

Service Manual

Digital Camera/Lens Kit/Double Zoom Lens Kit/Body

LUMIX



Model No. **DMC-G3KPP**

DMC-G3KPC

DMC-G3KEB

DMC-G3KEC

DMC-G3KEE

DMC-G3KEG

DMC-G3KGC

DMC-G3KGD

DMC-G3KGH

DMC-G3K GK

DMC-G3KGN

DMC-G3KGT

DMC-G3PP

DMC-G3PC

DMC-G3EB

DMC-G3EC

DMC-G3EE

DMC-G3EG

DMC-G3GC

DMC-G3GD

DMC-G3GH

DMC-G3GN

Panasonic[®]

DMC-G3GT

DMC-G3WPP

DMC-G3WEB

DMC-G3WEC

DMC-G3WEE

DMC-G3WEG

DMC-G3WGC

DMC-G3WGD

DMC-G3WGH

DMC-G3WGK

DMC-G3WGN

DMC-G3WGT

Vol. 1

Colour

[DMC-G3K]

(K).....Black Type

(R).....Red Type (except GD/GT)

(W).....White Type (except PC/EG)

(T).....Brown Type (only PP/EG/GC)

[DMC-G3]

(K).....Black Type

[DMC-G3W]

(K).....Black Type

(R).....Red Type (except PP/EE/GD/GT)

(W).....White Type (except PP/EB/EE/EG)

(T).....Brown Type (only EG/GC)

(KA).....Black Type (only EB)

DMC-G3K series: Interchangeable Lens (H-FS014042) is bundled.

DMC-G3W series: Interchangeable Lens (H-FS014042/H-FS045200) are bundled.

DMC-G3 series: Camera Body Only.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precautions

1.1. General Guidelines

1. IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by

 in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1\text{ M}\Omega$ and $5.2\text{ M}\Omega$. When the exposed metal does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5\text{ k}\Omega$, 10 W resistor, in parallel with a $0.15\text{ }\mu\text{F}$ capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure 1.
3. Use an AC voltmeter, with $1\text{ k}\Omega/\text{V}$ or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 V RMS . A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed $1/2\text{ mA}$. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Hot-Check Circuit

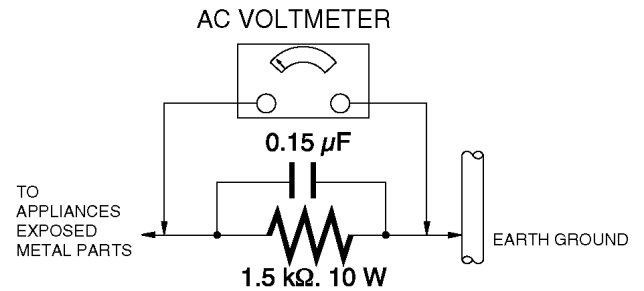


Figure. 1

1.4. How to Discharge the E. Capacitor on Flash P.C.B.

CAUTION:

1. Be sure to discharge the E. Capacitor on FLASH P.C.B..
2. Be careful of the high voltage circuit on FLASH P.C.B. when servicing.

[Discharging Procedure]

1. Refer to the disassemble procedure and remove the necessary parts/unit.
2. Put the insulation tube onto the lead part of Resistor (ERG5SJ102:1k Ω /5W).
(An equivalent type of resistor may be used.)
3. Put the resistor between both terminals of E. Capacitor on FLASH P.C.B. for approx. 5 seconds.
4. After discharging, confirm that the E. Capacitor voltage is lower than 10V by using a voltmeter.

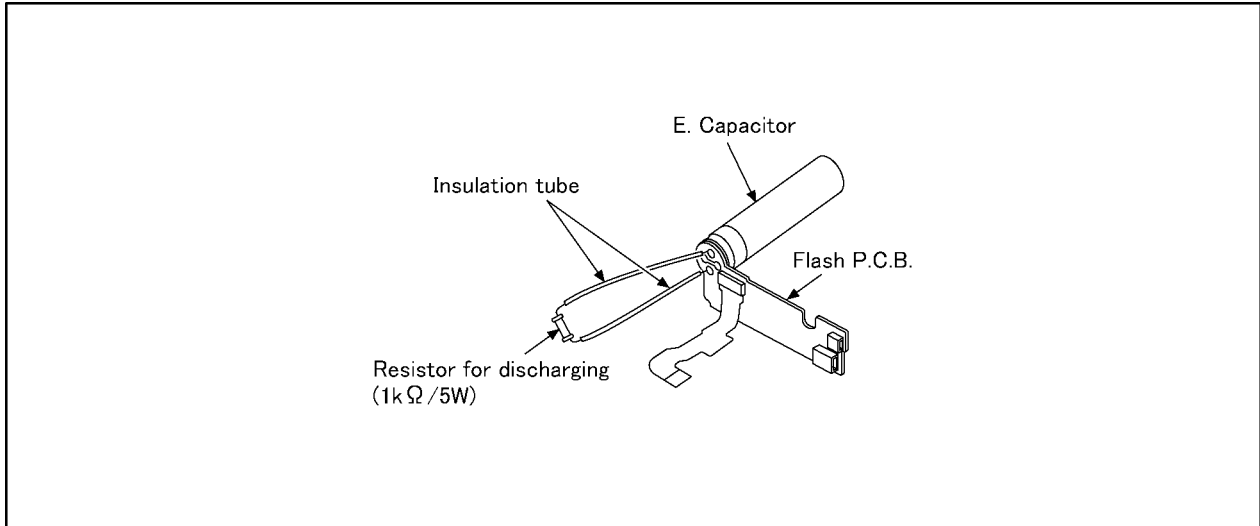


Fig. F1

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices.

Examples of typical ES devices are IC (integrated circuits) and some field-effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an antistatic solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION :

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. How to Recycle the Lithium Ion Battery (U.S. Only)

ENGLISH



A lithium ion battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

FRANÇAIS



L'appareil que vous vous êtes procuré est alimenté par une batterie au lithium-ion recyclable. Pour des renseignements sur le recyclage de la batterie, veuillez composer le 1-800-8-BATTERY.

2.3. Caution for AC Cord (For EB/GC/GH)

2.3.1. Information for Your Safety

IMPORTANT

Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

CAUTION

To reduce the risk of fire or shock hazard and annoying interference, use the recommended accessories only.

FOR YOUR SAFETY

DO NOT REMOVE THE OUTER COVER

To prevent electric shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

2.3.2. Caution for AC Mains Lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amperes and it is approved by ASTA or BSI to BS1362

Check for the ASTA mark or the BSI mark on the body of the fuse.



If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

If the fitted moulded plug is unsuitable for the socket outlet in your home then the fuse should be removed and the plug cut off and disposed of safely.

There is a danger of severe electrical shock if the cut off plug is inserted into any 13-ampere socket.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

2.3.2.1. Important

The wires in this mains lead are coloured in accordance with the following code:

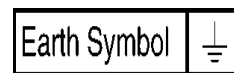
Blue	Neutral
Brown	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

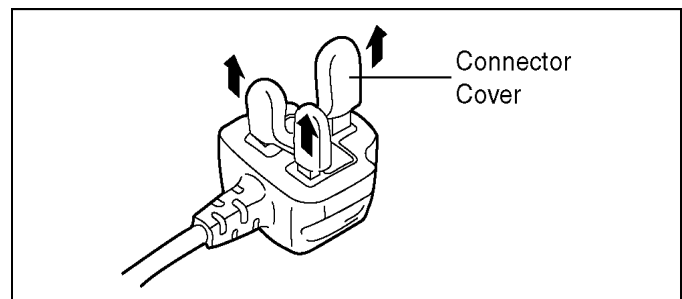
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol.



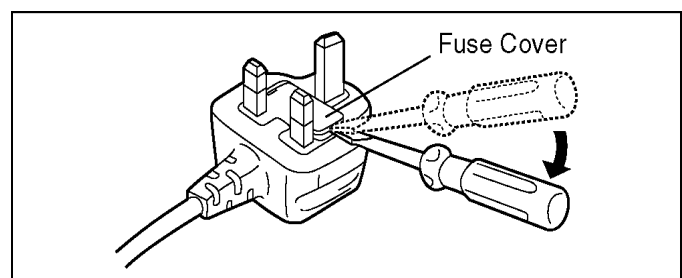
2.3.2.2. Before Use

Remove the Connector Cover as follows.

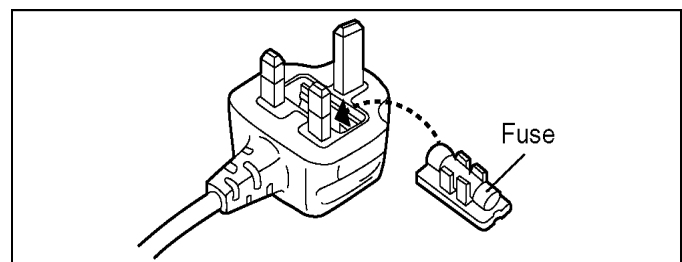


2.3.2.3. How to Replace the Fuse

1. Remove the Fuse Cover with a screwdriver.



2. Replace the fuse and attach the Fuse cover.



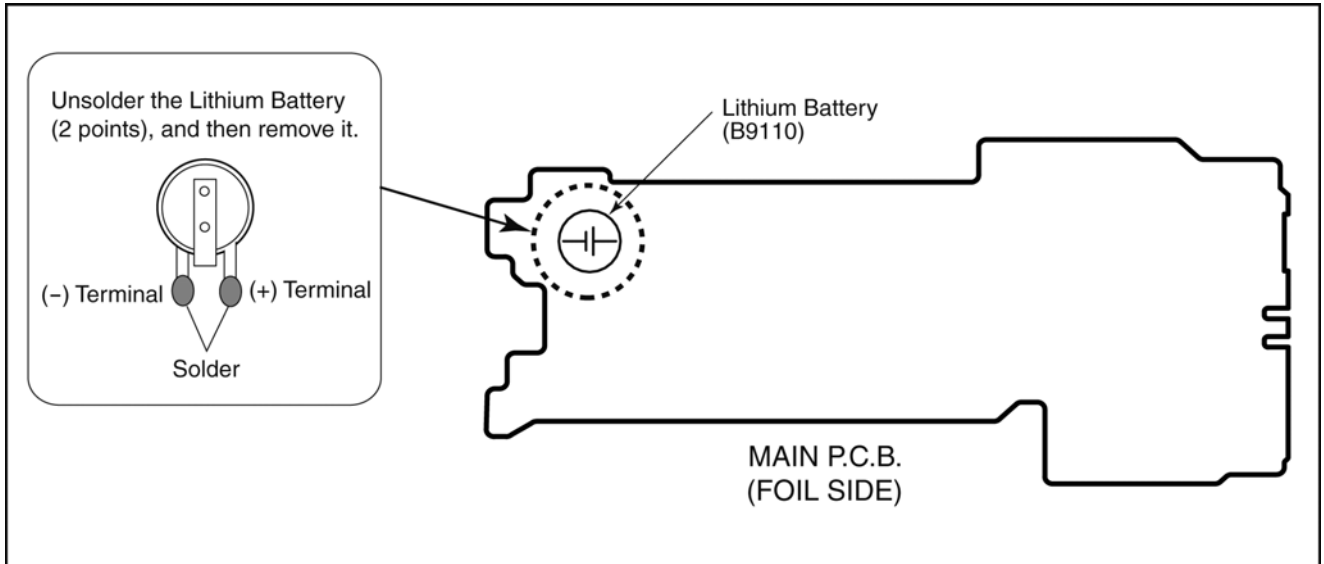
2.4. How to Replace the Lithium Battery

2.4.1. Replacement Procedure

1. Remove the MAIN P.C.B.. (Refer to Disassembly Procedures.)
2. Unsolder the each soldering point of electric lead terminal for Lithium battery (Ref. No. "B9110" at foil side of MAIN P.C.B.) and remove the Lithium battery together with electric lead terminal. Then replace it into new one.

NOTE:

The Type No. ML421 includes electric lead terminals.



NOTE:

This Lithium battery is a critical component.

(Type No.: ML421 **Manufactured by Energy Company, Panasonic Corporation.**)

It must never be subjected to excessive heat or discharge.

It must therefore only be fitted in requirement designed specifically for its use.

Replacement batteries must be of same type and manufacture.

They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.

Do not attempt to re-charge the old battery or re-use it for any other purpose.

It should be disposed of in waste products destined for burial rather than incineration.

(For English)

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

(For German)

ACHTUNG

Explosionsgefahr bei falschem Anbringen der Batterie. Ersetzen Sie nur mit einem äquivalentem vom Hersteller empfohlenem Typ.

Behandeln Sie gebrauchte Batterien nach den Anweisungen des Herstellers.

(For French)

MISE EN GARDE

Une batterie de remplacement inappropriée peut exploser. Ne remplacez qu'avec une batterie identique ou d'un type recommandé par le fabricant. L'élimination des batteries usées doit être faite conformément aux instructions du fabricant.

NOTE:

Above caution is applicable for a battery pack which is for DMC-G3K/G3W/G3 series, as well.

3 Service Navigation

3.1. Introduction

This service manual contains technical information, which allow service personnel's to understand and service this model.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, the information will be followed by service manual to be controlled with original service manual.

3.2. Important Notice

*When servicing, it is recommended dealing with Clean box. (Refer to "8.2. Clean Box" section of this service manual for details.)

3.2.1. Camera Body Unit

3.2.1.1. About VENUS FHD(IC6001) [Located on the Main P.C.B.]:

- The VENUS FHD (IC6001) mounted on the Main P.C.B. consists of FLASH-ROM chip and VENUS chip, both chips are integrated as one-piece with soldered directly.
- When replacing, always replace in pairs. (Units of service parts: integrated (one pair) state.)

NOTE:

- During servicing, do not press down hard on the surface of IC6001.

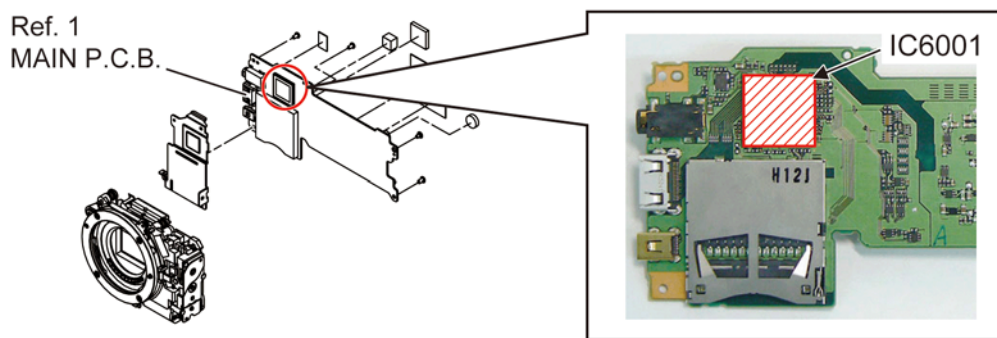


Fig. S1

3.2.1.2. About Mount Box Unit (Ref. 16)

1. This Service Manual does not contain the following repair service information for "MOUNT BOX UNIT"(Ref.16), because it requires special facilities and equipment.
 - a. Schematic diagram, Block diagram and P.C.B. layout.
 - b. Parts list for individual parts.
2. If the "MOUNT BOX UNIT" is confirmed as defective, exchange the "MOUNT BOX UNIT" as a unit (supplied as service parts size).
3. Before exchanging the "MOUNT BOX UNIT", the performances must be carefully checked, by following the "7.Troubleshooting Guide" section of this service manual.

Important:

1. After replacing the MOUNT BOX UNIT, the mount box data has to be stored to the unit.

The mount box unit supplied as service parts has affix the label of own configure data.
By inputting these data into the adjustment software and writing these data to VENUS FHD (IC6001), the shutter adjustment becomes needless.
In addition, the adjustment software can read data encoded to QR code by using WEB camera with a close-up function.
Refer to the adjustment instruction in the adjustment software for details.

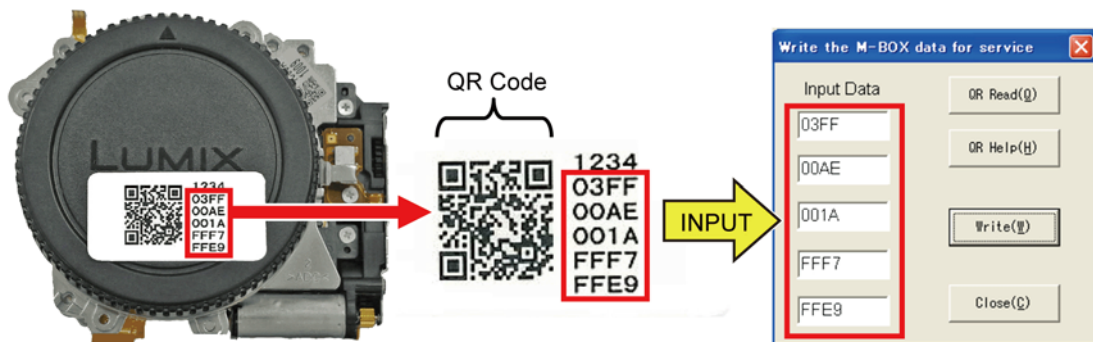


Fig. S2

2. The full adjustment must be performed after replacing the "MOUNT BOX UNIT", otherwise picture quality can not be meet with specification.

3.2.1.3. About Flexible Cable and Connector

Do not touch carelessly so that the foreign body should not adhere to the terminal part of flexible cable and connector.
Wipe off with a clean cloth and the cotton bud, etc. when the terminal part is dirty.

3.2.1.4. About Main P.C.B. (Ref. 1) / LCD IF P.C.B. (Ref. 40)

1. This Service Manual does not contain the following repair service information for "MAIN P.C.B."(Ref.1) and "LCD IF P.C.B."(Ref.40), because it requires special facilities and equipment.
 - a. Schematic diagram, Block diagram and P.C.B. layout.
 - b. Parts list for individual parts.
2. When a part replacement is required for repairing "MAIN P.C.B." and "LCD IF P.C.B.", replace as an assembled P.C.B. parts.
As for handling the defected P.C.B.s, contact the sales company service depart.
*MAIN P.C.B. (VEP56135A: PP/PC/EE/GC/GD/GH/GK/GN/GT)
*MAIN P.C.B. (VEP56135B: EB/EC/EG)
*LCD IF P.C.B. (VEP59096A)

Important (About Main P.C.B.):

1. Before exchange the "MAIN P.C.B.", the performances must be carefully checked, by following the "7.Troubleshooting Guide" section of this service manual.
2. Before replacing the "MAIN P.C.B.", proceed the EEPROM data backup from the unit. After replacing the MAIN P.C.B., overwrite the EEPROM data with backup data from the unit first, then proceed the adjustment /inspection.
If it is impossible to make a data backup due to the unit does not turns on the power and so on, additional adjustment (using the light box) is required.
Refer to the adjustment instruction in the adjustment software for details.
3. The full adjustment must be performed after replacing the "MAIN P.C.B.", otherwise Picture quality can not be meet with specification.

3.2.2. Lens Unit (Interchangeable Lens: H-FS014042)

3.2.2.1. About Lens Main Block Unit (Ref. 208)

1. This Service Manual does not contain the repair service information for "LENS MAIN BLOCK UNIT"(Ref.208), because it requires special facilities and equipment.
2. The "LENS MAIN BLOCK UNIT"(Ref.208) performance must be confirmed.
3. In case of the "LENS MAIN BLOCK UNIT"(Ref.208) defect, contact to the service department of sales company.

Ref. 208 LENS MAIN BLOCK UNIT (Not Supplied)

If this part is necessary, consult with the service department of sales company.

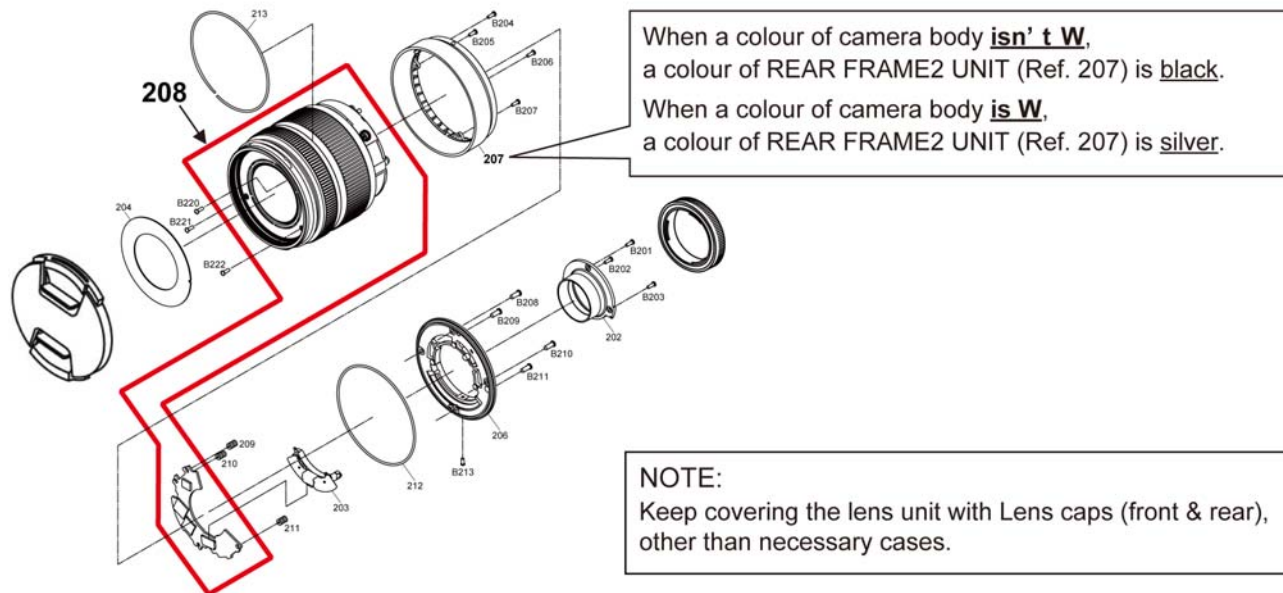


Fig. S3

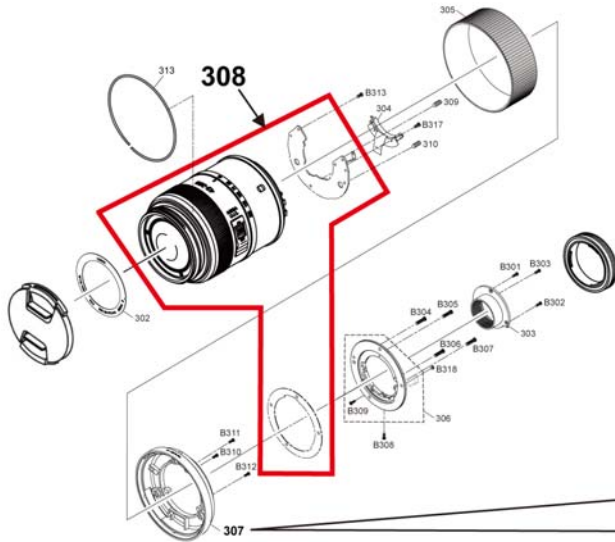
3.2.3. Lens Unit (Interchangeable Lens: H-FS045200)

3.2.3.1. About Lens Main Block Unit (Ref. 308)

1. This Service Manual does not contain the repair service information for "LENS MAIN BLOCK UNIT"(Ref.308), because it requires special facilities and equipment.
2. The "LENS MAIN BLOCK UNIT"(Ref.308) performance must be confirmed.
3. In case of the "LENS MAIN BLOCK UNIT"(Ref.308) defect, contact to the service department of sales company.

Ref. 308 LENS MAIN BLOCK UNIT (Not Supplied)

If this part is necessary, consult with the service department of sales company.



When a colour of camera body isn' t W,
a colour of REAR TUBE UNIT (Ref. 307) is black.
When a colour of camera body is W,
a colour of REAR TUBE UNIT (Ref. 307) is silver.

NOTE:

Keep covering the lens unit with Lens caps (front & rear),
other than necessary cases.

Fig. S4

3.3. General Description About Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30°C (86°F) more than that of the normal solder.

Distinction of P.C.B. Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the P.C.B. using the lead free solder.(See right figure)	PbF
--	-----

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
(Definition: The letter of "PbF" is printed on the P.C.B. using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the P.C.B. cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30°C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
RFKZ03D01KS------(0.3mm 100g Reel)
RFKZ06D01KS------(0.6mm 100g Reel)
RFKZ10D01KS------(1.0mm 100g Reel)

Note

* Ingredient: tin (Sn) 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

3.4. How to Define the Model Suffix (NTSC or PAL model)








There are eight kinds of DMC-G3 (Camera body unit), regardless of the colours.

- a) DMC-G3 (Japan domestic model)
- b) DMC-G3PP/PC
- c) DMC-G3EB/EC/EG/GH/GN
- d) DMC-G3EE
- e) DMC-G3GK
- f) DMC-G3GT
- g) DMC-G3GD
- h) DMC-G3GC

What is the difference is that the "INITIAL SETTINGS" data which is stored in VENUS FHD mounted on MAIN P.C.B..

3.4.1. Defining methods:

To define the model suffix to be serviced, refer to the nameplate which is putted on the bottom side of the Unit.

<p>a) DMC-G3 (Japan domestic model) The nameplate for this model shows the following Safety registration mark.</p> 
<p>b) DMC-G3PP/PC The nameplate for these models show the following Safety registration mark.</p> 
<p>c) DMC-G3EB/EC/EG/GH/GN The nameplate for these models show the following Safety registration mark.</p> 
<p>d) DMC-G3EE The nameplate for this model shows the following Safety registration mark.</p> 
<p>e) DMC-G3GK The nameplate for this model shows the following Safety registration mark.</p> 
<p>f) DMC-G3GT The nameplate for this model shows the following Safety registration mark.</p> 
<p>g) DMC-G3GD The nameplate for this model shows the following Safety registration mark.</p> 
<p>h) DMC-G3GC The nameplate for this model does not show any above Safety registration mark.</p>

NOTE:

After replacing the MAIN P.C.B., be sure to achieve adjustment.
Refer to the adjustment instruction in the adjustment software for details.

3.4.2. INITIAL SETTINGS:

After replacing the MAIN P.C.B., make sure to perform the initial settings after achieving the adjustment by ordering the following procedure in accordance with model suffix of the unit.

1. IMPORTANT NOTICE:

Before proceeding Initial settings, make sure to read the following CAUTION.

CAUTION:(INITIAL SETTINGS)

---AFTER REPLACING THE MAIN P.C.B. ---

[Except "EG, EB, EC and OLY" models : (VEP56135A is used as a Main P.C.B.)]

- *. The model suffix can be chosen **JUST ONE TIME.**
(Effective model suffix : " PP/PC/EE/GC/GD/GH/GK/GN/GT and NONE(JAPAN)")
- *. Once one of the model suffix has been chosen, the model suffix lists will not be displayed, thus, it can not be changed.

[Only for "EG, EB, EC and OLY" models : (VEP56135B is used as a Main P.C.B.)]

- *. From the beginning, only "EG, EB, EC and OLY" are displayed as model suffix lists, and these are displayed from the second times as well.

2. PROCEDURES:

- **Precautions:** Read the above "CAUTION" carefully.

- **Preparation:**

Attach the fully charged Battery, and insert the SD memory card.

Confirm that it is not intelligent auto mode [iA] or intelligent auto plus mode [iA+].

NOTE:

If the unit is intelligent auto mode [iA] or intelligent auto plus mode [iA+], it does not display the initial settings menu.

- **Step 1. The temporary cancellation of "INITIAL SETTINGS":**

While pressing [Q.MENU/Fn2], [DISP/Fn1] and "[RIGHT] of Cursor buttons" simultaneously, turn the Power on.

- **Step 2. The cancellation of "INITIAL SETTINGS":**

Press the [PLAYBACK] button, then playback the picture.

Press [Q.MENU/Fn2] and "[UP] of Cursor buttons" simultaneously, then turn the Power off.

- **Step 3. Turn the Power on:**

Set the mode dial to [P] (Program AE Mode), then turn the Power on.

- **Step 4. Display the INITIAL SETTING:**

While pressing "[RIGHT] of Cursor buttons" and [MENU/SET] simultaneously, turn the Power off.

The "INITIAL SETTINGS" menu is displayed.

There are two kinds of "INITIAL SETTINGS" menu form as follows:

[CASE 1. After replacing MAIN P.C.B.]

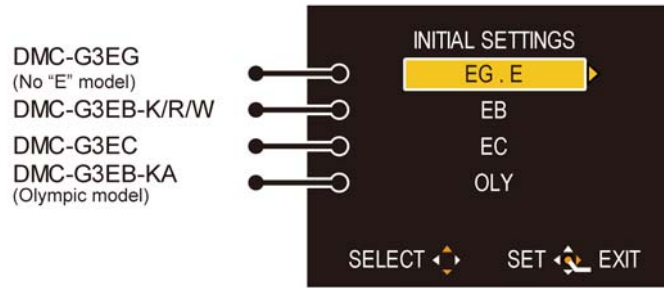
[Except "EG, EB, EC and OLY" models : (VEP56135A is used as a Main P.C.B.)]

When MAIN P.C.B. has just been replaced, all of the model suffix are displayed as follows. (two pages in total)



[Only for "EG, EB EC and OLY" models : (VEP56135B is used as a Main P.C.B.)]

When MAIN P.C.B. has just been replaced, only 4 model suffix are displayed as follows.



[CASE 2. Other than "After replacing MAIN P.C.B."]

< Other than "EG/EB/EC/OLY" models >



< Only "EG/EB/EC/OLY" models >



• Step 5. Choose the model suffix in "INITIAL SETTINGS": (Refer to "CAUTION")

[Caution: After replacing MAIN P.C.B.]

The model suffix can be chosen, **JUST ONE TIME**.

Once one of the model suffix have been chosen, the model suffix lists will not be displayed, thus, it can be changed.

Therefore, select the area carefully.

Select the area with pressing "[UP] / [DOWN] of Cursor buttons".

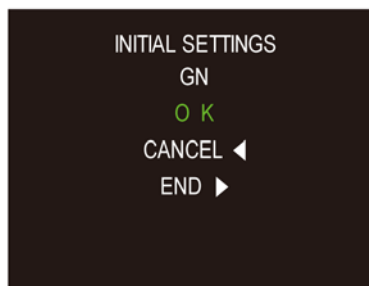
• Step 6. Set the model suffix in "INITIAL SETTINGS":

- Press the "[RIGHT] of Cursor buttons".

- The only set area is displayed, and then press the "[RIGHT] of Cursor buttons" after confirmation.

(The unit is powered off automatically.)

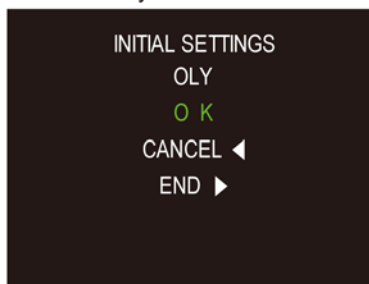
< Other than "OLY" models >



Press [RIGHT] button.



< Only "OLY" model >



Press [RIGHT] button.



• **Step 7. CONFIRMATION:**

Confirm the display of "PLEASE SET THE CLOCK" in concerned language when the unit is turned on again.

When the unit is connected to PC with USB cable, it is detected as removable media.

(When the "GT" or "GK" model suffix is selected, the display shows "PLEASE SET THE CLOCK" in Chinese.)

1) As for your reference, major default setting condition is as shown in the following table.

• **Default setting (After "INITIAL SETTINGS")**

	MODEL	VIDEO OUTPUT	LANGUAGE	DATE	REMARKS
a)	DMC-G3 (Japan domestic model)	NTSC	Japanese	Year/Month/Date	
b)	DMC-G3PP	NTSC	English	Month/Date/Year	
c)	DMC-G3PC	NTSC	English	Month/Date/Year	
d)	DMC-G3EB	PAL	English	Date/Month/Year	
e)	DMC-G3EC	PAL	English	Date/Month/Year	
f)	DMC-G3EE	PAL	Russian	Date/Month/Year	
g)	DMC-G3EG	PAL	English	Date/Month/Year	
h)	DMC-G3GC	PAL	English	Date/Month/Year	
i)	DMC-G3GD	NTSC	Korean	Year/Month/Date	
j)	DMC-G3GH	PAL	English	Date/Month/Year	
k)	DMC-G3GK	PAL	Chinese (simplified)	Year/Month/Date	
l)	DMC-G3GN	PAL	English	Date/Month/Year	
m)	DMC-G3GT	NTSC	Chinese (Traditional)	Year/Month/Date	

4 Specifications

Digital Camera Body (DMC-G3): Information for your safety

Power Source:	DC 8.4 V
Power Consumption:	3.1 W (When recording with LCD Monitor) [When the Interchangeable lens (H-FS014042) is used] 3.3 W (When recording with LCD Monitor) [When the Interchangeable lens (H-FS045200) is used] 1.9 W (When playing back with LCD Monitor) [When the Interchangeable lens (H-FS014042) is used] 2.1 W (When playing back with LCD Monitor) [When the Interchangeable lens (H-FS045200) is used]
Camera effective pixels	16,000,000 pixels
Image sensor	4/3" Live MOS sensor, total pixel number 16,680,000 pixels, Primary colour filter
Digital Zoom	Max. 4×
Extra Tele Conversion (Except for the maximum picture size for each aspect ratio)	ON/OFF simple enlargement (compatible with lenses from other manufacturers)
Focus	Auto Focus/Manual Focus, Face Detection/AF Tracking/23-area-focusing/ 1-area-focusing/Pinpoint (Touch focus area selection possible)
Shutter system	Focal-plane shutter
Burst recording	
Burst speed	20 pictures/second (Super high speed), 4 pictures/second (High speed), 3 pictures/second (Middle speed), 2 pictures/second (Low speed)
Number of recordable pictures	Max. 7 pictures (when there are RAW files) Depends on the capacity of the card (when there are no RAW files)
ISO sensitivity (Standard Output Sensitivity)	AUTO/[B]s/160/200/400/800/1600/3200/6400 (1/3 EV step change possible)
Minimum Illumination	Approx. 9 lx (when i-Low light is used, the shutter speed is [NTSC areas] 1/30th / [PAL areas] 1/25th of a second) [When the Interchangeable lens (H-FS014042) is used] Approx. 12 lx (when i-Low light is used, the shutter speed is [NTSC areas] 1/30th / [PAL areas] 1/25th of a second) [When the Interchangeable lens (H-FS045200) is used]
Shutter speed	B (Bulb) (Max. approx. 120 seconds), 60 seconds to 1/4000th of a second Taking still pictures during motion picture recording Motion picture priorities: [NTSC areas] 1/30th / [PAL areas] 1/25th of a second to 1/16000th of a second Still picture priorities: B (Bulb) (Max. approx. 120 seconds), 60 seconds to 1/4000th of a second
Metering range	EV 0 to EV 18
White Balance	Auto White Balance/Daylight/Cloudy/Shade/Incandescent lights/Flash/White set1/White set2/White Balance K set
Exposure (AE)	Programme AE (P)/Aperture-priority AE (A)/Shutter-priority AE (S)/Manual exposure (M)/AUTO Exposure Compensation (1/3 EV Step, -5 EV to +5 EV)
Metering Mode	Multiple/Centre weighted/Spot
LCD monitor	3.0" TFT LCD (3:2) (Approx. 460,000 dots) (field of view ratio about 100%) Touch panel
Viewfinder	Colour LCD Viewfinder (Approx. 1,440,000 dots) (field of view ratio about 100%) (with diopter adjustment -4 to +4 diopter)
Flash	Built-in pop up flash GN 10.5 equivalent (ISO160-m) Flash range: Approx. 50 cm (1.64 feet) to 6.7 m (22.0 feet) [When the Interchangeable lens (H-FS014042) is mounted, WIDE, [ISO AUTO] is set] Flash range: Approx. 1.0 m (3.28 feet) to 5.8 m (19.0 feet) [When the Interchangeable lens (H-FS045200) is mounted, WIDE, [ISO AUTO] is set] AUTO, AUTO/Red-Eye Reduction, Forced ON, Forced ON/Red-Eye Reduction, Slow Sync., Slow Sync./Red-Eye Reduction, Forced OFF
Flash synchronization speed	Equal to or smaller than 1/160th of a second
Microphone	Stereo
Speaker	Monaural
Recording media	SD Memory Card/SDHC Memory Card/SDXC Memory Card
Picture size	
Still picture	When the aspect ratio setting is [16:9] 4592×3448 pixels, 3232×2424 pixels, 2272×1704 pixels When the aspect ratio setting is [4:3] 4576×3056 pixels, 3232×2160 pixels, 2272×1520 pixels When the aspect ratio setting is [16:3] 4576×2576 pixels, 3232×1824 pixels, 1920×1080 pixels When the aspect ratio setting is [1:1] 3424×3424 pixels, 2416×2416 pixels, 1712×1712 pixels
Recording quality	
Motion pictures	[AVCHD] (With audio) [NTSC areas] When set to [FSH]: 1920×1080 pixels (60i* recording/ Approx. 17 Mbps)/ When set to [SH]: 1280×720 pixels (60p* recording/ Approx. 17 Mbps) (*Sensor output is 30 frames/sec.) [PAL areas] When set to [FSH]: 1920×1080 pixels (50i* recording/ Approx. 17 Mbps)/ When set to [SH]: 1280×720 pixels (50p* recording/ Approx. 17 Mbps) (*Sensor output is 25 frames/sec.) [MOTION JPEG] (With audio) When set to [HD]: 1280×720 pixels (30 frames/sec./) When set to [VGA]: 640×480 pixels (30 frames/sec./) When set to [QVGA]: 320×240 pixels (30 frames/sec.)

Quality	RAW/RAW+ Fine/RAW+ Standard/Fine/Standard/MPO+ Fine/ MPO+ Standard
Recording file format	
Still Picture	RAW/JPEG (based on "Design rule for Camera File system", based on "Exif 2.3" standard, DPOF corresponding)/MPO
Motion pictures with audio	AVCHD/QuickTime Motion JPEG
Interface	
Digital	"USB 2.0" (High Speed)
Analogue video/ audio	[NTSC areas] NTSC Composite [PAL areas] NTSC/PAL Composite (Switched by menu) Audio line output (monaural)
Terminal	
[REMOTE]	φ 2.5 mm jack
[AV OUT/DIGITAL]	Dedicated jack (8 pin)
[HDMI]	MiniHDMI TypeC
Dimensions	Approx. 115.2 mm (W)×83.6 mm (H)×46.7 mm (D) [4.54" (W)×3.29" (H)×1.84" (D)] (excluding the projecting parts)
Mass (weight)	Approx. 544 g/1.2 lb [with the Interchangeable lens (H-FS014042), card and battery] Approx. 761 g/1.68 lb [with the Interchangeable lens (H-FS045200), card and battery] Approx. 336 g/0.74 lb (camera body)
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity	10%RH to 80%RH

Battery Charger: Information for your safety

Input:	AC~110 V to 240 V, 50/60 Hz, 0.2 A
Output:	DC→8.4 V, 0.65 A

Battery Pack (lithium-ion): Information for your safety

Voltage/capacity:	7.2 V/1010 mAh
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Interchangeable Lens (H-FS014042)

"LUMIX G VARIO 14–42 mm/F3.5–5.6 ASPH./MEGA O.I.S."

Focal length	f=14 mm to 42 mm (35 mm film camera equivalent: 28 mm to 84 mm)
Aperture type	7 diaphragm blades/circular aperture diaphragm
Aperture range	F3.5 (Wide) to F5.6 (Tele)
Minimum aperture value	F22
Lens construction	12 elements in 9 groups (1 aspherical lens)
In focus distance	0.3 m (0.99 feet) to ∞(from the focus distance reference line)
Maximum image magnification	0.16× (35 mm film camera equivalent: 0.32×)
Optical Image Stabilizer	Available
[O.I.S.] switch	None (Setting of the [STABILIZER] is done in [REC] menu.)
Mount	"Micro Four Thirds Mount"
Angle of view	75° (Wide) to 29° (Tele)
Filter diameter	52 mm (2.05 inch)
Max. diameter	Approx. 60.6 mm (2.39 inch)
Overall length	Approx. 63.6 mm (2.50 inch) (from the tip of the lens to the base side of the lens mount)
Mass	Approx. 165 g/0.22 lb

Interchangeable Lens (H-FS045200)

"LUMIX G VARIO 45–200 mm/F4.0–5.6/MEGA O.I.S."

Focal length	f=45 mm to 200 mm (35 mm film camera equivalent: 90 mm to 400 mm)
Aperture type	7 diaphragm blades/circular aperture diaphragm
Aperture range	F4.0 (Wide) to F5.6 (Tele)
Minimum aperture value	F22
Lens construction	16 elements in 13 groups (no aspherical lens)
In focus distance	1.0 m (3.28 feet) to ∞(from the focus distance reference line)
Maximum image magnification	0.19× (35 mm film camera equivalent: 0.38×)
Optical Image Stabilizer	Available
[O.I.S.] switch	Available (Switching ON/OFF)
Mount	"Micro Four Thirds Mount"
Angle of view	27° (Wide) to 6.2° (Tele)
Filter diameter	52 mm (2.05 inch)
Max. diameter	Approx. 70 mm (2.76 inch)
Overall length	Approx. 100 mm (3.94 inch) (from the tip of the lens to the base side of the lens mount)
Mass	Approx. 380 g/0.84 lb

NOTE:(Only for "EB/EC/EG" models)

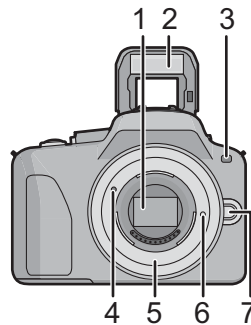
- Data from the PC can not be written to the camera using the USB connection cable.
- Motion pictures can be recorded continuously for up to 29 minutes 59 seconds.

5 Location of Controls and Components

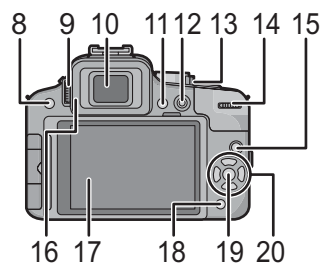
Names and Functions of Components

■ Camera body

- 1 Sensor
- 2 Flash
- 3 Self-timer indicator/
AF Assist Lamp
- 4 Lens fitting mark
- 5 Mount
- 6 Lens lock pin
- 7 Lens release button



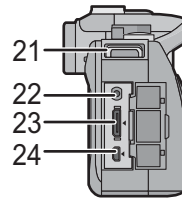
- 8 [LVF/LCD] button
- 9 Diopter adjustment dial
- 10 Viewfinder
- 11 Playback button
- 12 Motion picture button
- 13 Camera ON/OFF switch
- 14 Rear dial
- 15 [DISP./Fn1] button
- 16 Eye Cup
- 17 Touch panel/LCD monitor
- 18 [Q.MENU/Fn2] button /
Delete/Return button
- 19 [MENU/SET] button
- 20 Cursor buttons



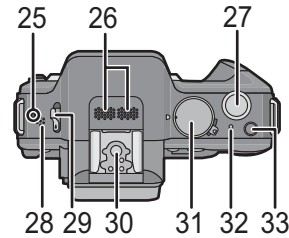
- ▲/ISO
- ▶/WB (White Balance)
- ◀/AF Mode button
- ▼/[DRIVE MODE] button

This button in picture record mode will allow the user to select between the following options.
Single/Burst /Auto bracket/Self-timer

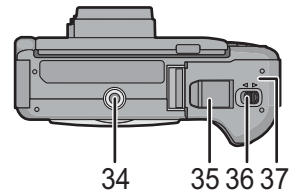
- 21 Shoulder strap eyelet
 - Be sure to attach the shoulder strap when using the camera to ensure that you will not drop it.
- 22 [REMOTE] socket
- 23 [HDMI] socket
- 24 [AV OUT/DIGITAL] socket



- 25 Focus distance reference mark
- 26 Stereo microphone
- 27 Shutter button
- 28 Speaker
- 29 Flash open lever
- 30 Hot shoe
- 31 Mode dial
- 32 Status indicator
- 33 Intelligent Auto button



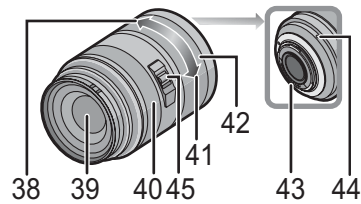
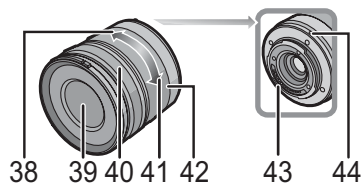
- 34 Tripod receptacle
- 35 DC coupler cover
 - When using an AC adaptor, ensure that the Panasonic DC coupler (optional) and AC adaptor (optional) are used.
- 36 Release lever
- 37 Card/Battery door



■ Lens

H-FS014042
(LUMIX G VARIO 14–42 mm/F3.5–5.6 ASPH./MEGA O.I.S.)

H-FS045200
(LUMIX G VARIO 45–200 mm/F4.0–5.6/MEGA O.I.S.)



- 38 Tele
- 39 Lens surface
- 40 Focus ring
- 41 Wide
- 42 Zoom ring
- 43 Contact point
- 44 Lens fitting mark
- 45 [O.I.S.] switch

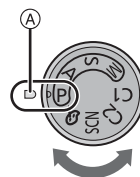
Selecting the Recording Mode

- To select a Recording Mode with the mode dial

Switching the mode by rotating the mode dial.

Align a desired mode with part ①.

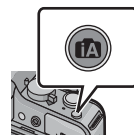
- Rotate the mode dial slowly and surely to adjust to each mode.



- To select Intelligent Auto Mode

Press [iA].

- [iA] button will light up when it is switched to Intelligent Auto Mode.
- The Recording Mode selected by the mode dial is disabled while the [iA] button is lit.



- Basic

iA Intelligent Auto Mode

The subjects are recorded using settings automatically selected by the camera.

P Program AE Mode

The subjects are recorded using your own settings.

- Advanced

A Aperture-Priority AE Mode

The shutter speed is automatically determined by the aperture value you set.

S Shutter-Priority AE Mode

The aperture value is automatically determined by the shutter speed you set.

M Manual Exposure Mode

The exposure is adjusted by the aperture value and the shutter speed which are manually adjusted.

C1 C2 Custom Mode

Use this mode to take pictures with previously registered settings.

SCN Scene Mode



This allows you to take pictures that match the scene being recorded.

Ⓢ Creative Control Mode

Record while checking the image effect.

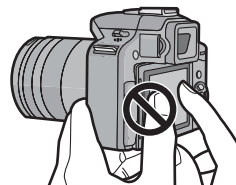
Touch Panel

This touch panel is a type that detects pressure.

Touch the screen To touch and release the touch panel.	Drag A movement without releasing the touch panel.
	
<p>Use this to perform tasks such as selecting icons or images displayed on the touch panel.</p> <ul style="list-style-type: none"> • When selecting features using the touch panel, be sure to touch the center of the desired icon. 	<p>This is used to move the AF area, operate the slide bar, etc.</p> <p>This can also be used to move to the next image during playback, etc.</p>

Note

- If you use a commercially available liquid crystal protection sheet, please follow the instructions that accompany the sheet. (Some liquid crystal protection sheets may impair visibility or operability.)
- If a commercially available protection sheet is used, **a little extra pressure** may be required if you notice that the touch panel is not responsive.
- Avoid having the hand holding the camera accidentally apply pressure to the touch panel. Doing so may affect the touch panel operation.
- Do not press on the LCD monitor with hard pointed tips, such as ball point pens.
- Do not operate with your fingernails.
- Wipe the LCD monitor with dry soft cloth when it gets dirty with finger prints and others.
- Do not scratch or press the LCD monitor too hard.
- For information about the icons displayed on the touch panel.



About the Stylus pen

It is easier to use the stylus pen (supplied) for detailed operation or if it is hard to operate with your fingers.

- Only use the supplied stylus pen.
- Do not place it where small children can reach.

6 Service Mode

6.1. Error Code Memory Function

1. General description

This unit is equipped with history of error code memory function, and can be memorized 16 error codes in sequence from the latest. When the error is occurred more than 16, the oldest error is overwritten in sequence.

The error code is not memorized when the power supply is shut down forcibly.

(i.e., when the unit is powered on by the battery, the battery is pulled out)

The error code is memorized to FLASH-ROM when the unit has just before powered off.

2. How to display

The error code can be displayed by ordering the following procedure:

• Preparation

Attach the fully charged Battery, and insert the SD memory card.

Confirm that it is not intelligent auto mode [iA] or intelligent auto plus mode [iA+].

NOTE:

If the unit is intelligent auto mode [iA] or intelligent auto plus mode [iA+], it does not display the initial settings menu.

• Step 1. The temporary cancellation of "INITIAL SETTINGS":

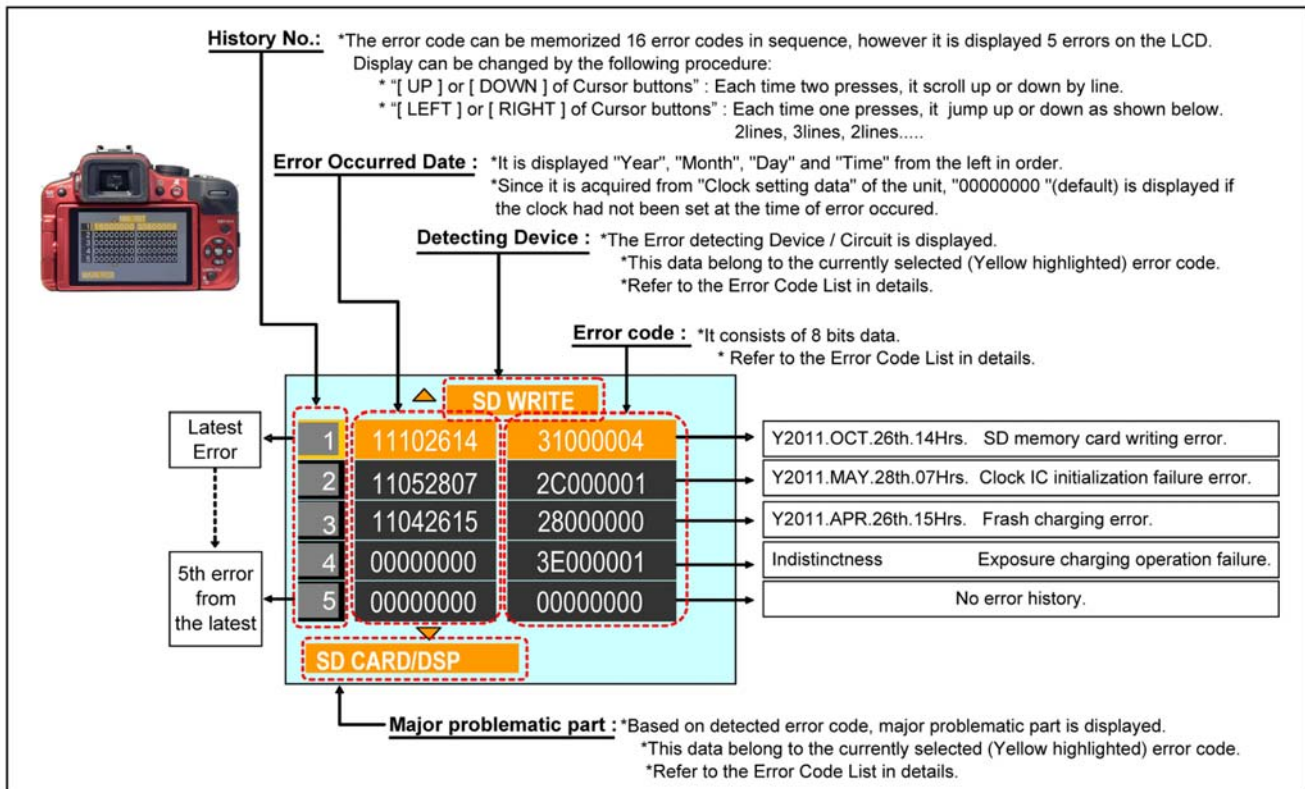
While pressing [Q.MENU/Fn2], [DISP/Fn1] and "[RIGHT] of Cursor buttons" simultaneously, turn the Power on.

• Step 2. Execute the error code display mode:

Press [Q.MENU/Fn2], [MENU/SET] and "[LEFT] of Cursor buttons" simultaneously with the step 1 condition.

The display is changed as shown below when the above buttons are pressed simultaneously.

Normal display → Error code display → Camera information display → Normal display →



Example of Error Code Display

• **Error Code List:**

The error code consists of 8 bit data and it shows the following information.

Attribute	Main item	Sub item	Error code		Contents (Upper line)	Error Indication	
			High 4 bits	Low 4 bits		Detecting device	Problematic Part/Circuit
HARD	VENUS A/D	Flash	28*0	0000	Flash charging capacitor did not been fully charged within 20 seconds.	STRB CHG	STRB PCB/FPC
	FLASH ROM	Data Area	2B*0	0001	Flash ROM data reading error is detected when the unit turns ON.	FROM RE	FROM
				0002	Flash ROM data writing error is detected when the unit turns OFF.	FROM WR	FROM
		Program Area		0005	Firmware update error.	(No indication)	(No indication)
	SYSTEM IC	Initialization	2C*0	0001	Clock IC initialization failure error.	SYS INIT	MAIN PCB
SOFT	CPU	Reset	30*0	0001	System error (NMI reset).	NMI RST	MAIN PCB
				0007			
	Recording Media	SD Memory Card	31*0	0001	SD memory card logic error. SD memory card format error. When it is detected, [MEMORY CARD ERROR FORMAT THIS CARD?] is displayed on the screen.	SD CARD	SD CARD/DSP
				0002	SD memory card physical error. During formatting the SD memory card, there is no response from the card. If the mini-SD memory card is used, check the SD memory card adaptor.		SD CARD/DSP
				0004	SD memory card writing error. Check the SD memory card. It might be damage one.	SD WRITE	SD CARD/DSP
	Lens	Communication	3C*0	0001 000E	Lens communication error.	(No indication)	(No indication)
	Camera	System	3B*0 3E*0	0000	Initialization failure error.	INIT	(No indication)
				0001	Exposure charging operation failure. (Mount Box Unit)		
				0002	Failure of the returning operation to the home position. (Mount Box Unit)	(No indication)	(No indication)
	Recording	Motion Image Recording	3F*0	0001	File time out error in recording motion image.		
0002				File data cue send error in recording motion image.			

Important notice about “Error Code List”

About "*" indication:

The third digit from the left is different as follows.

- In case of 0 (example: 2B001000)

When the third digit from the left shows “0”, this error occurred under the condition of INITIAL SETTINGS has been completed.

It means that this error is occurred basically at user side.

- In case of 8 (example: 2B801000)

When the third digit from the left shows "8", this error occurred under the condition of INITIAL SETTINGS has been released.

(Example; Factory assembling-line before unit shipment, Service mode etc.)

It means that this error is occurred at service side.

• **Step 3. How to exit from Error Code display mode:**

Simply, turn the power off. (Since Error Code display mode is executed under the condition of temporary cancellation of “INITIAL SETTINGS”, it wake up with normal condition when turn off the power.)

NOTE:

The error code can not be initialized.

7 Troubleshooting Guide

7.1. Checking Method of Body and Interchangeable Lens

1.INITIAL (DEFAULT) STATUS OF THE LENS UNIT

The Lens unit which is supplied as a standard accessory for this camera unit (H-FS014042, H-FS045200) shows the following status when the Lens is detached from the Camera unit.

NOTE: Although the lens unit is attached it shows the same condition when the Camera turns off.

H-FS014042 (Included in DMC-G3K and DMC-G3W):

- [1].ZOOM RING When the Zoom ring is rotated, Zoom condition is changing accordingly.
(The 1st lens frame moves.)
[Focal length : 14mm to 42mm [35mm film camera equivalent: 28mm to 84mm]]
- [2].FOCUS RING The Focus condition does not changed although Focus ring is rotated. (Free rotation.)

H-FS045200 (Included in DMC-G3W):

- [1].ZOOM RING When the Zoom ring is rotated, Zoom condition is changing accordingly.
(The 1st lens frame moves.)
[Focal length : 45mm to 200mm [35mm film camera equivalent: 90mm to 400mm]]
- [2].FOCUS RING The Focus condition does not changed although Focus ring is rotated. (Free rotation.)

2.INITIAL INSPECTION TIPS (BEFORE DETERMINE THE UNIT BEING FAULTY/DEFECTIVE) :

Since this unit is equipped with various functions/settings, some phenomenon/effect might be caused by miss usage of function and/or settings.

It might be made a miss-judgement caused by miss usage of function & settings although the unit is working properly without fault.

Therefore, check/confirm the followings before concluding/determine the unit being faulty/defective.



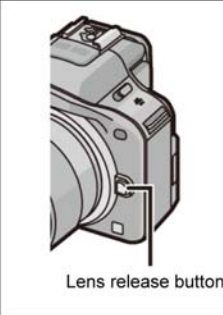

NOTE: Refer to the Operating Instructions carefully.

Also, useful hint/tips for this unit is available at following URL, and is updated frequently.

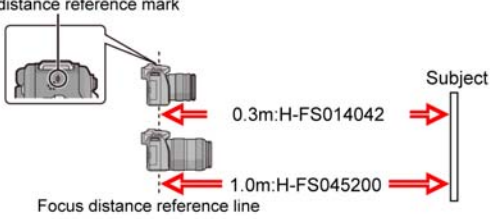
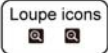

<http://panasonic.jp/support/global/cs/dsc/>


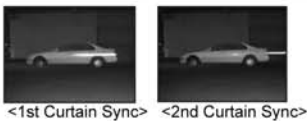

If it is hard to determine whether the resolution is out of specification or not, proceed the "RESOLUTION INSPECTION", before replacing the LENS MAIN BLOCK UNIT and/or MOUNT BOX UNIT. (The unit might be mishandling, dropping or others.)

[1]. [LENS RELATIVES]

TITLE	ITEMS	DESCRIPTION
LENS	Aperture size does not changed. (Although aperture value is changed, the physical size of aperture is never changed.)	*Although aperture value is changed, the physical size of aperture is never changed (It keeps the maximum aerture condition) until the shutter release button is fully released. (There is no "aperture stopping down" button. But instead, there are aperture effect preview function and shutter speed effect preview function.) ⇒ [CUSTOM MENU] (1/7) ----- [Q.MENU/Fn2] (PREVIEW)
	The Aperture condition does not changed. (Aperture value shows "A0.0")	*The Lens & Body are communicating (serial communication) through mount contacts (11pins). *Confirm that lens & body mount contacts are not dirty. *While keep pressing the [Lens release] button, it makes same situation that Lens does not attached. *Although lens is attached to the body, the Aperture value shows "A0.0" when the communication error is occurred. Also, when the firmware version confirmation mode is executed, the [- -] is displayed as Lens firmware version.  Aperture value is fixed at [A0.0]  Firmware version shows [LENS FIRMWARE : - -]  Lens release button
	Although the Focus ring is rotating, it does not change the Focus condition.	*The Focus condition is never changed although focus ring is rotated when the Focus mode is set to AFS or AFC. (When the [AF + MF] is set to [ON], it is able to fine adjust the focus manually by rotating the focus ring while AF lock.) ⇒ [CUSTOM MENU] (3/7) ----- [AF + MF] (ON/OFF)
	No released without lens attachment.	*It is able to release the shutter button without attaching the lens unit. ⇒ [CUSTOM MENU] (7/7) ----- [SHOOT W/O LENS] (ON/OFF)
	The Dusty and/or dirty of the Lens	*Define the location of the dirt / dust of the lens first, whether it is outside surface of the lens or not. If it is outside surface of the lens, order the following procedure in steps. STEP-1. Blow off the dust certainly with Hand Blower. STEP-2. Clean and wipe up the Lens surface by using the Lens cleaning Kit (VFK1900BK). *Refer to the "11 Maintenance" of this manual.  [Wiping up the lens surface] Like drawing the circle, wipe up the lens surface centre towards to outside slowly.
It does not become the Shutter speed [B] (Bulb) mode.	*It is only able to select the shutter speed to [B](Bulb) when mode is set to [M] (Manual) and drive mode is set to [SINGLE]. ([B] mode: the shutter stays open while the shutter button is pressed fully (up to about 4 minutes). The shutter closes if you release the shutter button.)	









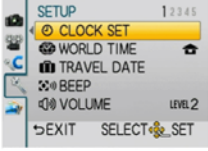
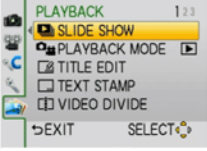
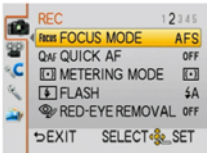

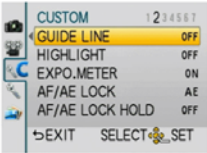




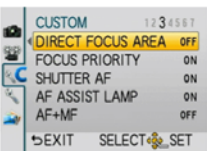

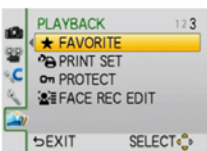



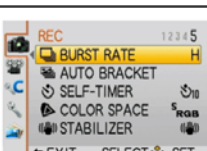
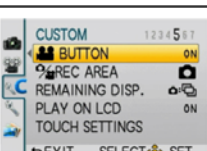
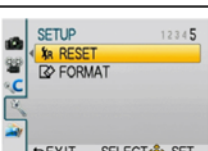
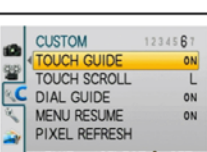
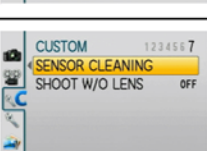
[2]. [BODY RELATIVES]

TITLE	ITEMS	DESCRIPTION
FOCUS	The picture is out of focus although the focus is adjusted in MF mode at once.	<ul style="list-style-type: none"> *In the following conditions, the focus may be out of focus, no matter the kind of subject. Therefore, adjust the focus again by rotating the Focus ring. *After "in-focus" condition, Zoom condition has been changed. *Power switch is turned OFF and ON again. *After releasing the Power save.
	Focus does not become in focus condition.	<ul style="list-style-type: none"> *If the shooting distance is less than the Minimum requirement distance for focus, the focus may not be brought into focus, no matter the kind of subject. 
	MF(Manual Focus)ASSIST does not work.	<ul style="list-style-type: none"> *The MF assist function is that the certain area image is able to enlarge 4/5/10 times to make easier to focus. (It can be changed enlarged value by rotating the rear dial or clicking the loupe icons on display.) *It does not activated if the [Focus Mode] is set to other than [MF] mode. *It does not activated when using the Digital Zoom. *It does not activated if [MF ASSIST] is set to OFF. ⇒ [CUSTOM MENU] (4/7) ----- [MF ASSIST] (ON/OFF) (To display the MF assist, press Left cursor button then press [MENU/SET].) 
	Face detection does not work.	<ul style="list-style-type: none"> *Select AF mode to face detection. (In [IA]mode, it is automatically assigned according with scene.) (Press the left side cursor button to display the AF mode menu.) *It does not activated when using the Digital Zoom. *It does not activated if the focus mode is set to MF.
	The subject is not focused properly.	<ul style="list-style-type: none"> *When get a fingerprint, dirt on the lens surface, resulting in the subject being out of focus. *The subject is beyond the focus range of the camera. *There is camera shake (jitter) or the subject is moving slightly. *The focus indication green mark is lights at the top right hand corner on the LCD when the subject is focused. *The shutter speed will become slower and the optical image stabilizer function may not work properly when taking pictures especially in dark places.
	Focus does not change.	<ul style="list-style-type: none"> *Focus & Exposure condition is locked when the [AF / AE LOCK] button is pressed under the condition of [AF/AE LOCK HOLD] is "On". ⇒ [CUSTOM MENU] (2/7) ----- [AF/AE LOCK HOLD] (ON/OFF) *It can be reset when [AF / AE LOCK] button is pressed again.
	Although [AF/AE LOCK] button is pressed, it does not hold the Focus, only Exposure is locked.	<ul style="list-style-type: none"> *Focus does not hold even if [AF/AE LOCK] button is pressed if the [AF/AE LOCK] is selected [AE]. ⇒ [CUSTOM MENU] (2/7) ----- [AF/AE LOCK] (AE, AF, AF/AE) *In the Manual Focus condition, It is only worked as [AE lock] function.
	It does not turn to the "AFC" mode. (Motion prediction does not work.)	<ul style="list-style-type: none"> *Confirm the setting of the focus mode (AFS / AFC / MF). *Although AFC is effective with burst mode, the focus is fixed on the first picture when subject is dark.
Flash	Some of the Flash setting(s) are not able to select.	*In accordance with the [REC] mode and [FLASH SYNCHRO] mode, selectable flash settings may be differ.
	[AUTO BRACKET] does not work.	*Only one picture can be taken when the Flash is fired.
	The subject is too bright / too dark with Flash.	<ul style="list-style-type: none"> *Confirm that the picture is taken within Flash range or not. *Confirm that flash output settings. ⇒ [REC] (3/5) ----- [FLASH ADJUST.] (1/3 EV Step, -2EV to +2EV)
	The Flash adjustment does not effect.	*Confirm that the picture is taken within Flash range or not.
	White round spots appear on the recording picture	<ul style="list-style-type: none"> *If you take a picture with flash in a dark place or indoors, white round spots may be appear on the picture caused by the flash reflecting of particles of dust in air. This is not a malfunction. *A characteristic of this is that the number of round spots and their position differ in every picture. 

TITLE	ITEMS	DESCRIPTION
Flash	Colour is strange when the Flash is fired.	<p>*The colour of the subject which is other than Flash reachable distance is not coverage of white balance.</p> <p>*Confirm that [WB Adjustment] setting condition. (Press the cursor [RIGHT] (WB) button, then press the cursor [DOWN] button, in order to execute the [WB ADJUST.] screen.</p> <p>*It also effects to the Flash recording mode as well.</p> 
	The appearance of the light source is strange. (The light source appears ahead the subject.)	<p>*Normally, the light source appears ahead the subject. (This is the effect of the 1st curtain synchro.)</p> <p>*The Flash synchro mode can be selected. ⇒ [REC] (3/5) ----- [FLASH SYNCHRO] (1ST / 2ND)</p> 
EXPOSURE	The Exposure condition can not be changed	<p>*Focus & Exposure condition is locked when the [AF/AE LOCK] button is pressed under the condition of [AF / AE LOCK HOLD] is "On". ⇒ [CUSTOM MENU] (2/7) ----- [AF / AE LOCK HOLD] (ON/OFF)</p> <p>*It can be reset when [AF/AE LOCK] button is pressed again.</p>
	Although [AF/AE LOCK] button is pressed, only focus is locked. (AE is not locked)	<p>*Focus does not hold even if [AF/AE LOCK] button is pressed if the [AF/AE LOCK] is set to [AF]. ⇒ [CUSTOM MENU] (2/7) ----- [AF/AE LOCK] (AE, AF, AF/AE)</p> <p>*In the Manual Focus condition, It is only worked as [AE lock] function, regardless any settings.</p>
	The pictures recorded with [AUTO BRACKET] function are too dark/bright.	<p>*The [AUTO BRACKET] is selected after setting the [EXPOSURE COMPENSATION], the compensated value is effected for its reference value.</p>
	The Exposure condition is changed extremely.	<p>*Spot metering mode is measuring only the limited narrow area on the centre of the screen.</p> <p>*Confirm the setting condition of [EXPOSURE COMPENSATION] (1/3 EV Step, -3EV to +3EV)</p>
CAPTURING	Although shutter is released, no picture is captured.	<p>*Although the shutter button is fully pressed, it can not take a picture until the subject is not focused. (It is able to take a picture when the Focus Priority turns [OFF] although focus condition does not perfect.) OFF is gives priority to the best time to take a picture.</p> <p>*A picture is not taken until the subject is brought into focus, because [FOCUS PRIORITY] is fixed to [ON] in Intelligent Auto Mode. ⇒ [CUSTOM MENU] (3/7) ----- [FOCUS PRIORITY] (ON/OFF)</p>
	[AUTO BRACKET] does not work.	<p>*Only single picture is able to captured when flash is fired.</p> <p>*It can not be used in My colour mode.</p> <p>*The exposure may not be compensated with auto bracket depending on the brightness of the subject.</p>
COLOUR REPRODUCTION	Colour is strange.	<p>*There is a possibility that [Finely adjusting the white balance] is selected/shifted.</p> <p>*Confirm that [WB Adjustment] setting condition. (Press the cursor [RIGHT] (WB) button, then after choosing the WB mode press the cursor [DOWN] button, in order to execute the [WB ADJUST.] screen.)</p> <p>*It is resumed/memorized although power turns off/on.</p> 
	Colour is strange. (With Flash)	<p>*The flash light does not reach enough to the subject due to the over than flash reachable distance. In this case, white balance may be other than its coverage.</p>
	The colour is strange (On PC monitor/ Printout image.)	<p>*There is a possibility that the picture is captured with [AdobeRGB] setting. ⇒ [REC] (5/5) ----- [COLOR SPACE] (sRGB/AdobeRGB)</p> <p>*To proceed proper colour reproduction for AdobeRGB, the AdobeRGB capable PC and Printer are necessary.</p> <p>*In accordance with PC environment, it may not be displayed properly when the picture is re-sized with business software.</p>
POWER	The Power is turned off.	<p>*Confirm that the setting condition of [SLEEP]. (If the camera has not been used for the time selected on the setting, the power turns off automatically.) ⇒ [SETUP] (2/5) ----- [ECONOMY] [SLEEP] (OFF/1MIN./2 MIN./5 MIN./10 MIN.)</p>
DISPLAY	Abnormal Picture Effect. Certain part of the picture is flashing in Black & White.	<p>*Confirm that the setting condition of [HIGHLIGHT]. ⇒ [CUSTOM MENU] (2/7) ----- [HIGH LIGHT] (ON/OFF)</p> <p>The white saturated areas appear blinking in Black and White.</p>
	Firmware version	<p>*Confirm that the firmware versions of the body and lens to be checked. ⇒ [SETUP] (4/5) ----- [VERSION DISP.]</p>

MENU LIST (Quick Reference)

The following menu items are displayed on the LCD monitor.

	 [REC]	 [MOTION PICTURE]	 [CUSTOM MENU]	 [SETUP]	 [PLAYBACK]
1st Page					
2nd Page					
3rd Page					
4th Page		/			/
5th Page		/			/
6th Page	/	/		/	/
7th Page	/	/		/	/

REMARKS:

*When pressing the [iA] button and having been illuminated the button, extra-menu groups are displayed. [Intelligent Auto Mode] or [Intelligent Auto Plus Mode] can be selected.



*When the [Intelligent Auto Mode] or [Intelligent Auto Plus Mode], as for [REC], [MOTION PICTURE], [CUSTOM MENU] and [SETUP], only the basic item is displayed.

	[REC]	[MOTION PICTURE]	[CUSTOM MENU]	[SETUP]	[PLAYBACK]
1st Page					Menu items of [PLAYBACK] mode are same as Normal.
2nd Page					

*When the mode dial is set to [Scene mode(SCN)], extra-menu groups are displayed.



NOTE:

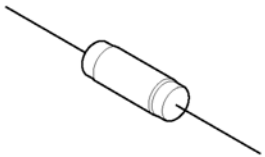
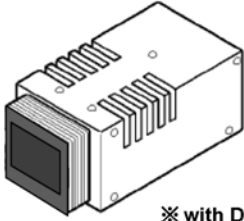
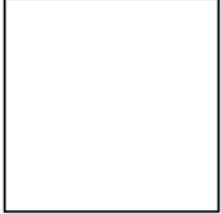
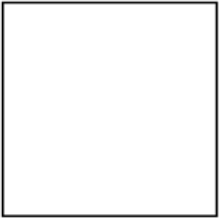
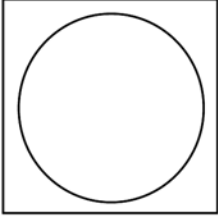
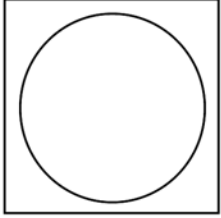
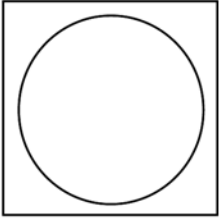
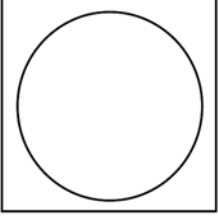

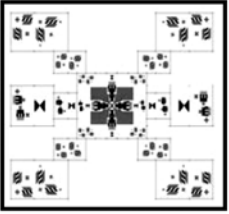




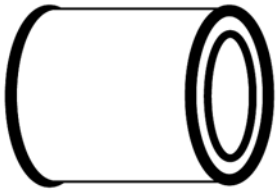
*When set [MENU RESUME] in the [CUSTOM MENU] menu to [ON], the screen shows the last selected menu item when the camera is turned off.

⇒ [CUSTOM MENU] (6/7) ----- [MENU RESUME] (ON/OFF)

8 Service Fixture & Tools

8.1. Service Fixture and Tools

The following Service Fixture and tools are used for checking and servicing this unit.

<p>Resistor for Discharging ERG5SJ102</p>  <p>An equivalent type of Resistor may be used.</p>	<p>LIGHT BOX RFKZ0523</p>  <p>※ with DC Cable * VFK1164TDVLB can be used.</p>	<p>ND FILTER 1 VFK1164ND09</p> 
<p>ND FILTER 2 RFKZ0513</p> 	<p>CC FILTER 1 RFKZ0511</p> 	<p>CC FILTER 2 RFKZ0512</p> 
<p>LB FILTER 1 RFKZ0520</p> 	<p>LB FILTER 2 RFKZ0521</p> 	<p>TOUCH PEN VGQ0C14</p>  <p>VYQ4370 can be used.</p>
<p>RESOLUTION CHART RFKZ0510</p>  <p>※Supplied as divided chart parts. (Assemble it before use.)</p>	<p>DRIVER VFK1390</p> 	<p>TORQUE DRIVER RFKZ0456</p>  <p>Spec.:2-30cN · m (Equiv.0.2-3kgf/cm)</p>
<p>DMC-G1K Set</p>  <p>*Correspond by the marketed commodity. (It does not supply as service fixture and tools.)</p>	<p>Lens Cleaning Kit (BK) VFK1900BK</p>  <p>* Only supplied as 10 set/box.</p>	<p>NAME RING FIXTURE RFKZ0507</p> 

8.2. Clean Box

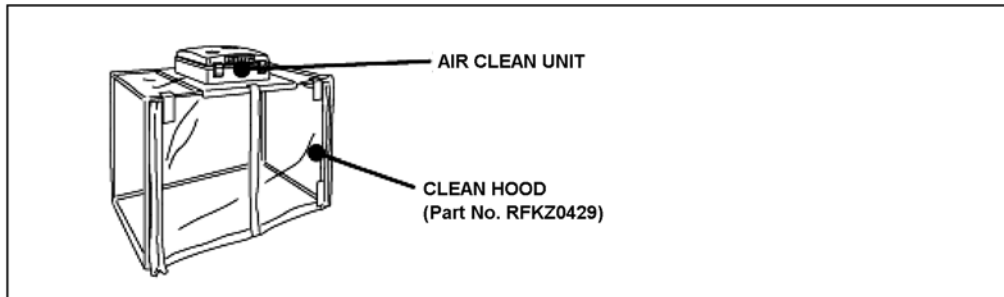
- The repair quality is considered, and it is recommended working in the environment of satisfied clean level less than class 10,000 (Federal Standard 209D).

(When remove the 1st lens frame, it is indispensable.)

[NOTE]

- Work in the environment of satisfied clean level less than class 10,000 (Federal Standard 209D) when remove the 1st lens frame for cleaning.

*Refer to "11.2. General description (Lens cleaning: Interchangeable Lens/H-FS014042)", "11.3. General description (Lens cleaning: Interchangeable Lens/H-FS045200)" section of this service manual for details.

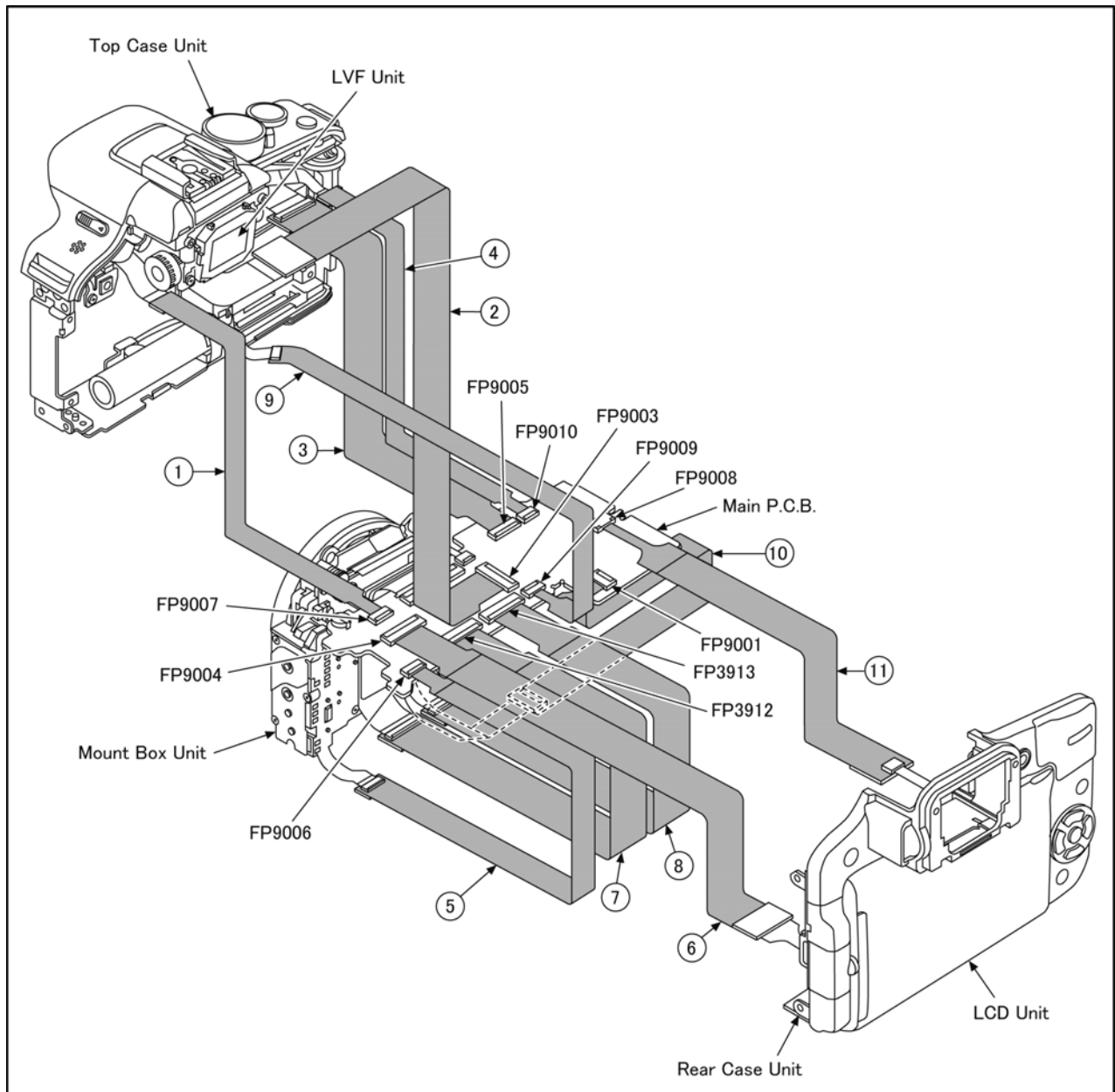


8.3. Service Position

This Service Position is used for checking and replacing parts. Use the following Extension cables for servicing.

Table S1 Extension Cable List

No.	Parts No.	Connection	Form
1	RFKZ0583	FP9007(MAIN) - HOT SHOE FPC	19PIN 0.3 FFC
2	RFKZ0477	FP9003(MAIN) - LVF UNIT	45PIN 0.3 FFC
3	VFK1976	FP9005(MAIN) - FPC←→FP8001(TOP)	19PIN 0.5 FFC
4	RFKZ0393	FP9010(MAIN) - FPC←→FP4202(MIC)	15PIN 0.3 FFC
5	RFKZ0583	FP9006(MAIN) - MOUNT BOX UNIT(SHUTTER)	19PIN 0.3 FFC
6	RFKZ0477	FP9004(MAIN) - LCD UNIT	45PIN 0.3 FFC
7	RFKZ0477	FP3912(MAIN) - MOUNT BOX UNIT	45PIN 0.3 FFC
8	RFKZ0477	FP3913(MAIN) - MOUNT BOX UNIT	45PIN 0.3 FFC
9	RFKZ0583	FP9009(MAIN) - FPC←→FP8501(FLASH)	19PIN 0.3 FFC
10	RFKZ0564	FP9001(MAIN) - MOUNT BOX UNIT(LENS I/F)	23PIN 0.3 FFC
11	VFK1480	FP9008(MAIN) - REAR OPERATION UNIT	6PIN 0.5 FFC



CAUTION-1. (When servicing FLASH P.C.B.)

1. Be sure to discharge the E.capacitor on FLASH P.C.B..
Refer to "HOW TO DISCHARGE THE E.CAPACITOR ON FLASH P.C.B.".
The E.capacitor voltage is not lowered soon even if the AC Cord is unplugged or the battery is removed.
2. Be careful of the high voltage circuit on FLASH P.C.B..
3. DO NOT allow other parts to touch the high voltage circuit on FLASH P.C.B..

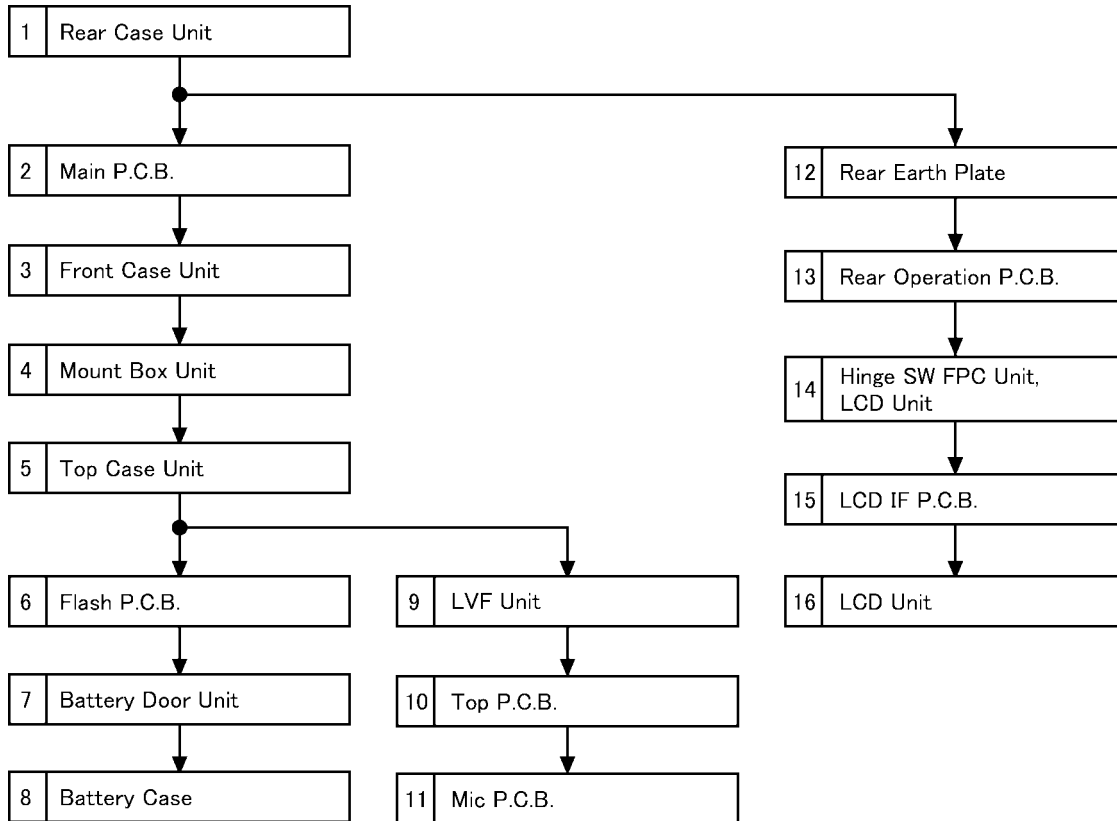
9 Disassembly and Assembly Instructions

9.1. Camera Body Part

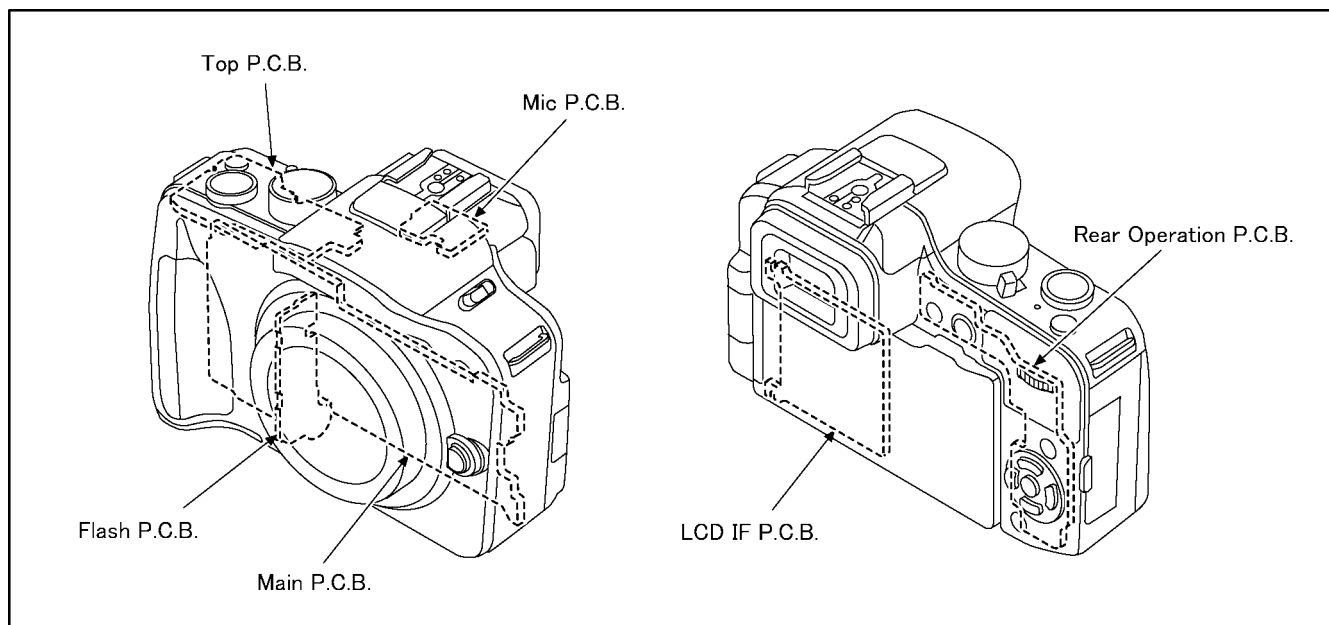
9.1.1. Disassembly Flow Chart

This is a disassembling chart.

When assembling, perform this chart conversely.



9.1.2. P.C.B. Location



9.1.3. Disassembly Procedure

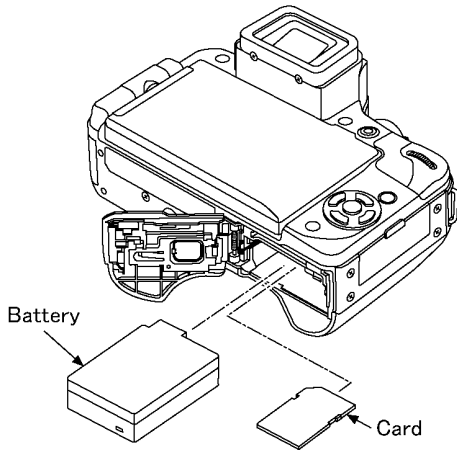
No.	Item	Fig	Removal
1	Rear Case Unit	(Fig. D1)	4 Screws (A)
			8 Screws (B)
		(Fig. D2)	Side Ornament R
			Side Ornament L
			Jack Door
			Eye Rubber
		(Fig. D3)	2 Screws (C)
			FP9004(Flex)
			FP9008(Flex)
			Rear Case Unit
2	Main P.C.B.	(Fig. D4)	1 Screw (D)
			3 Screws (E)
			FP9003(Flex)
			2 Tapes (A)
			1 Tape (B)
			FP3911(Flex)
			FP3912(Flex)
			FP3913(Flex)
			FP9001(Flex)
			FP9002(Flex)
			FP9005(Flex)
			FP9006(Flex)
			FP9007(Flex)
			FP9009(Flex)
			FP9010(Flex)
			(Fig. D5)
		3	Front Case Unit
(Fig. D7)	2 Screws (G)		
	Front Case Unit		
4	Mount Box Unit	(Fig. D8)	4 Screws (H)
			Mount Box Unit
5	Top Case Unit	(Fig. D9)	2 Screws (I)
			5 Locking tabs
			Capacitor PCB Cover
			P8502(Connector)
			P8503(Connector)
	Top Case Unit		
6	Flash P.C.B.	(Fig. D10)	1 Screw (J)
			1 Screw (K)
			Tape
			Flash P.C.B.
(Fig. D11)	Caution for Discharging		
7	Battery Door Unit	(Fig. D12)	Battery Door Shaft
			Battery Door Spring
			Battery Door Unit
8	Battery Case	(Fig. D13)	2 Locking tabs
			Heat Radiation Plate
			3 Locking tabs
			Battery Out Spring
			Battery Lock Knob
			Battery Lock Spring
			Battery Case
9	LVF Unit	(Fig. D14)	2 Screws (L)
			LVF Unit
10	Top P.C.B.	(Fig. D15)	2 Screws (M)
			FP8002(Flex)
			Multi-Button Switch
			1 Screw (N)
			Top P.C.B.
11	Mic P.C.B.	(Fig. D16)	FP4201(Flex)
			FP4202(Flex)
			1 Screw (O)
			Mic P.C.B.

No.	Item	Fig	Removal
12	Rear Earth Plate	(Fig. D17)	4 Screws (P)
			1 Screw (Q)
			2 Screws (R)
		(Fig. D18)	Grip Piece Rear
			2 Locking tabs
			Arm Cover Top
			Arm Cover Bottom
	Rear Earth Plate		
13	Rear Operation P.C.B.	(Fig. D19)	1 Screw (S)
			LCD Lock Holder
			Rear Operation P.C.B.
14	Hinge SW FPC Unit LCD Unit	(Fig. D20)	2 Screws (T)
			1 Screw (U)
			Flex
		(Fig. D21)	Hinge Plate
			2 Screws (V)
			6 Ribs
	Hinge SW FPC Unit		
	LCD Unit		
15	LCD IF P.C.B.	(Fig. D22)	2 Screws (W)
			2 Screws (X)
			6 Locking tabs
			LCD Case Bottom
			LCD Hinge Unit
			FP7202(Flex)
			FP7203(Flex)
			FP7204(Flex)
			FP7205(Flex)
			LCD PCB Sheet
LCD IF P.C.B.			
16	LCD Unit	(Fig. D23)	LCD BL Bezel Sheet
			LCD Case Top
			4 Locking tabs
			Backlight Unit
			LCD Unit

NOTE:

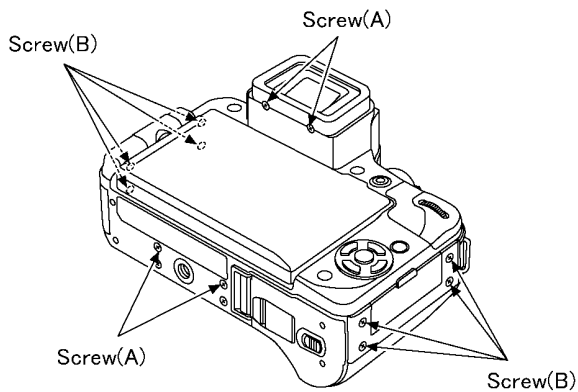
- When servicing and reassembling, remove the card and battery from the unit.
- Install the body cap, except when it is necessary to prevent garbage and dust.



- Card
- Battery



9.1.3.1. Removal of the Rear Case Unit

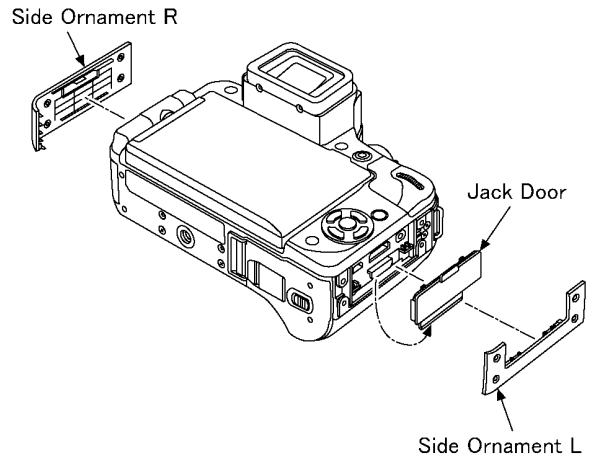
- Screw(A) × 4
- Screw(B) × 8



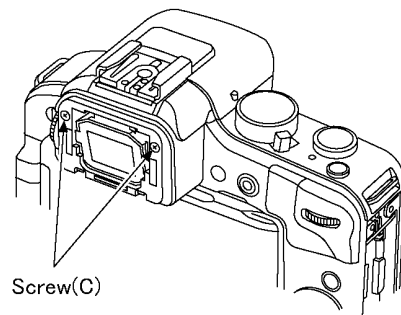
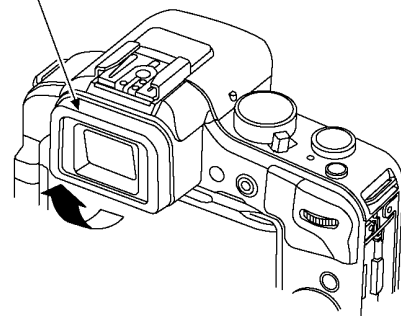
Screw(A)	Screw(B)
 3mm	 4.5mm
(K)(T)(R)(KA) : BLACK	(K)(T)(R)(KA) : BLACK
(W) : SILVER	(W) : SILVER

(Fig. D1)


- Side Ornament R
- Side Ornament L
- Jack Door
- Eye Rubber
- Screw(C) × 2



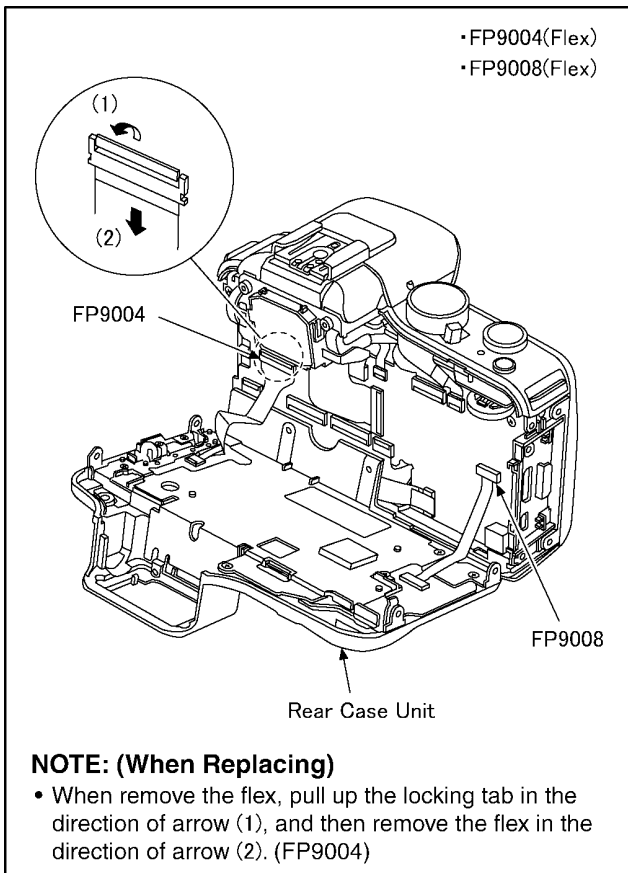
Eye Rubber



Screw(C)

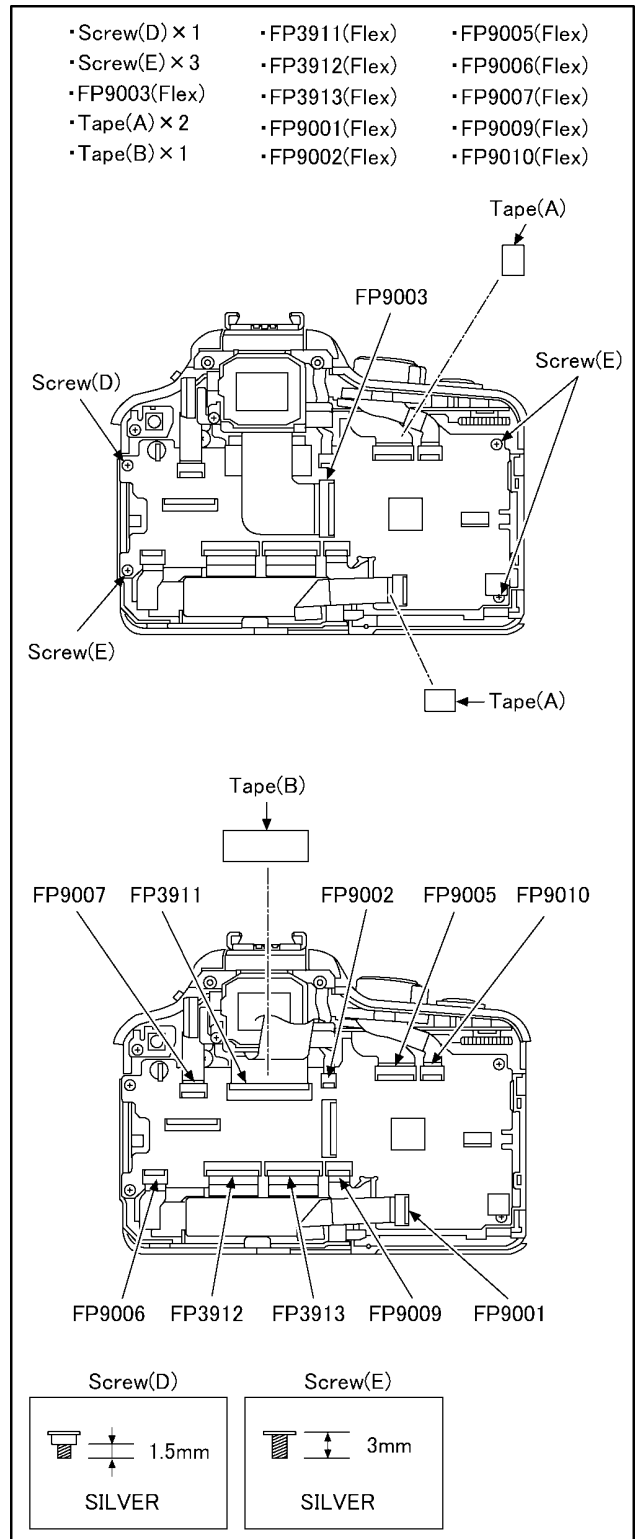
 4mm
SILVER

(Fig. D2)

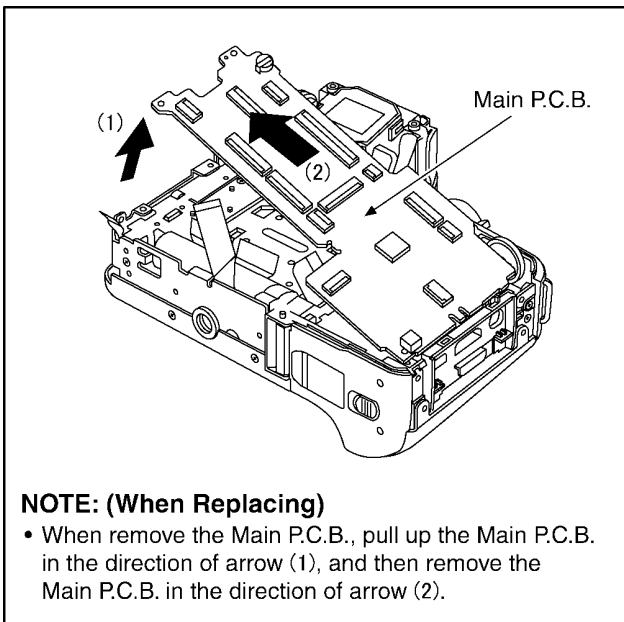


(Fig. D3)

9.1.3.2. Removal of the Main P.C.B.

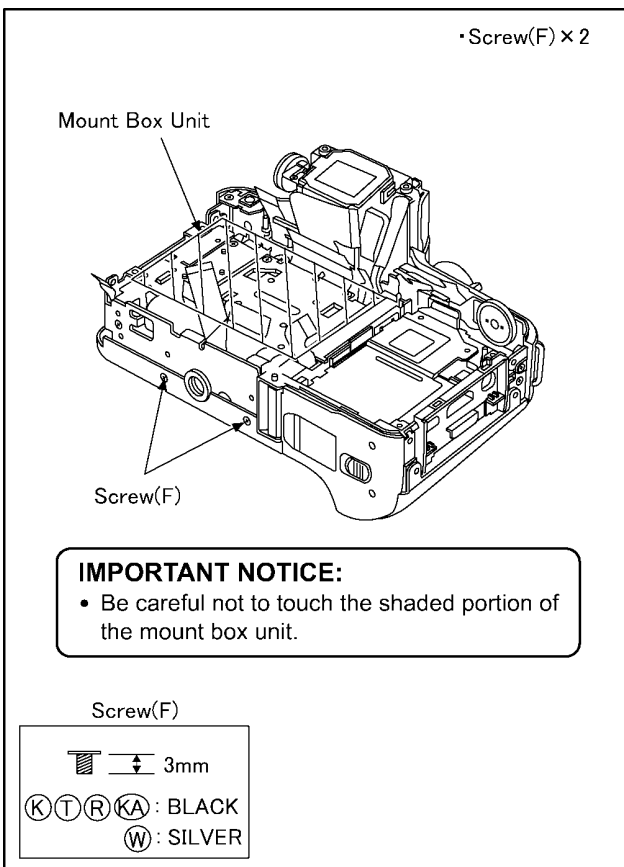


(Fig. D4)

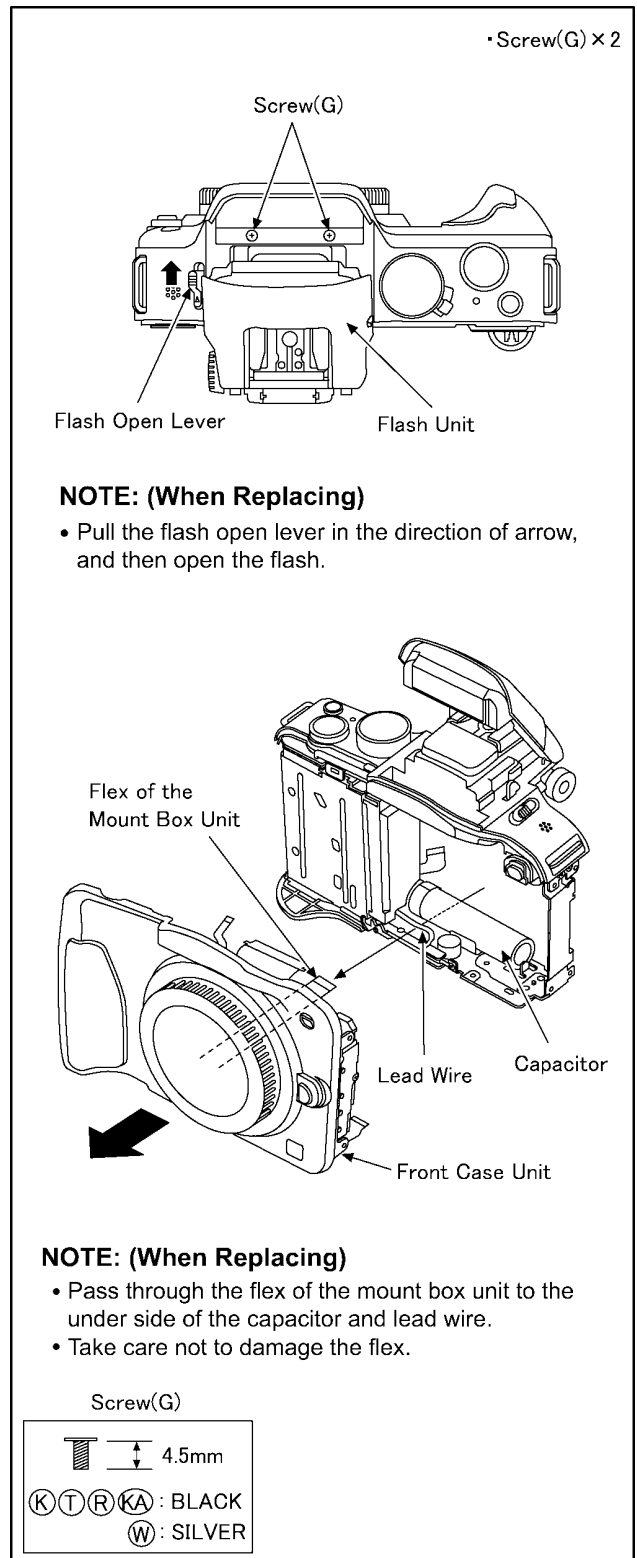


(Fig. D5)

9.1.3.3. Removal of the Front Case Unit

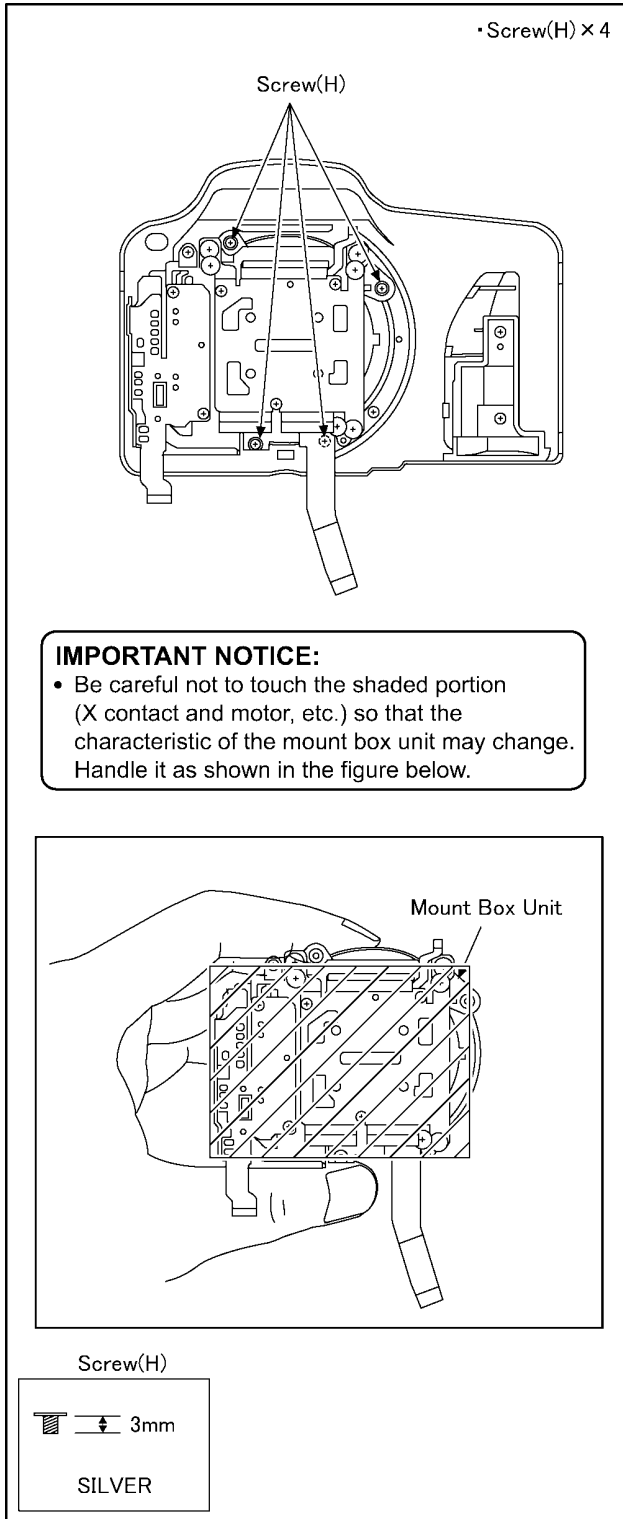


(Fig. D6)



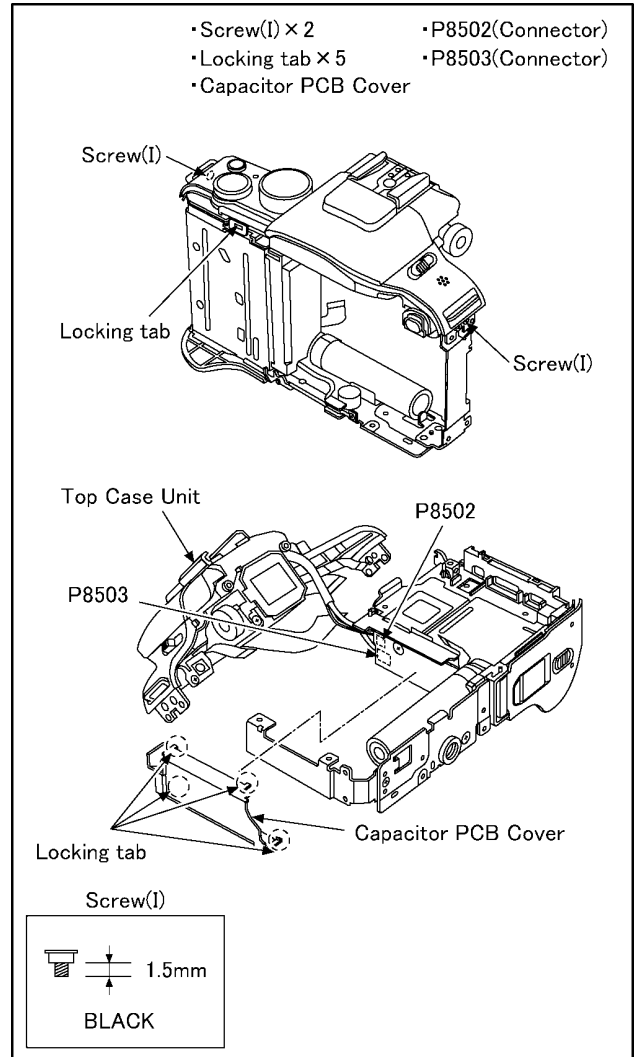
(Fig. D7)

9.1.3.4. Removal of the Mount Box Unit



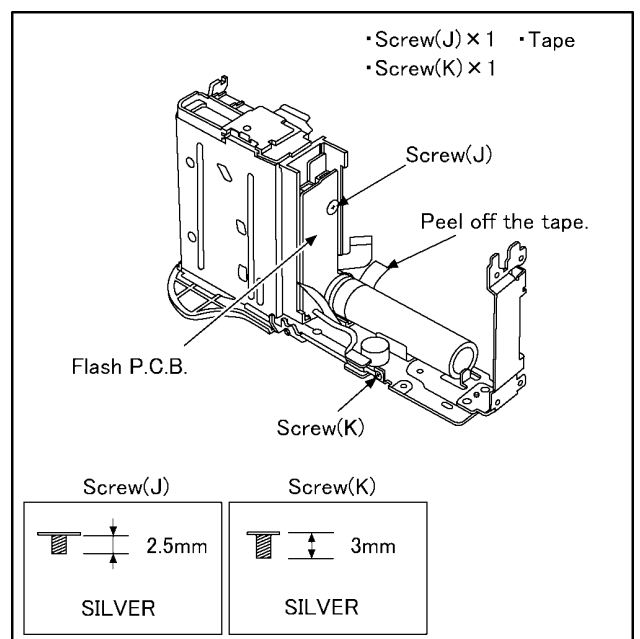
(Fig. D8)

9.1.3.5. Removal of the Top Case Unit

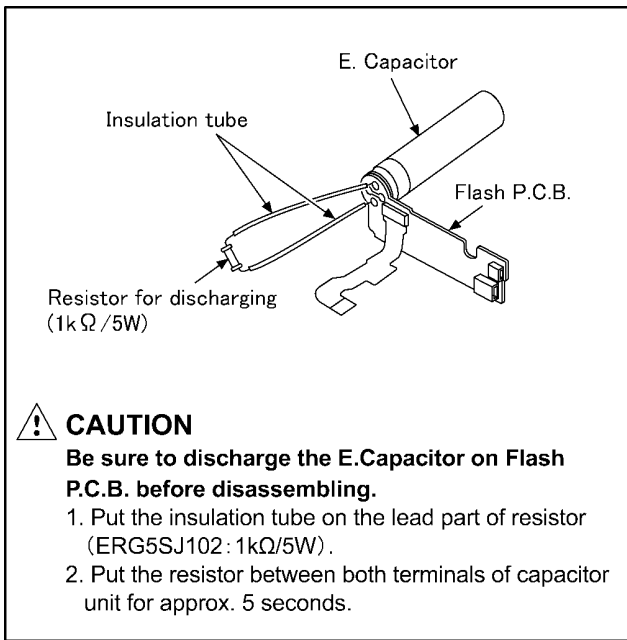


(Fig. D9)

9.1.3.6. Removal of the Flash P.C.B.

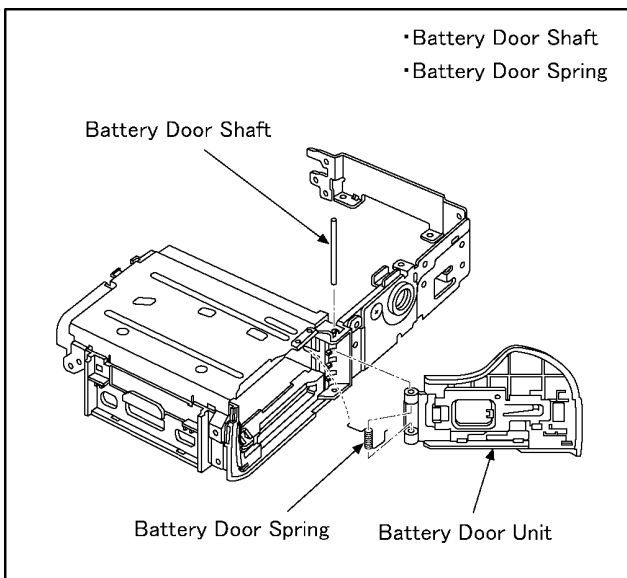


(Fig. D10)



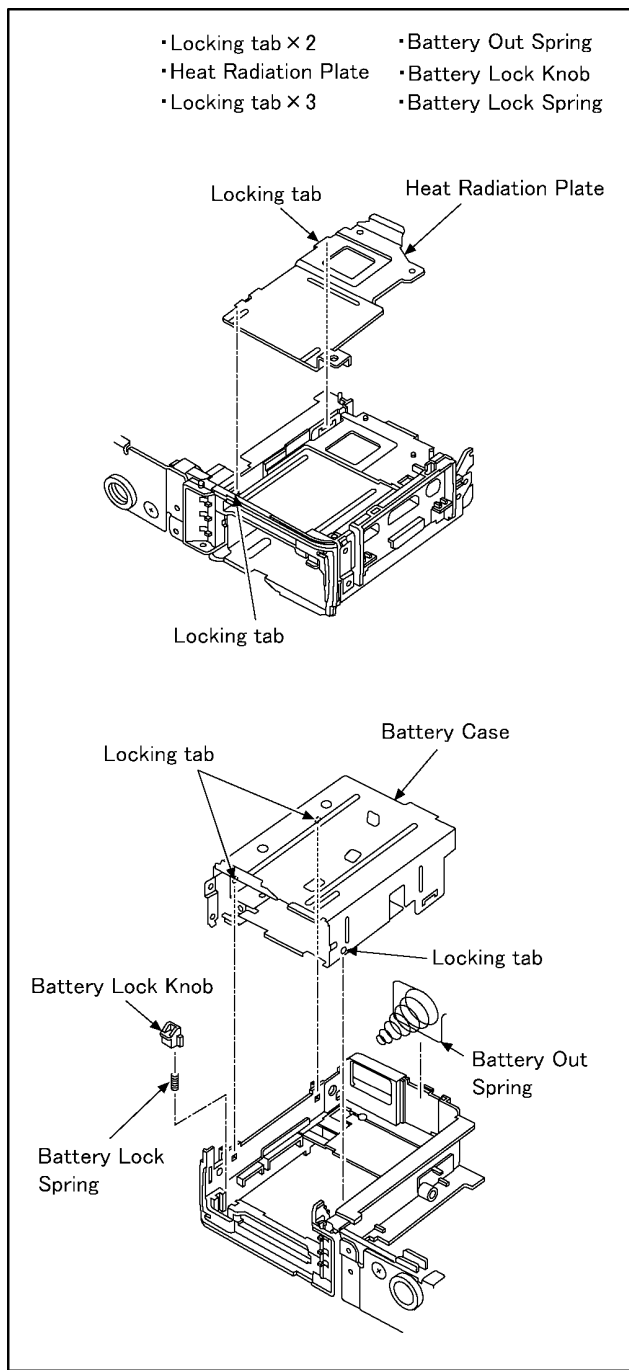
(Fig. D11)

9.1.3.7. Removal of the Battery Door Unit



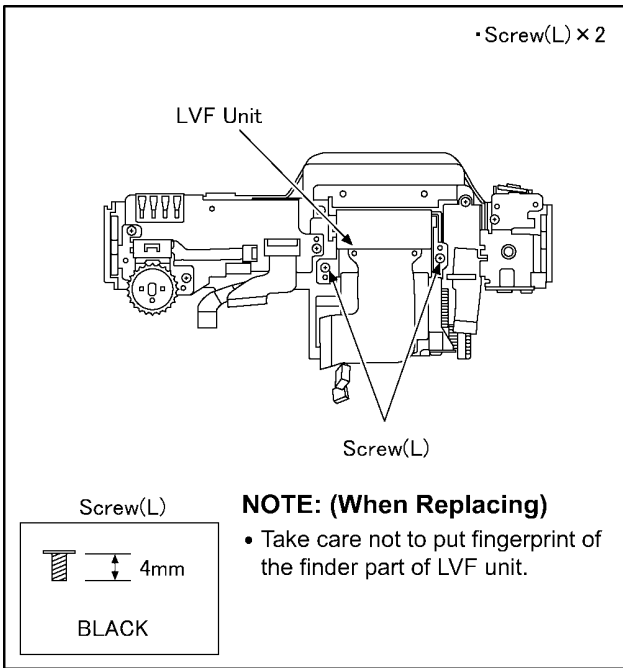
(Fig. D12)

9.1.3.8. Removal of the Battery Case



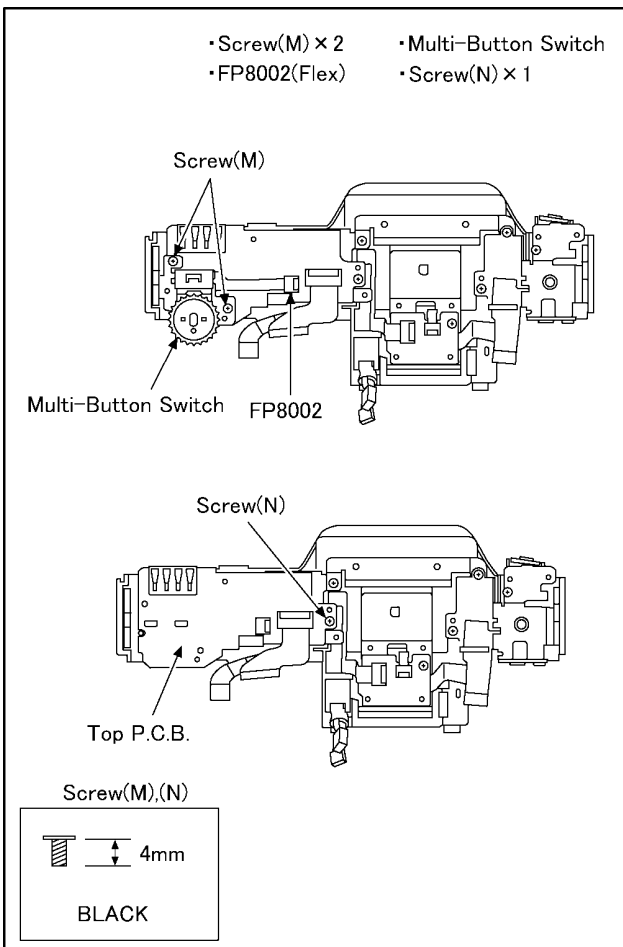
(Fig. D13)

9.1.3.9. Removal of the LVF Unit



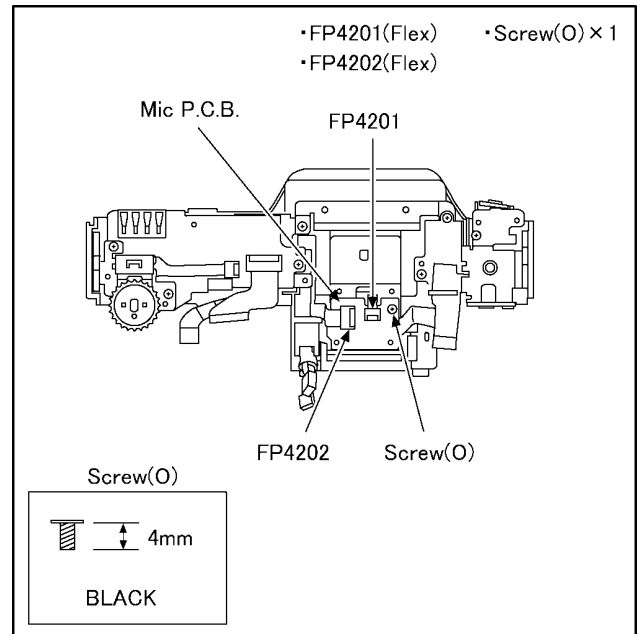
(Fig. D14)

9.1.3.10. Removal of the Top P.C.B.



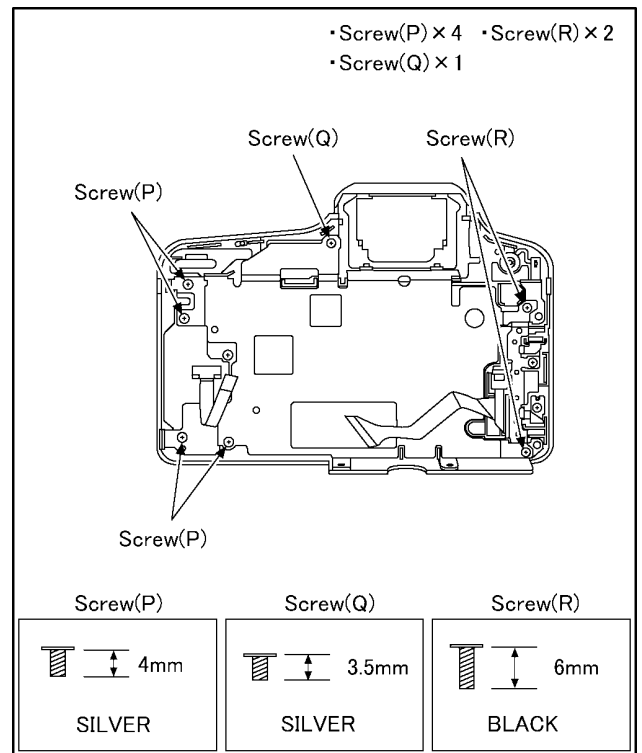
(Fig. D15)

9.1.3.11. Removal of the Mic P.C.B.



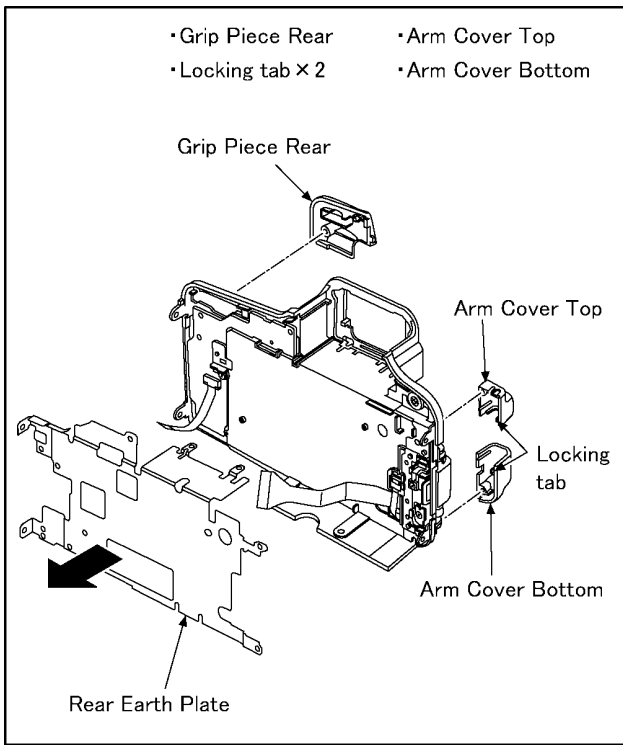
(Fig. D16)

9.1.3.12. Removal of the Rear Earth Plate



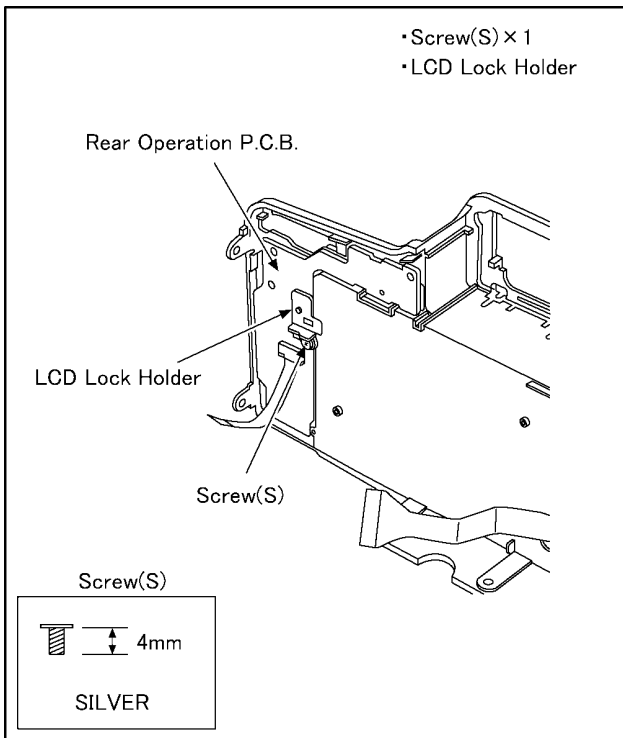
(Fig. D17)

9.1.3.14. Removal of the Hinge SW FPC Unit and LCD Unit

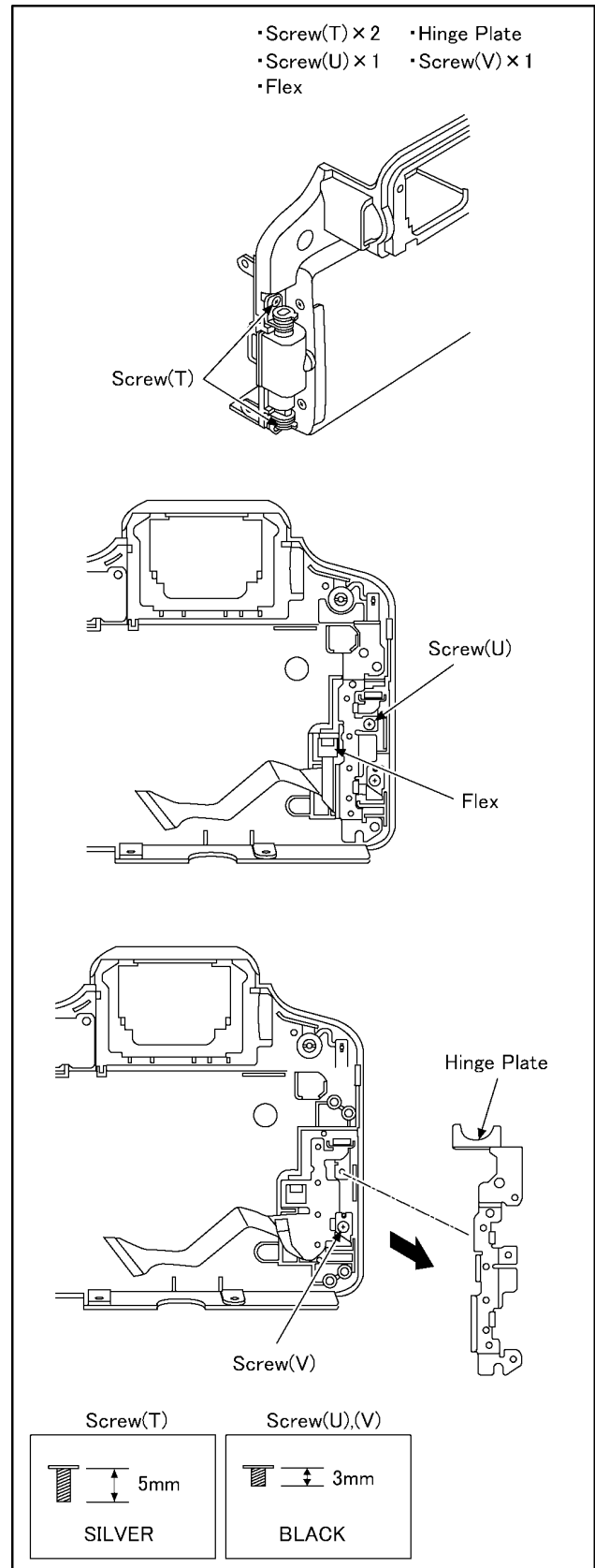


(Fig. D18)

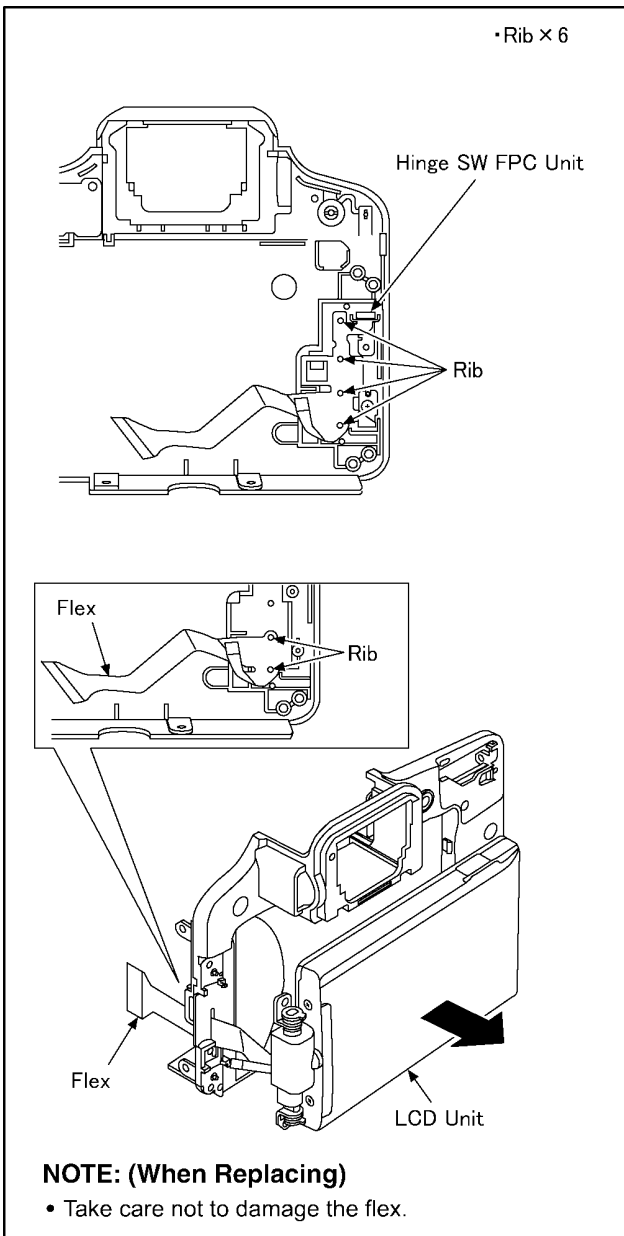
9.1.3.13. Removal of the Rear Operation P.C.B.



(Fig. D19)

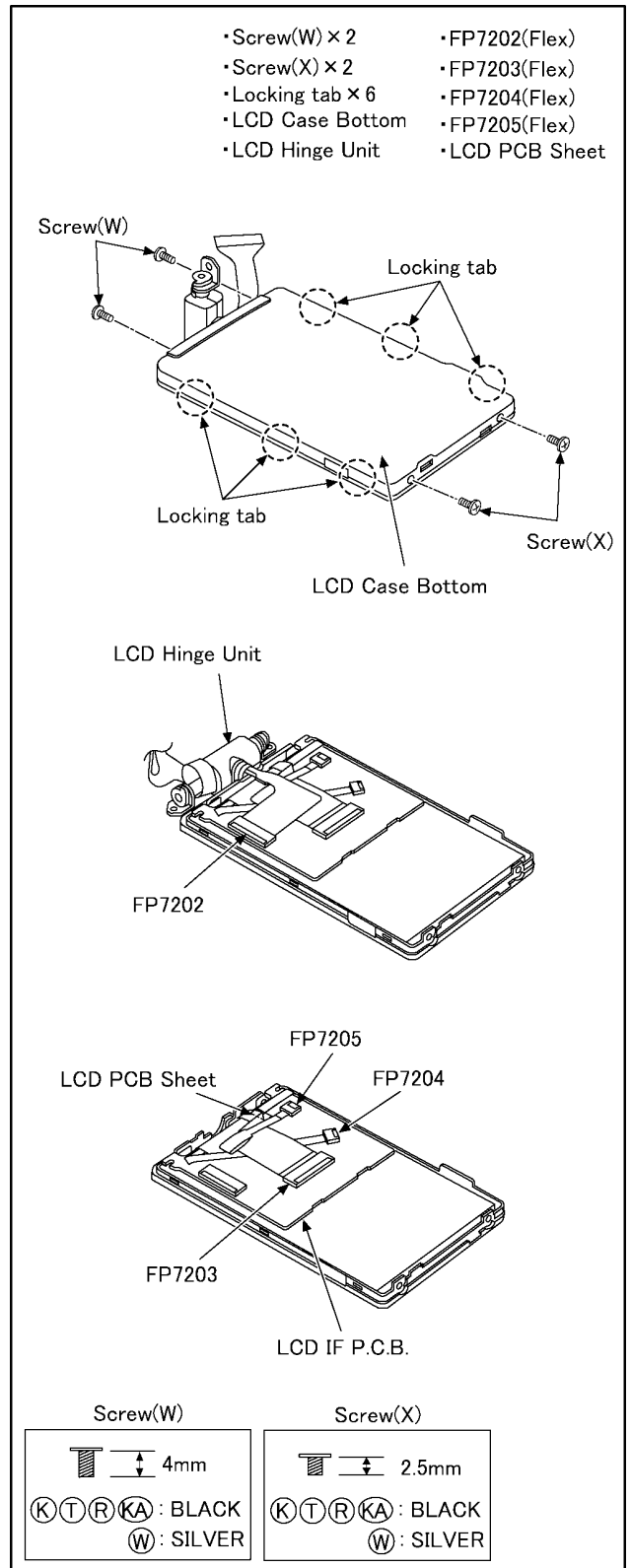


(Fig. D20)



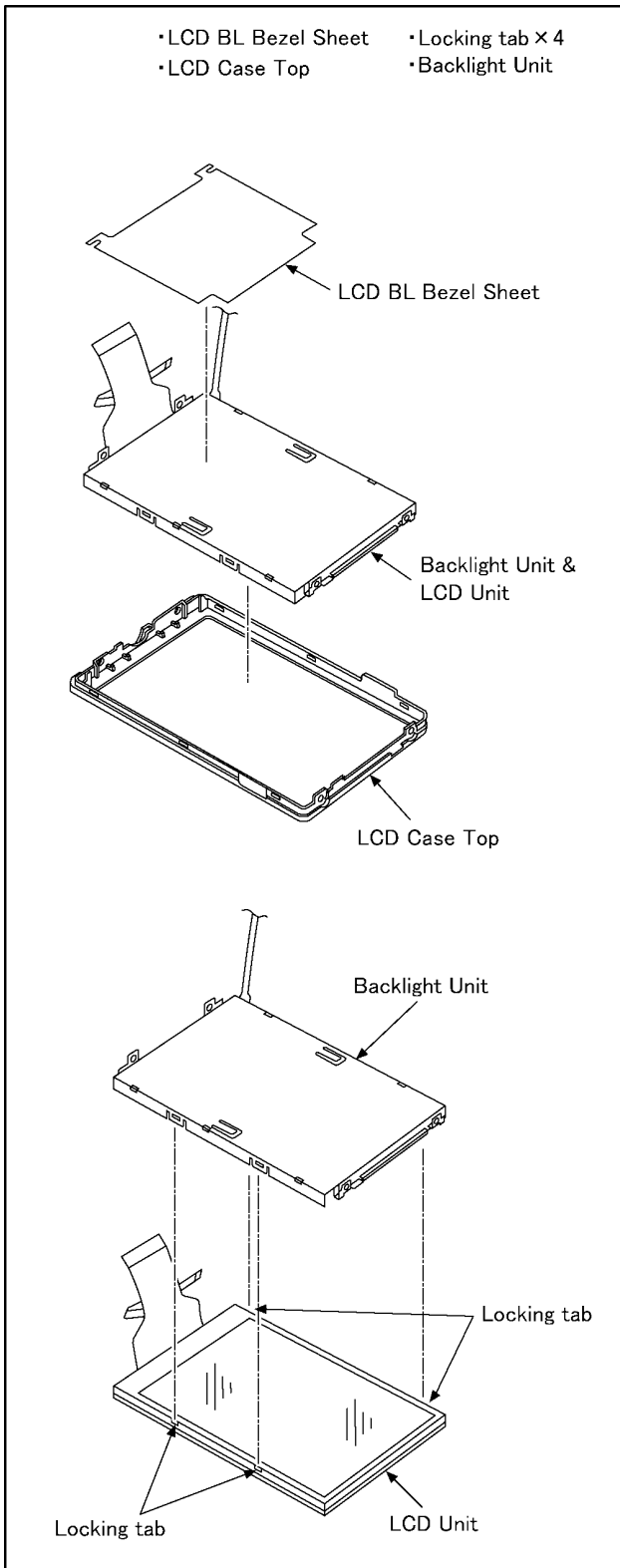
(Fig. D21)

9.1.3.15. Removal of the LCD IF P.C.B.



(Fig. D22)

9.1.3.16. Removal of the LCD Unit



(Fig. D23)

NOTE: (When Installing)

Make sure to confirm the following points when installing:

- The Screw is tightened enough.
- Installing conditions are fine. (No distortion, no abnormal-space.)
- No dust and/or dirt on Lens surfaces.
- LCD image is fine. (No dust and dirt on it, and no gradient images.)

9.2. Disassembly and Assemble Procedure for the Lens (H-FS014042)

It is recommended dealing with clean box, to keep maintaining the dustproof environment.
(Refer to "8.2. Clean Box" section of this service manual for details.)

Important:

- When servicing the enclosure part (refer to Fig. K1), it must be performed inside of satisfied clean level.
(Satisfied clean level: Less than class 10,000 (Federal Standard 209D))
As for procedure, refer to the "11 Maintenance" for details.
- To minimize the possibilities/risk of getting the dust/dirt on the lens surface, keep covering the lens unit with lens caps (front & rear), other than necessary cases.
- Do not touch the surface of the lens glasses with your fingers.
- Blow off the dust on the surface of the lens with a blower brush.
- Use lens cleaning KIT (BK)(VFK1900BK).

Proceed disassemble/assemble, by referring the following table and Fig. K1.

NOTE:

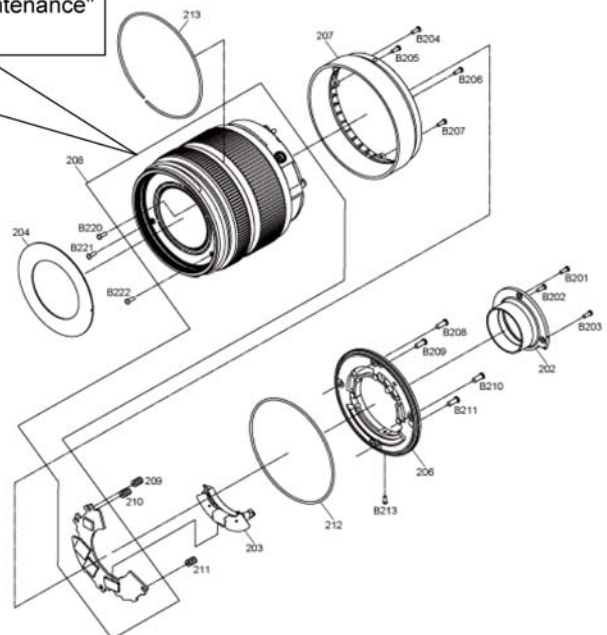
- When installing the screws, be sure to use the torque driver (RFKZ0456) and tighten the screws with specified torque, mentioned on the above table.
- The Ref.B213 is no need to remove/install for disassembly and assembly.
If necessary, use VFK1390 (small driver) when screwing it.

Interchangeable Lens (H-FS014042)

Caution :
Keep covering the lens unit with Lens caps (front & rear), other than necessary cases.

Concerned parts		screws					Remarks
Part name	Ref. No.	Ref. No.	Color	Length (mm)	Order	Torque value	
Shading frame	202	B201	Black	4mm	1	7±0.5	
		B202	Black	4mm	2	7±0.5	
		B203	Black	4mm	3	7±0.5	
L mount unit	206	B208	Black	5mm	2	15±1.2	
		B209	Black	5mm	4	15±1.2	
		B210	Black	5mm	3	15±1.2	
		B211	Black	5mm	1	15±1.2	
		B213	Black	3mm	----	----	Use Small Driver (VFK1390)
Rear frame 2 unit	207	B204	Black	4mm	1	7±0.5	
		B205	Black	4mm	4	7±0.5	
		B206	Black	4mm	3	7±0.5	
		B207	Black	4mm	2	7±0.5	

Refer to the "11.2.1. Disassembly procedure" of the "11 Maintenance" when disassemble and assemble this part.



(Fig. K1)

9.3. Disassembly and Assemble Procedure for the Lens (H-FS045200)

It is recommended dealing with clean box, to keep maintaining the dustproof environment.
(Refer to "8.2. Clean Box" section of this service manual for details.)

Important:

1. When servicing the enclosure part (refer to Fig. W1), it must be performed inside of satisfied clean level.
(Satisfied clean level: Less than class 10,000 (Federal Standard 209D))
As for procedure, refer to the "11 Maintenance" for details.
2. To minimize the possibilities/risk of getting the dust/dirt on the lens surface, keep covering the lens unit with lens caps (front & rear), other than necessary cases.
3. Do not touch the surface of the lens glasses with your fingers.
4. Blow off the dust on the surface of the lens with a blower brush.
5. Use lens cleaning KIT (BK)(VFK1900BK).

Proceed disassemble/assemble, by referring the following table and Fig. W1.

NOTE:

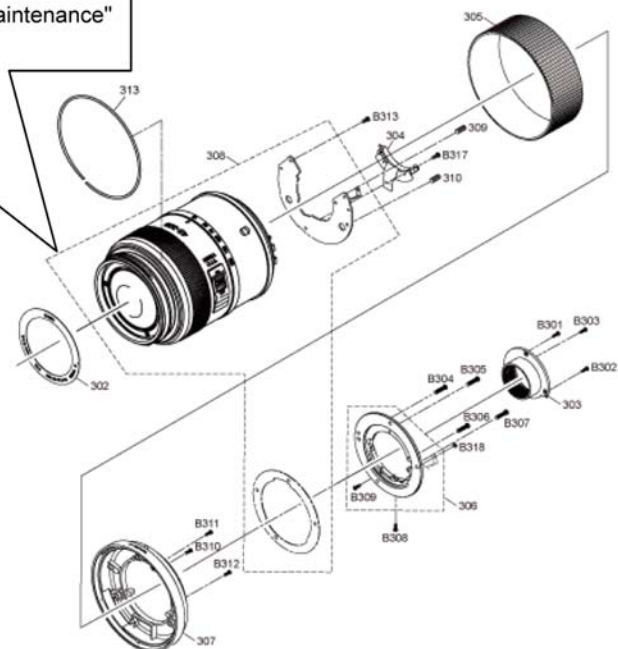
1. When installing the screws, be sure to use the torque driver (RFKZ0456) and tighten the screws with specified torque, mentioned on the above table.
2. The Ref.B309 is no need to remove/install for disassembly and assembly.
3. Use small driver (VFK1390) when removing/tighten the B308.

Interchangeable Lens (H-FS045200)

Caution :
Keep covering the lens unit with Lens caps (front & rear), other than necessary cases.

Concerned parts		screws					Remarks
Part name	Ref. No.	Ref. No.	Color	Length (mm)	Order	Torque value	
Shading frame	303	B301	Black	2.5 mm	10	9.8±1.0	
		B302	Black	2.5 mm	12	9.8±1.0	
		B303	Black	2.5 mm	11	9.8±1.0	
L mount unit	306	B304	Silver	5.0 mm	4	19.6±1.0	
		B305	Silver	5.0 mm	6	19.6±1.0	
		B306	Silver	5.0 mm	7	19.6±1.0	
		B307	Silver	5.0 mm	5	19.6±1.0	
		B318	Silver	1.2 mm	9	9.8±1.0	
Mount contact unit	304	B308	Silver	3.5 mm	----	----	Use Small Driver (VFK1390)
Rear frame unit	307	B310	Silver	7.0 mm	2	19.6±1.0	
		B311	Silver	7.0 mm	1	19.6±1.0	
		B312	Silver	7.0 mm	3	19.6±1.0	

Refer to the "11.3.1. Disassembly procedure" of the "11 Maintenance" when disassemble and assemble this part.



(Fig. W1)

10 Measurements and Adjustments

10.1. Matrix Chart for Replaced Part and Necessary Adjustment

The relation between Replaced part and Necessary Adjustment is shown in the following table.

When concerned part is replaced, be sure to achieve the necessary adjustment(s).

As for Adjustment condition/procedure, consult the "Adjustment Manual" which is available in Adjustment software.

NOTE:

After adjustments have been terminated, make sure to achieve "INITIAL SETTINGS".

After updates it to the latest firmware, the adjustment is executed.

Adjustment Item		Mount Box Unit (*3)	Main P.C.B. (*2)	VENUS FHD (IC6001) (*2)	·Flash P.C.B.	LCDu	LVFu (EVFu)	T. Panel Driver (IC7201)
S e c o n d i o n	C a m e r a	VENUS-ZOOM Inspection (PZM)	—	○	○	—	—	—
		ISO sensitivity adjustment (ISO)	○	○	○	—	—	—
		High brightness coloration inspection (SEN)	○	○	○	—	—	—
		Offset gain adjustment (SAT)	○	○	○	—	—	—
		AWB adjustment (WBL/WBM)	○	○	○	—	—	—
		IMAGE SENSOR white scratch compensation (WKI)	○	○	○	—	—	—
		IMAGE SENSOR black scratch compensation (BKI)	○	○	○	—	—	—
		Low illumination image quality correction (VSJ)	○	○	○	—	—	—
		Mount Box Adjustment data writing	○	—	—	—	—	—
		Mount box u readjustment	—	○	○	—	—	—
	AVCHD function inspection	—	○ (*4)	○ (*4)	—	—	—	
Display	Touch panel adjustment (TPC)	—	○	○	—	○	—	○
Defect Part Division/Inspection	Resolution inspection (*1)	○	—	—	—	—	—	—

- *1**
- Inspect it, not only corresponding part is replaced, but also camera body is shocked and/or dropped.
 - The Panasonic camera body in accordance with the Micro Four Thirds system (DMC-G1 unit, etc. marketed commodity: operates normal) and a standard zoom lens H-FS014045 (marketed commodity: operates normal) is required as a reference machine.
 - Refer to the adjustment instruction in the adjustment software for details.

***2 NOTE: (When exchange the MAIN P.C.B.)**

- Correspond by either the following when exchange the MAIN P.C.B. unavoidably by destruction and damage etc. of MAIN P.C.B..
 1. When it can turn on power, and the adjustment software can communicate with the camera body:
 - Before replacing, proceed the VENUS FHD (IC6001) data backup from the unit. After replacing, overwrite the VENUS FHD (IC6001) data with backup data from the unit, before proceeding the main body adjustment.
 2. When it cannot turn on power, or the adjustment software cannot communicate with the camera body:
 - The readjustment of mount box unit etc. are necessary.
 - Refer to the adjustment instruction in the adjustment software for details.

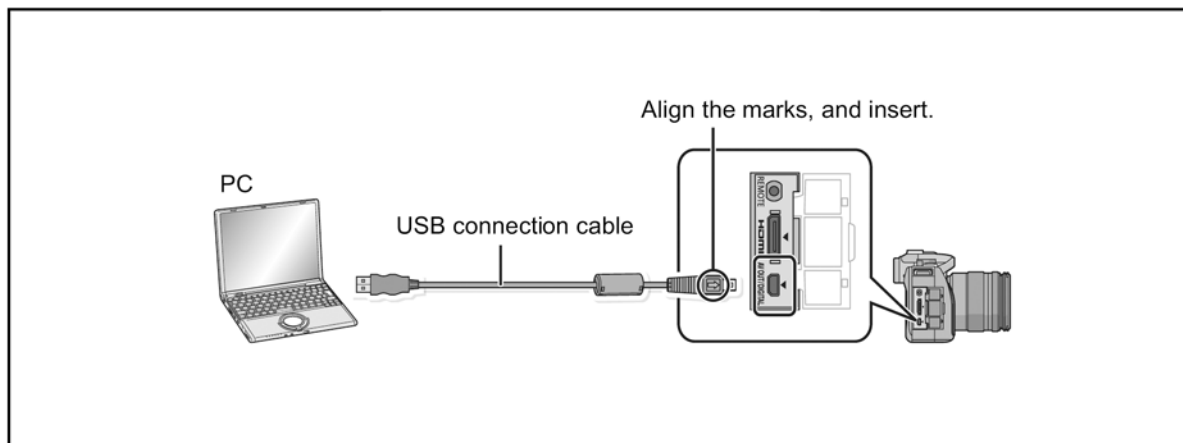
***3 NOTE: (After exchange the mount box unit)**

- Execute the resolution inspection by the comparison with the standard model (DMC-G1K etc.: operates normal).
- Refer to the adjustment instruction in the adjustment software for details.

***4**

- Confirm self recording/playback motion picture of AVCHD mode by the LCD.
- Confirm it on the TV with HDMI socket when repair HDMI relation.

* There are no LCD/LVF adjustment model.



***5 NOTE: (When AWB adjustment)**

- After change to WB adjustment mode for service with software, the adjustment is executed.
After adjusting the AWB adjustment, to cancel the WB adjustment mode for service.
- Details, refer to the instructions in the adjustment software.

About the 3D interchangeable lens (H-FT012) correspondence

This unit has no special structure (circuit or part) for the 3D interchangeable lens correspondence, only by software is processed the 3D interchangeable lens correspondence.

Therefore, if taken with other lenses as usual, the 3D interchangeable lens is no problem for operation.

11 Maintenance

11.1. Notice in external cleaning

11.1.1. ABOUT THE BODY

NOTE:

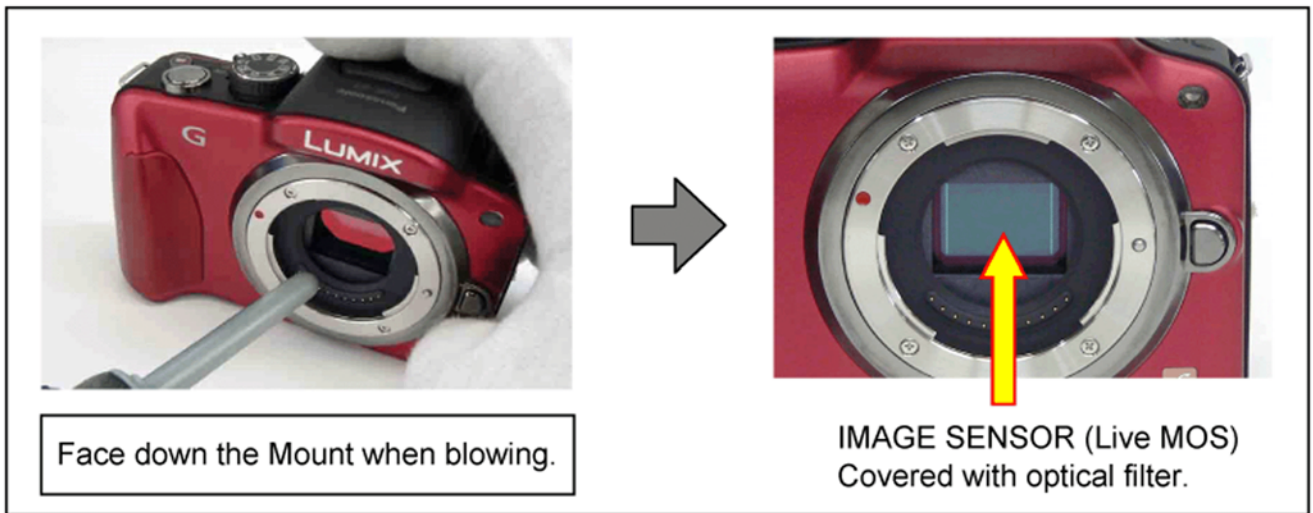
Before cleaning the camera, remove the battery and/or disconnect power plug from the outlet.
Also, remove the SD Memory card and lens unit.

11.1.1.1. DUST/DIRT ON THE OUTER CASING PART (S)

1. Blow off the dust first, then sweep out the dust from narrower spaces with soft cleaning brush.
2. Wipe up fingerprint and/or dirt on the Outer casing part with the dry fuzz-free cloth.

11.1.1.2. DUST/DIRT ON THE IMAGE SENSOR

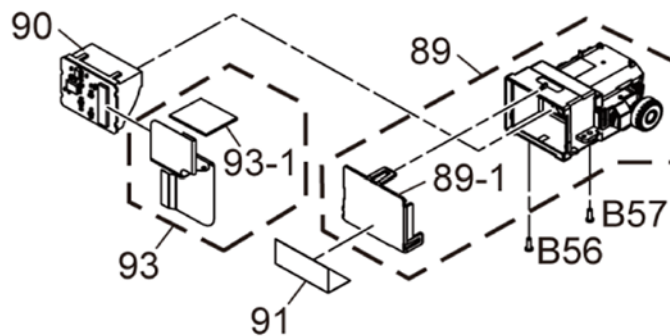
1. Blow off the dust on the surface of the Image sensor with the Blower. (Refer to the following Figure.)
 - Keep the Mount Facing down condition towards to floor when cleaning.
 - Do not put the Blower further inside than the lens mount.
 - Be careful not to blow too strongly.
2. Wipe off the dirt on the image sensor surface with Lens cleaning KIT(BK)(VFK1900BK).



11.1.1.3. ABOUT THE LVF UNIT

[PROCEDURES]

1. By referring the Disassembly & Assembly procedures and remove the LVF unit.
2. Disassemble the LVF unit as follows, then blow off the dust with blower.
3. Wipe off the dirt on the surface of glasses with Lens Cleanig KIT (VFK1900BK), if necessary.



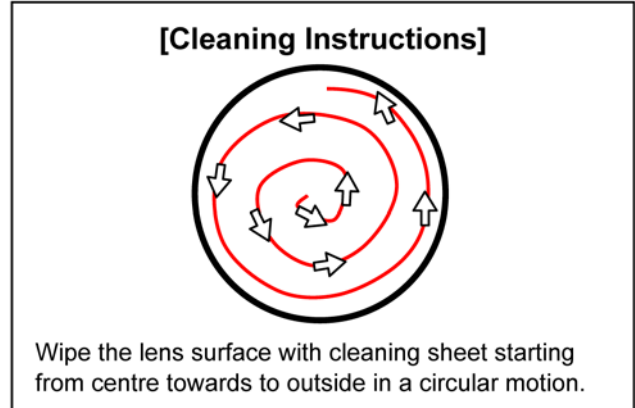
11.1.2. ABOUT THE LENS

11.1.2.1. DUST/DIRT ON THE OUTER CASING PART(S)

1. Blow off the dust first, then sweep out the dust from narrower spaces with soft cleaning brush.
2. Wipe up the Outer casing part with the dry fuzz-free cloth.

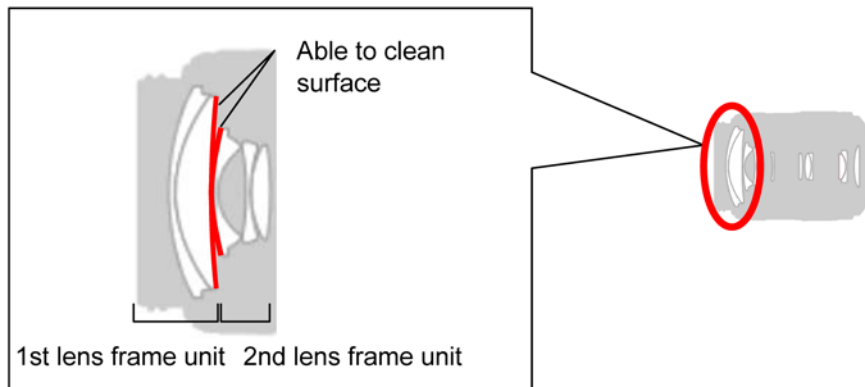
11.1.2.2. DUST/DIRT ON THE LENS GLASSES

- Define the location of the dust/dirt first, whether it is outside lens surface or not.
 1. When it is outside surface of the lens:
 - When the dust and/or dirt gets on the outer side surface of the Lens glasses, order the following procedures.
 - a. Blow off the dust on the Lens glass surface with the Blower, gently. (Do not Blow too strongly.)
 - b. Wipe out the dirt on the lens glass surface with Lens cleaning KIT(BK) (VFK1900BK) if necessary. (Consult the Instruction sheet which is included in the Lens cleaning KIT(BK) in details.)
 2. When it is inside of the lens:
 - Refer to the "11.2. General description (Lens cleaning: Interchangeable Lens/H-FS014042)", "11.3. General description (Lens cleaning: Interchangeable Lens/H-FS045200)" section of this service manual.



11.2. General description (Lens cleaning: Interchangeable Lens/H-FS014042)

When there is a dust/dirt inside surface of the 1st lens frame unit and/or subject side surface of the 2nd lens frame unit, remove it by referring the following procedures.



CAUTION

*DO NOT REMOVE 1st LENS FRAME UNIT OTHER THAN INSIDE OF SPECIFIED CLEAN LEVEL.
(Specified clean level: Less than class 10,000 (Federal Standard 209D))

Important:

1. When removing the 1st lens frame unit, it has to be proceed inside of satisfied clean level. (Less than class 10,000 (Federal Standard 209D))
As for clean box, refer to the "8.2. Clean Box", in details.
2. When tighten the screws (A), use torque driver (RFKZ0456) with specified torque.
3. To keep the Lens performance, use only the 1st lens frame unit which was fitted as it was.
Therefore, the 1st lens frame unit is not supplied as spare parts.
Also do not exchange the 1st lens unit taking from others.

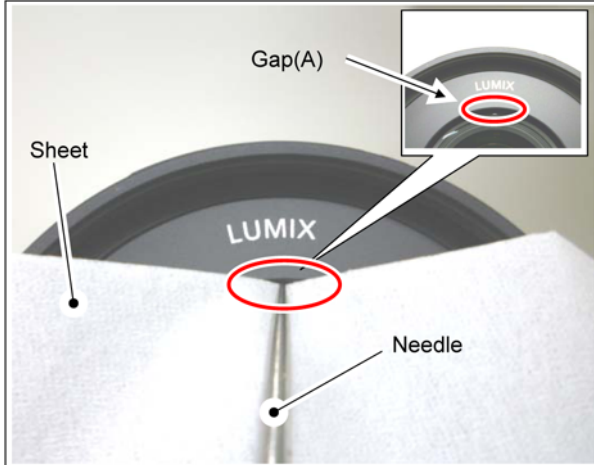
11.2.1. Disassembly procedure

Important:

It must be performed inside of satisfied clean level.
(Satisfied clean level: Less than class 10,000 (Federal Standard 209D))

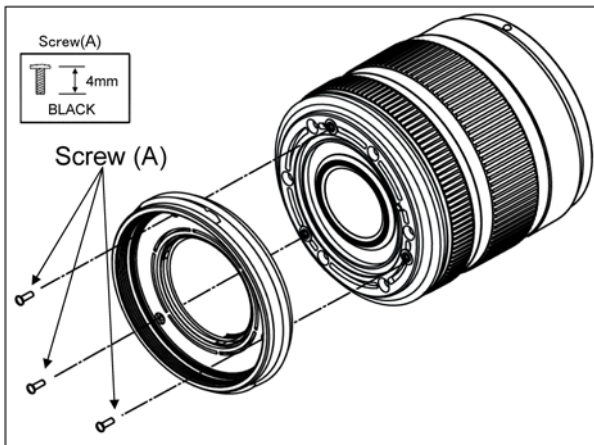
11.2.1.1. Removal of the Decoration Ring

1. Decoration ring is stuck on the 1st lens frame unit.
2. Put the sheet so that the lens glass is fully covered.
3. Insert the needle to Gap (A) (between the decoration ring and lens glass), and peel off the decoration ring gently.



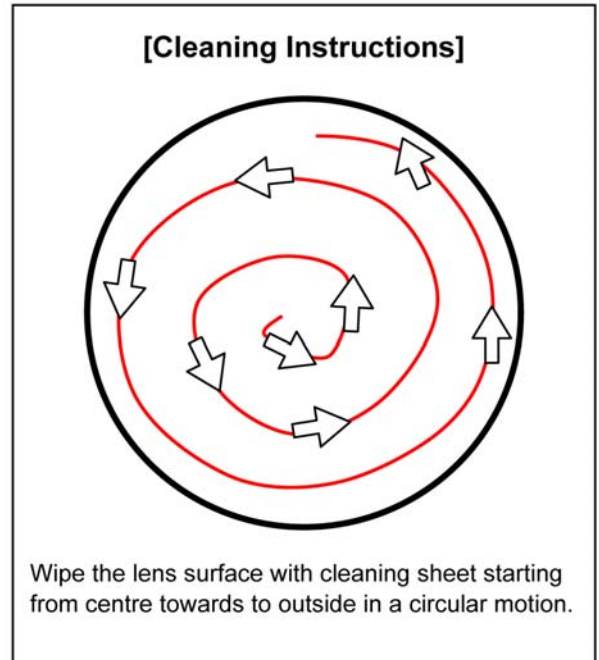
11.2.1.2. Removal of the 1st Lens Frame Unit

1. Remove the 3 screws (A).



11.2.1.3. Removal of a dust /dirt

1. Blow off the dust on the surface of the lens with a blower brush.
2. Use lens cleaning KIT(BK) (VFK1900BK), if necessary.



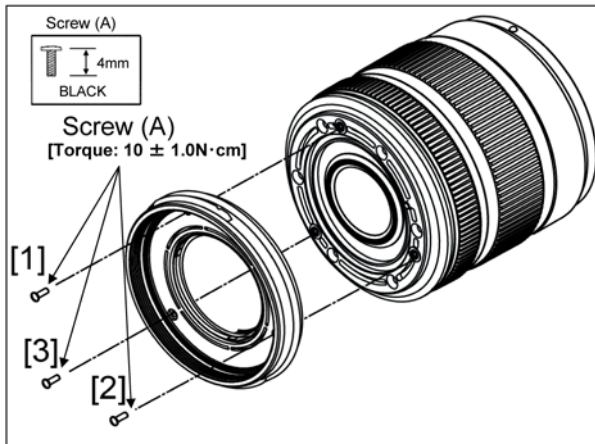
11.2.2. Assembly procedure

Important:

When tightening the screw, use a torque driver (RFKZ0456) by ordering the screwing order with specified torque described in each step.

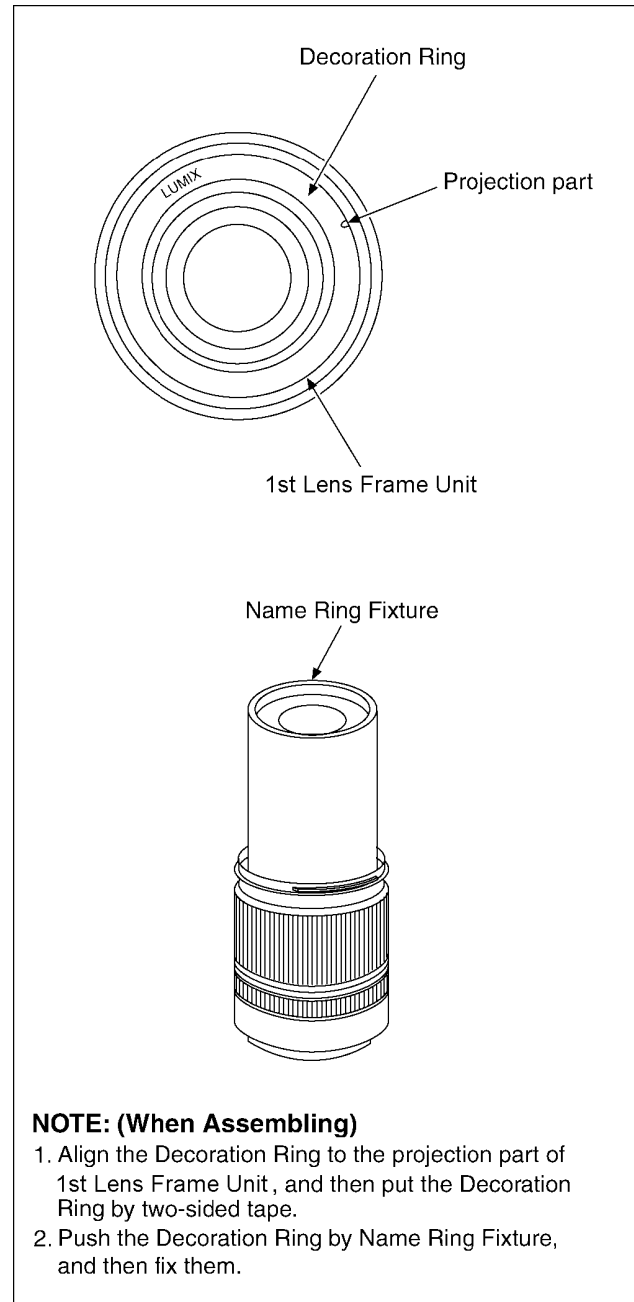
11.2.2.1. Installation of the 1st lens frame unit

1. Tighten the 3 screws (A) with specified torque in numerical order.
(Torque Driver: RFKZ0456)
(Torque: 10 ± 1.0 N·cm)



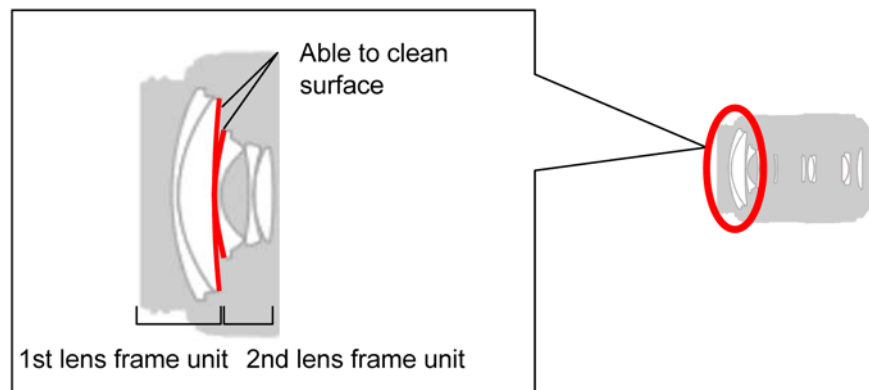
11.2.2.2. Installation of the Decoration Ring

1. Use the Name Ring fixture (RFKZ0507)
2. Use new Decoration ring. (Do not use the one which is removed.)



11.3. General description (Lens cleaning: Interchangeable Lens/H-FS045200)

When there is a dust/dirt inside surface of the 1st lens frame unit and/or subject side surface of the 2nd lens frame unit, remove it by referring the following procedures.



CAUTION

***DO NOT REMOVE 1st LENS FRAME UNIT OTHER THAN INSIDE OF SPECIFIED CLEAN LEVEL.
(Specified clean level: Less than class 10,000 (Federal Standard 209D))**

Important:

1. When removing the 1st lens frame unit, it has to be proceed inside of satisfied clean level.
(Less than class 10,000 (Federal Standard 209D))
As for clean box, refer to the "8.2. Clean Box", in details.
2. When tighten the screws (A), use torque driver (RFKZ0456) with specified torque.
3. To keep the Lens performance, use only the 1st lens frame unit which was fitted as it was.
Therefore, the 1st lens frame unit is not supplied as spare parts.
Also do not exchange the 1st lens unit taking from others.

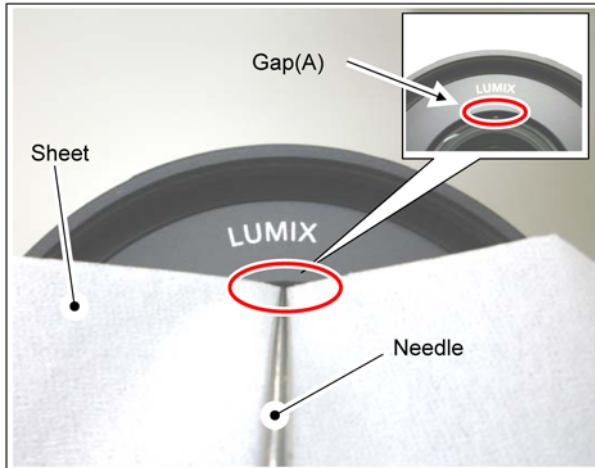
11.3.1. Disassembly procedure

Important:

It must be performed inside of satisfied clean level.
(Satisfied clean level: Less than class 10,000 (Federal Standard 209D))

11.3.1.1. Removal of the Decoration Ring

1. Decoration ring is stuck on the 1st lens frame unit.
2. Put the sheet so that the lens glass is fully covered.
3. Insert the needle to Gap (A) (between the decoration ring and lens glass), and peel off the decoration ring gently.



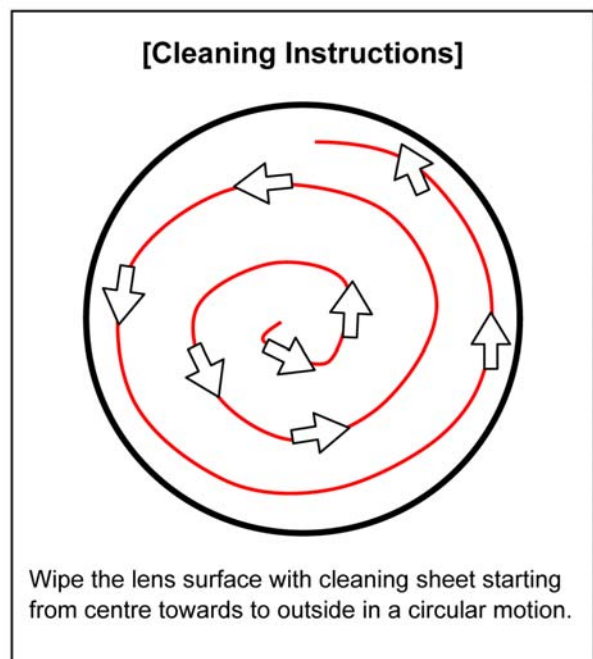
11.3.1.2. Removal of the 1st Lens Frame Unit

1. Remove the 3 screws (A).



11.3.1.3. Removal of a dust /dirt

1. Blow off the dust on the surface of the lens with a blower brush.
2. Use lens cleaning KIT(BK) (VFK1900BK), if necessary.



11.3.2. Assembly procedure

Important:

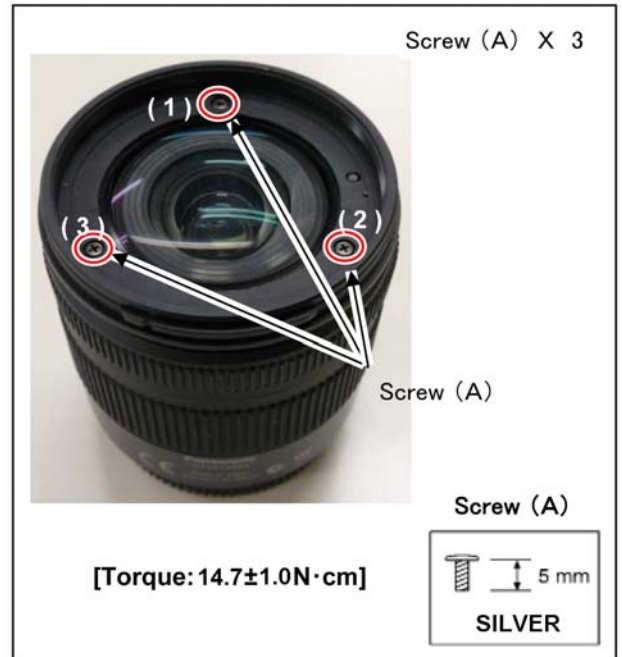
When tightening the screw, use a torque driver (RFKZ0456) by ordering the screwing order with specified torque described in each step.

11.3.2.1. Installation of the 1st lens frame unit

1. Install the 1st lens frame unit onto the lens unit to meet the through hole (A) with projection (A).

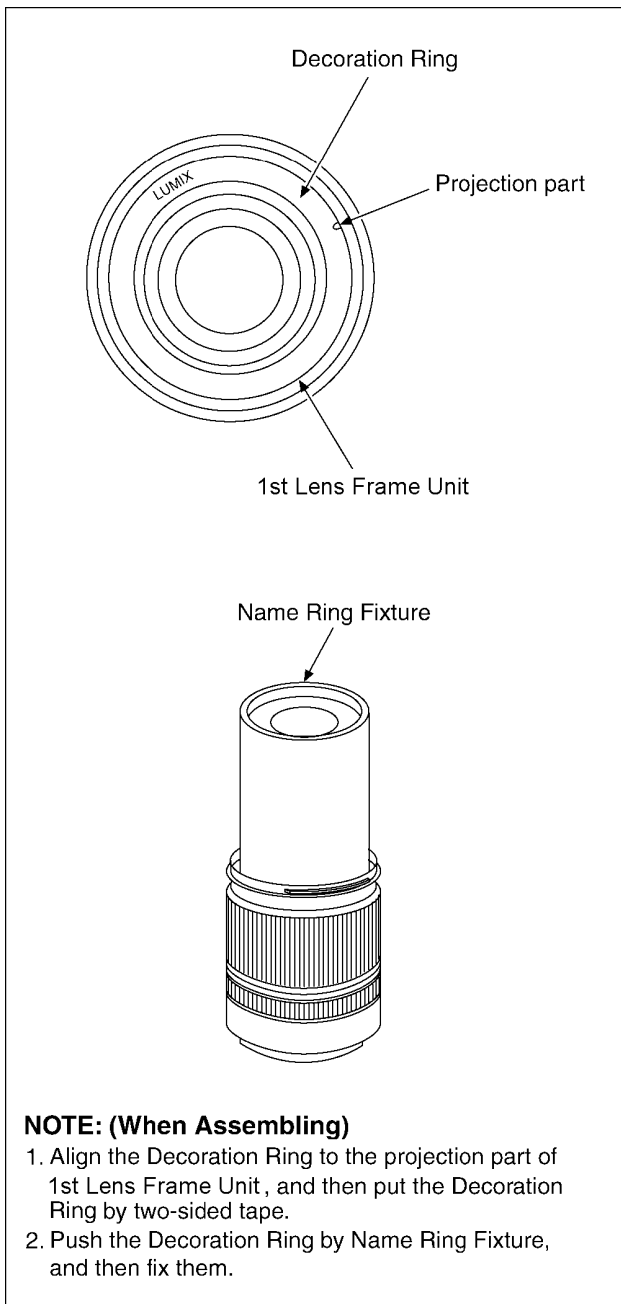


2. Tighten the 3 screws (A) with specified torque in numerical order.
(Torque Driver: RFKZ0456)
(Torque: 14.7 ± 1.0 N-cm)



11.3.2.2. Installation of the Decoration Ring

1. Use the Name Ring fixture (RFKZ0507)
2. Use new Decoration ring. (Do not use the one which is removed.)



Service Manual

Diagrams and Replacement Parts List

Digital Camera/Lens Kit/ Double Zoom Lens Kit/Body

Model No.

DMC-G3KPP	DMC-G3KGGH	DMC-G3EE	DMC-G3WEC
DMC-G3KPC	DMC-G3KGGK	DMC-G3EG	DMC-G3WEE
DMC-G3KEB	DMC-G3KGGN	DMC-G3GC	DMC-G3WEG
DMC-G3KEC	DMC-G3KGGT	DMC-G3GD	DMC-G3WGC
DMC-G3KEE	DMC-G3PP	DMC-G3GH	DMC-G3WGD
DMC-G3KEG	DMC-G3PC	DMC-G3GN	DMC-G3WGH
DMC-G3KGC	DMC-G3EB	DMC-G3GT	DMC-G3WGGK
DMC-G3KGD	DMC-G3EC	DMC-G3WPP	DMC-G3WGN
		DMC-G3WEB	DMC-G3WGT

Vol. 1
Colour

[DMC-G3K]	[DMC-G3]	[DMC-G3W]
(K).....Black Type	(K).....Black Type	(K).....Black Type
(R).....Red Type (except GD/GT)		(R).....Red Type (except PP/EE/GD/GT)
(W).....White Type (except PC/EG)		(W).....White Type (except PP/EB/EE/EG)
(T).....Brown Type (only PP/EG/GC)		(T).....Brown Type (only EG/GC)
		(KA).....Black Type (only EB)

DMC-G3K series: Interchangeable Lens (H-FS014042) is bundled.
DMC-G3W series: Interchangeable Lens (H-FS014042/H-FS045200) are bundled.
DMC-G3 series: Camera Body Only.

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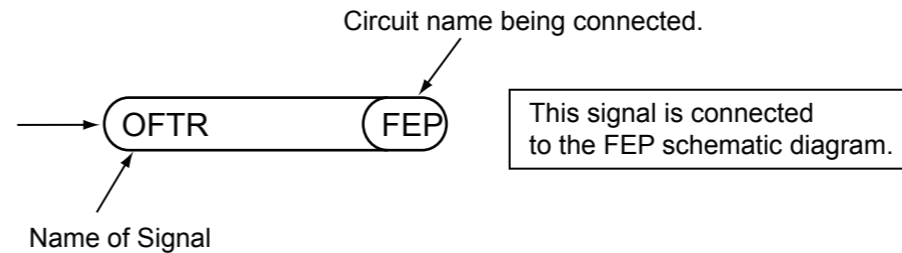
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S1. About Indication of The Schematic Diagram

S1.1. Important Safety Notice

COMPONENTS IDENTIFIED WITH THE MARK \triangle HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

1. Although reference number of the parts is indicated on the P.C.B. drawing and/or schematic diagrams, it is NOT mounted on the P.C.B. when it is displayed with "\$" mark.
2. It is only the "Test Round" and no terminal (Pin) is available on the P.C.B. when the TP (Test Point) indicated as "●" mark.
3. The voltage being indicated on the schematic diagram is measured in "Standard-Playback" mode when there is no specify mode is mentioned.
4. Although the voltage and waveform available on here is measured with standard frame, it may be differ from actual measurement due to modification of circuit and so on.
5. The voltage being indicated here may be include observational-error (deviation) due to internal-resistance and/or reactance of equipment. Therefore, handle the value indicated on here as reference.
6. Use the parts number indicated on the Replacement Parts List .
7. Indication on Schematic diagrams:



S2. Voltage Chart

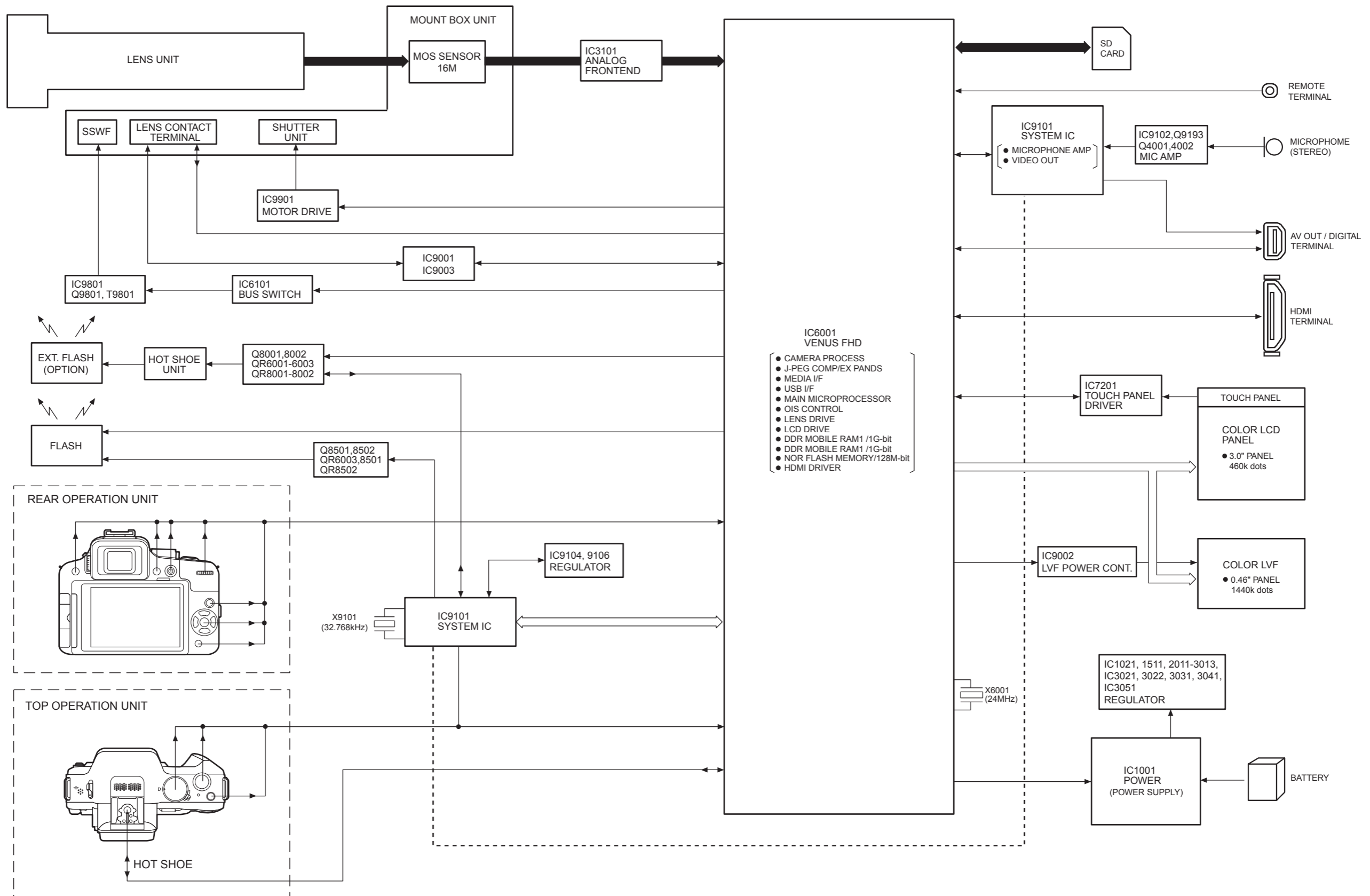
Note) Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

S2.1. Flash P.C.B.

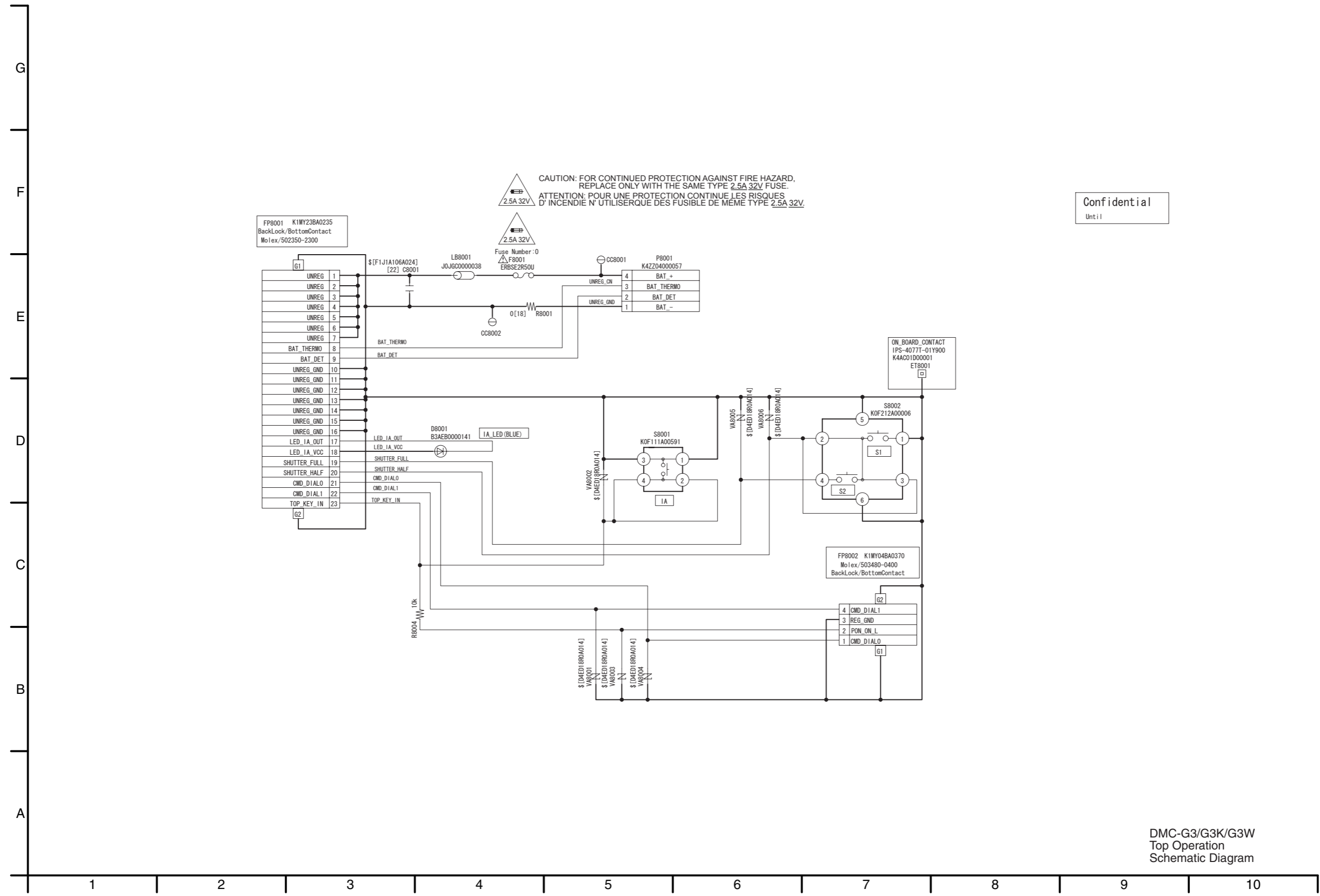
REF No.	PIN No.	POWER ON
Q8502	1	7.8
Q8502	2	7.8
Q8502	3	0
Q8502	4	0
Q8502	5	7.8
Q8502	6	7.8
QR8501	1	0
QR8501	2	4.5
QR8501	3	0
QR8501	4	4.8
QR8501	5	4.5
QR8501	6	0
QR8502	E	0
QR8502	C	4.5
QR8502	B	0

S3. Block Diagram

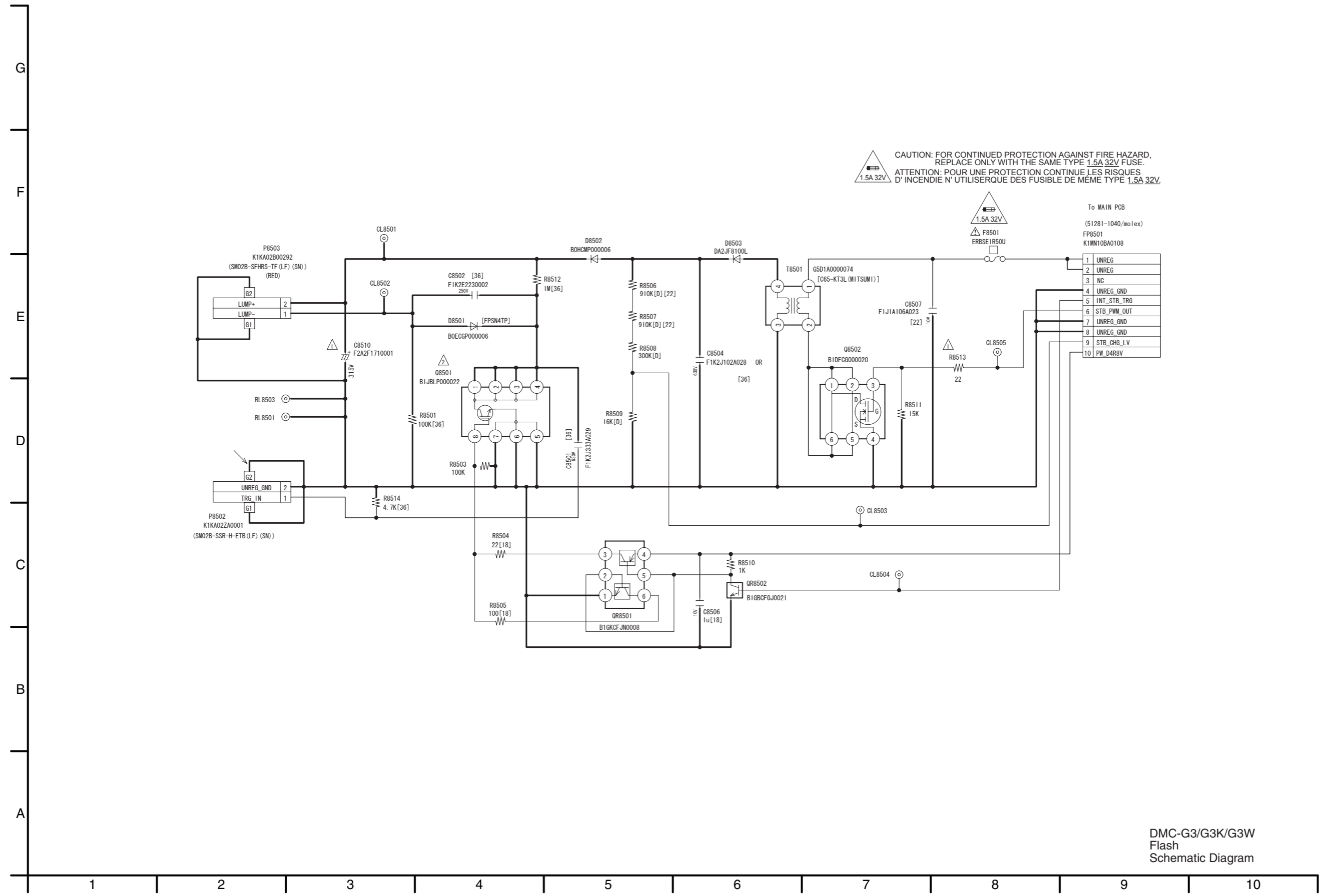
S3.1. Overall Block Diagram



S4.2. Top Operation Schematic Diagram

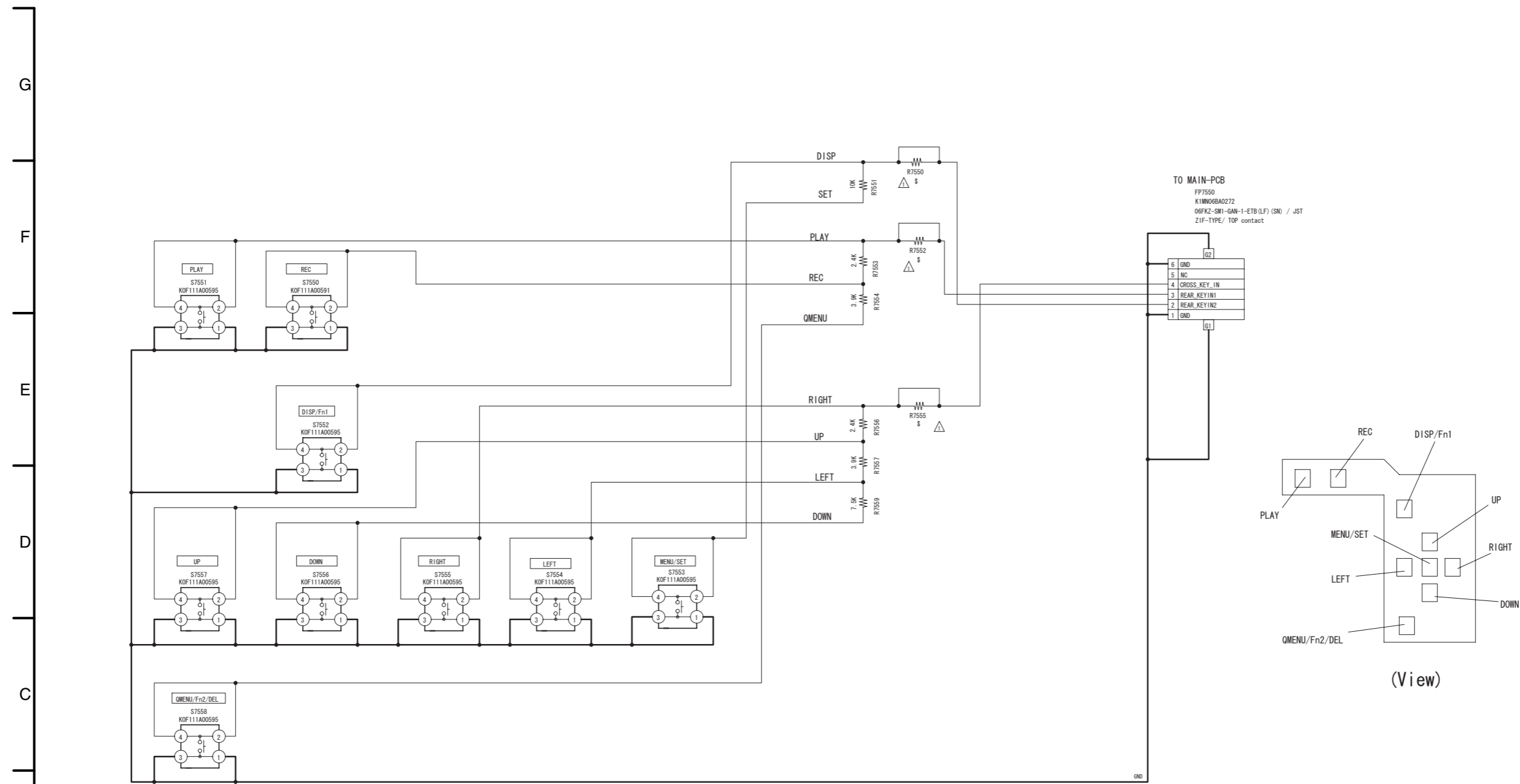


S4.3. Flash Schematic Diagram



DMC-G3/G3K/G3W
Flash
Schematic Diagram

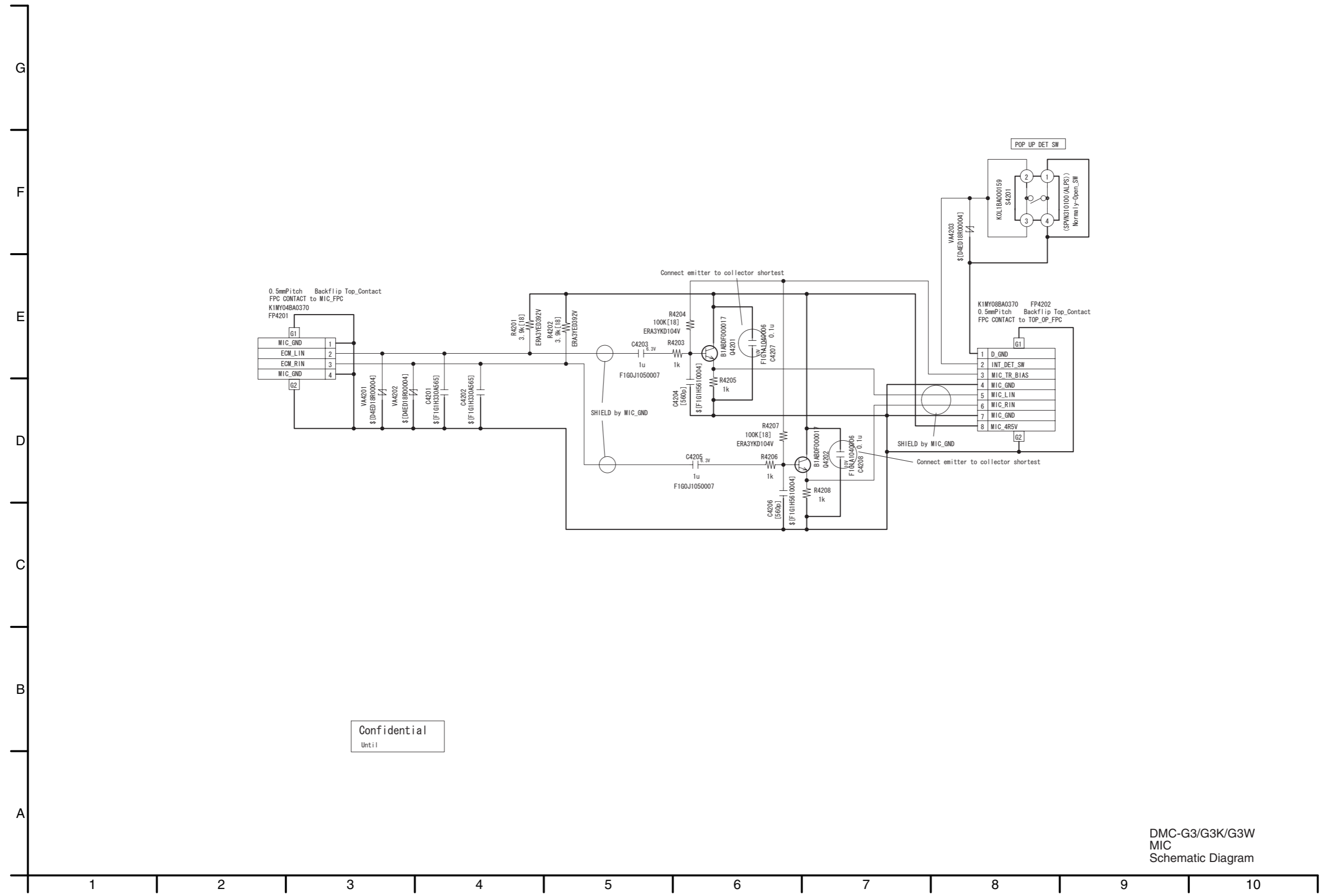
S4.4. Rear Operation Schematic Diagram



Confidential
Until

DMC-G3/G3K/G3W
Rear Operation
Schematic Diagram

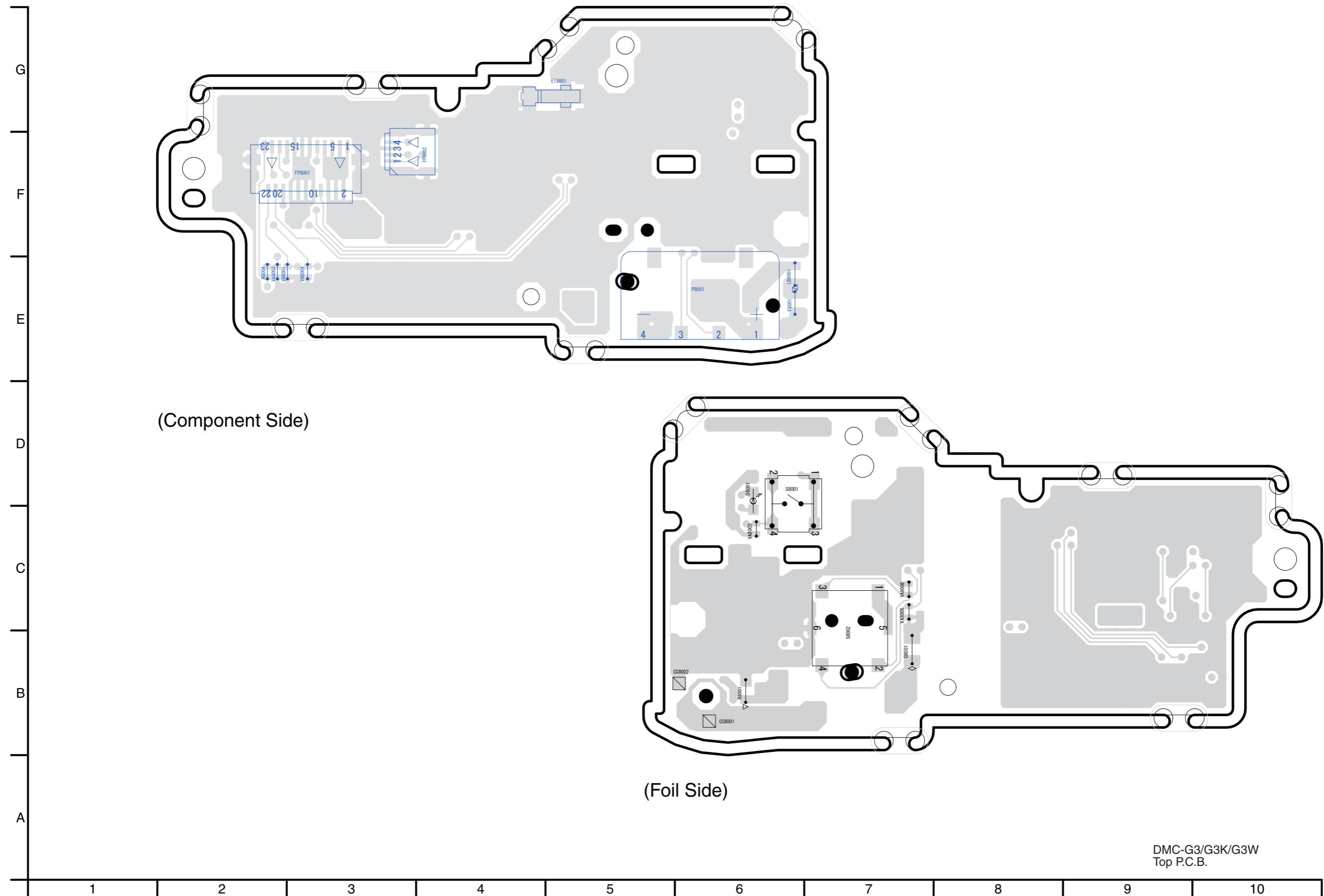
S4.5. MIC Schematic Diagram



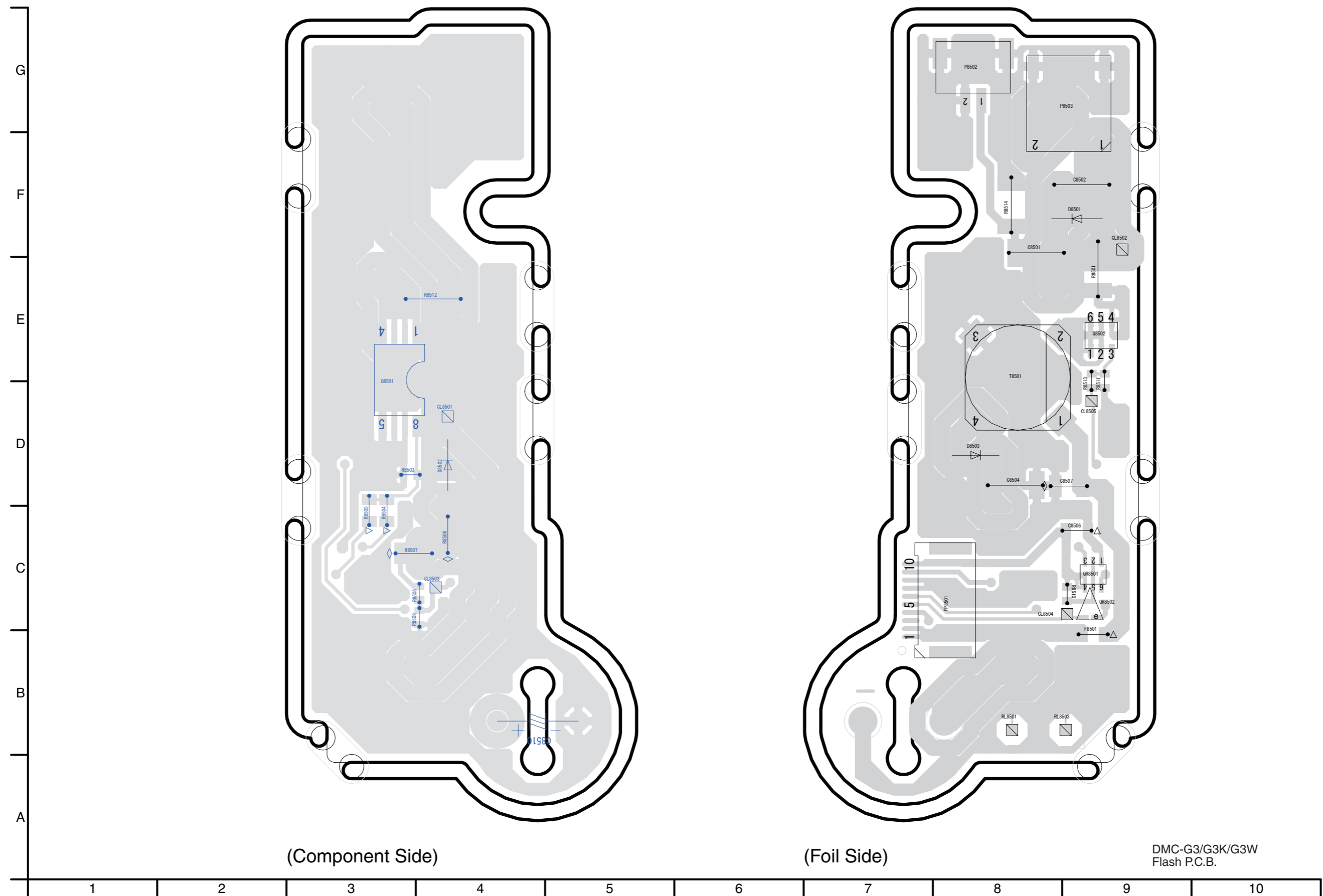
Confidential
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S5. Print Circuit Board

S5.1. Top P.C.B.



S5.2. Flash P.C.B.

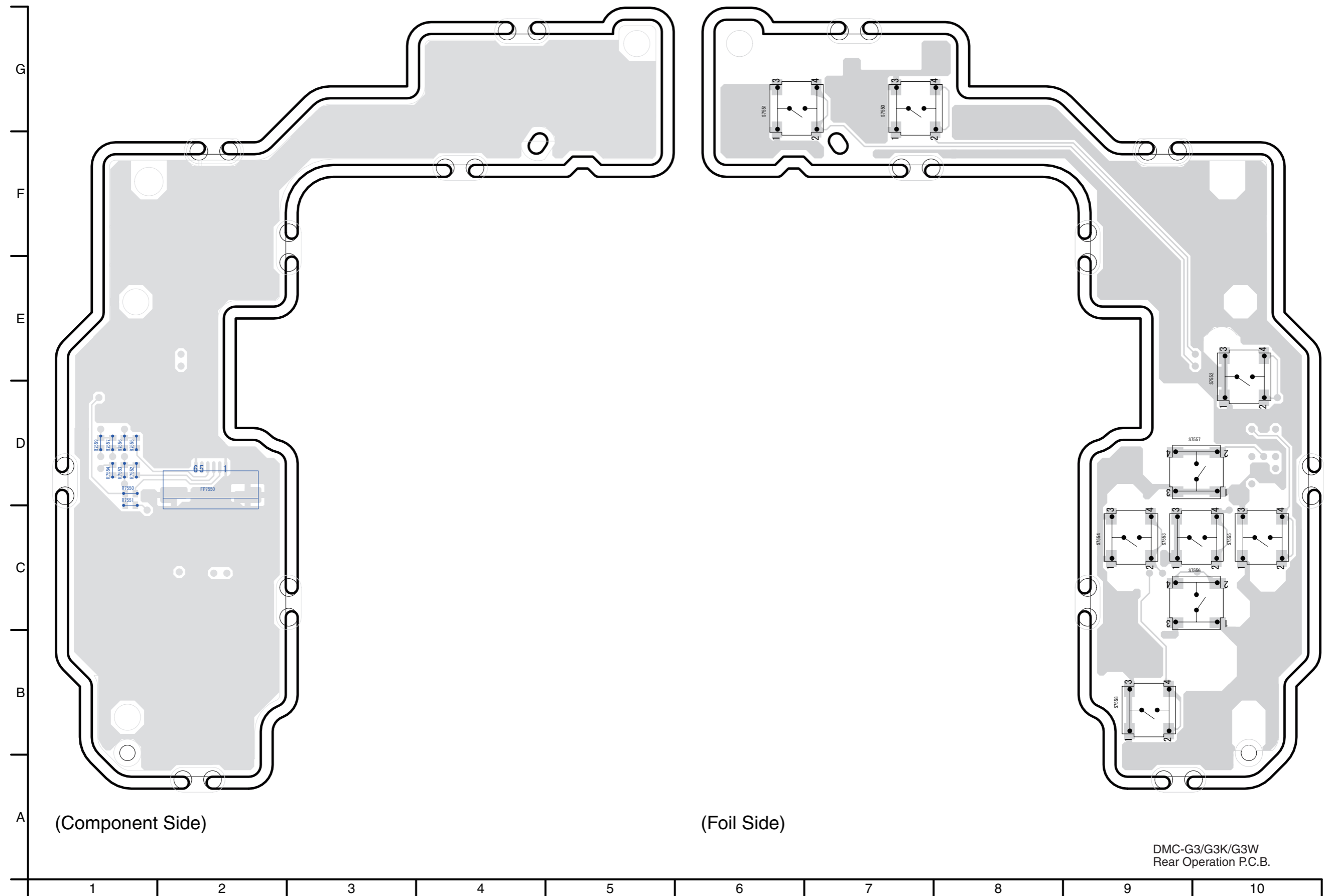


(Component Side)

(Foil Side)

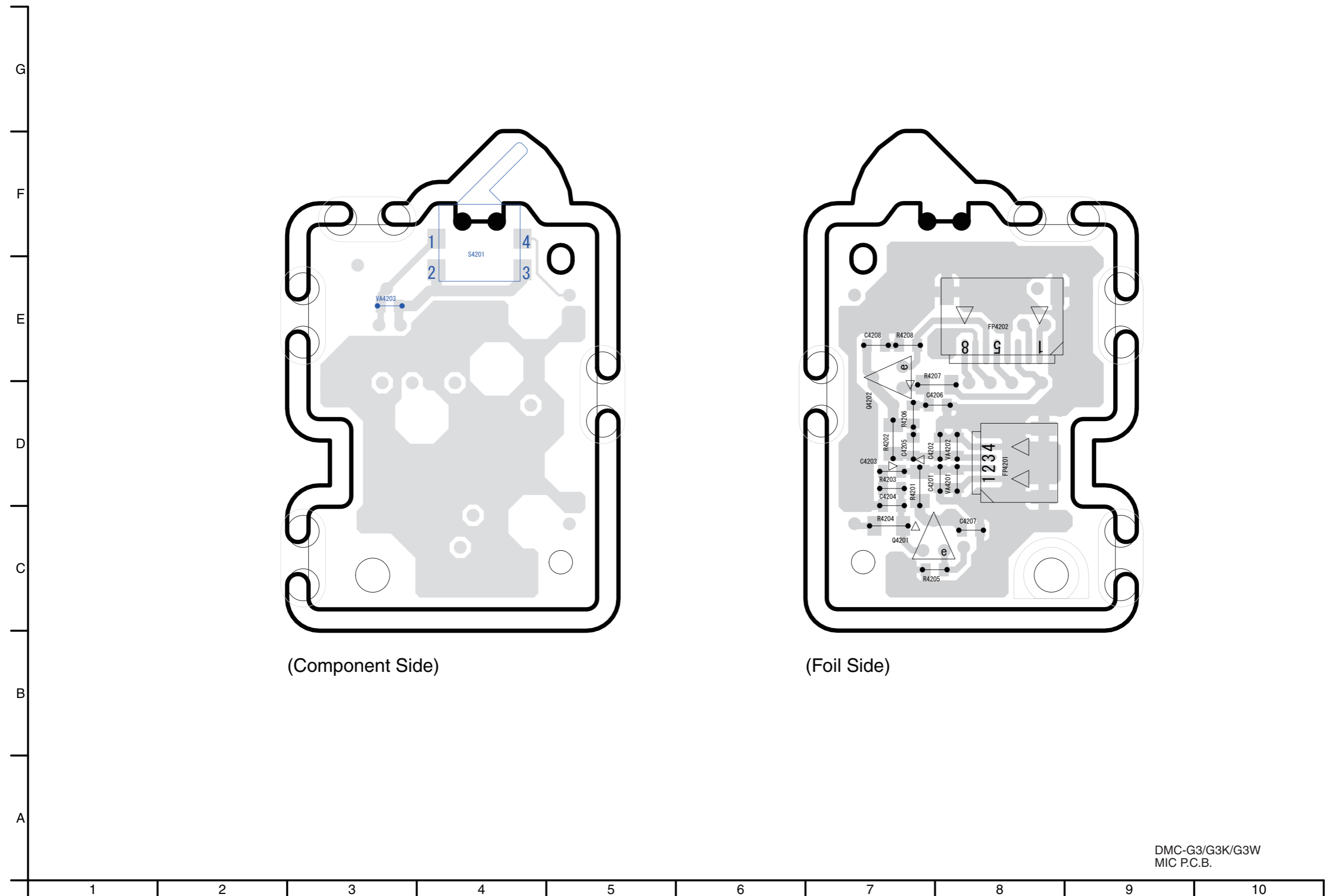
DMC-G3/G3K/G3W
Flash P.C.B.

S5.3. Rear Operation P.C.B.



DMC-G3/G3K/G3W
Rear Operation P.C.B.

S5.4. MIC P.C.B.



(Component Side)

(Foil Side)

S6. Replacement Parts List

- Note: 1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark \triangle have the special characteristics for safety.
When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICRO-FARADS (uf), P=uuF.
4. The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
5. Supply of CD-ROM, in accordance with license protection, is allowable as replacement parts only for customers who accidentally damaged or lost their own.

E.S.D. standards for Electrostatically Sensitive Devices, refer to PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES section.

<ABOUT LENS MAIN BLOCK UNIT "(Ref.208 and Ref.308)>

1. In case of the "LENS MAIN BLOCK UNIT" (Ref.208 and Ref.308) defects, contact to the service department of sales company.

<DEFINITION OF PARTS SUPPLIER>

1. Parts marked with [ENERGY] in the remarks column are supplied from Panasonic Corporation Energy Company.
2. Parts marked with [SPC] in the remarks column are supplied from AVC-CSC-SPC.
Others are supplied from PAVCSG.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
##	VEP56135A	MAIN P.C.B.		(RTL) E.S.D. PP,PC,EE,GC,GH,GT,GN,GD, KPP,KPC,KEE,KGC,KGH,KGT, KGG,KGN,KGD,WPP,WEE,WGC, WGH,WGT,WGK,WGN,WGD
##	VEP56135B	MAIN P.C.B.	1	(RTL) E.S.D. EG,EC,EB, KEG,KEC,KEB,WEG,WEC,WEB
##	VEP56137A	TOP P.C.B.	1	(RTL) E.S.D.
##	VEP56136A	FLASH P.C.B.	1	(RTL) E.S.D.
##	VEP50086A	REAR OPERATION P.C.B.	1	(RTL)
##	VEP54024A	MIC P.C.B.	1	(RTL) E.S.D.
##	VEP59096A	LCD IF P.C.B.	1	(RTL) E.S.D.
##	VEP56137A	TOP P.C.B.		(RTL) E.S.D.
D8001	B3AEB0000141	LED	1	E.S.D.
ET8001	K4AC01D00001	EARTH SPRING	1	
△ F8001	ERBSE2R50U	FUSE 32V 2.5A	1	
FP8001	K1MY23BA0235	CONNECTOR 23P	1	
FP8002	K1MY04BA0370	CONNECTOR 4P	1	
LB8001	J0JGC0000038	FILTER	1	
P8001	K4ZZ04000057	CONNECTOR 4P	1	
R8001	D0GBR00J0004	CHIP RESISTOR	1	
R8004	D0GA103JA023	CHIP RESISTOR	1	
S8001	K0F111A00591	SWITCH	1	
S8002	K0F212A00006	SWITCH	1	
##	VEP56136A	FLASH P.C.B.		(RTL) E.S.D.
C8501	F1K2J333A029	C.CAPACITOR 630V 0.033U	1	
C8502	F1K2E2230002	C.CAPACITOR 250V 0.022U	1	
C8504	F1K2J102A028	C.CAPACITOR 630V 1000P	1	
C8506	F1H1A105A025	C.CAPACITOR CH 10V 1U	1	
C8507	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
D8501	B0ECGP000006	DIODE	1	E.S.D.
D8502	B0HCMP000006	DIODE	1	E.S.D.
D8503	DA2JF8100L	DIODE	1	E.S.D.
△ F8501	ERBSE1R50U	FUSE 32V 1.5A	1	
FP8501	K1MN10BA0108	CONNECTOR 10P	1	
P8502	K1KA02ZA0001	CONNECTOR 2P	1	
P8503	K1KA02B00292	CONNECTOR 2P	1	
Q8501	B1JBLP000022	TRANSISTOR	1	E.S.D.
Q8502	B1DFCG000020	TRANSISTOR	1	E.S.D.
QR8501	B1GKCFJN0008	TRANSISTOR-RESISTOR	1	E.S.D.
QR8502	B1GBCFGJ0021	TRANSISTOR-RESISTOR	1	E.S.D.
R8501	ERJ8GEYJ104V	M.RESISTOR CH 1/4W 100K	1	
R8503	D0GA104JA023	CHIP RESISTOR	1	
R8504	D0GB220JA065	CHIP RESISTOR	1	
R8505	D0GB101JA065	CHIP RESISTOR	1	
R8506	ERJ6RED914V	CHIP RESISTOR	1	
R8507	ERJ6RED914V	CHIP RESISTOR	1	
R8508	ERJ2RKD304X	M.RESISTOR CH 1/16W 300K	1	
R8509	ERJ2RHD163X	M.RESISTOR CH 1/16W 16K	1	
R8510	D0GA102JA023	CHIP RESISTOR	1	
R8511	D0GA153JA023	CHIP RESISTOR	1	
R8512	ERJ8GEYJ105V	M.RESISTOR CH 1/4W 1M	1	
R8513	D0GA220JA023	CHIP RESISTOR	1	
R8514	ERJ8GEYJ472V	M.RESISTOR CH 1/4W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
T8501	G5D1A0000074	TRANSFORMER	1	
##	VEP50086A	REAR OPERATION P.C.B.		(RTL)
FP7550	K1MN06BA0272	CONNECTOR 6P	1	
R7551	D0GA103JA023	CHIP RESISTOR	1	
R7553	D0GA242JA023	CHIP RESISTOR	1	
R7554	D0GA392JA023	CHIP RESISTOR	1	
R7556	D0GA242JA023	CHIP RESISTOR	1	
R7557	D0GA392JA023	CHIP RESISTOR	1	
R7559	D0GA752JA023	CHIP RESISTOR	1	
S7550	K0F111A00595	SWITCH	1	
S7551	K0F111A00595	SWITCH	1	
S7552	K0F111A00595	SWITCH	1	
S7553	K0F111A00595	SWITCH	1	
S7554	K0F111A00595	SWITCH	1	
S7555	K0F111A00595	SWITCH	1	
S7556	K0F111A00595	SWITCH	1	
S7557	K0F111A00595	SWITCH	1	
S7558	K0F111A00595	SWITCH	1	
##	VEP54024A	MIC P.C.B.		(RTL) E.S.D.
C4203	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C4205	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C4207	F1G1A1040006	C.CAPACITOR CH 10V 0.1U	1	
C4208	F1G1A1040006	C.CAPACITOR CH 10V 0.1U	1	
FP4201	K1MY04BA0370	CONNECTOR 4P	1	
FP4202	K1MY08BA0370	CONNECTOR 8P	1	
Q4201	B1ABDF000017	TRANSISTOR	1	E.S.D.
Q4202	B1ABDF000017	TRANSISTOR	1	E.S.D.
R4201	ERA3YED392V	M.RESISTOR 1/16W 3.9K	1	
R4202	ERA3YED392V	M.RESISTOR 1/16W 3.9K	1	
R4203	D0GA102JA023	CHIP RESISTOR	1	
R4204	ERA3YKD104V	M.RESISTOR 1/16W 100K	1	
R4205	D0GA102JA023	CHIP RESISTOR	1	
R4206	D0GA102JA023	CHIP RESISTOR	1	
R4207	ERA3YKD104V	M.RESISTOR 1/16W 100K	1	
R4208	D0GA102JA023	CHIP RESISTOR	1	
S4201	K0L1BA000159	SWITCH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEP56135B	MAIN P.C.B.	1	(RTL) E.S.D. EG,EC,EB, KEG,KEC,KEB,WEG,WEC,WEB	40	VEP59096A	LCD IF P.C.B.	1	(RTL) E.S.D.
1	VEP56135A	MAIN P.C.B.	1	(RTL) E.S.D. PP,PC,EE,GC,GH,GT,GN,GD, KPP,KPC,KEE,KGC,KGH,KGT, KGG,KGN,KGD,WPP,WEE,WGC, WGH,WGT,WGK,WGN,WGD	41	VGQ0V38	LCD BL BEZEL SHEET	1	
2	ML-421S/DN	BATTERY	1	[ENERGY] (B9110)	42	VGQ0Y08	LCD PCB SHEET	1	
3	VGK3763	SIDE ORNAMENT L	1	(-K,-T,-R,-KA)	43	VGQ0Y08	LCD PCB SHEET	1	
3	VGK3764	SIDE ORNAMENT L	1	(-W)	44	VKM9409	LCD CASE TOP	1	(-K,-KA)
4	VGK3765	SIDE ORNAMENT R	1	(-K,-T,-R,-KA)	44	VKM9412	LCD CASE TOP	1	(-W)
4	VGK3766	SIDE ORNAMENT R	1	(-W)	44	VKM9411	LCD CASE TOP	1	(-T)
5	VGQ0V34	EYE RUBBER	1		44	VKM9410	LCD CASE TOP	1	(-R)
6	VGQ0V35	EYE CUP BASE	1		45	VKM9413	LCD CASE BOTTOM	1	(-K)
7	VGQ0X52	LENS FPC BUSTERAID	1		45	VKM9416	LCD CASE BOTTOM	1	(-W)
8	VGQ0Y02	TAPE	1		45	VKM9415	LCD CASE BOTTOM	1	(-T)
9	VGQ0Y02	TAPE	1		45	VKM9414	LCD CASE BOTTOM	1	(-R)
10	VGQ0Y02	TAPE	1		45	VKM9614	LCD CASE BOTTOM	1	(-KA)
11	VGQ0Y03	TAPE	1		46	VYK5G82	LCD UNIT	1	
12	VKF4888	JACK DOOR	1	(-K,-T,-R,-KA)	50	VYK5B79	LCD HINGE UNIT	1	(-K,-KA)
12	VKF4889	JACK DOOR	1	(-W)	50	VYK5B82	LCD HINGE UNIT	1	(-W)
13	VMT2182	HEAT RADIATION PAD1	1		50	VYK5B81	LCD HINGE UNIT	1	(-T)
14	VMT2183	HEAT RADIATION PAD2	1		50	VYK5B80	LCD HINGE UNIT	1	(-R)
15	VMT2184	HEAT RADIATION PAD3	1		56	VGQ0V89	CAPACITOR PCB COVER	1	
16	VXQ2142T	MOUNT BOX UNIT	1	[SPC]	57	VYK5B78	TOP CASE UNIT	1	(-K,-T,-R,-KA)
17	VYK5B51	FRONT CASE UNIT	1	(-K,-KA)	57	VYK5C72	TOP CASE UNIT	1	(-W)
17	VYK5B54	FRONT CASE UNIT	1	(-W)	59	VMC2111	SHOE SPRING	1	
17	VYK5B53	FRONT CASE UNIT	1	(-T)	60	K0RC00800003	MULTI-BUTTON SWITCH	1	
17	VYK5B52	FRONT CASE UNIT	1	(-R)	61	VEK0R79	MICROPHONE UNIT	1	
17-1	VGK3760	GRIP PIECE FRONT	1	(-K,-KA)	62	VEK0R81	FLASH UNIT	1	
17-1	VGK3788	GRIP PIECE FRONT	1	(-W)	63	VEP54024A	MIC P.C.B.	1	(RTL) E.S.D.
17-1	VGK3787	GRIP PIECE FRONT	1	(-T)	64	VEP56137A	TOP P.C.B.	1	(RTL) E.S.D.
17-1	VGK3770	GRIP PIECE FRONT	1	(-R)	65	VGQ0R32	MIC CUSHION (B)	1	
17-2	VGK3792	MOUNT RING	1	(-K,-T,-R,-KA)	66	VGQ0R33	MIC CUSHION (C)	1	
17-2	VGK3793	MOUNT RING	1	(-W)	67	VGQ0W43	MIC CUSHION (A)	1	
17-3	VGQ0V87	FRONT BLIND PIECE	1		68	VKM9421	FLASH CASE TOP	1	(-K,-T,-R,-KA)
17-4	VGU0J48	LENS RELEASE BUTTON	1	(-K,-T,-R,-KA)	68	VKM9422	FLASH CASE TOP	1	(-W)
17-4	VGU0K13	LENS RELEASE BUTTON	1	(-W)	69	VWJ2266	MAIN_POW_FPC	1	
17-5	VMB4504	LENS RELEASE BUTTON SPRING	1		71	VGQ0R70	CAPACITOR TAPE	1	
17-6	VMP9970	LENS RELEASE FIX PLATE	1		72	VGQ0W48	SHEET	1	
17-7	VMP9995	MOUNT RING PLATE	1		73	VGQ0W48	SHEET	1	
17-8	VGQ0H89	CUSHION	1		74	VGU0H25	BATTERY LOCK KNOB	1	
17-9	VGQ0H89	CUSHION	1		75	VKM9388	BATTERY FRAME	1	
18	VEK0R80	HINGE SW FPC UNIT	1		76	VMB4304	BATTERY LOCK SPRING	1	
21	VKM9393	ARM COVER TOP	1	(-K,-KA)	77	VMB4500	BATTERY DOOR SPRING	1	
21	VKM9396	ARM COVER TOP	1	(-W)	78	VMB4509	BATTERY OUT SPRING	1	
21	VKM9395	ARM COVER TOP	1	(-T)	79	VMP9955	BATTERY CASE	1	
21	VKM9394	ARM COVER TOP	1	(-R)	80	VMP9956	SIDE FRAME R	1	
22	VKM9397	ARM COVER BOTTOM	1	(-K,-KA)	81	VMP9957	TRIPOD	1	
22	VKM9400	ARM COVER BOTTOM	1	(-W)	82	VMP9958	HEAT RADIATION PLATE	1	
22	VKM9399	ARM COVER BOTTOM	1	(-T)	83	VMS8177	BATTERY DOOR SHAFT	1	
22	VKM9398	ARM COVER BOTTOM	1	(-R)	84	F2A2F1710001	E.CAPACITOR	1	(C8510)
23	VMP0A03	HINGE SW PLATE B	1		85	VEE1K29	CAPACITOR GND HARNESS	1	
24	VMP9961	HINGE PLATE	1		86	VEP56136A	FLASH P.C.B.	1	(RTL) E.S.D.
25	VMP9998	HINGE SW PLATE A	1		87	VMB4508	CAPACITOR EARTH SPRING	1	
26	VEP50086A	REAR OPERATION P.C.B.	1	(RTL)	88	VYK5B91	BATTERY DOOR UNIT	1	(-K,-KA)
27	VGQ0V32	GRIP PIECE REAR	1	(-K,-T,-R,-KA)	88	VYK5B94	BATTERY DOOR UNIT	1	(-W)
27	VGQ0V33	GRIP PIECE REAR	1	(-W)	88	VYK5B93	BATTERY DOOR UNIT	1	(-T)
28	VGQ0V36	LCD LOCK PIECE	1		88	VYK5B92	BATTERY DOOR UNIT	1	(-R)
29	VGQ0W26	LCD LOCK HOLDER	1		89	VYQ6831	LVF UNIT	1	
30	VGU0J50	LVF/LCD BUTTON	1	(-K,-T,-R,-KA)	89-1	VKM9429	LVF COVER	1	
30	VGU0K16	LVF/LCD BUTTON	1	(-W)	90	L5EDDY00255	LVF MODULE	1	
31	VGU0J51	PLAYBACK/MOTION PICTURE BUTTON	1	(-K,-T,-R,-KA)	91	VGQ0W20	LVF FPC FIX TAPE	1	
31	VGU0K15	PLAYBACK/MOTION PICTURE BUTTON	1	(-W)	92	VWJ2267	MAIN FLASH FPC	1	
32	VGU0J53	MOTION PICTURE PIECE	1		93	VWJ2271	LVF FPC	1	
33	VGU0K00	REAR OPERATION BUTTON	1	(-K,-T,-R,-KA)	93-1	VGQ0P70	LVF FPC FIX TAPE	1	
33	VGU0K14	REAR OPERATION BUTTON	1	(-W)	94	VGQ0Y27	CUSHION	1	
34	VMB4373	LCD LOCK SPRING	1		B1	VHD2149	SCREW	1	(-K,-T,-R,-KA)
35	VMP0A41	REC EARTH PLATE	1		B1	VHD2019	SCREW	1	(-W)
36	VMP9960	REAR EARTH PLATE	1		B2	VHD2149	SCREW	1	(-K,-T,-R,-KA)
37	VMP9968	REAR OPERATION EARTH PLATE	1		B2	VHD2019	SCREW	1	(-W)
38	VWJ2268	REAR OPEARTION FFC	1		B3	VHD2149	SCREW	1	(-K,-T,-R,-KA)
39	VYK5B67	REAR CASE UNIT	1	(-K,-KA)	B3	VHD2019	SCREW	1	(-W)
39	VYK5B70	REAR CASE UNIT	1	(-W)	B4	VHD2149	SCREW	1	(-K,-T,-R,-KA)
39	VYK5B69	REAR CASE UNIT	1	(-T)	B4	VHD2019	SCREW	1	(-W)
39	VYK5B68	REAR CASE UNIT	1	(-R)	B5	VHD2149	SCREW	1	(-K,-T,-R,-KA)
					B5	VHD2019	SCREW	1	(-W)
					B6	VHD2149	SCREW	1	(-K,-T,-R,-KA)
					B6	VHD2019	SCREW	1	(-W)
					B7	VHD2286	SCREW	1	
					B8	VHD2331-A	SCREW	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
400	VKF4385	BODY CAP	1 (G3K)	
401	VPF1316A	CAMERA BAG	1 (G3K)	
△ 402	DE-A94AA/SX	BATTERY CHARGER	1	KEG,KEC,KEB,KEE,KGN
△ 402	DE-A93BA/SX	BATTERY CHARGER	1	KPP,KPC
△ 402	DE-A94BB/SX	BATTERY CHARGER	1	KGC,KGH,KGT,KGK,KGD
△ 402	DE-A94CA/SX	BATTERY CHARGER	1	KGT
△ 403	-----	BATTERY	1	KEG,KEC,KEB,KEE,KGC,KGH, KGT,KGN,KGD,KGK,KPP,KPC
404	K1HY08YY0015	USB CABLE W/PLUG	1 (G3K)	
405	K1HY08YY0016	AV CABLE W/PLUG	1 (G3K)	
406	VFC4634	SHOULDER STRAP	1	KPP,KPC,KEG,KEC,KEB,KEE, KGC,KGH,KGT,KGK,KGN,KGD
△ 407	VFF0806	CD-ROM (INSTRUCTION BOOK)	1	KEG,KEC,KEB
△ 407	VFF0805	CD-ROM (INSTRUCTION BOOK)	1	KPP,KPC
△ 407	VFF0807	CD-ROM (INSTRUCTION BOOK)	1	KEE,KGC,KGH,KGN
△ 407	VFF0808	CD-ROM (INSTRUCTION BOOK)	1	KGT,KGD
△ 407	VFF0809	CD-ROM (INSTRUCTION BOOK)	1	KGK
408	VGQ0C14	TOUCH PEN	1 (G3K)	
409	VPF1100	BAG, POLYETHYLENE	1 (G3K)	
410	VQC8410	O/I SOFTWARE	1	KEG (GERMAN/FRENCH/ITALIAN/ DUTCH)
410	VQC8408	O/I SOFTWARE	1	KPP (ENGLISH/SPANISH/ PORTUGUESE)
410	VQC8409	O/I SOFTWARE	1	KPC (ENGLISH/CANADIAN FRENCH)
417	VQC8411	O/I SOFTWARE	1	KEC (SPANISH/PORTUGUESE/ SWEDISH/DANISH/FINNISH)
410	VQC8412	O/I SOFTWARE	1	KEB,KGN (ENGLISH)
410	VQC8413	O/I SOFTWARE	1	KEE (RUSSIAN/UKRAINIAN)
410	VQC8414	O/I SOFTWARE	1	KGC,KGH (ENGLISH/ CHINESE(TRADITIONAL)/ ARABIC)
410	VQC8415	O/I SOFTWARE	1	KGT (CHINESE(TRADITIONAL))
410	VQC8417	O/I SOFTWARE	1	KGD (KOREAN)
410	VQC8416	O/I SOFTWARE	1	KGK (CHINESE(SIMPLIFIED))
△ 411	VQT3N43	BASIC O/I	1	KEG (GERMAN/FRENCH)
△ 411	VQT3N44	BASIC O/I	1	KEG (ITALIAN/DUTCH)
△ 411	VQT3N40	BASIC O/I	1	KPP (ENGLISH/SPANISH)
△ 411	VQT3N41	BASIC O/I	1	KPP (PORTUGUESE)
△ 411	VQT3N42	BASIC O/I	1	KPC (ENGLISH/CANADIAN FRENCH)
△ 411	VQT3N45	BASIC O/I	1	KEC (SPANISH/PORTUGUESE)
△ 411	VQT3N46	BASIC O/I	1	KEC (SWEDISH/DANISH)
△ 411	VQT3N47	BASIC O/I	1	KEC (FINNISH)
△ 411	VQT3N48	BASIC O/I	1	KEB (ENGLISH)
△ 411	VQT3N49	BASIC O/I	1	KEE (RUSSIAN/UKRAINIAN)
△ 411	VQT3N50	BASIC O/I	1	KGC,KGH (ENGLISH/ CHINESE(TRADITIONAL))
△ 411	VQT3N51	BASIC O/I	1	KGC (ARABIC)
△ 411	VQT3N52	BASIC O/I	1	KGT (CHINESE(TRADITIONAL))

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
△ 411	VQT3N54	BASIC O/I	1	KGN (ENGLISH)
△ 411	VQT3N55	BASIC O/I	1	KGD (KOREAN)
△ 411	VQT3N53	BASIC O/I	1	KGK (CHINESE(SIMPLIFIED))
413	VPK5005	PACKING CASE	1	KPP,KPC
413	VPK5006	PACKING CASE	1	KEG,KEC,KEB,KEE,KGC,KGH, KGT,KGN,KGD
413	VPK5007	PACKING CASE	1	KGK
414	VPN7251	PAD A	1	(G3K)
415	VPN7253	PAD D	1	KPP,KPC,KEG,KEC,KEB,KEE, KGC,KGH,KGT,KGK,KGN,KGD
416	VPN7252	PAD B	1	KPP,KPC,KEG,KEC,KEB,KEE, KGC,KGH,KGT,KGK,KGN,KGD
417	VQL2C67-A	OPERATING LABEL	1	KPC
417	VQL2C68-1A	OPERATING LABEL	1	KGT
418	VQL2J61	GD LABEL	1	KGD
419	VQL1Z76	NTSC LABEL	1	KGT,KGD
421	VQL2H32	COLOR LABEL	1	KPP-W
421	VQL2M24	COLOR LABEL	1	KPP-T
421	VQL1Z66	COLOR LABEL	1	KPP-R,KPC-R
421	VQL2M25	COLOR LABEL	1	KEG-T,KGC-T
421	VQL1Z69	COLOR LABEL	1	KEG-R,KEC-R,KEB-R,KEE-R, KGC-R,KGH-R,KGN-R
421	VQL2B13	COLOR LABEL	1	KEC-W,KEB-W,KEE-W,KGC-W, KGH-W,KGT-W,KGN-W,KGD-W
421	VQL2H31	COLOR LABEL	1	KGK-W
421	VQL2F42	COLOR LABEL	1	KGK-R
422	VQL2H32	COLOR LABEL	1	KPP-W
422	VQL2M24	COLOR LABEL	1	KPP-T
422	VQL1Z66	COLOR LABEL	1	KPP-R,KPC-R
422	VQL2M25	COLOR LABEL	1	KEG-T,KGC-T
422	VQL1Z69	COLOR LABEL	1	KEG-R,KEC-R,KEB-R,KEE-R, KGC-R,KGH-R,KGN-R
422	VQL2B13	COLOR LABEL	1	KEC-W,KEB-W,KEE-W,KGC-W, KGH-W,KGT-W,KGN-W,KGD-W
422	VQL2H31	COLOR LABEL	1	KGK-W
422	VQL2F42	COLOR LABEL	1	KGK-R
423	VQL2H32	COLOR LABEL	1	KPP-W
423	VQL2M24	COLOR LABEL	1	KPP-T
423	VQL1Z66	COLOR LABEL	1	KPP-R,KPC-R
423	VQL2M25	COLOR LABEL	1	KEG-T,KGC-T
423	VQL1Z69	COLOR LABEL	1	KEG-R,KEC-R,KEB-R,KEE-R, KGC-R,KGH-R,KGN-R
423	VQL2B13	COLOR LABEL	1	KEC-W,KEB-W,KEE-W,KGC-W, KGH-W,KGT-W,KGN-W,KGD-W
423	VQL2H31	COLOR LABEL	1	KGK-W
423	VQL2F42	COLOR LABEL	1	KGK-R
424	VFC4315	LENS REAR CAP	1 (G3K)	[SPC]
425	VYF3201	LENS CAP	1 (G3K)	[SPC]
426	VPF1438	LENS BAG	1 (G3K)	[SPC]
427	VYC1009	LENS HOOD	1 (G3K)	[SPC]
△ 450	K2CT3YY00034	AC CORD W/PLUG	1	KEB,KGC,KGH
△ 451	K2CQ2YY00082	AC CORD W/PLUG	1	KEG,KEC,KEE,KGC
△ 451	K2CR2YY00026	AC CORD W/PLUG	1	KGD
△ 453	K2CA2YY00129	AC CORD W/PLUG	1	KGT
△ 453	K2CA2YY00130	AC CORD W/PLUG	1	KGK
△ 454	K2CJ2YY00052	AC CORD W/PLUG	1	KGN
460	VFF0800-S	CD-ROM(APPLI-OVERSEAS)	1	KPP,KPC,KEG,KEC,KEB,KEE, KGC,KGH,KGT,KGN,KGD [SPC]See "Notes"
460	VFF0801-S	CD-ROM (APPLI-CHINA)	1	KGK [SPC] See "Notes"

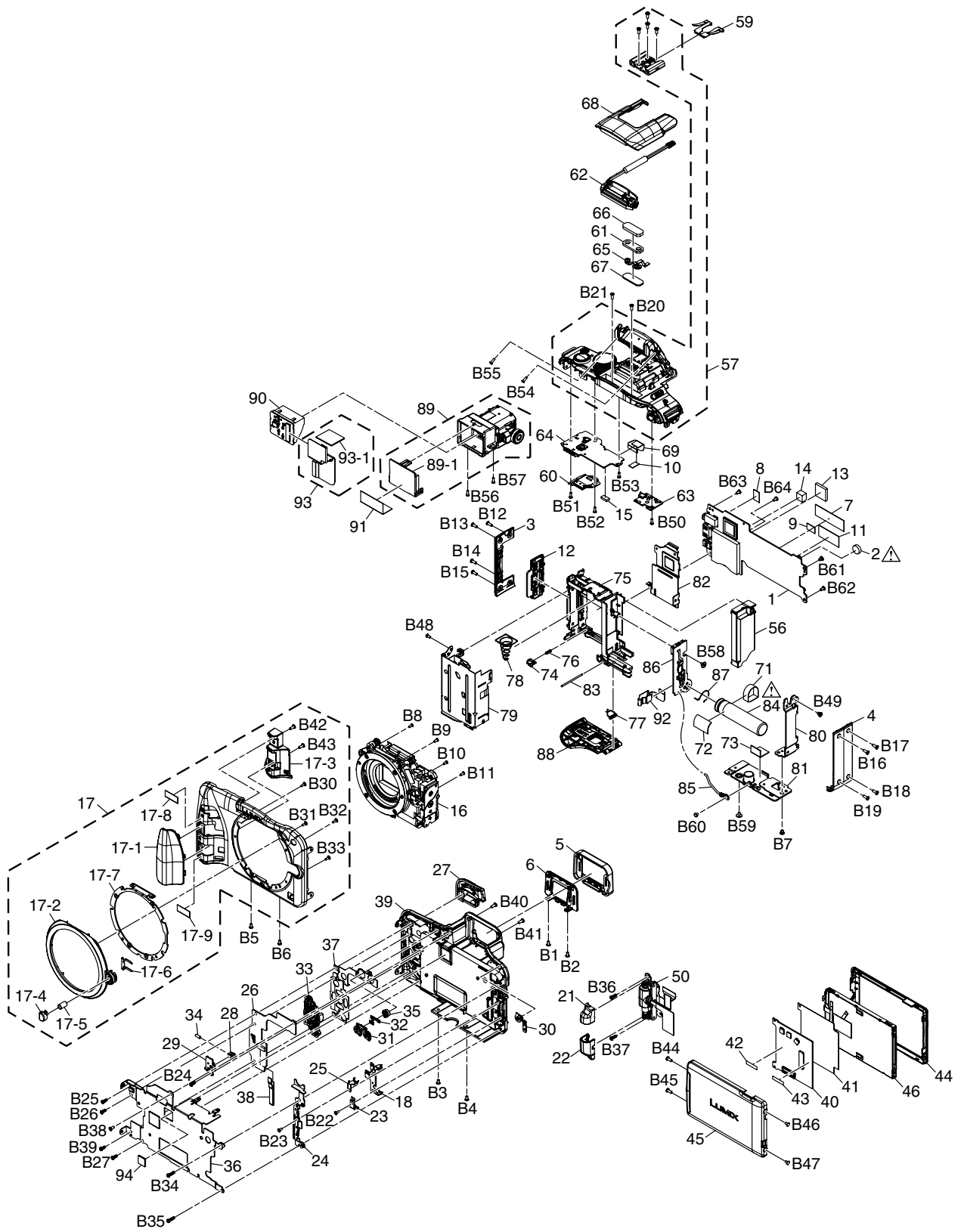
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
500	VKF4385	BODY CAP	1 (G3W)	
501	VPF1316A	CAMERA BAG	1 (G3W)	
△ 502	DE-A94AA/SX	BATTERY CHARGER	1	WEG,WEC,WEB,WEE,WGN
△ 502	DE-A93BA/SX	BATTERY CHARGER	1	WPP
△ 502	DE-A94BB/SX	BATTERY CHARGER	1	WGC,WGH,WGK,WGD
△ 502	DE-A94CA/SX	BATTERY CHARGER	1	WGT
△ 503	-----	BATTERY	1	WEG,WEC,WEB,WEE,WGN,WGC, WGH,WGK,WGD,WGT,WPP
504	K1HY08YY0015	USB CABLE W/PLUG	1 (G3W)	
505	K1HY08YY0016	AV CABLE W/PLUG	1 (G3W)	
506	VFC4634	SHOULDER STRAP	1	WPP,WEG,WEC,WEB-K/R,WEE-K, WGC,WGH,WGT,WGN,WGD,WGK
506	VFC4717	SHOULDER STRAP	1	WEB-KA
△ 507	VFF0806	CD-ROM (INSTRUCTION BOOK)	1	WEG,WEC,WEB
△ 507	VFF0805	CD-ROM (INSTRUCTION BOOK)	1	WPP
△ 507	VFF0807	CD-ROM (INSTRUCTION BOOK)	1	WEE,WGC,WGH,WGN
△ 507	VFF0808	CD-ROM (INSTRUCTION BOOK)	1	WGT,WGD
△ 507	VFF0809	CD-ROM (INSTRUCTION BOOK)	1	WGK
508	VGQC14	TOUCH PEN	1 (G3W)	
509	VPF1100	BAG, POLYETHYLENE	1 (G3W)	
510	VQC8410	O/I SOFTWARE (GERMAN/FRENCH/ITALIAN/ DUTCH)	1	WPP
510	VQC8408	O/I SOFTWARE (ENGLISH/SPANISH/ PORTUGUESE)	1	WEC
510	VQC8411	O/I SOFTWARE (SPANISH/PORTUGUESE/ SWEDISH/DANISH/FINNISH)	1	WEB,WGN
510	VQC8412	O/I SOFTWARE (ENGLISH)	1	WEE
510	VQC8413	O/I SOFTWARE (RUSSIAN/UKRAINIAN)	1	WGC,WGH
510	VQC8414	O/I SOFTWARE (ENGLISH/ CHINESE(TRADITIONAL)/ ARABIC)	1	WGT
510	VQC8415	O/I SOFTWARE (CHINESE(TRADITIONAL))	1	WGD
510	VQC8417	O/I SOFTWARE (KOREAN)	1	WGK
510	VQC8416	O/I SOFTWARE (CHINESE(SIMPLIFIED))	1	WEG
△ 511	VQT3N43	BASIC O/I (GERMAN/FRENCH)	1	WGT
△ 511	VQT3N44	BASIC O/I (ITALIAN/DUTCH)	1	WPP
△ 511	VQT3N40	BASIC O/I (ENGLISH/SPANISH)	1	WPP
△ 511	VQT3N41	BASIC O/I (PORTUGUESE)	1	WEC
△ 511	VQT3N45	BASIC O/I (SPANISH/PORTUGUESE)	1	WEC
△ 511	VQT3N46	BASIC O/I (SWEDISH/DANISH)	1	WEC
△ 511	VQT3N47	BASIC O/I (FINNISH)	1	WEB
△ 511	VQT3N48	BASIC O/I (ENGLISH)	1	WEE
△ 511	VQT3N49	BASIC O/I (RUSSIAN/UKRAINIAN)	1	WGC,WGH
△ 511	VQT3N50	BASIC O/I (ENGLISH/ CHINESE(TRADITIONAL))	1	WGC
△ 511	VQT3N51	BASIC O/I (ARABIC)	1	WGT
△ 511	VQT3N52	BASIC O/I (CHINESE(TRADITIONAL))	1	WGN
△ 511	VQT3N54	BASIC O/I (ENGLISH)	1	WGD
△ 511	VQT3N55	BASIC O/I (KOREAN)	1	WGK
△ 511	VQT3N53	BASIC O/I (CHINESE(SIMPLIFIED))		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
513	VPK5009	PACKING CASE	1	WPP-K
513	VPK5010	PACKING CASE	1	WEG,WEC,WEB-K/R,WEE-K, WGC,WGH,WGT,WGN,WGD
513	VPK5081	PACKING CASE	1	WEB-KA
513	VPK5011	PACKING CASE	1	WGK
514	VPN7251	PAD A	1 (G3W)	
515	VPN7254	PAD C	1	WPP,WEG,WEC,WEB,WEE,WGC, WGH,WGT,WGK,WGN,WGD
516	VPN7252	PAD B	1	WPP,WEG,WEC,WEB,WEE,WGC, WGH,WGT,WGK,WGN,WGD
517	VQL2C68-1A	OPERATING LABEL	1	WGT
518	VQL2J61	GD LABEL	1	WGD
519	VQL1Z76	NTSC LABEL	1	WGT,WGD
521	VQL2M25	COLOR LABEL	1	WEG-T,WGC-T
521	VQL1Z69	COLOR LABEL	1	WEG-R,WEC-R,WEB-R,WGC-R, WGH-R,WGN-R
521	VQL2B13	COLOR LABEL	1	WEC-W,WGC-W,WGH-W,WGT-W, WGN-W,WGD-W
521	VQL2H31	COLOR LABEL	1	WGK-W
521	VQL2F42	COLOR LABEL	1	WGK-R
522	VQL2M25	COLOR LABEL	1	WEG-T,WGC-T
522	VQL1Z69	COLOR LABEL	1	WEG-R,WEC-R,WEB-R,WGC-R, WGH-R,WGN-R
522	VQL2B13	COLOR LABEL	1	WEC-W,WGC-W,WGH-W,WGT-W, WGN-W,WGD-W
522	VQL2H31	COLOR LABEL	1	WGK-W
522	VQL2F42	COLOR LABEL	1	WGK-R
523	VQL2M25	COLOR LABEL	1	WEG-T,WGC-T
523	VQL1Z69	COLOR LABEL	1	WEG-R,WEC-R,WEB-R,WGC-R, WGH-R,WGN-R
523	VQL2B13	COLOR LABEL	1	WEC-W,WGC-W,WGH-W,WGT-W, WGN-W,WGD-W
523	VQL2H31	COLOR LABEL	1	WGK-W
523	VQL2F42	COLOR LABEL	1	WGK-R
524	VFC4315	LENS REAR CAP	1 (G3W) [SPC]	
525	VYF3201	LENS CAP	1 (G3W) [SPC]	
526	VPF1438	LENS BAG	1 (G3W) [SPC]	
527	VYC1009	LENS HOOD	1 (G3W) [SPC]	
528	VFC4315	LENS REAR CAP	1 (G3W) [SPC]	
529	VYF3201	LENS CAP	1 (G3W) [SPC]	
530	VPF1316	LENS BAG	1 (G3W) [SPC]	
531	VYC0986	LENS HOOD	1 (G3W) [SPC]	
△ 550	K2CT3YY00034	AC CORD W/PLUG	1	WEB,WGC,WGH
△ 551	K2CQ2YY00082	AC CORD W/PLUG	1	WEG,WEC,WEE,WGC
△ 551	K2CR2YY00026	AC CORD W/PLUG	1	WGD
△ 553	K2CA2YY00129	AC CORD W/PLUG	1	WGT
△ 553	K2CA2YY00130	AC CORD W/PLUG	1	WGK
△ 554	K2CJ2YY00052	AC CORD W/PLUG	1	WGN
560	VFF0800-S	CD-ROM (APPLI-OVERSEAS)	1	WPP,WEG,WEC,WEB,WEE,WGC, WGH,WGT,WGN,WGD [SPC] See "Notes"
560	VFF0801-S	CD-ROM (APPLI-CHINA)	1	WGK [SPC] See "Notes"

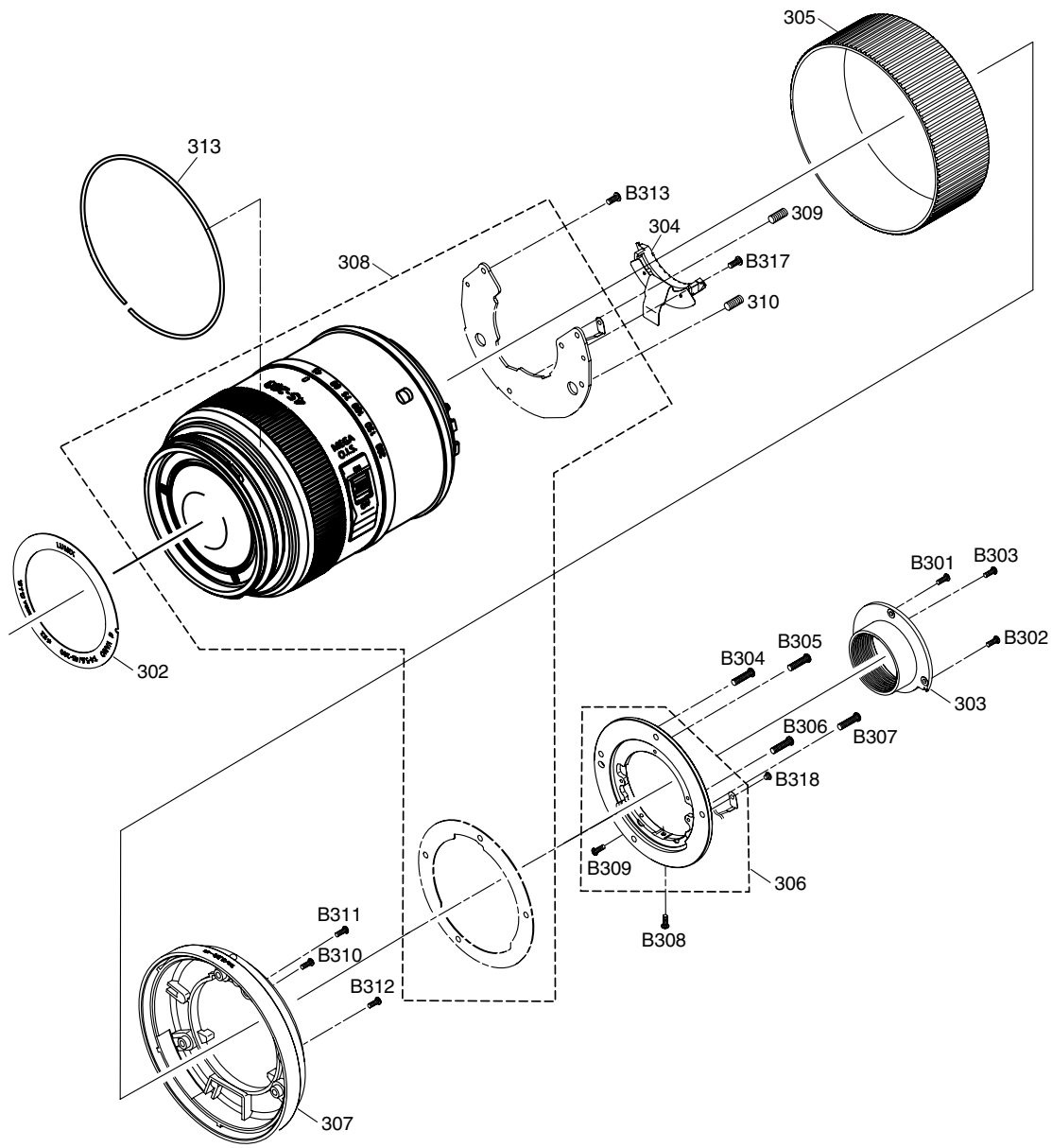
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
600	VKF4385	BODY CAP	1	(G3)	613	VPK5003	PACKING CASE	1	EG-K,EC-K,EB-K,EE-K,GC-K, GH-K,GT-K,GN-K,GD-K
601	VPF1316A	CAMERA BAG	1	(G3)	613	VPK5002	PACKING CASE	1	PP-K,PC-K
△ 602	DE-A94AA/SX	BATTERY CHARGER	1	EG,EC,EB,EE,GN	614	VPN7251	PAD A	1	(G3)
△ 602	DE-A93BA/SX	BATTERY CHARGER	1	PP,PC	615	VPN7253	PAD D	1	EG,PP,PC,EC,EB,EE,GC,GH, GT,GN,GD
△ 602	DE-A94BB/SX	BATTERY CHARGER	1	GC,GH,GD	616	VPN7261	PAD B	1	EG,PP,PC,EC,EB,EE,GC,GH, GT,GN,GD
△ 602	DE-A94CA/SX	BATTERY CHARGER	1	GT	617	VQL2C67-A	OPERATING LABEL	1	PC
△ 603	-----	BATTERY	1	EG,EC,EB,EE,GC,GH,GT,GN,GD, PP,PC	617	VQL2C68-1A	OPERATING LABEL	1	GT
604	K1HY08YY0015	USB CABLE W/PLUG	1	(G3)	618	VQL2J61	GD LABEL	1	GD
605	K1HY08YY0016	AV CABLE W/PLUG	1	(G3)	619	VQL1Z76	NTSC LABEL	1	GT,GD
606	VFC4634	SHOULDER STRAP	1	EG,PP,PC,EC,EB,EE,GC,GH, GT,GN,GD	△ 650	K2CT3YY00034	AC CORD W/PLUG	1	EB,GC,GH
△ 607	VFF0805	CD-ROM (INSTRUCTION BOOK)	1	PP,PC	△ 651	K2CQ2YY00082	AC CORD W/PLUG	1	EG,EC,EE,GC
△ 607	VFF0807	CD-ROM (INSTRUCTION BOOK)	1	EE,GC,GH,GN	△ 651	K2CR2YY00026	AC CORD W/PLUG	1	GD
△ 607	VFF0808	CD-ROM (INSTRUCTION BOOK)	1	GT,GD	△ 653	K2CA2YY00129	AC CORD W/PLUG	1	GT
△ 607	VFF0806	CD-ROM (INSTRUCTION BOOK)	1	EG,EC,EB	△ 654	K2CJ2YY00052	AC CORD W/PLUG	1	GN
608	VGQ0C14	TOUCH PEN	1	(G3)	660	VFF0800-S	CD-ROM (APPLI-OVERSEAS)	1	EG,PP,PC,EC,EB,EE,GC,GH, GT,GN,GD
609	VPF1100	BAG, POLYETHYLENE	1	(G3)					[SPC] See "Notes"
610	VQC8410	O/I SOFTWARE (GERMAN/FRENCH/ITALIAN/ DUTCH)	1	EG					
610	VQC8408	O/I SOFTWARE (ENGLISH/SPANISH/ PORTUGUESE)	1	PP					
610	VQC8411	O/I SOFTWARE (SPANISH/PORTUGUESE/ SWEDISH/DANISH/FINNISH)	1	EC					
610	VQC8412	O/I SOFTWARE (ENGLISH)	1	EB,GN					
610	VQC8413	O/I SOFTWARE (RUSSIAN/UKRAINIAN)	1	EE					
610	VQC8414	O/I SOFTWARE (ENGLISH/ CHINESE(TRADITIONAL/ ARABIC)	1	GC,GH					
610	VQC8415	O/I SOFTWARE (CHINESE(TRADITIONAL))	1	GT					
610	VQC8417	O/I SOFTWARE (KOREAN)	1	GD					
610	VQC8409	O/I SOFTWARE (ENGLISH/CANADIAN FRENCH)	1	PC					
△ 611	VQT3N42	BASIC O/I (ENGLISH/CANADIAN FRENCH)	1	PC					
△ 611	VQT3N43	BASIC O/I (GERMAN/FRENCH)	1	EG					
△ 611	VQT3N44	BASIC O/I (ITALIAN/DUTCH)	1	EG					
△ 611	VQT3N40	BASIC O/I (ENGLISH/SPANISH)	1	PP					
△ 611	VQT3N41	BASIC O/I (PORTUGUESE)	1	PP					
△ 611	VQT3N45	BASIC O/I (SPANISH/PORTUGUESE)	1	EC					
△ 611	VQT3N46	BASIC O/I (SWEDISH/DANISH)	1	EC					
△ 611	VQT3N47	BASIC O/I (FINNISH)	1	EC					
△ 611	VQT3N48	BASIC O/I (ENGLISH)	1	EB					
△ 611	VQT3N49	BASIC O/I (RUSSIAN/UKRAINIAN)	1	EE					
△ 611	VQT3N50	BASIC O/I (ENGLISH/ CHINESE(TRADITIONAL))	1	GC,GH					
△ 611	VQT3N51	BASIC O/I (ARABIC)	1	GC					
△ 611	VQT3N52	BASIC O/I (CHINESE(TRADITIONAL))	1	GT					
△ 611	VQT3N54	BASIC O/I (ENGLISH)	1	GN					
△ 611	VQT3N55	BASIC O/I (KOREAN)	1	GD					

S7. Exploded View

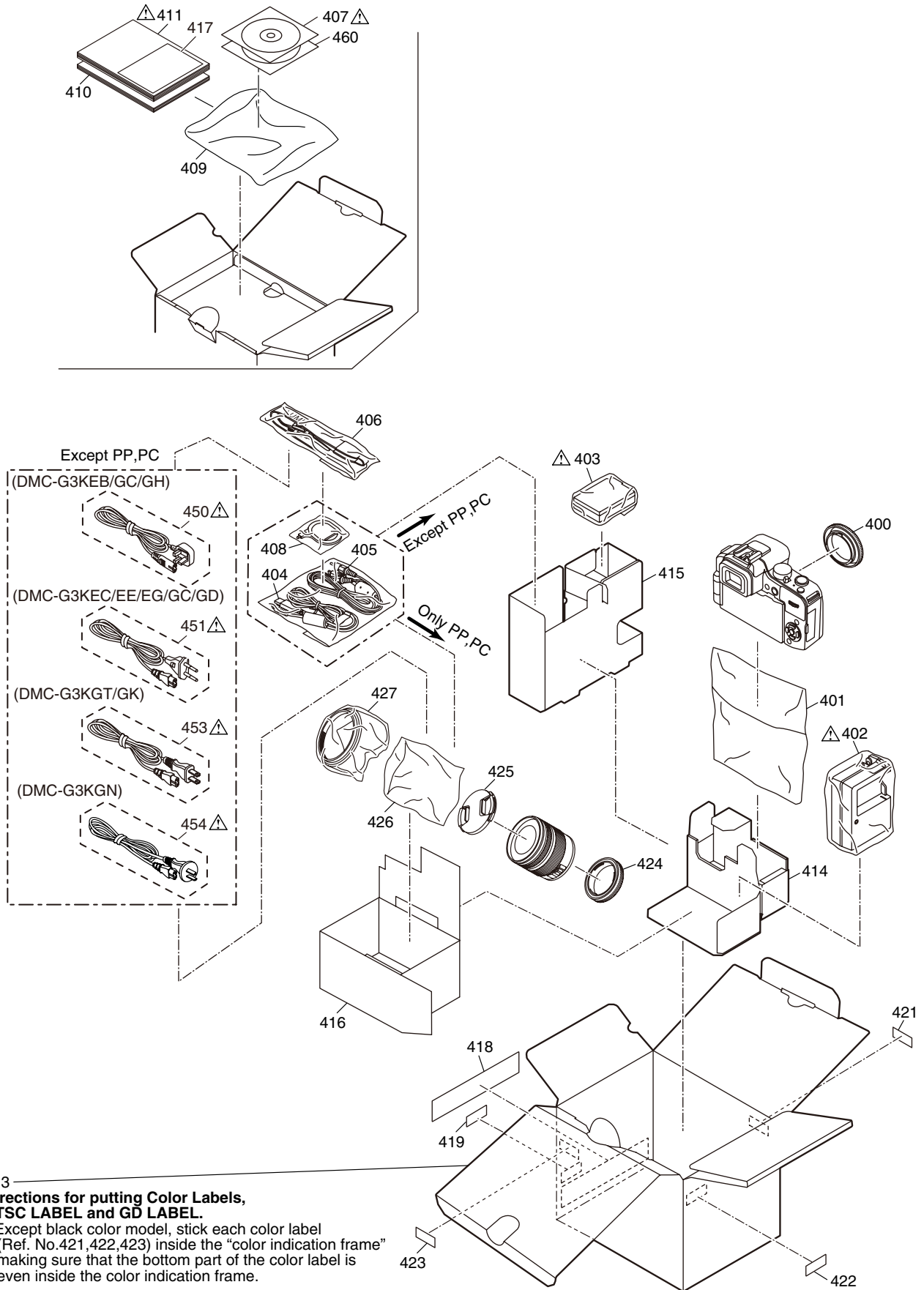
S7.1. Frame and Casing Section



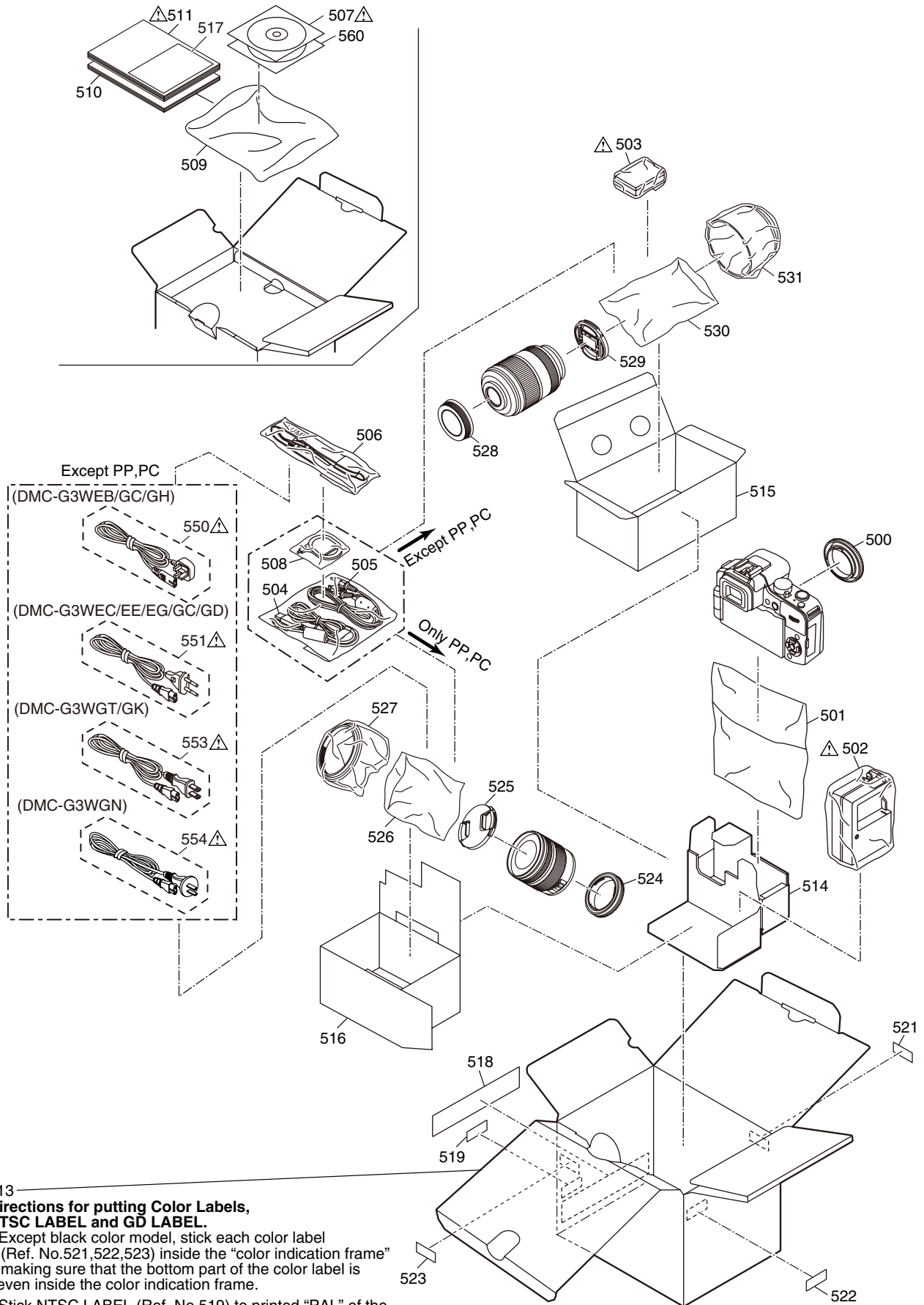
S7.3. Camera Lens Section (2)



S7.4. Packing Parts and Accessories Section (1)



S7.5. Packing Parts and Accessories Section (2)



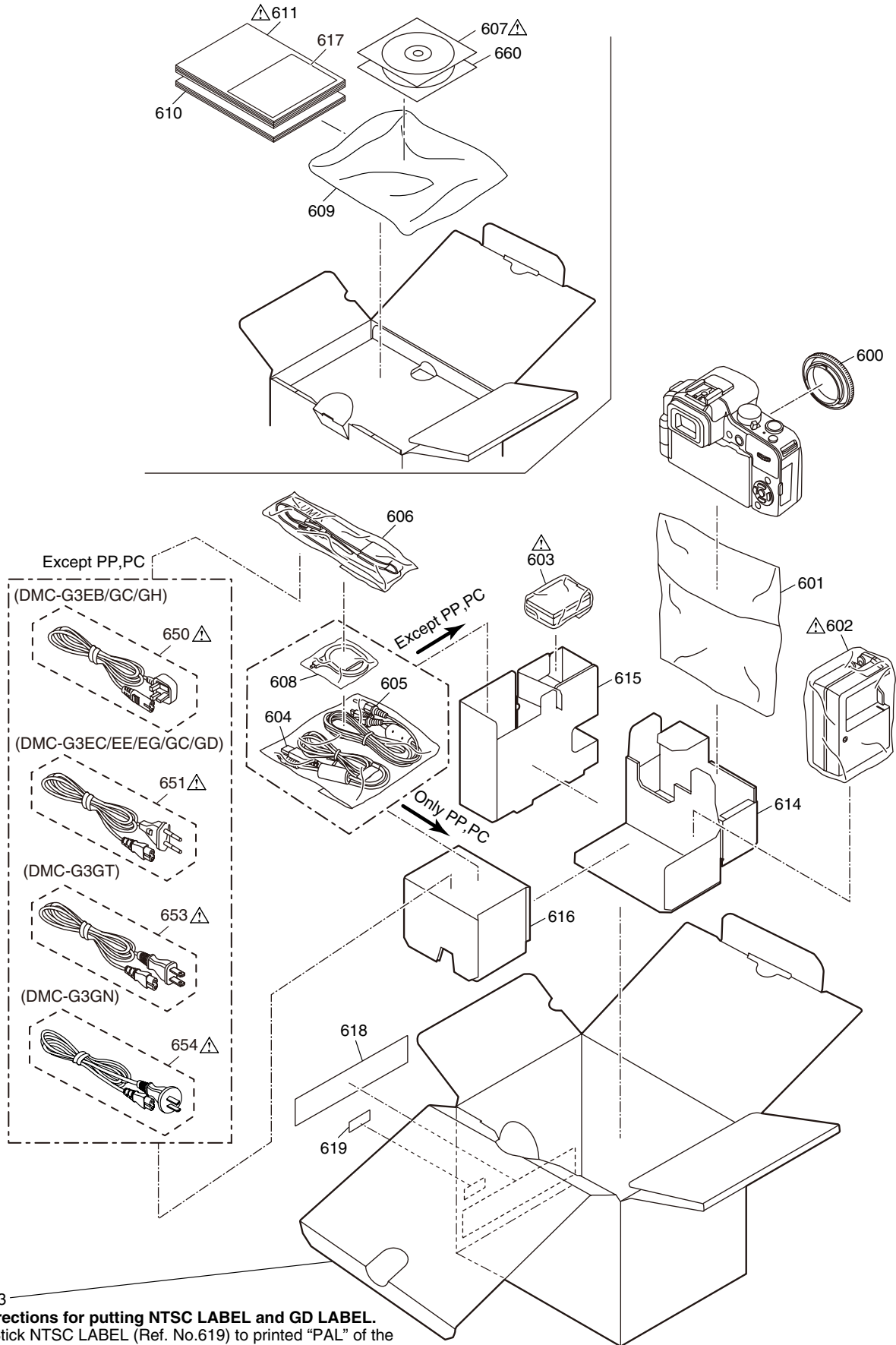
513 Directions for putting Color Labels, NTSC LABEL and GD LABEL.

* Except black color model, stick each color label (Ref. No.521,522,523) inside the "color indication frame" making sure that the bottom part of the color label is even inside the color indication frame.

* Stick NTSC LABEL (Ref. No.519) to printed "PAL" of the packing case for [GD] and [GT] models.

* Stick GD LABEL (Ref. No.518) for [GD] model on the original printed place.

S7.6. Packing Parts and Accessories Section (3)



613

Directions for putting NTSC LABEL and GD LABEL.

* Stick NTSC LABEL (Ref. No.619) to printed "PAL" of the packing case for [GD] and [GT] models.

* Stick GD LABEL (Ref. No.618) for [GD] model on the original printed place.