



# DIGITAL CAMERA LENS

**NX Lens-XL1012**  
**SAMSUNG 30mm F2**

# ***SERVICE***

# ***Manual***

## DIGITAL CAMERA LENS

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# 1. Product Specification

## 1-1 Specifications

Table. 1-1

Lens Name	SAMSUNG 30mm F2
Focus Length	30mm (equivalent to 46.2mm in 35mm format)
Elements in Group	5 groups in 5 elements (1 aspheric lens included)
Angle of View	50.2°
Aperture	F2 (minimum: F22), (Number of Blades: 7, Circular Aperture Diaphragm)
Mount Type	Samsung NX mount
Optical Image Stabilizer	Not Included
Minimum Focus Distance	0.25m~infinity
Maximum Magnification	Approx. 0.16X
Lens Hood	Optional
Filter Size	43mm
Max. Diameter x Length	61.5x21.5mm
Weight	Approx. 85g (without hood)
Operating Temperature	0~40 °C
Operating Humidity	5~85%

## 1-2 Identification of features

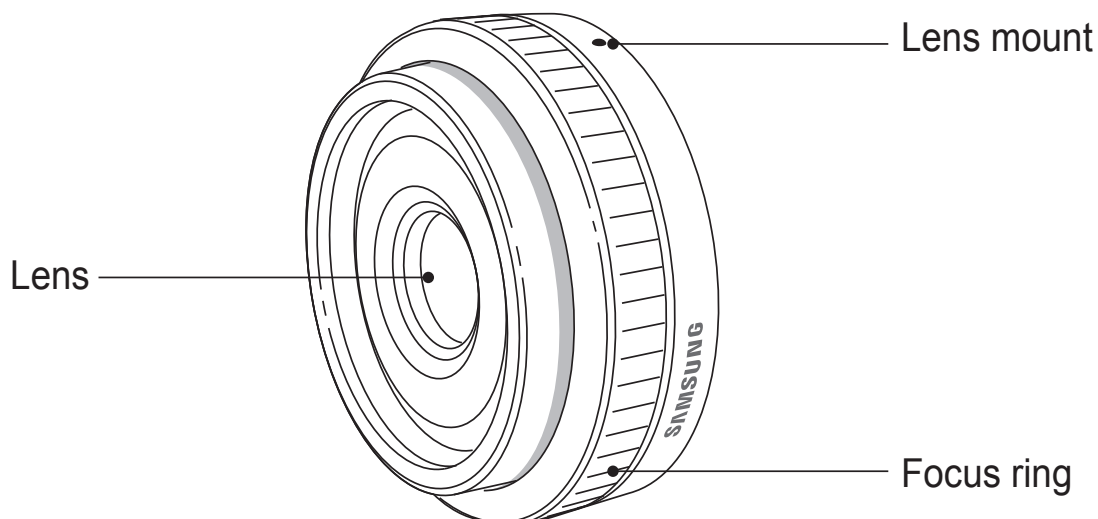


Fig. 1-1

## 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.

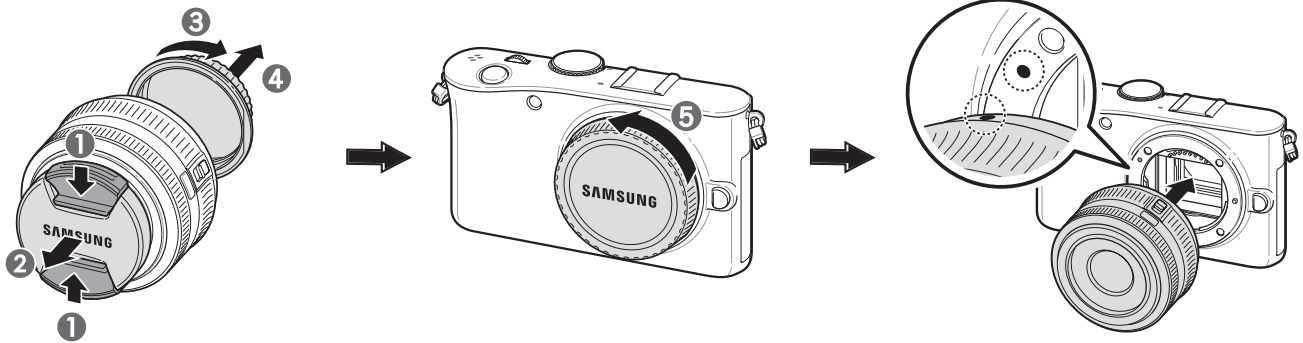


Fig. 2-1

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

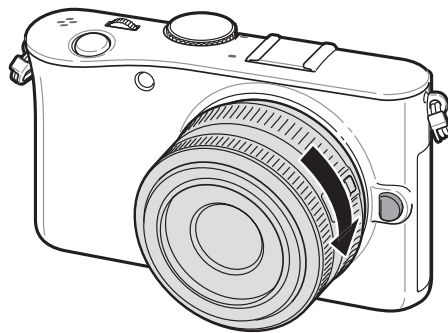


Fig. 2-2

#### **⚠ 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.

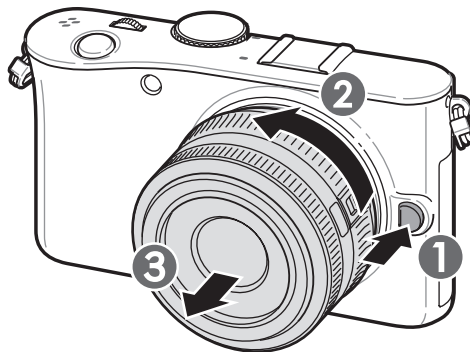


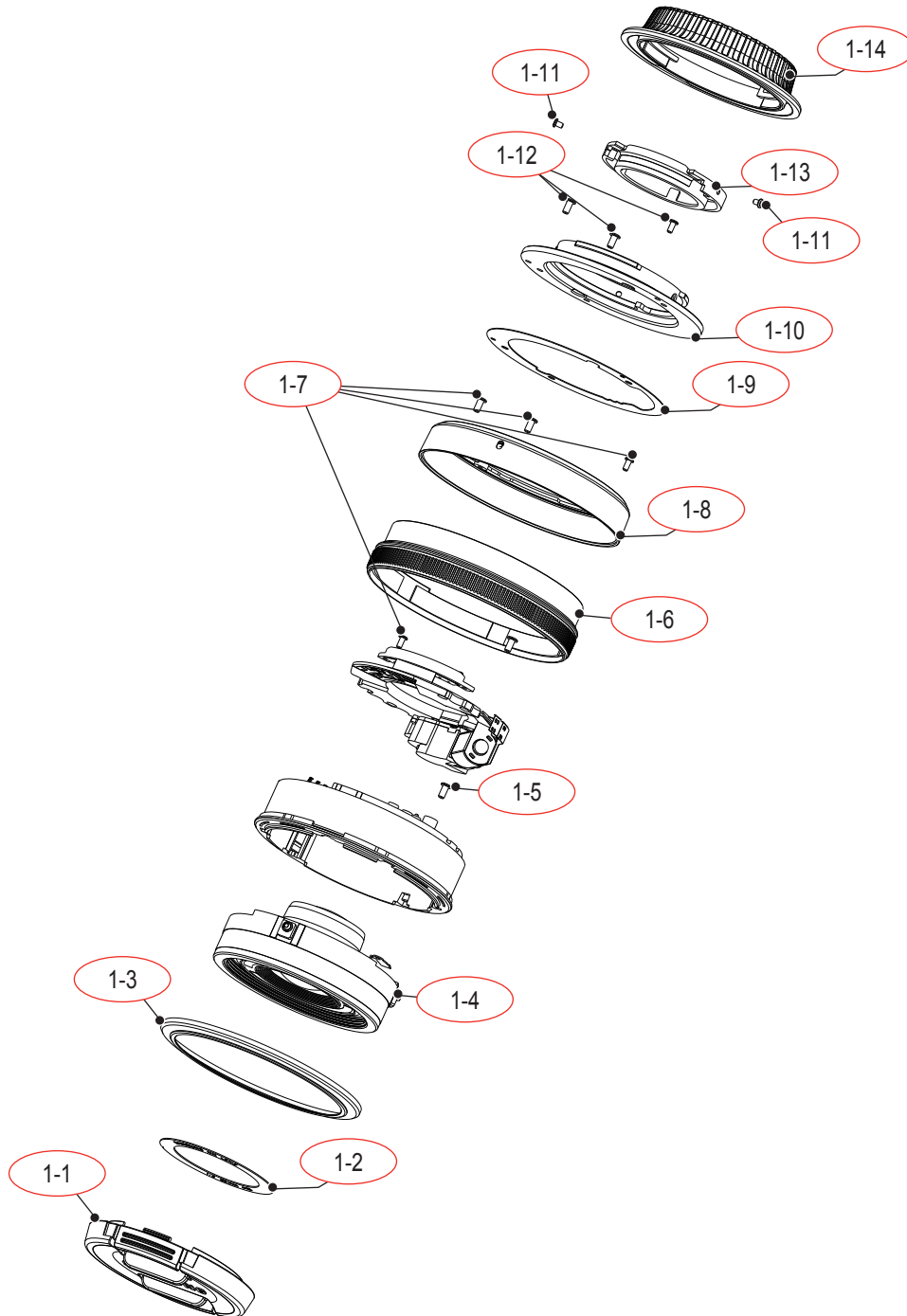
Fig. 2-3

### **⚠ 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.

### 3. Exploded View and Parts List

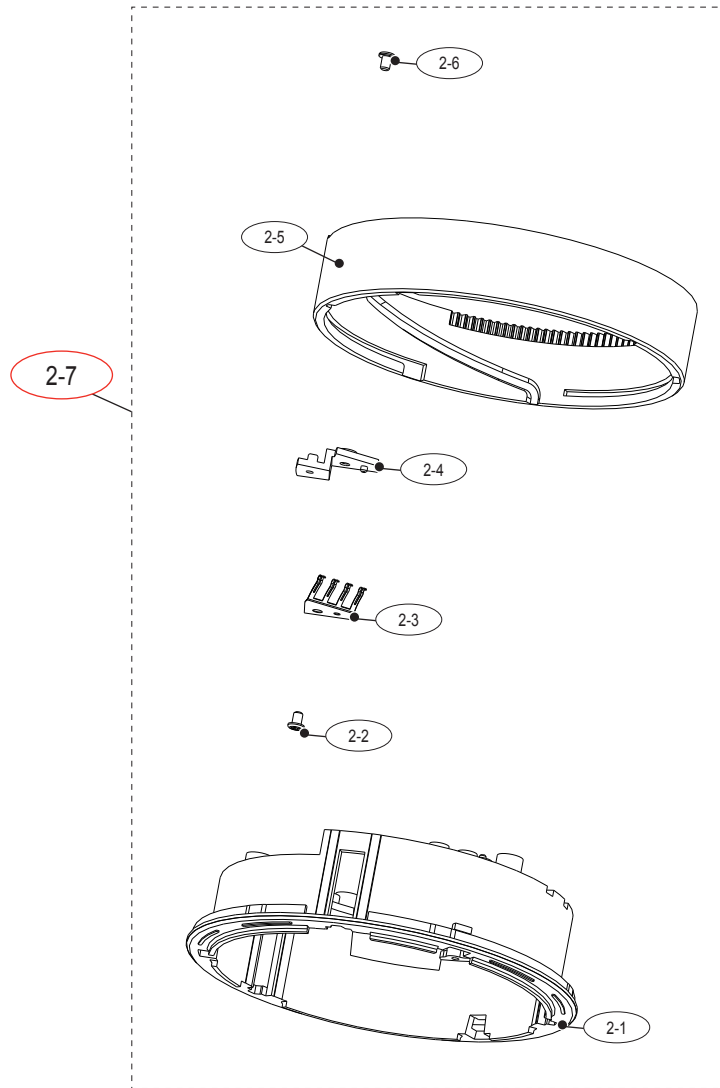
#### 3-1 (XL1012 : 30mm F2) TOTAL ASSEMBLY



## Exploded View and Parts List

Loc. No	Parts No.	Description	Q ty	Available	Remark
1-1	AD97-18381A	LENS CAP ASSY	1	0	
1-2	AD64-02627A	FRONT DECO PANEL	1	0	
1-3	AD64-02628A	DECO RING-OUTER COVER	1	0	
1-4	AD97-17956A	BARREL ASSY-LENS	1	0	
1-5	6003-001706	1430 SCREW	1	0	
1-6	AD92-00967A	LENS MAIN PCB ASSY	1	0	
1-7	6003-001706	1430 SCREW	7	0	
1-8	AD97-21233B	BARREL ASSY-MAIN	1	0	
1-9	AD61-04101A	PUNT AD PLATE A	1	0	
	AD61-04102A	PUNT AD PLATE B	1	0	
	AD61-04103A	PUNT AD PLATE C	1	0	
1-10	AD61-04115A	MOUNT	1	0	
1-11	6003-001714	1420 SCREW	3	0	
1-12	6003-001653	1735 SCREW	3	0	
1-13	AD63-03988A	MOUNT COVER	1	0	
1-14	AD63-03989A	MOUNT CAP	1	0	

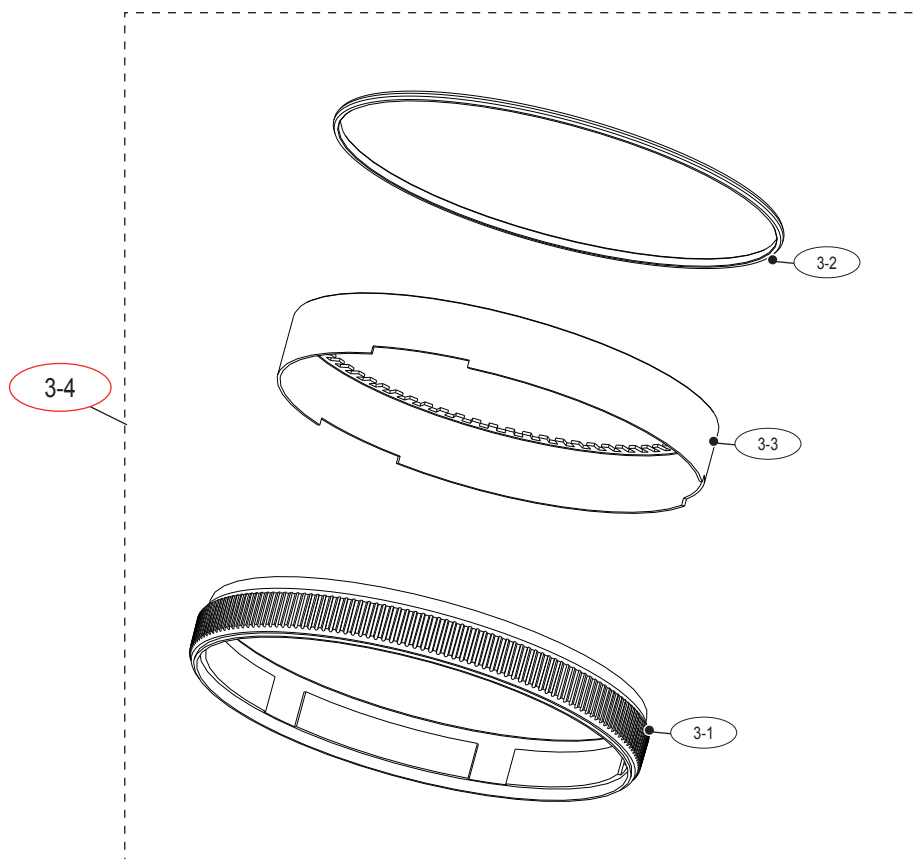
### 3-2 (XL1012 : 30mm F2) FIX CAM BARREL ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
2-1	AD67-01173A	FIX BARREL	1	X	
2-2	AD67-01171A	CAM BARREL	1	X	
2-3	6003-001714	1420 SCREW	1	X	
2-4	AD61-04104A	AF BRUSH	1	X	
2-5	AD61-04099A	BRUSH BODY	1	X	
2-6	6003-001714	1420 SCREW	1	X	
2-7	AD97-17954A	BARREL ASSY-FIX CAM	1	O	

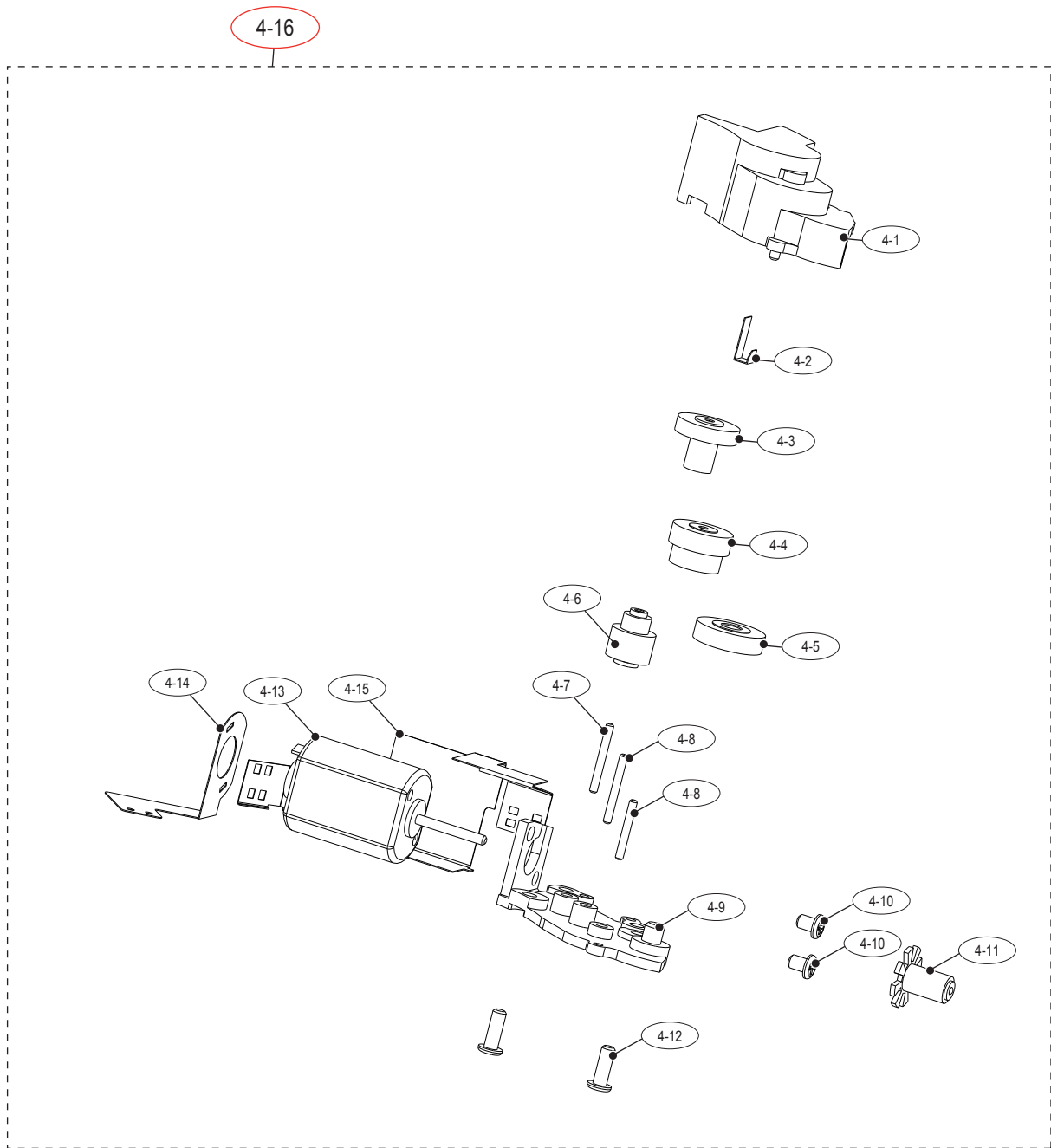


### 3-3 (XL1012 : 30mm F2) FOCUS RING BARREL ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
3-1	AD63-03996A	FOCUS GRIP	1	X	
3-2	AD64-02638B	BLUE RING	1	X	
3-3	AD66-00681A	FOCUS LEVER	1	X	
3-4	AD97-21234A	BARREL ASSY-FOCUS RIING	1	O	

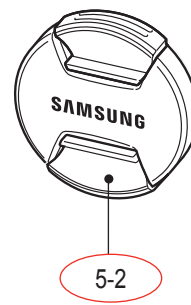
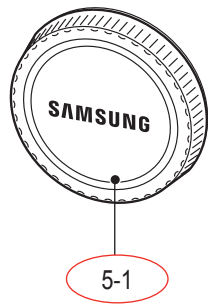
### 3-4 (XL1012 : 30mm F2) AF MODULE ASSEMBLY



## Exploded View and Parts List

Loc. No	Parts No.	Description	Q ty	Available	Remark
4-1	AD63-03987A	AF MODULE COVER	1	X	
4-2	AD61-04146A	AF MODULE SPRING	1	X	
4-3	AD66-00676A	AF GEAR B	1	X	
4-4	AD66-00677A	AF GEAR C	1	X	
4-5	AD66-00678A	AF GEAR D	1	X	
4-6	AD66-00675A	AF GEAR A	1	X	
4-7	AD66-00683A	AF SHAFT C	1	X	
4-8	AD66-00682A	AF SHAFT A	2	X	
4-9	AD61-04097A	AF MODULE BASE	1	X	
4-10	6001-002168	1420 SCREW	2	X	
4-11	AD66-00679A	WORM GEAR	1	X	
4-12	6003-001706	1430 SCREW	2	X	
4-13	AD31-00082A	DC MOTOR	1	X	
4-14	AD41-01307A	MOTOR FPCB	1	X	
4-15	AD41-01306A	PI FPCB	1	X	
4-16	AD97-18164A	MOTOR ASSY	1	O	

### 3-5 PACKING ITEMS



Loc. No	Parts No.	Description	Q ty	Available	Remark
5-1	AD63-03989A	COVER-MOUNT CAP	1	0	
5-2	AD97-18381A	ASSY-LENS CAP_XL1015	1	0	

## 4. Disassembly and reassembly

### 4-1 30mm Lens Disassembly

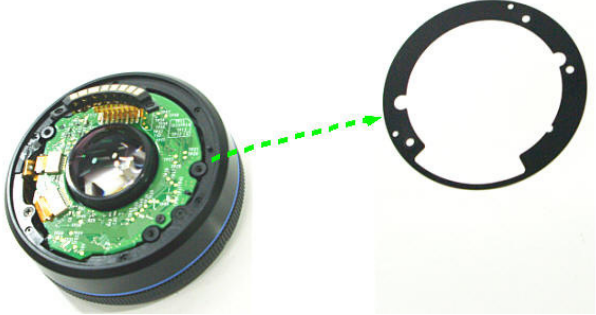
#### Precaution for disassembly/reassembly


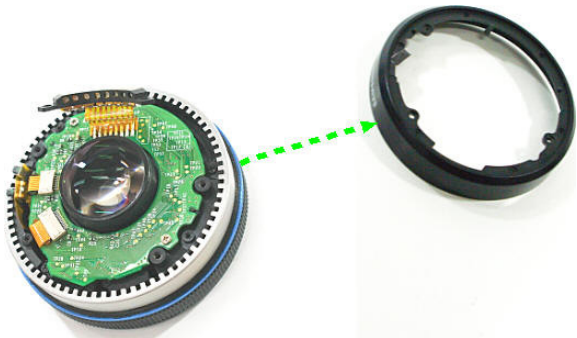
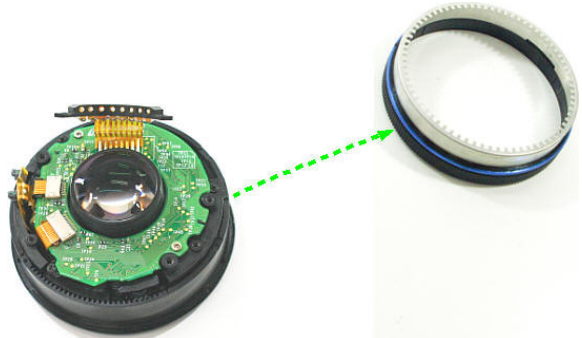
1. Set up the repair table where the anti-static mat is installed to disassemble and reassemble the camera.
2. When handling the key PCB of the camera, wear the anti-static band on the wrist to prevent any error from static electricity.
3. When handling key parts, be careful of the following.

<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>Remove 3 Screws.</p>
2		<p>Remove 3 Screws.</p>
3		<p>Disassemble the Mount Cover.</p>

No.	Disassembly image	Disassembly description
4		<p>Remove 2 Screws.</p>
5		<p>Disassemble the Mount..</p>
6		<p>Disassemble the AD Plate..</p>




No.	Disassembly image	Disassembly description
7		<p>Remove 3Screws.</p>
8		<p>Disassemble the Main Barrel Assy.</p>
9		<p>Disassemble the Focus Ring Assy.</p>



No.	Disassembly image	Disassembly description
10		<p>Remove 2 Screws, 2 Connectors.</p>
11		<p>Remove 2 Screws.</p>
12		<p>Remove Main PCB Assy.</p>

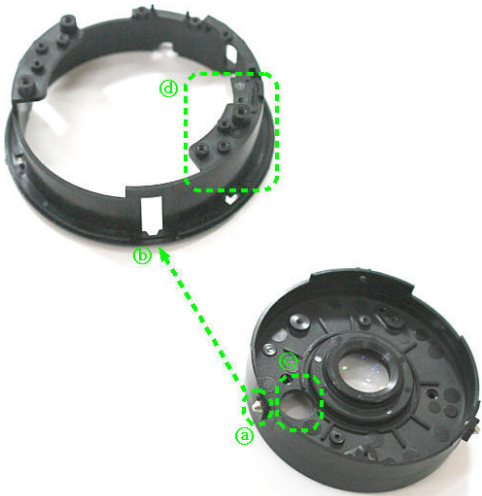
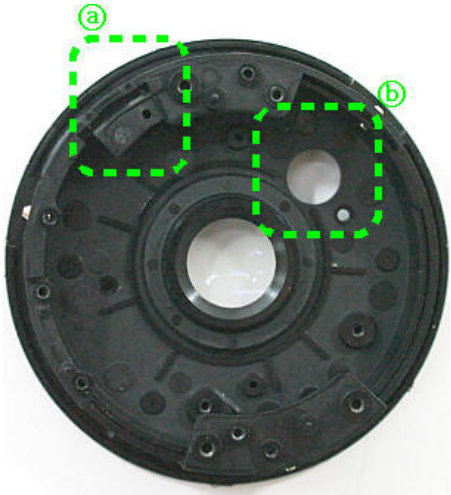
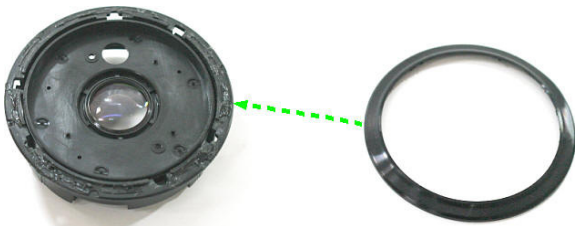
No.	Disassembly image	Disassembly description
13		<p>Take apart the CAM BARREL that turns counter-clockwise.</p>
14		<p>Disassemble the CAM Barrel.</p>
15		<p>Remove 4 Screws.</p>

No.	Disassembly image	Disassembly description
16		<p>Disassemble the 2ND Lens Barrel Assy.</p>
17		<p>Remove 2 Screws.</p>
18		<p>Disassemble the Front Deco Panel.</p>

No.	Disassembly image	Disassembly description
19		Remove 2 Screws.
20		Disassemble the Filtering.
21		Remove OUTER COVER DECO RING.

No.	Disassembly image	Disassembly description
22		Remove OUTER COVER DECO RING.
23		Remove LENS BARREL ASSY.

## 4-2 30mm Lens assembly

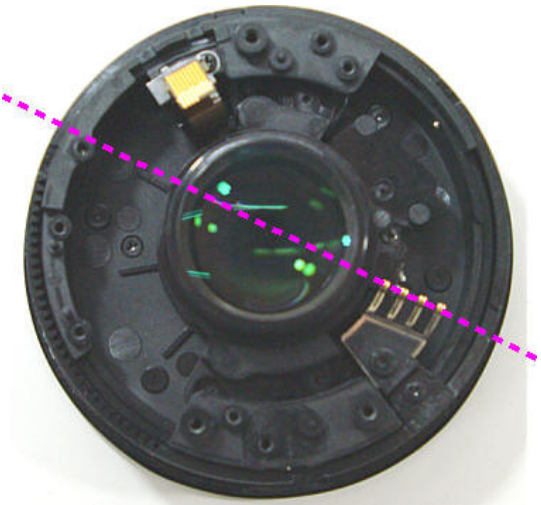


No.	Assembly image	Assembly description
1		<p>Assemble the (a), (b). At that time, give an attention to Lens Barrel Assy position, as same image.  <b>Caution : (b),(c) position</b></p>
2		<p>Assembled the LENS BARREL ASSY and FIX BARREL.  <b>Caution : (a),(b) position</b></p>
3		<p>Bonding the OUTER COVER DECO RING.</p>

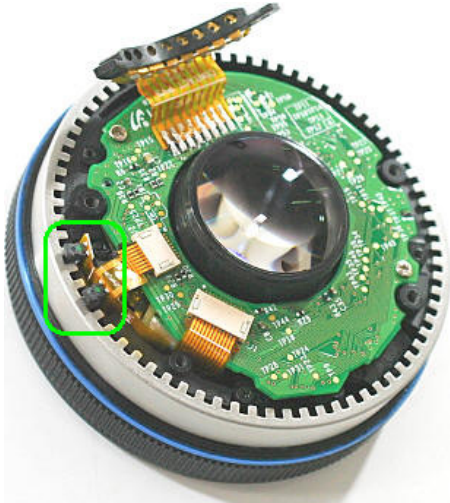

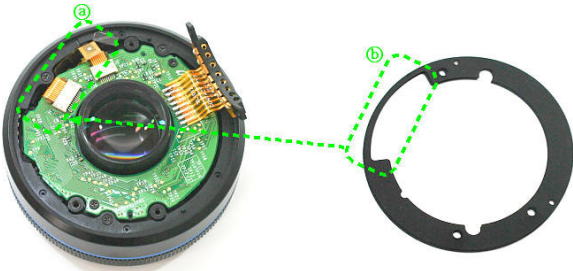
No.	Assembly image	Assembly description
4		Assembled the OUTER COVER DECO RING.
5		(a) and (b) position from Filtering
6		Assembled the Filtering.



No.	Assembly image	Assembly description
7		<p>FRONT DECO PANEL picture of the (a) position According to the assembly. <b>(Be careful about the location of “b”.)</b></p>
8		<p>Assembled the FRONT DECO PANEL.</p>
9		<p>Pictures like “a” and “b” according to the location 2ND LENS BARREL ASSY the assembly.</p>


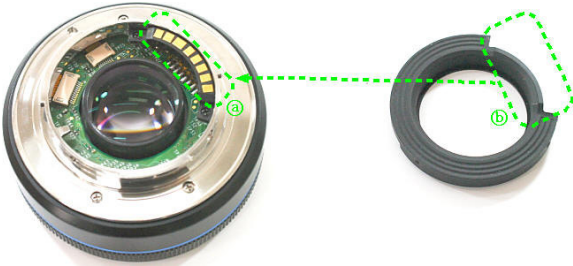




No.	Assembly image	Assembly description
10		<p>Assembled the 2ND LENS BARREL ASSY.</p>
11		<p>As shown in the location of the LENS BARREL ASSY          "a, b" according to the assembly  <b>(Be careful about the location of "c".)</b></p>
12		<p>Clockwise as shown assembled.</p>

No.	Assembly image	Assembly description
13	 <p>The image shows the back of a camera lens assembly. A black plastic housing contains a central lens element. A yellow connector is visible at the top left. A dashed purple line is drawn across the lens area.</p>	<p>This is the assembled state of the Cam barrel assembly.</p>
14	 <p>The image shows the green printed circuit board (PCB) of the AF module assembly mounted on the black plastic housing. A gold connector is at the top. Two screws are highlighted with green circles at the bottom left.</p>	<p>Assembled the 2 Screws, AF MODULE ASSY.</p>
15	 <p>The image shows the main PCB assembly mounted on the black plastic housing. A gold connector is at the top. Two screws are highlighted with green circles at the top left and bottom right.</p>	<p>MAIN PCB ASSY on the screw 2 and the connector 2 Assembly.</p>

No.	Assembly image	Assembly description
16		<p>2 position of PI, as shown in the FOCUS RING ASSY carefully assembled.</p>
17		<p>Assembled the 3Screws.</p>
18		<p>Assemble to the "b" of the PUNT AD PLATE by matching the point "a" as shown in the figure.</p>

No.	Assembly image	Assembly description
19	 <p>The image shows a top-down view of a camera lens assembly. A green printed circuit board (PCB) is mounted inside a black plastic housing. The PCB features a central lens element, various electronic components, and gold-colored connectors. A black ribbon cable is connected to the board.</p>	<p>This is the assembled state of the PUNT AD PLATE.</p>
20	 <p>The image shows two components. On the left is the lens assembly from step 19. On the right is a silver-colored metal ring (the MOUNT). Green dashed lines with labels 'a' and 'b' indicate alignment points. A dashed line with label 'c' points to a specific location on the MOUNT.</p>	<p>MOUNT shown to assemble.  <b>(Be careful about the location of "b", "c".)</b></p>
21	 <p>The image shows the lens assembly with the silver-colored MOUNT ring attached. Three screws are visible, securing the MOUNT to the lens housing. Green dashed lines with labels 'a', 'b', and 'c' indicate the locations of these screws.</p>	<p>MOUNT of the 3 screws assembly.</p>

No.	Assembly image	Assembly description
22		<p>CONTACT ASSY of the 2 screws assembly.</p>
23		<p>Pictures like "a" are assembled according to the MOUNT COVER.</p>
24		<p>MOUNT of the 3 screws assembly.</p>

No.	Assembly image	Assembly description
25		Assembly is completed



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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