DIGITAL CAMERA LENS

NX Lens-XL1103
SAMSUNG 85 mm F1.4 ED SSA

SERVICE Manual

DIGITAL CAMERA LENS

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1. Repair information

1-1 Customer satisfaction statement

We hold ourselves to the highest standards of customer satisfaction and service.

- Combining perfect technical solutions with a customer-oriented approach is our top priority.
- We treat our customers we serve with kindness, loyalty, respect and dignity.
- We are committed to earn customers' trust continuously through excellence in repair solutions.
- We keep our promises and commitments to our customers.
- Committed to quick and easy resolution of all support issues, we deliver industry-leading response times.

[Guide]

We listen carefully to our customers' requirements and always find an optimum solution for their needs.
We are committed to your satisfaction and have procedures in place to provide you with a fair, timely and effective means to resolve problems. It combines industry leading preventive assistance with responsive support that helps us address problems quickly and effectively.
We will continuously maintain and improve our services to satisfy the needs of our customers.

1-2 Warranty and repair service information

(1) General terms and conditions

It is guaranteed to be free of charge from defects in material and workmanship under normal use for a period of one year from date of purchase.
Digital Camera and lens come with a one year limited warranty from the date of purchase.

*** The duration of the warranty depends on the laws in the country in which it was purchased.**

The following information will be required to process warranty requests:

a. We imply warranties to one year from the original date of purchase. In the event that the purchaser is unable to provide a warranty card or proof of purchase, the warranty period will be determined by the date of manufacture. The warranty period shall be decreased to three months from the original product manufactured date.

b. The coverage under this warranty begins on the date of your purchase of the product. In the event that a warranty card or proof of purchase is not available, a purchase receipt, preferably the purchase invoice, to confirm the date of purchase is required for warranty service.

c. In the event that a valid date of purchase is not available, the warranty period will be determined by the date of manufacture. The warranty period shall be decreased to three months from the original product manufactured date.

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(2) Limited Warranty

It reserves the right to retain any parts or components replaced at its discretion in the event of a defect noticed in the product. The period with respect to retaining components may vary respectively depending on its components. We are not liable to repair or replace its faulty product after the Warranty Period has expired.

*** We warrant its retaining camera and lenses for five years and three years for the accessories.**

a. If a warranty claim is filed after the product has been discontinued, we reserves the right to honor the components warranty. Warranty period may vary depending on the type of components.

b. In the event that no identical warranty information is available for service repair, company has the right to provide warranty. The warranty does not affect the consumers' rights against the company related to its information.

For the length of the period indicated on the chart below, it starts with the date of original purchase.

(3) Warranty Period for components

Our liability under this warranty shall be limited to the following:

a. In the event of a same malfunction problem within two months after repair service by Samsung authorized technician, we will repair or replace free of charge the component of the product which is found to be defective.

b. In the event of the component that you have paid the replacement cost is returned under normal use within one year at our premises, such components will be replaced free of charge component of the product which is found to be defective.

<Table. 1-1 Warranty Periods for Parts>

Part Name	Warranty Period
Battery Charger	Six months
AC Adaptor	
Battery	
Remote Control	
CD Software	Three months
Earphone	
Pouch for camera	Not applicable
Cable	

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(4) Repair Claims

1) Repair free of charge

Essentially, the following causes of damage are covered:

a. Failing to function properly under normal use during the limited warranty period.

b. Repair Services free of charge is granted for the performance of a specific contract.

2) Repair charges

This warranty does not cover damage caused by:

a. Defect occurring after the expiration of the Warranty Period.

b. Damage due to negligence, immersion in water, impact, loss and tampering.

c. Repair or alteration performed by any party other than Samsung authorized technicians.

d. Misuse or other improper use of the power button.

e. Exhausted parts such as batteries, lamps and filters, etc.

f. Defect that occurs due to sand, dirt liquid, etc. entering the inside of the product casing.

g. Consumable parts which have ceased working through normal use such as as earphone, battery discharger and various accessories.

h. Products purchased second hand or any damage that occurs due to a second hand or repair performed by anyone other than Samsung or a Samsung authorized service station.

i. Fire, earthquake, flood or other natural disasters.

The warranty cover period for components is listed below as per table 1-2.

<Table. 1-2 Warranty Period for components>

<table>
<tr><th colspan="3">Types of consumer damages</th><th colspan="2">Compensation</th></tr>
<tr><td rowspan="7">Failing to perform or failing to function properly under normal use</td><td colspan="2">Required for essential repair within 10 days after the purchase</td><td>Replace the product or refund</td><td>-</td></tr>
<tr><td colspan="2">Required for essential repair within one month after the purchase</td><td>Replace the product or repair at free of charge</td><td>Repair charges</td></tr>
<tr><td rowspan="3">Applicable to repair</td><td>Problem occurred twice due to same malfunction</td><td colspan="2">Free of charge</td></tr>
<tr><td>Problem occurred three times due to same malfunction</td><td rowspan="3">Replace the product or refund</td><td rowspan="2">Repair charges</td></tr>
<tr><td>Problem occurred four times due to some other malfunction</td></tr>
<tr><td>Not applicable to repair</td><td>Within the period with respect to retaining components</td><td>Replace the product at the cost of the depreciated value or refund its price added 10% of depreciation</td></tr>
<tr><td rowspan="2">Failing to perform or failing to function properly as a result of willful intent and negligence of customer</td><td colspan="2">Applicable repair</td><td colspan="2">Repair charges</td></tr>
<tr><td colspan="2">Not applicable to repair
(Except for defects or malfunction as a result of fire or flood or other natural disasters</td><td>Replacement charge</td><td>Repair charge and replace the product at the cost of the depreciated value</td></tr>
</table>

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1-3 Precaution for disassembly and reassembly

CAUTION

1. Use the anti-static handing procedures included with the anti-static mat to ensure that there is no electrostatic discharge and component damage.

2. Static electricity is the biggest danger to the PCB parts you are about to disassemble or assemble. It's important to use your anti-static wrist strap to prevent damage to these components.

3. Dismantling a discrete electronic component such as main capacitor is dangerous.
   The capacitor contains high voltage, which can cause a severe electric shock if you touch it. This holds a charge even when the unit is not plugged in and is capable of delivering a fatal shock.

4. Using excessive force during disassembly and assembly can damage locking parts. Use care when handling "Locking parts" to avoid damage to FPCB or wire. Apply pressure only at the points designated in the maintenance instructions.

5. Due to increasing environmental concerns, a number of restrictions have been placed on the material content of electronic components and electronic assemblies. It requires utilizing Lead-Free (Pb-free) Soldering.

6. The following precautions must be observed when handling such components below.

<Table. 1-3>

Component	Precautions
FPCB	FPCB is brittle material. It can be easily damaged thus it should be handled with care. It is recommended to use wooden or plastic tweezers for manual placement.
CCD (CMOS) IR CUT Filter LCD, LENS	Be careful not to stained your finger. It is recommended to use wooden or plastic tweezers for manual placement. Stain is often caused by the Alcohol used in these components. Find a clean, well-ventilated place to do your work.
PCB	Use an anti-static mat as well as an anti-static wrist strap to avoid ESD damage to PCB.
CONNECTOR	The use wooden or plastic tweezers is recommended for manual placement. Metal tip tweezer might make marks or damage.
BARREL	Always follow proper direction while assembling the components of the barrel.

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2. Product specifications

2-1 Specifications

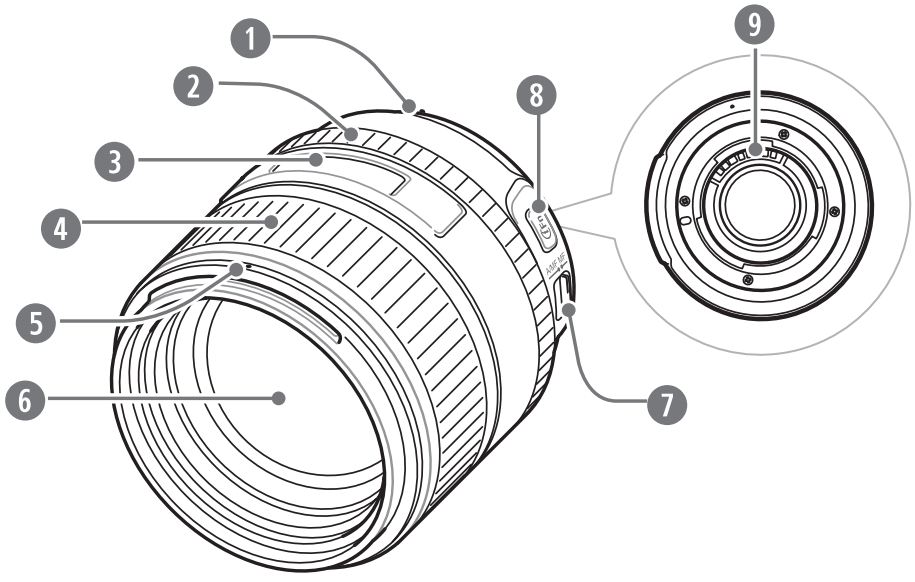
Specifications

<Table. 2-1>

Lens Name	SAMSUNG 85mm F1.4ED SSA
Image	
Focal Length	85 mm (equivalent to 130.9 mm in 35 mm format)
Elements in Group	10 elements in 8 groups (1 low dispersive lens included)
Angle of View	18.8°
Aperture	F1.4 (minimum: F22), (Number of Blades: 9, Circular Aperture Diaphragm)
Mount Type	Samsung NX mount
Optical Image Stabilizer	Not included
Minimum Focus Distance	0.82 m
Maximum Magnification	Approx. 0.13X
i-Scene	Supported (Beauty Shot, Portrait, Children, Sports, Backlight, Night)
i-Function Ring	Yes
i-Function Button	Yes
Lens Hood	Included
Filer Size	67 mm
Max. Diameter X Length	79 X 92.2 mm
Weight	Approx. 696 g (without hood)
OperatingTemperature	0 - 40 °C
Operating Humidity	5 - 85 %

2-2 Layouts

Layouts



1	Lens mount index
2	i-Function ring
3	Distance Scale
4	Focus ring
5	Lens hood mount index
6	Lens
7	A/MF, MF switch
8	i-Function button
9	Lens information contacts

Fig 2-1

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2-3 Accessories information

<Table. 2-2>

	Packing items image	Description	Parts No.
Packing items		**Lens**	SAMSUNG 85 mm F1.4 ED SSA
		Lens cap	AD97-20681A
		Lens mount cover	AD63-03989A
		Hood	AD97-21757A
		Leather case	AD69-03611A
		User manual	AD68-06790A

	image	Description
Optional items		**Filter** You can create different colored effects by attaching filters to your lens.

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3. Disassembly and reassembly

3-1 Repair toolkit and Screw parts list

XL-1103 85mm Repair toolkit

<Table. 3-1>

No.	Items	Code	Contact	Remark
1	Jig for the group 3 assembly	Q310-264453	Samsung Electronics Co., Ltd.	It is used to loosen or tighten the group 3 assembly.
2	Jig for the group 1 assembly	Q310-264452		It is used to assemble or disassemble the group 1 assembly.
3	IPA (Isopropyl alcohol)	-	Available at your local store	IPA stands for Isopropyl alcohol.
4	IPA Bottle	-		Container for IPA
5	Disposable syringe	-		Size: 13.SYS030
6	Locking Paint TB1401S	-		It is used to adhere the parts together.

Screw parts list

<Table. 3-2>

PAGE	TYPE	CODE	Qty
3-2	SCREW(M2.0,L6)	6001-000504	3
	SCREW(T1.4,L2.5)	6003-001674	3
	SCREW(M1.4,L2.5)	6001-002181	2
3-3	SCREW(M1.7,L3,HD3)	6001-001373	3
3-5	SCREW(M1.7,L3,HD3)	6001-001373	2
3-7	SCREW(M1.7,L3,HD3)	6001-001373	5
3-8	SCREW(M1.7,L3,HD3)	6001-001373	2
	SCREW(T1.4,L3.5)	6003-001630	3
	SCREW(M1.7,L3,HD2.5)	6001-002179	4
3-10	SCREW(M1.7,L3,HD2.5)	6001-002179	4
	SCREW(M1.4,L2.5)	6001-002181	2
3-16	SCREW(M1.4,L2.5)	6001-002181	2
	SCREW(M1.7,L3,HD2.5)	6001-002179	4
3-18	SCREW(M1.7,L3,HD2.5)	6001-002179	4
	SCREW(T1.4,L3.5)	6003-001630	3
	SCREW(M1.7,L3,HD3)	6001-001373	2
3-19	SCREW(M1.7,L3,HD3)	6001-001373	5
3-21	SCREW(M1.7,L3,HD3)	6001-001373	2
3-23	SCREW(M1.7,L3,HD3)	6001-001373	3
3-24	SCREW(M2.0,L6)	6001-000504	3
	SCREW(M1.4,L2.5)	6001-002181	2
	SCREW(T1.4,L2.5)	6003-001674	3

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3-2 Disassembly

LENS MOUNT

1. Remove the 3 screws (M2.0,L6) and the 3 screws(T1.4,L2.5).

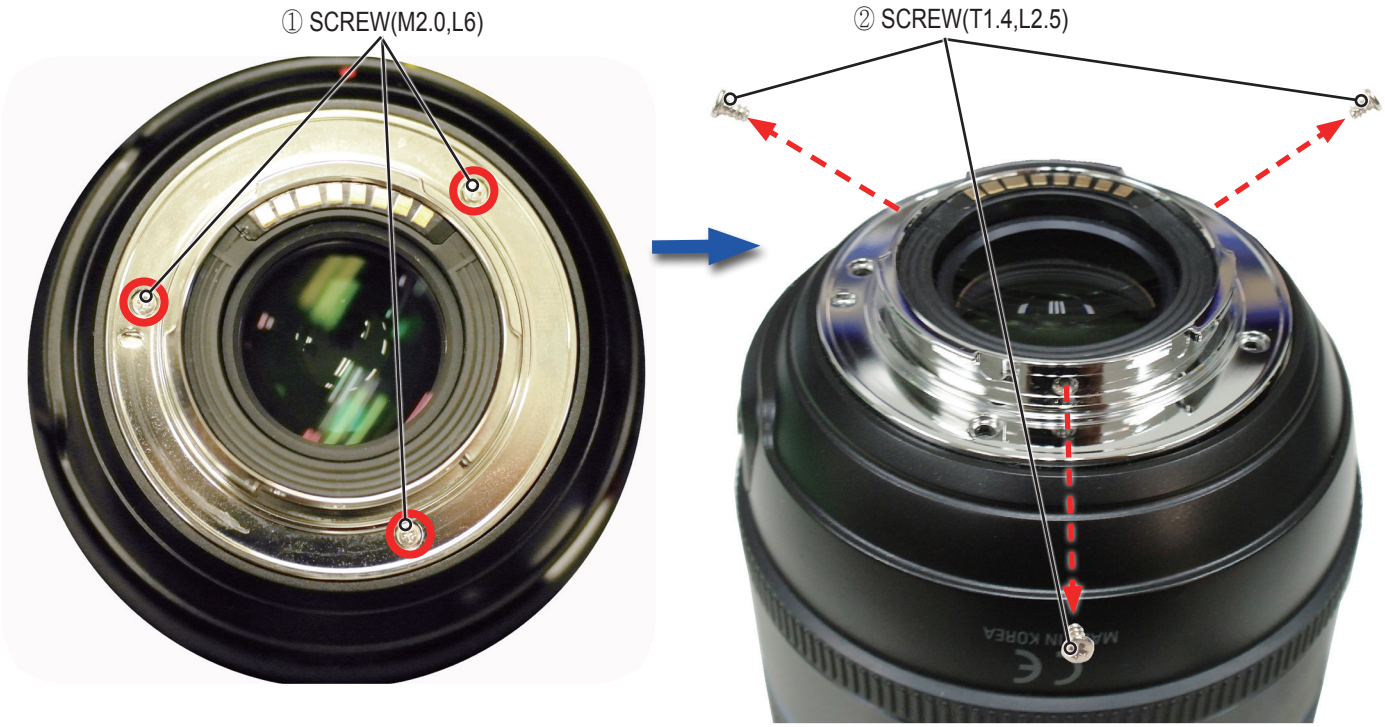

Fig. 3-1

2. After removing the COVER MOUNT, remove the 2 screws(M1.4,L2.5).

Fig. 3-2

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3. After removing the MOUNT_ LENS, remove the PLATE_BF_ADJUST_03.

Fig. 3-3

COVER_OUTER_ASSY

1. Remove the 3 screws(M1.7,L3,HD3).

Fig. 3-4

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2. Remove the FPCB as illustrated in Fig. A.

Caution

Use extra care when connecting the FPCB from the connector.

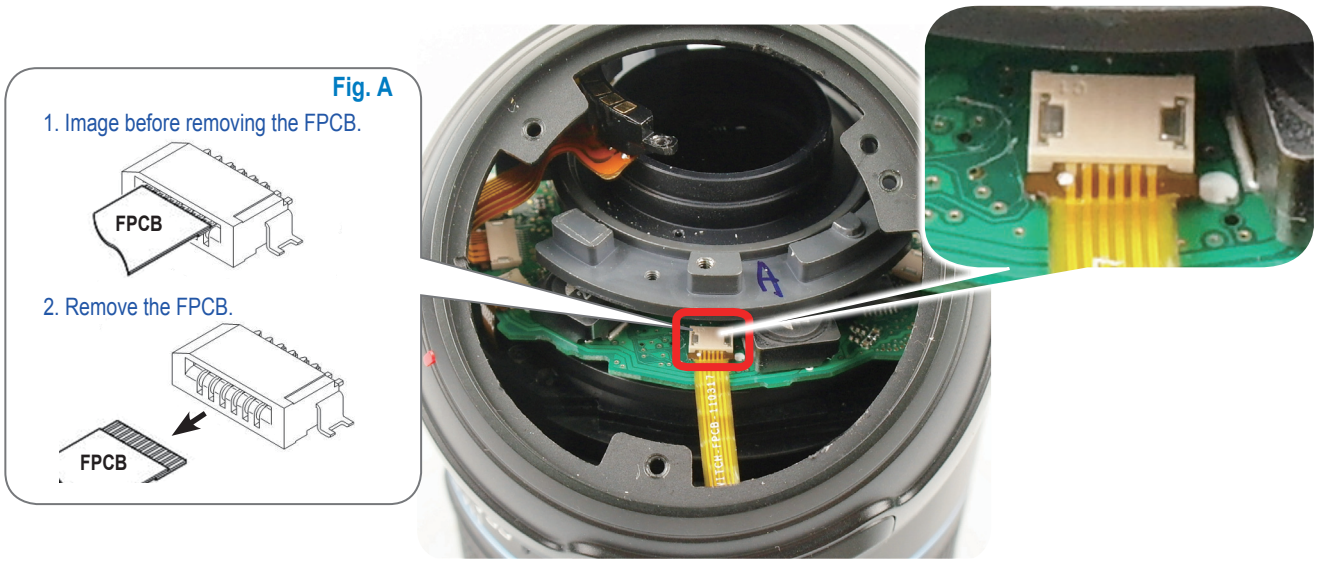

Fig. 3-5

3. Remove the COVER_OUTER_ASSY.

Fig. 3-6

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MAIN PCB

Caution

Name of each FPCB and symptoms.(Check each of the bad symptoms FPCB predictable damage)

No.	Names of FPCB	Symptom and Explanation
1	GMR SENSOR FPCB	Failure of AF
2	IRIS FPCB	Failure of F No. adjustment
3	SSA FPCB	Failure of AF / SSA(ultrasonic motor) malfunction
4	AF HOME PI FPCB	The vibration is occurred. / SSA(ultrasonic motor) malfunction
	IF PI FPCB	i-Fn dialing malfunction / Failure of i-Fn
5	MF PI FPCB	Unable to enlarge the screen when MF is on
6	Contact FPCB	Failure of Lens

1. Remove the 2 screws(M1.7,L3,HD3)and 6 FPCBs as illustrated in Fig. A.

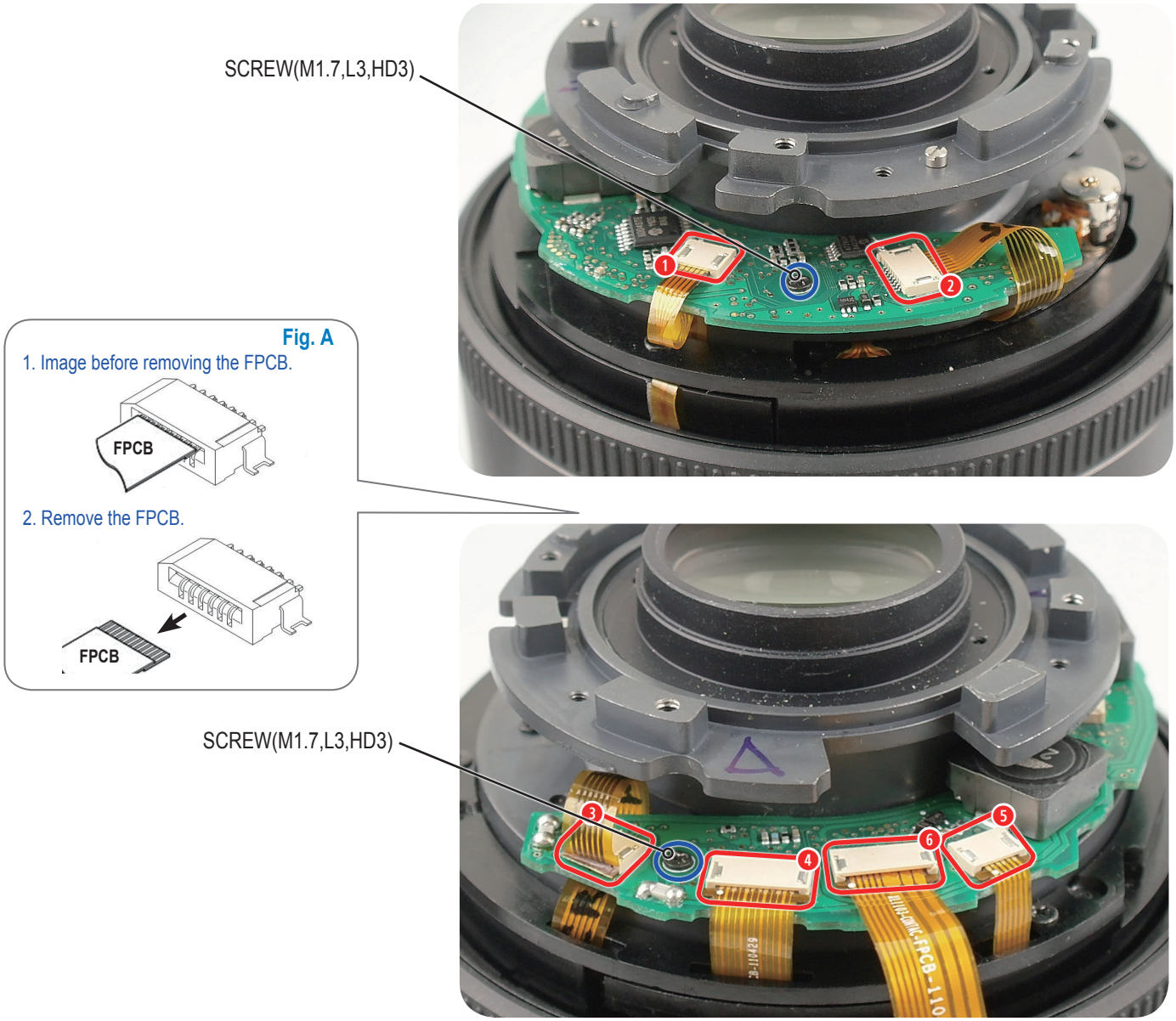

Fig. 3-7

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2. Remove the MAIN PCB.

Fig. 3 -8

I-FUNCTION ASSY

1. Remove the I-FUCTION ASSY.

Fig. 3-9

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COVER_MIDDLE_FRAME

1. After removing the 3 screws(M1.7,L3,HD3), remove the COVER_MIDDLE_FRAME.

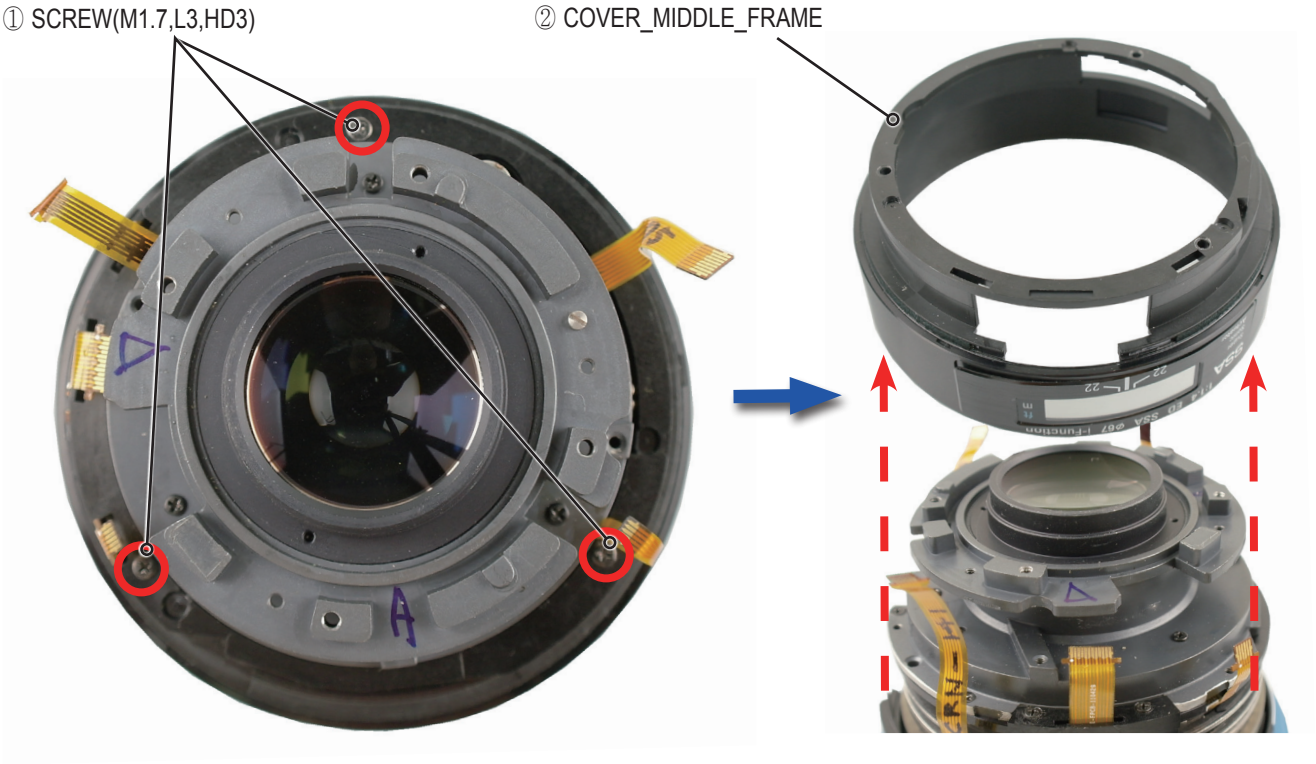

Fig. 3-10

HOME_PI_ASSY

1. After removing the 2 screws(M1.7,L3,HD3), remove the HOME_PI_ASSY.

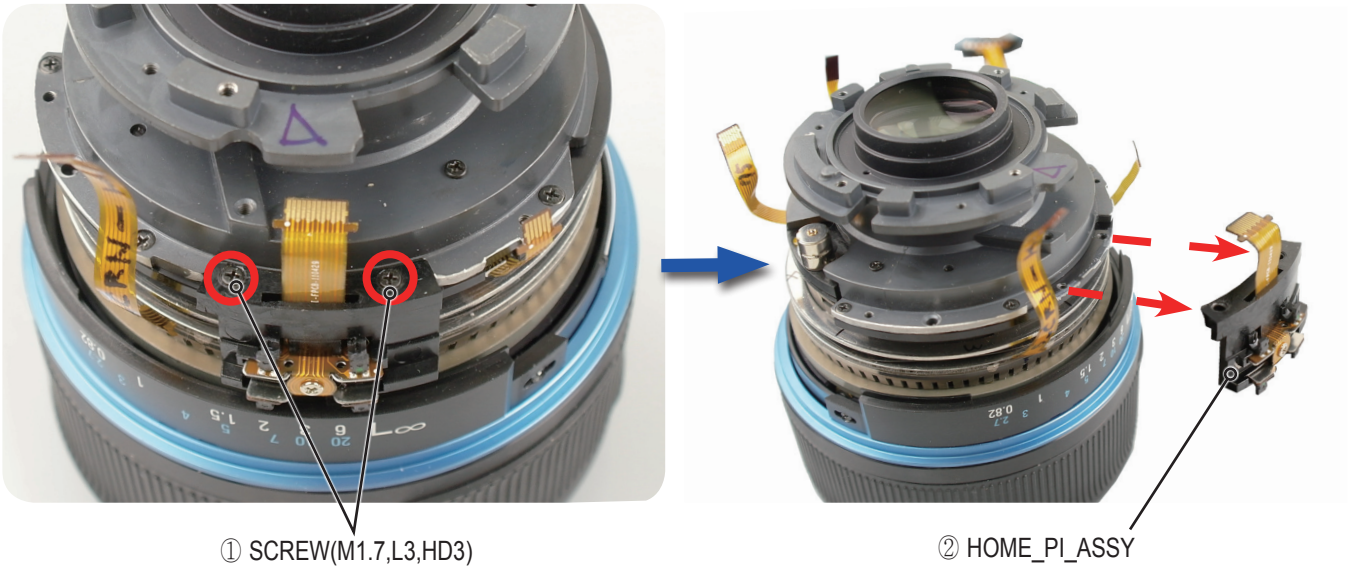

Fig. 3-11

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BARREL GMR SENSER

1. After removing the 2 screws(M1.7,L3,HD3), remove the BARREL GMR SENSER.

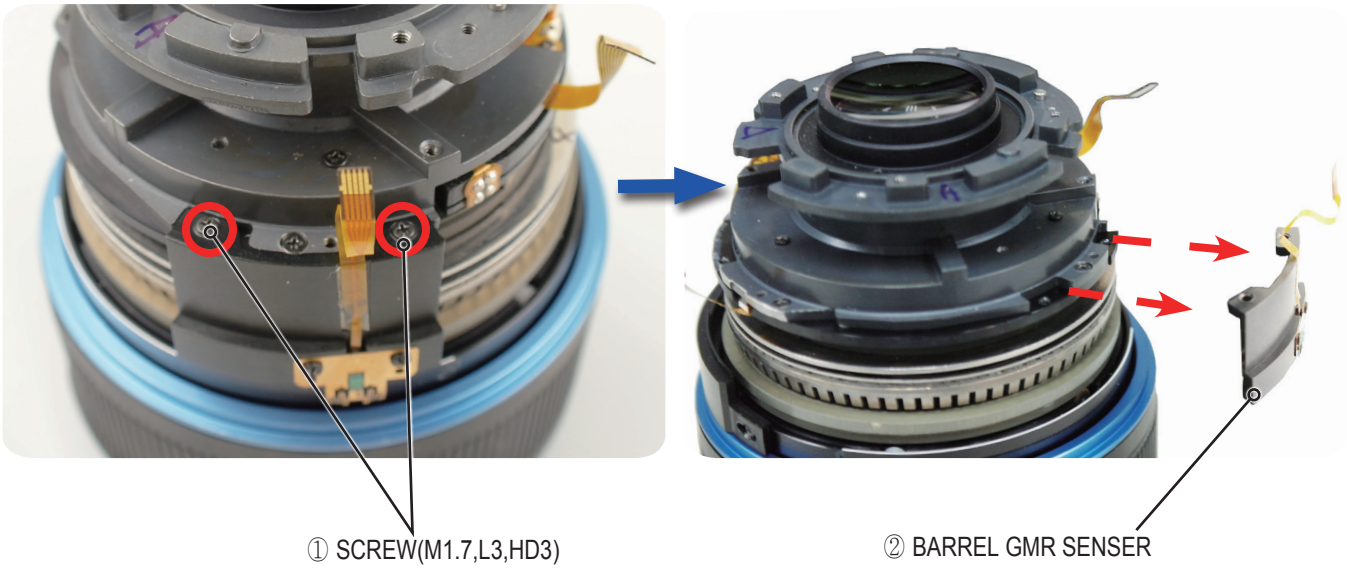

Fig. 3-12

3rd Lens Barrel Assy and IRIS ASSY

1. Remove the 4 screws(M1.7,L3,HD2.5) and the 3 screws(T1.4,L3.5).

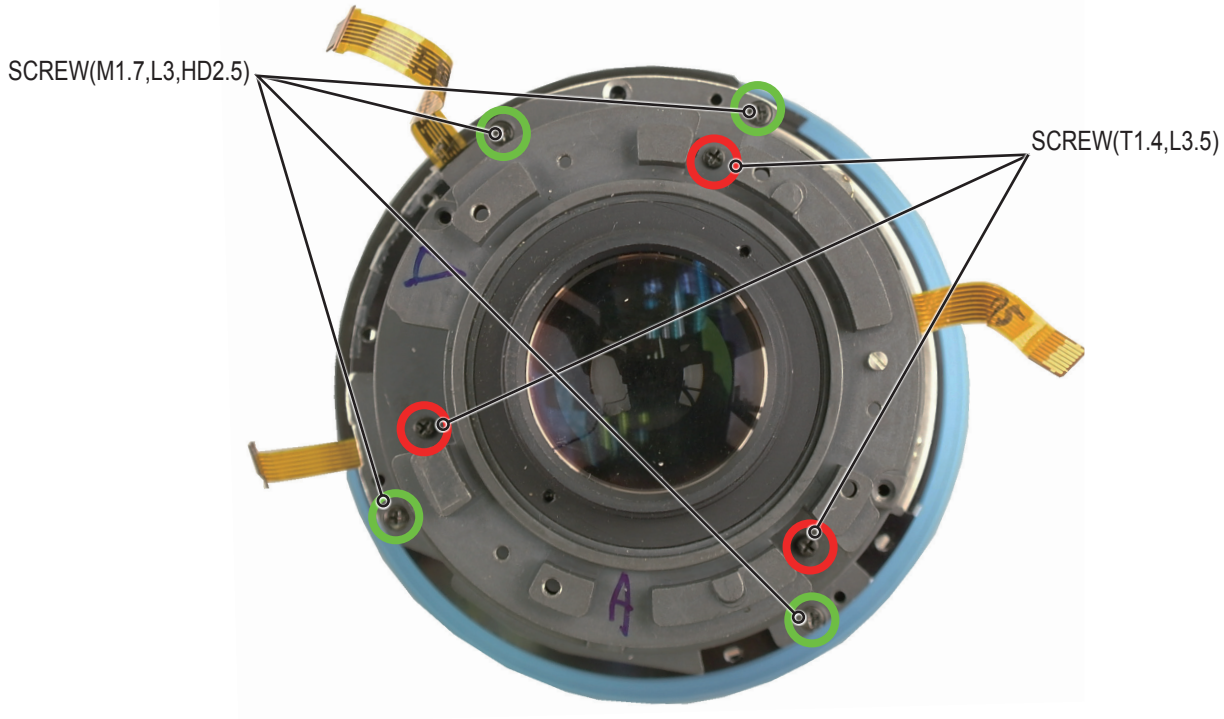

Fig. 3-13

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2. After removing the 3rd Lens Barrel Assy / Barrel Main, remove the IRIS ASSY.

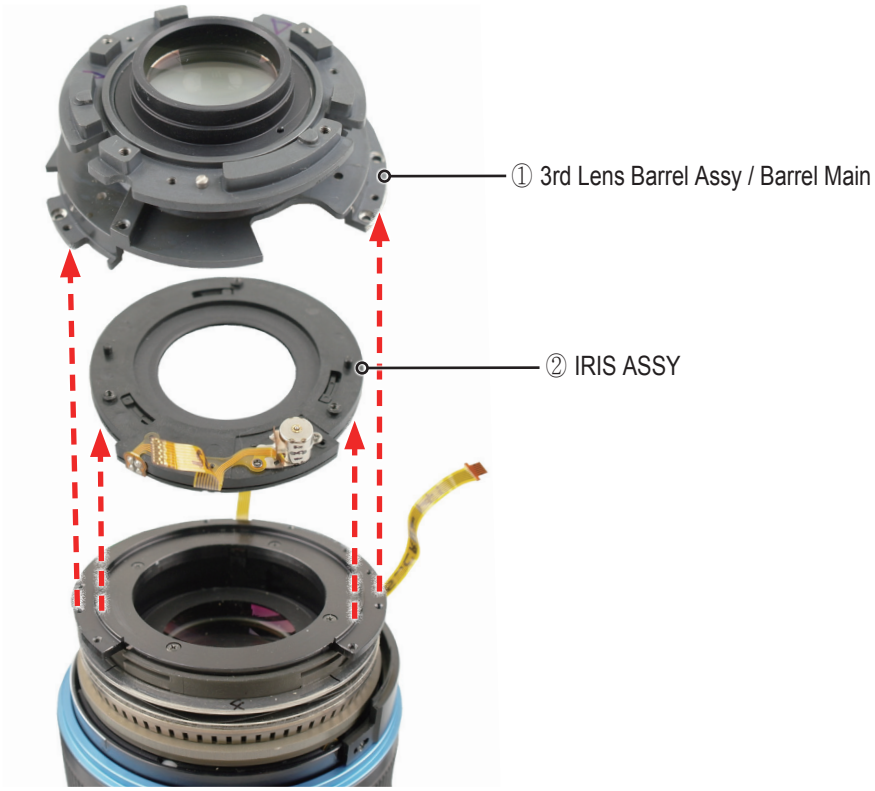

Fig. 3-14

3rd Lens Barrel Assy

1. Turn the Jig for the group 3 assembly counterclockwise to loosen the 3rd Lens Barrel Assy. Remove it in the direction of the arrow.

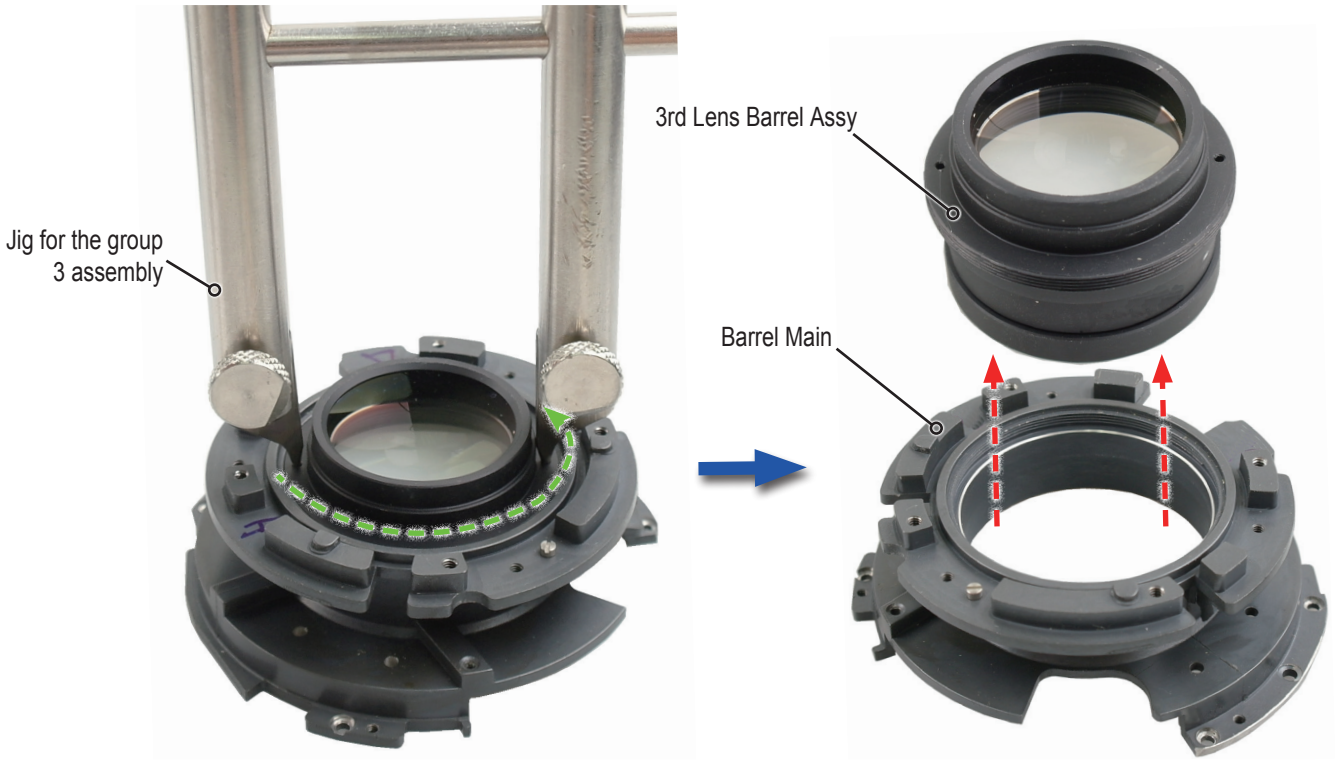

Fig. 3-15

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Barrel Connecting

1. After removing the 4 screws(M1.7,L3,HD2.5), remove the Barrel Connecting.

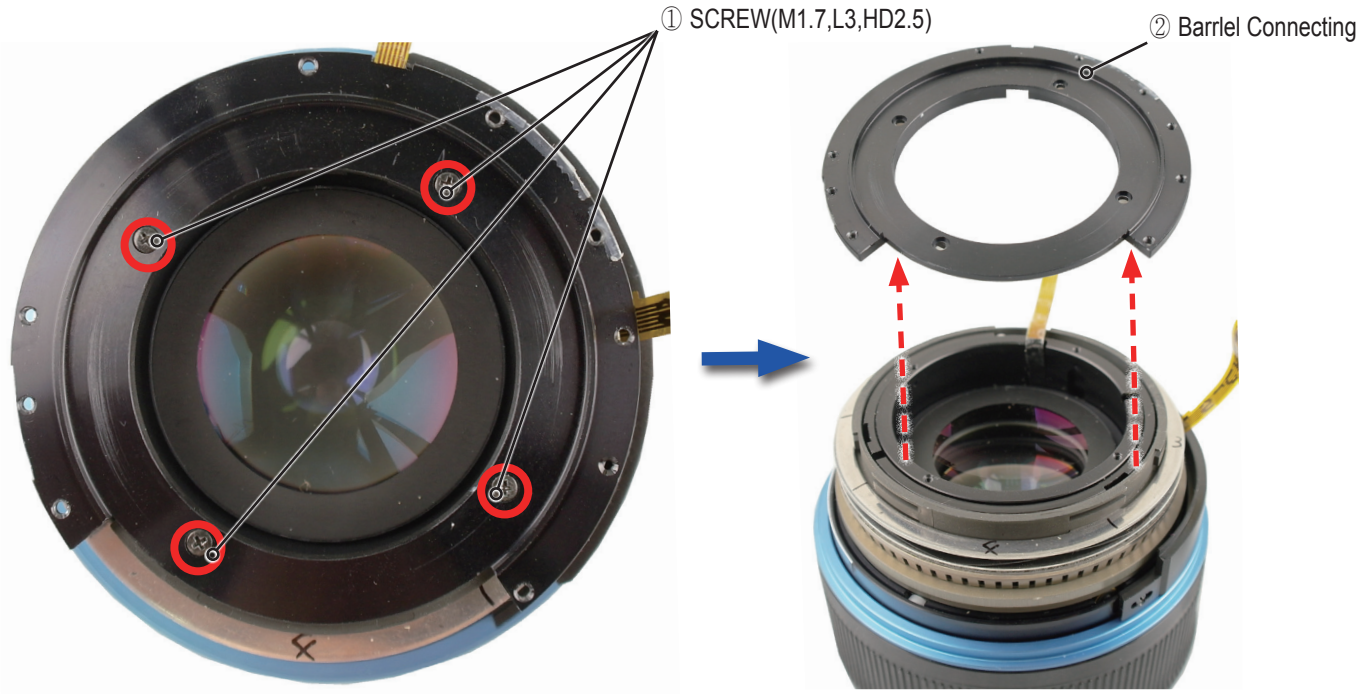

Fig. 3-16

Base Scale

1. Remove the 2 screws(M1.4,L2.5).

SCREW(M1.4,L2.5)

Fig. 3-17

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2. Remove the Base Scale.

Fig. 3-18

GRIP_FOCUS_RUBBER

1. Remove the GRIP_FOCUS_RUBBE.

Fig. 3-19

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1st Lens Barrel Assy

1. Rotate the focus ring so that the BARREL MIDDLE HOLE corresponds to the hole of the FOCUS RING as illustrated in Fig. A.
Put the needle of the syringe into the hole of the container.
Draw the IPA(Isopropyl Alcohol) into the syringe by pressing down on the inner part of the container.
Inject the syringe into the hole of the unit specified to remove the adherent part as illustrated in Fig A.

Fig. 3-20

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2. Make sure the Jig for the group1 assembly is firmly seated into the groove of the 1st Lens Barrel Assy.
Turn the Jig counterclockwise in order to make it easier to remove the 1st Lens Barrel Assy. You can lift it up.

Fig. 3-21

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3-3 Assembly

1st Lens Barrel Assy

The Base Scale must be adjusted when the 1st Lens Barrel Assy has been replaced. Please follow the instruction on page 3-25.

1. Install the 1st Lens Barrel Assy just enough to hold the assembly together.
Make sure the Jig for the group1 is firmly seated into the groove of the 1st Lens Barrel Assy.
Tighten the 1st Lens Barrel Assy by turning the Jig for group 1 assembly clockwise, making sure it is installed properly.

Fig. 3-22

2. Use the syringe to adhere the part. Draw the LOCTITE 1401S into the syringe.
Inject the syringe into the hole of the unit specified as illustrated in Fig. A. (Circled here in red.)

Fig. 3-23

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GRIP_FOCUS_RUBBER

1. Install the GRIP_FOCUS_RUBBE.

Fig. 3-24

Base Scale

1. Align the part in Fig. A with the part in Fig. B and install the Base Scale properly.

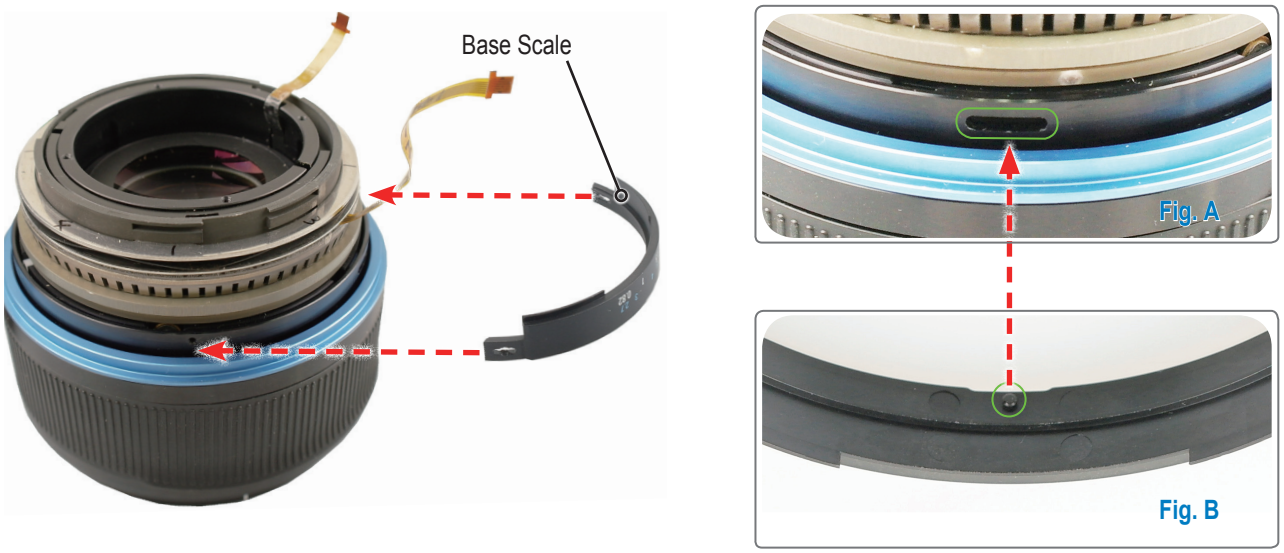

Fig. 3-25

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2 . Tighten the 2 screws(M1.4,L2.5).

Fig. 3-26

Barrel Connecting

1. After install the Barrlel Connecting, tighten the 4 screws(M1.7,L3,HD2.5).

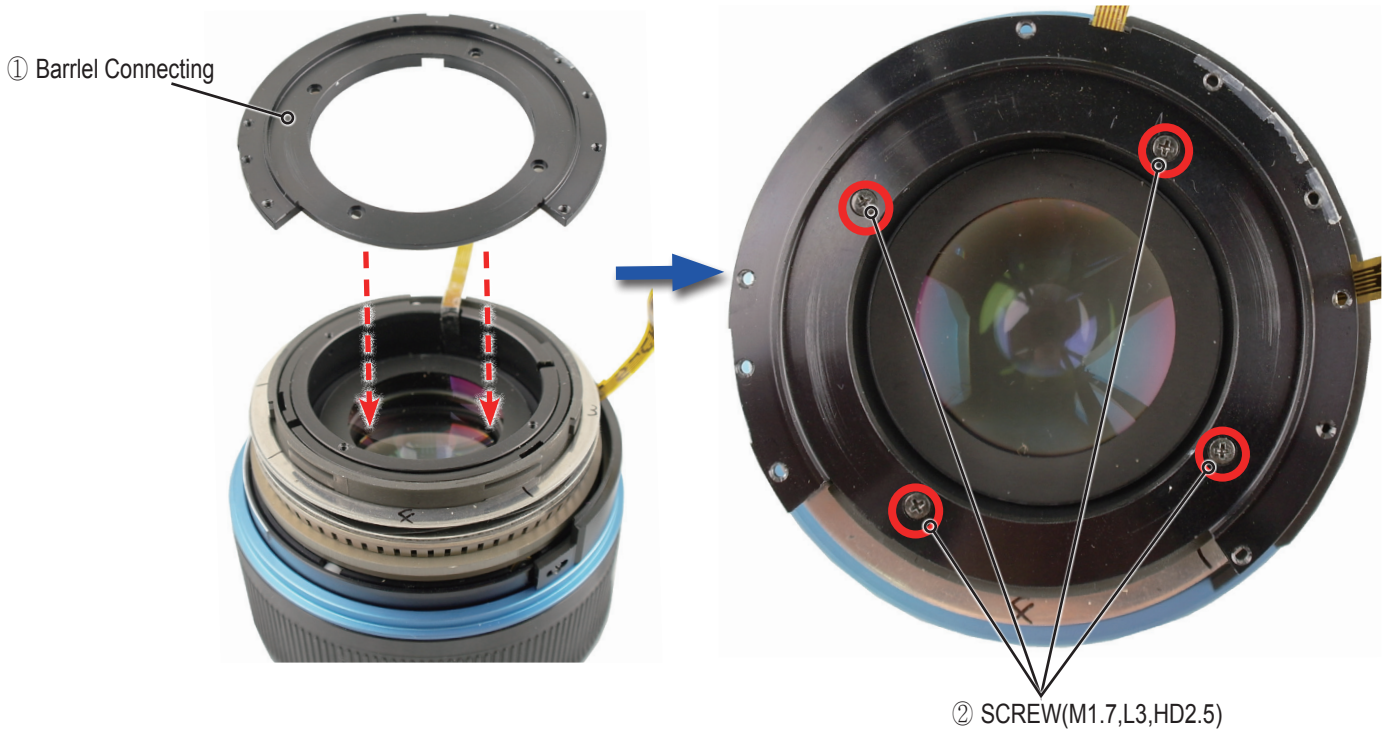

Fig. 3-27

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3rd Lens Barrel Assy

The Base Scale must be adjusted when the 3rd Lens Barrel Assy has been replaced. Please follow the instruction on page 3-25.

1. Install the 3rd Lens Barrel Assy just enough to hold the assembly together.
Turn the Jig for group 3 assembly clockwise to tighten the 3rd Lens Barrel Assy.

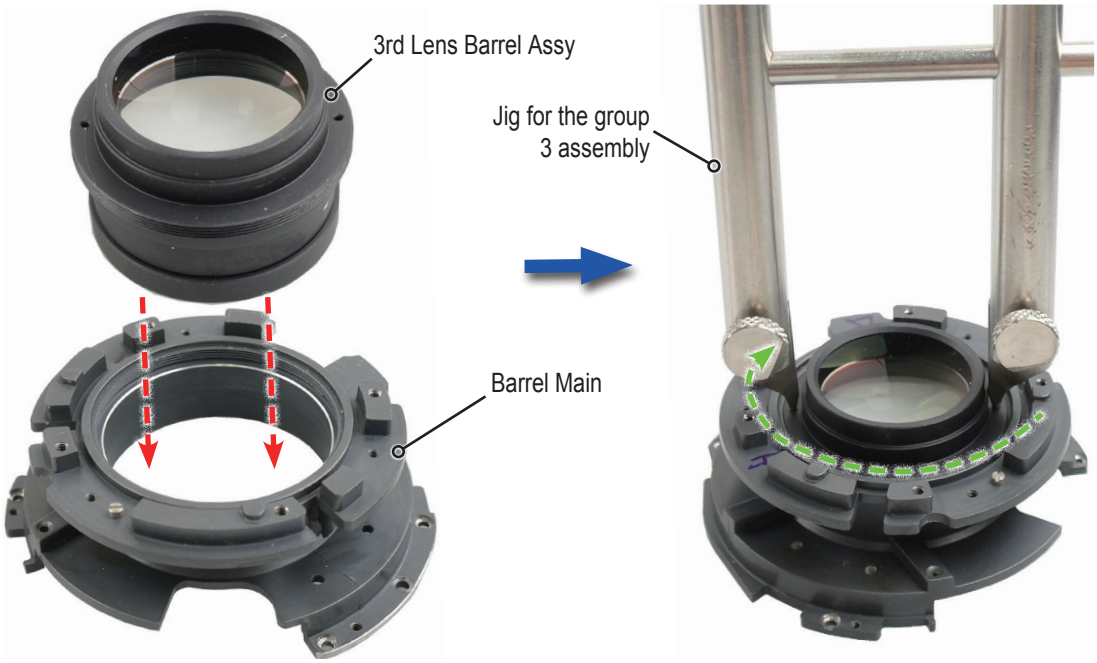

Fig. 3-28

3rd Lens Barrel Assy/Barrel Main/IRIS ASSY

1. Align the position specified on the 3rd Lens Barrel Assy / Barrel Main with the position on IRIS ASSY as specified by (a), then install them properly. Install the parts in to the groove of the unit as specified by (b).

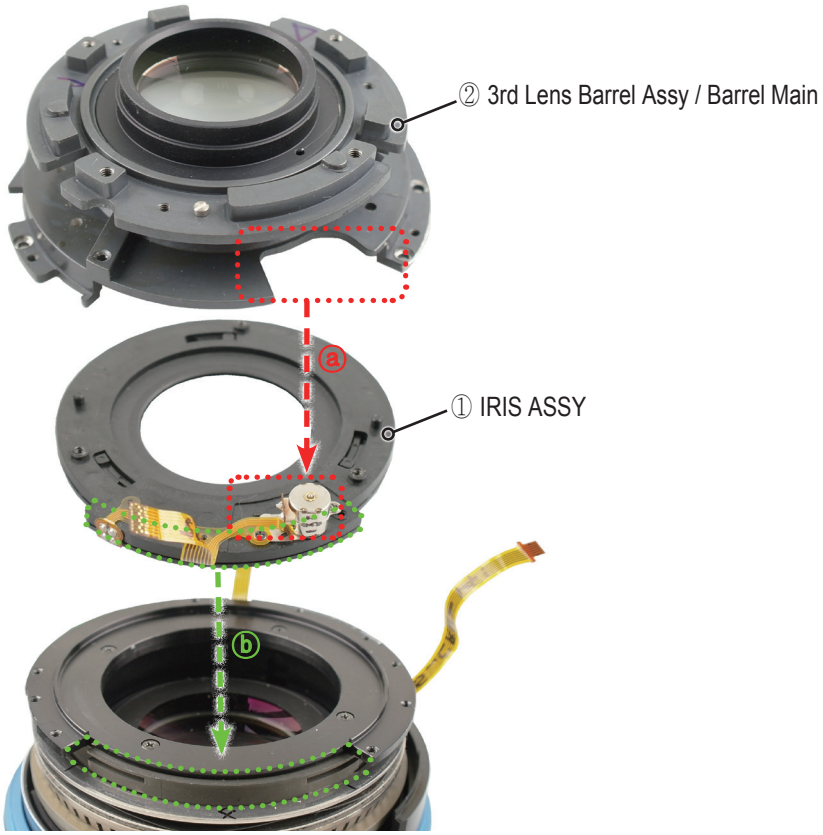

Fig. 3-29

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2. Tighten the 4 screws(M1.7,L3,HD2.5) and the 3 screws(T1.4,L3.5).

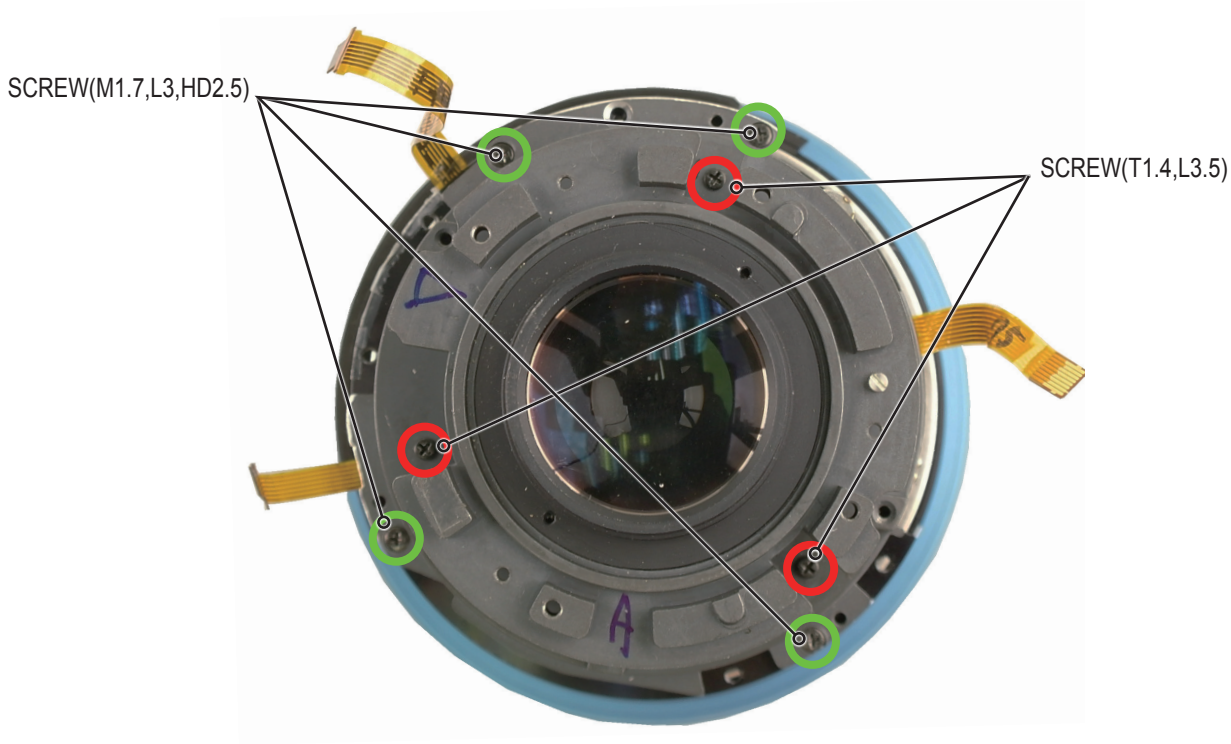

Fig. 3-30

BARREL GMR SENSER and SCREW

1. After installing the BARREL GMR SENSER, tighten the 2 screws(M1.7,L3,HD3).

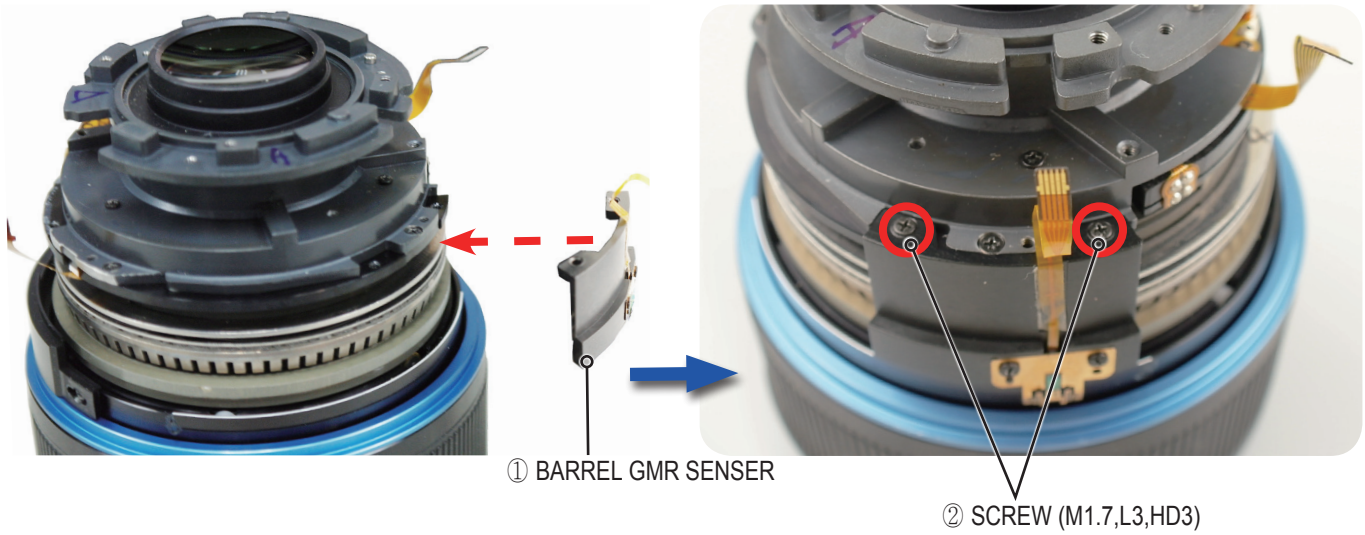

Fig. 3-31

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HOME_PI_ASSY

1. After installing the HOME_PI_ASSY, tighten the 2 screws(M1.7,L3,HD3).

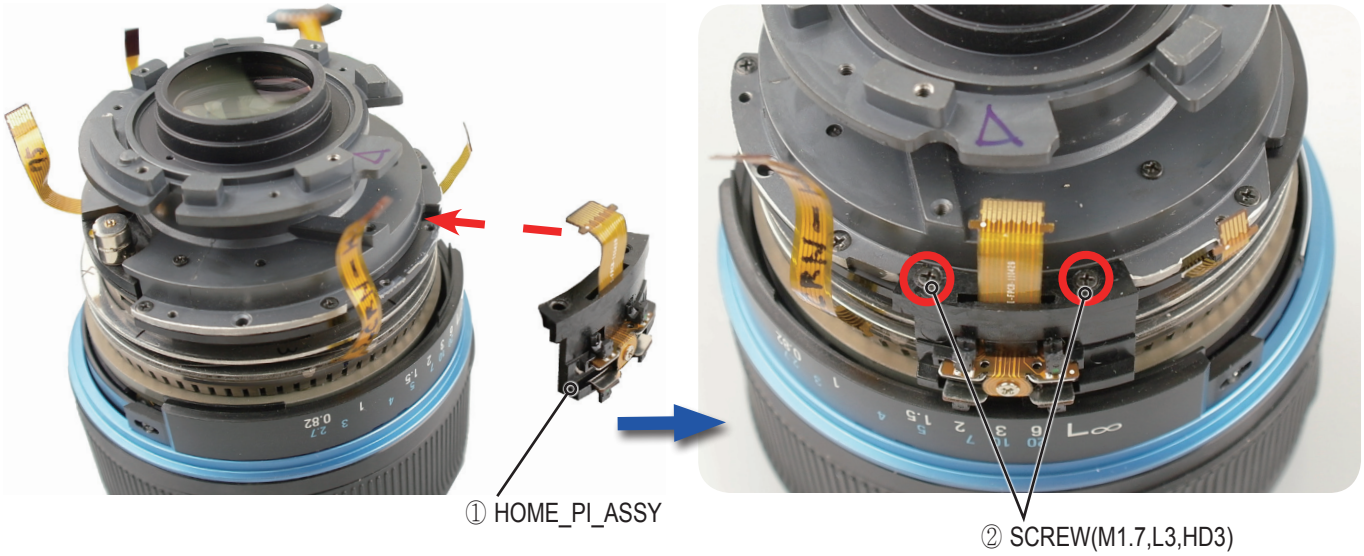

Fig. 3-32

COVER_MIDDLE_FRAME

1. Insert the (a), (b) and (C) FPCBs into the (a), (b) and (c) grooves of the COVER_MIDDLE_FRAME respectively. Tighten the 3 SCREW(M1.7,L3,HD3).

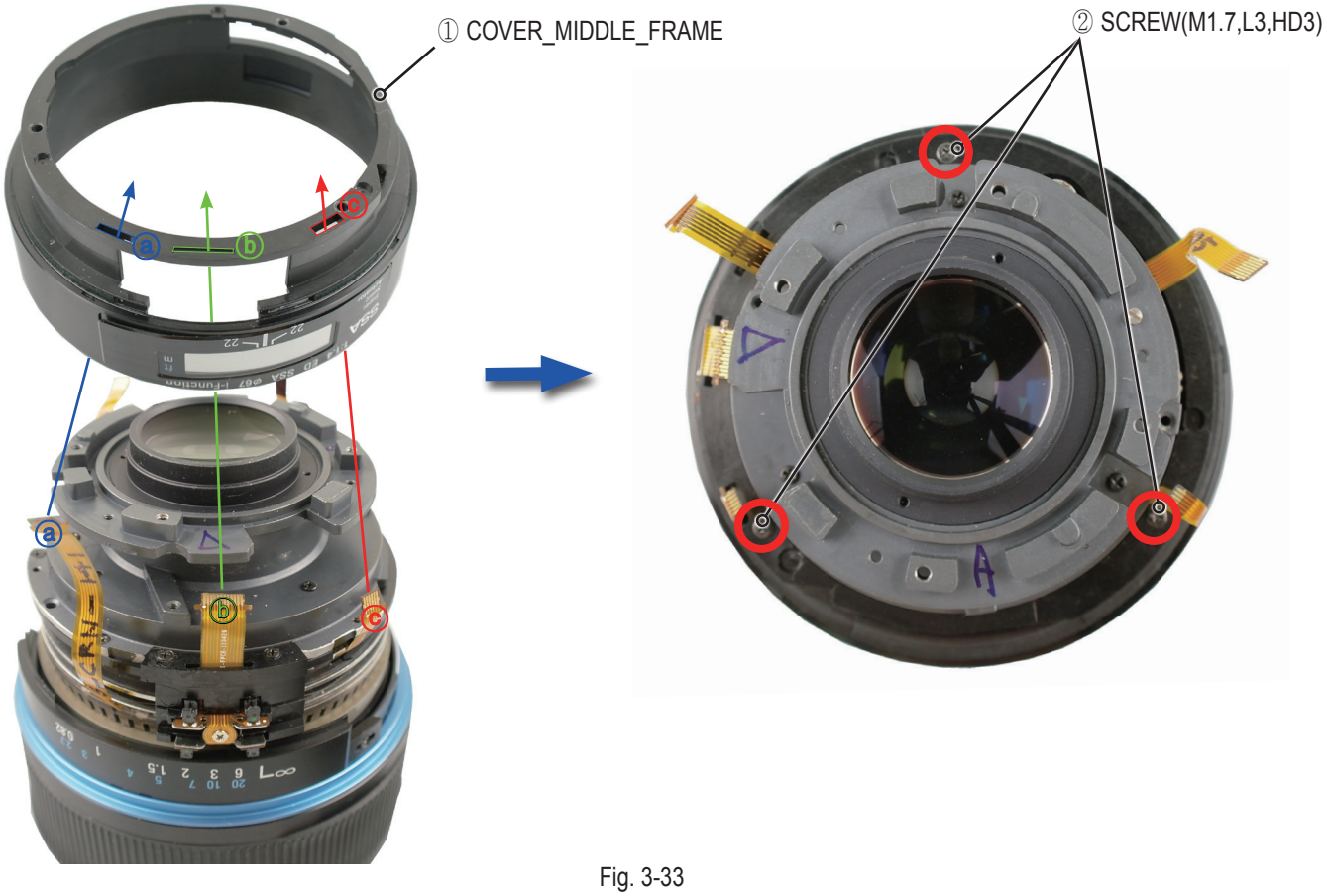

Fig. 3-33

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I-FUNCTION ASSY

1. Install the I-FUCTION ASSY.

Fig. 3-34

MAIN PCB

1. Install the MAIN PCB.

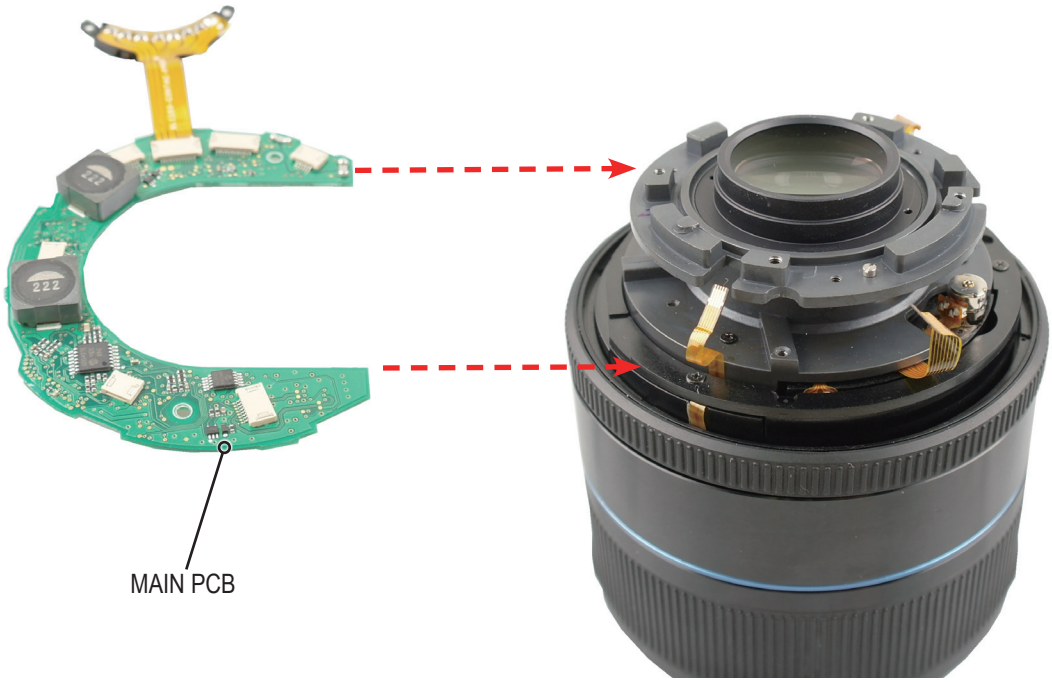

Fig. 3 -35

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Caution

Name of each FPCB and symptoms.(Check each of the bad symptoms FPCB predictable damage)

No.	Names of FPCB	Symptom and Explanation
1	GMR SENSOR FPCB	Failure of AF
2	IRIS FPCB	Failure of F No. adjustment
3	SSA FPCB	Failure of AF / SSA(ultrasonic motor) malfunction
4	AF HOME PI FPCB	The vibration is occurred. / SSA(ultrasonic motor) malfunction
	IF PI FPCB	i-Fn dialing malfunction / Failure of i-Fn
5	MF PI FPCB	Unable to enlarge the screen when MF is on
6	Contact FPCB	Failure of Lens

2. Tighten the 2 screws(M1.7,L3,HD3).
Connect the 6 FPCBs as illustrated in Fig. A.

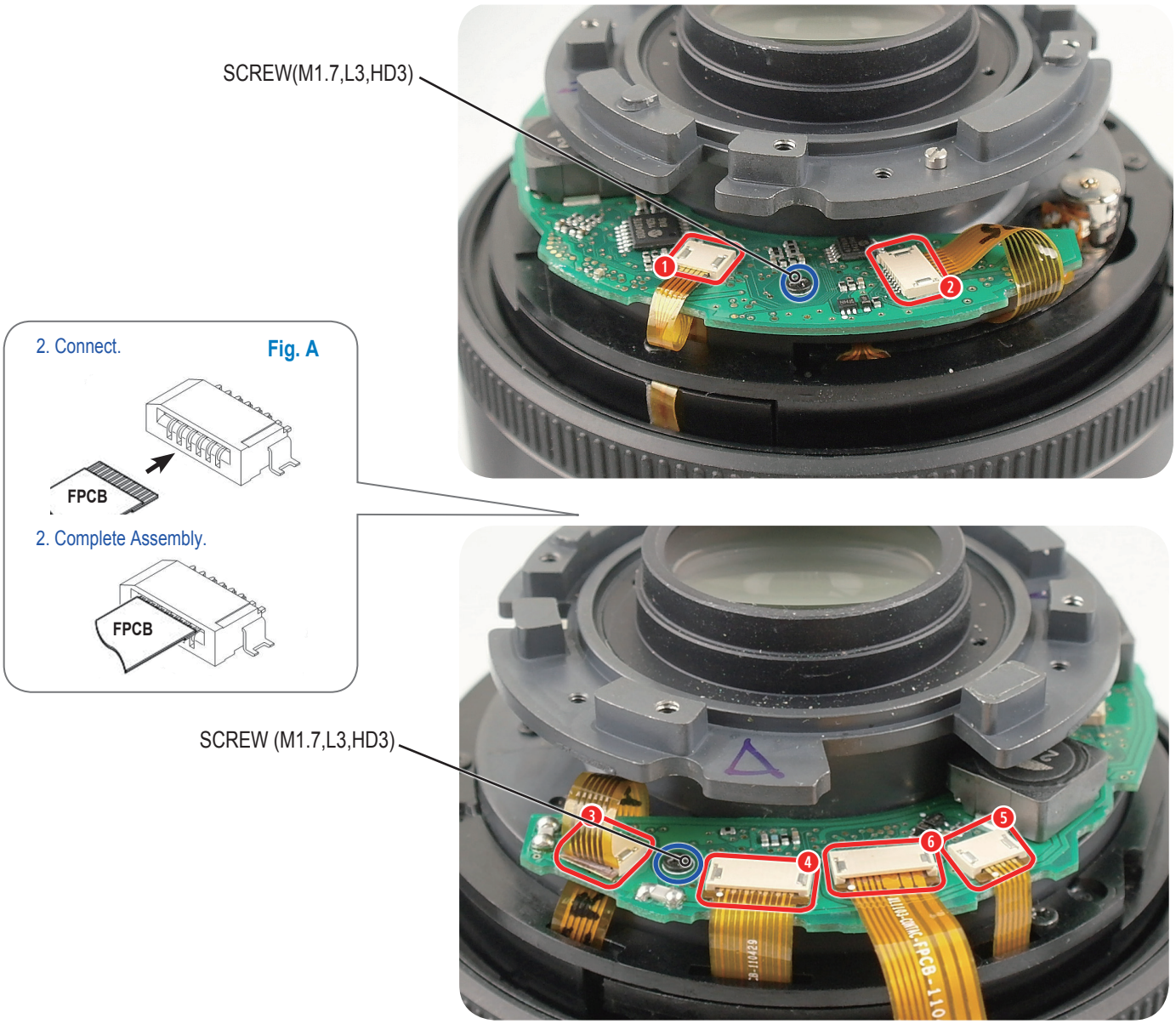

Fig. 3-36

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COVER_OUTER_ASSY

1. Install the COVER_OUTER_ASSY.

Fig. 3-37

2. Connect the FPCB as illustrated in Fig. A.

Caution

Use extra care when connecting the FPCB from the connector.

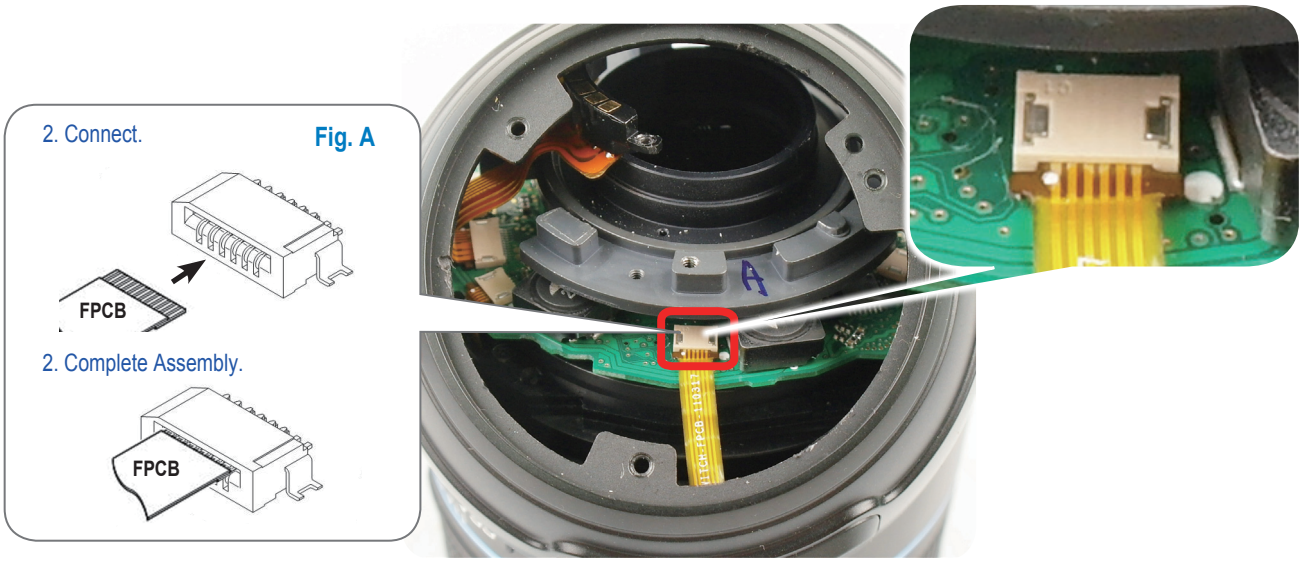

Fig. 3-38

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3. Tighten the 3 screws(M1.7,L3,HD3).

Fig. 3-39

LENS MOUNT

1. After installing the PLATE_BF_ADJUST_03, install the MOUNT_ LENS.

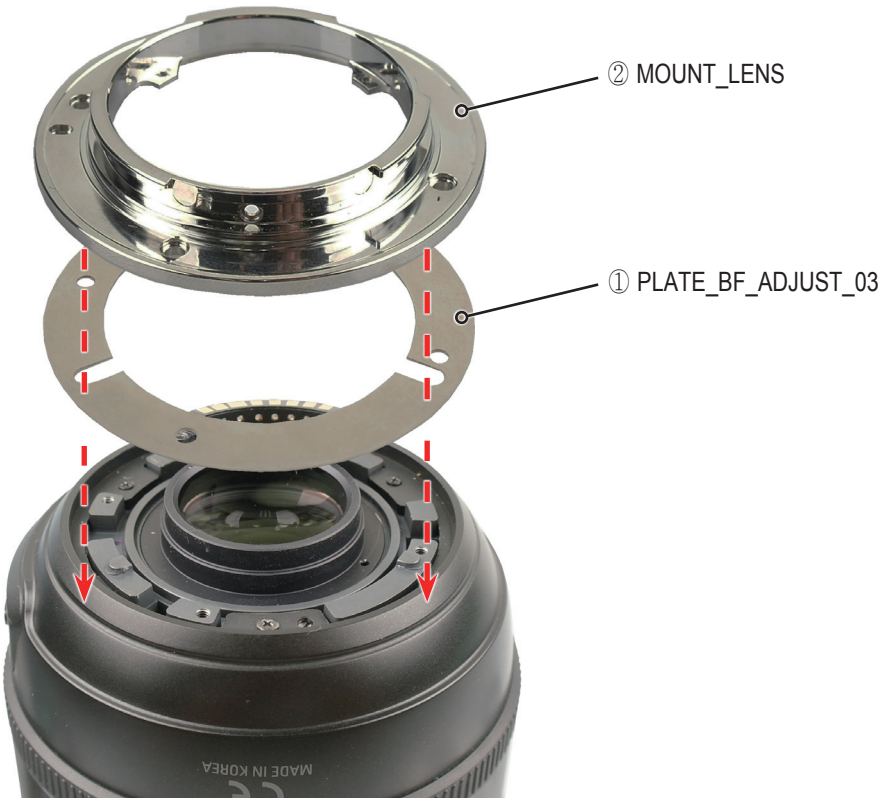

Fig. 3-40

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2. After tightening the 3 screws(M2.0,L6) tighten the 2 screws(M1.4,L2.5)

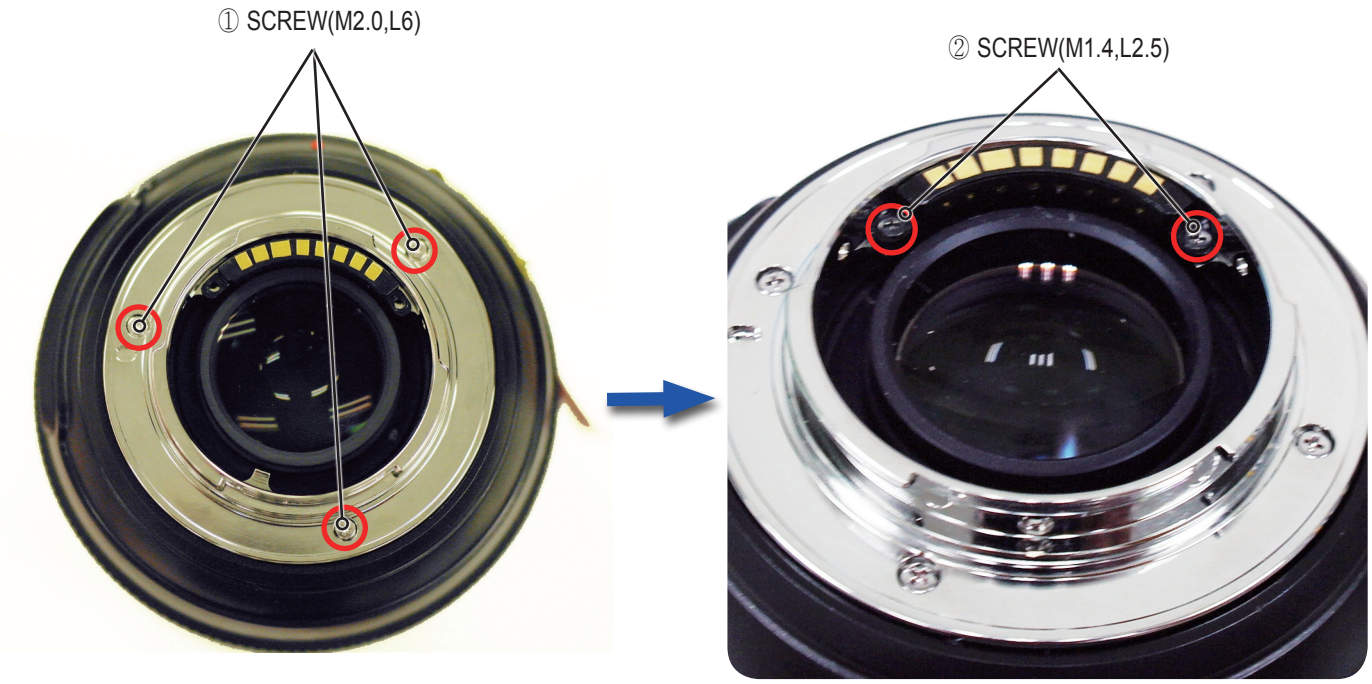

Fig. 3-41

3 . After installing the COVER MOUNT, tighten the 3 screws(T1.4,L2.5).

Fig. 3-42

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3-4 Adjustment

The Base Scale must be adjusted when the 1st Lens Barrel Assy or 3rd Lens Barrel Assy has been replaced.

1. Set it to the infinite focus mark on the 2nd Lens and attach the Barrel Assy to the collimator.

Fig. 3-43

2. Rotate the MF ring* until the image is sharp and clear, making sure punt image is sharply focused.

PUNT image loses focus. **PUNT image is sharply focused.**

Fig. 3-44

3. Align the infinite index mark on the BASE SCALE with the arrow mark on the COVER MIDDLE FRAME. (Set it properly so that distance scale index line corresponds to the barrel infinite index.) Once it is aligned properly, tighten the screw.

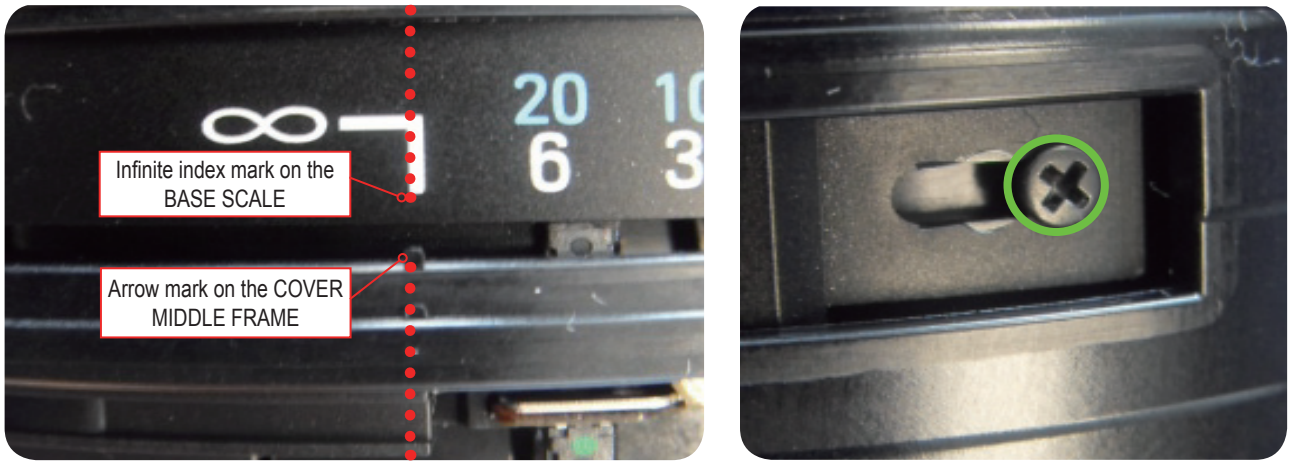

Fig. 3-45

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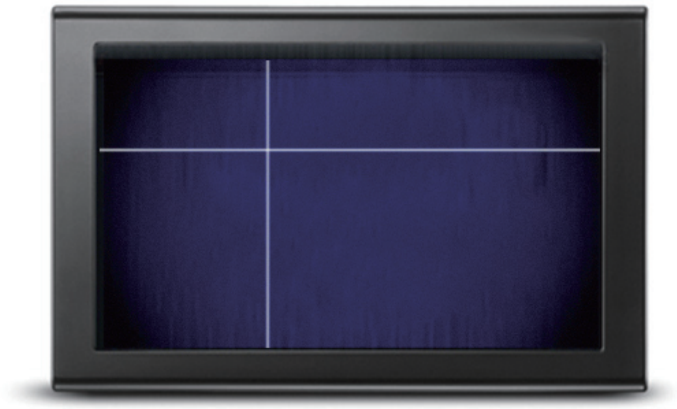
4.Check the focus of the PUNT image after attaching the BASE SCALE by tightening the screw.



PUNT image is sharply focused.

Fig. 3-46

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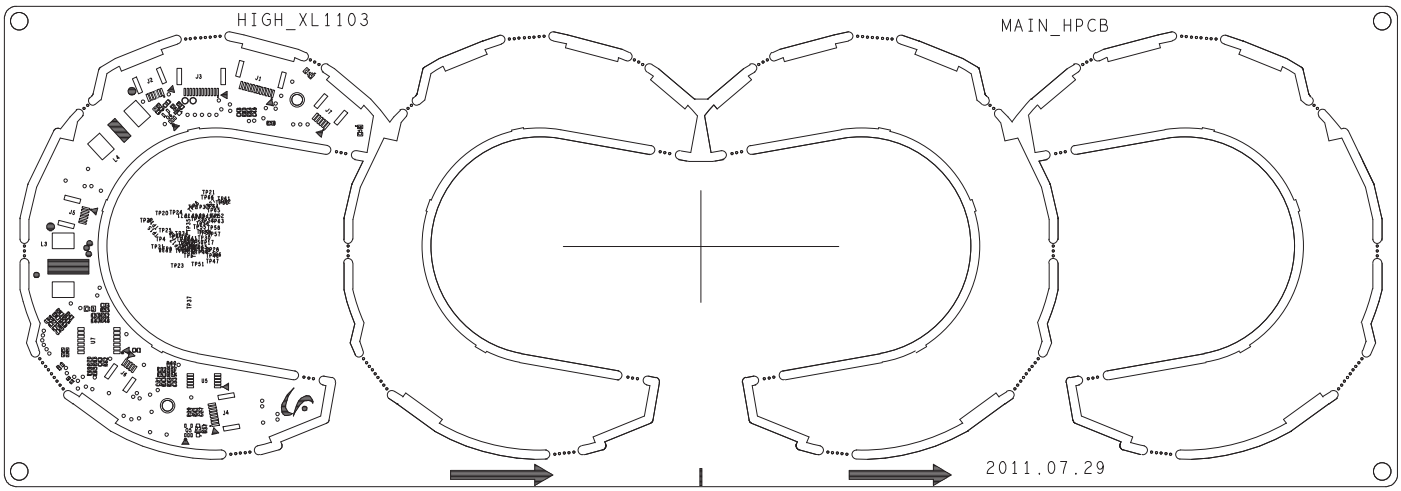
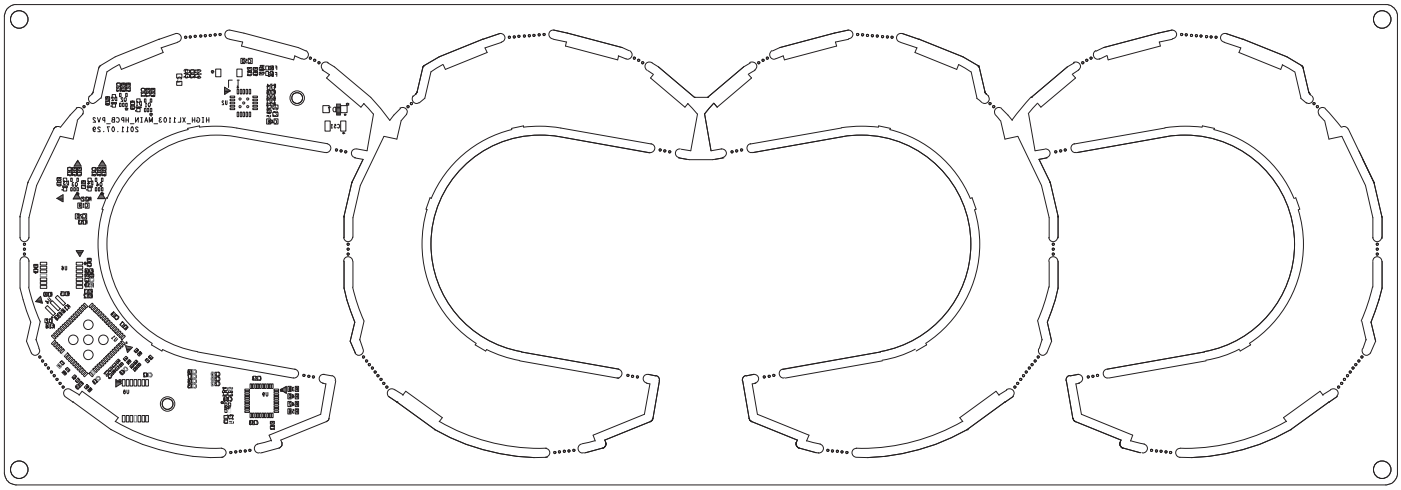
4. PCB diagrams

4-1 Main PCB (Top)



4-2 Main PCB(Bottom)



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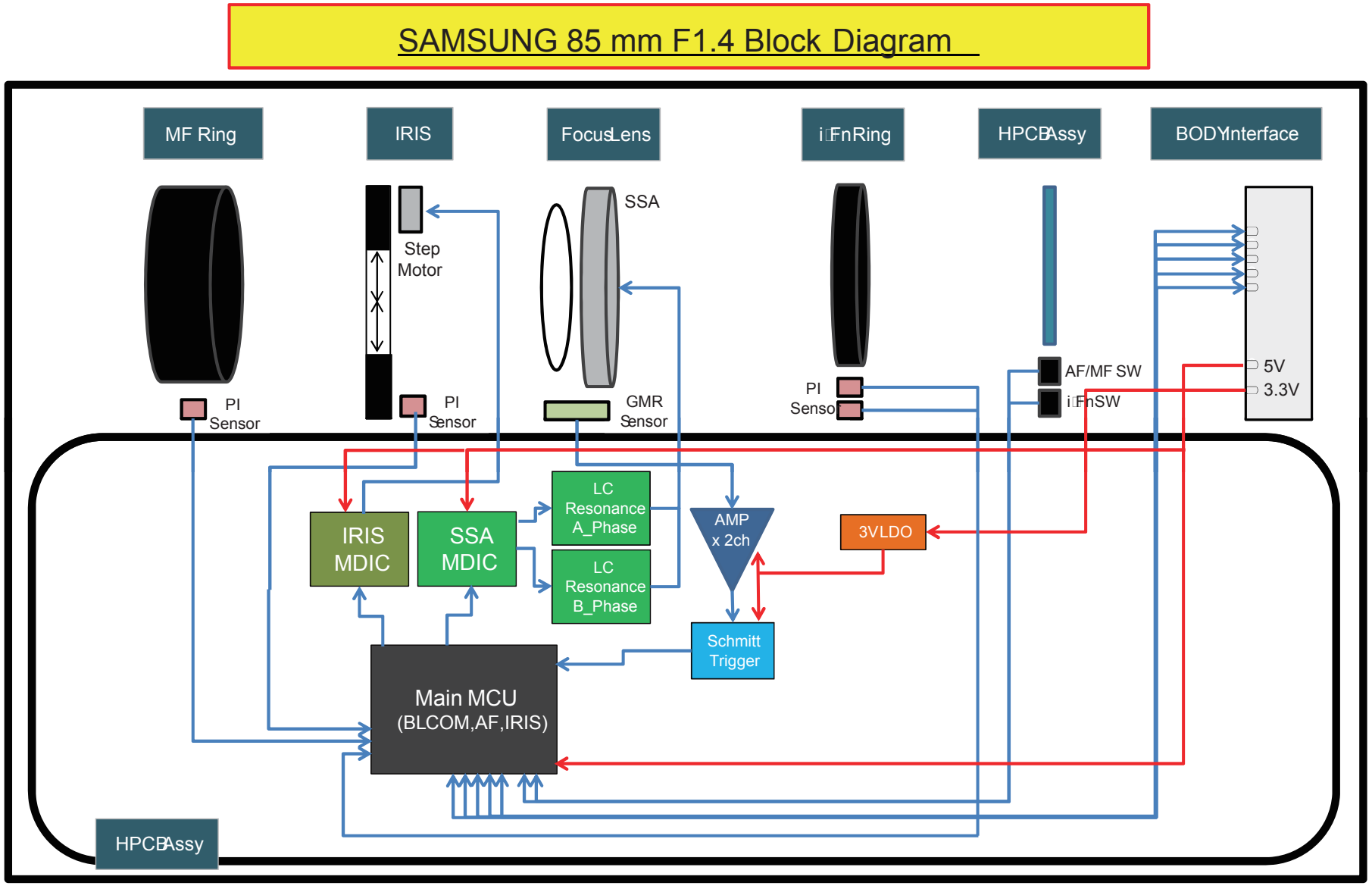
5. Block diagram



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6. Firmware update

6-1 Before upgrading the firmware

1. Make sure you use fully charged batteries. It is recommended that you use an AC adaptor for cameras that have an AC adaptor.
   If fully charged batteries are not used, or the power is cut during a firmware upgrade, the lens may be seriously damaged, resulting in lens malfunction.

2. Before upgrading the lens firmware, make sure that you format the memory card on your PC or camera and then download the necessary firmware file. Since the memory card may not be suitable for lens firmware upgrade, depending on the model, check before you proceed with upgrading the lens firmware.

3. Download the lens firmware file into the root directory of the memory card. Also check that the lens firmware file downloaded has the correct file name for the camera’s lens.

4. To upgrade lens firmware there should be sufficient free space on the memory card for the size of the lens firmware file.
   If the lens firmware upgrade is not completed because of insufficient memory space, delete some of the files saved on the memory to secure more free space and then try again.

5. Do not operate the camera, remove the batteries, or cut the power while upgrading lens firmware. Operate the camera only after the lens firmware upgrade is complete.

6. Once the lens firmware is upgraded, it is not possible to restore the earlier version of the lens firmware. When the lens firmware is upgraded, all the camera settings are set to their default values. Since all the files stored in the internal memory will be deleted, ensure that files are copied to other storage devices before upgrading the lens firmware.

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6-2 How to upgrade the firmware

If the batteries are completely discharged during the lens firmware upgrade, camera or lens malfunction may occur.
Make sure to use fully charged batteries for safety. Ensure that you format the memory card before using it,
and then save the lens firmware file on the formatted memory card.

1. Download the lens firmware file into the root directory of the memory card.
   * When you upgrade the lens firmware, the lens which you upgrade must be attached on the camera.
   - If you can not attach the lens to the camera, you can not not upgrade it.
   * The file name of lens firmware is “lens.bin”
   - If there is a difference between attached lens and lens firmware file, you can find the “File Error” message.

2. Insert the memory card on which the lens firmware file is to be saved and then turn on the camera.

3. Press the menu button.

4. Move to “Setup Menu 3” (Press the left button of 4-way key.)

5. Select the “Firmware Update”
   (After pressing the left button of 4-way key, press the OK button for 1 time.)

Fig. 6-1

6. Select the “Lens Firmware”. (Press the OK button for 1 time)

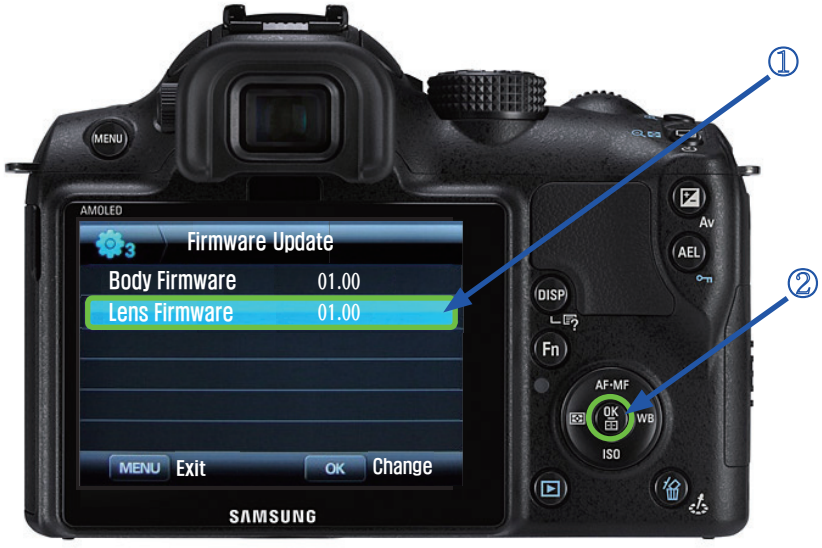

Fig. 6-2

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7. Select “Yes”. (After pressing the down button of 4-way key, press the OK button for 1 time.)

Fig. 6-3

8. The progress of the Firmware upgrade will be displayed on the **LCD** and the upgrade will proceed.

Fig. 6-4

9. After finishing it, you can find the **“Update Completed”** message on the **LCD**.

Fig. 6-5

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7. Exploded view and parts list

7-1 BODY ASSEMBLY_1

Loc. No	Parts No.	Description	Q ty	Available	Remark
1-1	6003-001692	SCREW-TAPTYPE	4	X	
1-2	AD97-21732A	ASSY BARREL-CAM	1	X	
1-3	AD97-21729A	ASSY BARREL-FOCUS	1	X	
1-4	6001-002179	SCREW-MACHINE	3	X	
1-5	AD67-02206A	BARREL-SSA FITTING	1	X	
1-6	AD97-21193B	ASSY MOTOR-XL1101_SSA	1	X	
1-7	AD61-05232A	COLLAR-SSA	1	X	
1-8	6009-001762	SCREW-SPECIAL	1	X	
1-9	AD67-02231A	BARREL-CONNECTING	1	X	
1-10	6001-002179	SCREW-MACHINE	4	X	
1-11	AD64-03402A	DECO RING-BLUE	1	X	

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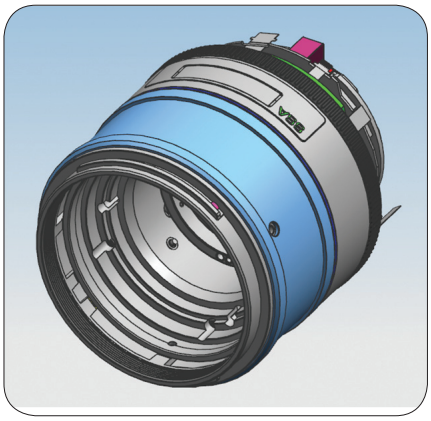
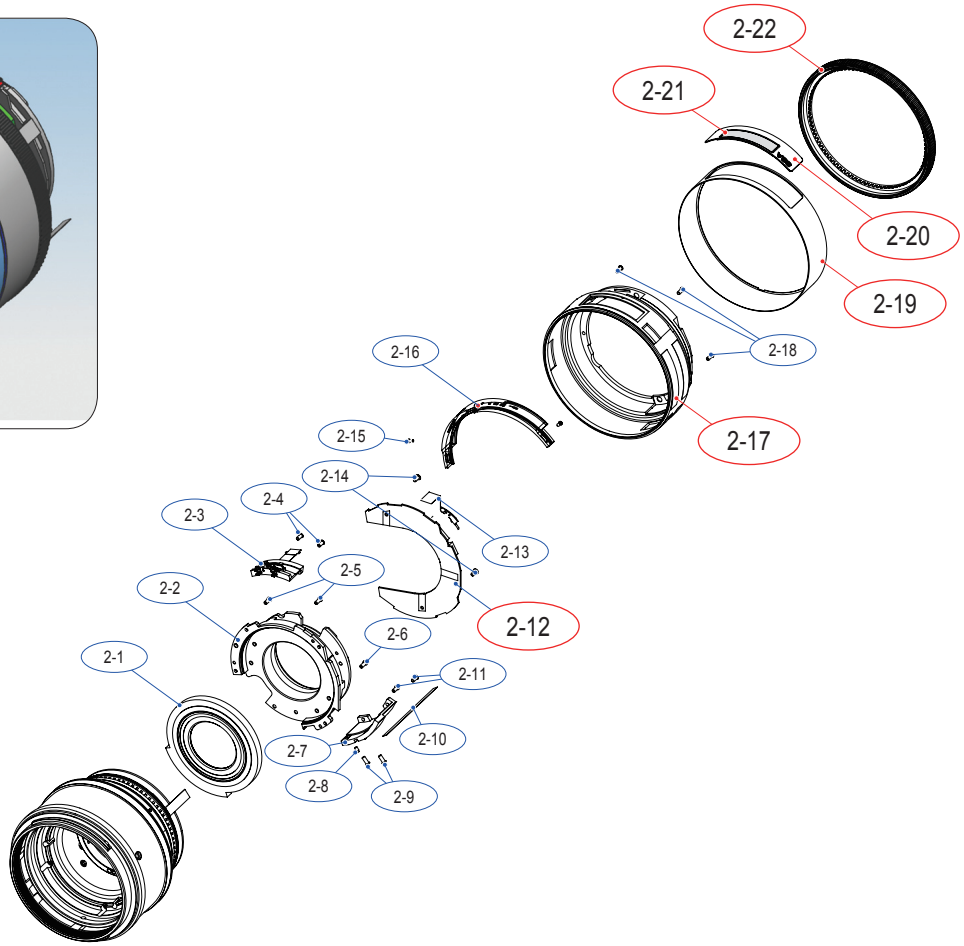
7-2 BODY ASSEMBLY_2





Loc. No	Parts No.	Description	Q ty	Available	Remark
2-1	AD97-21116A	ASSY IRIS-XL1103 IRIS	1	X	
2-2	AD67-02207A	BARREL-MAIN	1	X	
2-3	AD97-21715A	ASSY BARREL-HOME PI	1	X	
2-4	6001-001373	SCREW-MACHINE	2	X	
2-5	6003-001630	SCREW-TAPTYPE	3	X	
2-6	6001-002179	SCREW-MACHINE	4	X	
2-7	AD97-21714A	ASSY BARREL-BASE GMR	1	X	
2-8	AD61-05367A	ADJUST-PIN GMR	1	X	
2-9	6003-001629	SCREW-TAPTYPE	2	X	
2-10	AD32-00046A	SENSOR MAG-20UM	1	X	
2-11	6001-001373	SCREW-MACHINE	2	X	
2-12	AD92-01779A	ASSY PCB LENS MAIN-XL1103	1	O	
2-13	AD61-04213A	PLATE-CONTACT ASSY	1	X	
2-14	6001-001373	SCREW-MACHINE	2	X	
2-15	6001-002181	SCREW-MACHINE	2	X	
2-16	AD61-05325A	BASE-SCALE	1	X	
2-17	AD63-06204A	COVER-MIDDLE FRAME	1	O	
2-18	6001-001373	SCREW-MACHINE	3	X	
2-19	AD63-06226A	COVER-MIDDLE	1	O	
2-20	AD63-06232A	COVER-WINDOW DECO	1	O	
2-21	AD63-06206A	COVER-WINDOW	1	O	
2-22	AD97-21712A	ASSY BARREL-I FUNCTION	1	O	

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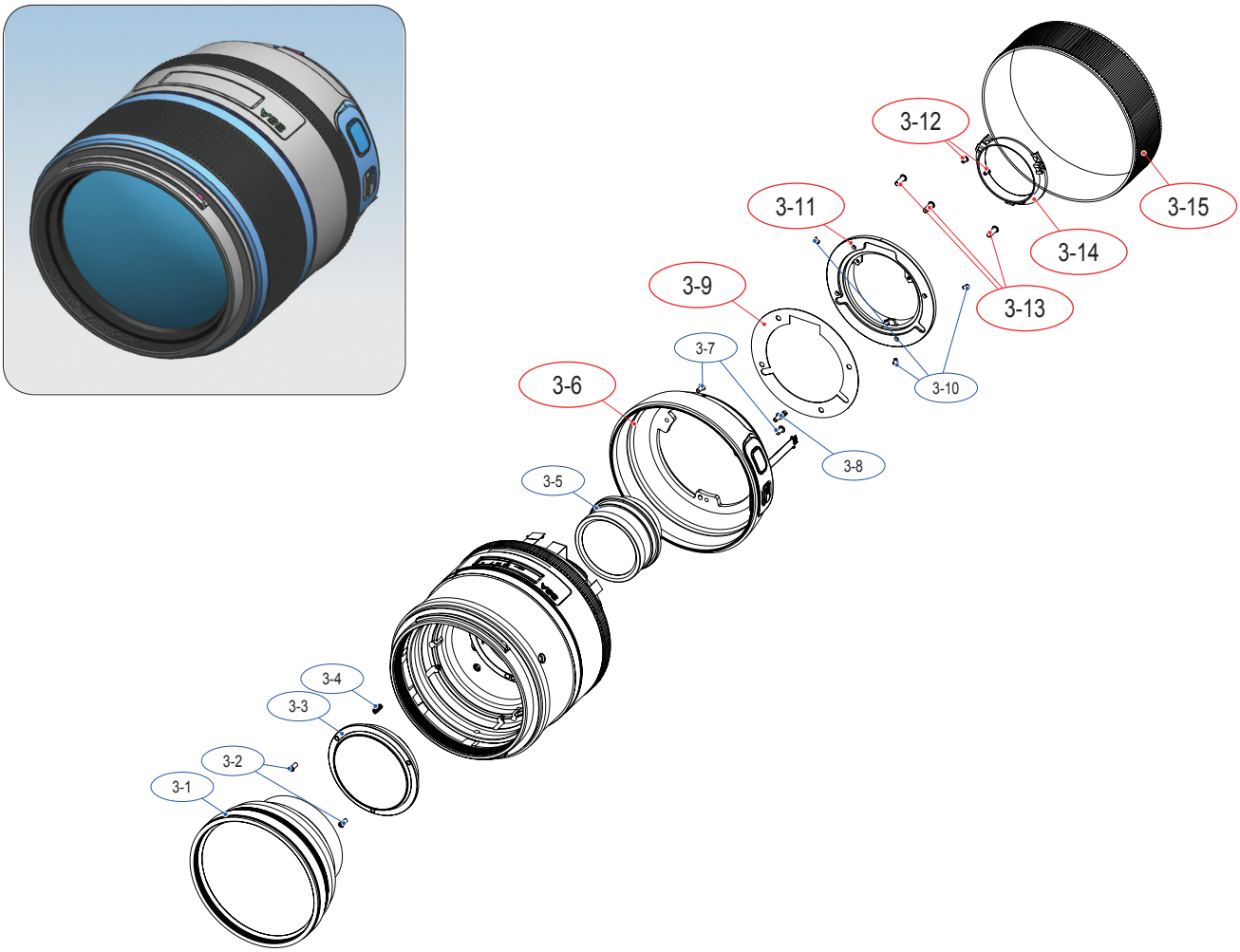
7-3 BODY ASSEMBLY_3



Loc. No	Parts No.	Description	Q ty	Available	Remark
3-1	AD97-21726A	ASSY BARREL-1ST	1	X	
3-2	6001-002172	SCREW-MACHINE	3	X	
3-3	AD97-21727A	ASSY BARREL-2ND	1	X	
3-4	6107-002993	SPRING-CS	3	X	
3-5	AD97-21728A	ASSY BARREL-3RD	1	X	
3-6	AD97-21713A	ASSY BARREL-OUTER COVER	1	O	
3-7	6001-002172	SCREW-MACHINE	3	X	
3-8	AD66-00888A	SHAFT-PIN STOP	1	X	
3-9	AD61-04206A	PLATE-BF ADJUST 03	1	O	
3-10	6003-001714	SCREW-TAPTYPE	3	X	
3-11	AD61-04237B	MOUNT-LENS	1	O	
3-12	6001-002181	SCREW-MACHINE	2	O	
3-13	6001-000504	SCREW-MACHINE	3	O	
3-14	AD63-05909A	COVER-MOUNT	1	O	
3-15	AD63-06239A	GRIP-FOCUS RUBBER	1	O	

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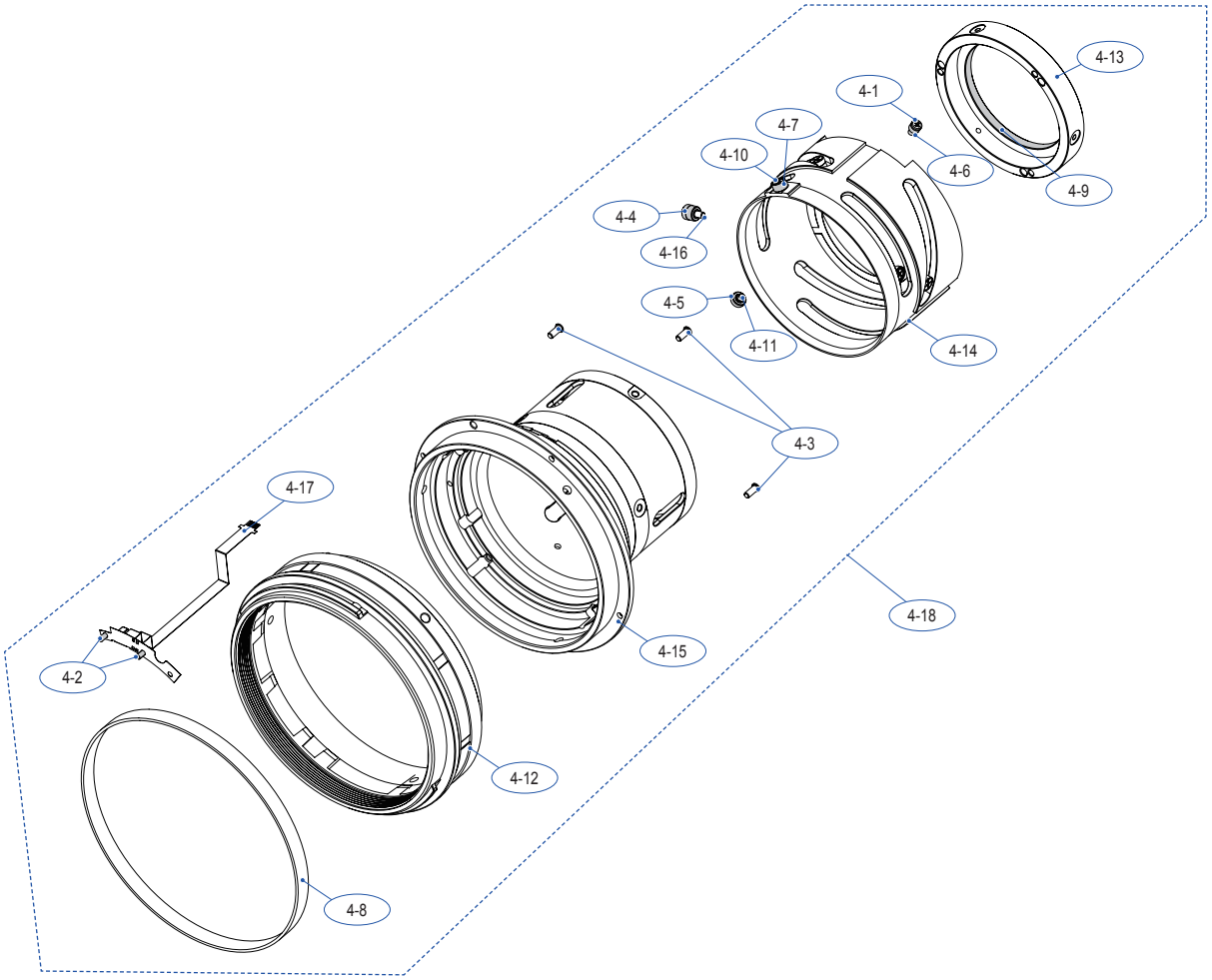
7-4 BARREL CAM ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
4-1	6001-001373	SCREW-MACHINE	1	X	
4-2	6001-002181	SCREW-MACHINE	2	X	
4-3	6003-001692	SCREW-TAPTYPE	4	X	
4-4	AD61-05362A	COLLAR-2ND BARREL	3	X	
4-5	AD61-05363A	COLLAR-CAM BARREL GUIDE	3	X	
4-6	AD61-05364A	COLLAR-STOPPER	1	X	
4-7	AD61-05365A	COLLAR-FTM LINK	1	X	
4-8	AD63-06227A	SHIELD-MF RING	1	X	
4-9	AD63-06230A	SHEET-G6 MASK	1	X	
4-10	AD66-00925A	SHAFT-SPECIAL FTM	1	X	
4-11	AD66-00926A	SHAFT-SPECIAL CAM GUIDE	3	X	
4-12	AD67-02201A	BARREL-FRONT	1	X	
4-13	AD67-02220A	BARREL-2ND BASE MOVE	1	X	
4-14	AD67-02222A	BARREL-CAM	1	X	
4-15	AD67-02229A	BARREL-MIDDLE	1	X	
4-16	AD66-00924A	SHAFT_SPECIAL_CAM Barrel	3	X	
4-17	AD92-01671A	ASSY SMD INSERT-XL1103_MFPI	1	X	
4-18	AD97-21732A	ASSY BARREL-CAM	1	X	

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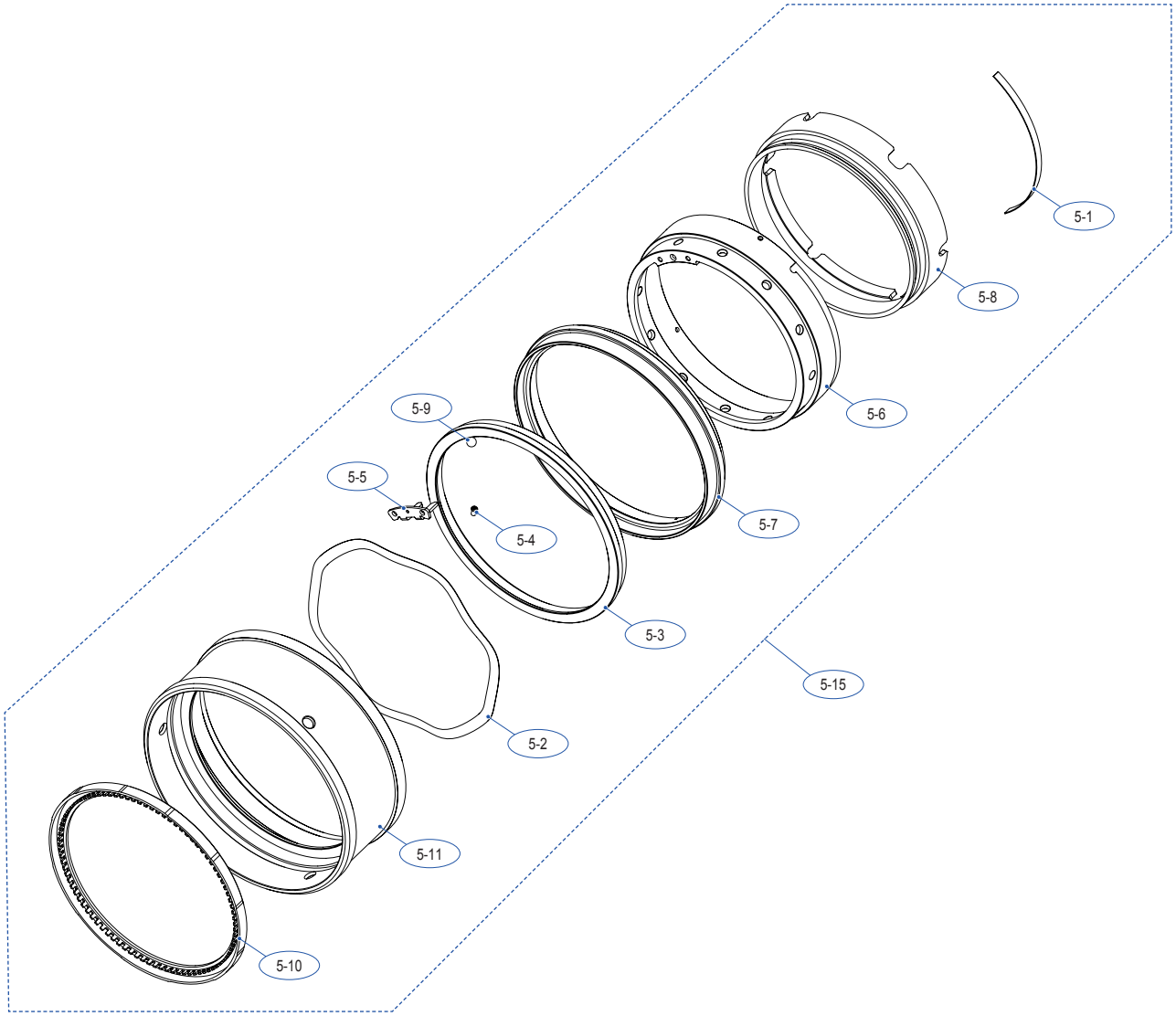
7-5 BARREL FOCUS ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
5-1	3309-001046	MAGNET-SHEET	1	X	
5-2	AD61-05356A	PLATE-FTM-WAVE	1	X	
5-3	AD67-02225A	BARREL-FTM HOLDER	1	X	
5-4	6001-002162	SCREW-MACHINE	2	X	
5-5	AD61-05355A	PLATE-CAM LEVER	1	X	
5-6	AD67-02223A	BARREL-DIF DRIVE	1	X	
5-7	AD67-02226A	BARREL-FTM RETAINER	1	X	
5-8	AD67-02232A	BARREL-DIF INNERRING	1	X	
5-9	AD81-09965A	BALL-30	12	X	
5-10	AD67-02205A	BARREL-MF PI RING	1	X	
5-11	AD67-02230A	BARREL-MANUAL FOCUS	1	X	
5-12	AD97-21729A	ASSY BARREL-FOCUS	1	X	

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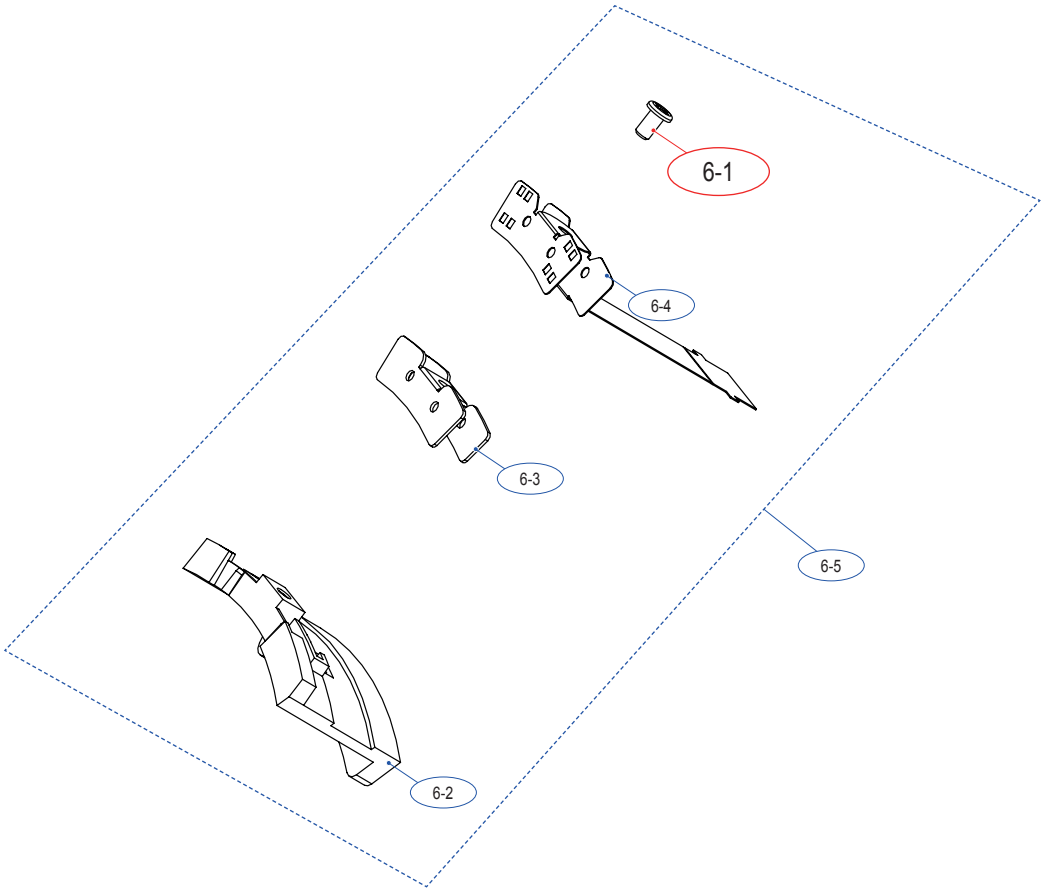
7-6 HOME PI ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
6-1	6003-001674	SCREW-TAPTYPE	1	O	
6-2	AD61-05326A	BASE-HOME PI	1	X	
6-3	AD61-05361A	PLATE-PI_FOCUS_FIX	1	X	
6-4	AD92-01672A	ASSY SMD INSERT-XL1103_HOMEPI	1	X	
6-5	AD97-21715A	ASSY BARREL-HOME PI	1	X	

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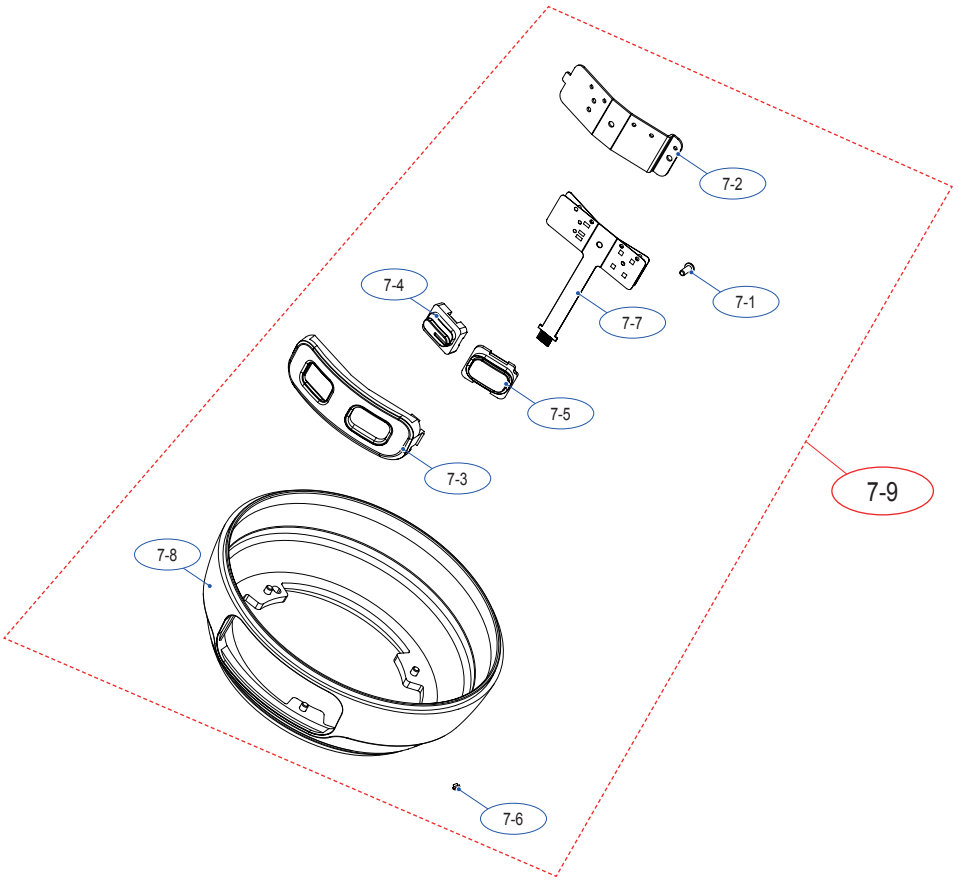
7-7 OUTER COVER BARREL ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
7-1	6003-001630	SCREW-TAPTYPE	1	X	
7-2	AD61-05357A	PLATE-BUTTON	1	X	
7-3	AD63-06202A	COVER-BUTTON	1	X	
7-4	AD64-03386A	BUTTON-MODE	1	X	
7-5	AD64-03387A	BUTTON-I FUNCTION	1	X	
7-6	AD66-00680A	SHAFT-SET POINT	1	X	
7-7	AD92-01673A	ASSY SMD INSERT-XL1103_S/WPI	1	X	
7-8	AD63-06205A	COVER-OUTER	1	X	
7-9	AD97-21713A	ASSY BARREL-OUTER COVER	1	O	

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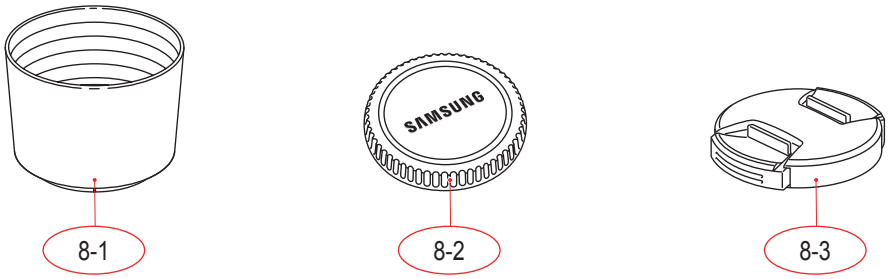
7-8 PACKING ITEMS



Loc. No	Parts No.	Description	Q ty	Available	Remark
8-1	AD97-21757A	ASSY BARREL-LENS HOOD_XL1103	1	O	
8-2	AD63-03989A	COVER-MOUNT CAP;XL1012,PC(GF30)	1	O	
8-3	AD97-20681A	ASSY LENS CAP	1	O	

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Area	Web Site
Europe, MENA, CIS, Africa	https://gspn1.samsungcsportal.com
E.Asia, W.Asia, China, Japan	https://gspn2.samsungcsportal.com
N.America, S.America	https://gspn3.samsungcsportal.com

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