DCR-TRV345E/TRV350/TRV351/TRV355E/TRV356E

RMT-814

SERVICE MANUAL

LEVEL 2

Ver 1.0 2002. 12

Revision History

Photo: DCR-TRV350

US Model
Canadian Model
DCR-TRV350
AEP Model
DCR-TRV345E/TRV355E
UK Model
DCR-TRV355E
East European Model
North European Model
DCR-TRV345E/TRV355E
E Model
DCR-TRV350/TRV351/TRV355E/TRV356E
Australian Model
DCR-TRV355E
Brazilian Model
DCR-TRV351
Chinese Model
DCR-TRV356E
Korea Model
DCR-TRV350
Tourist Model
DCR-TRV350/TRV355E

M2000 MECHANISM

Link

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

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987621851.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL1 (987621841.pdf).
- For MECHANISM ADJUSTMENTS, refer to the “8mm Video MECHANICAL ADJUSTMENT MANUAL IX M2000 MECHANISM ” (9-929-861-11).
- Reference No. search on printed wiring boards is available.
- Table for differences of function of each model.
- HELP: Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

On the VC-305 board

This service manual provides the information that is premised the circuit board replacement service and not intended repair inside the VC-305 board.

Therefore, schematic diagram, printed wiring board, waveforms, mounted parts location and electrical parts list of the VC-305 board are not shown.

The following pages are not shown.

Digital 8 DIGITAL VIDEO CAMERA RECORDER

SONY®

COVER

Self Diagnosis Supported model

Digital Handycam

InfoLITHIUM M SERIES

MEMORY STICK ™

SPECIFICATIONS

Video camera recorder

System

Video recording system
2 rotary heads
Helical scanning system
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
DCR-TRV350/TRV351:
NTSC color, EIA standards
DCR-TRV345E/TRV355E/TRV356E:
PAL color, CCIR standards
Usable cassette
8 mm video format cassette
Recording/playback time
DCR-TRV350/TRV351:
(using 120 min. Digital8 video cassette)
DCR-TRV345E/TRV355E/TRV356E:
(using 90 min. Digital8 video cassette)
SP mode: 1 hour
LP mode: 1 hour and 30 minutes
Fastforward/rewind time
DCR-TRV350/TRV351:
(using 120 min. Digital8 video cassette)
DCR-TRV345E/TRV355E/TRV356E:
(using 90 min. Digital8 video cassette)
Approx. 5 min.
Viewfinder
Electric viewfinder (monochrome)
Image device
3 mm (1/6 type) CCD
(Charge Coupled Device)
DCR-TRV350/TRV351:
Gross: Approx. 460 000 pixels
Effective: Approx. 290 000 pixels
DCR-TRV345E/TRV355E/TRV356E:
Gross: Approx. 800 000 pixels
Effective: Approx. 400 000 pixels
Lens
Combined power zoom lens
Filter diameter 37 mm. (1 7/16 in.)
20× (Optical), 700×(Digital)
Focal length
f = 2.5 - 50 mm (1/8 - 2 in.)
When converted to a 35 mm still camera
DCR-TRV350/TRV351:
f = 42 - 840 mm (1 11/16 - 33 1/8 in.)
DCR-TRV345E/TRV355E/TRV356E:
f = 45 - 900 mm (1 13/16 - 35 1/2 in.)
Color temperature
Auto
Minimum illumination
DCR-TRV350/TRV351:
4 lx (lux) (F 1.6)
DCR-TRV345E/TRV355E/TRV356E:
6 lx (lux) (F 1.6)
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

S video jack
Input/Output
4-pin mini DIN
Luminance signal: 1 Vp-p, 75 Ω (ohms), unbalanced
Chrominance signal:
DCR-TRV350/TRV351: 0.286 Vp-p
DCR-TRV345E/TRV355E/TRV356E: 0.3 Vp-p
75 Ω (ohms), unbalanced
Audio/Video jack
Input/Output
AV MINI JACK
VIDEO: 1 Vp-p, 75 Ω (ohms), unbalanced, sync negative
AUDIO: 327 mV, (at output impedance more than 47 kΩ (kilohms))
Input impedance with more than 47 kΩ (kilohms)
Output impedance with less than 2.2 kΩ (kilohms)
Stereo minijack (ø 3.5 mm)
MIC jack
Stereo minijack (ø 3.5 mm)
DV jack
4-pin connector
USB jack
mini-B
LANC jack
Stereo minijack (ø 2.5 mm)

LCD screen

Picture
6.2 cm (2.5 type)
50.3 × 37.4 mm (2 × 1 1/2 in.)
Total dot number
123 200 (560 × 220)

General

Power requirements
7.2 V (Rechargeable battery pack)
8.4 V (AC adaptor)
Average power consumption (when using the battery pack)
During camera recording using
LCD: 3.8 W
Viewfinder: 2.9 W
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Recommended charging temperature
10 °C to 30 °C (50 °F to 86 °F)
Storage temperature
–20 °C to +60 °C (–4 °F to +140 °F)
Dimensions (approx.)
89 × 101 × 199 mm
(3 5/8 × 4 × 7 7/8 in.) (w/h/d)
Mass (approx.)
Main unit only
DCR-TRV350/TRV351/TRV355E/TRV356E:
830 g (1 lb 13 oz)
DCR-TRV345E:
820 g (1 lb 12 oz)
Including the rechargeable battery pack, NP-FM30, Digital8 cassette, lens cap, and shoulder strap
DCR-TRV350/TRV351/TRV355E/TRV356E:
970 g (2 lb 2 oz)
DCR-TRV345E:
960 g (1 lb 1 oz)

AC adaptor

Power requirements
100 - 240 V AC, 50/60 Hz
Current comsumption
0.35 - 0.18 A
Power consumption
18 W
Output voltage
DC OUT: 8.4 V, 1.5 A in the operating mode
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 × 4 1/4 × 4 in.) (w/h/d)
excluding projecting parts
Mass (approx.)
190 g (6.7 oz)
DCR-TRV350/TRV351:
excluding the power cord
DCR-TRV345E/TRV355E/TRV356E:
excluding the main lead

Rechargeable battery pack

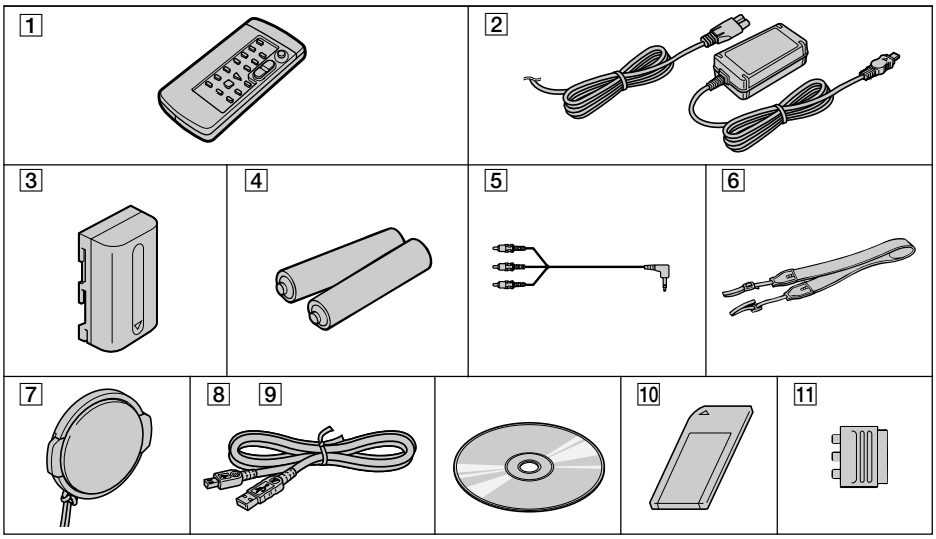
Maximum output voltage
DC 8.4 V
Output voltage
DC 7.2 V
Capacity
5.0 Wh (700 mAh)
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Dimensions (approx.)
38.2 × 20.5 × 55.6 mm
(1 9/16 × 13/16 × 2 1/4 in.)
(w/h/d)
Mass (approx.)
65 g (2.3 oz)
Type
Lithium ion

"Memory Stick"

DCR-TRV351/TRV356E:
Memory
Flash memory
8MB: MSA-8A
Operating voltage
2.7-3.6 V
Power consumption
Approx. 45 mA during operation
Approx. 130 µA in the standby mode
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



1 **Wireless Remote Commander** (1)
RMT-814
2 **AC-L15A/L15B AC Adaptor** (1), **Power cord** (1)
3 **NP-FM30 Rechargeable Battery Pack** (1)
4 **R6 (Size AA) battery for Remote Commander** (1)
5 **A/V connecting cable** (1)
6 **Shoulderstrap** (1)
7 **Lens cap** (1)
8 **USB cable** (1)
9 **CD-ROM (SPVD-010 USB Driver)** (1)
10 **"Memory Stick"** (1)
DCR-TRV350/TRV351/TRV355E/TRV356E
11 **21-pin adaptor** (1)
AEP, UK, EE, NE

Table for differences of function

Model	DCR-TRV345E	DCR-TRV350	DCR-TRV351	DCR-TRV355E	DCR-TRV356E
Destination	AEP, EE, NE	US, CND, E, KR, JE	E, BR	AEP, UK, EE, NE, E, AUS, JE	E, CH
Color system	PAL	NTSC		PAL	
CCD imager	960H	720H		960H	
Minimum illumination	6 lx	4 lx		6 lx	
	0 lx (In the Nightshot mode)				
Memory stick slot	×	○			
Tape PB zoom	×	○			

• Abbreviation
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND : Canadian model
EE : East European model
JE : Tourist model
KR : Korean model
NE : North European model

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ 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 ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS 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.

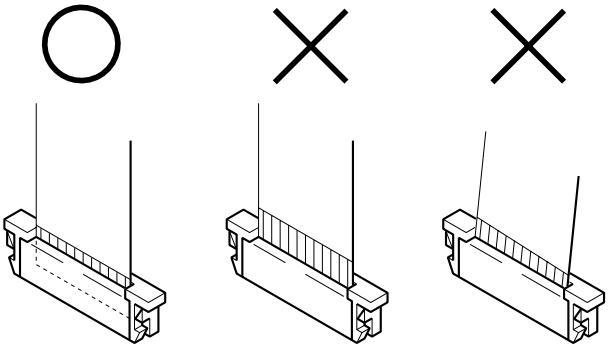
TABLE OF CONTENTS

COVER

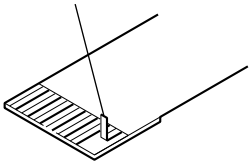
SECTION 1
SERVICE NOTE

1-1. NOTE FOR REPAIR

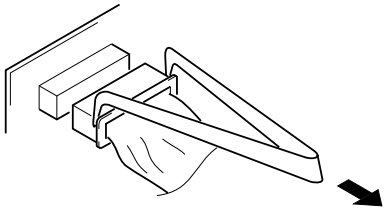
Make sure that the flat cable and flexible board are not cracked of bent at the terminal.
Do not insert the cable insufficiently nor crookedly.



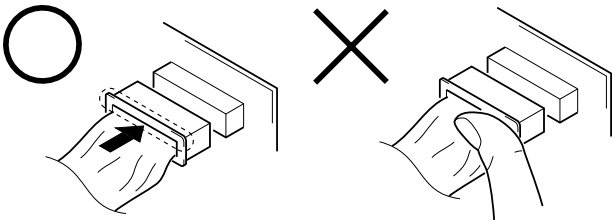
Cut and remove the part of gilt which comes off at the point. (Be careful or some pieces of gilt may be left inside)



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



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



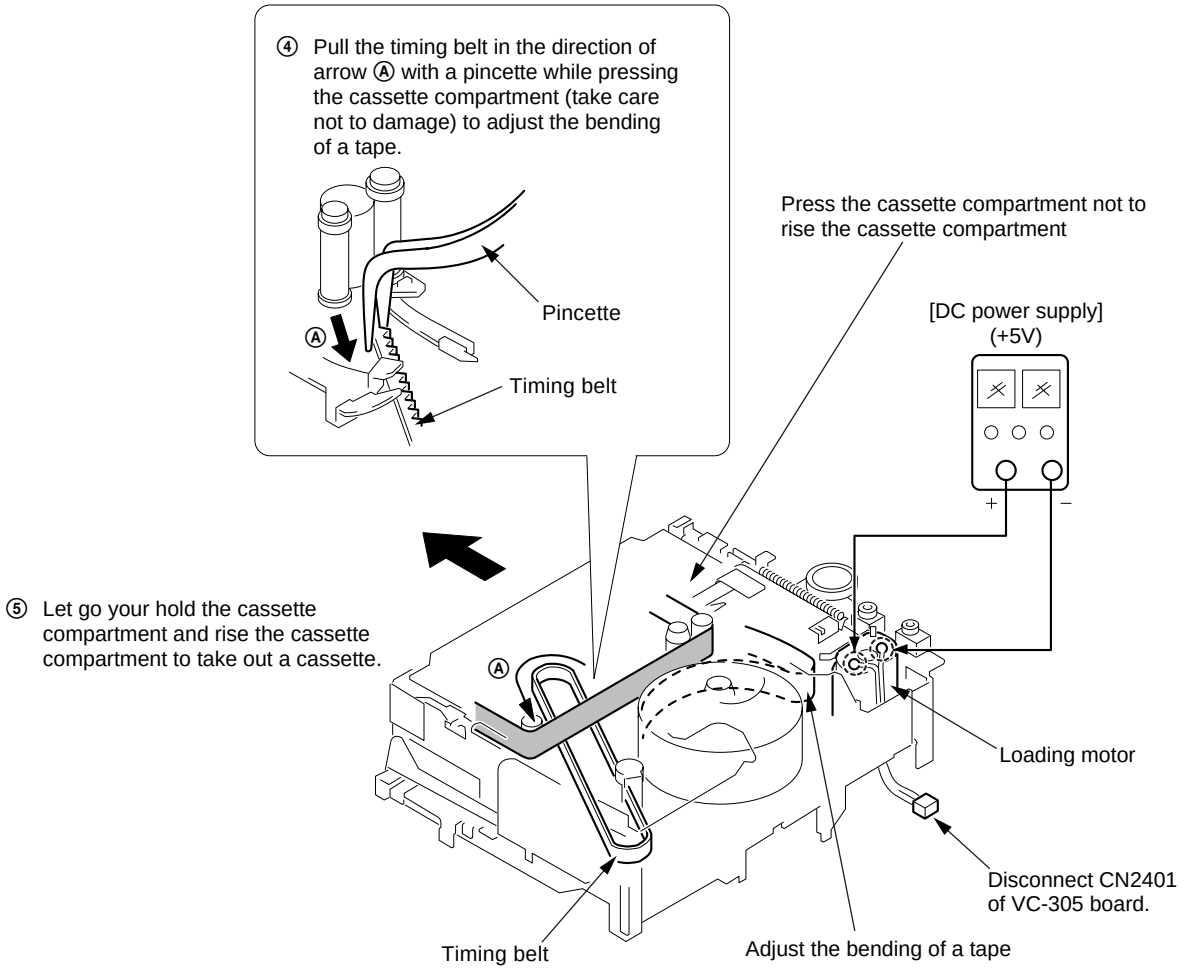
1-2. POWER SUPPLY DURING REPAIRS

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 method is available to prevent this.

Method 1.
Use the AC power adaptor (AC-L10, AC-VQ800 etc.).

1-3. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

① Refer to “SECTION 2. DISASSEMBLY” to remove the mechanism deck block.
② Disconnect CN2401 (2P) of VC-305 board.
③ Add +5V from the DC POWER SUPPLY and unload with a pressing the cassette compartment.



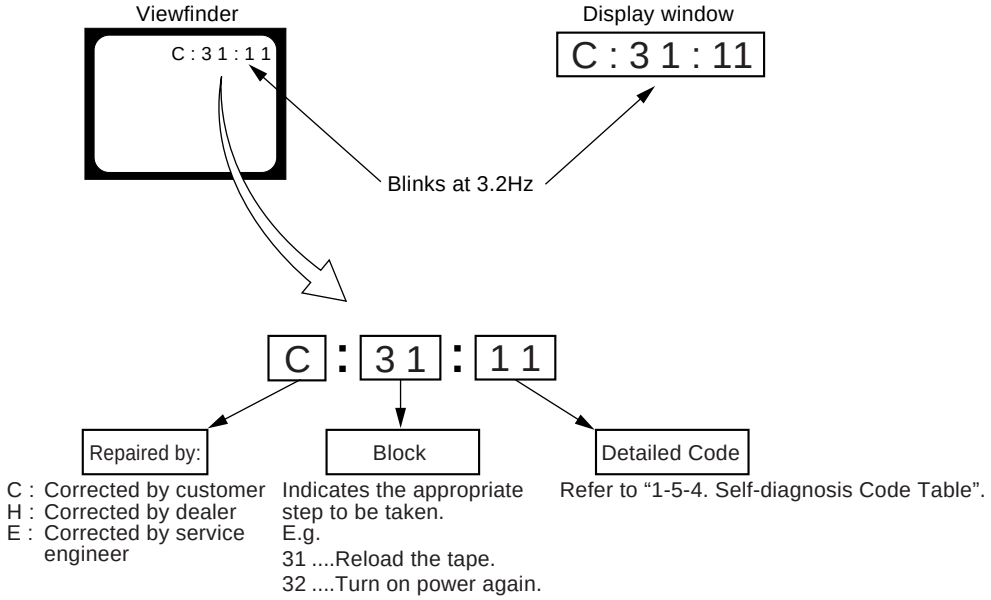
1-4. SELF-DIAGNOSIS FUNCTION

1-4-1. Self-diagnosis Function

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder or Display window what to do. This function consists of two display; self-diagnosis display and service mode display.
Details of the self-diagnosis functions are provided in the Instruction manual.

1-4-2. Self-diagnosis Display

When problems occur while the unit is operating, the counter of the viewfinder or Display window shows a 4-digit display consisting of an alphabet and numbers, which blinks at 3.2 Hz. This 5-character display indicates the "repaired by:", "block" in which the problem occurred, and "detailed code" of the problem.

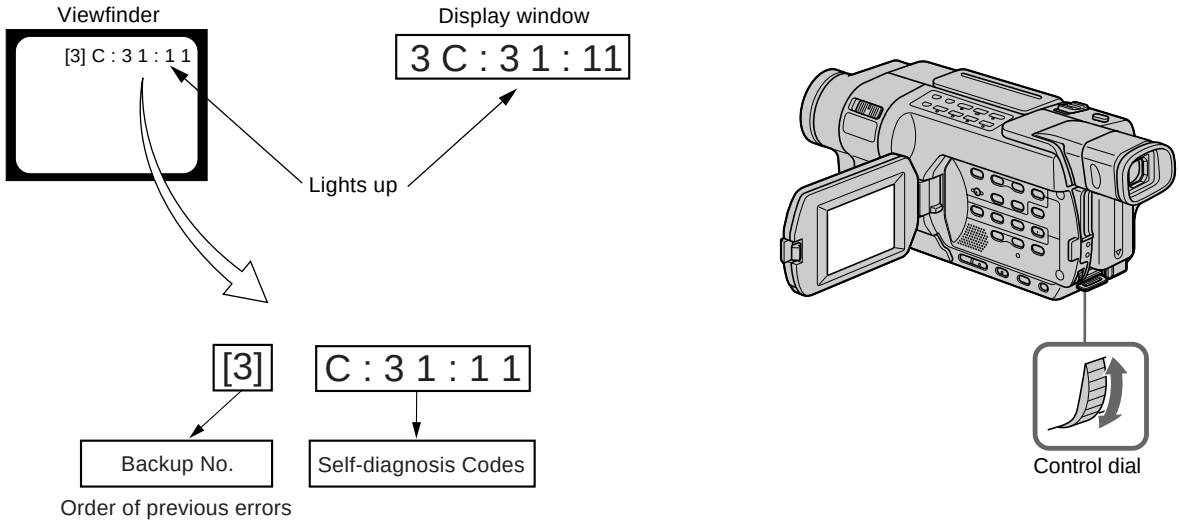


1-4-3. Service Mode Display

The service mode display shows up to six self-diagnosis codes shown in the past.

1. Display Method

While pressing the "STOP" key, set the switch from OFF to "VCR", and continue pressing the "STOP" key for 5 seconds continuously. The service mode will be displayed, and the counter will show the backup No. and the 5-character self-diagnosis codes.



2. Switching of Backup No.

By rotating the control dial, past self-diagnosis codes will be shown in order. The backup No. in the [] indicates the order in which the problem occurred. (If the number of problems which occurred is less than 6, only the number of problems which occurred will be shown.)
[1] : Occurred first time [3] : Occurred third time [5] : Occurred fifth time
[2] : Occurred second time [4] : Occurred fourth time [6] : Occurred the last time

3. End of Display

Turning OFF the power supply will end the service mode display.

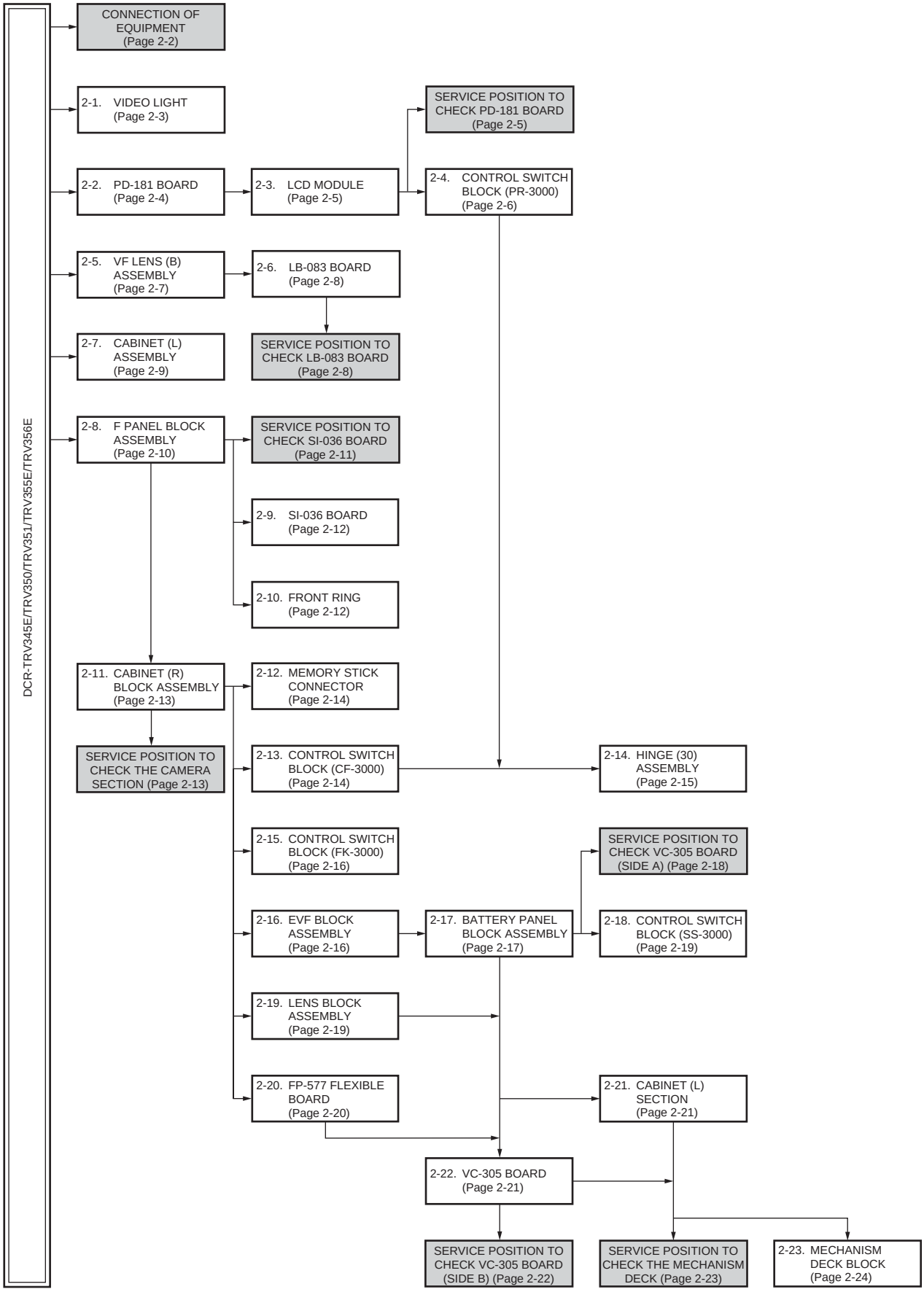
Note: The "self-diagnosis display" data will be backed up by the lithium battery (CONTROL SWITCH BLOCK (CF-3000): BT001). When removing the cabinet (R) (removing the VC-305 board CN1007), the "self-diagnosis display" data will be lost by initialization.

1-4-4. Self-diagnosis Code Table

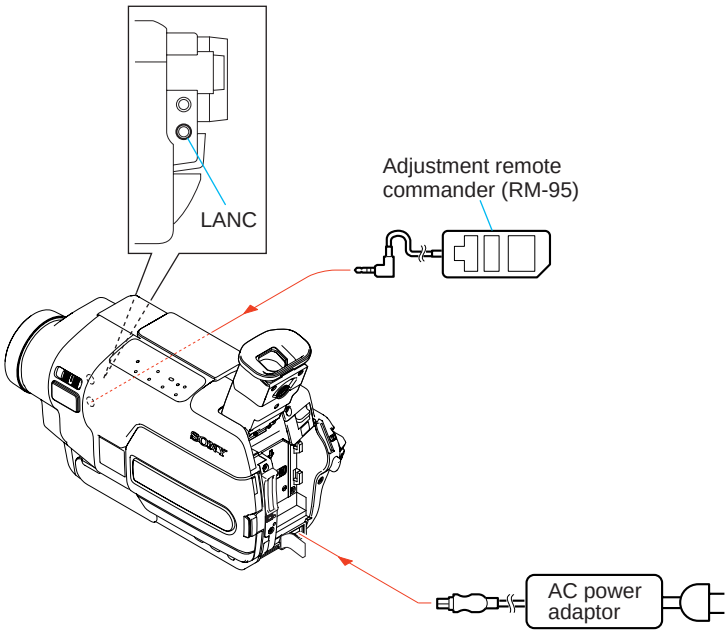
Self-diagnosis Code					Symptom/State	Correction
Repaired by:	Block Function		Detailed Code			
C	0	4	0	0	Non-standard battery is used.	Use the info LITHIUM battery.
C	2	1	0	0	Condensation.	Remove the cassette, and insert it again after one hour.
C	2	2	0	0	Video head is dirty.	Clean with the optional 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	2	1	0	LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	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 reset sensor (Pin ⑫ of VC-305 board CN1551) when focusing is performed when the control dial is rotated in the focus manual mode, and the focus motor drive circuit (IC1554 of VC-305 board) when the focusing is not performed.
E	6	1	1	0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom reset sensor (Pin ⑮ of VC-305 board CN1551) when zooming is performed when the zoom switch is operated and the zoom motor drive circuit (IC1554 of VC-305 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 (SE751 of SI-036 board)
E	6	2	0	1	Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE752 of SI-036 board)

SECTION 2
DISASSEMBLY

The following flow chart shows the disassembly procedure.

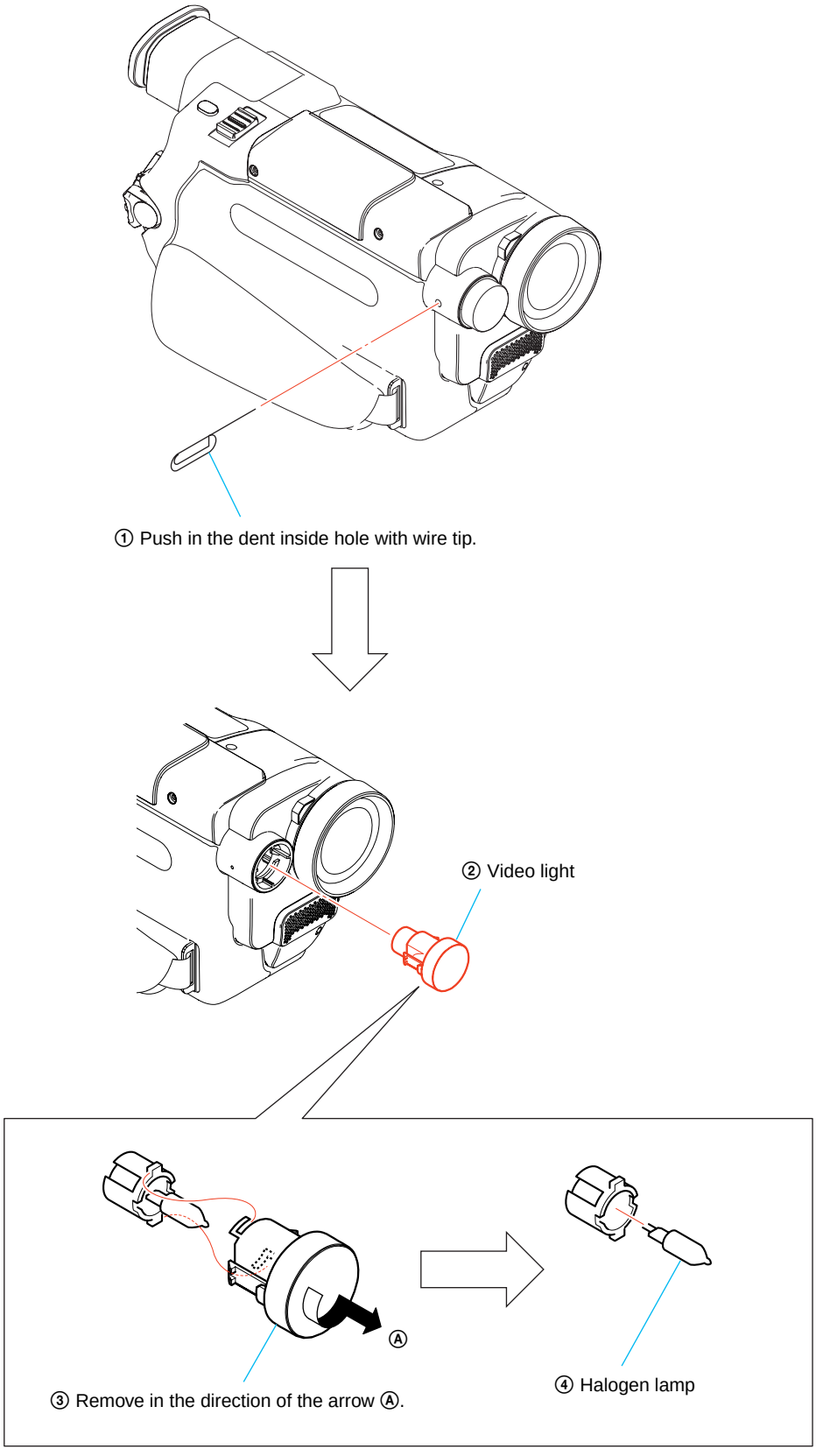


[CONNECTION OF EQUIPMENT]

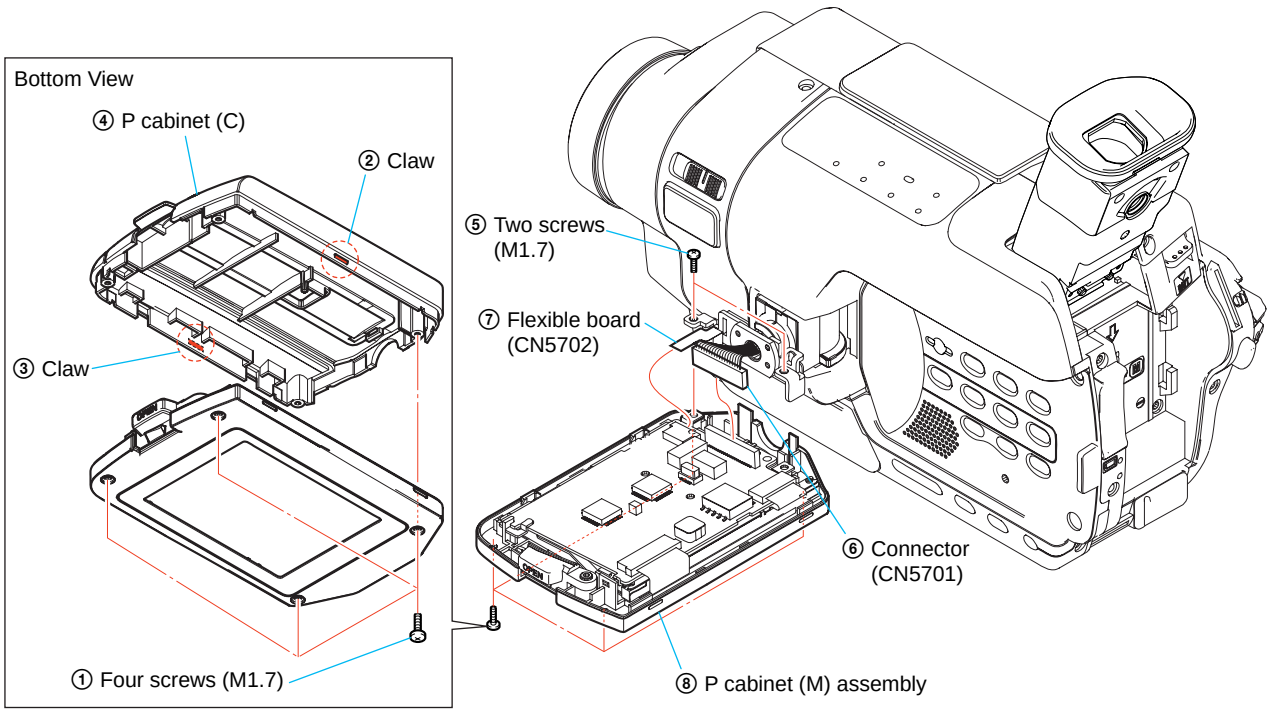


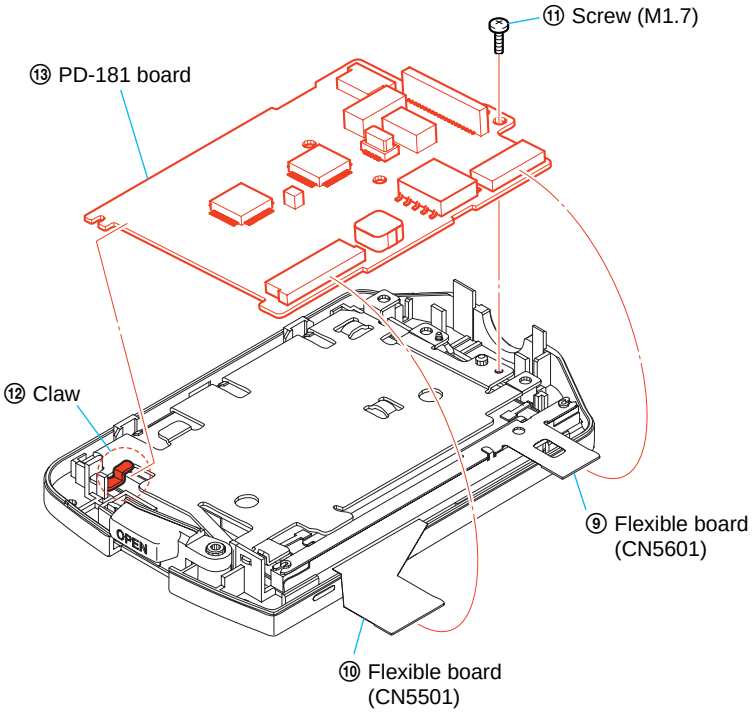
Note: Follow the disassembly procedure in the numerical order given.

2-1. VIDEO LIGHT

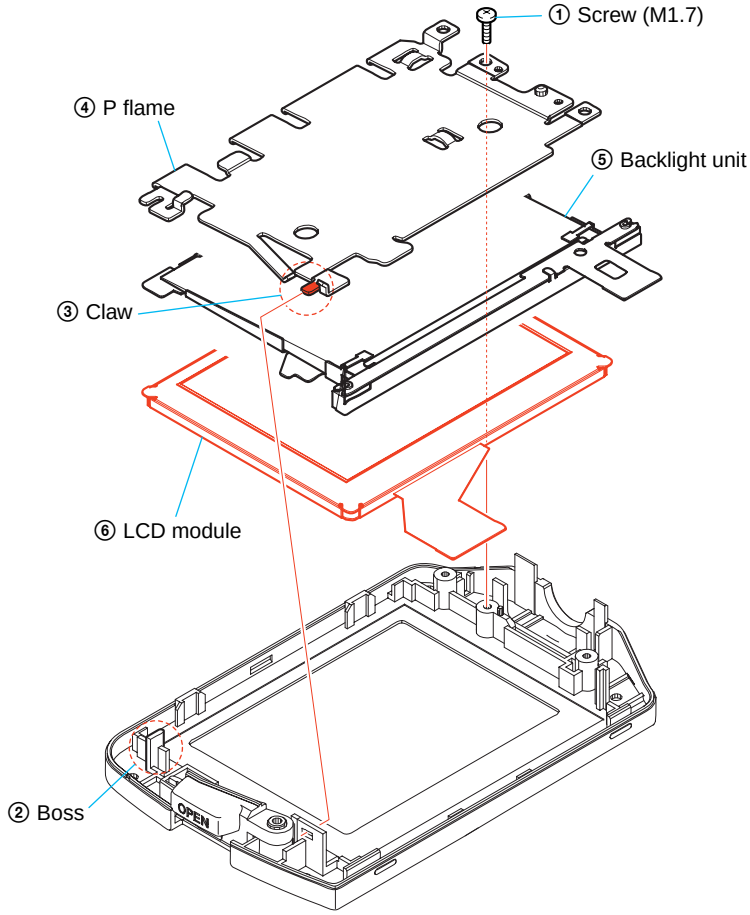


2-2. PD-181 BOARD

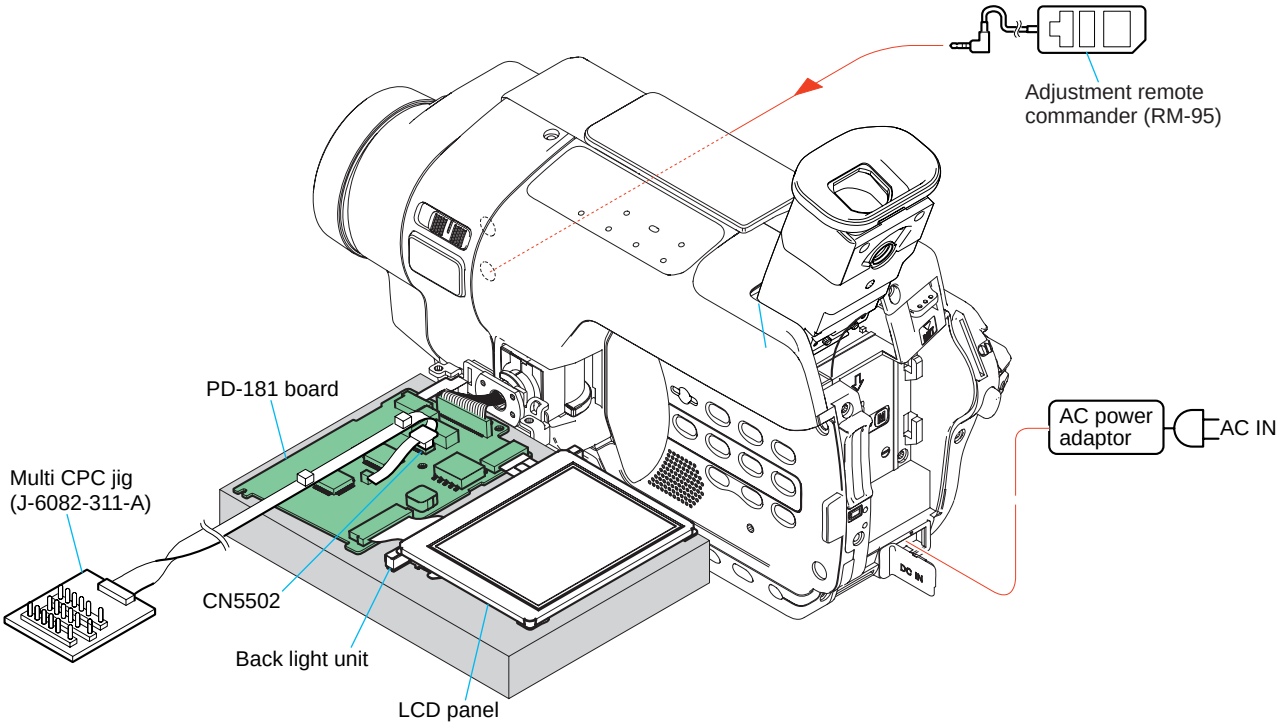




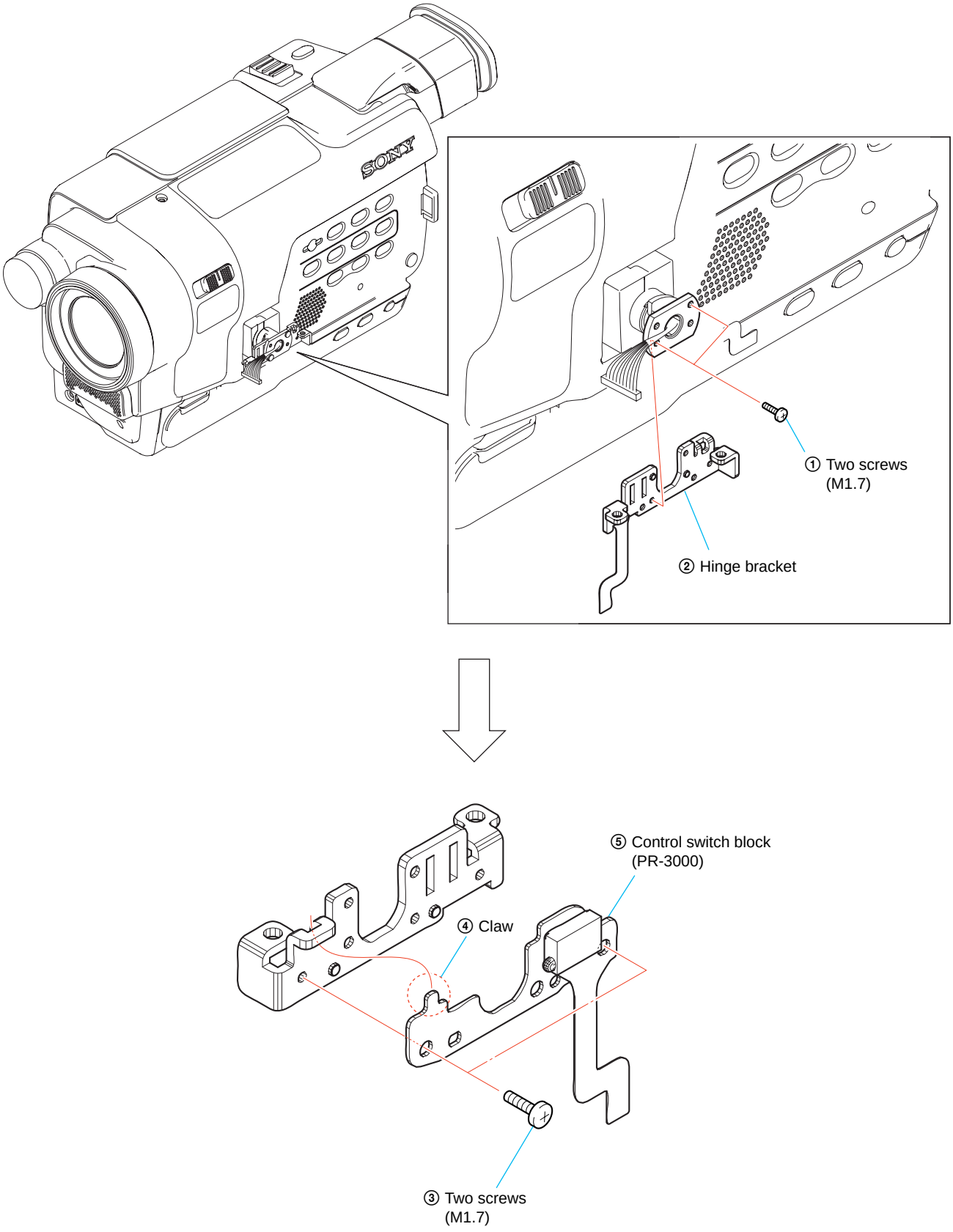
2-3. LCD MODULE



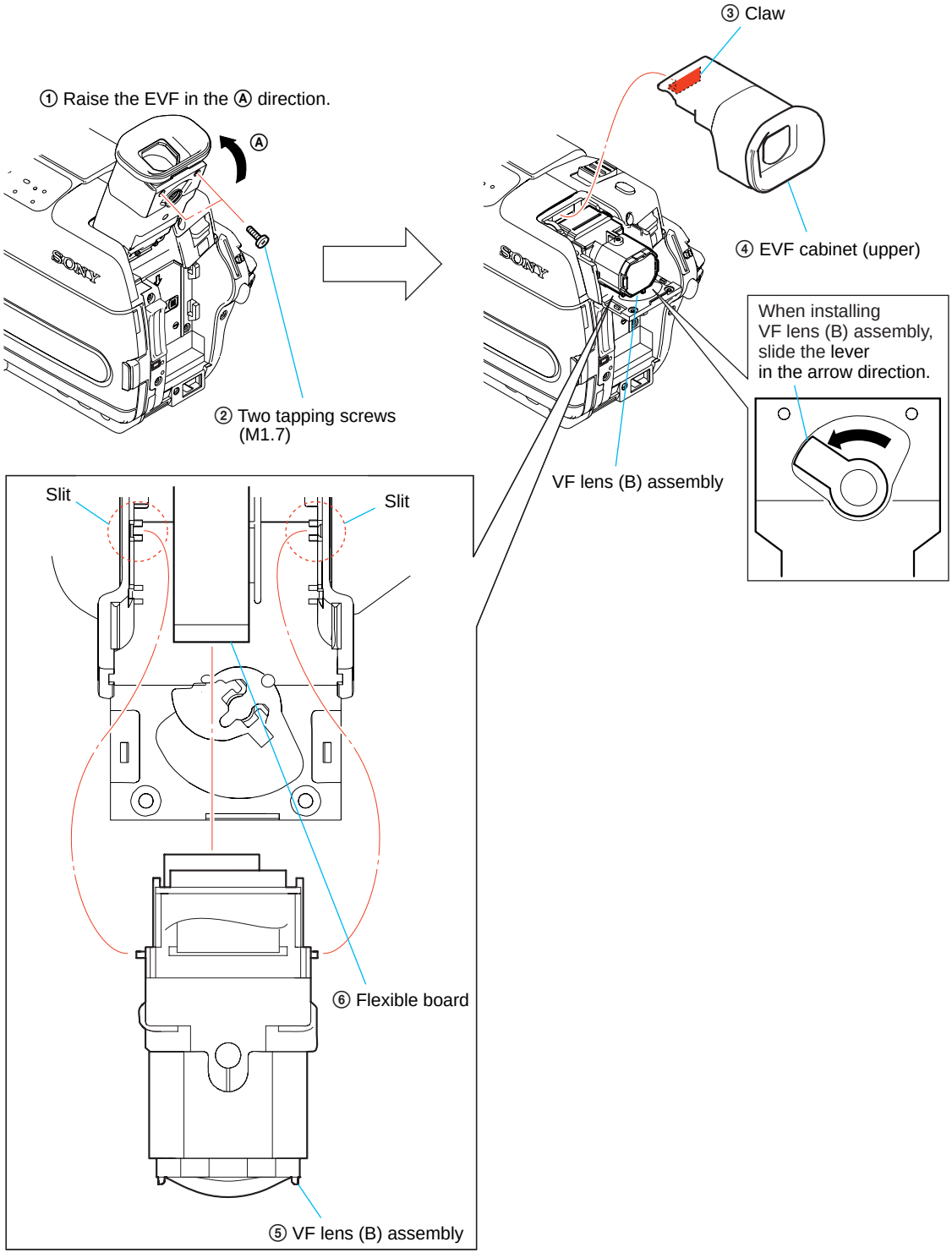
[SERVICE POSITION TO CHECK PD-181 BOARD]



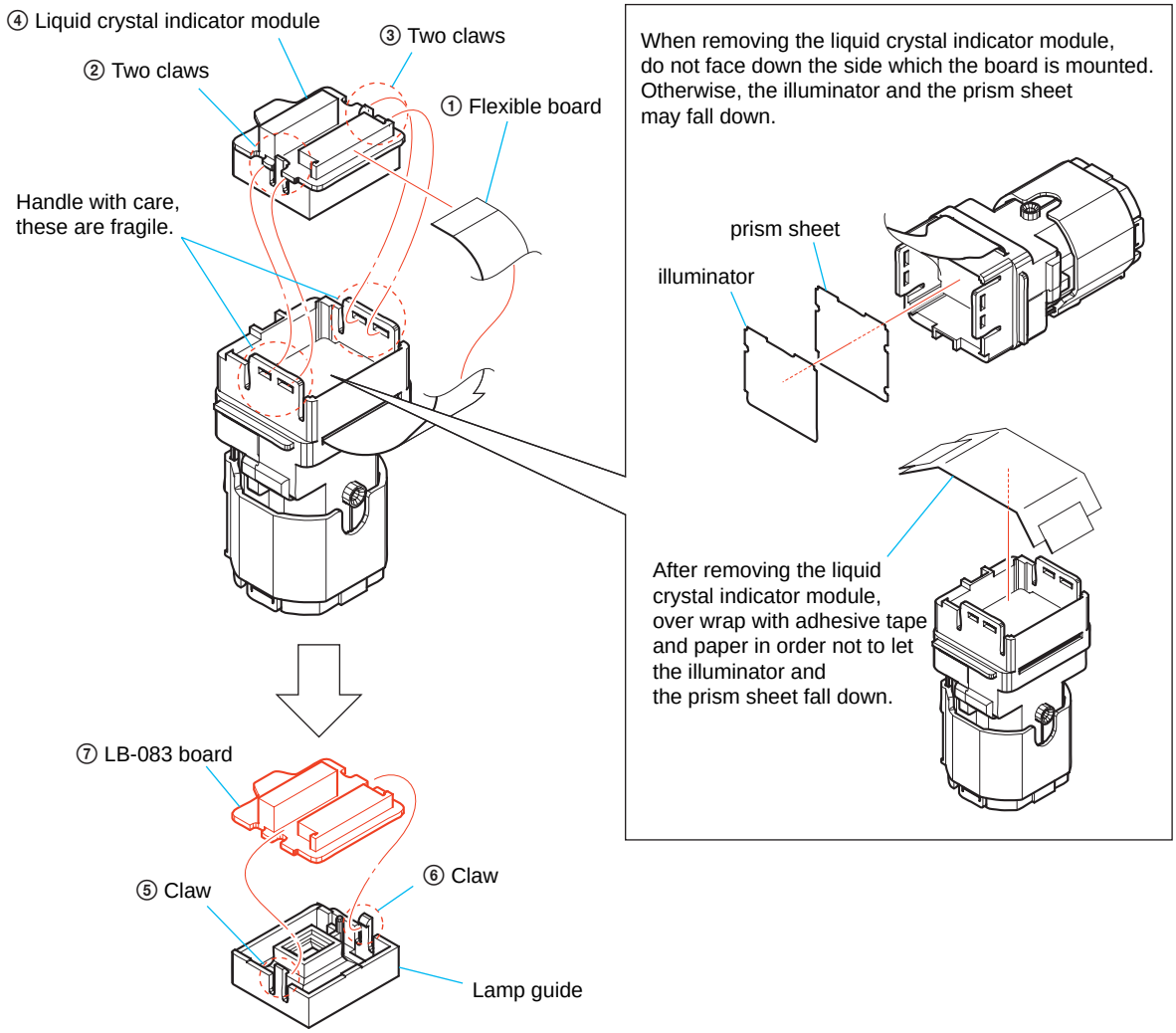
2-4. CONTROL SWITCH BLOCK (PR-3000)



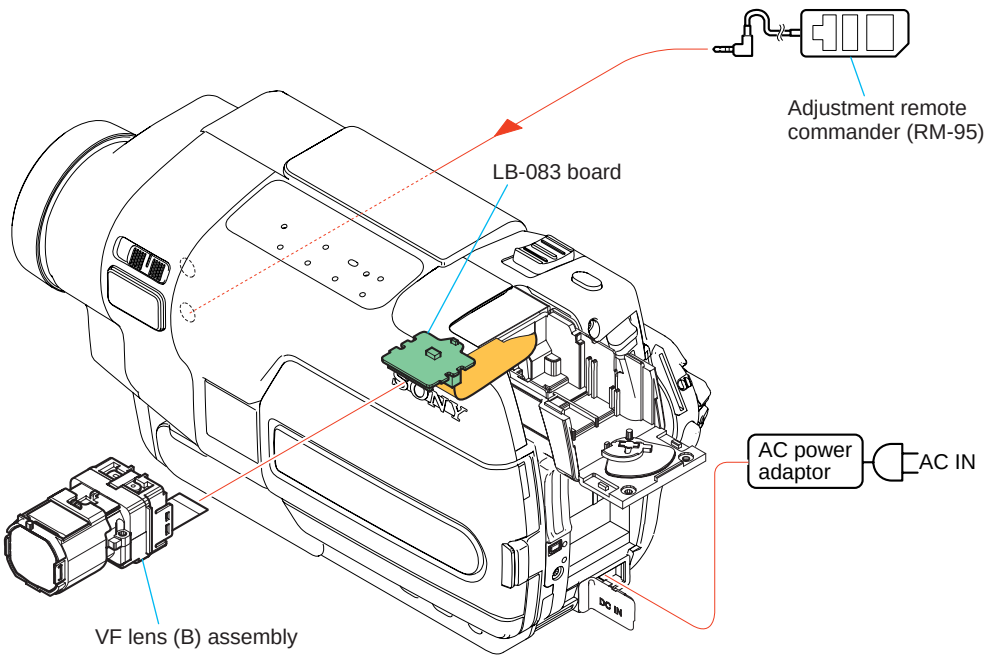
2-5. VF LENS (B) ASSEMBLY



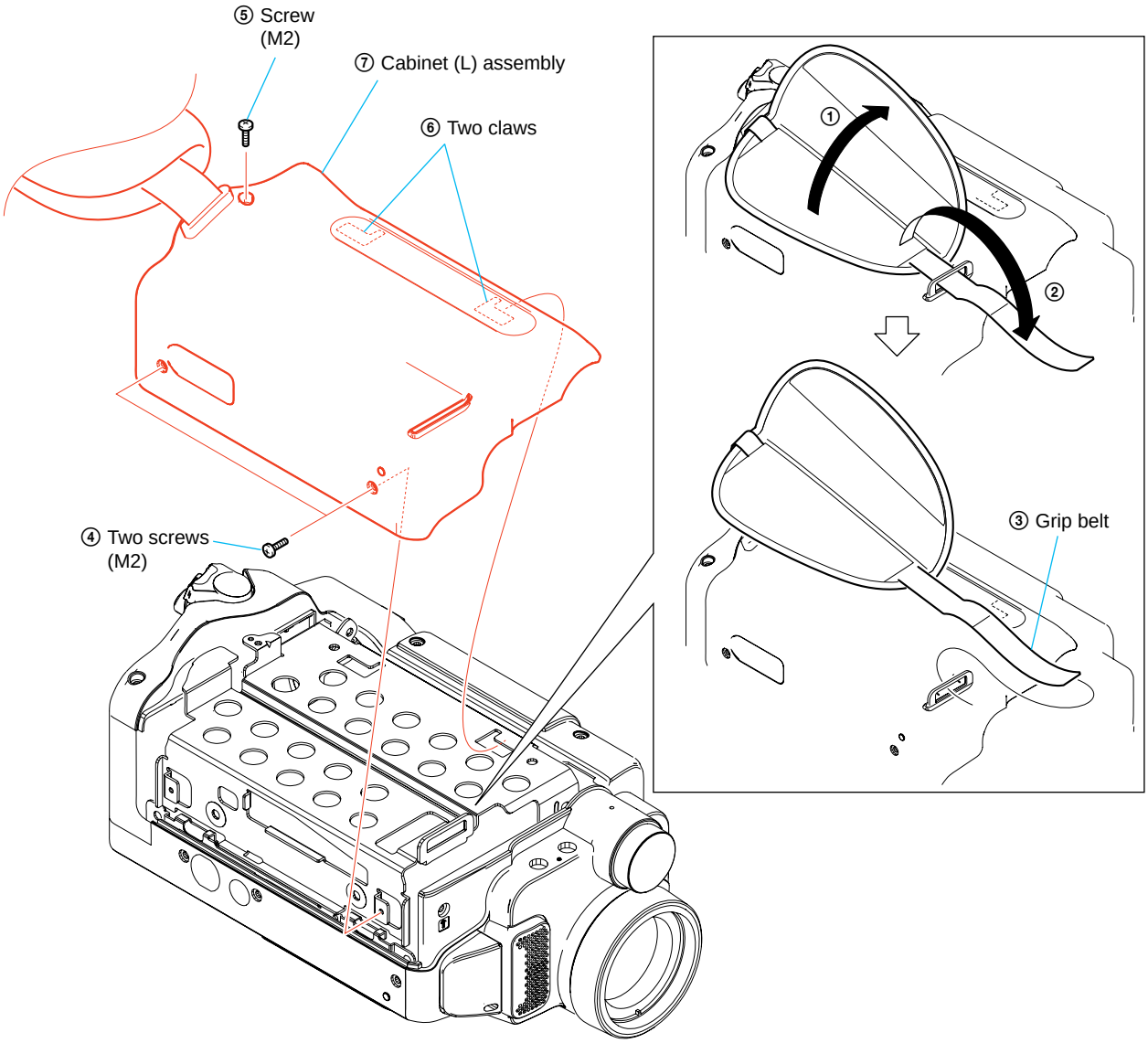
2-6. LB-083 BOARD



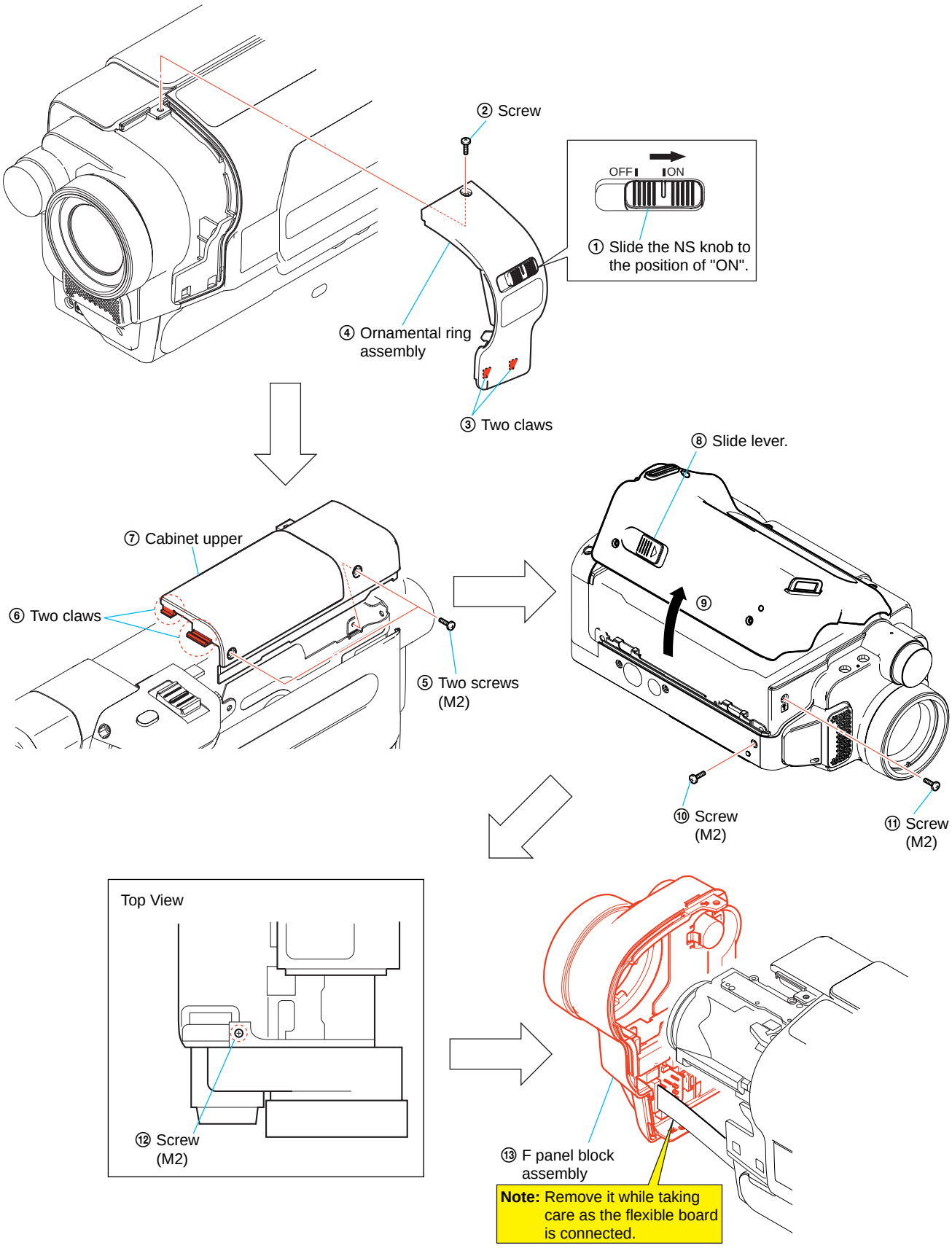
[SERVICE POSITION TO CHECK LB-083 BOARD]



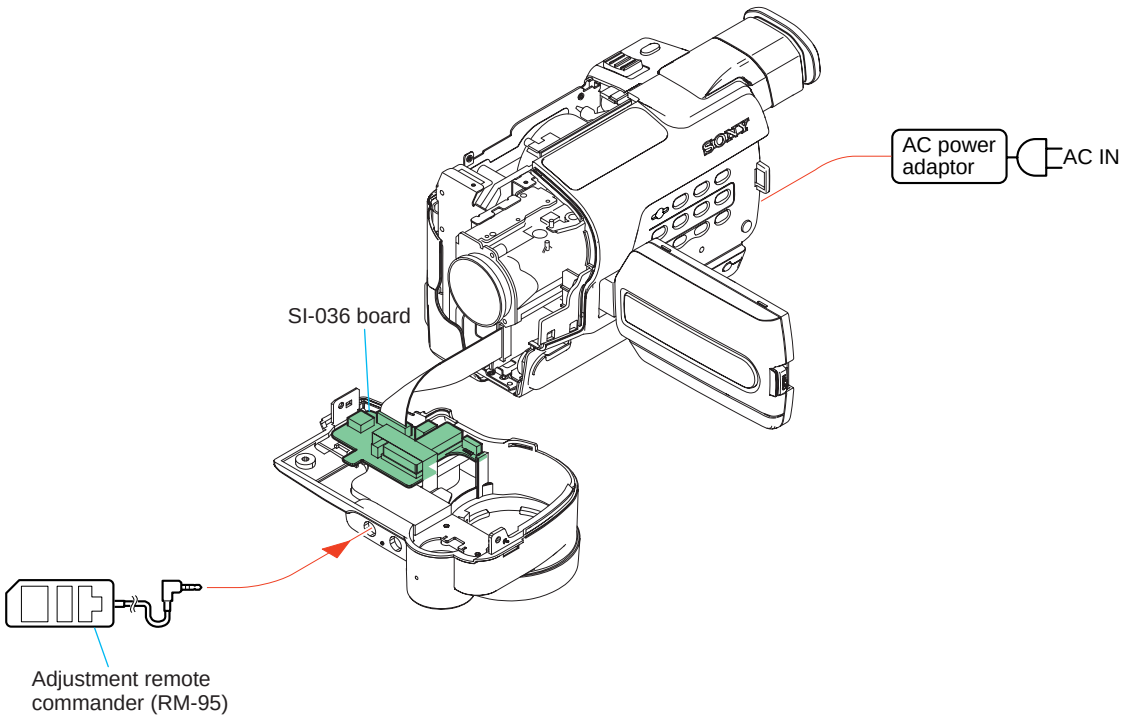
2-7. CABINET (L) ASSEMBLY



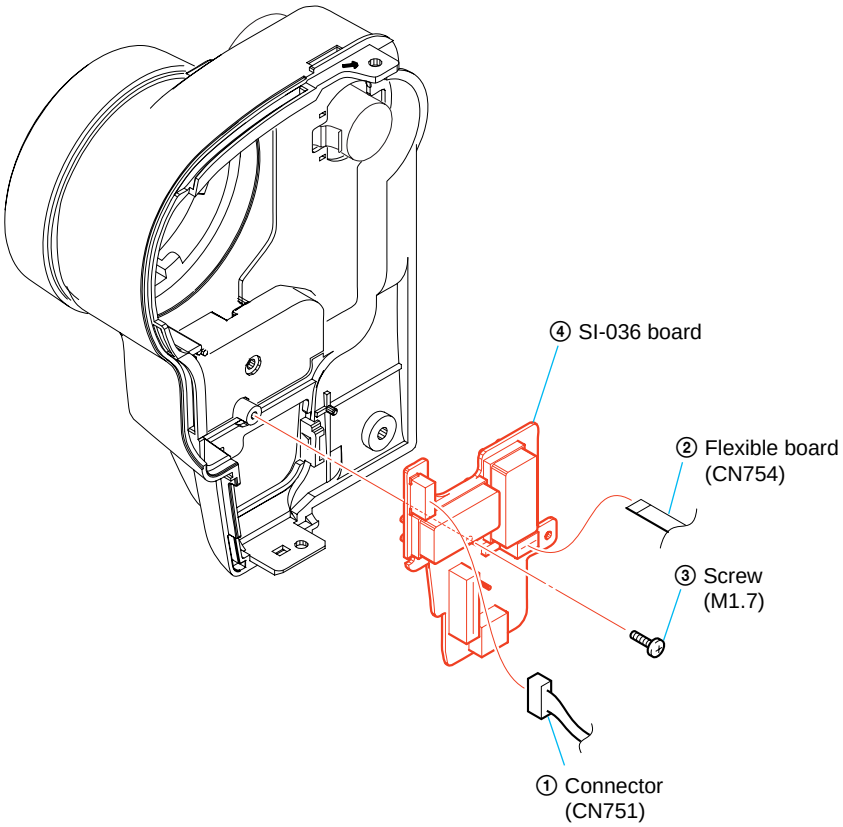
2-8. F PANEL BLOCK ASSEMBLY



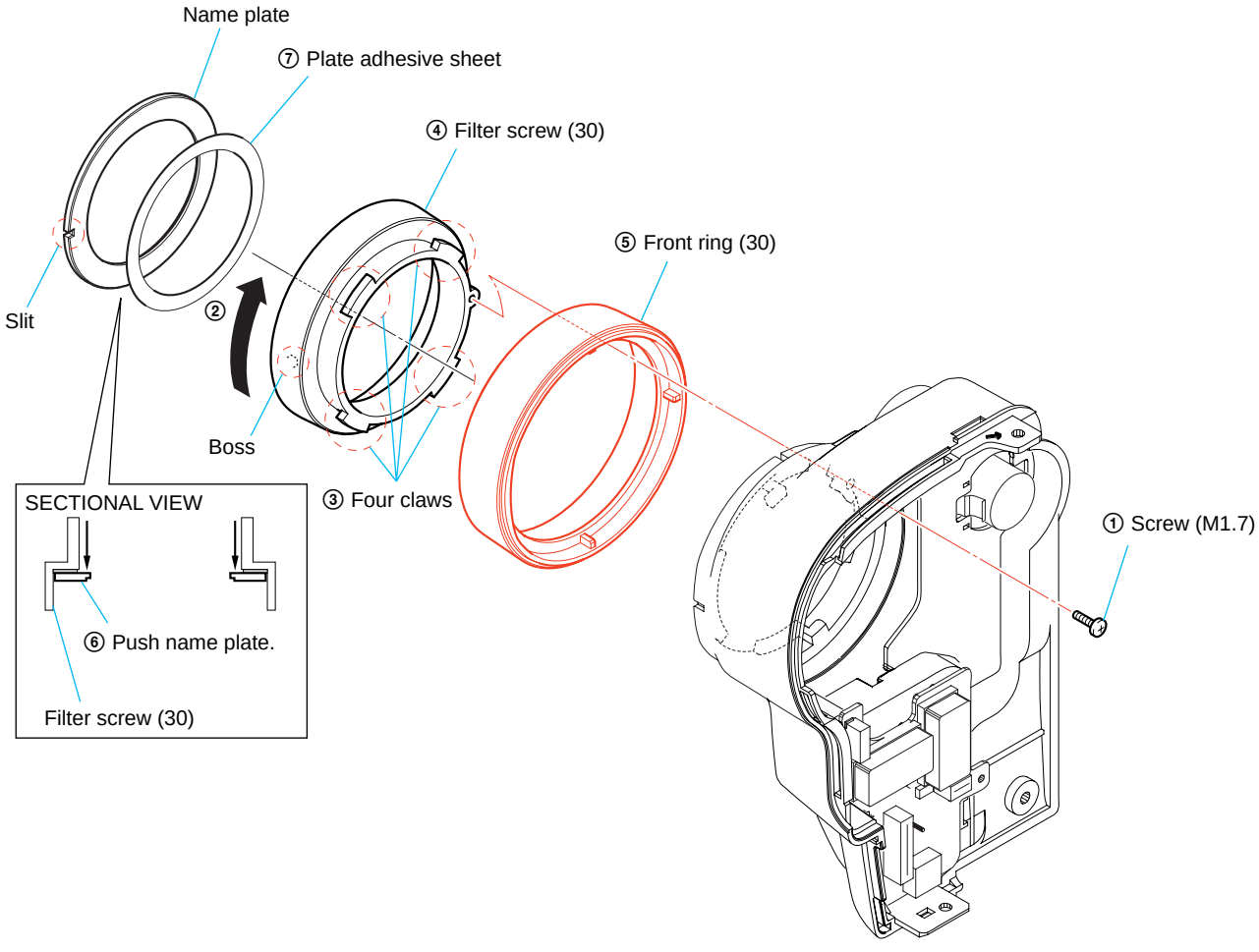
[SERVICE POSITION TO CHECK SI-036 BOARD]



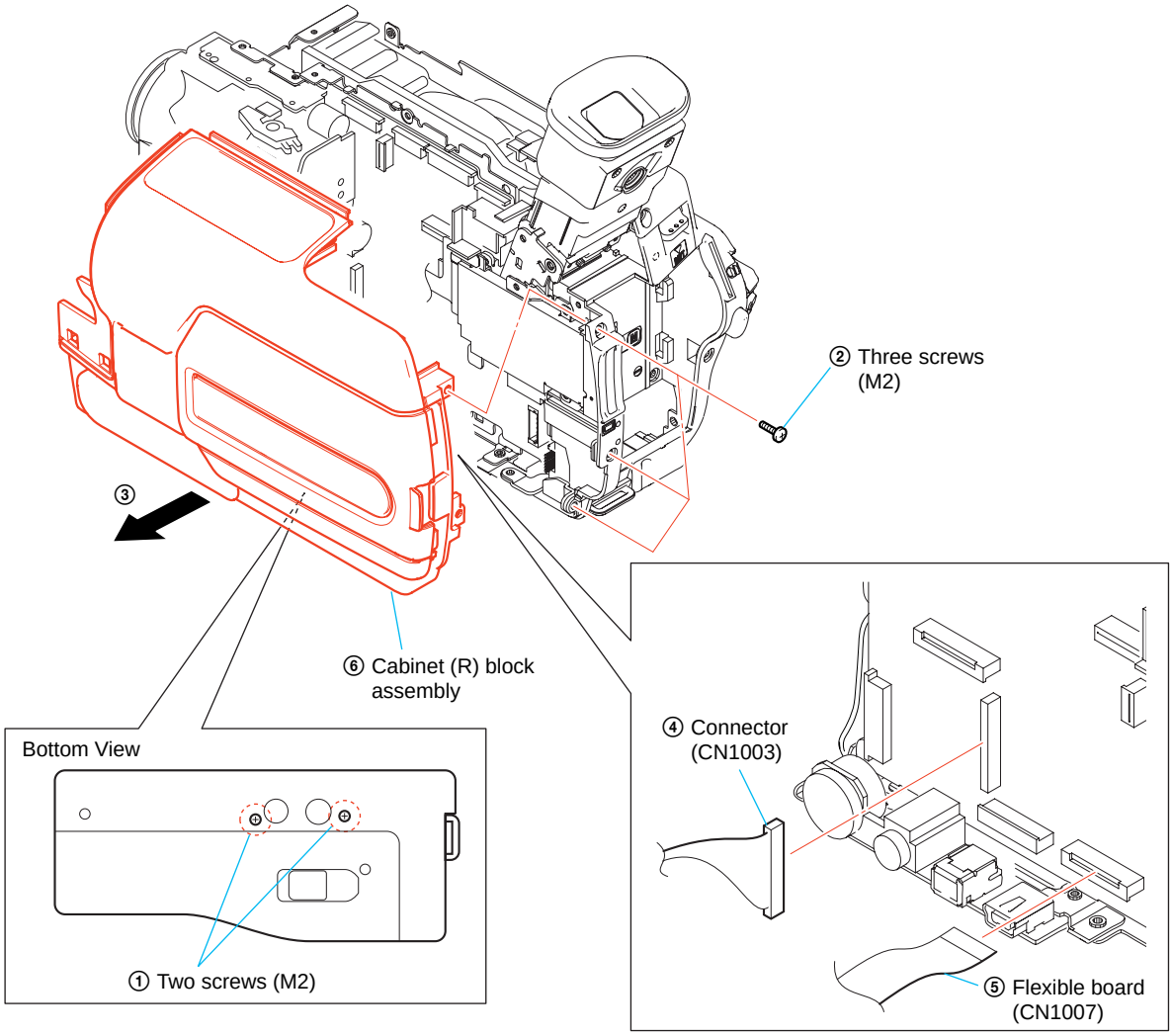
2-9. SI-036 BOARD



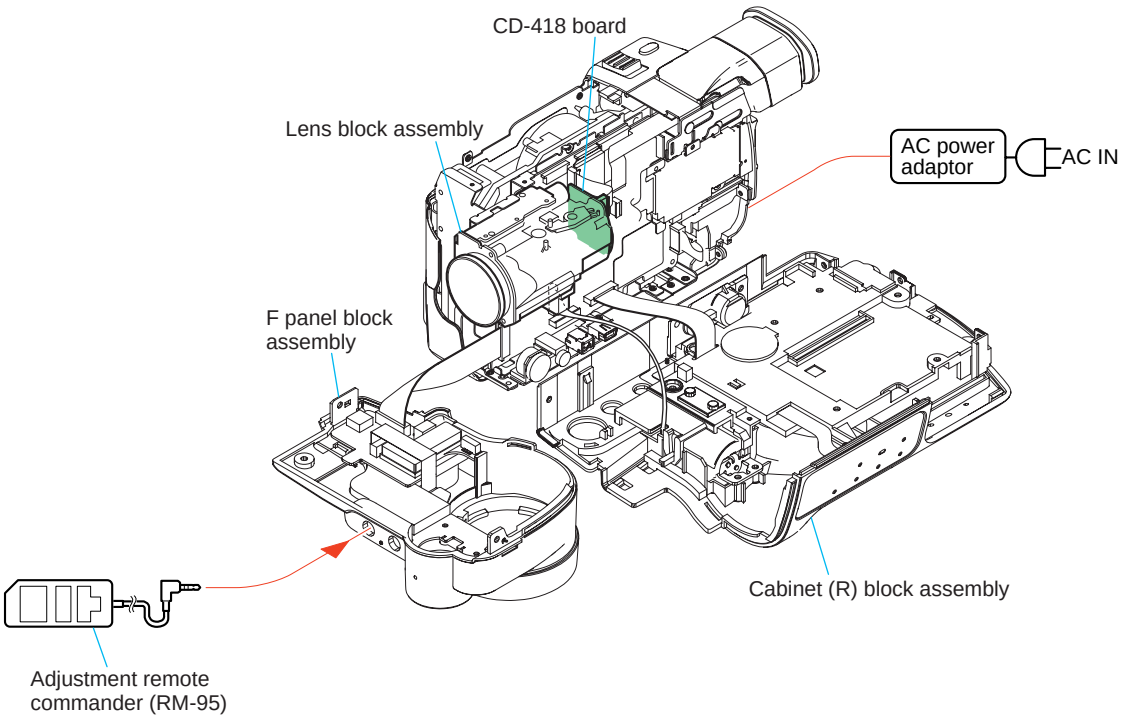
2-10. FRONT RING



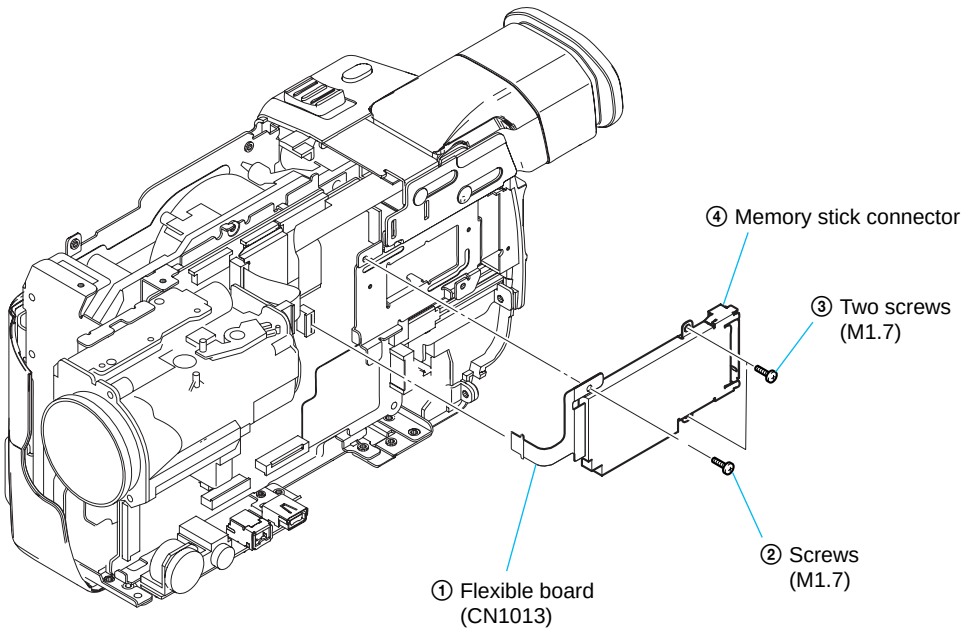
2-11. CABINET (R) BLOCK ASSEMBLY



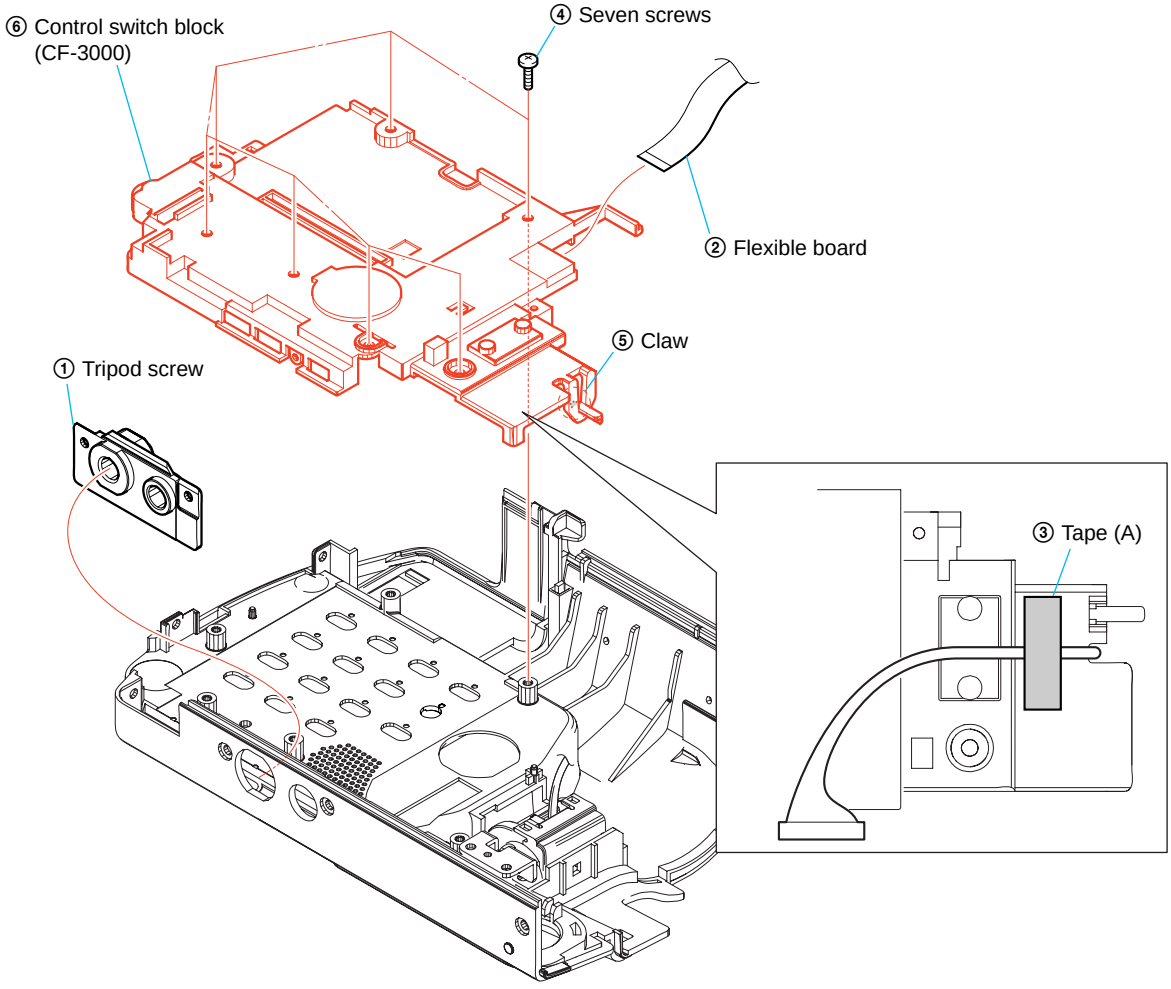
[SERVICE POSITION TO CHECK THE CAMERA SECTION]



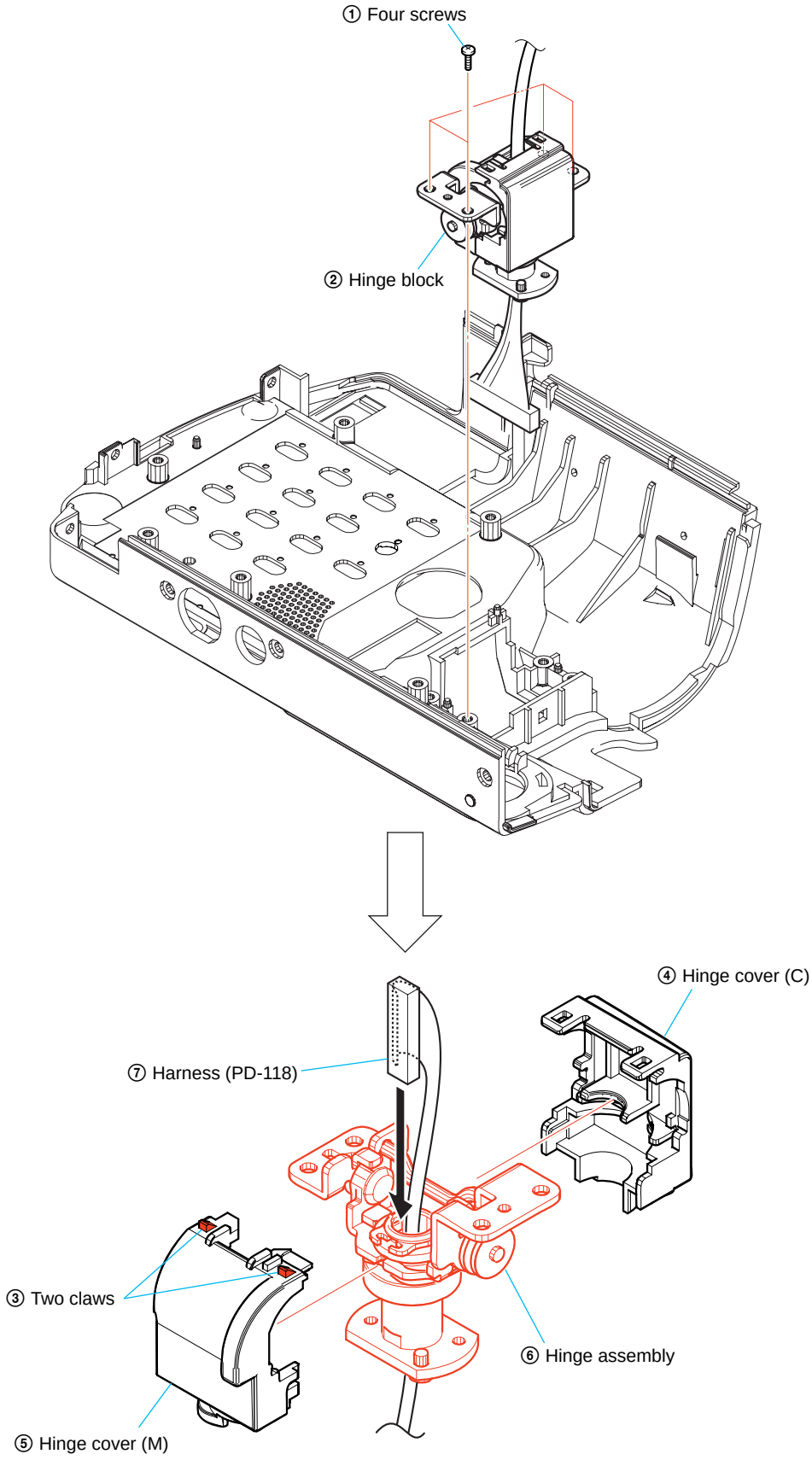
2-12. MEMORY STICK CONNECTOR



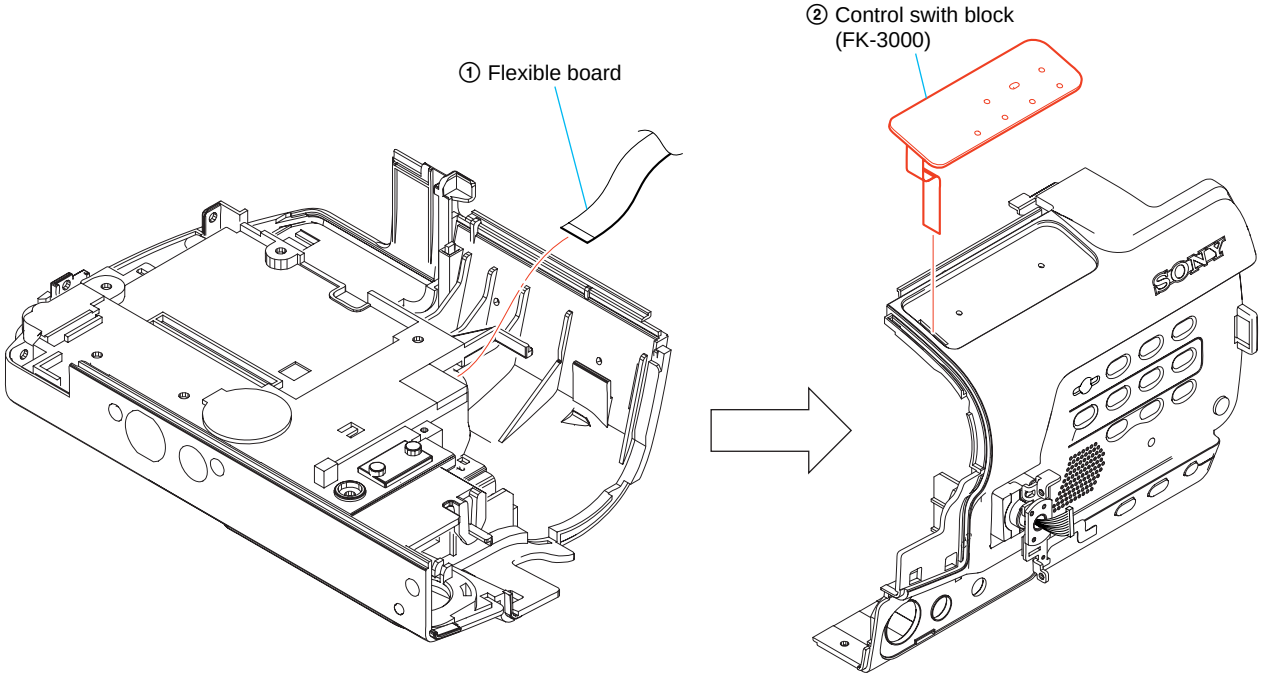
2-13. CONTROL SWITCH BLOCK (CF-3000)



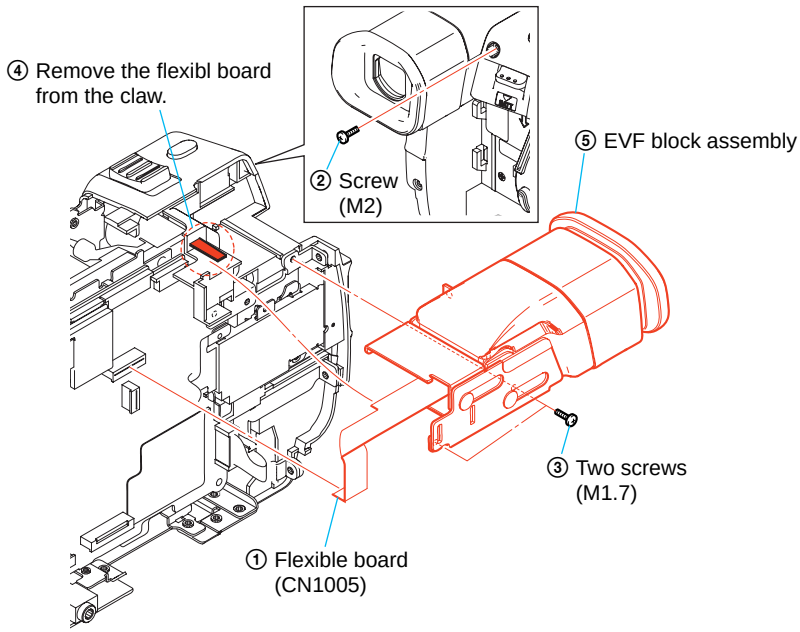
2-14. HINGE ASSEMBLY



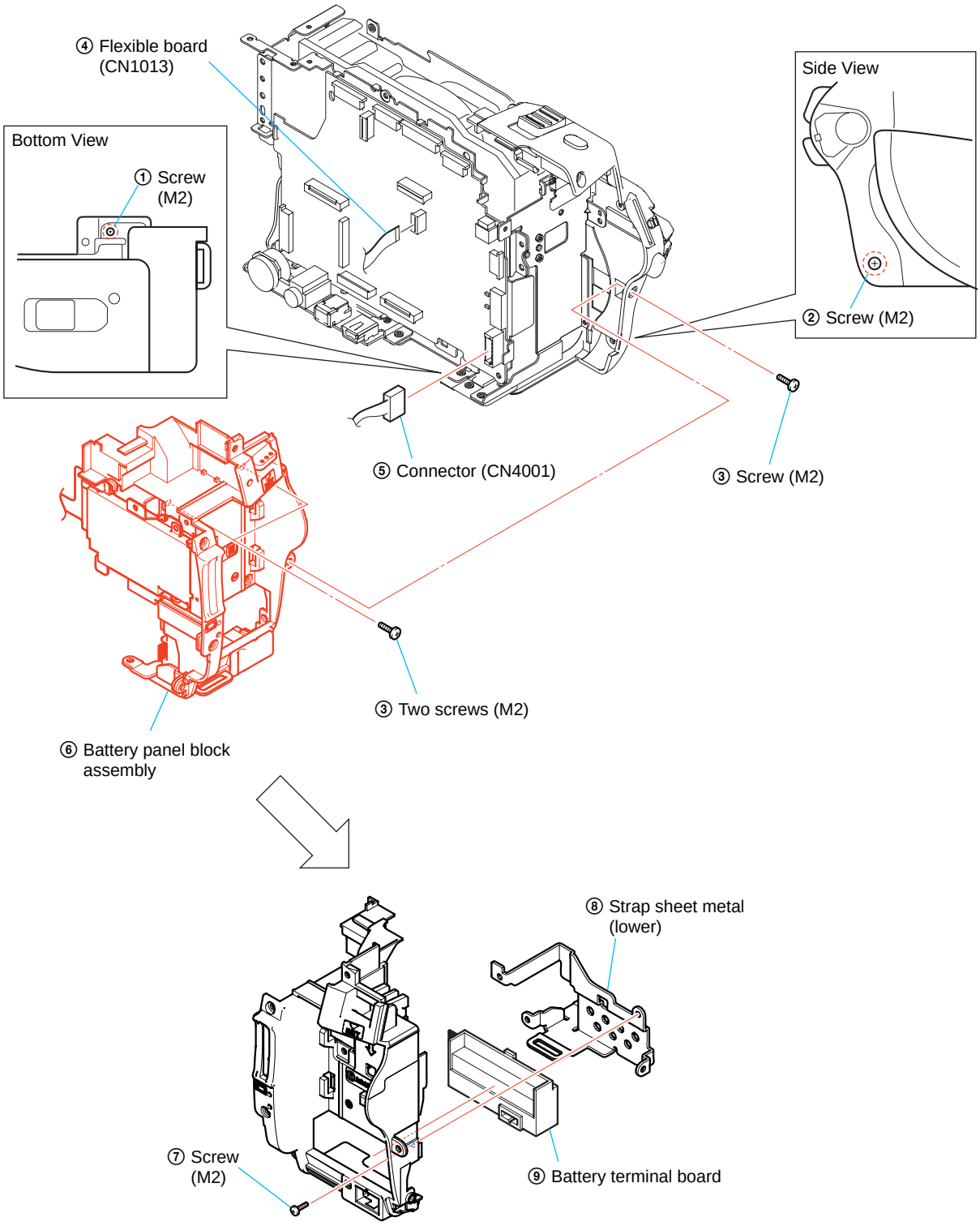
2-15. CONTROL SWITCH BLOCK (FK-3000)



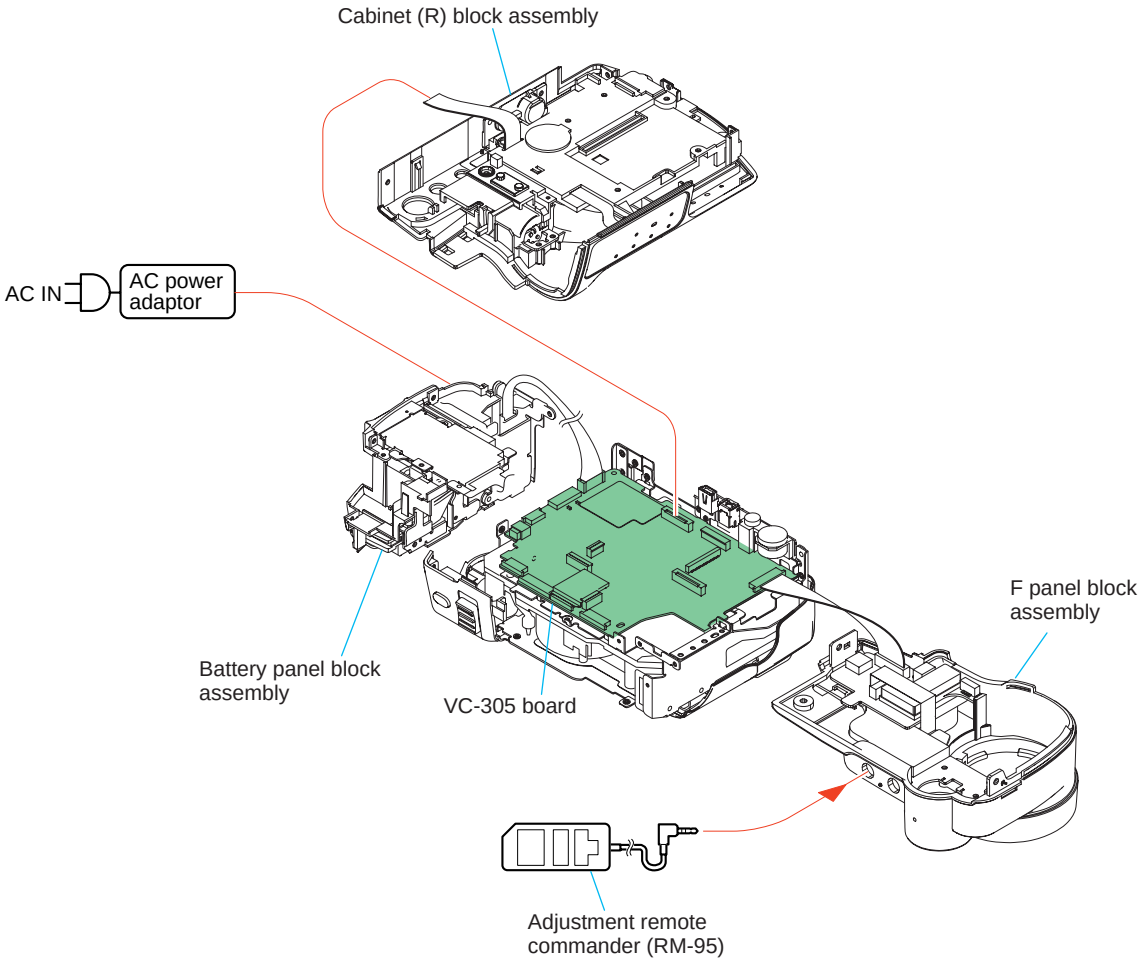
2-16. EVF BLOCK ASSEMBLY



2-17. BATTERY PANEL BLOCK ASSEMBLY

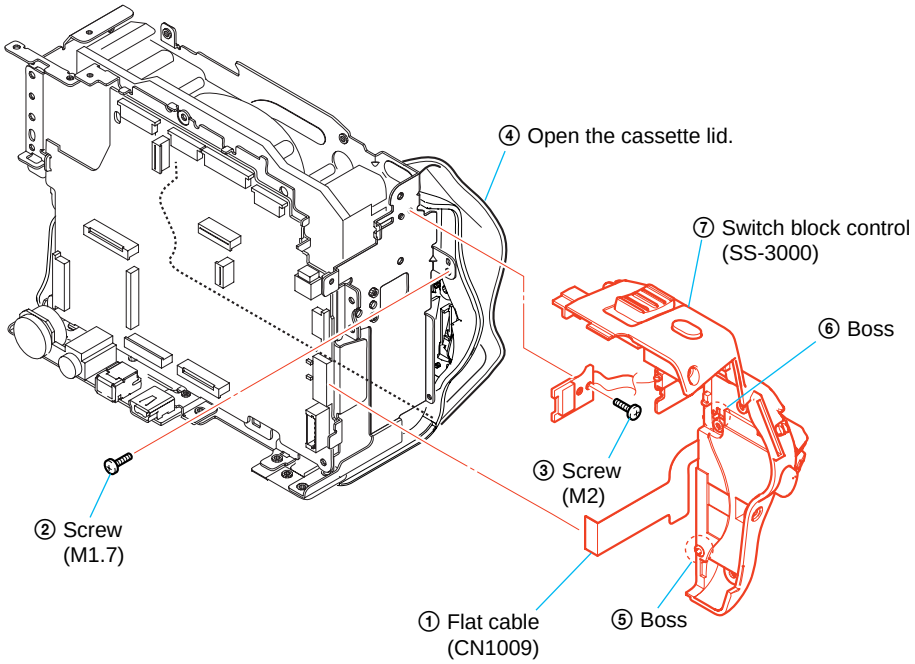


[SERVICE POSITION TO CHECK VC-305 BOARD (SIDE A)]

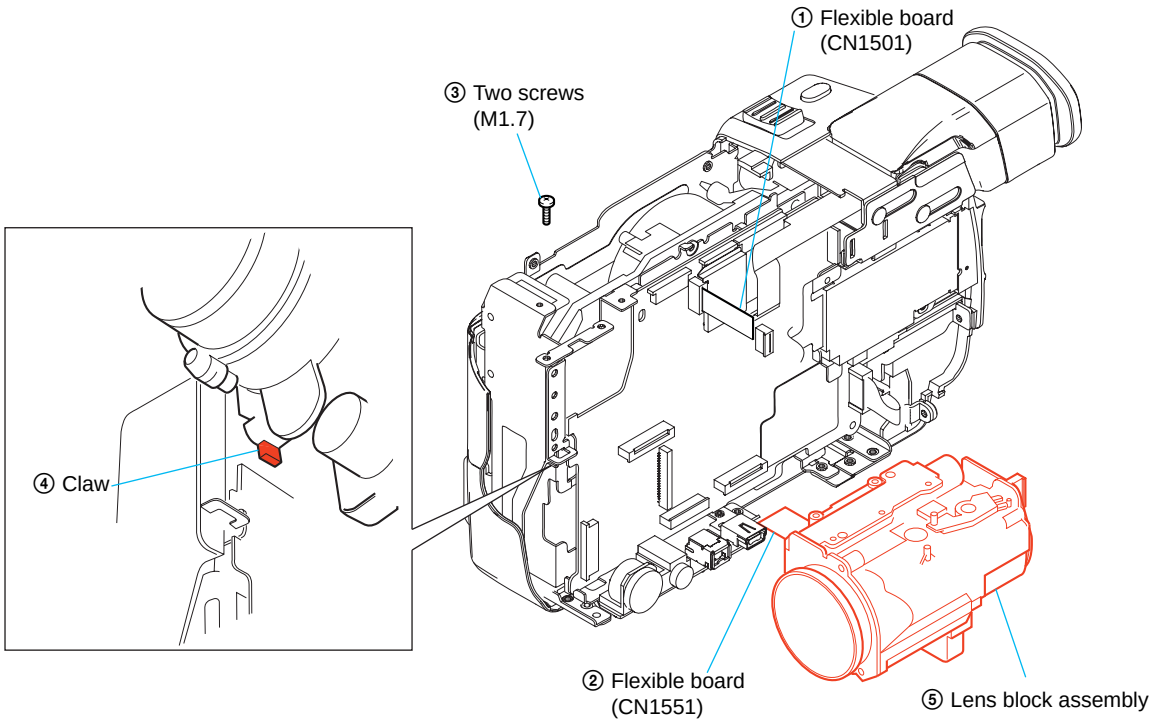


It is possible to check VC-305 board (side A) without removing battery panel block assembly in TRV345E model.

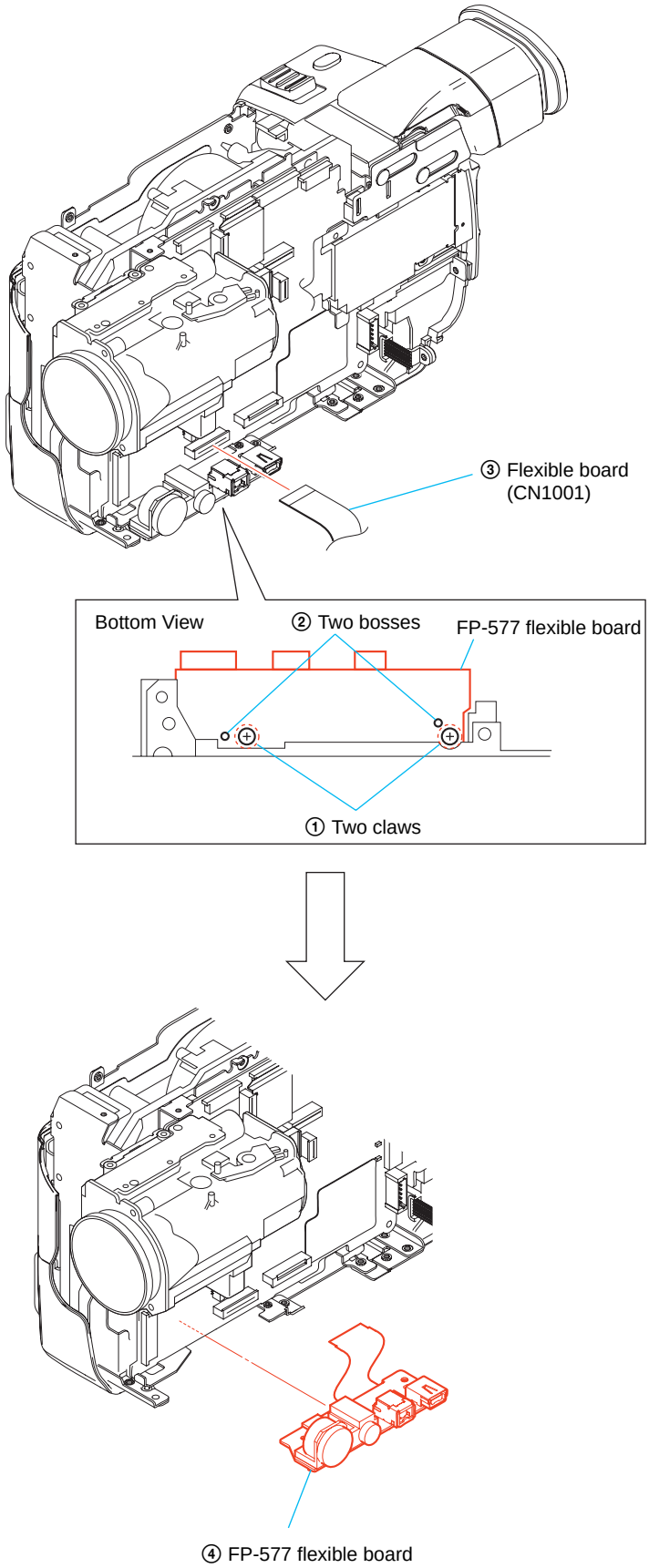
2-18. CONTROL SWITCH BLOCK (SS-3000)



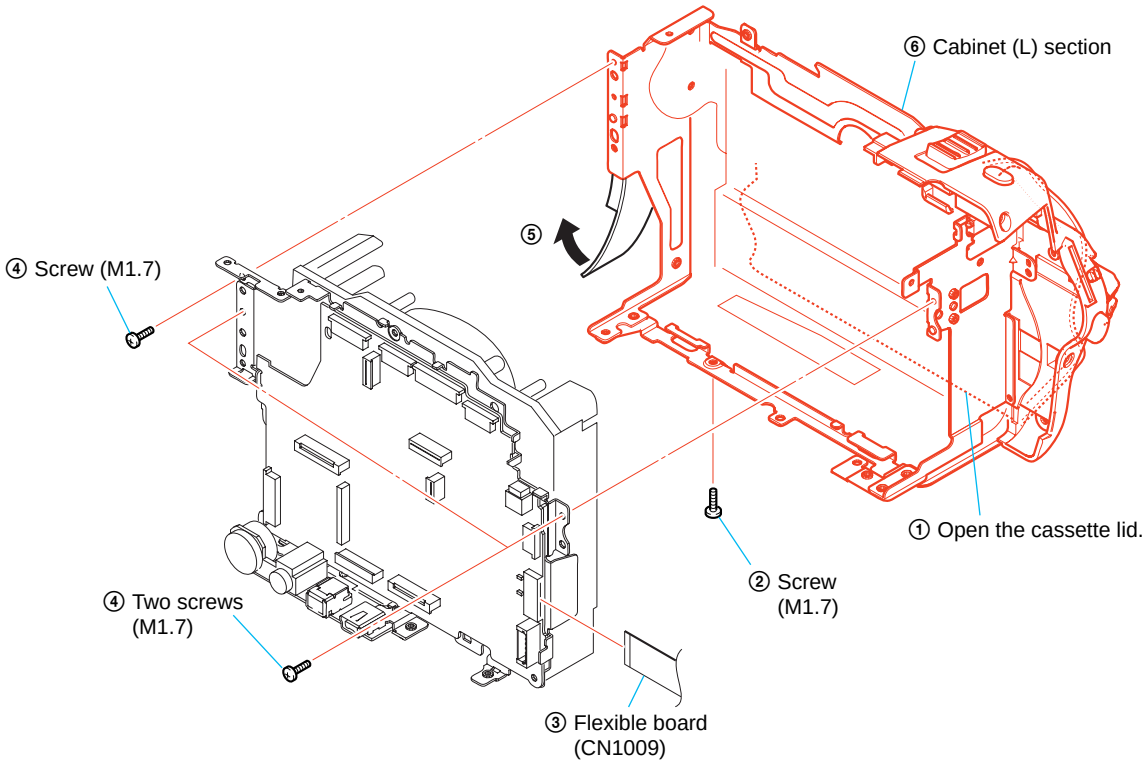
2-19. LENS BLOCK ASSEMBLY



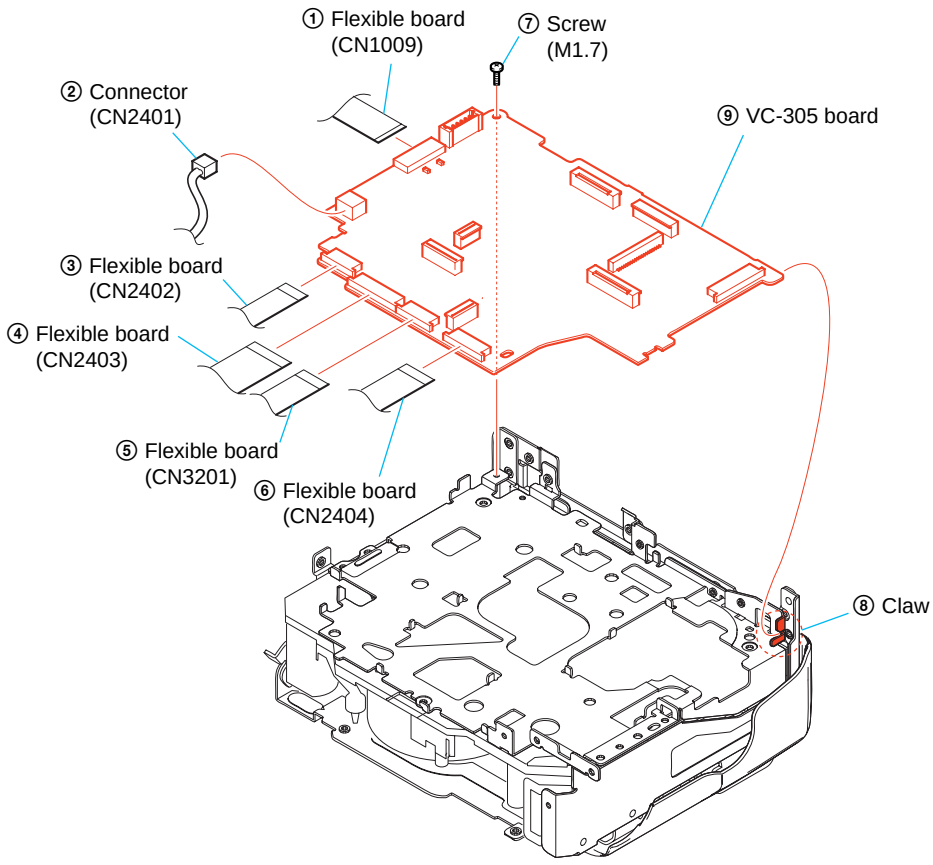
2-20. FP-577 FLEXIBLE BOARD



2-21. CABINET (L) SECTION



2-22. VC-305 BOARD



[SERVICE POSITION TO CHECK VC-305 BOARD (SIDE B)]

Connection to Check VC-305 Board (Side B)

To check VC-305 board (side B), set the camera or VTR to the "Forced camera power ON" mode. Operate the camera functions of the zoom and focus, the VTR section using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced Camera Power ON" mode

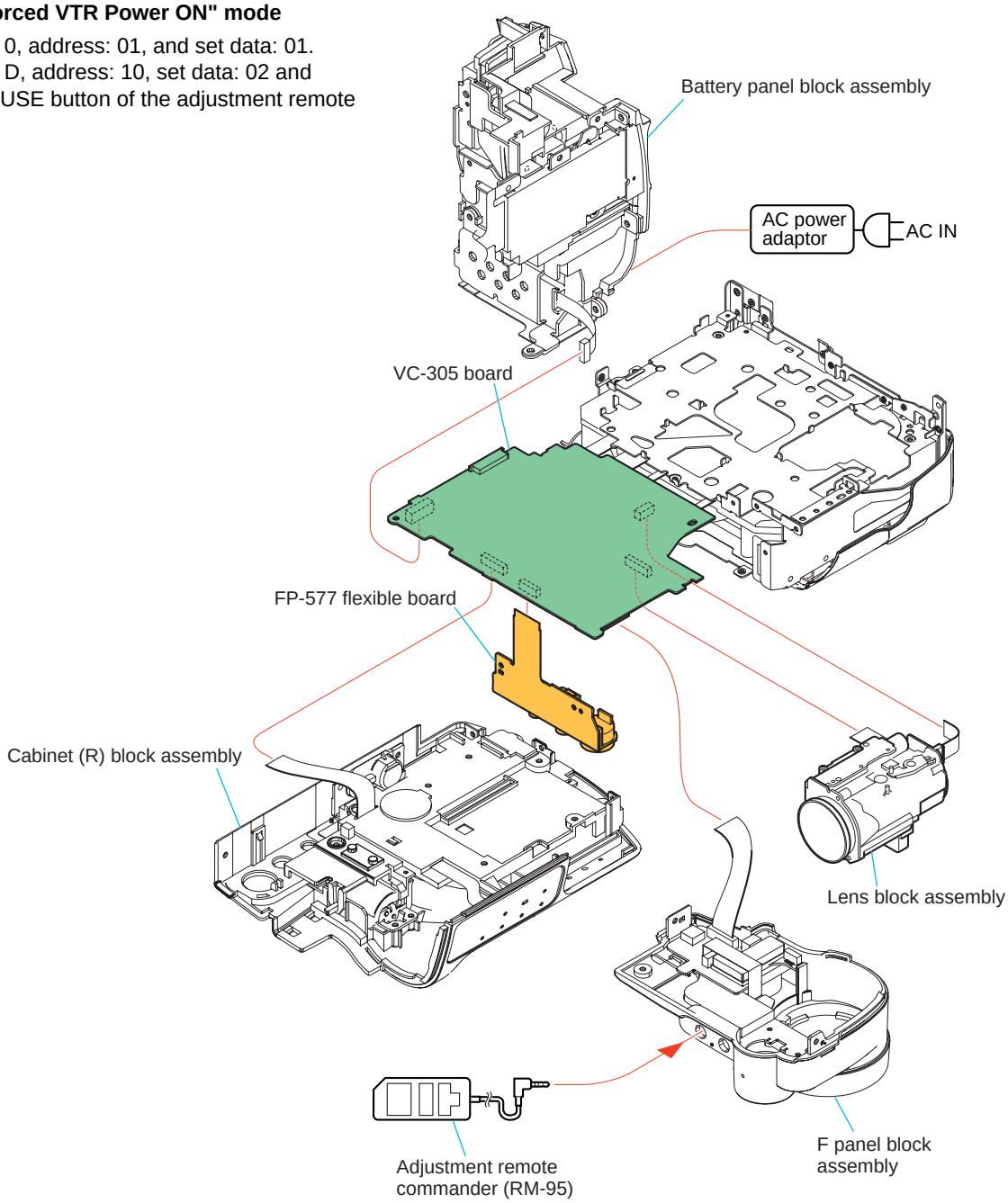
1) Select page: O, address: 01, and set data: 01.
2) Select page: D, address: 10, set data: 01 and press the PAUSE button of the adjustment remote commander.

Setting the "Forced VTR Power ON" mode

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

Exiting the "Forced Power ON" mode

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



[SERVICE POSITION TO CHECK THE MECHANISM DECK]

Connection to Check the Mechanism deck

To check the mechanism deck, set the VTR to the "Forced VTR power ON" mode. (Or, connect the control switch block (SS-3000) to the CN711 of VC-305 board and set the power switch to the "PLAYER" position.)
Operate the VTR function using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced VTR Power ON" mode

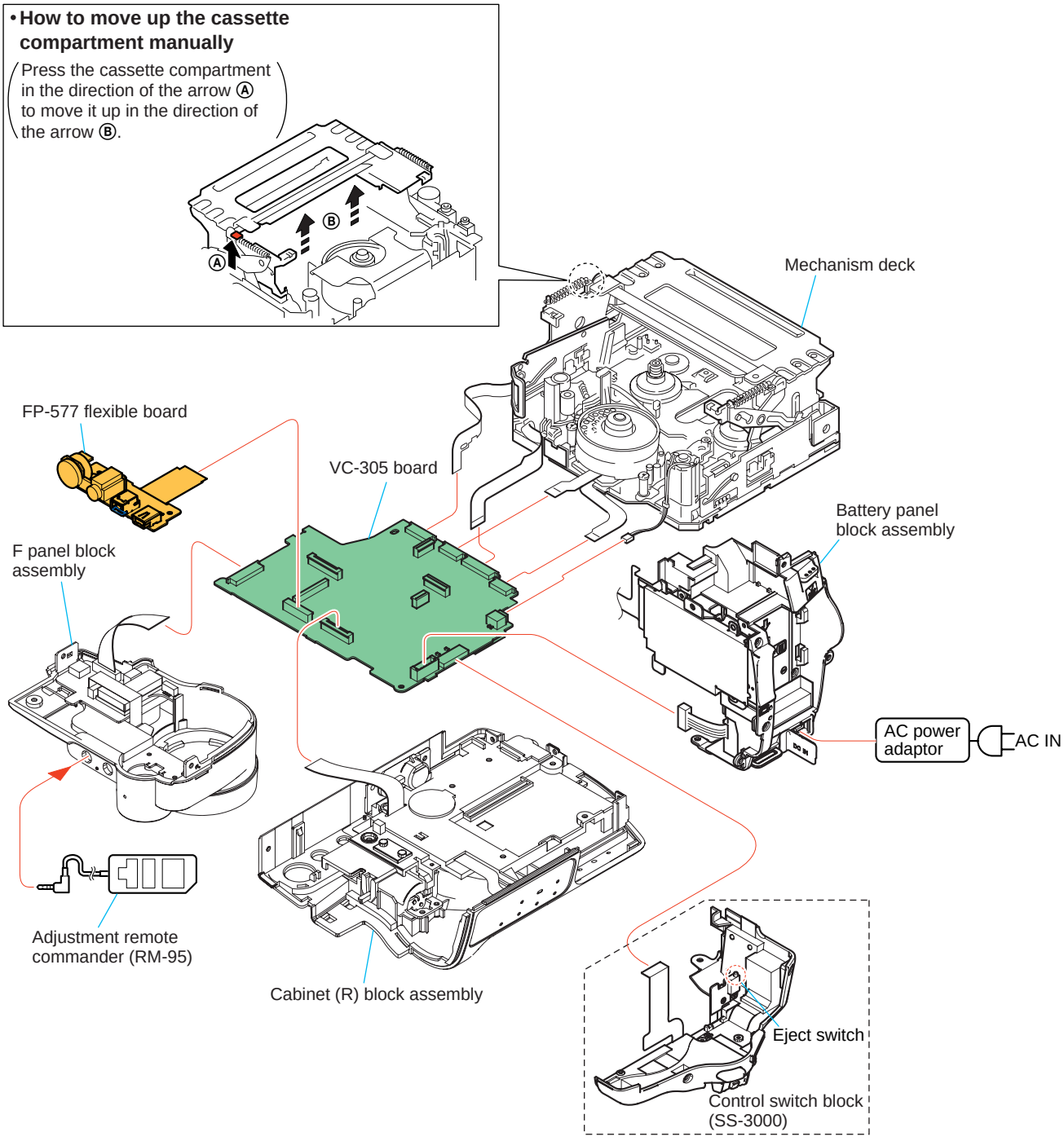
1) Select page: 0, address: 01, and set data: 01.
2) Select page: D, address: 10, set data: 02 and press the PAUSE button of the adjustment remote commander.

Exiting the "Forced VTR Power ON" mode

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

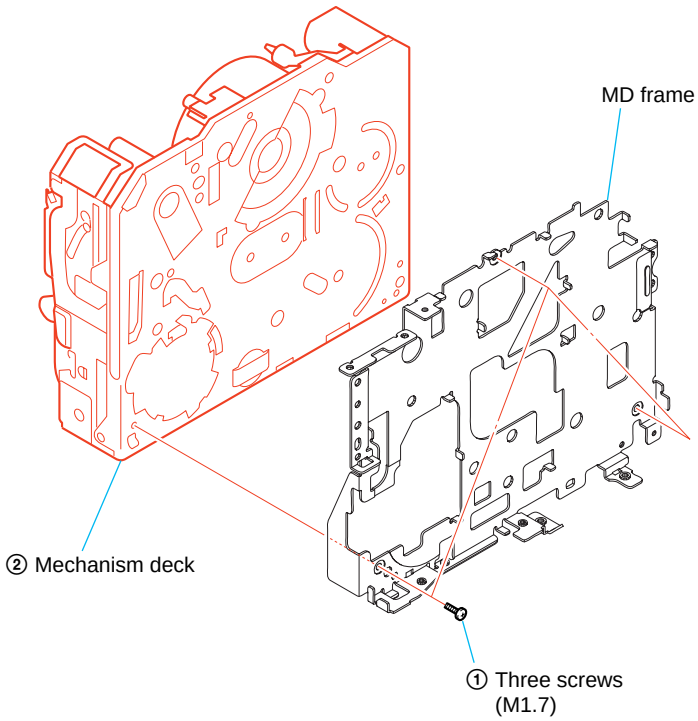
• How to move up the cassette compartment manually

Press the cassette compartment in the direction of the arrow Ⓐ to move it up in the direction of the arrow Ⓑ.

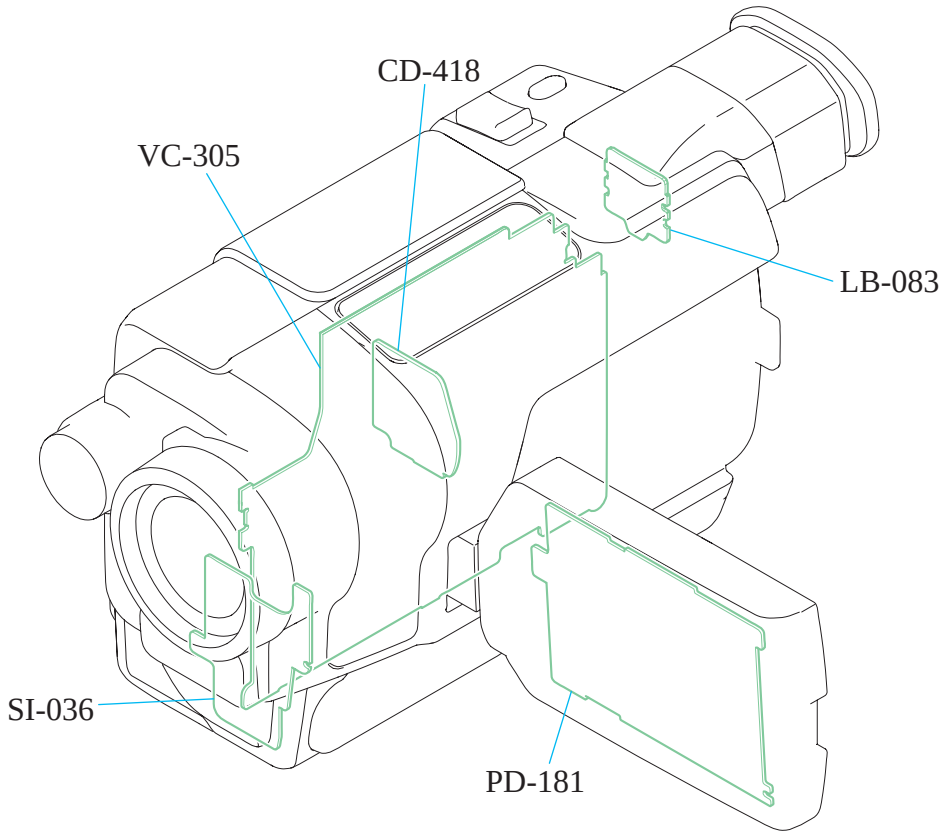


When exiting the "Forced VTR Power ON" mode, connect the control switch block (SS-3000) to the CN711 of VC-305 board. Or, when ejecting the cassette, connect the control switch block (SS-3000) to the CN711 of VC-305 board. and press the EJECT switch.

2-23. MECHANISM DECK BLOCK

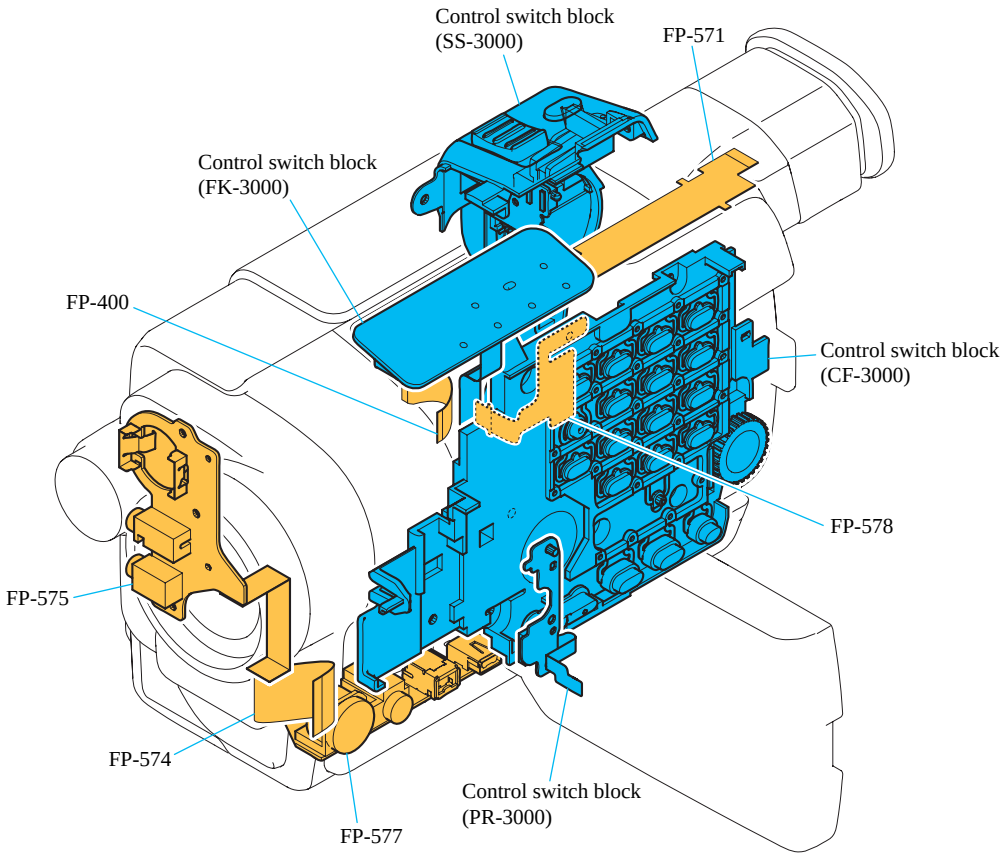


2-24. CIRCUIT BOARDS LOCATION



Board Name	Function
CD-418	CCD IMAGER
LB-083	EVF BACKLIGHT
PD-181	RGB DRIVE, TIMING GENERATOR, BACKLIGHT DRIVE
SI-036	STEADYSHOT, MIC
VC-305	A/D CONVERTER, TIMING GENERATOR, VIDEO/AUDIO DSP, LENS DRIVE, Hi8/Std8 VTR PROCESS, LENS CONTROL, VIDEO IN/OUT, DV SIGNAL PROCESS, REC/PB AMP, DV INTERFACE, Hi8/Std8 PB AMP, USB/MODE CONTROL, MS INTERFACE, HI CONTROL, CAMERA/MECHA CONTROL, SERVO, EVF DRIVE, AUDIO, MIC AMP, DC CONTROL

2-25. FLEXIBLE BOARDS LOCATION

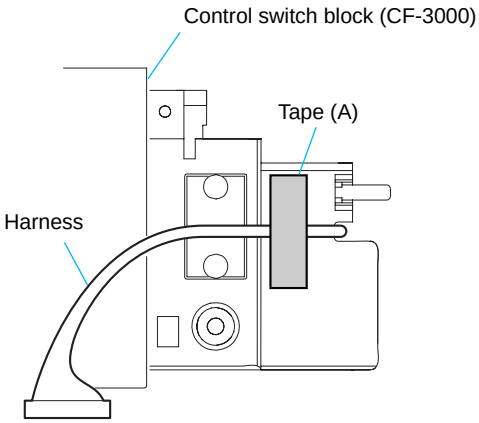


2002.11.25 Update

HELP

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

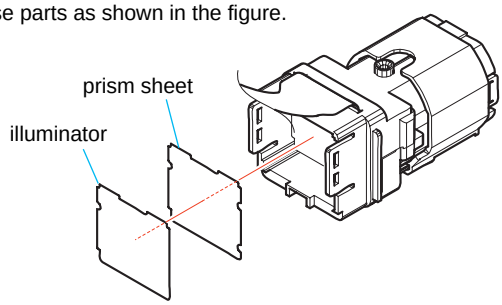
CABINET (R) BLOCK ASSEMBLY



When installing Control switch block (CF-3000),
set harness and tape (A) as shown in the figure.

PRISM SHEET AND ILLUMINATOR

When installing prism sheet and illuminator,
set these parts as shown in the figure.



COVER

3. BLOCK DIAGRAMS

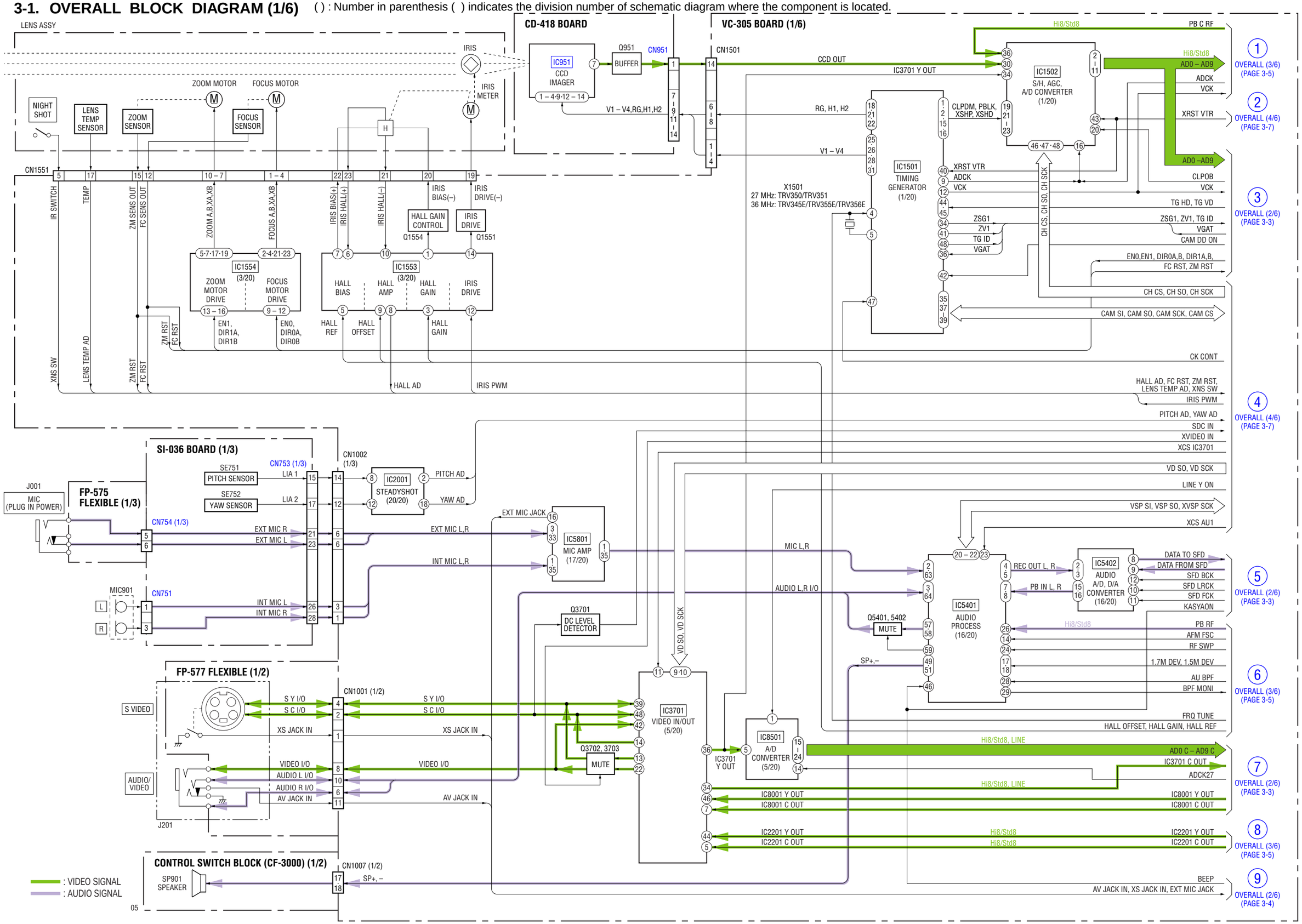
Link

COVER

SECTION 3
BLOCK DIAGRAMS

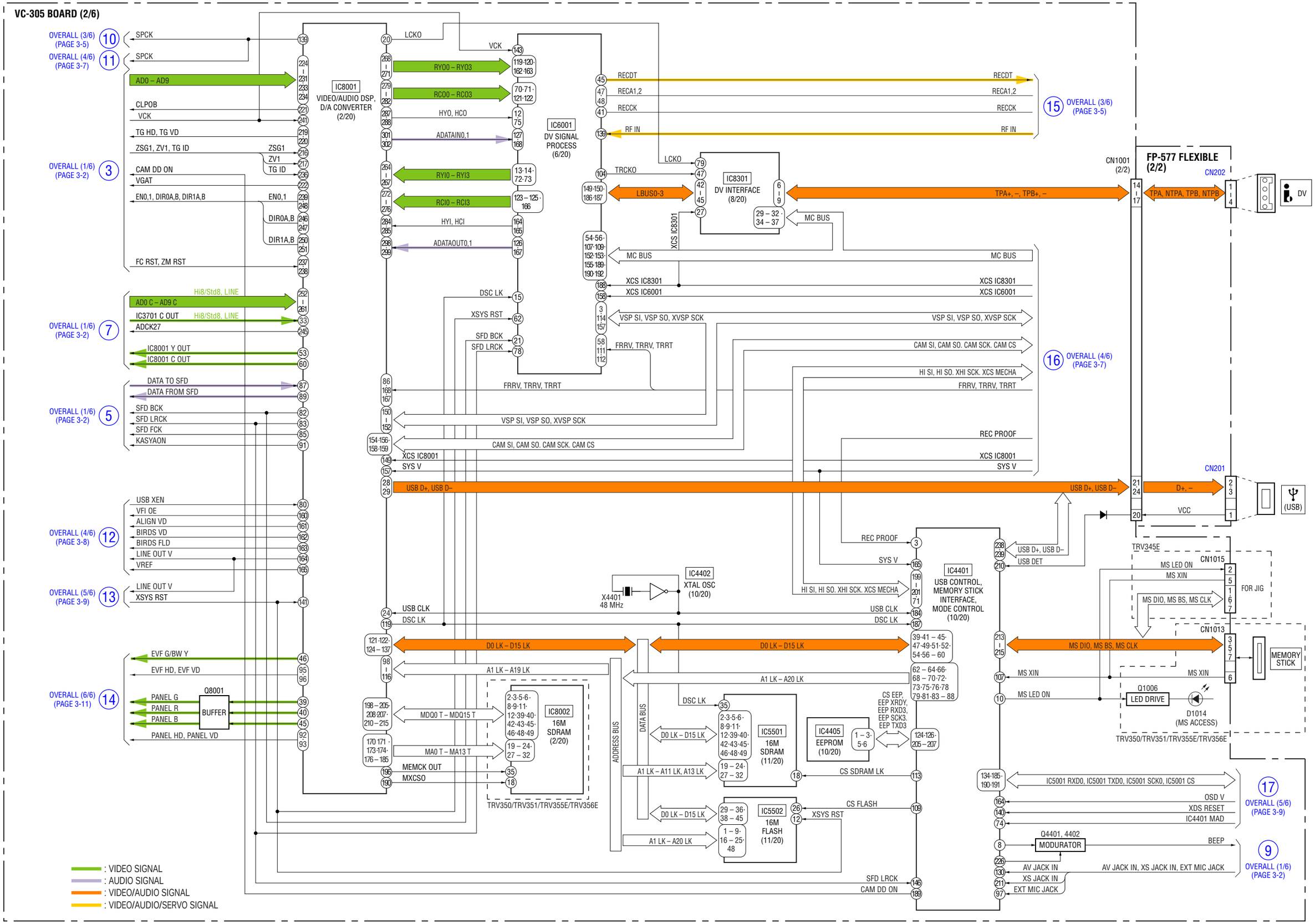
3-1. OVERALL BLOCK DIAGRAM (1/6)

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



3-2. OVERALL BLOCK DIAGRAM (2/6)

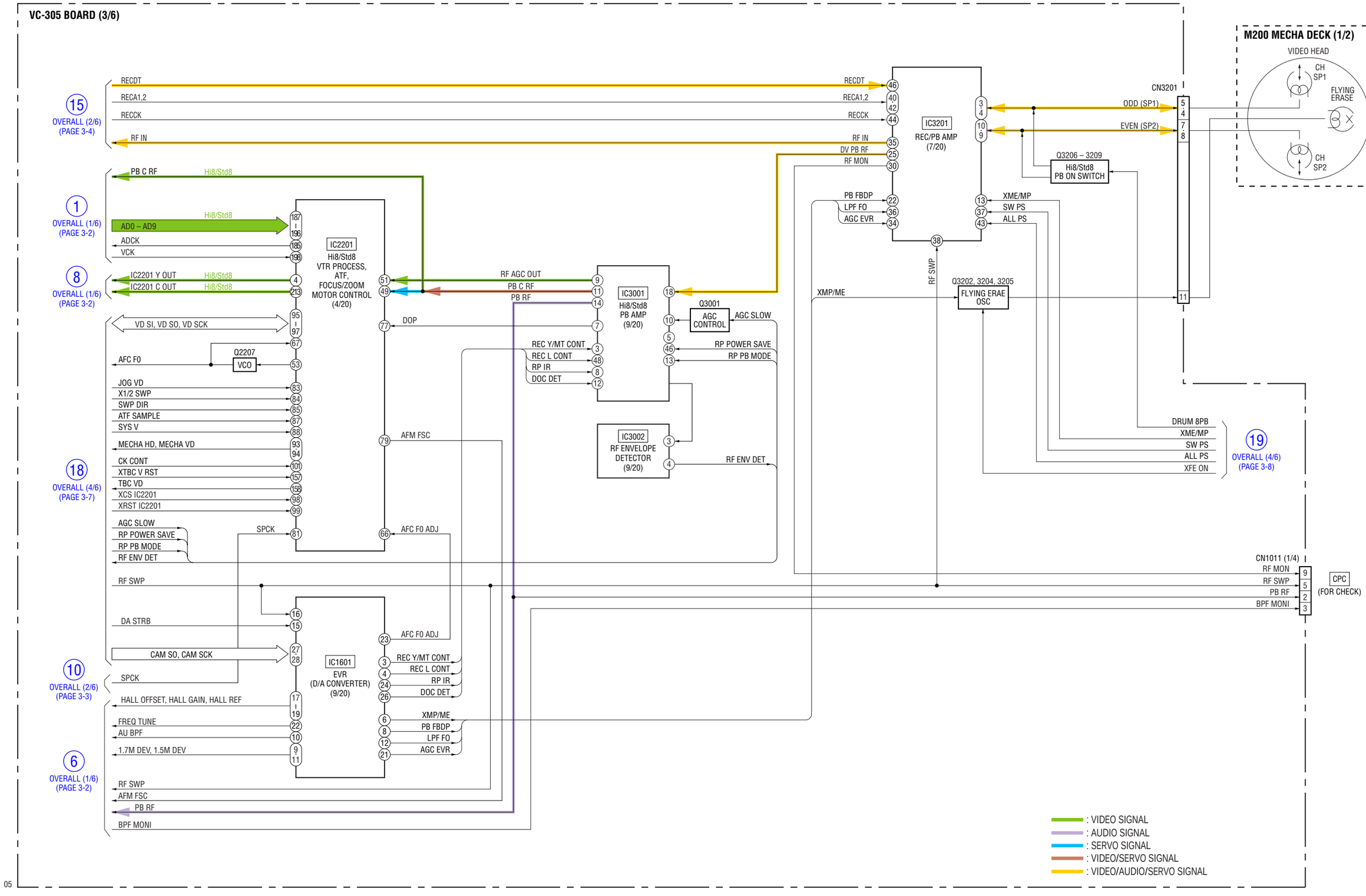
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



COVER

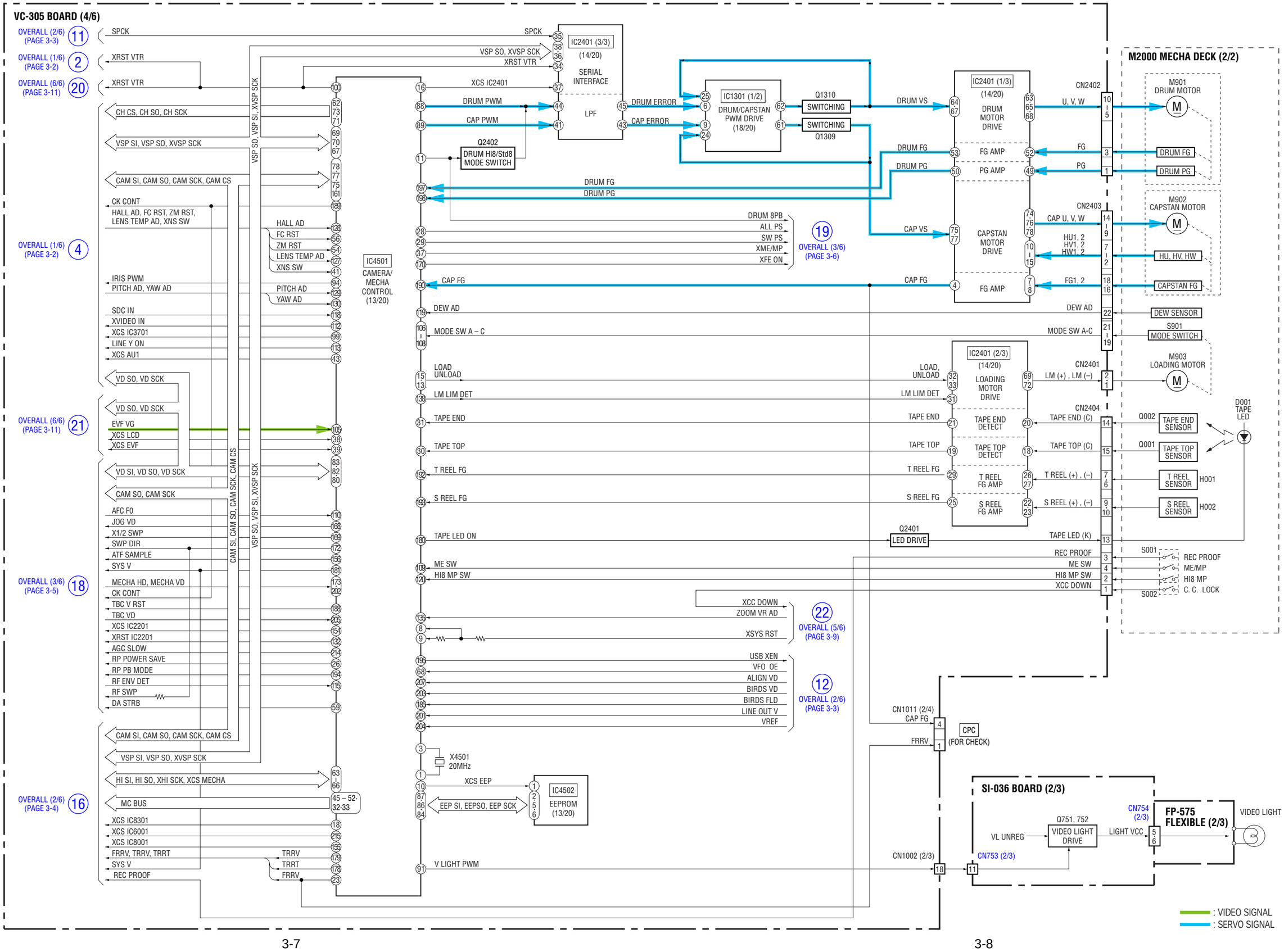
3-3. OVERALL BLOCK DIAGRAM (3/6)

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



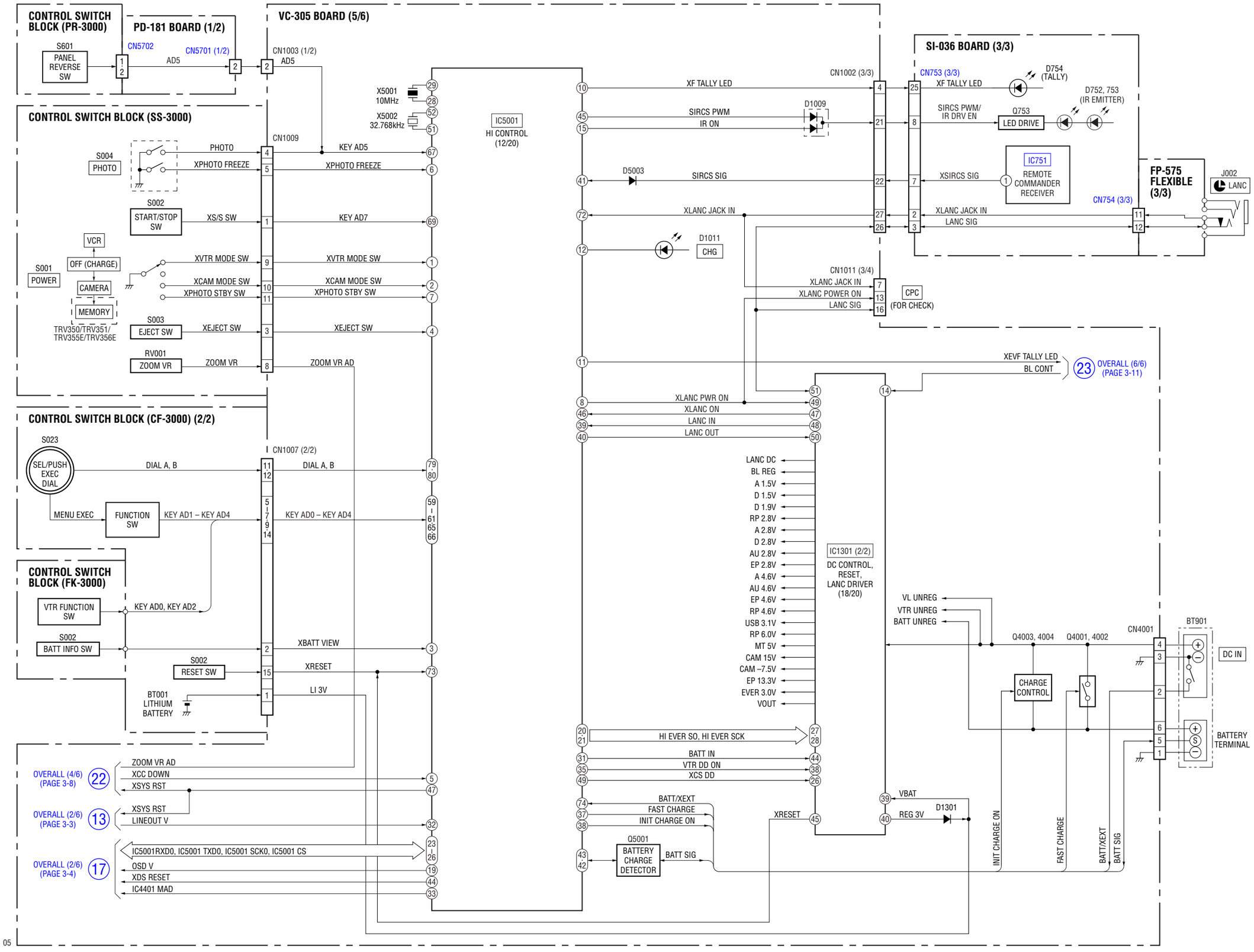
3-4. OVERALL BLOCK DIAGRAM (4/6)

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



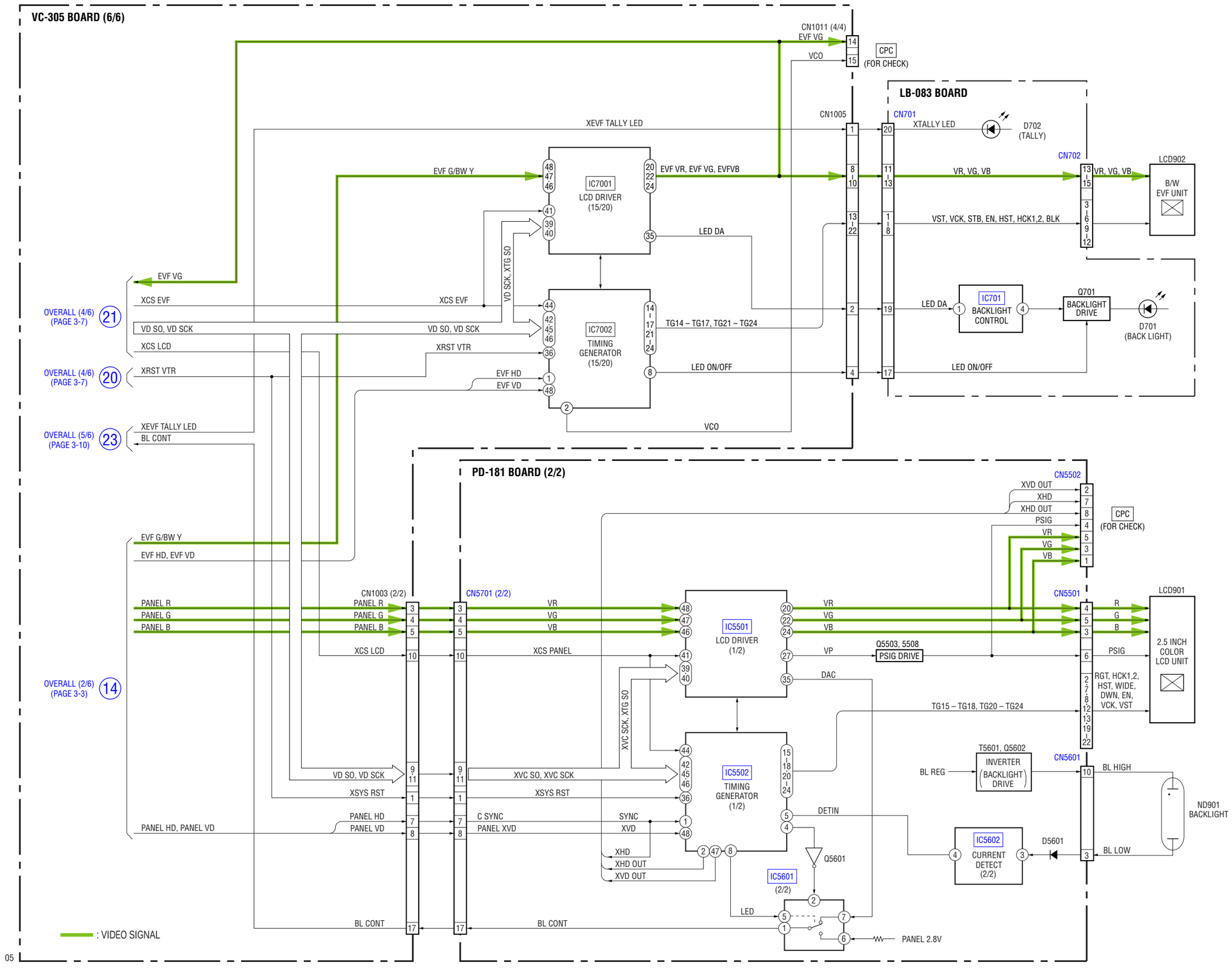
3-5. OVERALL BLOCK DIAGRAM (5/6)

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



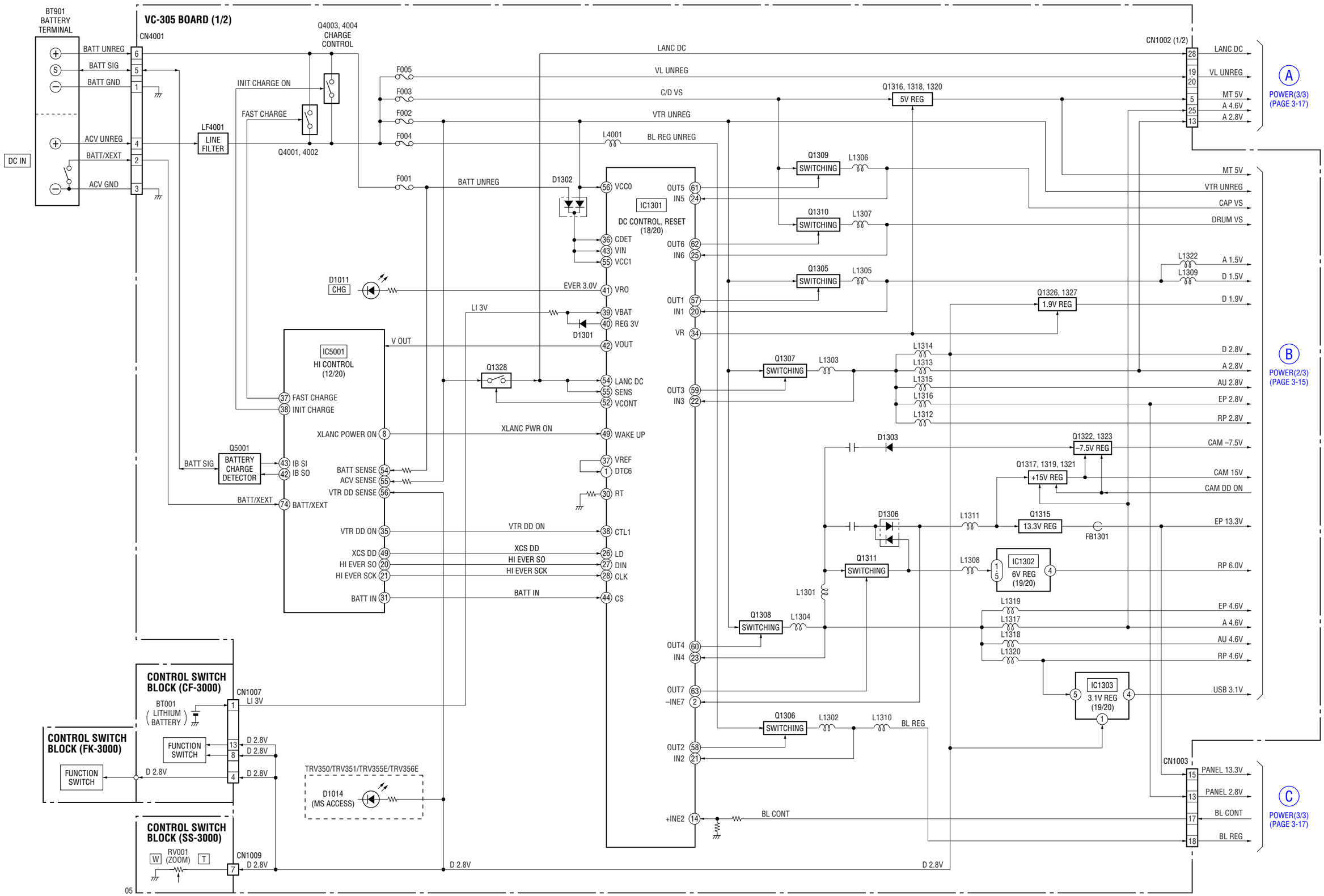
3-6. OVERALL BLOCK DIAGRAM (6/6)

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



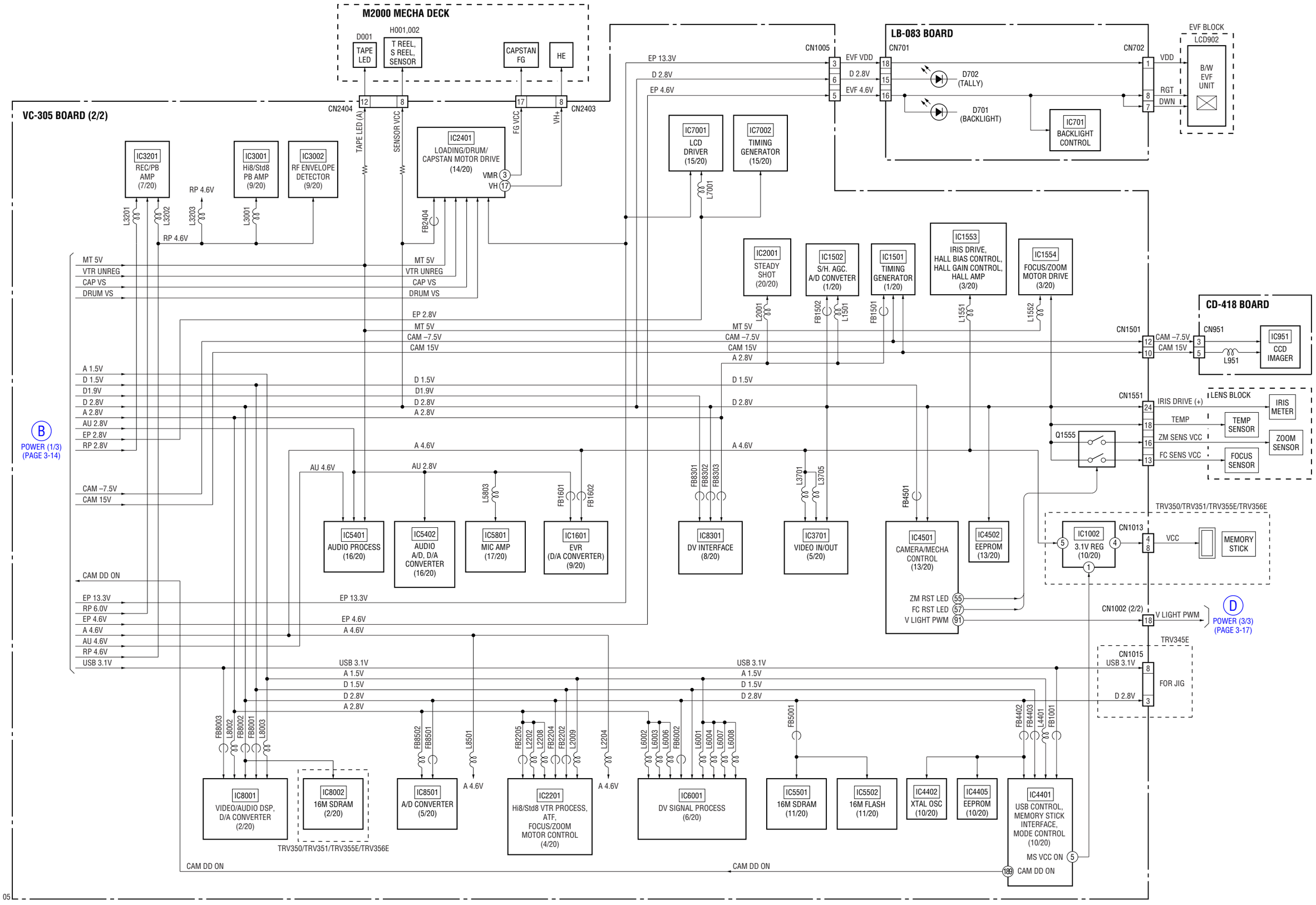
3-7. POWER BLOCK DIAGRAM (1/3)

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



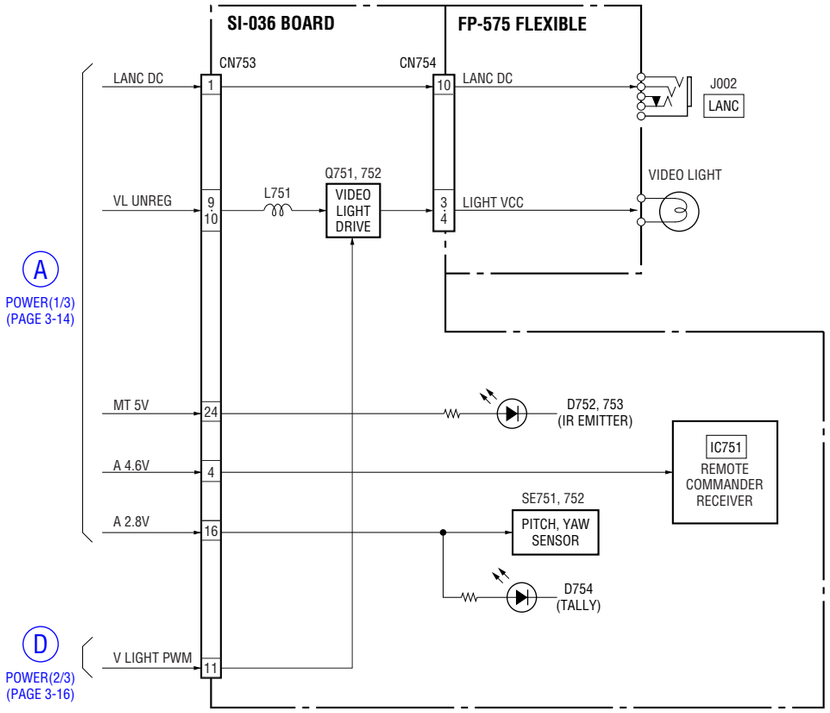
3-8. POWER BLOCK DIAGRAM (2/3)

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



3-9. POWER BLOCK DIAGRAM (3/3)

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



SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAMS

FRAME SCHEMATIC DIAGRAM (1/2)

LENS BLOCK

CD-418 BOARD

CN951 14P: V4 14, V3 13, V2 12, V1 11, GND 10, H2 9, H1 8, RG 7, GND 6, CAM_15V/12V 5, VSHT 4, CAM_-7.5 3, GND 2, CCD_OUT 1

FP-400 FLEXIBLE

CN1001 24P: 1 XS_JACK_IN, 2 S_C_I/O, 3 REG_GND, 4 S_Y_I/O, 5 S_GND, 6 AUDIO_R_I/O, 7 REG_GND, 8 VIDEO_I/O, 9 REG_GND, 10 AUDIO_L_I/O, 11 AV_JACK_IN, 12 S_GND, 13 REG_GND, 14 NTPB, 15 TPB, 16 TPA, 17 NTPA, 18 REG_GND, 19 REG_GND, 20 VCC, 21 D+, 22 REG_GND, 23 REG_GND, 24 D-

CN1002 28P: 28 LANC_DC, 27 XLANC_JACK_IN, 26 LANC_SIG, 25 A_4.6V, 24 REG_GND, 23 REG_GND, 22 XSIRCS_SIG, 21 SIRCS_PWM/IR_DRV_EM, 20 VL_UNREG, 19 VL_UNREG, 18 V_LIGHT_PWM, 17 UNREG_GND, 16 UNREG_GND, 15 VREF1, 14 LIA1, 13 A_2.8V, 12 LIA2, 11 VREF2, 10 SE_GND, 9 SE_GND, 8 EXT_MIC_R, 7 EXT_MIC_GND, 6 EXT_MIC_L, 5 MT_5V, 4 XF_TALLY_LED, 3 INT_MIC_L, 2 INT_MIC_GND, 1 INT_MIC_R

FP-574 FLEXIBLE

CN1501 14P: 14 CCD_OUT, 13 GND, 12 CAM_-7.5V, 11 VSHT, 10 CAM_15V/12V, 9 GND, 8 RG, 7 H1, 6 H2, 5 GND, 4 V1, 3 V2, 2 V3, 1 V4

CN1501 24P: 24 IRIS_DRIVE(+), 23 IRIS_HALL(+), 22 IRIS_BIAS(+), 21 IRIS_HALL(-), 20 IRIS_BIAS(-), 19 IRIS_DRIVE(-), 18 TEMP, 17 TEMP, 16 ZM_SENSE_VCC, 15 ZM_SENSE_OUT, 14 LENS_DET, 13 FC_SENSE_VCC, 12 FC_SENSE_OUT, 11 GND, 10 ZOOM_A, 9 ZOOM_B, 8 ZOOM_/-A, 7 ZOOM_/-B, 6 IN_SWITCH, 5 IN_SWITCH, 4 FOCUS_A, 3 FOCUS_B, 2 FOCUS_/-A, 1 FOCUS_/-B

FP-577 FLEXIBLE BOARD

CN202 4P: TPA 4, NTPA 3, TPB 2, NTPB 1

CN201 5P: GND 5, ID 4, D+ 3, D- 2, VCC 1

SI-036 BOARD

CN753 28P: LANC_DC 1, XLANC_JACK_IN 2, LANC_SIG 3, A_4.6V 4, REG_GND 5, REG_GND 6, XSIRCS_SIG 7, SIRCS_PWM/IR_DRV_EN 8, VL_UNREG 9, VL_UNREG 10, V_LIGHT_PWM 11, UNREG_GND 12, UNREG_GND 13, VREF1 14, LIA1 15, A_2.8V 16, LIA2 17, VREF2 18, SE_GND 19, SE_GND 20, EXT_MIC_R 21, EXT_MIC_GND 22, EXT_MIC_L 23, MT_5V 24, XF_TALLY_LED 25, INT_MIC_L 26, INT_MIC_GND 27, INT_MIC_R 28

MIC901 (MICROPHONE): L, R

CN751 4P: 1 INT_MIC_L, 2 GND, 3 INT_MIC_R, 4 GND

CN754 12P: 12 MIC_BIAS, 11 XLANC_JACK_IN, 10 LANC_DC, 9 REG_GND, 8 EXT_MIC_GND, 7 EXT_MIC_GND, 6 EXT_MIC_L, 5 EXT_MIC_R, 4 LIGHT VCC, 3 LIGHT VCC, 2 LIGHT GND, 1 LIGHT GND

FP-575 FLEXIBLE BOARD

VC-305 BOARD(1/2)

CN1009 12P: XS/S_SW 1, REG_GND 2, XEJECT_SW 3, KEY_ADS 4, XPHOTO_FREEZE 5, REG_GND 6, D_2.8V 7, ZOOM_VR 8, XVTR_MODE_SW 9, XCAM_MODE_SW 10, XPHOTO_STBY_SW 11, REG_GND 12

CONTROL SWITCH BLOCK (SS-3000)

CN4001 6P: BATT_GND 1, BATT/XEXT 2, ACV_GND 3, ACV_UNREG 4, BATT_SIG 5, BATT_UNREG 6

BT901 BATTERY TERMINAL

TRV345E

CN1015 8P: MS_SCLK 1, MS_LED_ON 2, D_2.8V 3, REG_GND 4, MS_XIN 5, MS_DIO 6, MS_BS 7, USB_3.1V 8

(FOR JIG)

TRV350/TRV351/TRV355E/TRV356E

CN1013 10P: VSS 1, VSS 2, BS 3, VCC 4, DIO 5, INS 6, SCLK 7, VCC 8, VSS 9, VSS 10

FP-578 FLEXIBLE

MEMORY STICK CONNECTOR

MEMORY STICK

CN2401 2P: LM(-) 1, LM(+) 2

CN2402 10P: PG 1, FG-PG_COM 2, FG 3, COM 4, W 5, W 6, V 7, V 8, U 9, U 10

CN3201 11P: GND 1, GND 2, GND 3, XOSD(SPY1X) 4, YOSD(SPY1Y) 5, GND 6, XEVEN(SP2X) 7, YEVEN(SP2Y) 8, GND 9, FE(Y) 10, FE(X) 11

CN2403 22P: VH- 1, HW2 2, HW1 3, HV2 4, HV1 5, HU2 6, HU1 7, VH+ 8, CAP_V 9, CAP_V 10, CAP_W 11, CAP_W 12, CAP_U 13, CAP_U 14, REG_GND 15, FG2 16, FG VCC 17, FG1 18, M-SW(C) 19, M-SW(B) 20, M-SW(A) 21, DEW 22

CN2404 15P: C_LOCK_SW 1, H/I_M/P 2, REC_PHOOF 3, MEAMP 4, HALL_COM 5, T_REEL(-) 6, T_REEL(+) 7, SENSOR_VCC 8, S_REEL(+) 9, S_REEL(-) 10, REG_GND 11, TAPE_LED(A) 12, TAPE_LED(K) 13, TAPE_END(C) 14, TAPE_TOP(C) 15

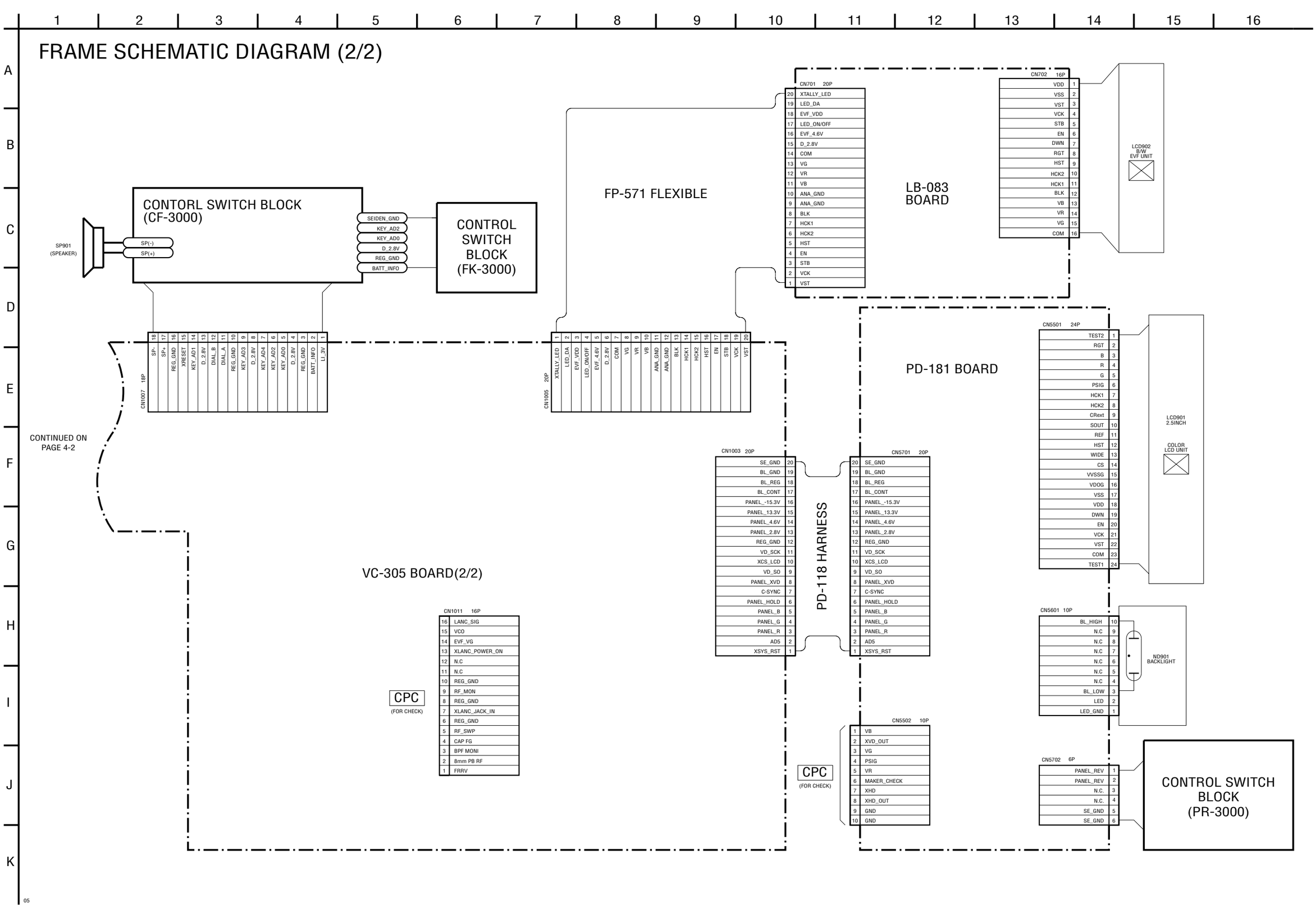
FP

LM

M2000 MECHANISM DECK

CONTINUED ON PAGE 4-3

FRAME SCHEMATIC DIAGRAM (2/2)



FRAME (2/2)

4-2. SCHEMATIC DIAGRAMS

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

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μμF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- 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 22U TA A; L452 10UH 2520

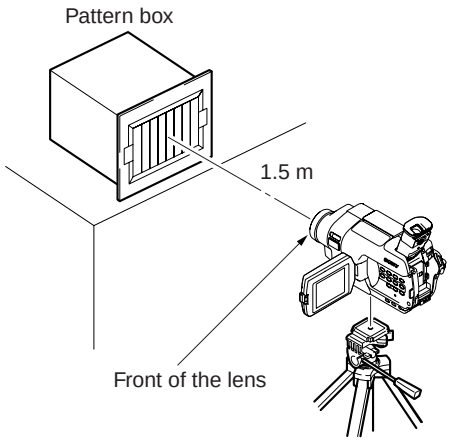
Kinds of capacitor
Case size
External dimensions (mm)

- 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 → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : 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
- : VIDEO/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 MΩ 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.

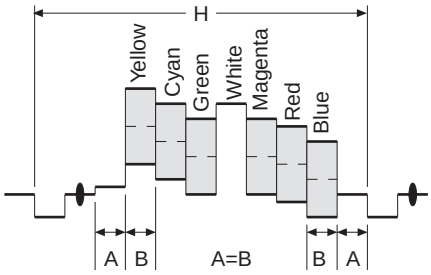


Fig. a (Video output terminal output waveform)

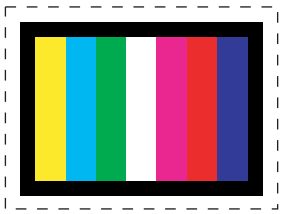


Fig.b (Picture on monitor TV)

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

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

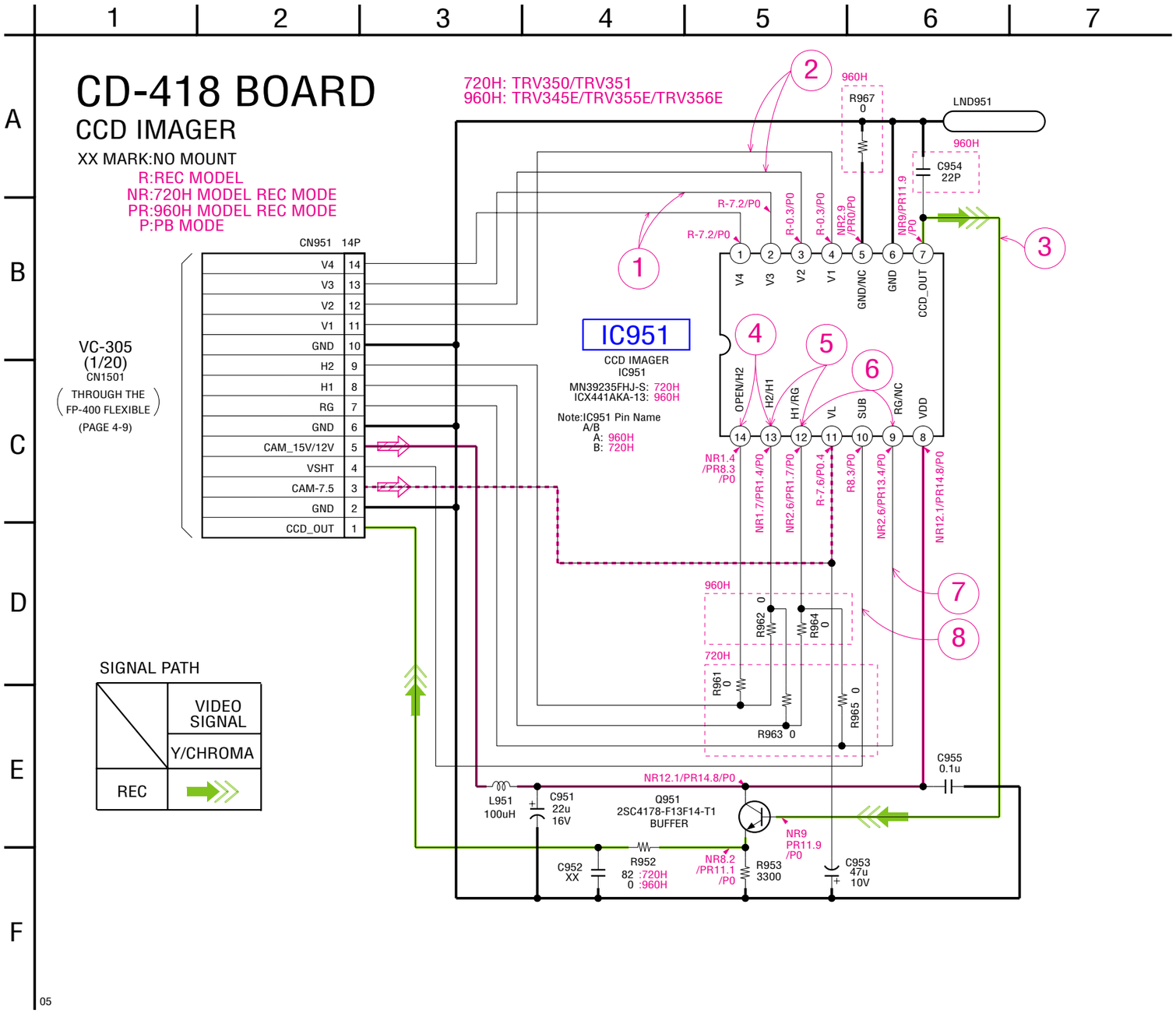
Note : Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifie.

COVER

4-2. SCHEMATIC DIAGRAMS

Link

For Schematic Diagram
• Refer to page 4-65 for printed wiring board.
• Refer to page 4-81 for waveforms.



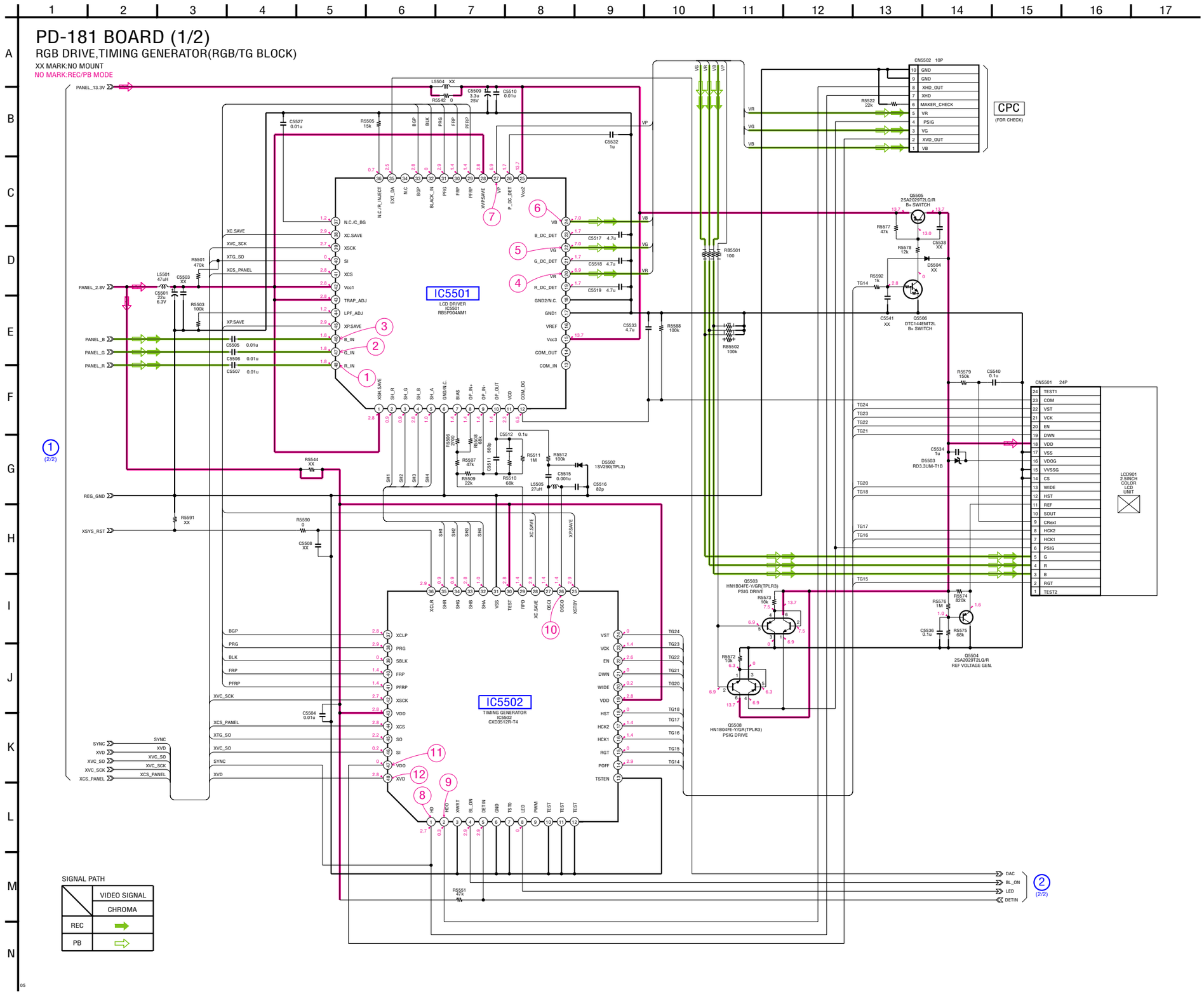
Precautions for Replacement of CCD Imager

- The CD-418 board mounted as a repair part is not equipped with a CCD imager.
  When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

Schematic diagrams of the VC-305 board are not shown.
Pages from 4-9 to 4-48 are not shown.

For Schematic Diagram

- Refer to page 4-71 for printed wiring board.
- Refer to page 4-88, 4-89 for waveforms.



For Schematic Diagram

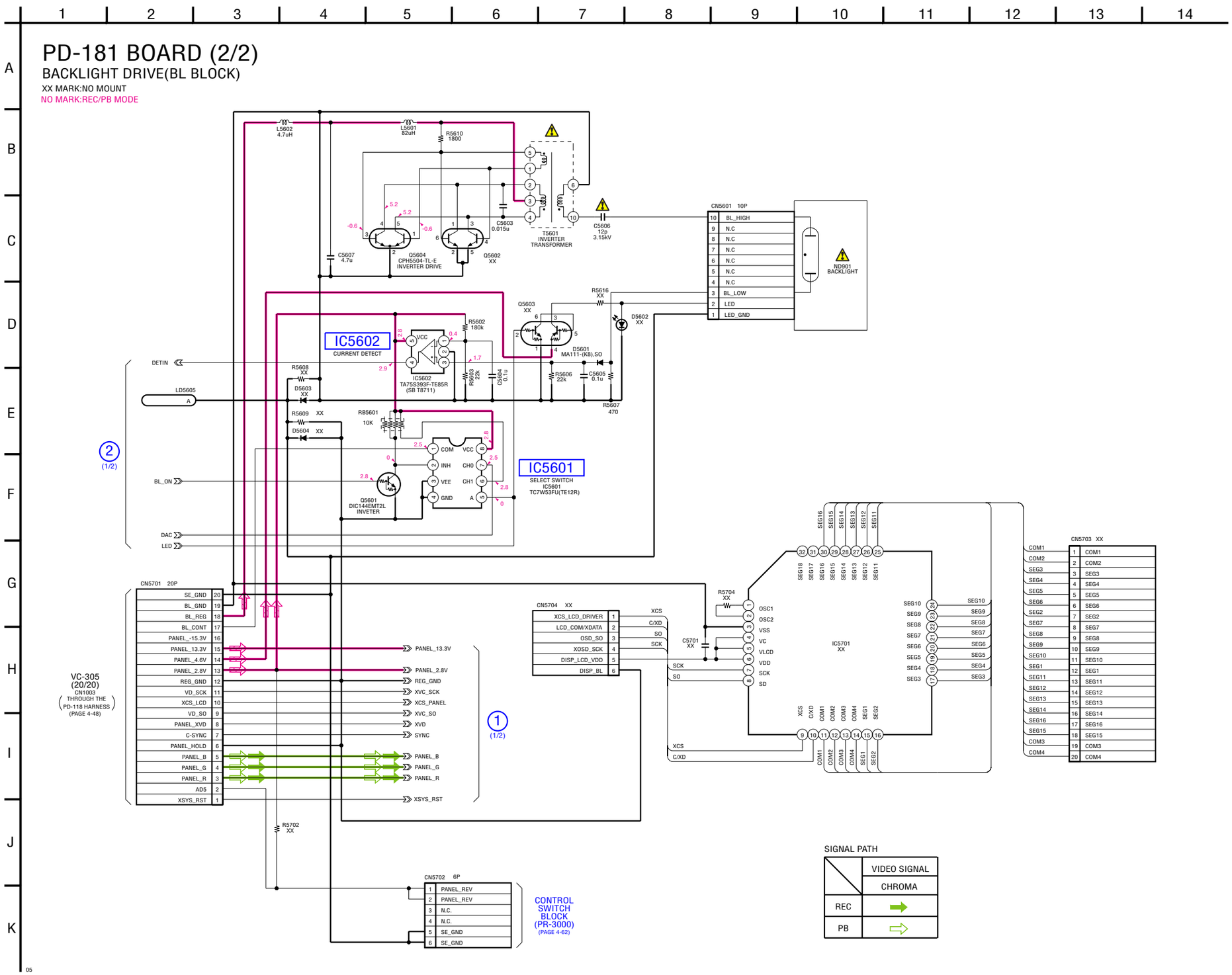
• Refer to page 4-71 for printed wiring board.

PD-181 BOARD (2/2)

BACKLIGHT DRIVE(BL BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE



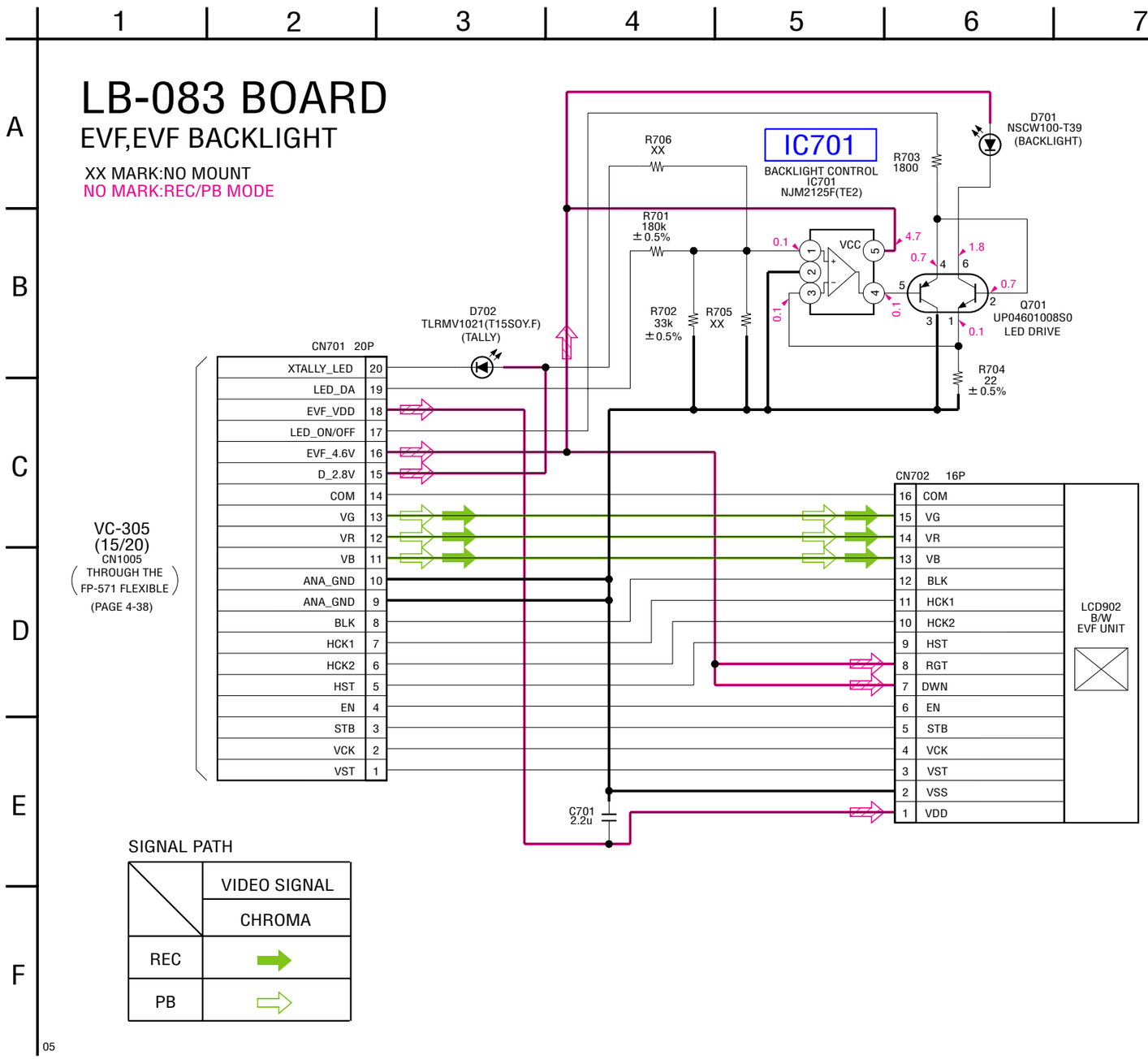
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

For Schematic Diagram
• Refer to page 4-75 for printed wiring board.

LB-083 BOARD

EVF,EVF BACKLIGHT

XX MARK:NO MOUNT
NO MARK:REC/PB MODE

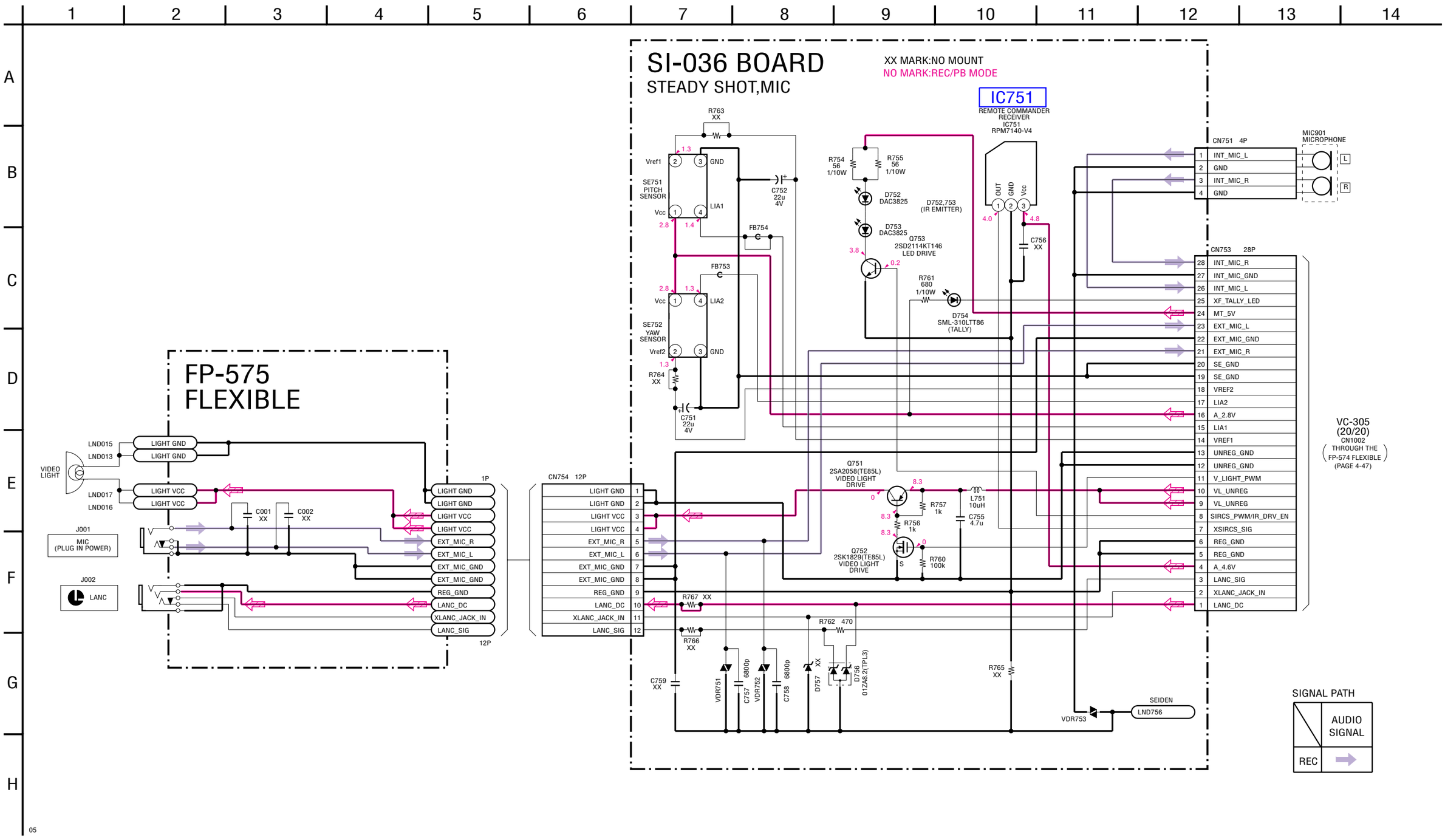


SIGNAL PATH

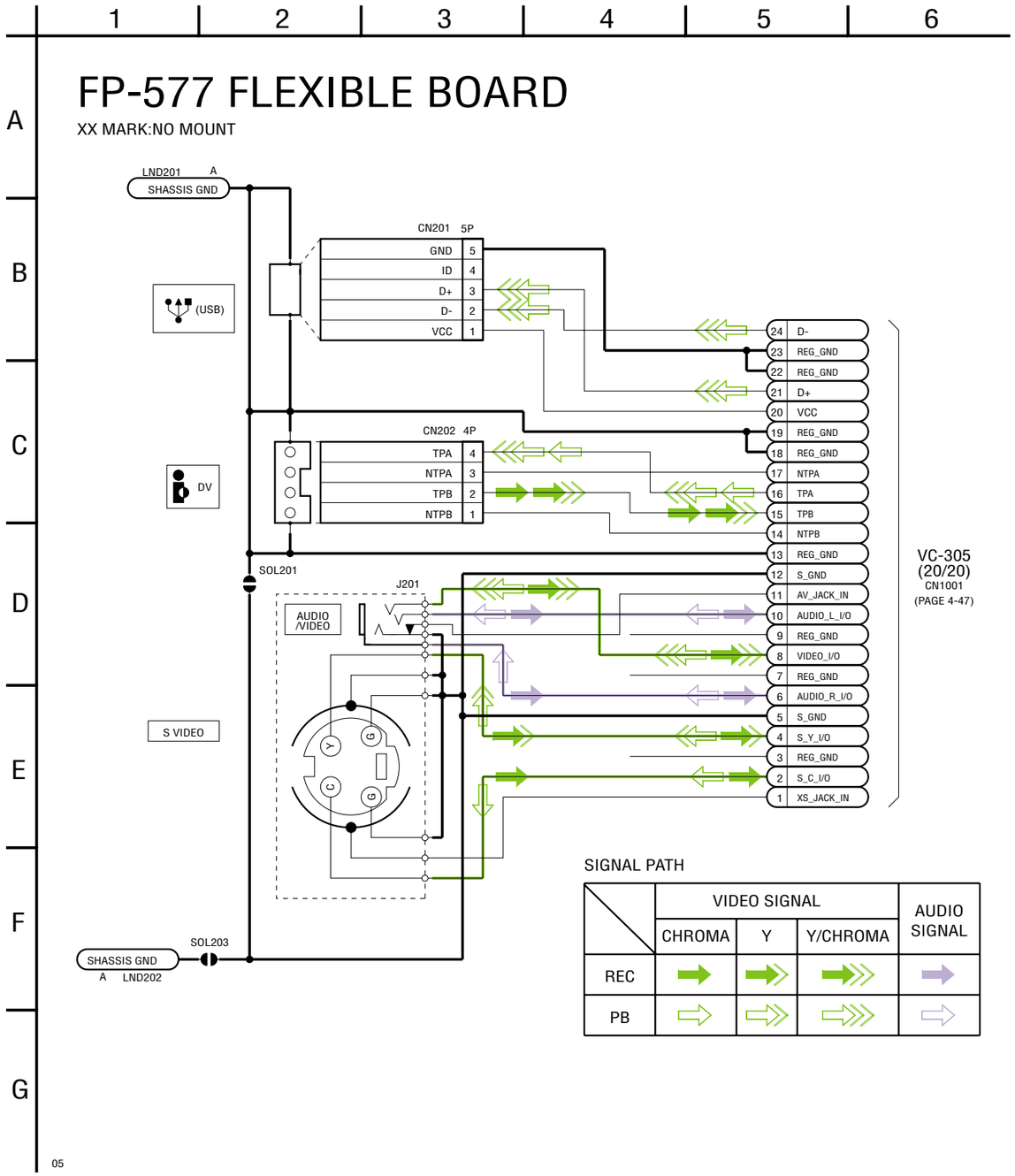
	VIDEO SIGNAL / CHROMA
REC	➡
PB	⇨

For Schematic Diagram

• Refer to page 4-77, 4-79 for printed wiring board.



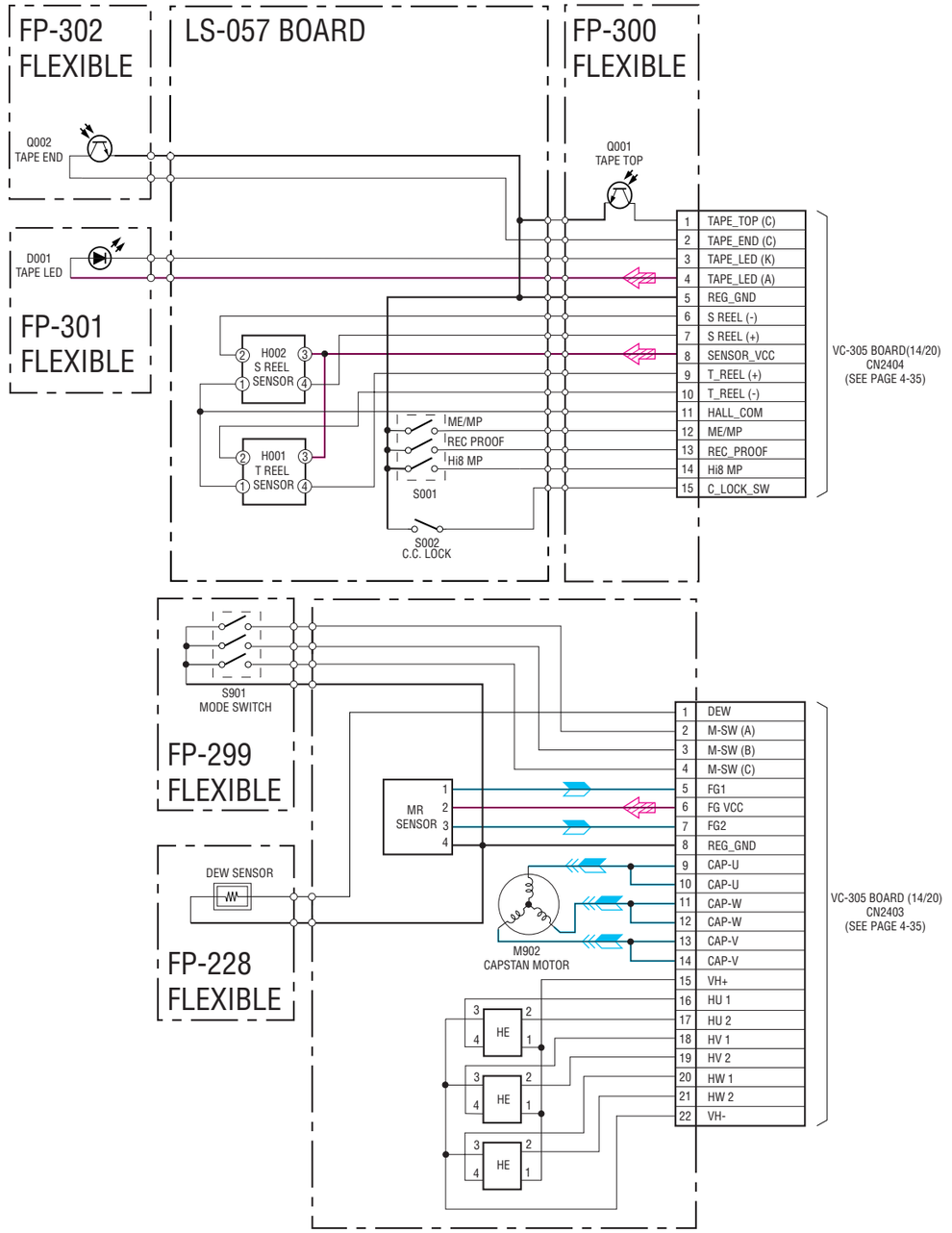
For Schematic Diagram
• Refer to page 4-79 for printed wiring board.



SIGNAL PATH

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

For Schematic Diagram
• Refer to page 4-80 for printed wiring board.



SIGNAL PATH

	REC	REC/PB	PB
Capstan speed servo		➡	
Capstan servo(speed and phase)		➡»	

COVER

4-2. SCHEMATIC DIAGRAMS

CONTROL SWITCH BLOCK (CF-3000)

XX MARK:NO MOUNT

・CONTROL SWITCH BLOCK (CF-3000) is replaced as block, so that PRINTED WIRING BOARD is omited.

SP901 (SPEAKER) SP+ SP-

BT001 LITHIUM BATTERY

VC-305 (20/20) CN1007 (PAGE 4-48)

LI_3V, BATT_INFO, REG_GND, D_2.8V, KEY_AD0, KEY_AD2, KEY_AD4, D_2.8V, KEY_AD3, REG_GND, DIAL_A, DIAL_B, D_2.8V, KEY_AD1, XRESET, REG_GND, SP+, SP-

REG_GND, N.C, LI_3V, BATT_INFO, REG_GND, D_2.8V, KEY_AD0, KEY_AD2, KEY_AD4, D_2.8V, KEY_AD3, REG_GND, DIAL_A, DIAL_B, KEY_AD2, D_2.8V, KEY_AD1, XRESET, REG_GND

SPEAKER_VOLUME

S008 END SEARCH — R005 1200 — R012 1500 — R020 2200 — R023 3900 — S019 — S021

S003 PB ZOOM — R006 1200 — S005 EXPOSURE — R009 1500 — S010 TITLE — R013 2200 — S012 MENU — R016 3900 — S015 DISPLAY — R019 8200 — S001 (PANEL_O/C_SW)

TRV350/TRV351/TRV355E/TRV356E

S004 DELEITE — R007 1200 — S006 MPEG — R010 1500 — S011 MEMORY MIX — R014 2200 — S013 INDEX — R017 3900 — MEMORY — S016 — R021 8200 — S020 — R024 27k — S022 PLAY

EDITSEARCH — S017 — R018 3900 — S018

S007 FOCUS — R008 1200 — S009 BACKLIGHT — R011 1500 — S014 FADER — R015 2200

R003 10k, R004 10k, R001 10k, R002 10k — S002 RESET

S023 SEL/PUSH EXEC — S7 — A1, COM2, SW1A3, SW24, SW1B5, B6

LND025 CH GND

LND026 CH GND

BATT_INFO, REG_GND, D_2.8V, KEY_AD0, KEY_AD2, SEIDEN_GND

SEIDEN_GND, KEY_AD2, KEY_AD0, D_2.8V, REG_GND, BATT_INFO

DUMMY CL001

CONTROL SWITCH BLOCK (FK-3000)

XX MARK:NO MOUNT

・CONTROL SWITCH BLOCK (FK-3000) is replaced as block, so that PRINTED WIRING BOARD is omited.

S001 COLOR SLOWS -SUPERNS — S004 VIDEO LIGHT — S005 STOP (□) — S006 FF (▶▶) — S007 REW (◀◀) — S008 PLAY (▷) — REC — S009 — S010

R001 10k — R002 1200 — R003 1500 — R004 2200 — R005 3900 — R006 8200 — R007 27K

BATT_INFO S002 — PAUSE (▮▮) S003

SIGNAL PATH

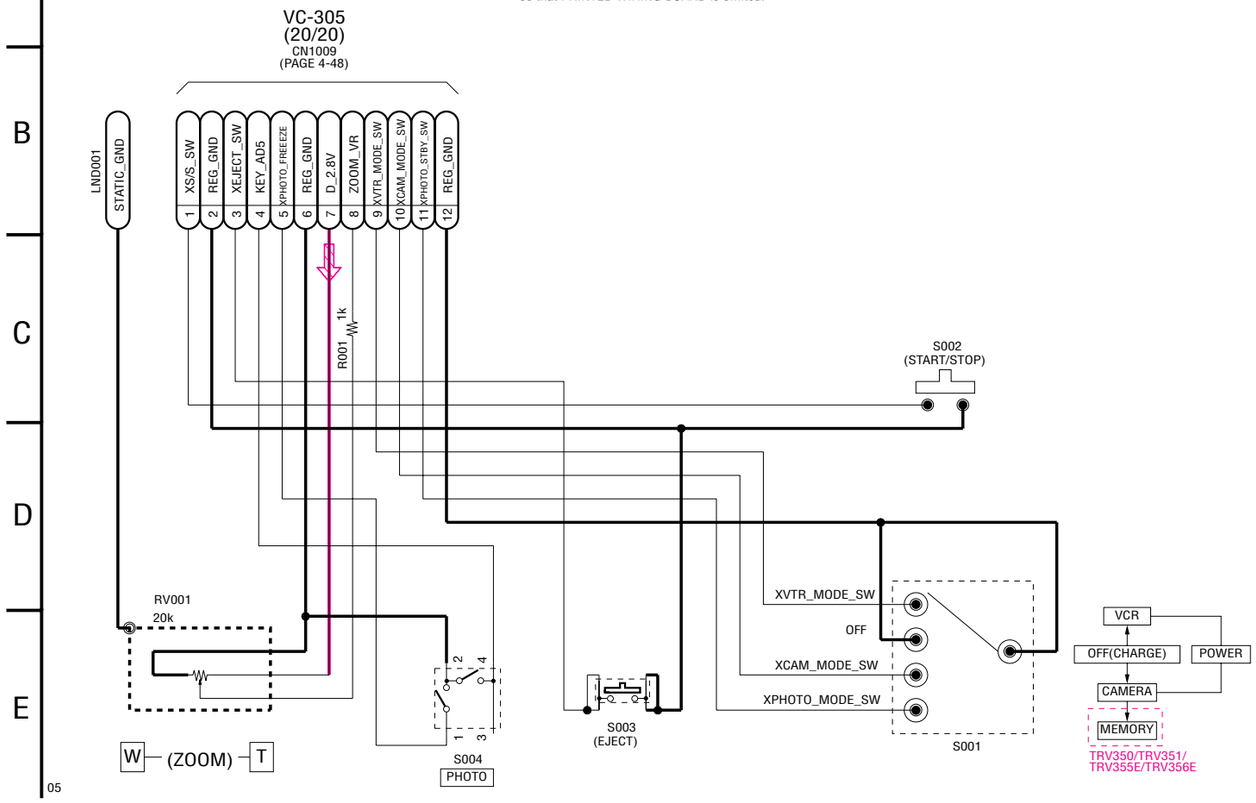
	AUDIO SIGNAL
PB	⇨

05

CONTROL SWITCH BLOCK(SS-3000)

XX MARK:NO MOUNT

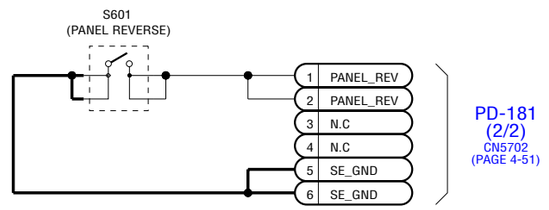
・CONTROL SWITCH BLOCK (SS-3000) is replaced as block, so that PRINTED WIRING BOARD is omited.



05

CONTROL SWITCH BLOCK (PR-3000)

・CONTROL SWITCH BLOCK (PR-3000) is replaced as block, so that PRINTED WIRING BOARD is omited.



05

COVER

4-3. PRINTED WIRING BOARDS

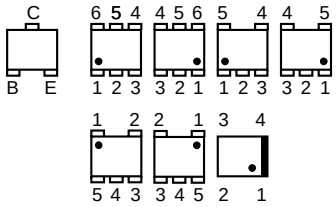
4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

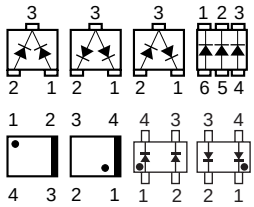
- : Uses unleaded solder.
- : Circuit board
  : Flexible board
  Pattern from the side which enables seeing.
  : pattern of the rear side
  (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on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

- Chip parts.

Transistor



Diode



Board Name	Parts Location	Waveforms	Pattern	
			Total Number of Layers	Layers Not Indicated
CD-418	–	4-81	2 layers	–
PD-181	4-92	4-88	2 layers	–
LB-083	–	–	8 layers	2 to 7 layers
SI-036	4-92	–	2 layers	–

COVER

4-3. PRINTED WIRING BOARDS

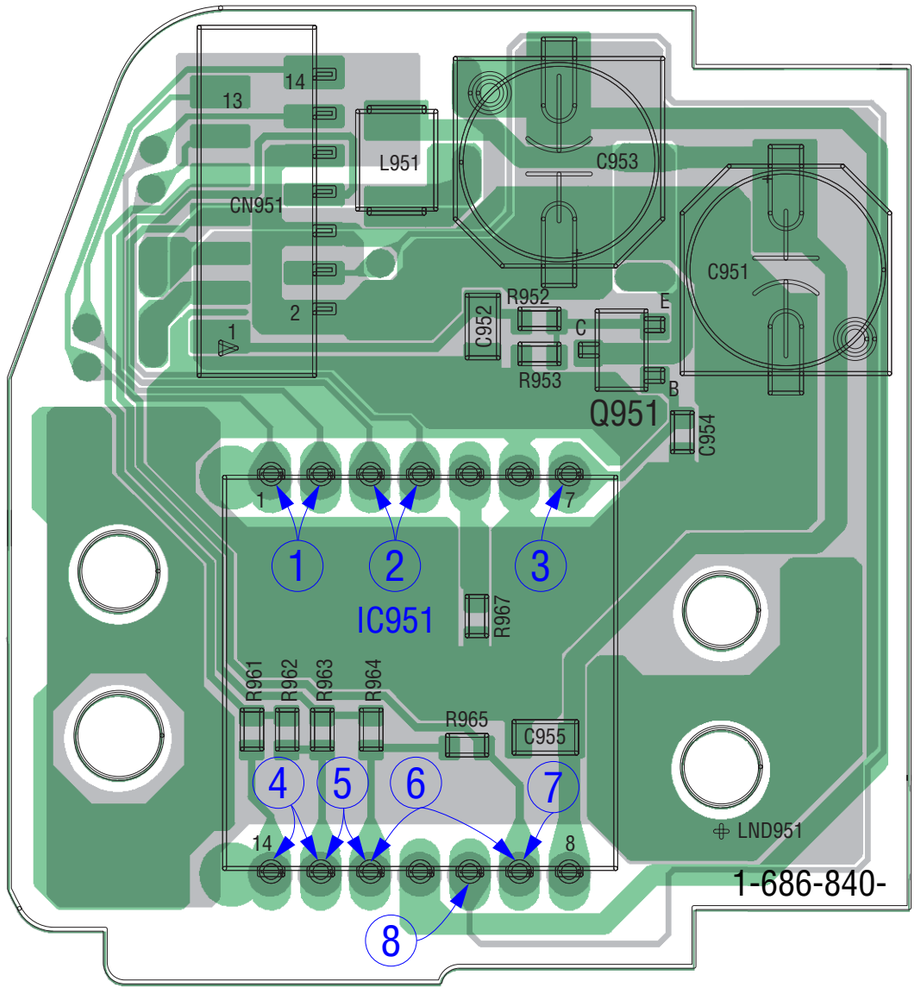
Link

- CD-418 BOARD
- LB-083 BOARD
- PD-181 BOARD (SIDE A)
- SI-036 BOARD
- PD-181 BOARD (SIDE B)
- LS-057 BOARD, FP-228, FP-299, FP-300,FP-301, FP-302, FP-575, FP-577 FLEXIBLE BOARD
- COMMON NOTE FOR PRINTED WIRING BOARDS
- WAVEFORMS
- MOUNTED PARTS LOCATION
- CIRCUIT BOARDS LOCATION
- FLEXIBLE BOARDS LOCATION

CD-418 (CCD IMAGER)

Note for Printed Wiring Board (See page 4-63).

CD-418 BOARD



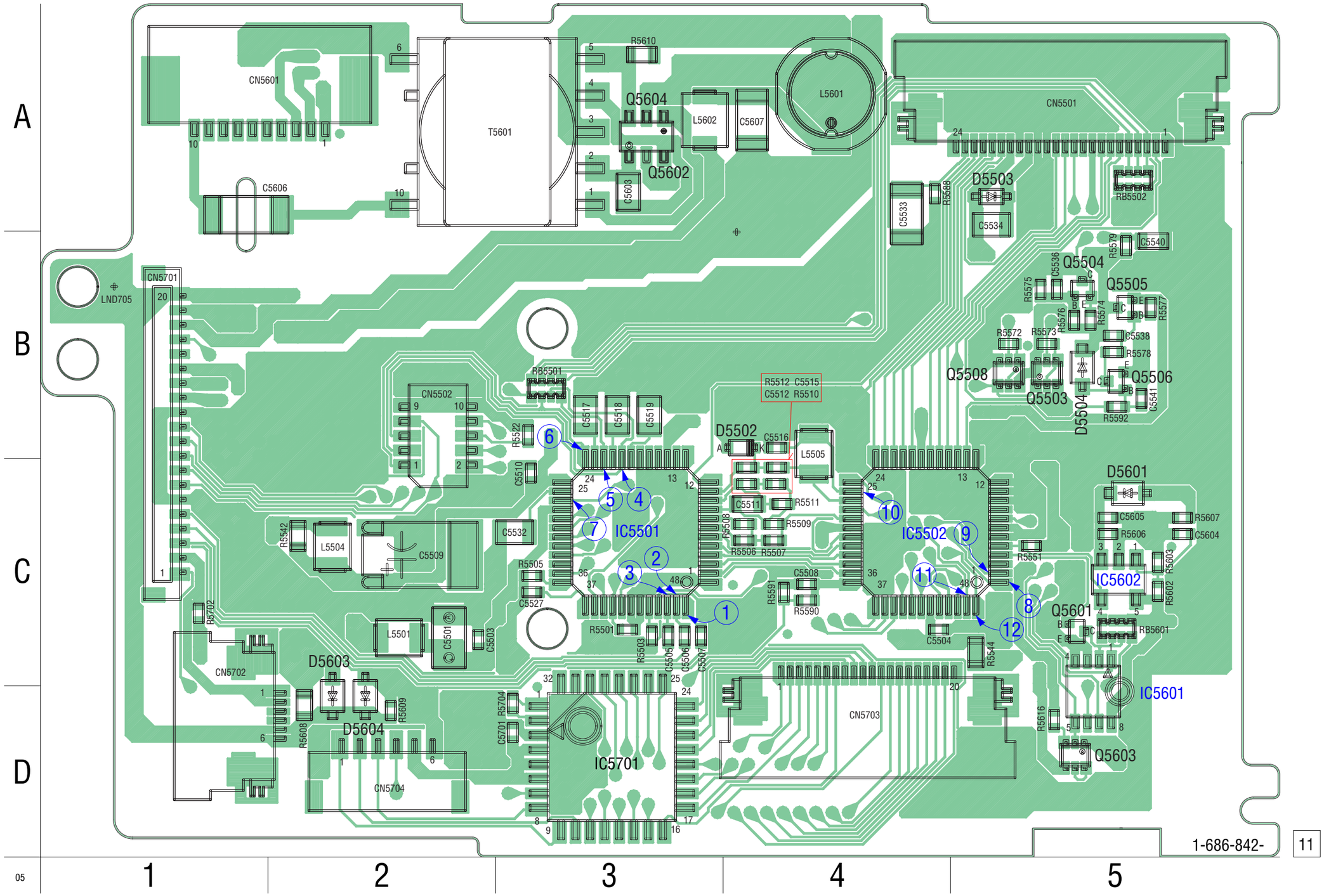
1-686-840-11

Printed wiring boards of the VC-305 board are not shown.
Pages from 4-67 to 4-70 are not shown.

PD-181 (RGB DRIVE, TIMING GENERATOR, BACKLIGHT DRIVE)

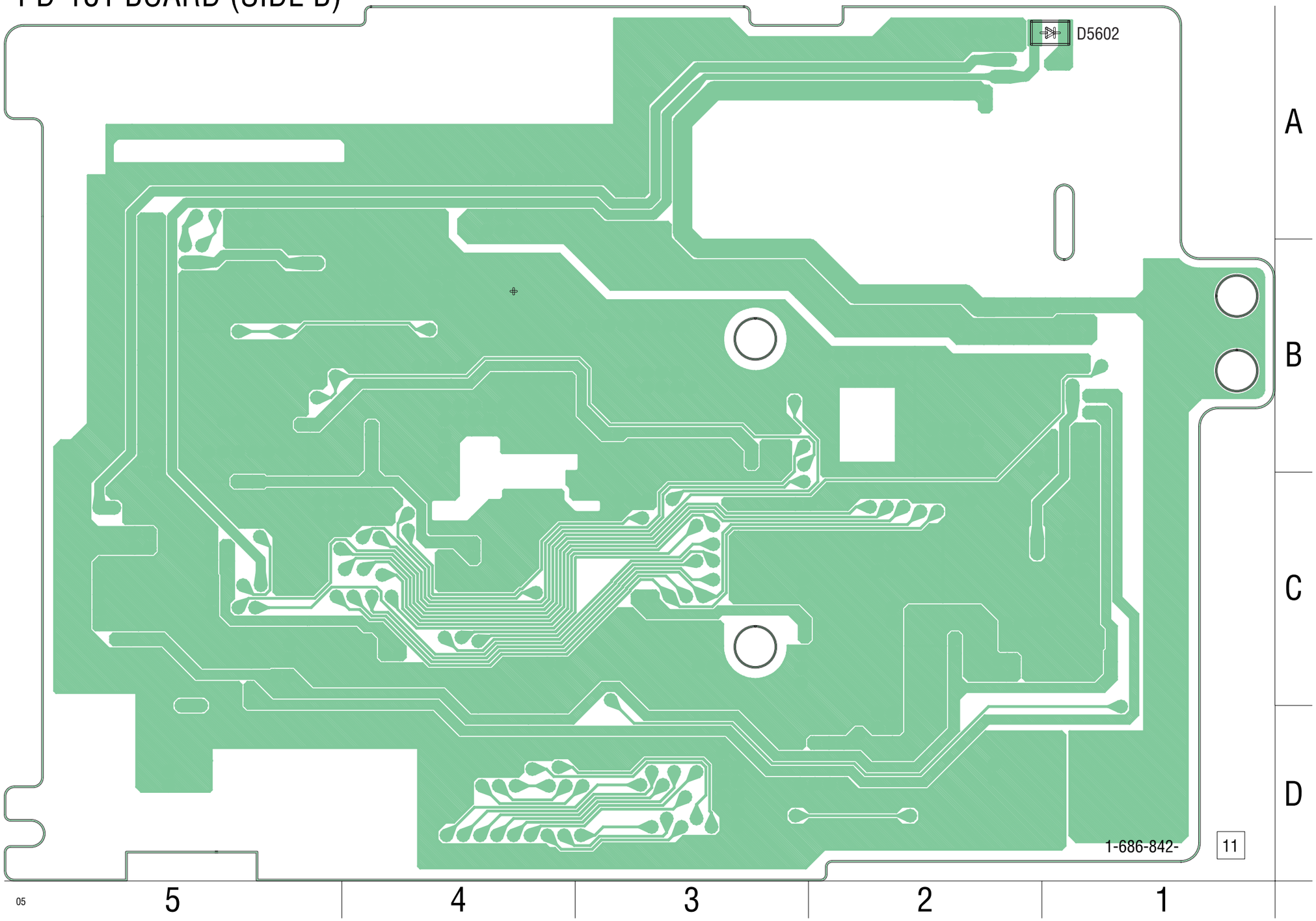
Note for Printed Wiring Board (See page 4-63).

PD-181 BOARD (SIDE A)



PD-181 (SIDE A)

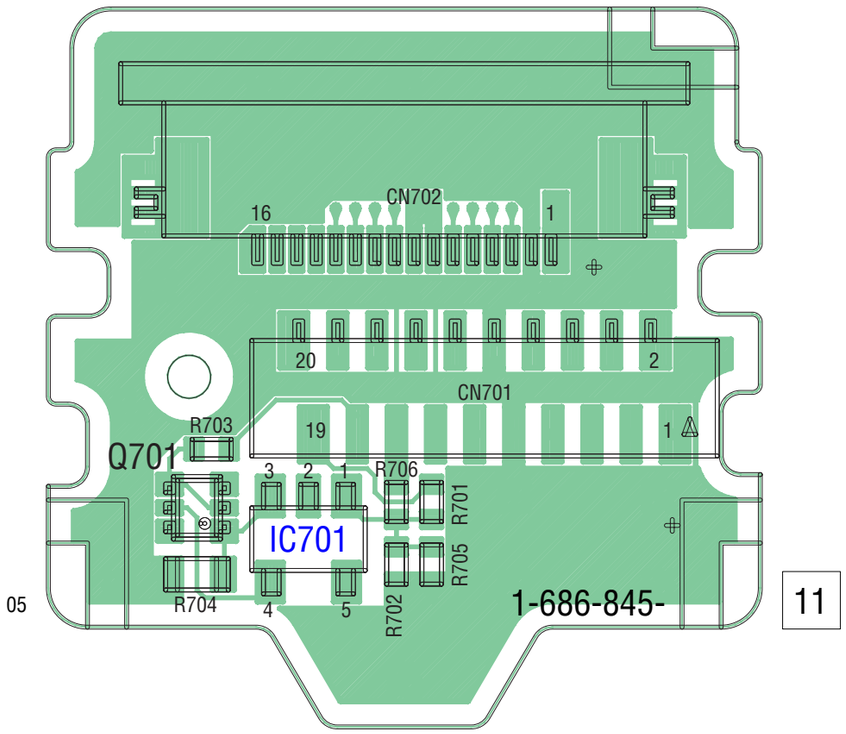
PD-181 BOARD (SIDE B)



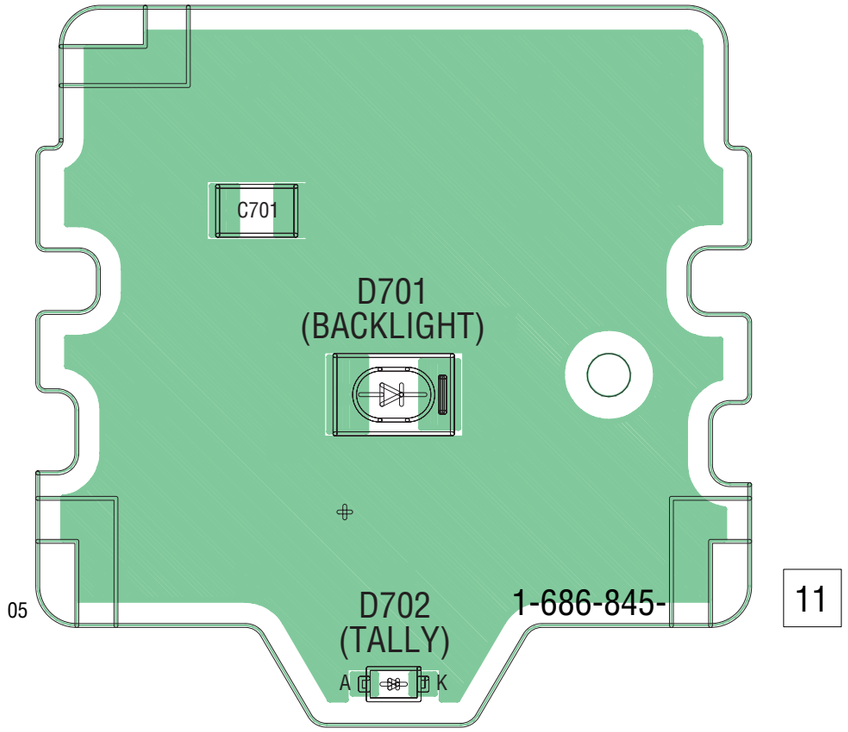
LB-083 (EVF BACKLIGHT)

Note for Printed Wiring Board (See page 4-63).

LB-083 BOARD (SIDE A)



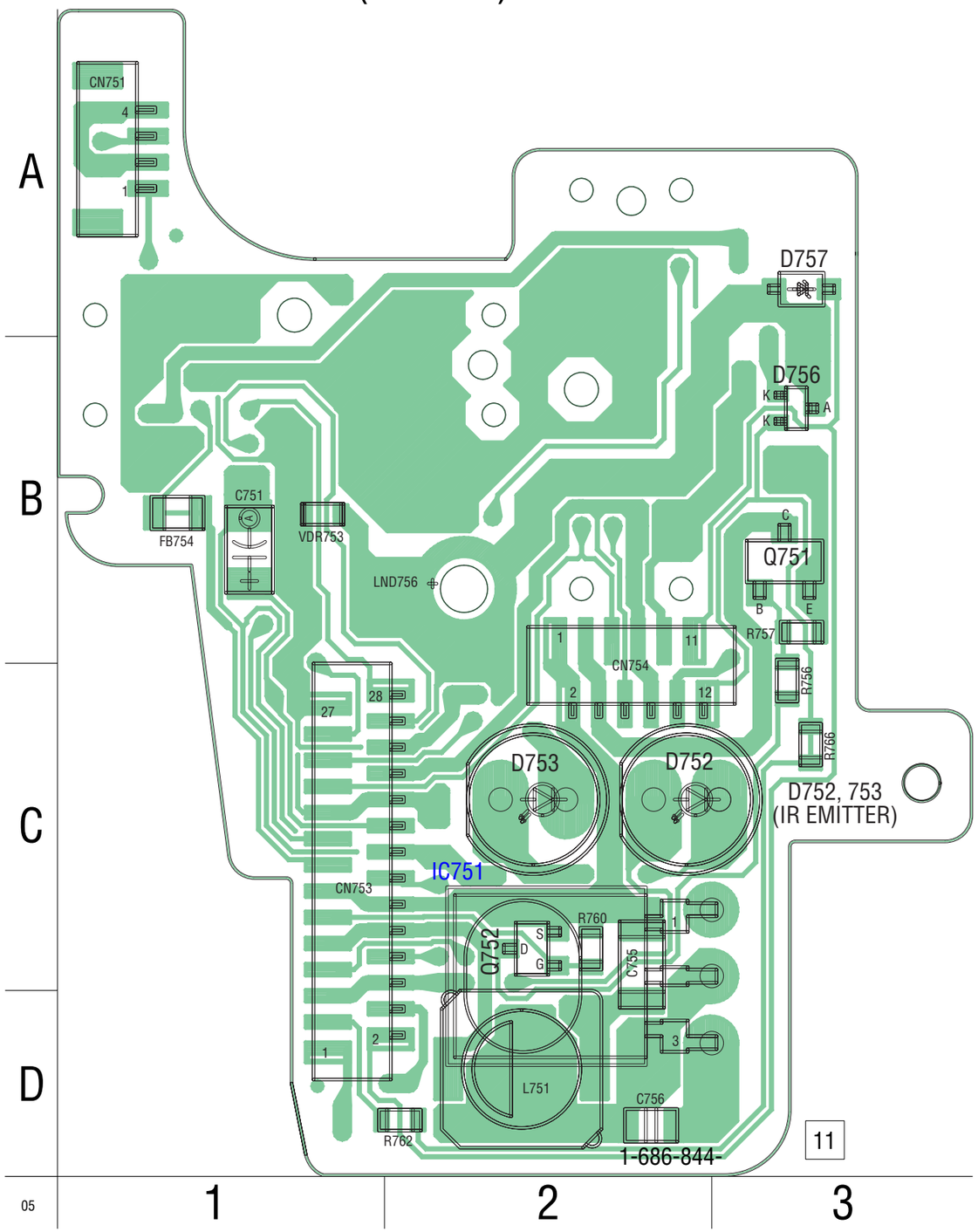
LB-083 BOARD (SIDE B)



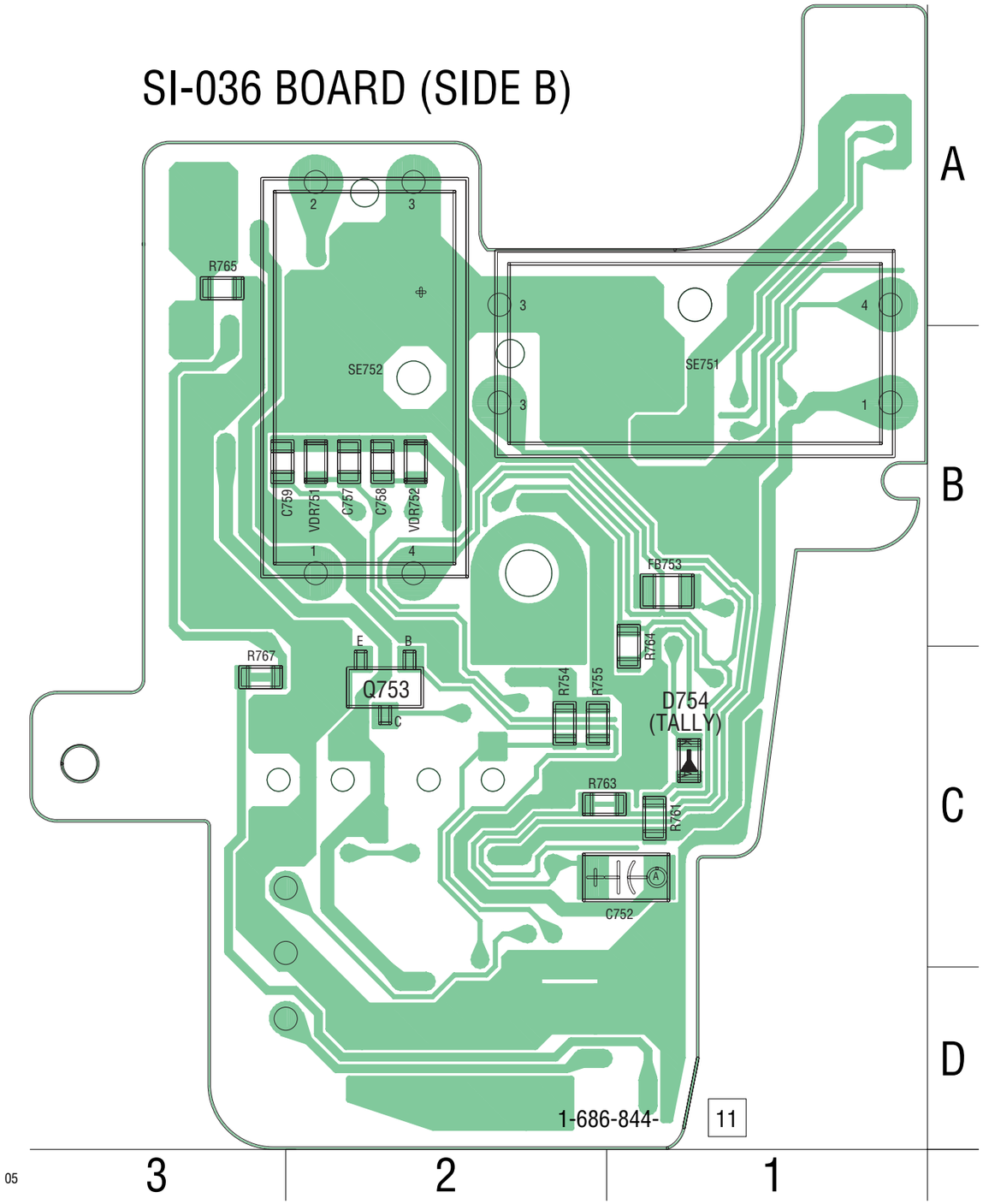
SI-036 (STEADYSHOT, MIC)

Note for Printed Wiring Board (See page 4-63).

SI-036 BOARD (SIDE A)

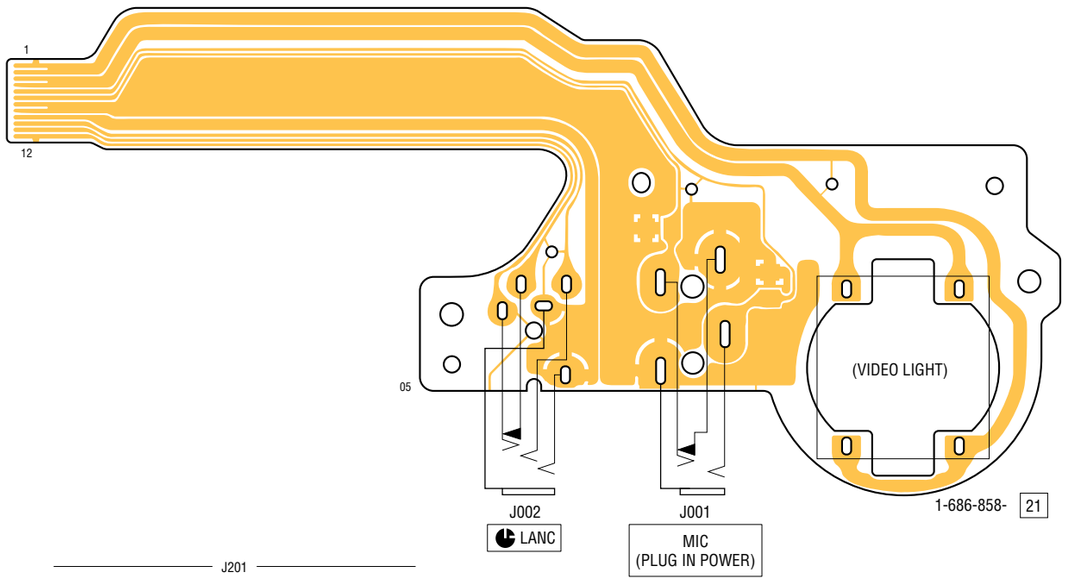


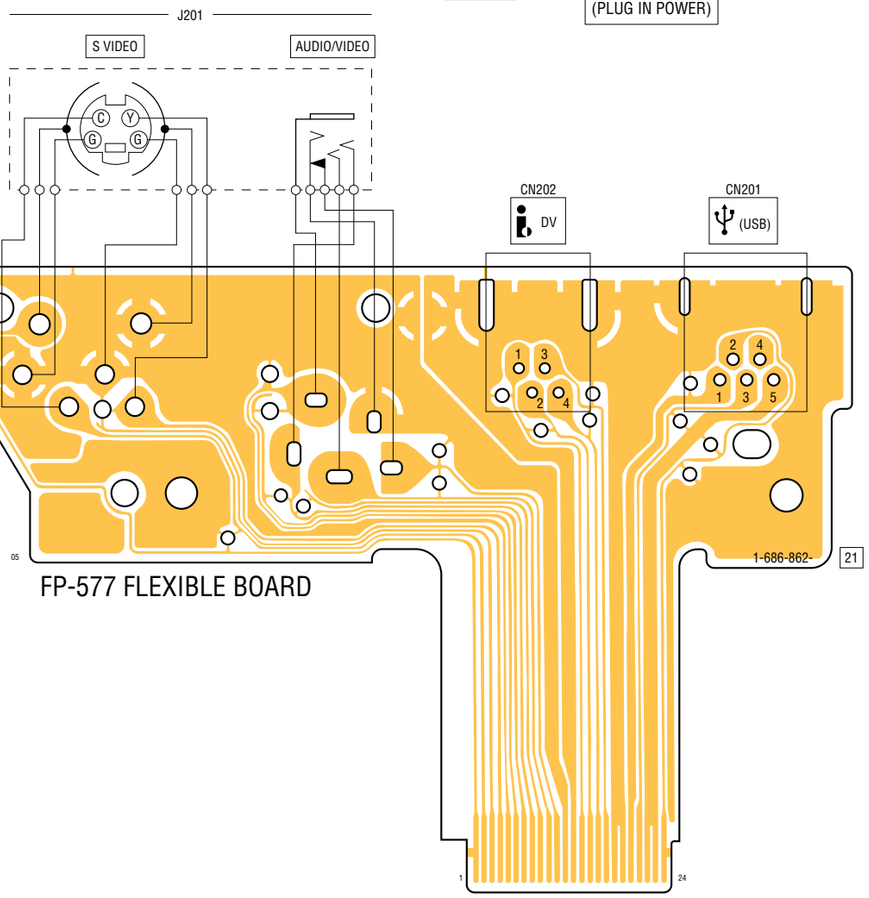
SI-036 BOARD (SIDE B)



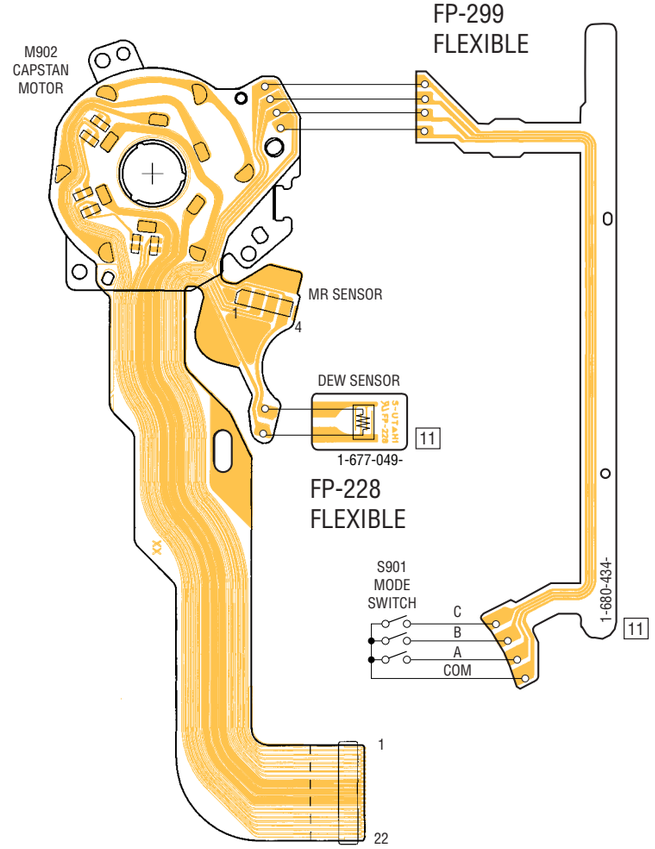
LS-057 (S/T REEL SENSOR), FP-228, FP-299, FP-300, FP-301, FP-302, FP-575, FP-577 FLEXIBLE

FP-575 FLEXIBLE BOARD

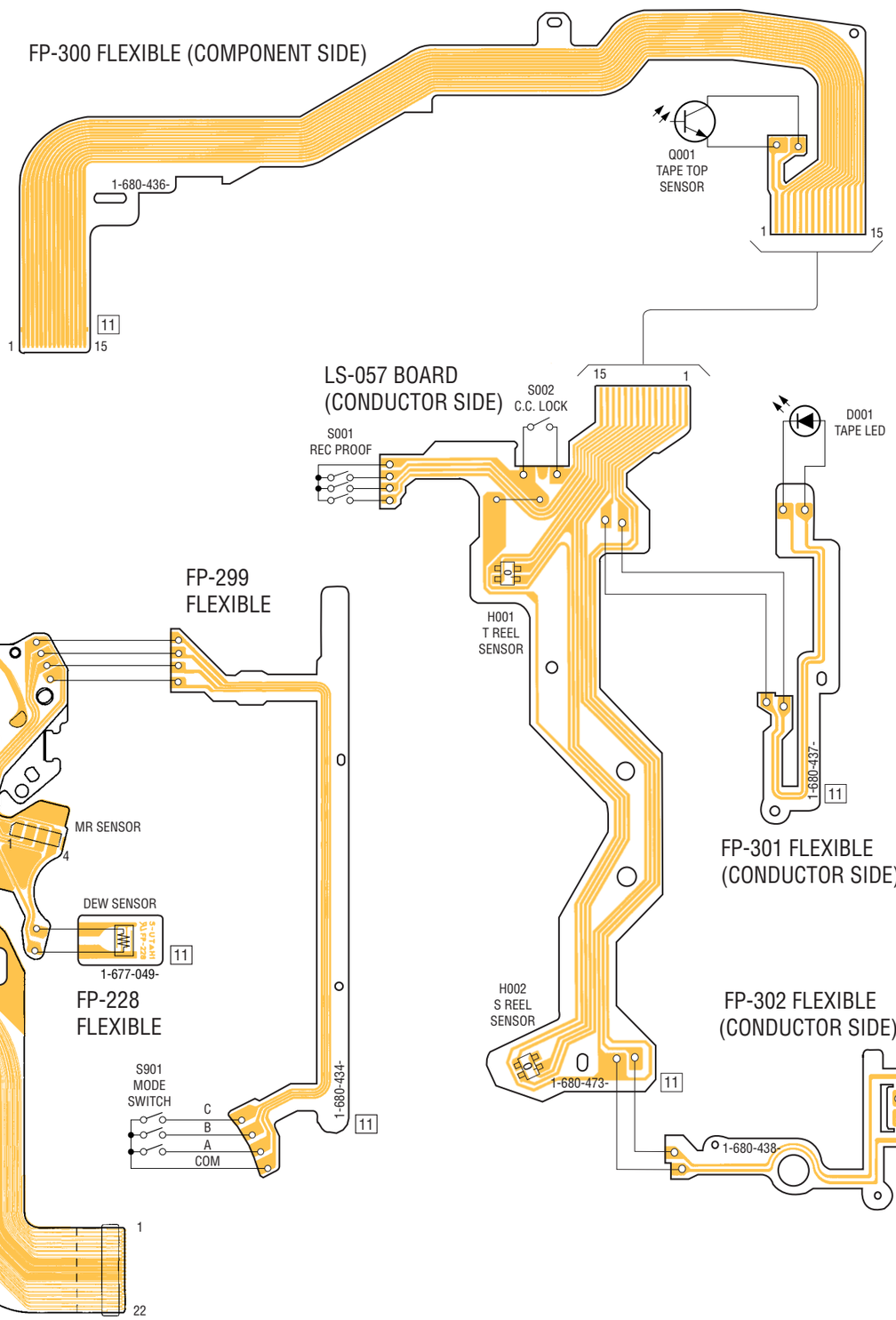




FP-577 FLEXIBLE BOARD



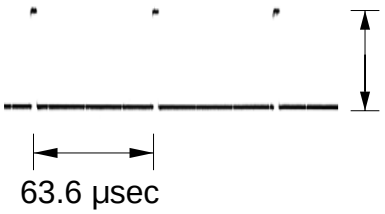
FP-299 FLEXIBLE



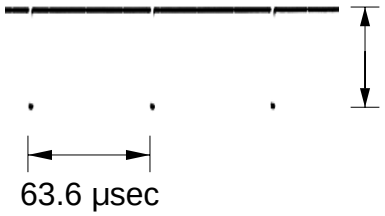
4-4. WAVEFORMS

720 H : TRV350/TRV351
960 H : TRV345E/TRV355E/TRV356E

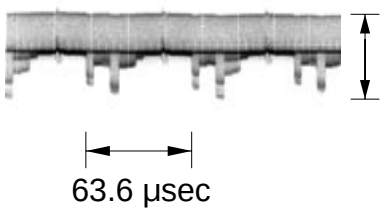
CD-418 BOARD

① 

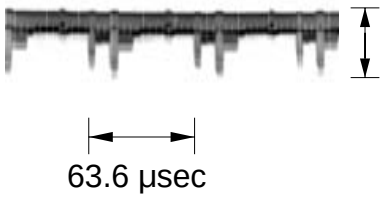
IC951 ①, ② REC

② 

IC951 ③, ④ REC

③ 720H 

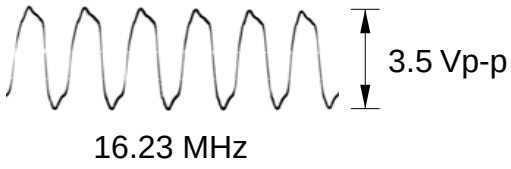
IC951 ⑦ REC

③ 960H 

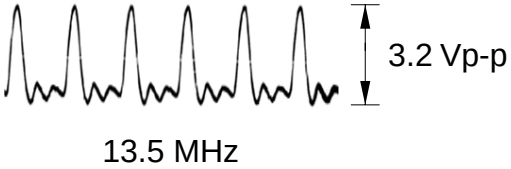
IC951 ⑦ REC

④ 720H 

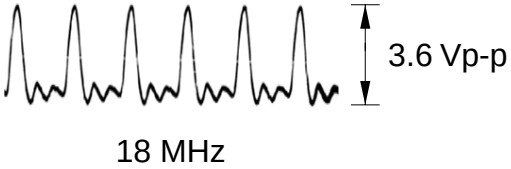
IC951 ⑬, ⑭ REC

⑤ 960H 

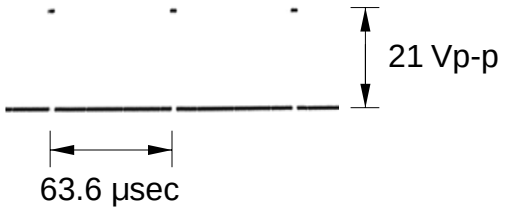
IC951 ⑫, ⑬ REC

⑥ 720H 

IC951 ⑨, ⑫ REC

⑦ 960H 

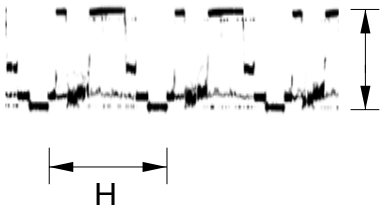
IC951 ⑨ REC

⑧ 

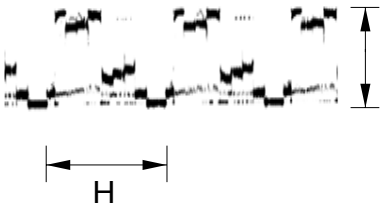
IC951 ⑩ REC

Waveforms of the VC-305 board are not shown.
Pages from 4-82 to 4-87 are not shown.

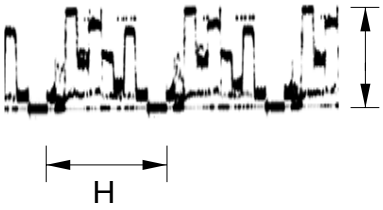
PD-181 BOARD (1/2)

① 

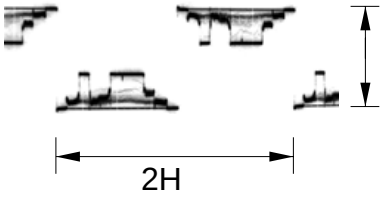
IC5501 ㊽ REC/PB

② 

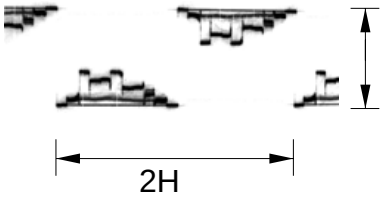
IC5501 ㊼ REC/PB

③ 

IC5501 ㊻ REC/PB

④ 

IC5501 ⑳ REC/PB

⑤ 

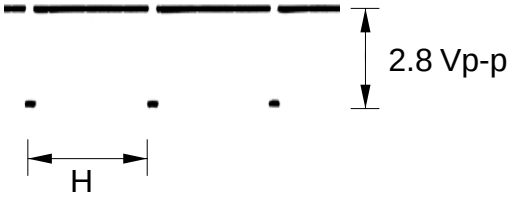
IC5501 ㉒ REC/PB

⑥ 

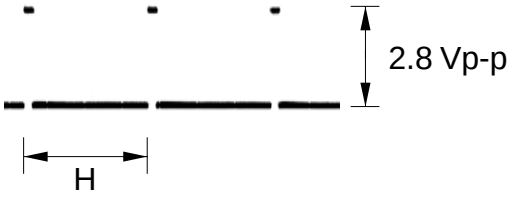
IC5501 ㉔ REC/PB

⑦ 

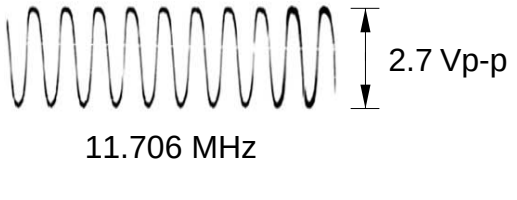
IC5501 ㉗ REC/PB

⑧ 

IC5502 ① REC/PB

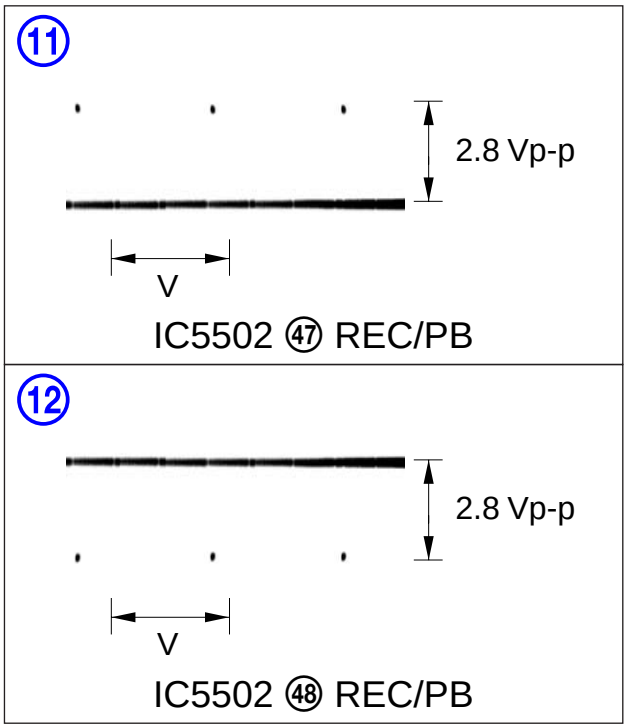
⑨ 

IC5502 ② REC/PB

⑩ 

IC5502 ㉖ REC/PB

PD-181 BOARD (2/2)



Mounted parts location of the VC-305 board is not shown.
Pages from 4-90 to 4-91 are not shown.

4-5. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

PD-181 BOARD

C5501 C-2
C5504 C-4
C5505 C-3
C5506 C-3
C5507 C-3
C5509 C-2
C5510 C-3
C5511 C-4
C5512 C-4
C5515 C-4
C5516 B-4
C5517 B-3
C5518 B-3
C5519 B-3
C5527 C-3
C5532 C-3
C5533 A-4
C5534 A-5
C5536 B-5
C5540 B-5
C5603 A-3
C5604 C-5
C5605 C-5
C5606 A-1
C5607 A-4

CN5501 A-5
CN5502 B-2
CN5601 A-1
CN5701 B-1
CN5702 D-1

D5502 B-4
D5503 A-5
D5601 C-5

IC5501 C-3
IC5502 C-4
IC5601 D-5
IC5602 C-5

L5501 C-2
L5505 B-4
L5601 A-4
L5602 A-3

Q5503 B-5
Q5504 B-5
Q5505 B-5
Q5506 B-5
Q5508 B-5
Q5601 C-5
Q5604 A-3

R5501 C-3
R5503 C-3
R5505 C-3
R5506 C-4
R5507 C-4
R5508 C-4
R5509 C-4
R5510 C-4
R5511 C-4
R5512 C-4
R5522 B-3
R5542 C-2
R5551 C-5
R5572 B-5
R5573 B-5
R5574 B-5
R5575 B-5
R5576 B-5
R5577 B-5
R5578 B-5
R5579 B-5
R5588 A-4
R5590 C-4
R5592 B-5
R5602 C-5
R5603 C-5
R5606 C-5
R5607 C-5
R5610 A-3

RB5501 B-3
RB5502 A-5
RB5601 C-5

T5601 A-3

SI-036 BOARD

C751 B-1
* C752 C-1
C755 C-2
* C757 B-2
* C758 B-2

CN751 A-1
CN753 C-1
CN754 C-2

D752 C-2
D753 C-2
* D754 C-1
D756 B-3

* FB753 B-1

IC751 C-2

L751 D-2

Q751 B-3
Q752 C-2
* Q753 C-2

* R754 C-2
* R755 C-2
R756 C-3
R757 B-3
R760 C-2
* R761 C-1
R762 D-2

* SE751 B-1
* SE752 B-2

* VDR751 B-2
* VDR752 B-2
VDR753 B-1

COVER

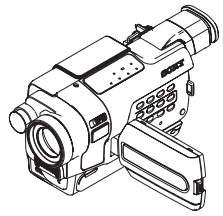
NOTE

5. REPAIR PARTS LIST

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

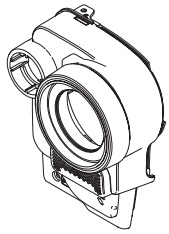
Link

EXPLODED VIEWS



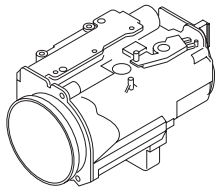
A

OVERALL ASSEMBLY



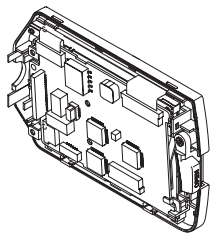
B

F PANEL BLOCK ASSEMBLY



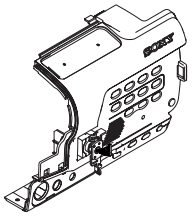
C

LENS BLOCK ASSEMBLY



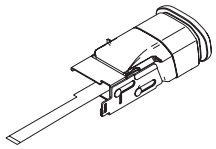
D

LCD BLOCK ASSEMBLY



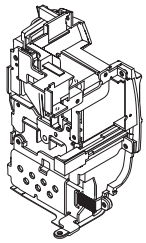
E

CABINET (R) BLOCK ASSEMBLY



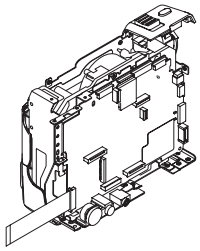
F

EVF BLOCK ASSEMBLY



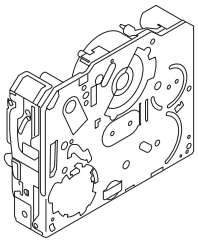
G

BATTERY PANEL BLOCK ASSEMBLY



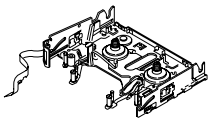
H

MD FRAME BLOCK



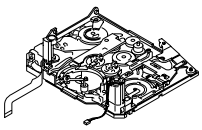
I

CASSETTE COMPARTMENT ASSEMBLY, DRUM ASSEMBLY



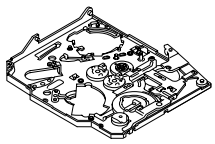
J

LS CHASSIS BLOCK ASSEMBLY



K

MECHANICAL CHASSIS BLOCK ASSEMBLY-1



L

MECHANICAL CHASSIS BLOCK ASSEMBLY-2

Link

ELECTRICAL PARTS LIST

ACCESSORIES

CD-418 BOARD C	FP-302 FLEXIBLE BOARD J	PD-181 BOARD D
FP-300 FLEXIBLE BOARD J	LB-083 BOARD F	SI-036 BOARD B
FP-301 FLEXIBLE BOARD J	LS-057 BOARD J	

COVER

5. REPAIR PARTS LIST

SECTION 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: µF
- COILS
  uH: µH
- 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...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  AUS : Australian model
  BR : Brazilian model
  CH : Chinese model
  CND : Canadian model
  EE : East European model
  JE : Tourist model
  KR : Korean model
  NE : North European model

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

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

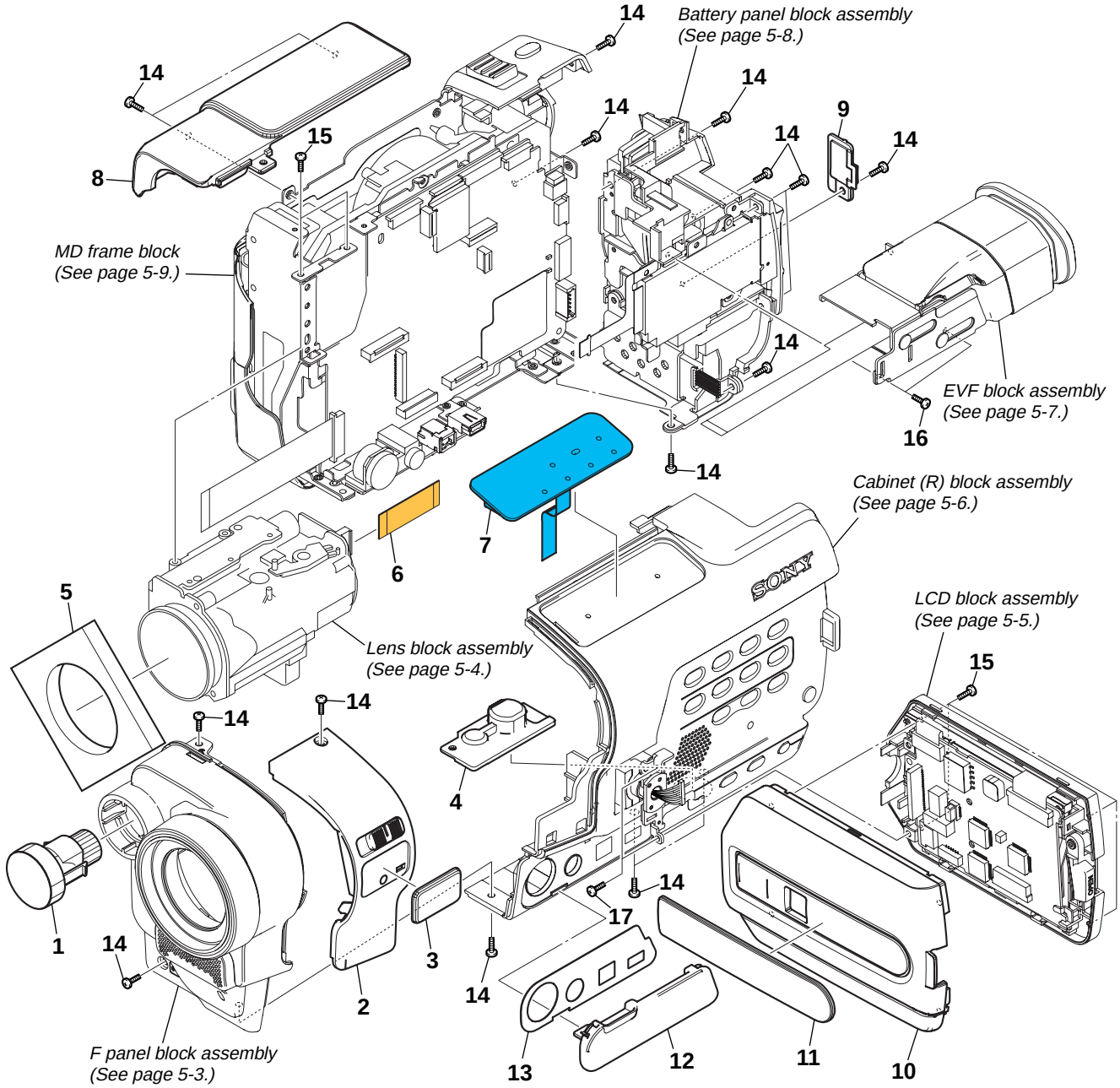
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

COVER

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

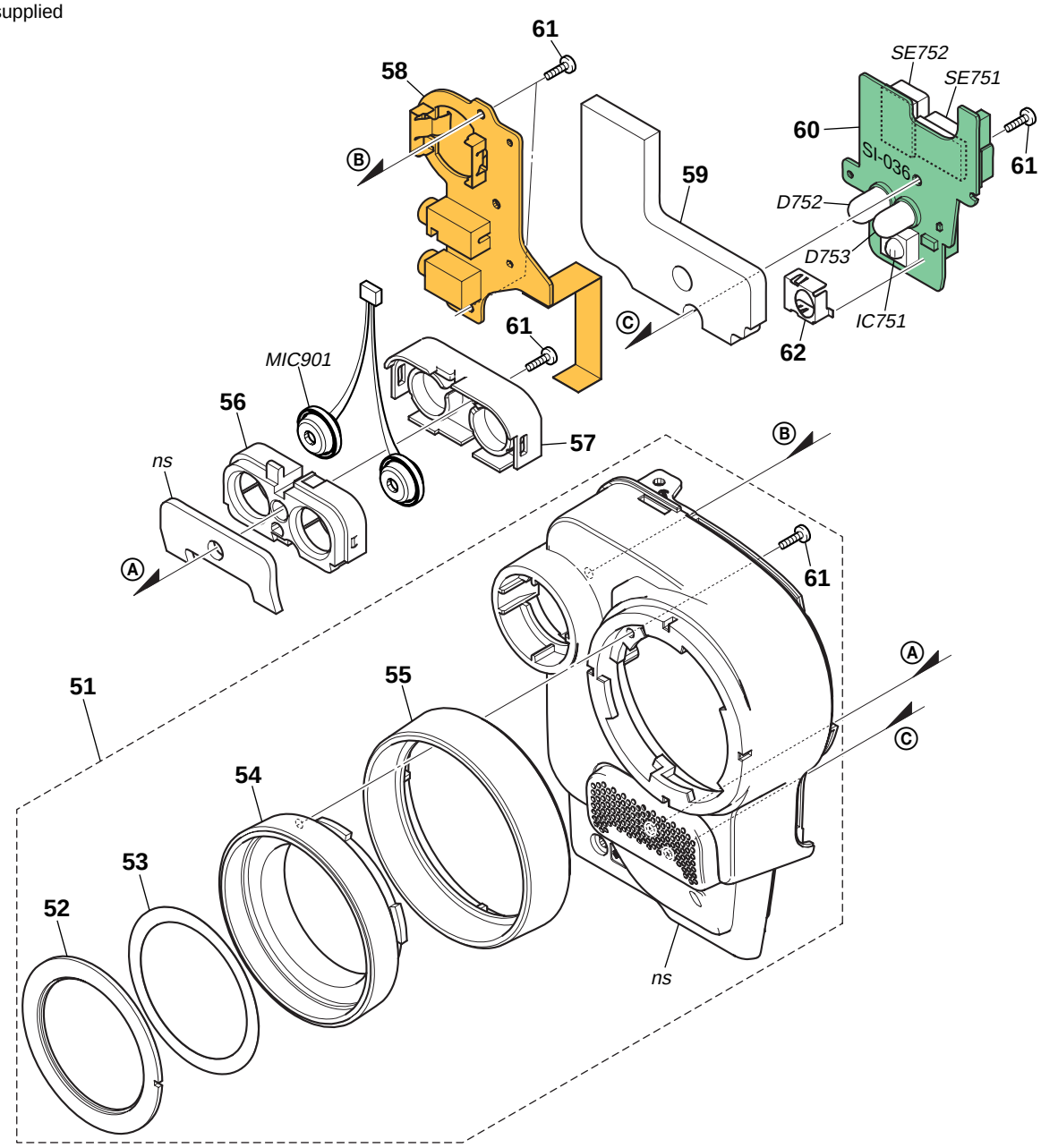
5-1-1. OVERALL ASSEMBLY



Ref. No.	Part No.	Description
1	1-518-787-21	LIGHT, VIDEO
2	X-3953-065-1	RING (33) ASSY, ORNAMENTAL (TRV345E)
2	X-3953-070-1	RING (36) ASSY, ORNAMENTAL (TRV350/TRV351/TRV355E/TRV356E)
3	3-079-010-21	PLATE (30), MAGNIFICATION
4	3-079-012-01	SCREW (30), TRIPOD
5	3-080-217-01	CUSHION (30), LENS
6	1-683-163-21	FP-400 FLEXIBLE BOARD
7	1-477-672-51	SWITCH BLOCK, CONTROL (FK-3000) (TRV350/TRV351)
7	1-477-672-61	SWITCH BLOCK, CONTROL (FK-3000) (TRV345E/TRV355E/TRV356E)
8	3-079-011-01	CABINET UPPER (30)
9	3-079-007-01	LID (30), CPC
10	3-079-492-12	CABINET (C) (36), P
11	X-3953-040-1	COVER (36) ASSY, CPC (TRV355E)
11	X-3953-051-1	COVER (36) ASSY, CPC (TRV350)
11	X-3953-052-1	COVER (36) ASSY, CPC (TRV351)
11	X-3953-053-1	COVER (36) ASSY, CPC (TRV356E)
11	X-3953-054-1	COVER (36) ASSY, CPC (TRV345E)
12	3-079-008-01	COVER (30), JACK
13	3-079-396-51	SHEET (30), JACK
14	3-067-347-01	MI SCREW M2 (H)
15	3-065-567-11	TAPPING (M1.7)
16	3-078-889-11	SCREW (M1.7)
17	3-065-567-01	TAPPING (M1.7)

5-1-2. F PANEL BLOCK ASSEMBLY

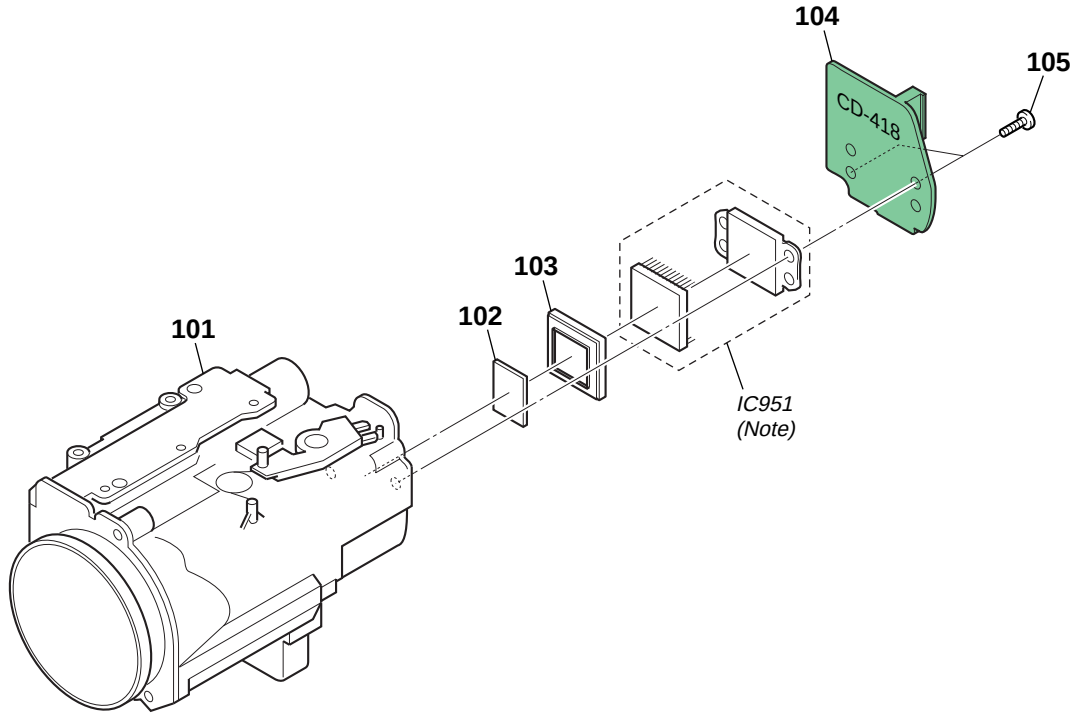
ns: not supplied



Ref. No.	Part No.	Description
51	X-3952-976-1	PANEL (36) ASSY, FRONT
52	3-079-000-01	PLATE (30), NAME
53	3-079-001-01	SHEET (30), ADHESIVE, PLATE
54	3-078-999-01	SCREW (30), FILTER
55	3-080-197-01	RING (36), FRONT
56	3-078-997-11	HOLDER (30), MICROPHONE
57	3-078-996-01	RETAINER (30), MICROPHONE
58	1-686-858-21	FP-575 FLEXIBLE BOARD
59	3-080-231-01	SHEET (30), MICROPHONE

Ref. No.	Part No.	Description
60	A-7013-272-A	SI-036 BOARD, COMPLETE
61	3-065-567-01	TAPPING (M1.7)
62	3-079-004-01	CASE (30), SHIELD, SI
D752	8-719-060-65	DIODE DCC3810 (IR EMITTER)
D753	8-719-060-65	DIODE DCC3810 (IR EMITTER)
IC751	6-701-681-01	IC RPM7140-V4
MIC901	1-542-477-11	MICROPHONE
SE751	1-803-042-31	SENSOR, ANGULAR VELOCITY (PITCH)
SE752	1-803-042-41	SENSOR, ANGULAR VELOCITY (YAW)

5-1-3. LENS BLOCK ASSEMBLY



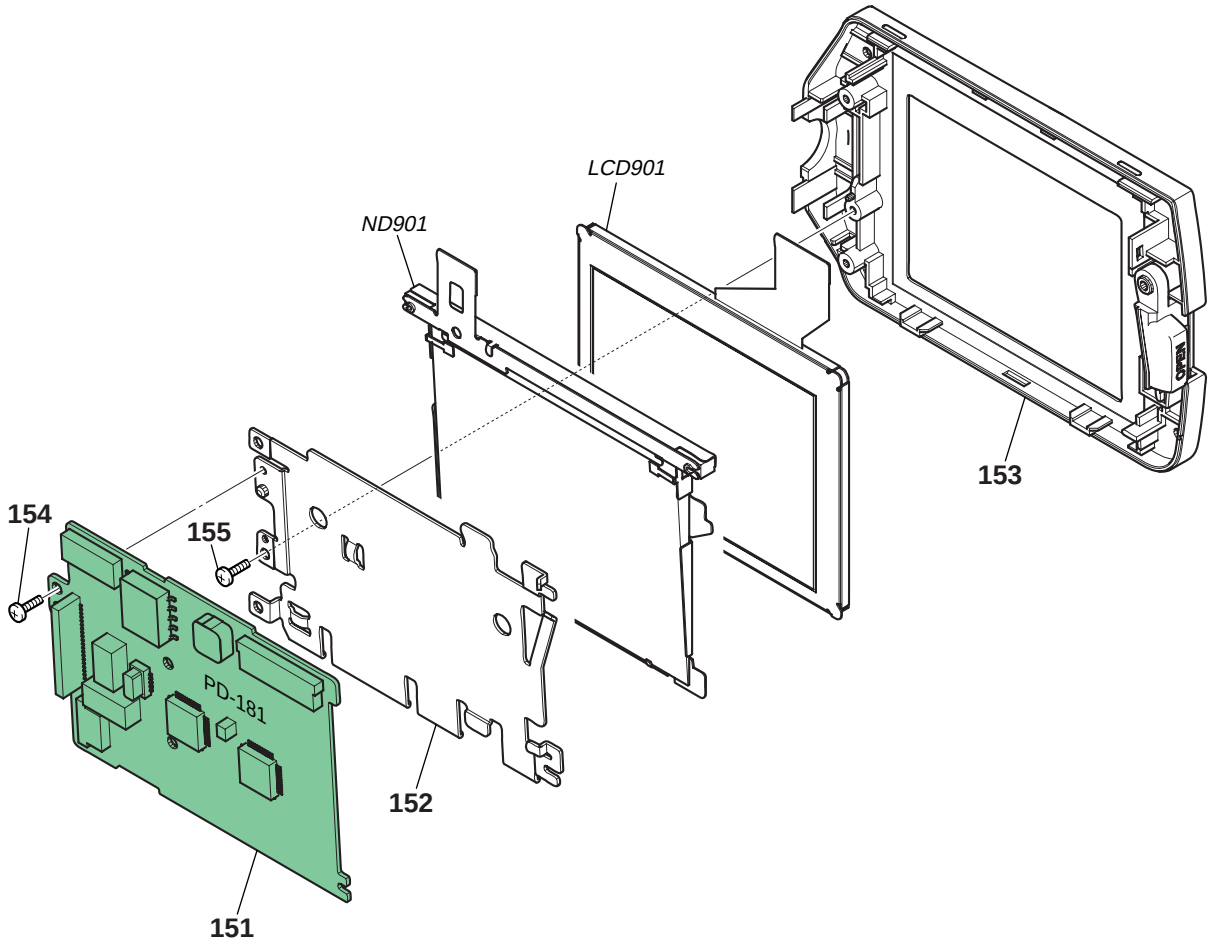
(Note) Be sure to read “Precuations for Replacement of CCD Imager” on page 4-8 when changing the CCD imager.

Ref. No.	Part No.	Description
101	8-848-765-01	DEVICE, LENS LSV-820A (TRV350/TRV351)
101	8-848-768-01	DEVICE, LENS LSV-820B (TRV345E/TRV355E/TRV356E)
102	1-758-553-11	FILTER BLOCK, OPTICAL (TRV345E/TRV355E/TRV356E)
102	1-758-554-11	FILTER BLOCK, OPTICAL (TRV350/TRV351)
103	3-053-973-01	RUBBER (W), SEAL
104	A-7013-263-A	CD-418 BOARD, COMPLETE (TRV350/TRV351)
104	A-7013-270-A	CD-418 BOARD, COMPLETE (TRV345E/TRV355E/TRV356E)
105	3-065-567-01	TAPPING (M1.7)
IC951	A-7013-400-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV350/TRV351)
IC951	A-7013-403-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV345E/TRV355E/TRV356E)

COVER

5. REPAIR PARTS LIST

5-1-4. LCD BLOCK ASSEMBLY



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

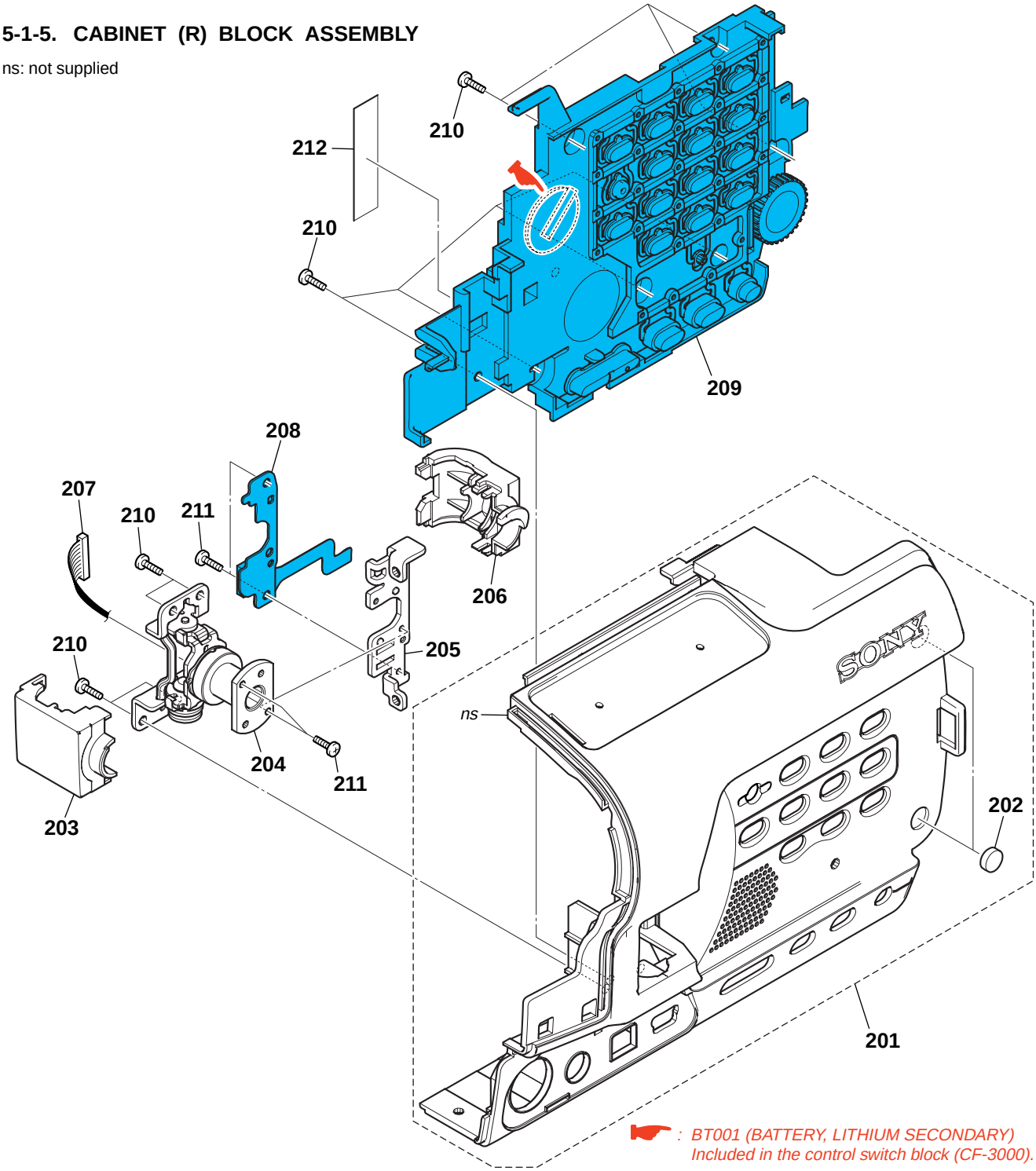
Ref. No.	Part No.	Description
151	A-7013-269-A	PD-181 BOARD, COMPLETE
152	3-079-032-01	FRAME (30), P
153	X-3952-955-2	CABINET (M) (30) ASSY, P
154	3-078-889-11	SCREW (M1.7)
155	3-065-567-01	TAPPING (M1.7)
LCD901	8-753-052-12	ACX307AKD-1
⚠ND901	1-518-796-11	TUBE, FLUORESCENT,COLD CATHODE

COVER

5. REPAIR PARTS LIST

5-1-5. CABINET (R) BLOCK ASSEMBLY

ns: not supplied

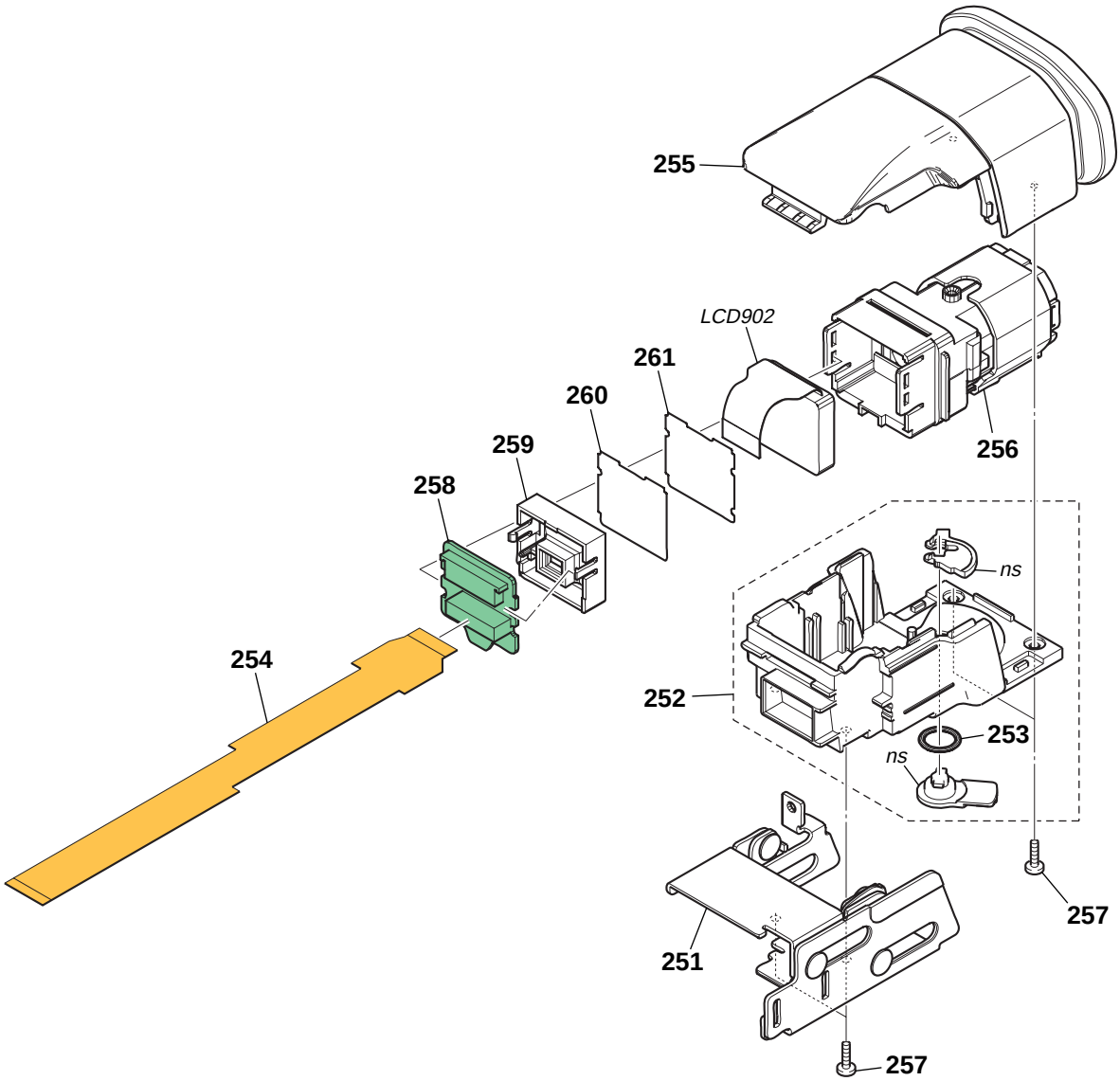


Ref. No.	Part No.	Description
201	X-3953-038-2	CABINET (R) (33) ASSY (TRV345E)
201	X-3953-039-2	CABINET (R) (36) ASSY (TRV350/TRV351/TRV355E/TRV356E)
202	3-959-978-02	CUSHION, PANEL
203	3-079-059-11	COVER (C) (30), HINGE
204	X-3952-973-1	HINGE (30) ASSY
205	3-079-057-01	BRACKET (30), HINGE
206	3-079-058-01	COVER (M) (30), HINGE
207	1-961-989-11	HARNESS (PD-118)

Ref. No.	Part No.	Description
208	1-477-675-11	SWITCH BLOCK, CONTROL (PR-3000)
209	1-477-673-21	SWITCH BLOCK, CONTROL (CF-3000) (TRV345E)
209	1-477-673-31	SWITCH BLOCK, CONTROL (CF-3000) (TRV350/TRV351/TRV355E/TRV356E)
210	3-080-205-21	SCREW, TAPPING, P2
211	3-989-735-41	SCREW (M1.7), LOCK ACE, P2
212	3-941-343-21	TAPE (A)

5-1-6. EVF BLOCK ASSEMBLY

ns: not supplied

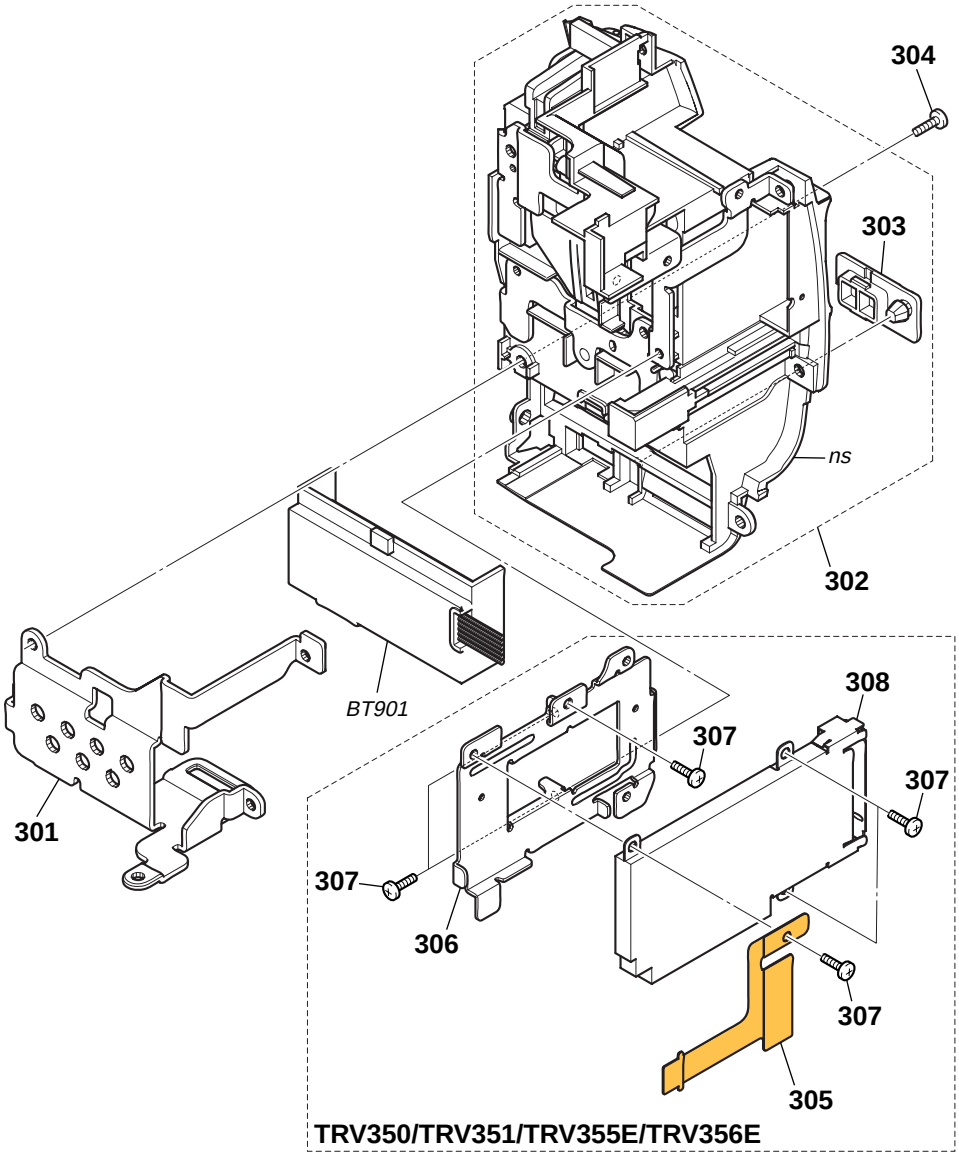


Ref. No.	Part No.	Description
251	X-3952-968-1	HINGE (30) ASSY, VF
252	X-3952-969-1	CABINET (LOWER) (30) ASSY, EVF
253	3-950-044-01	RING, O
254	1-686-854-11	FP-571 FLEXIBLE BOARD
255	X-3952-957-1	CABINET (UPPER) (30) ASSY, EVF
256	X-3952-214-1	LENS (B) ASSY, VF

Ref. No.	Part No.	Description
257	3-065-567-01	TAPPING (M1.7)
258	A-7013-271-A	LB-083 BOARD, COMPLETE
259	3-065-058-01	GUIDE, LAMP
260	3-072-211-01	ILLUMINATOR
261	3-072-210-01	SHEET, PRISM
LCD902	8-753-028-49	LCX032AP-5

5-1-7. BATTERY PANEL BLOCK ASSEMBLY

ns: not supplied



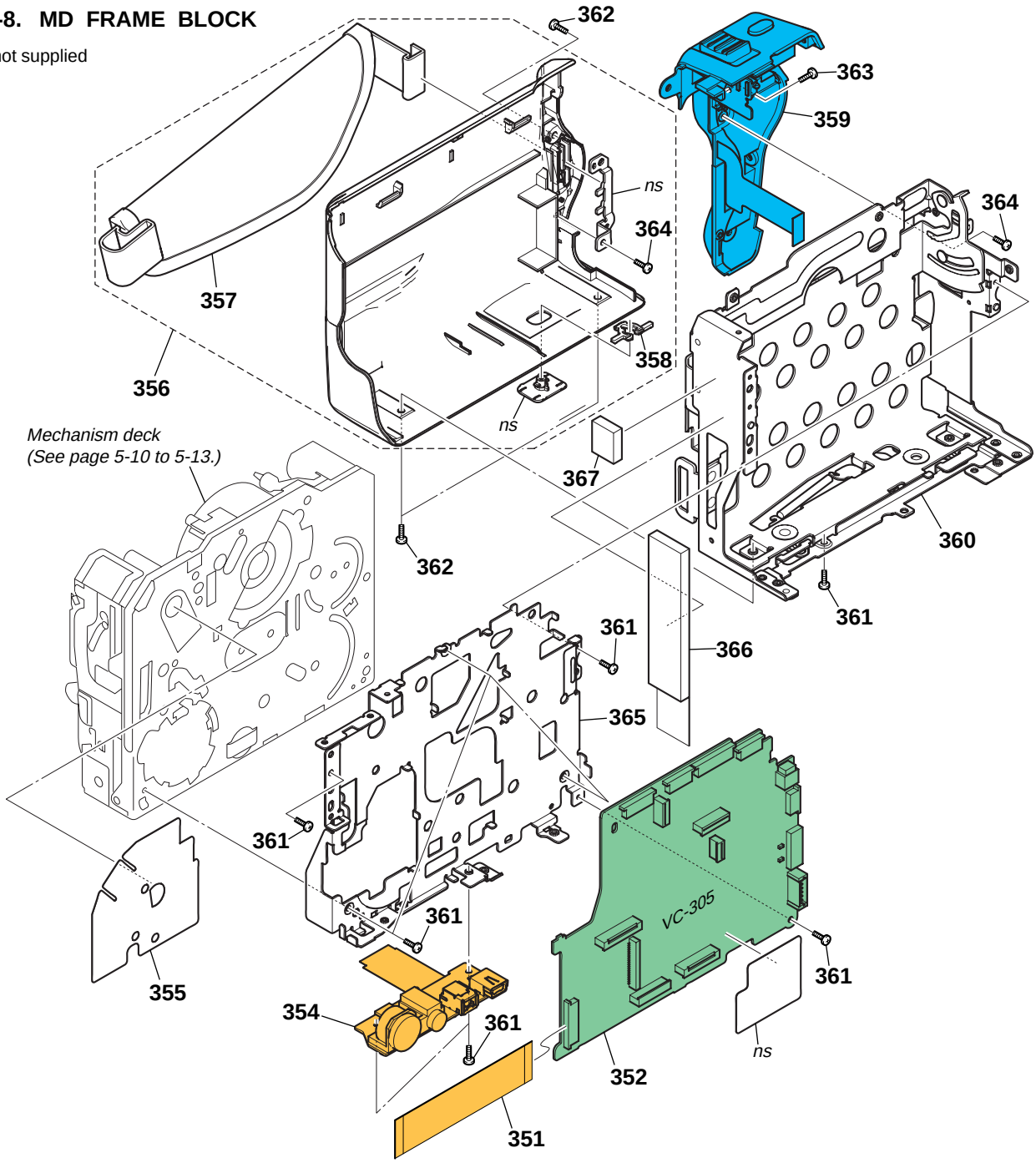
Ref. No.	Part No.	Description
301	3-079-039-03	SHEET METAL (LOWER), STRAP (30)
302	X-3952-954-1	PANEL (30) ASSY, BATTERY (TRV345E)
302	X-3953-082-1	PANEL (36) ASSY, BATTERY (TRV350/TRV351/TRV355E/TRV356E)
303	3-072-305-01	LID (2500), JACK
304	3-067-347-01	MI SCREW M2 (H)
305	1-686-852-11	FP-578 FLEXIBLE BOARD (TRV350/TRV351/TRV355E/TRV356E)
306	3-079-033-01	HOLDER (30), MS (TRV350/TRV351/TRV355E/TRV356E)
307	3-078-889-11	SCREW (M1.7)
308	1-816-271-11	CONNECTOR, MEMORY STICK 10P (TRV350/TRV351/TRV355E/TRV356E)
BT901	1-694-772-11	TERMINAL BOARD, BATTERY

COVER

5. REPAIR PARTS LIST

5-1-8. MD FRAME BLOCK

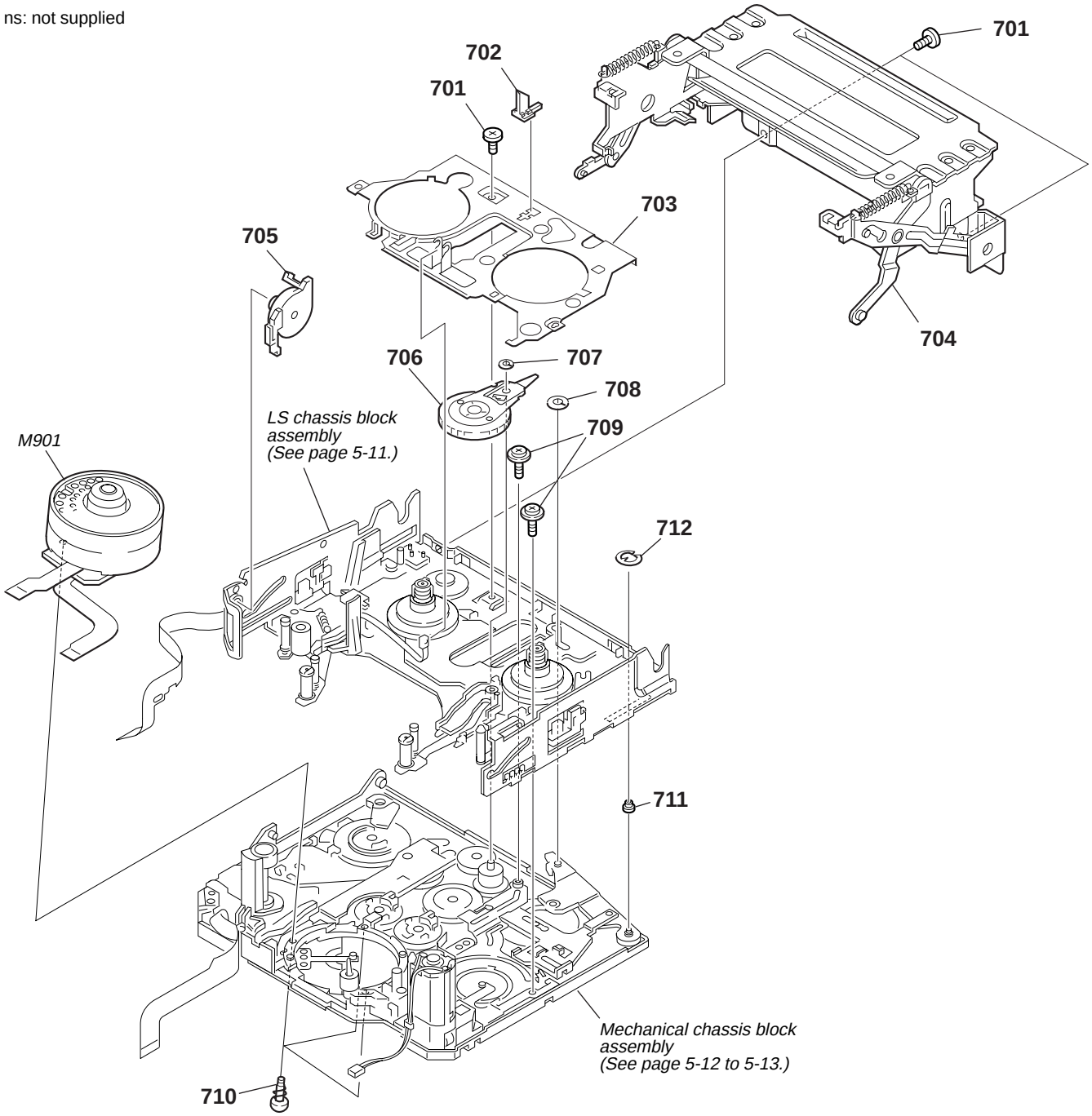
ns: not supplied



Ref. No.	Part No.	Description
351	1-686-857-11	FP-574 FLEXIBLE BOARD
352	A-7013-499-A	VC-305 BOARD, COMPLETE (SERVICE) (TRV350/TRV351)
352	A-7013-500-A	VC-305 BOARD, COMPLETE (SERVICE) (TRV355E/TRV356E)
352	A-7013-501-A	VC-305 BOARD, COMPLETE (SERVICE) (TRV345E)
354	1-686-862-21	FP-577 FLEXIBLE BOARD
355	3-066-169-01	SHEET (30), MD
356	X-3953-081-1	CABINET (L) (33) ASSY
357	3-052-815-01	BELT (ES), GRIP
358	3-978-765-01	SLIDER, G LOCK
359	1-477-674-31	SWITCH BLOCK, CONTROL (SS-3000) (TRV345E)
359	1-477-674-51	SWITCH BLOCK, CONTROL (SS-3000) (TRV350/TRV351/TRV355E/TRV356E)
360	X-3952-970-1	FRAME ASSY (30), CS
361	3-078-889-11	SCREW (M1.7)
362	3-067-347-01	MI SCREW M2 (H)
363	3-080-221-21	SCREW (M2), ES LOCK
364	3-065-567-01	TAPPING (M1.7)
365	3-079-006-01	FRAME (30), MD
366	3-079-176-01	COVER , MD (30)
367	3-081-243-01	SHEET (LT), RADIATION

5-1-9. CASSETTE COMPARTMENT ASSEMBLY, DRUM ASSEMBLY

ns: not supplied



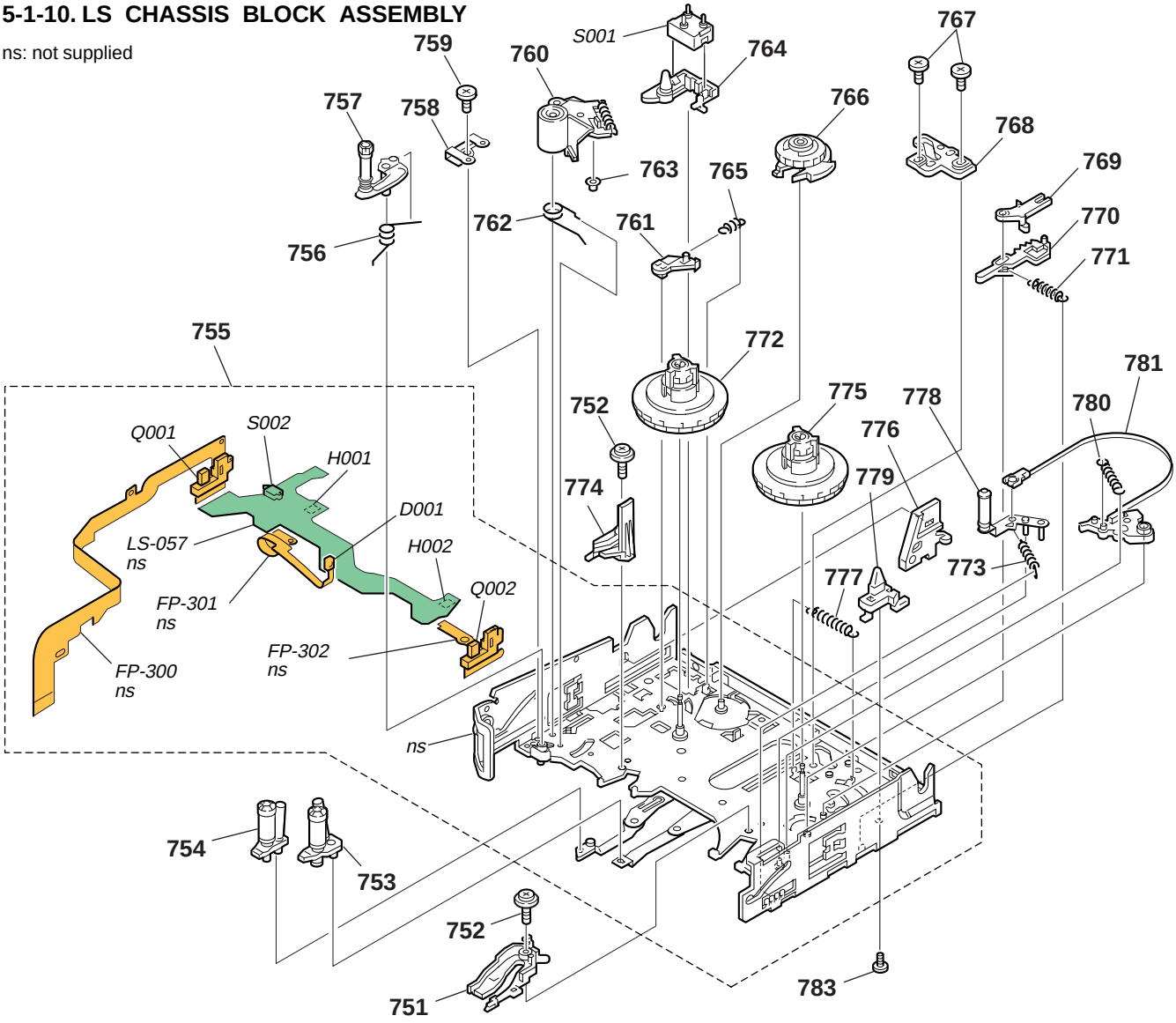
Ref. No.	Part No.	Description
701	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
702	3-065-895-01	LEVER, REEL RELEASE
703	3-065-896-01	PLATE, BLIND
704	X-3951-298-1	CASSETTE COMPARTMENT ASSY
705	X-3951-302-1	DAMPER ASSY
706	X-3951-297-1	GEAR ASSY, R DRIVE
707	3-065-840-01	CUT (0.98X3X0.13), LUMILER (W)
708	3-065-935-01	HLC CUT 1.8X4X0.5
709	3-947-503-01	SCREW (M1.4)
710	X-3951-299-1	SCREW ASSY, DRUM FITTING
711	3-074-309-01	ROLLER A, LS GUIDE
712	7-624-101-04	STOP RING 1.2 (E TYPE)
M901	A-7048-951-A	DRUM (DKH-04A-R) (SERVICE)

COVER

5. REPAIR PARTS LIST

5-1-10. LS CHASSIS BLOCK ASSEMBLY

ns: not supplied

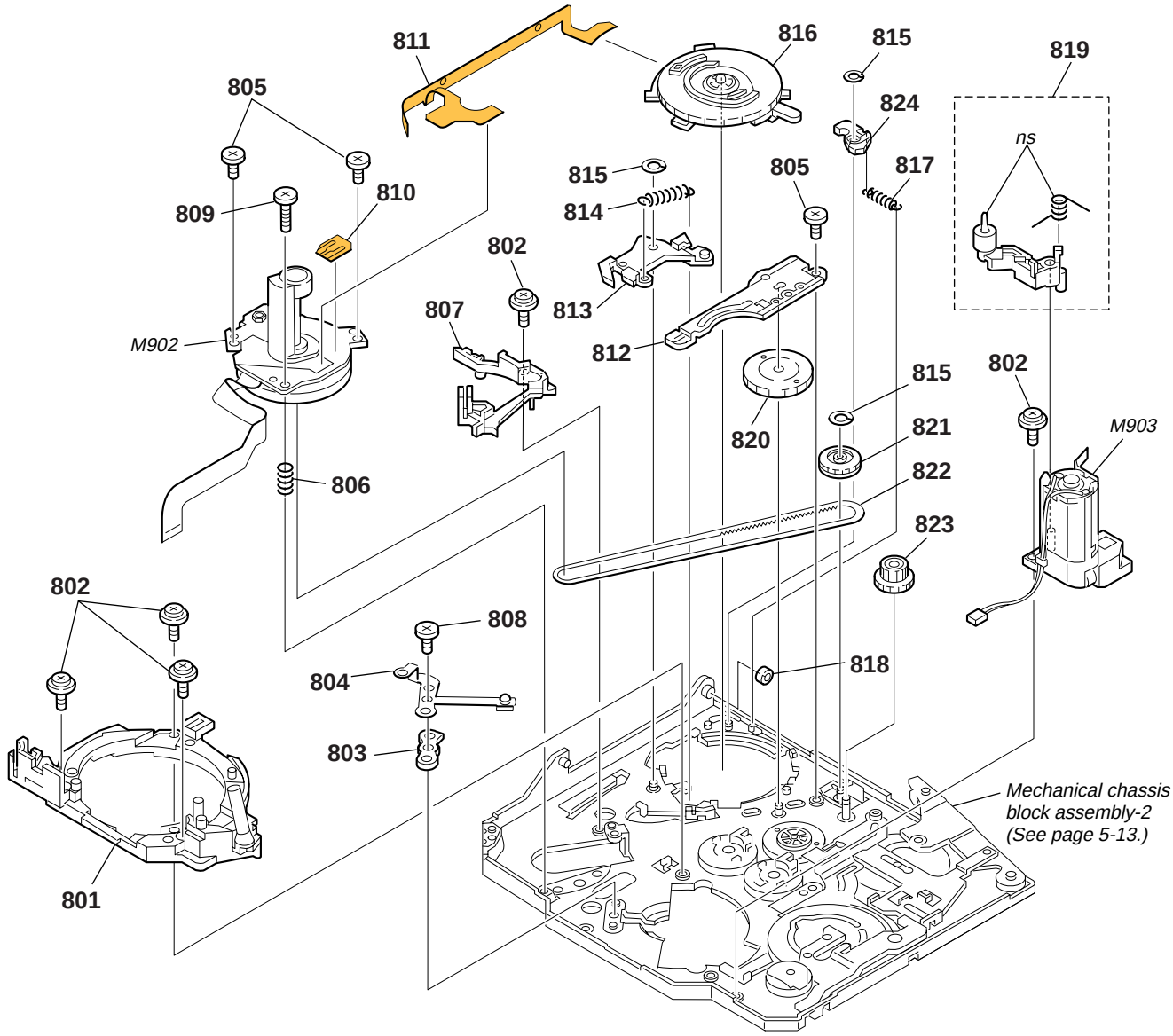


Ref. No.	Part No.	Description
751	3-065-822-02	RAIL (S), GUIDE
752	3-947-503-01	SCREW (M1.4)
753	A-7096-416-B	BASE (S) BLOCK ASSY, GUIDE
754	A-7096-415-A	BASE (T) BLOCK ASSY, GUIDE
755	A-7096-426-A	CHASSIS ASSY, LS
756	3-065-802-01	SPRING, TG7 ARM
757	A-7096-414-A	ARM BLOCK ASSY, TG7
758	3-065-801-01	RETAINER, TG7
759	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
760	X-3951-303-1	ARM ASSY, PINCH
761	3-065-823-01	ARM, T RATCHET
762	3-065-794-01	ROAD (SPR), PINCH ARM
763	3-065-792-01	ROLLER, P LIM ARM
764	3-065-834-01	GUIDE (T), CASSETTE
765	3-065-824-01	SPRING, T RATCHET
766	A-7096-417-A	SOFT ASSY, T
767	3-071-650-01	SCREW (M1.7) (S)
768	3-065-832-01	PLATE, LS CAM
769	3-065-828-01	ARM, S RATCHET
770	3-065-829-01	PLATE, S RATCHET (RE)

Ref. No.	Part No.	Description
771	3-065-830-01	SPRING, S RATCHET
772	X-3951-288-1	TABLE (T) ASSY, REEL
773	3-065-819-01	SPRING, TG1 ARM
774	3-065-821-01	RAIL (T), GUIDE
775	X-3951-289-1	TABLE (S) ASSY, REEL
776	3-065-833-01	GUIDE, LOCK
777	3-065-831-01	PLATE (SPR), RE RETURN
778	X-3951-304-1	ARM ASSY, TG1
779	3-065-835-01	GUIDE (S), CASSETTE
780	3-065-820-01	SPRING, RVS ARM
781	X-3951-296-1	BAND (ASSY), BT
783	3-067-167-01	SCREW (M1.4X2), CAMERA TAPPING
D001	8-719-988-42	DIODE GL453 (TAPE LED)
H001	8-719-033-37	ELEMENT, HALL HW-105C (T REEL)
H002	8-719-033-37	ELEMENT, HALL HW-105C (S REEL)
Q001	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE TOP)
Q002	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE END)
S001	1-692-614-11	SWITCH, PUSH (3 KEY) (REC PROOF)
S002	1-572-688-11	SWITCH, PUSH LEVER (1 KEY) (C. C. LOCK)

5-1-11. MECHANICAL CHASSIS BLOCK ASSEMBLY-1

ns: not supplied



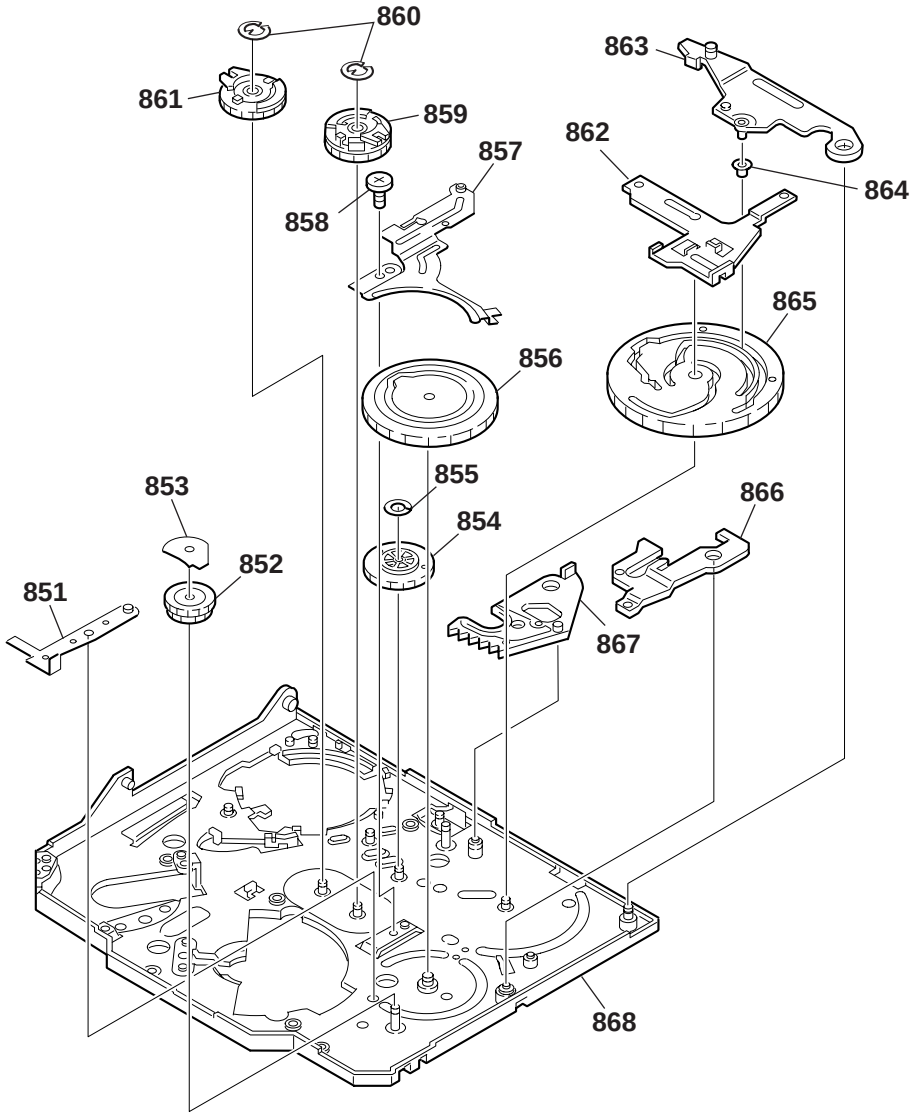
Ref. No.	Part No.	Description
801	A-7096-422-A	BASE ASSY, DRUM
802	3-947-503-01	SCREW (M1.4)
803	3-065-928-01	SPACER, GROUND
804	3-065-927-01	GROUND, DRUM
805	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
806	3-067-154-01	SPRING, CAPSTAN
807	3-065-931-01	RAIL (T2), GUIDE
808	X-3947-398-1	SCREW ASSY, M1.7 PW
809	3-065-933-01	PAN (2 MAIN 1.4X4.5), CAMERA
810	1-677-049-11	FP-228 FLEXIBLE BOARD
811	1-680-434-11	FP-299 FLEXIBLE BOARD
812	3-065-877-01	PLATE (T), GUIDE LOCK
813	X-3951-301-1	PLATE ASSY, PINCH PRESSURE

Ref. No.	Part No.	Description
814	3-065-881-01	SPRING, P PRESSURE PLATE
815	3-065-934-01	HLW CUT 0.98X3X0.25
816	1-786-096-11	SWITCH, ROTARY
817	3-065-898-01	SPRING, EJECT ARM
818	3-065-870-01	ROLLER, LS GUIDE
819	A-7096-421-A	ARM ASSY, HCL
820	3-065-918-01	GEAR (2), CAM RELAY
821	A-7096-419-A	GEAR ASSY, CHANGE
822	3-065-902-01	BELT, TIMING
823	3-065-905-01	GEAR, RELAY
824	3-065-882-01	ARM, EJECT
M902	8-835-701-01	MOTOR, DC SCE13A/C-NP (CAPSTAN)
M903	A-7096-420-A	MOTOR ASSY, LD (LOADING)

COVER

5. REPAIR PARTS LIST

5-1-12. MECHANICAL CHASSIS BLOCK ASSEMBLY-2



Ref. No.	Part No.	Description
851	3-065-920-01	ARM, HC DRIVE
852	3-065-913-01	GEAR (4), LD
853	3-065-914-01	SHEET, COVER
854	3-065-917-01	GEAR (1), CAM RELAY
855	3-065-934-01	HLW CUT 0.98X3X0.25
856	3-065-915-01	GEAR (1), CAM
857	3-065-878-01	PLATE (S), GUIDE LOCK
858	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
859	A-7096-413-A	GEAR (S) ASSY, GUIDE

Ref. No.	Part No.	Description
860	7-624-101-04	STOP RING 1.2 (E TYPE)
861	A-7096-412-A	GEAR (T) ASSY, GUIDE
862	X-3951-307-1	PLATE ASSY, M SLIDE
863	X-3951-305-1	ARM ASSY, LS
864	3-065-901-01	ROLLER, LS ARM
865	3-065-916-01	GEAR (2), CAM
866	3-065-919-01	ARM, T1 LIMITTER
867	X-3951-308-1	ARM ASSY, GL
868	X-3951-300-2	CHASSIS ASSY, MECHANICAL

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-7013-263-A	CD-418 BOARD, COMPLETE (TRV350/TRV351)			
	A-7013-270-A	CD-418 BOARD, COMPLETE (TRV345E/TRV355E/ TRV356E)			
		**********			
		(IC951 is not include in this complete board.)			
		< CAPACITOR >			
C951	1-126-395-11	ELECT	22uF	20%	16V
C953	1-128-994-21	ELECT CHIP	47uF	20%	10V
C954	1-164-858-11	CERAMIC CHIP	22PF	5%	50V (TRV345E/TRV355E/TRV356E)
C955	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< CONNECTOR >			
CN951	1-779-331-11	CONNECTOR, FFC/FPC 14P			
		< IC >			
IC951	A-7013-400-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV350/TRV351)			
IC951	A-7013-403-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV345E/TRV355E/TRV356E)			
		< COIL >			
L951	1-469-528-91	INDUCTOR	100uH		
		< TRANSISTOR >			
Q951	8-729-117-73	TRANSISTOR	2SC4178-F14		
		< RESISTOR >			
R952	1-218-940-11	RES-CHIP	82	5%	1/16W (TRV350/TRV351)
R952	1-218-990-11	SHORT CHIP	0 (TRV345E/TRV355E/TRV356E)		
R953	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R961	1-218-990-11	SHORT CHIP	0 (TRV350/TRV351)		
R962	1-218-990-11	SHORT CHIP	0 (TRV345E/TRV355E/TRV356E)		
R963	1-218-990-11	SHORT CHIP	0 (TRV350/TRV351)		
R964	1-218-990-11	SHORT CHIP	0 (TRV345E/TRV355E/TRV356E)		
R965	1-218-990-11	SHORT CHIP	0 (TRV350/TRV351)		
R967	1-218-990-11	SHORT CHIP	0 (TRV345E/TRV355E/TRV356E)		
		FP-300 FLEXIBLE BOARD (Not Supplied)			
		**********			
		< PHOTO TRANSISTOR >			
Q001	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE TOP)			
		FP-301 FLEXIBLE BOARD (Not Supplied)			
		**********			
		< DIODE >			
D001	8-719-988-42	DIODE GL453S (TAPE LED)			
		FP-302 FLEXIBLE BOARD (Not Supplied)			
		**********			
		< PHOTO TRANSISTOR >			
Q002	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE END)			
	A-7013-271-A	LB-083 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-164-505-11	CERAMIC CHIP	2.2uF		16V
		< CONNECTOR >			
CN701	1-779-334-11	CONNECTOR, FFC/FPC 20P			
CN702	1-691-354-21	CONNECTOR, FFC/FPC (ZIF) 16P			
		< DIODE >			
D701	8-719-082-33	DIODE NSCW100-T38 (BACKLIGHT)			
D702	6-500-506-01	DIODE TLRMV1021 (T15SOY, F) (TALLY)			
		< IC >			
IC701	8-759-581-11	IC NJM2125F (TE2)			
		< TRANSISTOR >			
Q701	8-759-054-48	TRANSISTOR	UP046001008S0		
		< RESISTOR >			
R701	1-208-941-11	METAL CHIP	180K	0.5%	1/16W
R702	1-208-719-11	METAL CHIP	33K	0.5%	1/16W
R703	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R704	1-211-977-11	METAL CHIP	22	0.5%	1/10W
		LS-057 BOARD (Not Supplied)			
		**********			
		< HALL ELEMENT >			
H001	8-719-033-37	ELEMENT, HALL HW-105C (T RELL)			
H002	8-719-033-37	ELEMENT, HALL HW-105C (S RELL)			
		< SWITCH >			
S001	1-692-614-11	SWITCH, PUSH (3 KEY) (REC PROOF)			
S002	1-572-688-11	SWITCH, PUSH LEVER (1 KEY) (C. C. LOCK)			
	A-7013-269-A	PD-181 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5501	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C5504	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5505	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5506	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5507	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5509	1-110-457-11	ELECT CHIP	3.3uF	20%	25V

(Note) Be sure to read "Precautions for Replacement of CCD Imager" on page 4-8 when changing the CCD imager.

Ref. No.	Part No.	Description			
C5510	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5511	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C5512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5515	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5516	1-164-870-11	CERAMIC CHIP	68PF	5%	50V
C5517	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5518	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5519	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5527	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5532	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C5533	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C5534	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C5536	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5540	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5603	1-164-657-11	CERAMIC CHIP	0.015uF	10%	50V
C5604	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5605	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
⚠C5606	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV
C5607	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
		< CONNECTOR >			
CN5501	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
* CN5502	1-573-984-11	CONNECTOR, BOARD TO BOARD 10P			
CN5601	1-764-709-11	CONNECTOR, FFC/FPC (LIF) 10P			
CN5701	1-794-998-31	PIN, CONNECTOR 20P			
CN5702	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
		< DIODE >			
D5502	8-719-084-47	DIODE 1SV290 (TPL3)			
D5503	8-719-050-42	DIODE RD3.3UM-T1B			
D5601	8-719-073-01	DIODE MA111- (K8).S0			
		< IC >			
IC5501	8-759-660-93	IC RB5P004AM1			
IC5502	8-752-407-33	IC CXD3512R-T4			
IC5601	8-759-564-49	IC TC7W53FU (TE12R)			
IC5602	8-759-075-70	IC TA75S393F			
		< COIL >			
L5501	1-414-756-11	INDUCTOR	47uH		
L5505	1-412-949-21	INDUCTOR	6.8uH		
L5601	1-428-878-11	INDUCTOR	82uH		
L5602	1-412-056-11	INDUCTOR	4.7uH		
		< TRANSISTOR >			
Q5503	8-729-054-48	TRANSISTOR	UP04601008S0		
Q5504	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q5505	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q5506	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q5508	8-729-054-48	TRANSISTOR	UP04601008S0		
Q5601	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q5604	6-550-065-01	TRANSISTOR	CPH5504-TL-E		
		< RESISTOR >			
R5501	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5503	1-218-974-11	METAL CHIP	56K	0.5%	1/16W
R5505	1-218-967-11	RES-CHIP	15K	5%	1/16W
R5506	1-218-958-11	RES-CHIP	2.7K	5%	1/16W
R5507	1-218-973-11	RES-CHIP	47K	5%	1/16W

Ref. No.	Part No.	Description			
R5508	1-218-975-11	RES-CHIP	68K	5%	1/16W
R5509	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5510	1-218-975-11	RES-CHIP	68K	5%	1/16W
R5511	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5512	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5522	1-218-971-11	RES-CHIP	33K	5%	1/16W
R5542	1-216-864-11	METAL CHIP	0	5%	1/10W
R5551	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5572	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5573	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5574	1-208-957-11	RES-CHIP	820K	5%	1/16W
R5575	1-218-975-11	RES-CHIP	68K	5%	1/16W
R5576	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5577	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5578	1-218-966-11	RES-CHIP	12K	5%	1/16W
R5579	1-218-979-11	RES-CHIP	150K	5%	1/16W
R5588	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5590	1-218-990-11	SHORT CHIP	0		
R5592	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5602	1-218-980-11	RES-CHIP	180K	5%	1/16W
R5603	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5606	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5607	1-218-949-11	RES-CHIP	470	5%	1/16W
R5610	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB5501	1-234-372-21	RES, NETWORK 100 x4 (1005)			
RB5502	1-234-381-21	RES, NETWORK 100K x4 (1005)			
RB5601	1-234-378-21	RES, NETWORK 10K x4 (1005)			
		< TRANSFORMER >			
⚠T5601	1-435-786-31	TRANSFORMER, INVERTER			
	A-7013-272-A	SI-036 BOARD, COMPLETE			
		**********			
(D752, D753, IC751, SE751 and SE752 are not included in this complete board.)					
		< CAPACITOR >			
C751	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C752	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C755	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C757	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C758	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
		< CONNECTOR >			
CN751	1-816-232-11	PIN, CONNECTOR (PC BOARD) 4P			
CN753	1-779-338-11	CONNECTOR, FFC/FPC 28P			
CN754	1-779-330-21	CONNECTOR, FFC/FPC 12P			
		< DIODE >			
D752	8-719-060-65	DIODE DCC3810 (IR EMITTER)			
D753	8-719-060-65	DIODE DCC3810 (IR EMITTER)			
D754	8-719-064-07	DIODE SML-310LTT86 (TALLY)			
D756	8-719-062-16	DIODE 01ZA8.2 (TPL3)			

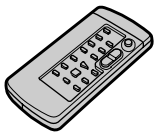
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SI-036

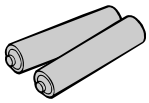
Ref. No.	Part No.	Description			
		< FERRITE BEAD >			
FB753	1-414-813-11	FERRITE	0uH		
		< IC >			
IC751	6-701-681-01	IC RPM7140-V4			
		< COIL >			
L751	1-419-353-21	INDUCTOR	10uH		
		< TRANSISTOR >			
Q751	6-550-091-01	TRANSISTOR 2SA2058 (TE85L)			
Q752	8-729-028-26	TRANSISTOR 2SK1829 (TE85L)			
Q753	8-729-023-22	TRANSISTOR 2SD2114K			
		< RESISTOR >			
R754	1-216-806-11	METAL CHIP	56	5%	1/10W
R755	1-216-806-11	METAL CHIP	56	5%	1/10W
R756	1-216-821-11	METAL CHIP	1K	5%	1/10W
R757	1-216-821-11	METAL CHIP	1K	5%	1/10W
R760	1-216-845-11	METAL CHIP	100K	5%	1/10W
R761	1-216-819-11	METAL CHIP	680	5%	1/10W
R762	1-216-817-11	METAL CHIP	470	5%	1/10W
		< SENSOR >			
SE751	1-803-042-31	SENSOR, ANGULAR VELOCITY (PITCH)			
SE752	1-803-042-41	SENSOR, ANGULAR VELOCITY (YAW)			
		< VARISTOR >			
VDR751	1-801-862-11	VARISTOR, CHIP (1608)			
VDR752	1-801-862-11	VARISTOR, CHIP (1608)			
VDR753	1-801-862-11	VARISTOR, CHIP (1608)			

Electrical parts list of the VC-305 board are not shown.
Pages 5-17 to 5-26 are not shown.

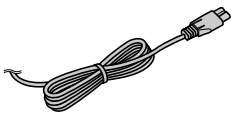
Checking supplied accessories.



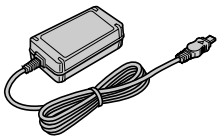
Wireless Remote Commander (1)
RMT-814
1-475-141-61
Lid, battery case (for RMT-814)
3-742-854-01



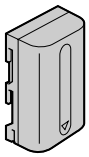
R6 (Size AA) battery
for Remote Commander (2)



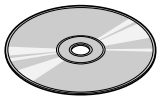
Power Cord (1)
⚠ 1-575-131-11 (AEP, EE, NE, E)
⚠ 1-696-819-21 (AUS)
⚠ 1-776-985-11 (KR)
⚠ 1-782-476-11 (CH)
⚠ 1-783-374-11 (UK)
⚠ 1-790-107-22 (US, CND)
⚠ 1-790-932-11 (JE)



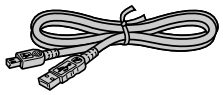
AC-L15A/L15B AC Adaptor (1)
⚠ 1-477-533-31 (EXCEPT BR)



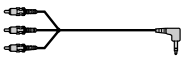
NP-FM30 battery pack (1)
⚠ A-7096-387-A (US, CND)
⚠ A-7096-388-B (EXCEPT US, CND)



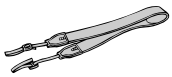
CD-ROM (SPVD-010 USB Driver) (1)
3-078-942-01 (EXCEPT US, CND)
3-078-943-01 (US, CND)



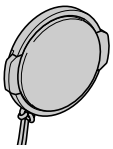
USB cable (1)
1-823-931-11



A/V connecting cable (STEREO) (1)
1-824-097-11

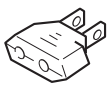


Shoulder strap (1)
3-987-015-01

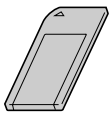


Lens cap (1)
X-3952-971-1

21-pin adaptor (1)
1-770-783-21 (AEP, UK, EE, NE)



Adaptor, conversion 2P
⚠ 1-569-008-12 (E)
⚠ 1-569-007-11 (JE)



"Memory Stick" (1) (TRV350/TRV351/TRV355E/TRV356E)

Other accessories

3-079-467-11 OPERATING INSTRUCTIONS (ENGLISH) (TRV350: US, CND, E, JE/TRV351: E)
3-079-467-21 OPERATING INSTRUCTIONS (FRENCH) (TRV350: CND)
3-079-467-31 OPERATING INSTRUCTIONS (SPANISH, PORTUGUESE) (TRV350: E, JE/TRV351: E)
3-079-467-41 OPERATING INSTRUCTIONS (TRADITIONAL CHINESE) (TRV350: E)
3-079-467-51 OPERATING INSTRUCTIONS (KOREAN) (TRV350: KR, JE)
3-079-467-61 OPERATING INSTRUCTIONS (ARABIC) (TRV350: E)
3-079-468-11 OPERATING INSTRUCTIONS (ENGLISH, FRENCH) (TRV345E: AEP/TRV355E: AEP, UK, E, AUS, JE/TRV356E)
3-079-468-21 OPERATING INSTRUCTIONS (SPANISH, PORTUGUESE) (TRV345E: AEP/TRV355E: AEP)
3-079-468-31 OPERATING INSTRUCTIONS (ITALIAN, GREECE) (TRV345E: AEP/TRV355E: AEP)
3-079-468-41 OPERATING INSTRUCTIONS (GERMAN, DUTCH) (TRV345E: AEP/TRV355E: AEP)
3-079-468-51 OPERATING INSTRUCTIONS (RUSSIAN, SWEDISH) (TRV345E: NE/TRV355E: NE, E, JE)
3-079-468-61 OPERATING INSTRUCTIONS (FINISH, DANISH) (TRV345E: NE/TRV355E: NE)
3-079-468-71 OPERATING INSTRUCTIONS (POLISH, CZECH) (TRV345E: EE/TRV355E: EE)
3-079-468-81 OPERATING INSTRUCTIONS (SLOVAKIAN, HUNGARIAN) (TRV345E: EE/TRV355E: EE)
3-079-468-91 OPERATING INSTRUCTIONS (ARABIC, PERUSSIAN) (TRV355E: E/TRV356E: E)
3-079-469-21 OPERATING INSTRUCTIONS (SIMPLIFIED CHINESE) (TRV355E: E, JE/TRV356E: CH)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-876-218-31

Sony EMCS Co.

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Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2002.12	Official Release	—	—