HDR-SR11/SR11E/SR12/SR12E

RMT-835

SERVICE MANUAL

LEVEL 2

Ver. 1.0 2008.01

Revision History

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

Photo: HDR-SR12

Link

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.

DIGITAL HD VIDEO CAMERA RECORDER

SONY

HDR-SR11/SR11E/SR12/SR12E_L2

9-852-254-31

Sony EMCS Co.

2008A0800-1

Published by Kohda TEC

These specifications are extracted from instruction manual of HDR-SR11E/SR12E.

ENGLISH | JAPANESE

Self Diagnosis Supported model

AVCHD

MEMORY STICK

InfoLITHIUM H SERIES

HDMI

SPECIFICATIONS

System

Video compression format: AVCHD (HD)/ MPEG2 (SD)/JPEG (Still images)

Audio compression format: Dolby Digital 2/5.1ch Dolby Digital 5.1 Creator

Video signal: PAL color, CCIR standards 1080/50i specification

Hard disk: HDR-SR11E: 60 GB
HDR-SR12E: 120 GB
When measuring media capacity, 1 GB equals 1 billion bytes, a portion of which is used for data management.

Recording format: Movie (HD): AVCHD 1080/ 50i
Movie (SD): MPEG2-PS
Still image: Exif Ver.2.2*

Viewfinder: Electric viewfinder: color

Image device: 5.8 mm (1/3.13 type) CMOS sensor
Recording pixels (still image, 4:3):
Max. 10.2 mega (3 680 × 2 760) pixels**
Gross: Approx. 5 660 000 pixels
Effective (movie, 16:9):
Approx. 3 810 000 pixels
Effective (still image, 16:9):
Approx. 3 810 000 pixels
Effective (still image, 4:3):
Approx. 5 080 000 pixels

Lens: Carl Zeiss Vario-Sonnar T✳
12 × (Optical), 24 ×, 150 × (Digital)

Focal length: F1.8 ~ 3.1
Filter diameter: 37 mm (1 1/2 in.)
f=4.9 ~ 58.8 mm (7/32 ~ 2 3/8 in.)
When converted to a 35 mm still camera
For movies: 40 ~ 480 mm (1 5/8 ~ 19 in.) (16:9)
For still images: 37 ~ 444 mm (1 1/2 ~ 17 1/2 in.) (4:3)

Color temperature: [AUTO], [ONE PUSH], [INDOOR] (3 200 K), [OUTDOOR] (5 800 K)

Minimum illumination: 5 lx (lux) ([AUTO SLW SHUTTR] [ON], Shutter speed 1/25 sec)
0 lx (lux) (during NightShot function)

* "Exif" is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association). Files in this format can have additional information such as your camcorder's setting information at the time of recording.

** The unique pixel array of Sony's ClearVid CMOS sensor and image processing system (BIONZ) allows for still image resolution equivalent to the sizes described.

Input/Output connectors

A/V Remote Connector: Component/video and audio output jack

HDMI OUT jack: HDMI Type C mini connector

Headphone jack: Stereo minijack (∅ 3.5mm)

MIC input jack: Stereo minijack (∅ 3.5mm)

USB jack: mini-B

LCD screen

Image: 8.0 cm (3.2 type, aspect ratio 16:9)

Total dot number: 921 600 (1 920 × 480)

General

Power requirements: DC 6.8 V/7.2 V (battery pack)
DC 8.4 V (AC Adaptor)

Average power consumption: During camera recording using the viewfinder with normal brightness:
Hard disk:
HD: 4.2 W SD: 3.6 W
"Memory Stick PRO Duo":
HD: 4.2 W SD: 3.5 W
During camera recording using the LCD with normal brightness:
Hard disk:
HD: 4.5 W SD: 3.8 W
"Memory Stick PRO Duo":
HD: 4.5 W SD: 3.8 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.): 83 × 76 × 138 mm (3 3/8 × 3 × 5 1/2 in.) (w/h/d) including the projecting parts
83 × 76 × 138 mm (3 3/8 × 3 × 5 1/2 in.) (w/h/d) including the projecting parts, and the supplied rechargeable battery pack attached

Mass (approx.): HDR-SR11E: 560 g (1 lb 3 oz) main unit only
640 g (1 lb 6 oz) including the supplied rechargeable battery pack
HDR-SR12E: 570 g (1 lb 4 oz) main unit only
650 g (1 lb 6 oz) including the supplied rechargeable battery pack

Handycam Station DCRA-C210

Input/Output connectors

A/V OUT jack: Component/video and audio output jack

USB jack: mini-B

AC Adaptor AC-L200/L200B

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

Current consumption: 0.35 - 0.18 A

Power consumption: 18 W

Output voltage: DC 8.4 V*

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.): 48 × 29 × 81 mm (1 15/16 × 1 3/16 × 3 1/4 in.) (w/h/d) excluding the projecting parts

Mass (approx.): 170 g (6.0 oz) excluding the power cord (mains lead)

* See the label on the AC Adaptor for other specifications.

Rechargeable battery pack NP-FH60

Maximum output voltage: DC 8.4 V

Output voltage: DC 7.2 V

Capacity: 7.2 Wh (1 000 mAh)

Type: Li-ion

Design and specifications of your camcorder and accessories are subject to change without notice.

These specifications are extracted from instruction manual of HDR-SR11/SR12.

ENGLISH | JAPANESE

SPECIFICATIONS

System

Video compression format: AVCHD (HD)/ MPEG2 (SD)/JPEG (Still images)

Audio compression format: Dolby Digital 2/5.1ch Dolby Digital 5.1 Creator

Video signal: NTSC color, EIA standards 1080/60i specification

Hard disk: HDR-SR11: 60 GB
HDR-SR12: 120 GB
When measuring media capacity, 1 GB equals 1 billion bytes, a portion of which is used for data management.

Recording format: Movie (HD): AVCHD 1080/ 60i
Movie (SD): MPEG2-PS
Still image: Exif Ver.2.2*

Viewfinder: Electric viewfinder: color

Image device: 5.8 mm (1/3.13 type) CMOS sensor
Recording pixels (still image, 4:3):
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Lens: Carl Zeiss Vario-Sonnar T✳
12 × (Optical), 24 ×, 150 × (Digital)

Focal length: F1.8 ~ 3.1
Filter diameter: 37 mm (1 1/2 in.)
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For still images: 37 ~ 444 mm (1 1/2 ~ 17 1/2 in.) (4:3)

Color temperature: [AUTO], [ONE PUSH], [INDOOR] (3 200 K), [OUTDOOR] (5 800 K)

Minimum illumination: 5 lx (lux) ([AUTO SLW SHUTTR] [ON], Shutter speed 1/30 sec)
0 lx (lux) (during NightShot function)

* "Exif" is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association). Files in this format can have additional information such as your camcorder's setting information at the time of recording.

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HDMI OUT jack: HDMI Type C mini connector

Headphone jack: Stereo minijack (∅ 3.5mm)

MIC input jack: Stereo minijack (∅ 3.5mm)

USB jack: mini-B

LCD screen

Image: 8.0 cm (3.2 type, aspect ratio 16:9)

Total dot number: 921 600 (1 920 × 480)

General

Power requirements: DC 6.8 V/7.2 V (battery pack)
DC 8.4 V (AC Adaptor)

Average power consumption: During camera recording using the viewfinder with normal brightness:
Hard disk:
HD: 4.5 W SD: 3.6 W
"Memory Stick PRO Duo":
HD: 4.4 W SD: 3.6 W
During camera recording using the LCD with normal brightness:
Hard disk:
HD: 4.8 W SD: 4.0 W
"Memory Stick PRO Duo":
HD: 4.6 W SD: 3.9 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.): 83 × 76 × 138 mm (3 3/8 × 3 × 5 1/2 in.) (w/h/d) including the projecting parts
83 × 76 × 138 mm (3 3/8 × 3 × 5 1/2 in.) (w/h/d) including the projecting parts, and the supplied rechargeable battery pack attached

Mass (approx.): HDR-SR11: 560 g (1 lb 3 oz) main unit only
640 g (1 lb 6 oz) including the supplied rechargeable battery pack
HDR-SR12: 570 g (1 lb 4 oz) main unit only
650 g (1 lb 6 oz) including the supplied rechargeable battery pack

Handycam Station DCRA-C210

Input/Output connectors

A/V OUT jack: Component/video and audio output jack

USB jack: mini-B

AC Adaptor AC-L200/L200B

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

Current consumption: 0.35 - 0.18 A

Power consumption: 18 W

Output voltage: DC 8.4 V*

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.): 48 × 29 × 81 mm (1 15/16 × 1 3/16 × 3 1/4 in.) (w/h/d) excluding the projecting parts

Mass (approx.): 170 g (6.0 oz) excluding the power cord (mains lead)

* See the label on the AC Adaptor for other specifications.

Rechargeable battery pack NP-FH60

Maximum output voltage: DC 8.4 V

Output voltage: DC 7.2 V

Capacity: 7.2 Wh (1 000 mAh)

Type: Li-ion

Design and specifications of your camcorder and accessories are subject to change without notice.

自己診断搭載機種

概略仕様

システム

映像圧縮方式：AVCHD（HD）/MPEG2（SD）/JPEG（静止画）

音声圧縮方式：Dolby Digital2/5.1ch
ドルビーデジタル5.1クリエーター搭載

映像信号：NTSCカラー、EIA標準方式
1080/60i方式

ハードディスク：HDR-SR11：60 GB
HDR-SR12：120 GB
容量は、1GBを10億バイトで計算した場合の数値です。また管理用ファイルなどを含むため、実際使用できる容量は若干減少する場合があります。

動画記録方式：動画HD：AVCHD 1080/60i
動画SD：MPEG2-PS

静止画記録方式：Exif Ver.2.2*

ファインダー：電子ファインダー：カラー

撮像素子：5.8 mm（1/3.13型）CMOSセンサー
記録画素数：静止画時最大1 020万画素相当**
（3 680×2 760）（4：3時）
総画素数：約566万画素
動画時有効画素数（16：9）：約381万画素
静止画時有効画素数（16：9）：約381万画素
静止画時有効画素数（4：3）：約508万画素

ズームレンズ：カール ツァイス バリオゾナーT*
12倍（光学）、24倍、150倍（デジタル）
フィルター径37 mm
F1.8～3.1
f=4.9～58.8 mm
35mmカメラ換算では動画撮影時
40～480 mm（16：9）
静止画撮影時：
37～444 mm（4：3）

色温度切り換え：［オート］、［ワンプッシュ］、［屋内］（3 200 K）、［屋外］（5 800 K）

最低被写体照度：5 lx（ルクス）（［オートスロシャッタ］［入］、［シャッタースピード］1/30秒）
0 lx（ルクス）（NightShot時）

* （社）電子情報技術産業協会（JEITA）にて制定された、撮影情報などの付帯情報を追加することができる静止画用のファイルフォーマット。

** ソニー独自のクリアビッドCMOSセンサーの画素配列と画像処理システムBIONZにより、静止画は表記の記録サイズを実現しています。

入/出力端子

A/Vリモート端子：コンポーネント、映像音声出力兼用端子

HDMI OUT端子：HDMIタイプCミニ端子

ヘッドホン端子：ステレオミニジャック（φ 3.5 mm）

MIC入力端子：ステレオミニジャック（φ 3. 5 mm）

USB端子：mini-B

液晶画面

画面サイズ：8.0 cm（3.2型、アスペクト比16：9）

総ドット数：921 600ドット
横1 920×縦480

電源部、その他

電源電圧：バッテリー端子入力 6.8 V/7.2 V
DC端子入力 8.4 V

消費電力：ファインダー使用時、明るさ標準：
ハードディスク：
HD：4.5 W SD:3.6 W
“メモリースティック PRO デュオ”：
HD：4.4 W SD:3.6 W
液晶画面使用時、明るさ標準：
ハードディスク：
HD：4.8 W SD:4.0 W
“メモリースティック PRO デュオ”：
HD：4.6 W SD:3.9 W

動作温度：0 ℃～+40 ℃

保存温度：−20 ℃～+60 ℃

外形寸法：83×76×138 mm
（突起部を含む）
（幅×高さ×奥行き）
83×76×138 mm
（突起部を含む、付属バッテリー装着状態）
（幅×高さ×奥行き）

本体質量：HDR-SR11：約560 g（本体のみ）
HDR-SR12：約570 g（本体のみ）

撮影時総質量：HDR-SR11：約640 g（付属バッテリー含む。）
HDR-SR12：約650 g（付属バッテリー含む。）

ハンディカムステーション DCRA-C210

入/出力端子

A/V OUT端子：コンポーネント、映像音声出力兼用端子

USB端子：mini-B

ACアダプター　AC-L200/L200B

電源：AC 100 V - 240 V、50/60 Hz

消費電力：18 W

定格出力：DC 8.4 V *

動作温度：0 ℃～+40 ℃

保存温度：−20 ℃～+60 ℃

外形寸法：約 48×29×81 mm（最大突起部をのぞく）（幅×高さ×奥行き）

質量：約170 g（本体のみ）

* その他の仕様については AC アダプターのラベルをご覧ください。

リチャージャブルバッテリーパック NP-FH60

最大電圧：DC 8.4 V

公称電圧：DC 7.2 V

容量：7.2 Wh（1 000 mAh）

使用電池：Li-ion

本機やアクセサリーの仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

Model information table

Model	HDR-SR11	HDR-SR11E	HDR-SR12	HDR-SR12E
Destination	US, CND, E, KR, JE, J	AEP, UK, NE, E, CH, HK, AUS, JE	US, CND, E, KR, JE, J	AEP, UK, NE, E, CH, HK, AUS, JE
Color system	NTSC	PAL	NTSC	PAL
Hard disk	60GB	60GB	120GB	120GB

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

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

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ 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.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

サービス，点検時には次のことにご注意下さい。

1. **注意事項をお守りください。**
   サービスのとき特に注意を要する個所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。これらの注意書き及び取扱説明書等の注意事項を必ずお守り下さい。
2. **指定部品のご使用を**
   セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。
3. **部品の取付けや配線の引きまわしはもとどおりに**
   安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。
4. **サービス後は安全点検を**
   サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。
5. **チップ部品交換時の注意**
   - 取外した部品は再使用しないで下さい。
   - タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。
6. **フレキシブルプリント基板の取扱いについて**
   - コテ先温度を270℃前後にして行なって下さい。
   - 同一パターンに何度もコテ先を当てないで下さい。（３回以内）
   - パターンに力が加わらないよう注意して下さい。
7. **無鉛半田について**
   無鉛半田を使用している基板には，無鉛（Lead Free）を意味するレッドフリーマークがプリントされています。
   （注意：基板サイズによっては，無鉛半田を使用していてもレッドフリーマークがプリントされていないものがあります）
   ：レッドフリーマーク
   無鉛半田には，以下の特性があります。
   - 融点が従来の半田よりも約40℃高い。
     従来の半田こてをそのまま使用することは可能ですが，少し長めにこてを当てる必要があります。
     温度調節機能のついた半田こてを使用する場合，約350℃に設定して下さい。
     注意：半田こてを長く当てすぎると，基板のパターン（銅箔）がはがれてしまうことがありますので，注意して下さい。
   - 粘性が強い
     従来の半田よりも粘性が強いため，IC端子などが半田ブリッジしないように注意して下さい。
   - 従来の半田と混ぜて使用可能
     無鉛半田には無鉛半田を追加するのが最適ですが，従来の半田を追加しても構いません。

1. SERVICE NOTE

ENGLISH JAPANESE

1-1. POWER SUPPLY DURING REPAIRS

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

Method:
Use the AC power adaptor (AC-L200/L200B).

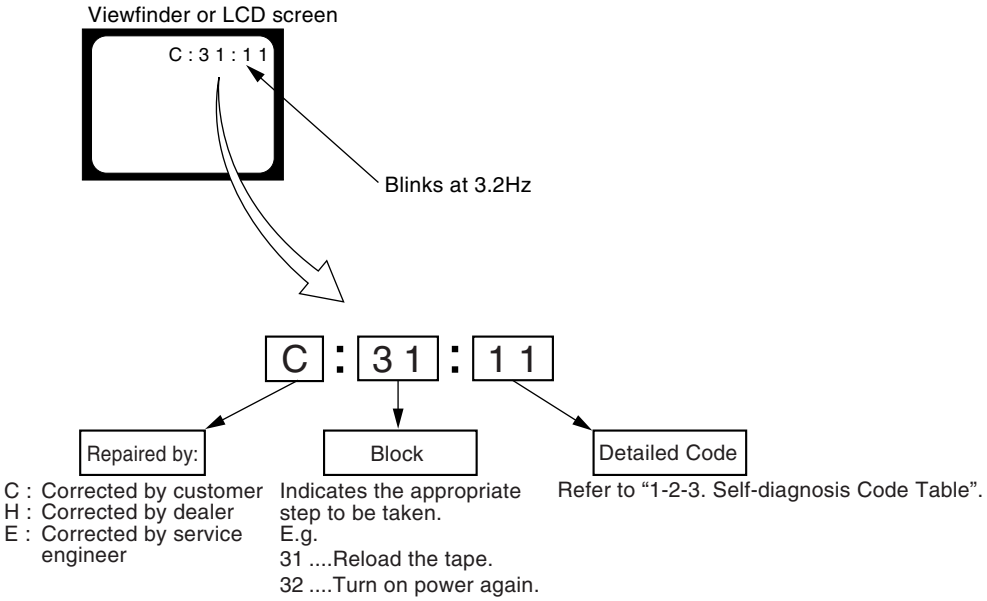
1-2. SELF-DIAGNOSIS FUNCTION

1-2-1. Self-diagnosis Function

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

1-2-2. Self-diagnosis Display

When problems occur while the unit is operating, the counter of the Viewfinder or the LCD screen 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.



1-2-3. Self-diagnosis Code Table

Self-diagnosis Code					Symptom/State	Correction
Repaired by:	Block Function		Detailed Code			
C	0	4	0	0	Non-standard battery is used.	Use the InfoLITHIUM battery.
C	1	3	0	1	"Memory Stick Duo" is unformatted. "Memory Stick Duo" is broken.	Format the "Memory Stick Duo". Insert a new "Memory Stick Duo".
C	1	3	0	2	Disc access error	Remove the power source. Reconnect it again and operate your camcorder again
C	3	2	6	0	Difficult to adjust focus (Cannot initialize focus)	Retry turn the power on by the power switch. If it does not recover, check the focus MR sensor of lens block (pin ⑳, ㉑ of CN5103 on the LD-230 board). If it is OK, check the focus motor drive IC (IC5201 on the LD-230 board).
E	2	0	0	0	Flash memory data are rewritten.	Make flash memory data correct value. (Note 1)
E	3	1	0	0	Drive fault	Inspect or replacement of the hard disk drive.
E	6	1	1	0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom MR sensor (pin ⑯, ⑰ of CN5103 on the LD-230 board) when zooming is performed when the zoom lever is operated, and the zoom motor drive circuit (IC5201 on the LD-230 board) when zooming is not performed.
E	6	1	1	1	The abnormalities in initialization of the focus lens and the abnormalities in initialization of the zoom lens occurred simultaneously.	Check both C: 32: 60 and E: 61: 10 of the self-diagnosis code.
E	6	2	0	0	Handshake correction function does not work well. (With PITCH angular velocity sensor output stopped.)	Inspect PITCH angular velocity sensors (SE9001 on the FR-278 board) peripheral circuits.
E	6	2	0	1	Handshake correction function does not work well. (With YAW angular velocity sensor output stopped.)	Inspect YAW angular velocity sensors (SE9002 on the FR-278 board) peripheral circuits.
E	6	2	0	2	Abnormality of IC for steadyshot.	Refer to [1-3-1. E : 62 : 02 (Abnormality of IC for Steadyshot) Occurred].
E	6	2	0	3	IC for steadyshot and micro controller communication abnormality among.	Inspect the steadyshot circuit (IC5501 on the LD-230 board).
E	6	2	1	0	Shift lens initializing failure.	Replacement of lens block. If an error occurs again, replace the LD-230 board. (Note 2)
E	6	2	1	1	Shift lens overheating (Pitch)	Refer to [1-3-2. E : 62 : 11 (Shift Lens Overheating (Pitch)) Occurred].
E	6	2	1	2	Shift lens overheating (Yaw)	Refer to [1-3-3. E : 62 : 12 (Shift Lens Overheating (Yaw)) Occurred].
E	6	2	2	0	Abnormality of thermistor.	Refer to [1-3-4. E : 62 : 20 (Abnormality of Thermistor) Occurred].
E	9	1	0	1	Abnormality when flash is being charged.	Checking of flash unit or replacement of flash unit.
E	9	4	0	0	Fault of writing or erasing the flash memory	Inspect the flash memory (IC2101 on the VC-516 board).

Note 1 : Refer to Service Manual, ADJ ("1-3. DESTINATION DATA WRITE").
Note 2 : When the lens block was replaced, execute the necessary adjustment items referring to Service Manual, ADJ. After the adjustment, make sure with the STEADYSHOT turned ON that the steadyshot functions appropriately in the handheld operation.

1-3. METHOD OF COPING WITH SHIFT LENS ERROR

Note: The length of low section will vary a little depending on the conditions.

Fig. 2
Change in output voltage of R5549 on the LD-230 board

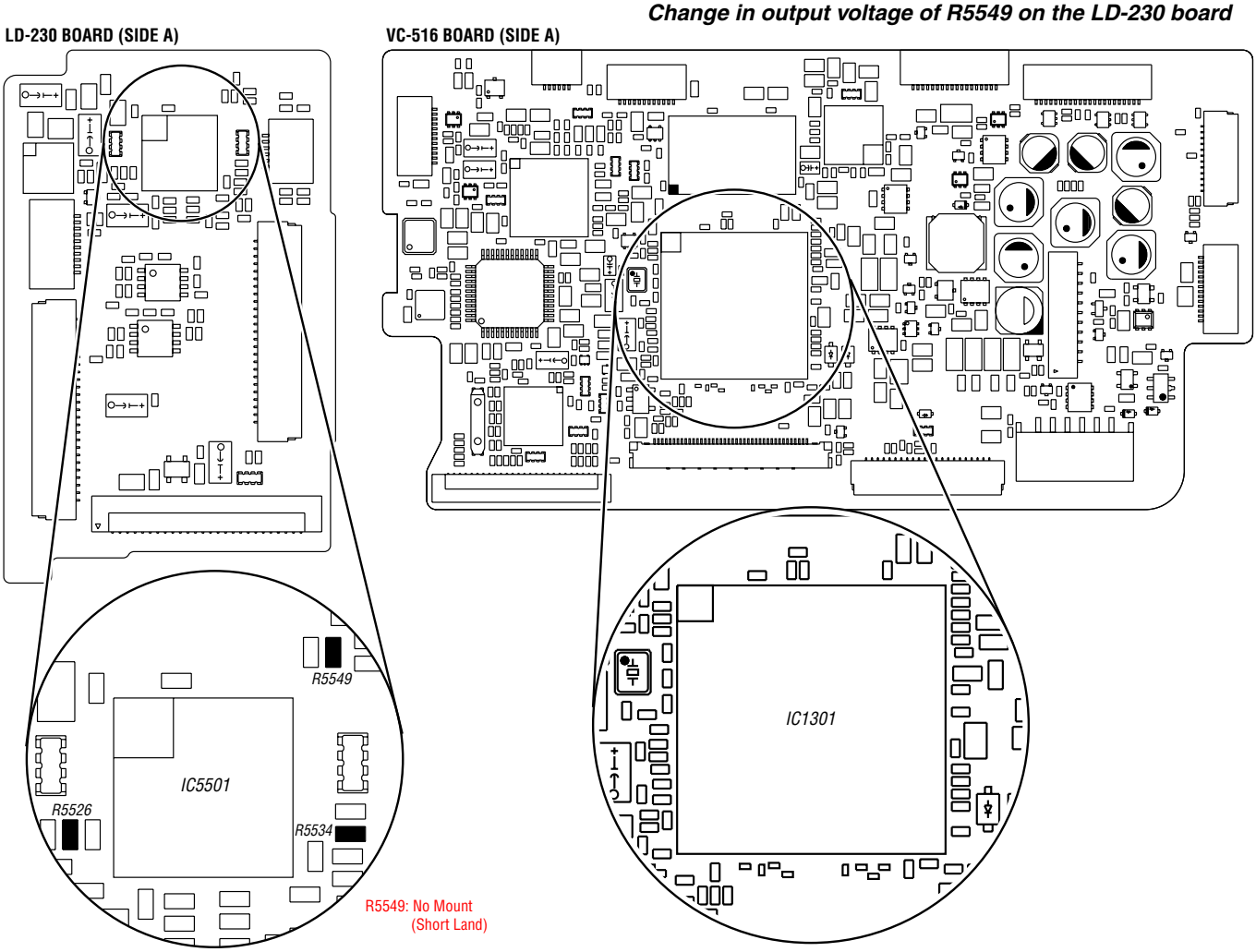


Fig. 1
Measurement points on the LD-230 board and the VC-516 board

1-3-1. E : 62 : 02 [Abnormality of IC for Steadyshot] Occurred

Order	Procedure
1	Turn the power OFF.
2	While measuring with an oscilloscope the output voltage of R5549 in the periphery of IC5501 on the LD-230 board, turn the power ON to check that the output voltage immediately after the power on change as shown in Fig. 2.
3	If the output voltage change as shown in Fig. 2, replace the lens block (Note). If it does not change as shown in Fig. 2, inspect the camera control circuit (IC1301 of VC-516 board) periphery.

Note: When the lens block was replaced, execute a necessary adjustment items referring to Service Manual, ADJ.
After the adjustment, make sure with the STEADYSHOT turned ON that the steadyshot functions appropriately in the handheld operation.

1-3-2. E : 62 : 11 [Shift Lens Overheating (Pitch)] Occurred

Connect by the SeusEX and perform the following process.

Order	Block	Page	Address	Data	Procedure
1	11	80	7430	01	Write the data. (After it starts, set it before caution is displayed.)
2	11	8E	F946	F0	Write the data.
3	11	8E	F948	01	Write the data. (Note 1)
4	11	8E	F948	00	Write the data.
5	11	8E	F946	10	Write the data.
6	11	8E	F948	01	Write the data. (Note 1)
7	11	8E	F948	00	Write the data.
8	11	80	7430	00	Write the data.
9					Check if the shift lens moves while setting the order 2 to 7. If the shift lens does not move, replace the lens block (Note 2). When the shift lens moved, proceed to the order 10.
10					While setting the order 2 to 7, measure with an oscilloscope the output voltage of R5526 in the periphery of IC5501 on the LD-230 board to check the output voltage varies.
11					If the output voltage does not vary, replace the lens block (Note 2). When the output voltage varied, proceed to the order 12.
12					Turn the power OFF.
13					While measuring with an oscilloscope the output voltage of R5549 in the periphery of IC5501 on the LD-230 board, turn the power ON to check that the output voltage immediately after the power on change as shown in Fig. 2.
14					If the output voltage change as shown in Fig. 2, replace the lens block (Note 2). If it does not change as shown in Fig. 2, inspect the camera control circuit (IC1301 of VC-516 board) periphery.

Note 1: Finish this operation within 10 seconds. If it is likely to take more than 10 seconds, set block: 11, page: 8E, address: F948, data: 00, and then retry.

Note 2: When the lens block was replaced, execute the necessary adjustment items referring to Service Manual, ADJ. After the adjustment, make sure with the STEADYSHOT turned ON that the steadyshot functions appropriately in the handheld operation.

1-3-3. E : 62 : 12 [Shift Lens Overheating (Yaw)] Occurred

Connect by the SeusEX and perform the following process.

Order	Block	Page	Address	Data	Procedure
1	11	80	7430	01	Write the data. (After it starts, set it before caution is displayed.)
2	11	8E	F947	F0	Write the data.
3	11	8E	F949	01	Write the data. (Note 1)
4	11	8E	F949	00	Write the data.
5	11	8E	F947	10	Write the data.
6	11	8E	F949	01	Write the data. (Note 1)
7	11	8E	F949	00	Write the data.
8	11	80	7430	00	Write the data.
9					Check if the shift lens moves while setting the order 2 to 7. If the shift lens does not move, replace the lens block (Note 2). When the shift lens moved, proceed to the order 10.
10					While setting the order 2 to 7, measure with an oscilloscope the output voltage of R5534 in the periphery of IC5501 on the LD-230 board to check the output voltage varies.
11					If the output voltage does not vary, replace the lens block (Note 2). When the output voltage varied, proceed to the order 12.
12					Turn the power OFF.
13					While measuring with an oscilloscope the output voltage of R5549 in the periphery of IC5501 on the LD-230 board, turn the power ON to check that the output voltage immediately after the power on change as shown in Fig. 2.
14					If the output voltage change as shown in Fig. 2, replace the lens block (Note 2). If it does not change as shown in Fig. 2, inspect the camera control circuit (IC1301 of VC-516 board) periphery.

Note 1: Finish this operation within 10 seconds. If it is likely to take more than 10 seconds, set block: 11, page: 8E, address: F949, data: 00, and then retry.

Note 2: When the lens block was replaced, execute the necessary adjustment items referring to Service Manual, ADJ. After the adjustment, make sure with the STEADYSHOT turned ON that the steadyshot functions appropriately in the handheld operation.

1-3-4. E : 62 : 20 [Abnormality of Thermistor] Occurred

Order	Procedure
1	Turn the power ON.
2	Confirm the connections of flexible flat cables and connectors between the lens block and LD-230 board, LD-230 board and VC-516 board.
3	In case of no malfunction of connections, replace the lens block with new one. (Note) When the error has occurred in spite of the lens replacement, replace LD-230 board with new one.

Note: When the lens block was replaced, execute the necessary adjustment items referring to Service Manual, ADJ. After the adjustment, make sure with the STEADYSHOT turned ON that the steadyshot functions appropriately in the handheld operation.

1-4. PRECAUTION ON REPLACING THE VC-516 BOARD

DESTINATION DATA

When you replace to the repairing board, the written destination data of repairing board also might be changed to original setting.
Refer to Service Manual ADJ, and perform “DESTINATION DATA WRITE”.

USB SERIAL No.

The set is shipped with a unique ID (USB Serial No.) written in it.
This ID has not been written in a new board for service, and therefore it must be entered after the board replacement.
Refer to Service Manual ADJ, and perform “USB SERIAL No. INPUT”.

1. SERVICE NOTE

ENGLISH | JAPANESE

1-1. 修理時の電源供給について

本機では，安定化電源（8.4Vdc）からバッテリ端子に電源を供給した場合，約10秒後にシャットオフし，動作しなくなります。これを避けるため，下記の方法を用いてください。

方法：

DC入力端子を使用する。（ACアダプタ（AC-L200/L200Bなど）を使用する。）

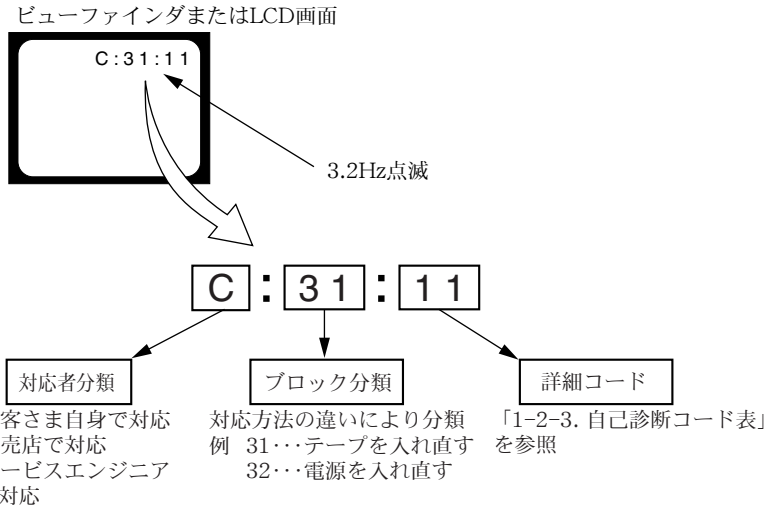
1-2. 自己診断機能

1-2-1. 自己診断機能について

本機の動作に不具合が生じたとき，自己診断機能が働き，ビューファインダまたはLCD画面に，どう処置したらよいか判断できる表示を行います。「自己診断表示」と「サービスモード表示」の２つの表示があります。自己診断機能については取扱説明書にも掲載されています。

1-2-2. 自己診断表示

本機の動作に不具合が生じたとき，ビューファインダまたはLCD画面のカウンタ表示部分がアルファベットと数字の4桁表示になり，3.2Hzで点滅します。この5文字の表示によって対応者分類および不具合の生じたブロックの分類，不具合の詳細コードを示します。



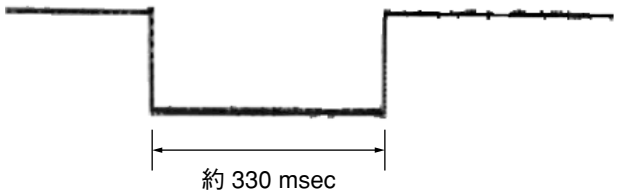
1-2-3. 自己診断コード表

自己診断コード			症状／状態	対応／方法
対応者	ブロック 機能	詳細 コード		
C	0 4	0 0	標準以外のバッテリを使用している	インフォリチウムバッテリを使用する。
C	1 3	0 1	フォーマットしていない“メモリーステック デュオ”を入れた“メモリーステック デュオ”が壊れている	“メモリーステック デュオ”をフォーマットする。 新しい“メモリーステック デュオ”に交換する。
C	1 3	0 2	ディスクアクセスエラー	電源を外し，再度入れ直してから操作する。
C	3 2	6 0	フォーカスが合いにくい（フォーカスの初期化ができない）	操作スイッチの電源を入れ直す。 復帰しない場合，レンズブロックのフォーカスMRセンサ（LD-230基板CN5103 ⑳，㉑ピン）を点検する。異常なければフォーカスモータ駆動回路（LD-230基板IC5201）を点検する。
E	2 0	0 0	フラッシュメモリが書き換えられている	フラッシュメモリのデータを元の値に戻す。（注意1）
E	3 1	0 0	ドライブ不良	ハードディスクドライブを点検または交換する。
E	6 1	1 0	ズーム動作の異常（ズームレンズの初期化ができない）	ズームレバーを操作したときにズーム動作をすれば，レンズブロックのズームMRセンサ（LD-230基板CN5103 ⑯，⑰ピン）を点検する。ズーム動作をしなければズームモータ駆動回路（LD-230基板IC5201）を点検する。
E	6 1	1 1	フォーカス，ズーム異常	自己診断コードC：32：60とE：61：10の両方を点検する。
E	6 2	0 0	手振れ補正が効きにくい（PITCH角速度センサ出力張り付き）	PITCH角速度センサ（FR-278基板SE9001）周辺回路を点検する。
E	6 2	0 1	手振れ補正が効きにくい（YAW 角速度センサ出力張り付き）	YAW角速度センサ（FR-278基板SE9002）周辺回路を点検する。
E	6 2	0 2	手振れ補正用ICの異常	「1-3-1. E:62:02（手振れ補正用ICの異常）が出た場合」を参照。
E	6 2	0 3	手振れ補正用ICとマイクロコントローラーとの通信異常	手振れ補正回路（LD-230基板IC5501）を点検。
E	6 2	1 0	シフトレンズ初期化異常	レンズブロックを交換する。エラーが再度発生する場合は， LD-230基板を交換する。（注意2）
E	6 2	1 1	シフトレンズオーバーヒート(PITCH)	「1-3-2. E:62:11（シフトレンズオーバーヒート（PITCH））が出た場合」を参照。
E	6 2	1 2	シフトレンズオーバーヒート(YAW)	「1-3-3. E:62:12（シフトレンズオーバーヒート（YAW））が出た場合」を参照。
E	6 2	2 0	サーミスタの異常	「1-3-4. E:62:20（サーミスタの異常）が出た場合」を参照。
E	9 1	0 1	フラッシュの充電異常	フラッシュユニットの点検または交換をする。
E	9 4	0 0	フラッシュメモリの書込み/消去動作不良	フラッシュメモリ（VC-516基板IC2101）を点検する。

注意1：ADJ編，「1-3. DESTINATION DATA WRITE」を参照してください。
注意2：レンズブロックを交換した場合は，ADJ編を参照して必要な調整項目を実施すること。調整後は手振れ補正ONの状態にして，手持ち動作で手振れ補正が適切に動作していることを確認する。

1-3. シフトレンズエラーの対処方法

図2



注意：Lowの区間の長さは場合によって多少異なる

図2. LD-230基板R5549の出力電圧の変化

図1

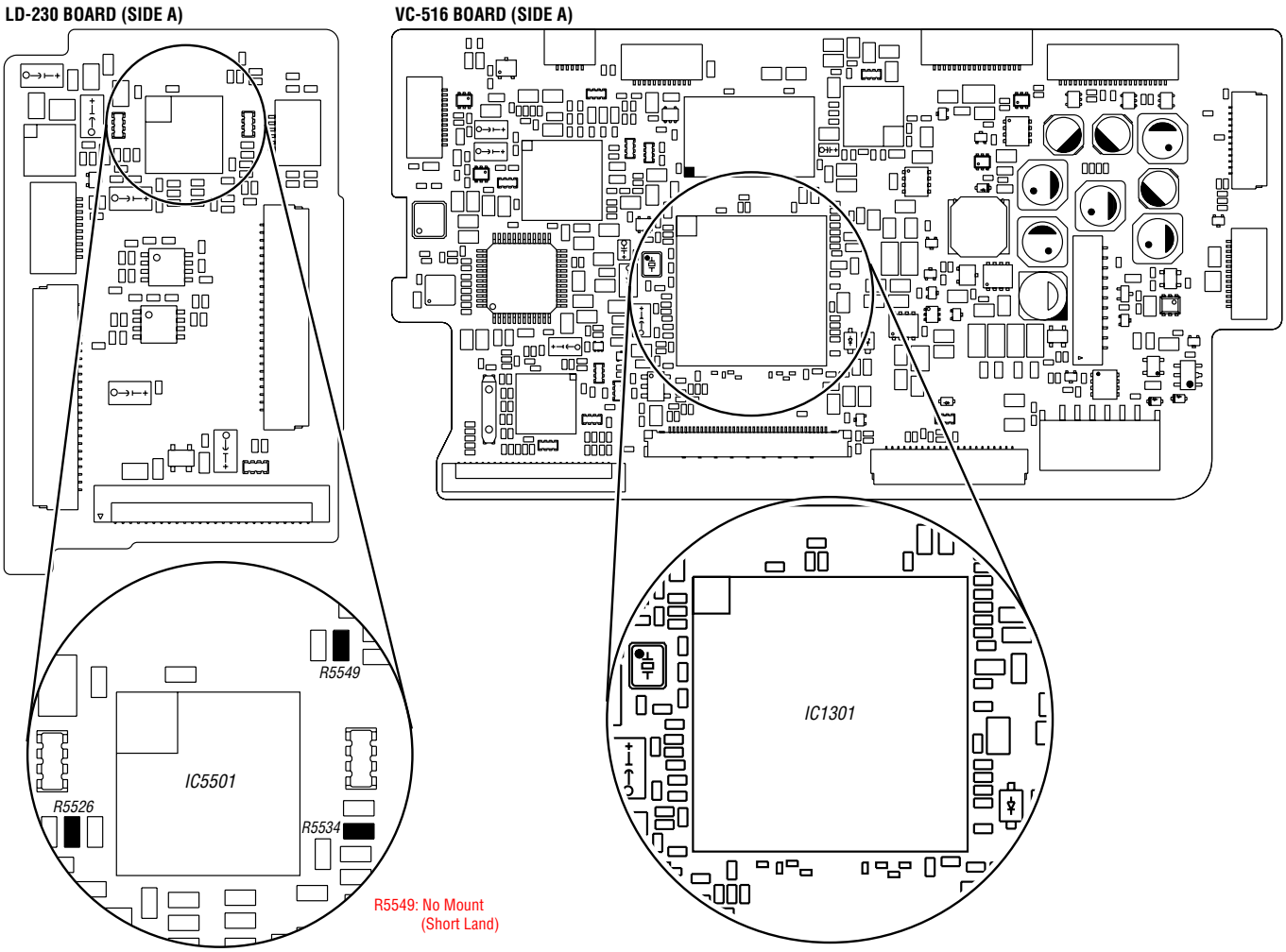


図1.LD-230基板，VC-516基板測定箇所

1-3-1. E：62：02（手振れ補正用ICの異常）が出た場合

順序	作業内容
1	電源を切る。
2	LD-230基板IC5501の周辺にあるR5549の出力電圧をオシロスコープで測定しながら電源を入れる。電源投入直後の出力電圧が図2の様に変化することを確認する。
3	出力電圧が図2の様に変化するときはレンズブロックを交換する（注意）。図2の様に変化しないときはカメラコントロール回路（VC-516基板IC1301）周辺を点検する。

注意：レンズブロックを交換した場合は，ADJ編を参照して必要な調整項目を実施すること。調整後は手振れ補正ONの状態にして，手持ち動作で手振れ補正が適切に動作していることを確認する。

1-3-2. E：62：11（シフトレンズオーバーヒート（PITCH））が出た場合

SeusEXで接続し、次の手順を行う。

順序	ブロック	ページ	アドレス	データ	作業内容
1	11	80	7430	01	データを書き込む。（セット起動後，コーションが表示される前に設定する事。）
2	11	8E	F946	F0	データを書き込む。
3	11	8E	F948	01	データを書き込む。（注意1）
4	11	8E	F948	00	データを書き込む。
5	11	8E	F946	10	データを書き込む。
6	11	8E	F948	01	データを書き込む。（注意1）
7	11	8E	F948	00	データを書き込む。
8	11	80	7430	00	データを書き込む。
9					順序2～7を設定している間にシフトレンズが動いたか確認する。もしシフトレンズが動かない場合はレンズブロックを交換する（注意2）。動く場合は順序10に進む。
10					LD-230基板IC5501の周辺にあるR5526の出力電圧をオシロスコープで測定しながら，順序2～7を設定したときに出力電圧が変化することを確認する。
11					出力電圧が変化しないときはレンズブロックを交換する（注意2）。変化するときは順序12に進む。
12					電源を切る。
13					LD-230基板IC5501の周辺にあるR5549の出力電圧をオシロスコープで測定しながら電源を入れる。電源投入直後の出力電圧が図2の様に変化することを確認する。
14					出力電圧が図2の様に変化するときはレンズブロックを交換する（注意2）。図2の様に変化しないときはカメラコントロール回路（VC-516基板IC1301）周辺を点検する。

注意1：この操作は10秒以内に終了してください。もし10秒以上経過しそうな場合は，ブロック：11，ページ：8E，アドレス：F948，データ：00 に設定しなおしてから再度実行してください。

注意2：レンズブロックを交換した場合は，ADJ編を参照して必要な調整項目を実施すること。調整後は手振れ補正ONの状態にして，手持ち動作で手振れ補正が適切に動作していることを確認する。

1-3-3. E：62：12(シフトレンズオーバーヒート(YAW))が出た場合

SeusEXで接続し、次の手順を行う。

順序	ブロック	ページ	アドレス	データ	作業内容
1	11	80	7430	01	データを書き込む。(セット起動後，コーションが表示される前に設定する事。)
2	11	8E	F947	F0	データを書き込む。
3	11	8E	F949	01	データを書き込む。(注意1)
4	11	8E	F949	00	データを書き込む。
5	11	8E	F947	10	データを書き込む。
6	11	8E	F949	01	データを書き込む。(注意1)
7	11	8E	F949	00	データを書き込む。
8	11	80	7430	00	データを書き込む。
9					順序2～7を設定している間にシフトレンズが動いたか確認する。もしシフトレンズが動かない場合はレンズブロックを交換する(注意2)。動く場合は順序10に進む。
10					LD-230基板IC5501の周辺にあるR5534の出力電圧をオシロスコープで測定しながら，順序2～7を設定したときに出力電圧が変化することを確認する。
11					出力電圧が変化しないときはレンズブロックを交換する(注意2)。変化するときは順序12に進む。
12					電源を切る。
13					LD-230基板IC5501の周辺にあるR5549の出力電圧をオシロスコープで測定しながら電源を入れる。電源投入直後の出力電圧が図2の様に変化することを確認する。
					出力電圧が図2の様に変化するときはレンズブロックを交換する(注意2)。図2の様に変化しないときはカメラコントロール回路(VC-516基板IC1301)周辺を点検する。

注意1：この操作は10秒以内に終了してください。もし10秒以上経過しそうな場合は，ブロック：11，ページ：8E，アドレス：F949，データ：00 に設定しなおしてから再度実行してください。

注意2：レンズブロックを交換した場合は，ADJ編を参照して必要な調整項目を実施すること。調整後は手振れ補正ONの状態にして，手持ち動作で手振れ補正が適切に動作していることを確認する。

1-3-4. E：62：20(サーミスタの異常)が出た場合

順序	作業内容
1	電源を入れる。
2	レンズブロックとLD-230基板間，LD-230基板とVC-516基板間の各フレキシブルフラットケーブルとコネクタの接続を確認する。
3	接続に異常がなければレンズブロックを交換する。(注意) 交換してもエラーが発生する場合はLD-230基板を交換する。

注意：レンズブロックを交換した場合は，ADJ編を参照して必要な調整項目を実施すること。調整後は手振れ補正ONの状態にして，手持ち動作で手振れ補正が適切に動作していることを確認する。

1-4. VC-516基板交換時の注意

仕向けデータ

補修用基板と交換する時，補修用基板に書かれている仕向けデータは元の設定と違っている場合があります。
ADJ編を参照して，「DESTINATION DATA WRITE」を行ってください。

USBシリアルNo.

セットは，1台毎に異なる固有のID（USB Serial No.）を書き込んだ後，出荷されています。
新品の補修用基板には，このIDが書き込まれていないので，基板交換後にIDを入力する必要があります。
ADJ編を参照して，「USB SERIAL No. INPUT」を行ってください。

(ENGLISH)
1-6. PRECAUTION ON REPLACING THE CABINET (G(900)) ASSY (HDR-SR11)

The model display adopts the laser printing method.Therefore, the cabinet (G(900)) assy for replacement differs depending on the destination.
As similar displays are provided, choose the suitable one for order.

Note1: After replacing the cabinet (G(900)) assy, the serial number for it will be changed to the one exclusive for service use.
Inform a customer of the serial number change and change the serial number in the repair data.

Note 2: When replacing the cabinet (G(900)) assy for US, affix the "Manufacturing year" label and the "Factory" label on the specified location as shown in the figure.
The replacement caution label and inset (how to affix) are supplied together with the cabinet (G(900)) assy.

Note 3: When replacing the cabinet (G(900)) assy for Korea, affix the "Manufacturing year" label on the specified location as shown in the figure.
The replacement caution label and inset (how to affix) are supplied together with the cabinet (G(900)) assy.

(JAPANESE)
1-6. キャビネット(G(900))組立交換時の注意 (HDR-SR11)

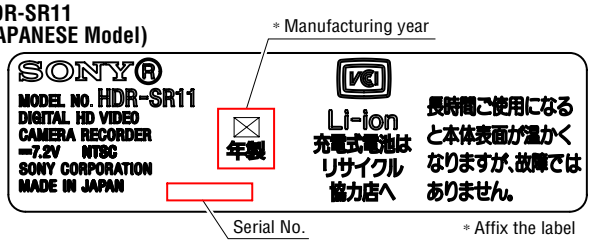
機種の表示部はレーザー印字方式を採用しております。
この為，交換用のキャビネット(G(900))組立は仕向けにより異なります。類似の表示もありますので，該当するものを選んで注文して下さい。

注意1: キャビネット(G(900))組立交換後はシリアルナンバーがサービス専用のシリアルナンバーに変更されます。お客様への案内と修理データのシリアルナンバー変更を行ってください。

注意2: US仕向けキャビネット(G(900))組立を交換した際は「製造年月」を表すラベルと，「製造所」を表すラベルを図の指定位置に貼り付けてください。
なお，キャビネット(G(900))組立には時期表示ラベル，投げ込み(ラベル貼り方)がセットで供給されます。

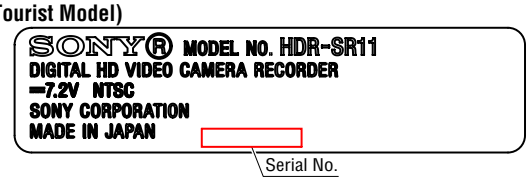
注意3: Korean仕向けキャビネット(G(900))組立を交換した際は，「製造年月」を表すラベルを図の指定位置に貼り付けてください。
なお，キャビネット(G(900))組立には時期表示ラベル，投げ込み(ラベル貼り方)がセットで供給されます。

HDR-SR11
(JAPANESE Model)



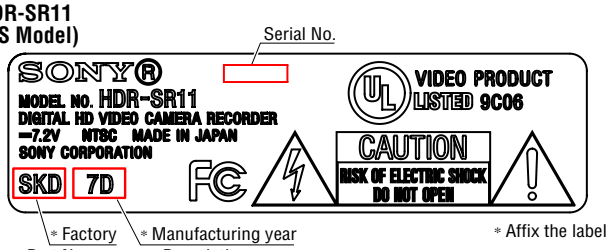
Part No.	Description
A-1526-522-A	CABINET(G(900))(SR11J1)

HDR-SR11
(Tourist Model)



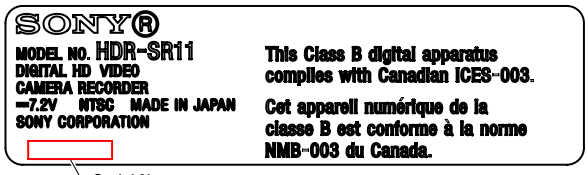
Part No.	Description
A-1526-524-A	CABINET(G(900))(SR11JE3)

HDR-SR11
(US Model)



Part No.	Description
A-1526-525-A	CABINET(G(900))(SR11U2)

HDR-SR11
(Canadian Model)

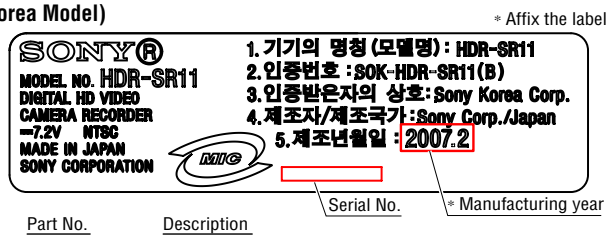


Part No.	Description
A-1526-526-A	CABINET(G(900))(SR11CA2)

HDR-SR11
(E Model)

Part No.	Description
A-1526-527-A	CABINET(G(900))(SR11E23)

HDR-SR11
(Korea Model)



Part No.	Description
A-1526-528-A	CABINET(G(900))(SR11KR2)

(ENGLISH)

1-7. PRECAUTION ON REPLACING THE CABINET (G(900)) ASSY (HDR-SR11E)

The model display adopts the laser printing method.Therefore, the cabinet (G(900)) assy for replacement differs depending on the destination.
As similar displays are provided, choose the suitable one for order.

Note1: After replacing the cabinet (G(900)) assy, the serial number for it will be changed to the one exclusive for service use.
Inform a customer of the serial number change and change the serial number in the repair data.

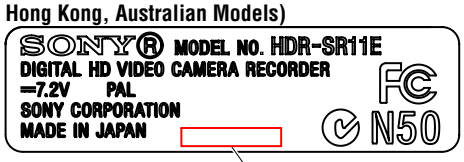
(JAPANESE)

1-7. キャビネット(G(900))組立交換時の注意 (HDR-SR11E)

機種の表示部はレーザー印字方式を採用しております。
この為，交換用のキャビネット(G(900))組立は仕向けにより異なります。類似の表示もありますので，該当するものを選んで注文して下さい。

注意1: キャビネット(G(900))組立交換後はシリアルナンバーがサービス専用のシリアルナンバーに変更されます。お客様への案内と修理データのシリアルナンバー変更を行ってください。

HDR-SR11E
(E, Hong Kong, Australian Models)



Part No.	Description
A-1526-529-A	CABINET(G(900))(SR11EE34)

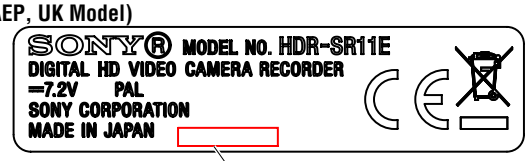
HDR-SR11E
(NE Models)

Part No.	Description
A-1526-530-A	CABINET(G(900))(SR11ECEL)

HDR-SR11E
(Tourist Model)

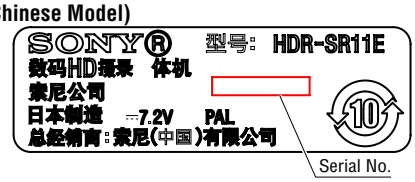
Part No.	Description
A-1526-560-A	CABINET(G(900))(SR11EJE3)

HDR-SR11E
(AEP, UK Model)



Part No.	Description
A-1526-561-A	CABINET(G(900))(SR11ECEH)

HDR-SR11E
(Chinese Model)



Part No.	Description
A-1526-562-A	CABINET(G(900))(SR11ECN2)

(ENGLISH)

1-8. PRECAUTION ON REPLACING THE CABINET (G(900)) ASSY (HDR-SR12)

The model display adopts the laser printing method.Therefore, the cabinet (G(900)) assy for replacement differs depending on the destination.
As similar displays are provided, choose the suitable one for order.

Note1: After replacing the cabinet (G(900)) assy, the serial number for it will be changed to the one exclusive for service use.
Inform a customer of the serial number change and change the serial number in the repair data.

Note 2: When replacing the cabinet (G(900)) assy for US, affix the "Manufacturing year" label and the "Factory" label on the specified location as shown in the figure.
The replacement caution label and inset (how to affix) are supplied together with the cabinet (G(900)) assy.

Note 3: When replacing the cabinet (G(900)) assy for Korea, affix the "Manufacturing year" label on the specified location as shown in the figure.
The replacement caution label and inset (how to affix) are supplied together with the cabinet (G(900)) assy.

(JAPANESE)

1-8. キャビネット(G(900))組立交換時の注意 (HDR-SR12)

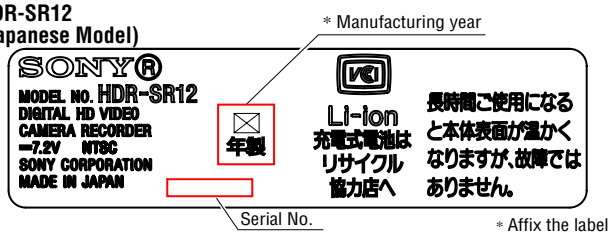
機種の表示部はレーザー印字方式を採用しております。
この為，交換用のキャビネット(G(900))組立は仕向けにより異なります。類似の表示もありますので，該当するものを選んで注文して下さい。

注意1: キャビネット(G(900))組立交換後はシリアルナンバーがサービス専用のシリアルナンバーに変更されます。お客様への案内と修理データのシリアルナンバー変更を行ってください。

注意2: US仕向けキャビネット(G(900))組立を交換した際は「製造年月」を表すラベルと，「製造所」を表すラベルを図の指定位置に貼り付けてください。
なお，キャビネット(G(900))組立には時期表示ラベル，投げ込み(ラベル貼り方)がセットで供給されます。

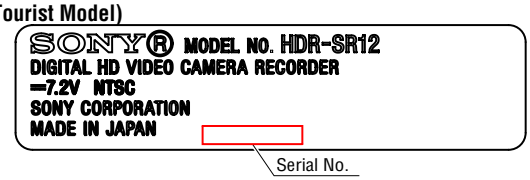
注意3: Korean仕向けキャビネット(G(900))組立を交換した際は，「製造年月」を表すラベルを図の指定位置に貼り付けてください。
なお，キャビネット(G(900))組立には時期表示ラベル，投げ込み(ラベル貼り方)がセットで供給されます。

HDR-SR12
(Japanese Model)



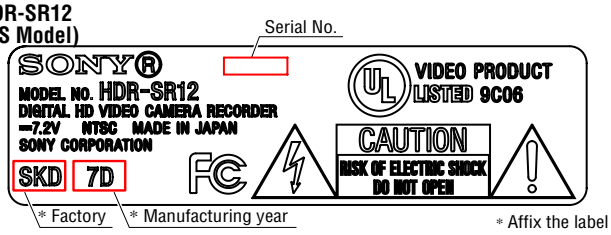
Part No.	Description
A-1526-563-A	CABINET(G(900))(SR12J1)

HDR-SR12
(Tourist Model)



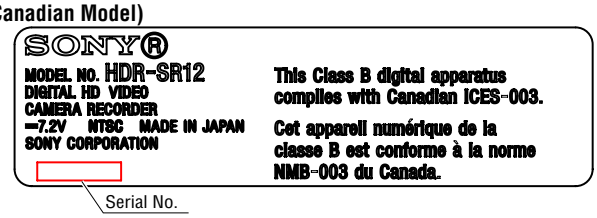
Part No.	Description
A-1526-565-A	CABINET(G(900))(SR12JE3)

HDR-SR12
(US Model)



Part No.	Description
A-1526-566-A	CABINET(G(900))(SR12U2)

HDR-SR12
(Canadian Model)

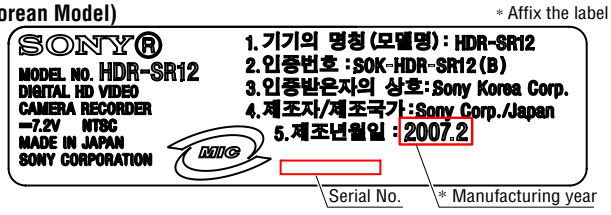


Part No.	Description
A-1526-567-A	CABINET(G(900))(SR12CA2)

HDR-SR12
(E Model)

Part No.	Description
A-1526-568-A	CABINET(G(900))(SR12E23)

HDR-SR12
(Korean Model)



Part No.	Description
A-1526-575-A	CABINET(G(900))(SR12KR2)

(ENGLISH)

1-9. PRECAUTION ON REPLACING THE CABINET (G(900)) ASSY (HDR-SR12E)

The model display adopts the laser printing method.Therefore, the cabinet (G(900)) assy for replacement differs depending on the destination.
As similar displays are provided, choose the suitable one for order.

Note1: After replacing the cabinet (G(900)) assy, the serial number for it will be changed to the one exclusive for service use.
Inform a customer of the serial number change and change the serial number in the repair data.

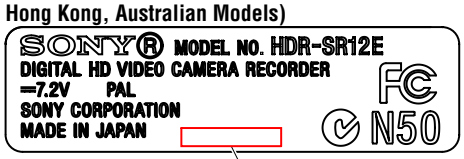
(JAPANESE)

1-9. キャビネット(G(900))組立交換時の注意 (HDR-SR12E)

機種の表示部はレーザー印字方式を採用しております。
この為，交換用のキャビネット(G(900))組立は仕向けにより異なります。類似の表示もありますので，該当するものを選んで注文して下さい。

注意1: キャビネット(G(900))組立交換後はシリアルナンバーがサービス専用のシリアルナンバーに変更されます。お客様への案内と修理データのシリアルナンバー変更を行ってください。

HDR-SR12E
(E, Hong Kong, Australian Models)



Part No.	Description
A-1526-576-A	CABINET(G(900))(SR12EE34)

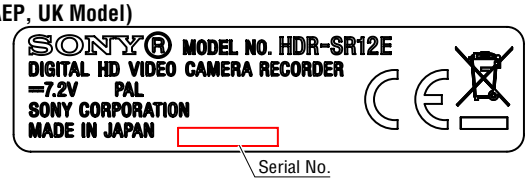
HDR-SR12E
(NE Models)

Part No.	Description
A-1526-577-A	CABINET(G(900))(SR12ECEL)

HDR-SR12E
(Tourist Model)

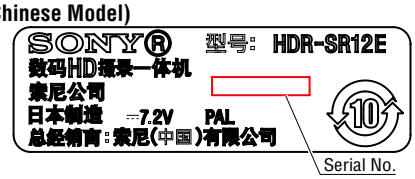
Part No.	Description
A-1526-578-A	CABINET(G(900))(SR12EJE3)

HDR-SR12E
(AEP, UK Model)



Part No.	Description
A-1526-579-A	CABINET(G(900))(SR12ECEH)

HDR-SR12E
(Chinese Model)



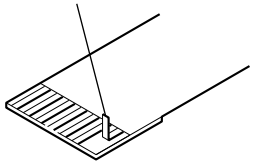
Part No.	Description
A-1526-580-A	CABINET(G(900))(SR12ECN2)

2. DISASSEMBLY

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.
- 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.

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

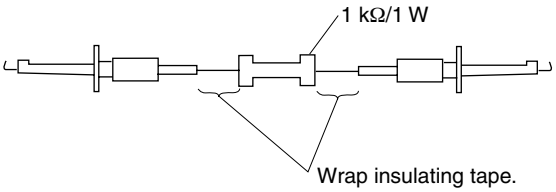


DISCHARGING OF THE ST-185 BOARD'S CHARGING CAPACITOR (C5006)

The charging capacitor (C5006) of the ST-185 board is charged up to the maximum 330 V potential.
There is a danger of electric shock by this high voltage when the capacitor is handled by hand. The electric shock is caused by the charged voltage which is kept without discharging when the main power of the unit is simply turned off. Therefore, the remaining voltage must be discharged as described below.

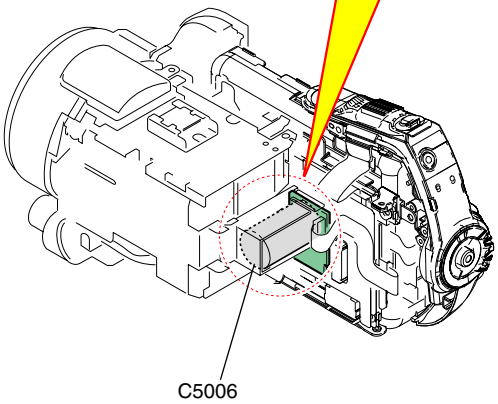
Preparing the Short Jig

To preparing the short jig, a small clip is attached to each end of a resistor of 1 kΩ /1 W (1-215-869-11).
Wrap insulating tape fully around the leads of the resistor to prevent electrical shock.

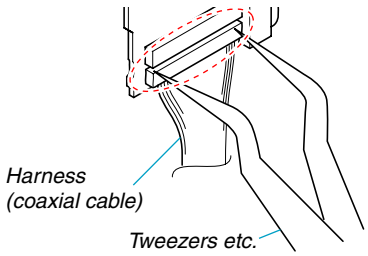


Note: High-voltage cautions

Discharging the Capacitor
Short-circuit between the two points with the short jig about 10 seconds.

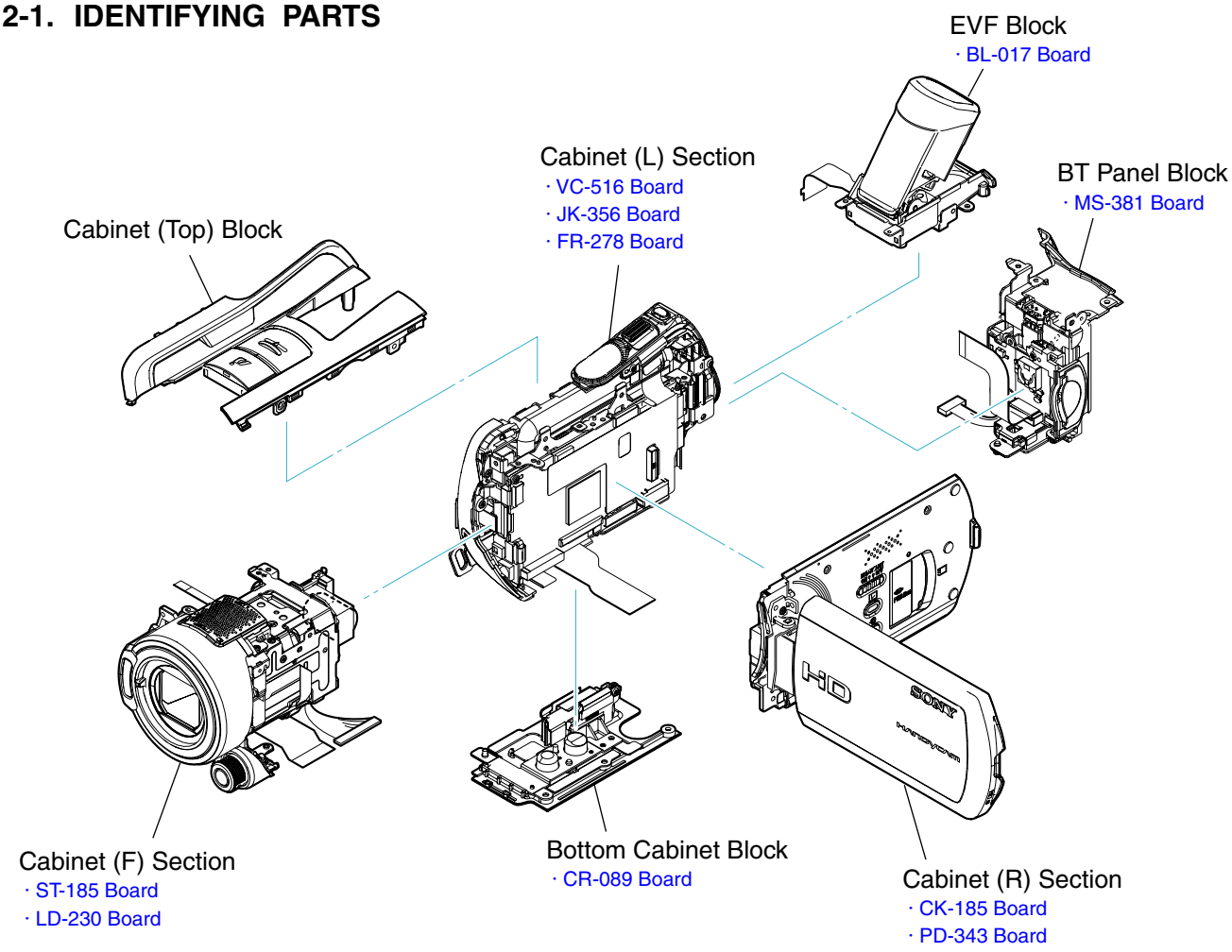


NOTE FOR DISCONNECTING THE HARNESS (COAXIAL CABLE)



When disconnecting the harness (COAXIAL CABLE), do not pull the harness part but pull off the connector body with tweezers etc.

2-1. IDENTIFYING PARTS



- DISASSEMBLY FLOW -

2-2-1. OVERALL SECTION-1
- Cabinet (G) Assy
- HDD
- Bottom Cabinet Block

2-2-2. OVERALL SECTION-2
- Cabinet (R) Section
- Cabinet (Top) Block
- EVF Block

2-2-3. OVERALL SECTION-3
- BT Panel Block
- Cabinet (F) Section

2-2-4. CABINET (L) SECTION-1
- VC-516 Board

2-2-5. CABINET (L) SECTION-2
- JK-356 Board
- Control Switch Block (PS28100)
- FR-278 Board

2-2-6. CABINET (F) SECTION
- Lens Block
- Control Switch Block (RS28900)
- Lens Barrier Unit

2-2-7. LENS BLOCK
- ST-185 Board
- LD-230 Board
- Flash Unit

2-2-8. CABINET (R) SECTION
- Loud Speaker
- CK-185 Board
- Panel Block

2-2-9. PANEL BLOCK
- Hinge Assy
- PD-343 Board
- LCD

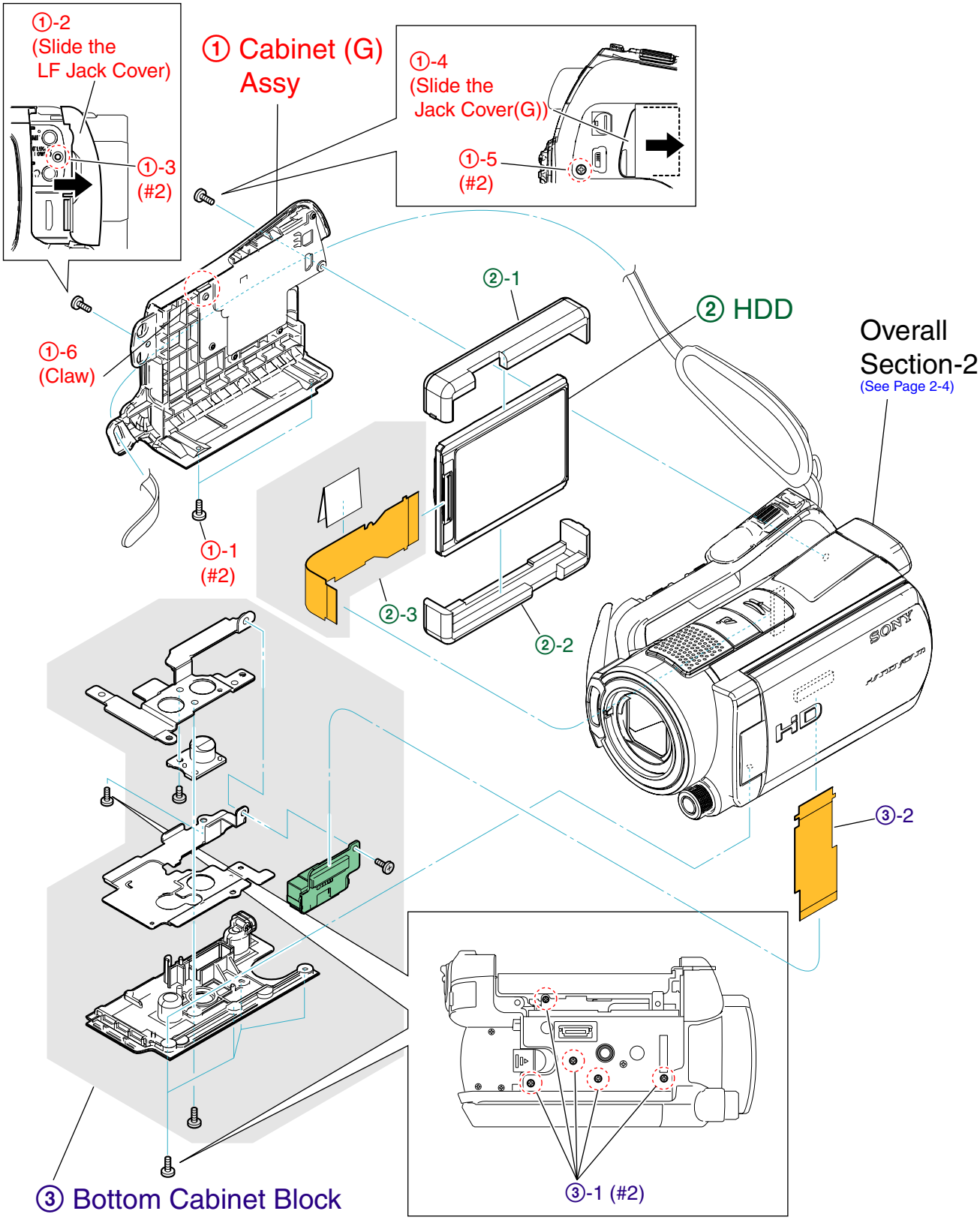
2-2. DISASSEMBLY

EXPLODED VIEW HARDWARE LIST

2-2-1. OVERALL SECTION-1

Follow the disassembly in the numerical order given.

① Cabinet (G) Assy (①-1 to ①-6)
② HDD (②-1 to ②-3)
③ Bottom Cabinet Block (③-1 to ③-2)

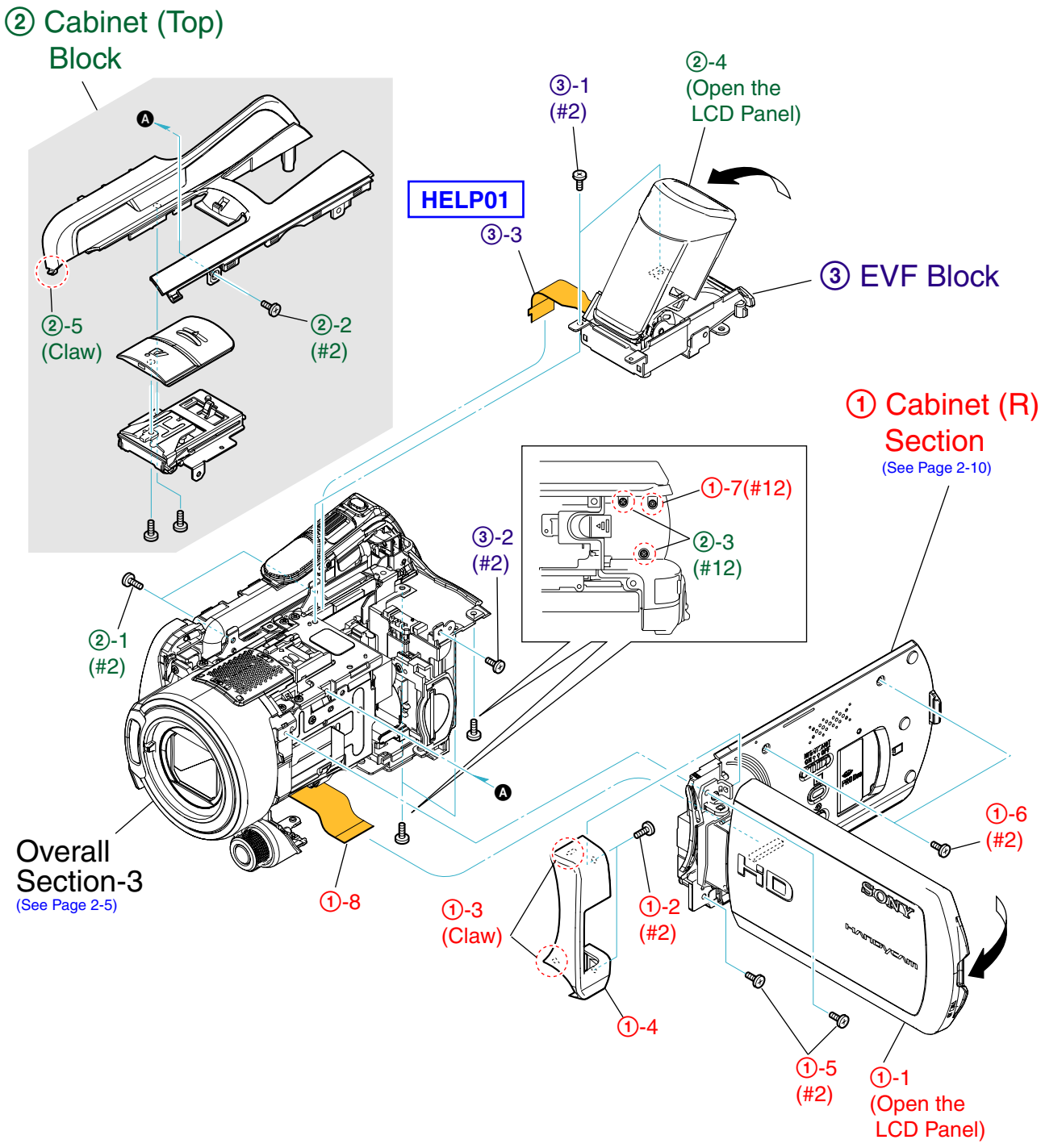


2-2-2. OVERALL SECTION-2

EXPLODED VIEW HARDWARE LIST

Follow the disassembly in the numerical order given.

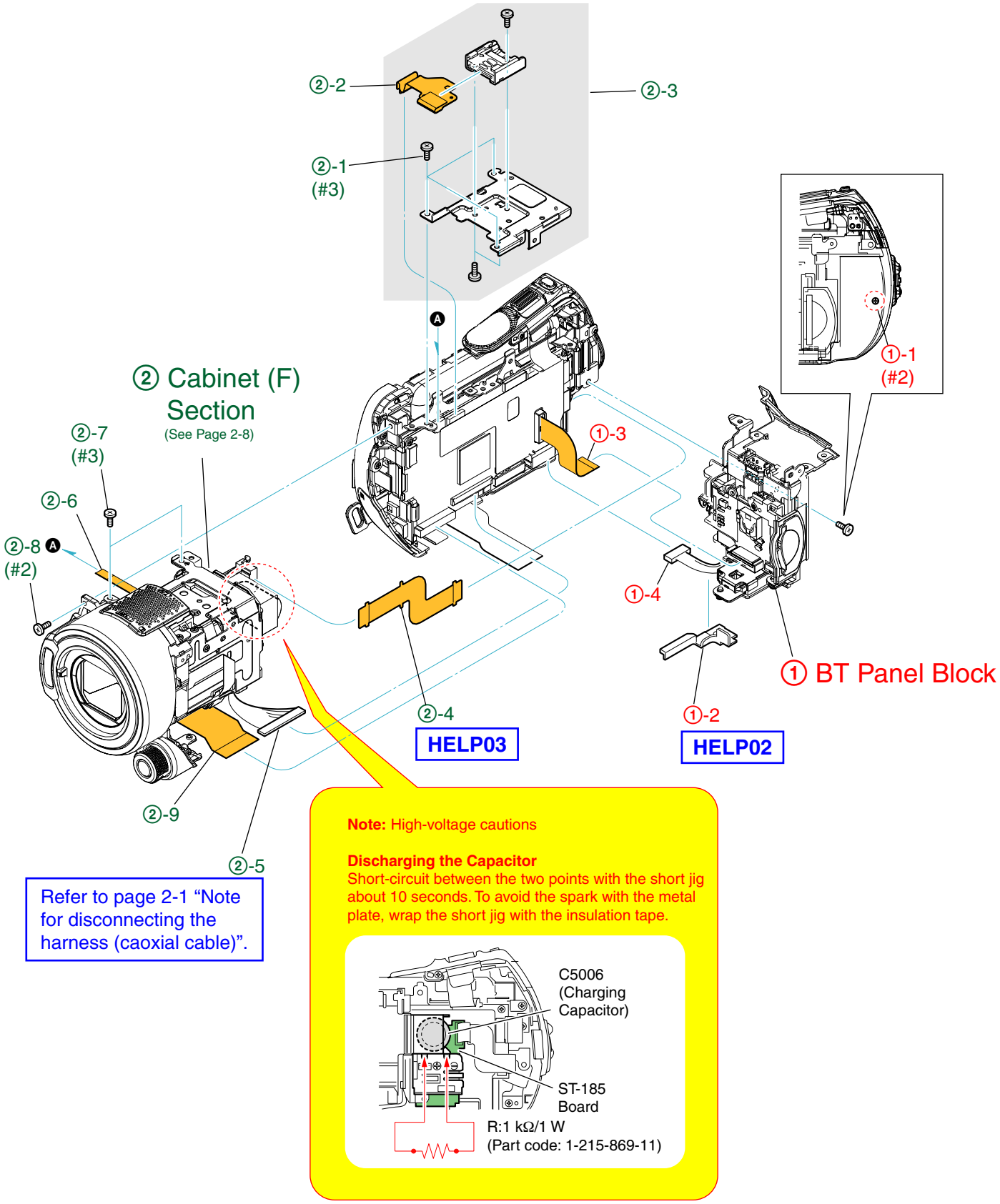
① Cabinet (R) Section (①-1 to ①-8)
② Cabinet (Top) Block (②-1 to ②-5)
③ EVF Block (③-1 to ③-3)



2-2-3. OVERALL SECTION-3

EXPLODED VIEW HARDWARE LIST

Follow the disassembly in the numerical order given.
① BT Panel Block (①-1 to ①-4)
② Cabinet (F) Section (②-1 to ②-9)

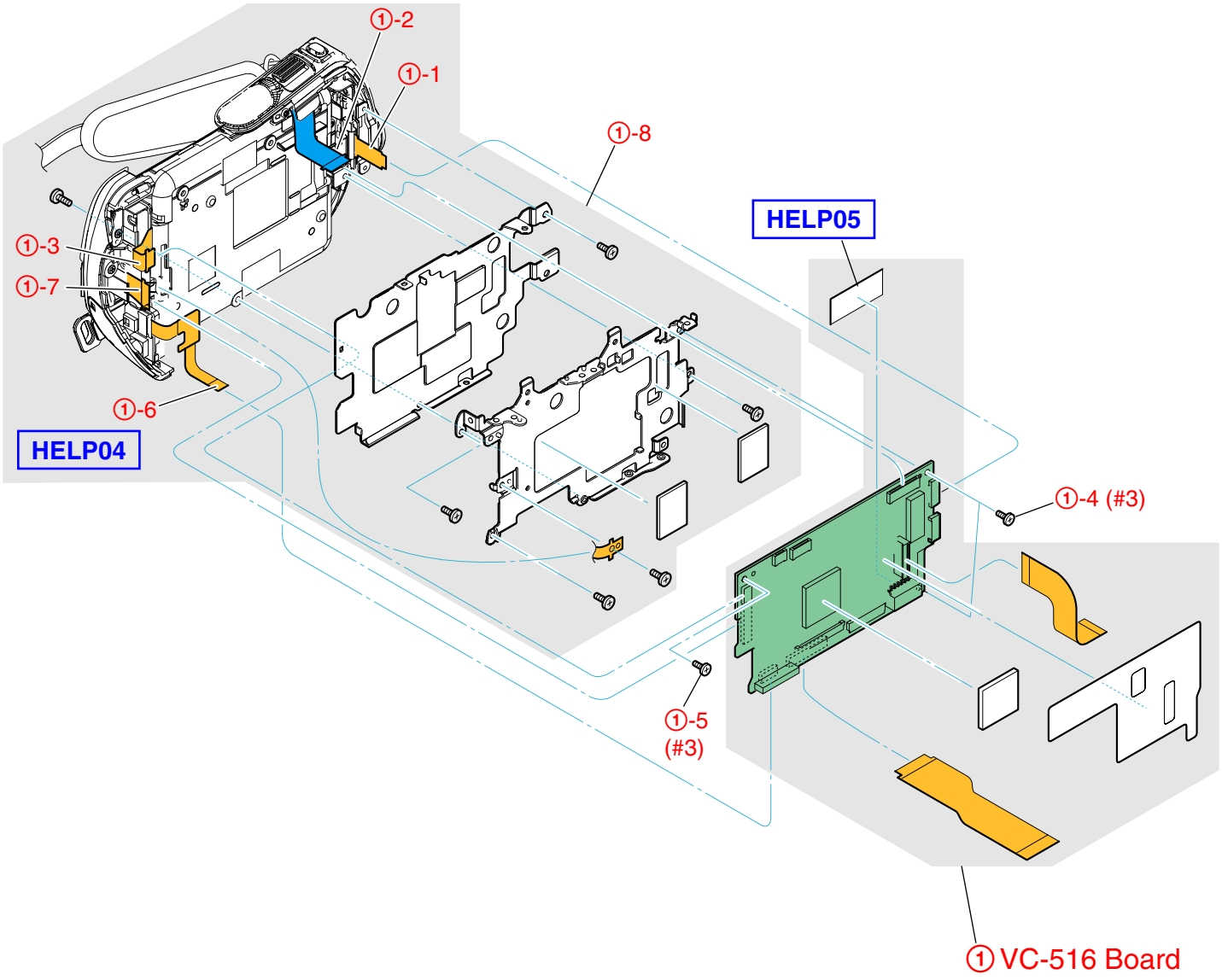


2-2-4. CABINET (L) SECTION-1

Follow the disassembly in the numerical order given.

① VC-516 Board (①-1 to ①-8)

EXPLODED VIEW HARDWARE LIST

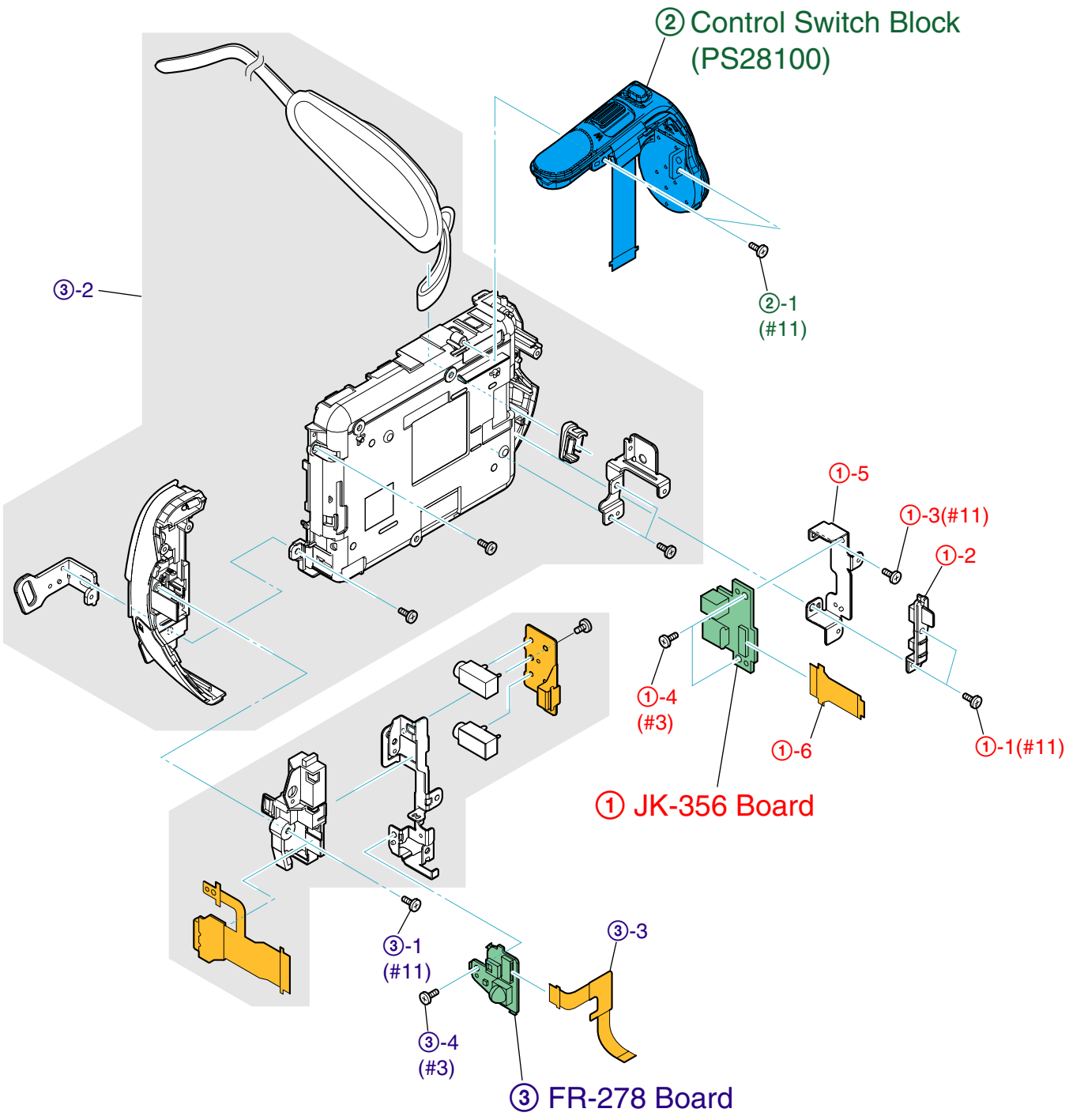


2-2-5. CABINET (L) SECTION-2

EXPLODED VIEW HARDWARE LIST

Follow the disassembly in the numerical order given.

① JK-356 Board (①-1 to ①-6)
② Control Switch Block (PS28100) (②-1)
③ FR-278 Board (③-1 to ③-4)

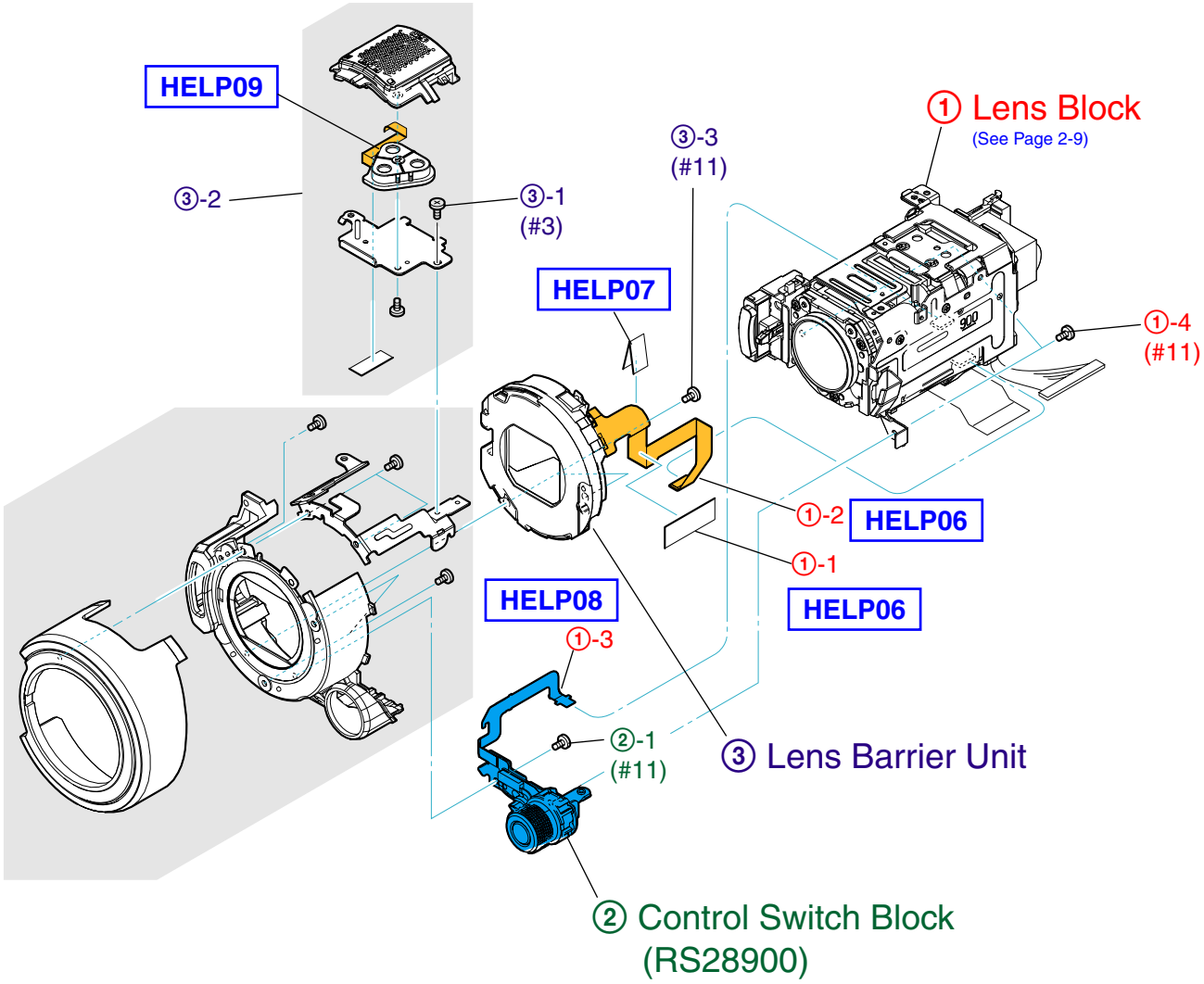


2-2-6. CABINET (F) SECTION

EXPLODED VIEW | HARDWARE LIST

Follow the disassembly in the numerical order given.

① Lens Block (①-1 to ①-4)
② Control Switch Block (RS28900) (②-1)
③ Lens Barrier Unit (③-1 to ③-3)

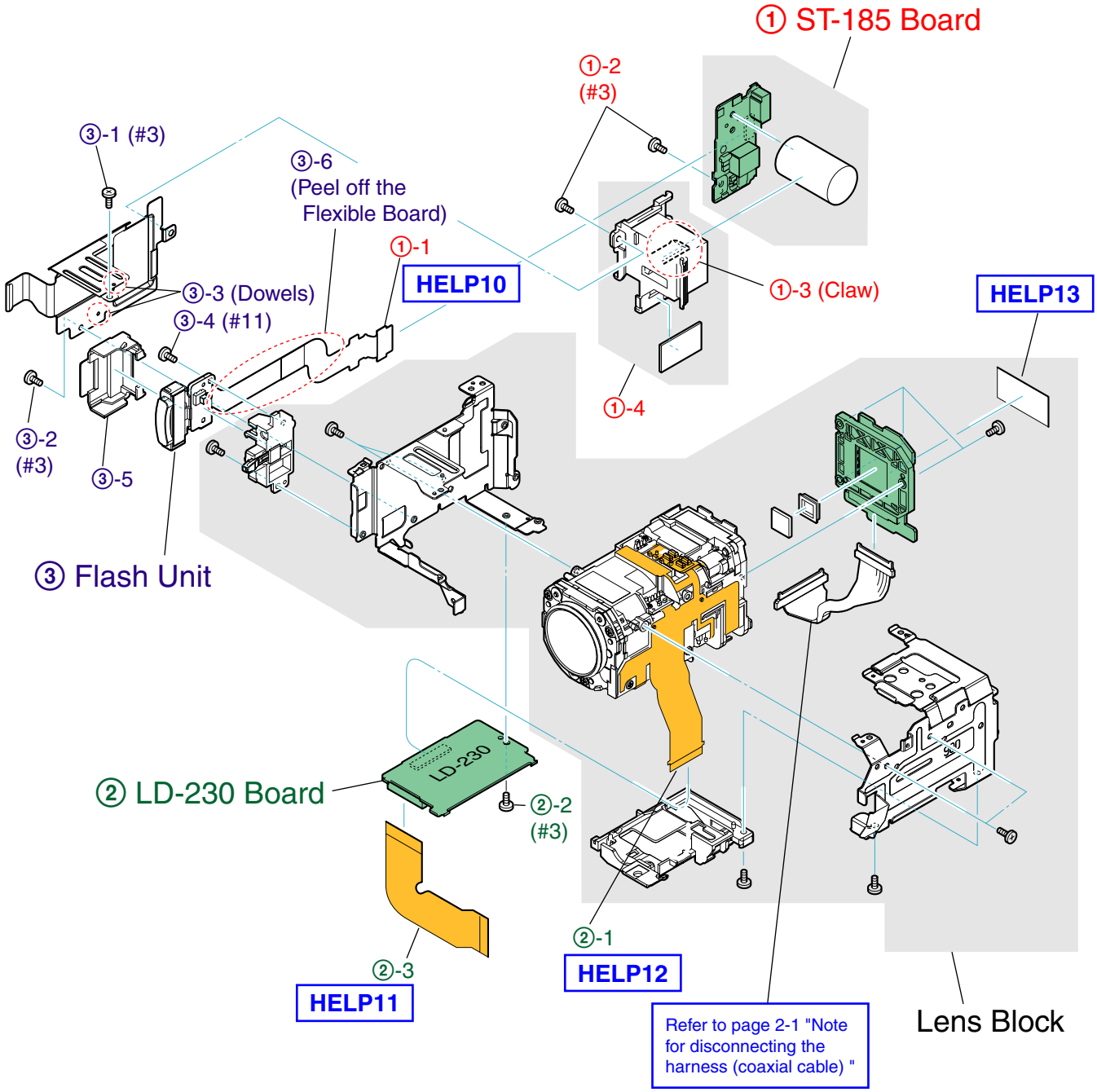


2-2-7. LENS BLOCK

Follow the disassembly in the numerical order given.

① ST-185 Board (①-1 to ①-4)
② LD-230 Board (②-1 to ②-3)
③ Flash Unit (③-1 to ③-6)

EXPLODED VIEW HARDWARE LIST

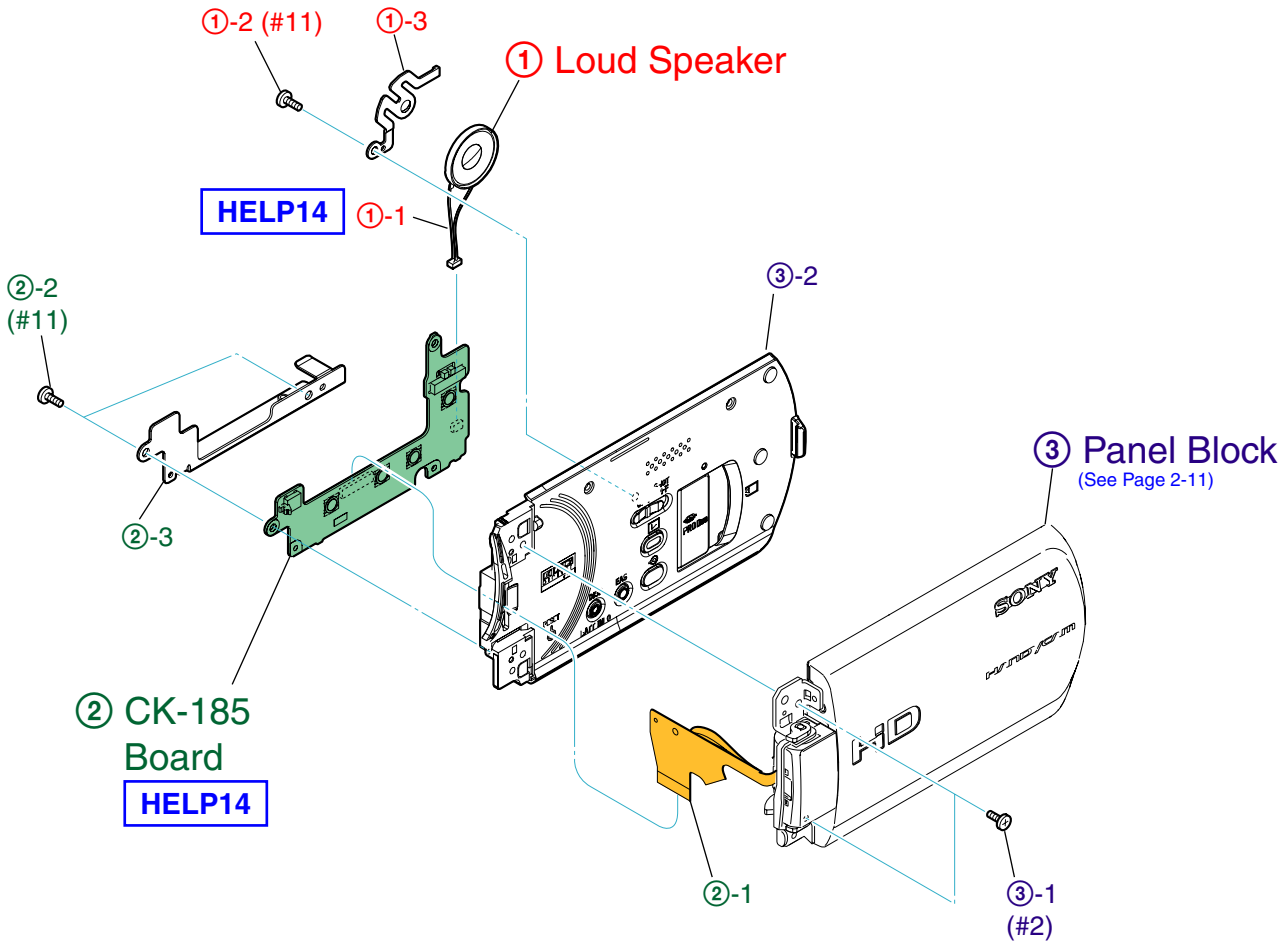


2-2-8. CABINET (R) SECTION

EXPLODED VIEW HARDWARE LIST

Follow the disassembly in the numerical order given.

① Loud Speaker (①-1 to ①-3)
② CK-185 Board (②-1 to ②-3)
③ Panel Block (③-1 to ③-2)

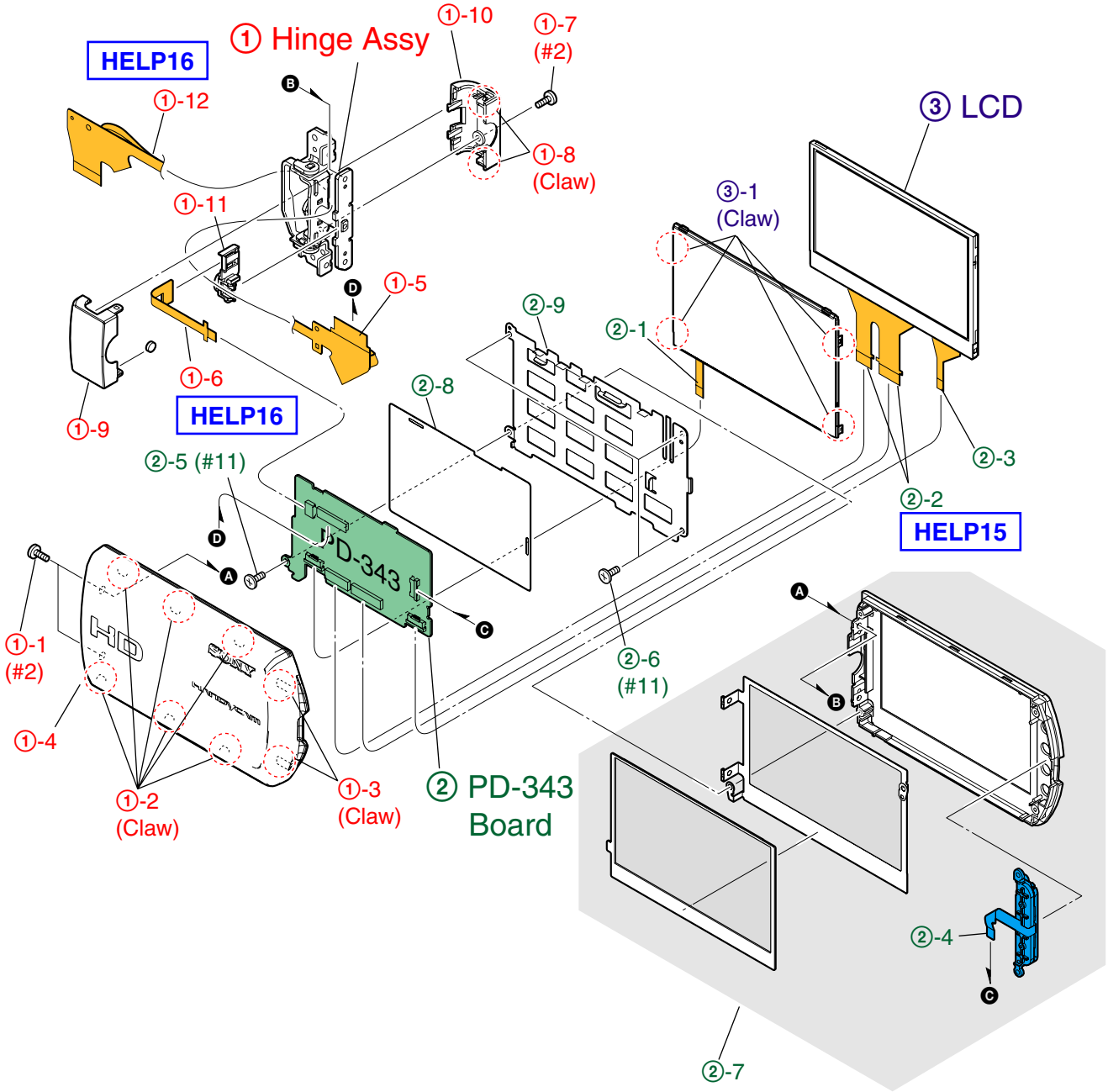


2-2-9. PANEL BLOCK

Follow the disassembly in the numerical order given.

① Hinge Assy (①-1 to ①-12)
② PD-343 Board (②-1 to ②-9)
③ LCD (③-1)

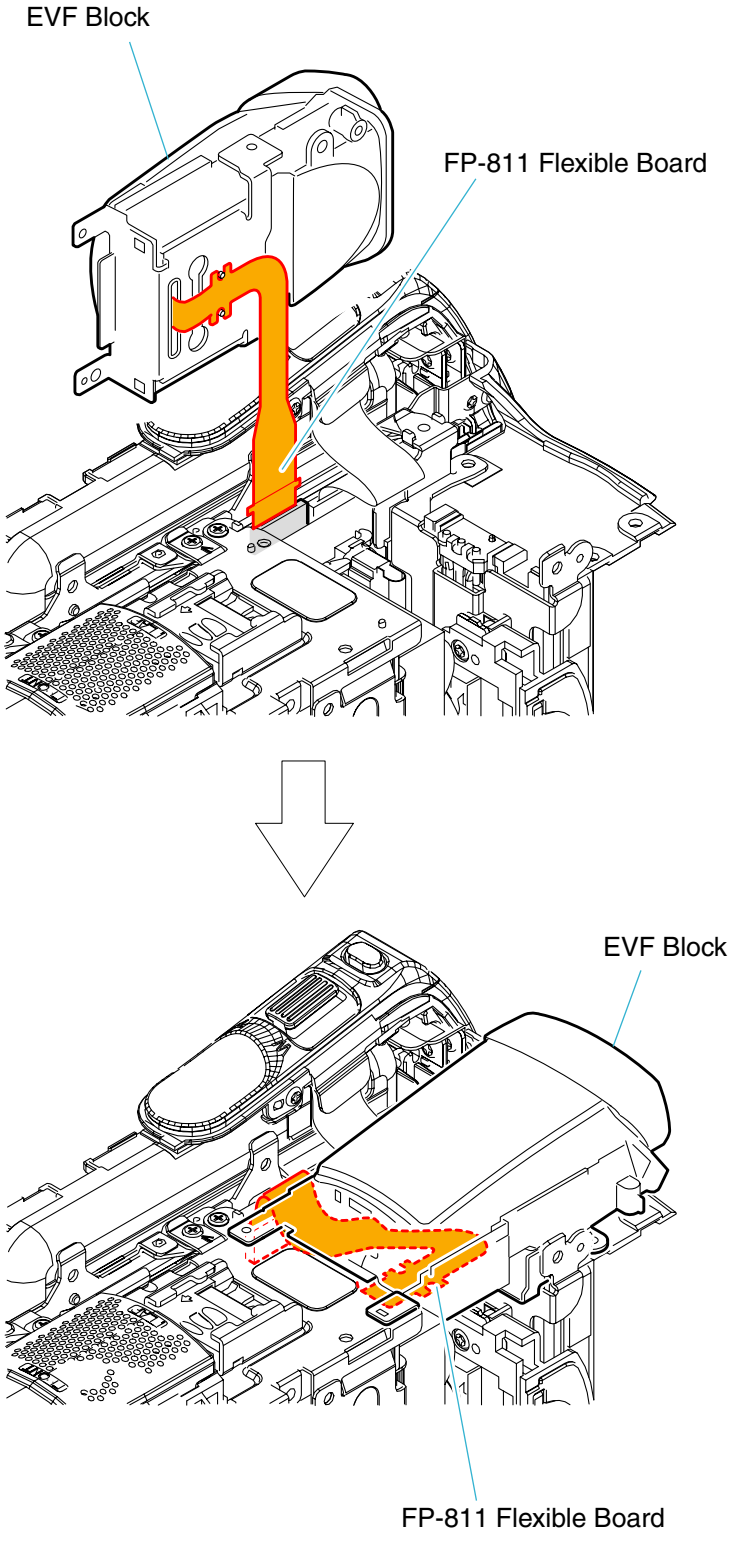
EXPLODED VIEW HARDWARE LIST



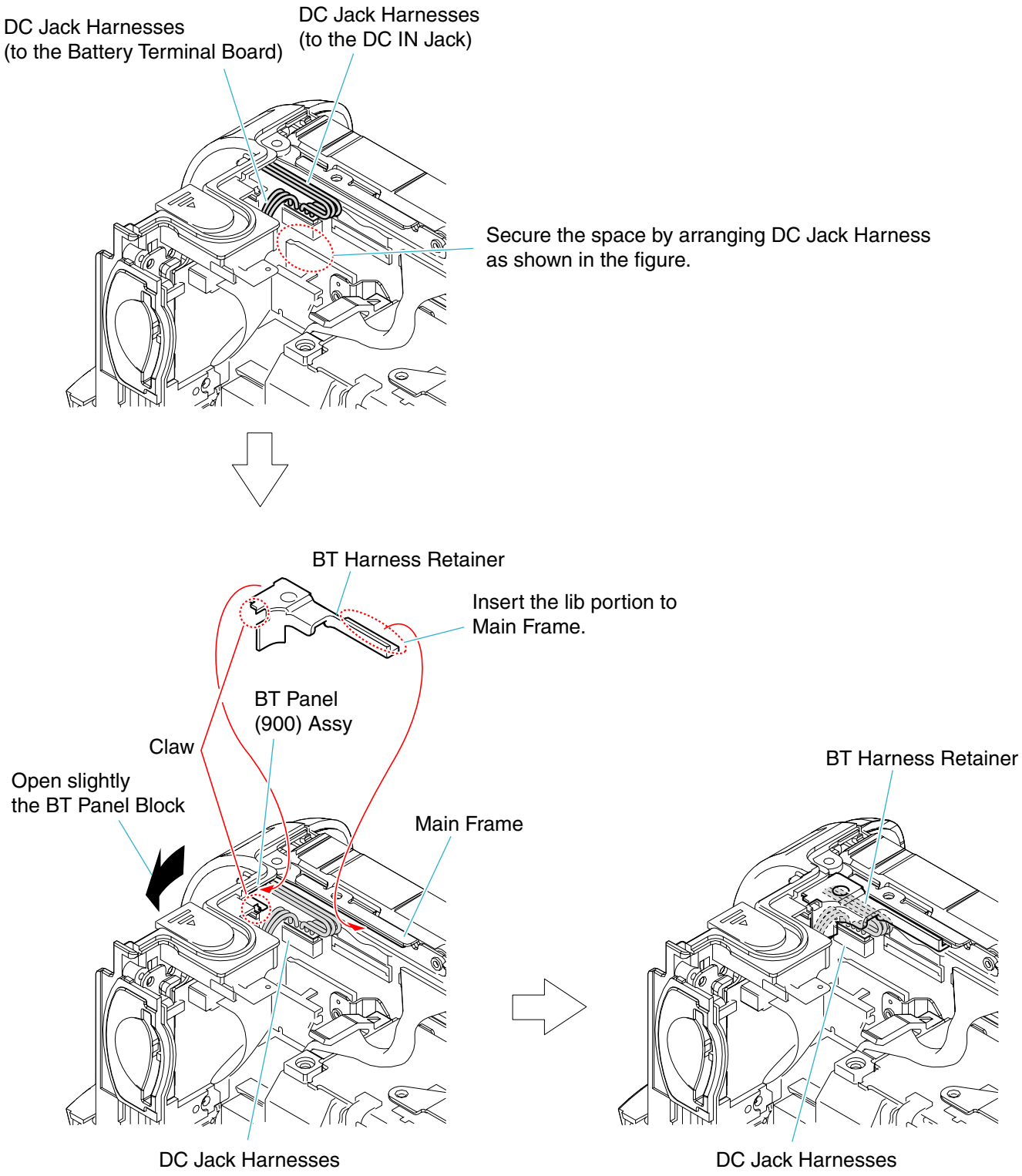
HELP

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

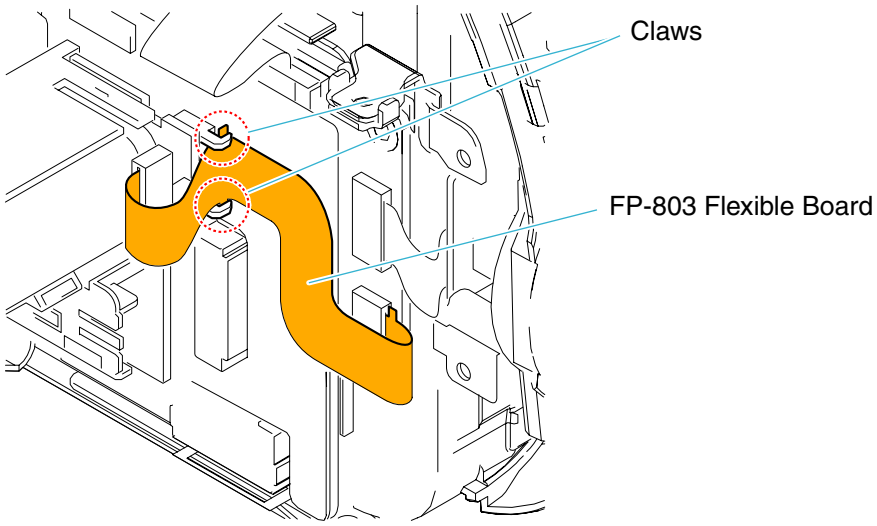
HELP01



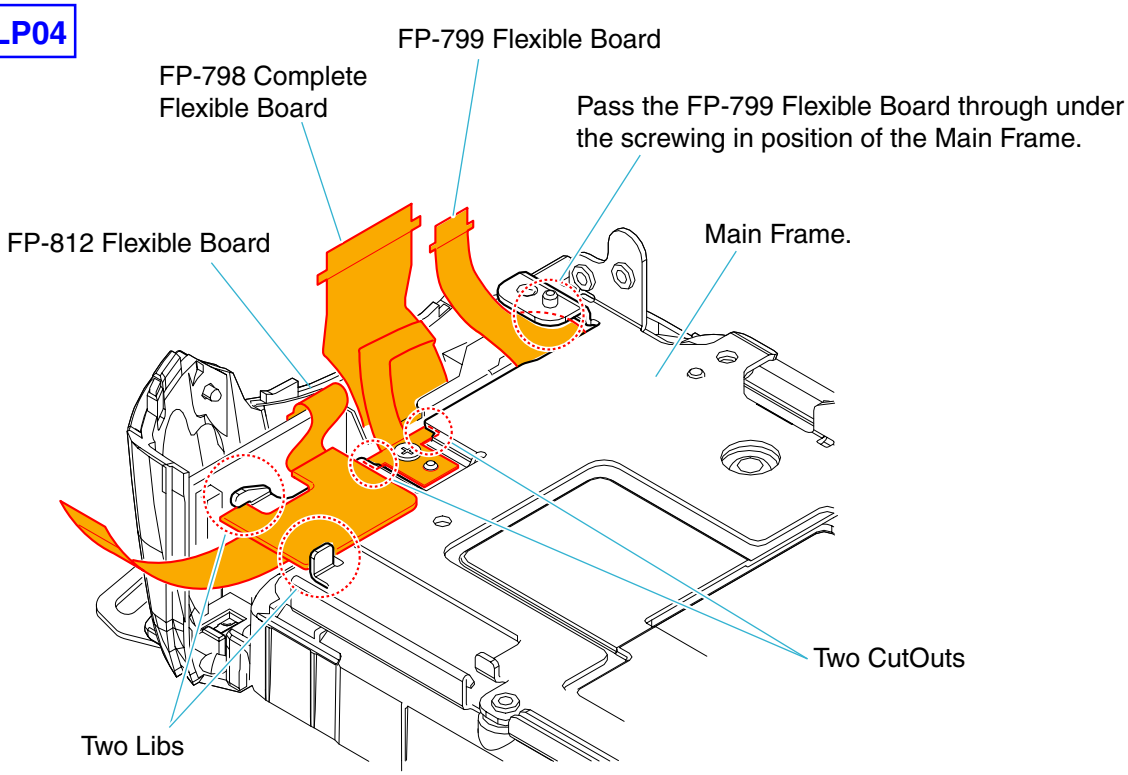
HELP02


DC Jack Harnesses
(to the Battery Terminal Board)
DC Jack Harnesses
(to the DC IN Jack)
Secure the space by arranging DC Jack Harness
as shown in the figure.
BT Harness Retainer
Insert the lib portion to
Main Frame.
BT Panel
(900) Assy
Claw
Open slightly
the BT Panel Block
Main Frame
DC Jack Harnesses
BT Harness Retainer
DC Jack Harnesses

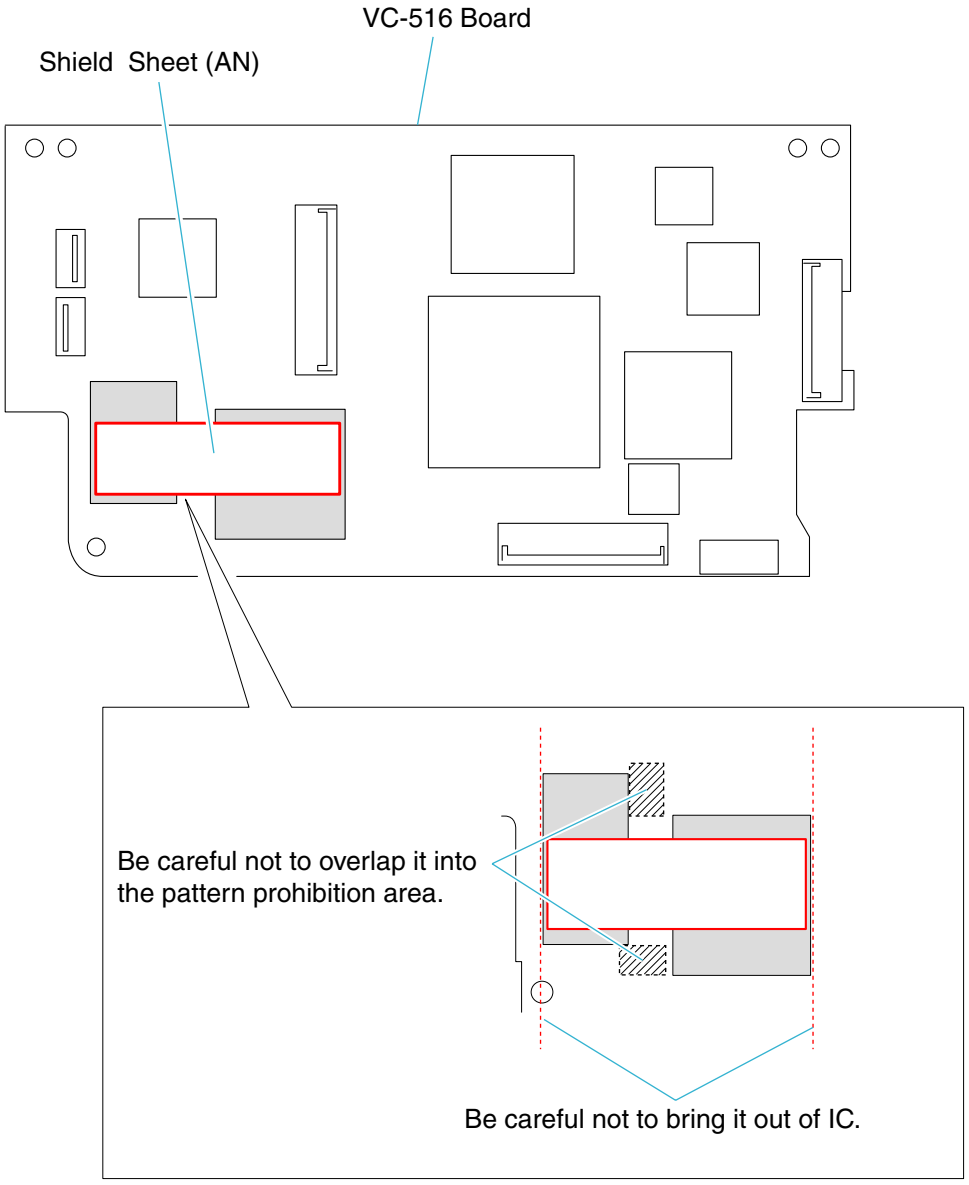
HELP03



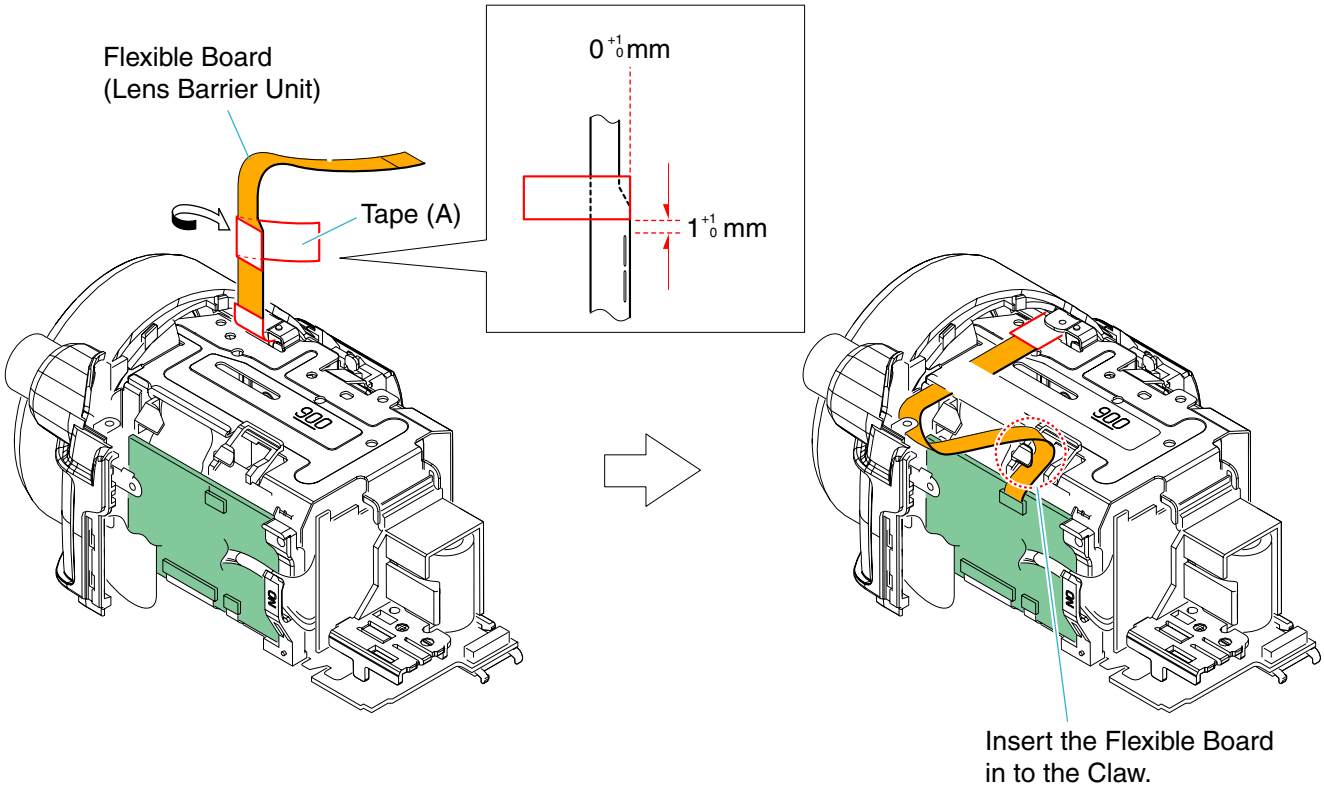
HELP04

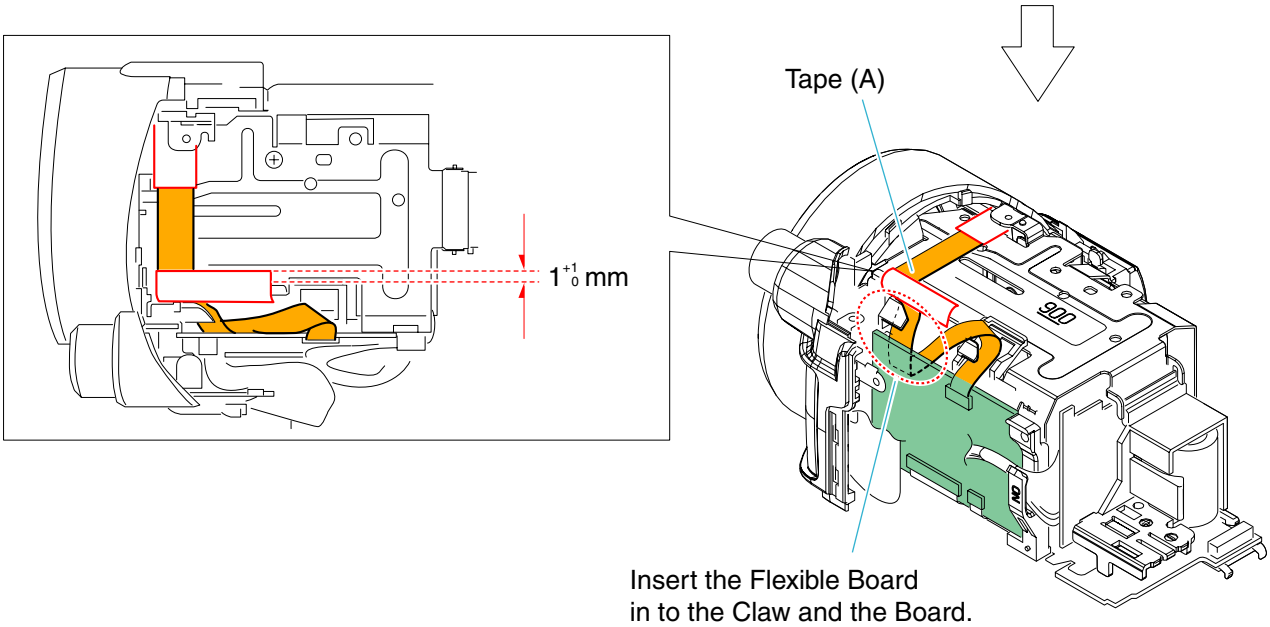


HELP05

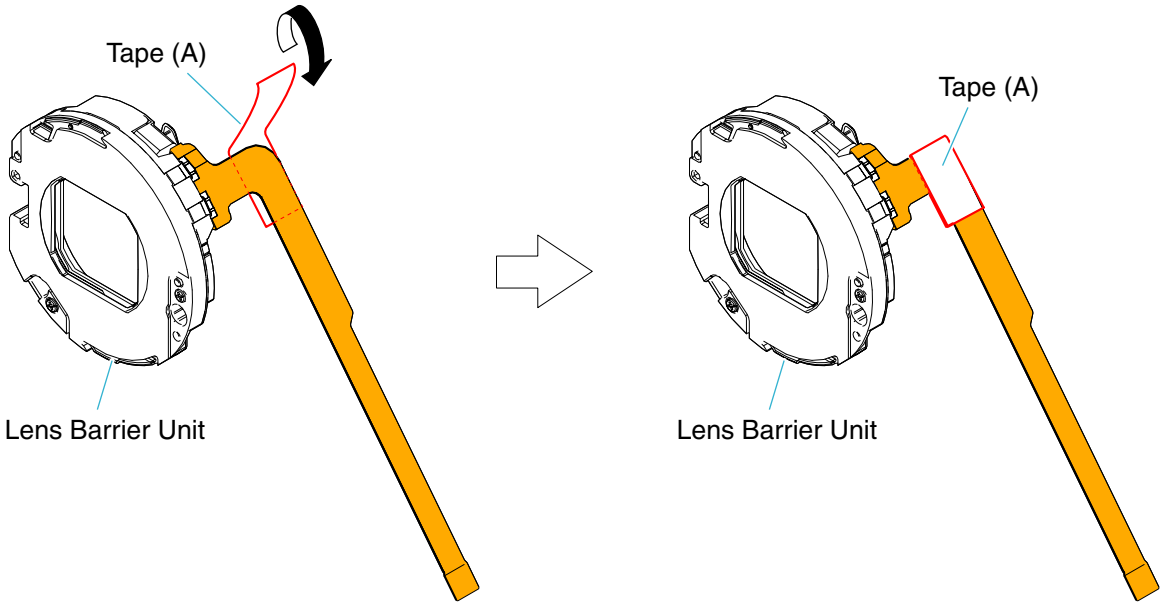

VC-516 Board
Shield Sheet (AN)
Be careful not to overlap it into the pattern prohibition area.
Be careful not to bring it out of IC.

HELP06

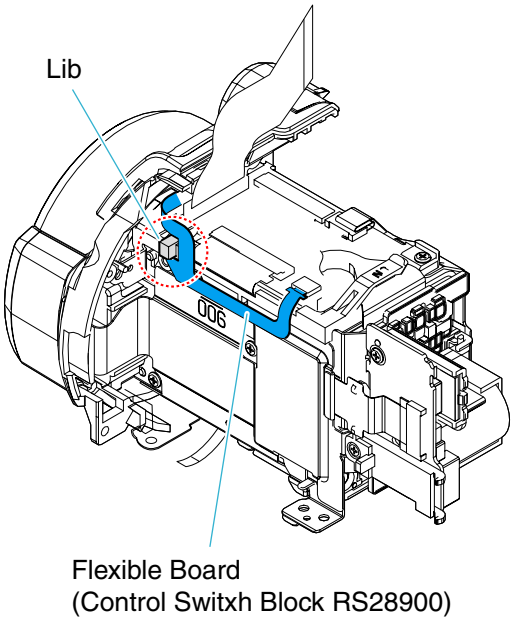

Flexible Board
(Lens Barrier Unit)
Tape (A)
0 +1 0 mm
1 +1 0 mm
Insert the Flexible Board
in to the Claw.


1 +1 0 mm
Tape (A)
Insert the Flexible Board
in to the Claw and the Board.

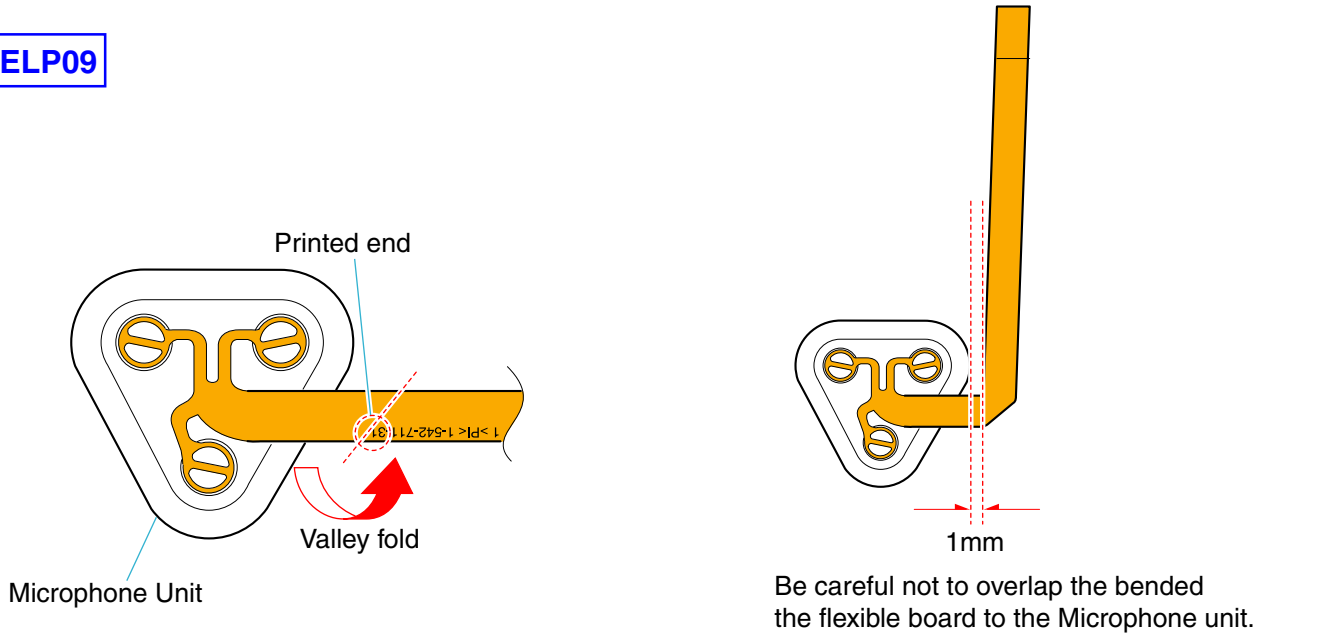
HELP07



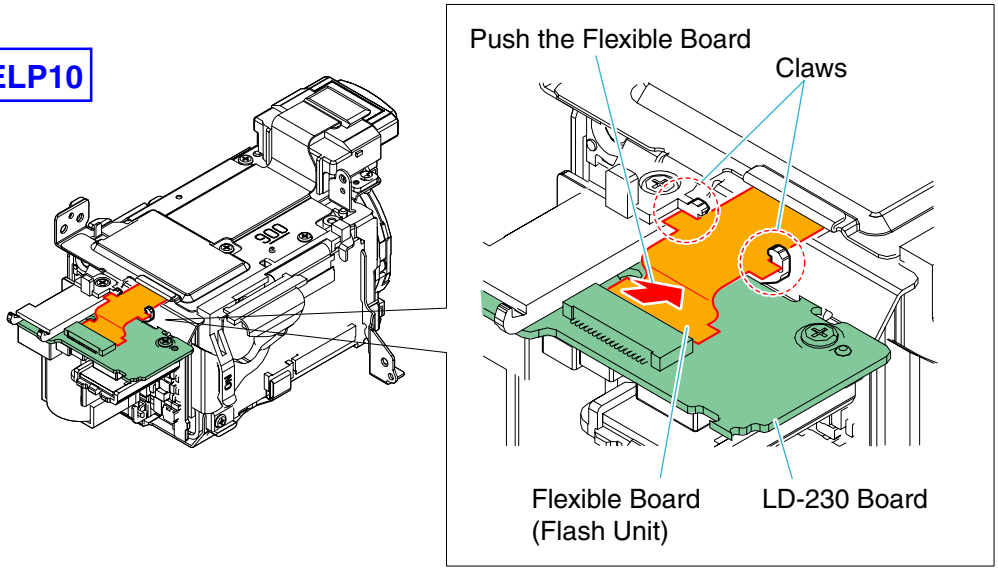
HELP08



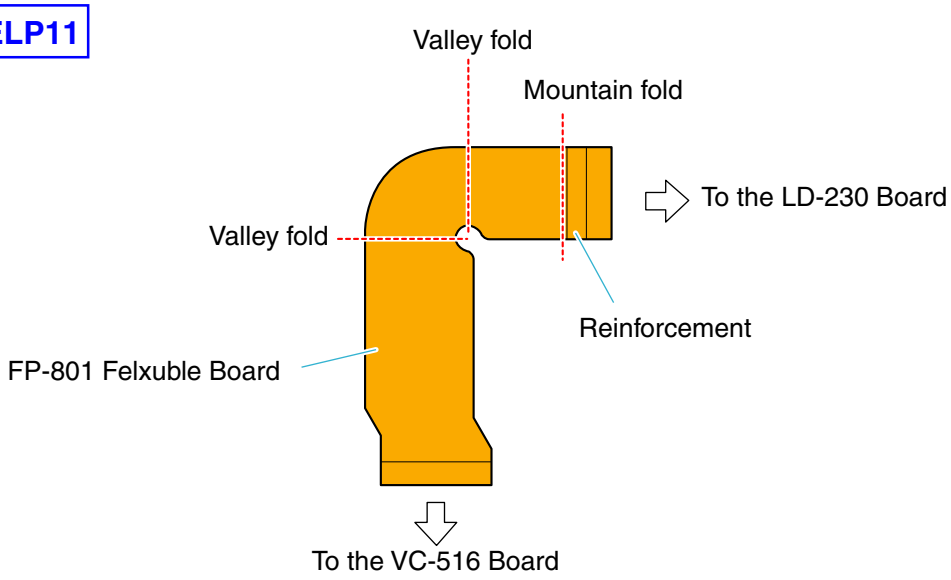
HELP09



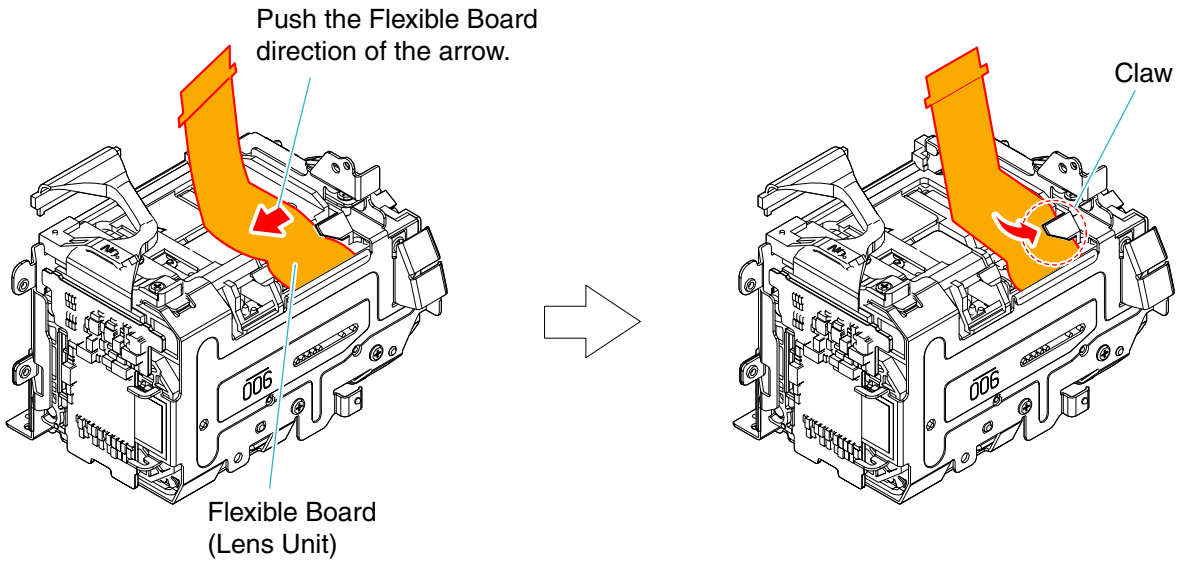
HELP10



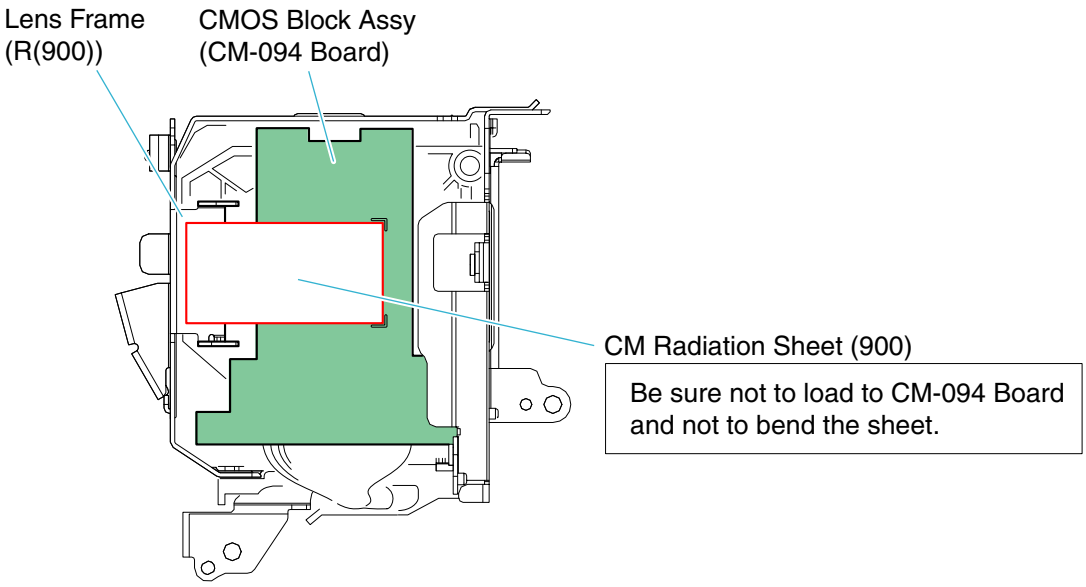
HELP11



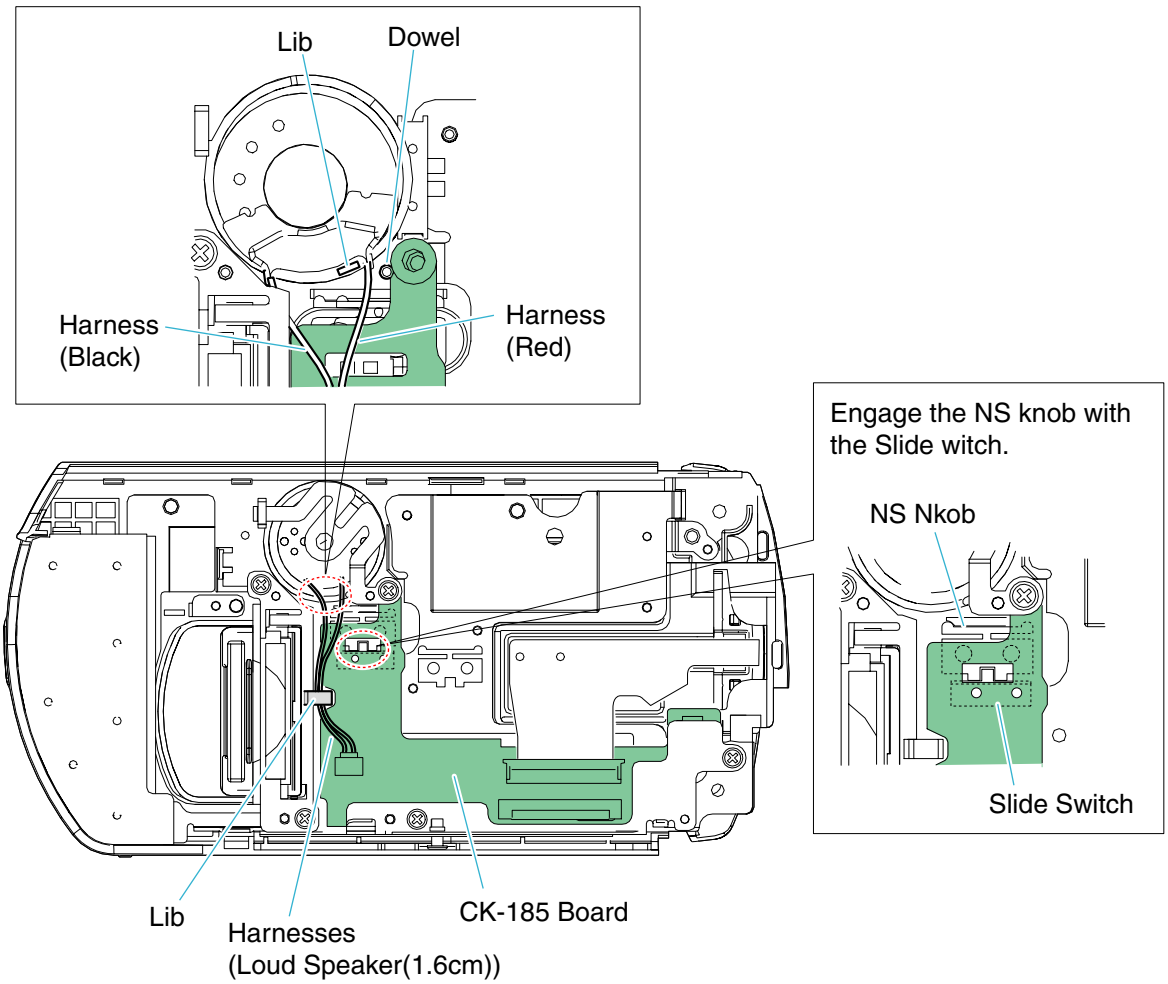
HELP12



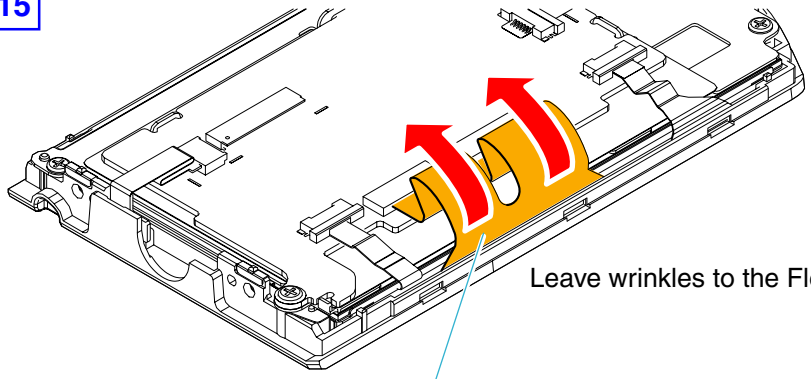
HELP13



HELP14



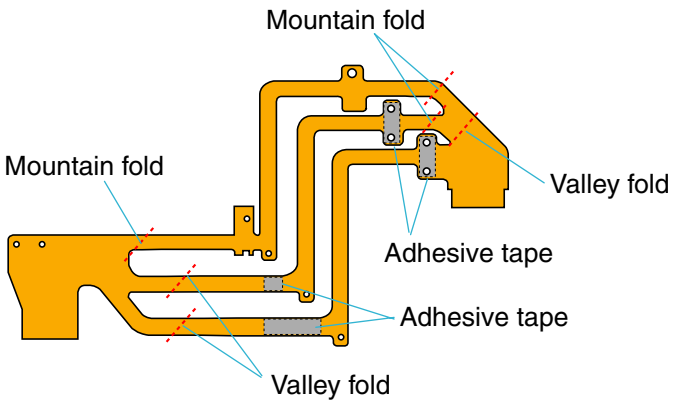
HELP15

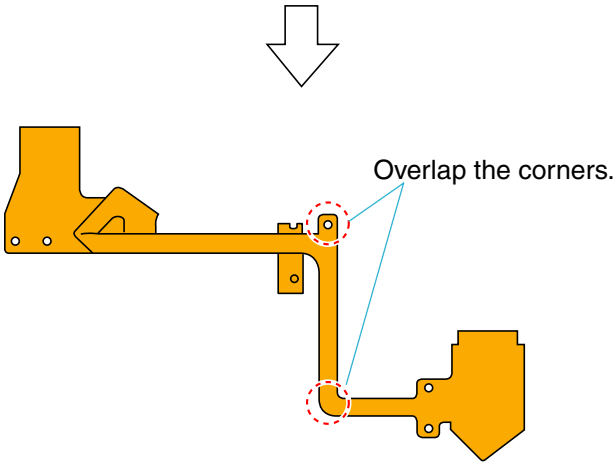

Leave wrinkles to the Flexible Board.
Flexible Board
(TP Block Assy)

HELP16

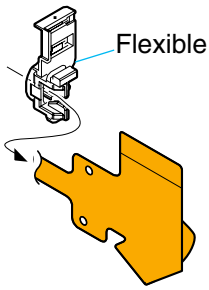
THE METHOD OF ATTACHMENT OF FP-807 FLEXIBLE BOARD AND FP-454 FLEXIBLE BOARD

① Fold dotted line parts of the FP-807 flexible board as shown in figure.

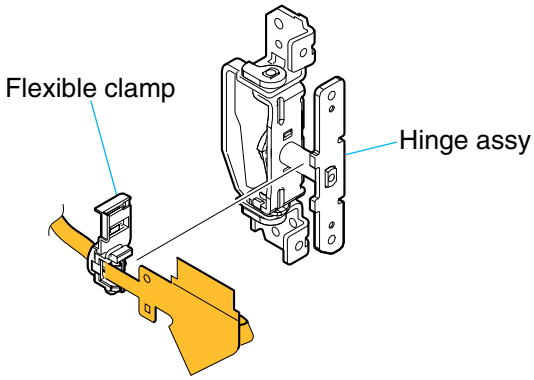




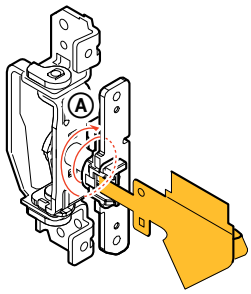
② Pass the FP-807 flexible board through the flexible clamp



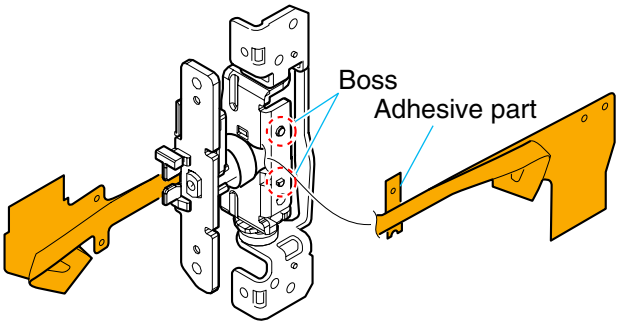
③ Install the flexible clamp in the hinge assy.



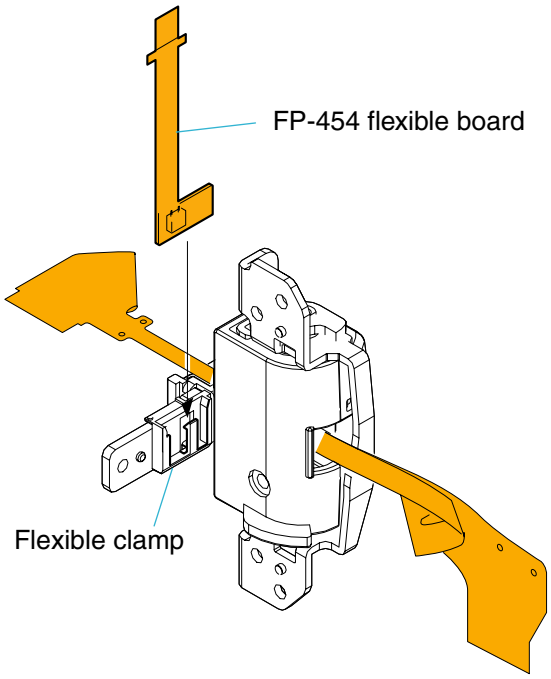
④ Roll the the FP-807 flexible board 1.5 times, in the direction of arrow Ⓐ.



⑤ Put the adhesive part and FP-807 flexible board on the hinge assy according to the position of the boss.



⑥ Insert the FP-454 flexible board to the flexible clamp as shown in figure.



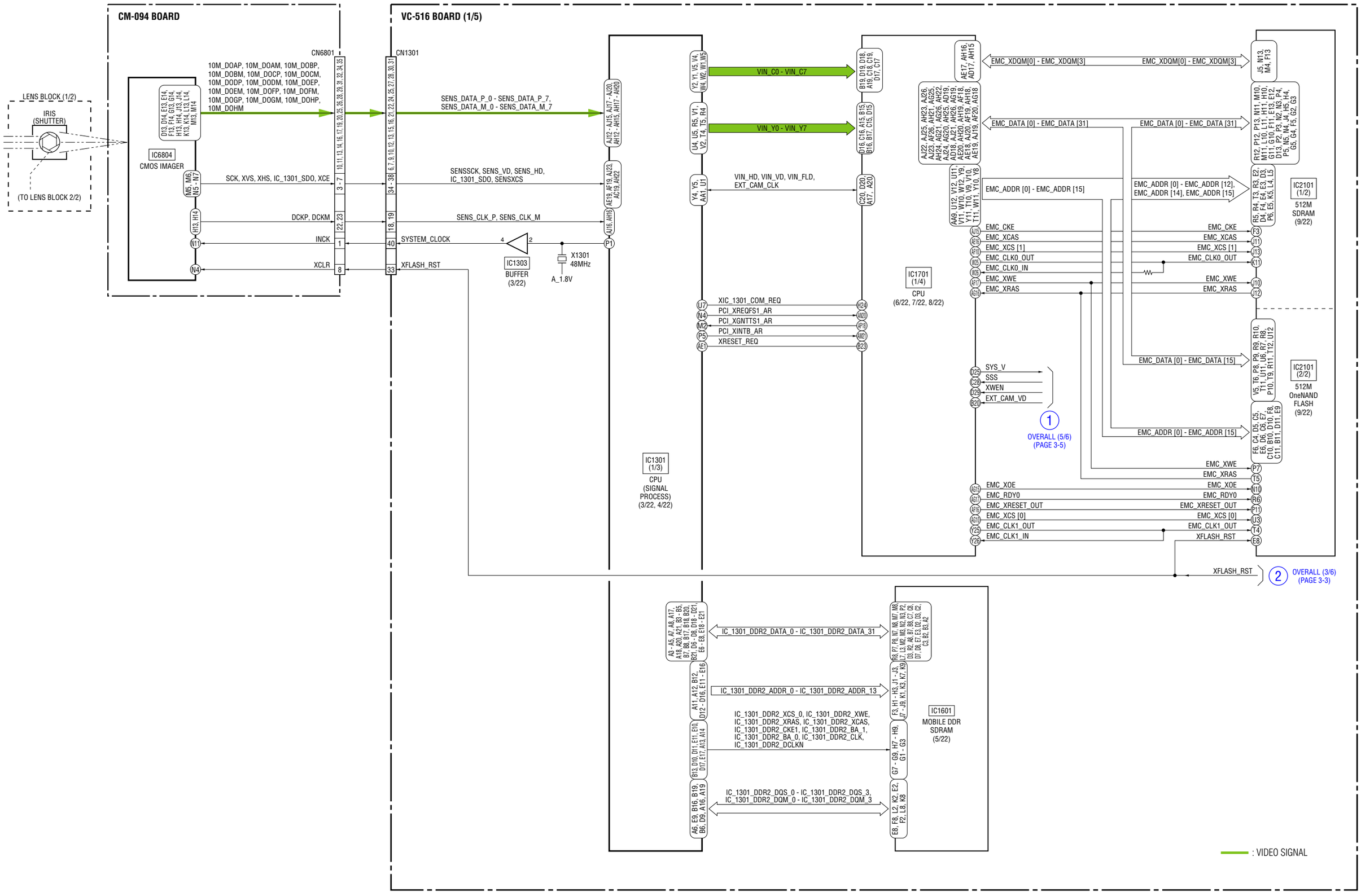
3. BLOCK DIAGRAMS

Link

3. BLOCK DIAGRAMS

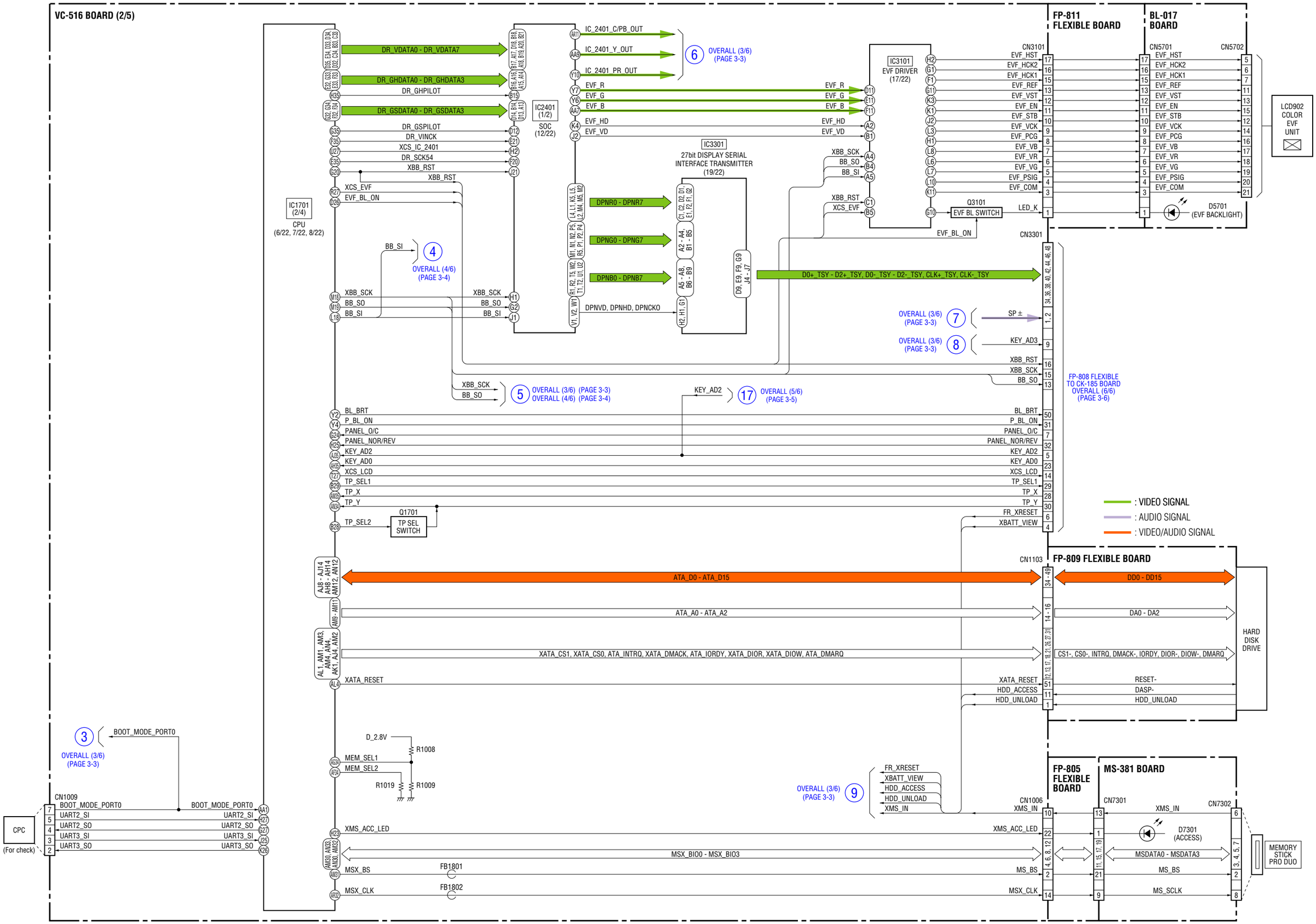
3-1. OVERALL BLOCK DIAGRAM (1/6)

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



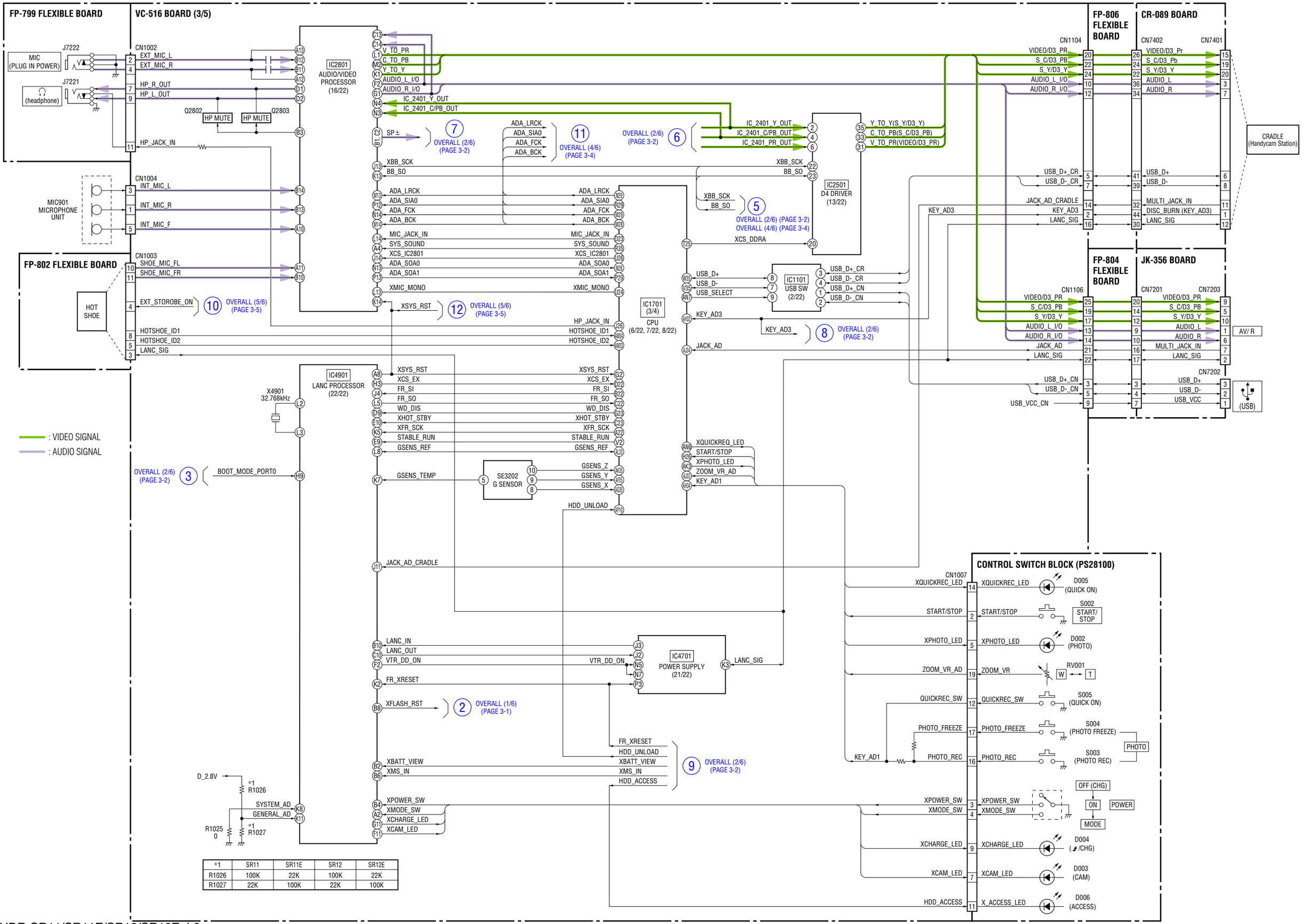
3-2. OVERALL BLOCK DIAGRAM (2/6)

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



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

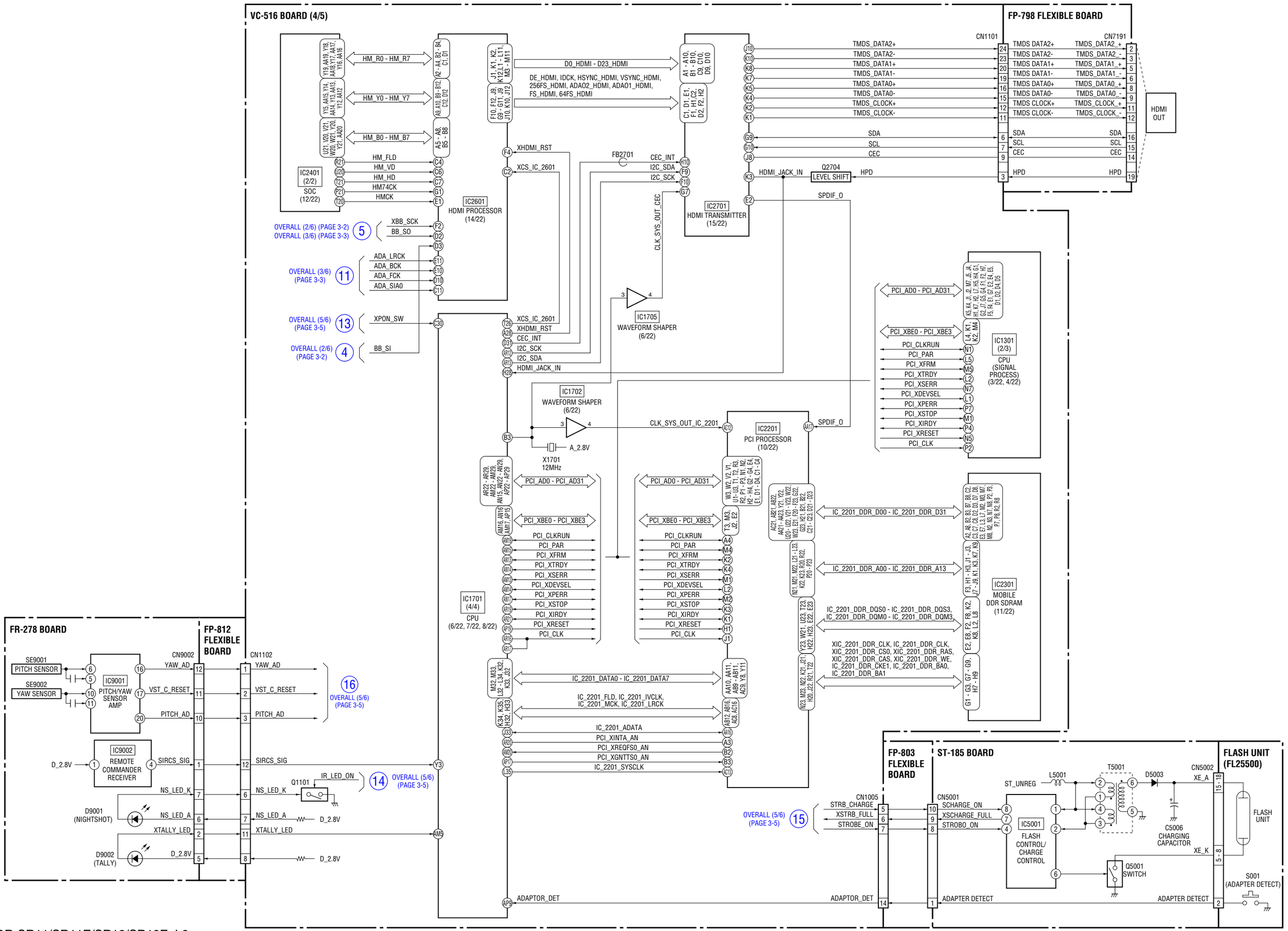
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



*1	SR11	SR11E	SR12	SR12E
R1026	100K	22K	100K	22K
R1027	22K	100K	22K	100K

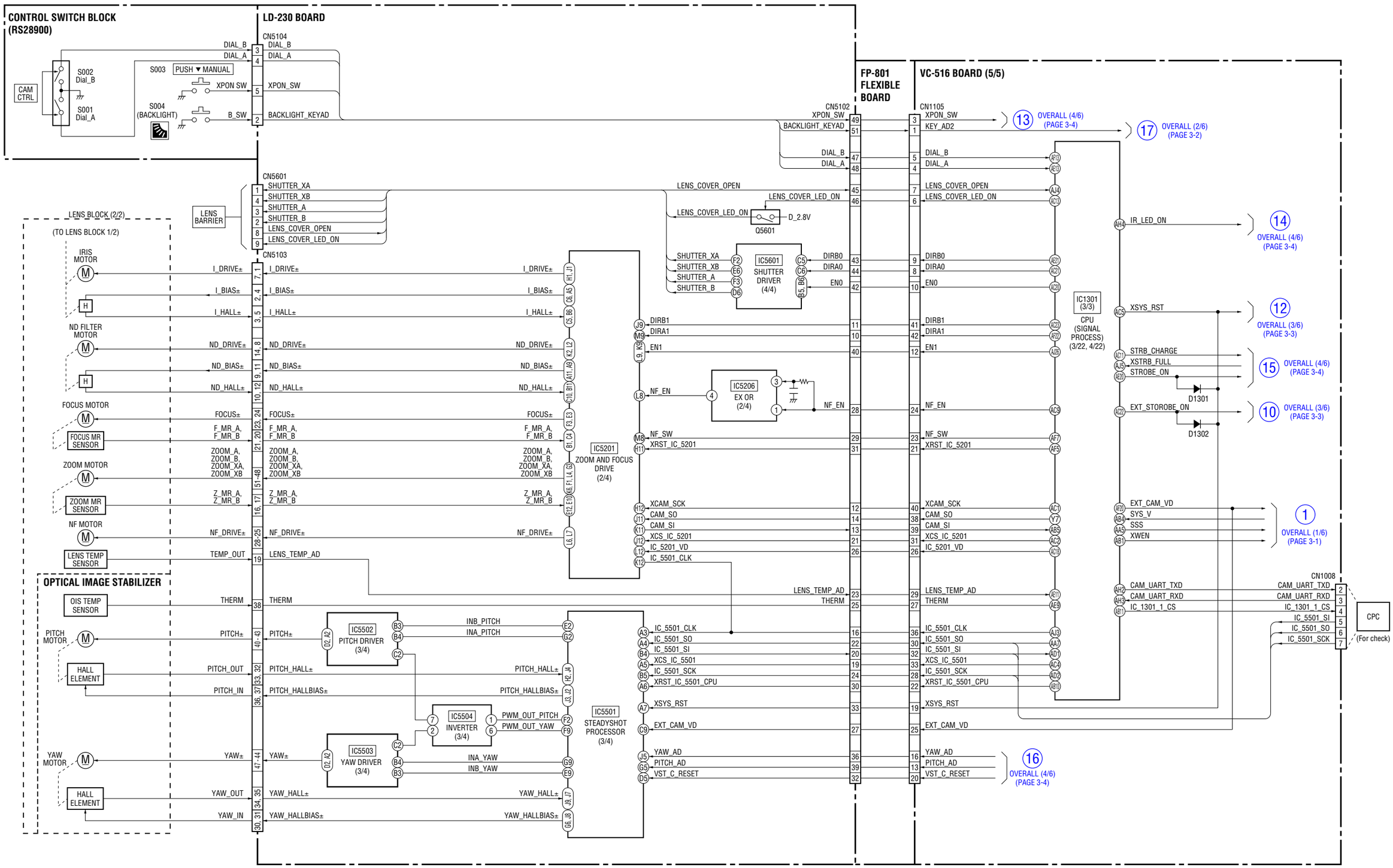
3-4. OVERALL BLOCK DIAGRAM (4/6)

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



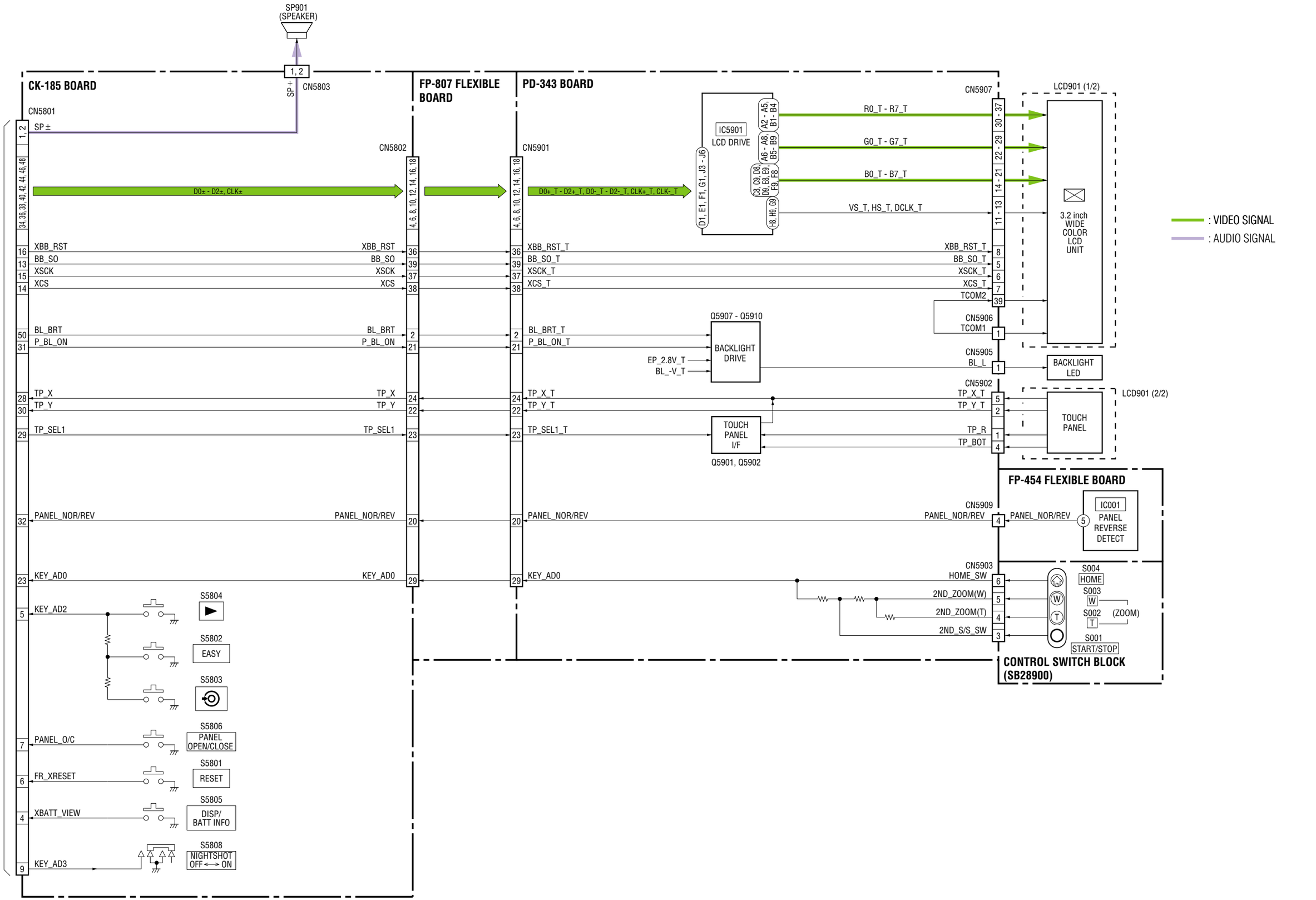
3-5. OVERALL BLOCK DIAGRAM (5/6)

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



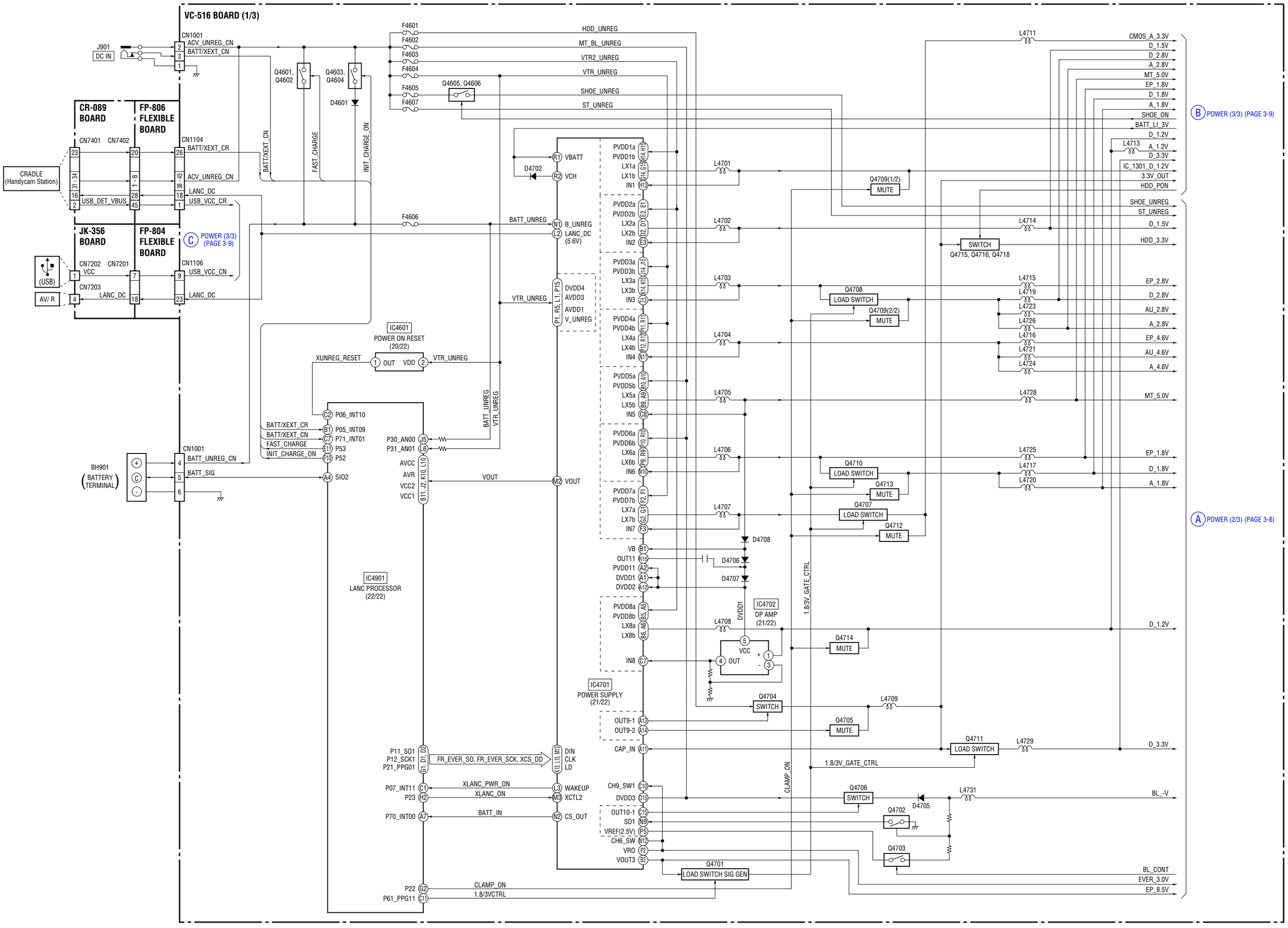
3-6. OVERALL BLOCK DIAGRAM (6/6)

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



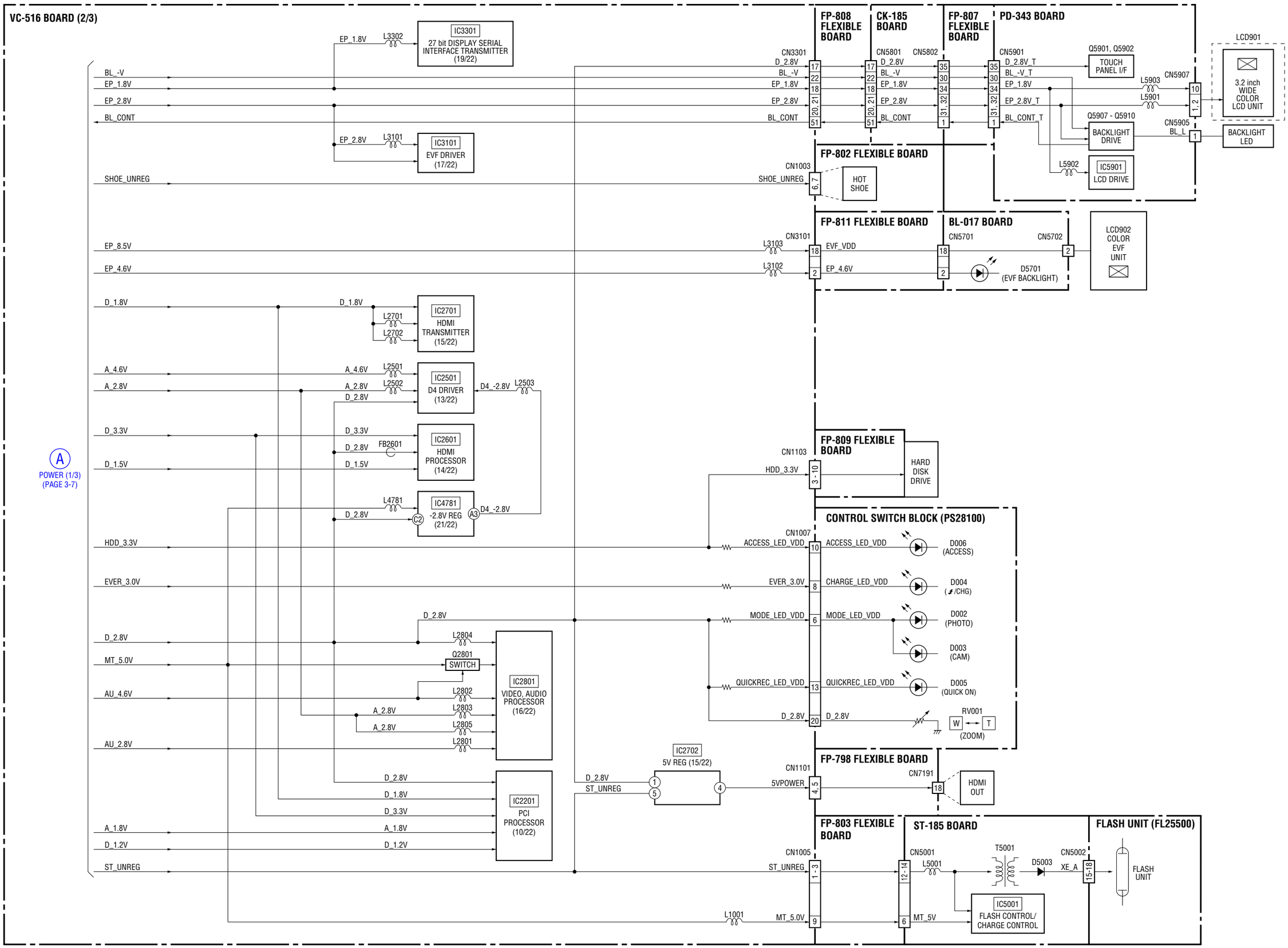
3-7. POWER BLOCK DIAGRAM (1/3)

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



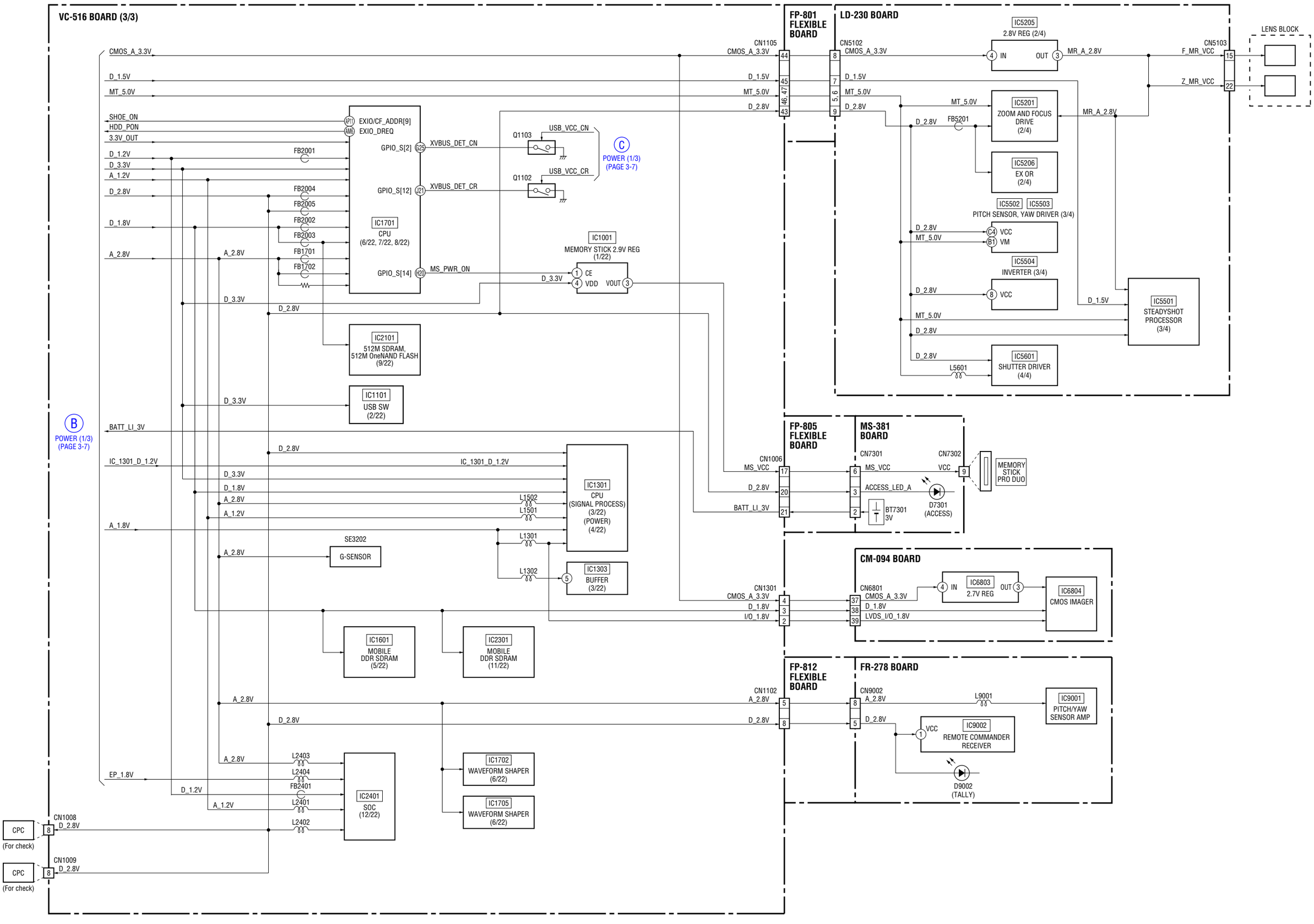
3-8. POWER BLOCK DIAGRAM (2/3)

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



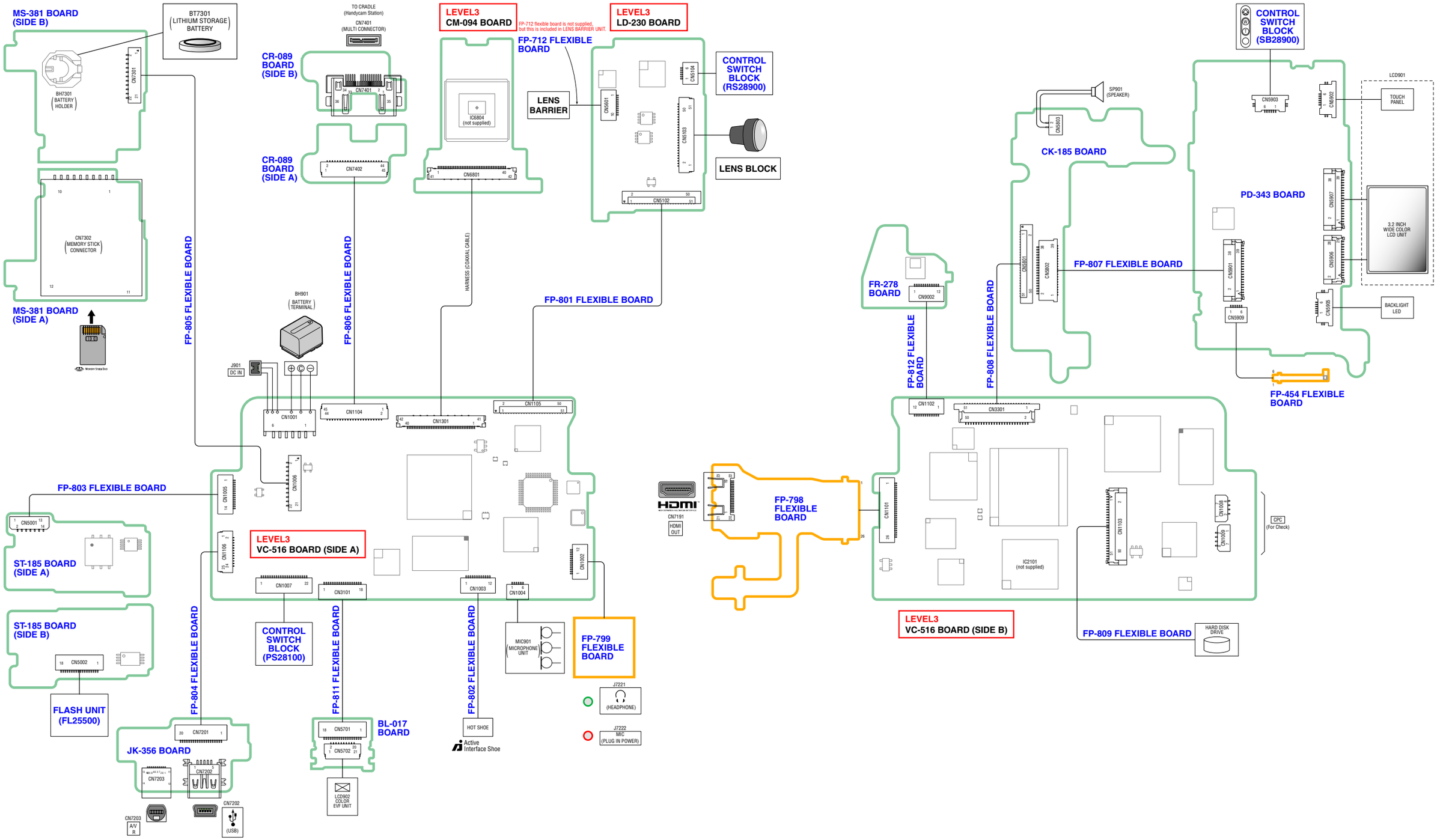
3-9. POWER BLOCK DIAGRAM (3/3)

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



4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



4-2. SCHEMATIC DIAGRAMS

Link

4-2. SCHEMATIC DIAGRAMS (ENGLISH)

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

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μμF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

  Example C541 22U TA A — Kinds of capacitor / Case size
  L452 10UH 2520 — External dimensions (mm)
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination.
  Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+,–) B LINE.
- : adjustment for repair.
- : not use circuit

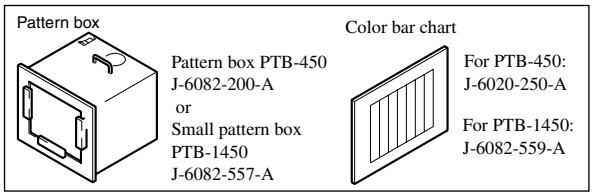
(Measuring conditions voltage and waveform)

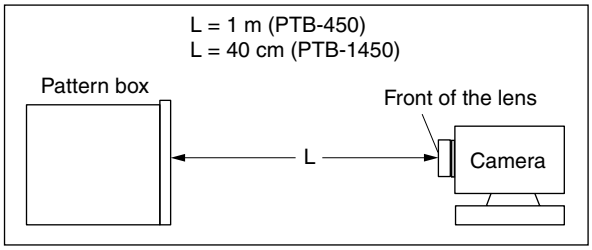
- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
  (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

Precautions for Replacement of Imager

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

1. Connection





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

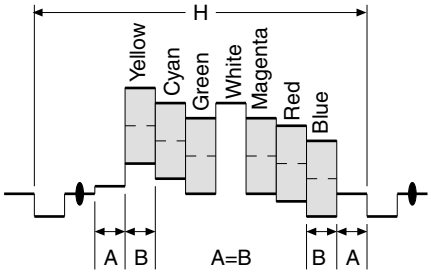


Fig. a (Video output terminal output waveform)

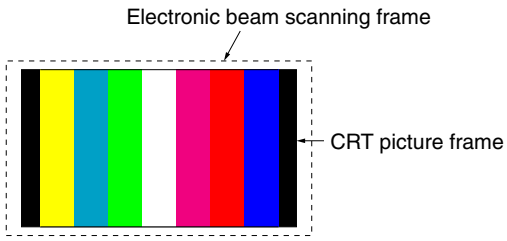


Fig.b (Picture on monitor TV)

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

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 spécifie.

(JAPANESE)

回路図共通ノート
（他に必要なノートは各ブロックに記載してあります）
【回路図ノート】

- ケミコン，タンタルを除くコンデンサで，耐圧50V以下のものはその耐圧を省略。単位はすべてμF（pはpF）。
- チップ抵抗で指示のないものは，1／10W以下。
  kΩ＝1000Ω，MΩ＝1000kΩ
- チップ部品交換時の注意
  取り外した部品は再使用せず，未使用の部品をご使用ください。
  タンタルコンデンサのマイナス側は熱に弱いため注意してください。
- チップ部品には下記のように表示したものがあります。

例	C 541	L 452
	22U	10UH
	TA　A	2520
	↑　↑	↑
	種類　ケースサイズ	外形寸法（mm）

- 抵抗，コンデンサ，ICなど定数にXXがあるものは，使用していない事を示しています。このため，使用していない回路が記載されている事があります。
- ★印のある部品は，機種などにより異なりますので機能別マウント一覧表を参照してください。
- 可変抵抗と半固定抵抗で，B特性の表示を省略。
- 信号名表記について，下記のような場合があります。
  XEDIT → $\overline{\text{EDIT}}$　　PB/XREC → PB/$\overline{\text{REC}}$
- は不燃性抵抗。
- はヒューズ抵抗。
- はパネル表示名称。
- はB＋ライン。
- はB－ライン。
- はBライン（＋，－）の入出力方向を示す。
- は調整名称。
- は未使用回路。

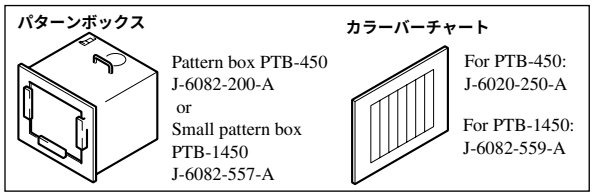
【電圧・波形測定条件ノート】

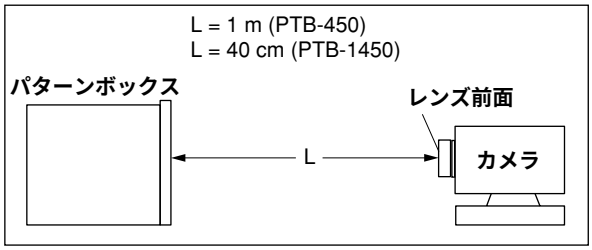
- 電圧値及び信号波形はパターンボックスのカラーバーチャートを被写体としたときの測定点対アース間の参考値。
  （デジタルマルチメータ；入力インピーダンス　DC10MΩ使用）
- 使用テスタの入力インピーダンスにより電圧値が多少異なります。

イメージャ交換時の注意

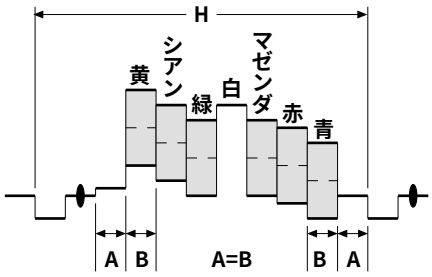
- イメージャを交換した場合は，カメラ部の全調整を行ってください。
- イメージャは構造上，静電気により破壊される恐れがあるため，MOS ICと同様に注意して取り扱ってください。
  また，受光部にはゴミの付着，および強い光がはいることのないように注意してください。

1. 接続図

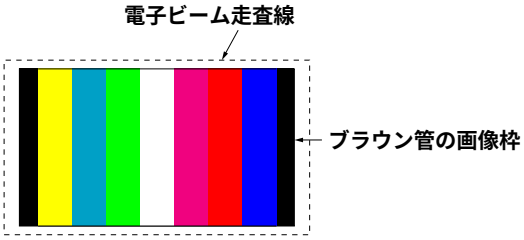




2. 図a及び図bの波形が得られるように画枠調整して下さい。



図a（映像入出力端子出力波形）

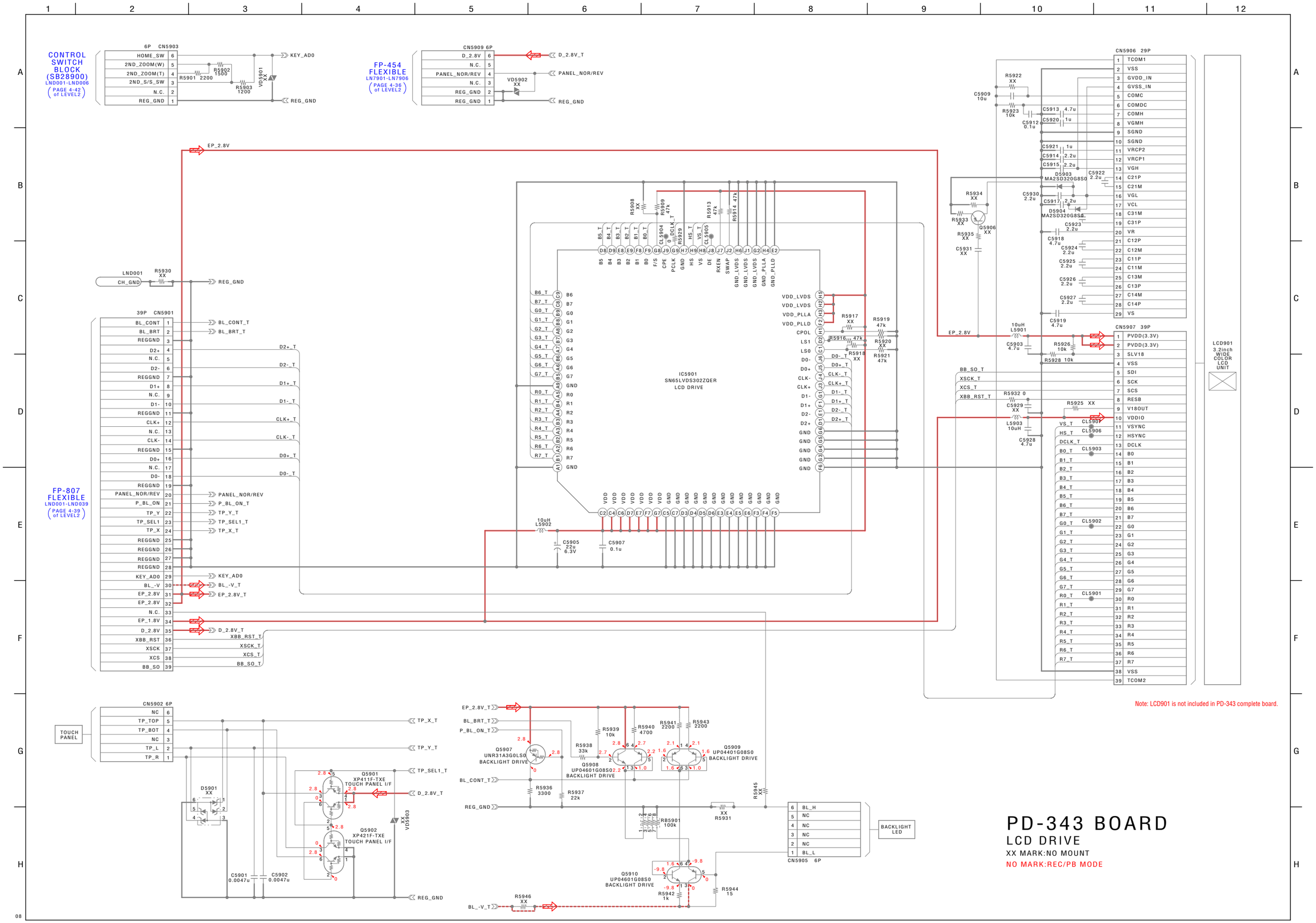


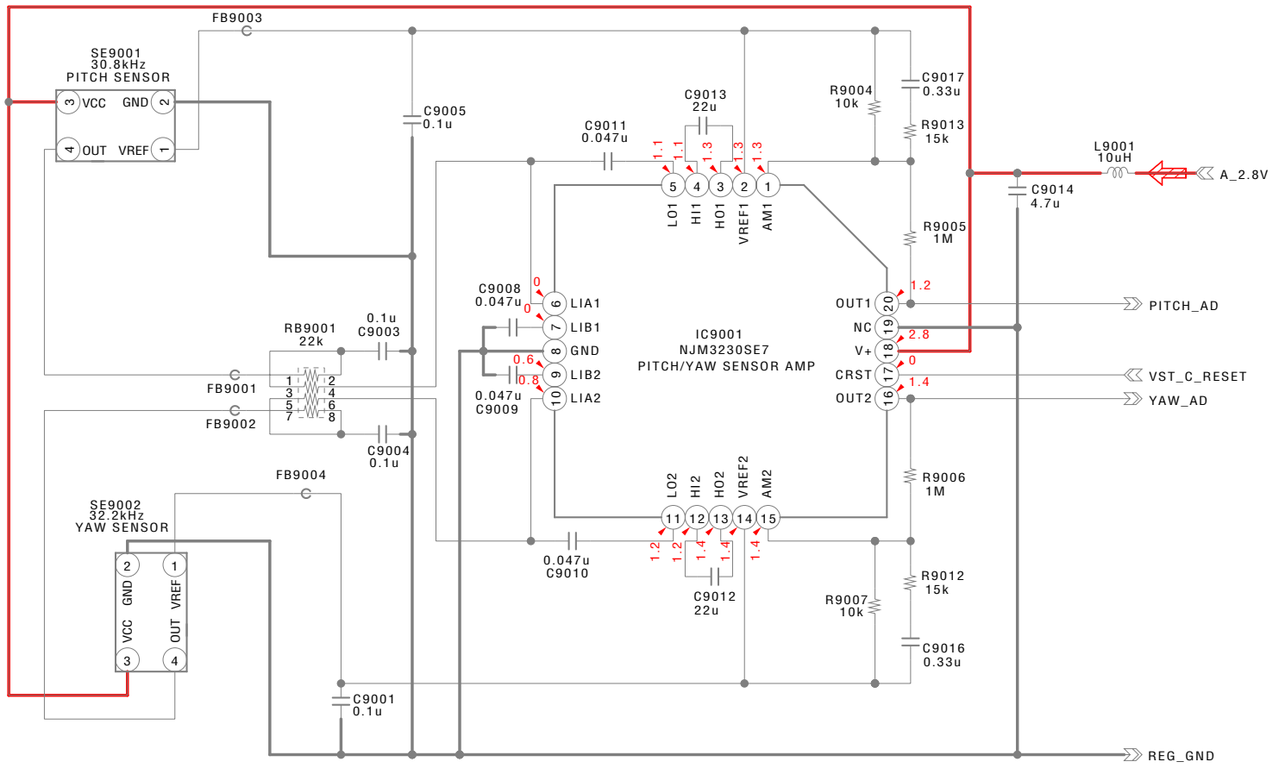
図b（テレビモニタの映像）

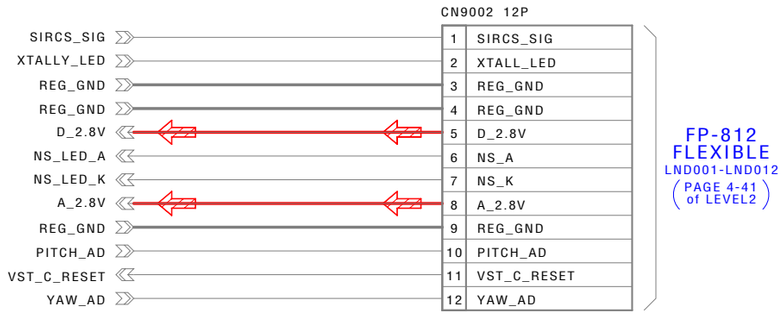
⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

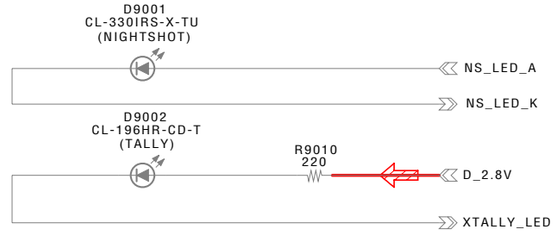
お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定して下さい。

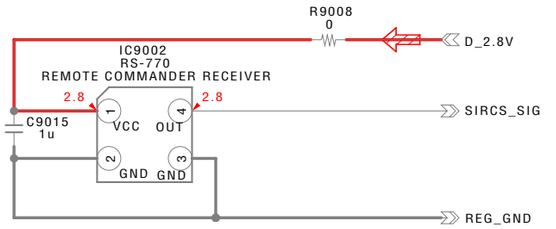
Schematic diagrams of the CM-094, VC-516 and LD-230 boards are not shown.
Pages 4-4 to 4-30 are not shown.


CONTROL SWITCH BLOCK (SB28900)
LND001-LND006
PAGE 4-42 of LEVEL2
6P CN5903
HOME_SW 6
2ND_ZOOM(W) 5
2ND_ZOOM(T) 4
2ND_S/S_SW 3
N.C. 2
REG_GND 1
R5901 2200
R5902 1500
R5903 1200
VD5901 XX
KEY_AD0
REG_GND
FP-454 FLEXIBLE
LN7901-LN7906
PAGE 4-36 of LEVEL2
CN5909 6P
D_2.8V 6
N.C. 5
PANEL_NOR/REV 4
N.C. 3
REG_GND 2
REG_GND 1
VD5902 XX
D_2.8V_T
PANEL_NOR/REV
REG_GND
FP-807 FLEXIBLE
LND001-LND039
PAGE 4-39 of LEVEL2
EP_2.8V
LND001
CH_GND
R5930 XX
REG_GND
39P CN5901
BL_CONT 1
BL_BRT 2
REGGND 3
D2+ 4
N.C. 5
D2- 6
REGGND 7
D1+ 8
N.C. 9
D1- 10
REGGND 11
CLK+ 12
N.C. 13
CLK- 14
REGGND 15
D0+ 16
N.C. 17
D0- 18
REGGND 19
PANEL_NOR/REV 20
P_BL_ON 21
TP_Y 22
TP_SEL1 23
TP_X 24
REGGND 25
REGGND 26
REGGND 27
REGGND 28
KEY_AD0 29
BL_-V 30
EP_2.8V 31
EP_2.8V 32
N.C. 33
EP_1.8V 34
D_2.8V 35
XBB_RST 36
XSCK 37
XCS 38
BB_SO 39
BL_CONT_T
BL_BRT_T
D2+_T
D2-_T
D1+_T
D1-_T
CLK+_T
CLK-_T
D0+_T
D0-_T
PANEL_NOR/REV
P_BL_ON_T
TP_Y_T
TP_SEL1_T
TP_X_T
KEY_AD0
BL_-V_T
EP_2.8V_T
D_2.8V_T
XBB_RST_T
XSCK_T
XCS_T
BB_SO_T
IC5901
SN65LVDS302ZQER
LCD DRIVE
R5908 XX
R5909 47k
R5913 47k
R5914 47k
CL5904
CL5905
R5929
DCLK_T
HS_T
VS_T
B5_T
B4_T
B3_T
B2_T
B1_T
B0_T
B5
B4
B3
B2
B1
B0
F/S
CPE
PCLK
GND
HS
VS
DE
RXEN
SWAP
GND_LVDS
GND_LVDS
GND_LVDS
GND_PLLA
GND_PLLD
B6_T
B7_T
G0_T
G1_T
G2_T
G3_T
G4_T
G5_T
G6_T
G7_T
R0_T
R1_T
R2_T
R3_T
R4_T
R5_T
R6_T
R7_T
B6
B7
G0
G1
G2
G3
G4
G5
G6
G7
R0
R1
R2
R3
R4
R5
R6
R7
GND
VDD_LVDS
VDD_LVDS
VDD_PLLA
VDD_PLLD
CPOL
LS1
LS0
D0-
D0+
CLK-
CLK+
D1-
D1+
D2-
D2+
R5917 XX
R5919 47k
R5916 47k
R5920 XX
R5918 XX
R5921 47k
D0-_T
D0+_T
CLK-_T
CLK+_T
D1-_T
D1+_T
D2-_T
D2+_T
VDD
GND
10uH L5902
C5905 22u 6.3V
C5907 0.1u
CN5906 29P
TCOM1
VSS
GVDD_IN
GVSS_IN
COMC
COMDC
COMH
VGMH
SGND
SGND
VRCP2
VRCP1
VGH
C21P
C21M
VGL
VCL
C31M
C31P
VR
C12P
C12M
C11P
C11M
C13M
C13P
C14M
C14P
VS
R5922 XX
C5909 10u
R5923 10k
C5913 4.7u
C5920 1u
C5912 0.1u
C5921 1u
C5914 2.2u
C5915 2.2u
D5903 MA2SD320G8S0
C5922 2.2u
C5930 2.2u
C5917 2.2u
D5904 MA2SD320G8S0
C5923 2.2u
C5918 4.7u
C5924 2.2u
C5925 2.2u
C5926 2.2u
C5927 2.2u
C5919 4.7u
R5934 XX
R5933 XX
Q5906 XX
R5935 XX
C5931 XX
CN5907 39P
PVDD(3.3V)
PVDD(3.3V)
SLV18
VSS
SDI
SCK
SCS
RESB
V18OUT
VDDIO
VSYNC
HSYNC
DCLK
B0
B1
B2
B3
B4
B5
B6
B7
G0
G1
G2
G3
G4
G5
G6
G7
R0
R1
R2
R3
R4
R5
R6
R7
VSS
TCOM2
10uH L5901
C5903 4.7u
R5926 10k
R5928 10k
BB_SO_T
XSCK_T
XCS_T
XBB_RST_T
R5932 0
C5929 XX
L5903 10uH
C5928 4.7u
R5925 XX
CL5907
CL5906
CL5903
CL5902
CL5901
LCD901 3.2inch WIDE COLOR LCD UNIT
Note: LCD901 is not included in PD-343 complete board.
CN5902 6P
NC 6
TP_TOP 5
TP_BOT 4
NC 3
TP_L 2
TP_R 1
TOUCH PANEL
TP_X_T
TP_Y_T
TP_SEL1_T
D_2.8V_T
REG_GND
D5901 XX
Q5901 XP411F-TXE TOUCH PANEL I/F
Q5902 XP421F-TXE TOUCH PANEL I/F
VD5903 XX
C5901 0.0047u
C5902 0.0047u
EP_2.8V_T
BL_BRT_T
P_BL_ON_T
BL_CONT_T
REG_GND
BL_-V_T
Q5907 UNR31A3G0LS0 BACKLIGHT DRIVE
Q5908 UP04601G08S0 BACKLIGHT DRIVE
Q5909 UP04401G08S0 BACKLIGHT DRIVE
Q5910 UP04601G08S0 BACKLIGHT DRIVE
R5939 10k
R5940 4700
R5941 2200
R5943 2200
R5938 33k
R5936 3300
R5937 22k
R5945 XX
RB5901 100k
XX R5931
R5946 XX
R5942 1k
R5944 15
6 BL_H
5 NC
4 NC
3 NC
2 NC
1 BL_L
CN5905 6P
BACKLIGHT LED
PD-343 BOARD
LCD DRIVE
XX MARK:NO MOUNT
NO MARK:REC/PB MODE







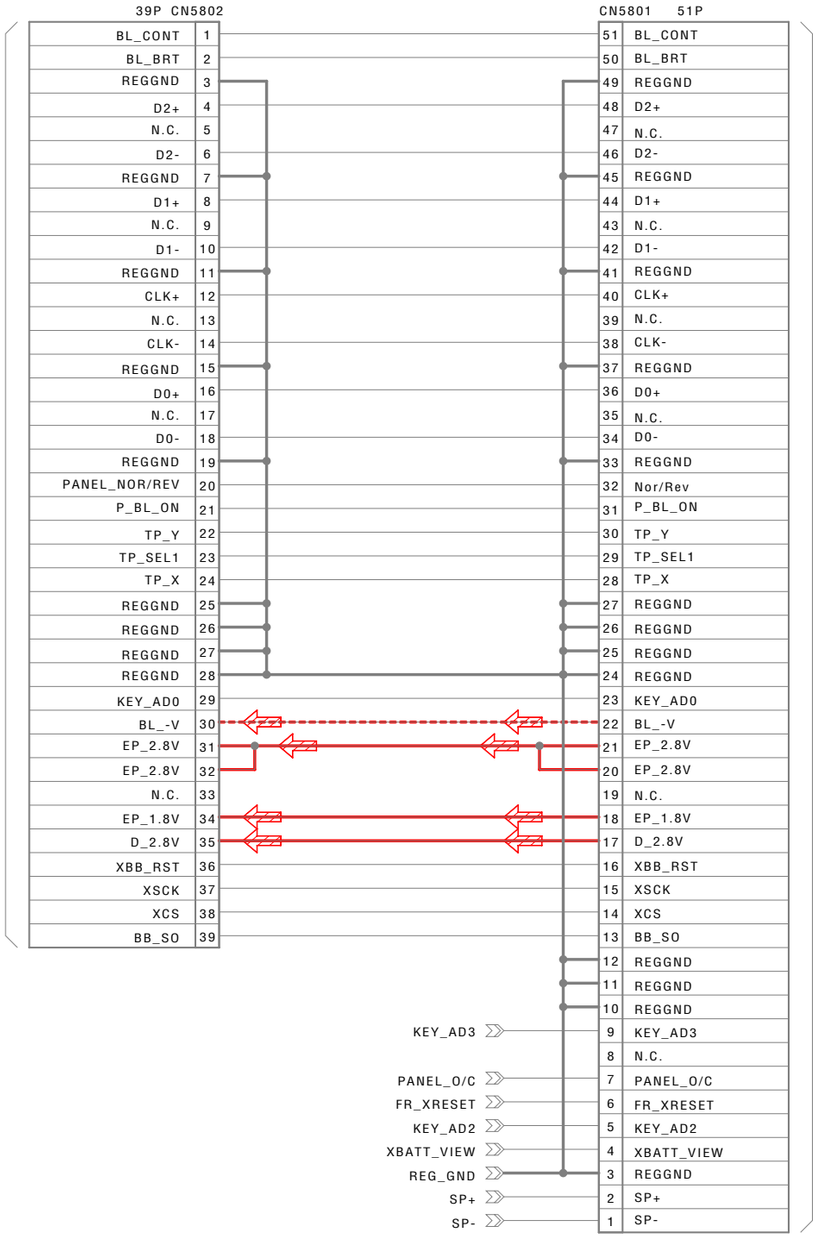


FR-278 BOARD

PITCH/YAW SENSOR AMP, REMOTE COMMANDER RECEIVER

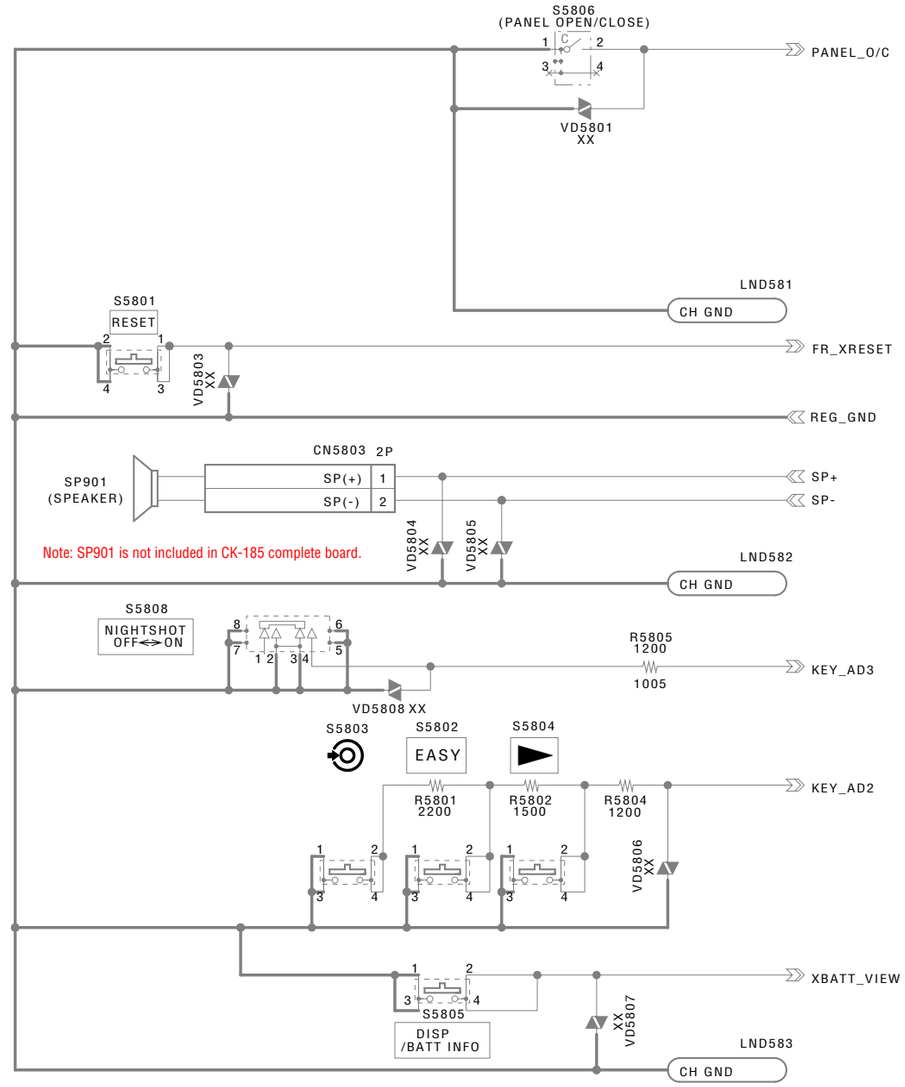
XX MARK:NO MOUNT

NO MARK:REC/PB MODE



FP-807
FLEXIBLE
LND040-LND078
(PAGE 4-39 of LEVEL2)

FP-808
FLEXIBLE
LND091-LND141
(PAGE 4-41 of LEVEL2)

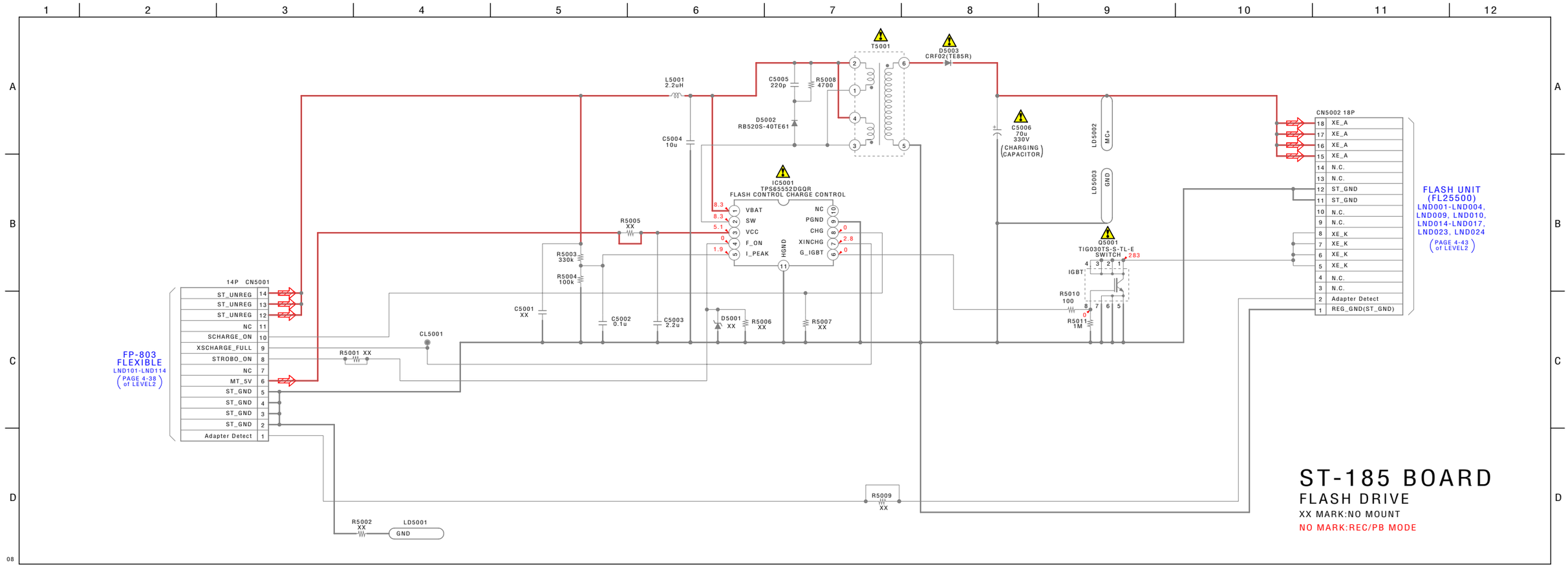


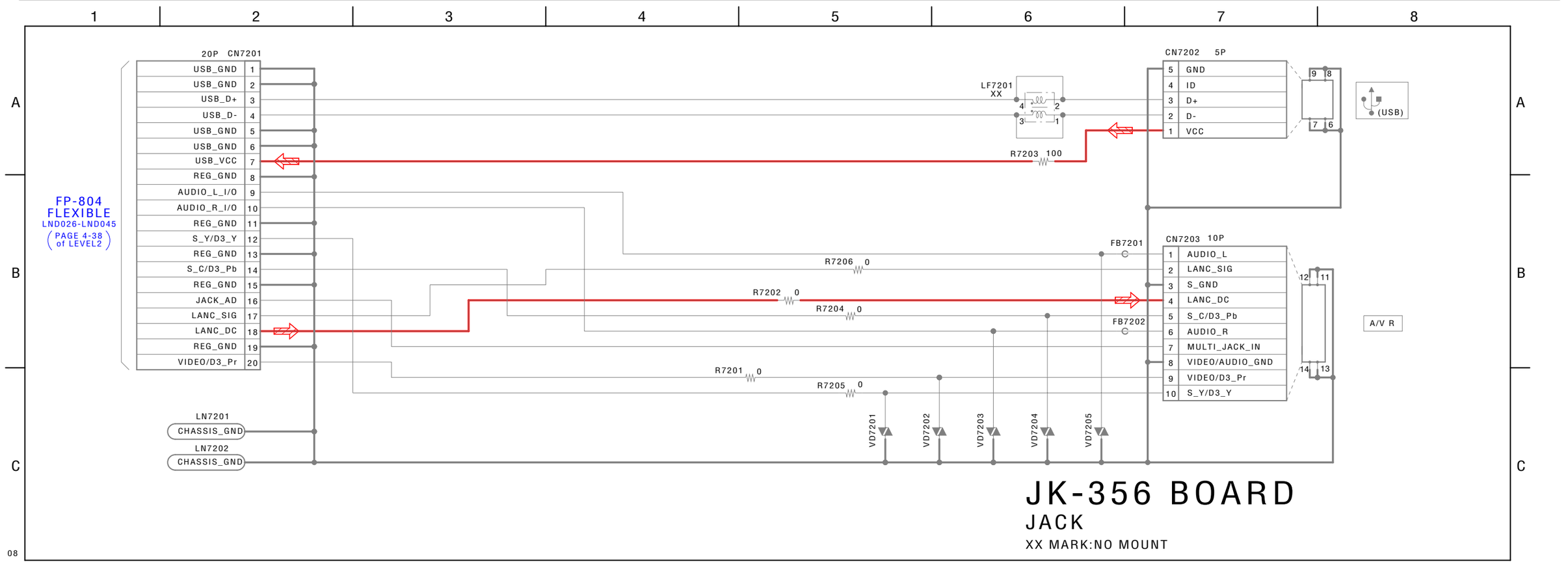
CK-185 BOARD

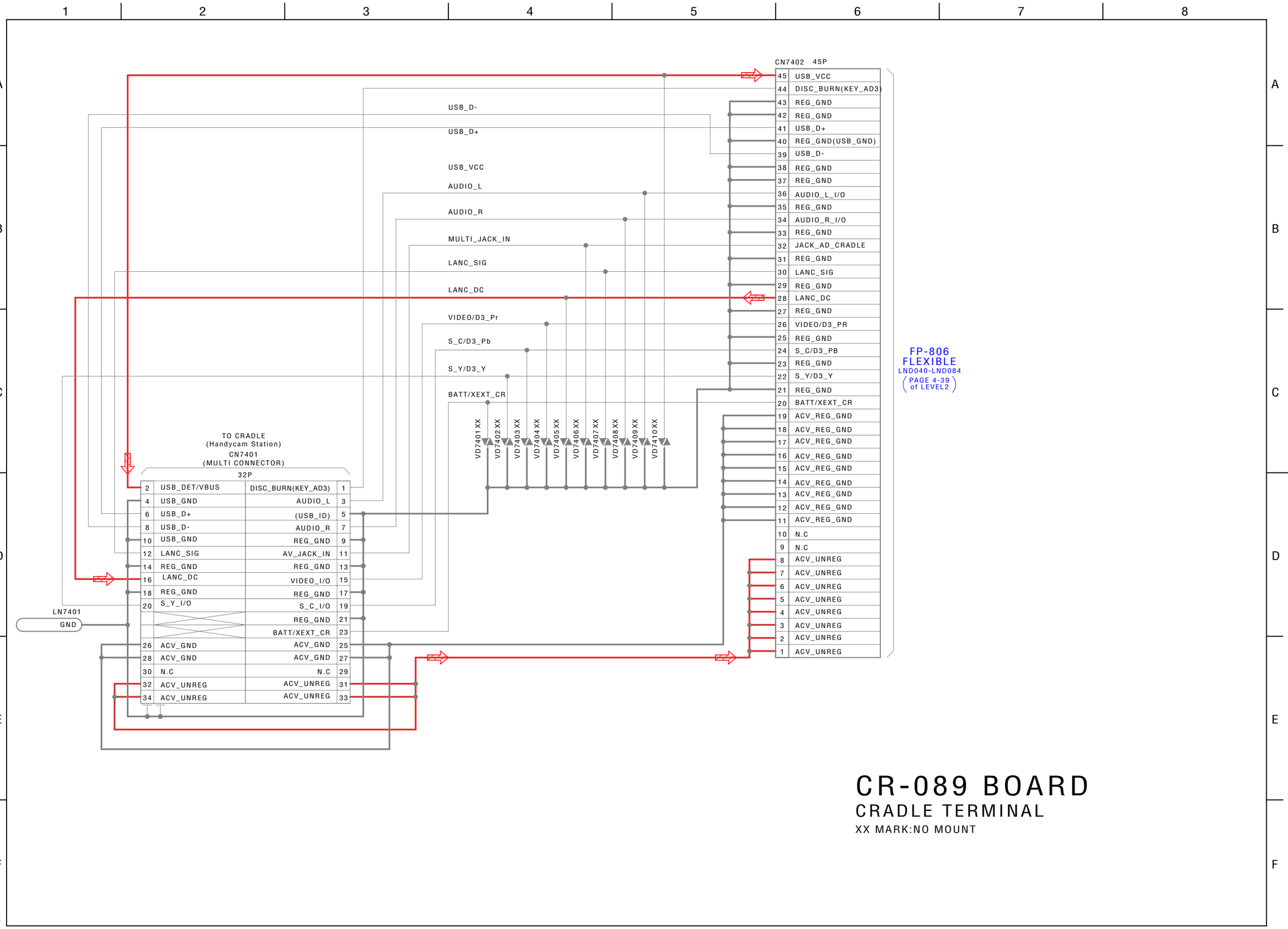
CONTROL SWITCH

XX MARK:NO MOUNT

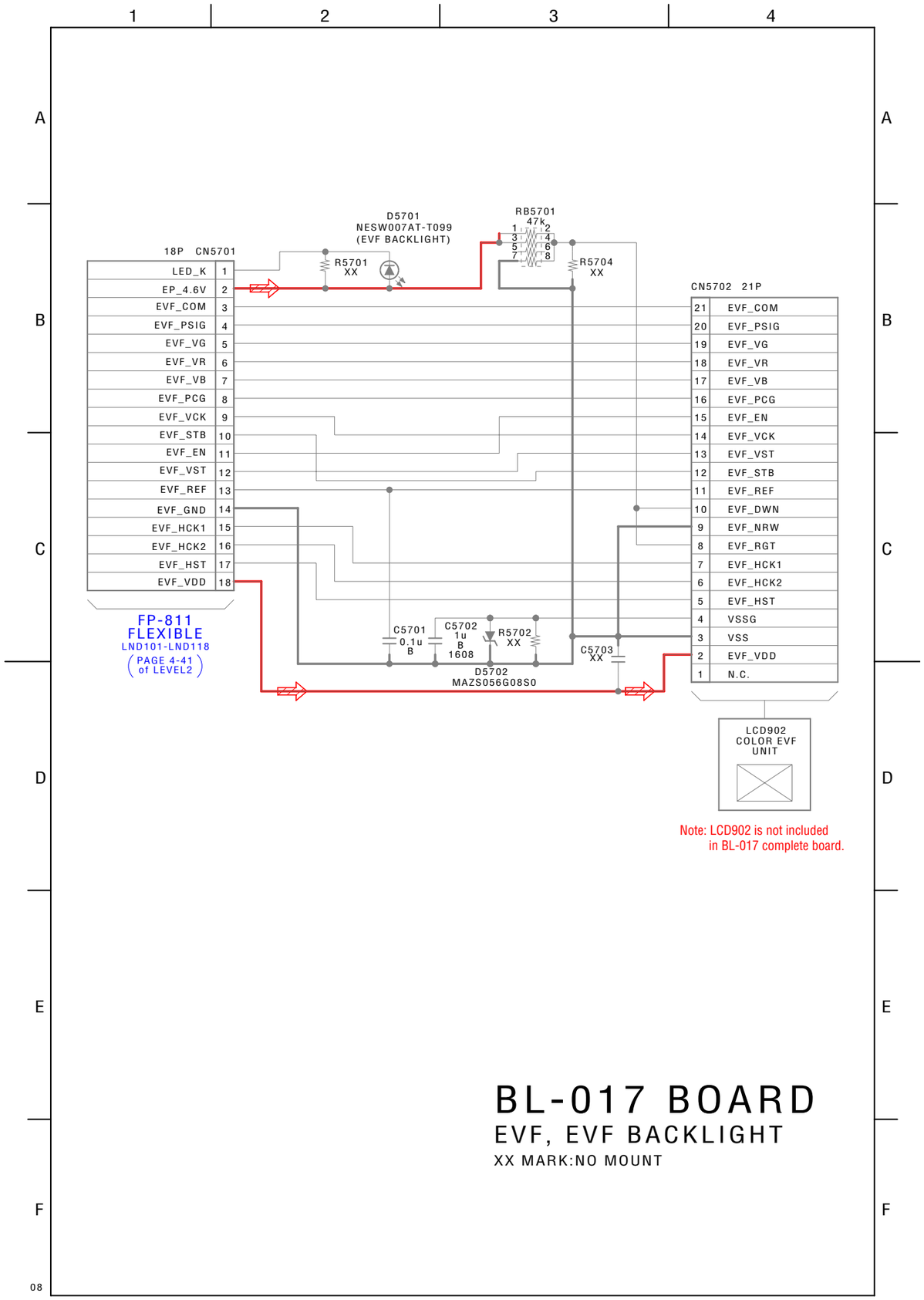
• Refer to page 4-2 (English), 4-3 (Japanese) for mark ⚠.

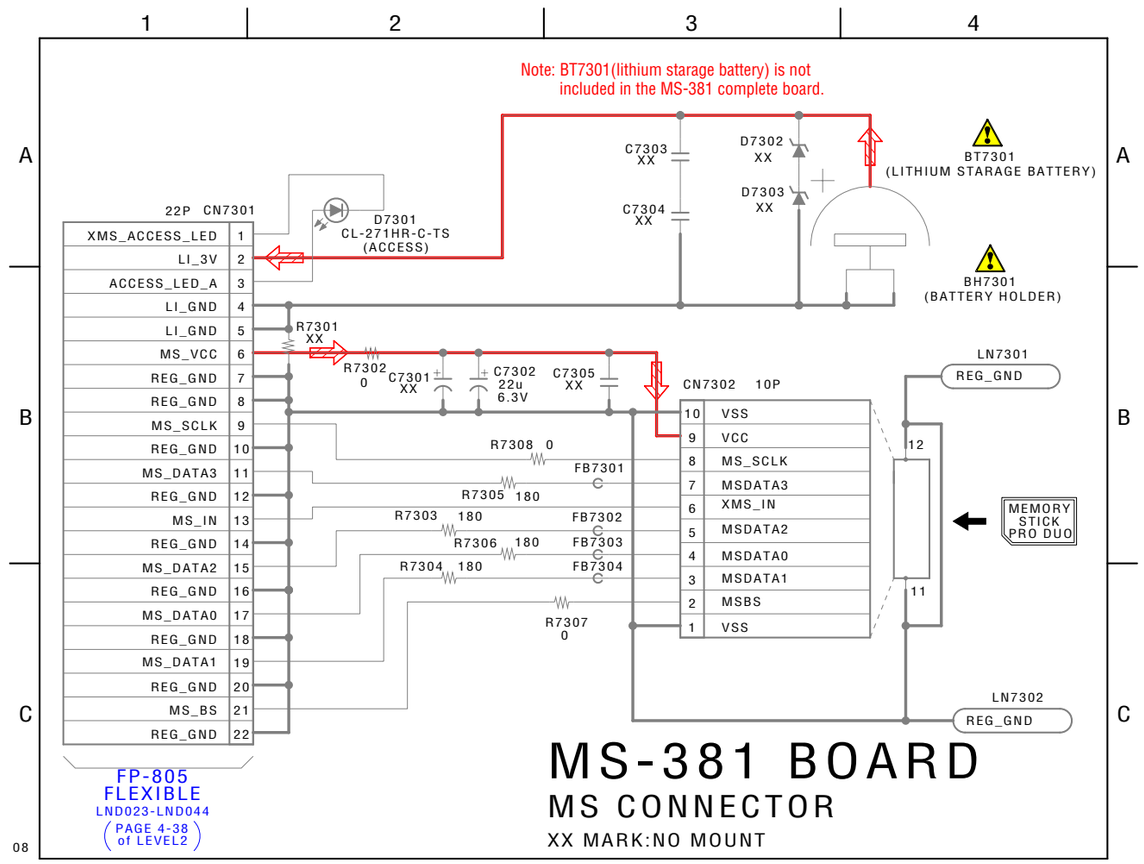


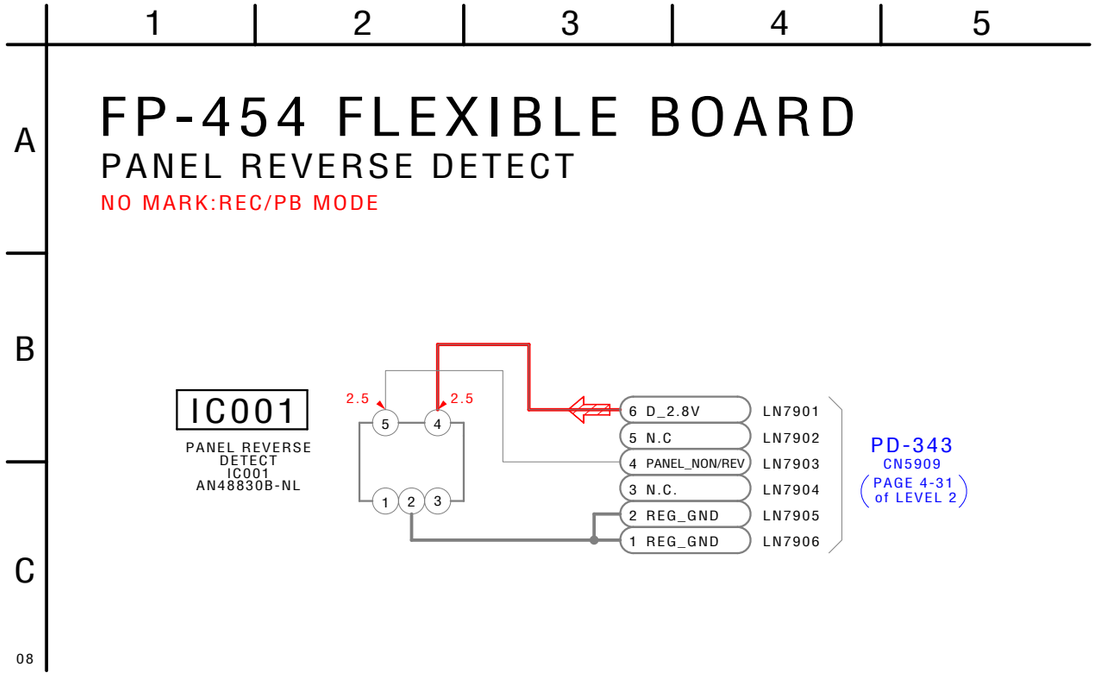


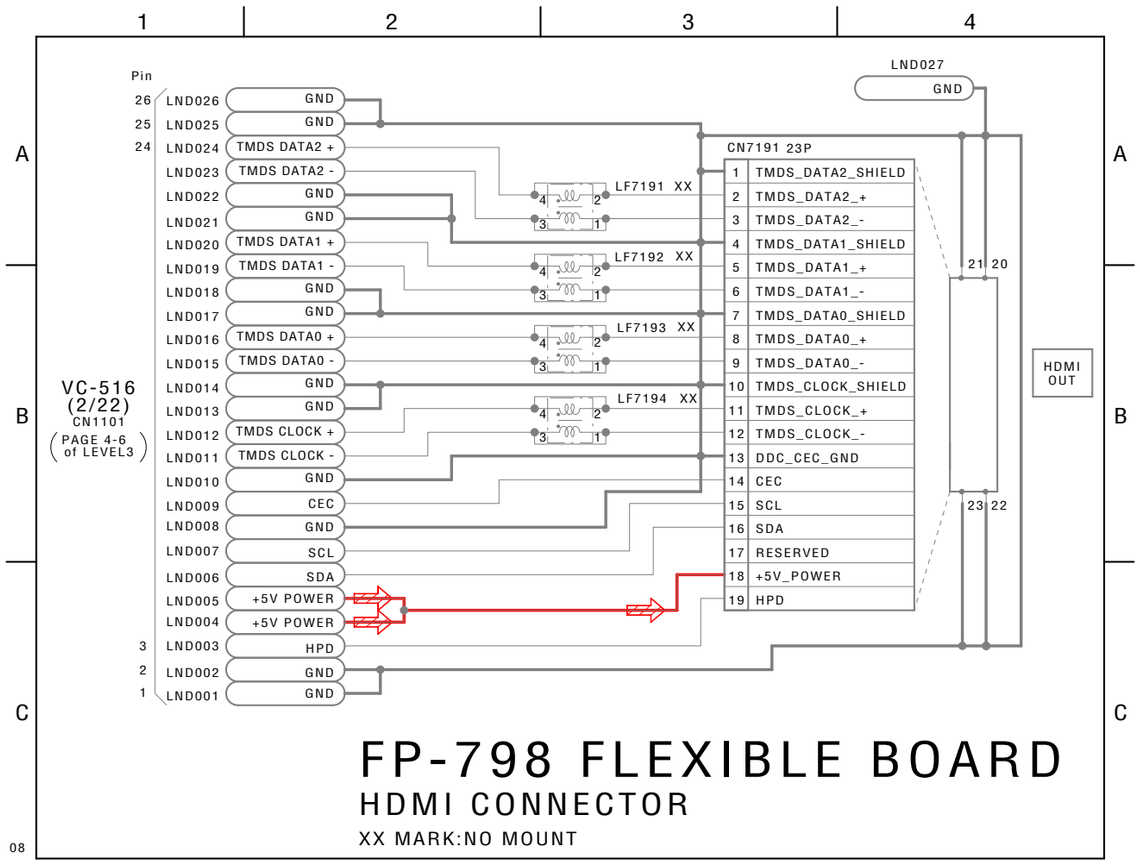

CN7402 45P
45 USB_VCC
44 DISC_BURN(KEY_AD3)
43 REG_GND
42 REG_GND
41 USB_D+
40 REG_GND(USB_GND)
39 USB_D-
38 REG_GND
37 REG_GND
36 AUDIO_L_I/O
35 REG_GND
34 AUDIO_R_I/O
33 REG_GND
32 JACK_AD_CRADLE
31 REG_GND
30 LANC_SIG
29 REG_GND
28 LANC_DC
27 REG_GND
26 VIDEO/D3_PR
25 REG_GND
24 S_C/D3_PB
23 REG_GND
22 S_Y/D3_Y
21 REG_GND
20 BATT/XEXT_CR
19 ACV_REG_GND
18 ACV_REG_GND
17 ACV_REG_GND
16 ACV_REG_GND
15 ACV_REG_GND
14 ACV_REG_GND
13 ACV_REG_GND
12 ACV_REG_GND
11 ACV_REG_GND
10 N.C
9 N.C
8 ACV_UNREG
7 ACV_UNREG
6 ACV_UNREG
5 ACV_UNREG
4 ACV_UNREG
3 ACV_UNREG
2 ACV_UNREG
1 ACV_UNREG
USB_D-
USB_D+
USB_VCC
AUDIO_L
AUDIO_R
MULTI_JACK_IN
LANC_SIG
LANC_DC
VIDEO/D3_Pr
S_C/D3_Pb
S_Y/D3_Y
BATT/XEXT_CR
VD7401 XX
VD7402 XX
VD7403 XX
VD7404 XX
VD7405 XX
VD7406 XX
VD7407 XX
VD7408 XX
VD7409 XX
VD7410 XX
TO CRADLE
(Handycam Station)
CN7401
(MULTI CONNECTOR)
32P
2 USB_DET/VBUS
4 USB_GND
6 USB_D+
8 USB_D-
10 USB_GND
12 LANC_SIG
14 REG_GND
16 LANC_DC
18 REG_GND
20 S_Y_I/O
26 ACV_GND
28 ACV_GND
30 N.C
32 ACV_UNREG
34 ACV_UNREG
DISC_BURN(KEY_AD3) 1
AUDIO_L 3
(USB_ID) 5
AUDIO_R 7
REG_GND 9
AV_JACK_IN 11
REG_GND 13
VIDEO_I/O 15
REG_GND 17
S_C_I/O 19
REG_GND 21
BATT/XEXT_CR 23
ACV_GND 25
ACV_GND 27
N.C 29
ACV_UNREG 31
ACV_UNREG 33
LN7401
GND
FP-806
FLEXIBLE
LND040-LND084
(PAGE 4-39 of LEVEL2)
CR-089 BOARD
CRADLE TERMINAL
XX MARK:NO MOUNT

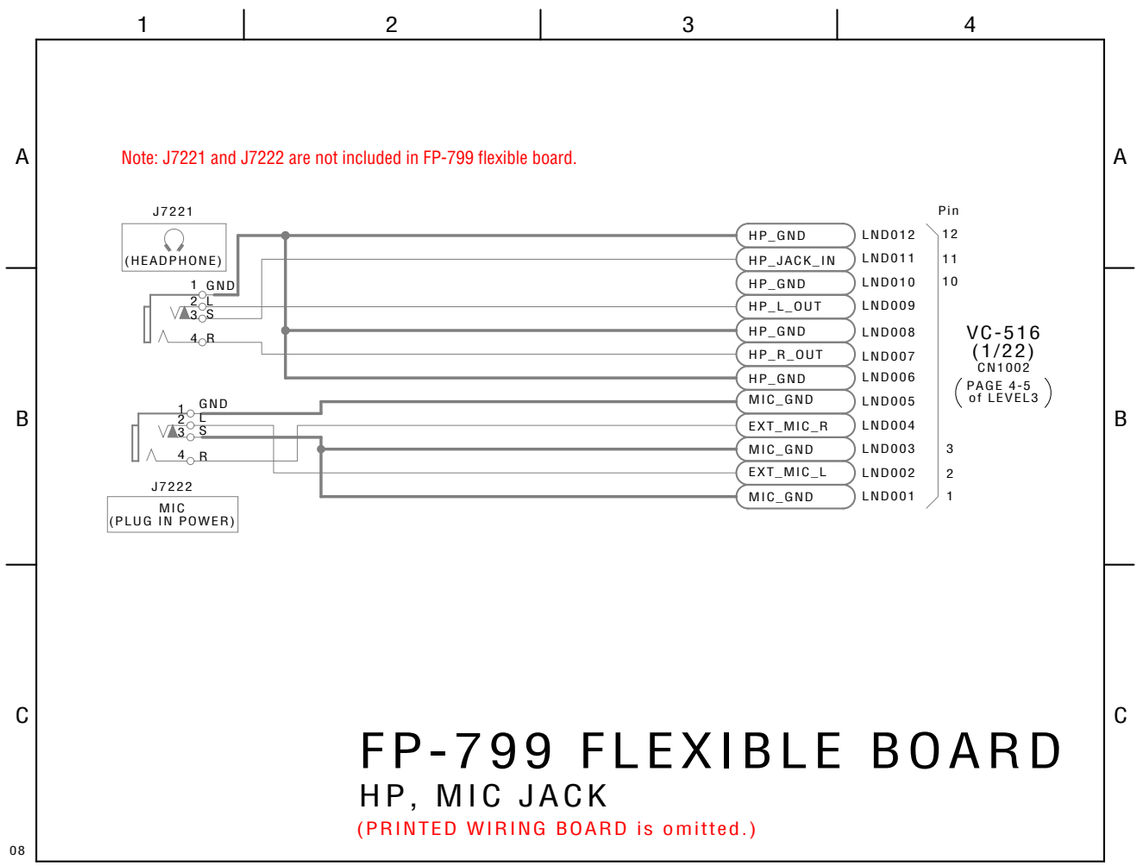
• Refer to page 4-2 (English), 4-3 (Japanese) for mark ⚠.

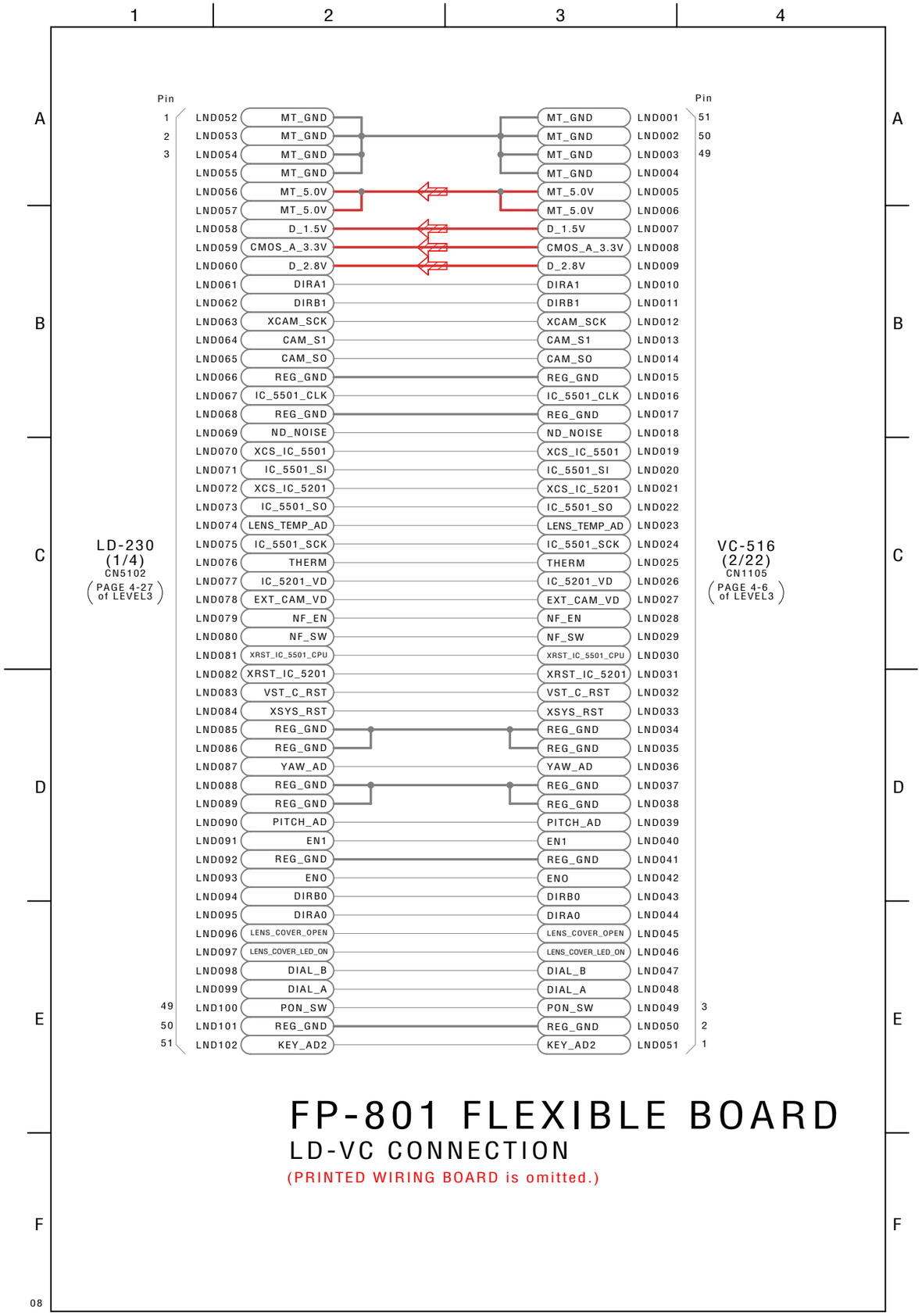


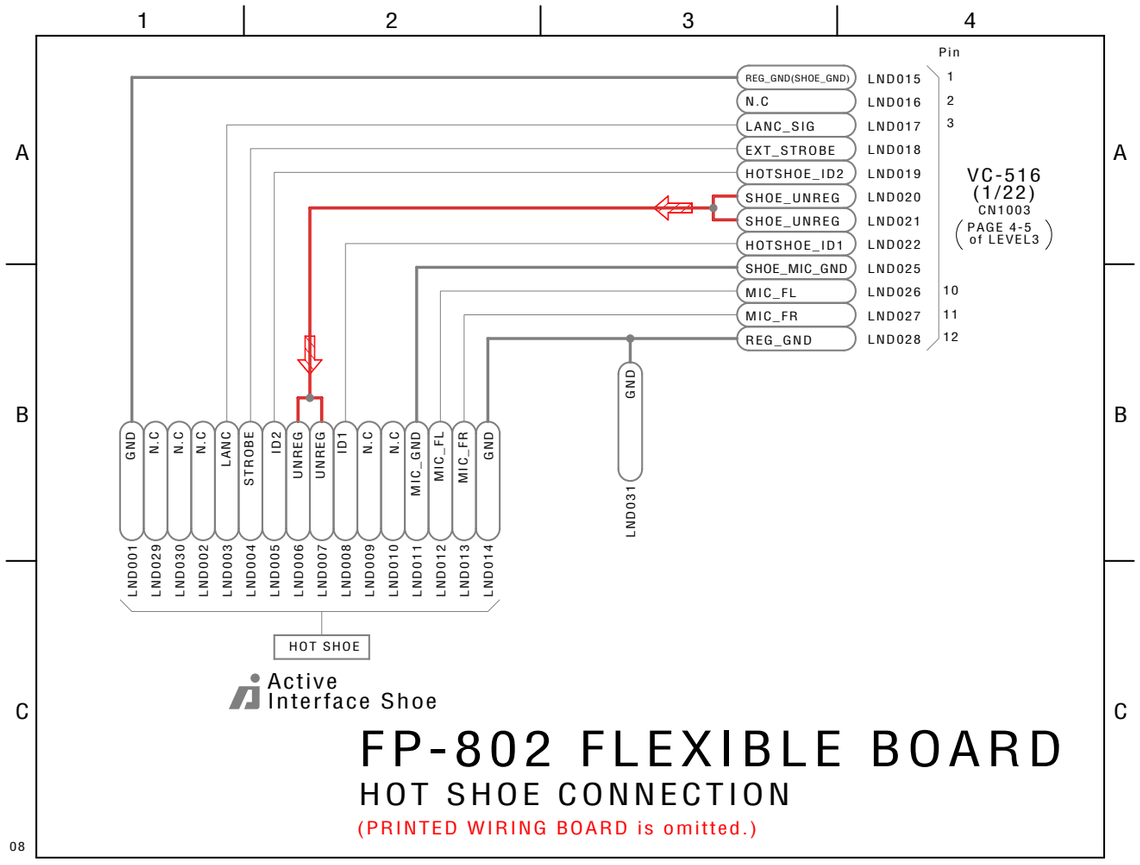


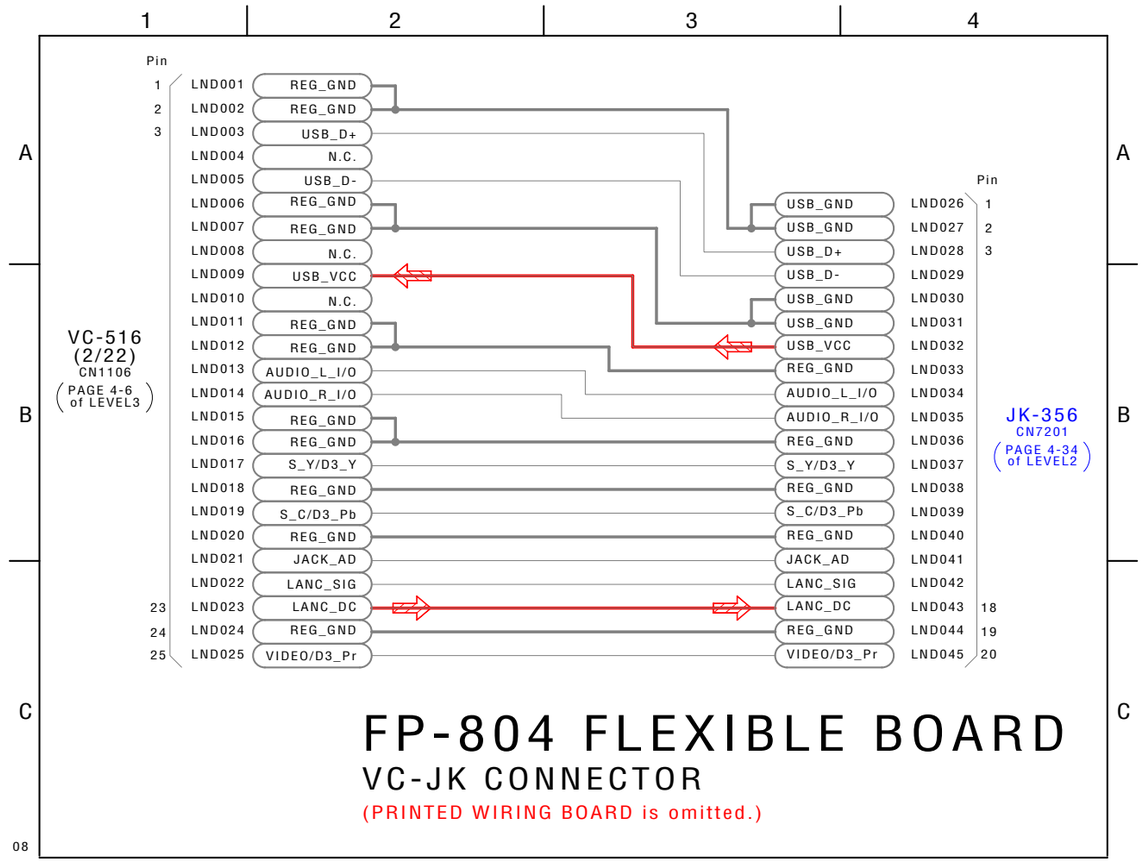


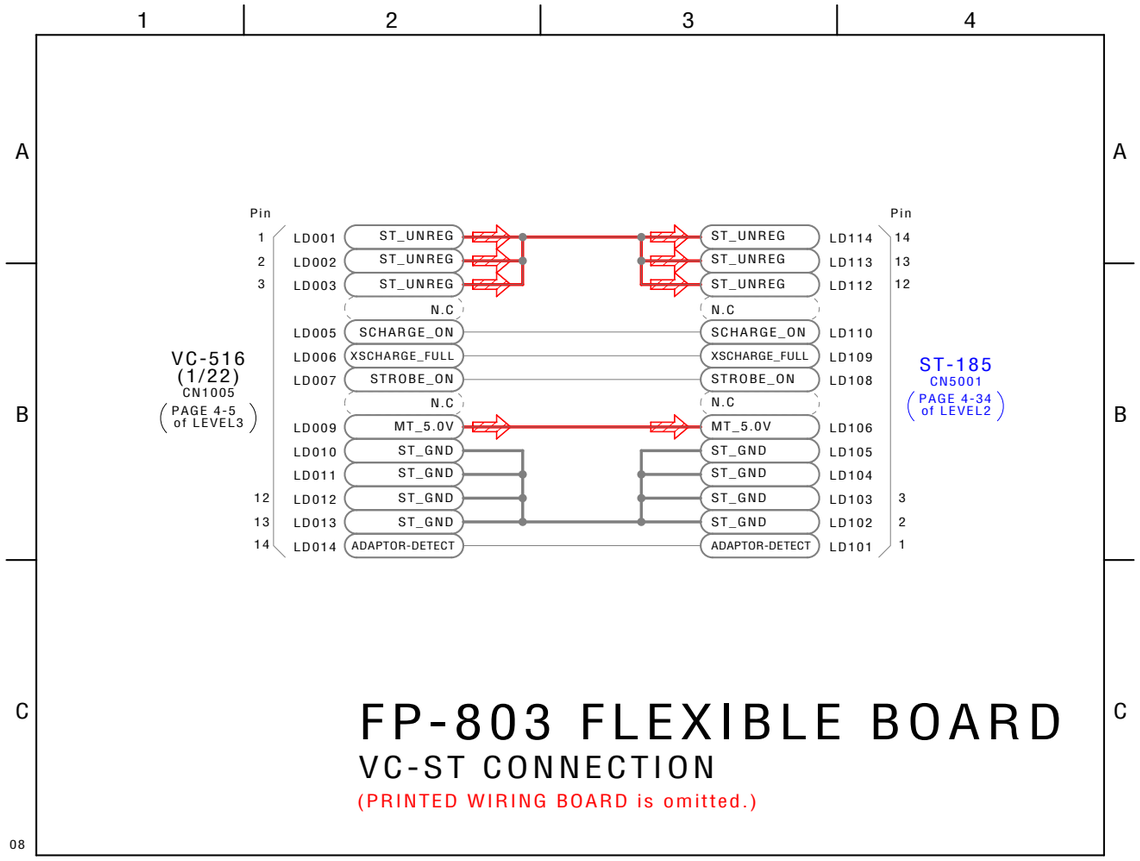

1
2
3
4
A
B
C
Pin
26 LND026 GND
25 LND025 GND
24 LND024 TMDS DATA2 +
LND023 TMDS DATA2 -
LND022 GND
LND021 GND
LND020 TMDS DATA1 +
LND019 TMDS DATA1 -
LND018 GND
LND017 GND
LND016 TMDS DATA0 +
LND015 TMDS DATA0 -
LND014 GND
LND013 GND
LND012 TMDS CLOCK +
LND011 TMDS CLOCK -
LND010 GND
LND009 CEC
LND008 GND
LND007 SCL
LND006 SDA
LND005 +5V POWER
LND004 +5V POWER
3 LND003 HPD
2 LND002 GND
1 LND001 GND
VC-516
(2/22)
CN1101
(PAGE 4-6 of LEVEL3)
LND027
GND
CN7191 23P
1 TMDS_DATA2_SHIELD
2 TMDS_DATA2_+
3 TMDS_DATA2_-
4 TMDS_DATA1_SHIELD
5 TMDS_DATA1_+
6 TMDS_DATA1_-
7 TMDS_DATA0_SHIELD
8 TMDS_DATA0_+
9 TMDS_DATA0_-
10 TMDS_CLOCK_SHIELD
11 TMDS_CLOCK_+
12 TMDS_CLOCK_-
13 DDC_CEC_GND
14 CEC
15 SCL
16 SDA
17 RESERVED
18 +5V_POWER
19 HPD
LF7191 XX
LF7192 XX
LF7193 XX
LF7194 XX
21 20
23 22
HDMI OUT
FP-798 FLEXIBLE BOARD
HDMI CONNECTOR
XX MARK:NO MOUNT
08

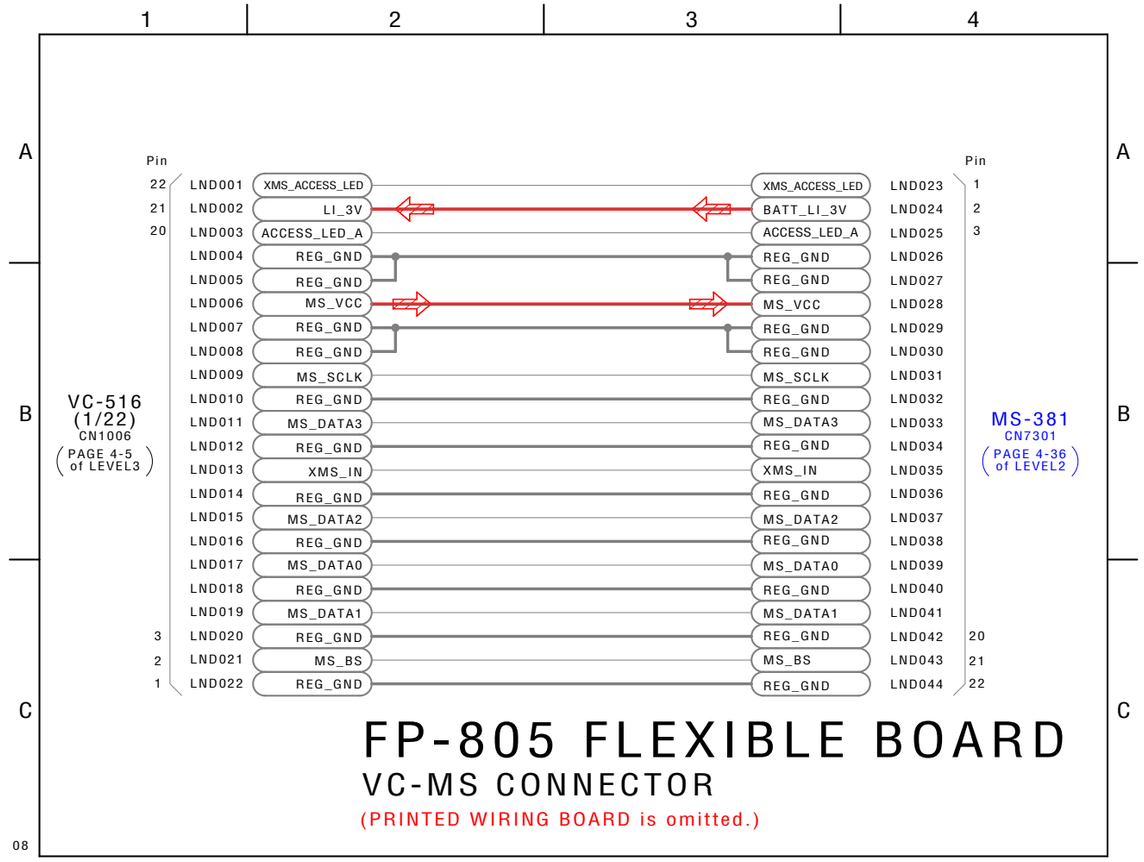

1
2
3
4
A
B
C
Note: J7221 and J7222 are not included in FP-799 flexible board.
J7221
(HEADPHONE)
1 GND
2 L
3 S
4 R
GND
1
L
2
S
3
4
R
J7222
MIC
(PLUG IN POWER)
Pin
HP_GND LND012 12
HP_JACK_IN LND011 11
HP_GND LND010 10
HP_L_OUT LND009
HP_GND LND008
HP_R_OUT LND007
HP_GND LND006
MIC_GND LND005
EXT_MIC_R LND004
MIC_GND LND003 3
EXT_MIC_L LND002 2
MIC_GND LND001 1
VC-516
(1/22)
CN1002
(PAGE 4-5 of LEVEL3)
FP-799 FLEXIBLE BOARD
HP, MIC JACK
(PRINTED WIRING BOARD is omitted.)
08

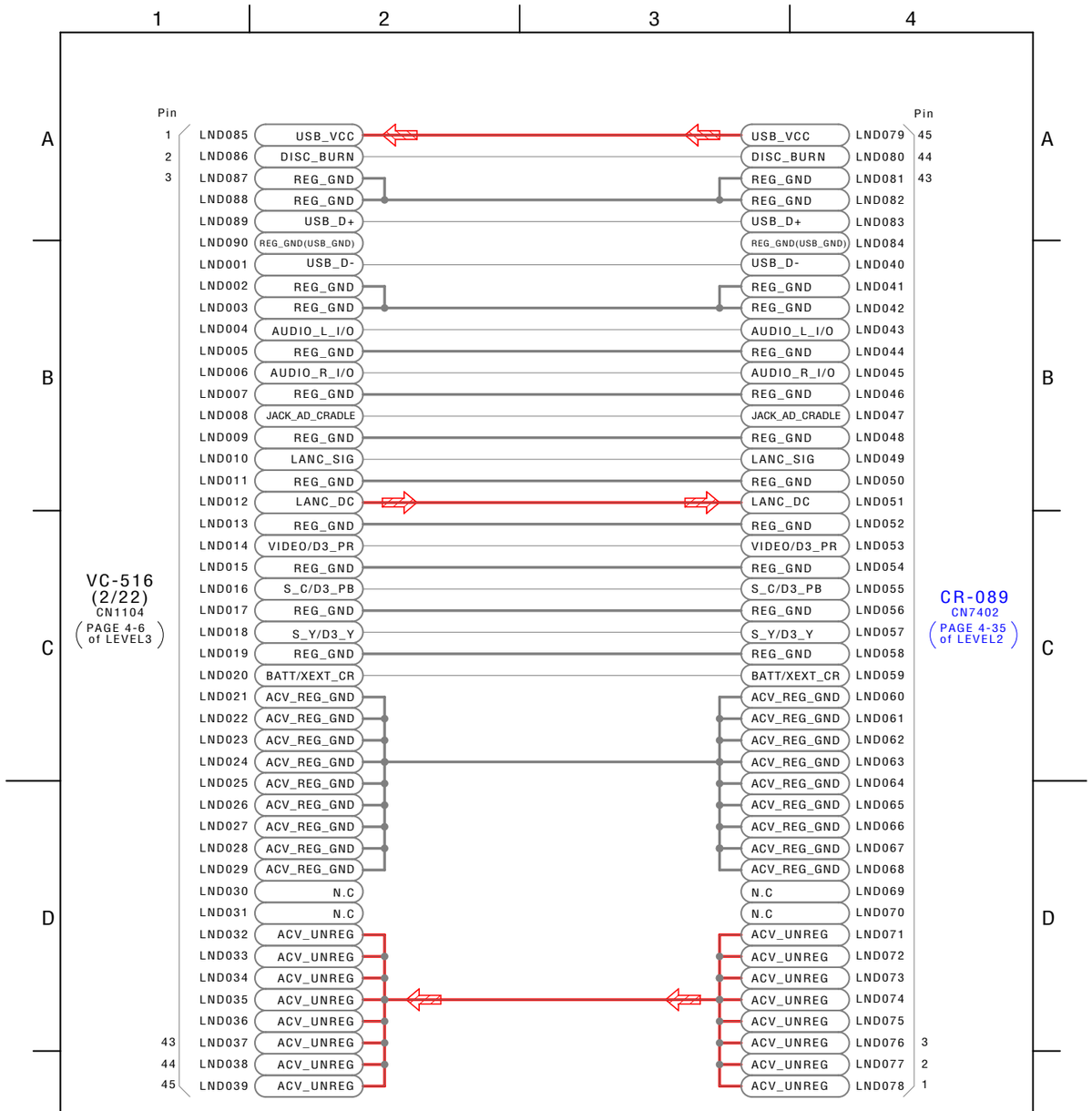

1
2
3
4
A
B
C
D
E
F
Pin
1 LND052 MT_GND
2 LND053 MT_GND
3 LND054 MT_GND
LND055 MT_GND
LND056 MT_5.0V
LND057 MT_5.0V
LND058 D_1.5V
LND059 CMOS_A_3.3V
LND060 D_2.8V
LND061 DIRA1
LND062 DIRB1
LND063 XCAM_SCK
LND064 CAM_S1
LND065 CAM_SO
LND066 REG_GND
LND067 IC_5501_CLK
LND068 REG_GND
LND069 ND_NOISE
LND070 XCS_IC_5501
LND071 IC_5501_SI
LND072 XCS_IC_5201
LND073 IC_5501_SO
LND074 LENS_TEMP_AD
LND075 IC_5501_SCK
LND076 THERM
LND077 IC_5201_VD
LND078 EXT_CAM_VD
LND079 NF_EN
LND080 NF_SW
LND081 XRST_IC_5501_CPU
LND082 XRST_IC_5201
LND083 VST_C_RST
LND084 XSYS_RST
LND085 REG_GND
LND086 REG_GND
LND087 YAW_AD
LND088 REG_GND
LND089 REG_GND
LND090 PITCH_AD
LND091 EN1
LND092 REG_GND
LND093 ENO
LND094 DIRB0
LND095 DIRA0
LND096 LENS_COVER_OPEN
LND097 LENS_COVER_LED_ON
LND098 DIAL_B
LND099 DIAL_A
49 LND100 PON_SW
50 LND101 REG_GND
51 LND102 KEY_AD2
LD-230
(1/4)
CN5102
(PAGE 4-27 of LEVEL3)
MT_GND LND001 51
MT_GND LND002 50
MT_GND LND003 49
MT_GND LND004
MT_5.0V LND005
MT_5.0V LND006
D_1.5V LND007
CMOS_A_3.3V LND008
D_2.8V LND009
DIRA1 LND010
DIRB1 LND011
XCAM_SCK LND012
CAM_S1 LND013
CAM_SO LND014
REG_GND LND015
IC_5501_CLK LND016
REG_GND LND017
ND_NOISE LND018
XCS_IC_5501 LND019
IC_5501_SI LND020
XCS_IC_5201 LND021
IC_5501_SO LND022
LENS_TEMP_AD LND023
IC_5501_SCK LND024
THERM LND025
IC_5201_VD LND026
EXT_CAM_VD LND027
NF_EN LND028
NF_SW LND029
XRST_IC_5501_CPU LND030
XRST_IC_5201 LND031
VST_C_RST LND032
XSYS_RST LND033
REG_GND LND034
REG_GND LND035
YAW_AD LND036
REG_GND LND037
REG_GND LND038
PITCH_AD LND039
EN1 LND040
REG_GND LND041
ENO LND042
DIRB0 LND043
DIRA0 LND044
LENS_COVER_OPEN LND045
LENS_COVER_LED_ON LND046
DIAL_B LND047
DIAL_A LND048
PON_SW LND049 3
REG_GND LND050 2
KEY_AD2 LND051 1
VC-516
(2/22)
CN1105
(PAGE 4-6 of LEVEL3)
FP-801 FLEXIBLE BOARD
LD-VC CONNECTION
(PRINTED WIRING BOARD is omitted.)
08


VC-516
(1/22)
CN1003
PAGE 4-5
of LEVEL3
Pin
REG_GND(SHOE_GND) LND015 1
N.C LND016 2
LANC_SIG LND017 3
EXT_STROBE LND018
HOTSHOE_ID2 LND019
SHOE_UNREG LND020
SHOE_UNREG LND021
HOTSHOE_ID1 LND022
SHOE_MIC_GND LND025
MIC_FL LND026 10
MIC_FR LND027 11
REG_GND LND028 12
GND
LND031
GND LND001
N.C LND029
N.C LND030
N.C LND002
LANC LND003
STROBE LND004
ID2 LND005
UNREG LND006
UNREG LND007
ID1 LND008
N.C LND009
N.C LND010
MIC_GND LND011
MIC_FL LND012
MIC_FR LND013
GND LND014
HOT SHOE
Active
Interface Shoe
FP-802 FLEXIBLE BOARD
HOT SHOE CONNECTION
(PRINTED WIRING BOARD is omitted.)


Pin
1 LND001 REG_GND
2 LND002 REG_GND
3 LND003 USB_D+
LND004 N.C.
LND005 USB_D-
LND006 REG_GND
LND007 REG_GND
LND008 N.C.
LND009 USB_VCC
LND010 N.C.
LND011 REG_GND
LND012 REG_GND
LND013 AUDIO_L_I/O
LND014 AUDIO_R_I/O
LND015 REG_GND
LND016 REG_GND
LND017 S_Y/D3_Y
LND018 REG_GND
LND019 S_C/D3_Pb
LND020 REG_GND
LND021 JACK_AD
LND022 LANC_SIG
23 LND023 LANC_DC
24 LND024 REG_GND
25 LND025 VIDEO/D3_Pr
VC-516
(2/22)
CN1106
PAGE 4-6
of LEVEL3
Pin
USB_GND LND026 1
USB_GND LND027 2
USB_D+ LND028 3
USB_D- LND029
USB_GND LND030
USB_GND LND031
USB_VCC LND032
REG_GND LND033
AUDIO_L_I/O LND034
AUDIO_R_I/O LND035
REG_GND LND036
S_Y/D3_Y LND037
REG_GND LND038
S_C/D3_Pb LND039
REG_GND LND040
JACK_AD LND041
LANC_SIG LND042
LANC_DC LND043 18
REG_GND LND044 19
VIDEO/D3_Pr LND045 20
JK-356
CN7201
PAGE 4-34
of LEVEL2
FP-804 FLEXIBLE BOARD
VC-JK CONNECTOR
(PRINTED WIRING BOARD is omitted.)


VC-516
(1/22)
CN1005
PAGE 4-5
of LEVEL3
Pin
1 LD001 ST_UNREG
2 LD002 ST_UNREG
3 LD003 ST_UNREG
N.C
LD005 SCHARGE_ON
LD006 XSCHARGE_FULL
LD007 STROBE_ON
N.C
LD009 MT_5.0V
LD010 ST_GND
LD011 ST_GND
12 LD012 ST_GND
13 LD013 ST_GND
14 LD014 ADAPTOR-DETECT
Pin
ST_UNREG LD114 14
ST_UNREG LD113 13
ST_UNREG LD112 12
N.C
SCHARGE_ON LD110
XSCHARGE_FULL LD109
STROBE_ON LD108
N.C
MT_5.0V LD106
ST_GND LD105
ST_GND LD104
ST_GND LD103 3
ST_GND LD102 2
ADAPTOR-DETECT LD101 1
ST-185
CN5001
PAGE 4-34
of LEVEL2
FP-803 FLEXIBLE BOARD
VC-ST CONNECTION
(PRINTED WIRING BOARD is omitted.)

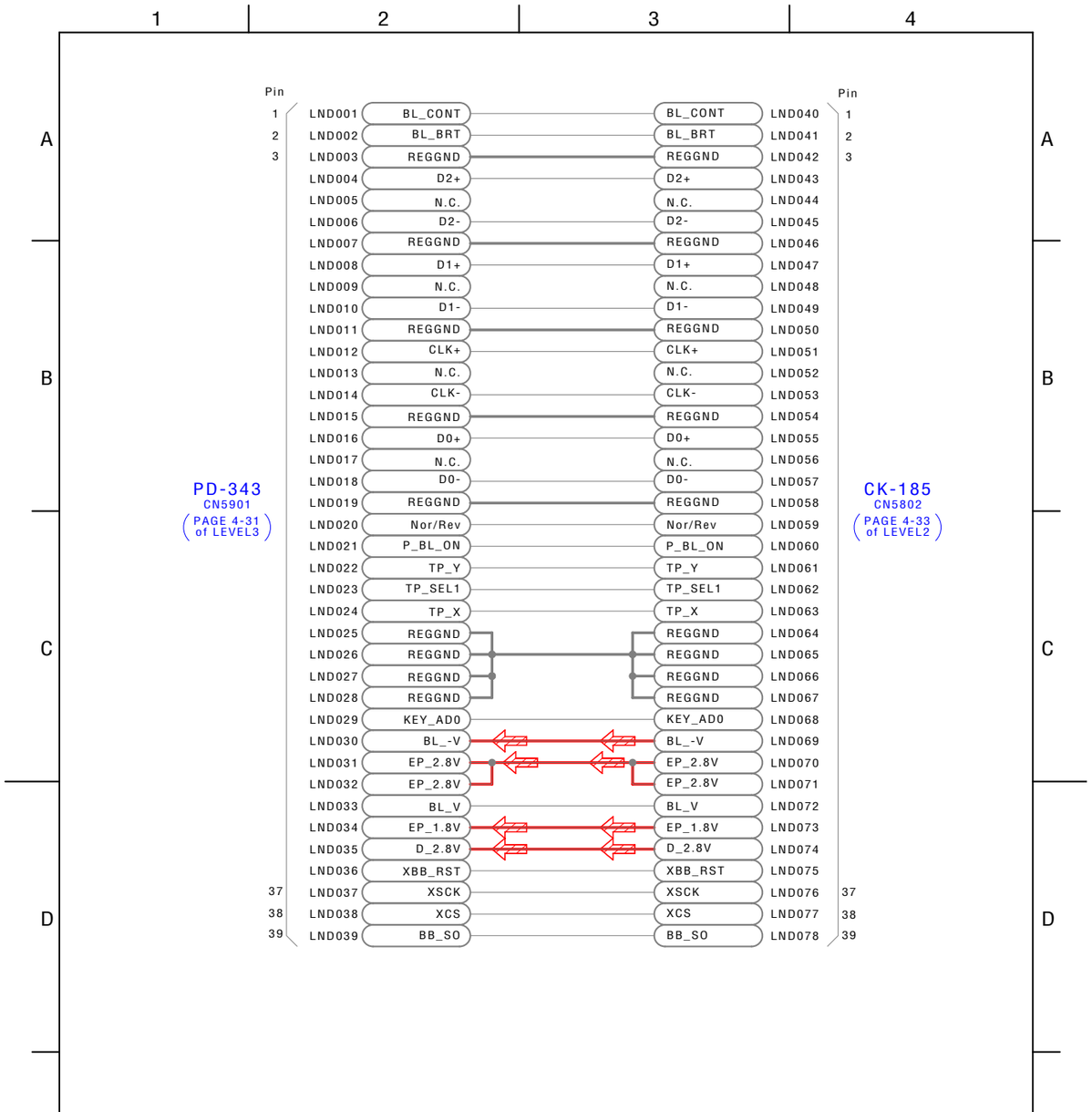

Pin
22 LND001 XMS_ACCESS_LED
21 LND002 LI_3V
20 LND003 ACCESS_LED_A
LND004 REG_GND
LND005 REG_GND
LND006 MS_VCC
LND007 REG_GND
LND008 REG_GND
LND009 MS_SCLK
LND010 REG_GND
LND011 MS_DATA3
LND012 REG_GND
LND013 XMS_IN
LND014 REG_GND
LND015 MS_DATA2
LND016 REG_GND
LND017 MS_DATA0
LND018 REG_GND
LND019 MS_DATA1
3 LND020 REG_GND
2 LND021 MS_BS
1 LND022 REG_GND
VC-516
(1/22)
CN1006
PAGE 4-5
of LEVEL3
Pin
XMS_ACCESS_LED LND023 1
BATT_LI_3V LND024 2
ACCESS_LED_A LND025 3
REG_GND LND026
REG_GND LND027
MS_VCC LND028
REG_GND LND029
REG_GND LND030
MS_SCLK LND031
REG_GND LND032
MS_DATA3 LND033
REG_GND LND034
XMS_IN LND035
REG_GND LND036
MS_DATA2 LND037
REG_GND LND038
MS_DATA0 LND039
REG_GND LND040
MS_DATA1 LND041
REG_GND LND042 20
MS_BS LND043 21
REG_GND LND044 22
MS-381
CN7301
PAGE 4-36
of LEVEL2
FP-805 FLEXIBLE BOARD
VC-MS CONNECTOR
(PRINTED WIRING BOARD is omitted.)



FP-806 FLEXIBLE BOARD

VC-CR CONNECTION

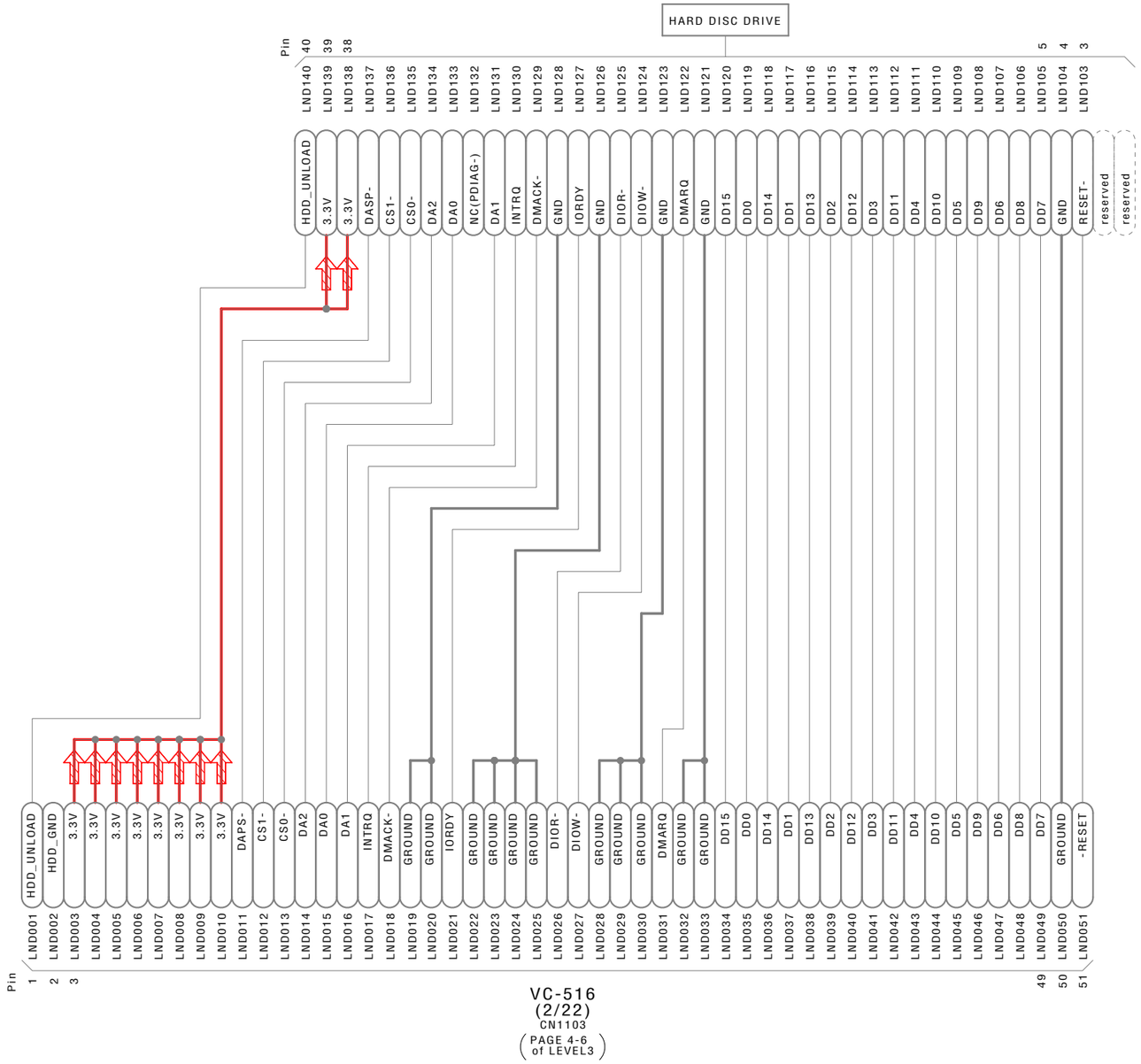
(PRINTED WIRING BOARD is omitted.)



FP-807 FLEXIBLE BOARD

PD-CK CONNECTION

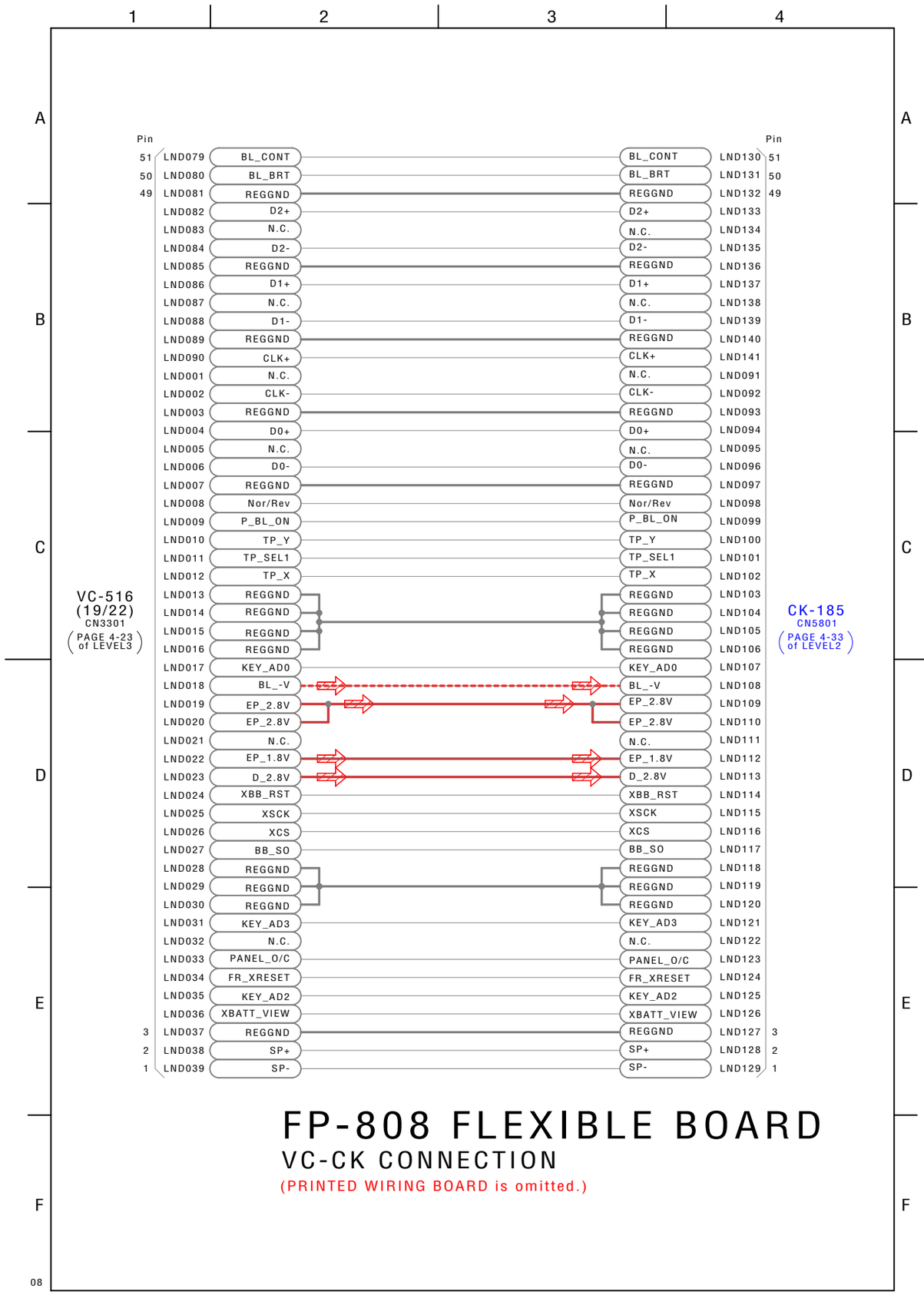
(PRINTED WIRING BOARD is omitted.)



FP-809 FLEXIBLE BOARD

HDD CONNECTION

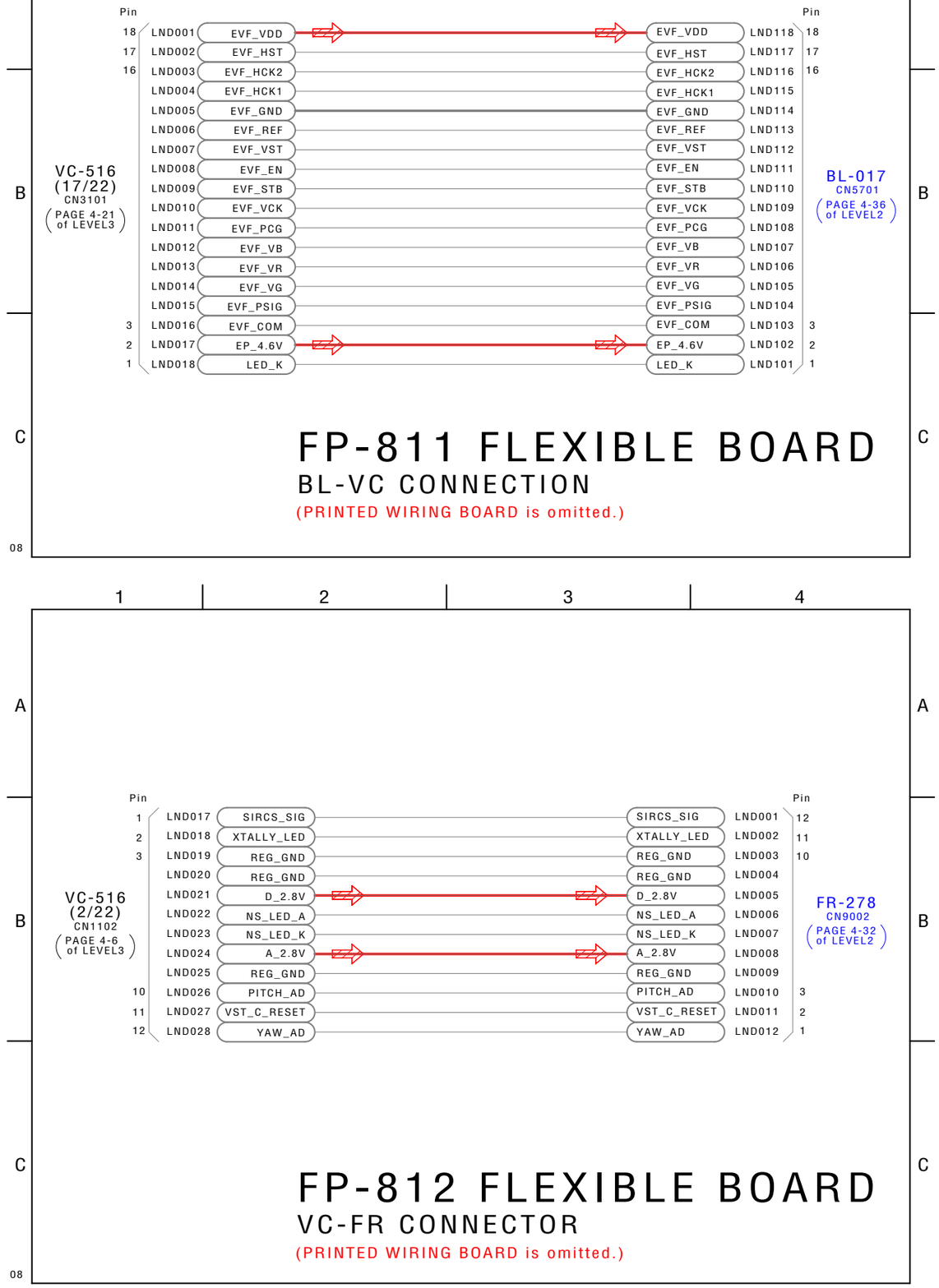
(PRINTED WIRING BOARD is omitted.)



FP-808 FLEXIBLE BOARD

VC-CK CONNECTION

(PRINTED WIRING BOARD is omitted.)



FP-811 FLEXIBLE BOARD

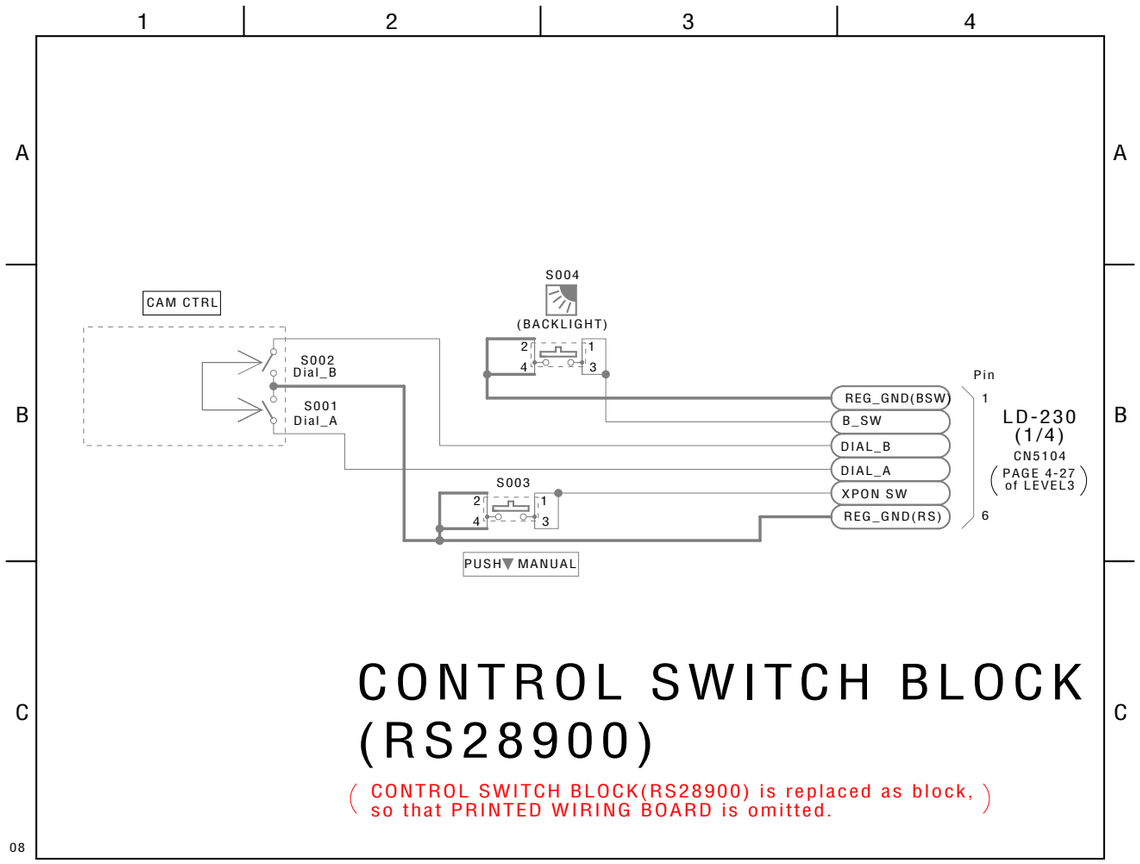
BL-VC CONNECTION

(PRINTED WIRING BOARD is omitted.)

FP-812 FLEXIBLE BOARD

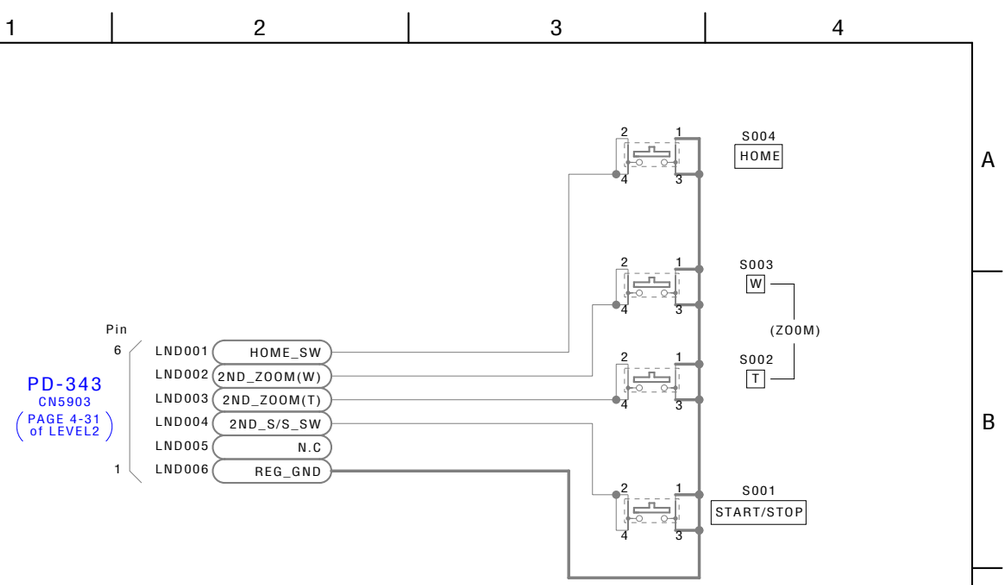
VC-FR CONNECTOR

(PRINTED WIRING BOARD is omitted.)



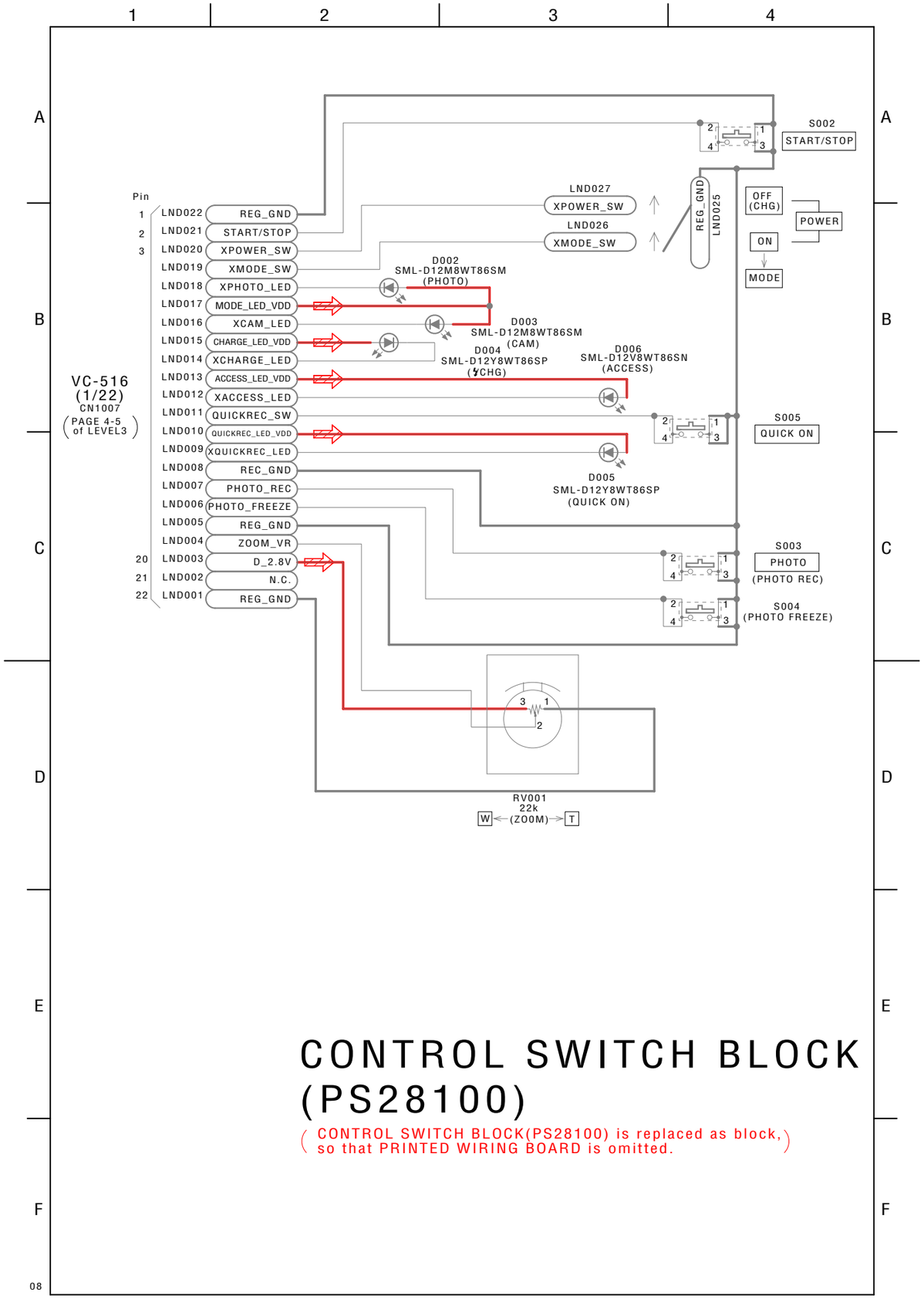
CONTROL SWITCH BLOCK (RS28900)

(CONTROL SWITCH BLOCK(RS28900) is replaced as block, so that PRINTED WIRING BOARD is omitted.)



CONTROL SWITCH BLOCK (SB28900)

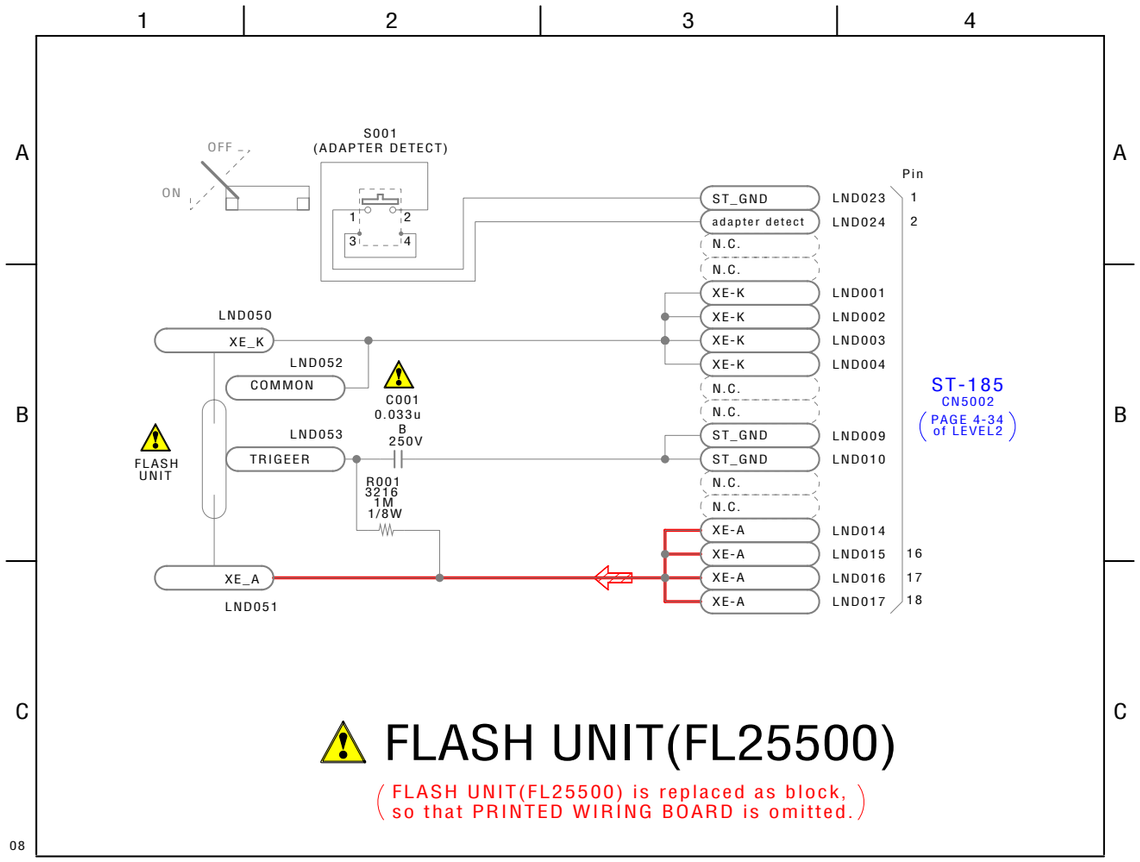
(CONTROL SWITCH BLOCK(SB28900) is replaced as block, so that PRINTED WIRING BOARD is omitted.)

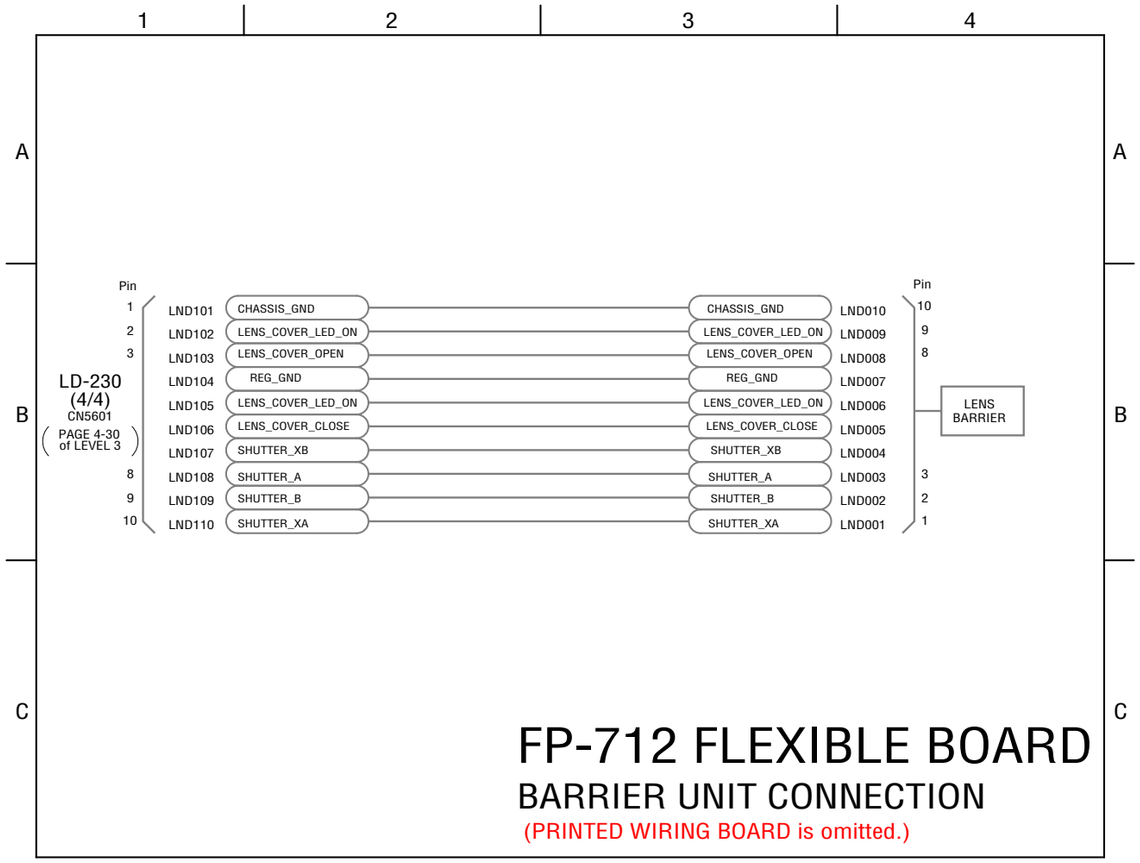


CONTROL SWITCH BLOCK (PS28100)

(CONTROL SWITCH BLOCK(PS28100) is replaced as block, so that PRINTED WIRING BOARD is omitted.)

• Refer to page 4-2 (English), 4-3 (Japanese) for mark ⚠.





4-3. PRINTED WIRING BOARDS

Link

PD-343 BOARD	CR-089 BOARD
FR-278 BOARD	MS-381 BOARD
CK-185 BOARD	BL-017 BOARD
ST-185 BOARD	FP-454 FLEXIBLE BOARD
JK-356 BOARD	FP-798 FLEXIBLE BOARD

COMMON NOTE FOR PRINTED WIRING BOARDS

4-3. PRINTED WIRING BOARDS

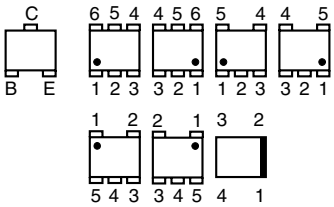
(ENGLISH)

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

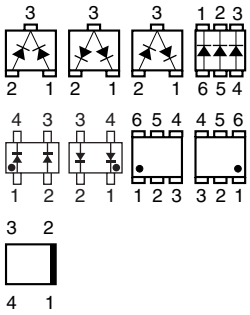
- : Uses unleaded solder.
- : Circuit board
  : Flexible board
  Pattern from the side which enables seeing.
  : pattern of the rear side
  (The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.
-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

- Chip parts.

Transistor



Diode



(JAPANESE)

プリント図共通ノート

【プリント図ノート】

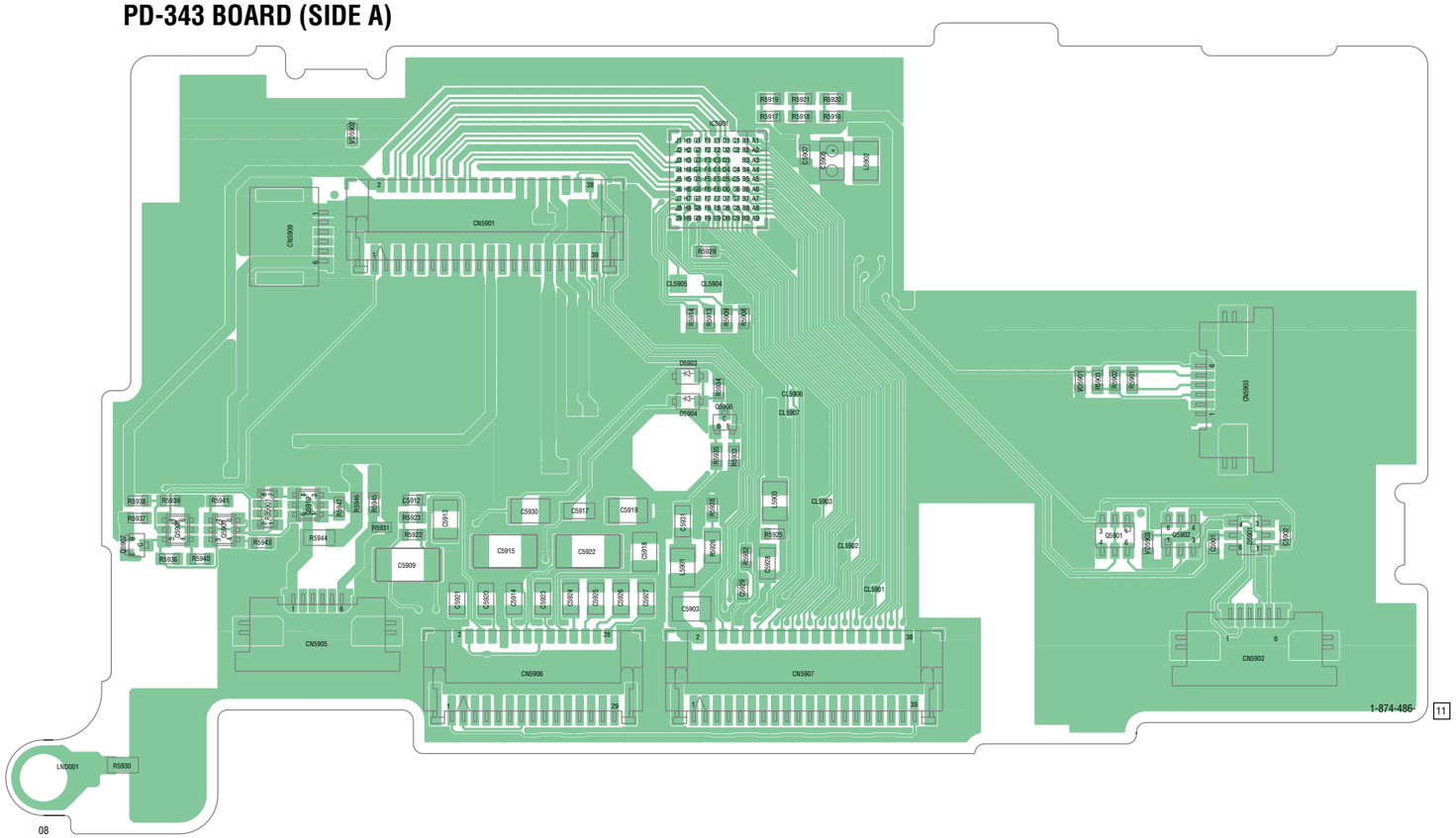
- **：無鉛半田を使用しています。**
- **：基板**
  ：フレキシブル配線板
  見ている面側のパターン。
  ：裏側のパターン
  （他のパターンについては表示されていません）
- **スルーホールは省略。**
- **プリント図には，本機で使用していない部品が記載されている場合があります。**
- **はパネル表示名称。**

Printed wiring boards of the CM-094, VC-516 and LD-230 boards are not shown.
Pages 4-45 to 4-48 are not shown.

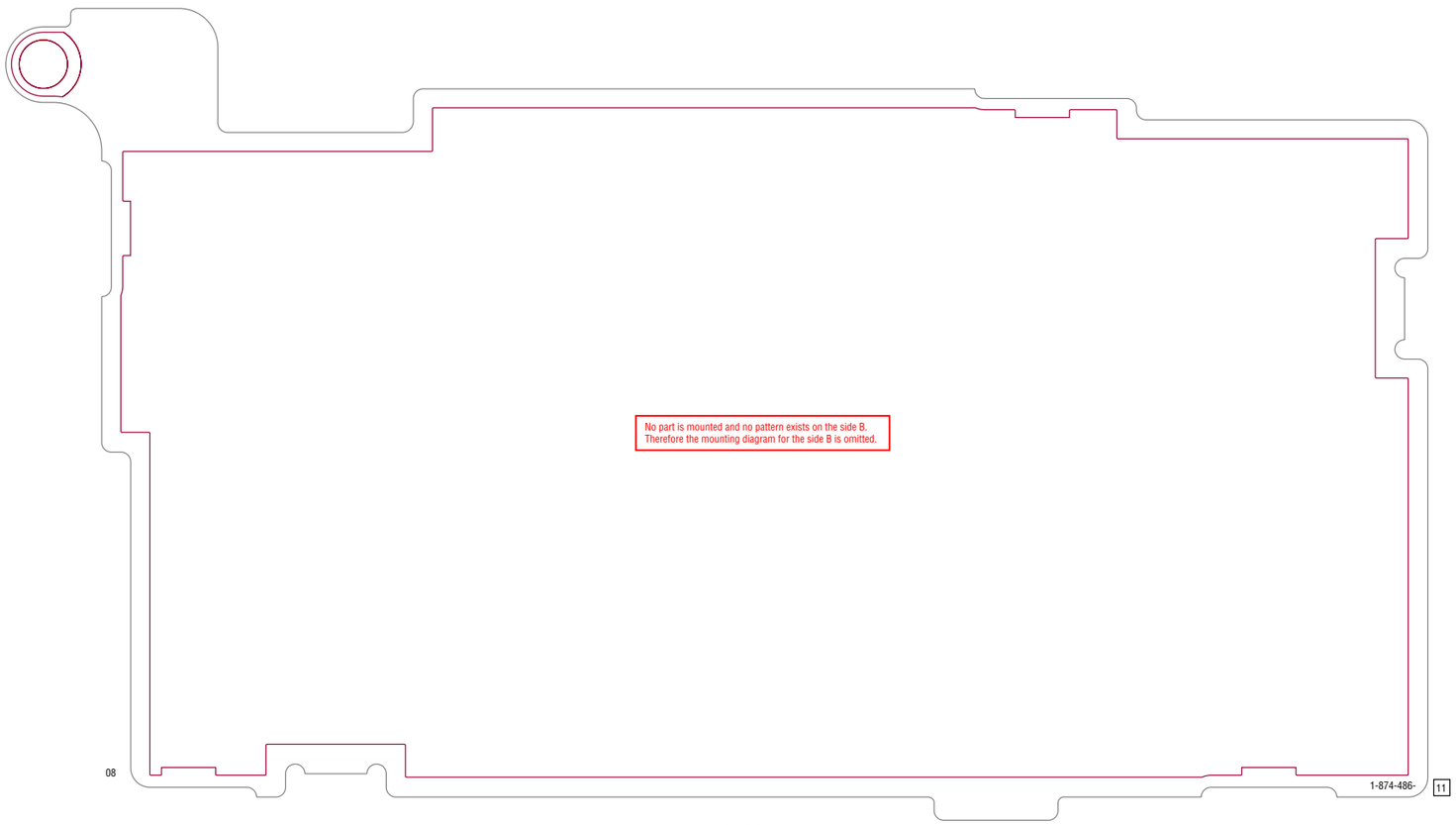
PD-343 (4 layers)

: Uses unleaded solder.

PD-343 BOARD (SIDE A)



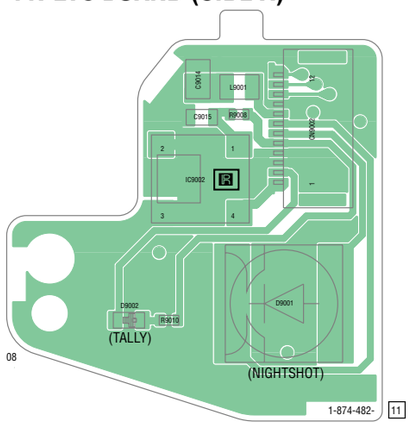
PD-343 BOARD (SIDE B)



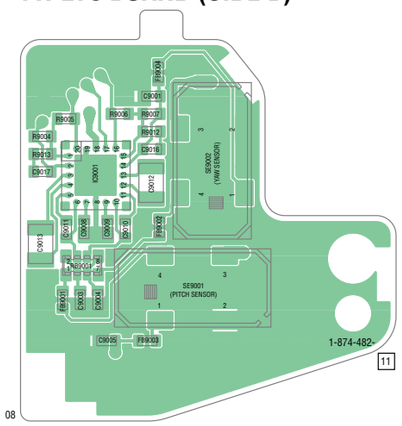
FR-278 (4 layers), CK-185 (2 layers)

: Uses unleaded solder.

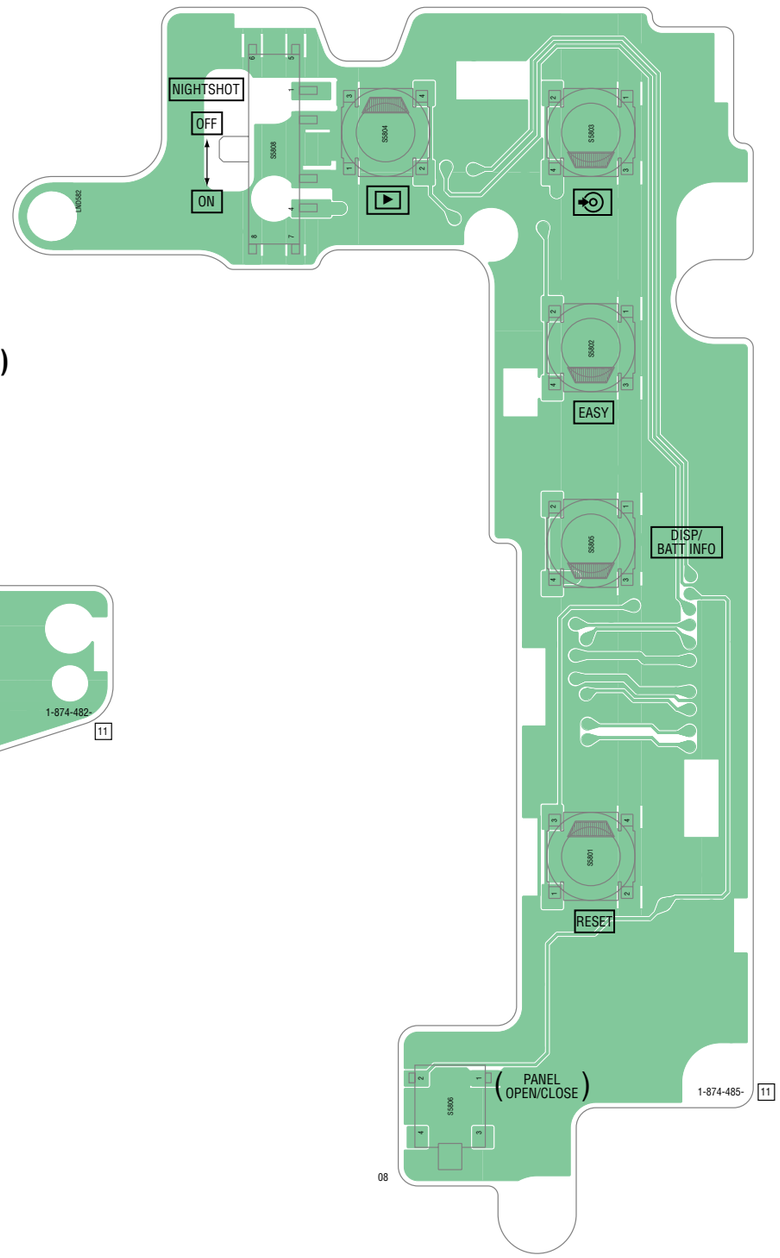
FR-278 BOARD (SIDE A)



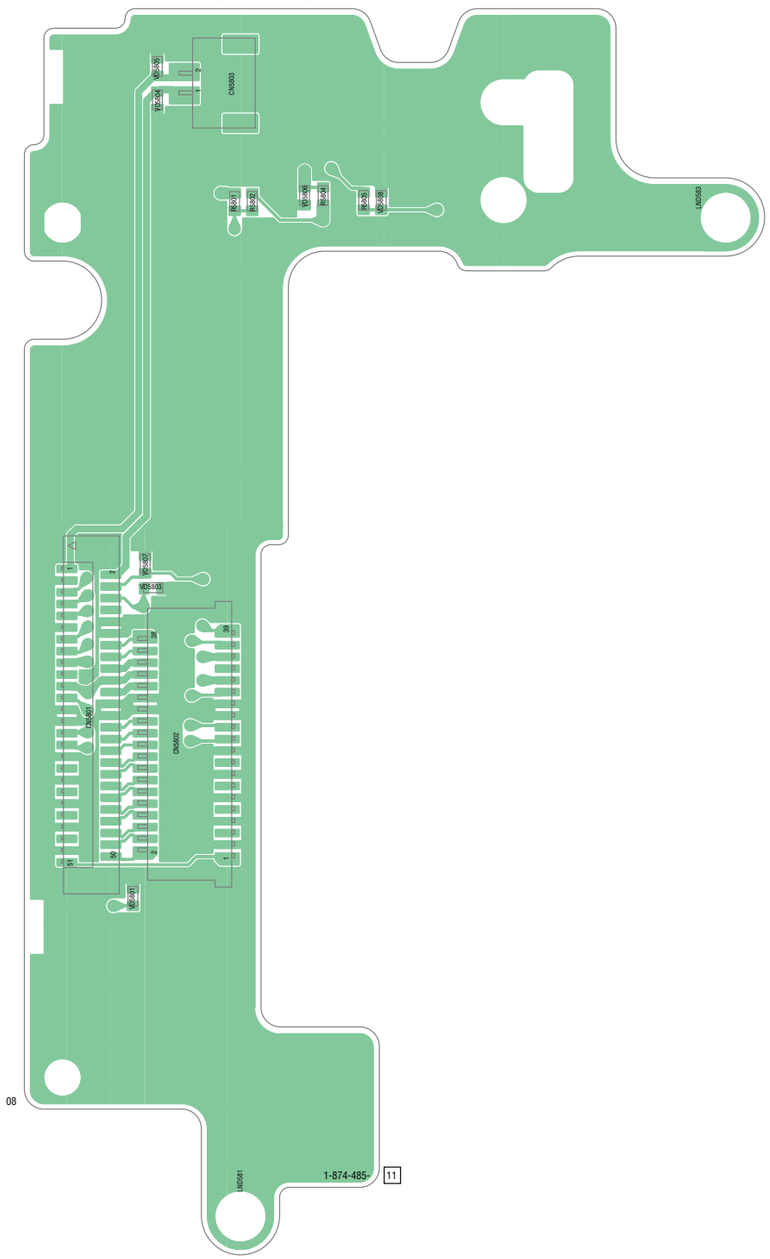
FR-278 BOARD (SIDE B)



CK-185 BOARD (SIDE A)



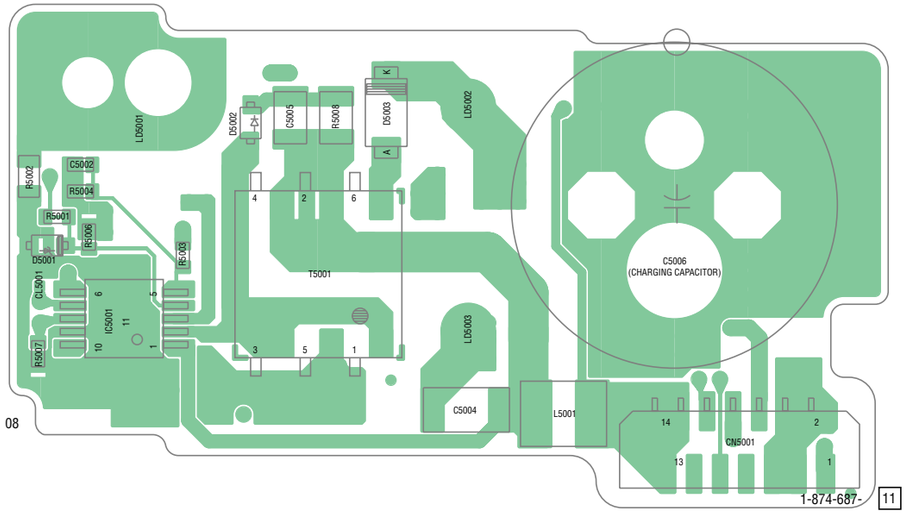
CK-185 BOARD (SIDE B)



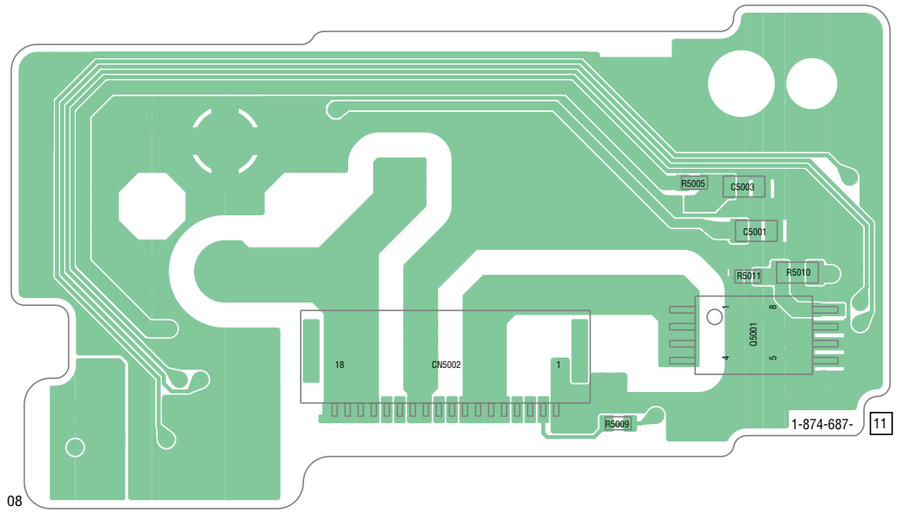
ST-185 (4 layers), JK-356 (2 layers), CR-089 (2 layers)

: Uses unleaded solder.

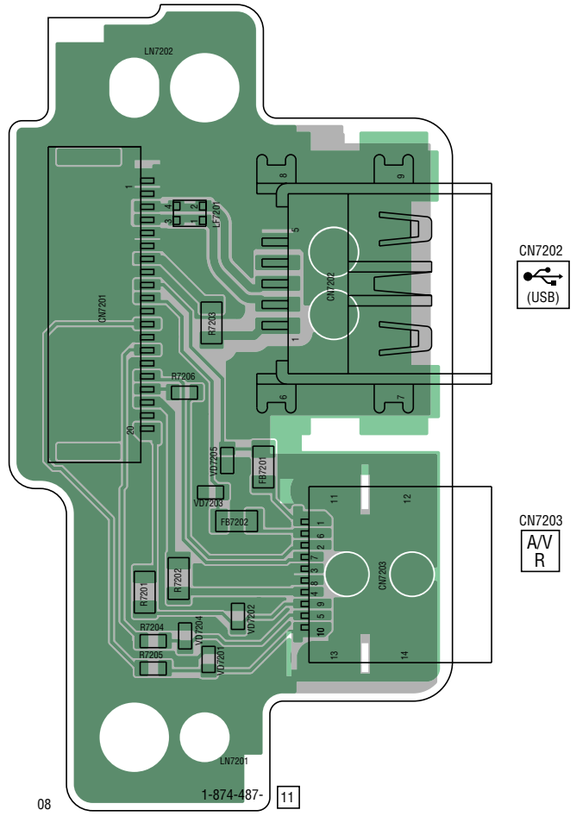
ST-185 BOARD (SIDE A)



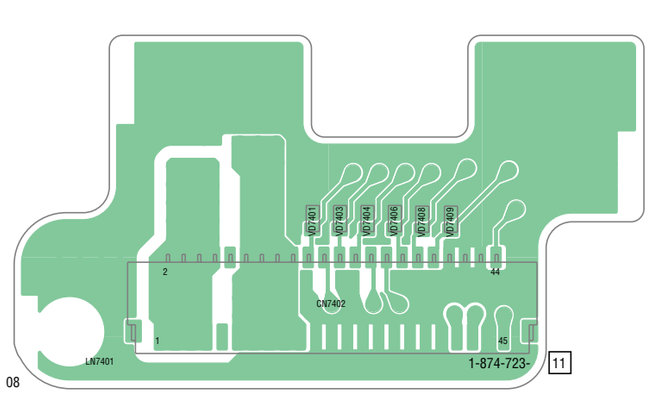
ST-185 BOARD (SIDE B)



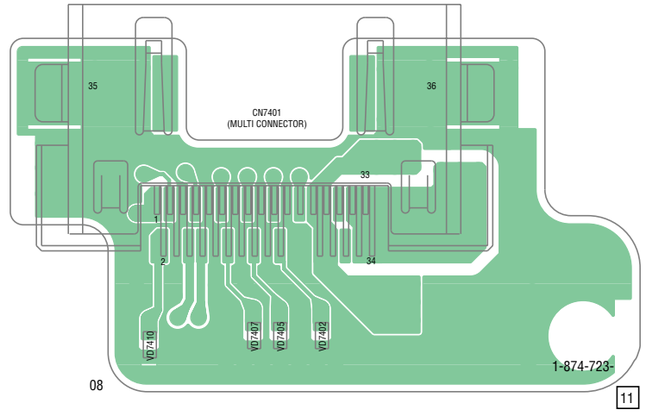
JK-356 BOARD



CR-089 BOARD (SIDE A)



CR-089 BOARD (SIDE B)



MS-381 (2 layers)

: Uses unleaded solder.

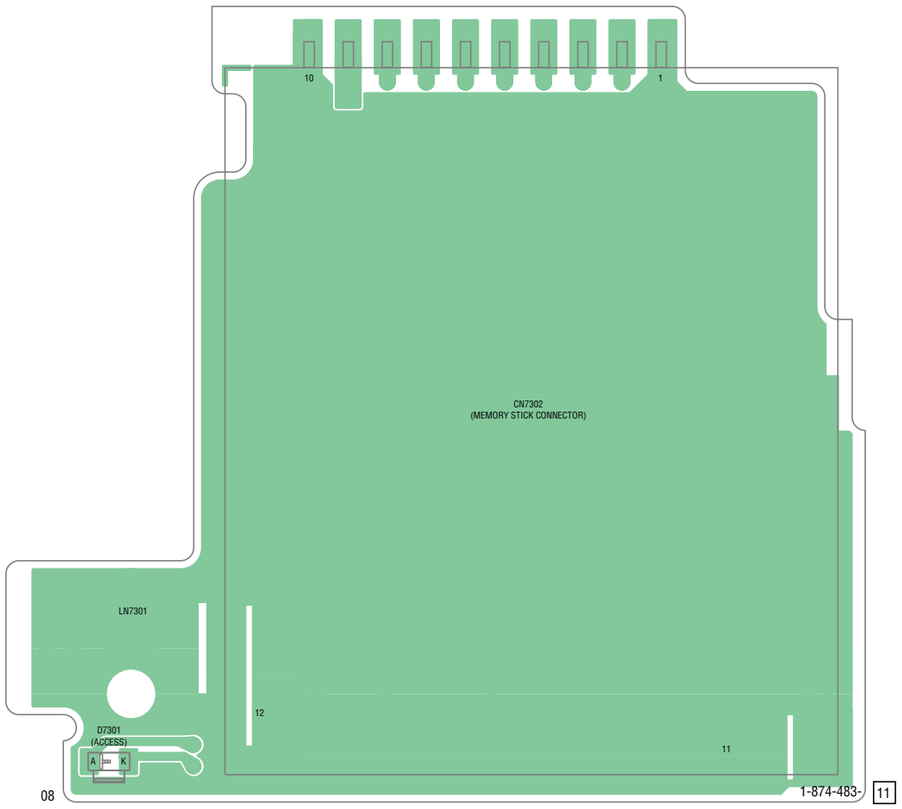
CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

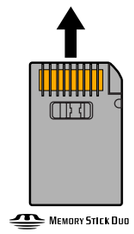
注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

Note: Replace the battery holder (BH7301) together when replacing the lithium storage battery (BT7301) on the MS-381 board. (The battery holder removed once cannot be used again.) When mounting these parts, mount new battery holder first and attach new lithium battery next.

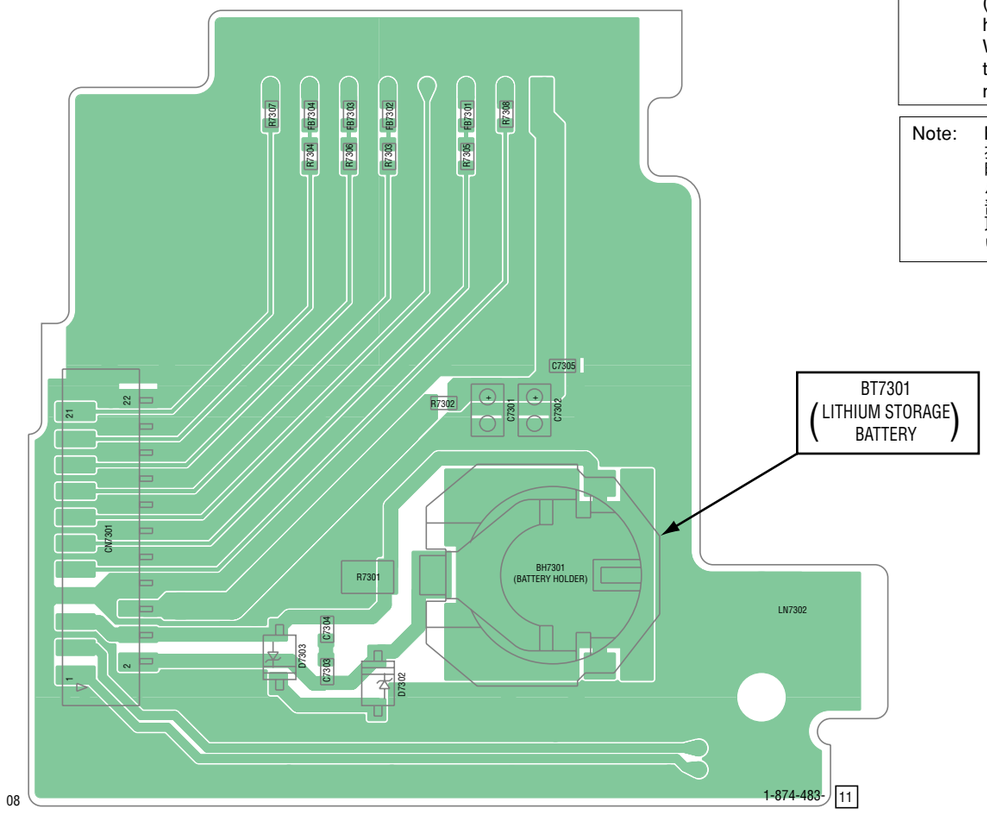
Note: MS-381基板のリチウム蓄電池（BT7301）を交換する場合はバッテリホルダ（BH7301）も同時に新品に交換して下さい。（一度使用したバッテリホルダは再使用できません。）
部品取り付けの際は，先にバッテリホルダを取り付けてからリチウム電池を装着して下さい。

MS-381 BOARD (SIDE A)





MS-381 BOARD (SIDE B)

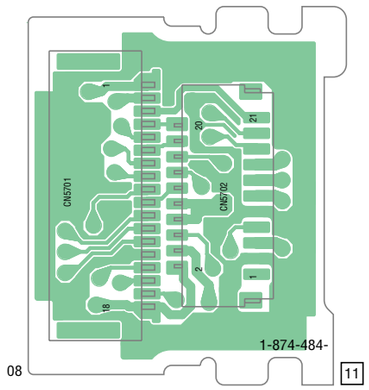


Note: BT7301 (lithium storage battery) is not included in the MS-381 complete board.

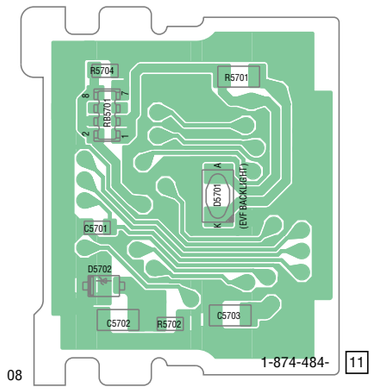
BL-017 (2 layers), FP-454 (1 layer), FP-798 (2 layers)

: Uses unleaded solder.

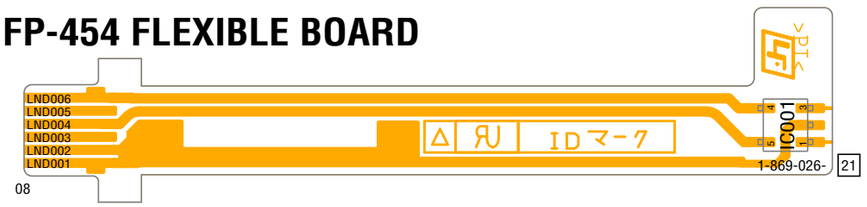
BL-017 BOARD (SIDE A)



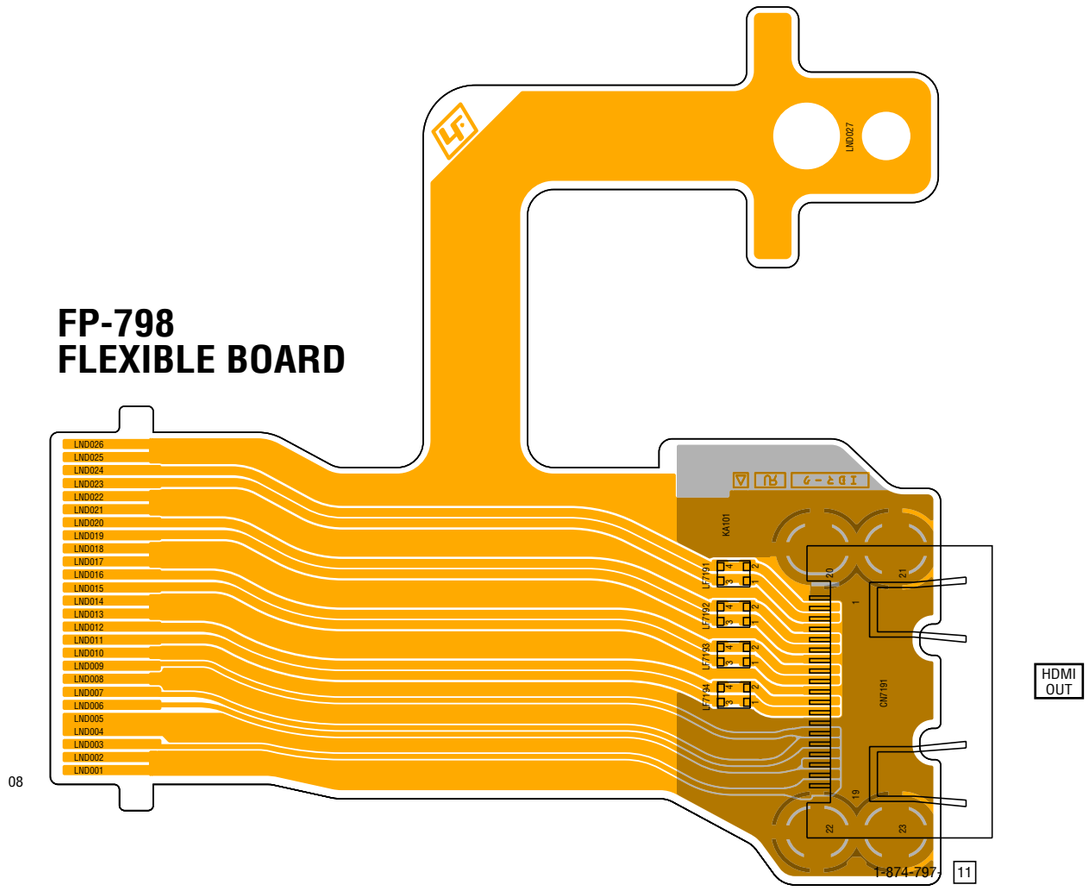
BL-017 BOARD (SIDE B)



FP-454 FLEXIBLE BOARD



FP-798 FLEXIBLE BOARD



NOTE

5. REPAIR PARTS LIST

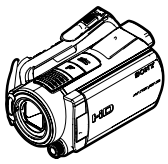
NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

EXPLODED VIEWS

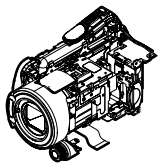
A

OVERALL SECTION-1



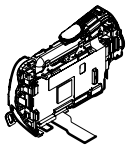
B

OVERALL SECTION-2



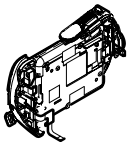
C

OVERALL SECTION-3



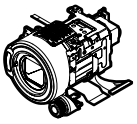
D

CABINET (L) SECTION-1



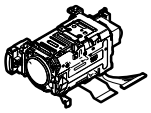
E

CABINET (L) SECTION-2



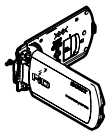
F

CABINET (F) SECTION



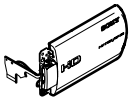
G

LENS BLOCK



H

CABINET (R) SECTION

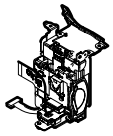


I

PANEL BLOCK

J

EVF BLOCK



K

BT PANEL BLOCK

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

Link

ELECTRICAL PARTS LIST

ACCESSORIES

BL-017 BOARD J	FP-803 FLEXIBLE BOARD C	FP-811 FLEXIBLE BOARD J
CK-185 BOARD H	FP-804 FLEXIBLE BOARD E	FP-812 FLEXIBLE BOARD E
CR-089 BOARD A	FP-805 FLEXIBLE BOARD D	FR-278 BOARD E
FP-454 FLEXIBLE BOARD I	FP-806 FLEXIBLE BOARD A	JK-356 BOARD E
FP-798 FLEXIBLE BOARD E	FP-807 FLEXIBLE BOARD I	MS-381 BOARD K
FP-799 FLEXIBLE BOARD E	FP-808 FLEXIBLE BOARD D	PD-343 BOARD I
FP-801 FLEXIBLE BOARD G	FP-809 FLEXIBLE BOARD A	ST-185 BOARD G
FP-802 FLEXIBLE BOARD C		

5. REPAIR PARTS LIST

(ENGLISH)

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...

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.

- Color Indication of Appearance Parts
  Example:
  (SILVER) : Cabinet's Color
  (Silver) : Parts Color

(JAPANESE)

【使用上の注意】

- ここに記載されている部品は, 補修用部品であるため, 回路図及びセットに付いている部品と異なる場合があります。
- -XX, -Xは標準化部品のため, セットに付いている部品と異なる場合があります。
- *印の部品は常備在庫しておりません。
- コンデンサの単位でuFは μFを示します。
- 抵抗の単位Ωは省略してあります。
  金　　被：金属被膜抵抗。
  サンキン：酸化金属被膜抵抗。
- インダクタの単位でuHは μHを示します。
- 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれ μA..., μPA..., μPB..., μPC..., μPD...を示します。

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は，必ず指定の部品を使用してください。

- 外装部品色表示
  例：
  (SILVER):セットの色を表す。
  (Silver) : 部品の色を表す。

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

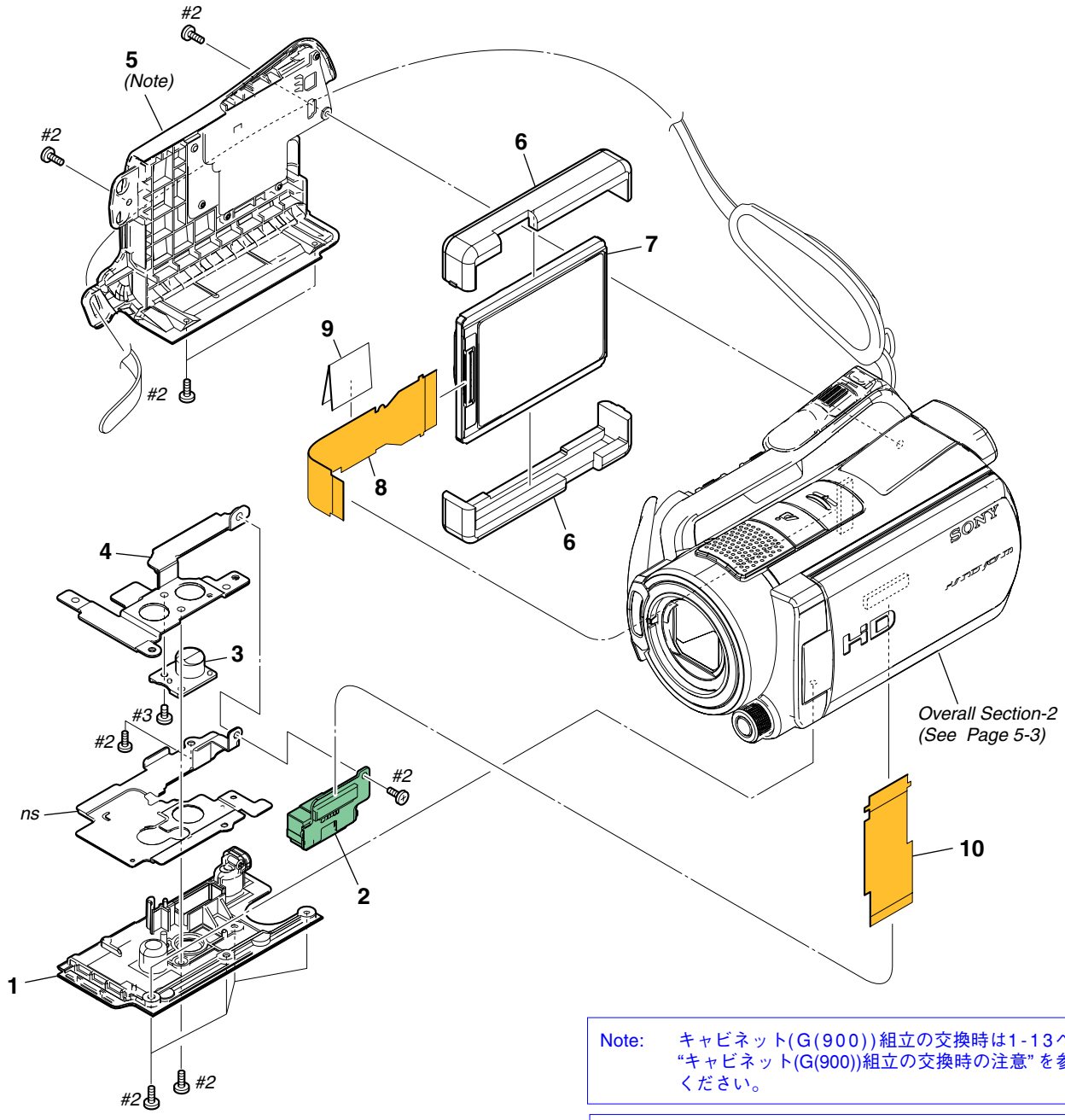
5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

DISASSEMBLY HARDWARE LIST

5-1-1. OVERALL SECTION-1

ns: not supplied



Note: キャビネット(G(900))組立の交換時は1-13ページの“キャビネット(G(900))組立の交換時の注意”を参照してください。

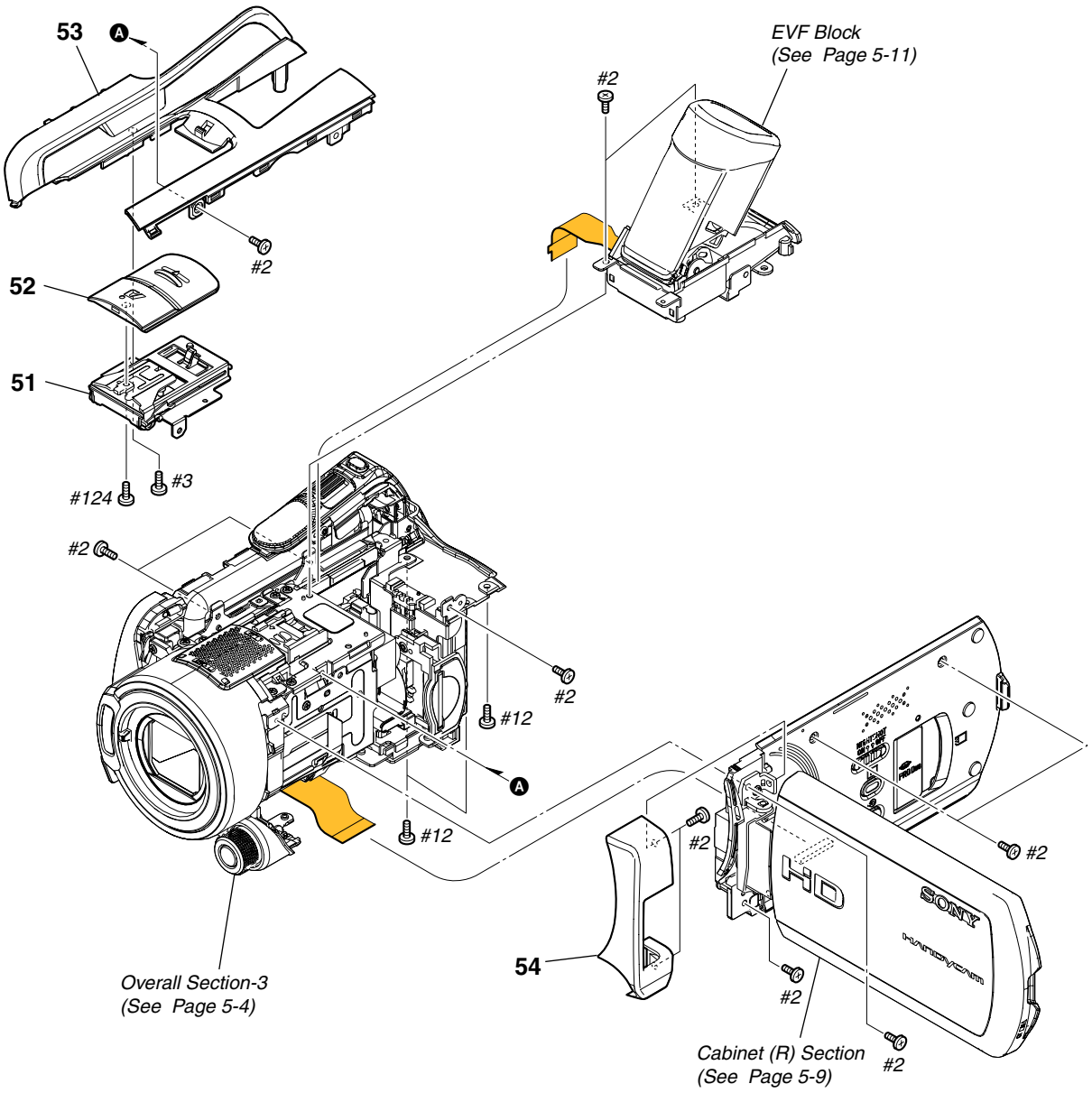
Note: Refer to page 1-13 “Precuation on replacing the Cabinet (G(900)) Assy” when changing the Cabinet (G(900)) Assy.

Ref. No.	Part No.	Description
1	X-2188-804-1	CABINET (700) ASSY, BOTTOM
2	A-1494-362-A	CR-089 BOARD, COMPLETE
3	2-664-982-01	SCREW, TRIPOD
* 4	3-290-644-01	FRAME, BOTTOM CABINET
5	(Note)	CABINET (G(900)) ASSY
6	3-294-308-01	DAMPER (1), 08STYLE (SR11/SR11E)
6	3-298-143-01	DAMPER (2), 08STYLE (SR12/SR12E)

Ref. No.	Part No.	Description
7	1-797-994-21	HDD (MK6014GAL-60GB) (SR11/SR11E)
7	1-797-995-21	HDD (MK1214GAH-120GB) (SR12/SR12E)
8	1-874-808-11	FP-809 FLEXIBLE BOARD
* 9	2-890-813-01	SHEET (CK), SHIELD
10	1-874-805-11	FP-806 FLEXIBLE BOARD
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)

5-1-2. OVERALL SECTION-2

DISASSEMBLY HARDWARE LIST

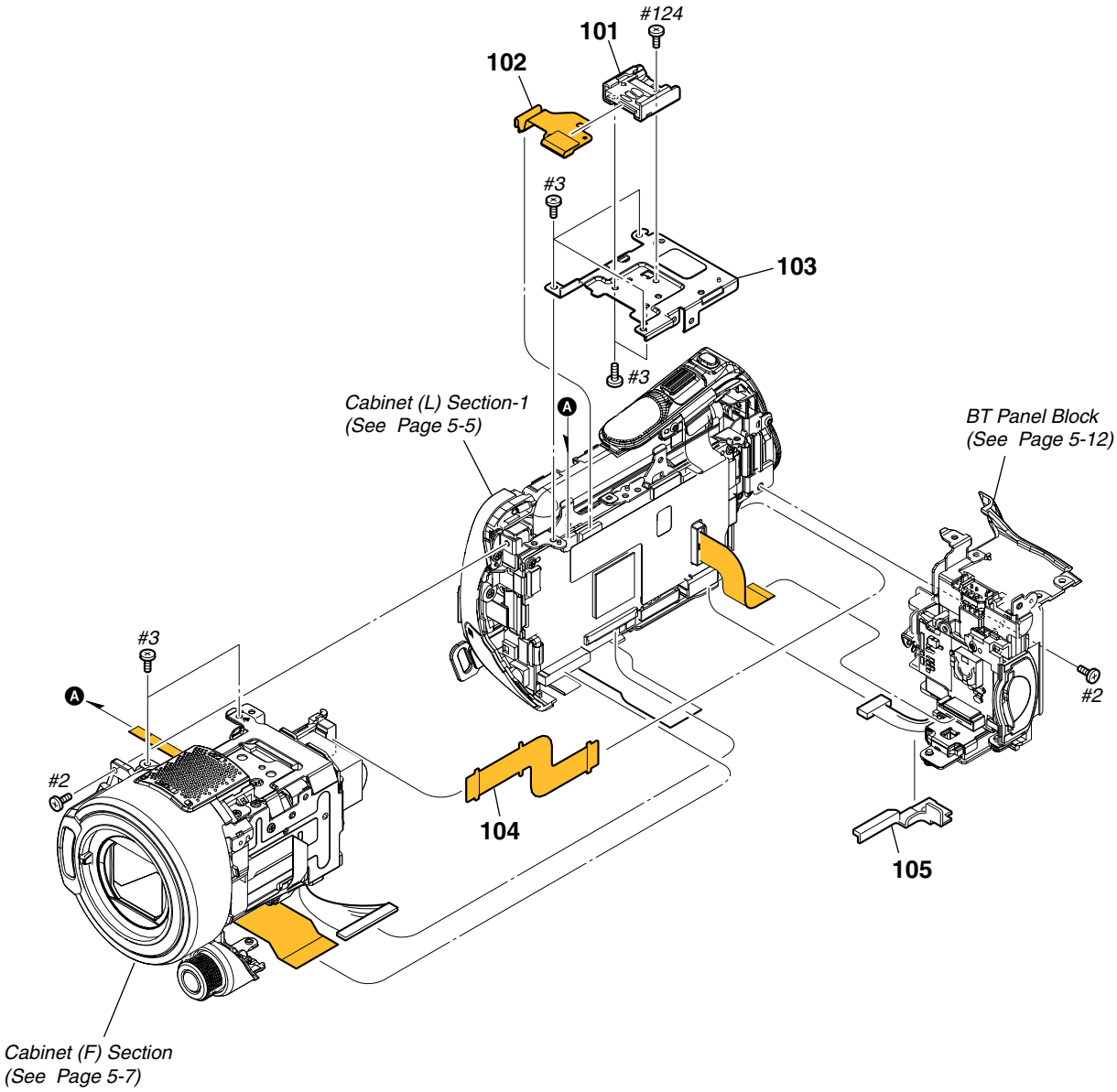


Ref. No.	Part No.	Description
51	X-2189-073-1	BASE (900) ASSY, SHOE COVER
52	X-2189-071-1	COVER (900S) ASSY, SHOE (SR11: J)
52	X-2189-072-1	COVER (900B) ASSY, SHOE (EXCEPT SR11: J)
53	X-2189-068-1	TOP (900S) ASSY (SR11: J)
53	X-2189-069-1	TOP (900B2) ASSY (SR12/SR12E)
53	X-2189-070-1	TOP (900B) ASSY (SR11: EXCEPT J/SR11E)

Ref. No.	Part No.	Description
54	3-292-369-01	COVER (R (900)), HINGE (SR11: J)
54	3-292-369-11	COVER (R (900)), HINGE (EXCEPT SR11: J)
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#12	3-080-204-21	SCREW, TAPPING, P2 (Black)
#124	2-599-475-01	SCREW (M1.7) (Silver)

5-1-3. OVERALL SECTION-3

DISASSEMBLY HARDWARE LIST

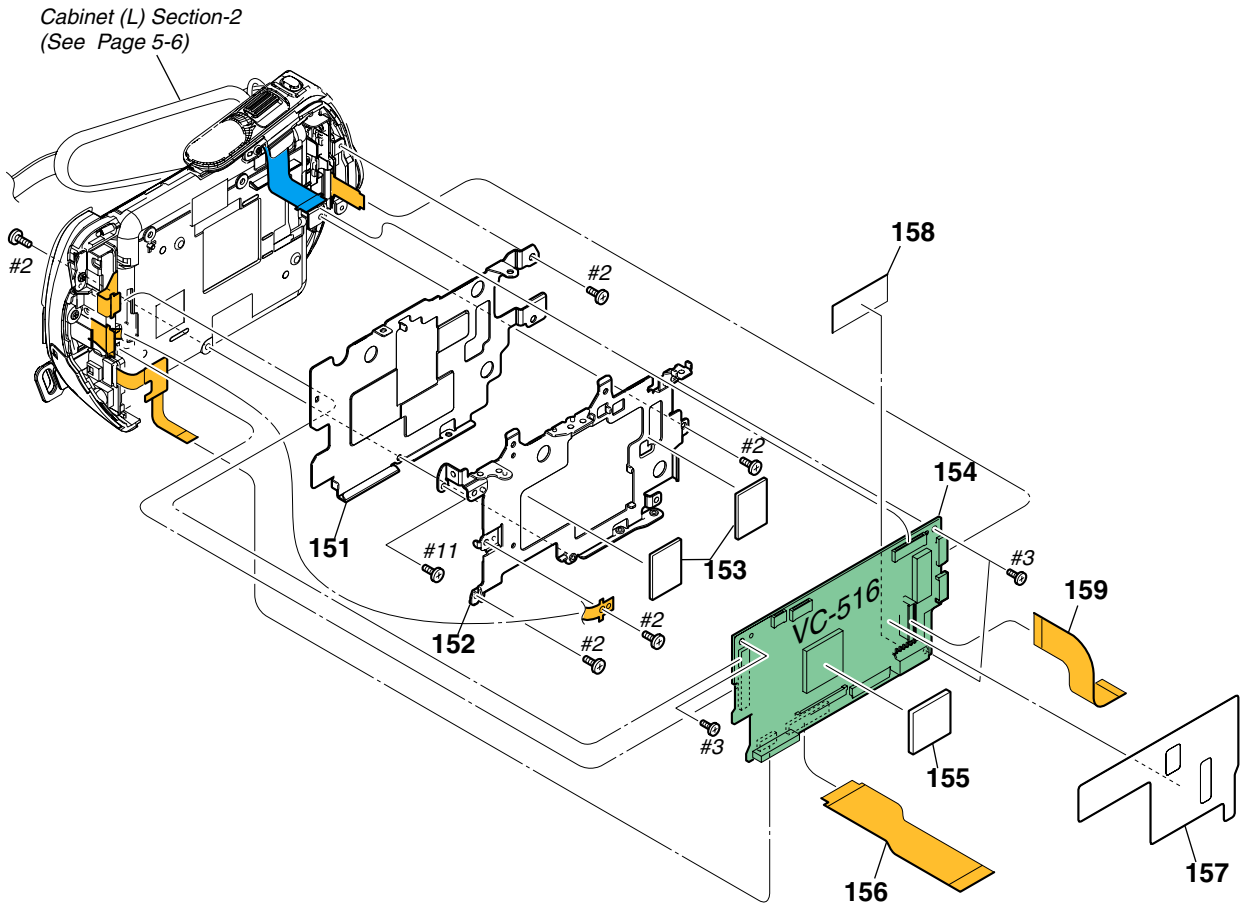


Ref. No.	Part No.	Description
101	1-818-890-11	CONNECTOR, EXTERNAL (HOT SHOE)
102	1-874-801-11	FP-802 FLEXIBLE BOARD
103	3-292-296-01	FRAME (900), SHOE
104	1-874-802-11	FP-803 FLEXIBLE BOARD
* 105	3-290-652-01	RETAINER, BT HARNESS

Ref. No.	Part No.	Description
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#124	2-599-475-01	SCREW (M1.7) (Silver)

5-1-4. CABINET (L) SECTION-1

DISASSEMBLY HARDWARE LIST



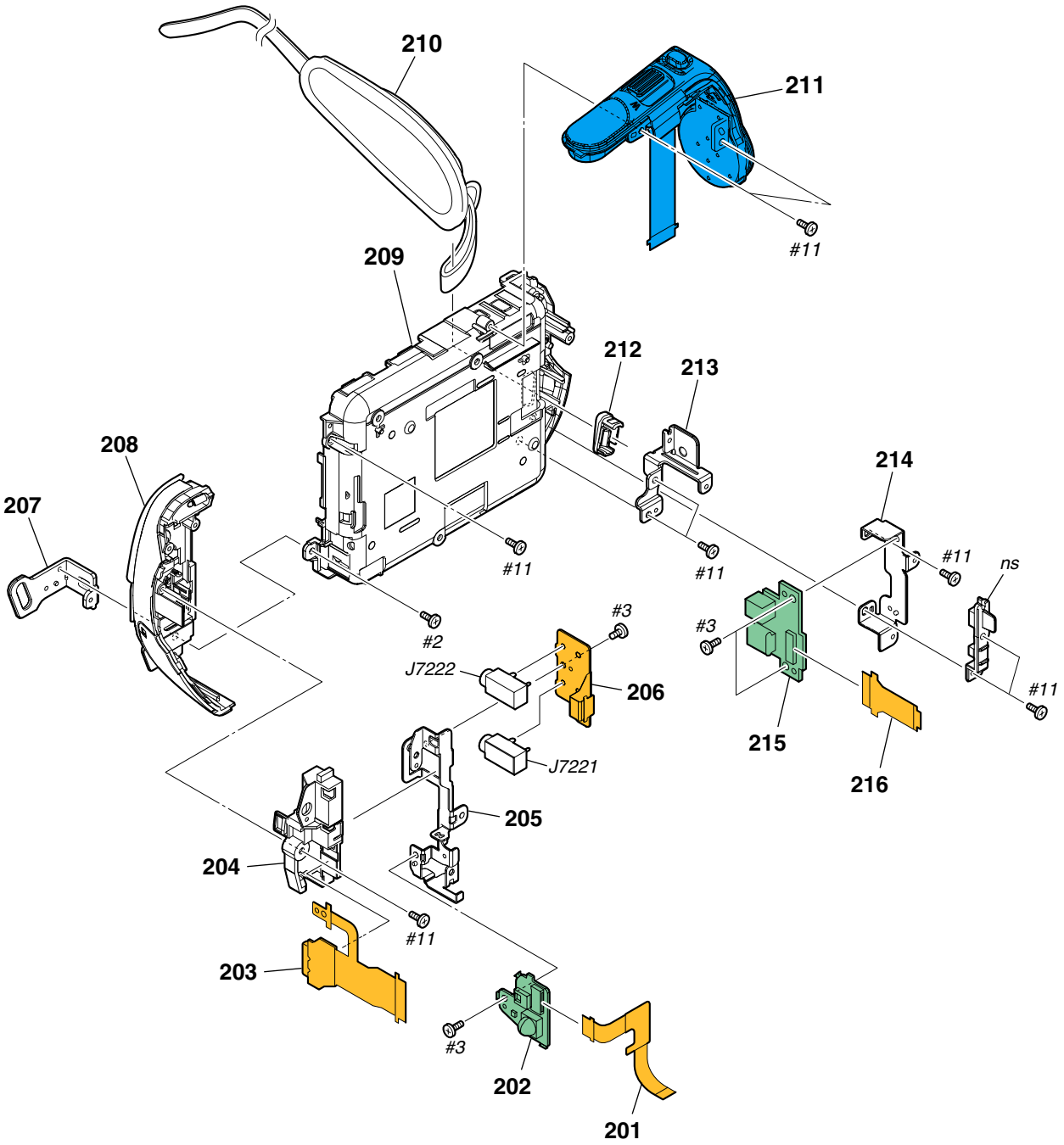
Ref. No.	Part No.	Description
* 151	3-292-179-01	HEAT SINK (B (900)), VC
152	3-292-178-01	FRAME (900), MAIN
153	3-290-677-01	SHEET (B), VC RADIATION
154	A-1508-553-A	VC-516 BOARD, COMPLETE (SERVICE) (SR11/SR12)
154	A-1508-554-A	VC-516 BOARD, COMPLETE (SERVICE) (SR11E/SR12E)

Ref. No.	Part No.	Description
155	3-290-676-01	SHEET (A), VC RADIATION
156	1-874-807-11	FP-808 FLEXIBLE BOARD
* 157	3-290-678-01	LABEL, FUSE REPLACEMENT CAUTION
* 158	3-398-042-01	SHEET (AN), SHIELD
159	1-874-804-11	FP-805 FLEXIBLE BOARD
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5-1-5. CABINET (L) SECTION-2

ns: not supplied

DISASSEMBLY HARDWARE LIST

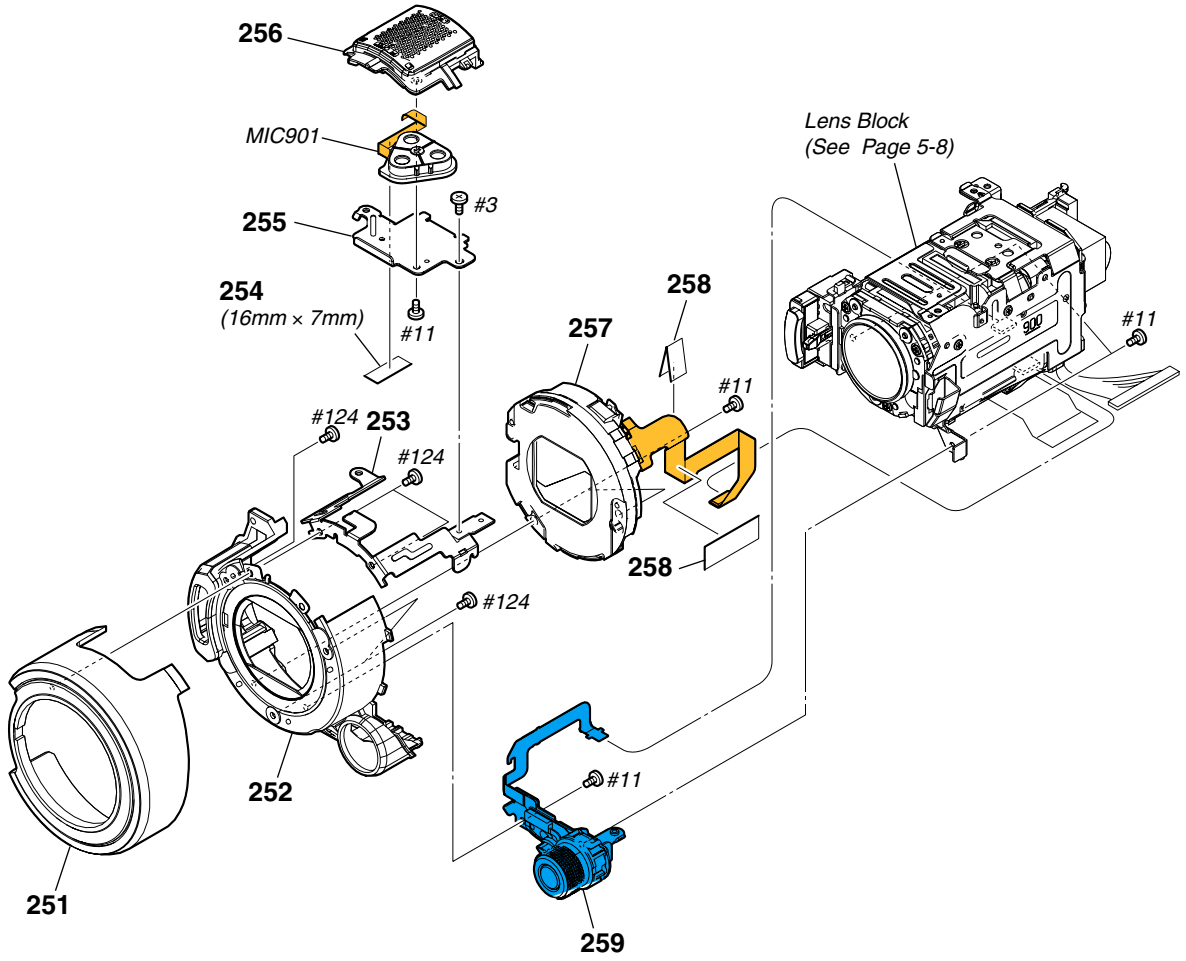


Ref. No.	Part No.	Description
201	1-874-811-11	FP-812 FLEXIBLE BOARD
202	A-1508-570-A	FR-278 BOARD, COMPLETE (SERVICE)
203	A-1494-357-A	FP-798 FLEXIBLE BOARD, COMPLETE
* 204	3-292-182-01	RETAINER, JACK
* 205	3-292-181-01	FRAME (900), LF
206	1-874-798-11	FP-799 FLEXIBLE BOARD
* 207	3-292-180-01	FRAME (F (900)), STRAP
208	X-2189-050-1	LF (900) ASSY, CABINET
209	3-290-483-01	CABINET (L) (EXCEPT SR11: US/SR12: US)
209	3-290-483-03	CABINET (L) (SR11: US/SR12: US)
210	2-664-928-41	BELT, GRIP
211	1-480-427-51	SWITCH BLOCK, CONTROL (PS28100)

Ref. No.	Part No.	Description
212	3-290-484-01	RETAINER, GRIP BELT
* 213	3-290-485-01	FRAME, BELT
* 214	3-290-672-01	FRAME, JK
215	A-1494-355-A	JK-356 BOARD, COMPLETE
216	1-874-803-11	FP-804 FLEXIBLE BOARD
J7221	1-569-950-41	JACK (SMALL TYPE) (HEADPHONE)
J7222	1-691-737-41	JACK (SMALL TYPE) (MIC)
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5-1-6. CABINET (F) SECTION

DISASSEMBLY HARDWARE LIST



注意： 254 : TAPE (0716) (3-084-668-01) は, ヒメロン T0.25 (3-076-631-01)を切って使用してください。

CAUTION: For the part of 254 : TAPE (0716) (3-084-668-01), cut NON WOVEN (T0.25) (3-076-631-01) into the desired length and use it.

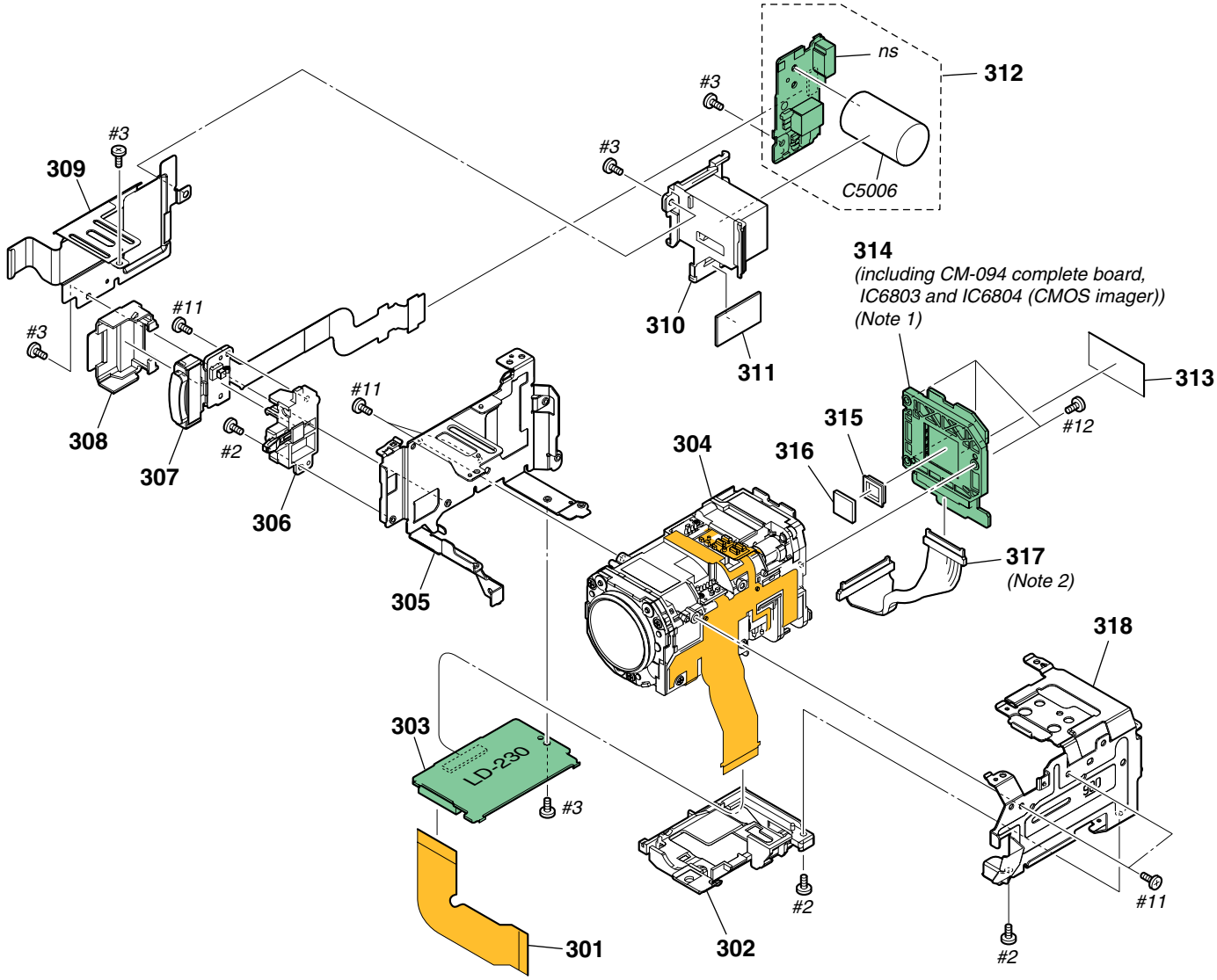
Ref. No.	Part No.	Description
251	3-292-211-01	RING (900), LENS (SR11: J)
251	3-292-211-11	RING (900), LENS (EXCEPT SR11: J)
252	X-2189-053-1	CABINET (F (900S)) ASSY (SR11: J)
252	X-2189-054-1	CABINET (F (900B)) ASSY (EXCEPT SR11: J)
253	3-292-212-01	FRAME (900), F
254	CAUTION	TAPE (0716)
255	3-292-213-01	FRAME (900), MICROPHONE
256	X-2189-055-1	HOLDER (900S) ASSY, MICROPHONE (SR11: J)
256	X-2189-056-1	HOLDER (900B) ASSY, MICROPHONE (EXCEPT SR11: J)

Ref. No.	Part No.	Description
257	A-1217-971-A	LENS BARRIER UNIT
258	3-080-272-01	TAPE (A)
259	1-480-432-11	SWITCH BLOCK, CONTROL (RS28900)
MIC901	1-542-711-31	MICROPHONE UNIT
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)
#124	2-599-475-01	SCREW (M1.7) (Silver)

5-1-7. LENS BLOCK

ns: not supplied

DISASSEMBLY HARDWARE LIST



Note 1: イメージャの交換時は4-3ページの“イメージャ交換時の注意”を必ずお読みください。

Note 1: Be sure to read “Precautions for Replacement of Imager” on page 4-2 when changing the imager.

Note 2: ハーネス（同軸ケーブル）の交換時は2-1ページの“Note for disconnecting the harness (coaxial cable)”を参照してください。

Note 2: Refer to page 2-1 “Note for disconnecting the harness (coaxial cable)” when changing the harness (coaxial cable).

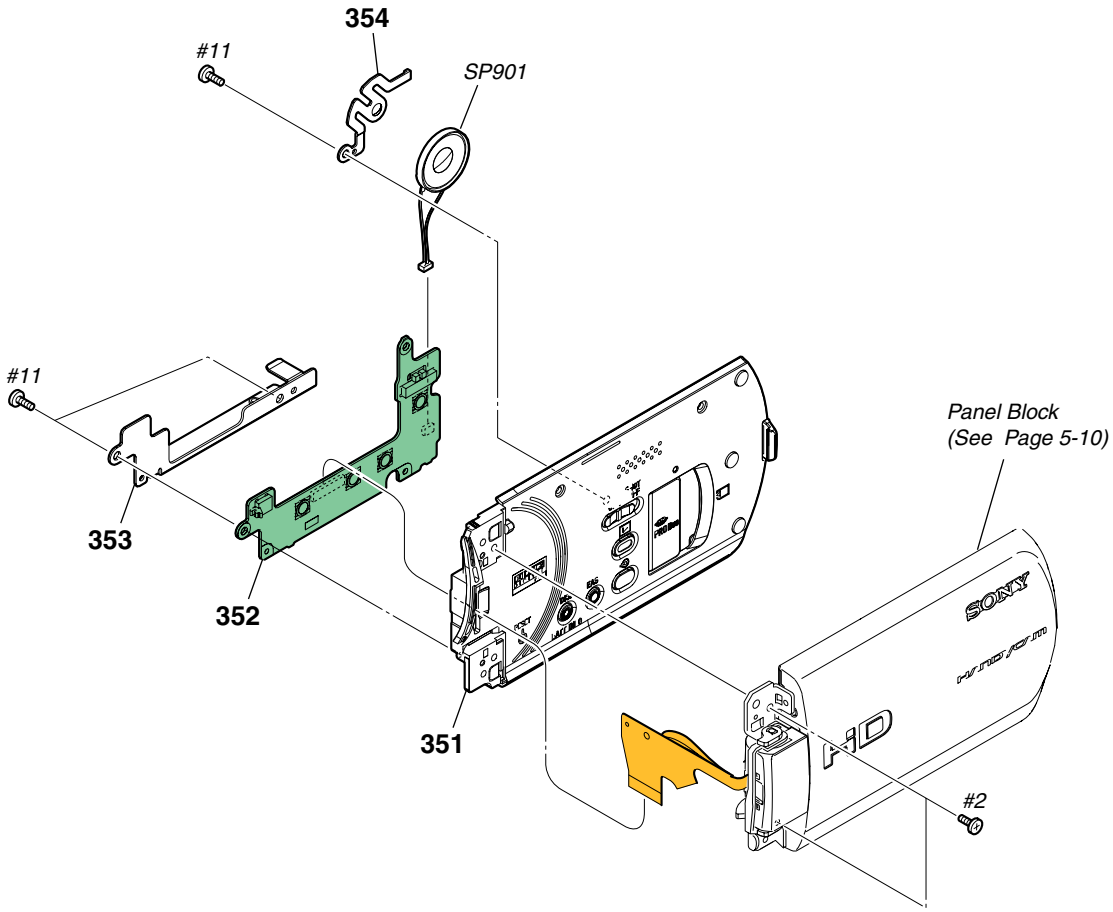
• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description
301	1-874-800-11	FP-801 FLEXIBLE BOARD
302	3-292-207-01	CLAMP (900), HARNESS
303	A-1494-364-A	LD-230 BOARD, COMPLETE
304	A-1497-729-A	LSV-1270A (SERVICE)
305	3-292-204-01	FRAME (L (900)), LENS
306	X-2189-052-1	HOLDER ASSY, ST
⚠307	1-480-263-11	FLASH UNIT
308	3-292-208-01	GUARD (900), ST
309	3-292-206-01	HEAT SINK (A (900)), VC
310	3-290-663-01	HOLDER, CAPACITOR
311	1-481-251-11	CORE, FERRITE
312	A-1494-365-A	ST-185 BOARD, COMPLETE
* 313	3-292-209-01	SHEET (900), CM RADIATION

Ref. No.	Part No.	Description
314	A-1512-350-A	CMOS BLOCK ASSY (1270) (including CM-094 complete board, IC6803 and IC6804 (CMOS imager)) (Note 1)
315	3-216-044-01	RUBBER (1270), SEAL
316	1-788-709-11	OPTICAL FILTER BLOCK (OFB-03-37)
317	1-965-256-31	HARNESS (COAXIAL CABLE) (Note 2)
318	3-292-205-01	FRAME (R (900)), LENS
⚠*C5006	1-114-393-11	ELECT 70uF 99% 330V
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)
#12	3-080-204-21	SCREW, TAPPING, P2 (Black)

5-1-8. CABINET (R) SECTION

DISASSEMBLY HARDWARE LIST

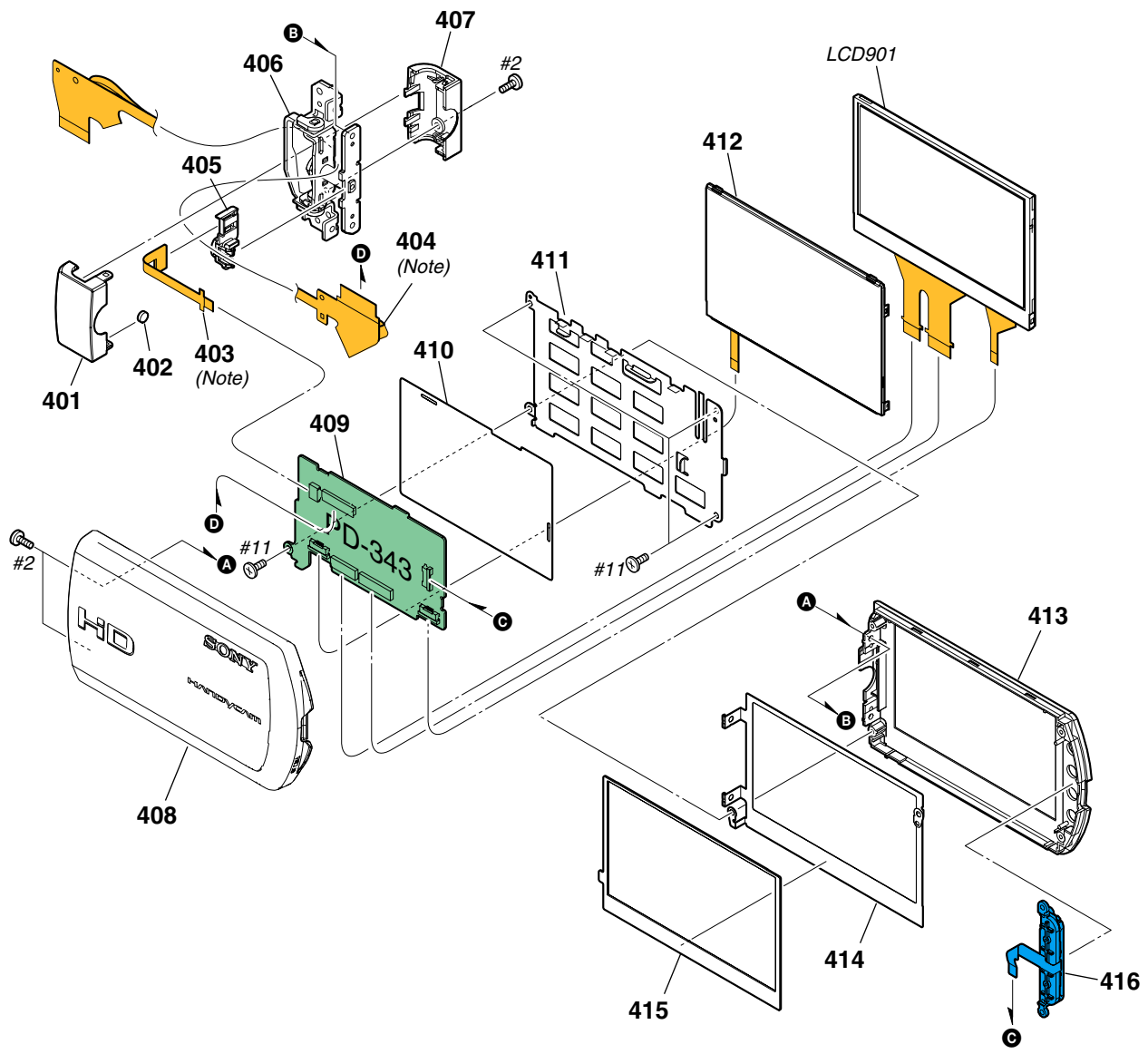


Ref. No.	Part No.	Description
351	X-2189-086-1	CABINET (R (900)) ASSY
352	A-1494-360-A	CK-185 BOARD, COMPLETE
* 353	3-292-375-01	FRAME (900), CK
* 354	3-292-376-01	RETAINER (900), SP

Ref. No.	Part No.	Description
SP901	1-825-262-82	LOUD SPEAKER (1.6CM)
#2	2-635-562-31	SCREW (M1.7) (Black)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5-1-9. PANEL BLOCK

DISASSEMBLY HARDWARE LIST



Note: FP-454, FP-807フレキシブル基板取付時は「HELP16」を必ずお読みください。

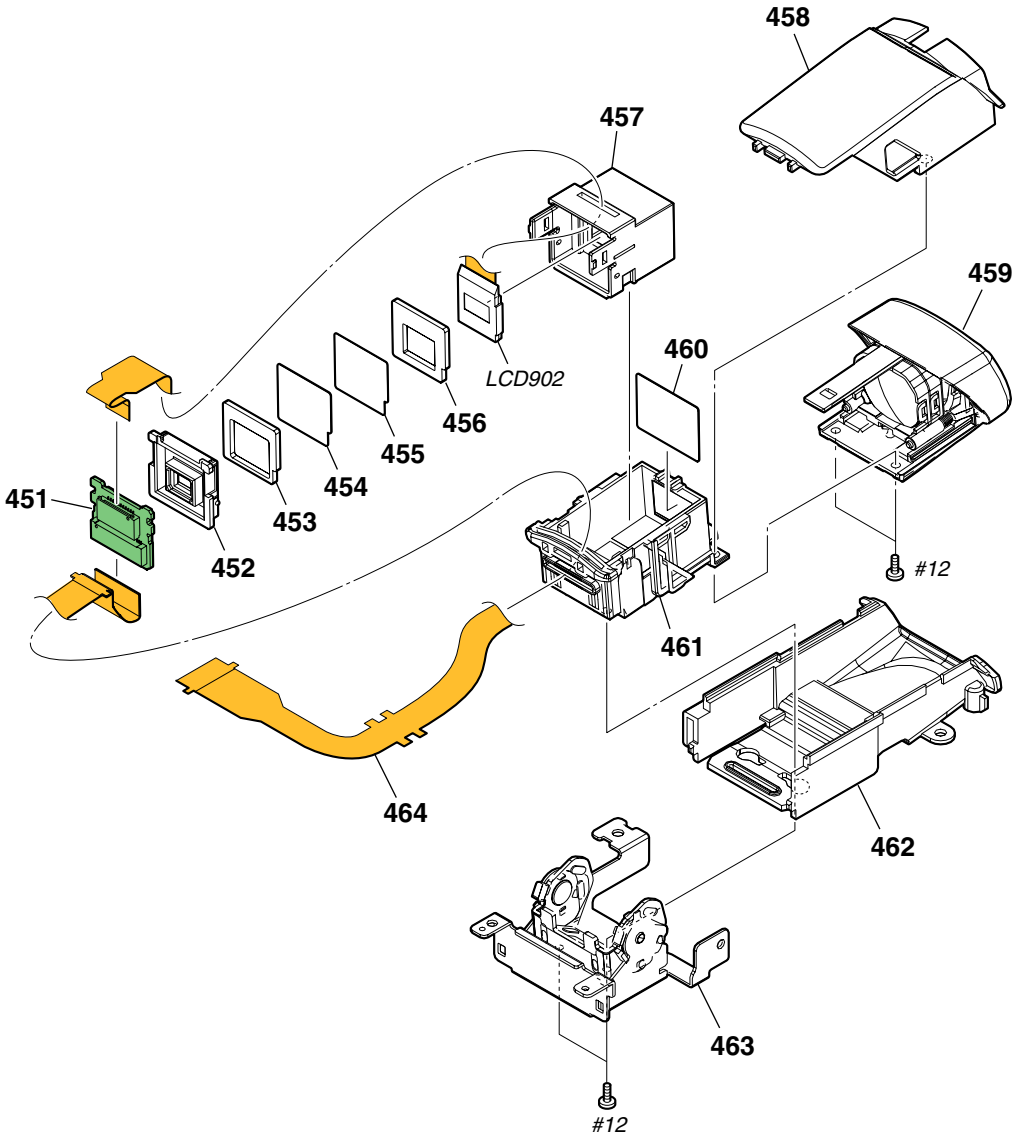
Note: Be sure to read “HELP16” when you install the FP-454, FP-807 flexible boards.

Ref. No.	Part No.	Description
401	3-292-370-01	COVER (O (900)), HINGE (SR11: J)
401	3-292-370-11	COVER (O (900)), HINGE (EXCEPT SR11: J)
402	1-471-278-11	MAGNET
403	A-1239-344-A	FP-454 FLEXIBLE BOARD, COMPLETE (Note)
404	1-874-806-11	FP-807 FLEXIBLE BOARD (Note)
* 405	3-292-372-01	CLAMP, FLEXIBLE
406	X-2189-085-1	HINGE (Y), 08 STYLE ASSY
407	3-292-371-01	COVER (U (900)), HINGE
408	A-1527-539-A	P CABINET(C (900)) SILVER (SR11: J)
408	X-2189-088-1	CABINET (C (900B)) ASSY, P (EXCEPT SR11: J)
409	A-1494-361-A	PD-343 BOARD, COMPLETE

Ref. No.	Part No.	Description
410	3-292-378-01	SHEET (P), INSULATING
* 411	3-292-374-01	RETAINER, P
412	1-480-358-21	BLOCK, LIGHT GUIDE PLATE (3.2)
413	3-292-368-01	CABINET (M (900)), P
* 414	3-292-373-01	PLATE (900), P GROUND
415	3-292-377-01	CUSHION (900), TP
416	1-480-458-11	SWITCH BLOCK, CONTROL (SB28900)
LCD901	A-1363-618-A	TP BLOCK ASSY (32ESHGU08)
#2	2-635-562-31	SCREW (M1.7) (Black)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5-1-10. EVF BLOCK

HARDWARE LIST



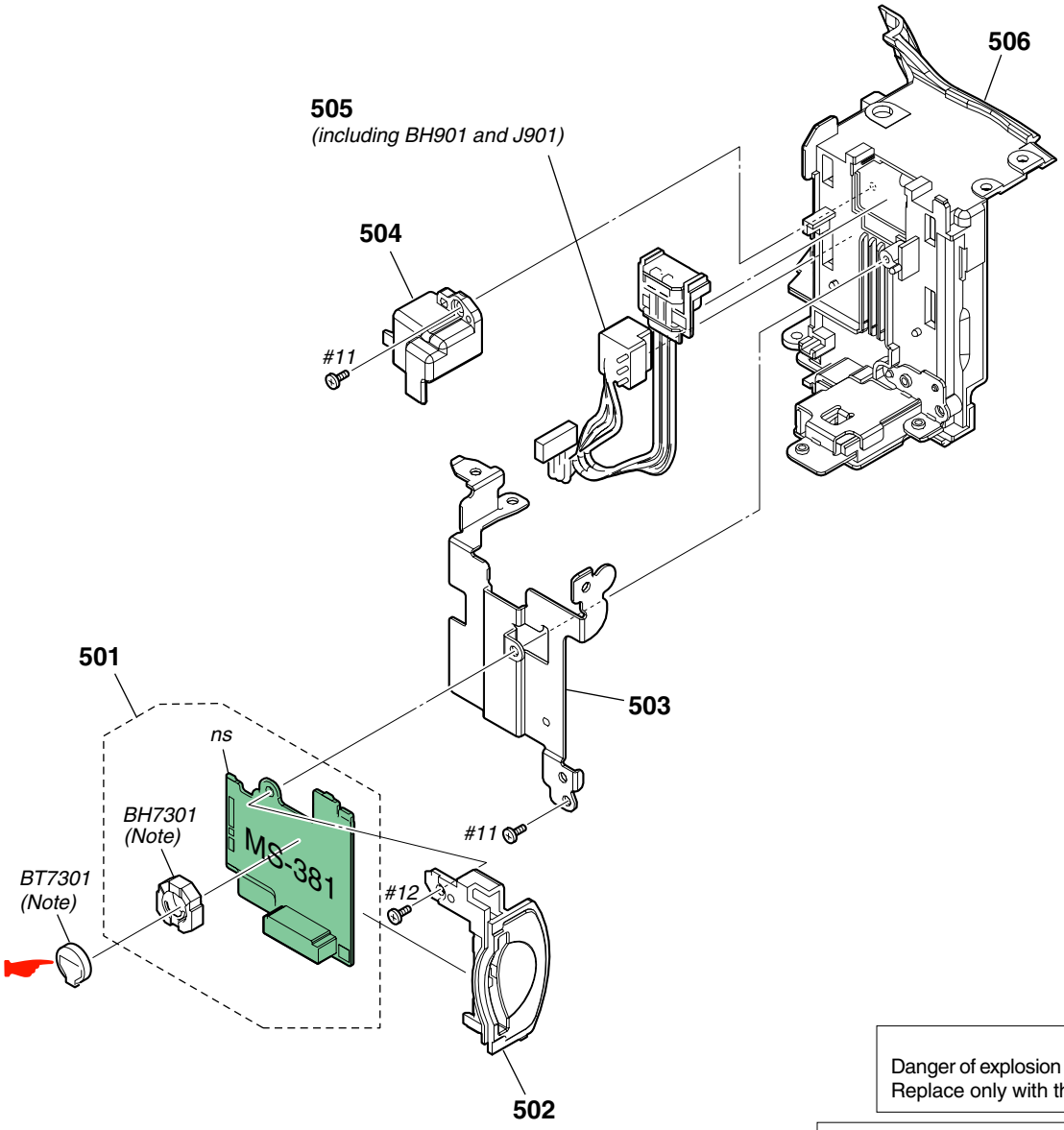
Ref. No.	Part No.	Description
451	A-1494-359-A	BL-017 BOARD, COMPLETE
452	2-664-672-01	GUIDE, LAMP
* 453	2-638-819-01	CUSHION, LCD
* 454	2-638-818-01	ILLUMINATOR
* 455	2-638-816-01	PLATE (TFT), DEFLECTION
456	2-664-671-01	SPACER, LCD
* 457	2-699-236-01	CABINET (222), INNER
458	3-292-322-01	CABINET (UPPER), VF (SR11: J)
458	3-292-322-11	CABINET (UPPER), VF (EXCEPT SR11: J)
459	X-2189-076-1	EYE CUP ASSY

Ref. No.	Part No.	Description
* 460	2-668-134-01	PANEL (CF), POLARIZATION
461	3-292-323-01	CABINET (LOWER), VF
462	3-292-324-01	COVER, VF BASE (SR11: J)
462	3-292-324-11	COVER, VF BASE (EXCEPT SR11: J)
463	X-2189-075-1	BASE ASSY, VF TILT
464	1-874-810-11	FP-811 FLEXIBLE BOARD
LCD902	8-753-241-14	LCX076AKE-1
#12	3-080-204-21	SCREW, TAPPING, P2 (Black)

5-1-11. BT PANEL BLOCK

ns: not supplied

HARDWARE LIST



: BT7301 (LITHIUM STORAGE BATTERY)
Board on the mount position.
(See page 4-52.)

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

注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

ノート: MS-381基板のリチウム蓄電池（BT7301）を交換する場合はバッテリホルダ（BH7301）も同時に新品に交換して下さい。（一度使用したバッテリホルダは再使用できません。）
部品取り付けの際は，先にバッテリホルダを取り付けてからリチウム電池を装着して下さい。

Note: Replace the battery holder (BH7301) together when replacing the lithium storage battery (BT7301) on the MS-381 board. (The battery holder removed once cannot be used again.)
When mounting these parts, mount new battery holder first and attach new lithium battery next.

• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description
501	A-1494-358-A	MS-381 BOARD, COMPLETE
502	3-290-650-01	CABINET, MS
* 503	3-290-649-01	FRAME (700), BT TERMINAL
* 504	3-290-651-01	RETAINER, DCIN
⚠505	1-821-575-21	DC JACK (including BH901 and J901)
506	X-2189-081-1	PANEL (900) ASSY, BT
⚠*BH7301	1-756-615-51	HOLDER, BATTERY (Note)
⚠BT7301	1-756-134-12	BATTERY, STORAGE, LITHIUM (Note)
#11	3-078-890-11	SCREW, TAPPING (Silver)
#12	3-080-204-21	SCREW, TAPPING, P2 (Black)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-1494-359-A	BL-017 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5701	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5702	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
		< CONNECTOR >			
* CN5701	1-816-647-51	FFC/FPC CONNECTOR (LIF) 18P			
* CN5702	1-817-698-81	CONNECTOR, FPC (ZIF) 21P			
		< DIODE >			
* D5701	6-501-591-01	DIODE NESW007AT-T099 (EVF BACKLIGHT)			
* D5702	6-501-955-01	DIODE MAZS056G08S0			
		< COMPOSITION CIRCUIT BLOCK >			
* RB5701	1-234-380-21	RES, NETWORK 47K (1005X4)			
	A-1494-360-A	CK-185 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
* CN5801	1-820-729-61	CONNECTOR, FPC (ZIF) 51P			
* CN5802	1-816-058-61	CONNECTOR, FPC (ZIF) 39P			
CN5803	1-778-506-21	PIN, CONNECTOR (PC BOARD) 2P			
		< RESISTOR >			
R5801	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5802	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5804	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R5805	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
		< SWITCH >			
S5801	1-771-138-21	SWITCH, KEY BOARD (RESET)			
S5802	1-771-138-21	SWITCH, KEY BOARD (EASY)			
S5803	1-771-138-21	SWITCH, KEY BOARD (DISC BURN)			
S5804	1-771-138-21	SWITCH, KEY BOARD (PLAY)			
S5805	1-771-138-21	SWITCH, KEY BOARD (DISP/BATT INFO)			
S5806	1-786-148-11	SWITCH, PUSH (1 KEY) (PANEL OPEN/CLOSE)			
S5808	1-771-731-11	SWITCH, SLIDE (NIGHTSHOT)			

Electrical parts list of the CM-094 is not shown.
Pages 5-14 is not shown.

Ref. No.	Part No.	Description
	A-1494-362-A	CR-089 BOARD, COMPLETE
		**********
		< CONNECTOR >
* CN7401	1-821-664-21	CONNECTOR, MULTIPLE (PLUG) 32P (MULTI CONNECTOR)
* CN7402	1-821-202-71	CONNECTOR, FPC (ZIF) 45P
	A-1239-344-A	FP-454 FLEXIBLE BOARD, COMPLETE
		**********
		< IC >
IC001	6-705-011-01	IC AN48830B-NL
	A-1494-357-A	FP-798 FLEXIBLE BOARD, COMPLETE
		**********
		< CONNECTOR >
CN7191	1-821-166-21	CONNECTOR, HDMI (HDMI OUT)
	1-874-798-11	FP-799 FLEXIBLE BOARD
		**********
(J7221 and J7222 are not included in FP-799 flexible board.)		
		< JACK >
J7221	1-569-950-41	JACK (SMALL TYPE) (HEADPHONE)
J7222	1-691-737-41	JACK (SMALL TYPE) (MIC)
	1-874-800-11	FP-801 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-801 flexible board.)		
	1-874-801-11	FP-802 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-802 flexible board.)		
	1-874-802-11	FP-803 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-803 flexible board.)		
	1-874-803-11	FP-804 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-804 flexible board.)		
	1-874-804-11	FP-805 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-805 flexible board.)		
	1-874-805-11	FP-806 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-806 flexible board.)		
	1-874-806-11	FP-807 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-807 flexible board.)		
	1-874-807-11	FP-808 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-808 flexible board.)		
	1-874-808-11	FP-809 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-809 flexible board.)		
	1-874-810-11	FP-811 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-811 flexible board.)		
	1-874-811-11	FP-812 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-812 flexible board.)		
	A-1508-570-A	FR-278 BOARD, COMPLETE (SERVICE)
		**********
		< CAPACITOR >

C9001	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9003	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9004	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9005	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C9008	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C9009	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C9010	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C9011	1-119-923-11	CERAMIC CHIP	0.047uF	10%	10V
C9012	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9013	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C9014	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C9015	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C9016	1-114-411-21	CERAMIC CHIP	0.33uF	10%	6.3V
C9017	1-114-411-21	CERAMIC CHIP	0.33uF	10%	6.3V

		< CONNECTOR >
* CN9002	1-816-644-51	FFC/FPC CONNECTOR (LIF) 12P
		< DIODE >
D9001	6-500-512-01	DIODE CL-330IRS-X-TU (NIGHTSHOT)
D9002	8-719-077-09	DIODE CL-196HR-CD-T (TALLY)
		< FERRITE BEAD >
FB9001	1-400-833-21	SMD EMI FERRITE
FB9002	1-400-833-21	SMD EMI FERRITE
FB9003	1-400-833-21	SMD EMI FERRITE
FB9004	1-400-833-21	SMD EMI FERRITE
		< IC >
IC9001	6-707-333-01	IC NJM3230SE7
IC9002	6-600-163-01	IC RS-770

Ref. No.	Part No.	Description			
		< COIL >			
L9001	1-400-588-11	INDUCTOR	10uH		
		< RESISTOR >			
R9004	1-218-965-11	RES-CHIP	10K	5%	1/16W
R9005	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9006	1-218-989-11	RES-CHIP	1M	5%	1/16W
R9007	1-218-965-11	RES-CHIP	10K	5%	1/16W
R9008	1-218-990-11	SHORT CHIP	0		
R9010	1-218-945-11	RES-CHIP	220	5%	1/16W
R9012	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
R9013	1-208-711-11	METAL CHIP	15K	0.5%	1/16W
		< COMPOSITION CIRCUIT BLOCK >			
* RB9001	1-234-379-21	RES, NETWORK	22K (1005X4)		
		< SENSOR >			
* SE9001	1-479-022-51	SENSOR, ANGULAR VELOCITY (PITCH)			
* SE9002	1-479-022-61	SENSOR, ANGULAR VELOCITY (YAW)			
	A-1494-355-A	JK-356 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
* CN7201	1-816-648-51	FFC/FPC CONNECTOR (LIF) 20P			
CN7202	1-819-436-11	CONNECTOR (SQUARE TYPE) (USB) 5P (USB)			
CN7203	1-815-794-13	CONNECTOR (MULTIPLE) (A/V R)			
		< FERRITE BEAD >			
FB7201	1-500-238-11	BEAD, FERRITE (CHIP) (1608)			
FB7202	1-500-238-11	BEAD, FERRITE (CHIP) (1608)			
		< RESISTOR >			
R7201	1-216-864-11	SHORT CHIP	0		
R7202	1-216-864-11	SHORT CHIP	0		
R7203	1-216-809-11	METAL CHIP	100	5%	1/10W
R7204	1-218-990-11	SHORT CHIP	0		
R7205	1-218-990-11	SHORT CHIP	0		
R7206	1-218-990-11	SHORT CHIP	0		
		< VARISTOR >			
* VD7201	1-802-279-11	VARISTOR (SMD)			
* VD7202	1-802-279-11	VARISTOR (SMD)			
* VD7203	1-802-279-11	VARISTOR (SMD)			
* VD7204	1-802-279-11	VARISTOR (SMD)			
* VD7205	1-802-279-11	VARISTOR (SMD)			

Electrical parts list of the LD-230 is not shown.
Pages 5-17 to 5-18 are not shown.

Ref. No.	Part No.	Description			
	A-1494-358-A	MS-381 BOARD, COMPLETE			
		**********			
(BT7301 (lithium storage battery) is not included in MS-381 complete board.)					
		< BATTERY HOLDER >			
⚠*BH7301	1-756-615-51	HOLDER, BATTERY (Note)			
		< BATTERY >			
⚠BT7301	1-756-134-12	BATTERY, STORAGE, LITHIUM (Note)			
		< CAPACITOR >			
C7302	1-100-786-91	TANTAL. CHIP	22uF	20%	6.3V
		< CONNECTOR >			
* CN7301	1-779-335-51	CONNECTOR, FFC/FPC 22P			
* CN7302	1-819-990-21	MEMORY STICK DUO CONNECTOR 10P (PRO DUO)			
		< DIODE >			
D7301	6-501-216-01	DIODE CL-271HR-C-TS (ACCESS)			
		< FERRITE BEAD >			
FB7301	1-469-580-21	INDUCTOR, FERRITE BEAD (1005)			
FB7302	1-469-580-21	INDUCTOR, FERRITE BEAD (1005)			
FB7303	1-469-580-21	INDUCTOR, FERRITE BEAD (1005)			
FB7304	1-469-580-21	INDUCTOR, FERRITE BEAD (1005)			
		< RESISTOR >			
R7302	1-218-990-11	SHORT CHIP	0		
R7303	1-218-944-11	RES-CHIP	180	5%	1/16W
R7304	1-218-944-11	RES-CHIP	180	5%	1/16W
R7305	1-218-944-11	RES-CHIP	180	5%	1/16W
R7306	1-218-944-11	RES-CHIP	180	5%	1/16W
R7307	1-218-990-11	SHORT CHIP	0		
R7308	1-218-990-11	SHORT CHIP	0		

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

注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

Note: Replace the battery holder (BH7301) together when replacing the lithium storage battery (BT7301) on the MS-381 board. (The battery holder removed once cannot be used again.)
When mounting these parts, mount new battery holder first and attach new lithium battery next.

ノート: MS-381基板のリチウム蓄電池（BT7301）を交換する場合はバッテリホルダ（BH7301）も同時に新品に交換して下さい。（一度使用したバッテリホルダは再使用できません。）
部品取り付けの際は，先にバッテリホルダを取り付けてからリチウム電池を装着して下さい。

Ref. No.	Part No.	Description			
	A-1494-361-A	PD-343 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C5901	1-100-581-81	CERAMIC CHIP	0.0047uF	10%	50V
C5902	1-100-581-81	CERAMIC CHIP	0.0047uF	10%	50V
C5903	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C5905	1-100-786-91	TANTAL. CHIP	22uF	20%	6.3V
C5907	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5909	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C5912	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5913	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C5914	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5915	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C5917	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5918	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C5919	1-112-300-91	CERAMIC CHIP	4.7uF	10%	10V
C5920	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C5921	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C5922	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C5923	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5924	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5925	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5926	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5927	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
* C5928	1-112-746-11	CERAMIC CHIP	4.7uF	10%	6.3V
C5930	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
		< CONNECTOR >			
* CN5901	1-817-544-71	CONNECTOR, FPC (ZIF) 39P			
* CN5902	1-794-322-51	CONNECTOR, FPC (ZIF) 6P			
CN5903	1-816-180-71	CONNECTOR, FPC (ZIF) 6P			
* CN5905	1-794-322-51	CONNECTOR, FPC (ZIF) 6P			
* CN5906	1-819-914-71	CONNECTOR, FPC (ZIF) 29P			
* CN5907	1-817-544-71	CONNECTOR, FPC (ZIF) 39P			
* CN5909	1-816-654-51	FFC/FPC CONNECTOR (LIF) 6P			
		< DIODE >			
D5903	6-500-813-01	DIODE MA2SD32008S0			
D5904	6-500-813-01	DIODE MA2SD32008S0			
		< IC >			
* IC5901	6-712-051-01	IC SN65LVDS302ZQER			
		< COIL >			
L5901	1-400-588-11	INDUCTOR	10uH		
L5902	1-400-588-11	INDUCTOR	10uH		
L5903	1-400-588-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q5901	8-729-427-37	TRANSISTOR	XP411F-TXE		
Q5902	8-729-427-67	TRANSISTOR	XP421F-TXE		
* Q5907	6-551-760-01	TRANSISTOR	UNR31A3G0LS0		
Q5908	8-729-053-48	TRANSISTOR	2SK3235		
* Q5909	6-551-846-01	TRANSISTOR	UP04401G08S0		
Q5910	8-729-053-48	TRANSISTOR	2SK3235		

• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description			
		< RESISTOR >			
R5901	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R5902	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R5903	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R5909	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5913	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5914	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5916	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5919	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5921	1-218-973-11	RES-CHIP	47K	5%	1/16W
R5923	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5926	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5928	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5929	1-218-990-11	SHORT CHIP	0		
R5932	1-218-990-11	SHORT CHIP	0		
R5936	1-208-695-11	METAL CHIP	3.3K	0.5%	1/16W
R5937	1-218-969-11	RES-CHIP	22K	5%	1/16W
R5938	1-208-923-11	METAL CHIP	33K	0.5%	1/16W
R5939	1-208-911-11	METAL CHIP	10K	0.5%	1/16W
R5940	1-208-699-11	METAL CHIP	4.7K	0.5%	1/16W
R5941	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R5942	1-208-683-11	METAL CHIP	1K	0.5%	1/16W
R5943	1-208-691-11	METAL CHIP	2.2K	0.5%	1/16W
R5944	1-211-973-11	METAL CHIP	15	0.5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB5901	1-234-381-11	RES, NETWORK	100K (1005X4)		
	A-1494-365-A	ST-185 BOARD, COMPLETE **********			
		< CAPACITOR >			
C5002	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C5003	1-165-884-91	CERAMIC CHIP	2.2uF	10%	6.3V
C5004	1-165-875-11	CERAMIC CHIP	10uF	10%	10V
C5005	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
⚠*C5006	1-114-393-11	ELECT	70uF	99%	330V
		< CONNECTOR >			
* CN5001	1-779-331-51	CONNECTOR, FFC/FPC 14P			
* CN5002	1-816-647-51	FFC/FPC CONNECTOR (LIF) 18P			
		< DIODE >			
D5002	6-500-619-01	DIODE RB520S-40TE61			
⚠D5003	6-501-096-01	DIODE CRF02 (TE85R)			
		< IC >			
⚠IC5001	6-707-554-01	IC TPS65552DGQR			
		< COIL >			
L5001	1-412-027-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
*⚠Q5001	6-551-686-01	TRANSISTOR	TIG030TS-S-TL-E		

Ref. No.	Part No.	Description			
		< RESISTOR >			
R5003	1-208-947-11	METAL CHIP	330K	0.5%	1/16W
R5004	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R5008	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R5010	1-216-809-11	METAL CHIP	100	5%	1/10W
R5011	1-218-989-11	RES-CHIP	1M	5%	1/16W
		< TRANSFORMER >			
⚠T5001	1-443-568-31	TRANSFORMER, D.C.-D.C.CONVERTER			

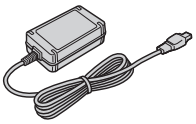
Electrical parts list of the VC-516 is not shown.
Pages 5-21 to 5-28 are not shown.

• Refer to page 5-1 for mark ⚠.

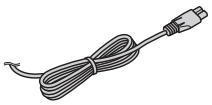
• EXCEPT J MODEL

Checking supplied accessories.

to J MODEL



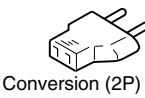
AC Adaptor
(AC-L200/L200B)
* Compatible in L200 and L200B.
⚠ 1-479-285-21



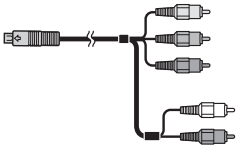
Power cord (Mains lead)
⚠ 1-555-074-91 (AUS)
⚠ 1-790-107-61 (US, CND)
⚠ 1-792-549-41 (JE)
⚠ 1-824-910-71 (AEP, NE, E:PAL)
⚠ 1-827-269-12 (UK, HK)
⚠ 1-832-121-31 (CH)
⚠ 1-833-892-21 (KR)
⚠ 1-834-852-11 (E:NTSC)

Operating Guide
(HDR-SR11/SR12)
3-286-585-11 (ENGLISH, SPANISH) (US, CND, JE, E:NTSC)
3-286-585-21 (FRENCH) (CND)
3-286-585-31 (PORTUGUESE) (JE)
3-286-585-41 (TRADITIONAL CHINESE) (E:NTSC)
3-286-585-51 (KOREAN) (KR, JE)

Operating Guide
(HDR-SR11E/SR12E)
3-286-586-11 (ENGLISH) (AEP, UK, HK, AUS, JE, E:PAL)
3-286-586-21 (FRENCH, DUTCH, GREEK) (AEP)
3-286-586-31 (GERMAN, ITALIAN, TURKISH) (AEP)
3-286-586-41 (SPANISH, PORTUGUESE, POLISH) (AEP)
3-286-586-51 (CZECH, HUNGARIAN, SLOVAK) (AEP)
3-286-586-61 (RUSSIAN, UKRAINIAN) (NE, JE)
3-286-586-71 (SWEDISH, DANISH, FINNISH) (NE)
3-286-586-81 (SIMPLIFIED CHINESE) (CH, JE, E:PAL)
3-286-586-91 (ARABIC, PERSIAN) (E:PAL)
3-286-587-41 (TRADITIONAL CHINESE) (HK)



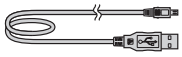
Conversion (2P) Adaptor
⚠ 1-569-007-12 (E:NTSC, JE)



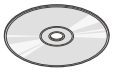
Component A/V cable
1-834-647-11

21-Pin Adaptor
1-770-783-21 (AEP, UK, NE)

A/V connecting cable
1-823-156-51

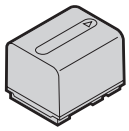


USB cable
1-829-868-31

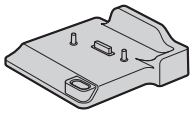


DVD-ROM
"ENJOY HANDYCAM"
3-282-264-01 (KR)
ENGLISH/KOREA/JAPANESE
3-282-264-11 (US, CND)
ENGLISH/FRENCH/SPANISH/PORTUGUESE
3-282-264-21 (UK, NE)
ENGLISH/RUSSIAN/GERMAN/TURKISH
3-282-264-51 (AEP)
ENGLISH / FRENCH / GERMAN / DUTCH / SPANISH / PORTUGUESE / ITALIAN / TURKISH
3-282-264-61 (HK, AUS, CH, E)
ENGLISH / FRENCH / SIMPLIFIED CHINESE / TRADITIONAL CHINESE
3-282-264-71 (E)
ENGLISH / TRADITIONAL CHINESE / SPANISH / PORTUGUESE

Wireless Remote Commander
(RMT-835)
1-479-275-41



Rechargeable battery pack
(NP-FH60)
⚠ A-1201-666-A (US, CND)
⚠ A-1201-667-A
(EXCEPT US, CND, CH)
⚠ A-1201-668-A (CH)

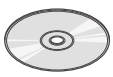


Handycam Station
(DCRA-C210)
1-821-692-11

Handycam Handbook (PDF)

The CD-ROM supplied contains all of language version of the Instruction Manual in pdf (Handycam Handbook.pdf) for printing.

- The printed matter is not supplied. If required, please order it with the part number below.
- (Only for destination Japanese model)
日本国内については日本語のみが印刷での部品供給可能です。



CD-ROM "Handycam Application Software"
– Picture Motion Browser (Software)
– PMB Guide
– Handycam Handbook
3-286-588-01

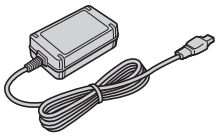
HDR-SR11/SR12
* 3-286-589-01 (JAPANESE)
* 3-286-589-11 (ENGLISH)
* 3-286-589-21 (FRENCH)
* 3-286-589-31 (SPANISH)
* 3-286-589-41 (PORTUGUESE)
* 3-286-589-51 (TRADITIONAL CHINESE)
* 3-286-589-61 (KOREAN)

HDR-SR11E/SR12E
* 3-286-590-11 (ENGLISH)
* 3-286-590-21 (FRENCH)
* 3-286-590-31 (DUTCH)
* 3-286-590-41 (GREEK)
* 3-286-590-51 (GERMAN)
* 3-286-590-61 (ITALIAN)
* 3-286-590-71 (TURKISH)
* 3-286-590-81 (SPANISH)
* 3-286-590-91 (PORTUGUESE)
* 3-286-591-11 (POLISH)
* 3-286-591-21 (CZECH)
* 3-286-591-31 (HUNGARIAN)
* 3-286-591-41 (SLOVAK)
* 3-286-591-51 (RUSSIAN)
* 3-286-591-61 (UKRAINIAN)
* 3-286-591-71 (SWEDISH)
* 3-286-591-81 (DANISH)
* 3-286-591-91 (FINNISH)
* 3-286-592-11 (SIMPLIFIED CHINESE)
* 3-286-592-21 (ARABIC)
* 3-286-592-31 (PERSIAN)
* 3-286-592-41 (MALAY)
* 3-286-592-51 (THAI)
* 3-286-592-61 (INDONESIAN)
* 3-286-592-71 (TRADITIONAL CHINESE)

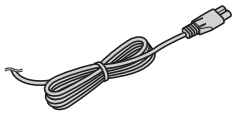
• Refer to page 5-1 for mark ⚠.

• J MODEL

付属品

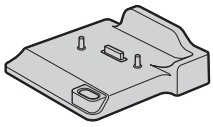


ACアダプター
(AC-L200/L200B)
＊L200とL200Bには
互換性があります。
⚠ 1-479-285-21

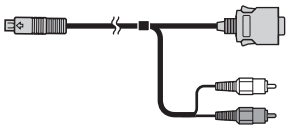


電源コード
⚠ 1-792-549-41

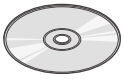
取扱説明書
3-286-585-01 (日本語)



ハンディカムステーション
(DCRA-C210)
1-821-692-11

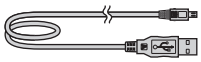


D端子A/Vケーブル
1-834-646-21



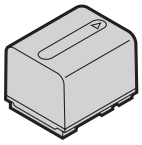
DVD-ROM
“エンジョイハンディーカム”
3-282-264-01
英語/韓国語/日本語

A/V接続ケーブル
1-823-156-51



USBケーブル
1-829-868-31

ワイヤレスリモコン
(RMT-835)
1-479-275-41

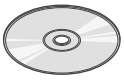


リチャージャブルバッテリーパック
(NP-FH60)
⚠ A-1201-665-A

ハンディカム ハンドブック (PDF)

印刷用の取扱説明書.pdf(ハンディカム ハンドブック.pdf)は
全ての言語が付属品のCD-ROMに含まれています。
- 印刷物は付属されておりません。
  必要な場合は下記部品番号にて注文となります。

＊ 3-286-589-01（日本語）



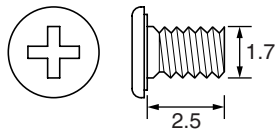
CD-ROM「Handycam
Application Software」
– 「Picture Motion Browser」
(ソフトウェア)
– 「PMB ガイド」
– 「ハンディカム ハンドブック」

3-286-588-01

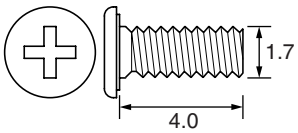
• ⚠マークについては，5-1ページを参照して下さい。

HARDWARE LIST (1/7)

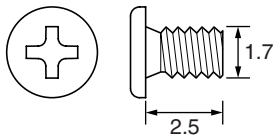
#1: M1.7 X 2.5
(Black)
2-635-562-11



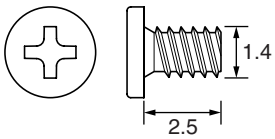
#2: M1.7 X 4.0
(Black)
2-635-562-31



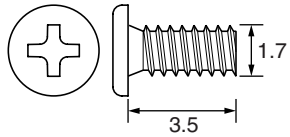
#3: M1.7 X 2.5
(Red)
2-660-401-01



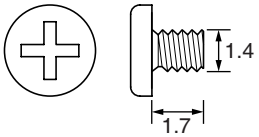
#4: M1.4 X 2.5 (Tapping)
(Dark Silver)
3-348-998-81



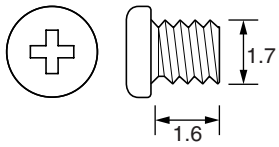
#5: M1.7 X 3.5 (Tapping)
(Black)
3-080-204-01



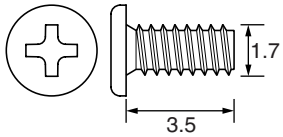
#6: M1.4 X 1.7
(Silver)
2-598-474-01



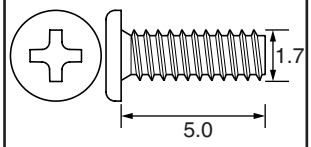
#7: M1.7 X 1.6
(Black)
7-627-552-18



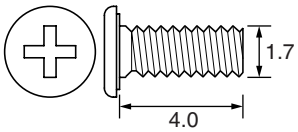
#8: M1.7 X 3.5 (Tapping)
(Silver)
3-078-890-01



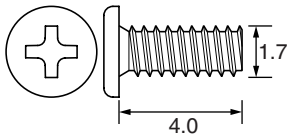
#9: M1.7 X 5.0 (Tapping)
(Silver)
3-078-890-21



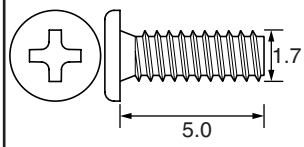
#10: M1.7 X 4.0
(Silver)
2-599-475-31



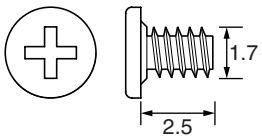
#11: M1.7 X 4.0 (Tapping)
(Silver)
3-078-890-11



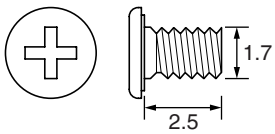
#12: M1.7 X 5.0 (Tapping)
(Black)
3-080-204-21



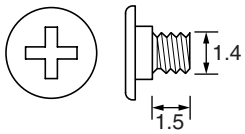
#13: M1.7 X 2.5 (Tapping)
(Silver)
3-085-397-01



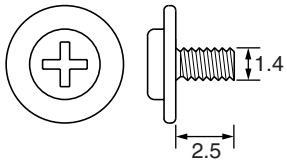
#14: M1.7 X 2.5
(Silver)
2-599-475-11



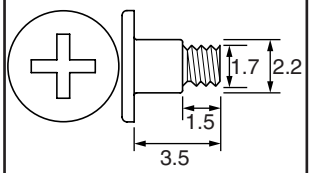
#15: M1.4 X 1.5
(Silver)
3-062-214-01



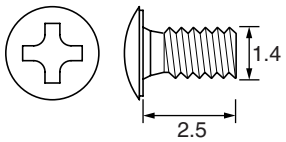
#16: M1.4 X 2.5
(Silver)
2-586-337-01



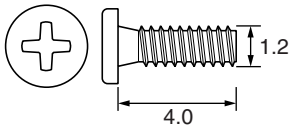
#17: M1.7 X 1.5
(Silver)
2-586-389-01



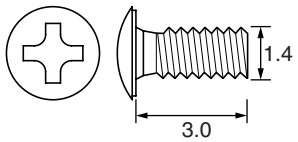
#18: M1.4 X 2.5
(Silver)
2-635-591-21



#19: M1.2 X 4.0 (Tapping)
(Red)
3-086-156-21

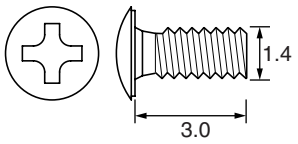


#20: M1.4 X 3.0
(Silver)
2-635-591-31

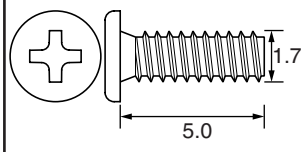


HARDWARE LIST (2/7)

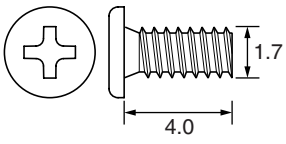
#21: M1.4 X 3.0
(Black)
2-662-396-21



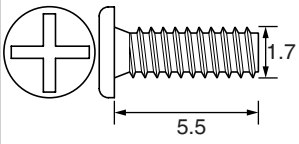
#22: M1.7 X 5.0 (Tapping)
(Silver)
3-083-261-01



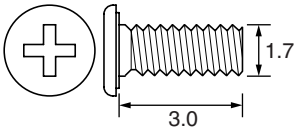
#23: M1.7 X 4.0 (Tapping)
(Black)
3-080-204-11



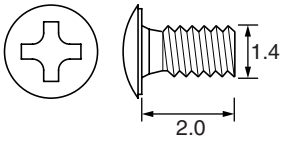
#24: B1.7 X 5.5 (Tapping)
(Black)
4-679-805-11



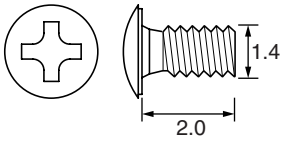
#25: M1.7 X 3.0
(Black)
2-635-562-21



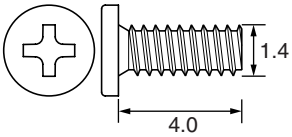
#26: M1.4 X 2.0
(Silver)
2-635-591-11



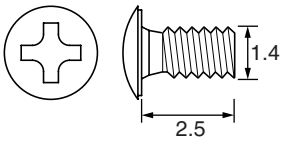
#27: M1.4 X 2.0
(Black)
2-662-396-11



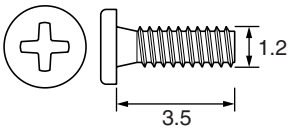
#28: M1.4 X 4.0 (Tapping)
(Silver)
3-348-998-61



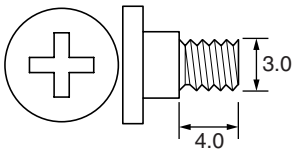
#29: M1.4 X 2.5
(Black)
2-662-396-01



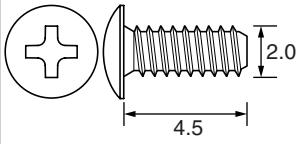
#30: M1.2 X 4.0 (Tapping)
(White)
3-086-156-11



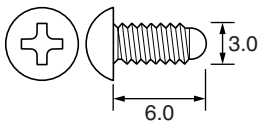
#31: M3.0 X 4.0
(Silver)
2-102-434-01



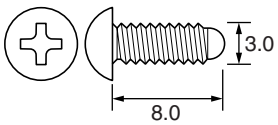
#32: M2.0 X 4.5 (Tapping)
(Silver)
2-102-498-01



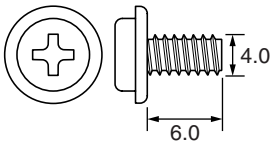
#33: M3.0 X 6.0
(Silver)
3-077-331-21



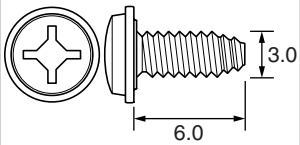
#34: M3.0 X 8.0
(Black)
3-077-331-41



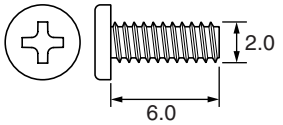
#35: M4.0 X 6.0 (Tapping)
(Silver)
3-975-291-02



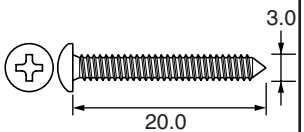
#36: M3.0 X 6.0
(Silver)
4-886-821-11



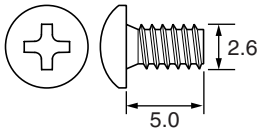
#37: M2.0 X 6.0 (Tapping)
(Black)
3-080-206-31



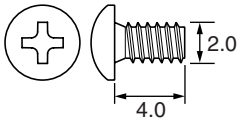
#38: M3.0 X 20.0 (Tapping)
(Silver)
7-685-651-79



#39: M2.6 X 5.0 (Tapping)
(Black)
7-685-791-09



#40: M2.0 X 4.0 (Tapping)
(Silver)
7-685-851-04



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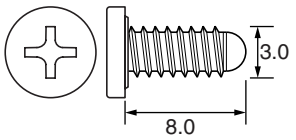
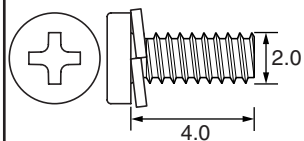
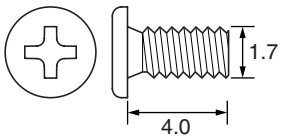
#41: M3.0 X 8.0 (Tapping)
(Silver)
3-065-748-01



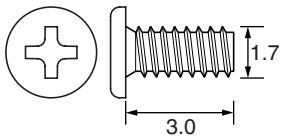
#42: M2.0 X 4.0 (Tapping)
(Silver)
7-628-253-00



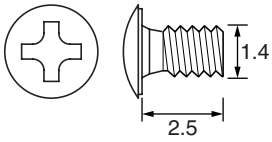
#43: M1.7 X 4.0
(Red)
2-660-401-31



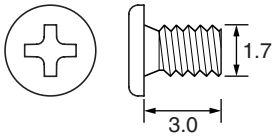
#44: M1.7 X 3.0 (Tapping)
(Silver)
3-078-890-61



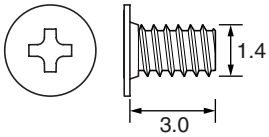
#45: M1.4 X 2.5
(Silver)
2-587-151-01



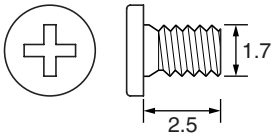
#46: M1.7 X 3.0
(Red)
2-660-401-11



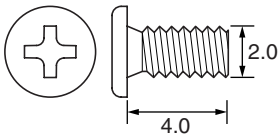
#47: M1.4 X 3.0 (Tapping)
(Silver)
2-665-774-01



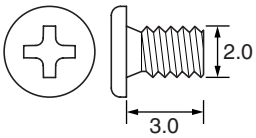
#48: M1.7 X 2.5
(Silver)
3-973-497-91



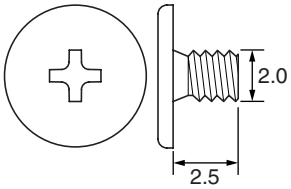
#49: M2.0 X 4.0
(Black)
2-630-005-31



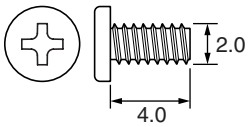
#50: M2.0 X 3.0
(Red)
2-891-494-11



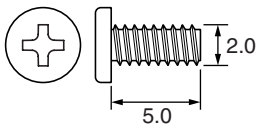
#51: M2.0 X 2.5
(Silver)
3-073-686-01



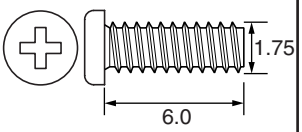
#52: M2.0 X 4.0 (Tapping)
(Black)
3-080-206-11



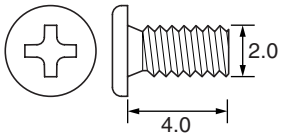
#53: M2.0 X 5.0 (Tapping)
(Black)
3-080-206-21



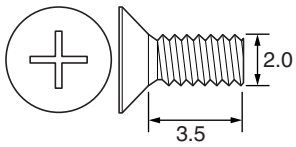
#54: M1.75 X 6.0 (Tapping)
(Black)
3-318-203-11



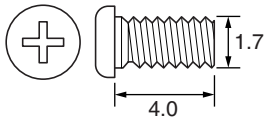
#55: M2.0 X 4.0
(Silver)
2-655-582-11



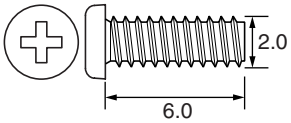
#56: M2.0 X 3.5
(Silver)
3-067-187-11



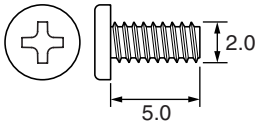
#57: M1.7 X 4.0
(Black)
7-627-852-18



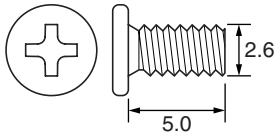
#58: M2.0 X 6.0 (Tapping)
(Silver)
3-719-408-11



#59: M2.0 X 5.0 (Tapping)
(Silver)
3-080-205-21

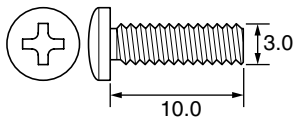


#60: M2.6 X 5.0
(Black)
3-061-062-11

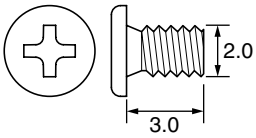


HARDWARE LIST (4/7)

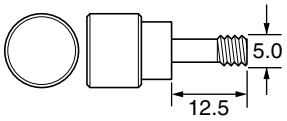
#61: M3.0 X 10.0
(Black)
7-682-549-09



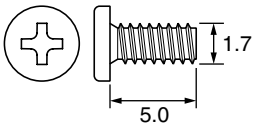
#62: M2.0 X 3.0
(Silver)
3-080-202-21



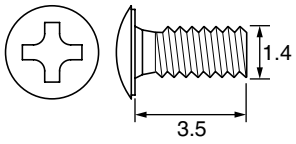
#63: M5.0 X 12.5
(Black)
3-060-811-21



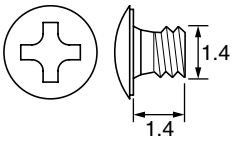
#64: M1.7 X 5.0 (Tapping)
(Silver)
2-666-551-21



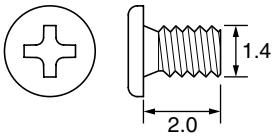
#65: M1.4 X 3.5
(Silver)
2-635-591-01



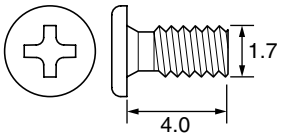
#66: M1.4 X 1.4
(Silver)
2-635-591-41



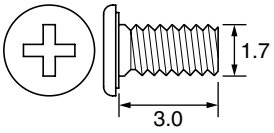
#67: M1.4 X 2.0
(Silver)
3-389-523-16



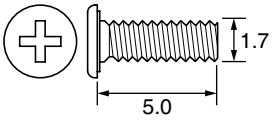
#68: M1.7 X 4.0
(Silver)
2-655-581-01



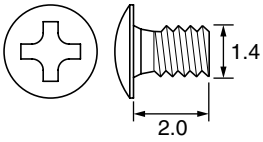
#69: M1.7 X 3.0
(Silver)
2-599-475-21



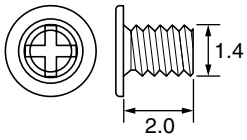
#70: M1.7 X 5.0
(Silver)
2-599-475-41



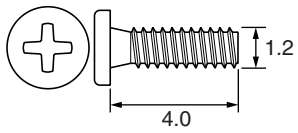
#71: M1.4 X 2.0
(Red)
3-208-537-01



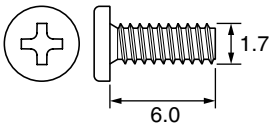
#72: M1.4 X 2.0
(Silver)
4-663-621-41



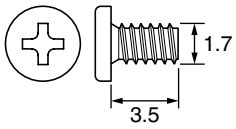
#73: M1.2 X 4.0 (Tapping)
(Black)
3-086-156-61



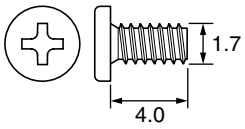
#74: M1.7 X 6.0 (Tapping)
(Silver)
2-666-551-31



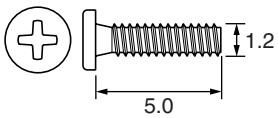
#75: M1.7 X 3.5 (Tapping)
(Silver)
2-666-551-01



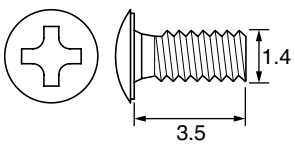
#76: M1.7 X 4.0 (Tapping)
(Silver)
2-666-551-11



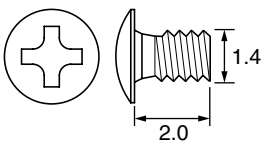
#77: M1.2 X 5.0 (Tapping)
(Silver)
3-086-156-31



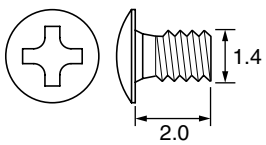
#78: M1.4 X 3.5
(Red)
3-208-537-11



#79: M1.4X 2.0
(Silver)
2-587-151-11

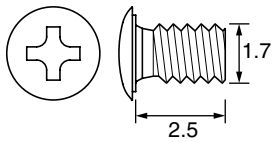


#80: M1.4X 2.0
(Black)
3-279-411-01

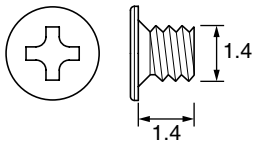


HARDWARE LIST (5/7)

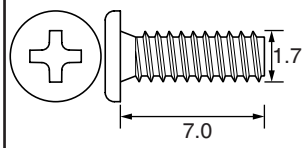
#81: M1.7 X 2.5
(Silver)
2-515-756-01



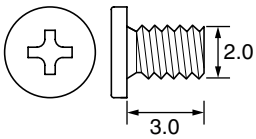
#82: M1.4 X 1.4
(Silver)
3-272-251-01



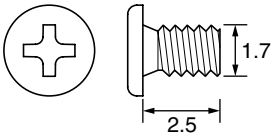
#83: M1.7 X 7.0 (Tapping)
(Black)
3-080-204-41



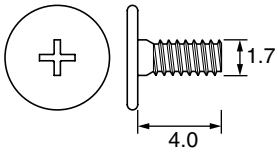
#84: M2.0 X 3.0
(Silver)
3-072-453-11



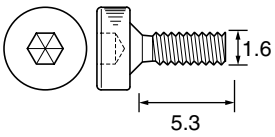
#85: M1.7 X 2.5
(Black)
2-515-483-11



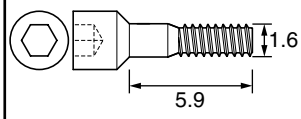
#86: M1.7 X 4.0 (Tapping)
(Silver)
2-695-434-21



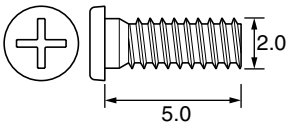
#87: M1.6 X 5.3
(Black)
2-689-328-01



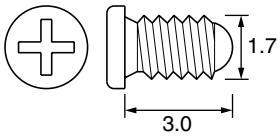
#88: M1.6 X 5.9 (Tapping)
(Silver)
2-689-015-01



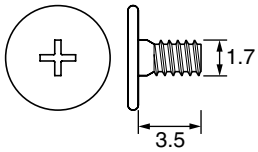
#89: M2.0 X 5.5 (Tapping)
(Silver)
2-695-575-01



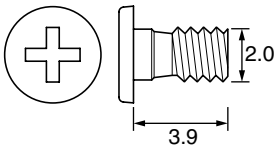
#90: M1.7 X 3.0
(Silver)
3-271-395-01



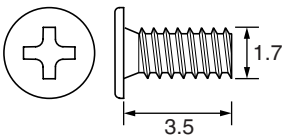
#91: M1.7 X 3.0 (Tapping)
(Silver)
2-695-434-11



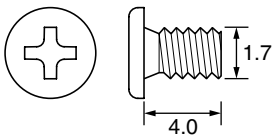
#92: M2.0 X 3.9
(Black)
3-268-954-01



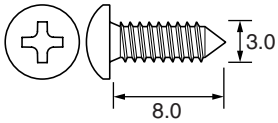
#93: M1.7 X 3.5 (Tapping)
(Silver)
3-254-082-01



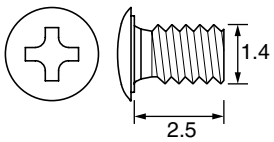
#94: M1.7 X 4.0
(Black)
2-515-483-31



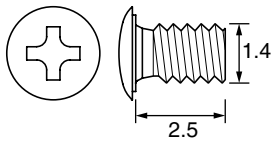
#95: M3.0 X 8.0 (Tapping)
(Black)
7-685-646-79



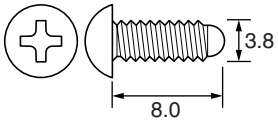
#96: M1.4 X 2.5
(Silver)
2-587-151-21



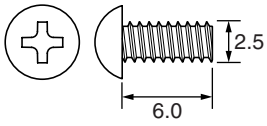
#97: M1.4 X 2.5
(Black)
2-662-396-31



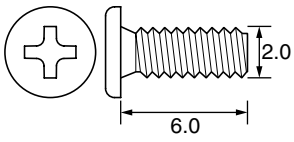
#98: M3.0 X 8.0
(Silver)
3-077-331-01



#99: M2.5 X 6.0 (Tapping)
(Silver)
3-776-750-02

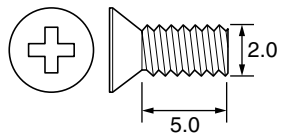


#100: M2.0 X 6.0
(Black)
3-080-203-51

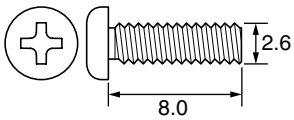


HARDWARE LIST (6/7)

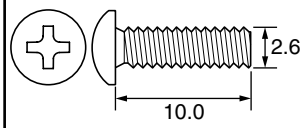
#101: M2.0 X 5.0
(Silver)
7-621-555-39



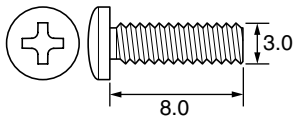
#102: M2.6 X 8.0
(Black)
7-621-284-30



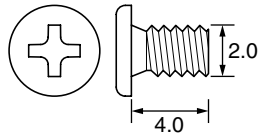
#103: M2.6 X 10.0
(Silver)
7-685-794-09



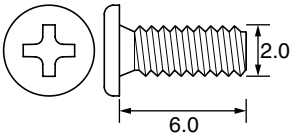
#104: M3.0 X 8.0
(Black)
7-682-548-09



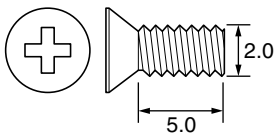
#105: M2.0 X 4.0
(Red)
2-891-494-31



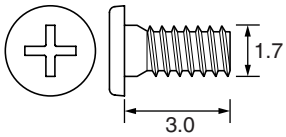
#106: M2.0 X 6.0
(Black)
3-713-786-11



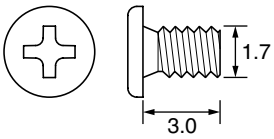
#107: M2.0 X 5.0
(Silver)
3-032-750-01



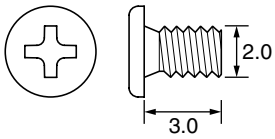
#108: M1.7 X 3.0 (Tapping)
(Black)
2-695-430-01



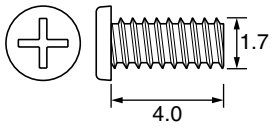
#109: M1.7 X 3.0
(Black)
2-515-483-21



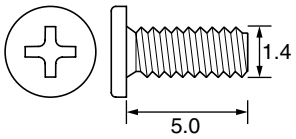
#110: M2.0 X 3.0
(Black)
2-630-005-21



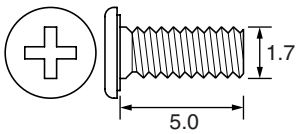
#111: M1.7 X 4.0 (Tapping)
(Black)
2-887-124-01



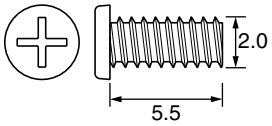
#112: M1.4 X 5.0
(Black)
2-178-410-11



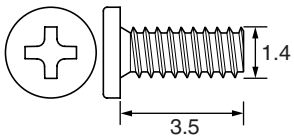
#113: M1.7 X 5.0
(Black)
2-635-562-41



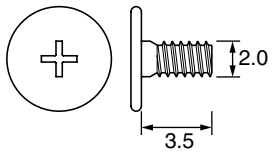
#114: M2.0 X 5.5 (Tapping)
(Silver)
2-698-464-01



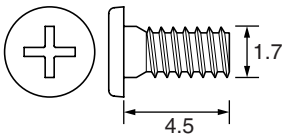
#115: M1.4 X 3.5 (Tapping)
(Silver)
3-348-998-51



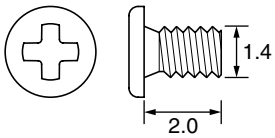
#116: M2.0 X 3.5 (Tapping)
(Silver)
2-695-435-01



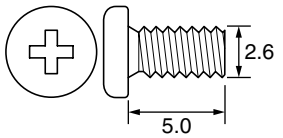
#117: M1.7 X 4.5 (Tapping)
(Silver)
2-695-429-31



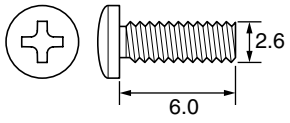
#118: M1.4 X 2.0
(Black)
2-655-580-01



#119: M2.6 X 5.0
(Black)
7-627-556-58

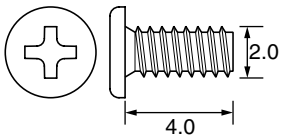


#120: M2.6 X 6.0
(Silver)
7-621-770-67

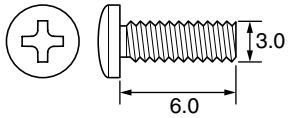


HARDWARE LIST (7/7)

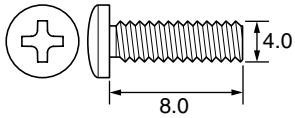
#121: M2.0 X 4.0 (Tapping)
(Silver)
3-080-205-11



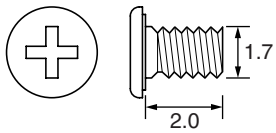
#122: M3.0 X 6.0
(Black)
7-682-547-09



#123: M4.0 X 8.0
(Black)
7-682-561-09



#124: M1.7 X 2.0
(Silver)
2-599-475-01



Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2008.01	Official Release	—	—