

DSC-T33

SERVICE MANUAL

LEVEL 2

Differences Manual

Ver 1.0 2004.11


Revision History

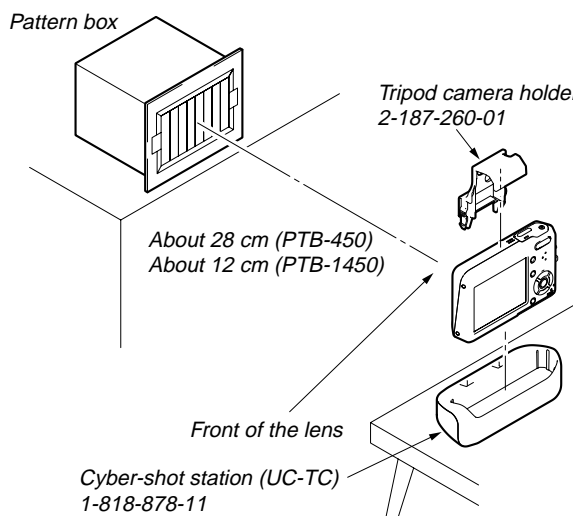
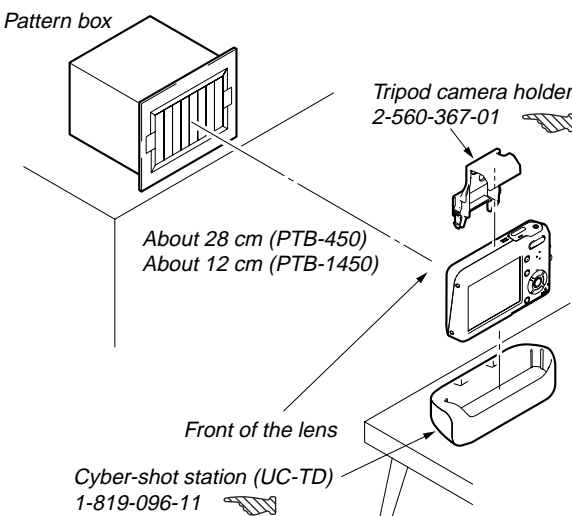




DSC-T33

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

- This Service Manual shows only the difference from DSC-T3. Refer to the Service Manual Level2 (9-876-764-31) of DSC-T3 also for repair.
- All of the accessories, disassembly procedure, exploded views of the DSC-T33 are shown in this manual.

 : Changed portion.

Page	DSC-T3	DSC-T33
4-5	<p>Pattern box</p>  <p>Tripod camera holder 2-187-260-01</p> <p>About 28 cm (PTB-450) About 12 cm (PTB-1450)</p> <p>Front of the lens</p> <p>Cyber-shot station (UC-TC) 1-818-878-11</p>	<p>Pattern box</p>  <p>Tripod camera holder 2-560-367-01 </p> <p>About 28 cm (PTB-450) About 12 cm (PTB-1450)</p> <p>Front of the lens</p> <p>Cyber-shot station (UC-TD) 1-819-096-11 </p>

SONY®



SPECIFICATIONS

■ Camera

[System]

Image device

7.66 mm (1/2.4 type) color CCD
Primary color filter

Total pixels number of camera

Approx. 5 255 000 pixels

Effective pixels number of camera

Approx. 5 090 000 pixels

Lens

Carl Zeiss Vario-Tessar
3× zoom lens
f = 6.7 – 20.1 mm (38 – 114 mm
when converted to a 35 mm still
camera)
F3.5 – 4.4

Exposure control

Automatic exposure, Scene selection
(9 modes)

White balance

Automatic, Daylight, Cloudy,
Fluorescent, Incandescent, Flash

File format (DCF compliant)

Still images: Exif Ver. 2.2 JPEG
compliant, DPOF compatible
Movies: MPEG1 compliant
(Monaural)

Recording media

“Memory Stick Duo”

Flash

Recommended distance (ISO set to
Auto):
DSC-T3
0.1 m to 1.7 m (4 inches to 5 feet
6 7/8 inches) (W)
0.5 m to 1.6 m (1 foot 7 3/4 inches to
5 feet 2 7/8 inches) (T)
DSC-T33
0.1 m to 1.6 m (4 inches to 5 feet
2 7/8 inches) (W)
0.5 m to 1.5 m (1 foot 7 3/4 inches to
4 feet 11 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

230 400 (960×240) dots

[Power, general]

Used battery pack

NP-FT1

Power requirements

3.6 V

Power consumption (during shooting)

1.4 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

DSC-T3

Approx. 91×60×17.8 mm
(3 5/8×2 3/8×23/32 inches)

DSC-T33

Approx. 99.4×60.9×20.7 mm
(4×2 2/1×27/32 inches)

(W/H/D, excluding maximum
protrusions)

Mass

DSC-T3

Approx. 171 g (6.0 oz)

DSC-T33

Approx. 150 g (5.3 oz)

(including battery pack NP-FT1,
“Memory Stick Duo” and wrist
strap)

Microphone

Electret condenser microphone

Speaker

Dynamic speaker

Exif Print

Compatible

PRINT Image Matching II

Compatible

PictBridge

Compatible

■ UC-TC/UC-TD Cyber-shot Station

[Input and Output connectors]

A/V OUT (MONO) jack (Monaural)

Minijack
Video: 1 V_{p-p}, 75 Ω, unbalanced,
sync negative
Audio: 327 mV (at a 47 kΩ load)
Output impedance 1 kΩ

USB jack B

USB connection

Hi-Speed USB
(USB 2.0 High-Speed compatible)

DC IN jack

Camera connector

■ AC-LM5/LM5A AC Adaptor

Input rating

100 V to 240 V AC, 50/60 Hz

AC-LM5

10 W

AC-LM5A

11 W

Output rating

4.2 V DC, 1.5 A

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

AC-LM5

Approx. 47×30×80 mm
(1 7/8×1 3/16×3 1/4 inches)

AC-LM5A

Approx. 48×29×81 mm
(1 15/16×1 3/16×3 1/4 inches)

(W/H/D, excluding projecting parts)

Mass

AC-LM5

Approx. 170 g (6.0 oz)

AC-LM5A

Approx. 160 g (5.6 oz)

excluding power cord (mains lead)

■ NP-FT1 battery pack

Used battery

Lithium-ion battery

Maximum voltage

DC 4.2 V

Nominal voltage

DC 3.6 V

Capacity

2.4 Wh (680 mAh)

■ Accessories

- AC-LM5/LM5A AC Adaptor (1)
- Power cord (mains lead) (1)
- NP-FT1 battery pack (1)
- Cyber-shot Station (1)
- UC-TC (DSC-T3)/UC-TD (DSC-T33)
- Camera holder for tripod (1)
- USB cable (1)
- A/V connecting cable (1)
- Wrist strap (1)
- “Memory Stick Duo” (32 MB) (1)
- Memory Stick Duo Adaptor (1)
- CD-ROM (USB driver SPVD-012) (1)
- Operating instructions (1)

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.

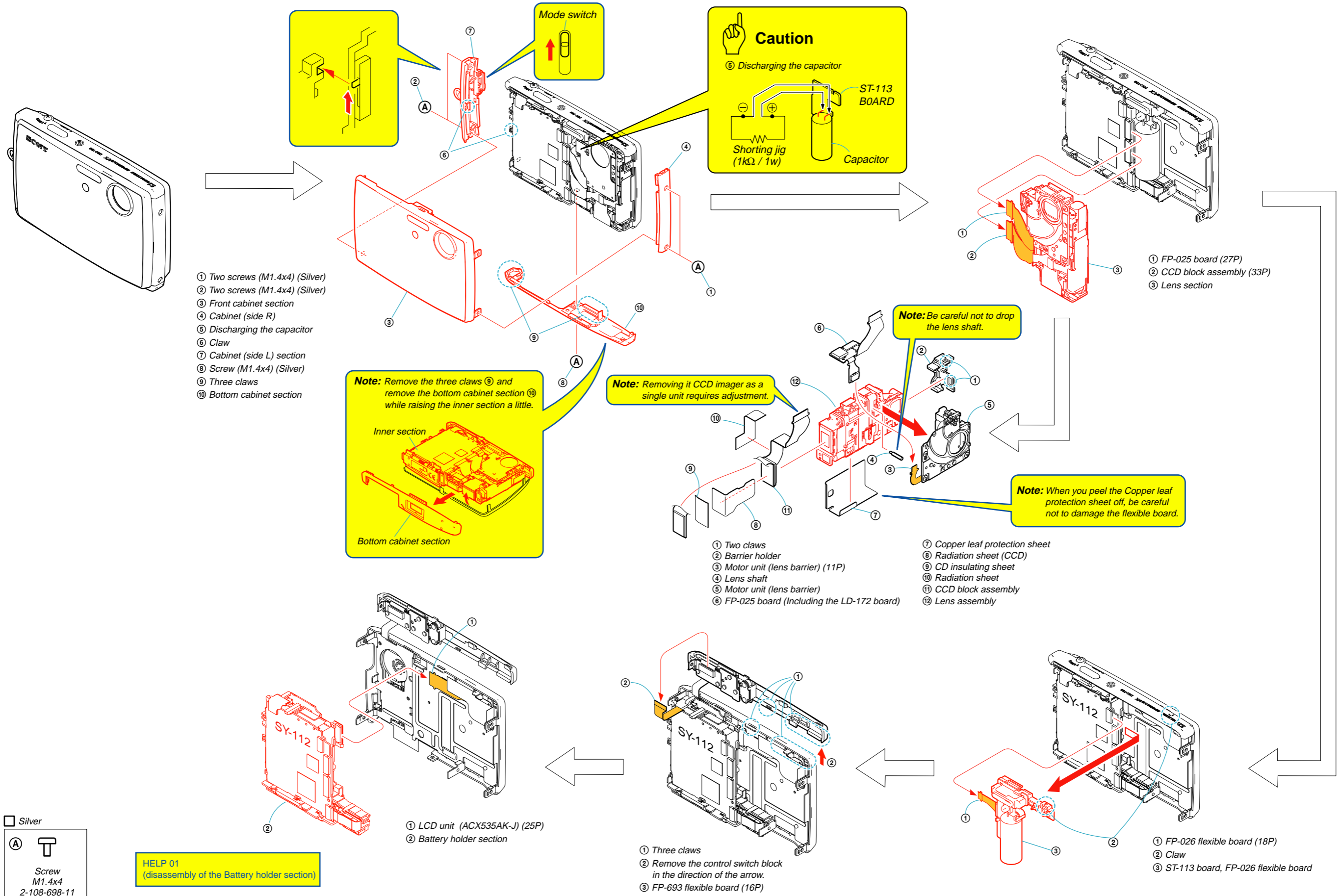
SAFETY-RELATED COMPONENT WARNING!!

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.

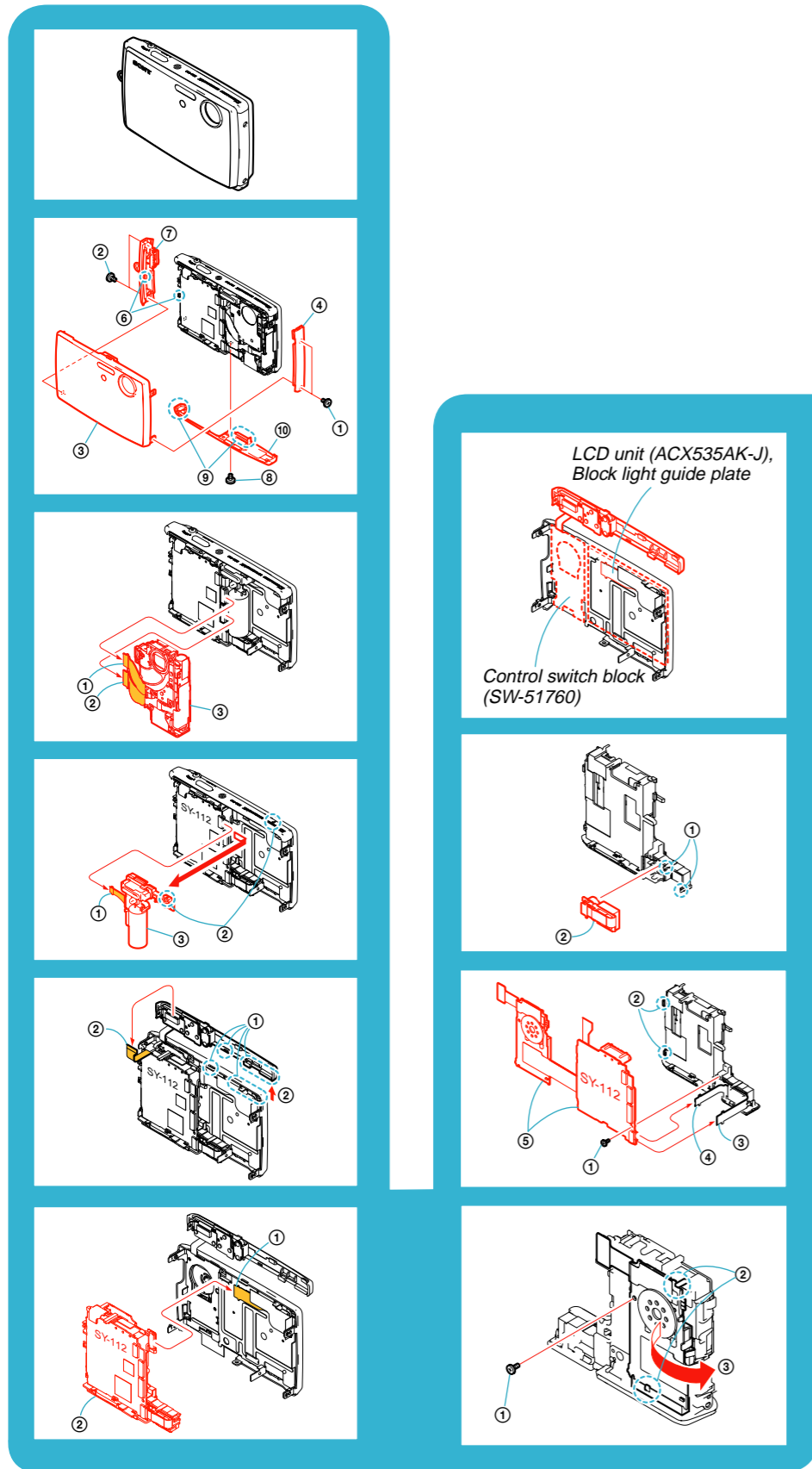
2. DISASSEMBLY

The following flow chart shows the disassembly procedure.

2-1. DISASSEMBLY

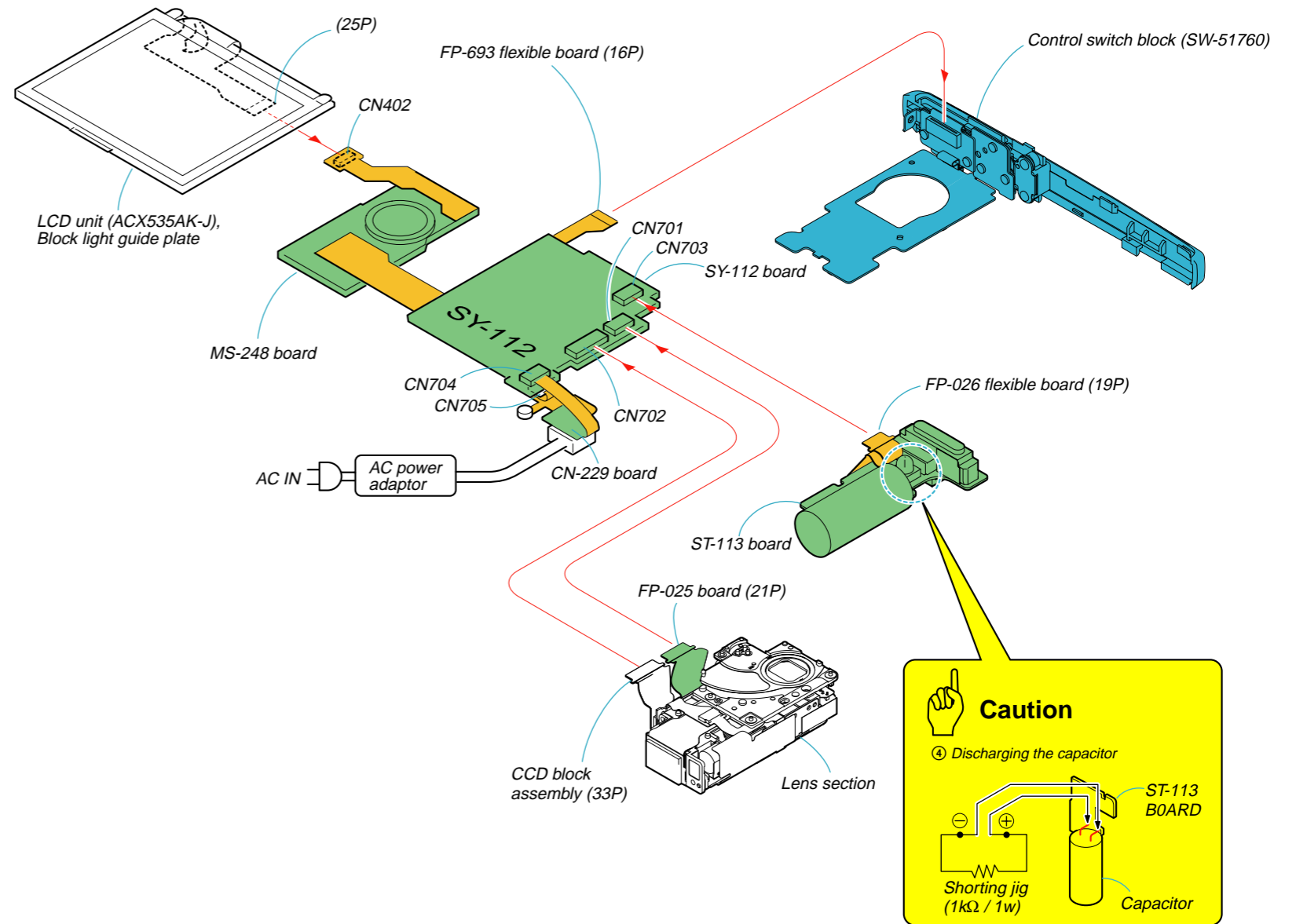


2-2. SERVICE POSITION

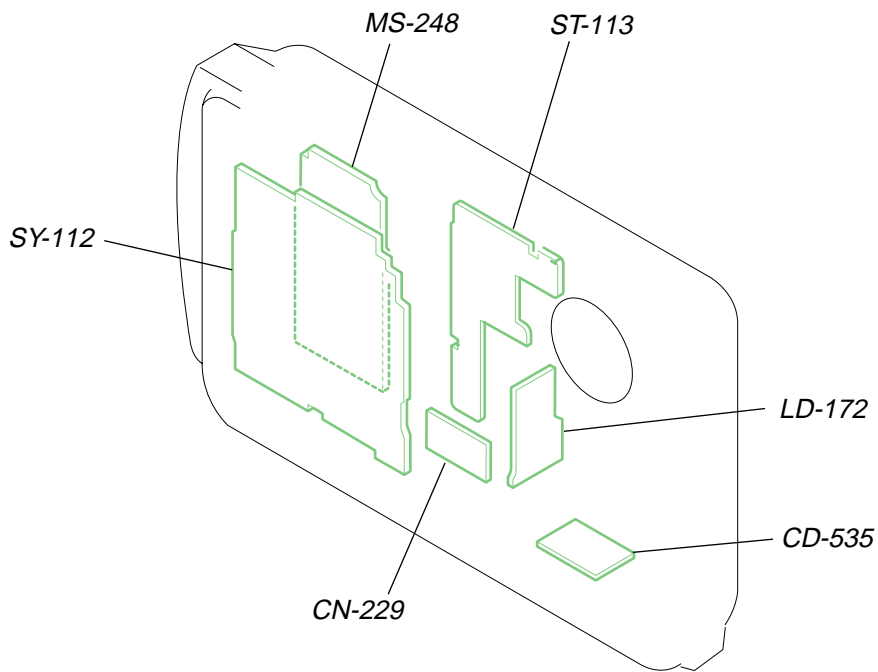


[SERVICE POSITION TO CHECK THE SY-112 BOARD]

Note1: When checking the VIDEO AMP (SY-112 board IC302) or the USB circuit, connect the cradle.



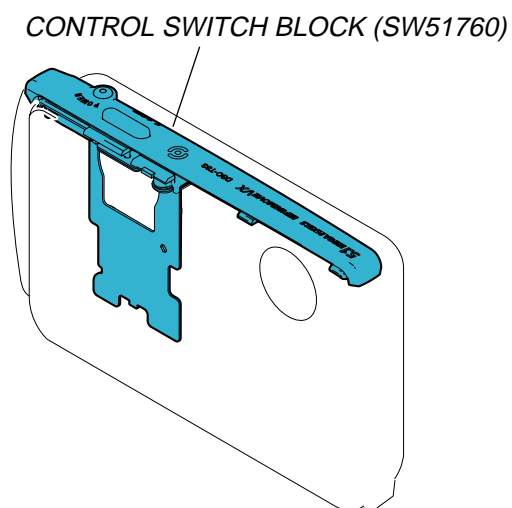
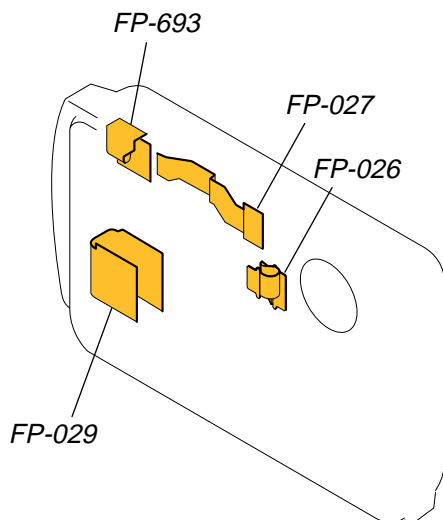
2-3. CIRCUIT BOARDS LOCATION



NAME	FUNCTION
<i>CD-535</i>	<i>CCD IMAGER</i>
<i>CN-229</i>	<i>MULTI CONNECTOR</i>
<i>LD-172</i>	<i>LENS DRIVE</i>
<i>MS-248</i>	<i>MS I/O, LCD PANEL DRIVE</i>
<i>ST-113</i>	<i>FLASH</i>
<i>SY-112</i>	<i>CAMERA A/D CONVERTER, TIMING GENERATOR, CAMERA DSP, LENS CONTROL, CAMERA SYSTEM CONTROL, HI CONTROL, AUDIO I/O, FLASH DRIVE, DC/DC CONVERTER, CONNECTOR</i>

2-4. FLEXIBLE BOARDS LOCATION

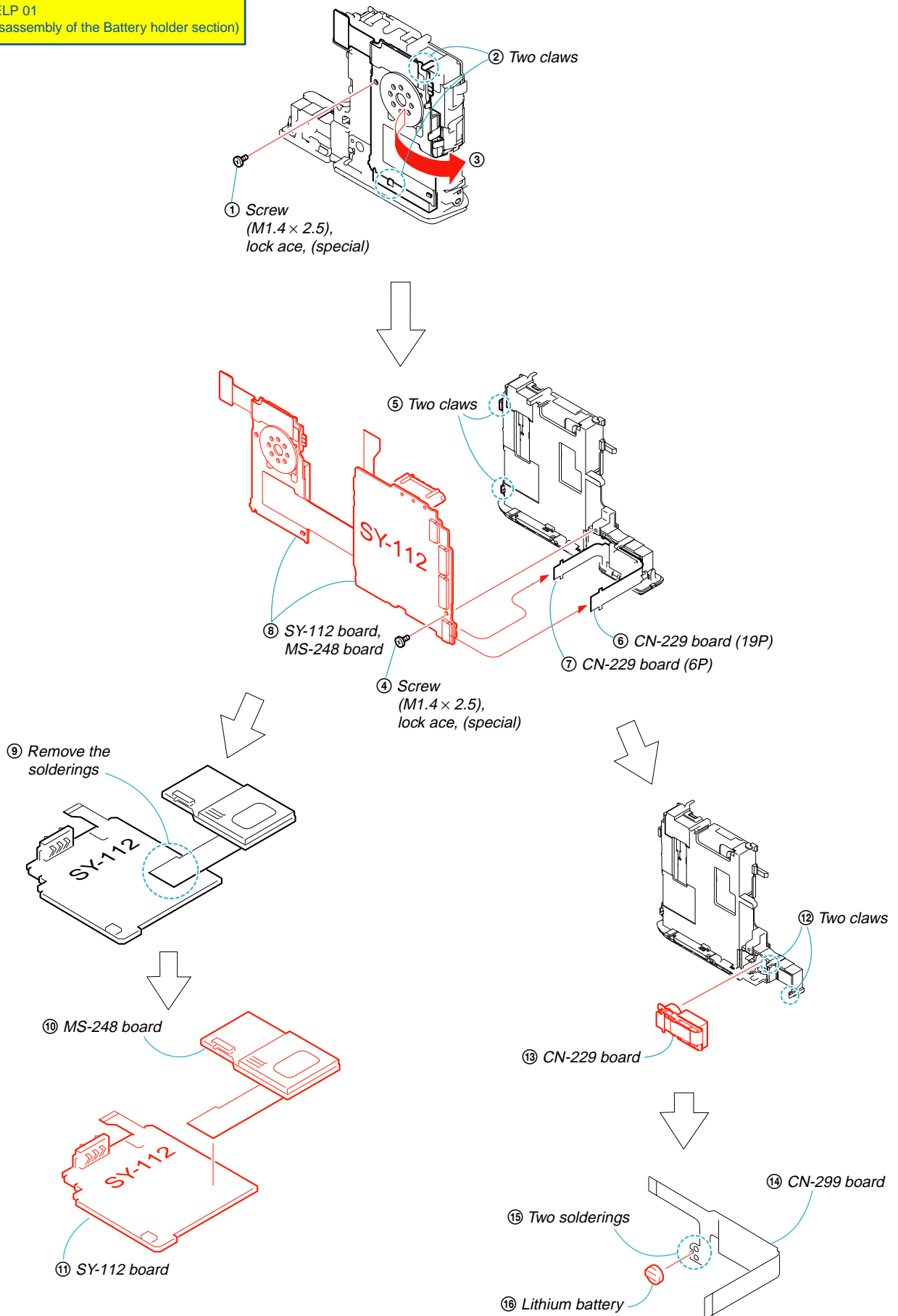
The flexible boards contained in the lens block is not shown.



HELP

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

HELP 01 (disassembly of the Battery holder section)

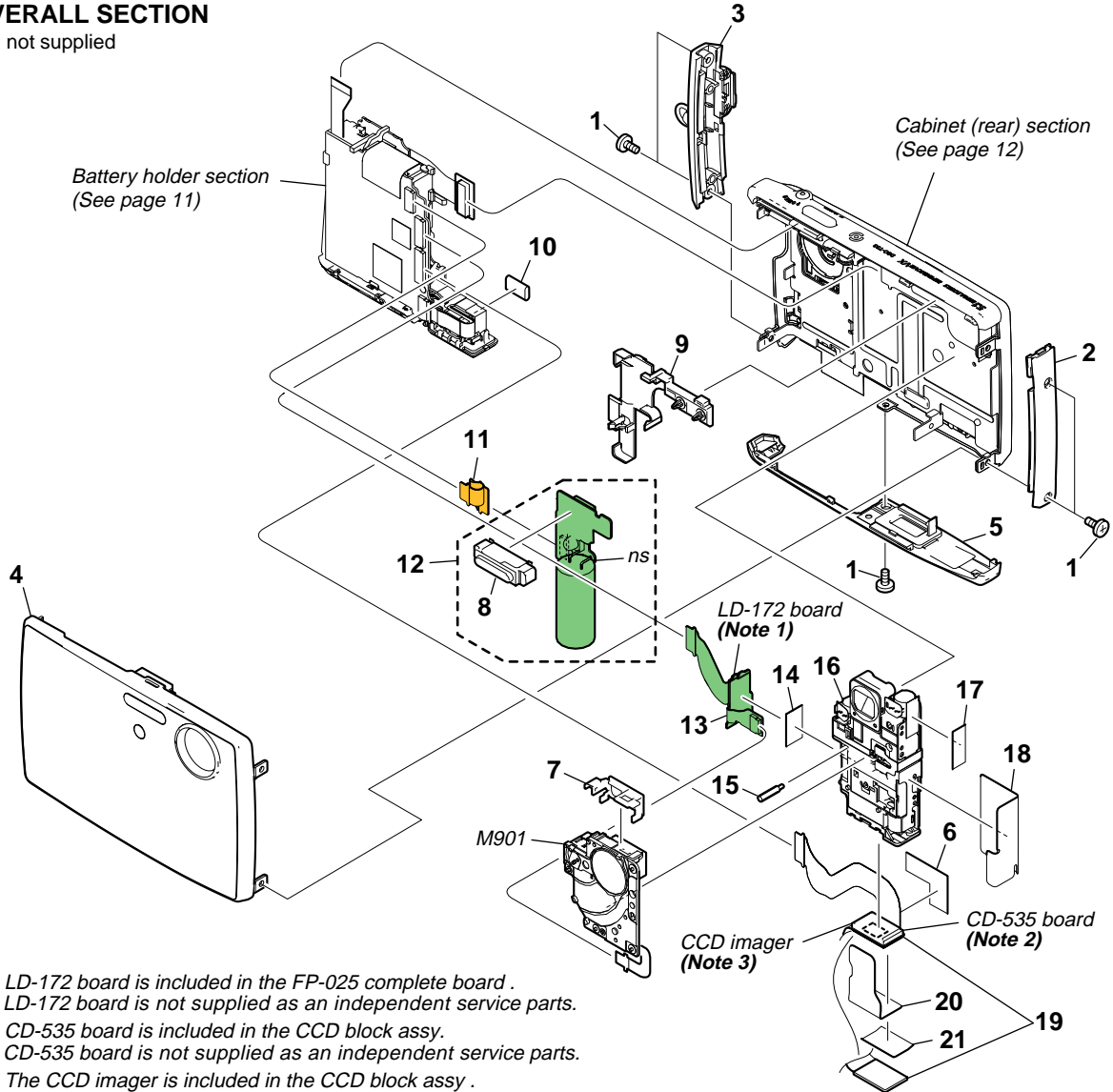


5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION

ns : not supplied



Note 1: LD-172 board is included in the FP-025 complete board .
LD-172 board is not supplied as an independent service parts.

Note 2: CD-535 board is included in the CCD block assy.
CD-535 board is not supplied as an independent service parts.

Note 3: The CCD imager is included in the CCD block assy .
The CCD imager is not supplied as a single unit since
removing it as a single unit requires adjustment.

Be sure to read "Precautions upon replacing CCD imager" on page 4-5 of Level 3 of DSC-T3 when changing the CCD imager.

Ref. No.	Part No.	Description
1	2-108-698-11	SCREW (M1.4)
2	2-560-322-01	CABINET (SIDE R) (760)
3	X-2048-558-1	CABINET (SIDE L) (760) ASSY
4	A-1092-523-A	SUB BLOCK ASSY, (FRONT CR)(GOLD)
4	A-1092-524-A	SUB BLOCK ASSY, (FRONT CR)(BLUE)
4	A-1098-364-A	SUB BLOCK ASSY, (FRONT CR)(BROWN)
4	A-1092-486-A	SUB BLOCK ASSY, (FRONT S)(WHITE)
5	2-582-859-01	BOTTOM (760), CABINET
6	2-587-869-01	SHEET (760), RADIATION
7	2-186-647-01	HOLDER, BARRIER
△ 8	1-478-972-11	FLASH UNIT
9	2-560-321-01	COVER (760), ST TERMINAL

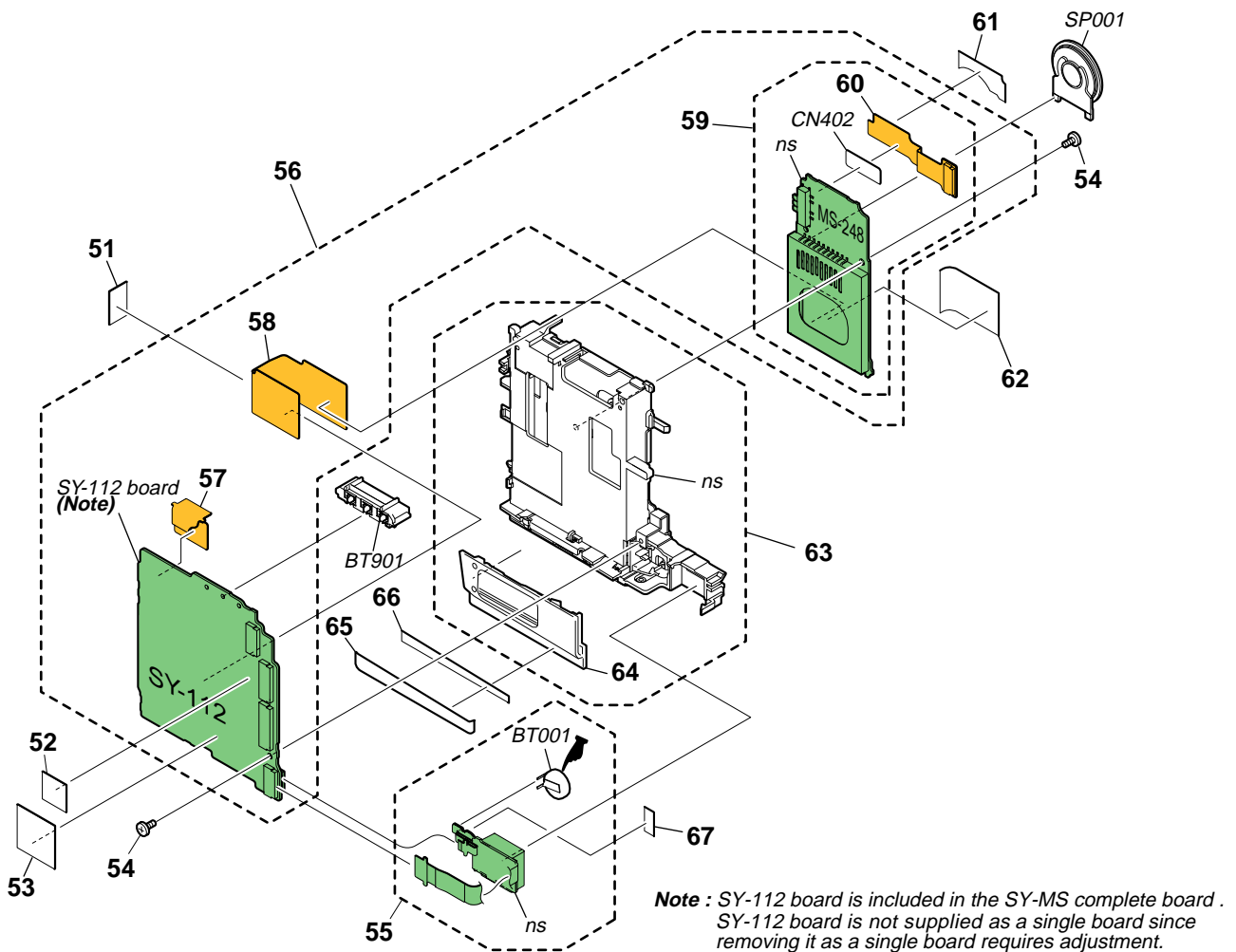
Ref. No.	Part No.	Description
10	3-087-670-01	GASKET (K)
11	1-862-981-11	FP-026 FLEXIBLE BOARD
12	A-1075-328-A	ST-113 BOARD, COMPLETE
13	A-1075-333-A	FP-025 BOARD, COMPLETE
14	3-086-237-01	SHEET (LD), ADHESIVE
15	2-186-646-01	SHAFT, LENS
16	A-1082-228-A	LENS ASSY (SERVICE USE)
17	3-089-781-01	SHEET (MOTOR), PROTECTION
18	2-186-593-01	SHEET, COPPER LEAF PROTECTION
19	A-1075-408-A	CCD BLOCK ASSY
20	3-086-236-01	SHEET (CCD), RADIATION
21	2-348-420-01	SHEET, CD INSULATING
M901	1-787-218-31	MOTOR UNIT (LENS BARRIER)


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

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

5-1-2. BATTERY HOLDER SECTION

ns : not supplied



 : BT001 (Lithium battery) CN-229 board on the mount position.
(See page 4-44 of level2 of DSC-T3)

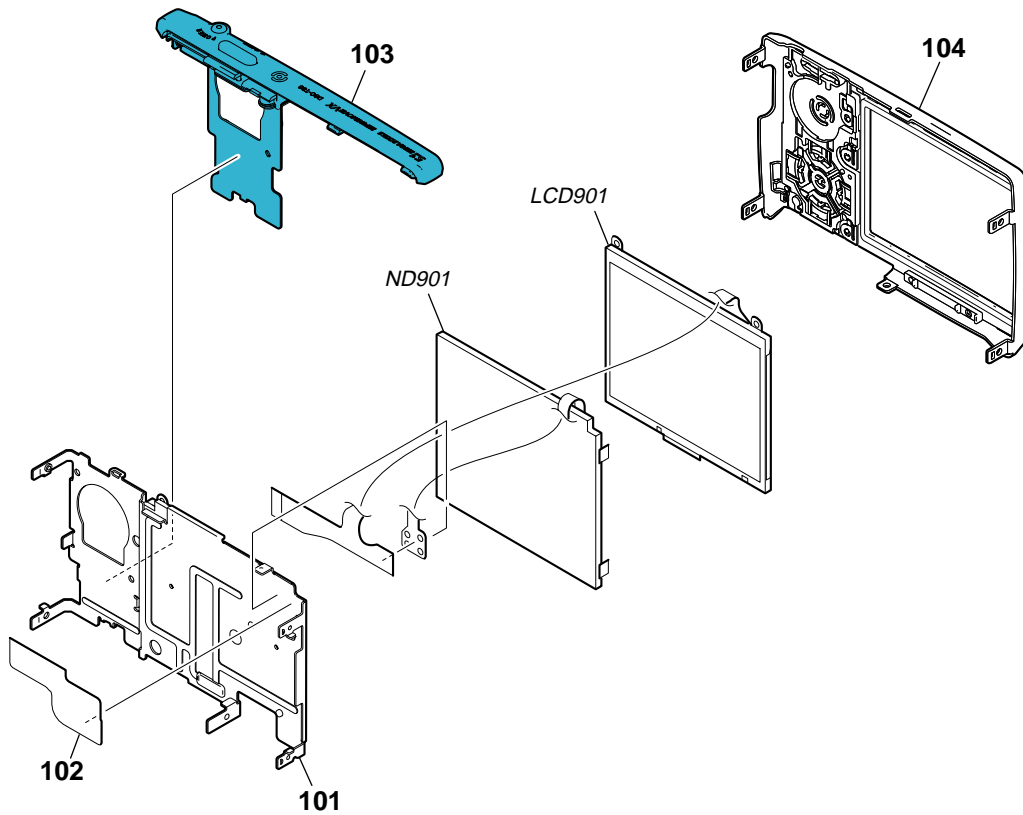
Ref. No.	Part No.	Description
51	2-589-335-01	SHEET (MK), RADIATION
52	3-089-985-01	SHEET
53	2-348-417-01	SHEET (MY), RADIATION
54	3-086-218-01	SCREW (M1.4), LOCK ASE, SPECIAL
55	A-1075-329-A	CN-229 BOARD, COMPLETE
56	A-1099-024-A	SY-MS BOARD, COMPLETE (SERVICE) (J)
56	A-1099-025-A	SY-MS BOARD, COMPLETE (SERVICE) (EXCEPT J)
57	1-860-517-13	FP-693 FLEXIBLE BOARD
58	1-862-984-11	FP-029 FLEXIBLE BOARD
59	A-1075-331-A	MS-248 BOARD, COMPLETE
60	1-862-982-11	FP-027 FLEXIBLE BOARD
61	2-186-609-01	MS PRTECTION SHEET (S)
62	2-588-056-01	SHEET (L) (760), MS PROTECTION

Ref. No.	Part No.	Description
63	X-2048-556-1	HOLDER (760) ASSY, BT
64	2-560-326-01	LID (760), BT
65	2-560-323-01	COVER (760), BT LID (GOLD)
65	2-560-323-11	COVER (760), BT LID (BLUE)
65	2-560-323-21	COVER (760), BT LID (WHITE)
65	2-560-323-31	COVER (760), BT LID (BROWN)
66	2-560-327-01	SHEET (BT) (760), ADHESIVE
67	2-548-224-01	SHEET (CN), INSULATING
△ BT001	1-528-999-51	BATTERY, LITHIUM SECONDARY
BT901	1-780-061-11	BATTERY TERMINAL BOARD
CN402	1-817-828-11	CONNECTOR, FPC (ZIF) 25P
SP001	1-825-983-11	LOUDSPEAKER (1.62CM)

Note :
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Note :
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5-1-3. CABINET (REAR) SECTION

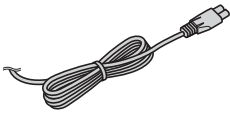


Ref. No.	Part No.	Description
101	2-560-340-01	FRAME (760), LCD
102	3-086-279-01	TAPE (LCD)
103	1-479-196-11	SWITCH BLOCK, CONTROL (SW51760)
104	A-1092-526-A	SUB BLOCK ASSY, (REAR CR)(GOLD)
104	A-1092-527-A	SUB BLOCK ASSY, (REAR CR)(BLUE)

Ref. No.	Part No.	Description
104	A-1098-365-A	SUB BLOCK ASSY, (REAR CR)(BROWN)
104	A-1092-495-A	SUB BLOCK ASSY, (REAR S) (WHITE)
LCD901	8-753-220-18	ACX535AK-J
ND901	1-478-882-11	BLOCK, LIGHT GUIDE PLATE (2.5)

Checking supplied accessories.

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



Power cord (Main lead) (1)
(AEP model)

▲ 1-823-946-12

Power cord (Main lead) (1)
(E model)

▲ 1-769-608-12

Power cord (Main lead) (1)
(KR model)

▲ 1-823-947-12

Power cord (Main lead) (1)
(UK, HK model)

▲ 1-783-374-12

Power cord (Main lead) (1)
(US, CND model)

▲ 1-790-107-22

Power cord (Main lead) (1)
(CH, JE model)

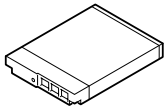
▲ 1-790-732-12

Power cord (Main lead) (1)
(J model)

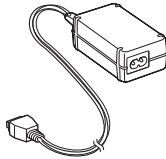
▲ 1-791-637-13

Power cord (Main lead) (1)
(AUS model)

▲ 1-827-945-12

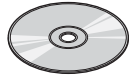


NP-FT1 battery pack (1)
(not supplied)



AC-LM5/LM5A AC Adaptor (1)

▲ 1-477-730-61

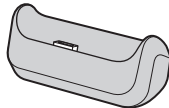


CD-ROM
(USB Driver SPVD-012.1 (CL)) (1)
(US, CND, J model)

2-187-477-01

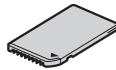
CD-ROM
(USB Driver SPVD-012.1 (C)) (1)
(EXCEPT: US, CND, J model)

2-187-478-01

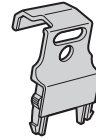


Cyber-shot station (UC-TD) (1)

1-819-096-11

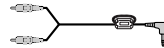


"Memory Stick Duo" (32MB) (1)
(not supplied)



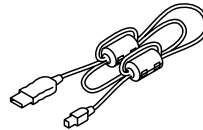
Tripod camera holder (1)

2-560-367-01



A/V connecting cable (1)

1-824-111-11



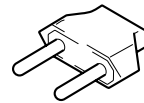
USB cable (1)

1-827-754-11



Wrist strap (1)

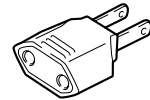
2-050-981-01



2-pin conversion adaptor (1)

(JE model)

1-569-007-12



2-pin conversion adaptor (1)

(E model)

1-569-008-12

• Abbreviation

- CND : Canadian model
- AUS : Australian model
- CH : Chinese model
- HK : Hong Kong model
- KR : Korea model
- JE : Tourist model
- J : Japanese model

Other accessories

- 2-548-269-01 MANUAL, INSTRUCTION (JAPANESE)(J)
- 2-548-269-11 MANUAL, INSTRUCTION
(ENGLISH)(US, CND, AEP, E, JE, UK, AUS, HK)
- 2-548-269-21 MANUAL, INSTRUCTION (FRENCH/ITALIAN)(CND, AEP)
- 2-548-269-31 MANUAL, INSTRUCTION
(SPANISH/PORTUGUESE)(AEP, E, JE)
- 2-548-269-41 MANUAL, INSTRUCTION (GERMAN/DUTCH)(AEP)

- 2-548-269-51 MANUAL, INSTRUCTION
(CHINESE(SIMPLIFIED/TRADITIONAL))(E, HK, JE)
- 2-548-269-61 MANUAL, INSTRUCTION (RUSSIAN/SWEDISH)(AEP)
- 2-548-269-71 MANUAL, INSTRUCTION (ARABIC/PERSIAN)(E)
- 2-548-269-81 MANUAL, INSTRUCTION (KOREAN)(JE, KR)
- 2-548-269-91 MANUAL, INSTRUCTION (POLISH/CZECH)(AEP)
- 2-548-272-11 MANUAL, INSTRUCTION (HUNGARIAN/SLOVAK)(AEP)
- 2-548-274-01 MANUAL, INSTRUCTION (JAPANESE)(J)

Note :

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Note :

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Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2004.11	Official Release	—	—