

DSC-S600

SERVICE MANUAL

LEVEL 2

Ver 1.0 2005.12

Revision History

How to use
Acrobat Reader

Internal memory
ON BOARD



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

Link

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

- [Precaution on Replacing the SY-145 board](#)

Note :

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

Note :

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®

These specifications are extracted from instruction manual of DSC-S600 (2-658-425-11).



SPECIFICATIONS

Camera

[System]

Image device	7.18 mm (1/2.5 type) color CCD, Primary color filter
Total pixel number of camera	Approx. 6 183 000 pixels
Effective pixel number of camera	Approx. 6 003 000 pixels
Lens	Carl Zeiss Vario-Tessar 3 zoom lens f = 5.1 – 15.3 mm (31 – 93 mm when converted to a 35 mm still camera) F2.8 – 5.1 Automatic ND filter switching
Exposure control	Automatic exposure, Scene Selection (7 modes)
White balance	Automatic, Daylight, Cloudy, Fluorescent, Incandescent
File format (DCF compliant)	Still images: Exif Ver. 2.21 JPEG compliant, DPOF compatible Movies: MPEG1 compliant (Monaural)
Recording media	Internal Memory (32 MB) "Memory Stick Duo"
Flash	Recommended distance (ISO set to Auto): approx. 0.2 m to 7.0 m (7 7/8 inches to 275 5/8 inches) (W)/approx. 0.5 m to 3.8 m (19 3/4 inches to 149 5/8 inches) (T)

[Input and Output connectors]

USB jack	mini-B
USB communication	Hi-Speed USB (USB 2.0 compliant)

[LCD screen]

LCD panel	5.1 cm (2.0 type) TFT drive
Total number of dots	84 960 (354×240) dots

[Power, general]

Power	R6 (size AA) Alkaline batteries (2), 3 V HR 15/51:HR6 (size AA) Nickel-Metal Hydride batteries (2, not supplied), 2.4 V ZR6 (size AA) Oxy Nickel Primary Battery (2, not supplied), 3 V AC-LS5K AC Adaptor (not supplied), 4.2 V
Power consumption (during shooting with the LCD screen on)	1.0 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	99.952. 0×36.8 mm (4×2 1/8×1 1/2 inches) (W/H/D, excluding protrusions)
Mass	Approx. 181 g (6.4 oz) (including two batteries and wrist strap, etc.)
Microphone	Electret condenser microphone
Speaker	Dynamic speaker
Exif Print	Compatible
PRINT Image Matching III	Compatible
PictBridge	Compatible

Design and specifications are subject to change without notice.

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.

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.

CAUTION :

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

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.

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.

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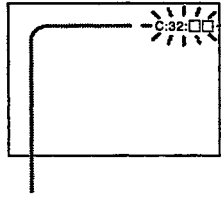
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1. SERVICE NOTE

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 Duo" or internal memory.	"Memory Stick Duo" or internal memory is unformatted.	FORMAT ERROR
	Insert a new "Memory Stick Duo".	"Memory Stick Duo" 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.	Abnormality when flash is being charged.	
E:92:□□	Insert batteries correctly.	Batteries are not inserted correctly.	

1-2. 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.)

Note1: When replacing the SY-145 board, erase the data in internal memory of the board before replacement.

Note2: When replacing the SY-145 board or the IC203 on the SY-145 board, execute formatting and initialize the internal memory after replacement.

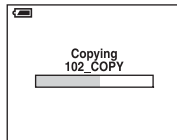
Method for Copying the Data in Internal Memory

Copy

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


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

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




Use batteries with enough capacity or the AC Adaptor (not supplied). If you attempt to copy image files using batteries with little remaining capacity, 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 Duo" after copying, then execute the [Format] command in  (Internal Memory Tool) (page 46).

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.

	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.

1-3. PRECAUTION ON REPLACING THE SY-145 BOARD

- The Repair Board has already been adjusted. Re-initialization or EVR data copy from the set before repair is not required.
- Perform “Initial Language Data Check” mentioned below, and also the adjustment items necessary after SY Board replacement.

1-4. INITIAL LANGUAGE DATA CHECK

If the SY-145 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	8C	00	English	●	●	●
		04	Spanish		●	●
		06	Portugal			●
		08	Simplified Chinese			●
		0B	Russian		●	
		0D	Korean			●

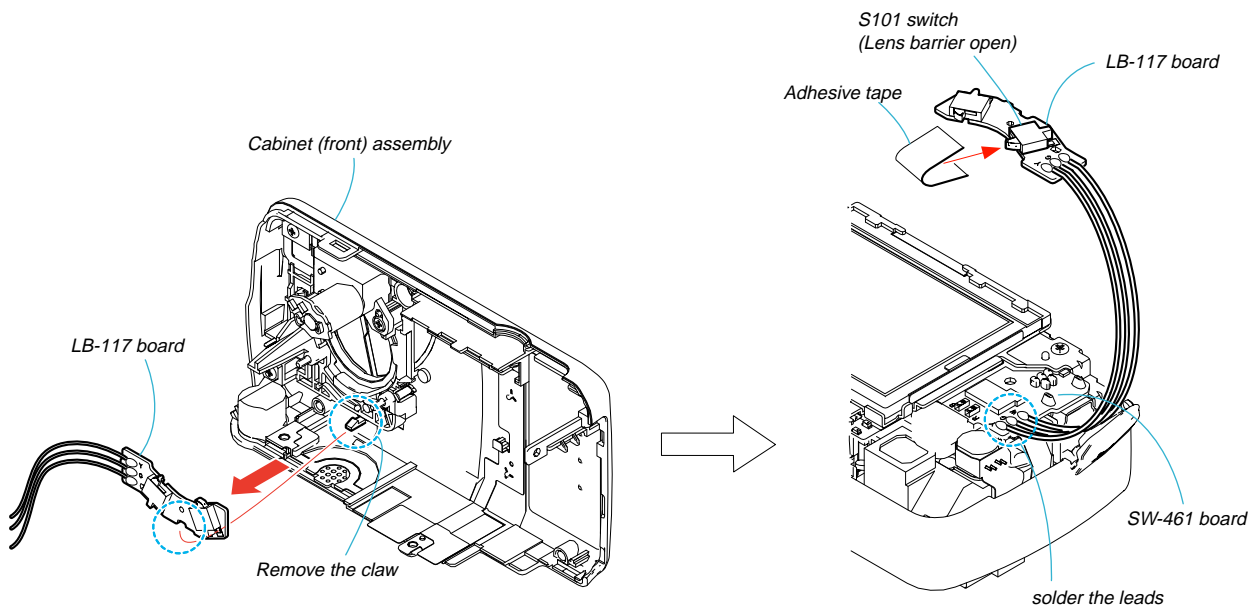
Note: GP2 is fixed to English.
GP3 is either English, Spanish, or Russian.
GP4 is either English, Spanish, Portugal, Simplified Chinese, or Korean.

Writing Method:

- 1) Select page: 00, address: 01 and set data: 01.
- 2) Select page: 4F, address: 8C, and set the Initial Language Data.
- 3) Select page: 40, address: 38, and set data: 00.
- 4) Click **Save** on the SEUS screen.
- 5) Select page: 80, address: 34, and check that the data is “00”.
- 6) Select page: 80, address: 30, and check that the data is “00”.
- 7) Select page: 00, address: 01, and set data: 00.
- 8) Turn off the camera.
- 9) Turn on the camera. Execute “Initialize” of Setup screen.
- 10) Check the language displayed when the camera starts.

1-5. HOW TO OPERATE THE CAMERA WITHOUT THE FRONT CABINET

Remove the LB-117 board from the cabinet (front) assembly, solder the leads to the SW-461 board, and fix the S101 switch (Lens barrier open) to the ON position with an adhesive tape.



2. DISASSEMBLY

Link

- [DISASSEMBLY](#)

- [HELP](#)

- [COMMON NOTE FOR DISASSEMBLY](#)

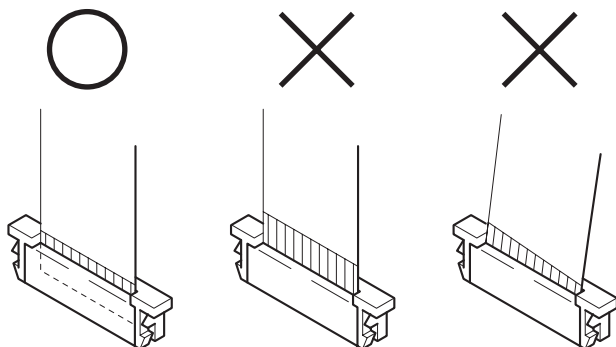
2. DISASSEMBLY

2. DISASSEMBLY

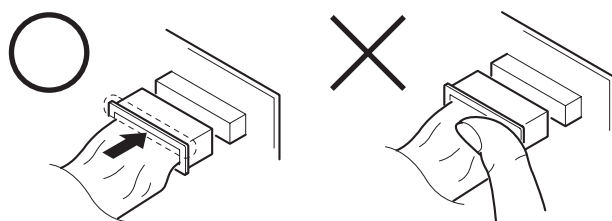
NOTE FOR REPAIR

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.

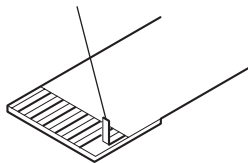
When remove a connector, don't pull at wire of connector. Be in danger of the snapping of a wire.



When installing a connector, don't press down at wire of connector. Be in danger of the snapping of a wire.



Cut and remove the part of gilt which comes off at the point.
(Take care that there are some pieces of gilt left inside)



DISCHARGING OF THE FLASHLIGHT POWER SUPPLY CAPACITOR

The charging elect capacitor 180uF (330V) 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 DSC-S600 is simply turned off. Therefore, the remaining voltage must be discharged as described below.

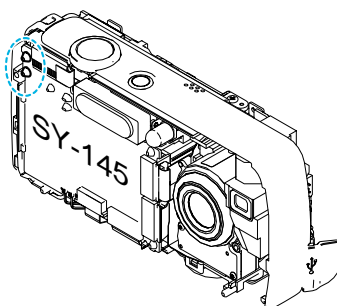
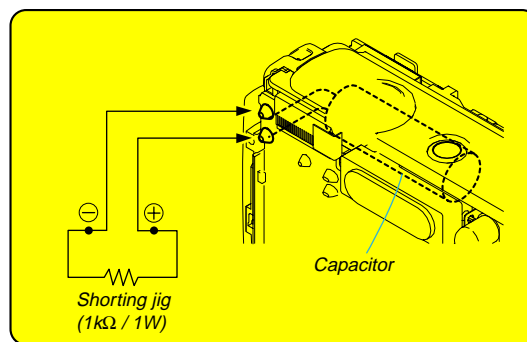
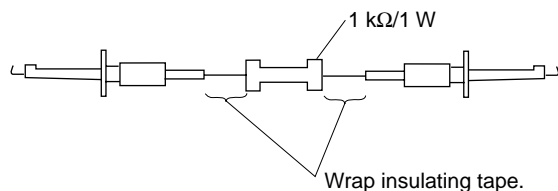
Discharging the Capacitor

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

Preparing the Short Jig

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

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

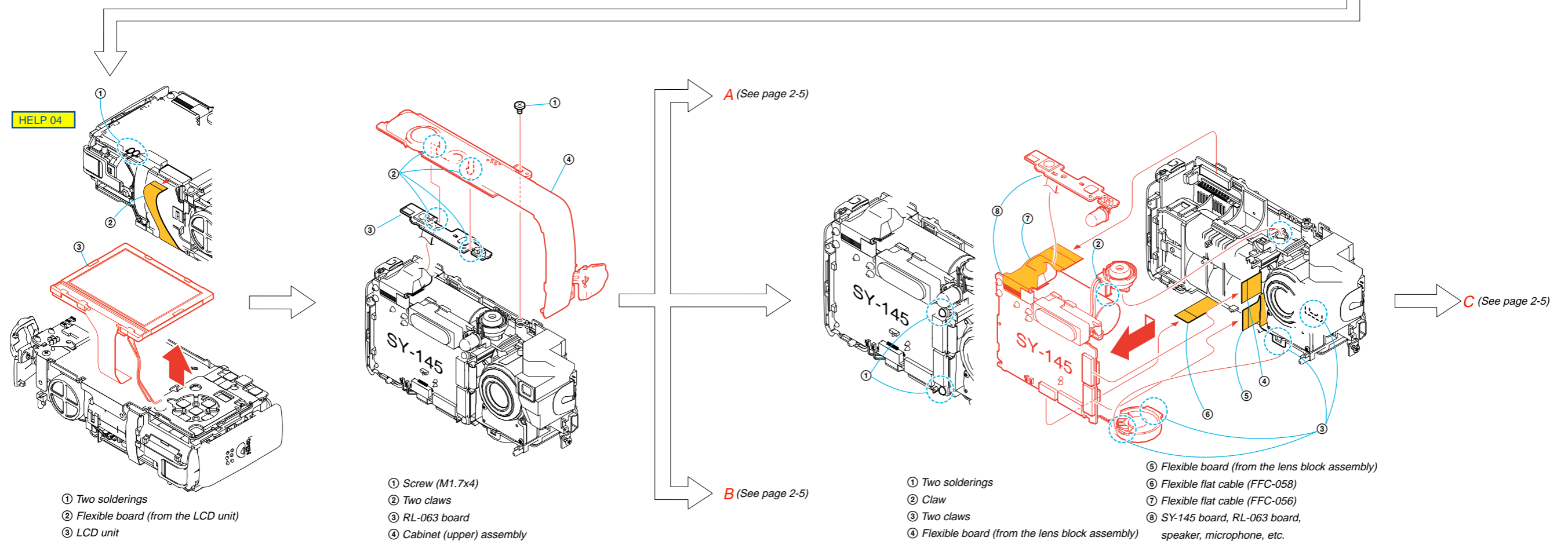
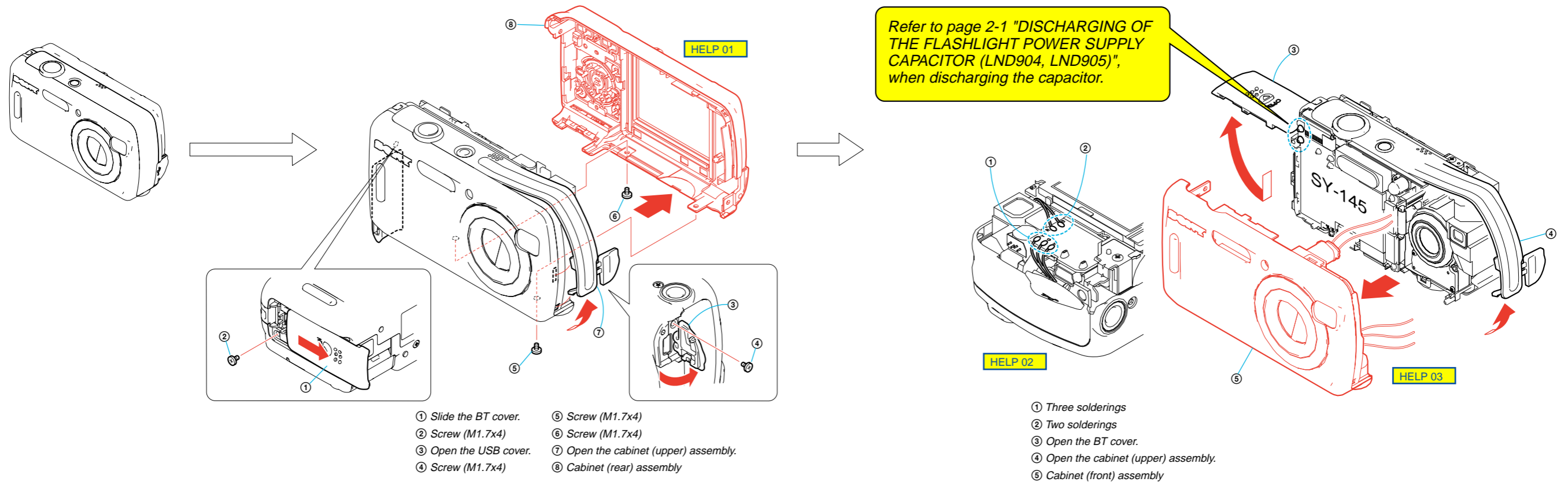


2. DISASSEMBLY

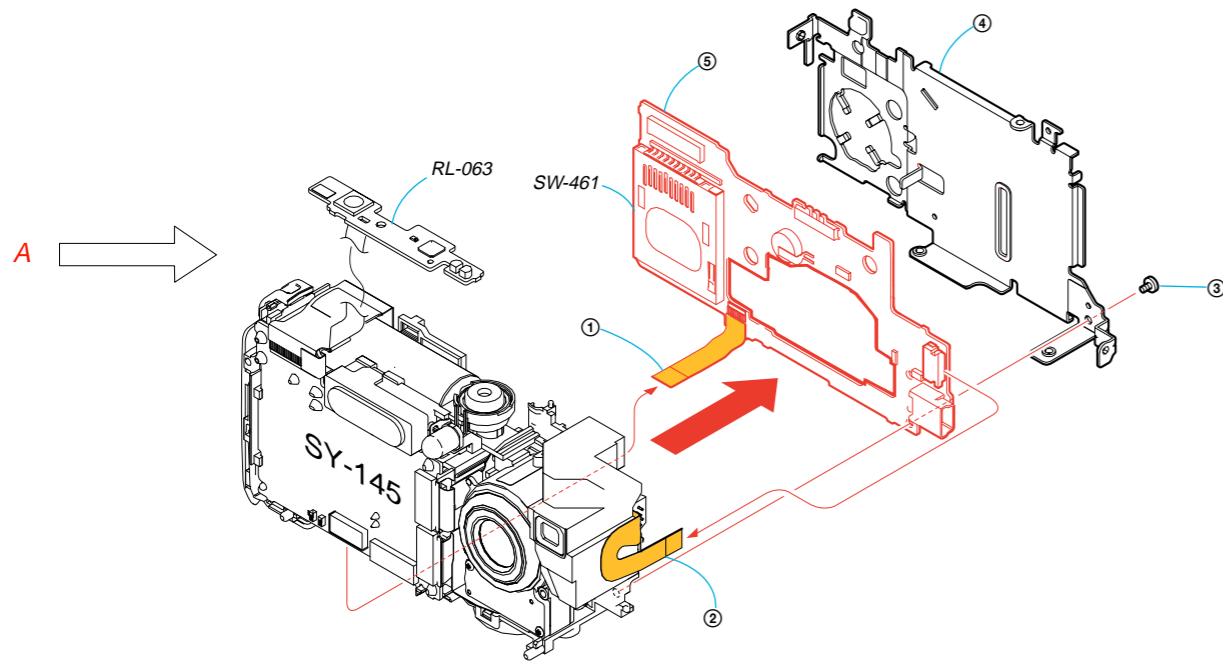
The following flow chart shows the disassembly procedure.

2-1. DISASSEMBLY

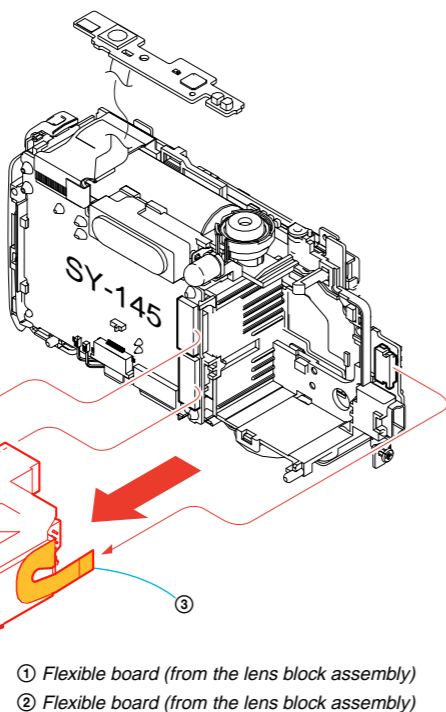
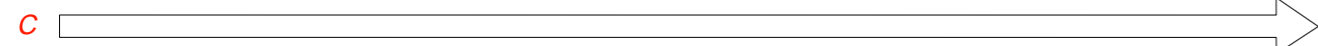
2. DISASSEMBLY



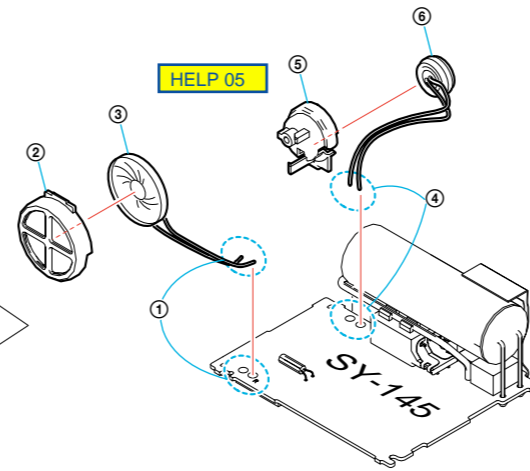
2. DISASSEMBLY



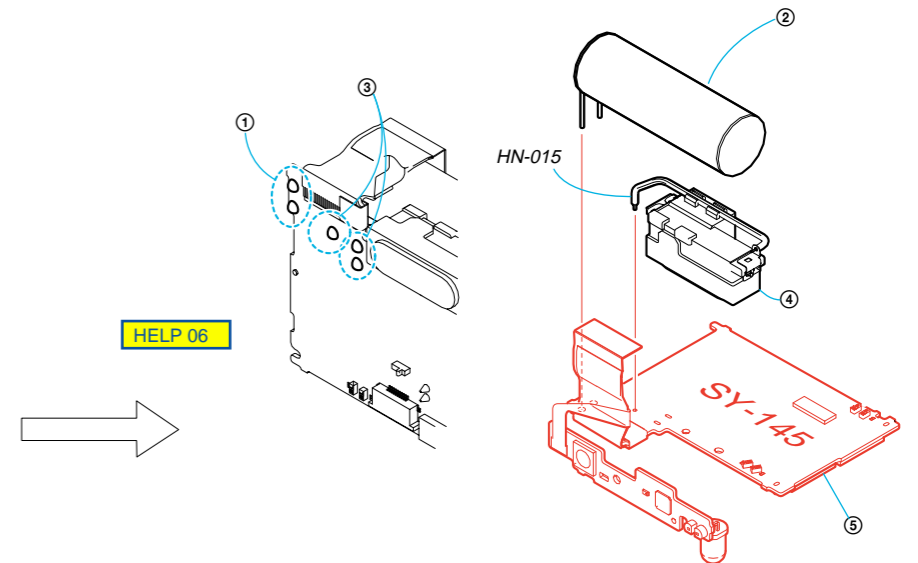
- ① Flexible flat cable (FFC-058)
- ② Flexible board (from the optical unit)
- ③ Screw (M1.7x4)
- ④ LCD frame
- ⑤ SW-461 board, flexible flat cable (FFC-058)



- ① Flexible board (from the lens block assembly)
- ② Flexible board (from the lens block assembly)
- ③ Flexible board (from the optical unit)
- ④ Lens block assembly, optical unit.



- ① Two solderings
- ② Speaker holder
- ③ Speaker
- ④ Two solderings
- ⑤ Microphone holder
- ⑥ Microphone



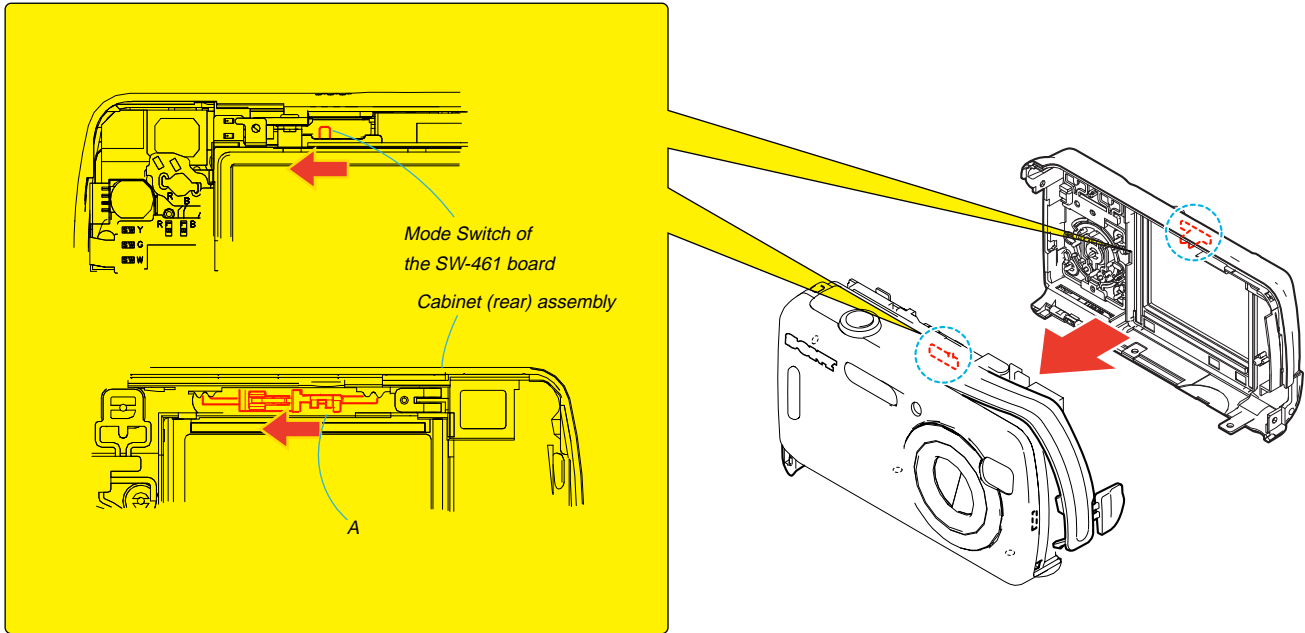
- ① Two solderings
- ② Elect 180uF (330V) capacitor
- ③ Three solderings
- ④ Flash unit, harness (HN-015)
- ⑤ SY-145 board, RL-063 board, flexible flat cable (FFC-056), etc.

HELP

Disassembling and assembling procedures that require attention are described here.

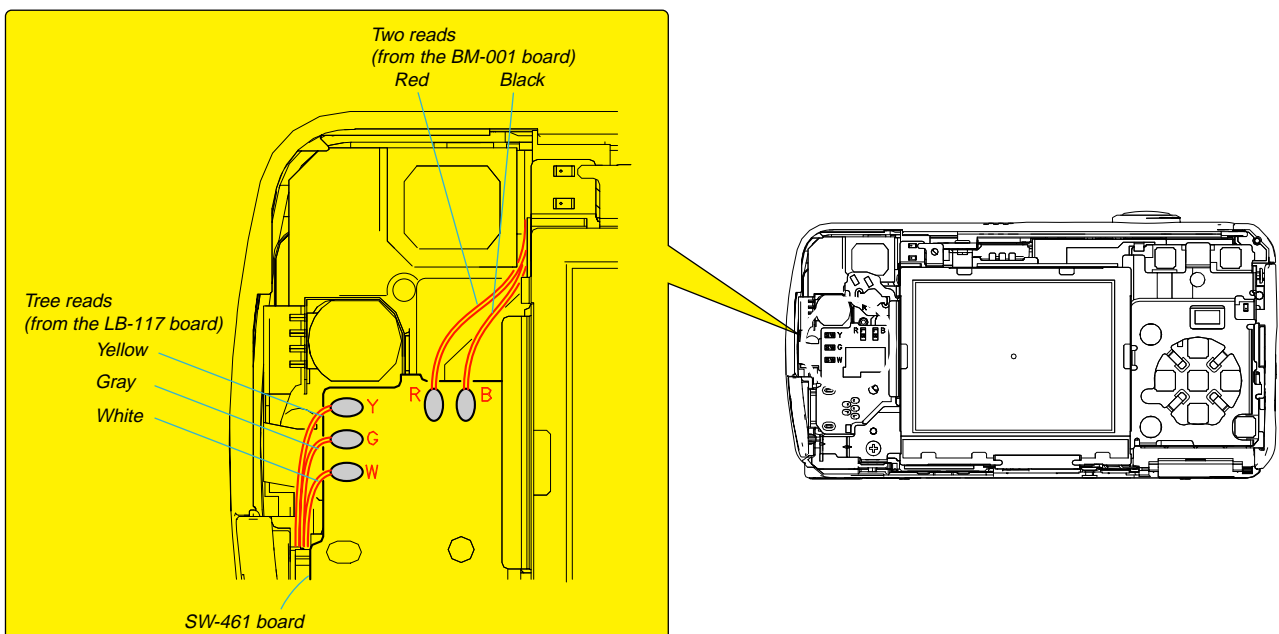
HELP 01

When installing the Cabinet (Rear) assembly, install it while aligning the Mode switch of the SW-461 board with the position A of the Cabinet (Rear) assembly.

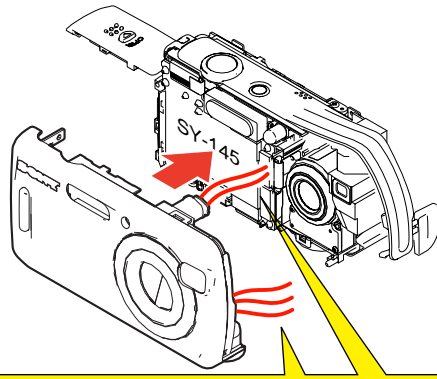


HELP 02

Solder each lead according to the color (Y: yellow, G: gray, W: white, R: red, B: black) displayed on the SW-461 board.

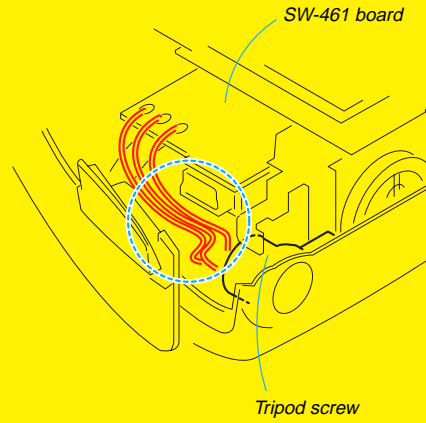
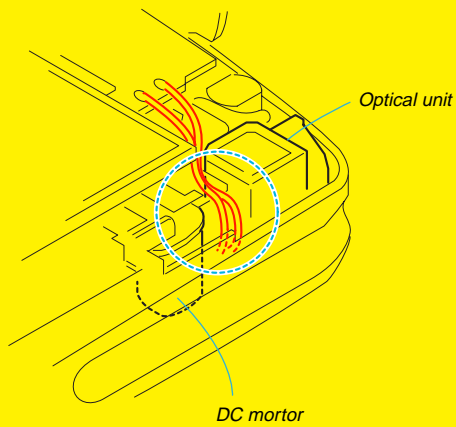


HELP 03



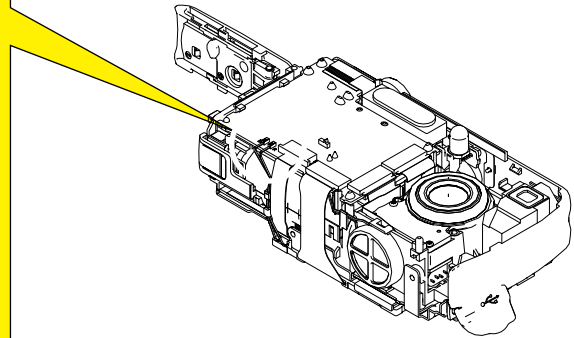
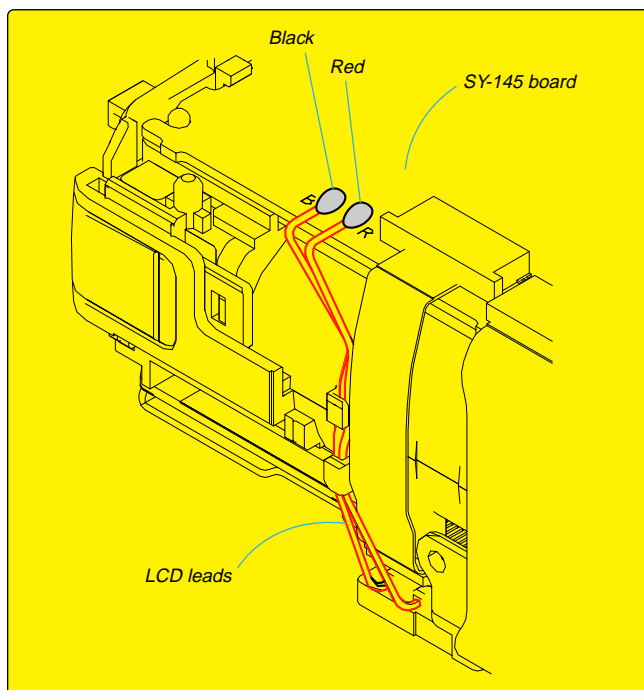
When installing the cabinet (front) assembly, put the lead lines in the space between the optical unit and the DC motor.

When installing the cabinet (front) assembly, put the lead lines in the space between the tripod screw and the SW-461 board.



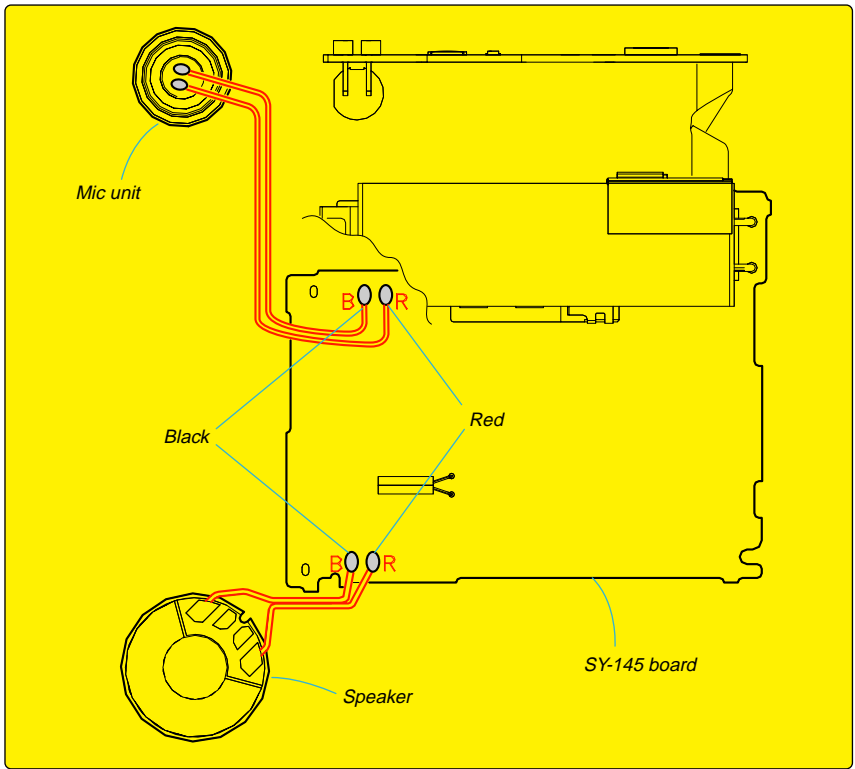
HELP 04

Solder each lead according to the color (R: red, B: black) displayed on the SY-145 board.



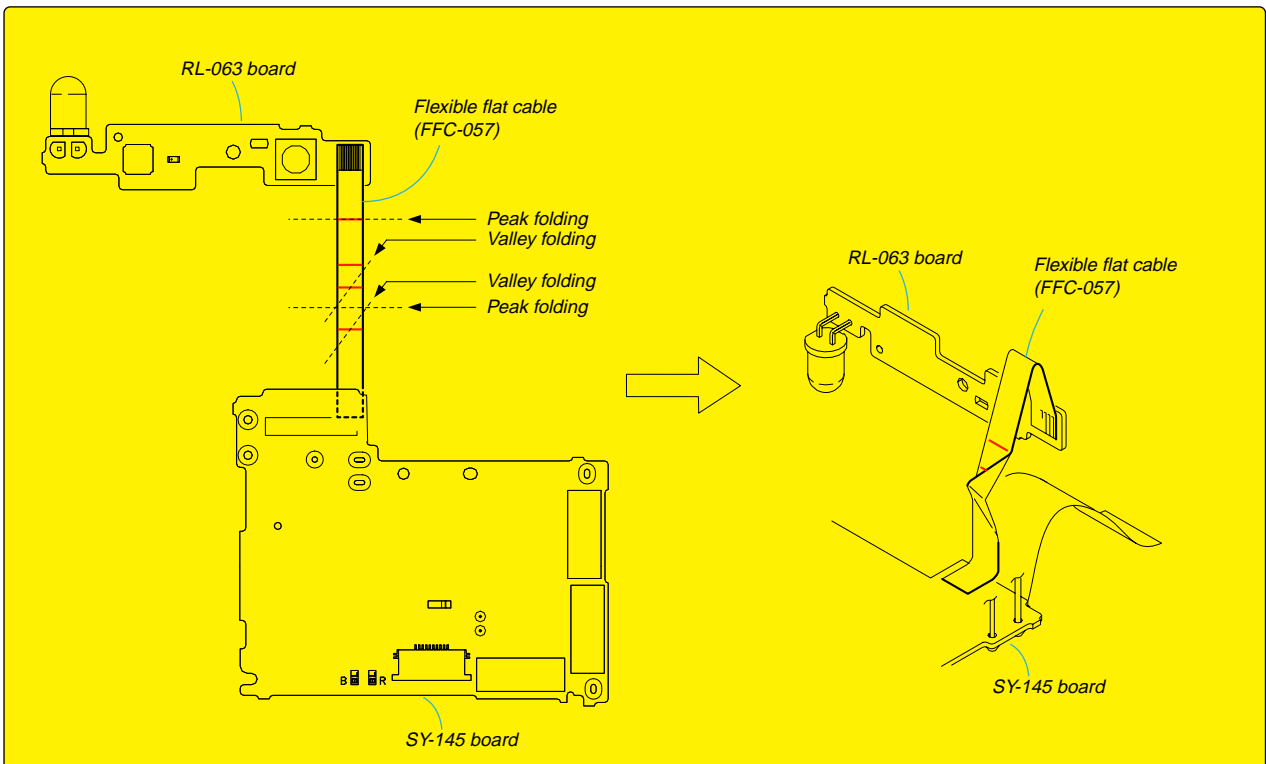
HELP 05

Solder each lead according to the color (R: red, B: black) displayed on the SY-145 board.



HELP 06

Give folding to the flexible flat cable (FFC-057).



3. BLOCK DIAGRAMS

Link

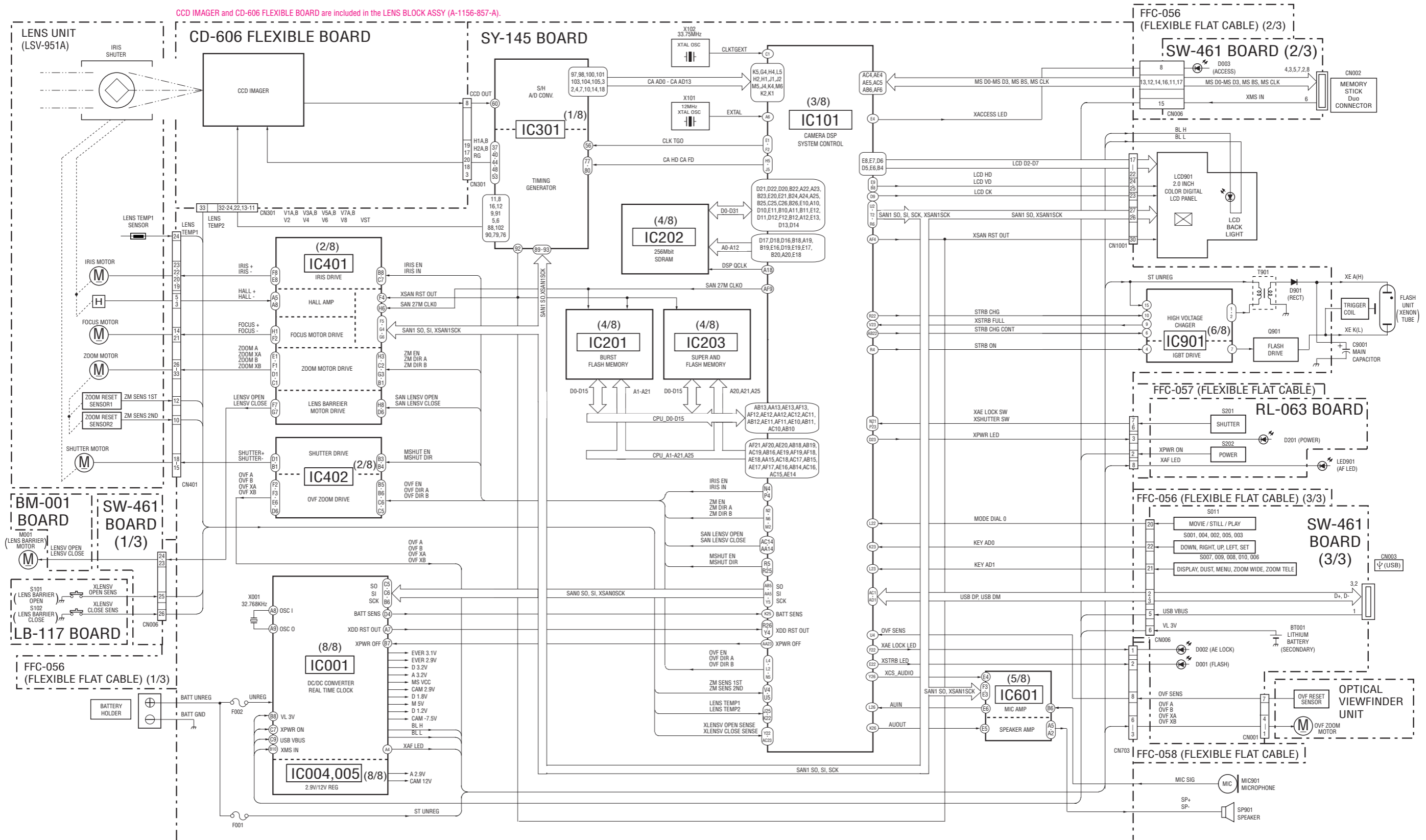
[• OVERALL BLOCK DIAGRAM](#)

[• POWER BLOCK DIAGRAM](#)

3. BLOCK DIAGRAMS

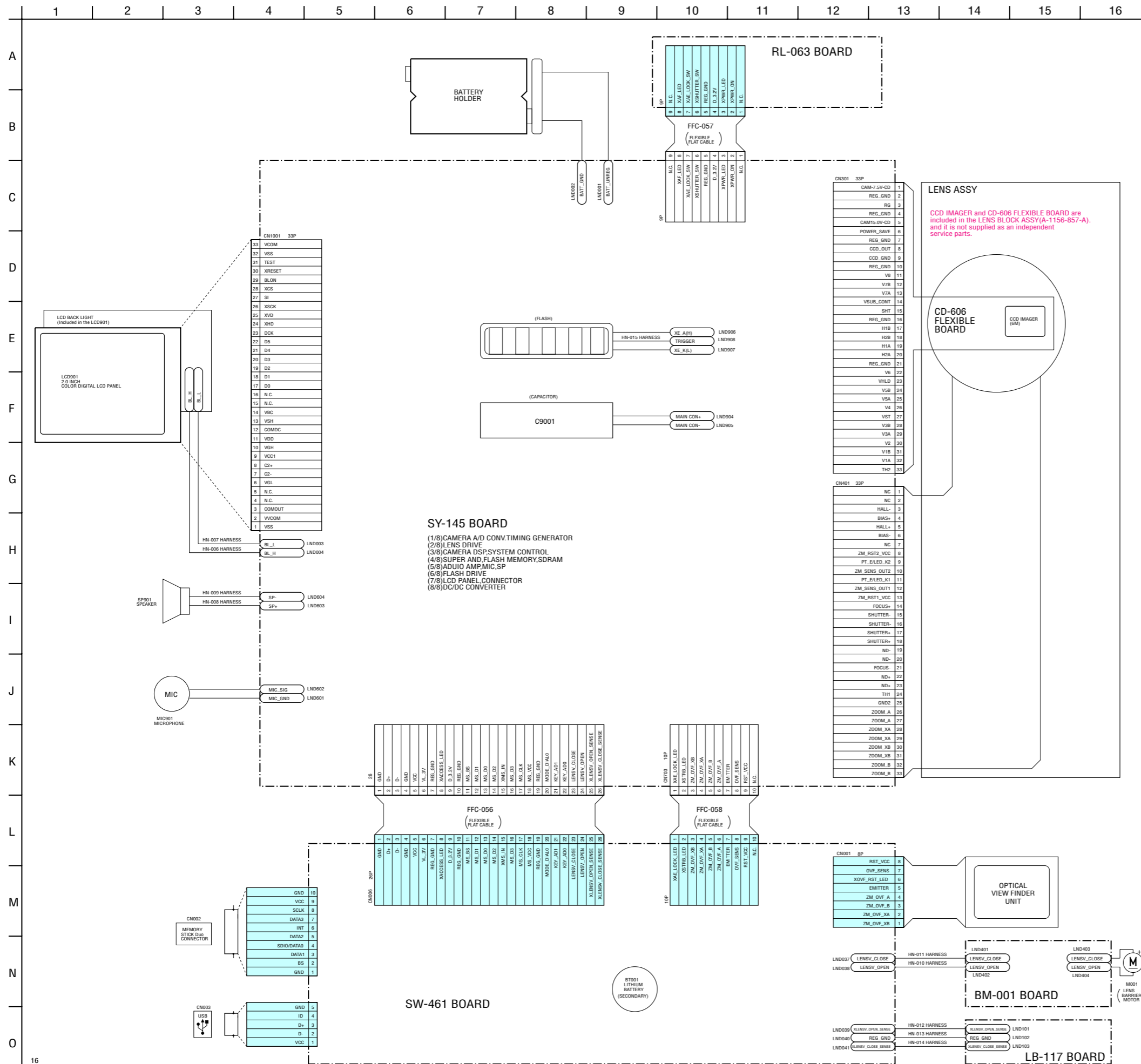
3-1. OVERALL BLOCK DIAGRAM

() : 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

• **BM-001 BOARD (LENS OPEN/CLOSE MOTOR)**

• **RL-063 BOARD (POWER SWITCH)**

• **LB-117 BOARD (OPEN/CLOSE SWITCH)**

• **SW-461 BOARD
(JACK, FUNCTION SW, LITHIUM BATTERY)**

• **COMMON NOTE FOR SCHEMATIC DIAGRAMS**

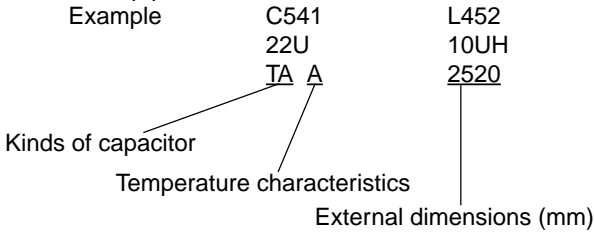
4-2. SCHEMATIC DIAGRAMS

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 : 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
 $\text{XEDIT} \rightarrow \overline{\text{EDIT}}$ $\text{PB/XREC} \rightarrow \overline{\text{PB/REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- Circled numbers refer to waveforms.

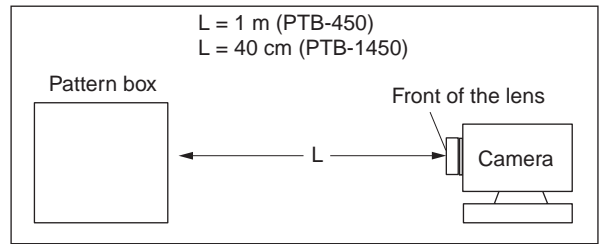
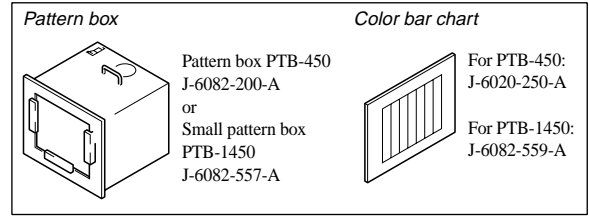
(Measuring conditions voltage and waveform)

- 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 M Ω 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.

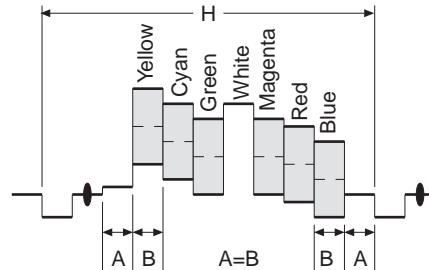


Fig. a (Video output terminal output waveform)

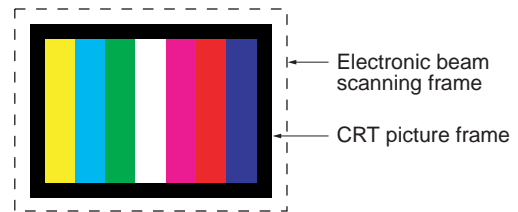


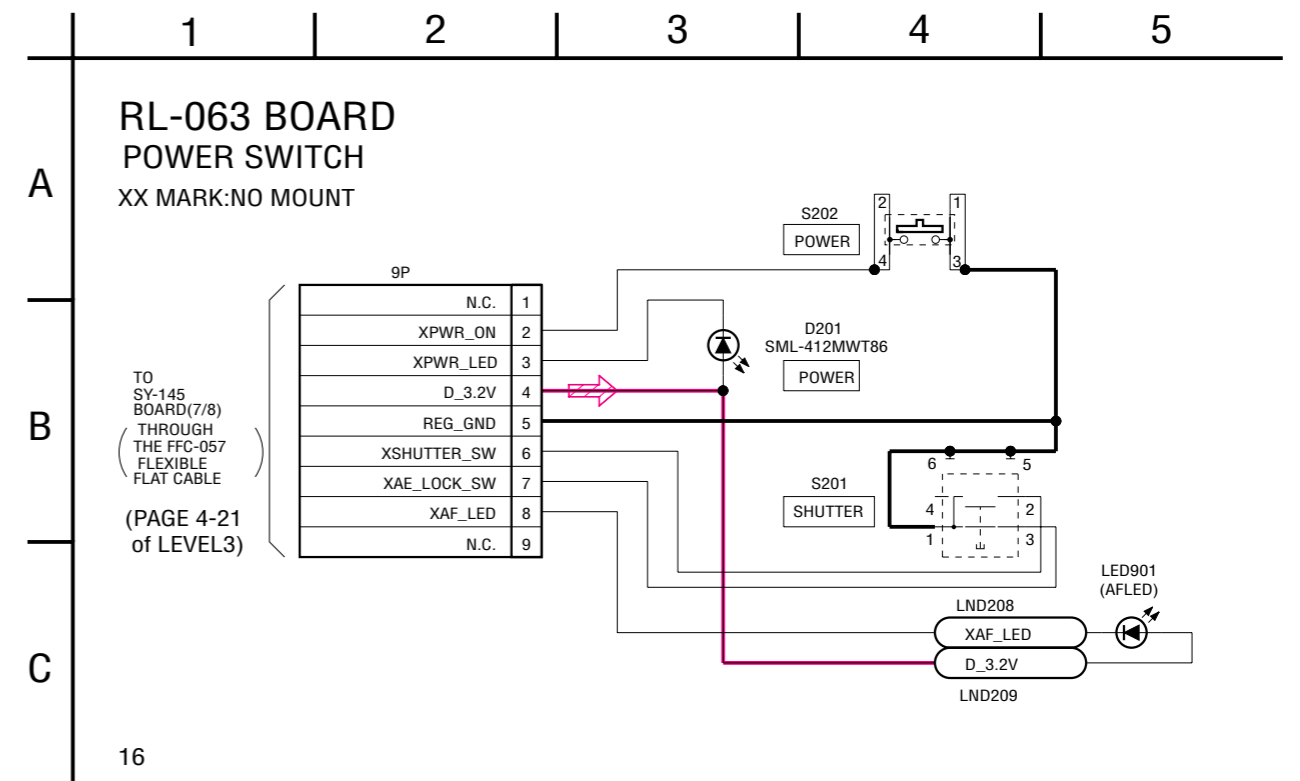
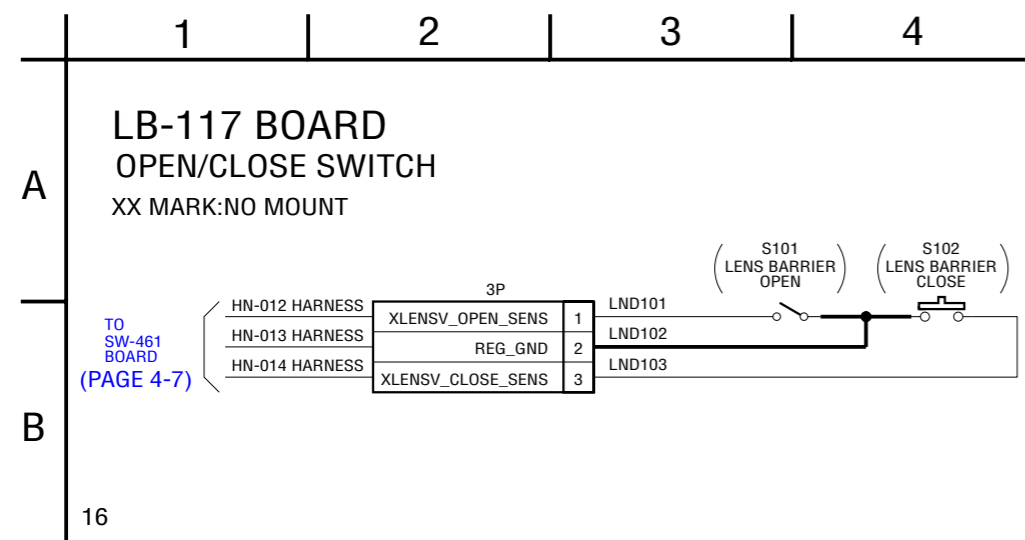
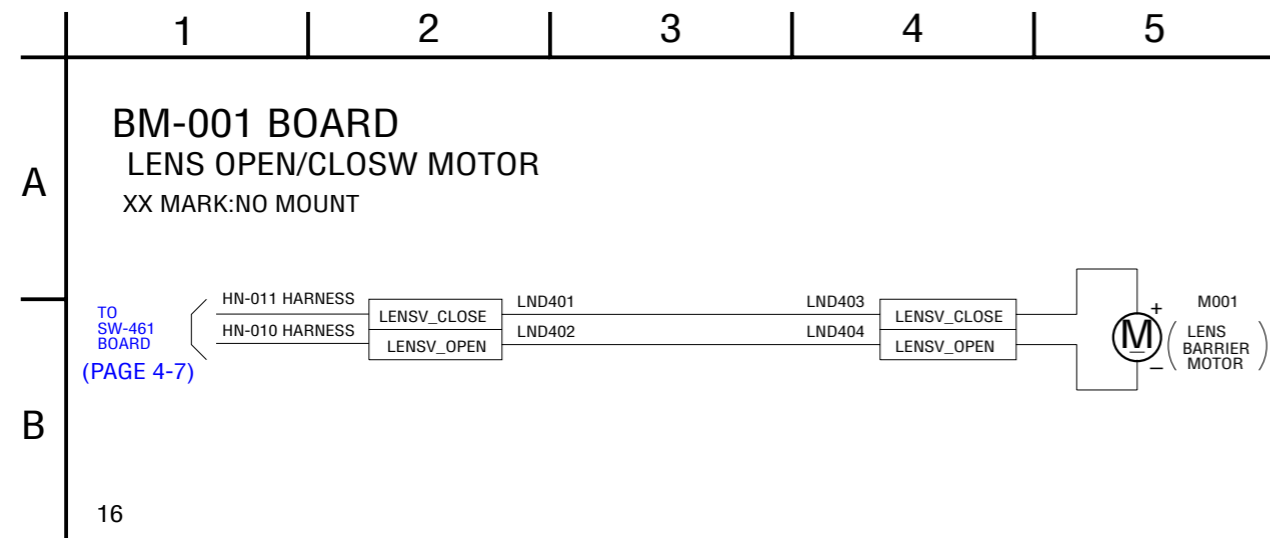
Fig.b (Picture on monitor TV)

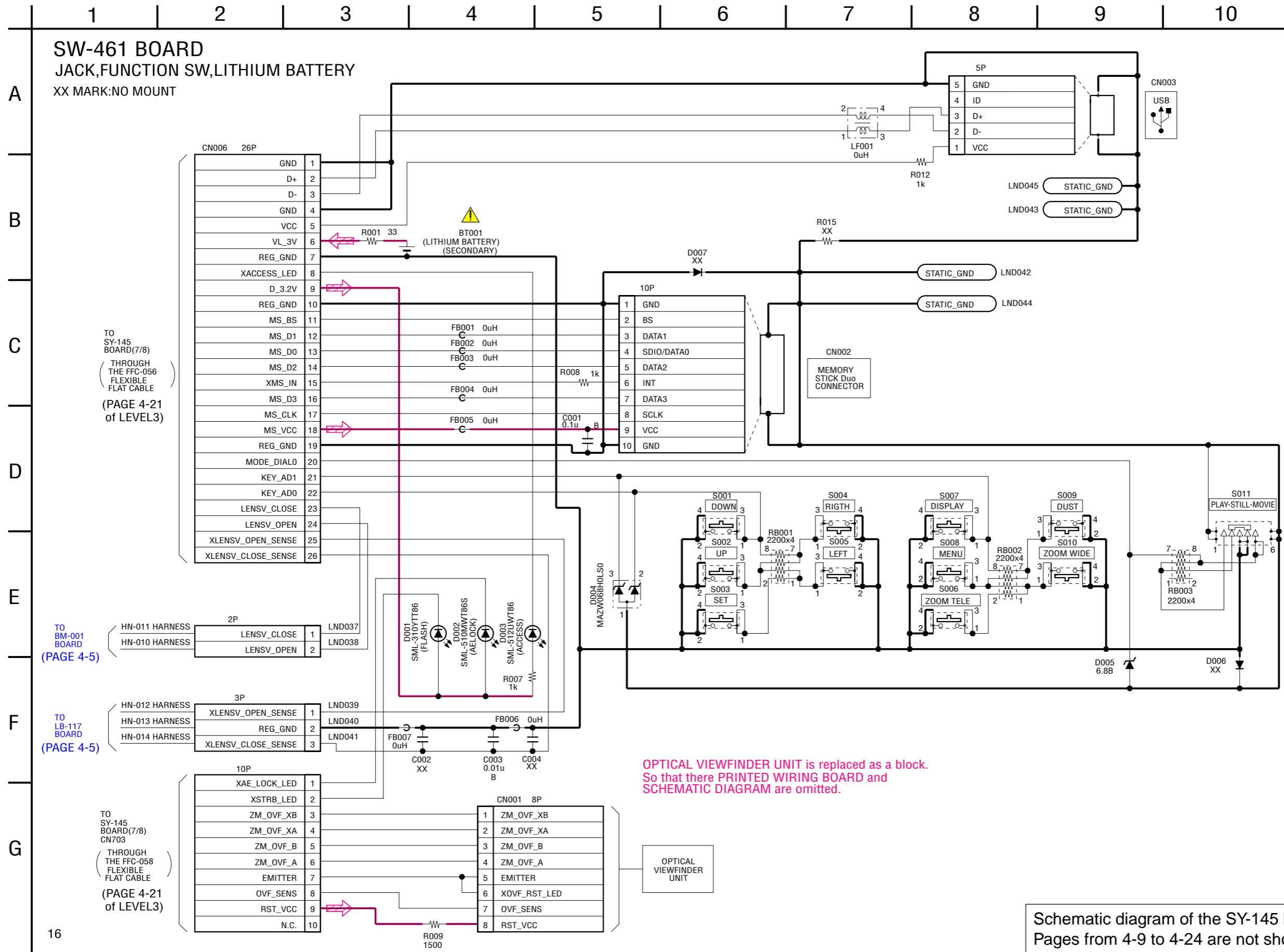
When indicating parts by reference number, please include the board name.

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

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

4-2. SCHEMATIC DIAGRAMS





Schematic diagram of the SY-145 board is not shown. Pages from 4-9 to 4-24 are not shown.

4-3. PRINTED WIRING BOARDS

Link




• BM-001 BOARD	• RL-063 BOARD
• LB-117 BOARD	• SW-461 BOARD
• COMMON NOTE FOR PRINTED WIRING BOARDS	• MOUNTED PARTS LOCATION

4-3. PRINTED WIRING BOARDS

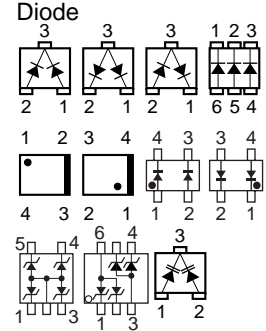
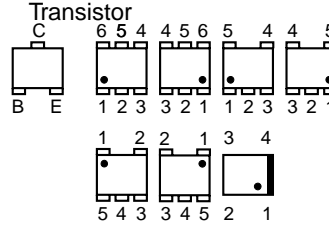
4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR WIRING BOARDS
(In addition to this, the necessary note is printed in each block)

(For printed wiring boards)


-  : Uses unleaded solder.
-  : Pattern from the side which enables seeing.
 (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.

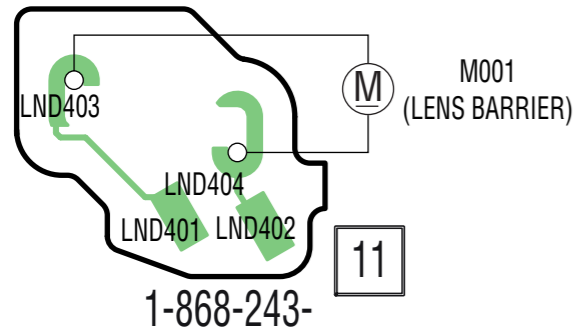


4-3. PRINTED WIRING BOARDS

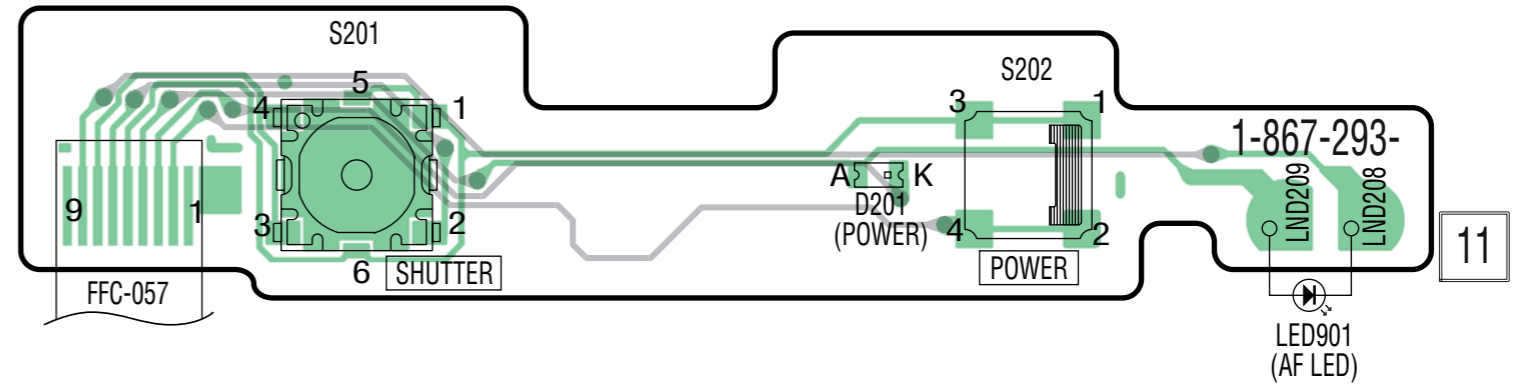
BM-001 (2 layers), LB-117 (2 layers), RL-063 (2 layers)

•  : Uses unleaded solder.

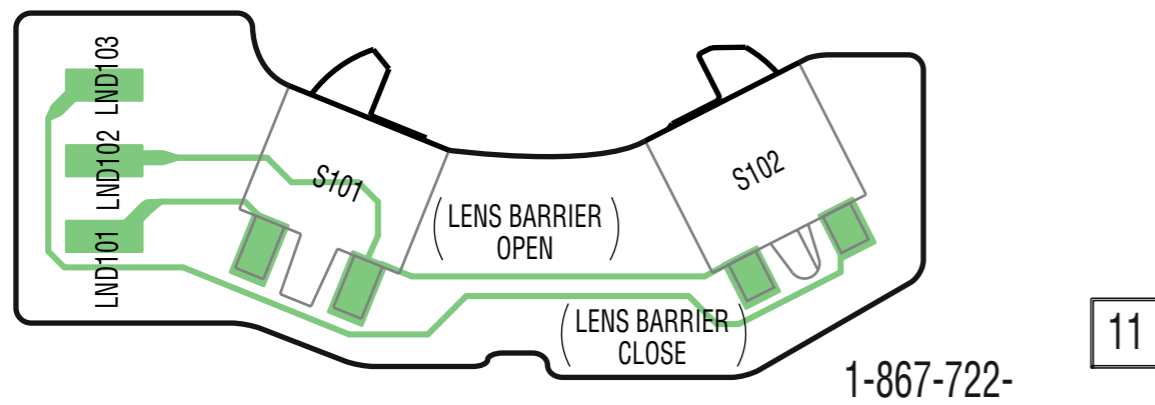
BM-001 BOARD




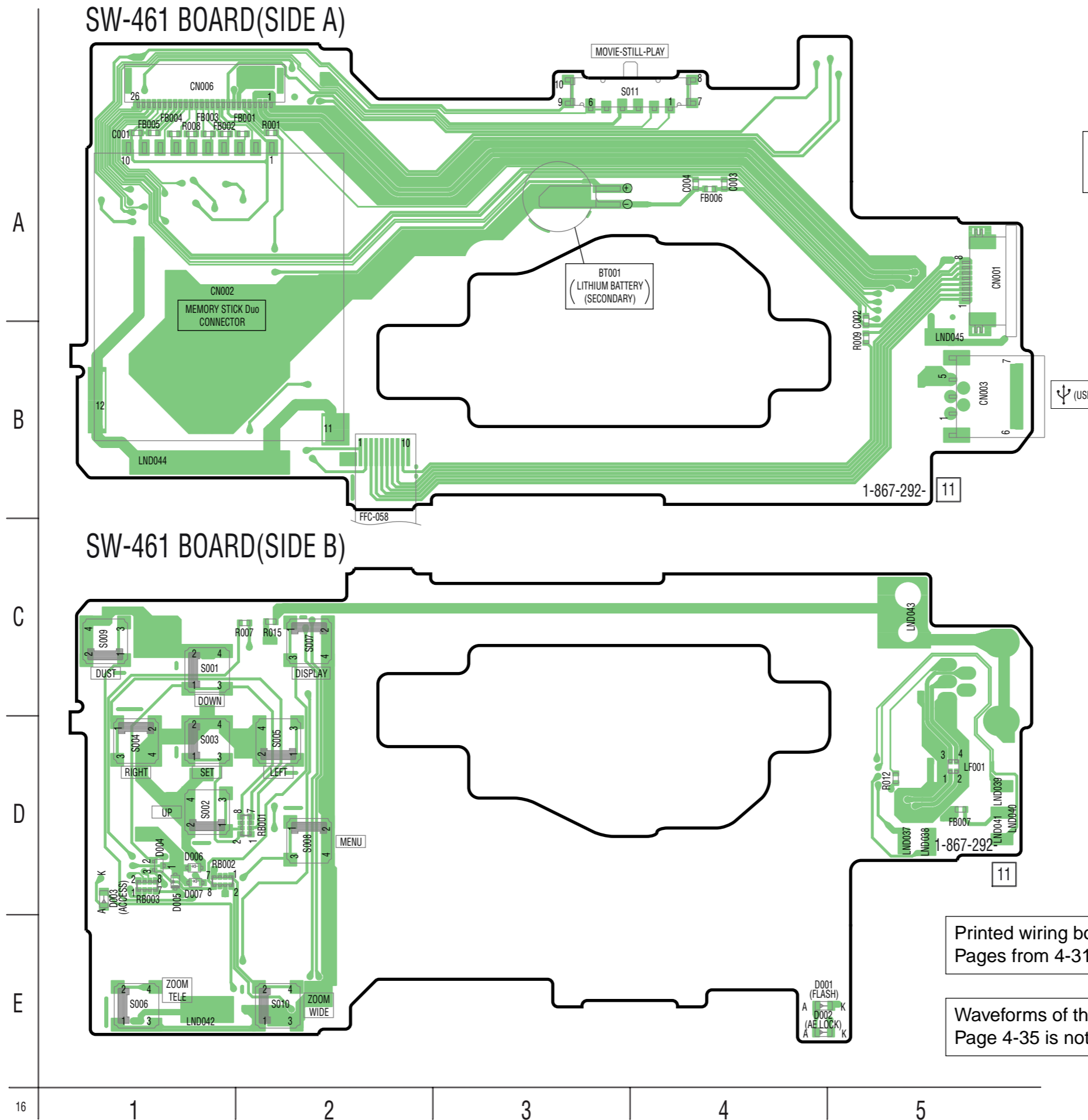
RL-063 BOARD



LB-117 BOARD



-  : Uses unleaded solder.



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

Printed wiring board of the SY-145 board is not shown.
 Pages from 4-31 to 4-34 are not shown.

Waveforms of the SY-145 board is not shown.
 Page 4-35 is not shown.

4-3. PRINTED WIRING BOARDS

4-5. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

SW-461 BOARD

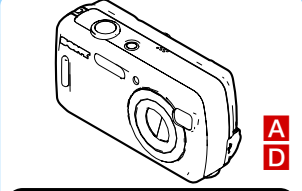
BT001	A-3
C001	A-1
C002	B-5
C003	A-4
C004	A-4
CN001	A-5
CN002	A-1
CN003	B-5
CN006	A-1
* D001	E-4
* D002	E-4
* D003	D-1
* D004	D-1
* D005	D-1
* D006	D-1
* D007	D-1
FB001	A-2
FB002	A-1
FB003	A-1
FB004	A-1
FB005	A-1
FB006	A-4
* FB007	D-5
* LF001	D-5
* LND037	D-5
* LND038	D-5
* LND039	D-5
* LND040	D-5
* LND041	D-5
* LND042	E-1
* LND043	C-5
LND044	B-1
LND045	B-5
R001	A-2
* R007	C-2
R008	A-1
R009	B-5
* R012	D-5
* R015	C-2
* RB001	D-2
* RB002	D-1
* RB003	D-1
* S001	C-1
* S002	D-1
* S003	D-1
* S004	D-1
* S005	D-2
* S006	E-1
* S007	C-2
* S008	D-2
* S009	C-1
* S010	E-2

Mounted parts location of the SY-145 board is not shown.
Page 4-37 is not shown.

5. REPAIR PARTS LIST

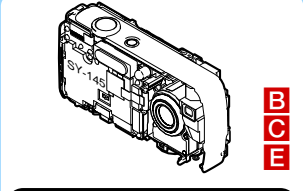
NOTE: Characters **A** to **Z** of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link **EXPLODED VIEWS**



A
D

OVERALL SECTION



B
C
E

BATTERY HOLDER SECTION

Link **ELECTRICAL PARTS LIST** **ACCESSORIES**

• BM-001 BOARD A	• RL-063 BOARD B	• SY-145 BOARD C
• LB-117 BOARD D	• SW-461 BOARD E	

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..., uPC..., μ PC...,
 uPD..., μ PD...

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

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

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

- CAUTION1 :**
 For the part of 51: TAPE, FFC FIXED (2-662-566-01) , cut WOVEN (T0.25), FABRIC NON (3-706-631-01) into the desired length and use it.
- CAUTION2 :**
 For the part of 58: TAPE, MOUNT PARTS FIXED (2-660-553-01) , cut SHEET, ADHESIVE (2-649-300-01) into the desired length and use it.
- CAUTION3 :**
 For the part of 68: HARNESS (HN-008) (1-963-980-11) and 71: HARNESS (HN-006) (1-963-978-11), cut HARNESS (HN-010) (1-964-232-11) into the desired length and use it.
- CAUTION4 :**
 For the part of 69: HARNESS (HN-009) (1-963-981-11) and 70: HARNESS (HN-007) (1-963-979-11), cut HARNESS (HN-011) (1-964-233-11) into the desired length and use it.

Language that can be selected about SY-145 board

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

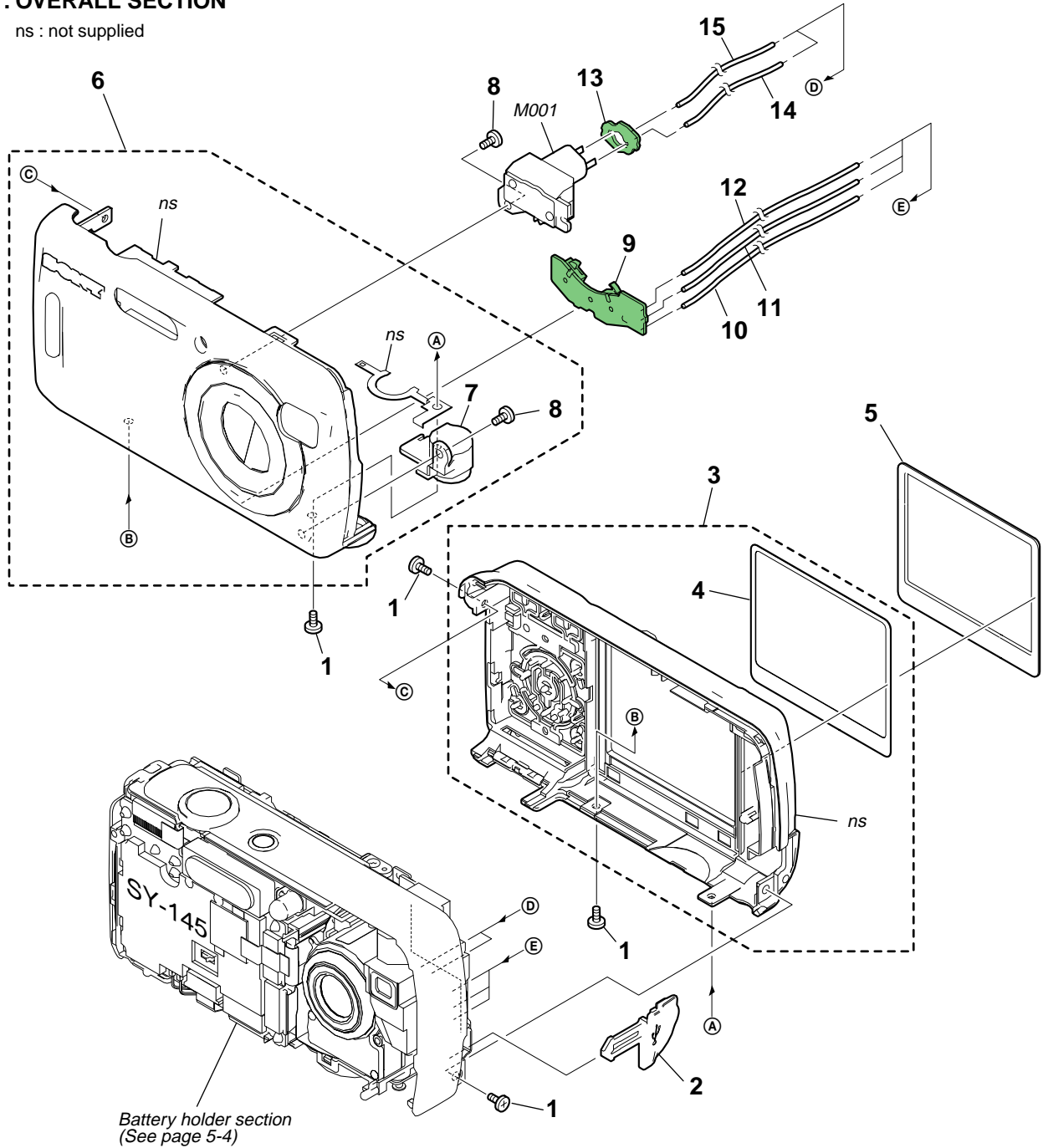
- Abbreviation
- AR : Argentine model
- AUS : Australian model
- BR : Brazilian model
- CH : Chinese model
- CND : Canadian model
- EE : East European model
- HK : Hong Kong model
- J : Japanese model
- JE : Tourist model
- KR : Korea model
- NE : North European model
- RU : Russian model

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION

ns : not supplied

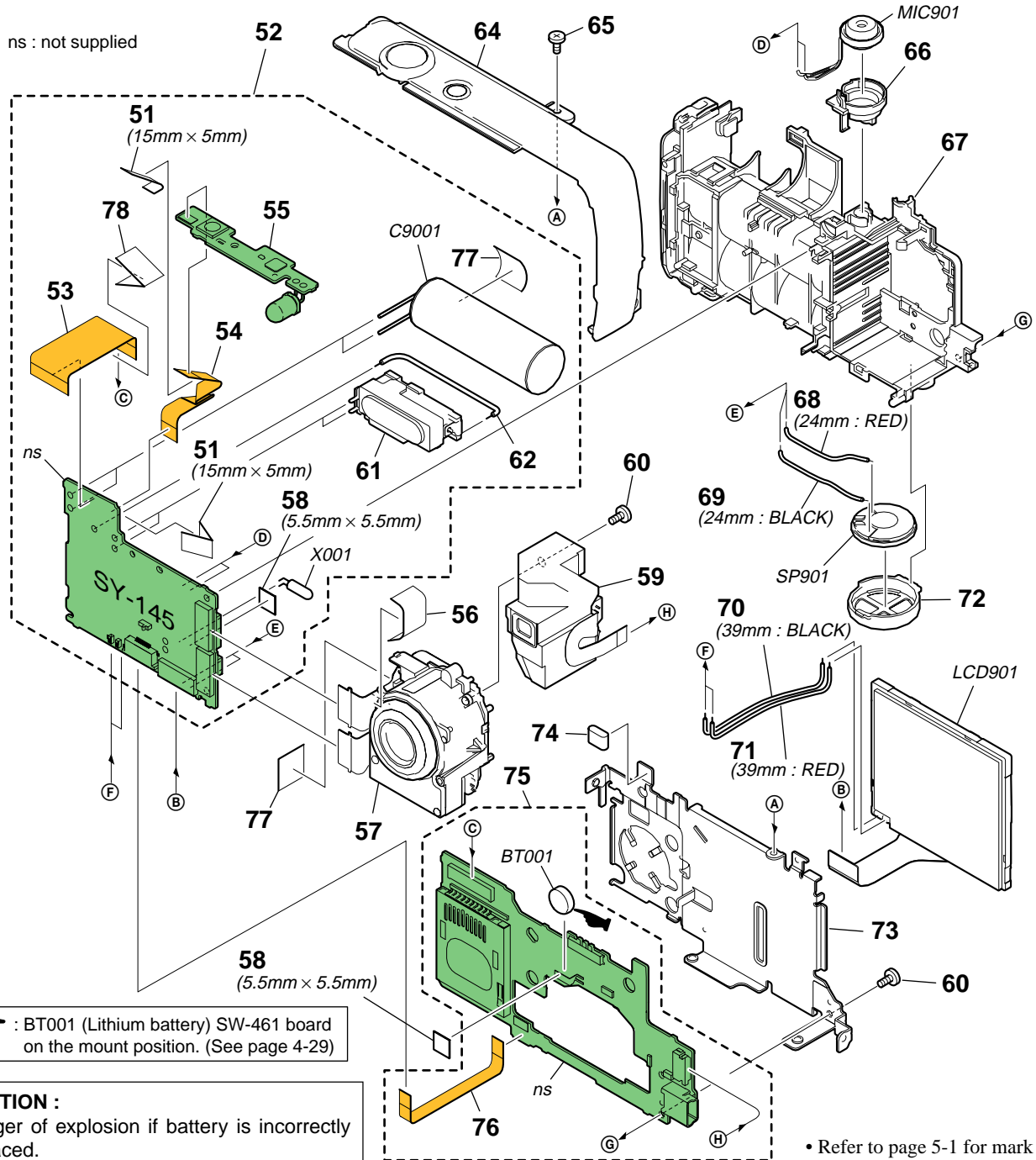


Ref. No.	Part No.	Description
1	2-599-475-31	SCREW (M1.7)
2	2-660-555-01	COVER, USB
3	X-2103-127-1	CABINET (REAR) ASSY
4	2-660-525-01	SHEET, LCD COVER ADHESIVE
5	2-660-556-01	COVER, LCD
6	X-2103-126-1	CABINET (FRONT) ASSY
7	2-660-502-01	SCREW, TRIPOD
8	3-080-204-11	SCREW, TAPPING, P2

Ref. No.	Part No.	Description
9	A-1156-110-A	LB-117 BOARD, COMPLETE
10	1-964-236-11	HARNESS (HN-014)(WHITE)
11	1-964-235-11	HARNESS (HN-013)(GRAY)
12	1-964-234-11	HARNESS (HN-012)(YELLOW)
13	A-1159-170-A	BM-001 BOARD, COMPLETE
14	1-964-232-11	HARNESS (HN-010)(RED)
15	1-964-233-11	HARNESS (HN-011)(BLACK)
M001	1-763-818-51	DC MOTOR 8C-036G55

5. REPAIR PARTS LIST

5-1-2. BATTERY HOLDER SECTION



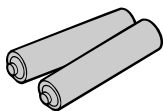
Ref. No.	Part No.	Description
51	Refer to page 5-1 CAUTION1	
52	A-1156-105-A	SY-145 BOARD, COMPLETE (SERVICE) (GP2)
52	A-1156-106-A	SY-145 BOARD, COMPLETE (SERVICE) (GP3)
52	A-1156-107-A	SY-145 BOARD, COMPLETE (SERVICE) (GP4)
53	1-830-730-11	FLEXIBLE FLAT CABLE (FFC-056)
54	1-830-731-11	FLEXIBLE FLAT CABLE (FFC-057)
55	A-1156-109-A	RL-063 BOARD, COMPLETE
* 56	2-670-904-01	SHEET (CCD), RADIATION
57	A-1156-857-A	LENS BLOCK ASSY (951A (C1))
58	Refer to page 5-1 CAUTION2	
59	1-788-228-12	UNIT, OPTICAL (G177)
60	3-080-204-11	SCREW, TAPPING, P2
△ 61	1-479-571-11	FLASH UNIT
62	1-964-308-11	HARNESS (HN-015)
64	X-2103-128-1	CABINET (UPPER) ASSY
65	2-599-475-31	SCREW (M1.7)
* 66	2-660-550-01	HOLDER, MICROPHONE
67	X-2103-129-1	HOLDER ASSY, BT

Ref. No.	Part No.	Description
68	Refer to page 5-1 CAUTION3	
69	Refer to page 5-1 CAUTION4	
70	Refer to page 5-1 CAUTION4	
71	Refer to page 5-1 CAUTION3	
* 72	2-660-551-01	HOLDER, SP
* 73	2-660-549-01	FRAME, LCD
74	2-633-989-01	GASKET (MS)
75	A-1179-454-A	SW-461 BOARD, COMPLE (SERVICE)
76	1-830-732-11	FLEXIBLE FLAT CABLE (FFC-058)
* 77	2-670-905-01	SHEET (CON), RADIATION
* 78	2-668-809-01	SHEET (FFC), RADIATION
△ BT001	1-756-539-21	BATTERY, LITHIUM SECONDARY
△ C9001	1-112-767-11	CAP, ELECT 180MF (330V)
LCD901	1-805-997-11	INDICATORMODULE, LIQUIDCRYSTAL
MIC901	1-542-676-11	MICROPHONE
SP901	1-826-347-11	SPEAKER (1.6CM)
X001	1-760-840-11	VIBRATOR, CRYSTAL (32.768kHz)

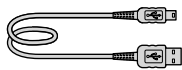
5. REPAIR PARTS LIST

Checking supplied accessories.

Make sure that the following accessories are supplied with your camcorder.



*R6 (size AA) alkaline batteries (2)
(not supplied)*



*USB cable (1)
(Except BR model)
1-827-038-11*



*Wrist strap (1)
(Except BR model)
2-050-981-01*

Other accessories

- 2-666-673-01 CD-ROM (CYBER-SHOT APPLICATION SOFTWARE) (EXCEPT BR)
- 2-658-423-11 INSTRUCTION (READ THIS FIRST) (ENGLISH)(EXCEPT CH,KR,BR)
- 2-658-423-21 INSTRUCTION (READ THIS FIRST) (FRENCH/ITALIAN)(CND,AEP)
- 2-658-423-31 INSTRUCTION (READ THIS FIRST) (SPANISH/PORTUGUESE)(AEP,E)
- 2-658-423-41 INSTRUCTION (READ THIS FIRST) (GERMAN/DUTCH)(AEP)
- 2-658-423-51 INSTRUCTION (READ THIS FIRST) (TRADITIONAL CHINESE/SIMPLIFIED CHINESE)(E,HK,CH)
- 2-658-423-61 INSTRUCTION (READ THIS FIRST) (RUSSIAN)(AEP)
- 2-658-423-71 INSTRUCTION (READ THIS FIRST) (ARABIC/PERSIAN)(E)
- 2-658-423-81 INSTRUCTION (READ THIS FIRST) (KOREAN)(KR)
- 2-658-423-91 INSTRUCTION (READ THIS FIRST) (CZECH/POLISH)(AEP)
- 2-658-424-11 INSTRUCTION (READ THIS FIRST) (HUNGARIAN/SLOVAKIAN)(AEP)
- 2-658-424-21 INSTRUCTION (READ THIS FIRST) (SWEDISH/FINNISH)(AEP)
- 2-658-424-31 INSTRUCTION (READ THIS FIRST) (NORWEGIAN/DANISH)(AEP)
- 2-658-425-11 INSTRUCTION (USER'S GUIDE) (ENGLISH)(EXCEPT CH,KR,BR)
- 2-658-425-21 INSTRUCTION (USER'S GUIDE) (FRENCH/ITALIAN)(CND,AEP)
- 2-658-425-31 INSTRUCTION (USER'S GUIDE) (SPANISH/PORTUGUESE)(AEP,E)
- 2-658-425-41 INSTRUCTION (USER'S GUIDE) (GERMAN/DUTCH)(AEP)
- 2-658-425-51 INSTRUCTION (USER'S GUIDE) (TRADITIONAL CHINESE/SIMPLIFIED CHINESE)(E,HK,CH)
- 2-658-425-61 INSTRUCTION (USER'S GUIDE) (RUSSIAN)(AEP)
- 2-658-425-71 INSTRUCTION (USER'S GUIDE) (ARABIC/PERSIAN)(E)
- 2-658-425-81 INSTRUCTION (USER'S GUIDE) (KOREAN)(KR)
- 2-658-425-91 INSTRUCTION (USER'S GUIDE) (POLISH/CZECH)(AEP)
- 2-658-426-11 INSTRUCTION (USER'S GUIDE) (HUNGARIAN/SLOVAKIAN)(AEP)
- 2-658-426-21 INSTRUCTION (USER'S GUIDE) (SWEDISH/FINNISH)(AEP)
- 2-658-426-31 INSTRUCTION (USER'S GUIDE) (NORWEGIAN/DANISH)(AEP)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
	A-1159-170-A	BM-001 BOARD, COMPLETE *****
	A-1156-110-A	LB-117 BOARD, COMPLETE ***** < SWITCH >
* S101	1-786-480-41	SWITCH, PUSH (1 KEY) (OPEN)
* S102	1-786-545-41	SWITCH, PUSH LEVER (S) (CLOSE)
	A-1156-109-A	RL-063 BOARD, COMPLETE ***** < DIODE >
D201	6-501-030-01	DIODE SML-412MWT86 (POWER)
LED901	6-500-505-01	DIODE OPY5052 (AF)
		< SWITCH >
* S201	1-786-912-21	TACTILE SWITCH (SHUTTER)
S202	1-786-885-21	SWITCH, TACTILE (POWER)
	A-1179-454-A	SW-461 BOARD, COMPLETE (SERVICE) *****
△ BT001	1-830-732-11	FLEXIBLE FLAT CABLE (FFC-058)
	1-756-539-21	BATTERY, LITHIUM SECONDARY
	not supplied	SW-461 BOARD, COMPLETE ***** (SW-461 board is included in the COMPLETE of SW-461 board (SERVICE).)
		< CAPACITOR >
C001	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C003	1-164-943-81	CERAMIC CHIP 0.01uF 10% 16V
		< CONNECTOR >
* CN001	1-766-644-51	CONNECTOR, FFC/FPC 8P
CN002	1-817-827-11	MEMORY STICK DUO CONNECTOR
CN003	1-794-962-11	CONNECTOR, SQUARE TYPE (USB 5P) (USB)
* CN006	1-818-087-51	CONNECTOR, FFC/FPC (LIF) 26P
		< DIODE >
D001	8-719-077-34	DIODE SML-310YTT86 (FLASH)
D002	8-719-075-29	DIODE SML-510MWT86S (AE LOCK)
D003	6-500-817-01	DIODE SML-512UWT86 (ACCESS)
D004	6-500-776-01	DIODE MAZW068H0LS0
D005	8-719-056-54	DIODE MAZS068008S0
		< FERRITE BEAD >
* FB001	1-481-021-21	INDUCTOR, FERRITE BEAD (1005)
* FB002	1-481-021-21	INDUCTOR, FERRITE BEAD (1005)
* FB003	1-481-021-21	INDUCTOR, FERRITE BEAD (1005)
* FB004	1-481-021-21	INDUCTOR, FERRITE BEAD (1005)
FB005	1-400-331-11	FERRITE, EMI (SMD) (1005)

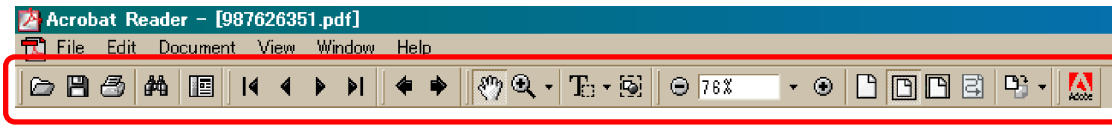
Ref. No.	Part No.	Description
FB006	1-400-331-11	FERRITE, EMI (SMD) (1005)
FB007	1-400-331-11	FERRITE, EMI (SMD) (1005)
		< LINE FILTER >
LF001	1-456-583-11	COMMON MODE CHOKE COIL
		< RESISTOR >
R001	1-218-935-11	RES-CHIP 33 5% 1/16W
R007	1-218-953-11	RES-CHIP 1K 5% 1/16W
R008	1-218-953-11	RES-CHIP 1K 5% 1/16W
R009	1-218-955-11	RES-CHIP 1.5K 5% 1/16W
R012	1-218-953-11	RES-CHIP 1K 5% 1/16W
		< COMPOSITION CIRCUIT BLOCK >
RB001	1-234-376-11	RES, NETWORK 2.2K (1005X4)
RB002	1-234-376-11	RES, NETWORK 2.2K (1005X4)
RB003	1-234-376-11	RES, NETWORK 2.2K (1005X4)
		< SWITCH >
S001	1-786-885-21	SWITCH, TACTILE (DOWN)
S002	1-786-885-21	SWITCH, TACTILE (UP)
S003	1-786-885-21	SWITCH, TACTILE (SET)
S004	1-786-885-21	SWITCH, TACTILE (RIGHT)
S005	1-786-885-21	SWITCH, TACTILE (LEFT)
S006	1-786-885-21	SWITCH, TACTILE (ZOOM T)
S007	1-786-885-21	SWITCH, TACTILE (DISPLAY)
S008	1-786-885-21	SWITCH, TACTILE (MENU)
S009	1-786-885-21	SWITCH, TACTILE (DUST)
S010	1-786-885-21	SWITCH, TACTILE (ZOOM W)
* S011	1-786-947-11	SIGNAL SELECTOR SWITCH (MOVIE/STILL/PLAY)

SY-145 BOARD, COMPLETE

Electrical parts list of the SY-145 board is not shown.
Pages from 5-7 to 5-10 are not shown.


• Refer to page 5-1 for mark △.

[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:

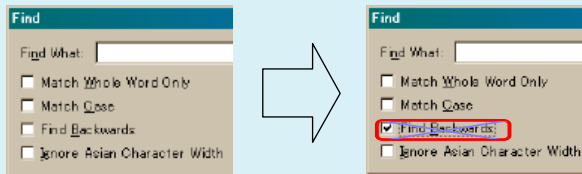
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

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 Backwards” 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.

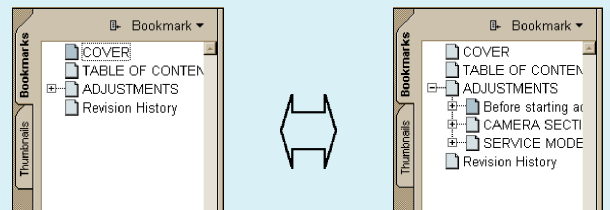
Moving with link

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.

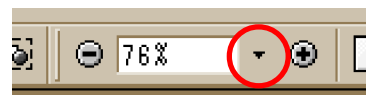
(To go back to original state, click )




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 .

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2005.12	Official Release	—	—