CHIP 0 (TYPE SH)
C006	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V (TYPE SA)	R006	1-218-974-11	RES-CHIP 56K 5% 1/16W (TYPE SH)
C007	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R007	1-218-990-81	SHORT CHIP 0 (TYPE SH)
C008	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R010	1-218-990-81	SHORT CHIP 0 (TYPE SH)
			R011	1-218-990-81	SHORT CHIP 0 (TYPE SH)
C010	1-100-743-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R050	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
C011	1-127-573-11	CERAMIC CHIP 1uF 10% 16V (TYPE SA)	R051	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
C011	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V (TYPE SH)	R052	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
C012	1-112-021-91	CERAMIC CHIP 2.2uF 20% 16V (TYPE SH)	R053	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
C013	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V (TYPE SA)	R054	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
C014	1-137-710-11	CERAMIC CHIP 10uF 20% 6.3V (TYPE SA)	R055	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
* C015	1-112-298-91	CERAMIC CHIP 1uF 10% 16V (TYPE SA)			< SWITCH >
C016	1-100-670-11	CERAMIC CHIP 4.7uF 20% 16V (TYPE SA)	S050	1-786-157-31	TACTILE SWITCH (▼ (SELF-TIMER))
C017	1-165-908-11	CERAMIC CHIP 1uF 10% 10V (TYPE SA)	S051	1-786-157-31	TACTILE SWITCH (SCREEN DISPLAY)
C018	1-165-908-11	CERAMIC CHIP 1uF 10% 10V (TYPE SA)	S052	1-786-157-31	TACTILE SWITCH (► (MACRO))
C019	1-165-908-11	CERAMIC CHIP 1uF 10% 10V (TYPE SA)	S053	1-786-157-31	TACTILE SWITCH (IMAGE SIZE/DELETE)
C020	1-164-943-81	CERAMIC CHIP 0.01uF 10% 16V (TYPE SH)	S054	1-786-157-31	TACTILE SWITCH (▲ (FLASH))
C025	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V (TYPE SA)	S055	1-786-157-31	TACTILE SWITCH (MENU)
C026	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V (TYPE SA)	S056	1-786-157-31	TACTILE SWITCH (◀ (IMAGE BRIGHTNESS (EV)))
		< CONNECTOR >	S057	1-786-157-31	TACTILE SWITCH (● (SET))
* CN001	1-817-564-51	CONNECTOR, FPC (ZIF) 33P			
CN002	1-817-544-51	CONNECTOR, FPC (ZIF) 39P			
* CN003	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P			
* CN004	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P			
		< DIODE >			
D001	8-719-069-29	DIODE RB520S-30TE61 (TYPE SH)			
D002	8-719-069-29	DIODE RB520S-30TE61 (TYPE SH)			

