

DCR-DVD110E/DVD115E/DVD310E/DVD410E/DVD610/ DVD610E/DVD710/DVD710E/DVD810/DVD810E RMT-835

SERVICE MANUAL

LEVEL 2

Ver. 1.3 2008.05

Revision History

Revised-2

Replace the previously issued
SERVICE MANUAL 9-852-249-32
with this manual.



Photo: DCR-DVD810

US Model
Canadian Model
AEP Model
UK Model
East European Model
North European Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Argentine Model
Brazilian Model
Thai Model
Tourist Model
Japanese Model

Link

SPECIFICATIONS	DISASSEMBLY	SCHEMATIC DIAGRAMS
MODEL INFORMATION TABLE	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAM	REPAIR PARTS LIST

• Precaution on Replacing the VC-520 Board

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

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



DIGITAL VIDEO CAMERA RECORDER

SONY®



SPECIFICATIONS

System

Video compression format

MPEG2/JPEG (Still images)

Audio compression format

DCR-DVD110E/DVD610E

Dolby Digital 2ch

Dolby Digital Stereo Creator

DCR-DVD115E/DVD310E/DVD410E/

DVD710E/DVD810E

Dolby Digital 2/5.1ch

Dolby Digital 5.1 Creator

Video signal

PAL color, CCIR standards

Internal memory (DCR-DVD410E/DVD810E)

8 GB

When measuring media capacity, 1 GB equals 1 billion bytes, a portion of which is used for data management.

Usable discs

8 cm DVD-RW/DVD+RW/DVD-R/
DVD+R DL

Movie recording format

Internal memory (DCR-DVD410E/
DVD810E)

MPEG2-PS

Disc

DVD-RW: DVD-VIDEO (VIDEO mode),

DVD-Video Recording (VR mode)

DVD+RW: DVD+RW Video

DVD-R/DVD+R DL: DVD-VIDEO

"Memory Stick PRO Duo"

MPEG2-PS

Still image recording format

Exif Ver.2.2*

Viewfinder

Electric viewfinder (color)

Image device

DCR-DVD110E/DVD115E/DVD610E
2.25 mm (1/8 type) CCD (Charge Coupled
Device)

Gross:

Approx. 800 000 pixels

Effective (Movie, 16:9)

Approx. 490 000 pixels

Effective (Still, 16:9)

Approx. 310 000 pixels

Effective (Still, 4:3)

Approx. 410 000 pixels

DCR-DVD310E/DVD410E/DVD710E/
DVD810E

3 mm (1/6 type) CCD (Charge Coupled
Device)

Gross:

Approx. 1 070 000 pixels

Effective (Movie, 16:9)

Approx. 670 000 pixels

Effective (Still, 16:9)

Approx. 750 000 pixels

Effective (Still, 4:3)

Approx. 1 000 000 pixels

Lens

Carl Zeiss Vario-Tessar

DCR-DVD110E/DVD115E/DVD610E

Optical: 40×, Digital: 80×, 2000×

DCR-DVD310E/DVD410E/DVD710E/
DVD810E

Optical: 25×, Digital: 50×, 2000×

Filter diameter: 30 mm (1 3/16 in.)

Focal length

DCR-DVD110E/DVD115E/DVD610E

F 1.8 - 4.1

f = 1.9 - 76 mm (3/32 - 3 in.)

When converted to a 35 mm still camera

For movies:

41 - 1 640 mm (1 5/8 - 64 5/8 in.) (16:9)

For still images:

48 - 1 920 mm (1 15/16 - 75 5/8 in.) (4:3)

DCR-DVD310E/DVD410E/DVD710E/
DVD810E

F 1.8 - 3.2

f = 2.5 - 62.5 mm (1/8 - 2 1/2 in.)

When converted to a 35 mm still camera

For movies:

41 - 1 189 mm (1 5/8 - 46 7/8 in.) (16:9)**

For still images:

36 - 900 mm (1 7/16 - 35 1/2 in.) (4:3)

Color temperature

[AUTO], [ONE PUSH], [INDOOR]

(3 200 K), [OUTDOOR] (5 800 K)

Minimum illumination

DCR-DVD110E/DVD115E/DVD610E

6 lx (lux) (AUTO SLW SHUTTR ON, Shutter

speed 1/25 second)

0 lx (lux) (during NightShot plus function)

DCR-DVD310E/DVD410E/DVD710E/
DVD810E

8 lx (lux) (AUTO SLW SHUTTR ON, Shutter

speed 1/25 second)

0 lx (lux) (during NightShot plus 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 focal length figures are actual figures resulting from wide angle pixel readout.

- Manufactured under license from Dolby Laboratories.

Input/Output connectors

A/V Remote Connector

Video/audio output jack

USB jack

mini-B

(DCR-DVD110E/DVD115E/DVD310E/
DVD410E: output only)

LCD screen

Picture

6.7 cm (2.7 type, aspect ratio 16:9)

Total number of pixels

123 200 (560 × 220)

General

Power requirements

DC 6.8 V/7.2 V (battery pack)

DC 8.4 V (AC Adaptor)

Average power consumption

Using the LCD screen or the viewfinder with
normal brightness

DCR-DVD110E/DVD115E/DVD610E

LCD: 2.9 W

Viewfinder: 2.7 W

DCR-DVD310E/DVD710E

LCD: 3.2 W

Viewfinder: 2.8 W

DCR-DVD410E/DVD810E

LCD: 2.8 W

Viewfinder: 2.4 W

Operating temperature

0 °C to +40 °C (32 °F to 104 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Dimensions (Approx.)

55 × 89 × 130mm (2 1/4 × 3 5/8 × 5 1/8 in.)

(w × h × d) including the projecting parts

55 × 89 × 130mm (2 1/4 × 3 5/8 × 5 1/8 in.)

(w × h × d) including the projecting parts with
the rechargeable battery pack NP-FH40
attached

Mass (Approx.)

DCR-DVD110E/DVD115E/DVD610E

390 g (13 oz) main unit only

440 g (15 oz) including the rechargeable

battery pack NP-FH40 and a disc

DCR-DVD310E/DVD710E

400 g (14 oz) main unit only

450 g (15 oz) including the rechargeable

battery pack NP-FH40 and a disc

DCR-DVD410E/DVD810E

400 g (14 oz) main unit only

445 g (15 oz) including the rechargeable

battery pack NP-FH40

Supplied accessories

AC Adaptor (1)

Power cord (mains lead) (1)

A/V connecting cable (1)

USB cable (1)

Wireless Remote Commander (DCR-

DVD310E/DVD410E/DVD710E/DVD810E)

(1)

Rechargeable battery pack NP-FH40 (1)

CD-ROM "Handycam Application Software"

(1)

Operating Guide (1)

See page 5-25.

AC Adaptor AC-L200/L200B

Power requirements

AC 100 V - 240 V, 50/60 Hz

Current consumption

0.35 A - 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 × 81mm (1 15/16 × 1 3/16 × 3 1/4 in.)

(w × h × d) excluding the projecting parts

Mass (Approx.)

170g (6oz) excluding the power cord
(mains lead)

* See at the label of the AC Adaptor for other
specifications.

Rechargeable battery pack NP-FH40

Maximum output voltage

DC 8.4 V

Output voltage

DC 7.2 V

Capacity

4.9 Wh (680 mAh)

Type

Li-ion

Design and specifications are subject to change
without notice.



HANDYCAM



SPECIFICATIONS

System

Video compression format

MPEG2/JPEG (Still images)

Audio compression format

DCR-DVD610

Dolby Digital 2ch

Dolby Digital Stereo Creator

DCR-DVD710/DVD810

Dolby Digital 2/5.1ch

Dolby Digital 5.1 Creator

Video signal

NTSC color, EIA standards

Internal memory (DCR-DVD810)

8 GB

When measuring media capacity, 1 GB equals 1 billion bytes, a portion of which is used for data management.

Usable discs

8 cm DVD-RW/DVD+RW/DVD-R/
DVD+R DL

Movie recording format

Internal memory (DCR-DVD810)

MPEG2-PS

Disc

DVD-RW: DVD-VIDEO (VIDEO mode),

DVD-Video Recording (VR mode)

DVD+RW: DVD+RW Video

DVD-R/DVD+R DL: DVD-VIDEO

"Memory Stick PRO Duo"

MPEG2-PS

Still image recording format

Exif Ver.2.2*

Viewfinder

Electric viewfinder (color)

Image device

DCR-DVD610

2.25 mm (1/8 type) CCD (Charge Coupled Device)

Gross:

Approx. 680 000 pixels

Effective (Movie, 16:9)

Approx. 410 000 pixels

Effective (Still, 16:9)

Approx. 250 000 pixels

Effective (Still, 4:3)

Approx. 340 000 pixels

DCR-DVD710/DVD810

3 mm (1/6 type) CCD (Charge Coupled Device)

Gross:

Approx. 1 070 000 pixels

Effective (Movie, 16:9)

Approx. 670 000 pixels

Effective (Still, 16:9)

Approx. 750 000 pixels

Effective (Still, 4:3)

Approx. 1 000 000 pixels

Lens

Carl Zeiss Vario-Tessar

DCR-DVD610

Optical: 40×, Digital: 80×, 2000×

DCR-DVD710/DVD810

Optical: 25×, Digital: 50×, 2000×

Filter diameter: 30 mm (1 3/16 in.)

Focal length

DCR-DVD610

F 1.8 - 4.1

f = 1.9 - 76 mm (3/32 - 3 in.)

When converted to a 35 mm still camera

For movies:

41 - 1 640 mm (1 5/8 - 64 5/8 in.) (16:9)

For still images:

48 - 1 920 mm (1 15/16 - 75 5/8 in.) (4:3)

DCR-DVD710/DVD810

F 1.8 - 3.2

f = 2.5 - 62.5 mm (1/8 - 2 1/2 in.)

When converted to a 35 mm still camera

For movies:

41 - 1 189 mm (1 5/8 - 46 7/8 in.) (16:9)**

For still images:

36 - 900 mm (1 7/16 - 35 1/2 in.) (4:3)

Color temperature

[AUTO], [ONE PUSH], [INDOOR]

(3 200 K), [OUTDOOR] (5 800 K)

Minimum illumination

DCR-DVD610

6 lx (lux) (AUTO SLW SHUTTR ON, Shutter

speed 1/30 second)

0 lx (lux) (during NightShot plus function)

DCR-DVD710/DVD810

8 lx (lux) (AUTO SLW SHUTTR ON, Shutter

speed 1/30 second)

0 lx (lux) (during NightShot plus 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 focal length figures are actual figures resulting from wide angle pixel readout.

• Manufactured under license from Dolby Laboratories.

Input/Output connectors

A/V Remote Connector

Video/audio output jack

USB jack

mini-B

LCD screen

Picture

6.7 cm (2.7 type, aspect ratio 16:9)

Total number of pixels

123 200 (560 × 220)

General

Power requirements

DC 6.8 V/7.2 V (battery pack)

DC 8.4 V (AC Adaptor)

Average power consumption

Using the LCD screen or the viewfinder with normal brightness

DCR-DVD610

LCD: 2.9 W

Viewfinder: 2.7 W

DCR-DVD710

LCD: 3.3 W

Viewfinder: 2.9 W

DCR-DVD810

LCD: 2.9 W

Viewfinder: 2.5 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.)

55 × 89 × 130mm (2 1/4 × 3 5/8 × 5 1/8 in.)

(w × h × d) including the projecting parts

55 × 89 × 130mm (2 1/4 × 3 5/8 × 5 1/8 in.)

(w × h × d) including the projecting parts with the rechargeable battery pack NP-FH40 attached

Mass (Approx.)

DCR-DVD610

390 g (13 oz) main unit only

440 g (15 oz) including the rechargeable battery pack NP-FH40 and a disc

DCR-DVD710

400 g (14 oz) main unit only

450 g (15 oz) including the rechargeable battery pack NP-FH40 and a disc

DCR-DVD810

400 g (14 oz) main unit only

445 g (15 oz) including the rechargeable battery pack NP-FH40

Supplied accessories

AC Adaptor (1)

Power cord (mains lead) (1)

A/V connecting cable (1)

USB cable (1)

Wireless Remote Commander (DCR-DVD710/DVD810) (1)

Rechargeable battery pack NP-FH40 (1)

CD-ROM "Handycam Application Software" (1)

Operating Guide (1)

See page 5-25.

AC Adaptor AC-L200/L200B

Power requirements

AC 100 V - 240 V, 50/60 Hz

Current consumption

0.35 A - 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 × 81mm (1 15/16 × 1 3/16 × 3 1/4 in.)

(w × h × d) excluding the projecting parts

Mass (Approx.)

170 g (6 oz) excluding the power cord (mains lead)

* See at the label of the AC Adaptor for other specifications.

Rechargeable battery pack NP-FH40

Maximum output voltage

DC 8.4 V

Output voltage

DC 7.2 V

Capacity

4.9 Wh (680 mAh)

Type

Li-ion

Design and specifications are subject to change without notice.



HANDYCAM



概略仕様

システム

映像圧縮方式

MPEG2/JPEG (静止画)

音声圧縮方式

Dolby Digital2/5.1ch

ドルビーデジタル5.1クリエイター搭載

映像信号

NTSCカラー、EIA標準方式

内蔵メモリー

8GB

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。

使用可能ディスク

8cmのDVD-RW/DVD+RW/DVD-R/DVD+R DL

動画記録方式

内蔵メモリー:MPEG2-PS

ディスク:
DVD-RW:
DVD-VIDEO (VIDEOモード)
DVD-Video Recording (VRモード)
DVD+RW: DVD+RW Video
DVD-R/DVD+R DL: DVD-VIDEO

“メモリスティック PRO デュオ”:
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

3.0mm(1/6型)CCD固体撮像素子
総画素数:約107万画素
動画時有効画素数(16:9モード):
約67万画素
静止画時有効画素数(16:9モード):
約75万画素
静止画時有効画素数(4:3モード):
約100万画素

ズームレンズ

カール ツァイス バリオテッサー
25倍(光学)
50倍、2,000倍(デジタル)
フィルター径30mm
F1.8~3.2
f=2.5~62.5mm
35mmカメラ換算では
動画撮影時:
41~1,189mm(16:9モード)**
静止画撮影時:
36~900mm(4:3モード)

色温度切り換え

[オート]、[フンブッシュ]、
[屋内] (3,200K)、[屋外] (5,800K)

最低被写体照度

8 lx(ルクス) (オートスローシャッター 入、
シャッタースピード 1/30秒)
0 lx(ルクス) (NightShot plus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。

** 広角画素読み出しによる実動作値

入/出力端子

A/V リモート端子

映像音声出力端子

USB端子

mini-B

液晶画面

画面サイズ

6.7cm(2.7型、アスペクト比16:9)

総ドット数

123,200ドット
横560×縦220

電源部、その他

電源電圧

バッテリー端子入力 DC6.8V/7.2V
DC端子入力 DC8.4V

消費電力

ファインダー使用時、明るさ標準:
2.5W
液晶画面使用時、明るさ標準:
2.9W

動作温度

0℃~+40℃

保存温度

-20℃~+60℃

外形寸法

55×89×130mm(幅×高さ×奥行き)(突起部含む)
55×89×130mm(幅×高さ×奥行き)(突起部含む、付属バッテリーNP-FH40装着状態)

本体質量

約400g(本体のみ)

撮影時総質量

約445g(バッテリーNP-FH40含む)

付属品

ACアダプター (1)
電源コード (1)
A/V接続ケーブル (1)
USBケーブル (1)
ワイヤレスリモコン (1)
リチャージャブルバッテリーパック
NP-FH40 (1)
CD-ROM「Handycam Application
Software」(1)
取扱説明書 (1)
保証書 (1)

ACアダプター AC-L200/L200B

電源

AC100V-240V, 50/60Hz

消費電力

18W

定格出力

DC8.4V*

動作温度

0℃~+40℃

保存温度

-20℃~+60℃

外形寸法

約48×29×81mm(最大突起部をのぞく)
(幅×高さ×奥行き)

質量

約170g(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-FH40

最大電圧

DC8.4V

公称電圧

DC7.2V

容量

4.9Wh(680mAh)

使用電池

Li-ion

本機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。

- ドルビーラボラトリーズからの実施権に基づき製造されています。

Ver. 1.2 2008.05

The changed portions from Ver. 1.1 are shown in blue.

Model information table

Non MEGA model

Model		DCR-DVD110E	DCR-DVD115E	DCR-DVD610	DCR-DVD610E
Destination		AEP, UK, EE, NE	AEP, UK, EE, NE	US, CND, E, AR, BR	NE, E, AUS, HK, CH, TH
Color system		PAL	PAL	NTSC	PAL
5.1ch recording		×	○	×	×
Data copy	CAM → PC	○	○	○	○
	PC → CAM	×	×	○	○
Remote commander		×	×	×	×
Active Interface Shoe		×	×	×	×
Internal flash memory		×	×	×	×
BL board		BL-021	BL-021	BL-021	BL-021
CD board		CD-731	CD-731	CD-731	CD-731
CK board		CK-191	CK-191	CK-191	CK-191
MS board		MS-391	MS-391	MS-391	MS-391
PD board		PD-351	PD-351	PD-351	PD-351
RV board		RV-011	RV-011	RV-011	RV-011

MEGA model

Model		DCR-DVD310E	DCR-DVD410E	DCR-DVD710	DCR-DVD710E	DCR-DVD810	DCR-DVD810E
Destination		AEP, UK, EE, NE	AEP, UK, EE, NE	US, CND, E, AR	NE, E, CH	US, CND, E, KR, AR, BR, JE, J	NE, E, AUS, HK, TH, JE
Color system		PAL	PAL	NTSC	PAL	NTSC	PAL
5.1ch recording		○	○	○	○	○	○
Data copy	CAM → PC	○	○	○	○	○	○
	PC → CAM	×	×	○	○	○	○
Remote commander		○	○	○	○	○	○
Active Interface Shoe		○	○	○	○	○	○
Internal flash memory		×	○	×	×	○	○
BL board		BL-022	BL-022	BL-022	BL-022	BL-022	BL-022
CD board		CD-687	CD-687	CD-687	CD-672/CD-687	CD-687	CD-672/CD-687
CK board		CK-192	CK-192	CK-192	CK-192	CK-192	CK-192
MS board		MS-392	MS-392	MS-392	MS-392	MS-392	MS-392
PD board		PD-352	PD-352	PD-352	PD-352	PD-352	PD-352
RV board		RV-012	RV-012	RV-012	RV-012	RV-012	RV-012

- Abbreviation
 - AR : Argentine model
 - AUS : Australian model
 - BR : Brazilian model
 - CH : Chinese model
 - CND : Canadian model
 - EE : East European model
 - HK : Hong Kong model
 - J : Japanese model
 - JE : Tourist model
 - KR : Korea model
 - MX : Mexican model
 - NE : North European model
 - TH : Thai model

CAUTION :

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

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

CAUTION:

The use of optical instrument with this product will increase eye hazard.

CAUTION

Use of controls or adjustments or performance procedures other than those specified herein may result in hazardous radiation exposure.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30 cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

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

SAFETY CHECK-OUT

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

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

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

 : **LEAD FREE MARK**

Unleaded solder has the following characteristics.

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

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ください。

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。

1-1. POWER SUPPLY DURING REPAIRS

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

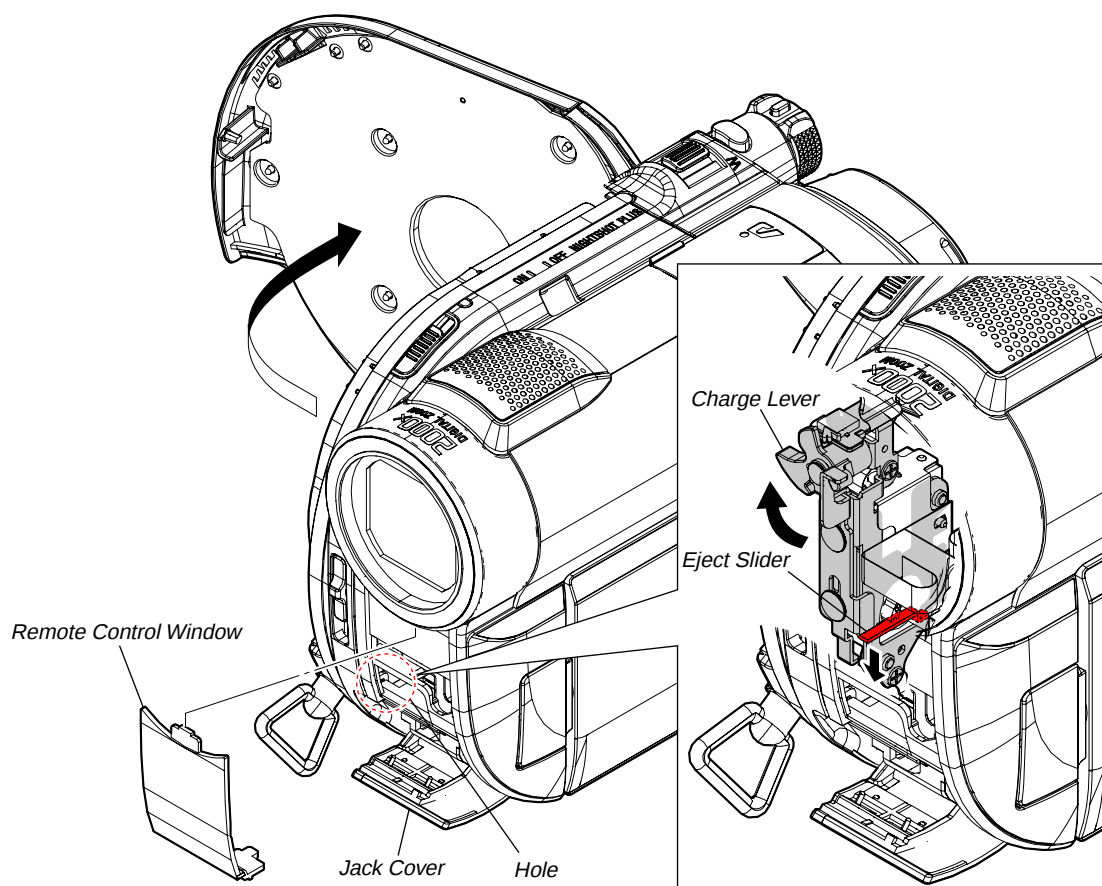
The following method is available to prevent this.

Method:

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

1-2. TO TAKE OUT A DISC WHEN NOT EJECT (FORCE EJECT)

- ① Open the jack cover and remove the remote control window.
- ② Insert the wire etc. in the hole and down the eject slider by it.



1-3. PRECAUTION ON REPLACING THE VC-520 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.

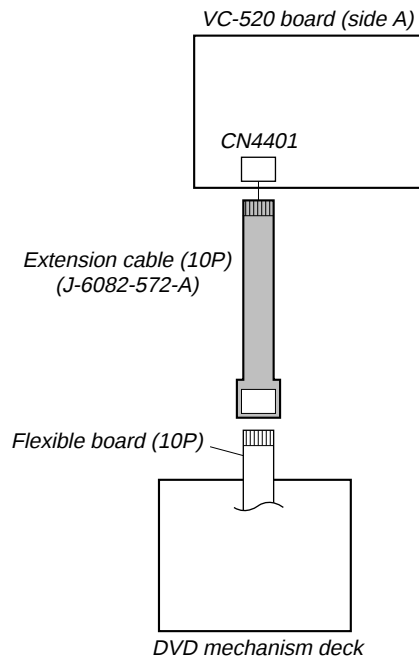
The set is shipped with a unique ID (USB Serial No.) written in it.

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".

1-4. USING SERVICE JIG

Connect the extension cable (J-6082-572-A) between the DVD mechanism deck and CN4401 on the VC-520 board.



1-5. SELF-DIAGNOSIS FUNCTION

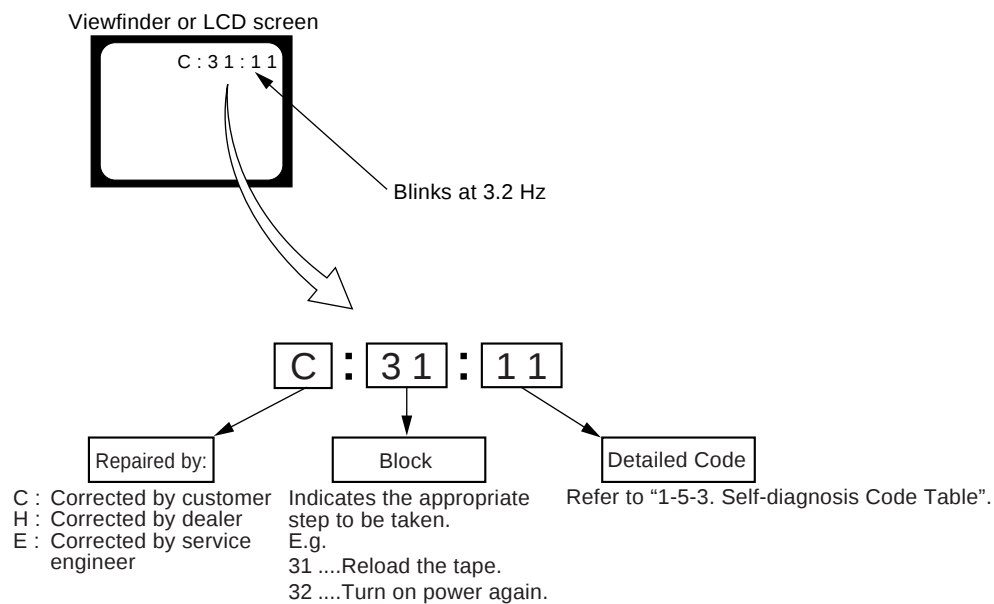
1-5-1. Self-diagnosis Function

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

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

1-5-2. Self-diagnosis Display

When problems occur while the unit is operating, the counter of the viewfinder or 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.



1-5-3. 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	Clean the disc with the supplied cleaning cloth. Use a compatible disc with the camcorder.
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 mechanism deck, IC (IC4401 on the VC-520 board) and drive block.
E	6 1	0 0		Difficult to adjust focus (Cannot initialize focus.)	Inspect the lens block focus reset sensor (pin ⑦ of CN5101 on the VC-520 board) when focusing is performed when the focus buttons of the touch panel are pressed in the focus manual mode, and the focus motor drive circuit (IC5401 (Non MEGA model) or IC5301 (MEGA model) on the VC-520 board) when the focusing is not performed.
E	6 1	1 0		Zoom operations fault (Cannot initialize zoom lens.)	Inspect the lens block zoom reset sensor (pin ⑩ of CN5101 on the VC-520 board) when zooming is performed when the zoom lever is operated, and the zoom motor drive circuit (IC5401 (Non MEGA model) or IC5301 (MEGA model) on the VC-520 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 whether the flexible board of the lens is broken, and check whether it is inserted imperfectly. If there is no problem in the flexible board, inspect the focus/zoom motor drive circuit (IC5401 (Non MEGA model) or IC5301 (MEGA model) on the VC-520 board).
E	6 2	0 0		Handshake correction function does not work well. (With PITCH angular velocity sensor output stopped.)	Inspect PITCH angular velocity sensors (SE7002 on the CD-672/CD-687 board) peripheral circuits. (MEGA model only)
E	6 2	0 1		Handshake correction function does not work well. (With YAW angular velocity sensor output stopped.)	Inspect YAW angular velocity sensors (SE7001 on the CD-672/CD-687 board) peripheral circuits. (MEGA model only)
E	9 4	0 0		Fault of writing to or erasing the flash memory	Inspect the flash memory (IC2101 on the VC-520 board). (Note 1)
E	9 4	0 1		Internal flash memory fault	Inspect the internal flash memory (MDL4060S3C) (DVD410E/DVD810/DVD810E only)

Note 1: Refer to "1-3. DESTINATION DATA WRITE", ADJ (9-852-249-51).

Note 2: Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E

MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

1-1. 修理時の電源供給について

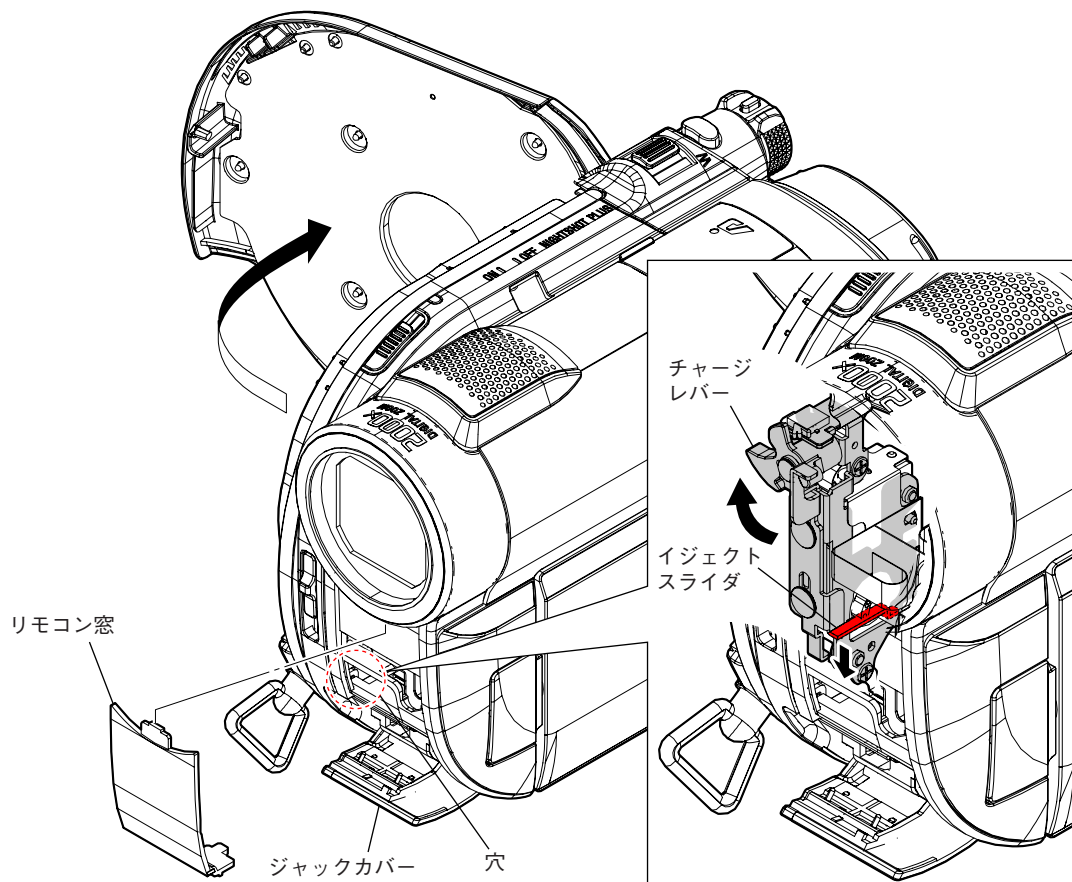
本機では、安定化電源（8.4Vdc）からバッテリー端子に電源を供給した場合、約10秒後にシャットオフし、動作しなくなります。これを避けるため、下記の方法を用いてください。

方法：

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

1-2. イジェクトしない時のディスク取出し方法（強制イジェクト）

- ① ジャックカバーを開き、リモコン窓を外す。
- ② 穴に針金等を差し込み、イジェクトスライダを下げる。



1-3. VC-520基板交換時の注意

仕向けデータ

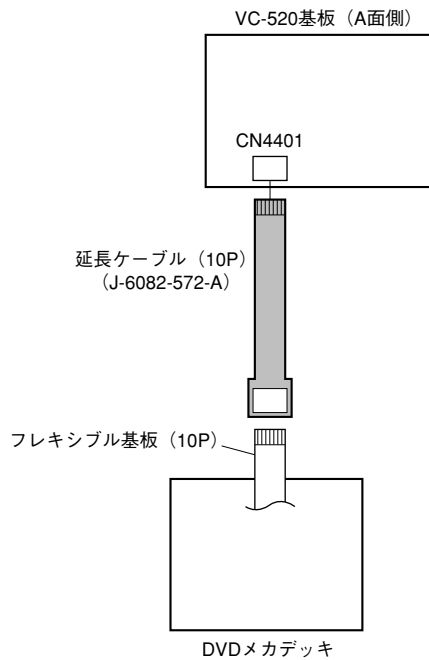
補修用基板と交換する時、補修用基板に書かれている仕向けデータは元の設定と違う場合があります。ADJ編を参照して、「DESTINATION DATA WRITE」を行ってください。

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。

1-4. 使用サービス治具

延長ケーブル (J-6082-572-A) をVC-520基板CN4401とDVDメカデッキの間に接続します。



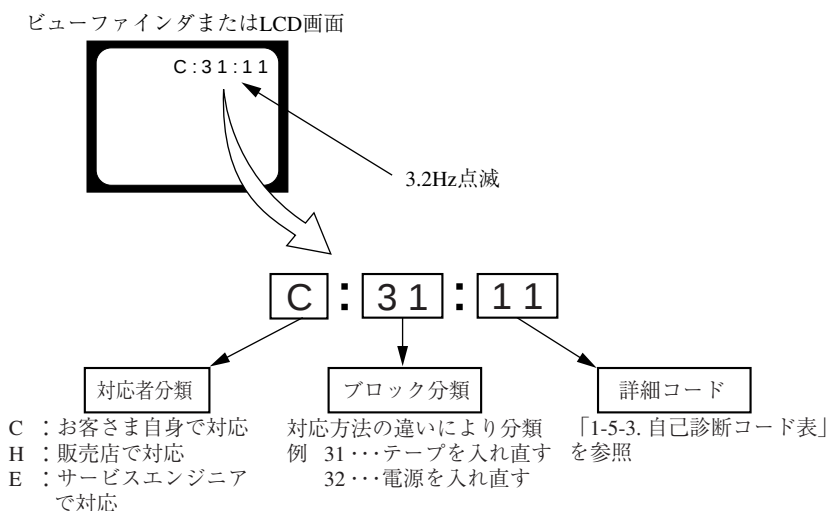
1-5. 自己診断機能

1-5-1. 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。自己診断機能については取扱説明書にも掲載されています。

1-5-2. 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。



1-5-3. 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ーを使用している	インフォリチウムバッテリーを使用する。
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	ディスククリーニングをする。または本機に対応したディスクに交換する。
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）
E	3 1	0 0	ドライブ不良	メカデッキ駆動IC（VC-520基板 IC4401）周辺回路および駆動部分を点検または交換する。
E	6 1	0 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）	タッチパネルでフォーカス操作をしたときにフォーカス動作をすれば、レンズブロックのフォーカスリセットセンサ（VC-520基板CN5101 ⑦ピン）を点検する。フォーカス動作をしなければフォーカスモータ駆動回路（VC-520基板 IC5301）を点検する。
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リセットセンサ（VC-520基板CN5101 ⑩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（VC-520基板IC5301）を点検する。
E	6 1	1 1	フォーカス、ズーム異常	フレキ切れ、半差し等の点検を行う。問題がない場合はフォーカス/ズームモータ駆動IC（VC-520基板IC5301）周辺回路を点検する。
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（CD-672/CD-687基板SE7002）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（CD-672/CD-687基板SE7001）周辺回路を点検する。
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-520基板IC2101）を点検する。（注）
E	9 4	0 1	内蔵フラッシュメモリ不良	内蔵フラッシュメモリ（MDL4060S3C）を点検する。

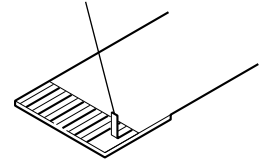
注：調整編（9-852-249-51）「1-3. DESTINATION DATA WRITE」を参照してください。

2. DISASSEMBLY

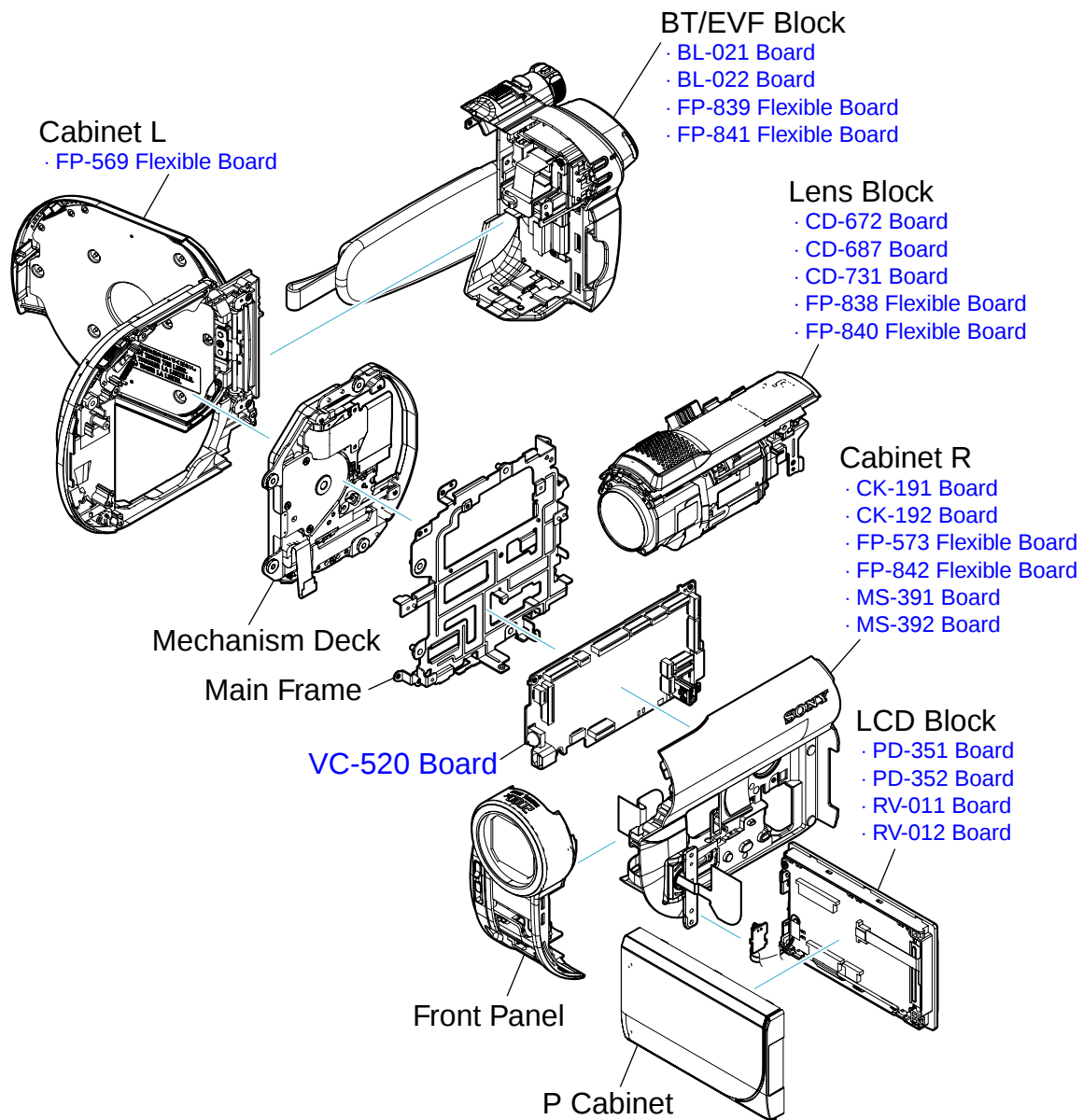
NOTE FOR REPAIR

- Make sure that the flat cable and flexible board are not cracked or 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)



2-1. IDENTIFYING PARTS



- DISASSEMBLY FLOW -

2-2-1. OVERALL SECTION

- Cabinet R
- BT/EVF Block

2-2-2. CABINET R SECTION-1

- Front Panel
- MS-391/392 Board
- LCD Block

2-2-3. CABINET R SECTION-2

- Hinge Block
- CK-191/192 Board

2-2-4. CABINET L SECTION

- Cabinet L

2-2-5. MD Section

- Lens Block
- VC-520 Board
- Mechanism Deck

2-2. DISASSEMBLY

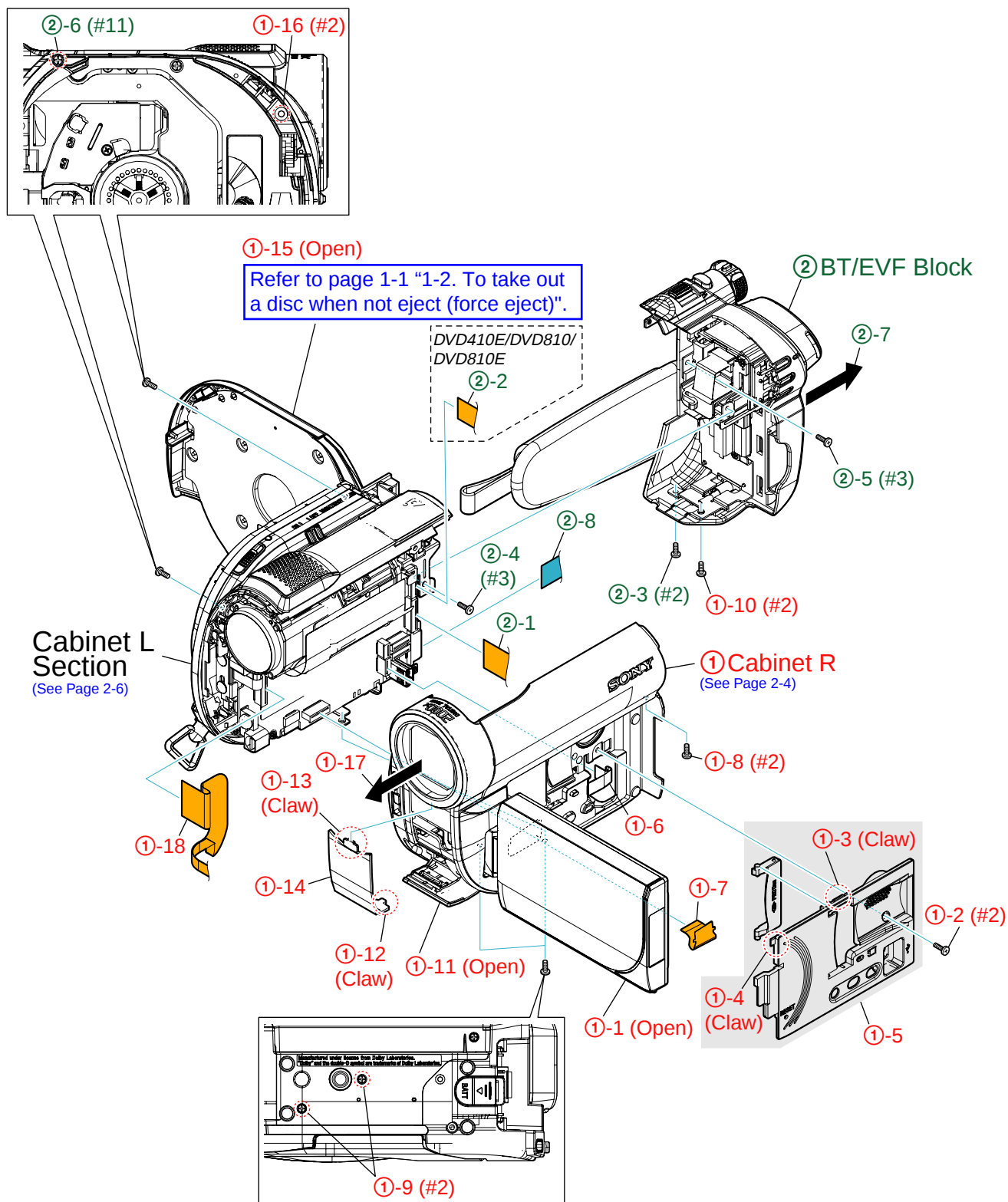
EXPLODED VIEW

HARDWARE LIST

2-2-1. OVERALL SECTION

Follow the disassembly in the numerical order given.

- ① Cabinet R (①-1 to ①-18)
- ② BT/EVF Block (②-1 to ②-8)



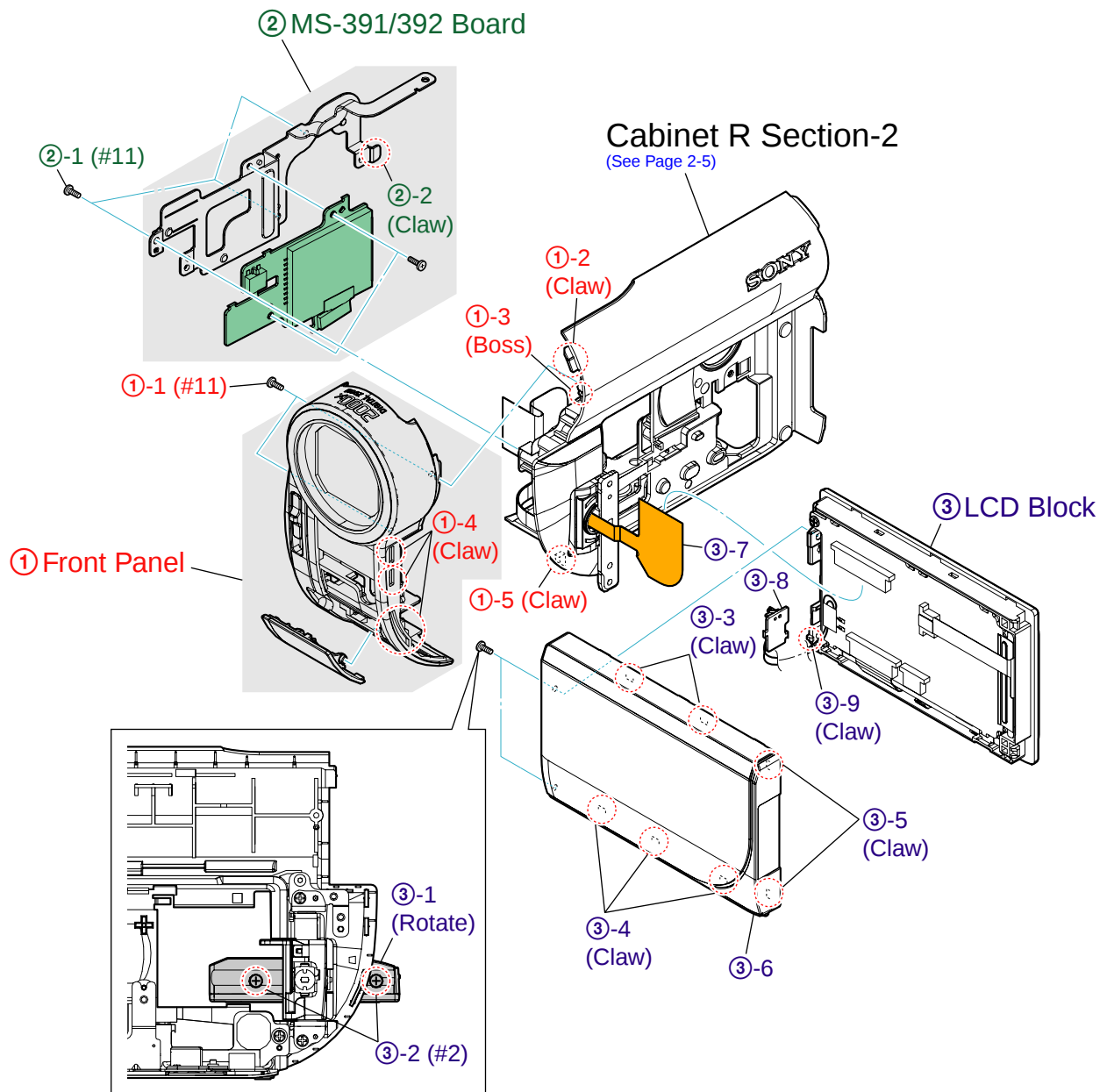
2-2-2. CABINET R SECTION-1

Follow the disassembly in the numerical order given.

- ① Front Panel (①-1 to ①-5)
- ② MS-391/392 Board (②-1 to ②-2)
- ③ LCD Block (③-1 to ③-9)

EXPLODED VIEW

HARDWARE LIST



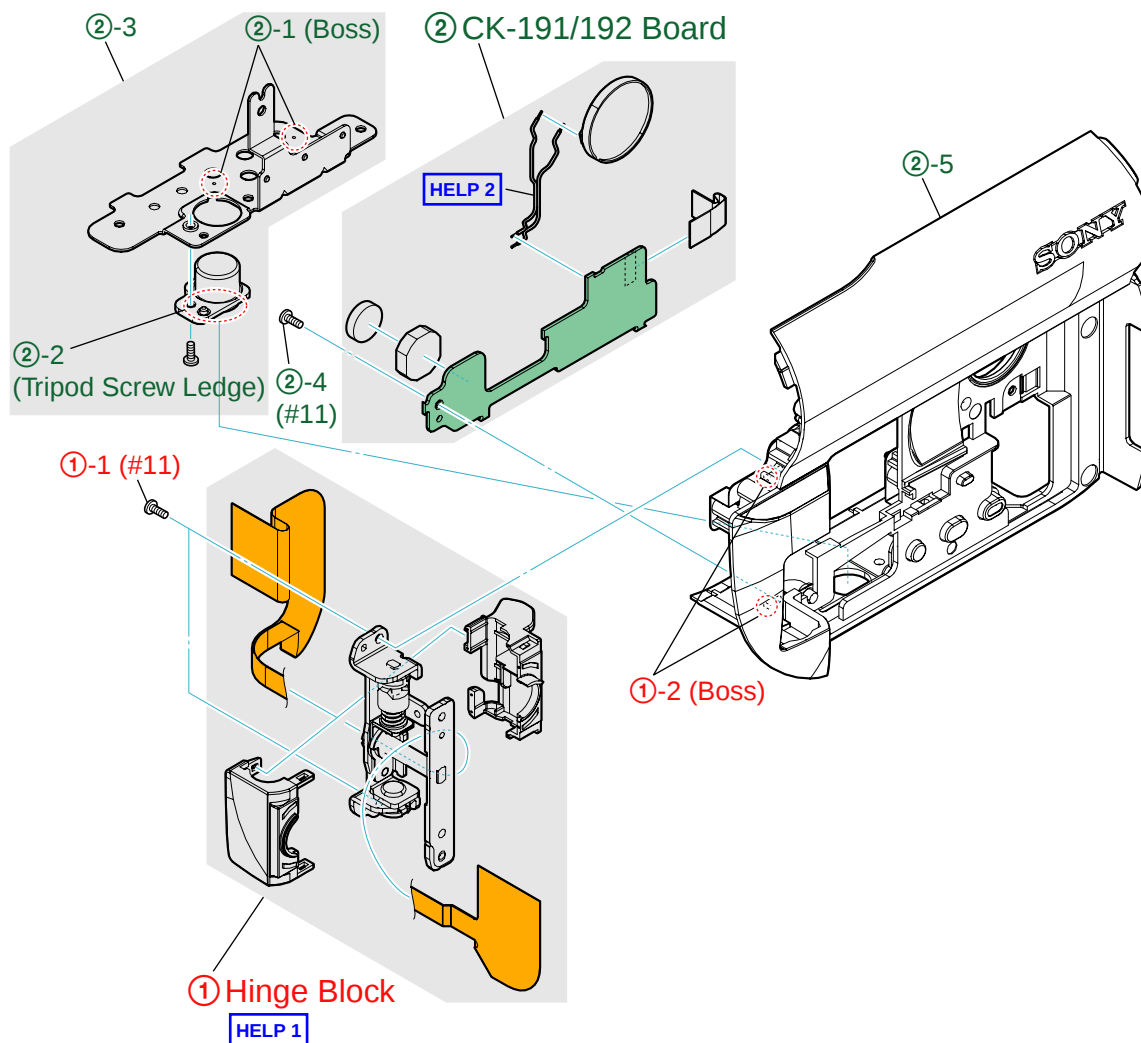
2-2-3. CABINET R SECTION-2

Follow the disassembly in the numerical order given.

- ① Hinge Block (①-1 to ①-2)
- ② CK-191/192 Board (②-1 to ②-5)

EXPLODED VIEW

HARDWARE LIST



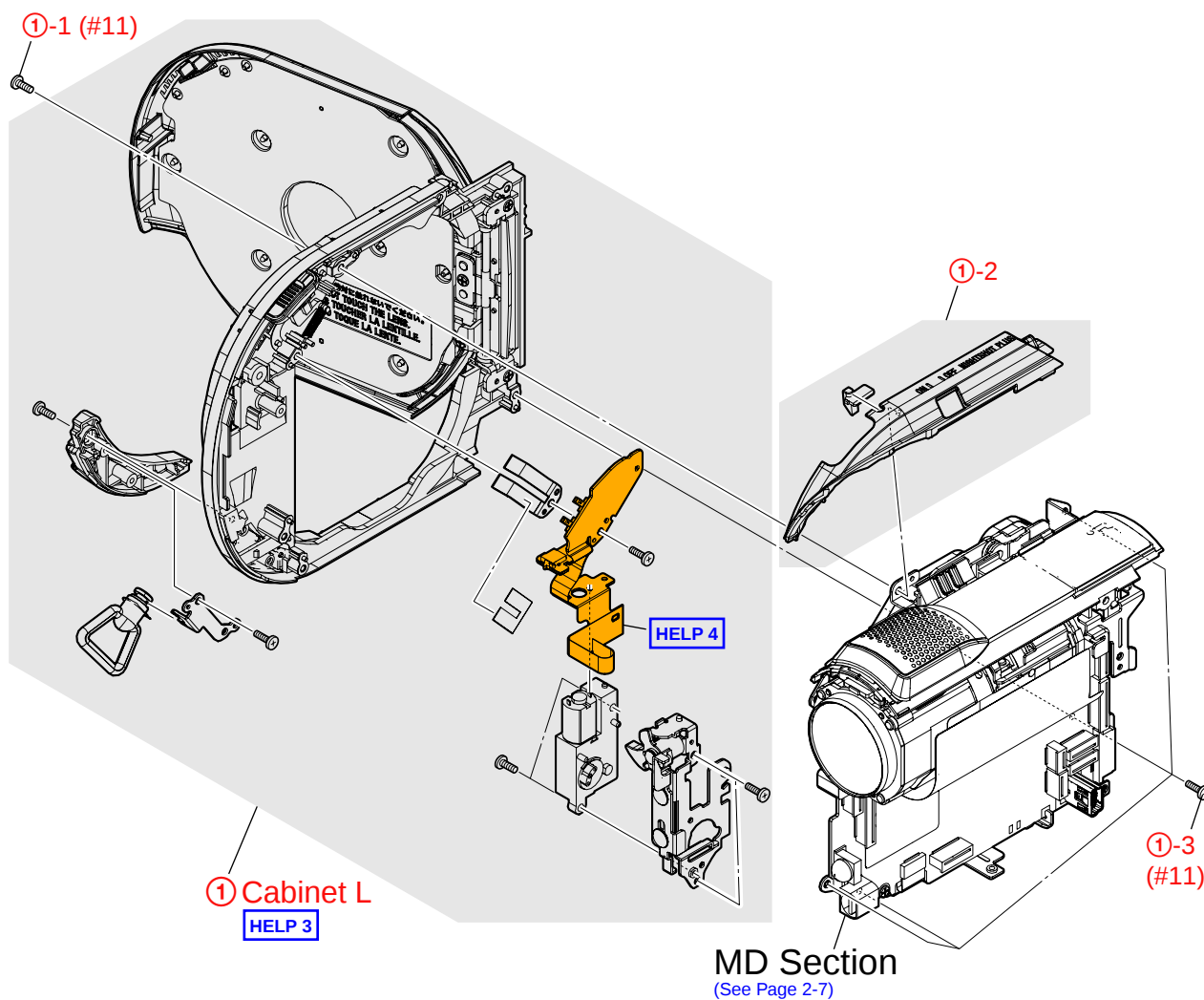
2-2-4. CABINET L SECTION

Follow the disassembly in the numerical order given.

- ① Cabinet L (①-1 to ①-3)

EXPLODED VIEW

HARDWARE LIST



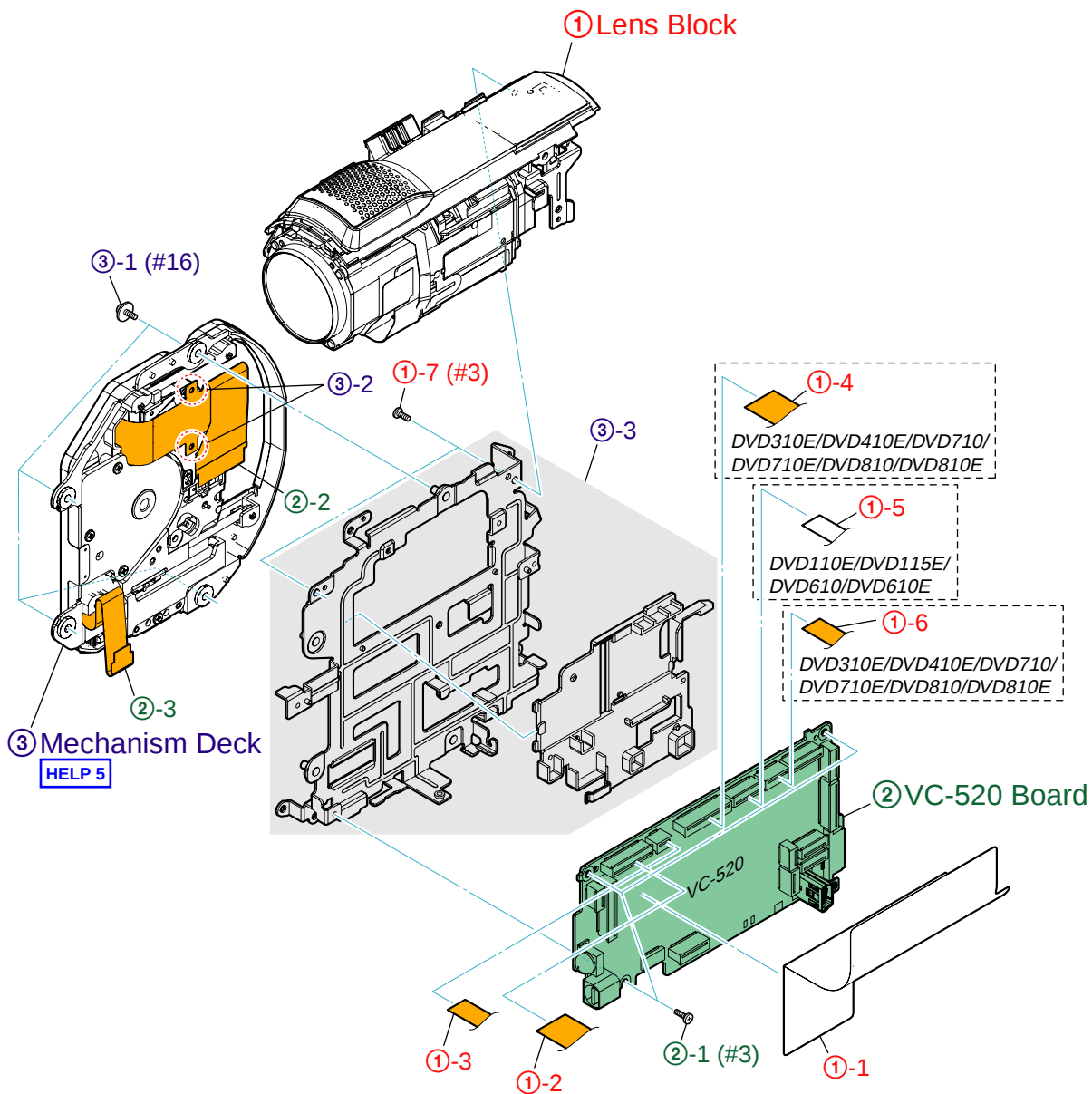
2-2-5. MD SECTION

Follow the disassembly in the numerical order given.

- ① Lens Block (①-1 to ①-7)
- ② VC-520 Board (②-1 to ②-3)
- ③ Mechanism Deck (③-1 to ③-3)

EXPLODED VIEW

HARDWARE LIST

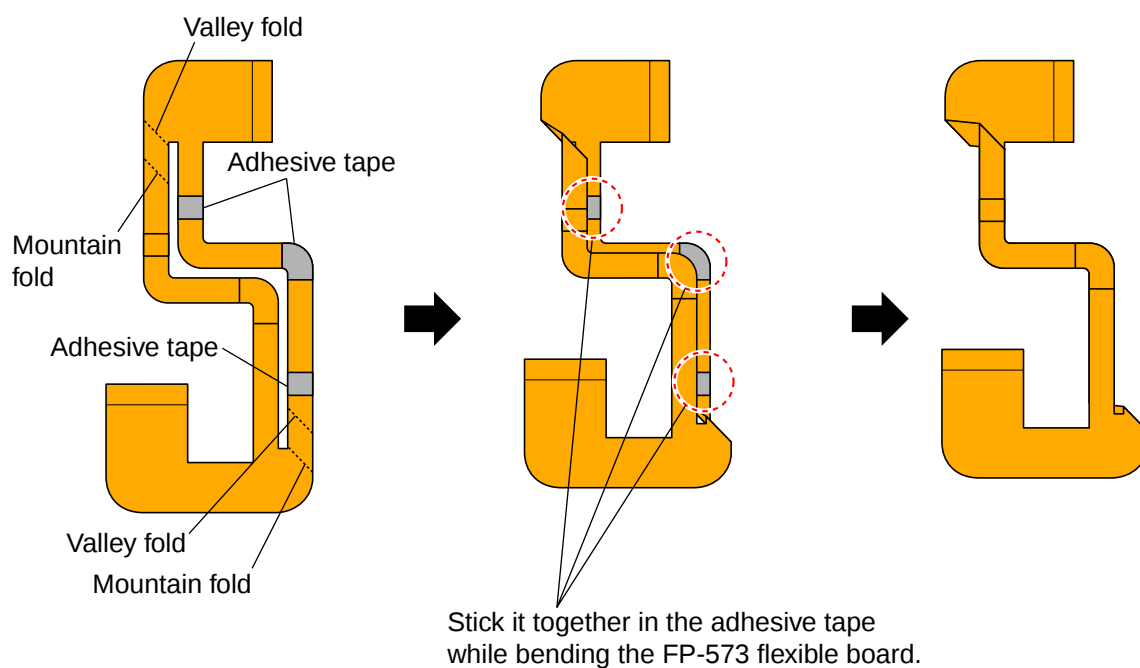


HELP

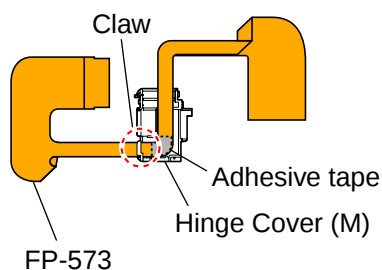
Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

HELP 1: THE METHOD OF ATTACHMENT OF FP-573 FLEXIBLE BOARD

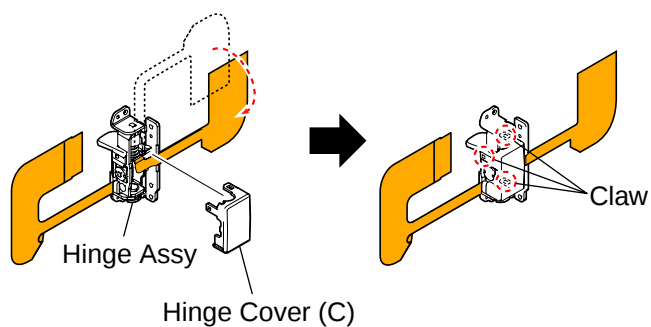
- ① Fold dotted line parts of the FP-573 flexible board as shown in figure.



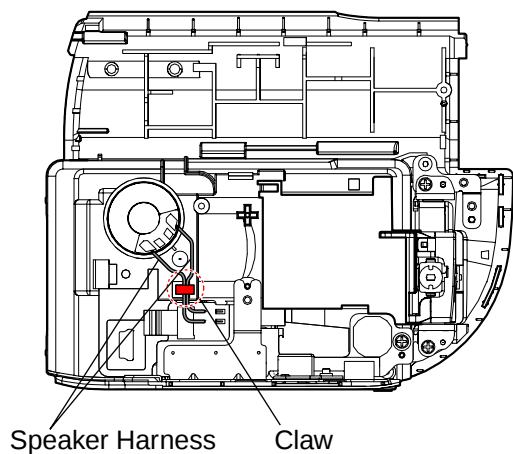
- ② Install FP-573 flexible board in the Hinge Cover (M).



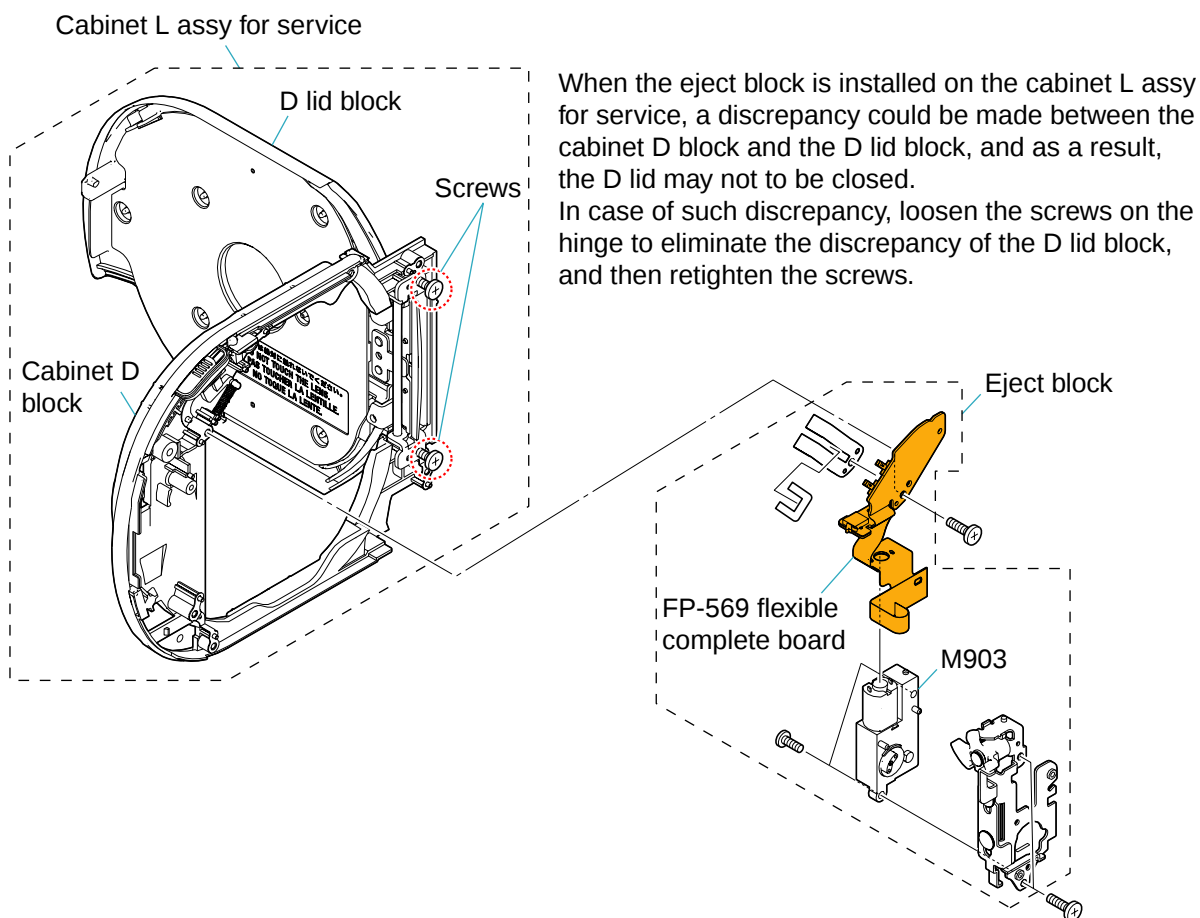
- ③ Install the Hinge Cover (C).



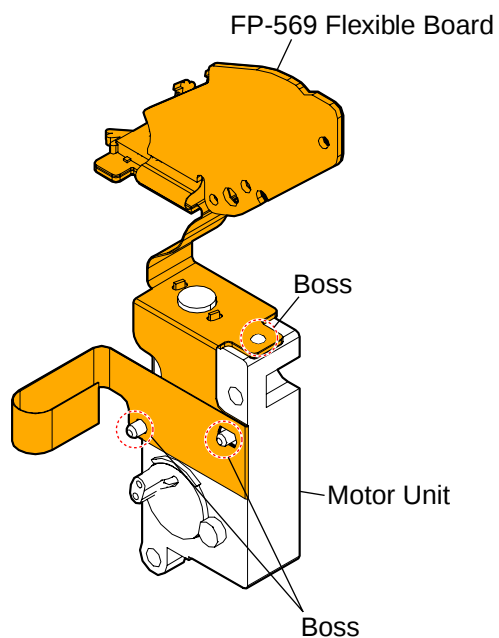
HELP 2: SPEAKER HARNESS



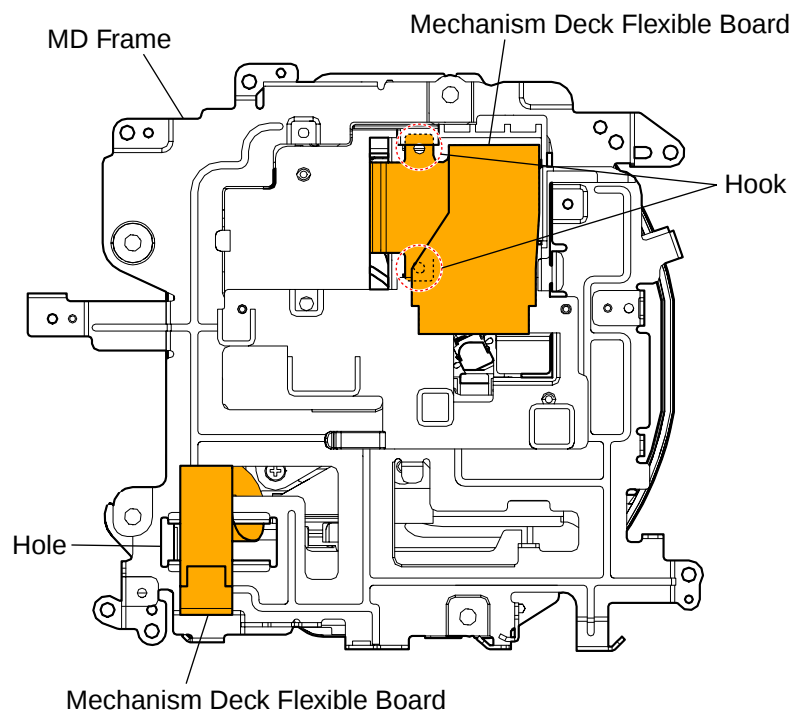
HELP 3: PRECAUTION WHEN INSTALLING THE CABINET L ASSY FOR SERVICE



HELP 4: FP-569 FLEXIBLE BOARD



HELP 5: MECHANISM DECK FLEXIBLE BOARD



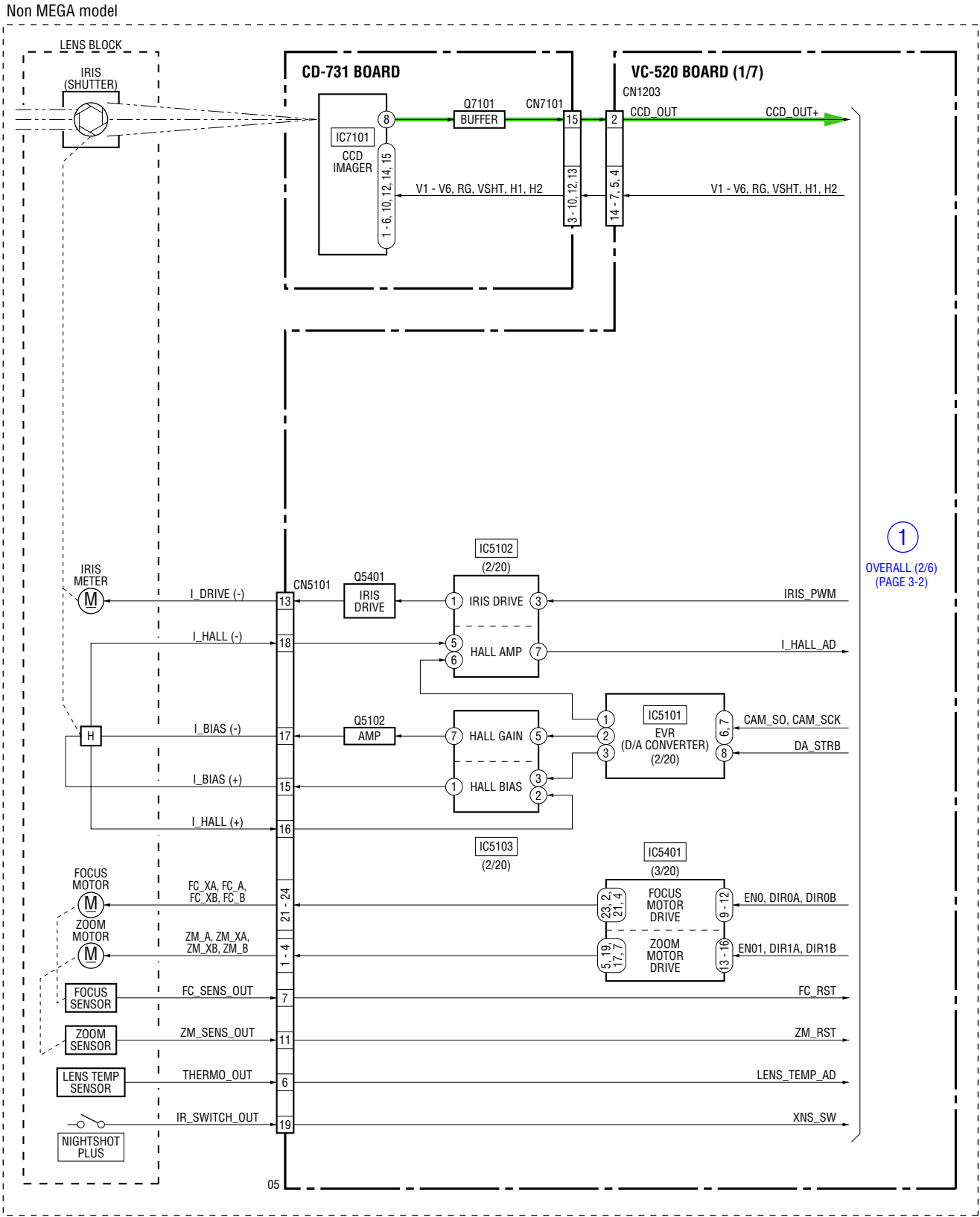
3. BLOCK DIAGRAMS

Link

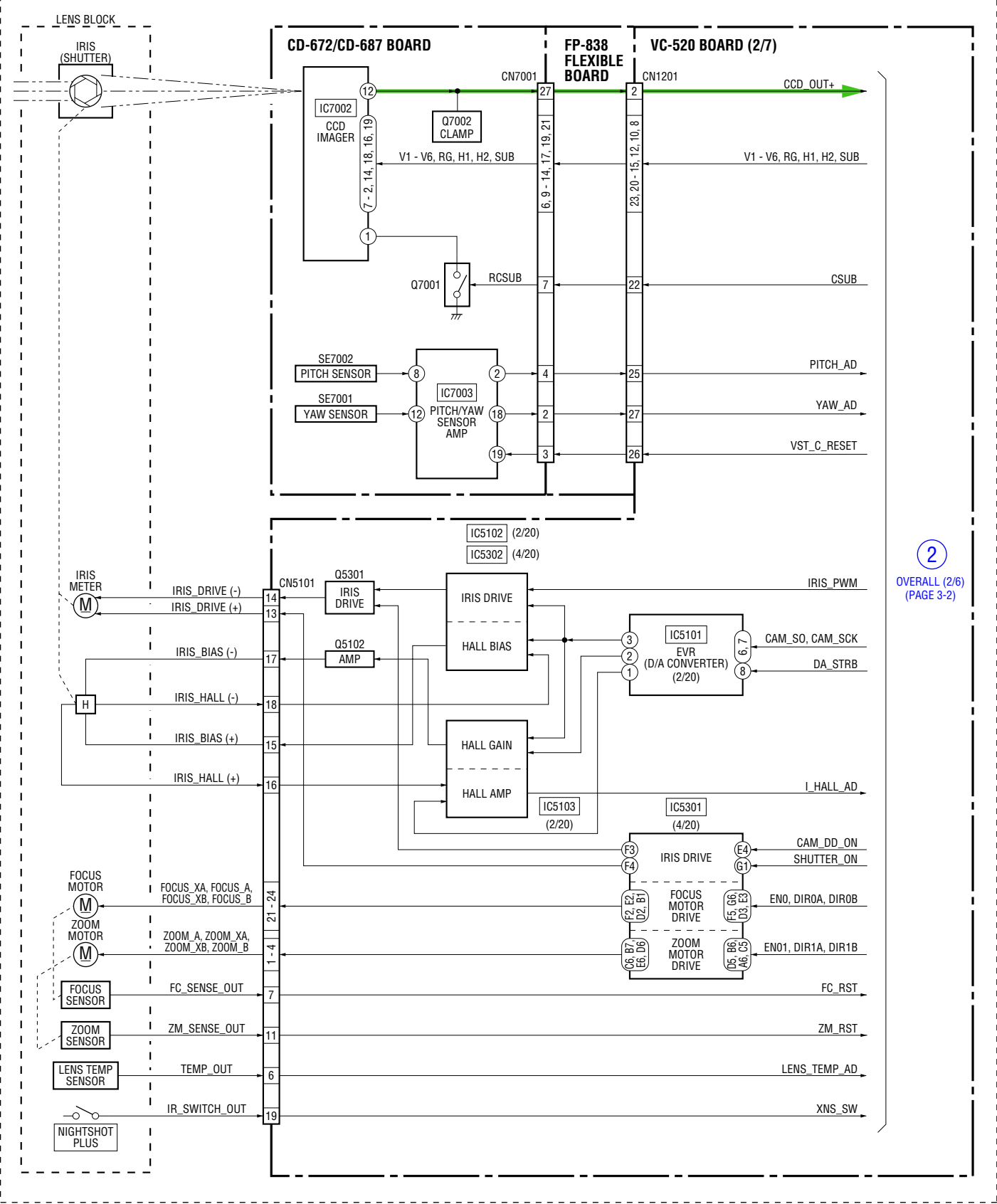
OVERALL BLOCK DIAGRAM (1/6)	OVERALL BLOCK DIAGRAM (6/6)
OVERALL BLOCK DIAGRAM (2/6)	POWER BLOCK DIAGRAM (1/3)
OVERALL BLOCK DIAGRAM (3/6)	POWER BLOCK DIAGRAM (2/3)
OVERALL BLOCK DIAGRAM (4/6)	POWER BLOCK DIAGRAM (3/3)
OVERALL BLOCK DIAGRAM (5/6)	

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.



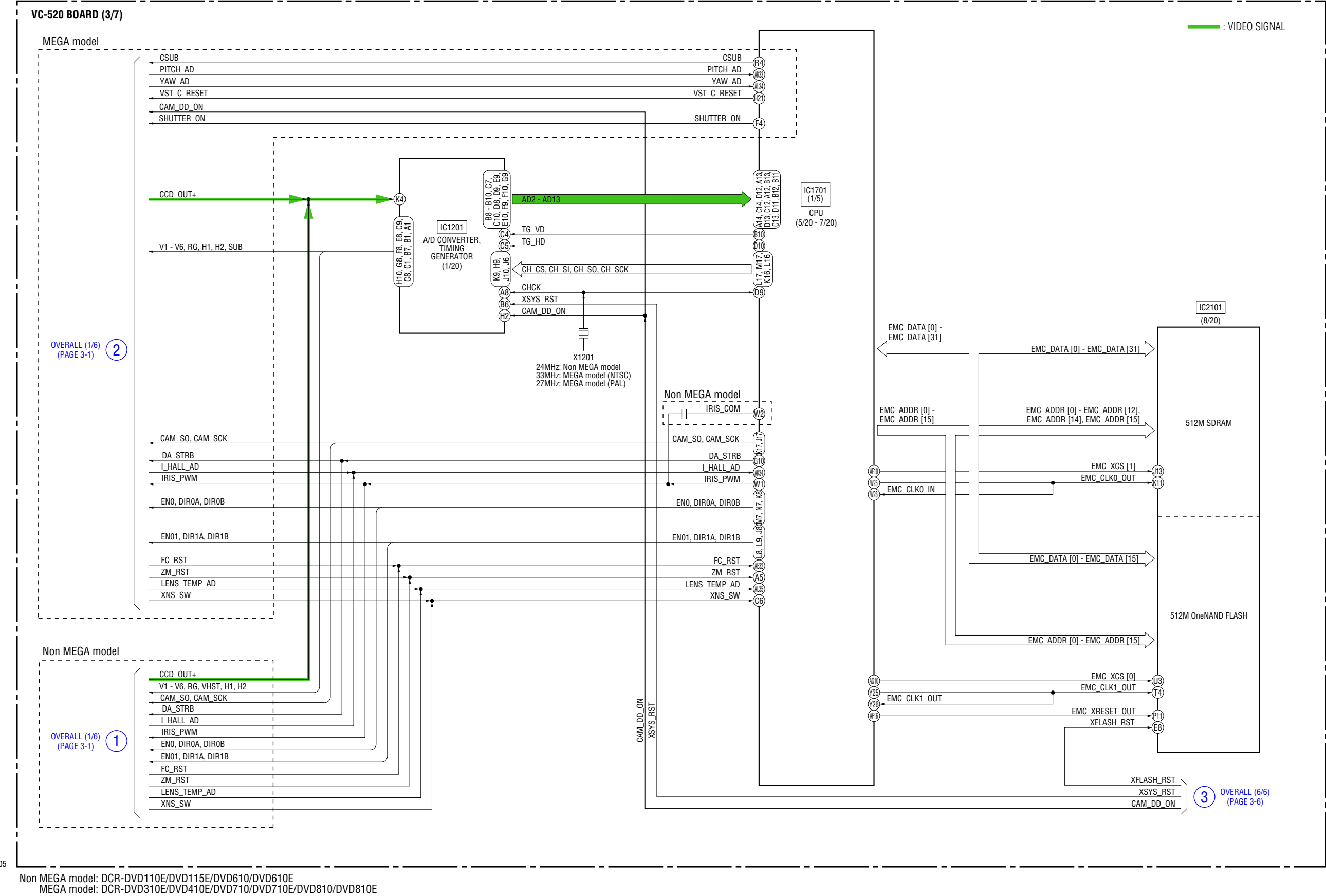
MEGA model



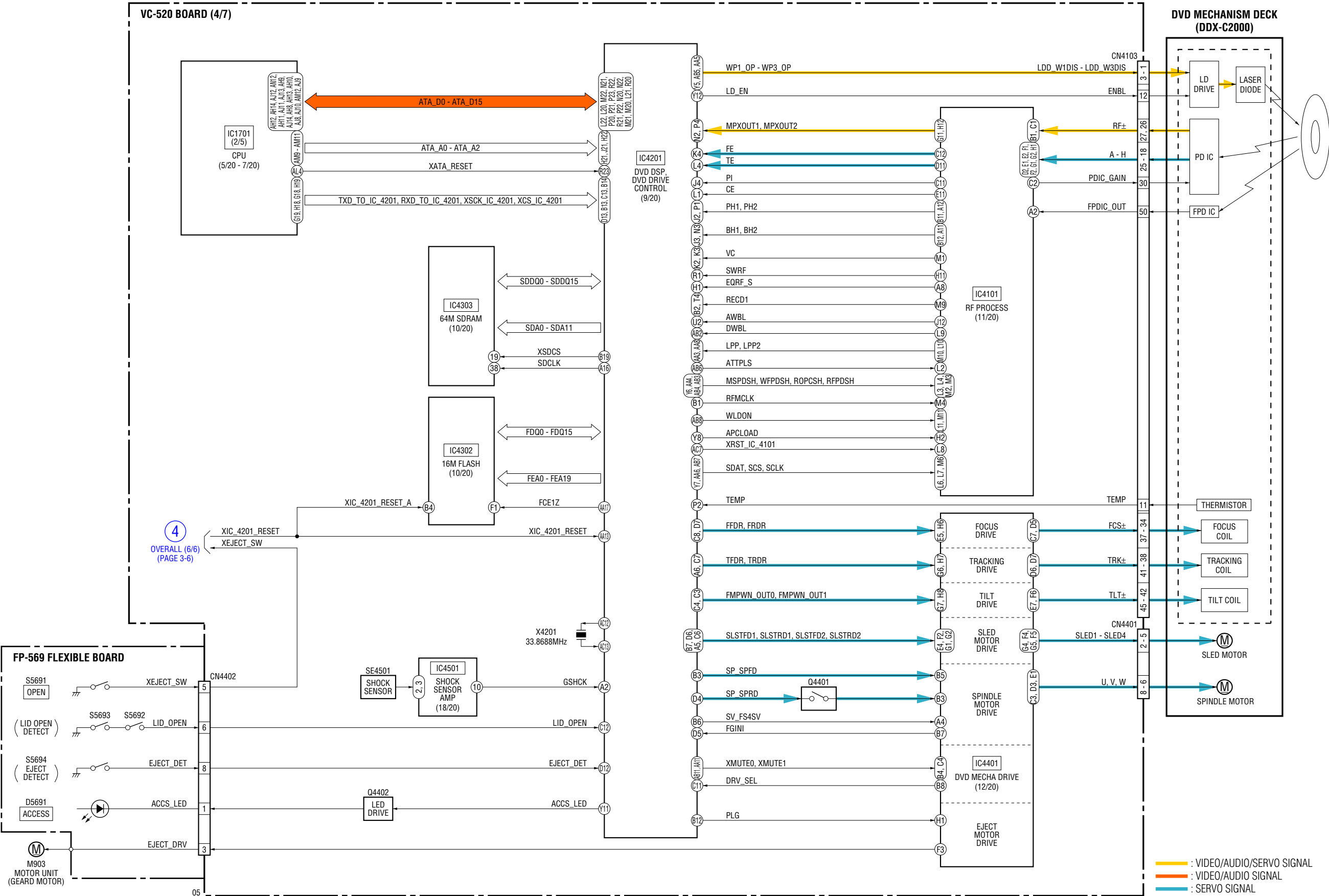
Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E
MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

VIDEO SIGNAL

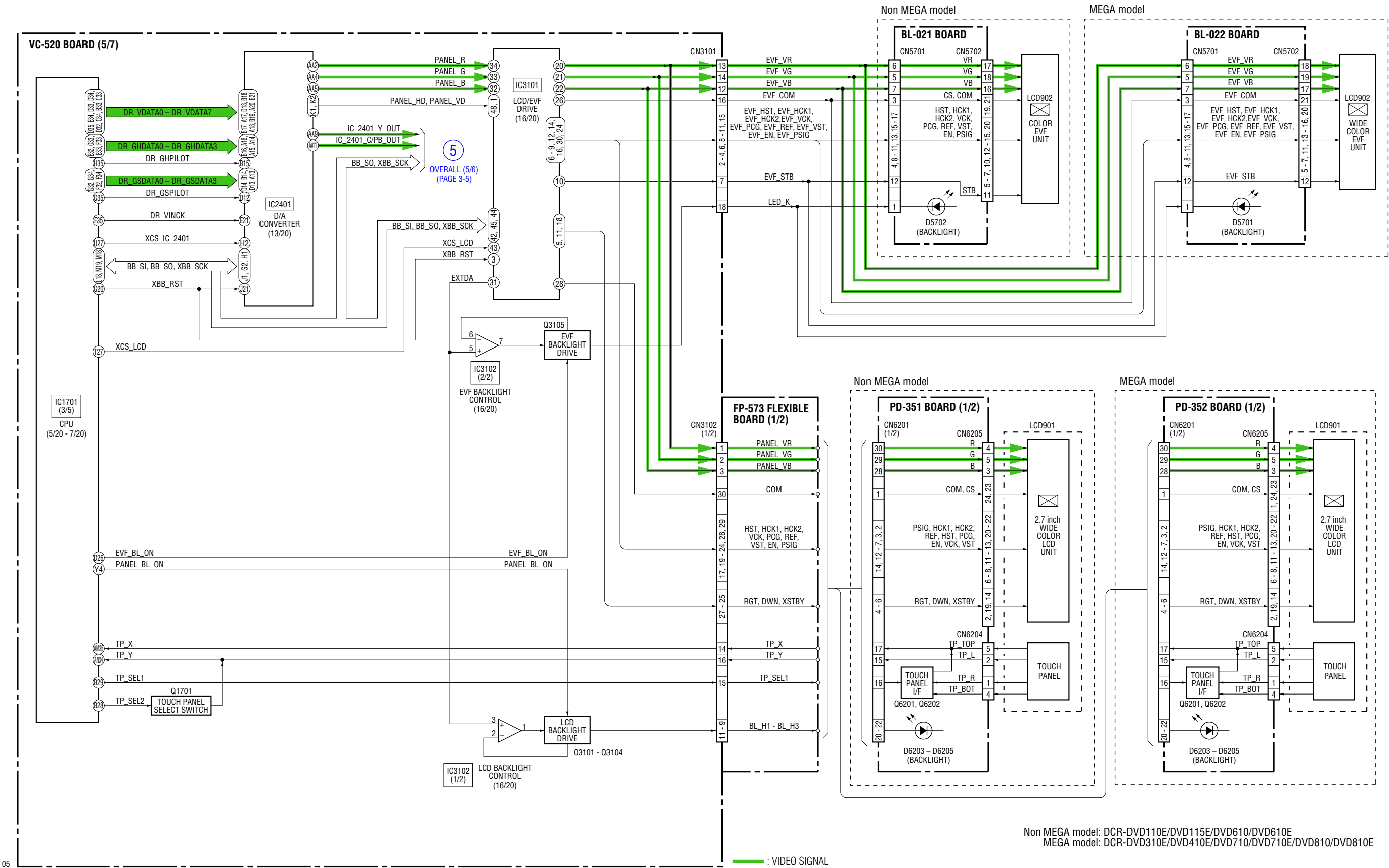
3-2. OVERALL BLOCK DIAGRAM (2/6) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



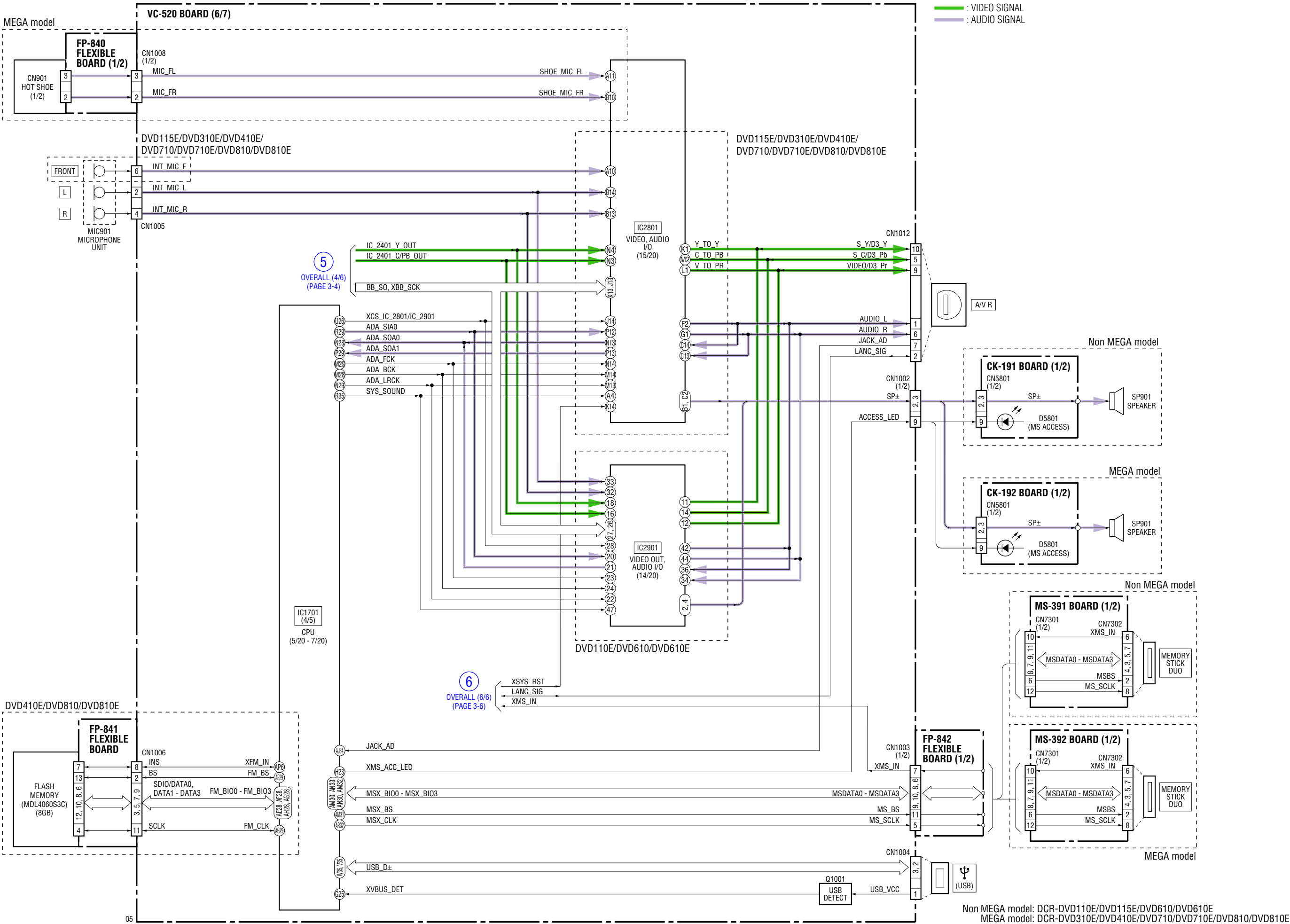
3-3. OVERALL BLOCK DIAGRAM (3/6) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



3-4. OVERALL BLOCK DIAGRAM (4/6) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.

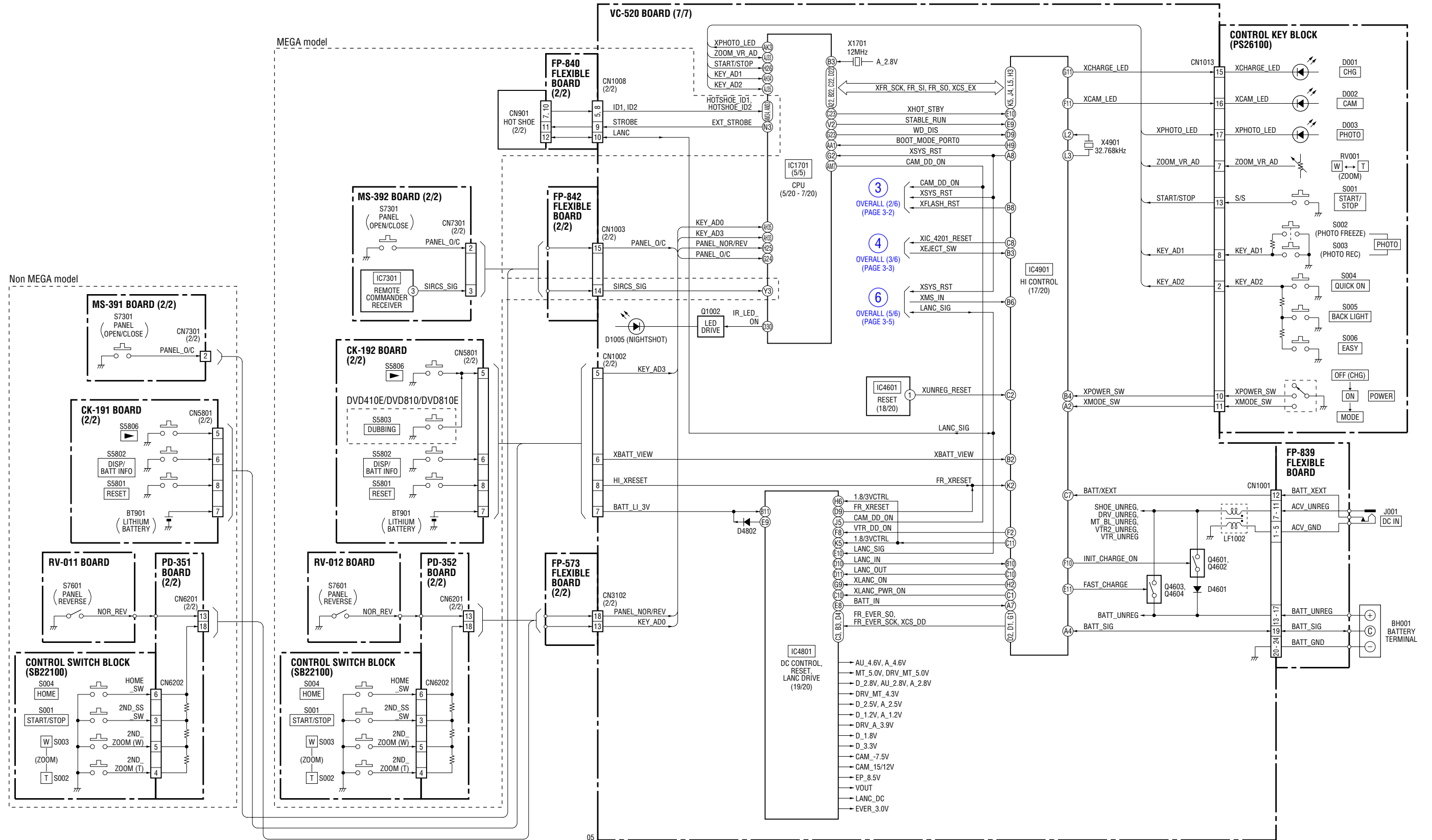


3-5. OVERALL BLOCK DIAGRAM (5/6) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



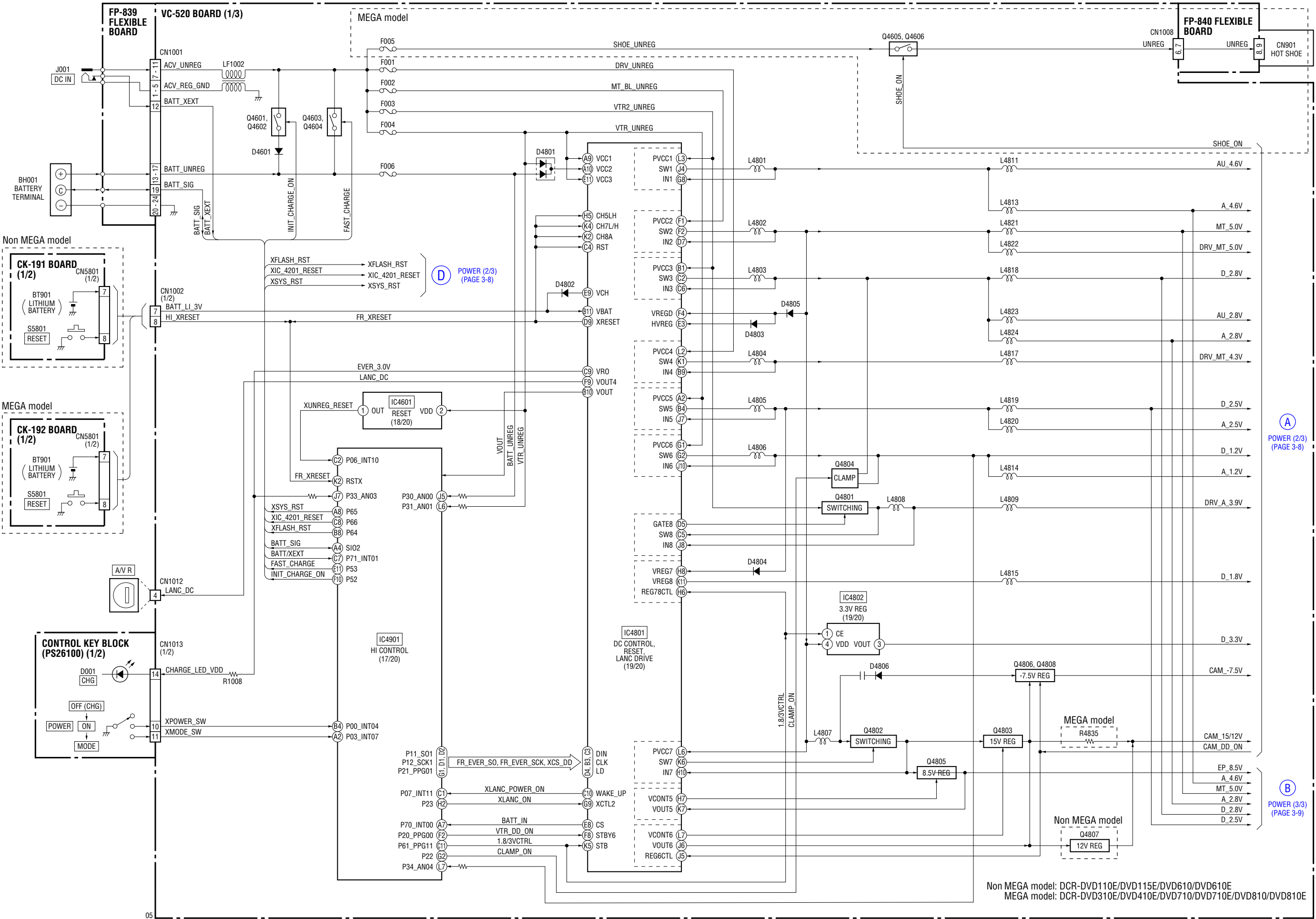
3-6. OVERALL BLOCK DIAGRAM (6/6)

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

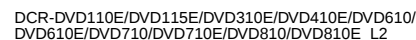


Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E
MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

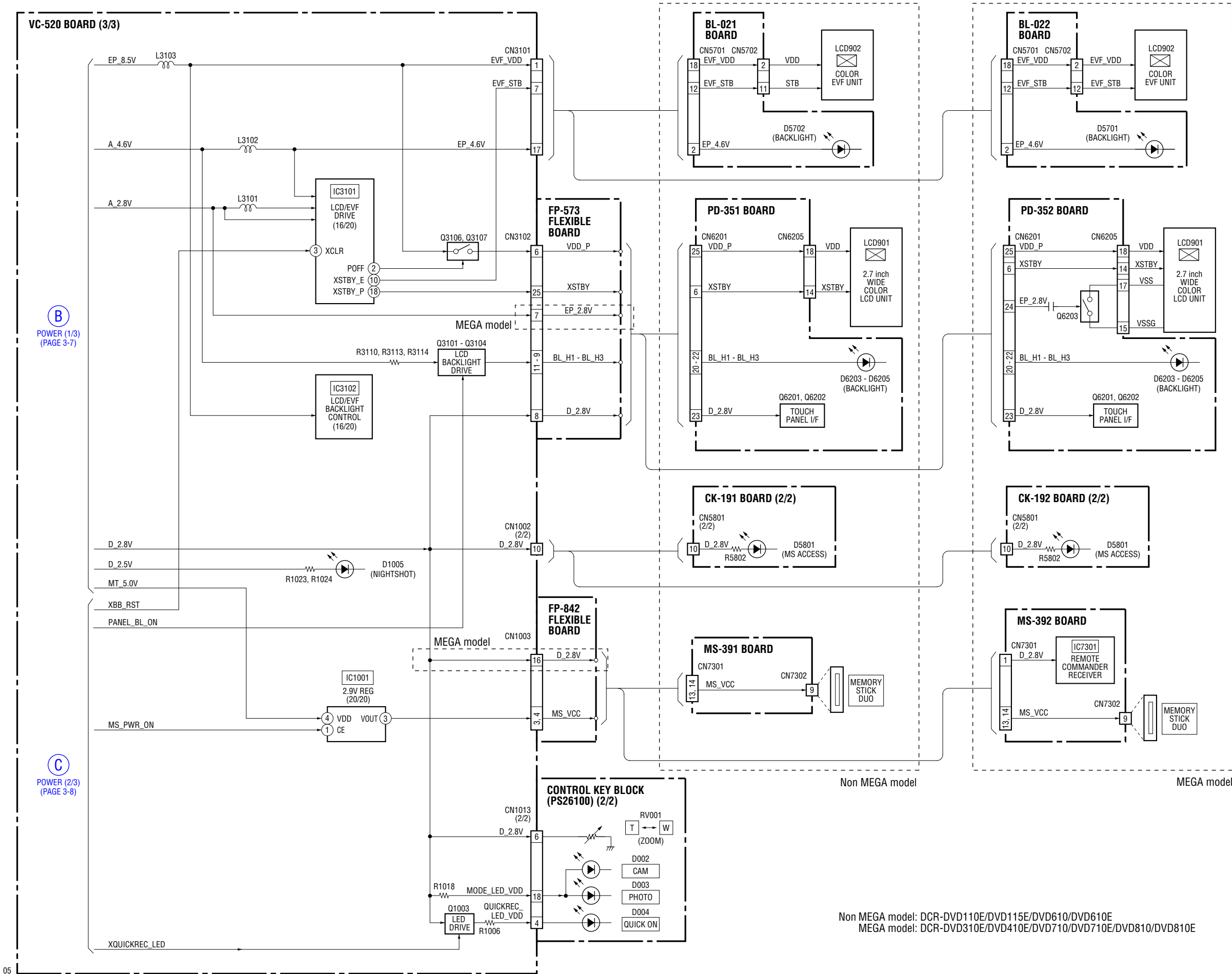
3-7. POWER BLOCK DIAGRAM (1/3) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



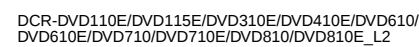
() : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



3-9. POWER BLOCK DIAGRAM (3/3) () : Number in parenthesis () indicates the division number of schematic diagram where the component is located.



4-1. FRAME SCHEMATIC DIAGRAM



4-2. SCHEMATIC DIAGRAMS

Link

• CD-672/CD-687 BOARD: MEGA model (CCD IMAGER)	• CK-192 BOARD: MEGA model (CONTROL SWITCH)
• FP-838 FLEXIBLE BOARD: MEGA model (VC-CD CONNECTION)	• MS-391 BOARD: Non MEGA model (MS CONNECTOR)
• CD-731 BOARD: Non MEGA model (CCD IMAGER)	• MS-392 BOARD: MEGA model (MS CONNECTOR, REMOTE COMMANDER RECEIVER)
• BL-021 BOARD: Non MEGA model (EVF, EVF BACKLIGHT)	• FP-841 FLEXIBLE BOARD: DVD410E/DVD810/DVD810E (FLASH MEMORY)
• BL-022 BOARD: MEGA model (EVF, EVF BACKLIGHT)	• FP-842 FLEXIBLE BOARD (VC-MS CONNECTION)
• PD-351 BOARD: Non MEGA model (LCD, LCD BACKLIGHT)	• RV-011: Non MEGA model (PANEL REVERSE DETECT)
• PD-352 BOARD: MEGA model (LCD, LCD BACKLIGHT)	• RV-012: MEGA model (PANEL REVERSE DETECT)
• FP-573 FLEXIBLE BOARD (VC-PD CONNECTION)	• CONTROL SWITCH BLOCK (SB22100)
• FP-569 FLEXIBLE BOARD (EJECT SWITCH/MOTOR)	• FP-839 FLEXIBLE BOARD (DC IN)
• FP-840 FLEXIBLE BOARD (HOT SHOE)	• CONTROL KEY BLOCK (PS26100)
• CK-191 BOARD: Non MEGA model (CONTROL SWITCH)	

• COMMON NOTE FOR SCHEMATIC DIAGRAMS

Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVE610E

MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

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 : μF . 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted.
 $\text{k}\Omega=1000 \Omega$, $\text{M}\Omega=1000 \text{k}\Omega$.
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

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

- 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 → EDIT PB/XREC → PB/REC
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.

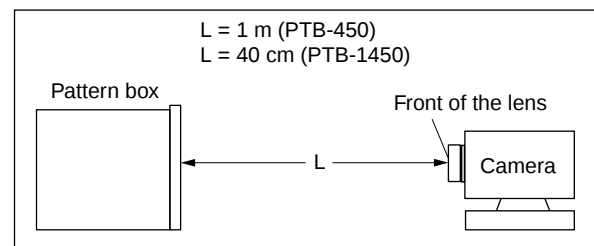
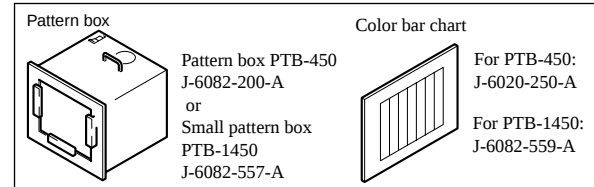
(Measuring conditions voltage and waveform)

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

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



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

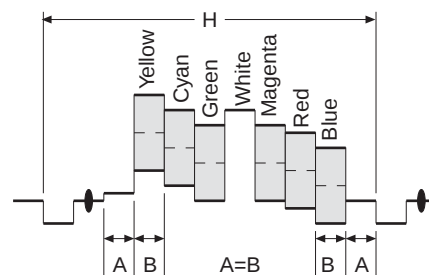


Fig. a (Video output terminal output waveform)

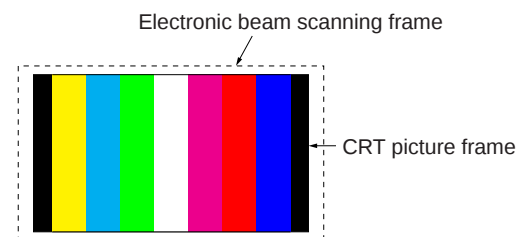


Fig.b (Picture on monitor TV)

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

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

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

(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、 $1/10\text{W}$ 以下。
 $k\Omega=1000\Omega$, $M\Omega=1000k\Omega$
- ・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ので注意してください。

- ・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 → EDIT PB/XREC → PB/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。

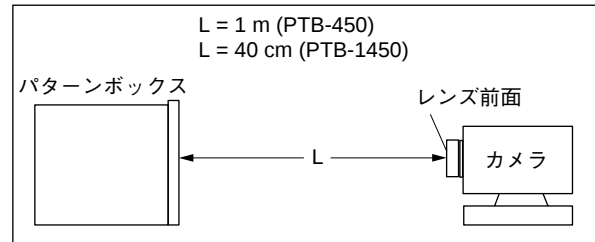
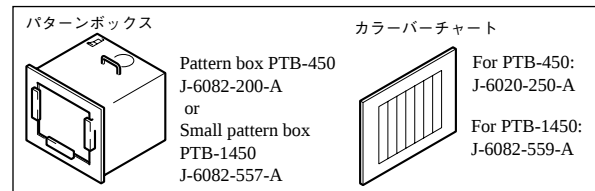
【電圧・波形測定条件ノート】

- ・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 $DC10M\Omega$ 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。

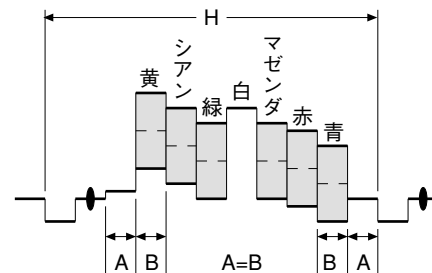
イメージ交換時の注意

- ・イメージを交換した場合は、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

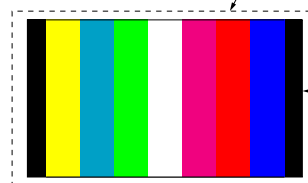


- 2. 図a及び図bの波形が得られるように画枠調整して下さい。



図a (映像入出力端子出力波形)

電子ビーム走査線

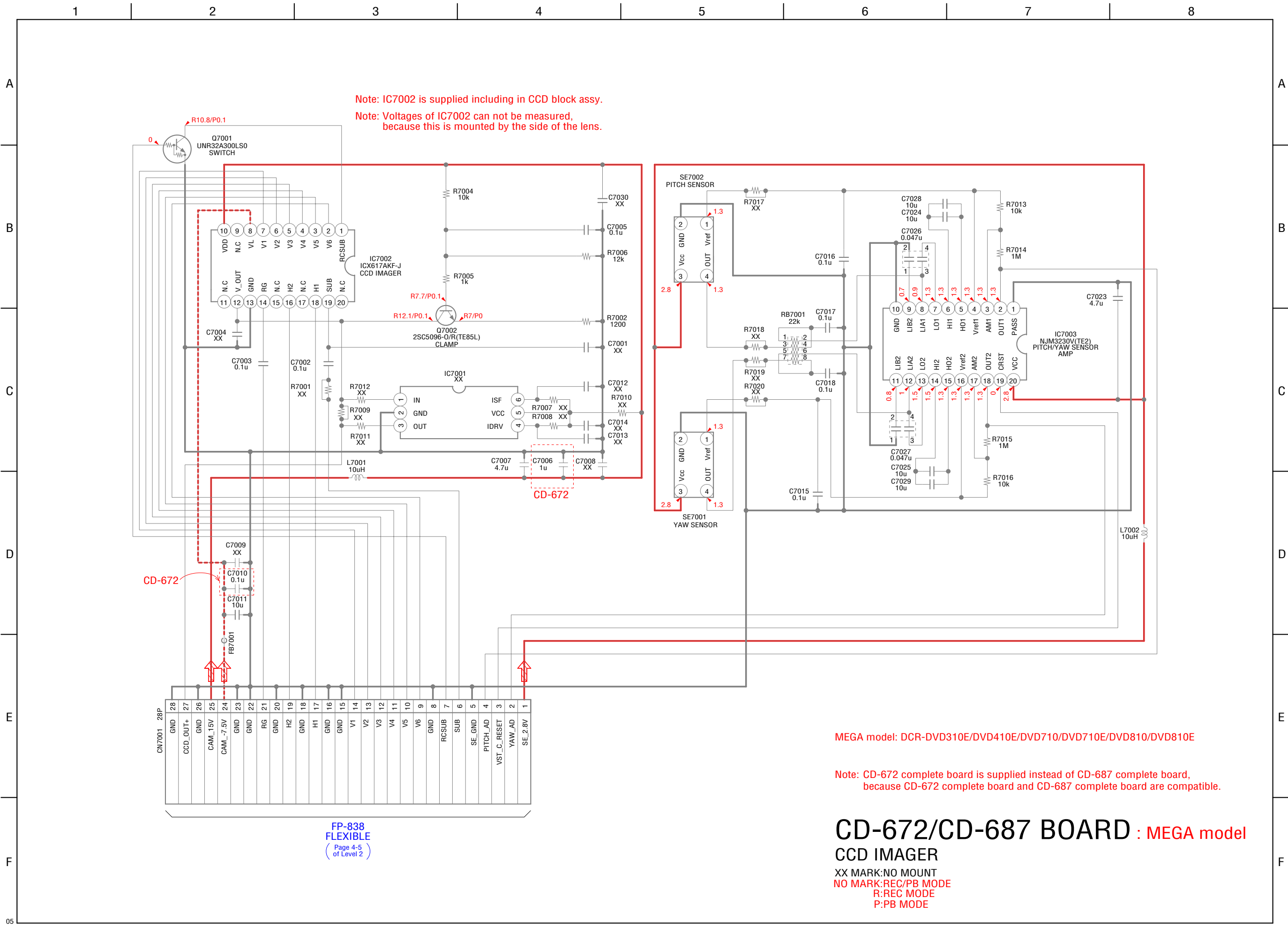


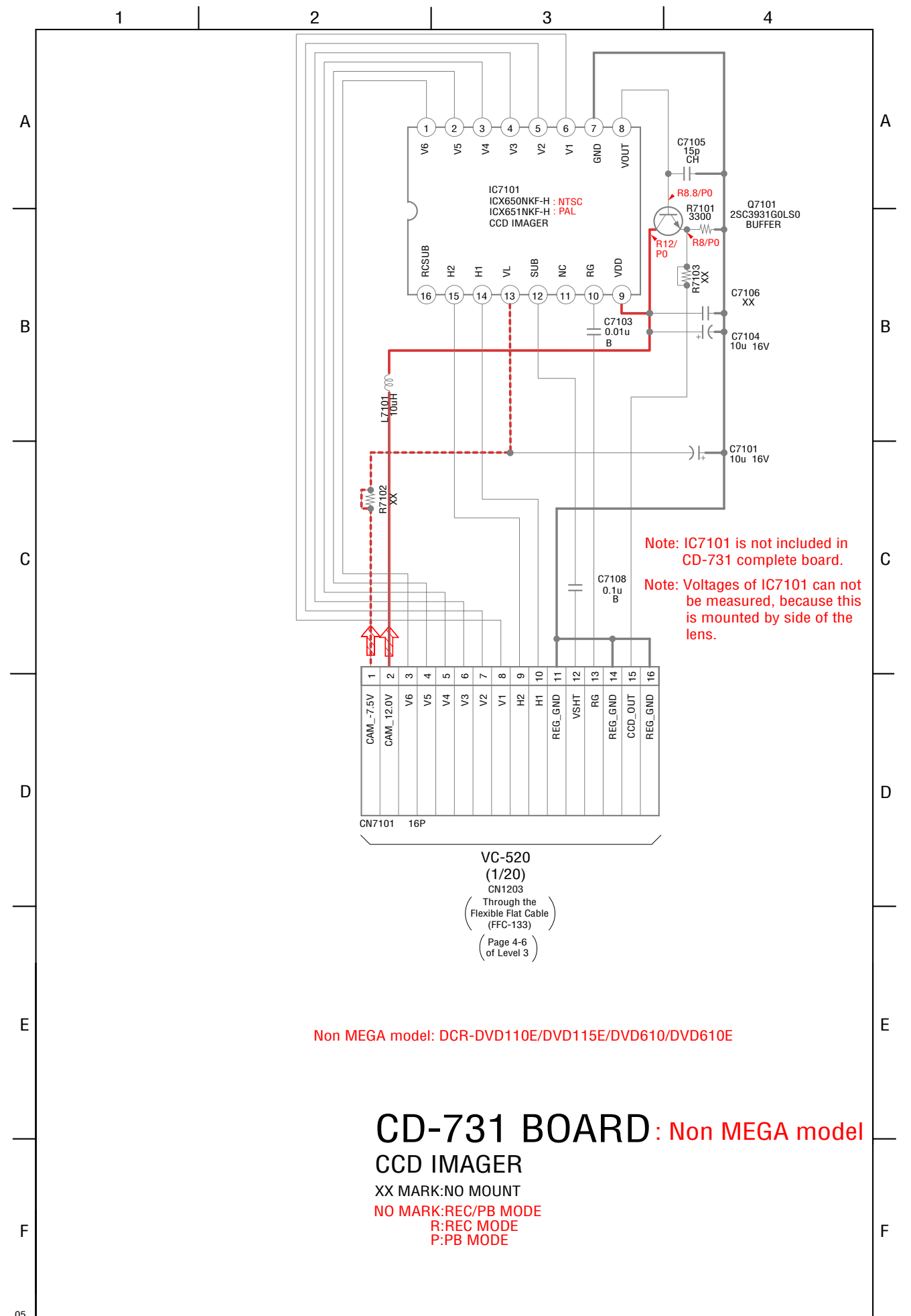
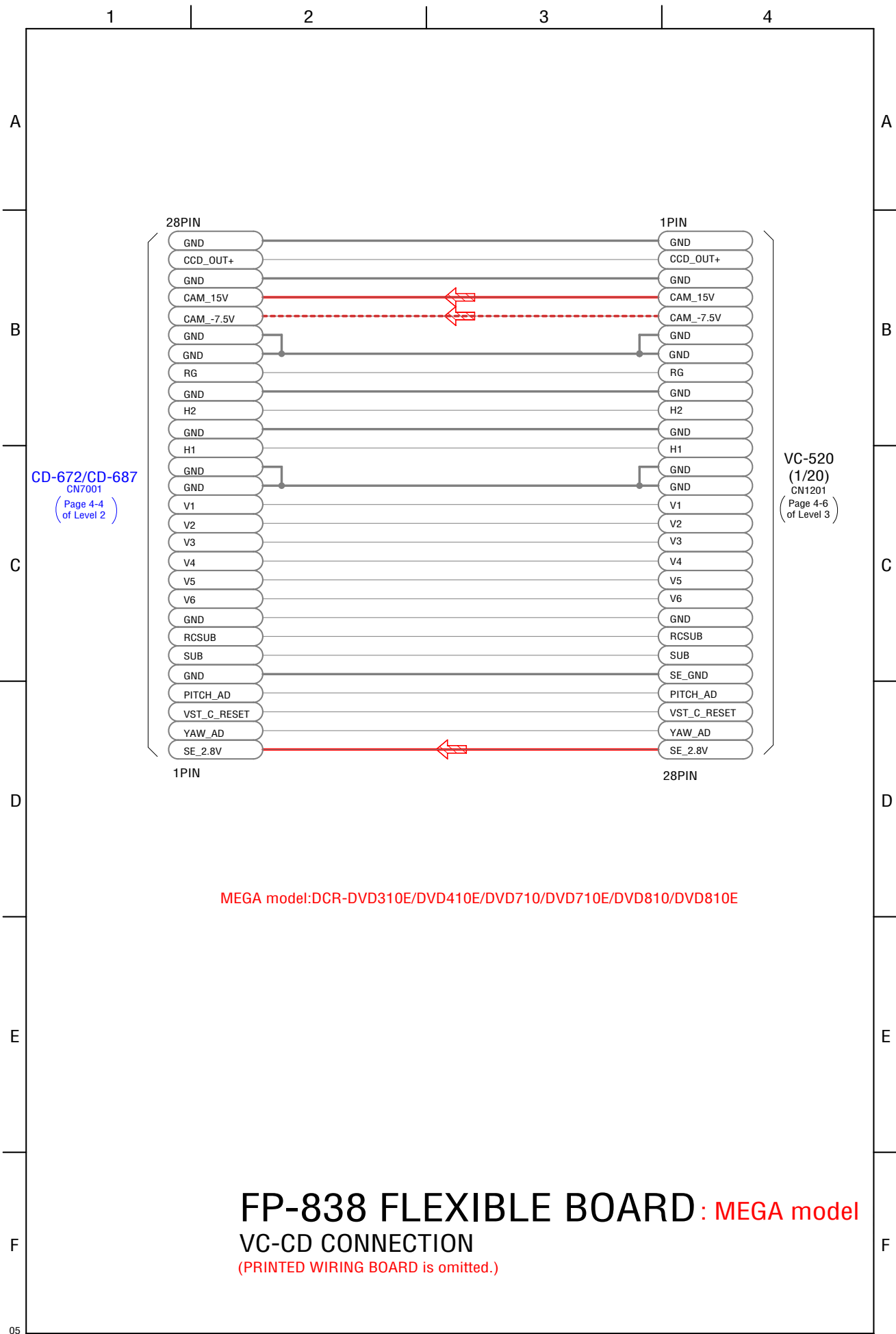
図b (テレビモニタの映像)

△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。

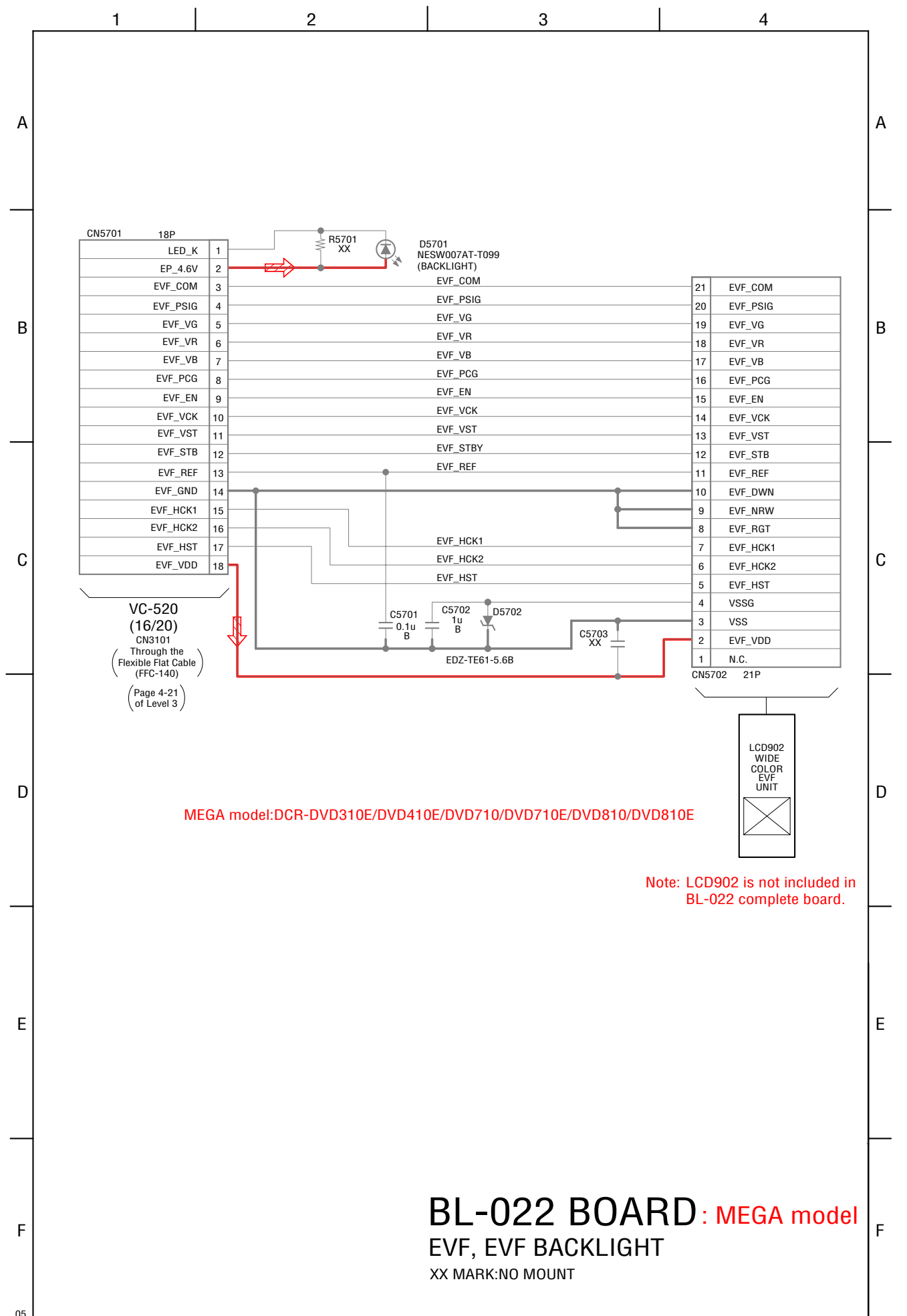
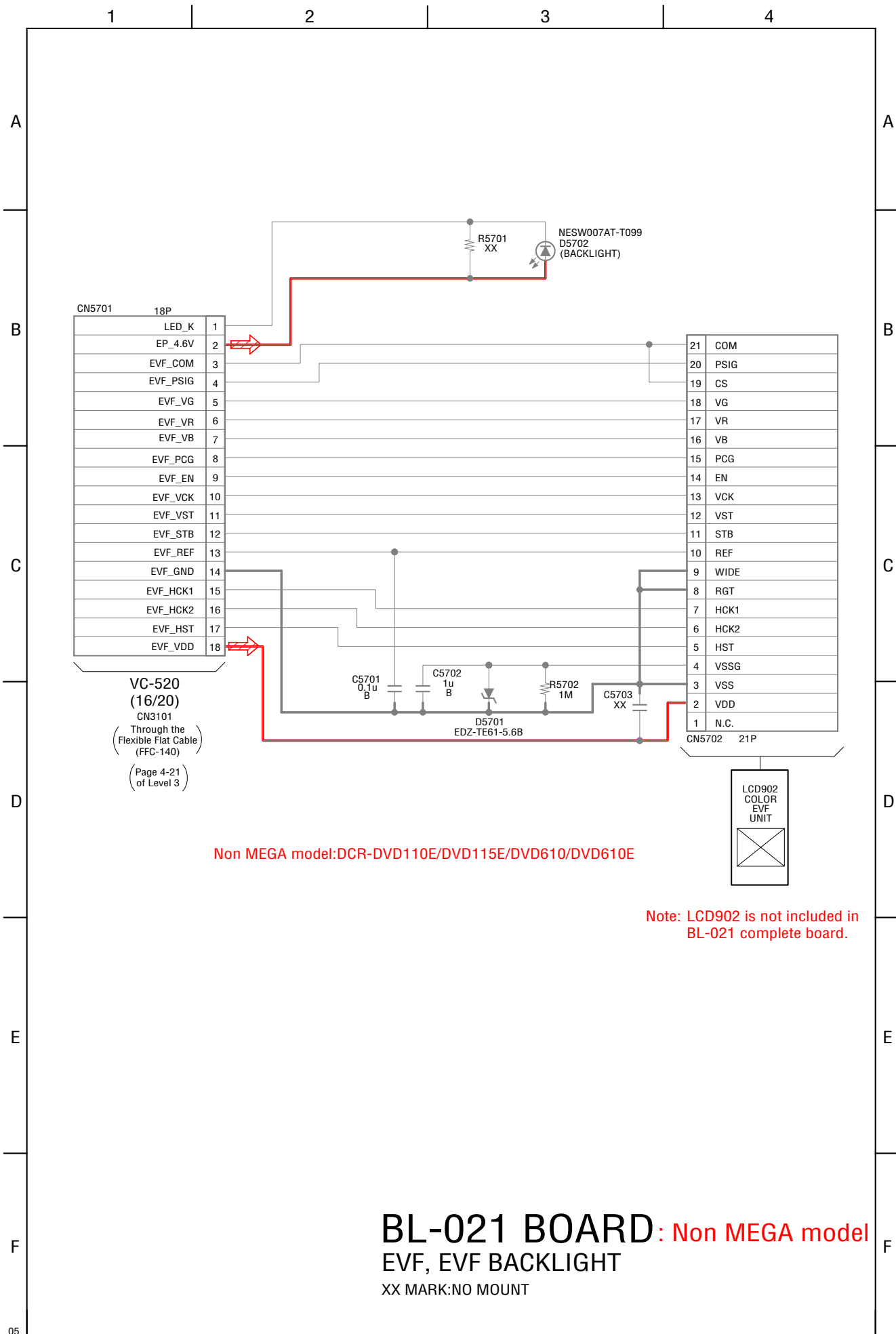
お願い

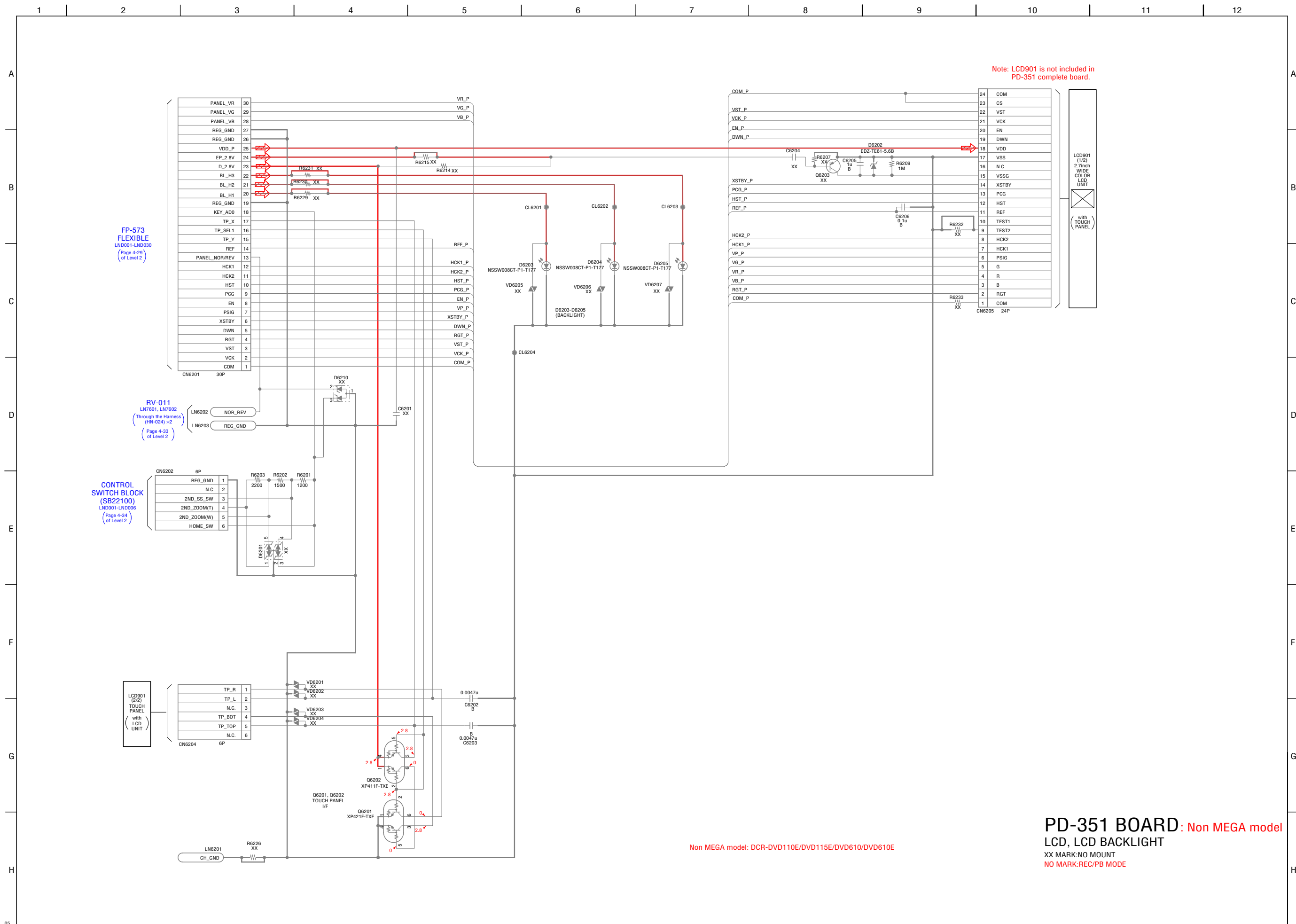
図面番号で部品を指定するときは基板名又はブロックを併せて指定して下さい。

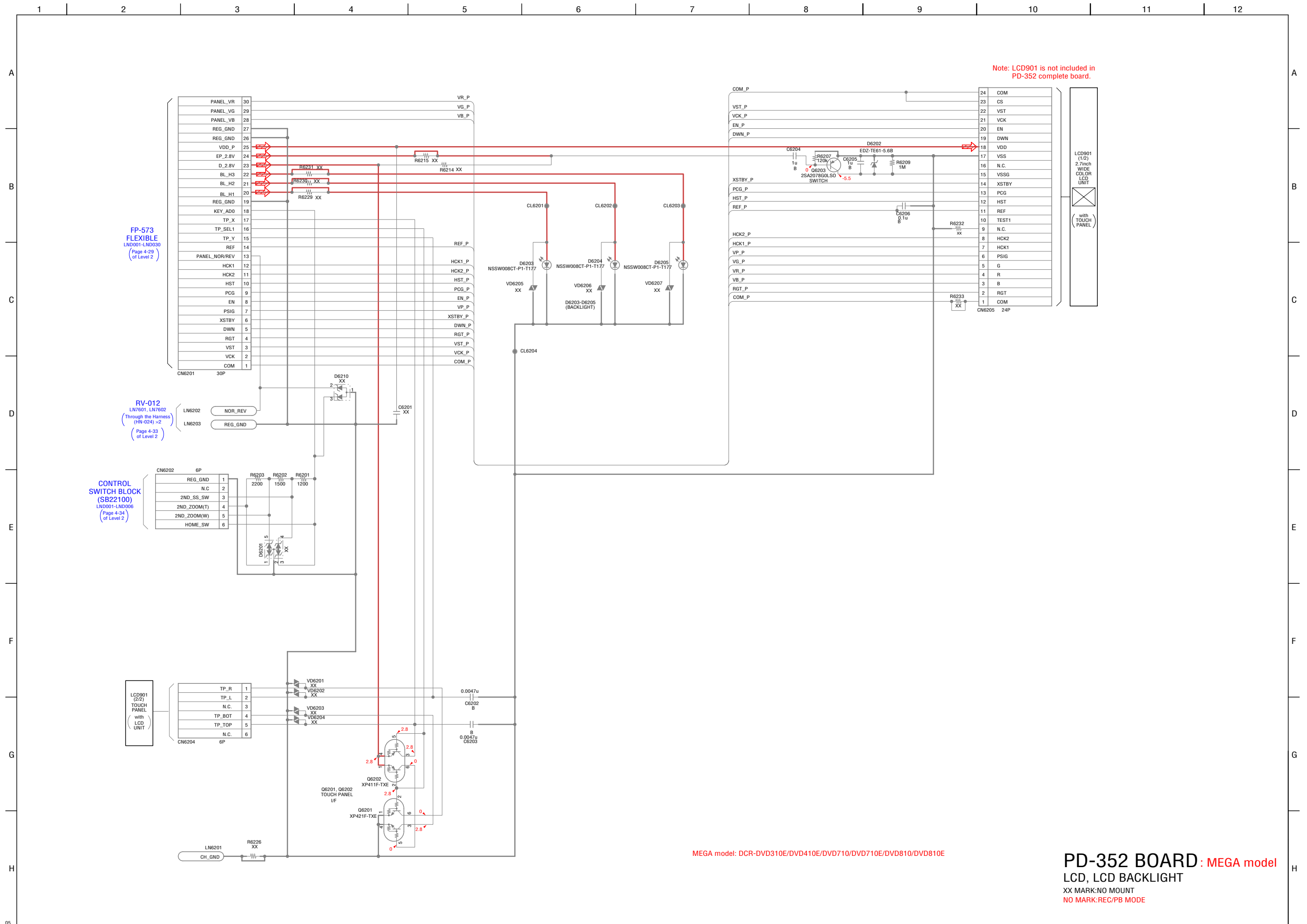


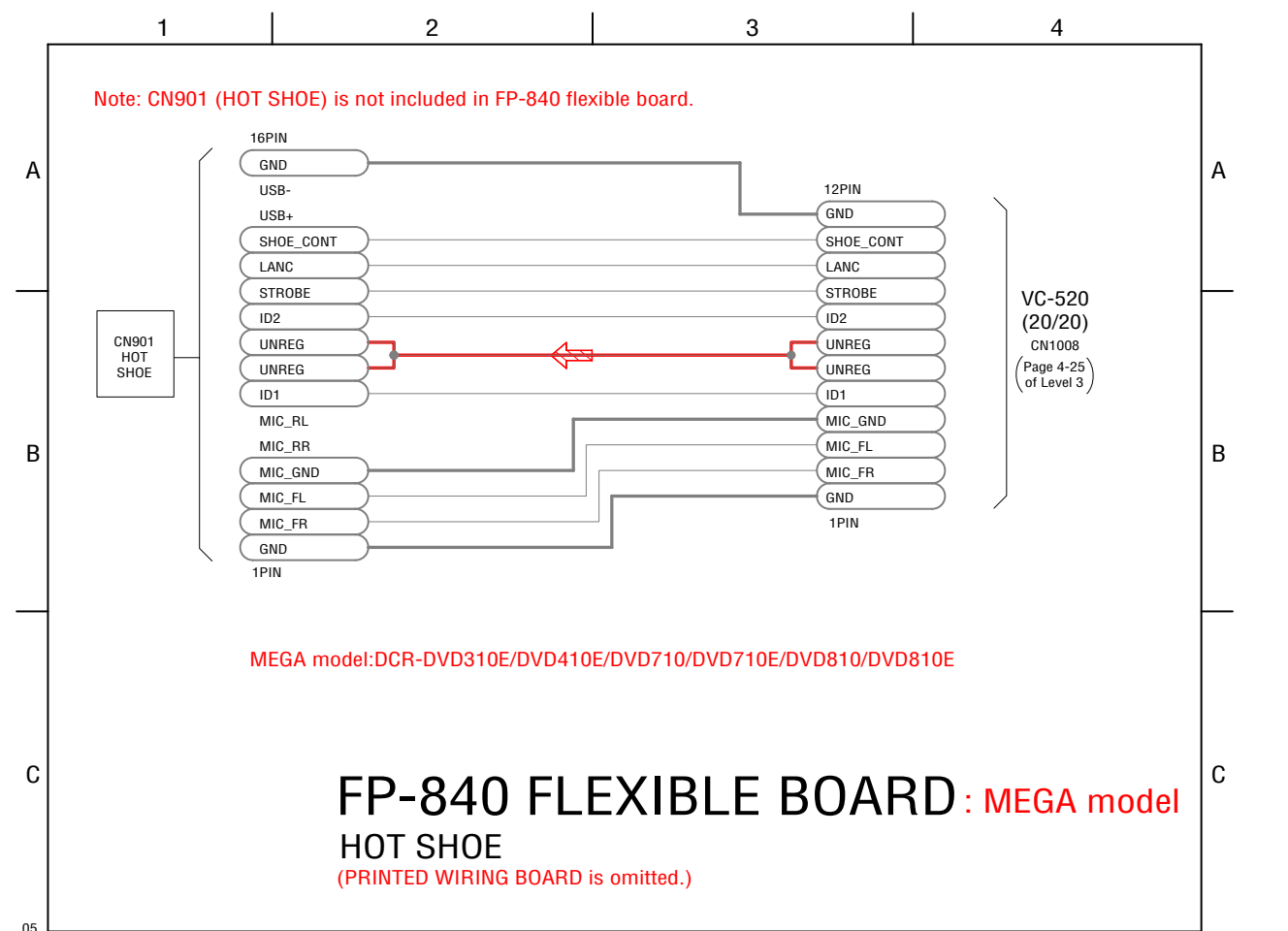
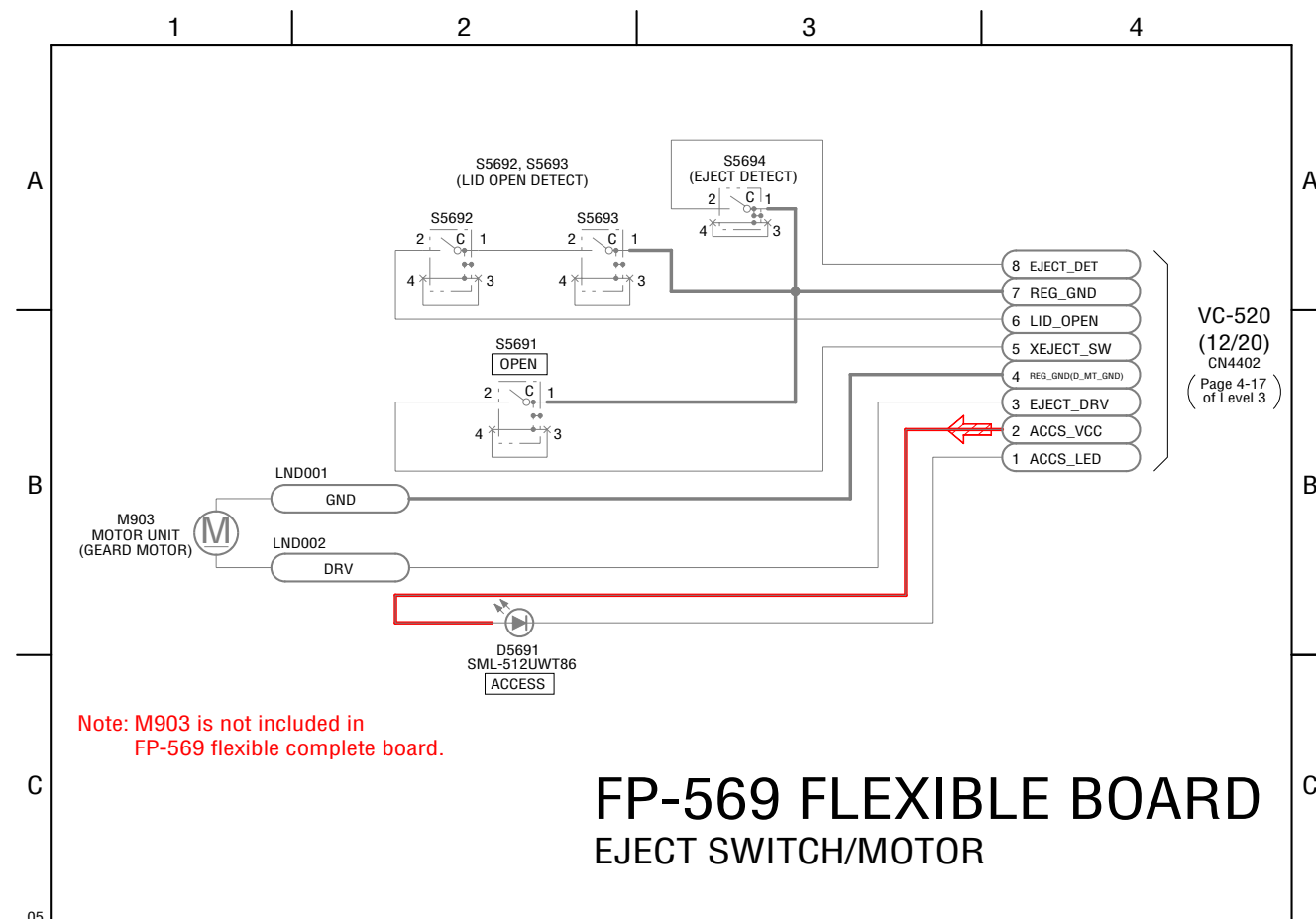
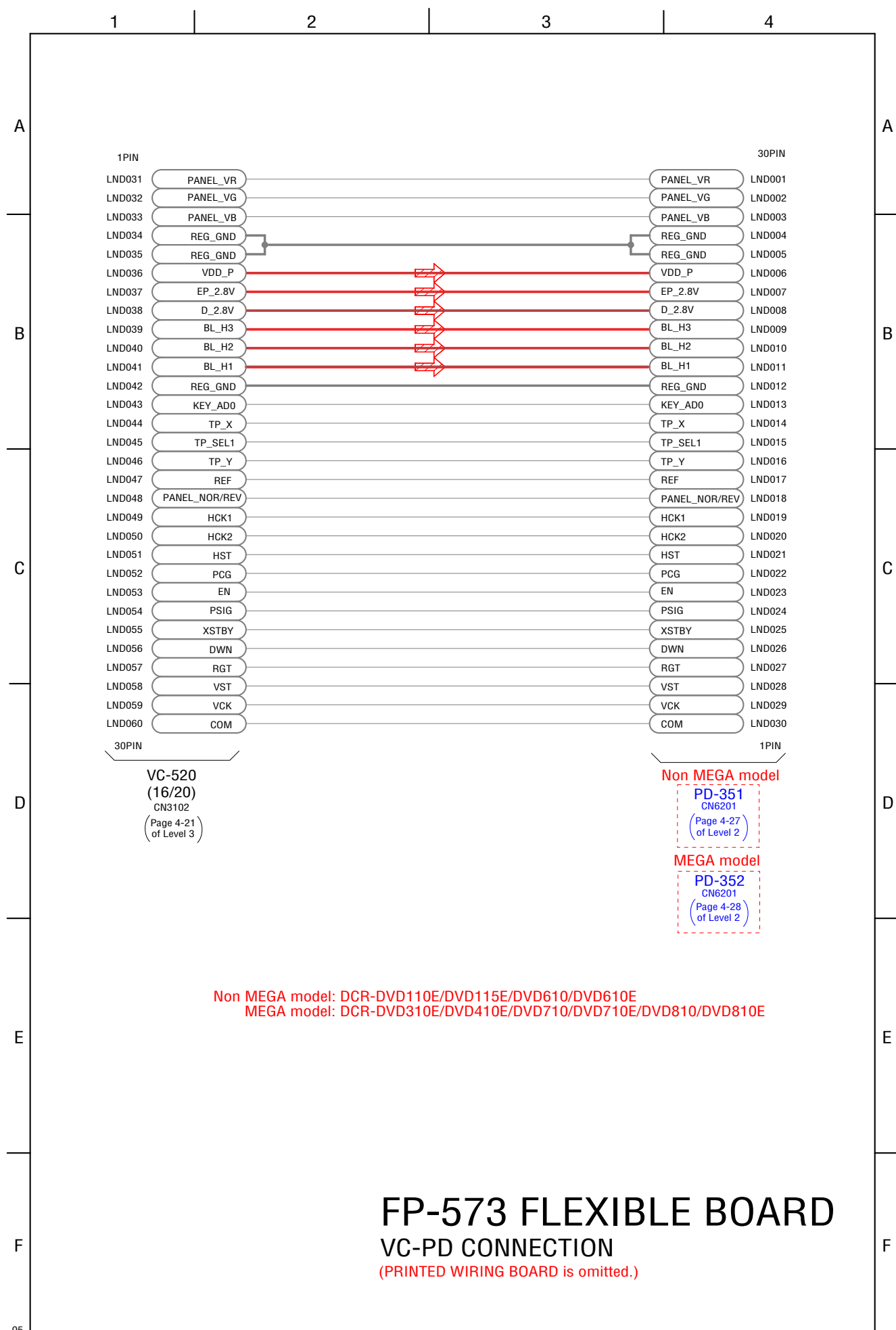


Schematic diagrams of the VC-520 board are not shown.
Pages from 4-6 to 4-25 are not shown.

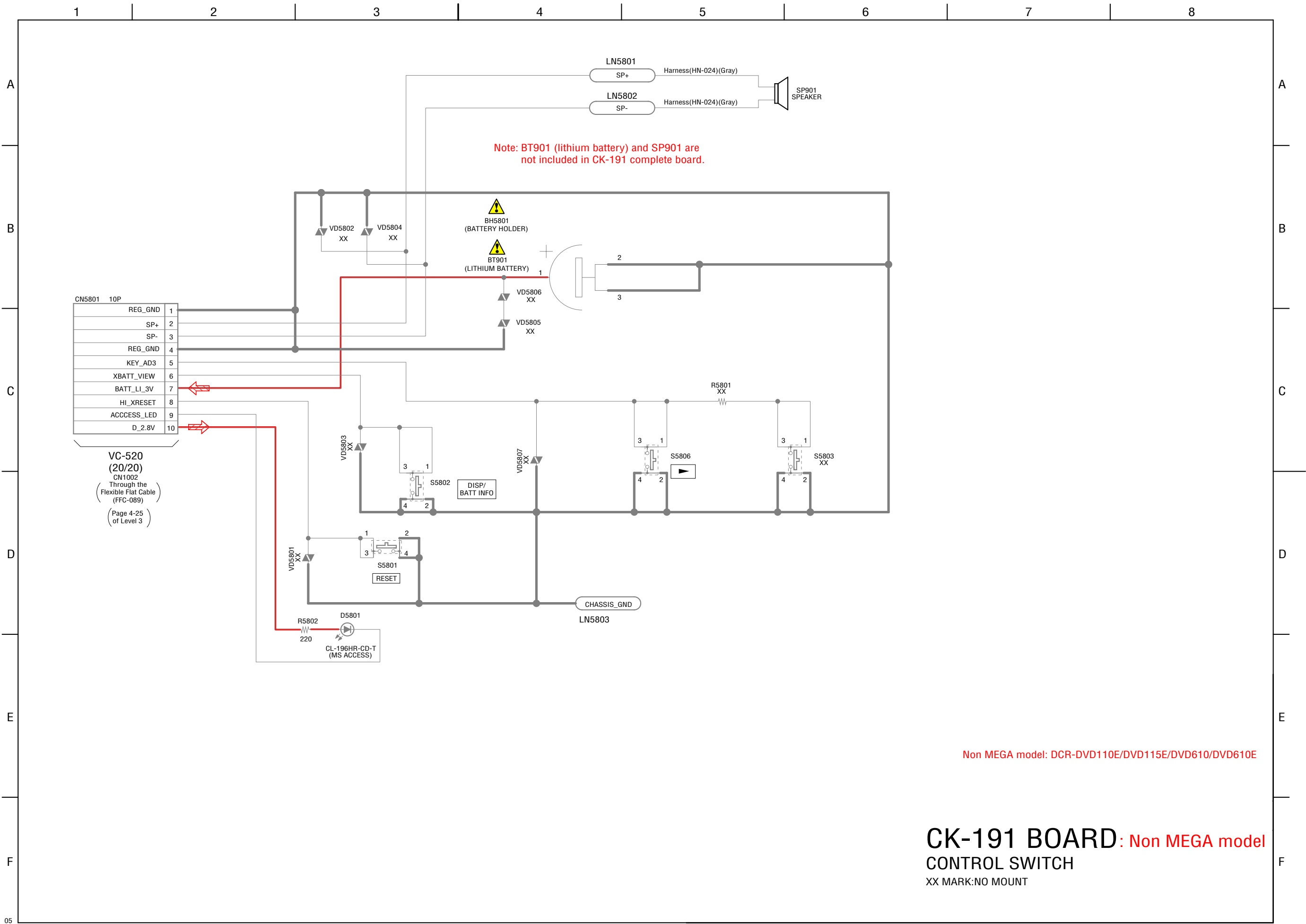




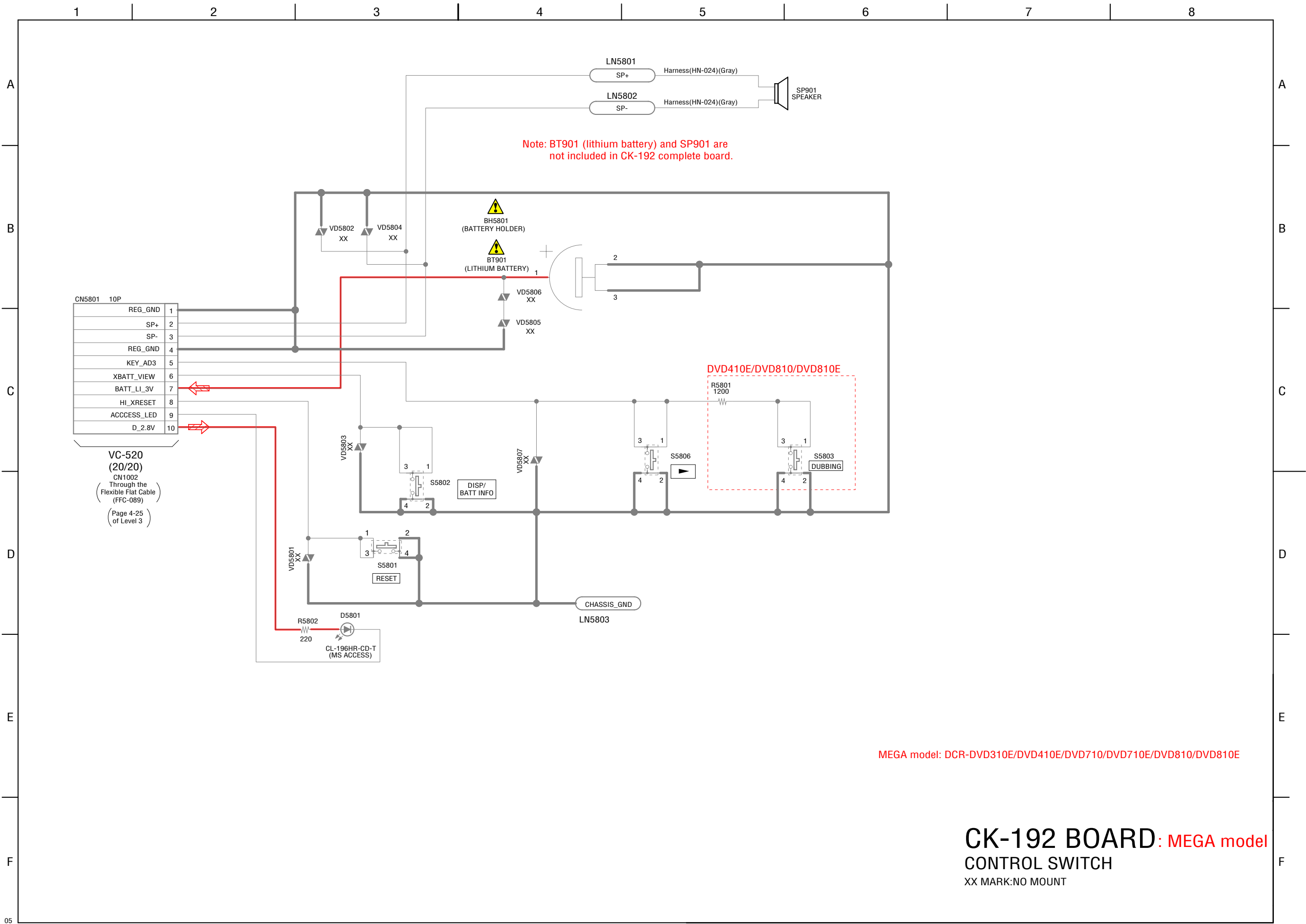


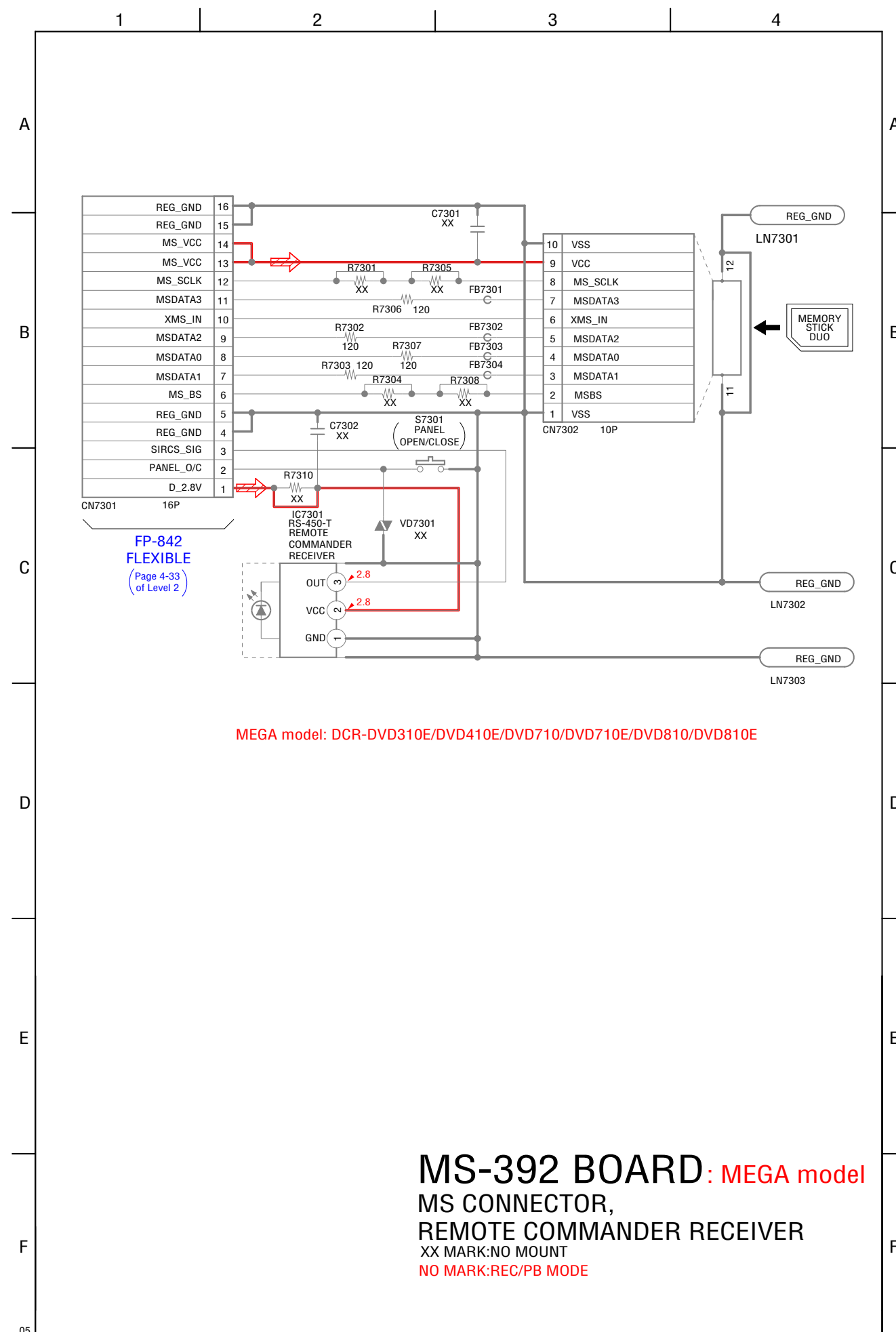
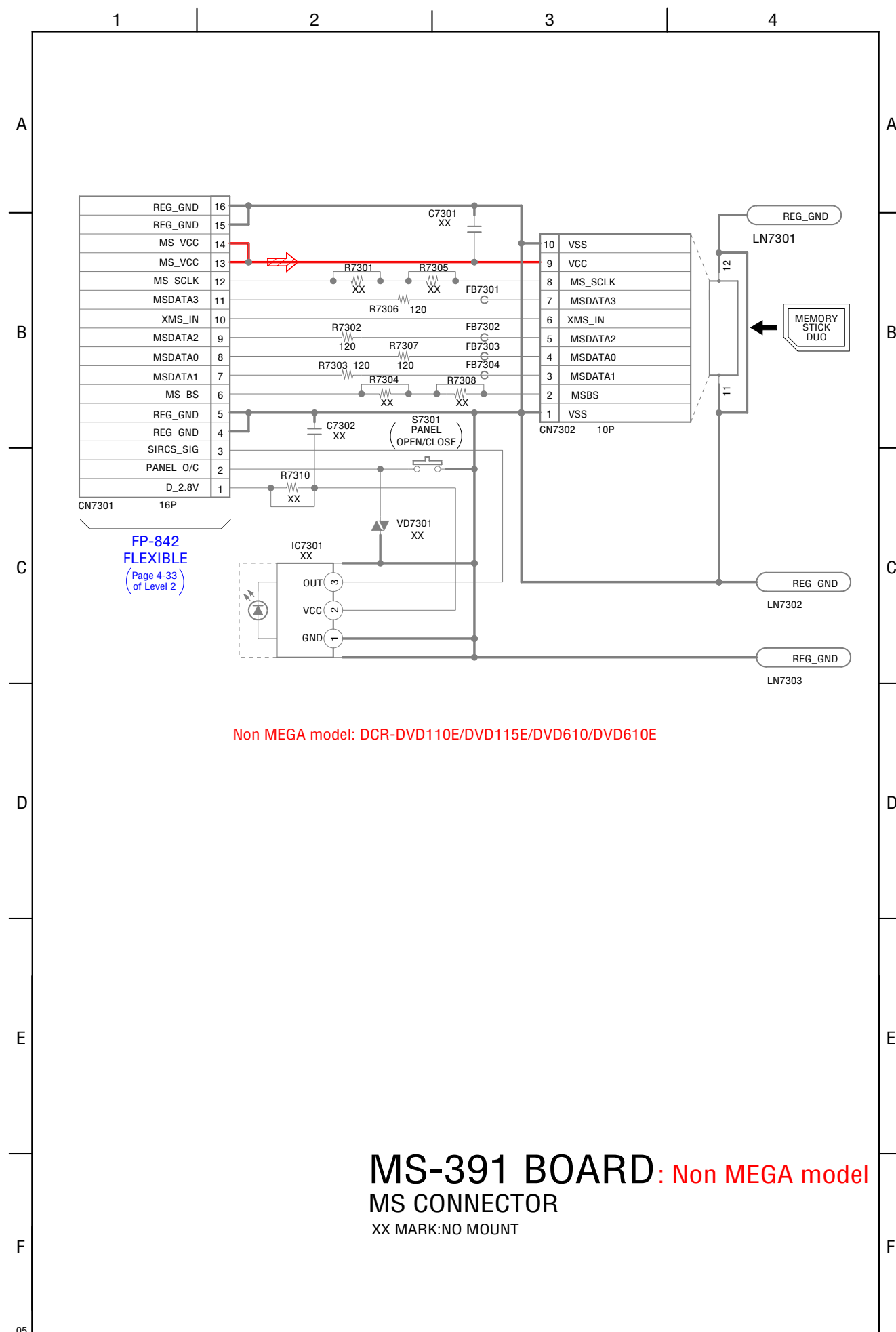


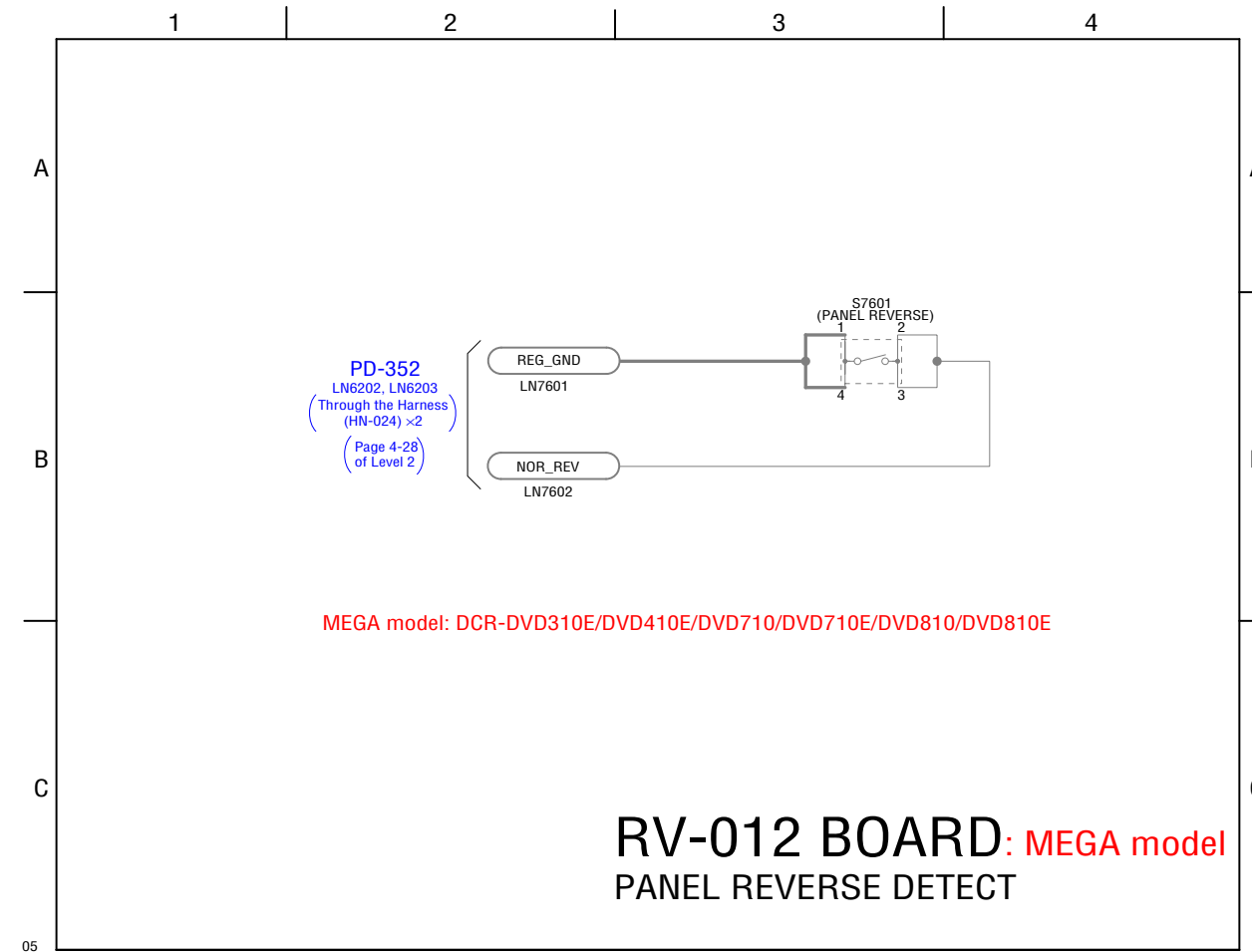
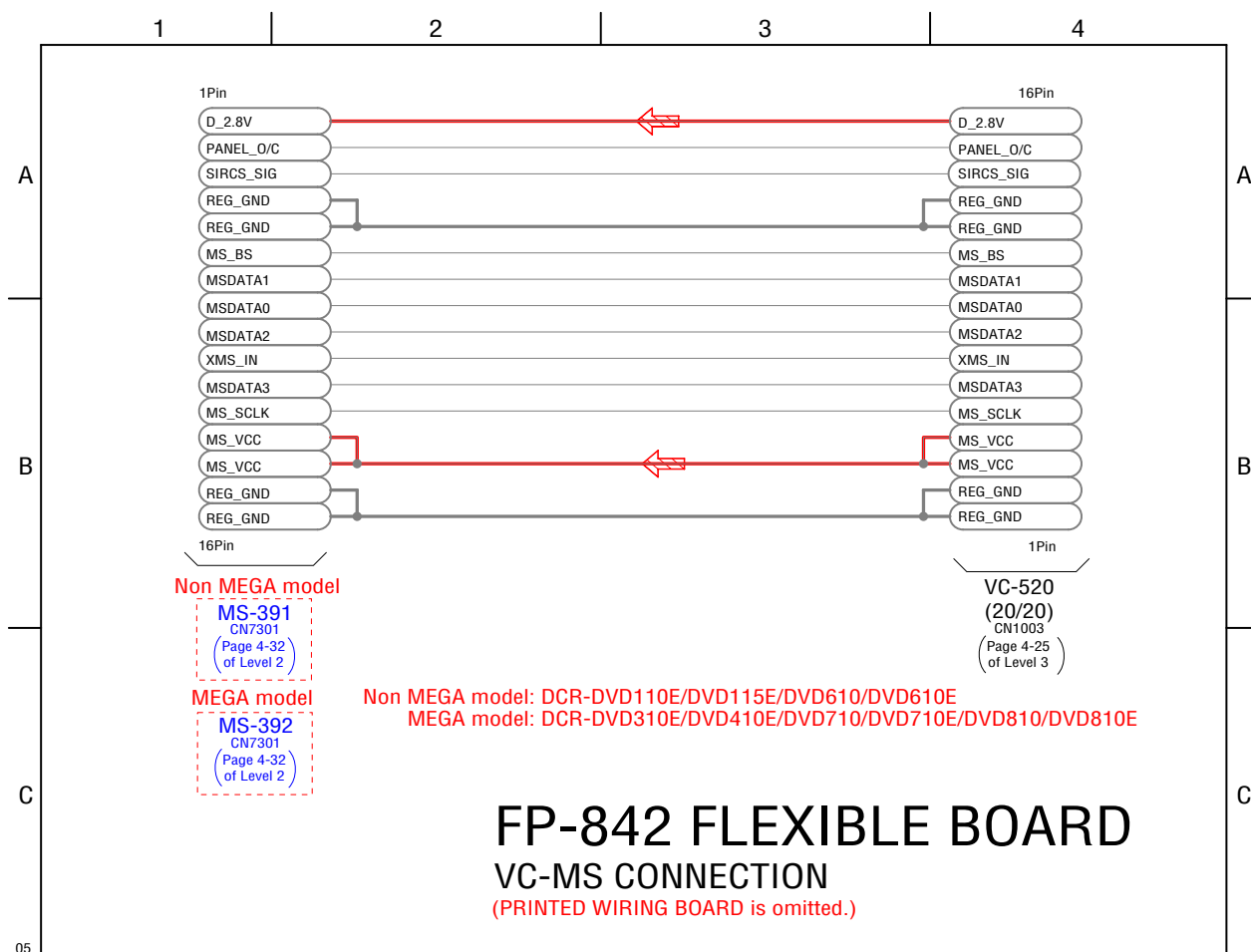
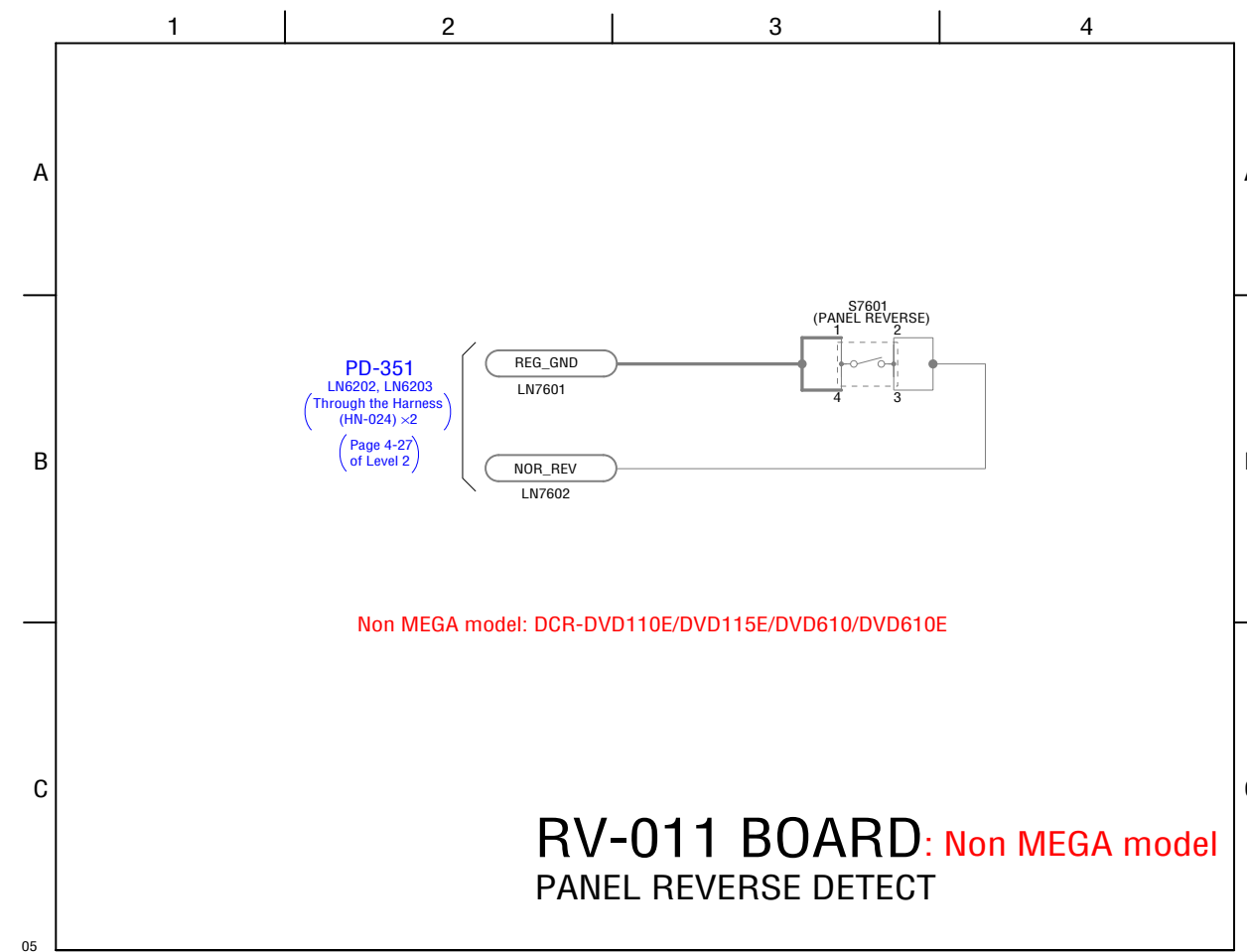
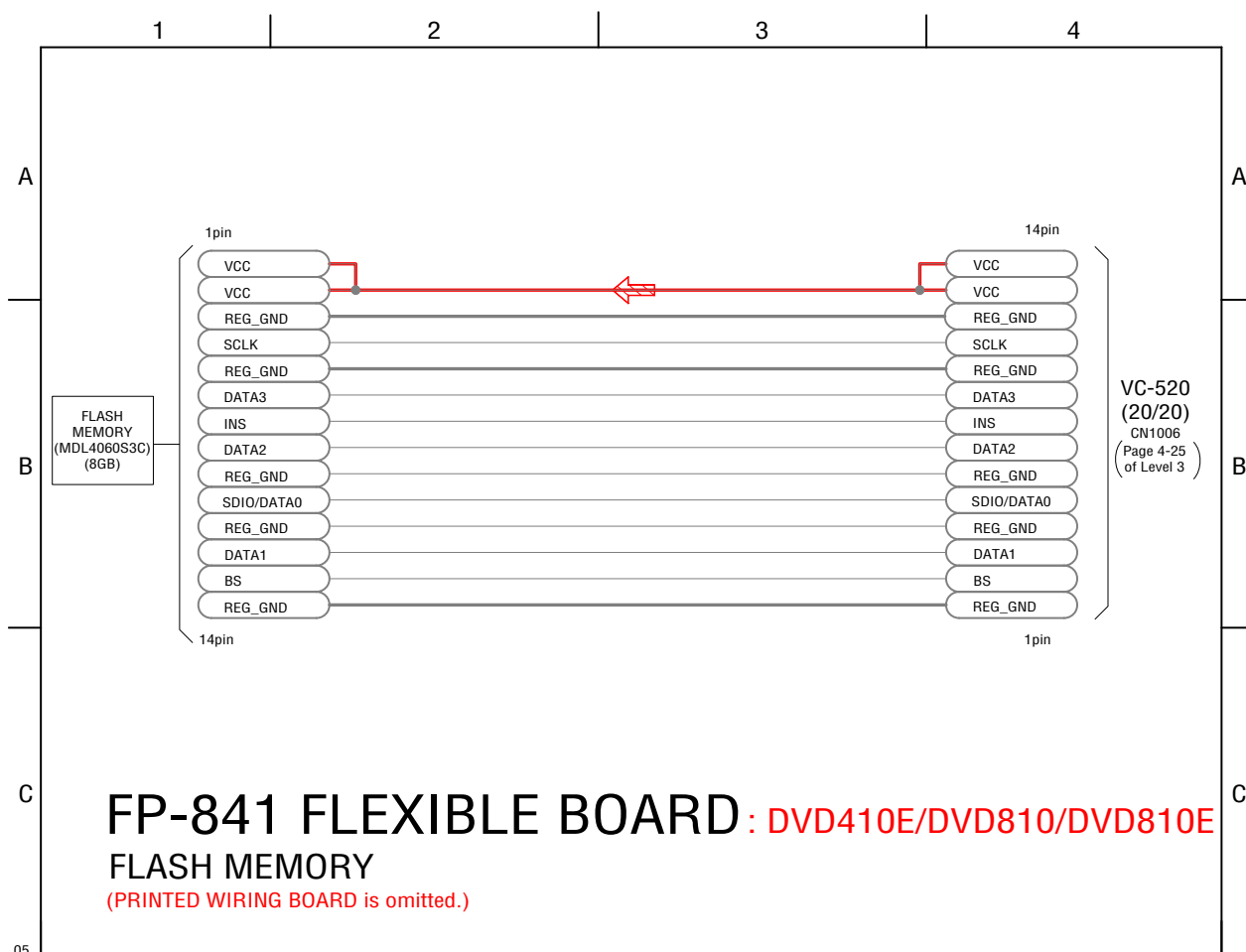
• Refer to page 4-2 (English), 4-3 (Japanese) for mark △.

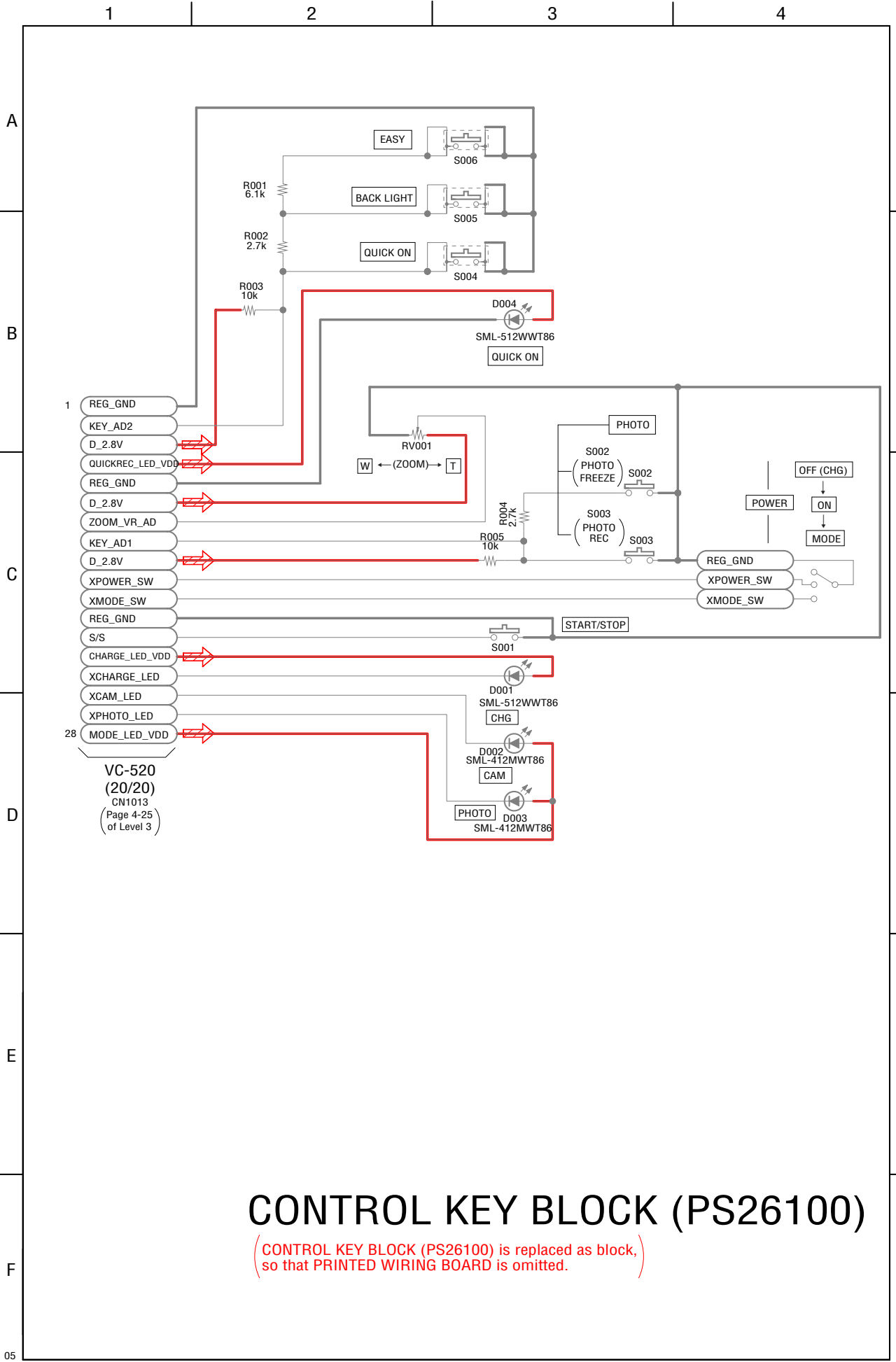
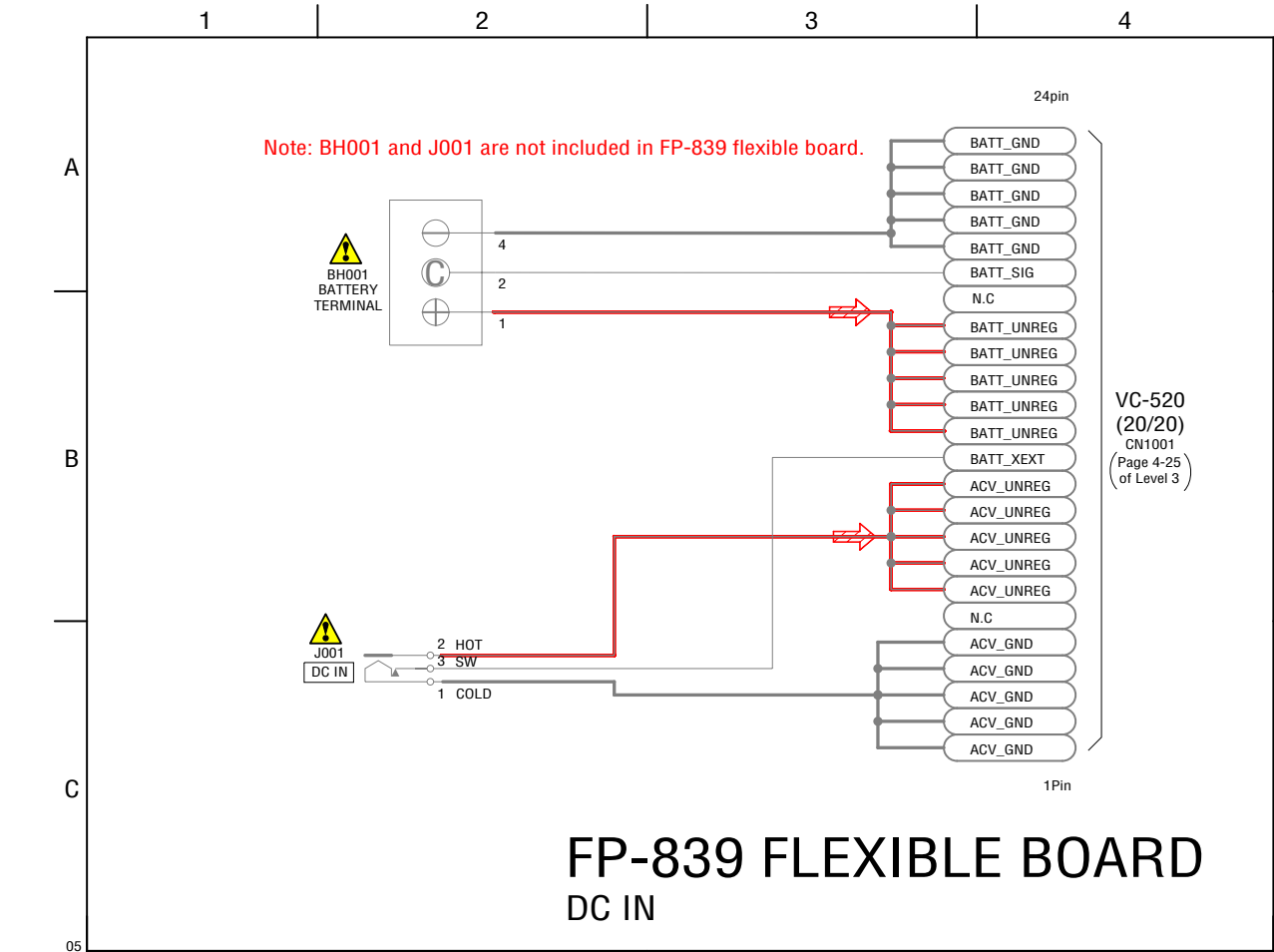
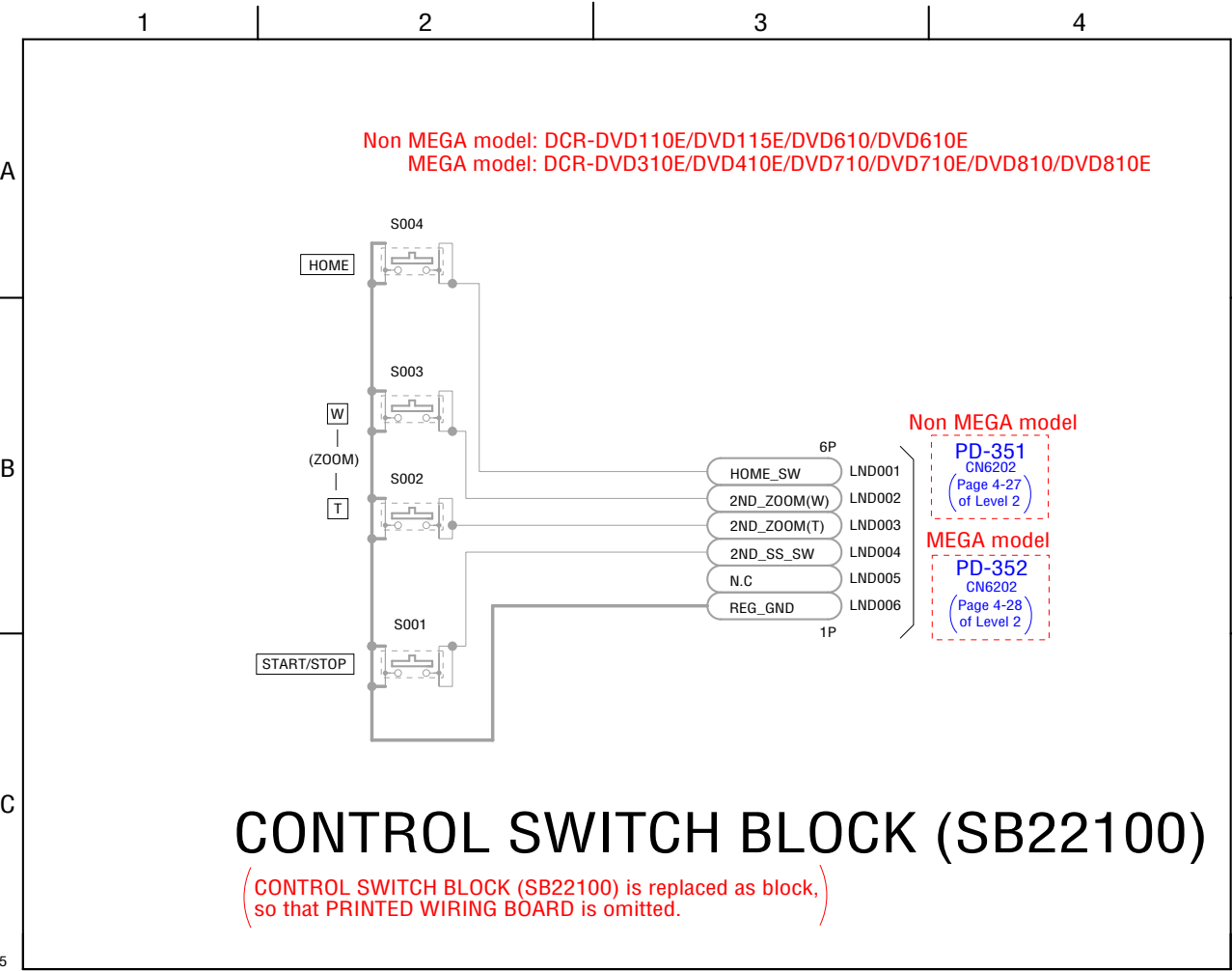


• Refer to page 4-2 (English), 4-3 (Japanese) for mark △.









4-3. PRINTED WIRING BOARDS

Link

• CD-672/CD-687 BOARD: MEGA model	• RV-012 BOARD: MEGA model
• CD-731 BOARD: Non MEGA model	• PD-352 BOARD (SIDE A): MEGA model
• FP-569 FLEXIBLE BOARD	• PD-352 BOARD (SIDE B): MEGA model
• BL-021 BOARD: Non MEGA model	• CK-191 BOARD: Non MEGA model
• BL-022 BOARD: MEGA model	• CK-192 BOARD: MEGA model
• RV-011 BOARD: Non MEGA model	• MS-391 BOARD: Non MEGA model
• PD-351 BOARD (SIDE A): Non MEGA model	• MS-392 BOARD: MEGA model
• PD-351 BOARD (SIDE B): Non MEGA model	• FP-839 FLEXIBLE BOARD

• COMMON NOTE FOR PRINTED WIRING BOARDS

Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVE610E

MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

4-3. PRINTED WIRING BOARDS

4-3. PRINTED WIRING BOARDS

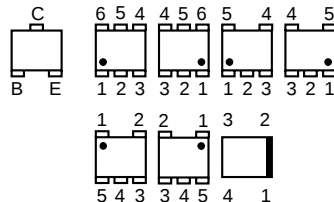
(ENGLISH)

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

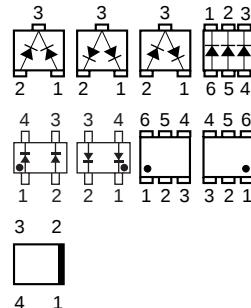
-  : Uses unleaded solder.
-  : Circuit board
-  : Flexible board
-  : Pattern from the side which enables seeing.
-  : pattern of the rear side
(The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.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

- Chip parts.

Transistor



Diode



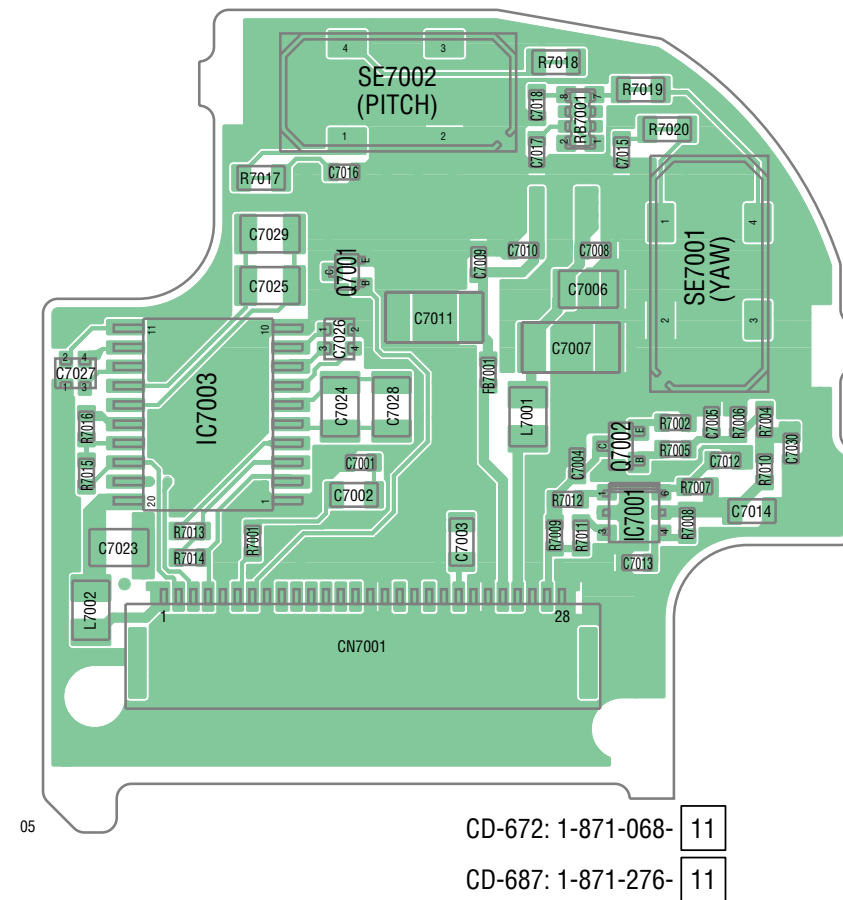
(JAPANESE)

プリント図共通ノート

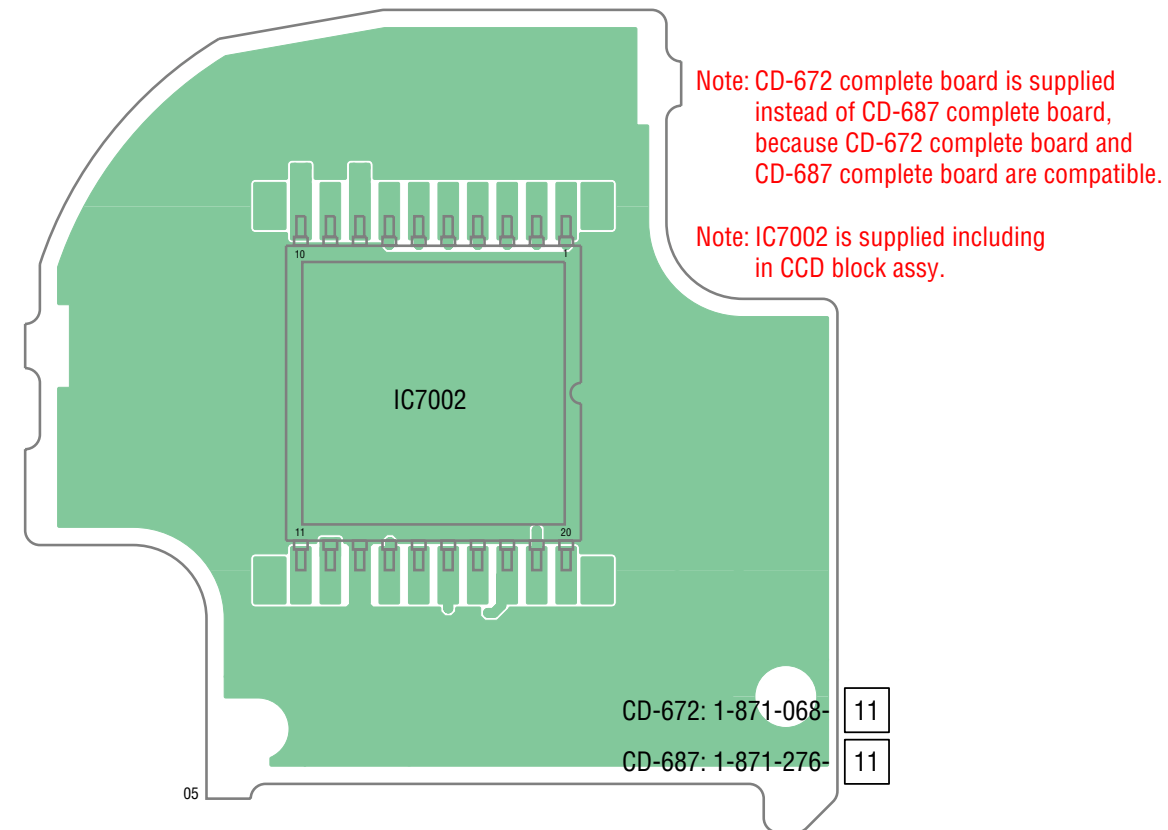
【プリント図ノート】

-  : 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。

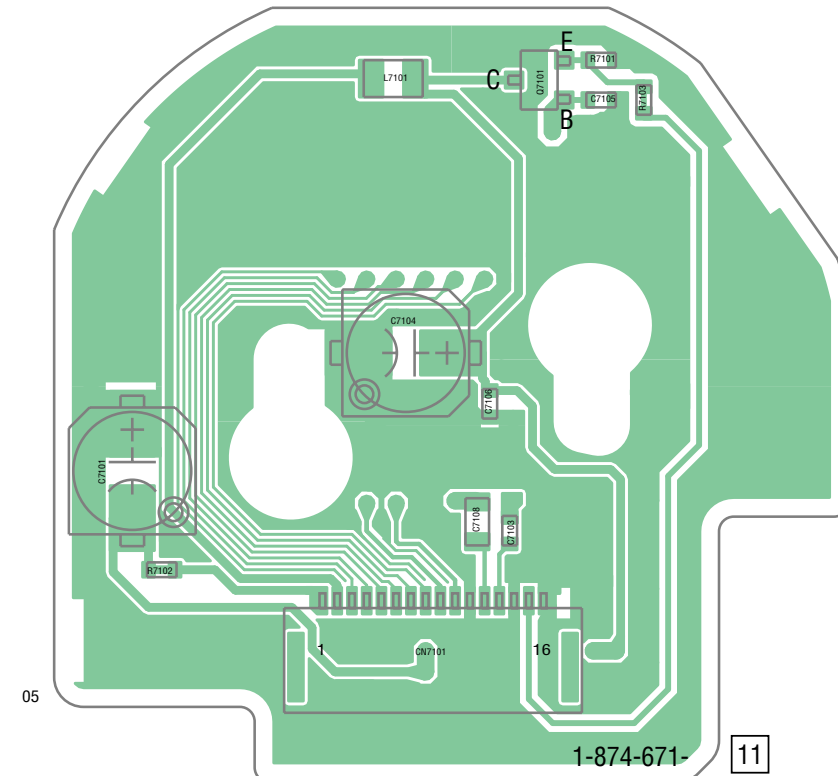
(MEGA model)



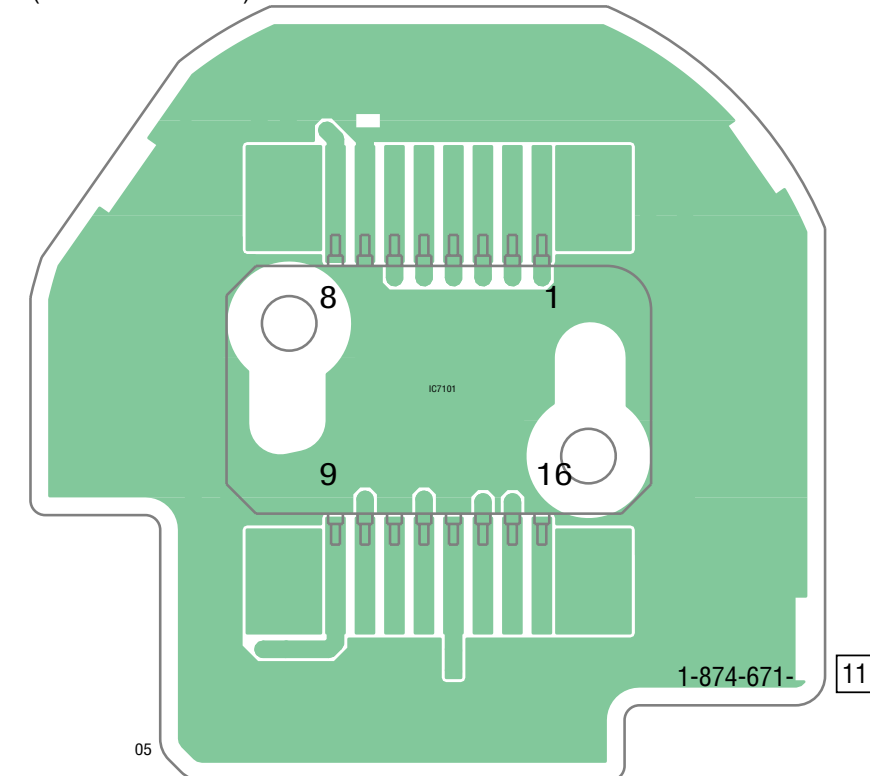
(MEGA model)



(Non MEGA model)



(Non MEGA model)

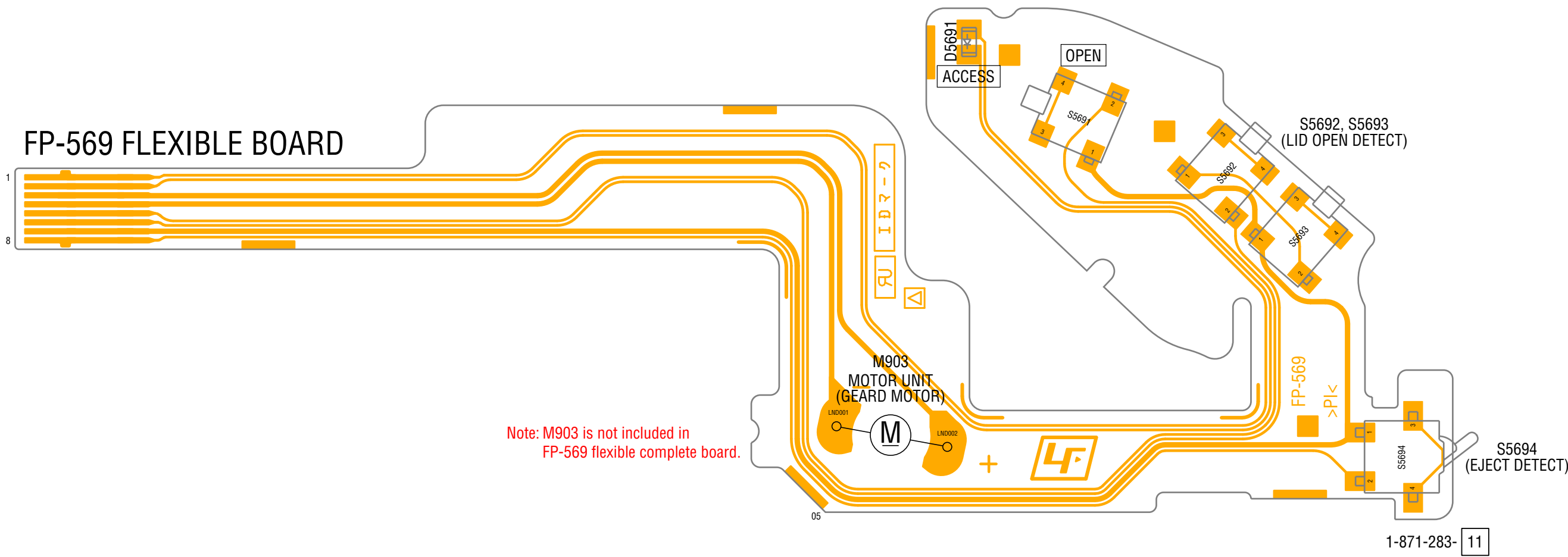


Printed wiring boards of the VC-520 boards are not shown.
Pages from 4-37 to 4-38 are not shown.

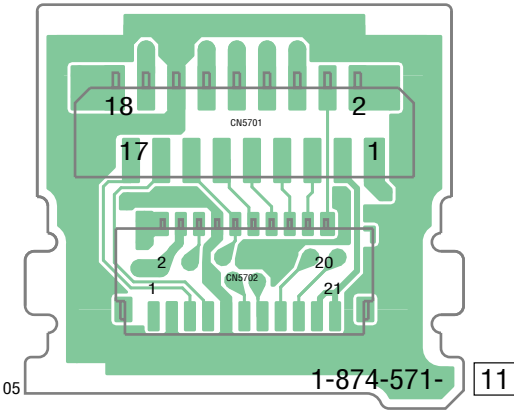
FP-569 (1 layer), BL-021 (2 layers): Non MEGA model, BL-022 (2 layers): MEGA model

 : Uses unleaded solder.

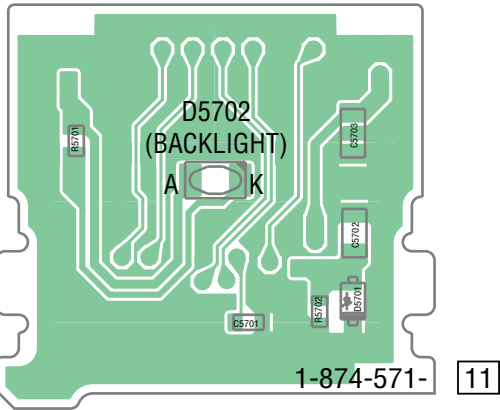
Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E
MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E



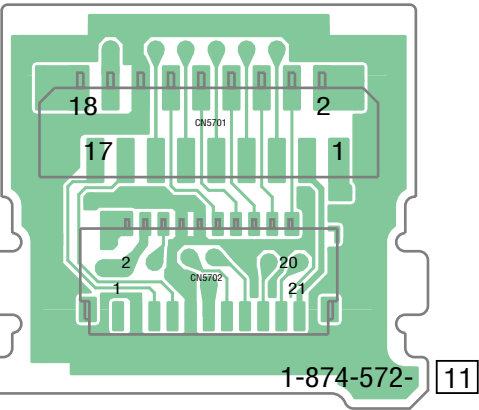
BL-021 BOARD (SIDE A)
(Non MEGA model)



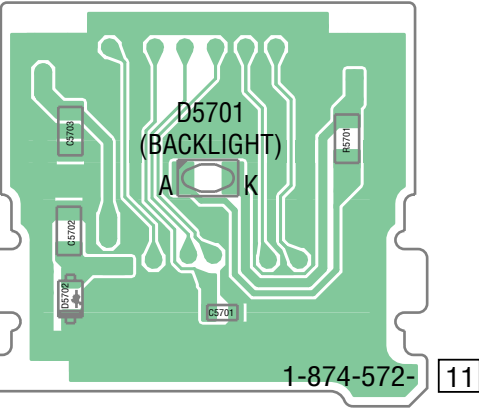
BL-021 BOARD (SIDE B)
(Non MEGA model)



BL-022 BOARD (SIDE A)
(MEGA model)



BL-022 BOARD (SIDE B)
(MEGA model)

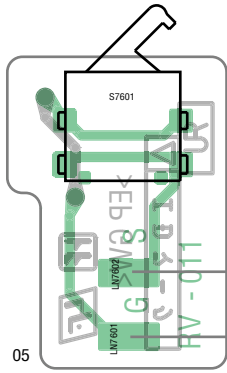


 : Uses unleaded solder.

Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E

PD-351 BOARD (SIDE A) (Non MEGA model)

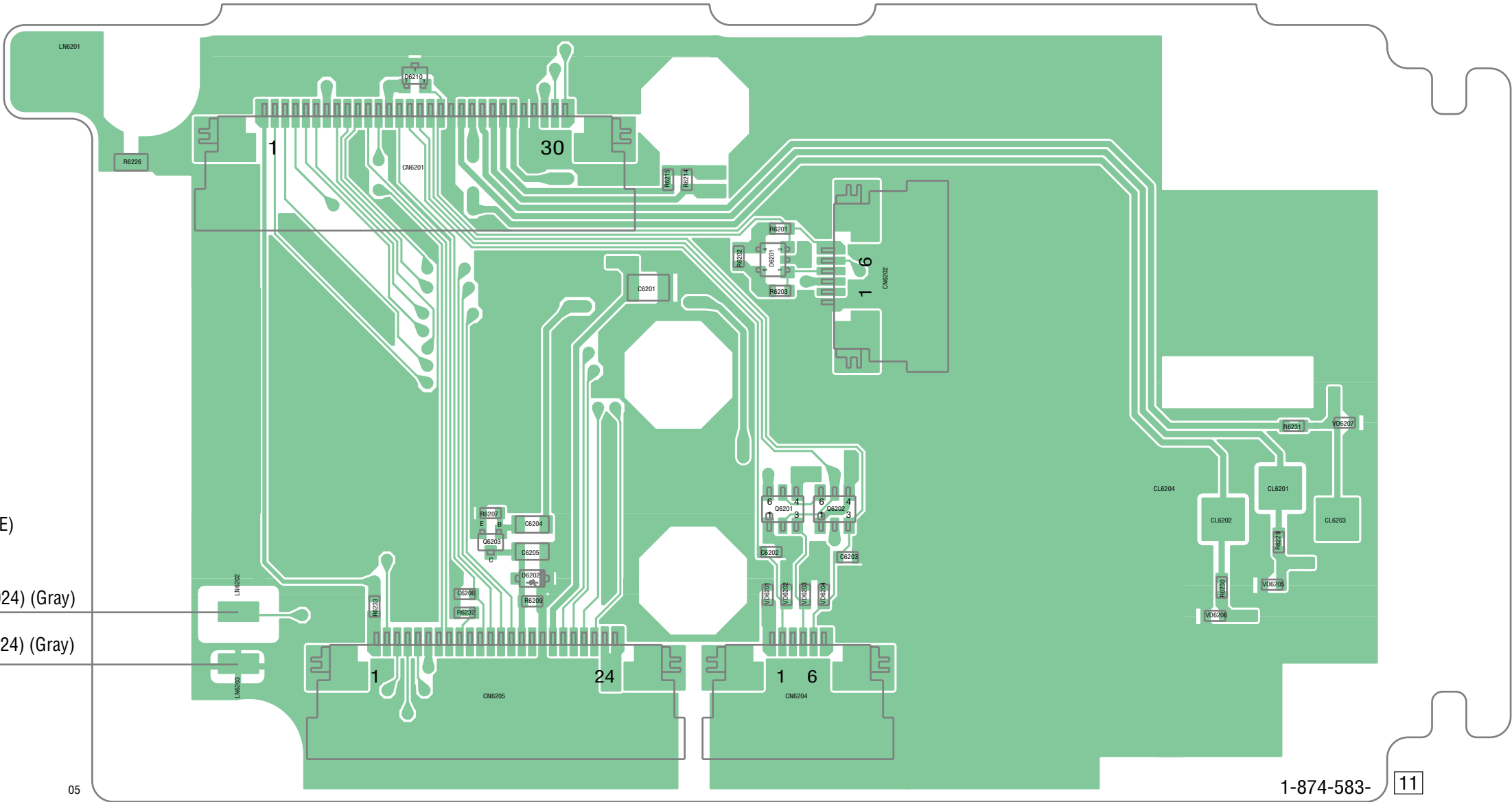
RV-011 BOARD
(Non MEGA model)



S7601
(PANEL REVERSE)

HARNESS (HN-024) (Gray)

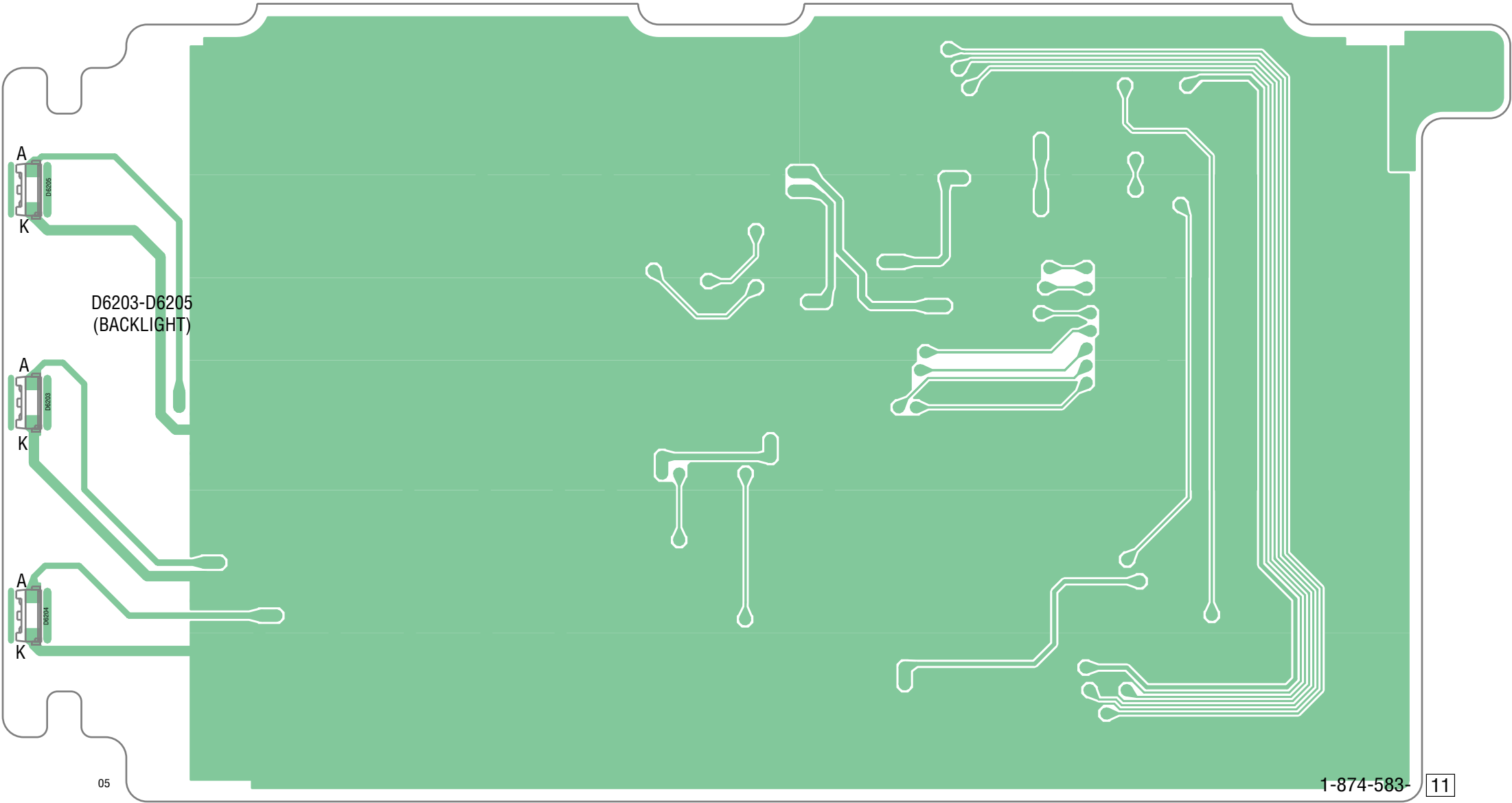
HARNESS (HN-024) (Gray)



PD-351 (2 layers): Non MEGA model

 : Uses unleaded solder.
Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E

PD-351 BOARD (SIDE B) (Non MEGA model)

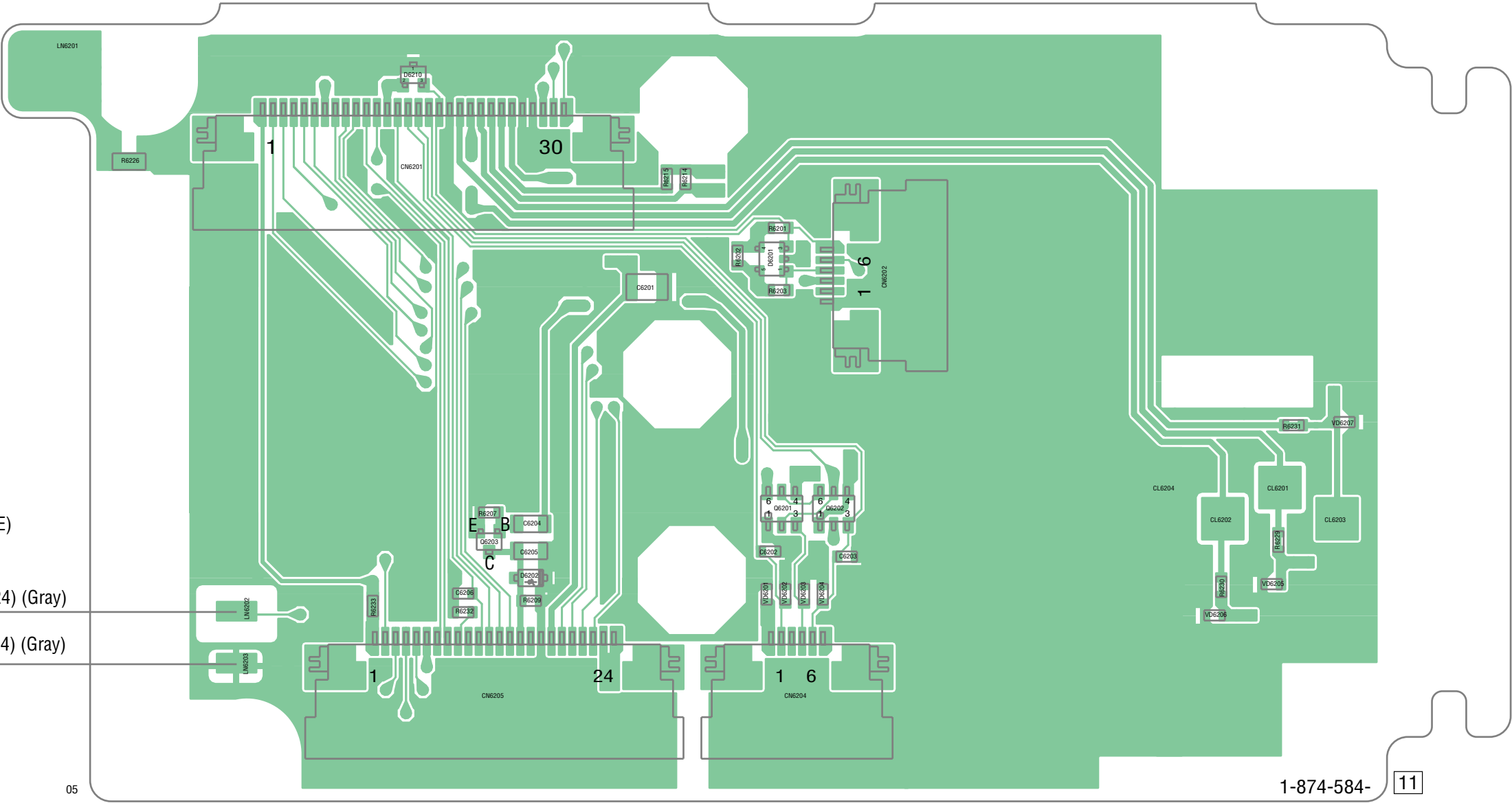
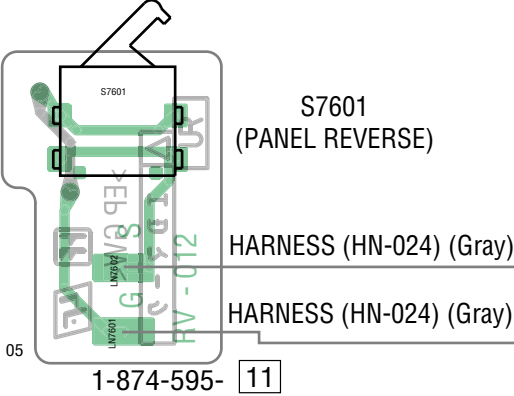


 : Uses unleaded solder.

MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

PD-352 BOARD (SIDE A) (MEGA model)

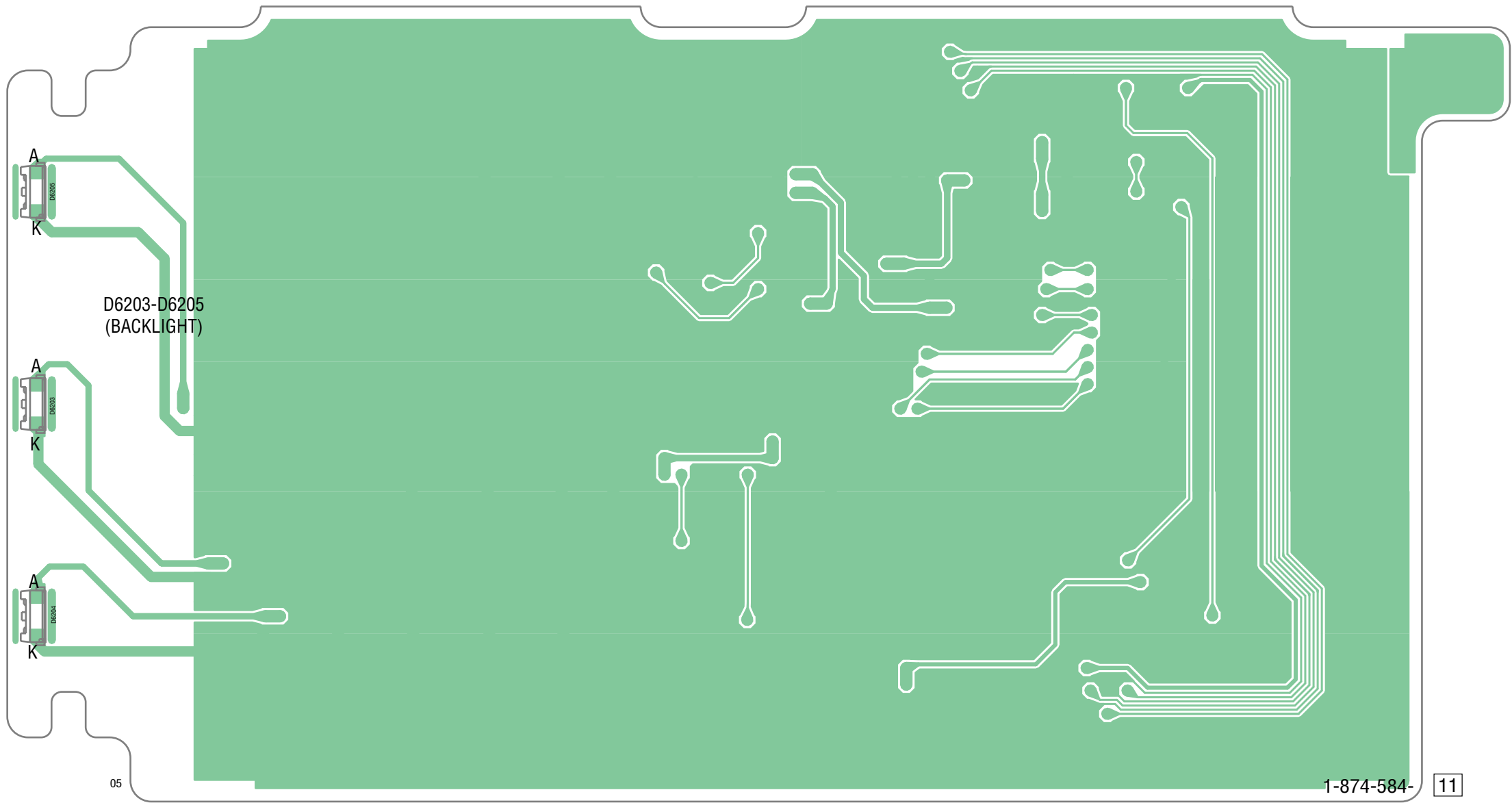
RV-012 BOARD
(MEGA model)



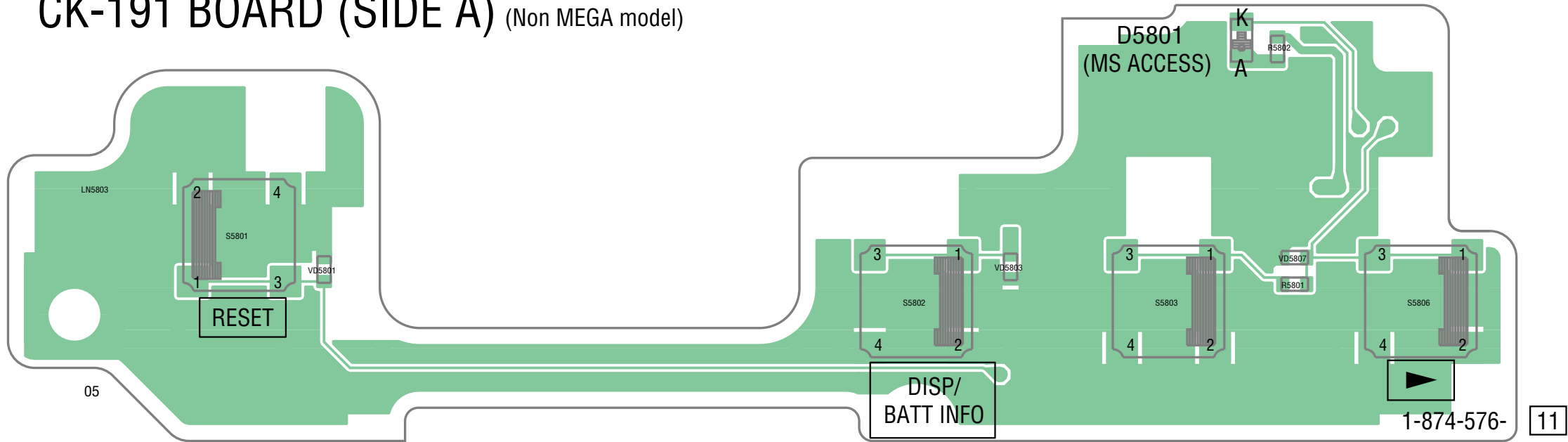
PD-352 (2 layers): MEGA model

 : Uses unleaded solder.
MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

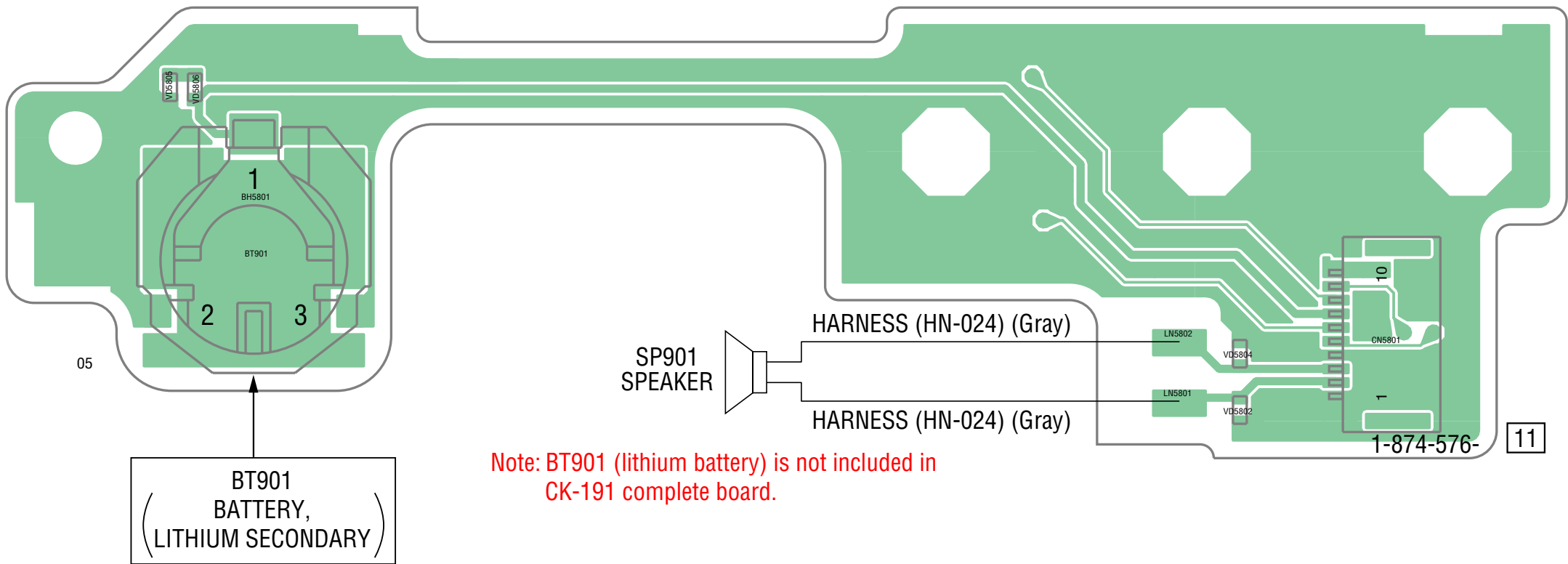
PD-352 BOARD (SIDE B) (MEGA model)



CK-191 BOARD (SIDE A) (Non MEGA model)



CK-191 BOARD (SIDE B) (Non MEGA model)



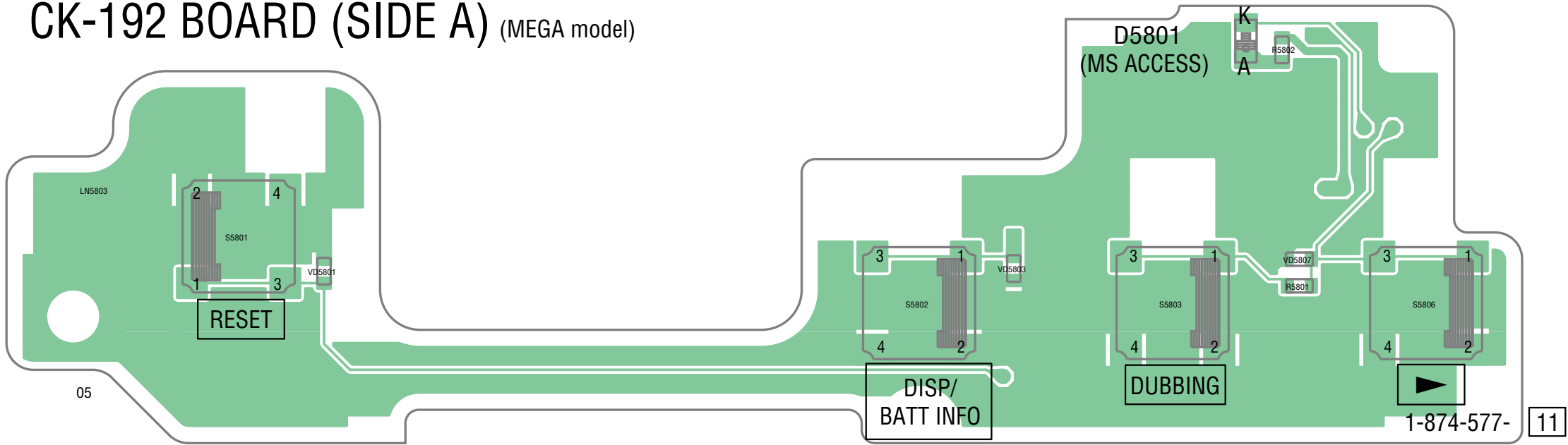
CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

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。

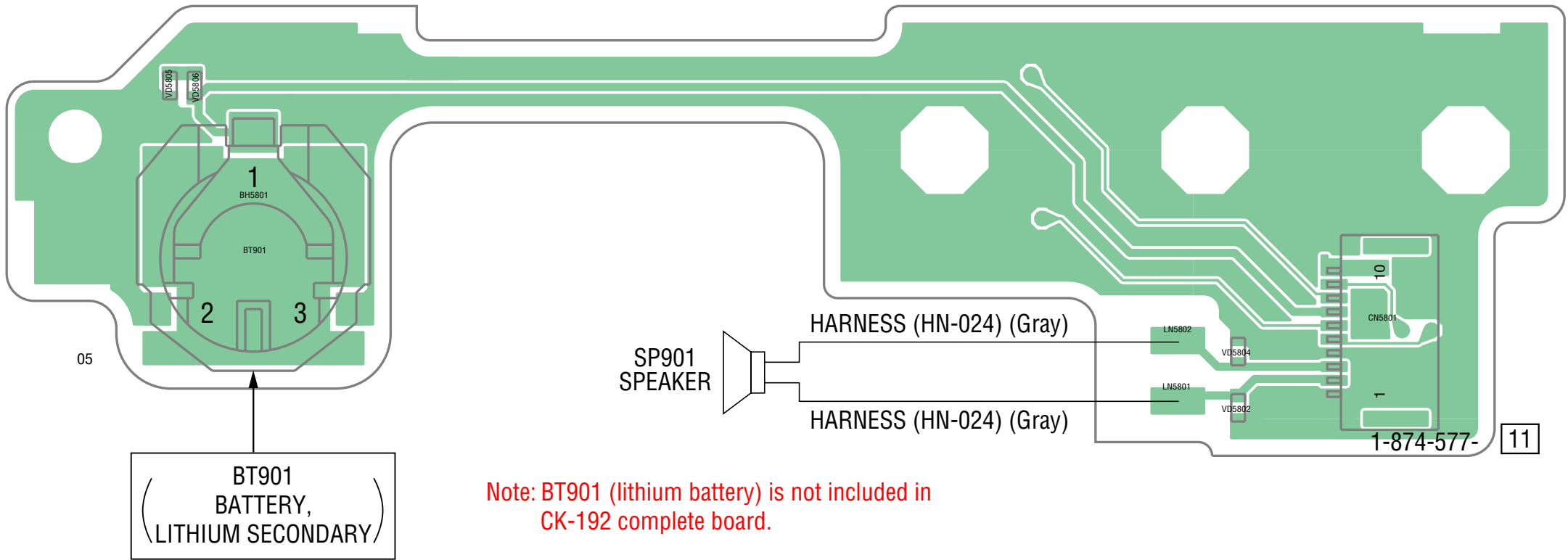
Note: Replace the battery holder (BH5801) together when replacing the lithium battery (BT901) on the CK-191 board. (The battery holder removed once cannot be used again.) When mounting these parts, mount new battery holder first and attach new lithium battery next.

ノート: CK-191基板のリチウム電池 (BT901) を交換する場合はバッテリーホルダ (BH5801) も同時に新品に交換して下さい。(一度使用したバッテリーホルダは再使用できません。) 部品取り付けの際は、先にバッテリーホルダを取り付けてからリチウム電池を装着してください。

CK-192 BOARD (SIDE A) (MEGA model)



CK-192 BOARD (SIDE B) (MEGA model)



Note: BT901 (lithium battery) is not included in CK-192 complete board.

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 (BH5801) together when replacing the lithium battery (BT901) on the CK-192 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.

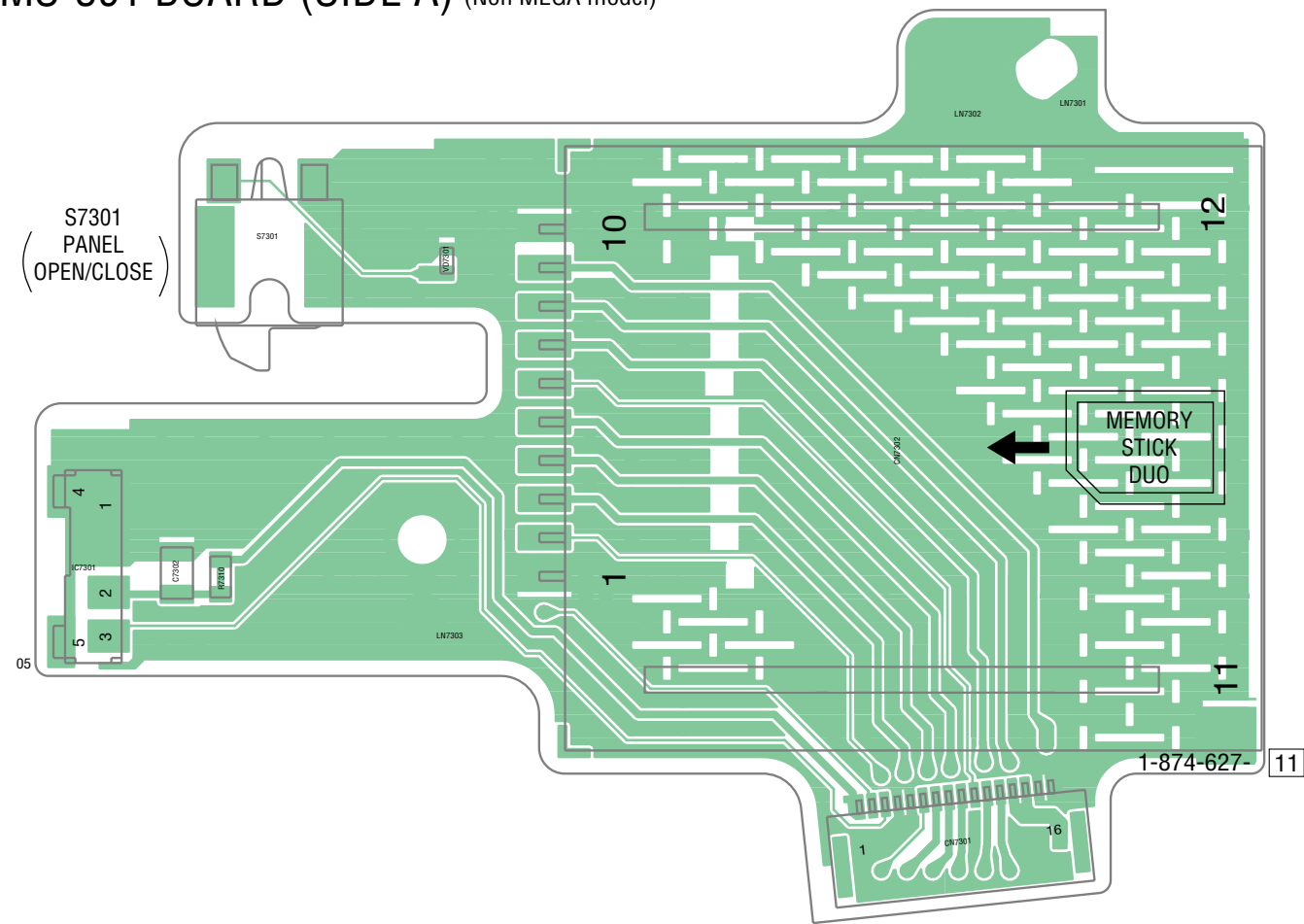
ノート: CK-192基板のリチウム電池 (BT901) を交換する場合はバッテリーホルダ (BH5801) も同時に新品に交換して下さい。(一度使用したバッテリーホルダは再使用できません。) 部品取り付けの際は、先にバッテリーホルダを取り付けてからリチウム電池を装着してください。

MS-391 (2 layers): Non MEGA model

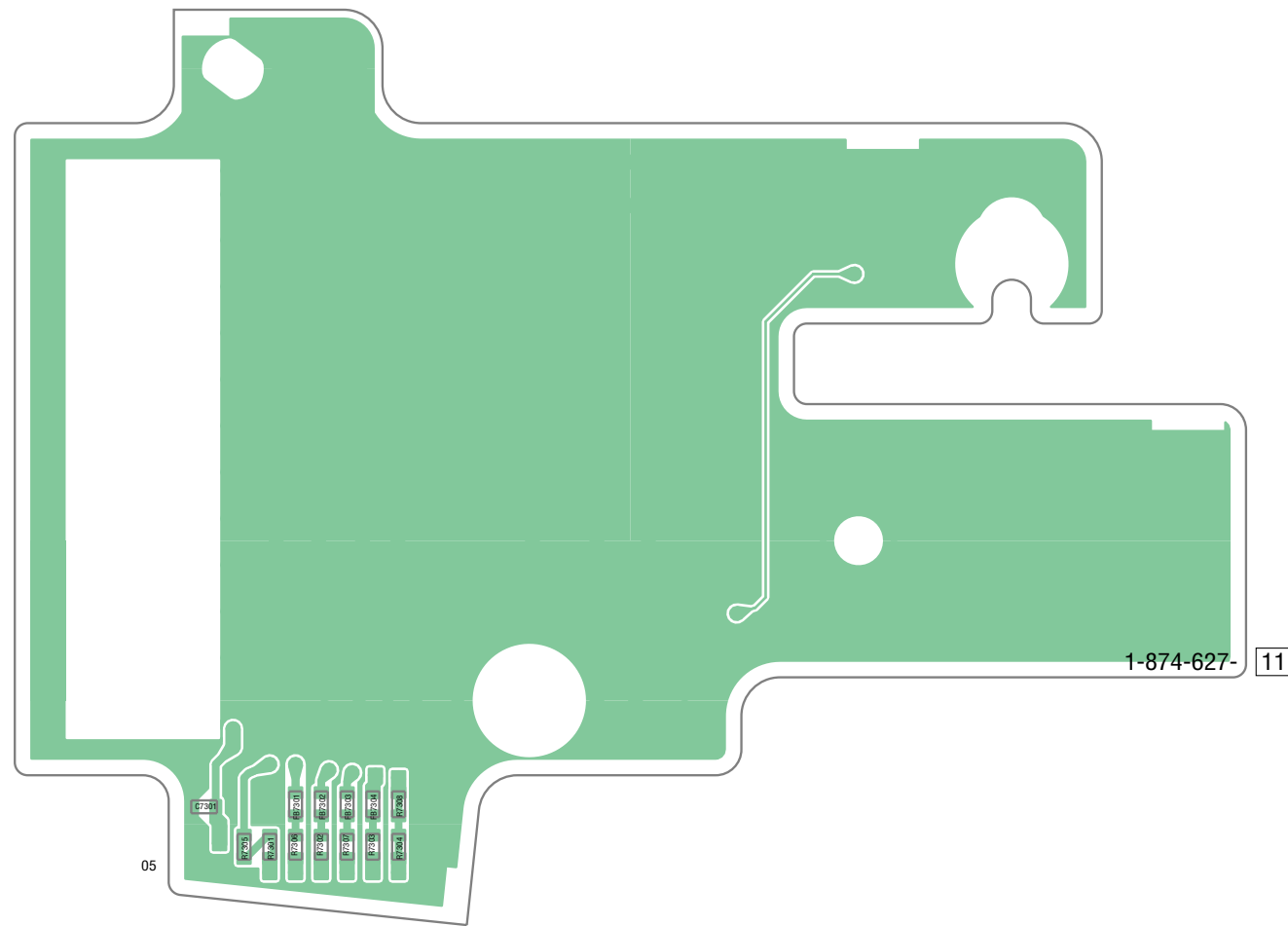
 : Uses unleaded solder.

Non MEGA model: DCR-DVD110E/DVD115E/DVD610/DVD610E

MS-391 BOARD (SIDE A) (Non MEGA model)



MS-391 BOARD (SIDE B) (Non MEGA model)

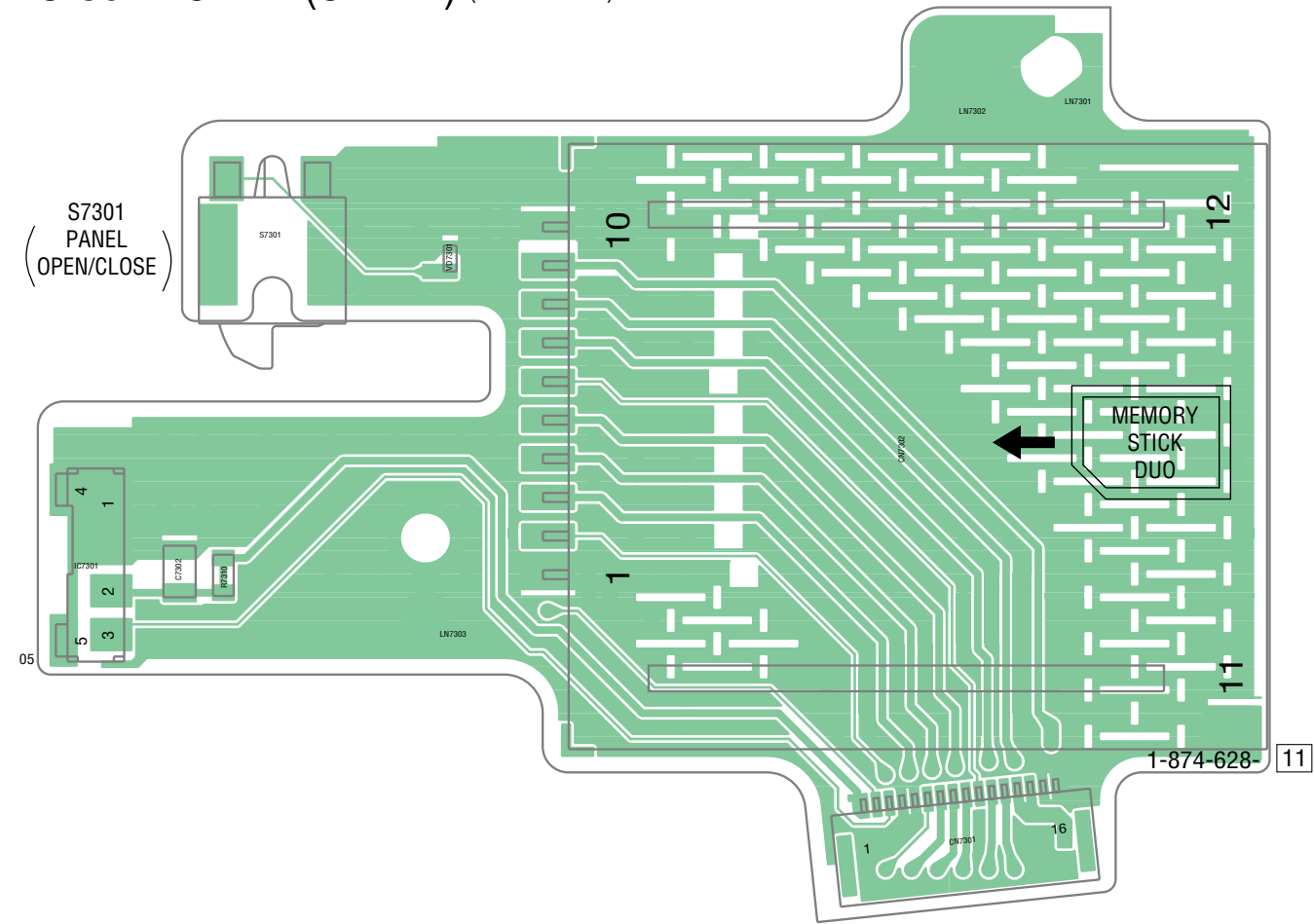


MS-392 (2 layers): MEGA model

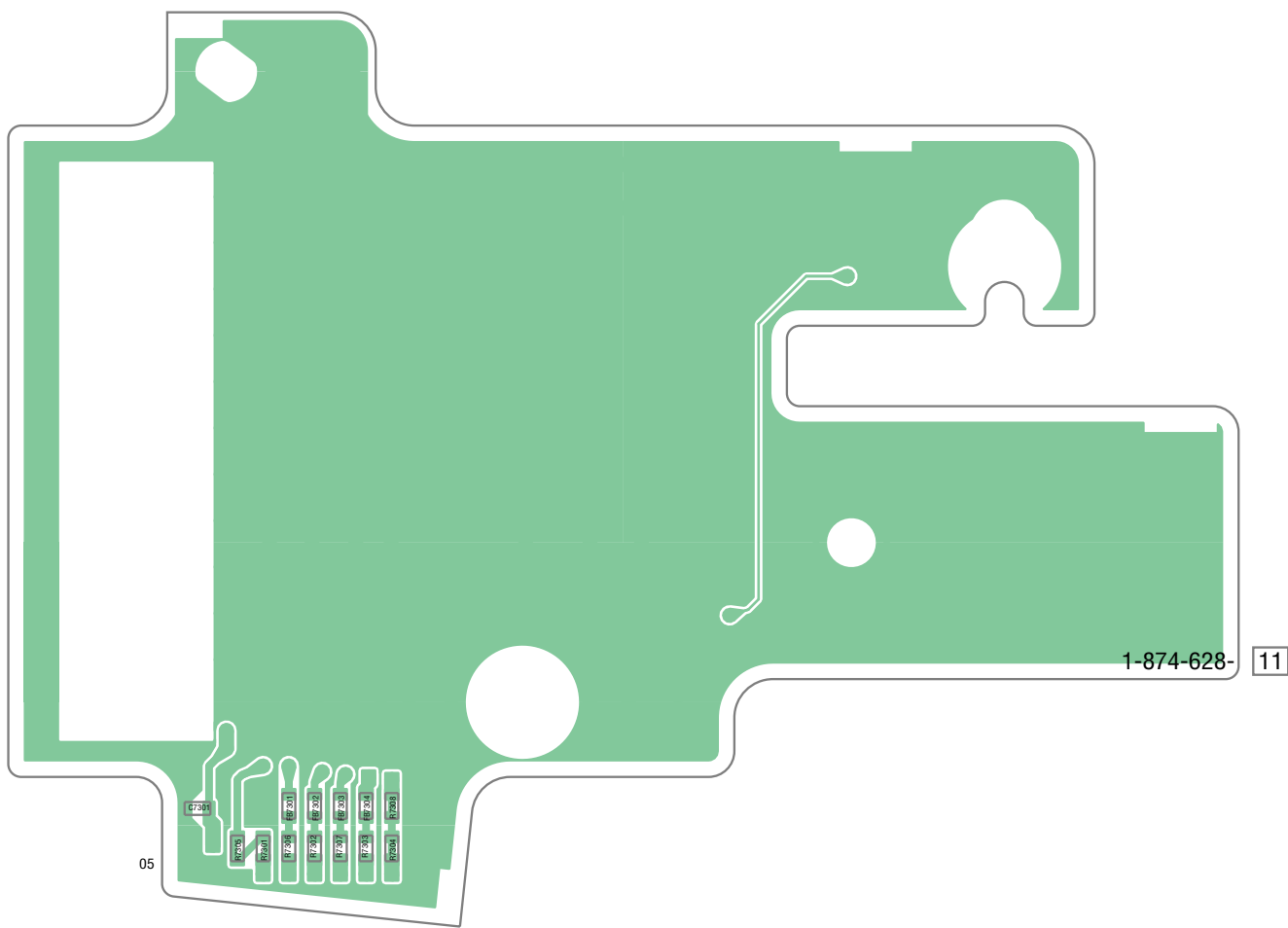
 : Uses unleaded solder.

MEGA model: DCR-DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E

MS-392 BOARD (SIDE A) (MEGA model)



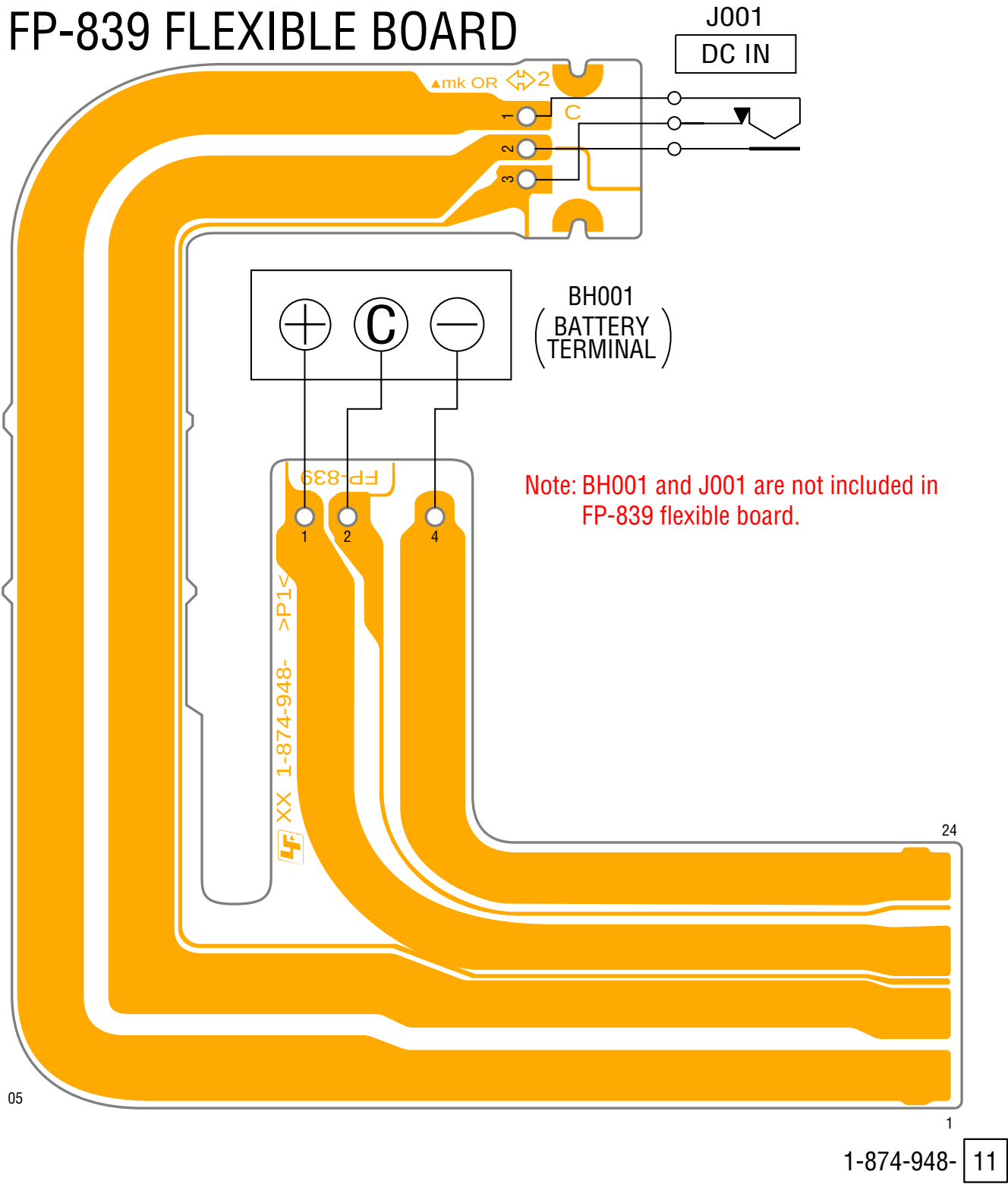
MS-392 BOARD (SIDE B) (MEGA model)



FP-839 (1 layer)

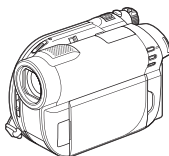
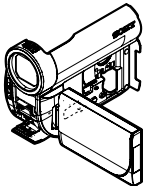
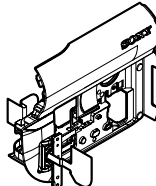
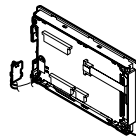
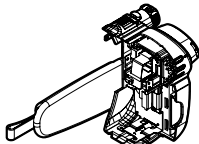
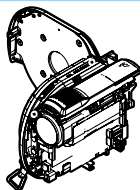
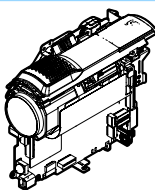
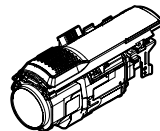
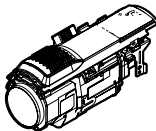
 : Uses unleaded solder.

FP-839 FLEXIBLE BOARD



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	 B	 C	 D	
OVERALL SECTION	CABINET R SECTION-1	CABINET R SECTION-2	LCD SECTION	
 E	 F	 G	 H	
BT/EVF SECTION	CABINET L SECTION	MD SECTION	LENS SECTION (DVD110E/ DVD115E/DVD610/DVD610E)	
 I				
LENS SECTION (DVD310E/DVD410E/ DVD710/DVD710E/DVD810/DVD810E)				

Link	ELECTRICAL PARTS LIST		ACCESSORIES
• BL-021 BOARD E	• CK-191 BOARD C	• MS-392 BOARD B	
• BL-022 BOARD E	• CK-192 BOARD C	• PD-351 BOARD D	
• CD-672 BOARD I	• FP-569 FLEXIBLE BOARD F	• PD-352 BOARD D	
• CD-687 BOARD I	• FP-839 FLEXIBLE BOARD E	• RV-011 BOARD D	
• CD-731 BOARD H	• MS-391 BOARD B	• RV-012 BOARD D	

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: μ F
- COILS
uH: μ H
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...

(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 μ F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 μ Hを示します。
- 半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれ μ A..., μ PA..., μ PB..., μ PC..., μ PD...を示します。

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

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

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

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

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。

$\triangle$ 印の部品、または $\triangle$ 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
AR : Argentine model
AUS : Australian model
BR : Brazilian model
CH : Chinese model
CND : Canadian model
EE : East European model
HK : Hong Kong model
J : Japanese model
JE : Tourist model
KR : Korea model
NE : North European model
TH : Thai model

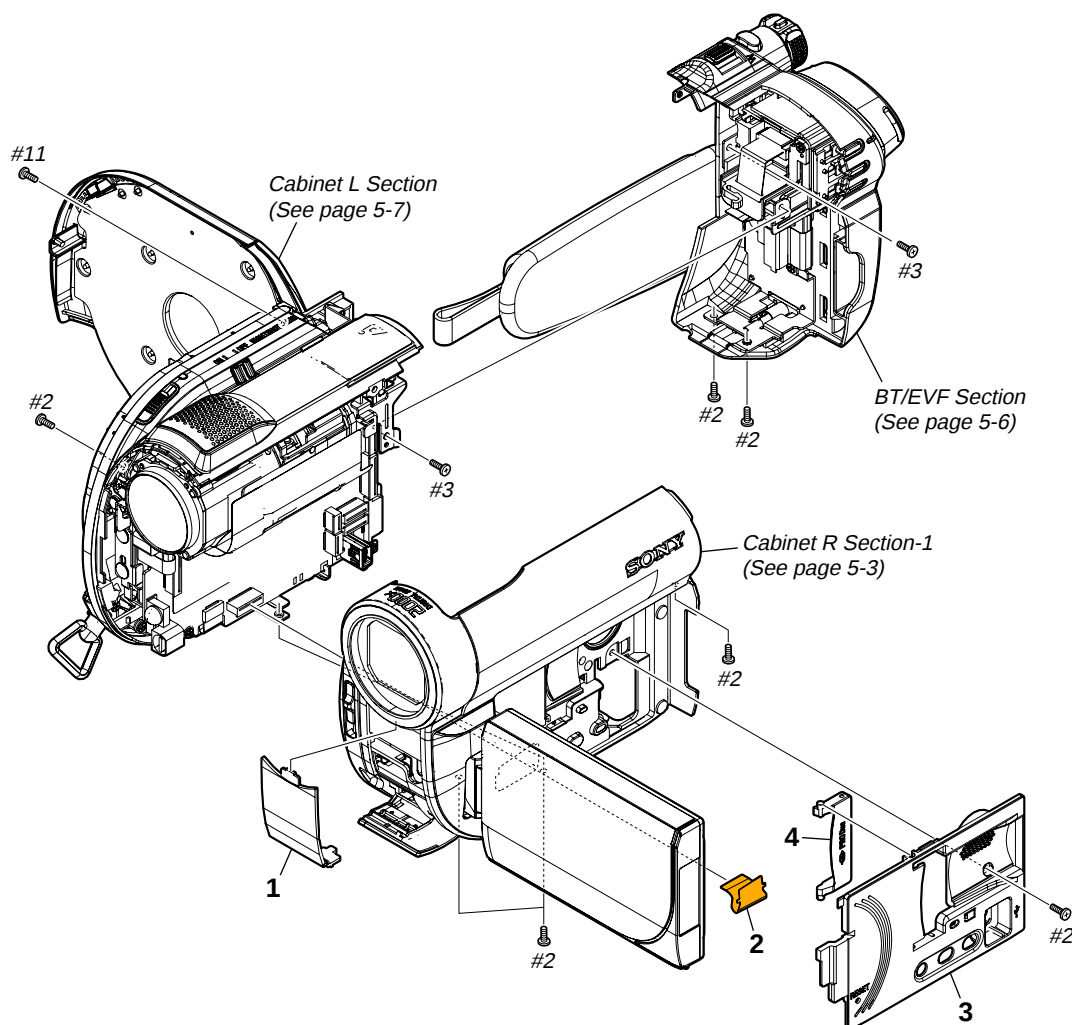
5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1. EXPLODED VIEWS

5-1-1. OVERALL SECTION



Ref. No.	Part No.	Description
1	3-281-796-01	WINDOW, REMOTE CONTROL
2	1-874-951-11	FP-842 FLEXIBLE BOARD
3	3-281-791-01	COVER, R (DVD110E/DVD115E/DVD610/DVD610E)
3	3-281-791-11	COVER, R (DVD310E/DVD710/DVD710E)
3	3-281-791-21	COVER, R (DVD410E/DVD810/DVD810E)

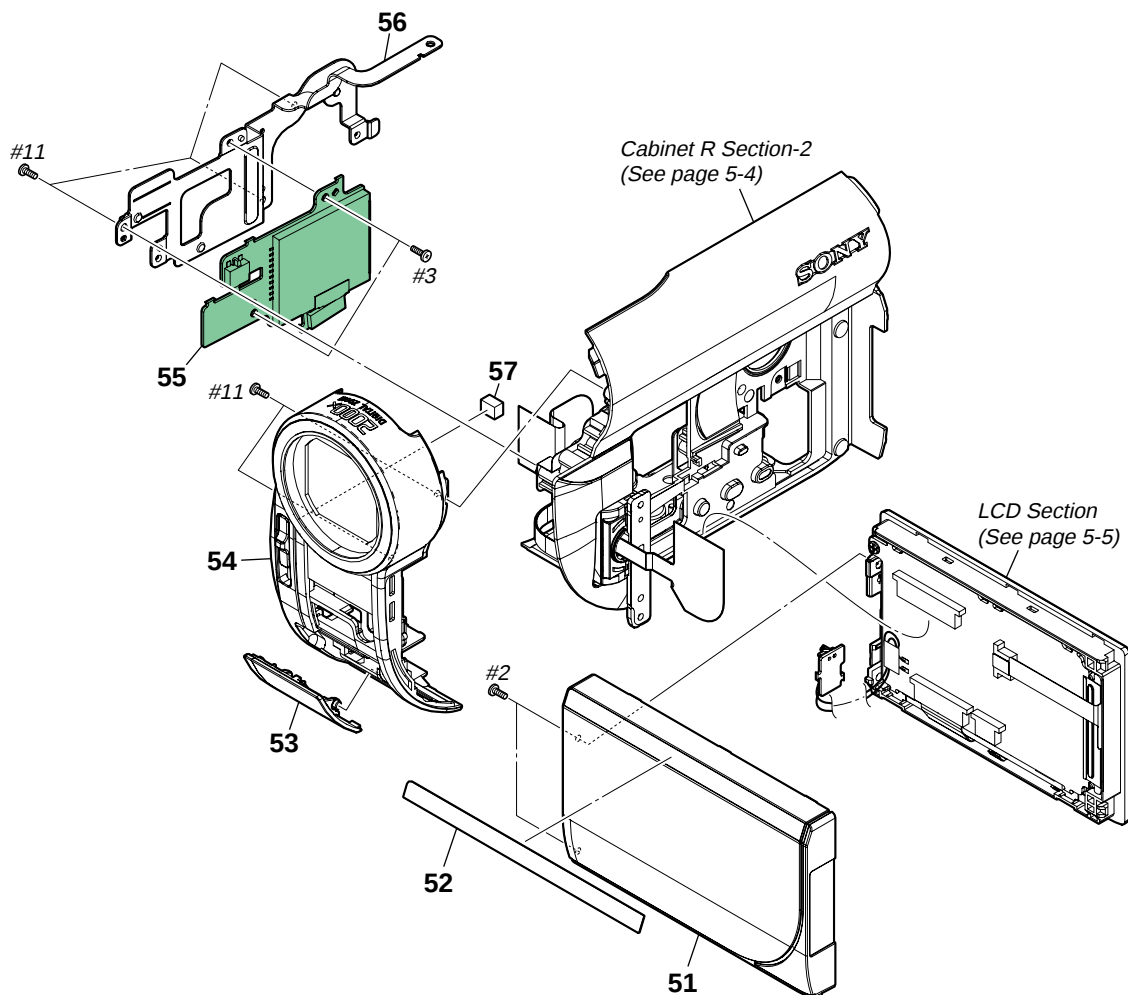
Ref. No.	Part No.	Description
4	3-281-795-01	LID, MS
#2	2-635-562-31	SCREW (M1.7) (Black)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-2. CABINET R SECTION-1



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
51	3-281-848-01	CABINET (C), P (261) (DVD110E/DVD115E/DVD610/DVD610E)	54	A-1436-155-A	PANEL ASSY (261), F (DVD110E/DVD115E/DVD610/DVD610E)
51	3-281-848-11	CABINET (C), P (261) (DVD310E/DVD710/DVD710E)	54	A-1436-156-A	PANEL ASSY (262), F (DVD310E/DVD410E/ DVD710/DVD710E/DVD810/DVD810E)
51	3-281-848-21	CABINET (C), P (261) (DVD410E/DVD810/DVD810E)	55	A-1439-631-A	MS-391 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)
52	3-281-849-01	BELT, (P) CABINET (C) (DVD110E)	55	A-1439-645-A	MS-392 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)
52	3-281-849-11	BELT, (P) CABINET (C) (DVD115E)			
52	3-281-849-21	BELT, (P) CABINET (C) (DVD610/DVD610E)	* 56	3-281-850-01	FRAME, MS
52	3-281-849-31	BELT, (P) CABINET (C) (DVD310E)	* 57	3-291-848-01	GASKET (TO)
52	3-281-849-41	BELT, (P) CABINET (C) (DVD710/DVD710E)	#2	2-635-562-31	SCREW (M1.7) (Black)
52	3-281-849-51	BELT, (P) CABINET (C) (DVD410E)	#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
52	3-281-849-61	BELT, (P) CABINET (C) (DVD810/DVD810E)			
53	A-1438-687-A	COVER ASSY (261), JACK (DVD110E/DVD115E/DVD610/DVD610E)	#11	3-078-890-11	SCREW, TAPPING (Silver)
53	A-1438-690-A	COVER ASSY (262), JACK (DVD310E/DVD410E/ DVD710/DVD710E/DVD810/DVD810E)			

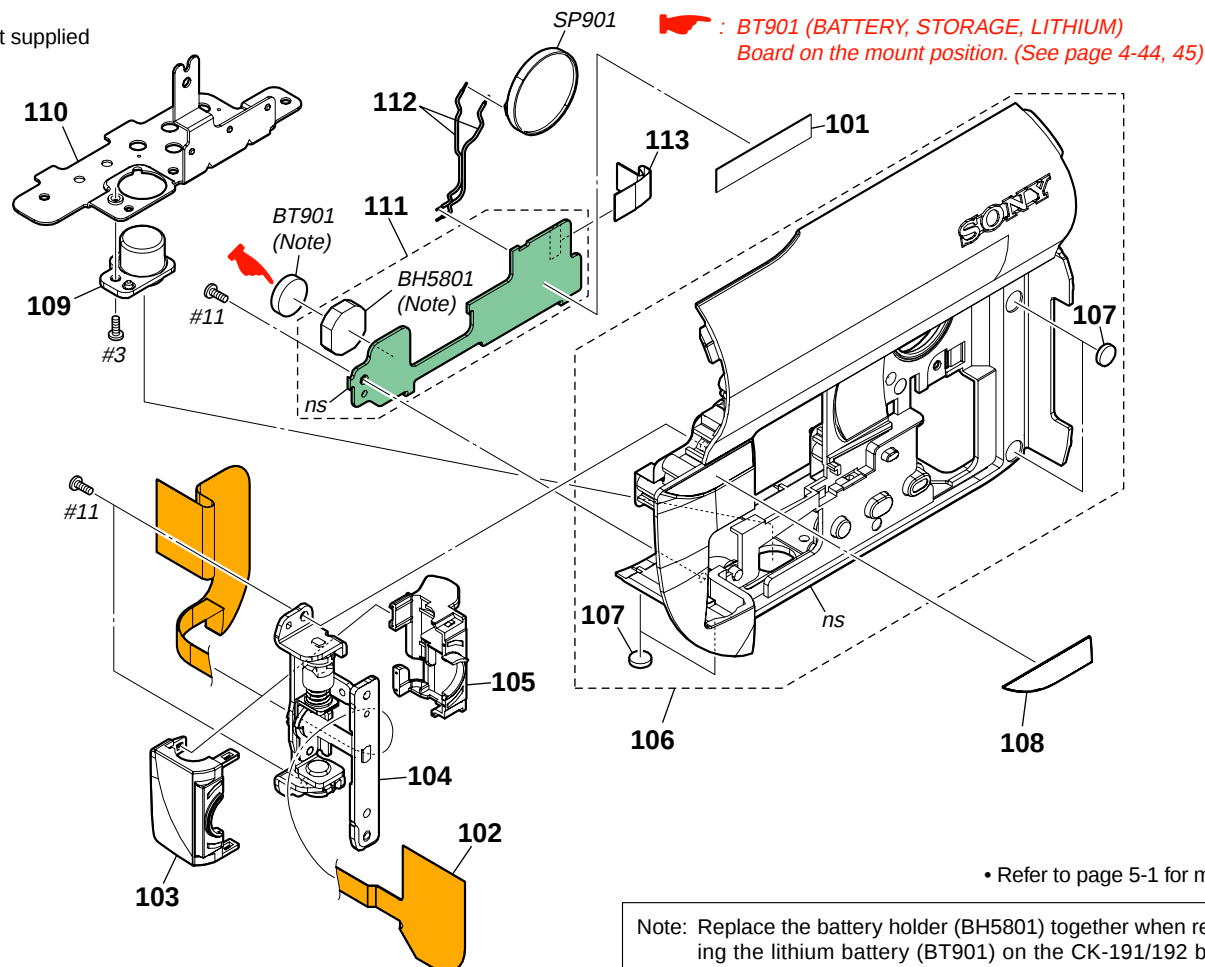
5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-3. CABINET R SECTION-2

ns: not supplied



• Refer to page 5-1 for mark △.

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 (BH5801) together when replacing the lithium battery (BT901) on the CK-191/192 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: CK-191/192基板のリチウム電池（BT901）を交換する場合はバッテリーホルダ（BH5801）も同時に新品に交換して下さい。（一度使用したバッテリーホルダは再使用できません。）部品取り付けの際は、先にバッテリーホルダを取り付けてからリチウム電池を装着してください。

Ref. No.	Part No.	Description
* 101	3-290-774-01	SHEET (261), MUFFLE
102	1-871-287-11	FP-573 FLEXIBLE BOARD
103	3-281-846-01	COVER (C), HINGE (DVD110E/DVD115E/DVD610/DVD610E)
103	3-281-846-11	COVER (C), HINGE (DVD310E/DVD710/DVD710E)
103	3-281-846-21	COVER (C), HINGE (DVD410E/DVD810/DVD810E)
104	X-2187-937-1	HINGE ASSY (281M)
105	3-281-847-01	COVER (M), HINGE
106	A-1519-609-A	CABINET (R) ASSY (261) (SERVICE) (DVD110E/DVD115E/DVD610/DVD610E)
106	A-1519-610-A	CABINET (R) ASSY (262) (SERVICE) (DVD310E/DVD710/DVD710E)
106	A-1519-611-A	CABINET (R) ASSY (263) (SERVICE) (DVD410E/DVD810/DVD810E)
107	2-589-376-01	FOOT (395), RUBBER
108	3-281-841-01	CABINET (R), ORNAMENTAL BELT

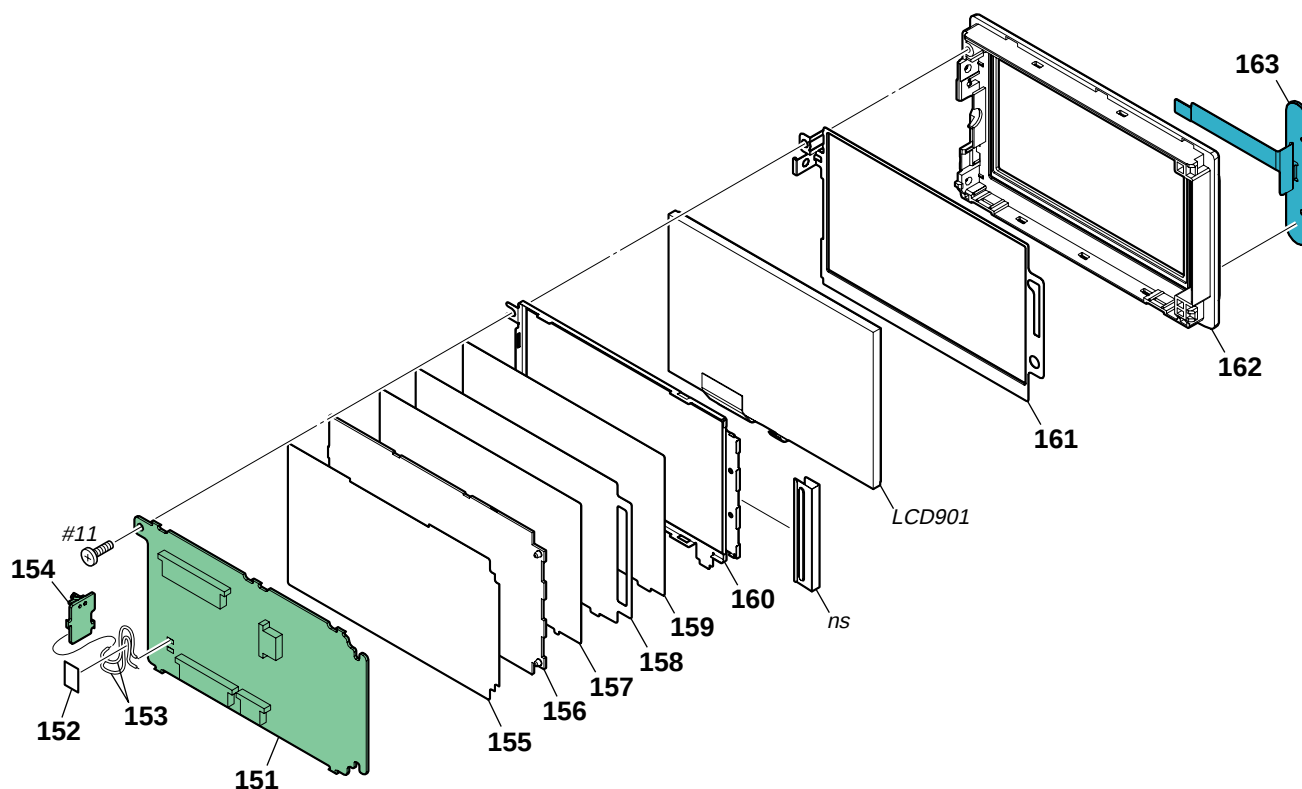
Ref. No.	Part No.	Description
109	3-283-643-01	SCREW, TRIPOD
* 110	3-281-851-01	FRAME, BOTTOM
111	A-1439-630-A	CK-191 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)
111	A-1439-643-A	CK-192 BOARD, COMPLETE (DVD310E/DVD710/DVD710E)
111	A-1439-644-A	CK-192 BOARD, COMPLETE (DVD410E/DVD810/DVD810E)
112	1-964-966-11	HARNESS (HN-024)
113	1-833-210-11	CABLE, FLEXIBLE FLAT (FFC-089)
△*BH5801	1-756-615-51	HOLDER, BATTERY (Note)
△BT901	1-756-134-12	BATTERY, STORAGE, LITHIUM (Note)
SP901	1-825-260-41	LOUD SPEAKER (1.6CM)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5. REPAIR PARTS LIST

HARDWARE LIST

5-1-4. LCD SECTION

ns: not supplied



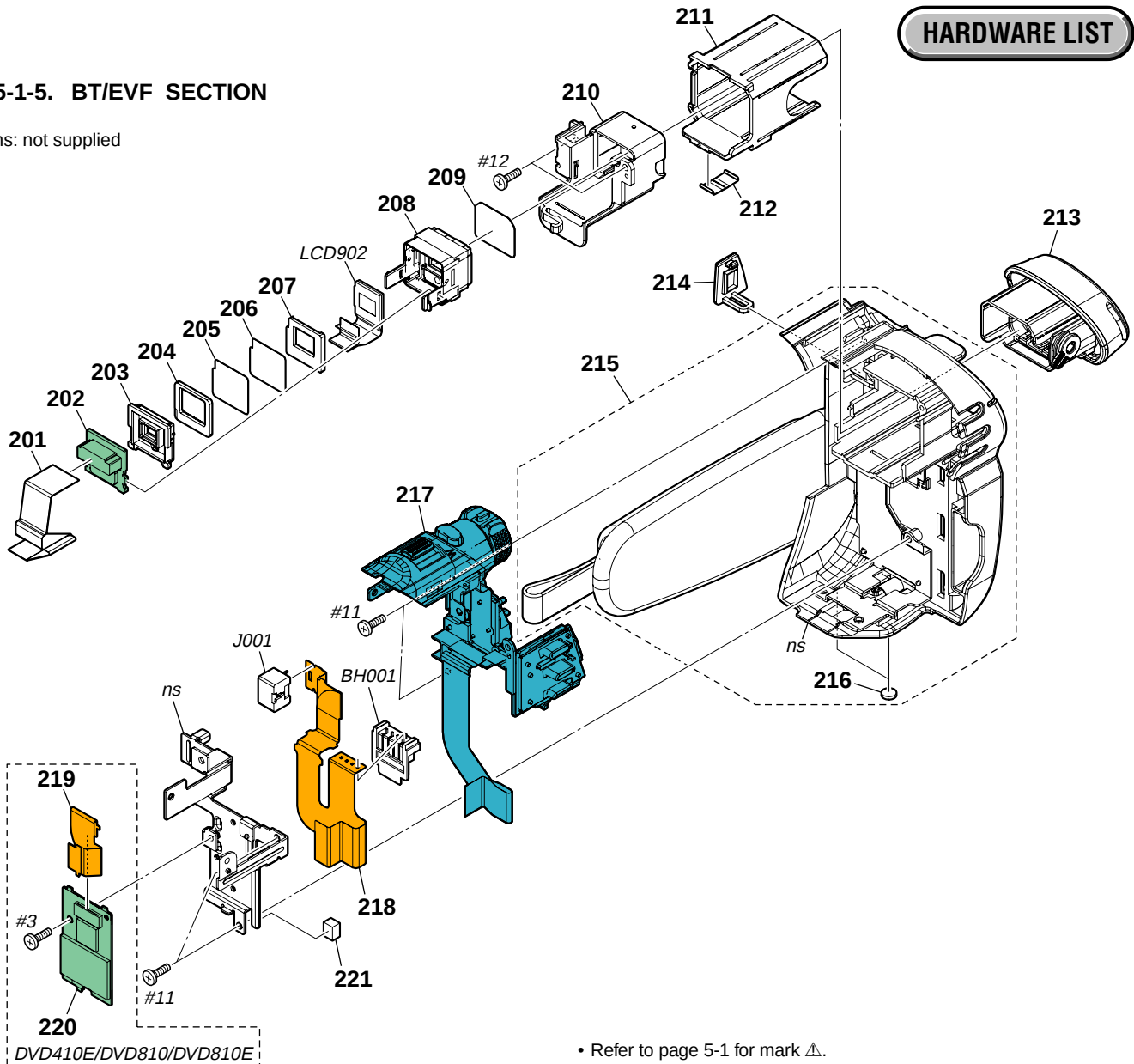
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
151	A-1439-627-A	PD-351 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)	157	2-694-514-01	DIFFUSION SHEET (2.7)
151	A-1439-640-A	PD-352 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)	158	2-694-513-01	PRISM SHEET H (2.7)
* 152	3-083-393-01	TAPE (P)	159	2-694-512-01	PRISM SHEET V (2.7)
153	1-964-966-11	HARNESS (HN-024)	160	2-694-516-01	FRONT FRAME (2.7)
154	A-1439-628-A	RV-011 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)	* 161	3-281-839-01	PLATE (261), LCD GROUND
154	A-1439-641-A	RV-012 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)	162	3-281-838-01	CABINET (M), P (261)
155	2-694-515-01	REFLECTION SHEET (2.7)	163	1-479-926-11	SWITCH BLOCK, CONTROL (SB22100)
156	2-666-801-11	LIGHT GUIDE (2.7)	LCD901	A-1363-616-A	TP BLOCK ASSY (27STMG08H) (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)
			LCD901	A-1363-617-A	TP BLOCK ASSY (27STMG08T) (DVD110E/DVD115E/DVD610/DVD610E)
			#11	3-078-890-11	SCREW, TAPPING (Silver)

5. REPAIR PARTS LIST

HARDWARE LIST

5-1-5. BT/EVF SECTION

ns: not supplied



Ref. No.	Part No.	Description
201	1-834-868-11	CABLE, FLEXIBLE FLAT (FFC-140)
202	A-1439-629-A	BL-021 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)
202	A-1439-642-A	BL-022 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)
* 203	2-638-820-02	GUIDE, LAMP
* 204	2-638-819-01	CUSHION, LCD
* 205	2-638-818-01	ILLUMINATOR
* 206	2-638-816-01	PLATE (TFT), DEFLECTION
* 207	2-638-815-01	SPACER, LCD
208	2-899-658-01	CAP (212), INNER (DVD110E/DVD115E/DVD610/DVD610E)
208	2-899-659-01	CAP (215), INNER (DVD310E/DVD410E/ DVD710/DVD710E/DVD810/DVD810E)
209	2-899-660-01	PANEL (CF), POLARIZATION
210	3-281-818-01	CABINET, INNER
211	3-281-825-01	CABINET, VF
212	2-664-667-01	SPRING, VF SLIDE
213	X-2187-715-1	EYE CUP ASSY
214	2-699-246-01	COVER, DC (IN)

• Refer to page 5-1 for mark Δ .

Ref. No.	Part No.	Description
215	A-1519-607-A	PANEL ASSY (261) (SERVICE), BT
216	2-589-376-01	FOOT (395), RUBBER
217	1-480-495-11	KEY BLOCK, CONTROL (PS26100)
218	1-874-948-11	FP-839 FLEXIBLE BOARD
219	1-874-950-11	FP-841 FLEXIBLE BOARD (DVD410E/DVD810/DVD810E)
220	A-1538-642-A	MDL4060S3C COMPLETE ASSY (SERVICE) (FLASH MEMORY) (DVD410E/DVD810/DVD810E)
* 221	3-096-097-01	CUSHION (P), EMC
Δ BH001	1-780-064-21	BATTERY TERMINAL BOARD
Δ J001	1-815-792-11	CONNECTOR, DC-IN (7.2V) (DC IN)
LCD902	8-753-241-14	LCX076AKE-1 (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)
LCD902	8-753-245-09	LCX059CKK-1 (DVD110E/DVD115E/DVD610/DVD610E)
#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red) (DVD410E/DVD810/DVD810E)
#11	3-078-890-11	SCREW, TAPPING (Silver)
#12	3-080-204-21	SCREW, TAPPING, P2 (Black)

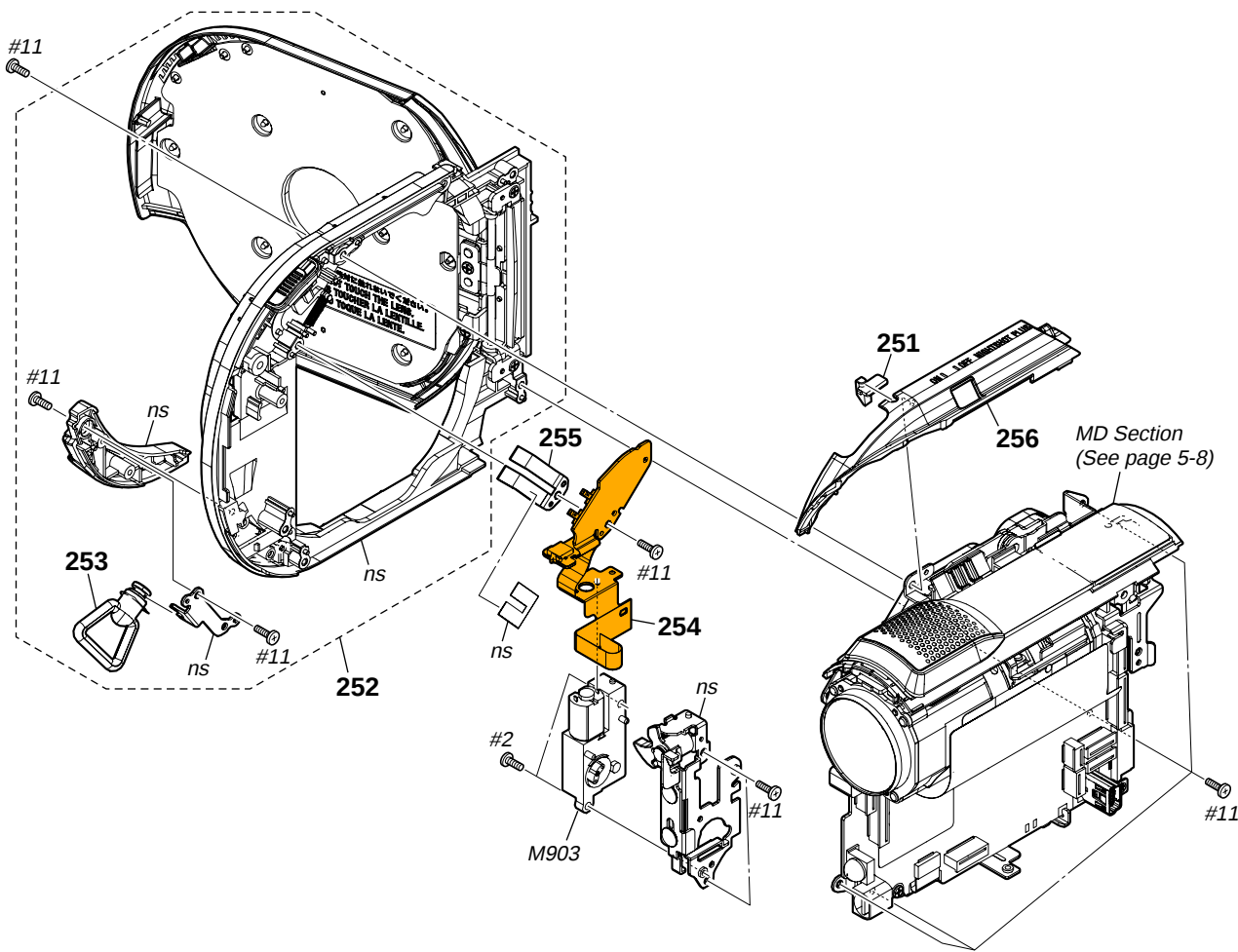
5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-6. CABINET L SECTION

ns: not supplied



Ref. No.	Part No.	Description
251	2-699-266-01	LIGHT, ACCESS GUIDE,
252	A-1519-608-A	CABINET (L) ASSY (261) (SERVICE)
253	3-090-616-01	SHAFT (F), STRAP
254	A-1228-528-A	FP-569 FLEXIBLE BOARD, COMPLETE
* 255	2-699-262-01	SHEET METAL, LID

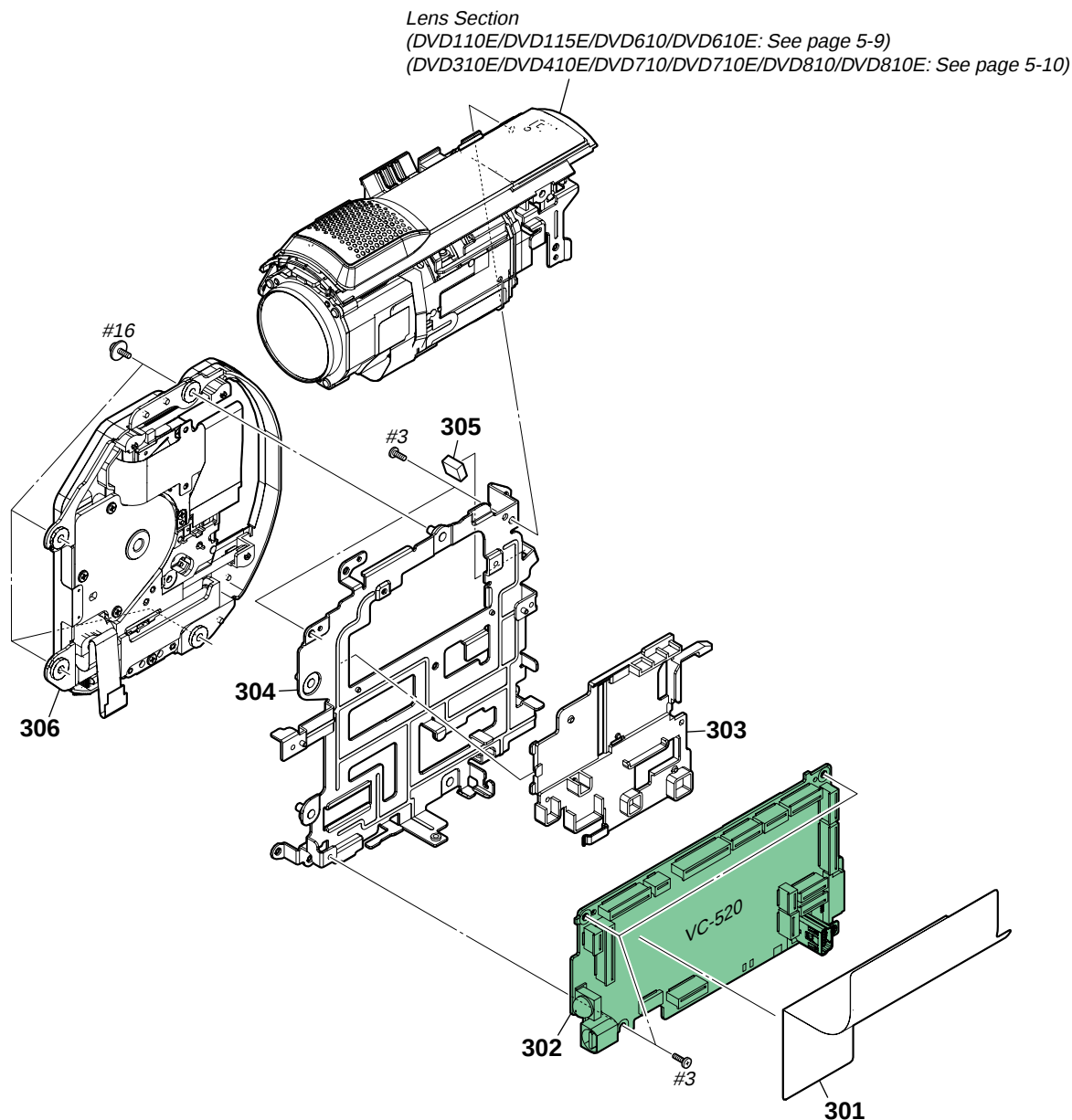
Ref. No.	Part No.	Description
256	3-281-794-01	CABINET (L UPPER))
M903	1-787-237-11	MOTOR UNIT (GEARD MOTOR)
#2	2-635-562-31	SCREW (M1.7) (Black)
#11	3-078-890-11	SCREW, TAPPING (Silver)

5. REPAIR PARTS LIST

DISASSEMBLY

HARDWARE LIST

5-1-7. MD SECTION



• Refer to page 5-1 for mark ▲.

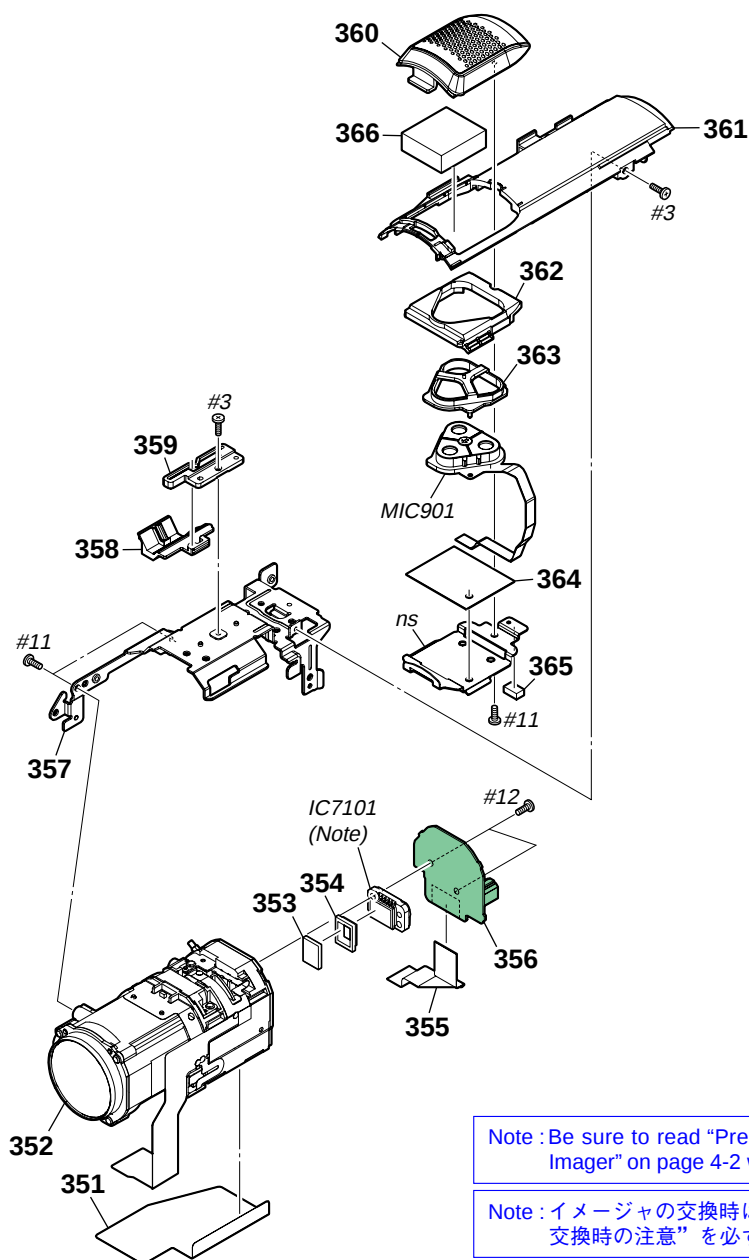
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
* 301	3-281-793-01	LABEL, REPLACEMENT CAUTION	302	A-1439-744-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD410E)
302	A-1439-718-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD110E)	302	A-1439-745-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD810)
302	A-1439-719-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD115E)	302	A-1439-746-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD810E)
302	A-1439-720-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD610/DVD610E)	* 303	3-281-792-01	GUARD, OP FLEXIBLE
302	A-1439-739-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD310E)	304	X-2187-713-1	FRAME ASSY, MD
302	A-1439-741-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD710)	* 305	2-596-924-11	GASKET (MD)
302	A-1439-742-A	VC-520 BOARD, COMPLETE (SERVICE) (DVD710E)	▲ 306	A-1212-602-A	SERVICE (DDX-C2000) BLOCK ASSY
			#3	2-660-401-01	SCREW (M1.7), NEW TRU-STAR, P2 (Red)
			#16	2-586-337-01	SCREW, MD (Silver)

5. REPAIR PARTS LIST

HARDWARE LIST

5-1-8. LENS SECTION (DVD110E/DVD115E/DVD610/DVD610E)

ns: not supplied



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

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

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
* 351	3-281-814-01	SHEET, LENS TERMINAL PROTECTION
352	8-848-839-01	DEVICE, LENS LSV-1171A
353	1-788-706-11	OPTICAL FILTER BLOCK (OFB-08-02)
354	3-271-382-01	SEAL RUBBER 1171
355	1-834-363-11	CABLE, FLEXIBLE FLAT (FFC-133)
356	A-1439-626-A	CD-731 BOARD, COMPLETE
* 357	3-281-802-01	FRAME, LENS
358	3-281-803-01	KNOB (261), NS
* 359	2-699-280-01	PLATE, NS CLICK
360	3-281-805-01	GRILLE, MICROPHONE (261)
		(DVD110E/DVD610/DVD610E)
360	3-281-806-01	GRILLE, MICROPHONE (262) (DVD115E)
361	3-281-812-01	CABINET, TOP (261)
		(DVD110E/DVD610/DVD610E)
361	3-281-812-11	CABINET, TOP (261) (DVD115E)

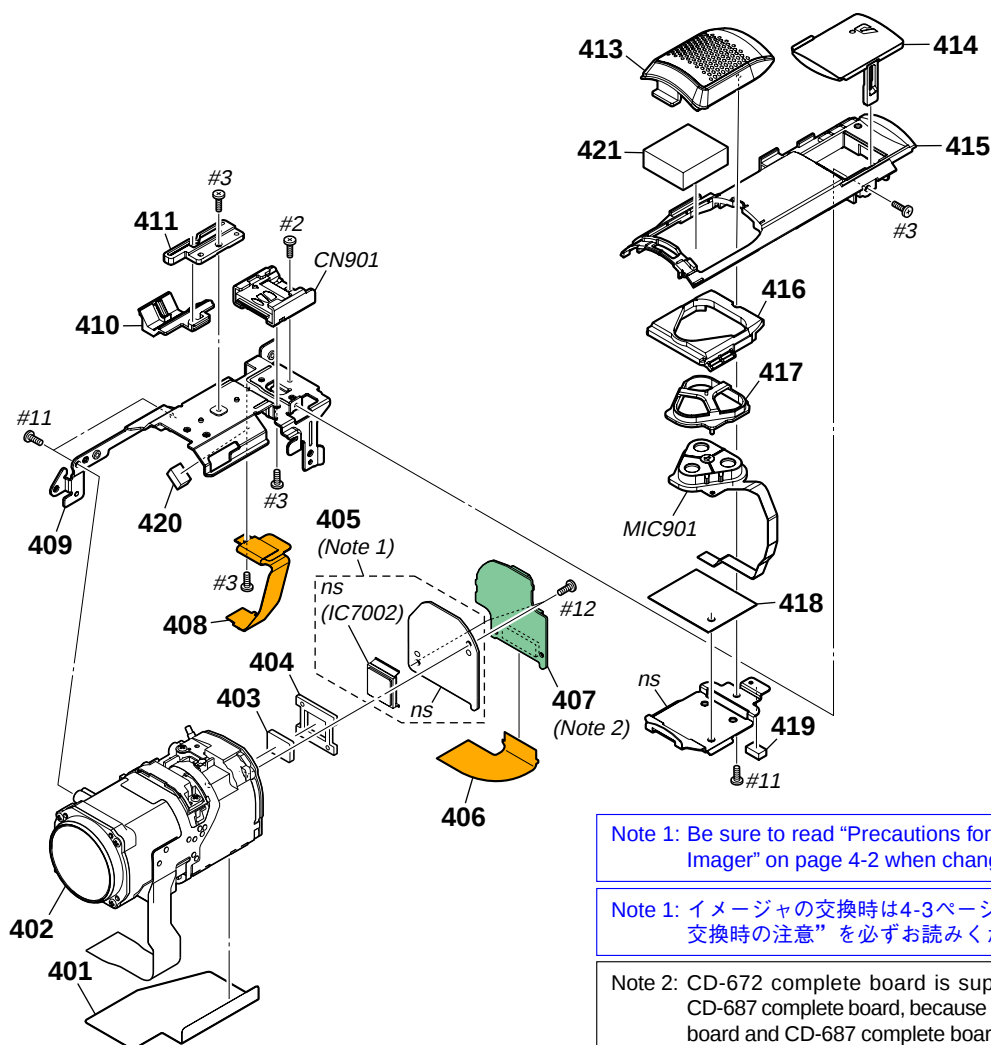
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
* 362	3-281-810-01	INSULATOR
* 363	3-281-808-01	HOLDER, MICROPHONE
* 364	3-281-811-01	CUSHION, MICROPHONE
* 365	2-898-042-01	GASKET (MIC)
366	3-281-807-01	SCREEN, WIND
IC7101	8-753-289-10	ICX651NKF-H (CCD IMAGER) (DVD110E/DVD115E/DVD610E) (Note)
IC7101	8-753-288-68	ICX650NKF-H (CCD IMAGER) (DVD610) (Note)
MIC901	1-542-723-31	MICROPHONE UNIT (DVD115E)
MIC901	1-542-723-41	MICROPHONE UNIT (DVD110E/DVD610/DVD610E)
#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. REPAIR PARTS LIST

HARDWARE LIST

5-1-9. LENS SECTION (DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E)

ns: not supplied



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

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 2: CD-672 complete board is supplied instead of CD-687 complete board, because CD-672 complete board and CD-687 complete board are compatible.

Note 2: CD-687基板は供給されません。代わりにCD-672基板が供給されます。

Ref. No.	Part No.	Description
* 401	3-281-814-01	SHEET, LENS TERMINAL PROTECTION
402	A-1248-849-A	LENS (BLOCK ASSY 1180 (J1))
403	1-788-523-11	OPTICALFILTER BLOCK (OFB-06-11)
404	3-088-645-01	RUBBER (Z), SEAL
405	A-1511-867-A	CCD BLOCK ASSY (1M SSGE) (CCD IMAGER) (Note 1)
406	1-874-947-11	FP-838 FLEXIBLE BOARD
407	A-1244-919-A	CD-672 BOARD, COMPLETE (DVD710E/DVD810E)
407	A-1244-919-A	CD-687 BOARD, COMPLETE (Note 2)
408	1-874-949-11	FP-840 FLEXIBLE BOARD
* 409	3-281-802-01	FRAME, LENS
410	3-281-804-01	KNOB (262), NS
* 411	2-699-280-01	PLATE, NS CLICK
413	3-281-806-01	GRILLE, MICROPHONE (262)
414	A-1438-988-A	COVER ASSY (262), SHOE (DVD310E/DVD710/DVD710E)
414	A-1438-989-A	COVER ASSY (263), SHOE (DVD410E/DVD810/DVD810E)

Ref. No.	Part No.	Description
415	3-281-813-01	CABINET, TOP (262) (DVD310E/DVD710/DVD710E)
415	3-281-813-11	CABINET, TOP (262) (DVD410E/DVD810/DVD810E)
* 416	3-281-810-01	INSULATOR
* 417	3-281-808-01	HOLDER, MICROPHONE
* 418	3-281-811-01	CUSHION, MICROPHONE
* 419	2-898-042-01	GASKET (MIC)
* 420	3-096-097-01	CUSHION (P), EMC
421	3-281-807-01	SCREEN, WIND
CN901	1-818-890-11	CONNECTOR, EXTERNAL (HOT SHOE)
MIC901	1-542-723-31	MICROPHONE UNIT
#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)

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
	A-1439-629-A	BL-021 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E) *****
		< CAPACITOR >
C5701	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C5702	1-165-908-11	CERAMIC CHIP 1uF 10% 10V
		< CONNECTOR >
* CN5701	1-779-333-51	CONNECTOR, FFC/FPC 18P
* CN5702	1-817-698-81	CONNECTOR, FPC (ZIF) 21P
		< DIODE >
D5701	8-719-074-67	DIODE EDZ-TE61-5.6B
* D5702	6-501-591-01	DIODE NESW007AT-T099 (BACKLIGHT)
		< RESISTOR >
R5702	1-218-989-11	RES-CHIP 1M 5% 1/16W
	A-1439-642-A	BL-022 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E) *****
		< CAPACITOR >
C5701	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C5702	1-165-908-11	CERAMIC CHIP 1uF 10% 10V
		< CONNECTOR >
* CN5701	1-779-333-51	CONNECTOR, FFC/FPC 18P
* CN5702	1-817-698-81	CONNECTOR, FPC (ZIF) 21P
		< DIODE >
* D5701	6-501-591-01	DIODE NESW007AT-T099 (BACKLIGHT)
D5702	8-719-074-67	DIODE EDZ-TE61-5.6B
	A-1244-919-A	CD-672 BOARD, COMPLETE (DVD710E/DVD810E)
	A-1244-919-A	CD-687 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E) (Note 1) ***** (IC7002 (CCD imager) is not included in CD-672/CD-687 complete board. Included in CCD block assy.)
		< CAPACITOR >
C7002	1-100-566-91	CERAMIC CHIP 0.1uF 10% 25V
C7003	1-100-566-91	CERAMIC CHIP 0.1uF 10% 25V
C7005	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C7006	1-100-591-91	CERAMIC CHIP 1uF 10% 25V (CD-672)
C7007	1-127-820-11	CERAMIC CHIP 4.7uF 10% 16V
C7010	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V (CD-672)
C7011	1-165-875-11	CERAMIC CHIP 10uF 10% 10V

Ref. No.	Part No.	Description
C7015	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C7016	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C7017	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C7018	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C7023	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C7024	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V
C7025	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V
C7026	1-100-251-11	CERAMIC CHIP 0.047uF 10% 10V
C7027	1-100-251-11	CERAMIC CHIP 0.047uF 10% 10V
C7028	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V
C7029	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V
		< CONNECTOR >
CN7001	1-820-586-51	CONNECTOR, FFC/FPC 28P
		< FERRITE BEAD >
FB7001	1-400-331-11	FERRITE, EMI (SMD) (1005)
		< IC >
IC7002	(Not supplied)	ICX617AKF-H (CCD IMAGER) (Note 2) (IC7002 is supplied including in CCD block assy.)
IC7003	8-759-489-19	IC uPC6756GR-8JG-E2
		< COIL >
L7001	1-400-588-11	INDUCTOR 10uH
L7002	1-400-588-11	INDUCTOR 10uH
		< TRANSISTOR >
Q7001	6-550-234-01	TRANSISTOR UNR32A300LS0
Q7002	8-729-055-21	TRANSISTOR 2SC5096-O/R (TE85L)
		< RESISTOR >
R7002	1-218-954-11	RES-CHIP 1.2K 5% 1/16W
R7004	1-218-965-11	RES-CHIP 10K 5% 1/16W
R7005	1-218-953-11	RES-CHIP 1K 5% 1/16W
R7006	1-218-966-11	RES-CHIP 12K 5% 1/16W
R7013	1-218-965-11	RES-CHIP 10K 5% 1/16W
R7014	1-218-989-11	RES-CHIP 1M 5% 1/16W
R7015	1-218-989-11	RES-CHIP 1M 5% 1/16W
R7016	1-218-965-11	RES-CHIP 10K 5% 1/16W
		< COMPOSITION CIRCUIT BLOCK >
* RB7001	1-234-379-21	RES, NETWORK 22K (1005X4)
		< ANGULAR VELOCITY SENSOR >
* SE7001	1-479-022-61	SENSOR, ANGULAR VELOCITY (YAW)
* SE7002	1-479-022-51	SENSOR, ANGULAR VELOCITY (PITCH)

Note 1: CD-672 complete board is supplied instead of CD-687 complete board, because CD-672 complete board and CD-687 complete board are compatible.

Note 1: CD-687基板は供給されません。代わりにCD-672基板が供給されます。

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

Note 2: 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。

Ref. No.	Part No.	Description
	A-1439-626-A	CD-731 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E) ***** (IC7101 is not included in CD-731 complete board.)
< CAPACITOR >		
C7101	1-124-779-00	ELECT CHIP 10uF 20% 16V
C7103	1-100-567-81	CERAMIC CHIP 0.01uF 10% 25V
C7104	1-124-779-00	ELECT CHIP 10uF 20% 16V
C7105	1-164-854-11	CERAMIC CHIP 15PF 5% 50V
C7108	1-100-566-91	CERAMIC CHIP 0.1uF 10% 25V
< CONNECTOR >		
* CN7101	1-816-646-51	FFC/CONNECTOR, FPC (LIF) 16P
< IC >		
IC7101	8-753-288-68	ICX650NKF-H (CCD IMAGER) (DVD610) (Note 1)
IC7101	8-753-289-10	ICX651NKF-H (CCD IMAGER) (DVD110E/DVD115E/DVD610E) (Note 1)
< COIL >		
L7101	1-400-588-11	INDUCTOR 10uH
< TRANSISTOR >		
* Q7101	6-551-873-01	TRANSISTOR 2SC3931G0LS0
< RESISTOR >		
R7101	1-218-959-11	RES-CHIP 3.3K 5% 1/16W
A-1439-630-A CK-191 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E) ***** (BT901 (lithium battery) is not included in CK-191 complete board.)		
< BATTERY HOLDER >		
△* BH5801	1-756-615-51	HOLDER, BATTERY (Note 2)
< BATTERY >		
△ BT901	1-756-134-12	BATTERY, STORAGE, LITHIUM ION (Note 2)
< CONNECTOR >		
* CN5801	1-816-643-51	FFC/CONNECTOR, FPC (LIF) 10P
< DIODE >		
D5801	8-719-077-09	DIODE CL-196HR-CD-T (MS ACCESS)
< RESISTOR >		
R5802	1-218-945-11	RES-CHIP 220 5% 1/16W
< SWITCH >		
S5801	1-771-844-21	SWITCH, TACTILE (SMD) (RESET)
S5802	1-771-844-21	SWITCH, TACTILE (SMD) (DISP/BATT INFO)

• Refer to page 5-1 for mark △.

Ref. No.	Part No.	Description
S5806	1-771-844-21	SWITCH, TACTILE (SMD) (▶)
A-1439-643-A CK-192 BOARD, COMPLETE (DVD310E/DVD710/DVD710E)		
A-1439-644-A CK-192 BOARD, COMPLETE (DVD410E/DVD810/DVD810E) ***** (BT901 (lithium battery) is not included in CK-192 complete board.)		
< BATTERY HOLDER >		
△* BH5801	1-756-615-51	HOLDER, BATTERY (Note 2)
< BATTERY >		
△ BT901	1-756-134-12	BATTERY, STORAGE, LITHIUM ION (Note 2)
< CONNECTOR >		
* CN5801	1-816-643-51	FFC/CONNECTOR, FPC (LIF) 10P
< DIODE >		
D5801	8-719-077-09	DIODE CL-196HR-CD-T (MS ACCESS)
< RESISTOR >		
R5801	1-218-954-11	RES-CHIP 1.2K 5% 1/16W (DVD410E/DVD810/DVD810E)
R5802	1-218-945-11	RES-CHIP 220 5% 1/16W
< SWITCH >		
S5801	1-771-844-21	SWITCH, TACTILE (SMD) (RESET)
S5802	1-771-844-21	SWITCH, TACTILE (SMD) (DISP/BATT INFO)
S5803	1-771-844-21	SWITCH, TACTILE (SMD) (DUBBING) (DVD410E/DVD810/DVD810E)
S5806	1-771-844-21	SWITCH, TACTILE (SMD) (▶)

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

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。

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 2: Replace the battery holder (BH5801) together when replacing the lithium battery (BT901) on the CK-191 board and CK-192 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 2: CK-191基板およびCK-192基板のリチウム電池 (BT901) を交換する場合はバッテリーホルダ (BH5801) も同時に新品に交換して下さい。(一度使用したバッテリーホルダは再使用できません。)
部品取り付けの際は、先にバッテリーホルダを取り付けてからリチウム電池を装着してください。

Ref. No.	Part No.	Description
	A-1228-528-A	FP-569 FLEXIBLE BOARD, COMPLETE *****
		< DIODE >
D5691	6-500-817-01	DIODE SML-512UWT86 (ACCESS)
		< SWITCH >
S5691	1-786-148-11	SWITCH, PUSH (1 KEY) (OPEN)
S5692	1-786-148-11	SWITCH, PUSH (1 KEY) (LID OPEN DETECT)
S5693	1-786-148-11	SWITCH, PUSH (1 KEY) (LID OPEN DETECT)
S5694	1-786-179-31	SWITCH, PUSH (1 KEY) (EJECT DETECT)
	1-874-948-11	FP-839 FLEXIBLE BOARD ***** (BH001 and J001 are not included in FP-839 flexible board.)
		< BATTERY TERMINAL >
△ BH001	1-780-064-21	BATTERY TERMINAL BOARD
		< CONNECTOR >
△ J001	1-815-792-11	CONNECTOR, DC-IN (7.2V) (DC IN)
	A-1439-631-A	MS-391 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E) *****
		< CONNECTOR >
* CN7301	1-816-646-51	FFC/CONNECTOR, FPC (LIF) 16P
CN7302	1-819-613-22	MEMORY STICK DUO CONNECTOR 10P
		< 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	1-218-942-11	RES-CHIP 120 5% 1/16W
R7303	1-218-942-11	RES-CHIP 120 5% 1/16W
R7306	1-218-942-11	RES-CHIP 120 5% 1/16W
R7307	1-218-942-11	RES-CHIP 120 5% 1/16W
		< SWITCH >
* S7301	1-786-545-41	SWITCH, PUSH LEVER (S) (PANEL OPEN/CLOSE)
	A-1439-645-A	MS-392 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E) *****
		< CONNECTOR >
* CN7301	1-816-646-51	FFC/CONNECTOR, FPC (LIF) 16P
CN7302	1-819-613-22	MEMORY STICK DUO CONNECTOR 10P

Ref. No.	Part No.	Description
		< 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)
		< IC >
* IC7301	6-600-563-01	IC RS-450-T
		< RESISTOR >
R7302	1-218-942-11	RES-CHIP 120 5% 1/16W
R7303	1-218-942-11	RES-CHIP 120 5% 1/16W
R7306	1-218-942-11	RES-CHIP 120 5% 1/16W
R7307	1-218-942-11	RES-CHIP 120 5% 1/16W
		< SWITCH >
* S7301	1-786-545-41	SWITCH, PUSH LEVER (S) (PANEL OPEN/CLOSE)
	A-1439-627-A	PD-351 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E) *****
		< CAPACITOR >
C6202	1-100-581-81	CERAMIC CHIP 0.0047uF 10% 50V
C6203	1-100-581-81	CERAMIC CHIP 0.0047uF 10% 50V
C6205	1-165-908-11	CERAMIC CHIP 1uF 10% 10V
C6206	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
		< CONNECTOR >
* CN6201	1-818-072-61	CONNECTOR, FFC/FPC (ZIF) 30P
* CN6202	1-818-069-61	CONNECTOR, FFC/FPC (ZIF) 6P
* CN6204	1-818-069-61	CONNECTOR, FFC/FPC (ZIF) 6P
CN6205	1-815-031-51	FFC/CONNECTOR, FPC (ZIF) 24P
		< DIODE >
D6202	8-719-074-67	DIODE EDZ-TE61-5.6B
* D6203	6-501-476-01	DIODE NSSW008CT-T071 (BACKLIGHT)
* D6204	6-501-476-01	DIODE NSSW008CT-T071 (BACKLIGHT)
* D6205	6-501-476-01	DIODE NSSW008CT-T071 (BACKLIGHT)
		< TRANSISTOR >
Q6201	8-729-427-67	TRANSISTOR XP421F-TXE
Q6202	8-729-427-37	TRANSISTOR XP411F-TXE
		< RESISTOR >
R6201	1-218-954-11	RES-CHIP 1.2K 5% 1/16W
R6202	1-218-955-11	RES-CHIP 1.5K 5% 1/16W
R6203	1-218-957-11	RES-CHIP 2.2K 5% 1/16W
R6209	1-218-989-11	RES-CHIP 1M 5% 1/16W

• Refer to page 5-1 for mark △.

Ref. No.	Part No.	Description
	A-1439-640-A	PD-352 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)

< CAPACITOR >

C6202	1-100-581-81	CERAMIC CHIP	0.0047uF	10%	50V
C6203	1-100-581-81	CERAMIC CHIP	0.0047uF	10%	50V
C6204	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C6205	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C6206	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V

< CONNECTOR >

* CN6201	1-818-072-61	CONNECTOR, FFC/FPC (ZIF) 30P
* CN6202	1-818-069-61	CONNECTOR, FFC/FPC (ZIF) 6P
* CN6204	1-818-069-61	CONNECTOR, FFC/FPC (ZIF) 6P
CN6205	1-815-031-51	FFC/CONNECTOR, FPC (ZIF) 24P

< DIODE >

D6202	8-719-074-67	DIODE	EDZ-TE61-5.6B
* D6203	6-501-476-01	DIODE	NSSW008CT-T071 (BACKLIGHT)
* D6204	6-501-476-01	DIODE	NSSW008CT-T071 (BACKLIGHT)
* D6205	6-501-476-01	DIODE	NSSW008CT-T071 (BACKLIGHT)

< TRANSISTOR >

Q6201	8-729-427-67	TRANSISTOR	XP421F-TXE
Q6202	8-729-427-37	TRANSISTOR	XP411F-TXE
* Q6203	6-551-836-01	TRANSISTOR	2SA2078G0LS0

< RESISTOR >

R6201	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R6202	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R6203	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R6207	1-218-978-11	RES-CHIP	120K	5%	1/16W
R6209	1-218-989-11	RES-CHIP	1M	5%	1/16W

A-1439-628-A	RV-011 BOARD, COMPLETE (DVD110E/DVD115E/DVD610/DVD610E)
--------------	--

< SWITCH >

S7601	1-786-707-11	SWITCH, DETECTION (SMD) (PANEL REVERSE)
-------	--------------	---

A-1439-641-A	RV-012 BOARD, COMPLETE (DVD310E/DVD410E/DVD710/DVD710E/ DVD810/DVD810E)
--------------	---

< SWITCH >

S7601	1-786-707-11	SWITCH, DETECTION (SMD) (PANEL REVERSE)
-------	--------------	---

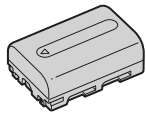
Electrical parts list of the VC-520 board is not shown.
Pages 5-15 to 5-24 are not shown.

The changed portions from Ver. 1.2 are shown in blue.

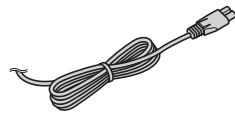
• EXCEPT J MODEL

Checking supplied accessories.

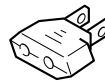
to J MODEL



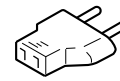
Rechargeable Battery Pack
NP-FH40
△ A-1201-658-A (US, CND)
△ A-1201-659-B
(EXCEPT US, CND, CH)
△ A-1201-660-A (CH)



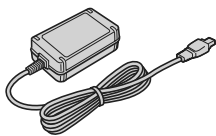
Power Cord
△ 1-555-074-91 (AUS)
△ 1-783-952-61 (AR)
△ 1-790-107-61 (US, CND)
△ 1-792-549-41 (JE)
△ 1-824-910-71 (AEP, EE, NE,
E: PAL, E: NTSC (Latin America))
△ 1-832-169-31 (UK, HK)
△ 1-832-121-31 (CH)
△ 1-833-892-21 (KR)
△ 1-834-852-11 (E: NTSC (Except
Latin America))
△ 1-835-434-11 (TH)



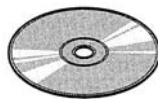
Conversion (2P) Adaptor
△ 1-569-008-12
(E: NTSC (Latin America))



Conversion (2P) Adaptor
△ 1-569-007-12
(E: NTSC (Except Latin
America), JE)



AC Adaptor
(AC-L200/L200B)
△ 1-479-285-71

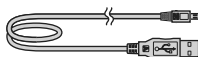


CD-ROM
"Handycam Application Software"
3-286-118-01



Operating Guide

3-285-366-11 (ENGLISH) (DVD610: US, CND, E/
DVD710: US, CND, E/DVD810: US, CND, E, JE)
3-285-366-21 (FRENCH) (DVD610: CND/DVD710: CND/
DVD810: CND)
3-285-366-31 (SPANISH) (DVD610: E, AR/DVD710: E, AR/
DVD810: E, AR, JE)
3-285-366-41 (PORTUGUESE) (DVD810: JE)
3-285-366-51 (TRADITIONAL CHINESE) (DVD610: E/
DVD710: E/DVD810: E)
3-285-366-61 (KOREAN) (DVD810: KR, JE)
3-285-367-11 (ENGLISH) (DVD110E: AEP, UK/
DVD115E: AEP, UK/DVD310E: AEP, UK/
DVD410E: AEP, UK/DVD610E: E, HK, AUS, TH/
DVD710E: E/DVD810E: E, HK, AUS, TH, JE)
3-285-367-21 (FRENCH) (DVD110E: AEP/DVD115E: AEP/
DVD310E: AEP/DVD410E: AEP)
3-285-367-31 (GERMAN, DUTCH) (DVD110E: AEP/
DVD115E: AEP/DVD310E: AEP/DVD410E: AEP)
3-285-367-41 (SPANISH, PORTUGUESE) (DVD110E: AEP/
DVD115E: AEP/DVD310E: AEP/DVD410E: AEP)
3-285-367-51 (ITALIAN, GREEK) (DVD110E: AEP/
DVD115E: AEP/DVD310E: AEP/DVD410E: AEP)
3-285-367-61 (RUSSIAN, SWEDISH) (DVD110E: NE/
DVD115E: NE/DVD310E: NE/DVD410E: NE/
DVD610E: NE/DVD710E: NE/DVD810E: NE, JE)
3-285-367-71 (DANISH, FINNISH) (DVD110E: NE/
DVD115E: NE/DVD310E: NE/DVD410E: NE)
3-285-367-81 (UKRAINIAN) (DVD110E: NE/DVD115E: NE/
DVD310E: NE/DVD410E: NE/DVD610E: NE/
DVD710E: NE/DVD810E: NE)
3-285-367-91 (POLISH, CZECH) (DVD110E: EE/
DVD115E: EE/DVD310E: EE/DVD410E: EE)
3-285-368-11 (HUNGARIAN, SLOVAK) (DVD110E: EE/
DVD115E: EE/DVD310E: EE/DVD410E: EE)
3-285-368-21 (TURKISH) (DVD110E: EE/DVD115E: EE/
DVD310E: EE/DVD410E: EE)
3-285-368-31 (SIMPLIFIED CHINESE) (DVD610E: E, CH/
DVD710E: E, CH/DVD810E: E, JE)
3-285-368-41 (TRADITIONAL CHINESE)
(DVD610E: HK/DVD810E: HK)
3-285-368-51 (ARABIC, PERSIAN)
(DVD610E: E/DVD710E: E/DVD810E: E)
3-285-368-91 (THAI) (DVD610E: TH/DVD810E: TH)



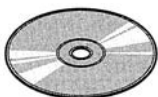
USB Cable
1-829-868-31



A/V Connecting Cable
1-831-553-11



Wireless Remote Commander
RMT-835
1-479-275-41
(DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E)



DVD-ROM
"ENJOY HANDYCAM"
3-282-264-01 (KR)
ENGLISH/KOREAN/JAPANESE
3-282-264-11 (US, CND, E, AR)
ENGLISH/FRENCH/SPANISH/PORTUGUESE
3-282-264-21 (EE, NE, UK)
ENGLISH/RUSSIAN/GERMAN
3-282-264-31 (AEP)
ENGLISH/SPANISH/PORTUGUESE/ITALIAN
3-282-264-41 (AEP)
ENGLISH/FRENCH/PORTUGUESE/DUTCH
3-282-264-61 (E, HK, AUS, CH, TH)
ENGLISH/FRENCH/SIMPLIFIED CHINESE for CHINA/
TRADITIONAL CHINESE for HONG KONG
3-282-264-71 (E)
ENGLISH/TRADITIONAL CHINESE for TAIWAN/
SPANISH/PORTUGUESE

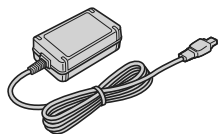
• Refer to page 5-1 for mark △.

Ver. 1.2 2008.05

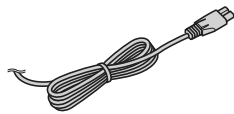
Ver. 1.1からの変更部分は
青色で記載されています。

● J MODEL

付属品



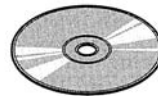
AC アダプター
(AC-L200/L200B)
△ 1-479-285-71



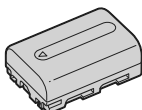
電源コード
△ 1-792-549-41



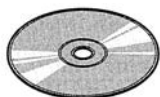
ワイヤレスリモコン
RMT-835
1-479-275-41



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



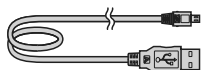
リチャージブルバッテリー
パック
NP-FH40
△ A-1201-657-A



CD-ROM
「Handycam Application
Software」
3-286-118-01



取扱説明書
3-285-366-01 (日本語)



USB ケーブル
1-829-868-31



A/V 接続ケーブル
1-831-553-11

● △マークについては、5-1ページを参照してください。

DCR-DVD110E/DVD115E/DVD310E/DVD410E/DVD610/ DVD610E/DVD710/DVD710E/DVD810/DVD810E RMT-835

SONY®

LEVEL 2

SERVICE MANUAL

Ver. 1.2 2008.05

*US Model
Canadian Model
AEP Model
UK Model
East European Model
North European Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Argentine Model
Brazilian Model
Thai Model
Tourist Model
Japanese Model*

SUPPLEMENT-1

File this supplement with the service manual.
(DI08-048)

- Addition of Brazilian Model (DVD810)
- Addition of Thai Model (DVD610E/DVD810E)
- Correction of Model information table
- Change of Repair Parts
- Revision of Accessories

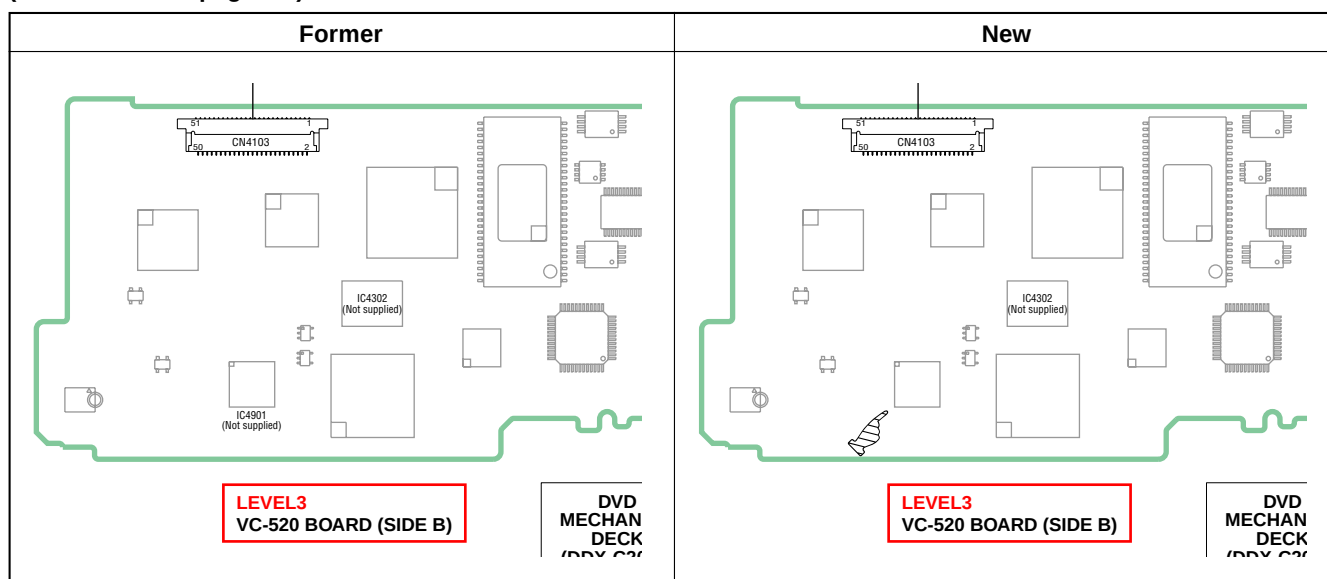
Note: Please refer to Ver.1.2 of SERVICE MANUAL (9-852-249-32) for the addition of Brazilian model (DVD810), the addition of Thai model (DVD610E/DVD810E), the correction of model information table and the revision of accessories.

 : Points changed portion.

4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM

(Service manual page 4-1)



5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

Page	Former			New		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
5-4	102	1-871-287-11	FP-573 FLEXIBLE BOARD	102	1-871-287-12	FP-573 FLEXIBLE BOARD
5-8	 306	A-1212-602-A	SERVICE (DDX-C2000) BLOCK ASSY	 306	A-1557-097-A	SERVICE (DDX-C2001) BLOCK ASSY

5-2. ELECTRICAL PARTS LIST

Page	Former			New		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
5-11	CD-672/CD-687 Board (DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E)			CD-672/CD-687 Board (DVD310E/DVD410E/DVD710/DVD710E/DVD810/DVD810E)		
	< CONNECTOR >			< CONNECTOR >		
	CN7001	1-820-586-51	CONNECTOR, FFC/FPC 28P	* CN7001	1-820-586-61	CONNECTOR, FFC/FPC 28P

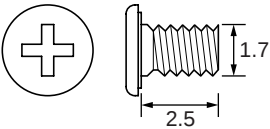
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

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

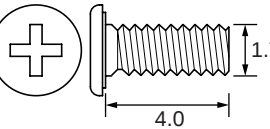
印の部品、または印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

HARDWARE LIST (1/6)

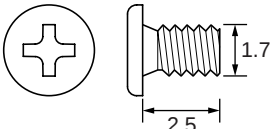
#1: M1.7 X 2.5
(Black)
2-635-562-11



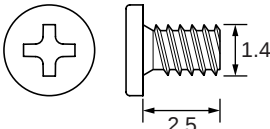
#2: M1.7 X 4.0
(Black)
2-635-562-31



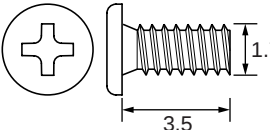
#3: M1.7 X 2.5
(Red)
2-660-401-01



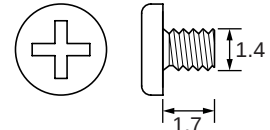
#4: M1.4 X 2.5 (Tapping)
(Dark Silver)
3-348-998-81



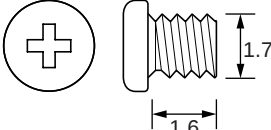
#5: M1.7 X 3.5 (Tapping)
(Black)
3-080-204-01



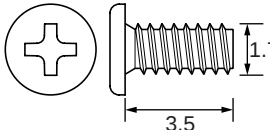
#6: M1.4 X 1.7
(Silver)
2-598-474-01



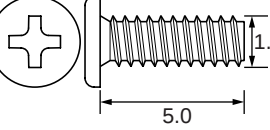
#7: M1.7 X 1.6
(Black)
7-627-552-18



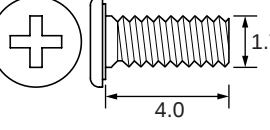
#8: M1.7 X 3.5 (Tapping)
(Silver)
3-078-890-01



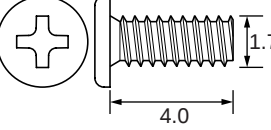
#9: M1.7 X 5.0 (Tapping)
(Silver)
3-078-890-21



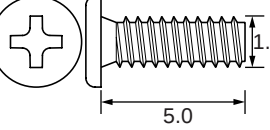
#10: M1.7 X 4.0
(Silver)
2-599-475-31



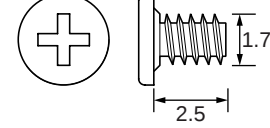
#11: M1.7 X 4.0 (Tapping)
(Silver)
3-078-890-11



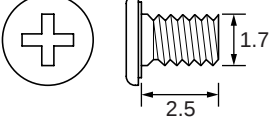
#12: M1.7 X 5.0 (Tapping)
(Black)
3-080-204-21



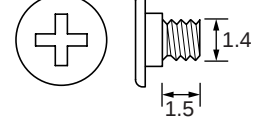
#13: M1.7 X 2.5 (Tapping)
(Silver)
3-085-397-01



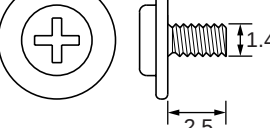
#14: M1.7 X 2.5
(Silver)
2-599-475-11



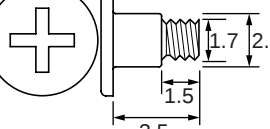
#15: M1.4 X 1.5
(Silver)
3-062-214-01



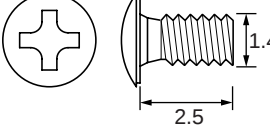
#16: M1.4 X 2.5
(Silver)
2-586-337-01



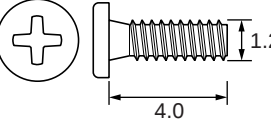
#17: M1.7 X 1.5
(Silver)
2-586-389-01



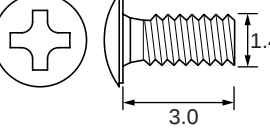
#18: M1.4 X 2.5
(Silver)
2-635-591-21



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

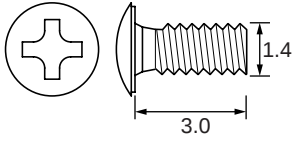


#20: M1.4 X 3.0
(Silver)
2-635-591-31

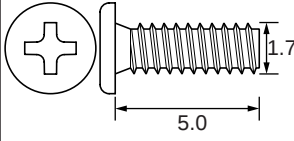


HARDWARE LIST (2/6)

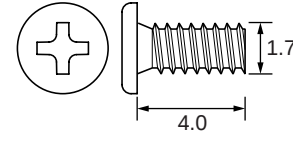
#21: M1.4 X 3.0
(Black)
2-662-396-21



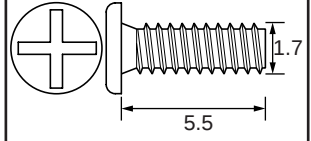
#22: M1.7 X 5.0 (Tapping)
(Silver)
3-083-261-01



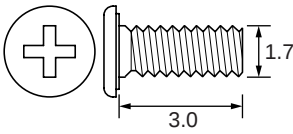
#23: M1.7 X 4.0 (Tapping)
(Black)
3-080-204-11



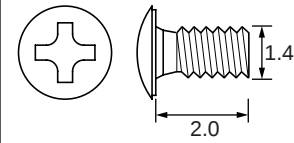
#24: B1.7 X 5.5 (Tapping)
(Black)
4-679-805-11



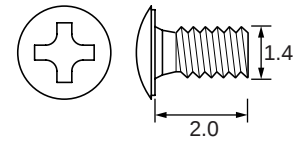
#25: M1.7 X 3.0
(Black)
2-635-562-21



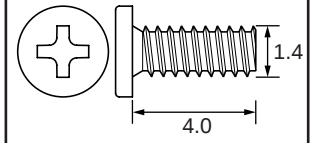
#26: M1.4 X 2.0
(Silver)
2-635-591-11



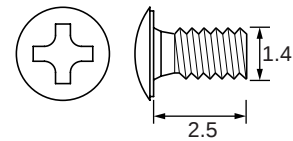
#27: M1.4 X 2.0
(Black)
2-662-396-11



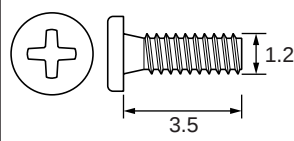
#28: M1.4 X 4.0 (Tapping)
(Silver)
3-348-998-61



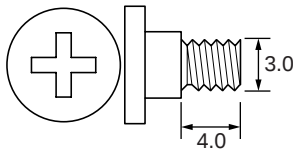
#29: M1.4 X 2.5
(Black)
2-662-396-01



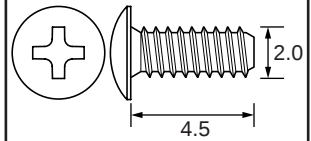
#30: M1.2 X 3.5 (Tapping)
(White)
3-086-156-11



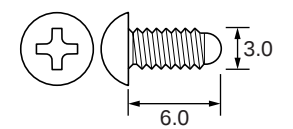
#31: M3.0 X 4.0
(Silver)
2-102-434-01



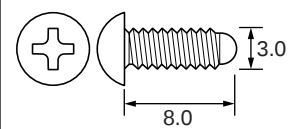
#32: M2.0 X 4.5 (Tapping)
(Silver)
2-102-498-01



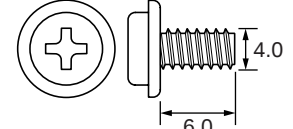
#33: M3.0 X 6.0
(Silver)
3-077-331-21



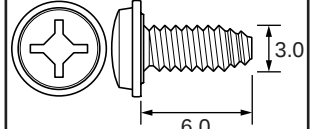
#34: M3.0 X 8.0
(Black)
3-077-331-41



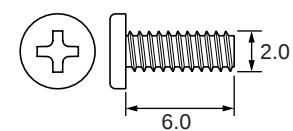
#35: M4.0 X 6.0 (Tapping)
(Silver)
3-975-291-02



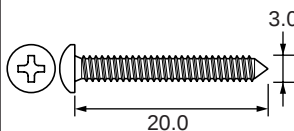
#36: M3.0 X 6.0
(Silver)
4-886-821-11



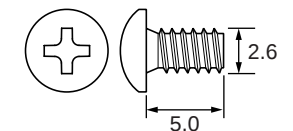
#37: M2.0 X 6.0 (Tapping)
(Black)
3-080-206-31



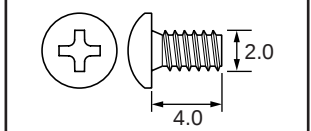
#38: M3.0 X 20.0 (Tapping)
(Silver)
7-685-651-79



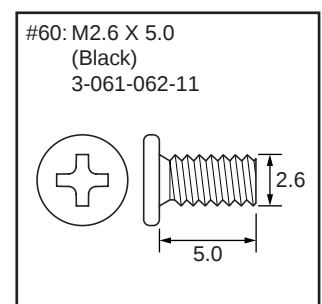
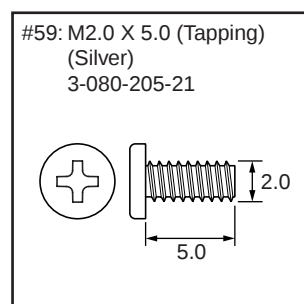
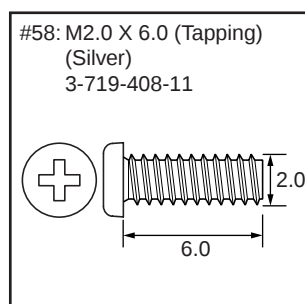
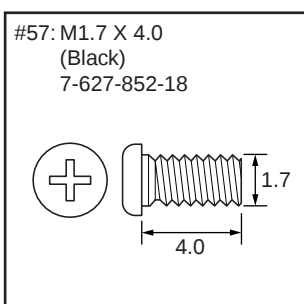
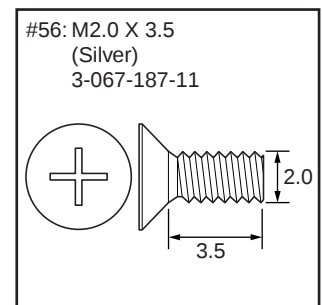
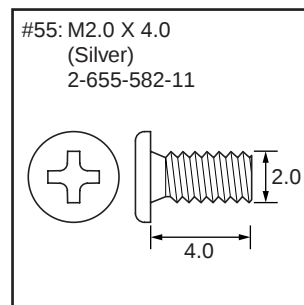
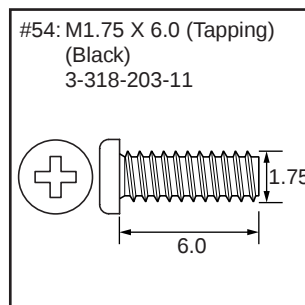
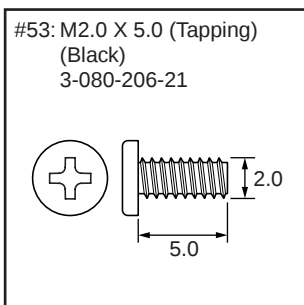
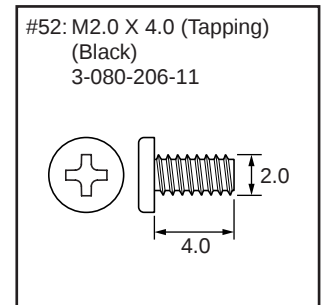
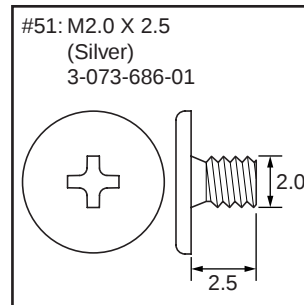
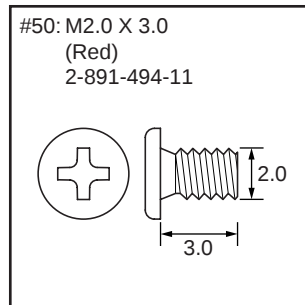
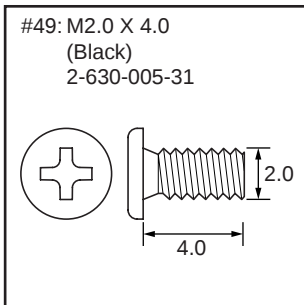
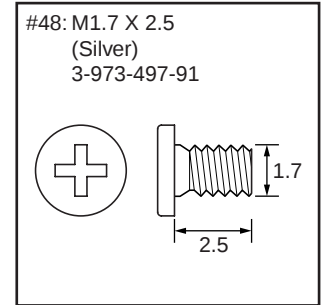
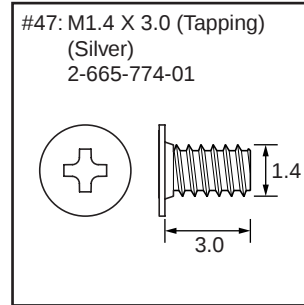
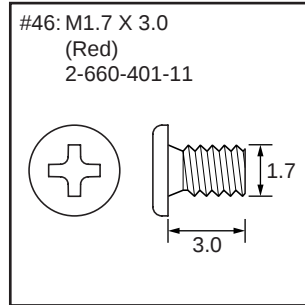
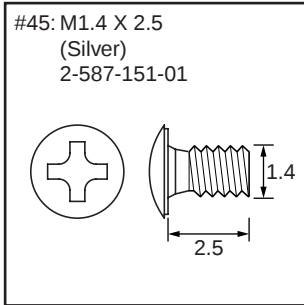
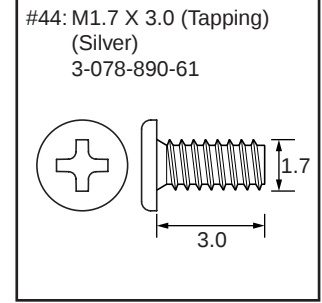
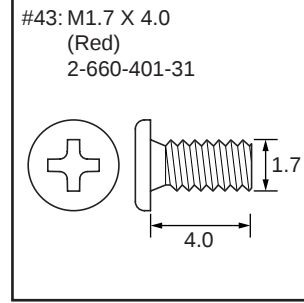
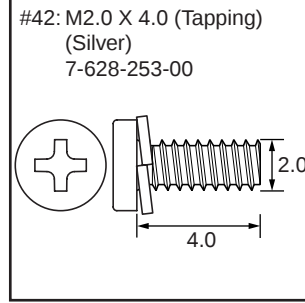
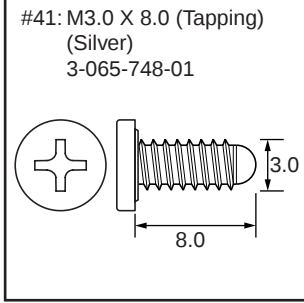
#39: M2.6 X 5.0 (Tapping)
(Black)
7-685-791-09



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

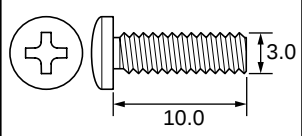


HARDWARE LIST (3/6)

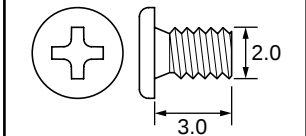


HARDWARE LIST (4/6)

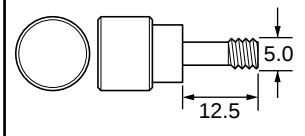
#61: M3.0 X 10.0
(Black)
7-682-549-09



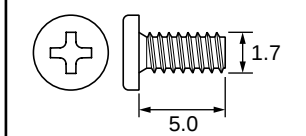
#62: M2.0 X 3.0
(Silver)
3-080-202-21



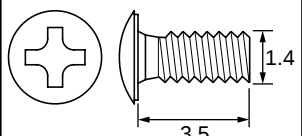
#63: M5.0 X 12.5
(Black)
3-060-811-21



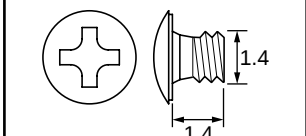
#64: M1.7 X 5.0 (Tapping)
(Silver)
2-666-551-21



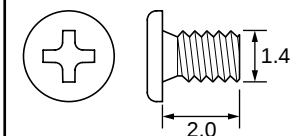
#65: M1.4 X 3.5
(Silver)
2-635-591-01



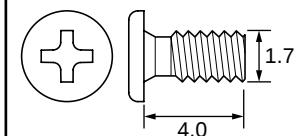
#66: M1.4 X 1.4
(Silver)
2-635-591-41



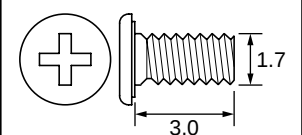
#67: M1.4 X 2.0
(Silver)
3-389-523-16



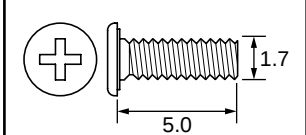
#68: M1.7 X 4.0
(Silver)
2-655-581-01



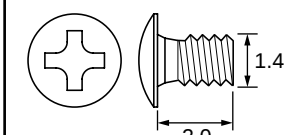
#69: M1.7 X 3.0
(Silver)
2-599-475-21



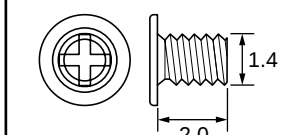
#70: M1.7 X 5.0
(Silver)
2-599-475-41



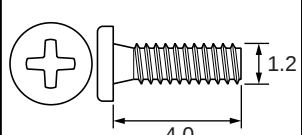
#71: M1.4 X 2.0
(Red)
3-208-537-01



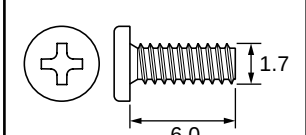
#72: M1.4 X 2.0
(Silver)
4-663-621-41



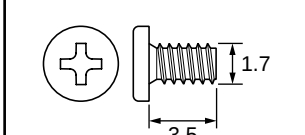
#73: M1.2 X 4.0 (Tapping)
(Black)
3-086-156-61



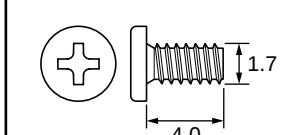
#74: M1.7 X 6.0 (Tapping)
(Silver)
2-666-551-31



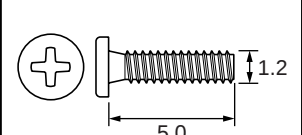
#75: M1.7 X 3.5 (Tapping)
(Silver)
2-666-551-01



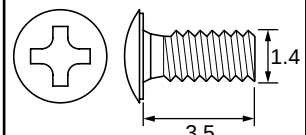
#76: M1.7 X 4.0 (Tapping)
(Silver)
2-666-551-11



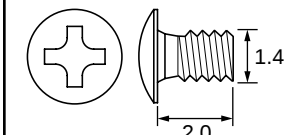
#77: M1.2 X 5.0 (Tapping)
(Silver)
3-086-156-31



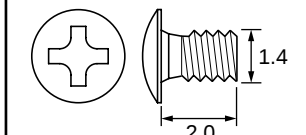
#78: M1.4 X 3.5
(Red)
3-208-537-11



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

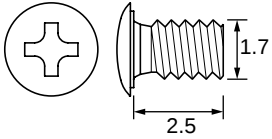


#80: M1.4 X 2.0
(Black)
3-279-411-01

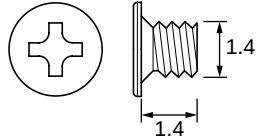


HARDWARE LIST (5/6)

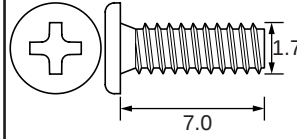
#81: M1.7 X 2.5
(Silver)
2-515-756-01



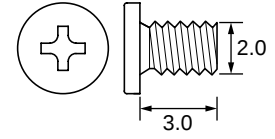
#82: M1.4 X 1.4
(Silver)
3-272-251-01



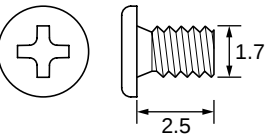
#83: M1.7 X 7.0 (Tapping)
(Black)
3-080-204-41



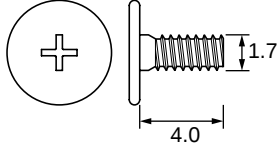
#84: M2.0 X 3.0
(Silver)
3-072-453-11



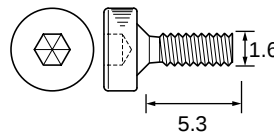
#85: M1.7 X 2.5
(Black)
2-515-483-11



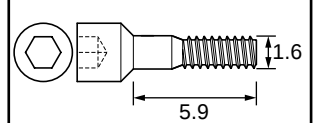
#86: M1.7 X 4.0 (Tapping)
(Silver)
2-695-434-21



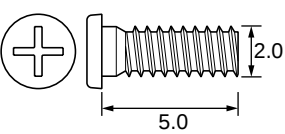
#87: M1.6 X 5.3
(Black)
2-689-328-01



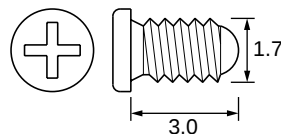
#88: M1.6 X 5.9 (Tapping)
(Silver)
2-689-015-01



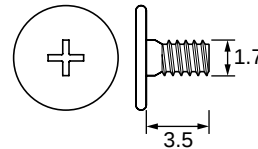
#89: M2.0 X 5.5 (Tapping)
(Silver)
2-695-575-01



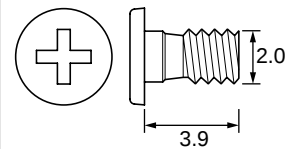
#90: M1.7 X 3.0
(Silver)
3-271-395-01



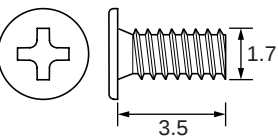
#91: M1.7 X 3.0 (Tapping)
(Silver)
2-695-434-11



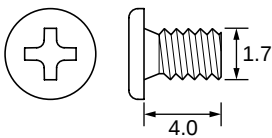
#92: M2.0 X 3.9
(Black)
3-268-954-01



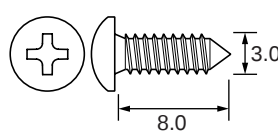
#93: M1.7 X 3.5 (Tapping)
(Silver)
3-254-082-01



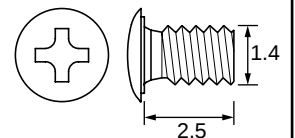
#94: M1.7 X 4.0
(Black)
2-515-483-31



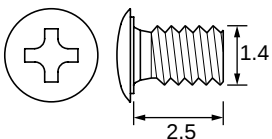
#95: M3.0 X 8.0 (Tapping)
(Black)
7-685-646-79



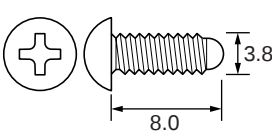
#96: M1.4 X 2.5
(Silver)
2-587-151-21



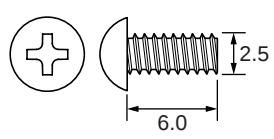
#97: M1.4 X 2.5
(Black)
2-662-396-31



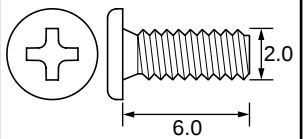
#98: M3.0 X 8.0
(Silver)
3-077-331-01



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

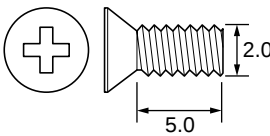


#100: M2.0 X 6.0
(Black)
3-080-203-51

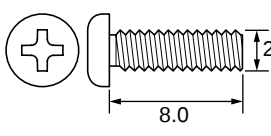


HARDWARE LIST (6/6)

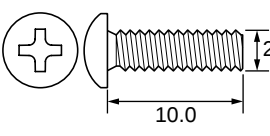
#101: M2.0 X 5.0
(Silver)
7-621-555-39



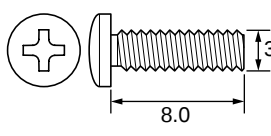
#102: M2.6 X 8.0
(Black)
7-621-284-30



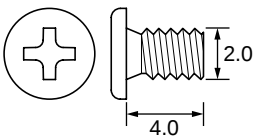
#103: M2.6 X 10.0
(Silver)
7-685-794-09



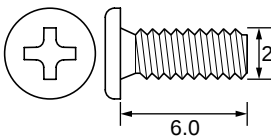
#104: M3.0 X 8.0
(Black)
7-682-548-09



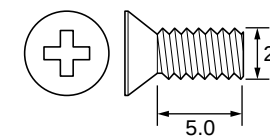
#105: M2.0 X 4.0
(Red)
2-891-494-31



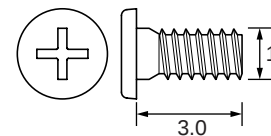
#106: M2.0 X 6.0
(Black)
3-713-786-11



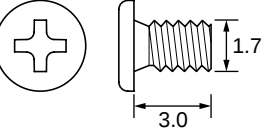
#107: M2.0 X 5.0
(Silver)
3-032-750-01



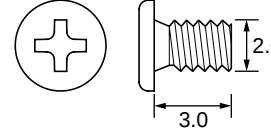
#108: M1.7 X 3.0 (Tapping)
(Black)
2-695-430-01



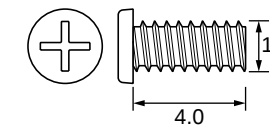
#109: M1.7 X 3.0
(Black)
2-515-483-21



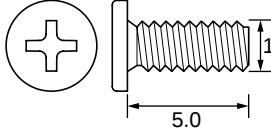
#110: M2.0 X 3.0
(Black)
2-630-005-21



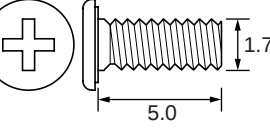
#111: M1.7 X 4.0 (Tapping)
(Black)
2-887-124-01



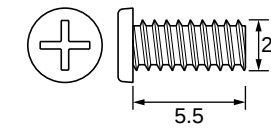
#112: M1.4 X 5.0
(Black)
2-178-410-11



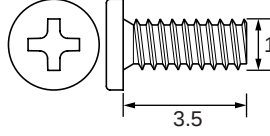
#113: M1.7 X 5.0
(Black)
2-635-562-41



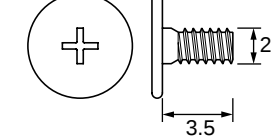
#114: M2.0 X 5.5 (Tapping)
(Silver)
2-698-464-01



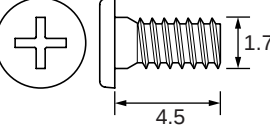
#115: M1.4 X 3.5 (Tapping)
(Silver)
3-348-998-51



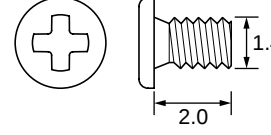
#116: M2.0 X 3.5 (Tapping)
(Silver)
2-695-435-01



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



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



Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2007.12	Official Release	—	—
1.1	2008.03	Revised-1 (A1 DI07-306)	• Correction of Repair Parts S.M. revised: Page 5-26	Yes
1.2	2008.05	Supplement-1 (S1 DI08-048)	• Addition of Brazilian Model (DVD810) • Addition of Thai Model (DVD610E/DVD810E) • Correction of Model information table • Change of Repair Parts • Revision of Accessories S.M. revised: Page 5 , Page 5-1 , Page 5-25 , Page 5-26	Yes
1.3	2008.05	Revised-2 (A2 DI08-094)	• Correction of Repair Parts S.M. revised: Page 5-25	Yes