DCR-TRV255E/TRV260/TRV265/TRV265E

RMT-830

SERVICE MANUAL

Ver 1.0 2003. 11

Revision History

How to use Acrobat Reader

Photo: DCR-TRV265

M2200 MECHANISM

US Model
Canadian Model
DCR-TRV260
AEP Model
UK Model
East European Model
North European Model
DCR-TRV255E/TRV265E
E Model
DCR-TRV260/TRV265/TRV265E
Australian Model
DCR-TRV265E
Tourist Model
DCR-TRV265/TRV265E

Link

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

NTSC MODEL: DCR-TRV260/TRV265
PAL MODEL: DCR-TRV255E/TRV265E

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987629251.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987629241.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.
- TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)
- When the machine needs to be repaired, make sure to follow the items of “LCD TYPE CHECK”.
- Changing the data is needs when IC4501 is replaced, make sure to follow the items of “CHANGE OF IC4501”.
- HELP: Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

Digital 8 VIDEO CAMERA RECORDER

SONY®

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-TRV260/265:
NTSC color, EIA standards
DCR-TRV255E/265E:
PAL color, CCIR standards
Usable cassette
8 mm video format cassette
Tape speed
DCR-TRV260/265:
SP: Approx. 28.67 mm/s
LP: Approx. 19.11 mm/s
DCR-TRV255E/265E:
SP: Approx. 28.70 mm/s
LP: Approx. 19.13 mm/s
Recording/playback time
DCR-TRV260/265:
(using 120 min. Digital8 video cassette)
DCR-TRV255E/265E:
(using 90 min. Digital8 video cassette)
SP: 1 h
LP: 1 h 30 min
Fast forward/rewind time
DCR-TRV260/265:
(using 120 min. Digital8 video cassette)
DCR-TRV255E/265E:
(using 90 min. Digital8 video cassette)
Approx. 5 min
Viewfinder
Electric viewfinder (monochrome)
Image device
3.0 mm (1/6 type) CCD (Charge Coupled Device)
DCR-TRV260/265:
Gross: Approx. 460 000 pixels
Effective: Approx. 290 000 pixels
DCR-TRV255E/265E:
Gross: Approx. 540 000 pixels
Effective: Approx. 350 000 pixels
Lens
Combined power zoom lens
Filter diameter: 37 mm (1 1/2 in.)
20 × (Optical), 990 × (Digital)
F=1.6 - 2.4
Focal length
2.5 - 50 mm (1/8 - 2 in.)
When converted to a 35 mm still camera
42 - 840 mm (1 11/16 - 33 1/8 in.)
Color temperature
Auto
Minimum illumination
4 lx (lux) (F 1.6)
0 lx (lux) (in the NightShot plus mode)*
* Objects unable to be seen due to the dark can be shot with infrared lighting.

Input/Output connectors

S video output
4-pin mini DIN
Luminance signal: 1 Vp-p, 75 Ω (ohms), unbalanced
Chrominance signal:
DCR-TRV260/265: 0.286 Vp-p
DCR-TRV255E/265E: 0.3 Vp-p
75 Ω (ohms), unbalanced
Audio/Video output
AV MINIJACK
Video signal: 1 Vp-p, 75 Ω: (ohms), unbalanced, sync negative
Audio signal: 327 mV (at output impedance more than 47 kΩ: (kilohms)), Output impedance with less than 2.2 kΩ: (kilohms)
Stereo minijack (ø 3.5 mm)
DV input/output
DCR-TRV260/265/265E:
4-pin connector
DV output
DCR-TRV255E:
4-pin connector
USB jack
mini-B

LCD screen

Picture
6.2 cm (2.5 type)
Total dot number
123 200 (560 × 220)

General

Power requirements
DC 7.2 V (battery pack)
DC 8.4 V (AC Adaptor)
Average power consumption (when using the battery pack)
During camera recording using viewfinder
2.5 W
During camera recording using LCD
3.4 W
Operating temperature
0°C to 40°C (32°F to 104°F)
Storage temperature
-20°C to + 60°C (-4°F to + 140°F)
Dimensions (approx.)
85 × 98 × 151 mm (3 3/8 × 3 7/8 × 6 in.) (w/h/d)
Mass (Approx.)
780 g (1 lb 11 oz) main unit only
890 g (1 lb 15 oz) including the NP-FM30 rechargeable battery pack, Digital8 cassette, lens cap, and shoulder strap
Supplied accessories
AC Adaptor (1)
Power cord (1)
Lens cap (1)
Shoulder strap (1)
Wireless Remote Commander (1)
RMT-830: (DCR-TRV265/265E)
A/V connecting cable (1)
USB cable (1)
Rechargeable battery pack NP-FM30 (1)
CD-ROM “SPVD-012 USB Driver” (1)
21-pin adaptor (1)
: (AEP, UK, EE, NE)
Camera Operating Guide (1)
Computer Application Guide (1)
See page 5-22.

AC Adaptor AC-L15A/L15B

Power requirements
AC 100 - 240 V, 50/60 Hz
Current consumption
0.35 - 0.18 A
Power consumption
18 W
Output voltage
DC 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 the projecting parts
Mass (approx.)
190 g (6.7 oz) excluding the 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

Design and specifications are subject to change without notice

Table for differences of function

Model	DCR-TRV255E	DCR-TRV260	DCR-TRV265	DCR-TRV265E	Remark
Destination	AEP, UK, EE, NE	US, CND, E	E, JE	AEP, UK, EE, NE, E, AUS, JE	
Remote commander	×	×	○	○	
Color system	PAL	NTSC	NTSC	PAL	
VTR Rec	×	○	○	○	○: with REC button
DV interface	DV OUT	DV IN/OUT	DV IN/OUT	DV IN/OUT	
LCD type	Please refer to page 1-3 to discriminate the type of LCD (TYPE C or TYPE S).				

- Abbreviation
  AUS : Australian model
  CND : Canadian model
  EE : East European model
  JE : Tourist 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.

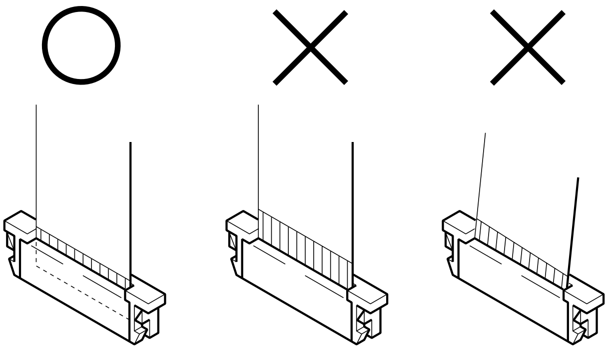
- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed 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

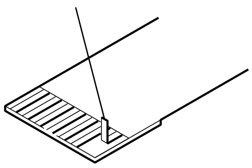
SECTION 1
SERVICE NOTE

1-1. NOTE FOR REPAIR

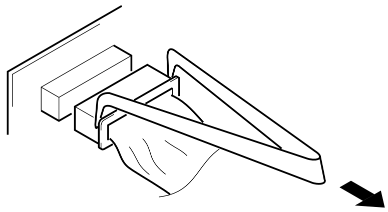
Make sure that the flat cable and flexible board are not cracked of bent at the terminal.
Do not insert the cable insufficiently nor crookedly.



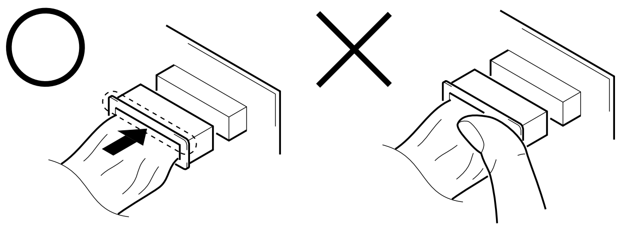
Cut and remove the part of gilt which comes off at the point.
(Be careful or some pieces of gilt may be left inside)



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.



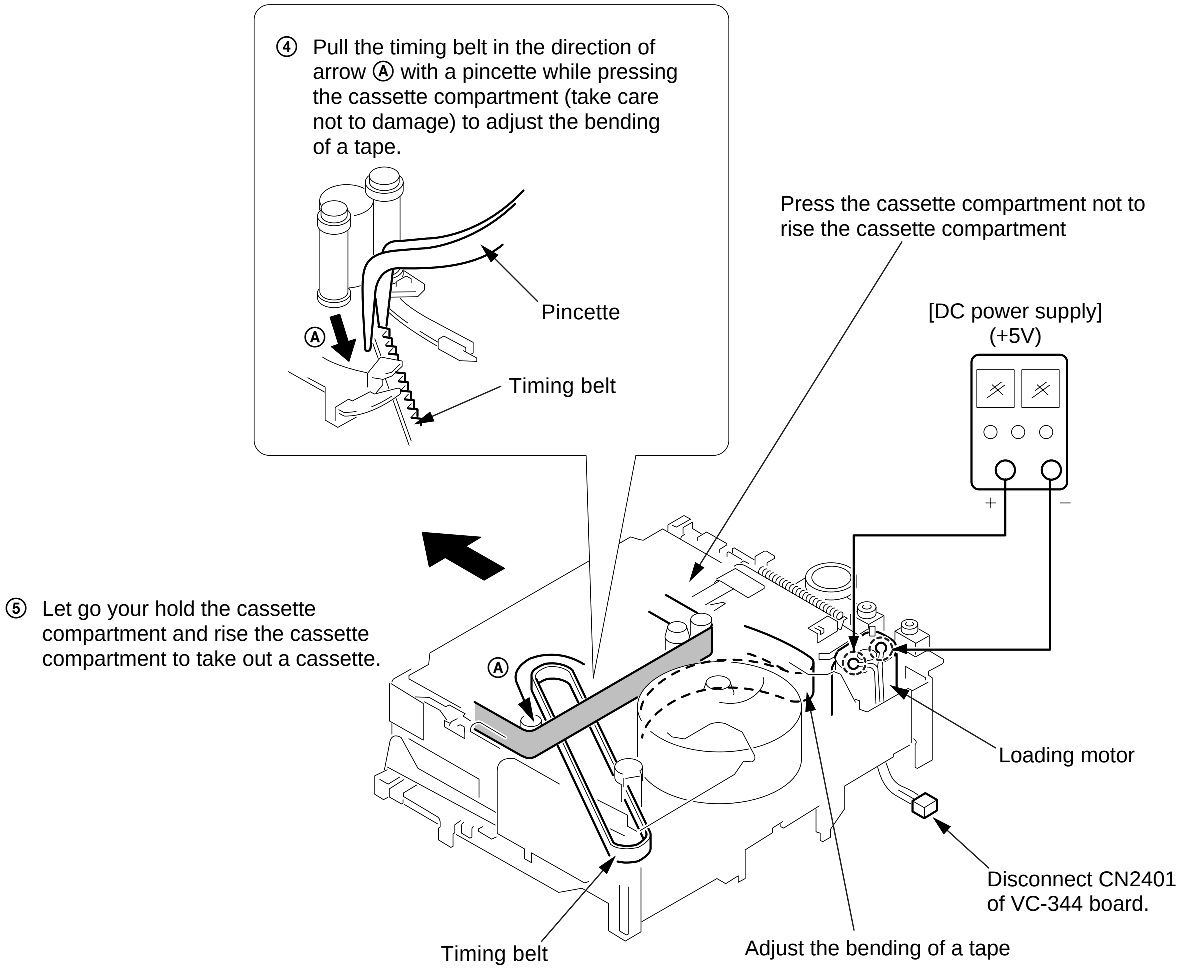
1-2. POWER SUPPLY DURING REPAIRS

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-344 board.
③ Add +5V from the DC POWER SUPPLY and unload with a pressing the cassette compartment.



1-4. LCD TYPE CHECK

The LCD type can be checked with data value by connecting the adjustment remote commander.
Note: About PD-204 board and LCD module, discriminate LCD type on the machine, and replace the same type.

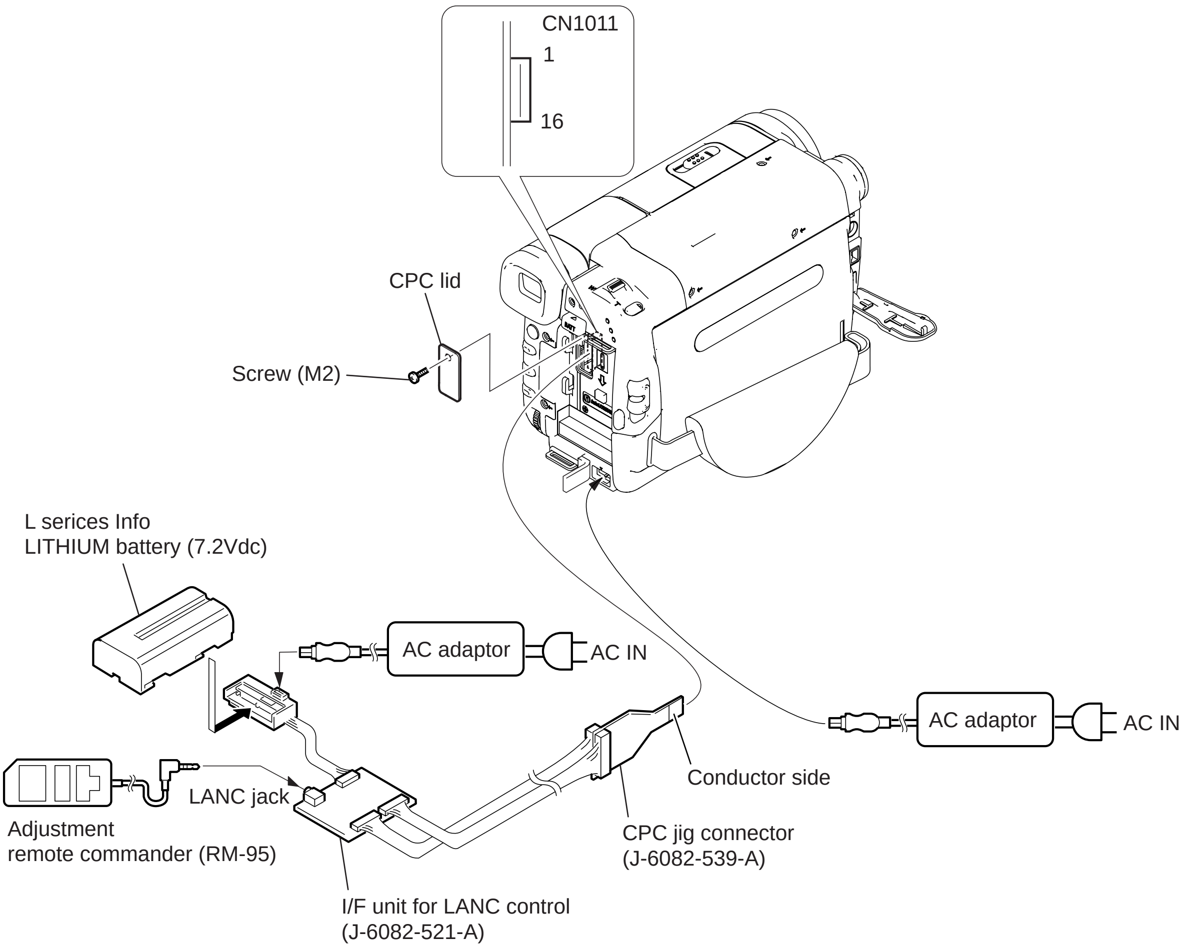
Preparations:

1) Connect the equipment for adjustments according to Fig. 1.
2) Connect the adjustment remote commander to VC-344 board CN1011 via I/F unit for LANC control (J-6082-521-A) and CPC jig connector (J-6082-539-A).
   To operate the adjustment remote commander, connect the AC power adaptor to the DC IN jack of I/F unit for LANC control, or connect the L series Info-LITHIUM battery to the battery terminal of I/F unit for LANC control.

Checking method:

1) Select page: 3, address: CC.
2) By checking the data value of display data, the type of LCD can be discriminated.

Data	LCD type
64 to 67	TYPE C
40 to 43	TYPE S



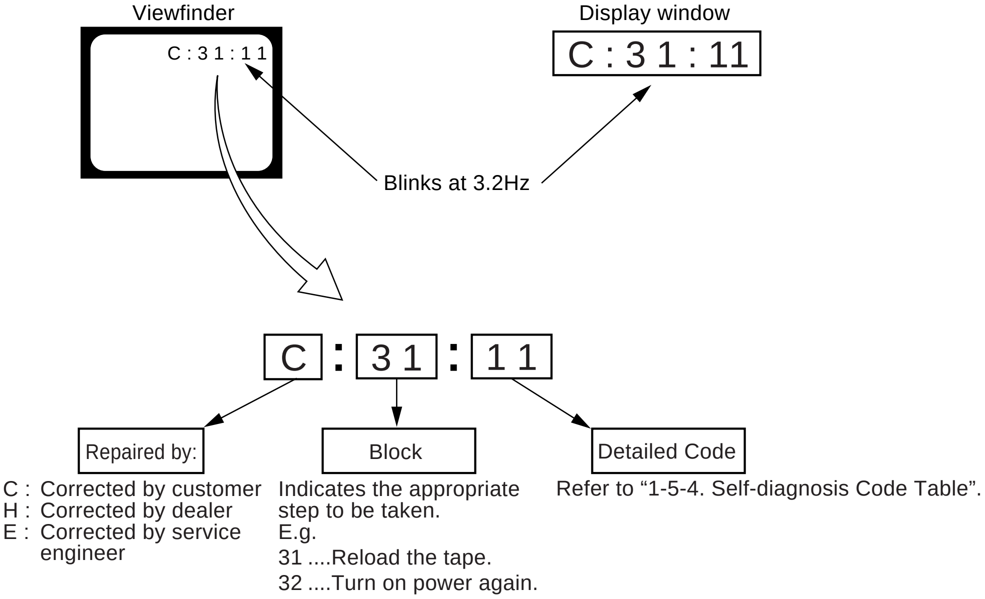
1-5. SELF-DIAGNOSIS FUNCTION

1-5-1. 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.

1-5-2. 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.

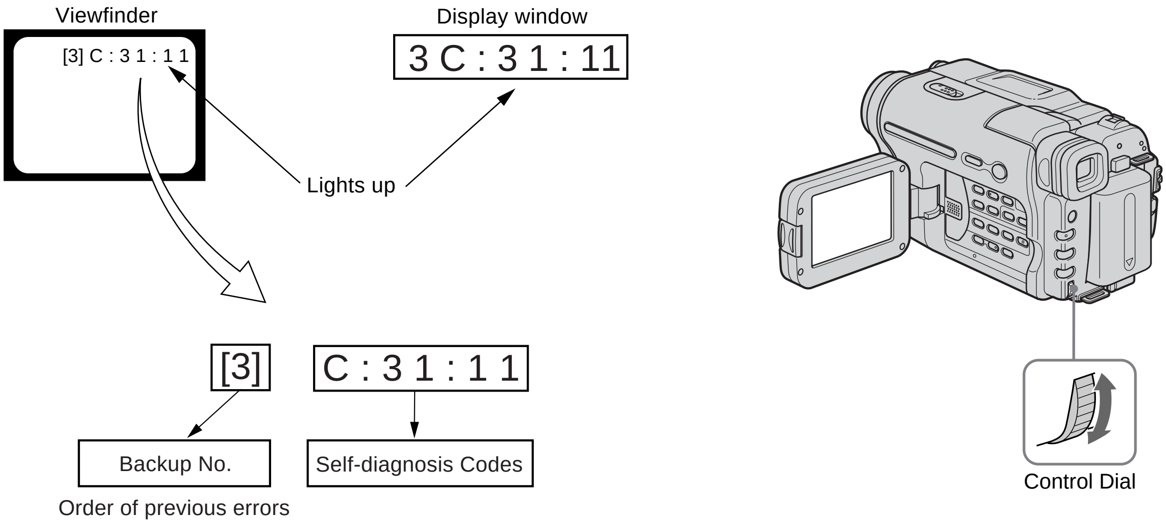


1-5-3. Service Mode Display

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 “ON”, 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 not be erased (reset), when the lithium battery (CONTROL KEY BLOCK (CF-5100): BT001) is removed.

1-5-4. 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 InfoLITHIUM 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	S reel side tape slacking when unloading.	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	3 0	FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3 1	3 1	FG fault during normal capstan operations.	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 1	PG 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	4 3	PG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3 1	4 4	Phase 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	S reel side tape slacking when unloading.	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	3 0	FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	3 1	FG fault during normal capstan operations.	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 1	PG 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.
C	3 2	4 3	PG fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	4 4	Phase fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.

Self-diagnosis Code			Symptom/State	Correction
Repaired by:	Block Function	Detailed Code		
E	6 1	0 0	Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus reset sensor (Pin ⑫ of CN1551 of VC-344 board) when focusing is performed when the control dial is rotated in the focus manual mode and the focus motor drive circuit (IC1553 of VC-344 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 CN1551 of VC-344 board) when zooming is performed when the zoom switch is operated and the zoom motor drive circuit (IC1553 of VC-344 board) when zooming is not performed.

1-6. CHANGE OF IC4501

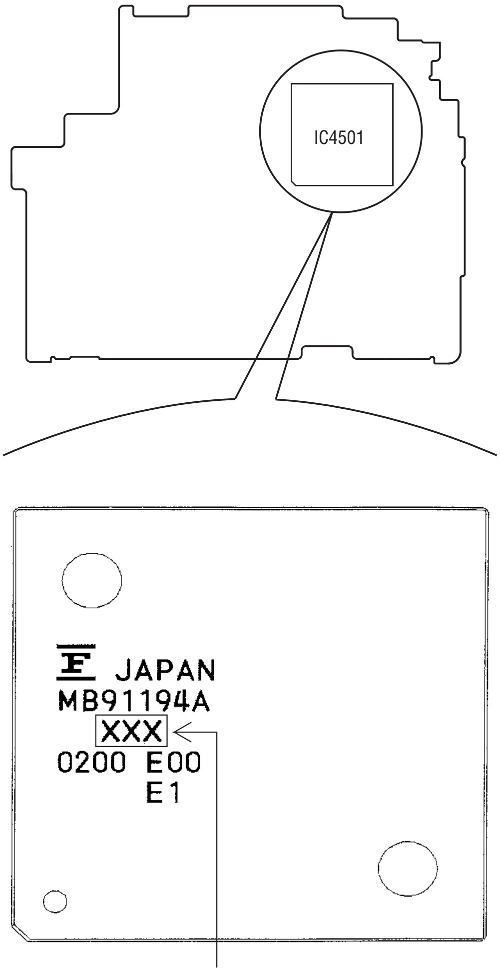
Due to the change of IC4501 (mechanism control), there are two types of versions A and B
The EEPROM data are different according to respective versions.
Also, the IC4501 version can be checked by a discrimination method by the model name or by the adjusting remote commander.

Note 1: Changing the version does not make any changes in schematic diagrams and the rest.

Note 2: Make it sure to confirm the version after replacing IC4501.

1. Discrimination method by the model name of IC4501 (mechanism control)

VC-344 BOARD (SIDE A)



154 : A
155 : B

2. Discrimination method by adjusting remote commander

Version check method:

1) Select page: 3, and address: FF.
2) The version of IC4501 can be checked from the displayed data.

Data	Version
01	A
02	B

Data change method:

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 1C, and input the data in the following table.

Note: To write in the non-volatile memory (EEPROM), press the PAUSE button of the adjustment remote commander each time to set the data.

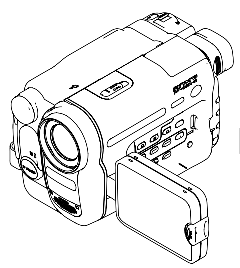
3) Select page: 0, address: 01, and set data: 00.

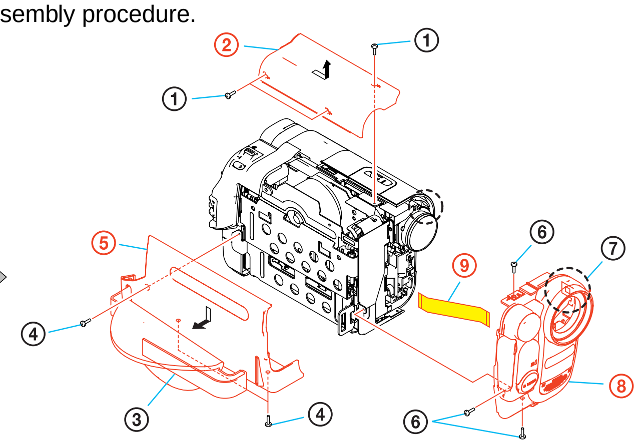
Version / Address	A	B
D0	40	42

SECTION 2
DISASSEMBLY

2-1. FLOW CHART

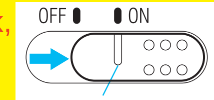
The following flow chart shows the disassembly procedure.



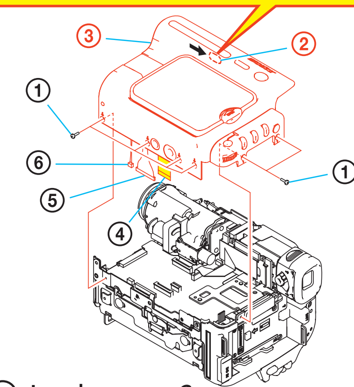


① Lock ace *x3*
② Cabi (upper)
③ Grip belt
④ Lock ace *x3*
⑤ Cabi (L)
⑥ Lock ace *x3*
⑦ Claw
⑧ Front panel
Note: Flexible board is connected.
⑨ FP-796: CN754, CN1001

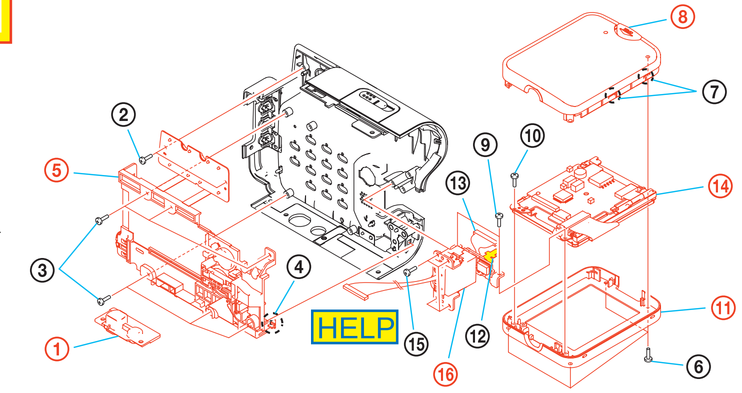
Note: When you remove Cabinet (R) Block, or when you assembly, please slide NS knob to the position of "ON".



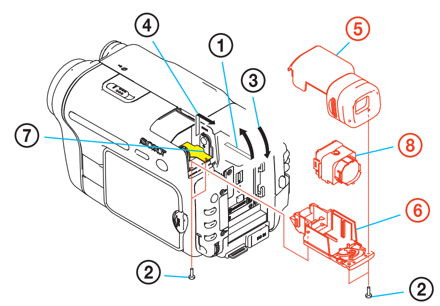
NS knob



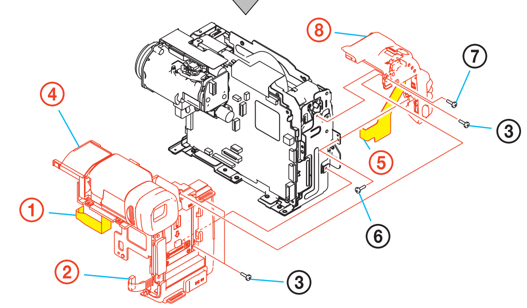
① Lock ace *x6*
② NS knob to the position of "ON".
③ Cabi (R)
④ VC-344: CN1007
⑤ VC-344: CN1003
⑥ VC-344: CN1008



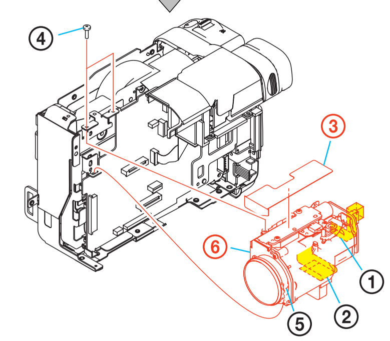
① Tripod Screw
② Tapping P2 *x2*
③ Tapping P2 *x6*
④ Claw
⑤ CF-5100
⑥ Tapping P2 *x4*
⑦ Claw *x2*
⑧ P Cabi (C)
⑨ Tapping P2 *x2*
⑩ Tapping P2 *x1*
⑪ P Cabi (M)
⑫ PD-204: CN6005
⑬ PD-204: CN6001
⑭ PD-204, LCD901, ND901
⑮ Tapping P2 *x4*
⑯ Hinge assy



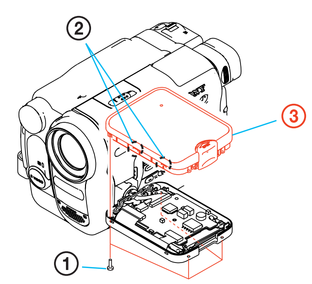
① Lift up the EVF.
② Tapping P2 *x4*
③ Down the EVF.
④ EVF block
⑤ EVF Cabi (upper)
⑥ EVF Cabi (lower)
⑦ FP-797: LCD902
⑧ EVF lens



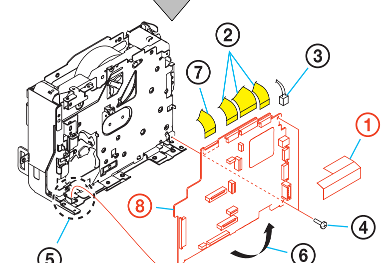
① VC-344: CN1013
② VC-344: CN4001
③ Lock ace *x3*
④ EVF/Battely panel block
⑤ VC-344: CN1009
⑥ Tapping P2 *x1*
⑦ Lock ace *x1*
⑧ SS-5100



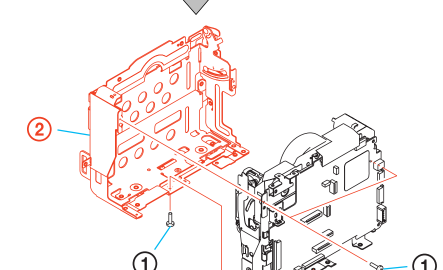
① VC-344: CN1501
② VC-344: CN1551
③ Lens sheet
④ Lock ace *x2*
⑤ Boss
⑥ Lens LSV-820A



① Tapping P2 *x4*
② Claw *x2*
③ P Cabi (C)

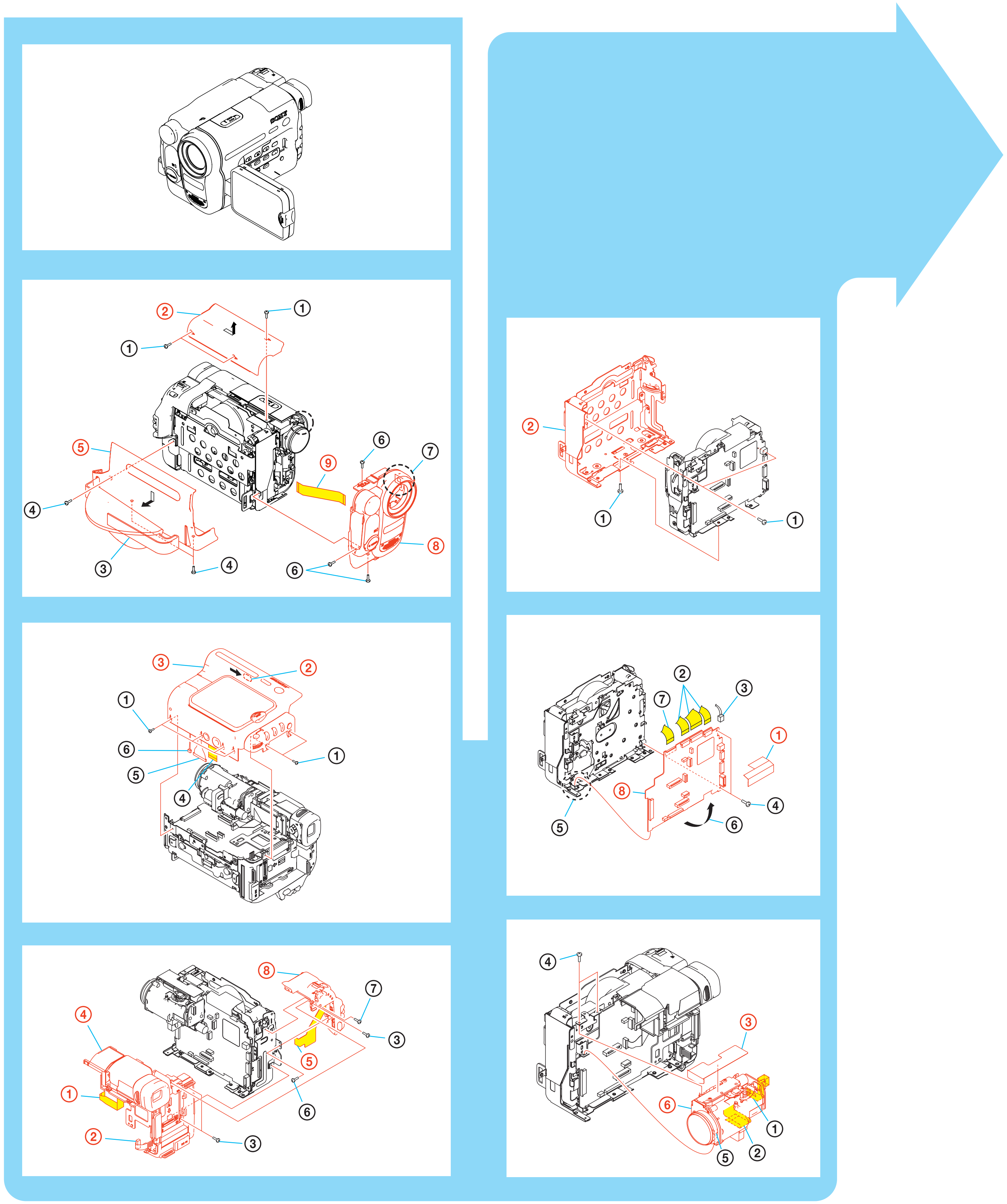


① VF blind sheet
② VC-344: CN2403, CN2404, CN3201
③ VC-344: CN2401
④ Screw (M1.7) *x2*
⑤ Claw
⑥ Open the VC-344.
⑦ VC-344: CN2402
⑧ VC-344



① Screw (M1.7) *x3*
② CS frame

2-2. MECHANISM DECK SERVICE POSITION



Connection to Check the Mechanism deck

To check the mechanism deck, set the Camera or VTR to the "Forced power ON" mode. (Or, connect the control key block (SS-5100) to the CN1009 of VC-344 board and set the power switch to the "CAMERA" or "PLAY/edit" position.) Operate the Camera functions of the zoom and focus, the VTR function using the adjustment remote commander (with the HOLD switch set in the OFF position).

Setting the "Forced Camera Power ON" mode

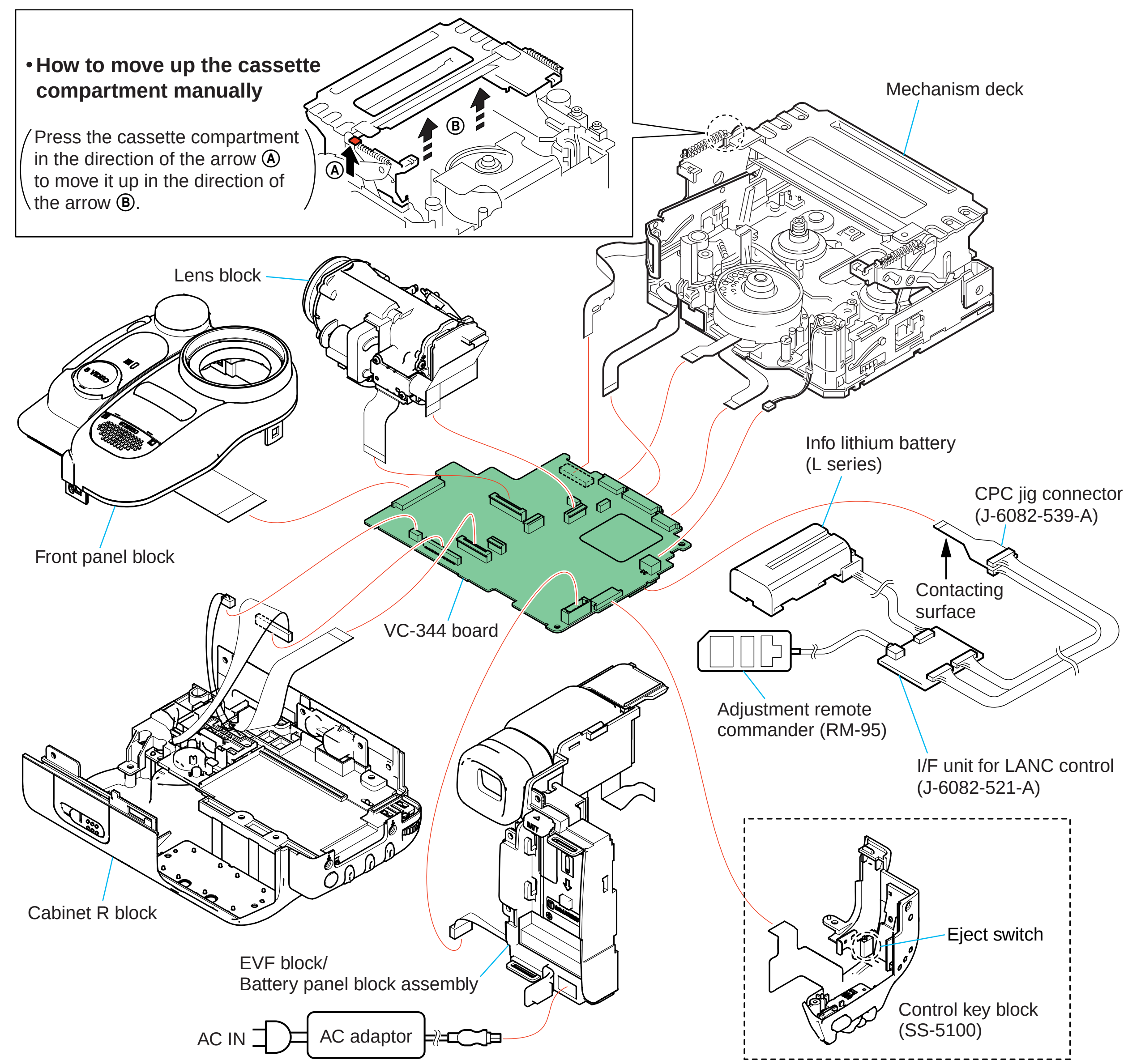
1) Select page: 0, address: 01, and set data: 01.
2) Select page: D, address: 10, set data: 02 and press the PAUSE button of the adjustment remote commander.

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.

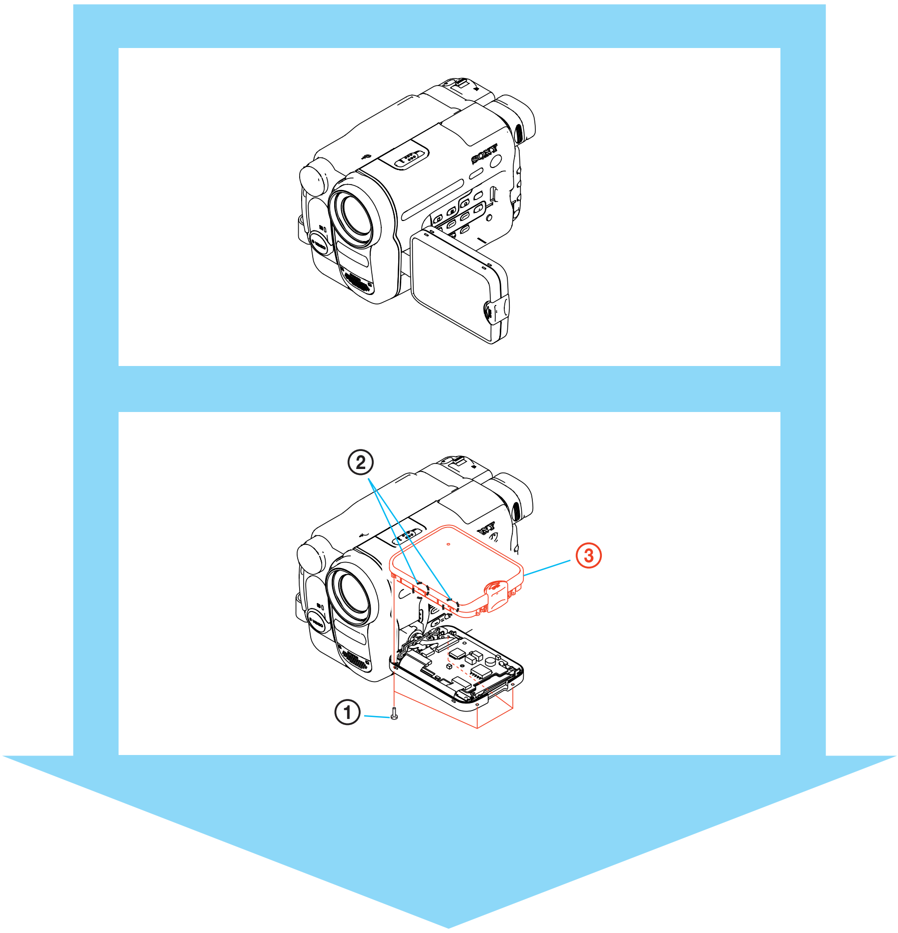
Exiting the "Forced Power ON" mode

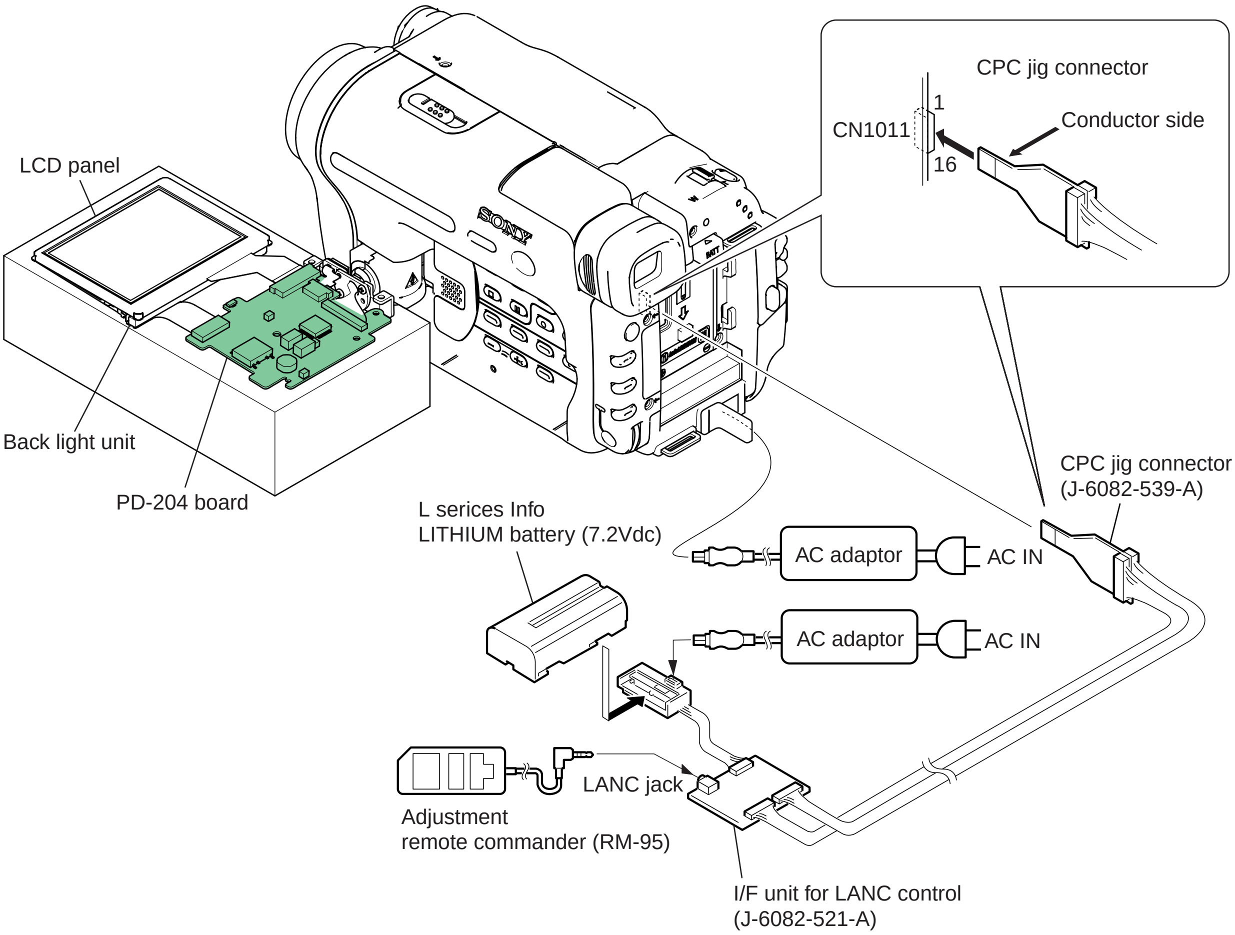
1) Select page: 0, address: 01, and set data: 01.
2) Select page: D, address: 10, data: 00, and press the PAUSE button of the adjustment remote commander.
3) Select page: 0, address: 01, and set data: 00.



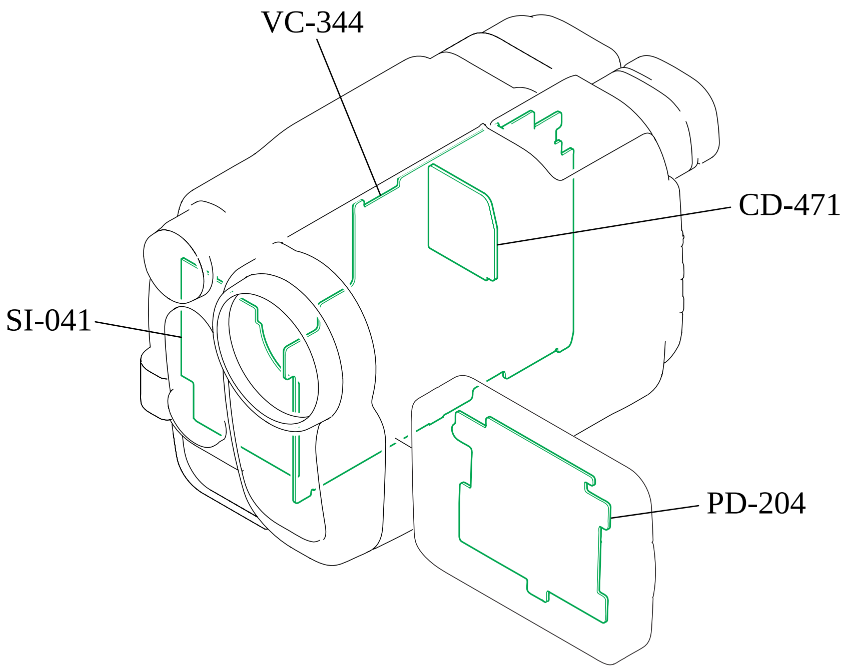
When exiting the "Forced Power ON" mode, connect the control key block (SS-5100) to the CN1009 of VC-344 board. Or, when ejecting the cassette, connect the control key block (SS-5100) to the CN1009 of VC-344 board. and press the Eject switch.

2-3. LCD SERVICE POSITION



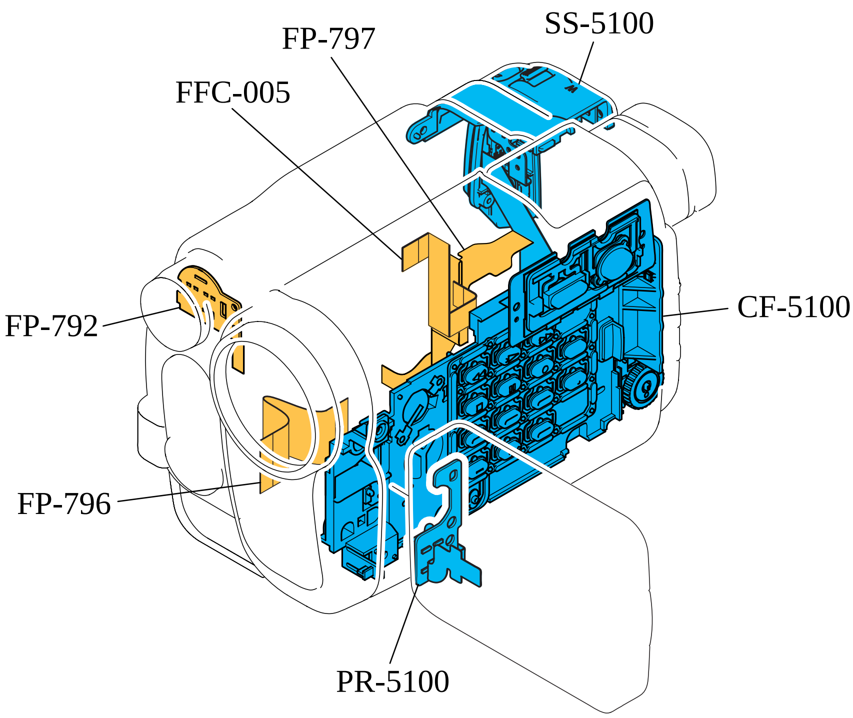


2-4. CIRCUIT BOARDS LOCATION



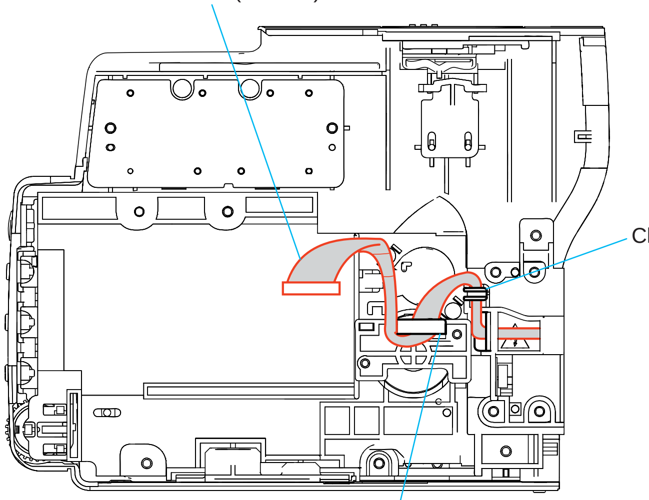
Board Name	Function
CD-471	CCD IMAGER
VC-344	A/D CONVERTER, TIMING GENERATOR, DV SIGNAL PROCESS, LENS CONTROL, STEADYSHOT, DV INTERFACE, VIDEO OUT, LENS DRIVE, REC/PB AMP, SERVO, CAMERA/MECHA CONTROL, HI CONTROL, AUDIO PROCESS, DC CONTROL, CONNECTOR
PD-204	LCD DRIVE, BACKLIGHT DRIVE
SI-041	JACK

2-5. FLEXIBLE BOARDS LOCATION



HELP

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



Note: Close the LCD panel, when you work.

3. BLOCK DIAGRAMS

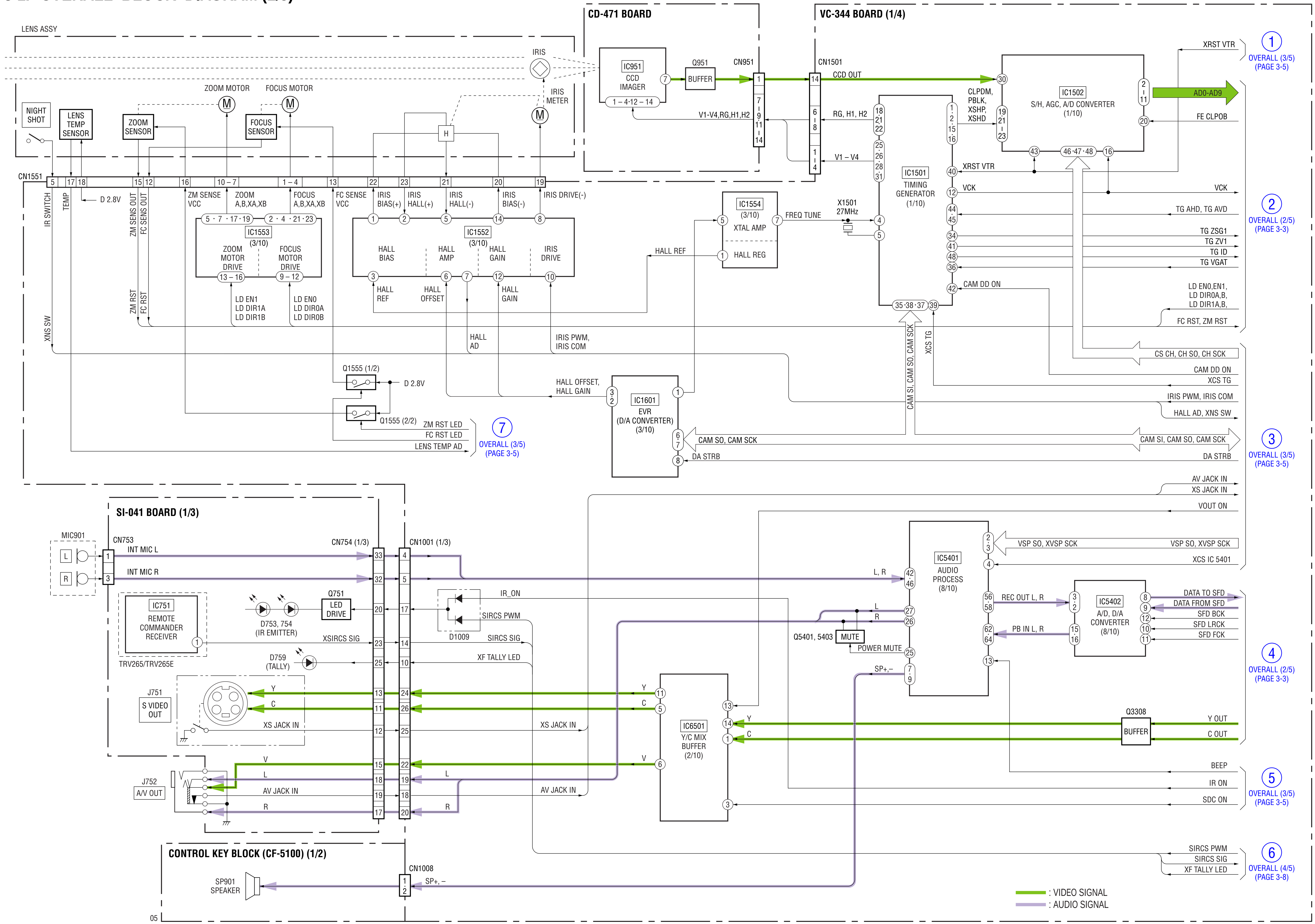
Link

SECTION 3 BLOCK DIAGRAMS

3. BLOCK DIAGRAMS

3-1. OVERALL BLOCK DIAGRAM (1/5)

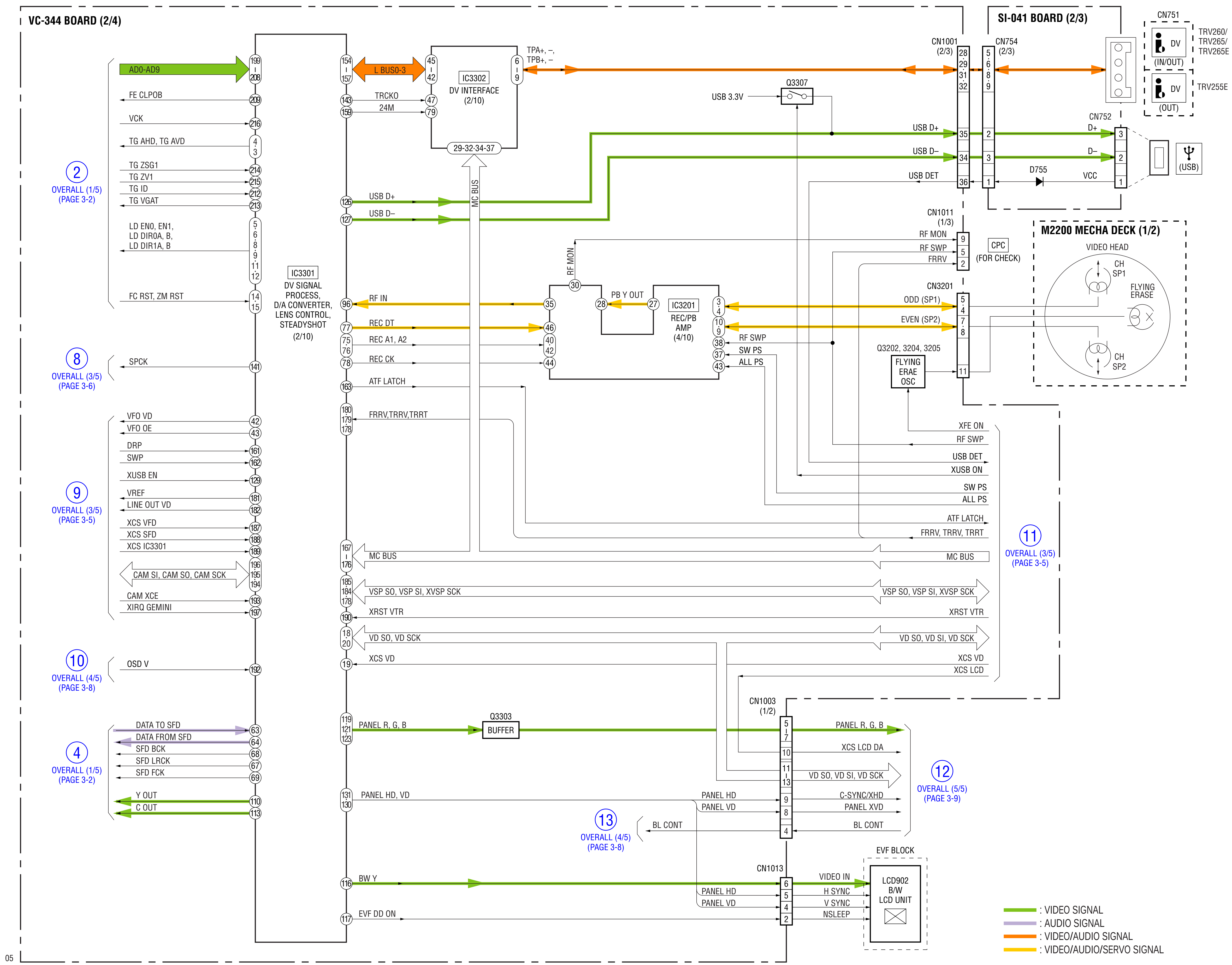
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-2. OVERALL BLOCK DIAGRAM (2/5)

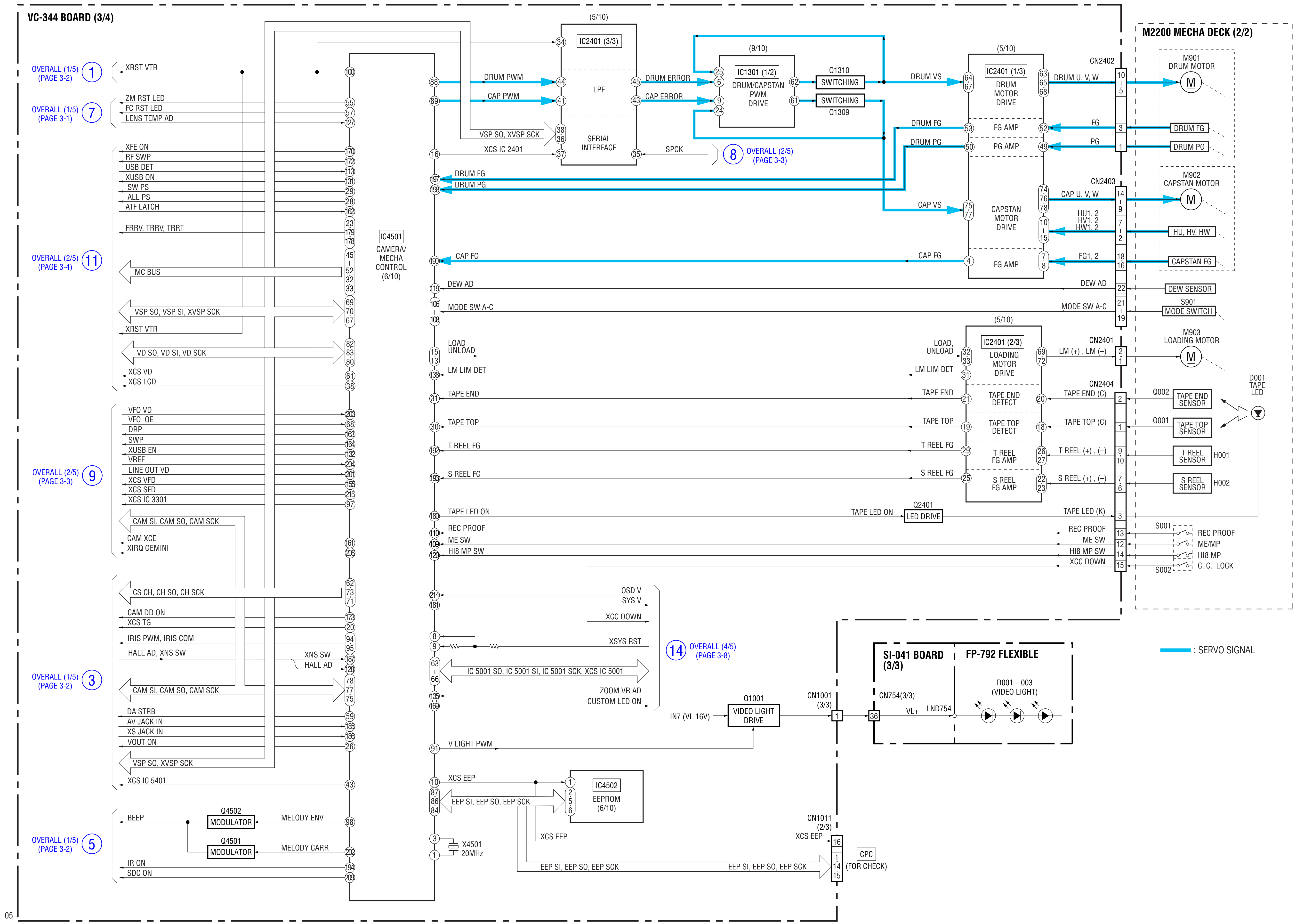
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

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

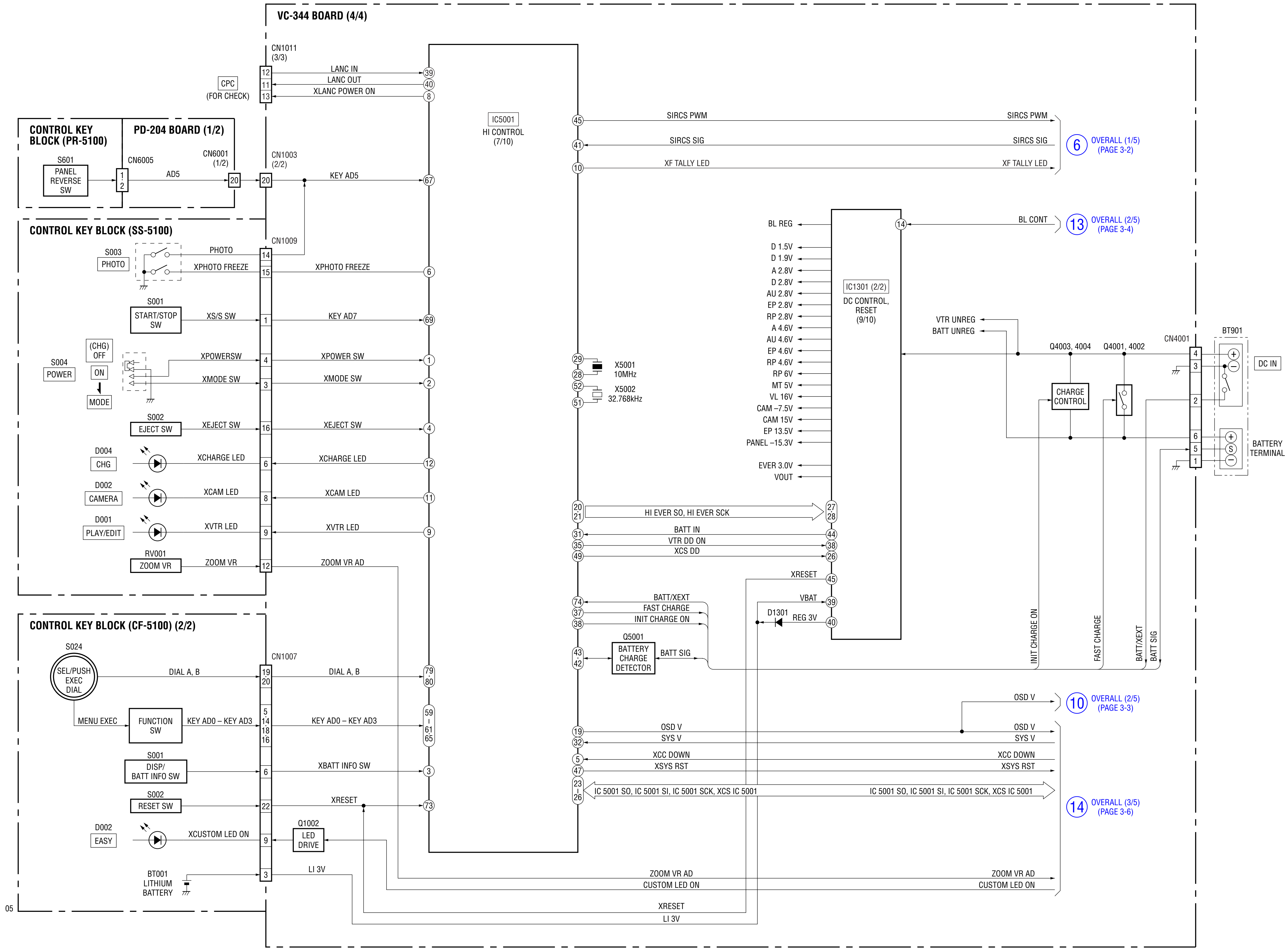
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-4. OVERALL BLOCK DIAGRAM (4/5)

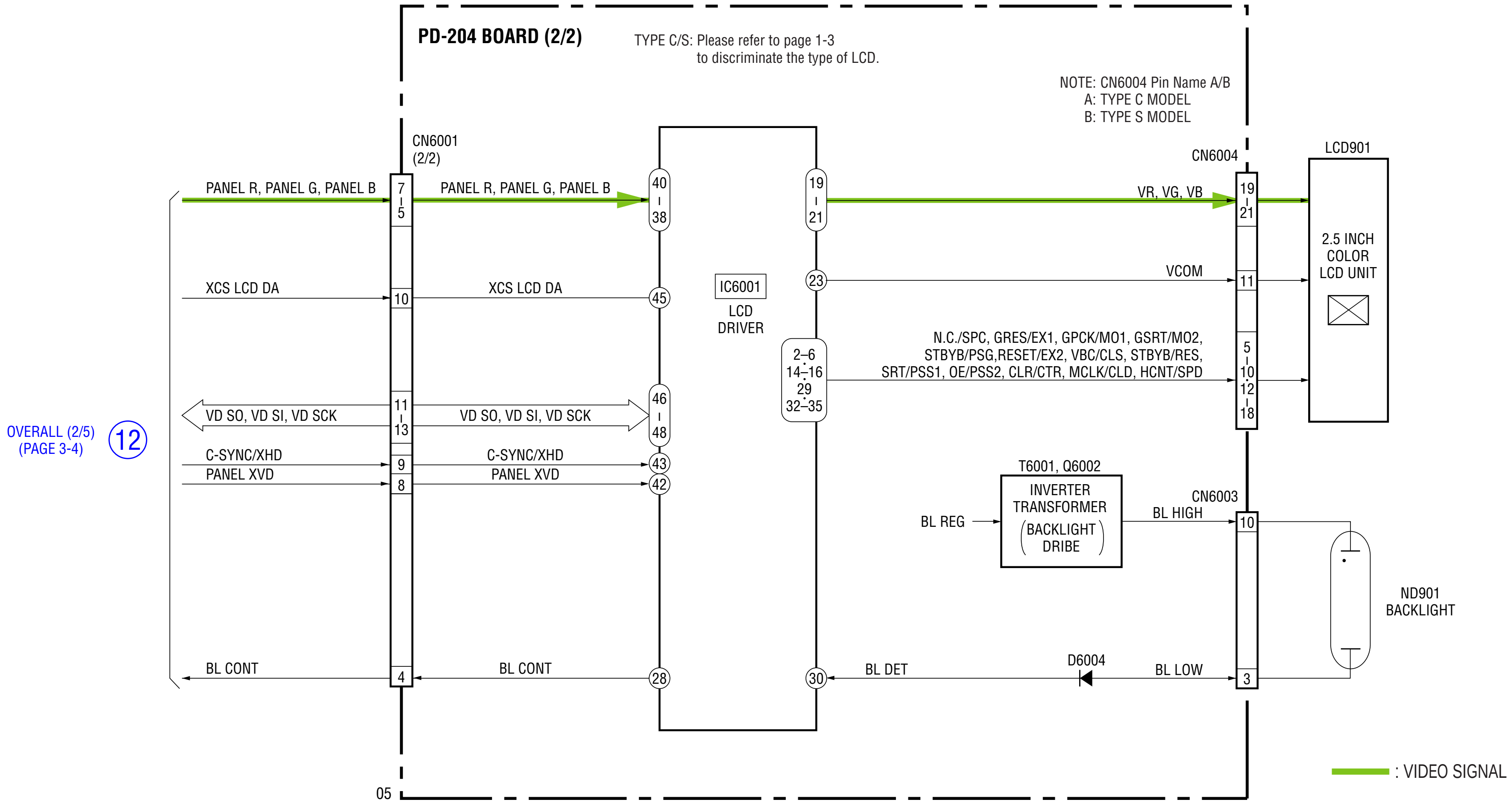
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

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

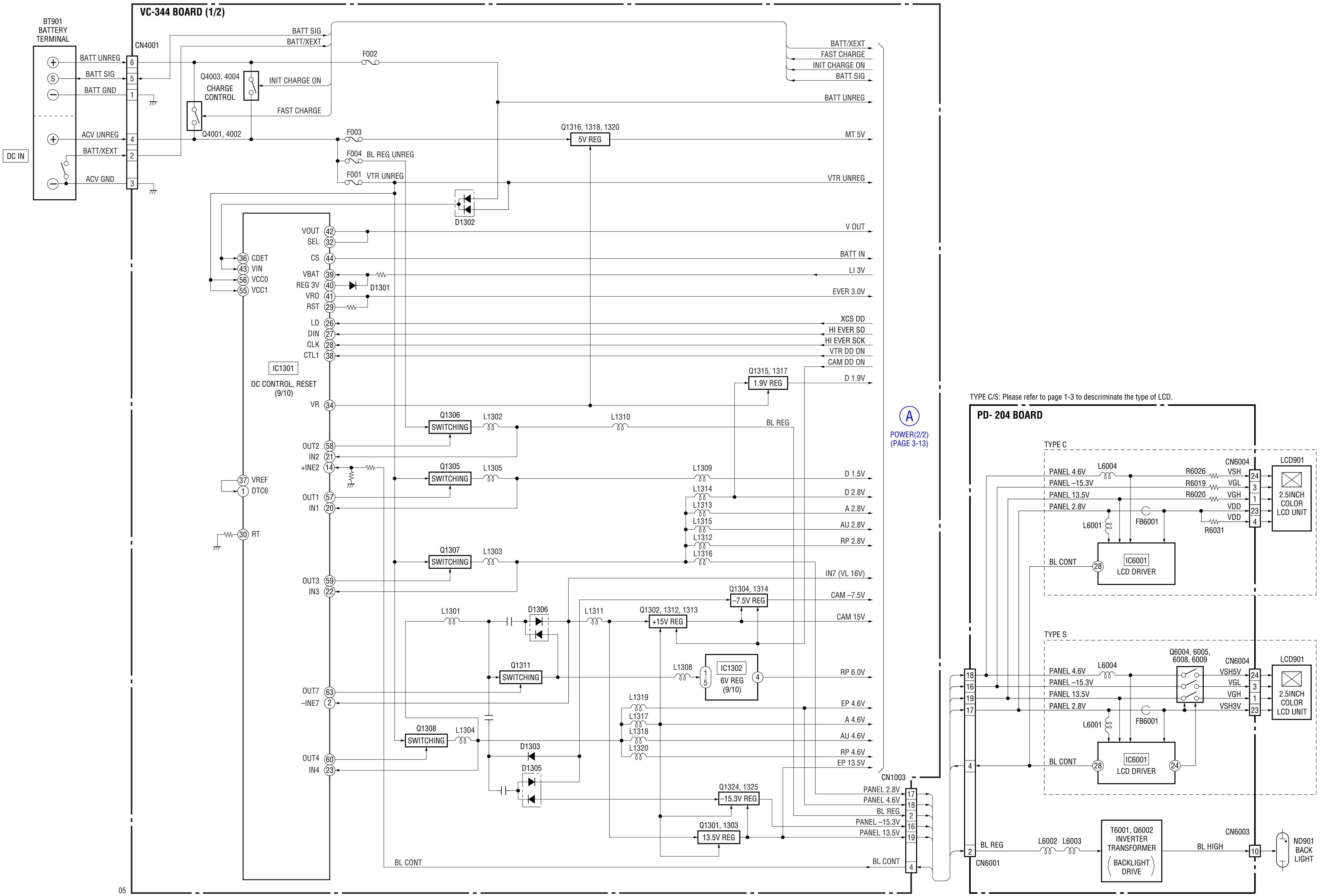
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-6. POWER BLOCK DIAGRAM (1/2)

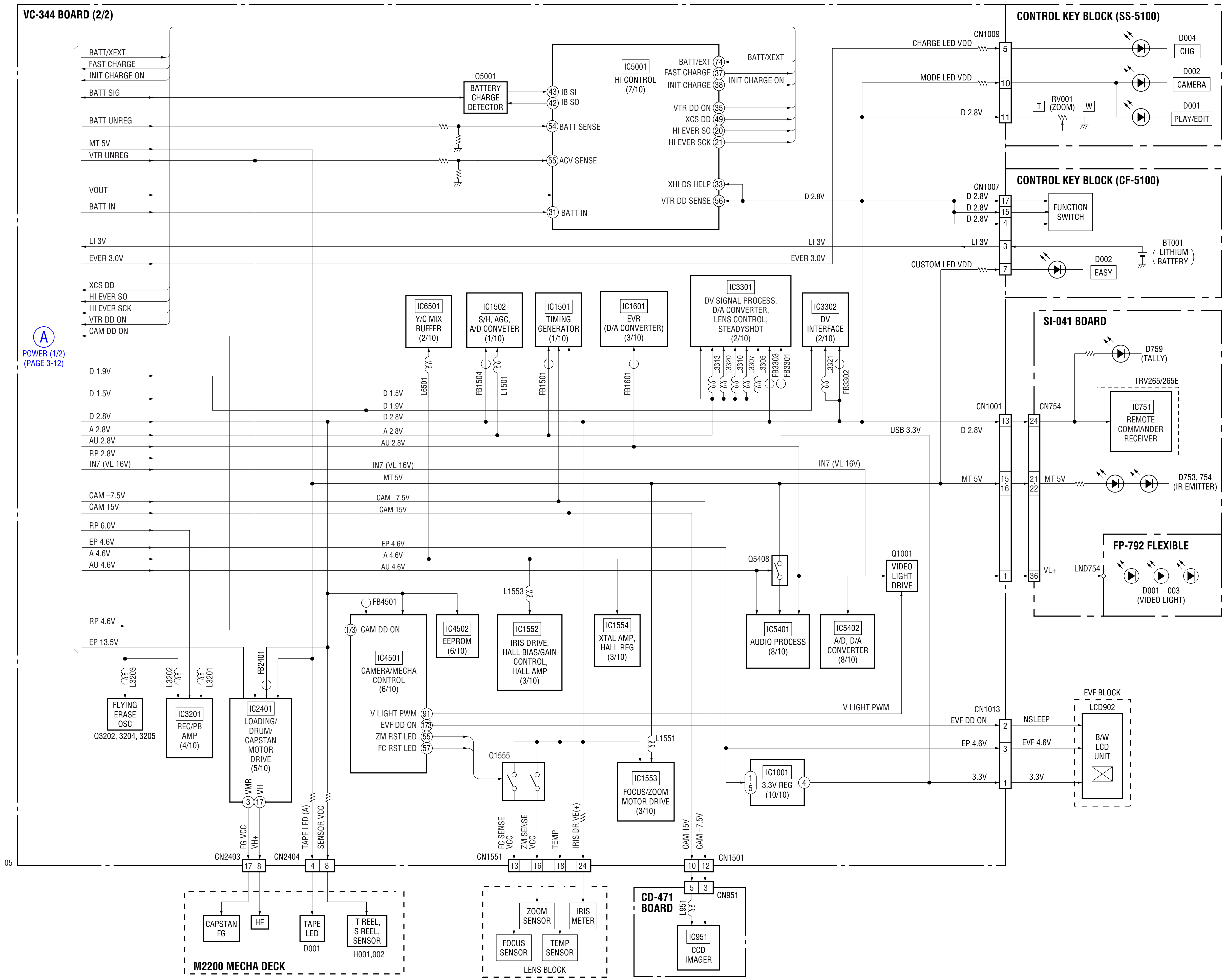
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

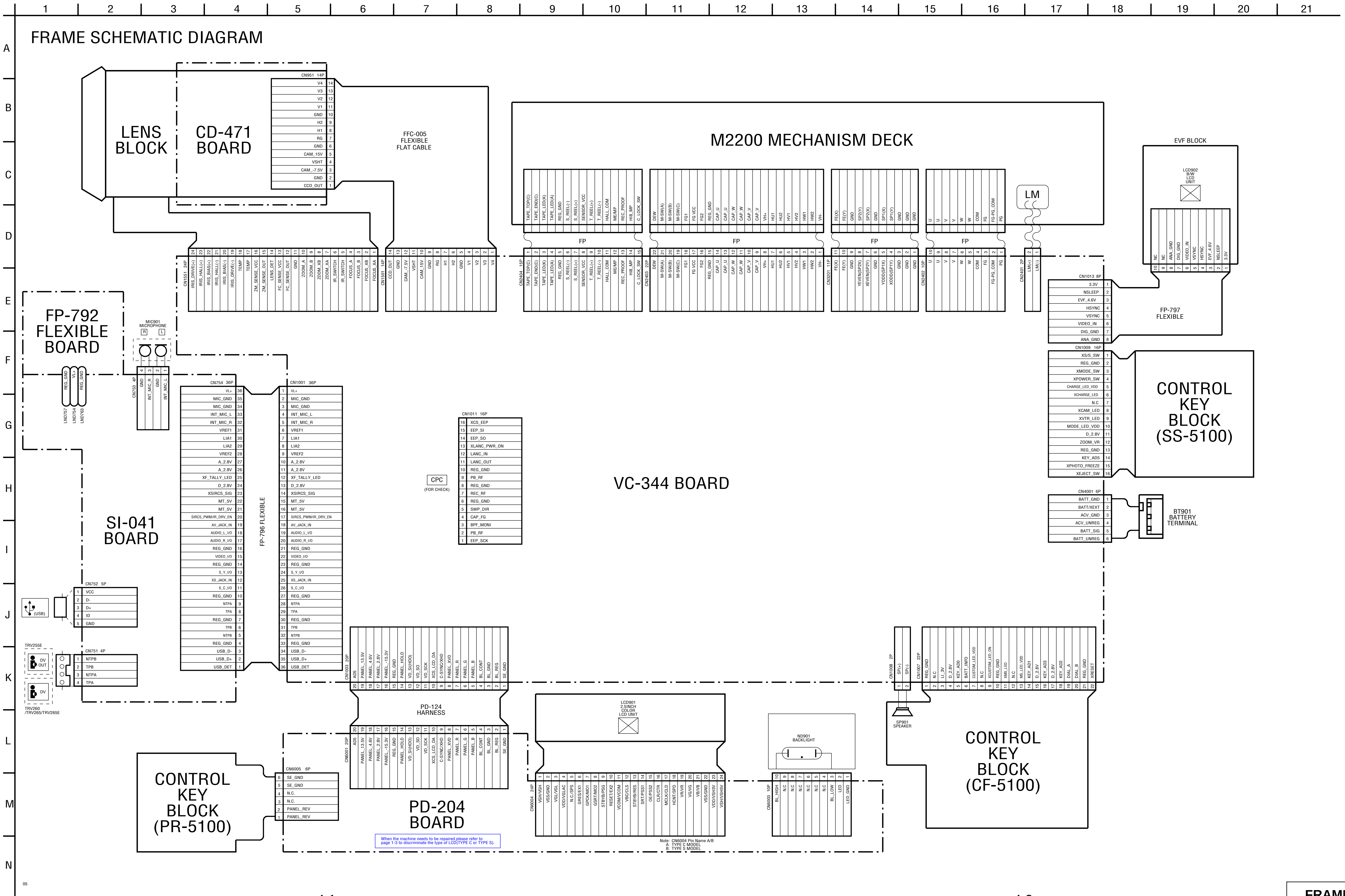
3-7. POWER BLOCK DIAGRAM (2/2)

( ) : 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



4-2. SCHEMATIC DIAGRAMS

Link

CD-471 BOARD (CCD IMAGER)	VC-344 BOARD (9/10) (DC CONTROL)
VC-344 BOARD (1/10) (A/D CONVERTER, TIMING GENERATOR)	VC-344 BOARD (10/10) (CONNECTOR)
VC-344 BOARD (2/10) (DV SIGNAL PROCESS, LENS CONTROL, DV INTERFACE, VIDEO OUT)	PD-204 BOARD (LCD DRIVER, BACKLIGHT DRIVE)
VC-344 BOARD (3/10) (LENS DRIVE)	SI-041 BOARD (JACK) FP-792 FLEXIBLE BOARD
VC-344 BOARD (4/10) (REC/PB AMP)	FP-228, FP-299, FP-300, FP-301, FP-302, FP-802 FLEXIBLE BOARD
VC-344 BOARD (5/10) (SERVO)	CONTROL KEY BLOCK (SS-5100)
VC-344 BOARD (6/10) (CAMERA/MECHA CONTROL)	CONTROL KEY BLOCK (PR-5100)
VC-344 BOARD (7/10) (HI CONTROL)	CONTROL KEY BLOCK (CF-5100)
VC-344 BOARD (8/10) (AUDIO PROCESS)	

COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

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

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : 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	L452
	22U	10UH
	TA A	2520

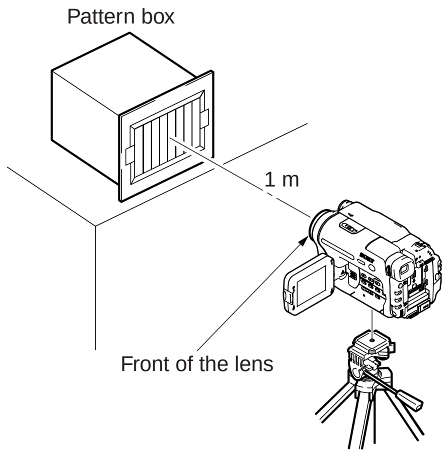
Kind of capacitor (TA) — Case size (A) — External dimensions (mm) (2520)

- 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.

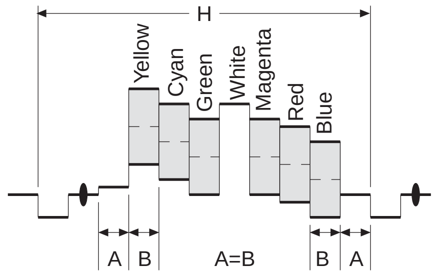


Fig. a (Video output terminal output waveform)

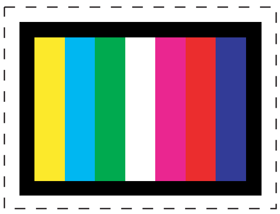


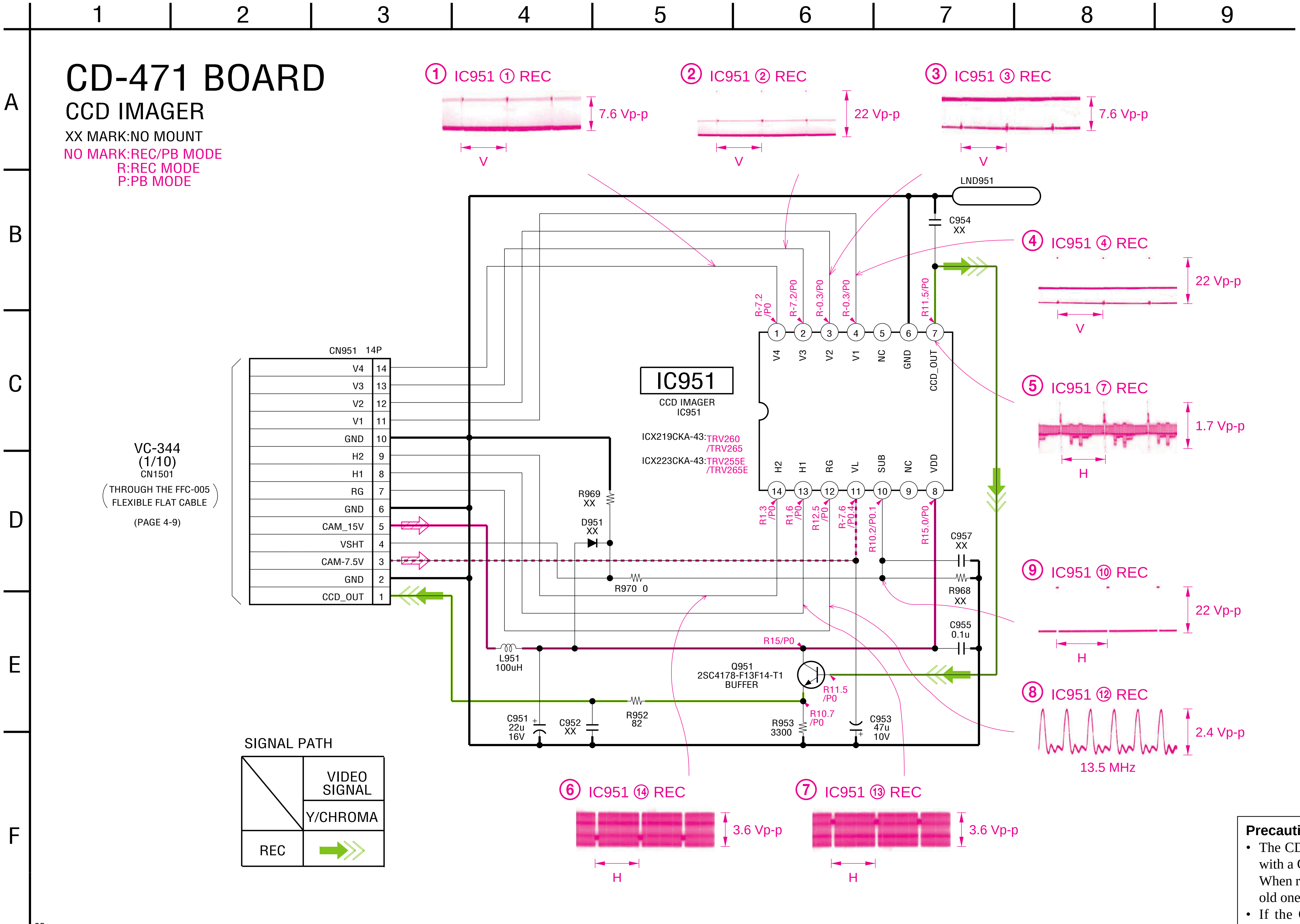
Fig.b (Picture on monitor TV)

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.

For Schematic Diagram
• Refer to page 4-41 for printed wiring board.

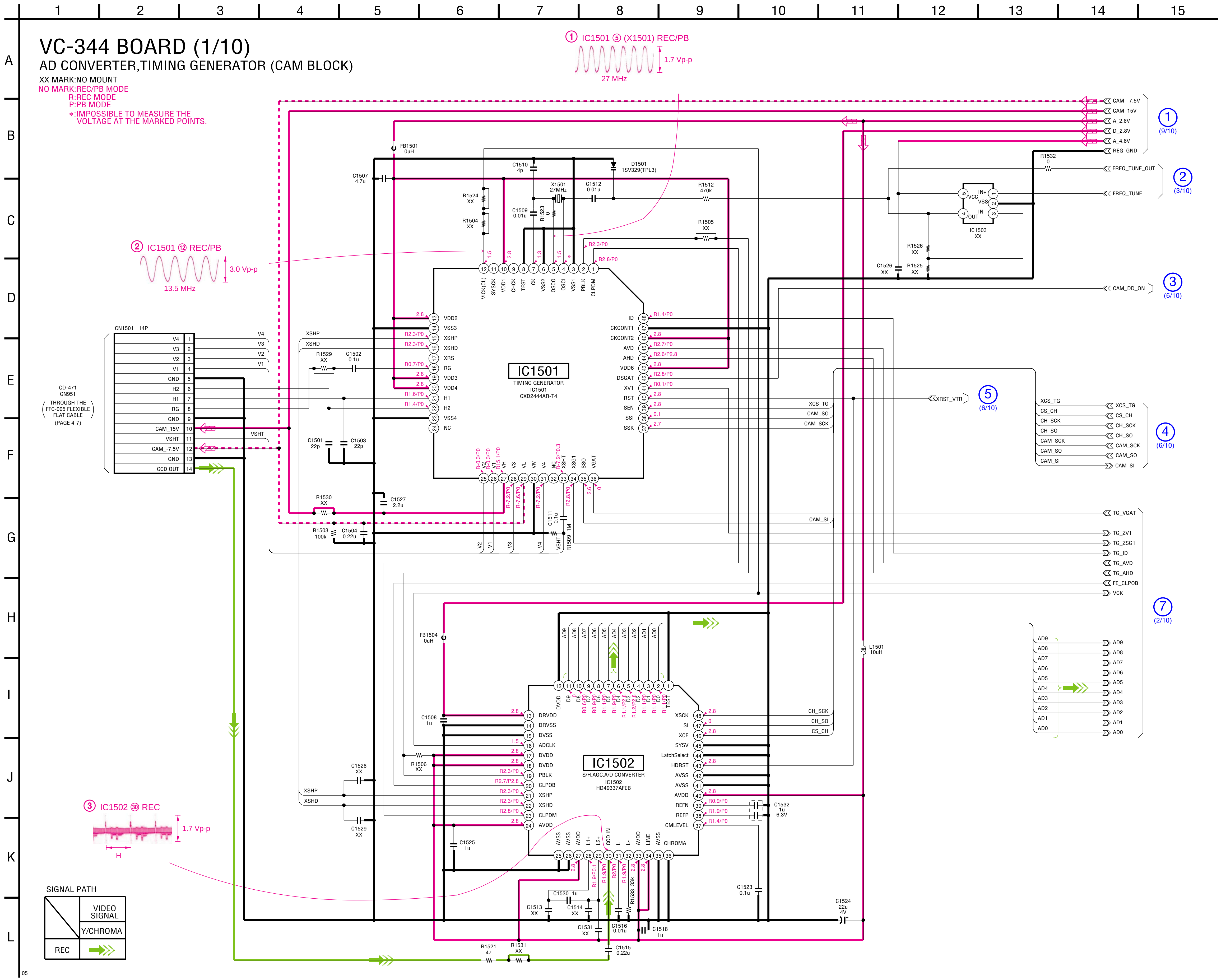


Precautions for Replacement of CCD Imager

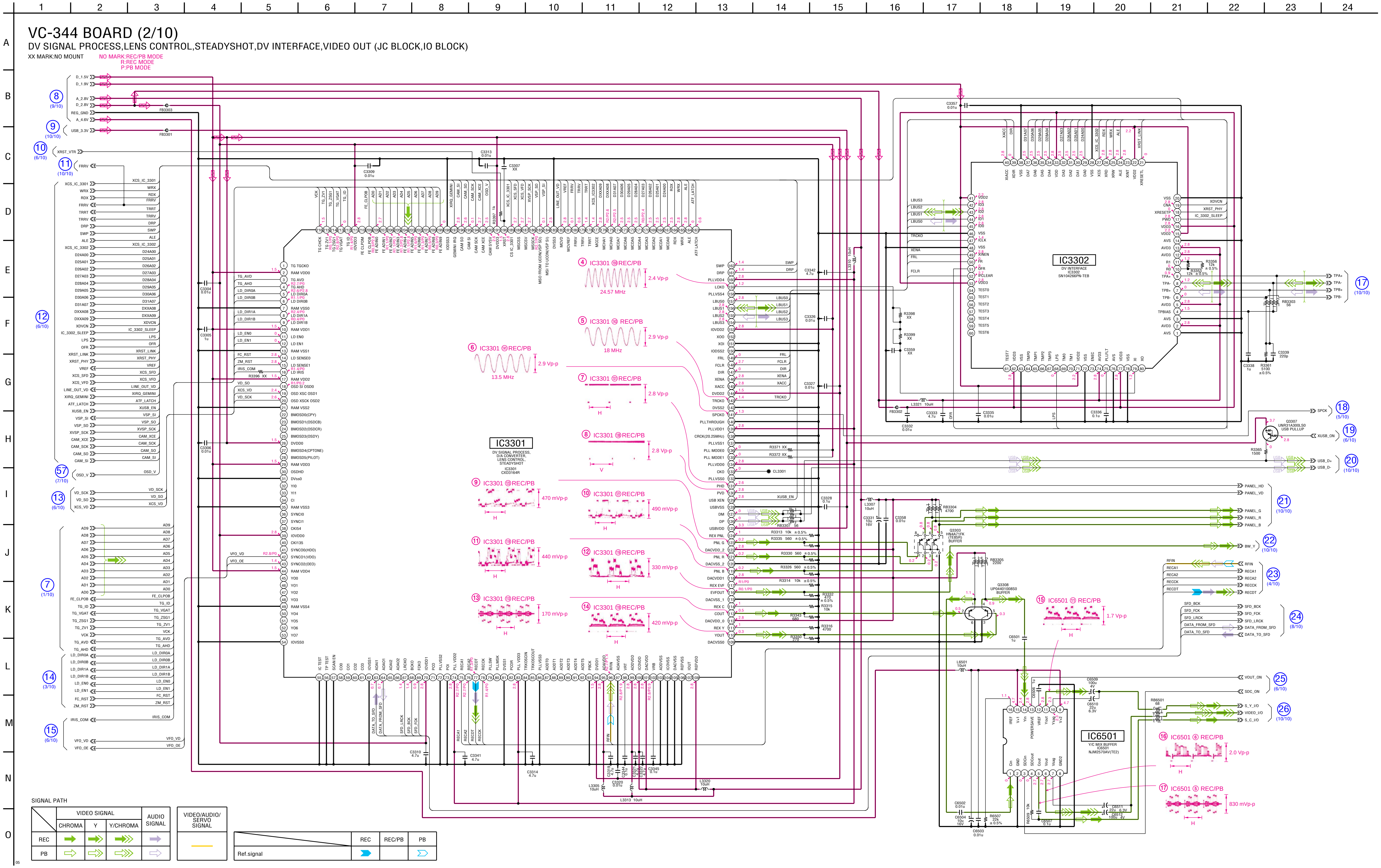
- The CD-471 board mounted as a repair part is not equipped with a CCD imager.
  When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged 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.

For Schematic Diagram

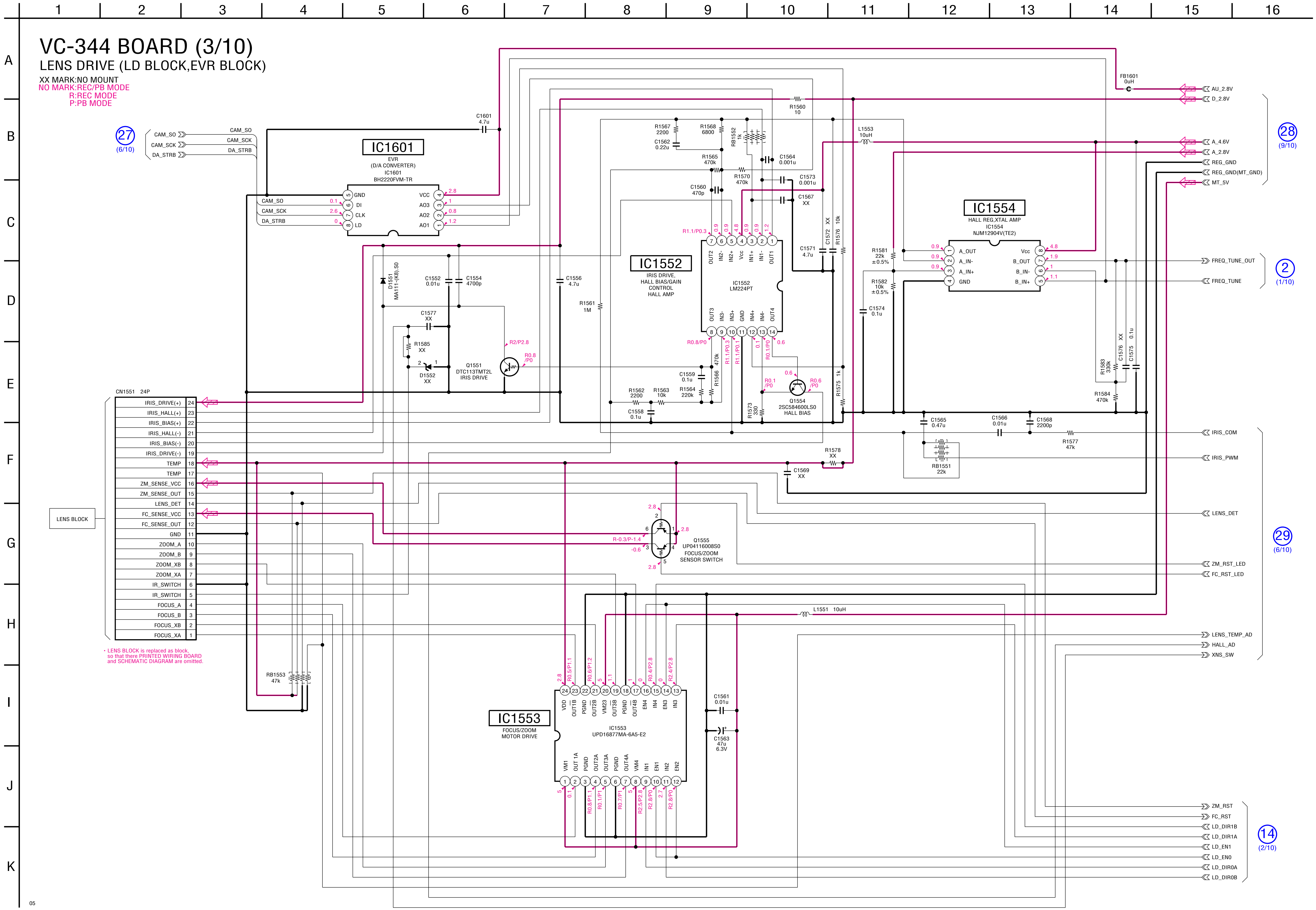
• Refer to page 4-43 for printed wiring board.



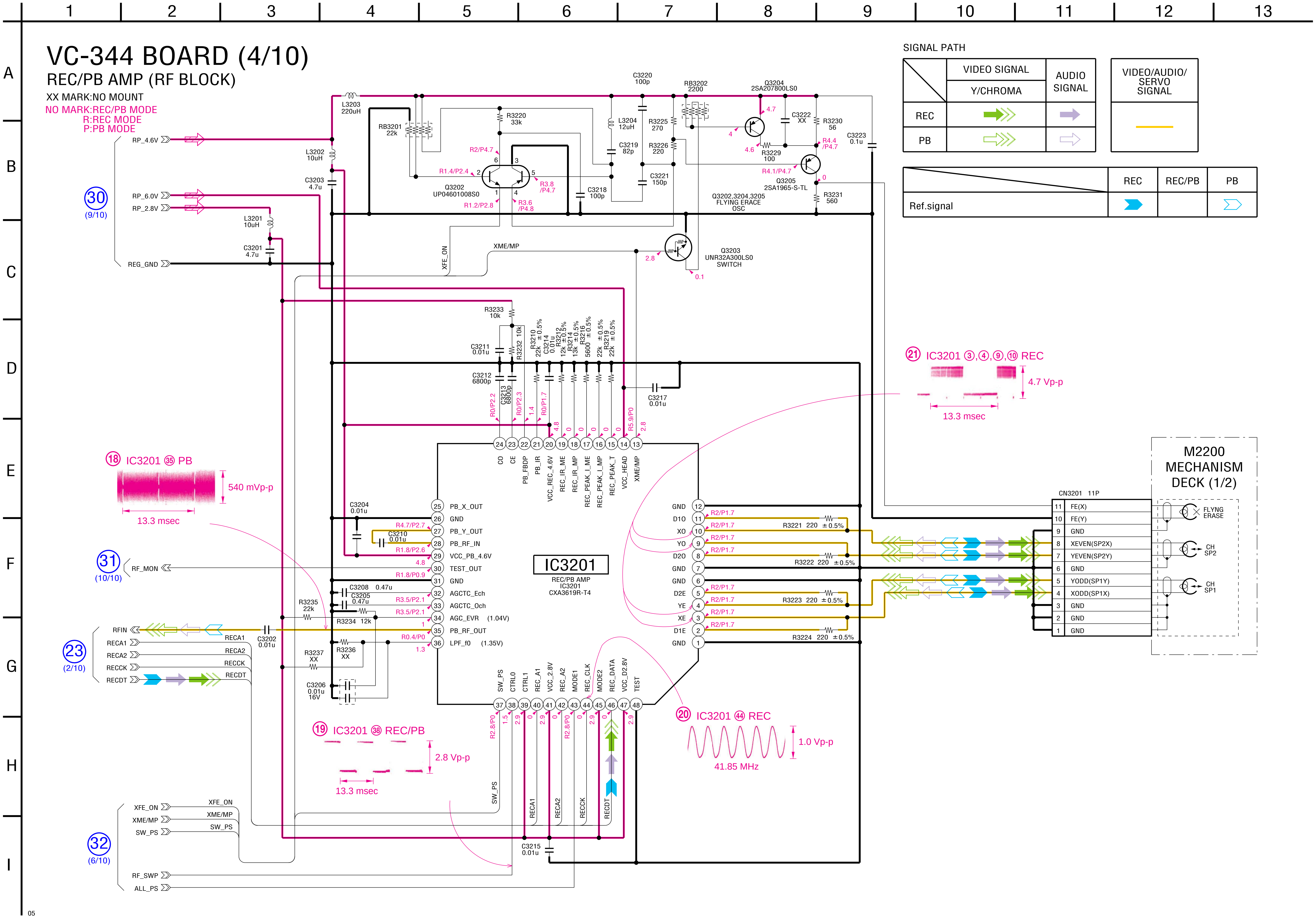
For Schematic Diagram
• Refer to page 4-43 for printed wiring board.



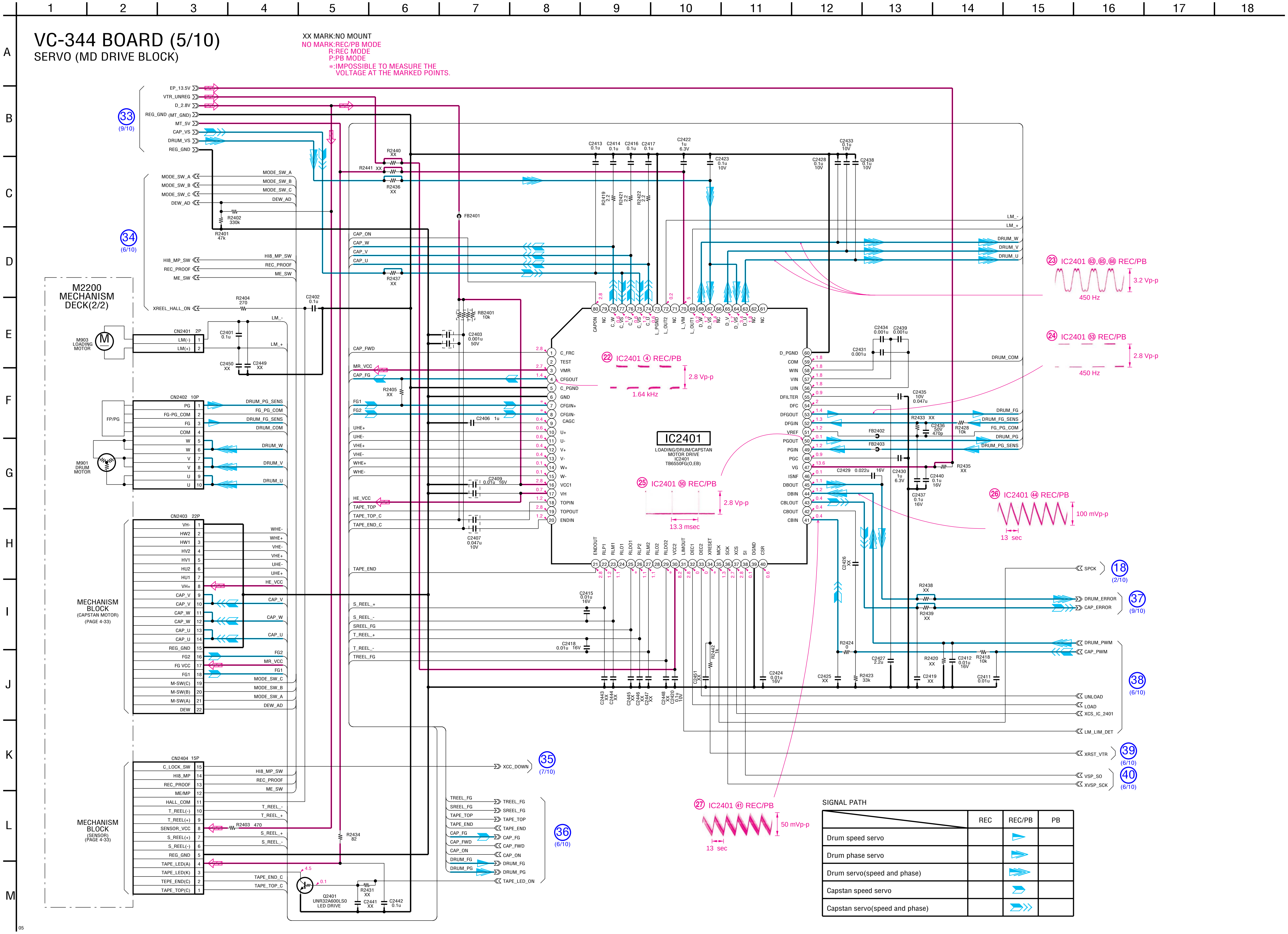
For Schematic Diagram
- Refer to page 4-43 for printed wiring board.



For Schematic Diagram
• Refer to page 4-43 for printed wiring board.

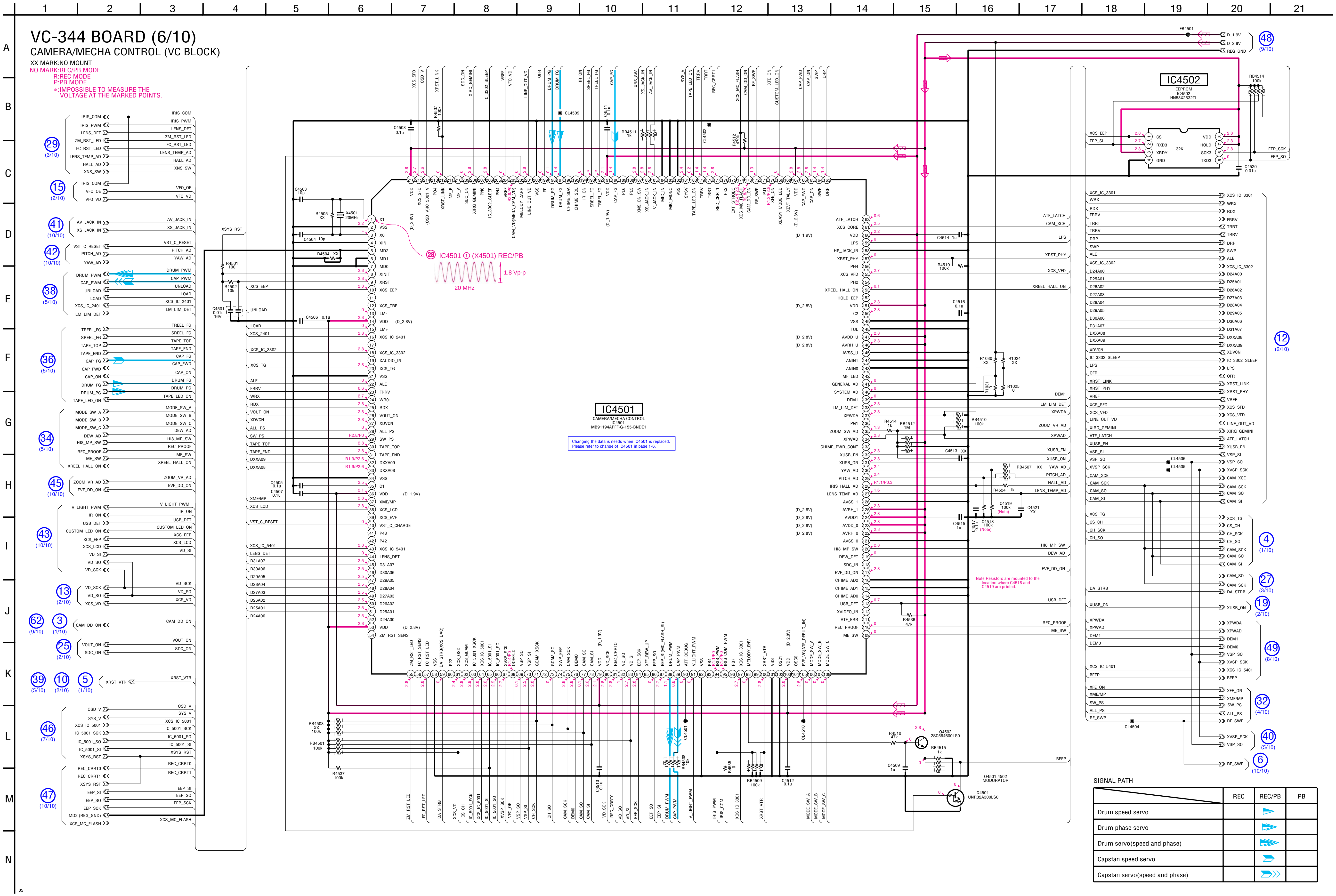


For Schematic Diagram
• Refer to page 4-43 for printed wiring board.



For Schematic Diagram

- Refer to page 4-43 for printed wiring board.



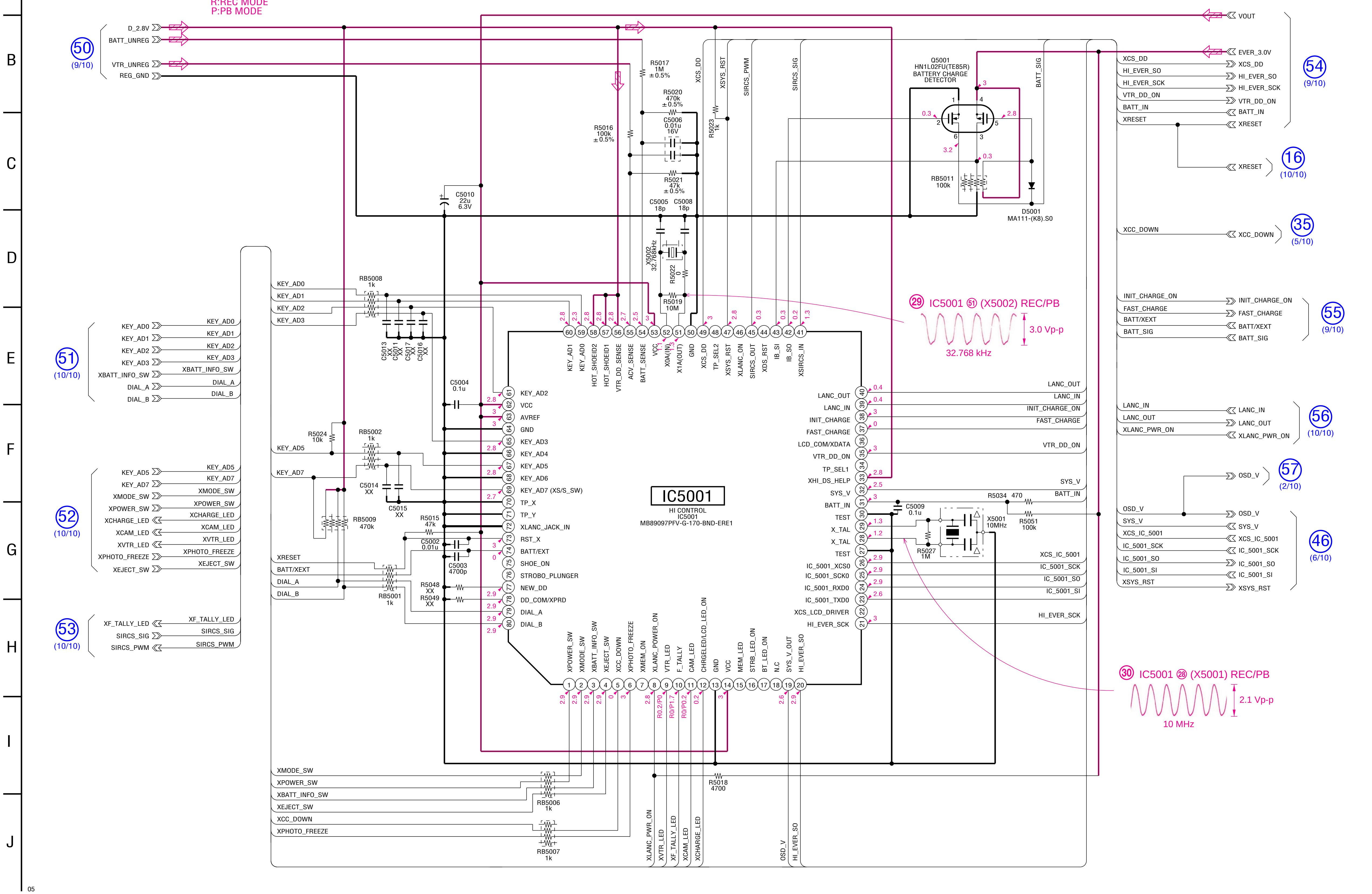
For Schematic Diagram
• Refer to page 4-43 for printed wiring board.

VC-344 BOARD (7/10)

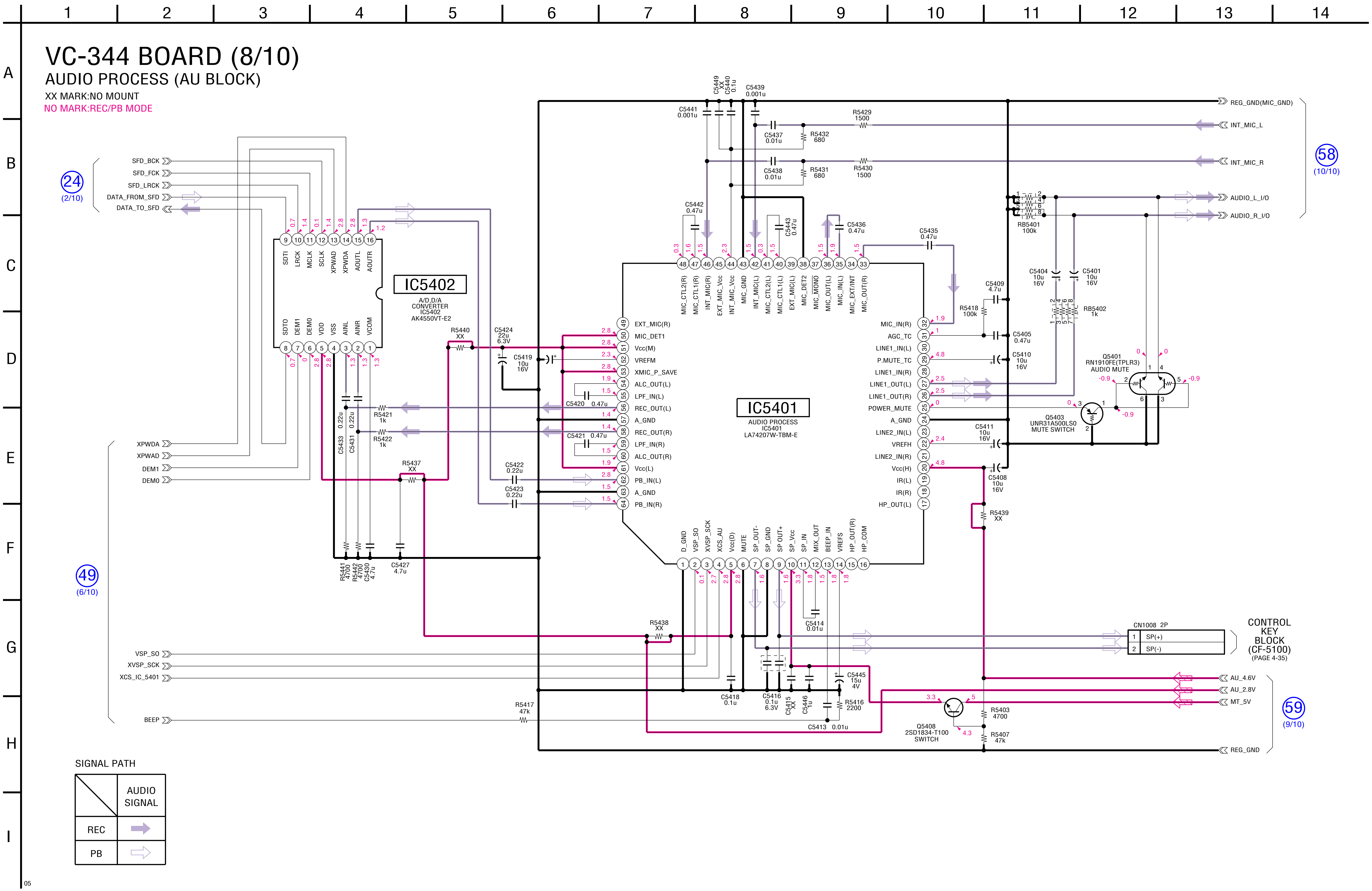
HI CONTROL (HI BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE
R:REC MODE
P:PB MODE

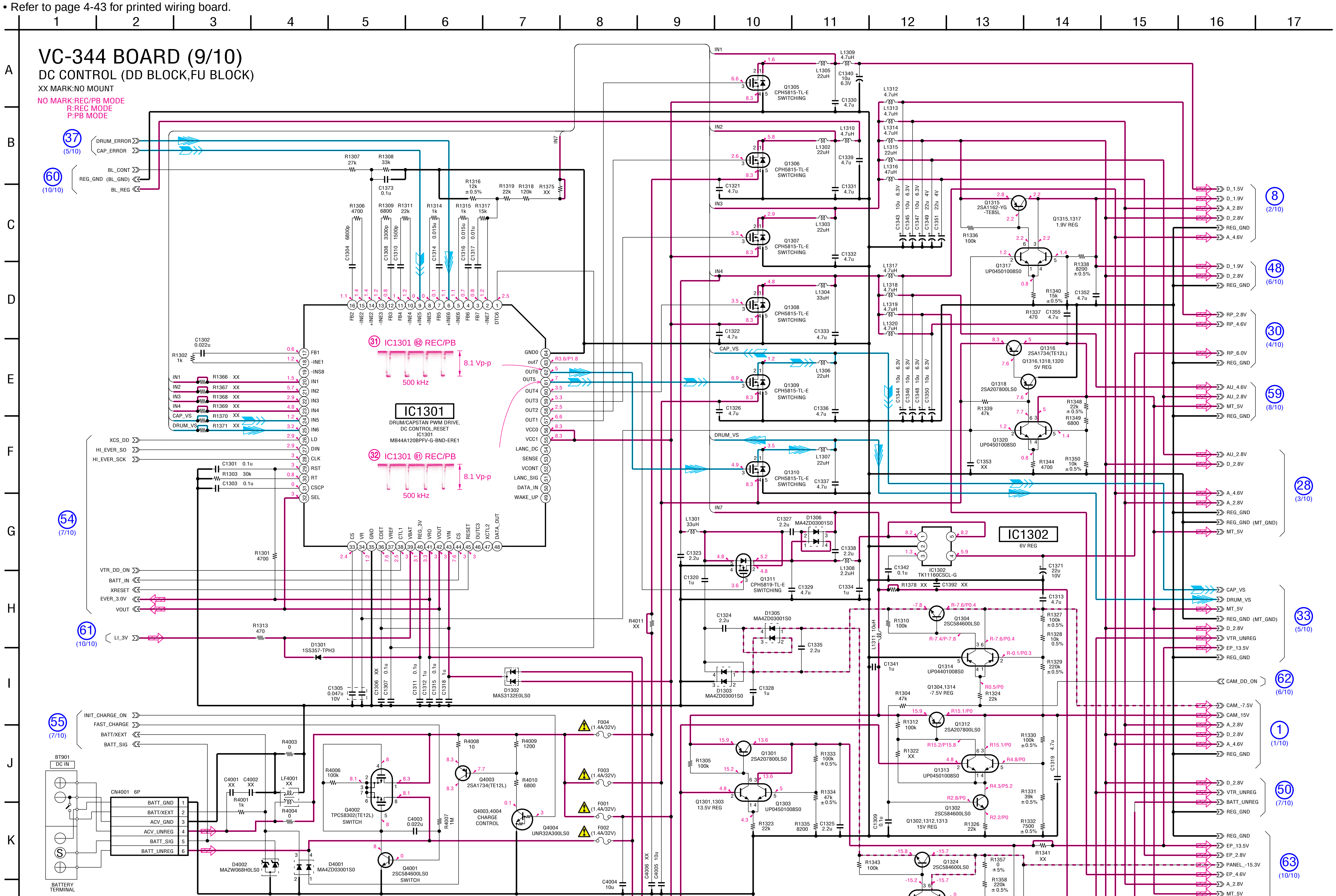


For Schematic Diagram
• Refer to page 4-43 for printed wiring board.



For Schematic Diagram

• Refer to page 4-43 for printed wiring board.



SIGNAL PATH

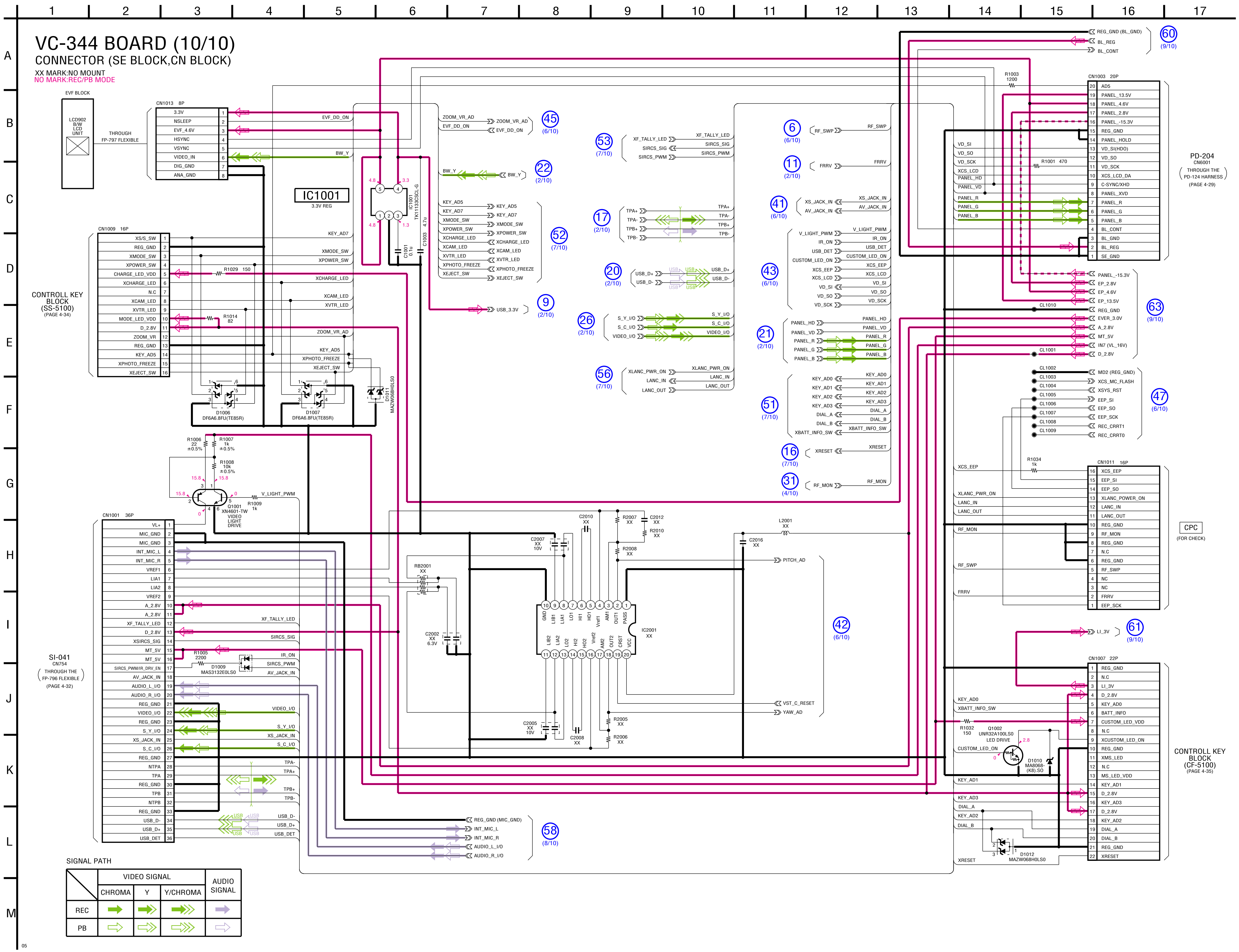
	REC	REC/PB	PB
Drum servo(speed and phase)			
Capstan servo(speed and phase)			

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.

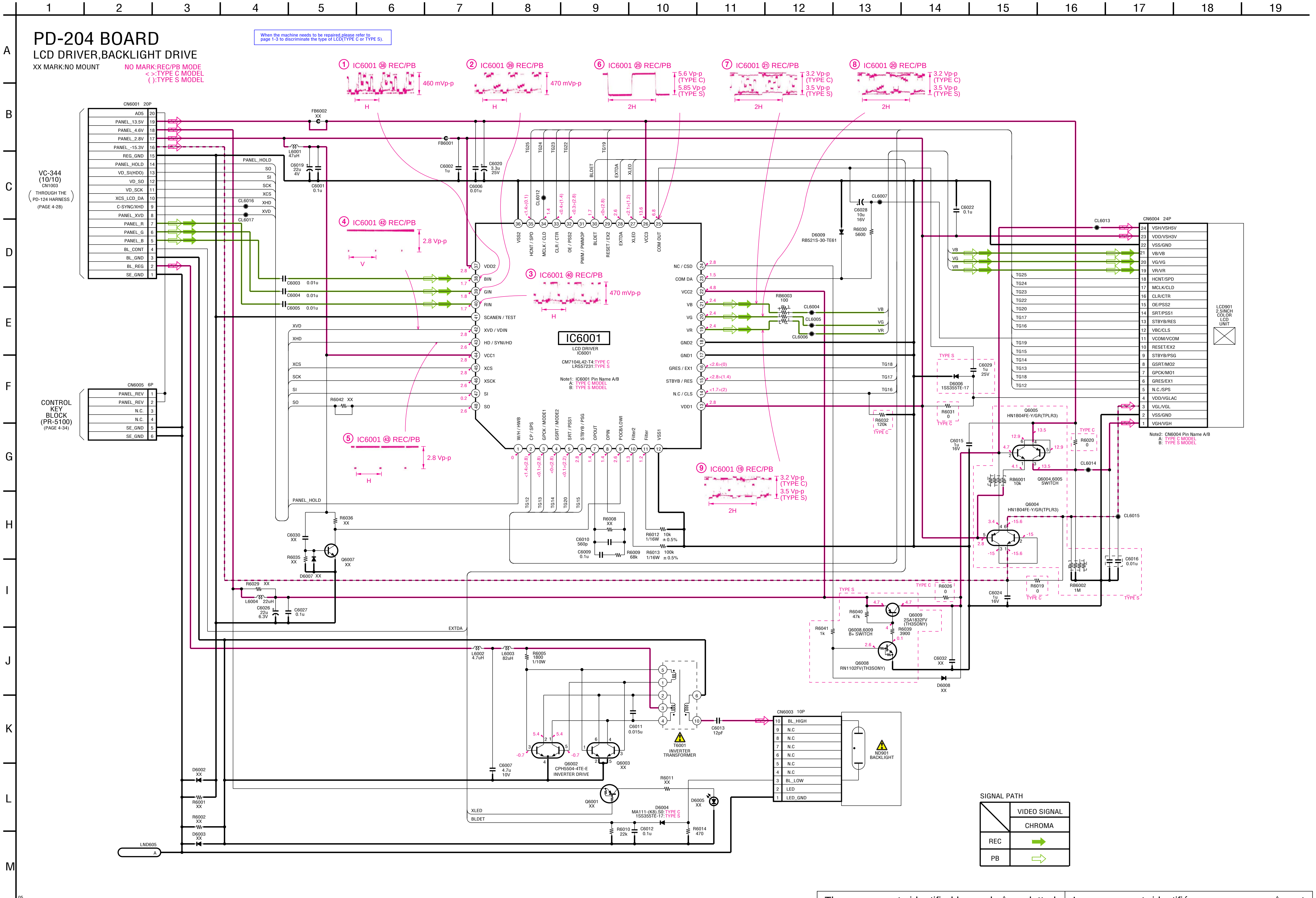
For Schematic Diagram

• Refer to page 4-43 for printed wiring board.



For Schematic Diagram

• Refer to page 4-47 for printed wiring board.

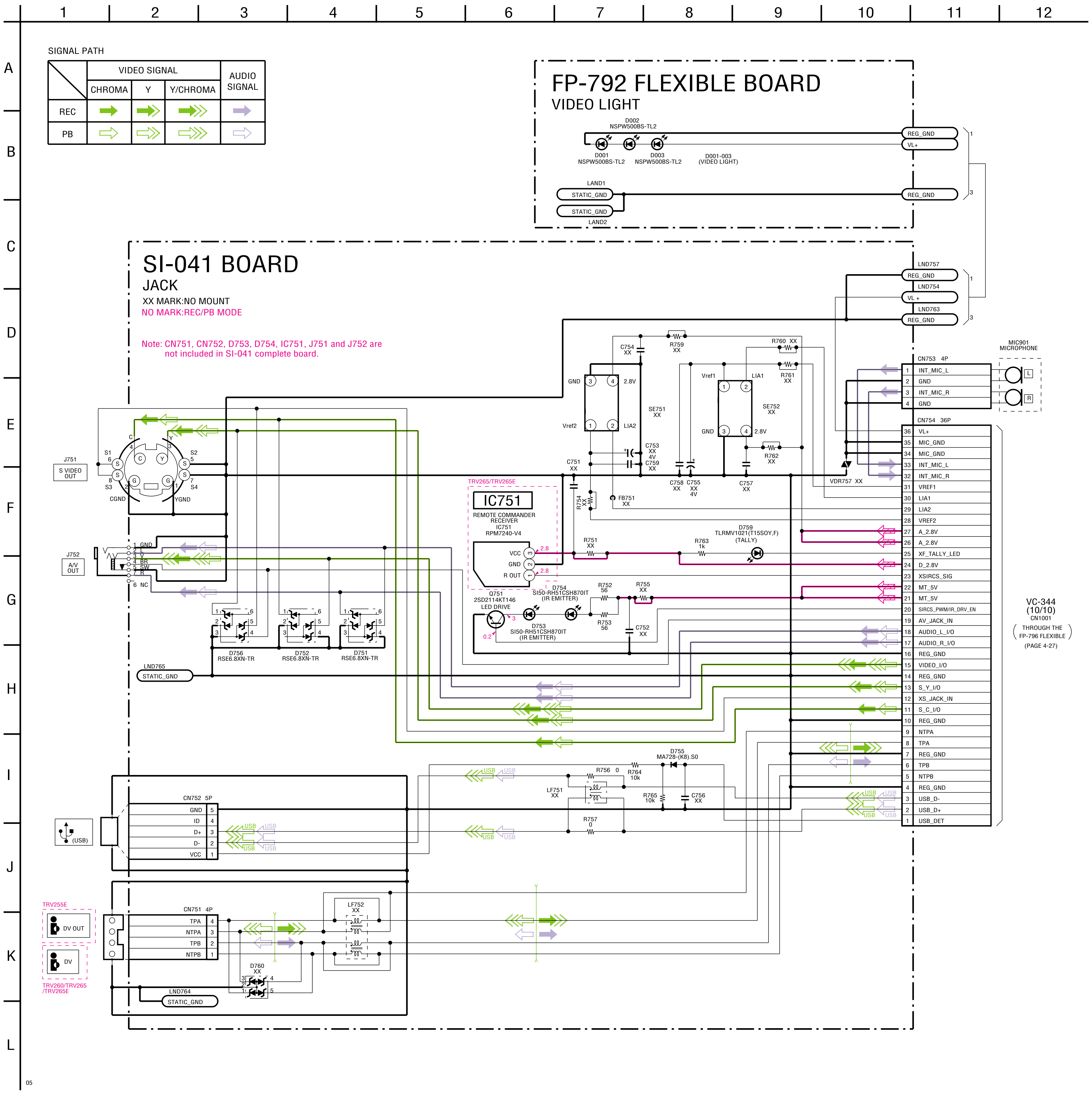


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

4-2. SCHEMATIC DIAGRAMS | SI-041 BOARD, FP-792 FLEXIBLE BOARD

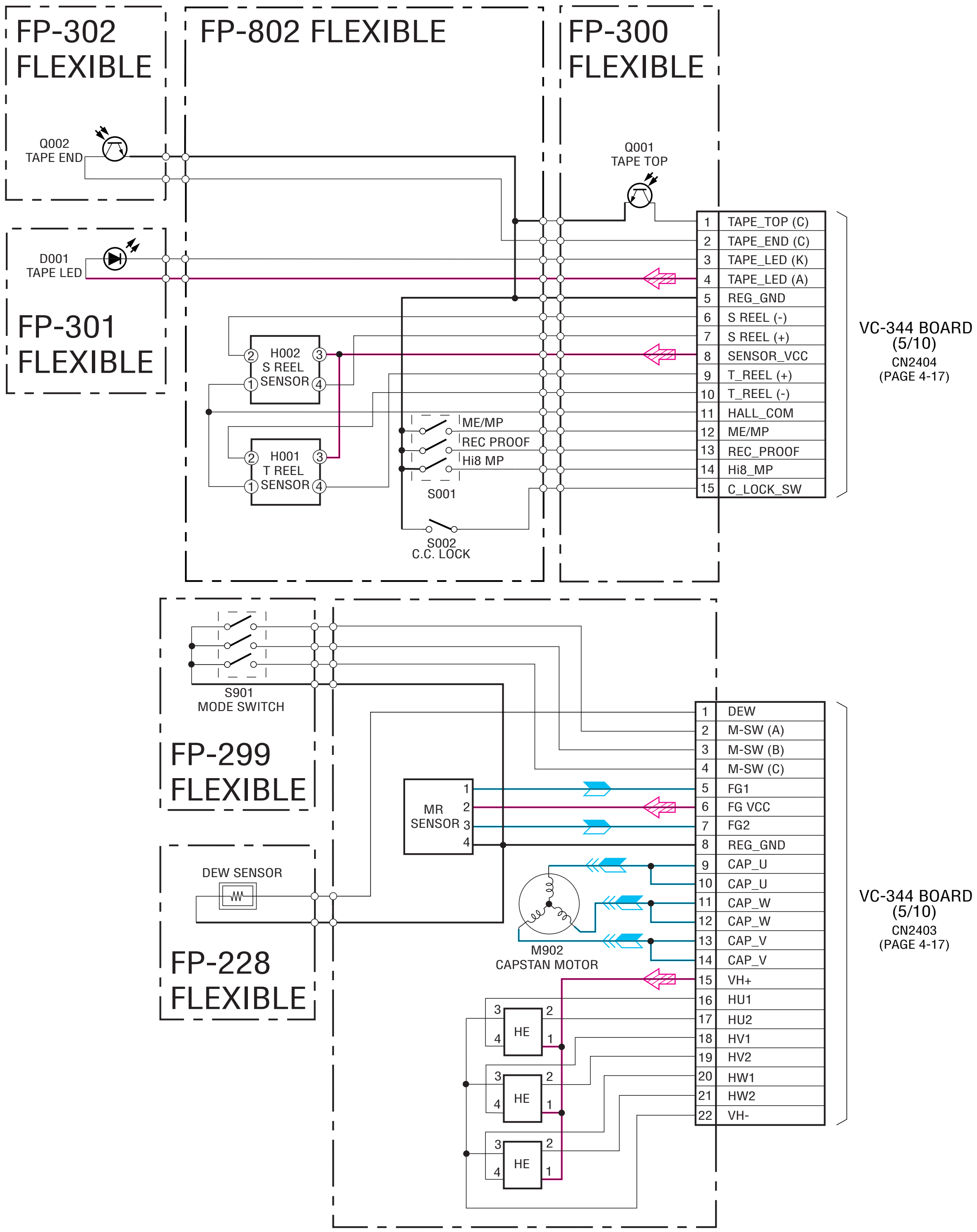
For Schematic Diagram

• Refer to page 4-49 for printed wiring board.



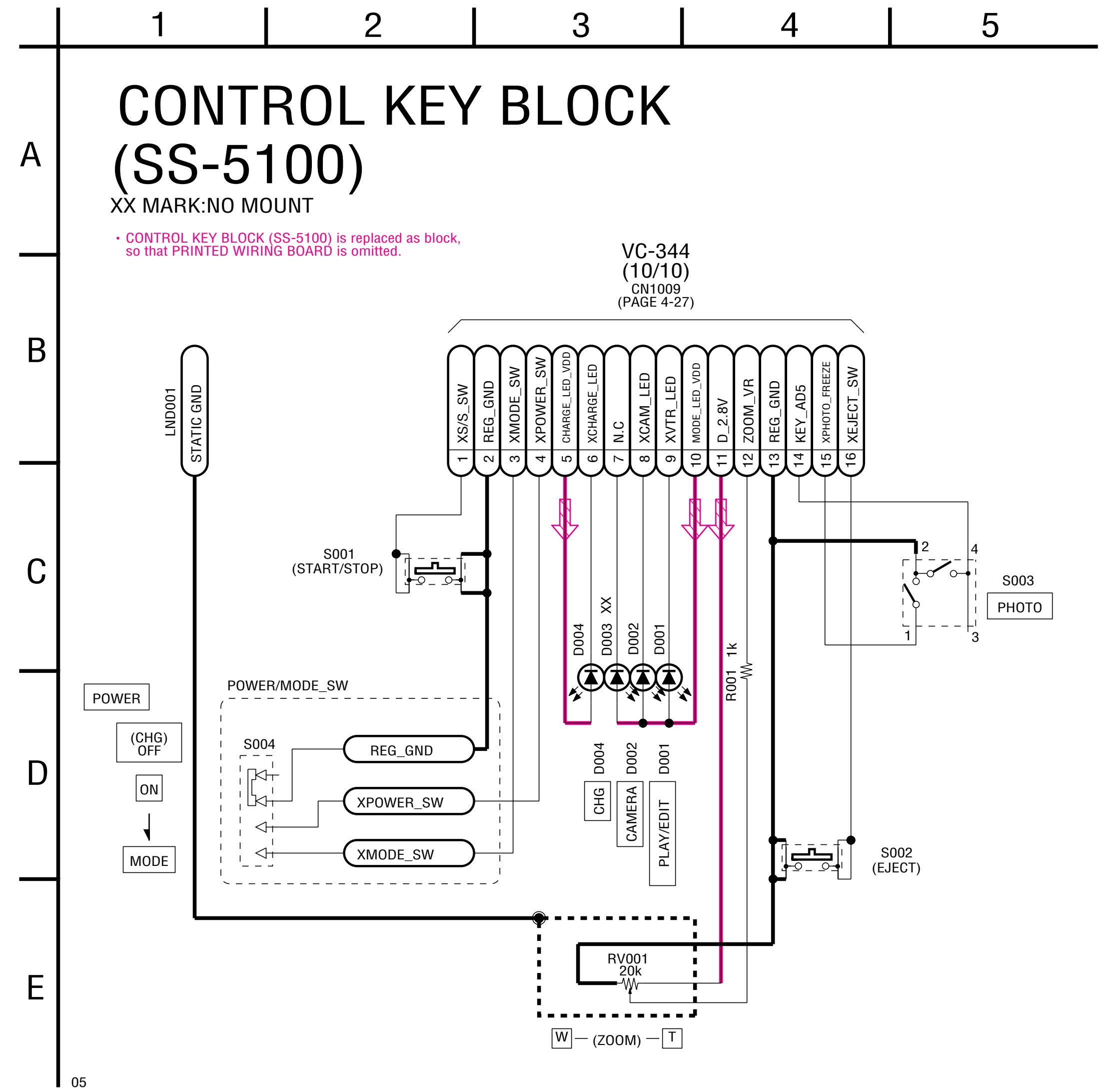
4-2. SCHEMATIC DIAGRAMS | FP-228, 299, 300, 301, 302, 802 FLEXIBLE BOARD

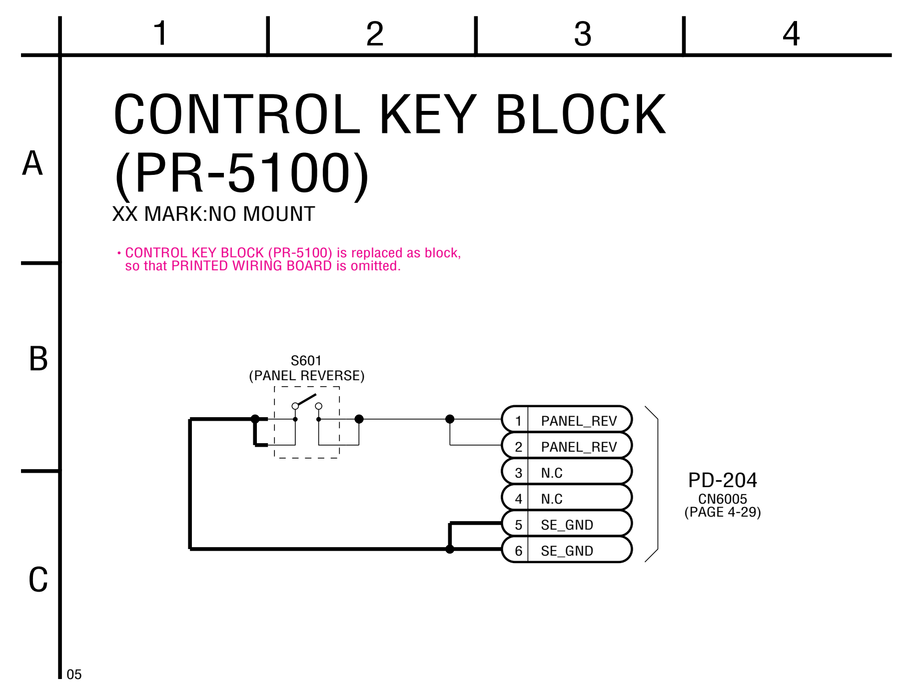
For Schematic Diagram
• Refer to page 4-51 for printed wiring board.



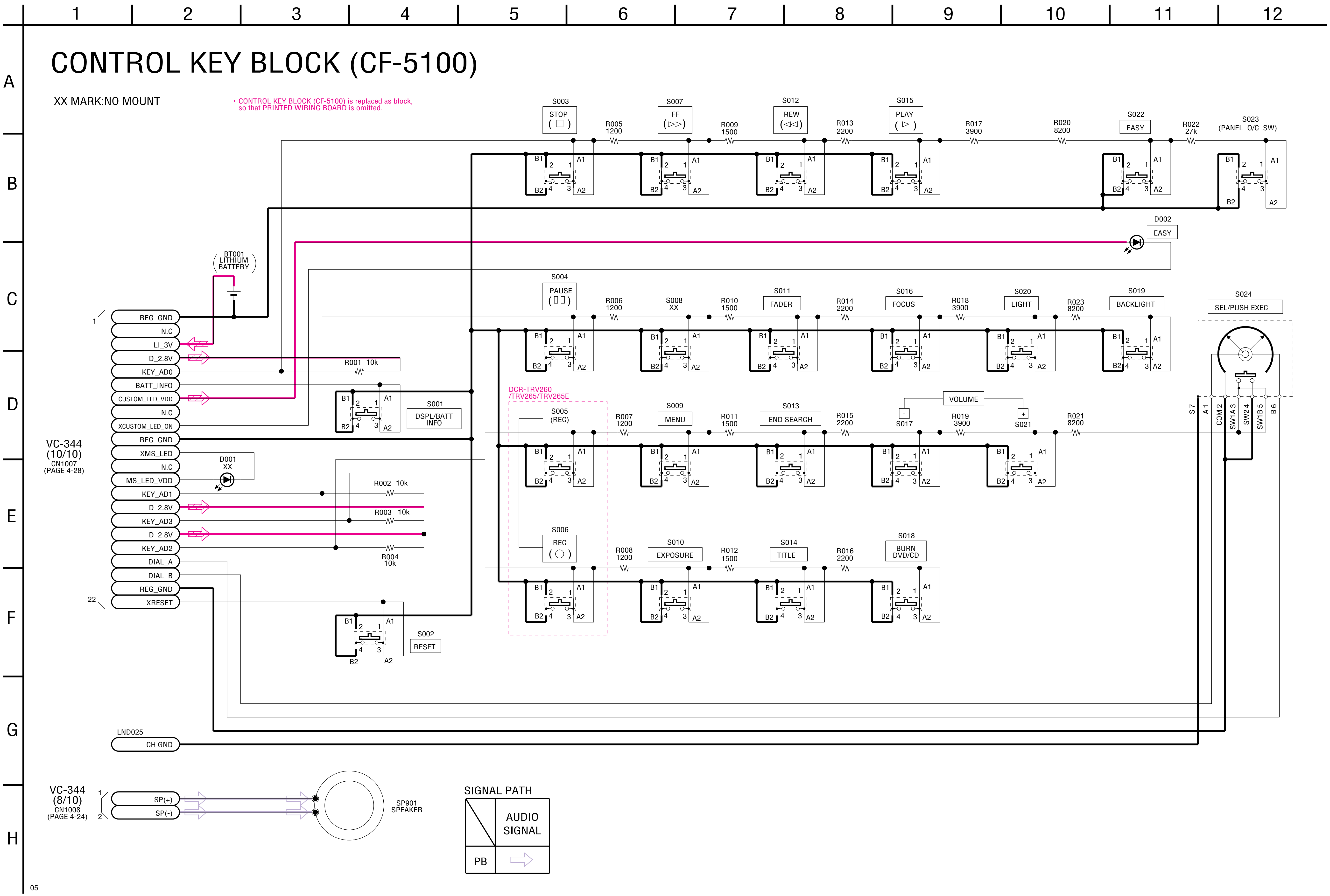
SIGNAL PATH

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





4-2. SCHEMATIC DIAGRAMS



4-3. PRINTED WIRING BOARDS

Link

- CD-471 BOARD
- SI-041 BOARD
- VC-344 BOARD (SIDE A)
- FP-792 FLEXIBLE BOARD
- VC-344 BOARD (SIDE B)
- FP-228, FP-299, FP-300, FP-301, FP-302, FP-802 FLEXIBLE BOARD
- PD-204 BOARD

- COMMON NOTE FOR PRINTED WIRING BOARDS
- MOUNTED PARTS LOCATION
- CIRCUIT BOARDS LOCATION
- FLEXIBLE BOARDS LOCATION

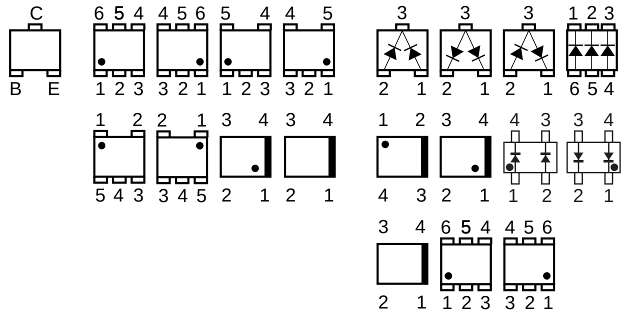
Board Name	Function
CD-471	CCD IMAGER
VC-344	A/D CONVERTER, TIMING GENERATOR, DV SIGNAL PROCESS, LENS CONTROL, STEADYSHOT, DV INTERFACE, VIDEO OUT, LENS DRIVE, REC/PB AMP, SERVO, CAMERA/MECHA CONTROL, HI CONTROL, AUDIO PROCESS, DC CONTROL, CONNECTOR
PD-204	LCD DRIVE, BACKLIGHT DRIVE
SI-041	JACK

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



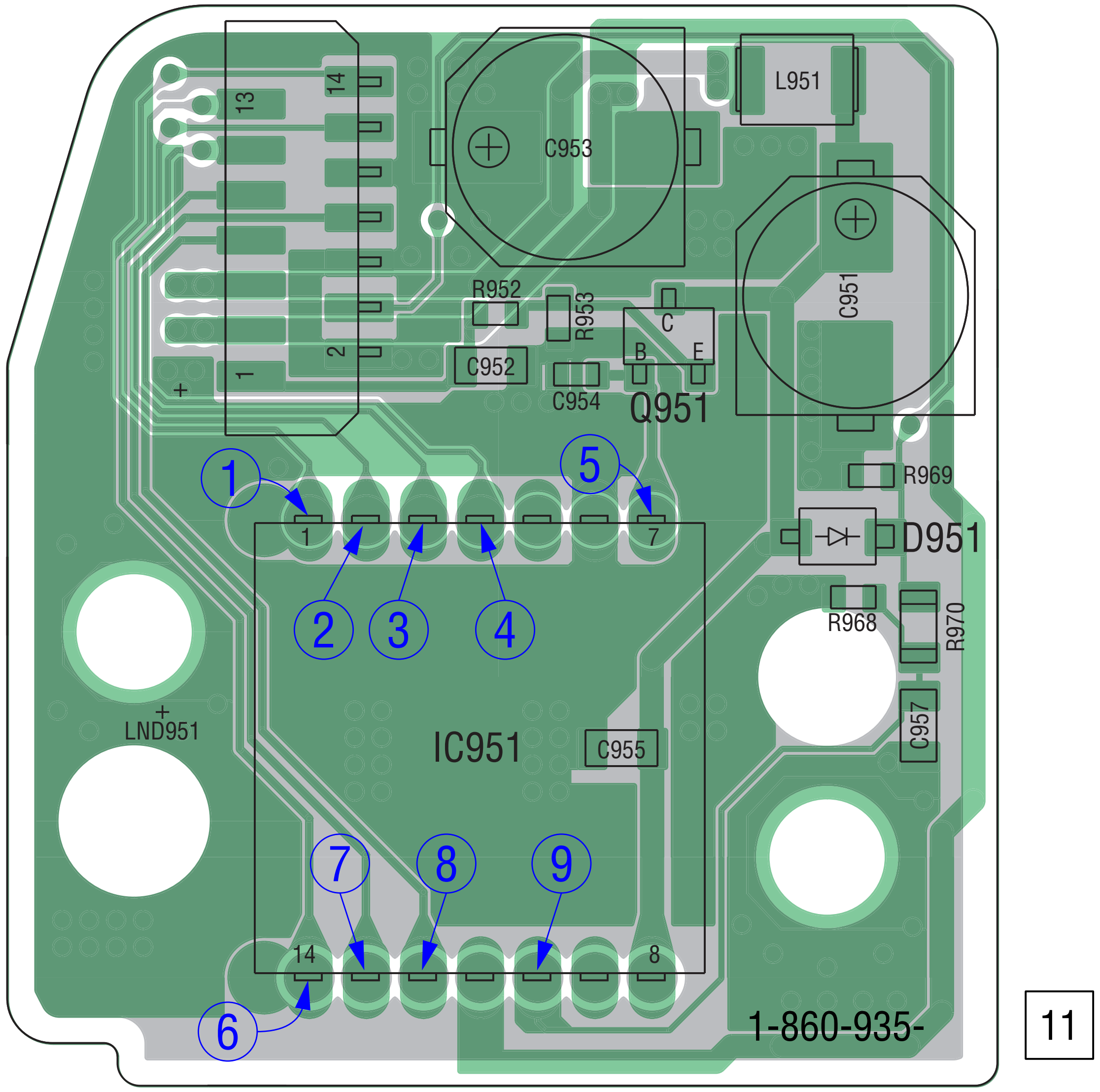
Board Name	Parts Location	Pattern	
		Total Number of Layers	Layers Not Indicated
CD-471	–	4 layers	2 to 3 layers
VC-344	4-53	4 layers	2 to 3 layers
PD-204	4-54	2 layers	–
SI-041	4-54	2 layers	–
FP-792 Flexible	–	1 layer	–
FP-228 Flexible	–	1 layer	–
FP-299 Flexible	–	1 layer	–
FP-300 Flexible	–	1 layer	–
FP-301 Flexible	–	1 layer	–
FP-302 Flexible	–	1 layer	–
FP-802 Flexible	–	1 layer	–

CD-471

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.

CD-471 BOARD



05

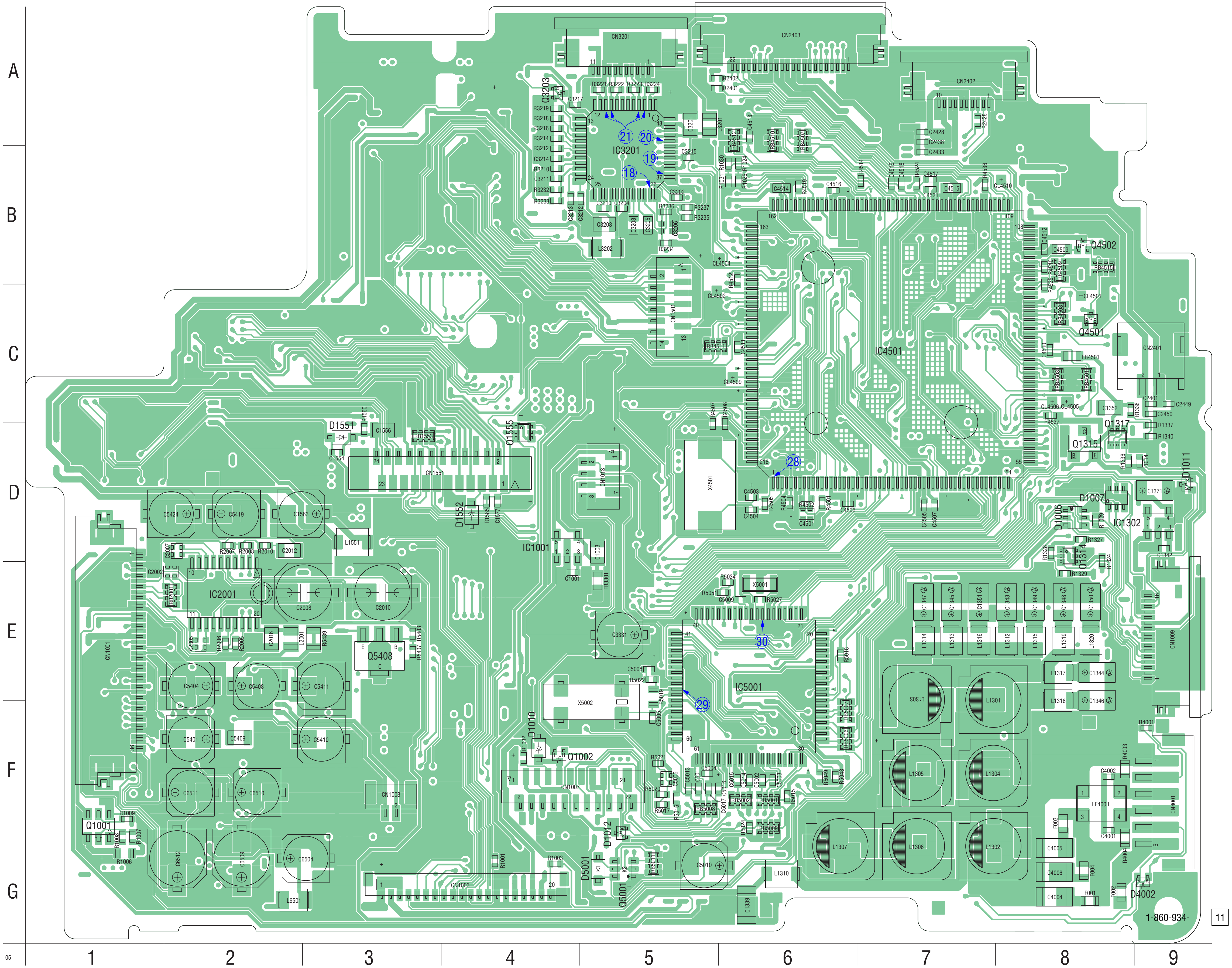
4-2. SCHEMATIC DIAGRAMS | 4-3. PRINTED WIRING BOARDS | MOUNTED PARTS LOCATION

VC-344

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.

VC-344 BOARD (SIDE A)

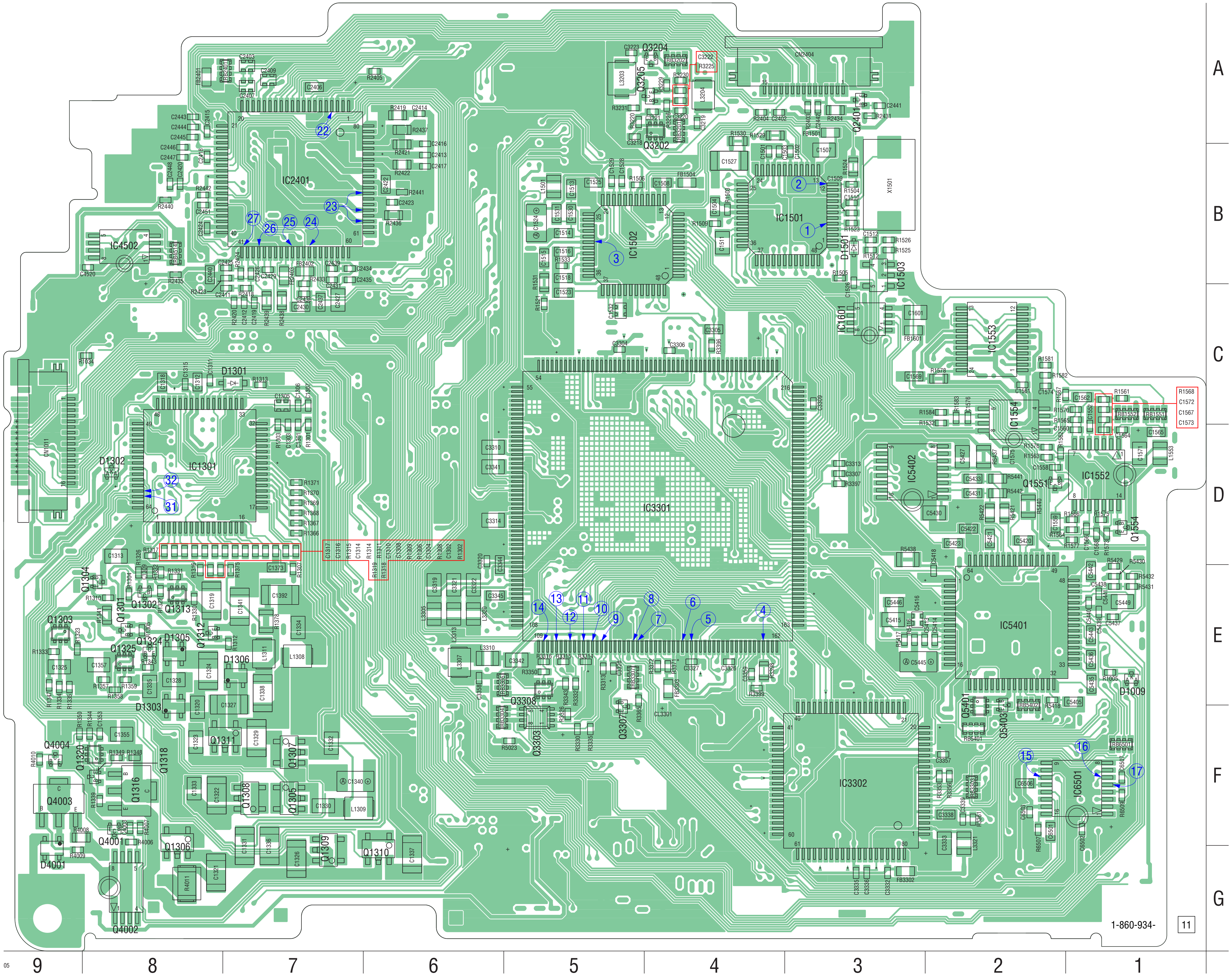


VC-344 (SIDE A)

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.

VC-344 BOARD (SIDE B)

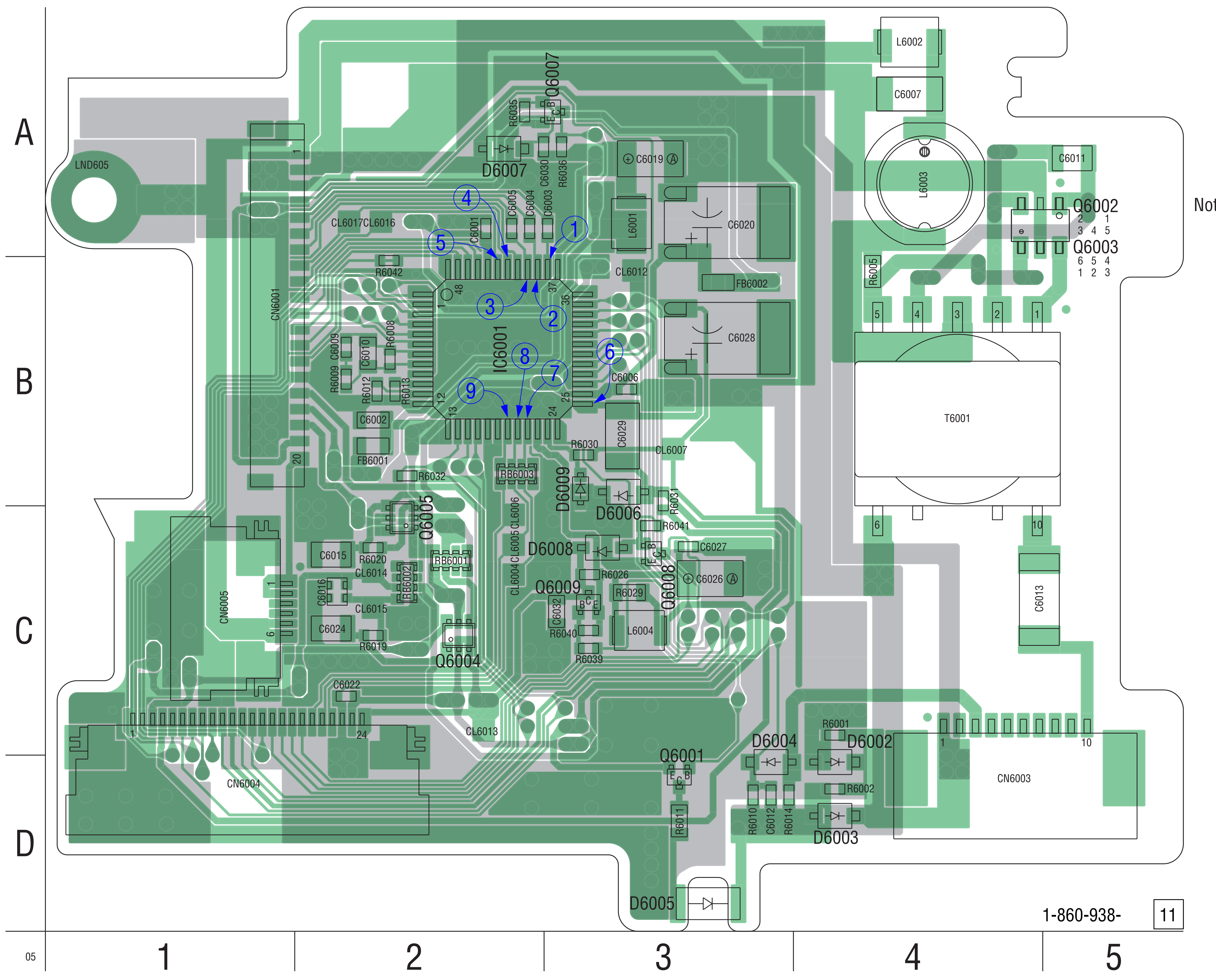


PD-204

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.

PD-204 BOARD

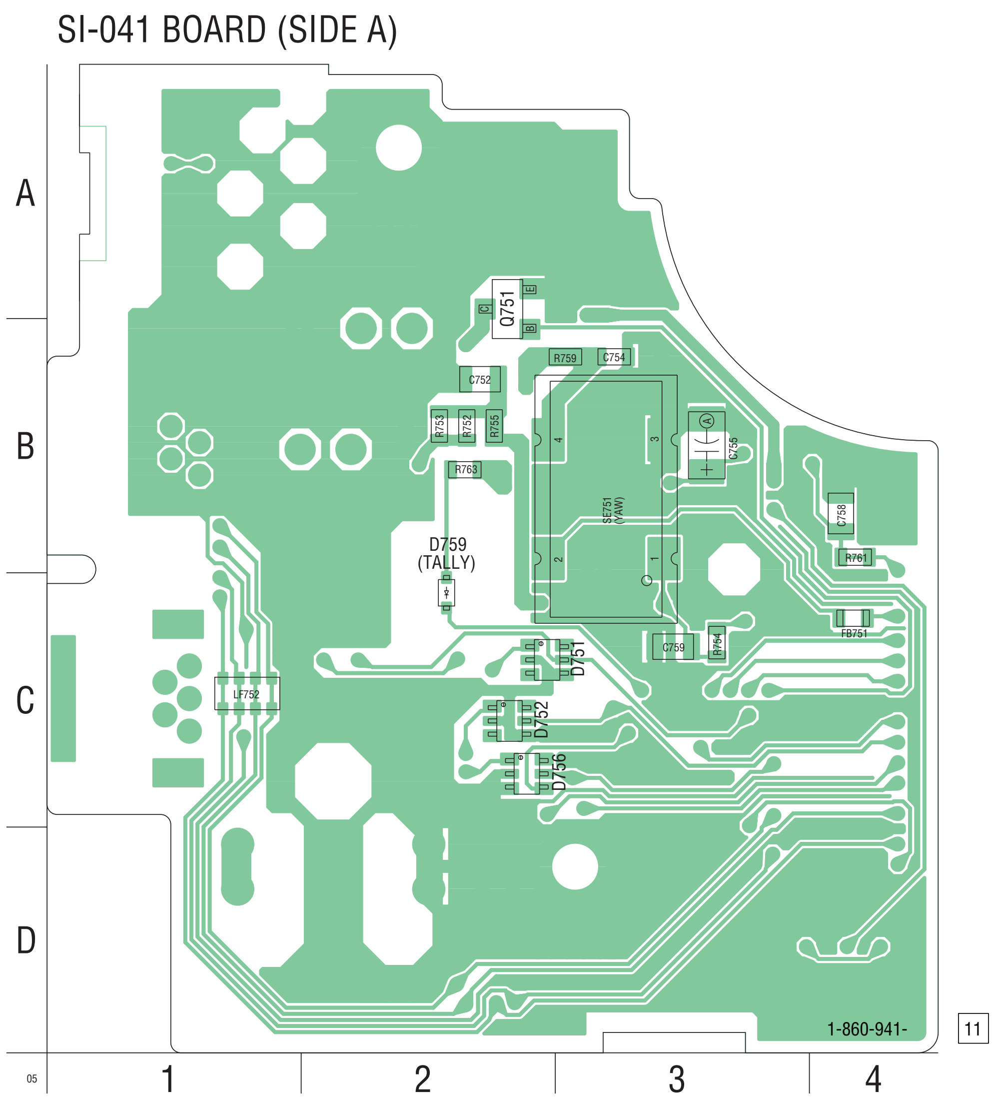


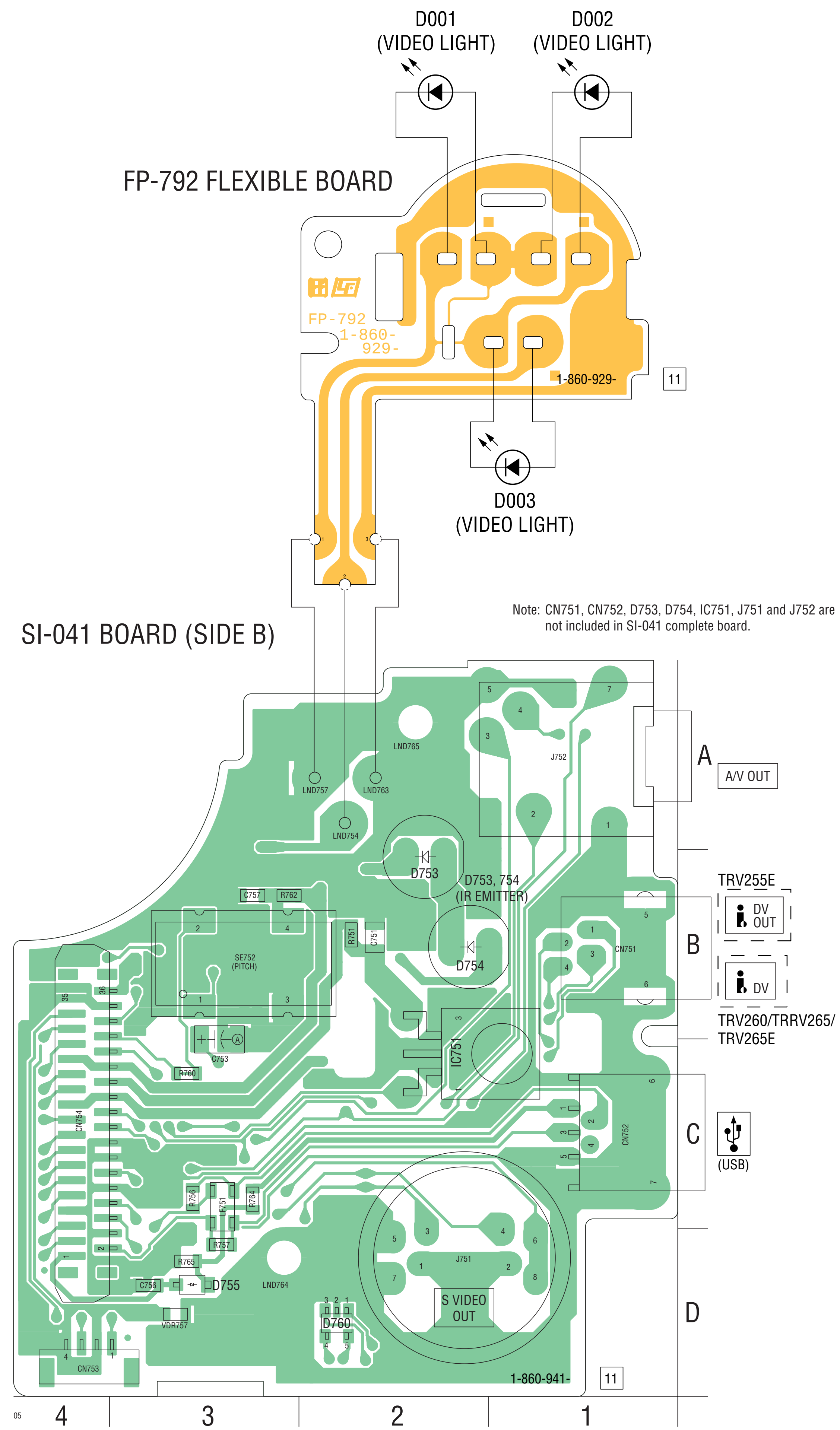
Note: Q6002 and Q6003 have the same mount location.
When replacing Q6002 or Q6003, please refer to schematic diagram and electrical parts list.

SI-041, FP-792 FLEXIBLE

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.

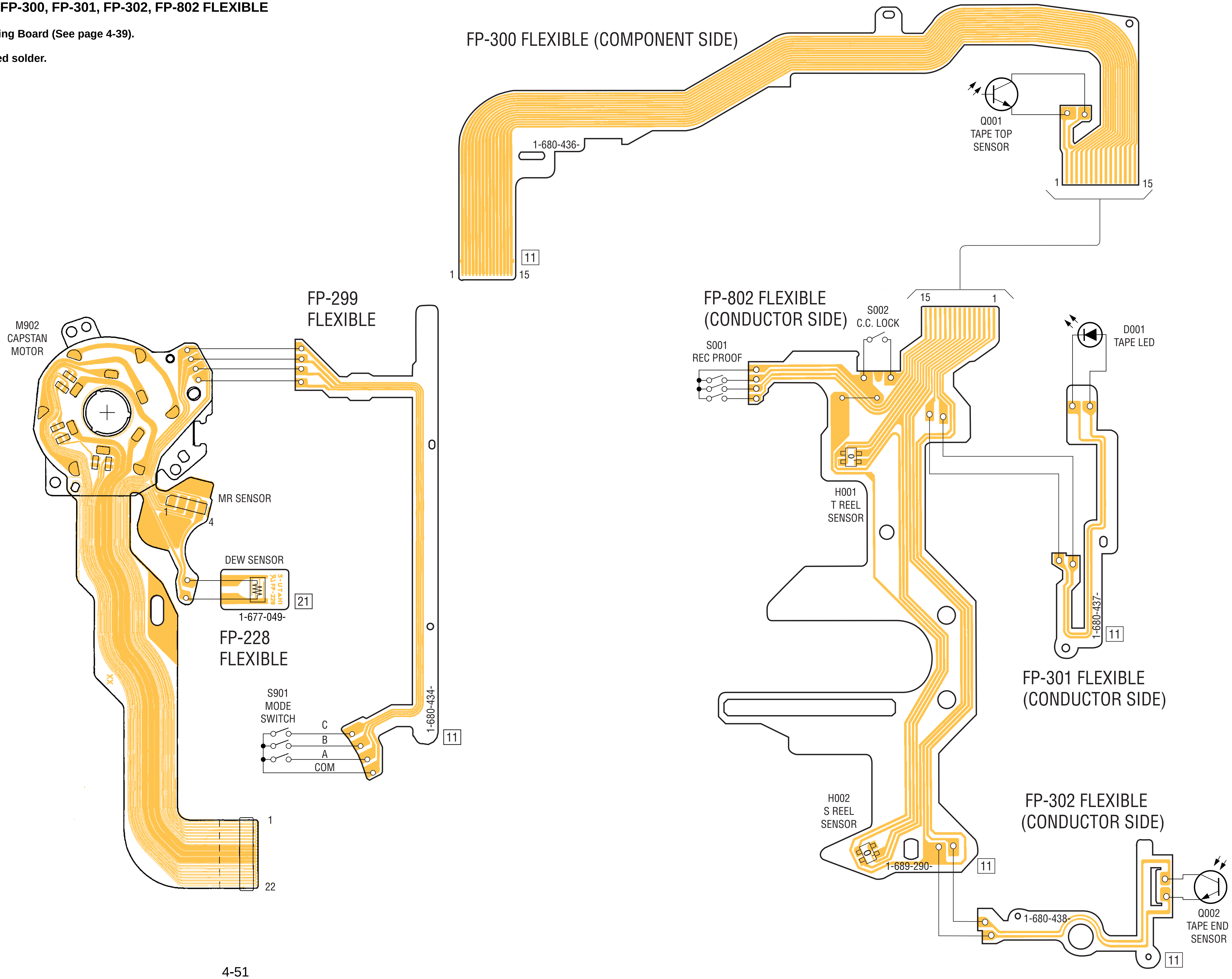




FP-228, FP-299, FP-300, FP-301, FP-302, FP-802 FLEXIBLE

Note for Printed Wiring Board (See page 4-39).

: Uses unleaded solder.



4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

VC-344 BOARD

Ref. No.	Location
C1001	E-4
C1003	D-5
* C1301	D-7
* C1302	D-7
* C1303	D-7
* C1304	D-7
* C1305	C-7
* C1307	C-7
* C1308	D-7
* C1309	E-8
* C1310	D-7
* C1311	C-8
* C1312	C-8
* C1313	D-8
* C1314	D-8
* C1315	C-8
* C1316	D-8
* C1317	D-8
* C1318	C-8
* C1319	E-8
* C1320	F-8
* C1321	G-8
* C1322	F-8
* C1323	F-8
* C1324	E-8
* C1325	E-9
* C1326	G-7
* C1327	E-7
* C1328	E-8
* C1329	F-7
* C1330	F-7
* C1331	G-7
* C1332	F-7
* C1333	F-8
* C1334	E-7
* C1335	E-8
* C1336	G-7
* C1337	G-6
* C1338	E-7
C1339	G-6
* C1340	F-7
* C1341	E-7
C1342	D-9
C1343	E-8
C1344	E-8
C1345	E-7
C1346	F-8
C1347	E-7
C1348	E-8
C1349	E-8
C1350	E-8
C1351	E-7
C1352	C-8
* C1355	F-8
* C1357	E-8
C1371	D-9
* C1373	E-7
* C1501	B-4
* C1502	B-3
* C1503	B-4
* C1504	B-4
* C1507	B-3
* C1508	B-4
* C1509	B-3
* C1510	B-3
* C1511	B-4
* C1512	B-3
* C1515	B-5
* C1516	B-5
* C1518	B-5
* C1523	C-5
* C1524	B-5
* C1525	B-5
* C1527	B-4
* C1530	B-5
* C1532	C-5
* C1552	D-1
C1554	D-3
C1556	D-3
* C1558	D-2
* C1559	D-2
* C1560	D-2
* C1561	C-2
* C1562	C-1
C1563	D-2
* C1564	D-1
* C1565	D-1
* C1566	D-1
* C1568	D-1
* C1571	D-1
* C1573	D-1
* C1574	C-2
* C1575	D-2
* C1601	C-3
C2401	C-9
* C2402	A-4
* C2403	A-7
* C2406	A-7
* C2407	A-7
* C2409	A-7
* C2411	C-7
* C2412	C-7
* C2413	B-6
* C2414	A-6
* C2415	A-8
* C2416	B-6
* C2417	B-6
* C2418	B-8
* C2420	B-8
* C2422	B-6
* C2423	B-6
* C2424	B-8
* C2427	C-7
C2428	A-7
* C2429	B-7
* C2430	C-7
* C2431	B-7
C2433	B-7
* C2434	B-7
* C2435	B-7
* C2436	C-7
* C2437	C-7
C2438	A-7
* C2439	B-7
* C2440	B-8
* C2442	A-3
C3201	A-5
C3202	B-5
C3203	B-5
C3204	B-5
C3205	B-5
C3206	B-5
C3208	B-5
C3210	B-5
C3211	B-4
C3212	B-5
C3213	B-4
C3214	B-4
C3215	B-5
C3217	A-4
* C3218	A-5
* C3219	A-4
* C3220	A-4
* C3221	A-4
* C3223	A-5
* C3304	C-5
* C3305	C-4
* C3306	C-4
* C3309	C-3
* C3310	D-6
* C3313	D-3
* C3314	D-6
* C3319	E-6
* C3320	D-6
* C3321	E-6
* C3322	E-6
* C3326	E-4
* C3327	E-4
* C3328	E-5
C3331	E-5
* C3332	G-3
* C3333	F-2
* C3335	G-3
* C3336	G-3
* C3338	F-2
* C3339	F-2
* C3341	D-6
* C3342	E-5
* C3344	D-6
* C3345	E-6
* C3357	F-2
* C3358	E-6
* C4003	F-8
C4004	G-8
C4005	G-8
C4501	D-6
C4503	D-6
C4504	D-6
C4505	D-7
C4506	D-6
C4507	D-7
C4508	D-6
C4509	B-8
C4510	C-8
C4511	C-6
C4512	B-8
C4514	B-6
C4515	B-7
C4516	B-6
C4517	B-7
C4518	B-7
C4519	B-7
* C4520	B-8
C5002	F-6
C5003	F-6
C5004	F-5
C5005	F-5
C5006	F-5
C5008	E-5
C5009	E-6
C5010	G-5
C5401	F-2
C5404	E-2
* C5405	E-1
C5408	E-2
C5409	F-2
C5410	F-3
C5411	E-3
* C5413	E-3
* C5414	E-2
* C5416	E-3
* C5418	E-2
C5419	D-2
* C5420	D-2
* C5421	D-2
* C5422	D-2
* C5423	D-2
C5424	D-2
* C5427	D-2
* C5430	D-2
* C5431	D-2
* C5433	D-2
* C5435	E-1
* C5436	E-1
* C5437	E-1
* C5438	E-1
* C5439	E-1
* C5440	E-1
* C5441	E-1
* C5442	E-1
* C5443	E-1
* C5445	E-3
* C5446	E-3
* C6501	F-2
* C6502	F-1
* C6503	F-2
C6504	G-3
* C6506	F-2
* C6507	F-1
C6509	G-2
C6510	F-2
C6511	F-2
C6512	G-2
CN1003	G-4
CN1007	F-4
CN1008	F-3
CN1009	E-9
* CN1011	D-9
CN1013	D-5
CN1501	C-5
CN1551	D-3
CN2401	C-9
CN2402	A-7
CN2403	A-6
* CN2404	A-3
CN3201	A-5
CN4001	F-9
D1006	D-8
D1007	D-8
* D1009	E-1
D1010	F-4
D1011	D-9
D1012	F-5
* D1301	C-7
* D1302	D-8
* D1303	F-8
* D1305	E-8
* D1306	E-7
* D1501	B-3
D1551	D-3
* D4001	G-9
D4002	G-9
D5001	G-5
F001	G-8
F002	G-8
F003	F-8
F004	G-8
* FB1501	A-3
* FB1504	B-4
* FB1601	C-3
* FB2401	A-8
* FB2402	B-7
* FB2403	B-7
FB3301	E-5
* FB3302	G-3
* FB3303	E-4
FB4501	C-8
IC1001	D-4
* IC1301	D-8
IC1302	D-9
* IC1501	B-3
* IC1502	B-5
* IC1552	D-1
* IC1553	C-2
* IC1554	C-2
* IC1601	C-3
* IC2401	B-7
IC3201	B-5
* IC3301	D-4
* IC3302	F-3
IC4501	C-7
* IC4502	B-8
IC5001	E-6
* IC5401	E-2
* IC5402	D-3
* IC6501	F-1
L1301	F-7
L1302	G-7
L1303	E-7
L1304	F-8
L1305	F-7
L1306	G-7
L1307	G-6
* L1308	E-7
* L1309	F-7
L1310	G-6
* L1311	E-7
L1312	E-8
L1313	E-7
L1314	E-7
L1315	E-8
L1316	E-7
L1317	E-8
L1318	E-8
L1319	E-8
L1320	E-8
* L1501	B-5
L1551	D-3
* L1553	D-1
L3201	A-5
L3202	B-5
* L3203	A-5
* L3204	A-4
* L3305	E-6
* L3307	E-6
* L3310	E-6
* L3313	E-6
* L3320	E-6
* L3321	F-2
L6501	G-2
Q1001	F-1
Q1002	F-4
* Q1301	E-8
* Q1302	E-8
* Q1303	E-9
* Q1304	E-8
* Q1305	F-7
* Q1306	F-8
* Q1307	F-7
* Q1308	F-7
* Q1309	G-7
* Q1310	G-6
* Q1311	F-7
* Q1312	E-8
* Q1313	E-8
Q1314	D-8
Q1315	D-8
* Q1316	F-8
Q1317	D-8
* Q1318	F-8
* Q1320	F-8
* Q1324	E-8
* Q1325	E-8
* Q1551	D-2
* Q1554	D-1
Q1555	D-4
* Q2401	A-3
* Q3202	A-4
Q3203	A-4
* Q3204	A-4
* Q3205	A-4
* Q3303	F-5
* Q3307	F-5
* Q3308	E-5
* Q4001	F-8
* Q4002	G-8
* Q4003	F-9
* Q4004	F-9
Q4501	C-8
Q4502	B-8
Q5001	G-5
* Q5401	F-2
* Q5403	F-2
Q5408	E-3
R1001	G-4
R1003	G-4
* R1005	E-1
R1006	G-1
R1007	F-1
R1008	F-1
R1009	F-1
R1014	D-9
R1025	B-6
R1029	D-8
R1031	B-6
R1032	F-4
* R1034	C-8
* R1301	D-7
* R1302	D-7
* R1303	D-7
* R1304	E-8
* R1305	E-8
* R1306	D-7
* R1307	E-7
* R1308	D-7
* R1309	D-7
* R1310	E-8
* R1311	D-8
* R1312	E-7
* R1313	C-7
* R1314	D-8
* R1315	D-8
* R1316	E-8
* R1317	D-8
* R1318	E-8
* R1319	E-8
* R1323	E-9
R1324	D-8
* R1326	E-8
R1327	D-8
R1328	D-8
R1329	E-8
* R1330	E-8
* R1331	E-8
* R1332	E-8
* R1333	E-9
* R1334	E-9
* R1335	E-9
R1336	D-8
R1337	D-9
R1338	C-9
* R1339	F-8
R1340	D-9
* R1343	E-8
* R1344	F-8
* R1347	E-9
* R1348	F-8
* R1349	F-8
* R1350	F-9
* R1357	E-8
* R1358	E-8
* R1359	E-8
* R1503	B-4
* R1509	B-4
* R1512	B-3
* R1521	C-5
* R1523	B-3
* R1532	C-2
* R1533	B-5
R1560	D-3
* R1561	C-1
* R1562	D-2
* R1563	D-2
* R1564	D-1
* R1565	C-1
* R1566	D-1
* R1567	C-2
* R1568	C-1
* R1570	C-1
* R1573	D-1
* R1575	D-1
* R1576	D-2
* R1577	D-1
* R1581	C-2
* R1582	C-2
* R1583	C-2
* R1584	C-2
R2401	A-6
R2402	A-6
* R2403	A-3
* R2404	A-4
* R2418	C-7
* R2419	A-6
* R2421	B-6
* R2422	B-6
* R2423	B-7
* R2424	B-7
R2428	A-7
* R2434	A-3
* R2442	B-8
R3210	B-4
R3212	B-4
R3214	A-4
R3216	A-4
R3218	A-4
R3219	A-4
* R3220	A-5
R3221	A-5
R3222	A-5
R3223	A-5
R3224	A-5
* R3225	A-4
* R3226	A-4
* R3229	A-4
* R3230	A-4
* R3231	A-5
R3232	B-4
R3233	B-4
R3234	B-5
R3235	B-5
* R3313	E-5
* R3314	E-5
* R3315	E-5
* R3316	E-5
* R3326	F-5
* R3330	F-5
* R3332	E-5
* R3335	F-5
* R3343	E-5

4-3. PRINTED WIRING BOARDS

no mark : side A
* mark : side B

* R3350	E-5
* R3353	F-2
* R3356	F-2
* R3361	F-2
* R3365	F-5
* R3397	D-3
R4001	F-9
R4003	F-8
R4004	G-8
* R4006	F-8
* R4007	F-8
* R4008	F-9
* R4009	G-9
* R4010	F-9
R4501	D-6
R4502	D-6
R4507	D-5
R4510	B-8
R4512	B-6
R4514	B-7
R4519	B-6
R4524	B-7
R4535	C-8
R4536	B-7
R4537	C-8
R5015	F-6
R5016	F-5
R5017	F-5
R5018	E-6
R5019	E-5
R5020	F-5
R5021	F-5
R5022	E-5
* R5023	F-5
R5024	F-6
R5027	E-6
R5034	E-6
R5051	E-6
R5403	E-3
R5407	E-3
* R5416	E-3
* R5417	E-3
* R5418	E-2
* R5421	D-2
* R5422	D-2
* R5429	E-1
* R5430	E-1
* R5431	E-1
* R5432	E-1
* R5441	D-2
* R5442	D-2
* R6507	F-2
* R6509	F-1
* RB1551	C-1
* RB1552	C-1
RB1553	D-3
* RB2401	A-7
* RB3201	A-4
* RB3202	A-4
* RB3303	F-2
* RB3304	F-6
* RB3305	E-6
* RB3307	E-5
RB4501	C-8
RB4508	C-8
RB4509	B-8
RB4510	A-6
RB4511	C-5
RB4512	A-6
* RB4514	B-8
RB4515	B-8
RB5001	F-6
RB5002	F-6
RB5006	F-6
RB5007	F-6
RB5008	F-5
RB5009	F-6
RB5011	G-5
* RB5401	F-2
* RB5402	F-2
* RB6501	F-1

* X1501	B-3
X4501	D-5
X5001	E-6
X5002	F-5

PD-204 BOARD

C6001	A-2
C6002	B-2
C6003	A-3
C6004	A-2
C6005	A-2
C6006	B-3
C6007	A-4
C6009	B-2
C6010	B-2
C6011	A-5
C6012	D-3
C6013	C-4
C6015	C-2
C6016	C-2
C6019	A-3
C6020	A-3
C6022	C-2
C6024	C-2
C6026	C-3
C6027	C-3
C6028	B-3
C6029	B-3
CN6001	B-1
CN6003	D-4
CN6004	D-1
CN6005	C-1
D6004	D-3
D6006	B-3
D6009	B-3
FB6001	B-2
IC6001	B-2
L6001	A-3
L6002	A-4
L6003	A-4
L6004	C-3
Q6002	A-4
Q6004	C-2
Q6005	C-2
Q6008	C-3
Q6009	C-3
R6005	B-4
R6009	B-2
R6010	D-3
R6012	B-2
R6013	B-2
R6014	D-3
R6019	C-2
R6020	C-2
R6026	C-3
R6030	B-3
R6031	B-3
R6032	B-2
R6039	C-3
R6040	C-3
R6041	C-3
RB6001	C-2
RB6002	C-2
RB6003	B-2
T6001	B-4

SI-041 BOARD

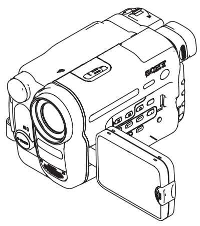
* CN751	B-1
* CN752	C-1
* CN753	D-4
* CN754	C-4
D751	C-2
D752	C-2
* D753	B-2
* D754	B-2
* D755	D-3
D756	C-2
D759	C-2
* IC751	C-2
* J751	D-2
* J752	A-1
Q751	A-2
R752	B-2
R753	B-2
* R756	C-3
* R757	D-3
R763	B-2
* R764	C-3
* R765	D-3

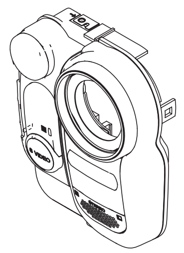
NOTE

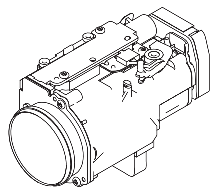
5. REPAIR PARTS LIST

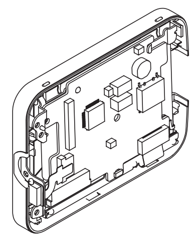
NOTE: Characters A to L of the electrical parts list indicate location of exploded views in which the desired part is shown.

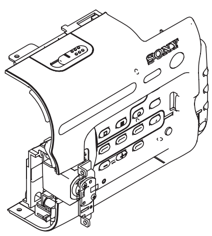
Link EXPLODED VIEWS

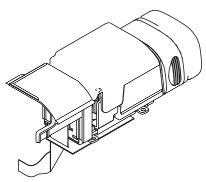

A
OVERALL ASSEMBLY

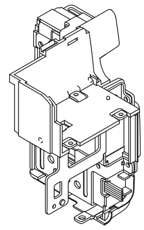

B
FRONT PANEL BLOCK

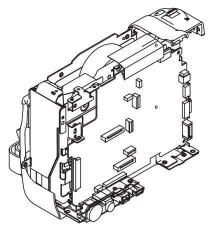

C
LENS BLOCK

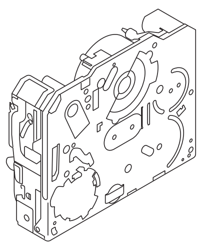

D
LCD BLOCK

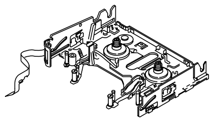

E
CABINET R BLOCK

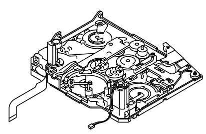

F
EVF BLOCK

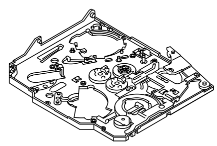

G
BATTERY PANEL BLOCK


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-471 BOARD C	FP-792 FLEXIBLE BOARD B	SI-041 BOARD B
FP-300 FLEXIBLE BOARD J	FP-802 FLEXIBLE BOARD J	VC-344 BOARD H
FP-301 FLEXIBLE BOARD J	PD-204 BOARD (TYPE C) D	
FP-302 FLEXIBLE BOARD J	PD-204 BOARD (TYPE S) D	

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
  CND : Canadian model
  EE : East European model
  JE : Tourist 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.

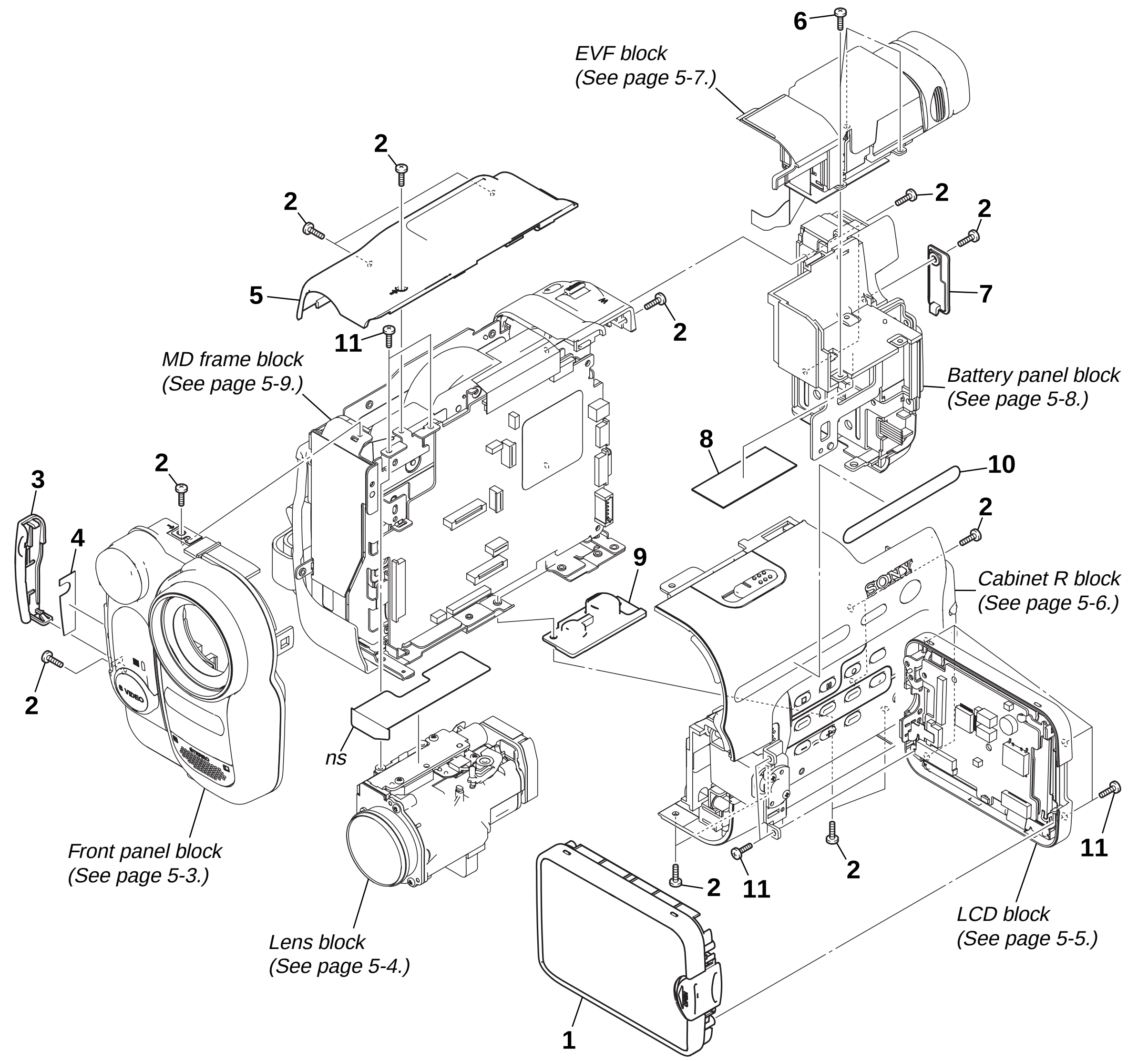
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

About PD-204 board and LCD module, discriminate LCD type on the machine referring to page 1-3, and replace the same type.

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL ASSEMBLY



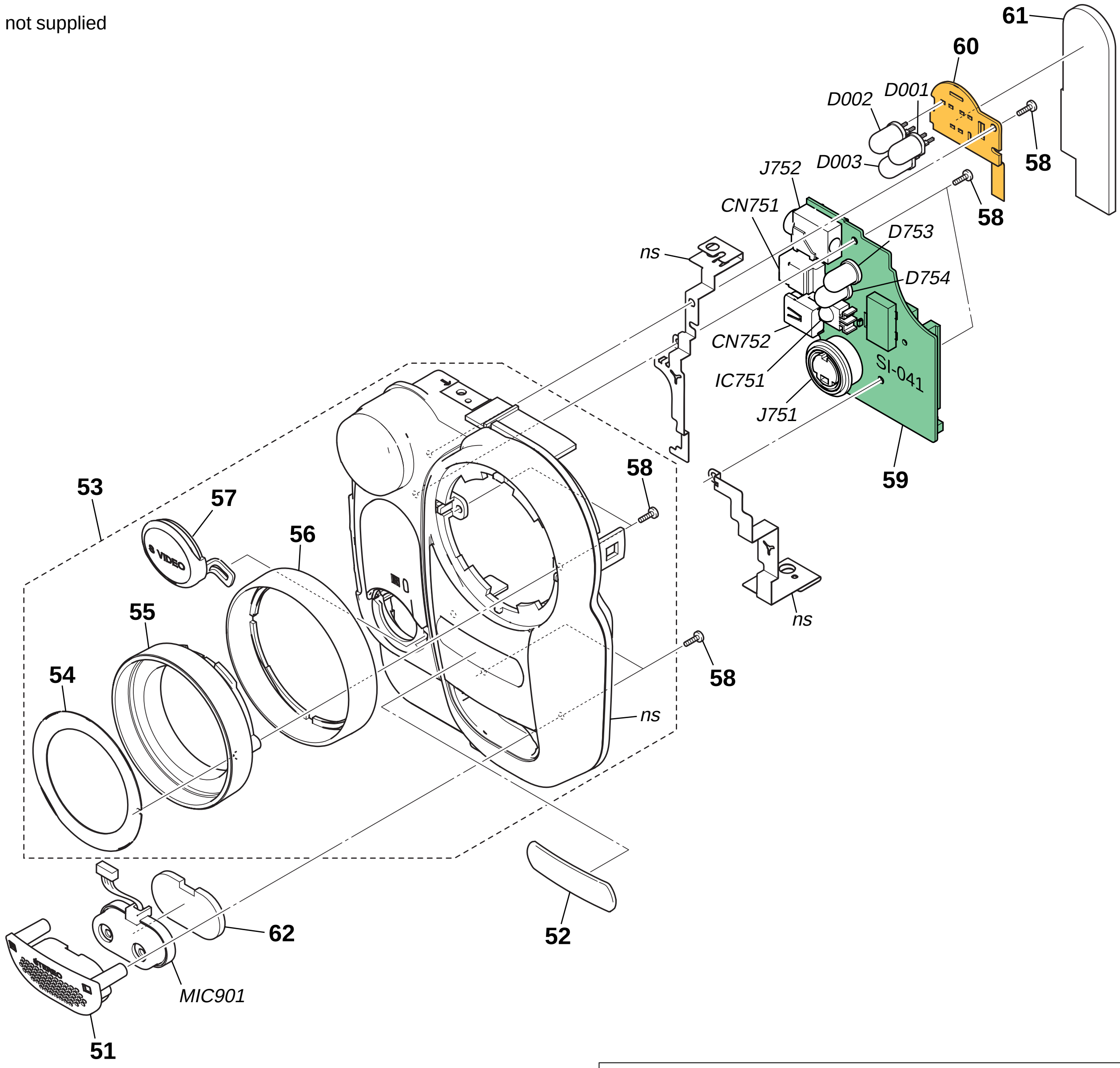
Ref. No.	Part No.	Description
1	X-3953-989-1	CABINET (C) (587) ASSY, P
2	3-080-203-31	SREW (M2), LOCK ACE, P2
3	3-087-813-01	COVER (51), JACK
4	3-087-812-21	SHEET (51), JACK (TRV255E)
4	3-087-812-31	SHEET (51), JACK (TRV260/TRV265/TRV265E)
5	3-087-811-01	CABINET (UPPER) (51)
6	3-078-889-11	SCREW (M1.7)
7	3-087-810-01	LID (51), CPC
8	CAUTION	RETAINER (51), EVF FLEXIBLE
9	3-079-012-01	SCREW (30), TRIPOD
10	3-087-831-21	LABEL (51)
11	3-080-204-21	SCREW, TAPPING, P2

CAUTION :
For the part of 8 : RETAINER (51), EVF FLEXIBLE (3-088-616-01), cut WOVEN (T0.25), FABRIC NON (3-076-631-01) into the desired length and use it.

5. REPAIR PARTS LIST

5-1-2. FRONT PANEL BLOCK

ns: not supplied



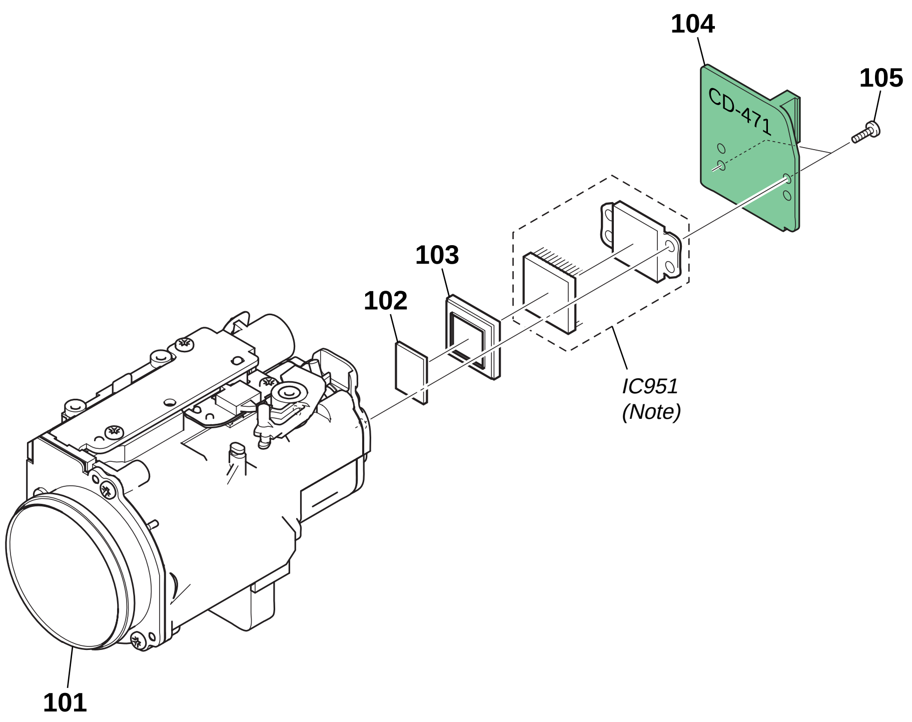
(Note) CN751, CN752, D753, D754, IC751, J751 and J752 are not included in SI-041 complete board.

Ref. No.	Part No.	Description
51	3-087-738-11	RETAINER (51), MICROPHONE
52	3-087-740-01	PLATE (51), MAGNIFICATION
53	X-3953-990-1	PANEL (587) ASSY, FRONT (TRV255E/TRV260)
53	X-3953-991-1	PANEL (590) ASSY, FRONT (TRV265/TRV265E)
54	3-087-739-01	PLATE (51), NAME
55	3-087-743-01	SCREW (51), FILTER
56	3-087-742-01	RING (51), FRONT
57	3-087-749-01	COVER (51), S TERMINAL
58	3-080-204-21	SCREW, TAPPING, P2
59	A-7111-952-A	SI-041 BOARD, COMPLETE (Note)
60	1-860-929-11	FP-792 FLEXIBLE BOARD
61	3-087-994-01	CUSHION (51), JACK
62	3-088-031-01	CUSHION (51), MICROPHONE

Ref. No.	Part No.	Description
CN751	1-794-276-11	CONNECTOR, SQUARE TYPE 4P (DV OUT/DV) (Note)
CN752	1-794-962-11	CONNECTOR, SQUARE TYPE (USB 5P) (USB) (Note)
D001	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)
D002	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)
D003	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)
D753	8-719-060-65	DIODE DCC3810 (IR EMITTER) (Note)
D754	8-719-060-65	DIODE DCC3810 (IR EMITTER) (Note)
IC751	6-704-975-01	IC RPM7240-V4 (Note)
J751	1-778-518-11	CONNECTOR, EXTERNAL (S VIDEO OUT) (Note)
J752	1-778-040-11	JACK, SMALL TYPE (A/V OUT) (Note)
MIC901	1-542-513-11	MICROPHONE

5. REPAIR PARTS LIST

5-1-3. LENS BLOCK



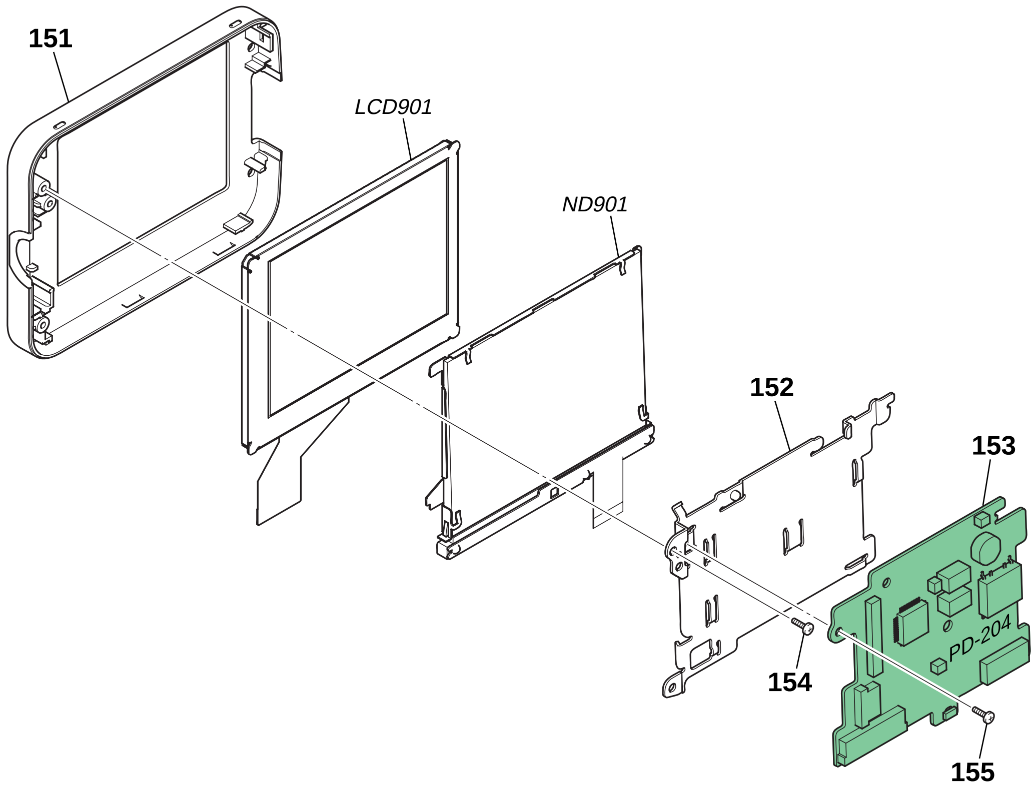
(Note) Be sure to read "Precuations for Replacement of CCD Imager" on page 4-8 when changing the CCD imager.

Ref. No.	Part No.	Description
101	8-848-765-01	DEVICE, LENS LSV-820A
102	1-758-554-11	FILTER BLOCK, OPTICAL
103	3-053-973-01	RUBBER (W), SEAL
104	A-7111-947-A	CD-471 BOARD, COMPLETE

Ref. No.	Part No.	Description
105	3-080-204-21	SCREW, TAPPING, P2
IC951	A-7013-401-A	CCD BLOCK ASSY (CCD IMAGER) (TRV255E/TRV265E) (Note)
IC951	A-7016-724-A	CCD BLOCK ASSY (CCD IMAGER) (TRV260/TRV265) (Note)

5. REPAIR PARTS LIST

5-1-4. LCD BLOCK



(Note)	About PD-204 board and LCD module, discriminate LCD type on the machine referring to page 1-3, and replace the same type.

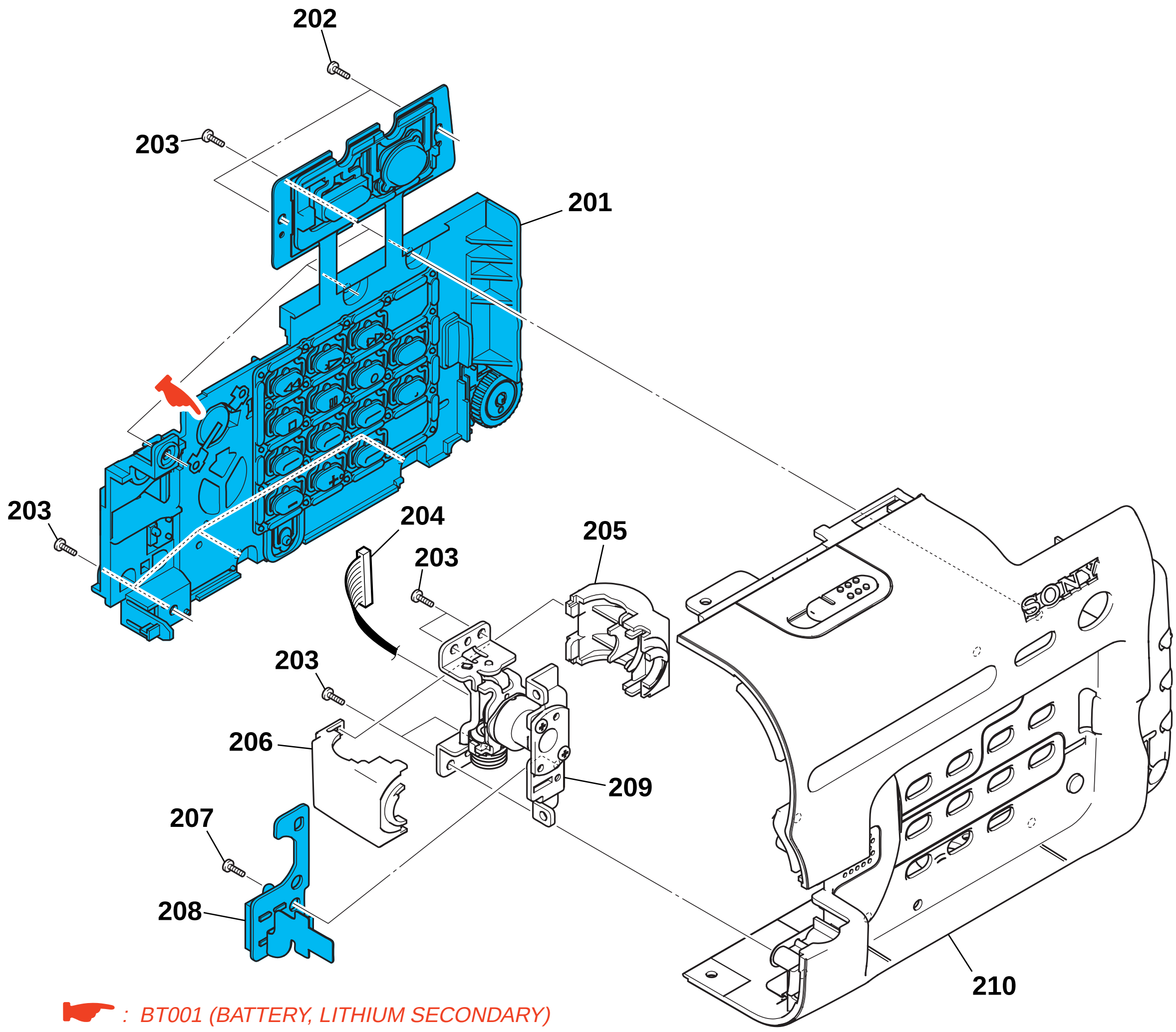
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description
151	3-087-780-01	CABINET (M) (51), P
152	3-087-781-01	FRAME (51), PANEL
153	A-7111-949-A	PD-204 BOARD, COMPLETE (TYPE S) (Note)
153	A-7111-948-A	PD-204 BOARD, COMPLETE (TYPE C) (Note)
154	3-080-204-21	SCREW, TAPPING, P2
155	3-078-889-11	SCREW (M1.7)

Ref. No.	Part No.	Description
LCD901	1-805-137-51	INDICATOR MODULE LIQUID CRYSTAL (TYPE S) (Note)
LCD901	1-805-138-21	INDICATOR MODULE LIQUID CRYSTAL (TYPE C) (Note)
⚠ND901	1-518-951-11	TUBE, FLUORESCENT, COLD CATHODE

5. REPAIR PARTS LIST

5-1-5. CABINET R BLOCK



: BT001 (BATTERY, LITHIUM SECONDARY)
Included in the control switch block (CF-5100).

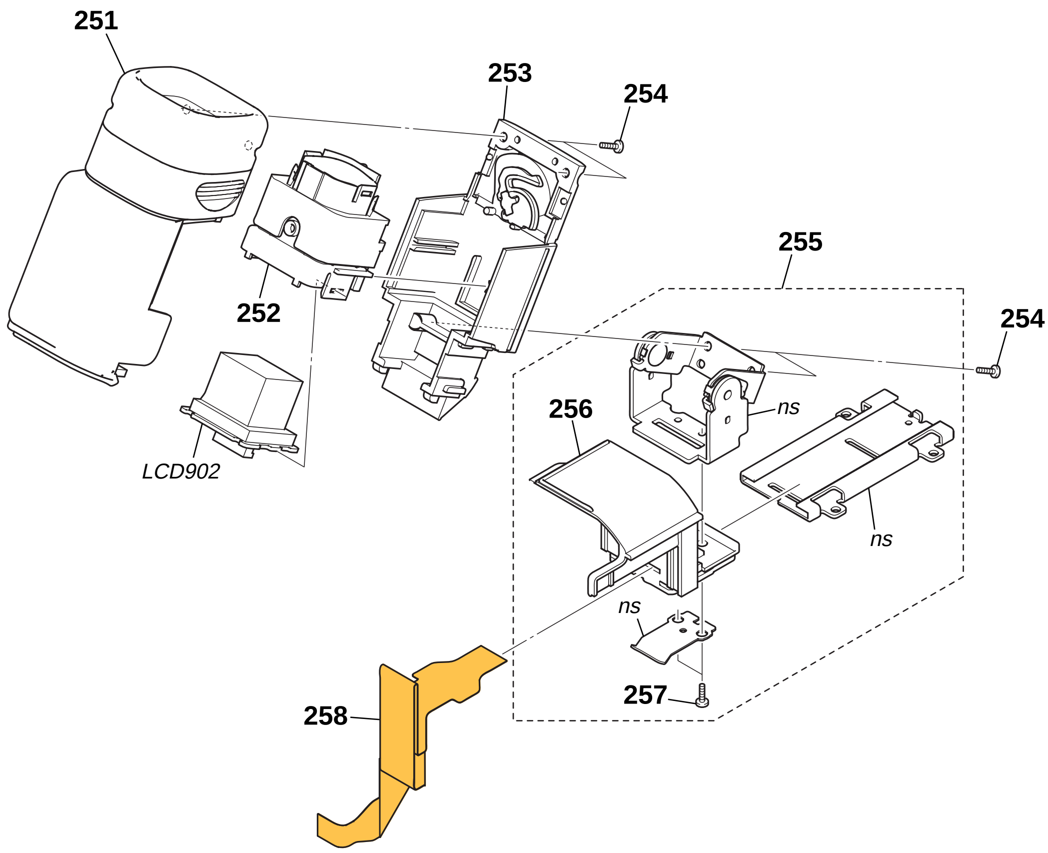
Ref. No.	Part No.	Description
201	1-478-416-21	KEY BLOCK, CONTROL (CF-5100)
202	3-080-206-11	SCREW, TAPPING, P2
203	3-080-205-21	SCREW, TAPPING, P2
204	1-962-648-11	HARNESS (PD-124)
205	3-087-826-01	COVER (M) (51), HINGE
206	3-087-825-11	COVER (C) (51), HINGE

Ref. No.	Part No.	Description
207	3-078-889-11	SCREW (M1.7)
208	1-478-418-11	KEY BLOCK, CONTROL (PR-5100)
209	X-3953-962-1	HINGE (51) ASSY
210	X-3954-043-1	CABINET (R) (585) ASSY (TRV255E)
210	X-3953-988-1	CABINET (R) (587) ASSY (TRV260/TRV265/TRV265E)

5. REPAIR PARTS LIST

5-1-6. EVF BLOCK

ns: not supplied

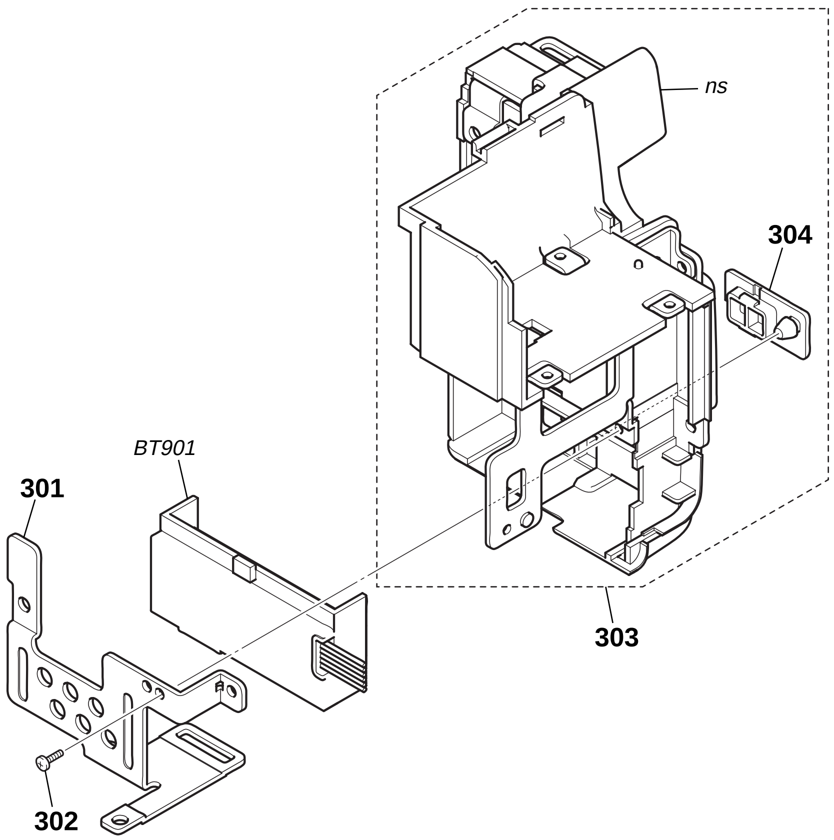


Ref. No.	Part No.	Description
251	X-3953-982-1	CABINET (UPPER) (587) ASSY, EVF
252	X-3951-166-1	LENS (M) ASSY, VF
253	X-3953-966-1	CABINET (LOWER) (515) ASSY, EVF
254	3-080-204-21	SCREW, TAPPING, P2
255	X-3953-967-1	BASE (51) ASSY, SLDE
256	3-087-788-01	BASE (51), SLIDE
257	3-080-203-31	SCREW (M2), LOCK ACE, P2
258	1-860-928-11	FP-797 FLEXIBLE BOARD
LCD902	1-805-465-61	INDICATOR MODULE LIQUID CRYSTAL (TRV260/TRV265)
LCD902	1-805-465-81	INDICATOR MODULE LIQUID CRYSTAL (TRV255E/TRV265E)

5. REPAIR PARTS LIST

5-1-7. BATTERY PANEL BLOCK

ns: not supplied

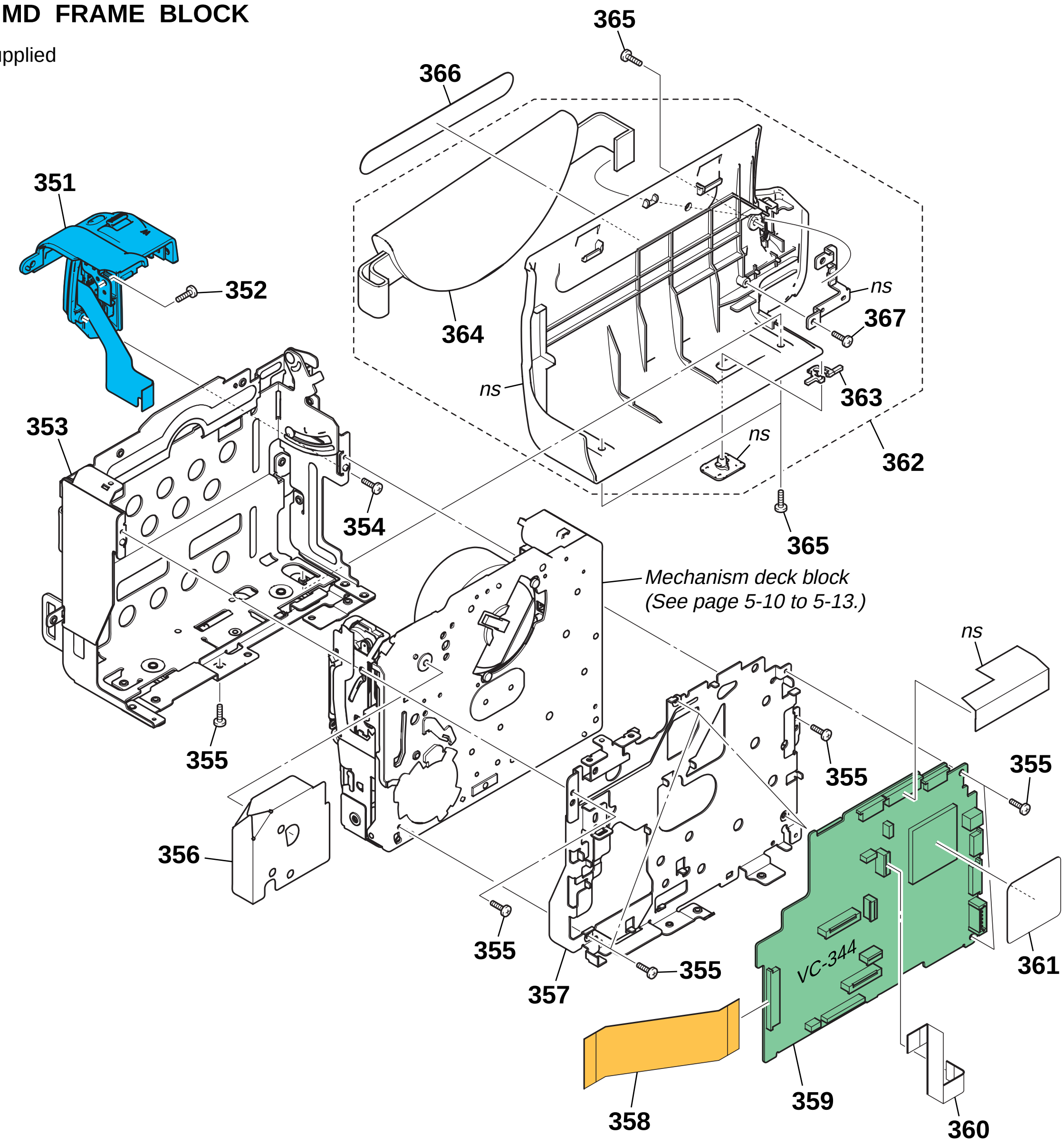


Ref. No.	Part No.	Description
301	3-087-799-01	SHEET METAL (LOWER) (51), STRAP
302	3-078-889-11	SCREW (M1.7)
303	X-3953-968-1	PANEL (515) ASSY, BATTERY
304	3-072-305-01	LID (2500), JACK
BT901	1-694-772-11	TERMINAL BOARD, BATTERY

5. REPAIR PARTS LIST

5-1-8. MD FRAME BLOCK

ns: not supplied



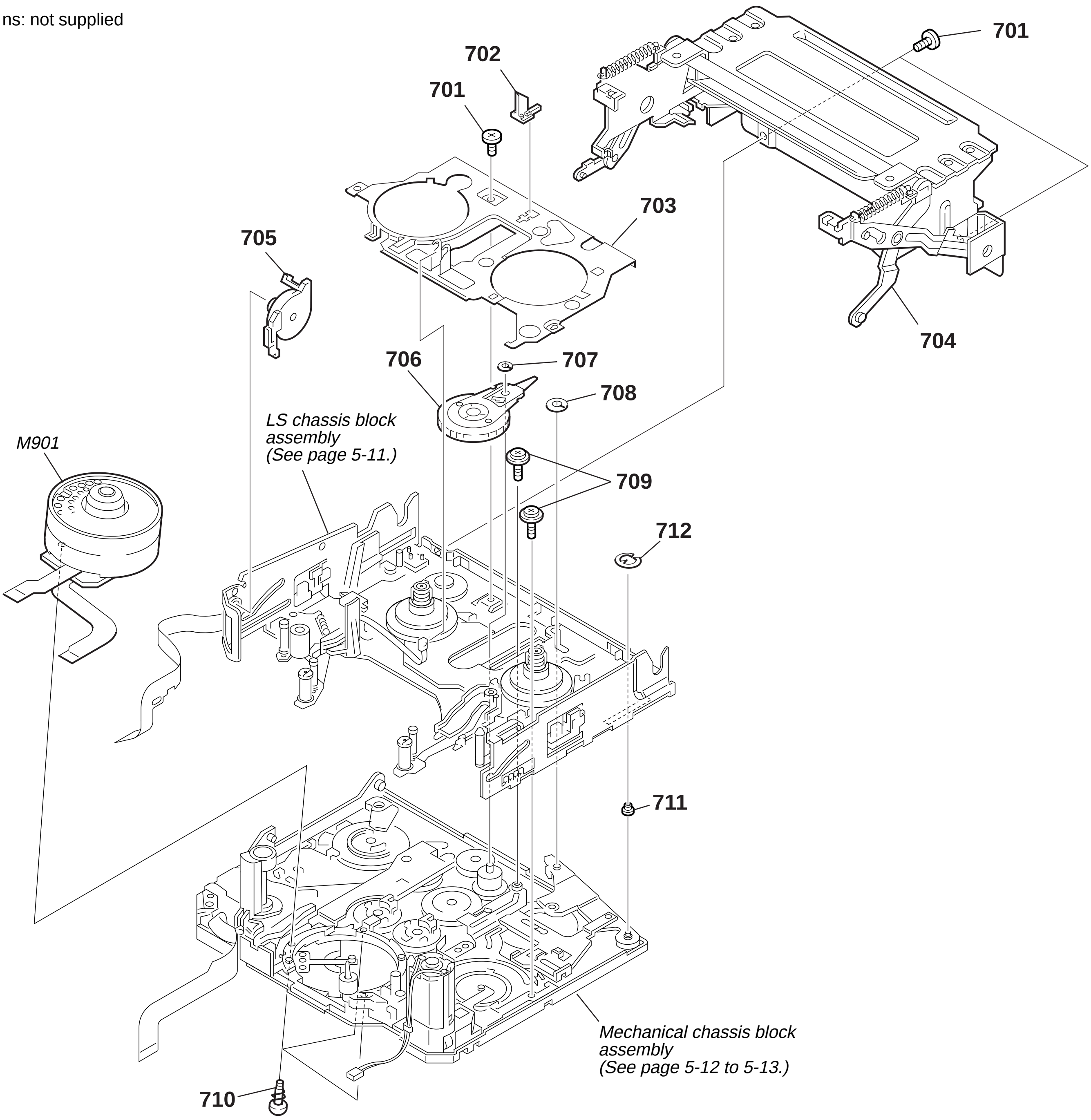
Ref. No.	Part No.	Description
351	1-478-417-31	KEY BLOCK, CONTROL (SS-5100)
352	3-080-253-01	SCREW (M1.7), LOCK ACE, P2
353	X-3953-958-2	FRAME (51) ASSY, CS
354	3-080-204-21	SCREW, TAPPING, P2
355	3-078-889-11	SCREW (M1.7)
356	3-066-169-01	SHEET (30), MD
357	3-087-809-01	FRAME (51), MD
358	1-860-927-11	FP-796 FLEXIBLE BOARD
359	A-7112-398-A	VC-344 BOARD, COMPLETE (SERVICE)
360	1-827-980-11	CABLE, FLEXIBLE FLAT (FFC-005)

Ref. No.	Part No.	Description
361	3-089-368-01	LABEL, FUSE REPLACEMENT (51) (TRV260)
362	X-3953-957-1	CABINET (L) (51) ASSY
363	3-978-765-01	SLIDER, G LOCK
364	3-087-802-01	BELT (51), GRIP
365	3-080-203-31	SREW (M2), LOCK ACE, P2
366	3-087-833-01	LABEL (L) (56) (TRV255E)
366	3-087-833-11	LABEL (L) (56) (TRV260)
366	3-087-833-31	LABEL (L) (56) (TRV265)
366	3-087-833-41	LABEL (L) (56) (TRV265E)
367	3-080-204-11	SCREW, TAPPING, P2

5. REPAIR PARTS LIST

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

ns: not supplied

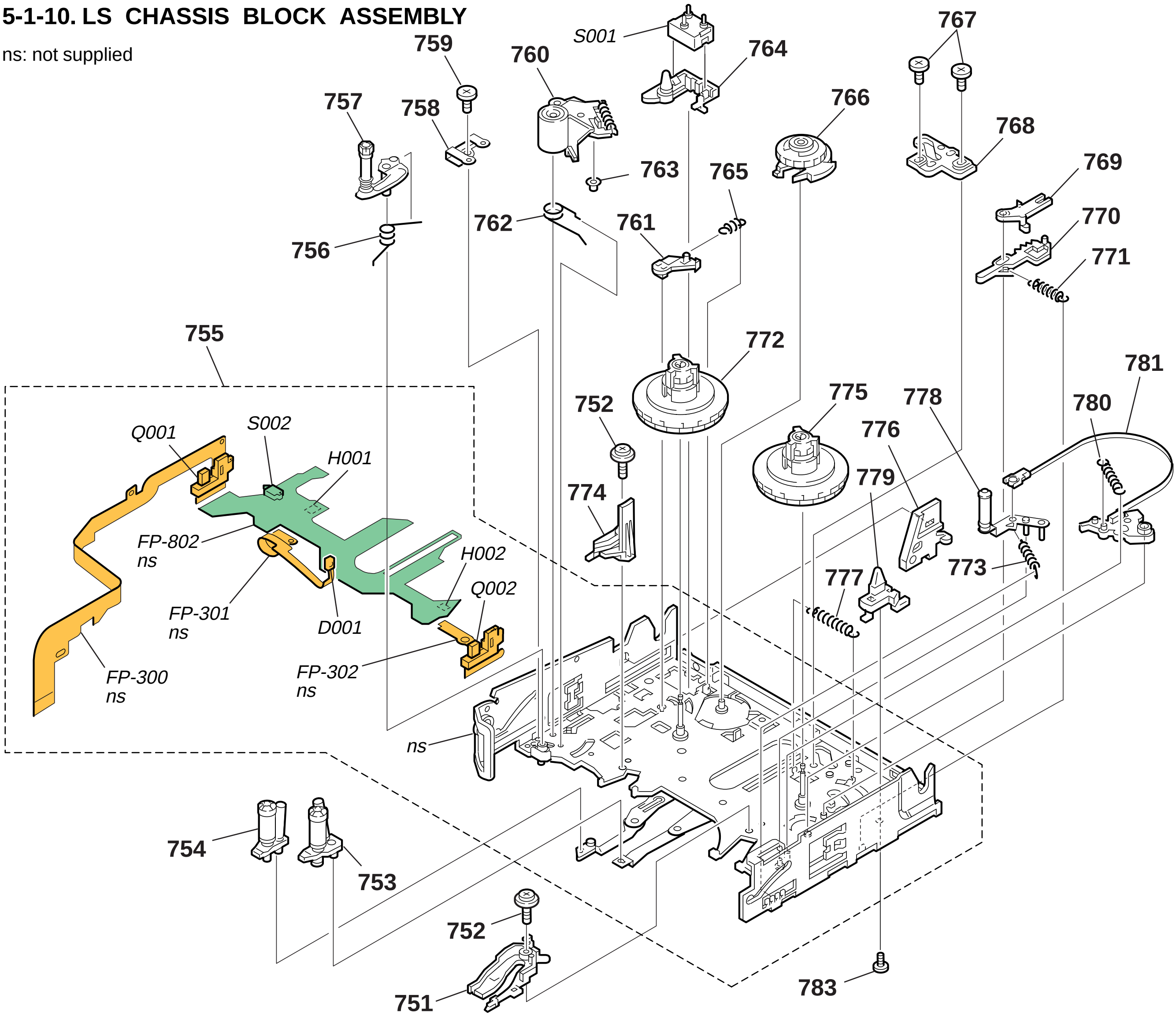


Ref. No.	Part No.	Description
701	3-065-932-01	PAN (2 MAIN M1.4X1.6), CAMERA
702	3-065-895-01	LEVER, REEL RELEASE
703	3-065-896-01	PLATE, BLIND
704	X-3951-298-1	CASSETTE COMPARTMENT ASSY
705	X-3951-302-1	DAMPER ASSY
706	X-3951-297-1	GEAR ASSY, R DRIVE
707	3-065-840-01	CUT (0.98X3X0.13), LUMILER (W)
708	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-7048-986-A	DRUM (DKH-04B-R) (SERVICE)

5. REPAIR PARTS LIST

5-1-10. LS CHASSIS BLOCK ASSEMBLY

ns: not supplied



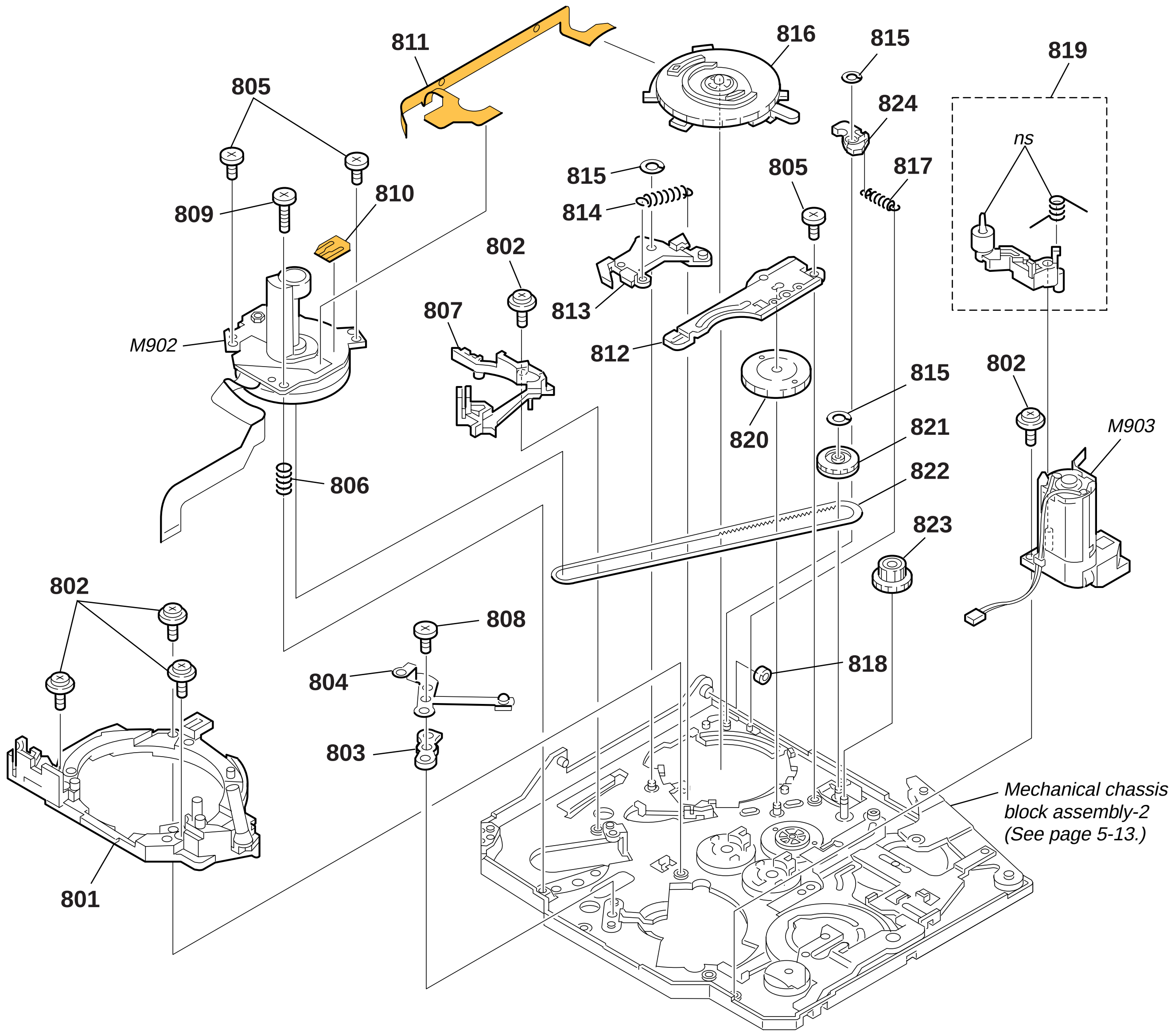
Ref. No.	Part No.	Description
751	3-065-822-02	RAIL (S), GUIDE
752	3-947-503-01	SCREW (M1.4)
753	A-7096-416-B	BASE (S) BLOCK ASSY, GUIDE
754	A-7096-415-A	BASE (T) BLOCK ASSY, GUIDE
755	A-7096-426-A	CHASSIS ASSY, LS
756	3-065-802-01	SPRING, TG7 ARM
757	A-7096-414-A	ARM BLOCK ASSY, TG7
758	3-065-801-01	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. REPAIR PARTS LIST

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

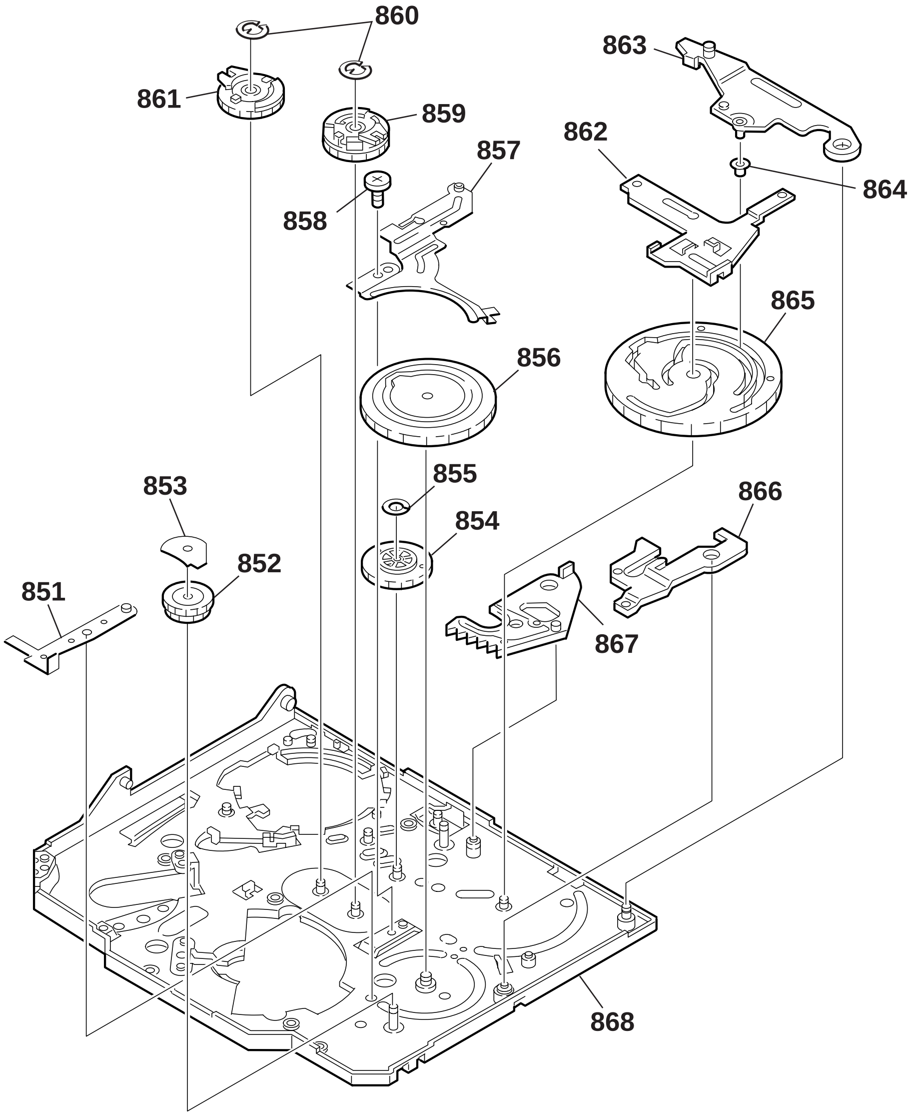
ns: not supplied



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
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)

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

CD-471 | FP-300 | FP-301 | FP-302 | FP-792 | FP-802 | PD-204 (TYPE C)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-7111-947-A	CD-471 BOARD, COMPLETE			
		************************			
		(IC951 is not included in this complete board.)			
		< CAPACITOR >			
C951	1-126-395-11	ELECT CHIP	22uF	20%	16V
C953	1-128-994-21	ELECT CHIP	47uF	20%	10V
C955	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< CONNECTOR >			
CN951	1-815-762-11	CONNECTOR, FFC/FPC 14P			
		< IC >			
IC951	A-7013-401-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV255E/TRV265E)			
IC951	A-7016-724-A	CCD BLOCK ASSY (CCD IMAGER) (Note) (TRV260/TRV265)			
		< 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
R953	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R970	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description
		FP-300 FLEXIBLE BOARD (Not Supplied)
		********************
		< PHOTO TRANSISTOR >
Q001	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE TOP)

Ref. No.	Part No.	Description
		FP-301 FLEXIBLE BOARD (Not Supplied)
		********************
		< DIODE >
D001	8-719-988-42	DIODE GL453S (TAPE LED)

Ref. No.	Part No.	Description
		FP-302 FLEXIBLE BOARD (Not Supplied)
		********************
		< PHOTO TRANSISTOR >
Q002	8-729-907-25	PHOTO TRANSISTOR PT4850F (TAPE END)

Ref. No.	Part No.	Description
	1-860-929-11	FP-792 FLEXIBLE BOARD
		********************
		(D001, D002 and D003 are not included in this flexible board.)
		< DIODE >
D001	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)
D002	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)
D003	6-500-744-01	DIODE NSPW500BS-TL2 (VIDEO LIGHT)

Ref. No.	Part No.	Description
		FP-802 FLEXIBLE BOARD (Not Supplied)
		********************
		< HOLE ELEMENT >
H001	8-719-033-37	ELEMENT, HALL HW-105C (T REEL)
H002	8-719-033-37	ELEMENT, HALL HW-105C (S REEL)
		< 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)

Ref. No.	Part No.	Description			
	A-7111-949-A	PD-204 BOARD, COMPLETE (TYPE C)			
		************************			
		< CAPACITOR >			
C6001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6002	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6004	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6005	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6006	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6007	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C6009	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6010	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C6011	1-163-023-00	CERAMIC CHIP	0.015uF	10%	50V
C6012	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6013	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV
C6015	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C6019	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C6020	1-110-457-11	ELECT CHIP	3.3uF	20%	25V
C6022	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6024	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C6026	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C6027	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6028	1-115-407-11	ELECT CHIP	10uF		16V
		< CONNECTOR >			
CN6001	1-794-997-11	PIN, CONNECTOR 20P			
CN6003	1-764-709-11	FFC/CONNECTOR, FPC (LIF) 10P			
CN6004	1-815-031-11	CONNECTOR, FFC/FPC (ZIF) 24P			
CN6005	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P			
		< DIODE >			
D6004	8-719-073-01	DIODE MA111-(K8).S0			
D6009	8-719-071-34	DIODE RB521S-30-TE61			
		< FERRITE BEAD >			
FB6001	1-414-760-21	FERRITE, EMI (SMD) (1608)			
		< IC >			
IC6001	6-705-329-01	IC CM7104L42-T4			

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

PD-204 (TYPE C) **PD-204 (TYPE S)**

< COIL >

Ref. No.	Part No.	Description			
L6001	1-469-527-91	INDUCTOR	47uH		
L6002	1-412-056-11	INDUCTOR	4.7uH		
L6003	1-428-878-11	INDUCTOR	82uH		
L6004	1-469-526-91	INDUCTOR	22uH		

< TRANSISTOR >

Ref. No.	Part No.	Description			
Q6002	6-550-065-01	TRANSISTOR	CPH5504-TL-E		

< RESISTOR >

Ref. No.	Part No.	Description			
R6005	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R6009	1-218-975-11	RES-CHIP	68K	5%	1/16W
R6010	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6012	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R6013	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R6014	1-218-949-11	RES-CHIP	470	5%	1/16W
R6019	1-218-990-11	SHORT CHIP	0		
R6020	1-218-990-11	SHORT CHIP	0		
R6026	1-218-990-11	SHORT CHIP	0		
R6030	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R6031	1-218-990-11	SHORT CHIP	0		
R6032	1-218-978-11	RES-CHIP	120K	5%	1/16W

< COMPOSITION CIRCUIT BLOCK >

Ref. No.	Part No.	Description
RB6003	1-234-372-21	RES, NETWORK 100 x 4 (1005)

< TRANSFORMER >

Ref. No.	Part No.	Description
⚠T6001	1-435-786-31	TRANSFORMER, INVERTER

A-7111-948-A PD-204 BOARD, COMPLETE (TYPE S)
****

< CAPACITOR >

Ref. No.	Part No.	Description			
C6001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6002	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6003	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6004	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6005	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6006	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6007	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C6009	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6010	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C6011	1-163-023-00	CERAMIC CHIP	0.015uF	10%	50V
C6012	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6013	1-100-371-11	CERAMIC CHIP	12PF	5%	3.15KV
C6015	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C6016	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C6019	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C6020	1-110-457-11	ELECT CHIP	3.3uF	20%	25V
C6022	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6024	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C6026	1-119-750-11	TANTAL. CHIP	22uF	20%	6.3V
C6027	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6028	1-115-407-11	ELECT CHIP	10uF		16V
C6029	1-125-827-91	CERAMIC CHIP	1uF	10%	25V

< CONNECTOR >

Ref. No.	Part No.	Description
CN6001	1-794-997-11	PIN, CONNECTOR 20P
CN6003	1-764-709-11	CONNECTOR, FFC/FPC (LIF) 10P
CN6004	1-815-031-11	FFC/CONNECTOR, FPC (ZIF) 24P
CN6005	1-816-176-11	CONNECTOR, FFC/FPC (ZIF) 6P

< DIODE >

Ref. No.	Part No.	Description
D6004	8-719-988-61	DIODE 1SS355TE-17
D6006	8-719-988-61	DIODE 1SS355TE-17
D6009	8-719-071-34	DIODE RB521S-30-TE61

< FERRITE BEAD >

Ref. No.	Part No.	Description
FB6001	1-414-760-21	FERRITE, EMI (SMD) (1608)

< IC >

Ref. No.	Part No.	Description
IC6001	6-705-330-01	IC LRS57231

< COIL >

Ref. No.	Part No.	Description			
L6001	1-469-527-91	INDUCTOR	47uH		
L6002	1-412-056-11	INDUCTOR	4.7uH		
L6003	1-428-878-11	INDUCTOR	82uH		
L6004	1-469-526-91	INDUCTOR	22uH		

< TRANSISTOR >

Ref. No.	Part No.	Description			
Q6002	6-550-065-01	TRANSISTOR	CPH5504-TL-E		
Q6004	8-729-054-48	TRANSISTOR	UP04601008S0		
Q6005	8-729-054-48	TRANSISTOR	UP04601008S0		
Q6008	6-550-242-01	TRANSISTOR	DTC114EMT2L		
Q6009	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		

< RESISTOR >

Ref. No.	Part No.	Description			
R6005	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R6009	1-218-975-11	RES-CHIP	68K	5%	1/16W
R6010	1-218-969-11	RES-CHIP	22K	5%	1/16W
R6012	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R6013	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R6014	1-218-949-11	RES-CHIP	470	5%	1/16W
R6030	1-218-962-11	RES-CHIP	5.6K	5%	1/16W
R6039	1-218-960-11	RES-CHIP	3.9K	5%	1/16W
R6040	1-218-973-11	RES-CHIP	47K	5%	1/16W
R6041	1-218-953-11	RES-CHIP	1K	5%	1/16W

< COMPOSITION CIRCUIT BLOCK >

Ref. No.	Part No.	Description
RB6001	1-234-378-21	RES, NETWORK 10K x 4 (1005)
RB6002	1-234-384-11	RES, NETWORK 1M x 4 (1005)
RB6003	1-234-372-21	RES, NETWORK 100 x 4 (1005)

< TRANSFORMER >

Ref. No.	Part No.	Description
⚠T6001	1-435-786-31	TRANSFORMER, INVERTER

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-041 **VC-344**

Ref. No.	Part No.	Description			
	A-7111-952-A	SI-041 BOARD, COMPLETE			
		**********************			
		(CN751, CN752, D753, D754, IC751, J751 and J752 are not included in this complete board.)			
		< CONNECTOR >			
CN751	1-794-276-12	CONNECTOR, SQUARE TYPE 4P (DV OUT/DV)			
CN752	1-794-962-11	CONNECTOR SQUARE TYPE (USB 5P) (USB)			
CN753	1-816-232-21	PIN, CONNECTOR (PC BOARD) 4P			
CN754	1-818-074-21	CONNECTOR, FFC/FPC (ZIF) 36P			
		< DIODE >			
D751	6-500-044-01	DIODE DF6A6.8FU (TE85R)			
D752	6-500-044-01	DIODE DF6A6.8FU (TE85R)			
D753	8-719-060-65	DIODE DCC3810 (IR EMITTER)			
D754	8-719-060-65	DIODE DCC3810 (IR EMITTER)			
D755	8-719-421-27	DIODE MA728			
D756	6-500-009-01	DIODE RSE6.8XN-TR			
D759	6-500-506-01	DIODE TLRMV1021 (T15SOY, F) (TALLY)			
		< IC >			
IC751	6-704-975-01	IC RPM7240-V4 (TRV265/TRV265E)			
		< JACK >			
J751	1-778-518-12	CONNECTOR, EXTERNAL (S VIDEO OUT)			
J752	1-778-040-11	JACK, SMALL TYPE (A/V OUT)			
		< TRANSISTOR >			
Q751	8-729-023-22	TRANSISTOR	2SD2114K		
		< RESISTOR >			
R752	1-216-806-11	METAL CHIP	56	5%	1/10W
R753	1-216-806-11	METAL CHIP	56	5%	1/10W
R756	1-216-864-11	SHORT CHIP	0		
R757	1-216-864-11	SHORT CHIP	0		
R763	1-216-821-11	METAL CHIP	1K	5%	1/10W
R764	1-216-833-11	METAL CHIP	10K	5%	1/10W
R765	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			
	A-7112-398-A	VC-344 BOARD, COMPLETE (SERVICE)			
		***********************			
		< CAPACITOR >			
C1001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1003	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1301	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1302	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C1303	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1304	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C1305	1-100-251-11	CERAMIC CHIP	0.047uF	10%	10V
C1307	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1308	1-164-940-11	CERAMIC CHIP	0.0033uF	10%	16V
C1309	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1310	1-164-938-11	CERAMIC CHIP	0.0015uF	10%	50V
C1311	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1312	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			
C1313	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C1314	1-127-988-81	CERAMIC CHIP	15000PF	10%	16V
C1315	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1316	1-127-988-81	CERAMIC CHIP	15000PF	10%	16V
C1317	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1318	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1319	1-164-506-11	CERAMIC CHIP	4.7uF		16V
C1320	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C1321	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1322	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1323	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C1324	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C1325	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C1326	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1327	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C1328	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C1329	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1330	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1331	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1332	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1333	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1334	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C1335	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C1336	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1337	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1338	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C1339	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C1340	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1341	1-125-827-91	CERAMIC CHIP	1uF	10%	25V
C1342	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1343	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1344	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1345	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1346	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1347	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1348	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1349	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C1350	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C1351	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C1352	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1355	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1357	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C1371	1-165-897-11	TANTAL. CHIP	22uF	20%	10V
C1373	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1501	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C1502	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1503	1-164-858-11	CERAMIC CHIP	22PF	5%	50V
C1504	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C1507	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1508	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C1509	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1510	1-164-844-11	CERAMIC CHIP	4PF	0.25PF	50V
C1511	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C1512	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1515	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C1516	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1518	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V

Ref. No.	Part No.	Description			
C1523	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1524	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C1525	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C1527	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C1530	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C1532	1-100-696-91	CERAMIC CHIP	1uF	10%	6.3V
C1552	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1554	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C1556	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1558	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1559	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1560	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C1561	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1562	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C1563	1-165-708-11	ELECT	47uF	20%	6.3V
C1564	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C1565	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C1566	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C1568	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C1571	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C1573	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C1574	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1575	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C1601	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C2401	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2402	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2403	1-100-246-11	CERAMIC CHIP	0.001uF	10%	50V
C2406	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2407	1-100-251-11	CERAMIC CHIP	0.047uF	10%	10V
C2409	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C2411	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2412	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2413	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2414	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2415	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2416	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2417	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2418	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2420	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2422	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2423	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2424	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C2427	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C2428	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2429	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C2430	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C2431	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C2433	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2434	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C2435	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C2436	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C2437	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2438	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C2439	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C2440	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2442	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3201	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3202	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3203	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3204	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3205	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C3206	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C3208	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C3210	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3211	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3212	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C3213	1-164-942-11	CERAMIC CHIP	0.0068uF	10%	16V
C3214	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3215	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3217	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3218	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C3219	1-164-872-11	CERAMIC CHIP	82PF	5%	50V
C3220	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C3221	1-164-878-11	CERAMIC CHIP	150PF	5%	50V
C3223	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3304	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3305	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C3306	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3309	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3310	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3313	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3314	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3319	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3320	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3321	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3322	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3326	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3327	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3328	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3331	1-124-779-00	ELECT CHIP	10uF	20%	16V
C3332	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3333	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3335	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3336	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C3338	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C3339	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C3341	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3342	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C3344	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3345	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3357	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C3358	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C4003	1-107-819-11	CERAMIC CHIP	0.022uF	10%	16V
C4004	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C4005	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C4501	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C4503	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C4504	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C4505	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4506	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4508	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4509	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C4510	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4511	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V

VC-344

Ref. No.	Part No.	Description			
C4512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4514	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C4515	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C4516	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4517	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C4518	1-218-977-11	RES-CHIP	100K	5%	1/16W (Note)
C4519	1-218-977-11	RES-CHIP	100K	5%	1/16W (Note)
C4520	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5002	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5003	1-164-941-11	CERAMIC CHIP	0.0047uF	10%	16V
C5004	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5005	1-164-856-81	CERAMIC CHIP	18PF	5%	50V
C5006	1-100-249-11	CERAMIC CHIP	0.01uF	10%	16V
C5008	1-164-856-81	CERAMIC CHIP	18PF	5%	50V
C5009	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5010	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C5401	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5404	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5405	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5408	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5409	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5410	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5411	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5413	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5414	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5416	1-100-252-11	CERAMIC CHIP	0.1uF	10%	6.3V
C5418	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5419	1-124-779-00	ELECT CHIP	10uF	20%	16V
C5420	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5421	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5422	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C5423	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C5424	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C5427	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5430	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5431	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C5433	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C5435	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5436	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5437	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5438	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C5439	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5440	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5441	1-164-937-11	CERAMIC CHIP	0.001uF	10%	50V
C5442	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5443	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C5445	1-135-158-21	TANTAL. CHIP	15uF	20%	4V
C5446	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6501	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6502	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6503	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C6504	1-124-779-00	ELECT CHIP	10uF	20%	16V
C6506	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C6507	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C6509	1-126-209-11	ELECT CHIP	100uF	20%	4V
C6510	1-124-778-00	ELECT CHIP	22uF	20%	6.3V

Ref. No.	Part No.	Description			
C6511	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C6512	1-126-209-11	ELECT CHIP	100uF	20%	4V
		< CONNECTOR >			
CN1001	1-818-076-11	CONNECTOR, FFC/FPC (ZIF) 36P			
CN1003	1-794-998-31	PIN, CONNECTOR 20P			
CN1007	1-779-335-21	CONNECTOR, FFC/FPC 22P			
CN1008	1-794-057-21	PIN, CONNECTOR (PC BOARD) 2P			
CN1009	1-766-677-21	CONNECTOR, FFC/FPC 16P			
CN1011	1-766-677-21	CONNECTOR, FFC/FPC 16P			
CN1013	1-779-328-21	CONNECTOR, FFC/FPC 8P			
CN1501	1-779-331-11	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 14P			
CN1551	1-750-360-21	FFC/CONNECTOR, FPC (ZIF) 24P			
* CN2401	1-580-055-21	PIN, CONNECTOR (SMD) 2P			
CN2402	1-766-340-21	CONNECTOR, FFC/FPC 10P			
CN2403	1-816-179-11	CONNECTOR, FFC/FPC (ZIF) 22P			
CN2404	1-766-345-21	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 15P			
CN3201	1-766-341-21	CONNECTOR, FFC/FPC 11P			
CN4001	1-573-806-21	PIN, CONNECTOR (1.5MM)(SMD) 6P			
		< DIODE >			
D1006	6-500-044-01	DIODE DF6A6.8FU (TE85R)			
D1007	6-500-044-01	DIODE DF6A6.8FU (TE85R)			
D1009	6-500-314-01	DIODE DAN222MT2L			
D1010	8-719-069-57	DIODE UDZSTE-176.8B			
D1011	6-500-776-01	DIODE MAZW068H0LS0			
D1012	6-500-776-01	DIODE MAZW068H0LS0			
D1301	8-719-027-76	DIODE 1SS357-TPH3			
D1302	6-500-314-01	DIODE DAN222MT2L			
D1303	8-719-074-08	DIODE MA4ZD03001S0			
D1305	8-719-074-08	DIODE MA4ZD03001S0			
D1306	8-719-074-08	DIODE MA4ZD03001S0			
D1501	8-719-082-63	DIODE 1SV329 (TPL3)			
D1551	8-719-073-01	DIODE MA111-(K8).S0			
D4001	8-719-074-08	DIODE MA4ZD03001S0			
D4002	6-500-776-01	DIODE MAZW068H0LS0			
D5001	8-719-073-01	DIODE MA111-(K8).S0			
		< FUSE >			
⚠F001	1-576-406-21	FUSE (1.4A/32V)			
⚠F002	1-576-406-21	FUSE (1.4A/32V)			
⚠F003	1-576-406-21	FUSE (1.4A/32V)			
⚠F004	1-576-406-21	FUSE (1.4A/32V)			
		< FERRITE BEAD >			
FB1501	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB1504	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB1601	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB2401	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB2402	1-500-283-11	INDUCTOR, FERRITE BEAD			
FB2403	1-500-283-11	INDUCTOR, FERRITE BEAD			
FB3301	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB3302	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB3303	1-414-760-21	FERRITE, EMI (SMD) (1608)			
FB4501	1-414-760-21	FERRITE, EMI (SMD) (1608)			
		< IC >			
IC1001	6-702-302-01	IC TK11133CSCL-G			

Note: Resistors are mounted to the location where C4518, C4519 are printed.

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			
IC1301	6-705-264-01	IC	MB44A120BPFV-G-BND-ERE1		
IC1302	6-703-228-01	IC	TK11160CSCL-G		
IC1501	8-752-417-70	IC	CXD2444AR-T4		
IC1502	6-703-146-01	IC	HD49337AFEB		
IC1552	8-759-681-42	IC	NJM12902V (TE2)		
IC1553	8-759-637-96	IC	uPD16877MA-6A5-E2		
IC1554	8-759-693-13	IC	NJM12904V (TE2)		
IC1601	6-701-985-01	IC	BH2220FVM-TR		
IC2401	6-705-676-01	IC	TB6550FG (O, EB)		
IC3201	8-752-106-95	IC	CXA3619R-T4		
IC3301	8-752-418-16	IC	CXD3164R		
IC3302	8-759-566-52	IC	SN104266PN-TEB		
IC4501	6-803-882-01	IC	MB91194APFF-G-155-BNDE1 (Note)		
IC4502	6-705-122-01	IC	BR25C320FV-WE2		
IC5001	6-803-798-01	IC	MB89097PFV-G-170-BND-ERE1		
IC5401	6-701-074-01	IC	LA74207W-TBM-E		
IC5402	8-759-647-71	IC	AK4550VT-E2		
IC6501	6-705-159-01	IC	NJM2570AV (TE2)		
		< COIL >			
L1301	1-416-670-11	INDUCTOR	33uH		
L1302	1-419-354-21	INDUCTOR	22uH		
L1303	1-419-354-21	INDUCTOR	22uH		
L1304	1-416-670-11	INDUCTOR	33uH		
L1305	1-419-354-21	INDUCTOR	22uH		
L1306	1-419-354-21	INDUCTOR	22uH		
L1307	1-419-354-21	INDUCTOR	22uH		
L1308	1-469-523-91	INDUCTOR	2.2uH		
L1309	1-469-524-91	INDUCTOR	4.7uH		
L1310	1-412-056-11	INDUCTOR	4.7uH		
L1311	1-469-525-91	INDUCTOR	10uH		
L1312	1-469-524-91	INDUCTOR	4.7uH		
L1313	1-469-524-91	INDUCTOR	4.7uH		
L1314	1-469-524-91	INDUCTOR	4.7uH		
L1315	1-469-526-91	INDUCTOR	22uH		
L1316	1-469-527-91	INDUCTOR	47uH		
L1317	1-469-524-91	INDUCTOR	4.7uH		
L1318	1-469-524-91	INDUCTOR	4.7uH		
L1319	1-469-524-91	INDUCTOR	4.7uH		
L1320	1-469-524-91	INDUCTOR	4.7uH		
L1501	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L1551	1-414-398-11	INDUCTOR	10uH		
L1553	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3201	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3202	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3203	1-414-406-41	INDUCTOR	220uH		
L3204	1-400-197-11	INDUCTOR	12uH		
L3305	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3307	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3310	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3313	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3320	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L3321	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L6501	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
		< TRANSISTOR >			
Q1001	8-729-402-84	TRANSISTOR	XN4601		
Q1002	6-550-242-01	TRANSISTOR	DTC114EMT2L		
Q1301	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q1302	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1303	8-729-054-50	TRANSISTOR	UP04501008S0		
Q1304	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1305	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1306	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1307	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1308	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1309	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1310	6-550-405-01	TRANSISTOR	CPH5815-TL-E		
Q1311	6-550-560-01	TRANSISTOR	CPH5819-TL-E		
Q1312	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q1313	8-729-054-50	TRANSISTOR	UP04501008S0		
Q1314	8-729-054-49	TRANSISTOR	UP04401008S0		
Q1315	8-729-216-22	TRANSISTOR	2SA1162-G		
Q1316	8-729-055-22	TRANSISTOR	2SA1734 (TE12L)		
Q1317	8-729-054-50	TRANSISTOR	UP04501008S0		
Q1318	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q1320	8-729-054-50	TRANSISTOR	UP04501008S0		
Q1324	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1325	8-729-054-49	TRANSISTOR	UP04401008S0		
Q1551	6-550-758-01	TRANSISTOR	DTC113TMT2L		
Q1554	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q1555	8-729-054-51	TRANSISTOR	UP04116008S0		
Q2401	6-550-283-01	TRANSISTOR	UNR32A600LS0		
Q3202	8-729-054-48	TRANSISTOR	UP04601008S0		
Q3203	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q3204	6-550-232-01	TRANSISTOR	2SA2029T2LQ/R		
Q3205	8-729-047-19	TRANSISTOR	2SA1965-S-TL		
Q3303	6-550-383-01	TRANSISTOR	HN4A71FK (TE85R)		
Q3307	6-550-239-01	TRANSISTOR	DTA144EMT2L		
Q3308	8-729-054-49	TRANSISTOR	UP04401008S0		
Q4001	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q4002	8-729-056-54	TRANSISTOR	TPCS8302 (TE12L)		
Q4003	8-729-055-22	TRANSISTOR	2SA1734 (TE12L)		
Q4004	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q4501	6-550-234-01	TRANSISTOR	UNR32A300LS0		
Q4502	6-550-237-01	TRANSISTOR	2SC5658T2LQ/R		
Q5001	8-729-041-43	TRANSISTOR	HN1L02FU (TE85R)		
Q5401	8-729-054-52	TRANSISTOR	UP04216008S0		
Q5403	6-550-240-01	TRANSISTOR	DTA114TMT2L		
Q5408	8-729-921-51	TRANSISTOR	2SD1834-T100		
		< RESISTOR >			
R1001	1-218-949-11	RES-CHIP	470	5%	1/16W
R1003	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R1005	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1006	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R1007	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R1008	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R1009	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1014	1-218-940-11	RES-CHIP	82	5%	1/16W
R1025	1-218-990-11	SHORT CHIP	0		
R1029	1-218-943-11	RES-CHIP	150	5%	1/16W
R1031	1-218-990-11	SHORT CHIP	0		
R1032	1-218-943-11	RES-CHIP	150	5%	1/16W
R1034	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1301	1-218-961-11	RES-CHIP	4.7K	5%	1/16W

Note: Changing the data is needs when IC4501 is replaced.
Please refer to change of IC4501 in page 1-6.

VC-344

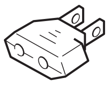
Ref. No.	Part No.	Description			
R1302	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1303	1-220-200-81	RES-CHIP	30K	5%	1/16W
R1304	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1305	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1306	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1307	1-218-970-11	RES-CHIP	27K	5%	1/16W
R1308	1-218-971-11	RES-CHIP	33K	5%	1/16W
R1309	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R1310	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1311	1-218-969-11	RES-CHIP	22K	5%	1/16W
R1312	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1313	1-218-949-11	RES-CHIP	470	5%	1/16W
R1314	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1315	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1316	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R1317	1-218-967-11	RES-CHIP	15K	5%	1/16W
R1318	1-218-978-11	RES-CHIP	120K	5%	1/16W
R1319	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1323	1-218-969-11	RES-CHIP	22K	5%	1/16W
R1324	1-218-969-11	RES-CHIP	22K	5%	1/16W
R1326	1-218-969-11	RES-CHIP	22K	5%	1/16W
R1327	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R1328	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R1329	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R1330	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R1331	1-208-721-11	METAL CHIP	39K	0.5%	1/16W
R1332	1-208-908-11	METAL CHIP	7.5K	0.5%	1/16W
R1333	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R1334	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R1335	1-218-964-11	RES-CHIP	8.2K	5%	1/16W
R1336	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1337	1-218-949-11	RES-CHIP	470	5%	1/16W
R1338	1-208-909-11	METAL CHIP	8.2K	0.5%	1/16W
R1339	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1340	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
R1343	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1344	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R1347	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1348	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1349	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R1350	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R1357	1-218-990-11	SHORT CHIP	0		
R1358	1-208-943-11	METAL CHIP	220K	0.5%	1/16W
R1359	1-208-931-11	METAL CHIP	68K	0.5%	1/16W
R1503	1-218-977-11	RES-CHIP	100K	5%	1/16W
R1509	1-218-989-11	RES-CHIP	1M	5%	1/16W
R1512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1521	1-218-937-11	RES-CHIP	47	5%	1/16W
R1523	1-218-990-11	SHORT CHIP	0		
R1532	1-218-990-11	SHORT CHIP	0		
R1533	1-218-971-11	RES-CHIP	33K	5%	1/16W
R1560	1-208-635-11	METAL CHIP	10	0.5%	1/16W
R1561	1-218-989-11	RES-CHIP	1M	5%	1/16W
R1562	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1563	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1564	1-218-981-11	RES-CHIP	220K	5%	1/16W
R1565	1-218-985-11	RES-CHIP	470K	5%	1/16W

Ref. No.	Part No.	Description			
R1566	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1567	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R1568	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R1570	1-218-985-11	RES-CHIP	470K	5%	1/16W
R1573	1-218-947-11	RES-CHIP	330	5%	1/16W
R1575	1-218-953-11	RES-CHIP	1K	5%	1/16W
R1576	1-218-965-11	RES-CHIP	10K	5%	1/16W
R1577	1-218-973-11	RES-CHIP	47K	5%	1/16W
R1581	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R1582	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R1583	1-218-983-11	RES-CHIP	330K	5%	1/16W
R1584	1-218-985-11	RES-CHIP	470K	5%	1/16W
R2401	1-218-973-11	RES-CHIP	47K	5%	1/16W
R2402	1-218-983-11	RES-CHIP	330K	5%	1/16W
R2403	1-218-949-11	RES-CHIP	470	5%	1/16W
R2404	1-218-946-11	RES-CHIP	270	5%	1/16W
R2418	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2419	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2421	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2422	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R2423	1-218-971-11	RES-CHIP	33K	5%	1/16W
R2424	1-218-990-11	SHORT CHIP	0		
R2428	1-218-965-11	RES-CHIP	10K	5%	1/16W
R2434	1-216-808-11	METAL CHIP	82	5%	1/10W
R2442	1-218-953-11	RES-CHIP	1K	5%	1/16W
R3210	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R3212	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R3214	1-220-196-11	RES-CHIP	13K	5%	1/16W
R3216	1-208-701-11	METAL CHIP	5.6K	0.5%	1/16W
R3218	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R3219	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R3220	1-218-971-11	RES-CHIP	33K	5%	1/16W
R3221	1-218-945-11	RES-CHIP	220	5%	1/16W
R3222	1-218-945-11	RES-CHIP	220	5%	1/16W
R3223	1-218-945-11	RES-CHIP	220	5%	1/16W
R3224	1-218-945-11	RES-CHIP	220	5%	1/16W
R3225	1-218-946-11	RES-CHIP	270	5%	1/16W
R3226	1-218-945-11	RES-CHIP	220	5%	1/16W
R3229	1-218-941-81	RES-CHIP	100	5%	1/16W
R3230	1-218-938-11	RES-CHIP	56	5%	1/16W
R3231	1-218-950-11	RES-CHIP	560	5%	1/16W
R3232	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3233	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3234	1-218-966-11	RES-CHIP	12K	5%	1/16W
R3235	1-218-969-11	RES-CHIP	22K	5%	1/16W
R3313	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R3314	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R3315	1-218-965-11	RES-CHIP	10K	5%	1/16W
R3316	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R3326	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3330	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3332	1-208-675-11	METAL CHIP	470	0.5%	1/16W
R3335	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R3343	1-218-951-11	RES-CHIP	680	5%	1/16W
R3350	1-218-946-11	RES-CHIP	270	5%	1/16W
R3353	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R3356	1-208-709-11	METAL CHIP	12K	0.5%	1/16W
R3361	1-218-864-11	METAL CHIP	5.1K	0.5%	1/10W

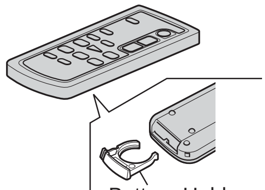
Ref. No.	Part No.	Description			
R3365	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R3397	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4001	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4003	1-216-864-11	SHORT CHIP	0		
R4004	1-216-864-11	SHORT CHIP	0		
R4006	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4007	1-218-989-11	RES-CHIP	1M	5%	1/16W
R4008	1-216-797-11	METAL CHIP	10	5%	1/10W
R4009	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R4010	1-218-963-11	RES-CHIP	6.8K	5%	1/16W
R4501	1-218-941-81	RES-CHIP	100	5%	1/16W
R4502	1-218-965-11	RES-CHIP	10K	5%	1/16W
R4507	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4510	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4512	1-218-985-11	RES-CHIP	470K	5%	1/16W
R4514	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4519	1-218-977-11	RES-CHIP	100K	5%	1/16W
R4524	1-218-953-11	RES-CHIP	1K	5%	1/16W
R4535	1-218-990-11	SHORT CHIP	0		
R4536	1-218-973-11	RES-CHIP	47K	5%	1/16W
R4537	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5015	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5016	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R5017	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5018	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R5019	1-219-570-11	METAL CHIP	10M	5%	1/10W
R5020	1-218-985-11	RES-CHIP	470K	5%	1/16W
R5021	1-208-927-11	METAL CHIP	47K	0.5%	1/16W
R5022	1-218-990-11	SHORT CHIP	0		
R5023	1-218-953-11	RES-CHIP	1K	5%	1/16W
R5024	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5027	1-218-989-11	RES-CHIP	1M	5%	1/16W
R5034	1-218-949-11	RES-CHIP	470	5%	1/16W
R5051	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5403	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R5407	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5416	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5417	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5418	1-218-977-11	RES-CHIP	100K	5%	1/16W
R5421	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5422	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5429	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5430	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5431	1-218-951-11	RES-CHIP	680	5%	1/16W
R5432	1-218-951-11	RES-CHIP	680	5%	1/16W
R5441	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5442	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R6507	1-208-715-11	METAL CHIP	22K	0.5%	1/16W
R6509	1-218-965-11	RES-CHIP	10K	5%	1/16W
		< COMPOSITION CIRCUIT BLOCK >			
RB1551	1-234-379-21	RES, NETWORK 22K x 4 (1005)			
RB1552	1-234-375-21	RES, NETWORK 1K x 4 (1005)			
RB1553	1-234-380-21	RES, NETWORK 47K x 4 (1005)			
RB2401	1-234-378-21	RES, NETWORK 10K x 4 (1005)			
RB3201	1-234-379-21	RES, NETWORK 22K x 4 (1005)			
RB3202	1-234-376-21	RES, NETWORK 2.2K x 4 (1005)			

Ref. No.	Part No.	Description
RB3303	1-234-714-11	RES, NETWORK 56 x 4 (1005)
RB3304	1-234-377-21	RES, NETWORK 4.7K x 4 (1005)
RB3305	1-234-376-21	RES, NETWORK 2.2K x 4 (1005)
RB3307	1-234-714-11	RES, NETWORK 56 x 4 (1005)
RB4501	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB4508	1-234-378-21	RES, NETWORK 10K x 4 (1005)
RB4509	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB4510	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB4511	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB4512	1-234-384-11	RES, NETWORK 1M x 4 (1005)
RB4514	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB4515	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5001	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5002	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5006	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5007	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5008	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB5009	1-234-383-21	RES, NETWORK 470K x 4 (1005)
RB5011	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB5401	1-234-381-21	RES, NETWORK 100K x 4 (1005)
RB5402	1-234-375-21	RES, NETWORK 1K x 4 (1005)
RB6501	1-234-702-11	RES, NETWORK 68 x 4 (1005)
		< VIBRATOR >
X1501	1-767-586-11	VIBRATOR, CRYSTAL (27MHz)
X4501	1-760-655-41	VIBRATOR, CRYSTAL (20MHz)
X5001	1-795-244-11	VIBRATOR, CERAMIC (10MHz)
X5002	1-760-458-21	VIBRATOR, CRYSTAL (32.768kHz)

Checking supplied accessories.

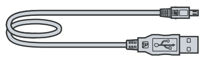


Conversion 2P adaptor (1)
⚠ 1-569-008-12 (E)



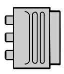
Battery Holder
3-087-983-01

Wireless Remote Commander
RMT-830 (1)
1-477-898-71
(TRV265/TRV265E: EXCEPT E2)
1-477-898-91
(TRV265E: E1)



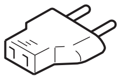
USB cable (1)
1-823-931-21

A/V connecting cable (1)
1-824-097-41

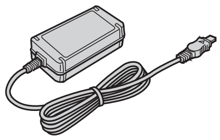


21-pin adaptor (1)
1-770-783-21
(AEP, UK, NE, EE)

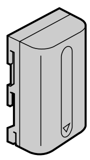
(Note) E1: No indication of country of origin.
E2: There is indication of country of origin.



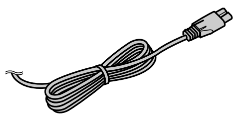
Conversion 2P adaptor (1)
⚠ 1-569-007-12 (JE)



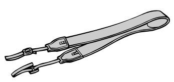
AC-L15A/L15B AC Adaptor (1)
⚠ 1-477-533-32
(Middle East area)
⚠ 1-477-533-51
(EXCEPT Middle East area)



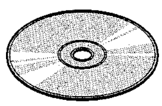
Rechargeable battery pack
NP-FM30 (1)
⚠ A-7096-387-A (US, CND)
⚠ A-7096-388-B
(EXCEPT US, CND)



Power cord (1)
⚠ 1-696-819-21 (AUS)
⚠ 1-769-608-11 (AEP, NE, EE, E)
⚠ 1-783-374-11 (UK)
⚠ 1-790-542-12 (US, CND)
⚠ 1-827-160-11 (JE)

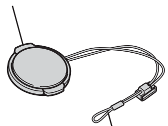


Shoulder strap (1)
3-987-015-01



CD-ROM
(SPVD-012 (V) USB Driver) (1)
3-086-790-01 (US, CND)
(SPVD-012 USB Driver) (1)
3-087-821-01
(EXCEPT US, CND)

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



Cap string (1)
3-979-194-12

Other accessories

CAMERA OPERATIONS GUIDE

3-087-918-11 MANUAL, INSTRUCTION (ENGLISH) (TRV260/TRV265)
3-087-918-21 MANUAL, INSTRUCTION (FRENCH) (TRV260: CND)
3-087-918-31 MANUAL, INSTRUCTION (SPANISH, PORTUGUESE) (TRV260: E/TRV265)
3-087-918-41 MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (TRV265: E)
3-087-918-51 MANUAL, INSTRUCTION (KOREA) (TRV265: JE)
3-087-918-61 MANUAL, INSTRUCTION (ARABIC) (TRV265: E)
3-087-919-11 MANUAL, INSTRUCTION (ENGLISH) (TRV255E: AEP, UK/TRV265E: AEP, UK, E, JE, AUS)
3-087-919-21 MANUAL, INSTRUCTION (FRENCH) (TRV255E: AEP/TRV265E: AEP, E, JE)
3-087-919-31 MANUAL, INSTRUCTION (SPANISH, PORTUGUESE) (TRV255E: AEP/TRV265E: AEP)
3-087-919-41 MANUAL, INSTRUCTION (ITALIAN, GREEK) (TRV255E: AEP/TRV265E: AEP)
3-087-919-51 MANUAL, INSTRUCTION (GERMAN, DUTCH) (TRV255E: AEP/TRV265E: AEP)
3-087-919-61 MANUAL, INSTRUCTION (SWEDISH, RUSSIAN) (TRV255E: NE/TRV265E: NE, JE)
3-087-919-71 MANUAL, INSTRUCTION (DANISH, FINNISH) (TRV255E: NE/TRV265E: NE)
3-087-919-81 MANUAL, INSTRUCTION (POLISH, CZECH) (TRV255E: EE/TRV265E: EE)
3-087-919-91 MANUAL, INSTRUCTION (HUNGALIAN, SLOVAKIAN) (TRV255E: EE/TRV265E: EE)
3-087-920-11 MANUAL, INSTRUCTION (ARABIC, PERSIAN) (TRV265E: E)
3-087-920-31 MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (TRV265E: E, JE)

COMPUTER APPLICATIONS GUIDE

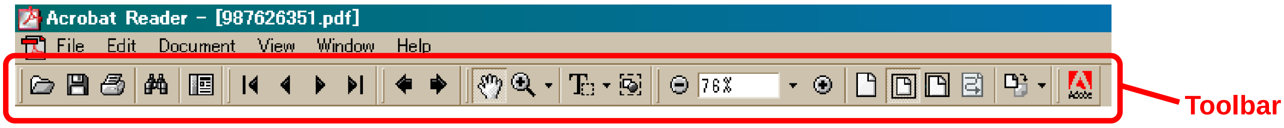
3-087-936-11 MANUAL, (PC) INSTRUCTION (ENGLISH) (TRV255E: UK/TRV260/TRV265/TRV265E: UK, E, AUS, JE)
3-087-936-21 MANUAL, (PC) INSTRUCTION (FRENCH) (TRV255E: AEP/TRV260: CND/TRV265E: AEP, E, JE)
3-087-936-31 MANUAL, (PC) INSTRUCTION (GERMAN, DUTCH) (TRV255E: AEP/TRV265E: AEP)
3-087-936-41 MANUAL, (PC) INSTRUCTION (SPANISH, PORTUGUESE) (TRV255E/TRV260: E/TRV265/TRV265E: AEP)
3-087-936-51 MANUAL, (PC) INSTRUCTION (ITALIAN, GREEK) (TRV255E: AEP/TRV265E: AEP)
3-087-936-61 MANUAL, (PC) INSTRUCTION (SWEDISH, RUSSIAN) (TRV255E: NE/TRV265E: NE, JE)
3-087-936-71 MANUAL, (PC) INSTRUCTION (DANISH, FINNISH) (TRV255E: NE/TRV265E: NE)
3-087-936-81 MANUAL, (PC) INSTRUCTION (POLISH, CZECH) (TRV255E: EE/TRV265E: EE)
3-087-936-91 MANUAL, (PC) INSTRUCTION (HUNGARIAN, SLOVAKIAN) (TRV255E: EE/TRV265E: EE)
3-087-937-11 MANUAL, (PC) INSTRUCTION (ARABIC, PERSIAN) (TRV265: E/TRV265E: E)
3-087-937-21 MANUAL, (PC) INSTRUCTION (TRADITIONAL CHINESE) (TRV265: E)
3-087-937-31 MANUAL, (PC) INSTRUCTION (SIMPLIFIED CHINESE) (TRV265E: E, JE)
3-087-937-41 MANUAL, (PC) INSTRUCTION (KOREA) (TRV265: JE)

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.

2003K0500-1

Published by DI CS Strategy Div

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



Printing a text

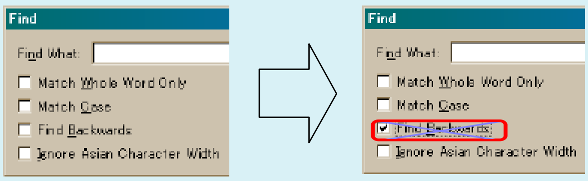
1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

Application of printing:
To set a range to be printed within a page, select the graphic selection tool and drag on the page to enclose a range to be printed, and then click the Print button.

Finding a text

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

Application to the Service Manual:
To execute "find" from current page toward the previous pages, select the check box "Find Backward" and then click the "Find".



3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

Application to the Service Manual:
The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.
Note: The find function may not be applied to the Service Manual depending on the date of issue.

Switching a page

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

Reversing the screens displayed once

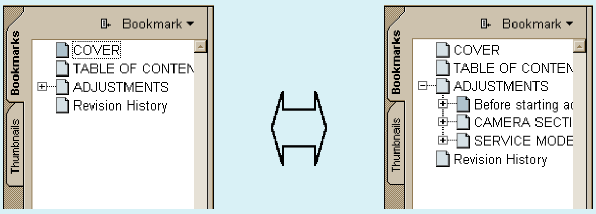
- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

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

Moving with link

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

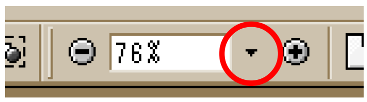
Moving with bookmark:
Click an item (text) on the bookmark pallet, and you can move to the link destination. Also, clicking can display the hidden items.
(To go back to original state, click)



Zooming or rotating the screen display

"Zoom in/out"

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click or for zooming in or out.



"Rotate"

- Click rotate tool , and the page then rotates 90 degrees each.

Application to the Service Manual:
The printed circuit board diagram you see now can be changed to the same direction as the set.

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.11	Official Release	—	—

DCR-TRV255E/TRV260/TRV265/TRV265E
RMT-830

Ver 1.0 2003. 11
Revision History

SECTION 6 ADJUSTMENTS

ADJ

Link

2003K0500-1

Published by DI CS Strategy Div

9-876-292-51

Sony EMCS Co.

TABLE OF CONTENTS

The camera optical axis frame is shown on page 6-53.
The camera color reproduction frame is shown on page 6-54.

SECTION 6
ADJUSTMENTS

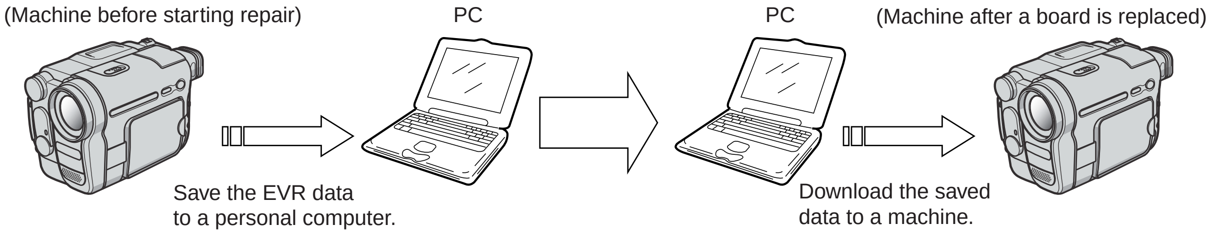
1. Before Starting Adjustments

EVR Data Re-writing Procedure When Replacing Board

The data that is stored in the repair board, is not necessarily correct.
Perform either procedure 1 or procedure 2 or procedure 3 when replacing board.

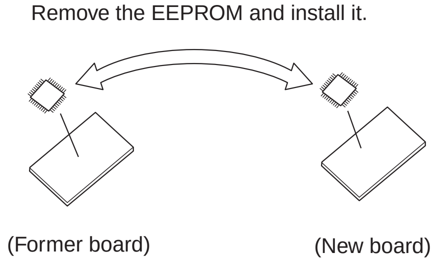
Procedure 1

Save the EVR data of the machine in which a board is going to be replaced. Download the saved data after a board is replaced.



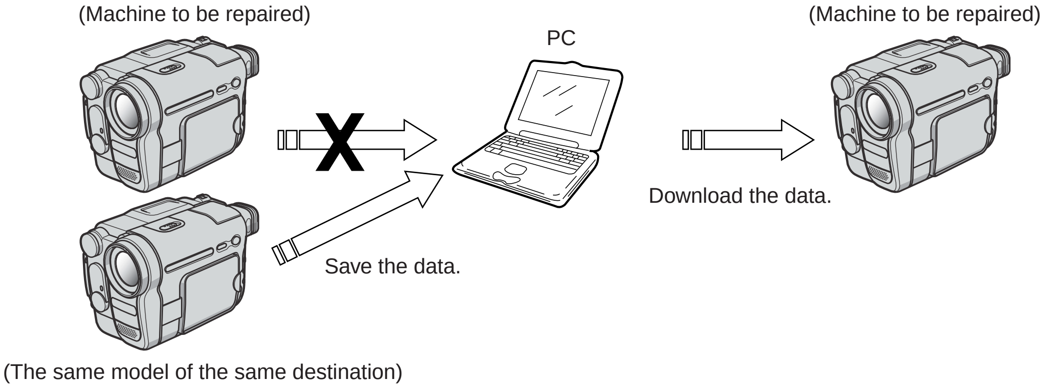
Procedure 2

Remove the EEPROM from the board of the machine that is going to be repaired. Install the removed EEPROM to the replaced board.



Procedure 3

When the data cannot be saved due to defective EEPROM, or when the EEPROM cannot be removed or installed, save the data from the same model of the same destination, and download it.



After the EVR data is saved and downloaded, check the respective items of the EVR data.
(Refer to page 6-3 for the items to be checked)

1-1. Adjusting Items when Replacing Main Parts and Boards

• Adjusting items when replacing main parts

When replacing main parts, adjust the items indicated by ● in the following table.

		Replaced part													
		Block replacement							Mounted part replacement						
Adjustment Section	Adjustment	Lens device	Video light (Note 2)	LCD block LCD901 (LCD panel)	LCD block ND901 (Fluorescent tube)	Mechanism deck (Note 1)	Mechanism deck M901 (Drum assembly) (Note 1)	Mechanism deck M902 (Capstan motor)	CD-471 board IC951 (CCD imager)	VC-344 board IC1501, X1501 (Timing generator)	VC-344 board IC1502 (S/H, AGC, A/D CONV.)	VC-344 board IC3301 (DV signal process, D/A Converter, Lens control)	VC-344 board IC6501 (Y/C MIX, Buffer)	VC-344 board IC1601 (EVR)	PD-204 board IC6001 (LCD driver)
Initialization of 8, A, C, D, E, F, 1C, 1F page data	Initializing of A, D page data														
	Initializing of 8, C, 1C page data														
	Initializing of E, F, 1F page data														
Camera	HALL adj.	●													
	Flange back adj.	●							●						
	Optical axis adj.	●							●						
	Color reproduction adj.								●		●				
	LV standard data input								●		●				
	AWB standard data input								●		●				
	Auto white balance adj.								●		●				
	Steadyshot check														
LCD	LCD level adj.														●
	LCD V-COM adj.			●											●
	LCD White balance adj.			●	●										●
System control	Node uniqe ID No. input														
Servo, RF	CAP FG/REEL FG duty adj.					●		●							
	Switching position adj.					●	●								
	SD error rate check (LP)					●	●					●			
Video	27 MHz origin osillation adj.									●				●	
	S VIDEO OUT Y level adj.											●	●		
	S VIDEO OUT C level adj.											●	●		
Mechanism	Tape path adj.					●	●	●							

Table 6-1-1 (1)

Note 1: When replacing the drum assy or mechanism deck, reset the data of page: 7, address: A7 to A9.
(Refer to “Record of Use Check” of “6-4. SERVICE MODE”)

Note 2: When replacing the video light, reset the data of page: 7, address: CE and CF.
(Refer to “Record of Use Check” of “6-4. SERVICE MODE”)

• Adjusting items when replacing a board or EEPROM

When replacing a board or EEPROM, adjust the items indicated by ● in the following table.

Adjustment Section	Adjustment	Replaced part: PD-204 board (COMPLETE)	Replaced part: VC-344 board (COMPLETE)	Replaced part: VC-344 board IC4502 (EEPROM)	Supporting
Initialization of 8, A, C, D, E, F, 1C, 1F page data	Initializing of A, D page data		●	●	
	Initializing of 8, C, 1C page data		●	●	
	Initializing of E, F, 1F page data		●	●	
Camera	HALL adj.		●	●	●
	Flange back adj.		●	●	●
	Optical axis adj.		●	●	
	Color reproduction adj.		●	●	
	LV standard data input		●	●	●
	AWB standard data input		●	●	●
	Auto white balance adj.		●	●	●
	Steadyshot check		●	●	●
LCD	LCD level adj.	●	●	●	●
	LCD V-COM adj.	●	●	●	
	LCD White balance adj.	●	●	●	
System control	Node uniqe ID No. input		●	●	
Servo, RF	CAP FG/REEL FG duty adj.		●	●	●
	Switching position adj.		●	●	●
	SD error rate check (LP)		●	●	●
Video	27 MHz origin osillation adj.		●	●	
	S VIDEO OUT Y level adj.		●	●	
	S VIDEO OUT C level adj.		●	●	
Mechanism	Tape path adj.				

Table 6-1-1 (2)

6-1. CAMERA SECTION ADJUSTMENTS

1-1. PREPARATIONS BEFORE ADJUSTMENTS (CAMERA SECTION)

1-1-1. List of Service Tools

- Oscilloscope
- Color monitor
- Vectorscope
- Regulated power supply
- Digital voltmeter
- Frequency counter

Ref. No.	Name	Parts Code	Usage
J-1	Filter for color temperature correction (C14)	J-6080-058-A	Auto white balance adjustment/check White balance adjustment/check
J-2	ND filter 1.0	J-6080-808-A	White balance check
	ND filter 0.4	J-6080-806-A	White balance check
	ND filter 0.1	J-6080-807-A	White balance check
J-3	Pattern box PTB-450	J-6082-200-A	
J-4	Color chart for pattern box	J-6020-250-A	
J-5	Adjustment remote commander (RM-95 upgraded).	J-6082-053-B	
J-6	Siemens star chart	J-6080-875-A	For checking the flange back
J-7	Clear chart for pattern box	J-6080-621-A	
J-8	CPC jig connector	J-6082-539-A	For connecting the adjustment remote commander
J-9	I/F unit for LANC control	J-6082-521-A	For connecting the adjustment remote commander
J-10	Mini pattern box	J-6082-353-B	For adjusting the flange back
J-11	Camera table	J-6082-384-A	For adjusting the flange back

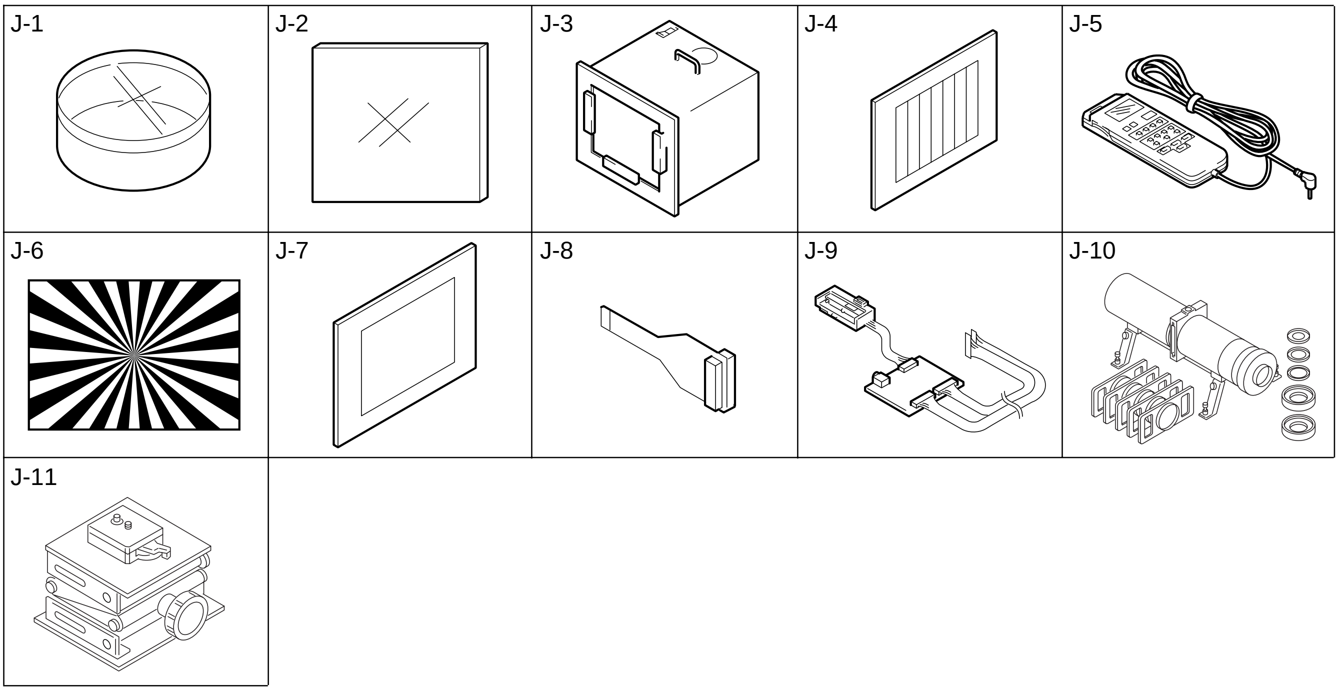


Fig. 6-1-1

1-1-2. Preparations

Note: Before perform the adjustment, check that the data of page: 0, address: 10 is “00”.
If not, select page: 0, address: 10, and set data “00”.

1) Connect the equipment for adjustments according to Fig. 6-1-3.
2) Connect the adjustment remote commander to VC-344 board CN1011 via I/F unit for LANC control (J-6082-521-A) and CPC jig connector (J-6082-539-A). (Fig. 6-1-3)
   To operate the adjustment remote commander, connect the AC power adaptor to the DC IN jack of I/F unit for LANC control, or connect the L series Info-LITHIUM battery to the battery terminal of I/F unit for LANC control.

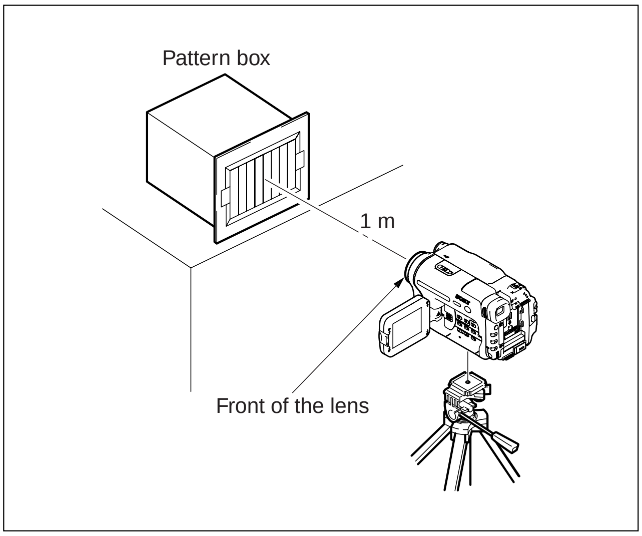


Fig. 6-1-2

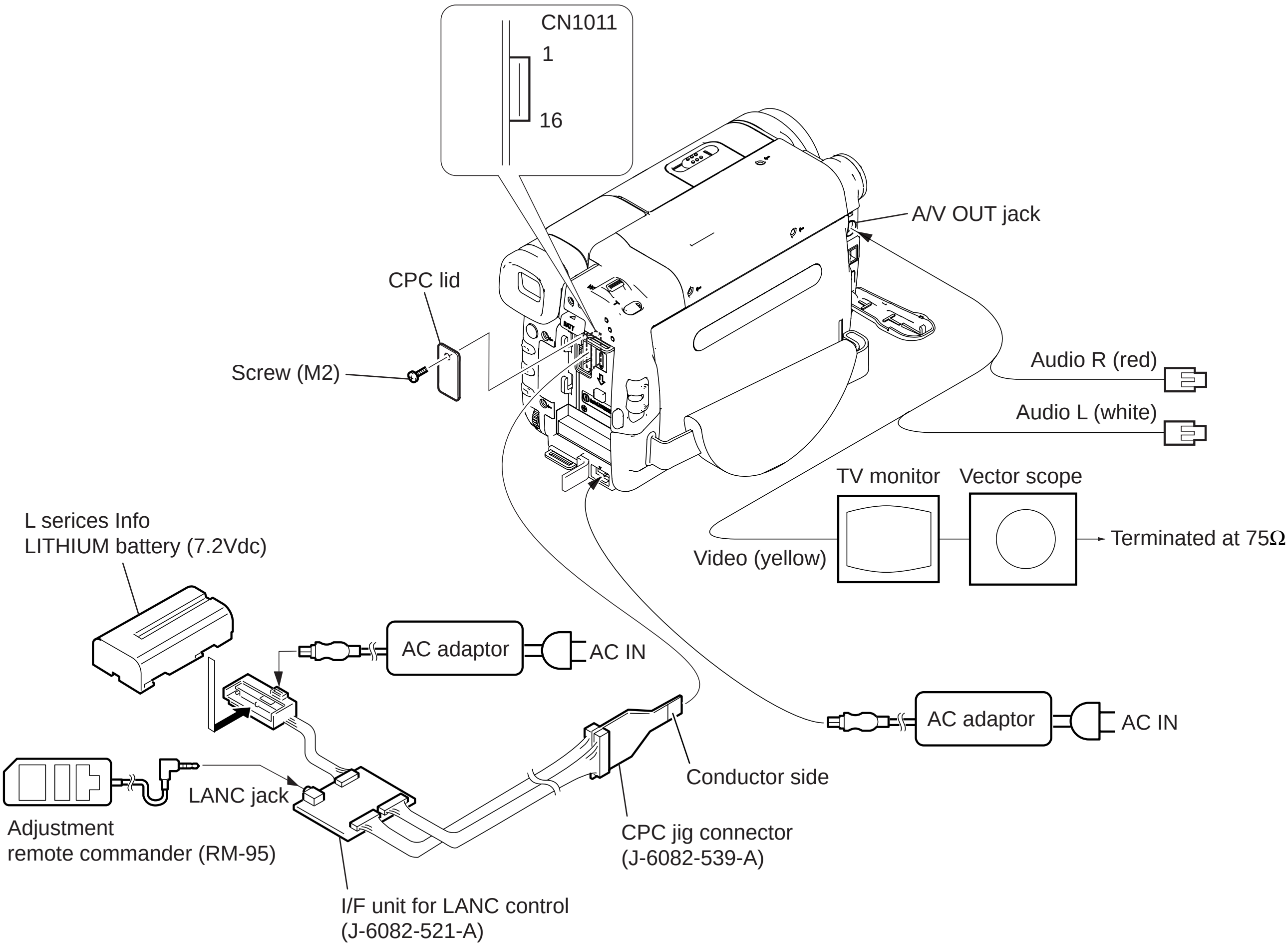


Fig. 6-1-3

1-1-3. Precaution

1. Setting the Switch

Unless otherwise specified, set the switches as follows and perform adjustments without loading cassette.

1. POWER switch (SS-5100 block) .... CAMERA
2. FOCUS (CF-5100 block) .... MANUAL
3. BACK LIGHT (CF-5100 block) .... OFF
4. PROGRAM AE (MENU setting) .... AUTO
5. NIGHTSHOT PLUS switch (Lens block) .... OFF
6. EXPOSURE (CF-5100 block) .... AUTO
7. P EFFECT (MENU setting) .... OFF
8. D ZOOM (MENU setting) .... OFF
9. DEMO MODE (MENU setting) .... OFF
10. 16 : 9 WIDE (MENU setting) .... OFF
11. DISPLAY (MENU setting) .... LCD

2. Order of Adjustments

Basically carry out adjustments in the order given.

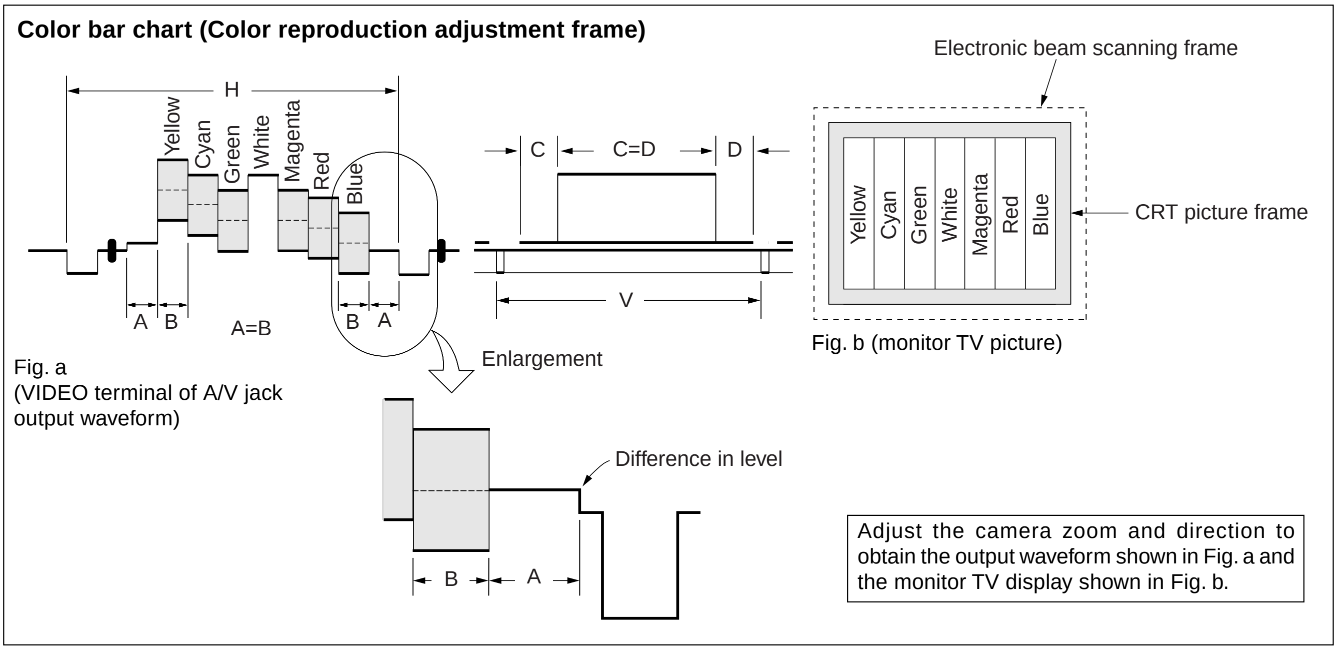


Fig. 6-1-4

3. Subjects

1) Color bar chart (Color reproduction adjustment frame)
   When performing adjustments using the color bar chart, adjust the picture frame as shown in Fig. 6-1-4. (Color reproduction adjustment frame)
2) Clear chart (Color reproduction adjustment frame)
   Remove the color bar chart from the pattern box and insert a clear chart in its place. (Do not perform zoom operations during this time)
3) Chart for flange back adjustment
   Join together a piece of white A0 size paper (1189mm × 841 mm) and a piece of black paper to make the chart shown in Fig. 6-1-5.

Note: Use a non-reflecting and non-glazing vellum paper. The size must be A0 or larger and the joint between the white and black paper must not have any undulations.

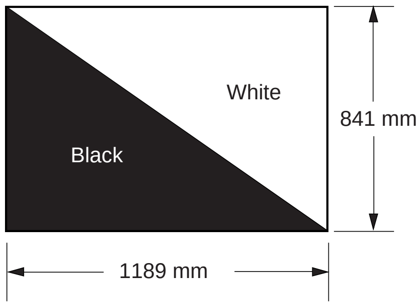


Fig. 6-1-5

1-2. INITIALIZATION OF 8, A, C, D, E, F, 1C, 1F PAGE DATA

Note: If reading/writing data on pages 1C, 1F, set data: 01 to page: 0, address: 10, and then select pages C, F. By this data setting, the pages 1C, 1F can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to "00".

1-2-1. Version Check

Due to the change of IC4501 (mechanism control), there are two types of versions A and B.
The EEPROM data are different according to respective versions.
Also, the IC4501 version can be checked by a discrimination method by the model name or by the adjusting remote commander.

Note 1: Changing the version does not make any changes in schematic diagrams and the rest.

Note 2: Make it sure to confirm the version after replacing IC4501.

1. Discrimination Method by the Model Name of IC4501 (Mechanism Control)

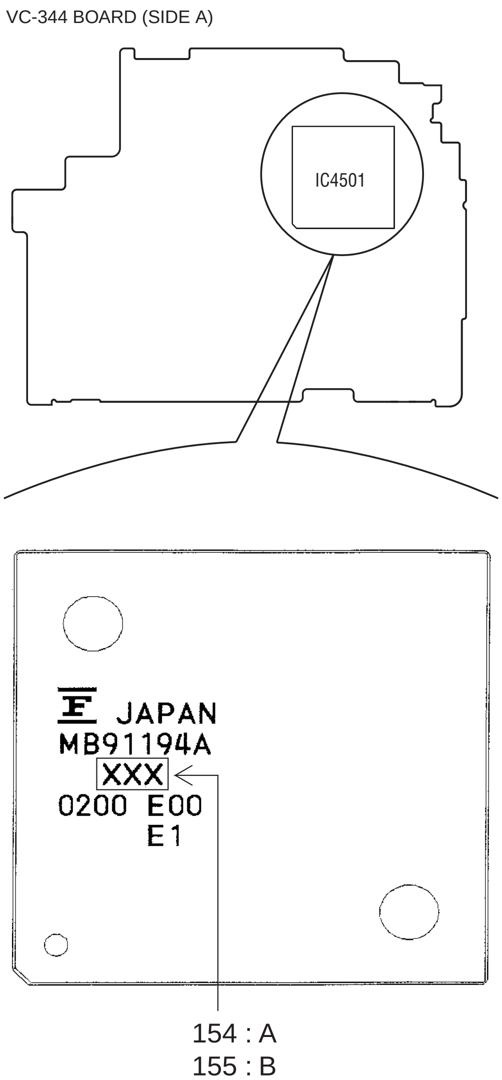


Fig. 6-1-6

2. Discrimination Method by Adjusting Remote Commander

Version check method:

1) Select page: 3, and address: FF.
2) The version of IC4501 can be checked from the displayed data.

Data	Version
01	A
02	B

Data change method:

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 1C, and input the data in the following table.

Note: To write in the non-volatile memory (EEPROM), press the PAUSE button of the adjustment remote commander each time to set the data.

3) Select page: 0, address: 01, and set data: 00.

Version / Address	A	B
D0	40	42

1-2-2. Initialization of A, D Page Data

Note: Check that the data of page: 0, address: 10 is “00”.

1. Initializing the A, D Page Data

Note 1: If “Initialization of Pages A, D” is executed, all data on pages A, D are initialized. (Only an individual page cannot be initialized)

Note 2: If the A, D page data has been initialized, the following adjustments need to be performed again.
1) Modification of A, D page data

Note 3: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Adjustment Page	A
Adjustment Address	10 to FF
Adjustment Page	D
Adjustment Address	10 to 7F

Initializing method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	0	10	00	
3	7	03		Set the following data. 00: NTSC model 80: PAL model
4	7	00	28	
5	7	01	28	Press PAUSE button.
6	7	02		Check the data changes to “01”.
7				Perform “Modification of A, D Page Data”

2. Modification of A, D Page Data

If the A, D page data has been initialized, change the data of the“Fixed data-2” address shown in the following table by manual input.

Modifying method:

1) Before changing the data, select page: 0, address: 01, and set data: 01.
2) New data for changing are not shown in the tables because they are different in destination. When changing the data, copy the data built in the same model.
   Note 1: If copy the data built in the different model, the camcorder may not operate.
3) When changing the data, press the PAUSE button of the adjustment remote commander each time when setting new data to write the data in the non-volatile memory.
4) Check that the data of adjustment addresses is the initial value. If not, change the data to the initial value.

Processing after completing modification A, D page data:

Order	Page	Address	Data	Procedure
1	2	00	29	
2	2	01	29	Press PAUSE button.

Note 2: If the following symptoms occur after completing of the“Modification A, D page data”, check that the data of the “Fixed data-2” addresses of A, D page are same as those of the same model of the same destination.
1) The power is shut off so that unit cannot operate.

3. A Page Table

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Fixed data-1: Initialized data. (Refer to “1. Initializing the A, D Page Data”)
Fixed data-2: Modified data. (Refer to “2. Modification of A, D Page Data”)

Address	Initial value NTSC	Initial value PAL	Remark
10 to 19			Fixed data-1 (Initialized data)
1A			Fixed data-2
1B to 30			Fixed data-1 (Initialized data)
31			Fixed data-2
32			
33 to 49			Fixed data-1 (Initialized data)
4A			Fixed data-2
4B to 4E			Fixed data-1 (Initialized data)
4F			Fixed data-2
50, 51			Fixed data-1 (Initialized data)
52			Fixed data-2
53			
54 to 64			Fixed data-1 (Initialized data)
65			Fixed data-2
66 to 7F			Fixed data-1 (Initialized data)
80			Fixed data-2
81			
82 to 8F			Fixed data-1 (Initialized data)
90			Fixed data-2
91 to 96			Fixed data-1 (Initialized data)
97			A: Fixed data-2 B: Fixed data-1 (Initialized data) (Refer to “1-2-1. Version Check”.)
98			
99 to DF			Fixed data-1 (Initialized data)
E0			Fixed data-2
E1			
E2			
E3			
E4			
E5			
E6			
E7			
E8			
E9			
EA			
EB			
EC			
ED			
EE			
EF			
F0			
F1			
F2			
F3			
F4			
F5			
F6			
F7			
F8			
F9			
FA			
FB			
FC			
FD			
FE, FF			Fixed data-1 (Initialized data)

4. D Page Table

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Fixed data-1: Initialized data. (Refer to “1. Initializing the A, D Page Data”)
Fixed data-2: Modified data. (Refer to “2. Modification of A, D Page Data”)

Address	Initial value NTSC	Initial value PAL	Remark
10	00	00	Test mode
11			Fixed data-1 (Initialized data)
12			Fixed data-2
13			
14 to 21			Fixed data-1 (Initialized data)
22			Fixed data-2
23			
24			
25			
26			
27 to 29			Fixed data-1 (Initialized data)
2A			Fixed data-2
2B			
2C to 35			Fixed data-1 (Initialized data)
36			Fixed data-2
37			
38			
39			Fixed data-1 (Initialized data)
3A			Fixed data-2
3B to 55			Fixed data-1 (Initialized data)
56			Fixed data-2
57			Fixed data-1 (Initialized data)
58			Fixed data-2
59 to 6E			Fixed data-1 (Initialized data)
6F			Fixed data-2
70 to 7F			Fixed data-1 (Initialized data)

1-2-3. Initialization of 8, C, 1C Page Data

Note: If reading/writing data on pages 1C, set data: 01 to page: 0, address: 10, and then select pages C. By this data setting, the pages 1C can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to “00”.

1. Initializing the 8, C, 1C Page Data

Note 1: If “Initialization of Pages 8, C, 1C” is executed, all data on pages 8, C, 1C are initialized. (Only an individual page cannot be initialized)

Note 2: If the 8, C, 1C page data has been initialized, the following adjustments need to be performed again.
1) Modification of 8, C, 1C page data
2) Electronic viewfinder system adjustments
3) LCD system adjustments
4) Node unique ID No. input
5) Servo, RF system adjustments
6) “S VIDEO OUT Y level adjustment” and “S VIDEO OUT C level adjustment” of video system adjustments.

Adjustment Page	8
Adjustment Address	00 to FF
Adjustment Page	C
Adjustment Address	10 to FF
Adjustment Page	1C
Adjustment Address	00 to FF

Initializing method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	0	10	00	
3	3	81	10	
4	3	80	0C	Press PAUSE button.
5	3	80		Check the data changes to “1C”.
6				Perform “Modification of 8, C, 1C Page Data”

2. Modification of 8, C, 1C Page Data

If the 8, C, 1C page data has been initialized, change the data of the “Fixed data-2” address shown in the following table by manual input.

Modifying method:
1) Before changing the data, select page: 0, address: 01, and set data: 01.
2) If modification of data on pages 8, C, set data: 00 to page: 0, address: 10, and then select pages 8, C.
3) If modification of data on pages 1C, set data: 01 to page: 0, address: 10, and then select pages C. After the modification of data finished, return the data on page: 0, address: 10 to “00”.
4) New data for changing are not shown in the tables because they are different in destination. When changing the data, copy the data built in the same model.
Note: If copy the data built in the different model, the camcorder may not operate.
5) When changing the data, press the PAUSE button of the adjustment remote commander each time when setting new data to write the data in the non-volatile memory.
6) Check that the data of adjustment addresses is the initial value. If not, change the data to the initial value.

Processing after completing modification 8, C, 1C page data:

Order	Page	Address	Data	Procedure
1	0	10	00	
2	2	00	29	
3	2	01	29	Press PAUSE button.

3. 8 Page Table

Note 1: Check that the data of page: 0, address: 10 is “00”.

Note 2: Fixed data-1: Initialized data. (Refer to “1. Initializing the 8, C, 1C Page Data”)
Fixed data-2: Modified data. (Refer to “2. Modification of 8, C, 1C Page Data”)

Address	Initial value		Remark
	NTSC	PAL	
00 to AB	Fixed data-1 (Initialized data)		
AC	Fixed data-2		
AD to C3	Fixed data-1 (Initialized data)		
C4	Fixed data-2		
C5			
C6			
C7			
C8 to FF	Fixed data-1 (Initialized data)		

4. C Page Table

Note 1: Check that the data of page: 0, address: 10 is "00".

Note 2: Fixed data-1: Initialized data. (Refer to "1. Initializing the 8, C, 1C Page Data")
Fixed data-2: Modified data. (Refer to "2. Modification of 8, C, 1C Page Data")

Address	Initial value		Remark
	NTSC	PAL	
10	EE	EE	Switching position adj.
11	00	00	
12	00	00	
13	00	00	
14, 15			Fixed data-1 (Initialized data)
16	E0	E0	CAP FG/REEL FG duty adj.
17	E0	E0	
18 to 24			Fixed data-1 (Initialized data)
25	86	86	S VIDEO OUT Y level adj.
26	90	90	S VIDEO OUT C level adj.
27	60	60	
28 to 2E			Fixed data-1 (Initialized data)
2F	0E	0E	CAP FG/REEL FG duty adj.
30 to 4D			Fixed data-1 (Initialized data)
4E			Fixed data-2
4F			Fixed data-1 (Initialized data)
50	7C	7C	LCD level adj. (VCO adj.)
51	8B	8B	
52	89	89	LCD V-COM adj.
53			Fixed data-2
54			Fixed data-1 (Initialized data)
55			Fixed data-2
56	6F	6F	LCD White balance adj.
57	4B	4B	
58	75	75	LCD level adj. (Contrast adj.)
59 to 5B			Fixed data-1 (Initialized data)
5C			Fixed data-2
5D			
5E to 65			Fixed data-1 (Initialized data)
66			Fixed data-2
67 to 74			Fixed data-1 (Initialized data)
75			Fixed data-2
76 to AC			Fixed data-1 (Initialized data)
AD			Fixed data-2
AE to D2			Fixed data-1 (Initialized data)
D3			Fixed data-2
D4			
D5			
D6			
D7 to DE			Fixed data-1 (Initialized data)
DF			Fixed data-2
E0	08	08	Node unique ID No. input
E1	00	00	
E2	46	46	

Address	Initial value		Remark
	NTSC	PAL	
E3	01	01	Node unique ID No. input
E4	02	02	
E5	00	00	
E6	00	00	
E7	00	00	
E8 to F3			Fixed data-1 (Initialized data)
F4	00	00	Emergency memory
F5	00	00	
F6	00	00	
F7	00	00	
F8	00	00	
F9	00	00	
FA	00	00	
FB	00	00	
FC	00	00	
FD	00	00	
FE	00	00	
FF	00	00	

5. 1C Page Table

Note 1: If reading/writing data on pages 1C, set data: 01 to page: 0, address: 10, and then select pages C. By this data setting, the pages 1C can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to "00".

Note 2: Fixed data-1: Initialized data. (Refer to "1. Initializing the 8, C, 1C Page Data")
Fixed data-2: Modified data. (Refer to "2. Modification of 8, C, 1C Page Data")

Address	Initial value		Remark
	NTSC	PAL	
00 to 08			Fixed data-1 (Initialized data)
09	FF	FF	Test mode
0A to B2			Fixed data-1 (Initialized data)
B3	00	00	SD error rate check (LP)
B4	00	00	
B5	00	00	
B6	00	00	
B7	00	00	
B8	80	80	
B9	00	00	
BA	00	00	
BB	00	00	
BC	00	00	
BD	00	00	
BE	00	00	
BF	00	00	
C0	00	00	
C1	00	00	
C2	00	00	
C3	80	80	
C4	00	00	
C5	00	00	
C6	00	00	
C7	00	00	
C8	00	00	
C9 to CF			Fixed data-1 (Initialized data)
D0			Fixed data-2
D1 to FF			Fixed data-1 (Initialized data)

1-2-4. Initialization of E, F, 1F Page Data

Note: Check that the data of page: 0, address: 10 is “00”.

1. Initializing the E, F, 1F Page Data

Note 1: If “Initialization of Pages E, F, 1F” is executed, all data on pages E, F, 1F are initialized. (Only an individual page cannot be initialized)

Note 2: If the E, F, 1F page data has been initialized, the following adjustments need to be performed again.
1) Modification of E, F, 1F page data
2) “27 MHz Origin Oscillation Adjustment” of video system adjustments
3) Camera system adjustments

Note 3: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Adjustment Page	E
Adjustment Address	00 to FF
Adjustment Page	F
Adjustment Address	10 to FF
Adjustment Page	1F
Adjustment Address	00 to FF

Initializing method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	0	10	00	
3	6	03	01	
4	6	01		Set the following data, and press PAUSE button. 2D: NTSC model 2F: PAL model
5	6	02		Check the data changes to “01”.
6				Perform “Modification of E, F, 1F Page Data”

2. Modification of E, F, 1F Page Data

If the E, F, 1F page data has been initialized, change the data of the “Fixed data-2” address shown in the following table by manual input.

Modifying method:

1) Before changing the data, select page: 0, address: 01, and set data: 01.
2) If modification of data on pages E, F, set data: 00 to page: 0, address: 10, and then select pages E, F.
3) If modification of data on pages 1F, set data: 01 to page: 0, address: 10, and then select pages F. After the modification of data finished, return the data on page: 0, address: 10 to “00”.
4) New data for changing are not shown in the tables because they are different in destination. When changing the data, copy the data built in the same model.
   Note: If copy the data built in the different model, the camcorder may not operate.
5) When changing the data, press the PAUSE button of the adjustment remote commander each time when setting new data to write the data in the non-volatile memory.
6) Check that the data of adjustment addresses is the initial value. If not, change the data to the initial value.

Processing after completing modification E, F, 1F page data:

Order	Page	Address	Data	Procedure
1	0	10	00	
2	2	00	29	
3	2	01	29	Press PAUSE button.

3. E Page Table

Note 1: Check that the data of page: 0, address: 10 is “00”.

Note 2: Fixed data-1: Initialized data. (Refer to “1. Initializing the E, F, 1F Page Data”)
Fixed data-2: Modified data. (Refer to “2. Modification of E, F, 1F Page Data”)

<table>
<tr><th rowspan="2">Address</th><th colspan="2">Initial value</th><th rowspan="2">Remark</th></tr>
<tr><th>NTSC</th><th>PAL</th></tr>
<tr><td>00 to 0F</td><td colspan="3">Fixed data-1 (Initialized data)</td></tr>
<tr><td>10</td><td colspan="3">Fixed data-2</td></tr>
<tr><td>11 to B0</td><td colspan="3">Fixed data-1 (Initialized data)</td></tr>
<tr><td>B1</td><td colspan="3">Fixed data-2</td></tr>
<tr><td>B2 to FF</td><td colspan="3">Fixed data-1 (Initialized data)</td></tr>
</table>

4. F Page Table

Note 1: Check that the data of page: 0, address: 10 is "00".

Note 2: Fixed data-1: Initialized data. (Refer to "1. Initializing the E, F, 1F Page Data")
Fixed data-2: Modified data. (Refer to "2. Modification of E, F, 1F Page Data")

Address	Initial value NTSC	Initial value PAL	Remark
10	80	80	27 MHz origin osillation adj.
11			Fixed data-1 (Initialized data)
12	4A	4A	Hall adj.
13	56	56	
14	11	11	
15	20	20	
16	02	02	
17	E0	E0	
18, 19			Fixed data-1 (Initialized data)
1A	00	00	LV standard data input
1B	60	60	
1C to 29			Fixed data-1 (Initialized data)
2A	29	1B	Auto white balance standard data input
2B	00	00	
2C	07	07	
2D	00	00	
2E	17	0E	Auto white balance adj.
2F	00	00	
30	0B	0D	
31	00	00	
32			Fixed data-1 (Initialized data)
33	22	22	Color reproduction adj.
34			Fixed data-1 (Initialized data)
35	27	24	Color reproduction adj.
36 to 39			Fixed data-1 (Initialized data)
3A	00	00	Color reproduction adj.
3B	F1	EF	
3C, 3D			Fixed data-1 (Initialized data)
3E	2A	2B	Auto white balance adj.
3F	C0	00	
40	59	59	
41	00	40	
42, 43			Fixed data-1 (Initialized data)
44	28	28	Flange back adj.
45	EC	EC	
46	35	35	
47	8F	8F	
48	13	13	
49	B8	B8	
4A	00	00	
4B	00	00	
4C	00	00	
4D	00	00	
4E	2B	2B	
4F	19	19	Flange back adj.
50	00	00	
51	32	32	
52	04	04	
53	00	00	
54	00	00	
55 to 59			Fixed data-1 (Initialized data)
5A	FF	FF	Optical axis adj.
5B to 8D			Fixed data-1 (Initialized data)
8E			Fixed data-2
8F			
90			
91 to 96			Fixed data-1 (Initialized data)
97			Fixed data-2
98, 99			Fixed data-1 (Initialized data)
9A			Fixed data-2
9B to A3			Fixed data-1 (Initialized data)
A4			Fixed data-2
A5 to C4			Fixed data-1 (Initialized data)
C5			Fixed data-2
C6			
C7 to FF			Fixed data-1 (Initialized data)

5. 1F Page Table

Note 1: If reading/writing data on pages 1F, set data: 01 to page: 0, address: 10, and then select pages F. By this data setting, the pages 1F can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to "00".

Note 2: Fixed data-1: Initialized data. (Refer to "1. Initializing the E, F, 1F Page Data")
Fixed data-2: Modified data. (Refer to "2. Modification of E, F, 1F Page Data")

Address	Initial value NTSC	Initial value PAL	Remark
00 to 7B			Fixed data-1 (Initialized data)
7C			Fixed data-2
7D to FF			Fixed data-1 (Initialized data)

1-3. CAMERA SYSTEM ADJUSTMENTS

Before perform the camera system adjustments, check that the specified values of “27 MHz Origin Oscillation Adjustment”, “S VIDEO OUT Y level Adjustment” and “S VIDEO OUT C level Adjustment” of “VIDEO SYSTEM ADJUSTMENT” are satisfied.
Check that the data of page: 0, address: 10, is “00”.
If not, select page: 0, address: 10, and set data “00”

1. HALL Adjustment RadarW

For detecting the position of lens iris, adjust the hall AMP gain and offset.

Mode	CAMERA
Subject	Not required
Measurement Point	Displayed data of page: 1 (Note 3)
Measuring Instrument	Adjusting remote commander
Adjustment Page	F
Adjustment Address	12 to 17
Specified value	87 to 8B during IRIS OPEN 15 to 19 during IRIS CLOSE

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Check that the data of page: 6, address: 02 is “00”.
If not, turn the power of unit OFF/ON.
Note 3: The right two digits of the page: 1 displayed data of the adjusting remote commander.

1:00:XX
Displayed data

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	94	89	
3	6	95	17	
4	6	01	6D	Press PAUSE button. (Note 4)
5	6	02		Check the data changes to “01”.
6	6	01	00	Press PAUSE button.

Note 4: The adjustment data will be automatically input to page: F, address: 12 to 17.

Checking method:

Order	Page	Address	Data	Procedure
1	0	03	03	
2	6	01	01	Press PAUSE button.
3	1			Check that the displayed data (Note 3) during IRIS OPEN satisfied the specified value.
4	6	01	03	Press PAUSE button.
5	1			Check that the displayed data (Note 3) during IRIS CLOSE satisfied the specified value.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	94	00	
3	6	95	00	
4	0	03	00	
5	0	01	00	

2. Flange Back Adjustment RadarW (Using the Minipattern Box)

The inner focus lens flange back adjustment is carried out automatically. In whichever case, the focus will be deviated during auto focusing/manual focusing.

Mode	CAMERA
Subject	Siemens star chart with ND filter for minipattern box (Note 1)
Measurement Point	Check operation on monitor TV
Measuring Instrument	
Adjustment Page	F
Adjustment Address	44 to 54

Note 1: Dark Siemens star chart.
Note 2: Check that the data of page: 0, address: 10 is “00”.
Note 3: Check that the data of page: 6, address: 02 is “00”. If not, turn the power of unit OFF/ON.
Note 4: Perform the adjustment with the camcorder in horizontal state.
Note 5: Perform “HALL Adjustment” before this adjustment.

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DISPLAY (Menu setting) .... LCD

Preparations before adjustments:
1) The minipattern box is installed as shown in the following figure.
   Note 6: The attachment lenses are not used.
2) Install the minipattern box so that the distance between it and the front of lens of camcorder is less than 3 cm.
3) Make the height of minipattern box and the camera equal.
4) Check the output voltage of the regulated power supply is the specified voltage ± 0.01 Vdc.
5) Check that the center of Siemens star chart meets the center of shot image screen with the zoom lens at TELE end and WIDE end respectively.

Specified voltage: The specified voltage varies according to the minipattern box, so adjust the power supply output voltage to the specified voltage written on the sheet which is supplied with the minipattern box.

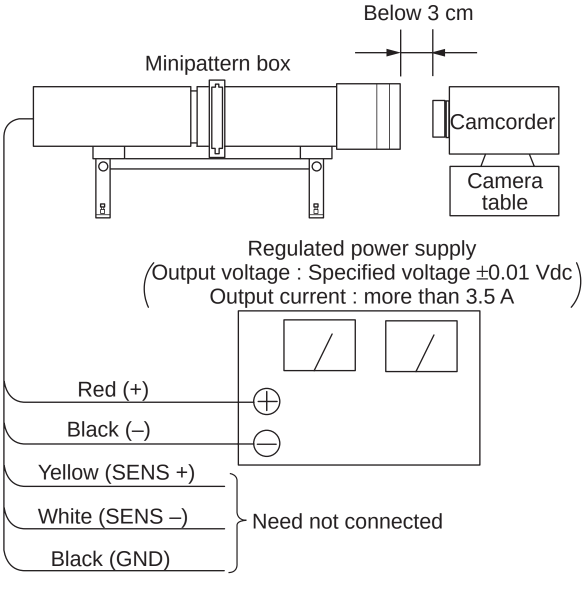


Fig. 6-1-7

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	01	13	Press PAUSE button.
4	6	01	27	Press PAUSE button. (Note 7)
5	6	02		Check the data changes to “01”.

Note 7: The adjustment data will be automatically input to page: F, address: 44 to 54.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	01	25	Press PAUSE button.
3	6	01	00	Press PAUSE button.
4	6	48	00	
5	0	01	00	
6				Perform “Flange Back Check”.

3. Flange Back Adjustment (Using the Flange Back Adjustment Chart and Subject More than 500 m Away)

The inner focus lens flange back adjustment is carried out automatically. In whichever case, the focus will be deviated during auto focusing/manual focusing.

3-1. Flange Back Adjustment (1) RadarW

Mode	CAMERA
Subject	Flange back adjustment chart (2.0 m from the front of lens) (Luminance: 300 to 400 lux)
Measurement Point	Check operation on monitor TV
Measuring Instrument	
Adjustment Page	F
Adjustment Address	44 to 54

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Check that the data of page: 6, address: 02 is “00”. If not, turn the power of unit OFF/ON.
Note 3: Perform the adjustment with the camcorder in horizontal state.
Note 4: Perform “HALL Adjustment” before this adjustment.

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DISPLAY (Menu setting) .... LCD

Preparations before adjustments:
1) Place the Flange back adjustment chart 2.0 m from the front of the lens.
2) Check that the center of Flange back adjustment chart meets the center of shot image screen with the zoom lens at TELE end and WIDE end respectively.

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	01	13	Press PAUSE button.
4	6	01	15	Press PAUSE button. (Note 5)
5	6	02		Check the data changes to “01”.

Note 5: The adjustment data will be automatically input to page: F, address: 44 to 54.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	01	25	Press PAUSE button.
3	6	01	00	Press PAUSE button.
4	6	48	00	
5	0	01	00	
6				Perform “Flange Back Adjustment (2)”.

3-2. Flange Back Adjustment (2) RadarW

Perform this adjustment after performing “Flange Back Adjustment (1)”.

Mode	CAMERA
Subject	Subject more than 500 m away (Subject with clear contrast such as buildings, etc.)
Measurement Point	Check operation on monitor TV
Measuring Instrument	
Adjustment Page	F
Adjustment Address	44 to 54

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Check that the data of page: 6, address: 02 is “00”. If not, turn the power of unit OFF/ON.

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DISPLAY (Menu setting) .... LCD

Preparations before adjustments:
1) Set the zoom lens to the TELE end and expose a subject that is more than 500 m away.
(subjects with clear contrast such as building, etc.)
(Nearby subjects less than 500 m away should not be in the screen)

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	01	13	Press PAUSE button.
4				Place ND filter on the lens so that the optimum image is obtain.
5	6	01	29	Press PAUSE button. (Note 3)
6	6	02		Check the data changes to “01”.

Note 3: The adjustment data will be automatically input to page: F, address: 44 to 54.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	01	25	Press PAUSE button.
3	6	01	00	Press PAUSE button.
4	6	48	00	
5	0	01	00	
6				Perform “Flange Back Check”.

4. Flange Back Check

Mode	CAMERA
Subject	Siemens star (2.0 m from the front of the lens) (Luminance: approx. 200 lux)
Measurement Point	Check operation on monitor TV
Measuring Instrument	
Specified value	Focused at the TELE end and WIDE end

Note 1: Check that the data of page: 0, address: 10 is "00".

Switch setting:

1) NIGHTSHOT PLUS .... OFF
2) DISPLAY (Menu setting) .... LCD

Note 2: When the auto focus is ON, the lens can be checked if it is focused or not by observing the data on the page: 1 of the adjusting remote commander.

1 : 00 : XX

Odd: Focused
Even: Unfocused

Checking method:

Order	Page	Address	Data	Procedure
1				Place the Siemens star 2.0 m from the front of the lens.
2				To open the IRIS, decrease the luminous intensity to the Siemens star up to a point before noise appear on the image.
3	6	40	01	
4	6	41	01	
5				Shoot the Siemens star with the zoom TELE end.
6				Turn on the auto focus.
7	0	03	0F	
8	1			Check that the lens is focused. (Note 2)
9	6	21	10	
10				Shoot the Siemens star with the zoom WIDE end.
11				Observe the TV monitor and check that the lens is focused.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	21	00	
2	6	40	00	
3	6	41	00	
4	0	03	00	

5. Optical Axis Adjustment

Correct a deviation of optical axis between the lens and the CCD imager.
If deviated, the screen center will be shifted when the lens is zoomed from TELE end to WIDE end.

Subject	Siemens Star
Measurement Point	Check operation on monitor TV
Measuring Instrument	
Adjustment Page	F
Adjustment Address	5A

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: “Flange Back Adjustment” must be already finished.

Switch setting:

1) DIGITAL ZOOM (Menu setting) .... OFF
2) STEADYSHOT (Menu setting) .... OFF
3) DISPLAY (Menu setting) .... LCD

Preparation for adjustment:

1) Play a monoscope portion of the System Check tape (WR5-5NSP (NTSC) or WR5-5CSP (PAL)).
2) Stick the optical axis deviation specification frame to the monitor screen so that the center of monoscope coincides with the center of specification frame.
3) Select the CAMERA mode.

Adjusting method:

1) Select page: 0, address: 01, and set data: 01.
2) Select page: F, address: 5A, and set data: 00, then press the PAUSE button on the adjusting remote commander.
3) Place the Siemens Star at 2 m position away from the lens.
4) Shoot the Siemens Star with the zoom at TELE end.
5) Change the lens direction so that the center of Siemens Star coincides with the center of optical axis deviation specification frame.
6) Shoot the Siemens Star with the zoom at WIDE end.
7) Check on the monitor TV which area the center of Siemens Star exists of the optical axis deviation specification frame.
At this time, measure the amount of deviation “L1” (distance from the center of Siemens Star to the center of optical axis deviation specification frame).
8) From the following table, read correction data according to the area.

Area	Deviation Phase	Correction Data
1	22.6° to 67.5°	01
2	67.6° to 112.5°	02
3	112.6° to 157.5°	03
4	157.6° to 202.5°	04
5	202.6° to 247.5°	05
6	247.6° to 292.5°	06
7	292.6° to 337.5°	07
8	337.6° to 22.5°	08

9) Select page: F, address: 5A, and set correction data, then press the PAUSE button on the adjusting remote commander.
10) Shoot the Siemens Star with the zoom at TELE end.
11) Change the lens direction so that the center of Siemens Star coincides with the center of optical axis deviation specification frame.
12) Shoot the Siemens Star with the zoom at WIDE end.
13) Measure the amount of deviation “L2” (distance from the center of Siemens Star to the center of optical axis deviation specification frame).
14) Compare L1 and L2, and make sure that the L2 is smaller than L1.
If large, select page: F, address: 5A, and set data: 00, then press the PAUSE button on the adjusting remote commander.

Processing after completion of adjustment:

1) Select page: 0, address: 01, and set data: 00.

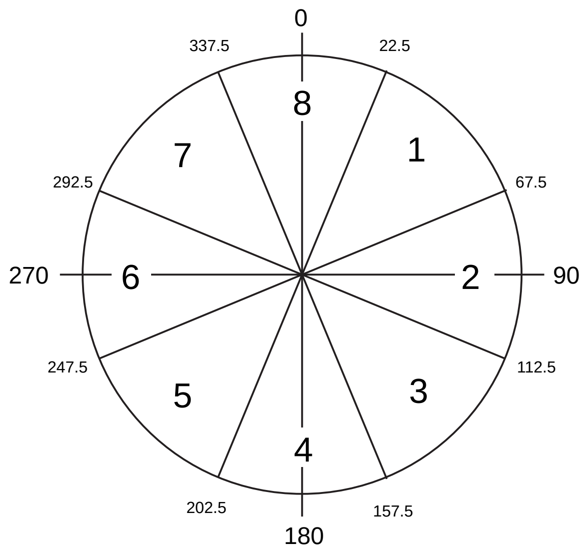


Fig. 6-1-8

6. Picture Frame Setting

Mode	CAMERA
Subject	Color bar chart (Color reproduction adjustment frame) (1.0 m from the front of lens)
Measurement Point	Video terminal of A/V OUT jack (75 Ω terminated)
Measuring Instrument	Oscilloscope and monitor TV
Specified Value	A=B, C=D, E=F

Note 1: Check that the data of page: 0, address: 10 is "00".
Note 2: Perform "Flange Back Adjustment" and "Optical Axis Adjustment" before this adjustment.

Switch setting:
1) DIGITAL ZOOM (Menu setting) .... OFF
2) STEADYSHOT (Menu setting) .... OFF
3) DISPLAY (Menu setting) .... LCD

Setting method:
1) Select page: 6, address: 48, and set data: 01.
2) Adjust the zoom and the camera direction, and set to the specified position.
3) Mark the position of the picture frame on the monitor display, and adjust the picture frame to this position in following adjustments using "Color reproduction adjustment frame".

Processing after completing camera system adjustments:
1) Select page: 6, address: 48, and set data: 00.

Check on the oscilloscope

1. Horizontal period

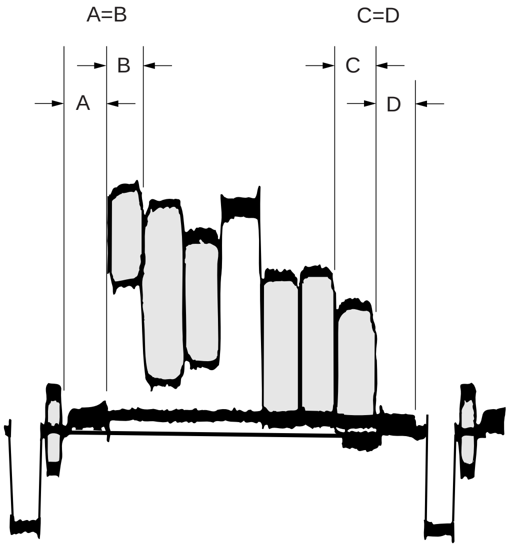


Fig. 6-1-9

2. Vertical period

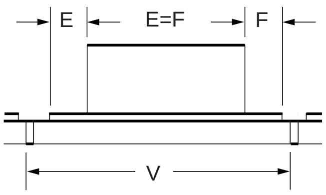


Fig. 6-1-10

Check on the monitor TV (Underscanned mode)

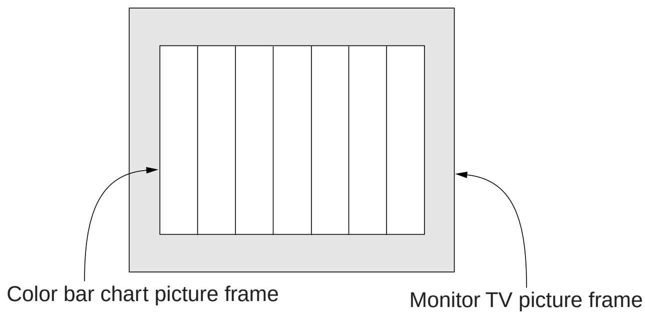


Fig. 6-1-11

7. Color Reproduction Adjustment

Adjust the color separation matrix coefficient so that proper color reproduction is produced.

Mode	CAMERA
Subject	Color bar chart (Color reproduction adjustment frame)
Measurement Point	Video terminal of A/V OUT jack (75 Ω terminated)
Measuring Instrument	Vectorscope
Adjustment Page	F
Adjustment Address	33, 35, 3A, 3B
Specified Value	All color luminance points should settle within each color reproduction frame.

Note 1: Check that the data of page: 0, address: 10 is "00".
Note 2: Perform "Flange Back Adjustment" before this adjustment.
Note 3: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DIGITAL ZOOM (Menu setting) .... OFF
3) STEADYSHOT (Menu setting) .... OFF
4) DISPLAY (Menu setting) .... LCD

Adjusting method:

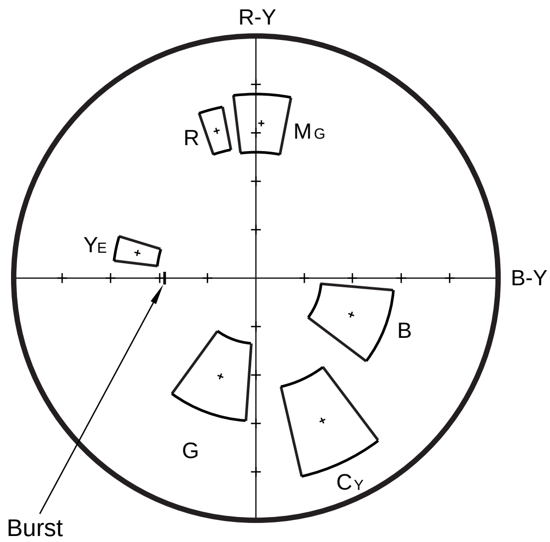
Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	9D	86	
4	6	01	3D	Press PAUSE button.
5	F	80		Set the following data, and press PAUSE button. 37: NTSC model B7: PAL model
6				Adjust the GAIN and PHASE of the vectorscope, and set to the burst luminance point to the burst position of color reproduction frame.
7	F	33 35 3A 3B		Change the data and settle each color luminance point in each color reproduction frame. (Note 4)

Note 4: Be sure to press the PAUSE button of the adjusting remote commander before changing the addresses. If not, the new data will not be written to the memory.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	48	00	
3	6	9D	00	
4	0	01	00	

NTSC model



PAL model

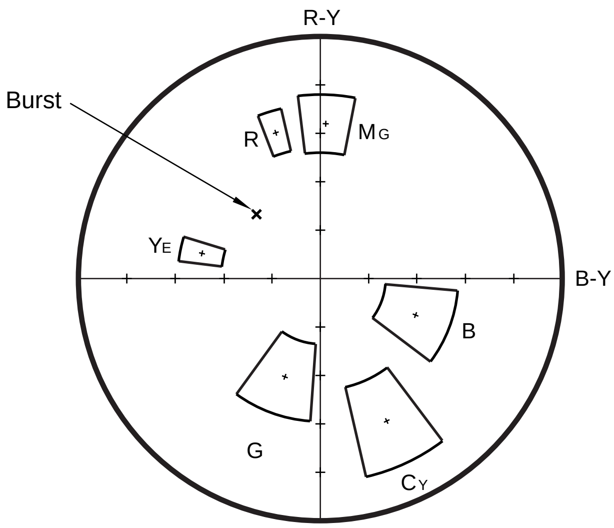


Fig. 6-1-12

8. LV Standard Data Input RadarW

Adjust the normal coefficient of the light value.

Mode	CAMERA
Subject	Clear chart (Color reproduction adjustment frame)
Measurement Point	Displayed data of page: 1 (Note 4)
Measuring Instrument	Adjusting remote commander
Adjustment Page	F
Adjustment Address	1A, 1B
Specified Value	0FE0 to 1020

Note 1: Perform "Flange Back Adjustment" before this adjustment.
Note 2: Check that the data of page: 0, address: 10 is "00".
Note 3: Check that the data of page: 6, address: 02 is "00".
If not, turn the power of unit OFF/ON.
Note 4: The right four digits of the page: 1 displayed data of the adjusting remote commander.

1:XX:XX

Displayed data

Switch setting:

1) NIGHTSHOT PLUS .... OFF
2) DIGITAL ZOOM (Menu setting) .... OFF
3) STEADYSHOT (Menu setting) .... OFF
4) DISPLAY (Menu setting) .... LCD

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	01	0D	Press PAUSE button. (Note 5)
4	6	02		Check the data changes to "01".
5	0	03	1E	
6	1			Check that the displayed data (Note 4) satisfied specified value.

Note 5: The adjustment data will be automatically input to page: F, address: 1A and 1B.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	48	00	
3	0	03	00	
4	0	01	00	

9. Auto White Balance Standard Data Input RadarW

Adjust the white balance reference at 3200K.

Mode	CAMERA
Subject	Clear chart (Color reproduction adjustment frame)
Adjustment Page	F
Adjustment Address	2A to 2D

Note 1: Perform "Color Reproduction Adjustment" before this adjustment.
Note 2: Check that the data of page: 0, address: 10 is "00".
Note 3: Check that the data of page: 6, address: 02 is "00".
If not, turn the power of unit OFF/ON.

Switch setting:

1) NIGHTSHOT PLUS .... OFF
2) DIGITAL ZOOM (Menu setting) .... OFF
3) STEADYSHOT (Menu setting) .... OFF
4) DISPLAY (Menu setting) .... LCD

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	6	48	01	
3	6	01	11	Press PAUSE button.
4	6	01	0B	Press PAUSE button. (Note 4)
5	6	02		Check the data changes to "01".

Note 4: The adjustment data will be automatically input to page: F, address: 2A to 2D.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	48	00	
3	0	01	00	

10. Auto White Balance Adjustment RadarW

Adjust to the proper auto white balance output data.
If it is not correct, auto white balance and color reproducibility will be poor.

Mode	CAMERA
Subject	Clear chart (Color reproduction adjustment frame)
Filter	Filter C14 for color temperature correction
Adjustment Page	F
Adjustment Address	2E to 31, 3E to 41

Note 1: Perform "Auto White Balance Standard Data Input" before this adjustment.
Note 2: Check that the data of page: 0, address: 10 is "00".
Note 3: Check that the data of page: 6, address: 02 is "00". If not, turn the power of unit OFF/ON.
Note 4: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DIGITAL ZOOM (Menu setting) .... OFF
3) STEADYSHOT (Menu setting) .... OFF
4) DISPLAY (Menu setting) .... LCD

Adjusting method:

Order	Page	Address	Data	Procedure
1				Place the C14 filter on the lens.
2	0	01	01	
3	6	48	01	
4	F	3E		Set the following data, and press PAUSE button. 2D: NTSC model 2C: PAL model
5	F	3F		Set the following data, and press PAUSE button. 10: NTSC model 50: PAL model
6	F	40	58	Press PAUSE button.
7	F	41		Set the following data, and press PAUSE button. 50: NTSC model 90: PAL model
8	6	01	83	Press PAUSE button.
9	6	01	81	Press PAUSE button. (Note 5)
10	6	02		Check the data changes to "01".

Note 5: The adjustment data will be automatically input to page: F, address: 2E to 31.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	48	00	
3	0	01	00	
4				Remove the C14 filter on the lens.

11. Auto White Balance Check RadarW

Mode	CAMERA	
Subject	Clear chart (Color reproduction adjustment frame)	
Filter	Filter C14 for color temperature correction ND filter 1.0, 0.4 and 0.1	
Measurement Point	Video terminal of A/V OUT jack (75 Ω terminated)	Displayed data of page: 1 (Note 3)
Measuring Instrument	Vectorscope	Adjusting remote commander
Specified Value	Fig. 6-1-13 (A) and (B)	NTSC model R ratio: 2CD0 to 2D50 B ratio: 5810 to 5890 InOut data: 8000 to 8BC0
		PAL model R ratio: 2C10 to 2C90 B ratio: 5850 to 58D0 InOut data: 8000 to 8BC0

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Perform “Auto White Balance Adjustment” before this adjustment.
Note 3: The right four digits of the page: 1 displayed data of the adjusting remote commander.

1:XX:XX
Displayed data

Note 4: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Switch setting:
1) NIGHTSHOT PLUS .... OFF
2) DIGITAL ZOOM (Menu setting) .... OFF
3) STEADYSHOT (Menu setting) .... OFF
4) DISPLAY (Menu setting) .... LCD

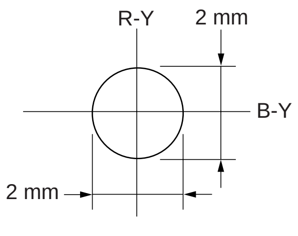


Fig. 6-1-13 (A)

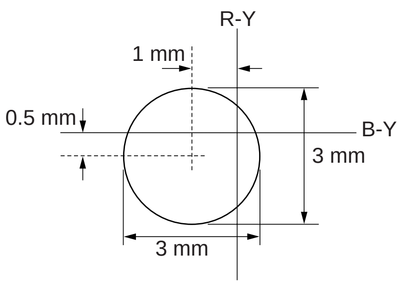


Fig. 6-1-13 (B)

Checking method:

Order	Page	Address	Data	Procedure
1				Check that the lens is not covered with either filter.
2	6	48	01	
INDOOR check				
3	6	01	0F	Press PAUSE button.
4				Check that the center of the white luminance point within the circle shown Fig. 6-1-13 (A)
5	6	01	00	Press PAUSE button.
OUTDOOR check				
6				Place the C14 filter on the lens.
7	6	01	3F	Press PAUSE button.
8				Check that the center of the white luminance point within the circle shown Fig. 6-1-13 (B)
9	0	03	04	
10	1			Check that the displayed data (Note 3) satisfied the R ratio specified value.
11	0	03	05	
12	1			Check that the displayed data (Note 3) satisfied the B ratio specified value.
13				Remove the C14 filter
InOut data check				
14				Place the ND filter 1.5 (1.0 + 0.4 + 0.1) on the lens.
15	6	01	00	Press PAUSE button.
16	0	03	06	
17	1			Check that the displayed data (Note 3) satisfied the InOut data specified value.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	48	00	
3	0	03	00	
4				Remove the ND filter 1.5 (1.0 + 0.4 + 0.1) on the lens.

12. Steadyshot Check RadarW

Check the sensorless steadyshot operation.

Mode	CAMERA
Subject	Not required
Measurement Point	Check on the monitor TV
Measuring Instrument	

Note: Check that the data of page: 0, address: 10 is “00”.

Switch setting:

1) ZOOM .... TELE end
2) STEADYSHOT (Menu setting) .... ON

Checking method:

Order	Page	Address	Data	Procedure
1	6	01	F1	Press PAUSE button.
2	6	D0	1E	
3	6	D1	03	
4	6	D2	03	
5	6	40	01	Check that a pattern screen rolls in horizontal direction.
6	6	40	02	Check that a rolling of the pattern screen becomes small.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	40	00	
2	6	D2	00	
3	6	D1	00	
4	6	D0	00	
5	6	01	00	Press PAUSE button.

13. CCD Defect Check RadarW

Mode	CAMERA
Subject	Not required
Measurement Point	Check on the monitor TV
Measuring Instrument	

Note: Check that the data of page: 0, address: 10 is “00”.

Checking method:

Order	Page	Address	Data	Procedure
1	6	01	05	Press PAUSE button.
2	6	1F	CC	
3	6	40	03	
4				Check on the monitor screen that no defect is found.
5	6	40	04	
6				Check on the monitor screen that no defect is found.

Processing after completing adjustment:

Order	Page	Address	Data	Procedure
1	6	01	00	Press PAUSE button.
2	6	40	00	
3	6	1F	00	

1-4. LCD SYSTEM ADJUSTMENTS

Before perform the LCD system adjustments, check that the data of page: 0, address: 10 is "00".
If not, select page: 0, address: 10, and set the data "00".

Note 1: When replacing the LCD unit, be careful to prevent damages caused by static electricity.
Note 2: Set the LCD BRIGHT (Menu setting) to the center.
Set the LCD B.L. (Menu setting) to the BRIGHT.
Set the LCD COLOR (Menu setting) to the center.
Note 3: Open the LCD panel during the LCD system adjustment.

1. LCD Level Adjustment (PD-204 Board) RadarW

This adjustment does the following items automatically.
VCO Adjustment
Contrast Adjustment

Mode	VTR stop (PLAY/EDIT mode)
Signal	No signal
Adjustment Page	C
Adjustment Address	50, 51 (VCO Adjustment) 58 (Contrast Adjustment)

Note 1: Check that the data of page: 0, address: 10 is "00".
Note 2: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	3	01	5A	Press PAUSE button. (Note 3)
3	3	02		Check the data changes to "00".
4	3	03		Check that the data is "00". (Note 4)
5	C	50		Read the data and this data is named D_{50}.
6				Convert D_{50} to decimal notation, and obtain D_{50}'. (Note 5)
7				Calculate D_{51}' using following equations. (decimal calculation) $D_{51}' = D_{50}' + 18$ (NTSC model) $D_{51}' = D_{50}' - 18$ (PAL model)
8				Convert D_{51}' to a hexadecimal number, and obtain D_{51}. (Note 5, 6)
9	C	51	D_{51}	Press PAUSE button.
10	0	01	00	

Note 3: The adjustment data will be automatically input to page: C, address: 50, 51 and 58.
Note 4: If the data is other than "00", adjustment has errors.
For the error contents, see the following table.
Note 5: Refer to table 6-4-1. "Hexadecimal-decimal conversion table".
Note 6: If $D_{51}' > 255$, then D_{51} = FF (NTSC model)
If $D_{51}' < 0$, then D_{51} = 00 (PAL model)

Page	Address	Data	Error contents
3	03	01	Adjustment time out.
	C6	60	Contrast adjustment error
		62	VCO adjustment error

2. LCD V-COM Adjustment (PD-204 Board)

Set the DC bias of the common electrode drive signal of LCD to the specified value.
If deviated, the LCD display will be move, producing flicker and conspicuous vertical lines.

Mode	VTR stop (PLAY/EDIT mode)
Signal	No signal
Measurement Point	Check on LCD screen
Measuring Instrument	
Adjustment Page	C
Adjustment Address	52
Specified Value	The brightness difference between the section-A and section-B is minimum

Note 1: Perform "LCD Level Adjustment" before this adjustment.
Note 2: Check that the data of page: 0, address: 10 is "00".

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	C	52		Change the data so that brightness of the section A and section B is equal.
3	C	52		Subtract 8 from the data.
4	C	52		Press PAUSE button.
5	0	01	00	

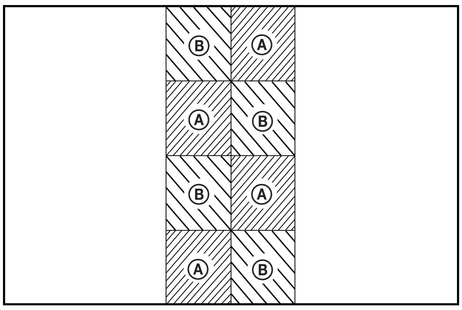


Fig. 6-1-14

3. LCD White Balance Adjustment (PD-204 Board)

Correct the white balance.
If deviated, the LCD screen color cannot be reproduced.

Mode	VTR stop (PLAY/EDIT mode)
Signal	No signal
Measurement Point	Check on LCD screen
Measuring Instrument	
Adjustment Page	C
Adjustment Address	56, 57
Specified Value	LCD screen must not be colored

Note 1: Check that the data of page: 0, address: 10 is "00".
Note 2: Check the white balance only when replacing the following parts. If necessary, adjust them.
1. LCD panel
2. Light induction plate
3. IC6001

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	C	56	6F	Press PAUSE button.
3	C	57	4B	Press PAUSE button.
4				Check that the LCD screen is not colored. If not colored, proceed to step 6.
5	C	56 57		Change the data so that the LCD screen is not colored. (Note 3)
6	0	01	00	

Note 3: To write in the non-volatile memory (EEPROM), press the PAUSE button each time to set the data.

6-2. MECHANISM SECTION ADJUSTMENTS

Mechanism Section adjustments, checks, and replacement of mechanism parts, refer to the separate volume “8mm Video Mechanical Adjustment Manual IX M2000 Mechanism ”.

Note 1: Before perform the adjustments, check that the data of page: 0, address: 10 is “00”.
If not, select page: 0, address: 10, and set the data “00”.
Note 2: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

2-1. ADJUSTMENT REMOTE COMMANDER

Connect the adjustment remote commander to CN1011 of VC-344 board via I/F unit for LANC control (J-6082-521-A) and CPC jig connector (J-6082-539-A). To operate the adjustment remote commander, connect the AC power adapter (8.4Vdc) to the DC IN jack of I/F unit for LANC control, or connect the L series InfoLITHIUM battery to the battery terminal of I/F unit for LANC control.

2-2. HOW TO ENTER RECORD MODE WITHOUT CASSETTE

1) Connect the adjustment remote commander.
2) Turn the HOLD switch of the adjustment remote commander to the ON position.
3) Close the cassette compartment without the cassette.
4) Select page: 3, address: 01, and set data: 0C, and press the PAUSE button of the adjustment remote commander.
(The mechanism enters the record mode automatically.)
Note: The function buttons becomes inoperable.
5) To quit the record mode, select page: 3, address: 01, set data: 00, and press the PAUSE button of the adjustment remote commander. (Whenever you want to quit the record mode, be sure to quit following this procedure.)

2-3. HOW TO ENTER PLAYBACK MODE WITHOUT CASSETTE

1) Connect the adjustment remote commander.
2) Turn the HOLD switch of the adjustment remote commander to the ON position.
3) Close the cassette compartment without the cassette.
4) Select page: 3, address: 01, and set data: 0B, and press the PAUSE button of the adjustment remote commander.
(The mechanism enters the playback mode automatically.)
Note: The function buttons becomes inoperable.
5) To quit the playback mode, select page: 3, address: 01, set data: 00, and press the PAUSE button of the adjustment remote commander. (Whenever you want to quit the playback mode, be sure to quit following this procedure.)

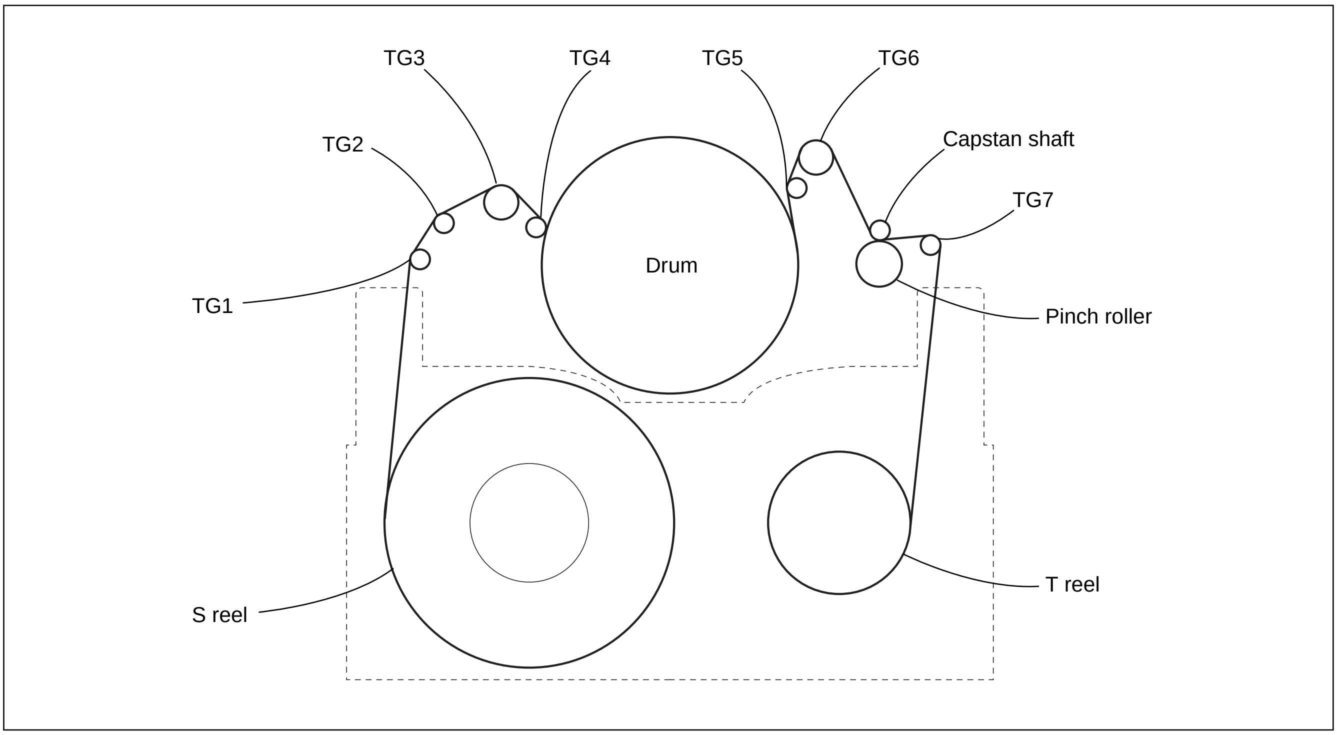


Fig. 6-2-1

2-4. TAPE PATH ADJUSTMENT

2-4-1. Preparations for Adjustment

1) Clean the tape path face (tape guide, drum, capstan shaft, pinch roller).
2) Connect the adjustment remote commander.
3) Turn on the HOLD switch of the adjustment remote commander.
4) Select page: 3, address: 33, and set data: 08.
5) Connect the oscilloscope to I/F unit for LANC control.
   Channel 1: PB RF (MON)
   Channel 2: SWP
   Note: Connect a 75 Ω resistor between the test point PB RF (MON) and GND.
   75 Ω resistor (Parts code: 1-247-804-11)
6) Playback the SW/OL standard tape. (WR5-2D)
7) Check that the oscilloscope RF waveform is flat at the entrance and exit.
   If not flat, perform the following section 2-4-2. until it is flat.
8) Perform “Processing after operations”, after completing adjustment.

Test point of I/F unit for LANC control

Pin No.	Signal Name	Pin No.	Signal Name
	BL	15	EVF VCO
14	EVF VG		BL 4.75
9	PB RF (MON)		
3	BPF MONI	6, 8 ,10	GND
	TMS	7	REC RF (RF IN)
	TDI		TDO
5	SWP		TCK
4	CAP FG	2	IR VIDEO

Note: Pin No. are those of CN1011.

Table 6-2-1.

[Processing after operations]

1) Connect the adjustment remote commander, and turn on the HOLD switch.
2) Select page: 3, address: 33, and set data: 00.
3) Remove the power supply from the unit.

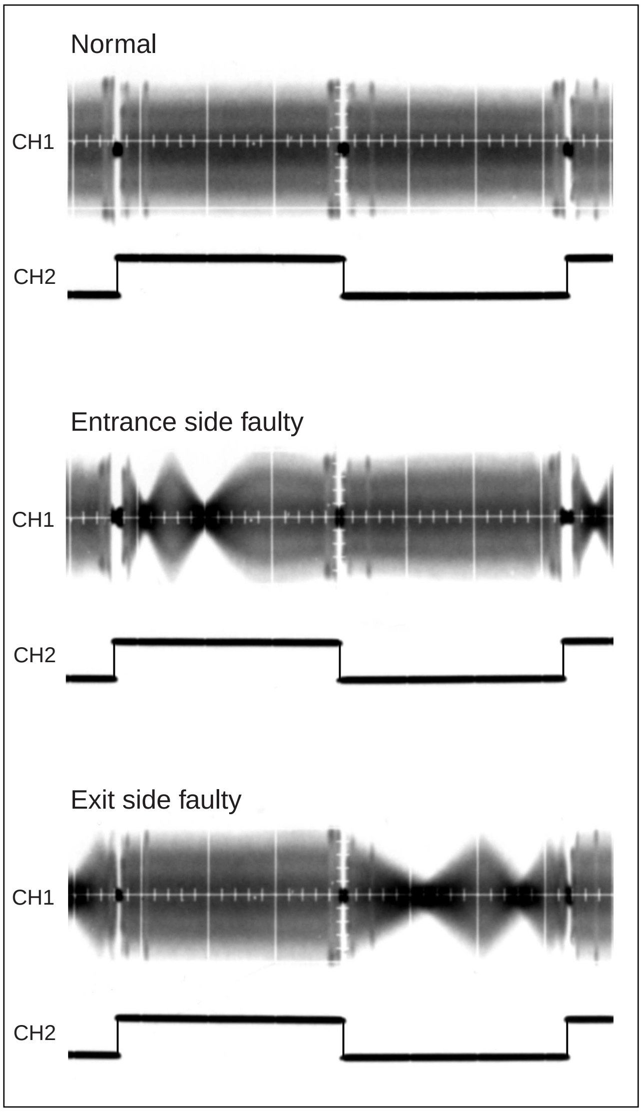


Fig. 6-2-2

2-4-2. Tape Path Adjustment

1) Playback the SW/OL standard tape. (WR5-2D)
2) Turn the tape guide No.3 and No.6 alternately until the waveform becomes flat. (Fig. 6-2-5)
   Note: Zenith adjustment screws for the TG3 and TG6 do not need to be adjusted.

[Entrance side adjustment]

3) Turn the No.3 guide slowly in the clockwise direction until the waveform amplitude at the entrance side begins to become small. (Fig. 6-2-6 (A))
   Confirm the rotation angle (A) of the No.3 guide.
4) Turn the No.3 guide slowly in the counterclockwise direction until the waveform becomes flat. (Fig. 6-2-5)
5) Turn the No.3 guide slowly in the counterclockwise direction until the waveform amplitude at the entrance side begins to become small. (Fig. 6-2-6 (B))
   Confirm the rotation angle (B) of the No.3 guide.
6) Turn the No.3 guide slowly in the clockwise direction and set up in the angle (C) in the middle of the rotation angle (A) and the rotation angle (B). (Fig. 6-2-4)

[Exit side adjustment]

7) Turn the No.6 guide slowly in the clockwise direction until the waveform amplitude at the exit side begins to become small. (Fig. 6-2-7 (A))
   Confirm the rotation angle (A) of the No.6 guide.
8) Turn the No.6 guide slowly in the counterclockwise direction until the waveform becomes flat. (Fig. 6-2-5)
9) Turn the No.6 guide slowly in the counterclockwise direction until the waveform amplitude at the exit side begins to become small. (Fig. 6-2-7 (B))
   Confirm the rotation angle (B) of the No.6 guide.
10) Turn the No.3 guide slowly in the clockwise direction and set up in the angle (C) in the middle of the rotation angle (A) and the rotation angle (B). (Fig. 6-2-4)

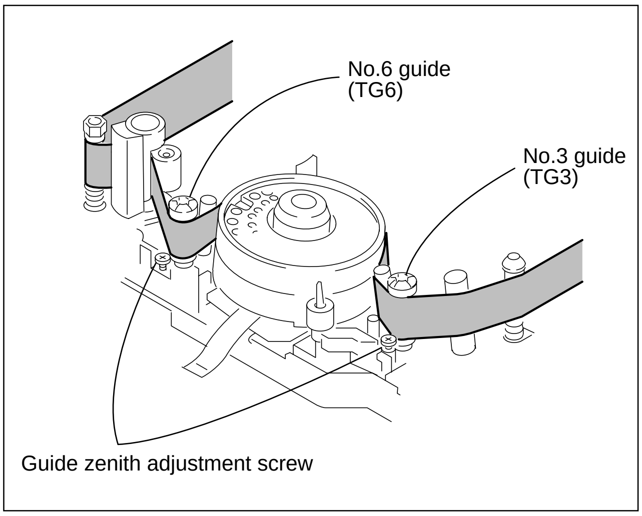


Fig. 6-2-3

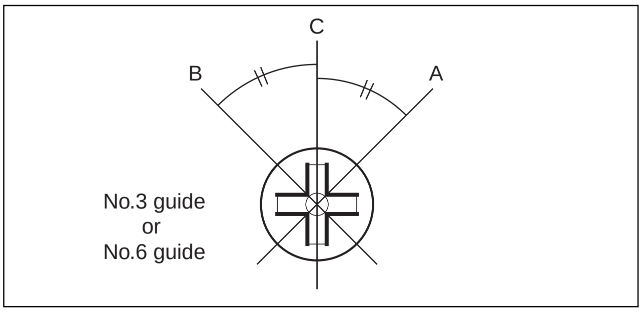


Fig. 6-2-4

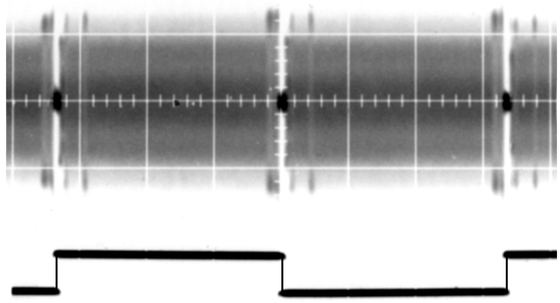


Fig. 6-2-5

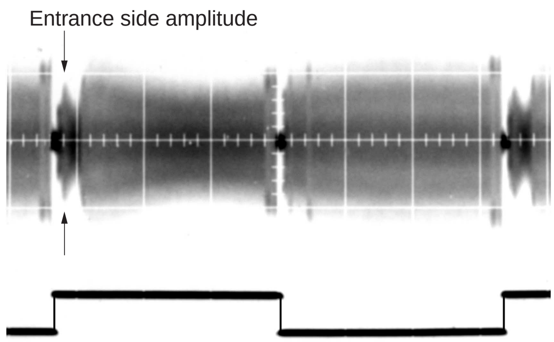


Fig. 6-2-6 (A)

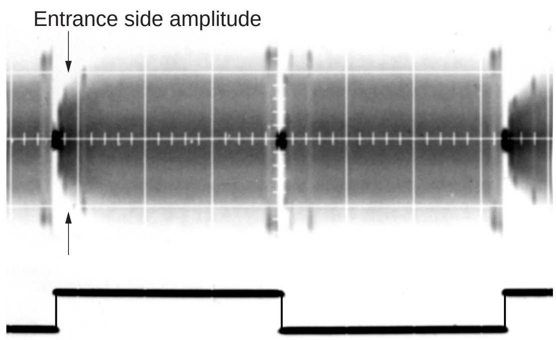


Fig. 6-2-6 (B)

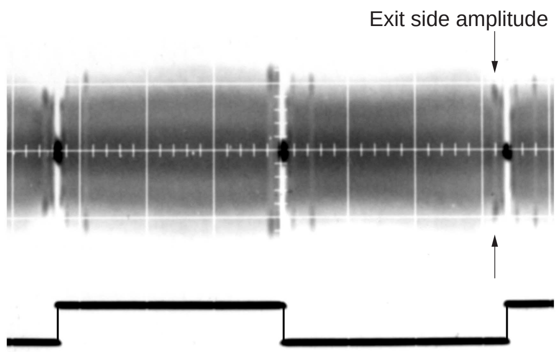


Fig. 6-2-7 (A)

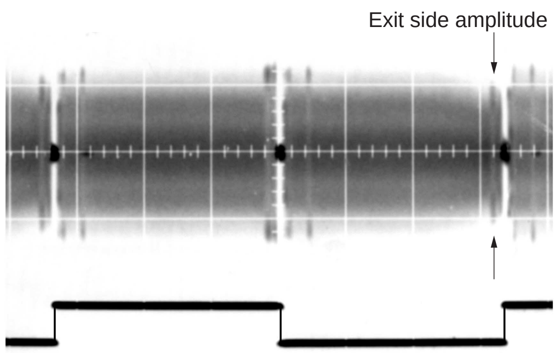


Fig. 6-2-7 (B)

2-4-3. No.7 Guide (TG7) Adjustment

1) Playback a tape in REV mode.
2) Confirm that tape slack dose not occur in between the guide No.6 (TG6) ① and capstan ②. If the tape slack is found, turn the height adjustment screw ④ of the Guide No.7 (TG7) ③ until tape slack is removed.
3) Playback a tape in normal mode. Confirm that tape slack dose not occur in between the guide No.7 (TG7) ③ and capstan ②. (Specification = 0.5 mm or less) If the tape slack of more than 0.5 mm is found, turn the height adjustment screw ④ until the slack is 0.5 mm or less. Playback a tape in REV mode and confirm that tape slack occurred in between the guide No.6 (TG6) ① and capstan ② is 0.3 mm or less, the adjustment is complete.

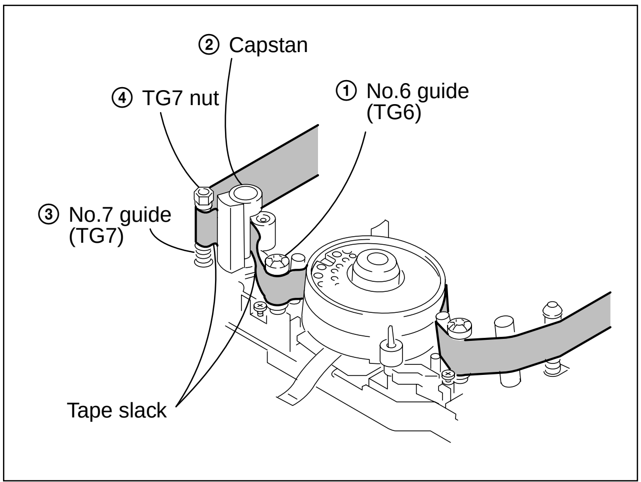


Fig. 6-2-8

2-4-4. CUE, REV Waveforms Check

1) Playback the SW/OL standard tape (WR5-2D) in REV mode. Confirm that pitches between the peaks of the waveform are equally spaced for 5 seconds or longer.
   The pitches are not equally spaced, perform section "2-4-2. Tape Path Adjustment" and section "2-4-3. No.7 Guide (TG7) Adjustment".
2) Playback the SW/OL standard tape in CUE mode.
   Confirm that pitches between the peaks of the waveform are equally spaced for 5 seconds or longer.
   The pitches are not equally spaced, perform section "2-4-2. Tape Path Adjustment".

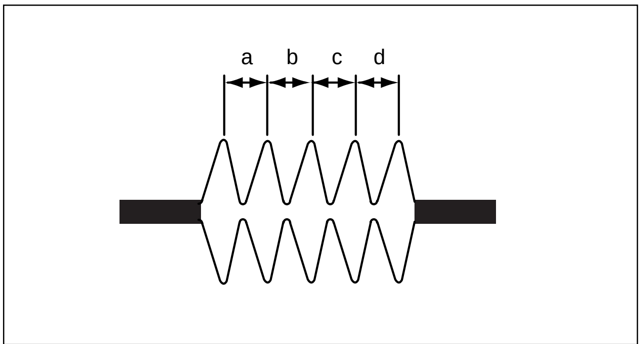


Fig. 6-2-9

2-5. CHECKS AFTER ADJUSTMENTS

2-5-1. Waveform Build-up Check

1) Playback the SW/OL standard tape.
2) Eject the tape once, insert and load the tape.
3) Start playing back the tape and confirm that the RF waveform builds up in three seconds with flat envelope. Confirm at this time that tape slack dose not occur near pinch roller.
4) Playback the tape in CUE/REV and FF/REW modes respectively. Confirm that the RF waveform builds up in three seconds with flat envelope. Confirm at this time that tape slack dose not occur near pinch roller.
5) Repeat the check items 2) to 5) again.

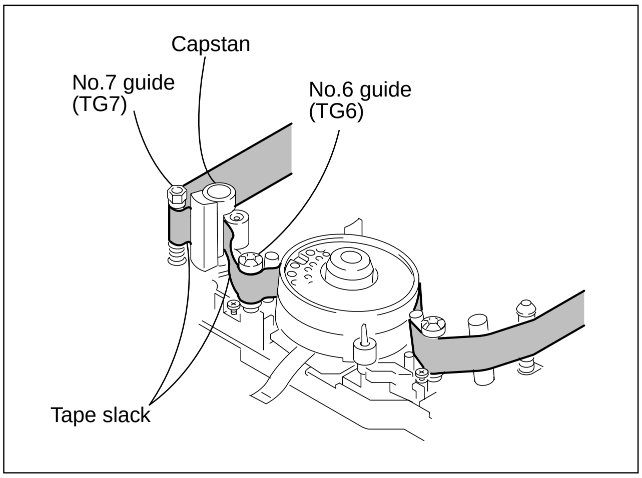


Fig. 6-2-10

2-5-2. Tape Path Check

1) Insert a thin video tape such as P5-120MP. Playback the thin tape. Confirm that there is no clearance or curl of 0.3 mm or more at the following points: Upper flange of guide No.3, upper flange of guide No. 6, upper and lower flanges of guide No.7.
2) Confirm that there is no clearance or curl of 0.3 mm or more at each tape guide when the FF button is pressed from the playback mode to enter the CUE mode, and when the REW button is pressed from the playback mode to enter the REV mode.

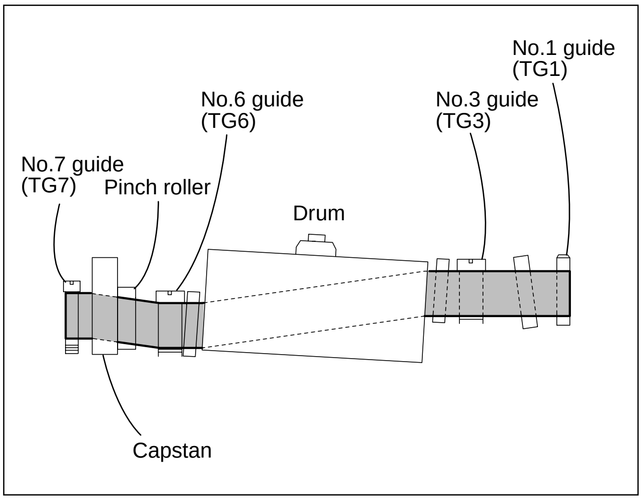


Fig. 6-2-11

6-3. VIDEO SECTION ADJUSTMENTS

3-1. PREPARATIONS BEFORE ADJUSTMENTS

Use the following measuring instruments for video section adjustments.

Note: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

3-1-1. Equipment to Required

1) TV monitor
2) Oscilloscope (dual-phenomenon, band width above 30 MHz with delay mode) (Unless specified otherwise, use a 10 : 1 probe)
3) Frequency counter
4) Digital voltmeter
5) Audio level meter
6) Audio distortion meter
7) Audio generator
8) Audio attenuator
9) Regulated power supply
10) Digital8 alignment tapes
    - SW/OL standard (WR5-2D)
      Parts code: 8-967-993-22
    - Audio operation check for NTSC (WR5-3ND)
      Parts code: 8-967-993-32
    - System operation check for NTSC (WR5-5ND)
      Parts code: 8-967-993-42
    - Audio operation check for PAL (WR5-3CD)
      Parts code: 8-967-993-37
    - System operation check for PAL (WR5-5CD)
      Parts code: 8-967-993-47
11) NTSC Hi8/Standard8 alignment tapes
    - For tracking adjustment (WR5-1NP)
      Parts code: 8-967-995-02
    - For video frequency characteristics adjustment (WR5-7NE)
      Parts code: 8-967-995-13
    - For checking Standard 8 mode operations
      For LP (WR5-4NL)
      Parts code: 8-967-995-51
      For SP (WR5-5NSP)
      Parts code: 8-967-995-42
      Note: The following alignment tapes can also be used.
      WR5-4NSP (8-967-995-41)
    - For checking Hi8 mode operations
      For LP (WR5-8NLE)
      Parts code: 8-967-995-52
      For SP (WR5-8NSE)
      Parts code: 8-967-995-43
    - For BPF adjustment (WR5-11NS)
      Parts code: 8-967-995-71
12) PAL Hi8/Standard8 alignment tapes
    - For tracking adjustment (WR5-1CP)
      Parts code: 8-967-995-07
    - For video frequency characteristics adjustment (WR5-7CE)
      Parts code: 8-967-995-18
    - For checking Standard 8 mode operations
      For LP (WR5-4CL)
      Parts code: 8-967-995-56
      For SP (WR5-5CSP)
      Parts code: 8-967-995-47
      Note: The following alignment tapes can also be used.
      1) WR5-3CL (8-967-995-36)
      2) WR5-4CSP (8-967-995-46)
    - For checking Hi8 mode operations
      For LP (WR5-8CLE)
      Parts code: 8-967-995-57
      For SP (WR5-8CSE)
      Parts code: 8-967-995-48
    - For BPF adjustment (WR5-11CS)
      Parts code: 8-967-995-76
13) Adjustment remote commander (J-6082-053-B)
14) CPC jig connector (J-6082-539-A)
15) I/F unit for LANC control (J-6082-521-A)

3-1-2. Precautions on Adjusting

This set is adjusted in two modes, VTR mode and CAMERA mode.

3-1-3. Adjusting Connectors

Some of the adjusting points of the video section are concentrated at VC-344 board CN1011. Connect the measuring instruments via I/F unit for LANC control (J-6082-521-A) and CPC jig connector (J-6082-539-A).
The following table shows the pin No. and signal name of CN1011.

Pin No.	Signal Name	Pin No.	Signal Name
1	EEP SCK	9	RF MON
2	FRRV	10	REG GND
3	N. C.	11	LANC OUT
4	N. C.	12	LANC IN
5	RF SWP	13	XLANC POWER ON
6	REG GND	14	EEP SO
7	N. C.	15	EEP SI
8	REG GND	16	XCS EEP

Table 6-3-1

The following table lists the test point of I/F unit of for LANC control.

Pin No.	Signal Name	Pin No.	Signal Name
	BL	15	EVF VCO
14	EVF VG		BL 4.75
9	PB RF (MON)		
3	BPF MONI	6, 8, 10	GND
	TMS	7	REC RF (RF IN)
	TDI		TDO
5	SWP		TCK
4	CAP FG	2	IR VIDEO

Note: Pin No. are those of CN1011.

Table 6-3-2

3-1-4. Connecting the Equipment

Connect the measuring instruments as shown in Fig. 6-3-1 and perform the adjustments.

Connecting the TV Monitor and Adjustment Remote Commander

Note: Use either the AC power adaptor or the InfoLITHIUM battery as the power supply of I/F unit for LANC control.

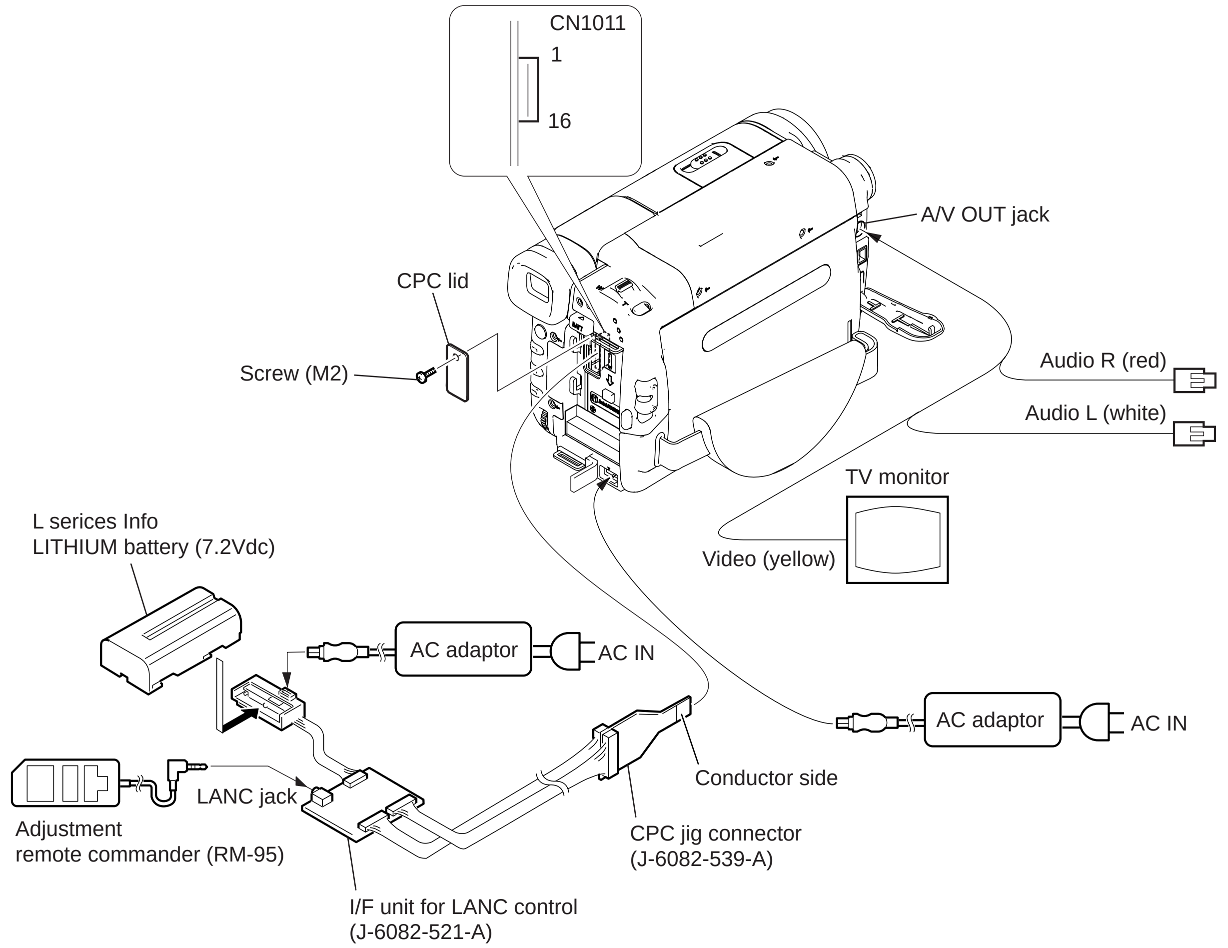


Fig. 6-3-1

3-1-5. Alignment Tape

The following table lists alignment tapes which are available. Use the tape specified in the signal column for each adjustment. If the type of tape to be used for checking operations is not specified, use whichever type.

Digital8 alignment tape

Name	Usage
SW/OL standard (WR5-2D)	Switching position adjustment
Audio operation check (WR5-3ND (NTSC), WR5-3CD (PAL))	Audio system adjustment
System operation check (WR5-5ND (NTSC), WR5-5CD (PAL))	Operation check

Hi8/Standard8 alignment tape

Name	Recording mode	Tape type	Tape speed	Usage
Tracking (WR5-1NP (NTSC), WR5-1CP (PAL))	Standard8	MP	SP	Tape path adjustment, Switching position adjustment
Video frequency characteristics (WR5-7NE (NTSC), WR5-7CE(PAL))	Hi8	ME	SP (NTSC) LP (PAL)	Frequency characteristics adjustment
Operation check (WR5-5NSP (NTSC), WR5-5CSP (PAL))	Standard8	MP	SP	Operation check
Operation check (WR5-8NSE (NTSC), WR5-8CSE (PAL))	Hi8	ME	SP	
Operation check (WR5-4NL (NTSC), WR5-4CL (PAL))	Standard8	MP	LP	
Operation check (WR5-8NLE (NTSC), WR5-8CLE (PAL))	Hi8	ME	LP	
AFM stereo operation check WR5-9NS(NTSC), WR5-9CS(PAL)	Standard8	MP	SP	AFM stereo Operation check
BPF adjustment WR5-11NS(NTSC), WR5-11CS(PAL)	Standard8	MP	SP	BPF adjustment

Tape type
ME .... Particle type metal tape
MP .... Evaporated type metal tape

Table 6-3-3

Fig. 6-3-2 Shows the color bar signals recorded on the alignment tape.
Note: Measure using the VIDEO terminal (Terminated at 75 Ω).

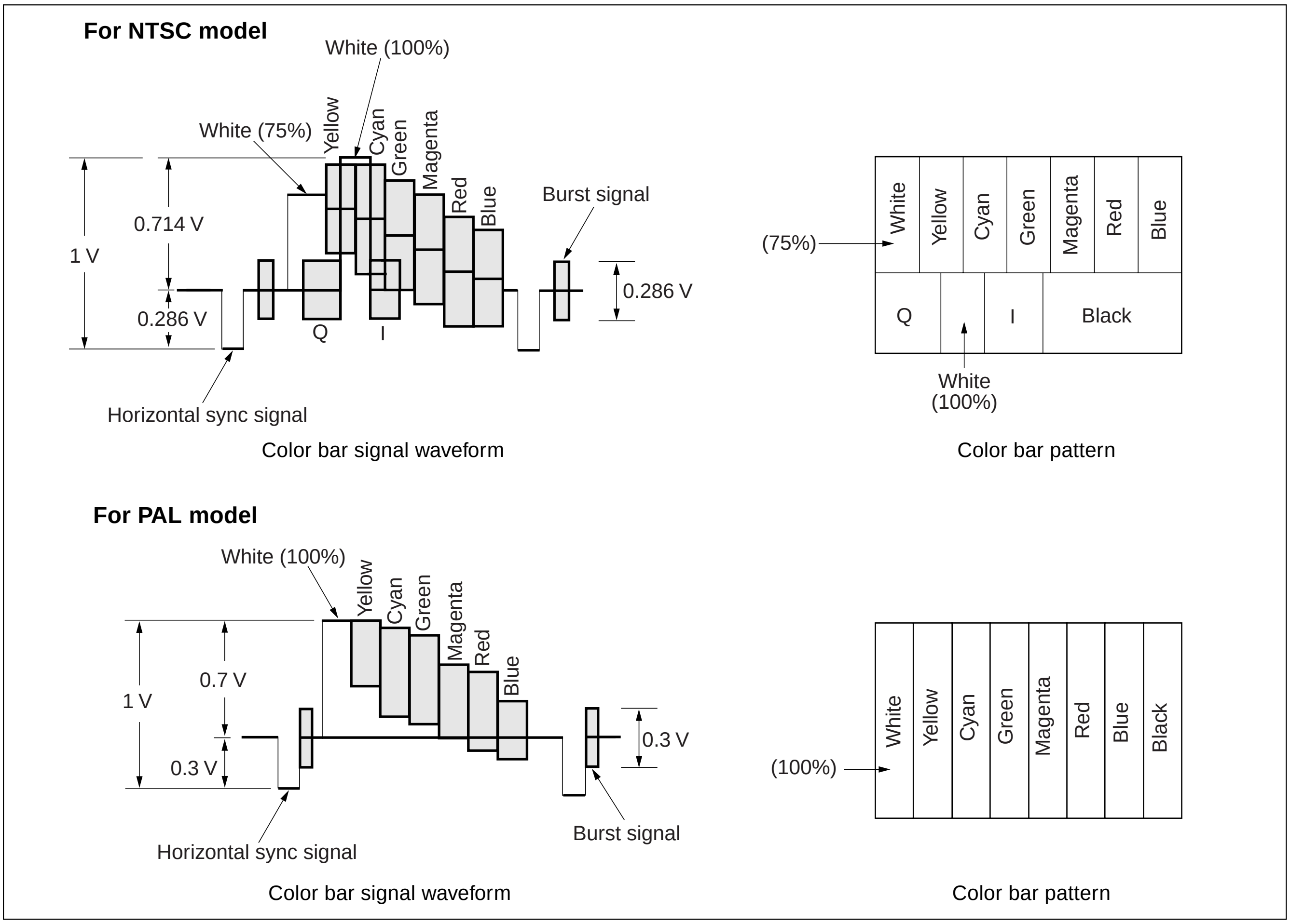


Fig. 6-3-2 Color Bar Signal of the Alignment Tape

3-1-6. Input/output Level and Impedance

Video input/output
  Phono jack, 1 Vp-p, 75 Ω, unbalanced, sync negative
S video input/output
  4-pin mini DIN
  Luminance signal:
    1 Vp-p, 75 Ω, unbalanced, sync negative
  Chrominance signal:
    0.286 Vp-p, 75 Ω, unbalanced (NTSC)
    0.300 Vp-p, 75 Ω, unbalanced (PAL)
Audio input/output
  Phono jack:
  Input: –7.5 dBs, input impedance more than 47 kΩ
  Output: –7.5 dBs, (at load impedance 47 kΩ), output impedance less than 2.2 kΩ

3-2. SYSTEM CONTROL SYSTEM ADJUSTMENTS

1. Initialization of 8, A, C, D, E, F, 1C, 1F Page Data

If the 8, A, C, D, E, F, 1C, 1F page data is erased due to some reason, perform "1-2. INITIALIZATION OF 8, A, C, D, E, F, 1C, 1F PAGE DATA ", of "6-1. CAMERA SECTION ADJUSTMENTS"

2. Node Unique ID No. Input

Note 1: Perform "2-2. Input of Serial No." if the data on page C has been cleared and the node unique ID No. is not found.
Note 2: Check that the data of page: 0, address: 10 is "00".

2-1. Input of Company ID

Write the company ID to the EEPROM (nonvolatile memory).

Page	C
Address	E0, E1, E2, E3, E4

Input method:
1) Select page: 0, address: 01, and set data: 01.
2) Select page: C, and enter the following data.

Note 3: Each time the data is set, press the PAUSE button on the adjusting remote commander.

Address	Data
E0	08
E1	00
E2	46
E3	01
E4	02

3) Select page: 0, address: 01, and set data: 00.

2-2. Input of Serial No.

Write the serial No. and model code to the EEPROM (nonvolatile memory).
In writing the serial No., a decimal number should be converted into a hexadecimal number.

Page	C
Address	E5, E6, E7

1) Select page: 0, address: 01, and set data: 01.
2) Read the serial No. from the model name label, and it is assumed to be D_1.
   Example: If serial No. is "77881",
   $D_1 = 77881$
3) From Table 6-3-4, obtain D_2 and H_1 that correspond to D_1.
   Example: If $D_1 = 77881$,
   $D_2 = D_1 - 65536 = 12345$
   $H_1 = FE$

D_1 (decimal)	D_2 (decimal)	H_1 (hexadecimal) (Service model code)
00001 to 65535	D_1	FE
65536 to 131071	$D_1 - 65536$	FE
131072 to196607	$D_1 - 131072$	FE
196608 to 262143	$D_1 - 196608$	FE
262144 to 327679	$D_1 - 262144$	FE
327680 to 393215	$D_1 - 327680$	FE
393216 to 458751	$D_1 - 393216$	FE
458752 to 524287	$D_1 - 458752$	FE
524288 to 589823	$D_1 - 524288$	FE
589824 to 655359	$D_1 - 589824$	FE
655360 to 720895	$D_1 - 655360$	FE
720896 to 786431	$D_1 - 720896$	FE
786432 to 851967	$D_1 - 786432$	FE
851968 to 917503	$D_1 - 851968$	FE
917504 to 983039	$D_1 - 917504$	FE
983040 to 999999	$D_1 - 983040$	FE

Table 6-3-4

4) Enter H_1 to address: E5 on page: C.
   Example: If $H_1 = FE$,
   select page: C, address: E5, and set data: FE, then press the PAUSE button.
5) From Table 6-3-5, obtain the maximum decimal number less than D_2, and it is assumed to be D_3.
   Example: If $D_2 = 12345$.
   $D_3 = 12288$
6) From Table 6-3-5, obtain a hexadecimal number that corresponds to D_3, and it is assumed to be H_3.
   Example: If $D_3 = 12288$,
   $H_3 = 3000$
7) Caluculate D_4 using following equations (decimal caluculation). ($0 \leqq D_4 \leqq 225$)
   $D_4 = D_2 - D_3$
   Example: If $D_2 = 12345$ and $D_3 = 12288$,
   $D_4 = 12345 - 12288 = 57$
8) Convert D_4 into a hexadecimal number to obtain H_4. (See Table 6-4-1 "Hexadecimal - decimal conversion table" in 6-4. Service Mode)
   Example: If $D_4 = 57$,
   $H_4 = 39$
9) Enter higher two digits of H_3 to address: E6 on page: C.
   Example: If $H_3 = 3000$,
   select page: C, address: E6, and set data: 30, then press the PAUSE button.
10) Enter H_4 to address: E7 on page: C.
   Example: If $H_4 = 39$,
   select page: C, address: E7, and set data: 39, then press the PAUSE button.
11) Select page: 0, address: 01, and set data: 00.

D_3	H_3	D_3	H_3	D_3	H_3	D_3	H_3	D_3	H_3	D_3	H_3	D_3	H_3	D_3	H_3
0	0000	8192	2000	16384	4000	24576	6000	32768	8000	40960	A000	49152	C000	57344	E000
256	0100	8448	2100	16640	4100	24832	6100	33024	8100	41216	A100	49408	C100	57600	E100
512	0200	8704	2200	16896	4200	25088	6200	33280	8200	41472	A200	49664	C200	57856	E200
768	0300	8960	2300	17152	4300	25344	6300	33536	8300	41728	A300	49920	C300	58112	E300
1024	0400	9216	2400	17408	4400	25600	6400	33792	8400	41984	A400	50176	C400	58368	E400
1280	0500	9472	2500	17664	4500	25856	6500	34048	8500	42240	A500	50432	C500	58624	E500
1536	0600	9728	2600	17920	4600	26112	6600	34304	8600	42496	A600	50688	C600	58880	E600
1792	0700	9984	2700	18176	4700	26368	6700	34560	8700	42752	A700	50944	C700	59136	E700
2048	0800	10240	2800	18432	4800	26624	6800	34816	8800	43008	A800	51200	C800	59392	E800
2304	0900	10496	2900	18688	4900	26880	6900	35072	8900	43264	A900	51456	C900	59648	E900
2560	0A00	10752	2A00	18944	4A00	27136	6A00	35328	8A00	43520	AA00	51712	CA00	59904	EA00
2816	0B00	11008	2B00	19200	4B00	27392	6B00	35584	8B00	43776	AB00	51968	CB00	60160	EB00
3072	0C00	11264	2C00	19456	4C00	27648	6C00	35840	8C00	44032	AC00	52224	CC00	60416	EC00
3328	0D00	11520	2D00	19712	4D00	27904	6D00	36096	8D00	44288	AD00	52480	CD00	60672	ED00
3584	0E00	11776	2E00	19968	4E00	28160	6E00	36352	8E00	44544	AE00	52736	CE00	60928	EE00
3840	0F00	12032	2F00	20224	4F00	28416	6F00	36608	8F00	44800	AF00	52992	CF00	61184	EF00
4096	1000	12288	3000	20480	5000	28672	7000	36864	9000	45056	B000	53248	D000	61440	F000
4352	1100	12544	3100	20736	5100	28928	7100	37120	9100	45312	B100	53504	D100	61696	F100
4608	1200	12800	3200	20992	5200	29184	7200	37376	9200	45568	B200	53760	D200	61952	F200
4864	1300	13056	3300	21248	5300	29440	7300	37632	9300	45824	B300	54016	D300	62208	F300
5120	1400	13312	3400	21504	5400	29696	7400	37888	9400	46080	B400	54272	D400	62464	F400
5376	1500	13568	3500	21760	5500	29952	7500	38144	9500	46336	B500	54528	D500	62720	F500
5632	1600	13824	3600	22016	5600	30208	7600	38400	9600	46592	B600	54784	D600	62976	F600
5888	1700	14080	3700	22272	5700	30464	7700	38656	9700	46848	B700	55040	D700	63232	F700
6144	1800	14336	3800	22528	5800	30720	7800	38912	9800	47104	B800	55296	D800	63488	F800
6400	1900	14592	3900	22784	5900	30976	7900	39168	9900	47360	B900	55552	D900	63744	F900
6656	1A00	14848	3A00	23040	5A00	31232	7A00	39424	9A00	47616	BA00	55808	DA00	64000	FA00
6912	1B00	15104	3B00	23296	5B00	31488	7B00	39680	9B00	47872	BB00	56064	DB00	64256	FB00
7168	1C00	15360	3C00	23552	5C00	31744	7C00	39936	9C00	48128	BC00	56320	DC00	64512	FC00
7424	1D00	15616	3D00	23808	5D00	32000	7D00	40192	9D00	48384	BD00	56576	DD00	64768	FD00
7680	1E00	15872	3E00	24064	5E00	32256	7E00	40448	9E00	48640	BE00	56832	DE00	65024	FE00
7936	1F00	16128	3F00	24320	5F00	32512	7F00	40704	9F00	48896	BF00	57088	DF00	65280	FF00

Note: D_3: Decimal
H_3: Hexadecimal

Table 6-3-5

3-3. SERVO AND RF SYSTEM ADJUSTMENTS

Before perform the servo and RF system adjustments, check that the specified values of "27MHz Origin Oscillation Adjustment" of "VIDEO SYSTEM ADJUSTMENTS" is satisfied.
Check that the data of page: 0, address: 10 is "00".
If not, select page: 0, address: 10, and set the data "00".

Adjusting procedure:

1. CAP FG/REEL FG duty adjustment
2. Switching position adjustment
3. SD error rate check

1. CAP FG/REEL FG Duty Adjustment (VC-344 Board)

RadarW

Set the CAP FG signal duty cycle to 50% to establish an appropriate capstan servo. If deviated, the uneven rotation of capstan and noise can occur in the LP mode.
Compensates the dispersion of the hall elements.

Mode	VTR stop (PLAY/EDIT mode)
Signal	No signal
Measurement Point	Displayed data of page: 3, address: 03
Measuring Instrument	Adjusting remote commander
Adjustment Page	C
Adjustment Address	16, 17, 2F
Specified value	The data of page: 3, address: 03 is "00"

Note 1: Check that the data of page: 0, address: 10 is "00".

Adjusting method:

Order	Page	Address	Data	Procedure
1				Close the cassette compartment without inserting cassette.
2	0	01	01	
3	3	01	1E	Press PAUSE button.
4	3	02		Check the data changes to "00".
5	3	03		Check the data is "00". (Note 2)
6	0	01	00	

Note 2: If the data is other value, adjustment has errors.
For the error contents, see the following table.

Data	Error contents
02, 03, 06, 07	T REEL is defective
08, 09, 0C, 0D	S REEL is defective
0A, 0B, 0E, 0F,	T REEL and S REEL are defective
81	CAP FG duty adjustment has error

2. Switching Position Adjustment (VC-344 Board)

RadarW

To obtain normal playback waveform output, adjust the switching position.

Mode	VTR playback (PLAY/EDIT mode)
Signal	SW/OL standard (WR5-2D)
Measurement Point	Displayed data of page: 3, address: 03
Measuring Instrument	Adjusting remote commander
Adjustment Page	C
Adjustment Address	10, 11, 12, 13
Specified value	The data of page: 3, address: 03 is "00"

Note 1: Check that the data of page: 0, address: 10 is "00".

Adjusting method:

Order	Page	Address	Data	Procedure
1				Insert the SW/OL standard tape and enter the VTR stop mode.
2	0	01	01	
3	C	10	EE	Press PAUSE button.
4	3	21		Check the data is "02". (Note 2)
5	3	01	0D	Press PAUSE button.
6	3	02		Check the data changes to "00".
7	3	03		Check the data is "00". (Note 3, 4)
8	0	01	00	

Note 2: If the data is "72", the tape top being played. After playing the tape for 1 to 2 seconds, stop it, perform step 5 and higher. If the data is "62", the tape end being played. After rewind the tape, perform step 5 and higher.

Note 3: If the data is not "00", select page: C, address: 21 and take a note of the data. Set data: 10, press the PAUSE button, then perform the adjustment again.
When the data does not become "00" even if the adjustment has been performed again, set back the data on page: C, address: 21.

Note 4: If bit0 of the data is "1", the EVEN channel is defective.
If bit1 of the data is "1", the ODD channel is defective.
Contents of the defect is see written into page: C, address: 10 and 12. See following table.
(For the bit values, refer to "6-4. SERVICE MODE", "4-3. 3. Bit Value Discrimination".)
If bit3 of the data is "1", the tape end being played. After rewinding the tape, perform the adjustment again.

When the EVEN channel is defective

Data of page: C, address: 10	Contents of defect
EE	Writing into EEP ROM (IC4502) is defective
E8	Adjustment data is out of range
E7	No data is returned from IC3301

When the ODD channel is defective

Data of page: C, address: 12	Contents of defect
E8	Adjustment data is out of range
E7	No data is returned from IC3301

3. SD Error Rate Check (LP) (VC-344 Board) RadarW

Checking the video error rate in LP mode, adjust the filter tap coefficient of IC3301.

Mode	VTR playback (PLAY/EDIT mode)
Signal	Recorded signal at "Preparations before adjustments"
Measurement Point	Displayed data of page: 3, address: 03
Measuring Instrument	Adjusting remote commander
Adjustment Page	1C (Note 1)
Adjustment Address	B3 to C8
Specified value	The data of page: 3, address: 03 is "00"

Note 1: If reading/writing data on page 1C, set data: 01 to page: 0, address: 10, and then select page C. By this data setting, the page C can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to "00".

Note 2: Use a Hi8 MP tape.

Switch setting:

1) REC MODE (Menu display) .... LP

Preparations before adjustment:

1) Set the camcoder to CAMERA mode (LP mode).
2) Record camera signal for a minute, and rewind tape.

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2				Playback the recorded signal at "Preparations before adjustments".
3	3	01	40	Press PAUSE button.
4	3	02		Check the data changes to "00".
5	3	03		Check the data is "00". (Note 3)
6	0	01	00	

Note 3: If the data is other value, adjustment has errors.
For the error contents, see the following table.

Data	Error contents
01	Error rate of the EVEN channel exceeds the specified value
02	Error rate of the ODD channel exceeds the specified value
03	Error rate of the EVEN and ODD channels exceeds the specified value

3-4. VIDEO SYSTEM ADJUSTMENTS

Before perform the video system adjustments, check that the data of page: 0, address: 10 is “00”.
If not, select page: 0, address: 10, and set data “00”
Video system adjustments must be performed in the following order.

Adjusting procedure:
1. 27 MHz origin oscillation adjustment
2. S VIDEO OUT Y level adjustment
3. S VIDEO OUT C level adjustment
4. VIDEO OUT level check

1. 27 MHz Origin Oscillation Adjustment (VC-344 Board)

Set the frequency of the clock for synchronization.
If deviated, the synchronization will be disrupted and the color will become inconsistent.

Mode	CAREMA
Subject	Arbitrary
Measurement Point	Pin ⑫ of IC1501
Measuring Instrument	Frequency counter
Adjustment Page	F
Adjustment Address	10
Specified value	f = 13500000 ± 68 Hz

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: Refer to “2. DISASSEMBLY”, when opening the VC-344 board.

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	F	10		Change the data and set the frequency (f) to the specified value.
3	F	10		Press PAUSE button.
4	0	01	00	

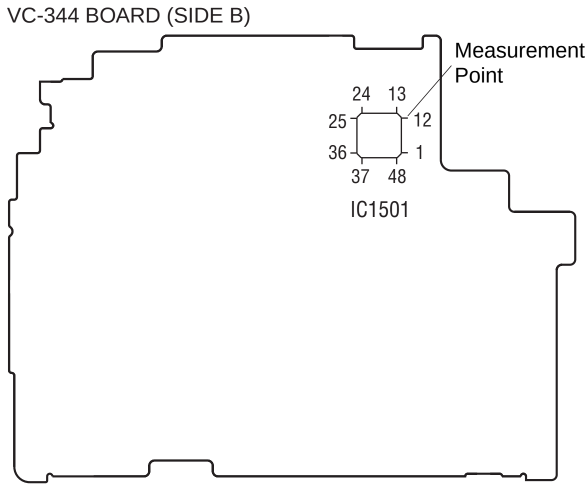


Fig. 6-3-3

2. S VIDEO OUT Y Level Adjustment (VC-344 Board)

Mode	CAMERA
Subject	Arbitrary
Measurement Point	Y signal terminal of S VIDEO jack (75 Ω terminated)
Measuring Instrument	Oscilloscope
Adjustment Page	C
Adjustment Address	25
Specified value	A = 1000 ± 20 mVp-p

Note 1: Check that the data of page: 0, address: 10 is “00”.

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	8	A0		Set the bit value of bit3 is “1”, and press PAUSE button. (Note 2)
3	3	0C	02	Press PAUSE button.
4	C	25		Change the data and set the Y signal level (A) to the specified value.
5	C	25		Press PAUSE button.
6	8	A0		Set the bit value of bit3 is “0”, and press PAUSE button. (Note 2)
7	3	0C	00	Press PAUSE button.
8	0	01	00	

Note 2: For the bit values, refer to “6-4. SERVICE MODE”, “4-3. 3. Bit Value Discrimination”.

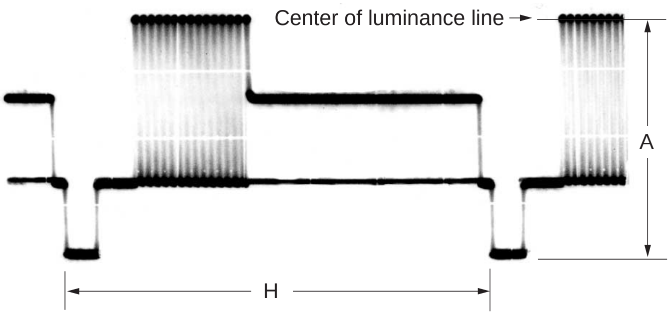


Fig. 6-3-4

3. S VIDEO OUT C Level Adjustment (VC-344 Board)

Mode	CAMERA
Subject	Arbitrary
Measurement Point	Chroma signal terminal of S VIDEO jack (75 Ω terminated) External trigger: Y signal terminal of S VIDEO jack (75 Ω terminated)
Measuring Instrument	Oscilloscope
Adjustment Page	C
Adjustment Address	26, 27
Specified value	Cr level: A = 714 ± 14 mVp-p (NTSC) A = 700 ± 14 mVp-p (PAL) Cb level: B = 714 ± 14 mVp-p (NTSC) B = 700 ± 14 mVp-p (PAL) Burst level: C = 286 ± 6 mVp-p (NTSC) C = 300 ± 6 mVp-p (PAL)

Note 1: Check that the data of page: 0, address: 10 is “00”.
Note 2: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

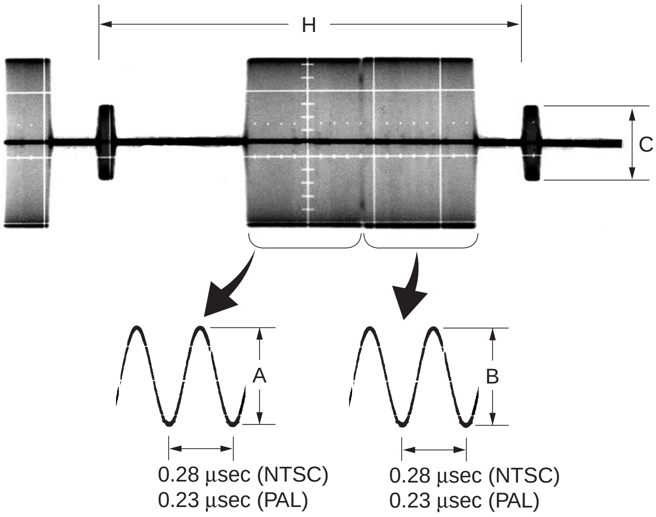


Fig. 6-3-5

Adjusting method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	8	A0		Set the bit value of bit 3 to “1”, and press PAUSE button. (Note 3)
3	3	0C	02	Press PAUSE button.
4	C	26		Change the data and set the Cr signal level (A) to the specified value.
5	C	26		Press PAUSE button.
6	C	27		Change the data and set the Cb signal level (B) to the specified value.
7	C	27		Press PAUSE button.
8				Check the burst signal (C) to the specified value.
9	8	A0		Set the bit value of bit 3 to “0”, and press PAUSE button. (Note 3)
10	3	0C	00	Press PAUSE button.
11	0	01	00	

Note 3: For the bit values, refer to “6-4. SERVICE MODE”, “4-3. 3. Bit Value Discrimination”.

4. VIDEO OUT Level Check (VC-344 Board)

Mode	CAMERA
Subject	Arbitrary
Measurement Point	Video terminal of A/V jack (75 Ω terminated)
Measuring Instrument	Oscilloscope
Specified value	Sync level: A = 286 ± 18 mVp-p (NTSC) A = 300 ± 18 mVp-p (PAL) Burst level: B = 286 ± 18 mVp-p (NTSC) B = 300 ± 18 mVp-p (PAL)

Note: NTSC model: DCR-TRV260/TRV265
PAL model: DCR-TRV255E/TRV265E

Checking method:

Order	Page	Address	Data	Procedure
1				Check that the SYNC level (A) satisfies the specified value.
2				Check that the burst level (B) satisfies the specified value.

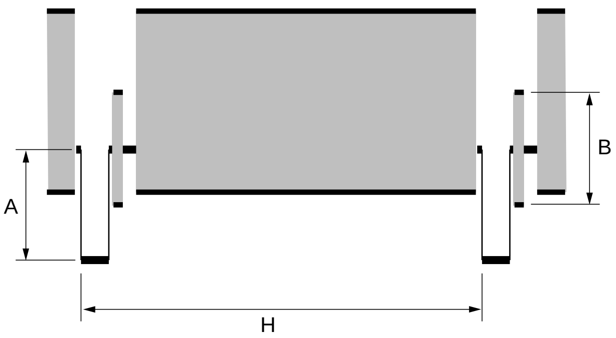


Fig. 6-3-6

3-5. AUDIO SYSTEM ADJUSTMENTS

[Connecting the measuring instruments for the audio]
Connect the audio system measuring instruments in addition to the video system measuring instruments as shown in Fig. 6-3-7.

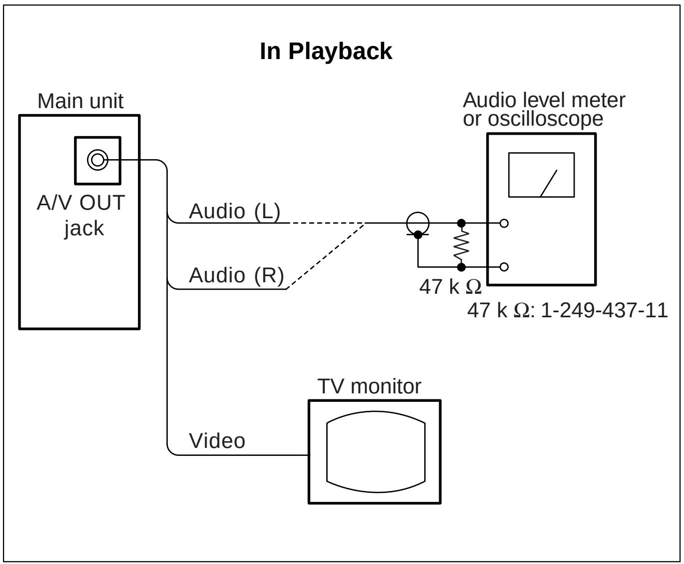


Fig. 6-3-7

1. Playback Level Check

Mode	VTR playback (PLAY/EDIT mode)
Signal	Digital8 alignment tape: For audio operation check (WR5-3CD)
Measurement Point	Audio left or right terminal of A/V OUT jack
Measuring Instrument	Audio level meter or oscilloscope
Specified Value	32 kHz mode: 1 kHz, + 3 dBs ± 2 dB (2.46 Vp-p to 3.89 Vp-p)
	48 kHz mode: 1 kHz, + 3 dBs ± 2 dB (2.46 Vp-p to 3.89 Vp-p)
	44.1 kHz mode (EMP OFF) : 7.35 kHz, + 2 dBs ± 2 dB (2.19 Vp-p to 3.47 Vp-p)
	44.1 kHz mode (EMP ON) : 7.35 kHz, – 3.8 dBs to – 1.2dBs (1.4 Vp-p to 1.9 Vp-p)

Checking method:
1) Check that the playback signal level is the specified value.

6-4. SERVICE MODE

4-1. ADJUSTMENT REMOTE COMMANDER

The adjustment remote commander is used for changing the calculation coefficient in signal processing, EVR data, etc. The adjustment remote commander performs bi-directional communication with the unit using the remote commander signal line (LANC). The resultant data of this bi-directional communication is written in the non-volatile memory.

1. Using the Adjustment Remote Commander

1) Connect the adjustment remote commander to CN1011 of VC-344 board via I/F unit for LANC control (J-6082-521-A) and CPC jig connector (J-6082-539-A).
2) Set the HOLD switch of the adjustment remote commander to “HOLD” (SERVICE position). If it has been properly connected, the LCD on the adjustment remote commander will display as shown in Fig. 6-4-1.

Fig. 6-4-1

3) Operate the adjustment remote commander as follows.
   - Changing the page
     The page increases when the EDIT SEARCH+ button is pressed, and decreases when the EDIT SEARCH– button is pressed. There are altogether 16 pages, from 0 to F.

Hexadecimal notation	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
LCD Display	0	1	2	3	4	5	6	7	8	9	A	b	c	d	E	F
Decimal notation conversion value	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

   - Changing the address
     The address increases when the FF (▶▶) button is pressed, and decreases when the REW (◀◀) button is pressed. There are altogether 256 addresses, from 00 to FF.
   - Changing the data (Data setting)
     The data increases when the PLAY (▶) button is pressed, and decreases when the STOP (■) button is pressed. There are altogether 256 data, from 00 to FF.
   - Writing the adjustment data
     The PAUSE button must be pressed to write the adjustment data in the nonvolatile memory. (The new adjusting data will not be recorded in the nonvolatile memory if this step is not performed)
4) After completing all adjustments, turn off the main power supply (8.4 V) once.

2. Precautions Upon Using the Adjustment Remote Commander

Mishandling of the adjustment remote commander may erase the correct adjustment data at times. To prevent this, it is recommended that all adjustment data be noted down before beginning adjustments and new adjustment data after each adjustment.

4-2. DATA PROCESS

The calculation of the DDS display and the adjustment remote commander display data (hexadecimal notation) are required for obtaining the adjustment data of some adjustment items. In this case, after converting the hexadecimal notation to decimal notation, calculate and convert the result to hexadecimal notation, and use it as the adjustment data. Indicates the hexadecimal-decimal conversion table.

Hexadecimal-decimal Conversion Table

Lower digit of hexadecimal / Upper digit of hexadecimal	0	1	2	3	4	5	6	7	8	9	A (A)	B (b)	C (c)	② D (d)	E (E)	F (F)
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	77	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A (A)	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
① B (b)	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C (c)	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D (d)	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E (E)	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F (F)	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

Note: The characters shown in the parenthesis ( ) shown the display on the adjustment remote commander.

(Example) If the DDS display or the adjustment remote commander shows BD (bd);
Because the upper digit of the adjustment number is B (b), and the lower digit is D (d), the meeting point "189" of ① and ② in the above table is the corresponding decimal number.

Table 6-4-1

4-3. SERVICE MODE

Additional note on adjustment

Note 1: If reading/writing data on page 1C, set data: 01 to page: 0, address: 10, and then select page C. By this data setting, the page 1C can be selected.
After the data reading/writing finished, return the data on page: 0, address: 10 to "00".

Note 2: After the completion of the all adjustments, cancel the service mode by either of the following ways.
1) After data on page: D and 1C is restored, press the RESET button and unplug the main power supply. (In this case, date and time and menu setting have been set by users are canceled. Perform resetting)
2) After data on page: D and 1C is restored, select page: 0, address: 01, and return the data to 00. And when data on page: 7 is changed, return data to the original condition.

1. Setting the Test Mode

Page 1C	Address 09

Data	Function
FF	Normal
00	Test mode Various emergency prohibitions and releases Drum emergency, capstan emergency, loading motor emergency, reel emergency, tape top and end, DEW detection

Page D	Address 10

Data	Function
00	Normal
01	Forced camera power ON
02	Forced VTR power ON
03	Forced camera + VTR power ON

- Before setting the data , select page: 0, address: 01, and set data: 01.
- For page D and 1C, the data set will be recorded in the non-volatile memory by pressing the PAUSE button of the adjustment remote commander. In this case, take note that the test mode will not be exited even when the main power is turned off (8.4 Vdc).
- After completing adjustments/repairs, be sure to return the data of this address to 00, and press the PAUSE button of the adjustment remote commander. And select page: 0, address: 01, and set data: 00.

2. Emergence Memory Address

2-1. C Page Emergence Memory Address

Page C	Address F4 to FF

Address	Contents
F4	EMG code when first error occurs
F6	Upper: MSW code when shift starts when first error occurs Lower: MSW code when first error occurs
F7	Lower: MSW code to be moved when first error occurs
F8	EMG code when second error occurs
FA	Upper: MSW code when shift starts when second error occurs Lower: MSW code when second error occurs
FB	Lower: MSW code to be moved when second error occurs
FC	EMG code when last error occurs
FE	Upper: MSW code when shift starts when last error occurs Lower: MSW code when last error occurs
FF	Lower: MSW code to be moved when last error occurs

When no error occurs in this unit, data "00" is written in the above addresses (F4 to FF). when first error occurs in the unit, the data corresponding to the error is written in the first emergency address (F4 to F7). In the same way, when the second error occurs, the data corresponding to the error is written in the second emergency address (F8 to FB).
Finally, when the last error occurs, the data corresponding to the error is written in the last emergency address (FC to FF).

Note: After completing adjustments, be sure to initialize the data of addresses F4 to FF to "00".

Initializing method:

Order	Page	Address	Data	Procedure
1	0	01	01	
2	3	01	37	Press PAUSE button.
3	3	02		Check the data changes to "00".
4	0	01	00	

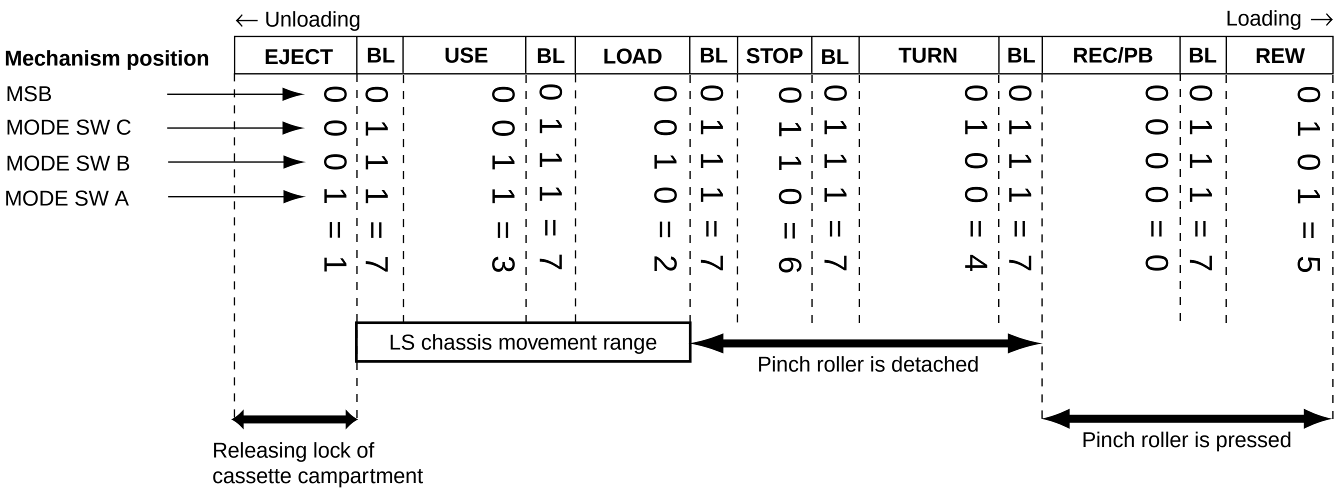
2-2. EMG Code (Emergency Code)

Codes corresponding to the errors which occur are written in C page, addresses F4, F8 and FC. The type of error indicated by the code are shown in the following table.

Code	Emergency Type
00	No error
10	Loading motor emergency during loading
11	Loading motor emergency during unloading
22	T reel emergency during normal rotation
23	S reel emergency during normal rotation
24	T reel emergency (Short circuit between S reel terminal and T reel terminal)
30	FG emergency at the start up of the capstan
40	FG emergency at the start up of the drum
42	FG emergency during normal rotation of the drum

2-3. MSW Codes

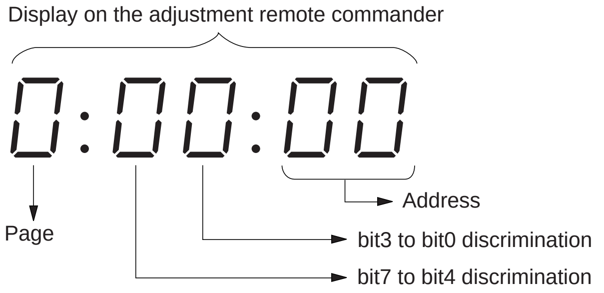
- The lower parts of the data of addresses F6, FA and FE represent the MSW codes (mode switch, mechanism position) when errors occurs.
- The upper parts of the data of addresses F6, FA and FE represent, when the mechanism position is to be moved, the MSW codes at the start of movement (when moving the loading motor).
- The lower parts of the data of addresses F7, FB and FF represent the MSW codes of the desired movement when the mechanism position is to be moved.



Mechanism Position	MSW Code	Contents
EJECT	1	Position at which the cassette compartment lock is released. The mechanism will not move any further in the unloading direction.
BL	7	BLANC code. Between two codes. The mechanism will not be stopped by this code while it is operating.
USE	3	EJECT completion position. When the cassette is ejected, the mechanism will stop at this position.
LOAD	2	Code during loading/unloading. Code that is used while the LS chassis is moving.
STOP	6	Normal stop position. The pinch roller separates, the tension regulator returns, and the brakes of both reels turn on.
TURN	4	Position at which is used when the pendulum gear swings from S to T or from T to S.
REC/PB	0	PB, REC, CUE, REV, PAUSE, FF positions. The pinch roller is pressed and tension regulator is on.
REW	5	REW position. REW are carried at this position. The mechanism will not move any further in the loading direction.

3. Bit Value Discrimination

Bit values must be discriminated using the display data of the adjustment remote commander for the following items. Us the table below to discriminate if the bit value is “1” or “0”.



(Example) If the remote commander display is “8E”, bit value from bit 7 to bit 4 can be discriminated from the column Ⓐ, and those from bit 3 to bit 0 from column Ⓑ.

	Display on the adjustment remote commander	Bit values			
		bit3 or bit7	bit2 or bit6	bit1 or bit5	bit0 or bit4
	0	0	0	0	0
	1	0	0	0	1
	2	0	0	1	0
	3	0	0	1	1
	4	0	1	0	0
	5	0	1	0	1
	6	0	1	1	0
	7	0	1	1	1
Ⓐ	8	1	0	0	0
	9	1	0	0	1
	A (A)	1	0	1	0
	B (b)	1	0	1	1
	C (C)	1	1	0	0
	D (d)	1	1	0	1
Ⓑ	E (E)	1	1	1	0
	F (F)	1	1	1	1

4. Switch Check (1)

Page 7	Address 0E

Note: Check that the data of page: 0, address: 10 is “00”.

Bit	Function	When bit value = 1	When bit value = 0
0	POWER SW (SS-5100 block S001)	ON	OFF
1	MODE SW (SS-5100 block S001)	ON	OFF
2	DISP/BATT INFO SW (CF-5100 block S001)	ON	OFF
3	EJECT SW (SS-5100 block S002)	ON	OFF
4	CC DOWN SW (Mechanism chassis)	ON (DOWN)	OFF (UP)
5	PHOTO SW (POTO FREEZE SW) (SS-5100 block S003)	ON	OFF
6			
7			

Using method:
1) Select page: 7, address: 0E.
2) By discriminating the bit value of display data, the state of the switches can be discriminated.

5. Switch Check (2)

Page 7	Address 0C

Note: Check that the data of page: 0, address: 10 is “00”.

Bit	Function	When bit value = 1	When bit value = 0
2	A/V OUT jack (SI-041 board)	Used	Not used
3	S VIDEO jack (SI-041 board)	Used	Not used

Using method:
1) Select page: 7, address: 0C.
2) By discriminating the bit value of display data, the state of the switch can be discriminated.

6. Switch Check (3)

Page 2	Address 60 to 67

Note: Check that the data of page: 0, address: 10 is "00".

Using method:
1) Select page: 2, address: 60 to 67.
2) By discriminating the display data, the pressed key can be discriminated.

Address	Data							
	00 to 0C	0D to 24	25 to 3F	40 to 5D	5E to 81	82 to AA	AB to D7	D8 to FF
60 (KEY AD0) (IC5001 59)	STOP (CF-5100 block) (S003)	FF (CF-5100 block) (S007)	REW (CF-5100 block) (S012)	PLAY (CF-5100 block) (S015)		EASY (CF-5100 block) (S022)	PANEL CLOSE (CF-5100 block) (S023)	PANEL OPEN (CF-5100 block) (S023)
61 (KEY AD1) (IC5001 60)	PAUSE (CF-5100 block) (S004)		FADER (CF-5100 block) (S011)	FOCUS (CF-5100 block) (S016)	VIDEO LIGHT (CF-5100 block) (S020)	BACKLIGHT (CF-5100 block) (S019)		No key input
62 (KEY AD2) (IC5001 61)	REC (CF-5100 block) (S005)	MENU (CF-5100 block) (S009)	END SEARCH (CF-5100 block) (S013)	VOLUME – (CF-5100 block) (S017)	VOLUME + (CF-5100 block) (S021)	EXECUTE (CF-5100 block) (S024)		No key input
63 (KEY AD3) (IC5001 65)	REC (CF-5100 block) (S006)	EXPOSURE (CF-5100 block) (S010)	TITLE (CF-5100 block) (S014)	BURN DVD/VCD (CF-5100 block) (S018)				No key input
64 (KEY AD4) (IC5001 66)								
65 (KEY AD5) (IC5001 67)	PHOTO (START) (SS-5100 block) (S003)	PANEL REVERSE (PR-5100 block) (S601)						PANEL NORMAL (PR-5100 block) (S601)
66 (KEY AD6) (IC5001 68)								
67 (KEY AD7) (IC5001 69)	START/ STOP (SS-5100 block) (S001)							

7. LED, Video Light, IR Light Check

Page 7	Address 07	Bit5, Bit6

Note: Check that the data of page: 0, address: 10 is "00".

Using method:
1) Set the unit to camera mode.
2) Select page: 7, address: 07, and set the bit value of bit5 and bit6 to "1".
3) Check that all LED are lit, that the IR light is lit, and that the video light is lit.
4) Select page: 7, address: 07, and set the bit value of bit5 and bit6 to "0".

8. Record of Use Check

Page 7	Address A7 to A9, C8 to CF

Address	Function		Remarks
A7	Drum rotation	Hour	100000th place digit and 10000th place digit of counted time (decimal digit)
A8	counted time	Hour	1000th place digit and 100th place digit of counted time (decimal digit)
A9	(BCD code)	Hour	10th place digit and 1st place digit of counted time (decimal digit)
C8	User initial power	Year	After setting the clock, set the date of power on next
C9	on date	Month	
CA	(BCD code)	Day	
CB	Final condensation	Year	
CC	occurrence date	Month	
CD	(BCD code)	Day	
CE	Video light	Hour (L)	10th place digit and 1st place digit of counted time (hexadecimal digit)
CF	counted time (Note 4)	Hour (H)	1000th place digit and 100th place digit of counted time (hexadecimal digit)

Using method:

1) The record of use data is displayed at page: 7, addresses: A7 to A9 and C8 to CF.

Note 1: This data will be kept even if the cabinet (R) assembly (VC-344 board CN1007 (22P)) is removed.

Note 2: When the drum was replaced, initialize the drum rotation counted time.

Note 3: When replacing the video light, initialize the data of address: CE and CF.

Note 4: Video light counted time is indicated in hexadecimal notation. Convert hexadecimal numbers to decimals before useing them.

Initializing method of drum rotation counted time:

1) Select page: 0, address: 01, and set data: 01.
2) Select page: 7, address: A7, set data: 00, and press the PAUSE button.
3) Select address: A8 and A9 and set data “00” into them in the same way as in address: A7.
4) Select page: 0, address: 01, and set data: 00.

9. Record of Self-diagnosis Check

Page 7	Address B0 to C6

Address	Self-diagnosis code
B0	“Repaired by” code (Occurred 1st time) *1
B1	“Block function” code (Occurred 1st time)
B2	“Detailed” code (Occurred 1st time)
B4	“Repaired by” code (Occurred 2nd time) *1
B5	“Block function” code (Occurred 2nd time)
B6	“Detailed” code (Occurred 2nd time)
B8	“Repaired by” code (Occurred 3rd time) *1
B9	“Block function” code (Occurred 3rd time)
BA	“Detailed” code (Occurred 3rd time)
BC	“Repaired by” code (Occurred 4th time) *1
BD	“Block function” code (Occurred 4th time)
BE	“Detailed” code (Occurred 4th time)
C0	“Repaired by” code (Occurred 5th time) *1
C1	“Block function” code (Occurred 5th time)
C2	“Detailed” code (Occurred 5th time)
C4	“Repaired by” code (Occurred the last time) *1
C5	“Block function” code (Occurred the last time)
C6	“Detailed” code (Occurred the last time)

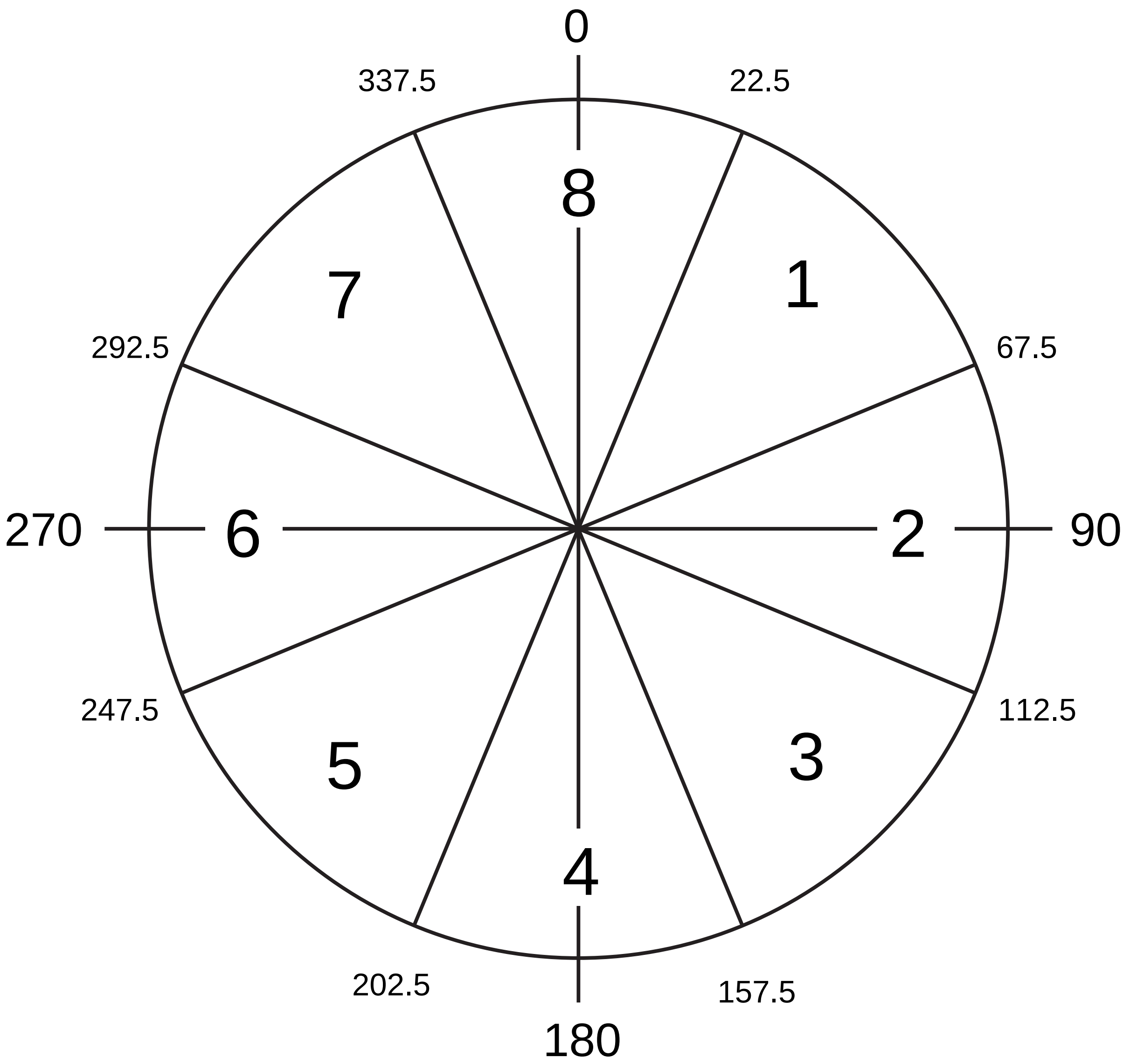
*1 : “01” → “C”, “03” → “E”

Using method:

1) The past self-diagnosis codes are displayed at page: 7, address: B0 to C6. Refer to “SELF-DIAGNOSIS FUNCTION” for detail of the self-diagnosis code.
   Note: This data will be kept even if the cabinet (R) assembly (VC-344 board CN1007 (22P)) is removed.

FOR CAMERA OPTICAL AXIS ADJUSTMENT

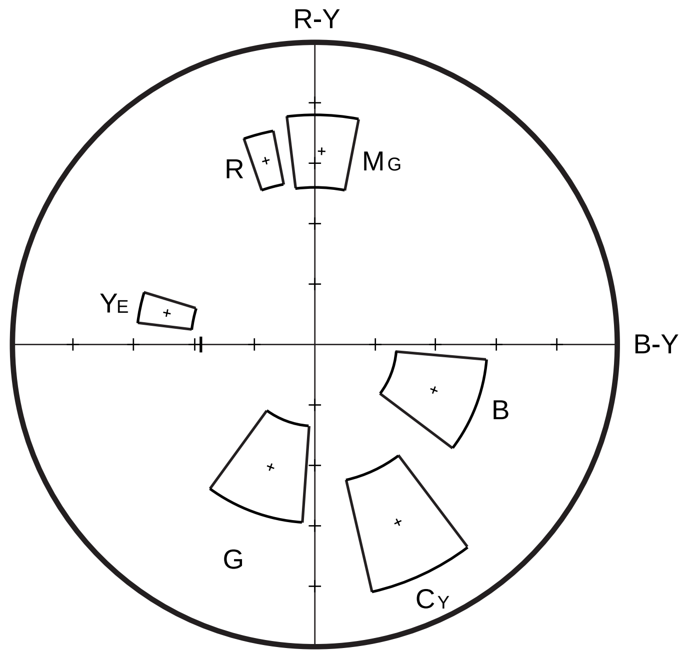
Take a copy of CAMERA OPTICAL AXIS FRAME with a clear sheet for use.



FOR CAMERA COLOR REPRODUCTION ADJUSTMENT

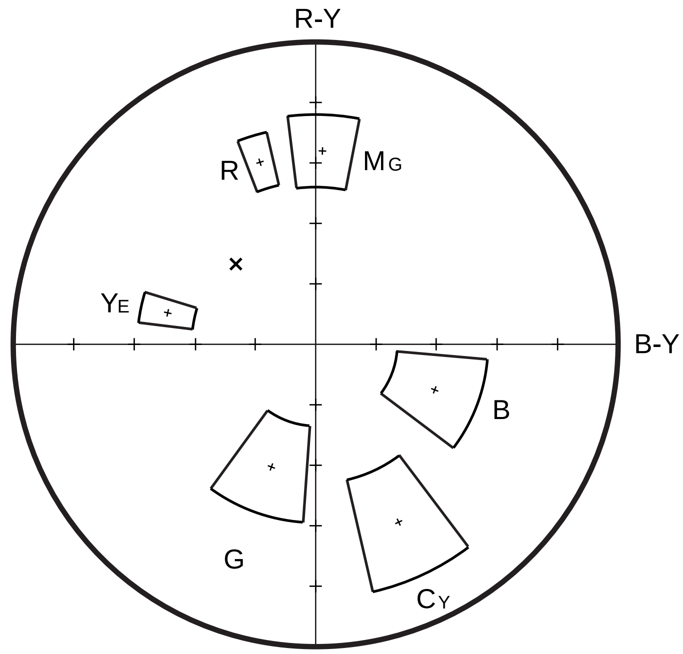
Take a copy of CAMERA COLOR REPRODUCTION FRAME with a clear sheet for use.

For NTSC model



DCR-TRV260/TRV265

For PAL model



DCR-TRV255E/TRV265E

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2003.11	Official Release	—	—