

DCR-PC103E/PC104E/ PC105/PC105E RMT-830/RMT-831

SERVICE MANUAL

LEVEL 2

Ver 1.0 2003.04

Revision History



Photo : DCR-PC103E

US Model
Canadian Model
Korea Model
DCR-PC105
AEP Model
UK Model
East European Model
DCR-PC103E/PC105E
E Model
Hong Kong Model
DCR-PC104E/PC105/PC105E
Chinese Model
DCR-PC104E/PC105E
Australian Model
DCR-PC105E
Tourist Model
DCR-PC105/PC105E

Z MECHANISM

Link

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

- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987625841.pdf).
- Reference No. search on printed wiring boards is available.

On the VC-319 board

This service manual provides the information that is premised the circuit board replacement service and not intended repair inside the VC-319 board.

Therefore, schematic diagram, printed wiring board, waveforms, mounted parts location and electrical parts list of the VC-319 board are not shown.

The following pages are not shown.

Schematic diagram	Pages 4-25 to 4-60	Mounted parts location	Page 4-89 to 4-90
Printed wiring board	Pages 4-77 to 4-80	Electrical parts list	Pages 5-15 to 5-23
Waveforms	Pages 4-85 to 4-86		

Mini DV Digital Video Cassette

DIGITAL VIDEO CAMERA RECORDER

SONY®



Digital Handycam



SPECIFICATIONS

Video camera recorder

System

Video recording system
2 rotary heads
Helical scanning system
Mini DV Format (SD Specification of Consumer-Use Digital VCR)

Audio recording system
Rotary heads, PCM system
Quantization: 12 bits (Fs 32 kHz, stereo 1, stereo 2), 16 bits (Fs 48 kHz, stereo)

Video signal
NTSC colour, EIA standards (DCR-PC105 only)
PAL colour, CCIR standards (DCR-PC103E/PC104E/PC105E only)

Usable cassette
Mini DV cassette with the ^{Mini} DV mark printed

Tape speed
SP: Approx. 18.81 mm/s
LP: Approx. 12.56 mm/s

Recording/playback time (using cassette DVM60)
SP: 1 hour
LP: 1.5 hours

Fastforward/rewind time (using cassette DVM60)
Approx. 2 min. and 40 seconds

Viewfinder
Electric viewfinder (Colour)

Image device
3.8 mm (1/4.7 type)
CCD (Charge Coupled Device)
Gross: Approx. 1 070 000 pixels
Effective (still)
(DCR-PC105/PC105E only):
Approx. 1 000 000 pixels
Effective (moving):
Approx. 690 000 pixels

Lens
Carl Zeiss
Combined power zoom lens
Filter diameter: 30 mm (1 3/16 in.)
10× (Optical), 120× (Digital)
F = 1.8 - 2.0

Focal length
3.7 - 37 mm (5/32 - 1 1/2 in.)
When converted to a 35 mm still camera
In CAMERA mode:
50 - 500 mm (2 - 19 3/4 in.)
In MEMORY mode
(DCR-PC105/PC105E only):
42 - 420 mm (1 11/16 - 16 5/8 in.)

Colour temperature
Auto, HOLD, INDOOR (3 200 K),
OUTDOOR (5 800 K)

Minimum illumination
7 lx (lux) (F 1.8)
0 lx (lux) (in the NightShot mode)*
* Objects unable to be seen due to the dark can be shot with infrared lighting.

Input/Output connectors

Audio/Video input (DCR-PC104E/PC105E only) /output
10-pin connector
Input/output auto switch (DCR-PC104E/PC105/PC105E only)
Video signal: 1 Vp-p, 75 Ω, unbalanced
Luminance signal: 1 Vp-p, 75 Ω, unbalanced
Chrominance signal:
0.286 Vp-p, 75 Ω (DCR-PC105 only)
0.3 Vp-p, 75 Ω
(DCR-PC103E/PC104E/PC105E only)
unbalanced
Audio signal: 327 mV, (at output impedance more than 47 kΩ)
Input impedance with more than 47 kΩ
(DCR-PC104E/PC105/PC105E only)
Output impedance with less than 2.2 kΩ

DV input (DCR-PC104E/PC105E only)/output
4-pin connector
DV jack (DCR-PC105 only)
4-pin connector
Headphone jack
Stereo minijack (ø 3.5 mm)
LANC jack
Stereo mini-minijack (ø 2.5 mm)

USB jack
mini-B

MIC jack
Minijack, 0.388 mV low impedance with 2.5 to 3.0 V DC, output impedance 6.8 kΩ (ø 3.5 mm)
Stereo type

LCD screen

Picture
6.2 cm (2.5 type)
Total dot number
211 200 (960 × 220)

General

Power requirements
7.2 V (battery pack)
8.4 V (AC Adaptor)

Average power consumption (when using the battery pack)
During camera recording using LCD
3.7 W
(DCR-PC103E/PC104E/PC105E only)
3.8 W (DCR-PC105 only)

Viewfinder
3.1 W
(DCR-PC103E/PC104E/PC105E only)
3.2 W (DCR-PC105 only)

Operating temperature
0°C to 40°C (32°F to 104°F)

Storage temperature
-20°C to + 60°C
(-4°F to + 140°F)

Dimensions (approx.)
51 × 104 × 97 mm
(2 × 4 1/8 × 3 7/8 in.) (w/h/d)
Mass (approx.)
DCR-PC105/PC105E:
460 g (1 lb)
DCR-PC103E/PC104E:
440 g (1 lb)
main unit only
DCR-PC105/PC105E:
550 g (1 lb 4 oz)
DCR-PC103E/PC104E:
530 g (1 lb 3 oz)
including the rechargeable battery pack NP-FM30 (not for sale), cassette DVM60

Supplied accessories
See page 3.

AC Adaptor AC-L15A/L15B

Power requirements
100 - 240 V AC, 50/60 Hz

Current consumption
0.35 - 0.18 A

Power consumption
18 W

Output voltage
DC OUT: 8.4 V, 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 (approx.)
56 × 31 × 100 mm
(2 1/4 × 1 1/4 × 4 in.) (w/h/d)
excluding projecting parts

Mass (approx.)
190 g (6.7 oz)
excluding mains lead

Rechargeable battery pack NP-FM30

Maximum output voltage
DC 8.4 V

Output voltage
DC 7.2 V

Capacity
5.0 Wh (700 mAh)

Dimensions (approx.)
38.2 × 20.5 × 55.6 mm
(1 9/16 × 13/16 × 2 1/4 in.) (w/h/d)

Mass (approx.)
65 g (2.3 oz)

Operating temperature
0°C to 40°C (32°F to 104°F)

Type
Lithium ion

"Memory Stick" (DCR-PC105/PC105E only)

Memory
Flash memory
8MB: MSA-8A

Operating voltage
2.7 - 3.6 V

Power consumption
Approx. 45 mA during operation mode
Approx. 130 µA during tape recording standby

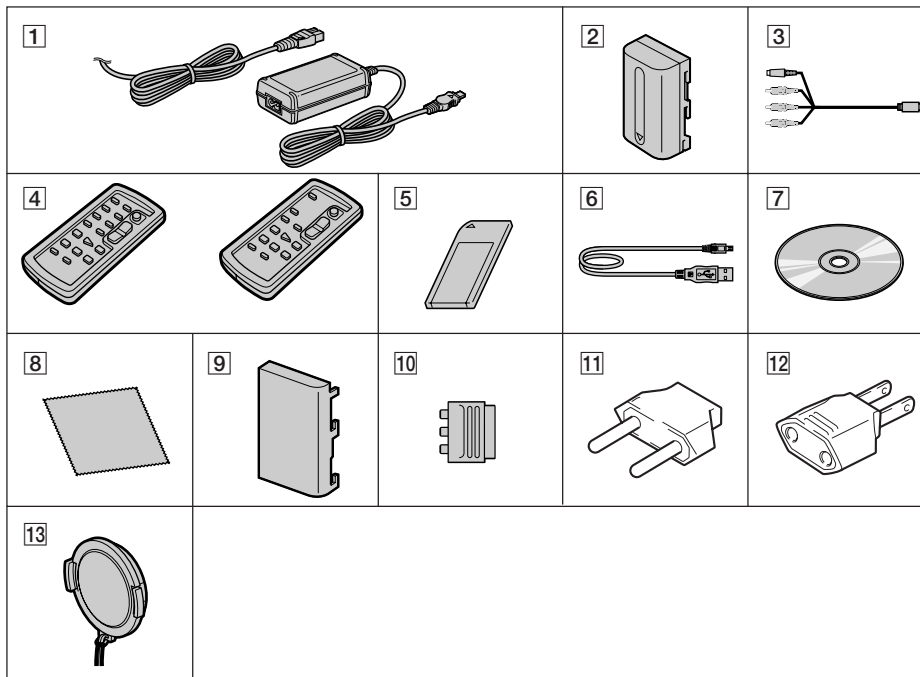
Dimensions (approx.)
50 × 2.8 × 21.5 mm
(2 × 1/8 × 7/8 in.) (w/h/d)

Mass (approx.)
4 g (0.14 oz)

Design and specifications are subject to change without notice.

• **SUPPLIED ACCESSORIES**

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



- 1 AC-L15A/L15B AC Adaptor (1), Mains lead (1)
- 2 NP-FM30 rechargeable battery pack (BLUE) (1)
- 3 A/V connecting cable (1) (AV multi)(1.5m)
- 4 Wireless Remote Commander (1)
(A button type lithium battery is built in.)
RMT-831: DCR-PC105/PC105E
RMT-830: DCR-PC103E/PC104E
- 5 "Memory Stick" (MSA-8A) (1) (DCR-PC105/PC105E only)
- 6 USB cable (1)
- 7 CD-ROM (SPVD-010 USB Driver) (1)
- 8 Cleaning cloth (1)
- 9 Battery terminal cover (1)
- 10 21-pin adaptor (1) (Models with **CE** mark printed on their bottom surfaces only)
(PC103E/PC105E: AEP, UK, EE only)
- 11 2-pin Conversion adaptor (1)
(PC105: JE/PC105E: JE only)
- 12 2-pin Conversion adaptor (1)
(PC104E: E, HK/PC105: E, HK/PC105E: E)
- 13 Lens cap (1)

Table for difference of functions

DCR-	PC103E	PC104E	PC105	PC105E	Remarks
Destination	AEP, UK, EE	E, HK, CH	US, CND, E, HK, JE, KR	AEP, UK, EE, E, HK, AUS, CH, JE	
Color system	PAL	PAL	NTSC	PAL	NTSC: X1501 is 66MHz. PAL: X1501 is 54MHz.
Remote commander	RMT-830	RMT-830	RMT-831	RMT-831	
VTR REC	×	○	○	○	
DV input	×	○	○	○	
MEMORY STICK (Digital still)	×	×	○	○	○ : With Memory stick connector
Flash	×	×	○	○	○ : With Flash unit (FL4400) With D001, S005 of PS4400 block With ST-084 board

- Abbreviation
- EE : East European model
- HK : Hong Kong model
- CH : Chinese model
- CND : Canadian model
- JE : Tourist model
- KR : Korea model
- AUS : Australian model

SAFETY-RELATED COMPONENT WARNING!!

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

**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 PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

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

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
 - Keep the temperature of the soldering iron around 270°C during repairing.
 - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
 - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead. (Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)



: LEAD FREE MARK

Unleaded solder has the following characteristics.

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

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Schematic diagram of the VC-319 board are not shown.
Pages from 4-25 to 4-60 are not shown.

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Printed wiring board of the VC-319 board are not shown.
Pages from 4-77 to 4-80 are not shown.

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4-4. WAVEFORMS

Waveforms of the VC-319 board are not shown.
Pages 4-85 to 4-86 are not shown.

4-5. MOUNTED PARTS LOCATION

Mounted parts location of the VC-319 board is not shown.
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Parts list of the VC-319 board are not shown.
Pages from 5-15 to 5-23 are not shown.



SECTION 1 SERVICE NOTE

1-1. SERVICE NOTE

1. POWER SUPPLY DURING REPAIRS

In this unit, about 10 seconds after power is supplied to the battery terminal using the regulated power supply (8.4V), the power is shut off so that the unit cannot operate.

The following two methods are available to prevent this. Take note of which to use during repairs.

Method 1.

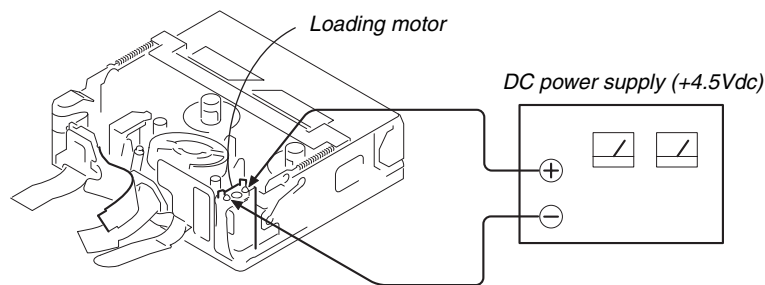
Use the AC power adaptor (AC-L10, AC-VQ800 etc.).

Method 2.

Connect the servicing remote commander RM-95 (J-6082-053-B) to the LANC jack, and set the commander switch to the "ADJ" side.

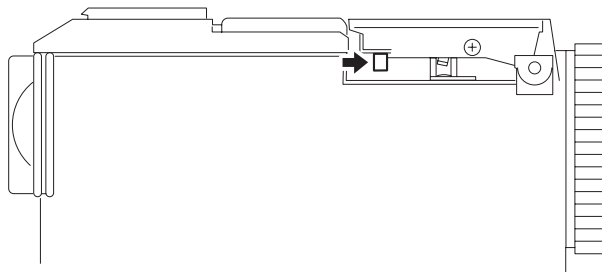
2. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

- ① Only for DCR-PC105/PC105E, open the flash.
- ② Only for DCR-PC105/PC105E, refer to "3. DISCHARGING OF THE FLASHLIGHT POWER SUPPLY CAPACITOR" to discharge the flash power supply capacitor.
- ③ Refer to 2-2., 2-3. and 2-4. to remove the cabinet (front) assembly, cabinet (G) assembly and cabinet (L).
- ④ Refer to 2-6. to remove the cabinet (R) section.
- ⑤ Refer to 2-13. and 2-14. to remove the cabinet (rear), control switch block (PS4400).
- ⑥ Refer to 2-15., 2-16. and 2-17. to remove the ST-084 board and LENS/EVF/ST section.
- ⑦ Refer to 2-28., 2-29. to remove the VC-319 board and mechanism deck (Z100).
- ⑧ Supply +4.5V from the DC power supply to the loading motor and unload with a pressing the cassette compartment.



3. HOW TO OPEN THE FLASH WHEN THE FLASH DOESN'T OPEN (DCR-PC105/PC105E)

- ① Refer to 2-3. and 2-4. to remove cabinet (G) assembly and cabinet (L).
- ② Push the part pointed out with the arrow in the direction of the arrow.



4. DISCHARGING OF THE FLASHLIGHT POWER SUPPLY CAPACITOR (DCR-PC105/PC105E)

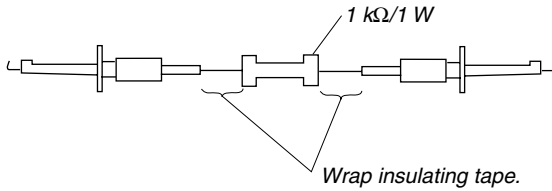
The power supply capacitor (C6606) of the ST-084 board is charged up to the maximum 300V potential.

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.

4-1. PREPARING THE SHORT JIG

To preparing the short jig, a small clip is attached to each end of a resistor of 1kΩ/1W (1-215-869-119)

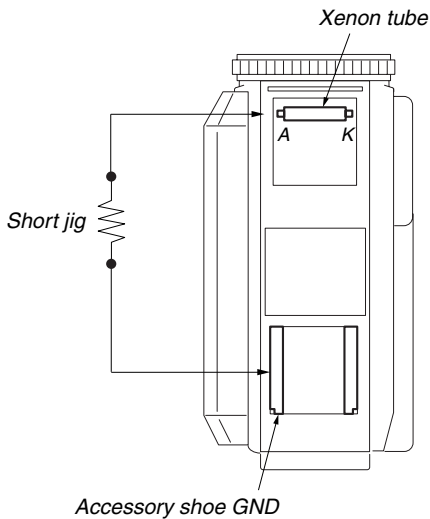
Wrap insulating tape fully around the reads of the resistor to prevent electric shock.



4-2. DISCHARGING THE CAPACITOR (DCR-PC105/PC105E)

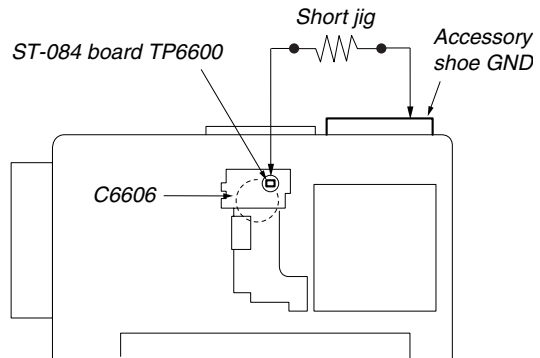
Discharging method (1):

- ① Open the flash.
- ② Remove the power supply (Battery or AC power adaptor).
- ③ Remove the ST cabinet (Upper).
- ④ Short-circuit between the Xenon tube anode and the GND (GND of the accessory shoe) with the short jig about 10 seconds.



Discharging method (2):

- ① Remove the power supply (Battery or AC power adaptor).
- ② Refer to 2-2. to remove the cabinet (front) section.
- ③ Refer to 2-6. to release the cassette cover lock and remove the cabinet (R) section.
- ④ Short-circuit between the TP6600 of the ST-084 board and the GND (GND of the accessory shoe) with the short jig about 10 seconds.



1-2. SELF-DIAGNOSIS FUNCTION

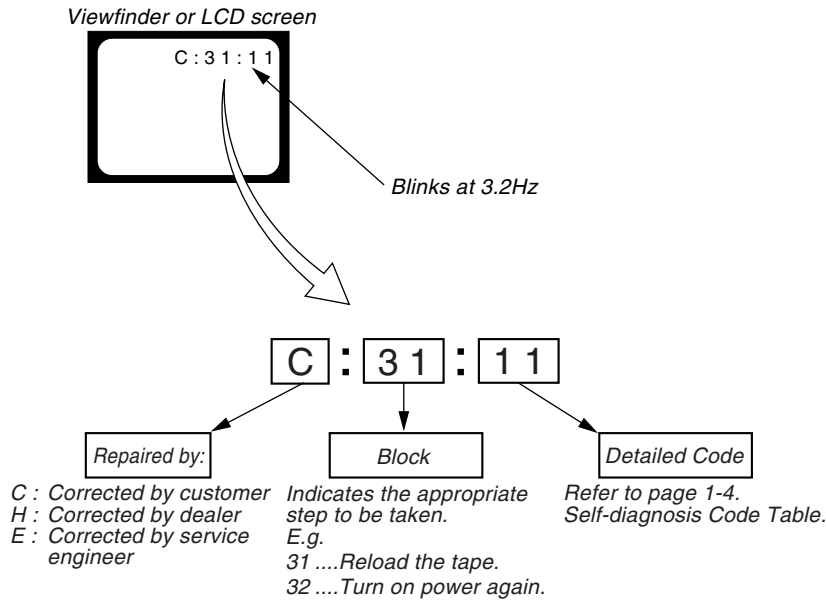
1. SELF-DIAGNOSIS FUNCTION

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder, or LCD screen what to do.

Details of the self-diagnosis functions are provided in the Instruction manual.

2. SELF-DIAGNOSIS DISPLAY

When problems occur while the unit is operating, the counter of the viewfinder or LCD screen consists of an alphabet and 4-digit number, which blinks at 3.2Hz. This 5-character display indicates the “repaired by:”, “block” in which the problem occurred, and “detailed code” of the problem.



Note: The “self-diagnosis display” data will be kept even if the lithium battery (BT6401 of LI-070 board) is removed.

3. SELF-DIAGNOSIS CODE TABLE

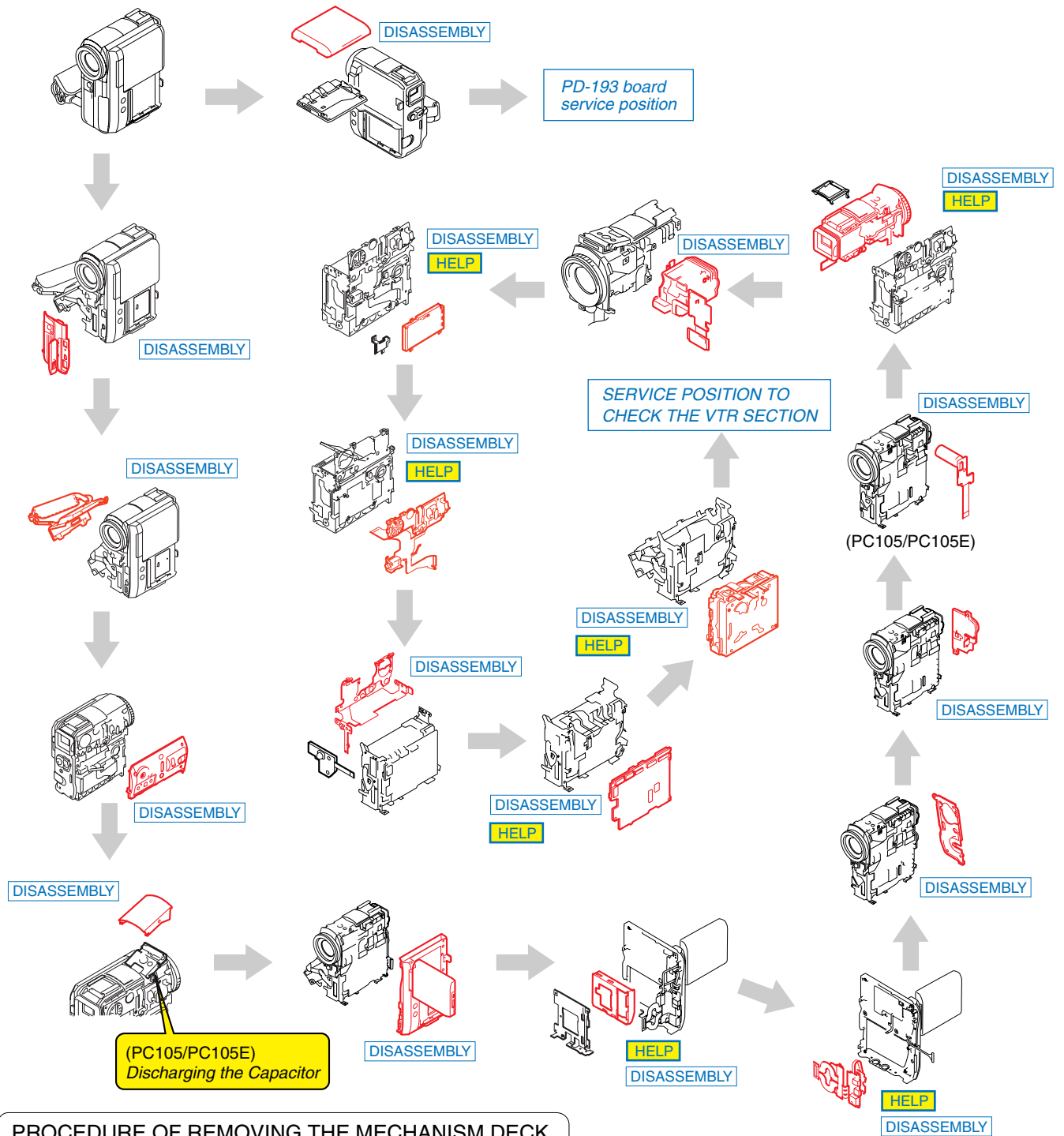
Self-diagnosis Code				Symptom/State	Correction
Repaired by:	Block Function	Detailed Code			
C	0 4	0 0		Non-standard battery is used.	Use the info LITHIUM battery.
C	2 1	0 0		Condensation.	Remove the cassette, and insert it again after one hour.
C	2 2	0 0		Video head is dirty.	Clean with the optional cleaning cassette.
C	3 1	1 0		LOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3 1	1 1		UNLOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3 1	2 0		T reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3 1	2 1		Winding S reel fault when counting the rest of tape.	Load the tape again, and perform operations from the beginning.
C	3 1	2 2		T reel fault.	Load the tape again, and perform operations from the beginning.
C	3 1	2 3		S reel fault.	Load the tape again, and perform operations from the beginning.
C	3 1	2 4		T reel fault.	Load the tape again, and perform operations from the beginning.
C	3 1	3 0		FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3 1	4 0		FG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3 1	4 2		FG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3 1	1 0		LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 1	1 1		UNLOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 0		T reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 1		Winding S reel fault when counting the rest of tape.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 2		T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 3		S reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	2 4		T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	3 0		FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 0		FG fault when starting drum	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 2		FG fault during normal drum operations	Remove the battery or power cable, connect, and perform operations from the beginning.
E	6 1	0 0		Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus MR sensor (Pin ⑱, ⑳ of CN1013 of VC-319 board) when focusing is performed when the focus ring is operated in the focus manual mode, and the focus motor drive circuit (IC1301 of VC-313 board) when the focusing is not performed.
E	6 1	1 0		Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom MR sensor (Pin ⑧, ⑩ of CN1013 of VC-319 board) when zooming is performed when the zoom switch is operated and the zoom motor drive circuit (IC1301 of VC-319 board) when zooming is not performed.
E	6 2	0 0		Steadyshot function does not work well. (With pitch angular velocity sensor output stopped.)	Inspect pitch angular velocity sensor (SE5202 of CD-444 board) peripheral circuits.
E	6 2	0 1		Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE5201 of CD-444 board) peripheral circuits.
E	9 1	0 1		Abnormality when the power supply capacitor of the flash unit is being charged.	Checking or replacement of the flash unit.



**SECTION 2
DISASSEMBLY**



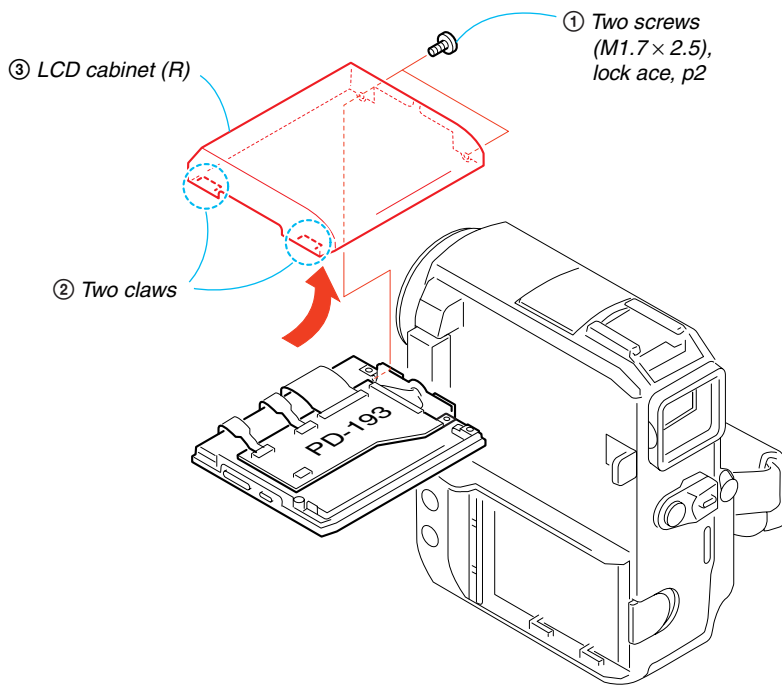
The following flow chart shows the disassembly procedure.



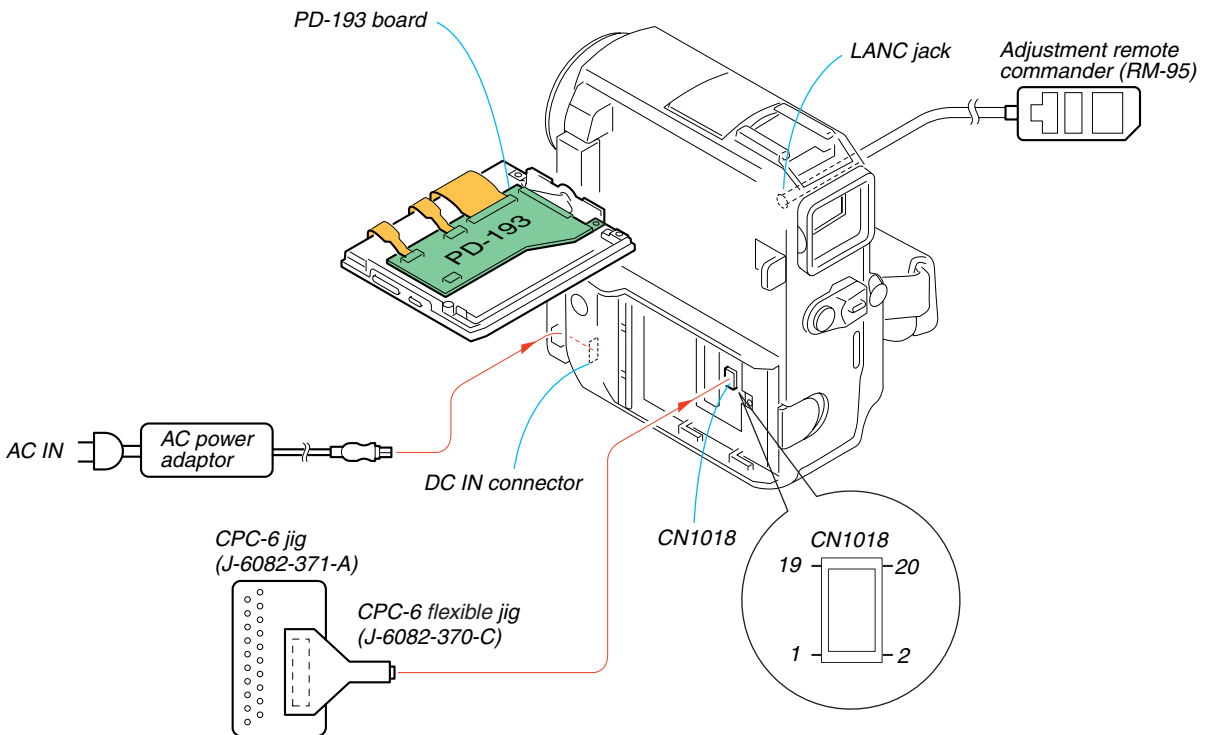
**PROCEDURE OF REMOVING THE MECHANISM DECK.
(VTR CHECK SERVICE POSITION)**

- | | |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------|
| ① 2-2. CABINET (FRONT) ASSEMBLY (page 2-3) | ⑫ 2-17. LENS/EVF/ST SECTION-2..... (page 2-13) |
| ② 2-3. CABINET (G) ASSEMBLY..... (page 2-3) | ⑬ 2-18. EVF SECTION..... (page 2-14) |
| ③ 2-4. CABINET (L)..... (page 2-4) | ⑭ 2-25. HR RETAINER ASSEMBLY,
MEMORY STICK CONNECTOR
(PC105/PC105E)..... (page 2-20) |
| ④ 2-5. ST CABINET (UPPER) ASSEMBLY..... (page 2-4) | ⑮ 2-26. CONTROL SWITCH BLOCK (FK4400)..... (page 2-21) |
| ⑤ 2-6. CABINET (R) SECTION..... (page 2-5) | ⑯ 2-27. NS-018 BOARD, FK FRAME ASSEMBLY..... (page 2-22) |
| ⑥ 2-7. BATTERY HOLDER..... (page 2-6) | ⑰ 2-28. VC-319 BOARD..... (page 2-22) |
| ⑦ 2-8. BJ-004 BOARD..... (page 2-7) | ⑱ 2-29. MECHANISM DECK (Z100)..... (page 2-23) |
| ⑧ 2-13. CABINET (REAR)..... (page 2-11) | ⑲ SERVICE POSITION TO CHECK
THE VTR SECTION..... (page 2-24) |
| ⑨ 2-14. CONTROL SWITCH BLOCK (PS4400)..... (page 2-12) | |
| ⑩ 2-15. ST-084 BOARD (PC105/PC105E)..... (page 2-12) | |
| ⑪ 2-16. LENS/EVF/ST SECTION-1..... (page 2-13) | |

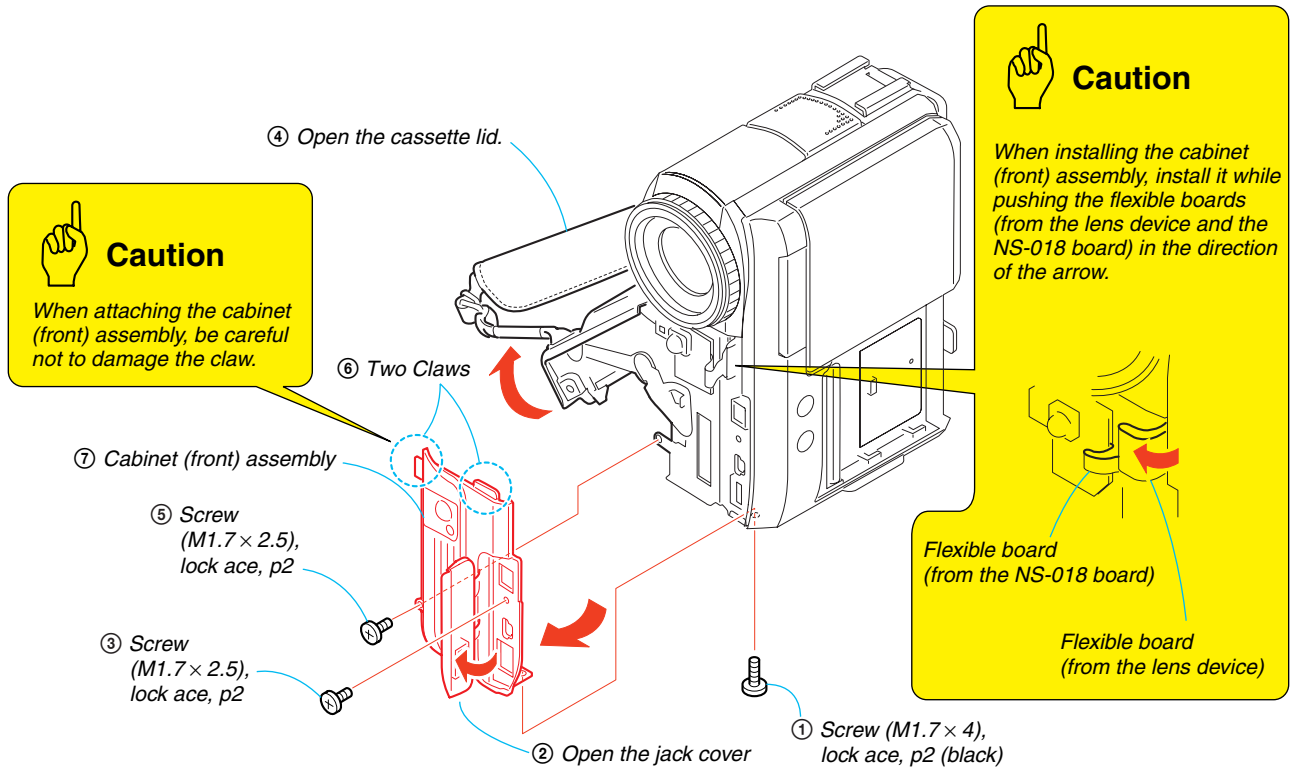
2-1. LCD CABINET (R)



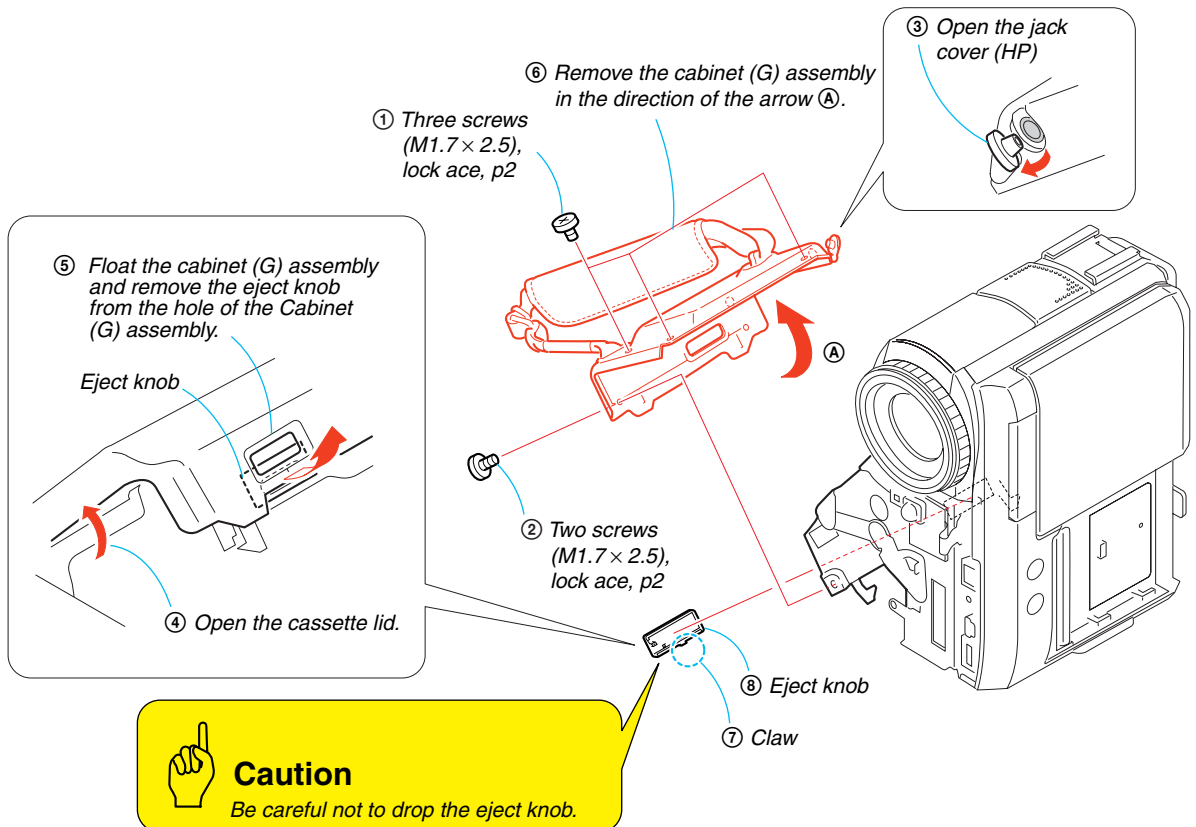
[PD-193 BOARD SERVICE POSITION]



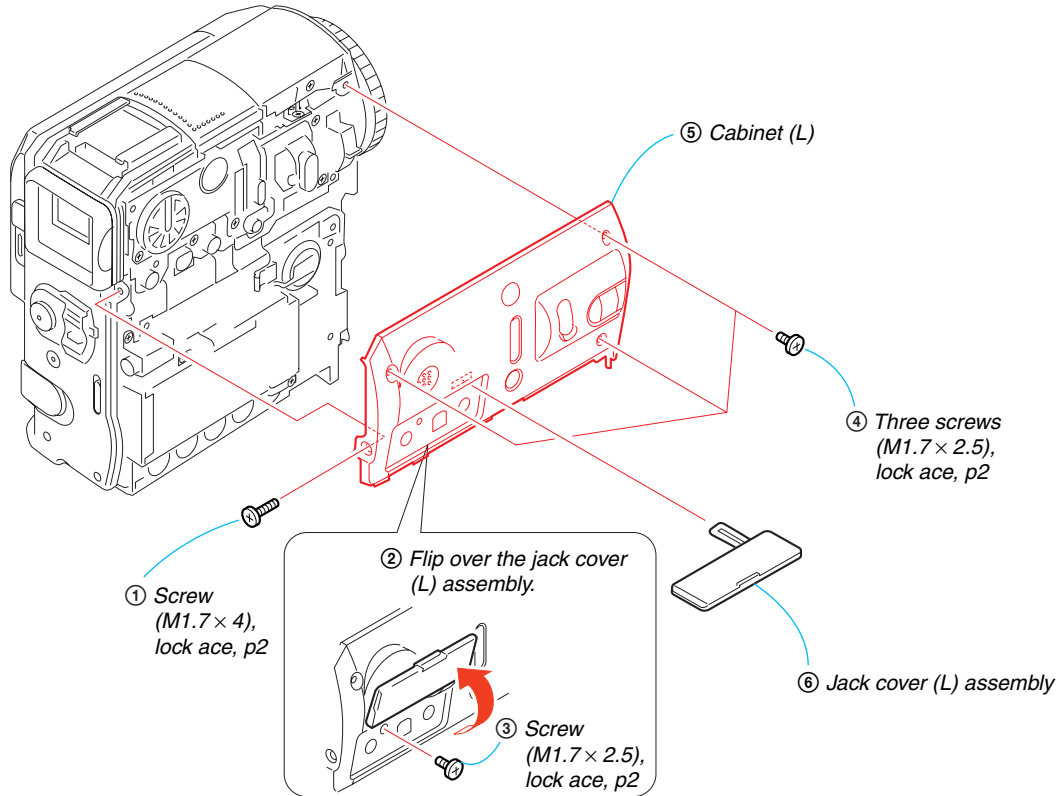
2-2. CABINET (FRONT) ASSEMBLY



2-3. CABINET (G) ASSEMBLY

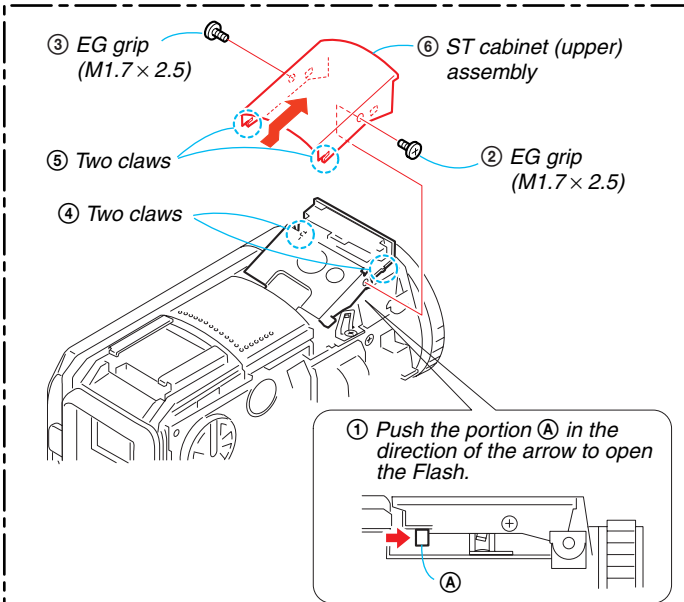


2-4. CABINET (L)

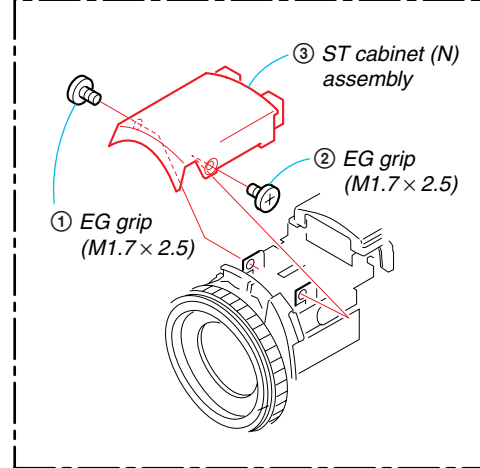


2-5. ST CABINET (UPPER) ASSEMBLY

(PC105/PC105E)

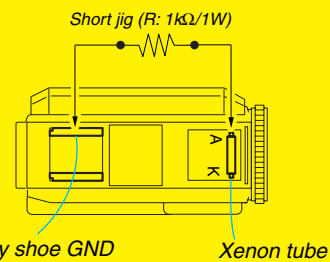


(PC103E/PC104E)

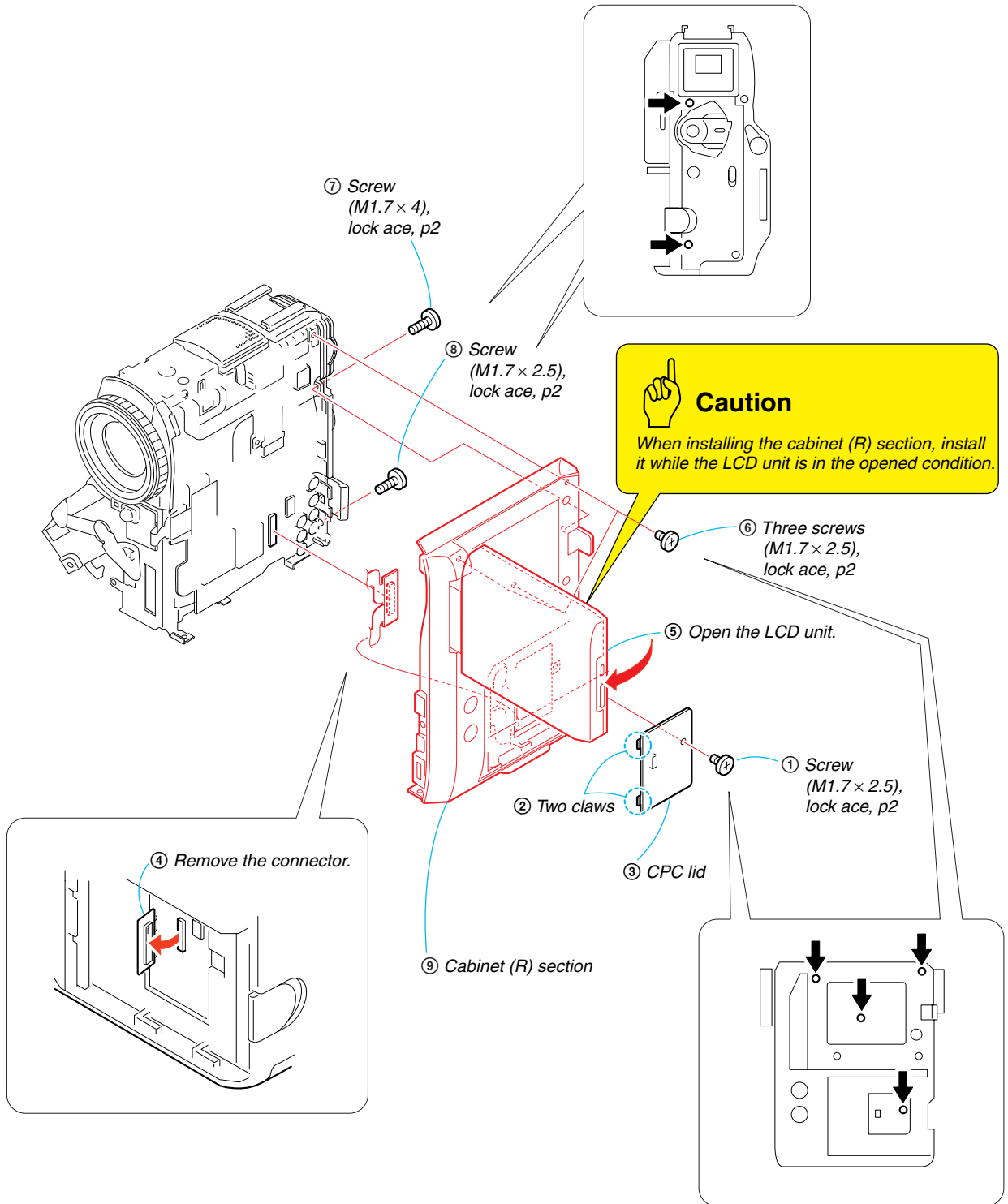


Caution

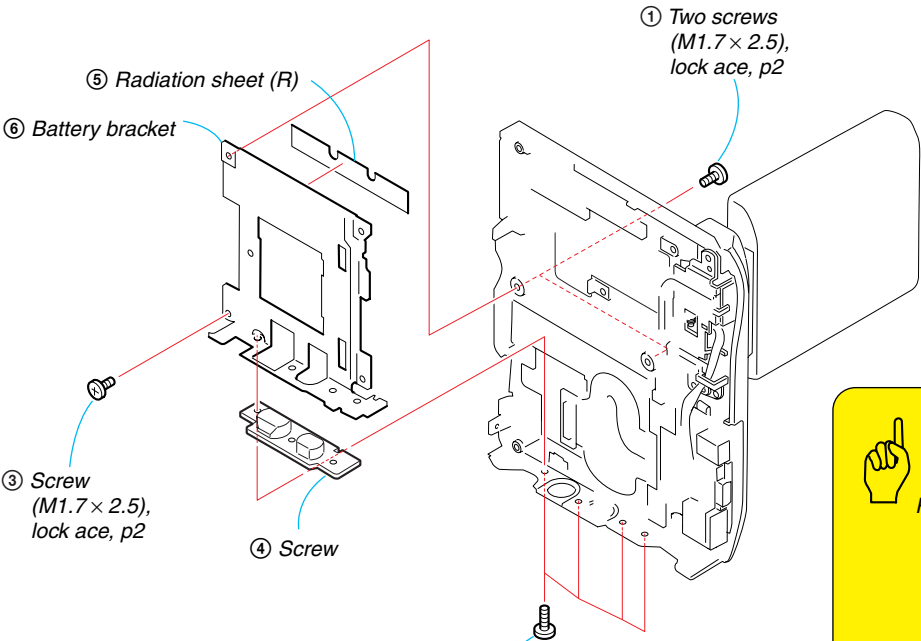
Note: The power supply capacitor of the flash unit is charged to the high tension voltage as high as 300 V at a maximum. You will get electrical shock when you touch the terminal of the charged capacitor. The charged potential remains even after the main power of the machine is turned off. Discharge the remaining power in the capacitor referring to Service Note (See page 1-2). High-voltage cautions. Short jig (R: 1kΩ/1W)



2-6. CABINET (R) SECTION

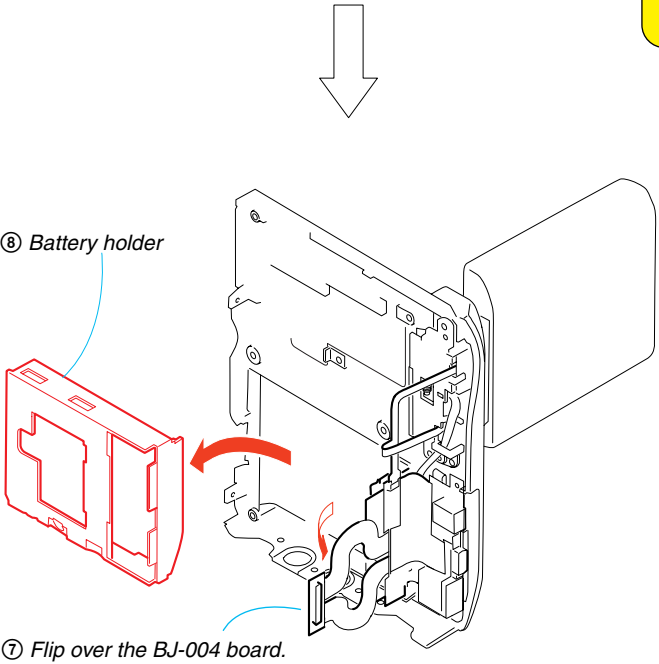


2-7. BATTERY HOLDER

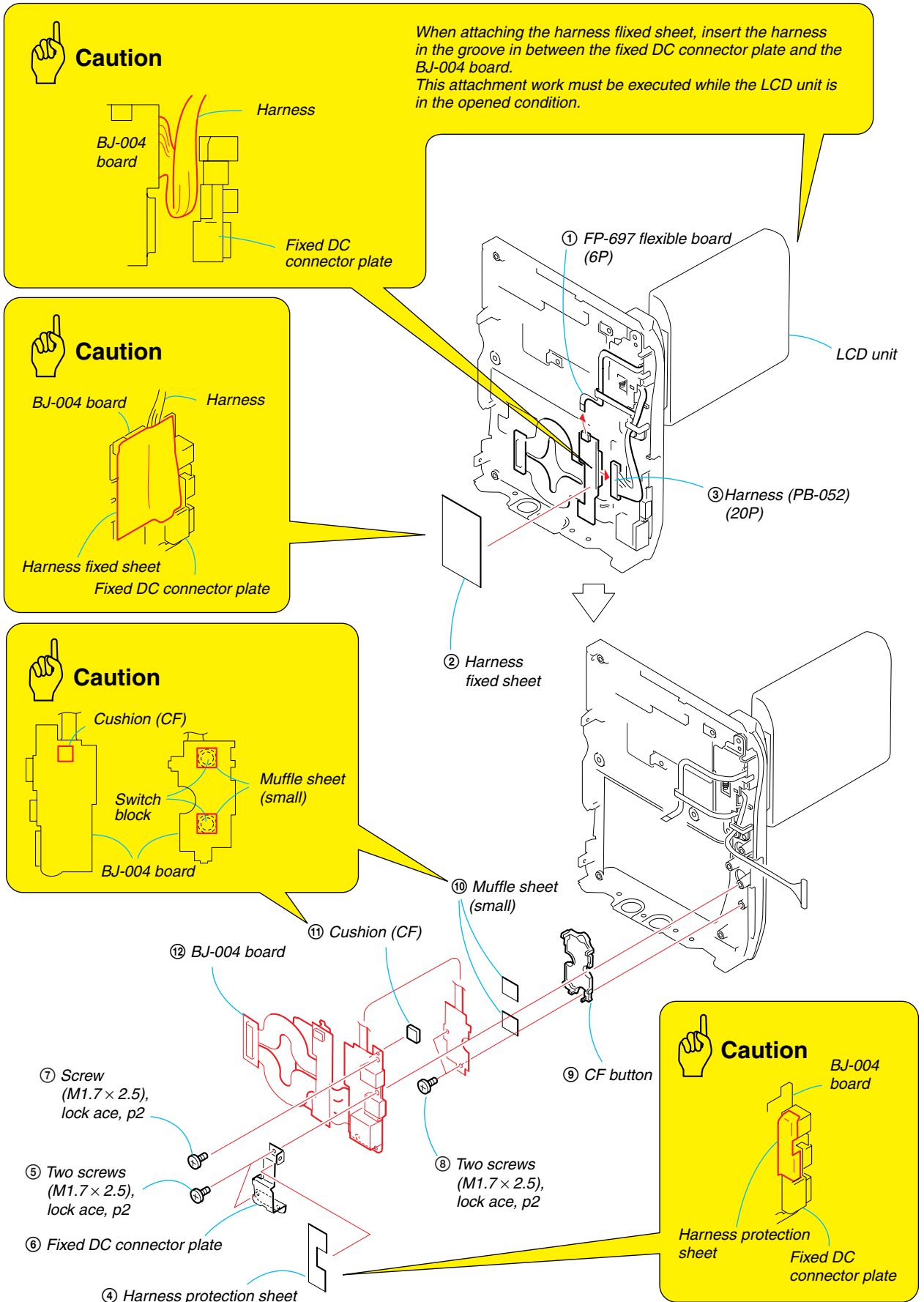


Caution
Radiation sheet (R)

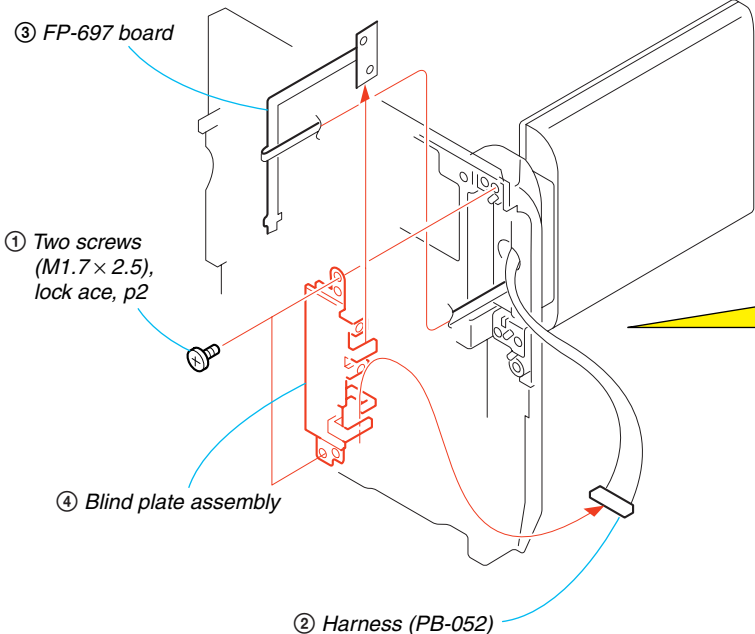
Battery bracket



2-8. BJ-004 BOARD



2-9. BLIND PLATE ASSEMBLY



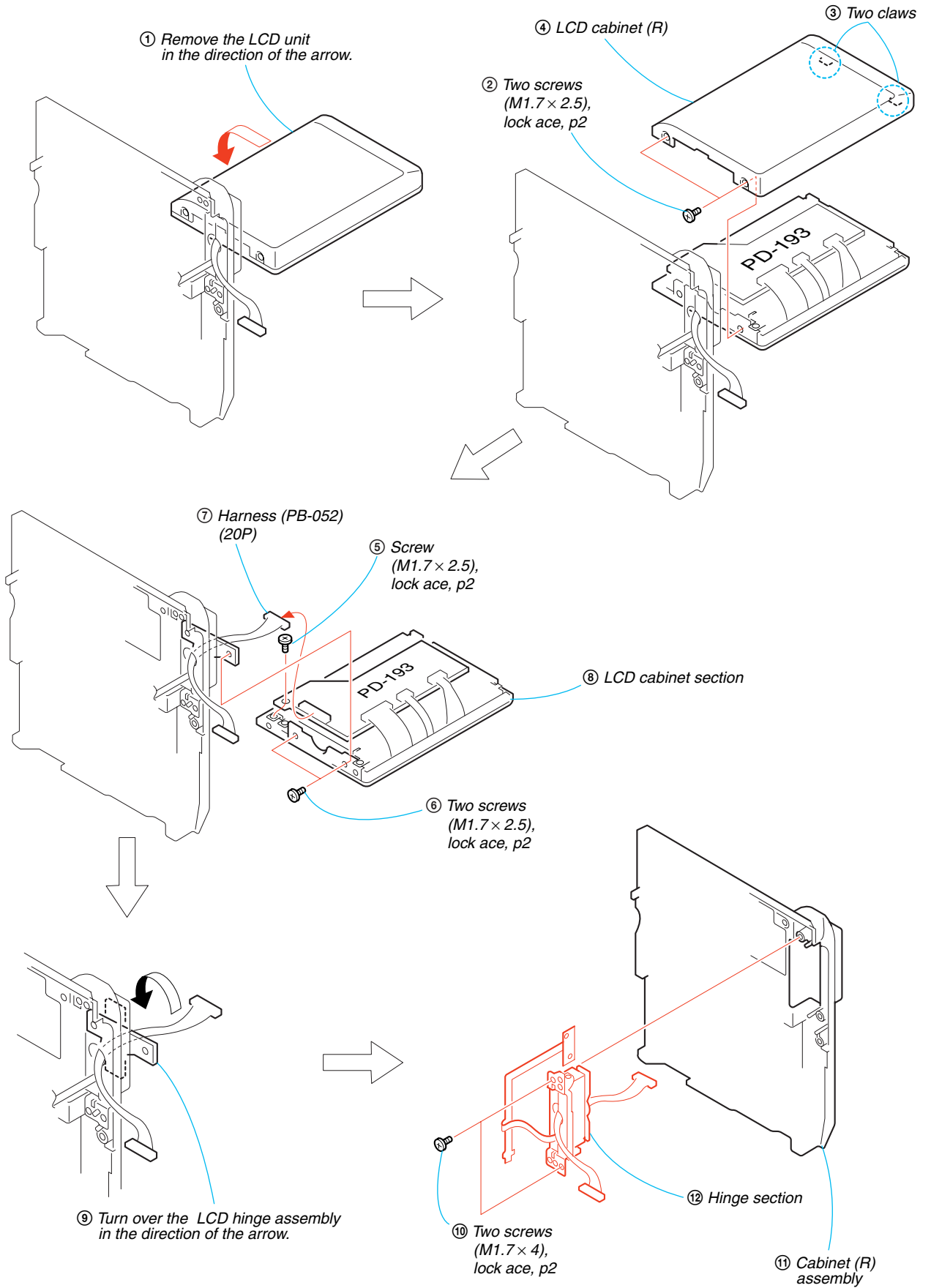
Caution

Blind plate assembly

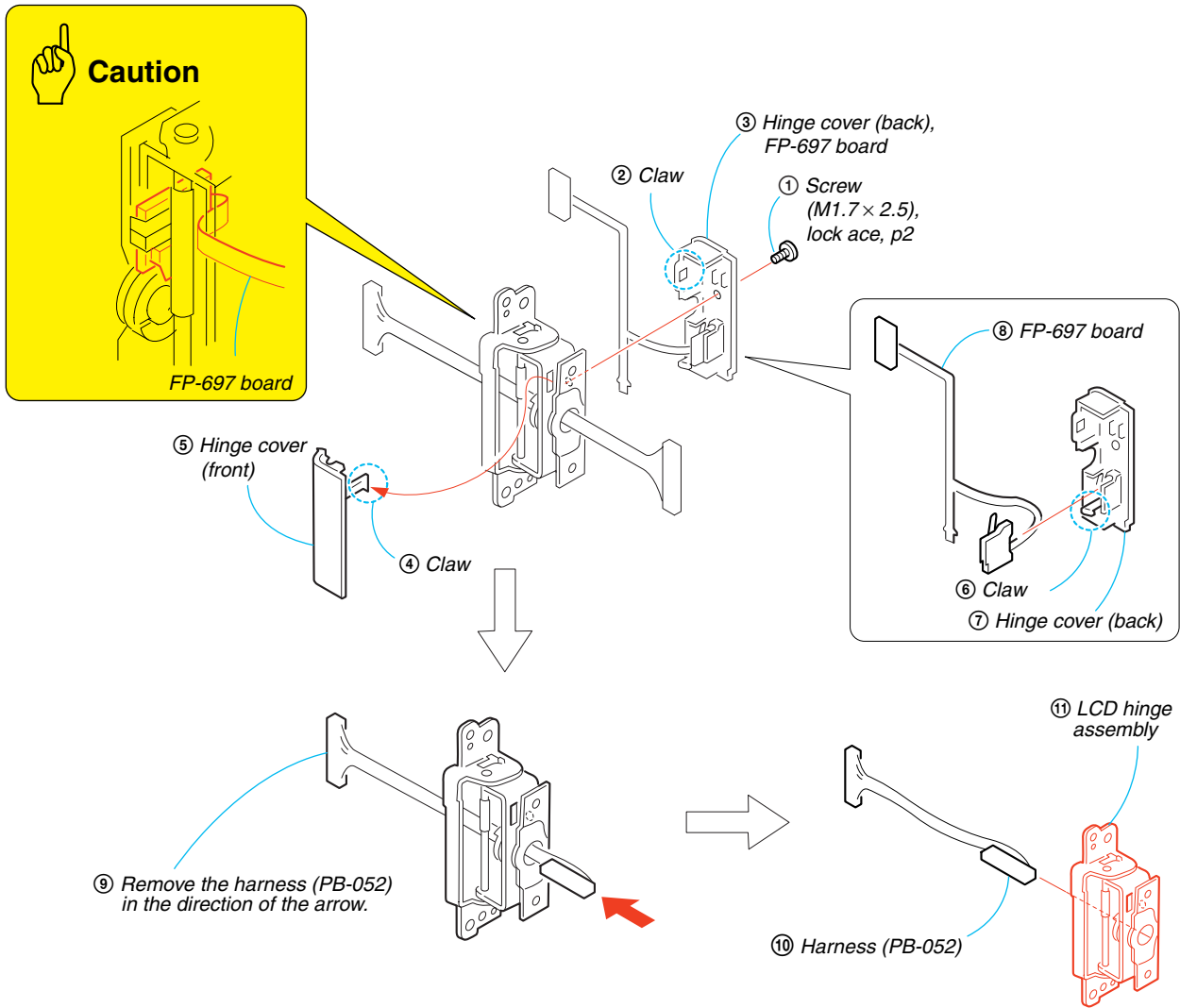
FP-697 board

Harness (PB-052)

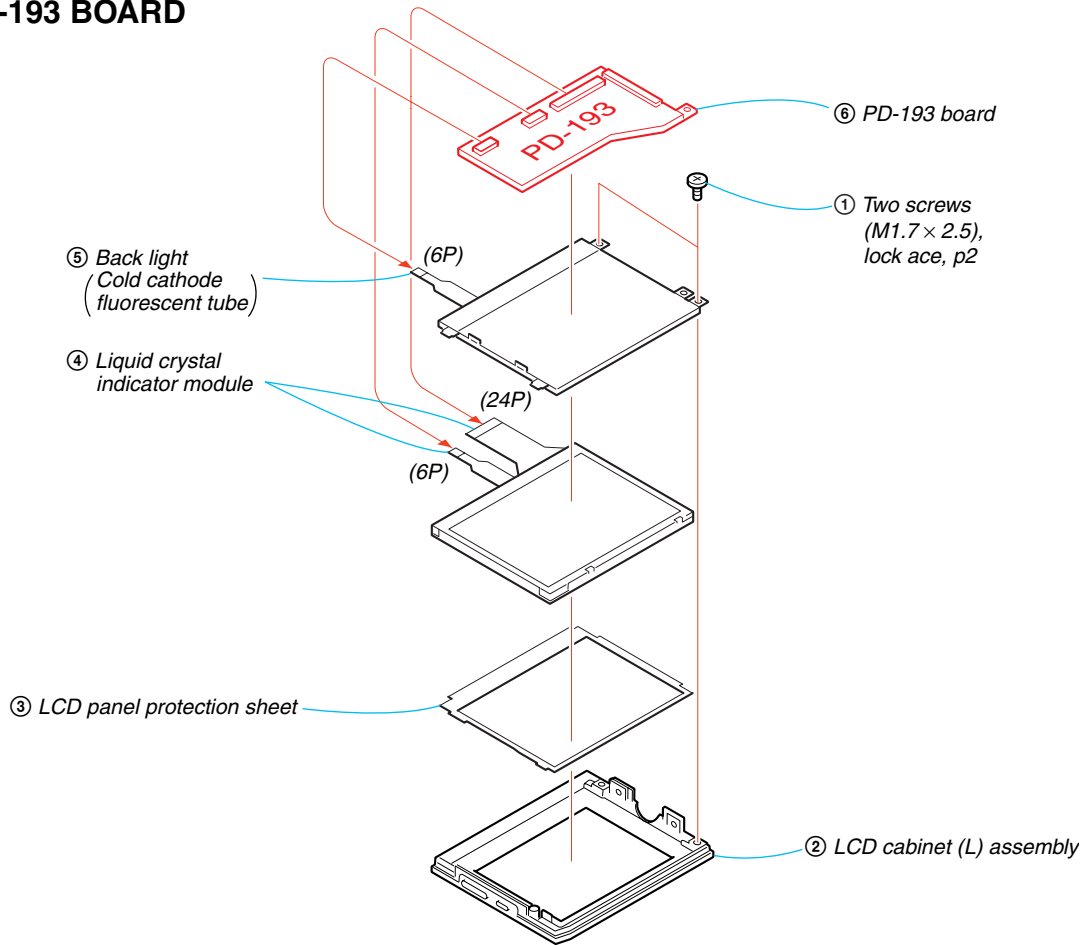
2-10.HINGE SECTION



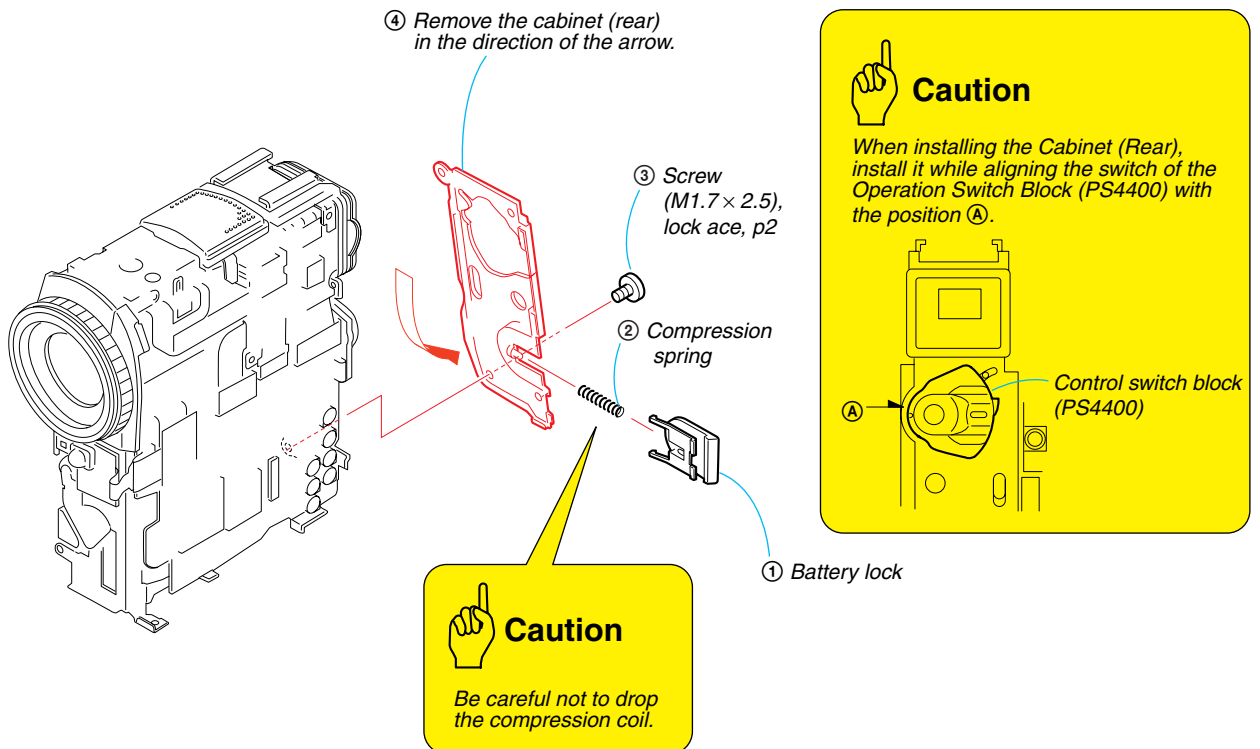
2-11. LCD HINGE ASSEMBLY



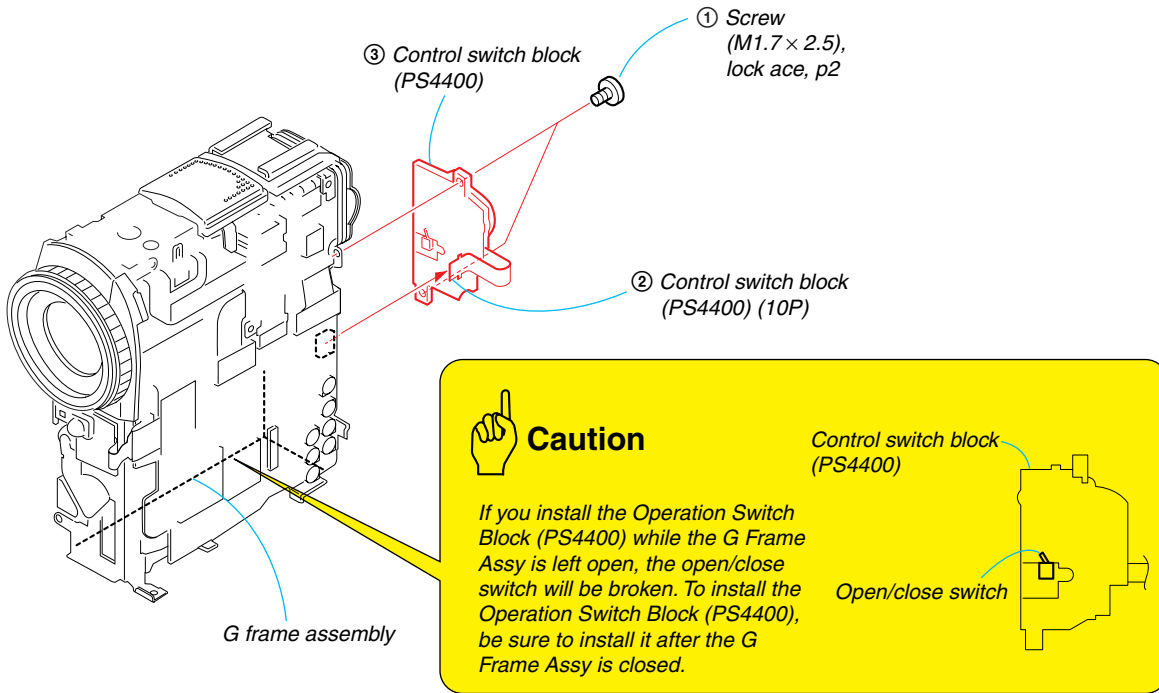
2-12. PD-193 BOARD



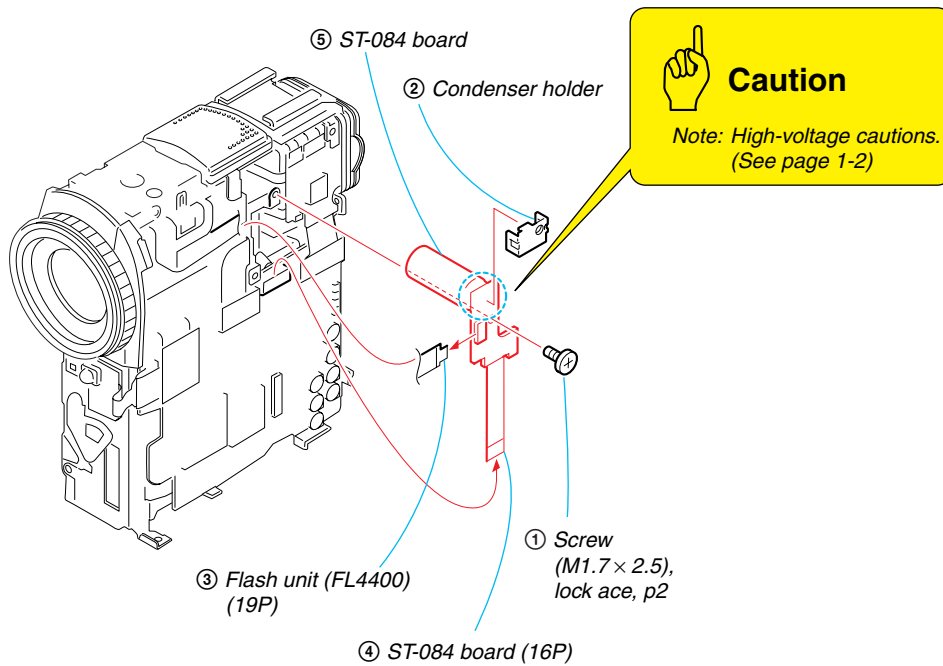
2-13. CABINET (REAR)



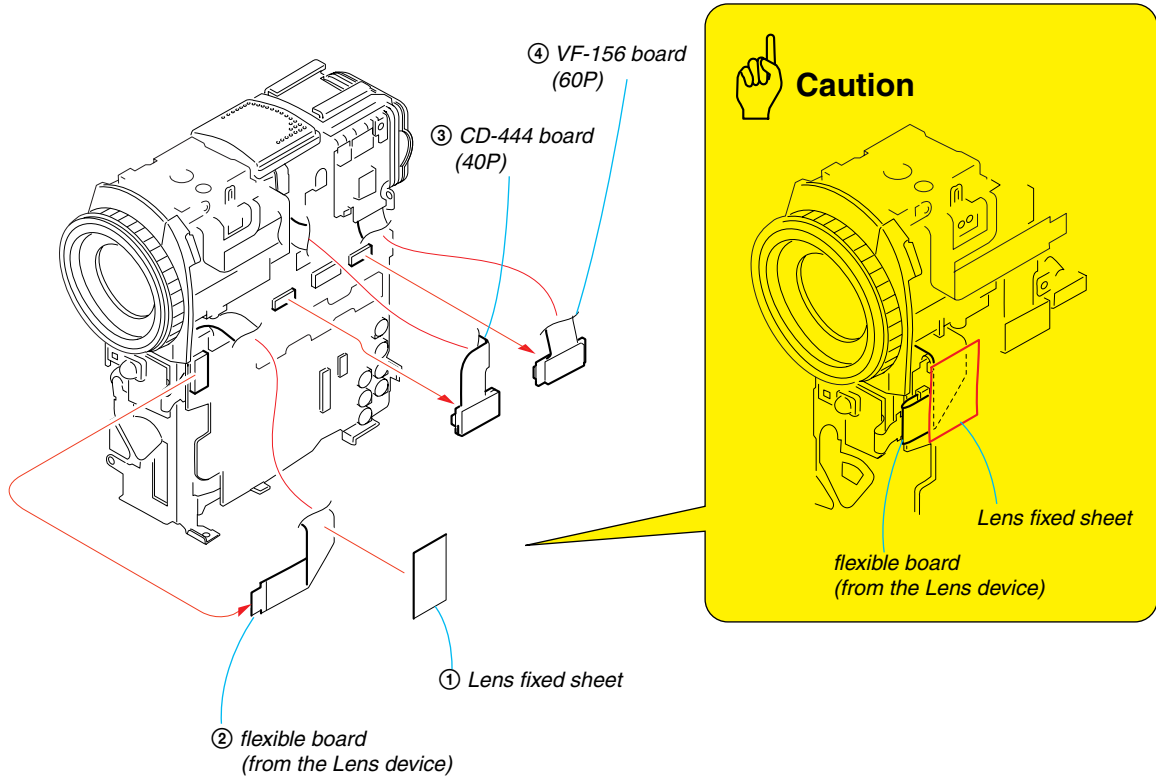
2-14. CONTROL SWITCH BLOCK (PS4400)



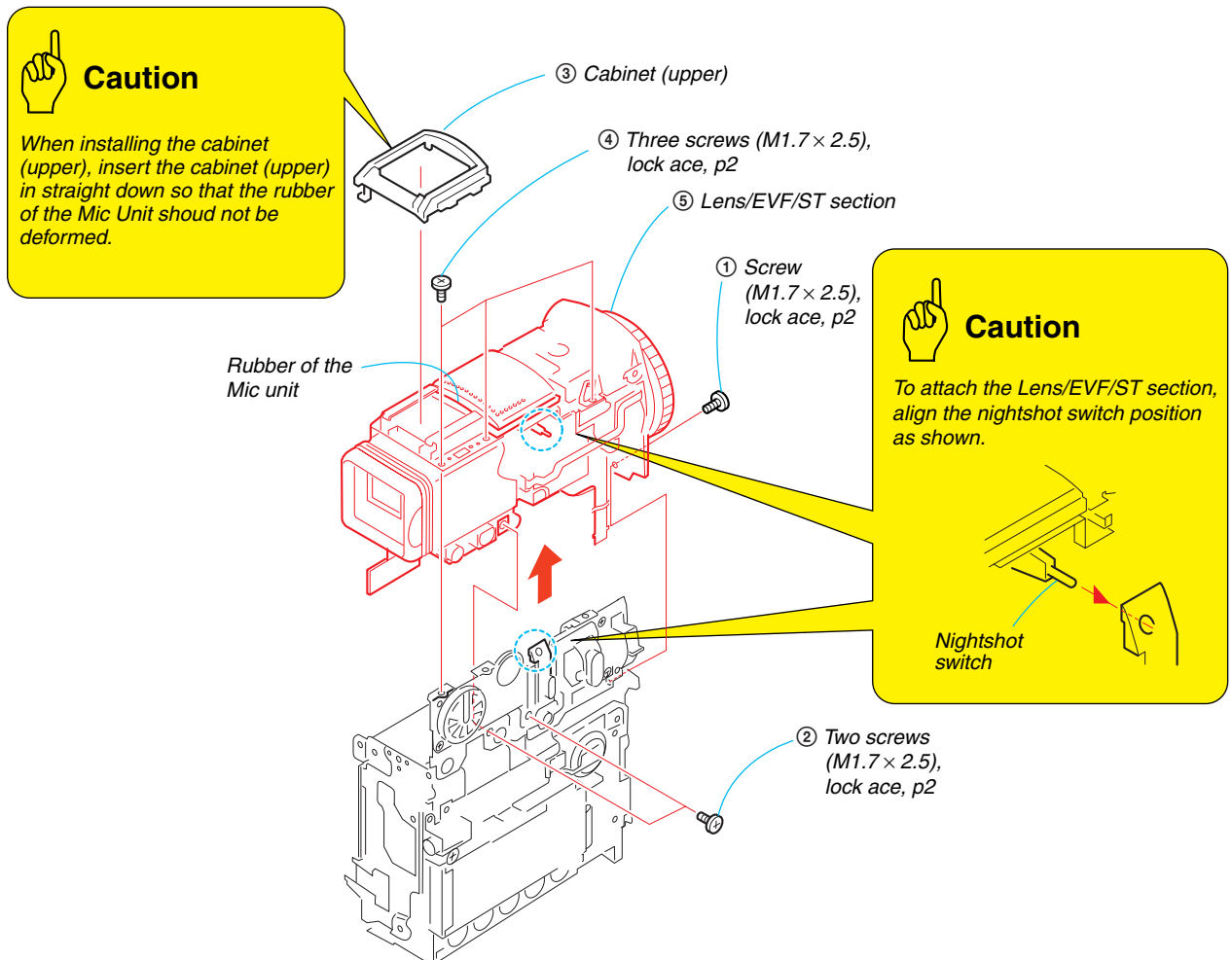
2-15. ST-084 BOARD (PC105/PC105E)



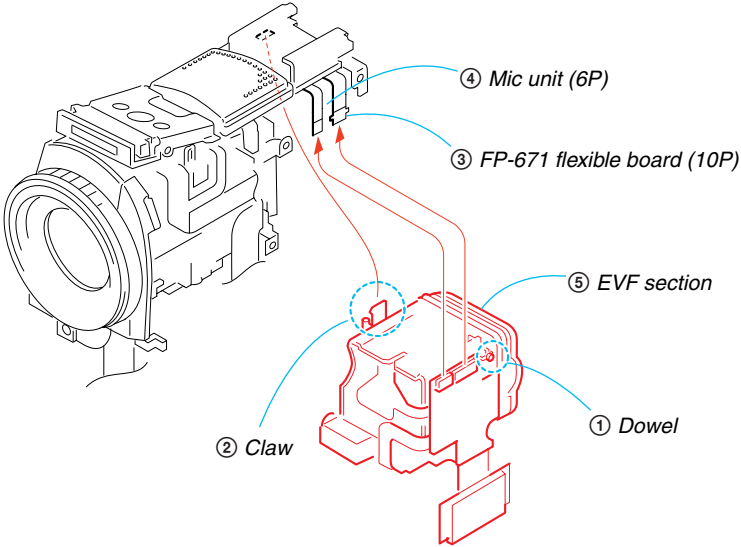
2-16. LENS/EVF/ST SECTION-1



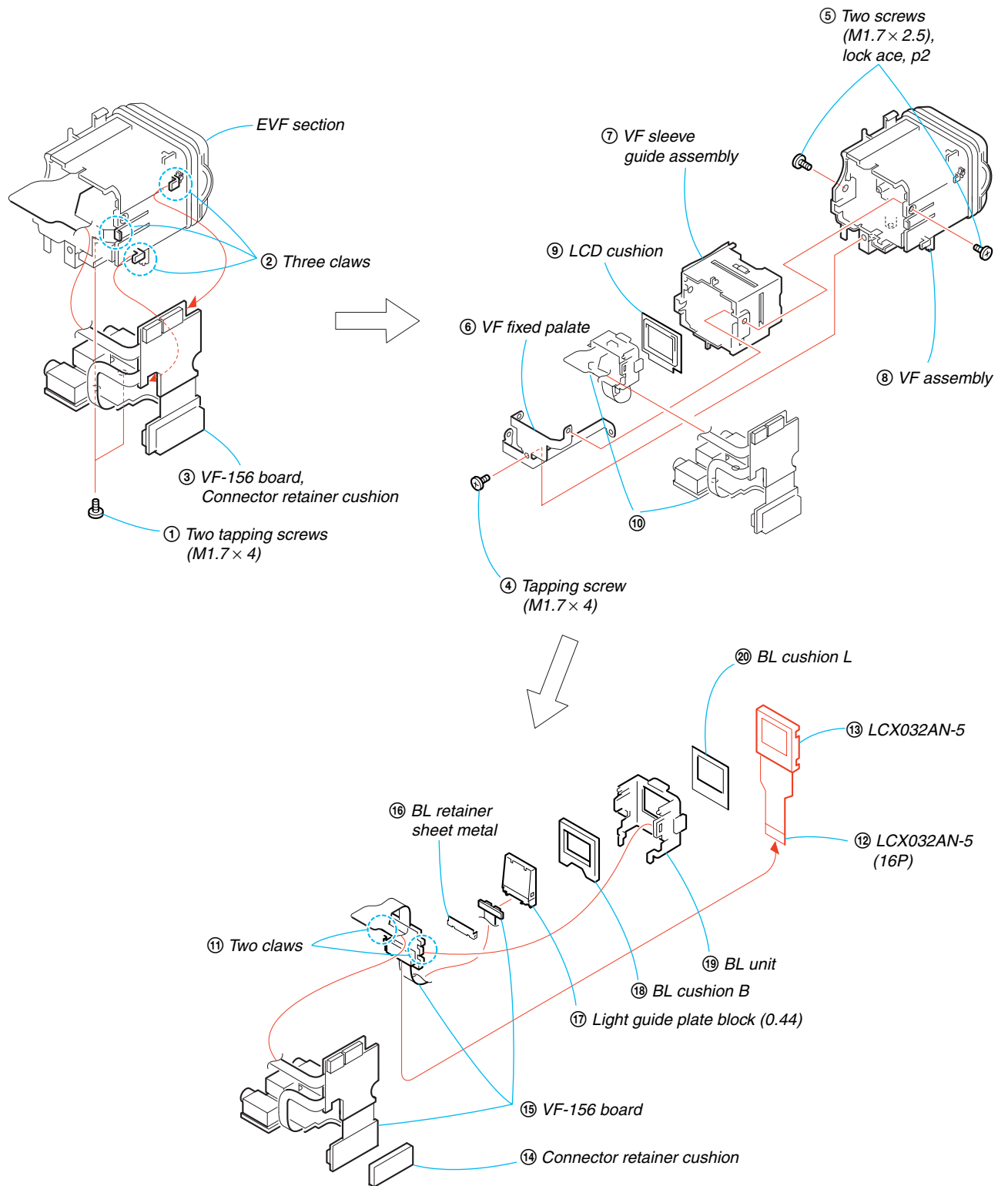
2-17. LENS/EVF/ST SECTION-2



2-18. EVF SECTION

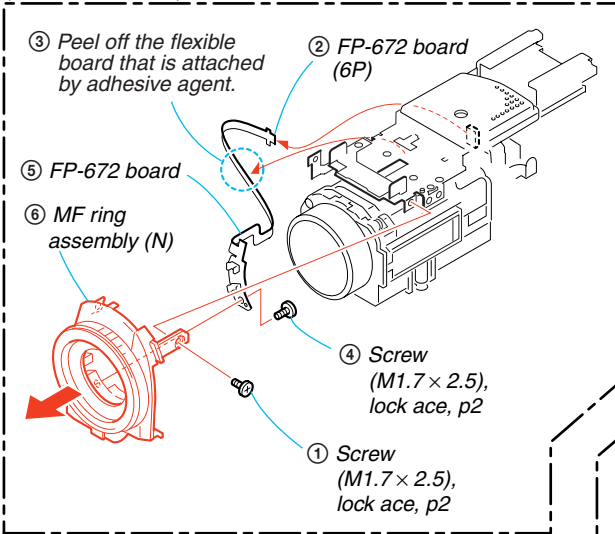


2-19. VF-156 BOARD

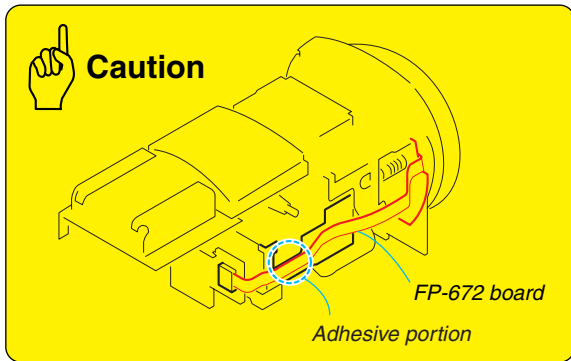
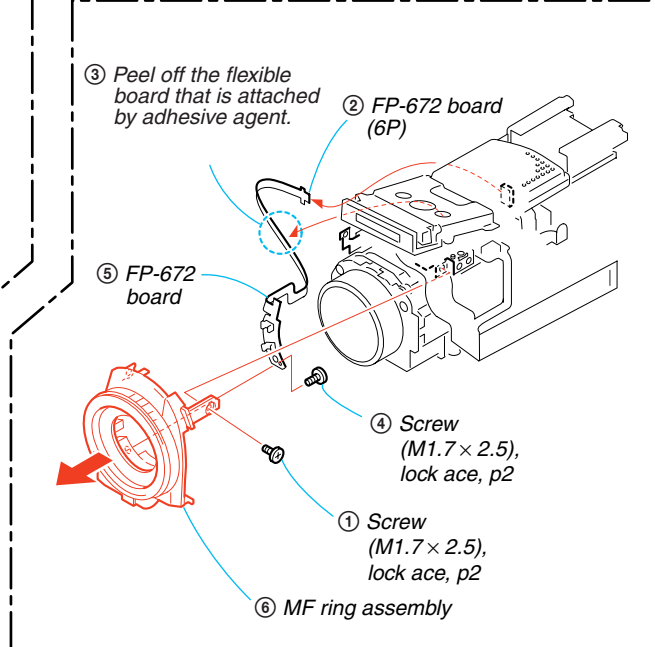


2-20. MF RING ASSEMBLY

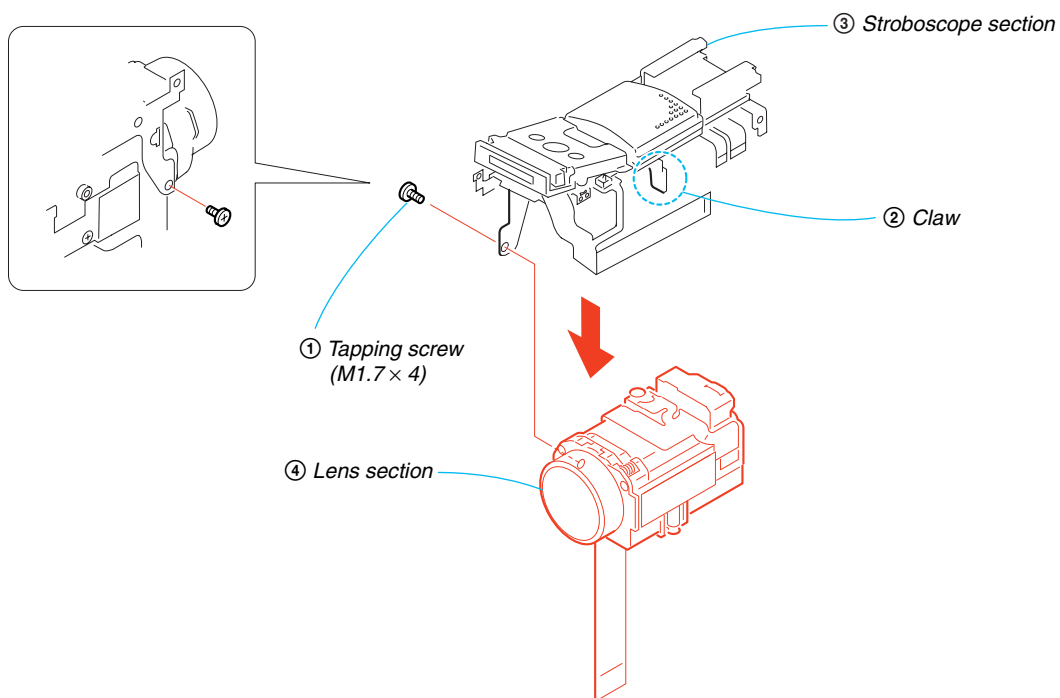
(PC103E/PC104E)



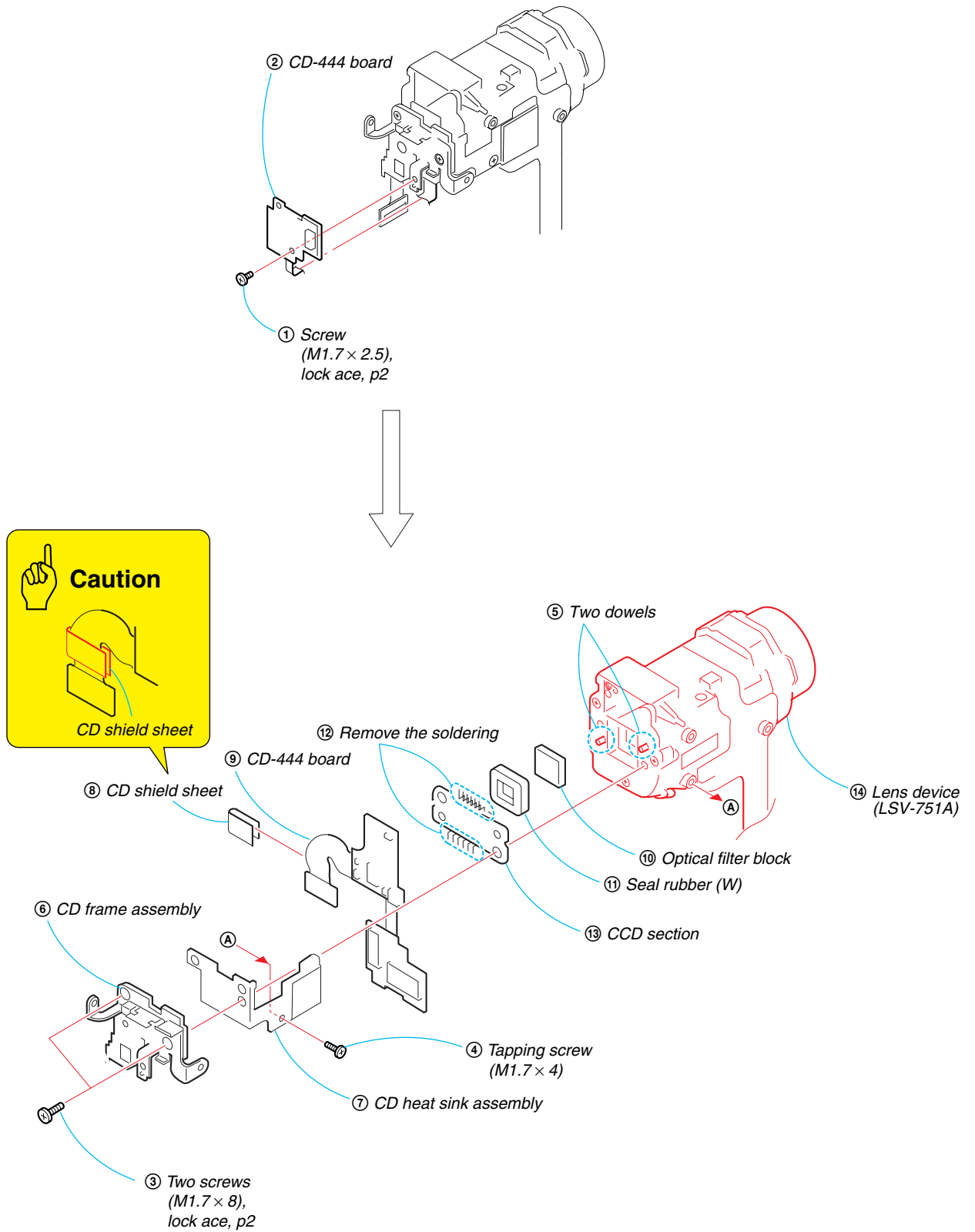
(PC105/PC105E)



2-21. LENS SECTION

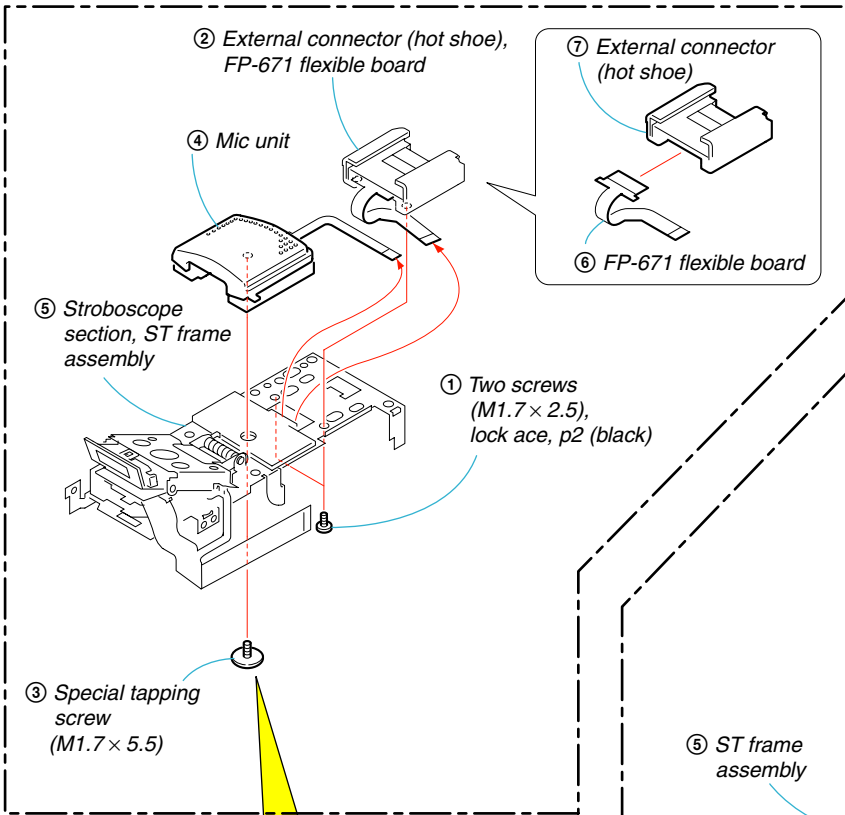


2-22. LENS DEVICE (LSV-751A)

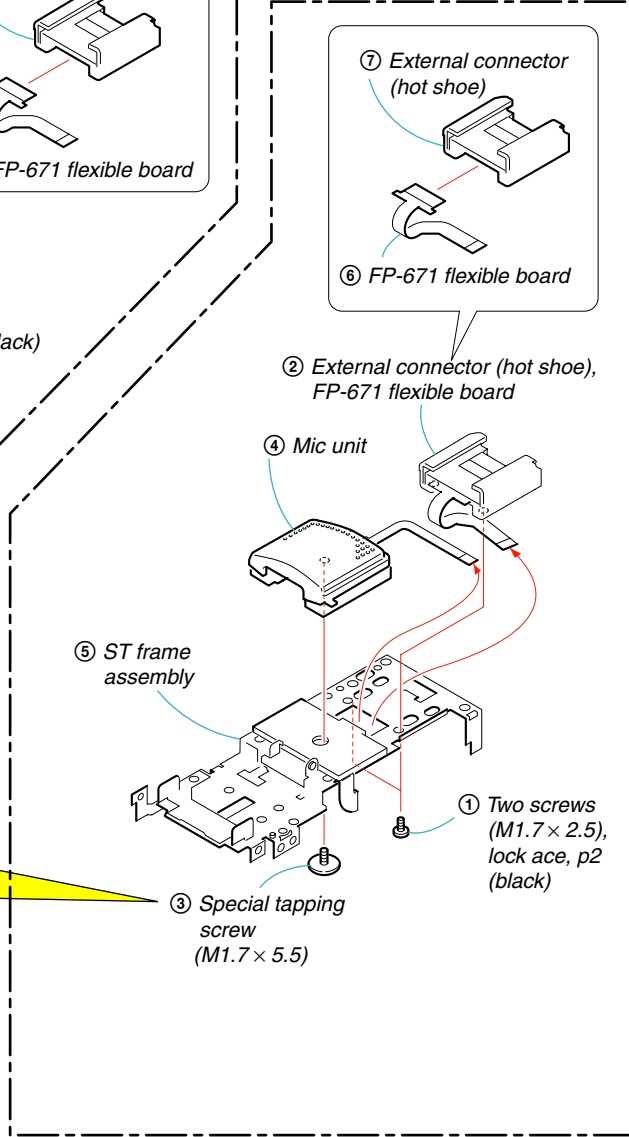


2-23. EXTERNAL CONNECTOR (HOT SHOE)

(PC105/PC105E)

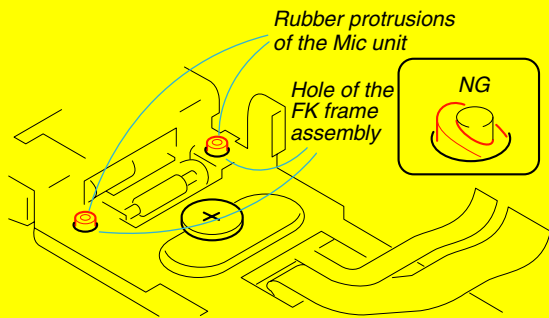


(PC103E/PC104E)

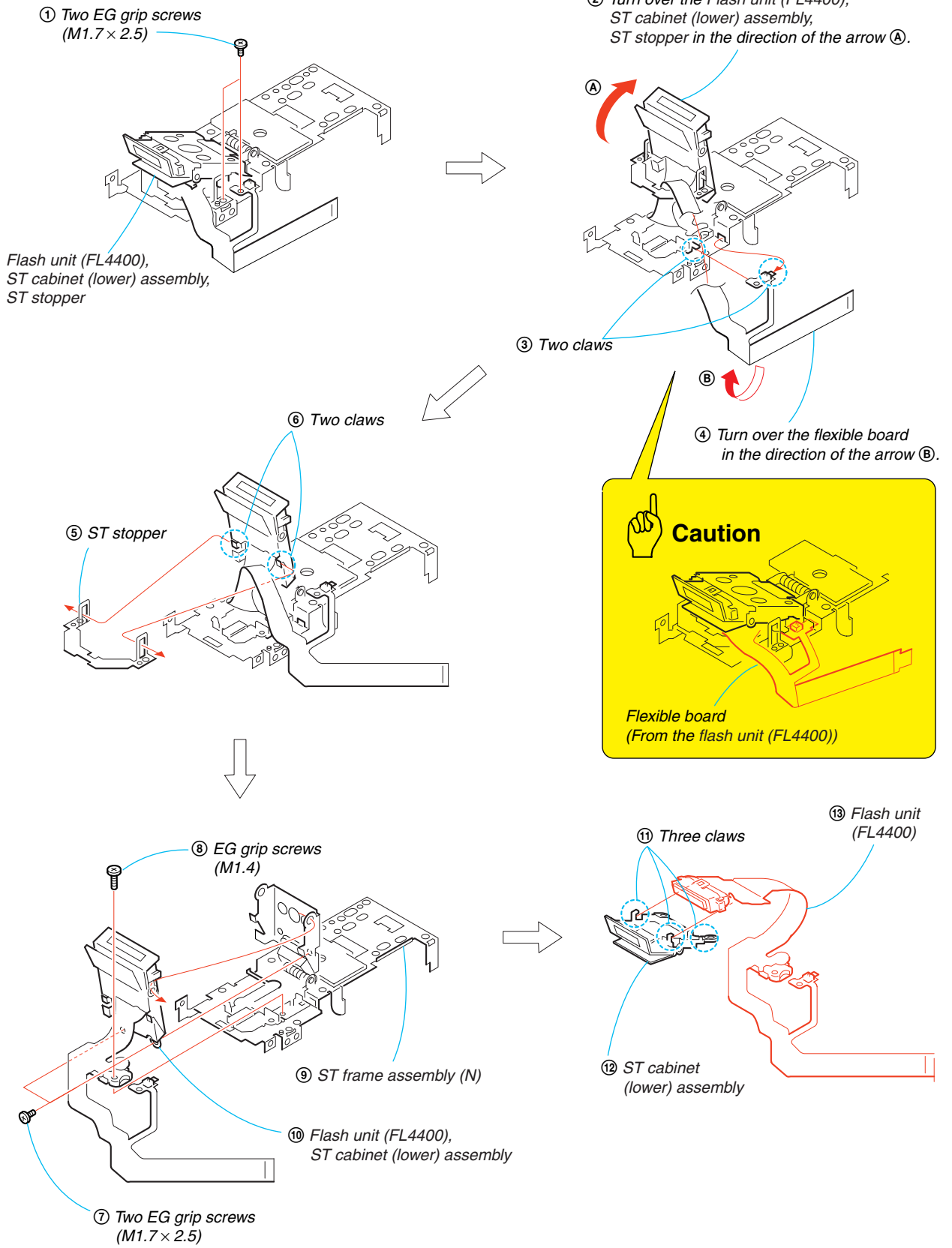


Caution

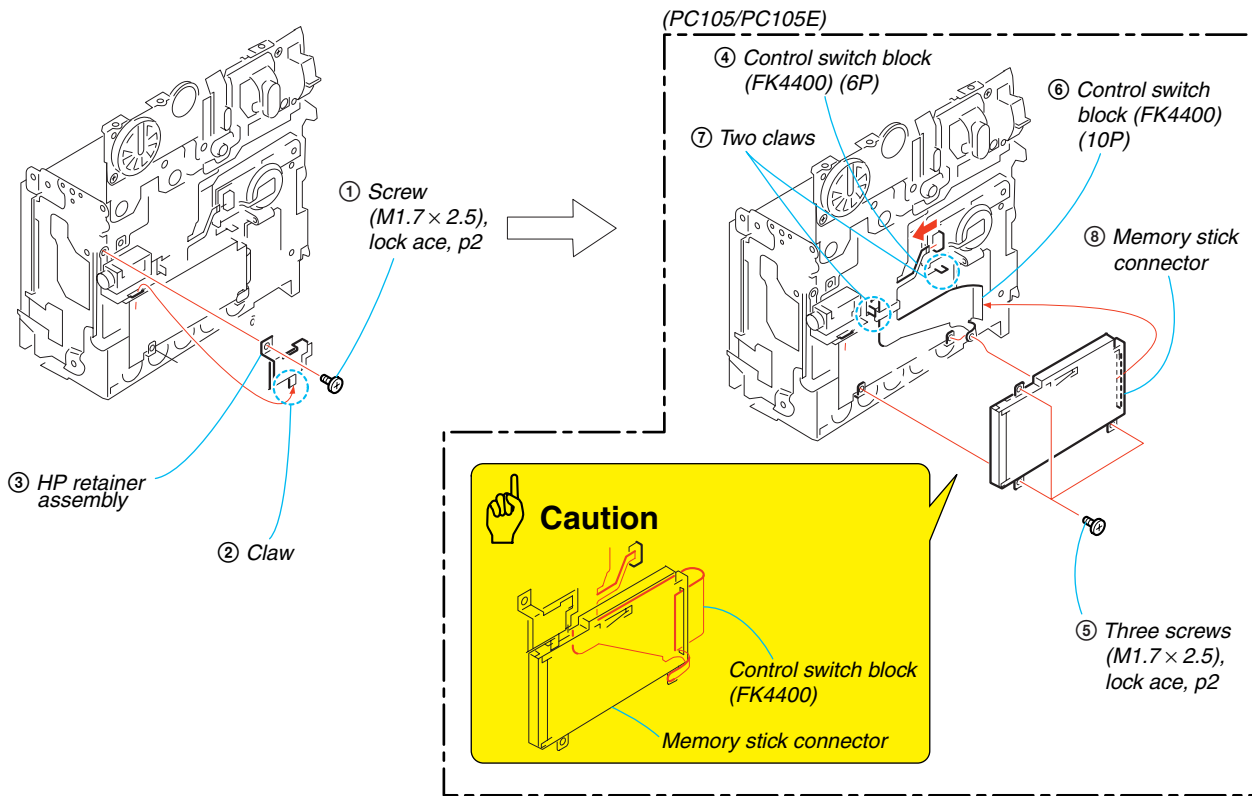
When installing the Mic unit, align and insert the rubber protrusions of the Mic unit into the hole of the FK frame assembly so that the Mic unit made of rubber should not be deformed.



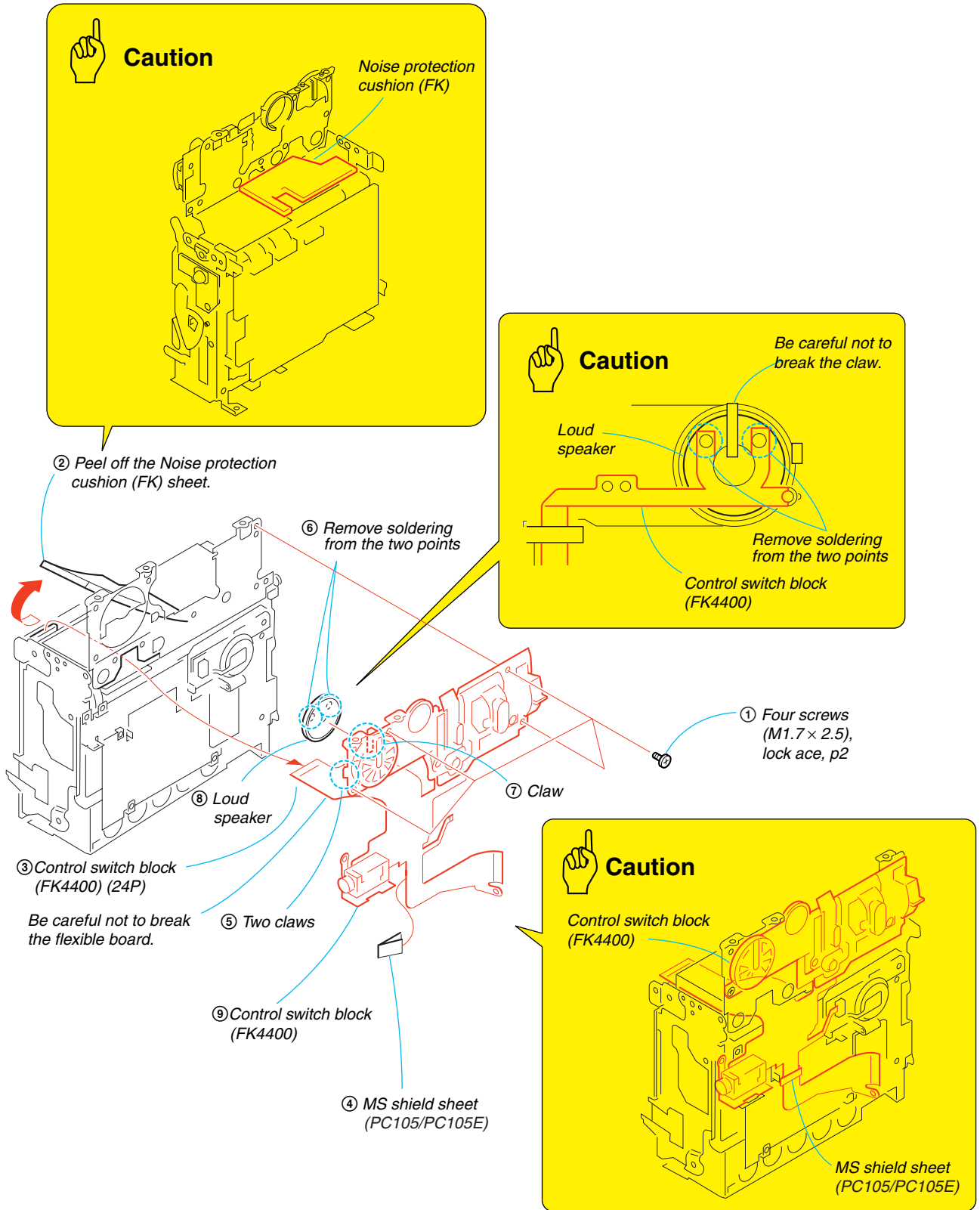
2-24. FLASH UNIT (FL4400) (PC105/PC105E)



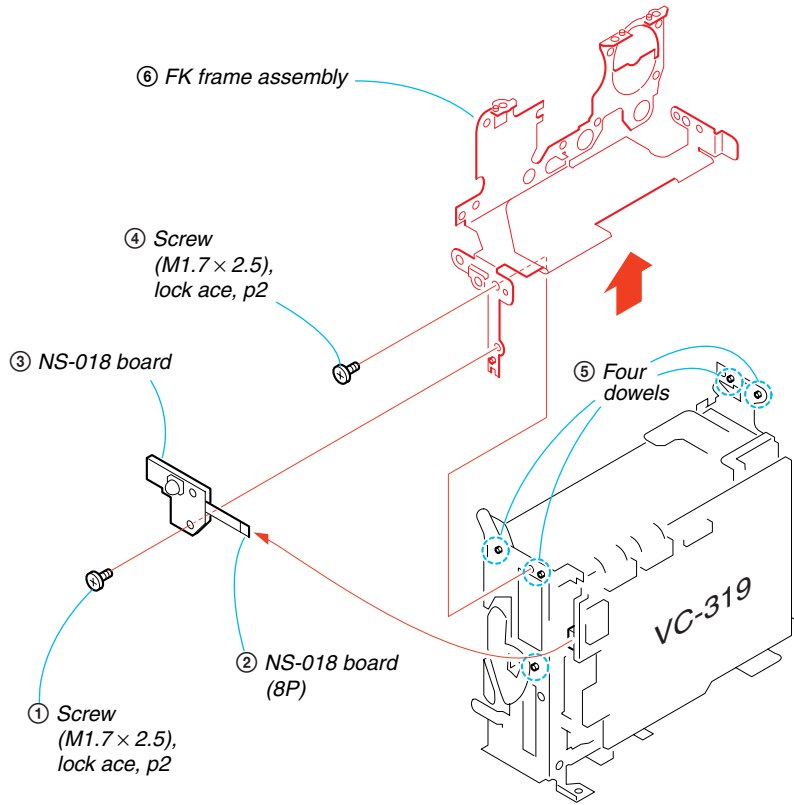
2-25. HP RETAINER ASSEMBLY, MEMORY STICK CONNECTOR (PC105/PC105E)



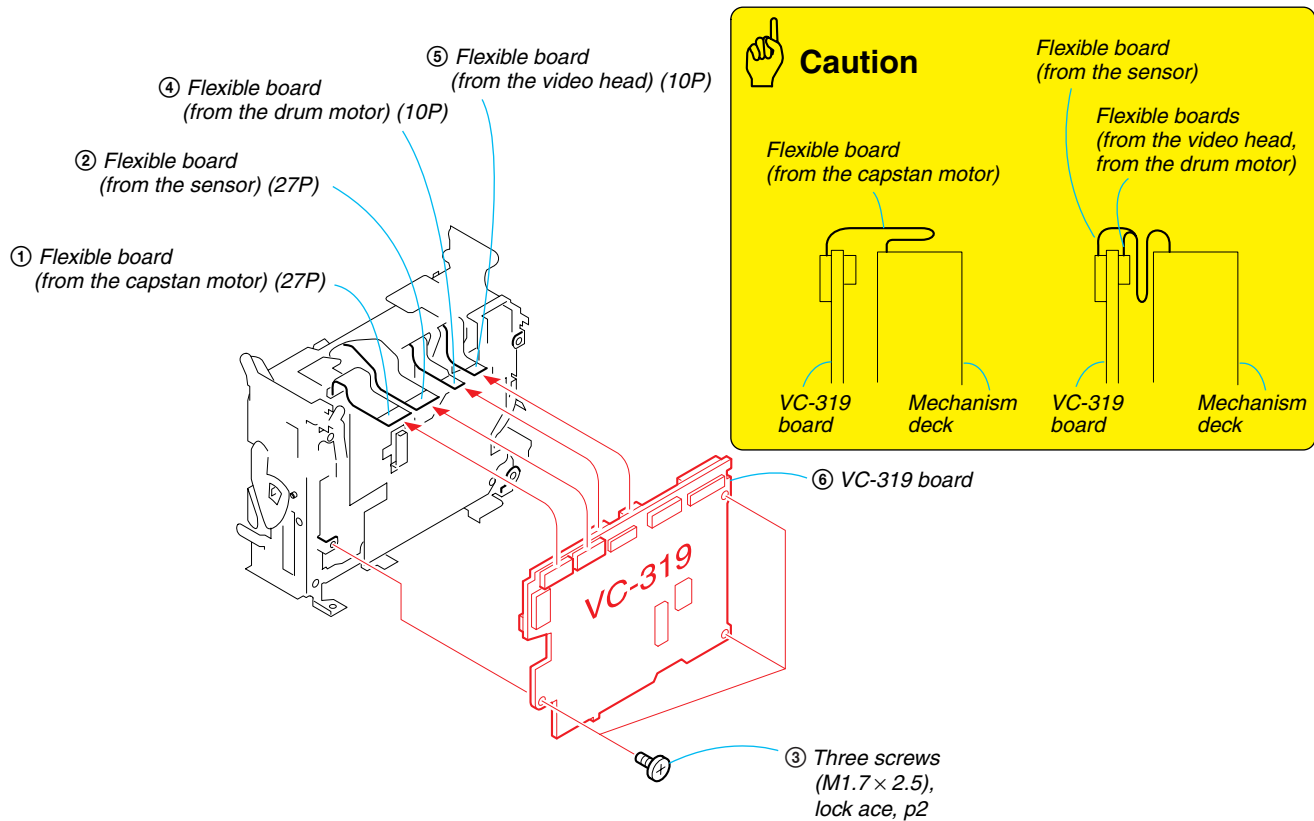
2-26. CONTROL SWITCH BLOCK (FK4400)



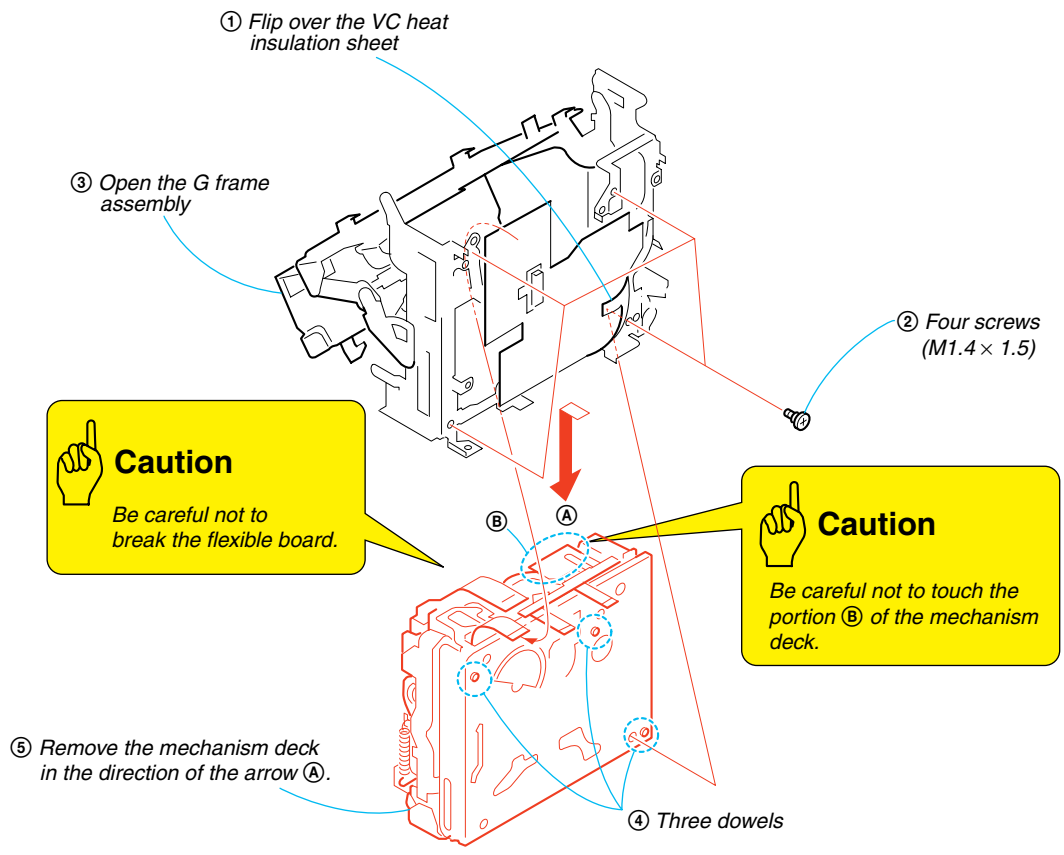
2-27. NS-018 BOARD, FK FRAME ASSEMBLY



2-28. VC-319 BOARD



2-29. MECHANISM DECK (Z100)



[SERVICE POSITION TO CHECK THE VTR SECTION]

Connection to Check the VTR Section

To check the VTR section, set the VTR to the "Forced VTR power ON" mode.

Operate the VTR functions using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced VTR Power ON" mode

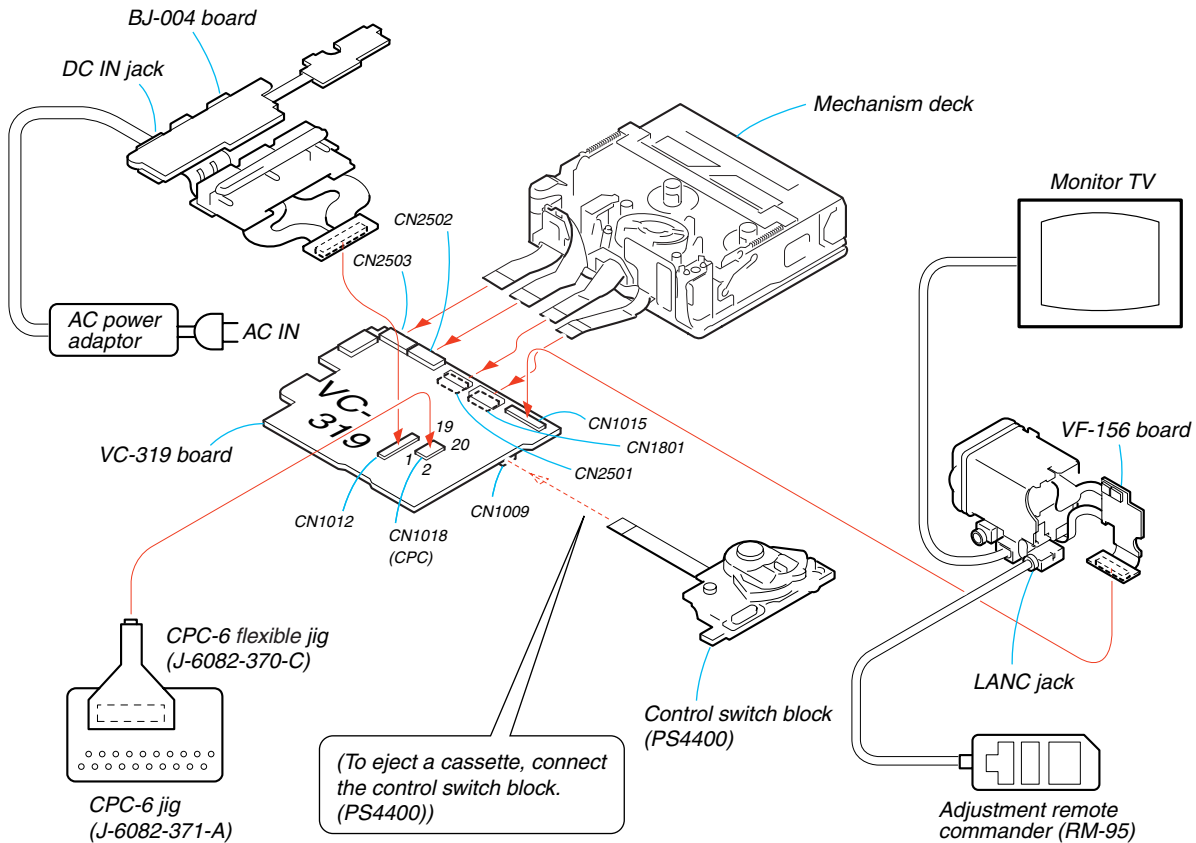
- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 0, address: 10, and set data: 00.
- 3) Select page: D, address: 10, set data: 02, and press the PAUSE button of the adjustment remote commander.

Exiting the "Forced VTR Power ON" mode

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 0, address: 10, and set data: 00.
- 3) Select page: D, address: 10, set data: 00, and press the PAUSE button of the adjustment remote commander.
- 4) Select page: 0, address: 01, and set data: 00.

Note: When the flash error code (E: 91: **) is displayed. After completion of "VTR check", clear the error flag in the following method.

- 1) Select page: 0, address: 10, and set data: 00.
- 2) Select page: 7, address: 00, and set data: 80.
- 3) Select page: 7, address: 01, set data: 80 and press the PAUSE button.
- 4) Check that the data of page: 7, address: 02 is "01".

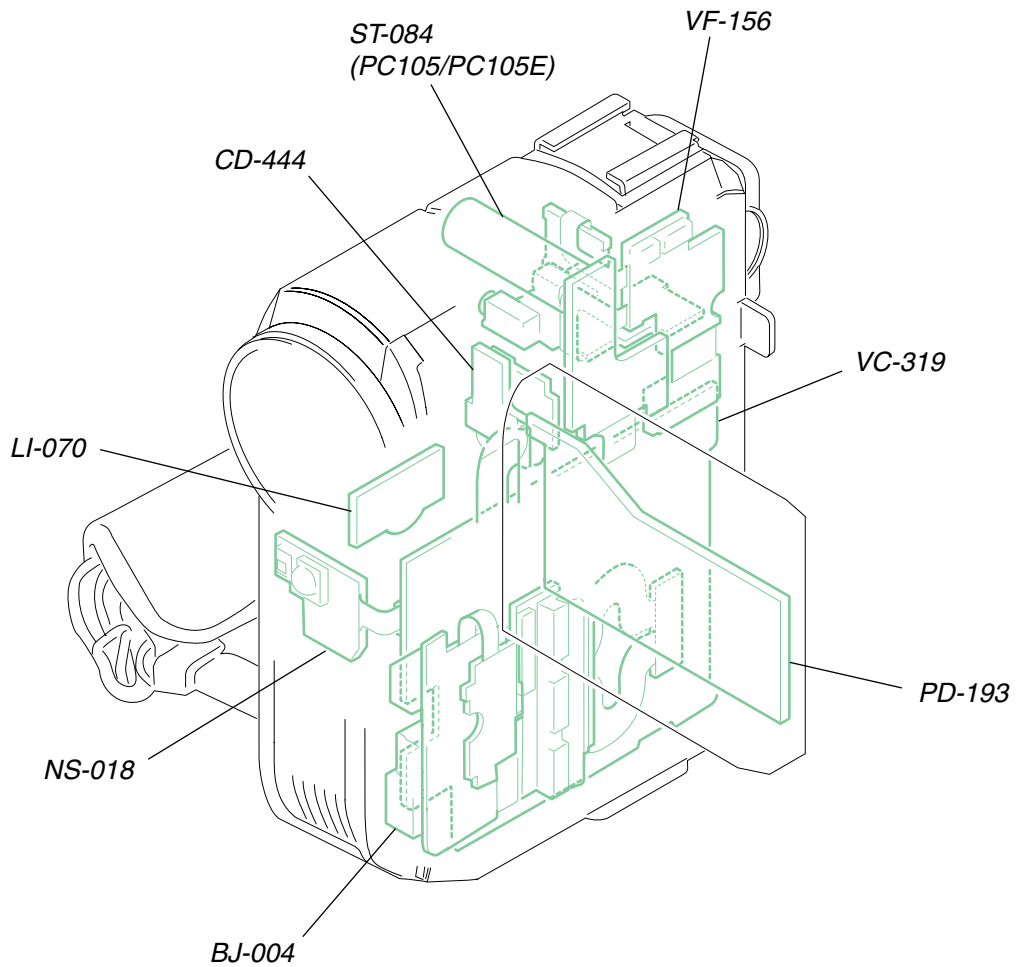


PROCEDURE OF REMOVING THE MECHANISM DECK. (VTR CHECK SERVICE POSITION)

- | | |
|--------------------------------------------------------|------------------------------------------------------------------------------|
| ① 2-2. CABINET (FRONT) ASSEMBLY (page 2-3) | ⑫ 2-17. LENS/EVF/ST SECTION-2..... (page 2-13) |
| ② 2-3. CABINET (G) ASSEMBLY..... (page 2-3) | ⑬ 2-18. EVF SECTION..... (page 2-14) |
| ③ 2-4. CABINET (L)..... (page 2-4) | ⑭ 2-25. HR RETAINER ASSEMBLY,
MEMORY STICK CONNECTOR
..... (page 2-20) |
| ④ 2-5. ST CABINET (UPPER) ASSEMBLY..... (page 2-4) | ⑮ 2-26. CONTROL SWITCH BLOCK (FK4400)..... (page 2-21) |
| ⑤ 2-6. CABINET (R) SECTION..... (page 2-5) | ⑯ 2-27. NS-018 BOARD, FK FRAME ASSEMBLY..... (page 2-22) |
| ⑥ 2-7. BATTERY HOLDER..... (page 2-6) | ⑰ 2-28. VC-319 BOARD..... (page 2-22) |
| ⑦ 2-8. BJ-004 BOARD..... (page 2-7) | ⑱ 2-29. MECHANISM DECK (Z100)..... (page 2-23) |
| ⑧ 2-13. CABINET (REAR)..... (page 2-11) | |
| ⑨ 2-14. CONTROL SWITCH BLOCK (PS4400)..... (page 2-12) | |
| ⑩ 2-15. ST-084 BOARD (PC105/PC105E)..... (page 2-12) | |
| ⑪ 2-16. LENS/EVF/ST SECTION-1..... (page 2-13) | |



2-30. CIRCUIT BOARDS LOCATION

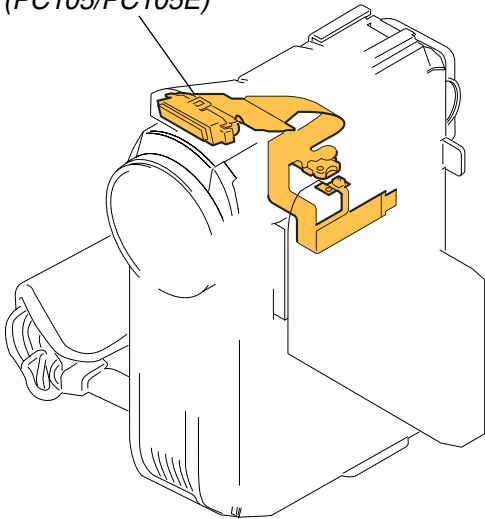


NAME	FUNCTION
BJ-004	JACK
CD-444	CCD IMAGER
LI-070	BATTERY
NS-018	SIRCS, NS
PD-193	LCD RGB DRIVER
ST-084 (PC105/PC105E)	FLASH DRIVER
VC-319	TIMING GENERATOR, S/H, AGC, A/D, CAMERA PROCESS, LENS DRIVE, MPEG MOVIE/DV STILL/AUDIO DIGITAL STILL CONTROL, DIGITAL STILL CONTROL, HI CONTROL, SDRAM/FLASH MEMORY, DV SIGNAL PROCESSOR, RF SIGNAL PROCESSOR, DV INTERFACE, REC/PB AMP, VIDEO IN/OUT, AGC, CAPSTAN/DRUM/LD MOTOR DRIVE, HI CONTROL, MECHA CONTROL, CAMERA CONTROL, EVF RGB DRIVER, TIMING GENERATOR, AUDIO I/O, A/D, D/A CONVERTER, CHARGE SWITCH, DC/DC CONVERTER, REGULATOR, CONNECTOR) PRINTED WIRING BOARD
VF-156	MIC AMP, JACK

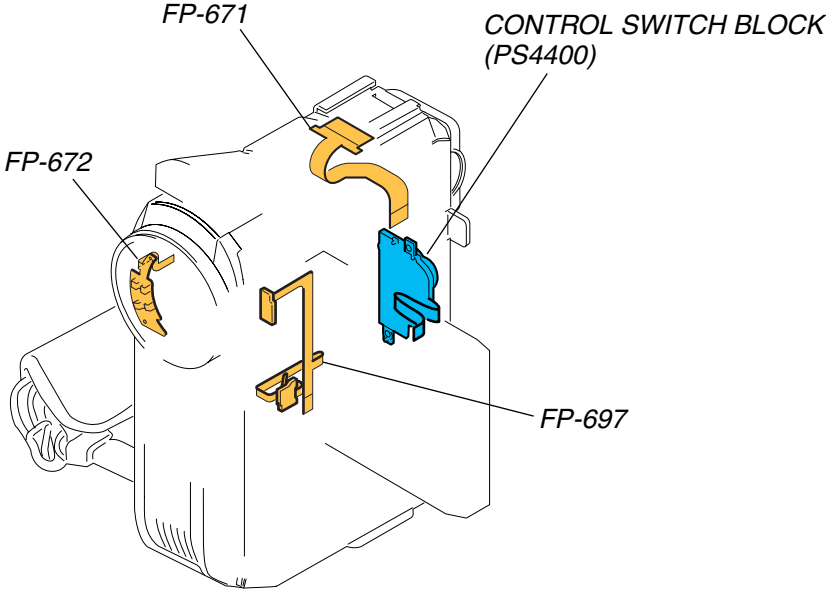
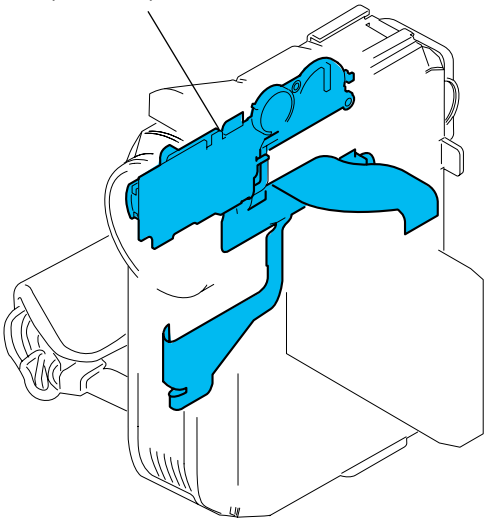


2-31. FLEXIBLE BOARDS LOCATION

FLASH UNIT
(PC105/PC105E)



CONTROL SWITCH BLOCK
(FK4400)

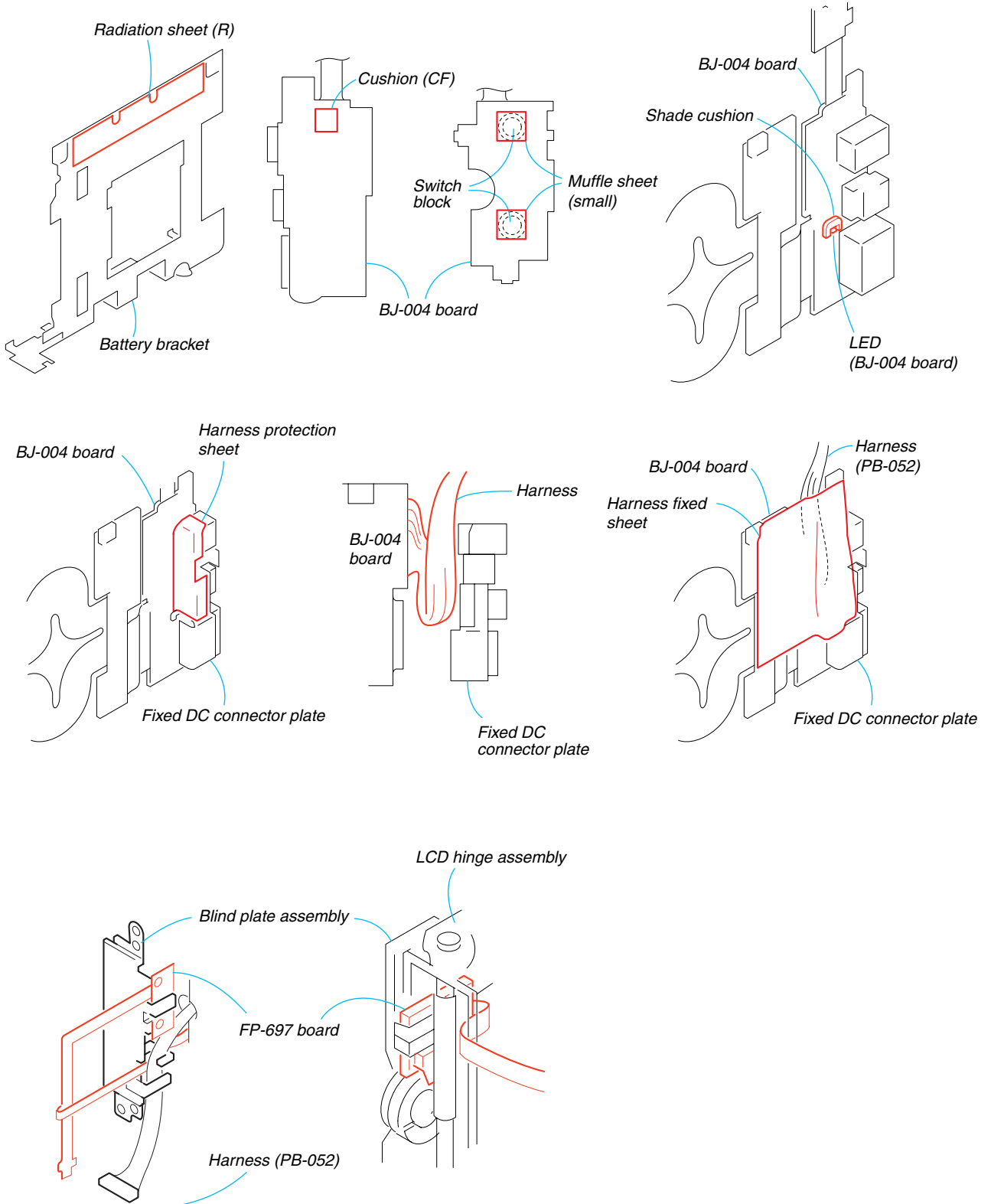




HELP

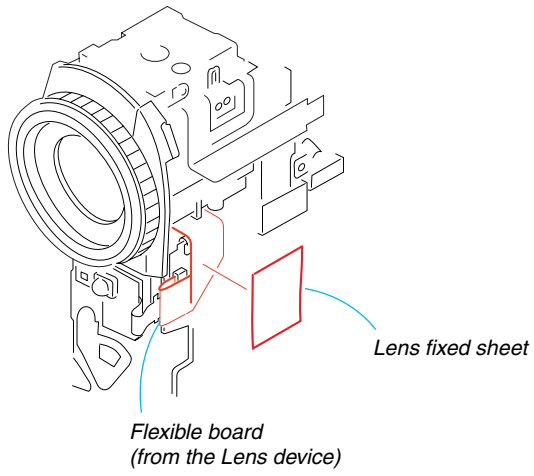
Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

CABINET (R) SECTION

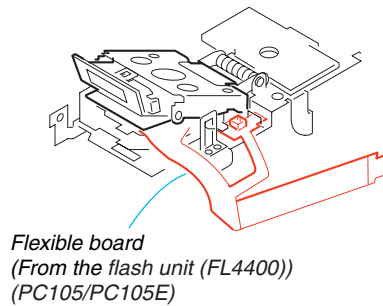
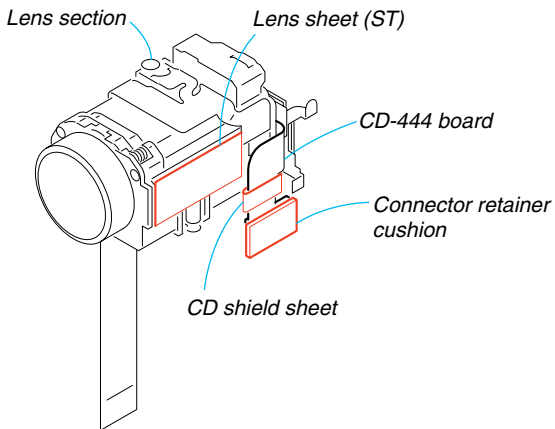
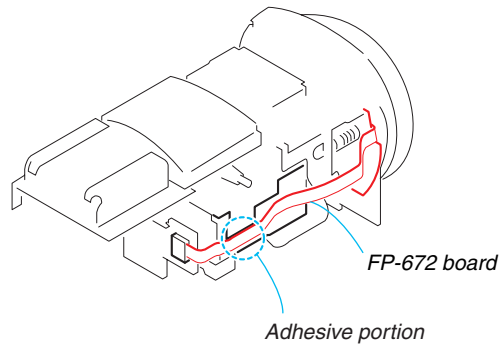
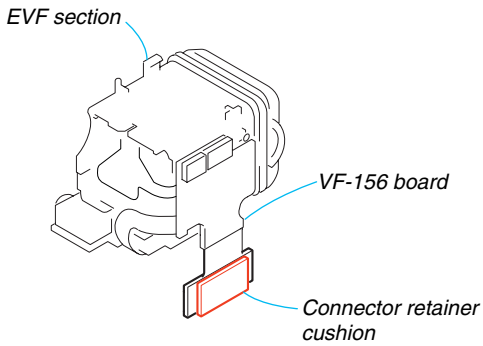




VTR OVERALL SECTION



LENS/EVF/ST SECTION

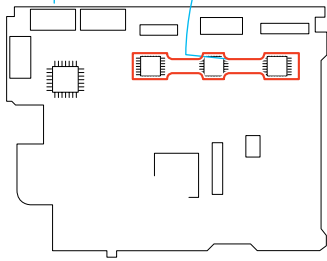




MD SECTION

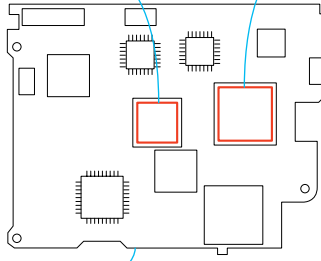
VC-319 board
(Side A)

Radiation sheet (VC)

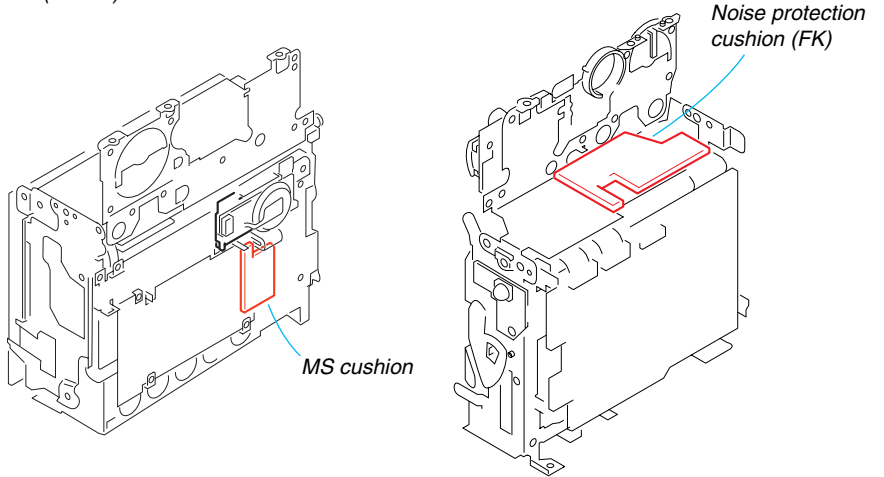
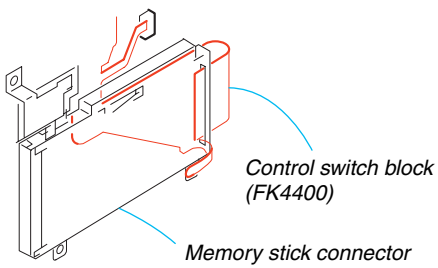


VC spacer

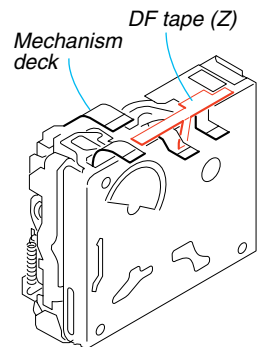
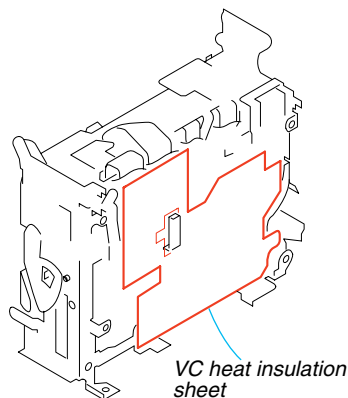
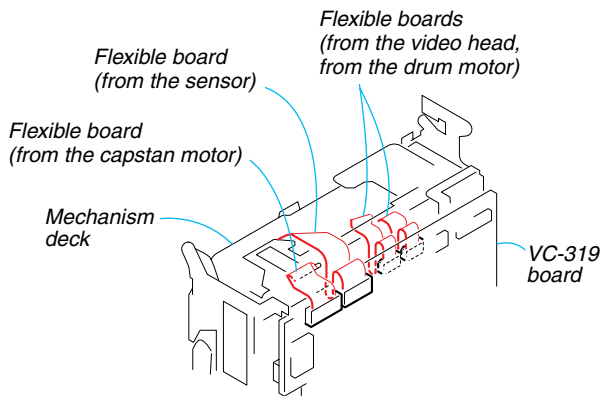
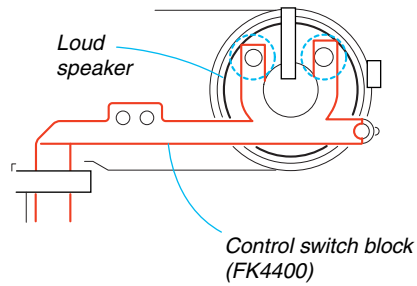
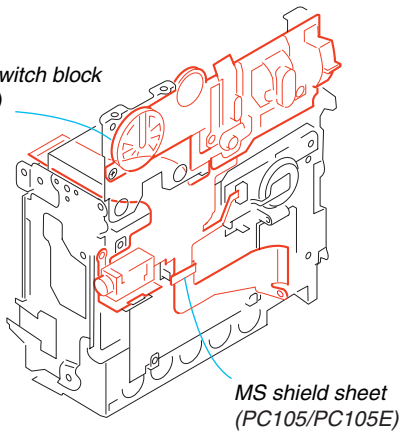
VC spacer (F)



VC-319 board
(Side B)



Control switch block
(FK4400)





3. BLOCK DIAGRAMS

Link

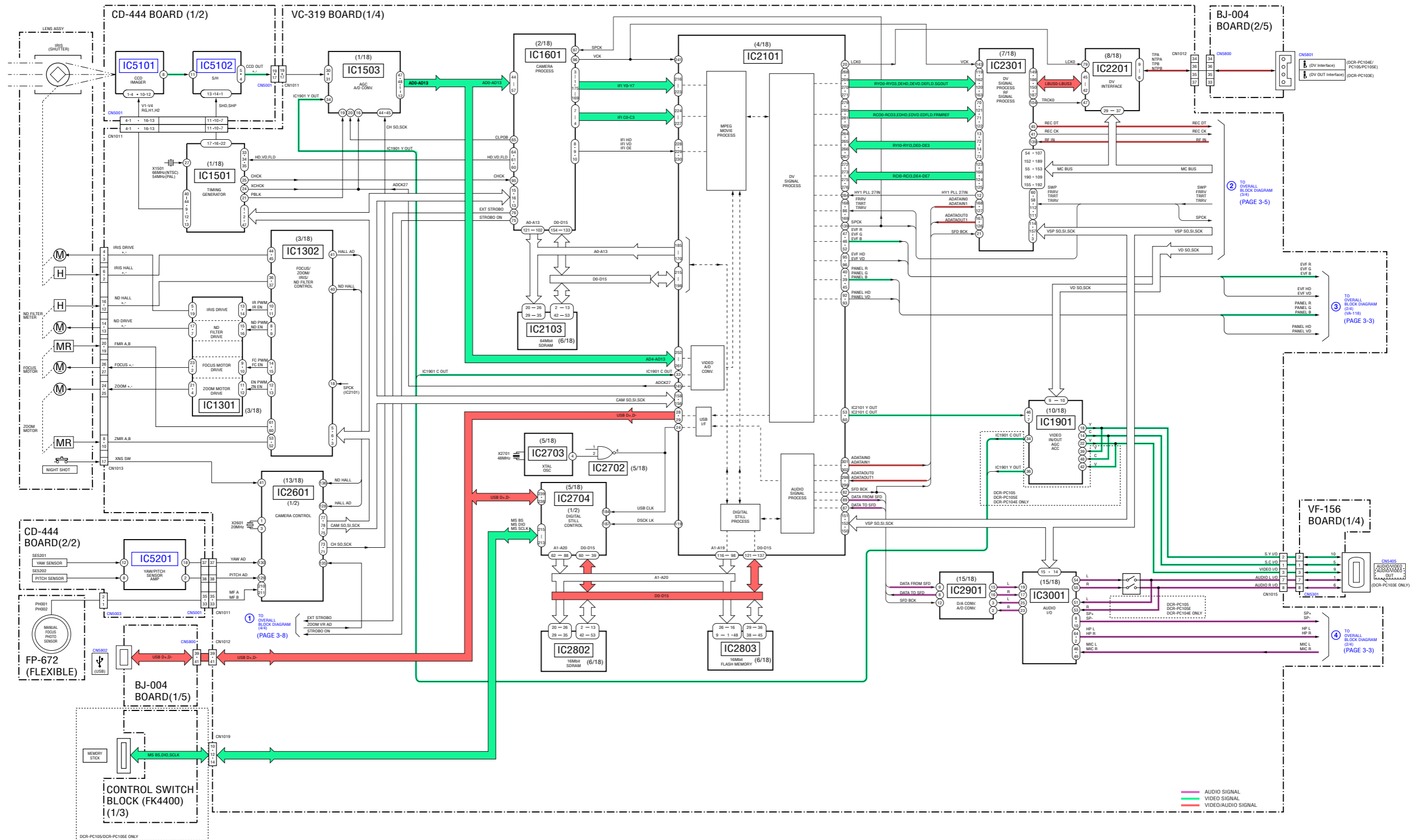
OVERALL BLOCK DIAGRAM (1/4)	POWER BLOCK DIAGRAM (1/2)
OVERALL BLOCK DIAGRAM (2/4)	POWER BLOCK DIAGRAM (2/2)
OVERALL BLOCK DIAGRAM (3/4)	
OVERALL BLOCK DIAGRAM (4/4)	



SECTION 3
BLOCK DIAGRAMS

3. BLOCK DIAGRAMS

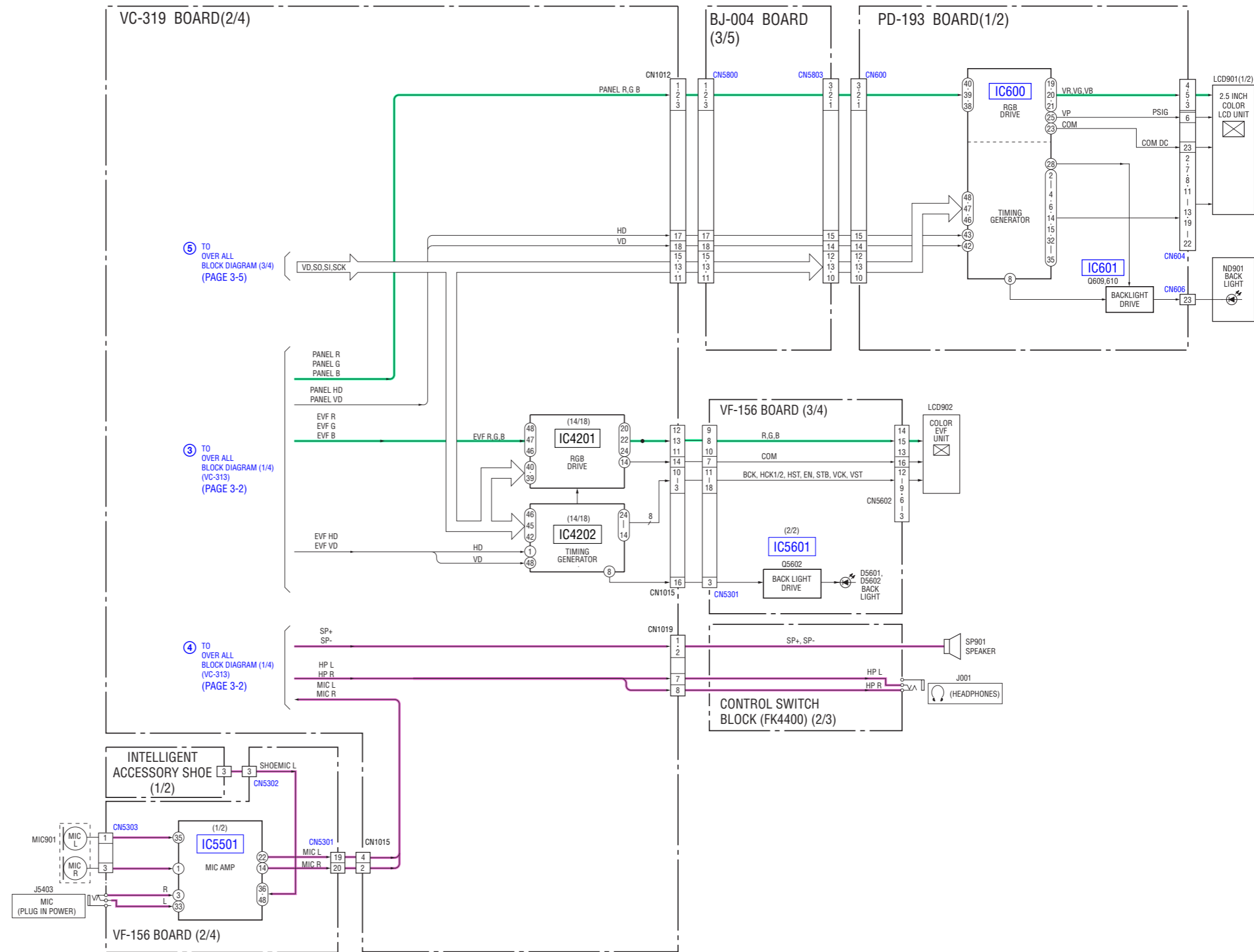
3-1. OVERALL BLOCK DIAGRAM (1/4) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

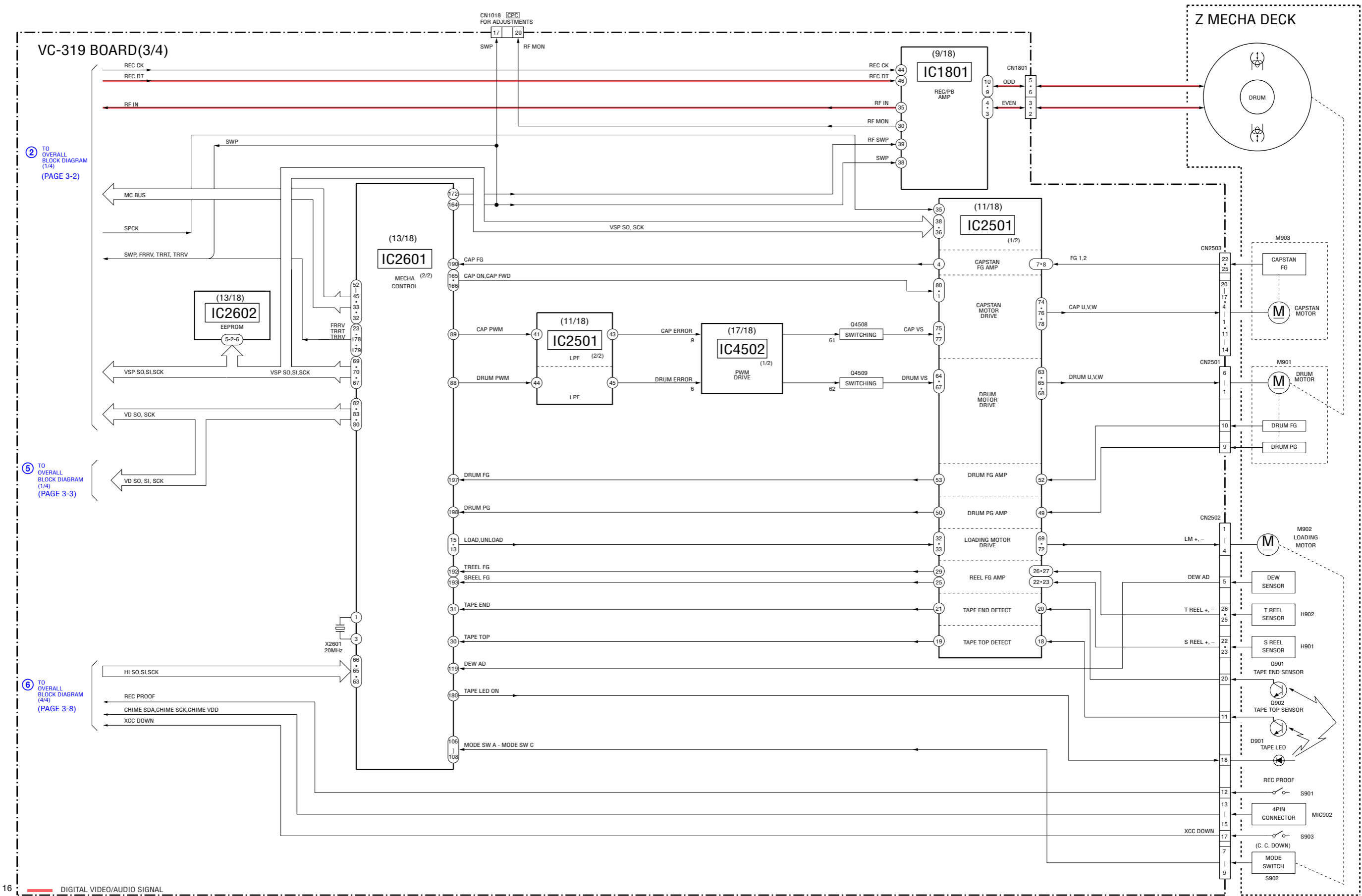
3-2. OVERALL BLOCK DIAGRAM (2/4) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

3-3. OVERALL BLOCK DIAGRAM (3/4) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.

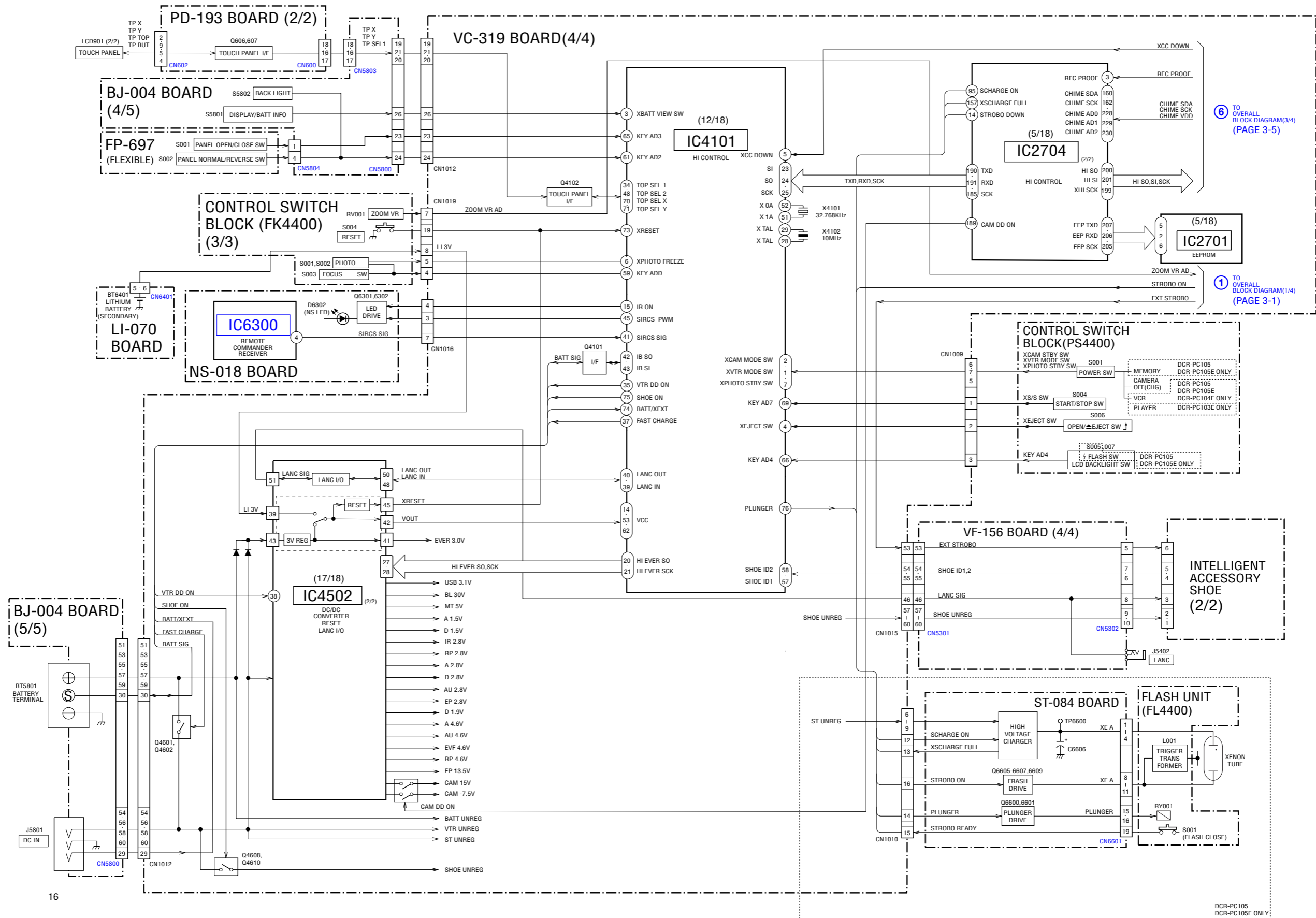


16 DIGITAL VIDEO/AUDIO SIGNAL



3. BLOCK DIAGRAMS

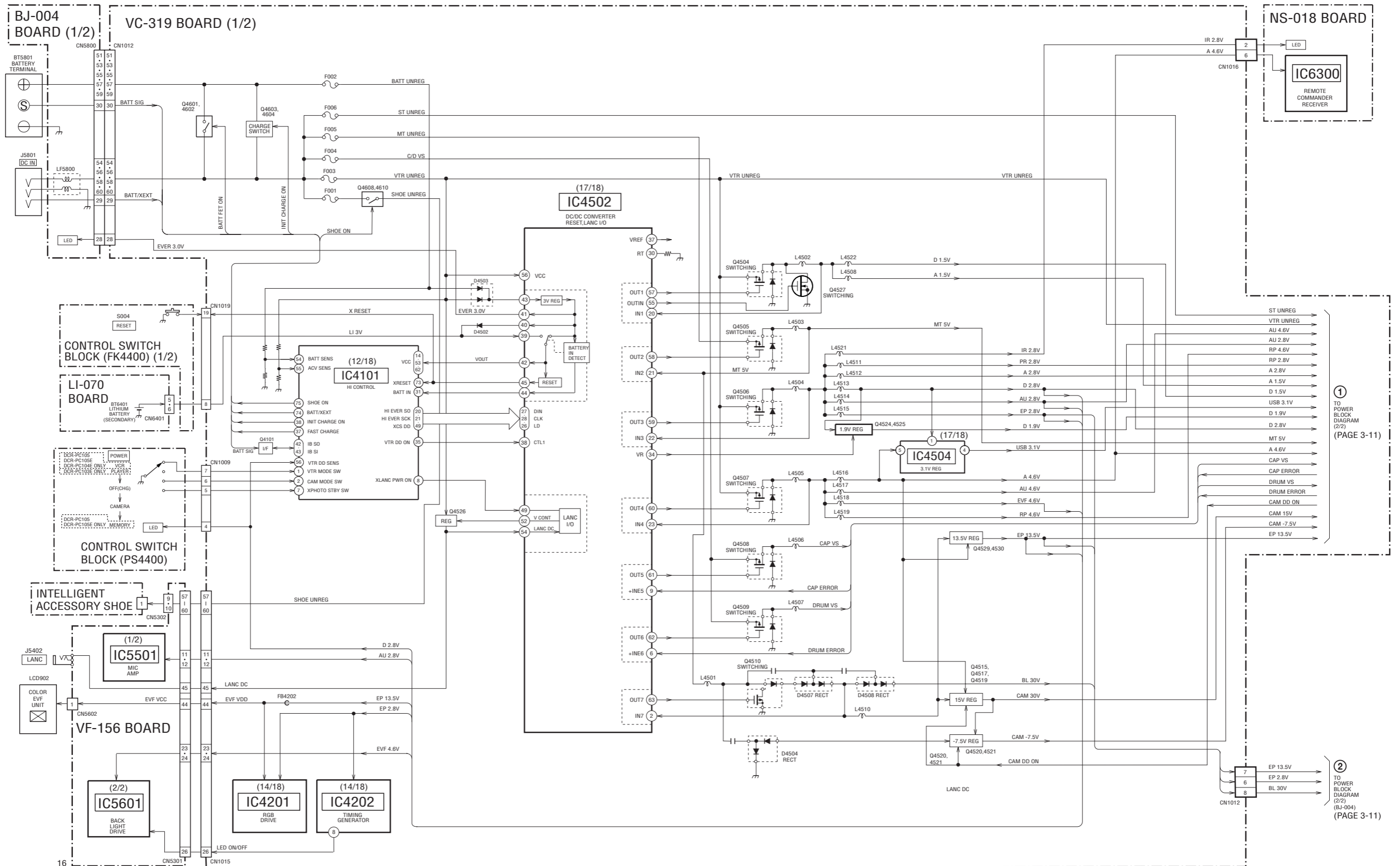
3-4. OVERALL BLOCK DIAGRAM (4/4) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.





3. BLOCK DIAGRAMS

3-5. POWER BLOCK DIAGRAM (1/2) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



① TO POWER BLOCK DIAGRAM (2/2) (PAGE 3-11)

② TO POWER BLOCK DIAGRAM (2/2) (83-004) (PAGE 3-11)



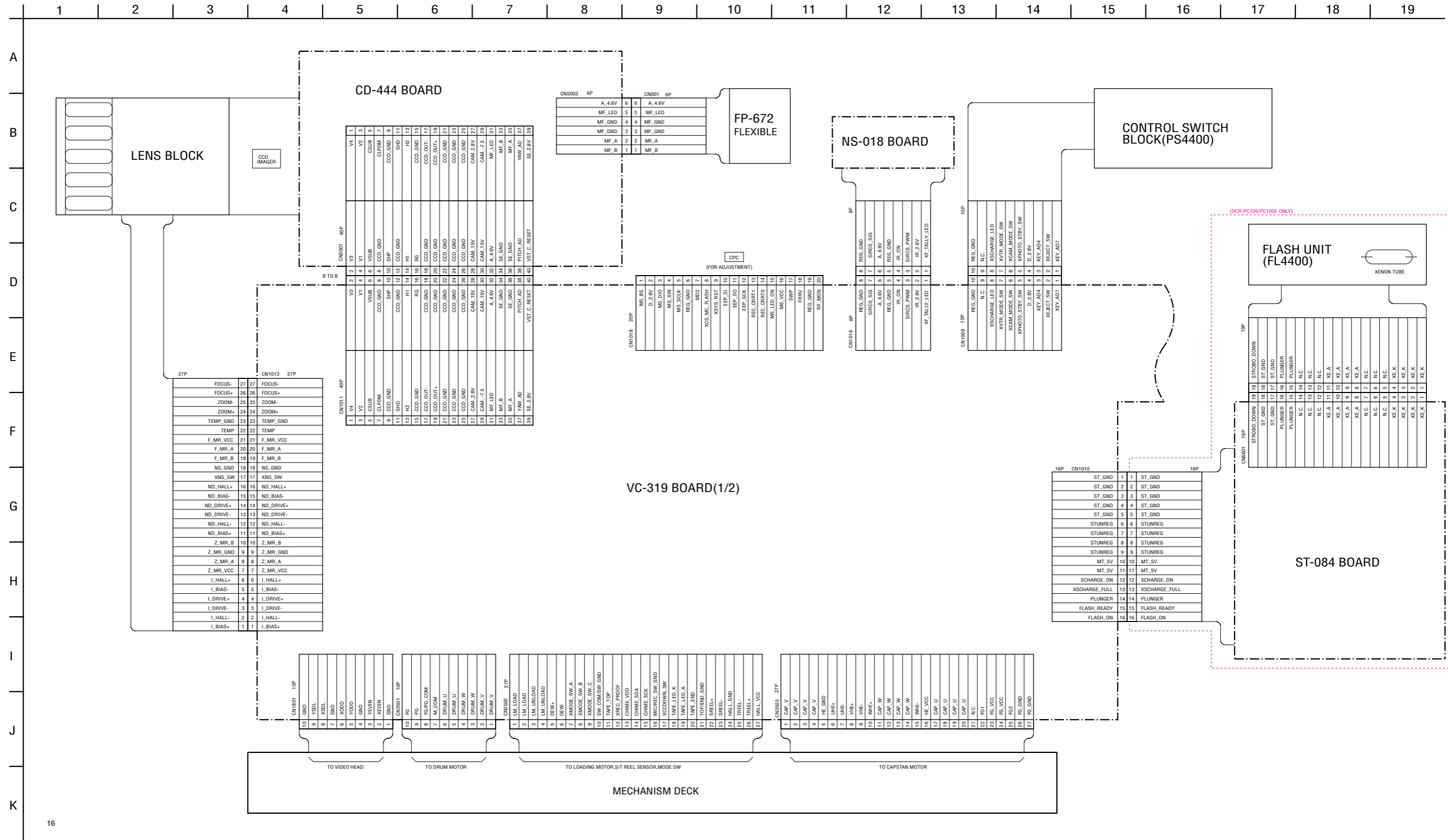
4-2. SCHEMATIC DIAGRAMS

4-3. PRINTED WIRING BOARDS

SECTION 4

PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM (1/2)

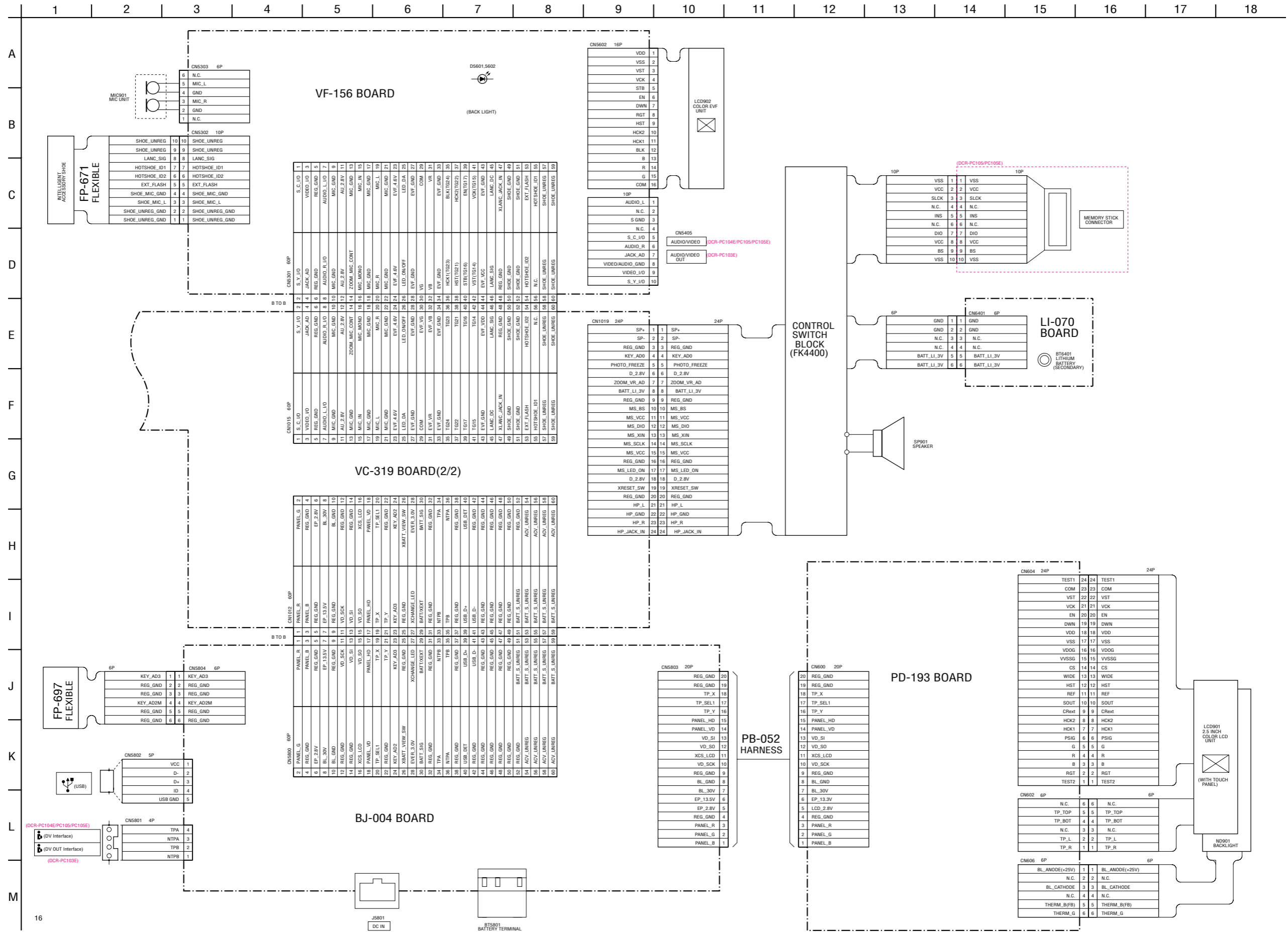




4-2. SCHEMATIC DIAGRAMS

4-3. PRINTED WIRING BOARDS

FRAME SCHEMATIC DIAGRAM (2/2)





4-2. SCHEMATIC DIAGRAMS

Link

• CD-444 BOARD (CCD IMAGER)	• ST-084 BOARD (FLASH DRIVER)
• FP-672 FLEXIBLE BOARD (MF SENSOR)	• FLASH UNIT (FL4400)
• PD-193 BOARD (LCD RGB DRIVE)	• VF-156 BOARD (1/2) (MIC AMP)
• CONTROL SWITCH BLOCK (FK4400) (MS,AUDIO OUT)	• VF-156 BOARD (2/2) (JACK)
• LI-070 BOARD (BATTERY)	• NS-018 BOARD (SIRCS,NS)
• BJ-004 BOARD (JACK)	• CONTROL SWITCH BLOCK (PS4400) (FUNCTION KEY)
• FP-697 FLEXIBLE BOARD	• FP-467/468/228 FLEXIBLE (MD BLOCK)

• COMMON NOTE FOR SCHEMATIC DIAGRAMS

• WAVEFORMS



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.

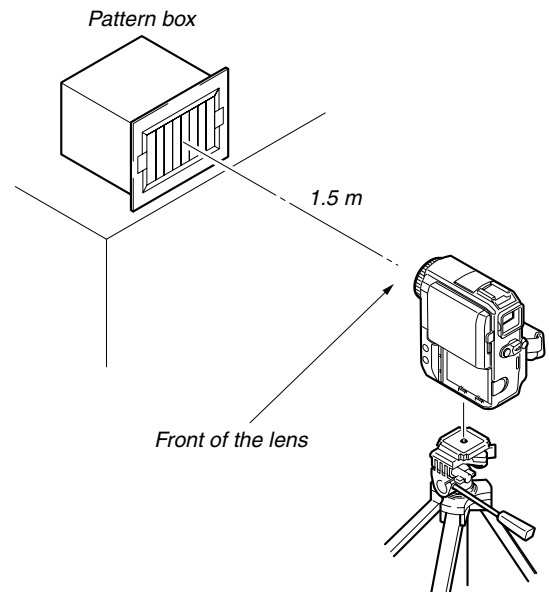
Example	C541	L452
	22U	10UH
	TA A	2520
Kinds of capacitor		
Temperature characteristics		
External dimensions (mm)		

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

(Measuring conditions voltage and waveform)

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

1. Connection



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

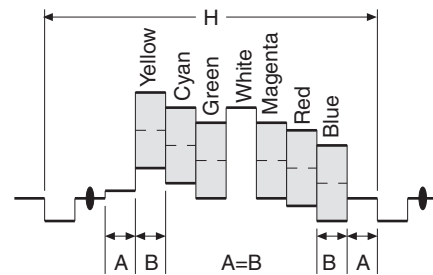


Fig. a (Video output terminal output waveform)

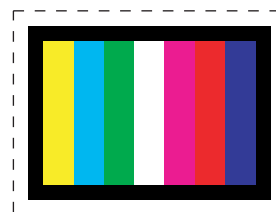


Fig.b (Picture on monitor TV)

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

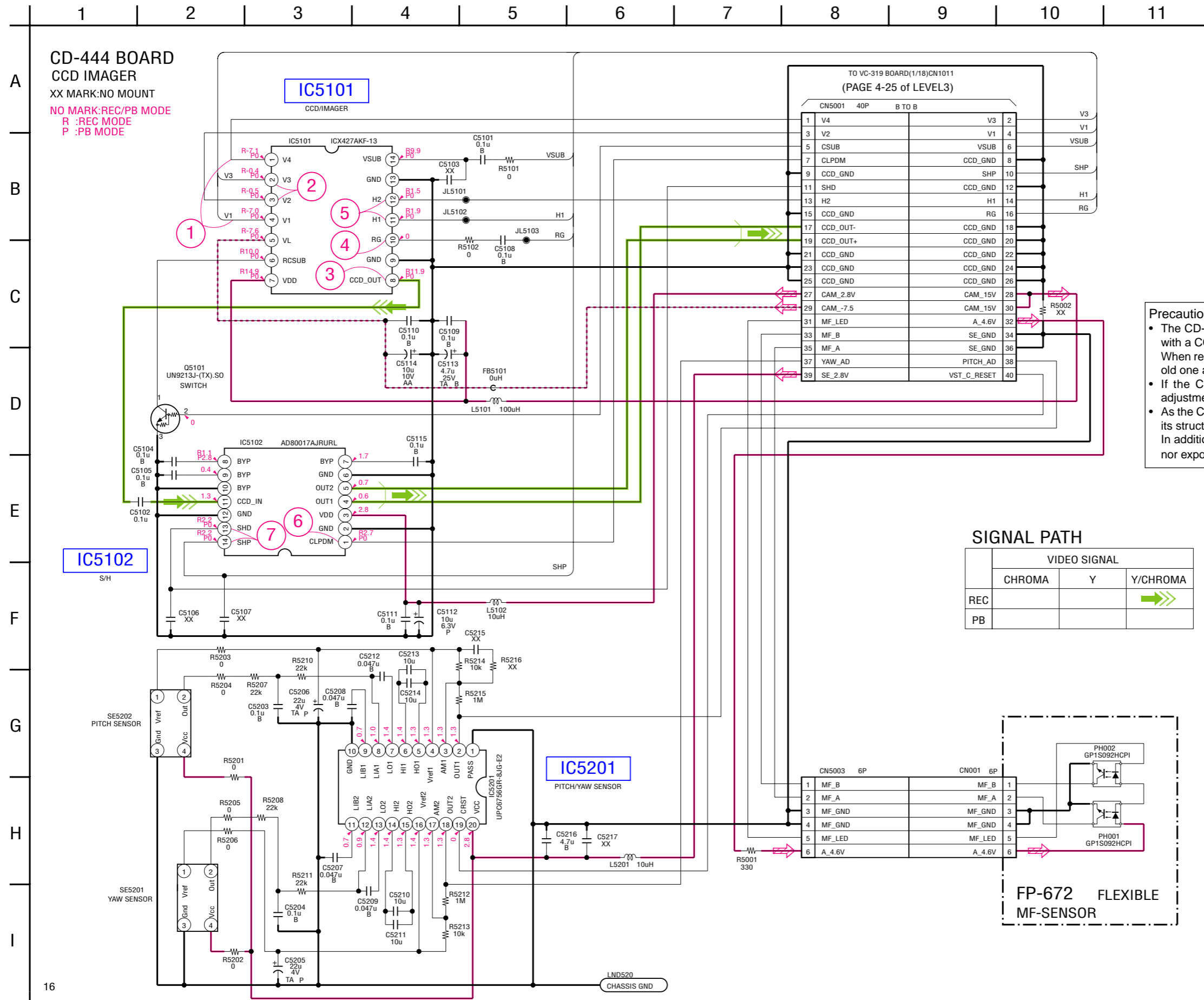
CD-444 BOARD

FP-672 BOARD

4-2. SCHEMATIC DIAGRAMS

For Schematic Diagram

- Refer to page 4-63 for printed wiring board of CD-444 board.
- Refer to page 4-65 for printed wiring board of FP-672 board.

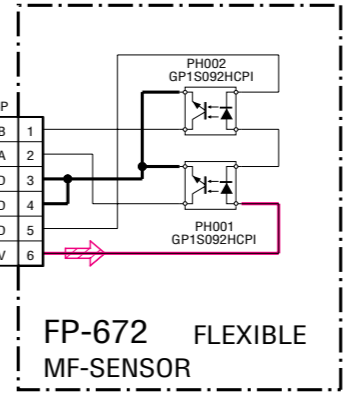


Precautions Upon Replacing CCD imager

- The CD-444 board mounted as a repair part is not equipped with a CCD imager. When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC. In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

SIGNAL PATH

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			➡➡➡
PB			





For Schematic Diagram
 • Refer to page 4-67 for printed wiring board.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A
B
C
D
E
F
G
H
I

PD-193 BOARD
 LCD RGB DRIVER
 XX MARK:NO MOUNT
 NO MARK:REC/PB MODE

SIGNAL PATH

		VIDEO SIGNAL		
	REC	CHROMA	Y	Y/CHROMA
	→			
	→			

TO
 S4-004 BOARD
 CN5803
 (THROUGH THE
 PB-052 HARNESS)
 (PAGE 4-14)

CN600 20P	
PANEL_B	1
PANEL_G	2
PANEL_R	3
REG_GND	4
LCD_2.8V	5
EP_13.5V	6
BL_30V	7
BL_GND	8
REG_GND	9
VD_SCK	10
XCS_LCD	11
VD_SO	12
VD_SI	13
PANEL_VD	14
PANEL_HD	15
TP_Y	16
TP_SEL1	17
TP_X	18
REG_GND	19
REG_GND	20

CN602 6P	
N.C.	8
TP_TOP	5
TP_BOT	4
N.C.	3
TP_L	2
TP_R	1

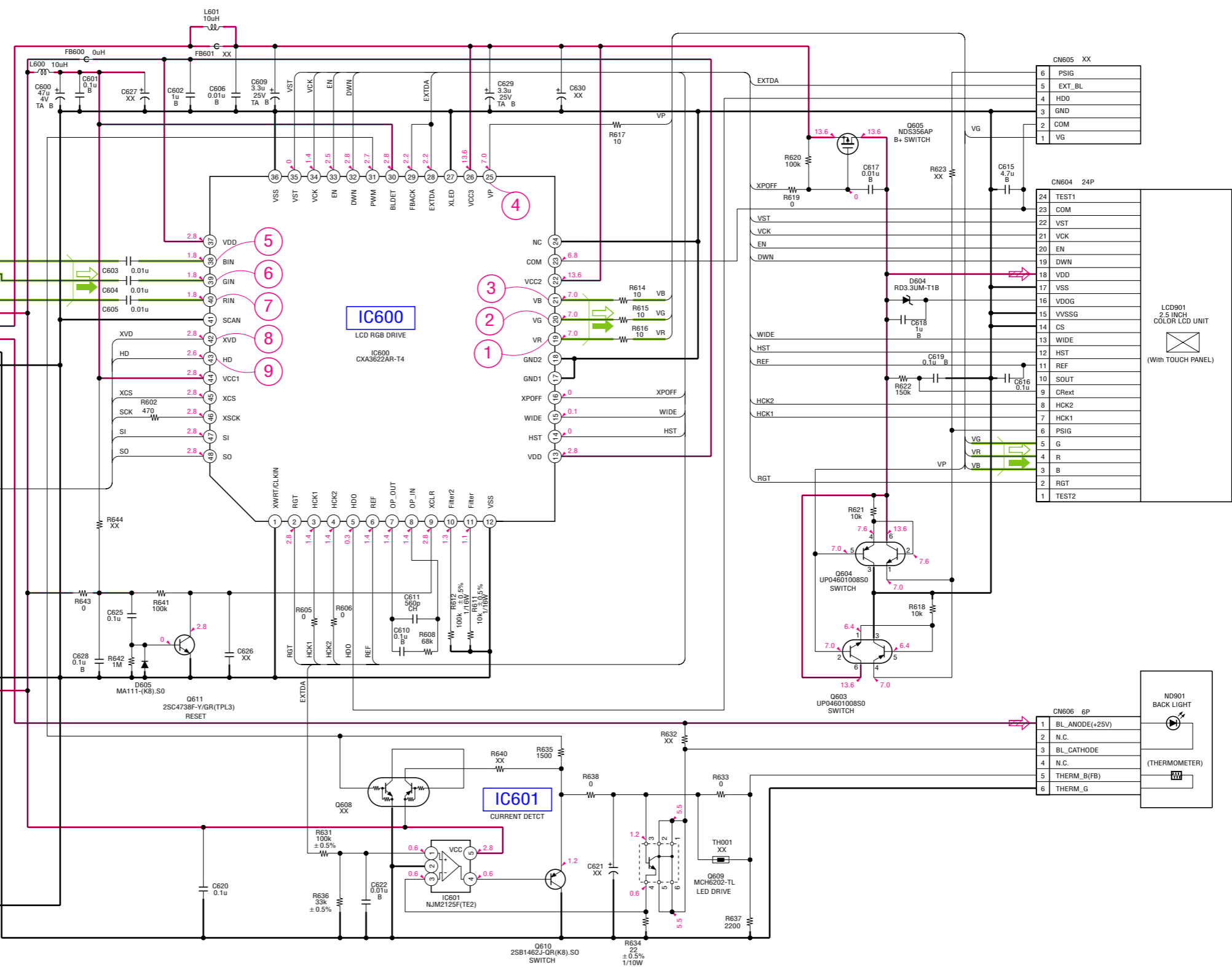
CN606 6P	
BL_ANODE(+25V)	1
N.C.	2
BL_CATHODE	3
N.C.	4
THERM_B(FB)	5
THERM_G	6

CN605 XX	
6	PSIG
5	EXT_BL
4	HDO
3	GND
2	COM
1	VG

CN604 24P	
24	TEST1
23	COM
22	VST
21	VCK
20	EN
19	DWN
18	VDD
17	VSS
16	VDOG
15	VVSSG
14	CS
13	WIDE
12	HST
11	REF
10	SOUT
9	CRext
8	HCK2
7	HCK1
6	PSIG
5	G
4	R
3	B
2	RG1
1	TEST2

LCD901
 2.5 INCH
 COLOR LCD UNIT
 (With TOUCH PANEL)

ND901
 BACK LIGHT
 (THERMOMETER)

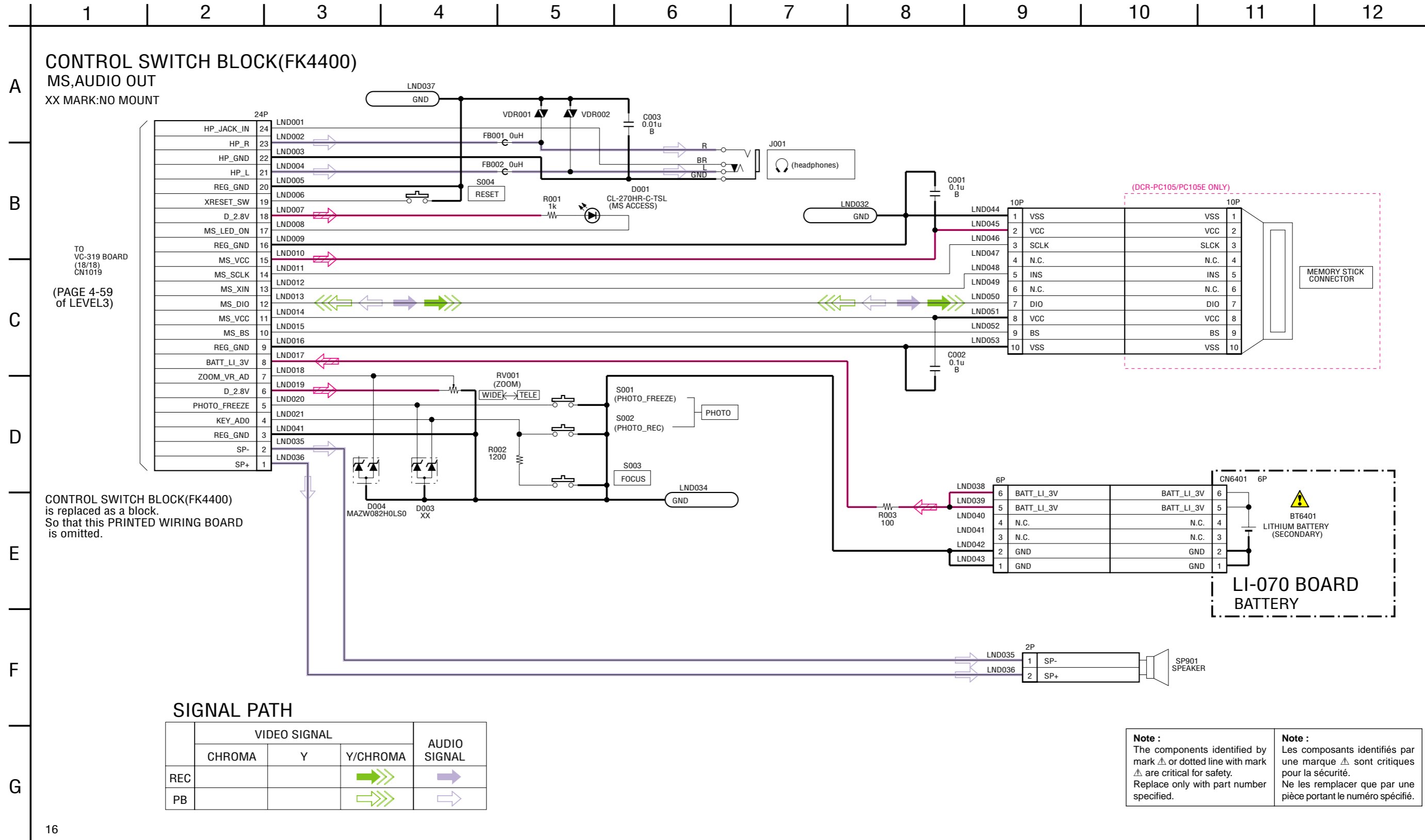




4-2. SCHEMATIC DIAGRAMS LI-070 PRINTED WIRING BOARD

For Schematic Diagram

• Refer to page 4-65 for printed wiring board of LI-070 board.

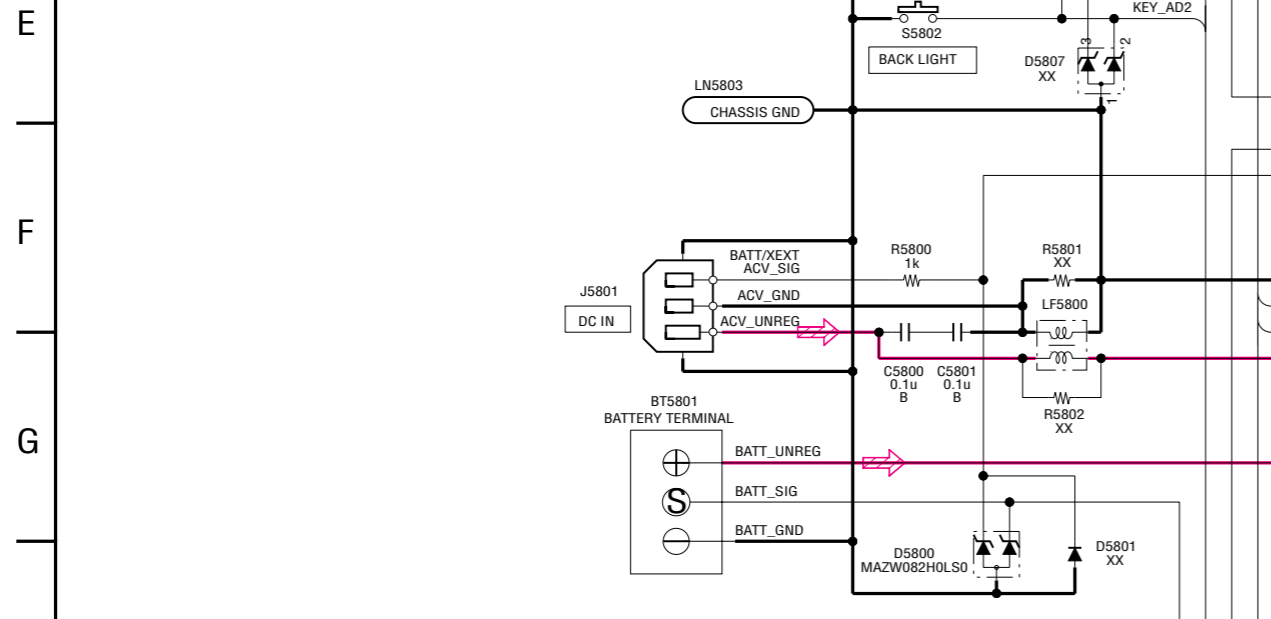
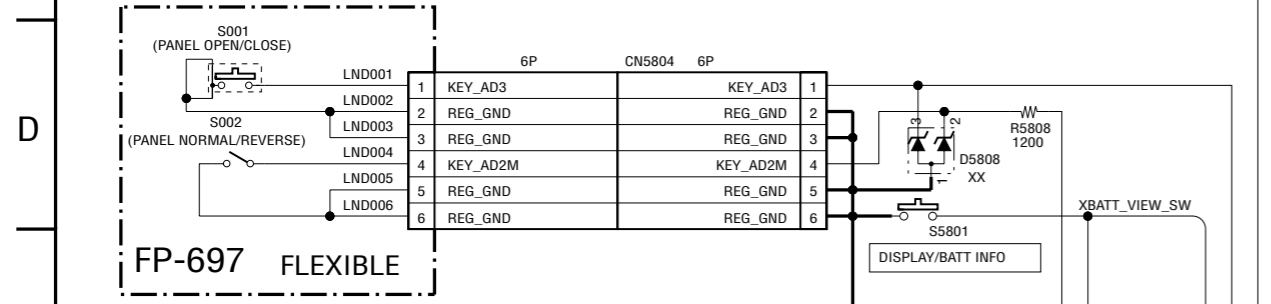
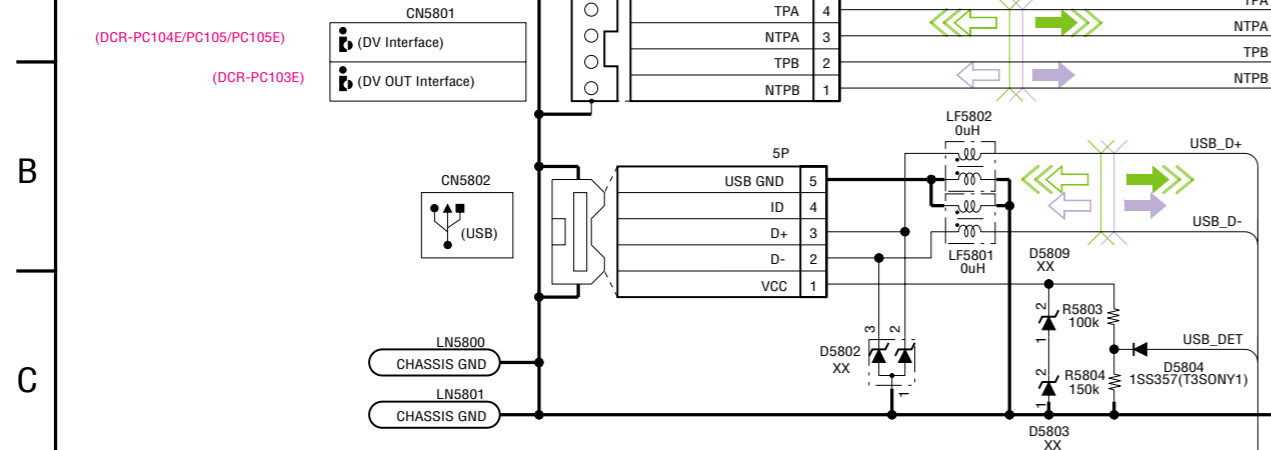


COVER

For Schematic Diagram
 • Refer to page 4-66 for printed wiring board of FP-697.
 • Refer to page 4-69 for printed wiring board of BJ-004.

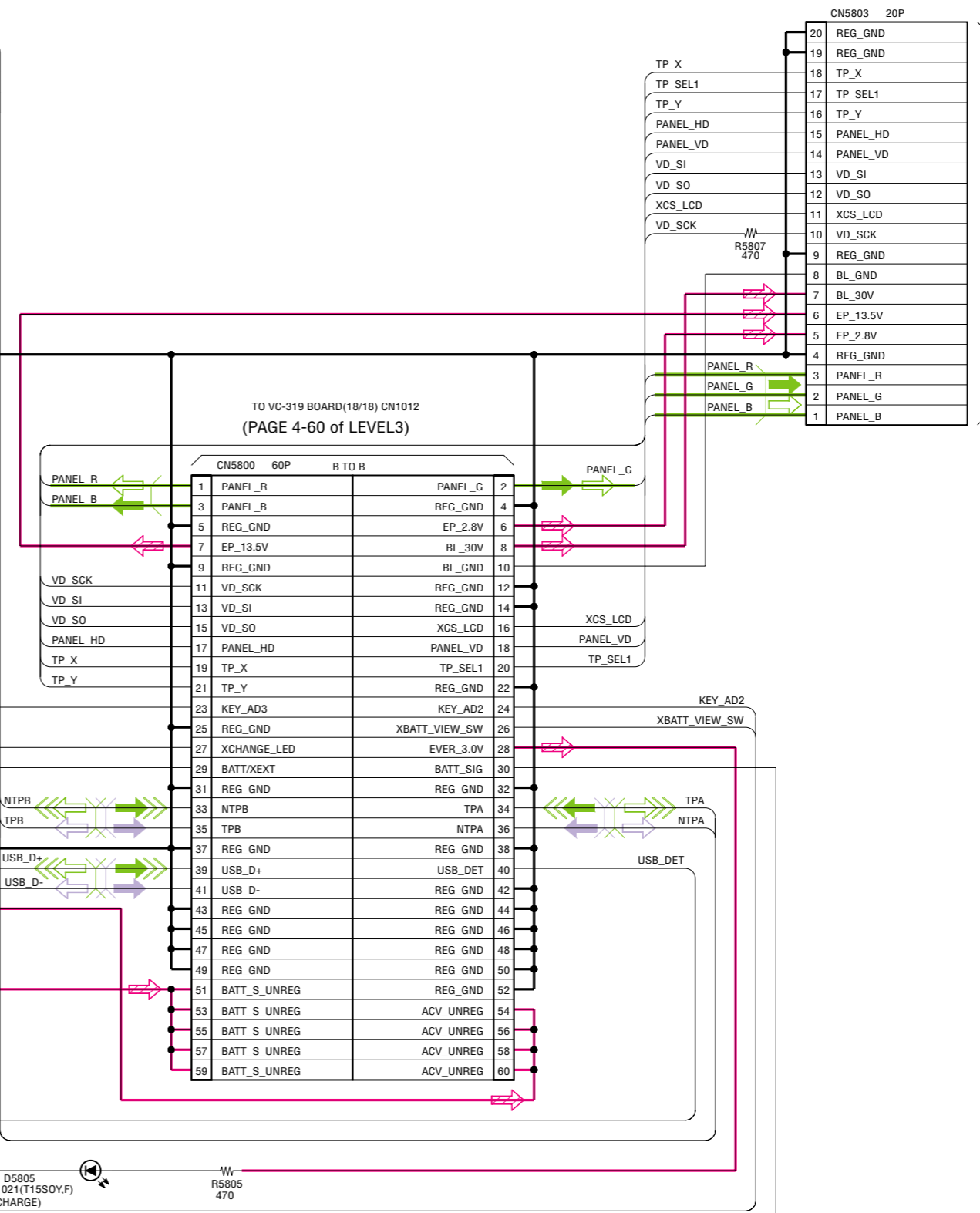
1 2 3 4 5 6 7 8 9 10 11 12 13

BJ-004 BOARD
JACK
 XX MARK:NO MOUNT



SIGNAL PATH

	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC	→		→	→
PB	→		→	→

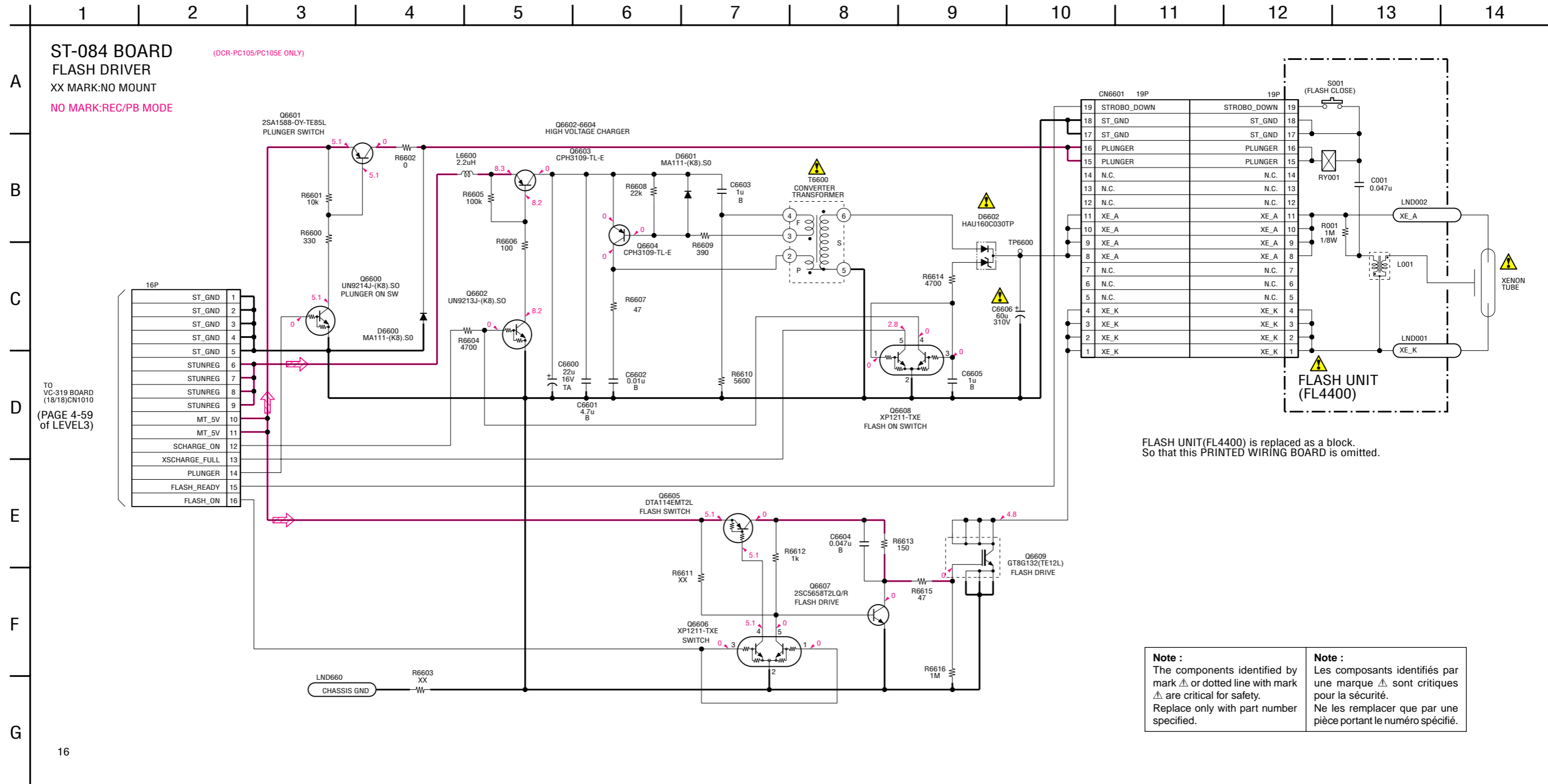




4-2. SCHEMATIC DIAGRAMS ST-084 PRINTED WIRING BOARD

For Schematic Diagram

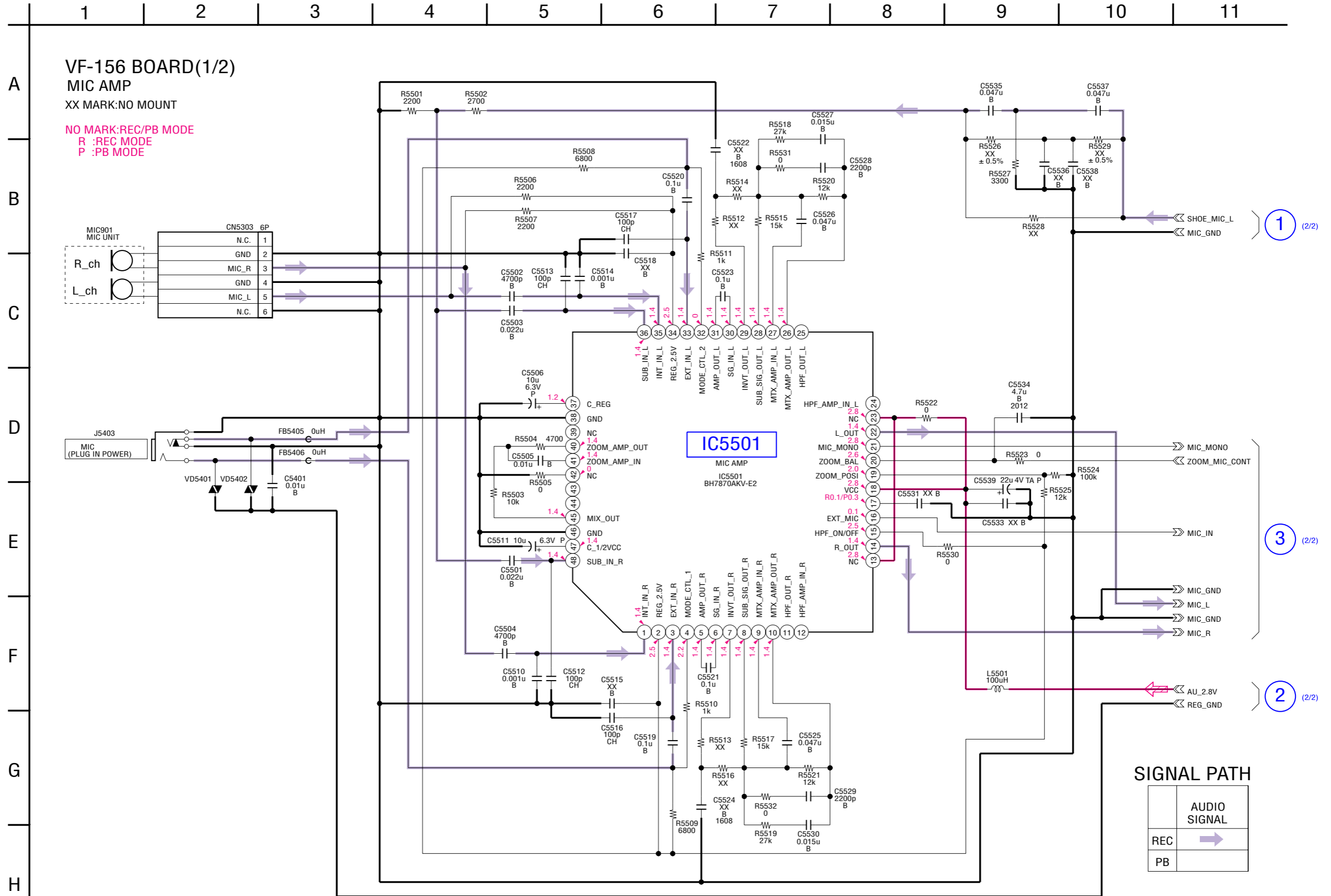
• Refer to page 4-71 for printed wiring board of ST-084.





For Schematic Diagram

• Refer to page 4-73 for printed wiring board.



1 (2/2)

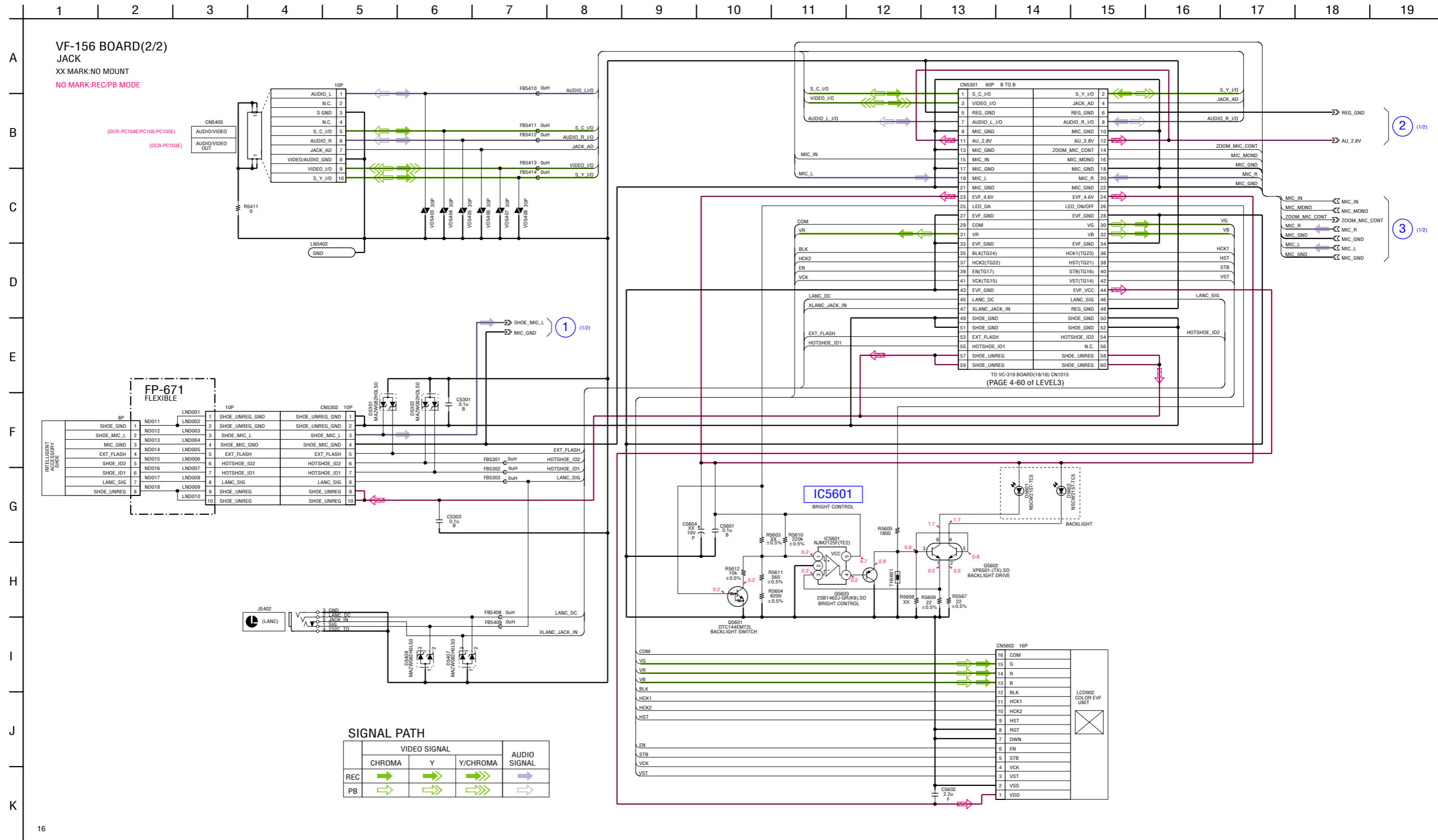
3 (2/2)

2 (2/2)



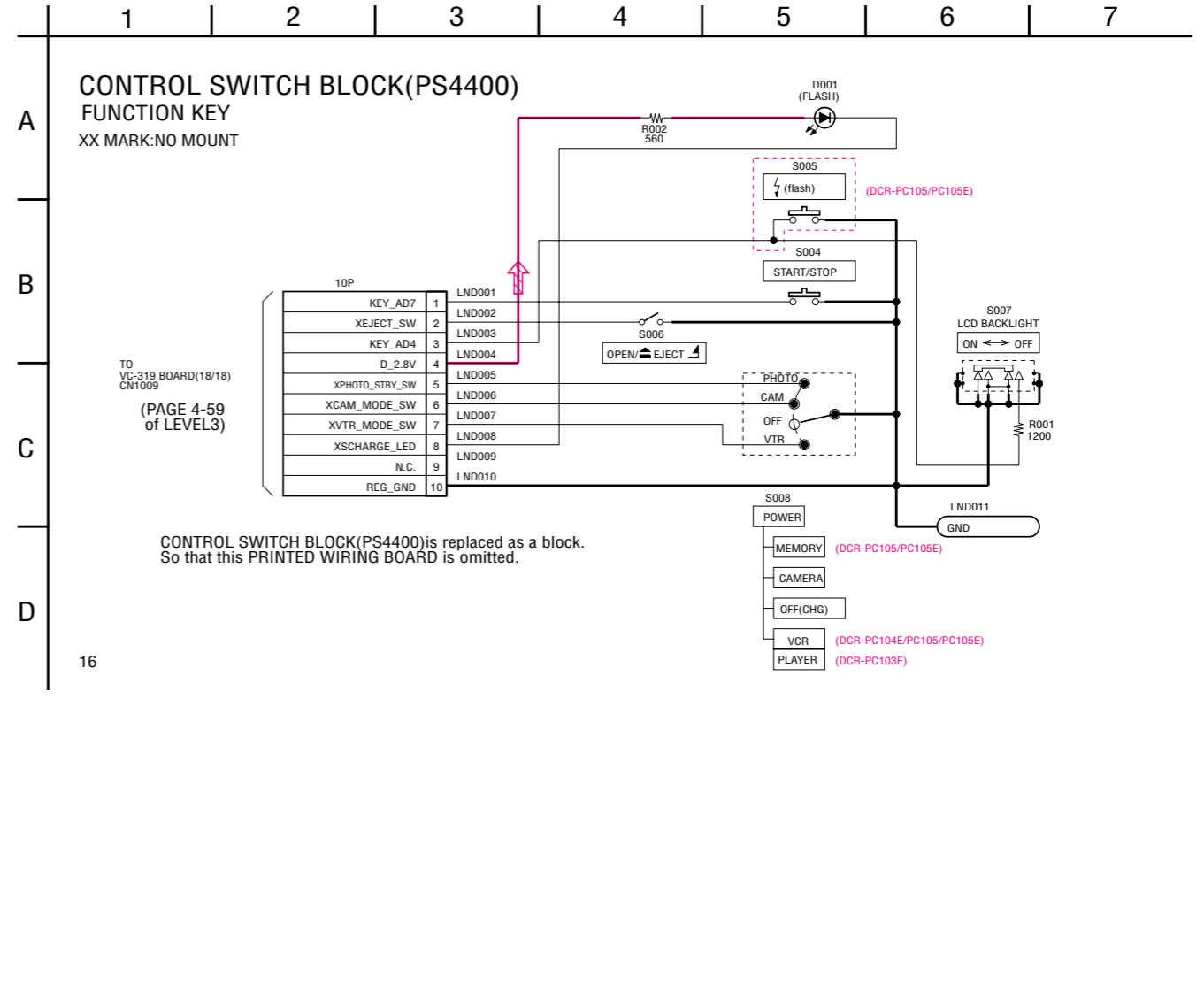
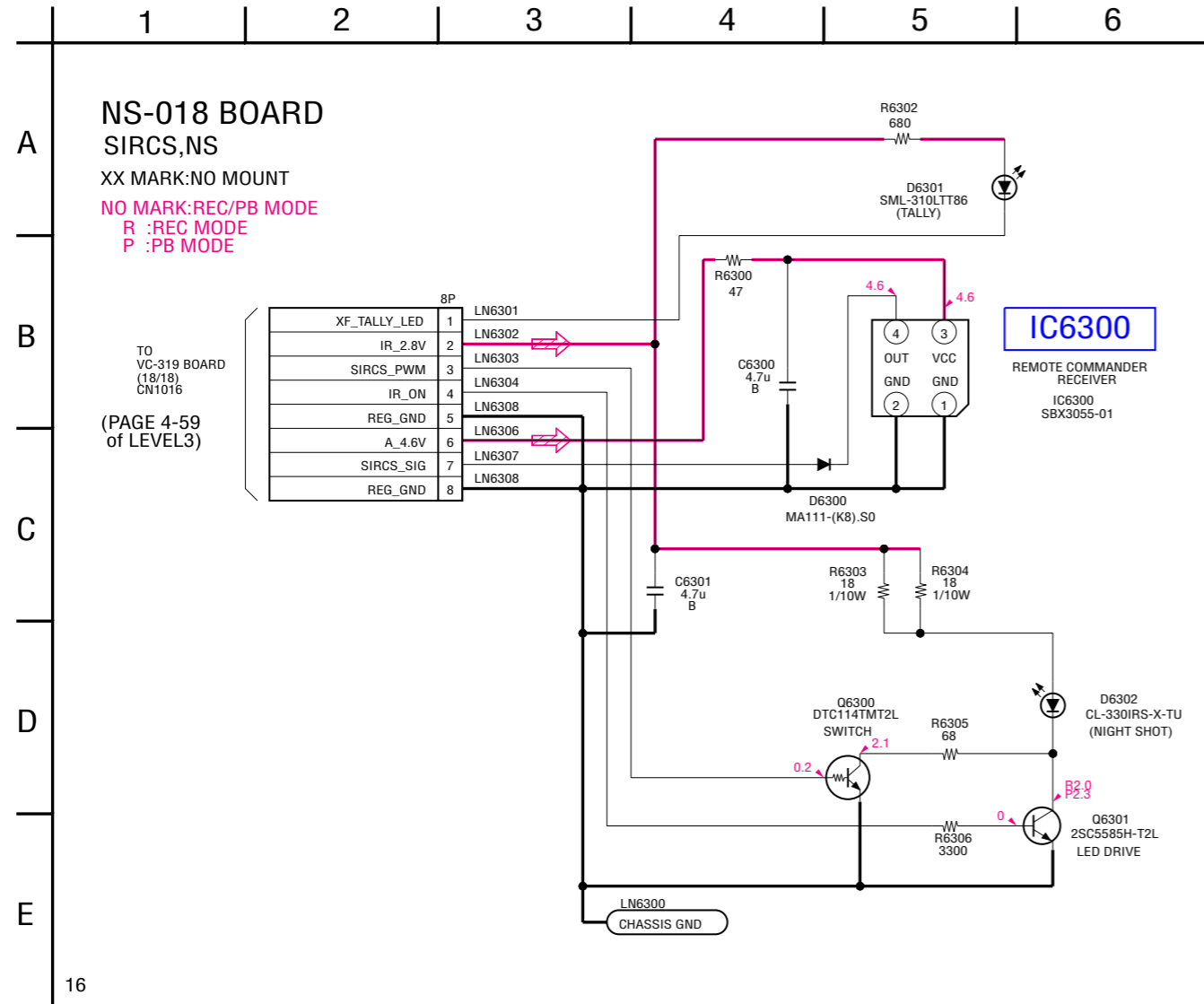
4-2. SCHEMATIC DIAGRAMS VF-156 BOARD SIDE A VF-156 BOARD SIDE B

For Schematic Diagram
 • Refer to page 4-73 for printed wiring board.





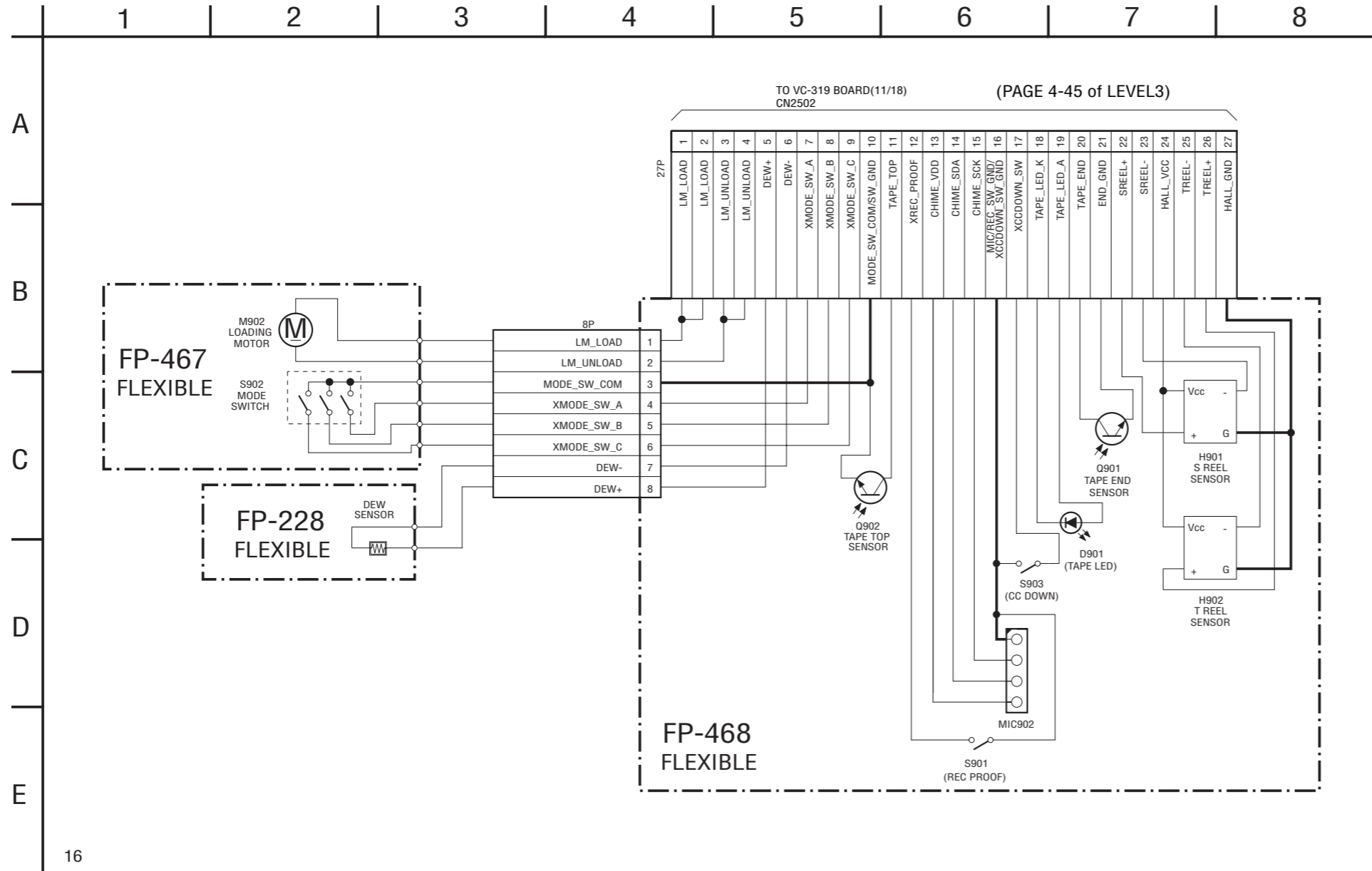
For Schematic Diagram
 • Refer to page 4-66 for printed wiring board of NS-018.





4-2. SCHEMATIC DIAGRAMS FP-467, FP-468, FP-228 FLEXIBLE BOARD

For Schematic Diagram
 • Refer to page 4-81 for printed wiring board.



Schematic diagram of the VC-319 board are not shown.
 Pages from 4-25 to 4-60 are not shown.



4-3. PRINTED WIRING BOARDS

Link

• CD-444 BOARD	• BJ-004 BOARD
• FP-672 FLEXIBLE BOARD	• ST-084 BOARD
• FP-697 FLEXIBLE BOARD	• VF-156 BOARD (SIDE A)
• LI-070 BOARD	• VF-156 BOARD (SIDE B)
• NS-018 BOARD	• FP-467/468/228 FLEXIBLE BOARD
• PD-193 BOARD	




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



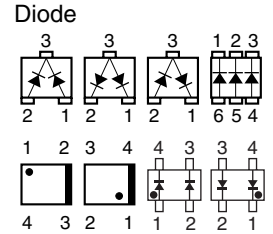
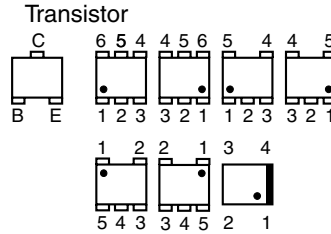
4-3. PRINTED WIRING BOARDS

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.



BOARD INFORMATION

board name	parts location (shown on page)	waveform (shown on page)	pattern		CSP IC
			number of layers	layers not shown	
CD-444	4-87	4-83	4	2 to 3	—
FP-672 FLEXIBLE	—	—	1	—	—
FP-697 FLEXIBLE	—	—	1	—	—
LI-070	—	—	2	—	—
NS-018	—	—	4	2 to 3	—
PD-193	4-87	4-84	2	—	—
BJ-004	4-87	—	4	2 to 3	—
ST-084	4-87	—	4	2 to 3	—
VF-156	4-88	—	4	2 to 3	—
VC-319	4-88, 89	4-85,86	8	2 to 7	IC1301, 1601, 1901, 2101, 2103, 2201, 2301, 2501, 2601, 2704, 2802, 2803, 3001, 4101



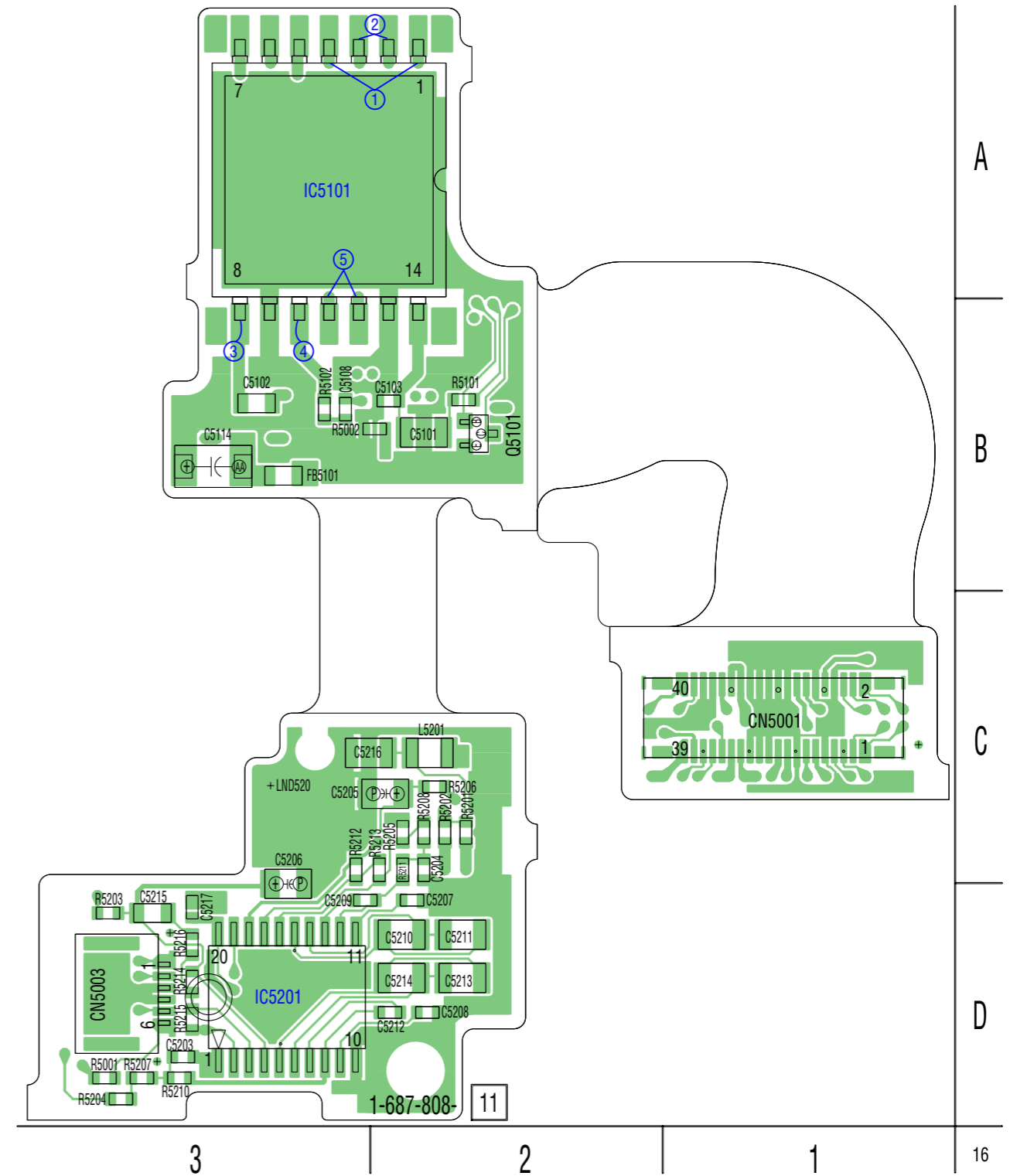
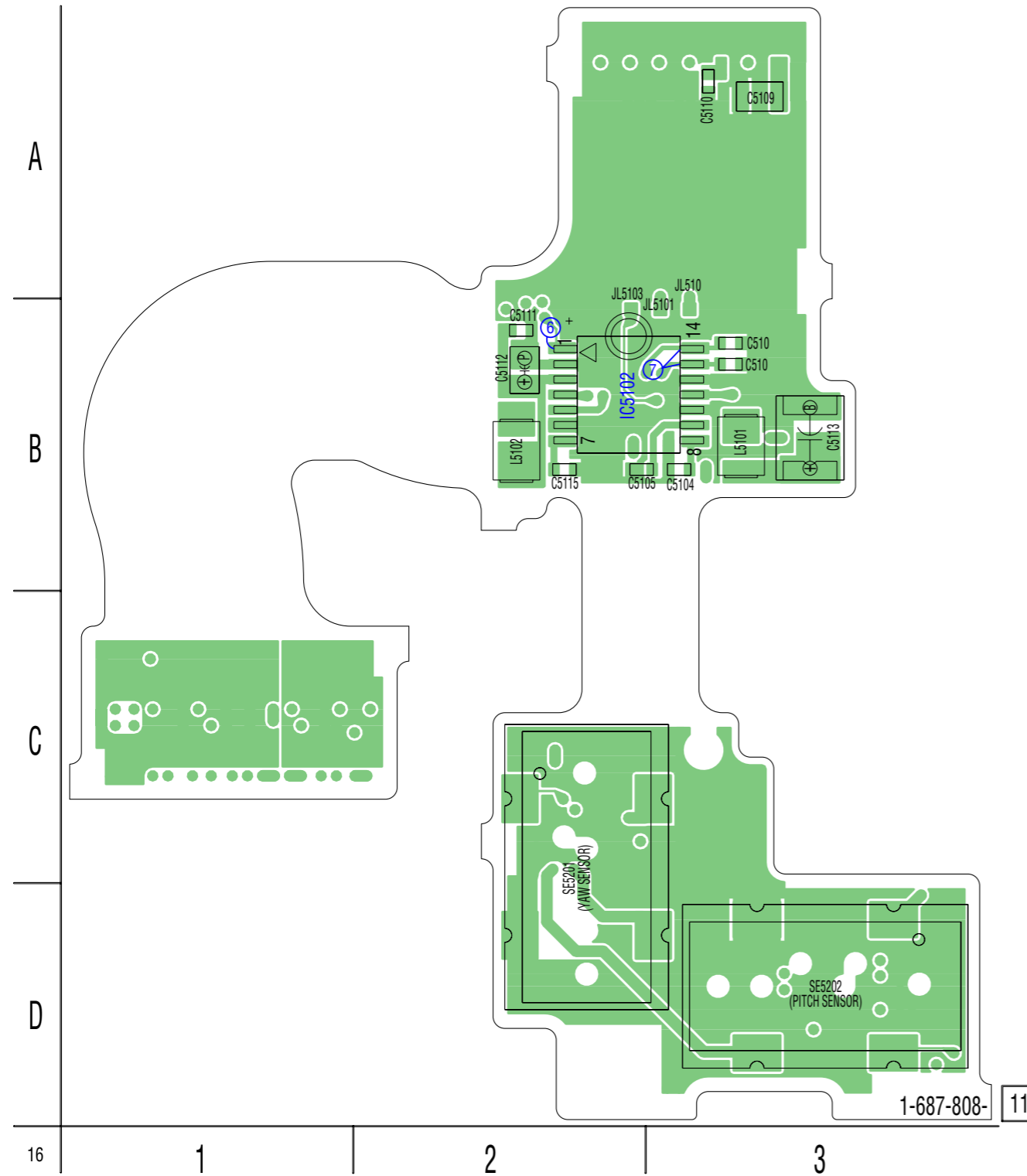
4-3. PRINTED WIRING BOARDS

CD-444 (CCD IMAGER) PRINTED WIRING BOARD • Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

CD-444 BOARD(SIDE A)

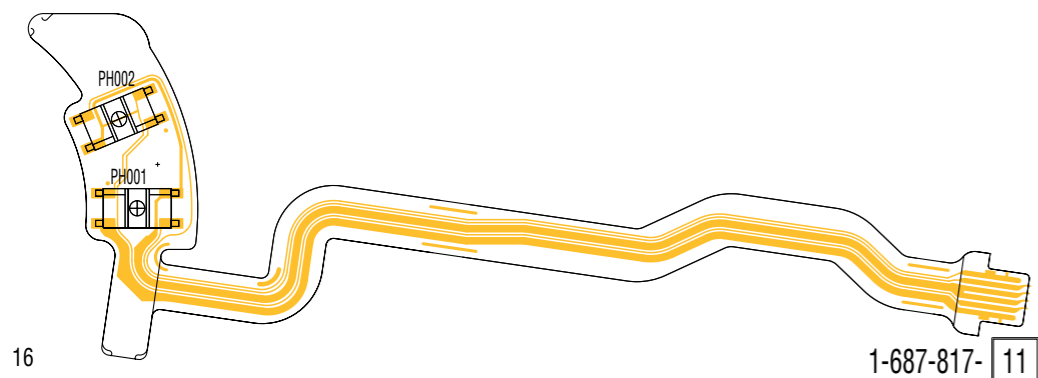
CD-444 BOARD(SIDE B)



COVER

FP-672 (MF SENSOR) FLEXIBLE BOARD

FP-672 BOARD

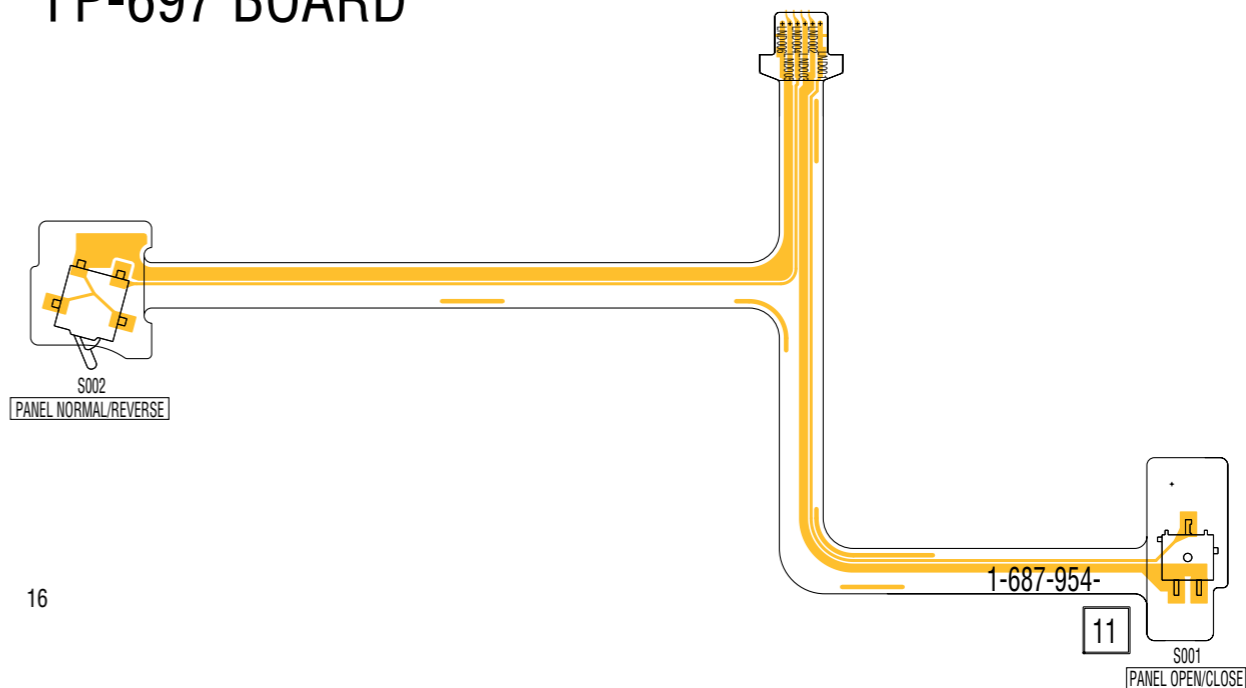


16

1-687-817-11

FP-697 FLEXIBLE BOARD

FP-697 BOARD



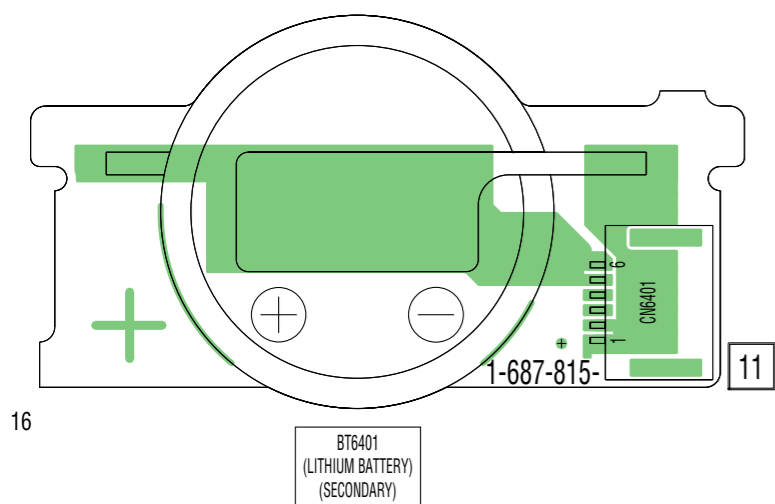
16

• Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

LI-070 (BATTERY) PRINTED WIRING BOARD

LI-070 BOARD



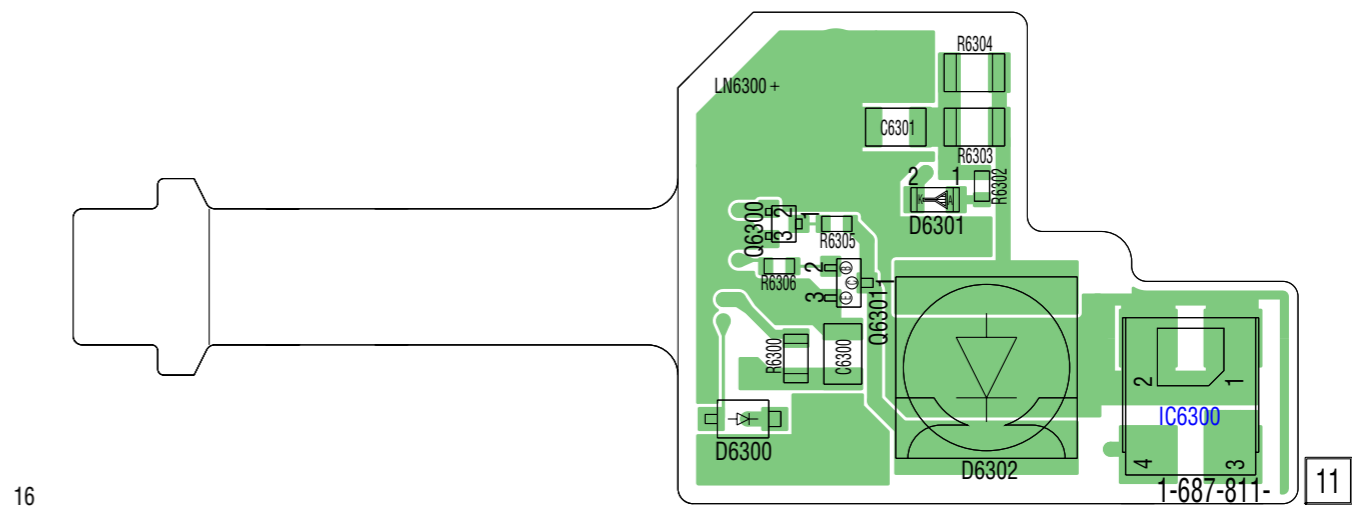
16

BT6401
(LITHIUM BATTERY)
(SECONDARY)

1-687-815-11

NS-018 (SIRCS,NS) PRINTED WIRING BOARD

NS-018 BOARD



16

1-687-811-11

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

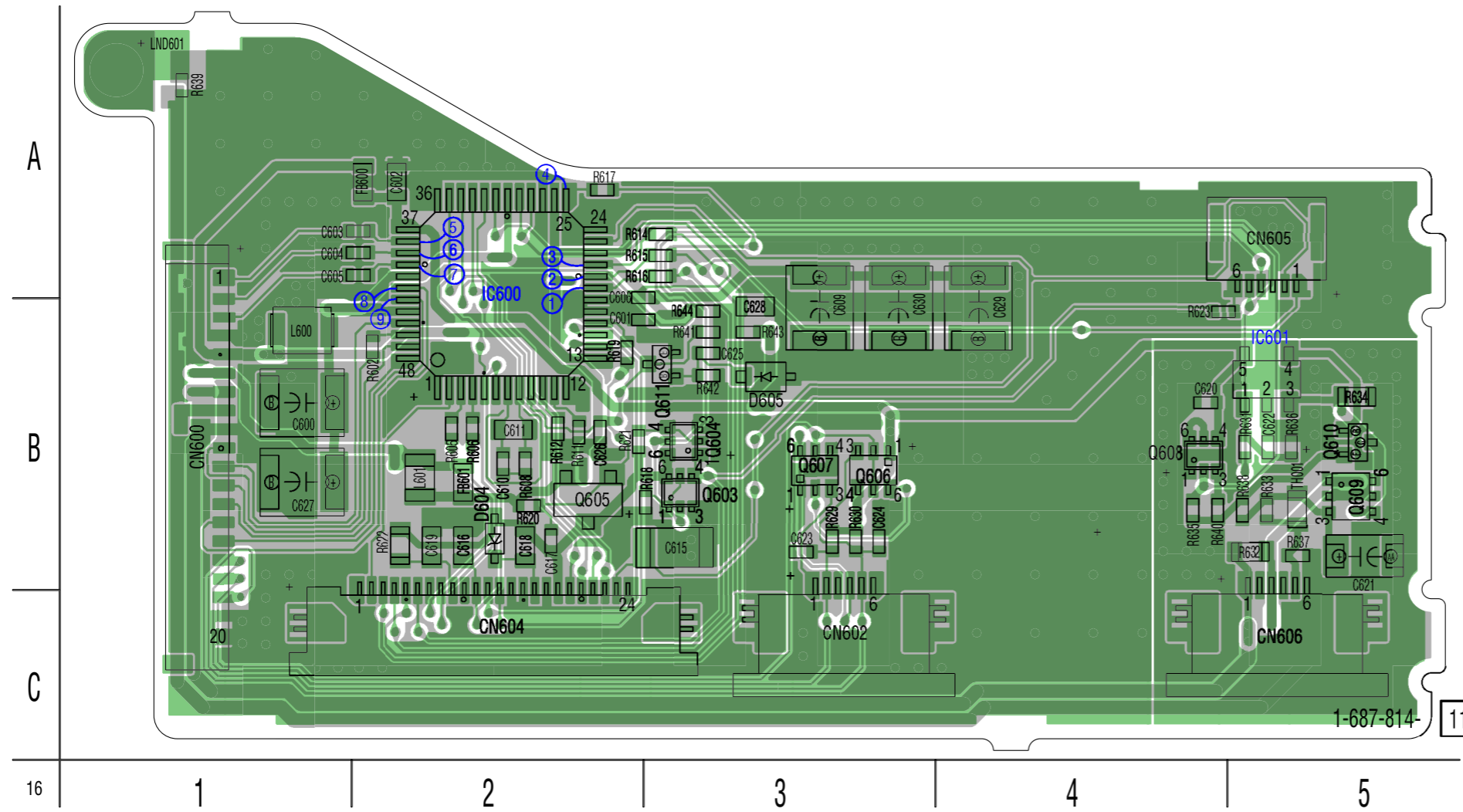


PD-193 (LCD RGB DRIVE) PRINTED WIRING BOARD

• Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

PD-193 BOARD





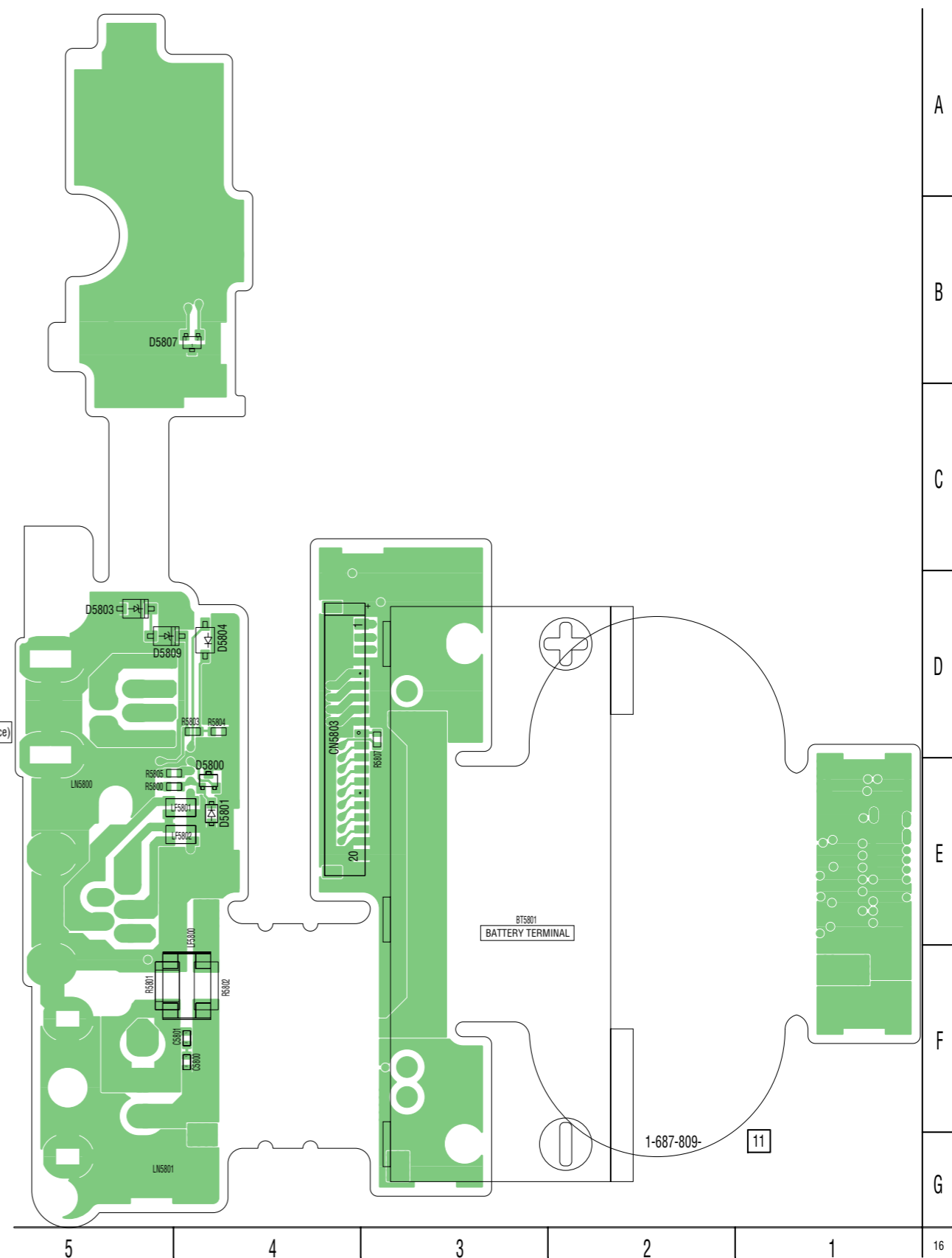
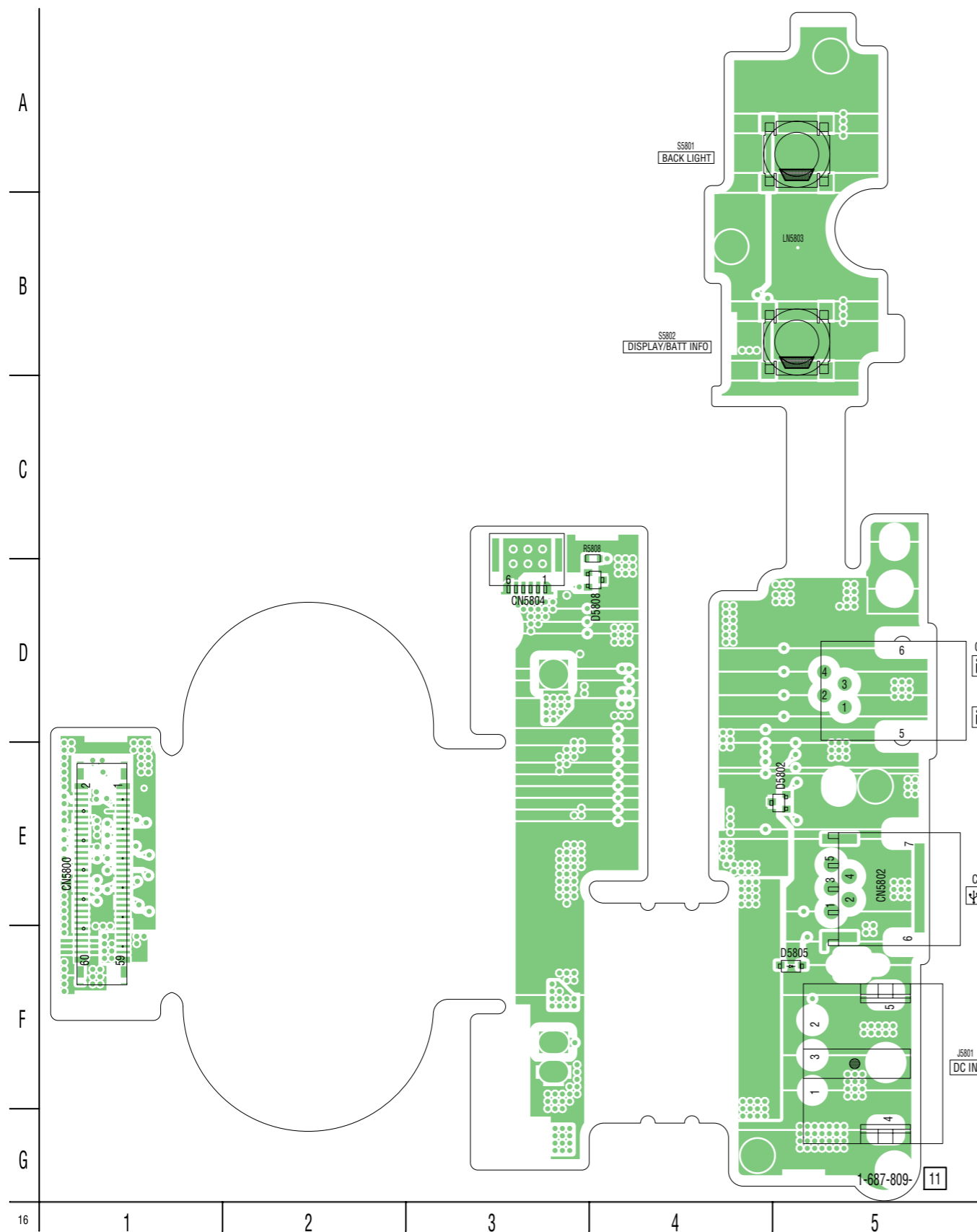
BJ-004 (JACK) PRINTED WIRING BOARD

• Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

BJ-004 BOARD(SIDE A)

BJ-004 BOARD(SIDE B)



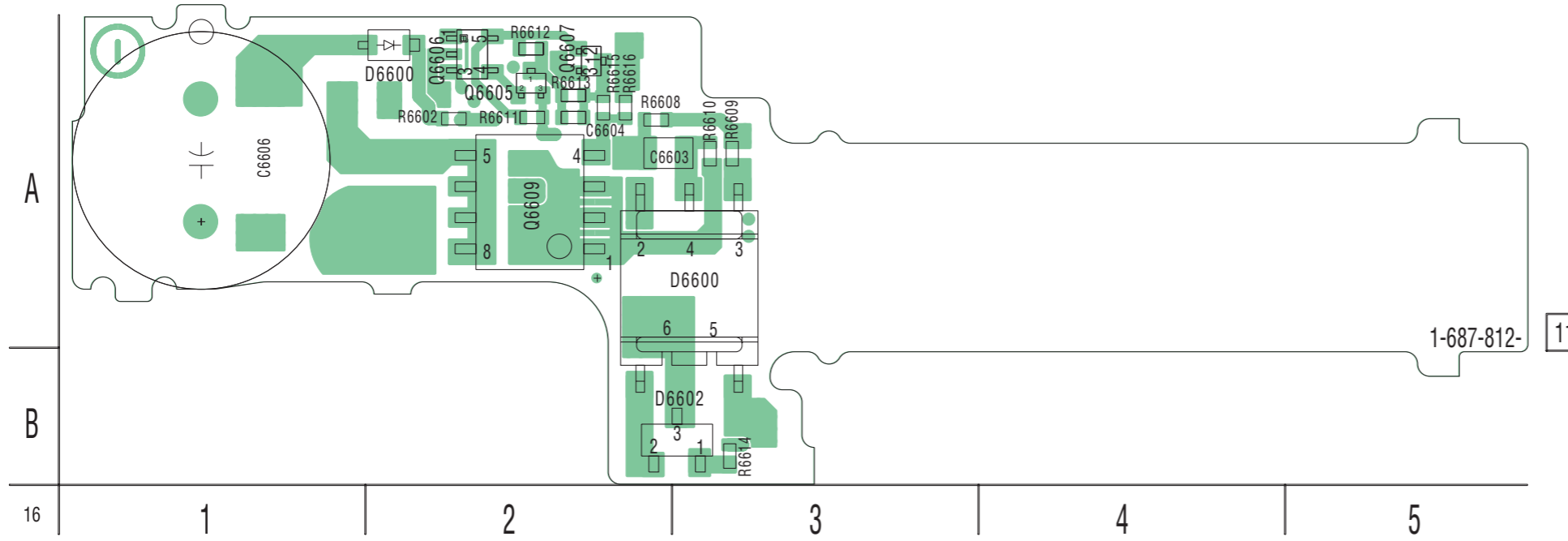


ST-084 (FLASH DRIVER) PRINTED WIRING BOARD

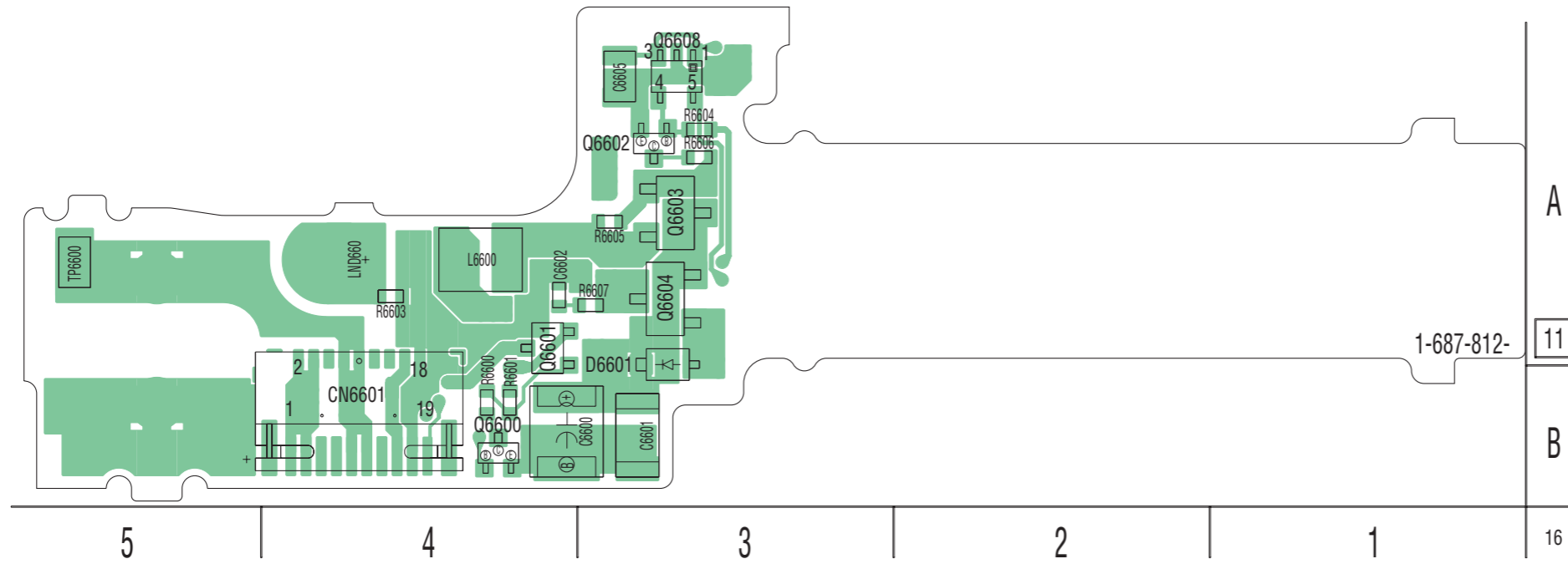
• Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

ST-084 BOARD(SIDE A)



ST-084 BOARD(SIDE B)

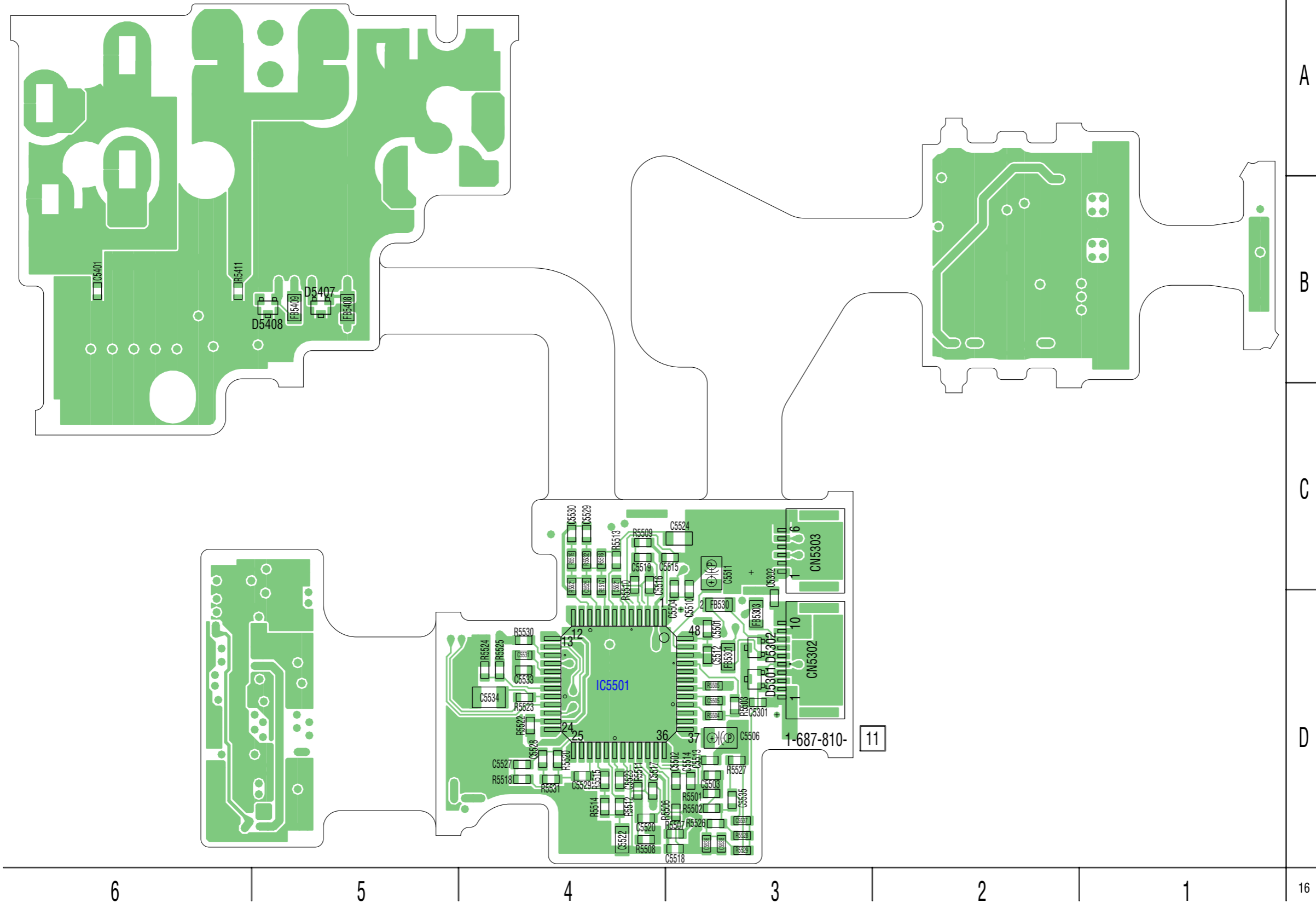




• Refer to page 4-61 for common note for printed wiring board.

• : Uses unleaded solder.

VF-156 BOARD(SIDE B)

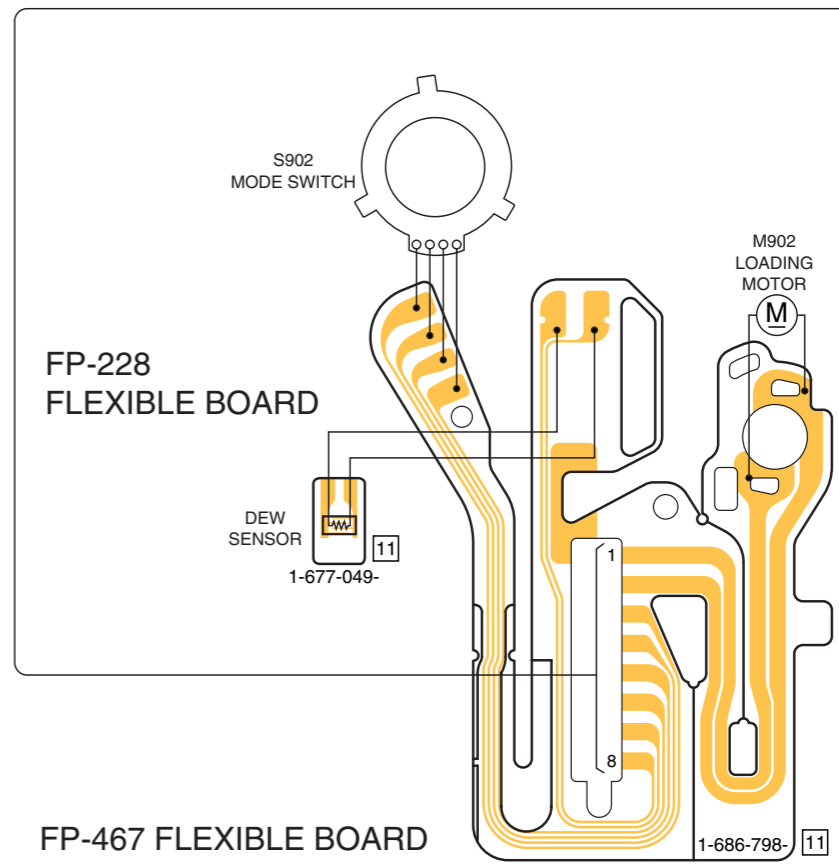
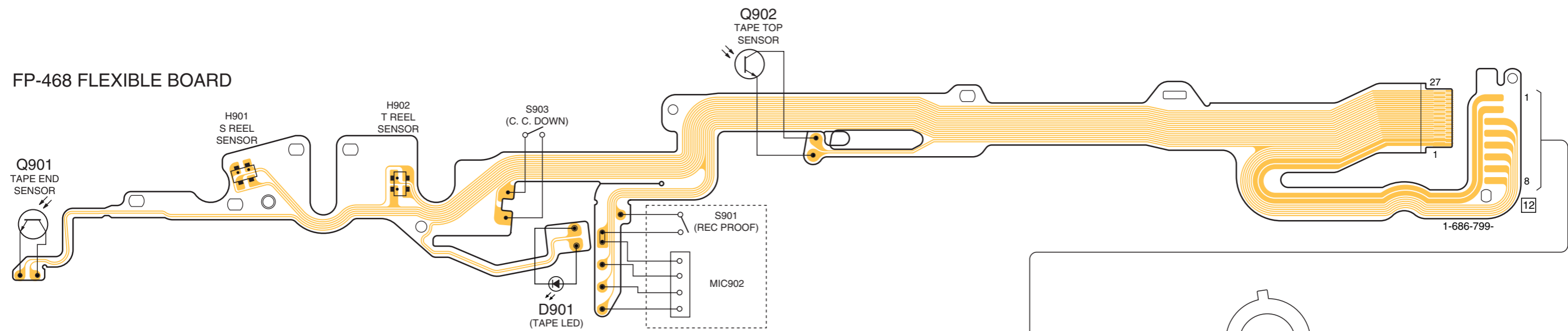


Printed wiring board of the VC-319 board are not shown.
Pages from 4-77 to 4-80 are not shown.



FP-467/468/228 FLEXIBLE WIRING BOARD (MD BLOCK)

FP-468 FLEXIBLE BOARD

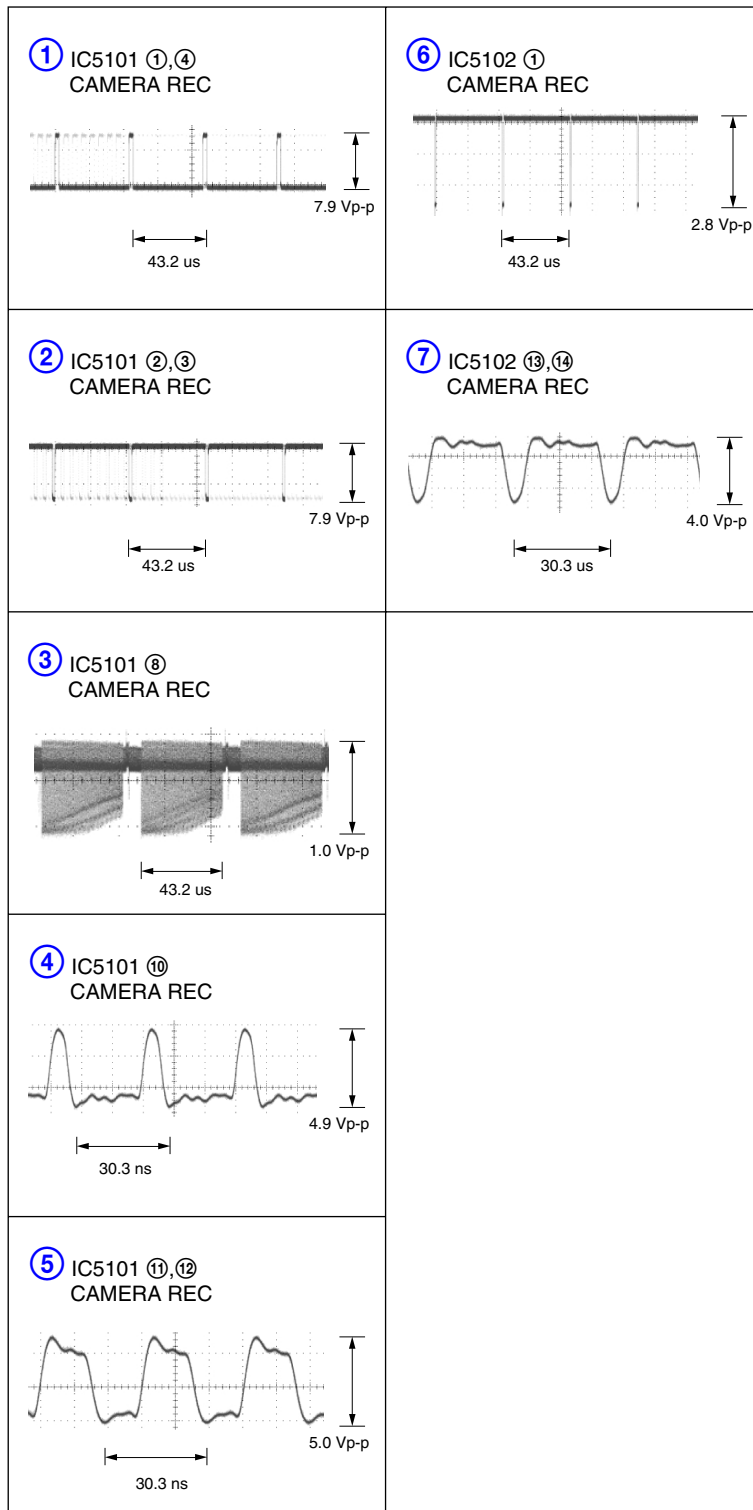




CD-444 PRINTED WIRING BOARD

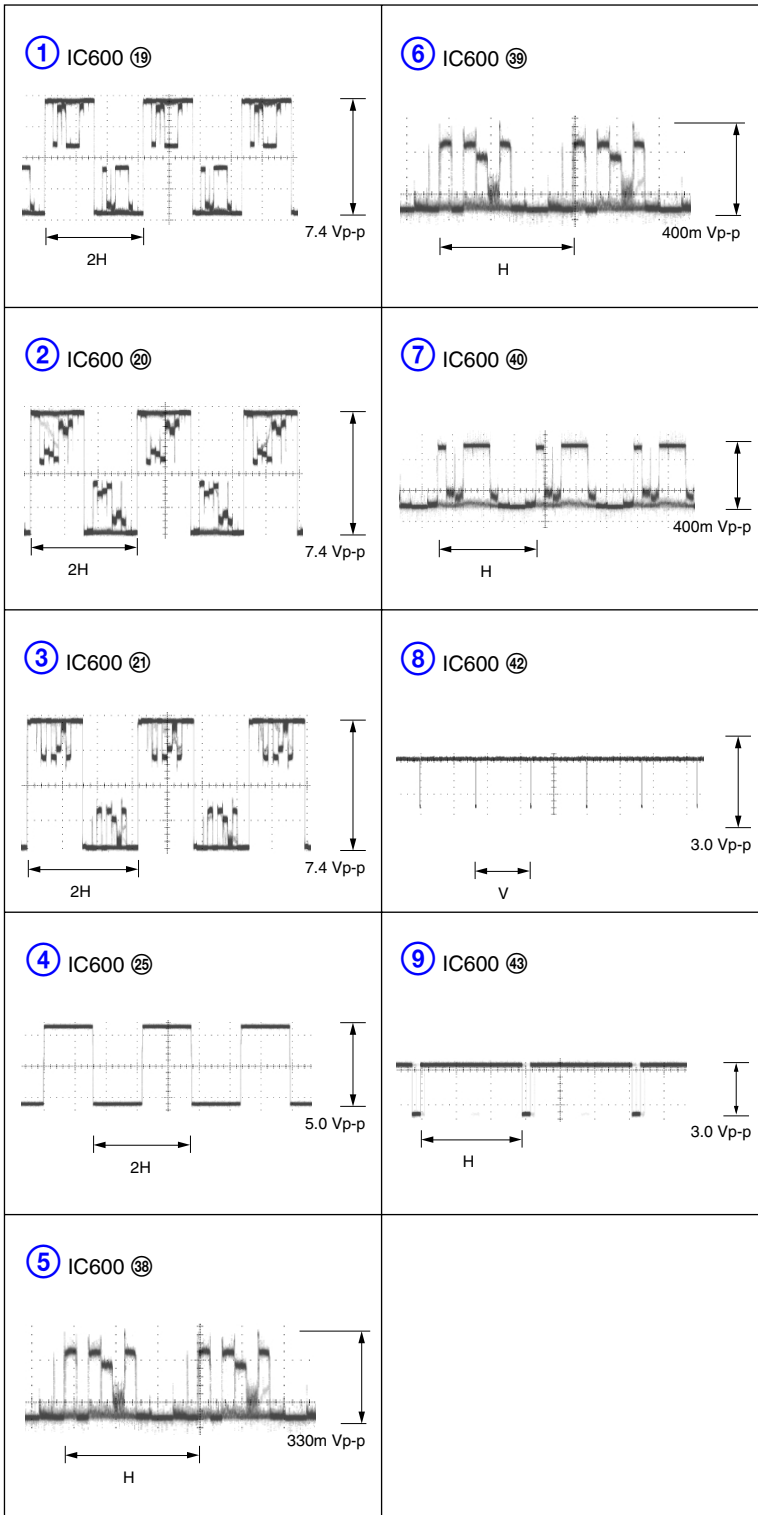
4-4. WAVEFORMS

CD-444 BOARD





PD-193 BOARD



Waveforms of the VC-319 board are not shown.
Pages from 4-85 to 4-86 is not shown.



4-3. PRINTED WIRING BOARDS

4-5. MOUNTED PARTS LOCATION

no mark : side A

* mark : side B

CD-444 BOARD

C510 B-3
 C510 B-3
 * C5101 B-2
 * C5102 B-3
 * C5103 B-2
 C5104 B-3
 C5105 B-2
 * C5108 B-3
 C5109 A-3
 C5110 A-3
 C5111 B-2
 C5112 B-2
 C5113 B-3
 * C5114 B-3
 C5115 B-2
 * C5203 D-3
 * C5204 C-2
 * C5205 C-2
 * C5206 C-3
 * C5207 D-2
 * C5208 D-2
 * C5209 D-2
 * C5210 D-2
 * C5211 D-2
 * C5212 D-2
 * C5213 D-2
 * C5214 D-2
 * C5215 D-3
 * C5216 C-2
 * C5217 D-3
 * CN5001 C-1
 * CN5003 D-3
 * FB5101 B-3
 * IC5101 A-3
 IC5102 B-2
 * IC5201 D-3
 L5101 B-3
 L5102 B-2
 * L5201 C-2
 * Q5101 B-2
 * R5001 D-3
 * R5002 B-2
 * R5101 B-2
 * R5102 B-3
 * R5201 C-2
 * R5202 C-2
 * R5203 D-3
 * R5204 D-3
 * R5205 C-2
 * R5206 C-2
 * R5207 D-3
 * R5208 C-2
 * R5210 D-3
 * R5211 C-2
 * R5212 C-3
 * R5213 C-2
 * R5214 D-3
 * R5215 D-3
 * R5216 D-3
 SE5201 C-2
 SE5202 D-3

PD-193 BOARD

C600 B-1
 C601 B-2
 C602 A-2
 C603 A-2
 C604 A-2
 C605 A-2
 C606 A-3
 C609 B-3
 C610 B-2
 C611 B-2
 C615 B-3
 C616 B-2
 C617 B-2
 C618 B-2
 C619 B-2
 C620 B-4
 C621 B-5
 C622 B-5
 C623 B-3
 C624 B-3
 C625 B-3
 C626 B-2
 C627 B-1
 C628 B-3
 C629 B-4
 C630 B-3
 CN600 B-1
 CN602 C-3
 CN604 C-2
 CN605 A-5
 CN606 C-5
 D604 B-2
 D605 B-3
 FB600 A-2
 FB601 B-2
 IC600 A-2
 IC601 B-5
 L600 B-1
 L601 B-2
 Q603 B-3
 Q604 B-3
 Q605 B-2
 Q606 B-3
 Q607 B-3
 Q608 B-4
 Q609 B-5
 Q610 B-5
 Q611 B-3
 R602 B-2
 R605 B-2
 R606 B-2
 R608 B-2
 R611 B-2
 R612 B-2
 R614 A-3
 R615 A-3
 R616 A-3
 R617 A-2
 R618 B-2
 R619 B-2
 R620 B-2
 R621 B-2
 R622 B-2
 R623 B-4
 R629 B-3
 R630 B-3
 R631 B-5
 R632 B-5
 R633 B-5
 R634 B-5
 R635 B-4
 R636 B-5
 R637 B-5
 R638 B-5
 R639 A-1
 R640 B-4
 R641 B-3

R642 B-3
 R643 B-3
 R644 B-3
 TH001 B-5

BJ-004 BOARD

* BT5801 E-3
 * C5800 F-4
 * C5801 F-4
 CN5800 E-1
 CN5801 D-5
 CN5802 E-5
 * CN5803 D-4
 CN5804 D-3
 * D5800 E-4
 * D5801 E-4
 D5802 E-5
 * D5803 D-5
 * D5804 D-4
 D5805 F-5
 * D5807 B-4
 D5808 D-4
 * D5809 D-5
 J5801 F-5
 * LF5800 F-4
 * LF5801 E-4
 * LF5802 E-4
 * R5800 E-4
 * R5801 F-5
 * R5802 F-4
 * R5803 D-4
 * R5804 D-4
 * R5805 E-4
 * R5807 D-3
 R5808 C-4
 S5801 B-5
 S5802 A-5

ST-084 BOARD

* C6600 B-4
 * C6601 B-3
 * C6602 A-4
 C6603 A-2
 C6604 A-2
 * C6605 A-3
 C6606 A-1
 * CN6601 B-4
 D6600 A-2
 D6600 A-3
 * D6601 A-3
 D6602 B-3
 * L6600 A-4
 * Q6600 B-4
 * Q6601 A-4
 * Q6602 A-3
 * Q6603 A-3
 * Q6604 A-3
 Q6605 A-2
 Q6606 A-2
 Q6607 A-2
 * Q6608 A-3
 Q6609 A-2
 * R6600 B-4
 * R6601 B-4
 R6602 A-2
 * R6603 A-4
 * R6604 A-3
 * R6605 A-3
 * R6606 A-3
 * R6607 A-3
 R6608 A-2
 R6609 A-3
 R6610 A-3
 R6611 A-2
 R6612 A-2
 R6613 A-2
 R6614 B-3
 R6615 A-2
 R6616 A-2
 * TP6600 A-5



4-3. PRINTED WIRING BOARDS

no mark : side A

* mark : side B

VF-156 BOARD

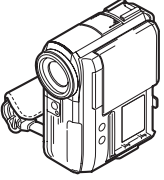
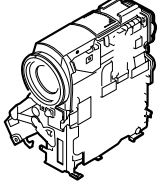
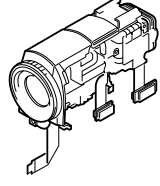
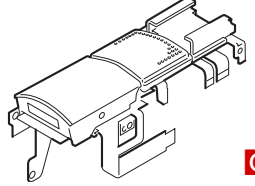
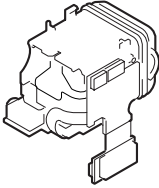
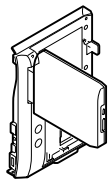
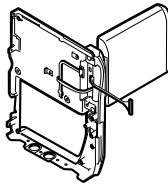
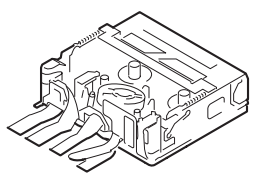
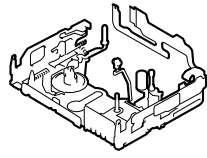
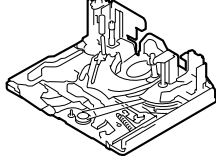
* C5301	D-3	* R5504	D-3
* C5302	C-3	* R5505	D-3
* C5401	B-6	* R5506	D-3
* C5501	D-3	* R5507	D-3
* C5502	D-3	* R5508	D-4
* C5503	D-3	* R5509	C-4
* C5504	C-3	* R5510	C-4
* C5505	D-3	* R5511	D-4
* C5506	D-3	* R5512	D-4
* C5510	C-3	* R5513	C-4
* C5511	C-3	* R5514	D-4
* C5512	D-3	* R5515	D-4
* C5513	D-3	* R5516	C-4
* C5514	D-3	* R5517	C-4
* C5515	C-3	* R5518	D-4
* C5516	C-4	* R5519	C-4
* C5517	D-4	* R5520	D-4
* C5518	D-3	* R5521	C-4
* C5519	C-4	* R5522	D-4
* C5520	D-4	* R5523	D-4
* C5521	C-4	* R5524	D-4
* C5522	D-4	* R5525	D-4
* C5523	D-4	* R5526	D-3
* C5524	C-3	* R5527	D-3
* C5525	C-4	* R5528	D-3
* C5527	D-4	* R5529	D-3
* C5528	D-4	* R5530	D-4
* C5529	C-4	* R5531	D-4
* C5529	D-4	* R5532	C-4
* C5530	C-4	R5603	B-2
* C5531	D-4	R5604	B-2
* C5533	D-4	R5605	A-2
* C5534	D-4	R5607	B-2
* C5535	D-3	R5608	B-2
* C5536	D-3	R5609	B-2
* C5537	D-3	R5610	B-2
* C5538	D-3	R5611	B-2
C5539	D-4	R5612	B-2
C5601	B-2		
C5602	A-2	TH5601	A-2
C5604	B-2		
CN5301	D-5	VD5401	B-6
* CN5302	D-3	VD5402	B-6
* CN5303	C-3	VD5403	B-6
CN5405	A-5	VD5404	B-6
CN5602	B-1	VD5405	B-6
		VD5406	B-6
		VD5407	B-6
* D5301	D-3	VD5408	B-6
* D5302	D-3		
* D5407	B-5		
* D5408	B-5		
D5601	B-1		
D5602	B-1		
* FB530	D-3		
* FB5301	D-3		
* FB5303	D-3		
FB5405	B-6		
FB5406	B-6		
* FB5408	B-5		
* FB5409	B-5		
FB5410	B-6		
FB5411	B-6		
FB5412	B-6		
FB5413	B-6		
FB5414	B-6		
* IC5501	D-4		
IC5601	B-2		
J5402	A-5		
J5403	A-6		
L5501	D-4		
Q5601	B-2		
Q5602	A-2		
Q5603	B-2		
* R5411	B-6		
* R5501	D-3		
* R5502	D-3		
* R5503	D-3		

Mounted parts location of the VC-319 board is not shown.
Pages from 4-89 to 4-90 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		
			
OVERALL	VTR COMPLETE SECTION A	LENS/EVF/ST SECTION B	STROBOSCOPE SECTION C
			
EVF SECTION D	CABINET (R) SECTION-1 E	CABINET (R) SECTION-2 F	MECHANISM DECK OVERALL (Z100)
			
LS CHASSIS BLOCK ASSEMBLY	MECHANISM CHASSIS BLOCK ASSEMBLY		

Link	ELECTRICAL PARTS LIST		ACCESSORIES
• BJ-004 BOARD E	• FP-697 FLEXIBLE BOARD	• PD-193 BOARD A	
• CD-444 BOARD B	• LI-070 BOARD A	• ST-084 BOARD F	
• FP-672 FLEXIBLE BOARD	• NS-018 BOARD A	• VF-156 BOARD D	
• VC-319 BOARD A			



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...
- Abbreviation
EE : East European model
HK : Hong Kong model
CH : Chinese model
CND : Canadian model
JE : Tourist model
KR : Korea model
AUS : Australian model

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

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

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

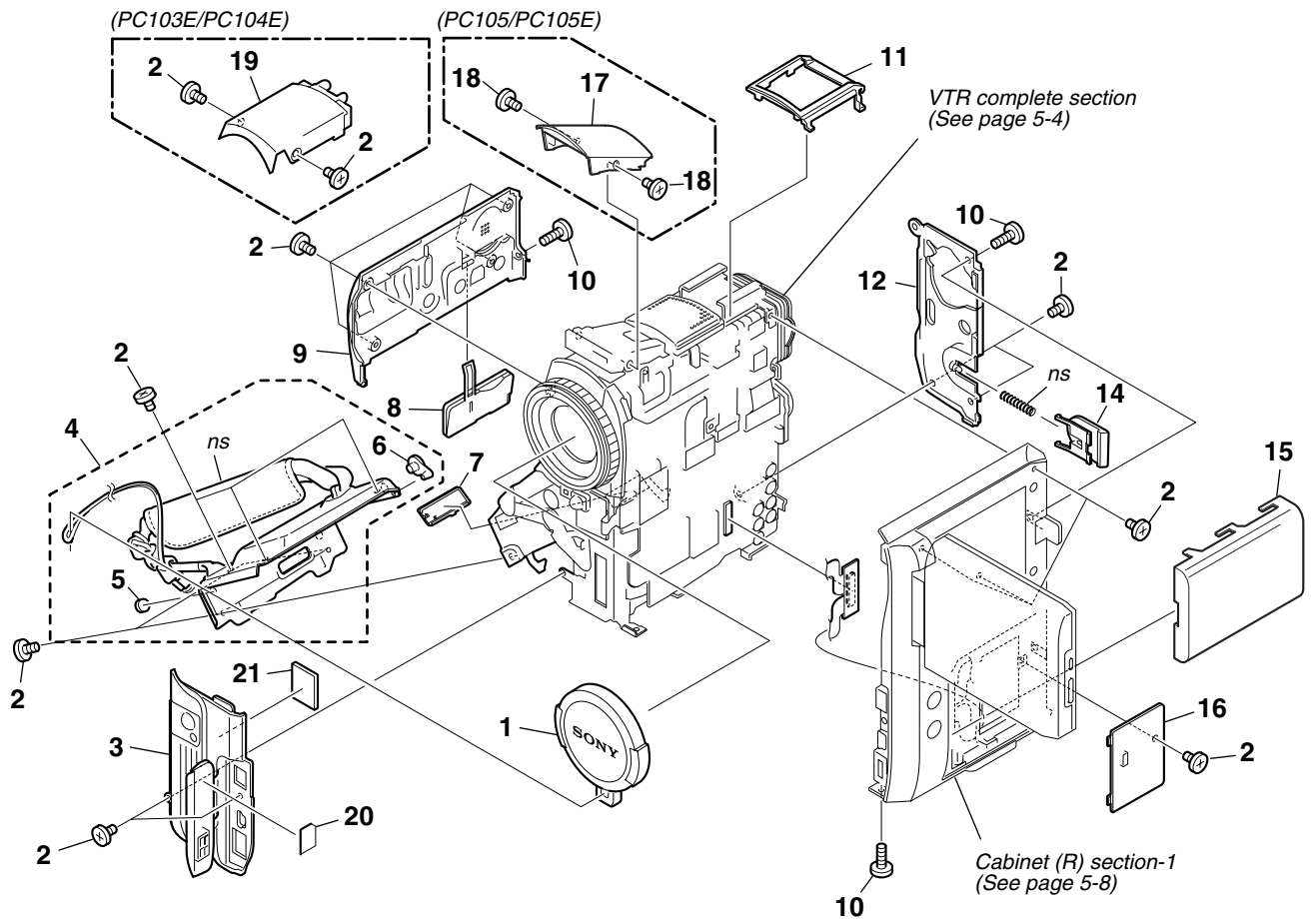


5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION

ns : not supplied



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	X-3953-477-1	CAP ASSY, LENS	12	3-082-529-11	CABINET (REAR) (PC105/PC105E)
2	4-974-725-01	SCREW (M1.7), LOCK ACE, P2	12	3-082-529-21	CABINET (REAR) (PC103E)
3	X-3953-361-1	CABINET (FRONT) ASSY (PC105/PC105E)	12	3-082-529-31	CABINET (REAR) (PC104E)
3	X-3953-399-1	CABINET (FRONT) ASSY (PC103E/PC104E)	14	3-082-530-01	LOCK, BATTERY
4	X-3953-394-1	CABINET (G) ASSY (PC105/PC105E)	15	3-082-552-01	COVER, BATTERY
4	X-3953-400-1	CABINET (G) ASSY (PC103E/PC104E)	16	3-082-525-01	LID, CPC
5	3-969-387-01	FOOT, RUBBER	17	X-3953-487-1	CABINET (UPPER) ASSY, ST (PC105:CND,E,HK,JE,KR/PC105E)
6	3-082-504-01	COVER (HP), JACK	17	X-3953-578-1	CABINET (UPPER) ASSY, ST (PC105:US)
7	3-075-309-01	KNOB, EJECT	18	3-078-893-11	O PLATE +P2 MAIN EG GRIP M1.7 (PC105/PC105E)
8	X-3953-392-1	COVER (L) ASSY, JACK (PC104E/PC105/PC105E)	19	X-3953-488-1	CABINET (N) ASSY,ST (PC103E/PC104E)
8	X-3953-398-1	COVER (L) ASSY, JACK (PC103E)	20	3-082-923-01	LABEL, DV (PC104E/PC105/PC105E)
9	3-082-537-11	CABINET (L)	20	3-082-923-11	LABEL, DV (PC103E)
10	3-989-735-31	SCREW (M1.7), LOCK ACE, P2	21	3-084-515-01	SHEET (FRONT), LIGHT PROTECTOR
11	3-082-522-01	CABINET (UPPER)			

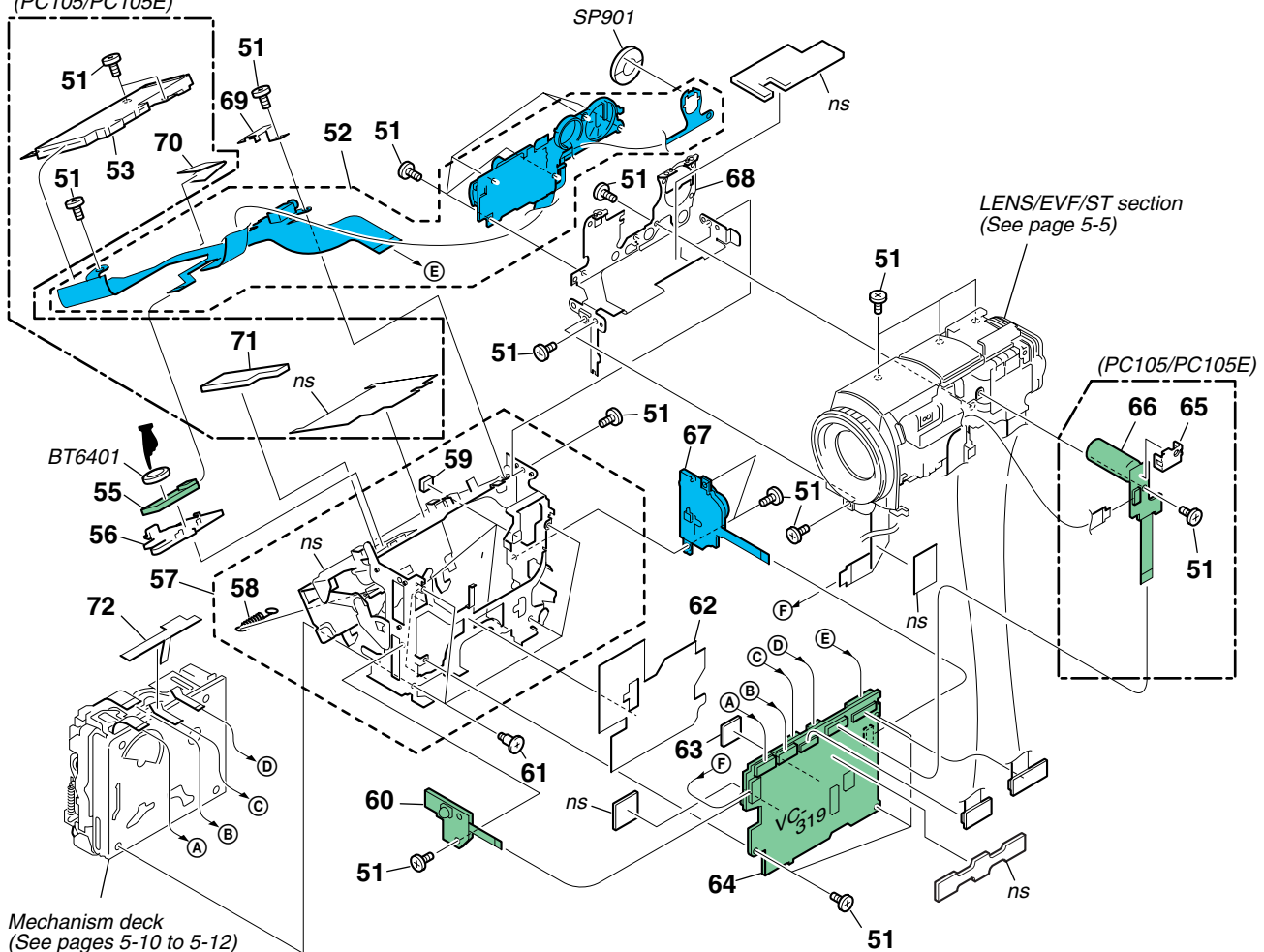


5. REPAIR PARTS LIST

5-1-2. VTR COMPLETE SECTION

ns : not supplied

(PC105/PC105E)



Mechanism deck
(See pages 5-10 to 5-12)

: BT6401 (Lithium battery) LI-070 board on the mount position. (See page 4-65)

CAUTION :

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

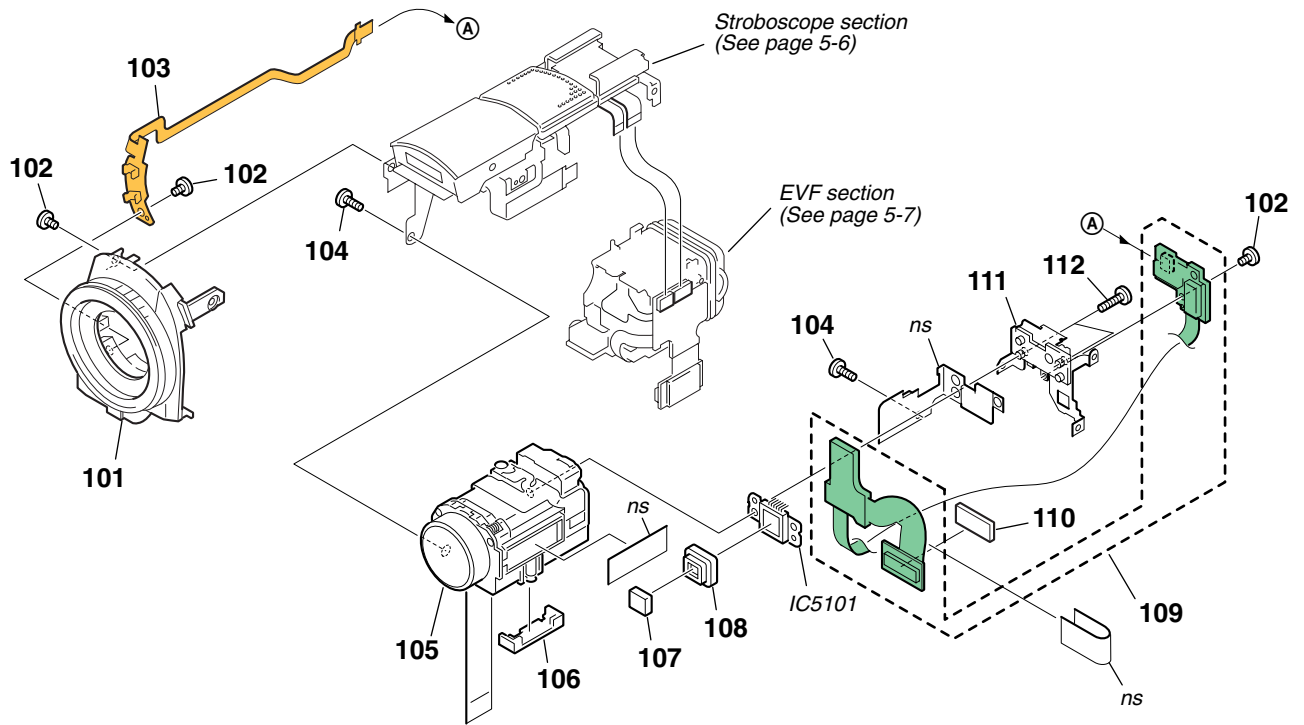
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
51	4-974-725-01	SCREW (M1.7), LOCK ACE, P2	64	A-7016-988-A	VC-319B BOARD, COMPLETE (PC104E/PC105E) (SERVICE)
52	1-477-820-11	SWITCH BLOCK, CONTROL (FK4400) (PC105/PC105E)	64	A-7016-989-A	VC-319C BOARD, COMPLETE (PC103E) (SERVICE)
52	1-477-820-21	SWITCH BLOCK, CONTROL (FK4400) (PC103E/PC104E)	65	3-082-545-01	HOLDER, CONDENSER (PC105/PC105E)
53	1-816-271-21	CONNECTOR, MEMORY STICK 10P (PC105/PC105E)	66	A-7016-619-A	ST-084 BOARD, COMPLETE (PC105/PC105E)
55	A-7016-632-A	LI-070 BOARD, COMPLETE	67	1-477-821-11	SWITCH BLOCK, CONTROL (PS4400) (PC105/PC105E)
56	3-082-538-01	HOLDER, LI	67	1-477-821-21	SWITCH BLOCK, CONTROL (PS4400) (PC103E/PC104E)
57	X-3953-354-1	FRAME ASSY, G	68	X-3953-373-1	FRAME ASSY, FK
58	3-954-730-01	SPRING, TENSION	69	X-3953-460-1	HP RETAINER ASSY
59	3-975-921-01	SHEET, VIBRATION PROOF	70	3-083-938-01	SHEET, SHIELD, MS (PC105/PC105E)
60	A-7016-623-A	NS-018 BOARD, COMPLETE	71	3-083-908-01	CUSHION, MS (PC105/PC105E)
61	3-062-214-01	SCREW (M1.4X1.5)	72	3-083-864-01	TAPE (Z), DF
62	3-082-580-01	SHEET, VC HEAT INSULATION	SP901	1-825-261-11	LOUD SPEAKER (1.6CM)
63	3-082-583-01	SPACER, VC			
64	A-7016-987-A	VC-319A BOARD, COMPLETE (PC105) (SERVICE)			



5. REPAIR PARTS LIST

5-1-3. LENS/EVF/ST SECTION

ns : not supplied



Be sure to read "Precautions upon replacing CCD imager" on page 4-8 when changing the CCD imager.

Ref. No.	Part No.	Description
101	X-3953-355-1	RING ASSY, MF (PC105/PC105E)
101	X-3953-402-1	RING ASSY (N), MF (PC103E/PC104E)
102	4-974-725-01	SCREW (M1.7), LOCK ACE, P2
103	A-7016-616-A	FP-672 BOARD, COMPLETE
104	3-713-791-71	SCREW (M1.7X4)
105	8-848-769-01	DEVICE, LENS LSV-751A
106	X-3953-094-2	PROTECTOR ASSY, MR

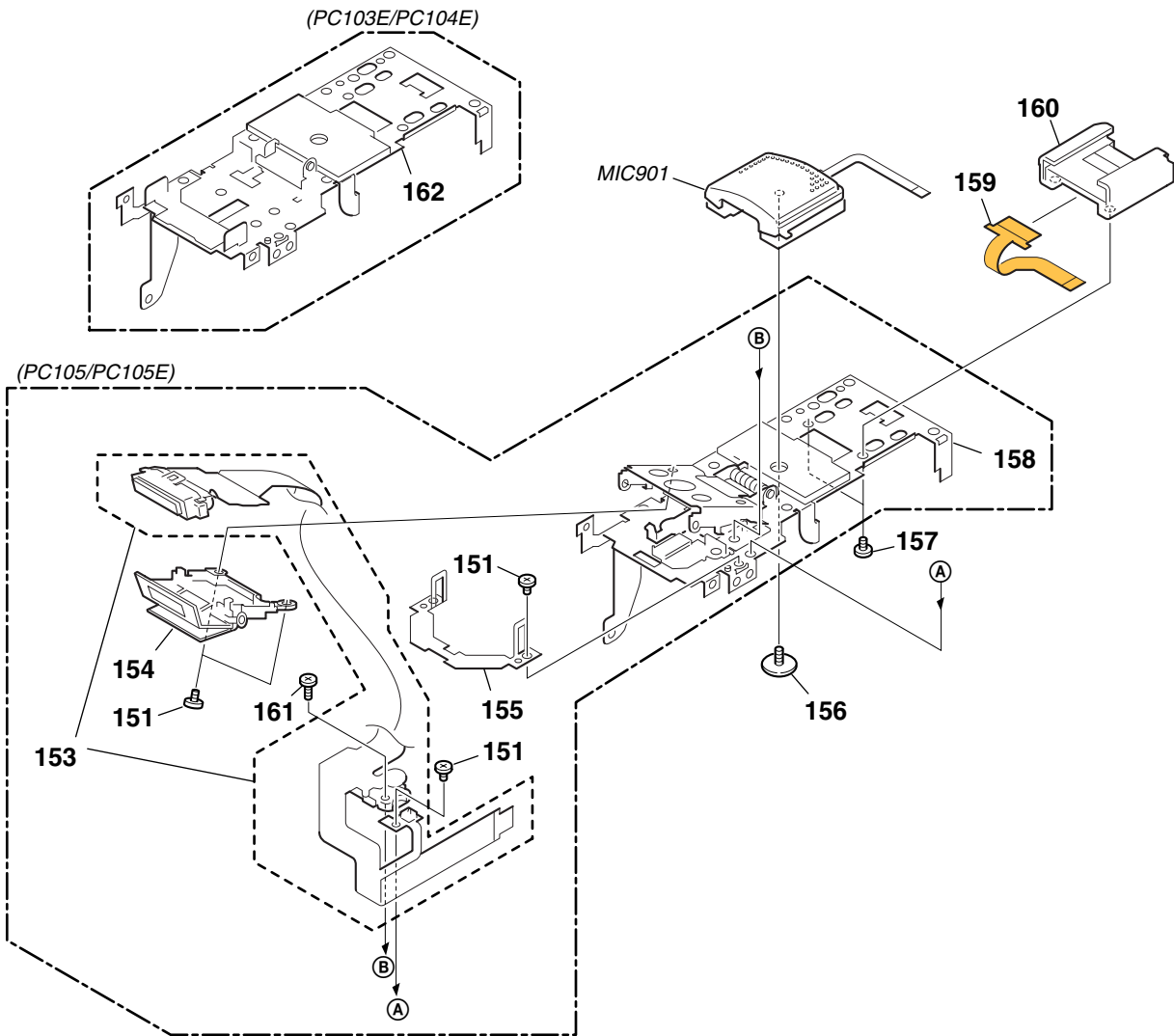
Ref. No.	Part No.	Description
107	1-758-569-11	FILTER BLOCK, OPTICAL
108	3-053-973-01	RUBBER (W), SEAL
109	A-7016-628-A	CD-444 BOARD, COMPLETE
110	3-082-559-01	CUSHION, CONNECTOR RETAINER
111	X-3953-364-1	FRAME ASSY, CD
112	3-713-791-21	SCREW (M1.7X8), TAPPING, P2
IC5101	A-7031-367-A	CCD BLOCK ASSY (CCD IMAGER)



5. REPAIR PARTS LIST

5-1-4. STROBOSCOPE SECTION

ns : not supplied



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
151	3-078-893-11	0 PLATE +P2 MAIN EG GRIP M1.7 (PC105/PC105E)	158	X-3953-362-1	FRAME ASSY, ST (PC105/PC105E)
△ 153	1-477-819-11	FLASH UNIT (FL4400) (PC105/PC105E)	159	1-687-816-11	FP-671 FLEXIBLE BOARD
154	X-3953-370-1	CABINET (LOWER) ASSY, ST (PC105/PC105E)	160	1-793-996-11	CONNECTOR, EXTERNAL
155	3-082-542-01	STOPPER, ST (PC105/PC105E)	161	3-068-597-11	GRIP (M1.4), EG
156	3-082-584-01	SCREW, TAPPING, SPECIAL	162	X-3953-391-1	FRAME ASSY (N), ST (PC103E/PC104E)
157	3-080-198-11	SCREW(M1.7),LOCK ACE,P2	MIC901	1-542-523-11	MICROPHONE UNIT

Note :

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

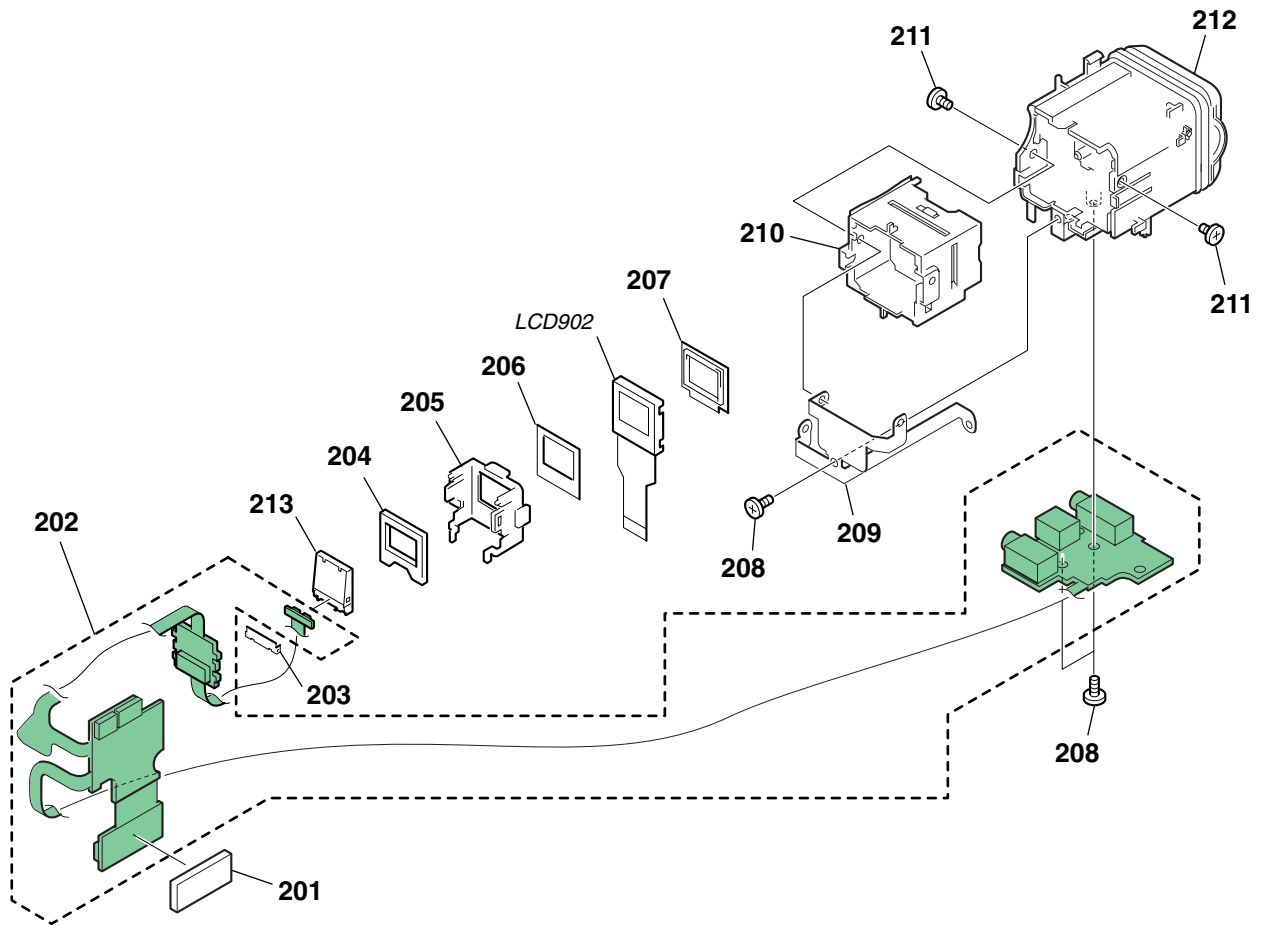
Note :

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



5. REPAIR PARTS LIST

5-1-5. EVF SECTION



Ref. No.	Part No.	Description
201	3-082-559-01	CUSHION, CONNECTOR RETAINER
202	A-7016-614-A	VF-156 BOARD, COMPLETE
203	3-069-940-01	SHEET METAL, BL RETAINER
204	3-062-205-11	CUSHION (B), BL
205	3-075-319-01	BL UNIT
206	3-068-772-01	CUSHION (L), BL
* 207	3-062-767-01	CUSHION, LCD

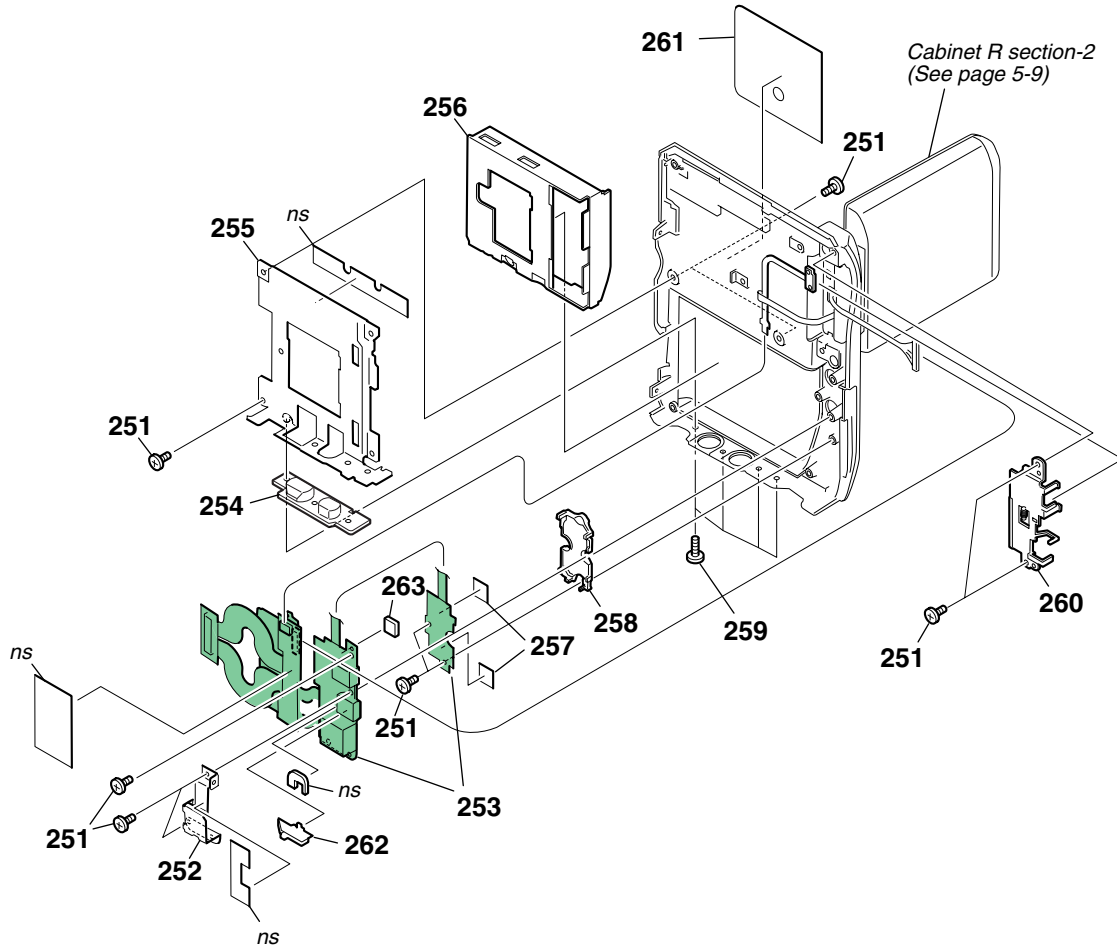
Ref. No.	Part No.	Description
208	3-713-791-71	SCREW (M1.7X4)
209	3-082-547-01	PLATE, FIXED, VF
210	X-3953-366-1	GUIDE ASSY, VF SLEEVE
211	4-974-725-01	SCREW (M1.7), LOCK ACE, P2
212	X-3953-365-2	VF ASSY
213	1-476-810-11	BLOCK(0.44), LIGHT GUIDE PLATE
LCD902	8-753-028-47	LCX032AN-5



5. REPAIR PARTS LIST

5-1-6. CABINET (R) SECTION-1

ns : not supplied



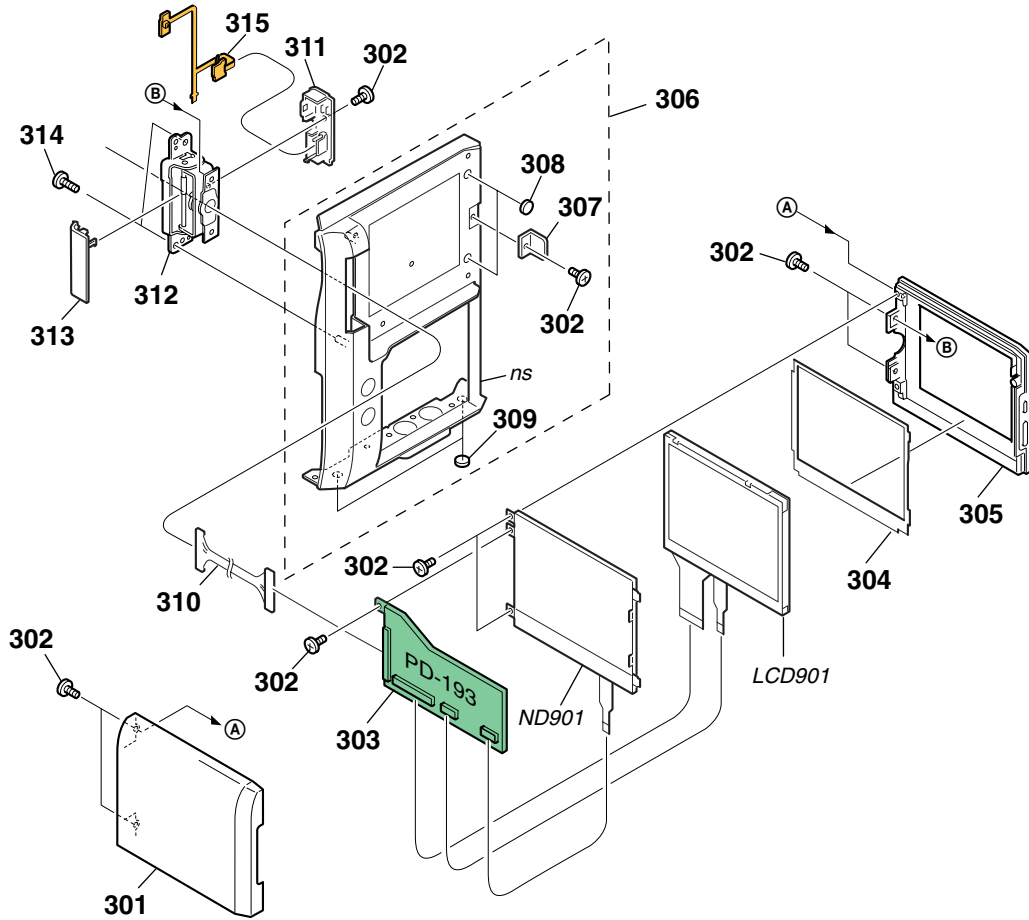
Ref. No.	Part No.	Description
251	4-974-725-01	SCREW (M1.7), LOCK ACE, P2
252	3-082-526-01	PLATE, FIXED, DC CONNECTOR
253	A-7016-629-A	BJ-004 BOARD, COMPLETE
254	3-082-482-01	SCREW
255	3-082-523-01	BRACKET, BATTERY
256	3-082-524-02	HOLDER, BATTERY
257	3-076-228-01	SHEET (SMALL), MUFFLE

Ref. No.	Part No.	Description
258	3-082-480-01	BUTTON, CF (PC105/PC105E)
258	3-082-480-11	BUTTON, CF (PC103E/PC104E)
259	3-989-735-31	SCREW (M1.7), LOCK ACE, P2
260	X-3953-360-2	PLATE ASSY, BLIND
261	3-082-531-11	SHEET, GUARD
262	X-3953-489-1	GUIDE ASSY, LIGHT, LED
263	3-084-055-02	CUSHION (CF)



5. REPAIR PARTS LIST

5-1-7. CABINET (R) SECTION-2

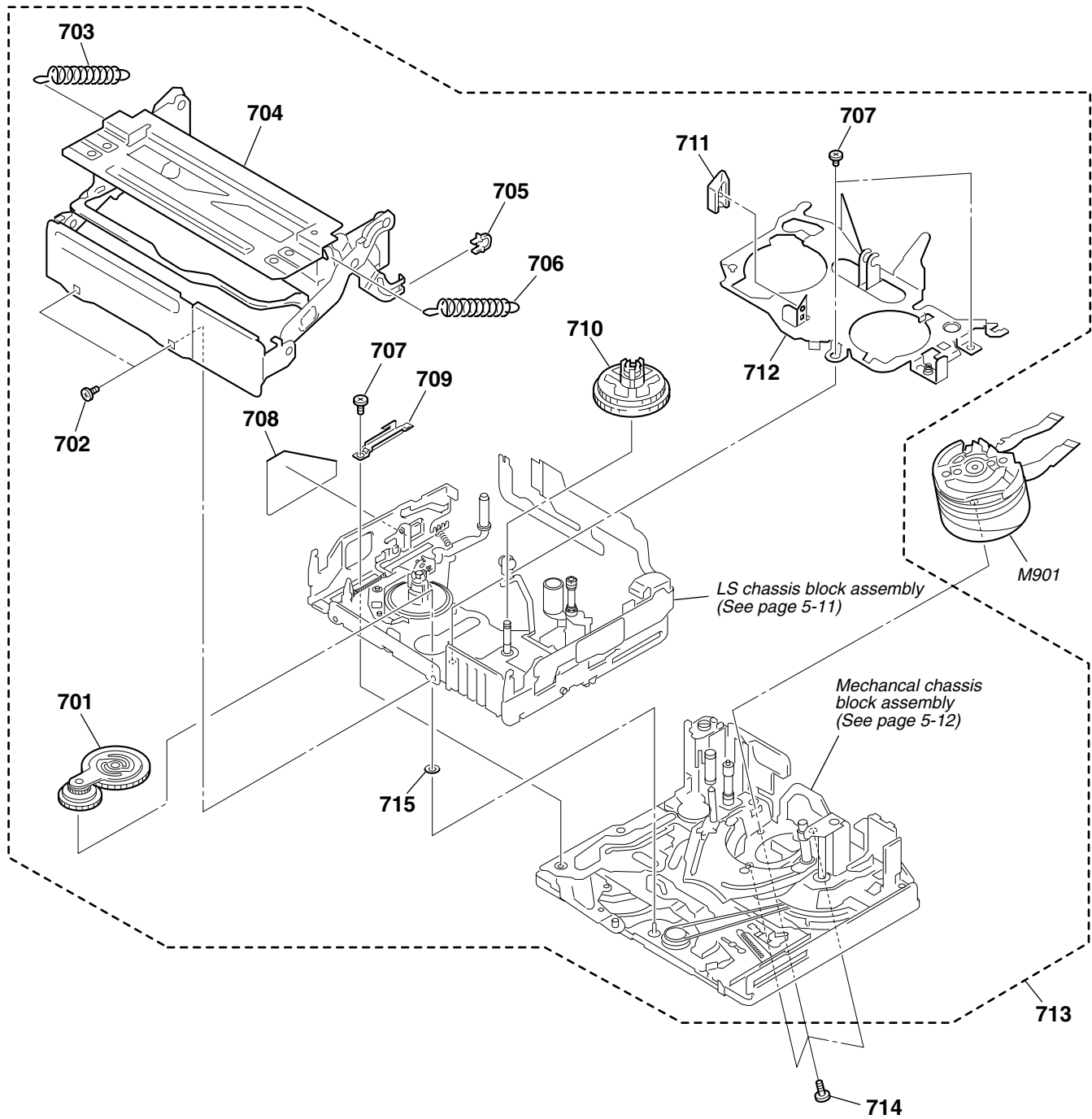


Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
301	3-082-532-11	CABINET (R), LCD (PC105E)	308	3-082-519-01	FOOT (R), RUBBER
301	3-082-532-21	CABINET (R), LCD (PC105)	309	3-969-387-01	FOOT, RUBBER
301	3-083-693-01	CABINET (R) (N), LCD (PC103E)	310	1-962-115-11	HARNESS (PB-052)
301	3-083-693-11	CABINET (R) (N), LCD (PC104E)	311	3-082-535-01	COVER (BACK), HINGE
302	4-974-725-01	SCREW (M1.7), LOCK ACE, P2	312	X-3953-359-1	HINGE ASSY, LCD
303	A-7016-624-A	PD-193 BOARD, COMPLETE	313	3-082-534-01	COVER (FRONT), HINGE
304	3-082-533-01	SHEET, PROTECTION, LCD PANEL	314	3-989-735-31	SCREW (M1.7), LOCK ACE, P2
305	X-3953-358-1	CABINET (L) ASSY, LCD	315	A-7016-626-A	FP-697 BOARD, COMPLETE
306	X-3953-390-2	CABINET (R) ASSY	LCD901	8-753-052-41	ACX500DMM-1
307	3-082-536-01	CLAW, PANEL LOCK	ND901	1-477-759-11	BLOCK LIGHT GUIDE PLATE (2.5)



5. REPAIR PARTS LIST

5-1-8. MECHANISM DECK OVERALL (Z100)



Ref. No.	Part No.	Description
701	X-3952-938-3	GEAR ASSY, GOOSENECK
702	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
703	3-079-206-02	SPRING (POP UP S), TXTENSION
704	X-3952-939-4	COMPARTMENT ASSY, CASSETTE
705	3-079-367-01	DAMPER, CASSETTE COMPARTMENT
706	3-079-215-02	SPRING (POP UP T), EXTENSION
707	3-703-816-15	SCREW (M1.4), SPECIAL HEAD
708	3-080-545-01	COVER, SENSOR S

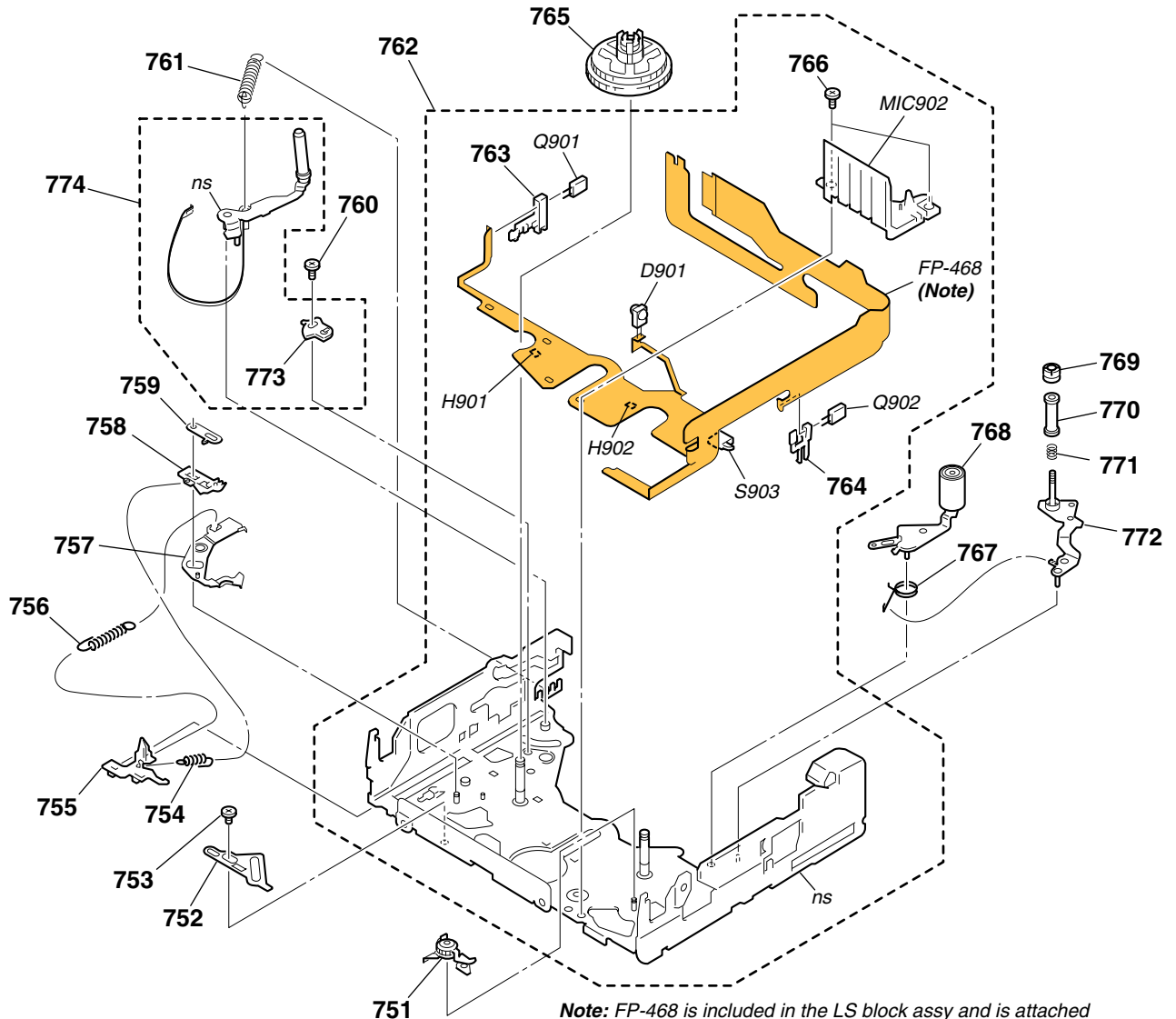
Ref. No.	Part No.	Description
709	3-079-364-01	RETAINER, LS GUIDE
710	X-3952-937-1	TABLE ASSY, T REEL
711	3-079-366-01	RELEASE, REEL LOCK
712	X-3953-257-1	PLATE ASSY, RETAINER
713	A-7095-393-A	MD (Z100) SUB ASSY
714	3-079-741-02	SCREW, DRUM FIXING
715	3-748-682-01	WASHER, T
M901	A-7048-981-A	DRUM BLOCK ASSY (DEH-30A-R) (SERVICE)



5. REPAIR PARTS LIST

5-1-9. LS CHASSIS BLOCK ASSEMBLY

ns : not supplied



Note: FP-468 is included in the LS block assy and is attached to chassis by hot-press.
Because installation of FP-468 requires a very high accuracy, FP-468 is not supplied as an independent service parts.

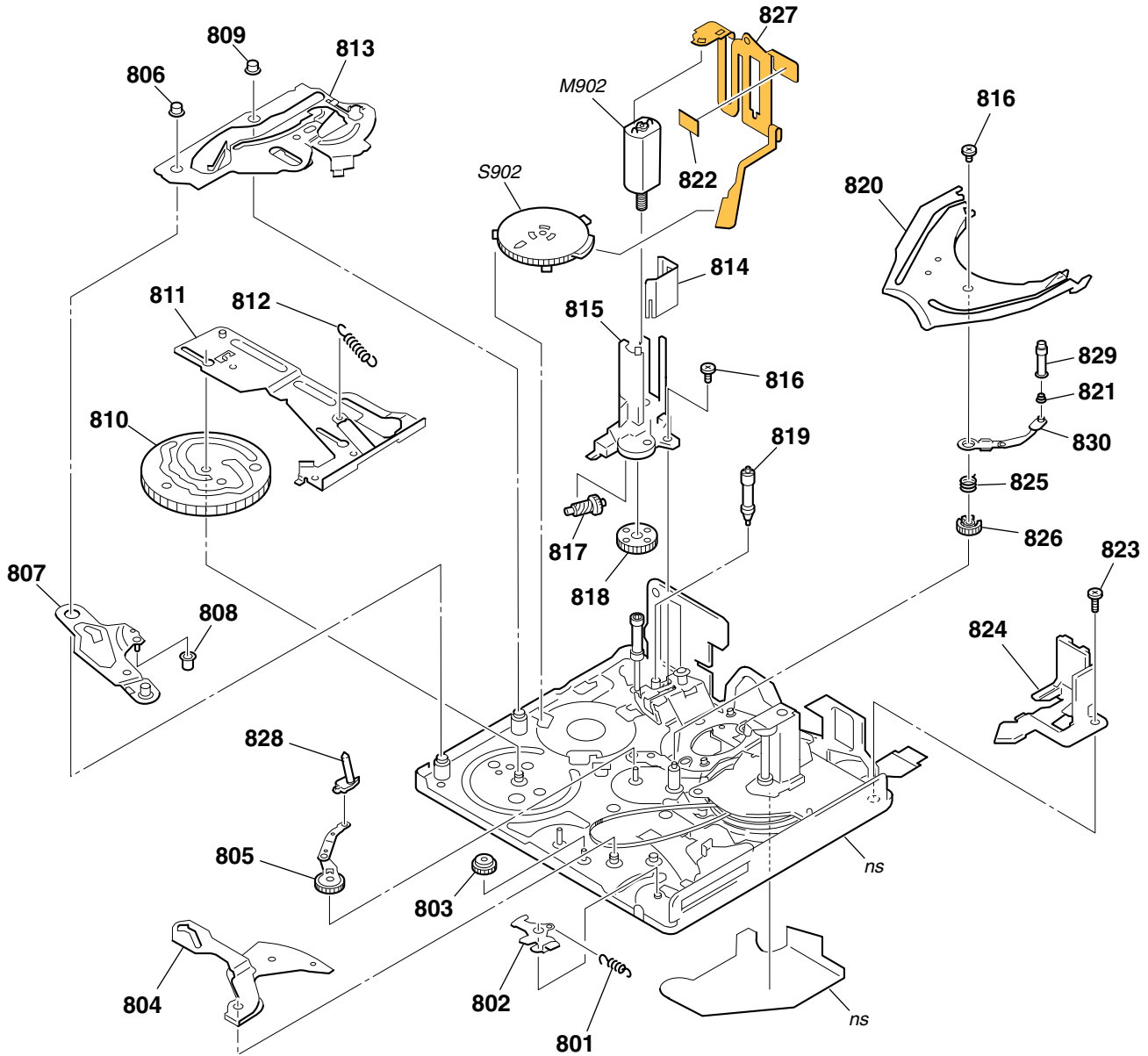
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
751	A-7095-402-B	BRAKE (T) BLOCK ASSY	767	3-079-243-02	SPRING (PINCH RETURN), TORSION
752	3-079-241-01	PLATE, LS CAM	768	X-3952-934-1	ARM ASSY, PINCH
753	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD	769	3-052-062-02	NUT, TG7
754	3-079-246-01	SPRING(RELEASE RACK),EXTENSION	770	3-079-219-02	TG7
755	3-079-248-01	POSITIONING(S), CASSETTE	771	3-081-591-01	SPRING, COMPRESSION (TG7)
756	3-079-244-01	SPRING (ULE), EXTENSION	772	X-3952-935-3	ARM ASSY, TG7
757	X-3952-932-1	BRAKE ASSY, ULE	773	3-079-237-02	ADJUSTOR, BAND
758	3-079-245-01	RACK (S), RELEASE	774	A-7095-403-D	TG2 ARM BLOCK ASSY
759	3-079-247-01	BRAKE (S)	D901	6-500-652-01	DIODE GL453SE0000F (TAPE LED)
760	3-059-090-11	SCREW (M1.4X2.5), SPECIAL HEAD	H901	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (S REEL)
761	3-079-242-01	SPRING, TENSION	H902	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (T REEL)
762	A-7095-401-A	LS BLOCK ASSY	MIC902	1-817-175-12	PIN, CONNECTOR (WITH DETECTION SWITCH)
763	3-079-267-01	HOLDER (S), SENSOR	S903	1-529-566-51	SWITCH, PUSH (1 KEY) (C.C.DOWN)
764	3-079-268-01	HOLDER (T), SENSOR	Q901	6-550-402-01	TRANSISTOR PT4850FE000F (TAPE END)
765	X-3952-936-2	TABLE ASSY, S REEL	Q902	6-550-402-01	TRANSISTOR PT4850FE000F (TAPE TOP)
766	3-703-816-15	SCREW (M1.4), SPECIAL HEAD			



5. REPAIR PARTS LIST

5-1-10. MECHANICAL CHASSIS BLOCK ASSEMBLY

ns : not supplied



Ref. No.	Part No.	Description
801	3-079-314-01	SPRING (EJ), EXTENSION
802	3-079-327-01	ARM, EJ
803	3-079-323-01	GEAR, CONVERSION
804	3-079-324-03	ARM, GL DRIVING
805	X-3952-928-1	GL (S) ASSY
806	3-079-315-01	ROLLER (S1), LS GUIDE
807	X-3952-925-1	ARM ASSY, LS
808	3-079-320-01	ROLLER, LS
809	3-079-316-01	ROLLER (S2), LS GUIDE
810	3-079-319-01	GEAR, CAM
811	X-3952-941-1	SLIDER ASSY, M
812	3-079-321-02	SPRING (PINCH), EXTENSION
813	X-3952-940-2	PLATE ASSY, TG2 CAM
814	3-079-312-01	SHIELD, MOTOR
815	3-079-307-01	HOLDER, MOTOR
816	3-703-816-15	SCREW (M1.4), SPECIAL HEAD

Ref. No.	Part No.	Description
817	3-079-308-01	SHAFT, WORM
818	3-079-309-01	GEAR, DECELERATION
819	X-3952-942-2	ROLLER ASSY, TG3
820	3-079-325-01	RAIL, GUIDE
821	3-079-295-02	SPRING, TG5
822	1-677-049-11	FP-228 FLEXIBLE BOARD (DEW SENSOR)
823	3-079-328-01	SCREW ,SPECIAL
824	3-079-326-02	SUPPORT, TG7
825	3-079-301-01	SPRING (GLT), TORSION
826	3-079-298-01	GEAR (T), GL
827	1-686-798-11	PFP-467 FLEXIBLE BOARD
828	X-3952-927-2	COASTER (S) ASSY
829	X-3952-930-3	ROLLER ASSY, TG5
830	X-3952-929-5	COASTER (T) ASSY
M902	A-7095-396-A	MOTOR BLOCK ASSY, L (LOADONG)
S902	1-477-679-11	ROTARY, ENCODER (MODE SWITCH)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description			
	A-7016-629-A	BJ-004 BOARD, COMPLETE *****						
		< BATTERY >						
BT5801	1-694-990-11	BATTERY TERMINAL BOARD						
		< CAPACITOR >						
C5800	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5801	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
		< CONNECTOR >						
CN5800	1-816-873-11	CONNECTOR BOARD TO BOARD 60P						
CN5801	1-794-276-11	CONNECTOR, SQUARE TYPE 4P						
CN5802	1-794-962-11	CONNECTOR, SQUARE TYPE(USB 5P)						
CN5803	1-794-997-11	PIN, CONNECTOR 20P						
CN5804	1-816-654-11	FFC/FPC CONNECTOR (LIF) 6P						
		< DIODE >						
D5800	6-500-289-01	DIODE MAZW082H0LS0						
D5804	8-719-078-02	DIODE 1SS357(T3SONY1)						
D5805	6-500-507-01	DIODE TLAV1021(T15SOY,F)						
		< JACK >						
J5801	1-817-361-11	DC-IN CONNECTOR						
		< LINE FILTER >						
LF5800	1-411-957-11	FILTER, COMMON MODE						
LF5801	1-428-914-11	INDUCTOR				0uH		
LF5802	1-428-914-11	INDUCTOR				0uH		
		< RESISTOR >						
R5800	1-218-953-11	RES-CHIP				1K	5%	1/16W
R5803	1-218-977-11	RES-CHIP				100K	5%	1/16W
R5804	1-218-979-11	RES-CHIP				150K	5%	1/16W
R5805	1-218-949-11	RES-CHIP				470	5%	1/16W
R5807	1-218-949-11	RES-CHIP				470	5%	1/16W
R5808	1-218-954-11	RES-CHIP				1.2K	5%	1/16W
		< SWITCH >						
S5801	1-771-138-82	SWITCH, KEY BOARD (DISPLAY/BATT INFO)						
S5802	1-771-138-82	SWITCH, KEY BOARD (BACK LIGHT)						
	A-7016-628-A	CD-444 BOARD, COMPLETE ***** (IC5101 is not included in this complete board.)						
		< CAPACITOR >						
C5101	1-164-004-11	CERAMIC CHIP				0.1uF	10%	25V
C5102	1-107-826-11	CERAMIC CHIP				0.1uF	10%	16V
C5104	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5105	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5108	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5109	1-164-004-11	CERAMIC CHIP				0.1uF	10%	25V
C5110	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5111	1-125-777-11	CERAMIC CHIP				0.1uF	10%	10V
C5112	1-117-919-11	TANTAL. CHIP				10uF	20%	6.3V
C5113	1-113-987-11	TANTAL. CHIP				4.7uF	20%	25V
		< CONNECTOR >						
CN5001	1-816-924-11	CONNECTOR BOARD TO BOARD 40P						
CN5003	1-816-654-11	FFC/FPC CONNECTOR (LIF) 6P						
		< FERRITE BEAD >						
FB5101	1-414-445-11	FERRITE				0uH		
		< IC >						
IC5101	A-7031-367-A	CCD BLOCK ASSY (CCD IMAGER)						
IC5102	6-701-755-01	IC AD80017AJRURL						
IC5201	8-759-489-19	IC uPC6756GR-8JG-E2						
		< COIL >						
L5101	1-414-757-11	INDUCTOR				100uH		
L5102	1-469-525-91	INDUCTOR				10uH		
L5201	1-469-570-11	INDUCTOR				10uH		
		< TRANSISTOR >						
Q5101	8-729-037-74	TRANSISTOR				UN9213J-(TX).SO		
		< RESISTOR >						
R5001	1-218-947-11	RES-CHIP				330	5%	1/16W
R5101	1-218-990-11	SHORT CHIP				0		
R5102	1-218-990-11	SHORT CHIP				0		
R5201	1-218-990-11	SHORT CHIP				0		
R5202	1-218-990-11	SHORT CHIP				0		
R5203	1-218-990-11	SHORT CHIP				0		
R5204	1-218-990-11	SHORT CHIP				0		
R5205	1-218-990-11	SHORT CHIP				0		
R5206	1-218-990-11	SHORT CHIP				0		
R5207	1-218-969-11	RES-CHIP				22K	5%	1/16W
R5208	1-218-969-11	RES-CHIP				22K	5%	1/16W
R5210	1-218-969-11	RES-CHIP				22K	5%	1/16W
R5211	1-218-969-11	RES-CHIP				22K	5%	1/16W
R5212	1-218-989-11	RES-CHIP				1M	5%	1/16W
R5213	1-218-965-11	RES-CHIP				10K	5%	1/16W
R5214	1-218-965-11	RES-CHIP				10K	5%	1/16W
R5215	1-218-989-11	RES-CHIP				1M	5%	1/16W

Be sure to read "Precautions upon replacing CCD imager" on page 4-8 when changing the CCD imager.

DCR-PC103E/PC104E/PC105/PC105E

CD-444

FP-672

VC-319

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
		< SENSOR >
SE5201	1-476-807-31	SENSOR, ANGULAR VELOCITY (YAW SENSOR)
SE5202	1-476-807-41	SENSOR, ANGULAR VELOCITY (PITCH SENSOR)

A-7016-616-A FP-672 BOARD, COMPLETE

< PHOTO INTERRUPTER >

PH001	8-749-016-83	IC GP1S092HCPI
PH002	8-749-016-83	IC GP1S092HCPI

A-7016-987-A VC-319A BOARD, COMPLETE (PC105)(SERVICE)
A-7016-988-A VC-319B BOARD, COMPLETE
(PC104E,PC105E)(SERVICE)
A-7016-989-A VC-319C BOARD, COMPLETE
(PC103E)(SERVICE)

**Electrical parts list of the VC-319 board
are not shown.
Pages from 5-15 to 5-23 are not shown.**

DCR-PC103E/PC104E/PC105/PC105E

FP-697

LI-070

NS-018

PD-193

Ref. No.	Part No.	Description
	A-7016-626-A	FP-697 BOARD, COMPLETE *****
		< SWITCH >
S001	1-762-805-21	SWITCH, PUSH (1 KEY) (PANEL OPEN/CLOSE)
S002	1-786-179-31	SWITCH, PUSH (1KEY) (PANEL NORMAL/REVERSE)

	A-7016-632-A	LI-070 BOARD, COMPLETE *****
		< BATTERY >
△ BT6401	1-756-128-11	BATTERY, LITHIUM (SECONDARY) < CONNECTOR >
CN6401	1-816-654-11	FFC/FPC CONNECTOR (LIF) 6P

	A-7016-623-A	NS-018 BOARD, COMPLETE *****
		< CAPACITOR >
C6300	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C6301	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
		< DIODE >
D6300	8-719-073-01	DIODE MA111-(K8).S0
D6301	8-719-064-07	DIODE SML-310LTT86
D6302	6-500-512-01	DIODE CL-330IRS-X-TU
		< IC >
IC6300	8-742-221-00	HYB IC SBX3055-01 < TRANSISTOR >
Q6300	6-550-235-01	TRANSISTOR DTC114TMT2L
Q6301	8-729-049-92	TRANSISTOR 2SC5585H-T2L
		< RESISTOR >
R6300	1-216-805-11	METAL CHIP 47 5% 1/16W
R6302	1-218-951-11	RES-CHIP 680 5% 1/16W
R6303	1-216-609-11	METAL CHIP 18 0.5% 1/10W
R6304	1-216-609-11	METAL CHIP 18 0.5% 1/10W
R6305	1-218-939-11	RES-CHIP 68 5% 1/16W
R6306	1-218-959-11	RES-CHIP 3.3K 5% 1/16W

	A-7016-624-A	PD-193 BOARD, COMPLETE *****
		< CAPACITOR >
C600	1-110-569-21	TANTAL. CHIP 47uF 20% 4V
C601	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C602	1-125-837-91	CERAMIC CHIP 1uF 10% 6.3V
C603	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C604	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V

Ref. No.	Part No.	Description
C605	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C606	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C609	1-135-213-21	TANTAL. CHIP 3.3uF 20% 25V
C610	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C611	1-164-739-11	CERAMIC CHIP 560PF 5% 50V
C615	1-115-566-11	CERAMIC CHIP 4.7uF 10% 10V
C616	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C617	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C618	1-165-908-11	CERAMIC CHIP 1uF 10% 10V
C619	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C620	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C622	1-164-943-11	CERAMIC CHIP 0.01uF 10% 16V
C624	1-164-939-11	CERAMIC CHIP 0.0022uF 10% 50V
C625	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C628	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C629	1-135-213-21	TANTAL. CHIP 3.3uF 20% 25V

		< CONNECTOR >
CN600	1-794-997-11	PIN, CONNECTOR 20P
CN602	1-691-344-11	CONNECTOR, FFC/FPC (ZIF) 6P
CN604	1-785-905-11	CONNECTOR, FFC/FPC (ZIF) 24P
CN606	1-691-344-11	CONNECTOR, FFC/FPC (ZIF) 6P

		< DIODE >
D604	8-719-050-42	DIODE RD3.3UM-T1B
D605	8-719-073-01	DIODE MA111-(K8).S0

		< FERRITE BEAD >
FB600	1-414-760-21	FERRITE 0uH

		< IC >
IC600	8-752-109-97	IC CXA3622AR-T4
IC601	8-759-581-11	IC NJM2125F(TE2)

		< COIL >
L600	1-469-525-91	INDUCTOR 10uH
L601	1-469-570-11	INDUCTOR 10uH

		< TRANSISTOR >
Q603	8-759-054-48	TRANSISTOR UP04601008S0
Q604	8-759-054-48	TRANSISTOR UP04601008S0
Q605	8-729-041-23	TRANSISTOR NDS356AP
Q606	8-729-427-12	TRANSISTOR XP4111-TXE
Q607	8-729-427-42	TRANSISTOR XP4211-TXE
Q609	8-729-050-24	TRANSISTOR MCH6202-TL
Q610	8-729-042-26	TRANSISTOR 2SB1462J-QR(K8).S0
Q611	8-729-037-52	TRANSISTOR 2SC4738F-Y/GR(TPL3)

		< RESISTOR >
R602	1-218-949-11	RES-CHIP 470 5% 1/16W
R605	1-218-990-11	SHORT CHIP 0
R606	1-218-990-11	SHORT CHIP 0
R608	1-218-975-11	RES-CHIP 68K 5% 1/16W
R611	1-208-707-11	METAL CHIP 10K 0.5% 1/16W

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

<p>Note : The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Note : Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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PD-193

ST-084

VF-156

Ref. No.	Part No.	Description			
R612	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R614	1-208-635-11	RES-CHIP	10	5%	1/16W
R615	1-208-635-11	RES-CHIP	10	5%	1/16W
R616	1-208-635-11	RES-CHIP	10	5%	1/16W
R617	1-208-635-11	RES-CHIP	10	5%	1/16W
R618	1-218-965-11	RES-CHIP	10K	5%	1/16W
R619	1-218-990-11	SHORT CHIP	0		
R620	1-218-977-11	RES-CHIP	100K	5%	1/16W
R621	1-218-965-11	RES-CHIP	10K	5%	1/16W
R622	1-216-847-11	METAL CHIP	150K	5%	1/16W
R631	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R633	1-218-990-11	SHORT CHIP	0		
R634	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R635	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R636	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R637	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R638	1-218-990-11	SHORT CHIP	0		
R641	1-218-977-11	RES-CHIP	100K	5%	1/16W
R642	1-218-989-11	RES-CHIP	1M	5%	1/16W
R643	1-218-990-11	SHORT CHIP	0		

A-7016-619-A ST-084 BOARD, COMPLETE (PC105/PC105E)

< CAPACITOR >

C6600	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C6601	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C6602	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6603	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C6604	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C6605	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
△ C6606	1-100-454-11	ELECT	60uF	99%	310V

< CONNECTOR >

CN6601 1-815-331-11 CONNECTOR, FPC (ZIF) 19P

< DIODE >

D6600	8-719-073-01	DIODE MA111-(K8).SO			
D6601	8-719-073-01	DIODE MA111-(K8).SO			
△ D6602	6-500-237-01	DIODE HAU160C030TP			

< COIL >

L6600 1-412-027-11 INDUCTOR 2.2uH

< TRANSISTOR >

Q6600	8-729-042-72	TRANSISTOR UN9214J-(K8).SO			
Q6601	8-729-013-31	TRANSISTOR 2SA1588-OY-TE85L			
Q6602	8-729-037-74	TRANSISTOR UN9213J-(K8).SO			
Q6603	8-729-048-75	TRANSISTOR CPH3109-TL-E			
Q6604	8-729-048-75	TRANSISTOR CPH3109-TL-E			
Q6605	6-550-238-01	TRANSISTOR DTA114EMT2L			
Q6606	8-729-426-24	TRANSISTOR XP1211-TXE			
Q6607	6-550-237-01	TRANSISTOR 2SC5658T2LQ/R			
Q6608	8-729-426-24	TRANSISTOR XP1211-TXE			
Q6609	8-729-053-74	TRANSISTOR GT8G132(TE12L)			

Ref. No.	Part No.	Description			
< RESISTOR >					
R6600	1-218-947-11	RES-CHIP	330	5%	1/16W
R6601	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6602	1-218-990-11	SHORT CHIP	0		
R6604	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R6605	1-218-977-11	RES-CHIP	100K	5%	1/16W
R6606	1-218-941-81	RES-CHIP	100	5%	1/16W
R6607	1-218-937-11	RES-CHIP	47	5%	1/16W
R6608	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6609	1-218-948-11	RES-CHIP	390	5%	1/16W
R6610	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R6612	1-218-953-11	RES-CHIP	1K	5%	1/16W
R6613	1-218-943-11	RES-CHIP	150	5%	1/16W
R6614	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R6615	1-218-937-11	RES-CHIP	47	5%	1/16W
R6616	1-218-989-11	RES-CHIP	1M	5%	1/16W

< TRANSFORMER >

△ T6600 1-437-532-11 TRANSFORMER, DC-DC CONVERTER

< TEST PIN >

TP6600 1-535-757-11 CHIP, CHECKER

A-7016-614-A VF-156 BOARD, COMPLETE

< CAPACITOR >

C5301	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5302	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5401	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5501	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C5502	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C5503	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C5504	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C5505	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5506	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C5510	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5511	1-117-919-11	TANTAL. CHIP	10uF	20%	6.3V
C5512	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5513	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5514	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5516	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5517	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C5519	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5520	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5521	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5523	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5525	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C5526	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C5527	1-127-988-81	CERAMIC CHIP	15000PF	10%	16V
C5528	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C5529	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V

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.

VF-156

Ref. No.	Part No.	Description
C5530	1-127-988-81	CERAMIC CHIP 15000PF 10% 16V
C5534	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C5535	1-119-923-11	CERAMIC CHIP 0.047uF 10% 10V
C5537	1-119-923-11	CERAMIC CHIP 0.047uF 10% 10V
C5539	1-127-895-91	TANTAL. CHIP 22uF 20% 4V
C5601	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C5602	1-164-505-11	CERAMIC CHIP 2.2uF 16V
< CONNECTOR >		
CN5301	1-816-873-11	CONNECTOR BOARD TO BOARD 60P
CN5302	1-794-767-31	FFC/FPC CONNECTOR (LIF) 10P
CN5303	1-816-654-11	FFC/FPC CONNECTOR (LIF) 6P
CN5405	1-815-794-21	CONNECTOR (MULTIPLE)
CN5602	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P
< DIODE >		
D5301	6-500-289-01	DIODE MAZW082H0LS0
D5302	6-500-289-01	DIODE MAZW082H0LS0
D5407	6-500-289-01	DIODE MAZW082H0LS0
D5408	6-500-289-01	DIODE MAZW082H0LS0
D5601	6-500-371-01	DIODE NSCW215T-TC5
D5602	6-500-371-01	DIODE NSCW215T-TC5
< FERRITE BEAD >		
FB5301	1-414-760-21	FERRITE 0uH
FB5302	1-414-760-21	FERRITE 0uH
FB5303	1-414-760-21	FERRITE 0uH
FB5405	1-414-760-21	FERRITE 0uH
FB5406	1-414-760-21	FERRITE 0uH
FB5408	1-414-760-21	FERRITE 0uH
FB5409	1-414-760-21	FERRITE 0uH
FB5410	1-414-760-21	FERRITE 0uH
FB5411	1-414-760-21	FERRITE 0uH
FB5412	1-414-760-21	FERRITE 0uH
FB5413	1-414-760-21	FERRITE 0uH
FB5414	1-414-760-21	FERRITE 0uH
< IC >		
IC5501	8-759-679-11	IC BH7870AKV-E2
IC5601	8-759-581-11	IC NJM2125F(TE2)
< JACK >		
J5402	1-793-995-11	JACK, SUPER SMALL TYPE (LANC)
J5403	1-691-737-41	JACK (SMALL TYPE) (MIC(PLUG IN POWER))
< COIL >		
L5501	1-469-528-91	INDUCTOR 100uH
< TRANSISTOR >		
Q5601	6-550-119-01	TRANSISTOR DTC144EMT2L
Q5602	8-729-427-83	TRANSISTOR XP6501-(TX).SO
Q5603	8-729-042-26	TRANSISTOR 2SB1462J-QR(K8).SO

Ref. No.	Part No.	Description
< RESISTOR >		
R5411	1-218-990-11	SHORT CHIP 0
R5501	1-218-957-11	RES-CHIP 2.2K 5% 1/16W
R5502	1-218-958-11	RES-CHIP 2.7K 5% 1/16W
R5503	1-218-965-11	RES-CHIP 10K 5% 1/16W
R5504	1-218-961-11	RES-CHIP 4.7K 5% 1/16W
R5505	1-218-990-11	SHORT CHIP 0
R5506	1-218-957-11	RES-CHIP 2.2K 5% 1/16W
R5507	1-218-957-11	RES-CHIP 2.2K 5% 1/16W
R5508	1-218-963-11	RES-CHIP 6.8K 5% 1/16W
R5509	1-218-963-11	RES-CHIP 6.8K 5% 1/16W
R5510	1-218-953-11	RES-CHIP 1K 5% 1/16W
R5511	1-218-953-11	RES-CHIP 1K 5% 1/16W
R5515	1-218-967-11	RES-CHIP 15K 5% 1/16W
R5517	1-218-967-11	RES-CHIP 15K 5% 1/16W
R5518	1-218-970-11	RES-CHIP 27K 5% 1/16W
R5519	1-218-970-11	RES-CHIP 27K 5% 1/16W
R5520	1-218-966-11	RES-CHIP 12K 5% 1/16W
R5521	1-218-966-11	RES-CHIP 12K 5% 1/16W
R5522	1-218-990-11	SHORT CHIP 0
R5523	1-218-990-11	SHORT CHIP 0
R5524	1-218-977-11	RES-CHIP 100K 5% 1/16W
R5525	1-218-966-11	RES-CHIP 12K 5% 1/16W
R5527	1-218-959-11	RES-CHIP 3.3K 5% 1/16W
R5530	1-218-990-11	SHORT CHIP 0
R5531	1-218-990-11	SHORT CHIP 0
R5532	1-218-990-11	SHORT CHIP 0
R5604	1-208-909-11	METAL CHIP 8.2K 0.5% 1/16W
R5605	1-218-956-11	RES-CHIP 1.8K 5% 1/16W
R5607	1-208-643-11	METAL CHIP 22 0.5% 1/16W
R5609	1-208-643-11	METAL CHIP 22 0.5% 1/16W
R5610	1-208-943-11	METAL CHIP 220K 0.5% 1/16W
R5611	1-208-677-11	METAL CHIP 560 0.5% 1/16W
R5612	1-208-707-11	METAL CHIP 10K 0.5% 1/16W
< VARISTOR >		
VD5401	1-801-862-11	VARISTOR, CHIP (1608)
VD5402	1-801-862-11	VARISTOR, CHIP (1608)
VD5403	1-803-974-21	VARISTOR, CHIP (1608)
VD5404	1-803-974-21	VARISTOR, CHIP (1608)
VD5405	1-803-974-21	VARISTOR, CHIP (1608)
VD5406	1-803-974-21	VARISTOR, CHIP (1608)
VD5407	1-803-974-21	VARISTOR, CHIP (1608)
VD5408	1-803-974-21	VARISTOR, CHIP (1608)

Checking supplied accessories.

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



Power cord (Main lead)(1)
(PC105:US,CND)

▲ 1-790-107-22

Power cord (Main lead)(1)
(PC105E:AUS)

▲ 1-696-819-21

Power cord (Main lead)(1)
(PC103E:AEP,EE/PC104E:E/
PC105:E/PC105E:AEP,EE,E)

▲ 1-769-608-11

Power cord (Main lead)(1)
(PC105:KR)

▲ 1-776-985-11

Power cord (Main lead)(1)
(PC104E:CH/PC105E:CH)

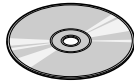
▲ 1-782-476-13

Power cord (Main lead)(1)
(PC103E:UK/PC104E:HK/
PC105:HK/PC105E:UK,HK)

▲ 1-783-374-11

Power cord (Main lead)(1)
(PC105:JE/PC105E:JE)

▲ 1-790-732-12



CD-ROM
(SPVD-010 USB Driver) (1)

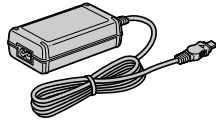
(PC103E/PC104E/PC105:
E,HK,JE,KR/PC105E)

3-078-942-03

CD-ROM
(SPVD-010 (I) USB Driver) (1)

(PC105:US,CND)

3-078-943-03



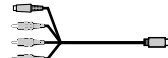
AC power adaptor (1)
(AC-L15A/L15B)

(EXCEPT PC104E:CH/
PC105E:CH)

▲ 1-477-533-31

(PC104E:CH/PC105E:CH)

▲ 1-477-533-41



A/V connecting cable
(AV multi)

(1.5m) (1)

1-823-156-12



"Memory Stick" (1)
(MSA-8A)

A-7024-735-A

(DCR-PC105/
PC105E only)



21-pin adaptor (1)
(PC103E/PC105E:

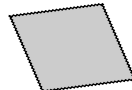
AEP,UK,EE only)

1-770-783-21



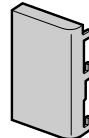
USB cable (1)

1-823-931-11



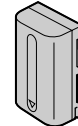
Cleaning cloth (1)

3-073-861-01



Battery terminal
cover (1)

3-082-552-01



NP-FM30 battery
pack (BLUE) (1)

A-7095-528-A

(PC105:US,CND)

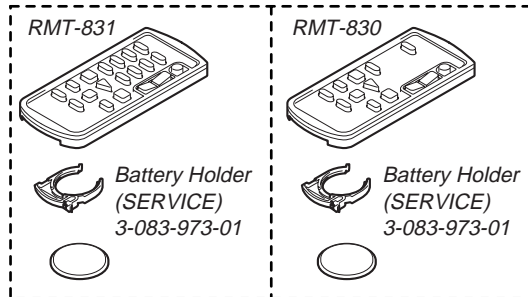
A-7095-529-A

(Except PC105:US,CND)



Lens cap (1)

X-3953-477-1



RMT-831

Battery Holder
(SERVICE)

3-083-973-01

RMT-830

Battery Holder
(SERVICE)

3-083-973-01

Wireless Remote Commander (1)
(DCR-PC105/PC105E)

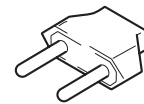
(RMT-831)

1-477-898-41

(DCR-PC103E/PC104E)

(RMT-830)

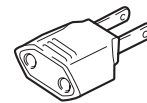
1-477-898-71



2-pin conversion adaptor (1)

(PC105:JE/PC105E:JE only)

1-569-007-12



2-pin conversion adaptor (1)

(PC104E:E,HK/
PC105E:E,HK/PC105E:E,HK)

1-569-008-12

• Abbreviation

CND : Canadian model	KR : Korea model
AUS : Australian model	HK : Hong Kong model
CH : Chinese model	JE : Tourist model
EE : East European model	

Other accessories

3-081-602-11	MANUAL, INSTRUCTION(ENGLISH) (PC105:US,CND,E,HK,JE)
3-081-602-21	MANUAL, INSTRUCTION (FRENCH)(PC105:CND)
3-081-602-31	MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (PC105:E,JE)
3-081-602-41	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (PC105:E,HK)
3-081-602-51	MANUAL, INSTRUCTION (KOREAN)(PC105:JE,KR)
3-081-602-61	MANUAL, INSTRUCTION (ARABIC)(PC105:E)
3-081-627-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH) (PC103E:AEP,UK/PC104E/PC105E:AEP,UK,E,HK,AUS,CH,JE)
3-081-627-21	MANUAL, INSTRUCTION (SPANISH/PORTUGUESE) (PC103E:AEP/PC105E:AEP)
3-081-627-31	MANUAL, INSTRUCTION (ITALIAN/GREEK) (PC103E:AEP/PC105E:AEP)

3-081-627-41	MANUAL, INSTRUCTION (GERMAN/DUTCH) (PC103E:AEP/PC105E:AEP)
3-081-627-51	MANUAL, INSTRUCTION (RUSSIAN/SWEDISH) (PC104E:E/PC105E:E,JE)
3-081-627-61	MANUAL, INSTRUCTION (ARABIC/PERSIAN) (PC104E:E/PC105E:E)
3-081-627-71	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (PC104E:HK/PC105E:HK)
3-081-627-81	MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (PC104E:E,CH/PC105E:E,CH,JE)

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.

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.04	Official Release	—	—