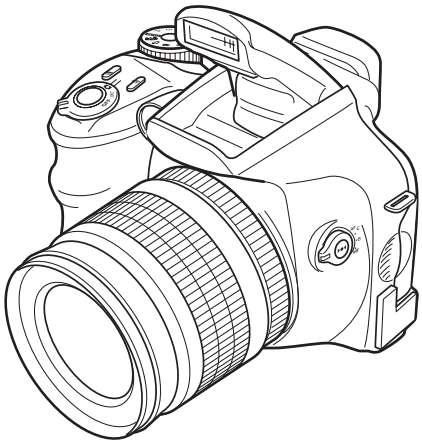
FUJIFILM

DIGITAL CAMERA



FinePix S6000fd/ S6500fd

SERVICE MANUAL

US/EU/EG/EE/AS/CH/JP-Model

⚠ CAUTION

- BECAUSE THIS PRODUCTIS RoHS LEAD-FREE COMPLIANT, USE THE DESIGNATED AFTER-SELES PARTS AND THE DESIGNATED LEAD-FREE SOLDER WHEN PERFORMING REPAIRS. (Refer to page 3 to page 5)

⚠ WARNING

- THE COMPONENTS IDENTIFIED WITH THE MARK " ⚠ " ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR SAFETY.
  PLEASE REPLACE ONLY WITH THE COMPONENTS SPECIFIED ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST.
- IF YOU USE PARTS NOT SPECIFIED, IT MAY RESULT IN A FIRE AND AN ELECTRICAL SHOCK.

FUJI PHOTO FILM CO., LTD.

Ref.No.:ZM00647-100

Printed in Japan 2006.09

SAFETY CHECK-OUT

After correcting the original problem, perform the following safety check before return the product to the customer.

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splasher 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, though 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. Make leakage - current measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

7.

RISK OF FIRE-
REPLACE FUSE
AS MARKED

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 2.5 AMPERES 125V FUSE.

ATTENTION: AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME, TYPE 2.5 AMPERES, 125 VOLTS.

8.

WARNING!
HIGH VOLTAGE

WARNING:
TO REDUCE THE ELECTRIC SHOCK, BE CAREFUL TO TOUCH THE PARTS.

RoHS lead-free compliance

Because this product is RoHS lead-free compliant, use the designated after-sales parts and the designated lead-free solder when performing repairs.

<Background & Overview>

With the exception of parts and materials expressly excluded from the RoHS directive (*1), all the internal connections and component parts and materials used in this product are lead-free compliant (*2) under the European RoHS directive.

*1: Excluded items (list of the main lead-related items)
- Lead included in glass used in fluorescent tubes, electronic components and cathode-ray tubes
- Lead in high-melting-point solder (i.e. tin-lead solder alloys that contain 85% lead or more)
- Lead in ceramic electronic parts (piezo-electronic devices)
- Mercury contained in fluorescent tubes is also excluded.

*2: Definition of lead-free
A lead content ratio of 0.1 wt% or less in the applicable locations (solder, terminals, electronic components, etc.)

<Reference>

RoHS:	The name of a directive issued by the European Parliament aimed at restricting the use of certain designated hazardous substances included in electrical and electronic equipment.
Designated substances (6):	Lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ether (PBDE)

<Lead-free soldering>

When carrying out repairs, use a designated lead-free solder, bearing in mind the differing work practices for conventional solder (eutectic) and lead-free solder.

■ Differences in the soldering work for lead-free and eutectic solder

When the soldering work practices for eutectic solder and lead-free solder are compared, the main differences are as shown below. In particular, when lead-free solder is used, the solder tends to be less workable than when eutectic solder is used. Accordingly, the soldering techniques used must take that into account.

	Difference	Countermeasure
1	The solder starts melting later.	The initial melting point of lead-free solder is high, so you have to get used to it.
2	Poor wetting	Move the tip of the soldering iron around to heat the entire connection to the melting temperature and assist wetting.
3	Solder feed rate is difficult to control.	Use the solder (wire) diameter and soldering iron that are best suited to connection being soldered.
4	Wetting the insides of through holes is especially difficult.	First apply solder to the area immediately around the through hold and then feed the solder into the hole.
5	During repairs (or modifications) removing solder from inside through holes is difficult.	Use a suitable wicking wire (with a suitable method and heating) and a suction tool.
6	There is serious carbonization of the soldering iron.	Either put solder onto the soldering iron tip after completing the work, or turn the iron off frequently.
7	The surface is not glossy.	Learn to recognize the appearance of the surface.

■ **Setting temperature during lead-free soldering**

• Lead-free solder melting temperature
The melting point of eutectic (Sn-Pb) solder is 183°C, while the melting point of lead-free solder (Sn-Ag-Cu) is 30°C higher at 220°C.

• Soldering iron tip temperature
The temperature setting for the soldering iron used should be such that the tip of the soldering iron is at the correct bonding temperature for the connection. This temperature is normally set at around 100°C higher than the melting point of the solder.
However, the actual temperature should take into account the shape and size of the soldering iron tip, the heat tolerance of the connection and the workability of that temperature.

• Correct bonding temperature
The correct bonding temperature refers not to the temperature of the heat source, but to the bonding temperature that will give the best bond strength.

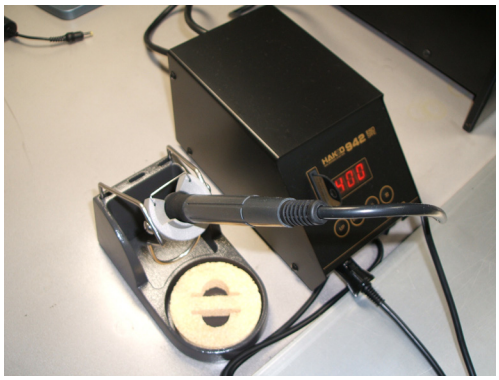
■ **Precautions when soldering with lead-free solder**

• Soldering iron maintenance
Because of the high soldering iron temperature in lead-free soldering, there is rapid carbonization of the flux adhering to the tip of the soldering iron.
(1) Always cover the tip of the soldering iron with solder when it is not being used.
(2) If the tip is black from carbonization, wipe it gently with a paper towel soaked in alcohol until the solder will wet.

• Uniform heating of the board and components
To ensure that the lead-free solder wets the entire surface of the pattern and the lands despite its poor wetting characteristics, you must move the tip of the soldering iron over a wide area to raise the temperature of the entire connection.

■ **Soldering iron**

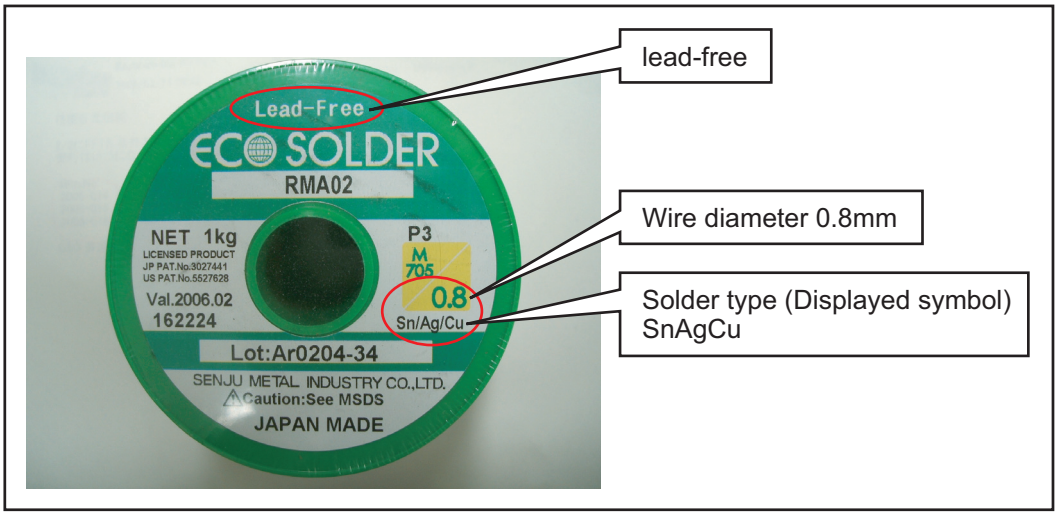
A soldering iron with a temperature control is best.



■ **Solder wire (thread)**

Use the lead-free solders specified below.
Solder type: Sn96.5Ag3Cu0.5 (Displayed symbol: SnAgCu)
Wire diameter: 0.6, 0.8 or 1.0 mm

Sample:



■ **Flux**

Conventional flux can be used.

■ **Solder application wires (mesh, wicking wire, etc.)**

Conventional application wires can be used.

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CONTENTS

MEMO

1. General

1-1. Product specification

System

Model	Digital camera FinePix S6000fd / FinePix S6500fd
Effective pixels	6.3 million pixels
CCD	1/1.7-inch Super CCD HR
Storage media	Internal memory (approx. 10 MB)/xD-Picture Card (16/32/64/128/256/512 MB/1 GB/2 GB)
File format	Still image: DCF-compliant Compressed: Exif ver.2.2 JPEG, DPOF-compatible Uncompressed: CCD-RAW (RAF) *Design rule for Camera File System compliant DPOF compatible Movie: AVI format, Motion JPEG Audio: WAVE format, Monaural sound
Number of recorded pixels	Still image:2848 × 2136 pixels/3024 × 2016 pixels/2048 × 1536 pixels/ 1600 × 1200 pixels/640 × 480 pixels (6M/3:2/3M/2M/VGA)
Lens	Fujinon 10.7× optical zoom lens F2.8-F4.9
Focal length	f=6.2 mm-66.7 mm (Equivalent to approx. 28 mm-300 mm on a 35 mm camera)
Digital zoom	Approx. 2.0× (10.7× optical zoom lens is used together: Max. zoom scale: approx. 21.4×)
Aperture (Wide-angle)	F2.8 to F11 Up to 13 steps in 1/3 EV increments Manual/Auto selectable
Focal range	Normal: Wide-angle: approx. 40 cm (1.3 ft.) to infinity (In High-speed shooting mode: approx. 2.0 m (6.6 ft.) to infinity) Telephoto: approx. 2.0 m (6.6 ft.) to infinity (In High-speed shooting mode: approx. 4.0 m (13.1 ft.) to infinity) Macro: Wide-angle: approx. 10 cm (3.9 in.) to 3.0 m (9.8 ft.) Telephoto: approx. 90 cm (3.0 ft.) to 3.0 m (9.8 ft.) Super macro: approx. 1 cm to 1.0 m (0.4 in. to 3.3 ft.) (Wide-angle only)
Sensitivity	AUTO/Equivalent to ISO 100/200/400/800/1600/3200
Photometry	TTL 256-zones metering Multi, Spot, Average
Exposure control	Program AE (When using P mode : Program Shift is enabled)/Shutter priority AE/ Aperture priority AE/Manual exposure
Scene position	(NATURAL LIGHT), (NATURAL &), (PORTRAIT), (LANDSCAPE), (SPORT), (NIGHT), (FIREWORKS), (SUNSET), (SNOW), (BEACH), (MUSEUM), (PARTY), (FLOWER), TEXT (TEXT)
Picture Stabilization	Available
Intelligent Face Detection	Available
Exposure compensation	-2 EV to +2 EV in 1/3 EV-step increments (P, S, A)
Shutter speed	AUTO, , , , , , , , , , , , TEXT: 1/4 sec. to 1/4000 sec*. : 4 sec. to 1/500 sec.* : 4 sec. to 1/2 sec.* : 1/45 sec. to 1/1000 sec.* (flash only). P, S, A: 4 sec. to 1/4000 sec.* M: 30 sec. to 1/4000 sec.* *depend on Exposure mode
Continuous shooting	Top-3: Number of recorded frames: up to 3 frames (Max. 2.2 frames/sec.) Final-3: Number of recorded frames: Last 3 frames before releasing the shutter button (Max. 2.2 frames/sec.) Long-period: Number of recorded frames: Depend on memory size. 1.5 sec. interval at 6M N depending on quality level. (Max. 0.6 frames/sec.)
Auto bracketing	± 1/3 EV, ± 2/3 EV, ± 1 EV

System

Focus	Mode: Single-AF, Continuous AF, Manual focus/One-touch AF (when using Manual focus) AF system: TTL contrast-type, AF-assist illuminator AF frame selection: AF (CENTER), AF (MULTI), AF(AREA)
White balance	Automatic scene recognition/Preset (Fine, Shade, Fluorescent (Daylight), Fluorescent (Warm White), Fluorescent (Cool White), Incandescent) /Custom
Self-timer	Approx. 2 sec./10 sec.
Flash type	Popping the flash up automatically
	Effective range:(ISO: AUTO): Wide-angle: approx. 60 cm-8.3 m (2.0 ft.-27.2 ft.) Telephoto: approx. 2.0 m-4.6 m (6.6 ft.-15.1 ft.) (Macro): Wide-angle: approx. 30 cm-2.0 m (1.0 ft.-6.6 ft.) Telephoto: approx. 90 cm-2.0 m (3.0 ft.-6.6 ft.)
Flash mode	Auto, Red-eye Reduction, Forced Flash, Suppressed Flash, Slow Synchro, Red-eye Reduction + Slow Synchro
Viewfinder	0.33 inches, approx. 115,000 pixels low-temperature polysilicon TFT color LCD finder, Approx. 100% coverage
LCD monitor	2.5 inches, Aspect ratio: 4:3; approx. 235,000 pixels Amorphous silicon TFT color LCD monitor, Approx. 100% coverage
Movie	640 × 480 pixels/320 × 240 pixels (640/320) (30 frames per second with monaural sound) A series of continuous image can be recorded depending on the available space on an xD-Picture Card or internal memory.
Photography functions	Intelligent face detection, High-speed shooting, Best framing, Post shot assist window, Frame No. memory, Histograms
Playback functions	Intelligent face detection, Trimming, Automatic playback, Multi-frame playback, Sorting by date, Image rotate, Histograms (Highlight warning), Voice memo
Other functions	PictBridge, Exif print, Language (日本語, English, Francais, Deutsch, Español, Italiano, 中文简, 繁體, 한글, Русский, Português, Nederlands, Türkçe), Time difference, FinePix photo mode (*F*-mode), Discharging rechargeable batteries

■ Standard number of available frames/recording time per xD-Picture Card and internal memory

The number of available frames, recording time or file size varies slightly depending on the subjects photographed. Note also that the divergence between standard number of frames and the actual number of frames is greater for xD-Picture Cards with higher capacities.

Quality setting	6M F	6M N	3:2	3M	2M	03M	RAW	640 (30 fps)	320 (30 fps)
Number of recorded pixels	2848 × 2136		3024 × 2016	2048 × 1536	1600 × 1200	640 × 480	– ✻	640 × 480	320 × 240
Image data size	3.0 MB	1.5 MB	1.5 MB	780 KB	630 KB	130 KB	13.4 MB	–	–
Internal memory (approx. 10 MB)	3	6	6	12	15	77	0	8 sec.	16 sec.
16 MB	5	10	10	19	25	122	1	13 sec.	26 sec.
32 MB	10	20	20	40	50	247	2	27 sec.	54 sec.
64 MB	21	42	42	81	101	497	4	55 sec.	109 sec.
128 MB	42	84	84	162	204	997	9	111 sec.	219 sec.
256 MB	85	169	169	325	409	1997	19	223 sec.	7.3 min.
512 MB	170	339	339	651	818	3993	38	7.4 min.	14.6 min.
1 GB	341	680	680	1305	1639	7995	76	14.9 min.	29.3 min.
2 GB	680	1360	1360	2558	3198	15992	152	29.8 min.	58.7 min.

✻ Number of recorded pixel is 4048 × 3036 when displaying images on PC by using FinePixViewer.

Input/Output Terminal

A/V OUT (Audio/Visual output)	NTSC/PAL-type (with monaural sound)
Digital input/output	USB 2.0 High-Speed/PTP (Picture Transfer Protocol)
DC input socket	AC Power Adapter AC-5VX (sold separately)

Power Supply and Others

Power supply

Use one of the following:
- 4× AA-size alkaline batteries
- 4× AA-size Ni-MH (Nickel-Metal Hydride) batteries (sold separately)
- AC Power Adapter AC-5VX (sold separately)

Guide to the number of available frames for battery operation

Battery Type	With LCD monitor ON	With viewfinder (EVF) ON
Alkaline batteries	Approx. 200 frames	Approx. 200 frames
Ni-MH batteries 2500 mAh	Approx. 400 frames	Approx. 400 frames

According to the CIPA (Camera & Imaging Products Association) standard procedure for measuring digital still camera battery consumption (extract):
When using alkaline batteries, use the batteries supplied with the camera. You can use Ni-MH batteries also. The storage media should be xD-Picture Card.
Pictures should be taken at a temperature of +23°C (+73°F), with the LCD monitor turned on, the optical zoom moved from full wide-angle to full telephoto (or vice-versa) and back again to its original position every 30 seconds, the flash used at full power every second shot and the camera turned off and then on again once every 10 shots.
- Note: Because the number of available shots varies depending on the capacity of alkaline batteries or the level of charge in Ni-MH batteries, the figures shown here for the number of available shots using batteries are not guaranteed.
  The number of available shots will also decline at low temperatures.

Camera dimensions (W/H/D)	130.7 mm × 97.2 mm × 119.5 mm/5.1 in. × 3.8 in. × 4.7 in. (not including accessories and attachments)
Camera mass (weight)	Approx. 570 g/20.1 oz. (not including accessories, batteries and xD-Picture Card)
Weight for photography	Approx. 660 g/23.3 oz. (including batteries and xD-Picture Card)
Operating conditions	Temperature: 0°C to +40°C (+32°F to +104°F) 80% humidity or less (no condensation)
Accessories included	● AA-size Alkaline Batteries (LR6) (4) ● Strap (1) ● Lens cap (1) ● Lens cap holder (1) ● Lens hood (1) ● A/V cable (1) Including plug to pin-plug ×2 ● USB cable (mini-B) (1) ● CD-ROM (1) Software for FinePix CX ● Owner's Manual (1)
Optional accessories	● xD-Picture Card 16MB/32MB/64MB/128MB/256MB/512MB/1GB/2GB ● AC Power Adapter AC-5VX ● Soft Case SC-FXS9 ● Wide Conversion Lens WL-FXS6 ● Image Memory Card Reader DPC-R1 • Compatible with xD-Picture Card of 16 MB to 512 MB, and SmartMedia of 3.3 V, 4 MB to 128 MB. ● PC Card Adapter DPC-AD • Compatible with xD-Picture Card of 16 MB to 512 MB, and SmartMedia of 3.3 V, 2 MB to 128 MB. ● CompactFlash Card Adapter DPC-CF

1-2. Explanation of Terms

Deactivated batteries: Leaving an Ni-MH battery unused in storage for a long period may cause a rise in the level of substances that inhibit current flow inside the battery and result in a dormant battery. A battery in this state is referred to as deactivated.
Because current flow is inhibited in a deactivated Ni-MH battery, the battery's original level of performance cannot be achieved.

EV: A number denotes Exposure Value. The EV is determined by the brightness of the subject and sensitivity (speed) of the film or CCD. The number is larger for bright subjects and smaller for dark subjects. As the brightness of the subject changes, a digital camera maintains the amount of light hitting the CCD at a constant level by adjusting the aperture and shutter speed.
When the amount of light striking the CCD doubles, the EV increases by 1. Likewise, when the light is halved, the EV decreases by 1.

Frame rate (fps): The frame rate refers to the number of images (frames) that are photographed or played back per second. For example, when 10 frames are continuously photographed in a 1-second interval, the frame rate is expressed as 10 fps.
For reference, TV images are displayed at 30 fps (NTSC).

JPEG: Joint Photographic Experts Group
A file format used for compressing and saving color images. The higher the compression rate, the greater the loss of quality in the decompressed (restored) image.

Memory effect: If an Ni-MH battery is repeatedly charged without first being fully discharged, its performance may drop below its original level.
This is referred to as the "memory effect".

Motion JPEG: A type of AVI (Audio Video Interleave) file format that handles images and sound as a single file. Images in the file are recorded in JPEG format. Motion JPEG can be played back by QuickTime 3.0 or later.

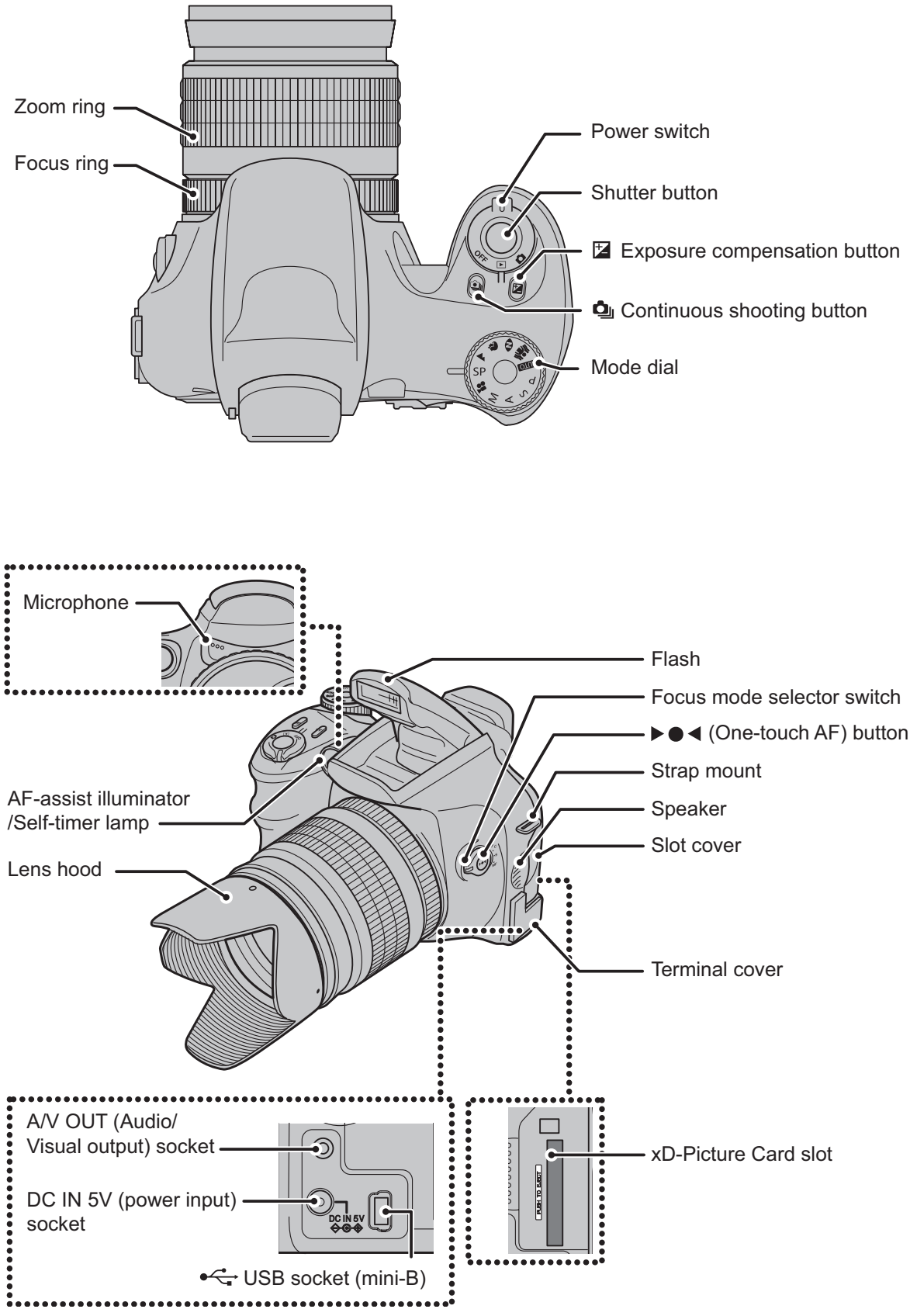
Smear: A phenomenon specific to CCDs whereby white streaks appear on the image when there is a very strong light source, such as the sun or reflected sunlight, in the photography screen.

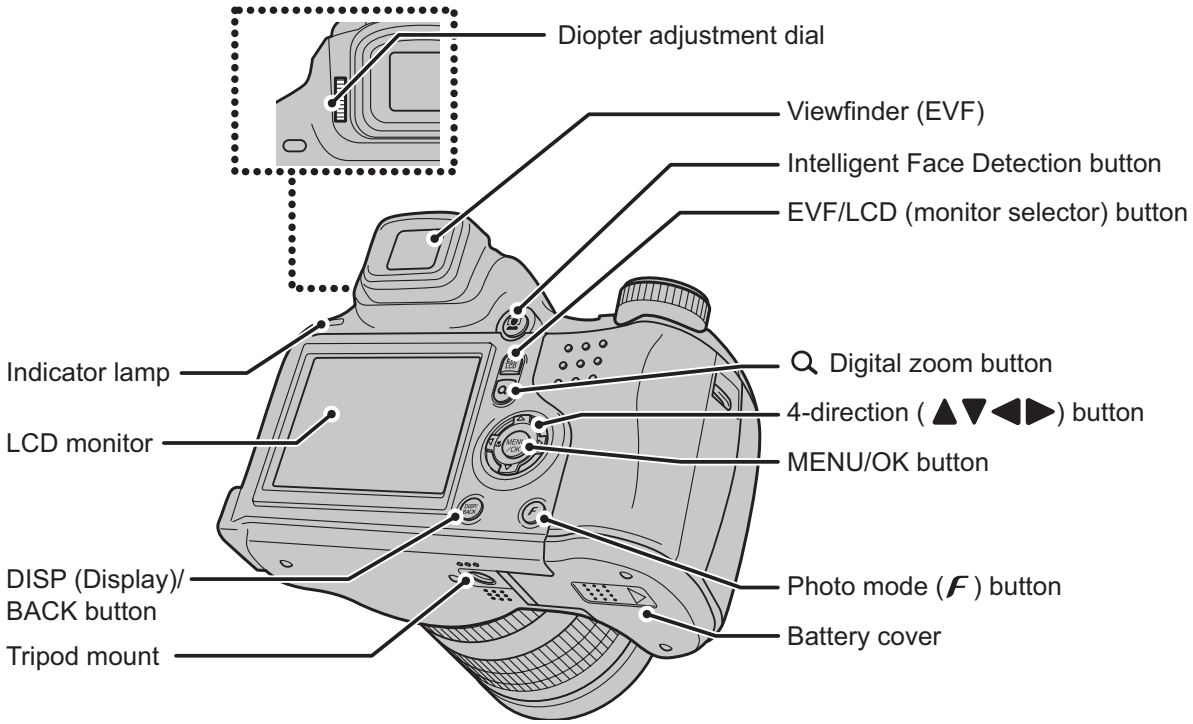
WAVE A standard format used on Windows systems for saving audio data. WAVE files have the ".WAV" file extension and the data can be saved in either compressed or uncompressed format. Uncompressed recording is used on this camera.
WAVE files can be played back on a personal computer using the following software:
Windows: MediaPlayer
Macintosh: QuickTime Player
* QuickTime 3.0 or later

White Balance: Whatever the kind of the light, the human eye adapts to it so that a white object still looks white. On the other hand, devices such as digital cameras see a white subject as white by first adjusting the color balance to suit the color of the ambient light around the subject. This adjustment is called matching the white balance.

Exif Print: Exif Print Format is a newly revised digital camera file format that contains a variety of shooting information for optimal printing.

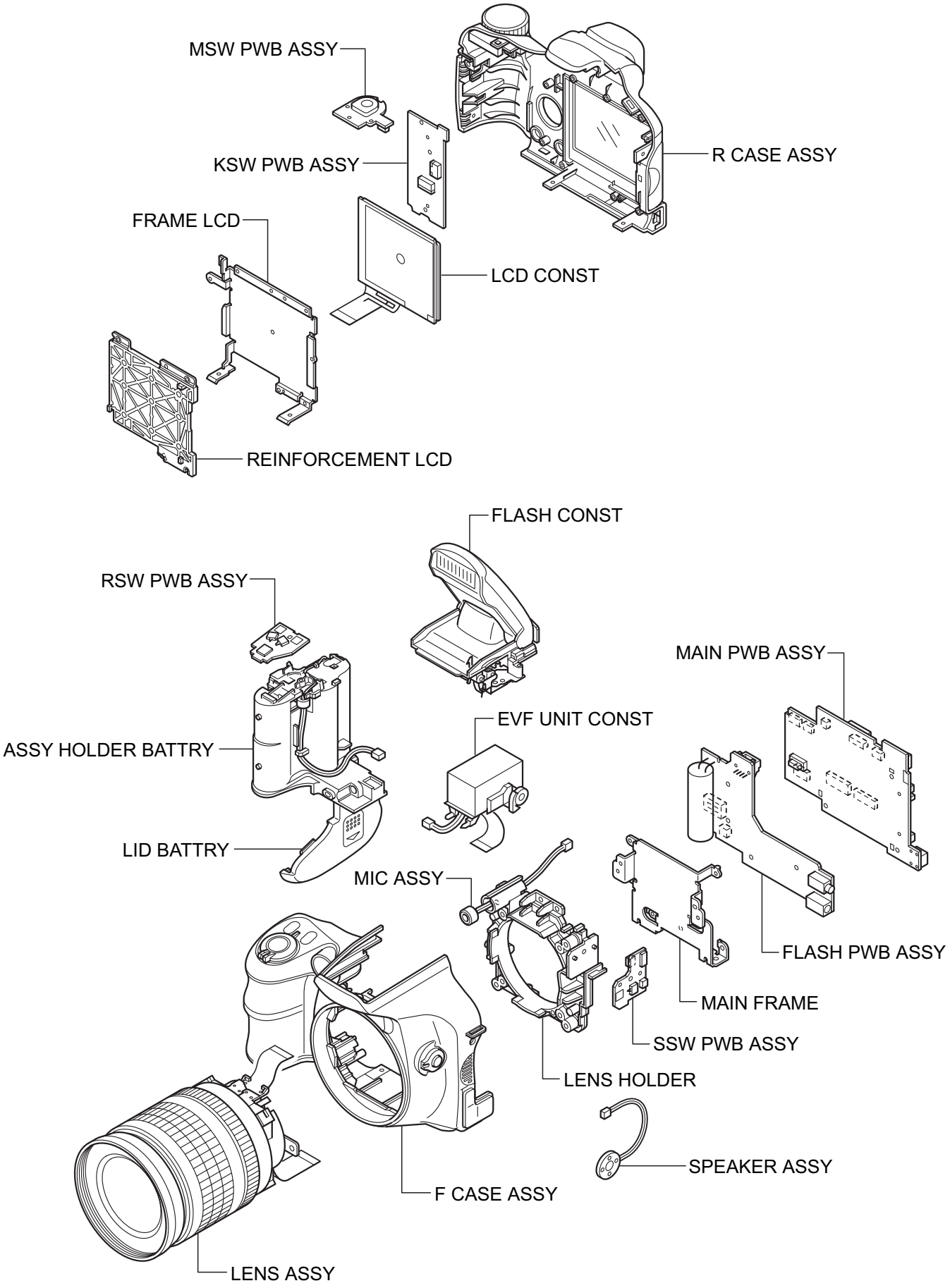
1-3. Names of External Components




Diopter adjustment dial
Viewfinder (EVF)
Intelligent Face Detection button
EVF/LCD (monitor selector) button
Indicator lamp
Digital zoom button
4-direction (▲▼◀▶) button
LCD monitor
MENU/OK button
DISP (Display)/
BACK button
Photo mode ( ) button
Tripod mount
Battery cover

2. Disassembly

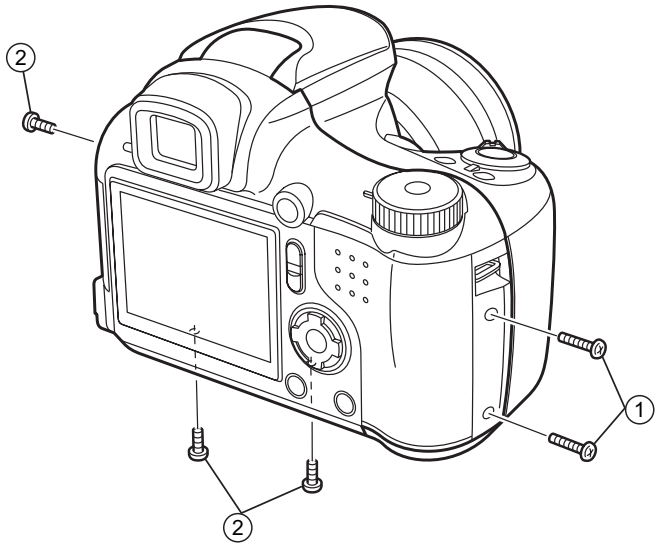
2-1. Names of internal Components



2-2. Removing the REAR CONST

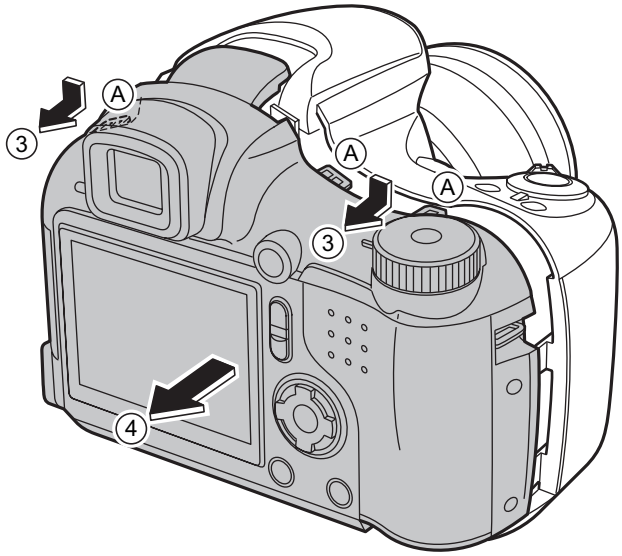
(1) Remove the 2 screws (M1.7 x 9.0).

(2) Remove the 3 screws (M1.7 x 3.5).



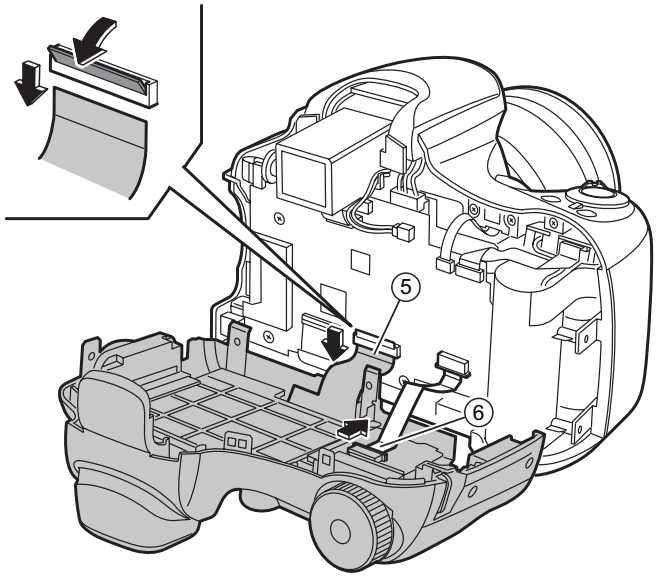
(3) Apply pressure in the direction of the arrow to disengage the catch for section A.

(4) Slowly remove the REAR CONST in the direction of the arrow.



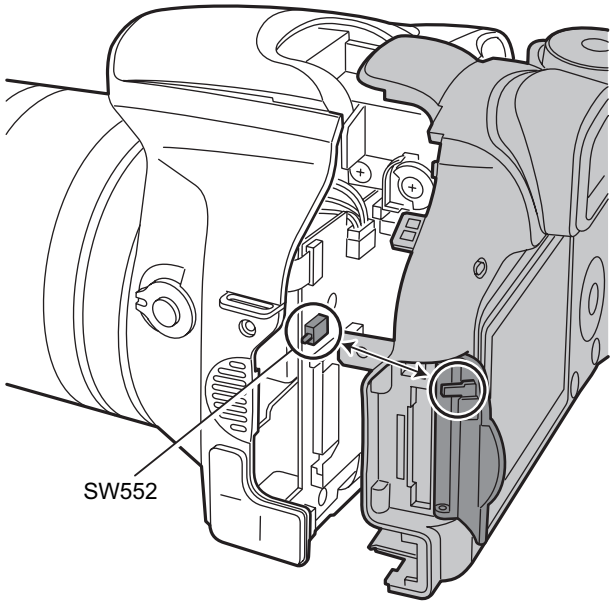
(5) Unlock the connector and remove the LCD FPC.

(6) Unlock the connector and remove the MAIN-KSW FPC.



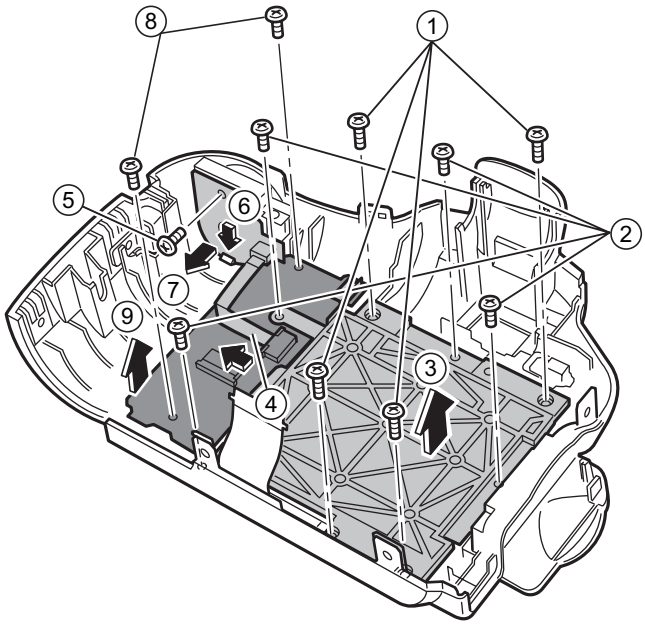
[Notes on Assembly]
Fit the REAR CONST into the F CASE with the CARD COVER open (to prevent damage to SW551).

[Assembly]
Assemble by performing the disassembly procedure in reverse.

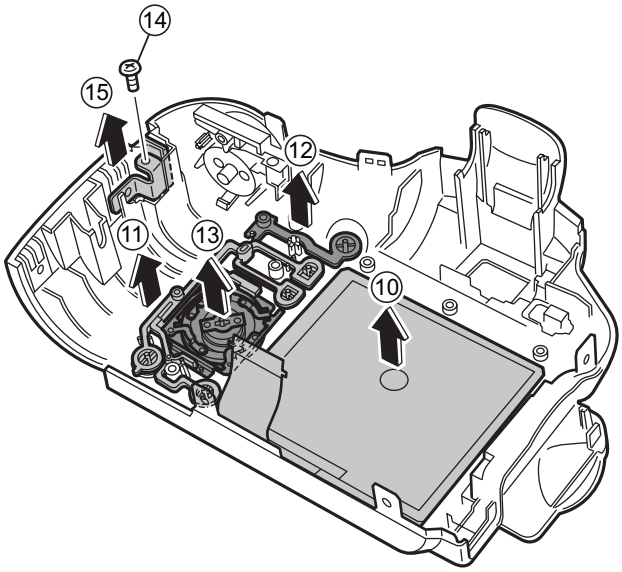


2-3. Disassembling the REAR CONST

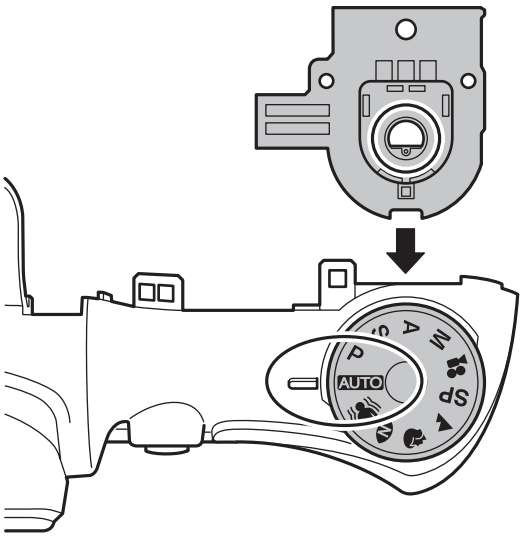
(1) Remove the 4 screws (M1.7 x 4.0).
(2) Remove the 4 screws (M1.7 x 4.0B).
(3) Remove the LCD FRAME.
(4) Unlock connector CN802 and remove the KSW-MSW FFC.
(5) Remove the screw (M1.7 x 4.0).
(6) Press the MSW-PWB locking catch in the direction of the arrow to release it.
(7) Remove the MSW-PWB in the direction of the arrow.
(8) Remove the 2 screws (M1.7 x 4.0).
(9) Remove the KSW-PWB in the direction of the arrow.



(10) Remove the LCD CONST in the direction of the arrow.
(11) Remove the FACE BUTTON in the direction of the arrow.
(12) Remove the REAR BUTTON in the direction of the arrow.
(13) Remove the CURSOR ASSY in the direction of the arrow.
(14) Remove the screw (M1.7 x 4.0).
(15) Remove the STRAP RIGHT in the direction of the arrow.



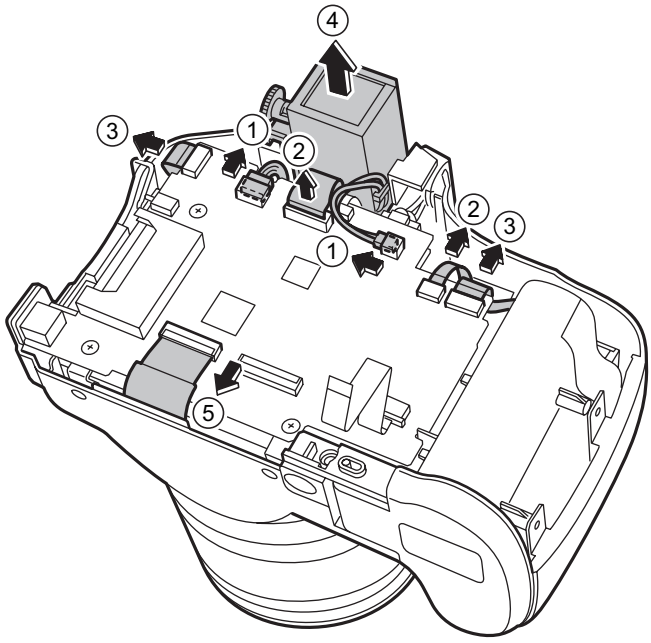
[Notes on Assembly]
When installing the MSW PWB in the R CASE, set the MODE DIAL to "AUTO" and set the selector dial on the MSW PWB to the position shown in the figure on the right.



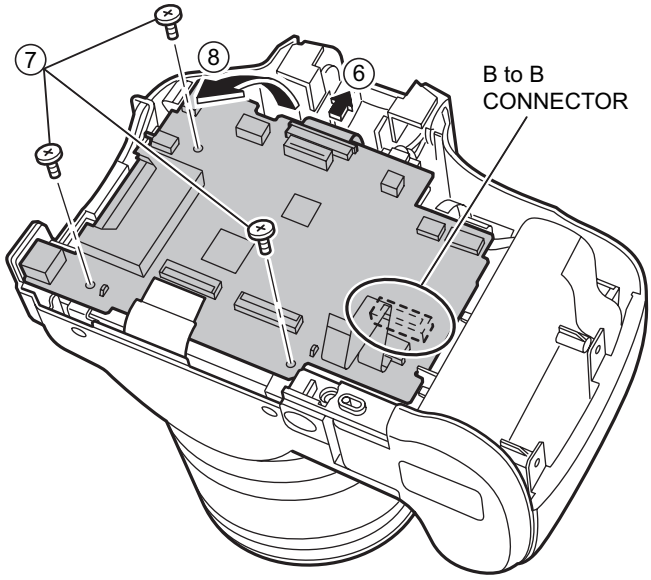
[Assembly]
Assemble by performing the disassembly procedure in reverse.

2-4. Removing the MAIN PWB ASSY and FLASH PWB ASSY

(1) Remove the 2 wire harnesses in the direction of the arrow.
(2) Remove the 2 FPCs in the direction of the arrow.
(3) Remove the 2 FFCs in the direction of the arrow.
(4) Remove the EVF UNIT in the direction of the arrow.
(5) Unlock the connector and remove the CCD FPC.



(6) Unlock the connector and remove the LENS MOTOR FPC.
(7) Remove the 3 screws (M1.7 x 2.5).
(8) Remove the B to B CONNECTOR and then remove the MAIN PWB ASSY in the direction of the arrow.



(9) Peel off the TAPE CONDENSER.

(10) Discharge the main capacitor.

Take care not to touch the main capacitor terminals before discharging the capacitor.

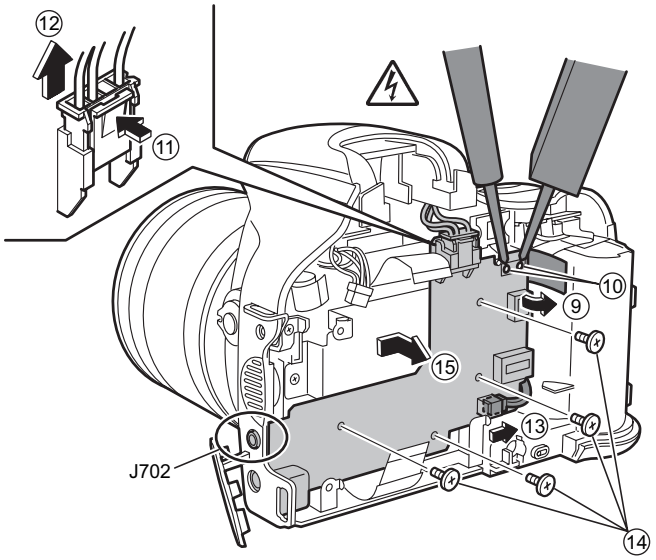
(11) Push the connector catch upwards.

(12) Remove the connector (FLASH CONST) in the direction of the arrow.

(13) Remove the connector (BATTERY CONST) in the direction of the arrow.

(14) Remove the 4 screws (M1.7 x 2.5).

(15) Push the FLASH PWB ASSY to the right and remove the AV jack alignment guide. Then pull the assembly outwards to remove it.

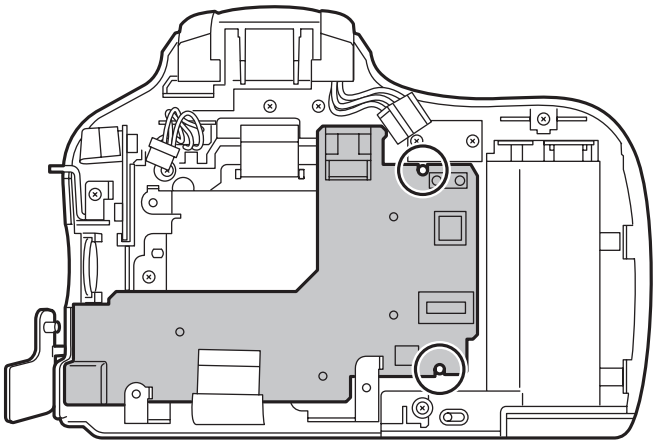


[Notes on Assembly]

Align the bosses for the FLASH PWB ASSY and F CASE so that they interlock in the correct position.

[Assembly]

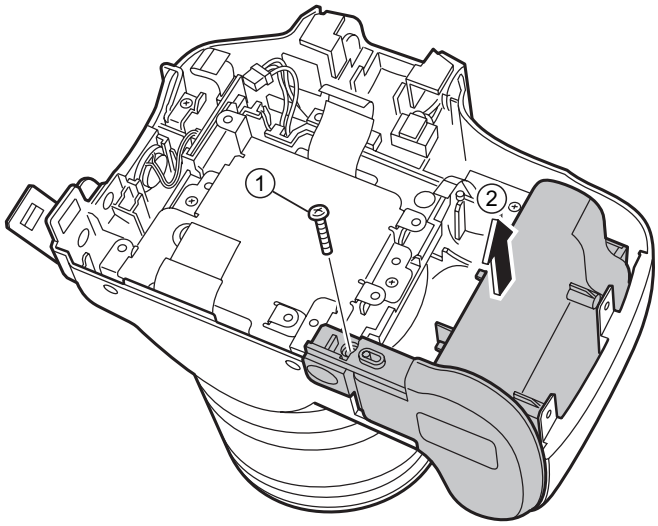
Assemble by performing the disassembly procedure in reverse.



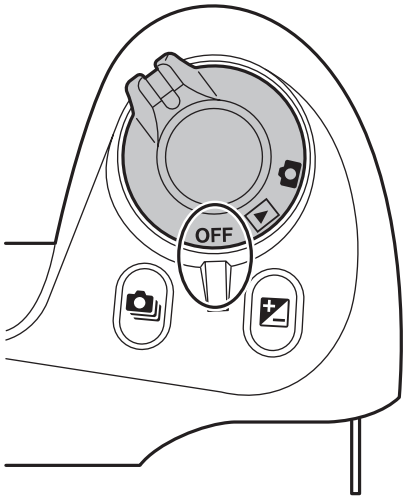
2-5. Removing the HOLDER BATTERY

(1) Remove the screw (M1.7 x 9.0).

(2) Remove the HOLDER BATTERY in the direction of the arrow.



[Notes on Assembly]
During HOLDER BATTERY assembly, set the RELEASE LEVER to OFF (to prevent damage to SW902 and SW903).

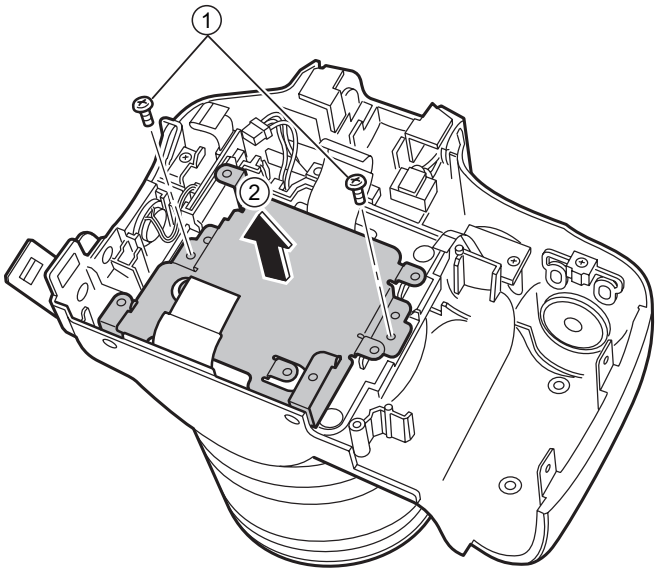


[Assembly]
Assemble by performing the disassembly procedure in reverse.

2-6. Removing the LENS ASSY

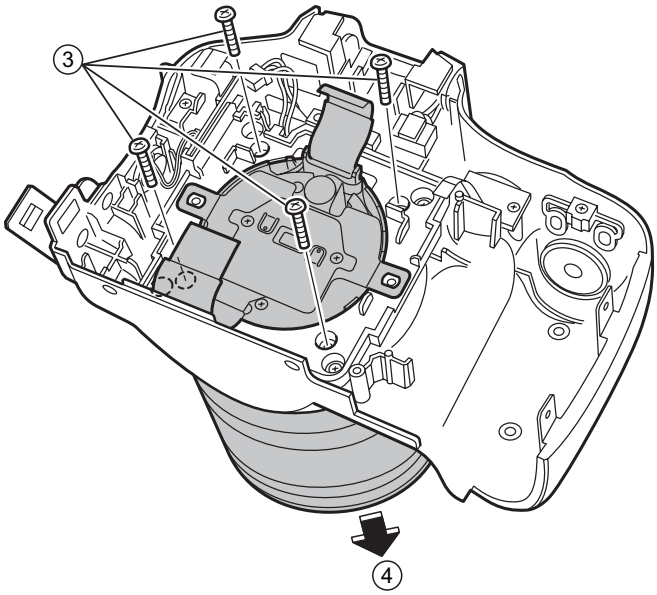
(1) Remove the 2 screws (M1.7 x 4.0).

(2) Remove the MAIN FRAME in the direction of the arrow.



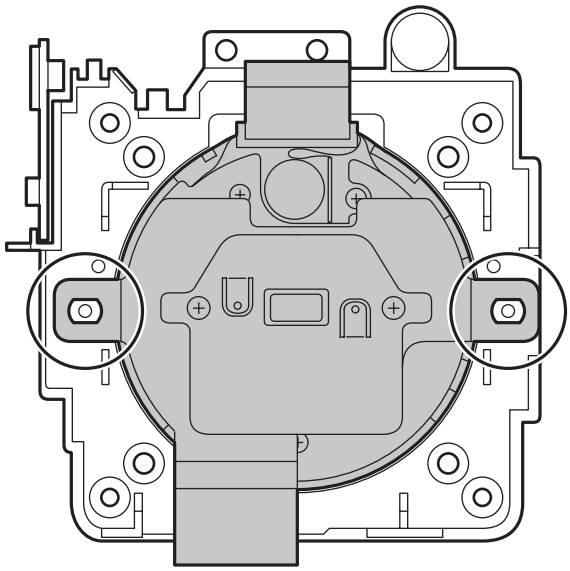
(3) Remove the 4 screws (M2.0 x 10.0).

(4) Remove the LENS ASSY in the direction of the arrow.



[Notes on Assembly]

Arrange the CCD FPC GND flap as shown in the figure on the right.

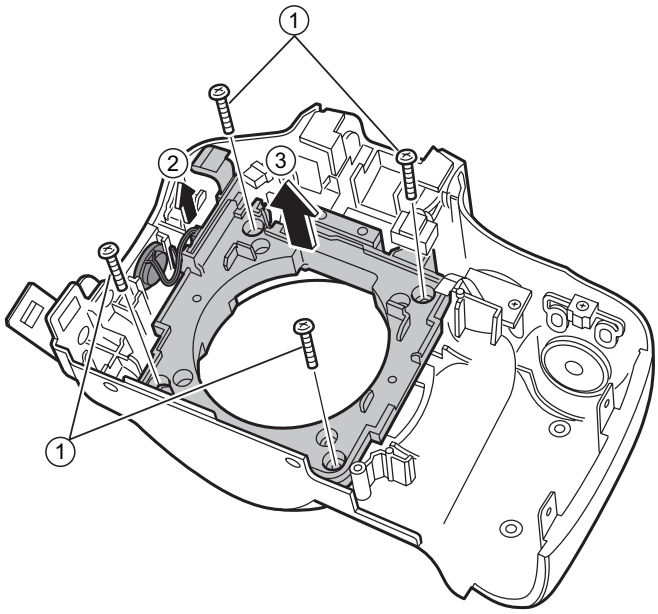


[Assembly]

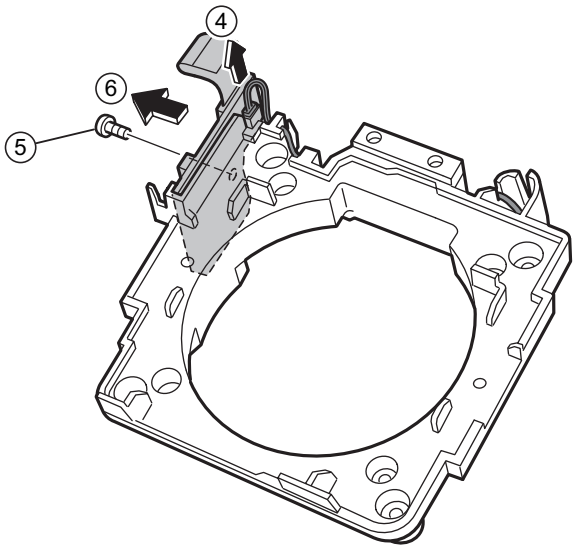
Assemble by performing the disassembly procedure in reverse.

2-7. Removing the LENS HOLDER

(1) Remove the wire harness (SPEAKER).
(2) Remove the 4 screws (M2.0 x 9.0).
(3) Remove the LENS HOLDER in the direction of the arrow.

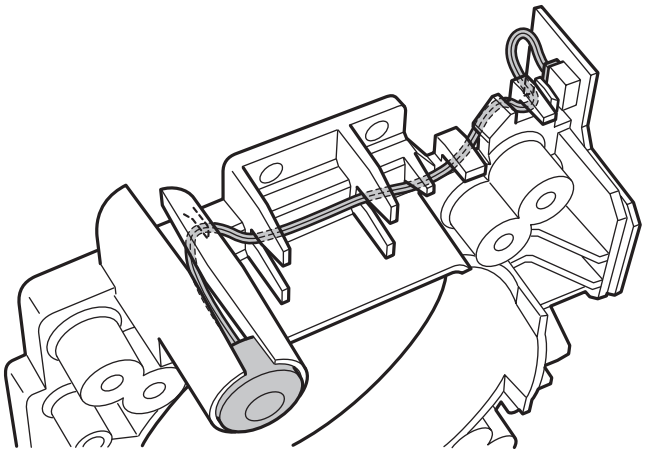


(4) Remove the wire harness (MIC).
(5) Remove the screw (M1.7 x 4.0).
(6) Remove the SSW PWB ASSY in the direction of the arrow.

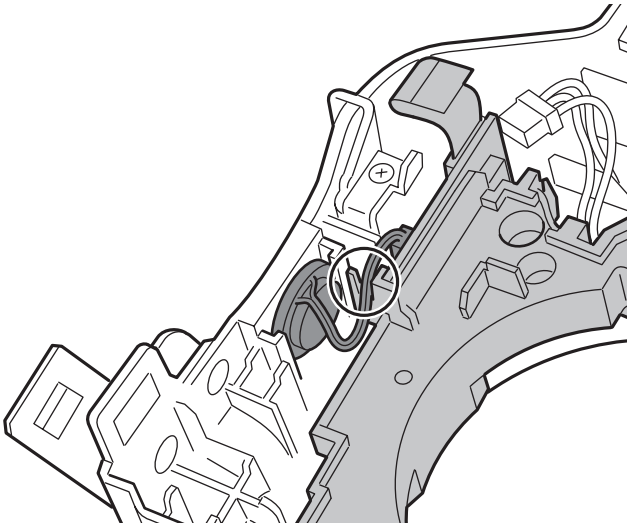


[Notes on Assembly]

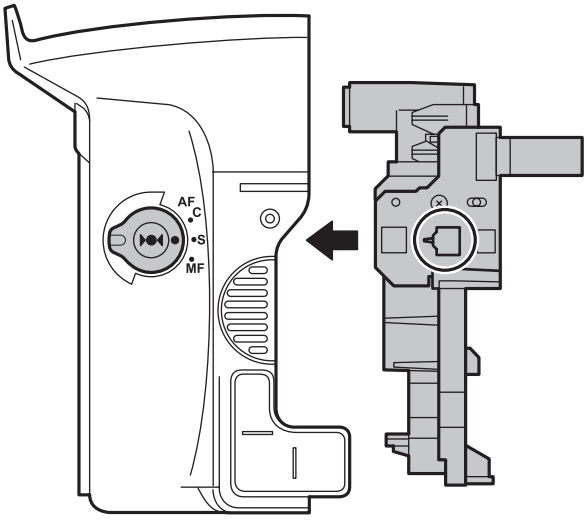
• Arrange the MIC wire harness as shown in the figure on the right.



• Arrange the SPEAKER wire harness as shown in the figure on the right.



• Assemble with the focus mode selector switch set to the "S" position.



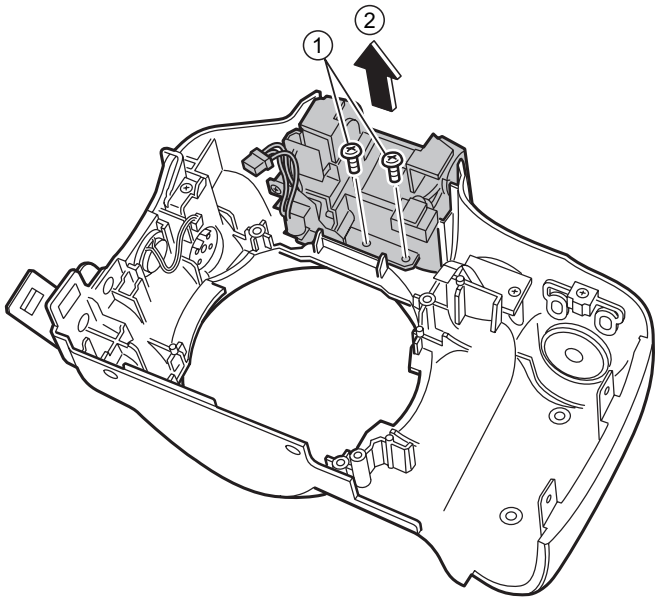
[Assembly]

Assemble by performing the disassembly procedure in reverse.

2-8. Removing the FLASH CONST

(1) Remove the 2 screws (M1.7 x 4.0).
(2) Remove the FLASH CONST in the direction of the arrow.

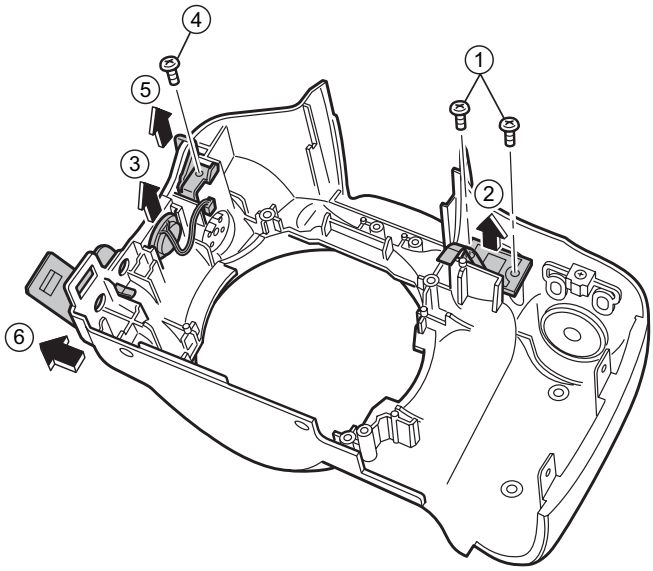
[Assembly]
Assemble by performing the disassembly procedure in reverse.



2-9. Removing the FRONT CONST

(1) Remove the 2 screws (M1.7 x 4.0).
(2) Remove the AFLED CONST in the direction of the arrow.
(3) Remove the SPEAKER ASSY in the direction of the arrow (taking care not to pull the wire harness).
(4) Remove the screw (M1.7 x 4.0).
(5) Remove the STRAP LEFT in the direction of the arrow.
(6) Remove the COVER JACK in the direction of the arrow.

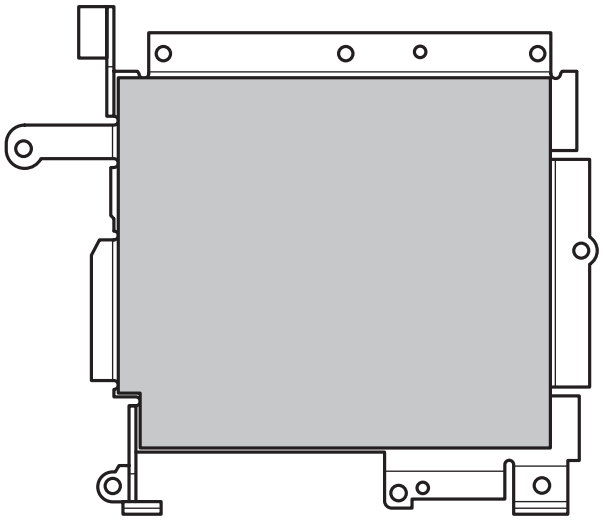
[Assembly]
Assemble by performing the disassembly procedure in reverse.



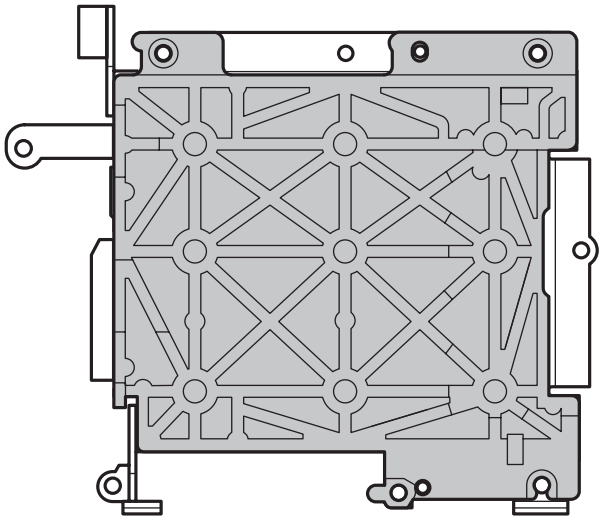
2-10. Specifications for the sheet component attachment locations

2-10-1. Affixing the REINFORCEMENT LCD

(1) Attach the LCD FRAME TAPE to the LCD FRAME as shown in the figure on the right.

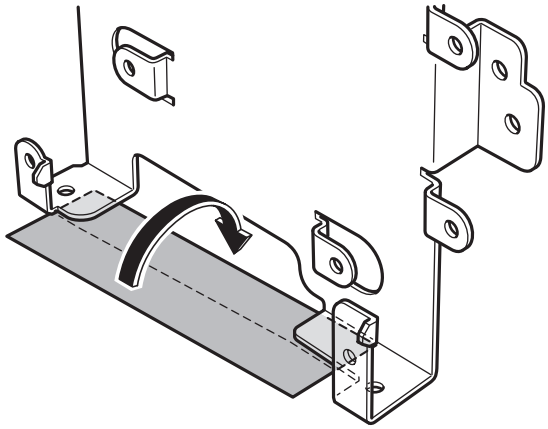


(2) Align the LCD FRAME bosses and attach the REINFORCEMENT LCD.



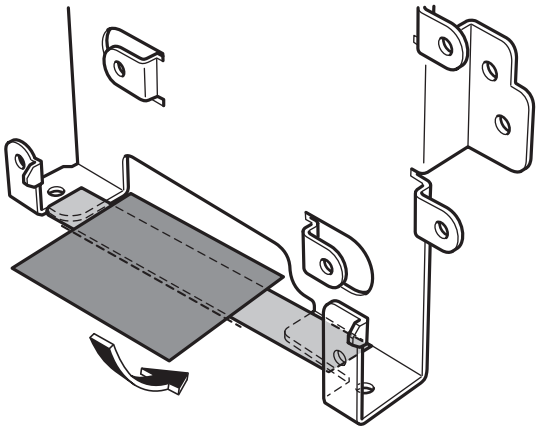
2-10-2. Affixing the MF SHEET

(1) Attach the MF SHEET to the MAIN FRAME as shown in the figure on the right.



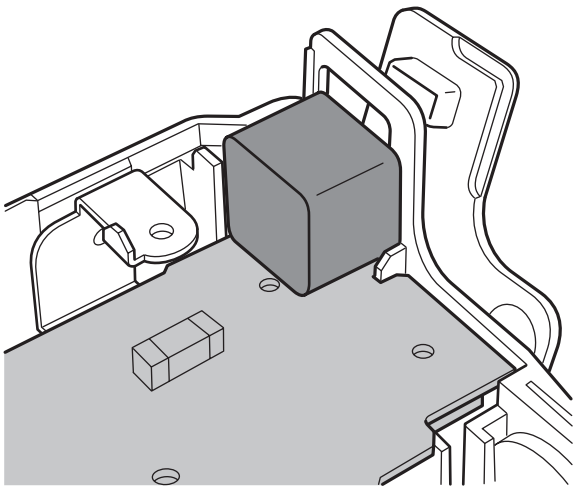
(2) Stick the UL TAPE around the central section of the MF SHEET, ensuring that the MF SHEET and the EMI SHEET CCD on the CCD FPC are not touching.

Tape size: 24 ± 2 mm x 19 mm



2-10-3. Affixing the FLASH PWB GASKET

(1) Affix as shown in the figure on the right.



MEMO

3. Schematics

3-1. Cautions

<Cautions when replacing parts>

- Do not reuse removed parts. Always use new parts.
- Note that the negative side of tantalum condensers is readily damaged by heat.
- Except for chemical condensers and tantalum condensers, voltage is not displayed on condensers with a voltage resistance of 50V or less.
- Resistors not marked are 1/16W chip resistors.
- KΩ = 1000Ω, MΩ = 1000KΩ
- B characteristics of variable resistors and semi-fixed resistors are not displayed.

3-2. Basic Block Names and Functions

Part name	Block name	Function
LENS ASSY	CCD FPC BLOCK	CCD Output
MAIN PWB ASSY	AV BLOCK	Audio/Video IN/PIT (IC281)
	CAMERA BLOCK	CCD Output A/D Conversion (IC102)
	DCDC BLOCK	Power Supply Generation (I301, IC305), Power Control
	EVF BLOCK	EVF Control (IC452)
	FDI BLOCK	Face Detection Signal Processing (IC651)
	FLASH JACK BLOCK	Flash Charge and Discharge
	KEY BLOCK	SSW Input, RSW Input, KSW Input
	LCD BLOCK	LCD Output CN, Back Light Control
	MOTOR BLOCK	Shutter/Iris/AF Drive (IC151)
	PMAN BLOCK	Power Control, LED Driver, Flash Charge Control (IC401)
	PROCESS BLOCK (IO)	Image Signal Processing (IC201: 1/3)
	PROCESS BLOCK (PW)	Power Input (IC201: 2/3)
	PROCESS BLOCK (SYS)	System Control, USB Communications (IC201: 3/3)
	AF LED BLOCK	AF_LED Output
	CN BLOCK	Connection with the FLASH PWB
	EMI BLOCK	High Frequency Noice Reduction
	LCD DATA7 BLOCK	LCD Signal Compensation
	MEDIA BLOCK	Media Data IN/OUT
	PLUNGER BLOCK	Flash Pop-up
	USB BLOCK	USB Signal IN/OUT
KSW PWB	KSW BLOCK	Key Switch, Interface for MSW
FSW PWB	FSW BLOCK	Flash Pop-up Detection
MSW PWB	MSW PWB	Camera Mode Select
RSW PWB	RSW PWB	Release, Camera/Play/Power, +/- Drive Input
XE PWB	XE BLOCK	Flash Firing
SSW PWB	SSW BLOCK	Mic, One-touch AF, AF/MF/C-AF Input, Speaker Output

3-3. Description of Main Block Functions

3-3-1. Technical Overview

The FinePix S6000fd/S6500fd features the new "Face Kirei-Navi" function -- the world's fastest face detection function -- developed using the "Image Intelligence?" ultra-high quality digital image processing software. You just press a button to set "Face Kirei-Navi" and the camera can detect up to 10 people's faces at once in as little as 0.05 seconds. It then focuses on a person's face and automatically selects the correct brightness for that face.
Thanks to the super-efficient light capturing capacity of the "Super CCD Honeycom VI HR" and the "Real Photo Engine II" image processing engine, the FinePix S6000fd/S6500fd can shoot full-pixel images with 6.3 million effective pixels even at ultra-high sensitivities of ISO 3200. It also features "iFlash", which recognizes the distance to the main subject of the shot and gauges the subject's size and position in the overall image. This enables it to automatically select the ideal flash brightness and sensitivity setting so that features such as skin tones are captured perfectly with no flaring.
The 10.7x zoom lens provided on the FinePix S6000fd uses high-definition Fujinon optics and an ultra-wide 28-300 mm focal range, so you can use just one lens for almost any type of shot. At 28 mm it is perfect for landscapes and snapshots while the 300 mm focal length is ideal for sporting events, concerts and portraits. The S6000fd/S6500fd is packed with functions built around the latest FUJIFILM technology, including the popular "high sensitivity dual-shot" function, which lets you record 2 continuous images of the same shot, one taken with the flash and one without. Also included is the Picture Stabilization mode for truly impressive telephoto images and crystal-clear shots of sporting events.

CCD signal processing/Camera circuit section

- Analog signals output from the 1/1.7 type Super-CCD Honeycom VI HR (IC951), with an effective pixel count of 6.3 mega-pixels, undergo false color compensation processing, adaptive interpolation processing, amplification (AGC) and signal mixing inside the CCD signal processing IC “BCS_MCM (IC102)” before being converted to 14-bit digital signals (A/D) and sent to the signal processing LSI “NCS_L (IC201)”.
- The CCD drive circuit, H drive, and V drive are installed in [BCS_MCM (IC102)].

Motor Circuit Section

- The signal processing LSI “NCS_L (IC201)” that has received various operating switch commands manages the motor drive IC (IC151) and controls the AF, SHUTTER, ZOOM and IRIS motors.

Imaging and Signal Processing Section

- Input data from the CCD
  14-bit digital image data (corresponding to 1H) that has been output from the imaging section (CCD/Camera Block) is sent to the signal processing LSI “NCS_L (IC201)”, converted to 32-bit (16-bit x 2) data by the [internal buffer] inside this LSI, and the image data for one frame (2848 x 2136 pix) is stored temporarily in [SD-RAM]. It is also integrated in the [AUTO operation section] using the 32-bit the signal processing LSI “NCS_L (IC201)” image data and sent to the BCS_MCM (IC102) to obtain the appropriate AE/AF/AWB.
- Record processing to xD Card
  Image data stored in SD-DRAM is sent one frame at a time to the internal [signal processing section] in the signal processing LSI “NCS_L (IC201)”. In a process called unpacking, “32-bit to 12-bit conversion” and “pre-processing including digital clamp, white balance and noise reduction processing, linear matrix processing, gamma correction and R/G/B 14-bit to R/G/B 8-bit conversion” to “8-bit digital R/G/B signals to Y:Cb:Cr = 4:2:2 YC processing” are implemented in this [signal processing section] and 8-bit Y/Cb/Cr image data are sent to the [internal buffer].
  The “rearrangement of data in a format in which 8-bit Y/Cb/Cr signals are easily compressed” is done in the [internal buffer] and after passing through the [JPEG operation block] to the [media controller], they are recorded on the xD card.
- Reproduction of images from xD card
  Compressed image data from the xD card is sent as 8-bit image data to the signal processing LSI “NCS_L (IC201)” then it is sent to the [media control section], the [DMA unit] and the SD-DRAM and then it is sent to the [media controller], to the [JPEG operation section] and to the [signal processing section].
  In the [signal processing section], 8-bit Y/Cb/Cr signals are converted to 8-bit R/G/B signals and at the same time, lettering display signals are weighted and passed through the [LCD controller to the LCD unit and displayed.
- Image capture system adjustment data are stored in the Flash ROM.

LCD Unit

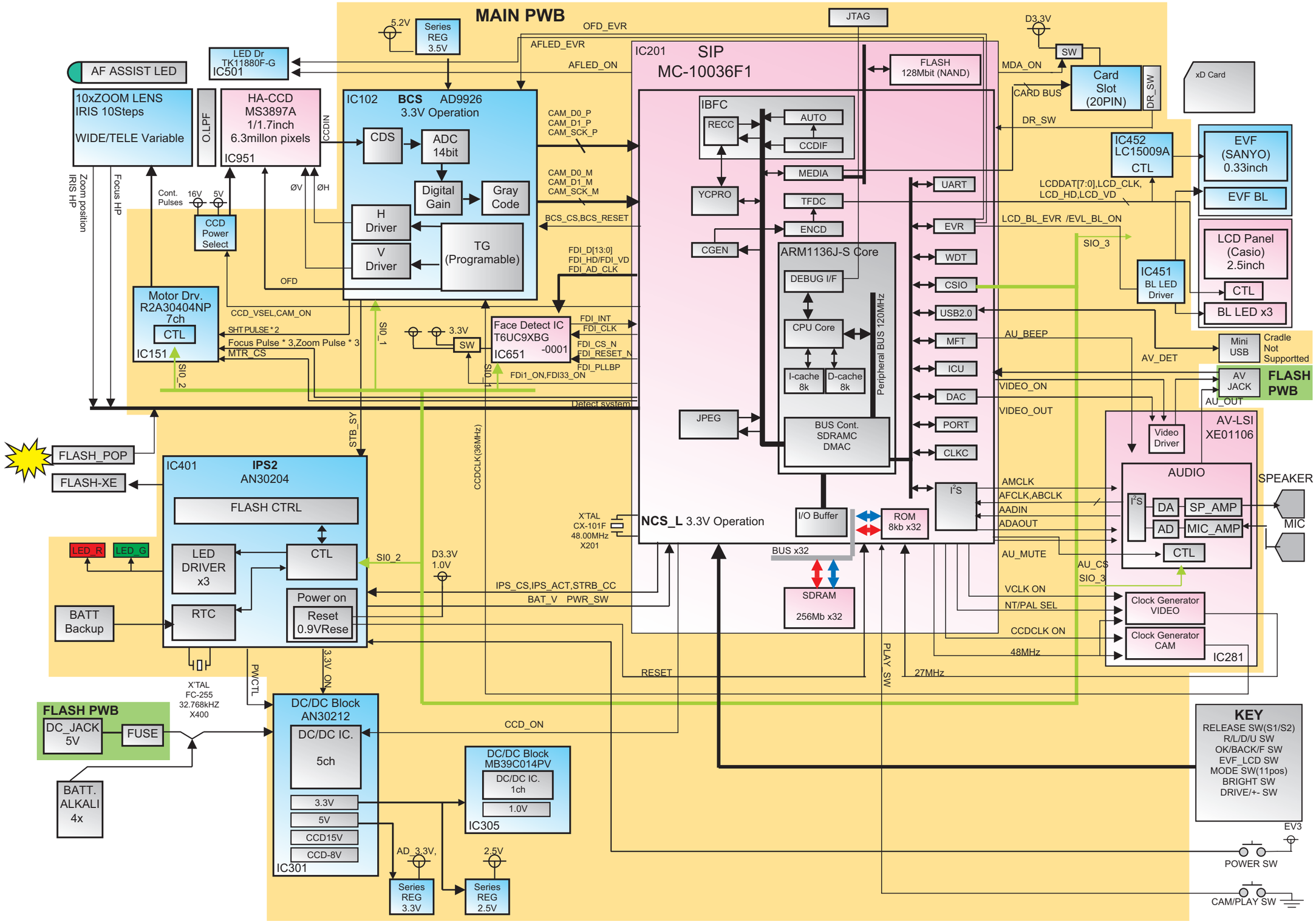
- Digital signals from the signal processing LSI "NCS_L (IC201)" are sent directly to the LCD. And signals processed by the EVF CONTROL IC (IC452) are sent to the EVF.

Power Supply Section

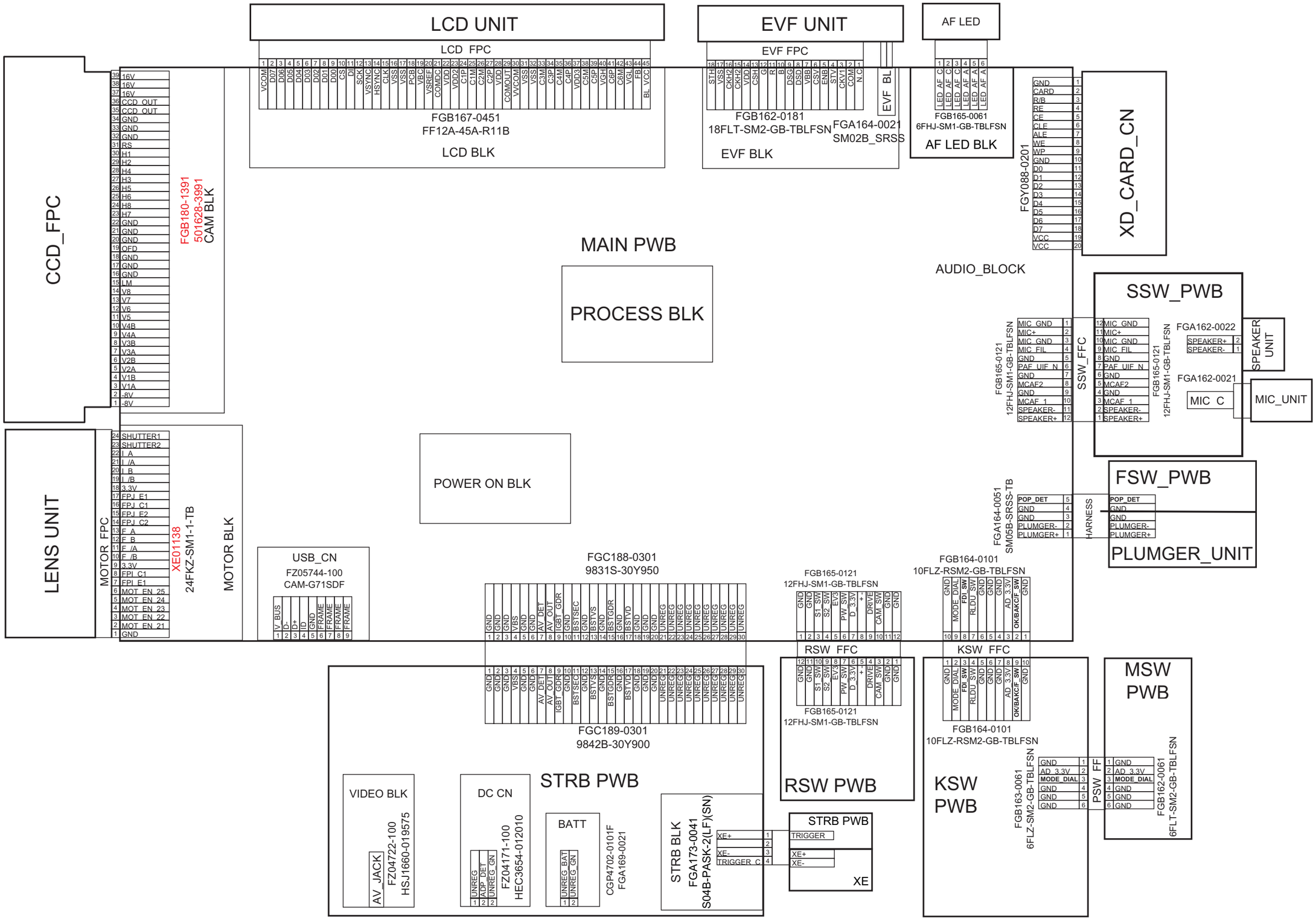
- Power supply circuits constructed in the core of the DC IC (IC300) create the following power supplies, which are supplied to each block.

+3.3VRUN	[IC281 (AV BLOCK), IC501 (AF LED BLOCK)]
+3.3VDOUT	[IC401 (PMAN BLOCK), IC201 (NCS_L), IC457 (LCD DATA7 BLOCK), CN261 (MEDIA BLOCK), IC271 (AV BLOCK), IC452 (EVF BLOCK), IC151 (MOTOR BLOCK)]
+3.3VAOUT	[IC452 (EVF BLOCK), IC201 (NCS_L)]
+15VRUN	[IC102 (CAMERA BLOCK)]
+5VAD	[IC102 (CAMERA BLOCK), IC451 (LCD BLOCK), IC401 (PMAN BLOCK)]
+3.3VCAM	[IC102 (CAMERA BLOCK)]
+5VRUN	[Q452 (EVF BLOCK), IC451 (LCD BLOCK), IC401 (PMAN BLOCK)]
+1VNCS	[IC651 (FDI BLOCK), IC401 (PMAN BLOCK)]
+3.3VNCS	[IC651 (FDI BLOCK), IC401 (PMAN BLOCK)]
+5VMOT_VM1	[IC151 (MOTOR BLOCK)]
+5VMOT_VM2	[IC151 (MOTOR BLOCK)]
+2.5VRUN	[IC201 (NCS_L)]
+1VRUN	[IC201 (NCS_L)]
-8V	[IC951 (CCD FPC BLOCK)]
15V	[IC951 (CCD FPC BLOCK)]

3-4. Block Diagram

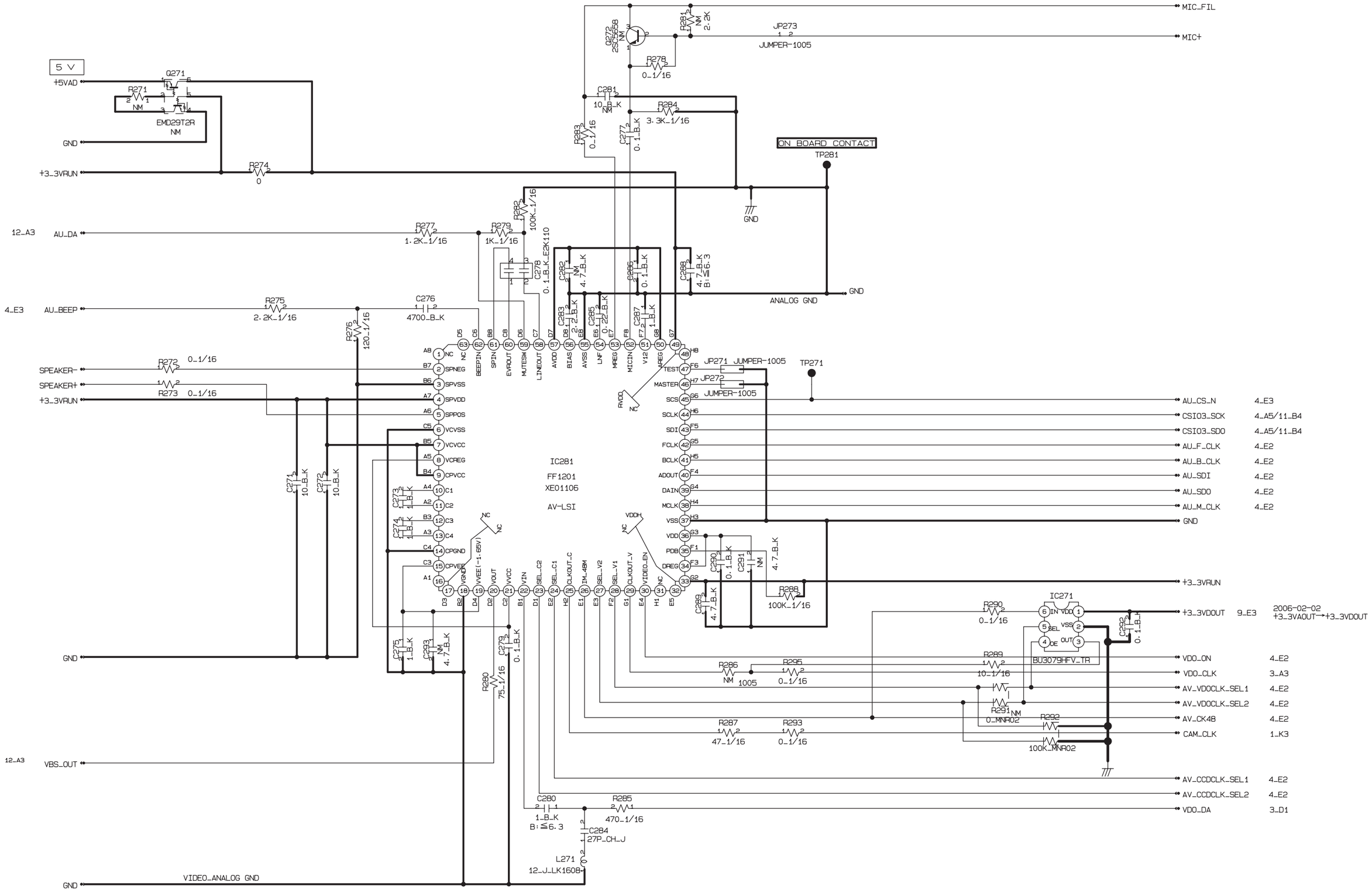


3-5. Overall connection Diagram

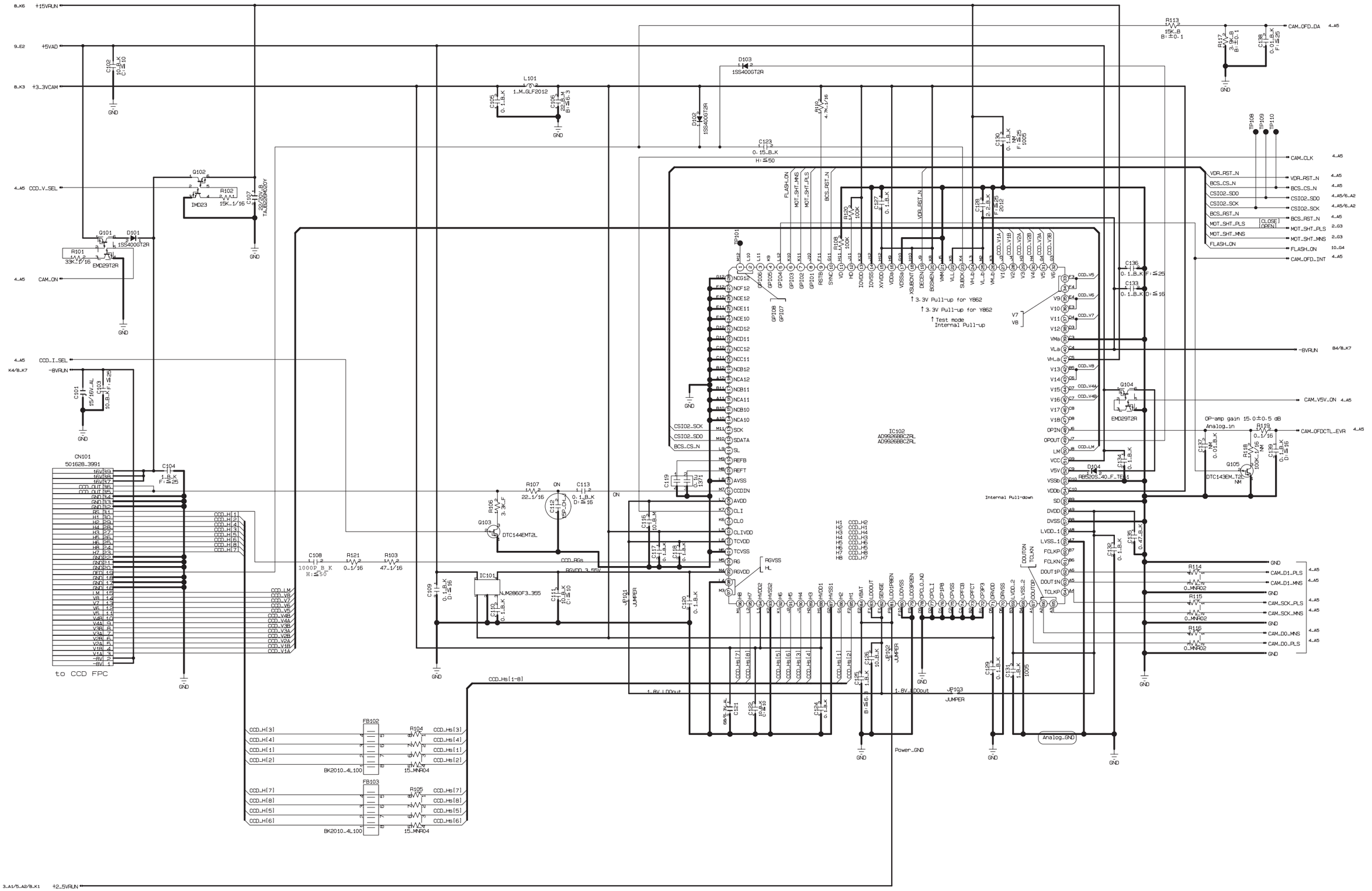


3-6. Circuit Diagrams

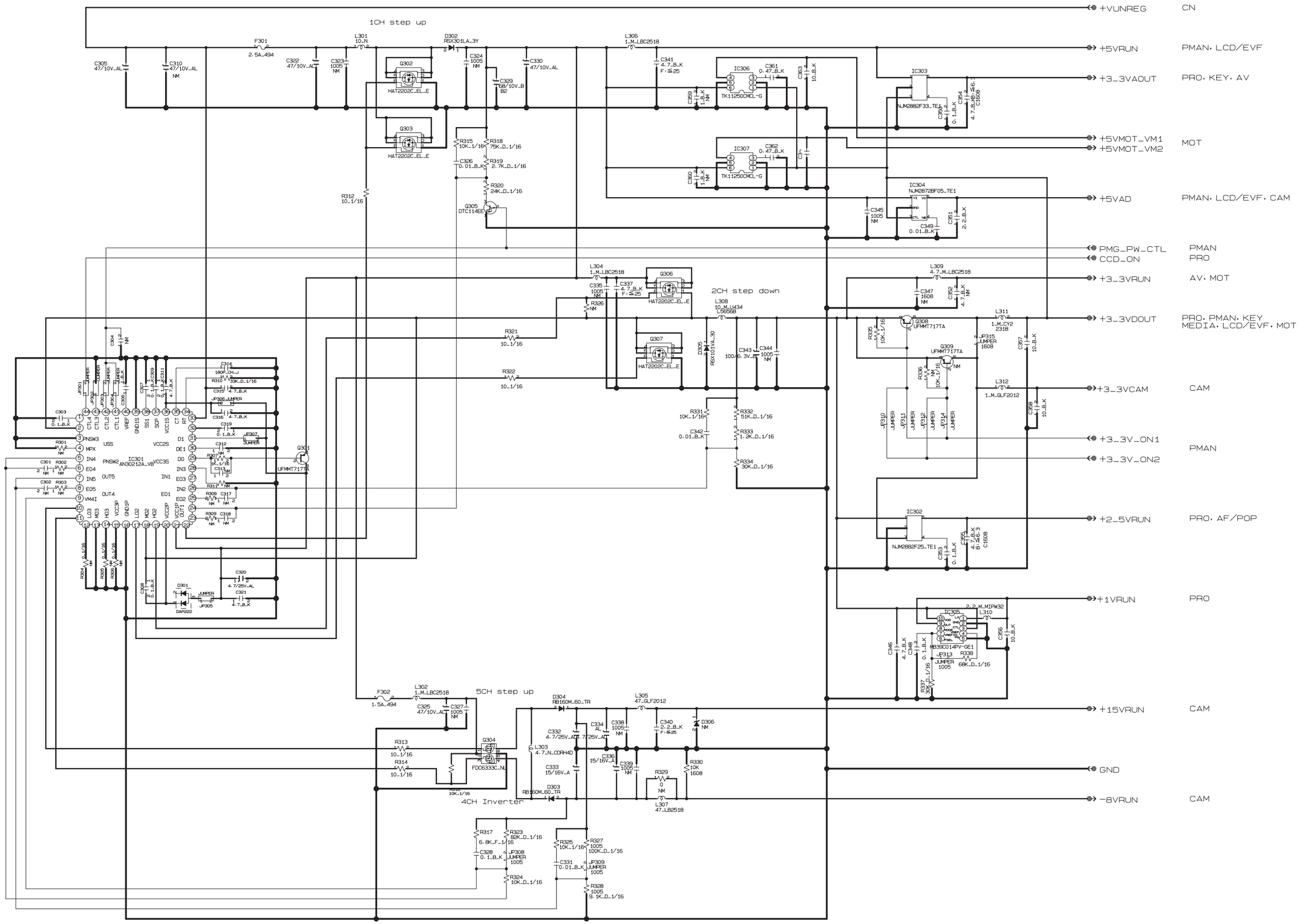
3-6-1. AV BLOCK



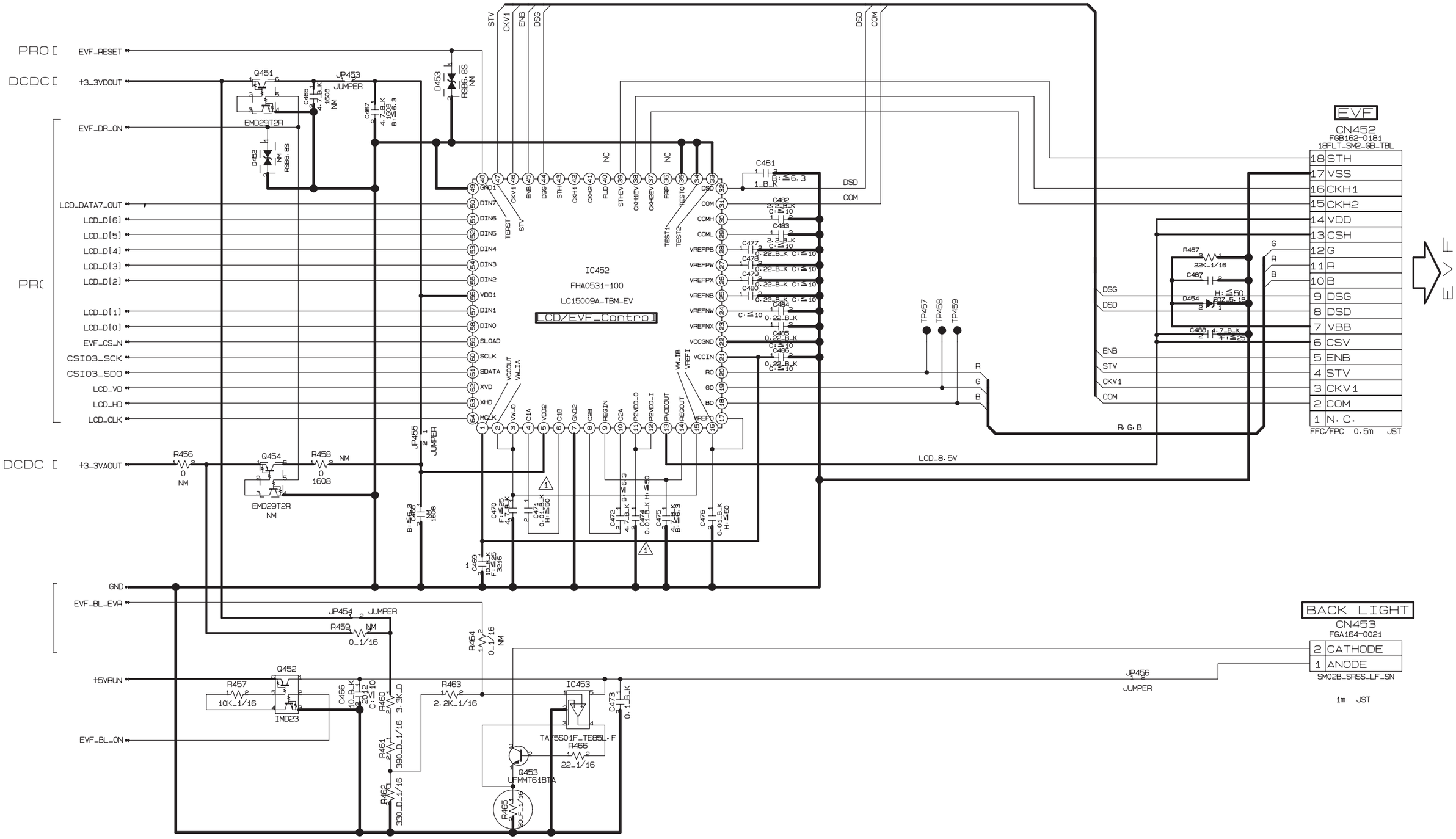
3-6-2. CAMERA BLOCK



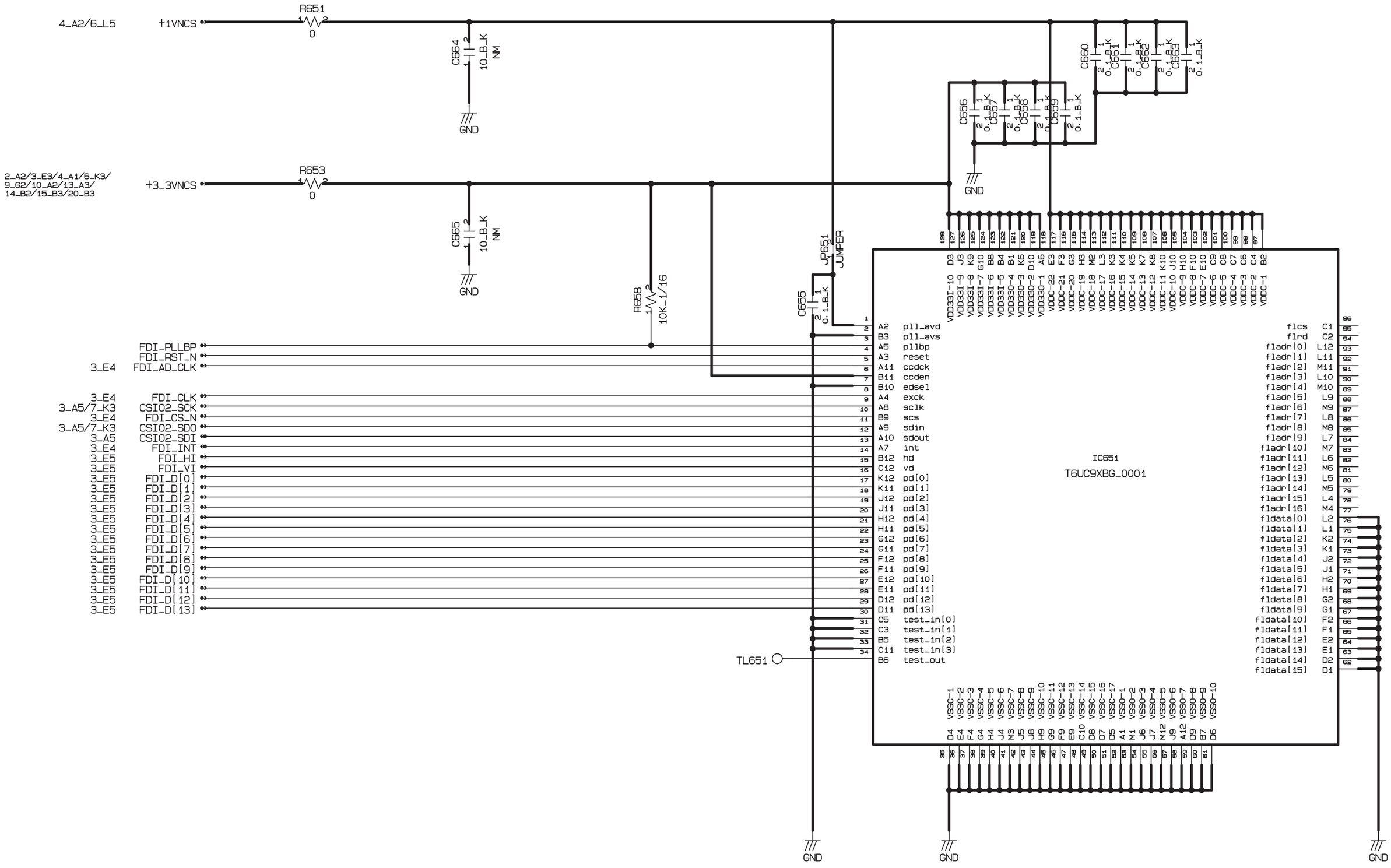
3-6-3. DCDC BLOCK



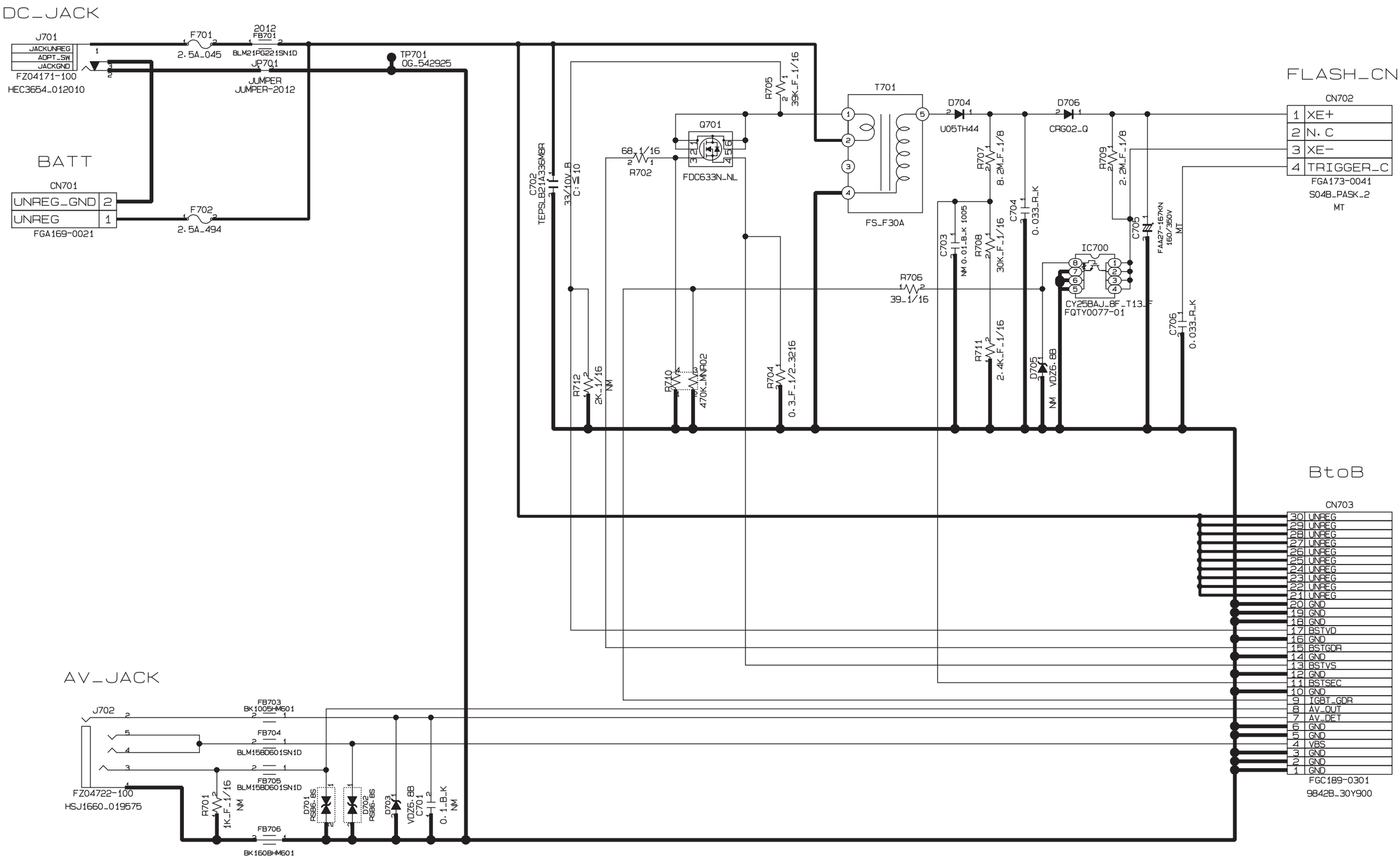
3-6-4. EVF BLOCK



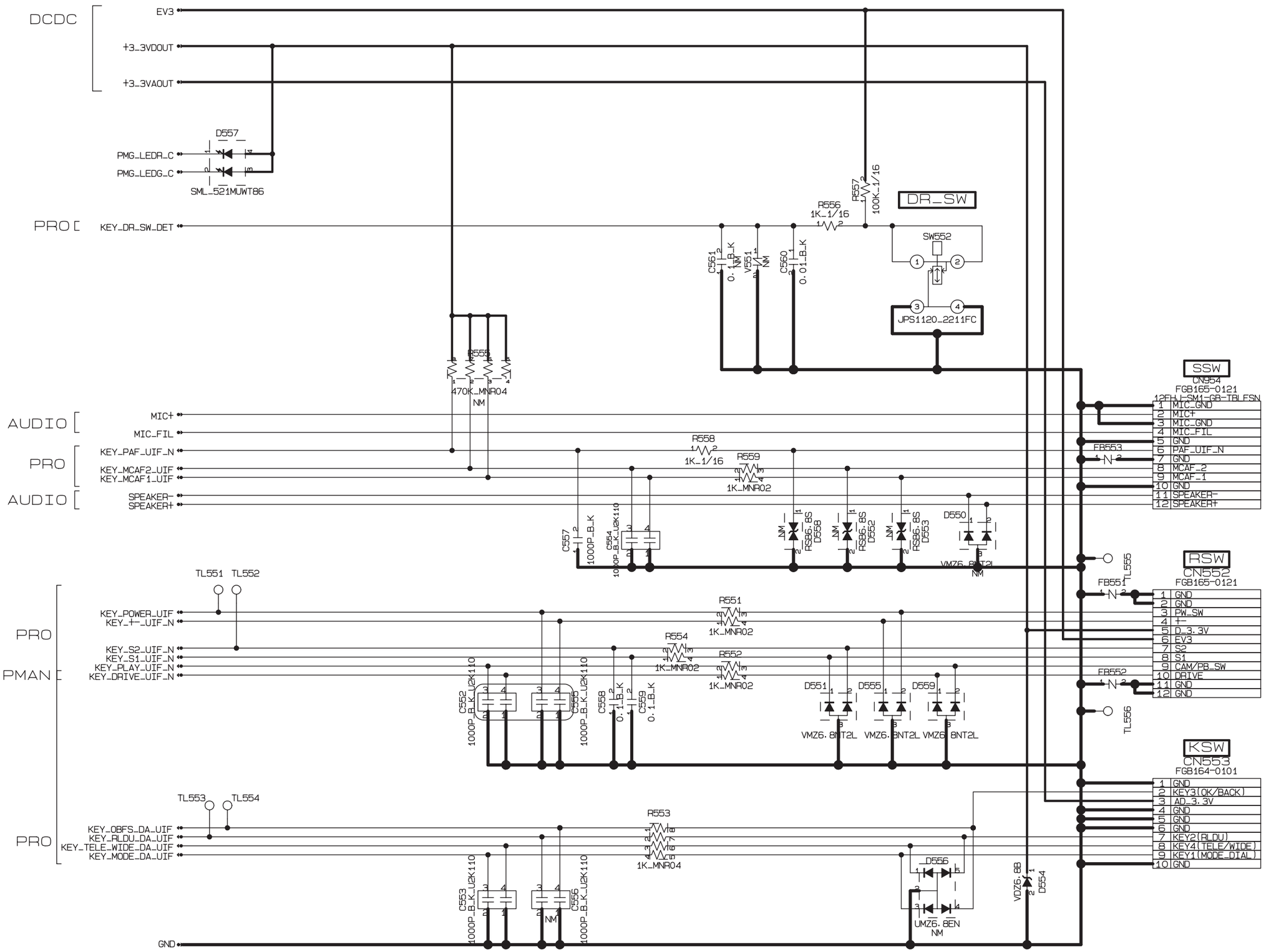
3-6-5. FDI BLOCK



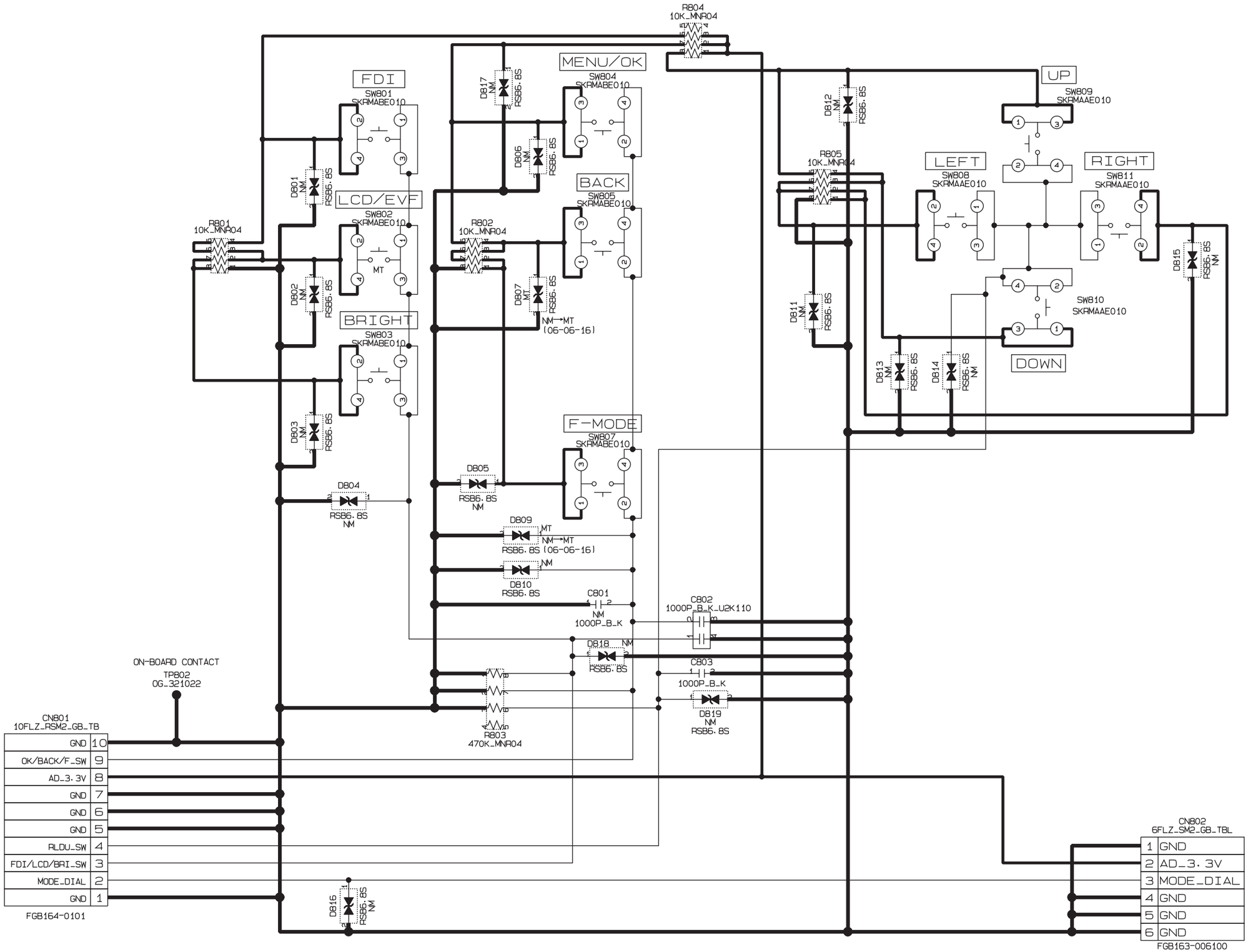
3-6-6. FLASH JACK BLOCK



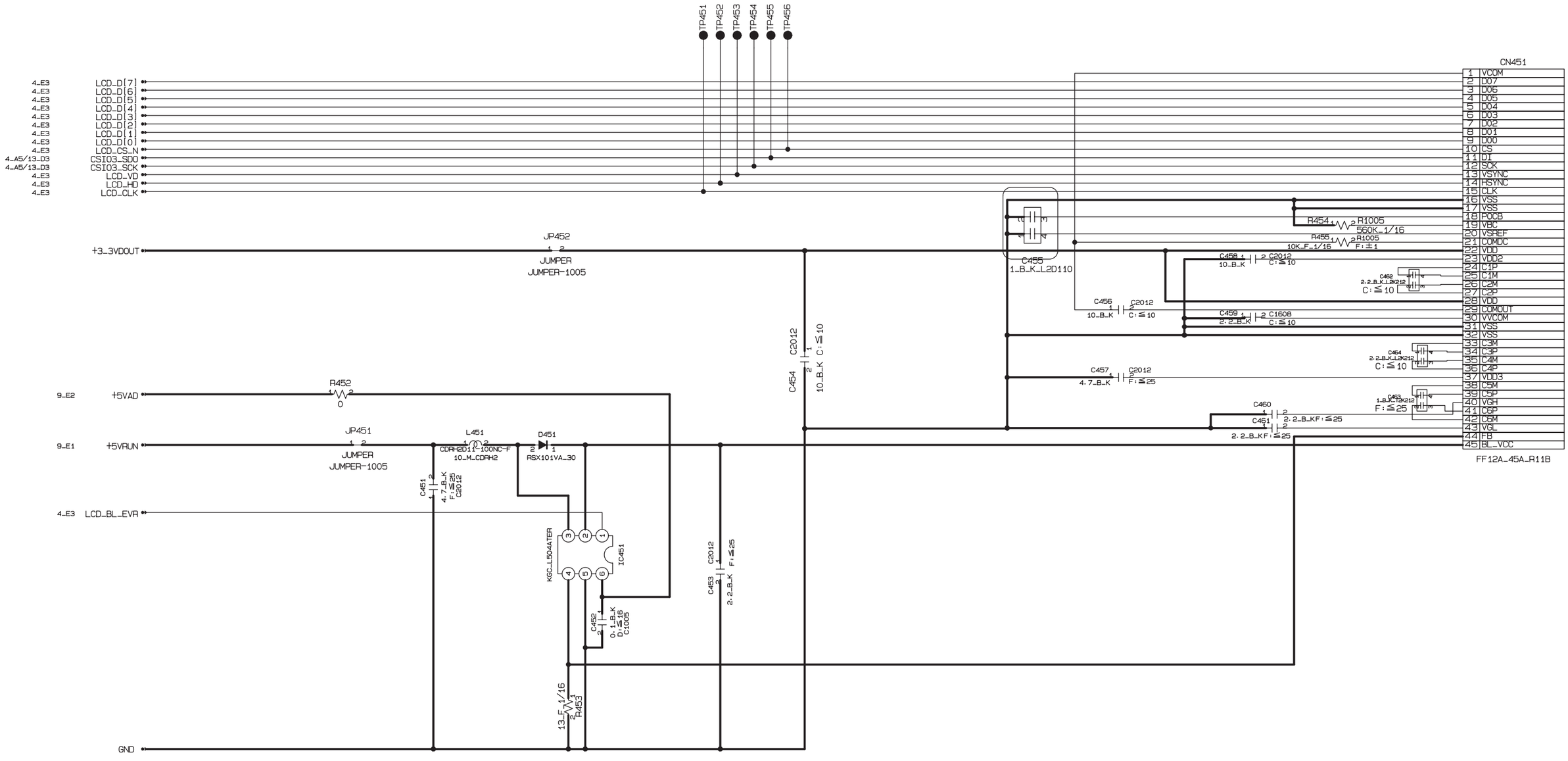
3-6-7. KEY BLOCK



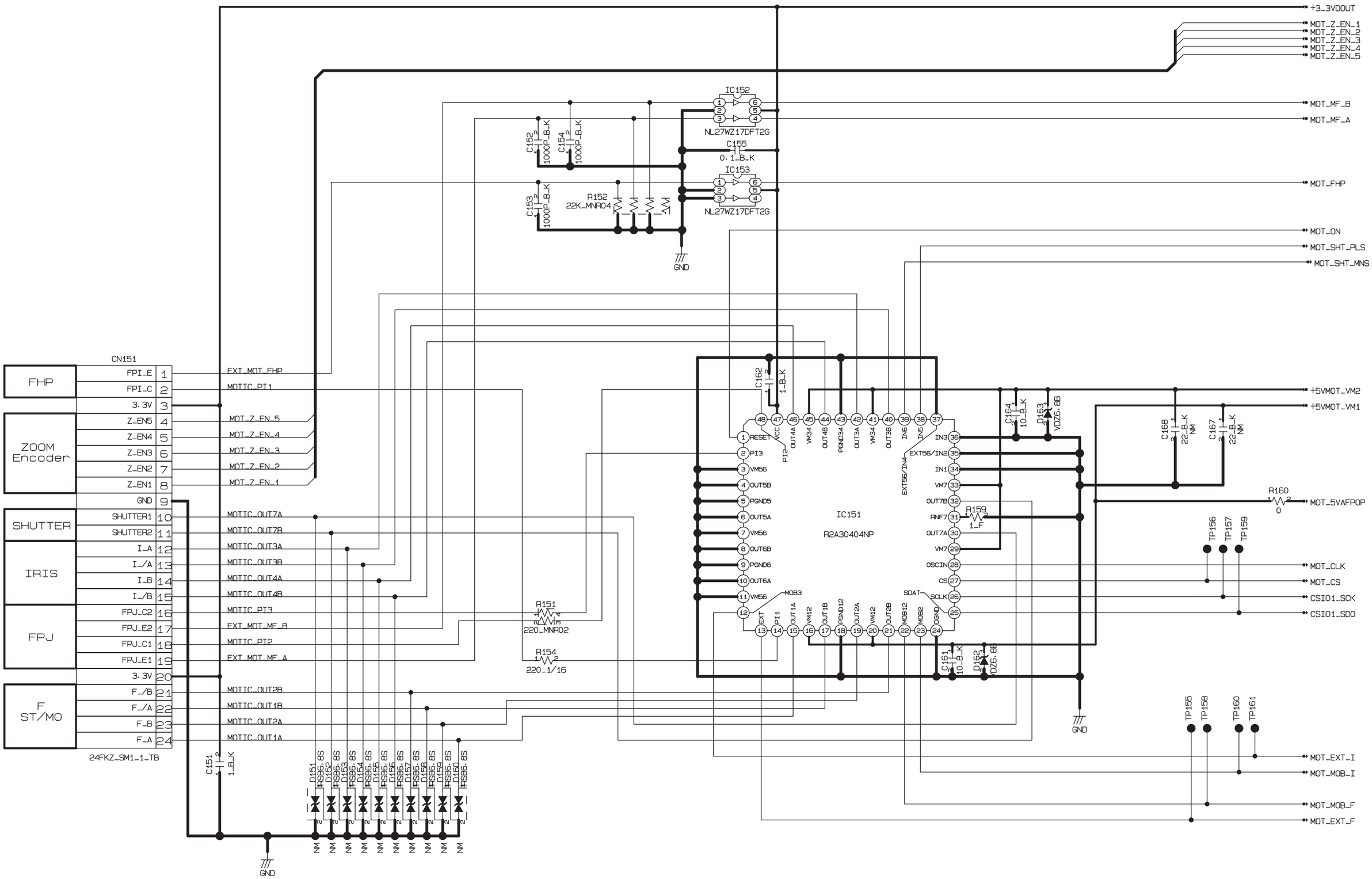
3-6-8. KSW BLOCK



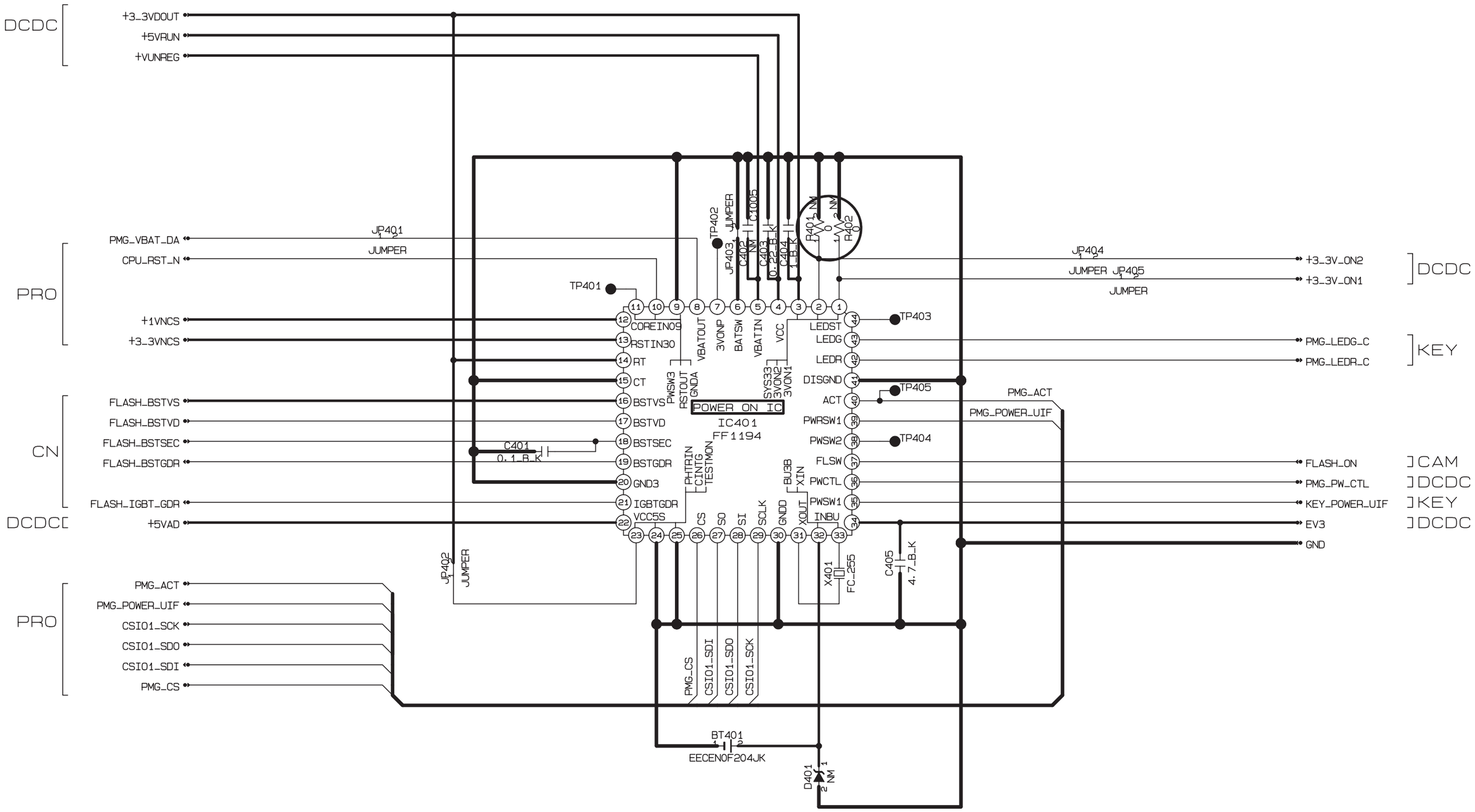
3-6-9. LCD BLOCK



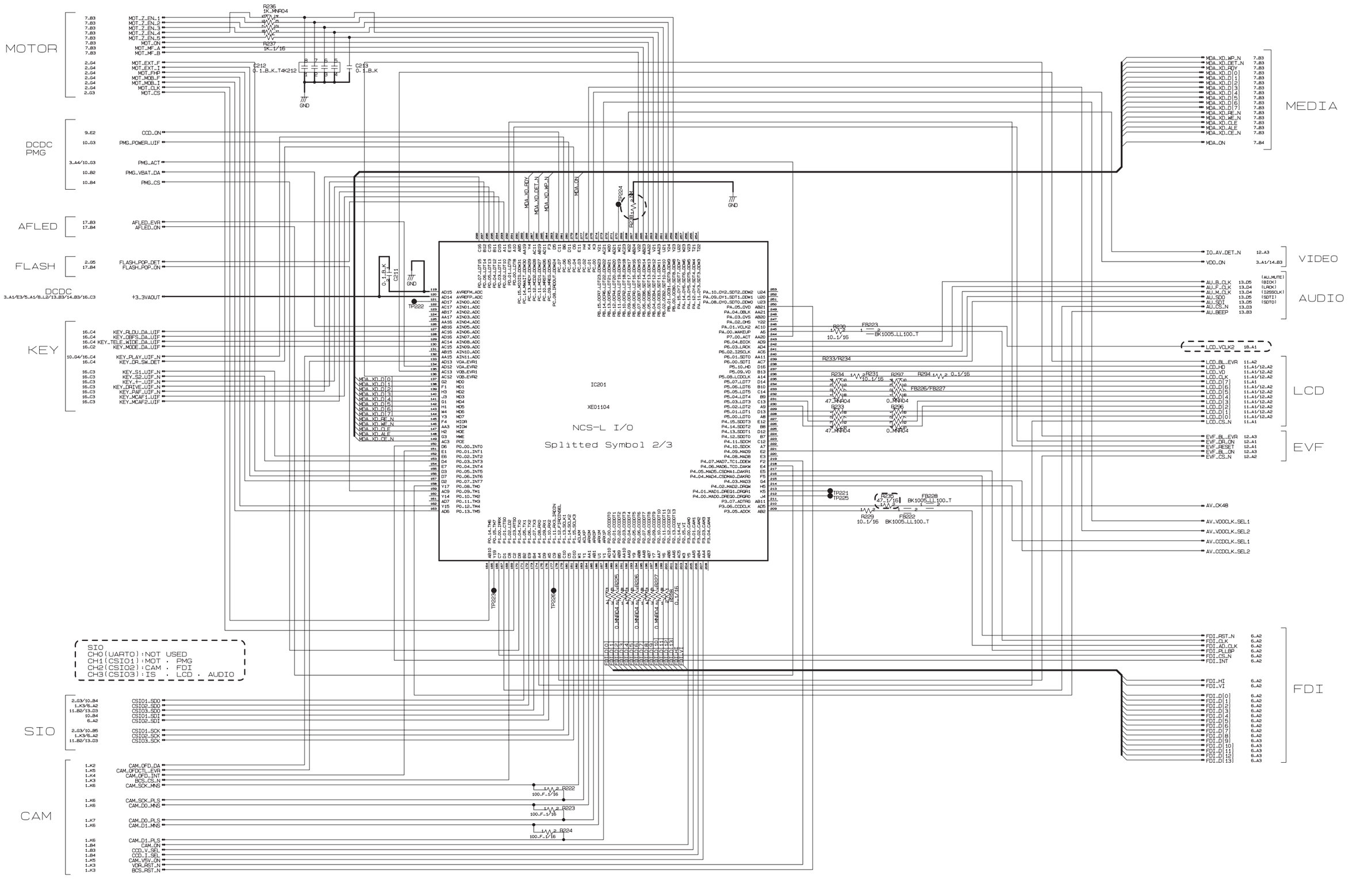
3-6-10. MOTOR BLOCK



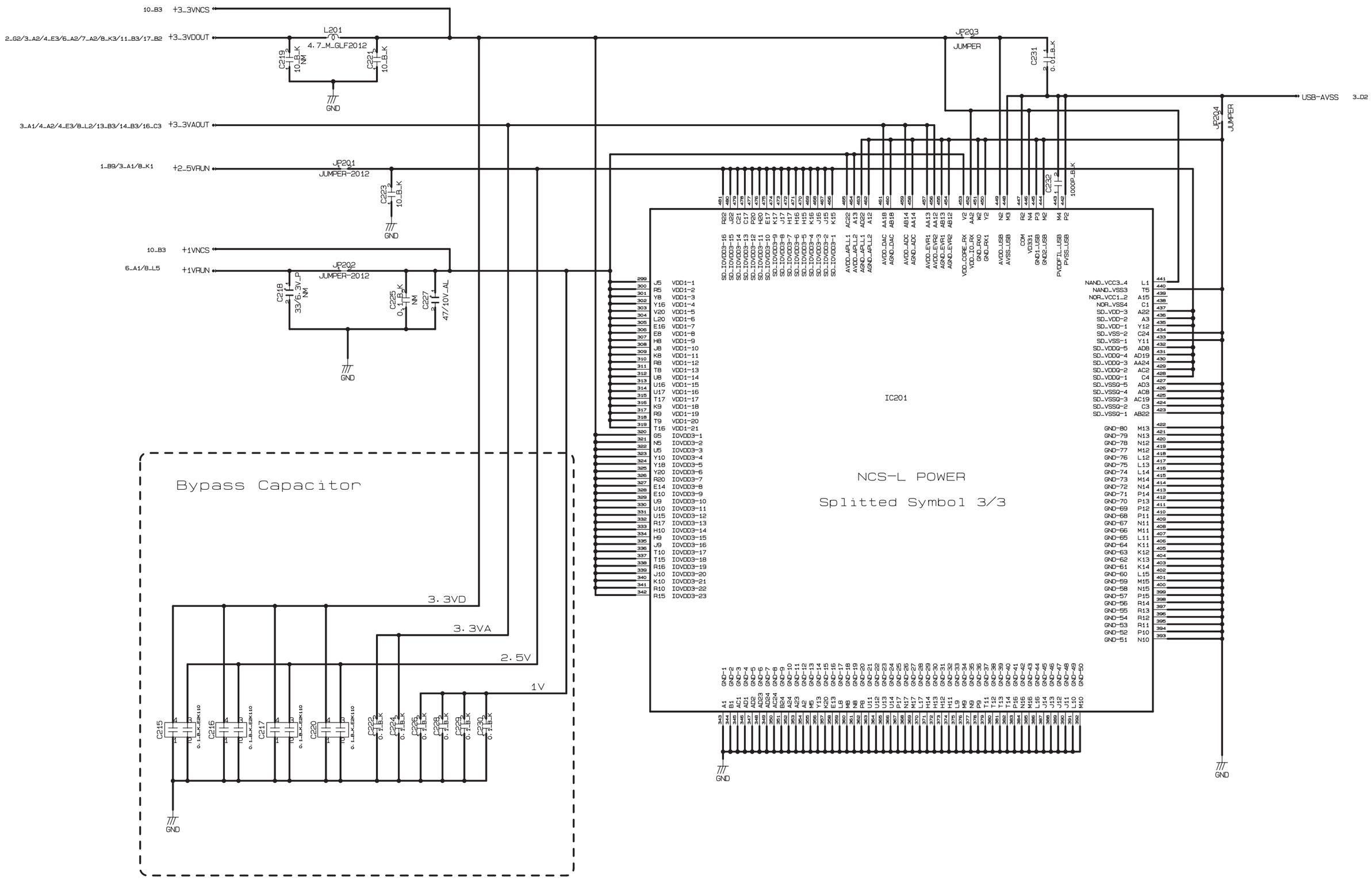
3-6-11. PMAN BLOCK



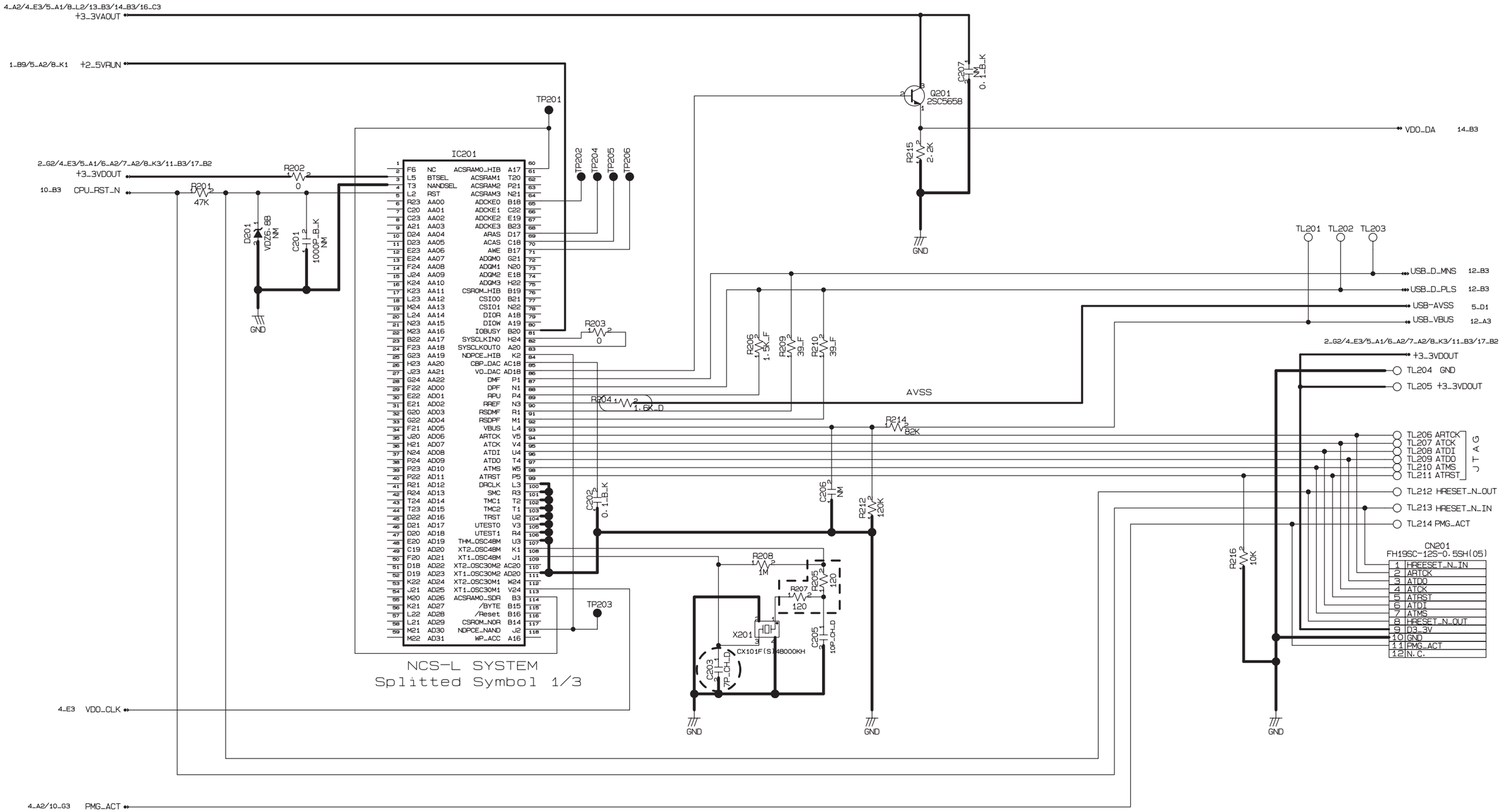
3-6-12. PROCESS BLOCK (IO)



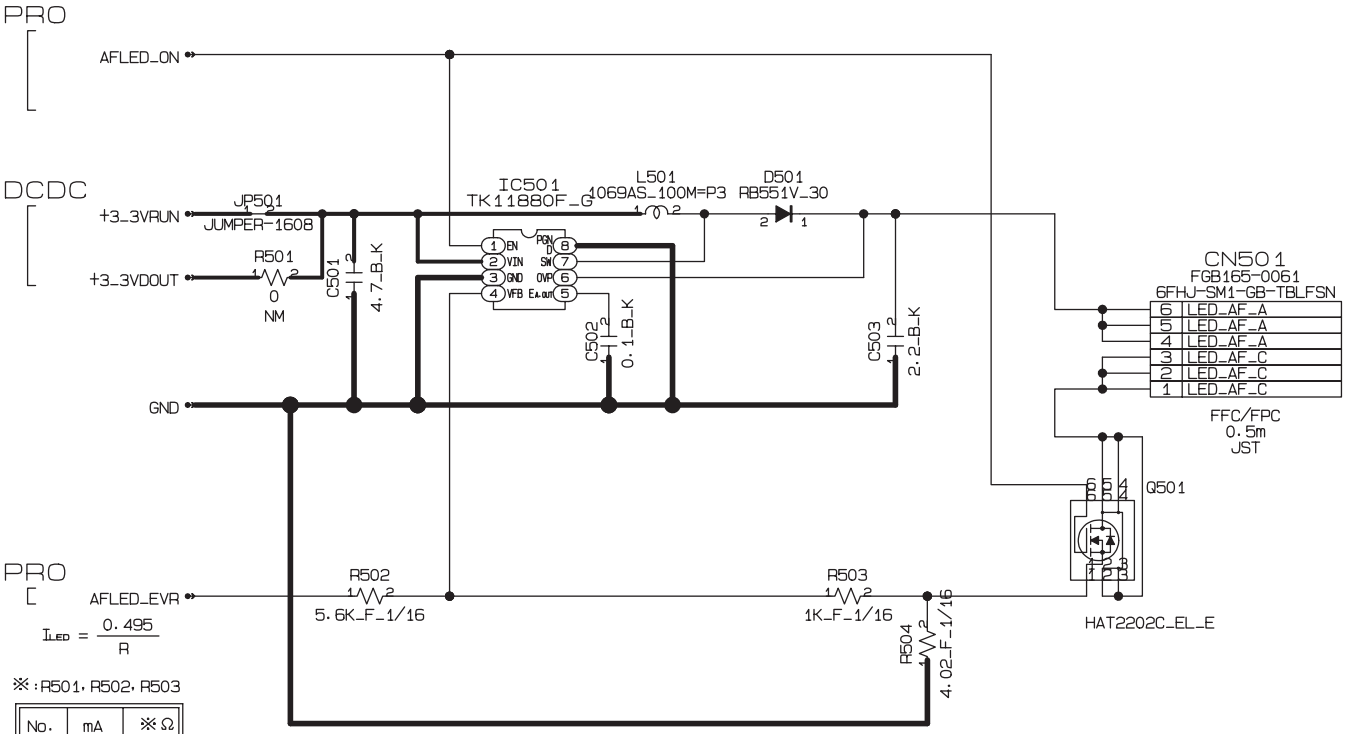
3-6-.13 PROCESS BLOCK (PW)



3-6-14. PROCESS BLOCK (SYS)



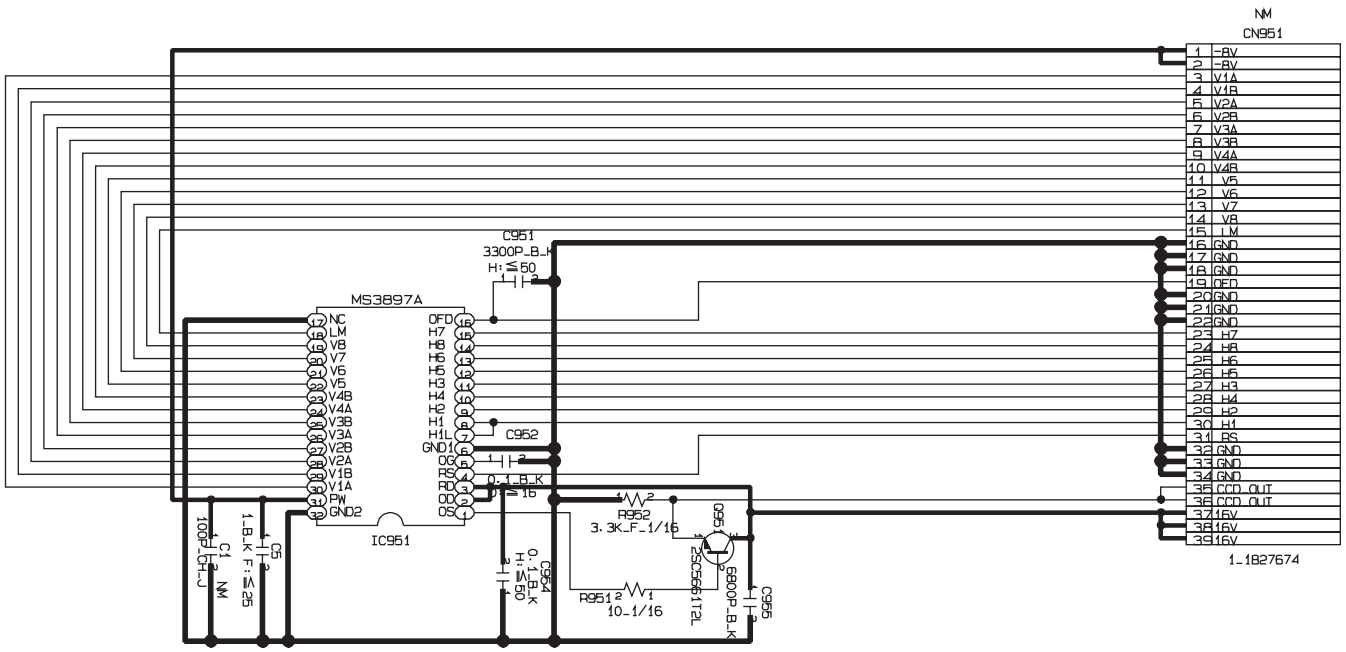
3-6-15. AF LED BLOCK



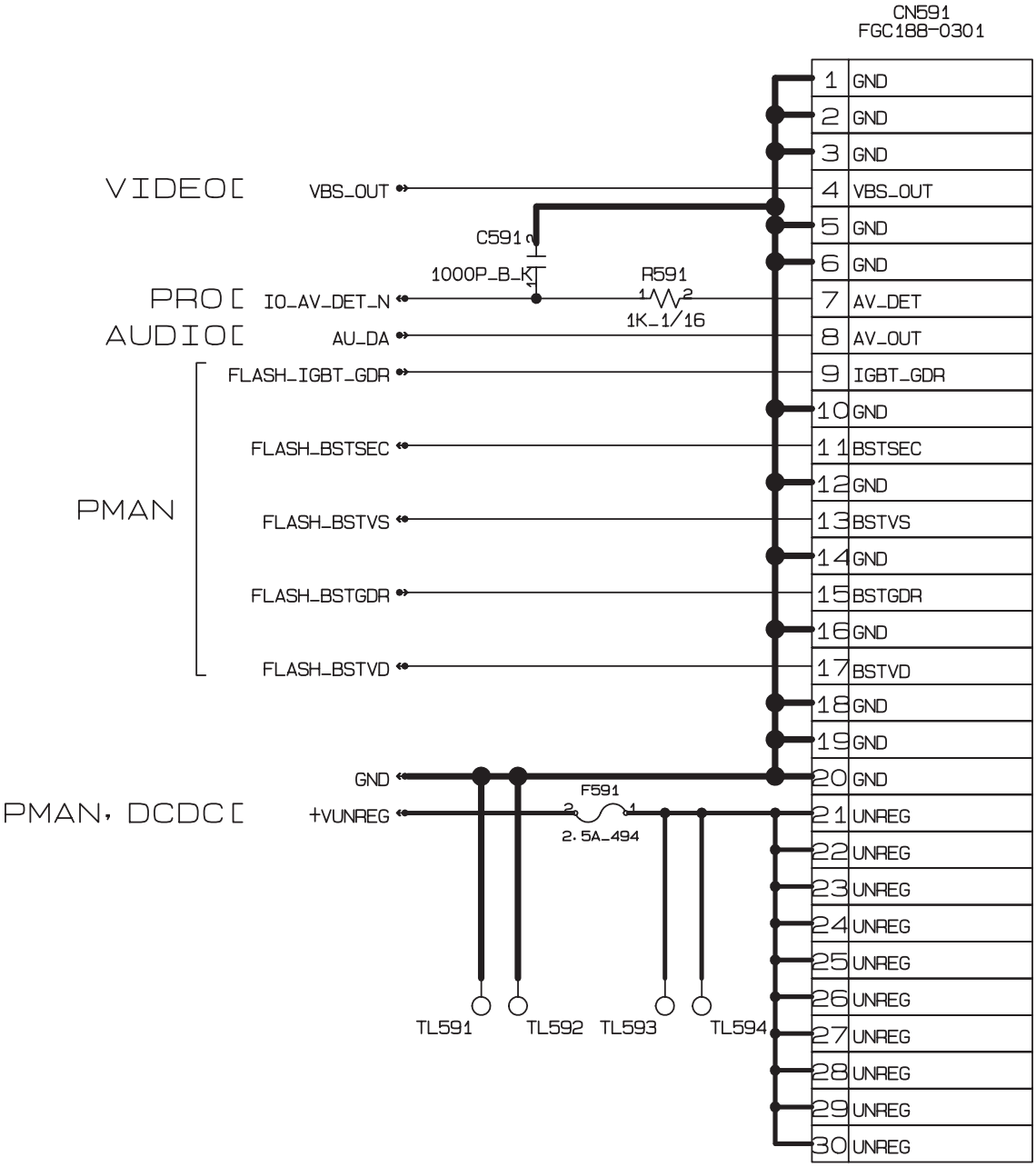
※:R501, R502, R503

No.	mA	※Ω
0	120	4.02
1	105	4.7
2	101	4.9
3	100	4.95
4	97	5.1
5	88	5.6
6	49.5	10
7	22.5	22

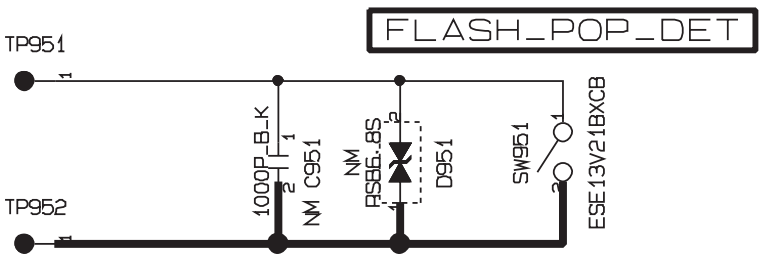
3-6-16. CCD FPC BLOCK



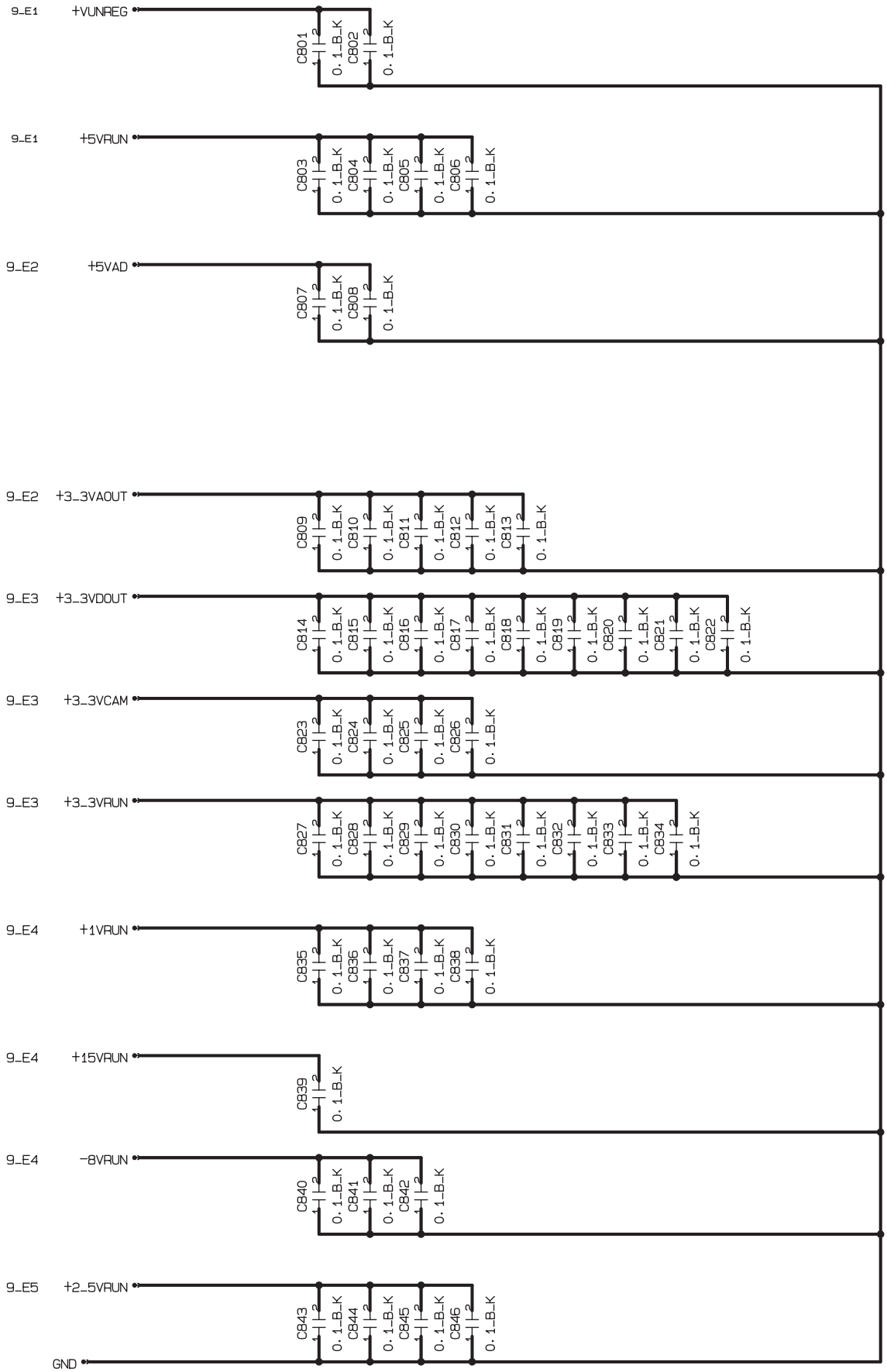
3-6-17. CN BLOCK



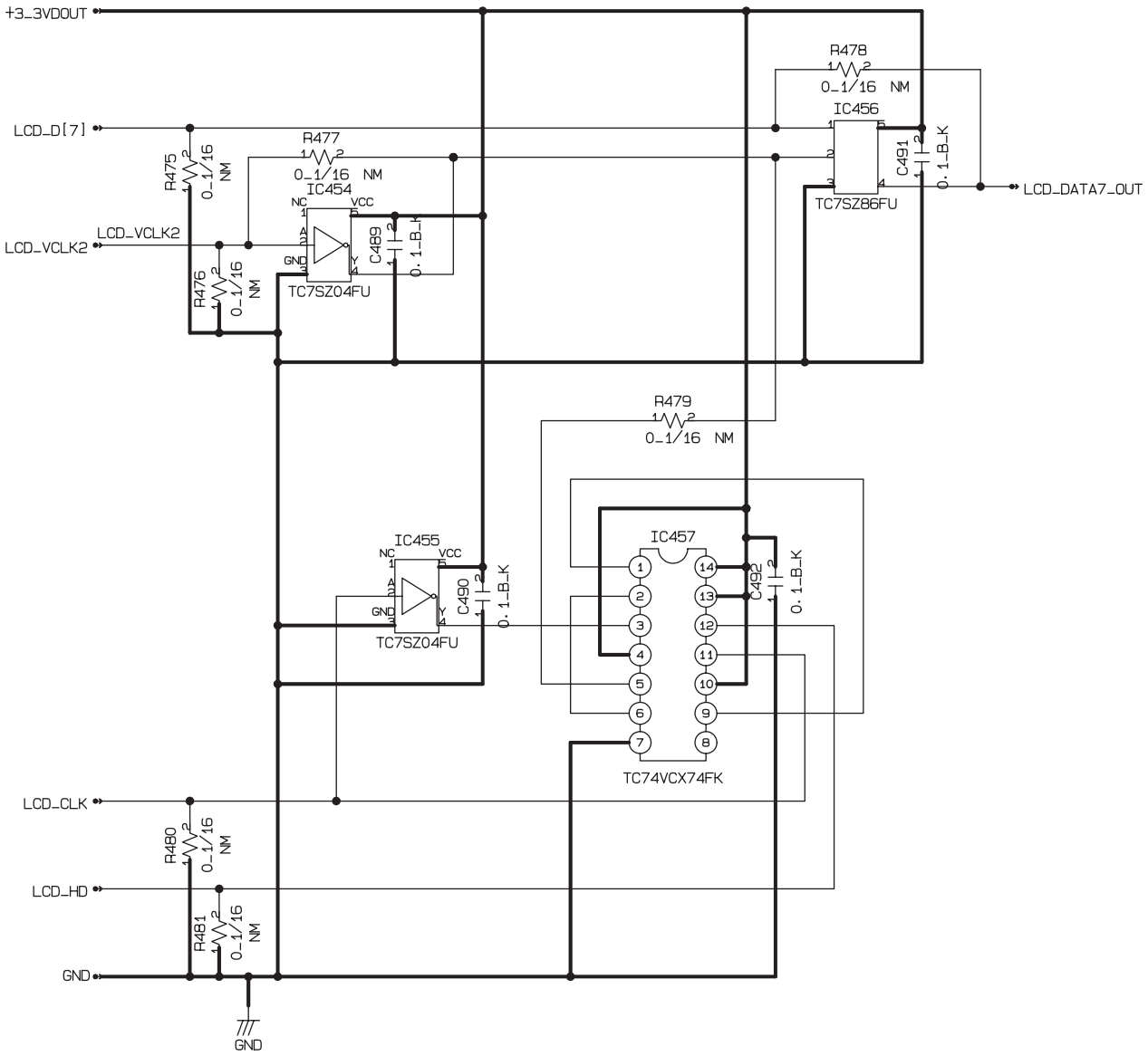
3-6-18. FSW BLOCK



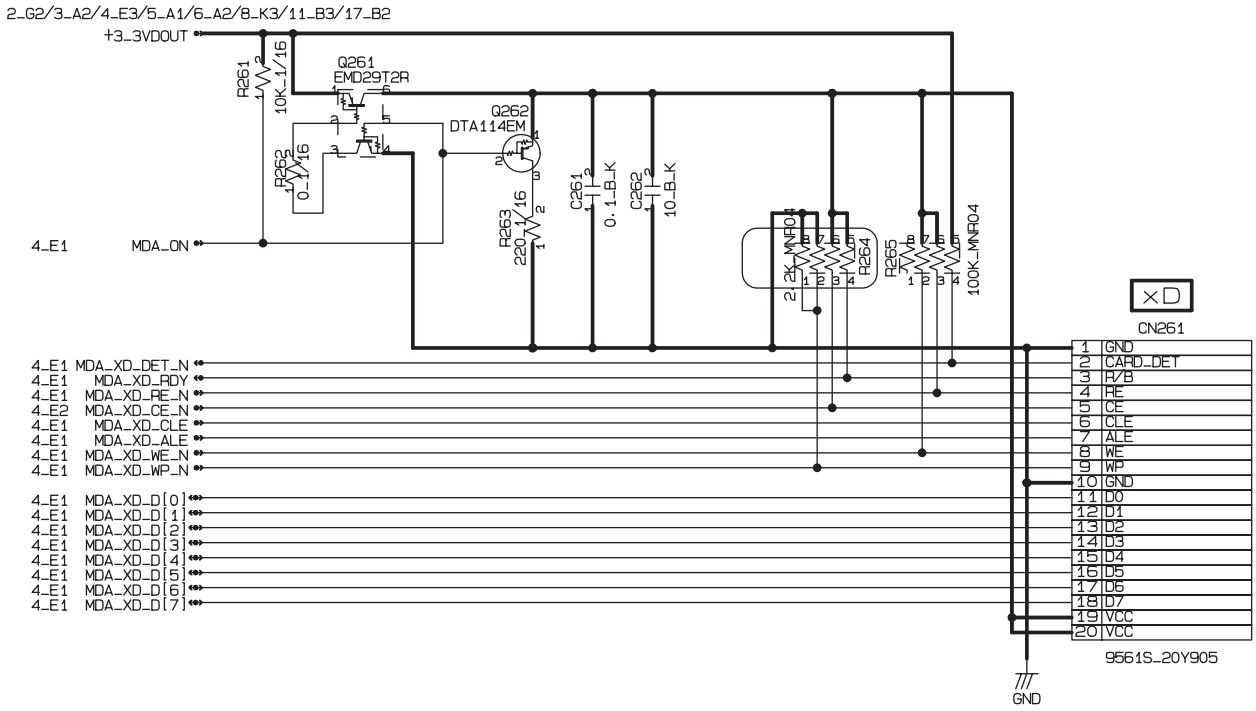
3-6-19. EMI BLOCK



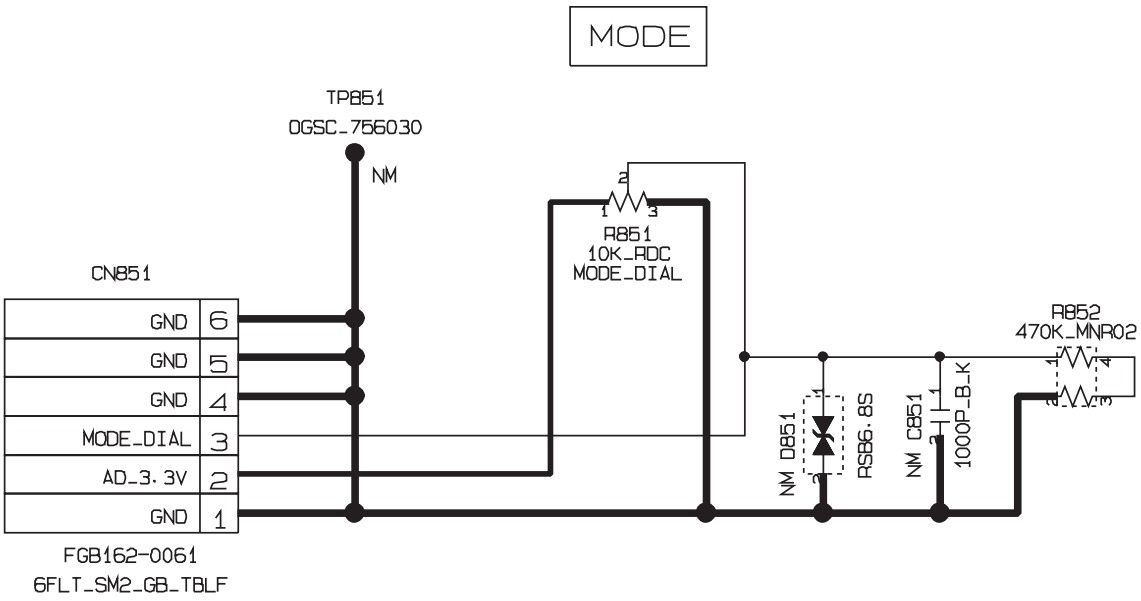
3-6-20. LCD DATA 7 BLOCK



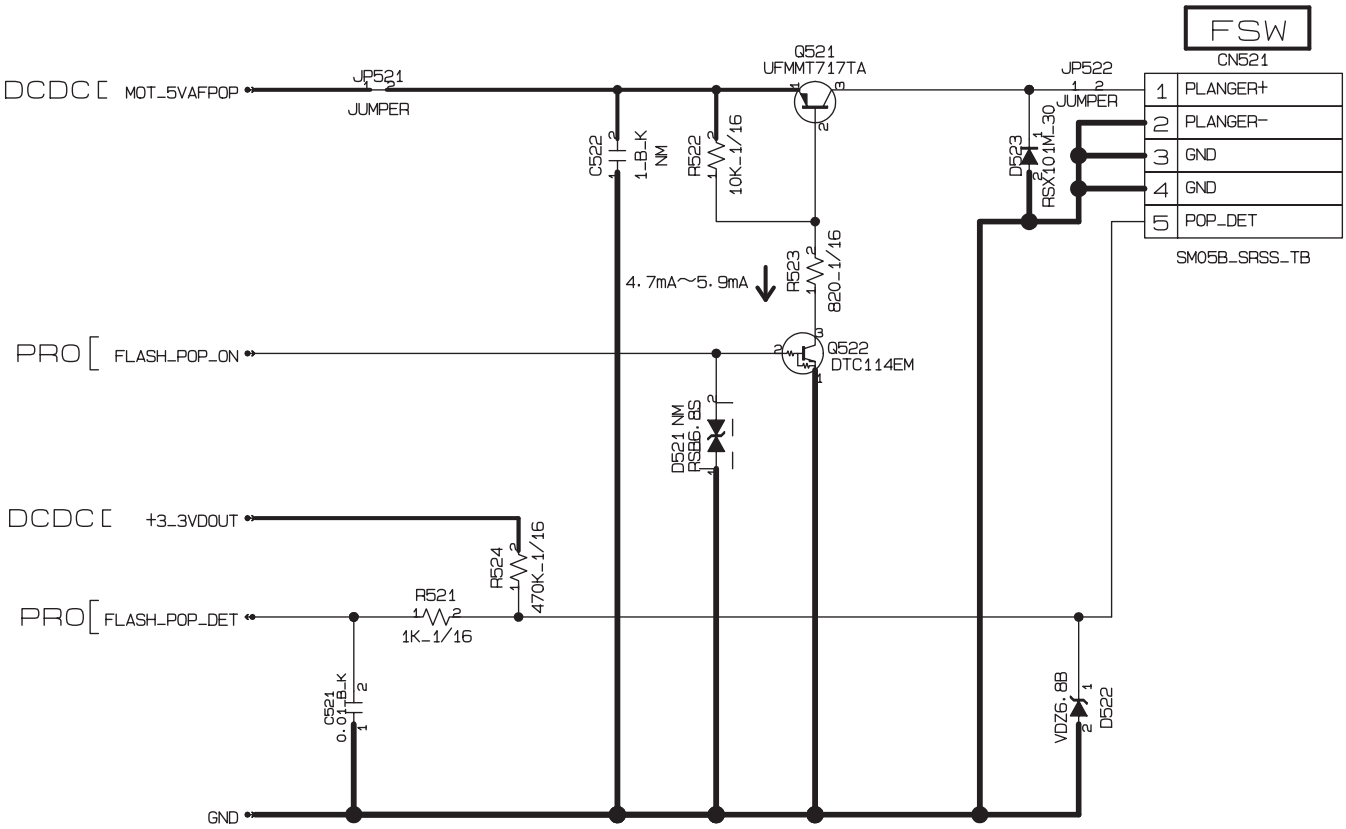
3-6-21. MEDIA BLOCK



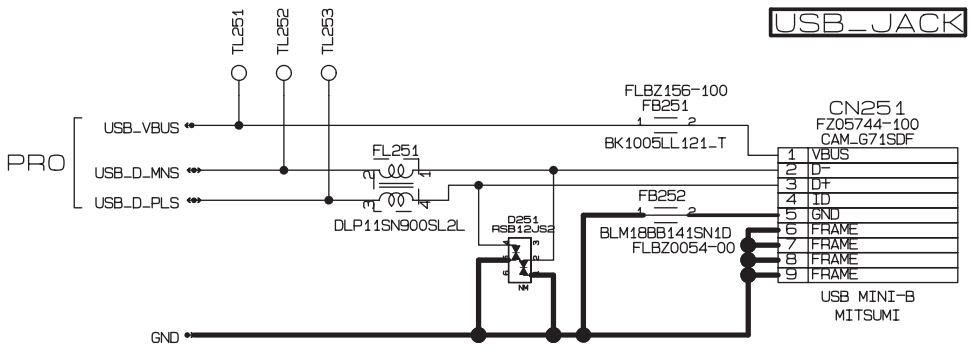
3-6-22. MSW BLOCK



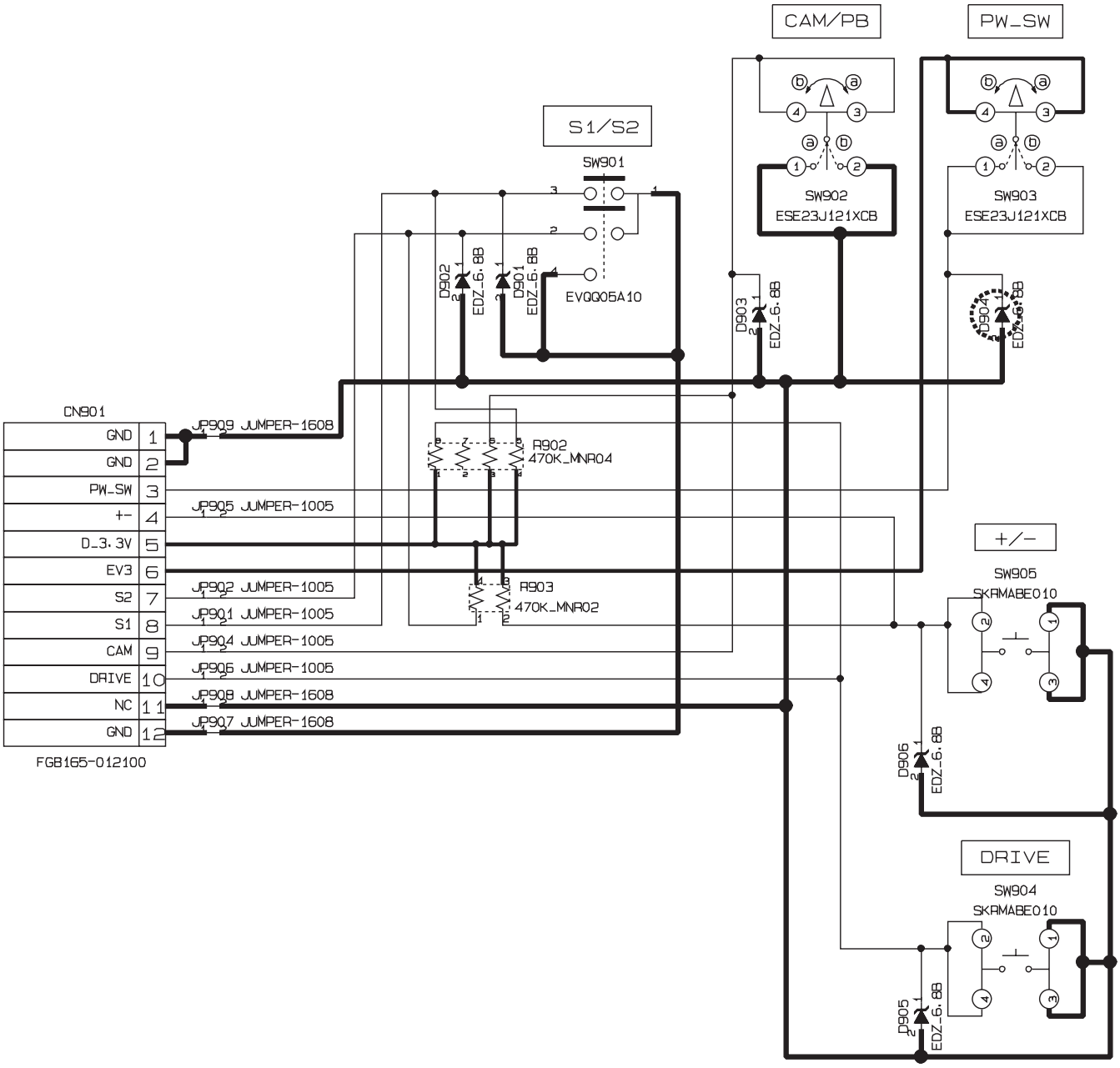
3-6-23. PLUNGER BLOCK



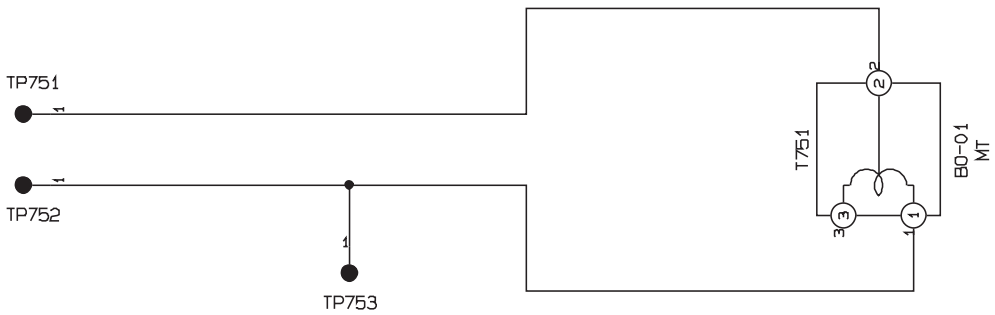
3-6-24. USB BLOCK



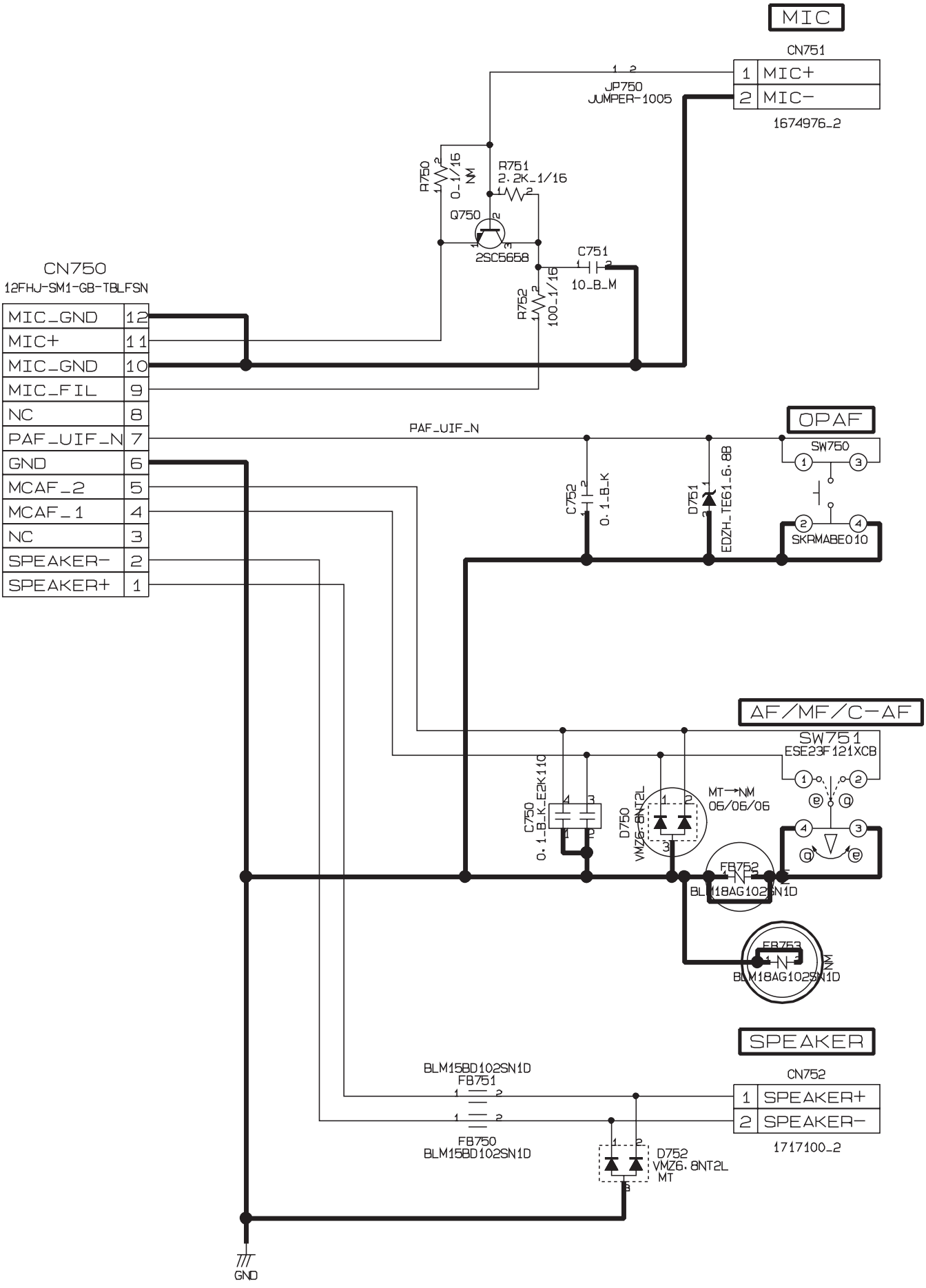
3-6-25. RSW BLOCK



3-6-26. XE BLOCK

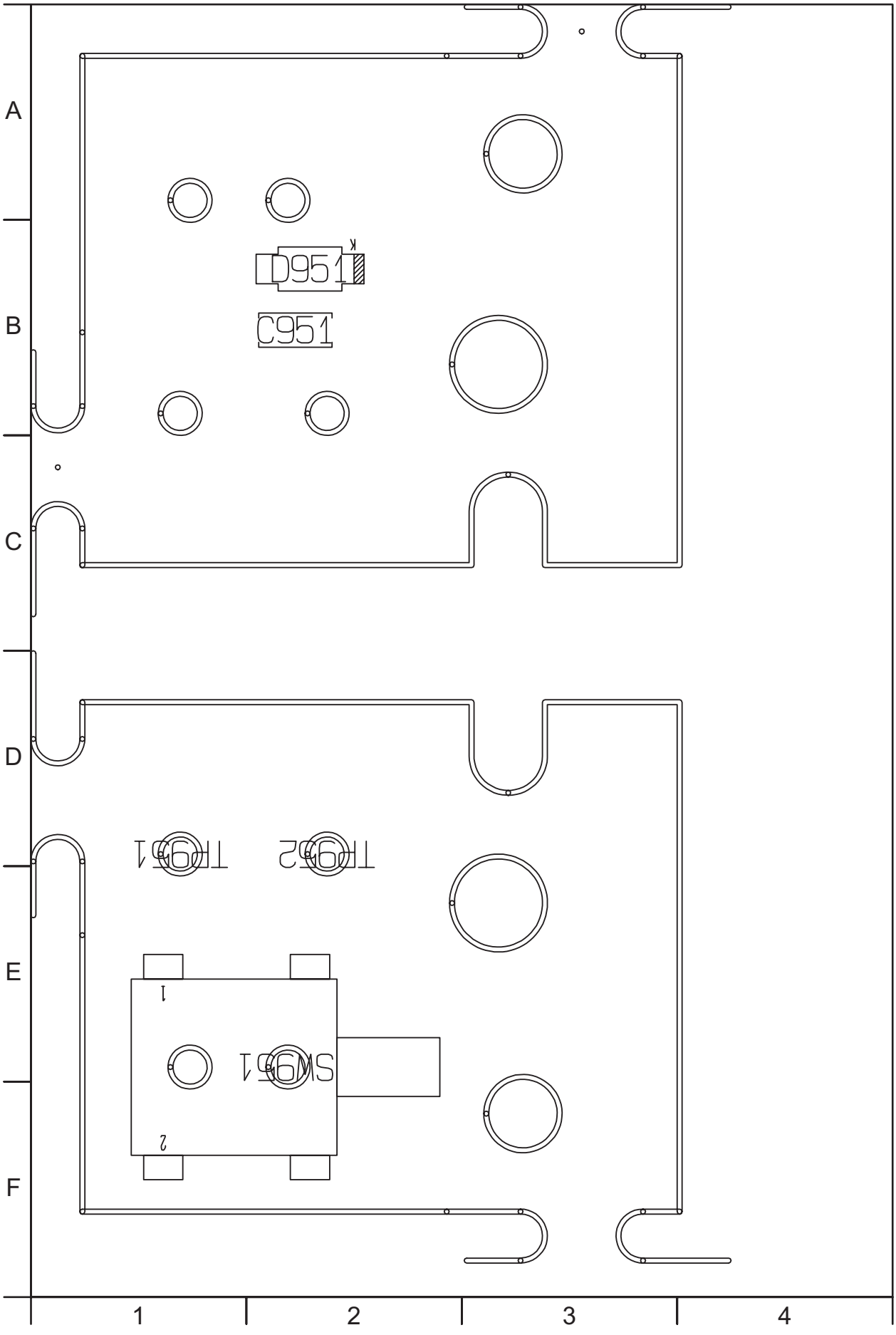


3-6-27. SSW BLOCK

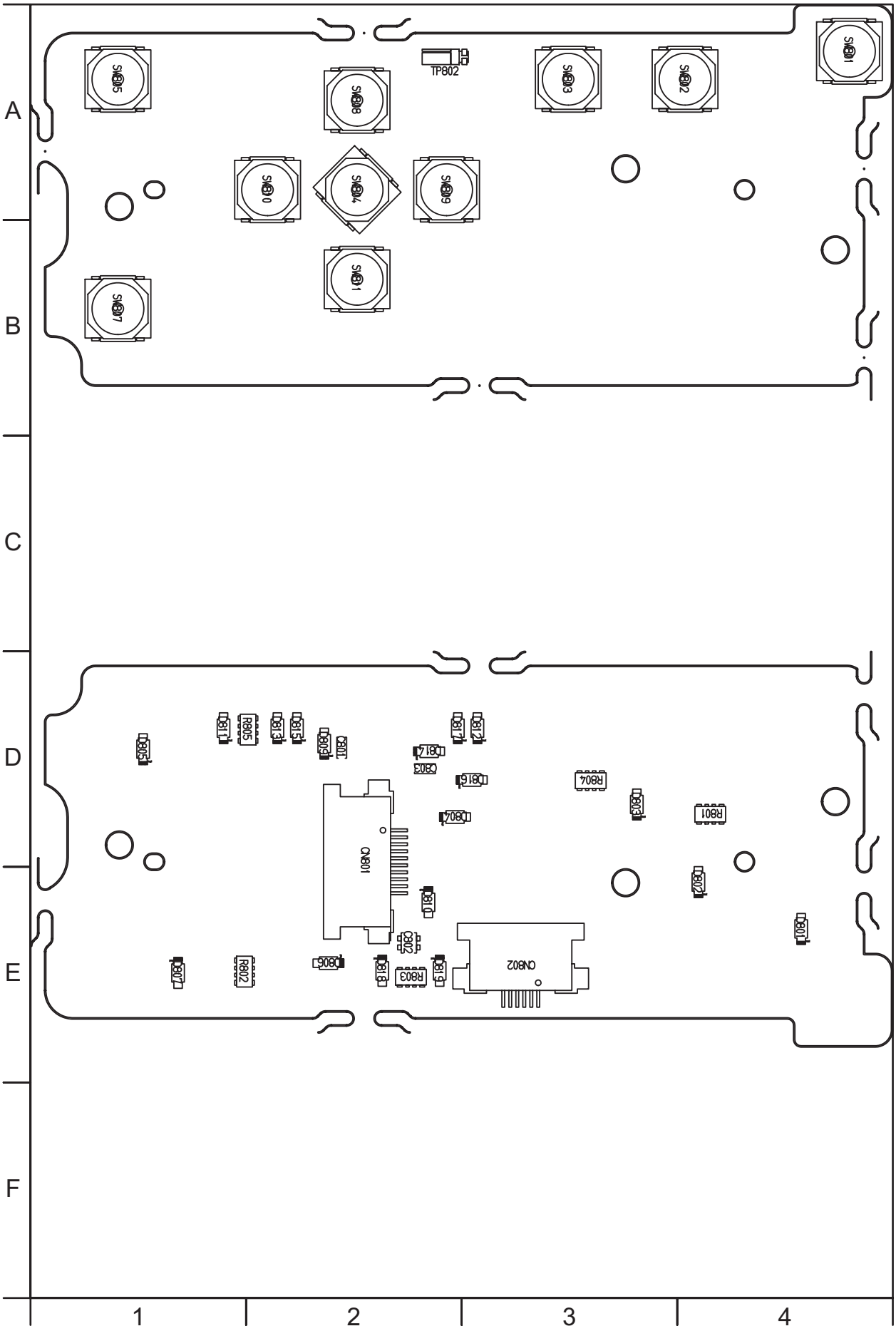


3-7. Mounted Parts Diagrams

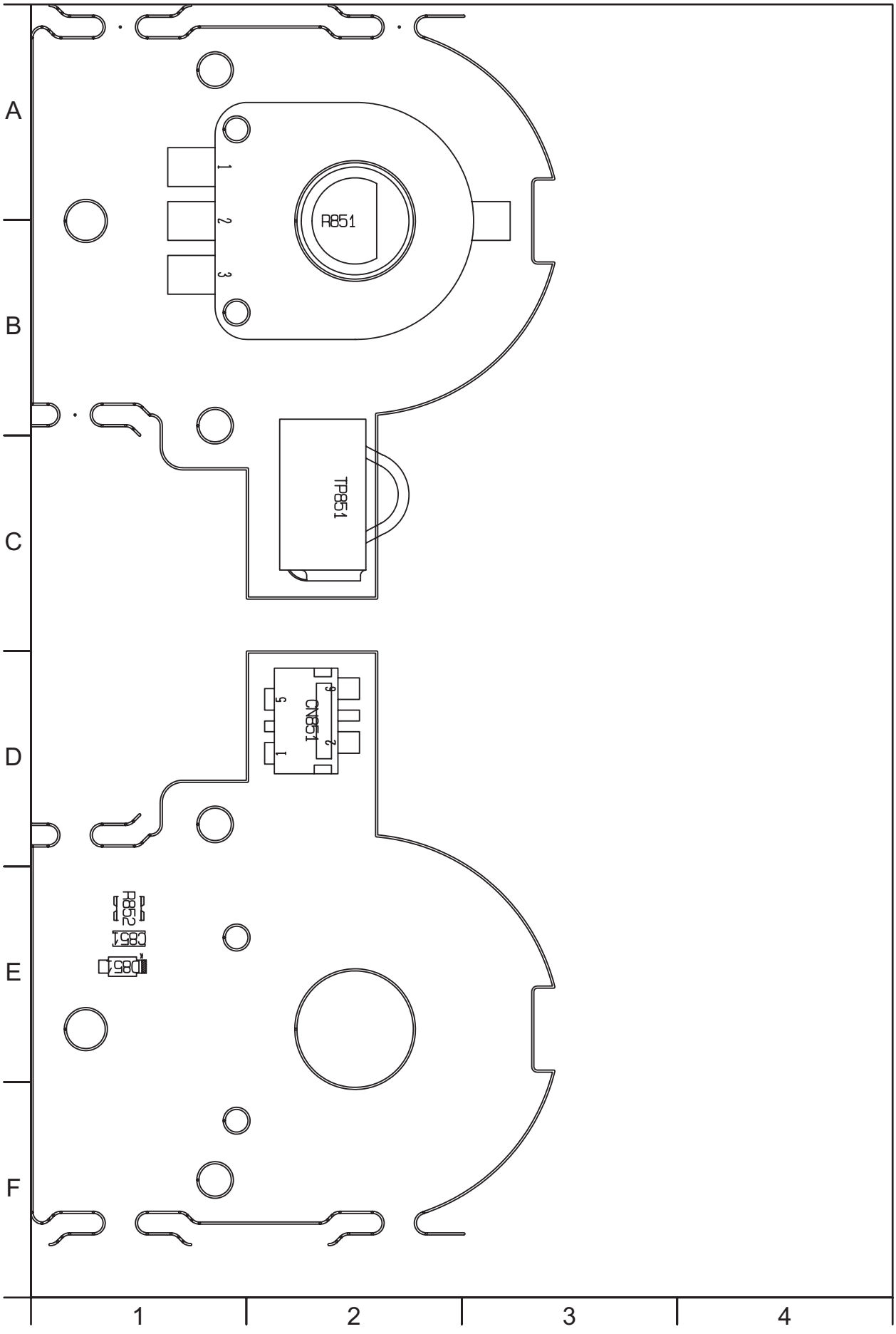
3-7-1. FSW PWB ASSY



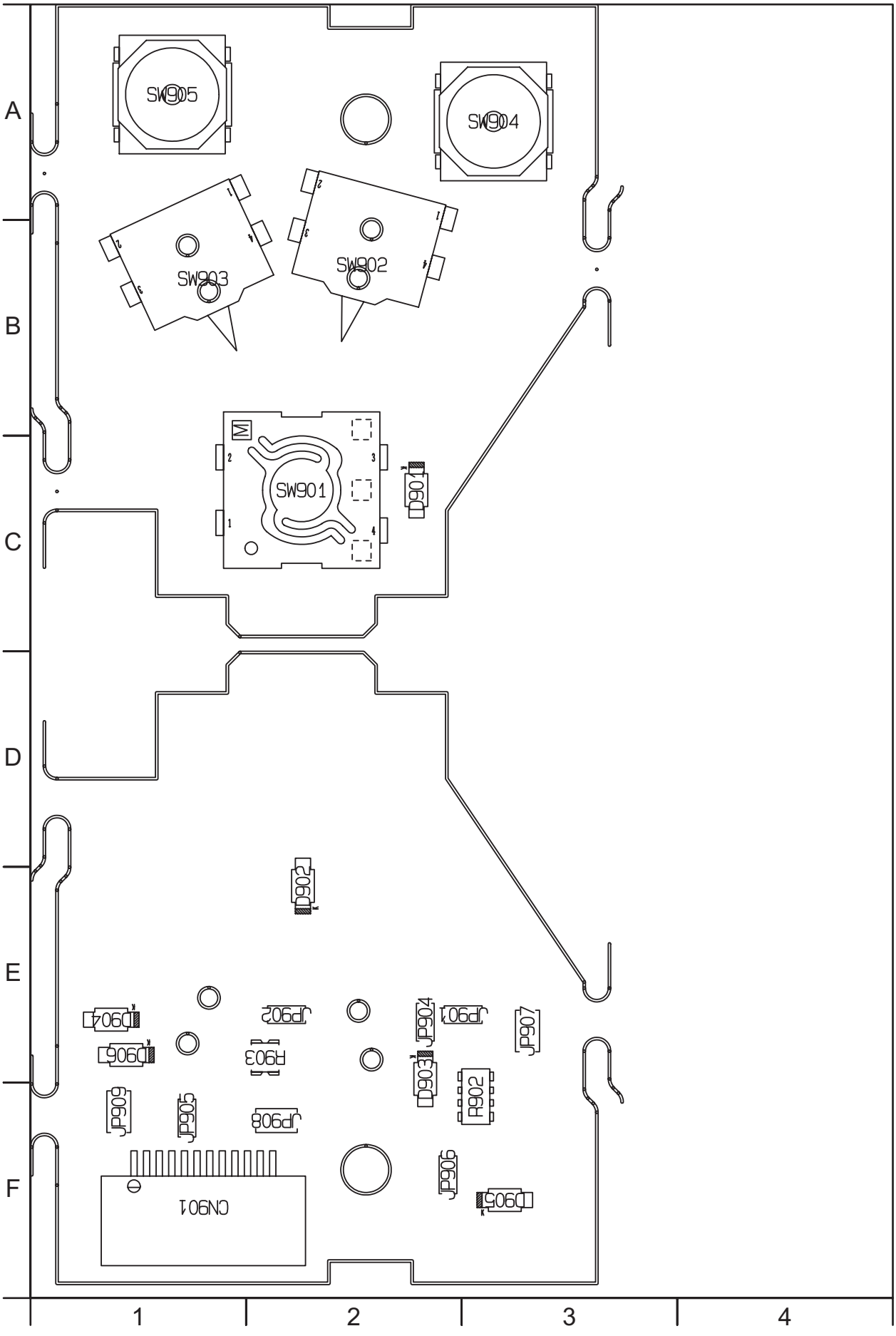
3-7-2. KSW PWB ASSY



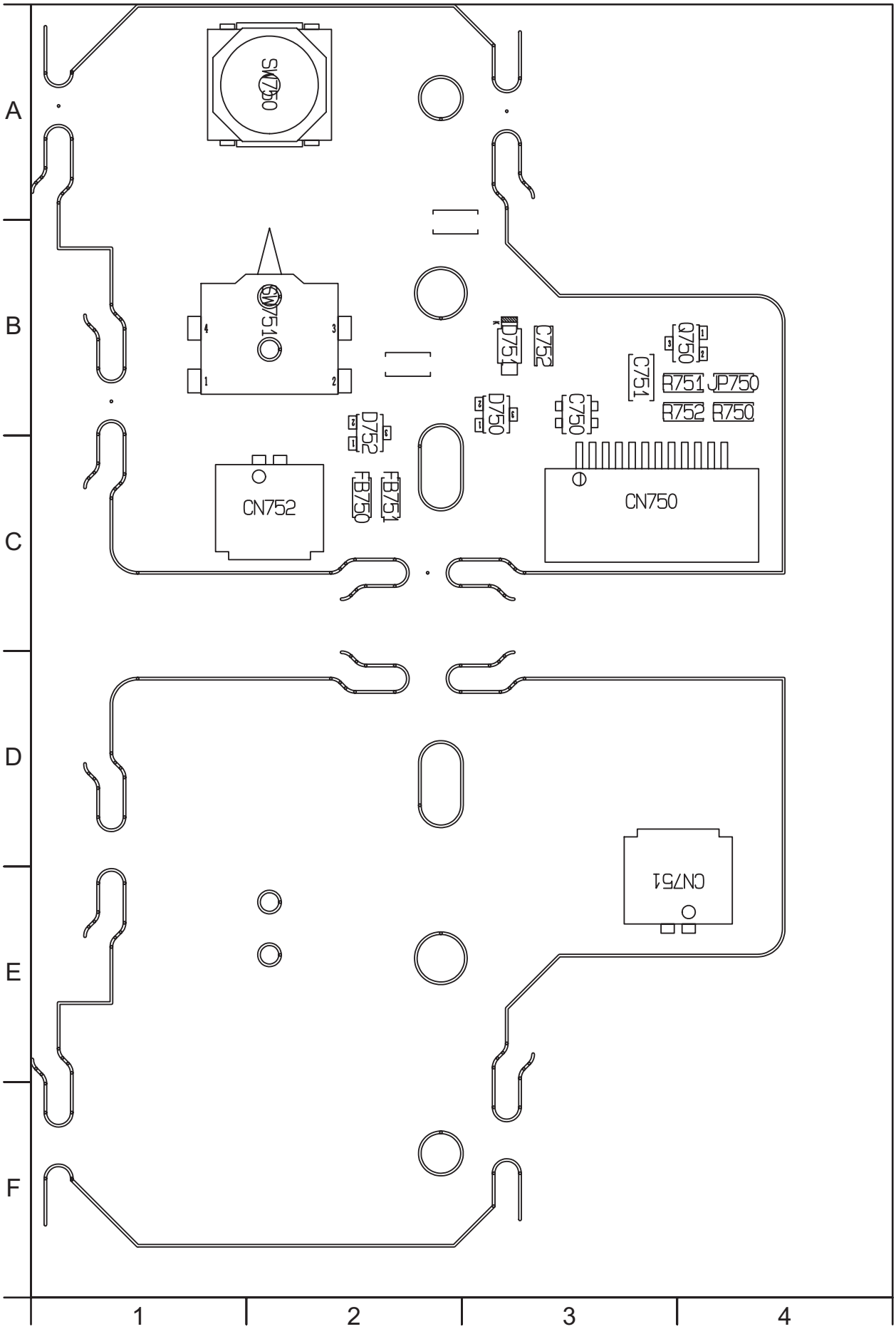
3-7-3. MSW PWB ASSY



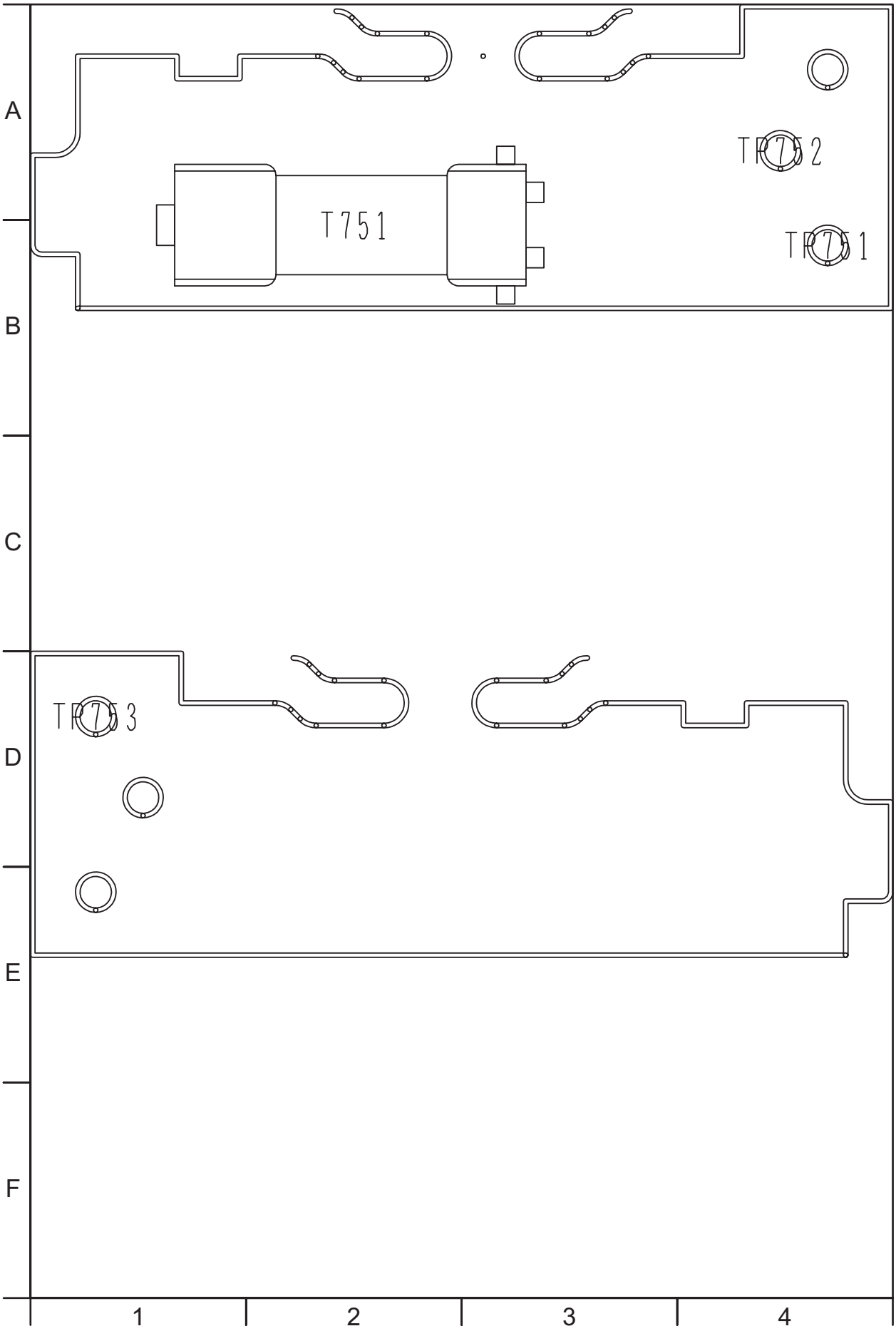
3-7-4. RSW PWB ASSY



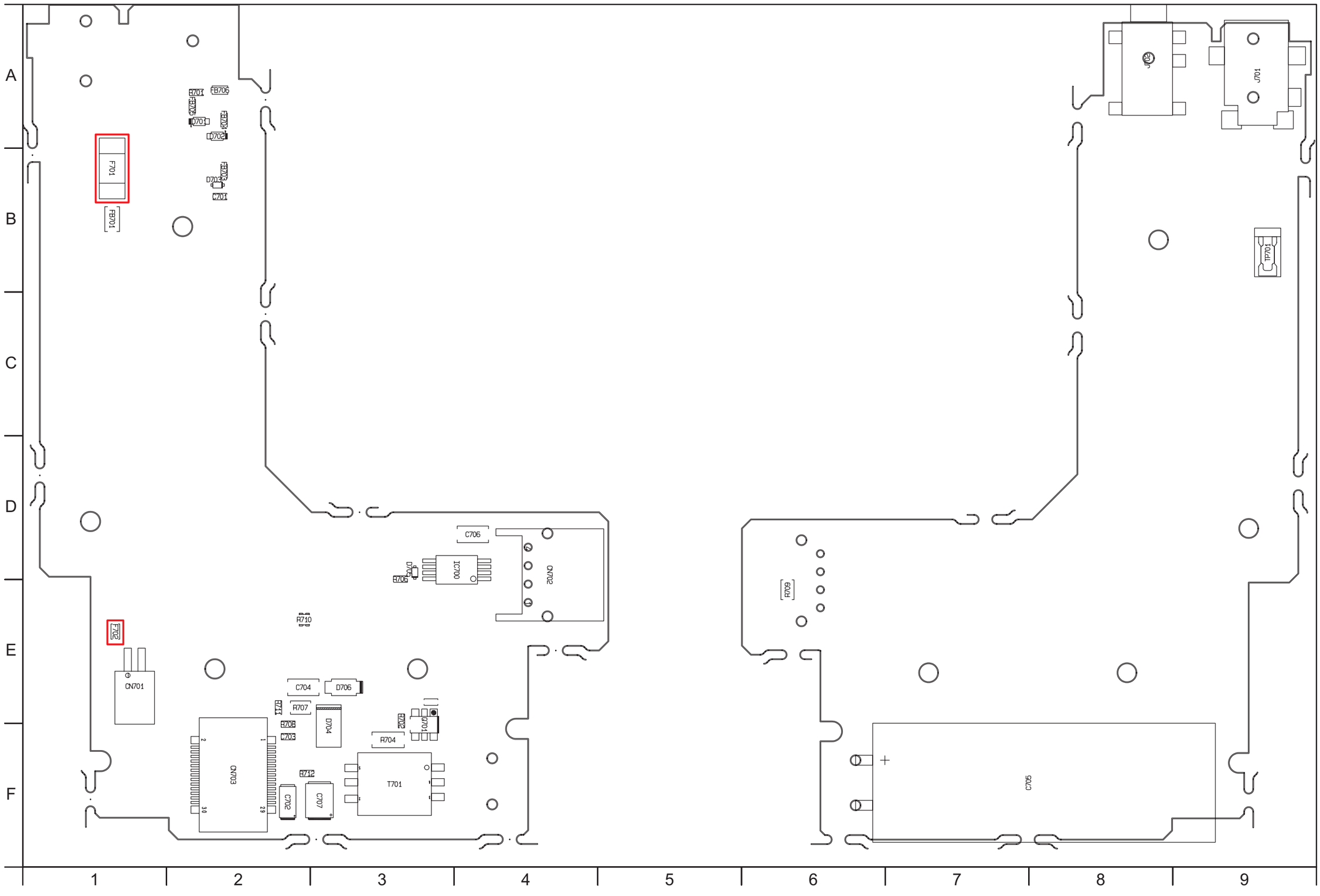
3-7-5. SSW PWB ASSY



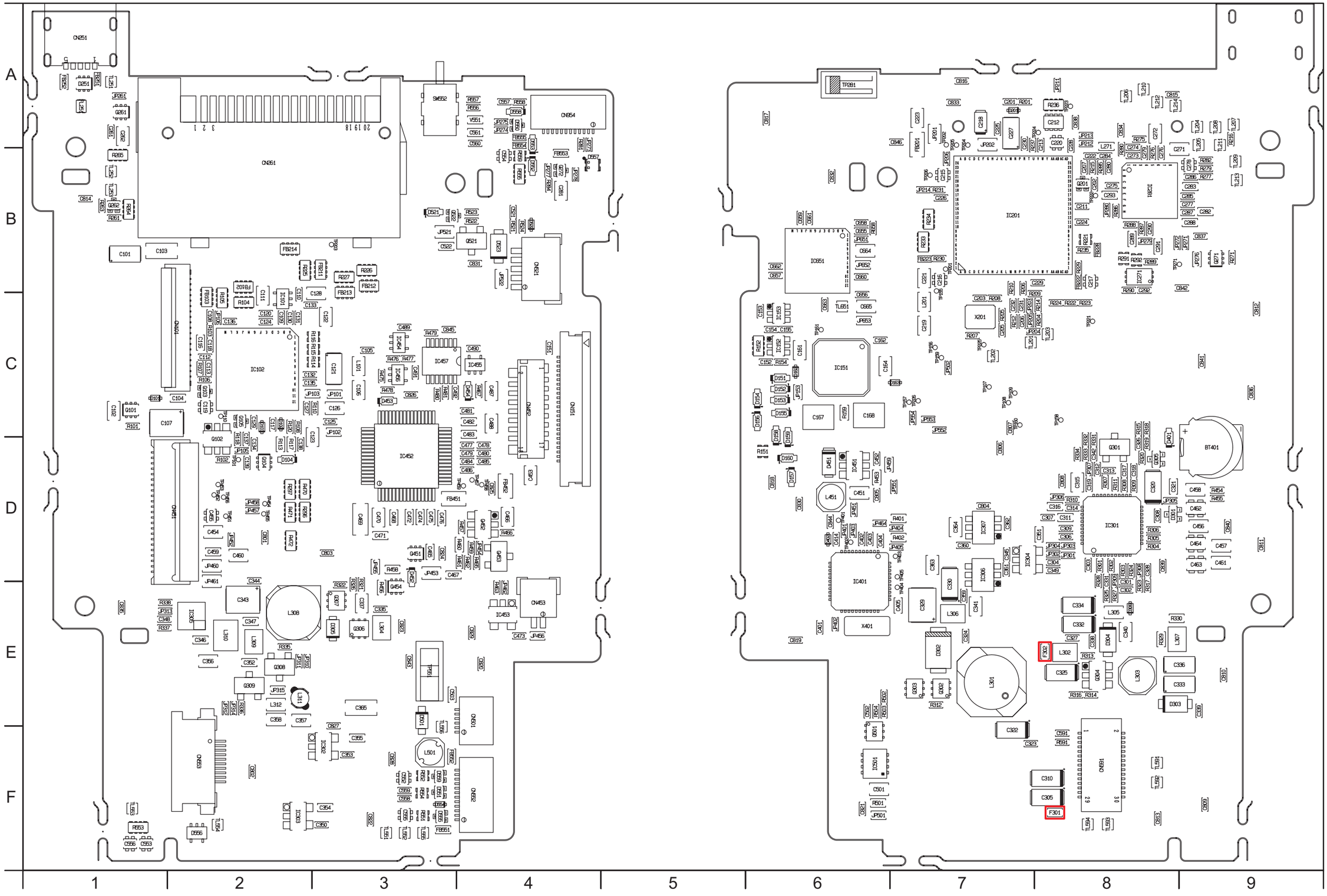
3-7-6. XE PWB ASSY



3-7-7. FLASH PWB ASSY



3-7-8. MAIN PWB ASSY



4. Adjustments

4-1. Important point before Adjustment

4-1-1. The handling of image files in internal memory

This camera has internal memory, image files stored in the internal memory should be handled as described below when the camera is replaced or repaired.
Take particular care to ensure that the customers images are not erased.

<Procedure for handling images>

When either of following work is necessary, extract as many as possible of the image files stored in the internal memory. Then, after the camera is repaired or replaced, load the images into the internal memory in the camera before the camera is returned to the customer.

1. When the replacement camera is provided.
2. When the MAIN PWB ASSY is replaced.
   --->When "MAIN PWB ASSY" is replaced, it is necessary to execute "Flash memory reset".
   (When the "Flash memory reset" was executed, involve formatting the internal memory.)

<Image file transfer procedure>

I. Procedure when images can be downloaded to a PC
   * If an xD-Picture card is inserted, data in the internal memory cannot be backed up.
   (1) Back up the images stored in internal memory.
   - Create a folder (named and located so as to avoid any confusion with the user's images).
   - Without inserting an xD-Picture card, connect the camera to a PC and copy the image files on the removable disk recognized by the PC to the folder created in the previous step.
   - Check that the images can be displayed correctly on the PC.

   (2) Return the backed up image files from the PC to the camera.
   - Turn the camera on without an xD-Picture card inserted and format the camera's internal memory.
   - Without inserting an xD-Picture card, connect the camera to the PC and copy the image files from the folder containing the images backed up in the previous step onto the removable disk recognized by the PC.
   - Check that the images can be displayed correctly on the camera.
   - Delete the backup files created on the PC in step (1) (the user's image files).

II. Procedure when images cannot be downloaded to a PC
   (1) Back up the images stored in internal memory.
   - Insert an xD-Picture card to be used for image backup into the camera and format the card.
   - From the SETUP menu, reset the frame numbers.
   - Select image copying from the playback menu, select "Camera -> Card" for all the frames and then copy the images.
   - Check that the images can be displayed correctly on the camera.

   (2) Return the backed up image files from the xD-Picture card to the camera.
   - Before inserting the card, format the camera's internal memory.
   - Insert the xD-Picture card containing the backed up copies of the user's image files.
   - From the SETUP menu, reset the frame numbers.
   - Select image copying from the playback menu, select "Card -> Camera" for all the frames and then copy the images.
   - Remove the xD-Picture card and check that the images can be displayed correctly on the camera.
   - From the SETUP menu, set the frame numbers to the default sequence.
   - If the image file numbers have changed, always notify the user in writing that the image file numbers have changed.

4-1-2. Important point Adjustment when Replacing Major Parts

Adjust the item shown by ¡ in the table below at the part replacement of LENS ASSY, MAIN PWB, FLASH ASSY and LCD CONST. (Other part replacements need not be adjusted.)

Adjustment item \ Replacing parts		LENS ASSY	MAIN PWB	FLASH ASSY	LCD CONST
0	Flash memory reset*		○		
1	CCD Defect Correction/OFD adjustment	○	○		
2	Camera adjustment	○	○		
3	Shading compensation adjustment	○	○		
4	AF adjustment	○	○		
5	Flash adjustment	○	○	○	
6	Battery adjustment	○	○		
7	Mode dial adjustment		○		
8	Video adjustment		○		
9	LCD adjustment		○		○
10	Firmware download	Do not use it until there is an instruction.			
11	End setting	(Do the end setting when you end the adjustment software when you set the camera to the Jig mode)			

* When the MAIN PWB ASSY is replaced, the camera will not operate normally unless the MAIN PWB is initialized.

4-2. Measuring Instruments Used

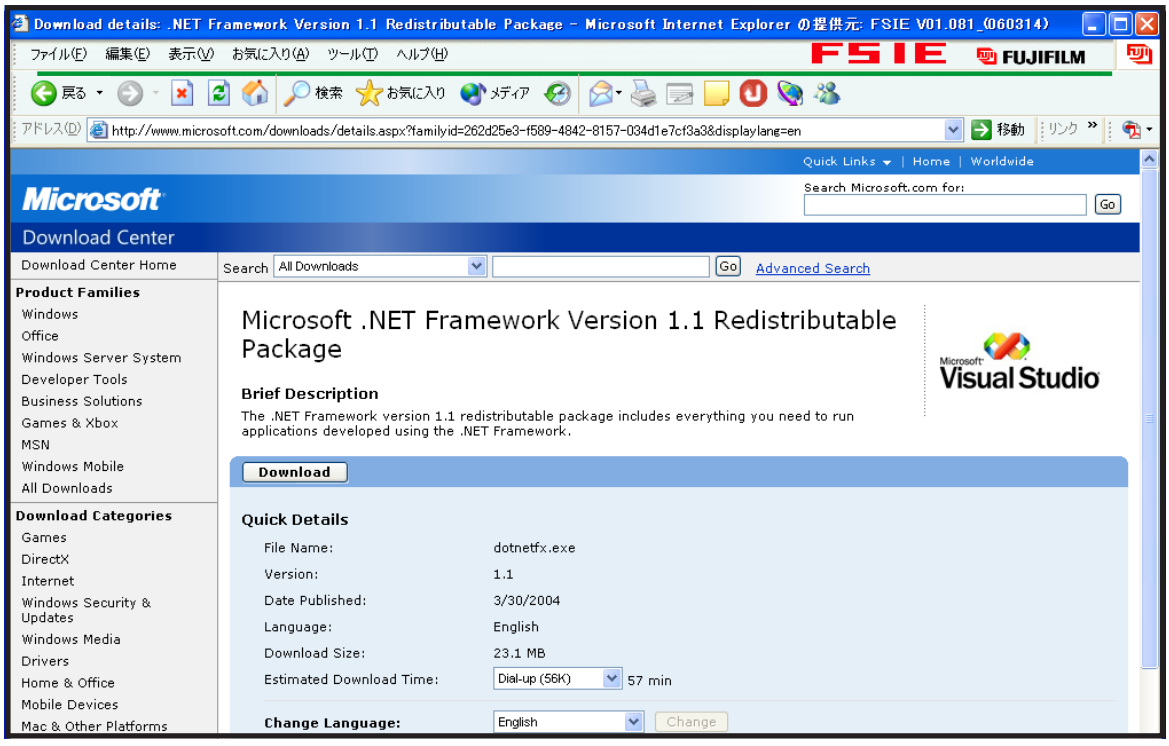
Measuring equipment	Remarks
Regulated power supply	For adjustment
Pattern box	PTB450F
Digital voltmeter	For Battery adjustment
PC	Used for various adjustments and operation checks (PC-AT compatible, Win 2000 / XP) *1 It is necessary to install Microsoft .NET Framework Ver1.1.*2
Brightness meter	LS-110 (Minolta) or equivalent
Color temperature meter	Color Meter IIIF (Minolta) or equivalent
Flash meter	Used for function checks

*1: PC condition

1. Hardware recommendation: **CPU;Pentium4 2.4GHz** or better, **RAM;512MB** or more.
   It might make an error of the adjustment when the performance of PC is low.
2. **Video Jig** and **LCD Jig** must be installed.

*2: Download it from the homepage of the Microsoft.

Microsoft .NET Framework Version 1.1
http://www.microsoft.com/downloads/details.aspx?familyid=262d25e3-f589-4842-8157-034d1e7cf3a3&displaylang=en



4-3. Use Jig list

Pats.No	Name	Comment	
ZJ00006-100	Filter LB140	Camera adjustment	Common with the DS-30/DS-20/DS-7
ZJ00008-100	Lens holder	AF adjustment	Common with the 8mmVTR/MX600
ZJ00009-100	Stand	AF adjustment	Common with the 8mmVTR/MX600
ZJ00254-100	Gray Chart (Reflective type)	Flash adjustmen	Common with the MX700/MX500
FZ06705-100	USB cable	General adjustment	This is bundled to the product
ZJ00998-100	FxS6000fd_6500fd W PC Soft Ver.1.00	PC adjustment	Win 2000 / XP English OS *1
ZJ00684-100	DSC JIG Driver Install.exe	For PC setup	Win 2000 / XP English OS *1
ZJ00580-100	Power Cable Jig	Battery / Mode dial adjustment	
ZJ00611-100	X-Y stage for AF adjustment	General adjustment	Common with the FinePix M603
ZJ00583-100	Screw Driver (D3LUFX88G (2X20))	General repair	Common with the FinePix M603
ZJ00653-100	LB140 filter holder kit for X-Y stage	Camera adjustment	Common with the FinePix F700
ZJ00650-100	Video adjustment jig	Video adjustment	Common with the FinePix A310
ZJ00553-100	AF solid chart	General adjustment	Common with the FinePix S2Pro
ZJ00999-100	CCD data for FxS6000fd/S6500fd	CCD Data Input	New Jig, MS3897D
FZ06229-100	Video cable	Video adjustment	Common with the FinePix A310
FZ03983-100	AC Cable (For EG)	Use with Video adjustment jig	Common with the FinePix A310 *2
FZ03982-100	AC Cable(For EU)	Use with Video adjustment jig	Common with the FinePix A310 *2
FZ00330-200	AC Cable (For US/JP)	Use with Video adjustment jig	Common with the FinePix A310 *2
ZJ00581-100	Discharger	Discharge for FLASH UNIT	
ZJ00525-100	MACRO CHART	Resolution inspection	Common with the FinePix A201
ZJ00922-200	S9000/S9500 Zoom drive jig	Camera/Shading compensation adjustment	Necessary for the AF adjustment
ZJ00994-100	800mm conversion lens(SLB-50-800P)	AF adjustment	Common with the FinePix S9100/S9600
ZJ00995-100	S9100/S9600 Multi-stripe chart	AF adjustment	Common with the FinePix S9100/S9600
ZJ00585-100	LCD adjustment jig	LCD adjustment	Common with the FinePix S304
ZJ00631-100	LCD jig cover	LCD adjustment	Common with the FinePix S304
ZJ00579-100	LCD adjustment image	LCD adjustment	Common with the FinePix S304

***1: Please downloaded from Web server (http://fujifilm-di.intranets.com/).**

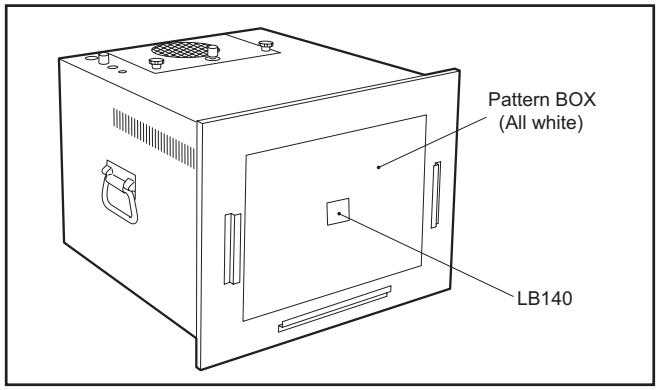
***2: Select one the power cable suitable each country.**

***3: S9000/9500 Zoom drive jig is a Jig by which the thing that the zoom position match of the shading compensation adjustment automatically does becomes possible. There is no necessity when shading compensation is adjusted by a manual match.**

4-4. Calibration method of pattern box

< Use the pattern box for Camera adjustment >

Turn on the power supply in the pattern box.
Afterwards, wait for about ten minutes so that the source of light may stabilize.



<Fig. 4-4-1> Calibration method of pattern box

(1) Brightness

Camera Adjustment, Shading compensation adjustment:
160 ± 5cd/m^2 (with LB140 filter)

CCD Defect Correction/OFD Adjustment:
140 ± 20cd/m^2 (with LB140 filter)

No chart, center of pattern box

Minolta brightness meter LS-110 or equivalent

* Calibration method

Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the brightness meter, adjust the pattern box brightness to 160 ± 5cd/m^2 or 140 ± 20cd/m^2.

(2) Color temperature

Camera Adjustment, Shading compensation adjustment: 6100 ± 50K (with LB140 filter)

CCD Defect Correction/OFD Adjustment: 6100 ± 200K (with LB140 filter)

No chart, center of pattern box

Minolta color meter IIIF or equivalent

* Calibration method

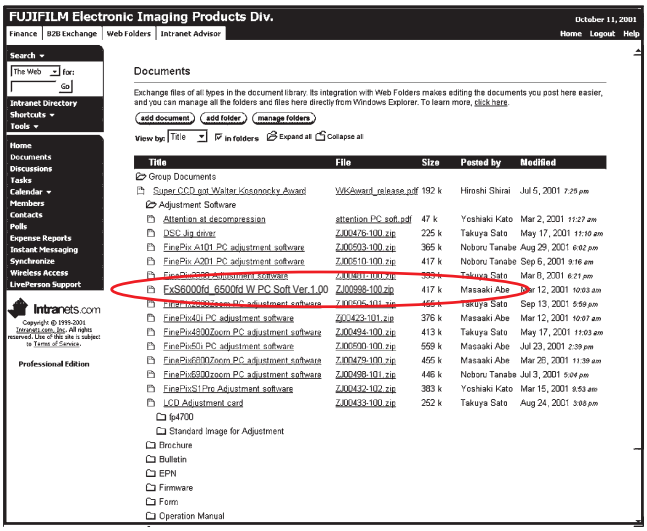
Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the color temperature meter, adjust the pattern box color temperature to 6100 ± 50K or 6100 ± 200K.

4-5. Adjustment software installation

4-5-1. Various downloading software decompressions, preservation methods, and notes

The PC adjustment softwares are in a specified Web server, and both of these are the compression of ZIP form files. Therefore, after downloading these compression files from the Web server, the decompression of the file is necessary. In the decompression software, if the decompression of the ZIP form can be done, any software is OK.
(Please prepare each one for the decompression software.)
The decompression and the preservation method of the PC adjustment software and the firmware are described to the following.

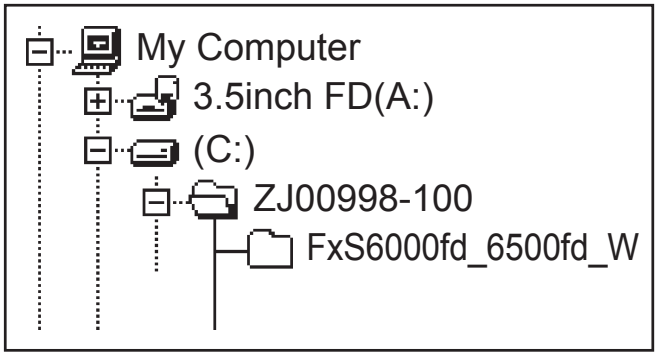
* The PC adjustment software decompression and preservation method.



<Fig. 4-5-1> Fujifilm-di.intranets Screen

<Step1>
The sdjustment software is downloaded from WEB, and software is installed in the PC.
We have uploaded the **"PC Adjustment Software (ZJ00998-100.zip) for "FxS6000fd_6500fd_W"** on our website: (http://fujifilm-di.intranets.com/).

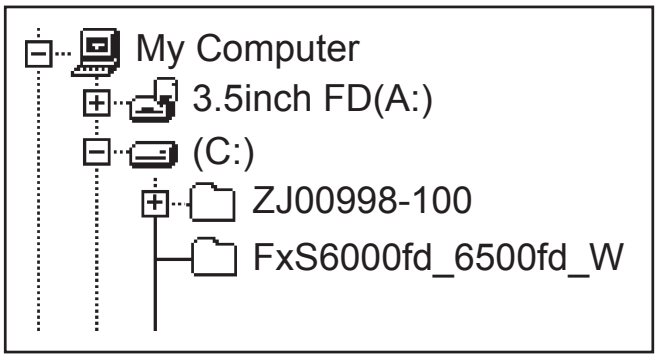
<Step2>
"ZJ00998-100" is a compression of "ZIP type" file.
The **"FxS6000fd_6500fd_W"** folder can be done by extracting it by "Compression software".
Copy the "FxS6000fd_6500fd_W" folder to the "C" drive on the Adjustment PC.



<Fig. 4-5-2>

<Step3>
When all the folders have been copied to the C:drive, double-click on [C:\ FxS6000fd_6500fd_W\ FFW.exe] to start the adjustment software.
(Note)

* Specify the preservation drive for C drive if it isdecompression software which can specify the preservation drive.
* Similarly, defrost without making a new folder if it is decompression software which can be defrosted without making a new folder.
* Defrost simply if the decompression software which you have cannot specify the drive specification and the folder making.



<Fig. 4-5-3>

[Caution][Important]
(a) PC adjustment software can not start when there is folder of FxS6000fd_6500fd_W in folder named ZJ00998-100.
Please preserve the folder of FxS6000fd_6500fd_W and SU1870 right under C drive.
(b) Please do not change the foldername named FxS6000fd_6500fd_W.
PC adjustment software can not start when foldername is changed.

4-5-2. Installation of DSC jig driver

* Since this camera uses the USB for communications with the personal computer, in order to start the PC adjustment software, [the DSC jig driver] needs to be installed in the personal computer beforehand.
* The DSC jig driver is the same as that for the FinePix S7000, so if this jig driver software is already installed in the personal computer, it is not necessary to install it.

The procedure is given below.

<Step 1>
DSC jig driver (ZJ00684-100.ZIP) is downloaded from Web server (http://fujifilm-di.intranets.com/).

<Step 2>
Defrost the downloaded compression software

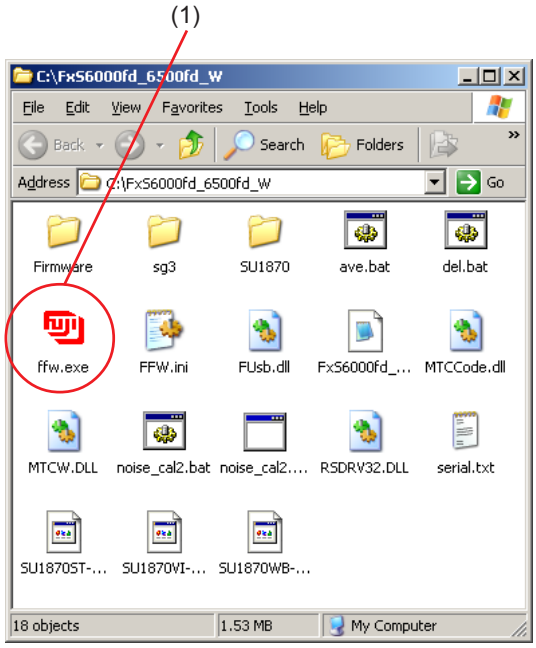
<Step 3>
Double-click setup.exe in the folder of defrosted ZJ00684-100 and install Fuji FILM DSC Jig Driver as follows.

<Step 4>
Install the software in [C:\ProgramFiles\Fjig] according to the instructions on the PC's screen.

<Fig. 4-5-4>

4-5-3. Adjustment software initiation method

When the folder has been copied to the C drive, double-click on the file C:\FxS6000fd_6500fd_W\ffw.exe (Fig.4-5-5) to start the adjustment software.



<Fig. 4-5-5>

4-6. Initial Settings of the Adjustment Software

* The initial settings are already written in the "FFW.ini" file, therefore perform the following procedure to the letter. Note that, if you change file names, the software will not start up.

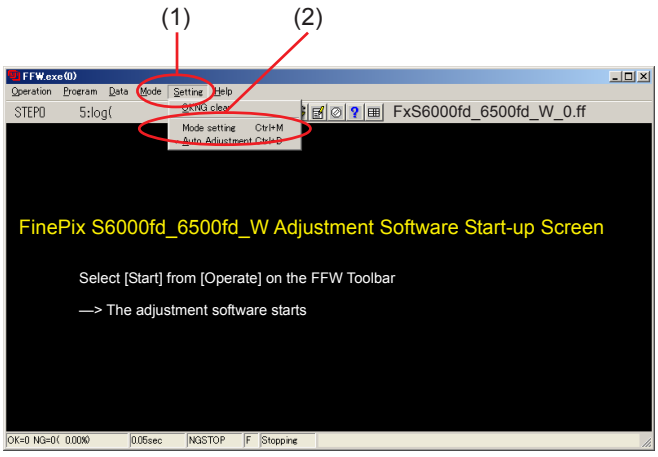
* The initial settings of steps 3 to 6 are already set in the "FFW.ini" file. Therefore, you need only to check them.

* Do not rewrite the user program (FxS6000fd_6500fd_W_0.ff). If the program is rewritten, the adjustment software will not startup.

<Step 1>
Double-click on the "FFW.exe" execute file of the adjustment software to open the "FinePixS6000fd_6500fd_W Adjustment Software Startup" screen (Fig. 4-6-1).

<Fig. 4-6-1>

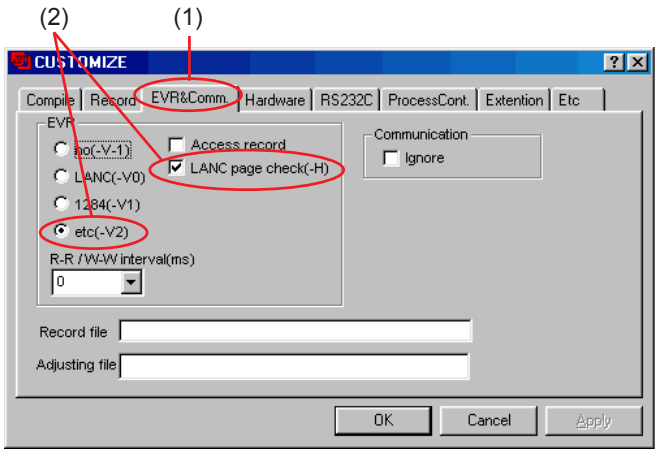
<Step 2>
Click on "Settings" ([1] in Fig. 4-6-2) in the menubar of the startup window.
Then, select "Mode setting" ([2] in Fig. 4-6-2) from the pull-down menu that appears.



<Fig. 4-6-2>

<Step 3>
Select the "EVR&Comm." tab ([1] in Fig. 4-6-3) in the "Customize" dialog box that appears.
Set the "EVR&Comm." items as follows.

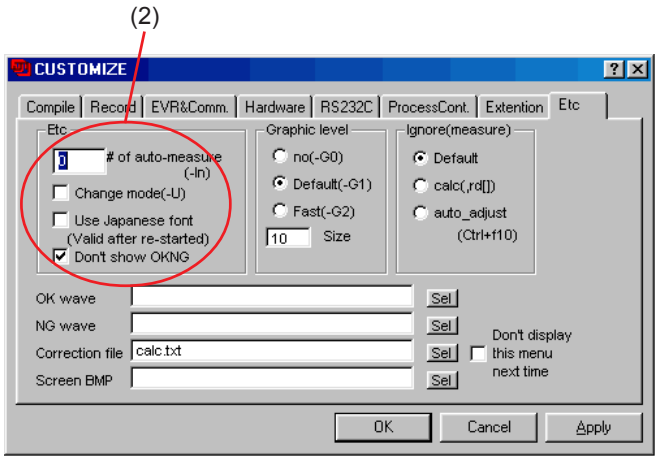
Item	Details
etc (-V2)	Check
LANC page	Check



<Fig. 4-6-3>

<Step 4>
Select the "Etc" tab ([1] in Fig. 4-6-4) in the "Customize" dialog box that appears.
Set the "Etc" items as follows.

Item	Details
# of auto measure	0
Change mode	Do not check



<Fig. 4-6-4>

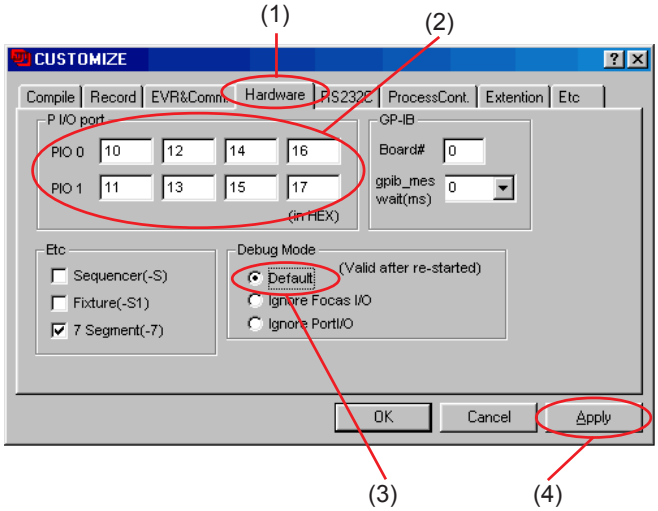
[Note]
If [Disable OKNG display] on the PC screen (Fig. 4-6-4) is set to OFF, the PC screen displays [OK] if adjustment is OK, and [NG] if adjustment is NG (either setting is OK).

<Step 5>
Select the "Hardware" tab ([1] in Fig. 4-6-5) in the "Customize" dialog box that appears.
Input the values for PI/O port ([2] in Fig. 4-6-5).

PIO 0	10	12	14	16
PIO 1	11	13	15	17

Set the "Hardware" items ([3] in Fig. 4-6-5) as follows.

Item	Details
Debug Mode	Select [Default]



<Fig. 4-6-5>

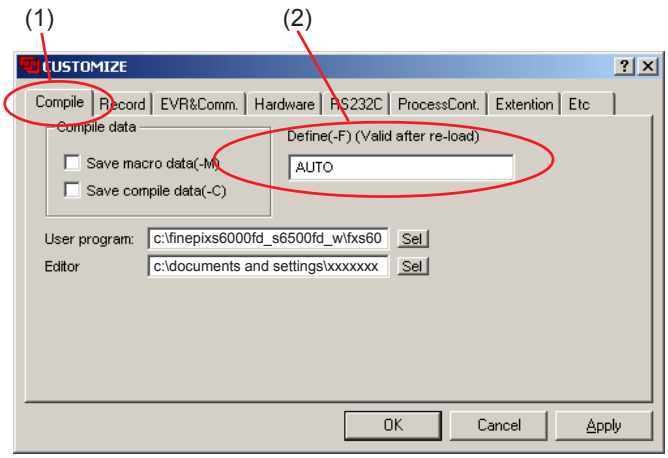
<Step 6>
Once the above settings have been made, click on "Apply" ([4] in Fig. 4-6-5) in the "Customize" dialog box to complete setup.
This applies the setup, therefore setting is unnecessary from the next time forward.

[Setting when S9000/9500 Zoom drive jig is used]

Always use this jig for AF adjustment.
But it can be used for either manual or automatic adjustment for shading.
A zoom drive jig is not required for manual adjustment.
If no zoom drive jig is connected, leave the [Define (-F)] field blank. (If the [AUTO] setting is used, an error occurs when the calibration software is launched.)

<Step 7>
Select the "Compile" tab ([1] in Fig. 4-6-6) in the "Customize" dialog box that appears.
Set the "Compile" items as follows.

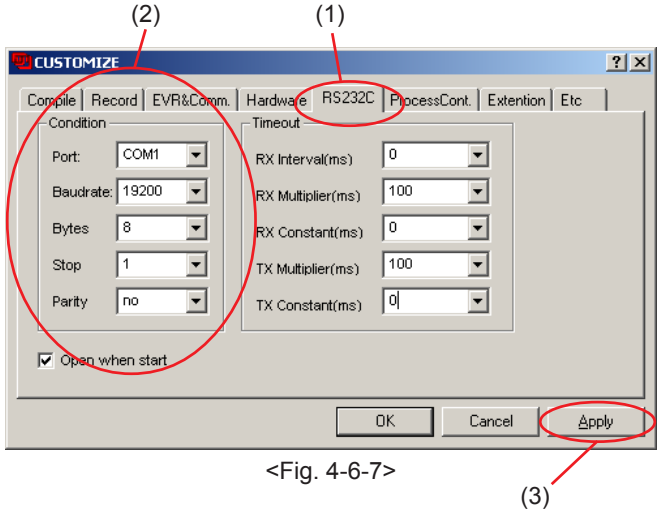
Item	Details
Define(-F)	AUTO
Compile data	Do not check



<Fig. 4-6-6>

<Step 8>
Select the "RS232C" tab ([1] in Fig. 4-6-7) in the "Customize" dialog box that appears.

Item	Details
Port:	COMX (Port connected with PC)
Baudrate:	19200
Bytes:	8
Stop:	1
Parity:	no
Open when start:	Check



<Fig. 4-6-7>

<Step 9>
Once the above settings have been made, click on "Apply" ([3] in Fig. 4-6-7) in the "Customize" dialog box to complete setup.

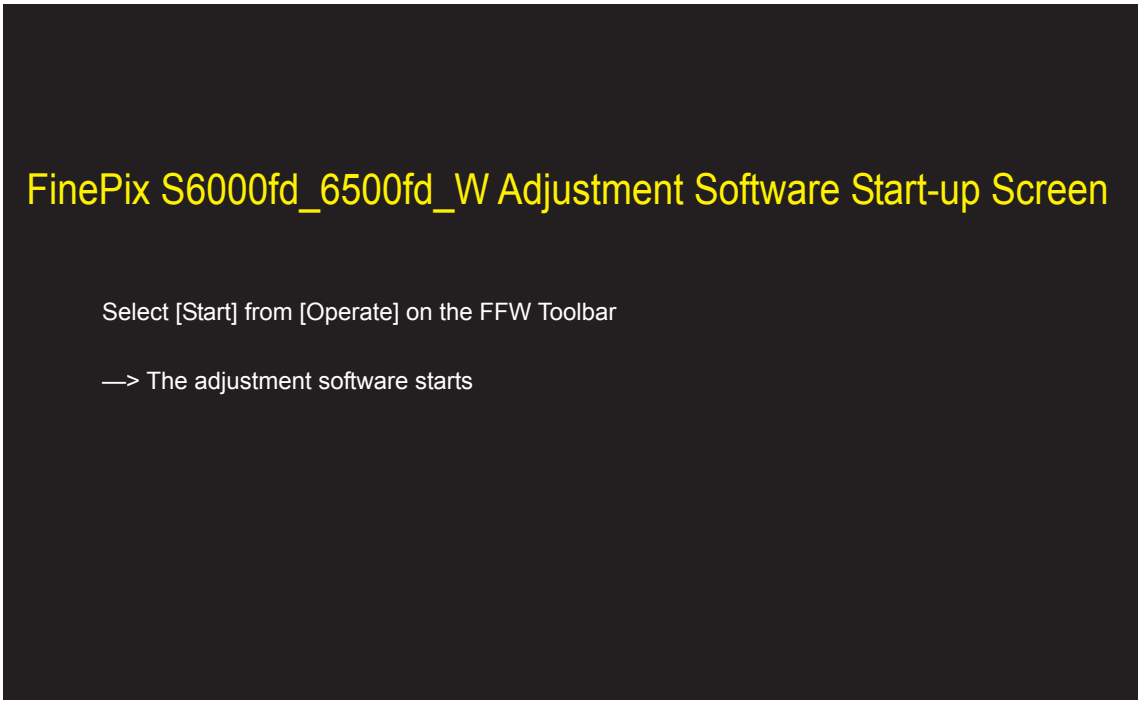
4-7. Starting the Adjustment Software

<Step 1>

Double-click on [FFW.EXE] (Fig. 4-5-3) in the folder copied to the C drive (see '4-5-1. Various downloading software decompressions, preservation methods and notes') to display the adjustment software start-up screen.

<Step 2>

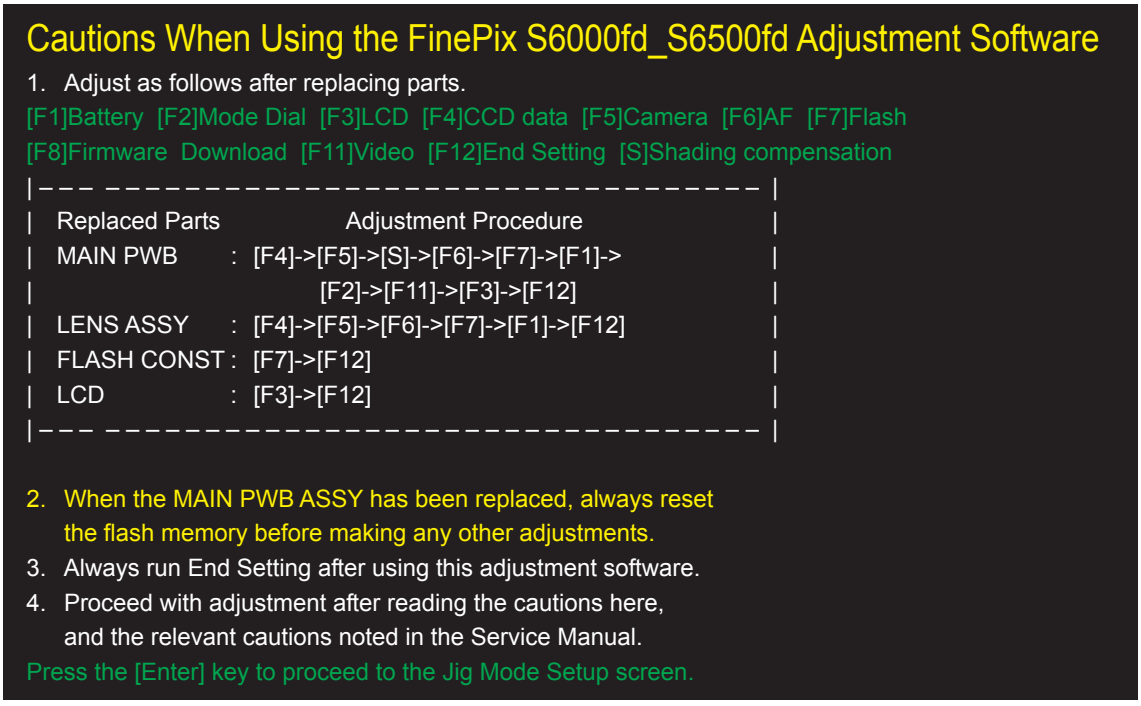
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-7-1>

—> The [Cautions When Using the Adjustment Software] screen appears.

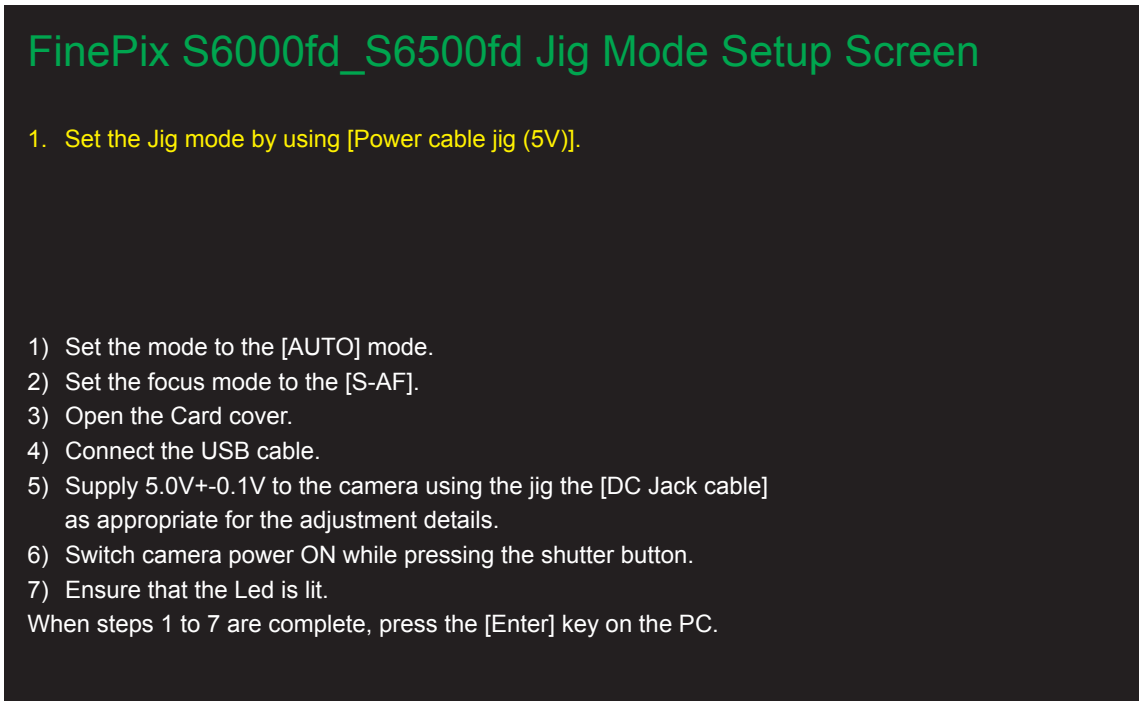
<Step 3>



<Fig. 4-7-2>

—> The [Jig Mode Setup] screen appears.

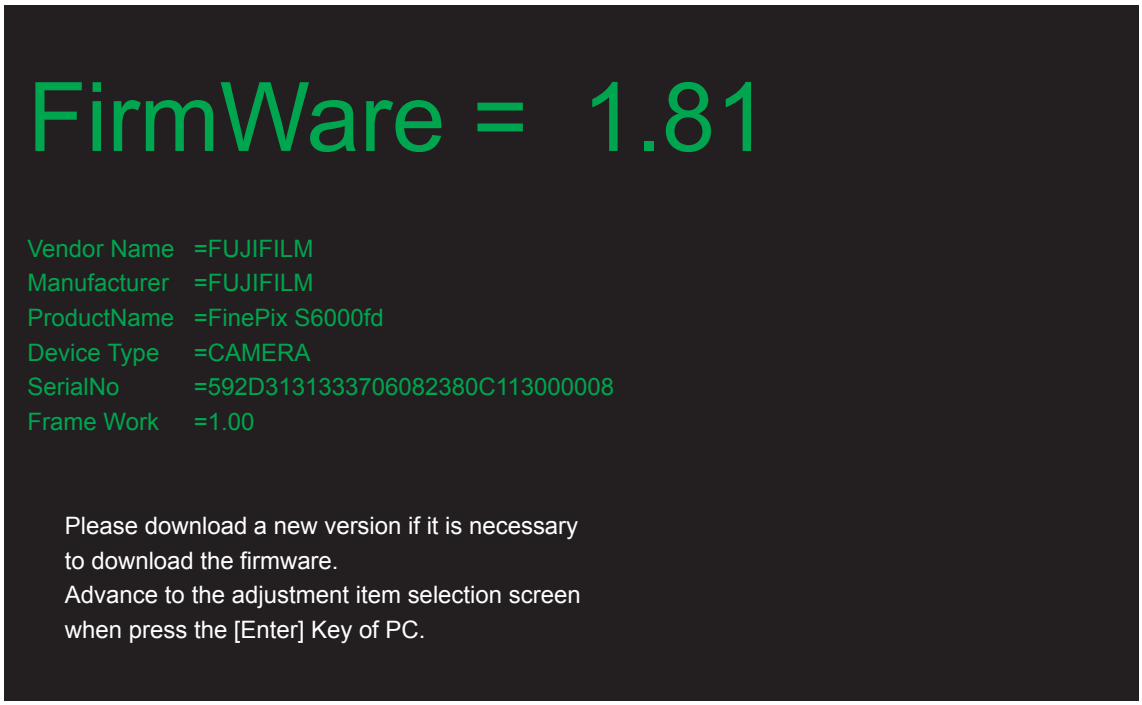
<Step 4>



<Fig. 4-7-3>

—> The [Firmware version check] screen appears.

<Step 5>

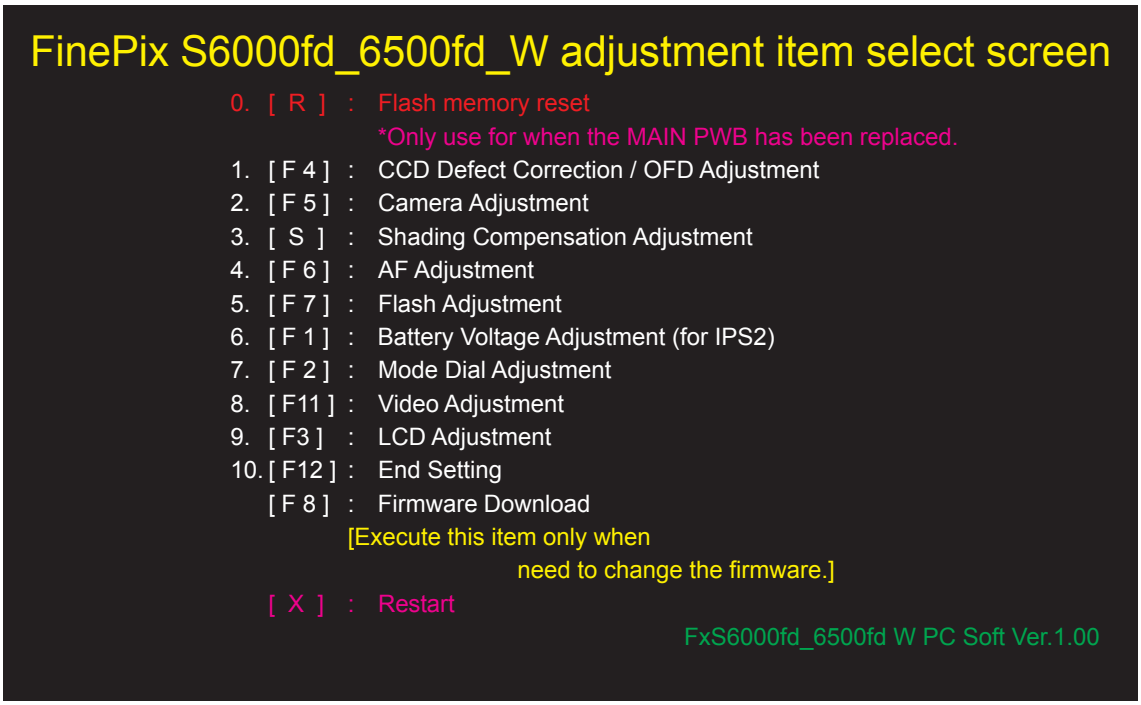


<Fig. 4-7-4>

—> The [Adjustment Items Select] screen appears.

<Note>
(1) [F1] Battery Adjustment cannot be run unless the Power Cable Jig is used to supply power to the camera.
(2) When new MAIN PWB ASSY is replaced, MAIN PWB ASSY is automatically initialized. At that time, wait for one-two minutes, and advance the adjustment according to the instruction of the adjustment software.

<Step 6>



<Fig. 4-7-5>

<Note>

(1) 'FxS6000fd_6500fd W PC Soft Ver.1.00' at the bottom-right of the screen indicates the version number of the adjustment software.

(2) After running firmware download, other adjustments may be required depending on the content of the download software. In such cases, the items to be adjusted, and the sequence of adjustment, will be indicated separately.

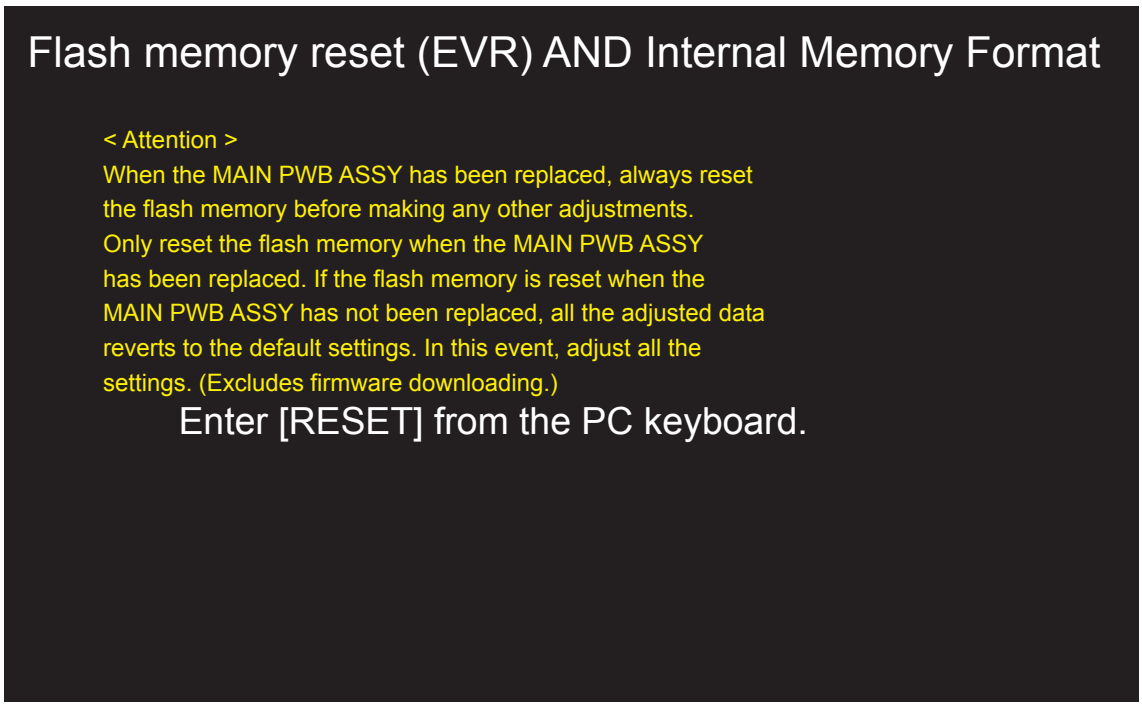
(3) After starting the adjustment software and beginning communication with the camera, always run End Setting following adjustment and before returning the camera to the customer. If the End Setting is not run, the PC will not recognize the camera when the two are connected.
Reason: As the camera will remain in the Jig mode (repair mode), it will not be recognized with the normal camera drivers.

(4) Pressing the [X]:Restart key interrupts adjustment and returns you to the "Notes on using the adjustment software" screen. However, the camera will still not be recognized as PTP or Mass Storage.

4-8. [R] : Flash Memory Reset

<Note>
Only reset the flash memory when the MAIN PWB ASSY has been replaced.
When the MAIN PWB ASSY has been replaced, always reset the flash memory before making any other adjustments.
If the flash memory is reset when the MAIN PWB ASSY has not been replaced, all the adjusted data reverts to the default settings.
In this event, adjust all the settings (Excludes firmware downloading).
After the MAIN PWB ASSY has been replaced, proceeding with other adjustments without first resetting the flash memory will prevent the successful completion of the adjustments (In some cases the camera may be completely disabled).
If this occurs, set the camera to jig mode again and then reset the flash memory.
Note that resetting the flash memory formats the internal memory, so considerable care should be taken with products being repaired.

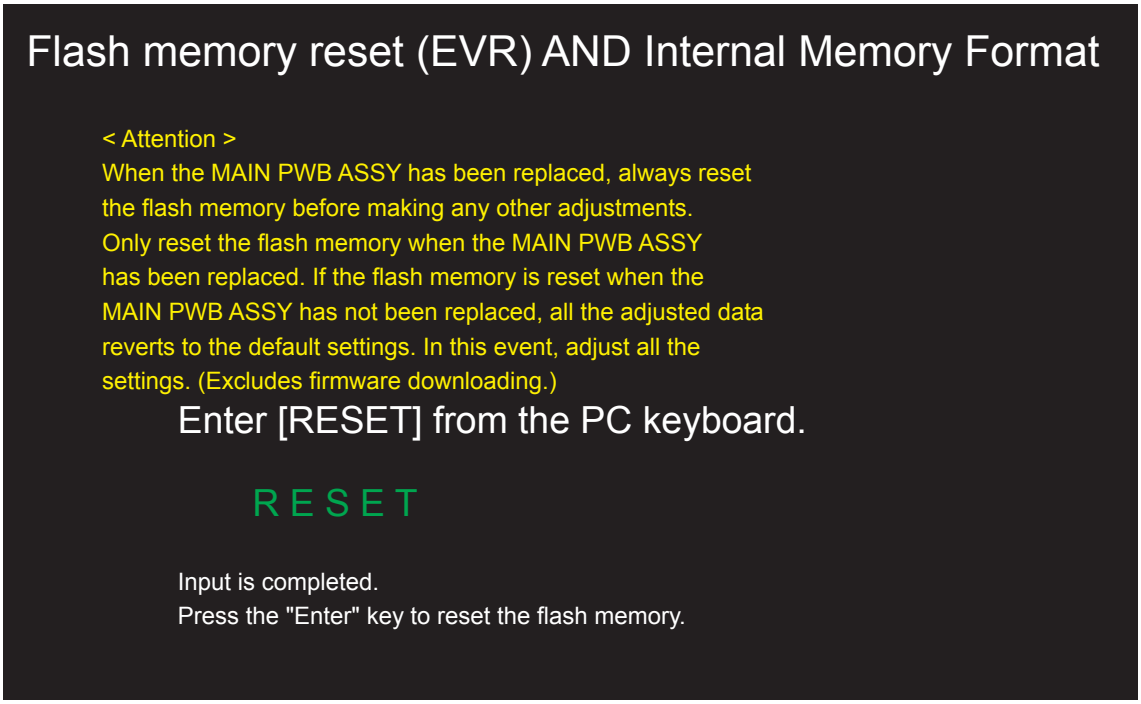
<Step 1>
In the adjustment item selection screen, select [R]: Reset flash memory.
-->The flash memory reset confirmation screen appears.



<Fig. 4-8-1>

-->The [Reconfirm flash memory reset] screen then appears.

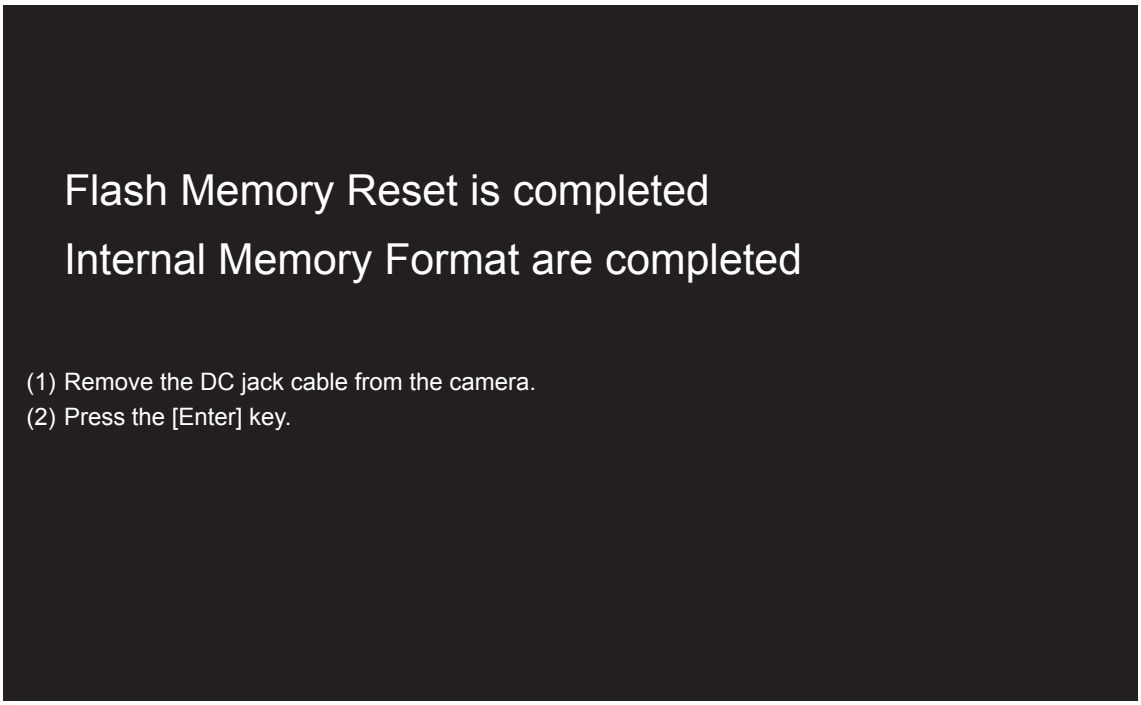
<Step 2>



<Fig. 4-8-2>

-->Once the flash memory reset has been completed successfully, the [End flash memory reset] screen appears.

<Step 3>



<Fig. 4-8-3>

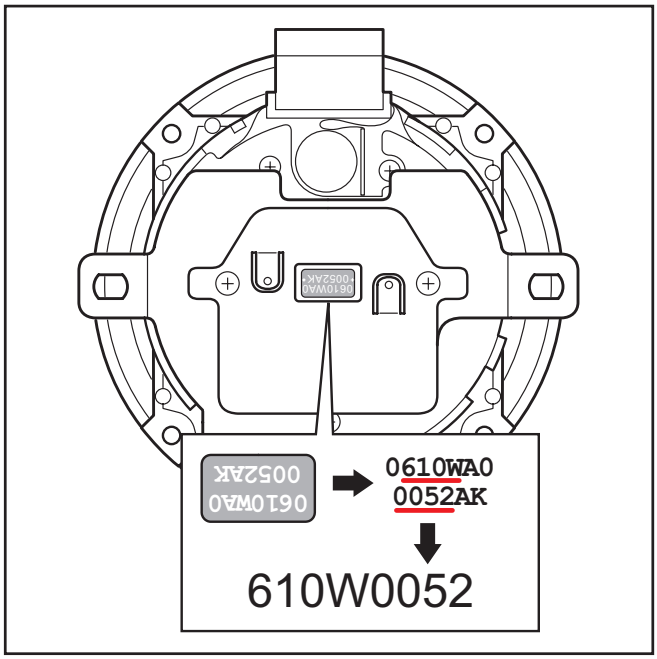
4-9. [F4] : CCD Defect Correction / OFD Adjustment

CCD data input is required when the LENS ASSY or MAIN PWB ASSY is replaced.

[Method of acquiring CCD data]

1. When you exchange LENS ASSY
   --> It is attached to LENS ASSY.

2. When you exchange MAIN PWB ASSY
   --> Creating a CCD data floppy disk when the MAIN PWB ASSY has been replaced.
   * The following example assumes the use of the serial No. shown at right.



<Fig. 4-9-1>

<Step 1>
Read the serial number of LENS ASSY.
The numbers shown at right are as follows.
First line: 0610WA0 (seven digits)
Bottom line: +0052AK+ (eight digits)
The name of the CCD data file containing this number is **"610W0052.dat"**.
* Use the 2-5th digit from the first line.
* Use the 1-4th digit from the Bottom line.

Cautions:

1. The CCD defect data file extension is **"dat"**. Depending upon Windows settings, this extension may not be displayed. In this case, change the settings to ensure that it is displayed.
2. In addition to numbers, letters are also used in the CCD serial No. The data file name is instructed in the same manner in this case.
3. Ensure that the CCD serial No. is read correctly. If the file name is read incorrectly CCD data for another camera will be loaded when this file is used.

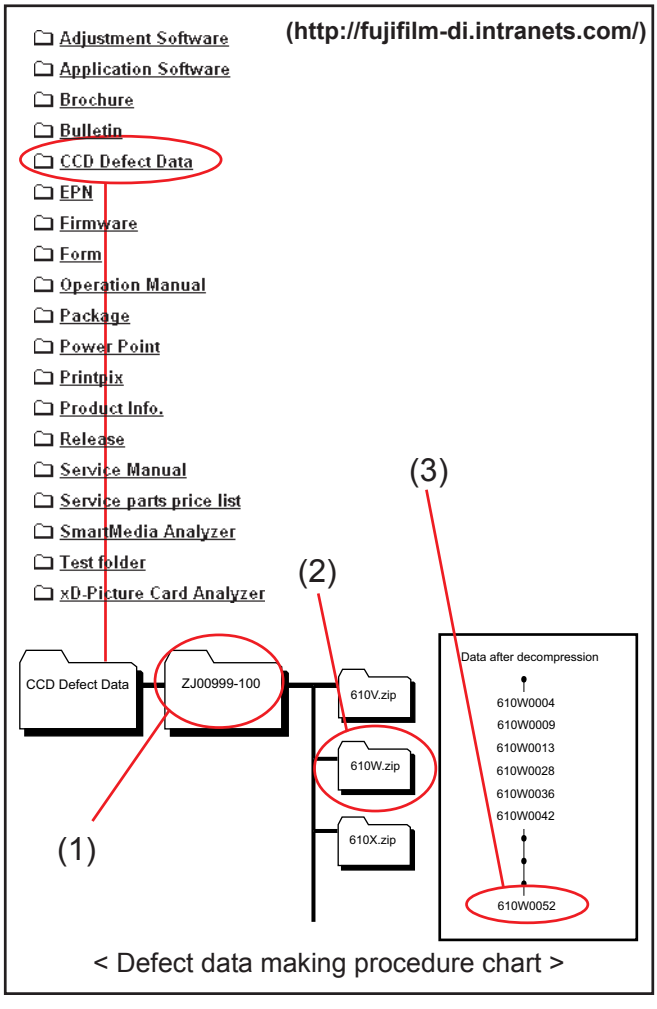
<Step 2>
Download the ZIP file of top four digits from Web server (http://fujifilm-di.intranets.com/).
Open [ZJ00999-100] in the CCD defect data folder, and download "610W.zip".

<Step 3>
Decompress "610W.zip".
--> "610W folders" including **"610W0052.dat"** is made.

<Step 4>
Insert a writable floppy disk into the floppy disk drive on the computer.

<Step 5>
Open in "610W folders", search for **"610W0052.dat"**, and copy it onto the floppy disk.

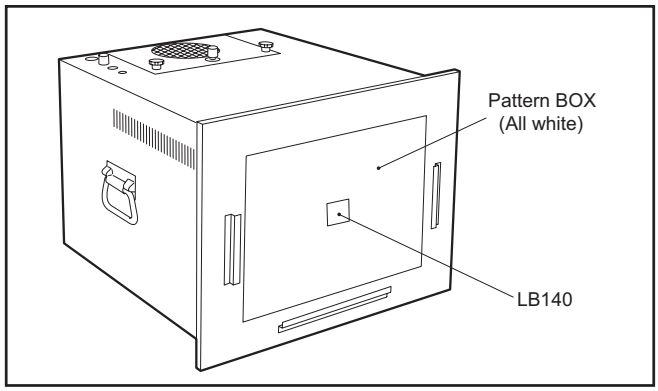
Caution: Do not create a folder on the floppy disk when copying the data.



< Defect data making procedure chart >

< Use the pattern box for Camera adjustment >

Turn on the power supply in the pattern box.
Afterwards, wait for about ten minutes so that the source of light may stabilize.



<Calibration method of pattern box>

(1) Brightness:
140 ± 20cd/m^2 (with LB140 filter)
No chart, center of pattern box
Minolta brightness meter LS-110 or equivalent
* Calibration method
Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the brightness meter, adjust the pattern box brightness to 140 ± 20cd/m^2.

(2) Color temperature:aa
6100 ± 200K (with LB140 filter)
No chart, center of pattern box
Minolta color meter IIIF or equivalent
* Calibration method
Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the color temperature meter, adjust the pattern box color temperature to 6100 ± 200K.

• Reference
Without the filter (LB140)
Luminance: 600 ± 60 cd/m^2 With the luminance meter connected to the pattern box
Color temperature: 3200 ± 100K With the color temperature meter connected to the pattern box

< Adjustment >

<Step 1>
Select [F4] CCD Defect Correction / OFD Adjustment on the [Adjustment Items Select] screen.
--> The [CCD Defect Correction / OFD Adjustment Preparation] screen appears.

<Step 2>
Run the adjustment in accordance with the instructions on the screen.

CCD Defect Correction / OFD Adjustment

< CCD data Preparations >

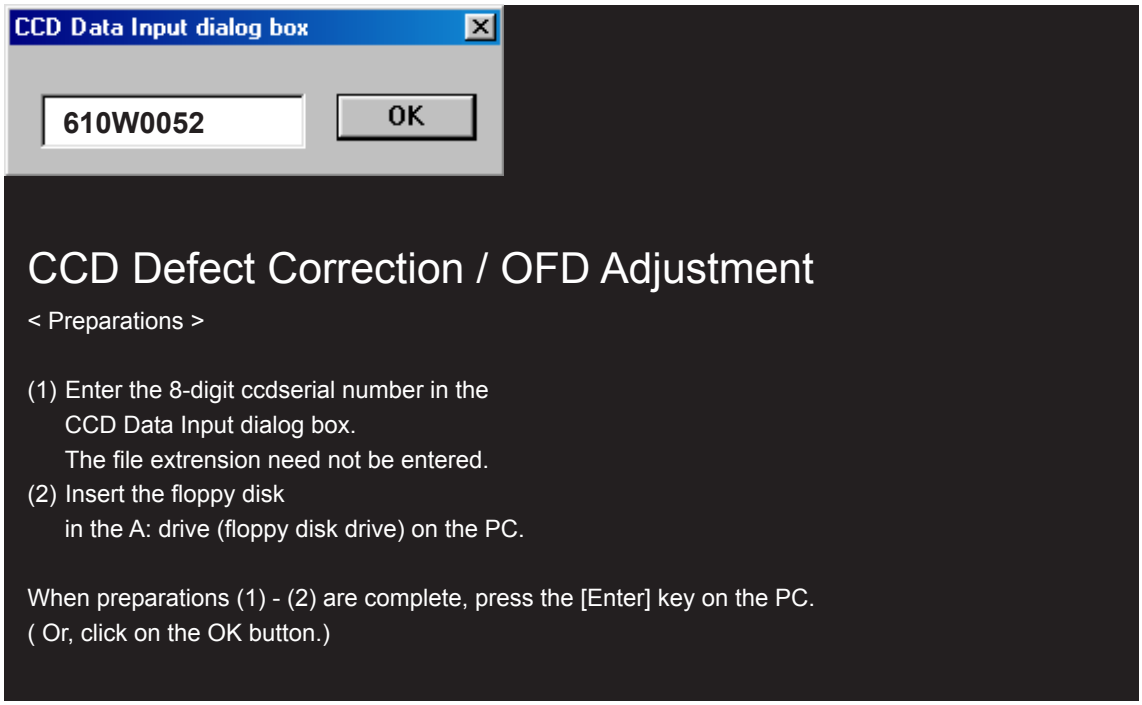
(1) Prepare the LB140 filter.
(2) Adjust the color temperature of the pattern box (PTB450) to 6100+-200K.
(3) Adjust the luminance of the pattern box (PTB450) to 140+-20cd/m^2.
(4) Fix the camera on a tripod and set it in front of the pattern box.

When preparations (1) - (4) are complete, press the [Enter] key on the PC.

<Fig. 4-9-2>

—> The [CCD Defect Correction / OFD Adjustment start] screen appears.

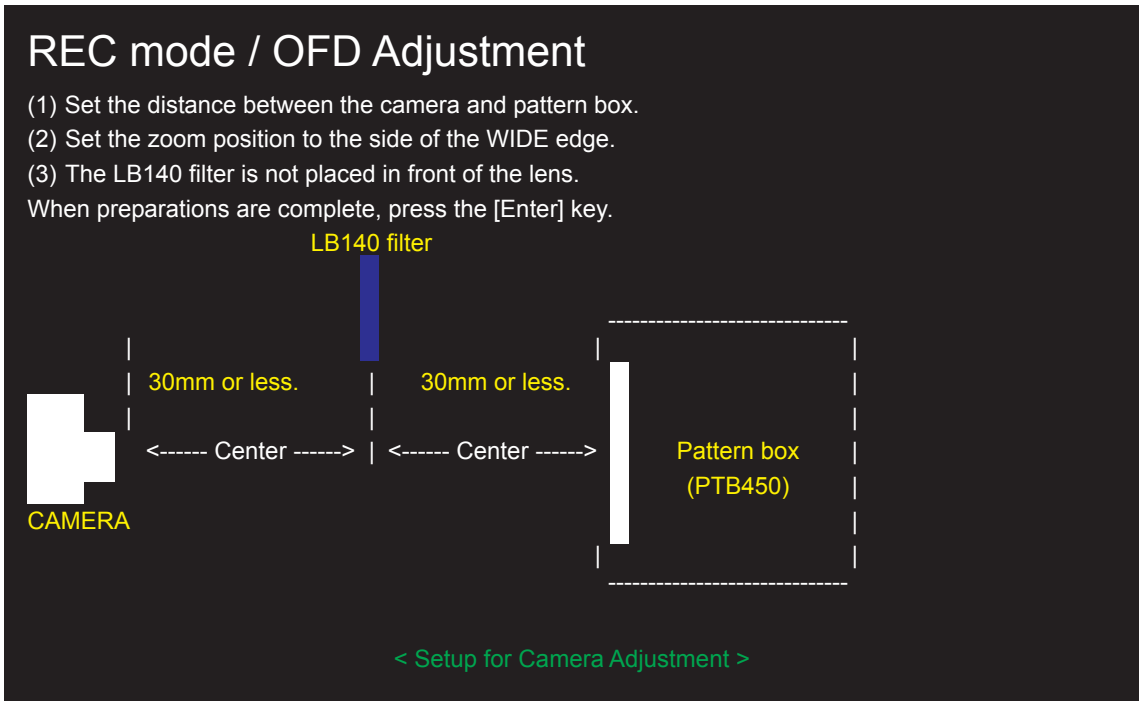
<Step 3>



<Fig. 4-9-3>

—> The [CCD Defect Correction / OFD Adjustment] screen appears.

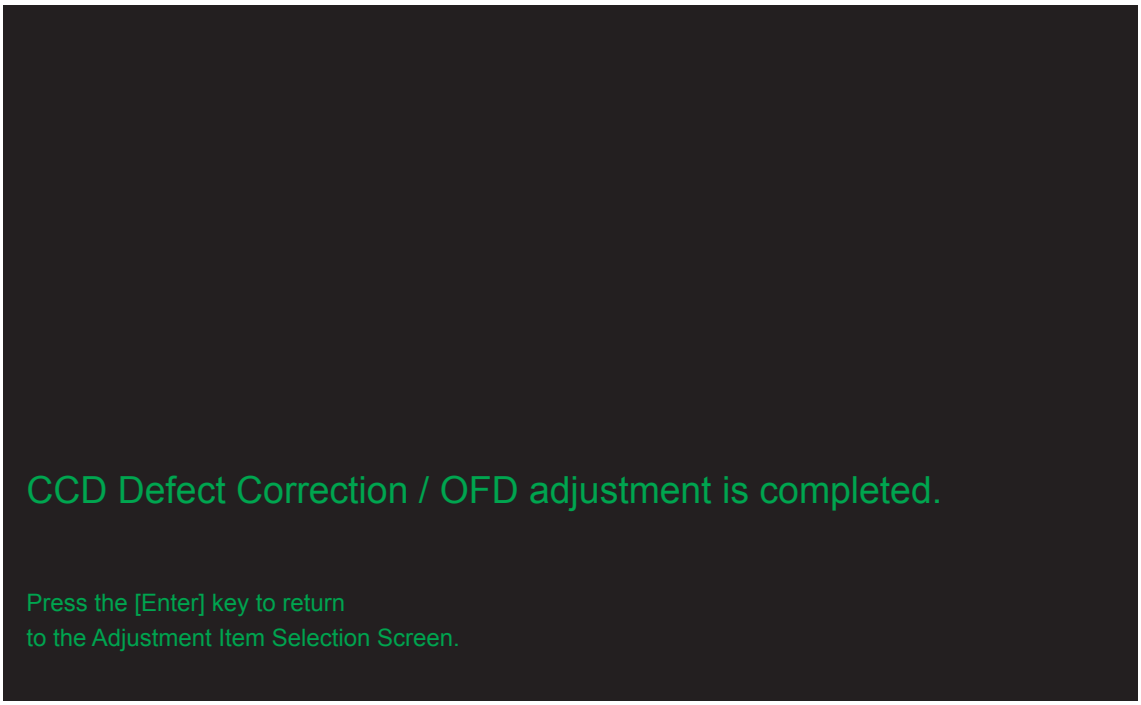
<Step 4>



<Fig. 4-9-4>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.
--> The [CCD data adjustment complete] screen appears.

<Step 4>



<Fig. 4-9-5>

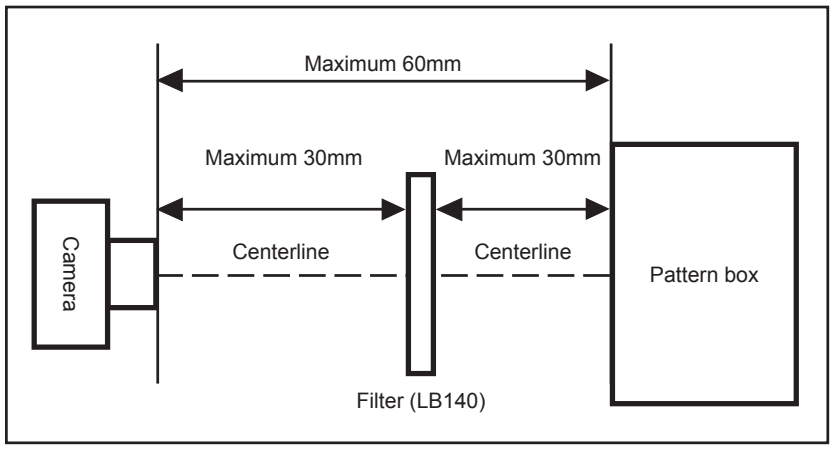
4-10. [F5] : Camera Adjustment

(shutter adjustment, adjustment for reduced aperture sensitivity, ISO sensitivity adjustment, white balance adjustment, AE adjustment, offset level adjustment)

< Setup for Camera Adjustment> < Importance! >

1. Calibrate the pattern box before adjusting the camera.

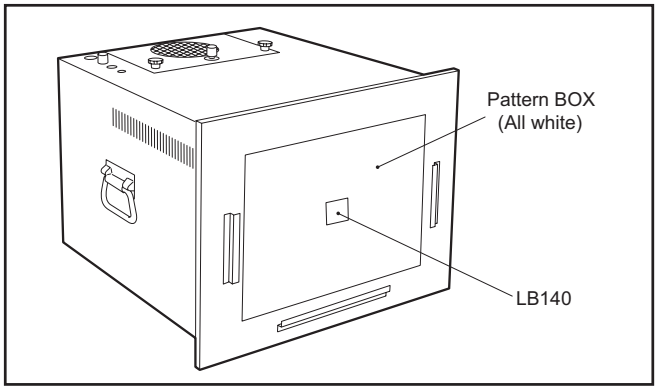
2. Ensure that camera adjustment is carried out in dark surroundings (ideally in a darkroom environment). If a darkroom cannot be set up, use a box painted black on the inside to cover the camera before performing the adjustment.



<Note>
An error will occur during Camera adjustment, and adjustment cannot be completed, unless the pattern box is calibrated correctly.

< Use the pattern box for Camera adjustment >

Turn on the power supply in the pattern box.
Afterwards, wait for about ten minutes so that the source of light may stabilize.



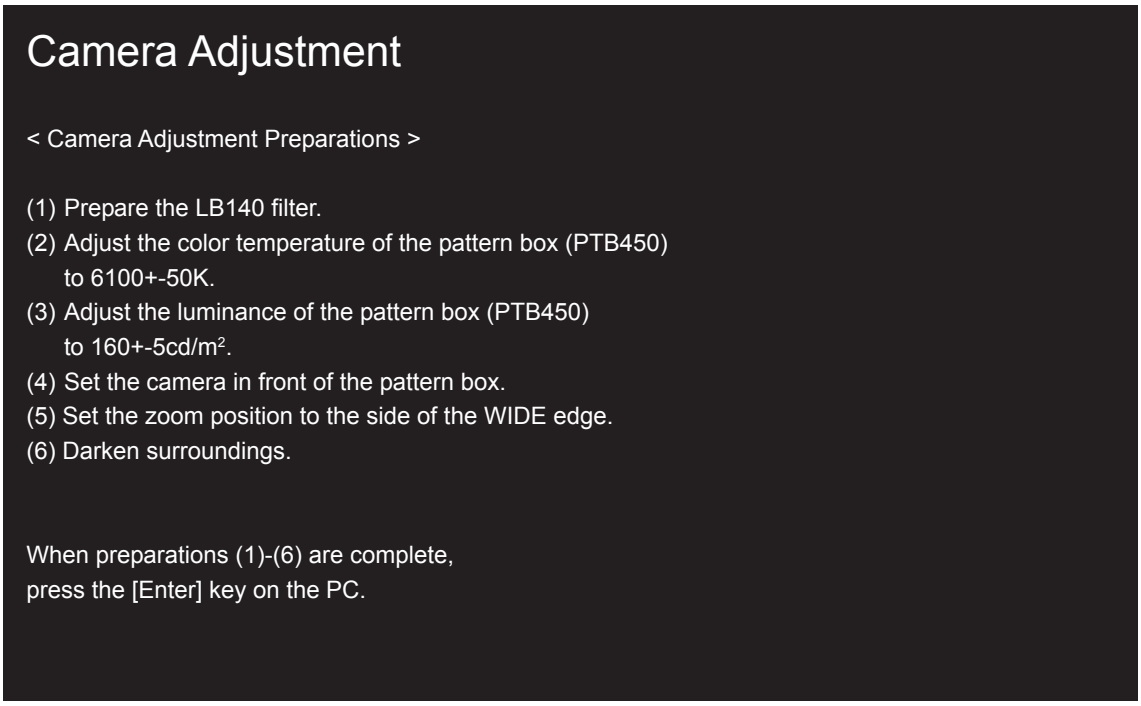
<Calibration method of pattern box>

(1) Brightness:
160 ± 5cd/m^2 (with LB140 filter)
No chart, center of pattern box
Minolta brightness meter LS-110 or equivalent
* Calibration method
Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the brightness meter, adjust the pattern box brightness to 160 ± 5cd/m^2.

(2) Color temperature:aa
6100 ± 50K (with LB140 filter)
No chart, center of pattern box
Minolta color meter IIIF or equivalent
* Calibration method
Place the filter (LB140) against the pattern box. With the filter (LB140) in contact with the color temperature meter, adjust the pattern box color temperature to 6100 ± 50K.

<Step 1>
Select [F5] Camera Adjustment on the [Adjustment Items Select] screen.
--> The [Camera Adjustment Preparation] screen appears.

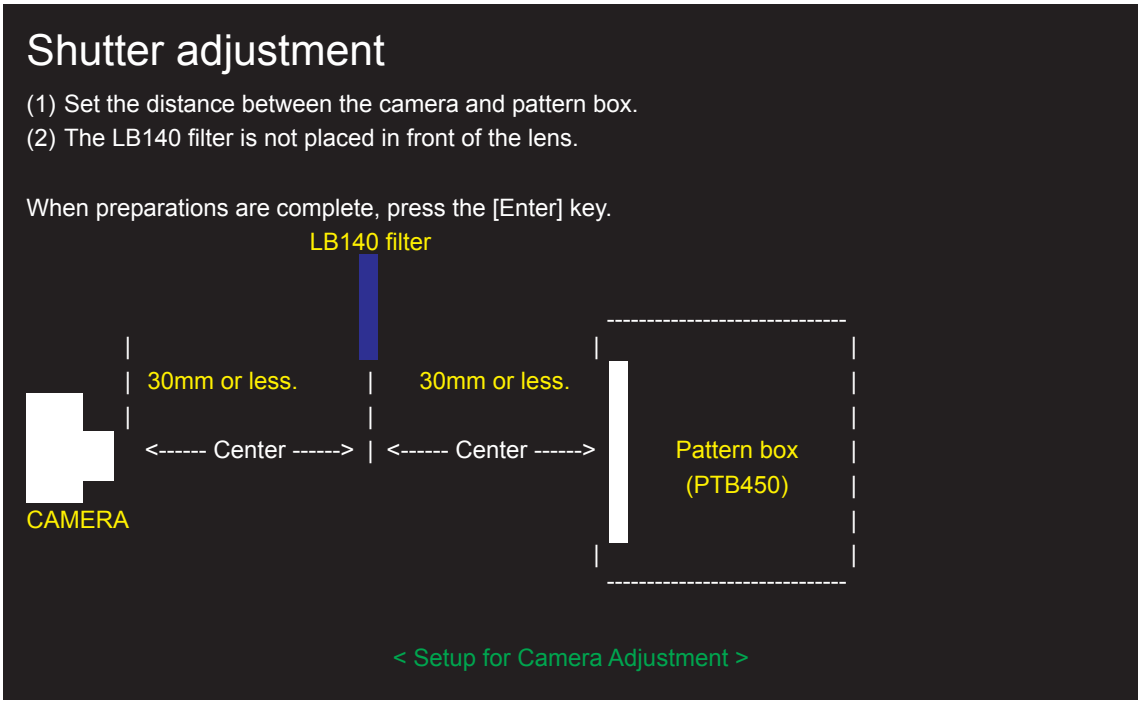
<Step 2>
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-10-1>

--> The [Shutter adjustment] screen appears.

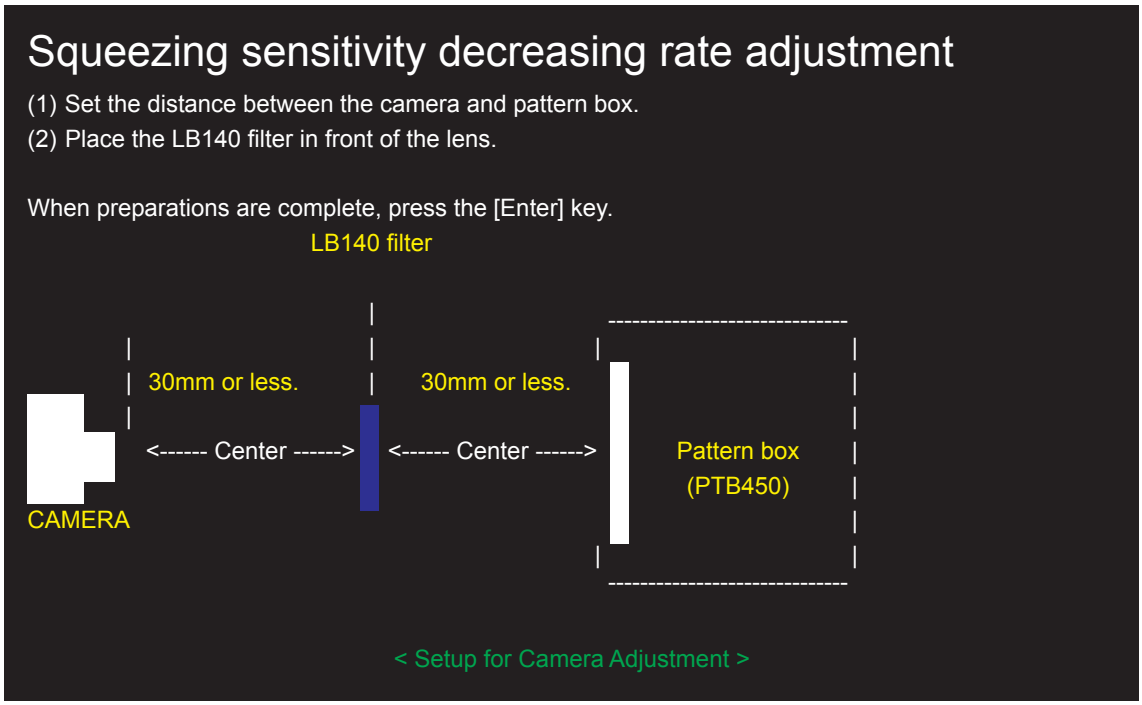
<Step 3>



<Fig. 4-10-2>

--> The [Squeezing sensitivity decreasing rate adjustment (with filter)] screen appears.

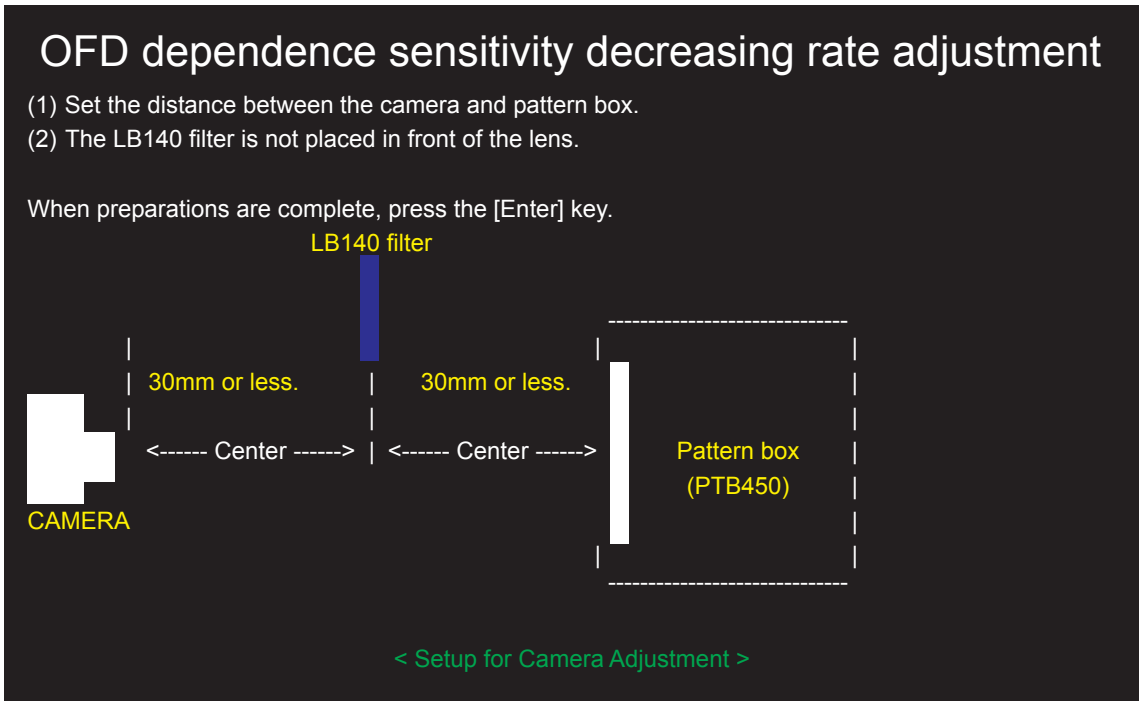
<Step 4>



<Fig. 4-10-3>

--> The [OFD dependence sensitivity decreasing rate adjustment (without filter)] screen appears.

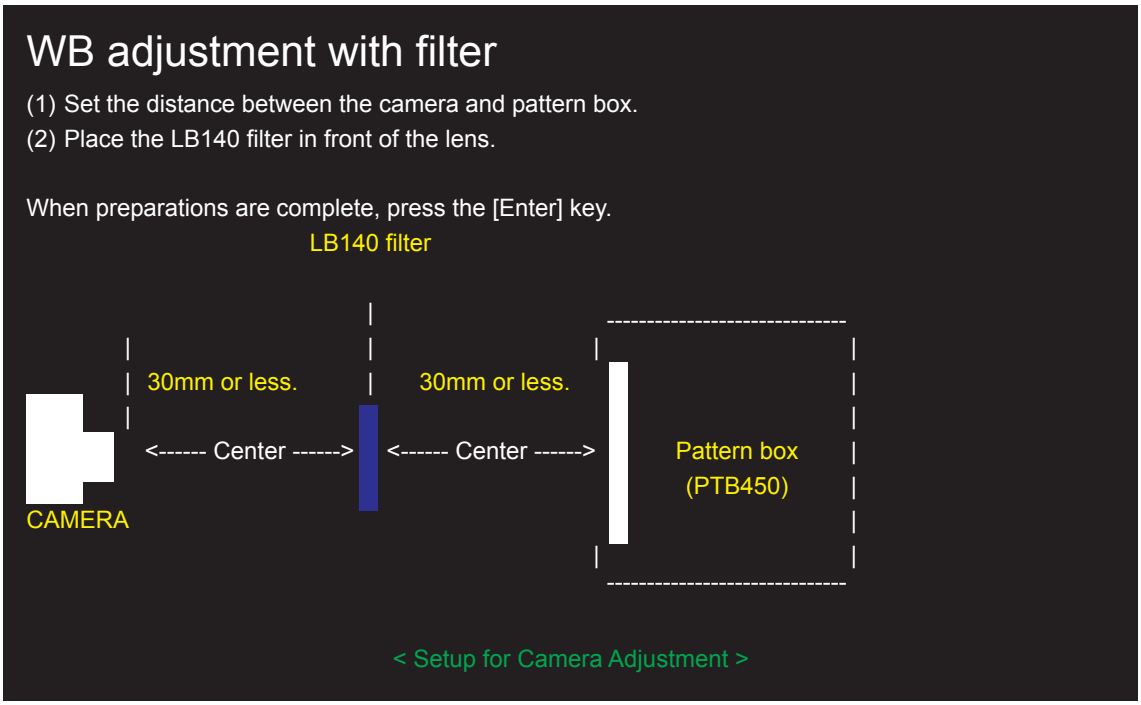
<Step 5>



<Fig. 4-10-4>

--> The [WB adjustment with filter] screen appears.

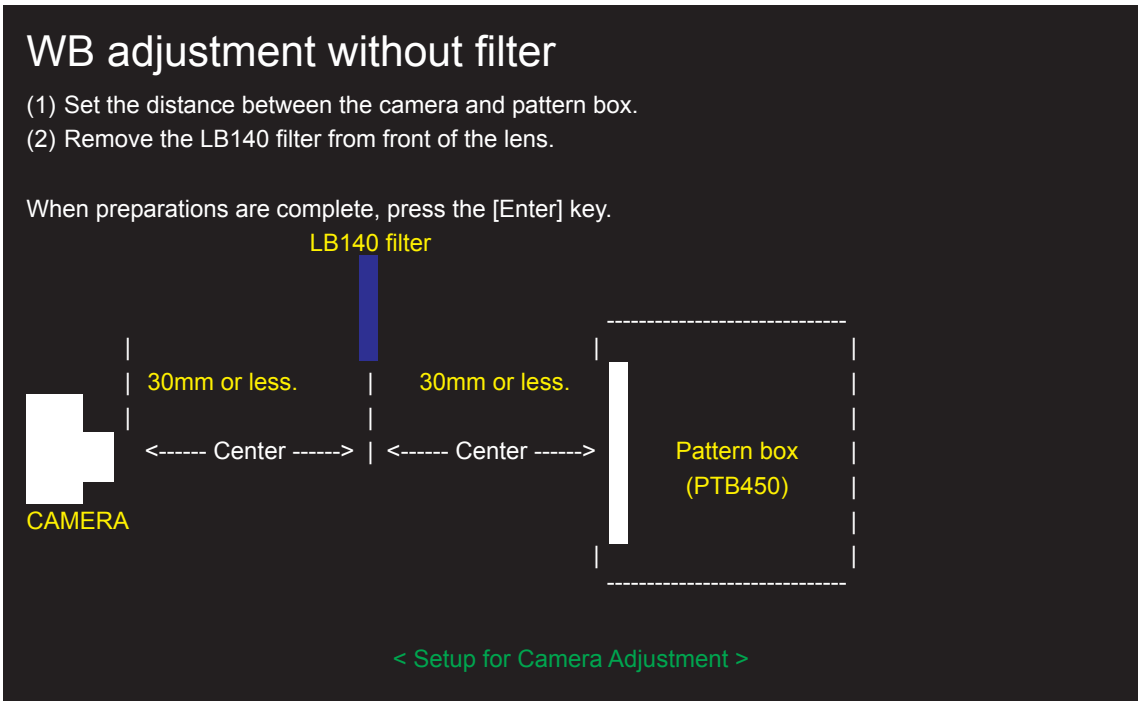
<Step 6>



<Fig. 4-10-5>

--> The [WB adjustment without filter] screen appears.

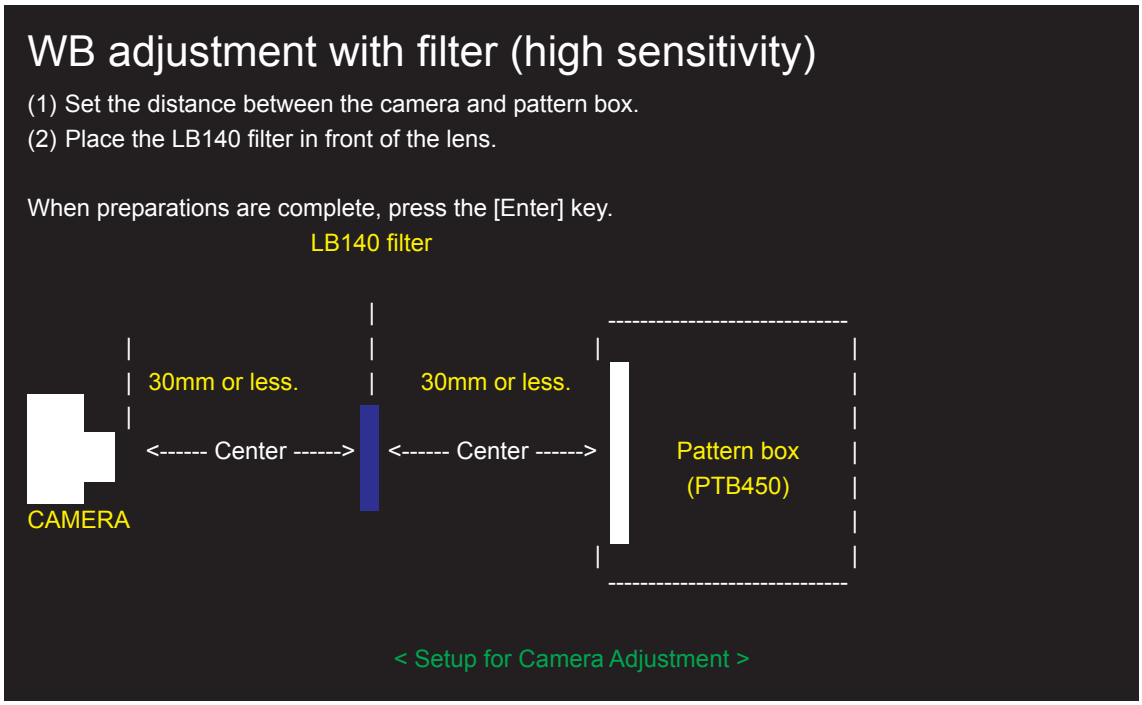
<Step 7>



<Fig. 4-10-6>

--> The [WB adjustment with filter (high sensitivity)] screen appears.

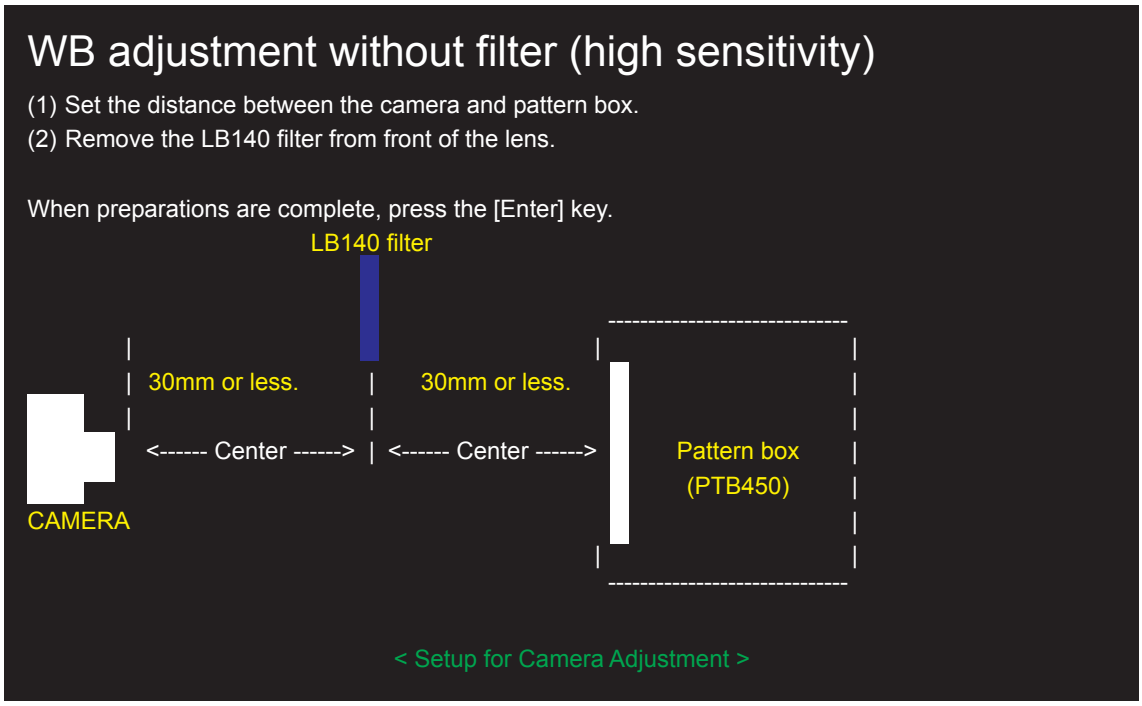
<Step 8>



<Fig. 4-10-7>

--> The [WB adjustment without filter (high sensitivity)] screen appears.

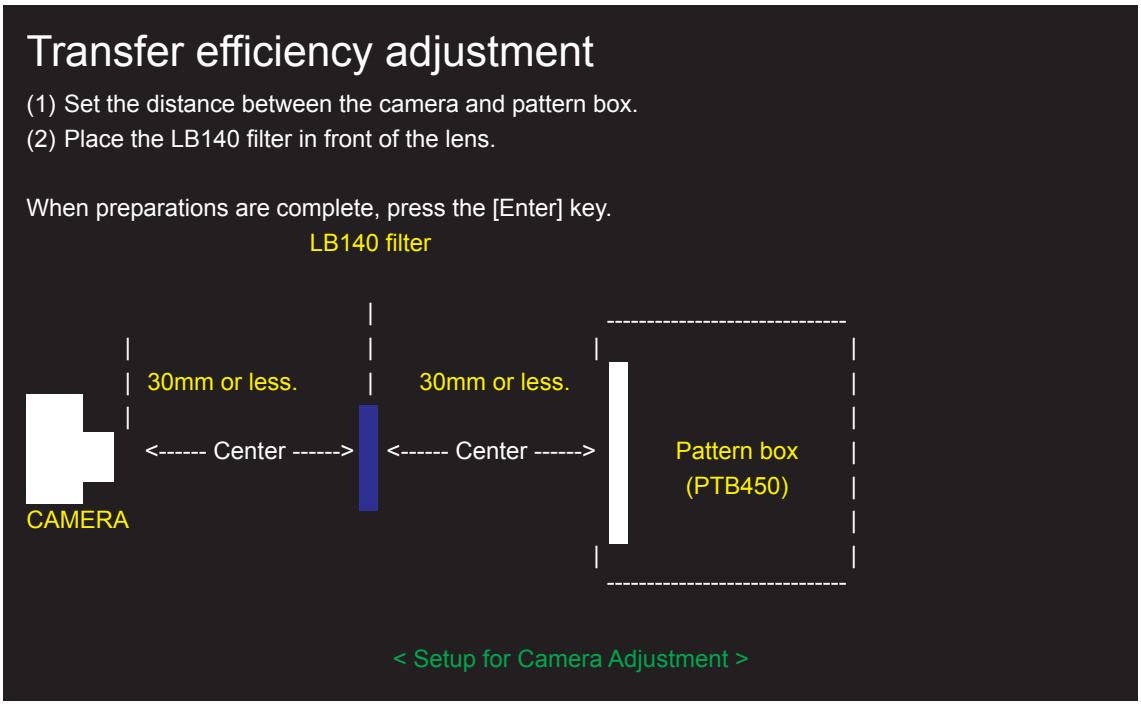
<Step 9>



<Fig. 4-10-8>

--> The [Transfer efficiency adjustment] screen appears.

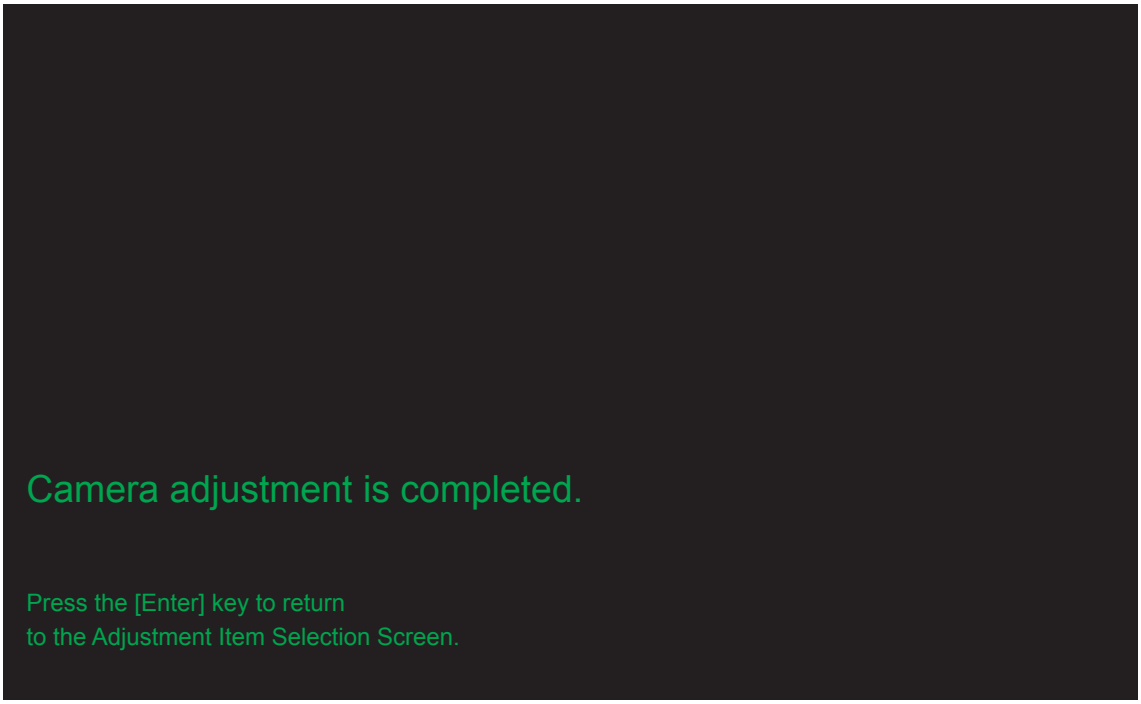
<Step 10>



<Fig. 4-10-9>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.
--> The [Camera Adjustment Complete] screen appears.

<Step 11>



<Fig. 4-10-10>

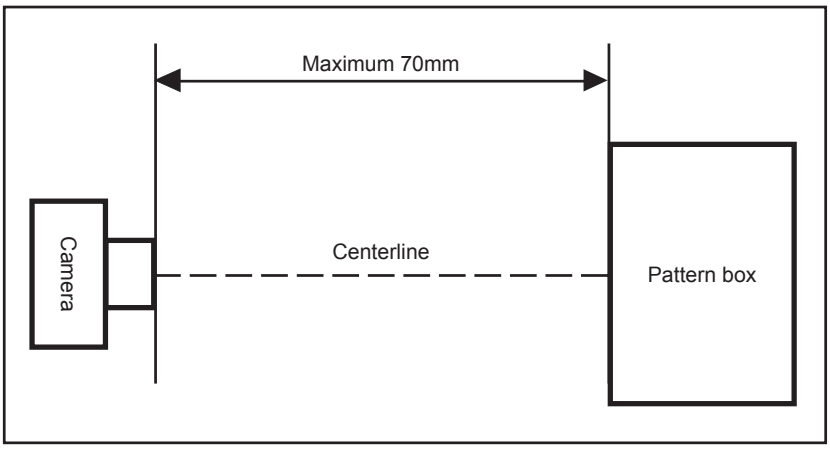
4-11. [S]: Shading compensation adjustment

(Shading compensation adjustment)

< Setup for Shading compensation adjustment > < Importance! >

1. Calibrate the pattern box before adjusting the shading.

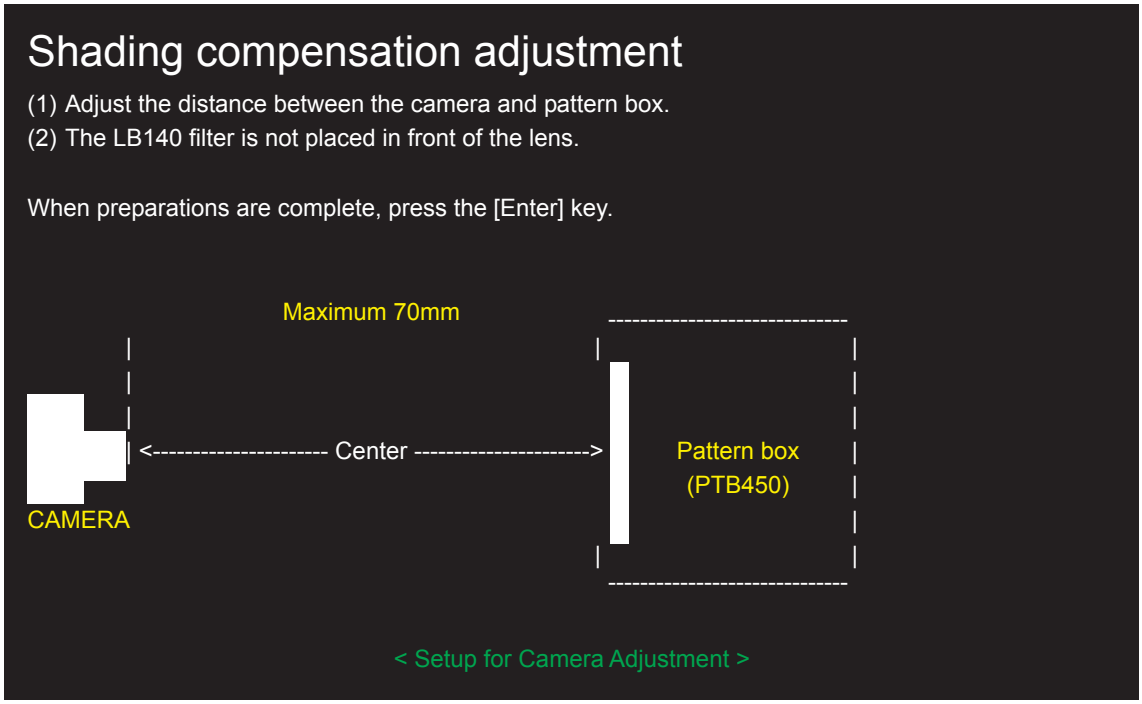
2. Ensure that shading adjustment is carried out in dark surroundings (ideally in a darkroom environment). If a darkroom cannot be set up, use a box painted black on the inside to cover the camera before performing the adjustment.



<Step 1>

Select [S] Shading compensation Adjustment on the [Adjustment Items Select] screen.

--> The [Shading Compensation Adjustment Preparation] screen appears.

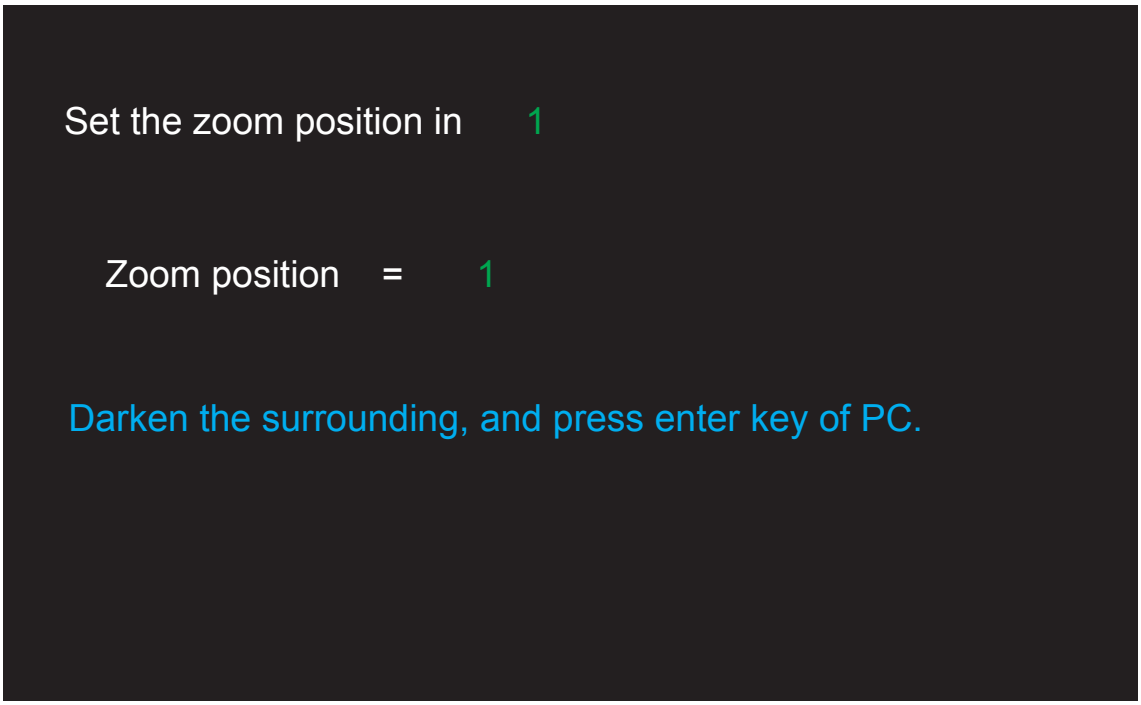


<Fig. 4-11-1>

--> The [Zoom setting of [1] position] screen appears (manual adjustment).

--> The [Shading compensation adjustment complete] screen appears (automatic adjustment).

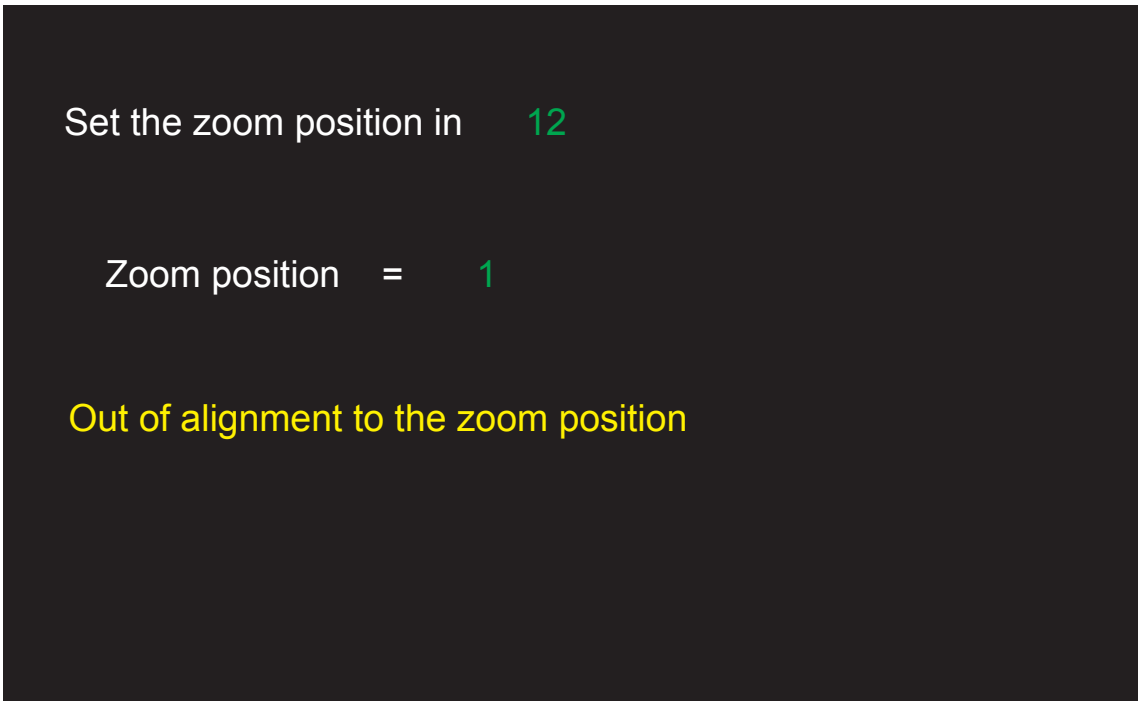
<Step 2>



<Fig. 4-11-2>

--> The [Zoom setting of [12] position] screen appears.

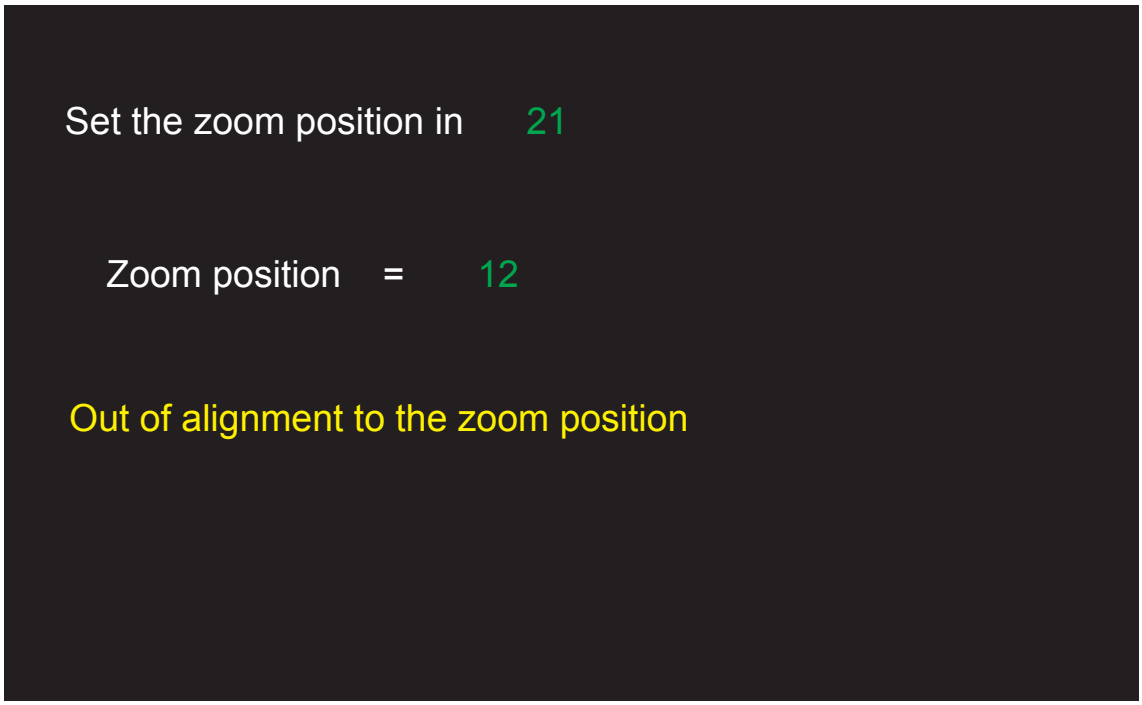
<Step 3>



<Fig. 4-11-3>

--> The [Zoom setting of [21] position] screen appears.

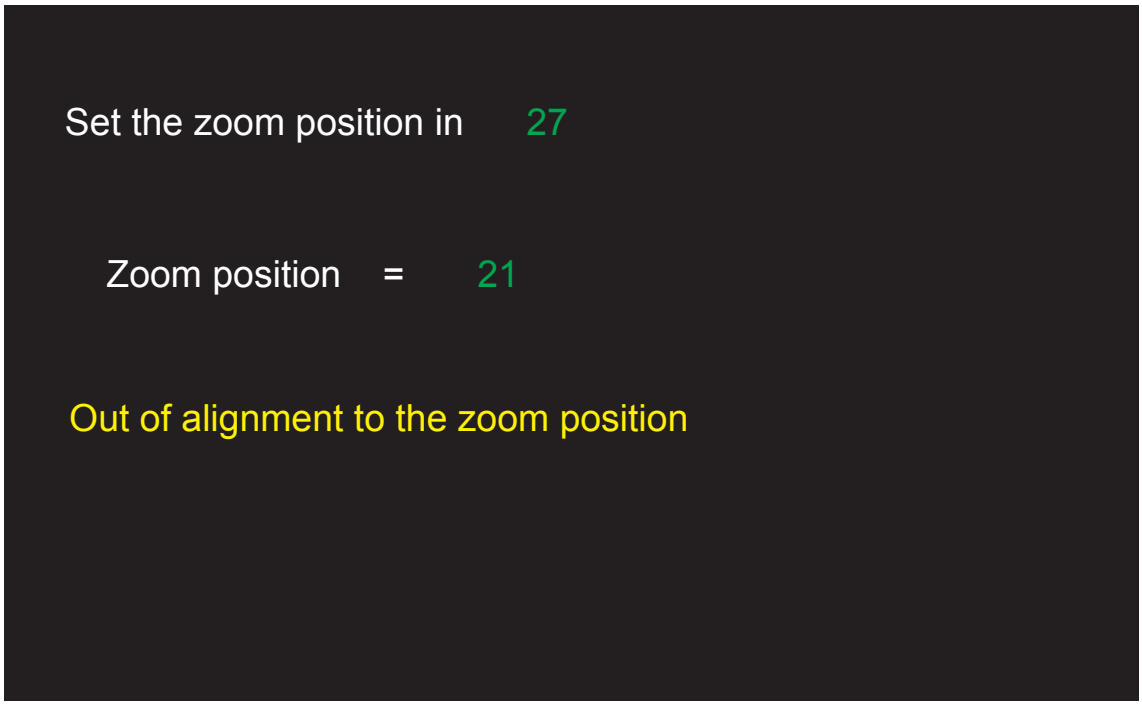
<Step 4>



<Fig. 4-11-4>

--> The [Zoom setting of [27] position] screen appears.

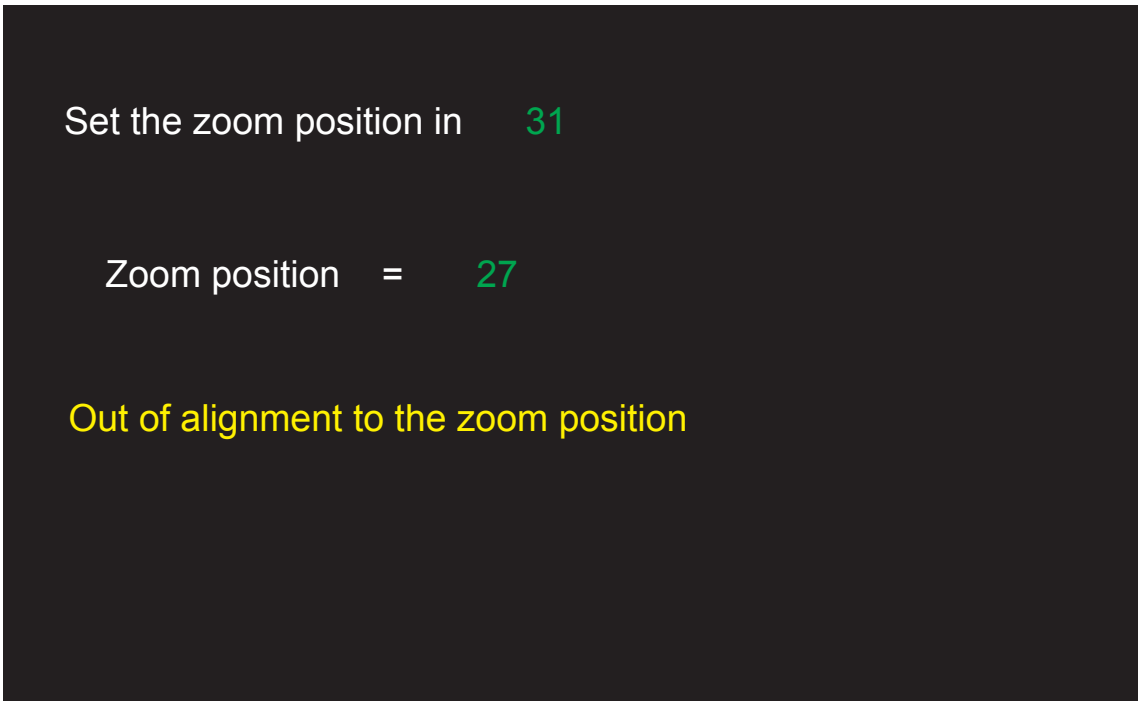
<Step 5>



<Fig. 4-11-5>

--> The [Zoom setting of [31] position] screen appears.

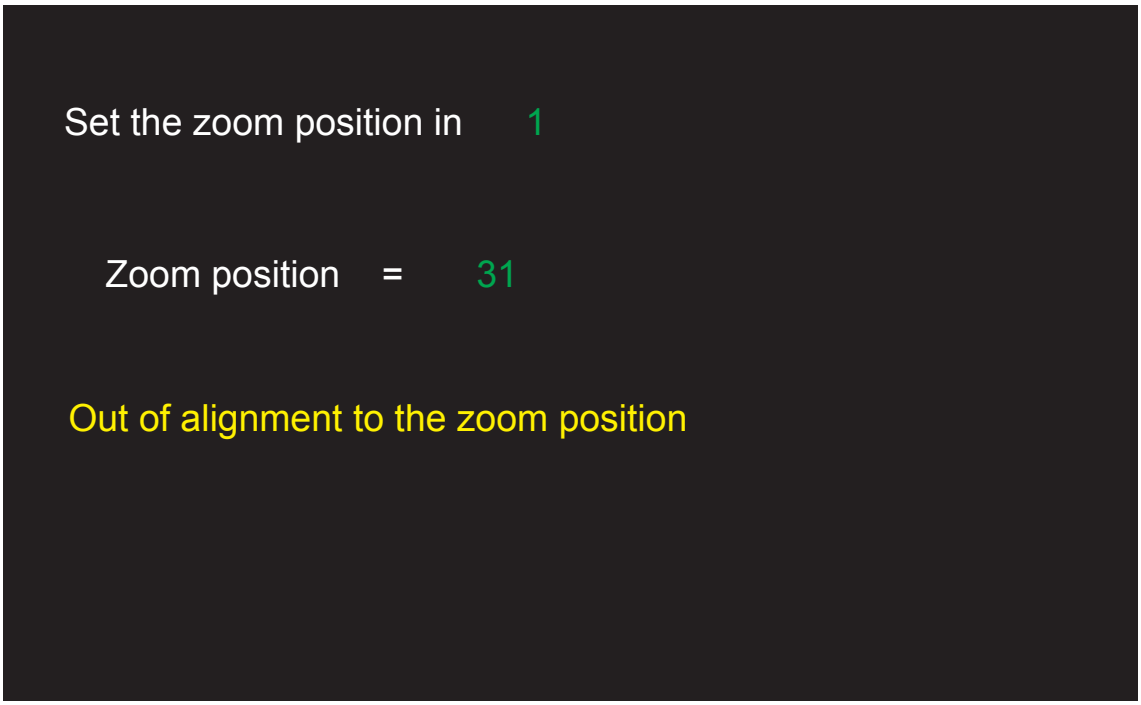
<Step 6>



<Fig. 4-11-6>

--> The [Zoom setting of [1] position] screen appears.

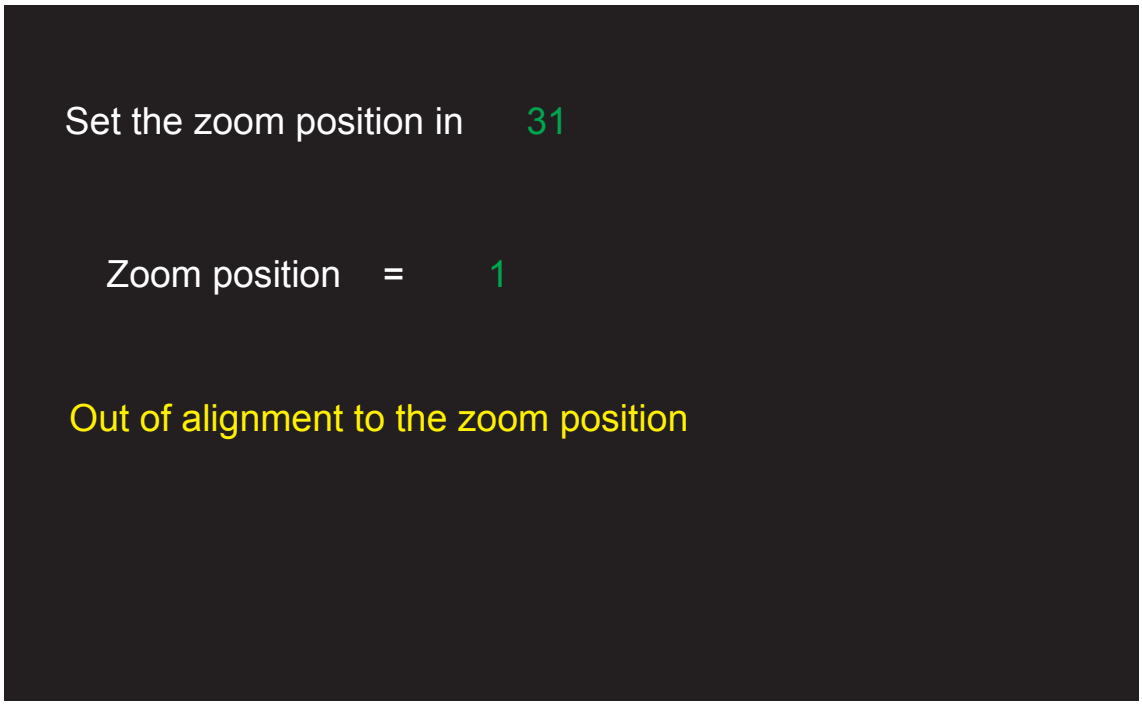
<Step 7>



<Fig. 4-11-7>

--> The [Zoom setting of [31] position] screen appears.

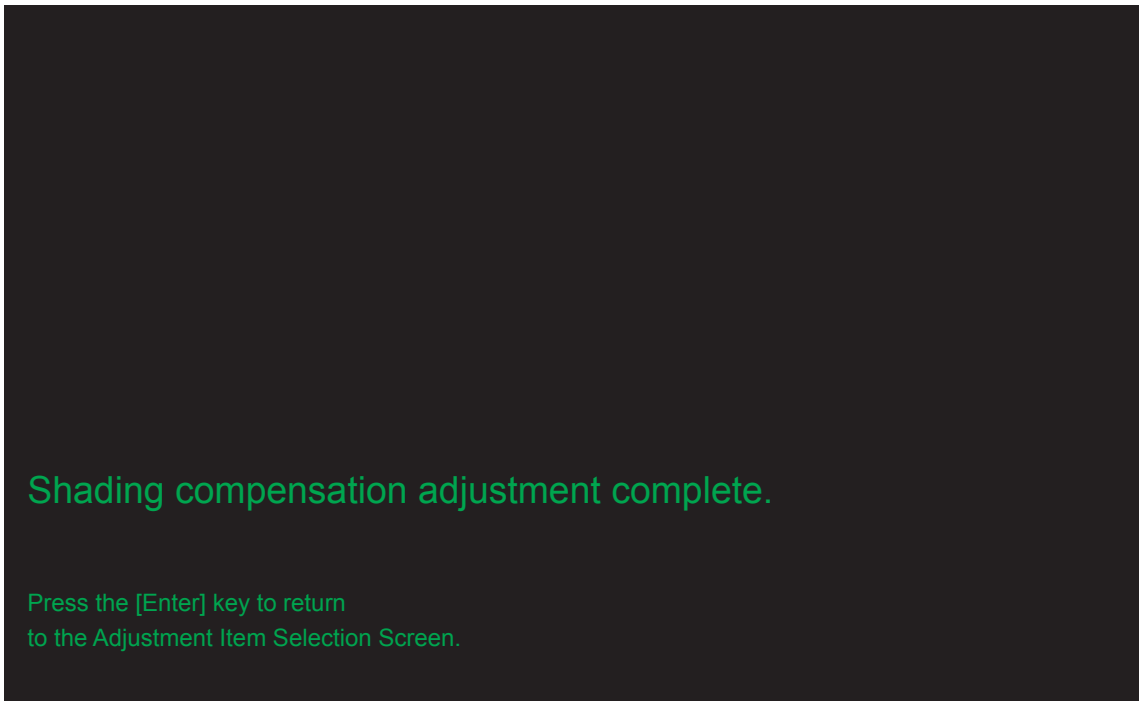
<Step 8>



<Fig. 4-11-8>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.
--> The [Shading compensation adjustment Complete] screen appears.

<Step 8>

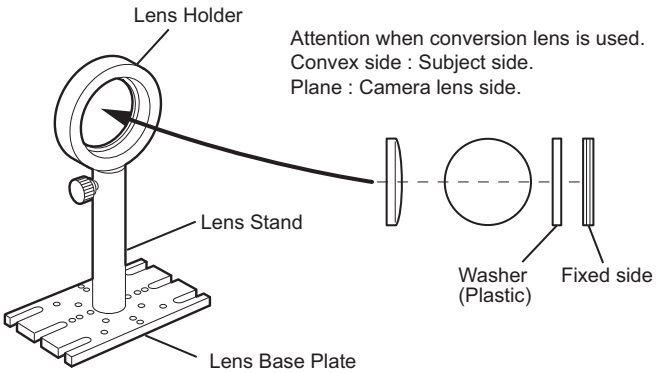


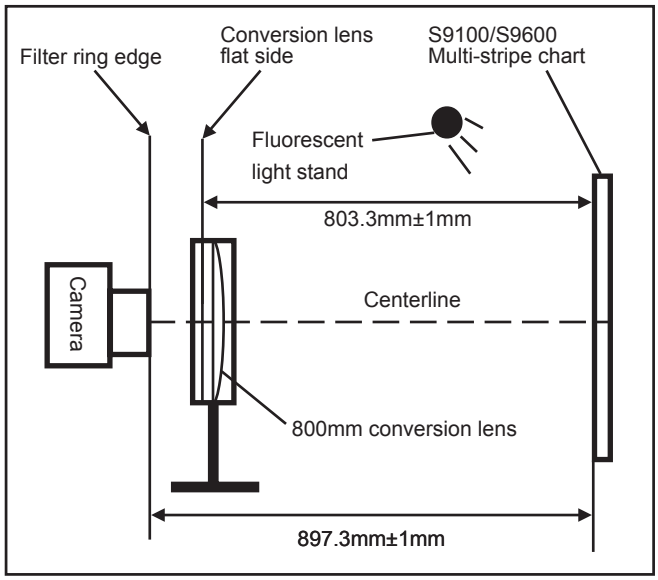
<Fig. 4-11-9>

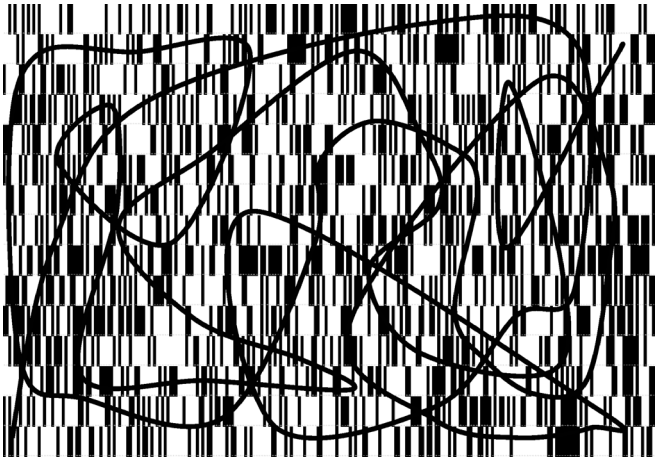
4-12. [F6] : AF Adjustment

<Setup for AF Adjustment>

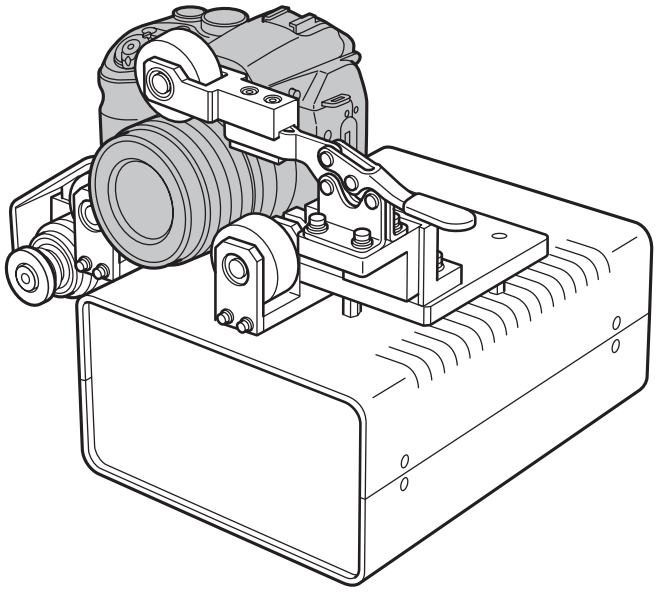
(1) Set the camera in the zoom drive jig.
(2) Set up the camera so that the distance from the multi-stripe chart to the front edge of the camera's filter ring is 897.3±1 mm.
(3) Illuminate the AF chart with a light source. Ensure that the brightness at the surface of the AF chart is between 8.0 to 10.0EV. (Check that the aperture is set to [F2.8] at the wide-angle zoom setting.)
(4) Set the conversion lens on the base.







S9100/S9600 Multi-stripe chart

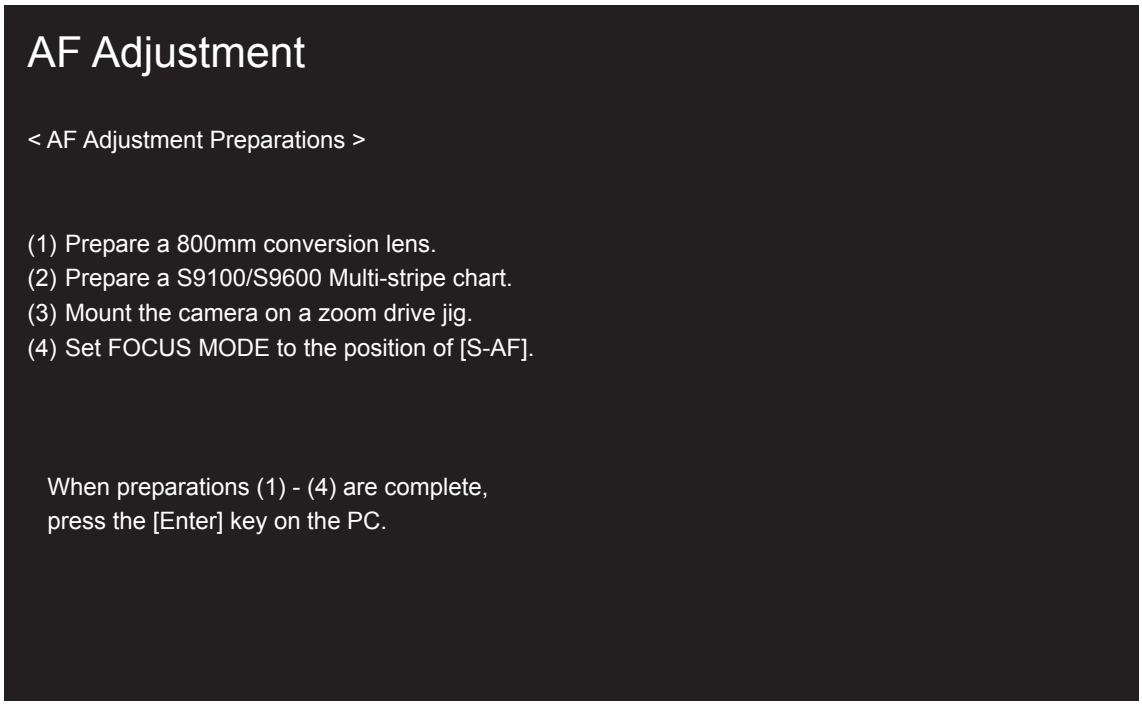


Zoom drive jig

<Step 1>
Select [F6] AF Adjustment on the [Adjustment Items Select] screen.
—> The [AF Adjustment Preparation] screen appears.

<Step 2>
Run the adjustment in accordance with the instructions on the screen.

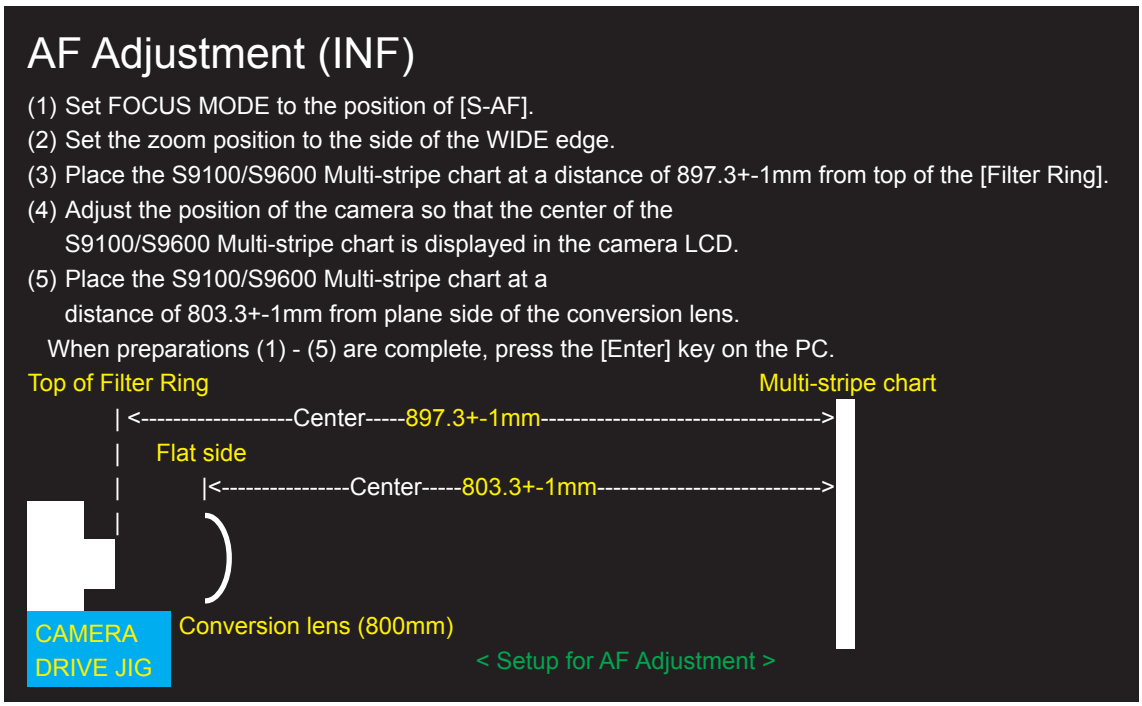
<Note>
Always use a **800mm** conversion lens.



<Fig. 4-12-1>

—> The [AF Adjustment (INF) Start] screen appears.

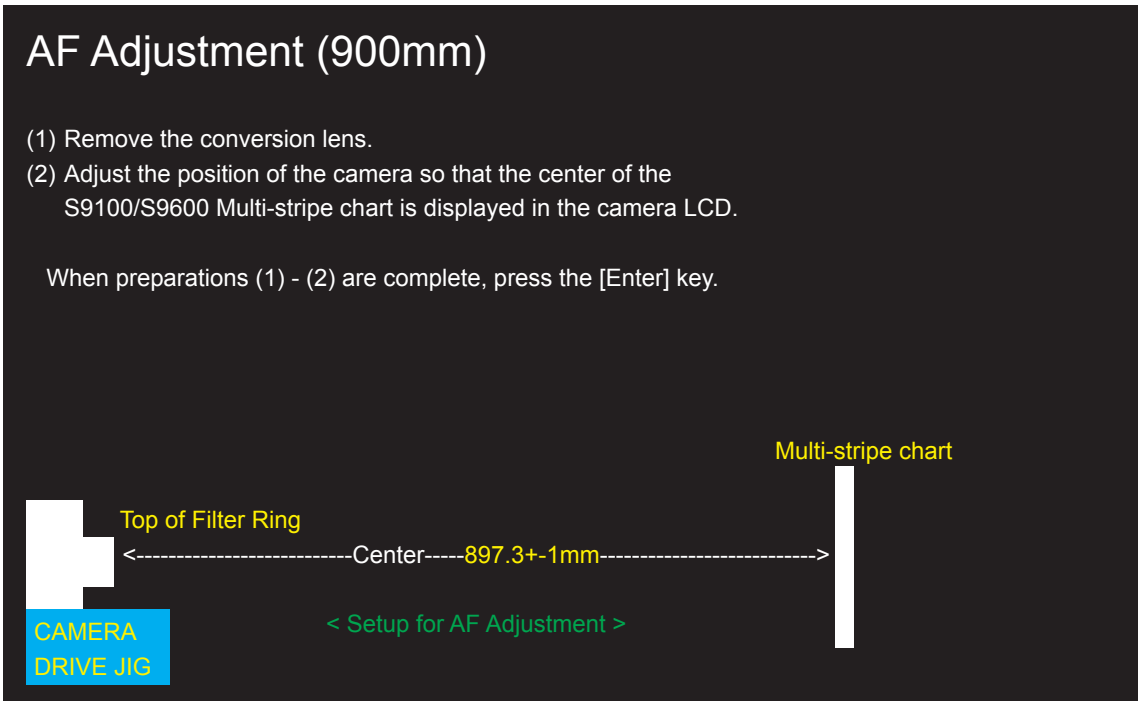
<Step 3>



<Fig. 4-12-2>

—> The [AF Adjustment (INF) Start] screen start.
—> Write the adjustment data to the flash ROM when adjustment has been completed correctly.

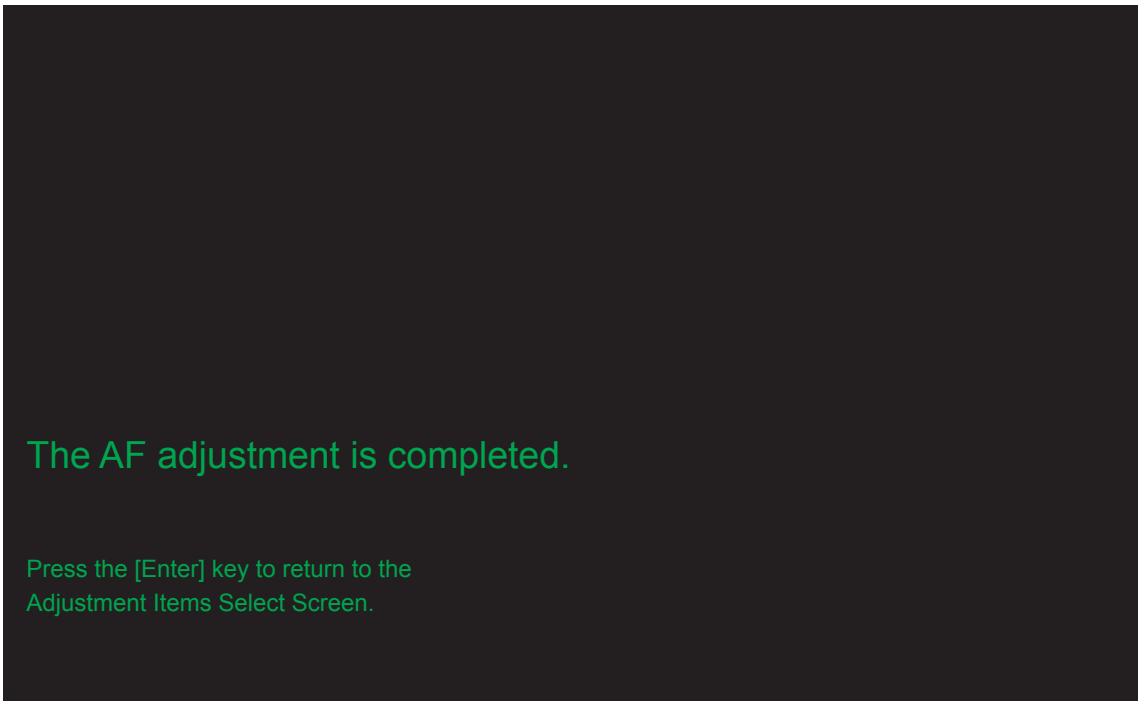
<Step 4>



<Fig. 4-12-3>

—> The [AF Adjustment Complete] screen appears.

<Step 5>

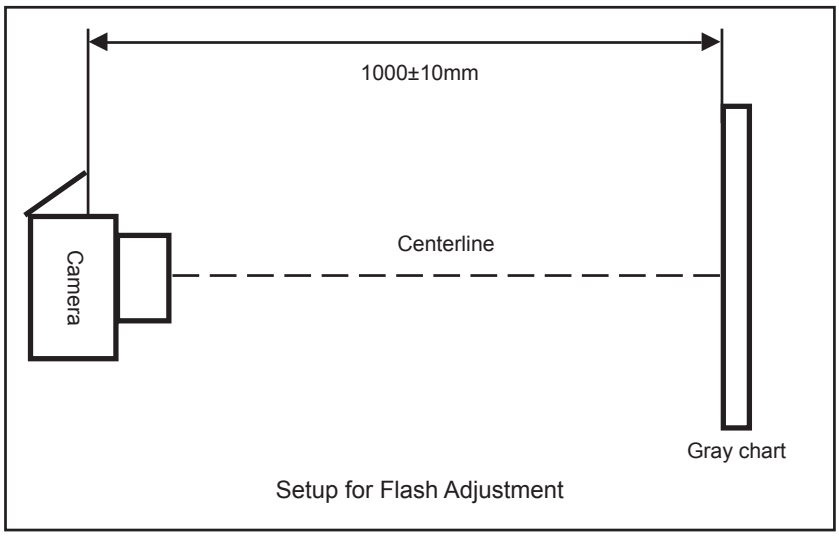


<Fig. 4-12-4>

4-13. [F7] : Flash Adjustment

<Setup for Flash Adjustment>

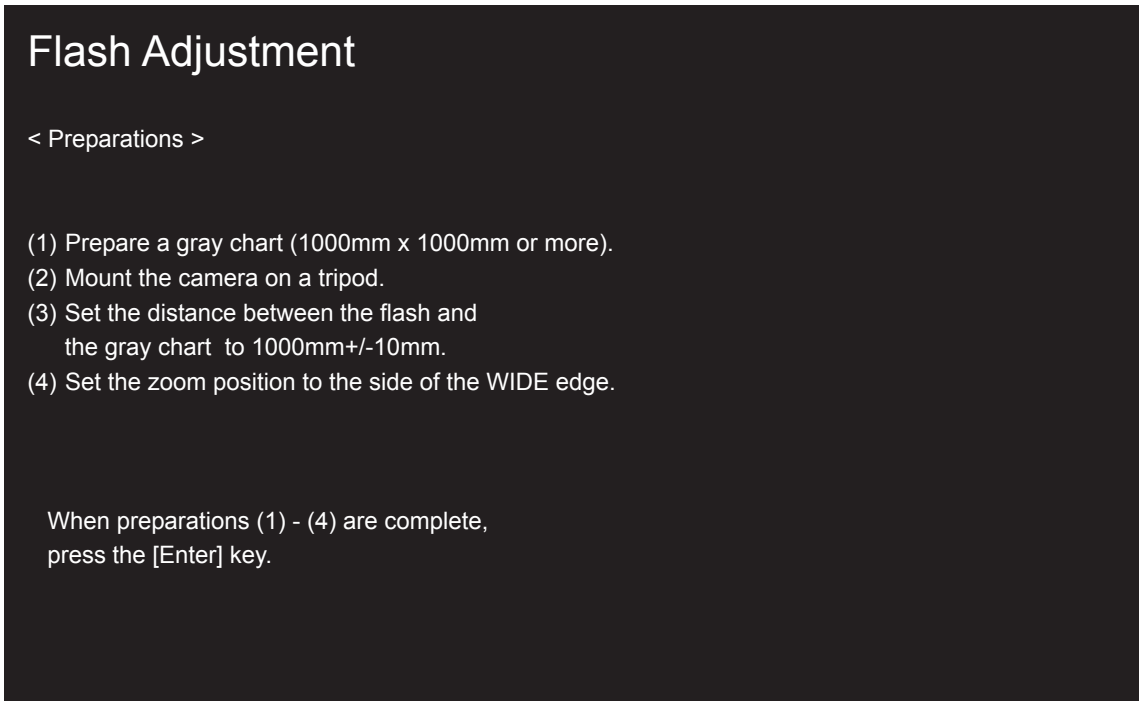
(1) As flash adjustment is readily affected by external light, ensure that the vicinity of the gray chart is very dark.
(2) Ensure that distance is measured from the front of the camera during flash adjustment.
(3) When adjusting the flash, always ensure that AF adjustment is complete before beginning flash adjustment.



Setup for Flash Adjustment

<Step 1>
Select [F7] Flash Adjustment on the [Adjustment Items Select] screen.
--> The [Flash Adjustment Preparation] screen appears.

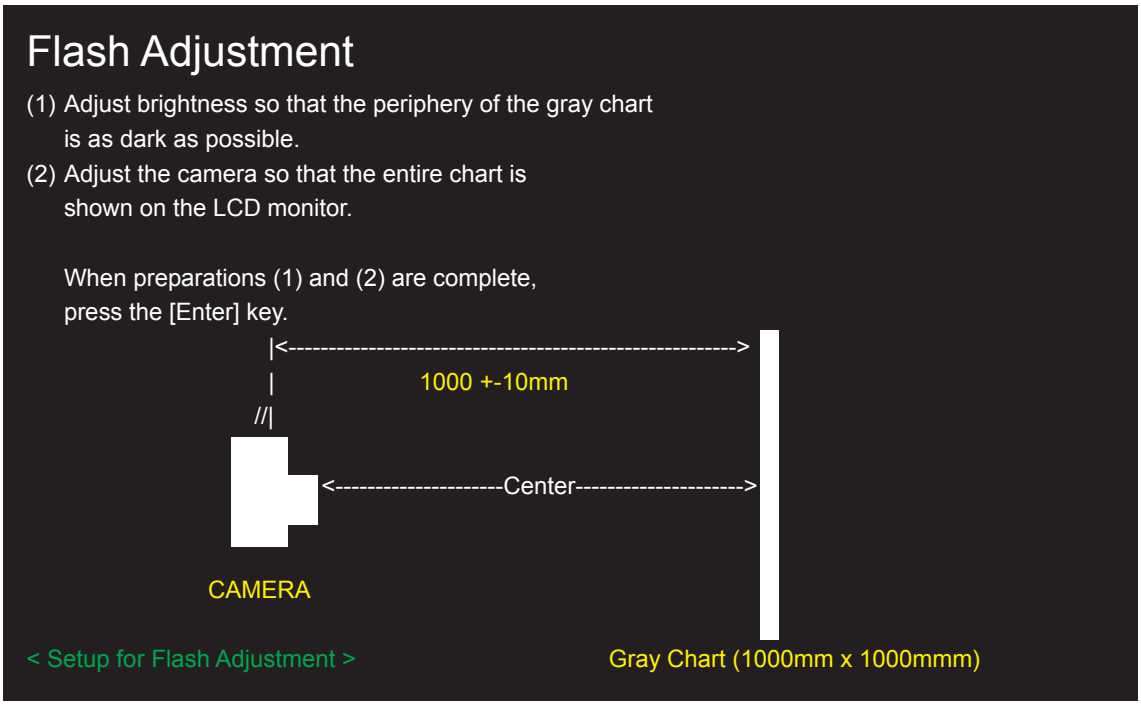
<Step 2>
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-13-1>

--> The [Flash Adjustment Start] screen appears.

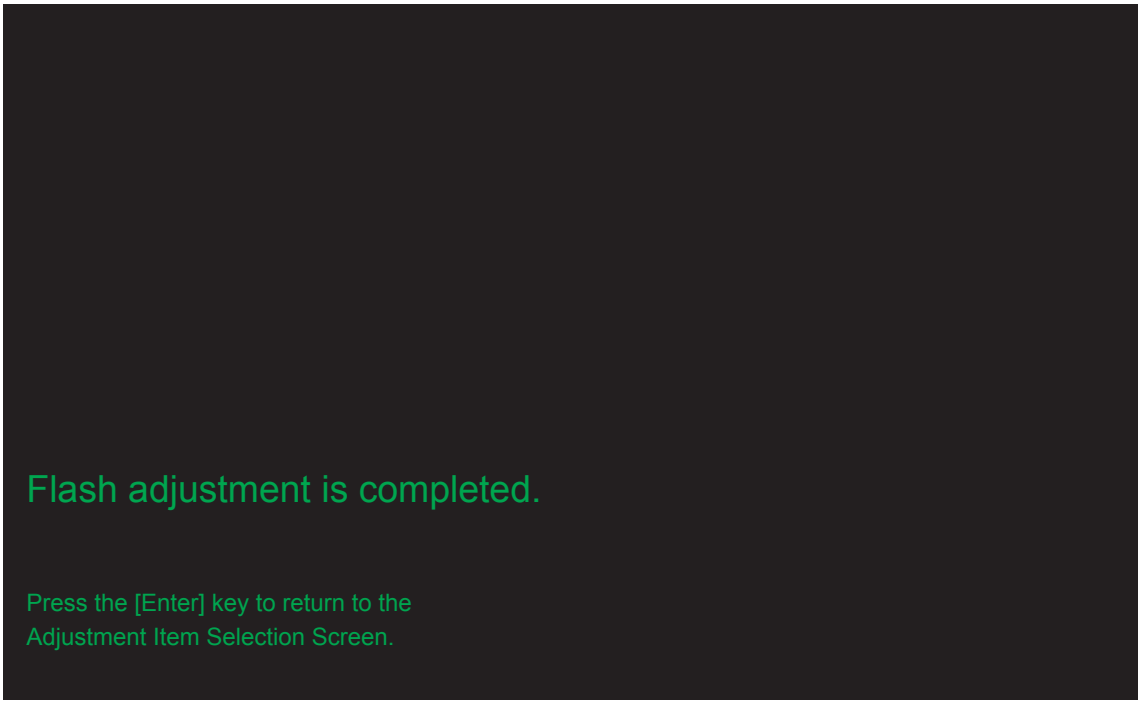
<Step 3>



<Fig. 4-13-2>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.
--> The [Flash Adjustment Complete] screen appears.

<Step 4>



<Fig. 4-13-3>

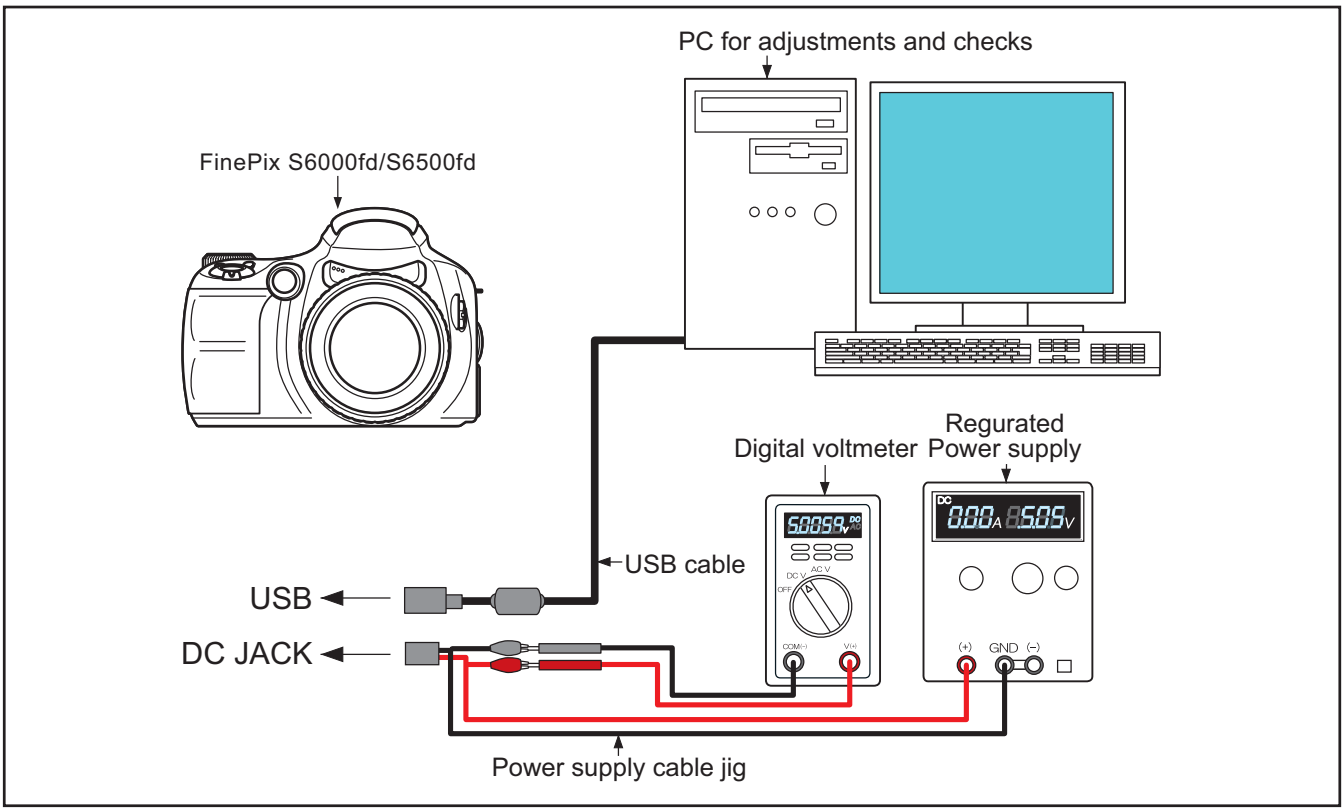
4-14. [F1] : Battery Voltage Adjustment

<Setup for Battery Voltterge Adjustment>

(1) When adjusting the battery voltage, supply power (5.0V) to the camera from the **[Power Cable Jig]** before setting the jig mode.

(2) Always measure input voltage in the vicinity of the DC IN terminal.

(3) When reducing the voltage, adjust the stabilized power supply to ensure that the voltage is not reduced excessively from the measured point. The adjustment software may produce an error if communication between the adjustment software and the camera is disrupted. Restart the adjustment software in this case.

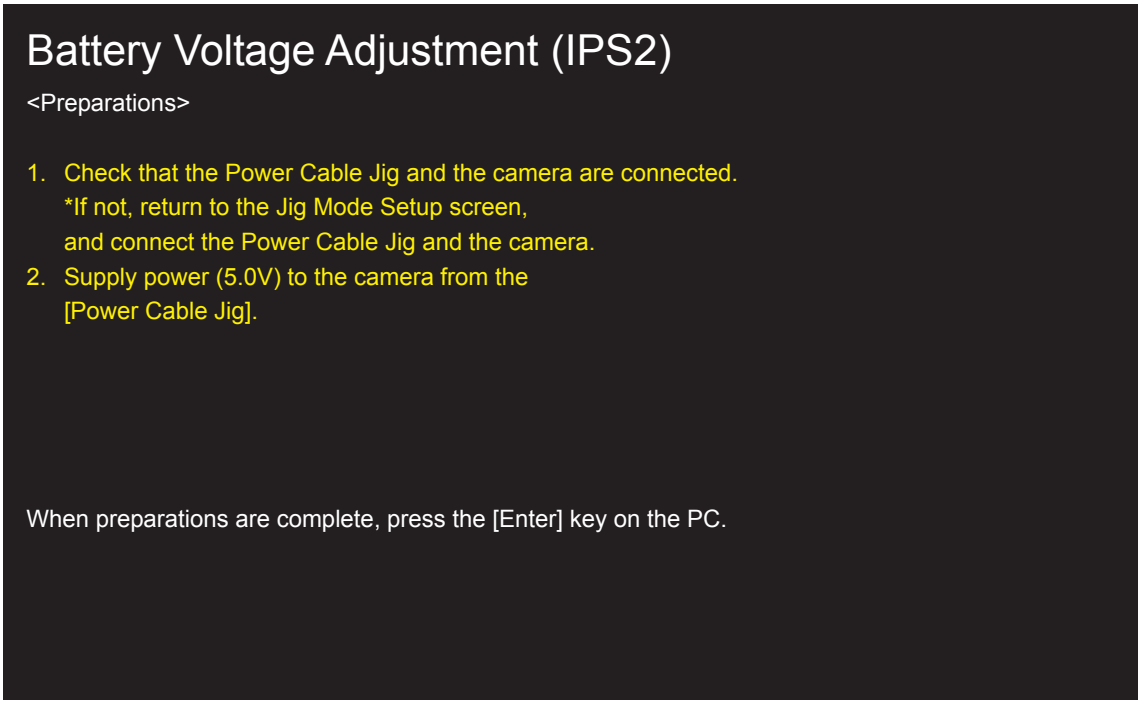


<Step 1>

Select [F1] Battery Voltage Adjustment on the [Adjustment Items Select] screen.

—> The [Battery Voltage Adjustment Preparation] screen appears.

<Step 2>
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-14-1>

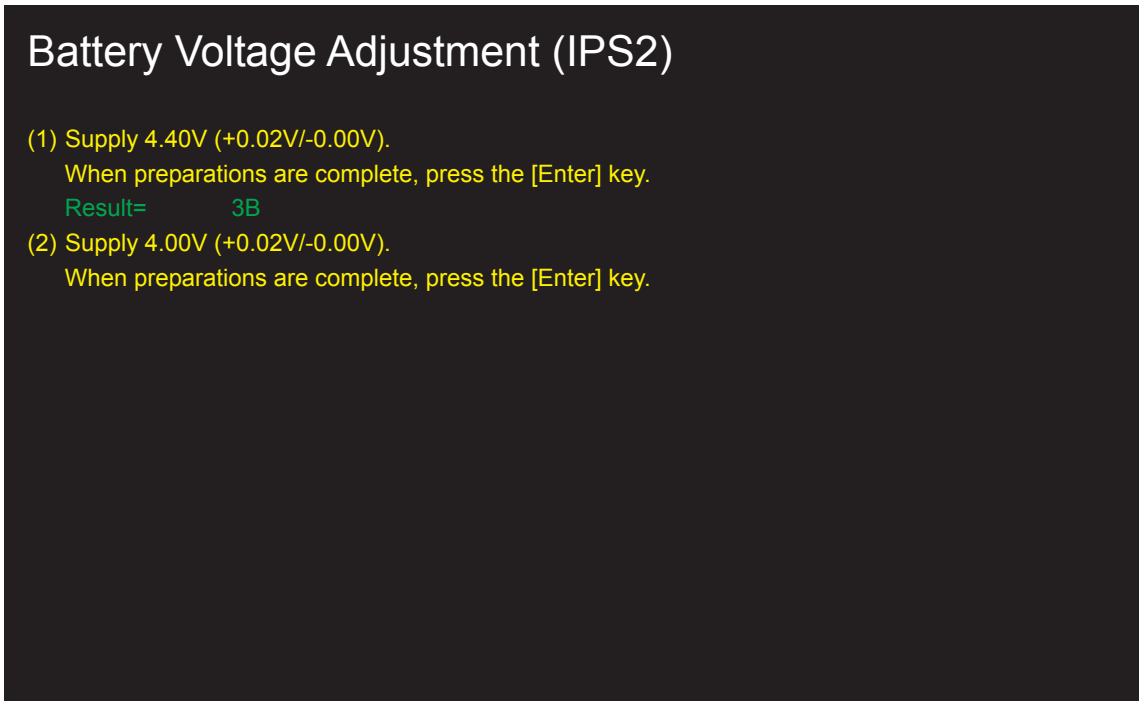
—> The [4.40V Input] screen appears.

<Step 3>

<Fig. 4-14-2>

—> The [4.00V Input] screen appears.

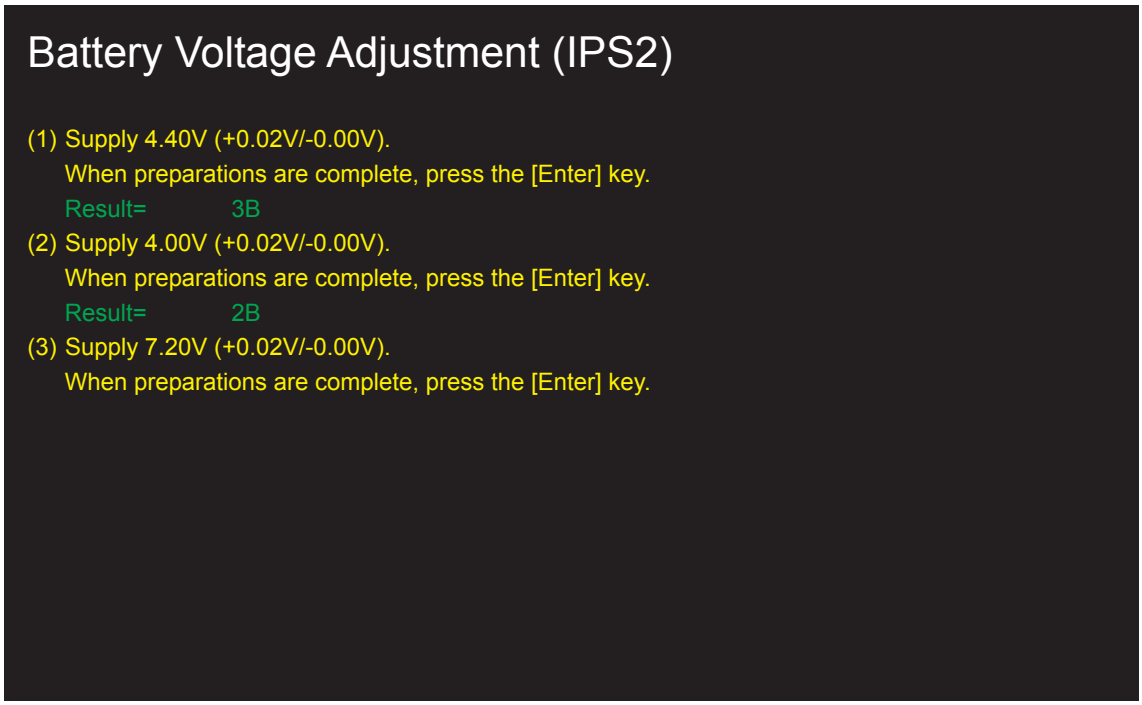
<Step 4>



<Fig. 4-14-3>

—> The [7.20V Input] screen appears.

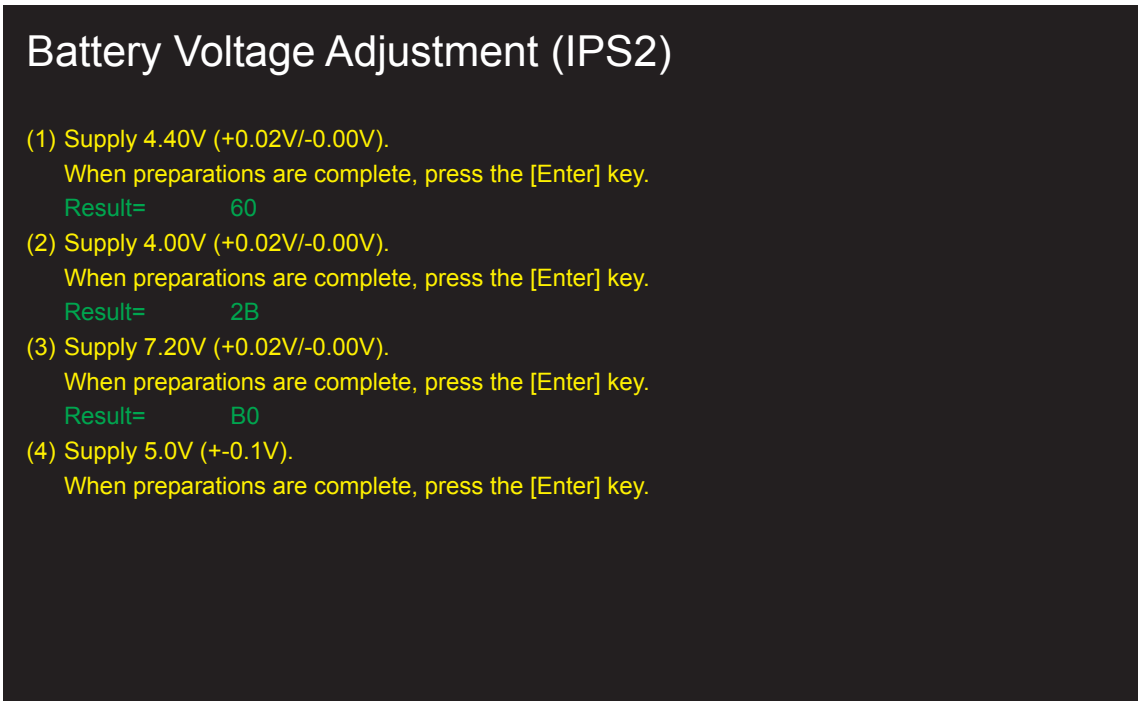
<Step 5>



<Fig. 4-14-4>

—> The [5.0V Input] screen appears.

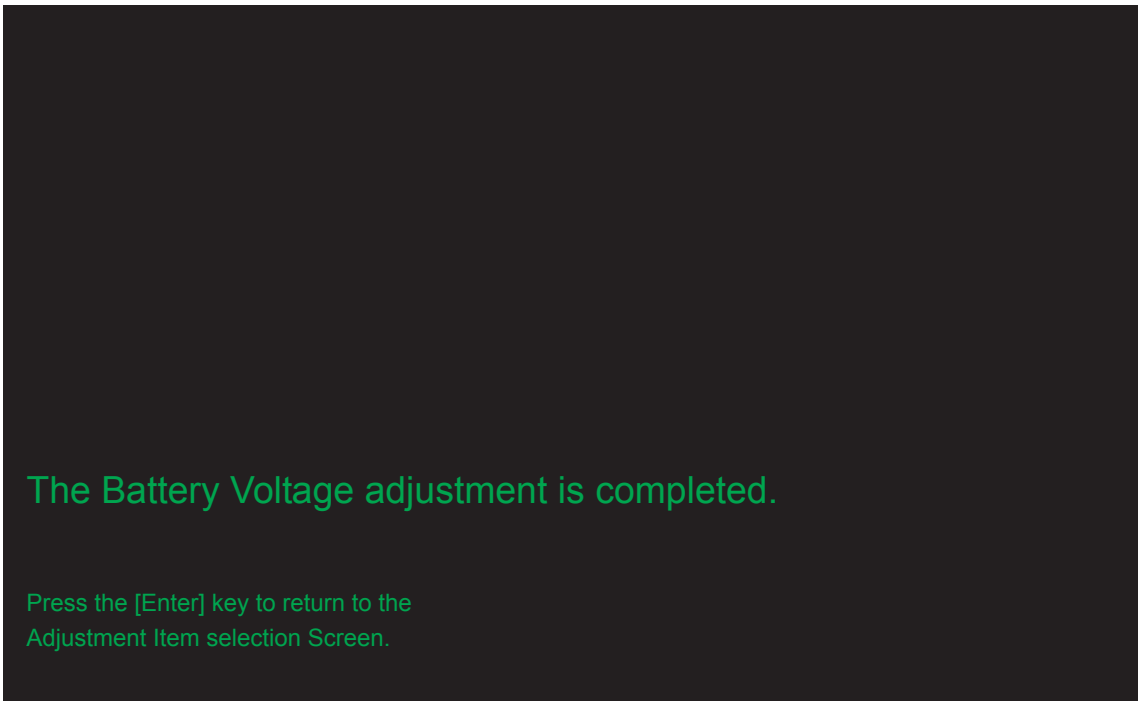
<Step 6>



<Fig. 4-14-5>

—> Write the adjustment data to the Flash ROM when adjustment has been completed correctly.
—> The [Battery Voltage Adjustment Complete] screen appears.

<Step 7>

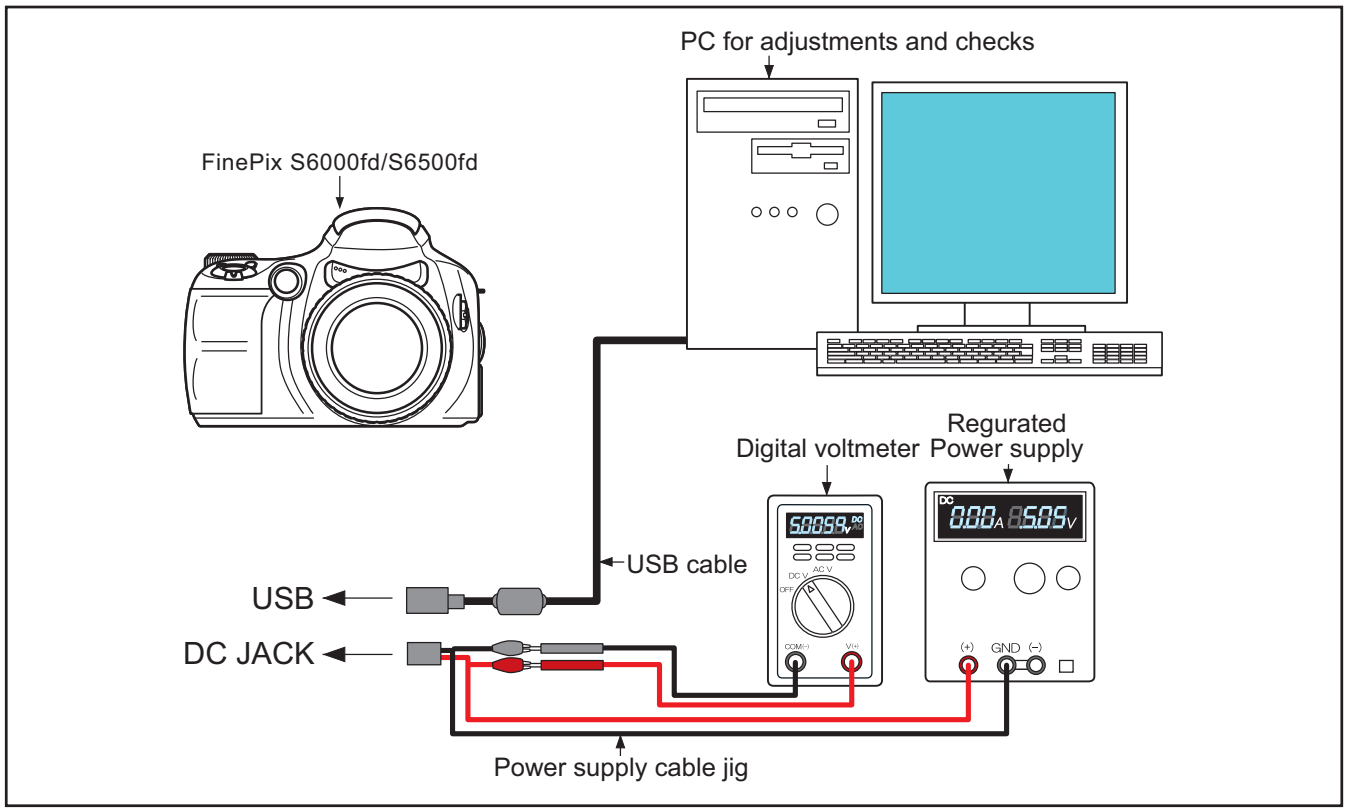


<Fig. 4-14-6>

4-15. [F2] : Mode Dial Adjustment

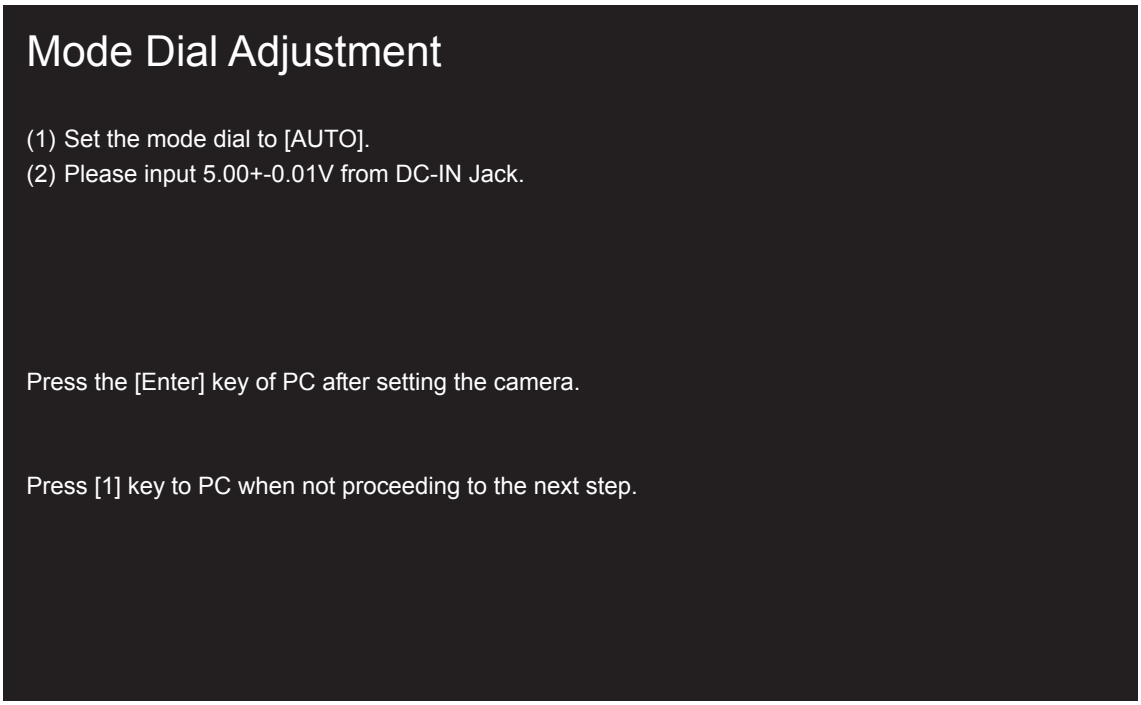
<Setup for Mode Dial Adjustment>

(1) When adjusting the Mode Dial, supply power (5.0V) to the camera from the **[Power Cable Jig]** before setting the jig mode.
(2) Always measure input voltage in the vicinity of the DC IN terminal.
(3) When reducing the voltage, adjust the stabilized power supply to ensure that the voltage is not reduced excessively from the measured point. The adjustment software may produce an error if communication between the adjustment software and the camera is disrupted. Restart the adjustment software in this case.



<Step 1>
Select [F2] Mode Dial Adjustment on the [Adjustment Items Select] screen.
—> The [Mode Dial Adjustment Preparation] screen appears.

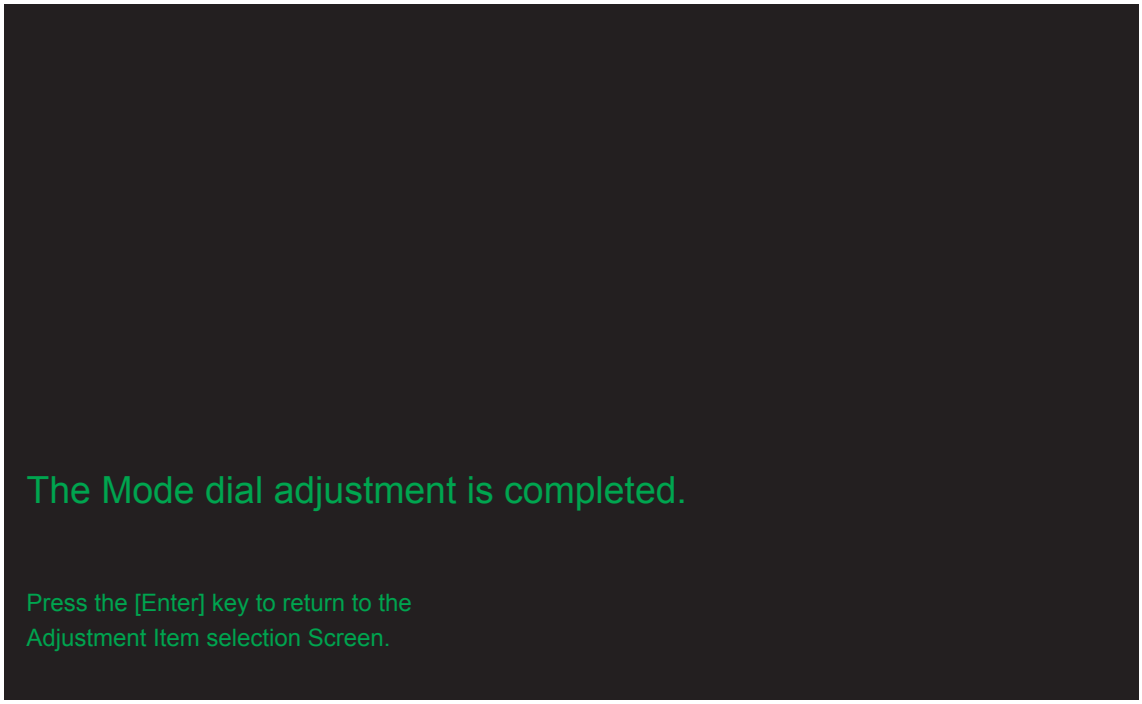
<Step 2>



<Fig. 4-15-1>

—> Write the adjustment data to the Flash ROM when adjustment has been completed correctly.
—> The [Mode Dial Adjustment Complete] screen appears.

<Step 3>



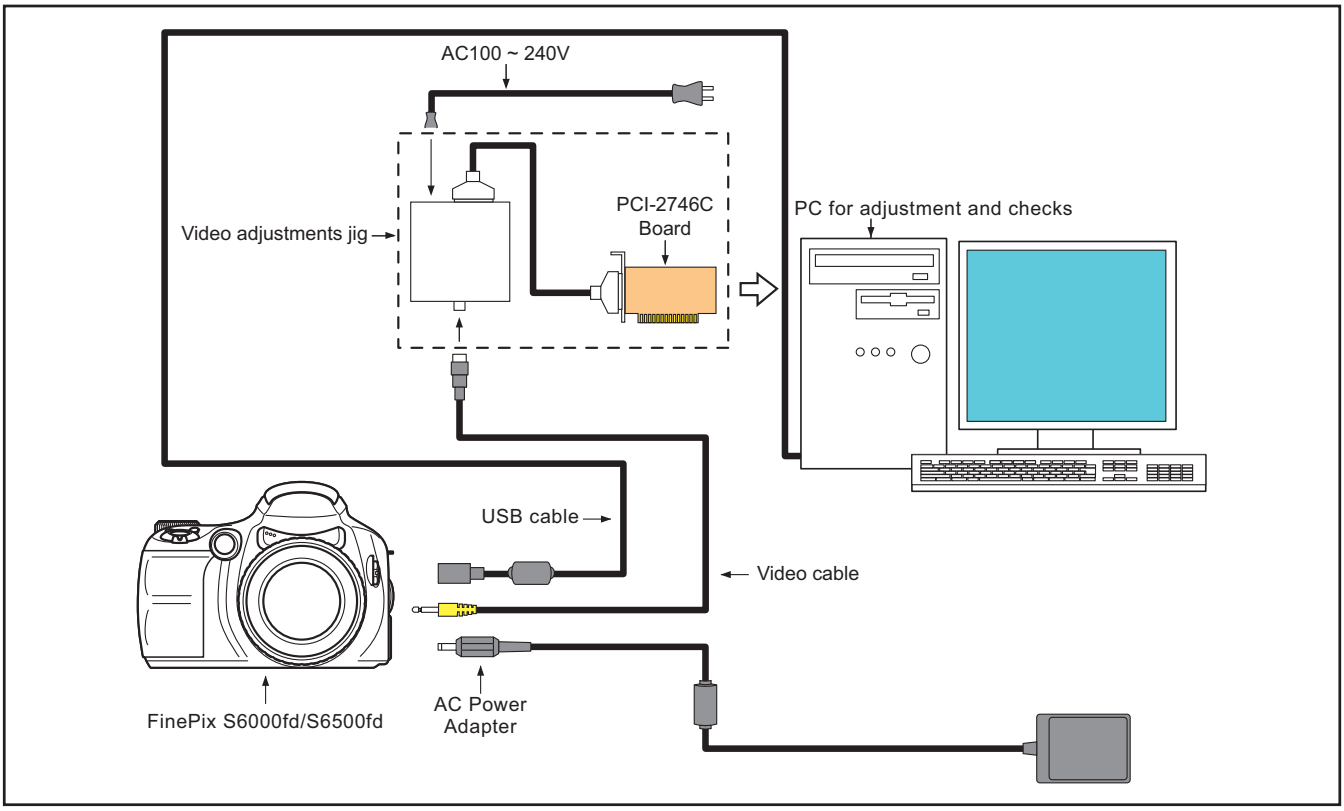
<Fig. 4-15-2>

4-16. [F11] : Video Adjustment

<Setup for Video Adjustment>

(1) Set up the PCI-2746C board in the computer as explained in the instructions for the video adjustment jig.

(2) If the waveform of the brightness signal (Y) or color signal (C) does not appear in the “WAVE No. 0” window during adjustments, check the connections of the video adjustment jig.



<Step 1>

Select [F11] Video Adjustment on the [Adjustment Items Select] screen.

—> The [Video Adjustment Preparation] screen appears.

<Step 2>
Run the adjustment in accordance with the instructions on the screen.

Video Adjustment

< Video Adjustment Preparations >

(1) Connect the camera and video adj. jig with the video cable.
(2) Confirm Video jig is connected with the video cable.

When preparations are complete,
press the [Enter] key.

<Fig. 4-16-1>

—> Write the adjustment data to the Flash ROM when adjustment has been completed correctly.
—> The [VIDEO Adjustment Complete] screen appears.

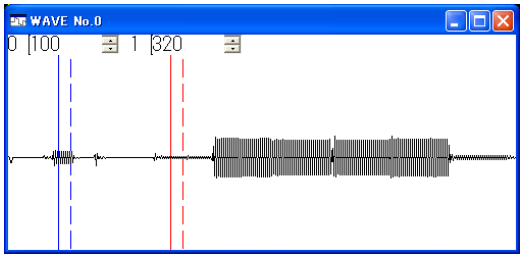
<Step 3>

Video adjustment is completed.

1. Disconnect Video cable from camera.
2. Close the [WAVE No.0] window by close button.

Press the [Enter] key to return to the
Adjustment Item selection Screen.

<Fig. 4-16-2>

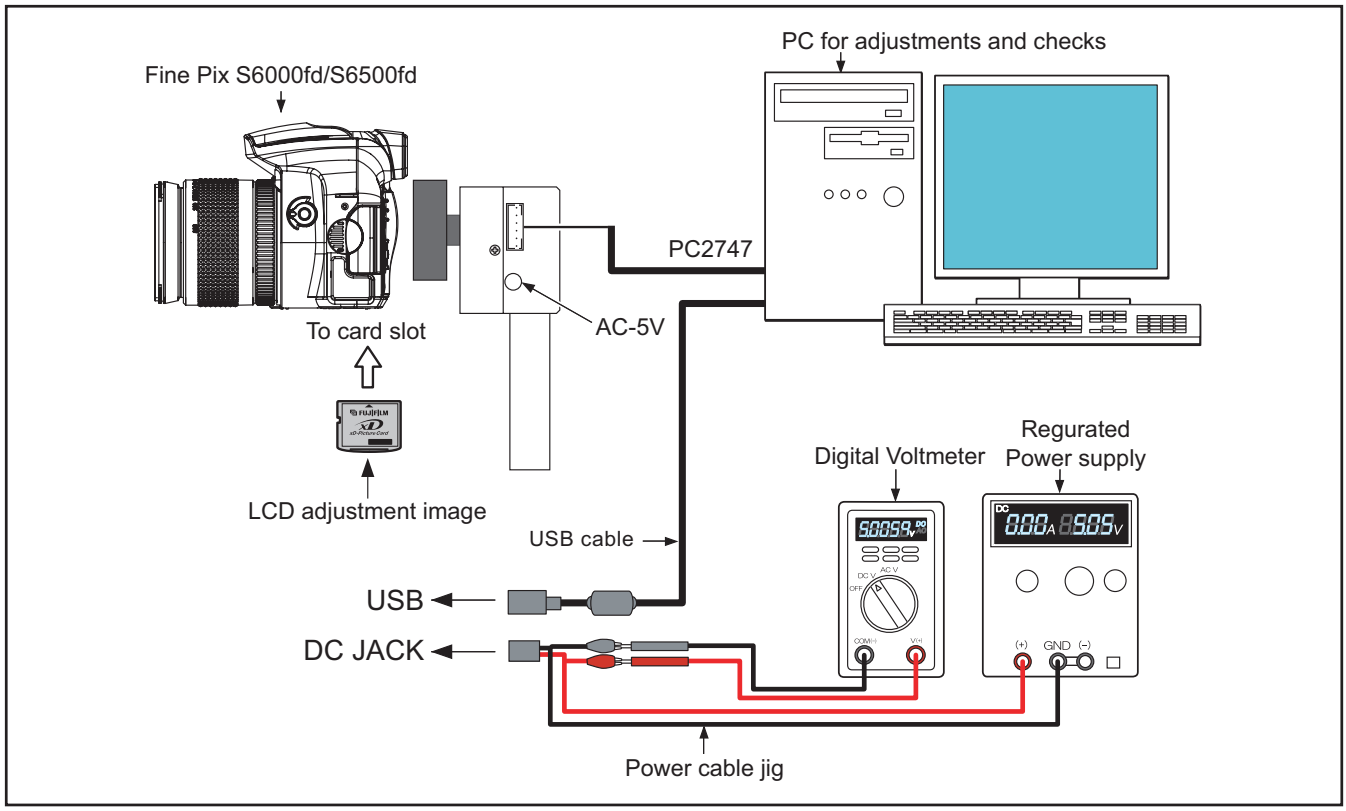


<Fig. 4-16-3>

4-17. [F3] : LCD Adjustment

<Setup for LCD Adjustment>

(Set up the PCI-2747C board in the computer as explained in the instructions for the LCD adjustment Jig.



<Step 1>

Select [F3] LCD Adjustment on the [Adjustment Items Select] screen.

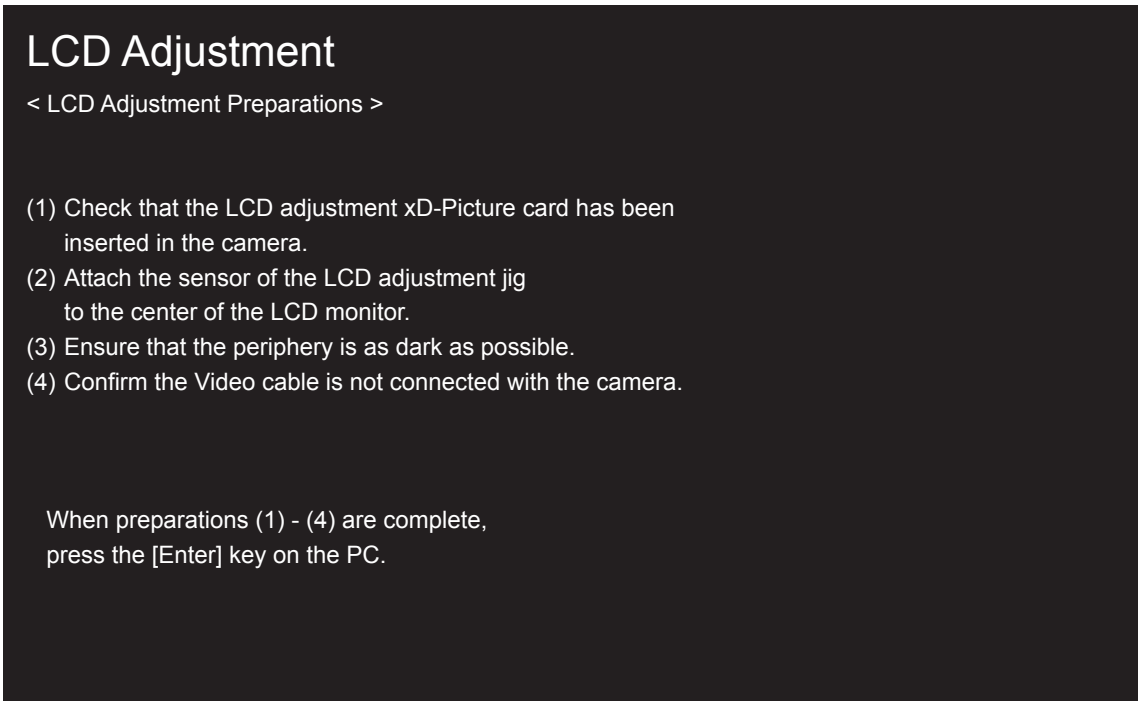
—> The [LCD Adjustment Start] screen appears.

<Step 2>

Run the adjustment in accordance with the instructions on the screen.

—> The [LCD Adjustment Complete] screen appears if download is successful.

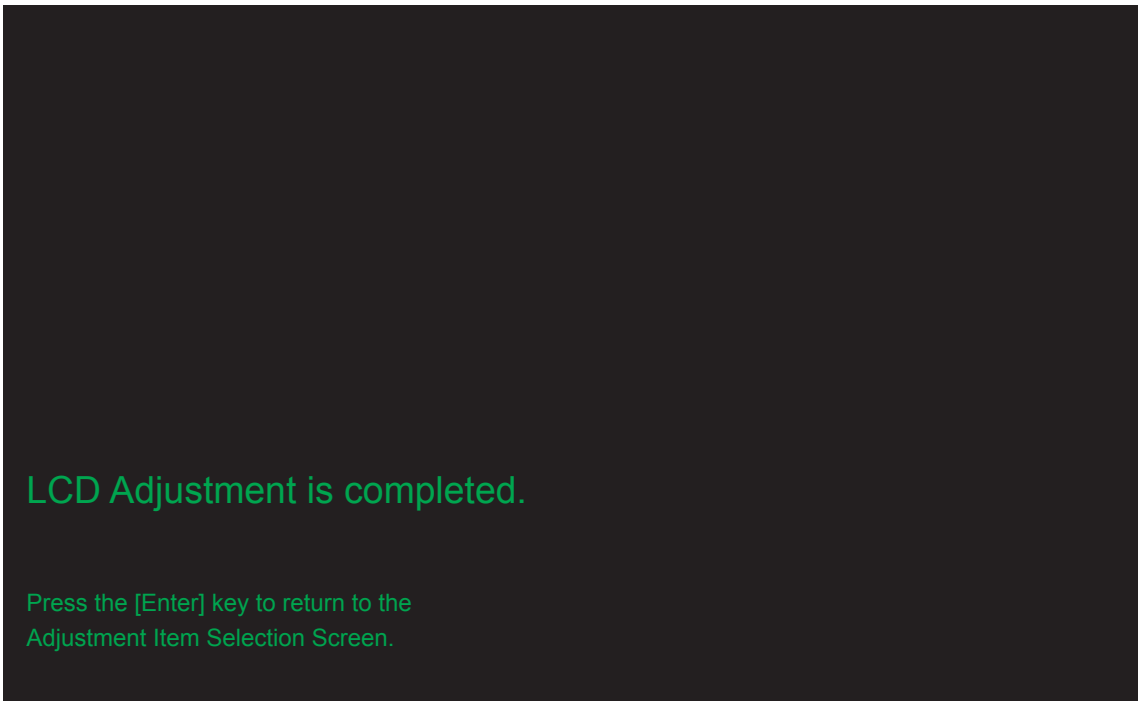
<Step 3>



<Fig. 4-17-1>

—> Write the adjustment data to the Flash ROM when adjustment has been completed correctly.
—> The [LCD Adjustment Complete] screen appears.

<Step 4>

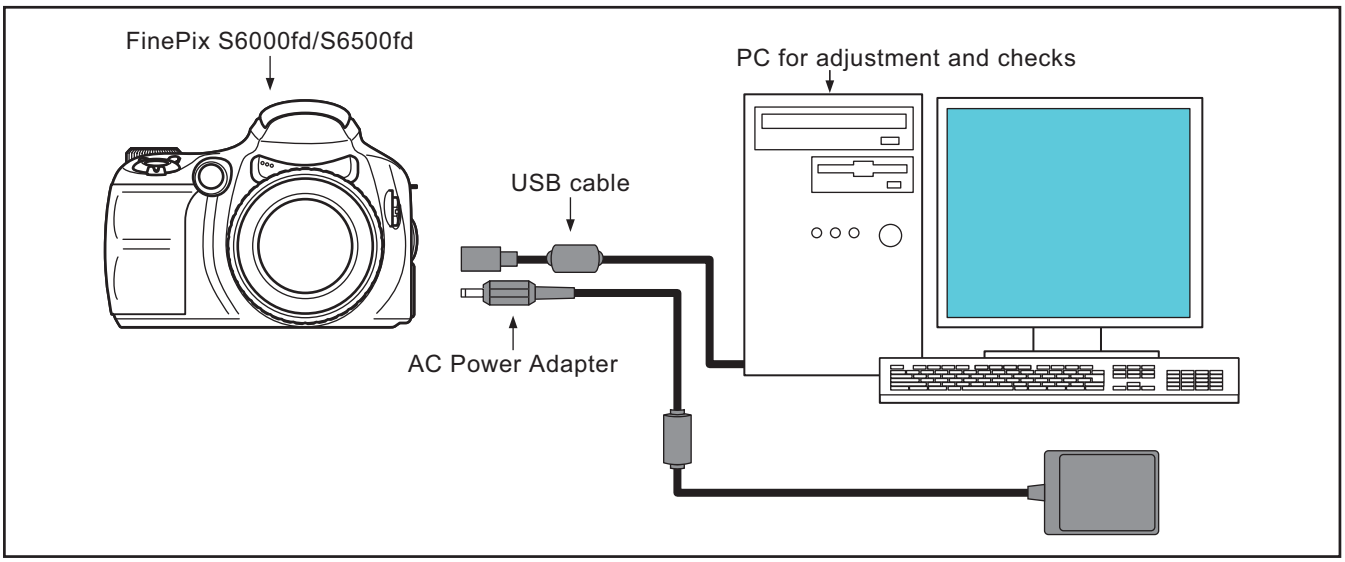


<Fig. 4-17-2>

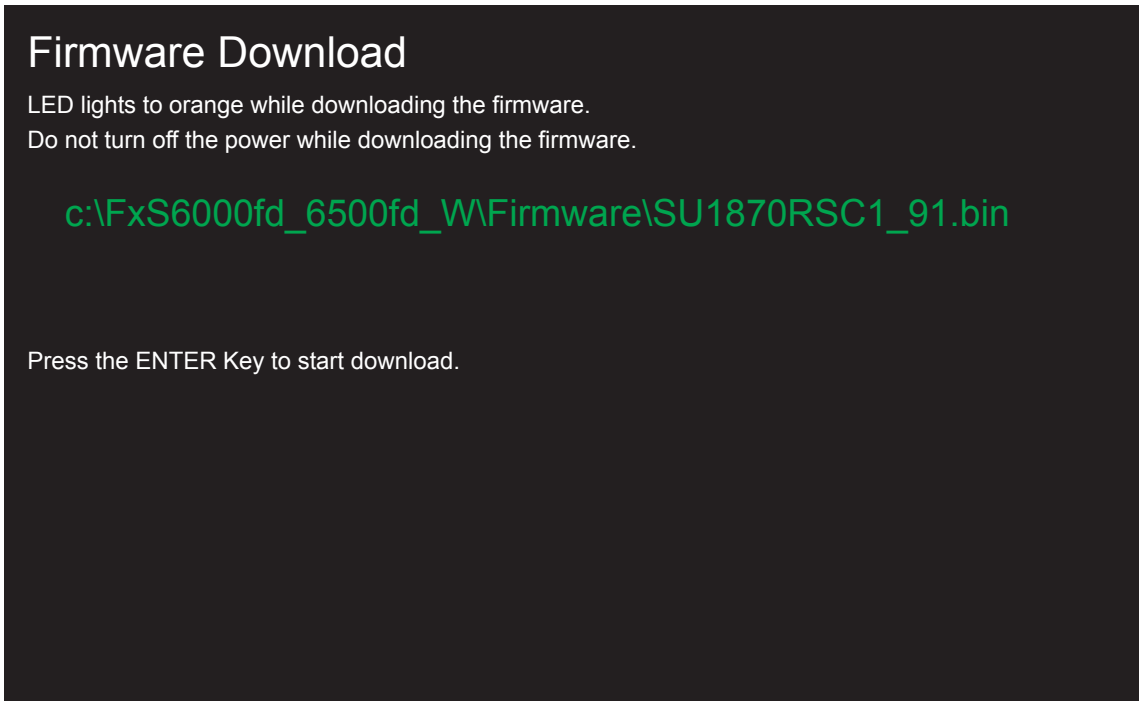
4-18. [F8] : Firmware Download

Attention : When the download of the firmware is needed, FUJI SERVICE BULLETIN is contacted from FTYO/QA. Till then, disregard this item.

<Setup for Firmware Download>



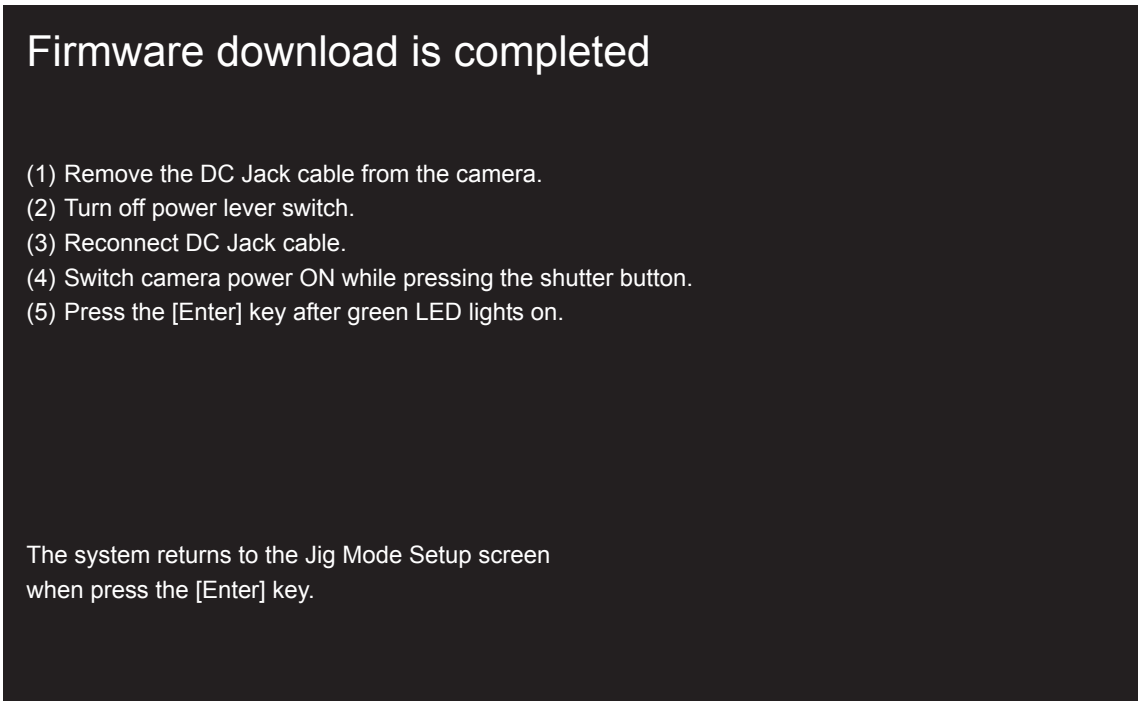
<Step 1>
Select [F8] Firmware Download on the [Adjustment Items Select] screen.



<Fig. 4-18-1>

—> The [Download Complete] screen appears if download is successful.

<Step 2>



<Fig. 4-18-3>

4-19. [F12] : End Setting

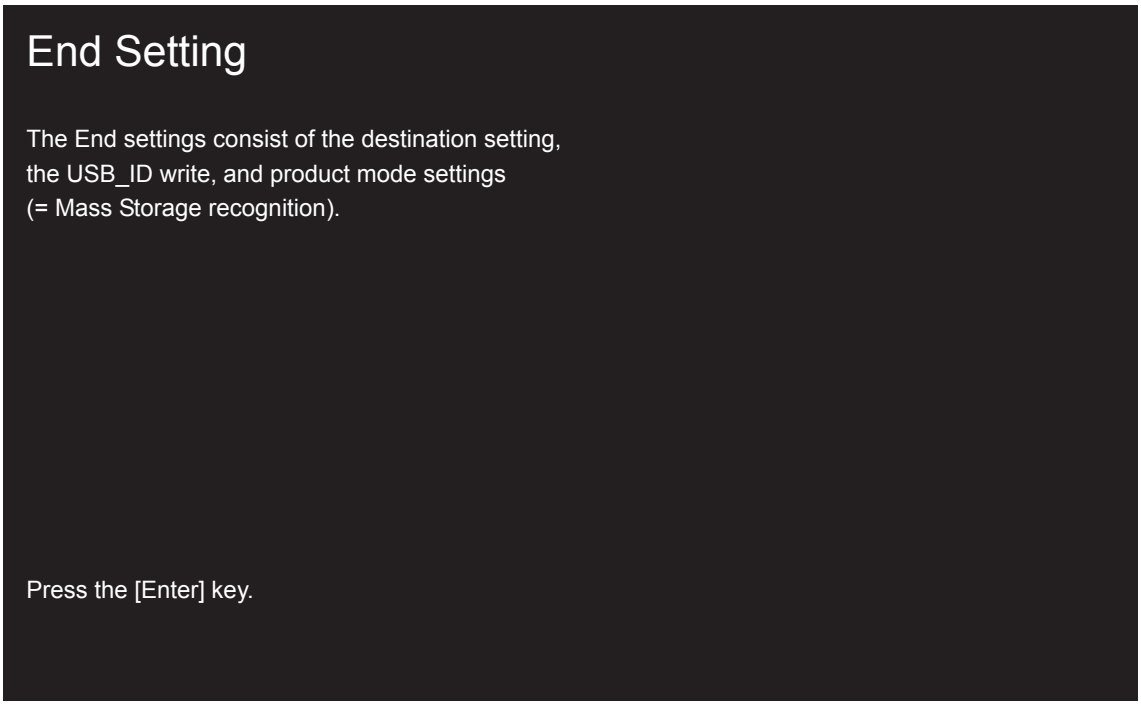
(Destination setting, USB ID write, Product mode setting)

1. The End setting consist of the following settings.
   * Destination setting
   * USB ID write
   * Product mode setting (mass storage identification)
2. The setting must always be run when the adjustment software is terminated. Failure to run Terminal Setting will prevent identification as PTP or Mass Storage when the camera is connected to the PC.
3. USB ID write details
   1) USB ID write requires that the USB device (in this case FinePix S6000fd/S6500fd) be unique throughout the world. For this reason, each device has a unique ID as determined by the USB standard. If multiple devices with the same USB ID are connected to a single PC, the PC will be unable to identify each USB device, thus preventing operation.

Item	Details			
Repair Date	Date information is acquired from the PC and written.			
Administrator ID	01(01)			
Repair Station	U.S.A.	61(a)	SAPPORO	30(0)
	CANADA	62(b)	SENDAI	31(1)
	HAWAII	63(c)	TOKYO	33(3)
	TAIWAN	64(d)	NAGOYA	34(4)
	ENGLAND	66(f)	OSAKA	35(5)
	GERMANY	67(g)	FUKUOKA	38(8)
	FRANCE	68(h)		
	SPAIN	69(i)		
	ITALY	6A(j)		
	NETHERLANDS	6B(k)		
	BELGIUM	6C(l)		
	SWEDEN	6D(m)		
	SWITZERLAND	6E(n)		
	NORWAY	6F(o)		
	FINLAND	70(p)		
	SINGAPORE	71(q)		
	CHINA	74(t)		
	OTHER	7A(z)		
Repair Serial No.	A serial No. is assigned automatically and written			

<Step 1>
Select [F12] End Setting on the [Adjustment Items Select] screen.
—> The [End Setting Description] screen appears.

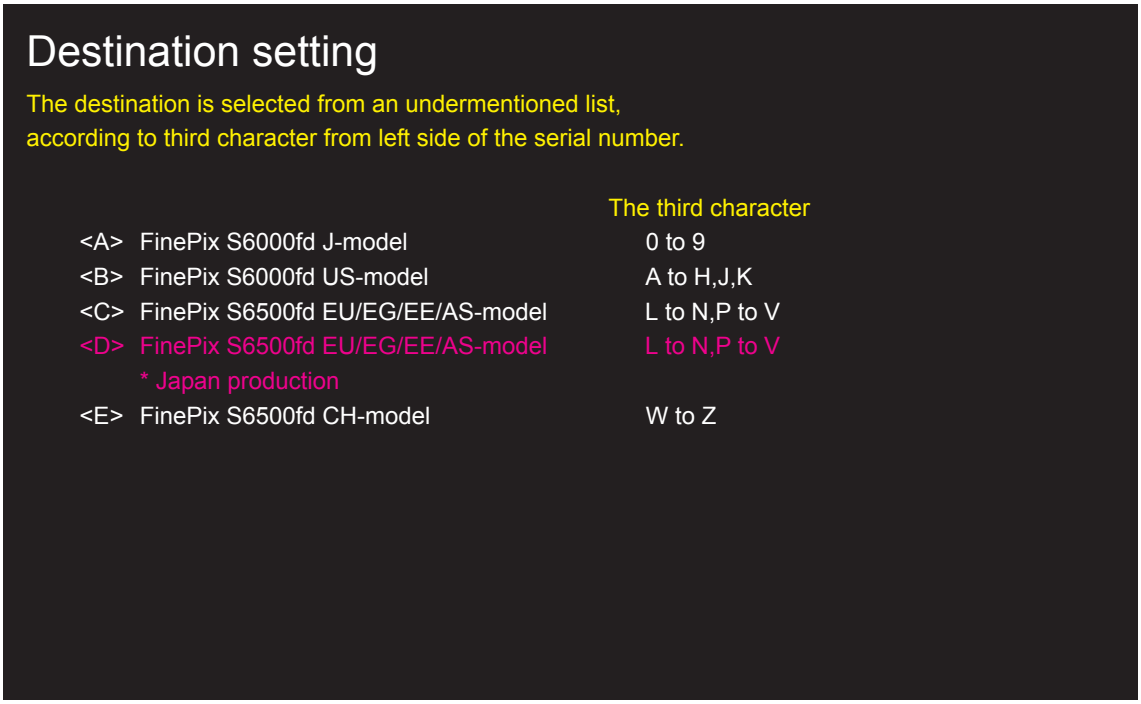
<Step 2>
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-19-1>

—> The [Destination Setting] screen appears.

<Step 3>



<Fig. 4-19-2>

<Note>
This example assumes that <B>US-Model has been selected. The following screen therefore appears.
Note: If the destination is "EE" and the production location is given as "MADE IN JAPAN" on the serial label, **"D"** should be selected.

—> The [US-Model selected] screen appears.

<Step 4>

Destination setting

The destination is selected from an undermentioned list,
according to third character from left side of the serial number.

		The third character
<A>	FinePix S6000fd J-model	0 to 9
<B>	FinePix S6000fd US-model	A to H,J,K
<C>	FinePix S6500fd EU/EG/EE/AS-model	L to N,P to V
<D>	FinePix S6500fd EU/EG/EE/AS-model * Japan production	L to N,P to V
<E>	FinePix S6500fd CH-model	W to Z

Selected FinePix S6000fd US-model.

Press the [Enter] key!

<Fig. 4-19-3>

—> The [USB ID Writing] screen appears.

<Step 5>

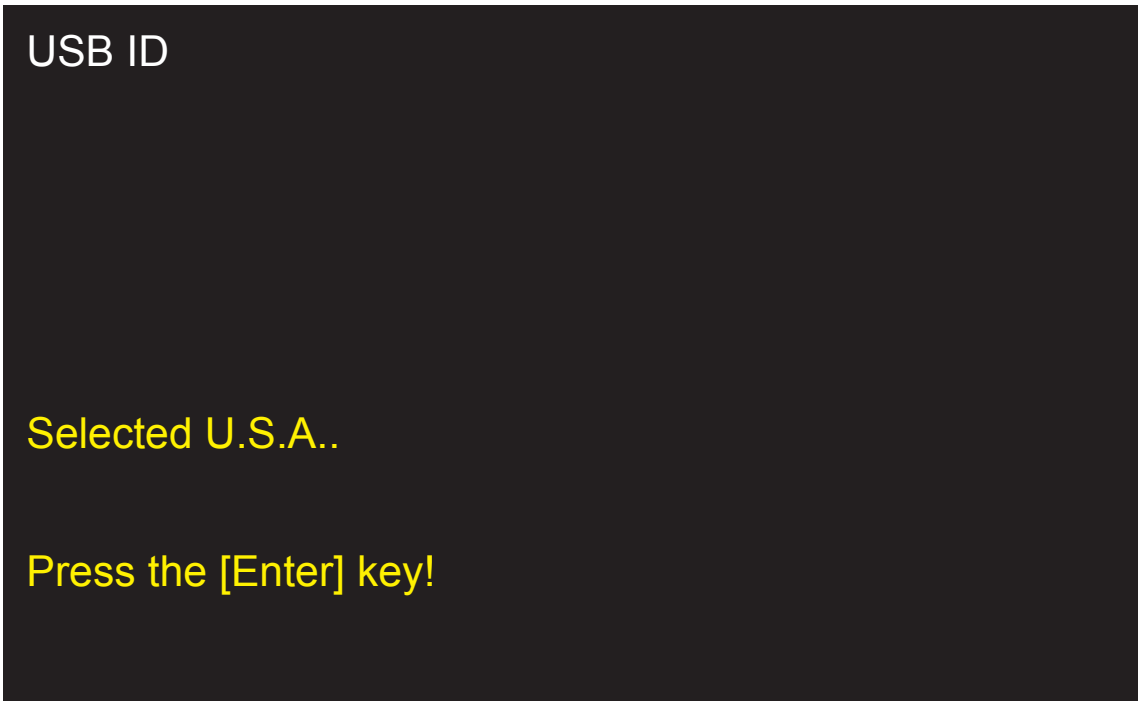
Repair site ID input menu
The repair site is selected from an undermentioned list.

<A>	SAPPORO SS	<M>	BRITAIN
<B>	SENDAI SS	<N>	GERMANY
<C>	TOKYO SS	<O>	FRANCE
<D>	NAGOYA SS	<P>	SPAIN
<E>	OSAKA SS	<Q>	ITALY
		<R>	NETHERLANDS
<G>	FUKUOKA SS	<S>	BELGIUM
<H>	U.S.A.	<T>	SWEDEN
<I>	CANADA	<U>	SWITZERLAND
<J>	HAWAII	<V>	NORWAY
<K>	TAIWAN	<W>	FINLAND
		<X>	SINGAPORE
<L>	CHINA	<Z>	OTHERS

<Fig. 4-19-4>

<Note>
This example assumes that <H>U.S.A. has been selected. The following screen therefore appears.
—> The [USB_ID U.S.A.] screen appears.

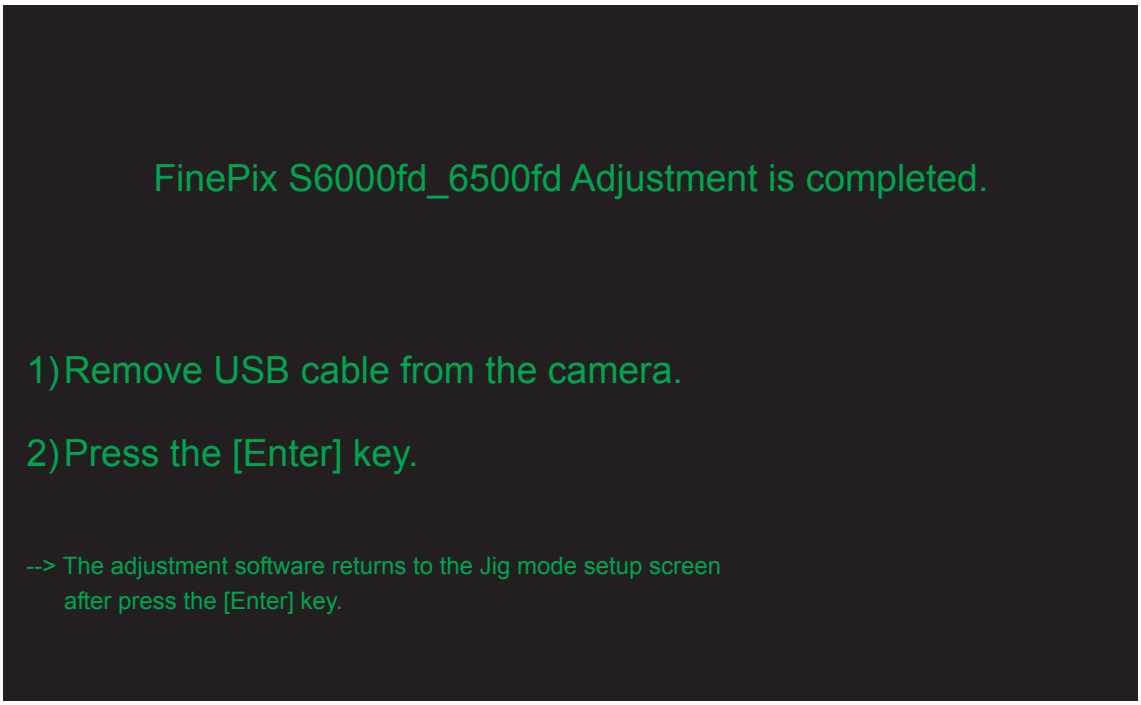
<Step 6>



<Fig. 4-19-5>

—> The [FinePix S6000fd_6500fd Adjustment End] screen appears.

<Step 7>



<Fig. 4-19-6>

MEMO

5. Inspection

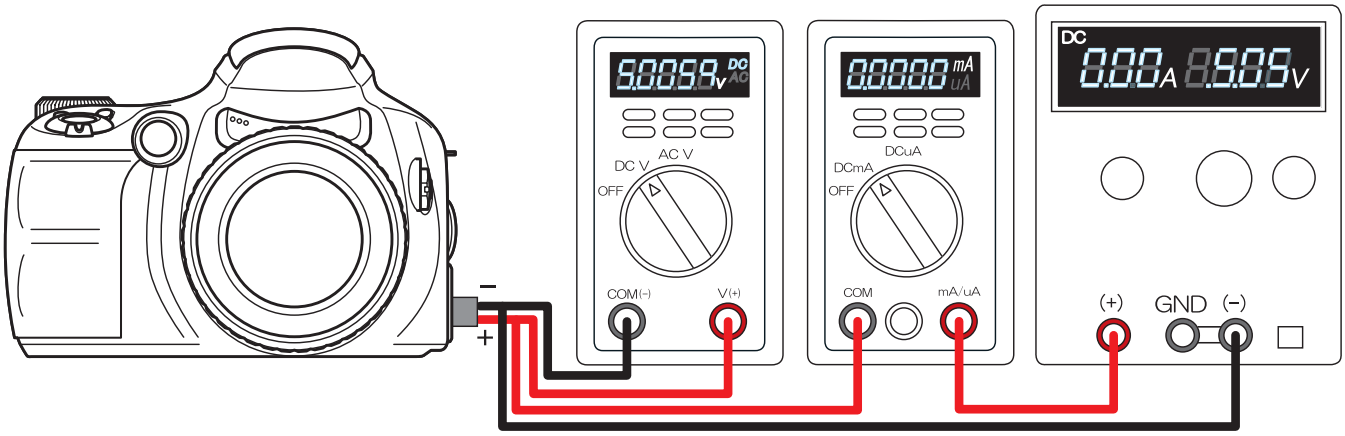
5-1. Required Measuring Equipment

Measuring equipment	Remarks
Power supply	AC adapter (AC-5V), Regurated power supply
Digital voltmeter	For general use
Ammeter	For general use (able to measure 1mA or less)
Power Cable Jig	Common with adjustment JIG (ZJ00580-100)
xD-Picture card	For general use
Macro Chart	Resolution confirmation (ZJ00525-100)
TV Monitor	TV monitor, minimum resolution 600 lines
LCD INSPECTION DATA	Download and use ZJ00885-100
Vectorscope	For general use

5-2. Connection of Measuring Equipment

Use Power Cable Jig.

The output current of the Regurated power supply must not become 2.5A or more.

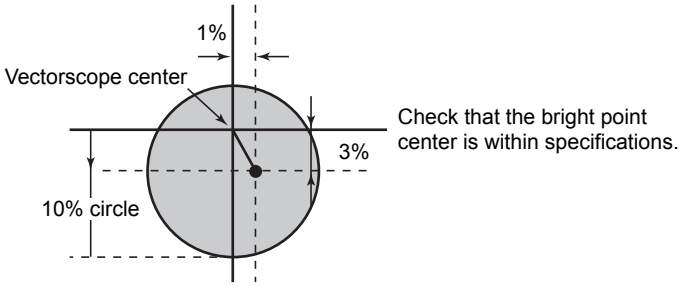


5-3. Inspection and Factory Settings

Sequemnce	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
1	External visual check		(1) Observe the camera.	(1) Check for damage to the outer casing (2) Check for problems with the clicking or sliding movement of switches. (3) Check for dust or fogging in the viewfinder and AF-assist flash window. (4) Check for dust or fogging in the LCD.		
2	Power switch check	Auto mode LCD-ON	(1) Connect the power supply jig to the DC IN terminal. (2) Insert a card and close the card cover. (3) Select the Mode dial setting. (4) Set the Power switch to photography mode. (5) If a message appears asking for the language and date to be set, press the specification button on the right. (6) Check the display status.	(1) Applied voltage: 5.00V ± 0.05 V (2) Card for recording checking (3) Mode: AUTO (4) Check that the camera beeps. (5) <DISP/BACK> (6) Check that the live image and text is displayed.		
		EVF-ON	(7) Press the <EVF/LCD> button. (8) Check for blemishes in the CCD live image.	(7) Check that the live image is displayed. (8) Monitor a very bright subject and check that the live image does not dim or darken.		
3	Shock noise check in Auto mode	Auto mode LCD-ON	(1) Apply a shock to the camera.	(1) Check for problems on the LCD monitor. Check that the camera recovers from synchronicity disruption. (Note) Do not apply shocks directly to the lens or card cover.		

Sequemnce	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
4	Resolution check Focusing check	Auto mode LCD-ON	(1) Use a macro resolution chart as the subject. (2) Set the camera to Macro mode. (3) Set the camera up so that the chart fills the screen from corner to corner. (4) Press the shutter button to take a picture. (5) Set the flash mode to red-eye reduction mode and after S1 press the flash pop-up button.	(2) Press the 4-way button (left) and check that the Macro icon (tulip) appears on the LCD monitor. (4) The indicator lamp lights green -> orange or green (recording) -> turns off. (5) 4-way button (right) operation: Check that the red-eye reduction icon appears on the LCD monitor. Do this in low-light conditions.		
5	Checking Manual Focus	Auto mode LCD-ON	(1) Set the focus mode selector switch to MF. (2) Press the <One-touch AF> button. (3) Turn the focusing ring. (4) Set the focus mode selector switch to AF.	(1) Check that MF is displayed. (2) Focus the shot and check that the circle displayed in the center of the screen turns yellow. (3) Check that ◄► appears below the circle in the center of the screen and that the focusing works. (4) Check that MF is no longer displayed.		
6	Movie/audio recording check	Movie mode LCD-ON	(1) Set the Mode dial to Movie shooting mode. (2) Press S1 -> S2 and then release S2 -> S1. (3) After 5 seconds, press and then release S1.	(1) Check that “STANDBY” appears on the LCD monitor. (2) Check that movie/audio recording begins. Check that “REC” appears on the LCD monitor. (3) Check that movie/audio recording ends and that the data is recorded on the card.		
7	Movie/audio playback check	Playback	(1) Set the camera to Playback mode. (2) Press the 4-way button (down) to play back the movie.	(2) Check that the movie is played back on the LCD monitor. Check that the sound is played back through the speaker. Check that sound is played back over external speakers.		

Sequemnce	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
8	Playback check	Playback	(1) Plug the AV cable into the camera. (2) Check images shot using the flash (18% gray chart, shot at a distance of 1 m). (3) Check images shot at macro resolutions (manual photography) (4) Disconnect the AV cable from the camera. Turn the camera off.	(1) Check that the LCD image disappears and the indicator lamp lights green. (2) Check that the position of the bright spot is within a 10% circle with a center that is X = 1% and Y = -3% from the center of the vectorscope (see figure below). (3) Where the horizontal resolution is as follows: 350 TV lines or better at the center and 300 TV lines or better at the periphery (NTSC) 300 TV lines or better at the center and 250 TV lines or better at the periphery (PAL)	Vectorscope TV monitor	
9	Playback mode check	Playback	(1) Insert a card. (2) Set the Power lever to Playback mode. (3) If a message prompting the user to set the date appears, press the button specified on the right. (4) Check the playback image.	(3) <DISP/BACK> (4) Check that the last image shot appears, regardless of whether it is automatic or manual. Check that the date is displayed in the YYYY.MM.DD format.		
10	Erase mode check	Erase	(1) Select “Erase” -> “Erase all” from the menu and then press the “OK” button. (2) Press the “OK” button again.	(1) Check that an erase message such as the following appears: Japan: “全コマ消去 OK?” Overseas: “ERASE ALL OK?” China: “删除所有 OK?” (2) Check that the recorded images are erased.		



Check that the Y level is 63.4 to 92.2 IRE (NTSC) or 444 to 646 mV (PAL).

Fig

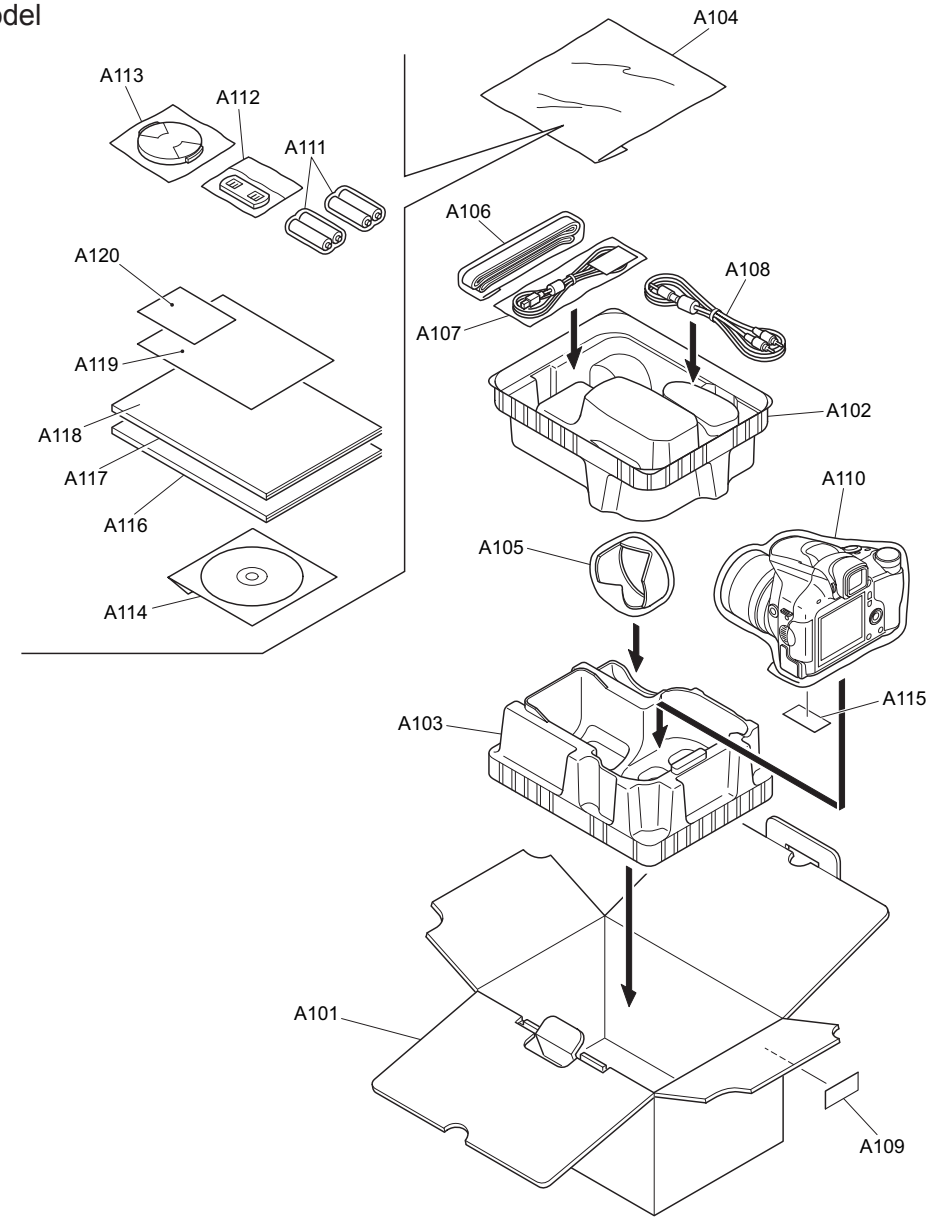
Sequemnce	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
11	Initialization		(1) Set Macro mode to the default setting. (2) Set the flash mode to AUTO.	(1) 4-way button (left) operation: Check that the Macro icon OFF appears on the LCD monitor. (2) Press the 4-way button (right) and check that “AUTO” appears on the LCD monitor.		
12	LCD dust/defect check	Playback	(1) Insert a standard xD-Picture card. (2) Play back a completely black image. (3) Play back a completely white (75%) image. (4) Change the setting with the EVF/LCD button.	(2) Check that there are no noticeable dust flecks or stains (bright spots, smears, flashing points, etc.) on the screen. (4) Play the above 2 frames and perform the same checks.	ZJ00885-100	
13	Battery low check	Movie	(1) Connect the power supply jig to the DC IN terminal. (2) Set the power supply voltage. (3) Set the Mode dial to Movie mode and turn the camera on. (4) Set the pre-end voltage. (5) Set the end voltage.	(2) 5.00V ± 0.10V (3) Check that the camera starts up normally. (4) 4.40V ± 0.10V Check that the battery low warning appears. (5) 4.00V ± 0.10V Check that the camera turns off.		
14	Current consumption check	Auto mode LCD-ON	(1) Connect the power supply jig to the DC IN terminal. (2) Set the power supply voltage. (3) Set the Mode dial to AUTO and turn the camera on. (4) After the LCD live image appears, check the current consumption.	(2) 5.00V ± 0.05V (4) 550 mA or less (Stable state -> IRIS/ FOCUS does not operate)		

Sequemnce	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
15	Factory setting		(1) Mode dial (2) Flash (3) Battery and cards not inserted (4) Card cover (5) Battery cover (6) Power lever (7)Focus mode selector switch (8) EVF diopter adjustment dial (9) Zoom position (10) Jack cover (11) SETUP frame No.	(1) AUTO (2) Pop down (4) Closed (5) Closed (6) OFF (7) S-AF (8) Center position indicator located close to the center. (9) Set the zoom to the W end. (10) Closed (11) New: The default SETUP frame No. setting is “Continuous”, but to clear the number of frames in the frame number memory to zero, you should always change the setting to “New” before turning the camera off.		
16	Checking standby current	Power OFF	(1) Connect the power supply jig to the DC IN jack. (2) Set the power supply voltage. (3) Check the standby current when the power is turned OFF.	(2) 5.00V ± 0.05V (3) 20 mA or less (Due to the possibility of measuring instrument error with a minimum unit of 0.01 A, 2 units should generally be used.)		
				*Setting and clearing date (1) Connect the USB cablefrom the PC to the camera (ensure that the PC isswitched ON). (2) Open the card cover andswitch power ON (POWER_ON) while pressing the shutter button. (3) Switch power OFF (POWER_OFF). (4) Check that the date hasbeen cleared.		

6. Parts List

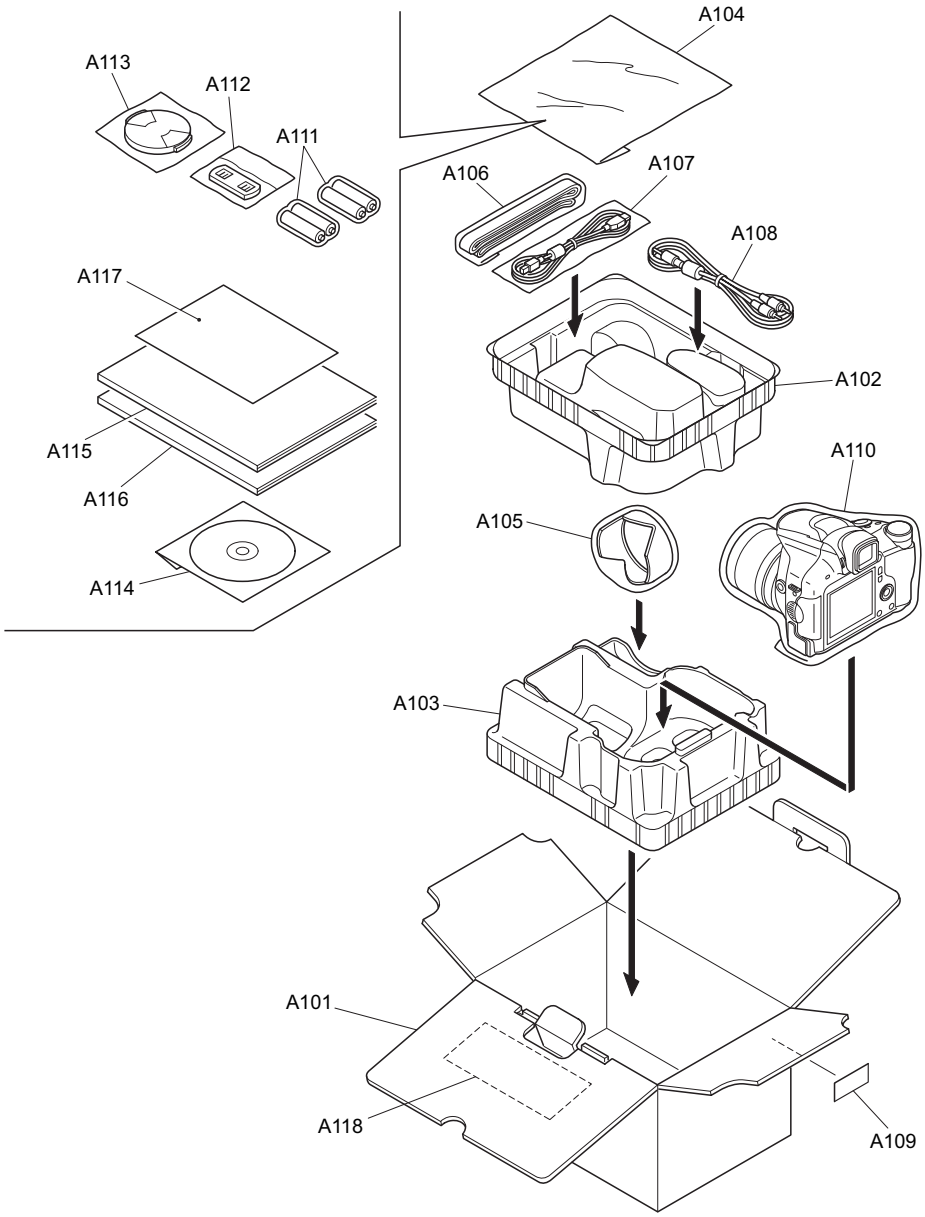
6-1. Packing and Accessories

6-1-1. US-model



Ref No.	Parts No.	Description	Comment
A101	FZ06668-200	UNITARY BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BB19704-100	CERTIFICATION SEAL	
A116	BL00548-200	MANUAL E	
A117	BL00549-200	QUICKGUIDE E	
A118	BL00549-500	QUICKGUIDE S	
A119	BL00372-101	IMPORTANT SAFETY	
A120	BL00373-101	US WARRANTY	

6-1-2. JP-model



Ref No.	Parts No.	Description	Comment
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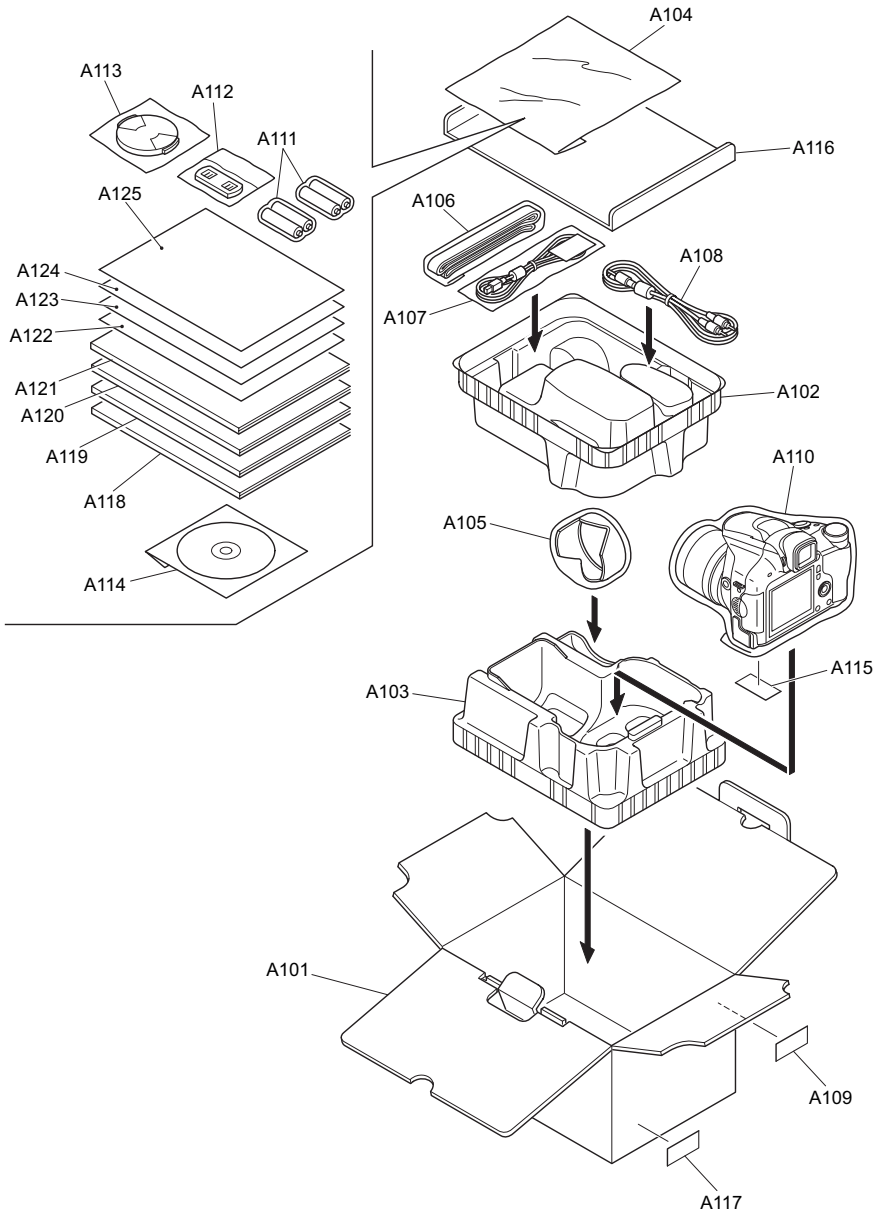
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06704-100	USB CABLE J	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06486-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BL00575-100	PTF GUIDE FPV	
A116	BL00548-100	MANUAL J	
A117	BL00190-101	SAFETYCARD H14	
A118	BB18949-101	WARRANTY CARD	

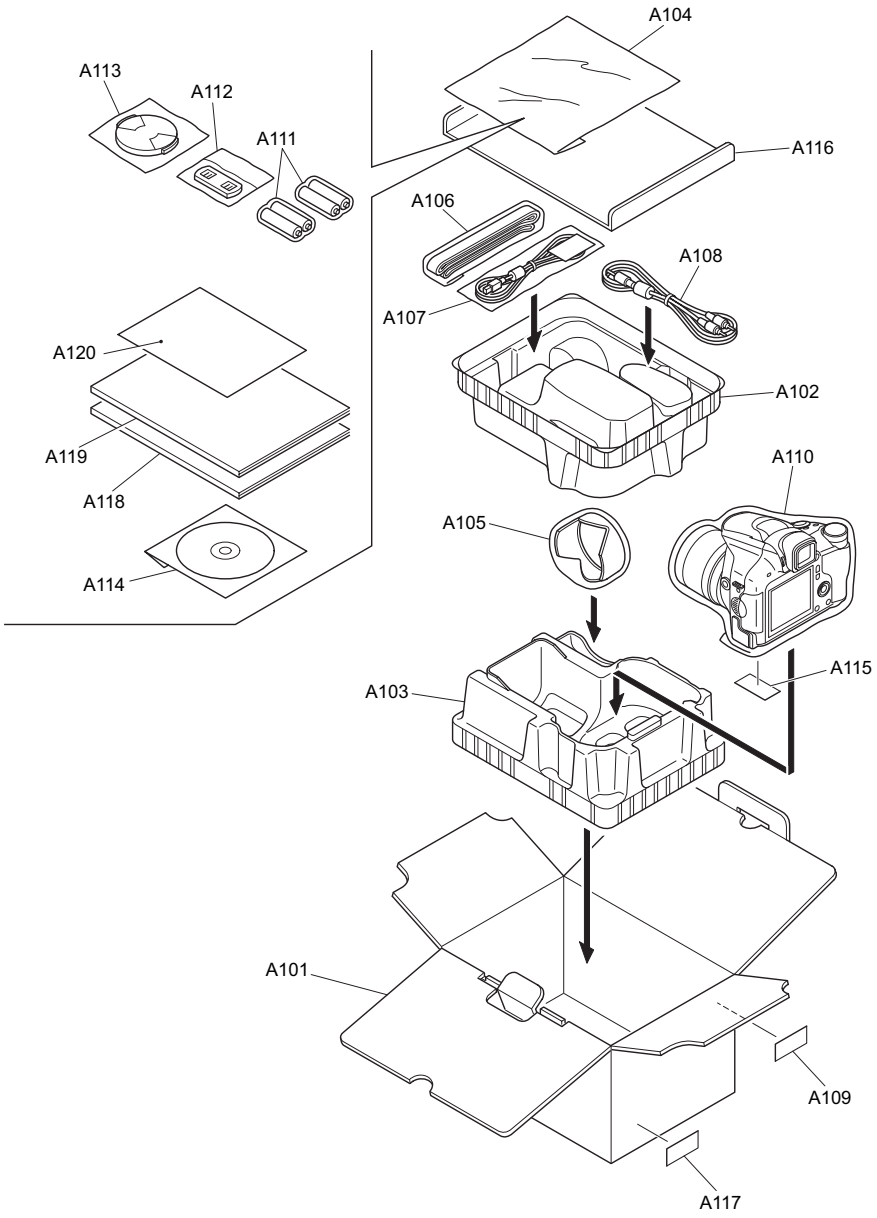
6-1-3. EU-model



N.S.=Not Supply

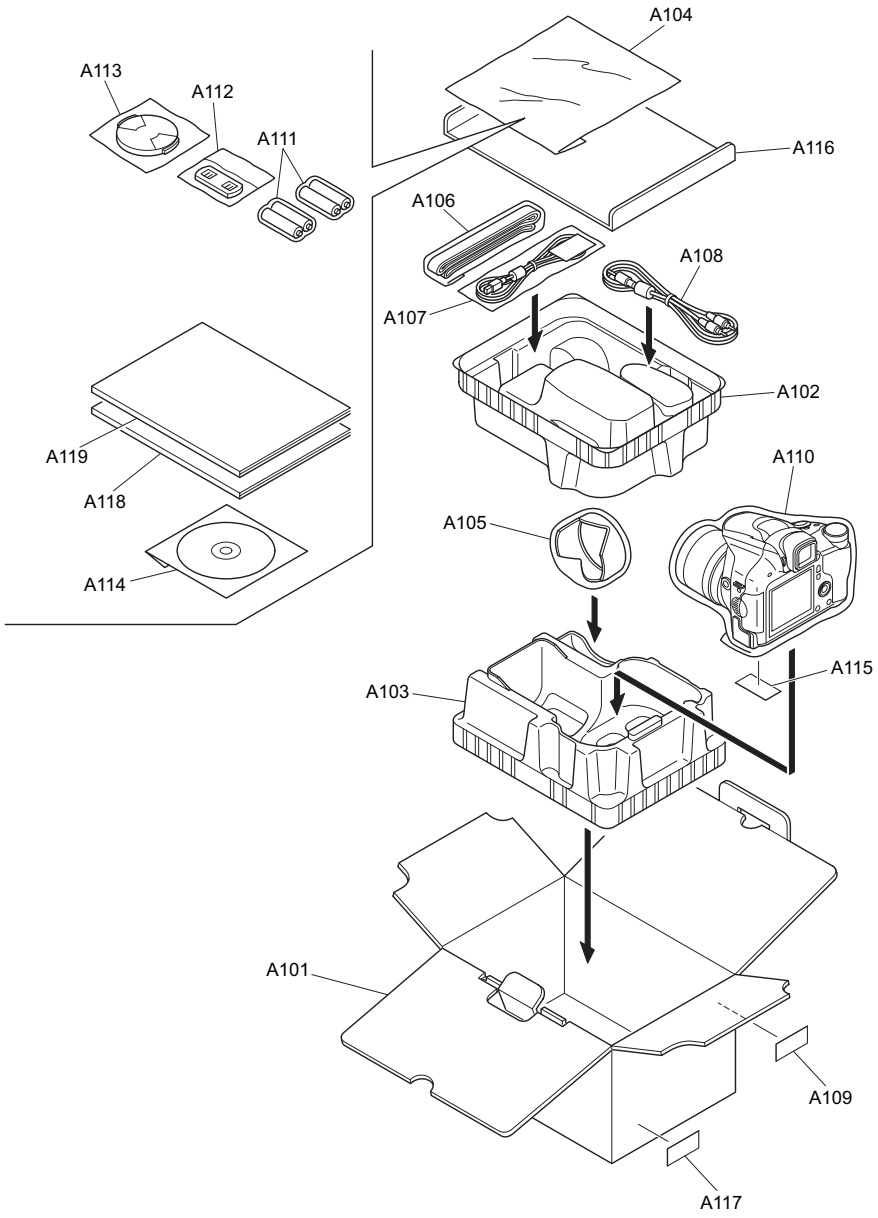
Ref No.	Parts No.	Description	Comment
A101	FZ06669-100	UNITARY U.BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BB19704-100	CERTIFICATION SEAL	
A116	FZ06674-100	PARTITION PAD	
A117	BB19697-B00	DEST.LBLEU CFG	
A118	N.S.	MANUAL E	
A119	N.S.	MANUAL F	
A120	N.S.	MANUAL G	
A121	N.S.	MANUAL S	
A122	N.S.	QUICKGUIDE E	
A123	N.S.	QUICKGUIDE F	
A124	N.S.	QUICKGUIDE G	
A125	N.S.	QUICKGUIDE S	

6-1-4. EG-model



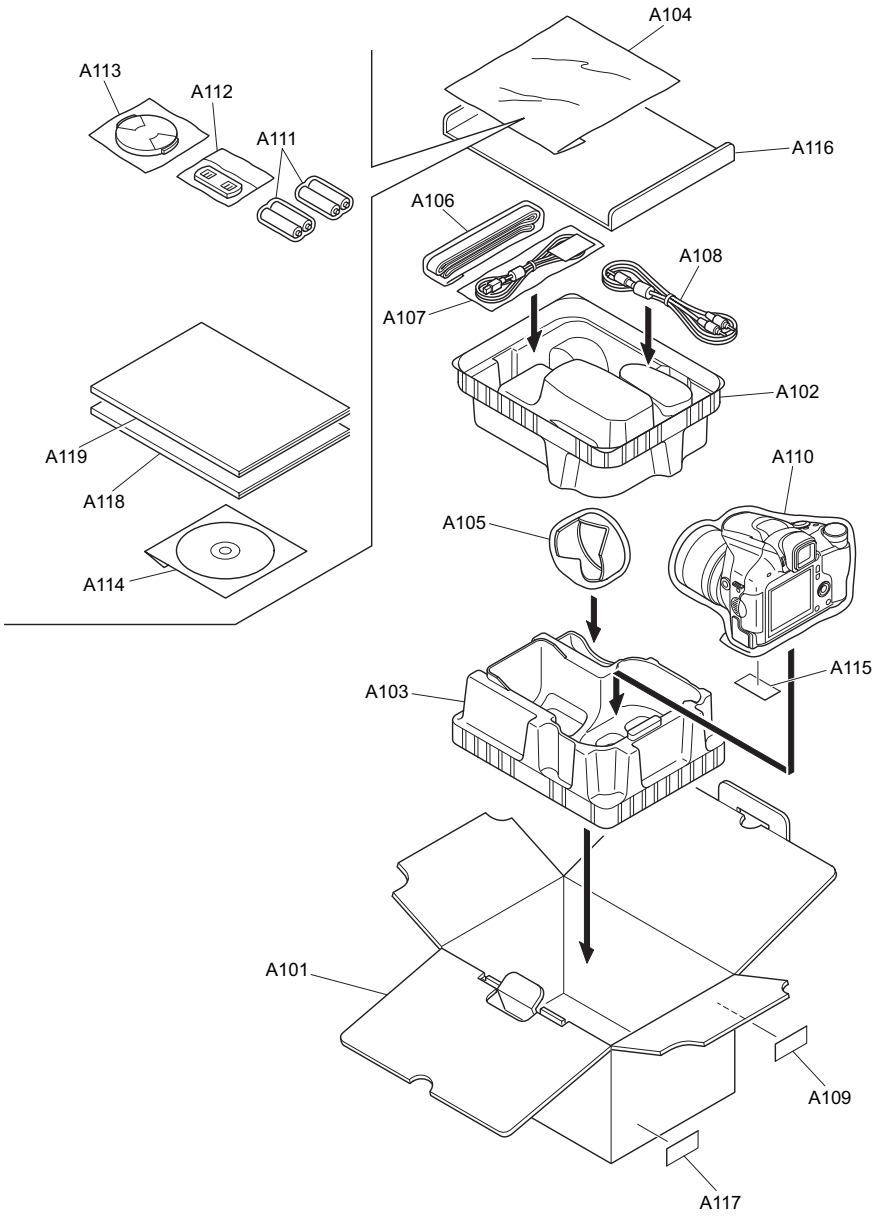
Ref No.	Parts No.	Description	Comment
A101	FZ06669-100	UNITARY U.BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BB19704-100	CERTIFICATION SEAL	
A116	FZ06674-100	PARTITION PAD	
A117	BB19697-C00	DEST.LBLEG CFG	
A118	BL00548-200	MANUAL E	
A119	BL00549-200	QUICKGUIDE E	
A120	BL00176-103	H14 WARRANTY CARD EG	

6-1-5. EE-model



Ref No.	Parts No.	Description	Comment
A101	FZ06669-100	UNITARY U.BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BB19704-100	CERTIFICATION SEAL	
A116	FZ06674-100	PARTITION PAD	
A117	BB19697-G00	DEST.LBLEE CFG	
A118	BL00548-200	MANUAL E	
A119	BL00549-200	QUICKGUIDE E	

6-1-6. EE-model (JP Production)



Ref No.	Parts No.	Description	Comment
A101	FZ06669-100	UNITARY U.BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
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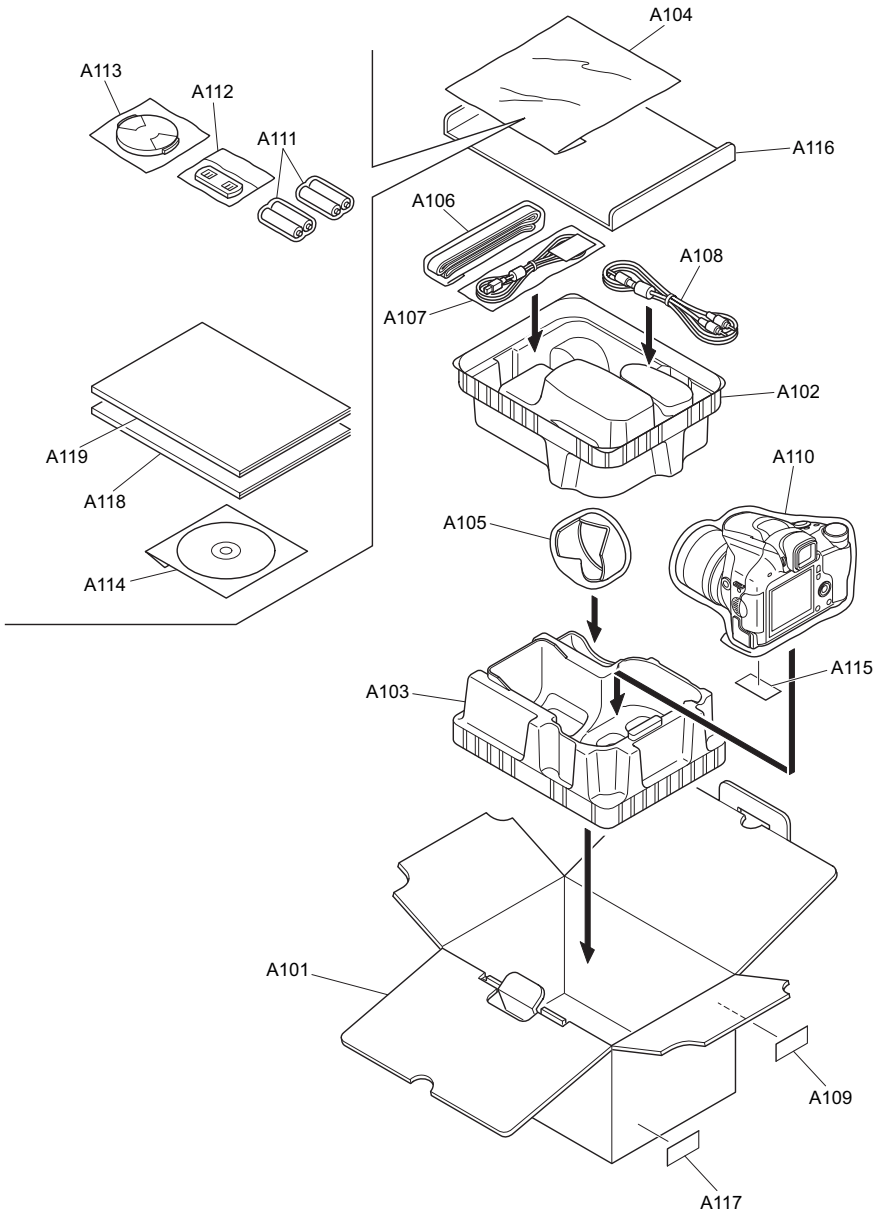
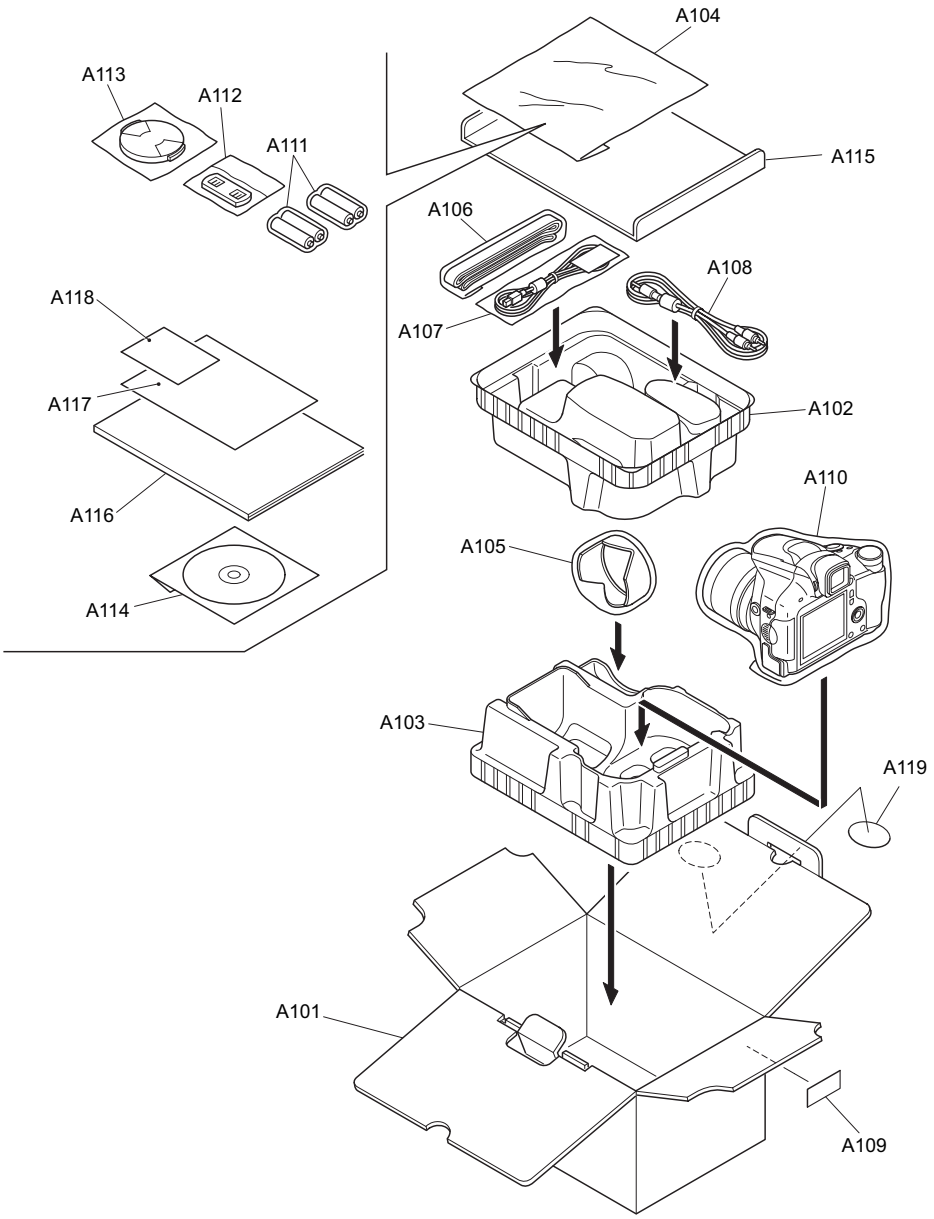
A116	FZ06674-100	PARTITION PAD	
A117	BB19697-700	DEST.LBL.EE JFG	
A118	BL00548-200	MANUAL E	
A119	BL00549-200	QUICKGUIDE E	

6-1-7. AS-model



Ref No.	Parts No.	Description	Comment
A101	FZ06669-100	UNITARY U.BOX	
A102	FZ06670-100	SHEET MOLD T	
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	BB19704-100	CERTIFICATION SEAL	
A116	FZ06674-100	PARTITION PAD	
A117	BB19697-F00	DEST.LBLAS CFG	
A118	BL00548-200	MANUAL E	
A119	BL00549-200	QUICKGUIDE E	

6-1-8. CH-model



Ref No.	Parts No.	Description	Comment
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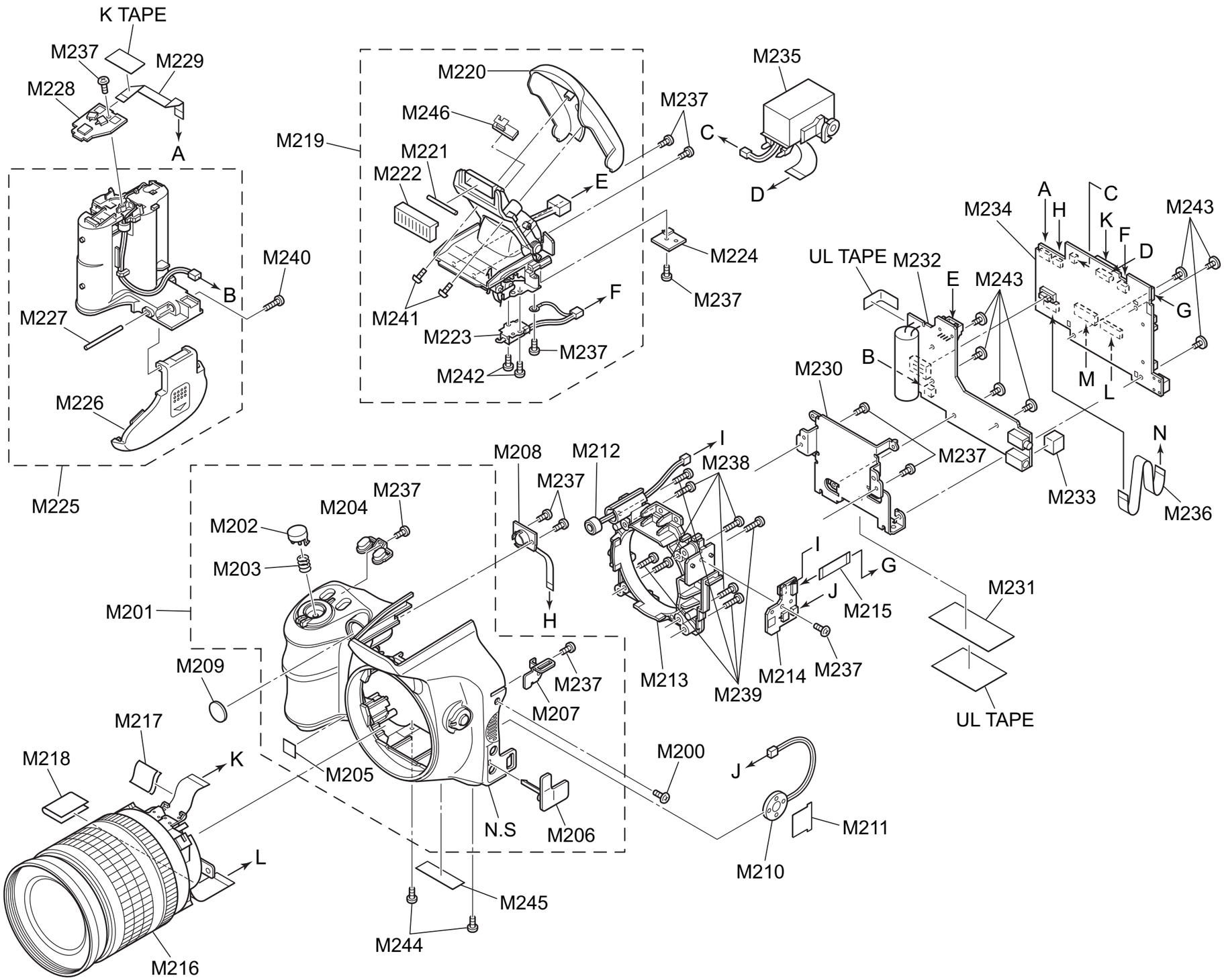
A103	FZ06671-100	SHEET MOLD U	
A104	AZF0000-101	LDPE BAG NO.10	
A105	FZ06312-100	HOOD	
A106	BU02939-100	SHOULDER BELT ASSY	
A107	FZ06705-100	USB CABLE W	
A108	FZ06706-100	AV CABLE	
A109	BB12943-100	BAR CODE LABEL BLANK	
A110	AZF0000-321	HDPE BAG NO.12	
A111	FZ06487-100	ALKALINE BATTERY	
A112	BB12402-100	LENSCAP HOLDER	
A113	FZ06311-101	LENS CAP	
A114	FZ06625-200	CD-ROM	
A115	FZ06673-100	PARTITION PAD	
A116	BL00548-600	MANUAL C	
A117	BB19102-101	WARRANTY CN	
A118	BU03405-100	FC_CERTIFICATE	
A119	BB19104-100	REGULATION SEAL	

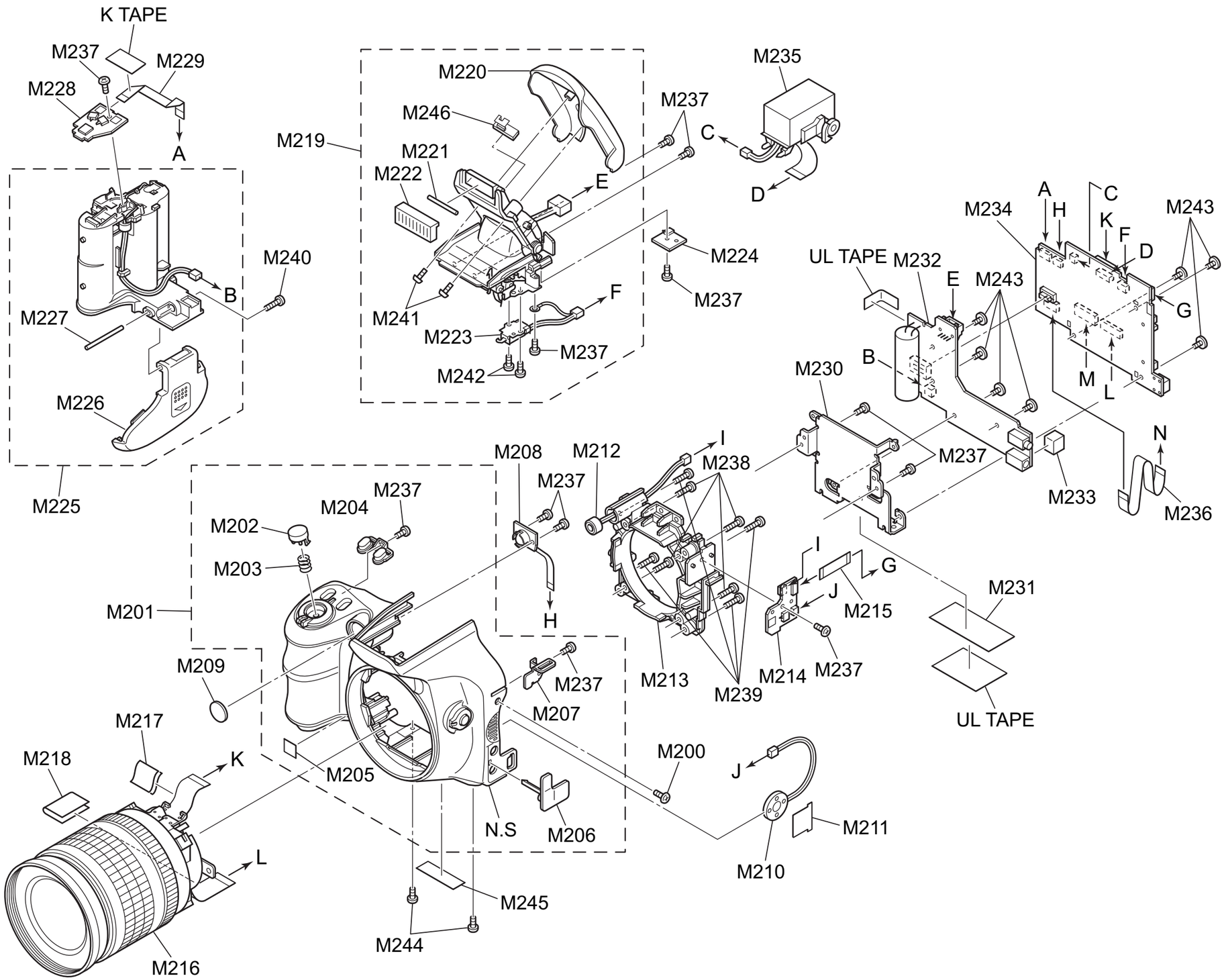
6-2. Cabi Front Block

6-2-1. US/JP-model



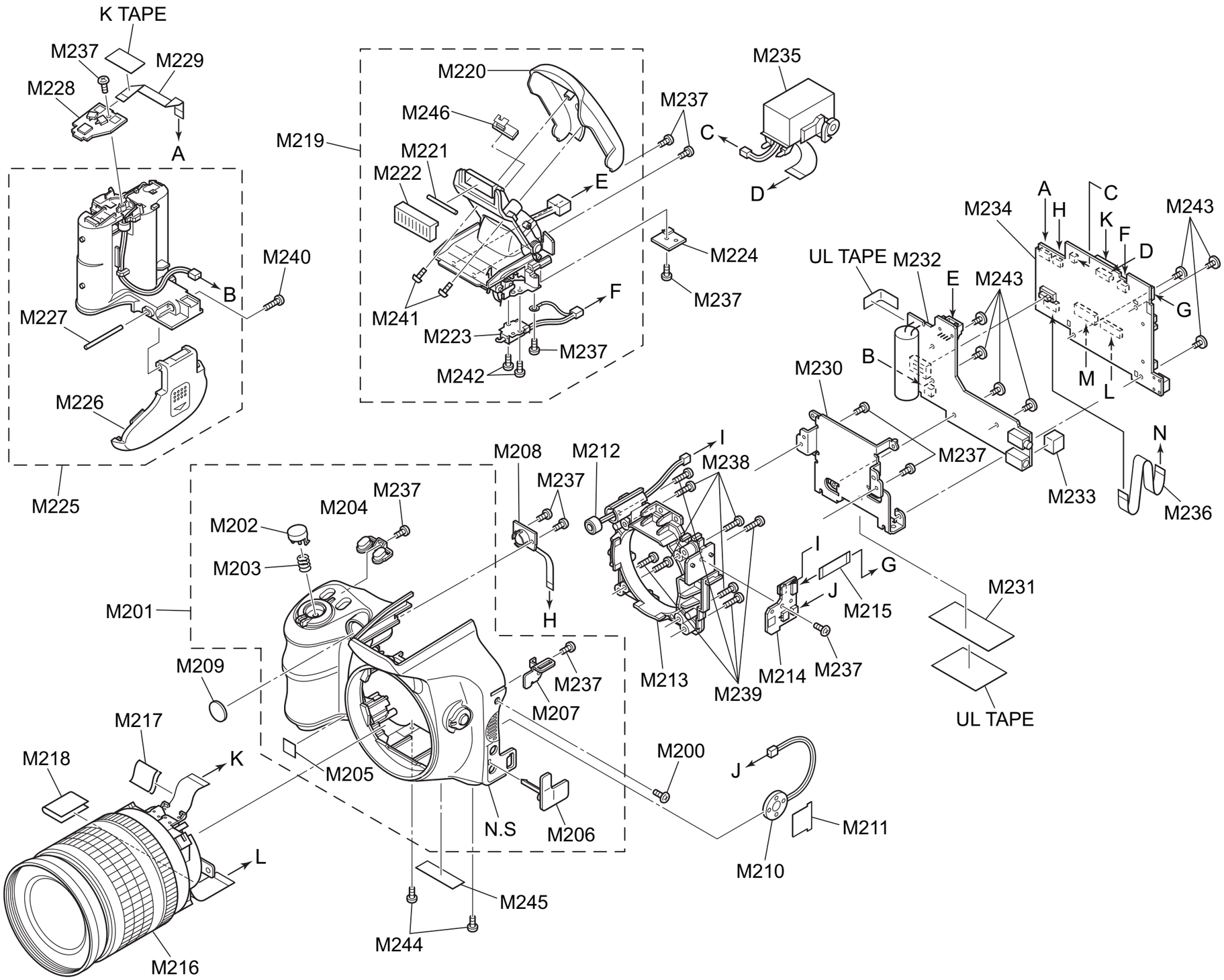
Ref No.	Parts No.	Description	Comment
M201	BU03374-101	F CASE ASSY	
M202	BB19588-100	RELEASE BUTTON	
M203	BB19134-100	CSP RELEASE	
M204	BB19557-100	AE BUTTON	
M205	BB18675-100	CCD BADGE	
M206	BB18977-100	COVER JACK	
M207	BB18967-100	STRAP LEFT	
M208	BF05759-100	AFLED CONST	
M209	BB18978-200	AF WINDOW	
M210	FZ06695-100	SPEAKER ASSY	
M211	BB18979-100	SHEET SP	
M212	FZ06696-100	MIC ASSY	
M213	BB19582-100	LENS HOLDER	
M214	CB1876-A200	SSW PWB ASSY	
M215	FZ06697-100	MAIN-SSW FFC	
M216	BF06163-100	LENS ASSY WITH DATA	
M217	FZ06719-100	EMI SHEET MOTOR	
M218	FZ06720-100	EMI SHEET CCD	
M219	BU03376-100	FLASH ASSY	
M220	BB19558-100	FLASH TOP	
M221	FZ06248-100	LIGHT	
M222	BB18987-100	FLASH WINDOW	
M223	FZ06685-100	PLUNGER UNIT	
M224	CB1876-A100	FSW PWB ASSY	
M225	BU03220-100	ASSY HOLDER BATTERY	
M226	BU03237-100	ASSY LID BATTERY	
M227	BB19168-100	SHAFT BATTERY	
M228	CB1875-A200	RSW PWB ASSY	
M229	FZ06337-100	MAIN-RSW FFC	
M230	BB19560-100	MAIN FRAME	
M231	BB19597-100	MF SHEET	
M232	CB1874-A101	FLASH PWB ASSY	
M233	BB19595-100	FLASH PWB GASKET	
M234	CB1892-A101	MAIN PWB ASSY	
M235	BU03397-101	EVF UNIT CONST	
M236	FZ06698-100	MAIN-KSW FFC	
M237	BB17681-400	BT2M1.7X4.0	
M238	BB19087-H00	MS0M2.0X10.0BN	
M239	BB19122-100	BT2M2.0X9.0	
M240	BB17335-E00	BT2M1.7X9.0B	
M241	BB17335-300	BT2M1.7X3.5B	
M242	BB18128-D00	MS2M1.4X1.6BN	
M243	BB17349-100	MSWM1.7X2.5	
M244	BB17337-300	MS2M1.7X3.5BN	
M245	BB19581-100	PRODUCT LABEL	
M246	CB1874-A200	XE PWB ASSY	

6-2-2. EU/EG/EE-model



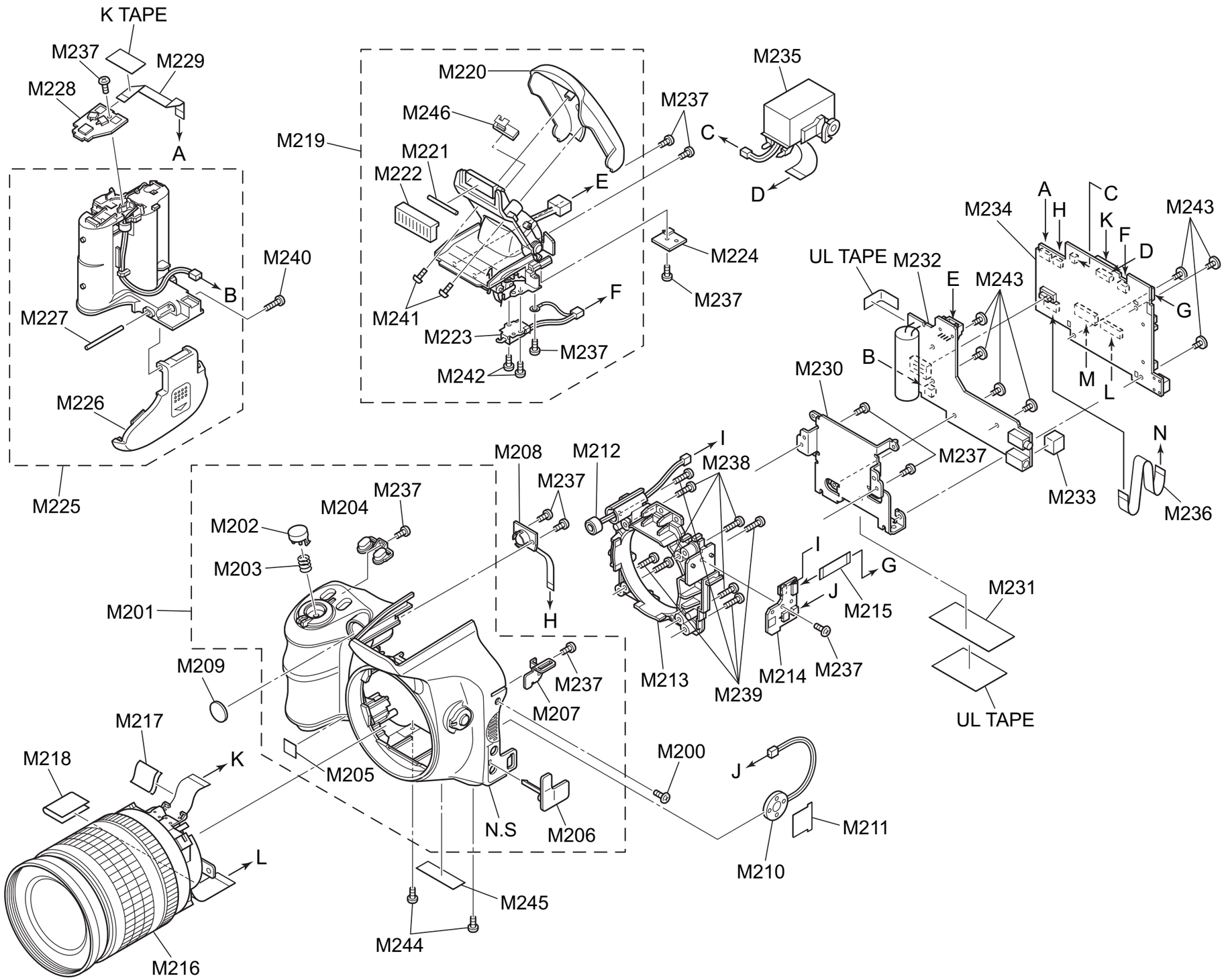
Ref No.	Parts No.	Description	Comment
M201	BU03374-101	F CASE ASSY	
M202	BB19588-100	RELEASE BUTTON	
M203	BB19134-100	CSP RELEASE	
M204	BB19557-100	AE BUTTON	
M205	BB18675-100	CCD BADGE	
M206	BB18977-100	COVER JACK	
M207	BB18967-100	STRAP LEFT	
M208	BF05759-100	AFLED CONST	
M209	BB18978-200	AF WINDOW	
M210	FZ06695-100	SPEAKER ASSY	
M211	BB18979-100	SHEET SP	
M212	FZ06696-100	MIC ASSY	
M213	BB19582-100	LENS HOLDER	
M214	CB1876-A200	SSW PWB ASSY	
M215	FZ06697-100	MAIN-SSW FFC	
M216	BF06163-100	LENS ASSY WITH DATA	
M217	FZ06719-100	EMI SHEET MOTOR	
M218	FZ06720-100	EMI SHEET CCD	
M219	BU03376-200	FLASH ASSY	
M220	BB19558-200	FLASH TOP	
M221	FZ06248-100	LIGHT	
M222	BB18987-100	FLASH WINDOW	
M223	FZ06685-100	PLUNGER UNIT	
M224	CB1876-A100	FSW PWB ASSY	
M225	BU03220-100	ASSY HOLDER BATTERY	
M226	BU03237-100	ASSY LID BATTERY	
M227	BB19168-100	SHAFT BATTERY	
M228	CB1875-A200	RSW PWB ASSY	
M229	FZ06337-100	MAIN-RSW FFC	
M230	BB19560-100	MAIN FRAME	
M231	BB19597-100	MF SHEET	
M232	CB1874-A101	FLASH PWB ASSY	
M233	BB19595-100	FLASH PWB GASKET	
M234	CB1892-A101	MAIN PWB ASSY	
M235	BU03397-101	EVF UNIT CONST	
M236	FZ06698-100	MAIN-KSW FFC	
M237	BB17681-400	BT2M1.7X4.0	
M238	BB19087-H00	MS0M2.0X10.0BN	
M239	BB19122-100	BT2M2.0X9.0	
M240	BB17335-E00	BT2M1.7X9.0B	
M241	BB17335-300	BT2M1.7X3.5B	
M242	BB18128-D00	MS2M1.4X1.6BN	
M243	BB17349-100	MSWM1.7X2.5	
M244	BB17337-300	MS2M1.7X3.5BN	
M245	BB19581-200	PRODUCT LABEL	
M246	CB1874-A200	XE PWB ASSY	

6-2-3. EE-model (JP Production)



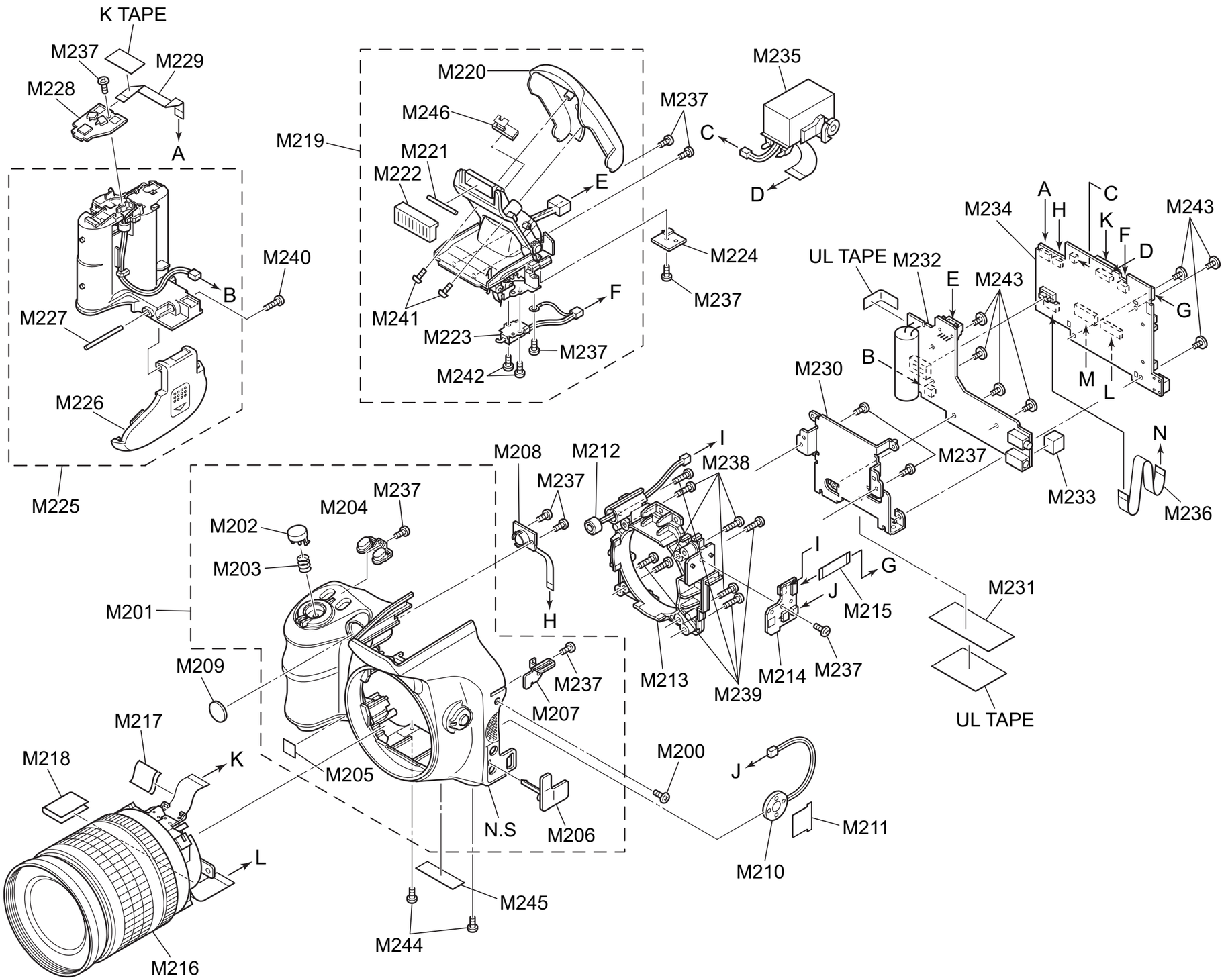
Ref No.	Parts No.	Description	Comment
M201	BU03374-101	F CASE ASSY	
M202	BB19588-100	RELEASE BUTTON	
M203	BB19134-100	CSP RELEASE	
M204	BB19557-100	AE BUTTON	
M205	BB18675-100	CCD BADGE	
M206	BB18977-100	COVER JACK	
M207	BB18967-100	STRAP LEFT	
M208	BF05759-100	AFLED CONST	
M209	BB18978-200	AF WINDOW	
M210	FZ06695-100	SPEAKER ASSY	
M211	BB18979-100	SHEET SP	
M212	FZ06696-100	MIC ASSY	
M213	BB19582-100	LENS HOLDER	
M214	CB1876-A200	SSW PWB ASSY	
M215	FZ06697-100	MAIN-SSW FFC	
M216	BF06163-100	LENS ASSY WITH DATA	
M217	FZ06719-100	EMI SHEET MOTOR	
M218	FZ06720-100	EMI SHEET CCD	
M219	BU03376-200	FLASH ASSY	
M220	BB19558-200	FLASH TOP	
M221	FZ06248-100	LIGHT	
M222	BB18987-100	FLASH WINDOW	
M223	FZ06685-100	PLUNGER UNIT	
M224	CB1876-A100	FSW PWB ASSY	
M225	BU03220-100	ASSY HOLDER BATTERY	
M226	BU03237-100	ASSY LID BATTERY	
M227	BB19168-100	SHAFT BATTERY	
M228	CB1875-A200	RSW PWB ASSY	
M229	FZ06337-100	MAIN-RSW FFC	
M230	BB19560-100	MAIN FRAME	
M231	BB19597-100	MF SHEET	
M232	CB1874-A101	FLASH PWB ASSY	
M233	BB19595-100	FLASH PWB GASKET	
M234	CB1892-A101	MAIN PWB ASSY	
M235	BU03397-101	EVF UNIT CONST	
M236	FZ06698-100	MAIN-KSW FFC	
M237	BB17681-400	BT2M1.7X4.0	
M238	BB19087-H00	MS0M2.0X10.0BN	
M239	BB19122-100	BT2M2.0X9.0	
M240	BB17335-E00	BT2M1.7X9.0B	
M241	BB17335-300	BT2M1.7X3.5B	
M242	BB18128-D00	MS2M1.4X1.6BN	
M243	BB17349-100	MSWM1.7X2.5	
M244	BB17337-300	MS2M1.7X3.5BN	
M245	BB19581-500	PRODUCT LABEL	
M246	CB1874-A200	XE PWB ASSY	

6-2-4. AS-model



Ref No.	Parts No.	Description	Comment
M201	BU03374-101	F CASE ASSY	
M202	BB19588-100	RELEASE BUTTON	
M203	BB19134-100	CSP RELEASE	
M204	BB19557-100	AE BUTTON	
M205	BB18675-100	CCD BADGE	
M206	BB18977-100	COVER JACK	
M207	BB18967-100	STRAP LEFT	
M208	BF05759-100	AFLED CONST	
M209	BB18978-200	AF WINDOW	
M210	FZ06695-100	SPEAKER ASSY	
M211	BB18979-100	SHEET SP	
M212	FZ06696-100	MIC ASSY	
M213	BB19582-100	LENS HOLDER	
M214	CB1876-A200	SSW PWB ASSY	
M215	FZ06697-100	MAIN-SSW FFC	
M216	BF06163-100	LENS ASSY WITH DATA	
M217	FZ06719-100	EMI SHEET MOTOR	
M218	FZ06720-100	EMI SHEET CCD	
M219	BU03376-200	FLASH ASSY	
M220	BB19558-200	FLASH TOP	
M221	FZ06248-100	LIGHT	
M222	BB18987-100	FLASH WINDOW	
M223	FZ06685-100	PLUNGER UNIT	
M224	CB1876-A100	FSW PWB ASSY	
M225	BU03220-100	ASSY HOLDER BATTERY	
M226	BU03237-100	ASSY LID BATTERY	
M227	BB19168-100	SHAFT BATTERY	
M228	CB1875-A200	RSW PWB ASSY	
M229	FZ06337-100	MAIN-RSW FFC	
M230	BB19560-100	MAIN FRAME	
M231	BB19597-100	MF SHEET	
M232	CB1874-A101	FLASH PWB ASSY	
M233	BB19595-100	FLASH PWB GASKET	
M234	CB1892-A101	MAIN PWB ASSY	
M235	BU03397-101	EVF UNIT CONST	
M236	FZ06698-100	MAIN-KSW FFC	
M237	BB17681-400	BT2M1.7X4.0	
M238	BB19087-H00	MS0M2.0X10.0BN	
M239	BB19122-100	BT2M2.0X9.0	
M240	BB17335-E00	BT2M1.7X9.0B	
M241	BB17335-300	BT2M1.7X3.5B	
M242	BB18128-D00	MS2M1.4X1.6BN	
M243	BB17349-100	MSWM1.7X2.5	
M244	BB17337-300	MS2M1.7X3.5BN	
M245	BB19581-300	PRODUCT LABEL	
M246	CB1874-A200	XE PWB ASSY	

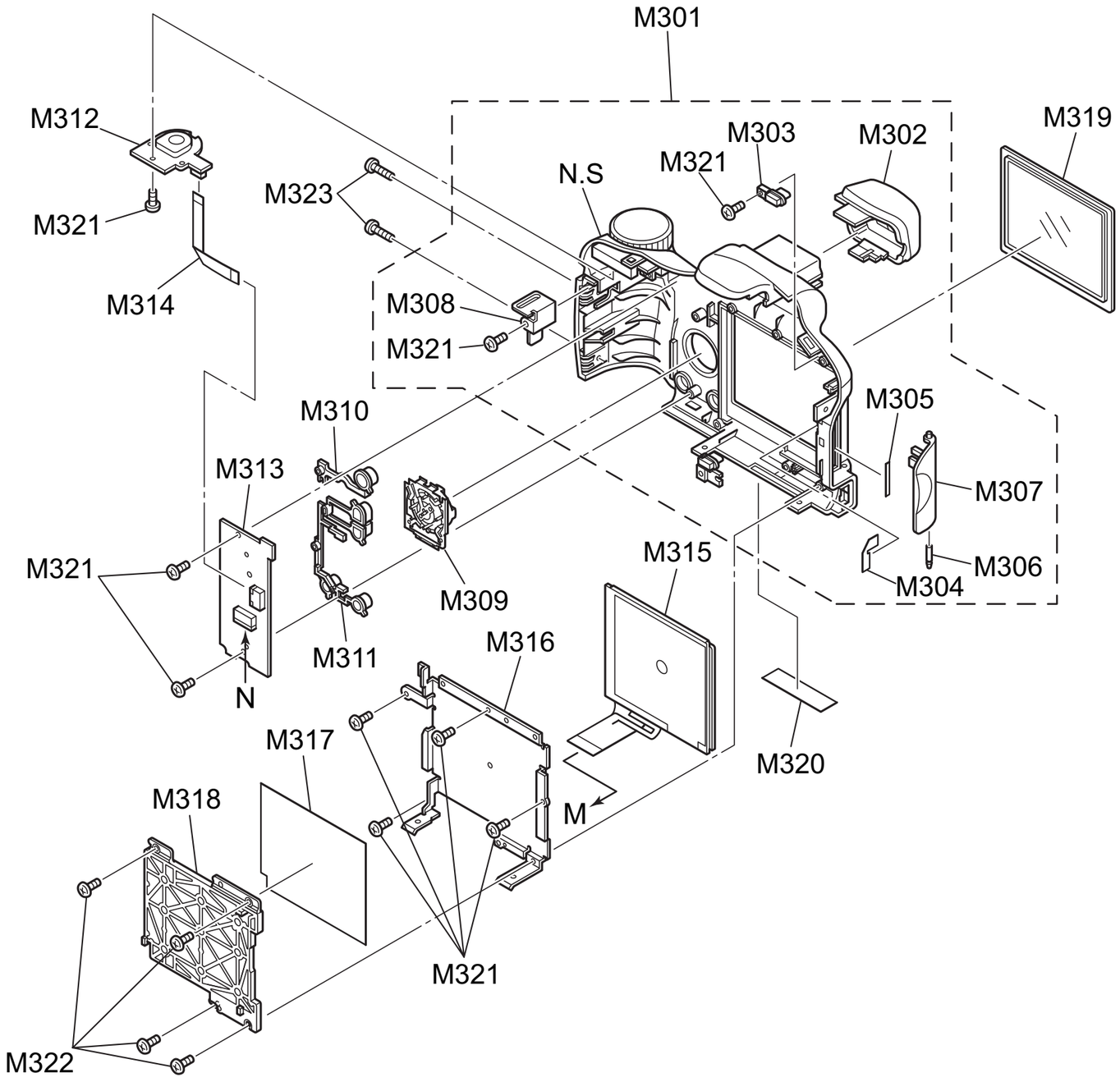
6-2-5. CH-model



Ref No.	Parts No.	Description	Comment
M201	BU03374-101	F CASE ASSY	
M202	BB19588-100	RELEASE BUTTON	
M203	BB19134-100	CSP RELEASE	
M204	BB19557-100	AE BUTTON	
M205	BB18675-100	CCD BADGE	
M206	BB18977-100	COVER JACK	
M207	BB18967-100	STRAP LEFT	
M208	BF05759-100	AFLED CONST	
M209	BB18978-200	AF WINDOW	
M210	FZ06695-100	SPEAKER ASSY	
M211	BB18979-100	SHEET SP	
M212	FZ06696-100	MIC ASSY	
M213	BB19582-100	LENS HOLDER	
M214	CB1876-A200	SSW PWB ASSY	
M215	FZ06697-100	MAIN-SSW FFC	
M216	BF06163-100	LENS ASSY WITH DATA	
M217	FZ06719-100	EMI SHEET MOTOR	
M218	FZ06720-100	EMI SHEET CCD	
M219	BU03376-200	FLASH ASSY	
M220	BB19558-200	FLASH TOP	
M221	FZ06248-100	LIGHT	
M222	BB18987-100	FLASH WINDOW	
M223	FZ06685-100	PLUNGER UNIT	
M224	CB1876-A100	FSW PWB ASSY	
M225	BU03220-100	ASSY HOLDER BATTERY	
M226	BU03237-100	ASSY LID BATTERY	
M227	BB19168-100	SHAFT BATTERY	
M228	CB1875-A200	RSW PWB ASSY	
M229	FZ06337-100	MAIN-RSW FFC	
M230	BB19560-100	MAIN FRAME	
M231	BB19597-100	MF SHEET	
M232	CB1874-A101	FLASH PWB ASSY	
M233	BB19595-100	FLASH PWB GASKET	
M234	CB1892-A101	MAIN PWB ASSY	
M235	BU03397-101	EVF UNIT CONST	
M236	FZ06698-100	MAIN-KSW FFC	
M237	BB17681-400	BT2M1.7X4.0	
M238	BB19087-H00	MS0M2.0X10.0BN	
M239	BB19122-100	BT2M2.0X9.0	
M240	BB17335-E00	BT2M1.7X9.0B	
M241	BB17335-300	BT2M1.7X3.5B	
M242	BB18128-D00	MS2M1.4X1.6BN	
M243	BB17349-100	MSWM1.7X2.5	
M244	BB17337-300	MS2M1.7X3.5BN	
M245	BB19581-401	PRODUCT LABEL	
M246	CB1874-A200	XE PWB ASSY	

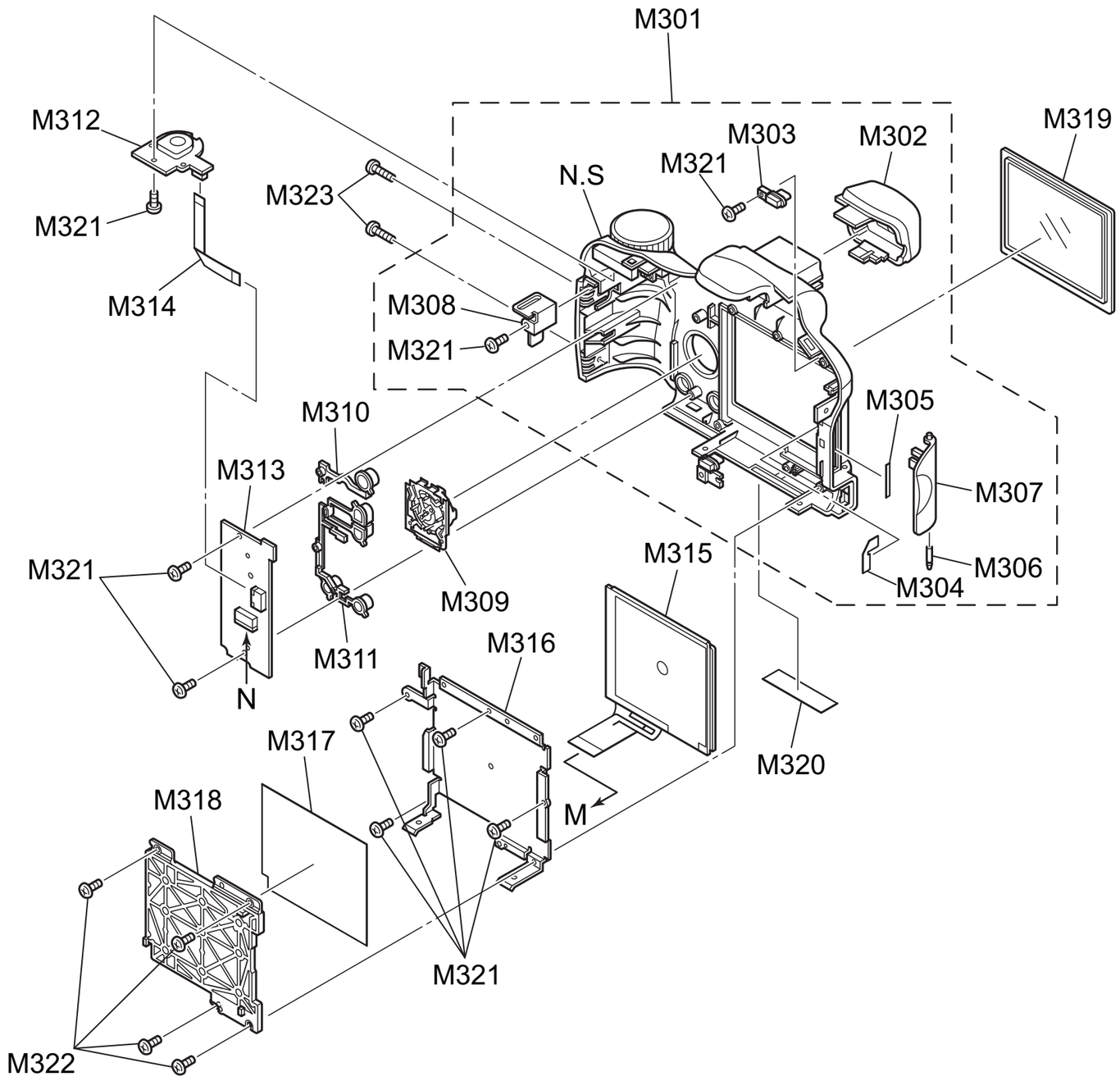
6-3. Cabi Rear Block

6-3-1. US/EU/EG/EE/AS/CH-model



Ref No.	Parts No.	Description	Comment
M301	BU03375-100	R CASE ASSY	
M302	BB19016-100	EYE PIECE	
M303	BB19563-100	GUIDE LIGHT	
M304	BB19018-100	SHEET SW	
M305	BB14959-300	LABEL	
M306	BB19013-100	CARD COVER SHAFT	
M307	BB19571-100	CARD COVER	
M308	BB19022-100	STRAP RIGHT	
M309	BU03282-200	CURSOR ASSY	
M310	BB19570-100	FACE BUTTON	
M311	BB19014-200	REAR BUTTON	
M312	CB1875-A300	MSW PWB ASSY	
M313	CB1875-A100	KSW PWB ASSY	
M314	FZ06336-100	KSW-MSW FFC	
M315	BF06003-100	LCD CONST	
M316	BB19580-100	LCD FRAME	
M317	BB19592-100	LCD FRAME TAPE	
M318	BB19591-100	REINFORCEMENT LCD	
M319	BB19590-101	LCD WINDOW	
M320	BB19194-100	PL SEAL J (FC)	
M321	BB17681-400	BT2M1.7X4.0	
M322	BB17335-600	BT2M1.7X5.0B	
M323	BB17335-E00	BT2M1.7X9.0B	

6-3-2. JP-mode



Ref No.	Parts No.	Description	Comment
M301	BU03375-100	R CASE ASSY	
M302	BB19016-100	EYE PIECE	
M303	BB19563-100	GUIDE LIGHT	
M304	BB19018-100	SHEET SW	
M305	BB14959-300	LABEL	
M306	BB19013-100	CARD COVER SHAFT	
M307	BB19571-100	CARD COVER	
M308	BB19022-100	STRAP RIGHT	
M309	BU03282-200	CURSOR ASSY	
M310	BB19570-100	FACE BUTTON	
M311	BB19014-200	REAR BUTTON	
M312	CB1875-A300	MSW PWB ASSY	
M313	CB1875-A100	KSW PWB ASSY	
M314	FZ06336-100	KSW-MSW FFC	
M315	BF06003-100	LCD CONST	
M316	BB19580-100	LCD FRAME	
M317	BB19592-100	LCD FRAME TAPE	
M318	BB19591-100	REINFORCEMENT LCD	
M319	BB19590-101	LCD WINDOW	
M320	BB19194-200	PL SEAL U (FC)	
M321	BB17681-400	BT2M1.7X4.0	
M322	BB17335-600	BT2M1.7X5.0B	
M323	BB17335-E00	BT2M1.7X9.0B	

MEMO

6-4. Electrical parts

[NOTE]

The components indicated by mark ⚠ are critical for safety. When indicated parts by reference number, please include the board name.

* Due to standardization, replacement in the parts list may be different from the parts list specified in the circuit or the components used on the set.

Ref No.	Parts No.	Description	Comment	PWB diagram
		MAIN PWB ASSY		
		[SWITCH]		
SW552	FZ05764-100	PUSH SWITCH		
		[CONNECTOR]		
CN101	FGB180-0391	CONNECTOR		
CN151	FGB181-0241	CONNECTOR		
CN251	FZ06692-100	JACK		
CN261	FGY097-0201	CONNECTOR		
CN451	FGB167-0451	CONNECTOR		
CN452	FGB162-0181	CONNECTOR		
CN453	FGA164-0021	CONNECTOR		
CN501	FGB165-0061	CONNECTOR		
CN521	FGA164-0051	CONNECTOR		
CN552	FGB165-0121	CONNECTOR		
CN553	FGB164-0101	CONNECTOR		
CN591	FGC188-0301	CONNECTOR		
CN954	FGB165-0121	CONNECTOR		
		[FUSE]		
⚠ F301	FP00039-253	FUSE		F-8
⚠ F302	FP00039-153	FUSE		E-8
		[BATTERY]		
BT401	FZ04705-200	BACKUP ELEC PAPTS		
		FLASH PWB ASSY		
		[CONNECTOR]		
CN701	FGA169-0021	CONNECTOR		
CN702	FGA173-0041	CONNECTOR		
CN703	FGC189-0301	CONNECTOR		
		[JACK]		
J701	FZ04171-100	JACK		
J702	FZ04722-100	JACK		
		[FUSE]		
F701	FP00043-253	FUSE		B-1
F702	FP00039-253	FUSE		E-1
		SSW PWB ASSY		
		[SWITCH]		
SW750	FZ04926-100	TACT SWITCH		
SW751	FZ06162-100	DETECTOR SWITCH		
		[CONNECTOR]		
CN750	FGB165-0121	CONNECTOR		
CN751	FGA162-0021	CONNECTOR		
CN752	FGA162-0022	CONNECTOR		

Ref No.	Parts No.	Description	Comment	PWB diagram
		KSW PWB ASSY		
		[SWITCH]		
SW801	FZ04926-100	TACT SWITCH		
SW802	FZ04926-100	TACT SWITCH		
SW803	FZ04926-100	TACT SWITCH		
SW804	FZ04926-100	TACT SWITCH		
SW805	FZ04926-100	TACT SWITCH		
SW807	FZ04926-100	TACT SWITCH		
SW808	FZ04926-200	TACT SWITCH		
SW809	FZ04926-200	TACT SWITCH		
SW810	FZ04926-200	TACT SWITCH		
SW811	FZ04926-200	TACT SWITCH		
		[CONNECTOR]		
CN801	FGB164-0101	CONNECTOR		
CN802	FGB163-0061	CONNECTOR		
		RSW PWB ASSY		
		[SWITCH]		
SW901	FZ04993-101	TACT SWITCH		
SW902	FZ05909-100	DETECTOR SWITCH		
SW903	FZ05909-100	DETECTOR SWITCH		
SW904	FZ04926-100	TACT SWITCH		
SW905	FZ04926-100	TACT SWITCH		
		[CONNECTOR]		
CN901	FGB165-0121	CONNECTOR		
		MSW PWB ASSY		
		[CONNECTOR]		
CN851	FGB162-0061	CONNECTOR		
		FSW PWB ASSY		
		[SWITCH]		
SW951	FZ06049-100	DETECTOR SWITCH		

MEMO

7. Appendix

7-1. List of Related Technical Updates Issued

To ensure that after-sales srevice is performed accuratety, keep a record here of the technical updates issued that cover this device.

Technical Update No.	Date	Title	Details/Other

FUJI PHOTO FILM CO., LTD.
26-30, Nishiazabu 2-chome, Minato-ku, Tokyo 106-8620, Japan.