



FUJIFILM

DIGITAL CAMERA



FinePix S9100/ S9600

SERVICE MANUAL

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




CAUTION

- BECAUSE THIS PRODUCT IS RoHS LEAD-FREE COMPLIANT, USE THE DESIGNATED AFTER-SALES 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.

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.
- 8.



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.



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 hole 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.



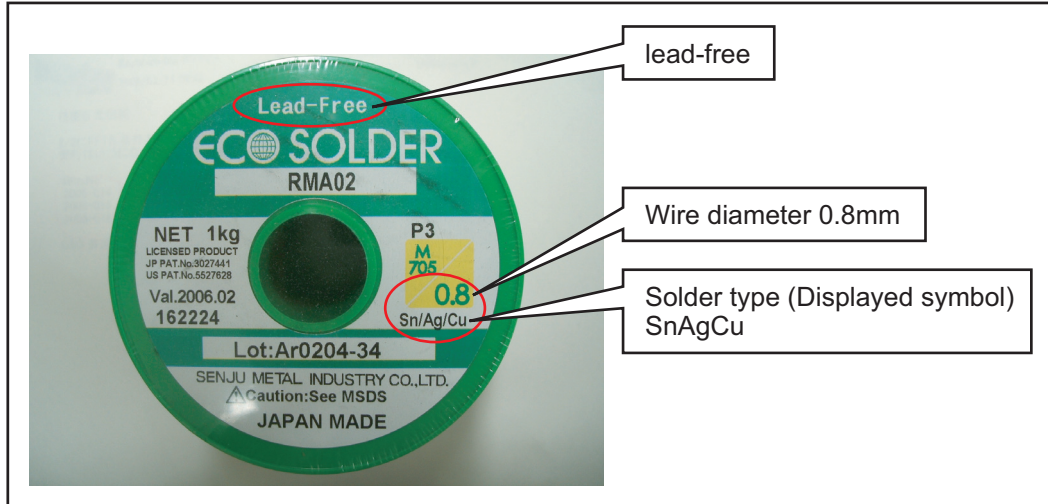
■ Solder wire (thread)

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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MEMO

1. General

1-1. Product specification

System	
Model	Digital camera FinePix S9100 / FinePix S9600
Effective pixels	9.0 million pixels
CCD	1/1.6-inch Super CCD HR
Storage media	xD-Picture Card (16/32/64/128/256/512 MB/1 GB/2 GB) CF card and Microdrive (Compatibility is listed on Fujifilm website: http://www.fujifilm.com/products/digital/)
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: 3488 × 2616 pixels/3696 × 2464 pixels/2592 × 1944 pixels/ 2048 × 1536 pixels/1600 × 1200 pixels/640 × 480 pixels (9M/8.2M/5M/3M/2M/0.3M)
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× (10.7× optical zoom lens is used together: Max. zoom scale: 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 m (6.6 ft.) to infinity) Telephoto: approx. 2 m (6.6 ft.) to infinity (In High-speed shooting mode: approx. 4 m (13.1 ft.) to infinity) Macro: Wide-angle: approx. 10 cm (3.9 in.) to 3 m (9.8 ft.) Telephoto: approx. 90 cm (3.0 ft.) to 3 m (9.8 ft.) Super macro: approx. 1 cm to 1 m (0.4 in. to 3.3 ft.) (Wide-angle only)
Sensitivity	AUTO/Equivalent to ISO 80/100/200/400/800/1600
Photometry	TTL 256-zones metering Multi, Spot, Average
Exposure control	Program AE (AUTO,  ,  ,  ,  ,  , P), Shutter-priority AE, Aperture-priority AE, Manual exposure
Scene position	 (Picture Stabilization),  (Natural light),  (Portrait),  (Landscape),  (Night)
Exposure compensation	-2 EV to +2 EV in 1/3 EV-step increments (P, S, A)
Shutter speed	 ,  ,  ,  ,  : 1/4 sec. to 1/4000 sec.  : 4 sec. to 1/500 sec. P/S/A: 4 sec. to 1/4000 sec. M: 30 sec. to 1/4000 sec. Bulb (Up to 30 sec.)
Continuous shooting	Top 4-frame: Number of recorded frames: up to 4 frames (Max. 1.5 frames/sec.) Final 4-frame: Number of recorded frames: last 4 frames before releasing the shutter button (Max. 1.5 frames/sec.) Long-period continuous shooting mode: Number of recorded frames: up to 40 frames. (Max. 1.1 frames/sec.)
Auto bracketing	± 1/3 EV, ± 2/3 EV, ± 1 EV
Focus	Mode: Auto focus, Continuous AF, Manual focus AF system: TTL contrast-type AF frame selection: AF (CENTER), AF (MULTI), AF (AREA)

System

White balance	Automatic scene recognition/Presets (Fine, Shade, Fluorescent (Daylight), Fluorescent (Warm White), Fluorescent (Cool White), Incandescent/Custom white balance (2 types))
Self-timer	Approx. 10 sec./2 sec.
Flash type	Auto flash Effective range: (☒: AUTO): Wide-angle: approx. 30 cm-5.6 m (1.0 ft.-18.4 ft.) Telephoto: approx. 90 cm-3 m (3.0 ft.-9.8 ft.)
Flash mode	Auto, Red-Eye Reduction, Forced Flash, Suppressed Flash, Slow Synchro, Red-Eye Reduction + Slow Synchro
Viewfinder	0.44 inches, 235,000 pixels, LCD viewfinder Approx. 100% coverage
LCD monitor	2.0 inches, Aspect ratio: 4:3; approx. 235,000 pixels low-temperature polysilicon TFT, 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 up to available recording time per media.
Photography functions	High-speed shooting, Best framing, Post shot assist window, Frame No. memory
Playback functions	Trimming, Image rotate, Automatic playback, Multi-frame playback, Sorting by date, Voice memo
Other functions	PictBridge, Exif print, Language (English, Français, Deutsch, Español, Italiano, 中文, 한글), Time difference, FinePix photo mode (F-mode)

Power Supply and Others

Power supply	Use one of the following: <ul style="list-style-type: none"> • 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	<table border="1"> <thead> <tr> <th>Battery Type</th> <th>Alkaline batteries</th> <th>Ni-MH batteries 2500 mAh</th> </tr> </thead> <tbody> <tr> <td>Media</td> <td></td> <td></td> </tr> <tr> <td>xD-Picture Card</td> <td>Approx. 120 frames</td> <td>Approx. 320 frames</td> </tr> <tr> <td>Microdrive</td> <td>Approx. 70 frames</td> <td>Approx. 300 frames</td> </tr> </tbody> </table>		Battery Type	Alkaline batteries	Ni-MH batteries 2500 mAh	Media			xD-Picture Card	Approx. 120 frames	Approx. 320 frames	Microdrive	Approx. 70 frames	Approx. 300 frames
	Battery Type	Alkaline batteries	Ni-MH batteries 2500 mAh											
	Media													
xD-Picture Card	Approx. 120 frames	Approx. 320 frames												
Microdrive	Approx. 70 frames	Approx. 300 frames												
<p>According to the CIPA (Camera & Imaging Products Association) standard procedure for measuring digital still camera battery consumption (extract):</p> <p>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 or Microdrive. Pictures should be taken at a temperature of +23°C (+73°C), with the LCD monitor turned on, AF-assist illuminator off, 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.</p> <p>• 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.</p>														
Camera dimensions (W/H/D)	128.0 mm × 93.0 mm × 129.0 mm/5.0 in. × 3.7 in. × 5.1 in. (not including accessories and attachments)													
Camera mass (weight)	Approx. 650 g/22.9 oz. (not including accessories, batteries and xD-Picture Card or CF/Microdrive)													
Weight for photography	Approx. 760 g/26.8 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)													

Power Supply and Others

- | | |
|----------------------|---|
| Accessories included | <ul style="list-style-type: none"> ● AA-size Alkaline Batteries (LR6) (4) ● Strap (1) ● Lens cap (1) ● Lens cap holder (1) ● Lens hood (1) ● A/V cable (1) Approx. 1.2 m (3.9 ft.), plug (2.5 mm dia.) to pin-plug ×2 ● USB cable (mini-B) (1) ● CD-ROM (2) •Software for FinePix CX •Hyper-Utility Software ● Owner's Manual (1) |
| Optional accessories | <ul style="list-style-type: none"> ● xD-Picture Card
16MB/32MB/64MB/128MB/256MB/512MB/1GB/2GB ● AC Power Adapter AC-5VX ● Fujifilm Rechargeable Battery 2HR-3UF ● Fujifilm Battery Charger with Battery BK-NH2 (With Euro type or UK type plug) ● Soft Case SC-FXS9 ● Wide Conversion Lens WL-FXS6 ● Image Memory Card Reader DPC-R1 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 |

Input/Output Terminal

- | | |
|----------------------------------|---|
| A/V OUT
(Audio/Visual output) | NTSC/PAL-type (with monaural sound) |
| Digital input/output | USB 2.0 High-Speed |
| DC input socket | AC Power Adapter AC-5VX (sold separately) |
| Accessory shoe | Hot shoe |
| Synchronizing terminal | Equipped with ISO 519 synchronizing terminal as standard, lock screw provided |

■ Standard number of available frames/recording time per media

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 medias with higher capacities. When used media is 4GB or more, a movie up to 60 minutes long (at the "640" setting) or 120 minutes long (at the "320" setting) can be recorded.

Visit website for information on available Microdrive / CompactFlash card: <http://www.fujifilm.com/products/digital/>

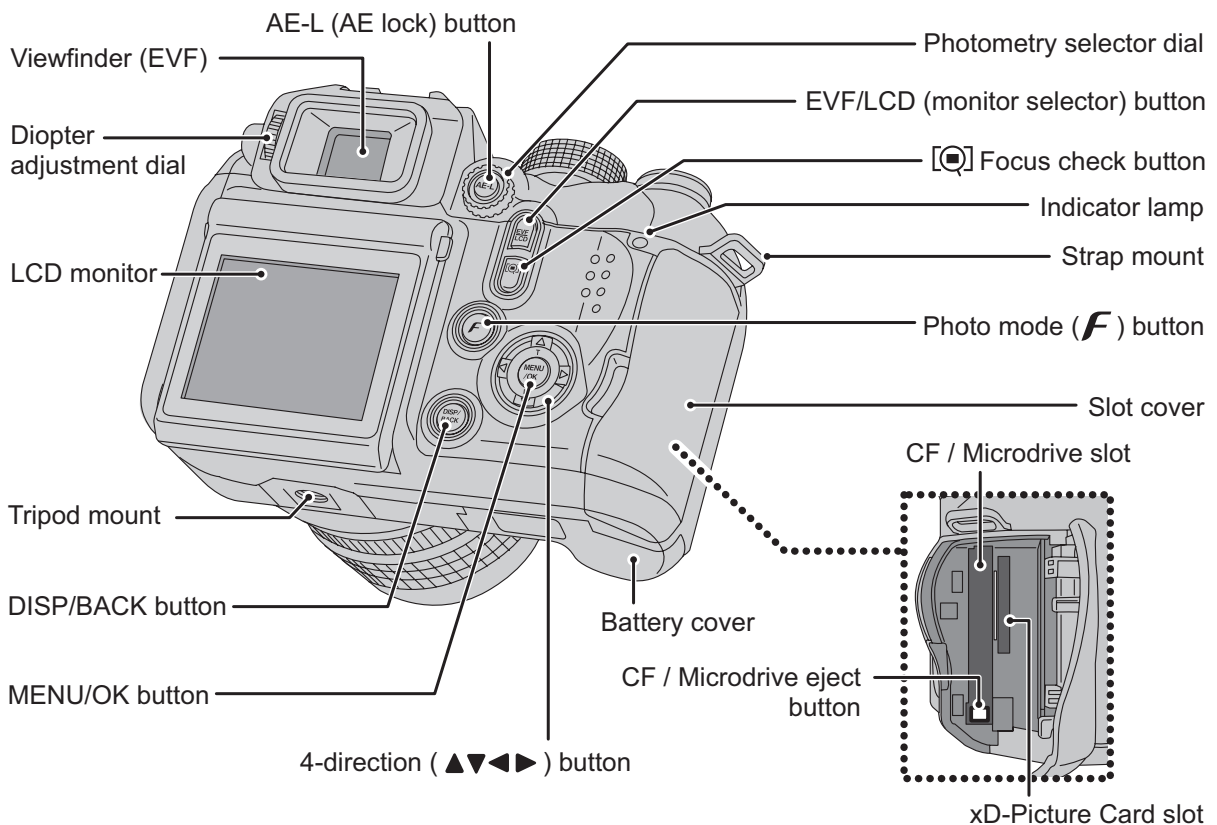
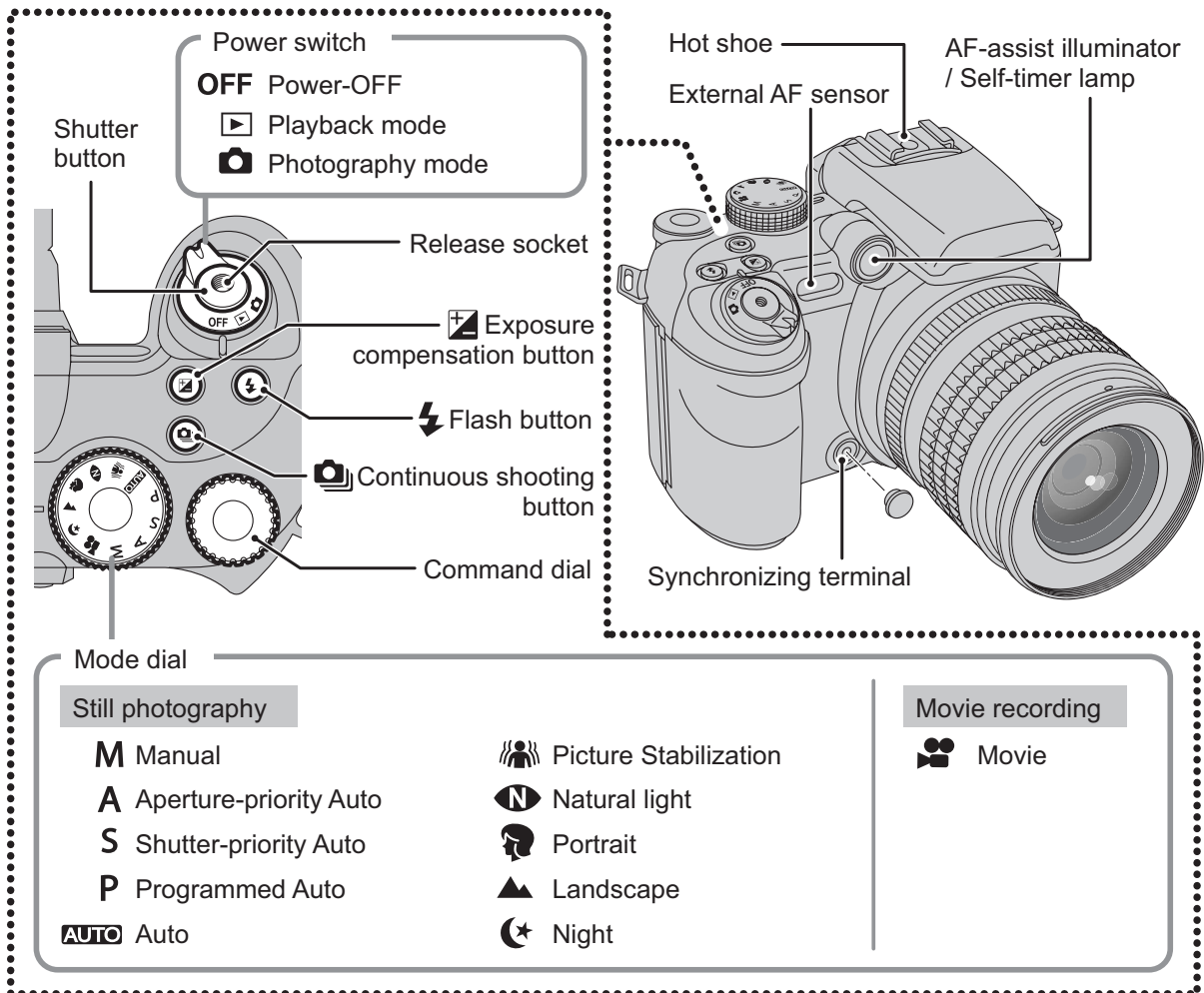
Quality setting	9M F	9M N	3:2	5M	3M	2M	03M	RAW	640 (30 fps)	320 (30 fps)	
Number of recorded pixels	3488 × 2616		3696 × 2464	2592 × 1944	2048 × 1536	1600 × 1200	640 × 480	— *	640 × 480	320 × 240	
Image data size	4.5 MB	2.2 MB	2.2 MB	1.2 MB	780 KB	630 KB	130 KB	18.8 MB	—	—	
xD-Picture Card	16 MB	3	6	6	12	19	25	122	0	13 sec.	26 sec.
	32 MB	6	13	13	25	40	50	247	1	27 sec.	54 sec.
	64 MB	13	28	28	50	81	101	497	3	55 sec.	109 sec.
	128 MB	28	56	56	102	162	204	997	6	111 sec.	219 sec.
	256 MB	56	113	113	204	325	409	1997	13	223 sec.	7.3 min.
	512 MB	113	227	227	409	651	818	3993	27	7.4 min.	14.6 min.
	1 GB	228	456	456	819	1305	1639	7995	54	14.9 min.	29.3 min.
	2 GB	456	913	913	1640	2558	3198	15992	108	29.8 min.	58.6 min.
Microdrive 340 MB	77	155	155	279	445	559	2729	18	5.1 min.	10.0 min.	
Microdrive 1 GB	234	469	469	842	1313	1642	8212	55	15.3 min.	30.1 min.	

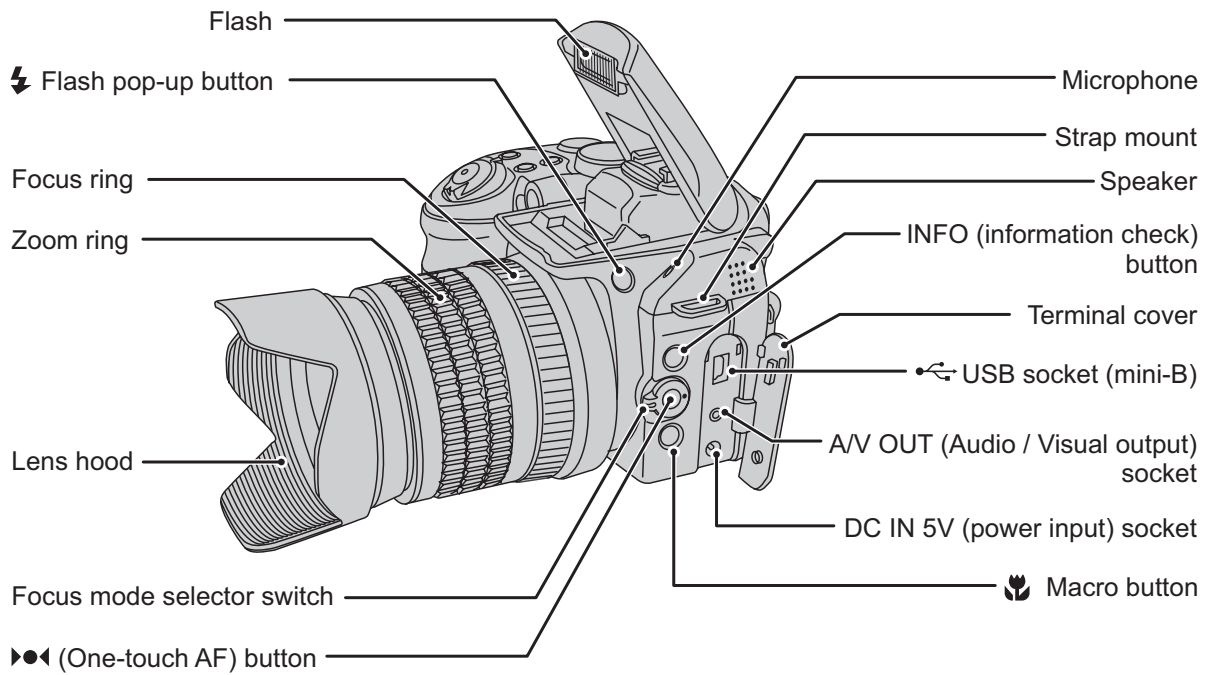
* Number of recorded pixel is 4864 × 3648 when displaying images on PC by using FinePixViewer.

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.

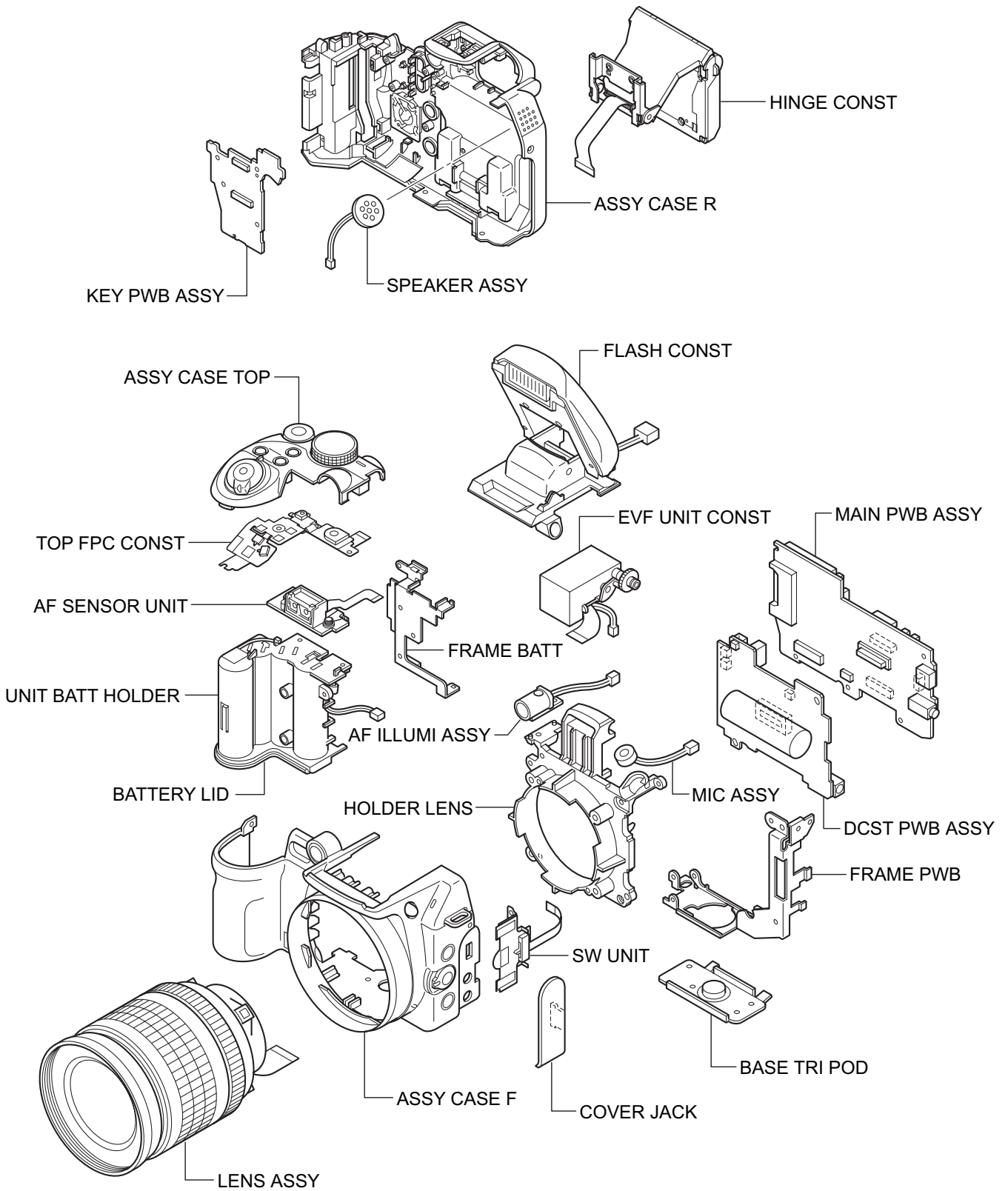
1-3. Names of External Components





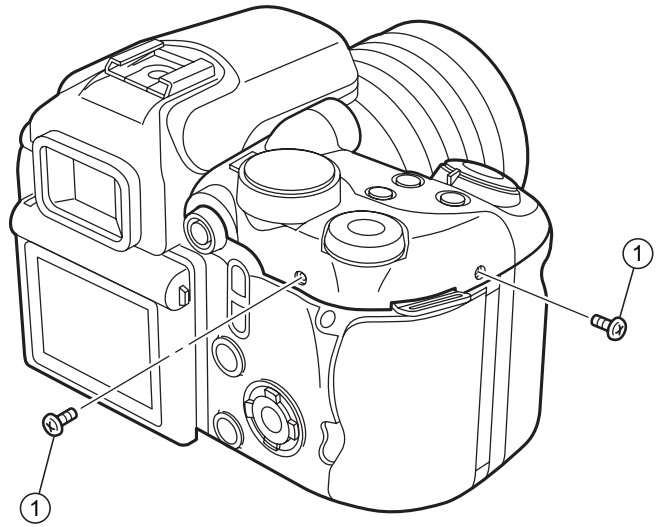
2. Disassembly

2-1. Names of internal Components

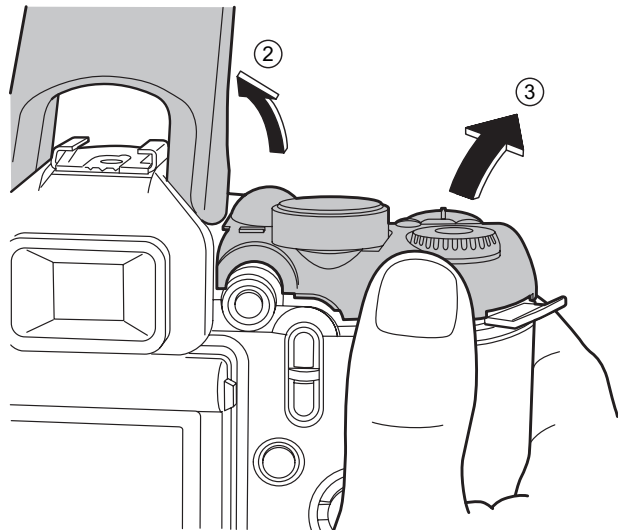


2-2. Removing the CONST CASE TOP

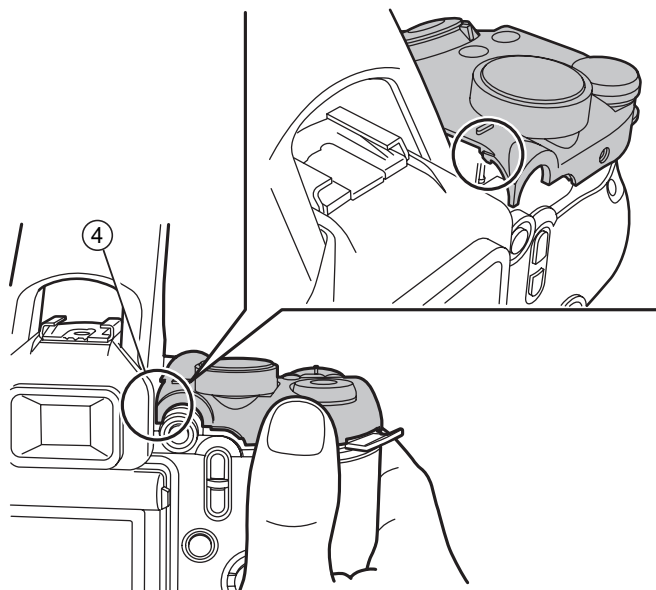
- (1) Remove the 2 screws (M1.7 x 5.0).



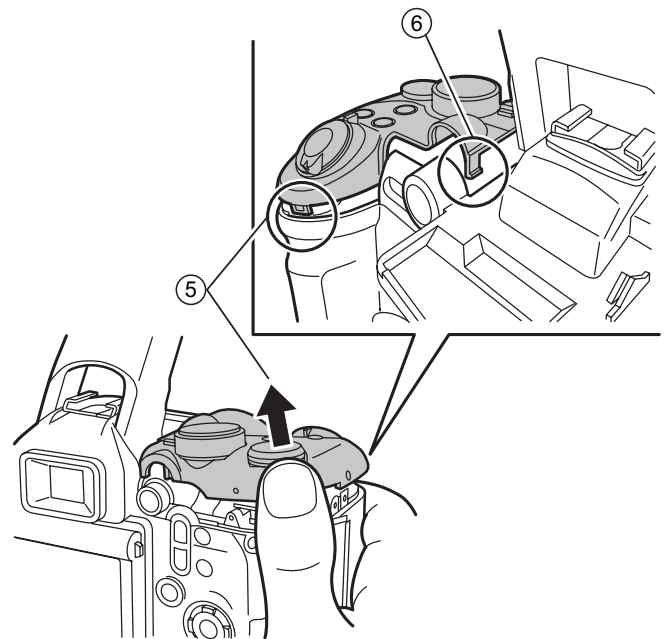
- (2) Press BUTTON FLASH to open the flash.
(3) Place your thumb on the bottom of the DIAL COMMAND on the CONST CASE TOP and push it up in the direction indicated by the arrow.



- (4) Release the catch on the left side of the LEVER AE.



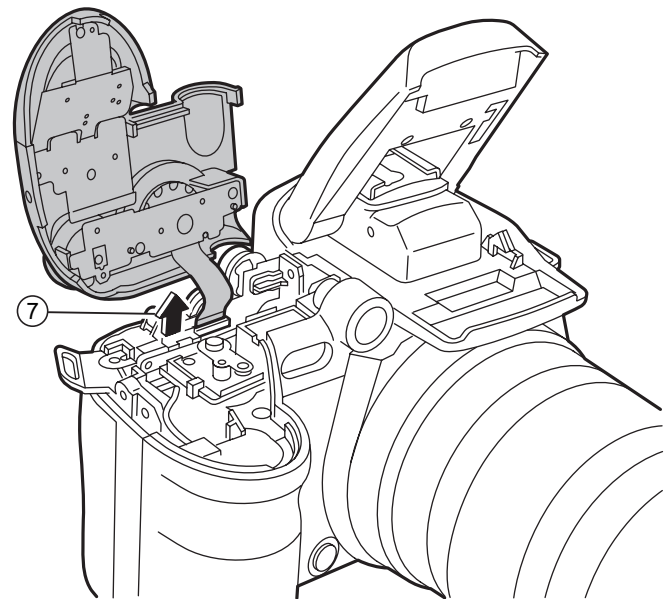
- (5) Pushing the CONST CASE TOP up in the direction of the arrow releases the catch on the front.
- (6) This releases the catch on the WINDOW AF side at the same time.



- (7) Remove the TOP FPC in the direction of the arrow.

[Assembly]

Assemble by performing the disassembly procedure in reverse order.

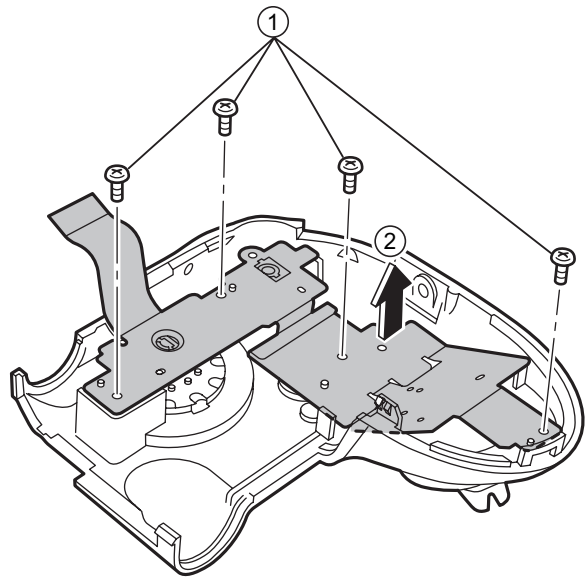


2-3. Disassembling the CONST CASE TOP

- (1) Remove the 4 screws (M1.7 x 3.0).
- (2) Remove the TOP FPC CONST in the direction of the arrow.

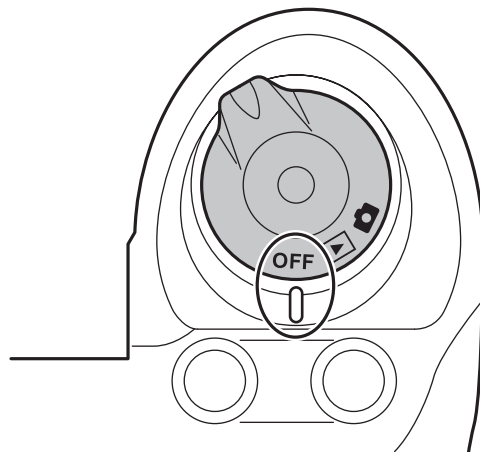
[Assembly]

Assemble by performing the disassembly procedure in reverse order.



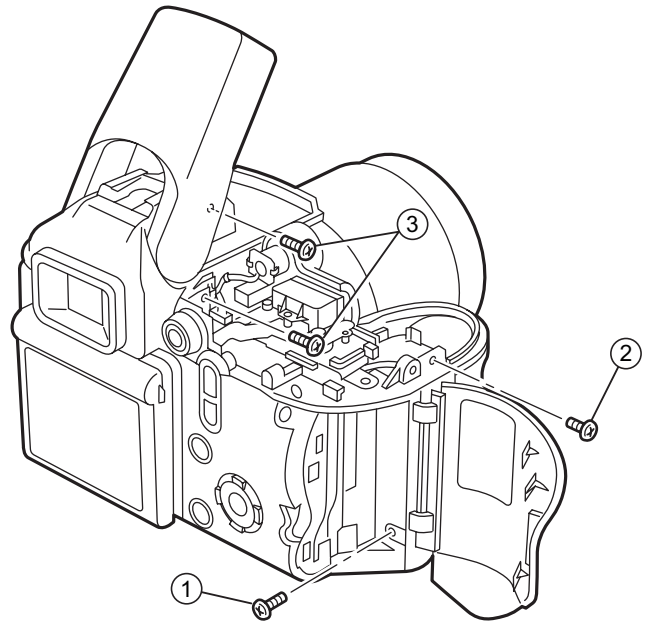
[Notes on assembly]

Assemble with the switch lever set to the OFF position.
(This is to prevent damage to SW851 and SW852.)

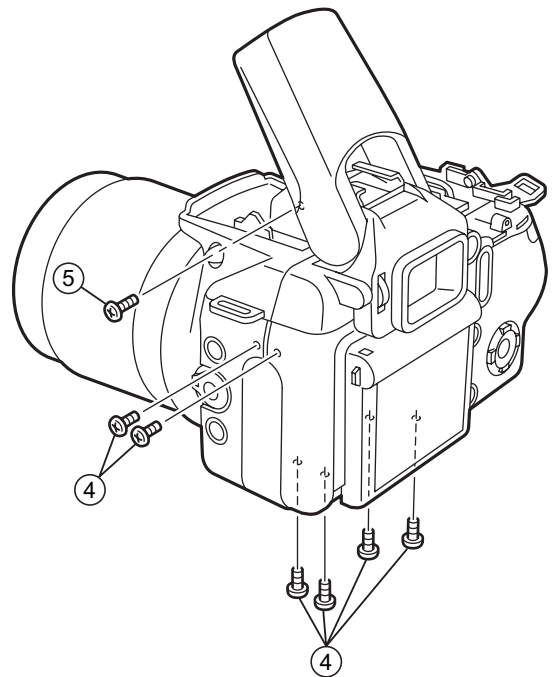


2-4. Removing the CASE R CONST

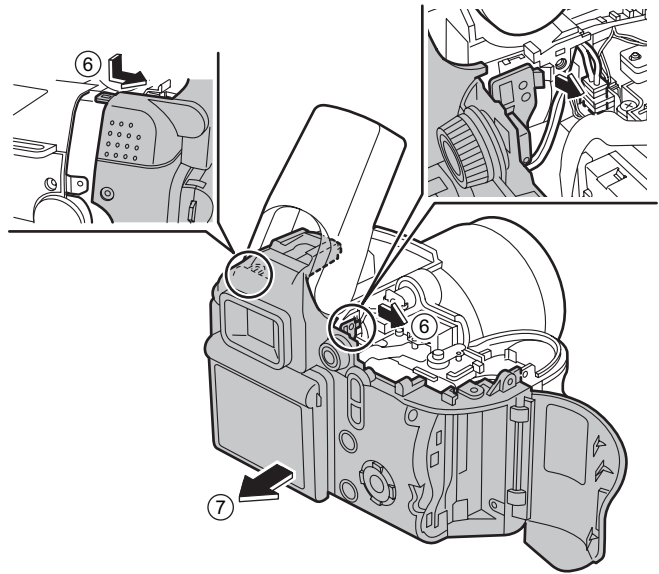
- (1) Remove the screw (M1.7 x 5.0).
- (2) Remove the screw (M1.7 x 3.5).
- (3) Remove the 2 screws (M1.7 x 4.0).



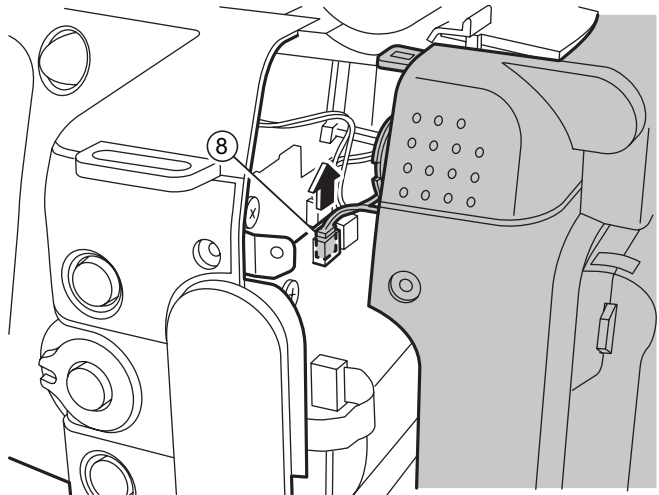
- (4) Remove the 6 screws (M1.7 x 3.5).
- (5) Remove the screw (M1.7 x 4.0).



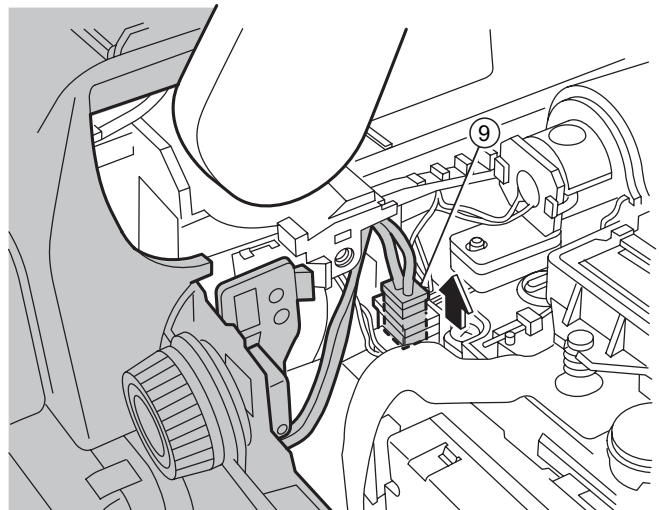
- (6) Release the PLATE REAR catch and the catch inside the left side.
- (7) Slowly pull off the CASE R CONST to the rear.



- (8) Remove the SPEAKER ASSY connector.



- (9) Remove the SHOE WIRE HARNESS connector.

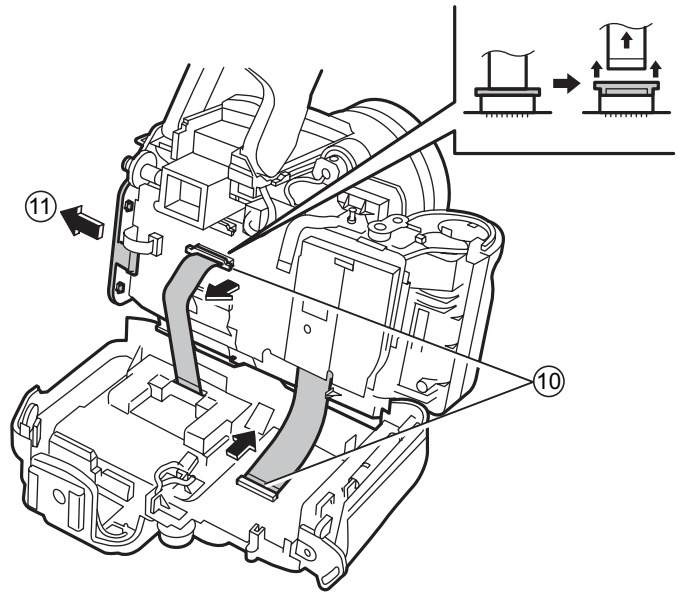


(10) After removing the connectors, remove the LCD FPC and KEY-MAIN FPC.

(11) Remove the COVER JACK.

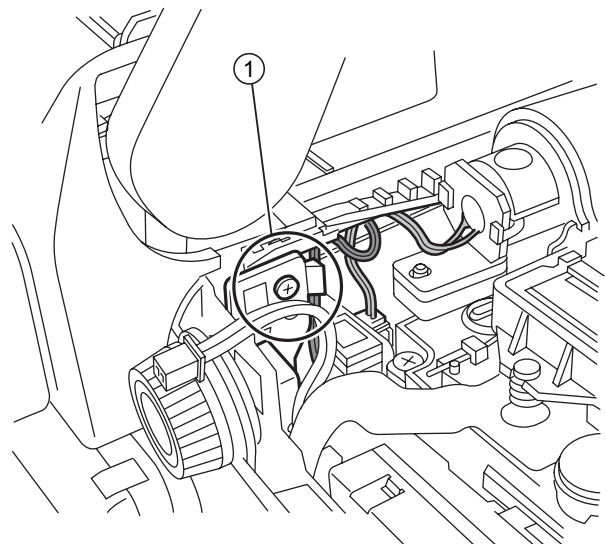
[Assembly]

Assemble by performing the disassembly procedure in reverse order.

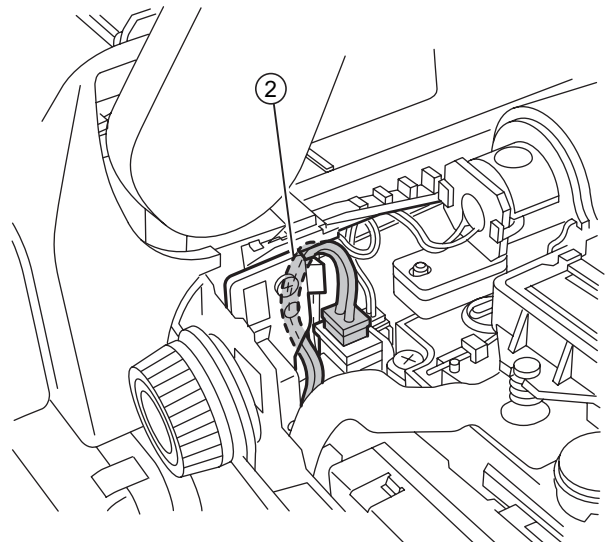


[Notes on assembly]

(1) Ensure that the harness is not pinched in the PLATE REAR during assembly.

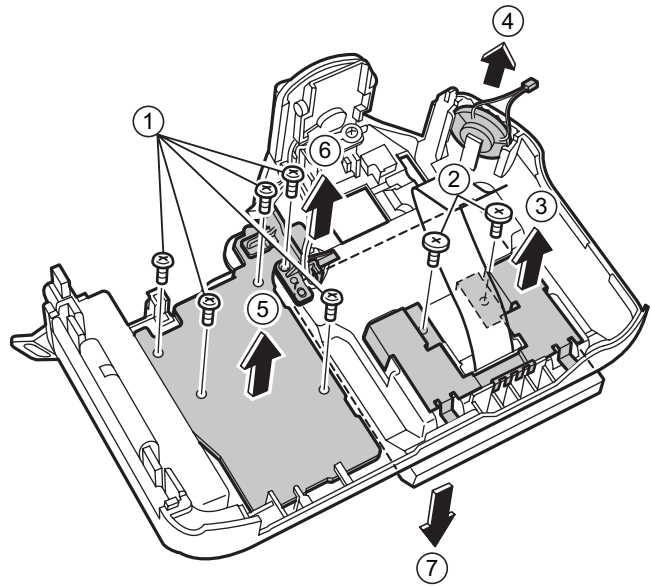


(2) Run the SHOE CONST, AF ILLUMI ASSY and FLASH CONST harness below the FLASH CONST.

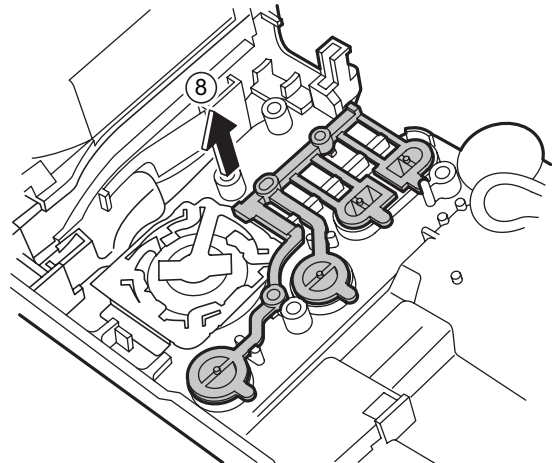


2-5. Disassembling the CASE R CONST CASE

- (1) Remove the 5 screws (M1.7 x 7.0).
- (2) Remove the 2 screws (M1.7 x 2.5).
- (3) Remove the PLATE EMI.
- (4) Take out the SPEAKER ASSY in the direction of the arrow. (Do not pull the harness.)
- (5) Remove the KEY PWB ASSY.
- (6) Remove the PLATE REAR.
- (7) Remove the HINGE CONST.



- (8) Remove the BUTTON REAR in the direction of the arrow.

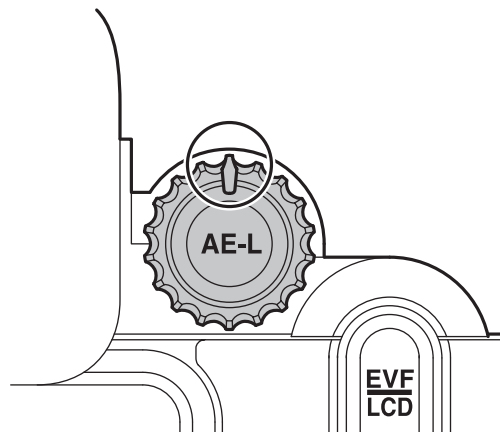


[Assembly]

Assemble by performing the disassembly procedure in reverse order.

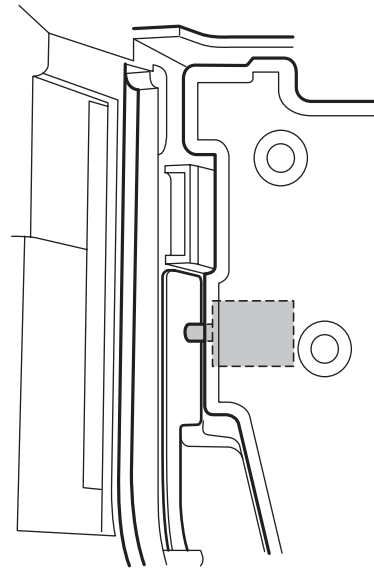
[Notes on assembly]

Assemble with the indicator lug on the LEVER AE upwards. (This prevents damage to SW750.)



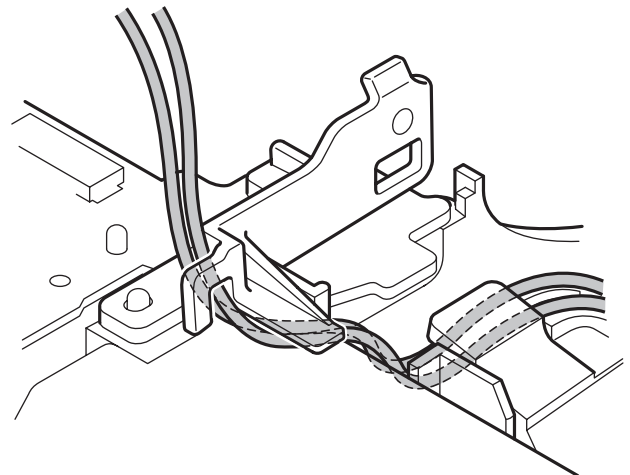
[Notes on assembly]

Ensure that the COVER CARD is open when assembling the KEY PWB. (This prevents damage to SW752.)



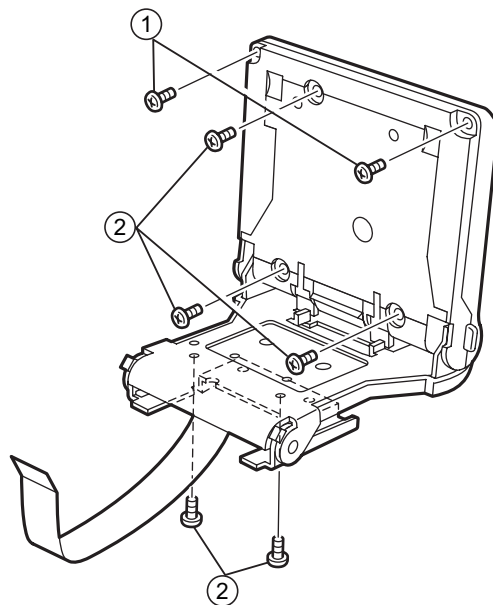
[Notes on assembly]

Run the SHOE CONST leads along the PLATE REAR, as shown in the figure on the right.

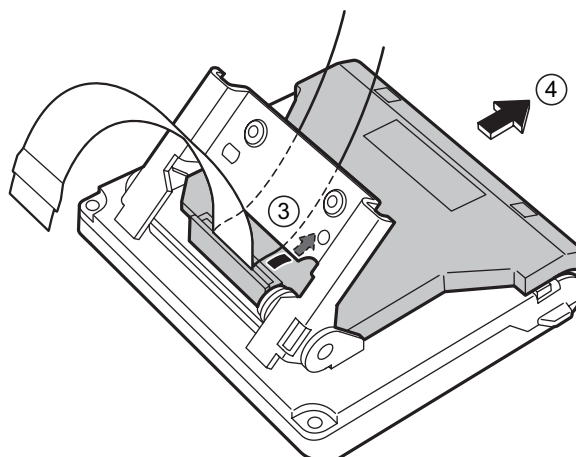


2-6. Removing the HINGE CONST

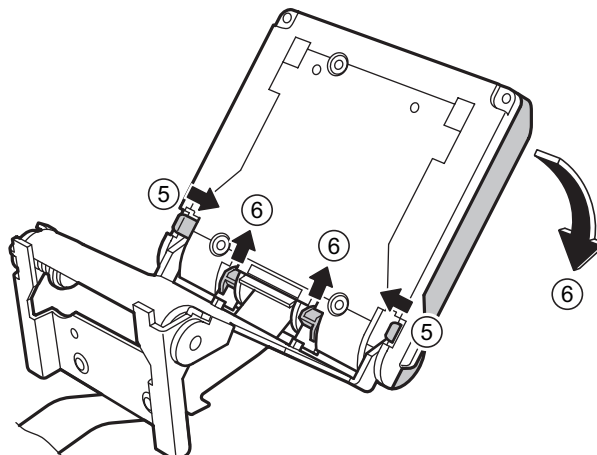
- (1) Remove the 2 screws (M1.7 x 4.0).
- (2) Remove the 5 screws (M1.7 x 2.0).



- (3) Run the LCD FPC to the inside.
- (4) Pull the COVER FPC off in the direction of the arrow.



- (5) Squeeze the catches on the CASE LCD F in the directions indicated by the arrows and remove.
- (6) While squeezing the catches in the directions indicated by the arrows, remove the case in the direction of the arrow.



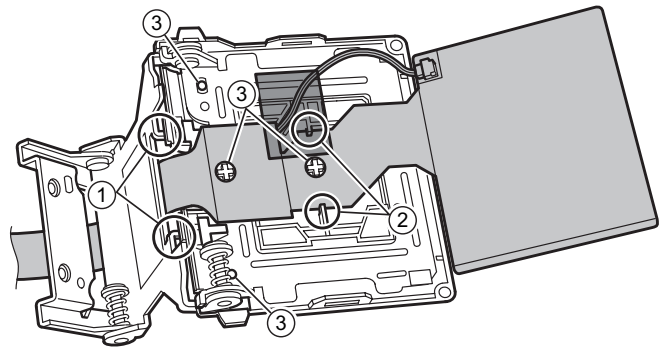
[Assembly]

Assemble by performing the disassembly procedure in reverse order.

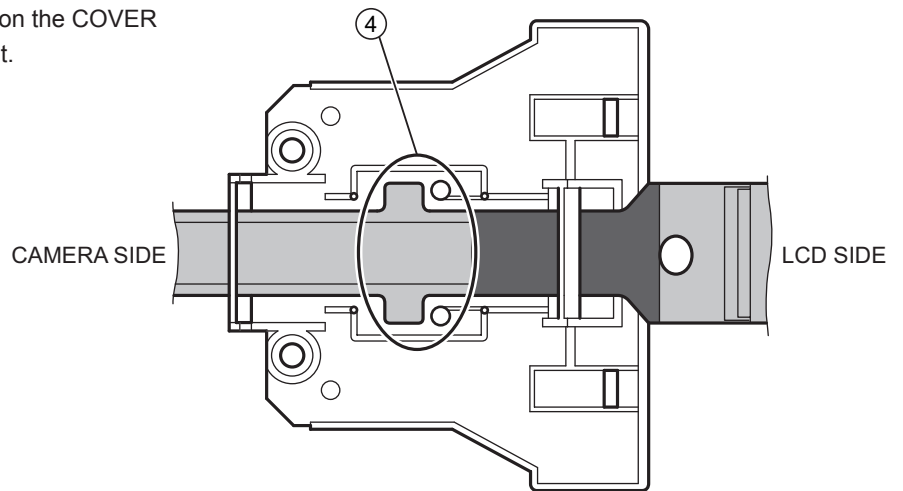
[Notes on assembly]

To attach the UNIT HINGE to the CASE LCD R.

- (1) Engage the catches.
- (2) Fit the flexible cable onto the catches.
- (3) Use the bosses to position the cable.

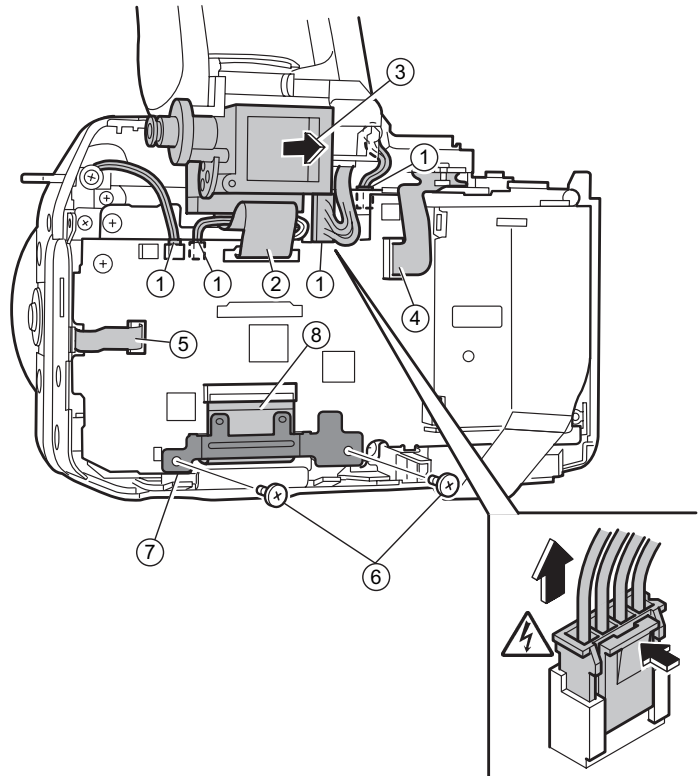



- (4) Install the LCD FPC in the location on the COVER FPC shown in the figure on the right.



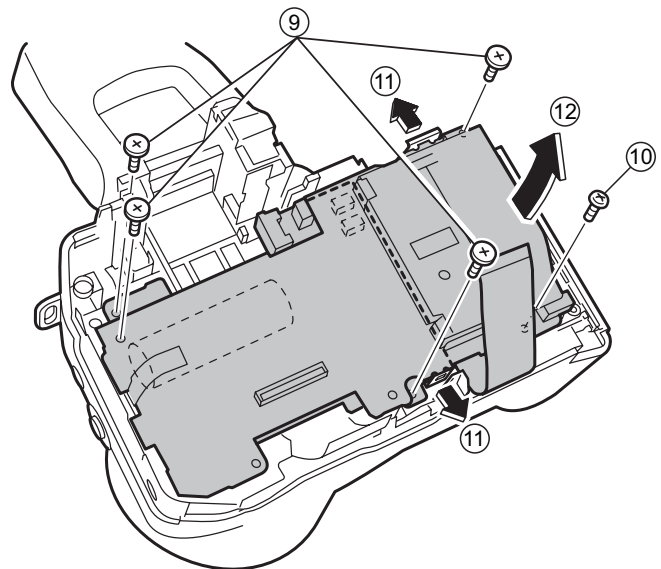
2-7. Removing the MAIN PWB ASSY/DCST PWB ASSY

- (1) Remove four WIRE HARNESS.
- (2) Remove the EVF FPC.
- (3) Remove the EVF UNIT CONST in the direction of the arrow.
- (4) Remove the AF SENSOR FPC.
- (5) Remove the SW UNIT FPC.
- (6) Remove the 2 screws (M1.7 x 2.5).
- (7) Remove the PLATE GND.
- (8) Remove the CCD FPC.

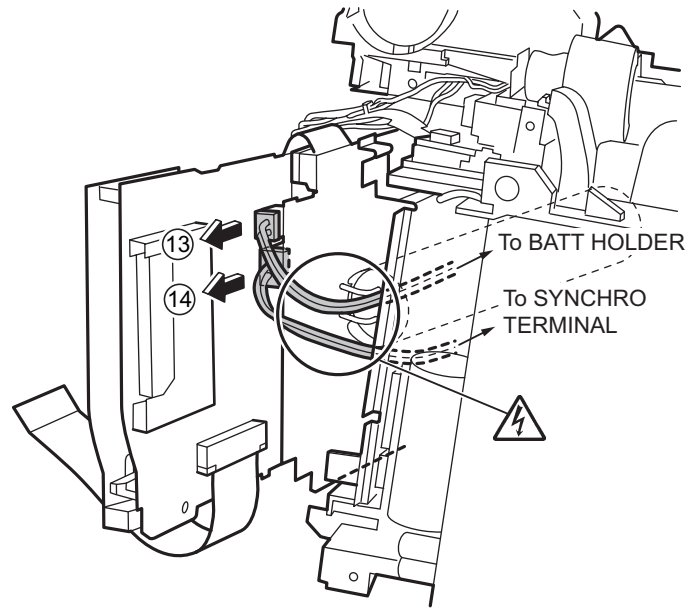



 If you are removing the WIRE HARNESS for the FLASH, take care not to touch the terminals as this could cause an electric shock.

- (9) Remove the 4 screws (M1.7 x 2.5).
- (10) Remove the screw (M1.7 x 4.0).
- (11) Spread open the 2 catches.
- (12) Lift out the MAIN PWB and DCST PWB set in the direction of the arrow.

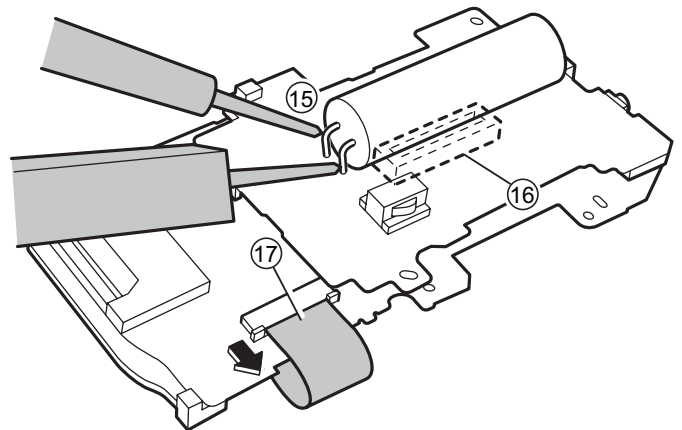


- (13) Remove the BATT HOLDER connector.
- (14) Remove the SYNCHRO TERMINAL connector.



 Take care not to touch the main capacitor terminal as this could result in an electric shock.

- (15) Discharge the main capacitor. (To prevent electric shock, check that it is fully discharged.)
- (16) Remove the connector and disassemble the MAIN PWB ASSY and DCST PWB ASSY.
- (17) Remove the connector catches and pull off the FFC.

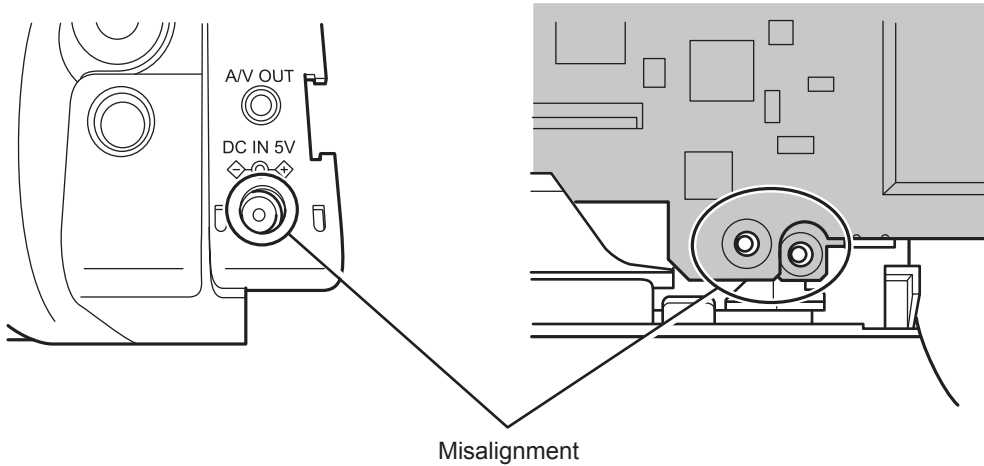


[Assembly]

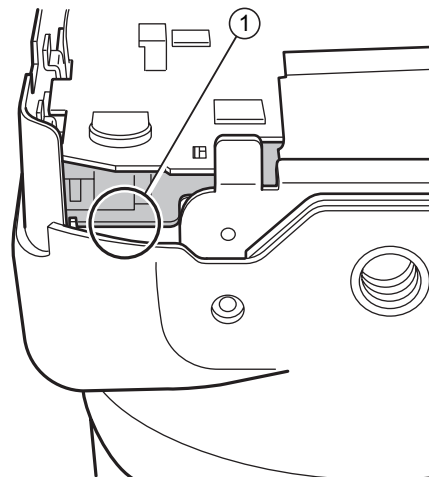
Assemble by performing the disassembly procedure in reverse order.

[Notes on assembling the MAIN PWB ASSY/DCST PWB ASSY]

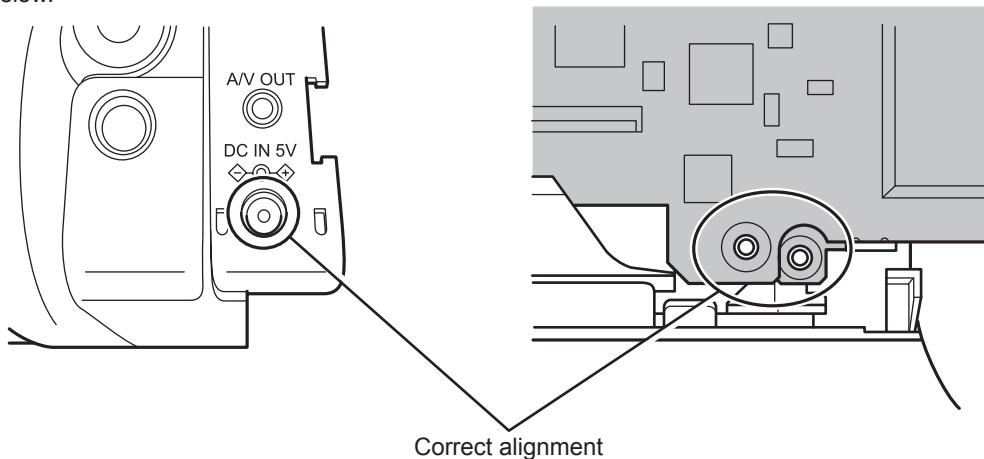
If the screw holes in the DC JACK and FRAME are misaligned as shown in the figure below, the PWB is out of position.



If this is the case, lifting the DCST PWB ASSY at point (1) will produce a clicking noise.

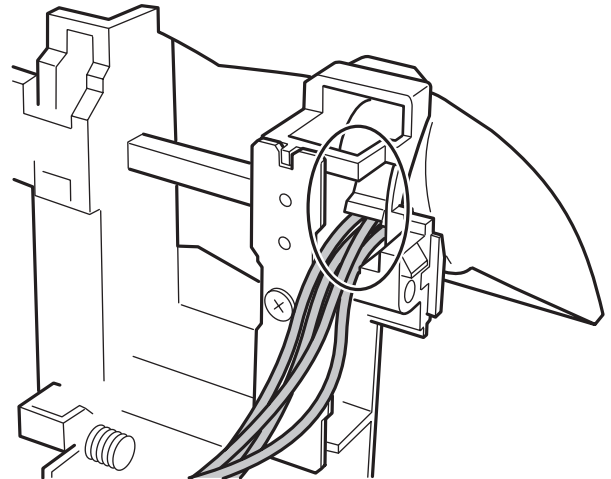


If you hear a click, reposition the PWB correctly as shown in the figure below.

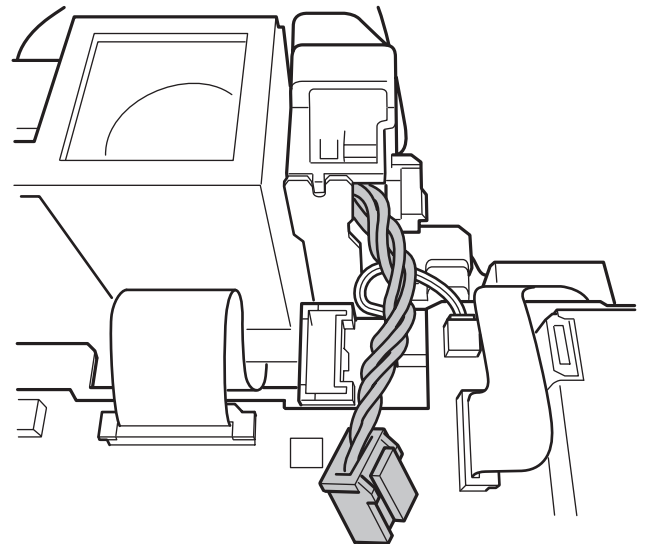


[Notes on assembling the WIRE HARNESS for the FLASH CONST]

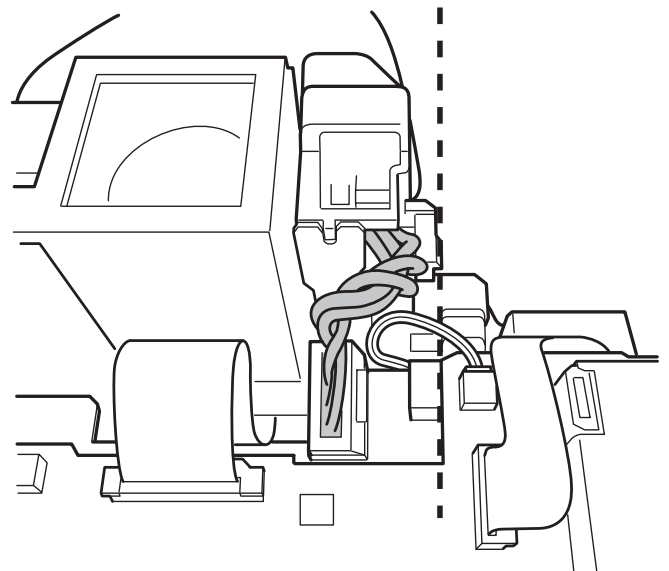
- (1) To ensure that the harness is not pinched when the FLASH TOP opens and closes, arrange the wires so that they form a 4-strand twisted cable.



- (2) Twist the harness 2 turns to the left from the correct position and fasten it to the connector.

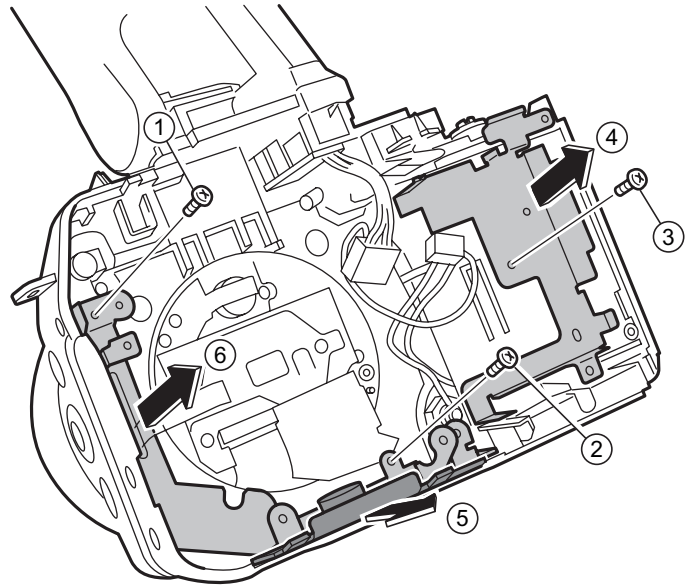


- (3) Ensure that the harness does not protrude below the FLASH CONST.



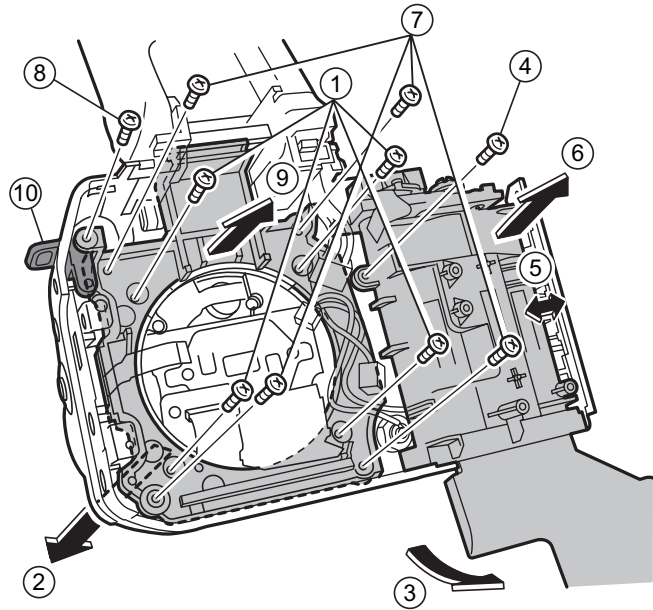
2-8. Removing the FRAME PWB/FRAME BATT

- (1) Remove the screw (M1.7 x 5.0).
- (2) Remove the screw (M1.7 x 4.0).
- (3) Remove the screw (M1.7 x 5.0).
- (4) Remove the FRAME BATT.
- (5) Pull off the BASE TRIPOD in the direction of the arrow.
- (6) Remove the FRAME PWB.

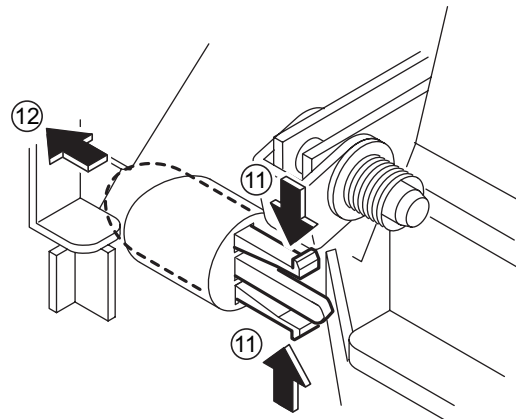


2-9. Disassembling the CASE F CONST

- (1) Remove the 4 screws (M2.0 x 8.0).
- (2) Pull off the LENS CONST to the front.
- (3) Open the BATTERY LID.
- (4) Remove the screw (M1.7 x 4.0).
- (5) Widen the gap between the CASE F and the BATT HOLDER.
- (6) Pull the UNIT BATT HOLDER off in the direction of the arrow.
- (7) Remove the 4 screws (M1.7 x 5.0).
- (8) Remove the screw (M1.7 x 4.0).
- (9) Remove the HOLDER LENS.
- (10) Remove the STRAP LEFT from the inside.



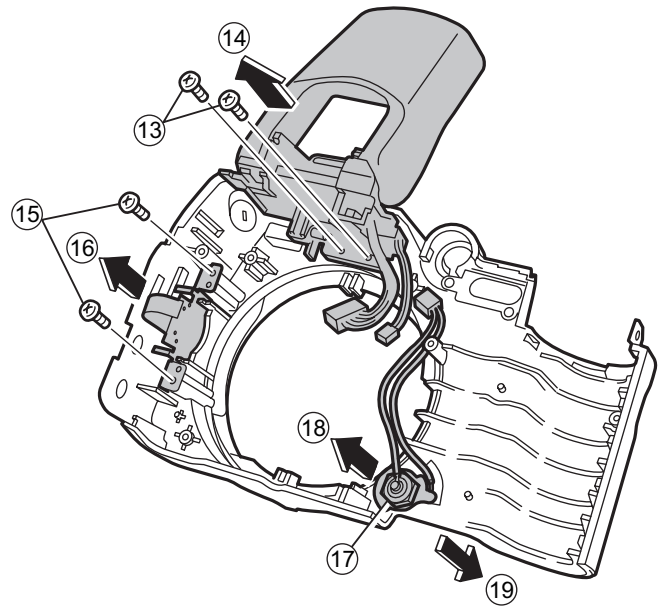
- (11) Push the catch on the inside of the BUTTON FLASH in the direction of the arrow.
- (12) Pull off the BUTTON FLASH in the direction of the arrow.



[Notes on assembly]

Take care not to lose the CSP, which is removed at the same time.

- (13) Remove the 2 screws (M1.7 x 4.0).
- (14) Pull the FLASH CONST off in the direction of the arrow.
- (15) Remove the 2 screws (M1.4 x 4.0).
- (16) Pull the SW UNIT off in the direction of the arrow.
- (17) Remove the solder on the red SYNCHRO TERMINAL lead and loosen the lock nut.
- (18) Remove the lock nut and base plate in the direction of the arrow.
- (19) Remove the SYNCHRO TERMINAL itself in the direction of the arrow.

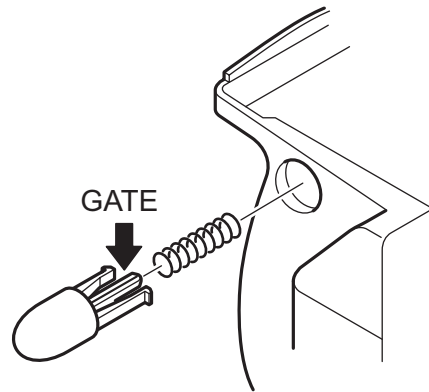


[Assembly]

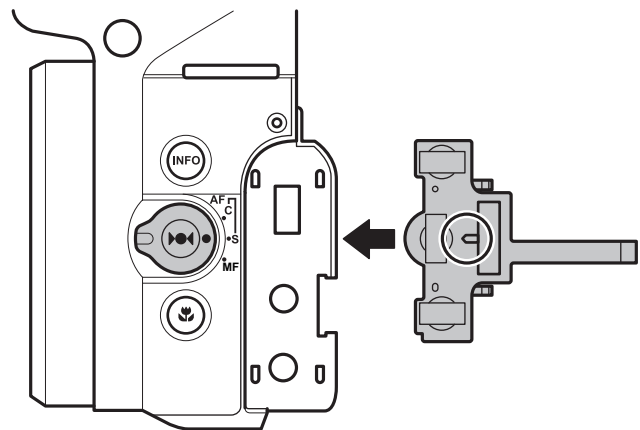
Assemble by performing the disassembly procedure in reverse order.

[Notes on assembly]

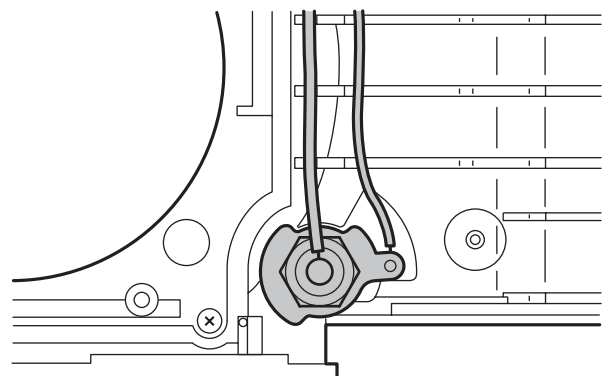
- (1) Ensure that the GATE section of the BUTTON FLASH is upwards when assembled.



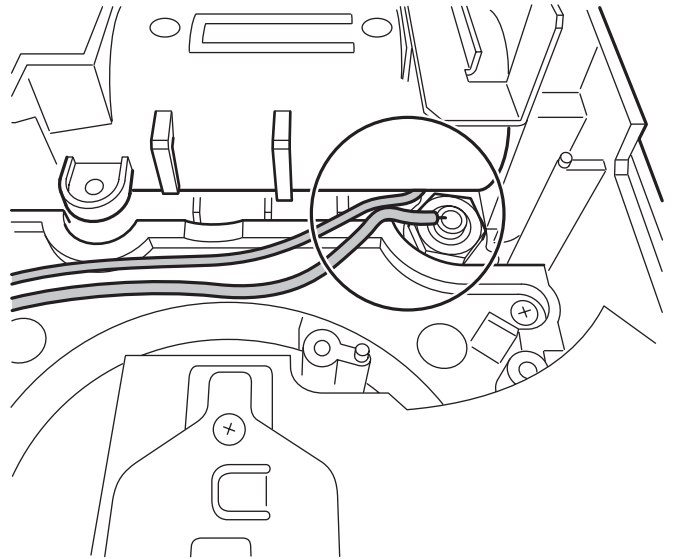
- (2) When assembling the SW UNIT, set the LEVER FOCUS to "S" and assemble with the SW UNIT lever set to the center position.



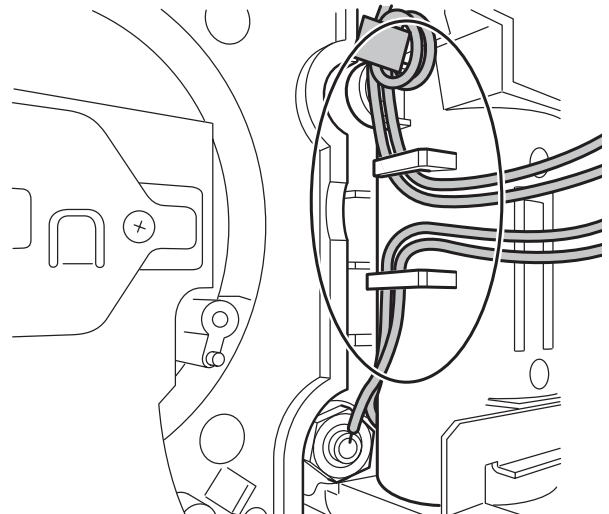
- (3) Run the SYNCHRO TERMINAL harness facing upwards as shown in the figure on the right. Secure the base plate facing in the direction shown in the figure on the right.



- (4) Ensure that the SYNCHRO TERMINAL harness is not pinched between the CASE F rib and the BATT HOLDER.



- (5) Run the 2 WIRE HARNESS pairs through the BATT HOLDER catches as shown in the figure.

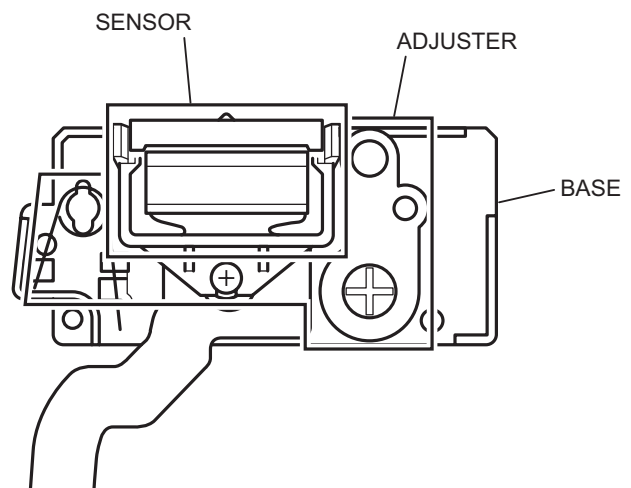


2-10. Removing the AF SENSOR UNIT

[Notes]

Hold the base of the AF SENSOR UNIT when working on it.

Do not touch the sensor or adjuster.

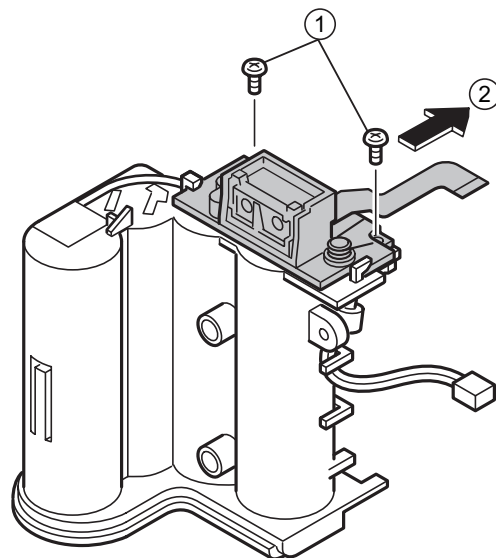


(1) Remove the 2 screws (M1.7 x 4.0).

(2) Pull the unit off in the direction of the arrow.

[Assembly]

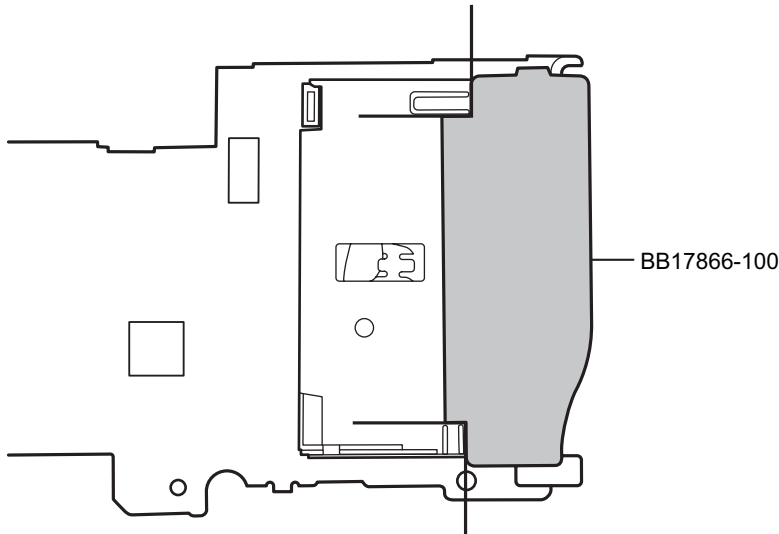
Assemble by performing the disassembly procedure in reverse order.



2-11. Location specifications for sticking on sheets

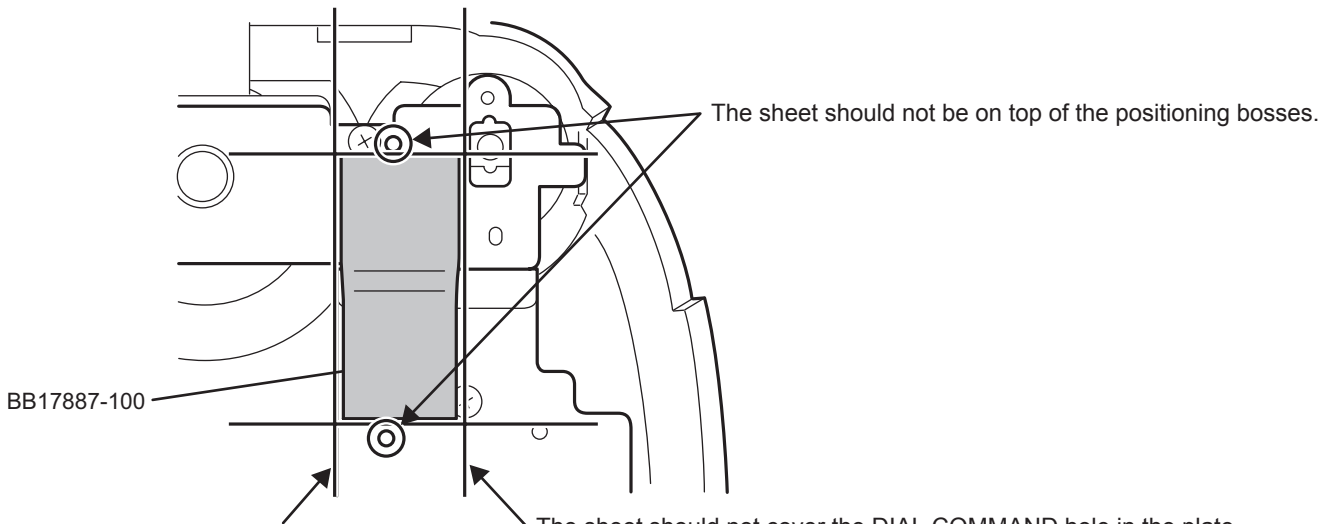
2-11-1. Sticking the SHEET CF to the MAIN PWB ASSY

Stick the sheet in place with the square notches aligned with the slits as shown in the figure.



2-11-2. Sticking the SHEET EMI TOP to the PLATE FPC TOP

Purpose: To ensure conductivity between the two metal plates

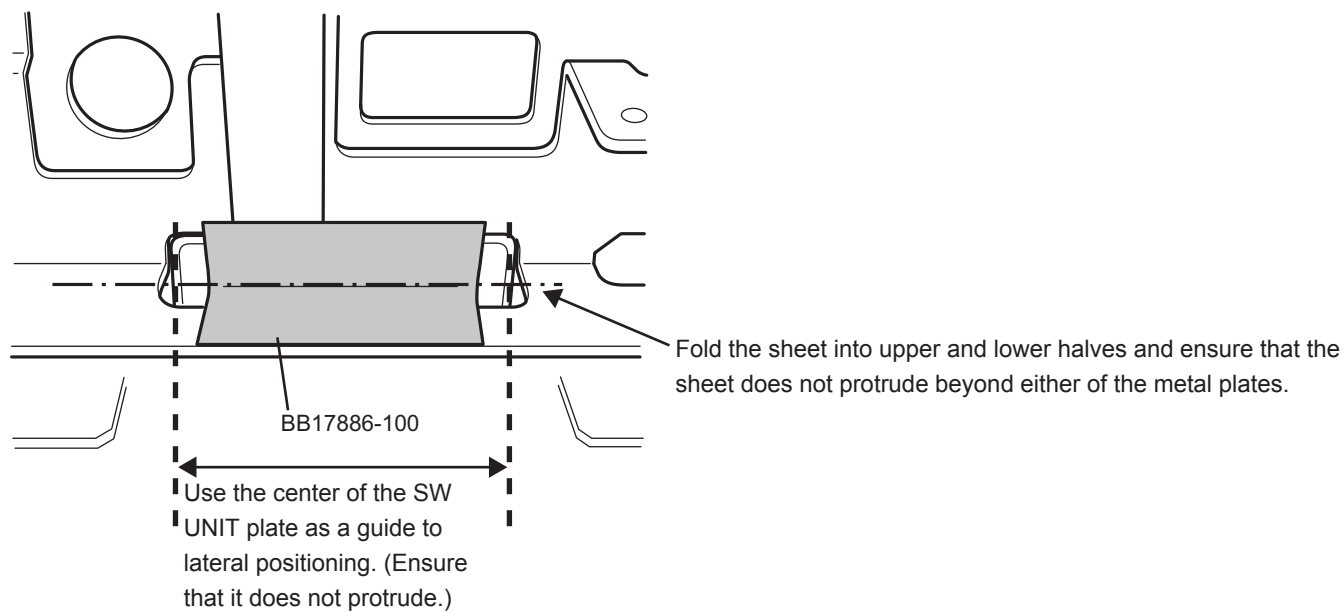


The top sheet should be aligned with the left edge of the bottom plate and should not protrude.

The sheet should not cover the DIAL COMMAND hole in the plate.

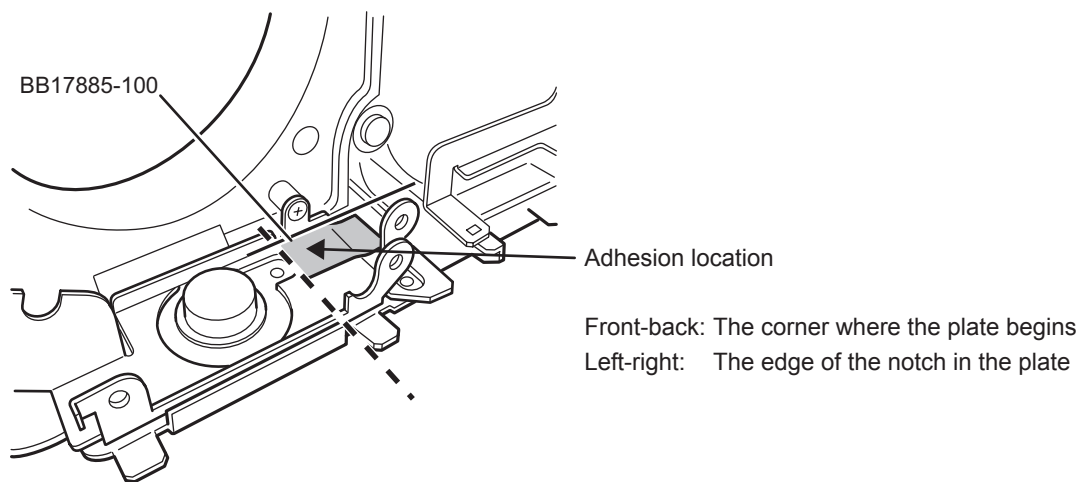
2-11-3. Sticking the SHEET EMI SIDE to the FRAME PWB

Purpose: To ensure conductivity between the two metal plates



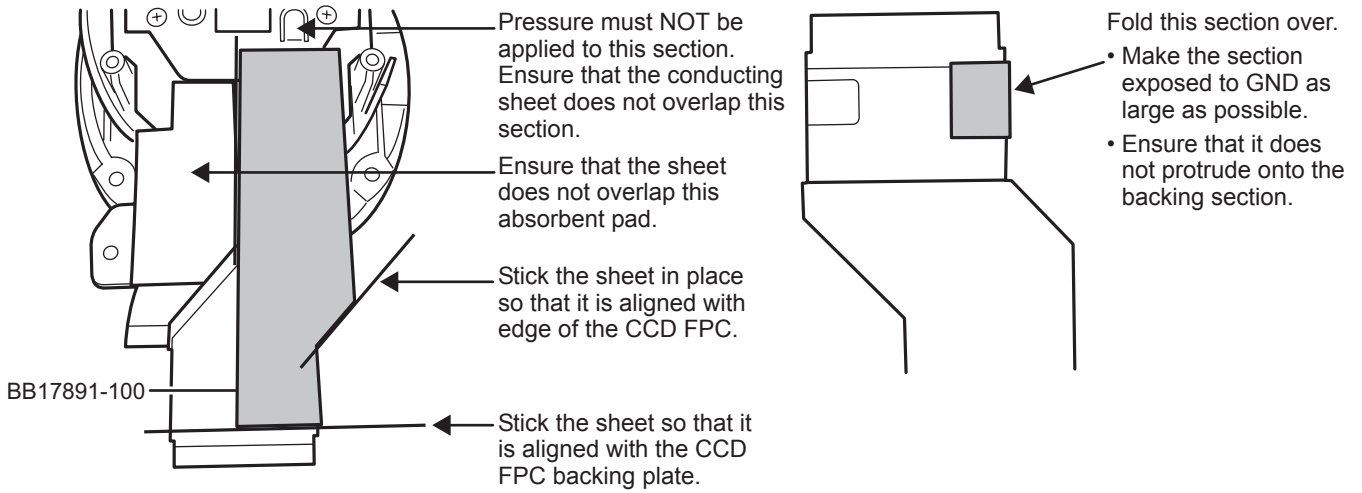
2-11-4. Sticking the SHEET EMI-BASE to the FRAME PWB/BASE TRIPOD

Purpose: To ensure conductivity between the two metal plates



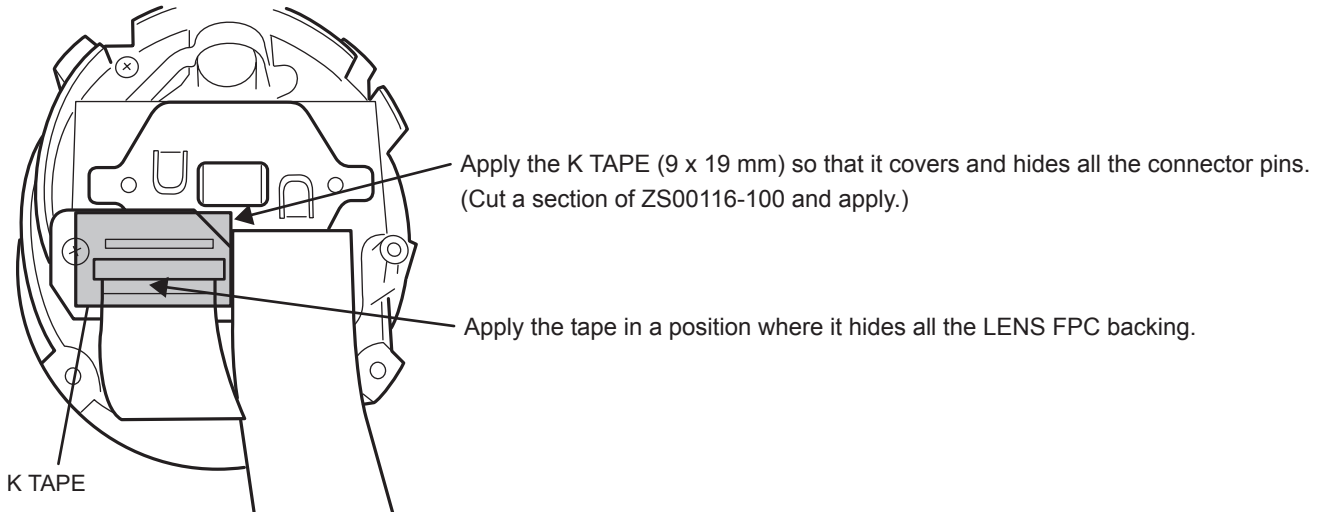
2-11-5. Sticking the SHEET EMI-CD to the CCD FPC

Purpose: To cover the CCD FPC with a conducting sheet to ensure that it makes contact with the CCD metal backing plate



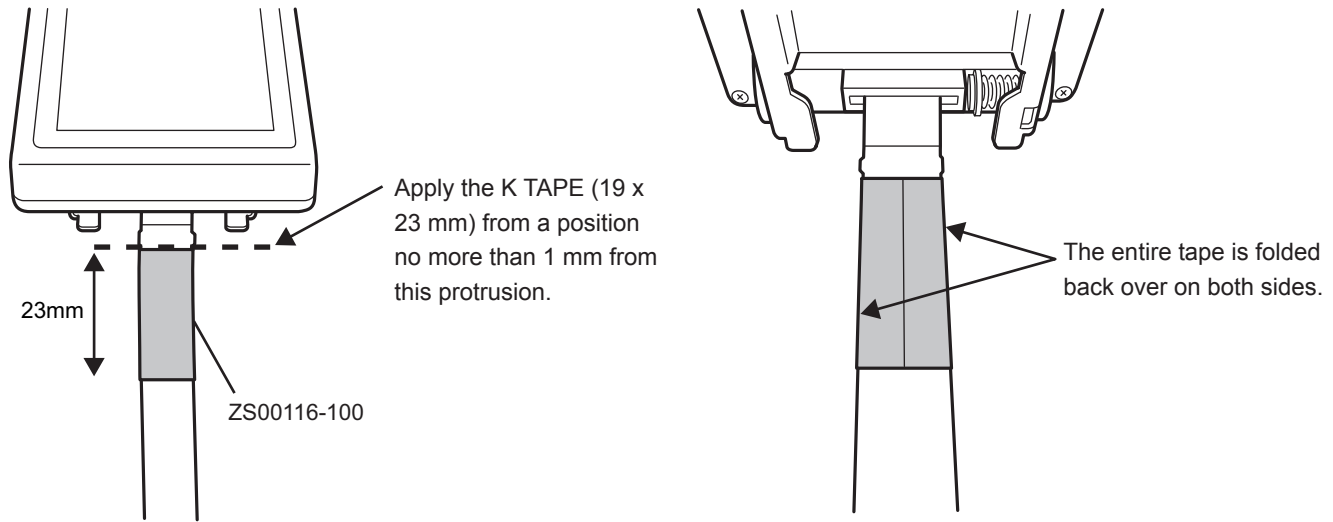
2-11-6. Sticking K TAPE onto the relay PWB

Purpose: To prevent short-circuits and to lock the connector in place.



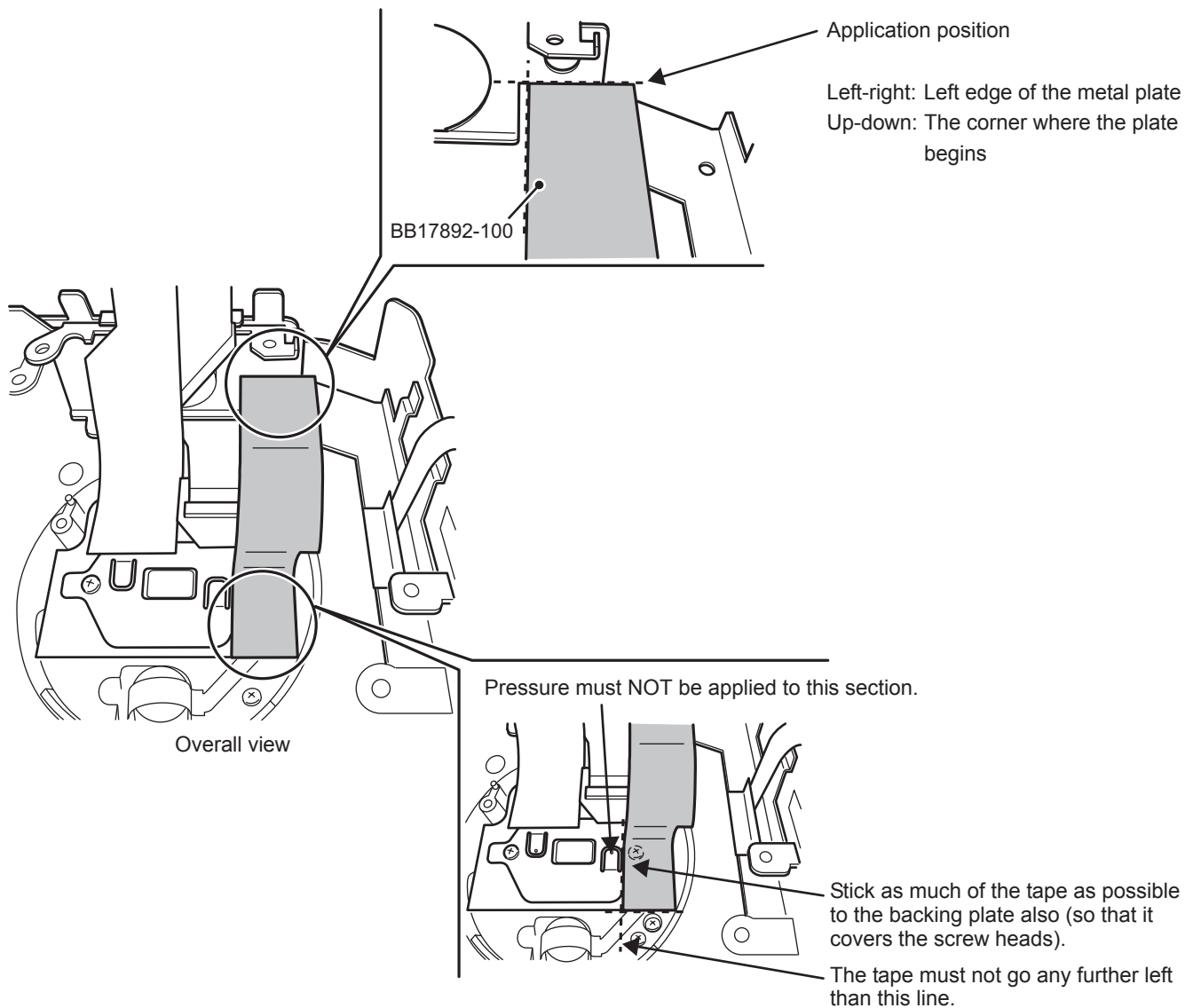
2-11-7. Sticking K TAPE onto the LCD FPC

Purpose: To protect the LCD FPC



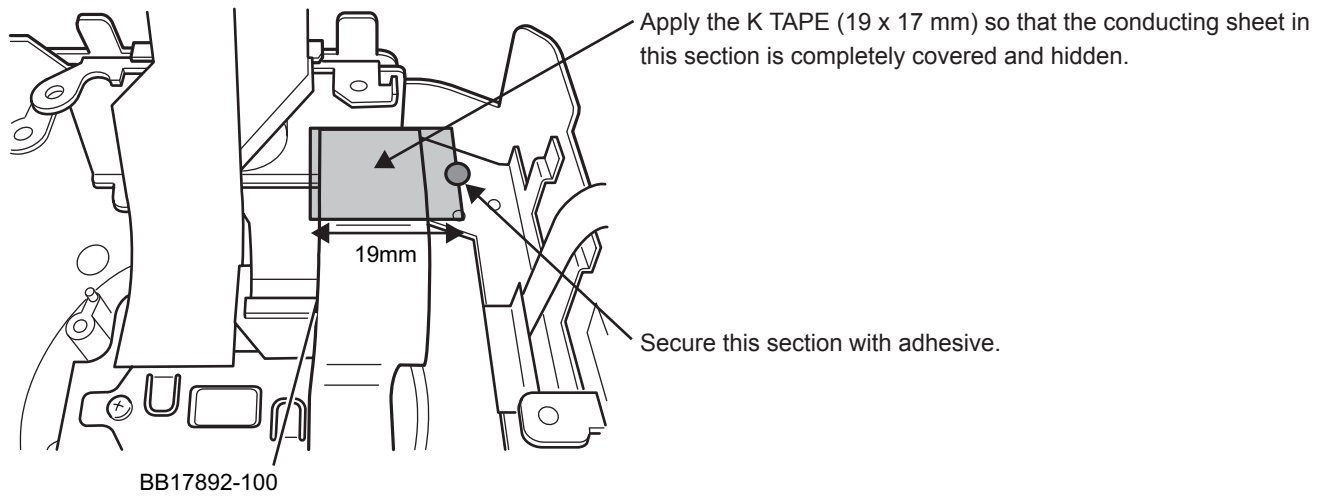
2-11-8. Sticking K TAPE onto the SHEET EMI-FRAME

Purpose: To ensure conductivity between the two metal plates



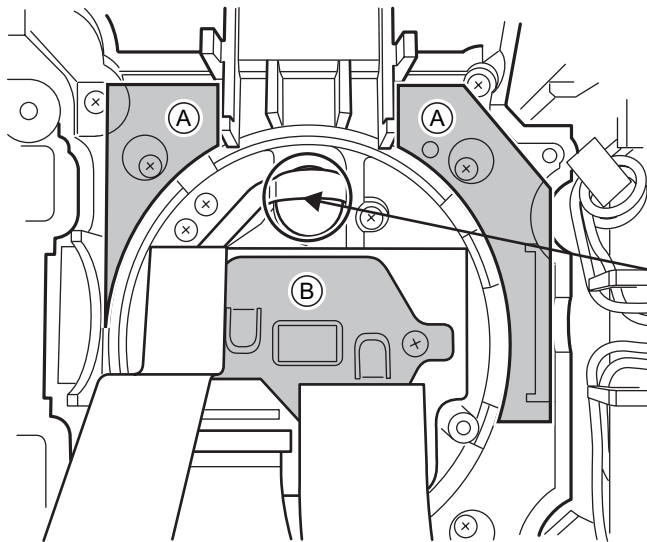
2-11-9. Sticking the SHEET EMI-FRAME to the FRAME PWB/CCD plate

Purpose: To insulate the conducting sheet



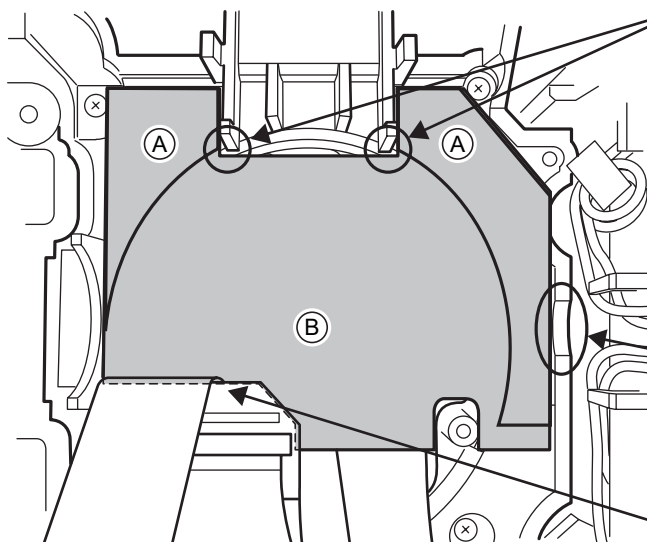
2-11-10. Sticking the SHEET GRAPHITE to the HOLDER LENS/CCD plate

Purpose: To connect area A and CCD backing plate B with the SHEET GRAPHITE (to release heat from the CCD)



Do not press on this area when applying the sheet (to prevent FPC breakage).

Stick the sheet in place as firmly as possible by pressing with your finger on A and CCD backing plate B.



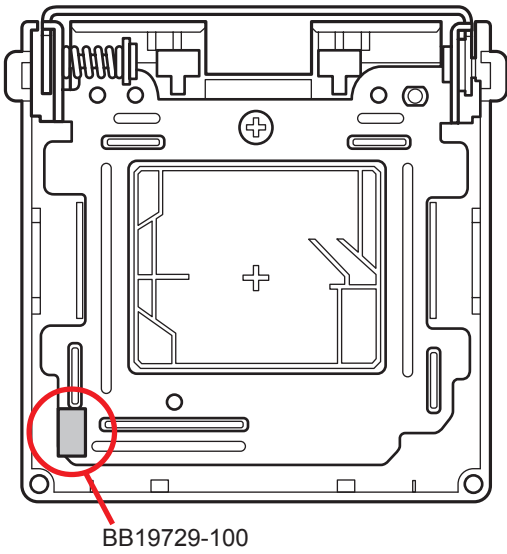
Apply the SHEET GRAPHITE so that the indentation in the sheet is aligned with the frame protrusions.

Ensure that the SHEET does not overlap the main capacitor receptacle.

In this area, push the SHEET in so that it goes behind the relay PWB.

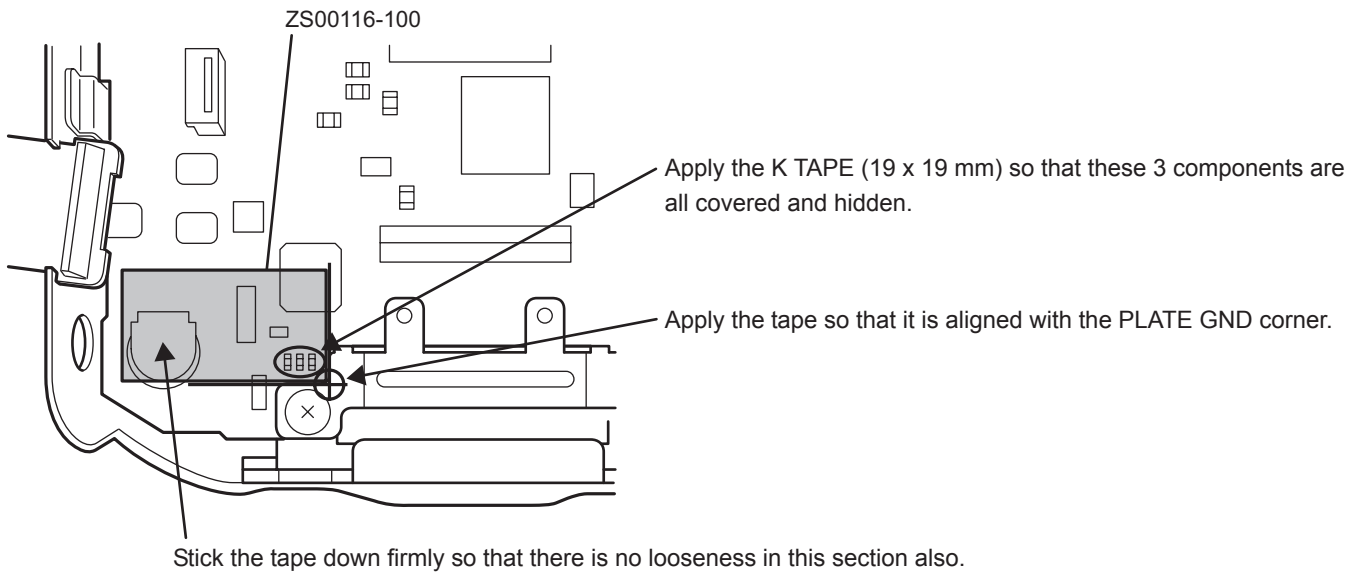
FZ06466-100

2-11-11. Sticking the GASKET to the UNIT HINGE



2-11-12. Sticking K TAPE to the MAIN PWB ASSY

Purpose: To prevent short-circuits with the MAIN PWB ASSY



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.
- $K\Omega = 1000\Omega$, $M\Omega = 1000K\Omega$
- 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 CONST	CCD FPC BLOCK	CCD Output (IC800)
MAIN PWB ASSY	CAMERA BLOCK	CCD Output A/D Conversion (IC103)
	MOTOR BLOCK	Shutter/iris/zoom Drive (IC350)
	AUDIO BLOCK	Audio IN/OUT(IC500)
	LCD/EVF BLOCK	LCD/EVF Control, Back Light Control
	IPS2 BLOCK	Power Control, LED Driver, Flash Charge Control (IC300)
	STRB BLOCK	Flash Charge
	PROCESS BLOCK	Image Signal Processing, USB Communications, System Control (IC204)
	MAIN IF BLOCK	Connection with the DCST PWB
DCST PWB ASSY	DC/DC BLOCK	Power Supply Generation (IC600), Power Control
KEY PWB ASSY	KEY BLOCK	Key SW
TOP FPC ASSY	TOP FPC BLOCK	Power SW, Release SW, Key SW

3-3. Description of Main Block Functions

3-3-1. Technical Overview

Featuring the "Super CCD Honeycom V HR" and the "Real Photo Engine", the FinePix S9100/S9600 not only gives you images with superb resolution and minimal noise, it is also highly effective at high sensitivities, providing images with little or no camera shake or subject blurring even in low-light conditions and telephoto shots. The lens performance and image processing functions on the FinePix S9000 were highly acclaimed both in Japan and overseas, but this camera takes this yet another step further, giving even higher resolutions and even more breathtaking color reproduction. It also features a new record in minimum AF speed of just 0.6 seconds. It also compares well with the FinePix S9000 in low-light scenes such as indoor shots, with autofocus as much as 1.8 times faster for truly snappy shooting.

It also comes with "iFlash", which automatically selects the ideal flash brightness and sensitivity setting so that features such as faces and skin tones are captured perfectly with no flaring. The 2-inch 235,000-pixel TFT LCD screen provides superb image quality and can be rotated to multiple angles, making it incredibly easy to view and use.

CCD signal processing/Camera circuit section

- Analog signals output from the 1/1.6 type Super-CCD Honeycom V HR (IC800), with an effective pixel count of 9.03 megapixels, undergo false color compensation processing, adaptive interpolation processing, amplification (AGC) and signal mixing inside the CCD signal processing IC "BCS (IC103)" before being converted to 14-bit digital signals (A/D) and sent to the signal processing LSI "YCS (IC204)".
- The vertical drive IC (IC102) for driving the CCD and the OFD voltage control IC (IC101) are in this block.

Motor Circuit Section

- The signal processing LSI "YCS (IC204)" that has received various processing operating switch commands manages the motor drive IC (IC350) and controls the AF, SHUTTER 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 "YCS (IC204)", converted to 32-bit (16-bit x 2) data by the [internal buffer] inside this LSI, and the image data for one frame (3488 x 2616 pix) is stored temporarily in [SD-RAM]. It is also integrated in the [AUTO operation section] using the 32-bit the signal processing LSI "YCS (IC204)" image data and sent to the BCS_IC (IC103) 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 "YCS (IC204)". 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 "YCS (IC204)" 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

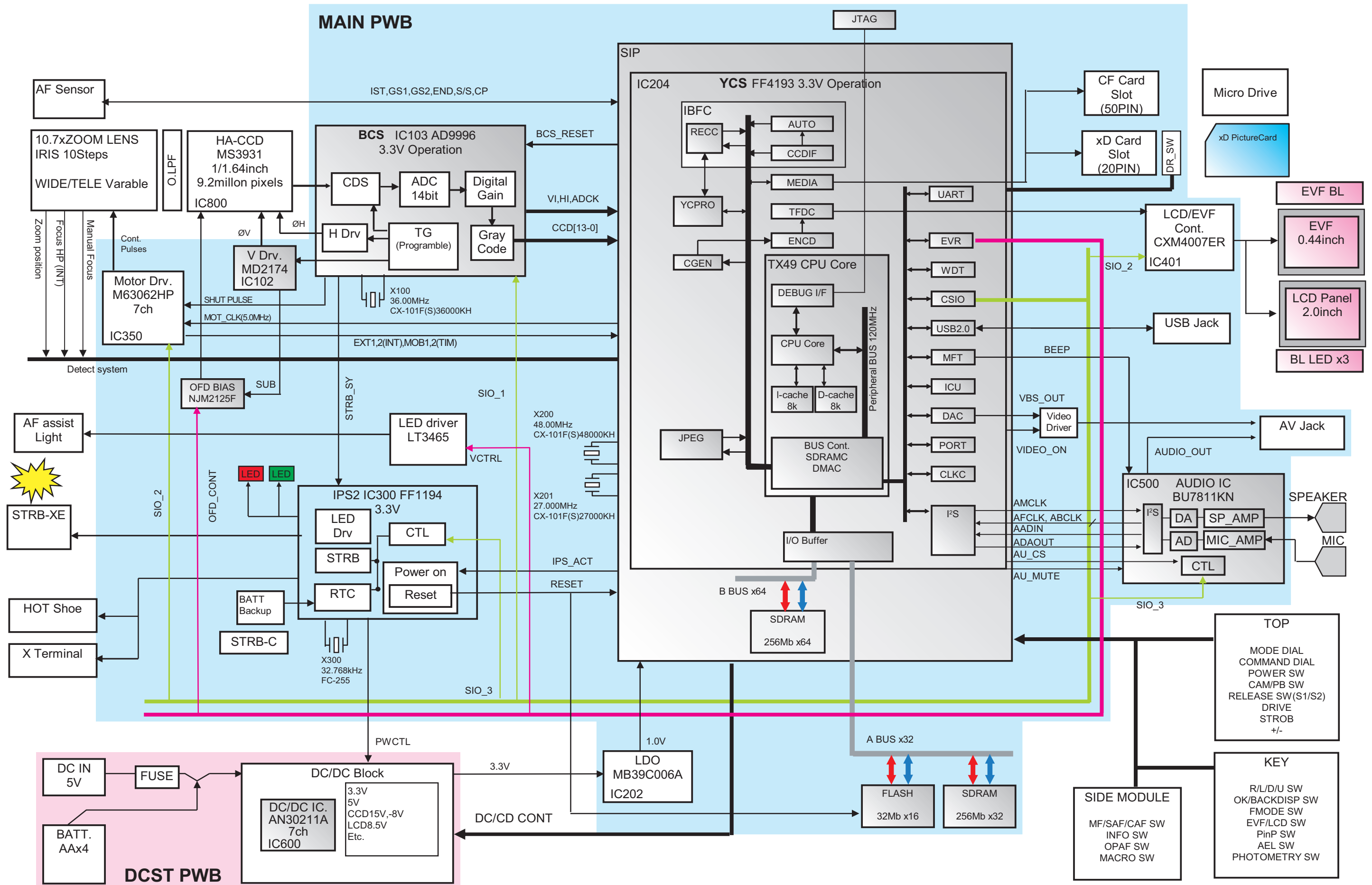
- Digital signals sent from the signal processing LSI "YCS (IC204)" are passed through the [LCD controller (IC401)] to the LCD unit.

Power Supply Section

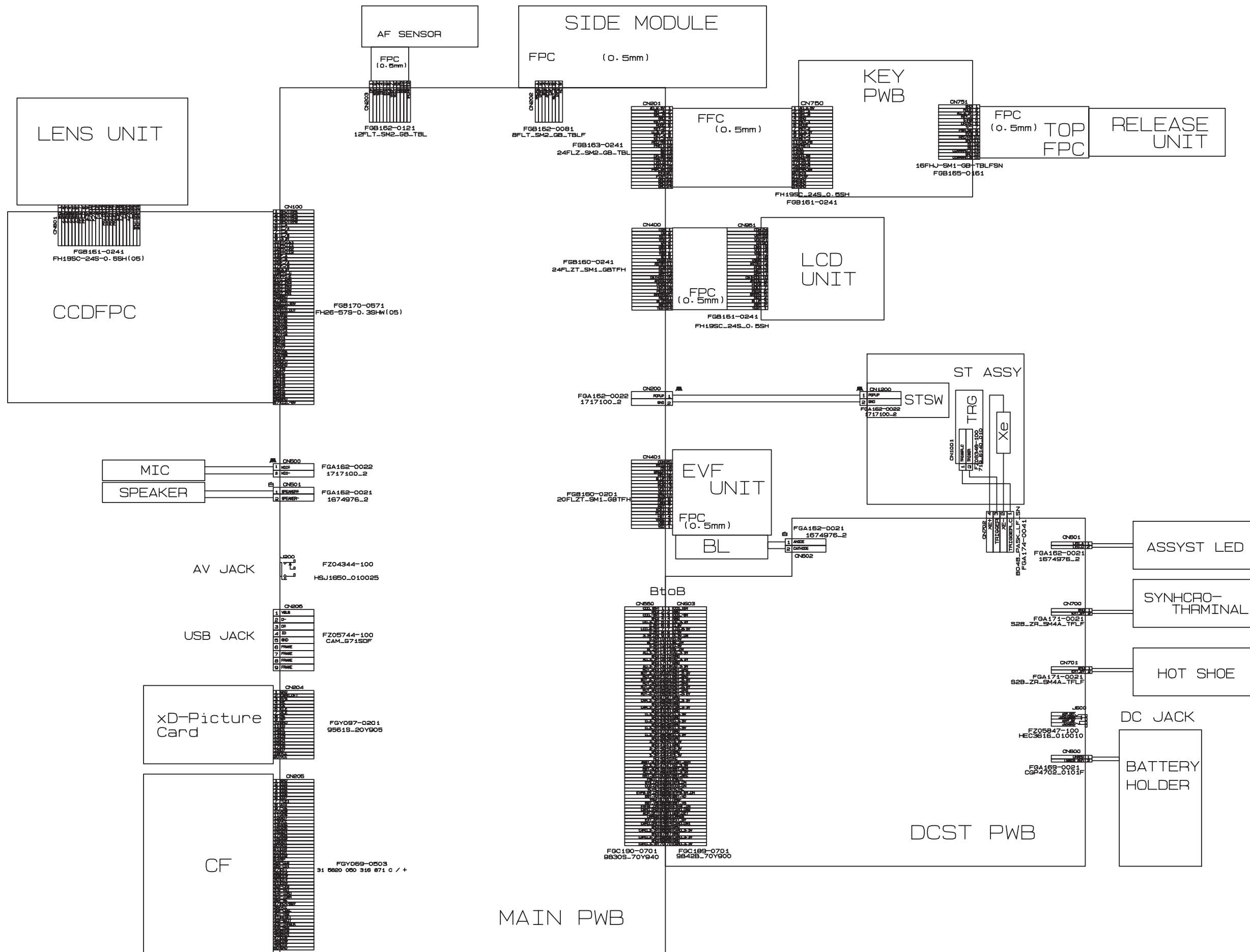
- Power supply circuits constructed in the core of the DC IC (IC600) create the following power supplies, which are supplied to each block.

3.3V	[IC202 (PROCESS BLOCK)]
D_3.3V	[IC204 (YCS), IC300 (IPS2), IC350 (MOTOR BLOCK),
AD_3.3V	[IC204 (YCS), IC207 (VIDEO Drv.), TOP FPC, KEY BLOCK]
AU_3.3V	[IC500 (AUDIO)]
CAM3.3V	[IC102 (V_Drv), IC103 (BCS)]
xD_3.3V	[CN204 (xD CARD CONNECTOR)]
CARD_3.3V	[CN205 (MICRO DRIVE CONNECTOR)]
D_5V	[IC102 (V_Drv), IC300 (IPS2), LCD/EVF BLOCK]
BL_5V	[LCD/EVF BLOCK]
MOT_5V	[IC353, IC354 (MOTOR BLOCK)]
CCD_-8V	[IC800 (CCD), IC102 (V_Drv)]
CCD_15V	[IC800 (CCD), IC102 (V_Drv), IC101 (OFD_Drv)]
1.0V	[IC204 (YCS), IC300 (IPS2)]
2.5V	[IC204 (YCS)]
D_2.5V	[IC204 (YCS)]
LCD_8.5V	[LCD/EVF BLOCK]

3-4. Block Diagram

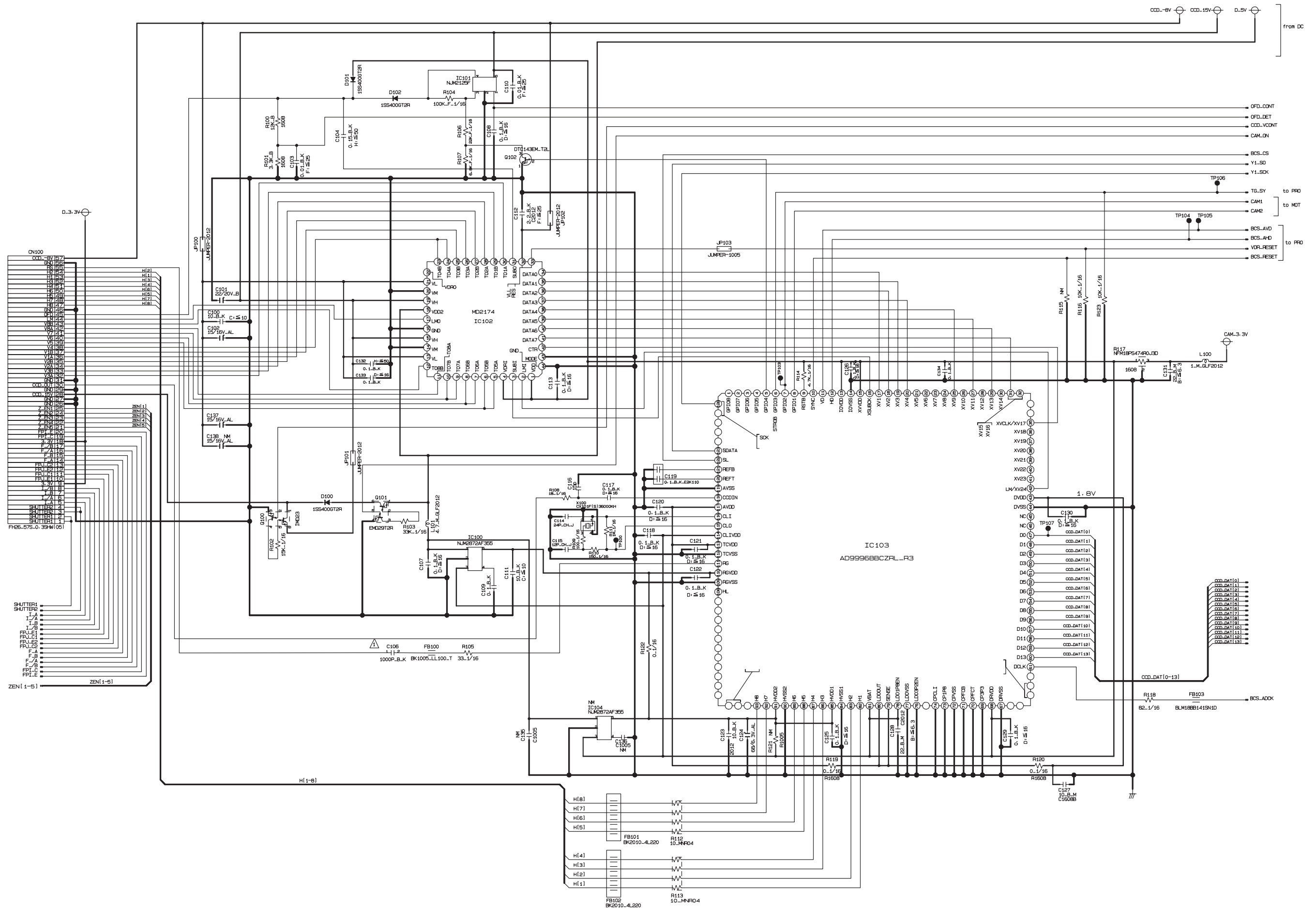


3-5. Overall connection Diagram

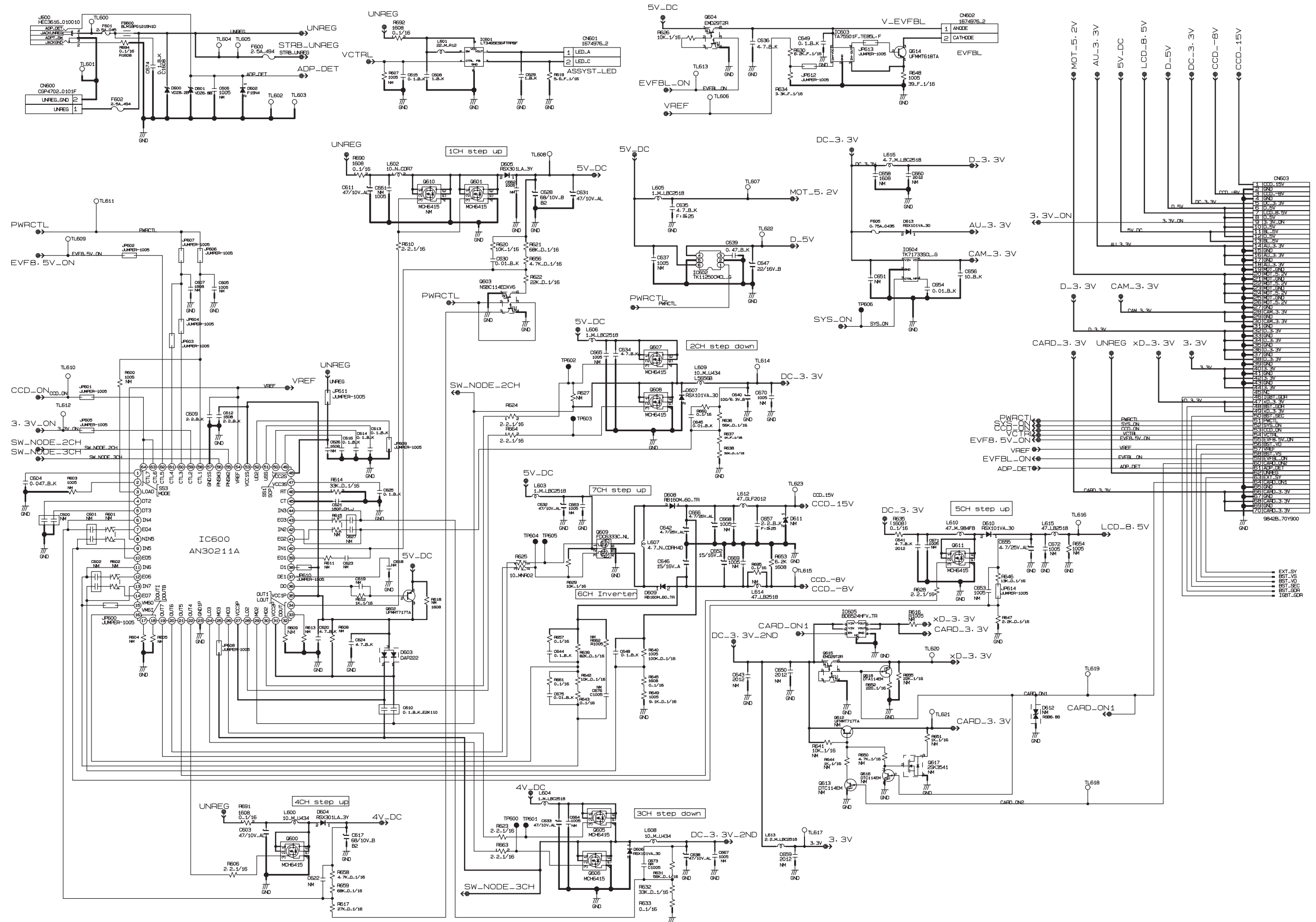


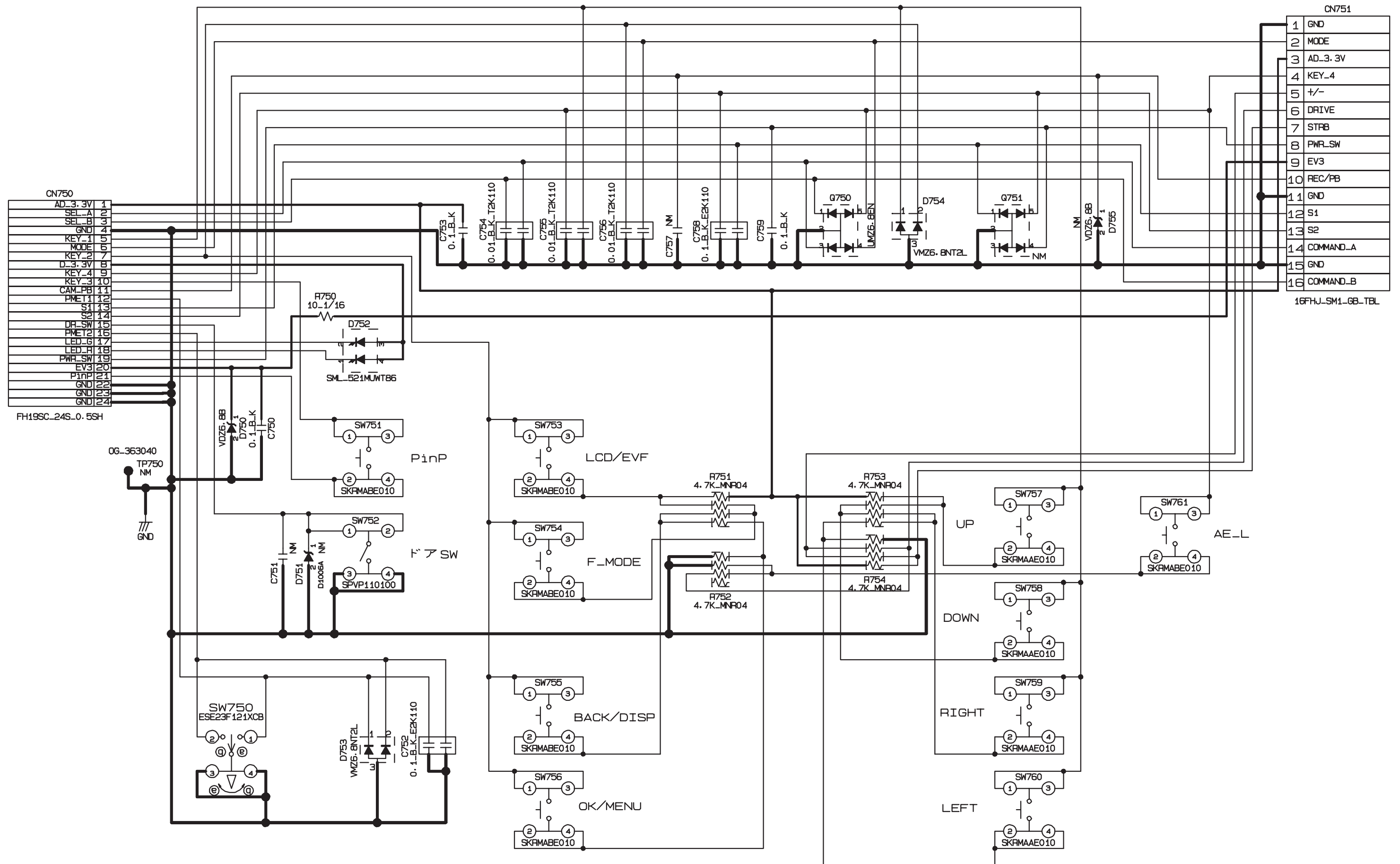
3-6. Circuit Diagrams

3-6-1. CAMERA BLOCK

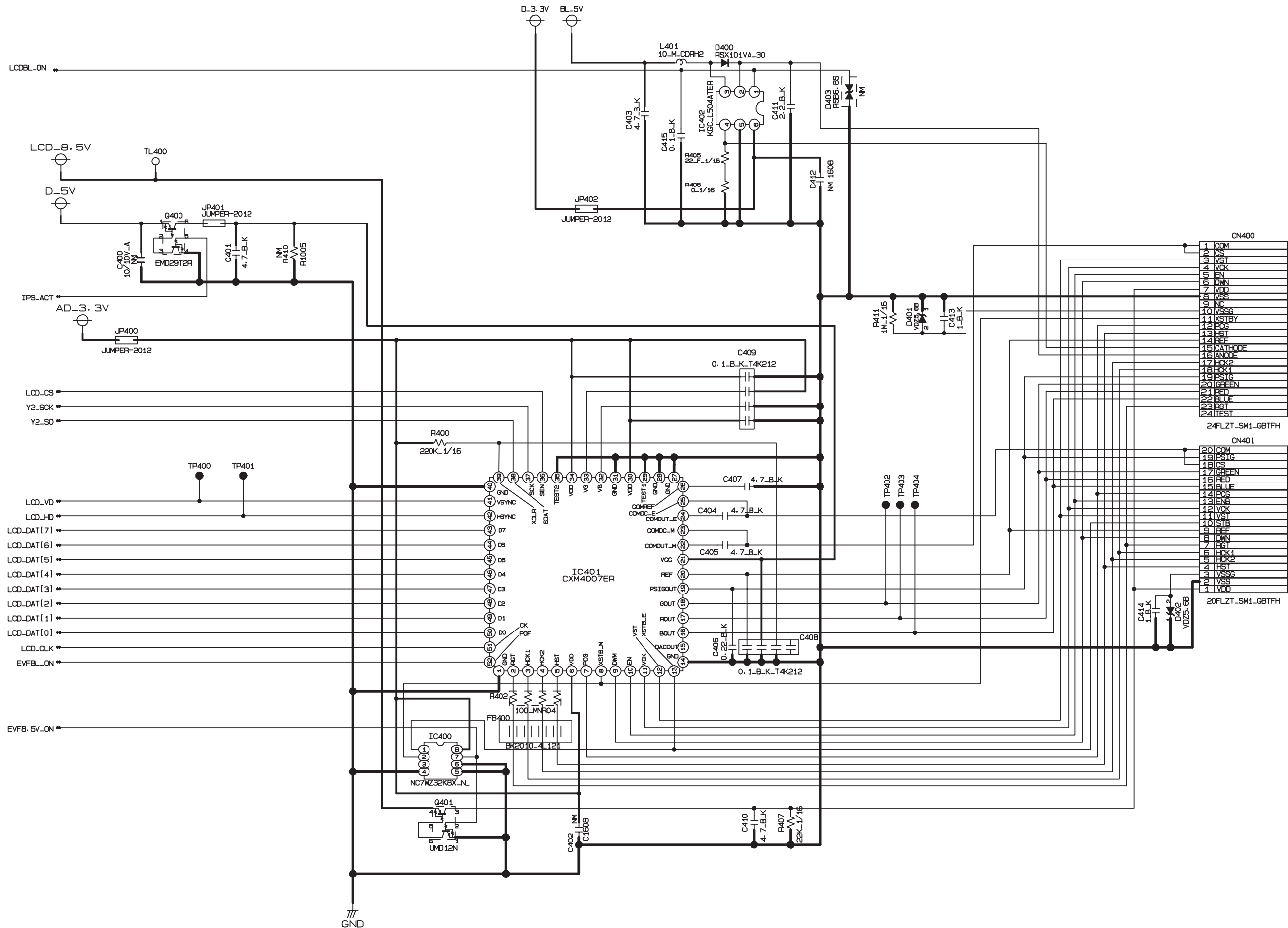


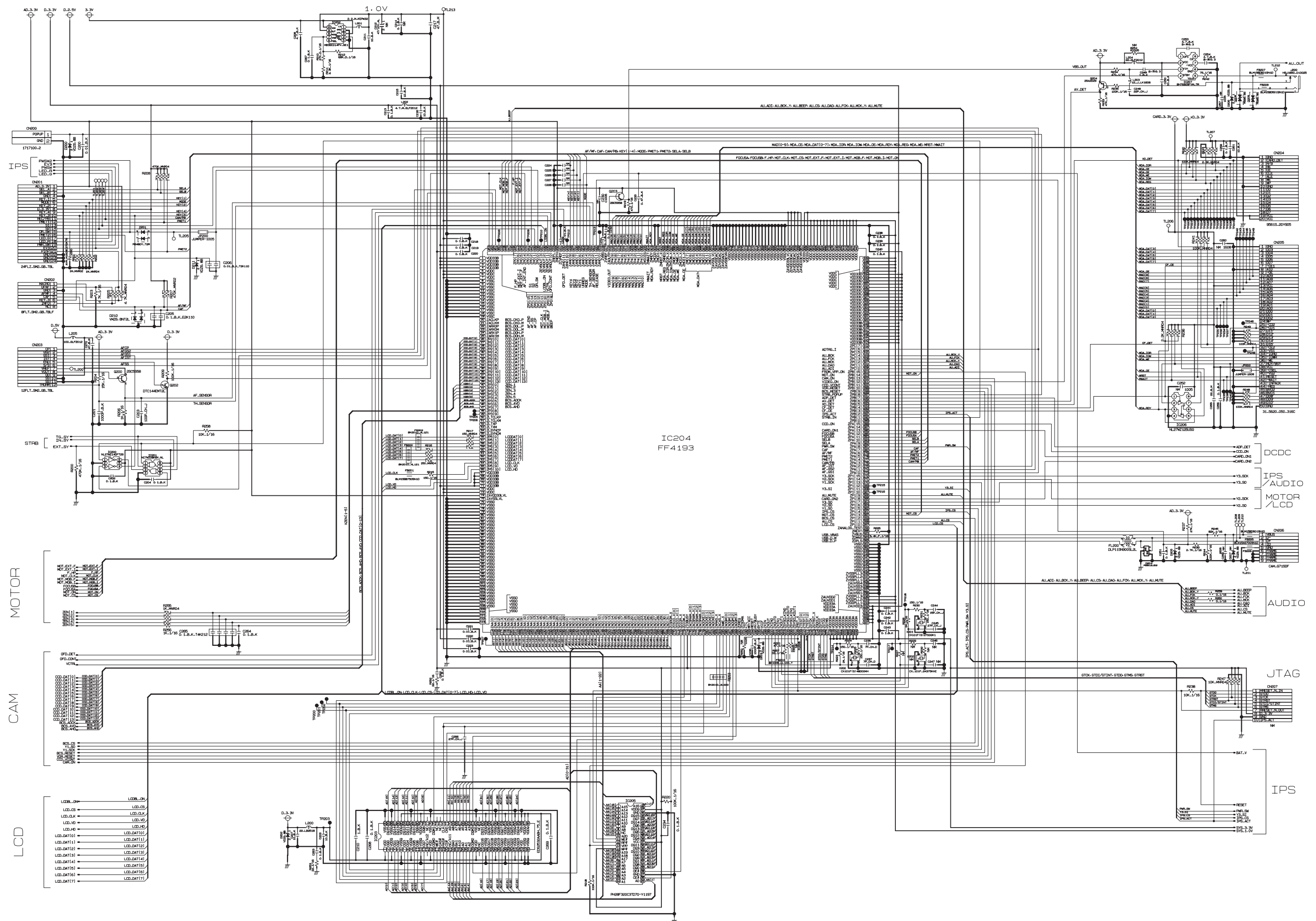
3-6-2. DCDC BLOCK





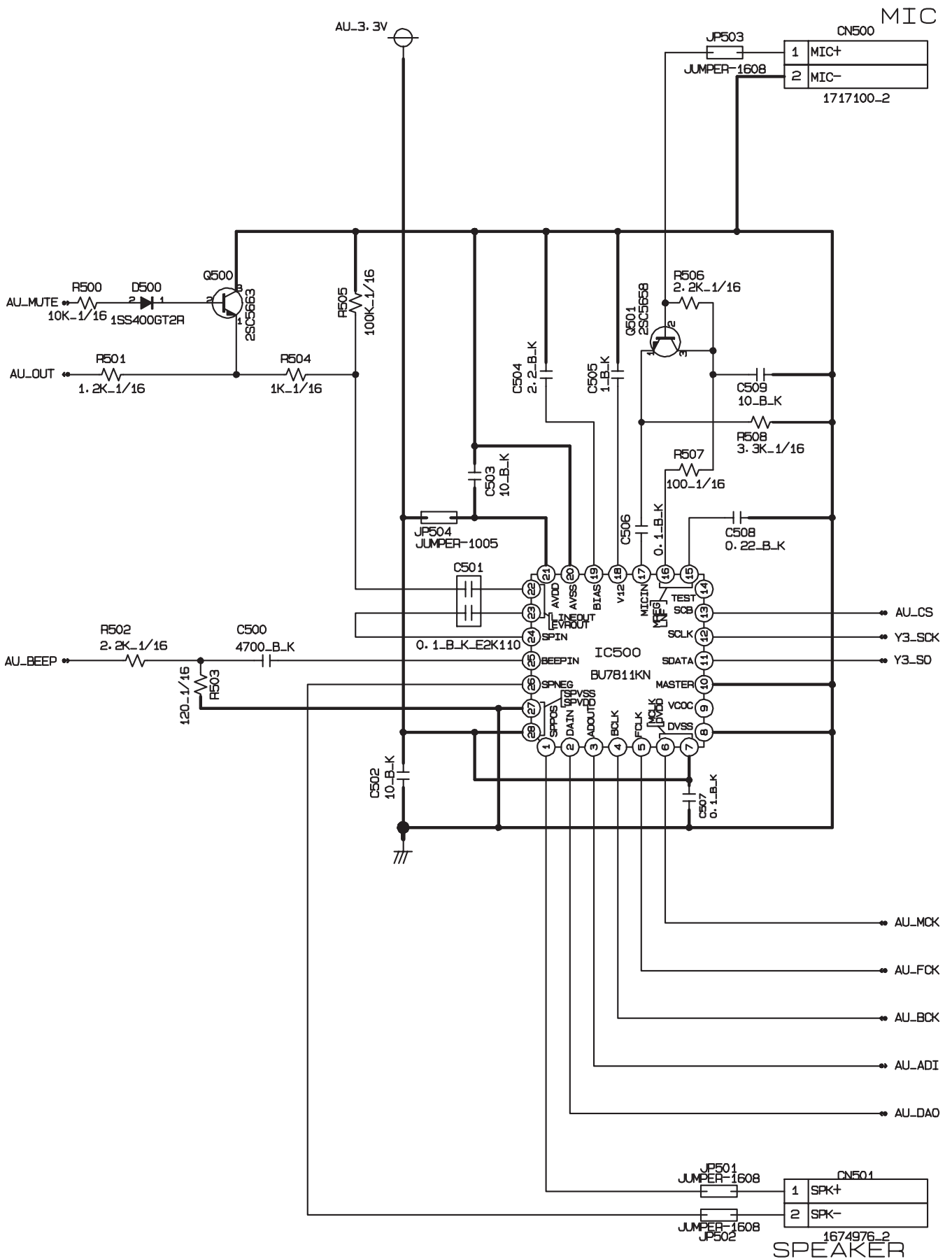
3-6-4. LCD/EVF BLOCK



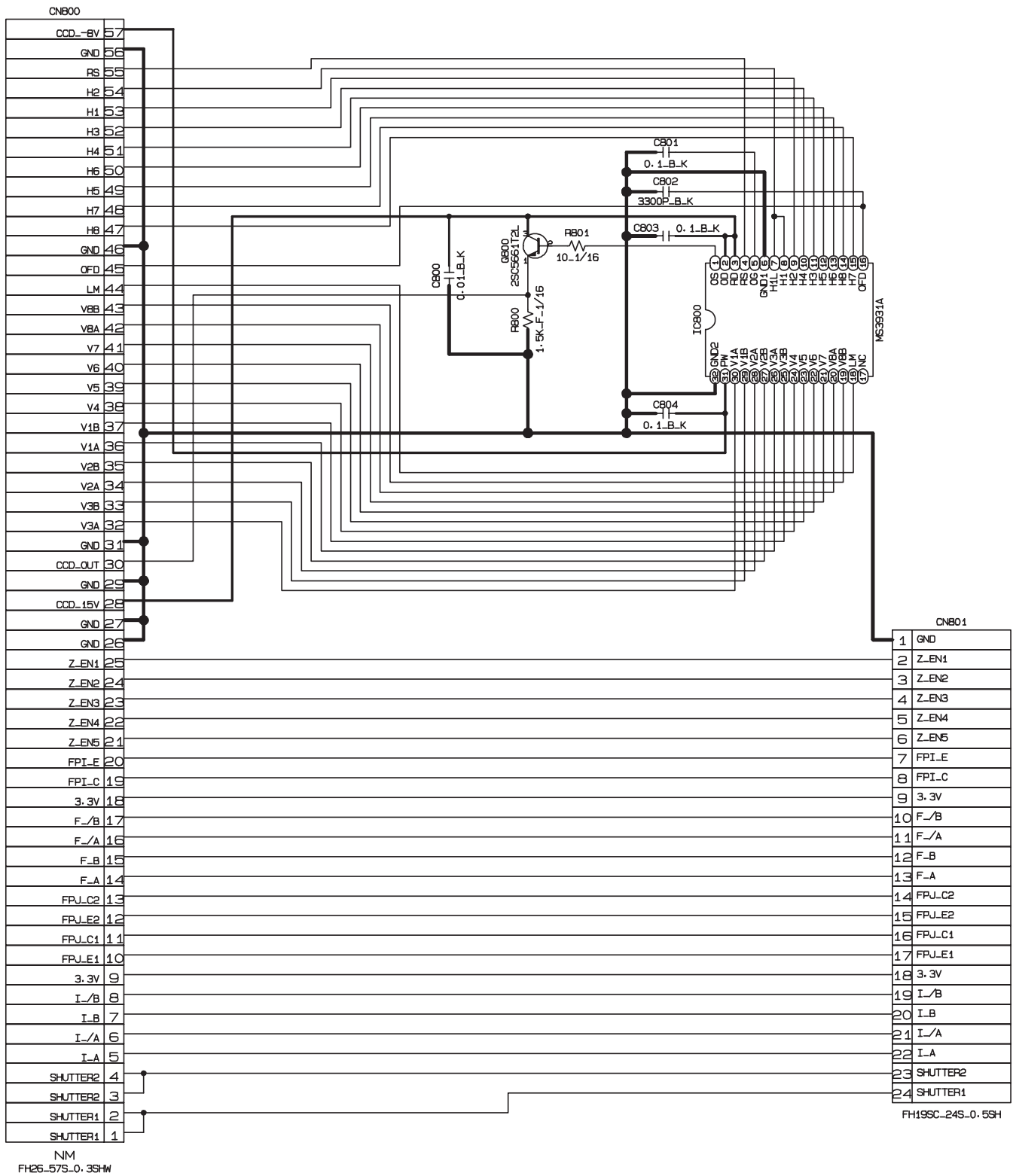


MEMO

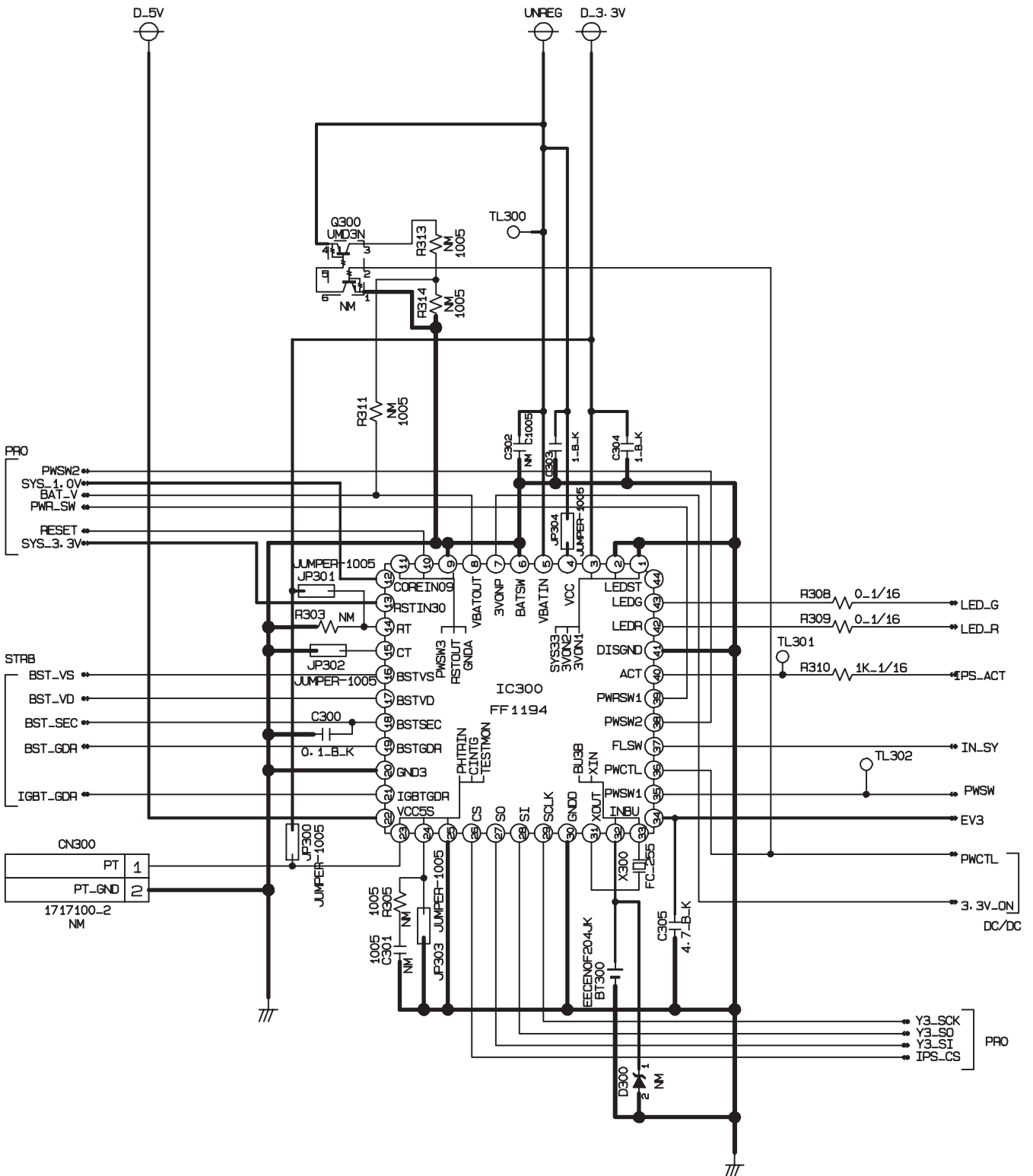
3-6-6. AUDIO BLOCK



3-6-7. CCD FPC BLOCK

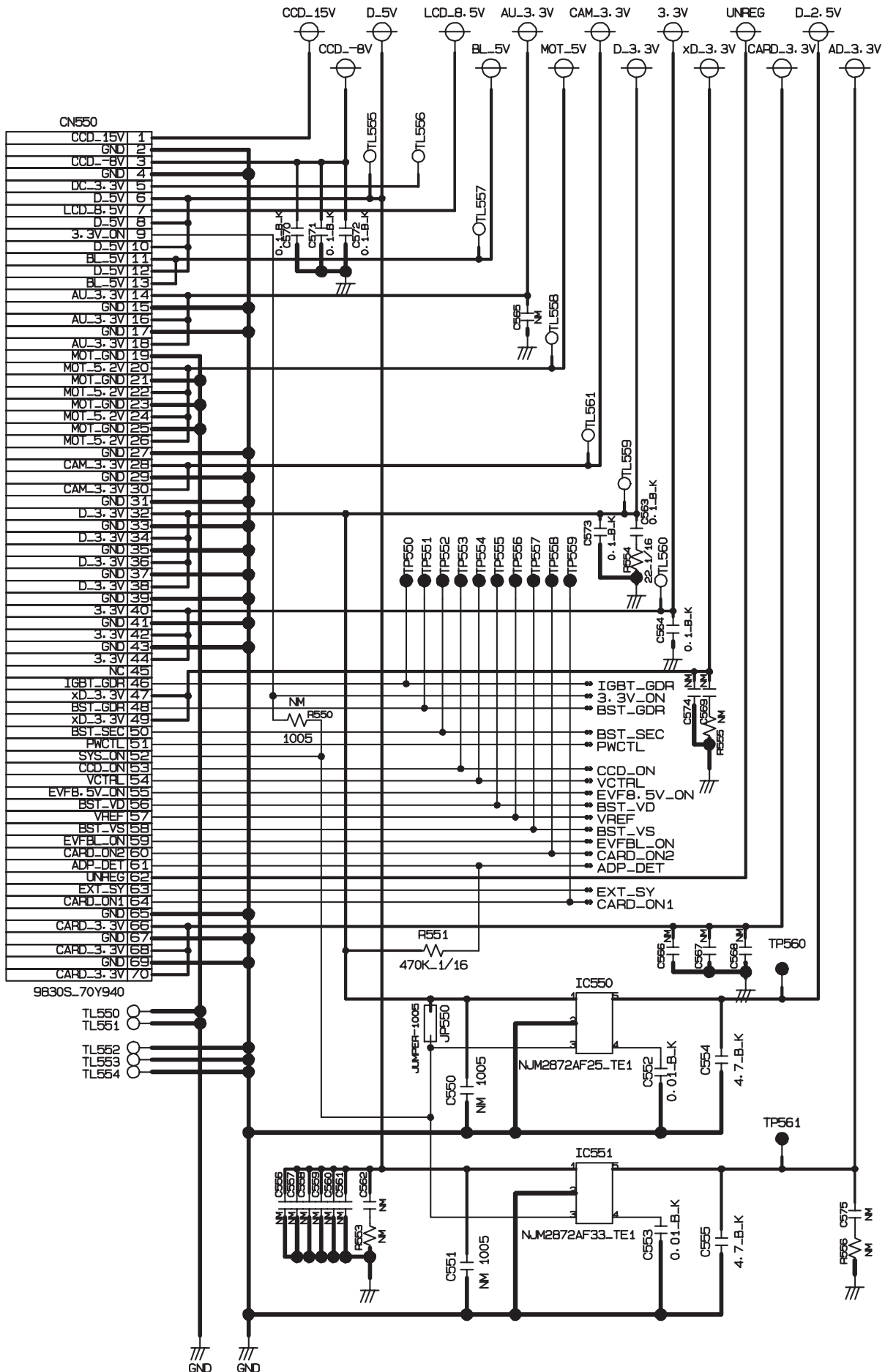


3-6-8. IPS2 BLOCK

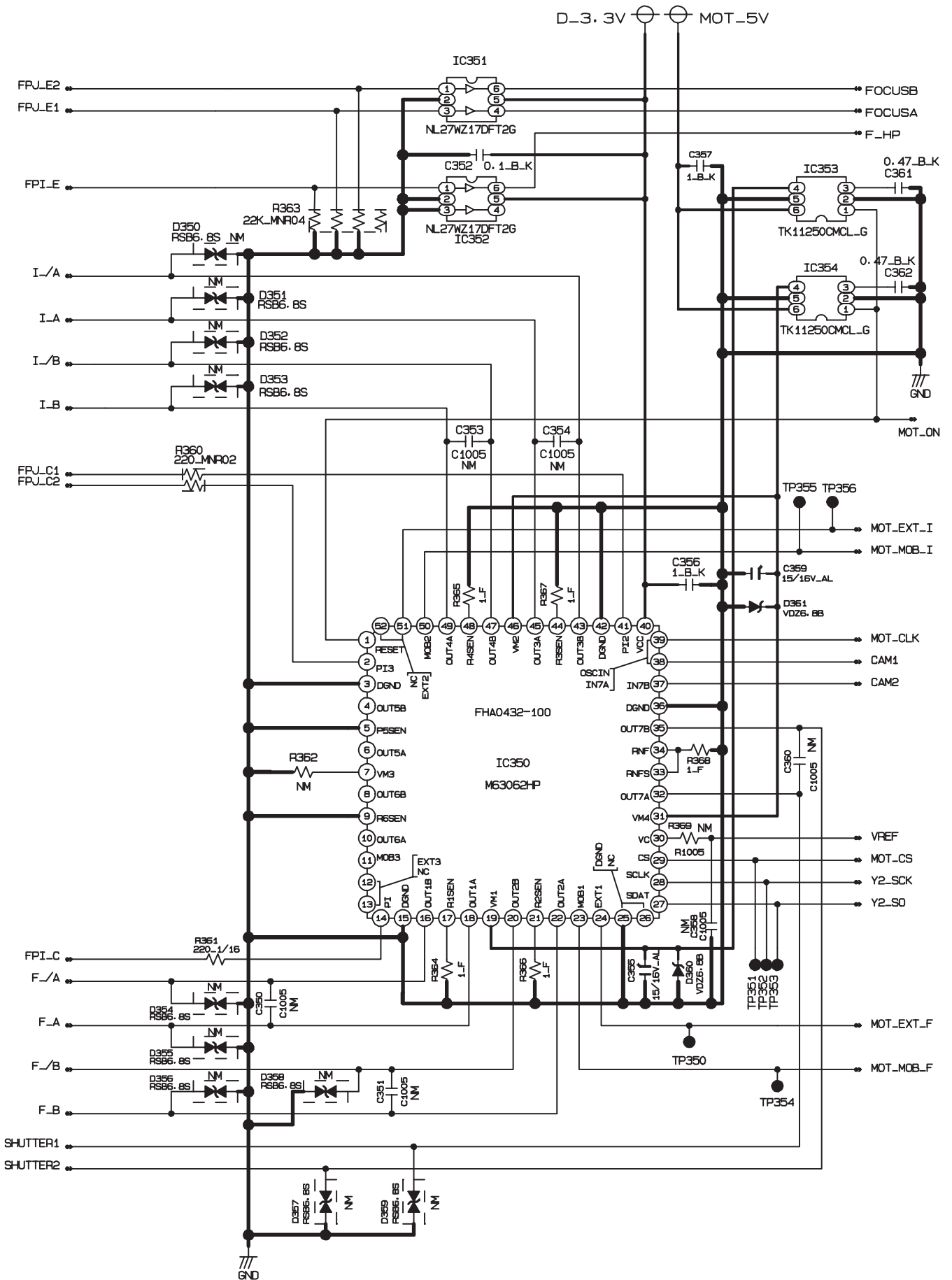


3. Schematics

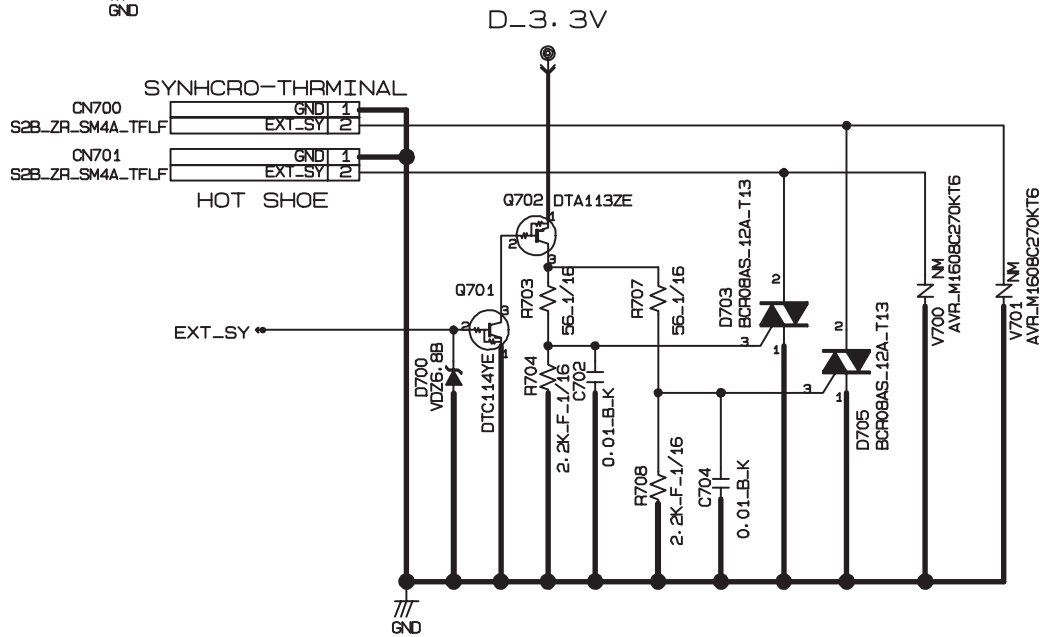
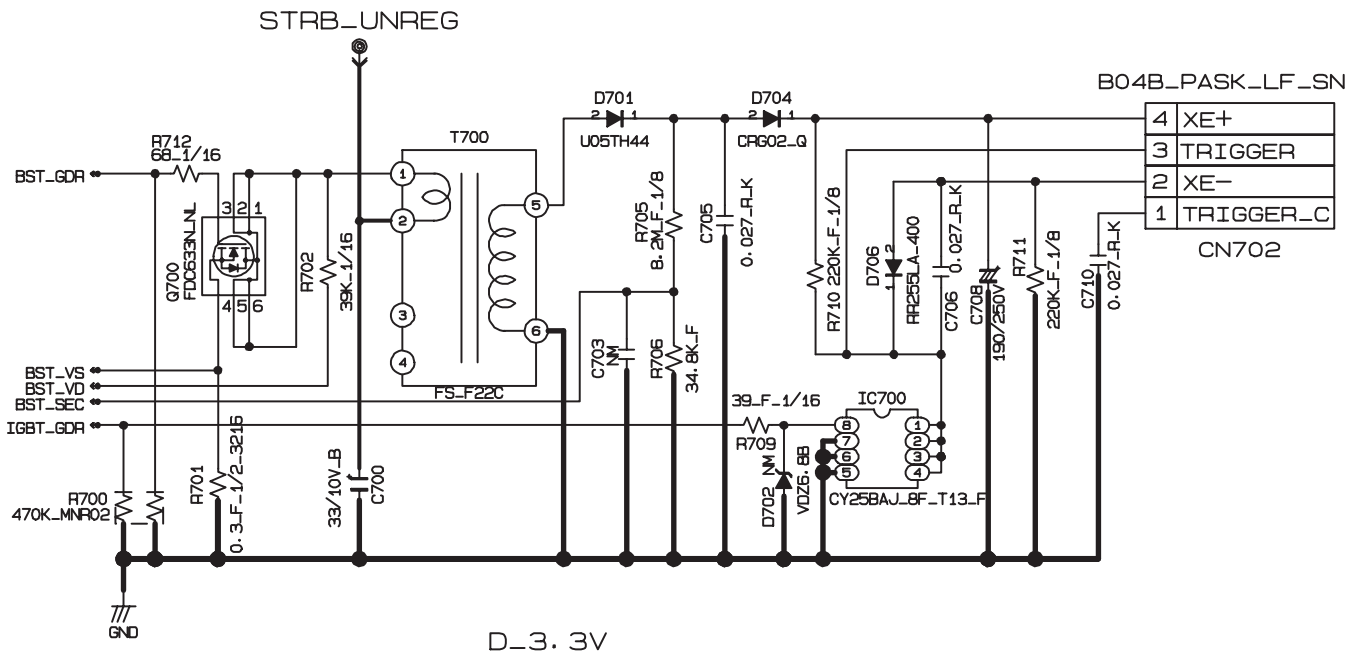
3-6-9. MAIN I/F BLOCK



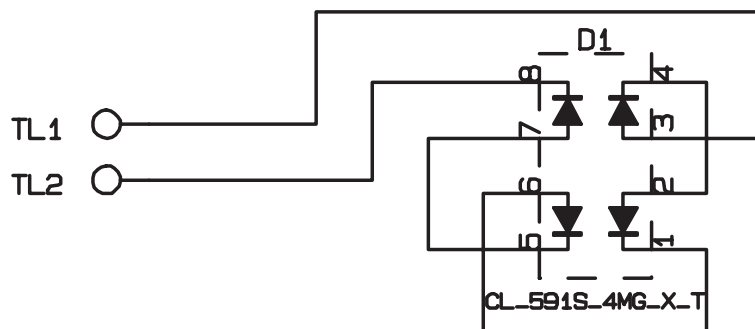
3-6-10. MOTOR BLOCK



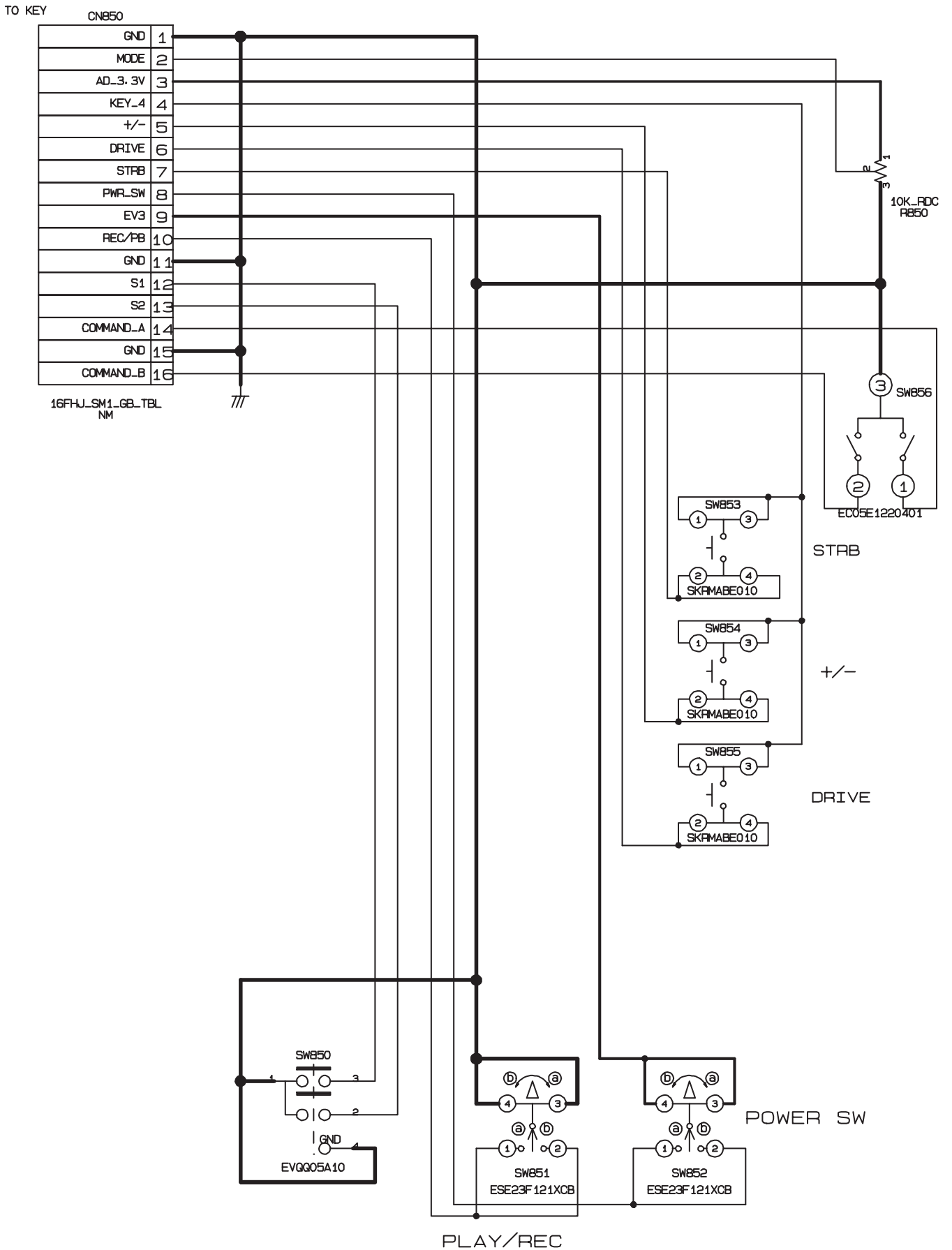
3-6-11. STRB BLOCK



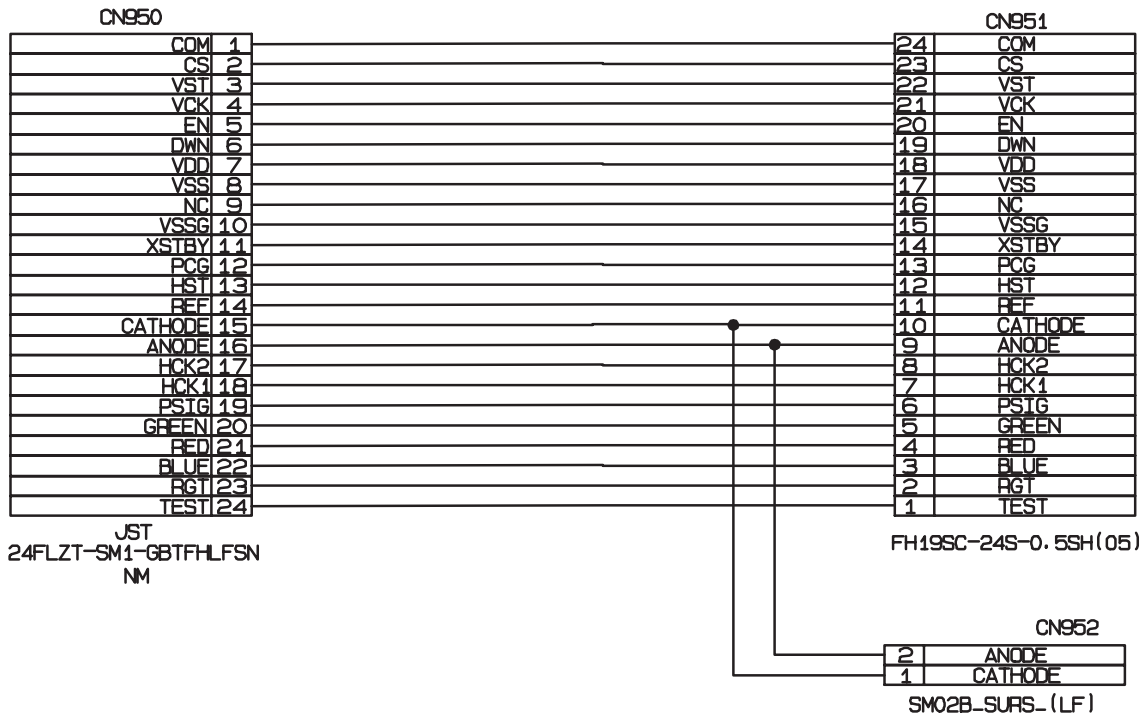
3-6-12. LCD CITI BLOCK



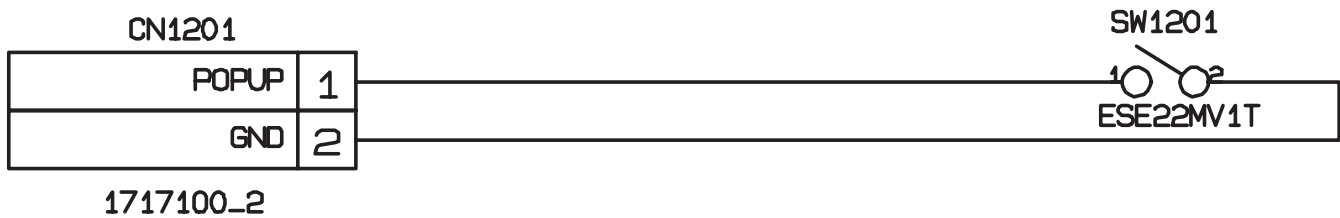
3-6-13. TOP FPC BLOCK



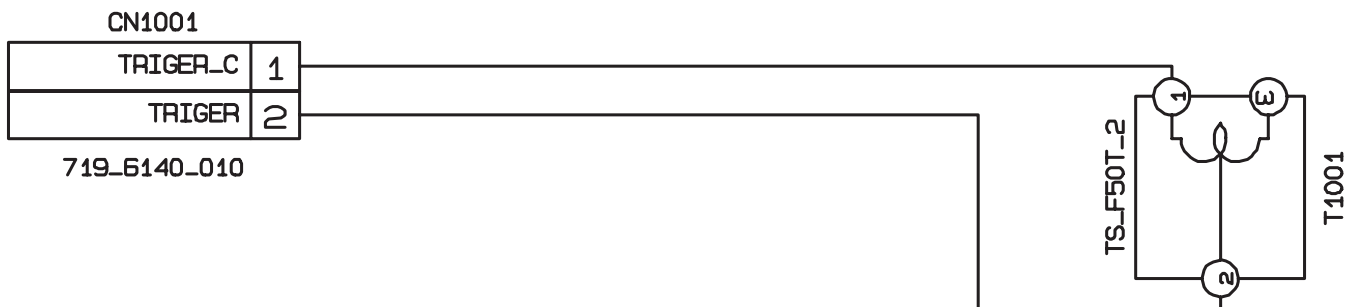
3-6-14. ML FPC BLOCK



3-6-15. STSW BLOCK

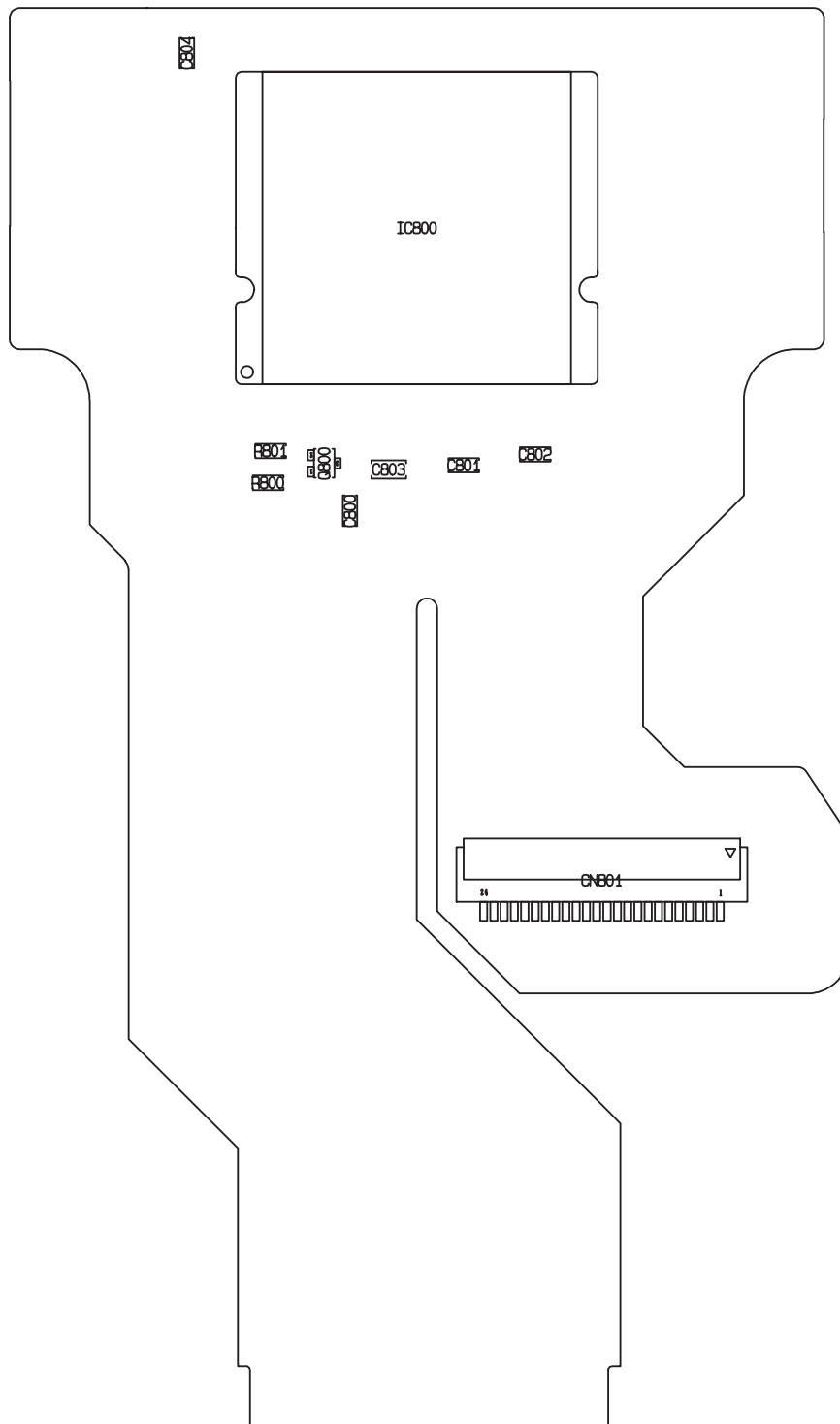


3-6-16. TRG BLOCK

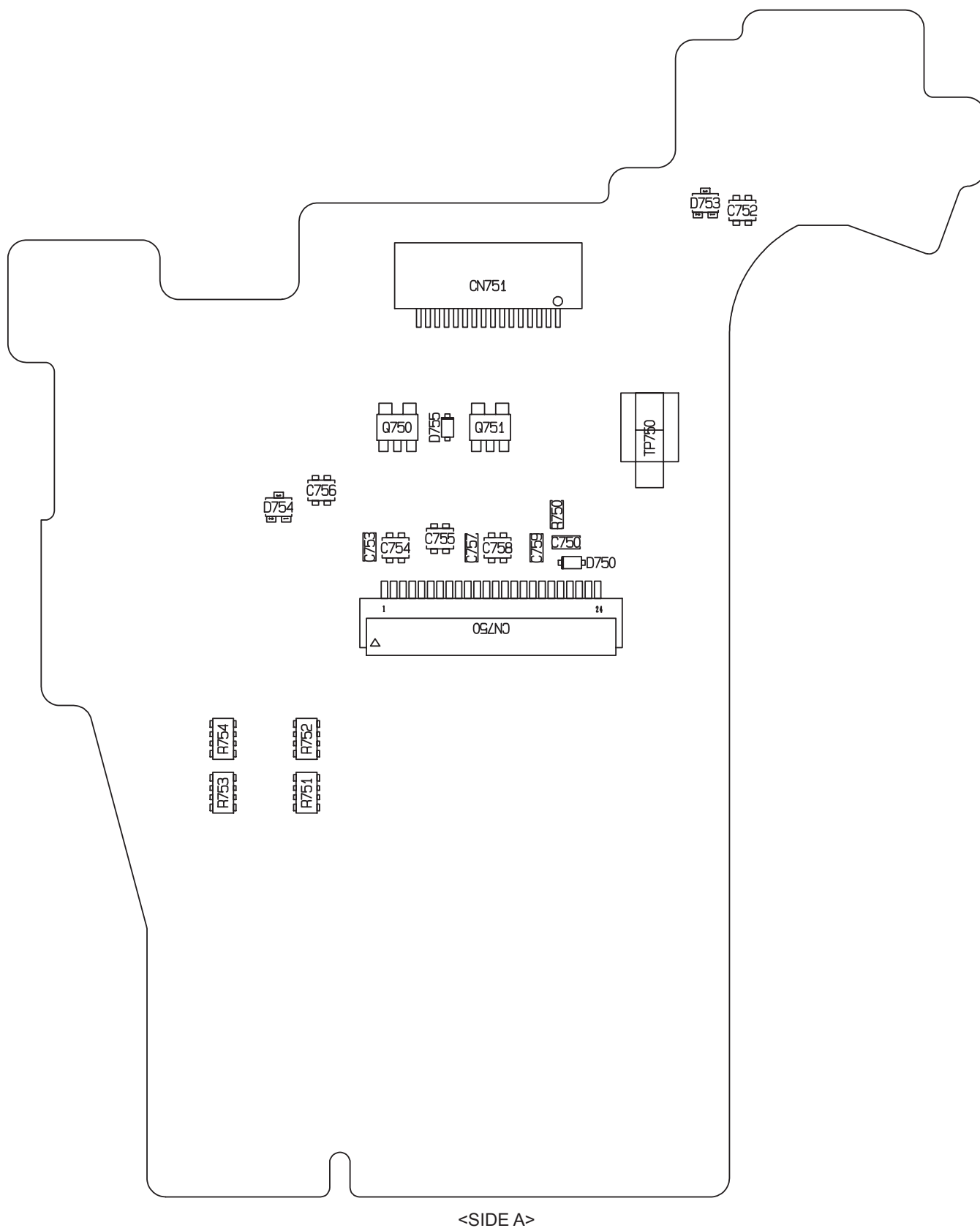


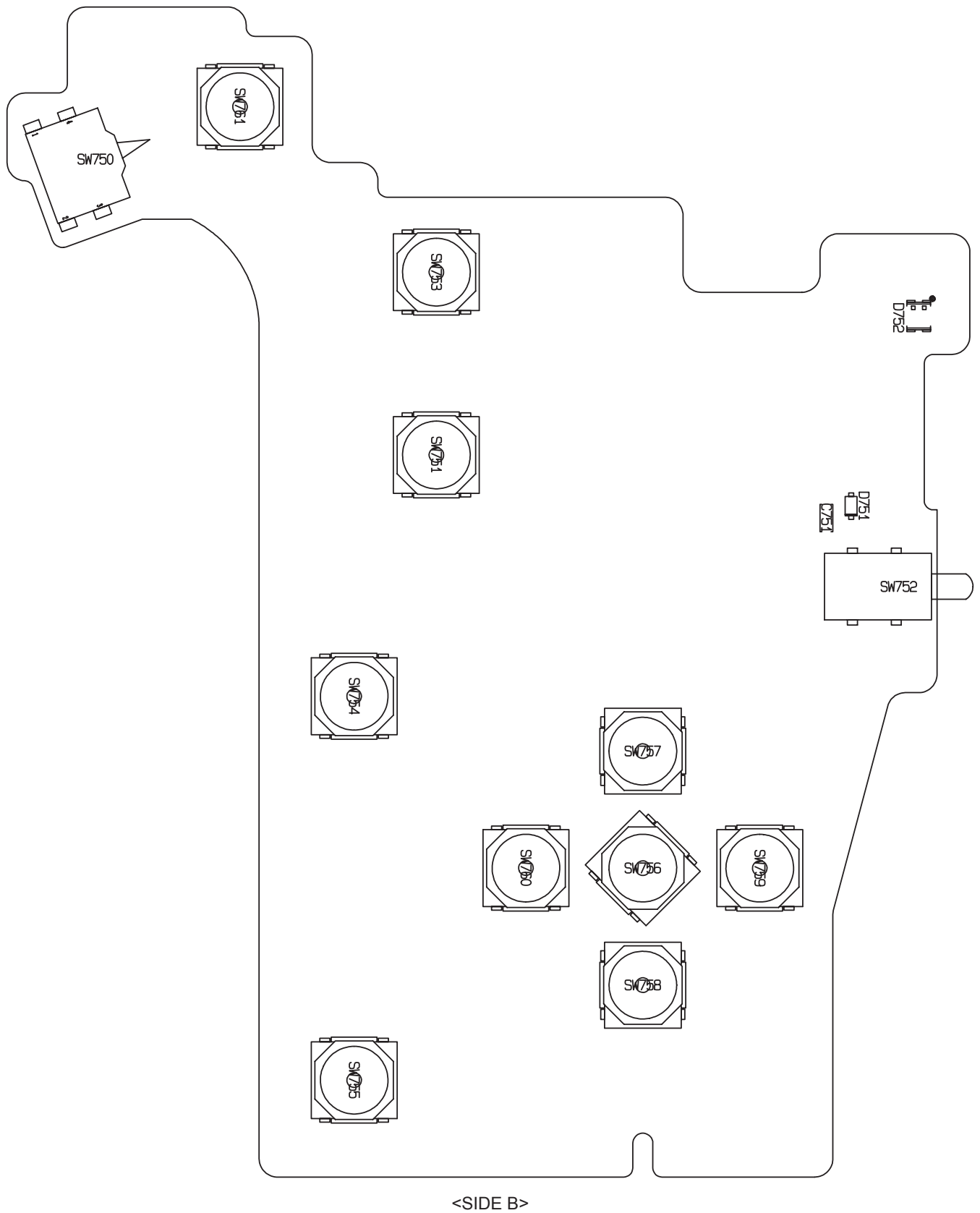
3-7. Mounted Parts Diagrams

3-7-1. CCD PWB ASSY

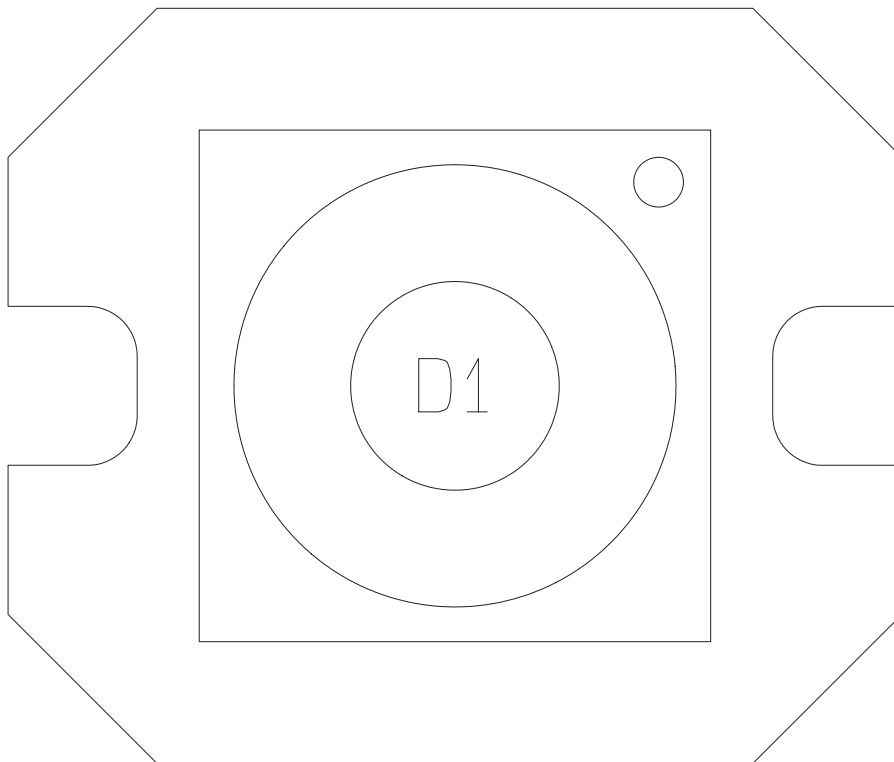


3-7-2. KEY PWB ASSY

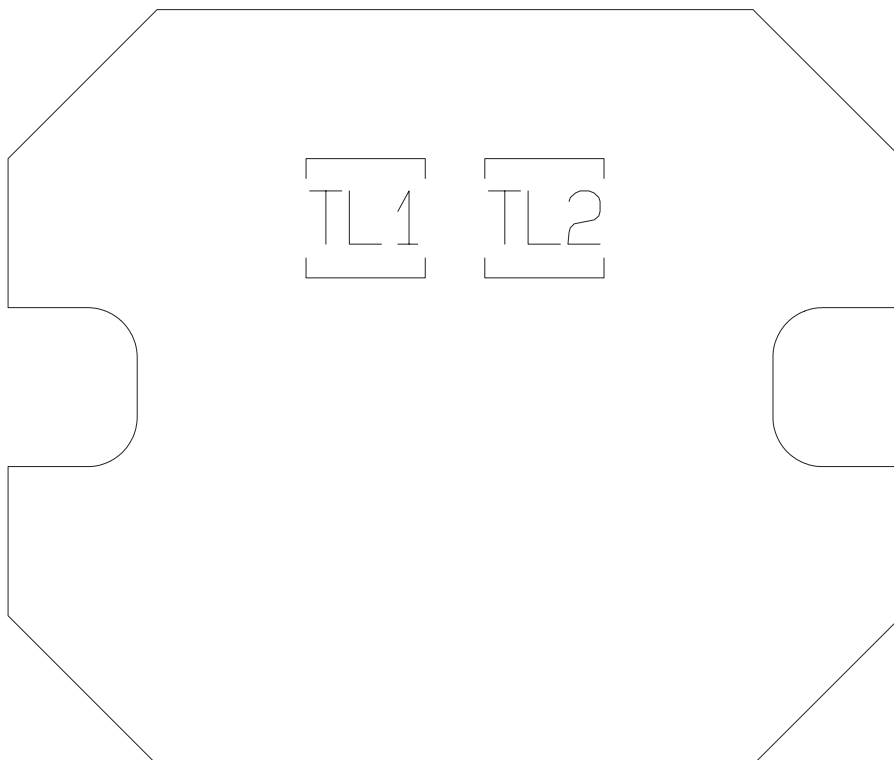




3-7-3. LED PWB ASSY

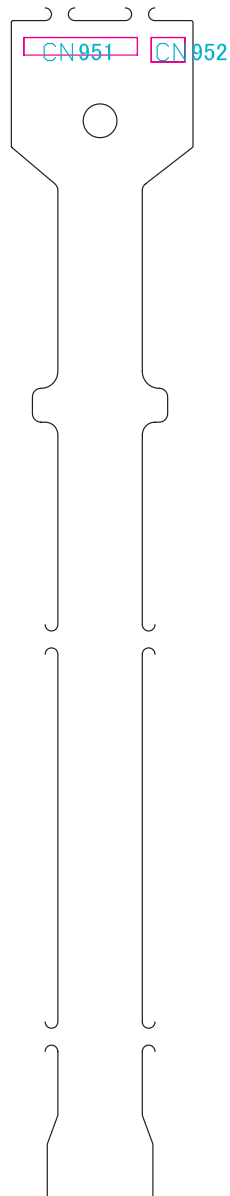


<SIDE A>

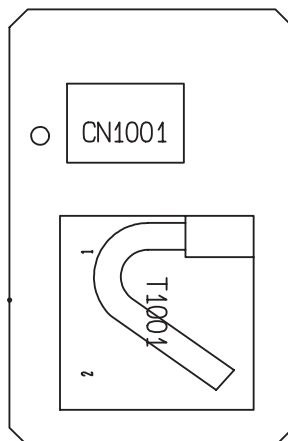


<SIDE B>

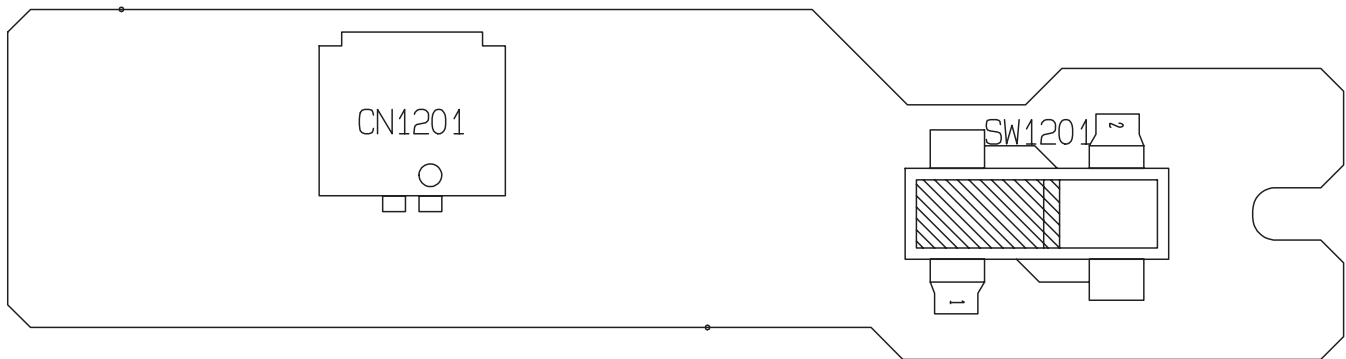
3-7-4. ML PWB ASSY



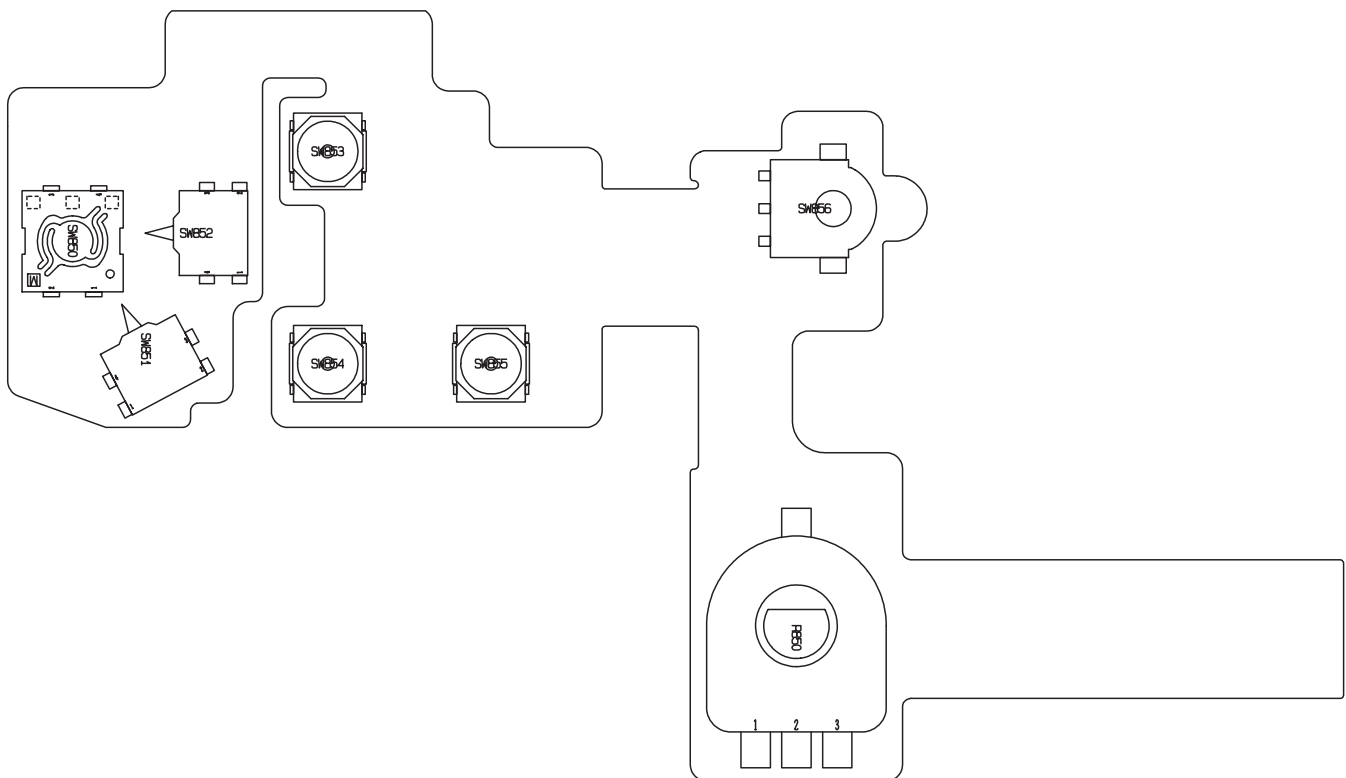
3-7-5. TRG PWB ASSY

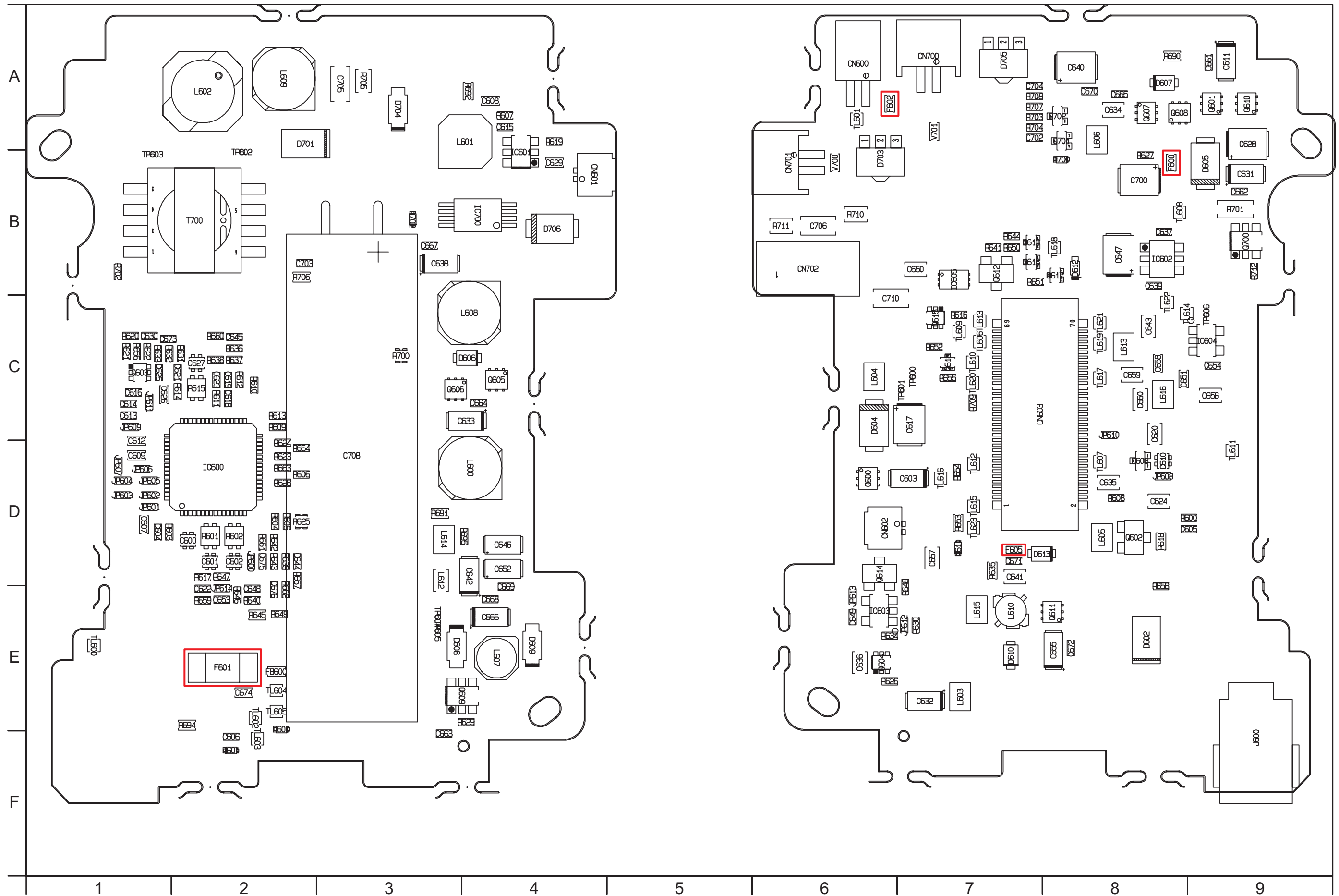


3-7-6. STSW PWB ASSY



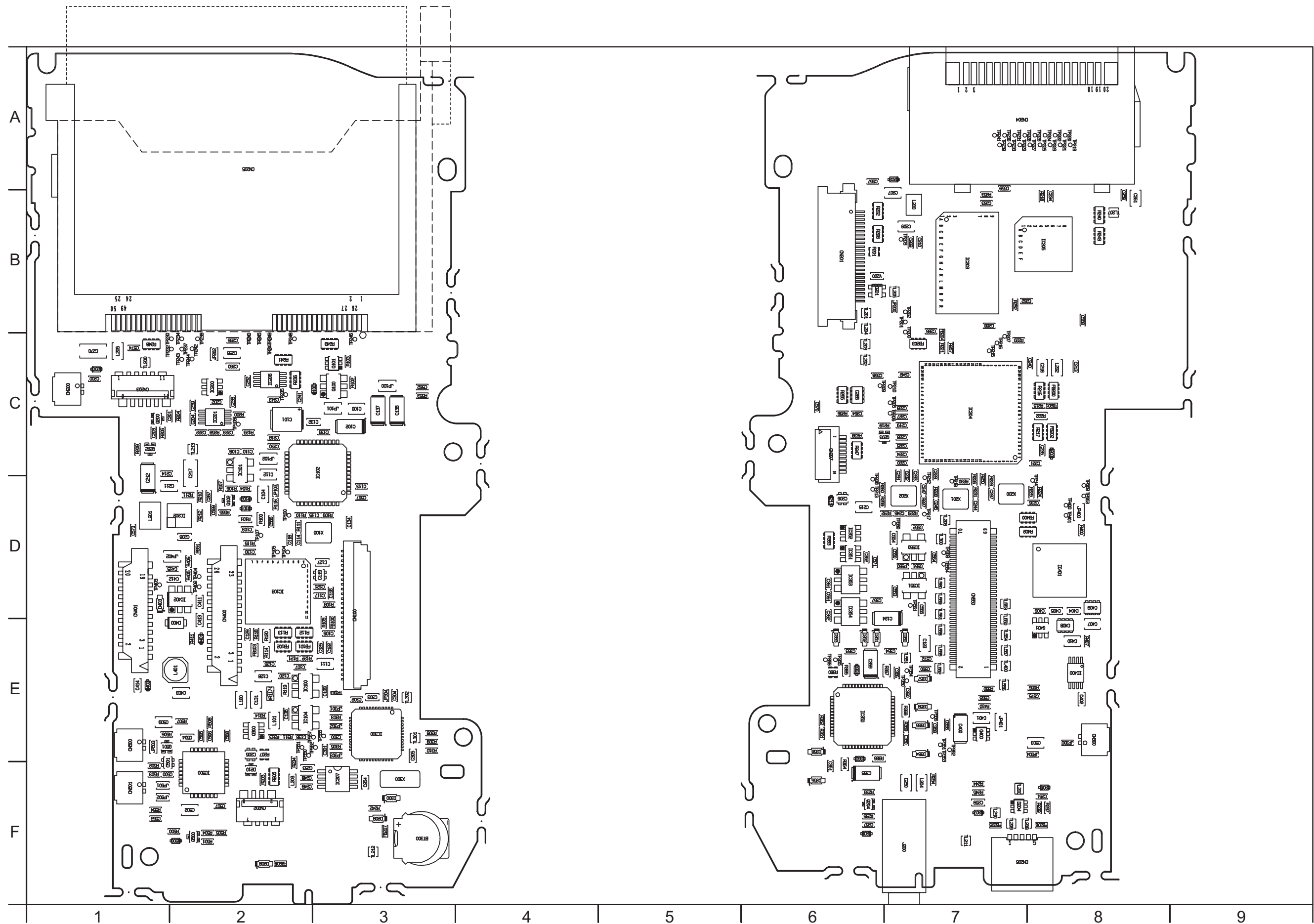
3-7-7. TOP PWB ASSY





3. Schematics

3-7-9. MAIN PWB ASSY



4. Adjustments

4-1. 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, DCST PWB, AF-SENSOR and FLASH CONST. (Other part replacements need not be adjusted.)

Replacing parts		LENS ASSY	MAIN PWB	DCST PWB	AF-SENSOR	FLASH CONST
0	Flash memory reset*		○			
1	AF-Sensor adjustment		○		○	
2	CCD Data Input	○	○			
3	Camera adjustment	○	○			
4	CCD Line Defect adjustment	○	○			
5	Shading compensation adjustment	○	○			
6	AF adjustment	○	○			
7	Flash adjustment	○	○	○		○
8	Battery adjustment	○	○	○		
9	Mode dial adjustment		○	○		
10	Video adjustment		○	○		
11	Firmware download	Do not use it until there is an instruction.				
12	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
xD-Picture Card (64MB or more)	For CCD Line Defect Adjustment
DPC-R1	For CCD Line Defect Adjustment

*1: PC condition

1. Hardware recommendation: **CPU;Pentium4 2.4GHZ** or better, **RAM;512MB** or more.

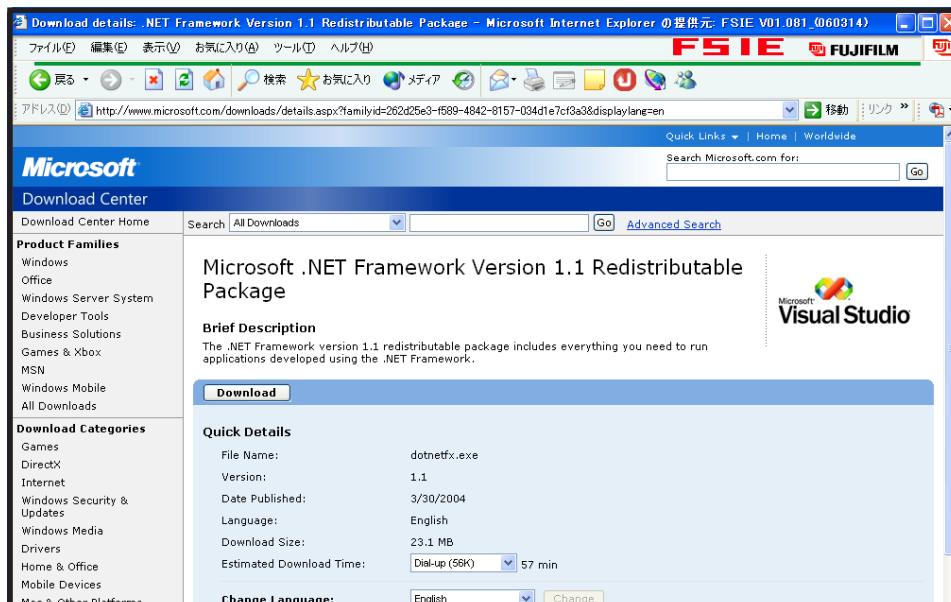
It might make an error of the adjustment when the performance of PC is low.

2. **Video Jig** 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 Sensor adjustment	Common with the 8mmVTR/MX600
ZJ00287-100	Conversion Lens(900mm)	AF Sensor adjustment	Common with the FinePix S7000
ZJ00009-100	Stand	AF Sensor 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
ZJ01001-100	FxS9100_9600 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
ZJ00929-100	CCD data for FinePix S9000_S9500	CCD Data Input	Common with the FinePix S9000/S9500 *1
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
ZJ00923-100	S9000/S9500 AF-1mV Chart	AF Sensor adjustment	Common with the FinePix S9000/S9500
ZJ00924-100	S9000/S9500 AF-1mH Chart	AF Sensor adjustment	Common with the FinePix S9000/S9500
ZJ00925-100	S9000/S9500 AF-70cm Chart	AF Sensor adjustment	Common with the FinePix S9000/S9500
ZJ00994-100	800mm conversion lens(SLB-50-800P)	AF adjustment	New Jig
ZJ00995-100	S9100/S9600 Multi-stripe chart	AF adjustment	New Jig
ZJ00971-100	AF Sensor attachment folder	AF Sensor adjustment	New Jig
ZJ00614-100	Tripod screw adaptor for X-Y stage	AF Sensor adjustment	Common with the FinePix M603

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

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

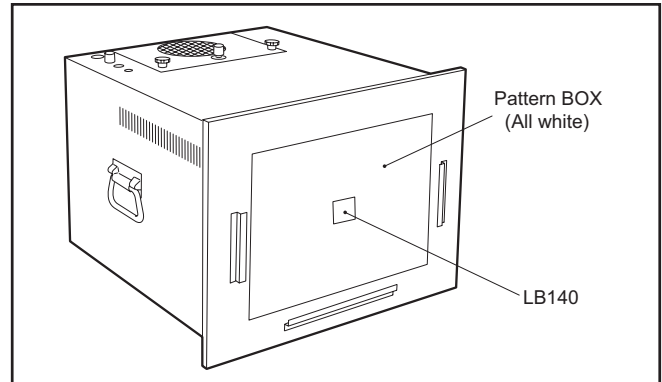
*3: S9000/9500 Zoom drive jig is a Jig by which the thing that the zoom position match of the shading compensation adjustment automatically does becomes possible. There is no necessity when shading compensation is adjusted by a manual match.

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.

- (1) Brightness:
 160±5cd/m² (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/m².



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

- (2) Color temperature:aa
 6100±50 K (with LB140 filter)
 No chart, center of pattern box
 Minolta color meter IIIIF 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 ± 50 K.

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.

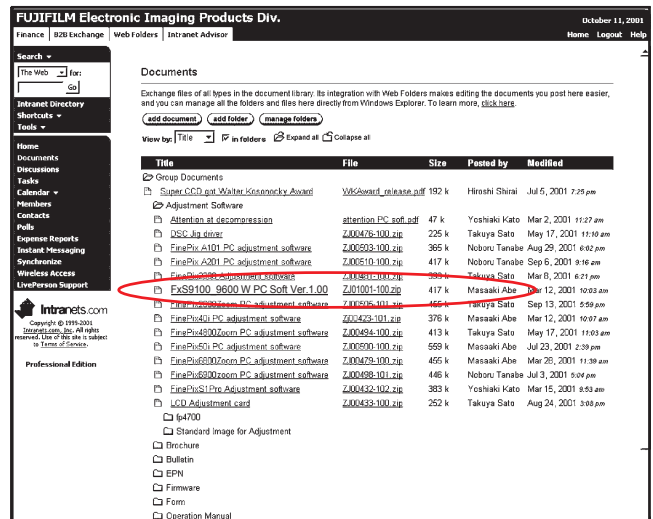
<Step1>

The adjustment software is downloaded from WEB, and software is installed in the PC.

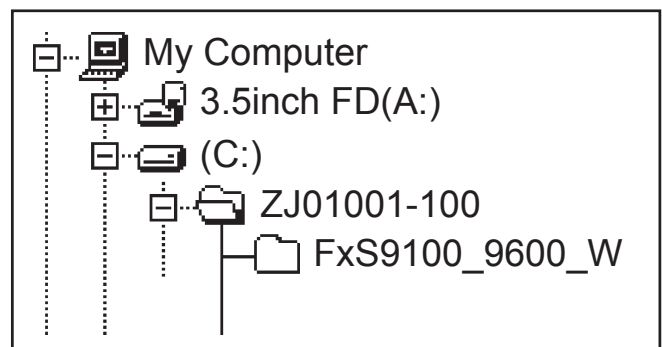
We have uploaded the “PC Adjustment Software (ZJ01001-100.zip) for “FxS9100_9600_W” on our website: (<http://fujifilm-di.intranets.com/>).

<Step2>

“ZJ01001-100” is a compression of “ZIP type” file. The “FxS9100_9600_W” folder can be done by extracting it by “Compression software”. Copy the “FxS9100_9600_W” folder to the “C” drive on the Adjustment PC.



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



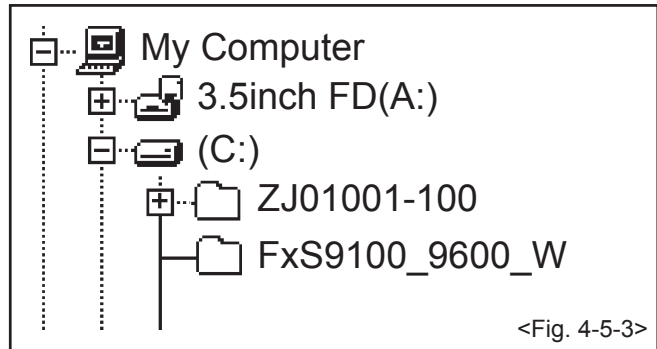
<Fig. 4-5-2>

<Step3>

When all the folders have been copied to the C:drive, double-click on [C:\ FxS9100_9600_W\ FFW.exe] to start the adjustment software.

(Note)

- * Specify the preservation drive for C drive if it is decompression 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 FxS9100_9600_W in folder named ZJ01001-100.

Please preserve the folder of FxS9100_9600_W and SU1875 right under C drive.

(b) Please do not change the foldername named FxS9100_9600_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>

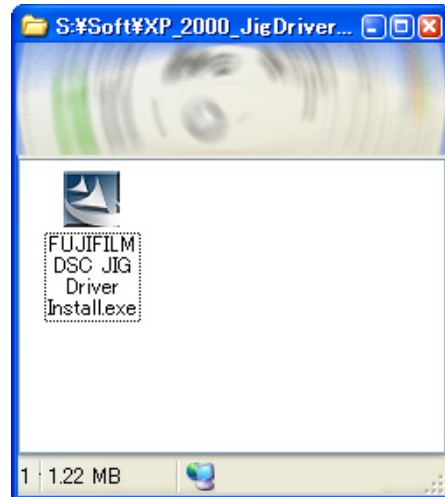
Defrost the downloaded compression software

<Step 3>

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

<Step 4>

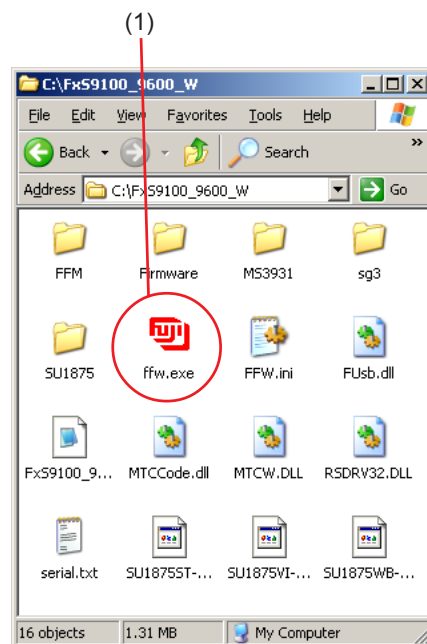
Install the software in [C:\ProgramFiles\Fjig] according to the instructions on the PC's screen.



<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:\FxS9100_9600_W\ffw.exe (Fig.4-5-5) to start the adjustment software.



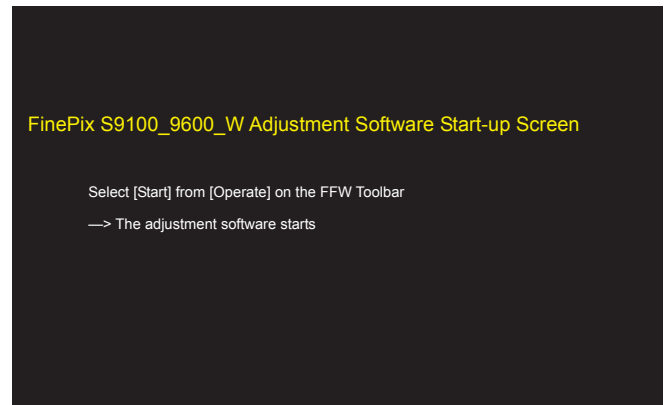
<Fig. 4-5-5>

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 (FxS9100_9600_W_0.ff). If the program is rewritten, the adjustment software will not startup.

<Step 1>

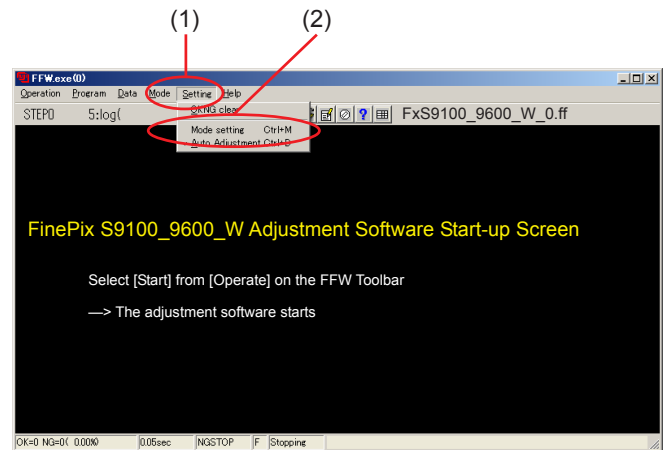
Double-click on the "FFW.exe" execute file of the adjustment software to open the "FinePixS9100_9600_W Adjustment Software Startup" screen (Fig. 4-6-1).



<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.



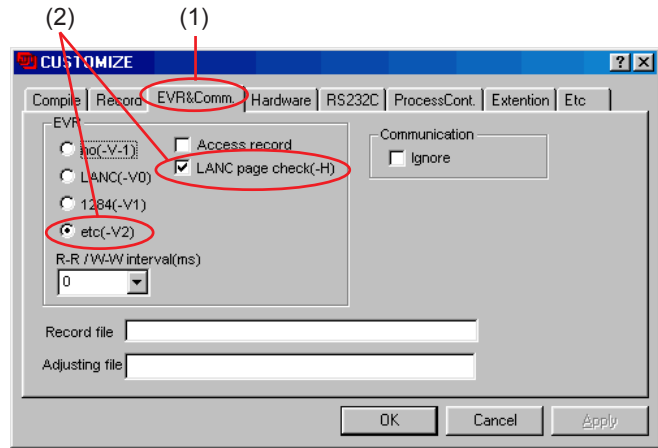
<Fig. 4-6-2>

4. Adjustments

<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>

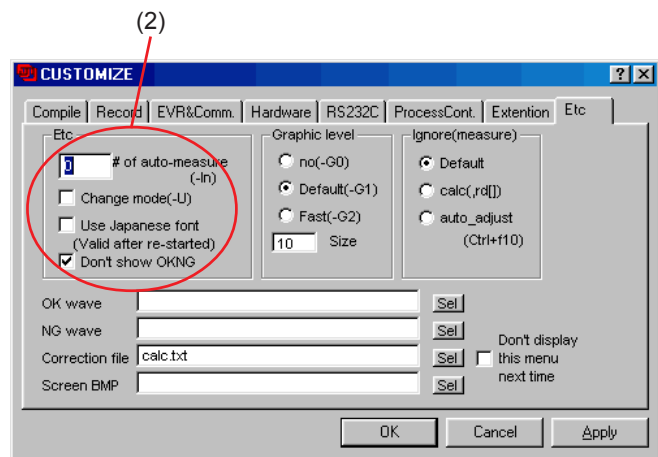
<Step 4>

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

[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).



<Fig. 4-6-4>

<Step 5>

Select the "Hardware" tab ([1] in Fig. 4-6-5) in the "Customize" dialog box that appears.
Input the values for PIO port ([2] in Fig. 4-6-5).

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

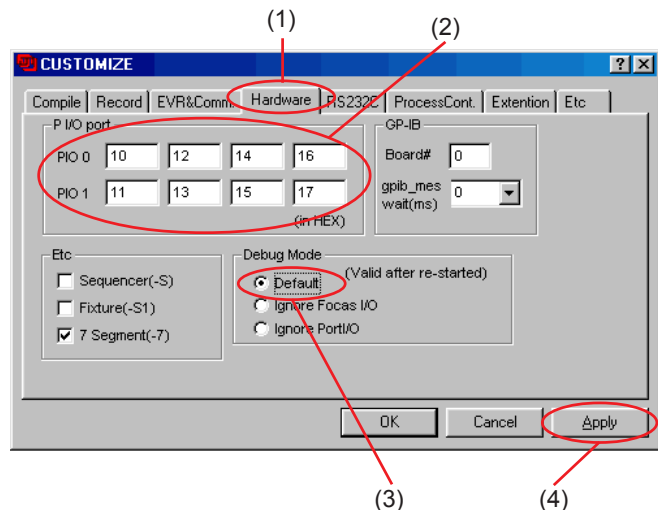
Set the "Hardware" items ([3] in Fig. 4-6-5) as follows.

Item	Details
Debug Mode	Select [Default]

<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.



<Fig. 4-6-5>

[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 CCD Line Defect and shading.

A zoom drive jig is not required for manual adjustment.

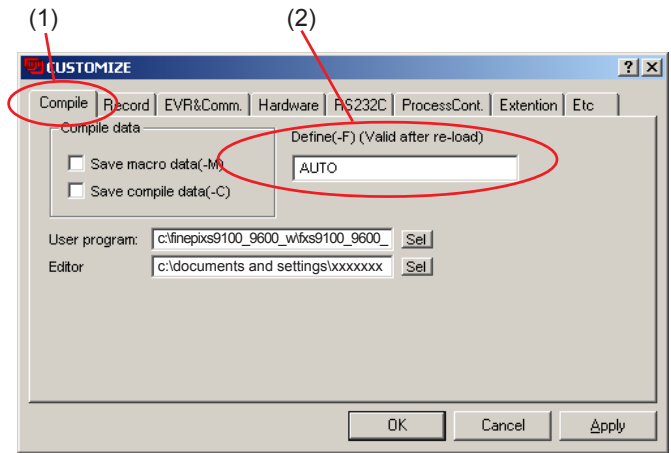
If no zoom drive jig is connected, leave the [Define (-F)] field blank. (If the [AUTO] setting is used, an error occurs when the calibration software is launched.)

<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

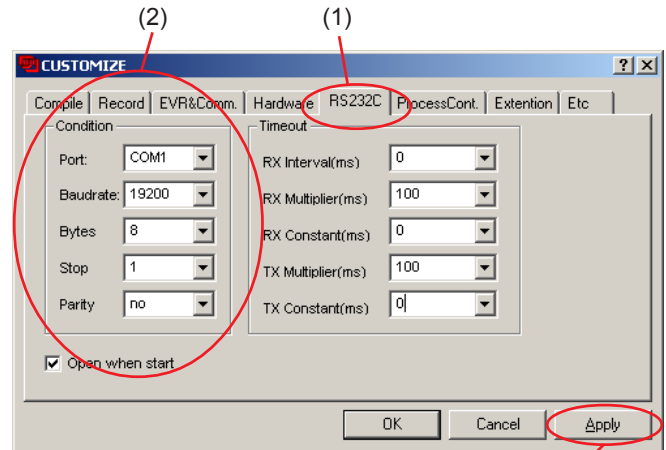


<Fig. 4-6-6>

<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>

(3)

<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.

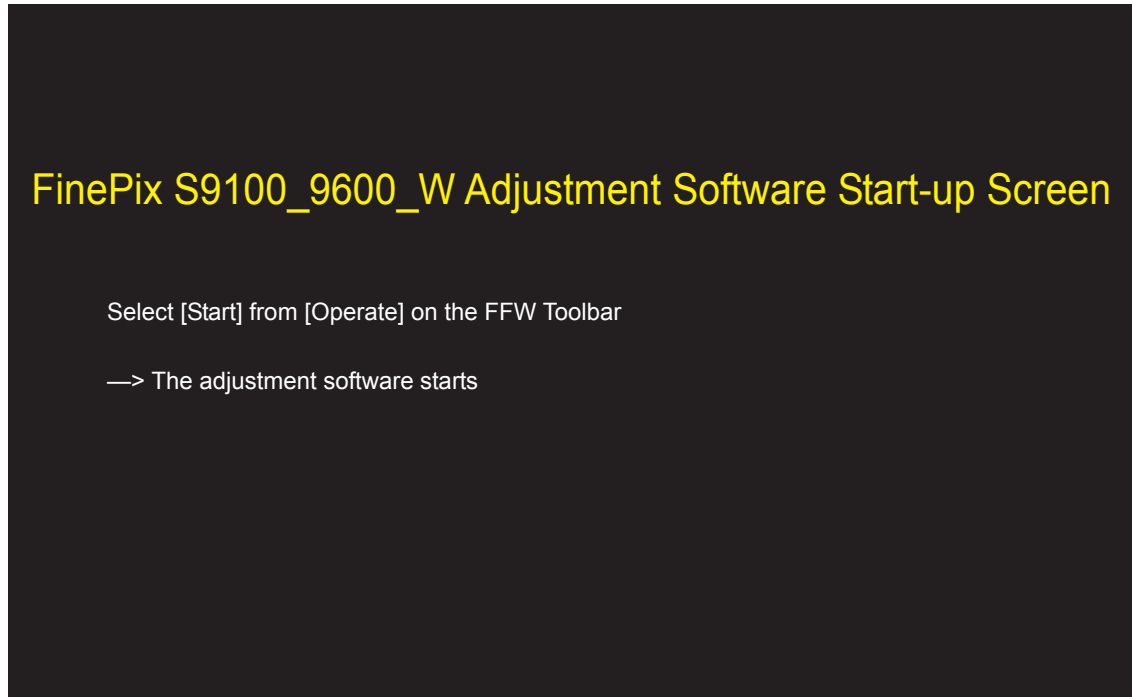
4-7. Starting the Adjustment Software

<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>

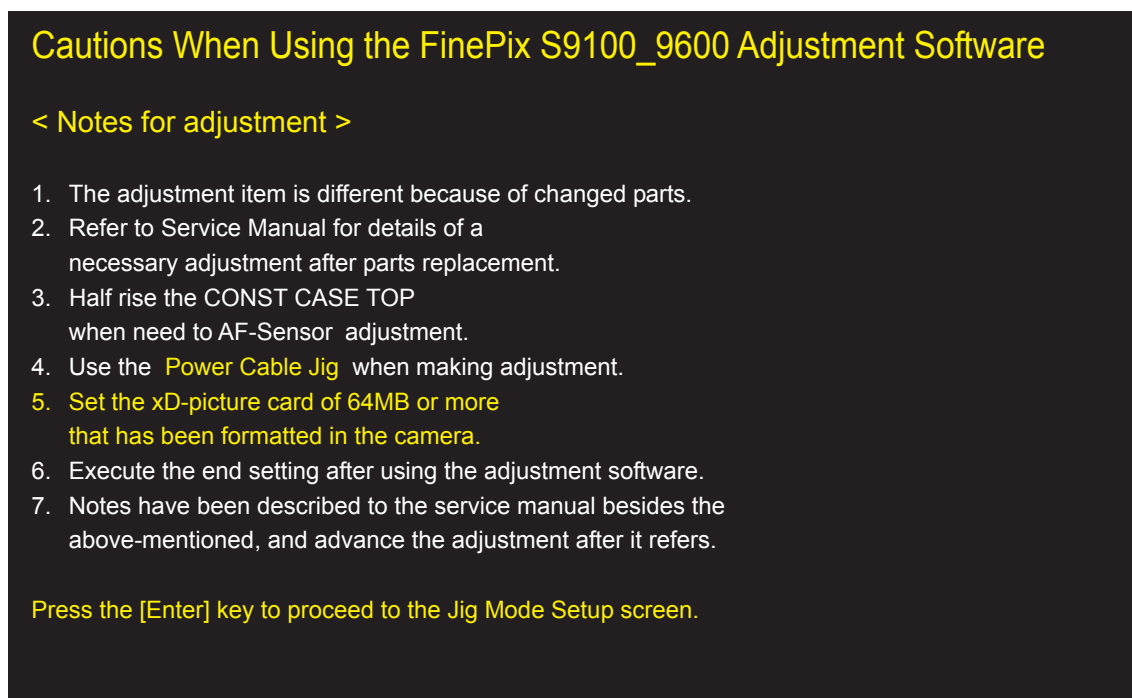
Run the adjustment in accordance with the instructions on the screen.



<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>

FinePix S9100_9600_W Adjustment Software

< Camera Jig Mode Setup Procedure >

1. Set the mode to the [AUTO] mode.
2. Open the Card cover.
3. Connect the USB cable.
4. Supply 5.0+-0.1V to the camera using the [DC Jack cable] as appropriate for the adjustment details.
5. Switch camera power ON while pressing the shutter button.
6. Ensure that the LED is lit.

When steps 1 to 6 are complete, press the [Enter] key on the PC.

<Fig. 4-7-3>

—> The [Firmware version check] screen appears.

<Step 5>

FirmWare = 1.06

Vendor Name =FUJIFILM
Manufacturer =FUJIFILM
ProductName =FinePix S9100
Device Type =CAMERA
SerialNo =592D313139370605187AB0100438E1
Frame Work =1.00

Please download a new version if it is necessary to download the firmware.

Advance to the adjustment item selection screen when press the [Enter] Key of PC.

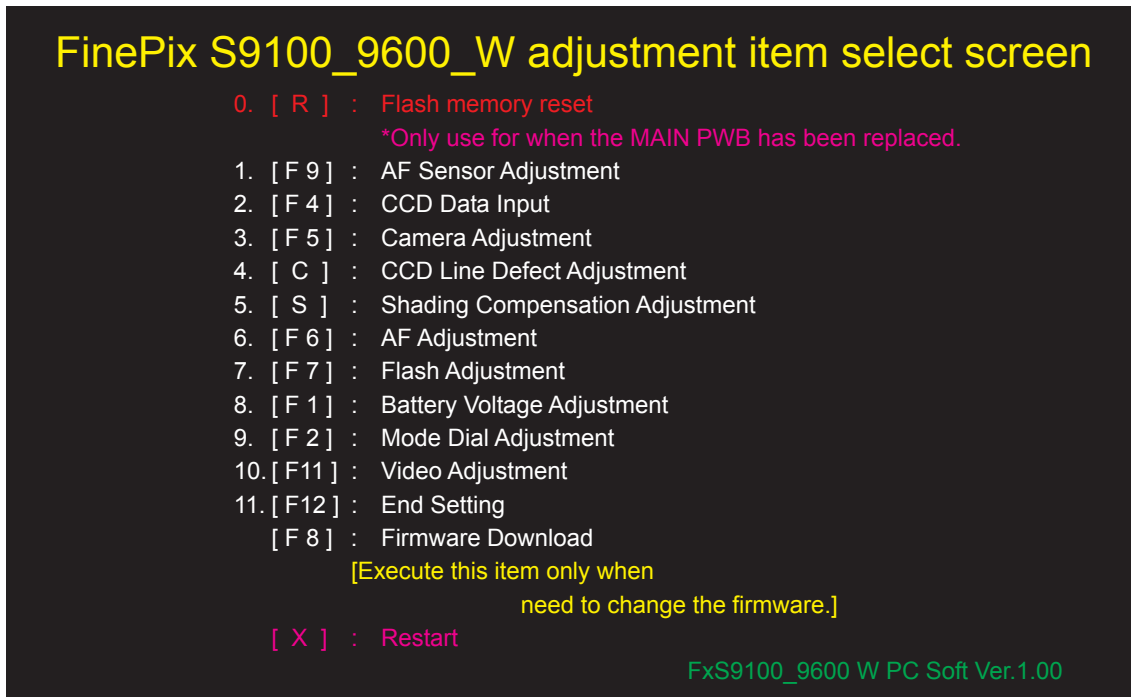
<Fig. 4-7-4>

—> 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) 'FxS9100_9600 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 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.

<Step 1>

In the adjustment item selection screen, select [R]: Reset flash memory.

-->The flash memory reset confirmation screen appears.

Flash memory reset (EVR)

< Attention >

When the MAIN PWB ASSY has been replaced, always reset the flash memory before making any other adjustments.

Only reset the flash memory when the MAIN PWB ASSY has been replaced. 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.)

Enter [RESET] from the PC keyboard.

<Fig. 4-8-1>

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

<Step 2>

Flash memory reset (EVR)

< Attention >

When the MAIN PWB ASSY has been replaced, always reset the flash memory before making any other adjustments. Only reset the flash memory when the MAIN PWB ASSY has been replaced. 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.)

Enter [RESET] from the PC keyboard.

RESET

Input is completed.
Press the "Enter" key to reset the flash memory.

<Fig. 4-8-2>

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

<Step 3>

Flash Memory Reset is completed

- (1) Remove the DC jack cable from the camera.
- (2) Press the [Enter] key.

<Fig. 4-8-3>

4-9. [F9] : AF-Sensor Adjustment

< Setup for AF-Sensor Adjustment >

- (1) Prepare as follows using non-defective equipment.
- (2) Mount the camera on a tripod, and place the S9000/S9500 AF-1mV Chart (for 1005mm) at a distance of **1005mm** from the front face of the AF-Sensor window.
- (3) Set the camera power lever to the Photography mode, and display the through screen on the TV monitor.
- (4) Set the lens position to **TELE END**.
- (5) Adjust the camera position so that the AF target symbol (yellow) displayed on the TV monitor overlaps the 'Red circle' symbol near the center of the 9000/S9500 AF-1mV chart (for 1005mm).
- (6) Attach an OHP sheet to the TV monitor.
- (7) Place a mark in the center of the target mark displayed on the TV monitor.
- (8) Draw a circle on the OHP sheet with the marked point as the center.

The size of the circle will differ from the TV monitor used. The circle sizes for the various TV monitors are as follows.

14" to 16" : 5mm radius

17" to 19" : 6mm radius

20" to 21" : 7mm radius

- (9) This completes preparations for AF-Sensor Adjustment.

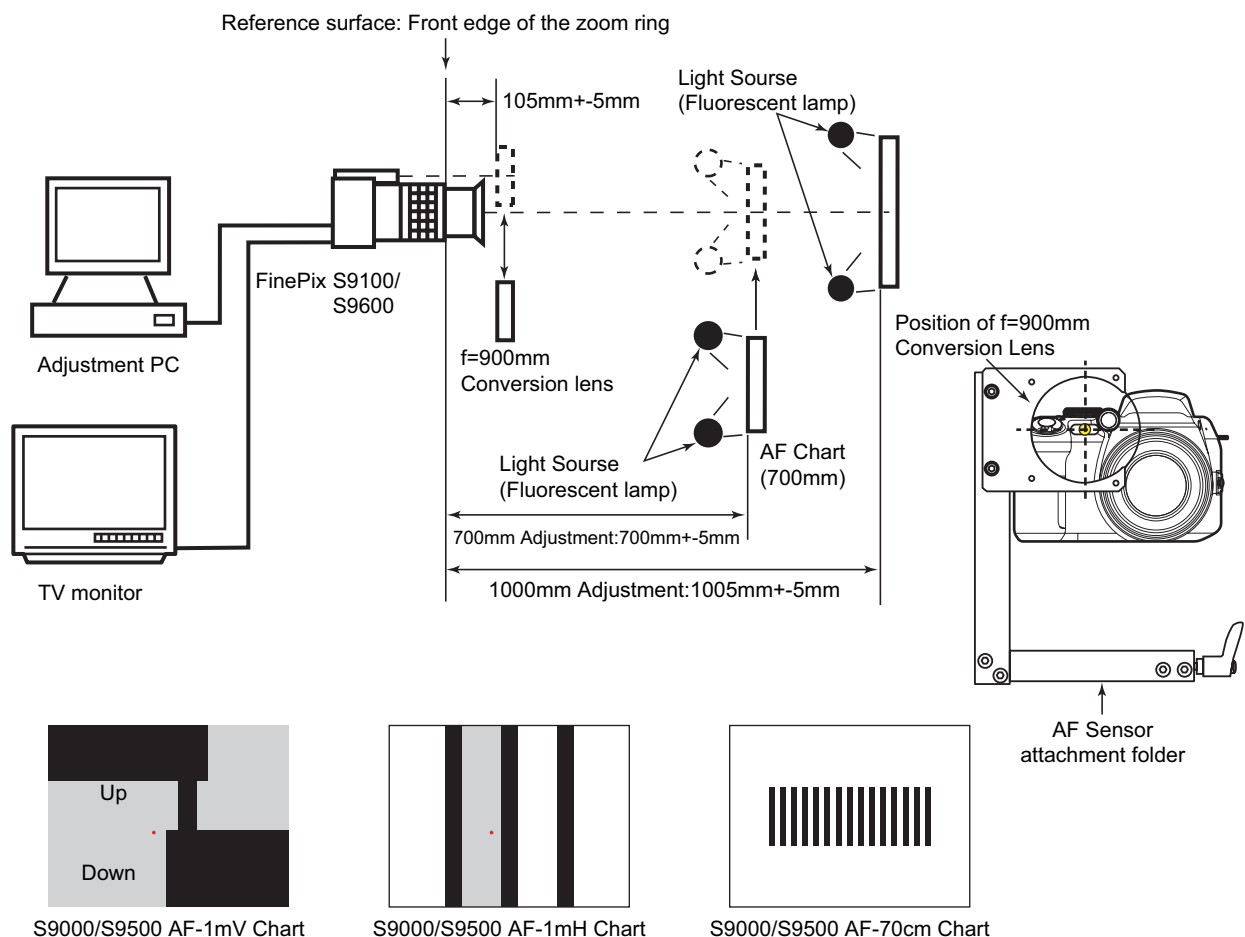
<Environmental Settings for AF-Sensor Adjustment >

- (1) Set up the conversion lens (f=900 mm) and the two types of AF-Sensor chart as shown below.
- (2) Illuminate the AF-Sensor chart (1000mm) using one or two light sources. Adjustment is impossible if the illumination does not match.

The distance between the light sources and the AF-Sensor chart must be approximately 5cm.

AF-Sensor chart reflective luminance : 7.0Ev to 9.0Ev

- (3) Place the conversion lens concentric with the front face of the AF-Sensor window.
- (4) If the center of the conversion lens and the center of the AF-Sensor window are significantly misaligned, an error will occur during AF-Sensor Adjustment, and adjustment will become impossible.



<Cautions During Adjustment>

Adjust the AF-Sensor when the AF-Sensor unit detaches or replaces it from the camera.

As the accuracy of AF distance measurement with the AF-Sensor unit changes with temperature, this adjustment should be performed immediately after the camera power supply is switched ON.

Errors will occur, and adjustment will become impossible, if adjustment is performed after the internal temperature of the camera has increased to 35°C or more.

If an adjustment error is displayed when the 900mm conversion lens is used, switch camera power OFF, wait, and perform the adjustment again.

Purpose: Mechanical adjustment in the horizontal and vertical directions of the AF-Sensor (passive) in relation to the optical axis of the lens assembly.

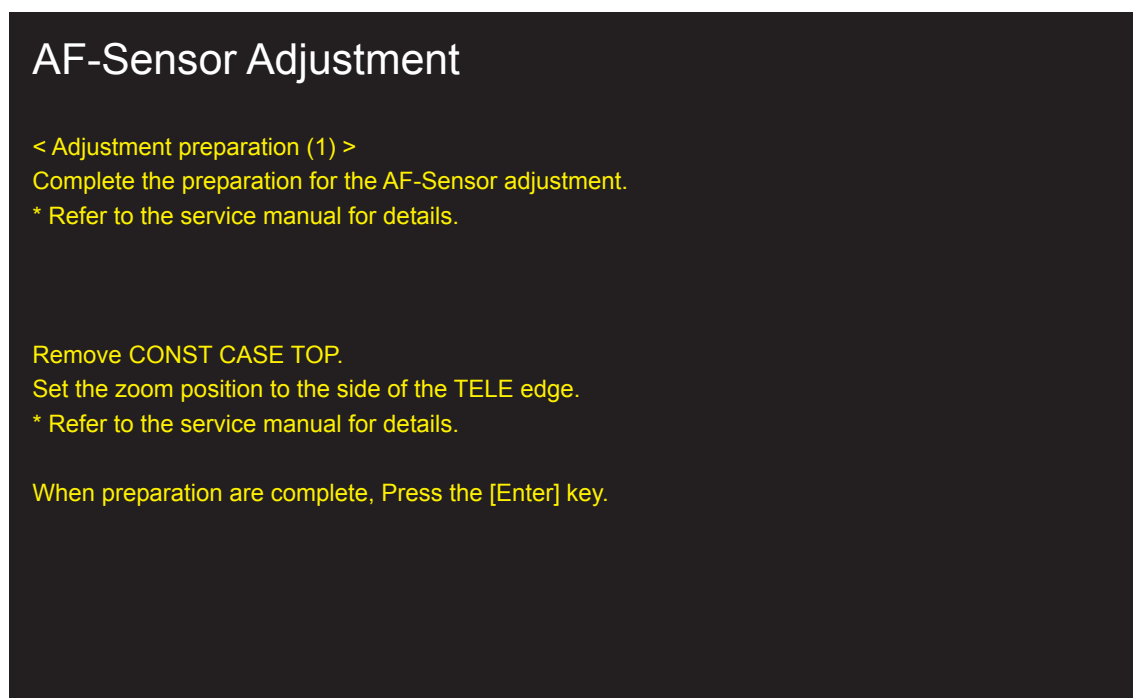
<Step 1>

Select [F9] from the [Adjustment Items Select Screen]. (press [F9] on the PC keyboard)

--> The [AF-Sensor adjustment Screen (Fig. 4-9-1)] appears.

<Step 2>

When preparations are complete, press the Enter key.



<Fig. 4-9-1>

--> The [AF-Sensor vertical Adjustment Screen (Fig. 4-9-2)] appears.

<Step 3>

When preparations are complete, press the Enter key.

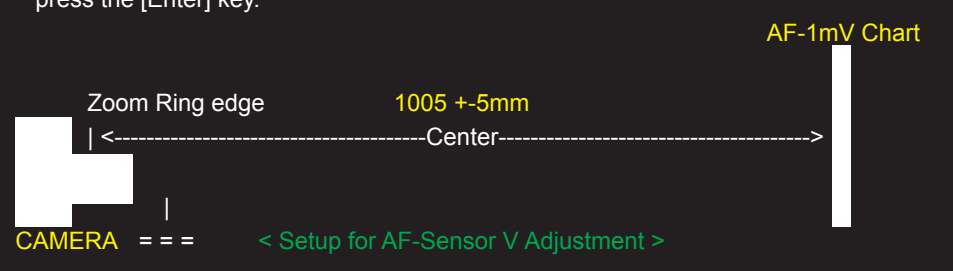
AF-Sensor vertical Adjustment

(1) Place the S9000/S9500 AF-1mV Chart at a distance of 1005±5mm from the Zoom-Ring edge.

(2) Don't set the conversion lens yet.

(3) Set the zoom position to the side of the TELE edge.

When preparations (1) - (3) are complete, press the [Enter] key.



CAMERA === < Setup for AF-Sensor V Adjustment >

<Fig. 4-9-2>

--> The [AF-Sensor Sensor vertical Adjustment Screen (Fig. 4-9-3)] appears.

Caution:

When adjusting the camera, measure distance from the front face of the Focus ring.

<Step 4>

Adjust the screen angle so that the 'Red circle' symbol displayed on the TV monitor is within the circle.

When preparations are complete, press the Enter key.

AF-Sensor vertical Adjustment

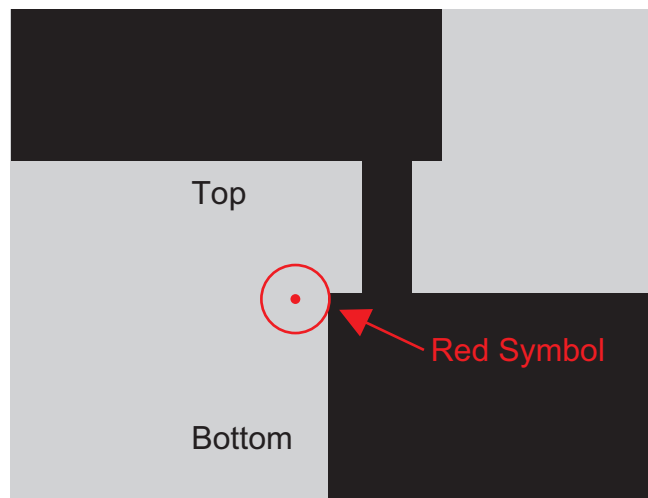
< Adjustment preparation >

Confirm Red circle of the AF-1mV Chart displayed in the TV monitor is in the round sign made in the TV monitor.

When preparation is complete, press the [Enter] key.

<Fig. 4-9-3>

--> The [AF-Sensor vertical Adjustment Screen (Fig. 4-9-4)] appears.



S9000/S9500 AF-1mV Chart (1000mm): Expansion

<Step 5>

Adjust the AF-Sensor by turning the AF-Sensor Adjustment screw (**silver colored**) with a **+** screwdriver in accordance with the instructions from the adjustment software.

AF-Sensor vertical Adjustment

THRE1	=	146		
MAX	=	195	MAX	= 195
MIN	=	130	MIN	= 133

Turn the AF-Sensor vertical adjustment screw.
 Press the [Enter] of PC when the adjustment is completed.

TURN CCW

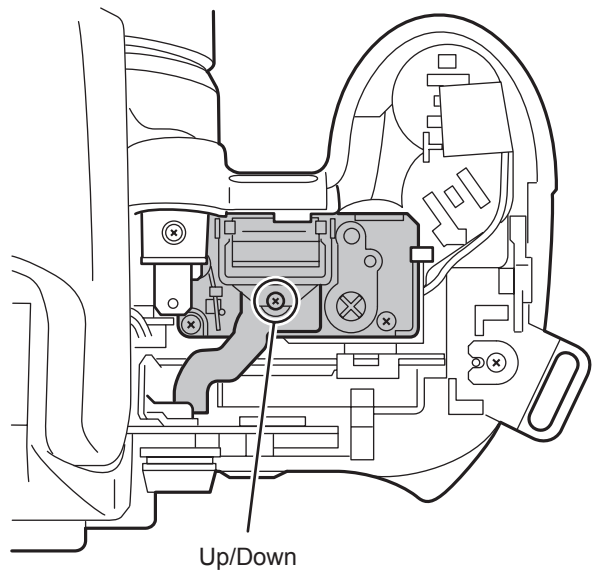
Press [0]key of PC when you cannot complete the adjustment.

<Fig. 4-9-4>

Turn the adjustment screw while viewing the WAVE No.0 screen to increase the speed of adjustment.



WAVE No.0 screen



Position of AF-Sensor Adjustment Screw

When [Adjustment OK!] appears on the screen, press the [Enter] key on the PC and make adjustment preparations in accordance with the instructions from the adjustment software.

AF-Sensor vertical adjustment

THRE1	=	146		
MAX	=	195	MAX	=
MIN	=	129	MIN	=
				132

Turn the AF-Sensor vertical adjustment screw.
Press the [Enter] of PC when the adjustment is completed.

OK!

Press [0]key of PC when you cannot complete the adjustment.

<Fig. 4-9-5>

--> The [AF-Sensor horizontal adjustment Screen (Fig. 4-9-6)] appears.

<Step 6>

AF-Sensor horizontal Adjustment

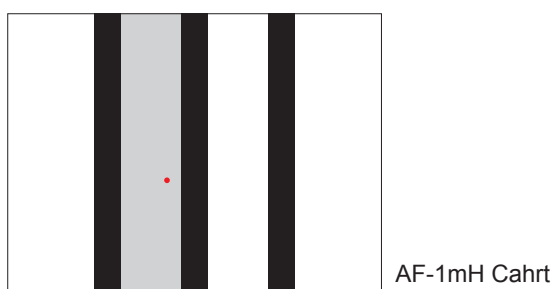
- (1) Change the S9000/S9500 AF-1mH Chart at a distance of 1005+-5mm from the Zoom-Ring edge.
- (2) Don't set the conversion lens yet.
- (3) Set the zoom position to the side of the TELE edge.

When preparations (1) - (3) are complete, press the [Enter] key.

CAMERA = = = < Setup for AF-Sensor H Adjustment >

<Fig. 4-9-6>

--> The [AF-Sensor horizontal adjustment Screen (Fig. 4-9-7)] appears.



<Step 7>

AF-Sensor horizontal adjustment

THRE1	=	137		
MAX	=	194	MAX	= 194
MIN	=	109	MIN	= 116

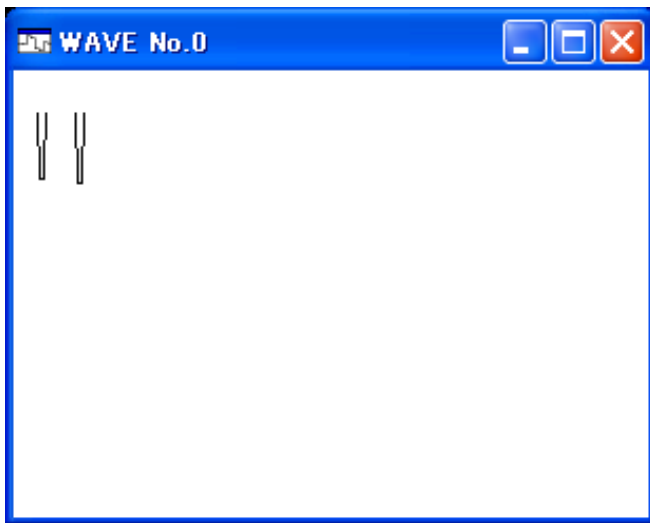
Turn the AF-Sensor horizontal adjustment screw.
 Press the [Enter] of PC when the adjustment is completed.

TURN CW

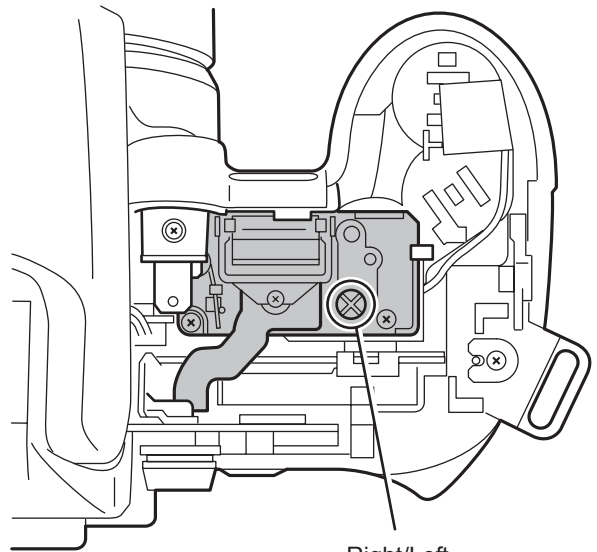
Press [0]key of PC when you cannot complete the adjustment.

<Fig. 4-9-7>

Turn the adjustment screw while viewing the WAVE No.0 screen to increase the speed of adjustment.



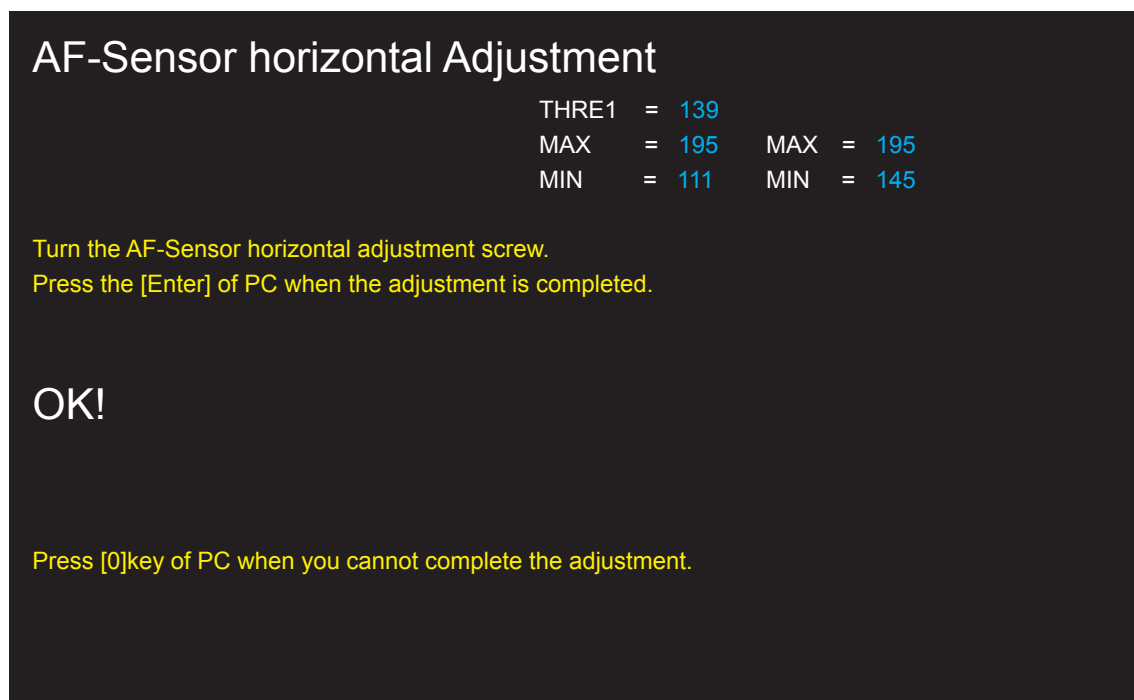
WAVE No.0 screen



Right/Left

Position of AF-Sensor Adjustment Screw

When [Adjustment OK!] appears on the screen, press the [Enter] key on the PC and make adjustment preparations in accordance with the instructions from the adjustment software.



<Fig. 4-9-8>

--> The [AF-Sensor right and left difference adjustment (Fig. 4-9-9)] appears.

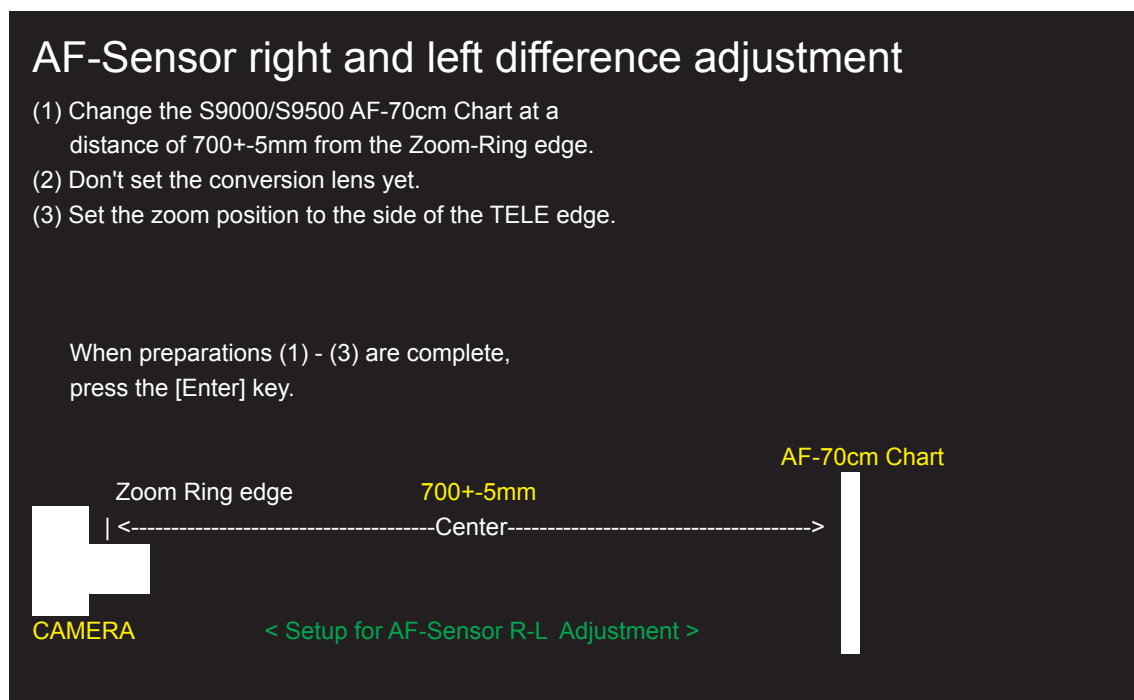
<Step 8>

Prepare the AF sensor right and left difference adjustment according to the instruction of the adjustment software.

AF-70cm chart setup distance : 700mm+/-5mm from front Zoom-Ring edge.

Chart surface reflective luminance : 7.0Ev to 9.0Ev.

Press the Enter key.



<Fig. 4-9-9>

--> The [AF-Sensor Linearity adjustment Screen (Fig. 4-9-10)] appears.

<Step 9>

Prepare the AF sensor Linearity adjustment according to the instruction of the adjustment software.

AF-1mH chart setup distance : 1005mm+/-5mm from front Zoom-Ring edge.

Chart surface reflective luminance : 7.0Ev to 9.0Ev.

Press the Enter key.

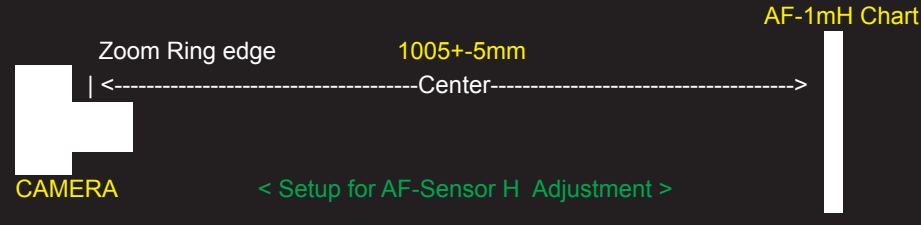
AF-Sensor Linearity adjustment

(1) Change the S9000/S9500 AF-1mH Chart at a distance of 1005+/-5mm from the Zoom-Ring edge.

(2) Don't set the conversion lens yet.

(3) Set the zoom position to the side of the TELE edge.

When preparations (1) - (3) are complete, press the [Enter] key.

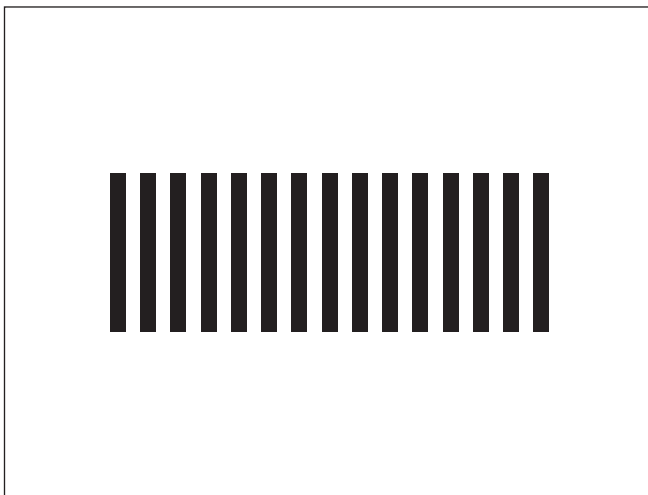


CAMERA

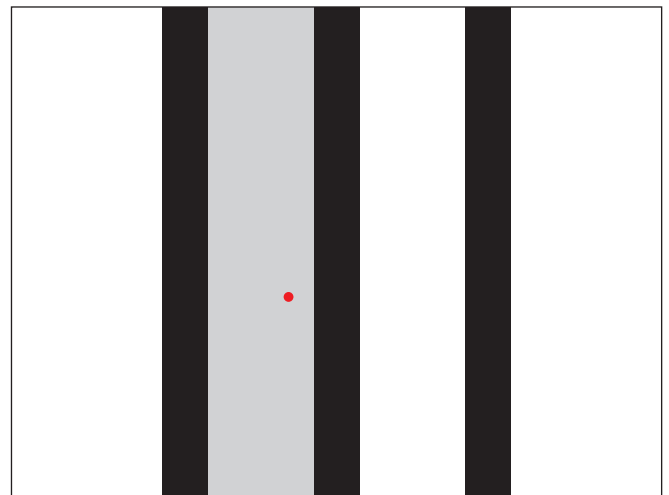
< Setup for AF-Sensor H Adjustment >

<Fig. 4-9-10>

--> The [AF-Sensor Linearity adjustment (900mm) (Fig. 4-9-11)] appears.



AF-70cm <Step 8>, <Step 11>



AF-1mH <Step 9>, <Step 10>

<Step 10>

Prepare the AF sensor Linearity adjustment (900mm) according to the instruction of the adjustment software.

900mm conversion lens setup distance : 105mm+/-5mm from Zoom-Ring edge.

Chart surface reflective luminance : 7.0Ev to 9.0Ev.

Press the Enter key.

If an adjustment error is displayed, turn the camera off for some time and then perform the adjustment again.

AF-Sensor Linearity adjustment

- (1) Set the 900mm conversion lens at a distance of 105+/-5mm from the Zoom-Ring edge.
- (2) Set the zoom position to the side of the TELE edge.

When preparations (1) - (2) are complete, press the [Enter] key.

The diagram shows a camera on the left and an AF-1mH Chart on the right. A conversion lens is positioned between them. A dashed line indicates a distance of 105 +/- 5mm from the Zoom-Ring edge to the center of the conversion lens. Another dashed line indicates a distance of 1005 +/- 5mm from the center of the conversion lens to the center of the AF-1mH Chart. The text 'CAMERA = = =' is at the bottom left, and '< Setup for AF-Sensor L Adjustment >' is at the bottom center.

<Fig. 4-9-11>

--> The [AF-Sensor right and left difference adjustment (Fig. 4-9-12)] appears.

<Step 11>

Adjust the AF sensor right and left difference again according to the instruction of the adjustment software.

AF-70cm chart setup distance : 700mm+/-5mm from front Zoom-Ring edge.

Chart surface reflective luminance : 7.0Ev to 9.0Ev.

Press the Enter key.

AF-Sensor right and left difference adjustment

- (1) Change the S9000/S9500 AF-70cm Chart at a distance of 700+/-5mm from the Zoom-Ring edge.
- (2) Don't set the conversion lens yet.
- (3) Set the zoom position to the side of the TELE edge.

When preparations (1) - (3) are complete, press the [Enter] key.

The diagram shows a camera on the left and an AF-70cm Chart on the right. A vertical line marks the Zoom Ring edge. A dashed line indicates a distance of 700 +/- 5mm from the Zoom Ring edge to the center of the AF-70cm Chart. The text 'CAMERA' is at the bottom left, and '< Setup for AF-Sensor R-L Adjustment >' is at the bottom center.

<Fig. 4-9-12>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.

--> The [AF-Assist light adjustment complete Screen (Fig. 4-9-13)] appears.

<Step 12>

The AF-Sensor adjustment is completed.

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

<Fig. 4-9-13>

4-10. [F4] : CCD Data Input

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

[Method of acquiring CCD data]

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

<Step 1>

Read the serial number of LENS ASSY.
The numbers shown at right are as follows.
First line: 05001A0 (seven digits)
Bottom line: +0179AC+ (eight digits)

The name of the CCD data file containing this number is "50010179.dat".

- * Use the 2-5th digit from the first line.
- * Use the 1-4th digit from the Bottom line.

Cautions:

- 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.
- 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.
- 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 [ZJ00929-100] in the CCD defect data folder, and download "5001.zip".

<Step 3>

Decompress "5001.zip".
--> "5001 folders" including "50010179.dat" is made.

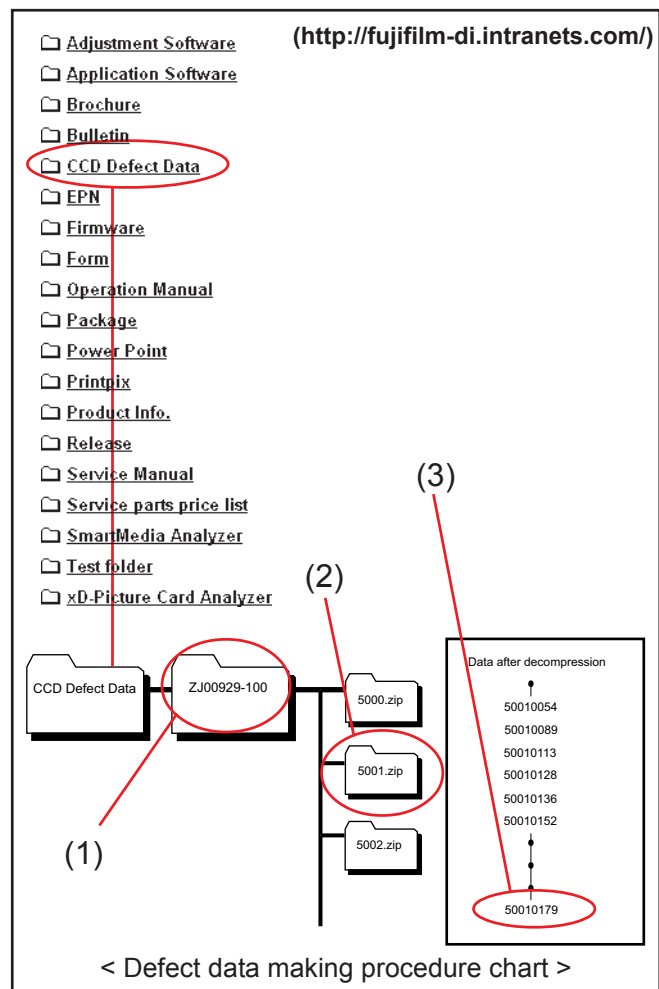
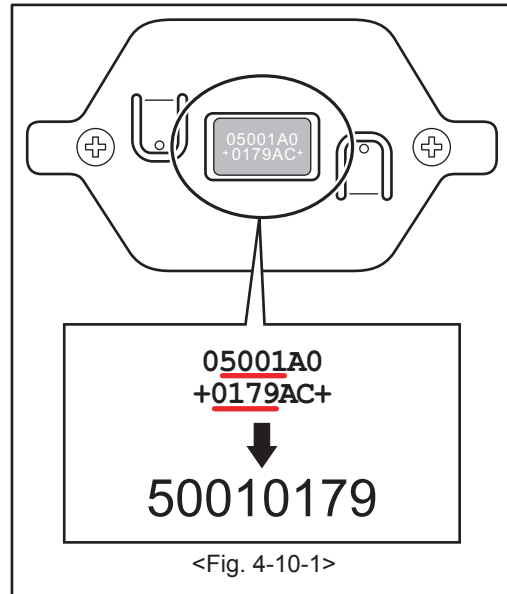
<Step 4>

Insert a writable floppy disk into the floppy disk drive on the computer.

<Step 5>

Open in "5001 folders", search for "50010179.dat", and copy it onto the floppy disk.

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



< Adjustment >

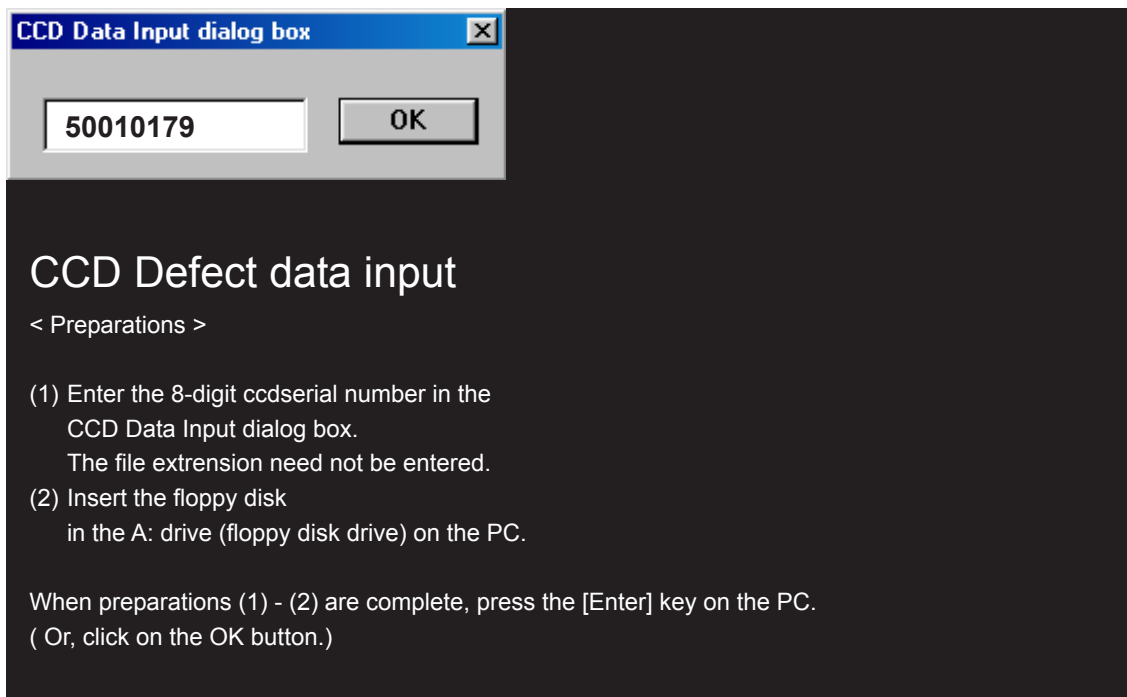
<Step 1>

Select [F4] CCD Defect Data Input on the [Adjustment Items Select] screen.

--> The [CCD Defect Data Input Start] screen appears.

<Step 2>

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

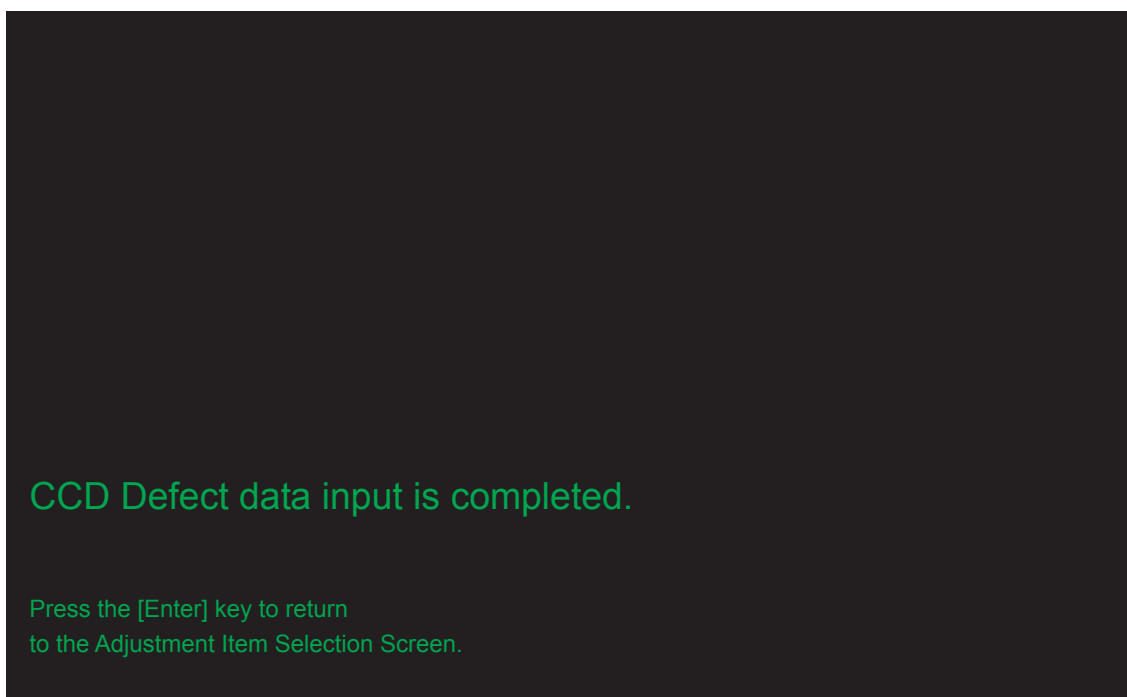


<Fig. 4-10-2>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.

--> The [CCD Defect Data Input Complete] screen appears.

<Step 3>



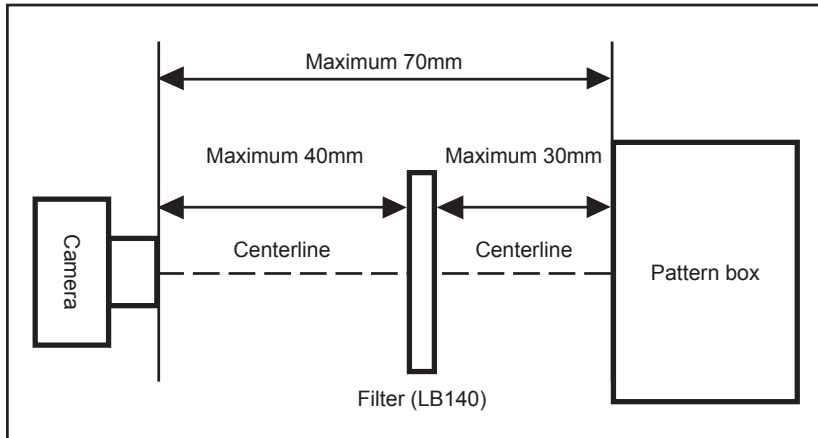
<Fig. 4-10-3>

4-11. [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.

<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.

Camera Adjustment

< Camera Adjustment Preparations >

- (1) Prepare the LB140 filter.
- (2) Adjust the color temperature of the pattern box (PTB450) to 6100±50K.
- (3) Adjust the luminance of the pattern box (PTB450) to 160±5cd/m².
- (4) Set the camera in front of the pattern box.
- (5) Set the zoom position to the side of the WIDE edge.
- (6) Darken surroundings.

When preparations (1)-(6) are complete, press the [Enter] key on the PC.

<Fig. 4-11-1>

--> The [Shutter adjustment] screen appears.

<Step 3>

Shutter adjustment

(1) Set the distance between the camera and pattern box.
 (2) The LB140 filter is not placed in front of the lens.

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

< Setup for Camera Adjustment >

<Fig. 4-11-2>

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

<Step 4>

Squeezing sensitivity decreasing rate adjustment

(1) Set the distance between the camera and pattern box.
 (2) Place the LB140 filter in front of the lens.

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

< Setup for Camera Adjustment >

<Fig. 4-11-3>

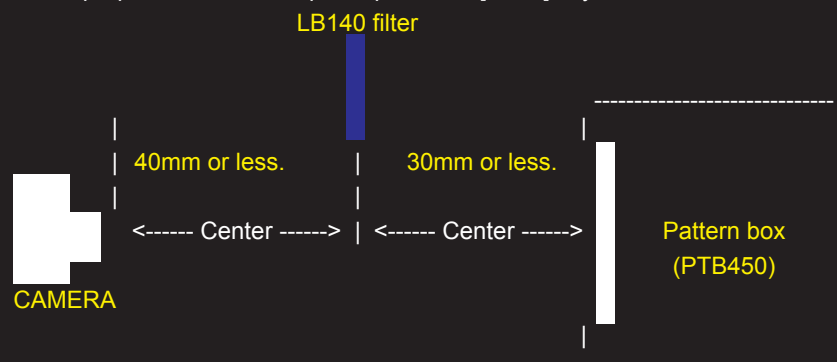
--> The [OFD dependence sensitivity decreasing rate adjustment (without filter)] screen appears.

<Step 5>

OFD dependence sensitivity decreasing rate adjustment

- (1) Set the distance between the camera and pattern box.
- (2) The LB140 filter is not placed in front of the lens.

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



<Fig. 4-11-4>

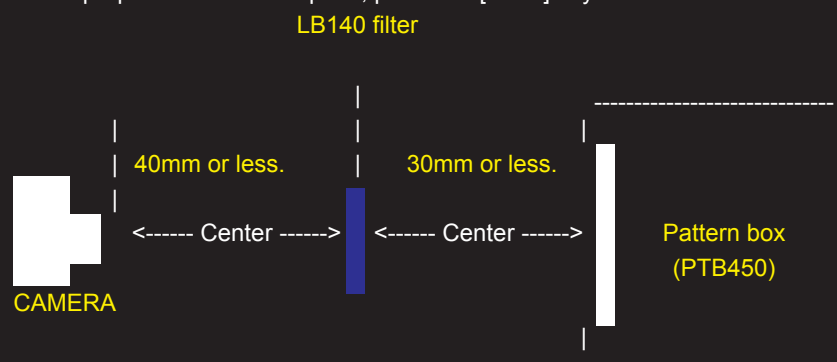
--> The [WB adjustment with filter] screen appears.

<Step 6>

WB adjustment with filter

- (1) Set the distance between the camera and pattern box.
- (2) Place the LB140 filter in front of the lens.

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



<Fig. 4-11-5>

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

<Step 7>

WB adjustment without filter

(1) Set the distance between the camera and pattern box.
 (2) Remove the LB140 filter from front of the lens.

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

< Setup for Camera Adjustment >

<Fig. 4-11-6>

--> The [WB adjustment with filter (avobe ISO800)] screen appears.

<Step 8>

WB adjustment with filter (avobe ISO800)

(1) Set the distance between the camera and pattern box.
 (2) Place the LB140 filter in front of the lens.

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

< Setup for Camera Adjustment >

<Fig. 4-11-7>

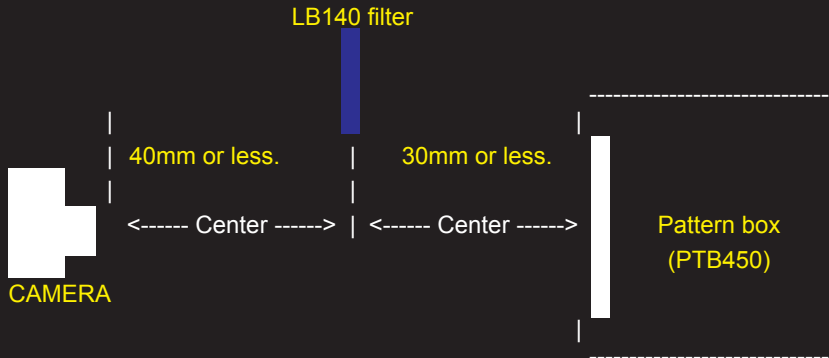
--> The [WB adjustment without filter (avobe ISO800)] screen appears.

<Step 9>

WB adjustment without filter (above ISO800)

- (1) Set the distance between the camera and pattern box.
- (2) Remove the LB140 filter from front of the lens.

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



< Setup for Camera Adjustment >

<Fig. 4-11-8>

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

<Step 10>

Camera adjustment is completed.

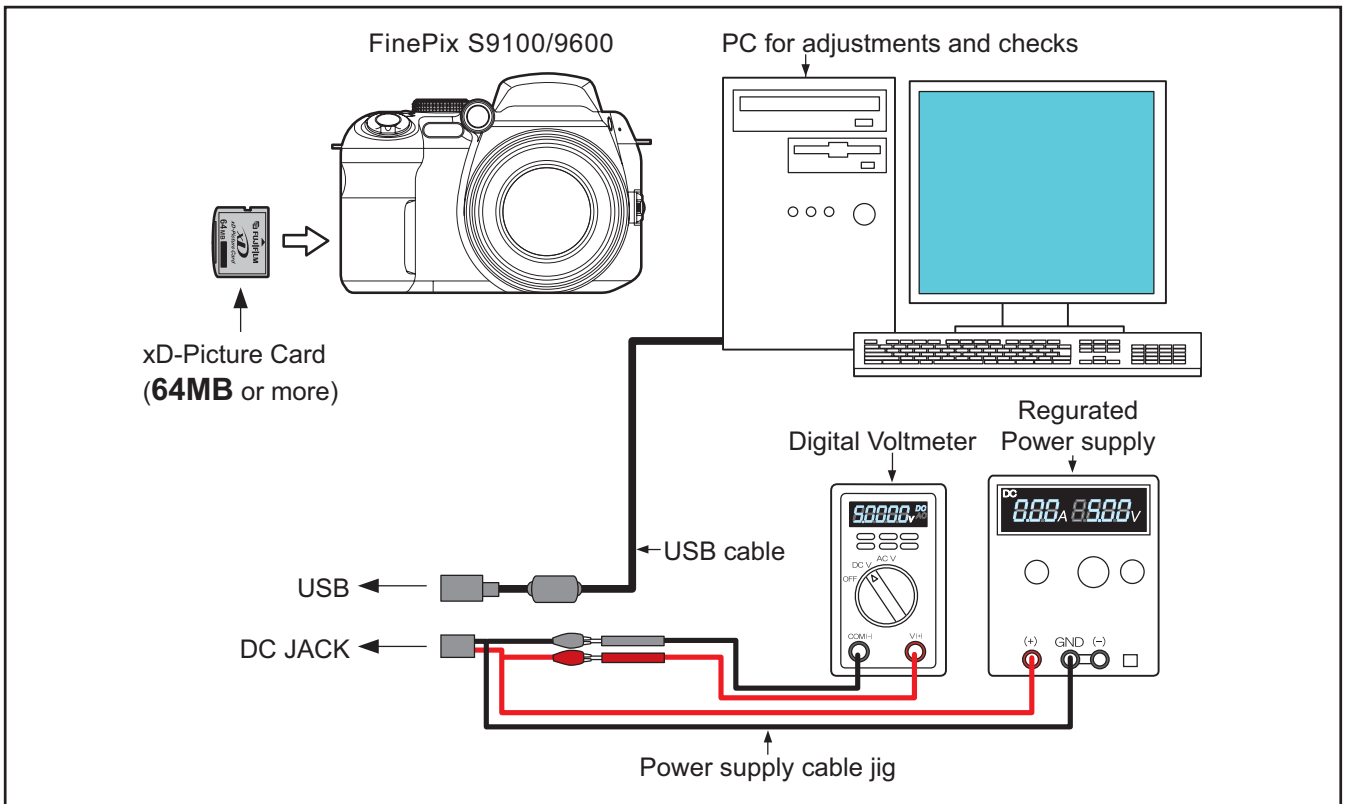
Press the [Enter] key to return to the Adjustment Item Selection Screen.

<Fig. 4-11-9>

4-12. [C] : CCD Line Defect Adjustment

<Setup for CCD Line Defect Adjustmen>

Set up DPC-R1 to the computer as explained by instructing CCD Line Defect Adjustment.
 After Camera adjustment and CCD data input are complete, this adjustment is done.



< Adjustment >

<Step 1>

Select [C] CCD line defect adjustment on the [Adjustment Items Select] screen.

--> The [CCD line defect adjustment Start] screen appears.

<Step 2>

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

CCD Line defect adjustment

< CCD Line Defect Adjustment Preparations >

- (1) Insert the xD card of 64MB or more that has been formatted in the camera.
- (2) Set FRAME No. to RENEW.
- (3) Prepare the CCD data of this camera.
- (4) Set the zoom position to the side of the WIDE edge.

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

<Fig. 4-12-1>

--> The [Taking a picture complete] screen appears.

<Step 3>

Taking a picture complete

< CCD Line defect Adjustment Preparations >

- (1) Turn off power switch.
- (2) Pull out the xD card from the camera, and insert it in the card reader etc.
- (3) Copy DSCF0001.CM file that has been taken a picture in to [C:/FxS9100_9600_W/MS3931/].
- (4) Turn on the power switch while pressing the shutter button.
- (5) Press the [Enter] key after green LED lights on.

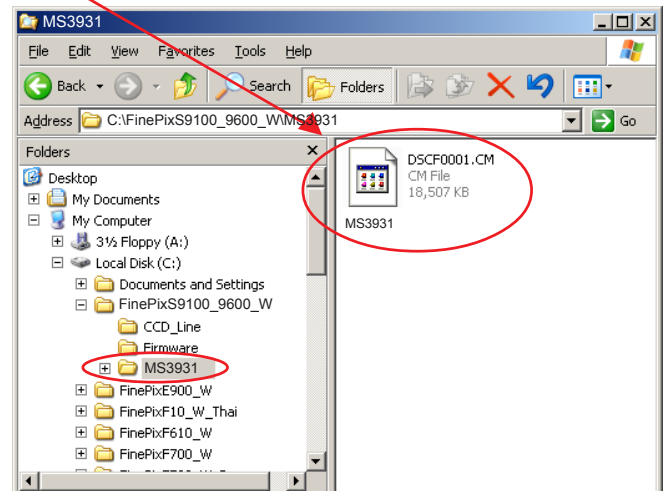
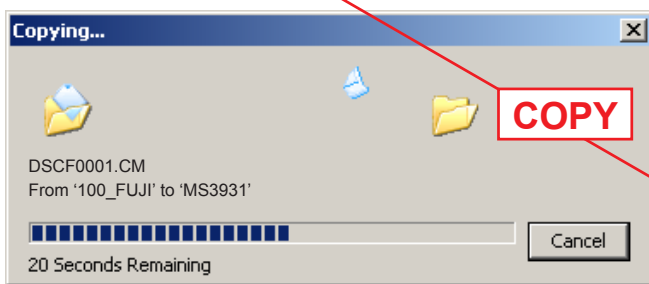
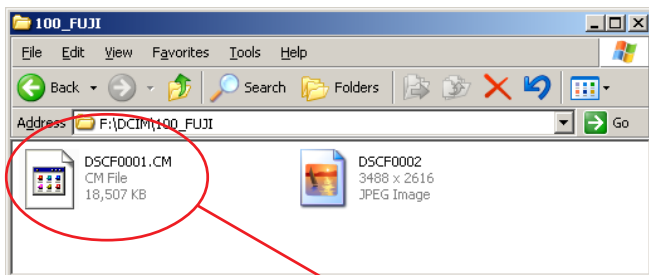
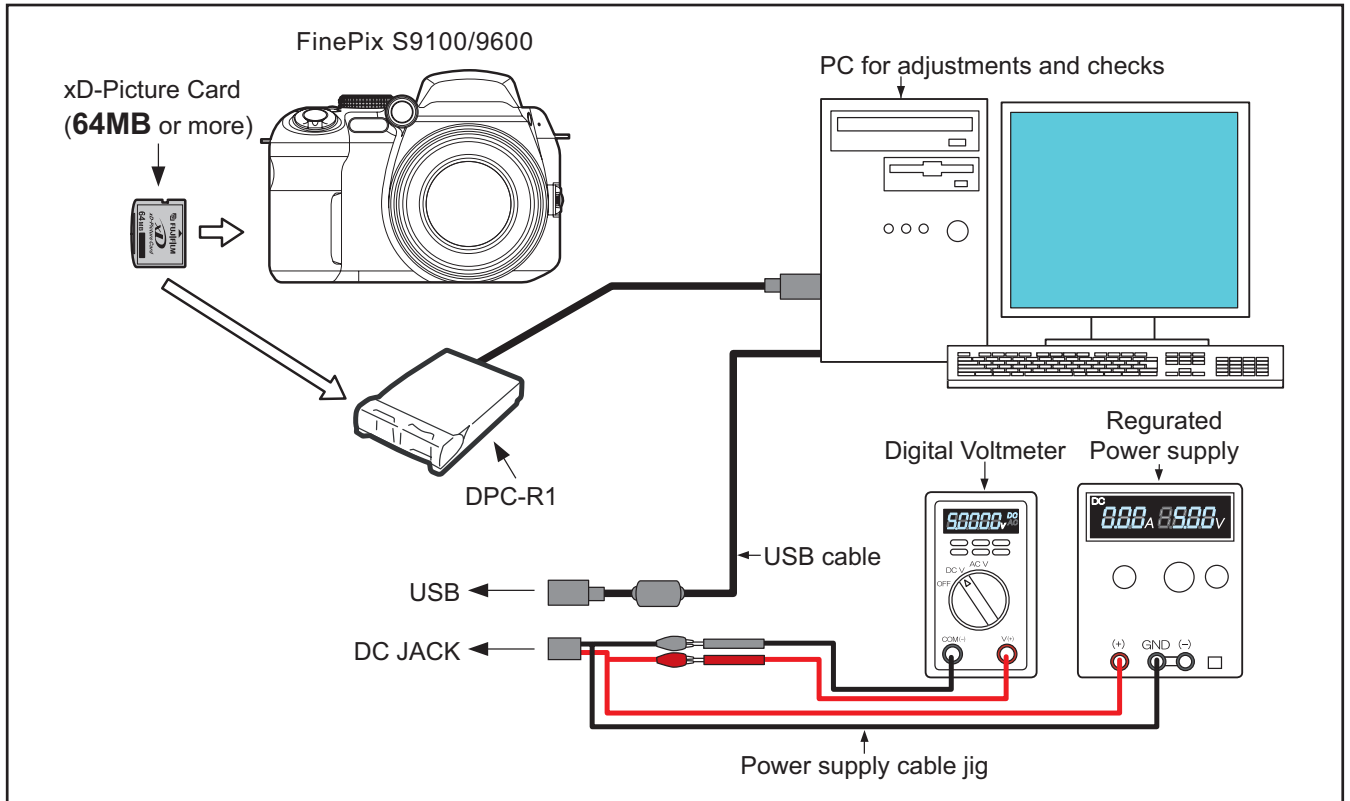
The system returns to the CCD data input screen when press the [Enter] key.

<Fig. 4-12-2>

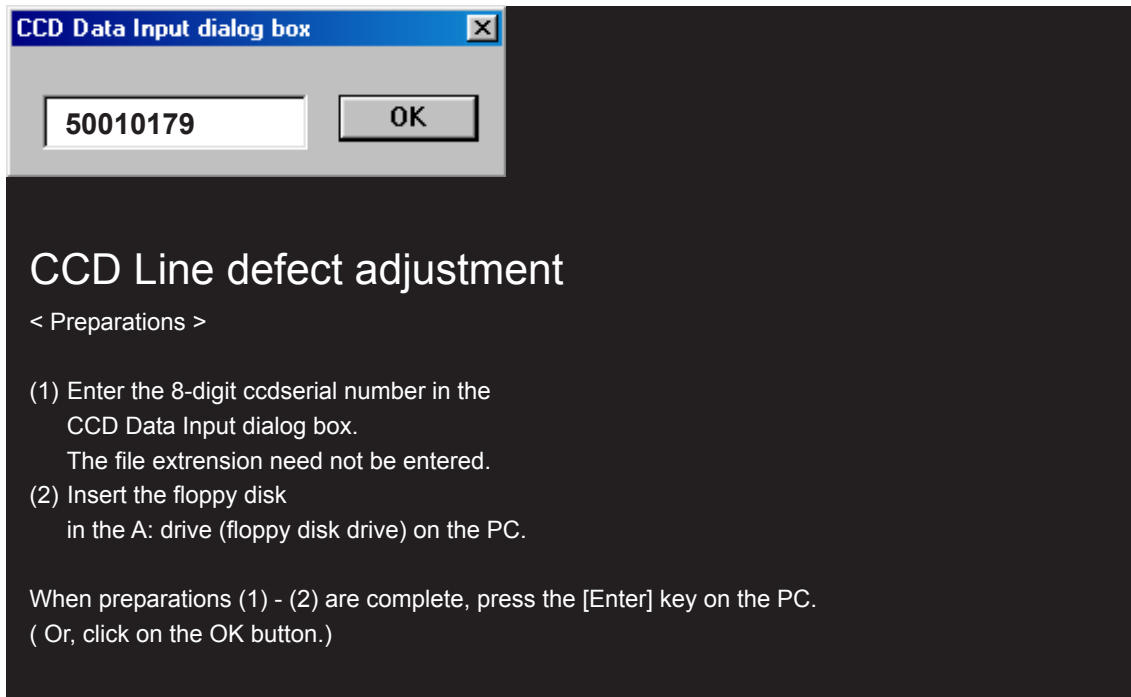
--> The [CCD data input] screen appears.

☆

<Step 4>



<Step 5>

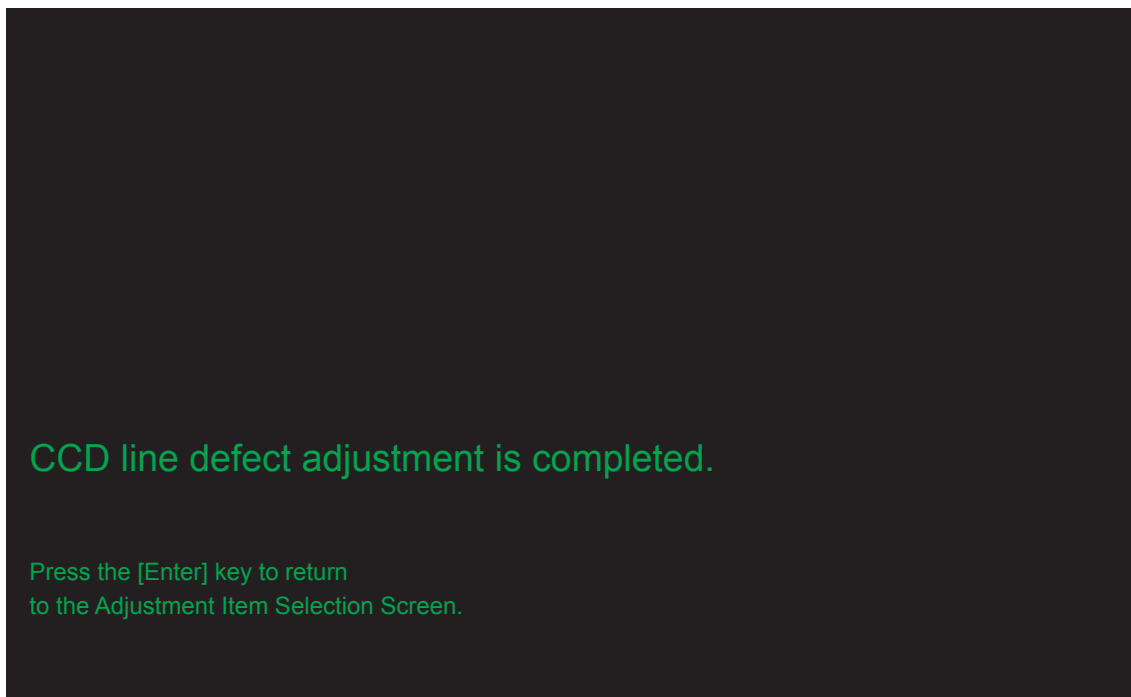


<Fig. 4-12-3>

--> Write the adjustment data to the flash ROM when adjustment has been completed correctly.

--> The [CCD line defect adjustment] screen appears.

<Step 6>



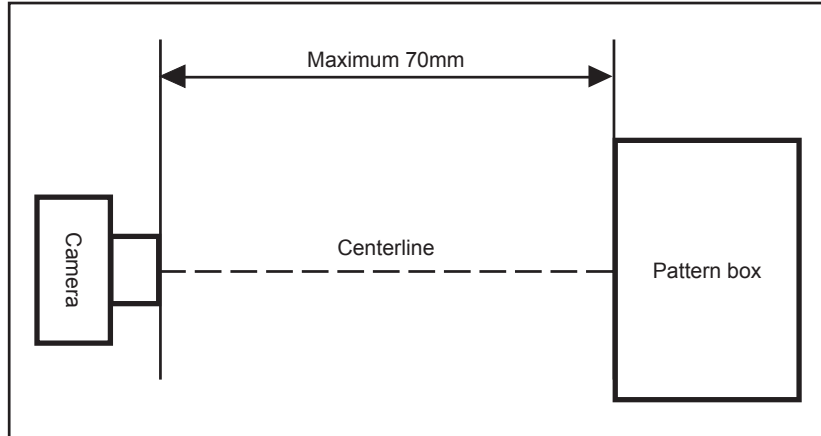
<Fig. 4-12-4>

4-13. [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.

Shading compensation adjustment

(1) Set the distance between the camera and pattern box.
 (2) The LB140 filter is not placed in front of the lens.

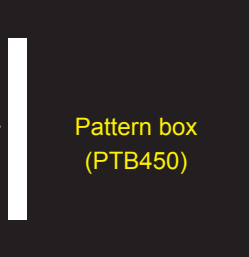
When preparations are complete, press the [Enter] key.



CAMERA

Maximum 70mm

Center



Pattern box
(PTB450)

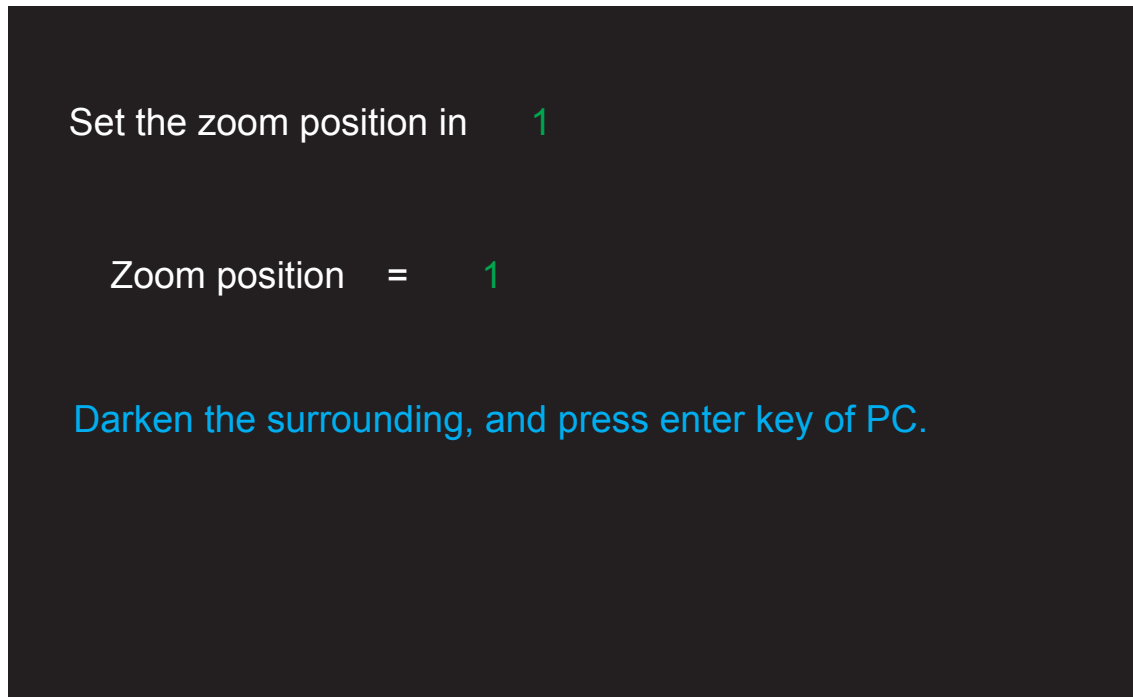
< Setup for Camera Adjustment >

<Fig. 4-13-1>

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

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

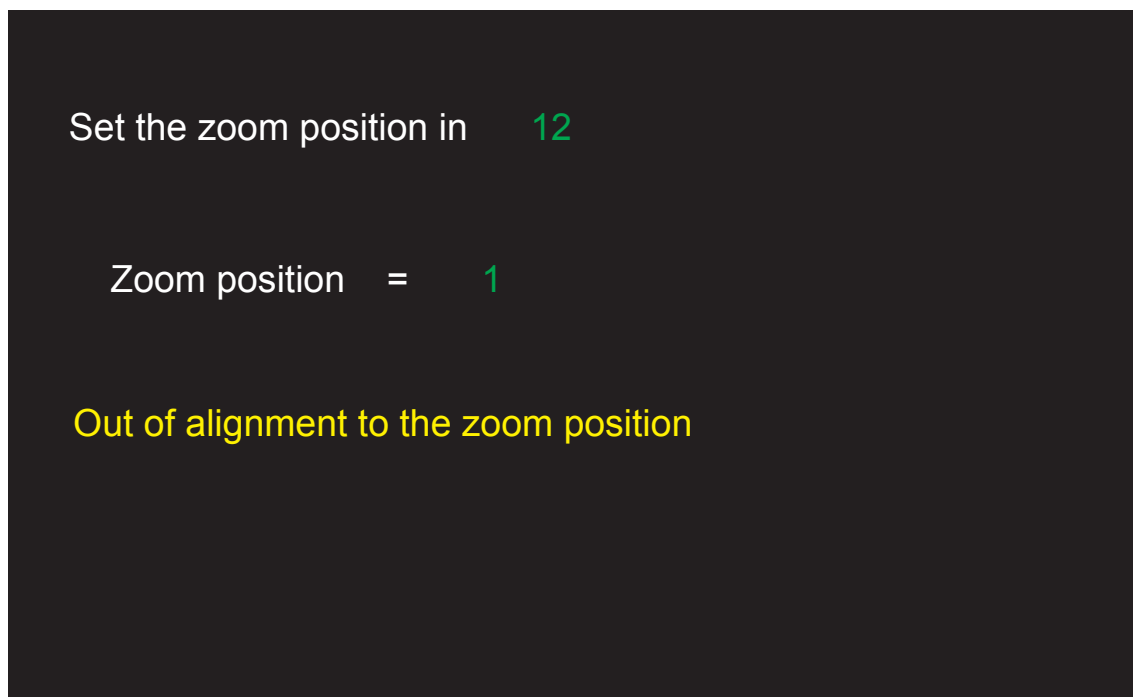
<Step 2>



<Fig. 4-13-2>

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

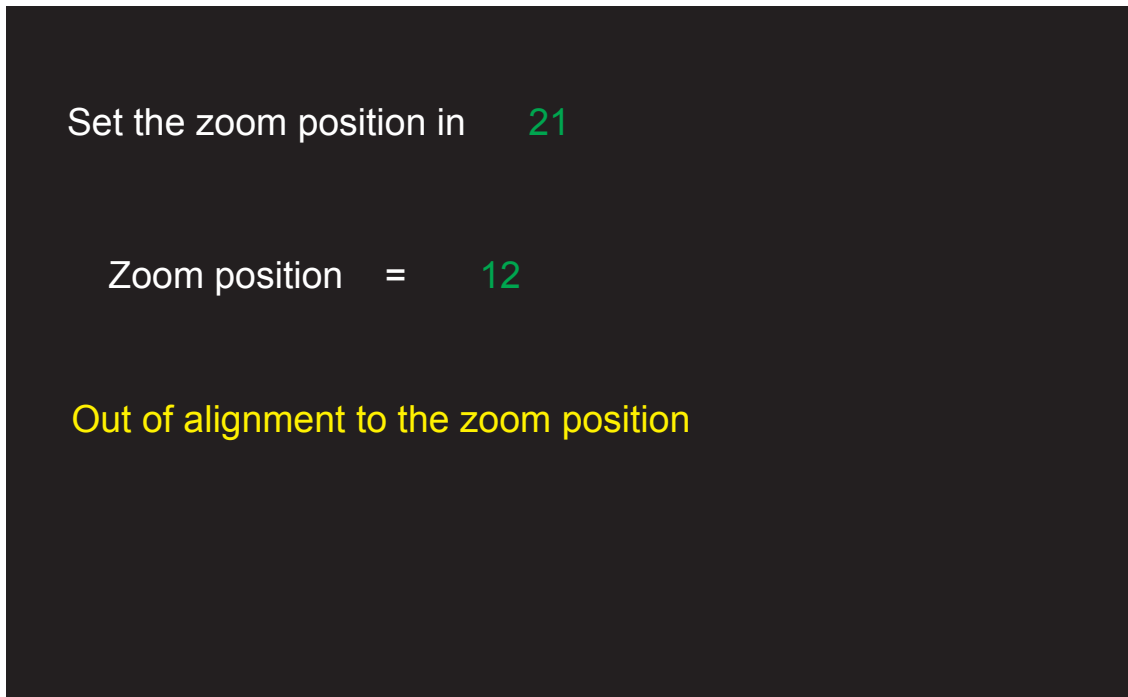
<Step 3>



<Fig. 4-13-3>

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

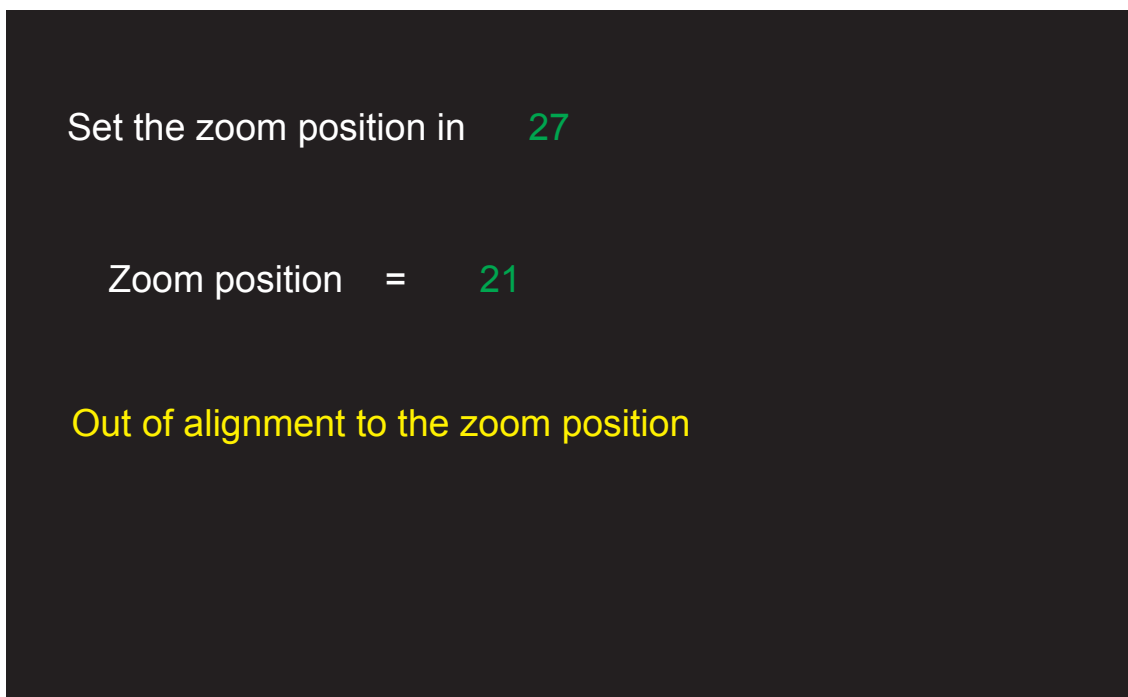
<Step 4>



<Fig. 4-13-4>

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

<Step 5>



<Fig. 4-13-5>

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

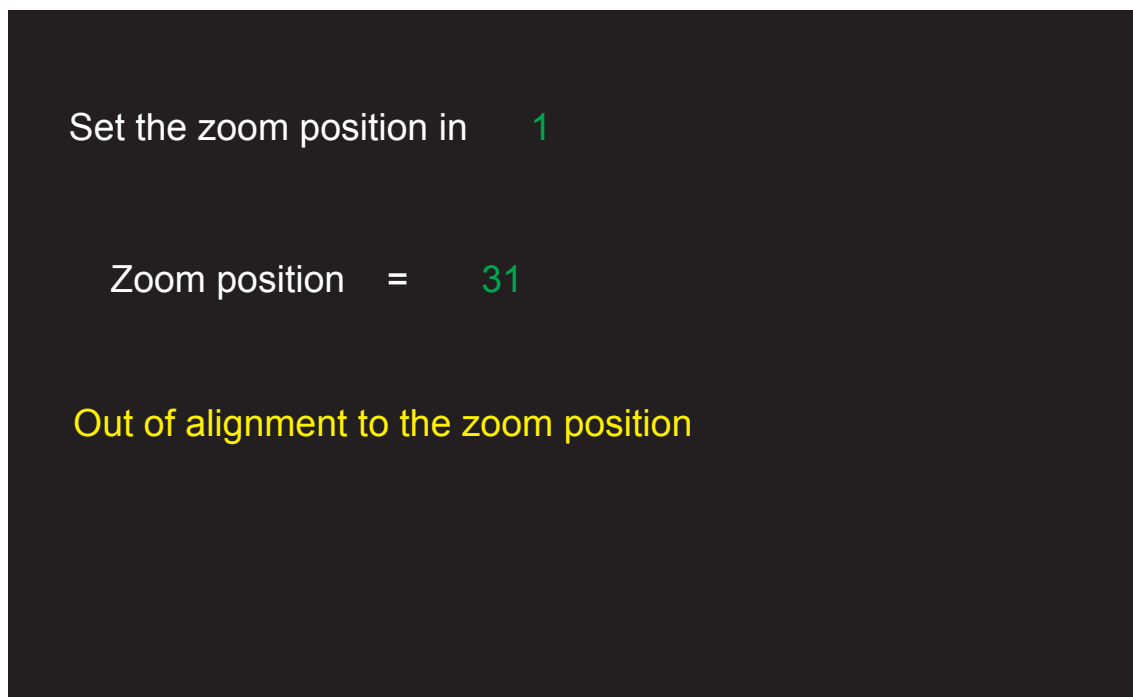
<Step 6>



<Fig. 4-13-6>

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

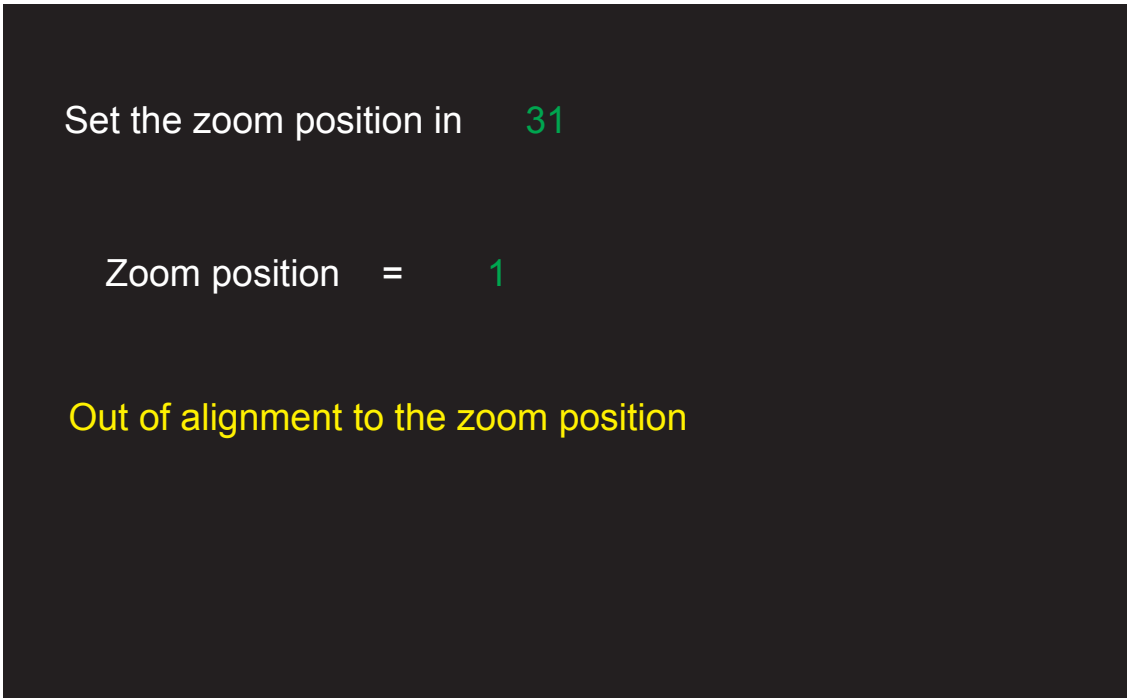
<Step 7>



<Fig. 4-13-7>

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

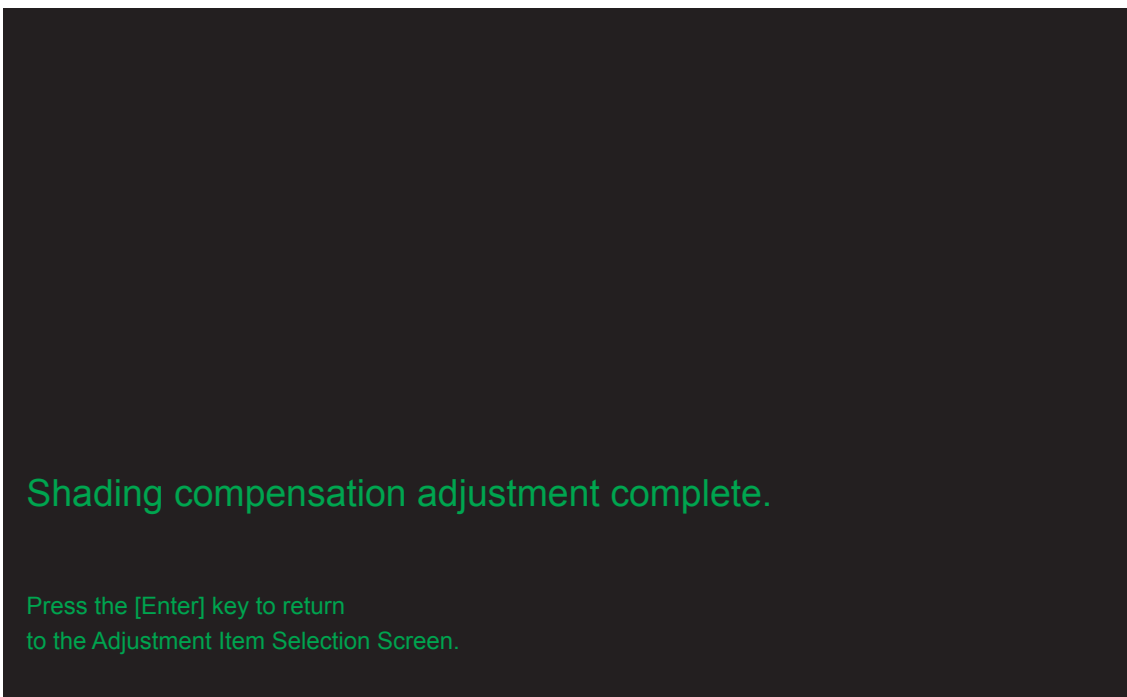
<Step 8>



<Fig. 4-13-8>

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

<Step 8>

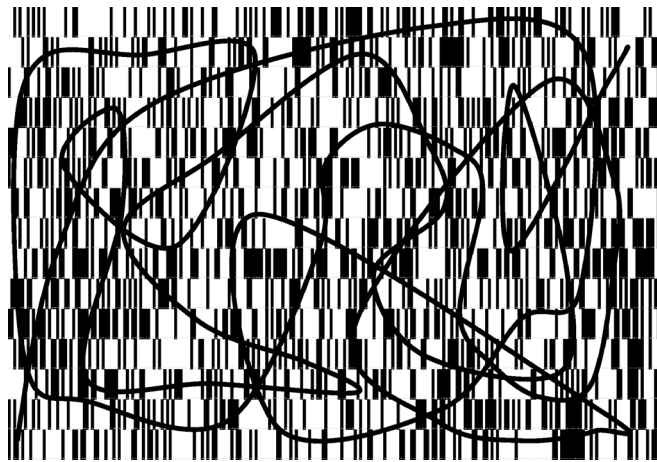
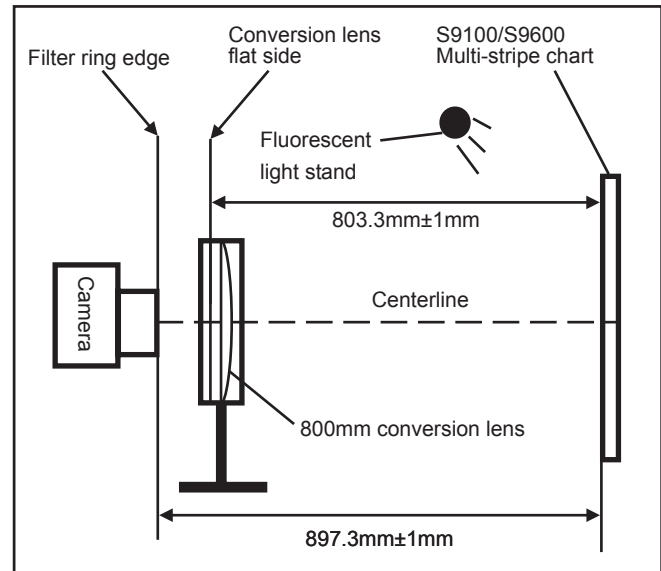
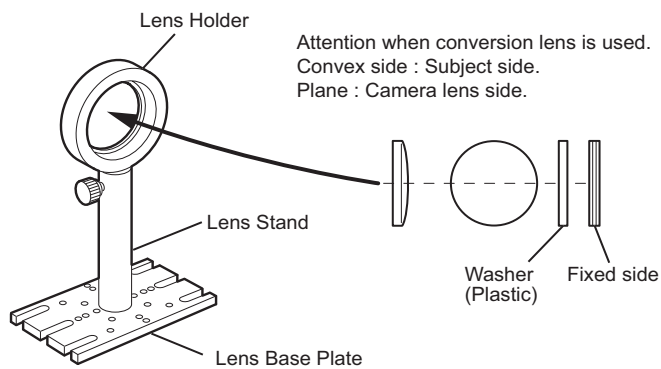


<Fig. 4-13-9>

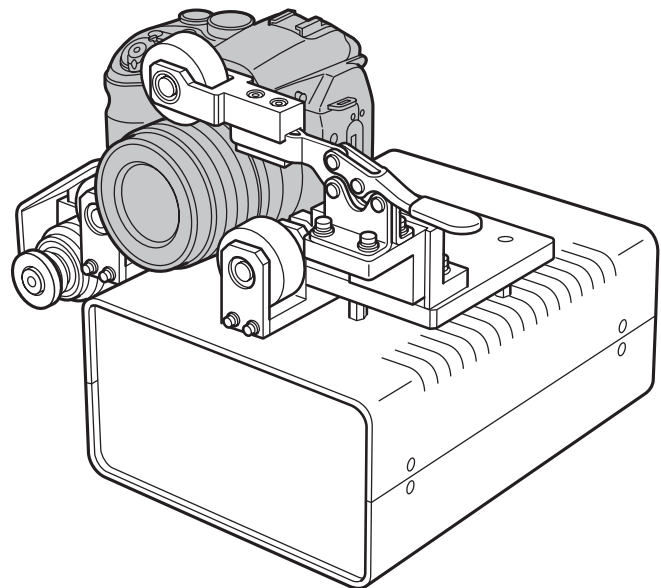
4-14. [F6] : AF Adjustment

<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.

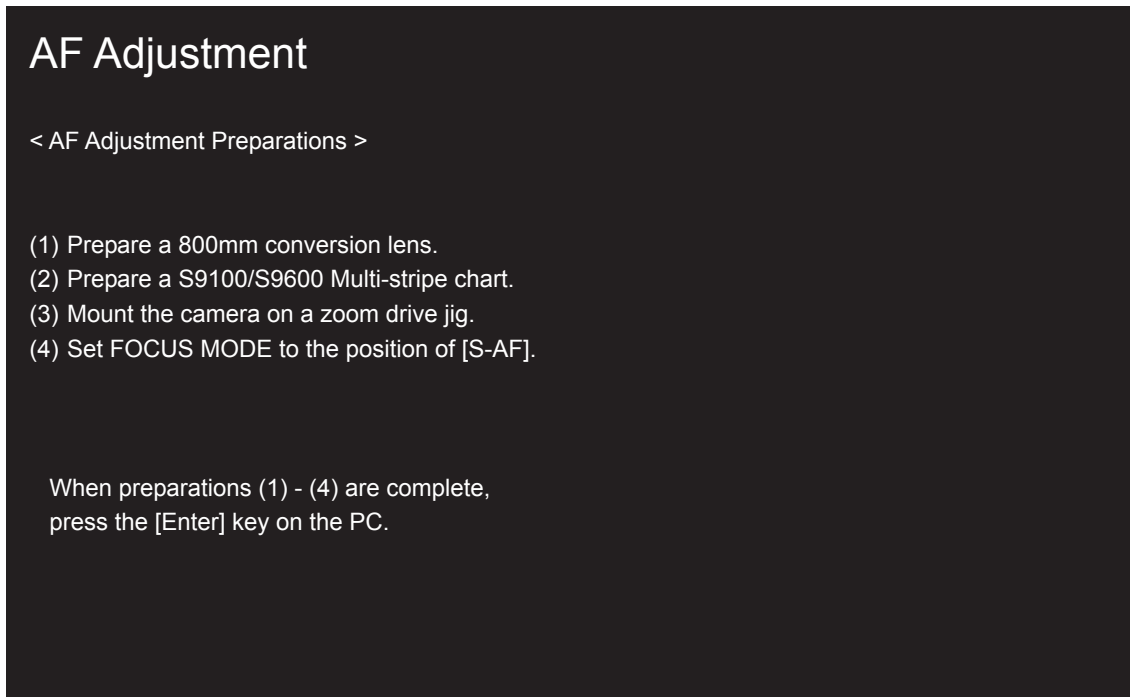
—> The [AF Adjustment Preparation] screen appears.

<Step 2>

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

<Note>

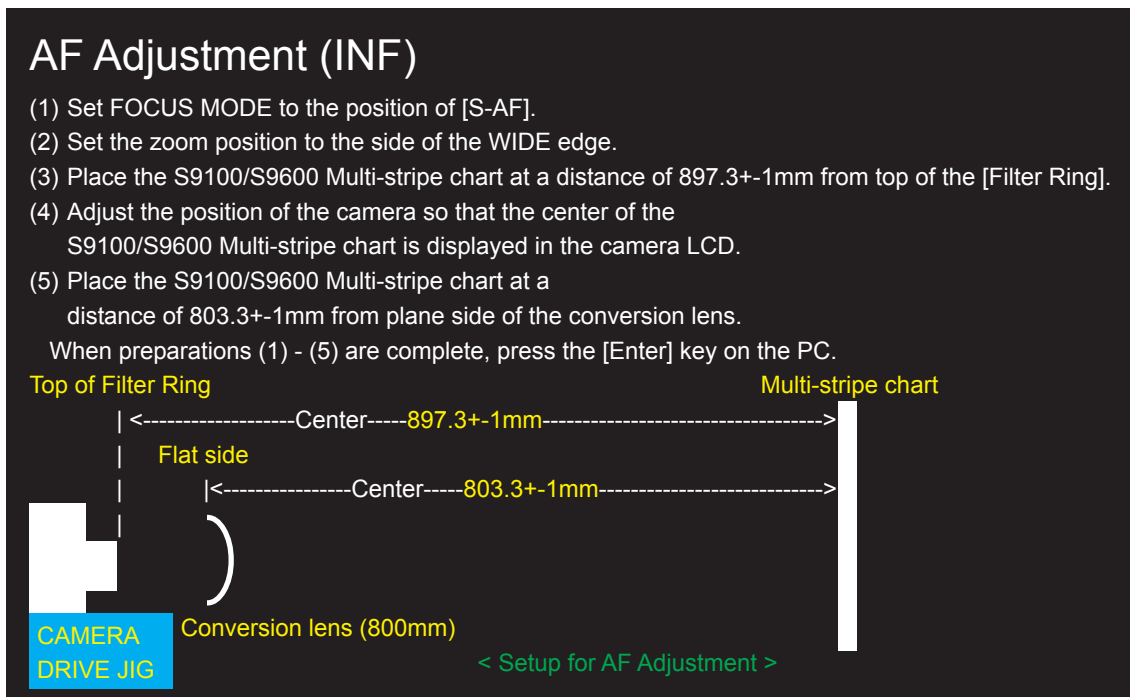
Always use a **800mm** conversion lens.



<Fig. 4-14-1>

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

<Step 3>



<Fig. 4-14-2>

→ The [AF Adjustment (INF) Start] screen start.

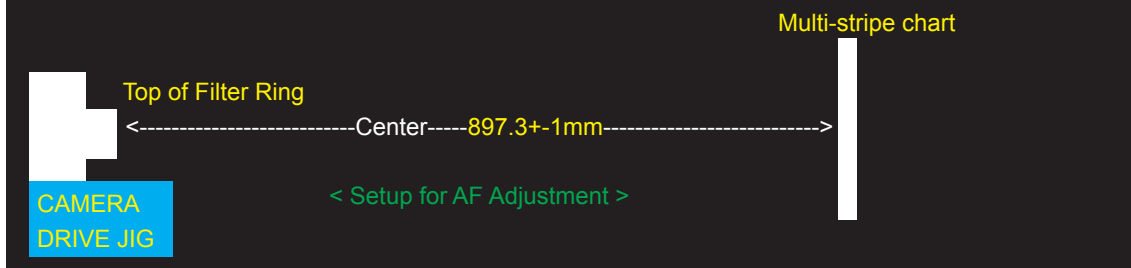
→ Write the adjustment data to the flash ROM when adjustment has been completed correctly.

<Step 4>

AF Adjustment (900mm)

- (1) Remove the conversion lens.
- (2) Adjust the position of the camera so that the center of the S9100/S9600 Multi-stripe chart is displayed in the camera LCD.

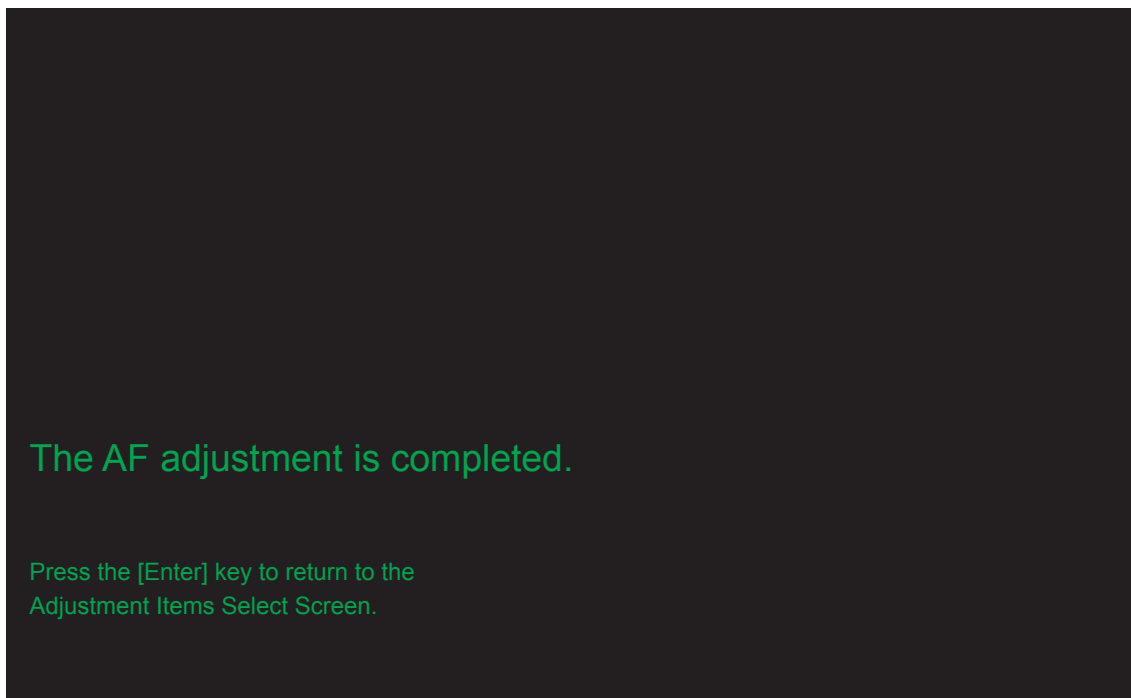
When preparations (1) - (2) are complete, press the [Enter] key.



<Fig. 4-14-3>

→ The [AF Adjustment Complete] screen appears.

<Step 5>

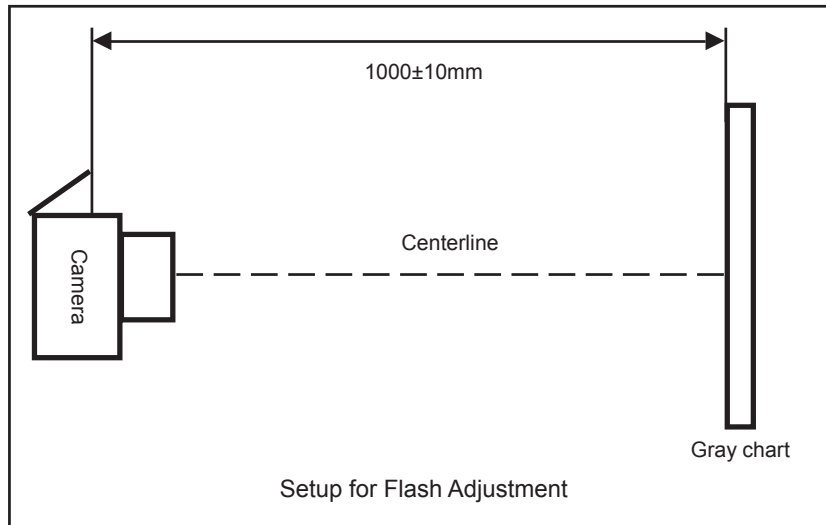


<Fig. 4-14-4>

4-15. [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.



<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.

Flash Adjustment

< Preparations >

- (1) Prepare a gray chart (1000mm x 1000mm or more).
- (2) Mount the camera on a tripod.
- (3) Press the flash pop-up button.
- (4) Set the distance between the flash and the gray chart to 1000mm+/-10mm.
- (5) Set the zoom position to the side of the WIDE edge.

When preparations (1) - (5) are complete, press the [Enter] key.

<Fig. 4-15-1>

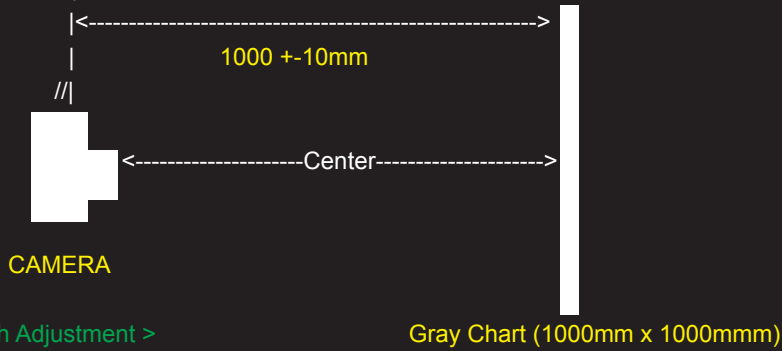
--> The [Flash Adjustment Start] screen appears.

<Step 3>

Flash Adjustment

- (1) Adjust brightness so that the periphery of the gray chart is as dark as possible.
- (2) Adjust the camera so that the entire chart is shown on the LCD monitor.

When preparations (1) and (2) are complete, press the [Enter] key.



<Fig. 4-15-2>

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

<Step 4>

Flash adjustment is completed.

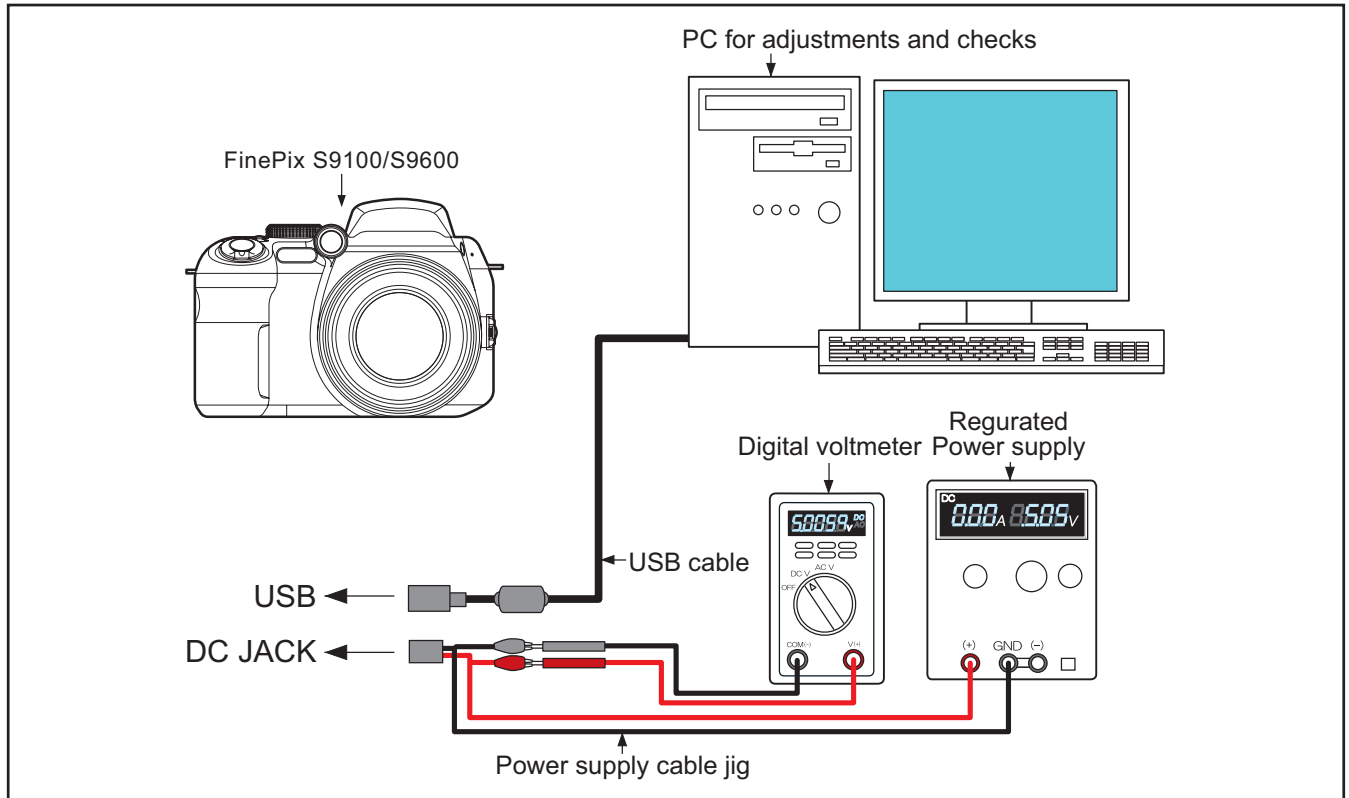
Press the [Enter] key to return to the Adjustment Item Selection Screen.

<Fig. 4-15-3>

4-16. [F1] : Battery Voltage Adjustment

<Setup for Battery Voltage 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.



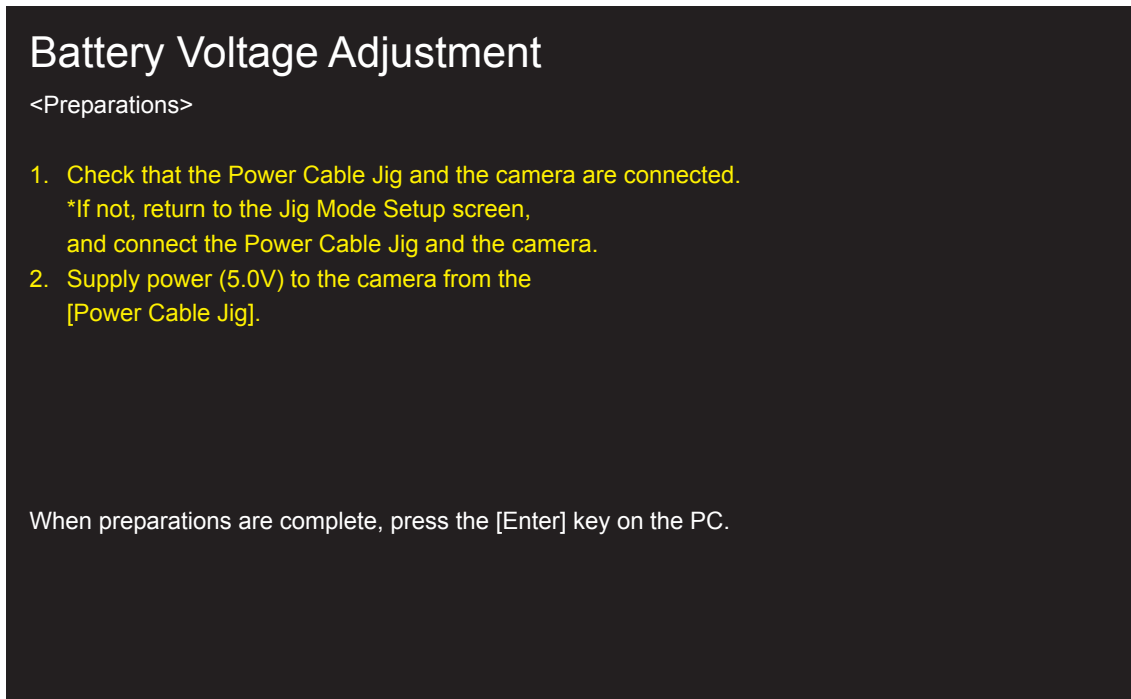
<Step 1>

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. 4-16-1>

—> The [4.50V Input] screen appears.

<Step 3>



<Fig. 4-16-2>

—> The [4.00V Input] screen appears.

<Step 4>

Battery Voltage Adjustment

(1) Supply 4.50V (+0.02V/-0.00V).

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

Result= 60

(2) Supply 4.00V (+0.02V/-0.00V).

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

<Fig. 4-16-3>

—> The [7.20V Input] screen appears.

<Step 5>

Battery Voltage Adjustment

(1) Supply 4.50V (+0.02V/-0.00V).

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

Result= 60

(2) Supply 4.00V (+0.02V/-0.00V).

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

Result= 46

(3) Supply 7.20V (+0.02V/-0.00V).

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

<Fig. 4-16-4>

—> The [5.0V Input] screen appears.

<Step 6>

Battery Voltage Adjustment

- (1) Supply 4.50V (+0.02V/-0.00V).
When preparations are complete, press the [Enter] key.
Result= 60
- (2) Supply 4.00V (+0.02V/-0.00V).
When preparations are complete, press the [Enter] key.
Result= 46
- (3) Supply 7.20V (+0.02V/-0.00V).
When preparations are complete, press the [Enter] key.
Result= E2
- (4) Supply 5.0V (+-0.1V).
When preparations are complete, press the [Enter] key.

<Fig. 4-16-5>

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

<Step 7>

The Battery Voltage adjustment is completed.

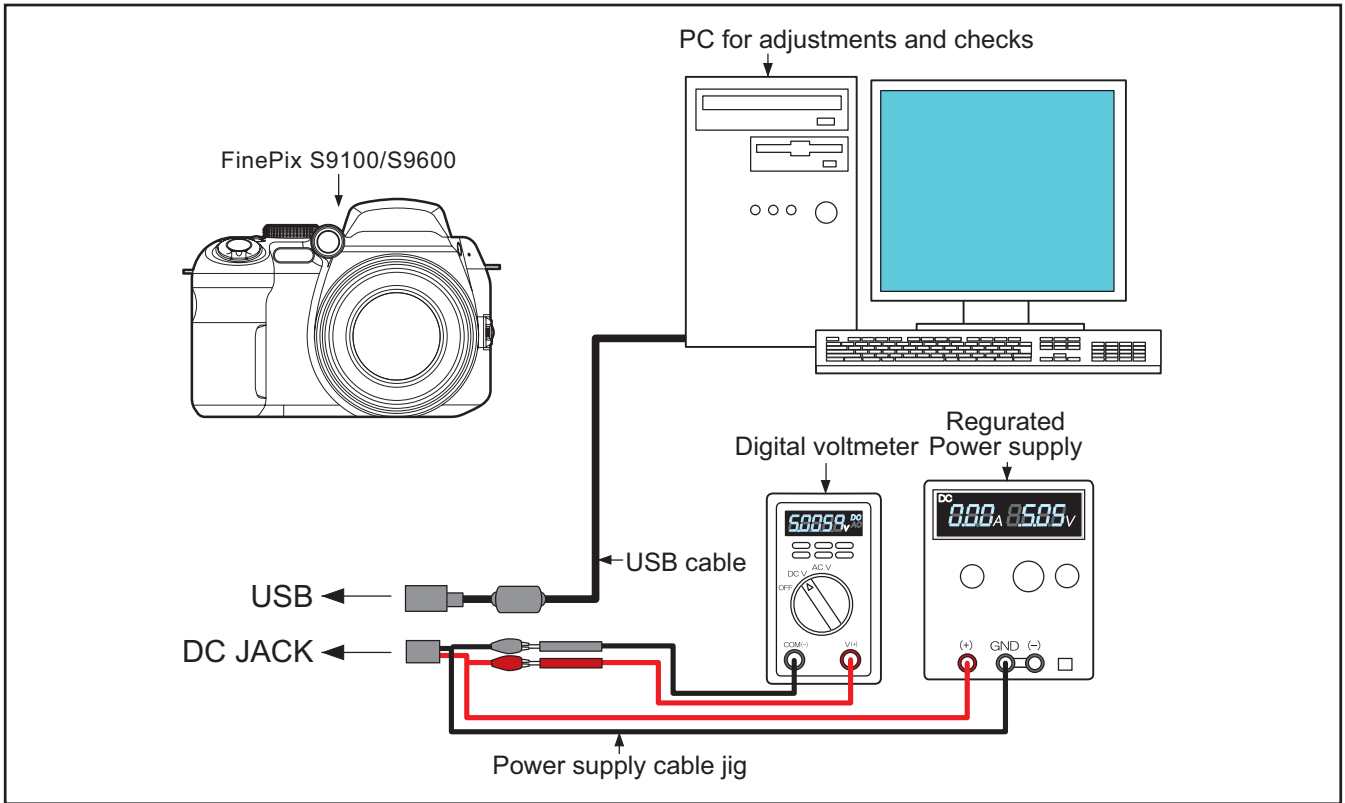
Press the [Enter] key to return to the Adjustment Item selection Screen.

<Fig. 4-16-6>

4-17. [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>

Mode Dial Adjustment

- (1) Set the mode dial to [AUTO].
- (2) Please input 5.00+-0.01V from DC-IN Jack.

Press the [Enter] key of PC after setting the camera.

Press [1] key to PC when not proceeding to the next step.

<Fig. 4-17-1>

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

<Step 3>

The Mode dial adjustment is completed.

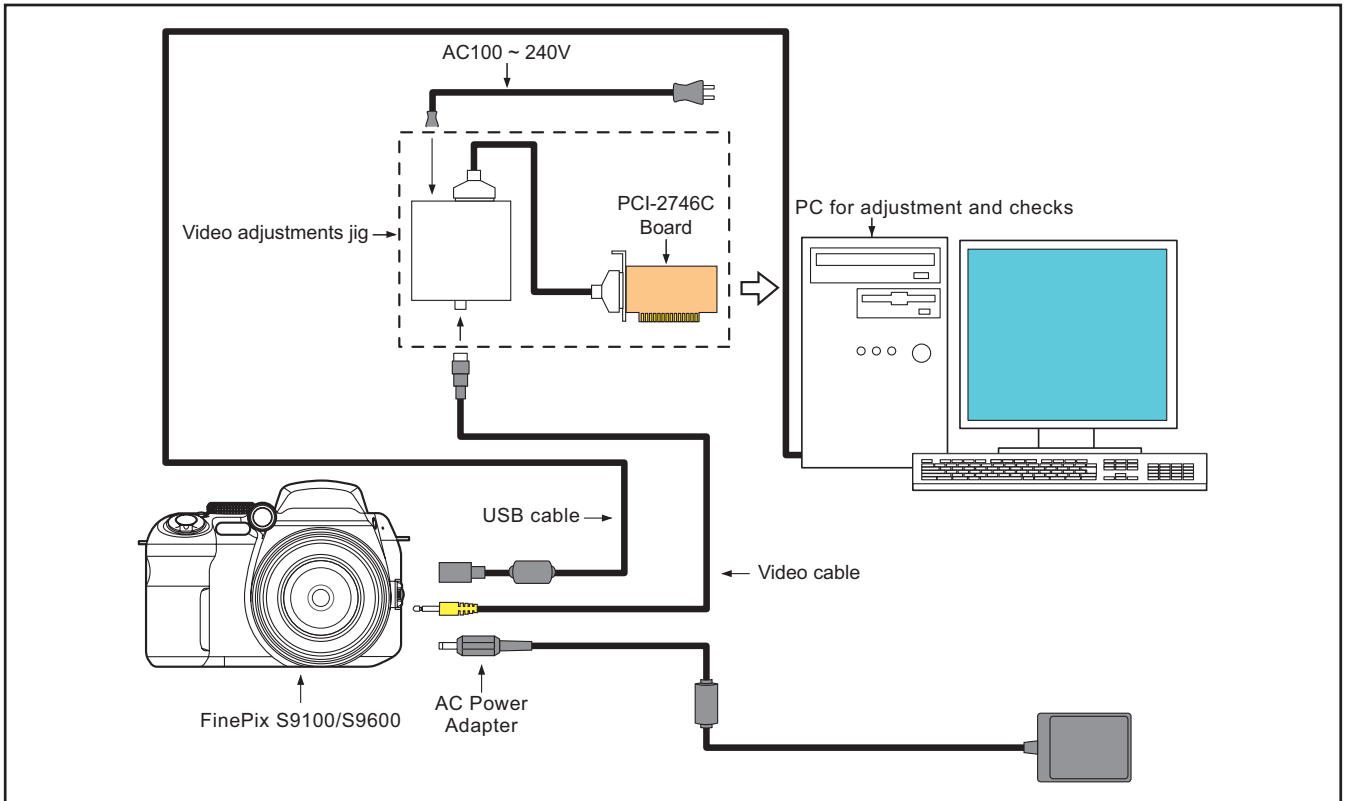
Press the [Enter] key to return to the Adjustment Item selection Screen.

<Fig. 4-17-2>

4-18. [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.



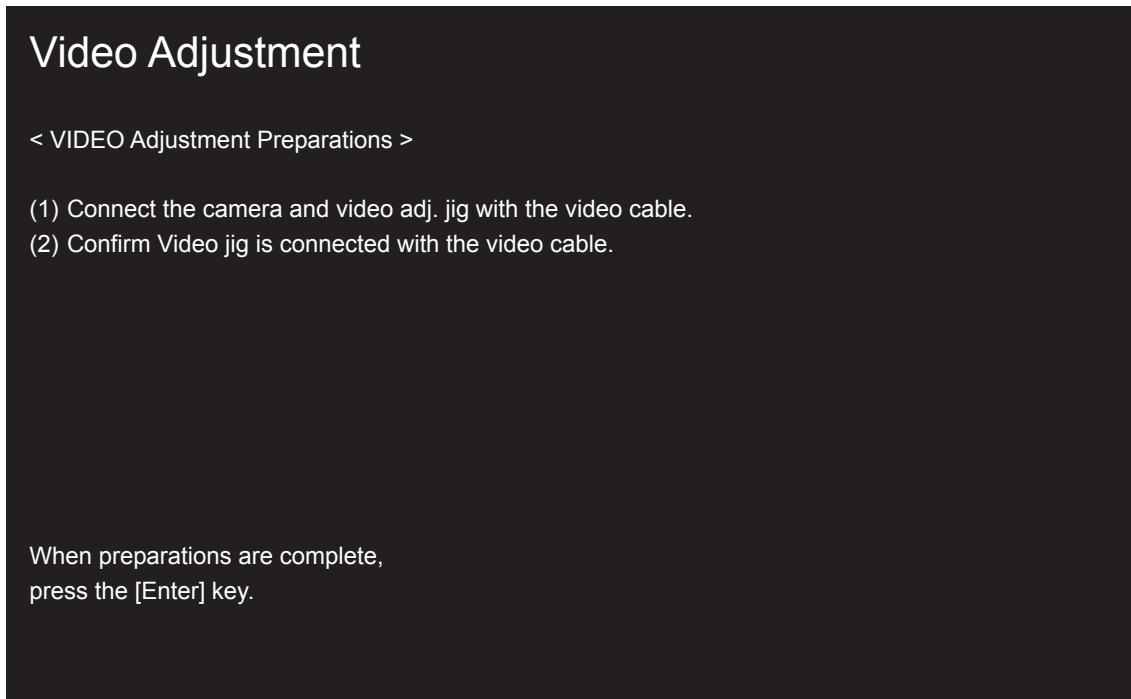
<Step 1>

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.

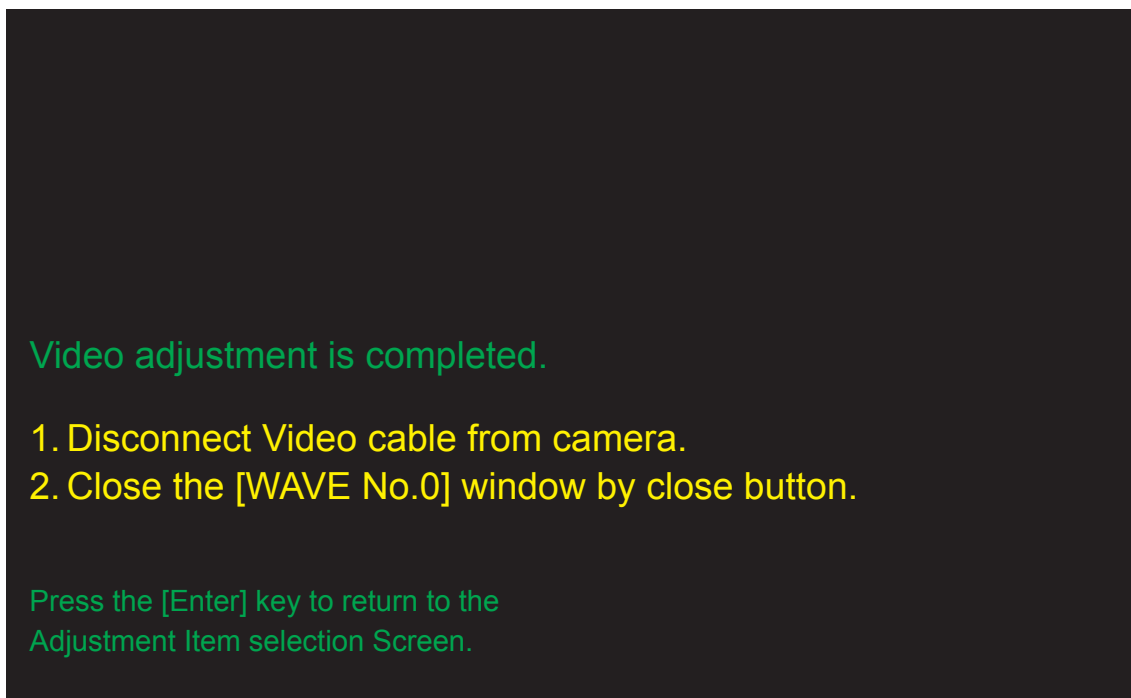


<Fig. 4-18-1>

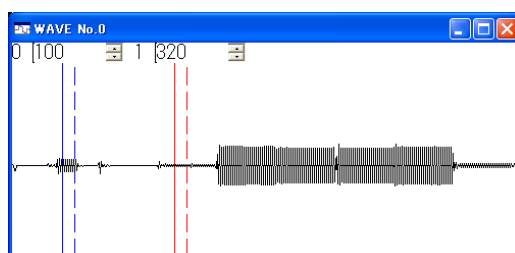
—> Write the adjustment data to the Flash ROM when adjustment has been completed correctly.

—> The [VIDEO Adjustment Complete] screen appears.

<Step 3>



<Fig. 4-18-2>

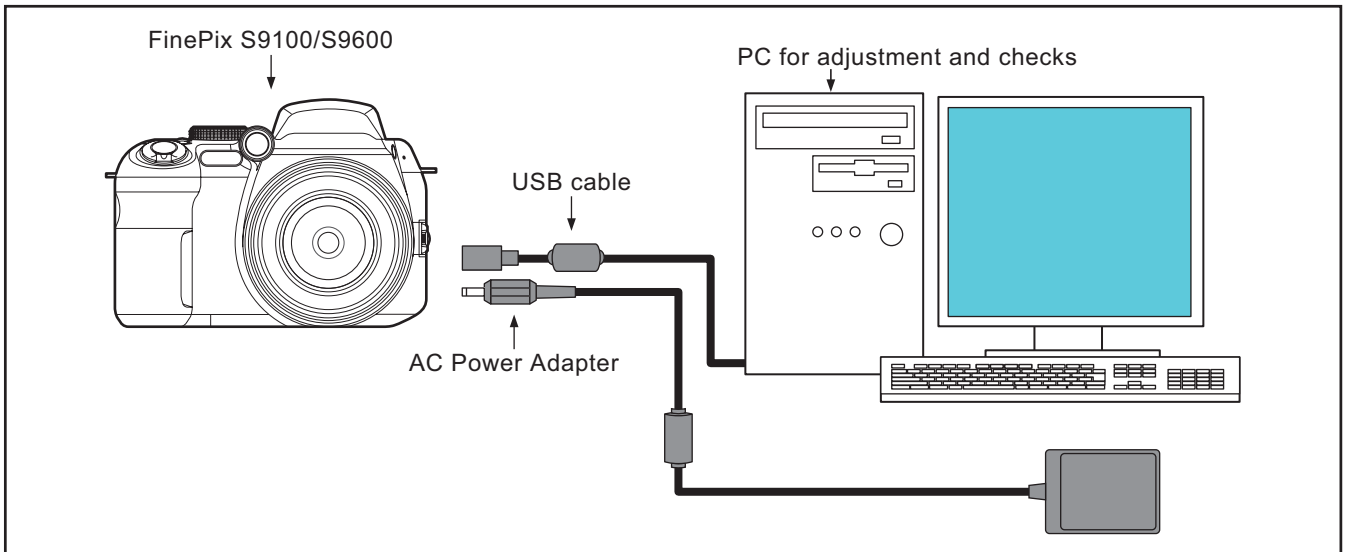


<Fig. 4-18-3>

☆4-19. [F8] : Firmware Download

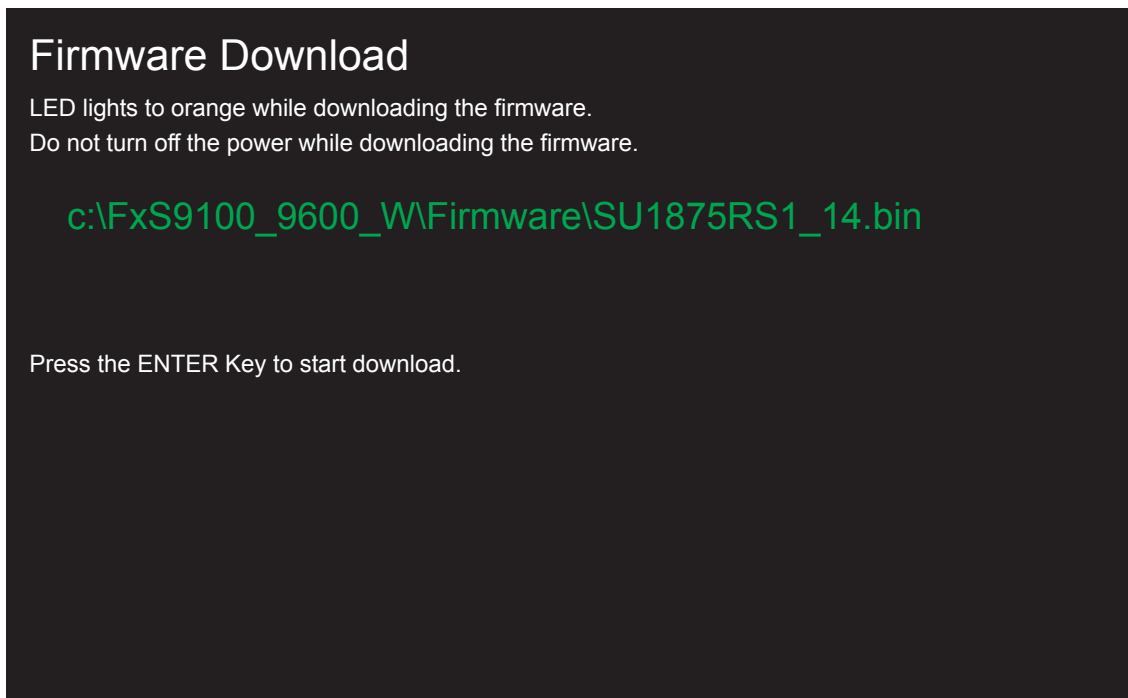
Attention : When the download of the firmware is needed, FUJI SERVICE BULLETIN is contacted from FTYO/QA. Till then, disregard this item.

<Setup for Firmware Download>



<Step 1>

Select [F8] Firmware Download on the [Adjustment Items Select] screen.



<Fig. 4-19-1>

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

☆<Step 3>

Firmware download is completed

- (1) Remove the DC Jack cable from the camera.
- (2) Turn off power lever switch.
- (3) Reconnect DC Jack cable.
- (4) Switch camera power ON while pressing the shutter button.
- (5) Press the [Enter] key after green LED lights on.

The system returns to the Jig Mode Setup screen when press the [Enter] key.

<Fig. 4-19-2>

4-20. [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 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 S9100/S9600) 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			

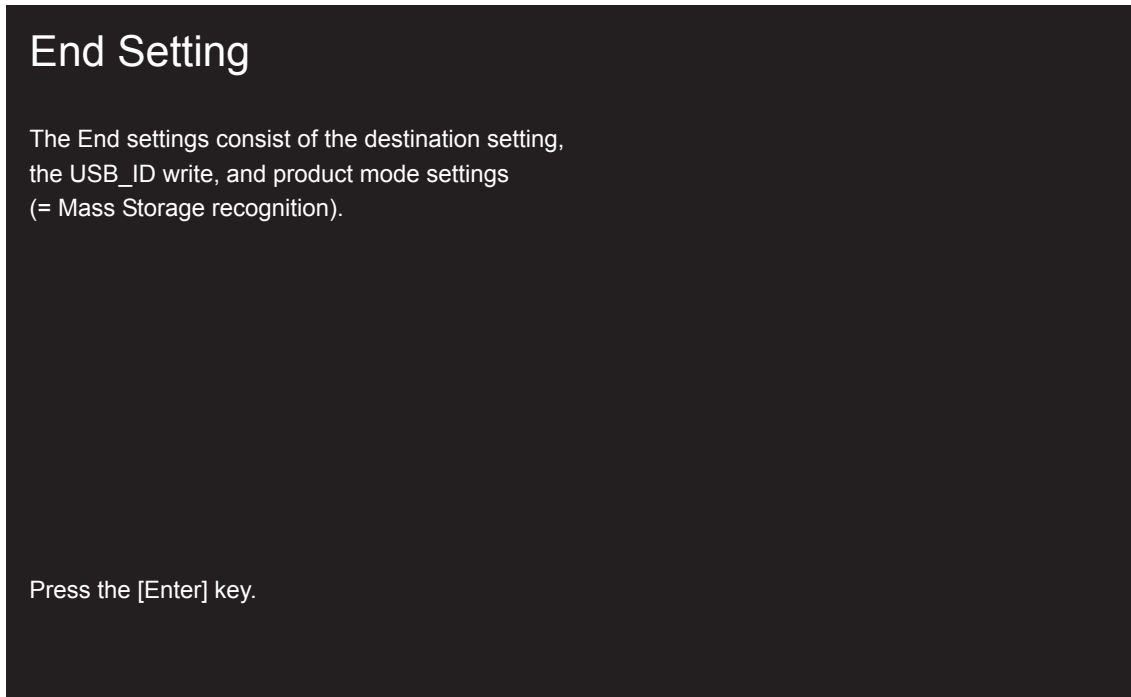
<Step 1>

Select [F12] End Setting on the [Adjustment Items Select] screen.

—> The [End Setting Description] screen appears.

<Step 2>

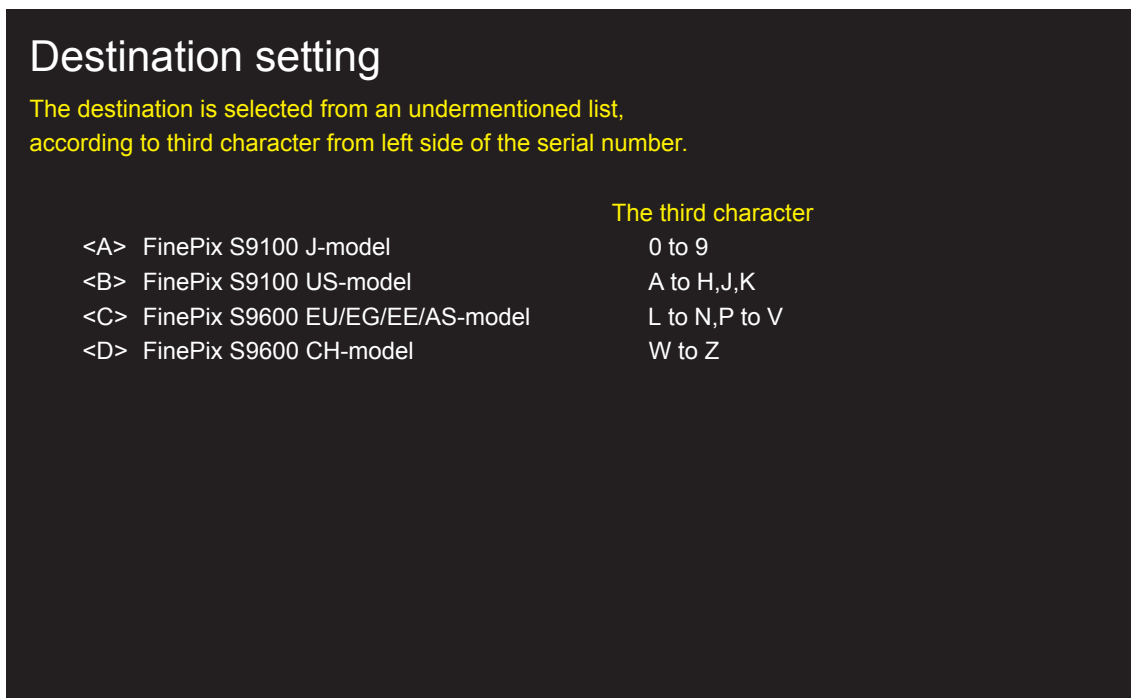
Run the adjustment in accordance with the instructions on the screen.



<Fig. 4-20-1>

—> The [Destination Setting] screen appears.

<Step 3>



<Fig. 4-20-2>

<Note>

This example assumes that US-Model has been selected. The following screen therefore appears.

—> 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 S9100 J-model	0 to 9
 FinePix S9100 US-model	A to H,J,K
<C> FinePix S9600 EU/EG/EE/AS-model	L to N,P to V
<D> FinePix S9600 CH-model	W to Z

Selected FinePix S9100 US-model.

Press the [Enter] key!

<Fig. 4-20-3>

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

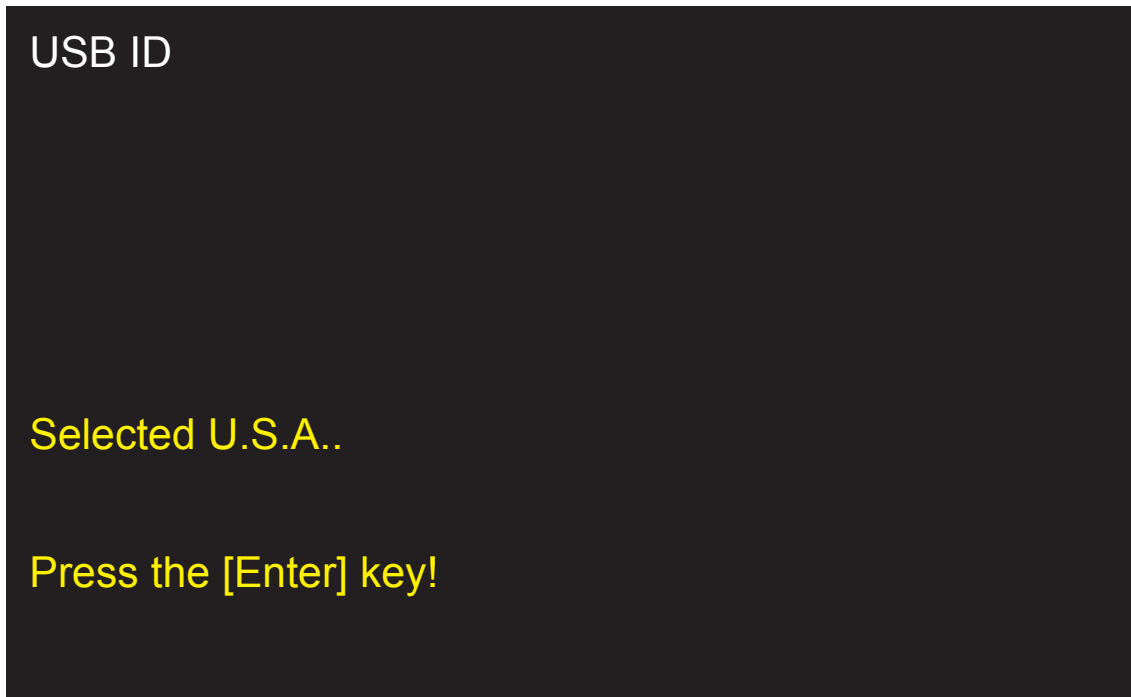
<Fig. 4-20-4>

<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.

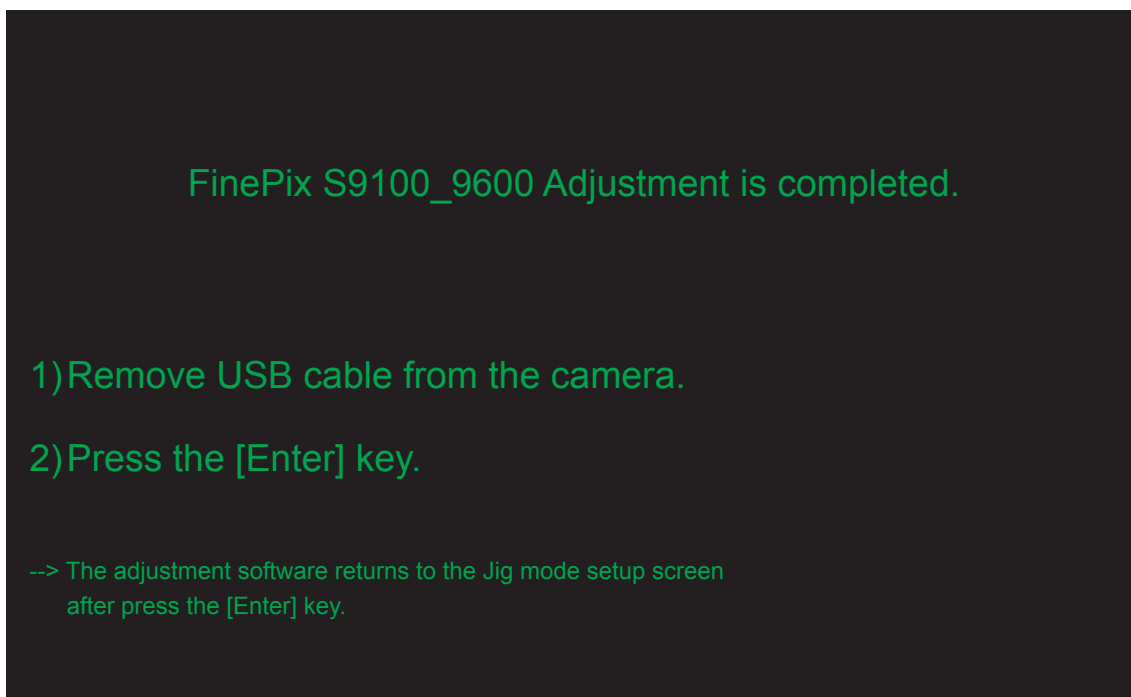
<Step 6>



<Fig. 4-20-5>

—> The [FinePix S9100_9600 Adjustment End] screen appears.

<Step 7>



<Fig. 4-20-6>

5. Inspection

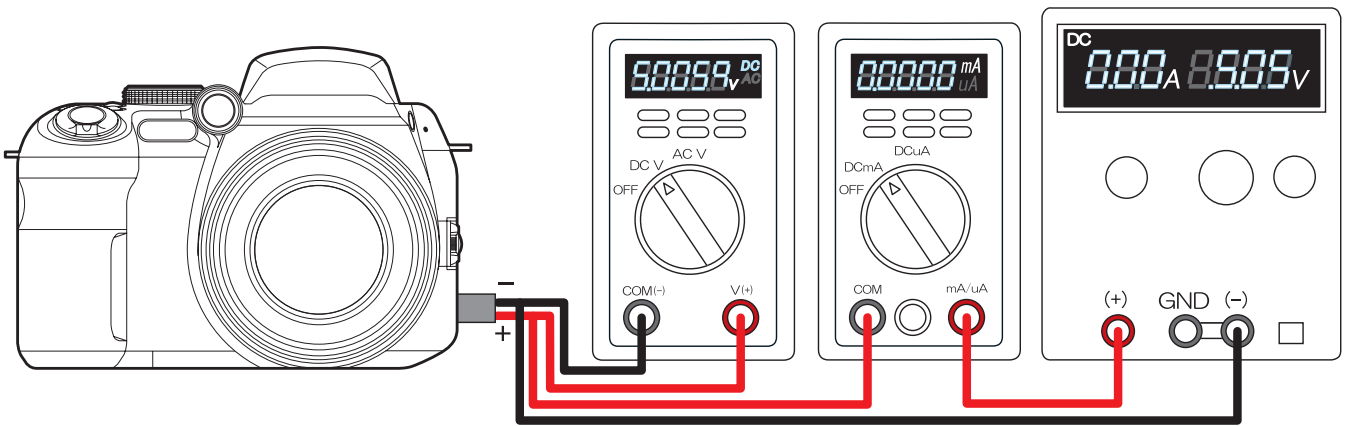
5-1. Required Measuring Equipment

Measuring equipment	Remarks
Power supply	AC adapter (AC-5V), Regulated 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
High-resolution chart	Resolution check (ZJ00398-100)

5-2. Connection of Measuring Equipment

Use POWER CABLE JIG

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



5-3. Inspection and Factory Settings

Sequence	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		Camera observation	(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 EVF (4) Check for dust or fogging in the LCD		
2	Power switch check	Auto mode LCD-ON EVF-ON	(1) Load batteries into the camera. (2) Insert a card and close the card cover. (3) Select the Mode dial setting. (4) Turn the camera on in Photography mode. (5) If a message prompting the user to set the date appears, press the button specified on the right. (6) Check the display status (7) Press the <EVF/LCD> button. (8) Turn the dioptic adjustment dial up and down. (9) Check for blemishes in the CCD live image.	(1) 4.6 V to 6.8 V (sample) (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. (7) Check that the live image is displayed. (8) Check that the blurring of the EVF screen varies. Check that the dial turns smoothly between the upper and lower limits. (9) 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.		

Sequence	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) Press the flash pop-up button to pop up the flash. (4) Set the camera to flash mode with red-eye reduction. (5) Close the pop-up flash. (6) Set the camera up so that the chart fills the screen from corner to corner. (7) Press the shutter button to take a picture.	(2) Press the Macro button once. Check that the Macro icon (tulip) appears on the LCD monitor. (3) Check that the flash icon (A) appears on the LCD monitor. After checking, lower the flash unit by 1 cm and check that "A" appears when the flash is carefully released. (4) Use the "Flash button + Command dial" combination to select Red-eye reduction mode. Check that the red-eye reduction icon appears on the LCD monitor. (5) Check that the pop-up flash closes. (6) Set the zoom to the extreme WIDE setting. (7) Check that the viewfinder LED changes from green to orange (during recording) and then to green.	ZJ00525-100	
5	Manual focusing check	Auto mode LCD-ON	(1) Set the Focus mode selector switch to MF. (2) Press the one-push AF button. (3) Turn the focusing ring. (4) Set the Focus mode selector switch to AF.	(1) Check that the MF icon remains as displayed. (2) Check that the camera focuses and that the circle in the center of the screen changes to yellow. (3) Check that ◀▶ appears below the circle in the center of the screen and that the focus moves. (4) Check that the MF icon disappears.		
6	Command dial check	P mode LCD-ON	(1) Turn the command dial left and right.	(1) Check that the F** number in the bottom left of the monitor screen changes.		

5. Inspection

Sequence	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
7	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) Hold down S1 for 5 seconds and then release.	(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.		
8	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.		
9	Playback check	Playback	(1) Check images shot at macro resolutions (manual photography) (2) Turn the camera off.	(1) Where the horizontal 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).	TV monitor ZJ00525-100	
10	Playback mode check	Playback	(1) Insert a card. (2) Set the Mode dial 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.		
11	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 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.		

Sequence	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
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) on the screen. (3) Check that there are no noticeable dust flecks or stains (smears, flashing points, etc.) on the screen. (4) Play the above 2 frames and perform the same checks.	ZJ00885-100	
13	Battery low/ Backup check	Auto mode LCD-ON	(1) Connect the power supply jig to the DC IN terminal. (xD card loaded, no Microdrive) (2) Set the power supply voltage. (3) Set the Mode dial to AUTO and turn the camera on in Camera mode with the LCD on. (4) Check that the pop-up flash opens and closes and check the backup. (5) Set the pre-end voltage. (6) Set the end voltage.	(1) Connect after the battery or battery jig has been removed. (2) 5.0 V ± 0.1 V (3) Check that the camera starts up normally. (4) Press the flash pop-up button to pop up the flash unit. Check that the flash red- eye reduction icon appears. After completing the check, use the "Flash button + Command dial" combination to return the camera to Flash AUTO mode. (5) 4.50 V ± 0.03 V Check that the battery low warning appears. (6) 4.00 V ± 0.03 V Check that the camera turns off.	ZJ00580-100	

5. Inspection

Sequence	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
14	Current consumption check	Auto mode LCD-ON	<p>(1) Connect the power supply jig to the DC IN terminal. (xD-Picture card loaded, no Microdrive)</p> <p>(2) Set the power supply voltage.</p> <p>(3) Set the Mode dial to AUTO and turn the camera on.</p> <p>(4) Press the EVF/LCD selector switch.</p> <p>(5) After the LCD live image appears, check the current consumption.</p>	<p>(2) 5.00 ± 0.05 V</p> <p>(5) 650 mA or less. If the current consumption exceeds the above value, it is OK if the current drops into the standard range within 10 seconds. If the current is still outside the standard range after 10 seconds, the camera is faulty.</p>	ZJ00580-100	
15	Factory setting		<p>(1) Mode dial</p> <p>(2) Flash</p> <p>(3) Battery and cards not inserted</p> <p>(4) Card cover</p> <p>(5) Battery cover</p> <p>(6) Power switch</p> <p>(7) Focus mode selector switch</p> <p>(8) EVF dioptic adjustment dial</p> <p>(9) Zoom position</p> <p>(10) Jack cover</p> <p>(11) Photomemory selector dial</p> <p>(12) Sync terminal</p> <p>(13) SETUP frame No.</p>	<p>(1) AUTO</p> <p>(2) Pop down</p> <p>(4) Closed</p> <p>(5) Closed</p> <p>(6) OFF</p> <p>(7) S-AF</p> <p>(8) Center position indicator located close to the center.</p> <p>(9) Set to extreme W</p> <p>(10) Closed</p> <p>(11) Multi</p> <p>(12) Fitted</p> <p>(13) 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.</p>		

Sequence	Item	Mode	Preparations for adjustment (measurement points, subject, other)	Method of adjustment (VRs, waveforms, required values)	Measuring equipment and jigs	Measurement points (VRs, positions)
				*Setting and clearing date (1) Connect the USB cable from the PC to the camera (ensure that the PC is switched ON). (2) Open the card cover and switch power ON (POWER_ON) while pressing the shutter button. (3) Switch power OFF (POWER_OFF). (4) Check that the date has been cleared.		

5-4. Resolution Checking

<Step 1>

Refer to the settings for resolution checking in the figure at right and set up the camera and the high-resolution chart. Use a light source to illuminate the high-resolution chart so that the surface brightness of the chart is 9.0 to 11.5 EV.

<Step 2>

Prepare the following:

- (1) Insert a formatted 32 MB xD picture card into the camera.
- (2) Supply power to the camera. (Batteries can be used.)
- (3) Set the camera to "A" mode and switch it on.
- (4) Set the camera on a tripod and point it directly at the high-resolution chart (set at 90° horizontally and vertically relative to the chart).
- (5) Position the high-resolution chart 375 mm from the end of the lens at the WIDE setting and 3950 mm from the end of the lens in the TELE setting.

<Step 3>

Make the following changes to the default photography mode settings:

- (1) Select A mode.
- (2) Select "Fine" and "9M" (3488 x 2616) mode.
- (3) Set the flash to OFF.
- (4) Set the aperture for WIDE: F2.8, TELE: F4.9.
- (5) Select ISO 200.
- (6) Set the focusing mode to "S".
- (7) Adjust so that the angle of view is the same as the chart displayed on the LCD monitor (Fig. 5-4-2).

<Step 4>

To avoid camera shake, set the self-timer to 2 seconds and then press the camera's shutter button.

--> A resolution checking image (Fig. 5-4-2) is recorded.

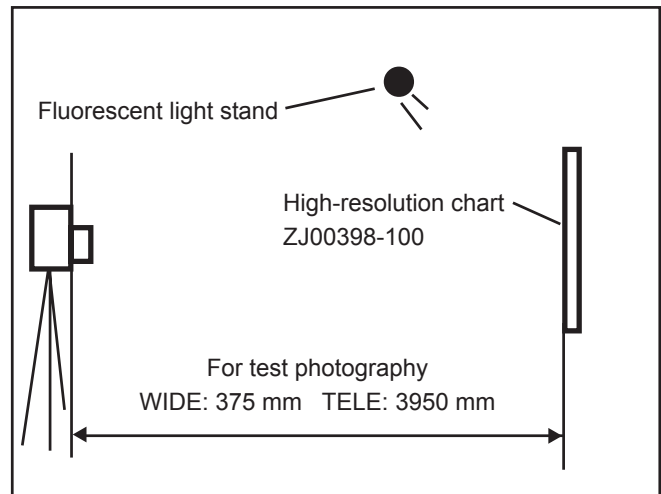
<Step 5>

Download the resolution checking image to your computer.

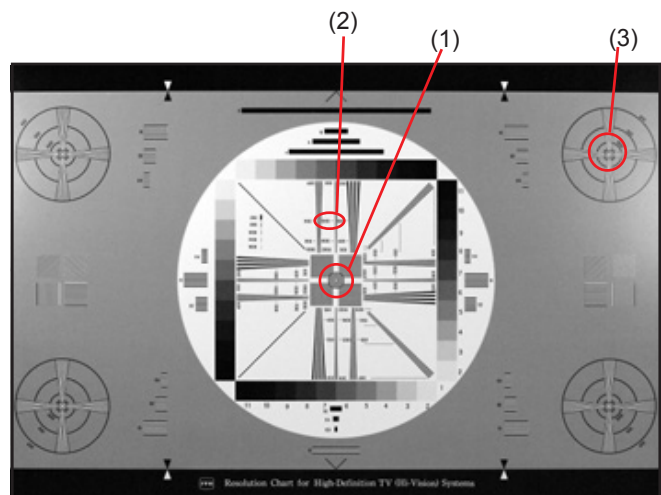
<Step 6>

Resolution checking image enlargement procedure (Fig. 5-4-2 (2)).

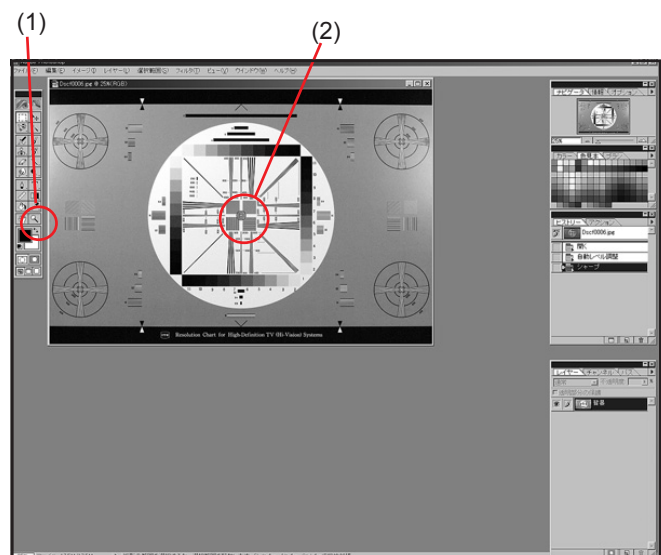
- (1) Open the image in Photoshop 5.0.
- (2) Display the image as shown in Fig. 5-4-3. The procedure varies depending on your software settings.
- (3) Use the zooming tool in the tool box (Fig. 5-4-3 (1)) to enlarge the area shown in Fig. 5-4-3 (2) to 300%.
- (4) When you enlarge the image, the centrally enlarged image (Fig. 5-4-4) appears.



<Fig. 5-4-1> Setting for Inspecting Resolution



<Fig. 5-4-2> Resolution Check Image



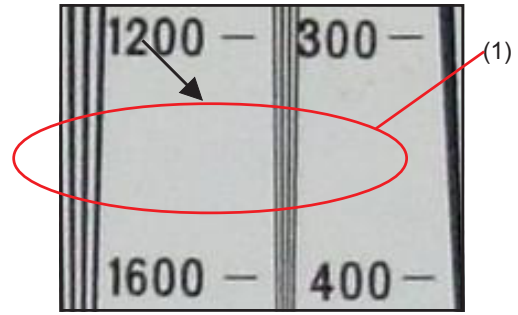
<Fig. 5-4-3> Enlargement Using Photoshop

The centrally enlarged image (Fig. 5-4-4 (1)) is normal if a resolution of 1400 lines can be confirmed.
 Use the same procedure to check the resolution of peripherally enlarged versions (Fig. 5-4-5 (1)) of the resolution checking image (Fig. 5-4-2 (3)). The peripherally enlarged image is normal if a resolution of 1000 lines can be confirmed.

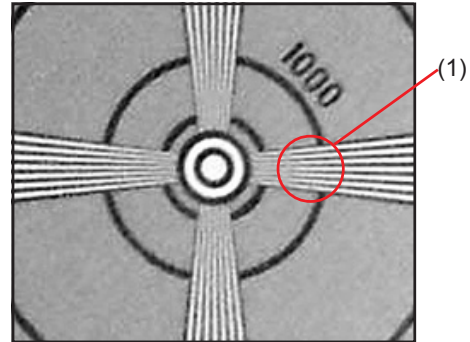
Check location	Service resolution value
Center (horizontal/vertical)	1400
Peripheral (horizontal/vertical)	1000

[Note!]

The resolution values given in this description are not the original "FinePix S9000/S9500" resolution values (TV resolution). The values given are according to the high-resolution chart set in the jig.
 Accordingly, the values shown in the above table are for servicing purposes and should be confirmed as being for use in in-house inspections.



<Fig. 5-4-4> Enlargement to 300% (Center)



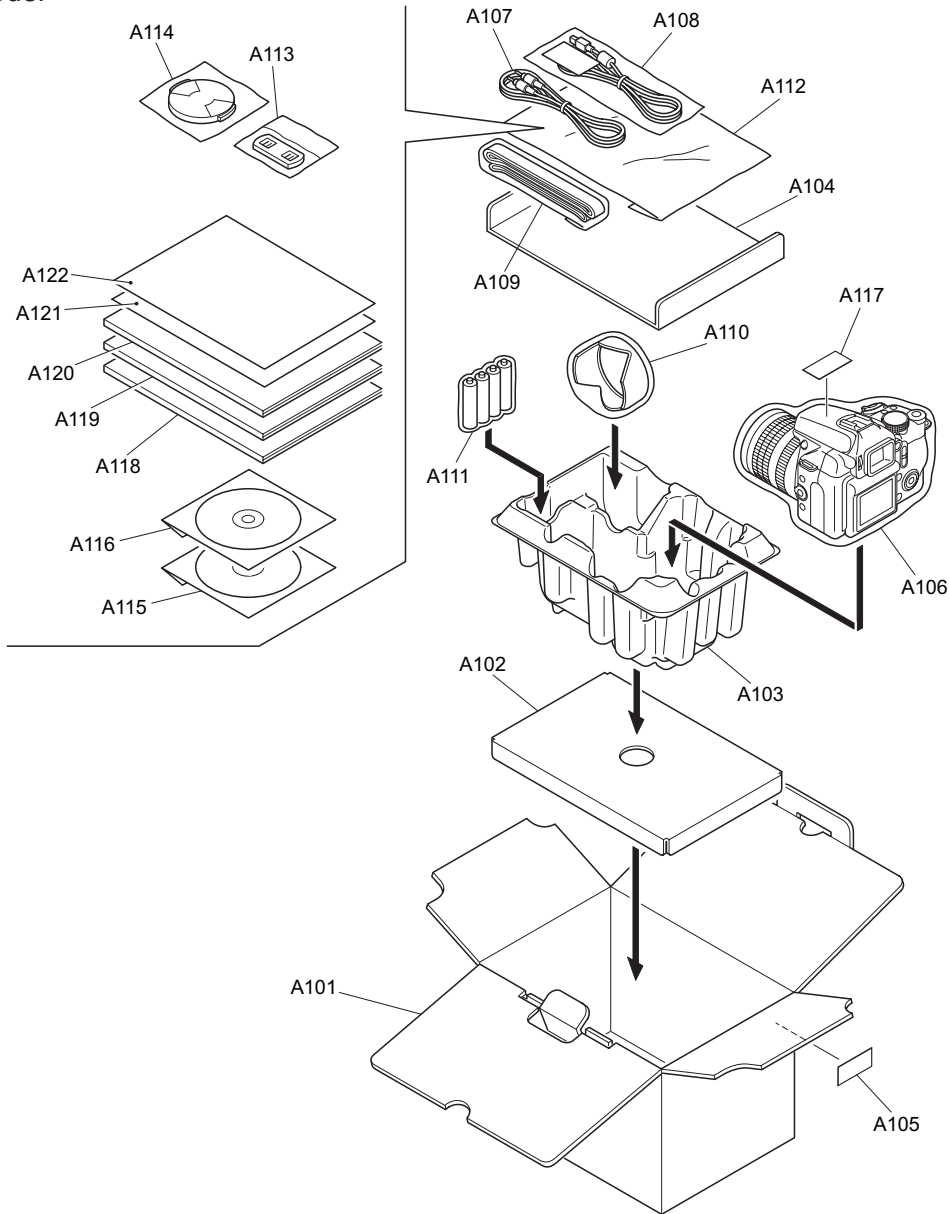
<Fig. 5-4-5> Enlargement to 300% (Peripheral)

MEMO

6. Parts List

6-1. Packing and Accessories

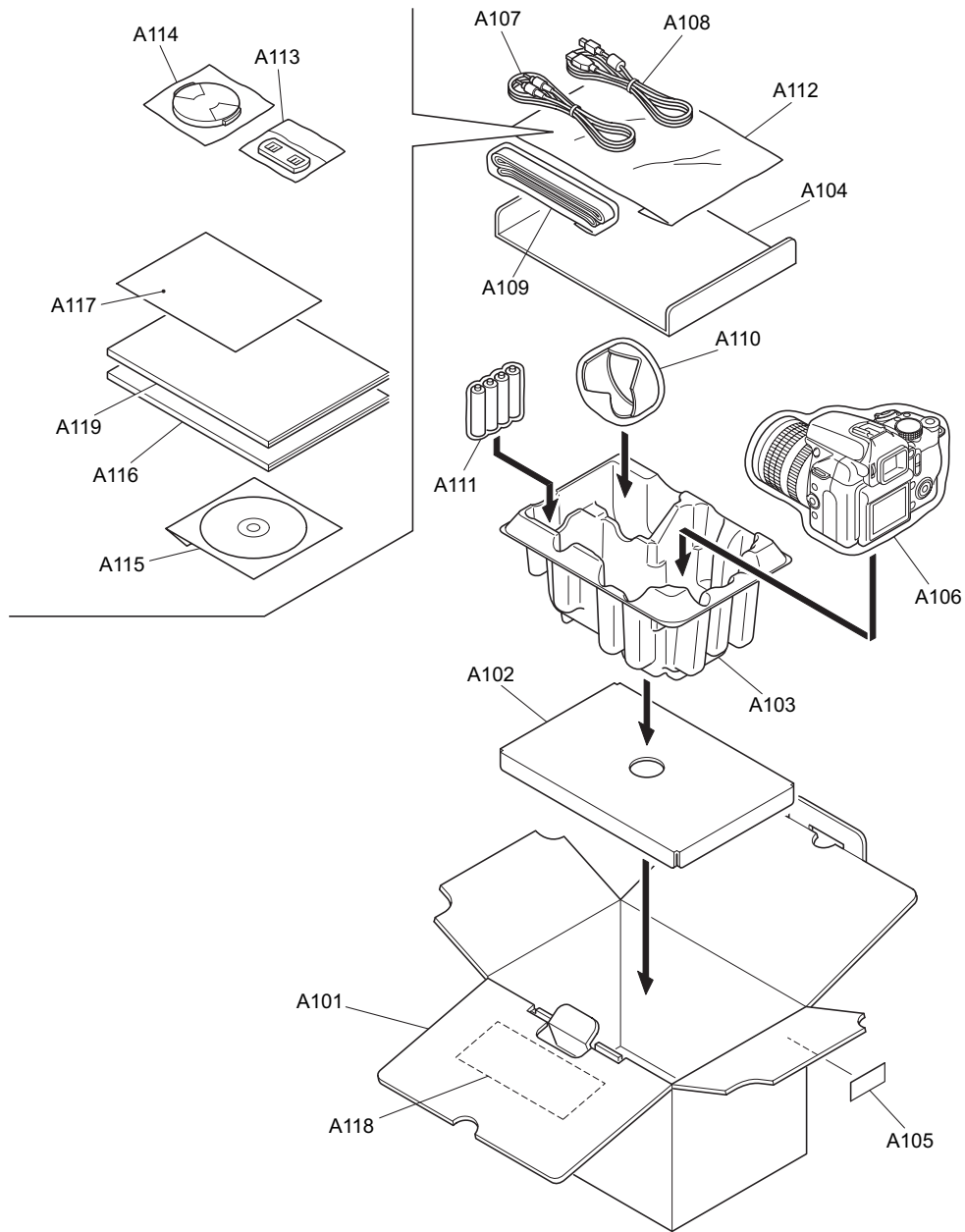
6-1-1. US-model



Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
A101	FZ06680-200	UNITARY BOX		A116	FZ05614-500	CD-ROM(HS-V2)	
A102	FZ06406-100	UNITARY BOX PAD		A117	BB18002-100	CERTIFICATION SEAL	
A103	FZ06187-100	SHEET MOLD		A118	BL00558-200	MANUAL E	
A104	FZ06713-100	PARTITION PAD		A119	BL00559-200	QUICKGUIDE E	
A105	BB12943-100	BAR CODE LABEL BLANK		A120	BL00559-500	QUICKGUIDE S	
A106	AZF0000-321	HDPE BAG NO.12		A121	BL00372-101	IMPORTANT SAFETY	
A107	FZ06706-100	AV CABLE		A122	BL00373-101	US WARRANTY	
A108	FZ06705-100	USB CABLE W					
A109	BB13161-200	SHOULDER BELT					
A110	FZ06312-100	HOOD					
A111	FZ06487-100	ALKALINE BATTERY					
A112	AZF0000-101	LDPE BAG NO.10					
A113	BB12402-100	LENSCAP HOLDER					
A114	FZ06311-101	LENS CAP					
A115	FZ06522-200	CD-ROM					

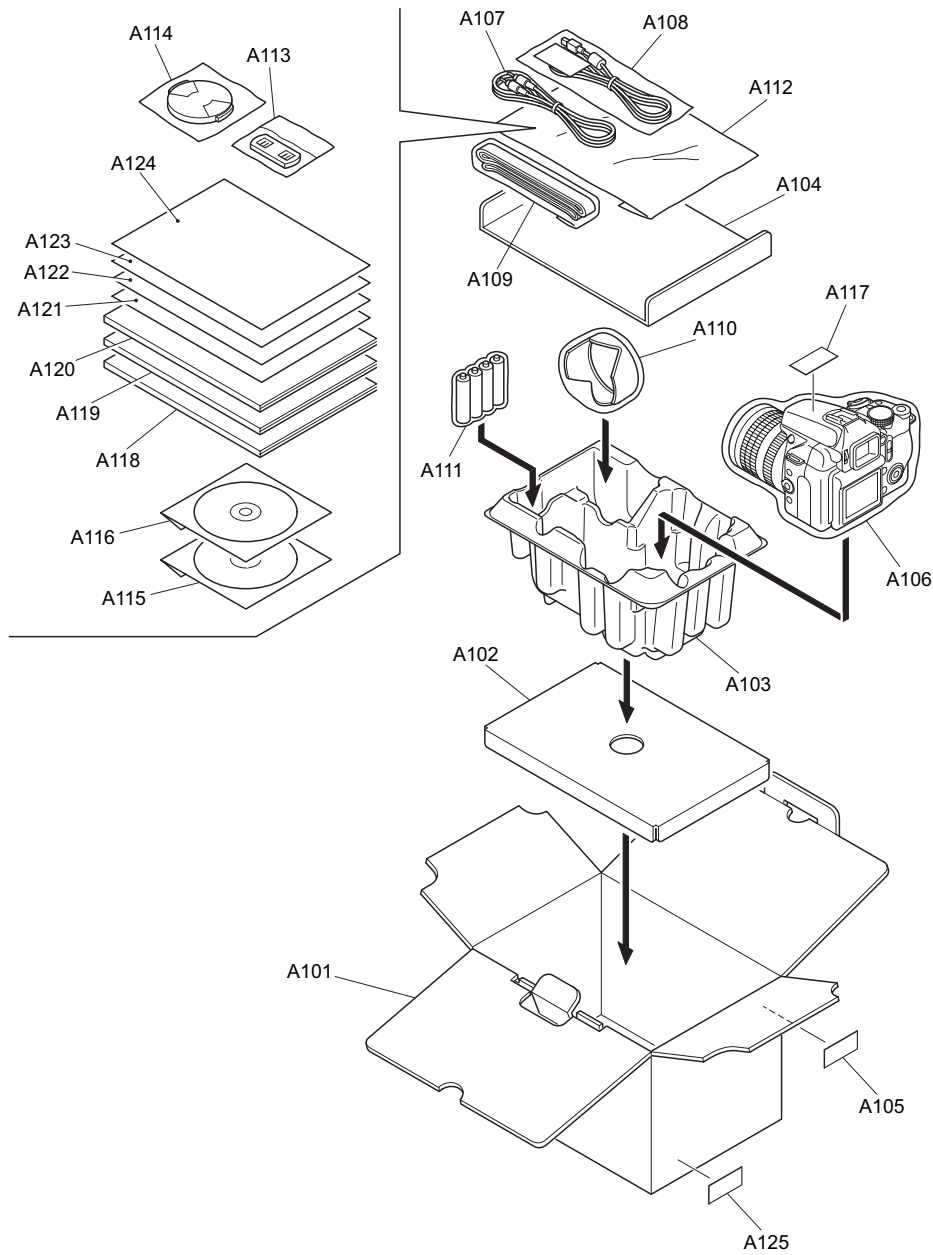
6. Parts List

6-1-2. JP-model



Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
A101	FZ06680-100	UNITARY BOX					
A102	FZ06406-100	UNITARY BOX PAD					
A103	FZ06187-100	SHEET MOLD					
A104	FZ06713-100	PARTITION PAD					
A105	BB12943-100	BAR CODE LABEL BLANK					
A106	AZF0000-321	HDPE BAG NO.12					
A107	FZ06706-100	AV CABLE					
A108	FZ06704-100	USB CABLE J					
A109	BB13161-200	SHOULDER BELT					
A110	FZ06312-100	HOOD					
A111	FZ01782-100	ALKALINE BATTERY					
A112	AZF0000-101	LDPE BAG NO.10					
A113	BB12402-100	LENSCAP HOLDER					
A114	FZ06311-101	LENS CAP					
A115	FZ06625-100	CD-ROM					
A116	BL00558-100	MANUAL J					
A117	BL00190-101	SAFETYCARD H14					
A118	BB18949-101	WARRANTY CARD					
A119	BL00575-100	PTF GUIDE FPV					

6-1-3. EU-model

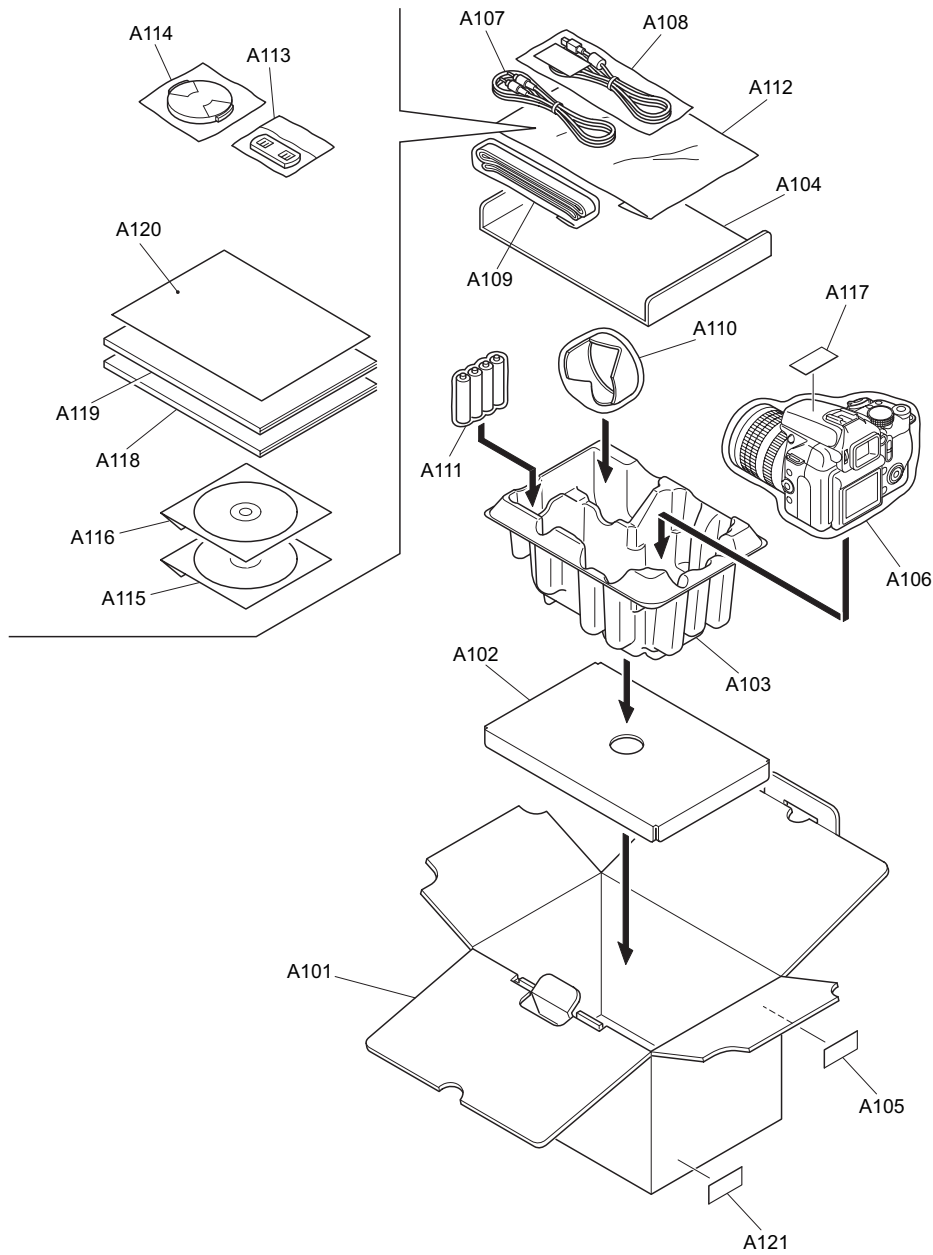


N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
A101	FZ06681-100	UNITARY BOX		A116	FZ05614-500	CD-ROM(HS-V2)	
A102	FZ06406-100	UNITARY BOX PAD		A117	BB18002-100	CERTIFICATION SEAL	
A103	FZ06187-100	SHEET MOLD		A118	N.S.	MANUAL E	
A104	FZ06714-100	PARTITION PAD		A119	N.S.	MANUAL F	
A105	BB12943-100	BAR CODE LABEL BLANK		A120	N.S.	MANUAL G	
A106	AZF0000-321	HDPE BAG NO.12		A121	N.S.	QUICKGUIDE E	
A107	FZ06706-100	AV CABLE		A122	N.S.	QUICKGUIDE F	
A108	FZ06705-100	USB CABLE W		A123	N.S.	QUICKGUIDE G	
A109	BB13161-200	SHOULDER BELT		A124	N.S.	QUICKGUIDE S	
A110	FZ06312-100	HOOD		A125	BB19700-200	DEST.LBL.EU JFG	
A111	FZ06487-100	ALKALINE BATTERY					
A112	AZF0000-101	LDPE BAG NO.10					
A113	BB12402-100	LENSCAP HOLDER					
A114	FZ06311-101	LENS CAP					
A115	FZ06522-200	CD-ROM					

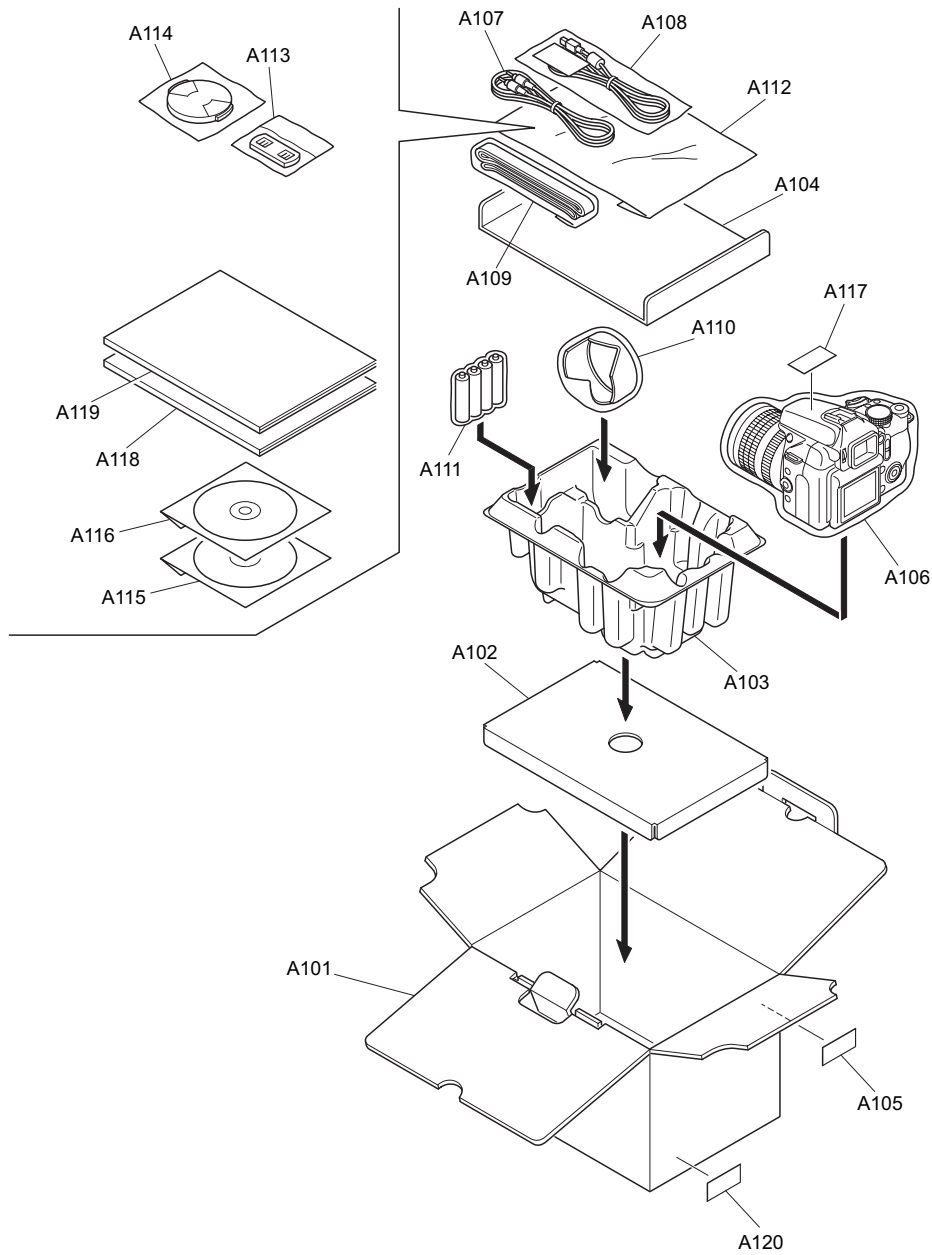
6. Parts List

6-1-4. EG-model



Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
A101	FZ06681-100	UNITARY BOX		A116	FZ05614-500	CD-ROM(HS-V2)	
A102	FZ06406-100	UNITARY BOX PAD		A117	BB18002-100	CERTIFICATION SEAL	
A103	FZ06187-100	SHEET MOLD		A118	BL00558-200	MANUAL E	
A104	FZ06714-100	PARTITION PAD		A119	BL00559-200	QUICKGUIDE E	
A105	BB12943-100	BAR CODE LABEL BLANK		A120	BL00176-103	H14 WARRANTY CARD EG	
A106	AZF0000-321	HDPE BAG NO.12		A121	BB19700-300	DEST.LBL.EG JFG	
A107	FZ06706-100	AV CABLE					
A108	FZ06705-100	USB CABLE W					
A109	BB13161-200	SHOULDER BELT					
A110	FZ06312-100	HOOD					
A111	FZ06487-100	ALKALINE BATTERY					
A112	AZF0000-101	LDPE BAG NO.10					
A113	BB12402-100	LENSCAP HOLDER					
A114	FZ06311-101	LENS CAP					
A115	FZ06522-200	CD-ROM					

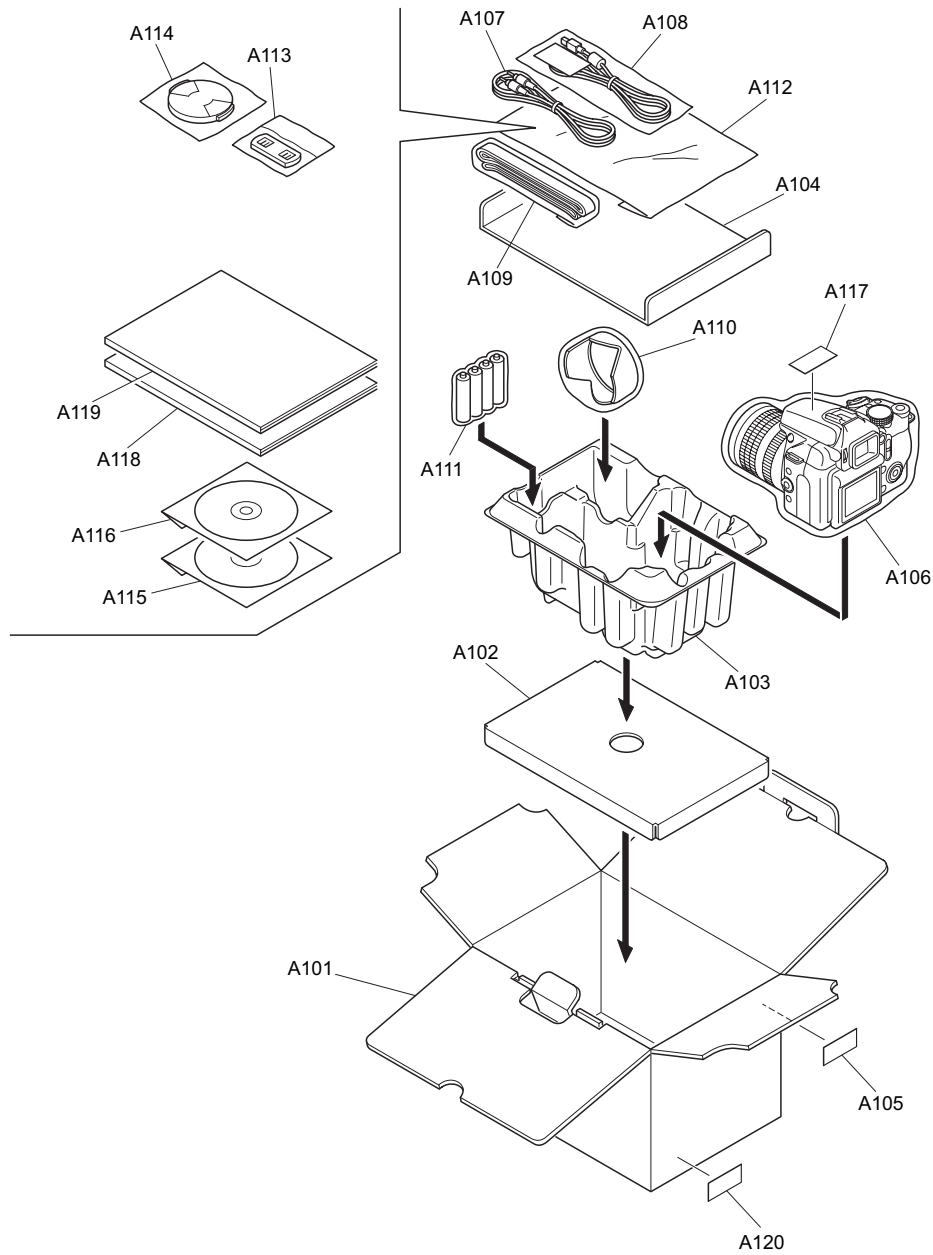
6-1-5. EE-model



Ref No.	Parts No.	Description	Comment
A101	FZ06681-100	UNITARY BOX	
A102	FZ06406-100	UNITARY BOX PAD	
A103	FZ06187-100	SHEET MOLD	
A104	FZ06714-100	PARTITION PAD	
A105	BB12943-100	BAR CODE LABEL BLANK	
A106	AZF0000-321	HDPE BAG NO.12	
A107	FZ06706-100	AV CABLE	
A108	FZ06705-100	USB CABLE W	
A109	BB13161-200	SHOULDER BELT	
A110	FZ06312-100	HOOD	
A111	FZ06487-100	ALKALINE BATTERY	
A112	AZF0000-101	LDPE BAG NO.10	
A113	BB12402-100	LENSCAP HOLDER	
A114	FZ06311-101	LENS CAP	
A115	FZ06522-200	CD-ROM	
A116	FZ05614-500	CD-ROM(HS-V2)	
A117	BB18002-100	CERTIFICATION SEAL	
A118	BL00558-200	MANUAL E	
A119	BL00559-200	QUICKGUIDE E	
A120	BB19700-700	DEST.LBL.EE JFG	

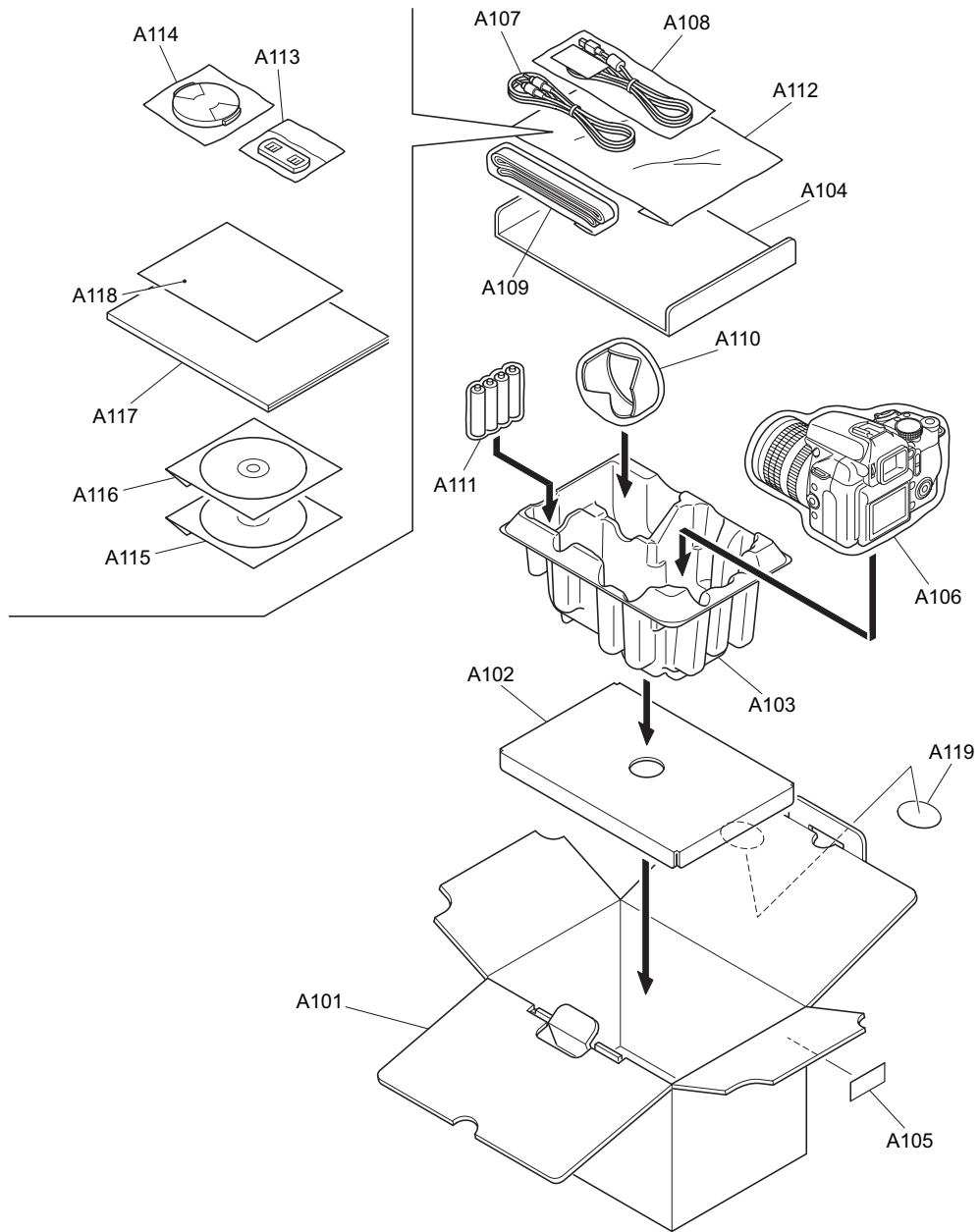
6. Parts List

6-1-6. AS-model



Ref No.	Parts No.	Description	Comment
A101	FZ06681-100	UNITARY BOX	
A102	FZ06406-100	UNITARY BOX PAD	
A103	FZ06187-100	SHEET MOLD	
A104	FZ06714-100	PARTITION PAD	
A105	BB12943-100	BAR CODE LABEL BLANK	
A106	AZF0000-321	HDPE BAG NO.12	
A107	FZ06706-100	AV CABLE	
A108	FZ06705-100	USB CABLE W	
A109	BB13161-200	SHOULDER BELT	
A110	FZ06312-100	HOOD	
A111	FZ06487-100	ALKALINE BATTERY	
A112	AZF0000-101	LDPE BAG NO.10	
A113	BB12402-100	LENSCAP HOLDER	
A114	FZ06311-101	LENS CAP	
A115	FZ06522-200	CD-ROM	
A116	FZ05614-500	CD-ROM(HS-V2)	
A117	BB18002-100	CERTIFICATION SEAL	
A118	BL00558-200	MANUAL E	
A119	BL00559-200	QUICKGUIDE E	
A120	BB19700-600	DEST.LBL.AS JFG	

★6-1-7. CH-model

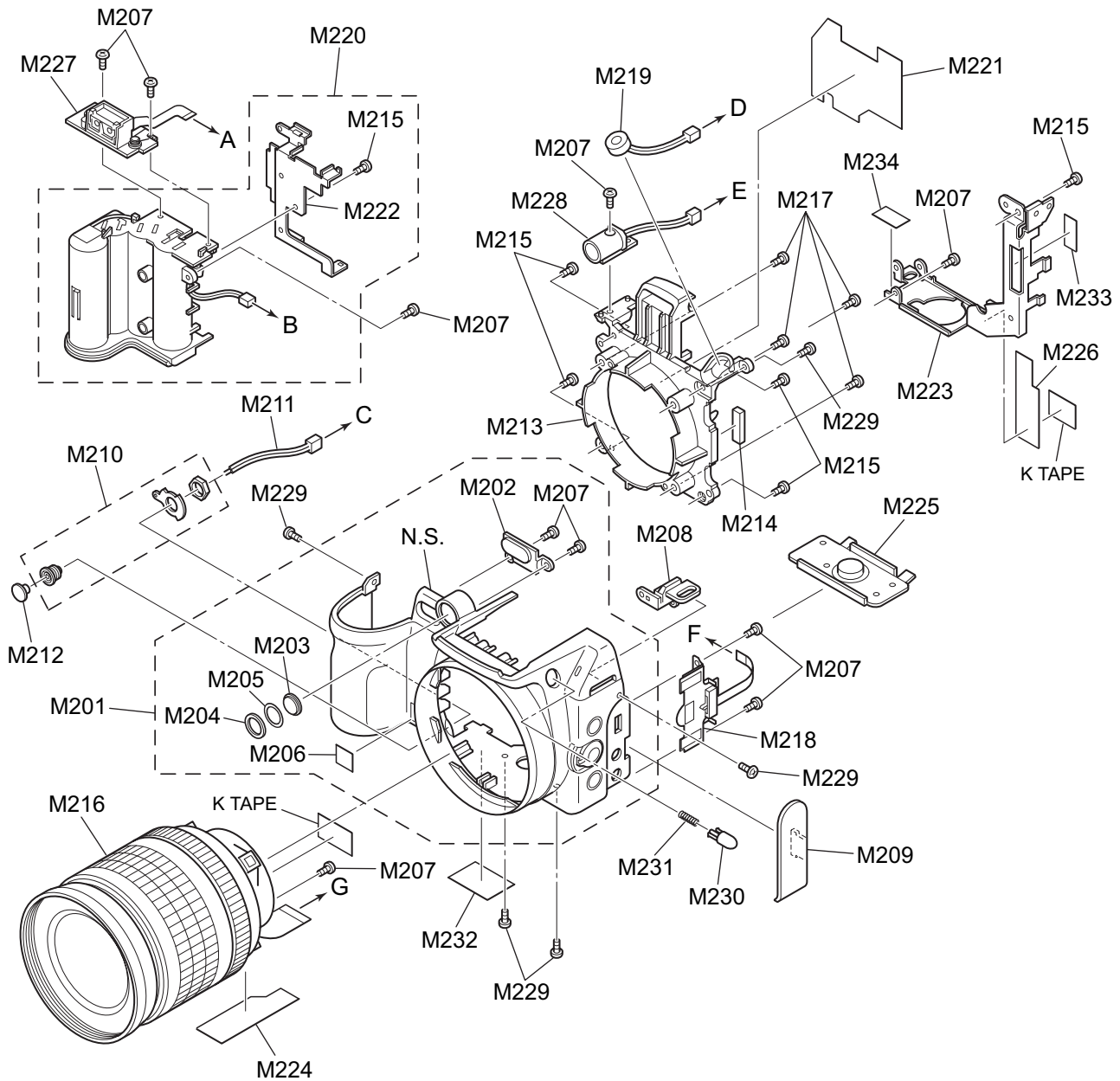


Ref No.	Parts No.	Description	Comment
A101	FZ06680-300	UNITARY BOX	
A102	FZ06406-100	UNITARY BOX PAD	
A103	FZ06187-100	SHEET MOLD	
A104	FZ06713-100	PARTITION PAD	
A105	BB12943-100	BAR CODE LABEL BLANK	
A106	AZF0000-321	HDPE BAG NO.12	
A107	FZ06706-100	AV CABLE	
A108	FZ06705-100	USB CABLE W	
A109	BB13161-200	SHOULDER BELT	
A110	FZ06312-100	HOOD	
A111	FZ06487-100	ALKALINE BATTERY	
A112	AZF0000-101	LDPE BAG NO.10	
A113	BB12402-100	LENSCAP HOLDER	
A114	FZ06311-101	LENS CAP	
A115	FZ06522-200	CD-ROM	
A116	FZ05614-500	CD-ROM(HS-V2)	
A117	BL00558-600	MANUAL C	
A118	BB19102-101	WARRANTY CN	
A119	BB19104-100	REGULATION SEAL	

★ Revised: 24, Oct. 2006

6-2. Cabi Front Block

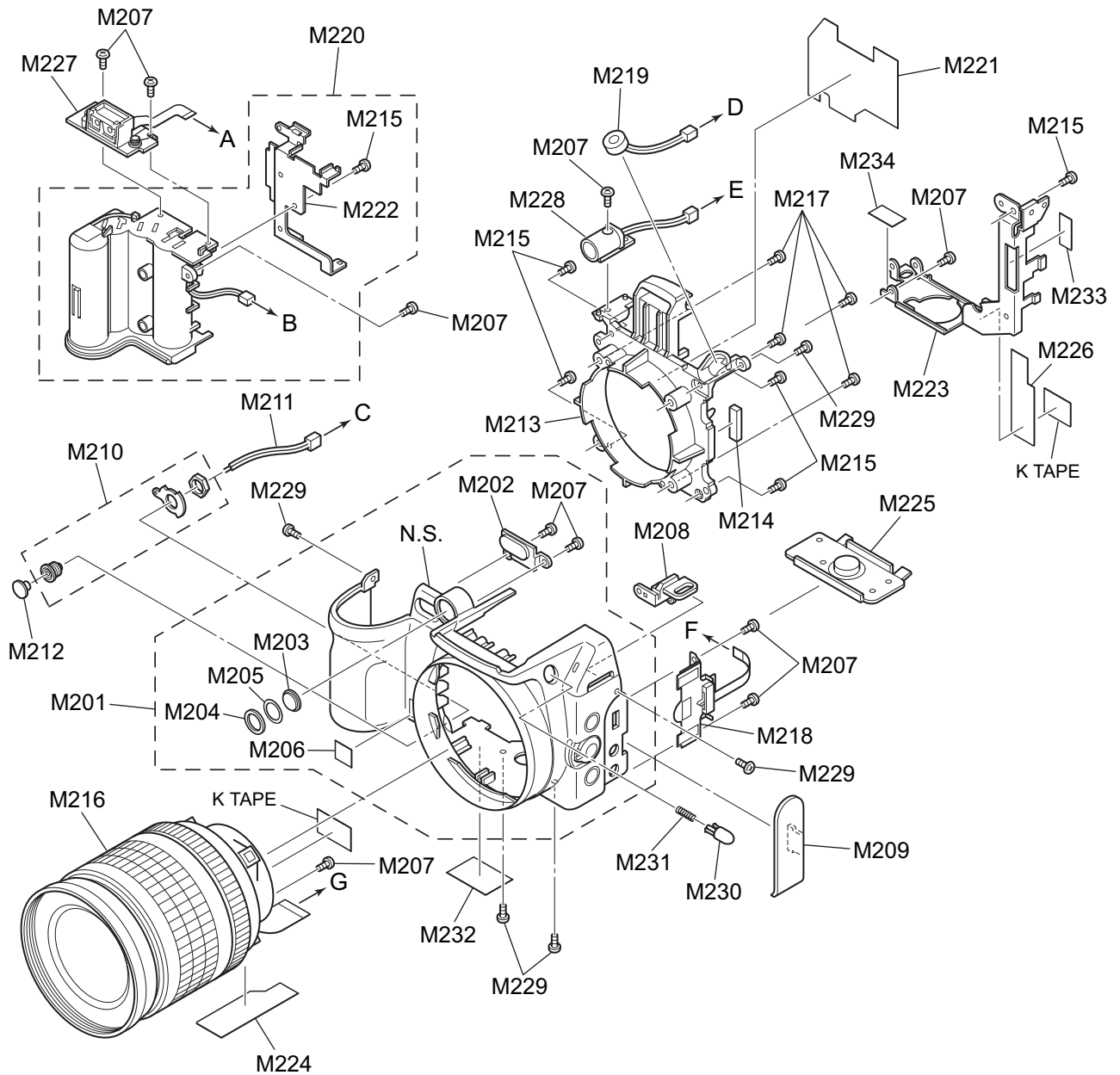
6-2-1. US-model



N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M201	BU03062-200	ASSY CASE F		M221	FZ06466-100	SHEET GRAPHITE	
M202	BB17785-100	WINDOW AF		M222	BB17793-100	FRAME BATT	
M203	BB17786-100	WINDOW SUB LIGHT		M223	BB17794-100	FRAME PWB	
M204	BB17787-100	RING SUB LIGHT		M224	BB17891-101	SHEET EMI-CCD	
M205	BB17795-100	TAPE SUB LIGHT		M225	BB17797-100	BASE TRIPOD	
M206	BB18675-100	CCD BADGE		M226	BB17892-100	SHEET EMI-FLAME	
M207	BB17335-200	BT2M1.7X3.0B		M227	FZ06282-100	AF SENSOR UNIT	
M208	BB17790-101	STRAP LEFT		M228	BU03216-100	AF ILLUMI ASSY	
M209	BB17788-100	COVER JACK		M229	BB19086-300	N-MS2M1.7X3.5BN	
M210	FZ06350-100	SYNCHRO TERMINAL		M230	BB17813-100	BUTTON FLASH	
M211	FZ06351-100	WIRE HARNESS		M231	BB17814-100	CSP FL BUTTON	
M212	BB17818-100	COVER SYNCHRO		M232	BB19699-200	LABEL PRODUCT	
M213	BB17791-100	HOLDER LENS		M233	BB17886-100	SHEET EMI-SIDE	
M214	BB17837-100	CUSHION		M234	BB17885-100	SHEET EMI-BASE	
M215	BB17681-600	BT2M1.7X5.0					
M216	BF06162-100	LENS ASSY WITH DATA					
M217	BB19087-G00	MS0M2.0X8.0BN					
M218	FZ06302-100	SW UNIT					
M219	FZ06347-100	MIC ASSY					
M220	FZ05848-100	UNIT BATT HOLDER					

6-2-2. JP-model

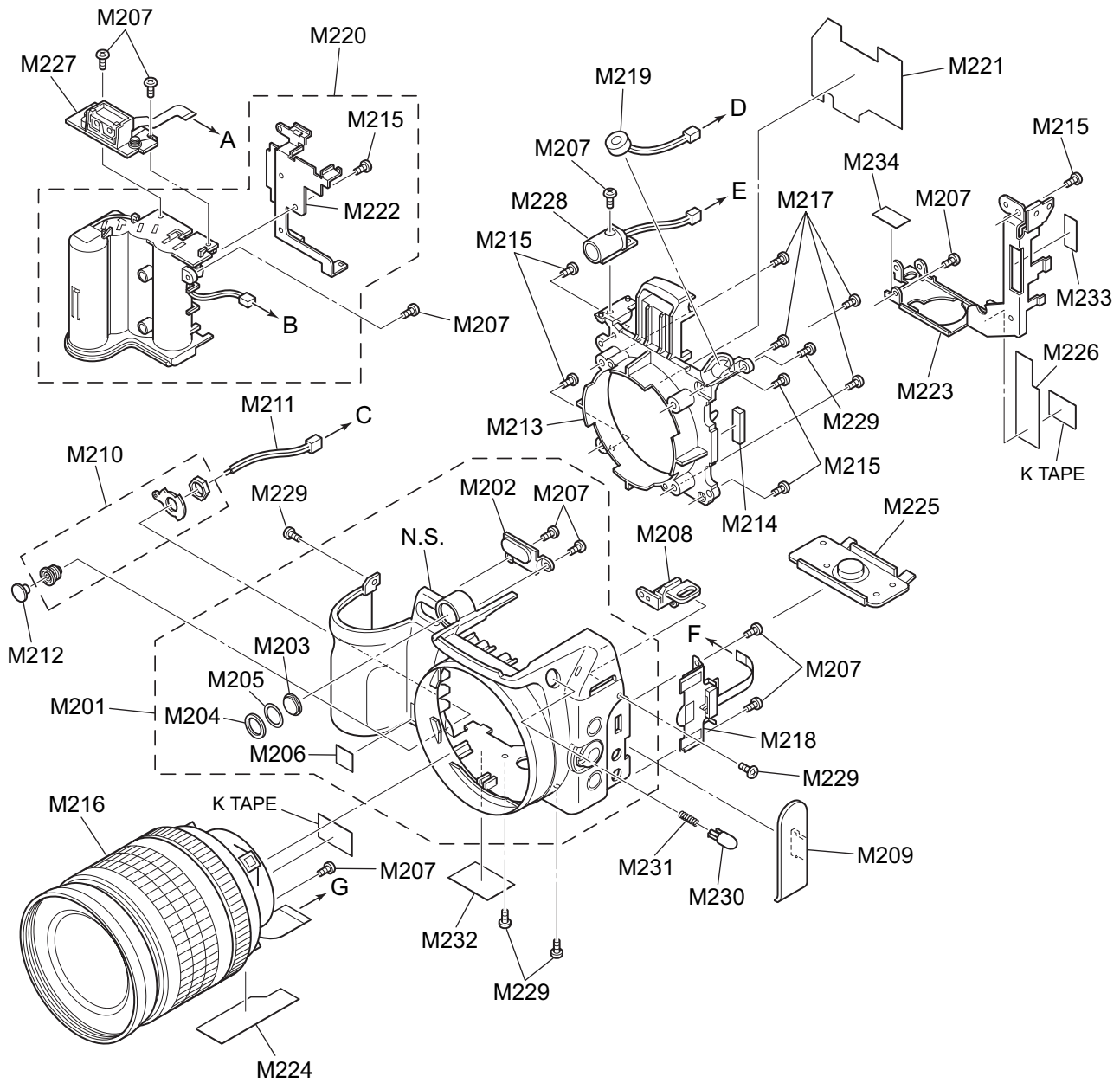


N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M201	BU03062-200	ASSY CASE F		M221	FZ06466-100	SHEET GRAPHITE	
M202	BB17785-100	WINDOW AF		M222	BB17793-100	FRAME BATT	
M203	BB17786-100	WINDOW SUB LIGHT		M223	BB17794-100	FRAME PWB	
M204	BB17787-100	RING SUB LIGHT		M224	BB17891-101	SHEET EMI-CCD	
M205	BB17795-100	TAPE SUB LIGHT		M225	BB17797-100	BASE TRIPOD	
M206	BB18675-100	CCD BADGE		M226	BB17892-100	SHEET EMI-FLAME	
M207	BB17335-200	BT2M1.7X3.0B		M227	FZ06282-100	AF SENSOR UNIT	
M208	BB17790-101	STRAP LEFT		M228	BU03216-100	AF ILLUMI ASSY	
M209	BB17788-100	COVER JACK		M229	BB19086-300	N-MS2M1.7X3.5BN	
M210	FZ06350-100	SYNCHRO TERMINAL		M230	BB17813-100	BUTTON FLASH	
M211	FZ06351-100	WIRE HARNESS		M231	BB17814-100	CSP FL BUTTON	
M212	BB17818-100	COVER SYNCHRO		M232	BB19699-100	LABEL PRODUCT	
M213	BB17791-100	HOLDER LENS		M233	BB17886-100	SHEET EMI-SIDE	
M214	BB17837-100	CUSHION		M234	BB17885-100	SHEET EMI-BASE	
M215	BB17681-600	BT2M1.7X5.0					
M216	BF06162-100	LENS ASSY WITH DATA					
M217	BB19087-G00	MS0M2.0X8.0BN					
M218	FZ06302-100	SW UNIT					
M219	FZ06347-100	MIC ASSY					
M220	FZ05848-100	UNIT BATT HOLDER					

6. Parts List

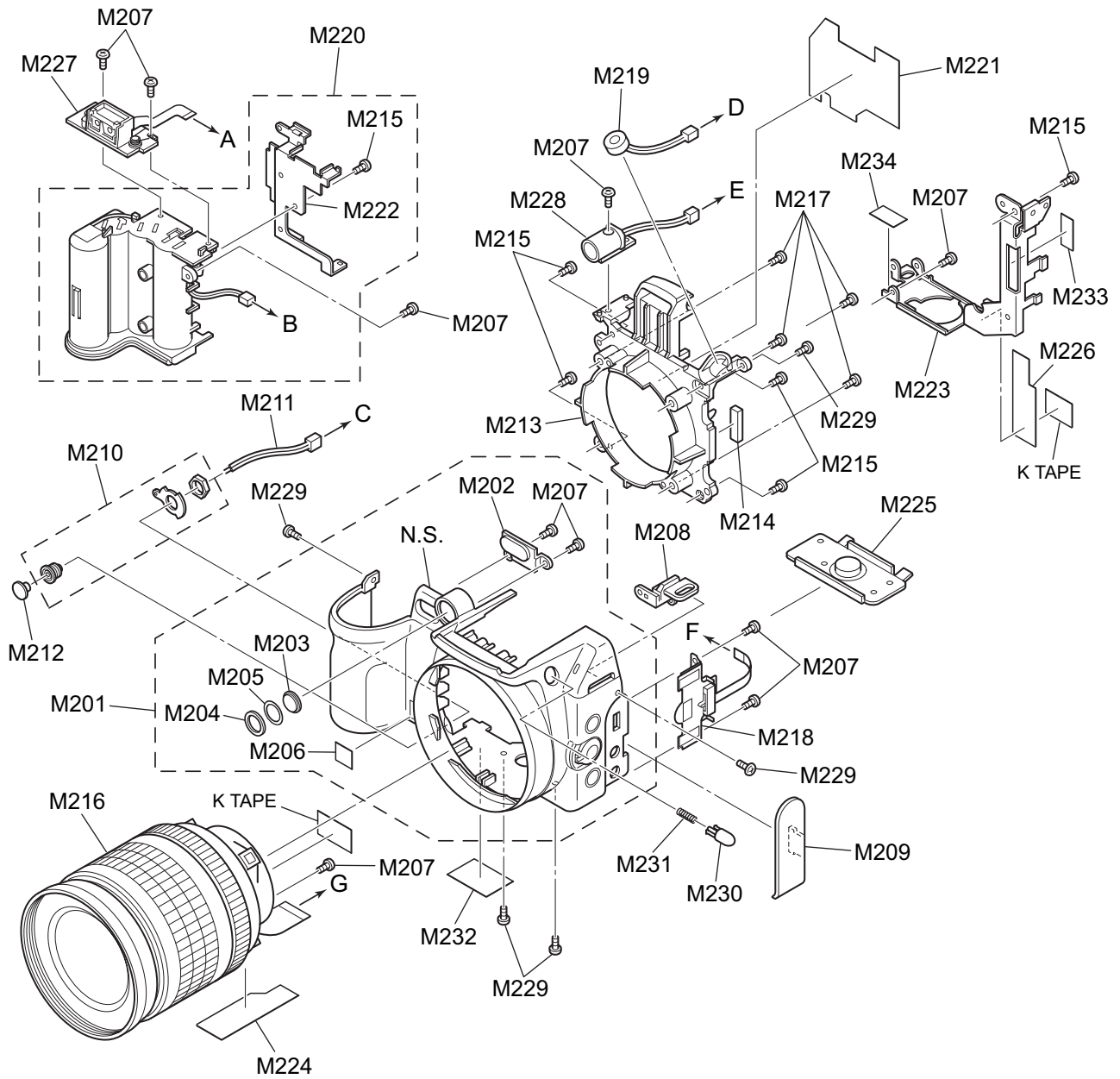
6-2-3. EU/EG/EE-model



N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M201	BU03062-200	ASSY CASE F		M221	FZ06466-100	SHEET GRAPHITE	
M202	BB17785-100	WINDOW AF		M222	BB17793-100	FRAME BATT	
M203	BB17786-100	WINDOW SUB LIGHT		M223	BB17794-100	FRAME PWB	
M204	BB17787-100	RING SUB LIGHT		M224	BB17891-101	SHEET EMI-CCD	
M205	BB17795-100	TAPE SUB LIGHT		M225	BB17797-100	BASE TRIPOD	
M206	BB18675-100	CCD BADGE		M226	BB17892-100	SHEET EMI-FLAME	
M207	BB17335-200	BT2M1.7X3.0B		M227	FZ06282-100	AF SENSOR UNIT	
M208	BB17790-101	STRAP LEFT		M228	BU03216-100	AF ILLUMI ASSY	
M209	BB17788-100	COVER JACK		M229	BB19086-300	N-MS2M1.7X3.5BN	
M210	FZ06350-100	SYNCHRO TERMINAL		M230	BB17813-100	BUTTON FLASH	
M211	FZ06351-100	WIRE HARNESS		M231	BB17814-100	CSP FL BUTTON	
M212	BB17818-100	COVER SYNCHRO		M232	BB19699-400	LABEL PRODUCT	
M213	BB17791-100	HOLDER LENS		M233	BB17886-100	SHEET EMI-SIDE	
M214	BB17837-100	CUSHION		M234	BB17885-100	SHEET EMI-BASE	
M215	BB17681-600	BT2M1.7X5.0					
M216	BF06162-100	LENS ASSY WITH DATA					
M217	BB19087-G00	MS0M2.0X8.0BN					
M218	FZ06302-100	SW UNIT					
M219	FZ06347-100	MIC ASSY					
M220	FZ05848-100	UNIT BATT HOLDER					

6-2-4. AS/CH-model

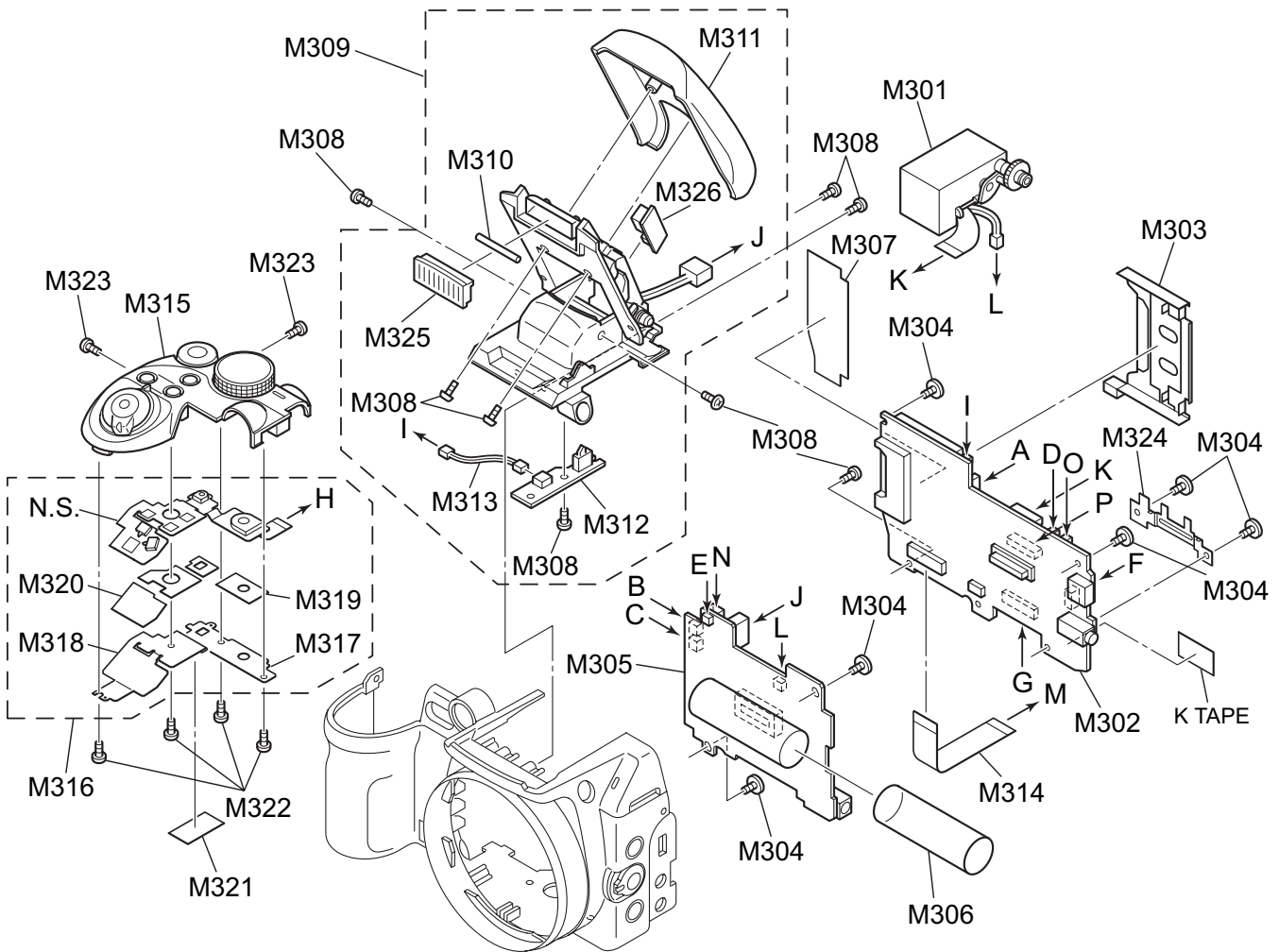


N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M201	BU03062-200	ASSY CASE F		M221	FZ06466-100	SHEET GRAPHITE	
M202	BB17785-100	WINDOW AF		M222	BB17793-100	FRAME BATT	
M203	BB17786-100	WINDOW SUB LIGHT		M223	BB17794-100	FRAME PWB	
M204	BB17787-100	RING SUB LIGHT		M224	BB17891-101	SHEET EMI-CCD	
M205	BB17795-100	TAPE SUB LIGHT		M225	BB17797-100	BASE TRIPOD	
M206	BB18675-100	CCD BADGE		M226	BB17892-100	SHEET EMI-FLAME	
M207	BB17335-200	BT2M1.7X3.0B		M227	FZ06282-100	AF SENSOR UNIT	
M208	BB17790-101	STRAP LEFT		M228	BU03216-100	AF ILLUMI ASSY	
M209	BB17788-100	COVER JACK		M229	BB19086-300	N-MS2M1.7X3.5BN	
M210	FZ06350-100	SYNCHRO TERMINAL		M230	BB17813-100	BUTTON FLASH	
M211	FZ06351-100	WIRE HARNESS		M231	BB17814-100	CSP FL BUTTON	
M212	BB17818-100	COVER SYNCHRO		M232	BB19699-300	LABEL PRODUCT	
M213	BB17791-100	HOLDER LENS		M233	BB17886-100	SHEET EMI-SIDE	
M214	BB17837-100	CUSHION		M234	BB17885-100	SHEET EMI-BASE	
M215	BB17681-600	BT2M1.7X5.0					
M216	BF06162-100	LENS ASSY WITH DATA					
M217	BB19087-G00	MS0M2.0X8.0BN					
M218	FZ06302-100	SW UNIT					
M219	FZ06347-100	MIC ASSY					
M220	FZ05848-100	UNIT BATT HOLDER					

6-3. Internal Block

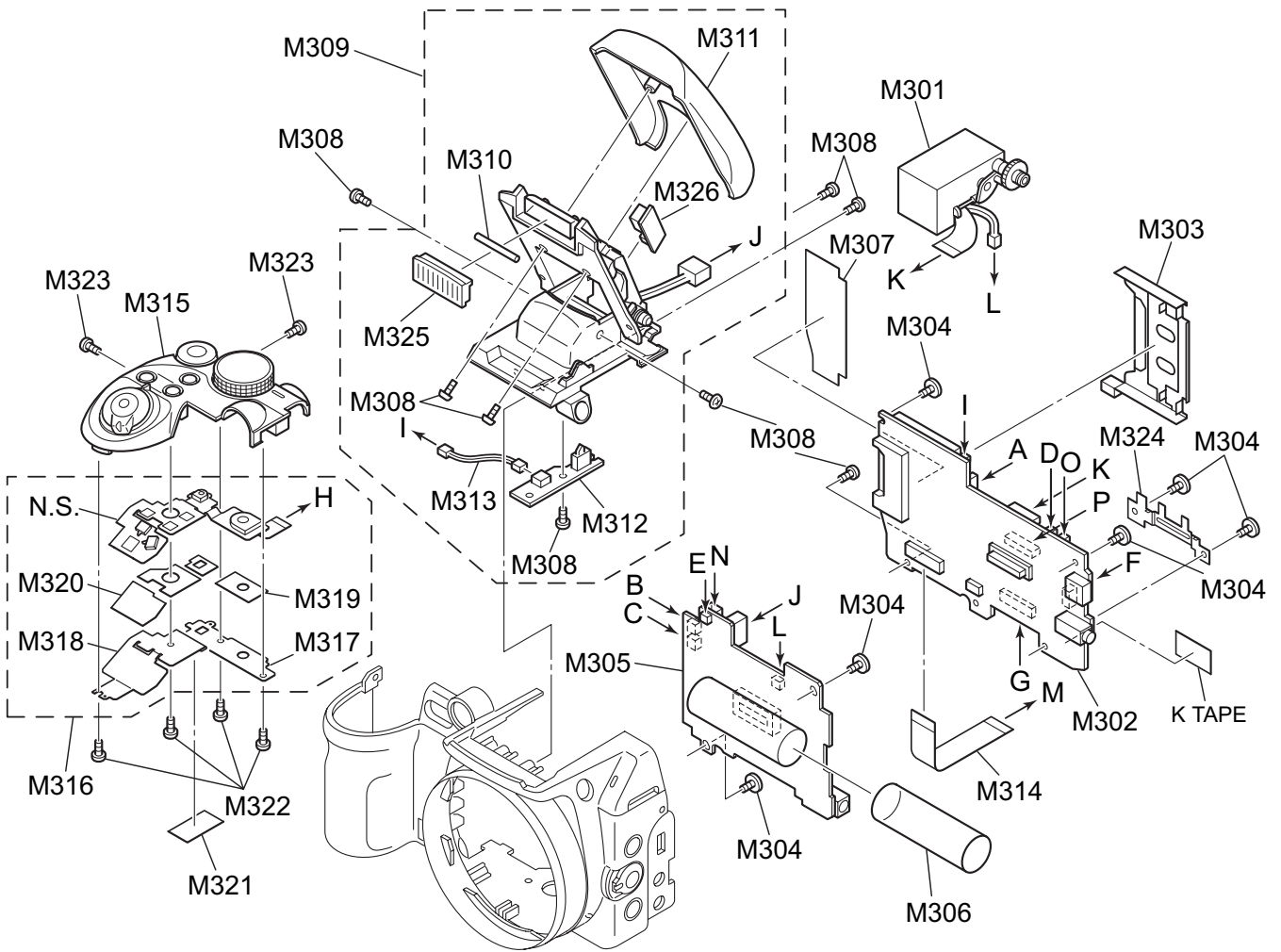
6-3-1. US/JP-model



N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M301	BU03393-100	EVF UNIT CONST		M316	BF05749-100	TOP FPC CONST	
M302	CB1678-B101	MAIN PWB ASSY		M317	BB17792-100	PLATE FPC TOP D	
M303	FZ06283-100	EJECTOR		M318	BB17868-100	PLATE FPC TOP	
M304	BB17349-100	MSWM1.7X2.5		M319	BB17878-100	TAPE FPC TOP D	
M305	CB1679-B100	DCST PWB ASSY		M320	BB17877-100	TAPE FPC TOP	
M306	BB17796-100	TUBE CONDENSER		M321	BB17887-100	SHEET EMI-TOP	
M307	BB17866-100	CHEET CF		M322	BB17335-200	BT2M1.7X3.0B	
M308	BB17335-400	BT2M1.7X4.0B		M323	BB19183-600	N-BT2M1.7X5.0B	
M309	BF05116-300	FLASH CONST		M324	BB19189-100	PLATE GND	
M310	FZ06247-100	LIGHT		M325	BB17798-100	WINDOW FLASH	
M311	BB17812-301	FLASH TOP		M326	CB1684-A100	TRG PWB ASSY	
M312	CB1684-A200	STSW PWB ASSY					
M313	FZ06344-100	WIRE HARNESS					
M314	FZ06345-100	FFC					
M315	BU03065-201	ASSY CASE TOP					

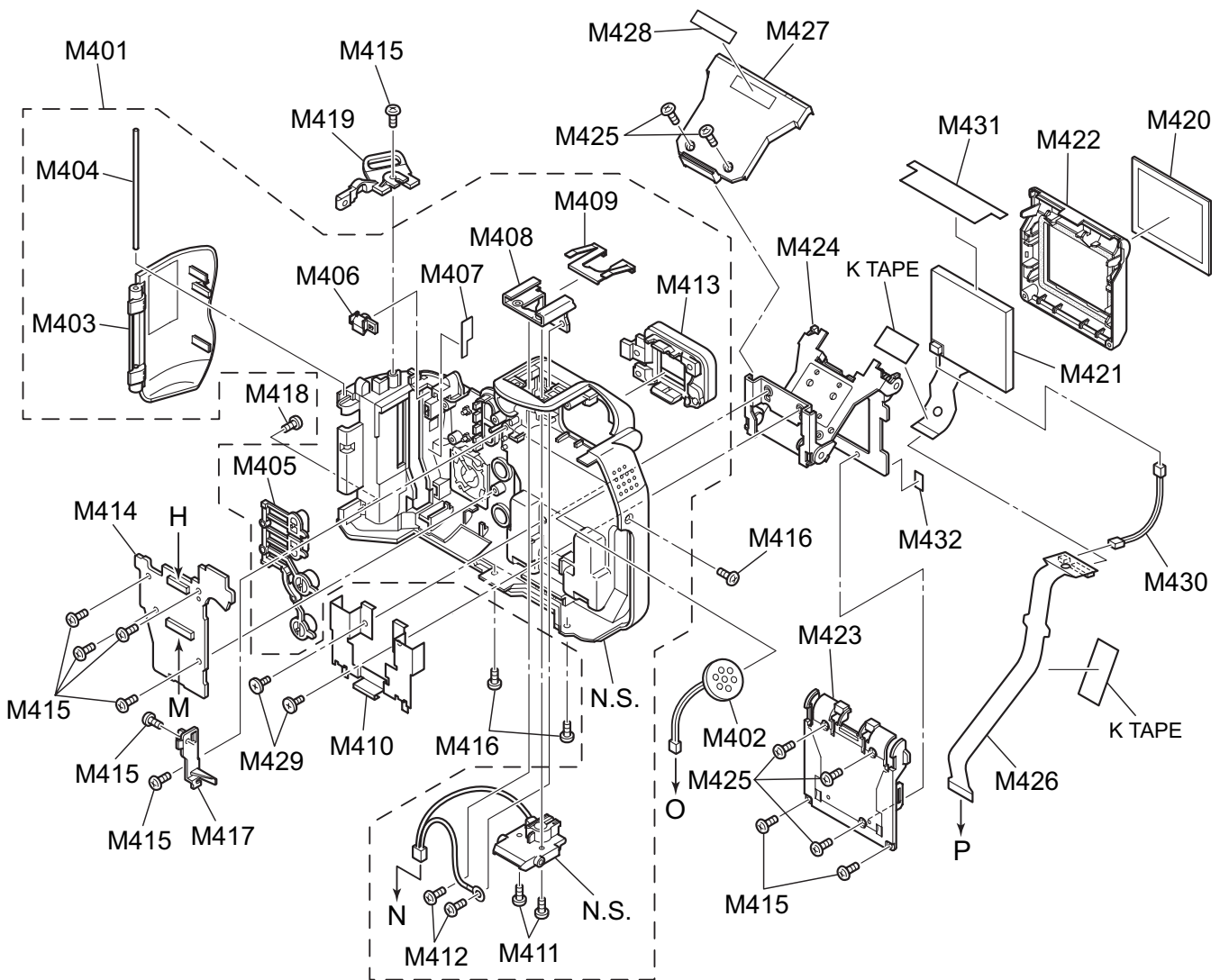
6-3-2. EU/EG/EE/AS/CH-model



N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M301	BU03393-100	EVF UNIT CONST		M316	BF05749-100	TOP FPC CONST	
M302	CB1678-B101	MAIN PWB ASSY		M317	BB17792-100	PLATE FPC TOP D	
M303	FZ06283-100	EJECTOR		M318	BB17868-100	PLATE FPC TOP	
M304	BB17349-100	MSWM1.7X2.5		M319	BB17878-100	TAPE FPC TOP D	
M305	CB1679-B100	DCST PWB ASSY		M320	BB17877-100	TAPE FPC TOP	
M306	BB17796-100	TUBE CONDENSER		M321	BB17887-100	SHEET EMI-TOP	
M307	BB17866-100	CHEET CF		M322	BB17335-200	BT2M1.7X3.0B	
M308	BB17335-400	BT2M1.7X4.0B		M323	BB19183-600	N-BT2M1.7X5.0B	
M309	BF05116-400	FLASH CONST		M324	BB19189-100	PLATE GND	
M310	FZ06247-100	LIGHT		M325	BB17798-100	WINDOW FLASH	
M311	BB17812-401	FLASH TOP		M326	CB1684-A100	TRG PWB ASSY	
M312	CB1684-A200	STSW PWB ASSY					
M313	FZ06344-100	WIRE HARNESS					
M314	FZ06345-100	FFC					
M315	BU03065-201	ASSY CASE TOP					

6-4. Cabi Rear Block



N.S.=Not Supply

Ref No.	Parts No.	Description	Comment	Ref No.	Parts No.	Description	Comment
M401	BU03064-200	ASSY CASE R		M421	FZ06688-100	LCD CONST	
M402	FZ06346-100	SPEAKER ASSY		M422	BU03382-100	ASSY CASE LCD F	
M403	BB17816-100	COVER CARD		M423	BB19677-100	CASE LCD R	
M404	BB13167-200	CARD SHAFT		M424	FZ05850-200	UNIT HINGE	
M405	BB17826-100	BUTTON REAR		M425	BB19085-A00	MS2M1.7X2.0N	
M406	BB17827-100	GUIDE LIGHT		M426	CB1877-A101	MLFPC PWB ASSY	
M407	BB17828-100	SHEET SW		M427	BB17844-100	COVER FPC	
M408	BB17829-100	SHOE		M428	BB17803-100	SHEET COVER FPC	
M409	BB17830-101	COVER SHOE		M429	BB19084-100	N-MSWM1.7X2.5N	
M410	BB19685-100	PLATE EMI		M430	FZ06699-100	WIRE HARNESS	
M411	BB19078-H00	MS2M1.7X6.5N		M431	BB19828-100	SHEET LCD	
M412	BB17335-600	BT2M1.7X5.0B		M432	BB19729-100	GASKET	
M413	BB17834-100	FRAME FINDER					
M414	CB1680-A100	KEY PWB ASSY					
M415	BB17335-400	BT2M1.7X4.0B					
M416	BB19086-300	N-MS2M1.7X3.5BN					
M417	BB17784-100	PLATE REAR					
M418	BB19183-600	N-BT2M1.7X5.0B					
M419	BB17864-100	STRAP RIGHT					
M420	BB19678-101	WINDOW LCD					

6-5. Electrical parts

[NOTE]

The components indicated by mark \triangle 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	Ref No.	Parts No.	Description	Comment	PWB diagram
MAIN PWB ASSY					KEY PWB ASSY				
[CONNECTOR]					[SWITCH]				
CN100	FGB170-0571	CONNECTOR			SW750	FZ06162-100	DETECTOR SWITCH		
CN200	FGA162-0022	CONNECTOR			SW751	FZ04926-100	TACT SWITCH		
CN201	FGB163-0241	CONNECTOR			SW752	FZ05894-100	DETECTOR SWITCH		
CN202	FGB162-0081	CONNECTOR			SW753	FZ04926-100	TACT SWITCH		
CN203	FGB162-0121	CONNECTOR			SW754	FZ04926-100	TACT SWITCH		
CN204	FGY097-0201	CONNECTOR			SW755	FZ04926-100	TACT SWITCH		
CN205	FGY098-0501	CONNECTOR			SW756	FZ04926-100	TACT SWITCH		
CN206	FZ05744-100	JACK			SW757	FZ04926-200	TACT SWITCH		
CN400	FGB160-0241	CONNECTOR			SW758	FZ04926-200	TACT SWITCH		
CN401	FGB160-0201	CONNECTOR			SW759	FZ04926-200	TACT SWITCH		
CN500	FGA162-0022	CONNECTOR			SW760	FZ04926-200	TACT SWITCH		
CN501	FGA162-0021	CONNECTOR			SW761	FZ04926-100	TACT SWITCH		
CN550	FGC190-0701	CONNECTOR			[CONNECTOR]				
[JACK]					CN750	FGB161-0241	CONNECTOR		
J200	FZ04344-100	JACK			CN751	FGB165-0161	CONNECTOR		
[BATTERY]					TOP FPC ASSY				
BT300	FZ04705-200	BACKUP ELEC PARTS			[SWITCH]				
DCST PWB ASSY					SW850	FZ04993-101	TACT SWITCH		
[FUSE]					SW851	FZ06162-100	DETECTOR SWITCH		
\triangle F600	FP00039-253	FUSE		B-8	SW852	FZ06162-100	DETECTOR SWITCH		
\triangle F601	FP00043-253	FUSE		E-2	SW853	FZ04926-100	TACT SWITCH		
\triangle F602	FP00039-253	FUSE		A-6	SW854	FZ04926-100	TACT SWITCH		
\triangle F605	FP00042-752	FUSE		E-2	SW855	FZ04926-100	TACT SWITCH		
[CONNECTOR]					SW856	FZ05877-100	ROTARYENCODERSWITCH		
CN600	FGA169-0021	CONNECTOR							
CN601	FGA162-0021	CONNECTOR							
CN602	FGA162-0021	CONNECTOR							
CN603	FGC189-0701	CONNECTOR							
CN700	FGA171-0021	CONNECTOR							
CN701	FGA171-0021	CONNECTOR							
CN702	FGA174-0041	CONNECTOR							
[JACK]									
J600	FZ05847-100	JACK							

MEMO

7. Appendix

7-1. List of Related Technical Updates Issued

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

Technical Update No.	Date	Title	Details/Other
2006-116	24, Oct. 2006	Parts list correction and Service manual revision	Revised page: P6-7
2007-008	30, Jan. 2007	Adjustment software and Service manual revision	Revised page: P4-32 and P4-53 to P4-54

