

**Panasonic®**

**ORDER NO.VM1602003CE**

**B27**

# Service Manual

## High Definition Video Camera

- Model No. **HC-W580PP**  
**HC-W580PU**  
**HC-W580EB**  
**HC-W580EF**  
**HC-W580EG**  
**HC-W580EP**  
**HC-W580EE**  
**HC-W580GC**  
**HC-W580GK**  
**HC-W580GW**  
**HC-W580MGK**  
**HC-W580MGN**

### Colour

- (K).....Black Type  
(W).....White Type (only HC-W580MGK)  
(T).....Brown Type (only HC-W580GC)



 **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 M $\Omega$  and 5.2 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 k $\Omega$ , 10 W resistor, in parallel with a 0.15  $\mu$ 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 k $\Omega$ /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 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.

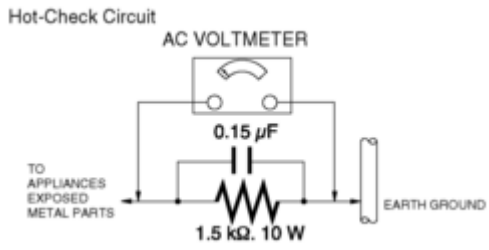


Figure. 1

## 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 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)

<p><b>ENGLISH</b></p>		<p>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.</p>
<p><b>FRANÇAIS</b></p>		<p>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.</p>

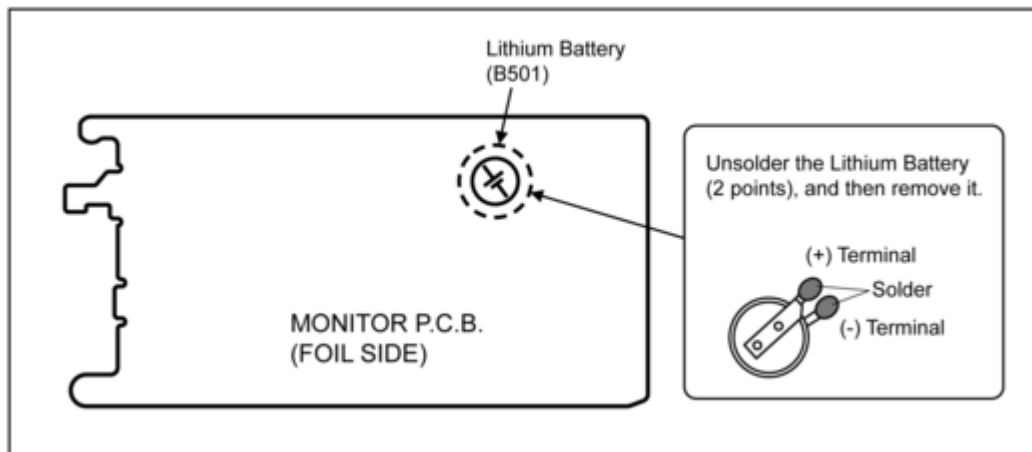
## 2.3 How to Replace the Lithium Battery

### 2.3.1 Replacement Procedure

1. Remove the MONITOR P.C.B.. (Refer to Disassembly Procedures.)
2. Unsolder the each soldering point of electric lead terminal for Lithium battery (Ref. No. "B501" at foil side of MONITOR P.C.B.) and remove the Lithium battery together with electric lead terminal. Then replace it into new one.

**NOTE:**

The Lithium battery includes electric lead terminals.



**NOTE:**

This Lithium battery is a critical component.

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 HC-W580/W580M 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 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.
  - SVKZ000001----- (0.3mm 100g Reel)
  - SVKZ000002----- (0.6mm 100g Reel)
  - SVKZ000003----- (1.0mm 100g Reel)

#### Note

\* Ingredient: Tin (Sn) 96.5%, Silver (Ag) 3.0%, Copper (Cu) 0.5%. (Flux cored)

### 3.3 How to Define the Model Suffix (NTSC or PAL model)

There are seven kinds of HC-W580/W580M.

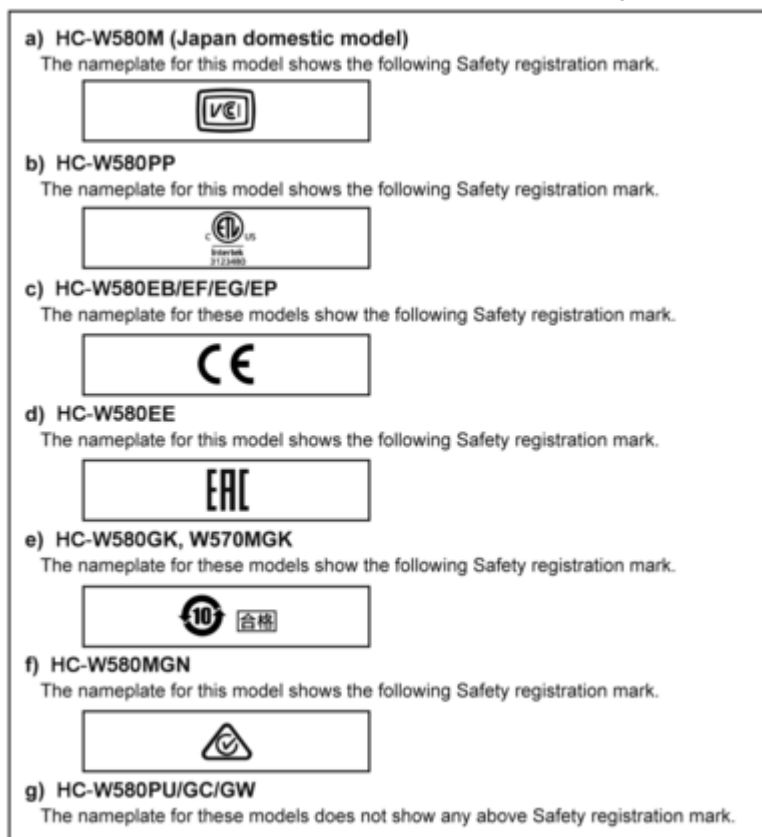
- a) HC-W580M (Japan domestic model)

- b) HC-W580PP
- c) HC-W580EB/EF/EG/EP
- d) HC-W580EE
- e) HC-W580GK, W580MGK
- f) HC-W580MGN
- g) HC-W580PU/GC/GW

What is the difference is that the "INITIAL SETTING" data which is stored in Flash ROM mounted on Main P.C.B..

### 3.3.1 Defining methods:

To define the model suffix to be serviced, refer to the rating label and caution label which are putted on the Unit.



#### NOTE:

After replacing the MAIN P.C.B., be sure to achieve adjustment.

## 3.4 Baking of replacement IC and defective P.C.B.

When replacing the CSP/BGA/QFN type IC mounted on the P.C.B., the problem of IC crack or foil pattern breaking in the P.C.B.

might sometimes occur by rapid heating.

In order to improve the success rate of IC replacement for repair, it would be required to work out baking of replacement IC and defective P.C.B. before replacing IC.

Please refer the way of baking as follows.

Replacement IC and defective P.C.B. must be put in the heater together.


- Baking temperature and time (Hour)  
80°C / 24 hour



Heater for example  
(Incubator)

Replacement IC and defective P.C.B.  
must be put in the heater together.

Setting condition for Heater  
Temperature    80°C  
Time            24 hour



# 4 Specifications

The following specification is for HC-W580GC/GW, HC-W580MGN, HC-V380GC/GW.  
Some specifications may differ depending on model suffix.

The page number in this chapter does not show the page number of this service manual.

## High Definition Video Camera

Information for your safety

### Power source:

DC 5.0 V (When using AC adaptor)  
DC 3.6 V (When using battery)

### Power consumption:

Recording: 5.4 W  
Charging: 7.7 W

### Motion picture recording format:

[AVCHD]:  
AVCHD format version 2.0 compliant  
(AVCHD Progressive)  
[MP4/iFrame]:  
MPEG-4 AVC file format compliant (.MP4)

### Motion picture compression:

MPEG-4 AVC/H.264

### Audio compression:

[AVCHD]:  
Dolby® Digital/2 ch  
[MP4/iFrame]:  
AAC/2 ch

### Recording mode and transfer rate:

#### [AVCHD]

[1080/50p]:  
Maximum 28 Mbps (VBR)  
[PH]:  
Maximum 24 Mbps (VBR)  
[HA]:  
Average 17 Mbps (VBR)  
[HG]:  
Average 13 Mbps (VBR)  
[HE]:  
Average 5 Mbps (VBR)

#### [MP4/iFrame]

[1080/50M]:  
Maximum 50 Mbps (VBR)  
[1080/28M]:  
Maximum 28 Mbps (VBR)  
[720]:  
Average 9 Mbps (VBR)  
[iFrame]:  
Maximum 28 Mbps (VBR)

- Refer to the operating instructions (PDF format) for the picture size and recordable time of a motion picture.

### Still picture recording format:

JPEG (Design rule for Camera File system, based on Exif 2.2 standard)

- Refer to the operating instructions (PDF format) for picture size of a still picture and number of recordable pictures.

### Recording media:

SD Memory Card  
SDHC Memory Card  
SDXC Memory Card

- Refer to the operating instructions (PDF format) for details on SD cards usable in this unit.

Built-in memory ( **W580M** ); 32 GB

**Image sensor:**

1/5.8 type (1/5.8") 1MOS image sensor  
 Total: 2510 K  
 Effective pixels;  
 Motion picture; 2200 K (16:9)\*  
 Still picture;  
 2200 K (16:9), 1700 K (4:3), 1670 K (3:2)

**Lens:**

Auto Iris, 50× optical zoom, F1.8 to F4.2  
 Focal length;  
 2.06 mm to 103 mm  
 Macro (Full range AF)  
 35 mm equivalent;  
 Motion picture;  
 28.0 mm to 1740 mm (16:9)\*  
 Still picture;  
 28.0 mm to 1740 mm (16:9),  
 34.0 mm to 1766 mm (4:3),  
 33.6 mm to 1714 mm (3:2)  
 Minimum focus distance;  
 Normal; Approx. 2.0 cm (Wide)/  
 Approx. 2.2 m (Tele)  
 Tele Macro; Approx. 1.1 m (Tele)  
 Intelligent Auto Macro;  
 Approx. 1.0 cm (Wide)/Approx. 1.1 m  
 (Tele)

**Zoom:**

i.Zoom OFF 62×\*, 90× i.Zoom, 150×/  
 3000× digital zoom  
 (Using image sensor effective area)

\* When [O.I.S.] is set to [Standard] and Level  
 Shot Function is set to off.

**Image stabilizer function:**

Optical (Hybrid Optical Image Stabilizer,  
 Active Mode (Rotation correction), Optical  
 Image Stabilizer Lock function)

**Level Shot Function:**

Off/Normal/Strong

**Creative Control:**

[Miniature Effect]/[Silent movie]/[8mm  
 movie]/[Time Lapse Rec]

**HDR movie ( [W580] / [W580M] );**

Low/High

**Monitor:**

7.5 cm (3.0") wide LCD monitor (Approx.  
 460 K dots)

**Microphone:**

Stereo (with a Zoom Microphone)

**Minimum required illumination:**

Approx. 4 lx (1/25 with Low Light Mode in the  
 Scene Mode)

Approx. 1 lx with the Night Mode function

**AV connector video output level:**

1.0 Vp-p, 75 Ω, PAL system

**HDMI mini connector video output level:**

HDMI™ (x.v.Colour™) 1080p/1080i/576p

**AV connector audio output level (Line):**

251 mV, 600 Ω, 2 ch

**HDMI mini connector audio output level:**

[AVCHD];  
 Dolby Digital/Linear PCM  
 [iFrame], [MP4];  
 Linear PCM

**USB:**

Reader function  
 SD card; Read only (No copyright  
 protection support)  
 Built-in memory ( [W580M] ); Read only  
 Hi-Speed USB (USB 2.0), USB terminal  
 Type micro AB  
 USB host function (for USB HDD)  
 Battery charging function (Charges from  
 USB terminal when the main unit is off)

**Dimensions:**

60 mm (W)×62 mm (H)×129 mm (D)  
 (including projecting parts)

**Mass:**

[W580]  
 Approx. 264 g  
 [without battery (supplied) and an SD card  
 (optional)]  
 [W580M]  
 Approx. 266 g  
 [without battery (supplied)]  
 [V380]  
 Approx. 252 g  
 [without battery (supplied) and an SD card  
 (optional)]

**Mass in operation:****W580**

Approx. 309 g

[with battery (supplied) and an SD card (optional)]

**W580M**

Approx. 309 g

[with battery (supplied)]

**V380**

Approx. 295 g

[with battery (supplied) and an SD card (optional)]

**Operating temperature:**

0 °C to 40 °C

**Operating humidity:**

10%RH to 80%RH

**Battery operation time:**

See page 12

**Wireless transmitter:**

Compliance standard; IEEE802.11b/g/n

Frequency range used;

Central frequency 2412 MHz to 2462 MHz

[11ch]

Encryption method; Wi-Fi compliant WPA™/

WPA2™/WEP

Access method; Infrastructure mode

**Sub Camera ( W580 / W580M )****Image sensor:**

1/5 type (1/5") 1MOS image sensor

Total; 2000 K

**Lens:**

35 mm equivalent (Motion picture);

30.6 mm

**AC adaptor**

Information for your safety

**Power source:**

AC 110 V to 240 V, 50/60 Hz

**AC input:**

0.25 A

**DC output:**

DC 5.0 V, 1.8 A

**Dimensions:**

(VSK0815L)

66.4 mm (W)×72 mm (H)×46.3 mm (D)

(VSK0815K)

66.4 mm (W)×78.8 mm (H)×31 mm (D)

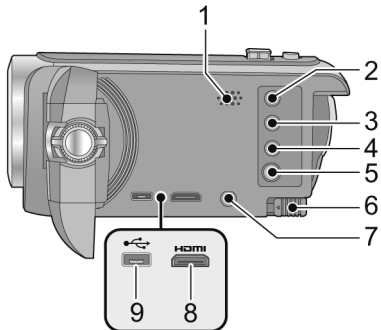
**Mass:**

(VSK0815L)

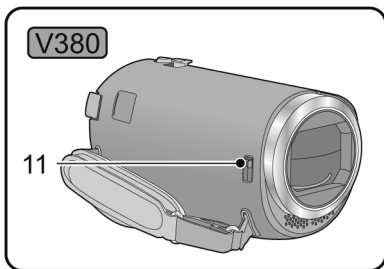
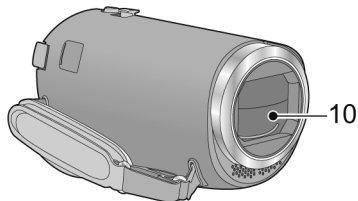
Approx. 70 g

(VSK0815K)

Approx. 65 g



- 1 **Speaker**
- 2 **Recording/playback button** [ / ]  
(→ 18)
- 3  **/ HDR button** [ **HDR** ] (→ 45)  
 **Level Shot Function button** [ / ]  
(→ 44)
- 4 **Wi-Fi button** [ **Wi-Fi** ]  
(→ 140, 146, 149, 155, 157, 161, 176, 179, 189, 193)
- 5 **Power button** [ / ] (→ 17)
- 6 **Battery release lever** [ **BATT** ] (→ 10)
- 7 **A/V connector** [ **A/V** ] (→ 116, 134)
- 8 **HDMI mini connector** [ **HDMI** ] (→ 116)
- 9 **USB terminal** [ ] (→ 124, 132, 215)



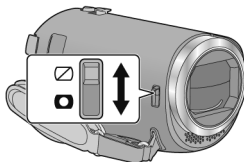
## 10 **Lens cover**

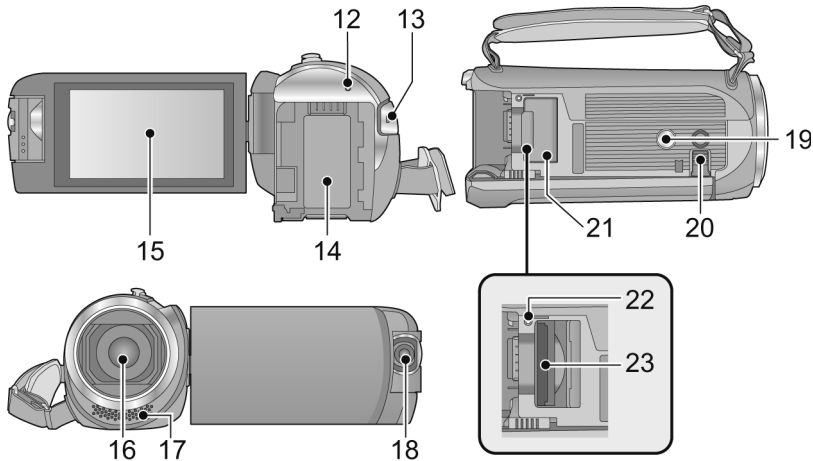
- **/**   
The lens cover opens in Motion Picture Recording Mode or Still Picture Recording Mode. (→ 18)

## 11 **Lens cover opening/closing switch**

When not using the unit, close the lens cover to protect the lens.

- Slide the opening/closing switch to open/close the cover.





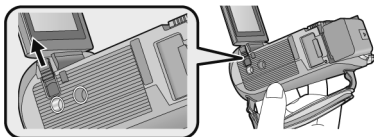
- 12 **Status indicator** (→ 17, 168)
- 13 **Recording start/stop button** (→ 23)
- 14 **Battery holder** (→ 10)
- 15 **LCD monitor (Touch screen)** (→ 19)

#### 19 **Tripod receptacle**

- Attaching a tripod with a screw length of 5.5 mm or more may damage the unit.

#### 20 **Sliding stand**

When using this unit on a desk or any flat surface, pull out the sliding stand as illustrated below to keep this unit stable.

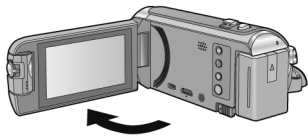


- Before closing the LCD monitor, retract the sliding stand.

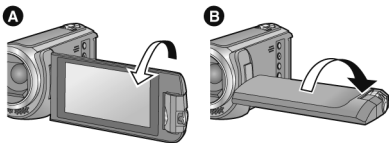
#### 21 **SD card cover** (→ 15)

#### 22 **Access lamp [ACCESS]** (→ 15)

#### 23 **Card slot** (→ 15)



- It can open up to 90°.

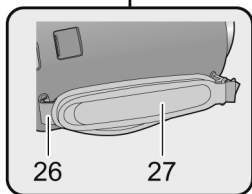
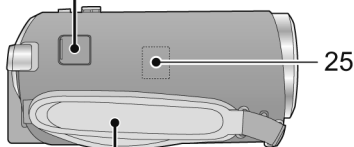
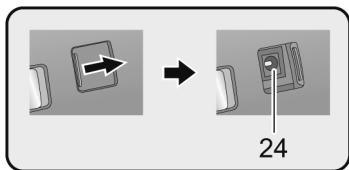


- It can rotate up to 180° **A** towards the lens or 90° **B** towards the opposite direction.

#### 16 **Lens**

#### 17 **Internal stereo microphones**

#### 18 **W580 / W580M** **Sub camera** (→ 46)



#### 24 DC input terminal [DC IN] (→ 11)

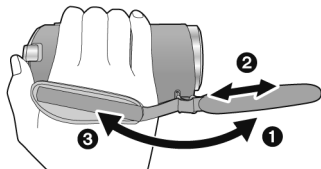
- Do not use any other AC adaptors except the supplied one.

#### 25 Wi-Fi Transmitter (→ 139)

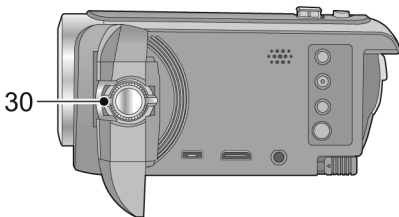
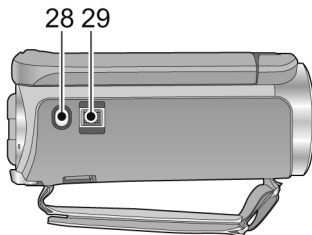
#### 26 Shoulder strap fixture

#### 27 Grip belt

Adjust the length of the grip belt so that it fits your hand.



- 1 Flip the belt.
- 2 Adjust the length.
- 3 Replace the belt.



#### 28 Photoshot button [ ] (→ 26)

#### 29 Zoom lever [W/T] (In Motion Picture Recording Mode or Still Picture Recording Mode) (→ 43)/

#### Thumbnail display switch [ / ] (→ 30)/

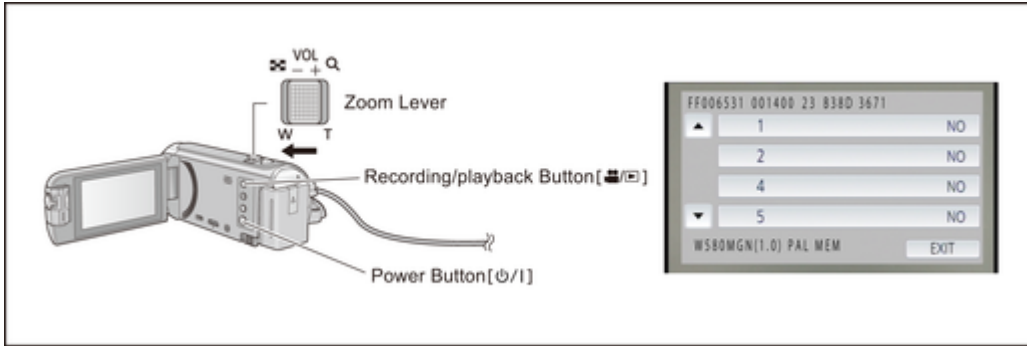
#### Volume lever [-VOL+] (In Playback Mode) (→ 30)

#### 30 Sub Camera dial (→ 47)

# 6 Service Mode

## Indication method of the service menu

1. Keep pressing the “Power” button, “Zoom Lever” to W side and “Recording/Playback” button for more than 3 seconds until the top screen of the Service Mode Menu being displayed.



## Service mode menu

Screen display	Contents	Function
1	Factory settings	Function to throw a product up in a factory shipment state.
2	Model/Destination settings	Change the Model/Destination. (Selectable models and destinations are displayed.)
4	Lock search history indication	Display the main and sub camera system error cord for each three histories saved in EEPROM.
5	Power ON self check result display	Power ON self check (function to diagnose correct function of the device and interface between devices) result display.
14	Adjtment function for the service	The service adjustment do setup and adjustment of the following items required in the field service.
15	Restore the backed up adjustment data	Restore the adjustment data to new or repaired Main P.C.B. from SD card that the data backed up from original Main P.C.B. before repairs or replacement.
16	Touch panel calibration	Calibrate the touch positions of the touch panel.

### NOTE:

Do not using service mode except above table of Service mode menu.

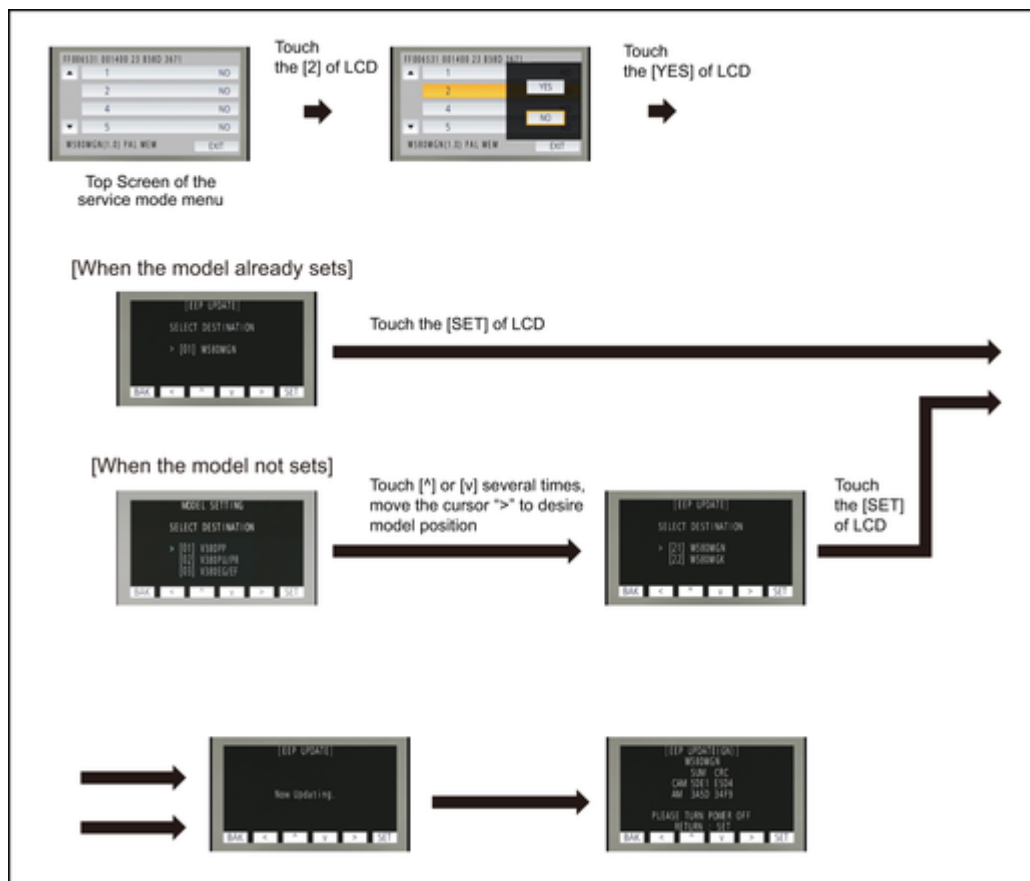
2. End method of the top screen of the service mode menu  
Touch the [ EXIT ] of LCD to end the service mode, and then POWER OFF.

## 6.1 Model/Destination Settings

Touch the [ 2 ] of LCD, select model/destination settings.

### Operation specifications





### Function description

- Change the Model/Destination  
Display the lists of model/destination which the unit can be changed, if a shipment setup is finished. Therefore in some cases, the model/destination that is currently set is only displayed.

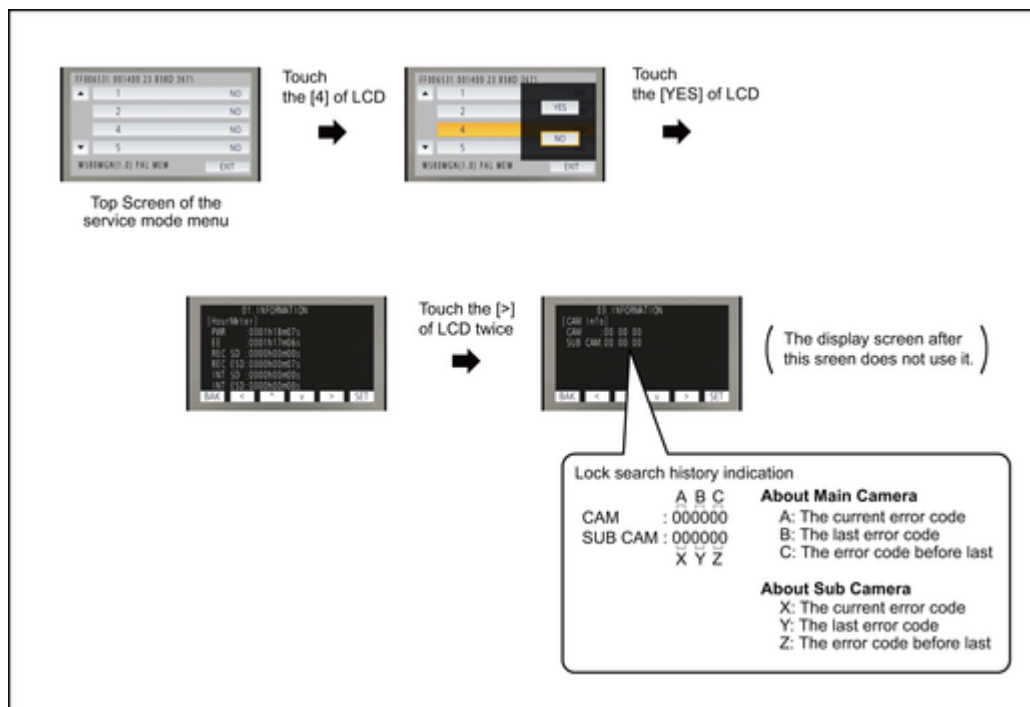
### End method of operation

- Touch the [ SET ] of LCD to exit the mode/destination settings, and then POWER OFF.

## 6.2 Lock Search and Error History Indication

Touch the [ 4 ] of LCD, select Lock search and error history indication.

### Operation specifications



### Indication contents

#### 1. Main Camera

- Lock search history indication of main camera  
Display the main camera system error code for three histories saved in EEPROM.
- The error code contents which are displayed

Error code	Description	Problematic Parts
51	Focus control is abnormal	FOCUS STEPPING MOTOR / LENS UNIT
52	Zoom control is abnormal	2ND STEPPING MOTOR / LENS UNIT
53	OIS lens control is abnormal	LENS UNIT
54	Zoom control is abnormal (2)	3RD STEPPING MOTOR / LENS UNIT
71	Lens barrier open/close is abnormal	BARRIER MOTOR UNIT / LENS FRAME UNIT

#### 2. Sub Camera

- Lock search history indication of sub camera  
Display the sub camera system error code for three histories saved in EEPROM.
- The error code contents which are displayed

Error code	Description	Problematic Parts
91	Sub camera error	SUB CAMERA UNIT

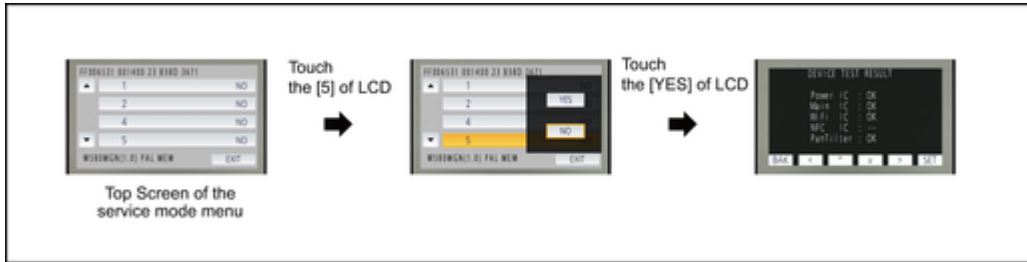
### End method of operation

- Touch the [ BAK ] of LCD to exit the lock search and error history indication, and then POWER OFF.

## 6.3 Power ON Self Check Result Display

Touch the [ 5 ] of LCD, select Power ON self check result display.

### Operation specifications



### Indication contents

- Power ON self check result display  
Function to diagnose correct function of the device and interface between devices result display.  
Display the following communication test result.
  - Power IC : Communication test between IC3401 and IC1503.
  - Main IC : DDR. Communication test inside IC3401.
  - WiFi IC : Communication test between IC3401 and Wi-Fi P.C.B..
  - NFC IC : (Excluded)
- Display other than “OK” are abnormalities of each lines.
  - PanTilter : Error display of the Remote Pan Tilt Cradle (VW-CTR1)  
(When not connected the remote pan tilt cradle, display “--”.)  
When error is occurred, display “NG” with the error code.

Error Code	Description
NG 01	Battery undercut
NG 04	The start-up state of the update error factor
NG 10	The failure of Tilt motor
NG 80	USB Communication Error

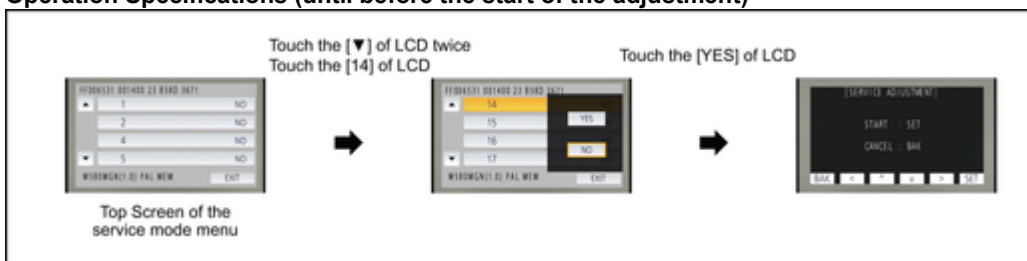
### End method of operation

- Touch the [ BAK ] of LCD to exit the power on self check result display, and the POWER OFF.

## 6.4 Adjustment function for the Service

Touch the [14] of LCD, select the adjustment function for the service.

### Operation Specifications (until before the start of the adjustment)



### Function description

The service adjustment do setup and adjustment of the following items required in the field service.  
For a detailed content, such as the adjustment procedure, refer to “9 Measurements and Adjustments”.

- Model setting
- Setting of the file name for adjustment data backup to SD card.
- Execution of adjustment data backup to SD card
- Checking of Switches
- Camera adjustment
- Zoom Tracking adjustments

- Indoor White Balance Adjustment
- Outdoor White Balance Adjustment
- Level shot adjustment

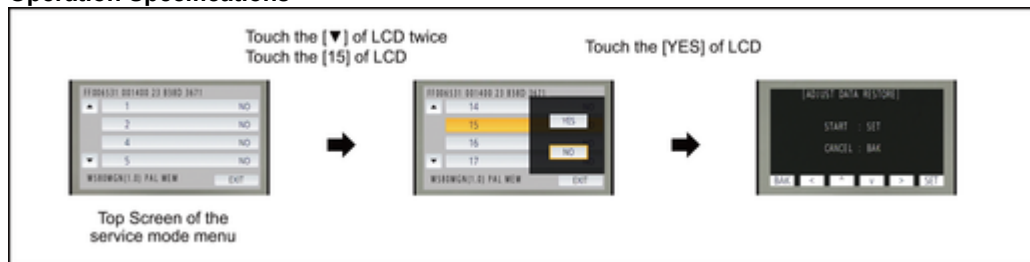
#### End method of operation

- Press the power button to turn the unit off.

## 6.5 Restore the backed up adjustment data

Touch the [15] of LCD, select restoring the backed up adjustment data from SD card to the unit.

#### Operation Specifications



#### Function description

Restore the adjustment data to new or repaired Main P.C.B. from SD card that the data backed up from original Main P.C.B. before repairs or replacement.

To backup the adjustment data, use "6.4. Adjustment function for the Service".

#### Restoring procedure



**End method of operation**

- Press the power button to turn the unit off.

# 7 Service Fixture & Tools

## 7.1 Service Fixture and Tools

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

Parts name	Parts No.	Remarks
Zoom Guide Shaft	VMS8231	2 use

(\* When Installing the MOS Unit )

## 7.2 When Replacing the Main P.C.B.

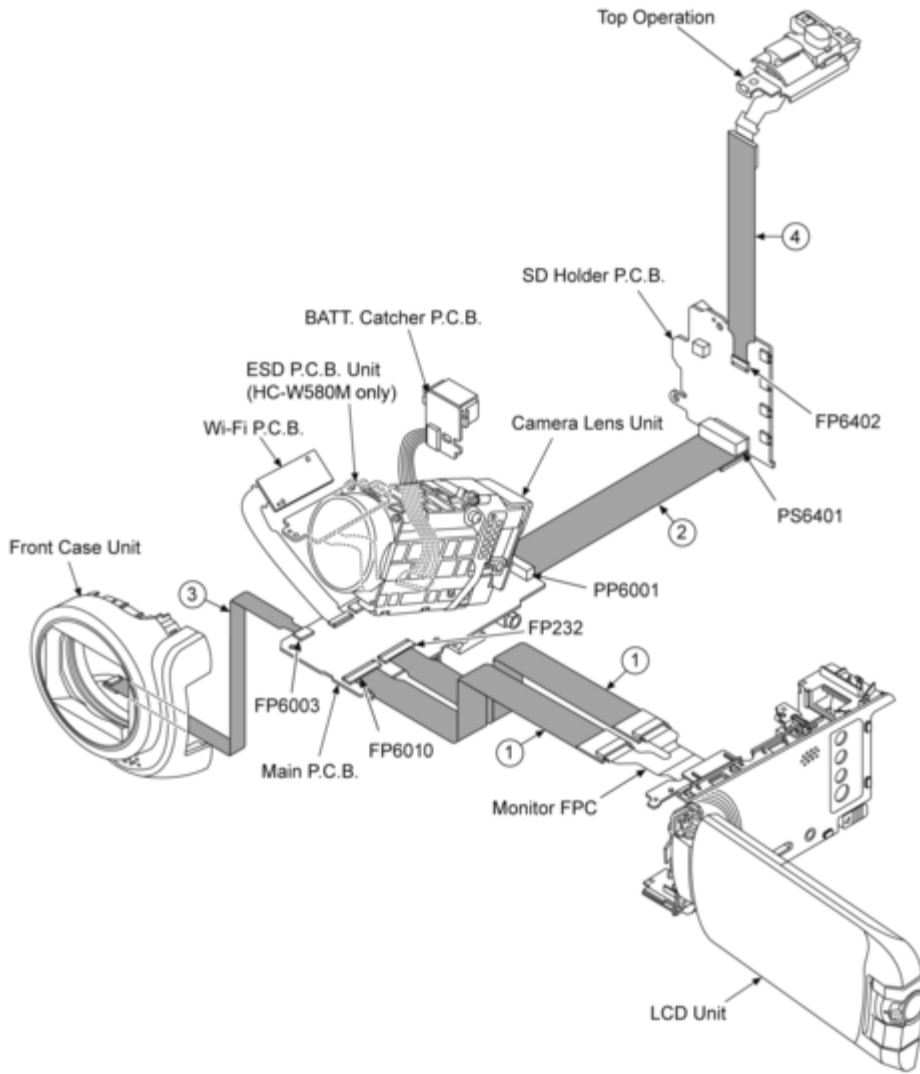
After replacing the MAIN P.C.B., be sure to achieve adjustment.

## 7.3 Service Position

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

No.	Parts No.	Connection	Form
1	RFKZ0354	FP6010(MAIN) - MONITOR FPC	37PIN 0.3 FFC
1	RFKZ0354	FP232(MAIN) - MONITOR FPC	37PIN 0.3 FFC
2	RFKZ0444	PP6001(MAIN) - PS6401(SD HOLDER)	50PIN 0.5 B to B
3	VFK1480	FP6003(MAIN) - ECM FPC	6PIN 0.5 FFC
4	VFK1440	FP6402(SD HOLDER) - TOP OPERATION	10PIN 0.5 FFC

### 7.3.1 Extention Cable Connection



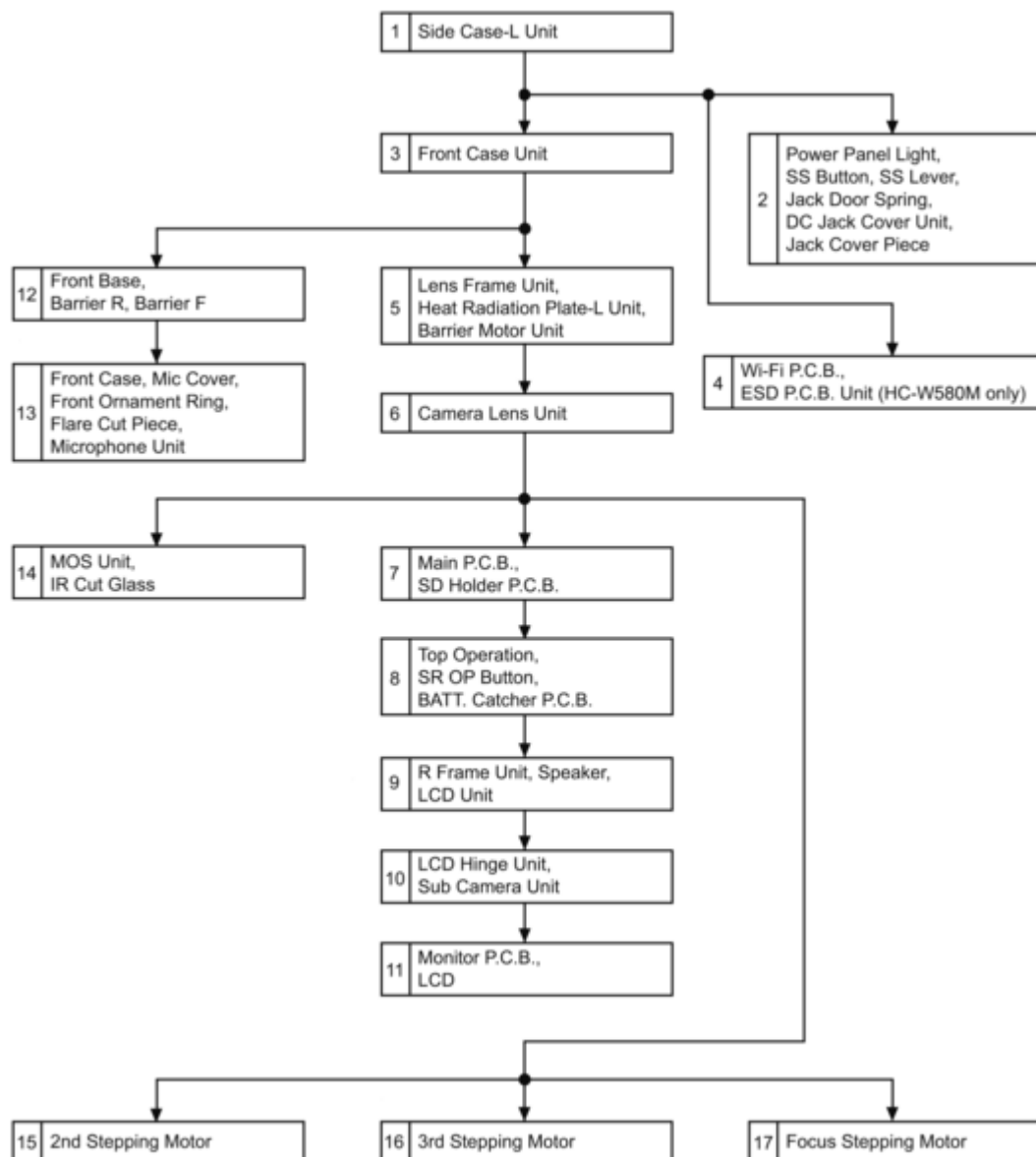


# 8 Disassembly and Assembly Instructions

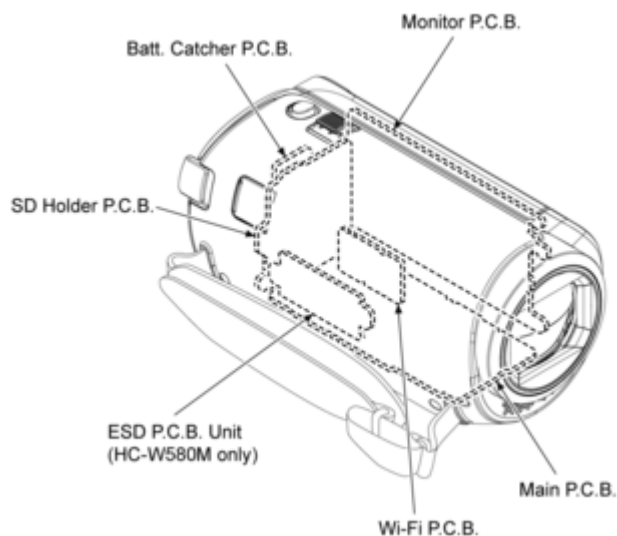
## 8.1 Disassembly Flow Chart for the Unit

This is a disassembling chart.

When assembling, perform this chart conversely.



## 8.2 PCB Location



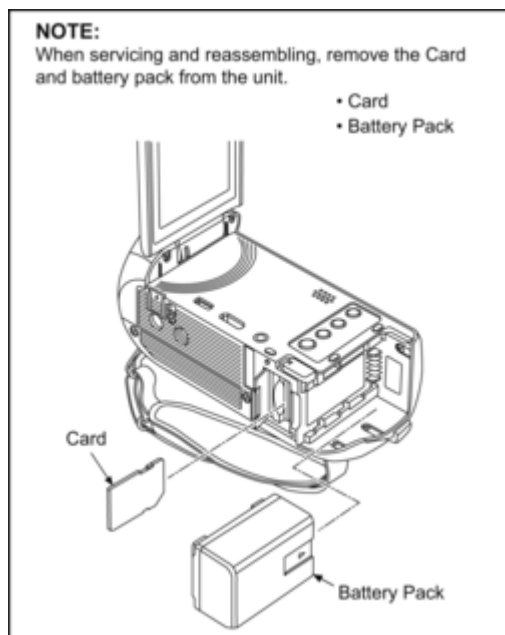
## 8.3 Disassembly Procedure for the Unit

No.	Item	Fig.	Removal
1	Side Case-L Unit	<a href="#">(Fig. D1)</a> <a href="#">(Fig. D2)</a>	Screw (A) x 5
			Screw (B) x 1
			Locking tab x 5
			Projecting part x 1
			Side Case-L Unit
2	Power Panel Light, SS Button, SS Lever, Jack Door Spring, DC Jack Cover Unit, Jack Cover Piece	<a href="#">(Fig. D3)</a>	Power Panel Light
			Locking tab x 1
			SS Button
			Screw (C) x 1
			Locking tab x 2
			Locking tab x 2
			SS Lever
			Convex x 4
			Jack Door Spring
			DC Jack Cover Unit
			Jack Cover Piece
3	Front Case Unit	<a href="#">(Fig. D4)</a>	Screw (D) x 1
			Screw (E) x 2
			FP6003 (Flex)
			Locking tab x 1
			Convex x 2
		<a href="#">(Fig. D5)</a>	Front Case Unit
4	Wi-Fi P.C.B., ESD P.C.B. Unit (HC-W580M only)	<a href="#">(Fig. D7)</a>	Flex A
			Screw (G) x 1
			Wi-Fi P.C.B.
			Flex B (HC-W580M only)
			Screw (G) x 1 (HC-W580M only)
			ESD P.C.B. Unit (HC-W580M only)
5	Lens Frame Unit, Heat Radiation Plate-L Unit,	<a href="#">(Fig. D8)</a>	Screw (H) x 1
			Screw (I) x 1
			P6003 (Connector)

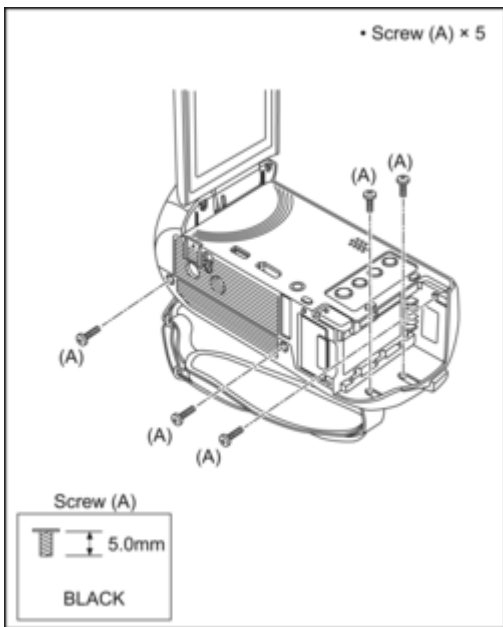
	Barrier Motor Unit		Screw (J) x 2
			Projecting part x 1
			Locking tab x 2
		(Fig. D9)	FP6004 (Flex)
			Screw (K) x 3
			Barrier Motor Unit
			Hooking part x 2
			Heat Radiation Plate-L Unit
			Lens Frame Unit
6	Camera Lens Unit	(Fig. D10)	FP301 (Flex)
			FP6008 (Flex)
			Convex x 2
			Camera Lens Unit
7	Main P.C.B., SD Holder P.C.B.	(Fig. D11)	Screw (L) x 1
			Screw (M) x 1
			Screw (N) x 1
			Convex x 2
			Heat Radiation Plate Unit
			Screw (N) x 1
			Screw (O) x 1
			P6401 (Connector)
			FP6402 (Flex)
			FP232 (Flex)
			FP6010 (Flex)
		(Fig. D12)	Convex x 4
			SR Slide Lever
			Locking tab x 4
			Convex x 2
			Bottom Frame Unit
			PP6001 (Connector)
			SD Holder P.C.B.
			Main P.C.B.
8	Top Operation, SR OP Button, BATT. Catcher P.C.B.	(Fig. D13)	Locking tab x 1
			Hooking part x 1
			Top Operation
			Locking tab x 1
			Hooking part x 1
			Convex x 3
			SR OP Button
		(Fig. D14)	BATT. Catcher P.C.B.
9	R Frame Unit, Speaker, LCD Unit	(Fig. D15)	Screw (P) x 2
		(Fig. D16)	Locking tab x 4
			Convex x 1
			LCD Lever
			R Frame Unit
		(Fig. D17)	Convex x 4
			Hooking part x 4
			Speaker
			Convex x 2
			LCD Unit
10	LCD Hinge Unit, Sub Camera Unit	(Fig. D18)	Screw (Q) x 2
			Screw (R) x 2
			Locking tab x 8
			LCD Case (T) Unit
			FP253 (Flex)

			FP902 (Flex)
		(Fig. D19)	Projecting part x 1
			Convex x 1
			LCD Hinge Unit
			Screw (S) x 1
			FP252 (Flex)
			Convex x 1
			LCD Frame A
			Locking tab x 1
			Convex x 2
			Sub Camera Unit
11	Monitor P.C.B., LCD	(Fig. D20)	FP904 (Flex)
			FP905 (Flex)
			Locking tab x 1
			Hooking part x 1
			Monitor P.C.B.
		(Fig. D21)	Locking tab x 4
			LCD
			TP Tape
			LCD Frame B
			LCD Case (B) Unit
		(Fig. D22)	Reflection Sheet
			Light Guide Plate
			Diffusion Sheet
			Prism Sheet B
			Prism Sheet A
			LGP Holder
12	Front Base, Barrier R, Barrier F	(Fig. D23)	Projecting part x 3
			Lens Damper Rubber
			Screw (T) x 4
			Convex x 3
			Front Base
			Barrier R
			Barrier F
13	Front Case, Mic Cover, Front Ornament Ring, Flare Cut Piece, Microphone Unit	(Fig. D24)	Screw (U) x 1
			Hooking part x 3
			Flare Cut Piece
			Front Ornament Ring
			Mic Cover
			Convex x 1
			Mic Sponge-F
			Mic Sponge-M
			Microphone Unit
			Mic Sponge-R
			Front Case
14	MOS Unit, IR Cut Glass	(Fig. D25)	Screw (V) x 3
			MOS Unit
			MOS Cushion
			IR Cut Glass
		(Fig. D26)	NOTE: (When Installing
		(Fig. D27)	the MOS Unit)
15	2nd Stepping Motor	(Fig. D28)	Solder x 16 points
			Screw (W) x 3
			Convex x 5
		(Fig. D29)	Screw (X) x 2

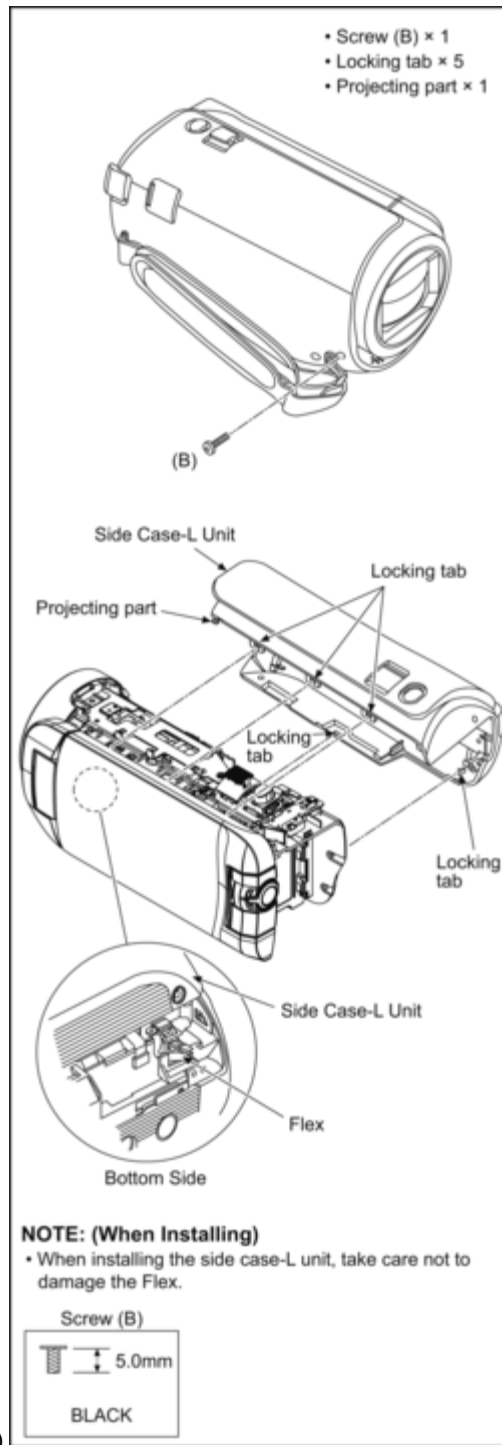
			Convex x 4
			2nd Stepping Motor
16	3rd Stepping Motor	(Fig. D30)	Solder x 4 points
		(Fig. D31)	Screw (Z) x 2
			3rd Stepping Motor
17	Focus Stepping Motor	(Fig. D32)	Solder x 8 points
			Screw (a) x 1
			Convex x 1
		(Fig. D33)	Screw (b) x 2
			Focus Stepping Motor



### 8.3.1 Removal of the Side Case-L Unit

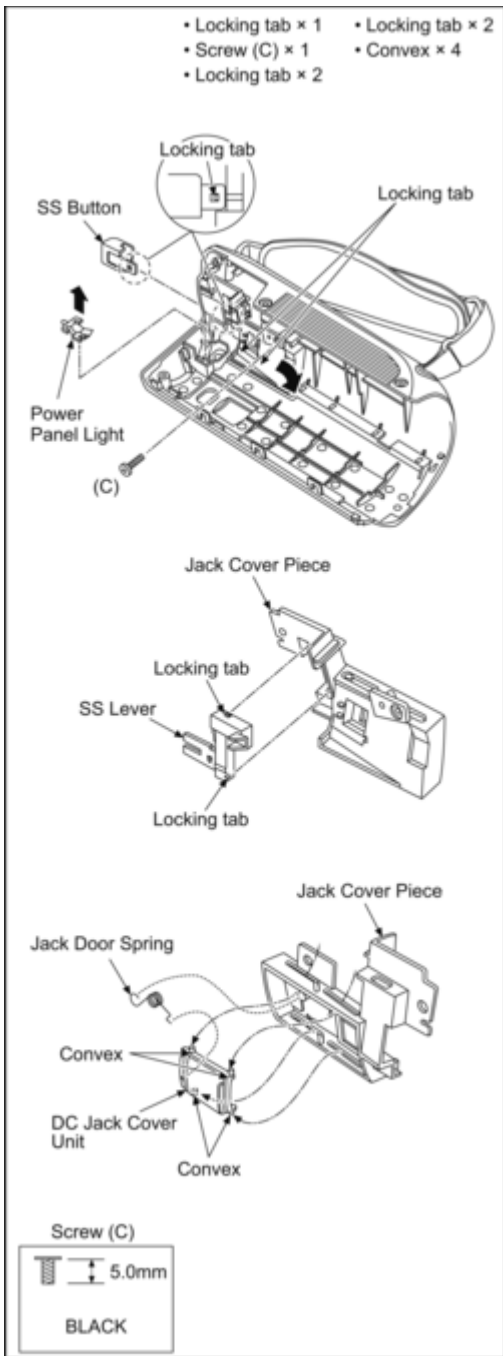


(Fig. D1)



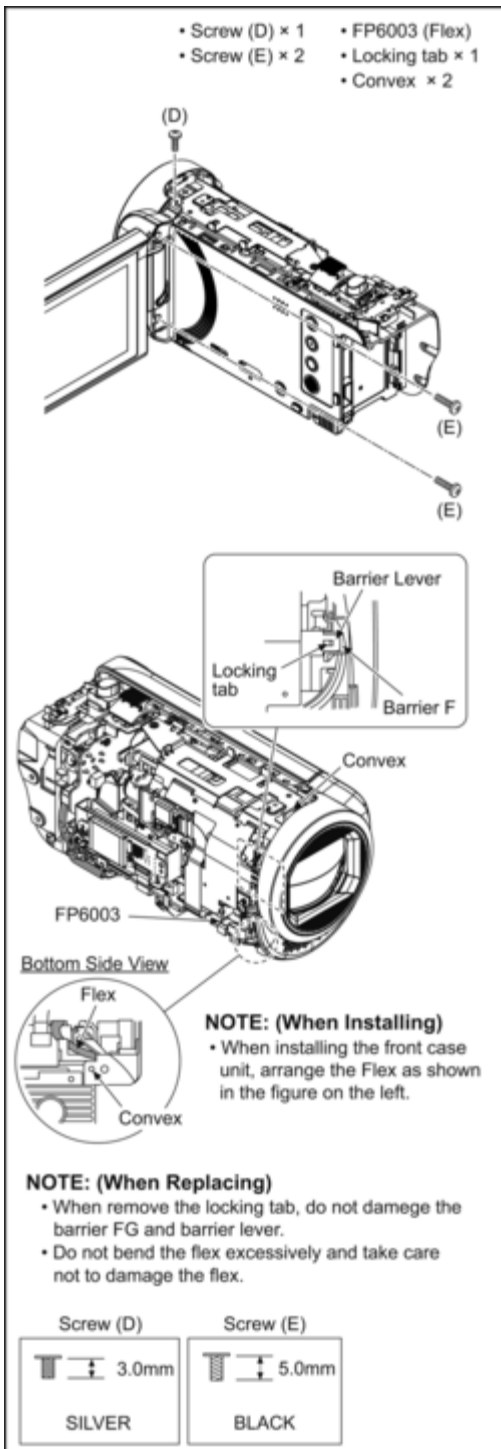
(Fig. D2)

### 8.3.2 Removal of the Power Panel Light, SS Button, SS Lever, Jack Door Spring, DC Jack Cover Unit, Jack Cover Piece

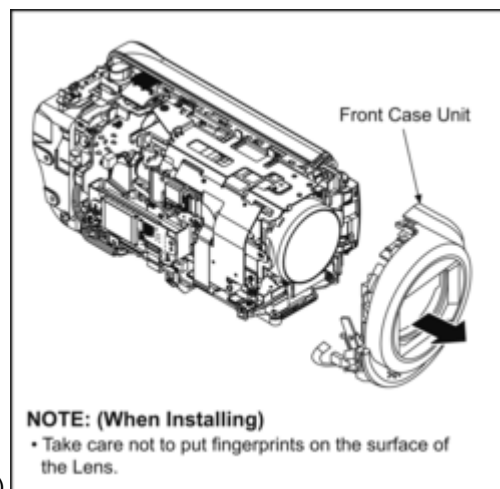


(Fig. D3)

### 8.3.3 Removal of the Front Case Unit



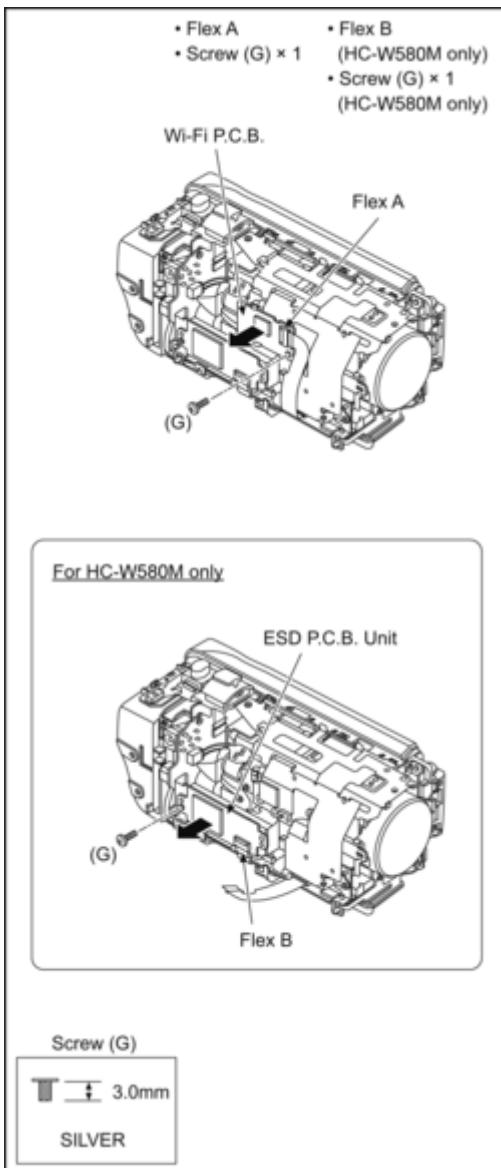
(Fig. D4)



(Fig. D5)

### 8.3.4 Removal of the Wi-Fi P.C.B., ESD P.C.B. Unit (HC-W580M only)

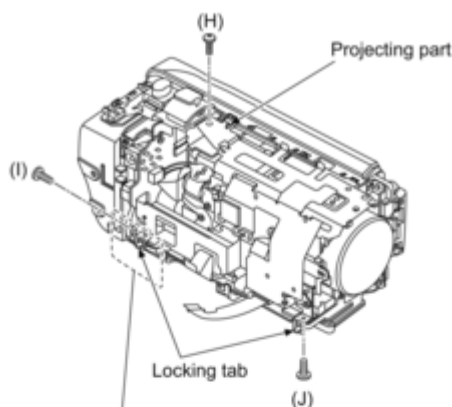




(Fig. D7)

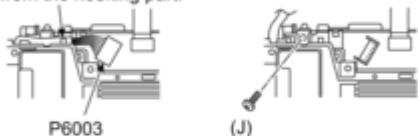
### 8.3.5 Removal of the Lens Frame Unit, Heat Radiation Plate-L Unit, Barrier Motor Unit

- Screw (H) × 1 • P6003 (Connector) • Projecting part × 1
- Screw (I) × 1 • Screw (J) × 2 • Locking tab × 2



Bottom Side

- Remove the Batt. catcher wire from the hooking part.



**NOTE: (When Removing)**

- When removing the connector (P6003), raise the tip, and then detach the connector.

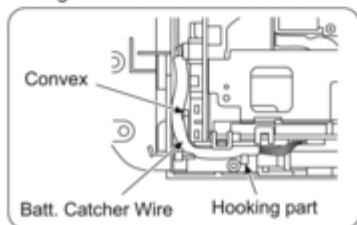



**NOTE: (When Installing)**

- When install the connector (P6003), Insert the base of the connector first (1), and then press the tip (2).



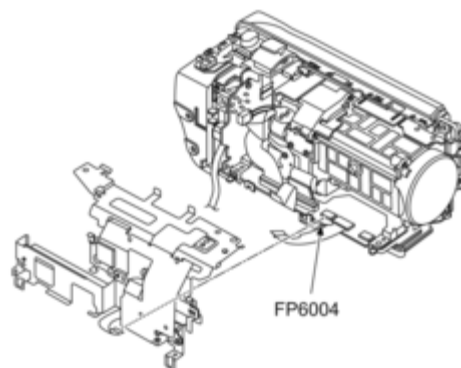
- Arrangement of the Batt. Catcher Wire



Screw (H)	Screw (I)	Screw (J)
 3.0mm	 3.0mm	 5.0mm
SILVER	RED	BLACK

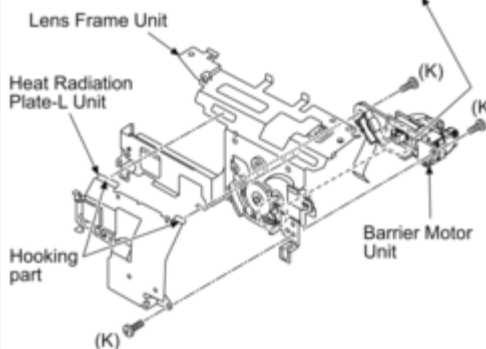
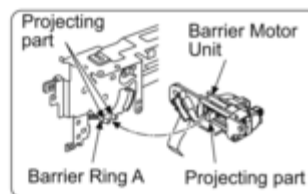
(Fig. D8)

- FP6004 (Flex) • Hooking part × 2
- Screw (K) × 3



**NOTE: (When Installing)**

- Engage the projecting part of the barrier motor unit in between two projecting part of the barrier ring A.



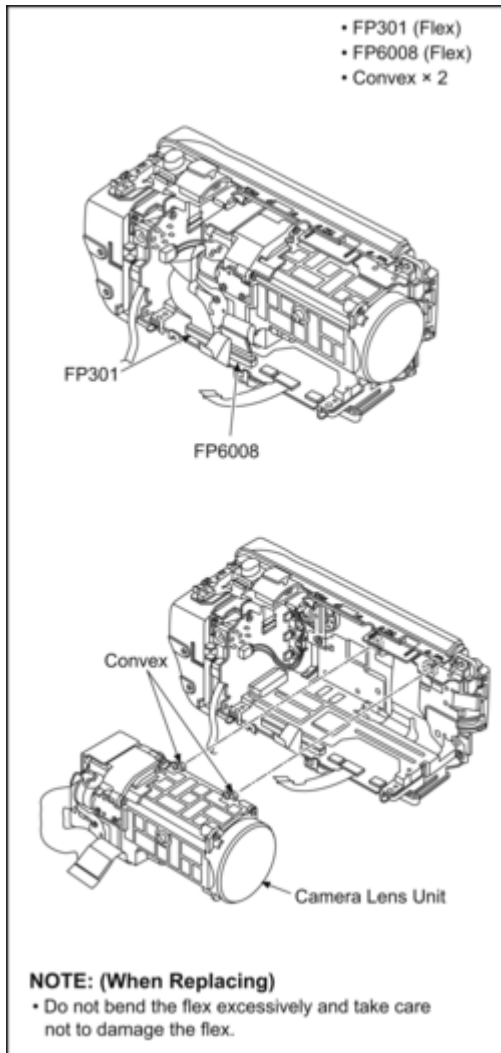
**NOTE: (When Replacing)**

- Do not bend the flex excessively and take care not to damage the flex.

Screw (K)
 3.0mm
RED

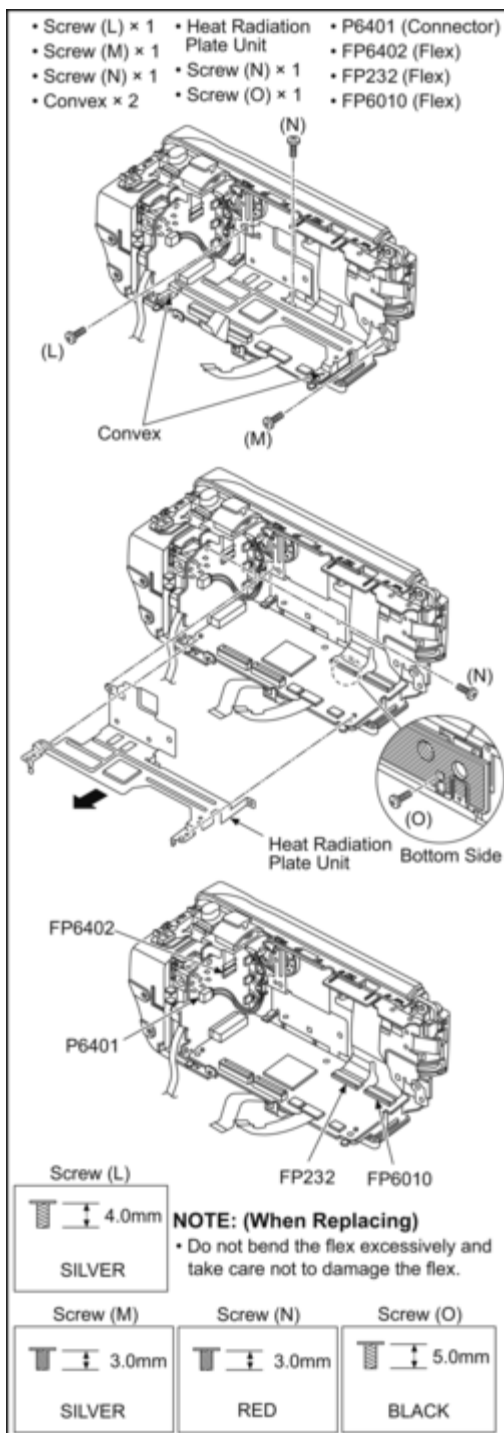
(Fig. D9)

### 8.3.6 Removal of the Camera Lens Unit

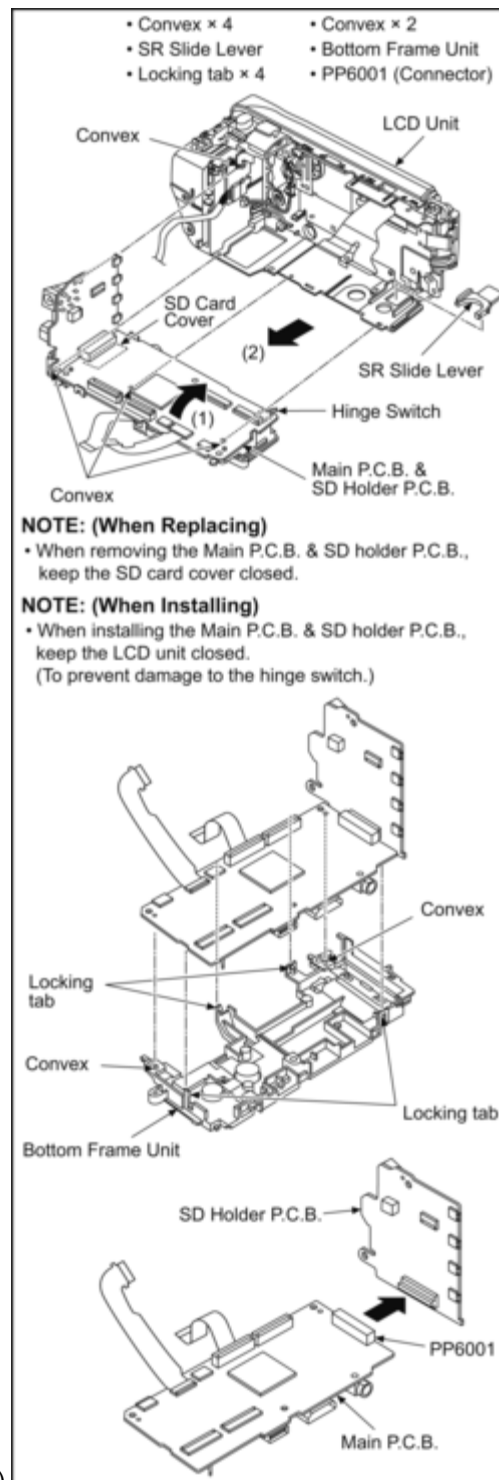


(Fig. D10)

### 8.3.7 Removal of the Main P.C.B., SD Holder P.C.B.

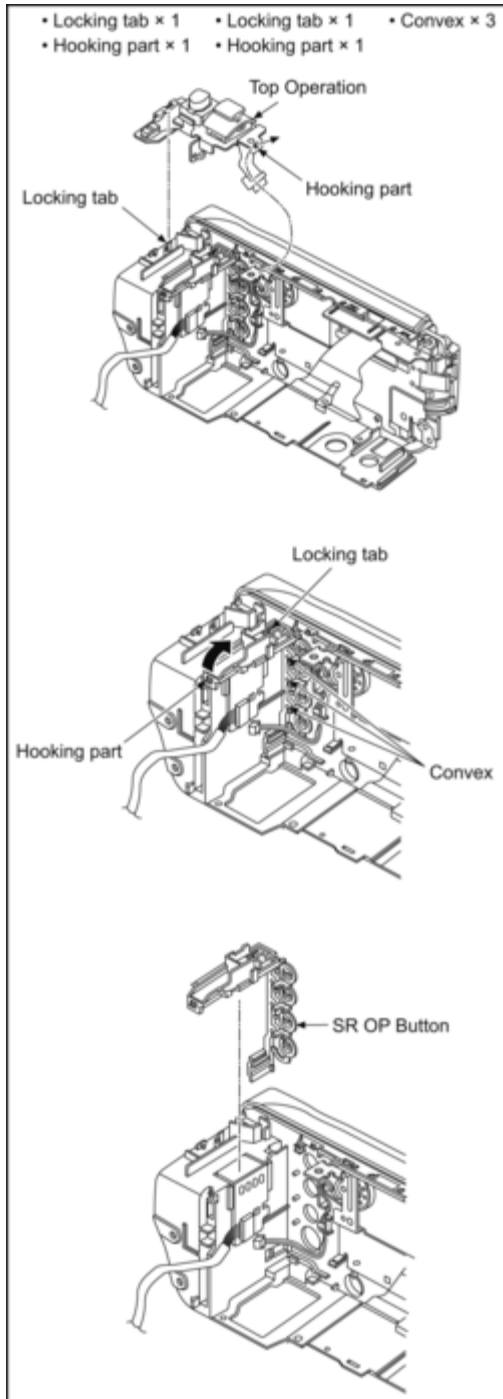


(Fig. D11)

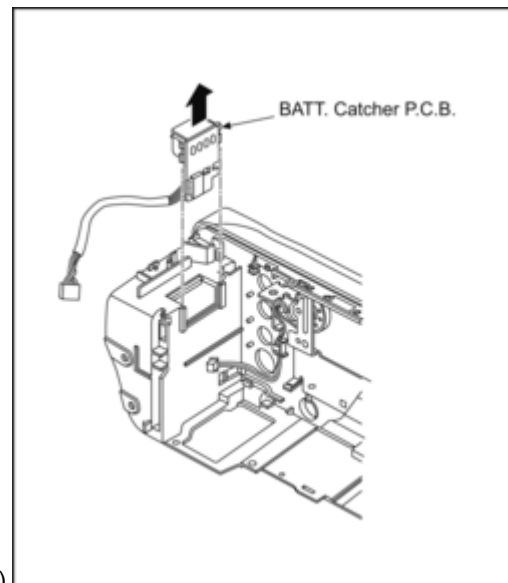


(Fig. D12)

### 8.3.8 Removal of the Top Operation, SR OP Button, BATT. Catcher P.C.B.

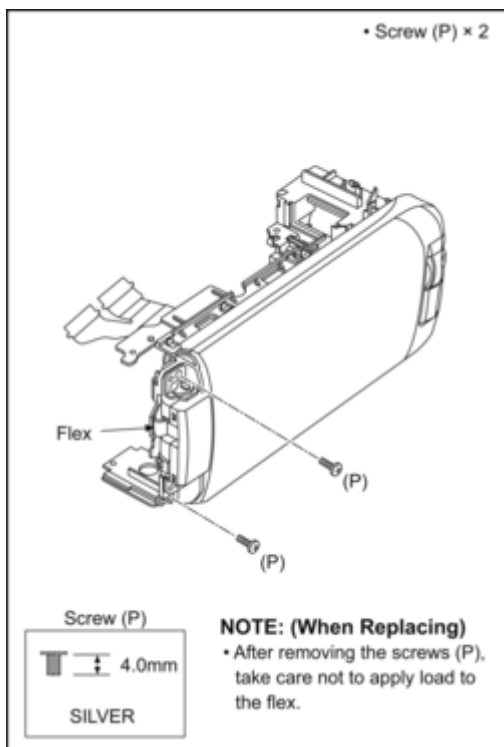


(Fig. D13)

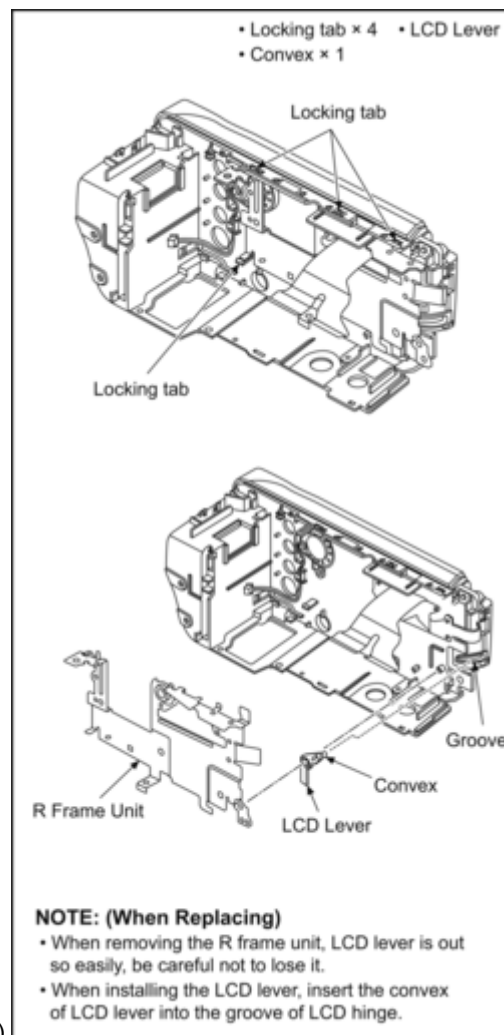


(Fig. D14)

### 8.3.9 Removal of the R Frame Unit, Speaker, LCD Unit

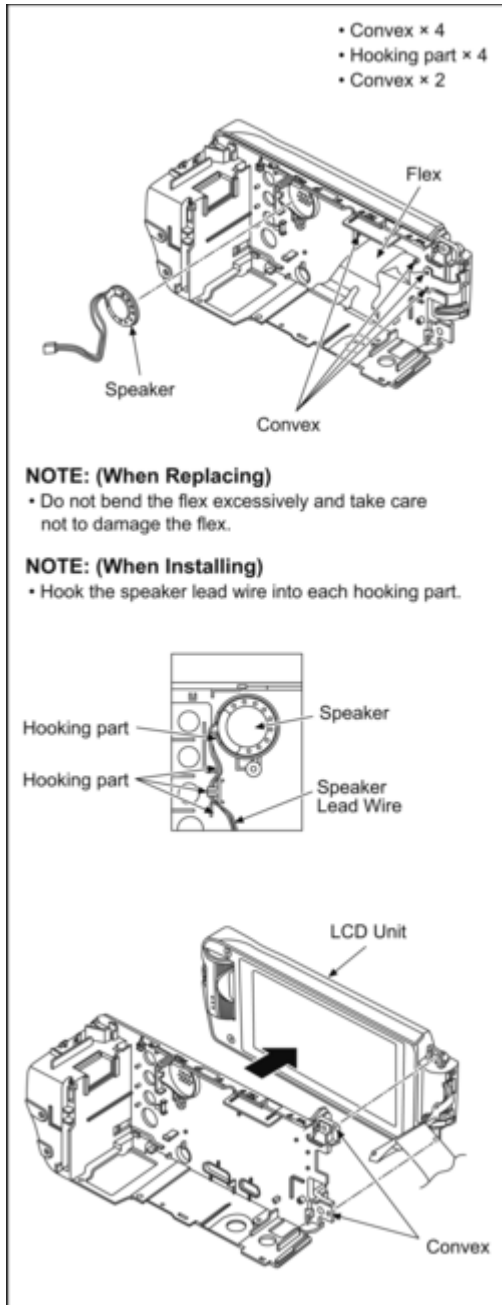


(Fig. D15)



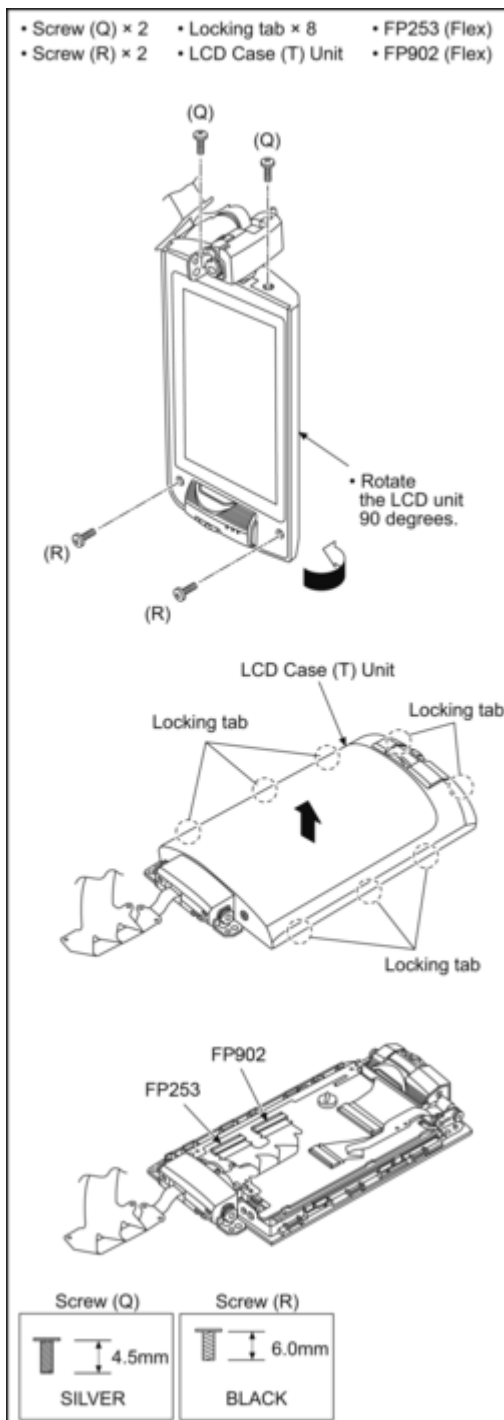
(Fig. D16)

(Fig.

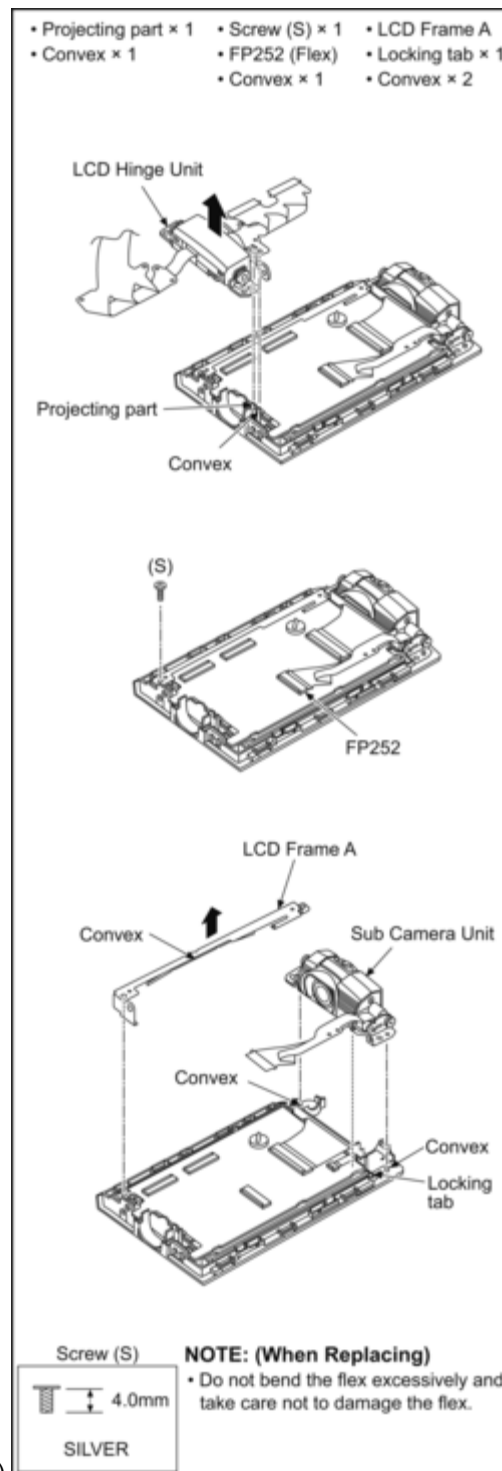


D17)

### 8.3.10 Removal of the LCD Hinge Unit, Sub Camera Unit



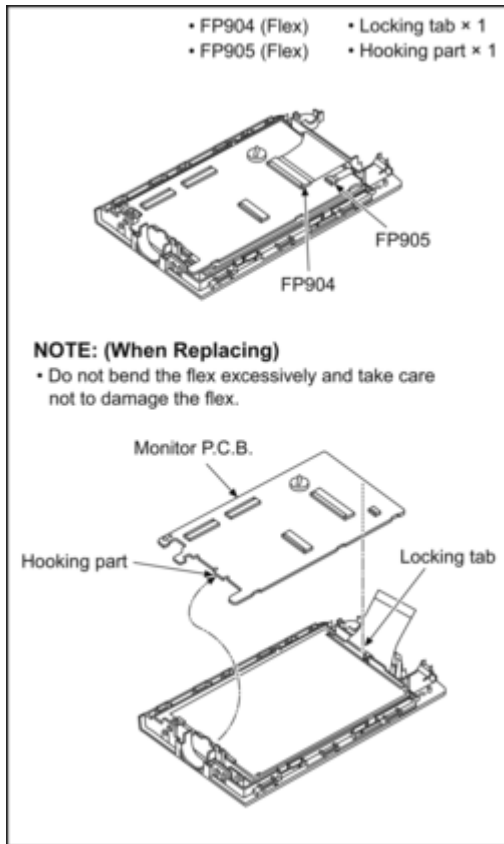
(Fig. D18)



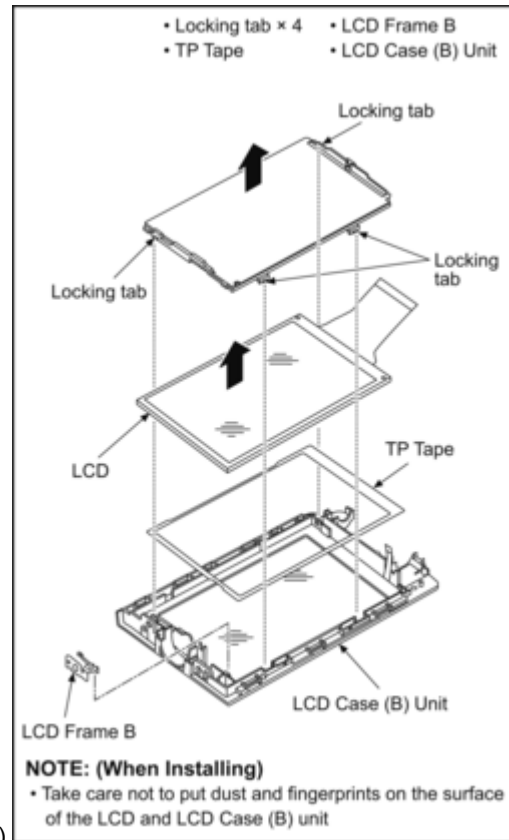
(Fig. D19)

### 8.3.11 Removal of the Monitor P.C.B., LCD



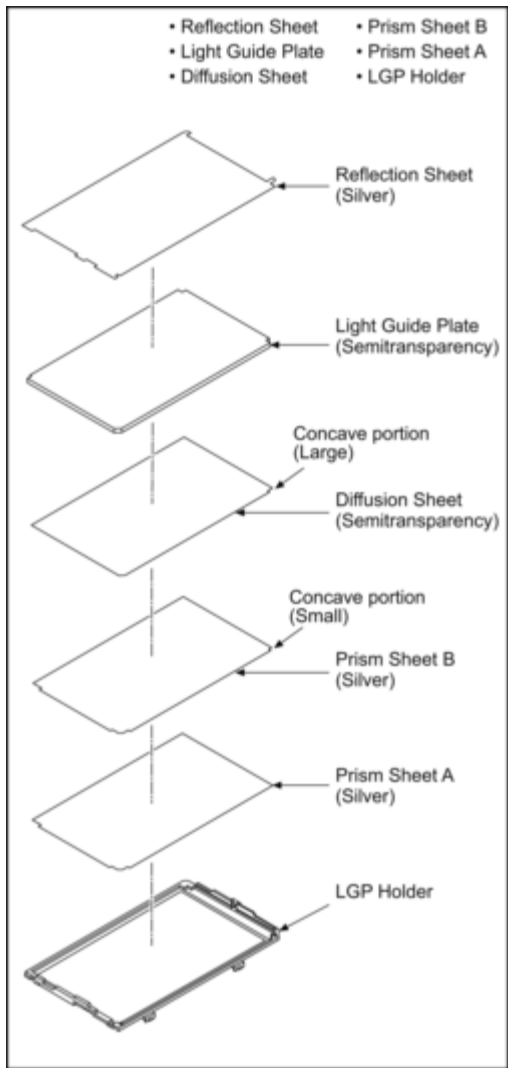


(Fig. D20)



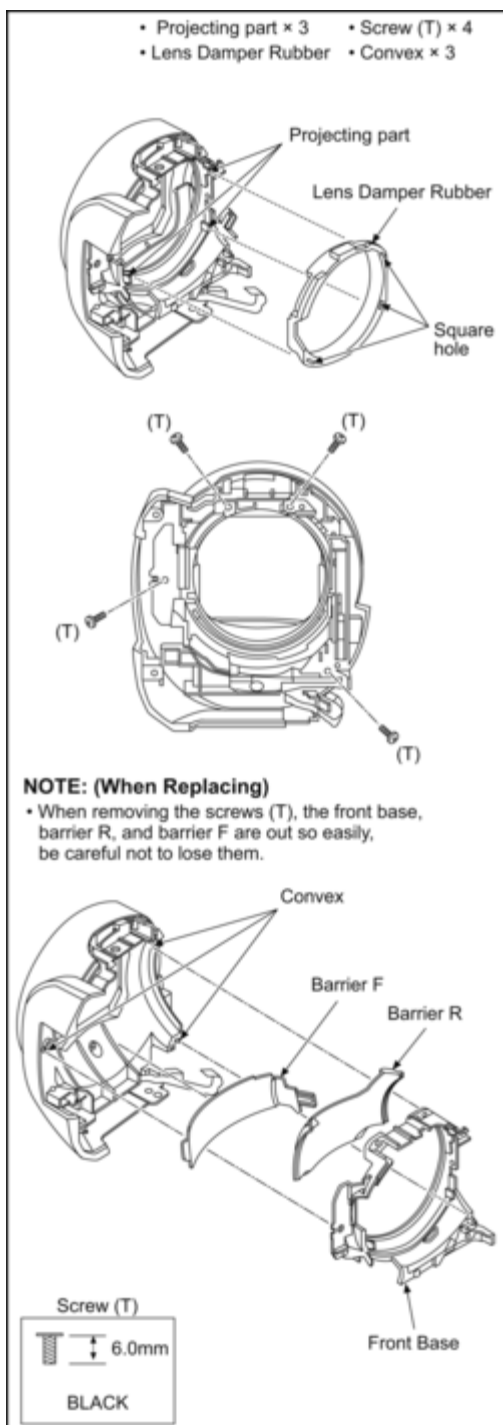
(Fig. D21)

(Fig.



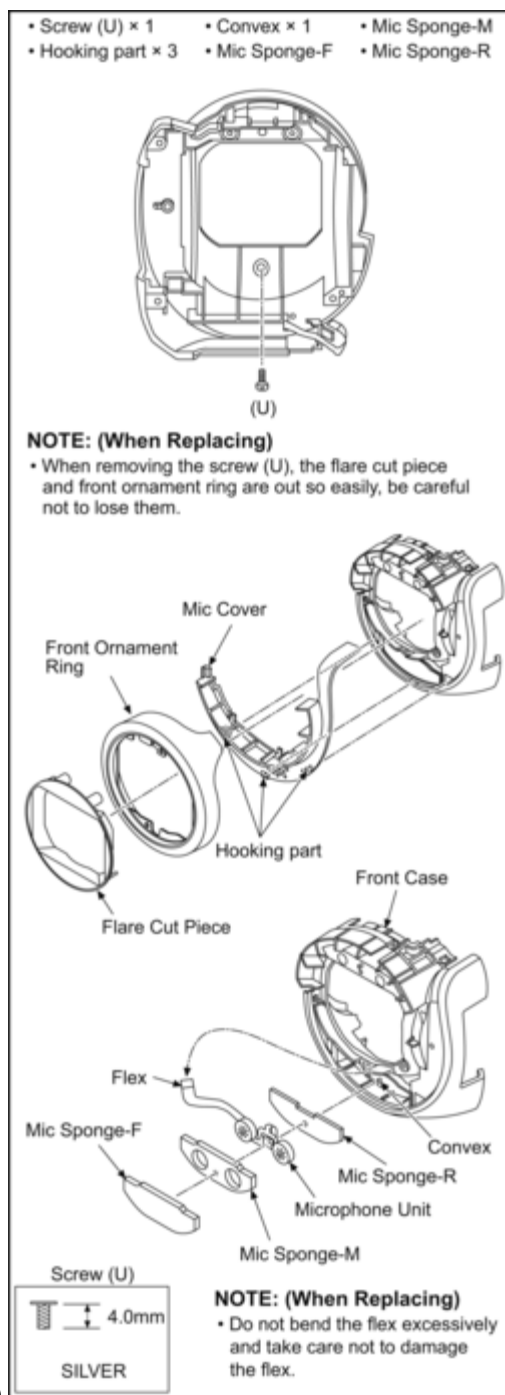
D22)

### 8.3.12 Removal of the Front Base, Barrier R, Barrier F



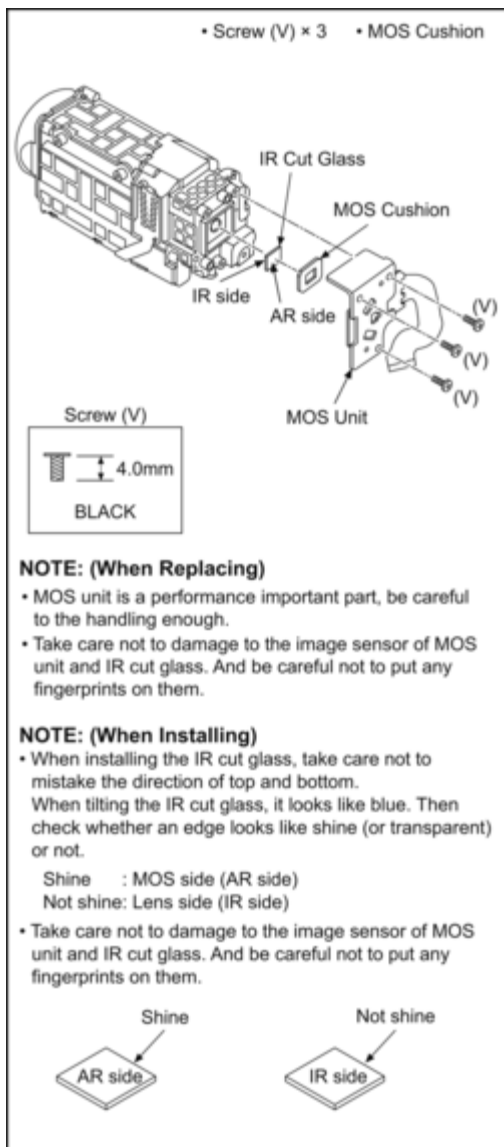
(Fig. D23)

### 8.3.13 Removal of the Front Case, Mic Cover, Front Ornament Ring, Flare Cut Piece, Microphone Unit

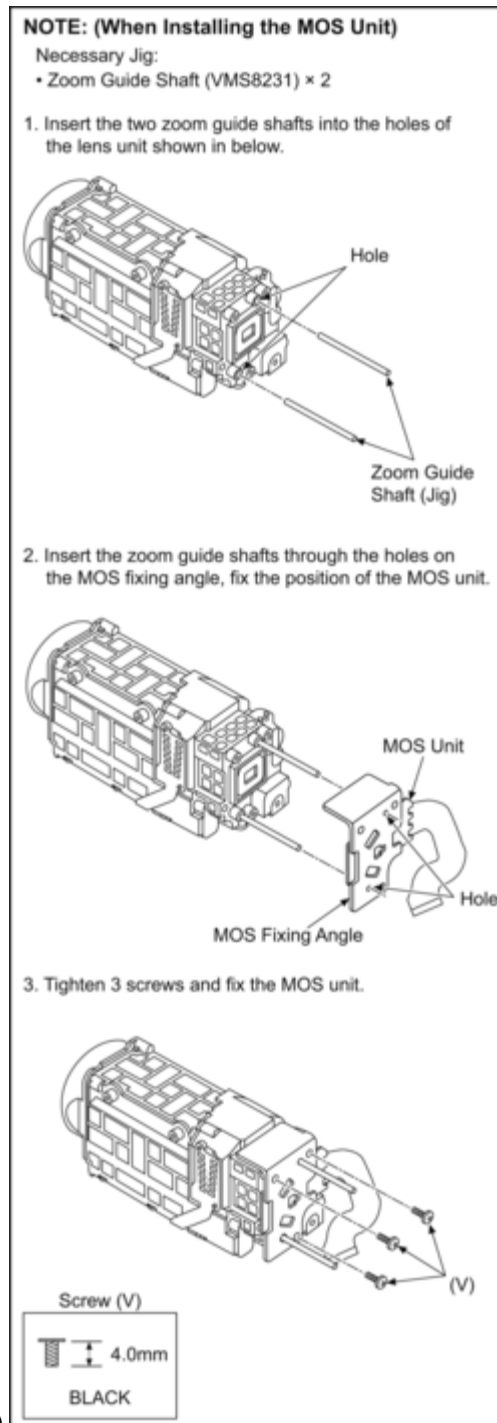


(Fig. D24)

### 8.3.14 Removal of the MOS Unit, IR Cut Glass



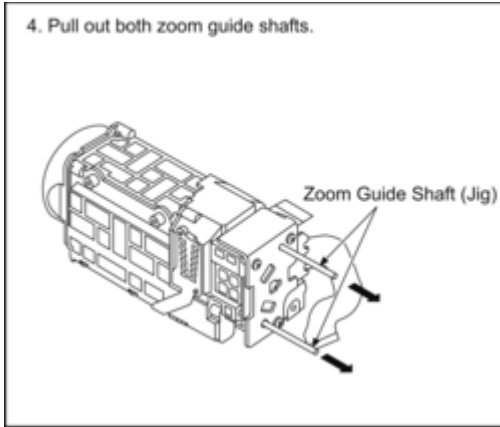
(Fig. D25)



(Fig. D26)

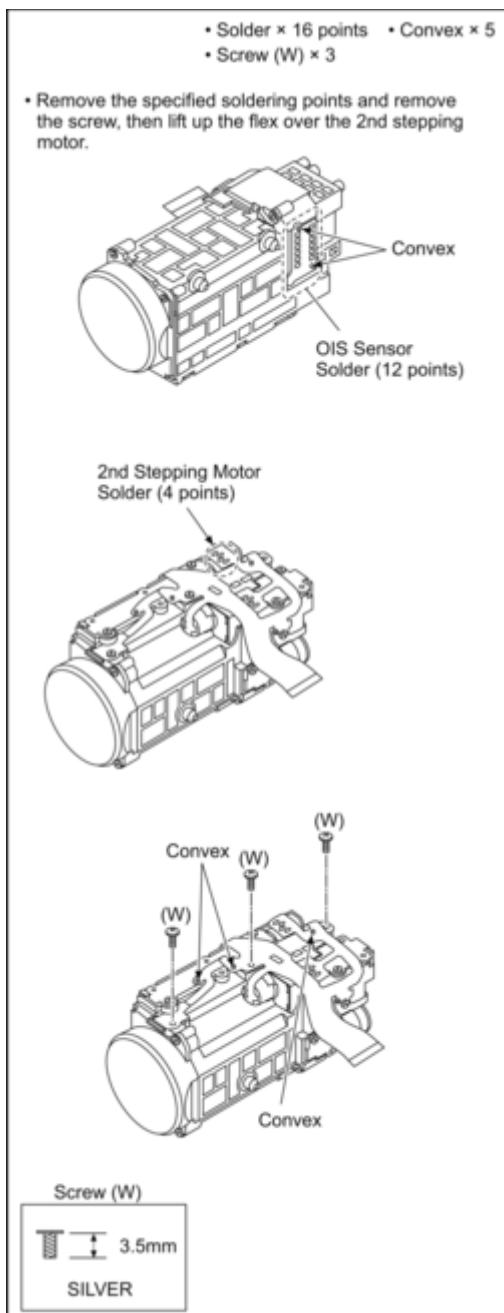
(Fig.)

4. Pull out both zoom guide shafts.

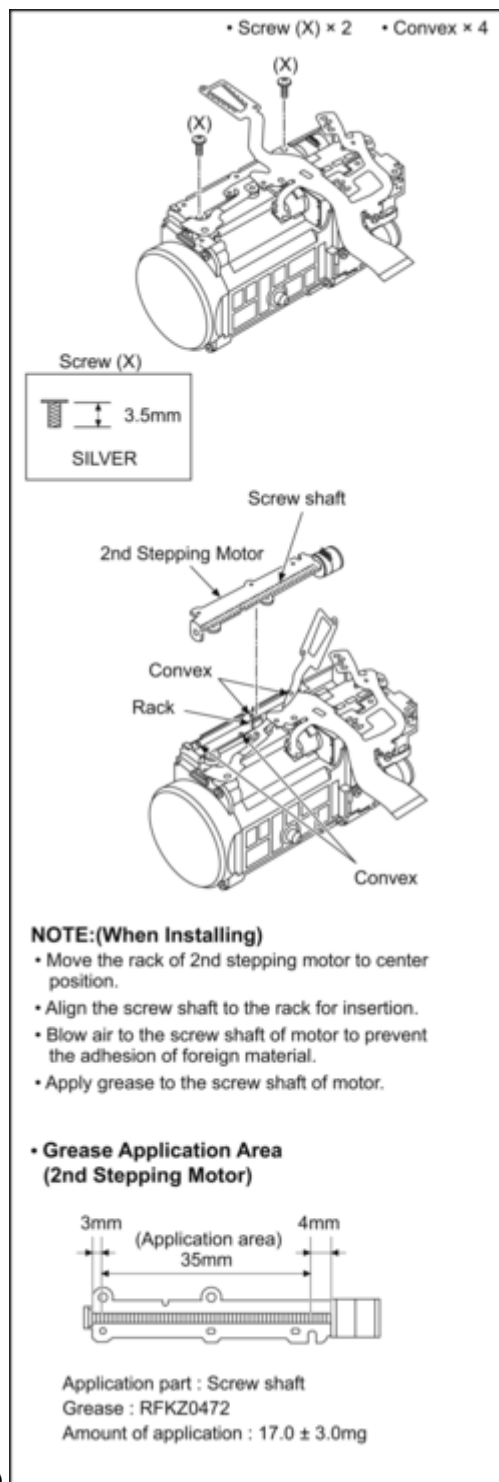


D27)

### 8.3.15 Removal of the 2nd Stepping Motor

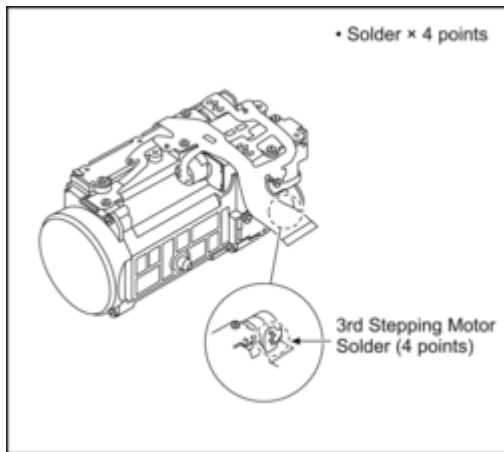


(Fig. D28)

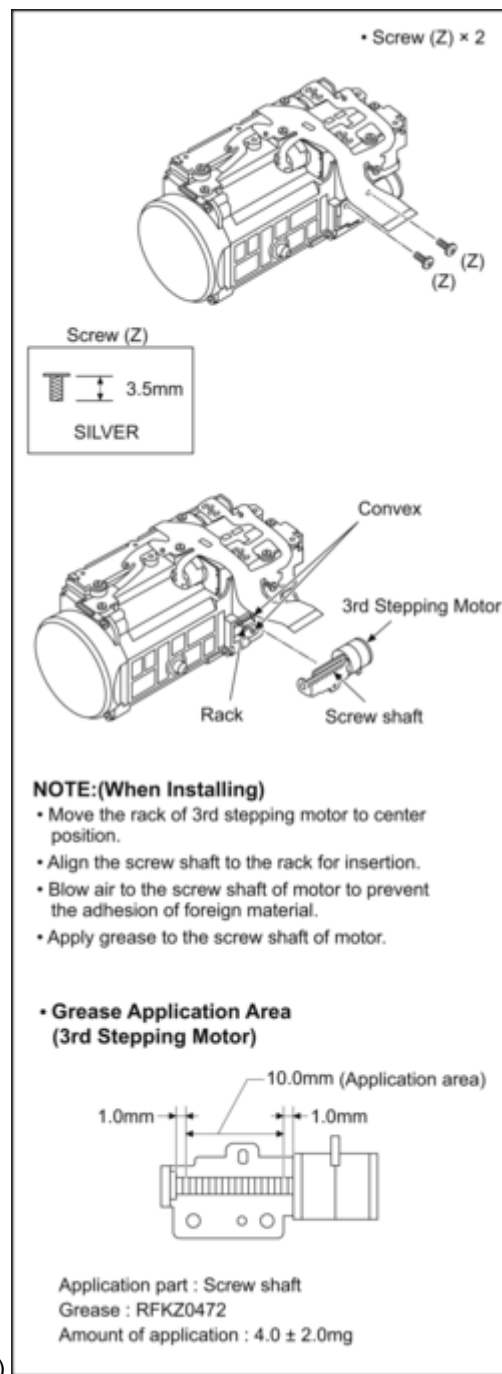


(Fig. D29)

### 8.3.16 Removal of the 3rd Stepping Motor



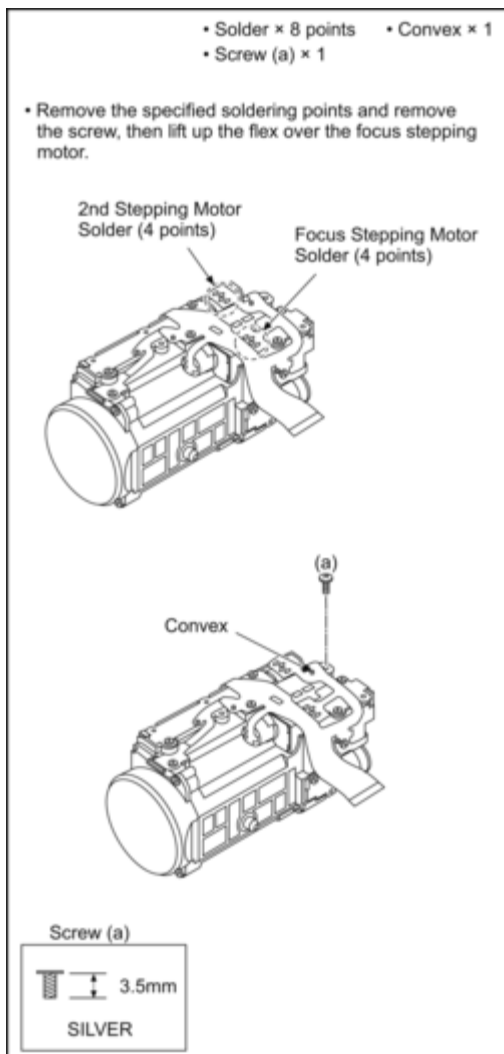
(Fig. D30)



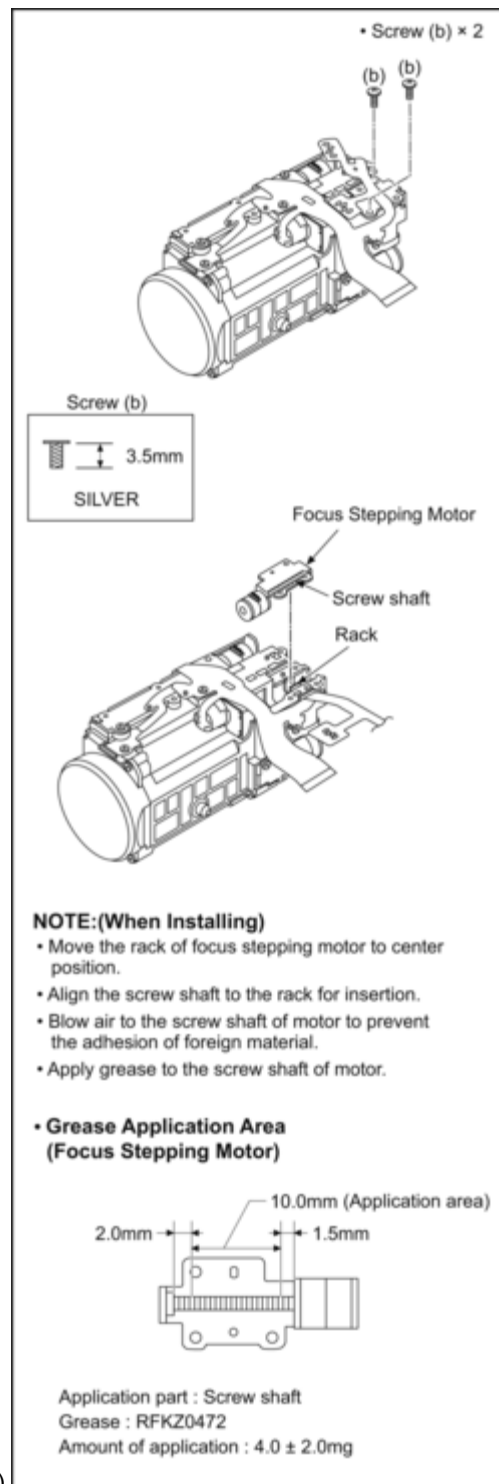
(Fig. D31)

### 8.3.17 Removal of the Focus Stepping Motor





(Fig. D32)



(Fig. D33)

# 9 Measurements and Adjustments

## 9.1 Electric Adjustment

- An exclusive jig are necessary for electric adjustment.
- Connection method of the main unit and an exclusive adjustment jig as follows.

Figure of connection

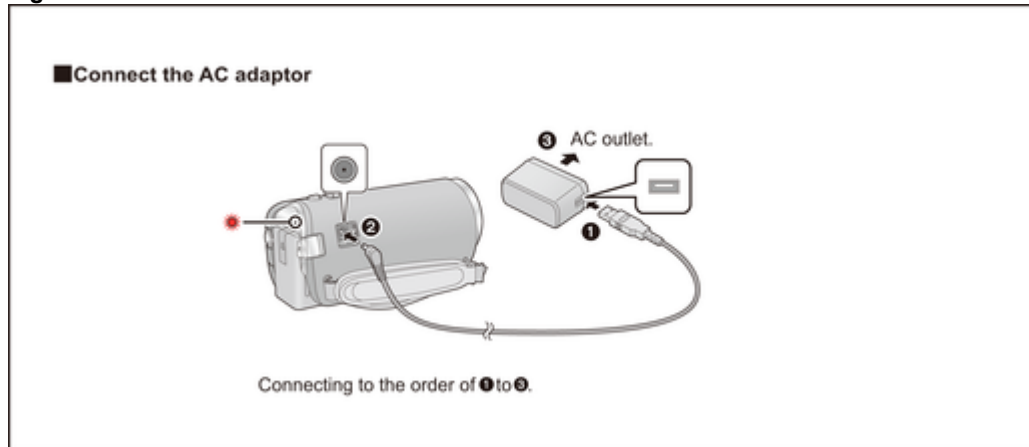
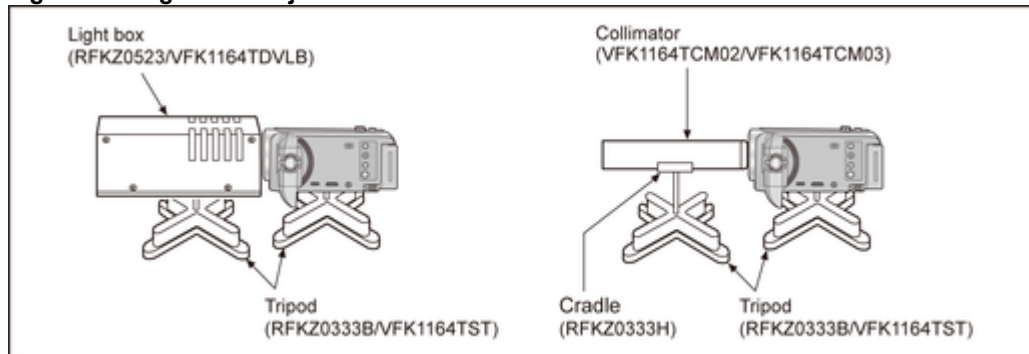


Figure of image when adjustment



Part Number of jig

1. Basic Jig

Item	Contents
AC adaptor	Banded with camcorder
DC Cable	Banded with camcorder

2. Optical Jig for Camera Adjustment

Item	Part number	Remarks
Light box	VFK1164TDVLB/RFKZ0523*	Need external power supply: 12V $\pm$ 0.1V /1.8A or over
Collimator with focus chart	VFK1164TCM02/VFK1164TCM03	Same as DSC
CC filter	3100K/5100K VFK1164CC10G	Need 2 set. For indoor/outdoor white balance adjustment
C2 Filter	5100K VFK1164LBB2	For outdoor white balance adjustment

C8 Filter	5100K	VFK1164LBB8	For outdoor white balance adjustment
ND Filter 0.1	3100K	VFK1164ND01	For indoor white balance adjustment
ND Filter 0.6	3100K	VFK1164ND06	For indoor white balance adjustment
Adjustment chart for Level Shot	Banded with this Manual		For Level shot adjustment

\* RFKZ0523 (same as DSC) is recommended.

## [Level Shot Adjutment Chart]

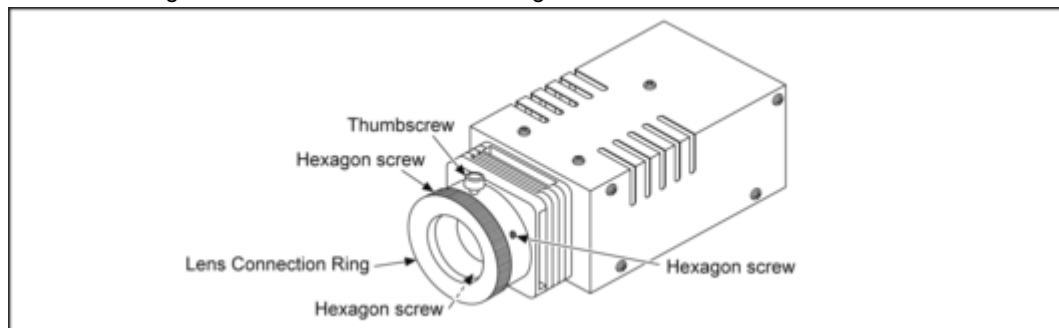


## 9.1.1 About Light Box

### When using VFK1164TDVLB Light Box

If using VFK1164TDVLB Light Box, remove the lens connection ring by loosing thumbscrew and three hexagon screws.

\* RFKZ0523 Light Box has no lens connection ring.

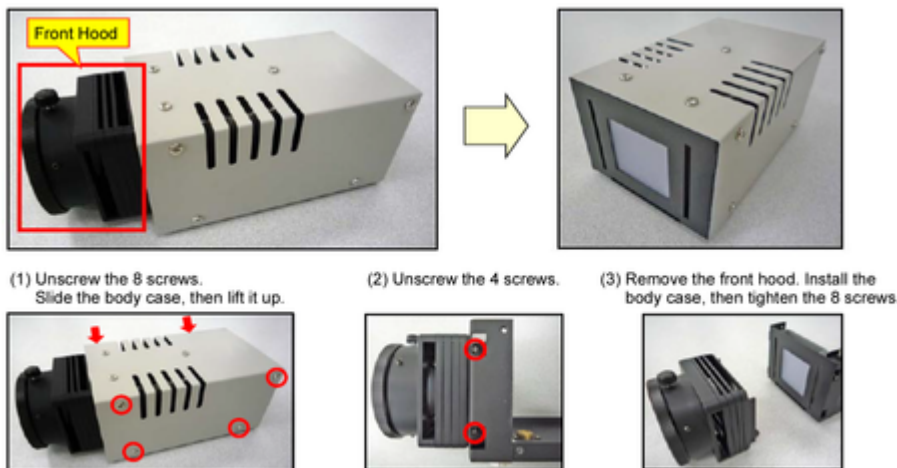


### How to remove the Front Hood

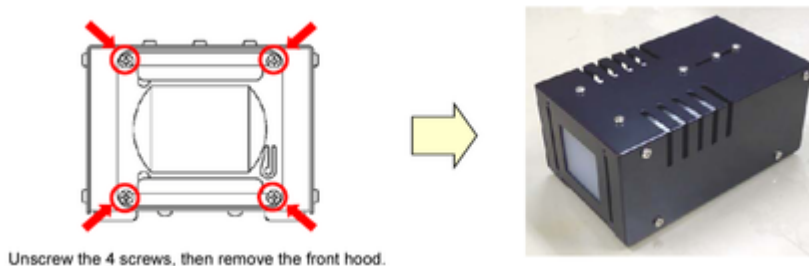
In order to utilize maximum of the diffusing surface of light box, some adjustment items need the distance between diffusing surface of light box and camera body becomes several cent-meters.

Before the adjustments, remove the front hood of light box following steps below.

#### [ For VFK1164TDVLB Light Box ]



#### [ For RFKZ0523 Light Box ]



Unscrew the 4 screws, then remove the front hood.

## 9.1.2 Adjustment Items

Adjustment item as follows.

Replacement part		Adjustments						Settings		
		Camera Adjustments *1	Zoom Tracking Adjustment	Indoor White Balance Adjustment	Outdoor White Balance Adjustment	Level Shot adjustment *2	Touch Panel Calibration	Model setting	Factory settings	
MAIN P.C.B.	IC701	LENS DRIVE IC	○	○	○	○	○	-	○	○
	IC751	ROLL GYRO	○	-	-	-	○	-	-	-
	IC1001	7CH DC/DC IC	○	○	○	○	○	-	-	-
	IC1421	REG 3V I/O	○	○	○	○	○	-	-	-
	IC3401	VENUS ENGINE	-	-	-	-	○	-	-	-
	IC3404	FLASH ROM	○	○	○	○	○	-	○	○
SD HOLDER P.C.B.	IC6401	PIT/YAW GYRO	○	-	-	-	○	-	-	-
	IC6411	ACCELEROMETER	-	-	-	-	○	-	-	-
ESD P.C.B. *3			-	-	-	-	○	-	-	-
Wi-Fi P.C.B.			-	-	-	-	○	-	-	○
LENS UNIT			○	○	○	○	○	-	-	-
MOS UNIT			○	○	○	○	○	-	-	-
LCD CASE (B) UNIT			-	-	-	-	○	○	-	-

\*1...IRIS adjustment, OIS hall amp adjustment, Missing pixels compensation, OIS gyro adjustment, AGS adjustment.

\*2...Accelerometer : Since the assembly is accompanied, always need to be adjusted.

\*3...HC-W580M only

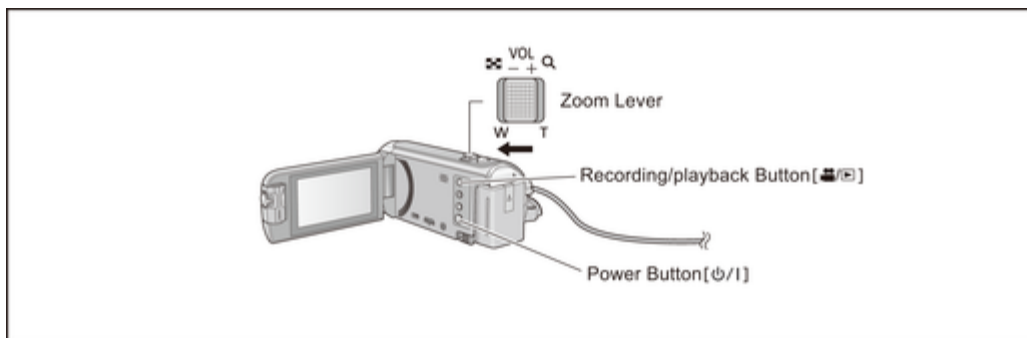
## 9.1.3 Adjustment Procedure

All adjustments except “Touch Panel Calibration” and “Factory Setting” performs using “14 Adjustment function for the service” in service mode menu.

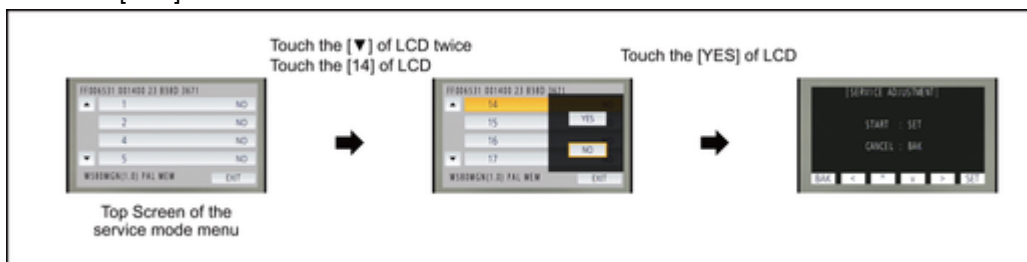
“Touch Panel Calibration” is performed using 16 of service mode menu and “Factory Setting” is performed using 1 of service mode menu. Refer to “6 Service mode” and “10 Factory Setting”.

### [Execute adjustment function for service]

1. While the power is turned OFF, keep pressing the “Power” button, “Zoom Lever” to W side and “Recording/Playback” button for more than 3 seconds until the top screen of the Service Mode Menu being displayed.



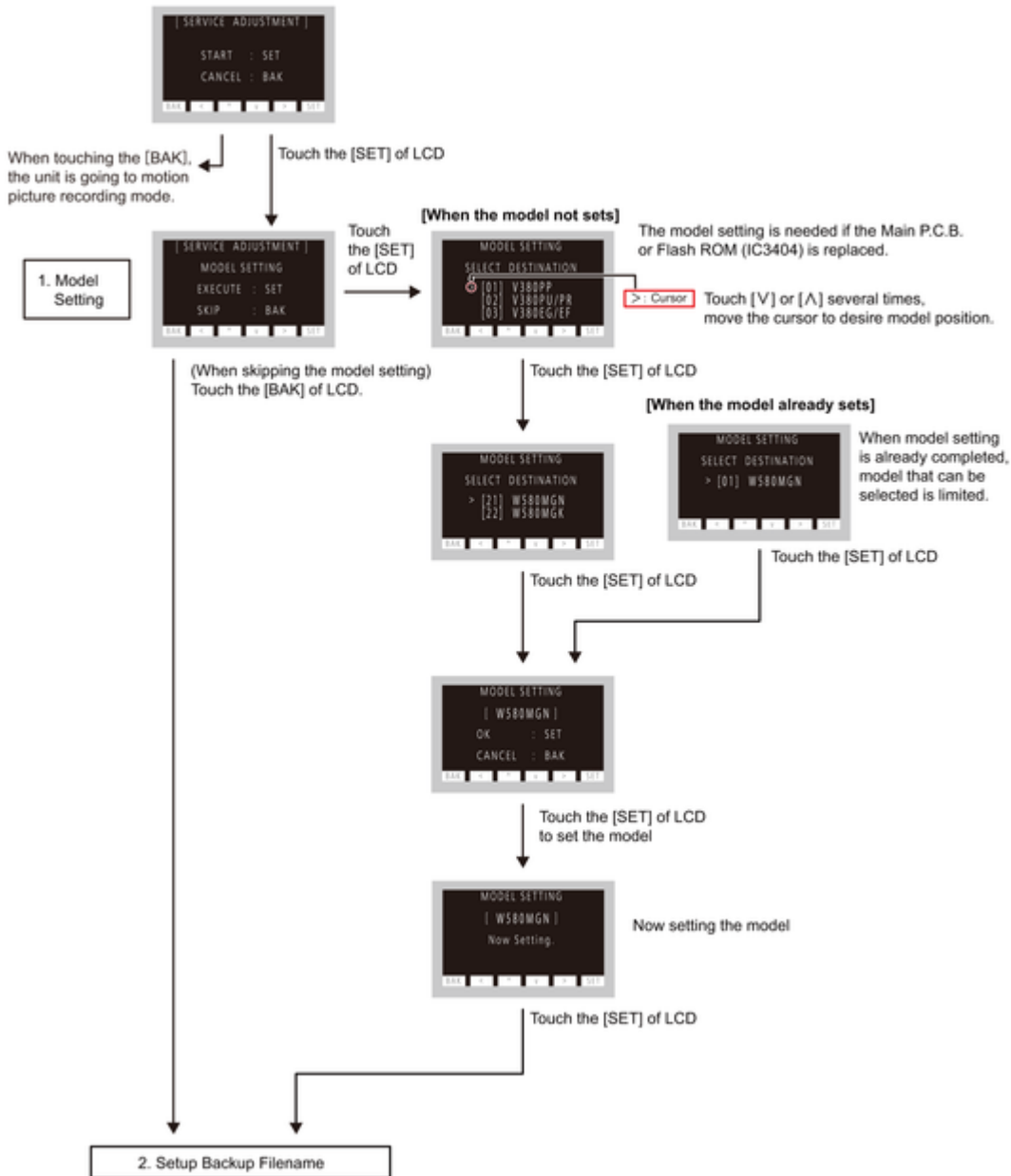
2. Touch the ▼ twice then touch the [14] of LCD.
3. Touch the [YES] of LCD.

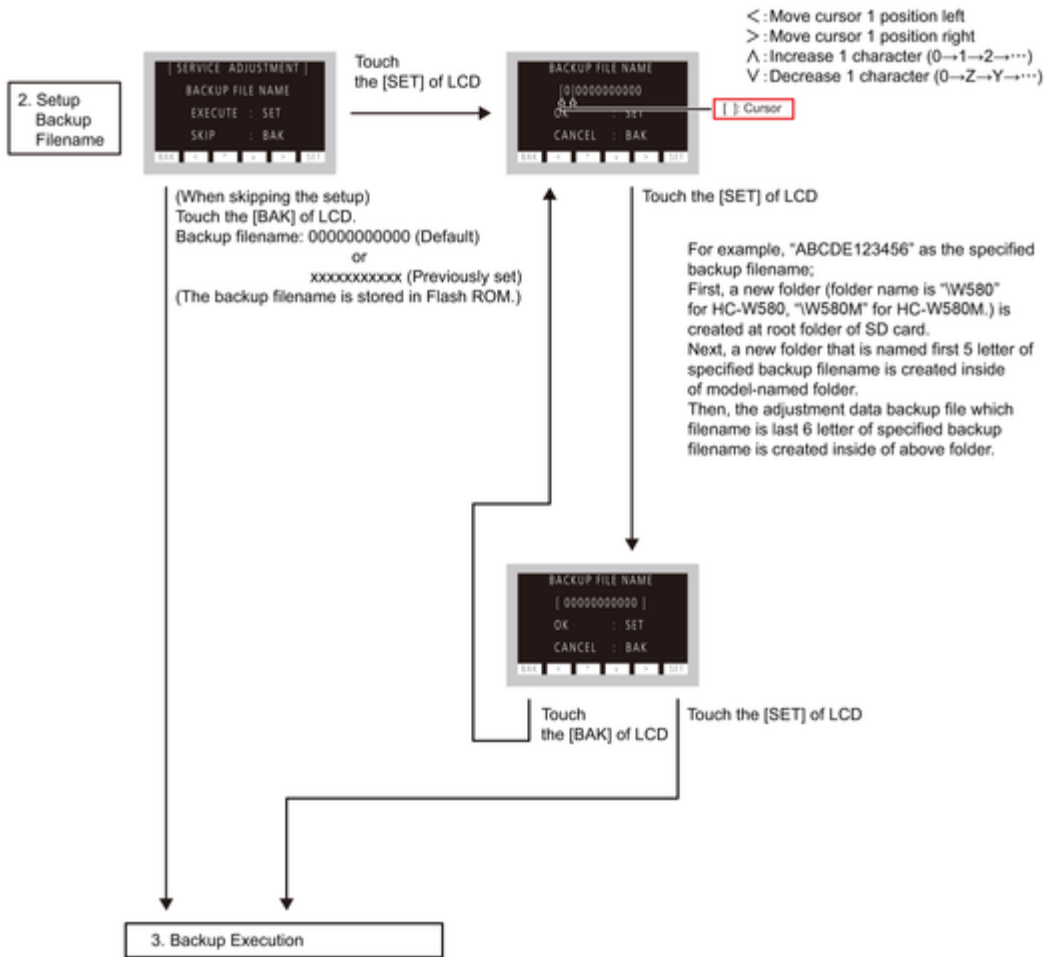


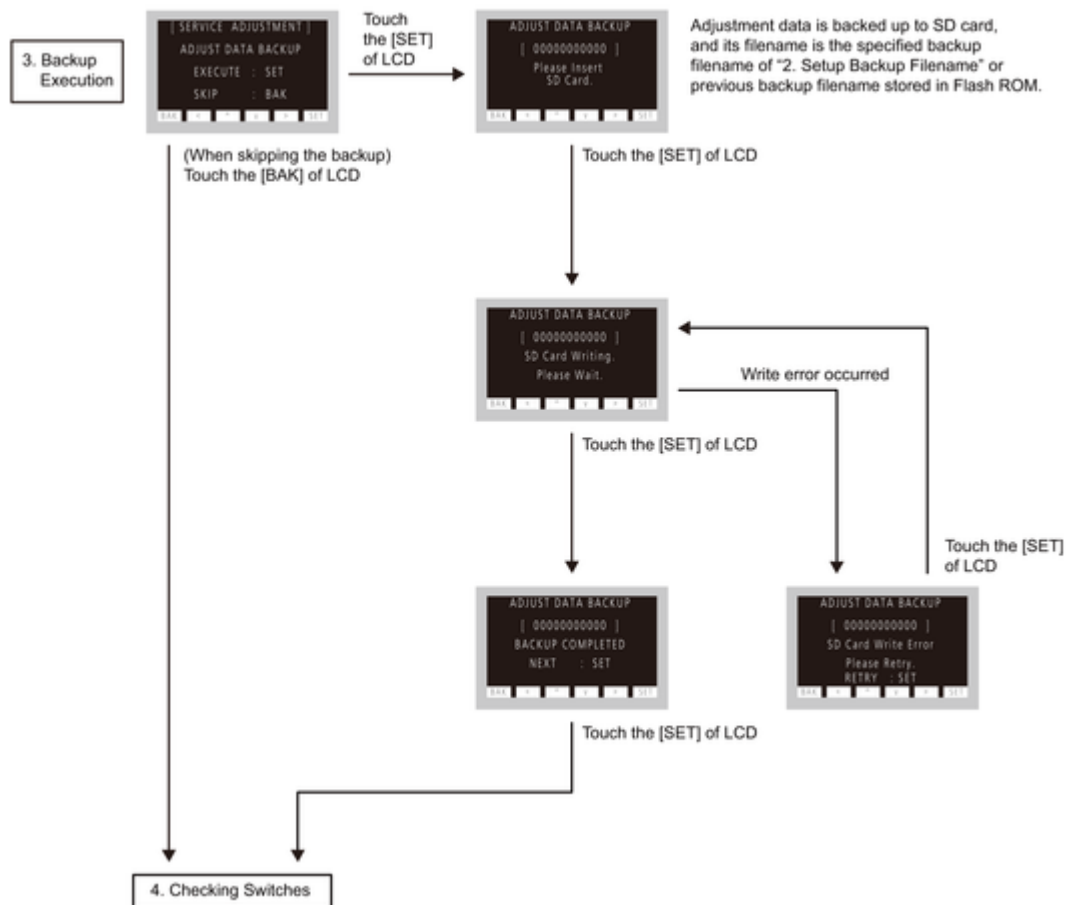
### [Adjustment Procedure]

Adjustments and settings are performed following order:

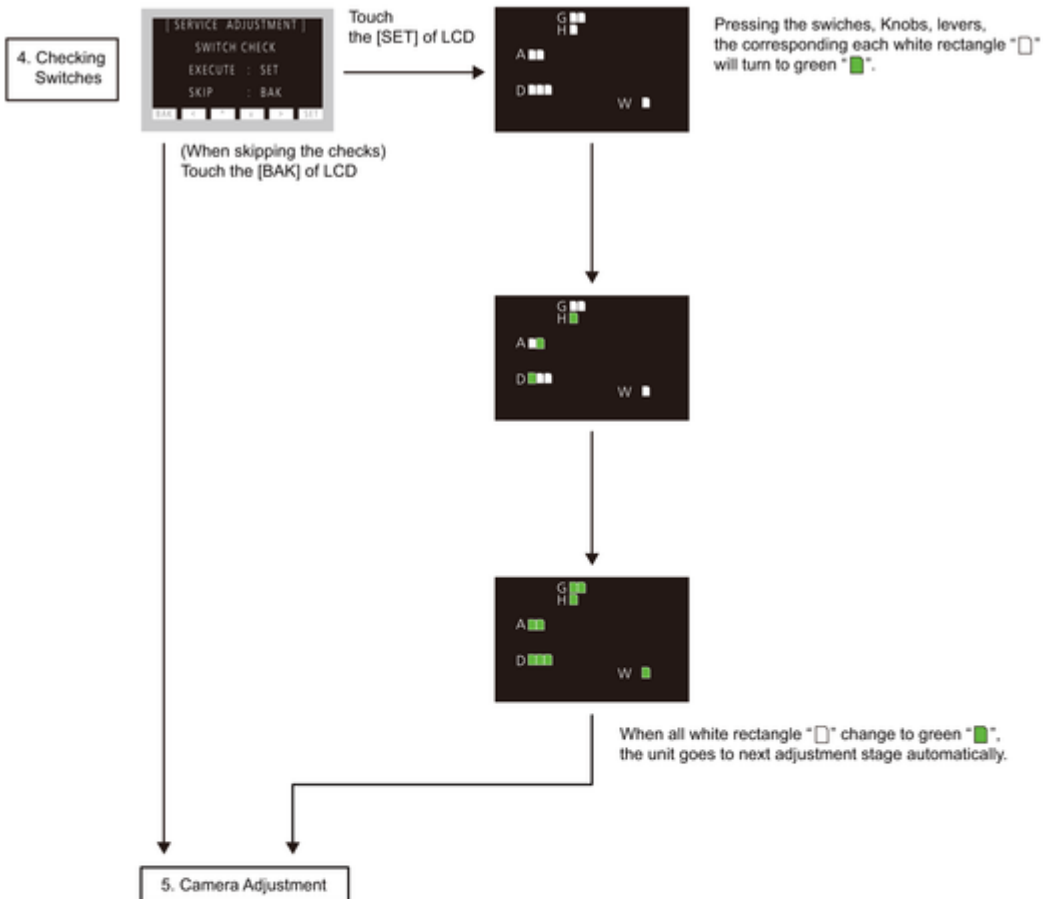
1. Model setting
2. Filename setting for backup to SD card
3. Backing up adjustment data to SD card
4. Checking switches
5. Camera adjustment
6. Zoom/tracking adjustment
7. Indoor white balance adjustment
8. Outdoor white balance adjustment
9. Level shot adjustment



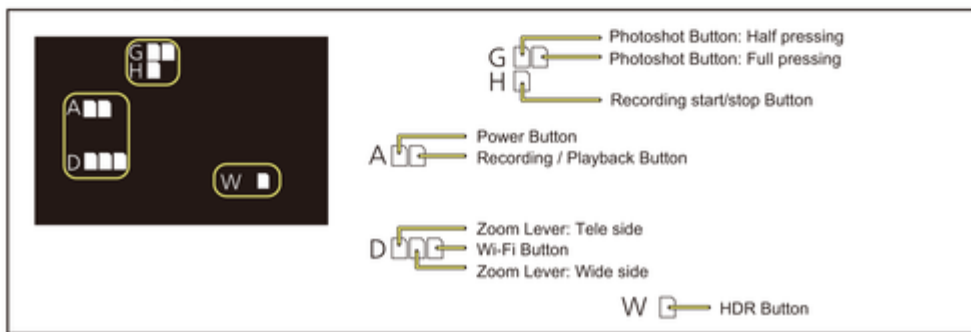




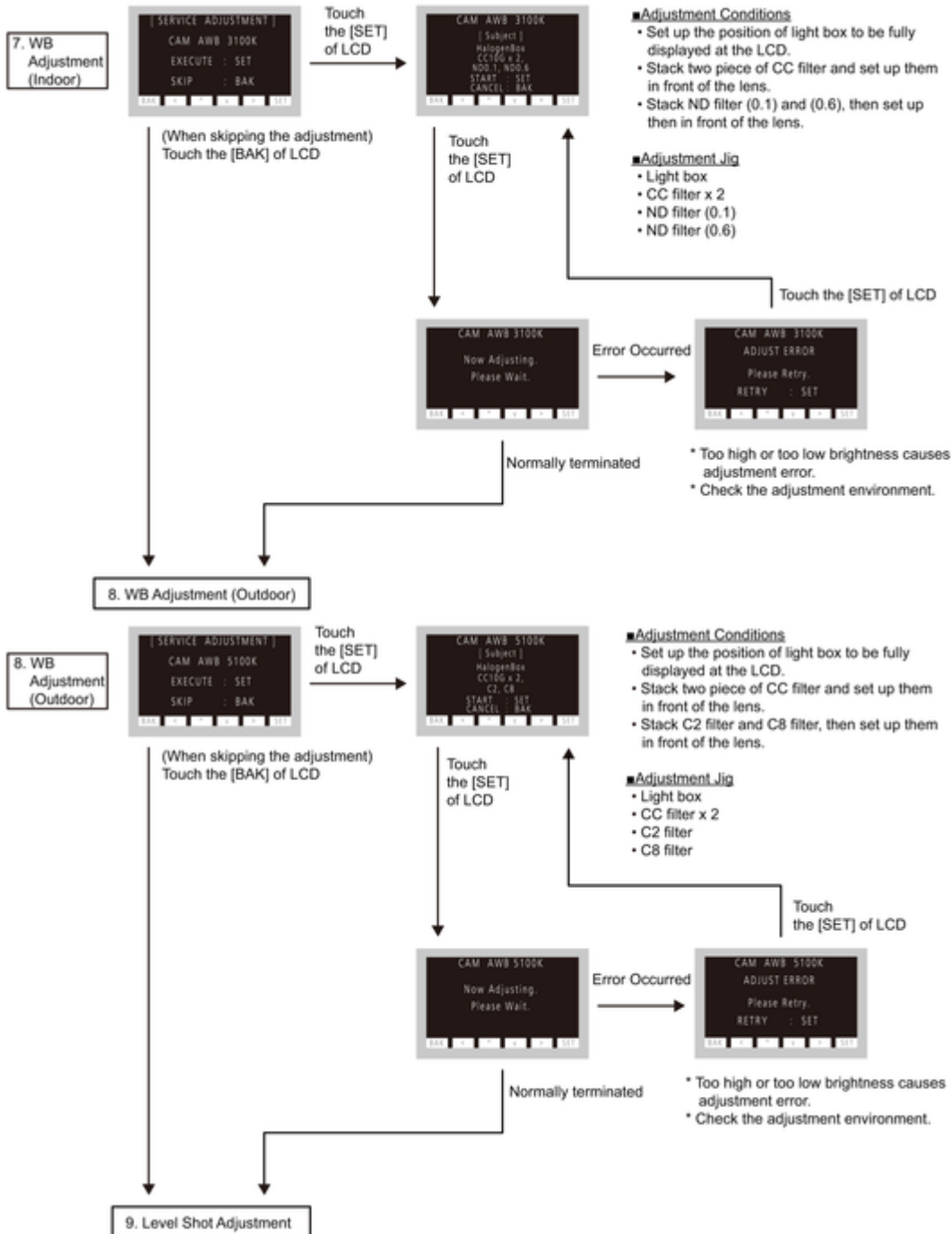


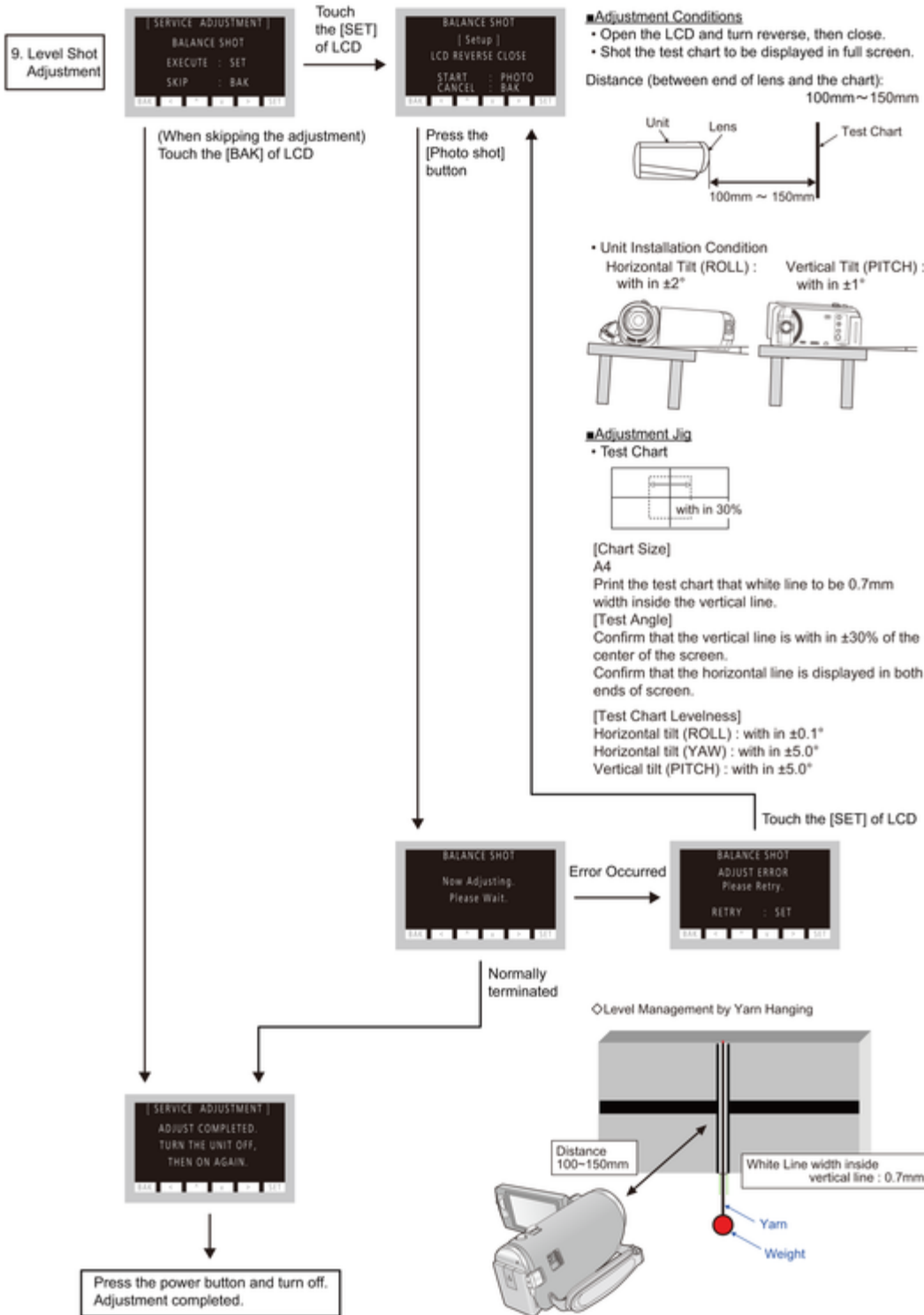


< Switches arrangement >





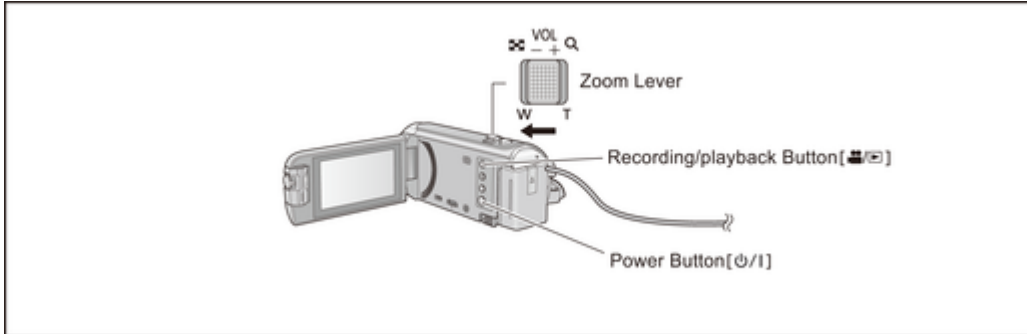




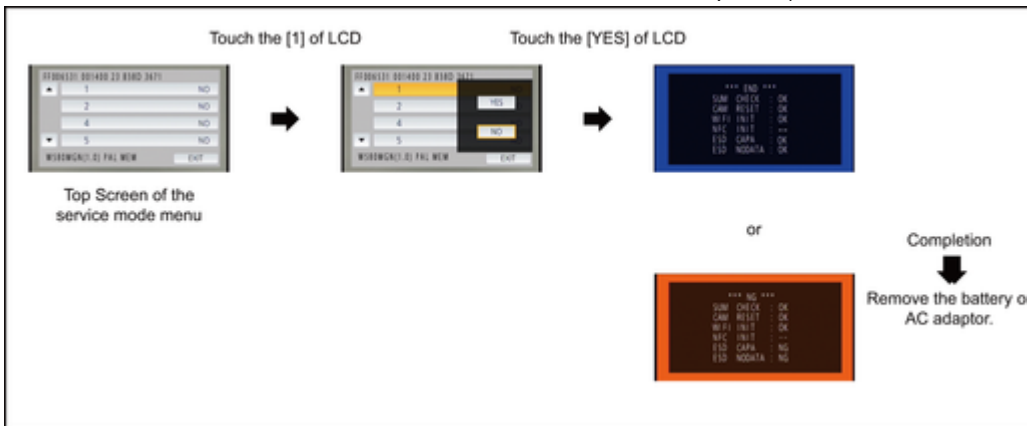
# 10 Factory Setting

## 10.1 How To Turn On The Factory Settings?

1. While the power is turned OFF, keep pressing the “Power” button, “Zoom Lever” to W side and “Recording/Playback” button for more than 3 seconds until the top screen of the Service Mode Menu being displayed.



2. Touch the [ 1 ] of LCD.
3. Touch the [ YES ] of LCD.
4. After few seconds “END” is displayed or “ESD NODATA” as “NG” is displayed on LCD monitor. Cutting of battery connection or AC power supply connection as a completion of the “FACTORY SETTINGS”.  
(After recording at least once, even if the physical format of the build-in memory will be performed, “ESD NODATA” as “NG” is indicated, but “FACTORY SETTINGS” is completed.)



## 10.2 What Is The Factory Settings?

The factory settings clean up and/or refresh the following settings.

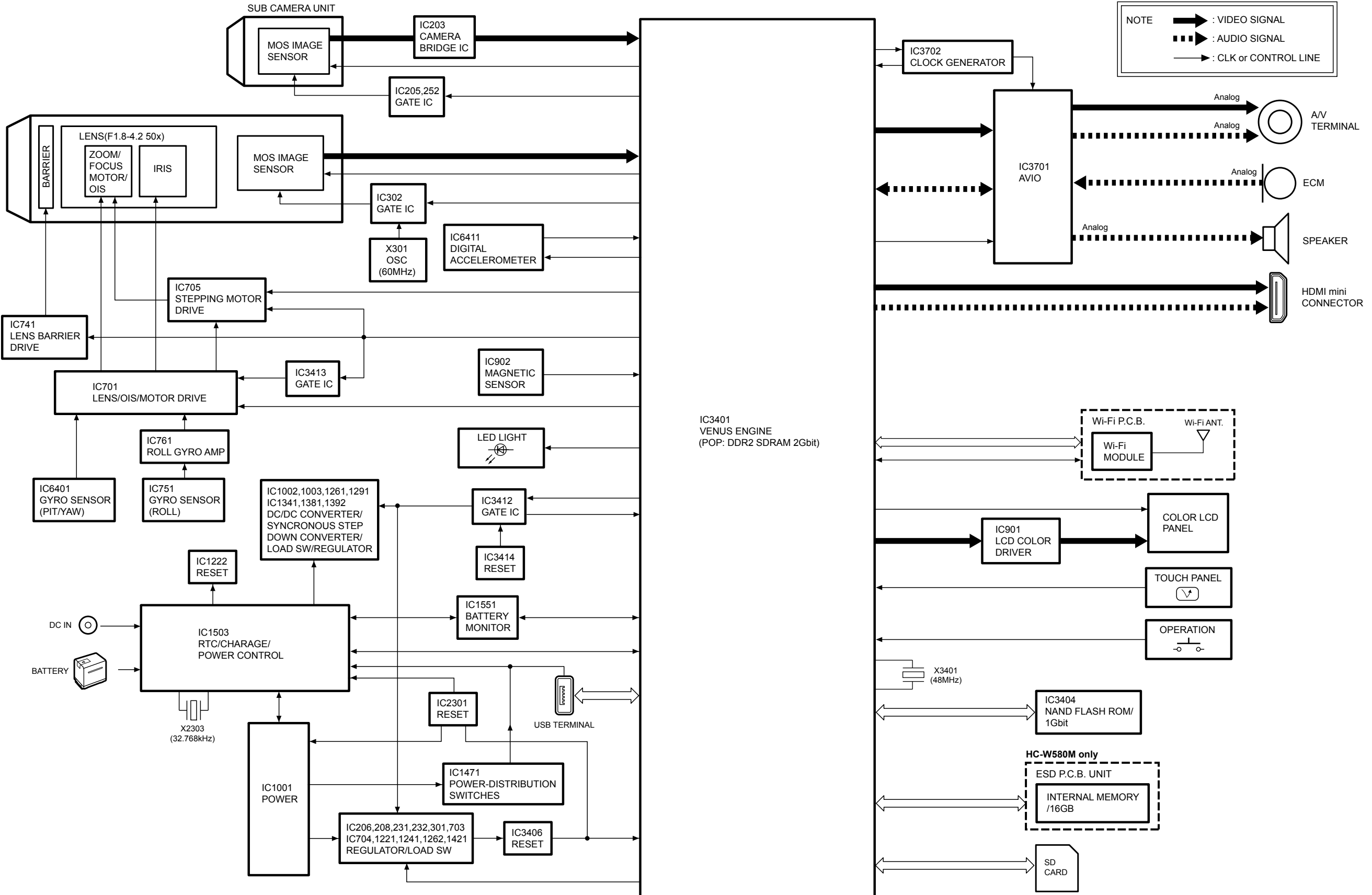
1. Setting Values of menu.
2. Clear the time and date setting.
3. Initialize the Wi-Fi data settings.
4. Confirm that the built-in memory capacity is correct. (HC-W580M only)  
(Checking of the built-in memory mounting error.)
5. Confirm that the data area of built-in memory is cleared. (HC-W580M only)
6. Close the lens cover

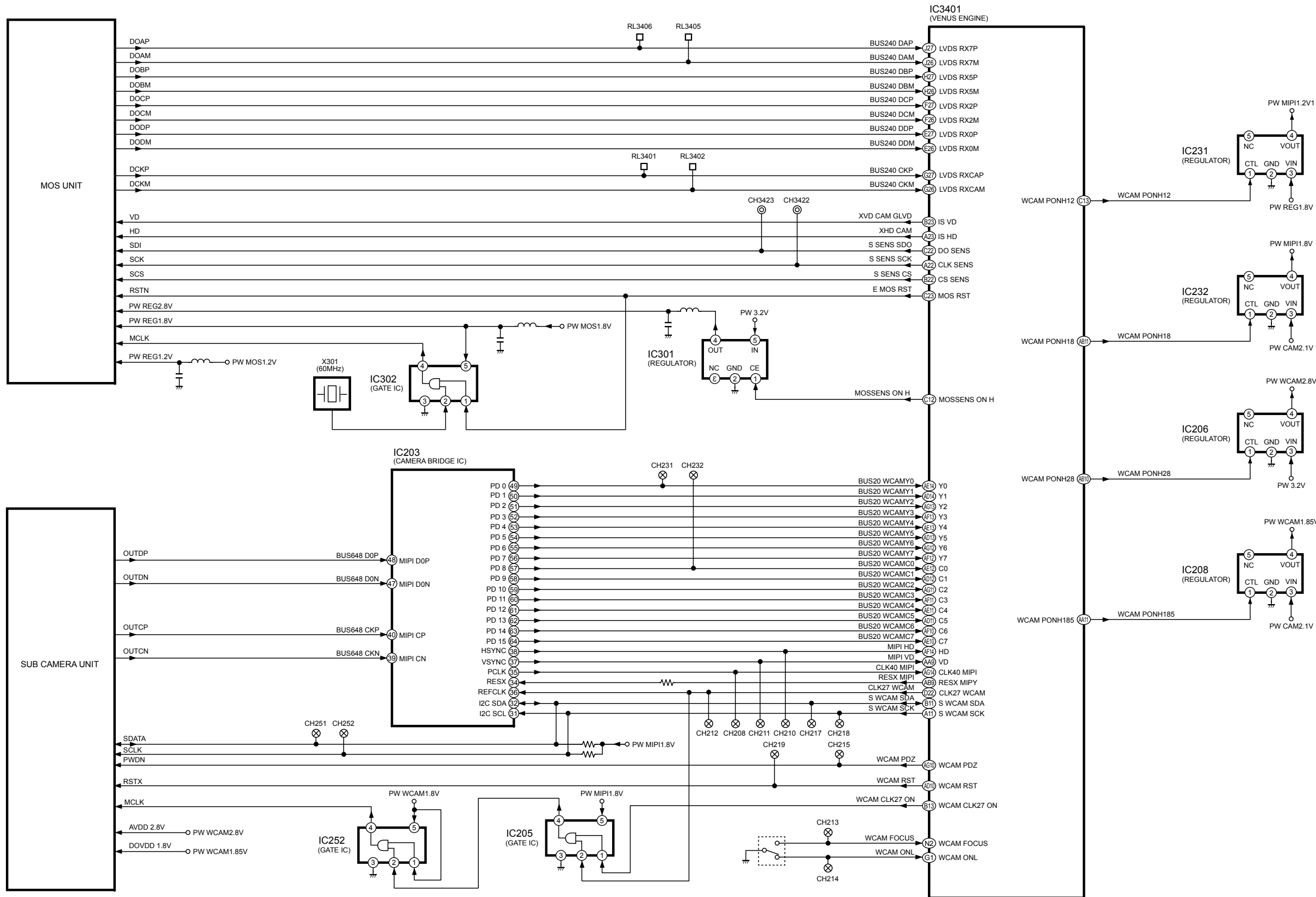
(HC-W580M only)

If the “Factory Settings” is completed, physical format of the built-in memory is not performed, execute physical format according to the following procedure.

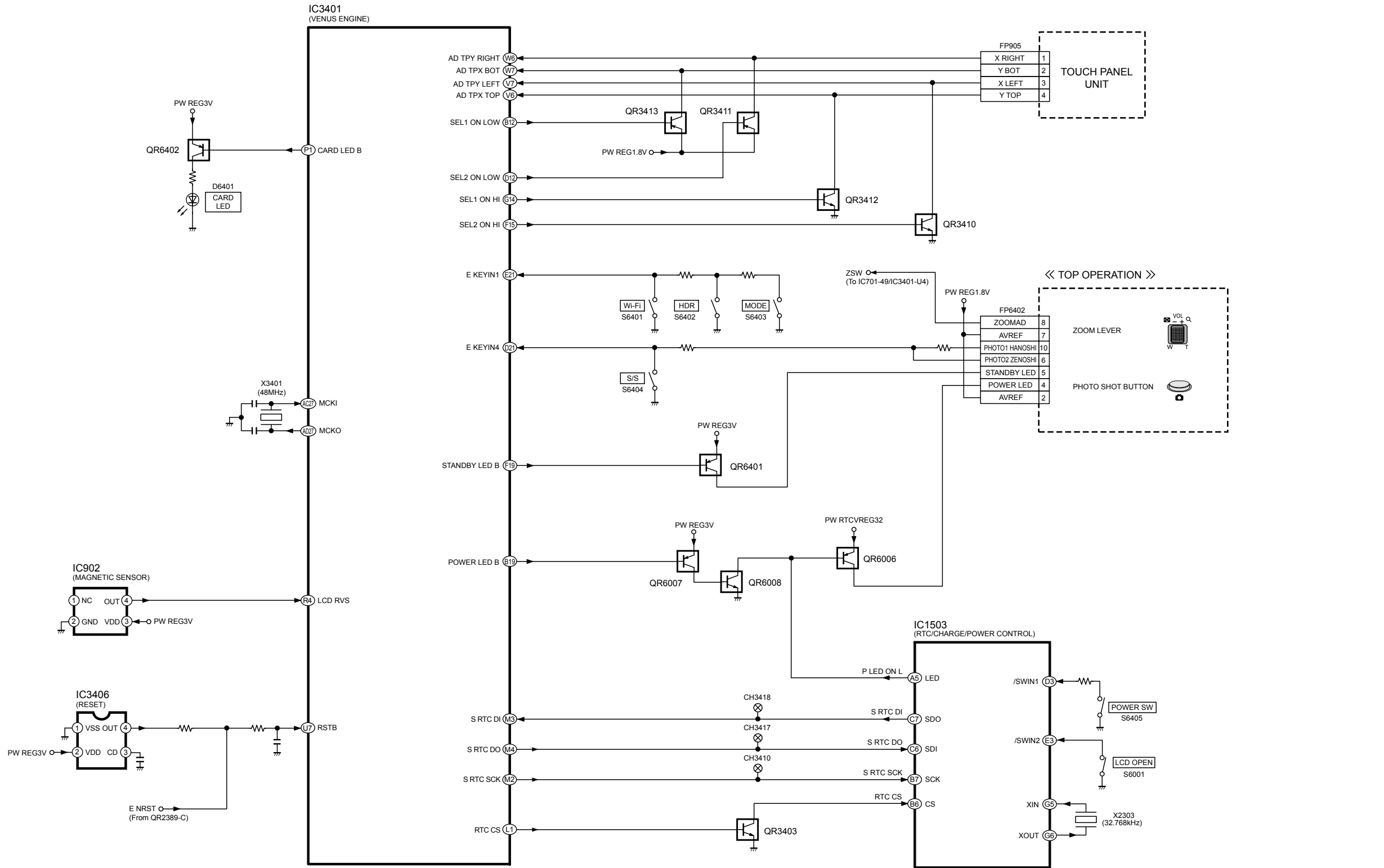
To physically format the built-in memory, connect the unit via the AC adaptor, select [SETUP] → [FORMAT MEDIA] → [Built-inMemory] from the menu, and then press and hold the recording start/stop button on the screen below for about 3 seconds. When the built-in memory data deletion screen appears, select [YES], and then follow the on-screen instructions.

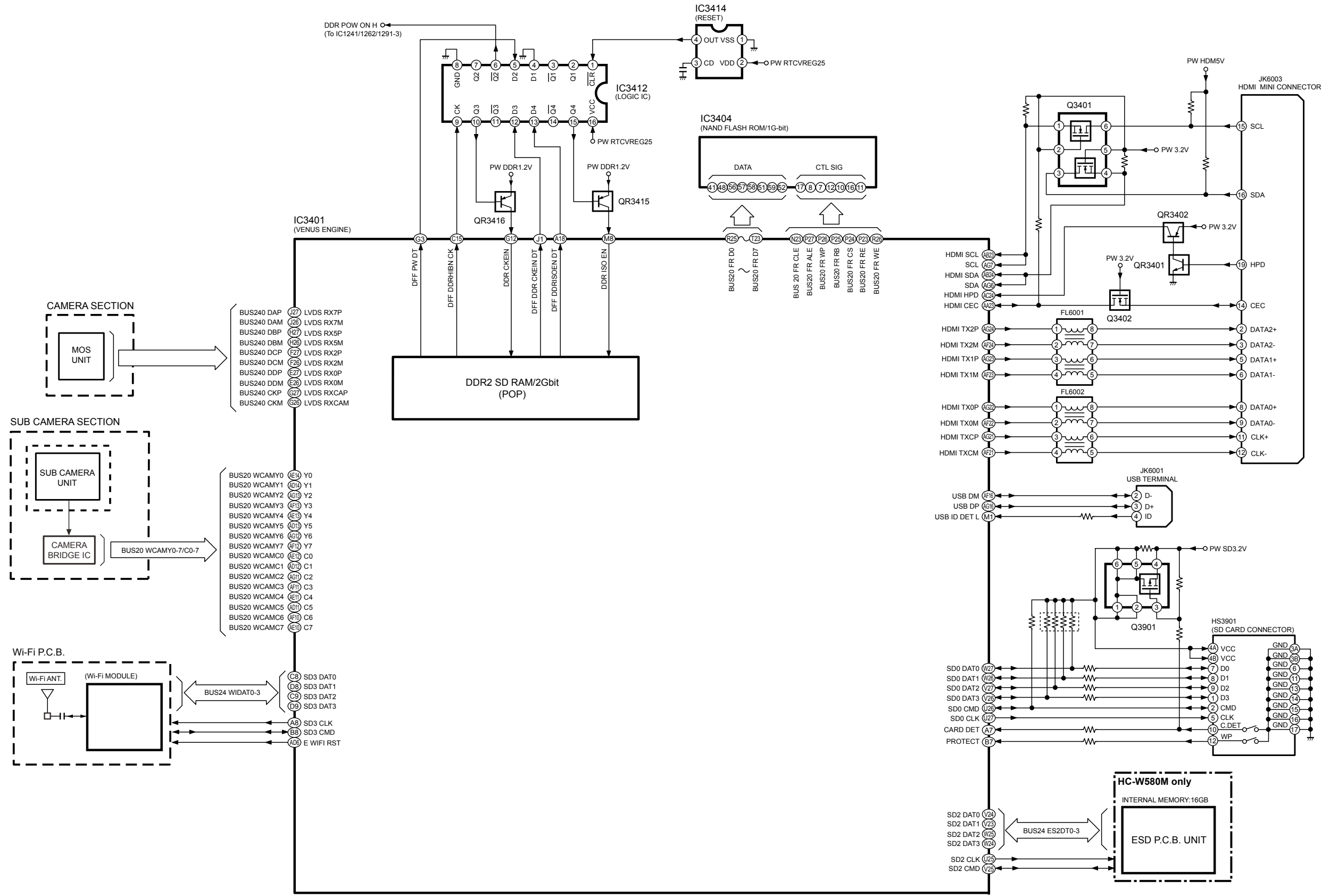






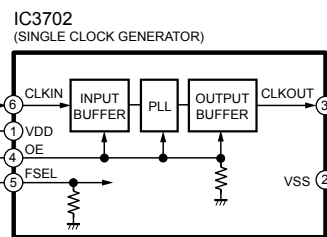
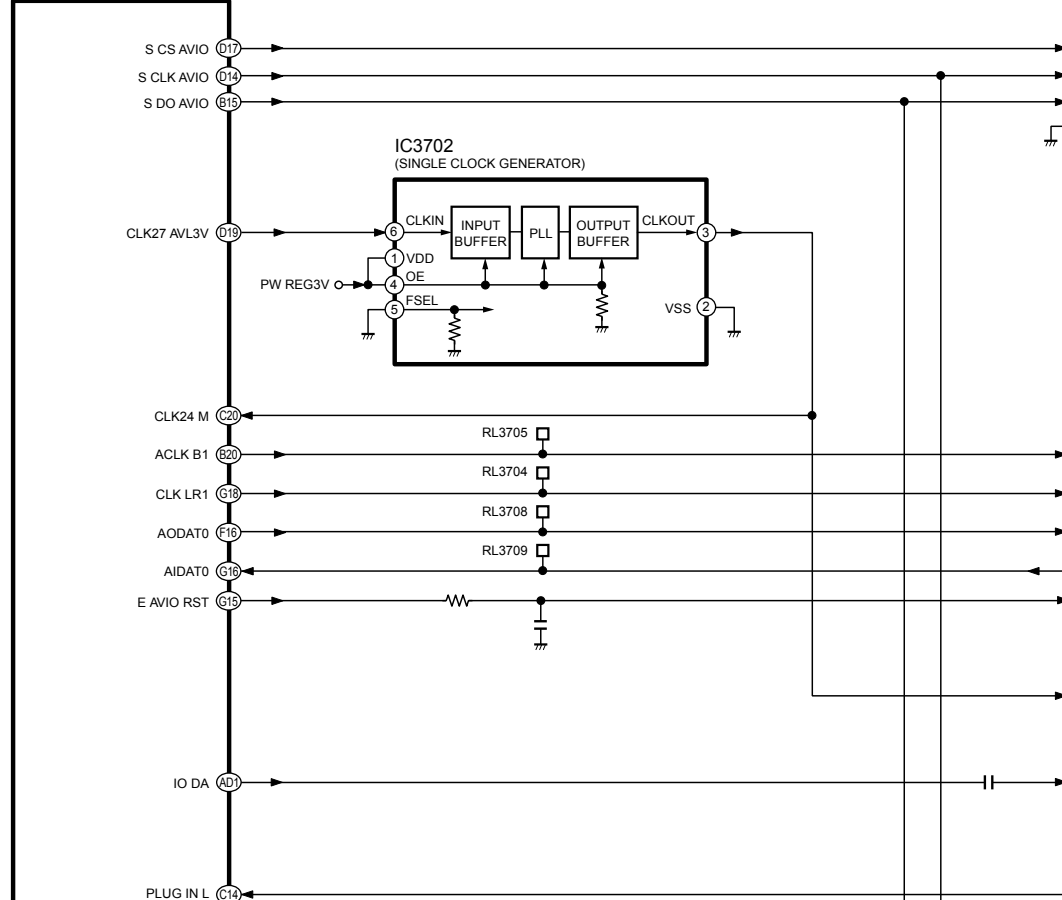




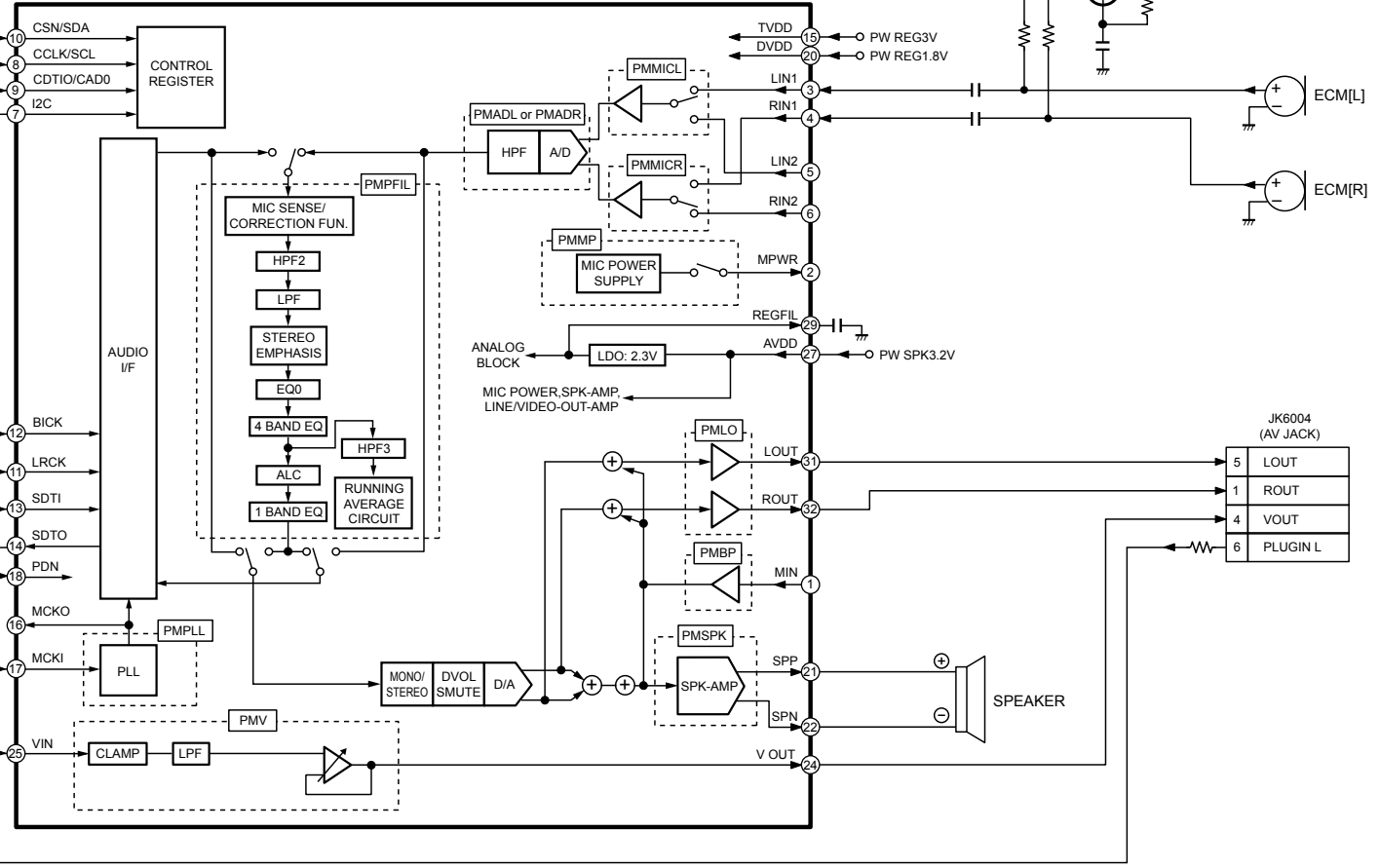


HC-W580/W580M VIDEO/AUDIO PROCESS(1) CIRCUIT BLOCK DIAGRAM

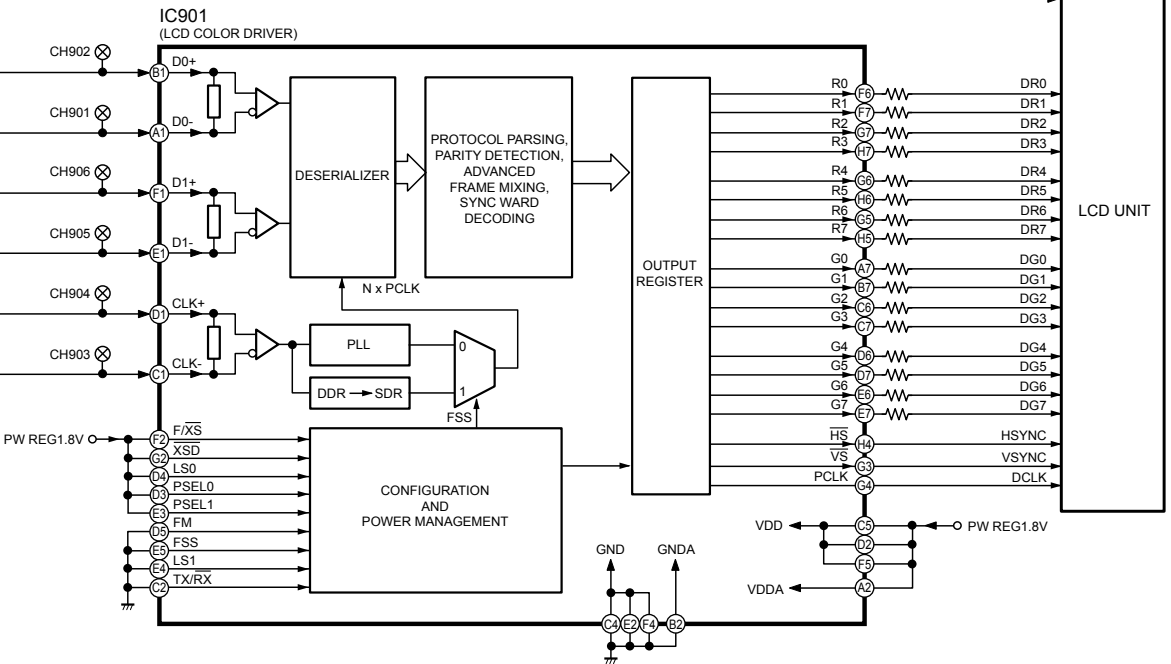
IC3401  
(VENUS ENGINE)

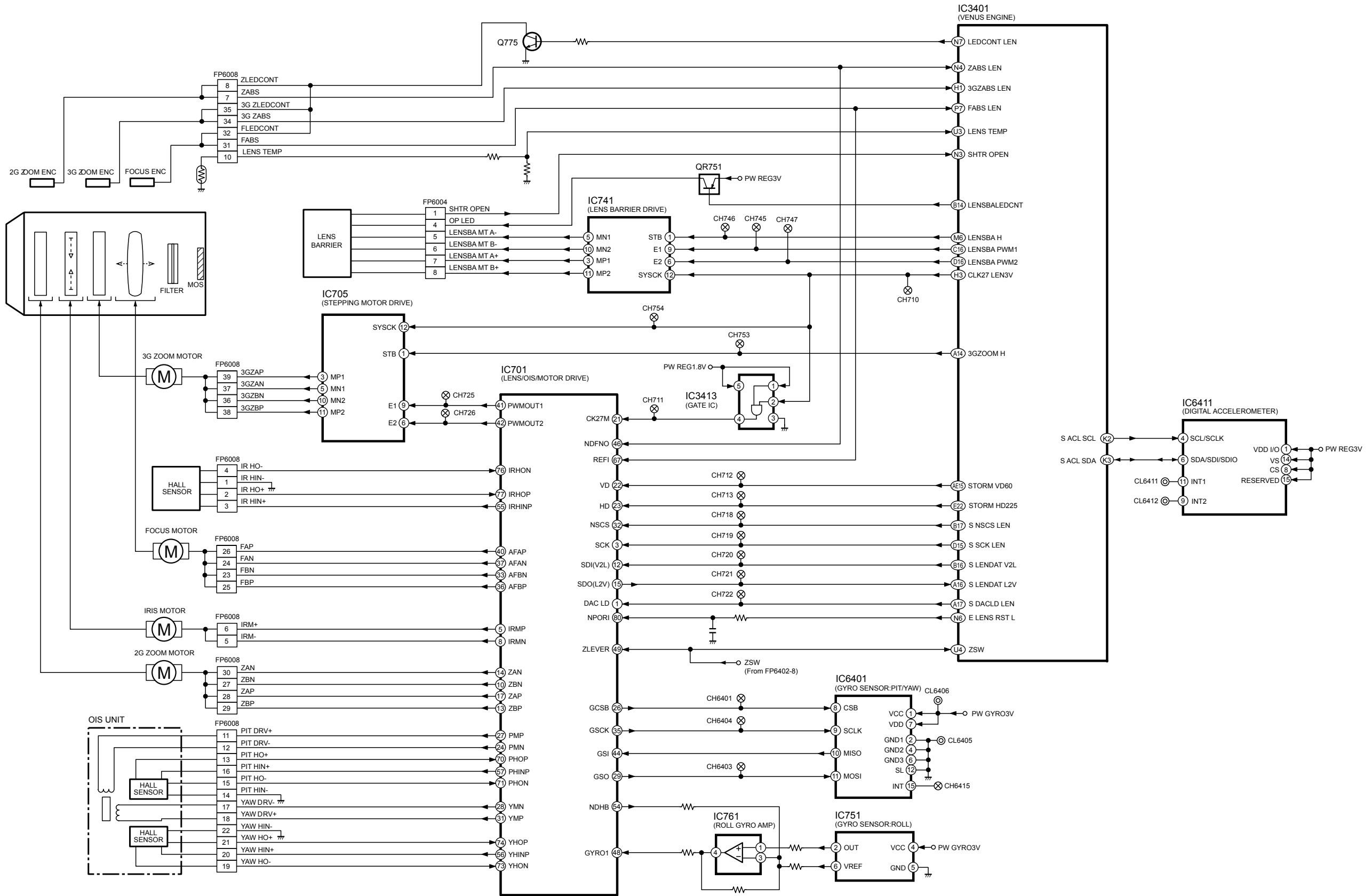


IC3701  
(AVIO)



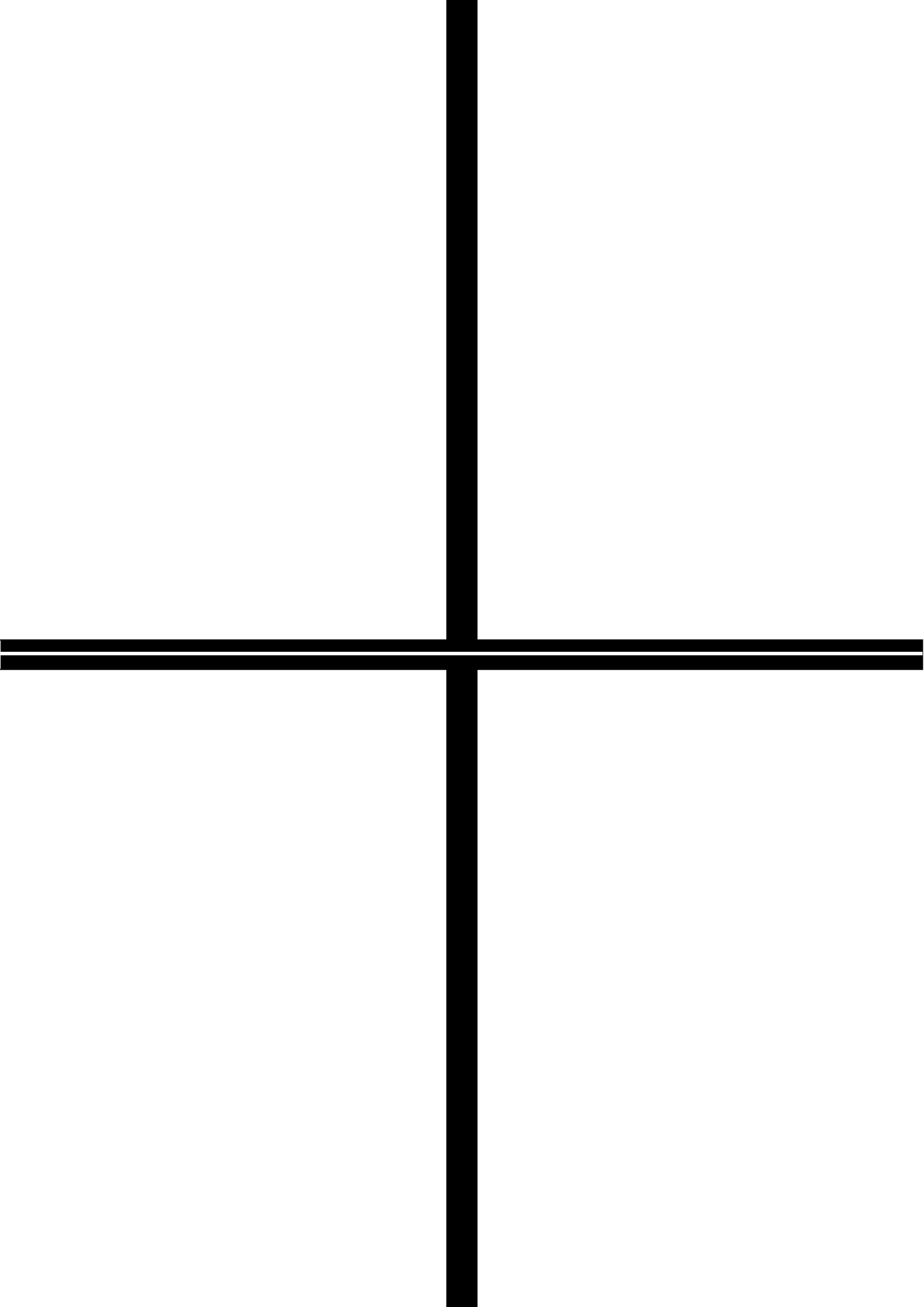
IC901  
(LCD COLOR DRIVER)











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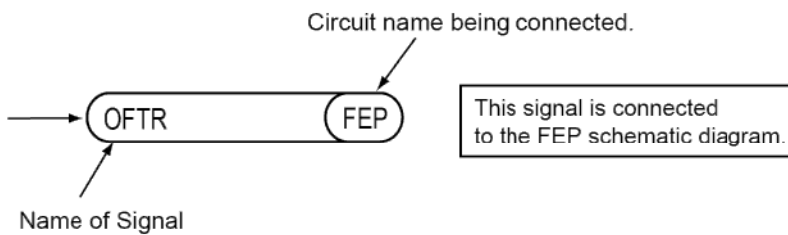
**Model No. : HC-W580/W580M Schematic Diagram Note**

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**IMPORTANT SAFETY NOTICE:**

COMPONENTS IDENTIFIED WITH THE MARK ⚠ 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. Use the parts number indicated on the Replacement Parts List .
4. Indication on Schematic diagrams:



5. It might be taking time for display and/or access of the Schematic Diagrams & P. C. B having the heavy data volume.



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**Model No. : HC-W580/W580M Parts List Note**

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- 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.

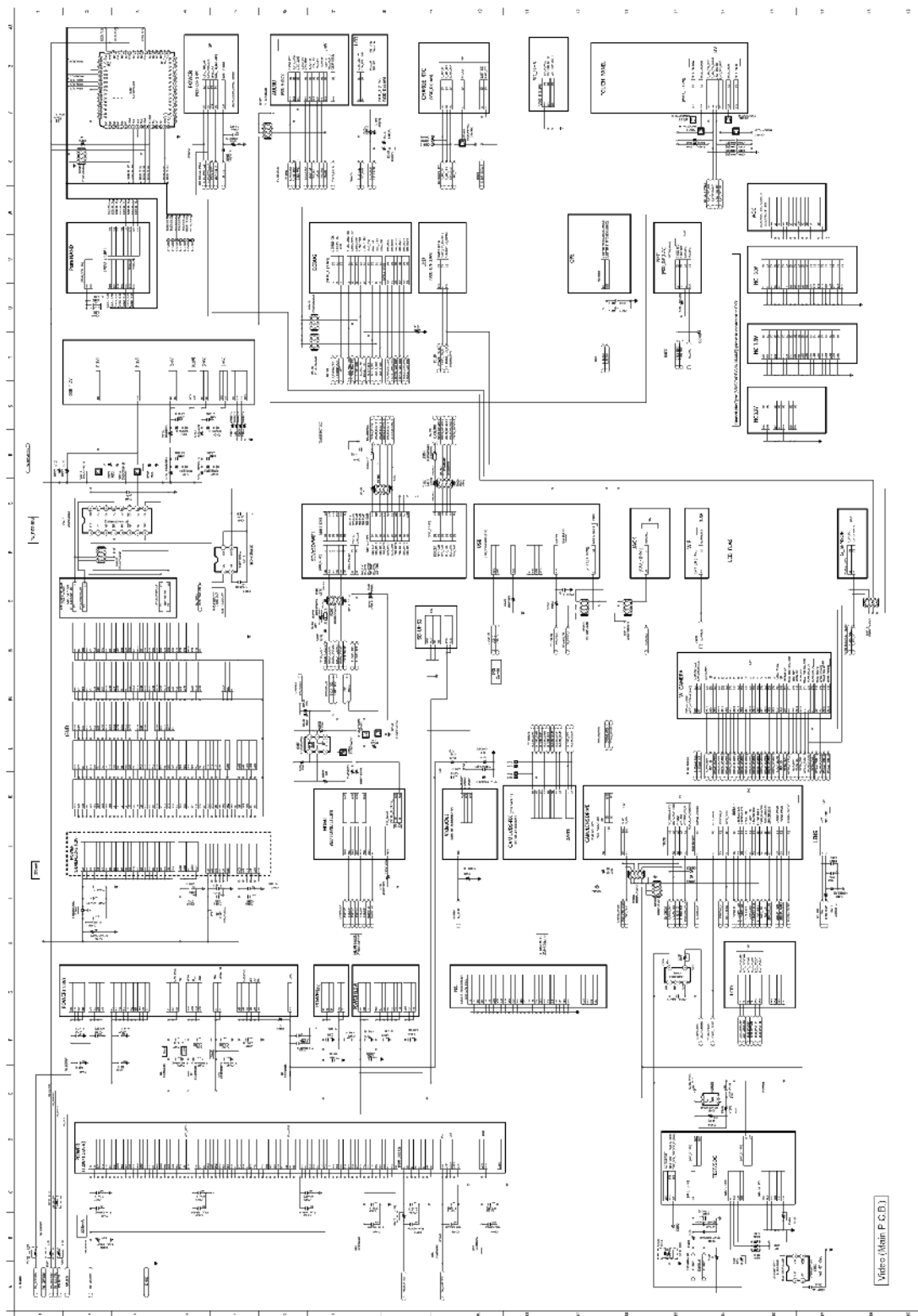
**E.S.D. standards for Electrostatically Sensitive Devices, refer to PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES section.**

**Definition of Parts supplier:**

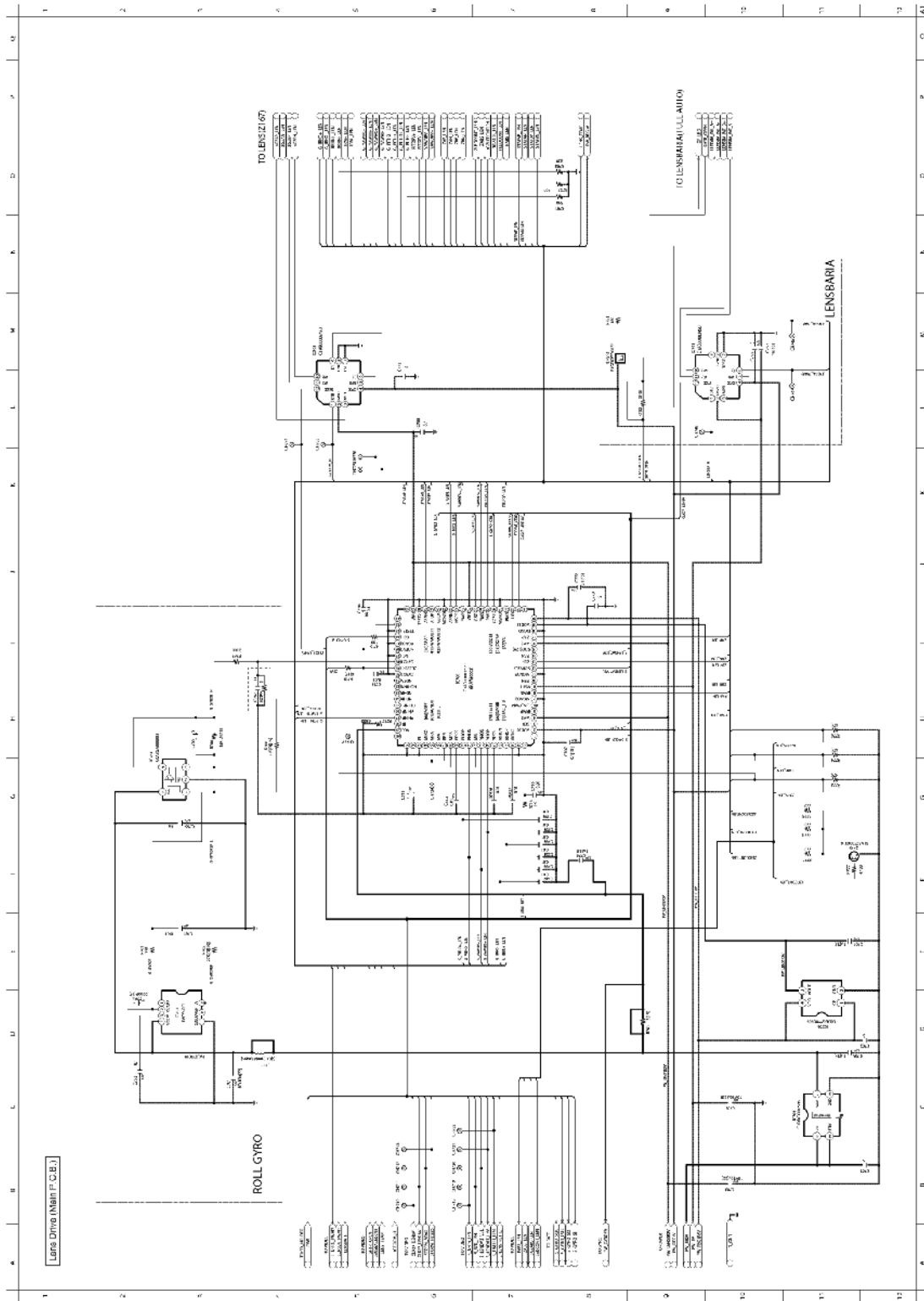
1. **Parts marked with [INBD] in the remarks column are supplied from AVC-IMAGING. Others are supplied from PAVCJM.**



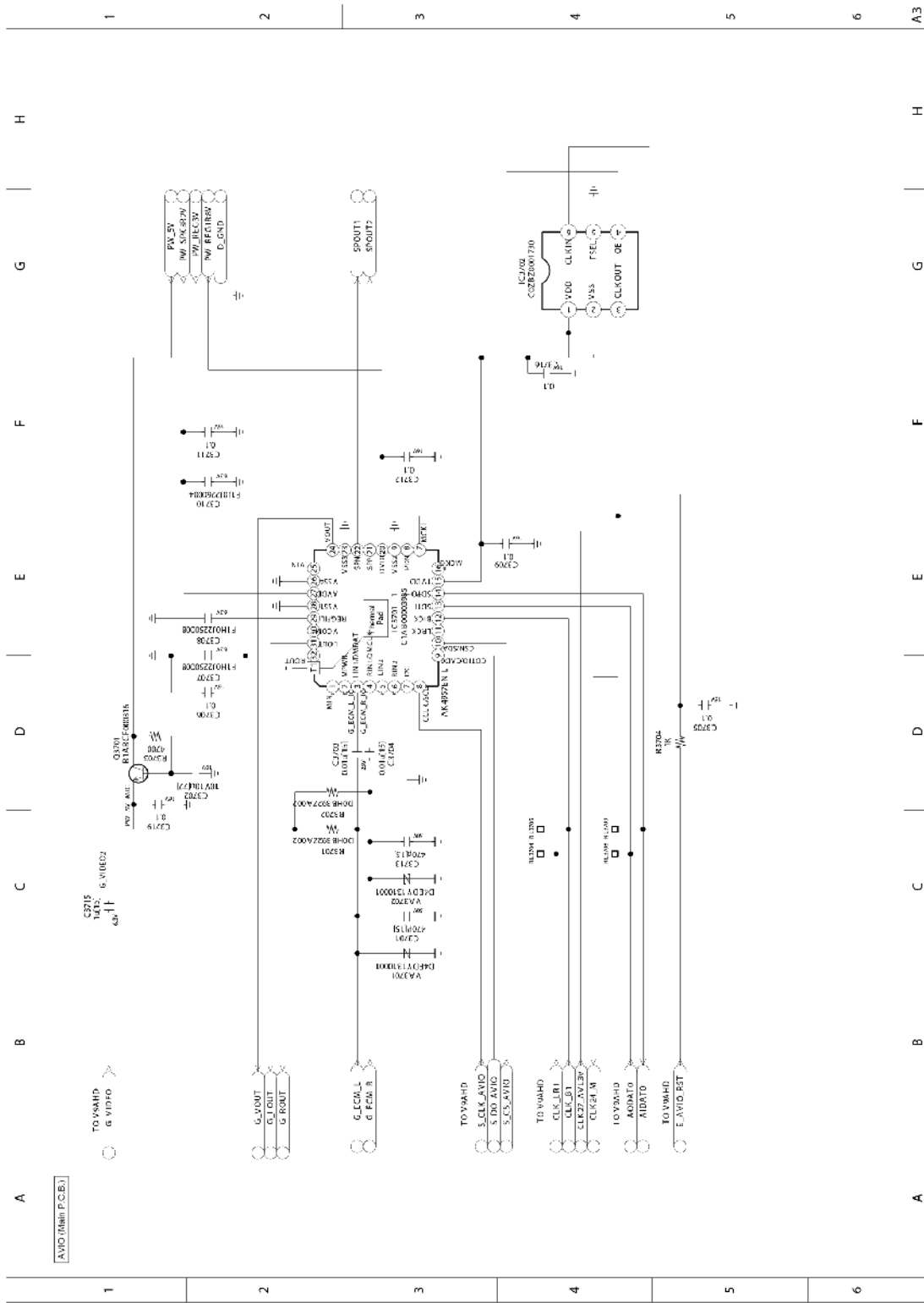
Model No. : HC-W580/W580M Video (Main P.C.B.)



# Model No. : HC-W580/W580M Lens Drive (Main P.C.B.)

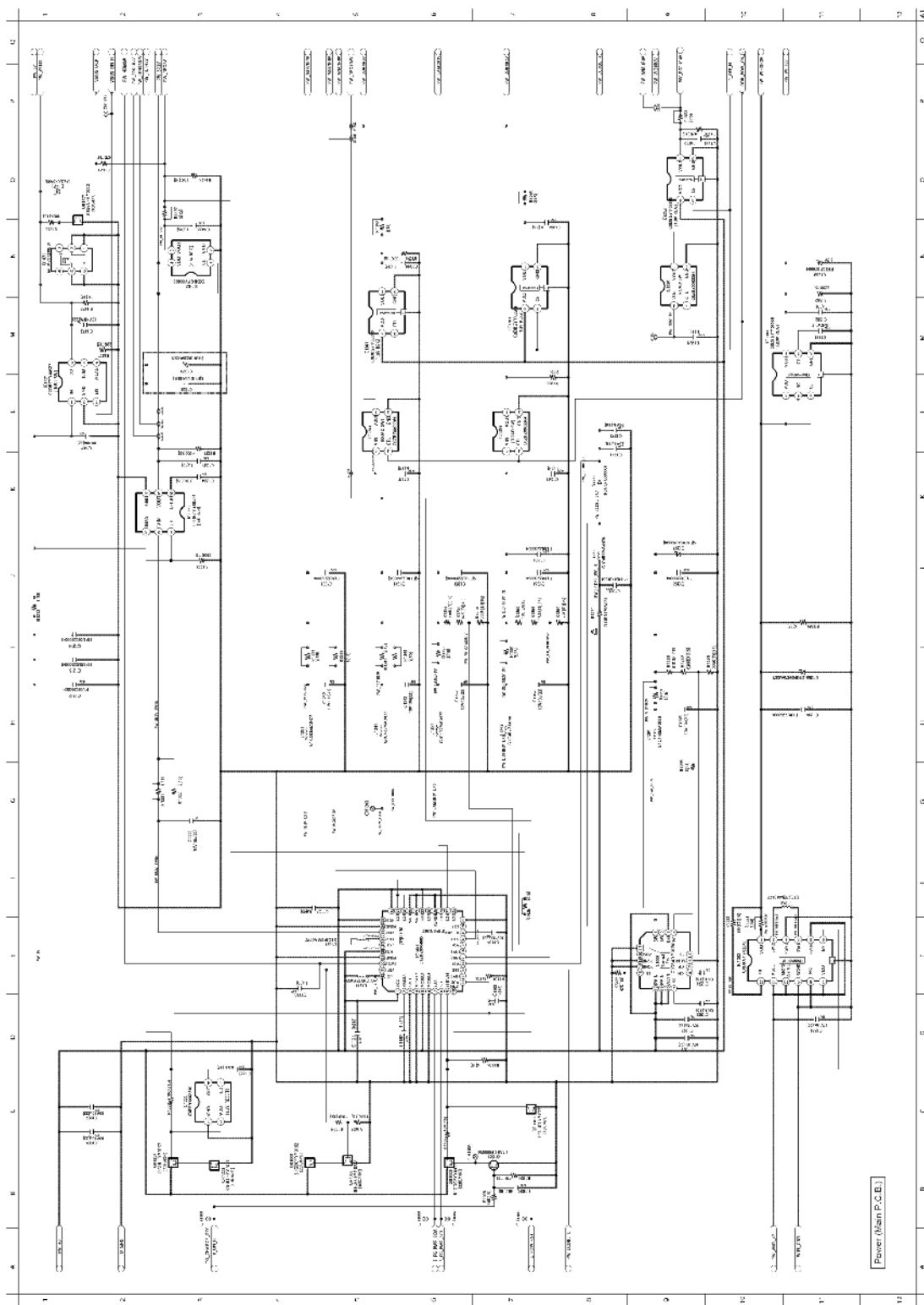


Model No. : HC-W580/W580M AVIO (Main P.C.B.)

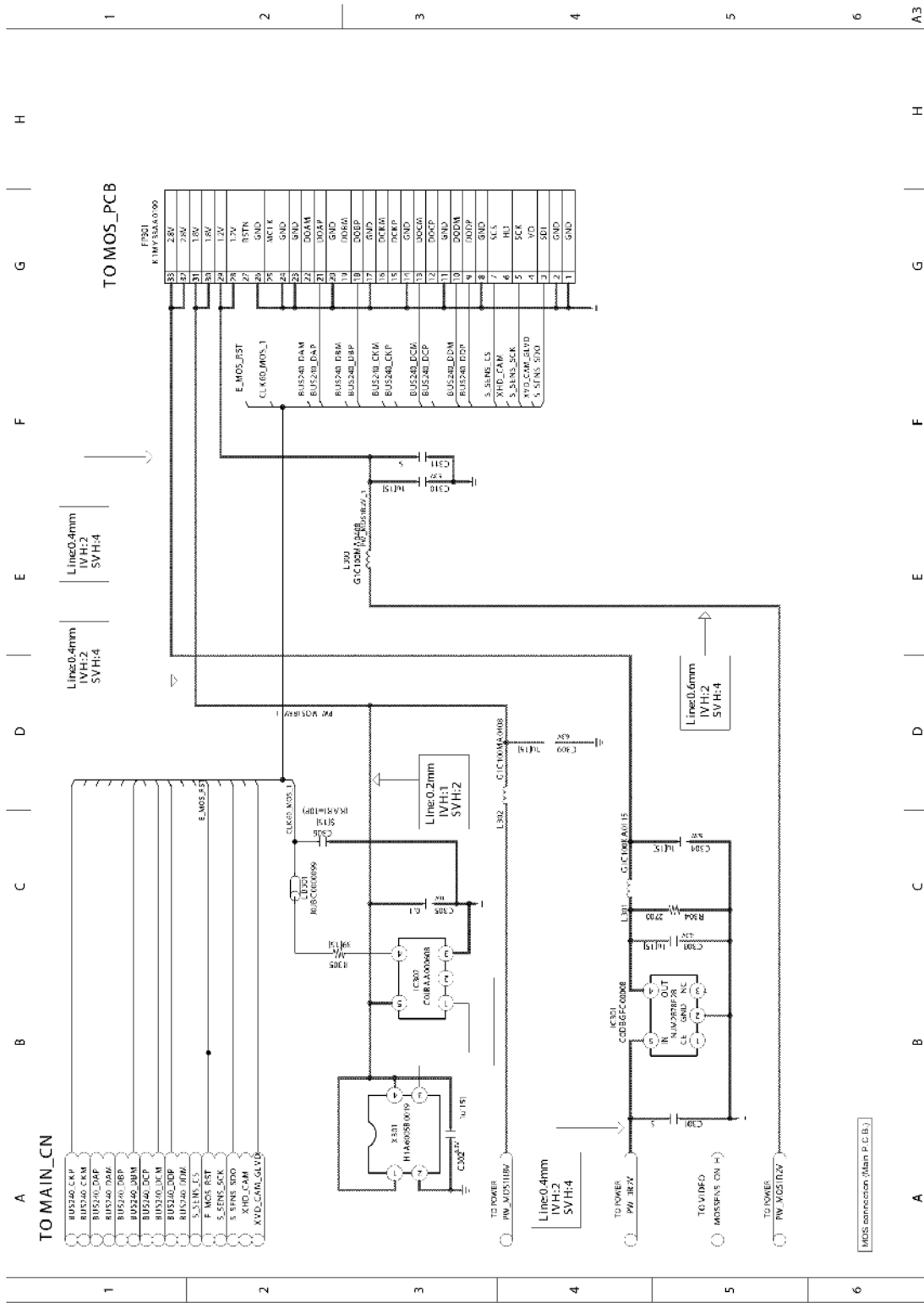




Model No. : HC-W580/W580M Power (Main P.C.B.)



**Model No. : HC-W580/W580M MOS connection (Main P.C.B.)**



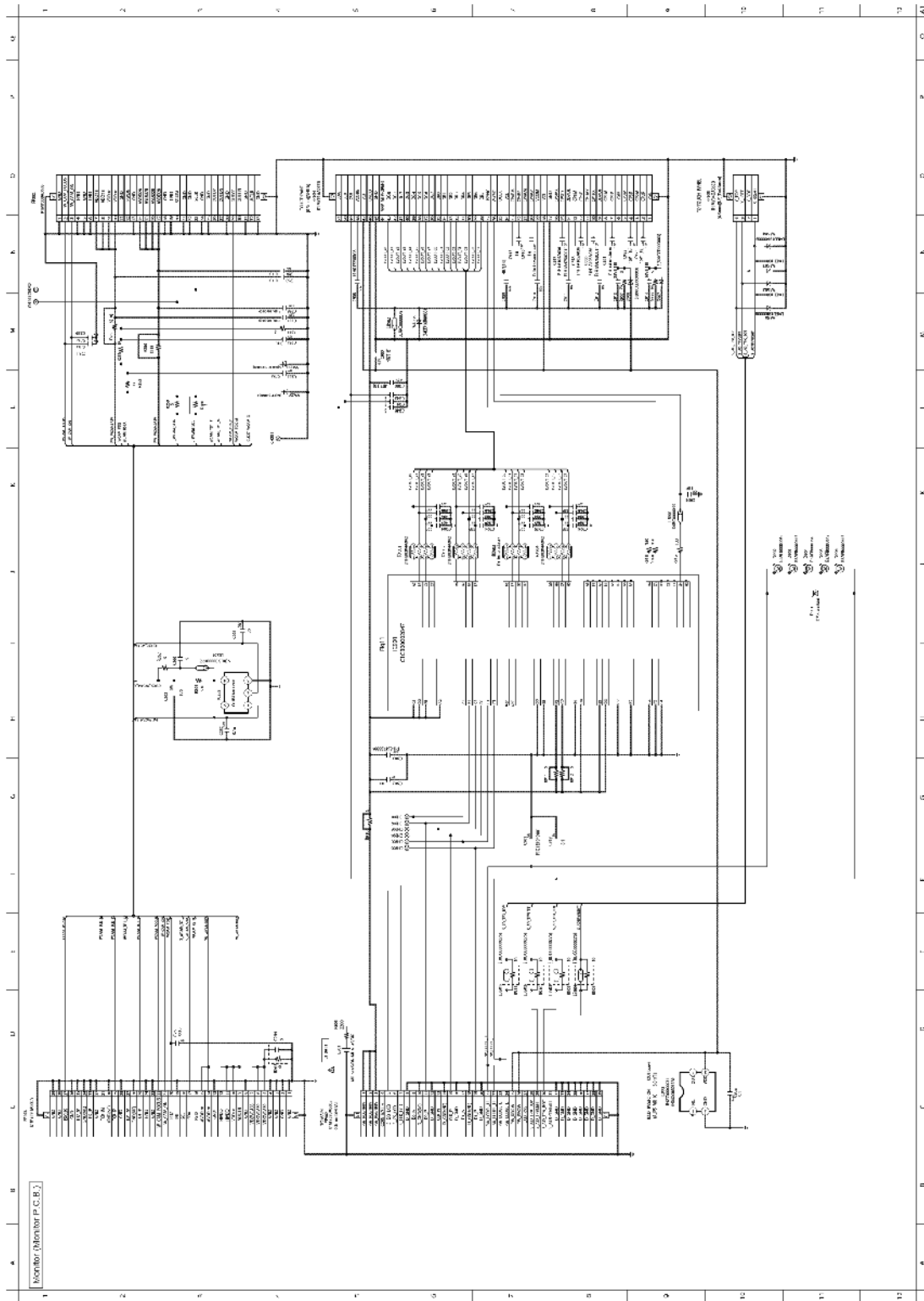
MOS connection (Main P.C.B.)







# Model No. : HC-W580/W580M Monitor (Monitor P.C.B.)

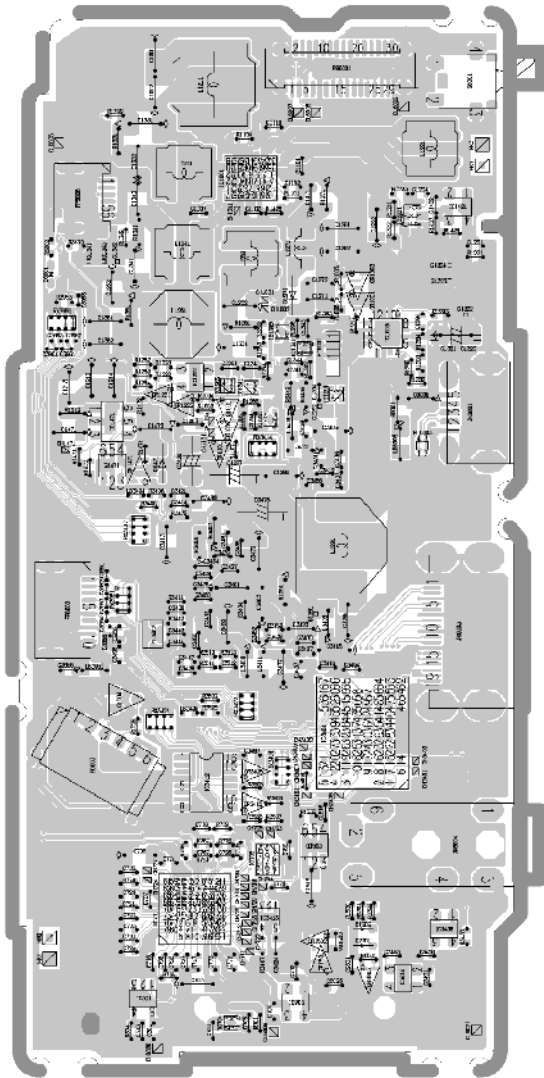




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**Model No. : HC-W580/W580M Main P.C.B.(Component Side)**

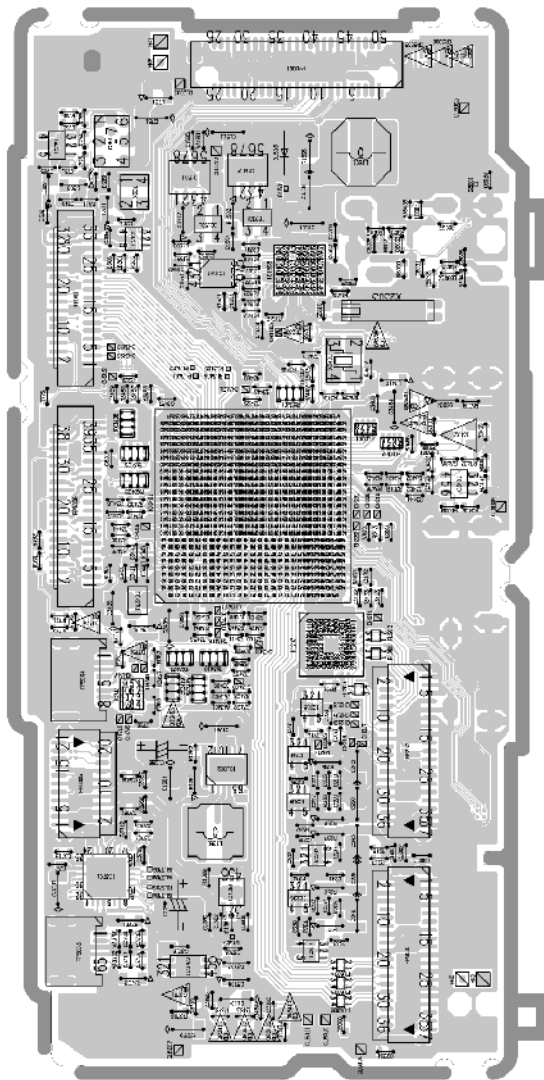
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**Model No. : HC-W580/W580M Main P.C.B.(Foil Side)**

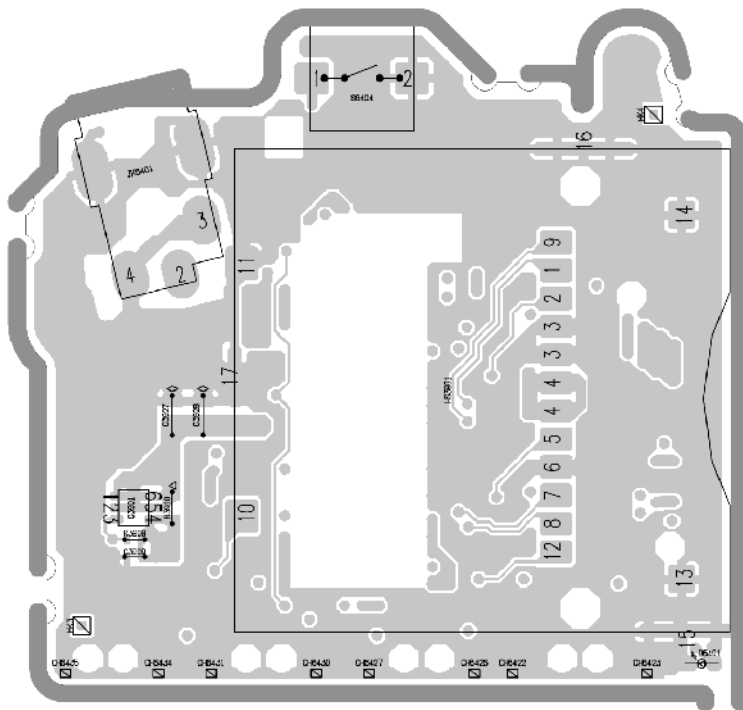
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**Model No. : HC-W580/W580M SD Holder P.C.B.(Component Side)**

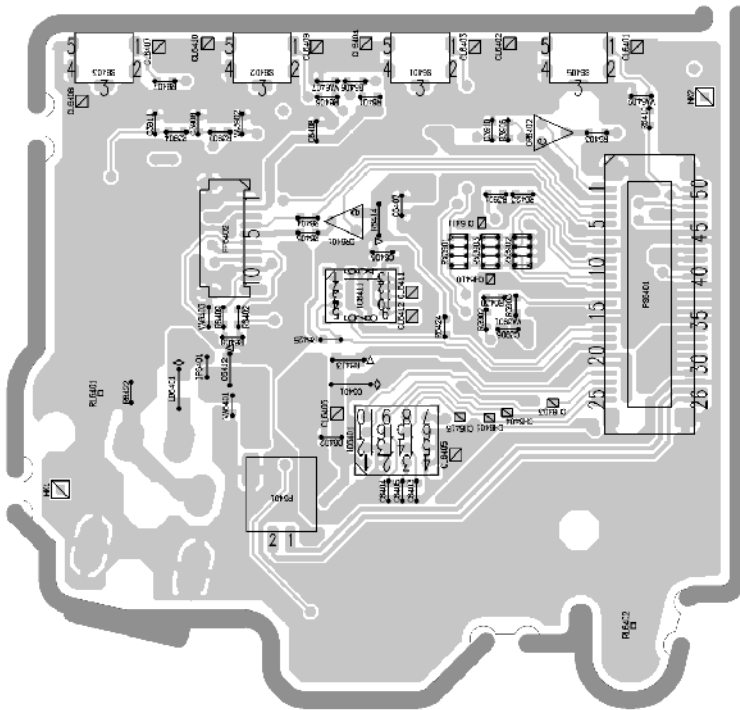
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**Model No. : HC-W580/W580M SD Holder P.C.B.(Foil Side)**

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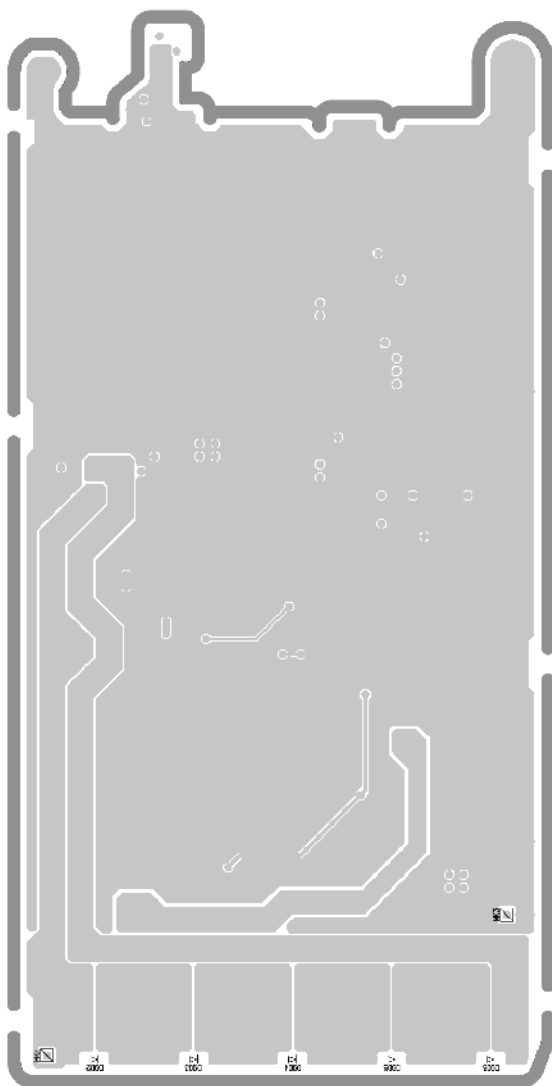




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**Model No. : HC-W580/W580M Monitor P.C.B.(Component Side)**

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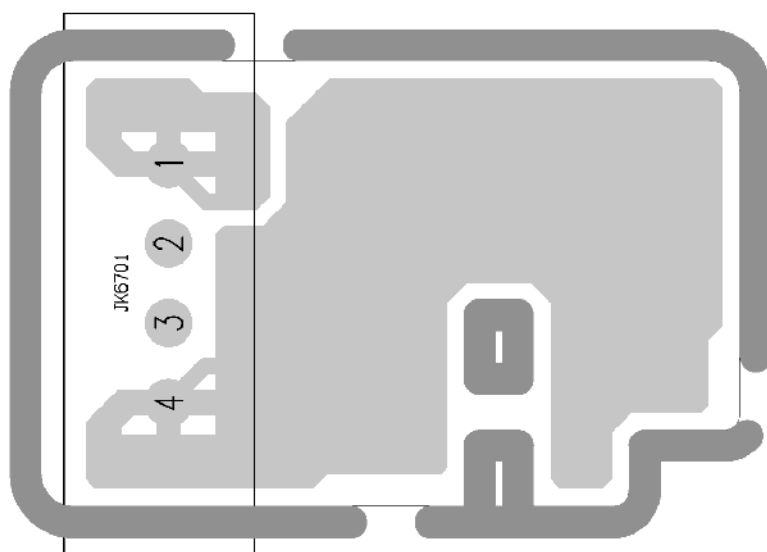




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**Model No. : HC-W580/W580M Battery Catcher P.C.B.(Component Side)**

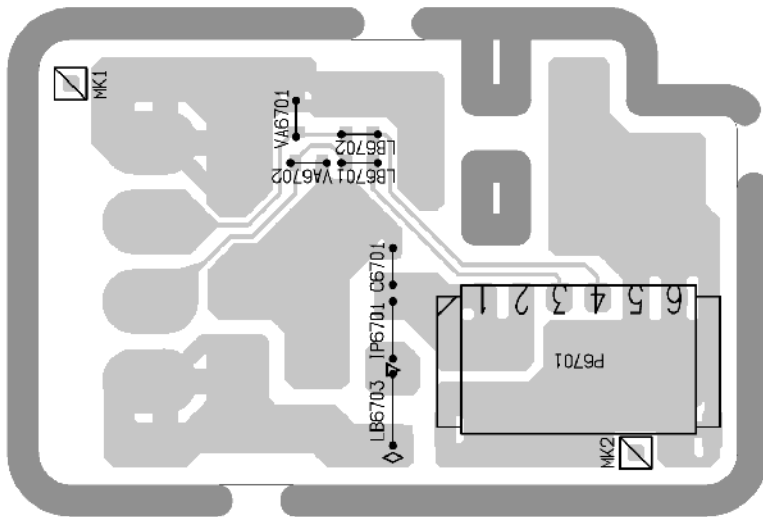
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**Model No. : HC-W580/W580M Battery Catcher P.C.B.(Foil Side)**

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**Model No. : HC-W580/W580M Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		B501	ML-614S/DN	BUTTON BATTERY	1	
		C219	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C224	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C225	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C226	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C227	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C228	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C229	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C230	F1G1H8R0A833	C.CAPACITOR CH 50V 8P	1	
		C231	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C232	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C233	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C235	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C236	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C237	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C239	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C241	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C242	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C243	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C244	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C251	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C252	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C253	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C254	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C257	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C258	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C259	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C260	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C261	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C262	F1G1H100A833	C.CAPACITOR CH 50V 10P	1	
		C263	F1G1H3R0A831	C.CAPACITOR CH 50V 3P	1	
		C265	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C302	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C303	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C304	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C305	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C309	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C310	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C703	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C704	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C705	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C707	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C708	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C715	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C716	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C718	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C719	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C720	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C721	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C722	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C723	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C724	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C725	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C726	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C727	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C728	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C751	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C753	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C754	F1G1H222A830	C.CAPACITOR CH 50V 2200P	1	
		C755	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C761	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	

		C765	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
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**Model No. : HC-W580/W580Mn; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		C767	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C769	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C772	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C774	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C901	F1G1E1040001	C.CAPACITOR CH 25V 0.1U	1	
		C902	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C903	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C904	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C905	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C906	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C907	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C908	F1H0J2250008	C.CAPACITOR CH 6.3V 2.2U	1	
		C909	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C910	F1H0J2250008	C.CAPACITOR CH 6.3V 2.2U	1	
		C911	F1H1A4750001	C.CAPACITOR CH 10V 4.7U	1	
		C912	F1H1A4750001	C.CAPACITOR CH 10V 4.7U	1	
		C913	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
		C914	F1H1C105A167	C.CAPACITOR CH 16V 1U	1	
		C915	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C916	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C917	F1H1A1050040	C.CAPACITOR CH 10V 1U	1	
		C918	F1H1A1050040	C.CAPACITOR CH 10V 1U	1	
		C919	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C920	F1H1A1050040	C.CAPACITOR CH 10V 1U	1	
		C921	F1H1A1050040	C.CAPACITOR CH 10V 1U	1	
		C922	F1H1C105A167	C.CAPACITOR CH 16V 1U	1	
		C923	F1H1C105A167	C.CAPACITOR CH 16V 1U	1	
		C924	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C925	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C926	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C927	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C928	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C929	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C930	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C931	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C932	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C933	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C934	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C935	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C936	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C937	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C938	F1G1H220A834	C.CAPACITOR CH 50V 22P	1	
		C939	F1G1H150A834	C.CAPACITOR CH 50V 15P	1	
		C1001	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1002	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1003	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C1071	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C1101	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1102	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1103	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1104	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1107	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1110	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1212	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1221	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1222	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1223	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C1224	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C1232	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1241	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1242	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	

		C1252	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
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**Model No. : HC-W580/W580Mnbs; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		C1261	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1262	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1264	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1271	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
		C1272	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
		C1281	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1284	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1288	F3G0J1070012	C.CAPACITOR CH 6.3V 100U	1	
		C1291	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1292	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1293	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C1294	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C1295	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1296	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1331	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1344	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1361	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1362	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C1381	F1G0J4740003	C.CAPACITOR CH 6.3V 0.47U	1	
		C1382	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1393	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1394	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1422	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C1471	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1472	F1J1A475A112	C.CAPACITOR CH 10V 4.7U	1	
		C1501	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1505	F1G1E1040001	C.CAPACITOR CH 25V 0.1U	1	
		C1507	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1508	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1511	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1512	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
		C1515	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1516	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1518	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1519	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C1551	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1552	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1553	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C1554	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C2301	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C2304	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C2305	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C2310	F1G1H8R0A833	C.CAPACITOR CH 50V 8P	1	
		C2311	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3401	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3403	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3404	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3405	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3406	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3407	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3408	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3409	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3410	F1G1H9R0A833	C.CAPACITOR CH 50V 9P	1	
		C3411	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3412	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3413	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C3414	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3415	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3416	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3417	F1G1H9R0A833	C.CAPACITOR CH 50V 9P	1	
		C3420	F3F0G4760004	E.CAPACITOR CH 4V 47U	1	

		C3421	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
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**Model No. : HC-W580/W580Mn; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		C3422	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3423	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
		C3424	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3425	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3426	F1G1E682A144	C.CAPACITOR CH 25V 6800P	1	
		C3427	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3428	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3429	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3430	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3431	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3432	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3433	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3434	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3435	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C3437	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3438	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3439	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3443	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3444	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3447	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3449	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3450	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3451	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3452	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3453	F1G1H472B014	C.CAPACITOR CH 50V 4700P	1	
		C3454	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3455	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3456	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3457	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3461	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3462	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3463	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3464	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C3465	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3466	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3469	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3474	F1G1H332A946	C.CAPACITOR CH 50V 3300P	1	
		C3476	F3G0J1070012	C.CAPACITOR CH 6.3V 100U	1	
		C3477	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3479	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3480	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3481	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3484	F1G1H332A946	C.CAPACITOR CH 50V 3300P	1	
		C3485	F1G1H332A946	C.CAPACITOR CH 50V 3300P	1	
		C3486	F1G1H332A946	C.CAPACITOR CH 50V 3300P	1	
		C3487	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3488	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3489	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3490	F1J0J106A020	C.CAPACITOR CH 6.3V 10U	1	
		C3491	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3492	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3495	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
		C3496	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3497	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3701	F1G1H471A946	C.CAPACITOR CH 50V 470P	1	
		C3702	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C3703	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3704	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3705	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3706	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3707	F1H0J2250008	C.CAPACITOR CH 6.3V 2.2U	1	



		C3708	F1H0J2250008	C.CAPACITOR CH 6.3V 2.2U	1	
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**Model No. : HC-W580/W580Mnbsp; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		C3709	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3710	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C3711	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3712	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3713	F1G1H471A946	C.CAPACITOR CH 50V 470P	1	
		C3715	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3716	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3719	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3906	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3908	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3909	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3910	F1G1E103A144	C.CAPACITOR CH 25V 0.01U	1	
		C3911	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C3927	F1J0J2260004	C.CAPACITOR CH 6.3V 22U	1	
		C3956	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	(W580M)
		C3957	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3958	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C3966	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C6001	F1G1E1040001	C.CAPACITOR CH 25V 0.1U	1	
		C6002	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6005	F1H1C105A167	C.CAPACITOR CH 16V 1U	1	
		C6018	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6023	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6024	F1H1C105A167	C.CAPACITOR CH 16V 1U	1	
		C6031	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C6033	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
		C6035	F1G1H472B014	C.CAPACITOR CH 50V 4700P	1	
		C6038	F1G1H472B014	C.CAPACITOR CH 50V 4700P	1	
		C6401	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
		C6403	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6404	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6405	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6406	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6407	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6408	F1G1C104A146	C.CAPACITOR CH 16V 0.1U	1	
		C6412	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
		D901	DZ2J200M0L	DIODE	1	E.S.D.
		D902	B3AFB0000645	DIODE	1	E.S.D.
		D903	B3AFB0000645	DIODE	1	E.S.D.
		D904	B3AFB0000645	DIODE	1	E.S.D.
		D905	B3AFB0000645	DIODE	1	E.S.D.
		D906	B3AFB0000645	DIODE	1	E.S.D.
		D1271	B0ACRC000001	DIODE	1	E.S.D.
		D1471	DZ2J075M0L	DIODE	1	E.S.D.
		D1503	B0JCMC000019	DIODE	1	E.S.D.
		D1505	DB2S31100L	DIODE	1	E.S.D.
		D2301	DB2S31100L	DIODE	1	E.S.D.
		D6401	B3AAB0000343	LED	1	E.S.D.
		ET6001	K4ZZ01000208	EARTH TERMINAL	1	
		FL3401	F1H0J105A037	C.CAPACITOR CH 6.3V 1U	1	
		FL3402	F1H0J105A037	C.CAPACITOR CH 6.3V 1U	1	
		FL6001	JOZZB0000148	FILTER	1	
		FL6002	JOZZB0000148	FILTER	1	
		FL6004	EXC14CE900U	FILTER	1	
		FL6005	EXC14CE900U	FILTER	1	
		FL6006	EXC14CE900U	FILTER	1	
		FP232	K1MY37BA0667	CONNECTOR 37P	1	
		FP252	K1MY33BA0605	CONNECTOR 33P	1	
		FP253	K1MY39BA0667	CONNECTOR 39P	1	
		FP301	K1MY33AA0199	CONNECTOR 33P	1	
		FP902	K1MY39BA0667	CONNECTOR 39P	1	

		FP904	K1MY51BA0575	CONNECTOR 51P	1	
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Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		FP905	K1MY04BA0633	CONNECTOR 4P	1	
		FP6002	K1MY10BA0641	CONNECTOR 10P	1	(W580M)
		FP6003	K1MY06BA0641	CONNECTOR 6P	1	
		FP6004	K1MY08BA0641	CONNECTOR 8P	1	
		FP6005	K1MY21BA0605	CONNECTOR 21P	1	
		FP6008	K1MY39AA0199	CONNECTOR 39P	1	
		FP6010	K1MY37BA0667	CONNECTOR 37P	1	
		FP6402	K1MY10BA0633	CONNECTOR 10P	1	
		HS3901	K1NA09E00153	MEMORY CARD CONNECTOR	1	
		IC203	C0JBAZ003196	IC	1	E.S.D.
		IC205	C0JBAA000608	IC	1	E.S.D.
		IC206	C0DBGYY04550	IC	1	E.S.D.
		IC208	C0DBGYY04659	IC	1	E.S.D.
		IC231	C0DBGYY04532	IC	1	E.S.D.
		IC232	C0DBGYY04540	IC	1	E.S.D.
		IC252	C0JBAA000608	IC	1	E.S.D.
		IC301	C0DBGFC00008	IC	1	E.S.D.
		IC302	C0JBAA000608	IC	1	E.S.D.
		IC701	C1AB00003719	IC	1	E.S.D.
		IC703	C0DBGYY00909	IC	1	E.S.D.
		IC704	VUEALLPT080	IC	1	E.S.D. [INBD]
		IC705	C1AB00003450	IC	1	E.S.D.
		IC741	C1AB00003450	IC	1	E.S.D.
		IC751	EWTS9RCL1A	IC	1	E.S.D. [INBD]
		IC761	C0ABGA000035	IC	1	E.S.D.
		IC901	C1CB00002847	IC	1	E.S.D.
		IC902	B4ZZ00000031	IC	1	E.S.D.
		IC1001	C1ZBZ0004885	IC	1	E.S.D.
		IC1221	C0DBZYY00724	IC	1	E.S.D.
		IC1222	C0EBY0002310	IC	1	E.S.D.
		IC1241	C0ZBZ0002264	IC	1	E.S.D.
		IC1261	C0DBGYY05584	IC	1	E.S.D.
		IC1262	C0ZBZ0002264	IC	1	E.S.D.
		IC1291	C0ZBZ0002264	IC	1	E.S.D.
		IC1341	C0DBGYY05590	IC	1	E.S.D.
		IC1381	C0DBGYY03698	IC	1	E.S.D.
		IC1392	C0DBGYY05582	IC	1	E.S.D.
		IC1421	C0DBGYY00936	IC	1	E.S.D.
		IC1471	C0DBZYY00793	IC	1	E.S.D.
		IC1503	C0DBDYY00054	IC	1	E.S.D.
		IC1551	VUEALLPT082	IC	1	E.S.D. [INBD]
		IC2301	C0EBY0002322	IC	1	E.S.D.
		IC3401	VSG1024	IC	1	E.S.D.
		IC3404	TC58NYG0E16A	IC	1	E.S.D.
		IC3406	C0EBY0002365	IC	1	E.S.D.
		IC3412	C0JBAF000805	IC	1	E.S.D.
		IC3413	C0JBAA000608	IC	1	E.S.D.
		IC3414	C0EBY0002355	IC	1	E.S.D.
		IC3701	VUEALLPT077	IC	1	E.S.D. [INBD]
		IC3702	C0ZBZ0001730	IC	1	E.S.D.
		IC6401	EWTS9PDL1A	IC	1	E.S.D. [INBD]
		IC6411	VUEALLPT053	IC	1	E.S.D. [INBD]
		IP6401	ERBRD4R00X	IC PROTECTOR	1	
		IP6701	K5H402YA0080	IC PROTECTOR	1	
		JK6001	K2HZ105B0012	JACK	1	
		JK6003	K1FA119E0020	JACK	1	
		JK6004	K2HC106E0009	JACK	1	
		JK6401	K2EB2E000009	JACK	1	
		JK6701	K4ZZ04000056	JACK	1	
		L301	G1C100KA0115	CHIP INDUCTOR 10UH	1	

		L302	G1C100MA0408	CHIP INDUCTOR 10UH	1	
		L303	G1C100MA0408	CHIP INDUCTOR 10UH	1	



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Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		L1211	G1C4R7ZA0390	CHIP INDUCTOR 4.7UH	1	
		L1221	G1C3R3MA0477	CHIP INDUCTOR 3.3UH	1	
		L1231	G1C3R3MA0477	CHIP INDUCTOR 3.3UH	1	
		L1241	G1C4R7MA0477	CHIP INDUCTOR 4.7UH	1	
		L1251	G1C4R7MA0477	CHIP INDUCTOR 4.7UH	1	
		L1261	G1C4R7ZA0240	CHIP INDUCTOR 4.7UH	1	
		L1271	G1C6R8MA0478	CHIP INDUCTOR 6.8UH	1	
		L1281	G1C2R2MA0477	CHIP INDUCTOR 2.2UH	1	
		L1291	G1C1R0MA0535	CHIP INDUCTOR 1.0UH	1	
		L1501	G1C4R7ZA0240	CHIP INDUCTOR 4.7UH	1	
		L3406	G1C4R7MA0495	CHIP INDUCTOR 4.7UH	1	
		L3408	G1C4R7MA0408	CHIP INDUCTOR 4.7UH	1	
		L3409	G1C100MA0495	CHIP INDUCTOR 10UH	1	
		L3410	G1C100MA0495	CHIP INDUCTOR 10UH	1	
		L3411	G1C4R7MA0408	CHIP INDUCTOR 4.7UH	1	
		L3412	G1C4R7MA0495	CHIP INDUCTOR 4.7UH	1	
		L3415	G1C4R7MA0495	CHIP INDUCTOR 4.7UH	1	
		LB202	J0JBC0000115	FILTER	1	
		LB301	J0JBC0000099	FILTER	1	
		LB901	J0JBC0000099	FILTER	1	
		LB902	J0JHC0000078	FILTER	1	
		LB3401	J0JBC0000099	FILTER	1	
		LB3404	J0JBC0000099	FILTER	1	
		LB3405	J0JBC0000099	FILTER	1	(W580M)
		LB3951	J0JGC0000059	FILTER	1	(W580M)
		LB6005	J0JJC0000015	FILTER	1	
		LB6013	J0JCC0000276	FILTER	1	
		LB6014	J0JCC0000276	FILTER	1	
		LB6015	J0JCC0000276	FILTER	1	
		LB6401	J0JJC0000015	FILTER	1	
		LB6406	J0JCC0000276	FILTER	1	
		LB6701	J0JCC0000276	FILTER	1	
		LB6702	J0JCC0000276	FILTER	1	
		LB6703	J0JJC0000015	FILTER	1	
		P6003	K1KY06BA0495	CONNECTOR 6P	1	
		P6401	K1KA02BA0014	CONNECTOR 2P	1	
		P6701	K1KY06BA0495	CONNECTOR 6P	1	
		PP6001	K1KY50BA0082	CONNECTOR 50P	1	
		PS6401	K1KB50AA0094	CONNECTOR 50P	1	
		Q775	B1ABCF000316	TRANSISTOR	1	E.S.D.
		Q1001	B1ABCF000316	TRANSISTOR	1	E.S.D.
		Q1471	MTM761230LBF	TRANSISTOR	1	E.S.D.
		Q1501	B1CHQD000012	TRANSISTOR	1	E.S.D.
		Q1502	MTM684110LBF	TRANSISTOR	1	E.S.D.
		Q1503	MTM761230LBF	TRANSISTOR	1	E.S.D.
		Q1504	B1CFJD000007	TRANSISTOR	1	E.S.D.
		Q3401	B1CFGD000003	TRANSISTOR	1	E.S.D.
		Q3402	B1CFJD000007	TRANSISTOR	1	E.S.D.
		Q3701	B1ABCF000316	TRANSISTOR	1	E.S.D.
		Q3901	MTM761230LBF	TRANSISTOR	1	E.S.D.
		QR751	B1GDCFYY0154	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1001	B1GDCFYY0152	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1002	B1GDCFYY0152	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1003	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1101	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1221	B1GDCFYY0152	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1222	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1471	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1501	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1502	B1GDCFYY0207	TRANSISTOR-RESISTOR	1	E.S.D.
		QR1503	B1GDCFYY0207	TRANSISTOR-RESISTOR	1	E.S.D.


		QR2308	B1GDCFYY0207	TRANSISTOR-RESISTOR	1	E.S.D.
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**Model No. : HC-W580/W580Mnbs; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		QR2389	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3401	B1GBCFYY0224	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3402	B1GDCFY0207	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3403	B1GBCFYY0284	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3410	B1GBCFYY0234	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3411	B1GDCFY0189	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3412	B1GBCFYY0234	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3413	B1GDCFY0189	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3415	B1GDCFY0151	TRANSISTOR-RESISTOR	1	E.S.D.
		QR3416	B1GDCFY0151	TRANSISTOR-RESISTOR	1	E.S.D.
		QR6006	B1GDCFY0151	TRANSISTOR-RESISTOR	1	E.S.D.
		QR6007	B1GDCFY0152	TRANSISTOR-RESISTOR	1	E.S.D.
		QR6008	B1GBCFYY0217	TRANSISTOR-RESISTOR	1	E.S.D.
		QR6401	B1GDCFY0180	TRANSISTOR-RESISTOR	1	E.S.D.
		QR6402	B1GDCFY0180	TRANSISTOR-RESISTOR	1	E.S.D.
		R203	DOGA272JA023	M.RESISTOR CH 1/10W 2.7K	1	
		R206	DOGAR00J0005	M.RESISTOR CH 1/10W 0	1	
		R213	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R214	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	
		R216	DOGA222JA023	M.RESISTOR CH 1/10W 2.2K	1	
		R217	DOGA222JA023	M.RESISTOR CH 1/10W 2.2K	1	
		R218	DOGA272JA023	M.RESISTOR CH 1/10W 2.7K	1	
		R220	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	
		R231	DOGA272JA023	M.RESISTOR CH 1/10W 2.7K	1	
		R232	DOGA272JA023	M.RESISTOR CH 1/10W 2.7K	1	
		R251	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R252	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R261	DOGA5R6JA023	M.RESISTOR CH 1/16W 5.6	1	
		R263	DOGAR00J0005	M.RESISTOR CH 1/10W 0	1	
		R304	DOGA272JA023	M.RESISTOR CH 1/10W 2.7K	1	
		R305	DOGA390JA023	M.RESISTOR CH 1/10W 39	1	
		R505	DOGA222JA023	M.RESISTOR CH 1/10W 2.2K	1	
		R508	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R509	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R510	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R511	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R715	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	
		R716	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R717	DOGA682JA023	M.RESISTOR CH 1/10W 6.8K	1	
		R719	DOGAR00J0005	M.RESISTOR CH 1/10W 0	1	
		R751	DOGA181JA023	M.RESISTOR CH 1/10W 180	1	
		R761	DOGA223JA023	M.RESISTOR CH 1/10W 22K	1	
		R765	D1BA2702A022	M.RESISTOR CH 1/16W 27K	1	
		R766	D1BA1502A022	M.RESISTOR CH 1/16W 15K	1	
		R767	DOGA222JA023	M.RESISTOR CH 1/10W 2.2K	1	
		R768	D1BA3302A022	M.RESISTOR CH 1/16W 33K	1	
		R771	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R772	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R773	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R774	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R775	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R776	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R777	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
		R791	DOGA391JA023	M.RESISTOR CH 1/10W 390	1	
		R792	DOGA391JA023	M.RESISTOR CH 1/10W 390	1	
		R793	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R913	DOGA151JA023	M.RESISTOR CH 1/10W 150	1	
		R914	DOGA151JA023	M.RESISTOR CH 1/10W 150	1	
		R915	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	
		R1003	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R1004	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	

	R1005	DOGA154JA023	M.RESISTOR CH 1/10W 150K	1	
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**Model No. : HC-W580/W580Mn; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		R1006	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R1101	DOGA120JA023	M.RESISTOR CH 1/10W 12	1	
		R1107	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R1221	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
		R1222	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R1223	DOGA224JA023	M.RESISTOR CH 1/10W 220K	1	
		R1241	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R1252	D1BA3303A022	M.RESISTOR CH 1/16W 330K	1	
		R1253	D1BA4702A022	M.RESISTOR CH 1/16W 47K	1	
		R1254	D1BA2203A022	M.RESISTOR CH 1/16W 220K	1	
		R1262	D1BA1002A022	M.RESISTOR CH 1/16W 10K	1	
		R1263	D1BA1501A022	M.RESISTOR CH 1/16W 1.5K	1	
		R1264	D1BA2202A022	M.RESISTOR CH 1/16W 22K	1	
		R1271	D1JBR179A023	FUSING RESISTOR 0.179	1	
		R1282	D1BA1302A022	M.RESISTOR CH 1/16W 13K	1	
		R1292	D1BA5102A022	M.RESISTOR CH 1/16W 51K	1	
		R1293	D1BA6201A022	M.RESISTOR CH 1/16W 6.2K	1	
		R1294	D1BA2203A022	M.RESISTOR CH 1/16W 220K	1	
		R1296	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R1297	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R1382	DOGA222JA023	M.RESISTOR CH 1/10W 2.2K	1	
		R1426	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R1471	DOGA163JA023	M.RESISTOR CH 1/10W 16K	1	
		R1472	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R1473	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R1474	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R1501	DOGA105JA023	M.RESISTOR CH 1/10W 1M	1	
		R1513	D1BA1503A022	M.RESISTOR CH 1/16W 150K	1	
		R1515	D1BA1203A022	M.RESISTOR CH 1/16W 120K	1	
		R1516	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R1522	D1BA1203A022	M.RESISTOR CH 1/16W 120K	1	
		R1523	D1BA1803A022	M.RESISTOR CH 1/16W 180K	1	
		R1525	D1BA2202A022	M.RESISTOR CH 1/16W 22K	1	
		R1526	D1BDR100A111	M.RESISTOR CH 1/3W 100	1	
		R1529	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	
		R1531	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R1535	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
		R1551	DOGA331JA023	M.RESISTOR CH 1/10W 330	1	
		R2301	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R2304	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R2312	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
		R3400	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3401	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3402	DOGA681JA023	M.RESISTOR CH 1/10W 680	1	
		R3406	DOGA121JA023	M.RESISTOR CH 1/10W 120	1	
		R3409	DOGA560JA023	M.RESISTOR CH 1/10W 56	1	
		R3411	D1BA3901A022	M.RESISTOR CH 1/16W 3.9K	1	
		R3413	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3414	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3417	DOGA122JA023	M.RESISTOR CH 1/10W 1.2K	1	
		R3418	DOGA122JA023	M.RESISTOR CH 1/10W 1.2K	1	
		R3419	DOGA681JA023	M.RESISTOR CH 1/10W 680	1	
		R3424	DOGA105JA023	M.RESISTOR CH 1/10W 1M	1	
		R3426	DOGA470JA023	M.RESISTOR CH 1/10W 47	1	
		R3427	D1BA2400A022	M.RESISTOR CH 1/16W 240	1	
		R3428	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3429	DOGA273JA023	M.RESISTOR CH 1/10W 27K	1	
		R3430	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3431	D1BA2400A022	M.RESISTOR CH 1/16W 240	1	
		R3432	D1BA4701A022	M.RESISTOR CH 1/16W 4.7K	1	
		R3433	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	

	R3436	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
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**Model No. : HC-W580/W580Mnbsp; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		R3437	DOGA182JA023	M.RESISTOR CH 1/10W 1.8K	1	
		R3438	DOGA182JA023	M.RESISTOR CH 1/10W 1.8K	1	
		R3439	D1BA2400A022	M.RESISTOR CH 1/16W 240	1	
		R3440	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R3441	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R3442	DOGA680JA023	M.RESISTOR CH 1/10W 68	1	
		R3443	DOGA470JA023	M.RESISTOR CH 1/10W 47	1	
		R3444	D1BA2400A022	M.RESISTOR CH 1/16W 240	1	
		R3448	D1BA6201A022	M.RESISTOR CH 1/16W 6.2K	1	
		R3450	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3451	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3453	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3454	D1BA1801A022	M.RESISTOR CH 1/16W 1.8K	1	
		R3457	DOGA152JA023	M.RESISTOR CH 1/10W 1.5K	1	
		R3458	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3461	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R3462	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3463	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R3466	DOGA473JA039	M.RESISTOR CH 1/16W 47K	1	
		R3467	D1BA1802A022	M.RESISTOR CH 1/16W 18K	1	
		R3468	D1BA1002A022	M.RESISTOR CH 1/16W 10K	1	
		R3470	D1BA2000A022	M.RESISTOR CH 1/16W 200	1	
		R3472	D1BA6801A022	M.RESISTOR CH 1/16W 6.8K	1	
		R3476	D1BA2000A022	M.RESISTOR CH 1/16W 200	1	
		R3486	DOGA270JA023	M.RESISTOR CH 1/10W 27	1	
		R3487	DOGA270JA023	M.RESISTOR CH 1/10W 27	1	
		R3499	DOGAR00J0005	M.RESISTOR CH 1/10W 0	1	
		R3506	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3507	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3508	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3526	DOGA101JA039	M.RESISTOR CH 1/16W 100	1	(W580M)
		R3527	DOGA560JA023	M.RESISTOR CH 1/10W 56	1	(W580M)
		R3701	D0HB392ZA002	M.RESISTOR CH 1/16W 3.9K	1	
		R3702	D0HB392ZA002	M.RESISTOR CH 1/16W 3.9K	1	
		R3703	DOGA472JA023	M.RESISTOR CH 1/10W 4.7K	1	
		R3704	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3901	DOGA560JA023	M.RESISTOR CH 1/10W 56	1	
		R3902	DOGA680JA023	M.RESISTOR CH 1/10W 68	1	
		R3903	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R3904	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R3906	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3907	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R3909	DOGA104JA039	M.RESISTOR CH 1/16W 100K	1	
		R3910	DOGB150JA065	M.RESISTOR CH 1/10W 15	1	
		R3953	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R3956	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	(W580M)
	⚠	R6001	D1JBR045A055	FUSING RESISTOR 0.045	1	
		R6002	DOGA103JA039	M.RESISTOR CH 1/16W 10K	1	
		R6006	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R6007	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R6009	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R6010	DOGA100JA023	M.RESISTOR CH 1/10W 10	1	
		R6020	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		R6021	DOGA223JA023	M.RESISTOR CH 1/10W 22K	1	
		R6022	DOGA223JA023	M.RESISTOR CH 1/10W 22K	1	
		R6025	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R6026	DOGA221JA023	M.RESISTOR CH 1/10W 220	1	
		R6027	D1BA68R0A022	M.RESISTOR CH 1/16W 68	1	
		R6401	D1BA1002A022	M.RESISTOR CH 1/16W 10K	1	
		R6402	D1BA1002A022	M.RESISTOR CH 1/16W 10K	1	
		R6403	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	

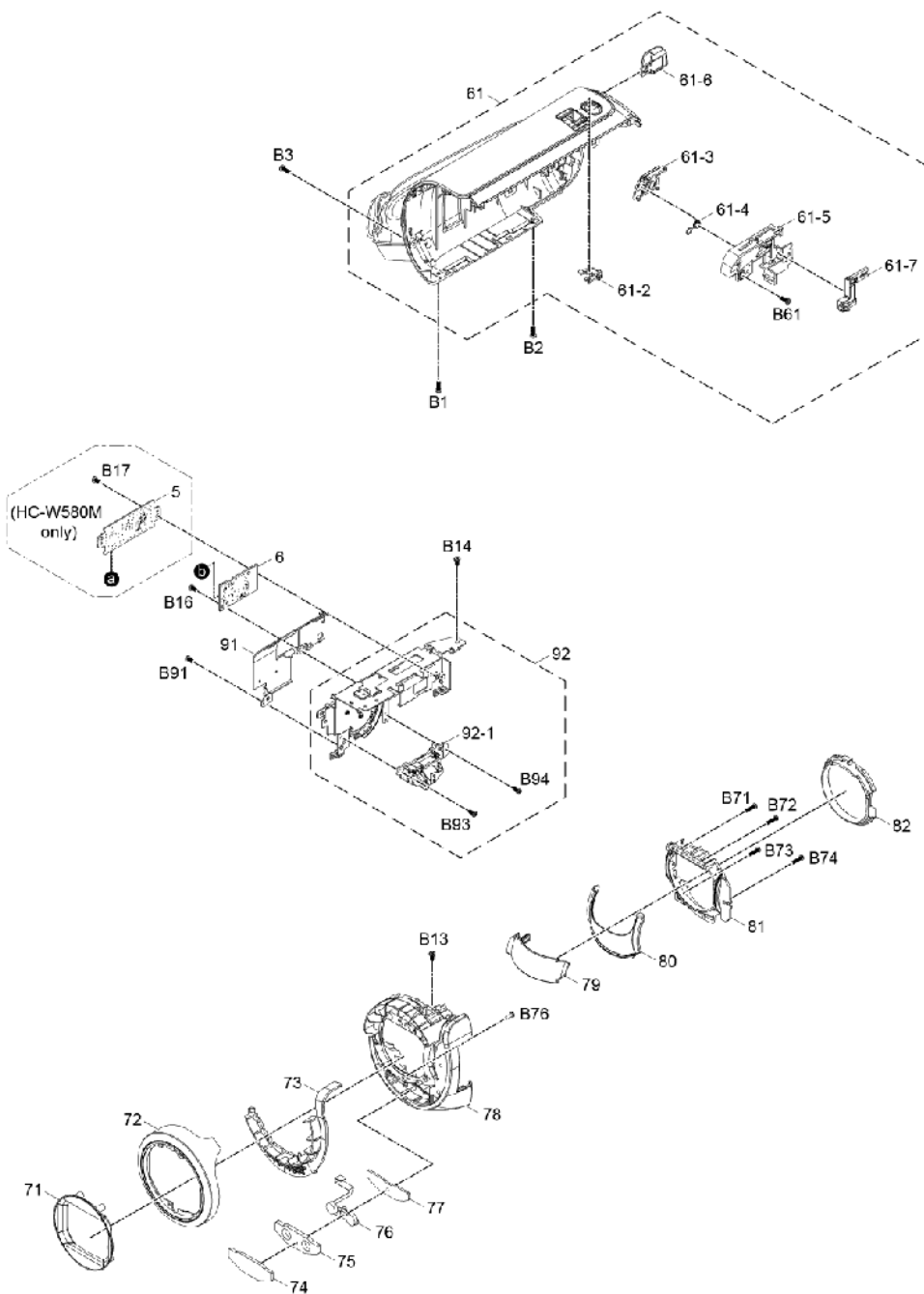
	R6404	DOGA181JA023	M.RESISTOR CH 1/10W 180	1	
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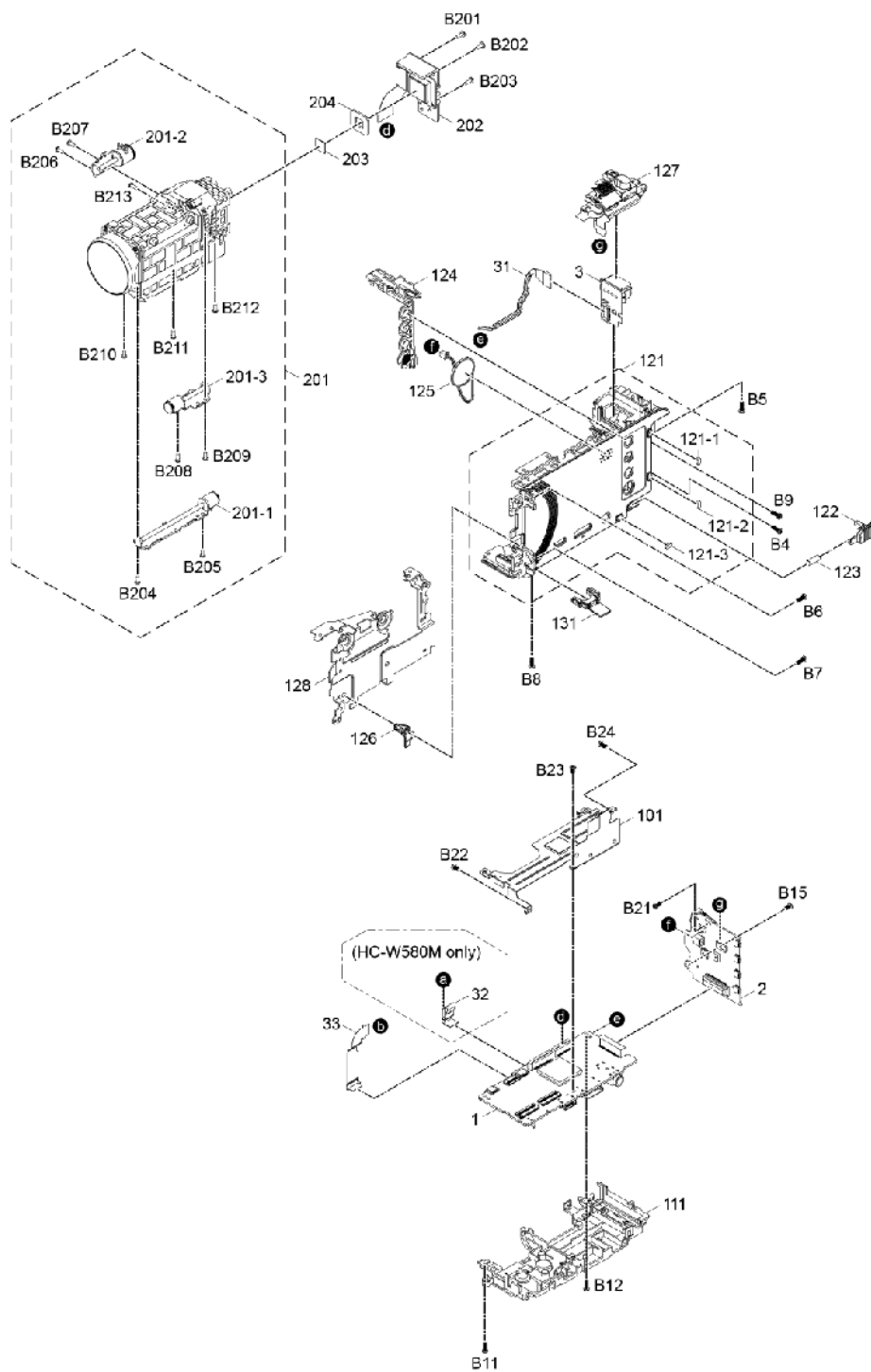
**Model No. : HC-W580/W580Mn; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		R6405	DOGA470JA023	M.RESISTOR CH 1/10W 47	1	
		R6406	D1BA4701A022	M.RESISTOR CH 1/16W 4.7K	1	
		R6407	D1BA1502A022	M.RESISTOR CH 1/16W 15K	1	
		R6408	D1BA4701A022	M.RESISTOR CH 1/16W 4.7K	1	
		R6409	D1BA1502A022	M.RESISTOR CH 1/16W 15K	1	
		R6410	DOGA102JA039	M.RESISTOR CH 1/16W 1K	1	
		RX901	D1H88204A042	RESISTOR NETWORKS	1	
		RX902	D1H88204A042	RESISTOR NETWORKS	1	
		RX903	D1H88204A042	RESISTOR NETWORKS	1	
		RX904	D1H88204A042	RESISTOR NETWORKS	1	
		RX3401	D1H84704A042	RESISTOR NETWORKS	1	
		RX3404	D1H81034A042	RESISTOR NETWORKS	1	
		RX3405	D1H81034A042	RESISTOR NETWORKS	1	
		RX3407	D1H85604A042	RESISTOR NETWORKS	1	
		RX3408	D1H84734A042	RESISTOR NETWORKS	1	
		RX3409	D1H84734A042	RESISTOR NETWORKS	1	
		RX3414	D1H84734A042	RESISTOR NETWORKS	1	
		RX3415	D1H81034A042	RESISTOR NETWORKS	1	
		RX3418	D1H84724A042	RESISTOR NETWORKS	1	
		RX3419	D1H81034A042	RESISTOR NETWORKS	1	
		RX3420	D1H81034A042	RESISTOR NETWORKS	1	
		RX3421	D1H81034A042	RESISTOR NETWORKS	1	
		RX3422	D1H85604A042	RESISTOR NETWORKS	1	(W580M)
		RX3901	D1H86804A042	RESISTOR NETWORKS	1	
		RX3902	D1H81034A042	RESISTOR NETWORKS	1	
		RX3951	D1H81034A042	RESISTOR NETWORKS	1	(W580M)
		RX3952	D1H81034A042	RESISTOR NETWORKS	1	
		S6001	ESE18L12BXPFD	SWITCH	1	
		S6401	K0H1BA000580	SWITCH	1	
		S6402	K0H1BA000580	SWITCH	1	
		S6403	K0H1BA000580	SWITCH	1	
		S6404	K0F111A00475	SWITCH	1	
		S6405	K0H1BA000580	SWITCH	1	
		VA251	D4ED16R80001	VARISTOR	1	
		VA501	D4ED18R00008	VARISTOR	1	
		VA502	D4ED18R00008	VARISTOR	1	
		VA503	D4ED18R00008	VARISTOR	1	
		VA504	D4ED18R00008	VARISTOR	1	
		VA906	D4ED16R80001	VARISTOR	1	
		VA1502	D4ED1270A011	VARISTOR	1	
		VA3701	D4EDY1310001	VARISTOR	1	
		VA3702	D4EDY1310001	VARISTOR	1	
		VA6401	D4ED1270A011	VARISTOR	1	
		VA6402	D4ED18R00008	VARISTOR	1	
		VA6405	D4EDY1310001	VARISTOR	1	
		VA6406	D4EDY1310001	VARISTOR	1	
		VA6407	D4ED18R00008	VARISTOR	1	
		VA6701	D4EDY1310001	VARISTOR	1	
		VA6702	D4EDY1310001	VARISTOR	1	
		X301	H1A6005B0019	CRYSTAL OSCILLATOR	1	
		X2303	H0J327200085	CRYSTAL OSCILLATOR	1	
		X3401	H0J480500048	CRYSTAL OSCILLATOR	1	

**Model No. : HC-W580/W580M Frame and Casing Section (1)**



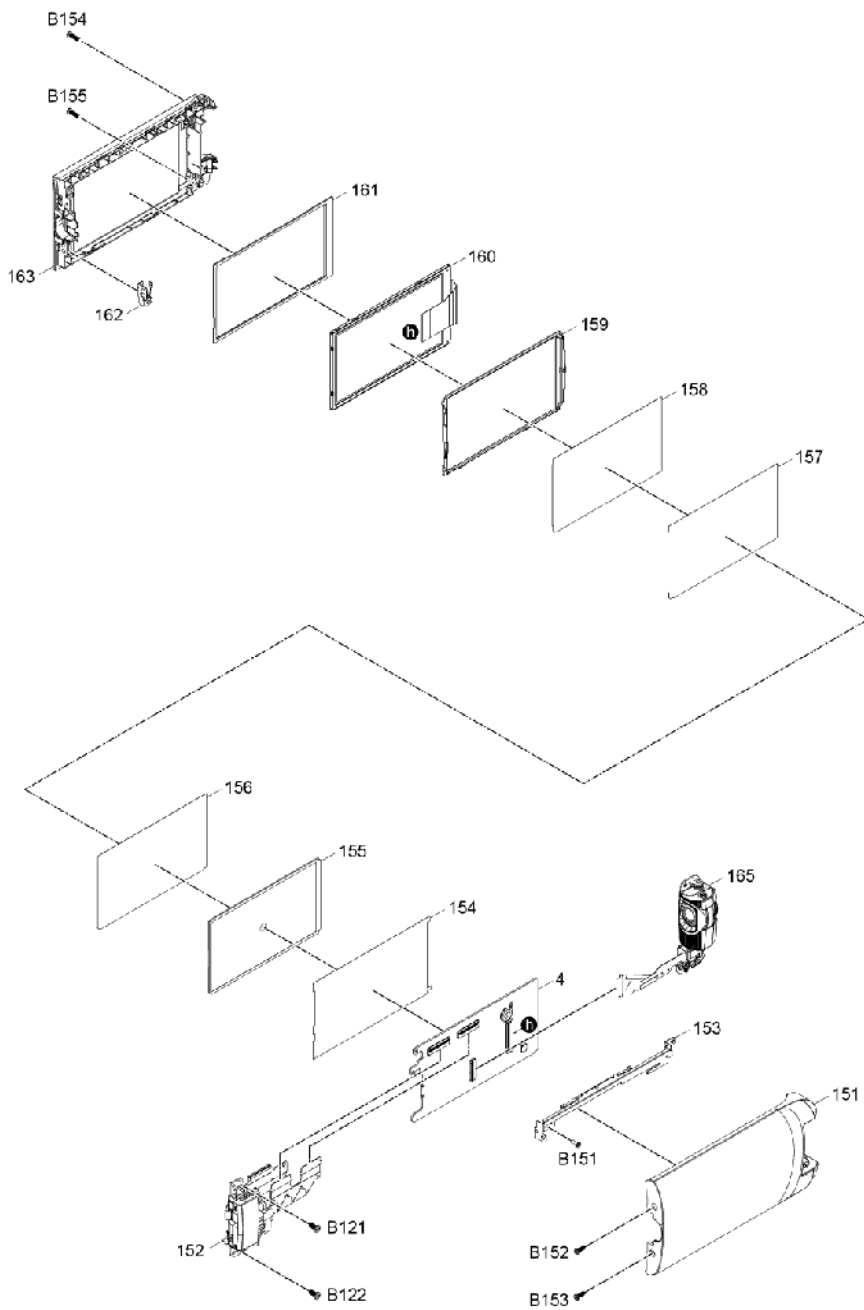
**Model No. : HC-W580/W580M Frame and Casing Section (2)**



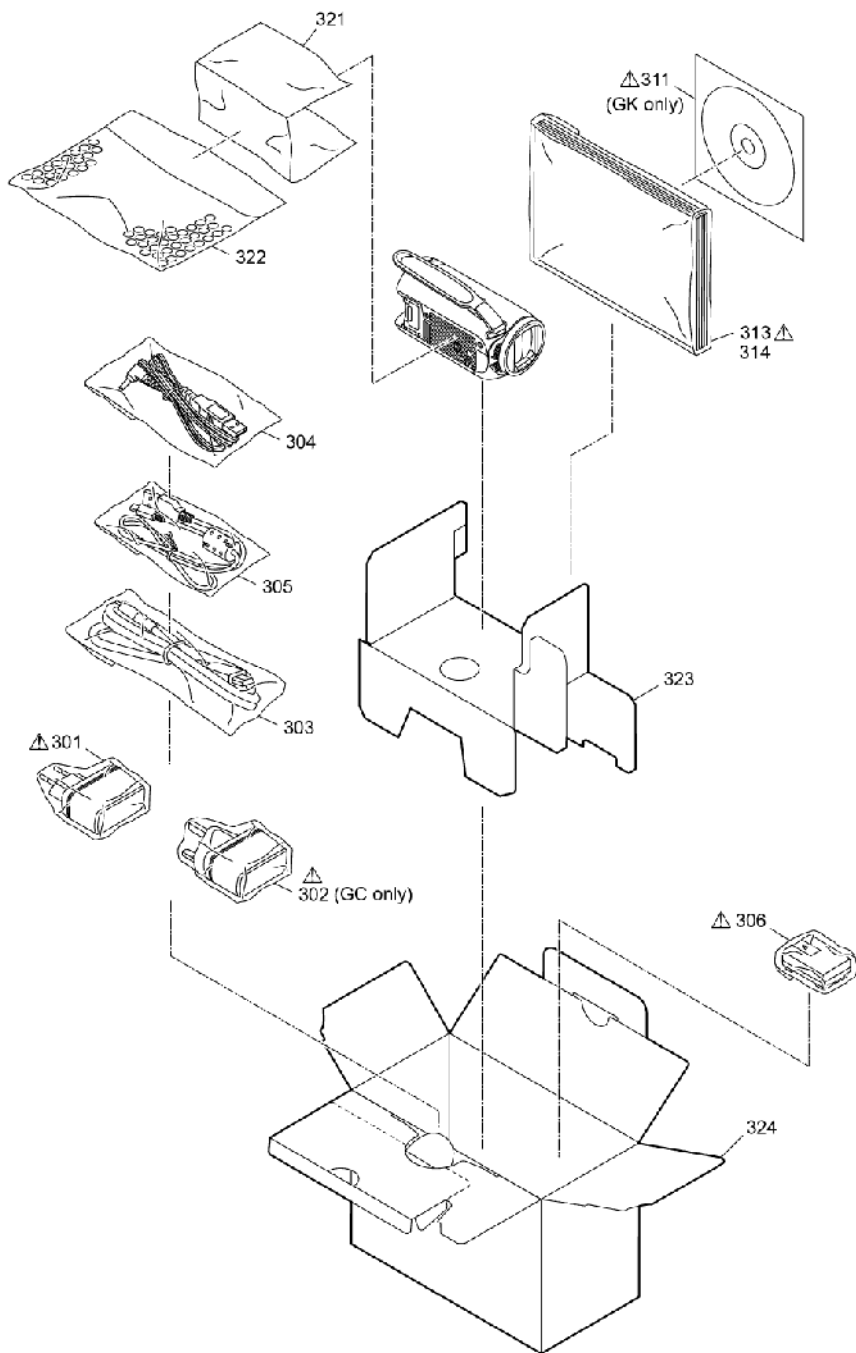
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**Model No. : HC-W580/W580M LCD Section**

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**Model No. : HC-W580/W580M Packing Parts and Accessories Section**



**Model No. : HC-W580/W580M Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		1	SEP0268AC	MAIN P.C.B.	1	(RTL) E.S.D. (W580M)
		1	SEP0268AD	MAIN P.C.B.	1	(RTL) E.S.D. (W580)
		2	SEP0269AB	SD HOLDER P.C.B.	1	(RTL) E.S.D.
		3	VEP01A79B	BATT. CATCHER P.C.B.	1	(RTL) E.S.D.
		4	SEP0270AB	MONITOR P.C.B.	1	(RTL) E.S.D.
		5	VEP03J60AB	ESD P.C.B. UNIT	1	E.S.D. (W580M)
		6	VEP06G78J	Wi-Fi P.C.B.	1	E.S.D. (except GK)
		6	VEP06G78L	Wi-Fi P.C.B.	1	E.S.D. (GK)
		31	SEE0191	BATT. CATCHER WIRE	1	
		32	VWJ2260	ESD FPC	1	(W580M)
		33	VWJ2378	Wi-Fi FPC	1	
		61	SYK1286	SIDE CASE-L UNIT	1	(-K)
		61	SYK1367	SIDE CASE-L UNIT	1	(-T)
		61	SYK1362	SIDE CASE-L UNIT	1	(-W)
		61-2	SGL0011	POWER PANEL LIGHT	1	
		61-3	SYK1238	DC JACK COVER UNIT	1	(-K)
		61-3	SYK0511	DC JACK COVER UNIT	1	(-T)
		61-3	SYK0510	DC JACK COVER UNIT	1	(-W)
		61-4	VMB4656	JACK DOOR SPRING	1	
		61-5	SGQ0278	JACK COVER PIECE	1	
		61-6	SGU0108	SS BUTTON	1	
		61-7	SGQ0279	SS LEVER	1	
		71	VGQ1H98-A	FLARE CUT PIECE	1	
		72	SGK0264K	FRONT ORNAMENT RING	1	(-K)
		72	SGK0264N	FRONT ORNAMENT RING	1	(-T, -W)
		73	SKK0350K	MIC COVER	1	(-K)
		73	SKK0350N	MIC COVER	1	(-T, -W)
		74	SGQ0282	MIC SPONGE-F	1	
		75	SGQ0283	MIC SPONGE-M	1	
		76	L0CBAY000164	MICROPHONE UNIT	1	
		77	SGQ0284	MIC SPONGE-R	1	
		78	SKK0156K	FRONT CASE	1	(-K)
		78	SKK0156T	FRONT CASE	1	(-T)
		78	SKK0156W	FRONT CASE	1	(-W)
		79	VGQ1J09	BARRIER F	1	
		80	VGQ1J10	BARRIER R	1	
		81	VGQ1J11-A	FRONT BASE	1	
		82	VMG2069	LENS DAMPER RUBBER	1	
		91	SYK0105	HEAT RADIATION PLATE-L UNIT	1	
		92	SYQ0199	LENS FRAME UNIT	1	
		92-1	N9ZZ00000450	BARRIER MOTOR UNIT	1	
		101	SYQ0125	HEAT RADIATION PLATE UNIT	1	
		111	SYK0716	BOTTOM FRAME UNIT	1	
		121	SYK1281	SIDE CASE-R UNIT	1	
		121-1	SGQ0007	LCD CUSHION	1	
		121-2	SGQ0007	LCD CUSHION	1	
		121-3	SGQ0007	LCD CUSHION	1	
		122	SGU0106	BATT. LOCK BUTTON	1	
		123	VMB4482	BATT. LOCK SPRING	1	
		124	SGU0107	SR OP BUTTON	1	
		125	L0AA01A00161	SPEAKER	1	
		126	SGQ0296	LCD LEVER	1	
		127	K0RE00300032	TOP OPERATION	1	
		128	SYQ0126	R FRAME UNIT	1	
		131	SGQ0335	SR SLIDE LEVER	1	
		151	SYK1309	LCD CASE(T) UNIT	1	PP-K, PU-K, EB-K, EE-K, EF-K, EG-K, EP-K, GC-K, GK-K, GW-K
		151	SYK1366	LCD CASE(T) UNIT	1	GC-T
		151	SYK1283	LCD CASE(T) UNIT	1	MGK-K, MGN-K
		151	SYK1290	LCD CASE(T) UNIT	1	MGK-W
		152	SYQ0615	LCD HINGE UNIT	1	(-K)

		152	SYQ0617	LCD HINGE UNIT	1	(-T)
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**Model No. : HC-W580/W580Mnbspc; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		152	SYQ0616	LCD HINGE UNIT	1	(-W)
		153	SGF0035	LCD FRAME A	1	
		154	VGL1449	REFLECTION SHEET	1	
		155	VKW3518	LIGHT GUIDE PLATE	1	
		156	VGL1384	DIFFUSION SHEET	1	
		157	VGL1460	PRISM SHEET B	1	
		158	SGQ0313	PRISM SHEET A	1	
		159	SGQ0002	LGP HOLDER	1	
		160	L5BDDYY00073	LCD	1	
		161	SGQ0001	TP SPACER	1	
		162	SGF0002	LCD FRAME B	1	
		163	SYK1284	LCD CASE (B) UNIT	1	(-K) *With a touch panel
		163	SYK1291	LCD CASE (B) UNIT	1	(-T,-W) *With a touch panel
		165	SYK0733	SUB CAMERA UNIT	1	(-K)
		165	SYK0735	SUB CAMERA UNIT	1	(-T)
		165	SYK0734	SUB CAMERA UNIT	1	(-W)
		201	SXW0173	LENS UNIT	1	E.S.D.
		201-1	L6HAYYYB0008	2ND STEPPING MOTOR	1	
		201-2	L6HAYYYB0009	3RD STEPPING MOTOR	1	
		201-3	L6HAYYYB0010	FOCUS STEPPING MOTOR	1	
		202	SXQ0229	MOS UNIT	1	E.S.D.
		203	VDL2992	IR CUT GLASS	1	
		204	VMX4008	MOS CUSHION	1	
		B1	XQN16+BJ5FJK	SCREW	1	
		B2	XQN16+BJ5FJK	SCREW	1	
		B3	XQN16+BJ5FJK	SCREW	1	
		B4	XQN16+BJ5FJK	SCREW	1	
		B5	XQN16+BJ5FJK	SCREW	1	
		B6	XQN16+BJ5FJK	SCREW	1	
		B7	XQN16+BJ5FJK	SCREW	1	
		B8	XQN16+BJ5FJK	SCREW	1	
		B9	XQN16+BJ5FJK	SCREW	1	
		B11	XQN16+B5FJK	SCREW	1	
		B12	XQN16+B5FJK	SCREW	1	
		B13	XQN16+B3FN	SCREW	1	
		B14	XQN16+B3FN	SCREW	1	
		B15	VHD1919	SCREW	1	
		B16	XQN16+B3FN	SCREW	1	
		B17	XQN16+B3FN	SCREW	1	(W580M)
		B21	VHD1919	SCREW	1	
		B22	XQN16+B3FN	SCREW	1	
		B23	VHD1919	SCREW	1	
		B24	XQN16+BJ4FN	SCREW	1	
		B61	XQN16+BJ5FJK	SCREW	1	
		B71	XQN14+BJ6FJK	SCREW	1	
		B72	XQN14+BJ6FJK	SCREW	1	
		B73	XQN14+BJ6FJK	SCREW	1	
		B74	XQN14+BJ6FJK	SCREW	1	
		B76	XQN14+BJ4FN	SCREW	1	
		B91	VHD1919	SCREW	1	
		B93	VHD1919	SCREW	1	
		B94	VHD1919	SCREW	1	
		B121	VHD1411	SCREW	1	
		B122	VHD1411	SCREW	1	
		B151	XQN14+BJ4FN	SCREW	1	
		B152	VHD1688	SCREW	1	
		B153	VHD1688	SCREW	1	
		B154	XQN16+BJ5FJK	SCREW	1	
		B155	XQN16+BJ5FJK	SCREW	1	
		B201	VHD2448	SCREW	1	
		B202	VHD2448	SCREW	1	



		E203	VHD2448	SCREW	1	
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**Model No. : HC-W580/W580Mnbsp; Parts List**

Change	Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
		B204	VHD2398	SCREW	1	
		B205	VHD2398	SCREW	1	
		B206	VHD2398	SCREW	1	
		B207	VHD2398	SCREW	1	
		B208	VHD2398	SCREW	1	
		B209	VHD2398	SCREW	1	
		B210	VHD2398	SCREW	1	
		B211	VHD2398	SCREW	1	
		B212	VHD2398	SCREW	1	
		B213	VHD2398	SCREW	1	
	⚠	301	VSK0815FA	AC ADAPTOR	1	PP, PU
	⚠	301	VSK0815H	AC ADAPTOR	1	GK, MGK
	⚠	301	VSK0815K	AC ADAPTOR	1	EE, EF, EG, EP, GC
	⚠	301	VSK0815L	AC ADAPTOR	1	EB
	⚠	301	VSK0815MA	AC ADAPTOR	1	MGN
	⚠	301	VSK0815Q	AC ADAPTOR	1	GW
	⚠	302	VSK0815N	AC ADAPTOR	1	GC
		303	K1HY19YY0021	HDMI MINI CABLE	1	
		304	K2GHYYS00002	DC CABLE	1	
		305	K2KYYYY00236	USB CABLE	1	
	⚠	306	-----	BATTERY PACK	1	PP
	⚠	306	-----	BATTERY PACK	1	PU, EB, EE, EF, EG, EP, GC, GW, MGN
	⚠	306	-----	BATTERY PACK	1	GK, MGK
	⚠	311	SFM0119	CD-ROM (O/I)	1	GK, MGK
	⚠	313	SQT1139	OPERATING INSTRUCTIONS (ENGLISH/FR ENCH)	1	PP
	⚠	313	SQT1140	OPERATING INSTRUCTIONS (SPANISH)	1	PU
	⚠	313	SQT1141	OPERATING INSTRUCTIONS (GERMAN/TUR KISH/ITALIAN)	1	EG
	⚠	313	SQT1142	OPERATING INSTRUCTIONS (FRENCH/DUT CH)	1	EF, EG
	⚠	313	SQT1143	OPERATING INSTRUCTIONS (SPANISH/PO RTUGUESSE)	1	EG
	⚠	313	SQT1144	OPERATING INSTRUCTIONS (SWEDISH/DA NISH/FINNISH)	1	EG
	⚠	313	SQT1145	OPERATING INSTRUCTIONS (ENGLISH)	1	EB, EP
	⚠	313	SQT1146	OPERATING INSTRUCTIONS (POLISH/CZE CH/HUNGARIAN)	1	EP
	⚠	313	SQT1147	OPERATING INSTRUCTIONS (ENGLISH)	1	GC, GW, MGN
	⚠	313	SQT1148	OPERATING INSTRUCTIONS (ARABIC)	1	GC
	⚠	313	SQT1149	OPERATING INSTRUCTIONS (RUSSIAN/UK RAINIAN)	1	EE
	⚠	313	SQT1150	OPERATING INSTRUCTIONS (CHINESE)	1	GK, MGK
		314	VPF1545	BAG, POLYETHYLENE	1	
		321	LSMF0623	PROTECT SHEET	1	
		322	VPF1560	PROTECT BAG	1	
		323	SPN0185	PAD	1	
		324	SPG0562	PACKING CASE	1	PP, PU, EB, EE, EF, EG, EP, GW
		324	SPG0564	PACKING CASE	1	GC-K
		324	SPG0566	PACKING CASE	1	MGN
		324	SYQ0655	PACKING CASE UNIT	1	GK-K
		324	SYQ0658	PACKING CASE UNIT	1	MGK-K
		324	SYQ0659	PACKING CASE UNIT	1	MGK-W
		324	SYQ0660	PACKING CASE UNIT	1	GC-T