



# DIGITAL CAMERA LENS

**NX Lens-XL1013/XL1013i**  
**SAMSUNG 18~55mm**  
**F3.5~5.6 OIS**

# ***SERVICE***

# ***Manual***

## DIGITAL CAMERA LENS

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# 1. Product Specification

## 1-1 Specifications

Table. 1-1

Lens Name	SAMSUNG 18~55mm F3.5~5.6 OIS
Focus Length	18~55mm (equivalent to 27.7~84.7mm in 35mm format)
Elements in Group	12 elements in 9 groups (1 aspheric lens included)
Angle of View	75.9°~28.7°
Aperture	F3.5~5.6 (minimum: F22), (Number of Blades: 7, Circular Aperture Diaphragm)
Mount Type	Samsung NX mount
Optical Image Stabilizer	Included
Minimum Focus Distance	0.28m~infinity
Maximum Magnification	Approx. 0.22X
Lens Hood	Included
Filter Size	58mm
Max. Diameter x Length	63x65.1mm
Weight	Approx. 198g (without hood)
Operating Temperature	0~40 °C
Operating Humidity	5~85%

## 1-2 Identification of features

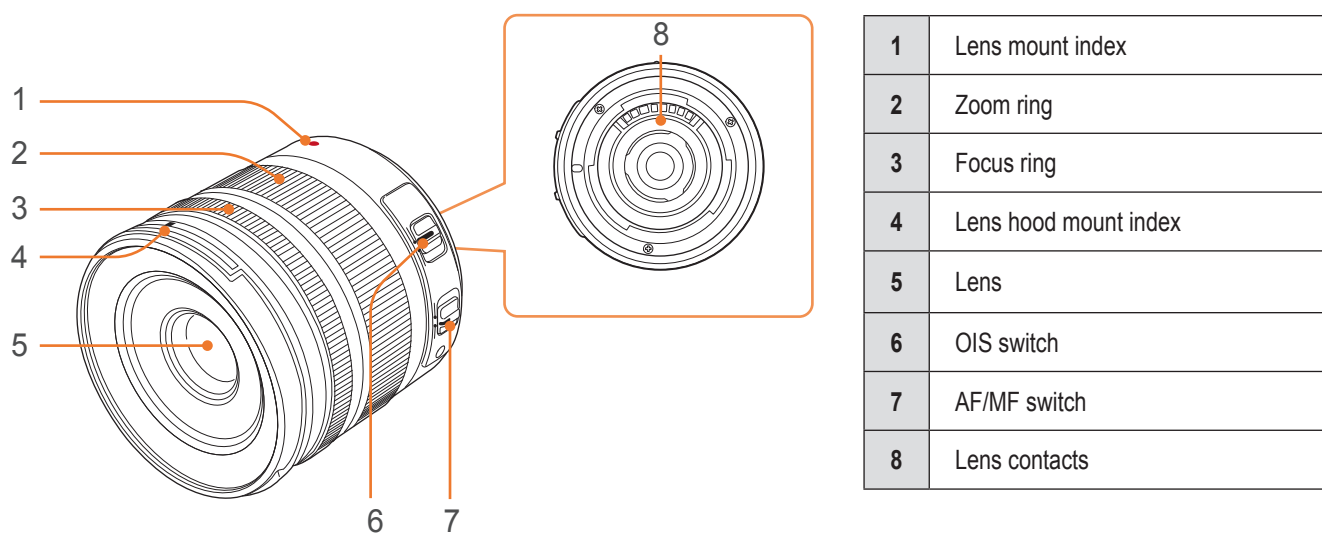


Fig. 1-1

## 2. Operation Instruction & Installation

### 2-1 Install

#### 2-1-1 Attach the lens



- Before mounting the lens, remove the lens cap, lens mount cover, and body cap.

1) Align the red mark on the lens with the red mark on the camera body.

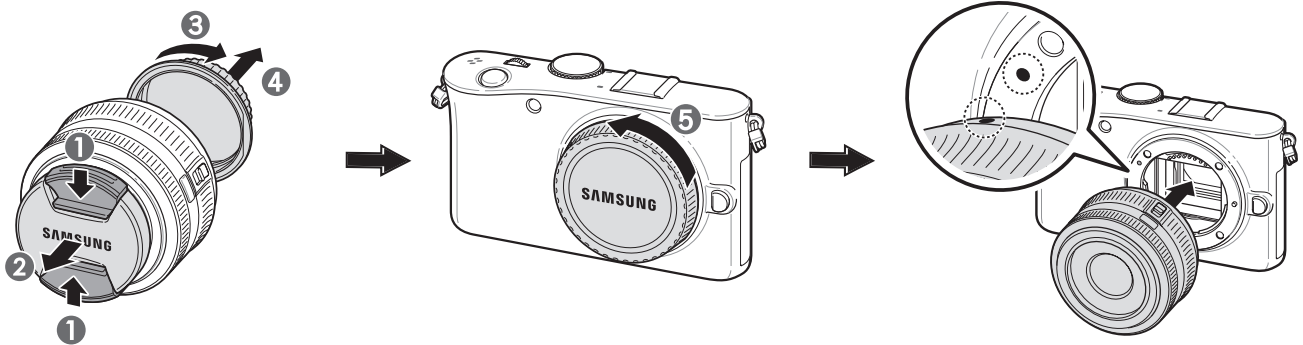


Fig. 2-1

2) Rotate the lens clockwise until it locks into place.

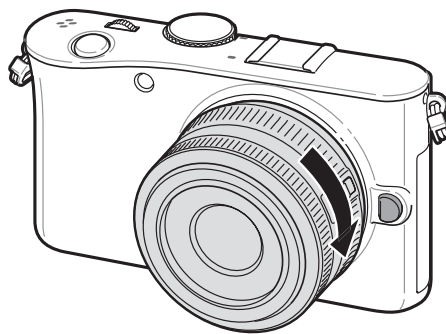


Fig. 2-2

#### ⚠ Caution

- If you attach a lens with the zoom lock switch, unlock it by rotating the zoom ring counter-clockwise. When the lens is locked, you cannot capture photos and the Lens is locked message appears.
- To lock the lens with the zoom lock switch, turn the zoom ring clockwise while pushing the zoom lock switch..

## 2-1-2 Remove the lens

- 1) Turn off the camera before removing the lens.
- 2) Rotate the lens clockwise until it locks into place.

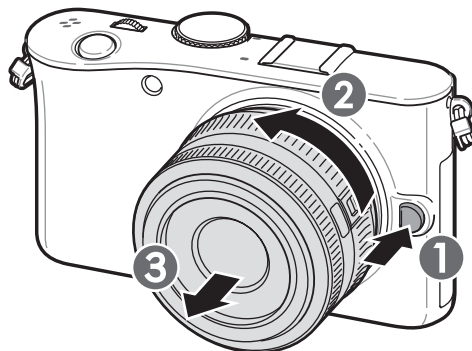


Fig. 2-3

### **⚠ Caution**

- Samsung is not responsible for damage caused by using another manufacturer's lenses.
- When not using the lens, attach the lens cap and lens mount cover to protect the lens from dust and scratches.
- Do not attach or remove lenses in dusty, dirty areas. Dust and foreign particles can damage the lens or the camera.
- Do not touch the inside of the camera mount. Dust and foreign particles can damage the lens.
- When not using a lens, attach the body cap.

## 2-1-3 Setting the automatic/manual focus function



- The focus can be adjusted automatically or manually by using the AF/MF switch on the side of the lens.

### 1) Use of automatic focus

Set the AF/MF switch of the camera to AF. The focus is adjusted automatically if pressing half of the shutter button.

### 2) Use of manual focus

Set the AF/MF switch of the lens to MF. The focus can be adjusted manually by turning the focus ring.

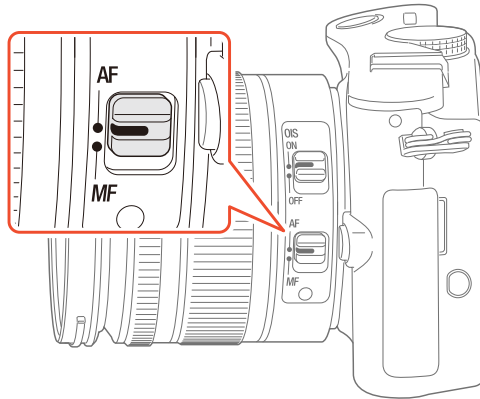


Fig. 2-4

## 2-1-4 Optical Image Stabilization (OIS)



- When using the optical image stabilization (OIS) function in taking pictures, the user can accurately focus pictures since this function minimizes camera shaking.

1) The OIS function can be used only in the case that the lens in use has the OIS function.

2) To use this function, please set [OIS] to ON.

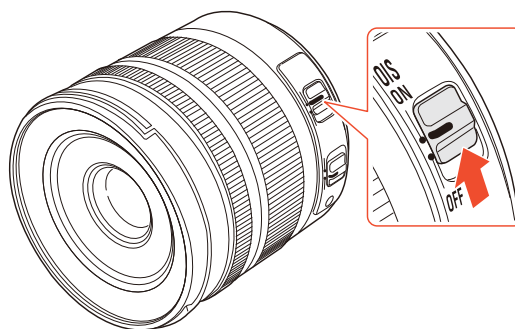
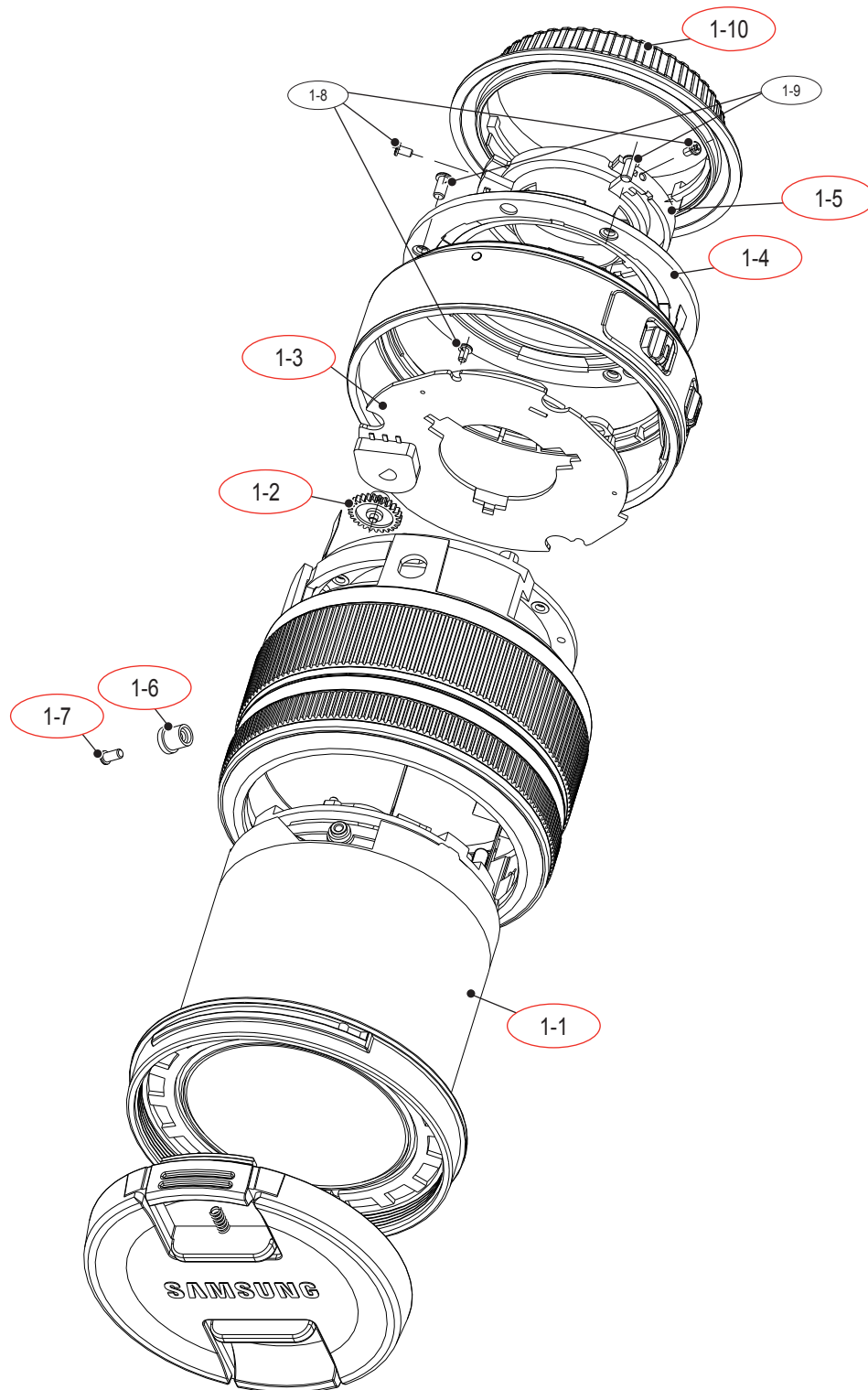


Fig. 2-5

# Memo

### 3. Exploded View and Parts List

#### 3-1 (XL1013/XL1013i: 18-55mm F3.5 - 5.6 OIS) TOTAL BARREL ASSEMBLY

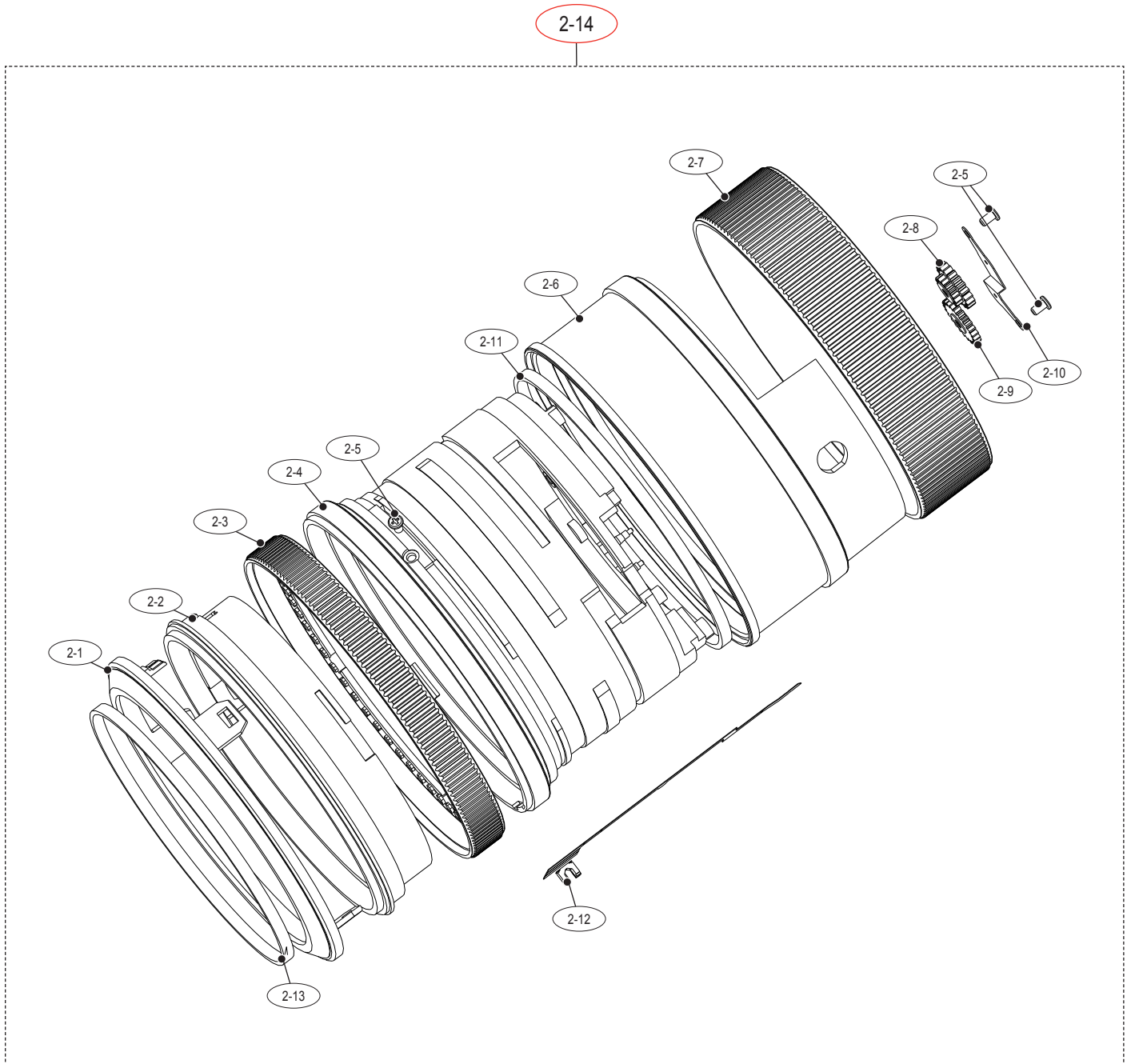




## Exploded View and Parts List

Loc. No	Parts No.	Description	Q ty	Available	Remark
1-1	AD97-21699B	SUB BARREL ASSY	1	O	
1-2	AD66-00725A	P-GEAR 3	1	O	
1-3	AD92-00864A	LENS PCB ASS'Y	1	O	XL1013
	AD92-01898A	LENS PCB ASSY_i Version	1	O	XL1013i
1-4	AD61-05701A	MOUNT	1	O	
1-5	AD63-04242A	MOUNT COVER	1	O	
1-6	AD66-00732A	ZOOM ROLLER	1	O	
1-7	6003-001641	SCREW 1735-25	1	O	
1-8	6003-001769	SCREW 1425-25	3	X	
1-9	6003-001759	SCREW 2040-30	3	X	
1-10	AD63-03989A	MOUNT CAP	1	O	

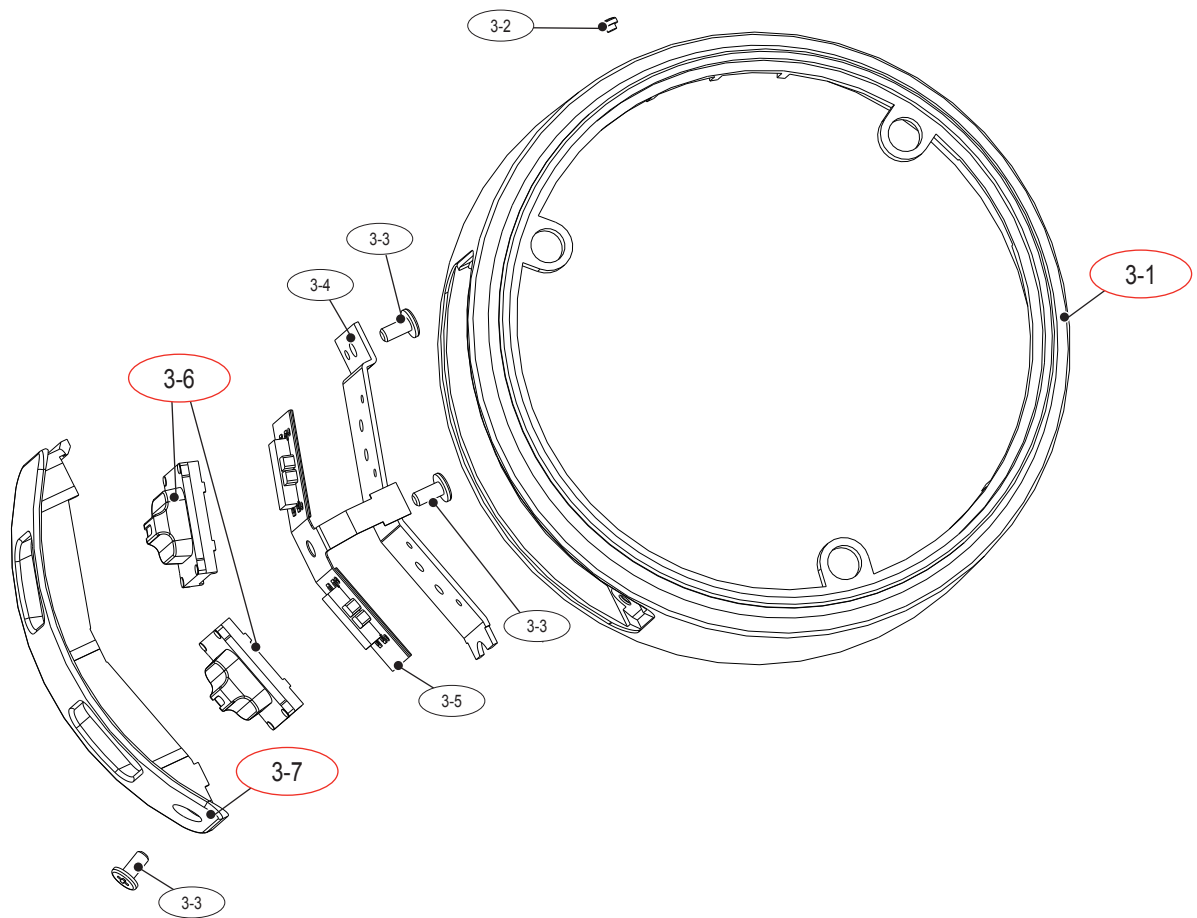
### 3-2 (XL1013/XL1013i: 18-55mm F3.5 - 5.6 OIS) OUTER BARREL ASSEMBLY



## Exploded View and Parts List

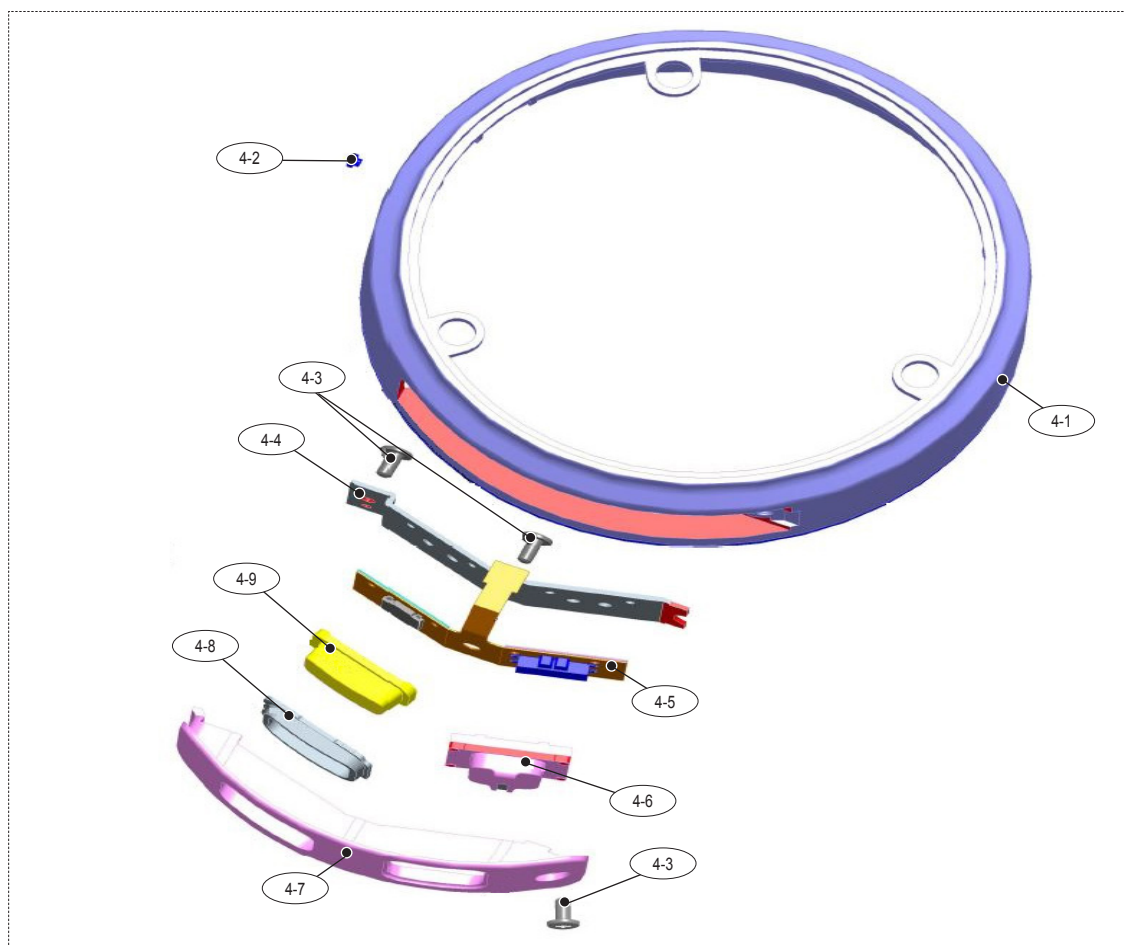
Loc. No	Parts No.	Description	Q ty	Available	Remark
2-1	AD67-01365B	INDEX RING3	1	X	
2-2	AD67-01362B	FOCUS RING2	1	X	
2-3	AD67-01361A	FOCUS RING1	1	X	XL1013
	AD67-01361C	FOCUS RING1_i Vesion	1	X	XL1013i
2-4	AD67-01364A	INDEX RING2	1	X	XL1013
	AD67-01364E	INDEX RING 2_i Version	1	X	XL1013i
2-5	6003-001769	SCREW 1425-25	3	X	
2-6	AD67-01377C	ZOOM RING	1	X	
2-7	AD67-02163A	ZOOM RUBBER	1	X	
2-8	AD66-00723A	P-GEAR 1	1	X	
2-9	AD66-00724A	P-GEAR 2	1	X	
2-10	AD61-04259A	P-PLATE	1	X	
2-11	AD63-04268A	SHIELD 1	1	X	
2-12	AD41-01327A	MFPI FPCB	1	X	
2-13	AD63-04270A	SHIELD 3	1	X	
2-14	AD97-20985C	ASSY BARREL-OUTER	1	O	

### 3-3 (XL1013: 18-55mm F3.5 - 5.6 OIS) SWITCH ASSEMBLY



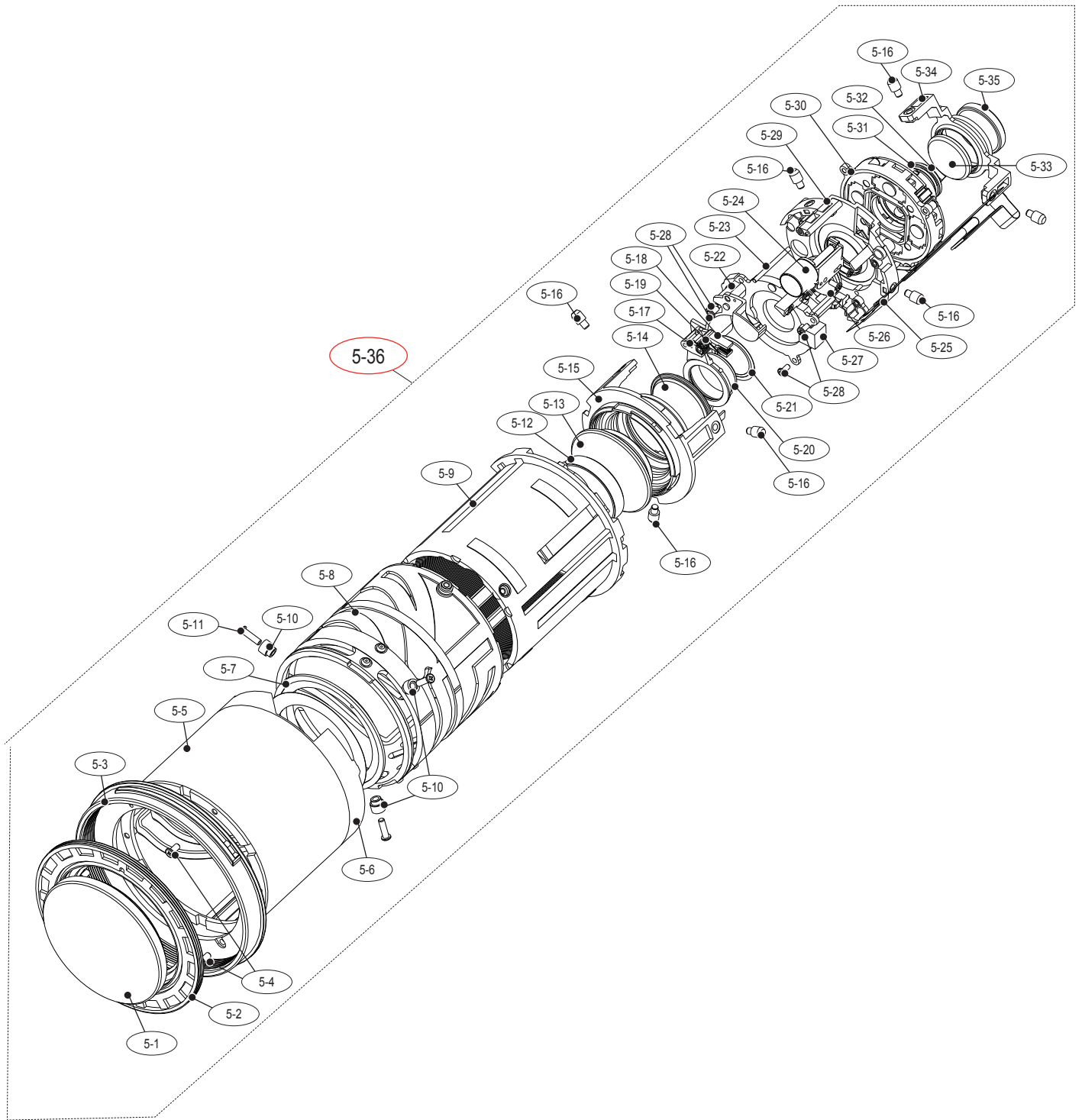
Loc. No	Parts No.	Description	Q ty	Available	Remark
3-1	AD67-01363A	INDEX RING1	1	O	
3-2	AD66-00680A	SET POINT	1	X	
3-3	6003-001770	SCREW 1430-30	3	X	
3-4	AD61-04258A	SLIDE SWITCH BASE	1	X	
3-5	AD41-01328A	SWITCH FPCB	1	X	
3-6	AD64-02675A	BUTTON	2	O	
3-7	AD63-04241A	BUTTON COVER	1	O	

### 3-4 (XL1013i: 18-55mm F3.5 - 5.6 OIS) SWITCH ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
4-1	AD67-01363D	INDEX RING1	1	X	
4-2	AD66-00680A	SET POINT	1	X	
4-3	6003-001770	SCREW 1430-30	3	X	
4-4	AD61-04258A	SLIDE SWITCH BASE	1	X	
4-5	AD92-01618A	SMD FPCB ASSY-IFN_SWITCH	1	X	
4-6	AD64-02675A	BUTTON-A	1	X	
4-7	AD63-04241C	BUTTON COVER	1	X	
4-8	AD64-03308B	BUTTON BLUE RING	1	X	
4-9	AD64-03293B	BUTTON PUSH	1	X	
4 -10	AD97-21213B	SWITCH iFn ASSY	1	O	

### 3-5 (XL1013/XL1013i: 18-55mm F3.5 - 5.6 OIS) SUB BARREL ASSY



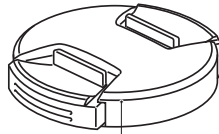
## Exploded View and Parts List

Loc. No	Parts No.	Description	Q ty	Available	Remark
5-1	AD67-01366A	G1/G2 LENS ASSY	1	X	
5-2	AD67-01352A	1ST LENS BARREL	1	X	
5-3	AD97-01360B	FILTER BARREL	1	X	
5-4	6003-001637	SCREW 17355-30	3	X	
5-5	AD67-01353B	1ST MOVER BARREL	1	X	
5-6	AD61-04270A	MASK G3	1	X	
5-7	AD67-01375A	2ND PUSH RING	1	X	
5-8	AD67-01358A	CAM BARREL	1	X	
5-9	AD67-01359A	MAIN BARREL	1	X	
5-10	AD66-00733A	CAM ROLLER	3	X	
5-11	6003-001671	SCREW 1750-25	3	X	
5-12	AD67-01367A	G3 LENS	1	X	
5-13	AD67-01368A	G4 LENS	1	X	
5-14	AD67-01369A	G5 LENS	1	X	
5-15	AD67-01354A	2ND MOVER BARREL	1	X	
5-16	AD66-00734A	MOVE PIN	9	X	
5-17	AD67-01355A	3RD BARREL	1	X	
5-18	AD61-04242A	CLIP	1	X	
5-19	6107-001826	CLIP SPRING	1	X	
5-20	AD67-01370A	G6 LENS	1	X	
5-21	AD61-04434A	MASK G6	1	X	
5-22	AD61-04243A	GUIDE BAR HOLDER	1	X	
5-23	AD66-00731A	GUIDE BAR	1	X	
5-24	AD97-17522A	AF MOTOR	1	X	
5-25	AD41-01326A	AF MOTOR FPCB	1	X	
5-26	AD67-01371A	G7/G8 LENS ASSY	1	X	
5-27	AD97-17534A	IRIS ASSY	1	X	
5-28	6003-001706	SCREW 1430-25	7	X	
5-29	AD67-01356B	4TH BARREL	1	X	
5-30	AD97-17503A	SHUTTER ASSY-OIS MECHA	1	X	
5-31	AD67-01376A	4-2ND BARREL	1	X	
5-32	AD67-01372A	G9/G10 LENS ASSY	1	X	
5-33	AD67-01374A	G11 LENS	1	X	
5-34	AD67-01357A	5TH MOVER BARREL	1	X	
5-35	AD67-01373A	G12 LENS	1	X	
5-36	AD97-21699B	SUB BARREL ASSY	1	O	

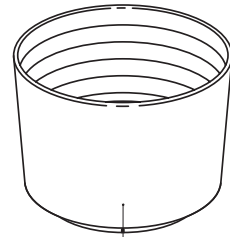
### 3-6 PACKING ITEMS



6-1



6-2



6-3

Loc. No	Parts No.	Description	Q ty	Available	Remark
6-1	AD63-03989A	REAR-MOUNT CAP	1	O	
6-2	AD97-18288A	ASSY_FRONT_CAP	1	O	
6-3	AD97-19350A	ASSY BARREL-LENS HOOD	1	O	



## 4. Disassembly and reassembly

### 4-1 18-55mm Lens disassembly

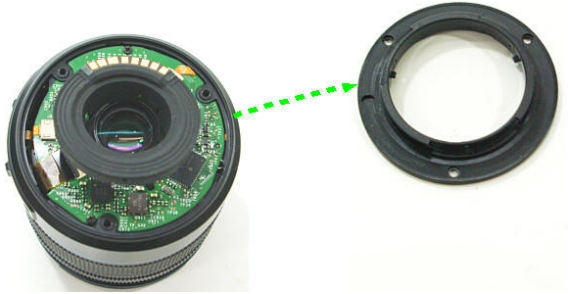

#### Precaution for disassembly/reassembly

1. Set up the repair table where the anti-static mat is installed to disassemble and reassemble the camera.
2. When handling the key PCB of the camera, wear the anti-static band on the wrist to prevent any error from static electricity.
3. When handling key parts, be careful of the following.

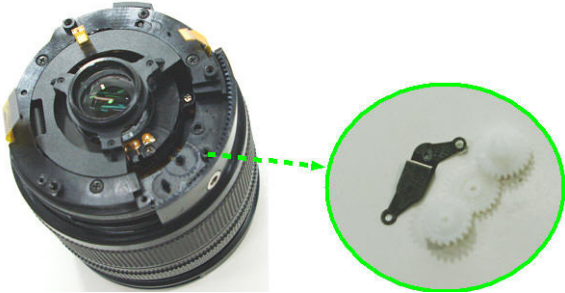
<Table 4-1>

Part	Precaution
<b>F PCB Type</b>	When assembling the F PCB to the CONNECTOR with a pin set, be careful not to cause dents or tears on the PCB.
<b>CCD and IR CUT</b>	When handling the parts, be careful not to leave any fingerprints. Use the pin set with soft tips. When cleaning the parts with alcohol, be careful not to cause any stains. Do the repair work in a dust free environment.
<b>PCB Type</b>	Always use the anti-static mat and wrist band, as the parts can be damaged from static electricity from the hand.
<b>CONTACT Type</b>	Be careful of damage of deformation of parts from the pin set.

No.	Disassembly image	Disassembly description
1		<p>disassemble the Lens on 18mm position, as its official position</p>
2		<p>Remove 3 screws.</p>
3		<p>Remove 3 screws.</p>

No.	Disassembly image	Disassembly description
4		<p>Disassemble the Mount</p>
5		<p>Remove 1 Connector.</p>
6		<p>Disassemble the SWITCH ASSY.</p>

No.	Disassembly image	Disassembly description
7		<p>Remove 3 Connectors.</p>
8		<p>Remove 2 screws.</p>
9		<p>Disassemble the LENS PCB ASSY.</p>

No.	Disassembly image	Disassembly description
10		<p>Remove 2 Screws of P-Plate.</p>
11		<p>Remove P-Plate and P-Gear 1,2,</p>
12		<p>Remove 3 screws.</p>

No.	Disassembly image	Disassembly description
13		<p>Remove 1 Screw of ZOOM ROLLER.</p>
14		<p>Disassemble the OUTER BARREL ASSY.</p>
15		<p>Disassemble the Sub Barrel Ass'y by turning the Cam barrel with arrow direction.</p>


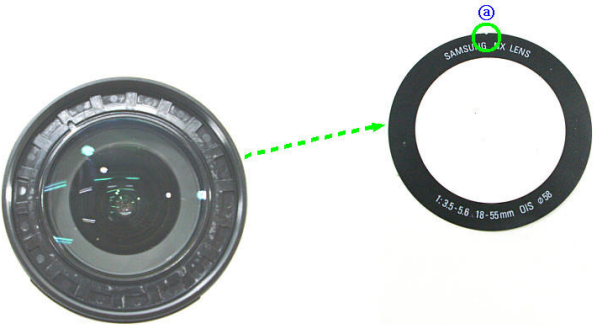

No.	Disassembly image	Disassembly description
16		<p>Disassemble the 1st Mover Barrel Assy.</p>
17		<p>Disassemble the 5th Mover Barrel Assy.</p>
18		<p>Disassemble the 5TH MOVER BARREL ASSY.</p>

No.	Disassembly image	Disassembly description
19		<p>Remove 3 Screw of Cam Roller..</p>
20		<p>Disassemble the CAM Barrel.</p>
21		<p>Remove 2 FPCB.  <b>(Caution: there is double-side tape)</b></p>



No.	Disassembly image	Disassembly description
22		Disassemble the Main Barrel.
23		2 Take apart the 2nd PUSH Ring that turns counter-clockwise from the 2nd MOVER BARREL ASSY
24		Disassemble the 2ND Mover Barrel Assy.

## 4-2 18-55mm 1st Mover Barrel assy Lens disassembly

No.	Disassembly image	Disassembly description
1		<p>Disassemble the Name Plate  <b>(Caution : Give an attention when disassembled)</b></p>
2		<p>When assembled, a should be match with 1st LENS BARREL</p>
3		<p>Take apart the 1st LENS BARREL that turns counter-clockwise (Assemble it by turning clockwise)</p>

No.	Disassembly image	Disassembly description
4		<p>Disassemble the 1st Lens Barrel.</p>
5		<p>Remove 3Screws.</p>
6		<p>Disassemble the Filter Barrel.</p>



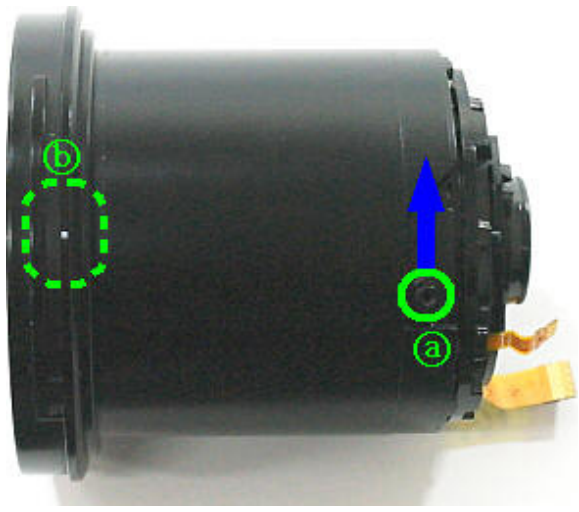

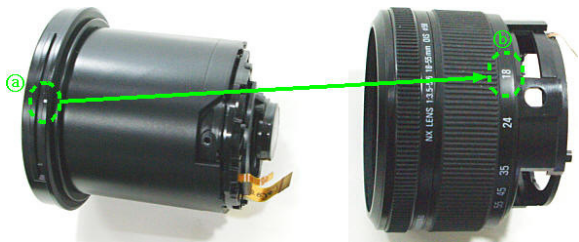
■ For the assembly procedure as this, refer to the BARREL disassembly part.

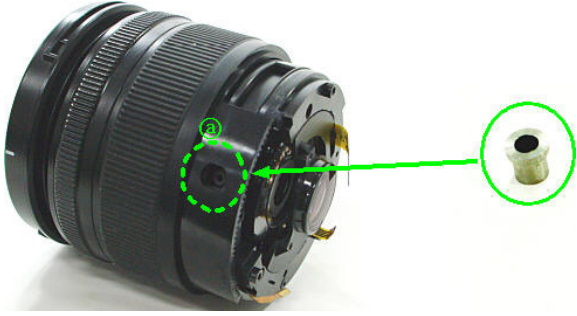
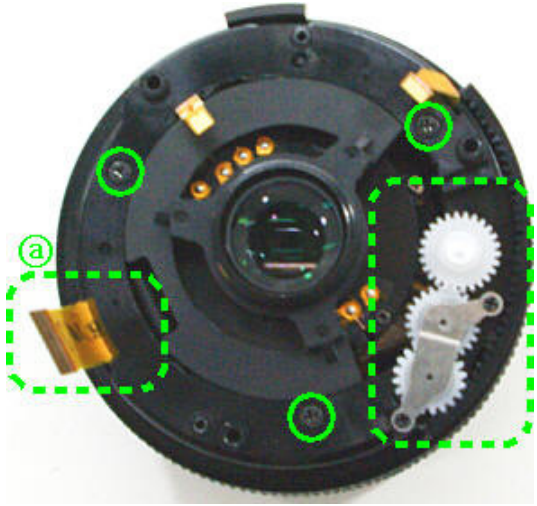
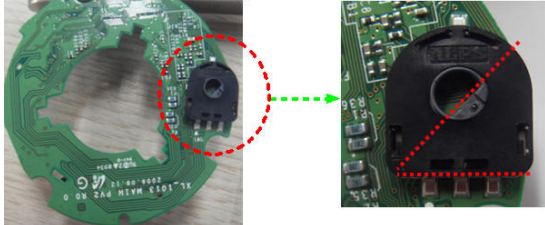
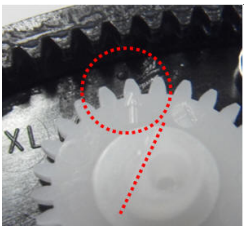
### 4-3 18-55mm Lens assembly

No.	Disassembly image	Disassembly description
1		<p>Assemble to the "b" of the 2ND MOVER BARREL ASSY by matching the point "a" as shown in the figure.</p>
2		<p>Assemble the 2nd PUSH RING by turning clockwise.</p>
3		<p>Assemble the MOVE Pin on the 4th BARREL                      1 - should be matched with a position                      2 - b on the AF MOTOR FPCB should be matched with c on the Main BARREL</p>


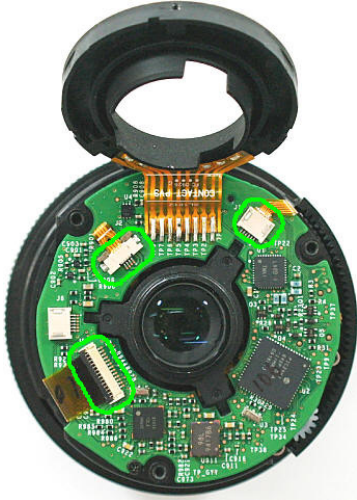
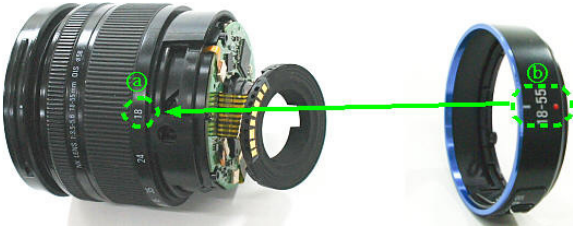
No.	Disassembly image	Disassembly description
4		<p>Assembled the Main Barrel Assy.</p>
5		<p>Assemble the Move pin "a" at the 4th Barrel with "b".  <b>(Be careful about the location of "b", "c".)</b></p>
6		<p>Assembled the 3 Cam Rollers, 3Screws.</p>

No.	Disassembly image	Disassembly description
7		<p>Assemble the Move pin "a" at the 4th Barrel with "b".</p>
8		<p>Assembled the 5th Mover Barrel Assy.</p>
9		<p>When assembled the 1st MOVER BARREL ASSY, a should be match with b .  <b>(Be careful about the location of "c".)</b></p>

No.	Disassembly image	Disassembly description
10		<p>Assemble "a" as the arrow direction.  <b>(Be careful about the location "b")</b></p>
11		<p>Assembled the part "a".</p>
12		<p>Assemble the "a" by matching the point "b" as shown in the figure.  <b>(In case of OUTER BARREL, please assemble as WIDE condition)</b></p>

No.	Disassembly image	Disassembly description
13		<p>ZOOM ROLLER should be on the a position.</p>
14		<p>Assemble the 3 P-GEAR, P-PLATE and , 3 Screws.  <b>(Be careful about the location of FPCB "a")</b></p>
15	<p>1) Potentail Meter Initial position.</p>  <p>2) the direction of P Gear 3</p> 	<p>Assemble P Gear 3 by matching the point the location of LENS MAIN PCB ASSY Potentail Meter.</p>



No.	Disassembly image	Disassembly description
16		<p>Assembled the 2 Screws.</p>
17		<p>Assembled the 3 Connectors.</p>
18		<p>When assembled , a on the OUTER BARREL ASSY should be match with b on the SWITCH ASSY.</p>

No.	Disassembly image	Disassembly description
19		<p>Assembled the Connector of SWITCH ASSY.</p>
20		<p>Assemble "a" between AF swich and OIS swich and tighten the 3 pcs of screw.</p>
21		<p>Assembled the 3 Screws.</p>

No.	Disassembly image	Disassembly description
22	 A black Samsung NX 18-55mm lens is shown with its lens cap attached. The lens has a blue ring near the base and white text indicating 'NX LENS 1.3-5.6 18-55mm OIS 0.58'. The focal length markings '18', '24', '35', and '45' are visible on the lens barrel. The lens cap is black and has '18-55' printed on it.	Assembled the Mount Cover.



Area	Web Site
Europe, MENA, CIS, Africa	<a href="https://gspn1.samsungcportal.com">https://gspn1.samsungcportal.com</a>
E.Asia, W.Asia, China, Japan	<a href="https://gspn2.samsungcportal.com">https://gspn2.samsungcportal.com</a>
N.America, S.America	<a href="https://gspn3.samsungcportal.com">https://gspn3.samsungcportal.com</a>

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Code No: EC-NX lens