



DIGITAL CAMERA

SAMSUNG NX200

SERVICE

Manual

DIGITAL CAMERA



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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.

(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	

(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>

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

1-3 Precaution for disassembly and reassembly

CAUTION

1. Use the anti-static handling 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.

2. Product specifications

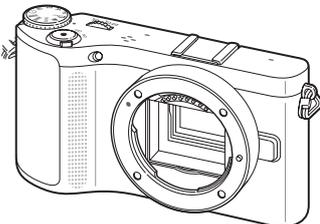
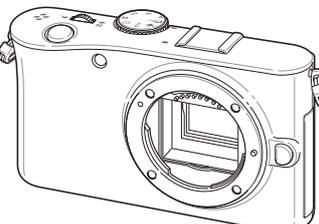
2-1 Specifications

<Table. 2-1>

Image Sensor	
Type(size)	CMOS(23.5 X 15.7mm)
Effective/ Total pixels	Approx. 20.3 mega-pixels/ Approx. 21.6 mega-pixels
Lens Mount	
Type/ Available lens	Samsung NX Mount/ Samsung lenses
Image Stabilization	
Type/ Mode	Lens shift (depends on lens)/ Mode 1 / Mode 2 / Off
i-Function	
i-Scene (depends on lens), Smart Filter, Intelli zoom	
Dust Reduction	
Type	Super sonic drive
Display	
Type/ Size	AMOLED 3.0" (7.6 cm)
Resolution	VGA (640X480) 614 k dots (PenTile)
Shutter	
Type	Electronically controlled vertical-run focal plane shutter
Speed	<ul style="list-style-type: none"> • Auto: 1/4,000-30 sec. • Manual: 1/4,000-30 sec. (1/3 EV Step) • Bulb (time limit: 4 min)
Dust Reduction	
Type	Super sonic drive
Flash	
Type	External flash only(Bundle with SEF8A)
Angle of view	28mm (35mm film equivalent)
White Balance	
Mode	Auto WB, Daylight, Cloudy, Fluorescent White, Fluorescent NW, Fluorescent Daylight, Tungsten, Flash WB, Custom Set, Color Temp. (Manual)
Micro adjustment	Amber/Blue/Green/Magenta 7 steps respectively
Storage	
External memory (optional): SD card (up to 4 GB guaranteed), SDHC card (up to 32 GB guaranteed), SDXC card (up to 128 GB guaranteed)	
GPS	
Type	Geo-tagging with optional GPS Module (WGS 84)
Feature	<ul style="list-style-type: none"> • Location name (English and Korean only) • Google Map link (with Intelli-studio)
Interface	
Digital output	USB 2.0(HI-SPEED)
DC power input	DC 9.0 V, 1.5 A(100~240 V)
Power Source	
Type	<ul style="list-style-type: none"> • Rechargeable battery: BP1030 (1,030 mAh) • Charger: BC1030
Dimensions (W X H X D)	
4.59X 2.46X 1.44in(without protrusions)	
Weight	
7.77oz(without battery and memory card)	

2-2 Product comparison

<Table. 2-2>

Model	NX200	NX100
Specs		
Product image		
Image Sensor(size)	CMOS(23.5 X15.7mm)	CMOS(23.4X15.6mm)
Effective pixels	Approx. 20.3 mega-pixels	Approx. 14.6 mega-pixels
Total pixels	Approx. 21.6 mega-pixels	Approx. 15.1 mega-pixels
Wight	7.77oz(without battery and memory card)	9.95oz(without battery and memory card)
Dimensions	4.59X2.46X1.44in(without protrusions)	4.74X2.80X1.36in(without protrusions)
Display	<ul style="list-style-type: none"> Type : AMOLED, 3.0" (7.6cm) Resolution : VGA (640X480) 614 k dots (PenTile) 	<ul style="list-style-type: none"> Type : AMOLED, 3.0" (7.6 cm) Resolution : VGA (640X480) 614 k dots (PenTile)
i-Function	i-Scene (depends on lens), Smart Filter, Intelli zoom	-
Shutter	<ul style="list-style-type: none"> Type : Electronically controlled vertical-run focal plane shutter Speed : - Auto: 1/4,000-30sec. - Manual: 1/4,000-30sec. (1/3 EV Step) - Bulb (time limit: 4min) 	<ul style="list-style-type: none"> Type : Electronically controlled vertical-run focal plane shutter Speed : - Auto: 1/4,000-30sec. - Manual: 1/4,000-30sec. (1/3 EV Step) - Bulb (time limit: 8min)
ISO equivalent	<ul style="list-style-type: none"> 1 Step: Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12800 1/3 Step: Auto, ISO 100, ISO 125, ISO 160, ISO 200, ISO 250, ISO 320, ISO 400, ISO 500, ISO 640, ISO 800, ISO 1000, ISO 1250, ISO 1600, ISO 2000, ISO 2500, ISO 3200, ISO 4000, ISO 5000, ISO 6400, ISO 8000, ISO 10000, ISO 12800 	<ul style="list-style-type: none"> 1 or 1/3 step : Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200 ISO expansion: up to ISO 6400
Flash	<ul style="list-style-type: none"> Type : External flash only(Bundle with SEF8A) Angle of view : 28mm (35mm film equivalent) 	<ul style="list-style-type: none"> Type : External flash only(Optional)
GPS	<ul style="list-style-type: none"> Type : Geo-tagging with optional GPS Module (WGS 84) Feature : - Location name (English and Korean only) - Google Map link (with Intelli-studio) 	<ul style="list-style-type: none"> Type : Geo-tagging with optional GPS Module (WGS 84) Feature : - Location name (English and Korean only) - Google Map link (with Intelli-studio)
Storage	External memory (optional): <ul style="list-style-type: none"> SD card (up to 4GB guaranteed) SDHC card (up to 32GB guaranteed) SDXC card (up to 128GB guaranteed) 	External memory (optional): <ul style="list-style-type: none"> SD card (up to 4GB guaranteed) SDHC card (up to 32GB guaranteed)
Image Stabilization	<ul style="list-style-type: none"> Type : Lens shift (depends on lens) Mode : Mode 1 / Mode 2 / Off 	<ul style="list-style-type: none"> Type : Lens shift (depends on lens) Mode : OIS mode1 / mode2
Power Source	<ul style="list-style-type: none"> Rechargeable battery: BP1030 (1,030 mAh) Charger: BC1030 	<ul style="list-style-type: none"> Rechargeable battery: BP1310(1300 mAh) Charger: BC1310 AC adapter: AD9NX01 (optional)

2-3 Accessories information

<Table. 2-4>

	image	Description	Parts No.	
Packing items		Camera (including the body cap and hot-shoe cover)	NX200	
		External Flash	AD97-21562A	
		USB cable	AD39-00190A	
		Battery cradle/AC power cable	AD43-00202A	
		Battery cradle		AD44-00203A
		AC power cable	CHINA	3903-000611
			EXP-D1	3903-000616
			USA-D1	3903-000618
			UK	3903-000613
			AUS-D1	3903-000612
BRA			3903-000617	
ARG	3903-000610			
	Software CD-ROM (User manual included)	AD46-00417A		
	User manual Basic Operation	Varies from country to country.		
	Strap	AD63-04468A		

	image	Description
Optional items		<p>External Flash You can purchase external flashes separately.</p>
		<p>Camera bag You can purchase the camera bag separately.</p>
		<p>Camera Case You can purchase the camera case separately.</p>
		<p>Memory card This camera accepts SD (Secure Digital), SDHC (Secure Digital High Capacity), and SDXC (Secure Digital eXtended Capacity) memory card.</p>
		<p>Strap You can additionally purchase the straps.</p>
		<p>A/V cable You can connect to other devices by using the A/V cable.</p>
		<p>Filter You can create different colored effects by attaching filters to your lens.</p>
		<p>USB cable</p>
		<p>HDMI cable You can view high-definition photos and videos by connecting the camera to an HDMI-compatible monitor with the HDMI (HDMI type C) cable.</p>
		<p>Battery pack You can purchase additional battery packs.</p>

2-4 About the memory card

<Table. 2-3>

GB SD card:										
Size		Super Fine	Fine	Normal	RAW	RAW + S.Fine	RAW + Fine	RAW + Normal		
Photos	20.0M	5472X3648	94	185	272	17	13	15	16	
	10.1M	3888X2592	192	368	530	-	16	17	17	
	5.9M	2976X1984	318	593	834	-	17	18	18	
	2.0M	1728X1152	827	1393	1806	-	18	18	18	
	Burst		371	685	954	-	-	-	-	
	16.9M	5472X3080	116	227	333	-	14	16	17	
	7.8M	3712X2088	246	467	665	-	16	17	18	
	4.9M	2944X1656	379	699	972	-	17	18	18	
	2.1M	1920X1080	799	1354	1762	-	18	18	18	
	13.3M	3648X3648	147	284	413	-	15	17	17	
	7.0M	2640X2640	272	513	728	-	16	17	18	
	4.0M	2000X2000	454	823	1130	-	17	18	18	
	1.1M	1024X1024	1344	2062	2508	-	18	18	19	

Size		HQ	Normal
*Video (30 per sec)	1920X1080	Approx. 8' 54"	Approx. 10' 16"
	1280X720(60 fps)	Approx. 8' 21"	Approx. 9' 32"
	1280X720(30 fps)	Approx. 14' 47"	Approx. 16' 37"
	640X480	Approx. 37' 16"	Approx. 43' 14"
	320X240	Approx. 119' 57"	Approx. 145' 49"

* The recordable time may vary if you use the zoom. Several videos were recorded in succession to determine the total recording time.

2-5 About the battery

<Table. 2-4>

Battery specifications	
Specification	Description
Model	BP1030
Type	Lithium-ion battery
Cell capacity	1,030 mAh
Voltage	7.4 V
Charging time (When the camera is turned off)	Approx. 140 min

<Table. 2-5>

Battery life	
Shooting mode	Average time / Number of photos
Photos	Approx. 160 min/Approx. 320 photos
Videos	Approx. 110 min (Record videos at 1920X1080 resolution and 30 FPS.)

- The figures above are measured by Samsung's standards. Your results may differ, depending on your actual usage.
- Available shooting time differs depending on background, shooting interval, and use conditions.
- Several videos were recorded in succession to determine the total recording time.

<Table 2-6>

Photos		
Battery level indicator	Time(minute)	%
	Approx. 100 min	Approx. 56.30%
	Approx. 133 min	Approx. 27.10%
	Approx. 171.5 min	Approx. 13.25%
Low battery	Approx. 177.5 min	Approx. 3.35%

Videos		
Battery level indicator	Time(minute)	%
	Approx. 111 min	Approx. 86.75%
	Approx. 124.5 min	Approx. 10.50%
	Approx. 126 min	Approx. 1.25%
Low battery	Approx. 128 min	Approx. 1.50%

3. Disassembly and reassembly

3-1 Screw parts list

<Table. 3-1>

PAGE	TYPE	CODE	Qty
3-2	T.SCREW(M1.7X3.5/BLK)	6003-001703	2
	M.SCREW(M1.7XL4/BLK)	6001-001291	4
	T.SCREW(M1.7XL3/BLK)	6003-001637	1
3-5	T.SCREW	6003-001637	5
3-9	T.SCREW(M1.7XL4/NI)	6001-001490	3
3-11	M.SCREW(M1.7XL4/NI-Cr)	6001-002662	1
3-13	M.SCREW(M1.7XL3/NI)	6001-002282	1
3-14	T.SCREW(M1.7XL3/NI)	6003-001490	2
3-15	T.SCREW(M1.4XL2.5/B)	6003-001674	4
	M.SCREW(M1.7XL3.5/NI)	6001-001914	1
3-17	M.SCREW(M1.7X5/NI)	6001-002662	4
3-18	M.SCREW(M1.7XL4/NI)	6001-001719	3
3-19	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-20	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-21	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-23	M.SCREW(HEXA M1.7XL4/BLK)	6001-002279	3
3-26	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-27	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-28	T.SCREW(M1.7XL3.5/BLK)	6003-001641	2
3-29	M.SCREW(M1.7XL4/NI)	6001-001719	3
3-30	M.SCREW(M1.7X5/NI)	6001-002662	4
3-33	T.SCREW(M1.4XL2.5/B)	6003-001674	4
	M.SCREW(M1.7XL3.5/NI)	6001-001914	1
3-34	T.SCREW(M1.7XL3/NI)	6003-001490	2
3-35	M.SCREW(M1.7XL3/NI)	6001-002282	1
3-37	M.SCREW(M1.7XL4/NI-Cr)	6001-002662	1
3-40	T.SCREW	6003-001637	5
3-42	T.SCREW(M1.7XL4/NI)	6001-001490	3
3-44	T.SCREW(M1.7X3.5/BLK)	6003-001703	2
	M.SCREW(M1.7XL4/BLK)	6001-001291	4
	T.SCREW(M1.7XL3/BLK)	6003-001637	1
3-46	SCREW1750	6003-001753	2
3-48	SCREW1750	6003-001753	2
	SCREW1730	6003-001637	2
3-53	SCREW1750	6003-001753	2
3-53	SCREW1750	6003-001753	2
3-56	SCREW1750	6003-001753	2
3-57	SCREW1750	6003-001753	2
3-61	SCREW1750	6003-001753	2
	SCREW1730	6003-001637	2
3-62	SCREW1750	6003-001753	2

3-2 Disassembly

1. Provide the general support.

: Take the parts such as LCD, Back-Cover and Top to Samsung authorized service centers.

2. Provide the technical expertise support.

: After replacing the parts such as Main PBA, CMOS, Shutter, CMOS, it is required to adjust these parts with equipments specified below.

For more detail information, refer to the service manual (CH7 Adjustmet).

<Table. 3-2>

Repair Service	Parts	Items to be adjusted	Required equipment
General support	LCD, Back-Cover, Top	None	None
Technical expertise support	LENS Mount, Front-Cove	CMOS Tilt	CMOS-Tilt Shutter speed Light box (5,500K) Light box (3,350K)
	ASSY-CMOS	CMOS Tilt, AWB(Light box)	
	Shutter MAINPBA	Shutter Speed	
	MAIN PBA	AWB(Light box)	

3-2-1 General support - Disassembly

1. Remove the screws from the camera body.

- (a) Remove the COVER-HOT SHOE.
 (b) Remove the 2 screws on the left side.



- (c) Remove the 2 screws on the right side and 3 screws on the bottom side of the camera body.



2. Remove the LOCK of COVER.

Run a pry tool around the groove to release the locking park as illustrated in image below. Slightly wiggle it to widen the gap. You'll have to apply a little force to remove it.



3. Removing the FPCB.

Remove the FPCB from the connector as illustrated in "Fig A".



Remove the FPCB from the connector.

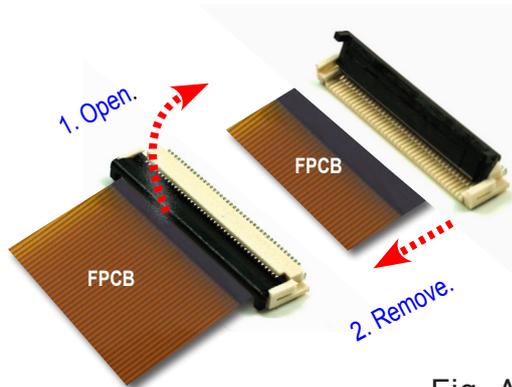


Fig. A

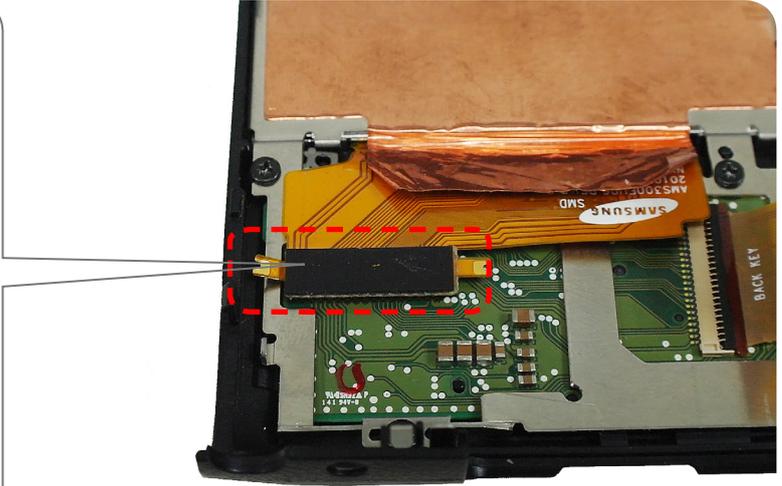
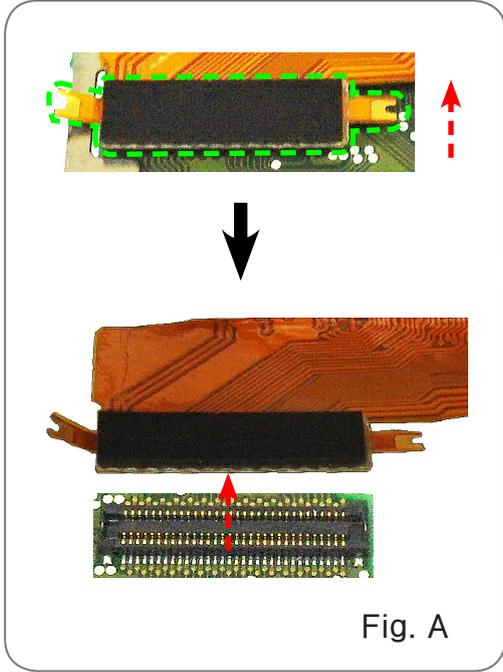
4. Removing the ASSY COVER BACK.

Remove the ASSY COVER BACK.



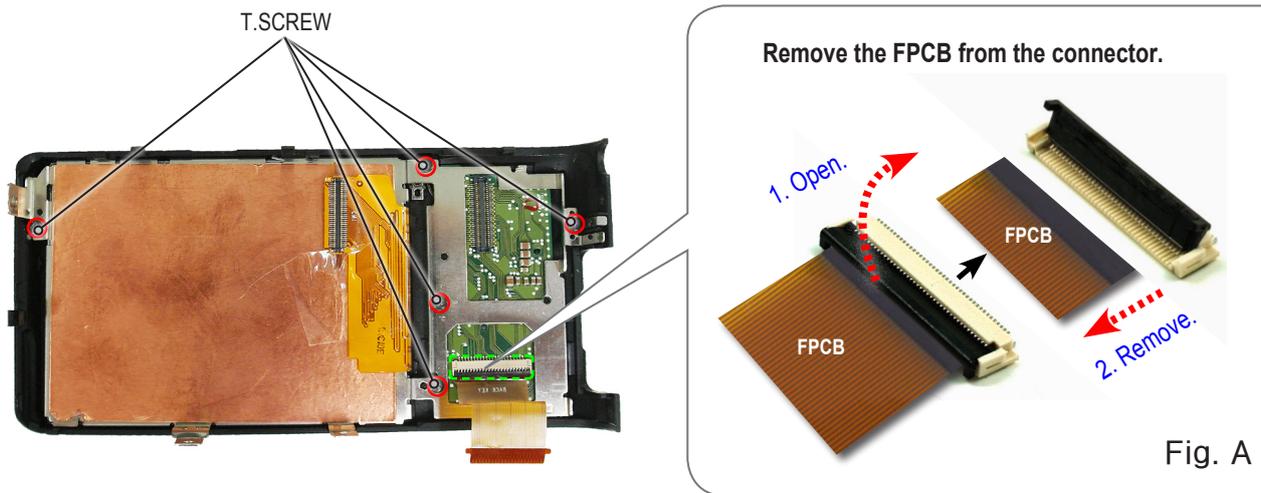
5. Removing the FPCB.

Remove the FPCB from the connector as illustrated in "Fig A".



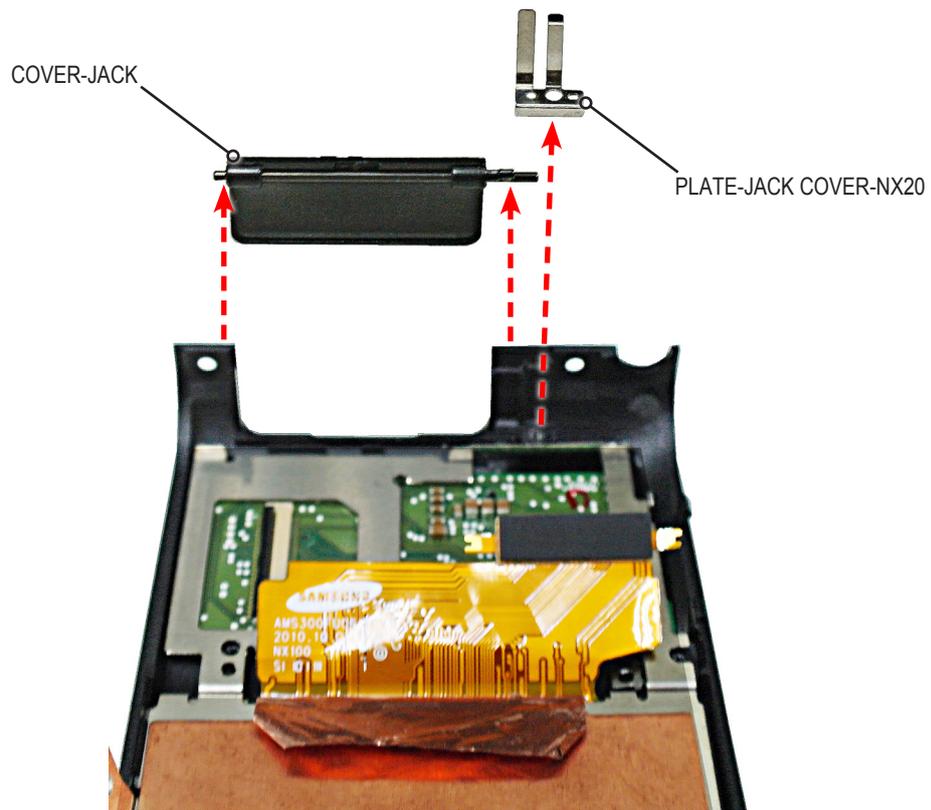
6. Removing the screw and LCD FPCB.

Remove the 5 screws and LCD FPCB as illustrated in "Fig. A".



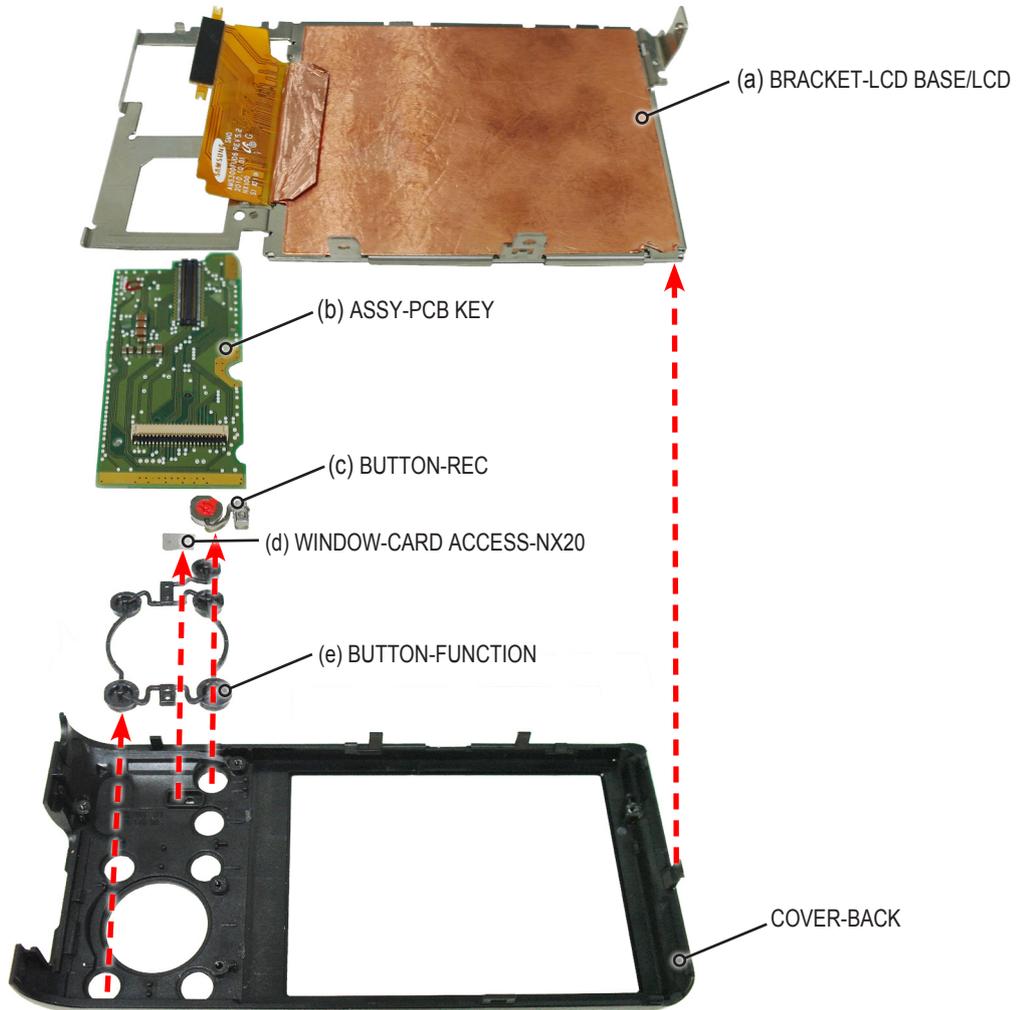
7. Removing the COVER-JACK and PLATE-JACK COVER-NX20.

Remove the COVER-JACK and PLATE-JACK COVER-NX20.



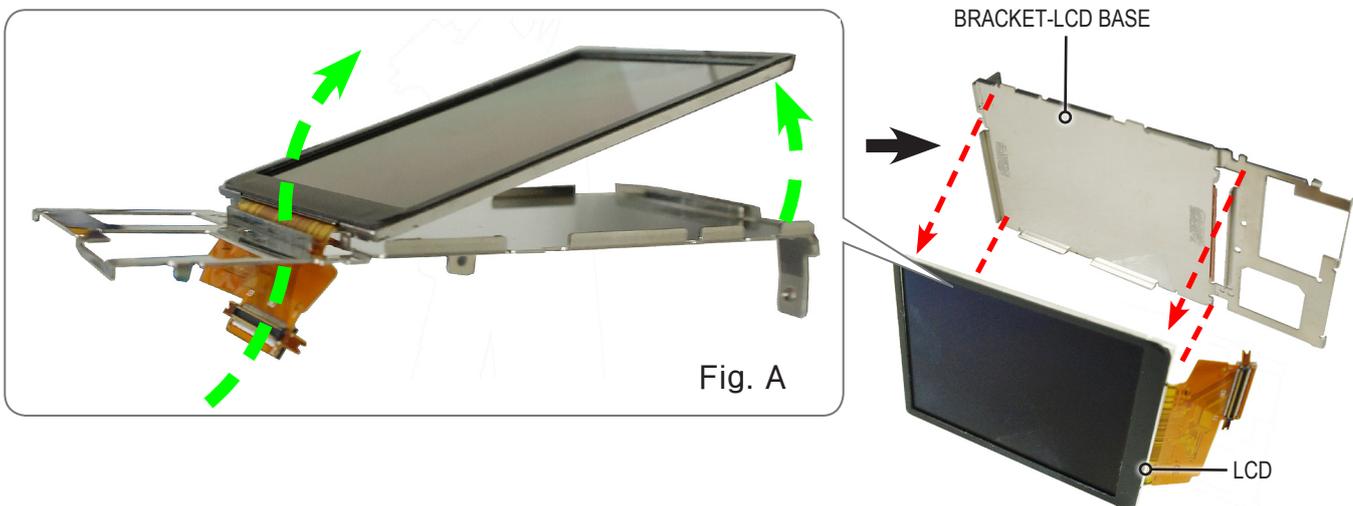
8. Removing the ASSY BACK COVER.

- (a) Remove the BRACKET-LCD BASE/LCD.
- (b) Remove the ASSY-PCB KEY.
- (c) Remove the BUTTON-REC.
- (d) Remove the WINDOW-CARD ACCESS-NX20.
- (e) Remove the BUTTON-FUNCTION.



9. Removing the LCD.

Remove the LCD FPCB through the groove of the BRACKET-LCD BASE in the direction of the arrow as illustrated in "Fig. A". Then remove the LCD.

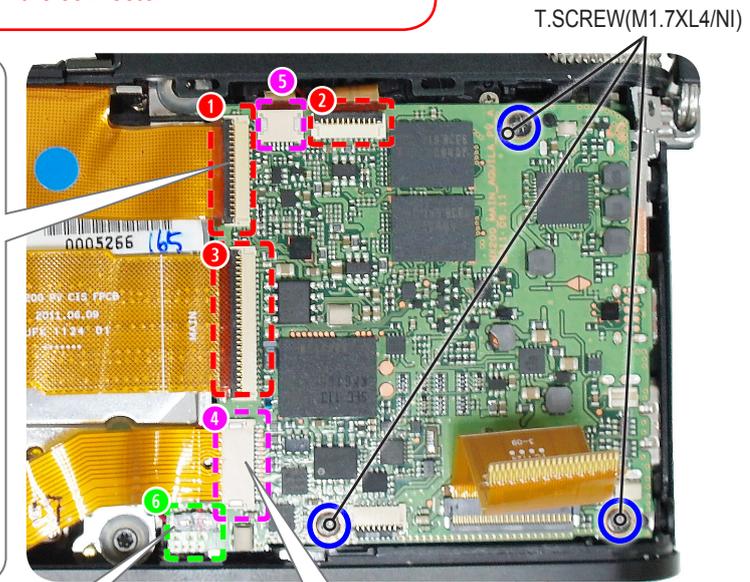
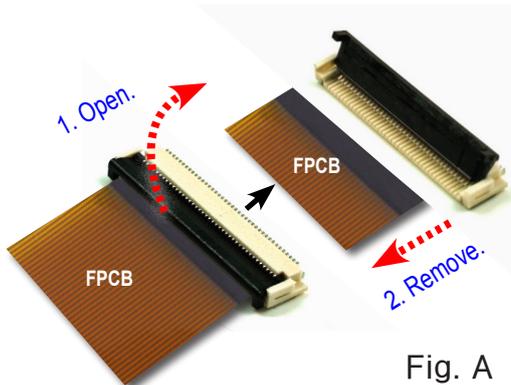


10. Removing the FPCB and screw.

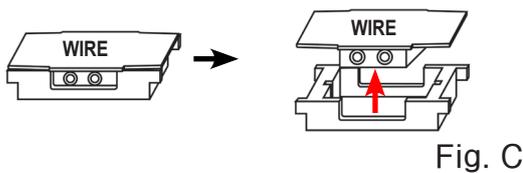
- (a) Remove the 3 screws.
- (b) Refer to "Fig. A", " Fig. B" and "Fig. C" below. Remove the 5 FPCBs and wire.

CAUTION
Use extra care when removing the FPCB from the connector.

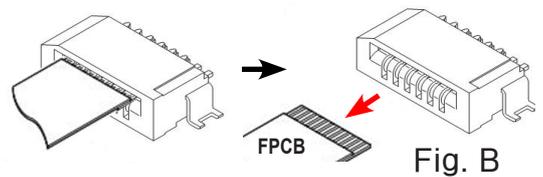
① The numbers ①, ②, ③ in the assembly instruction indicate the order to remove the FPCBs. Follow this order when removing the FPCB.



③ The numbers ⑥ Remove the wire.

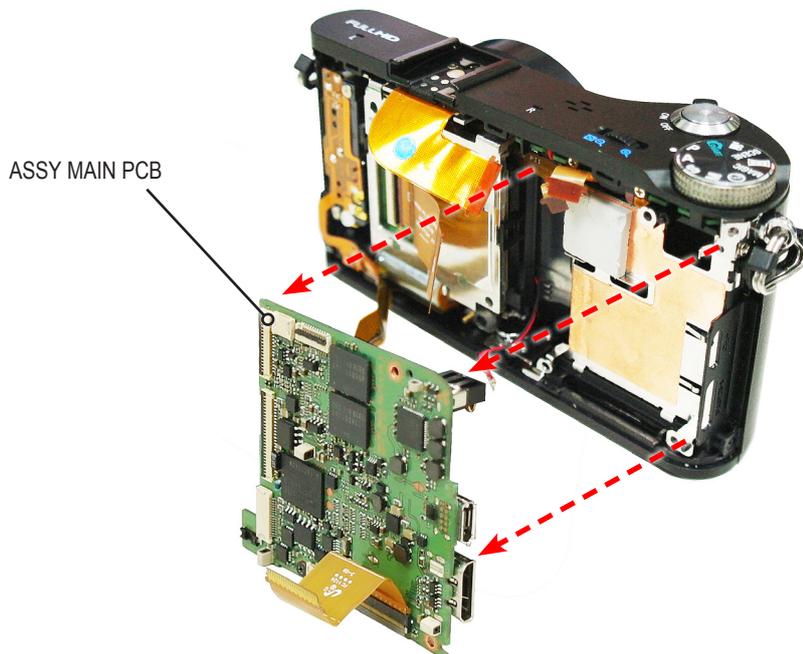


② The numbers ④, ⑤ in the assembly instruction indicate the order to remove the FPCBs. Follow this order when removing the FPCB.



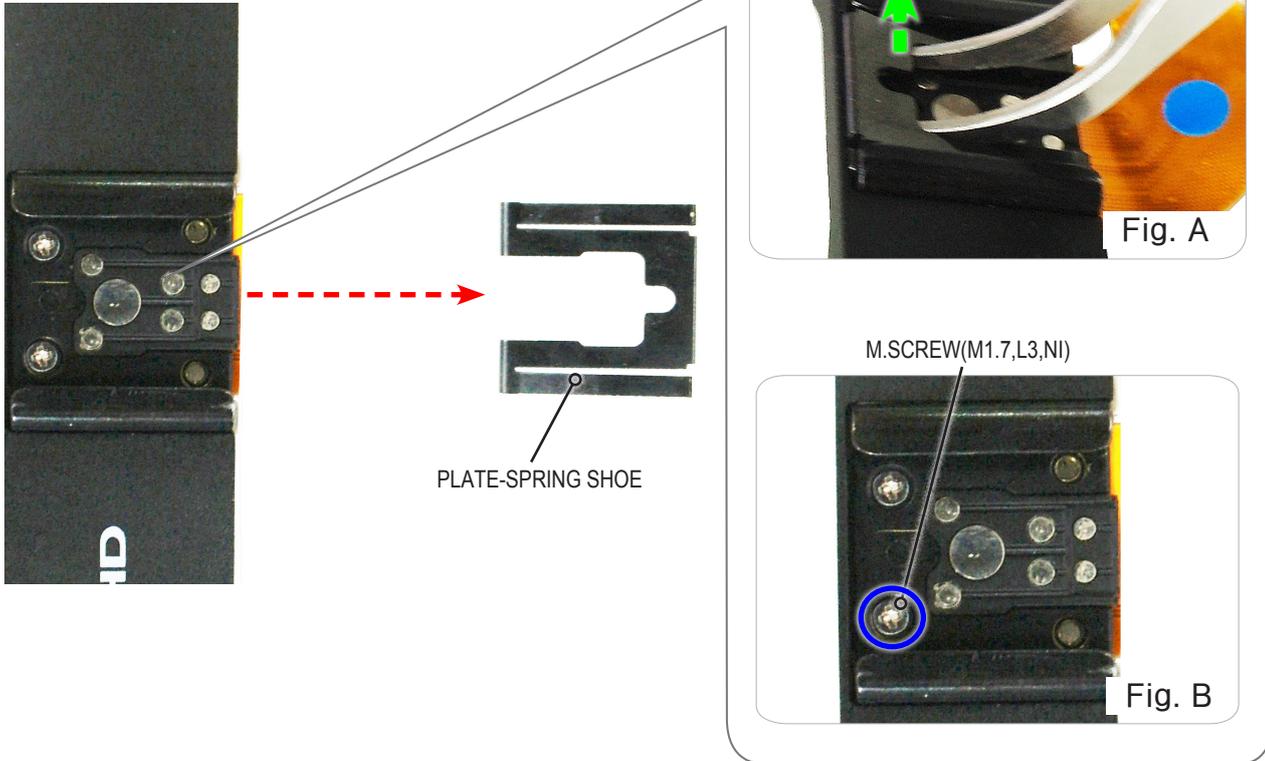
11. Removing the ASSY MAIN PCB.

Remove the ASSY MAIN PCB.



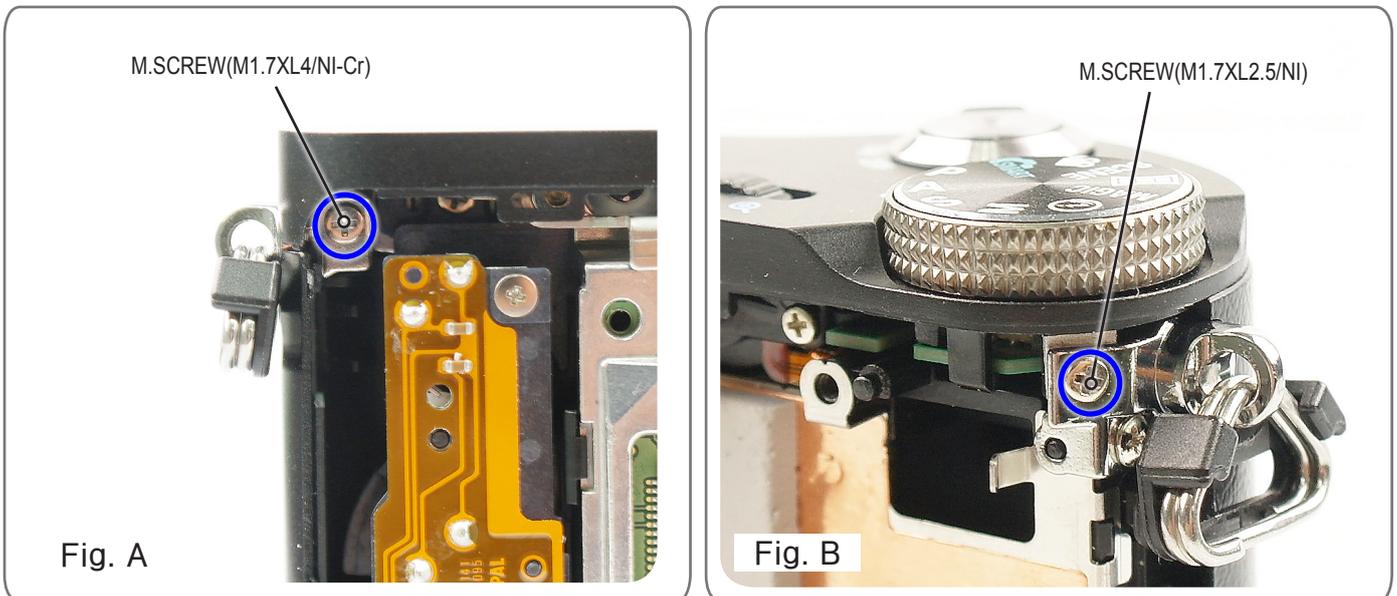
12. Removing the PLATE-SPRING SHOE / COVER-HOT SHOE and the screw.

Remove the COVER-HOT SHOE. Lift up the PLATE-SPRING SHOE with tweezers and remove it as illustrated in "Fig.A" below. Remove the screw as illustrated in "Fig. B".



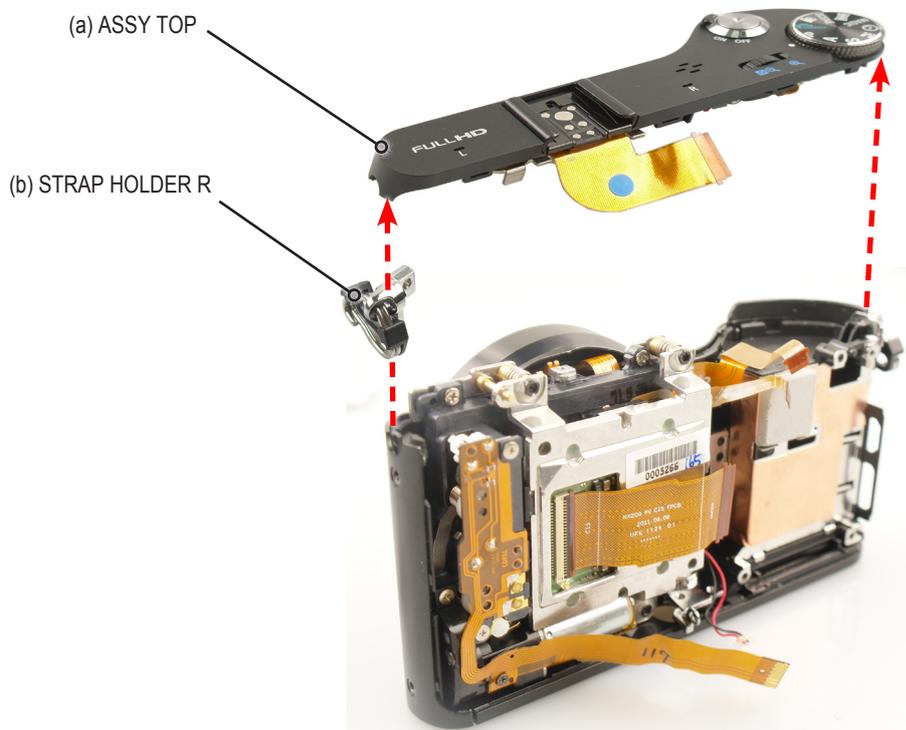
13. Removing the screws.

Remove the 2 screws as illustrated in "Fig. A" and "Fig. B".



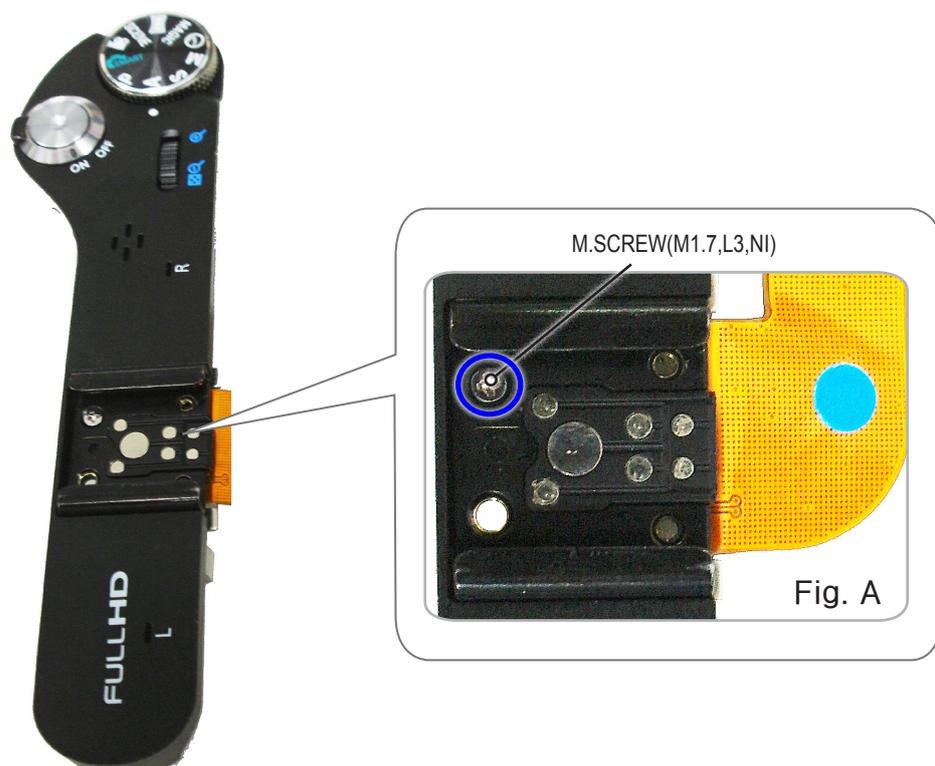
14. Removing the ASSY TOP and STRAP HOLDER R.

- (a) Remove the ASSY TOP.
- (b) Remove the STRAP HOLDER R.



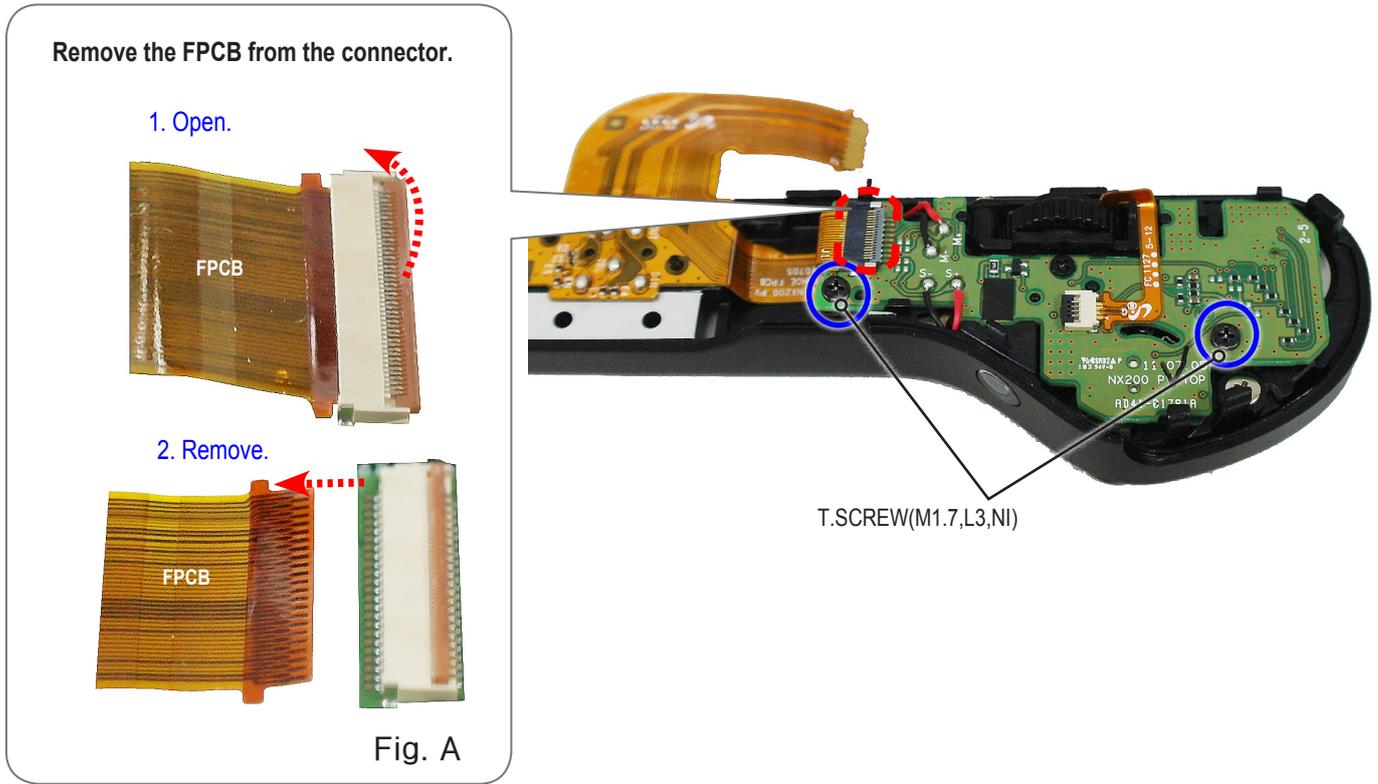
15. Removing the screw.

Remove the screw as illustrated in "Fig.A" below.



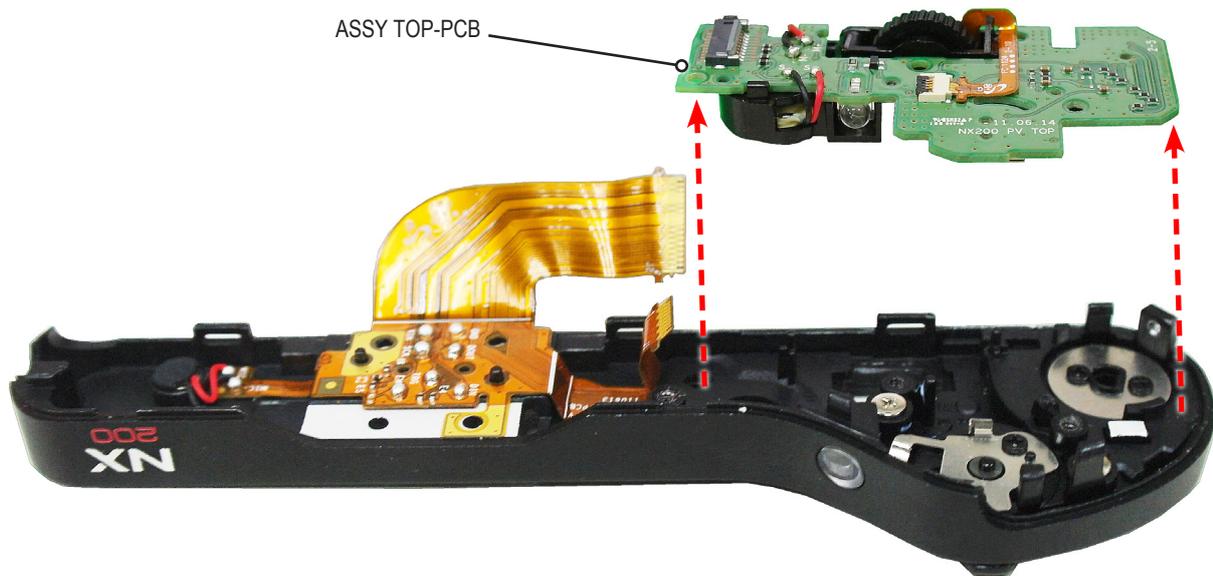
16. Removing the screw and FPCB.

After removing the 2 screws, remove the FPCB as illustrated in "Fig. A".



17. Removing the ASSY TOP-PCB.

Remove the ASSY TOP-PCB.

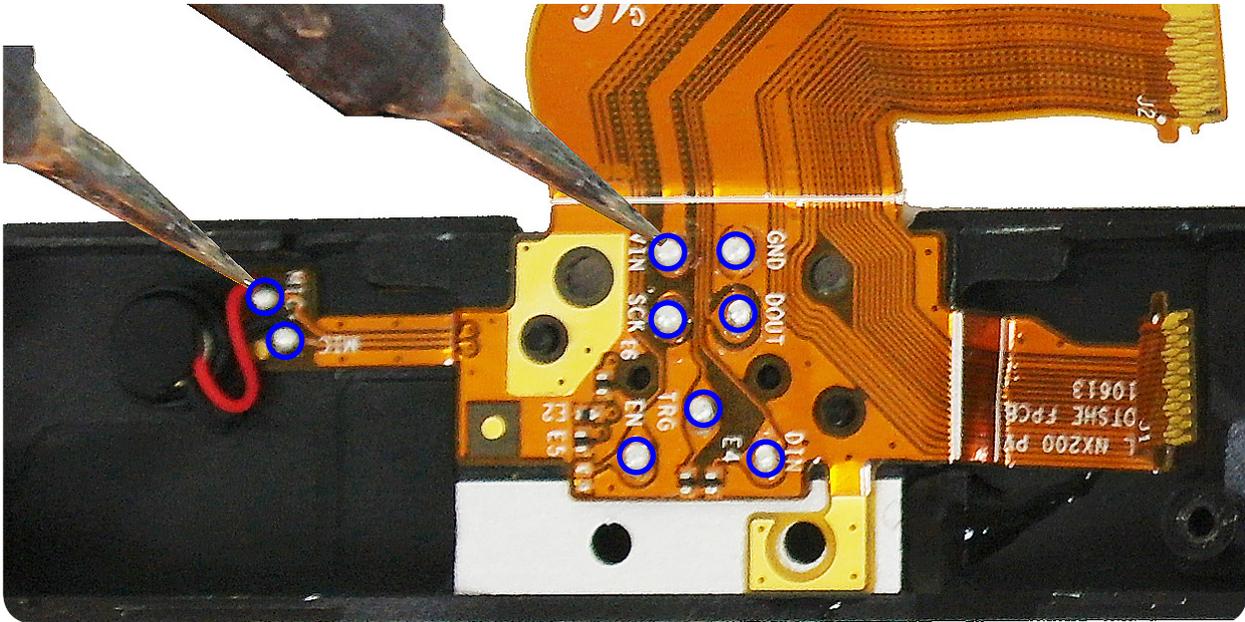


18. Removing the solder on the ASSY PCB SUB.

Remove the 9 solders specified by the blue circle.

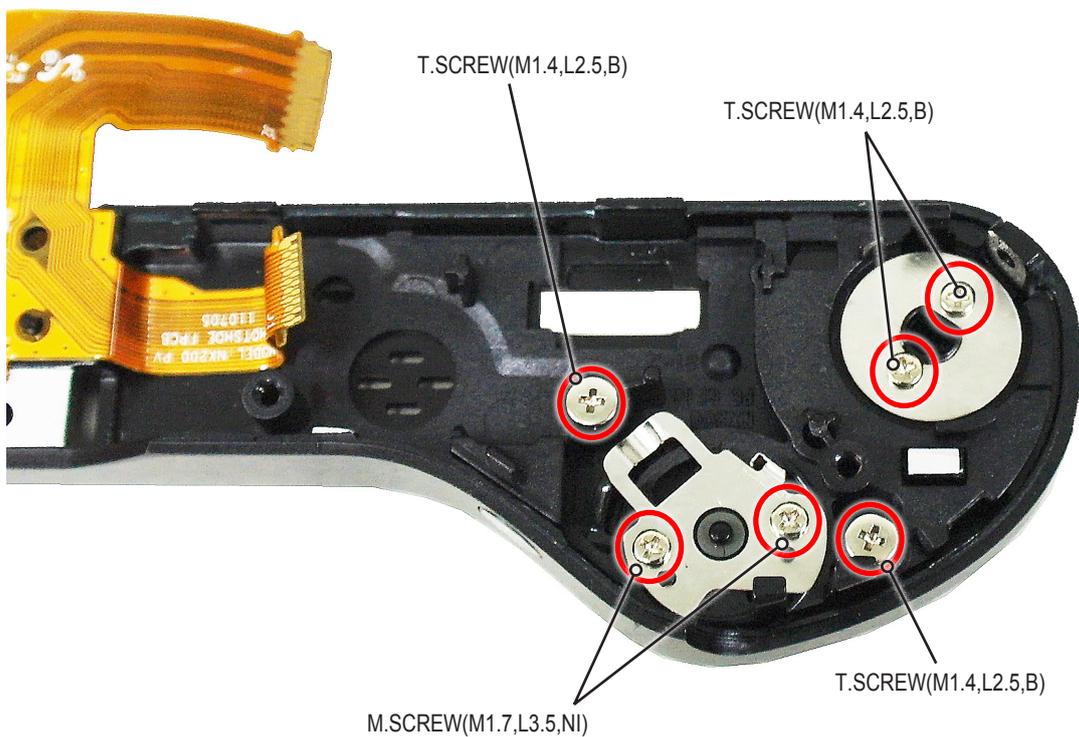
CAUTION

Be especially careful not to touch the surrounding circuitry and components when removing the solder from the ASSY PCB SUB.



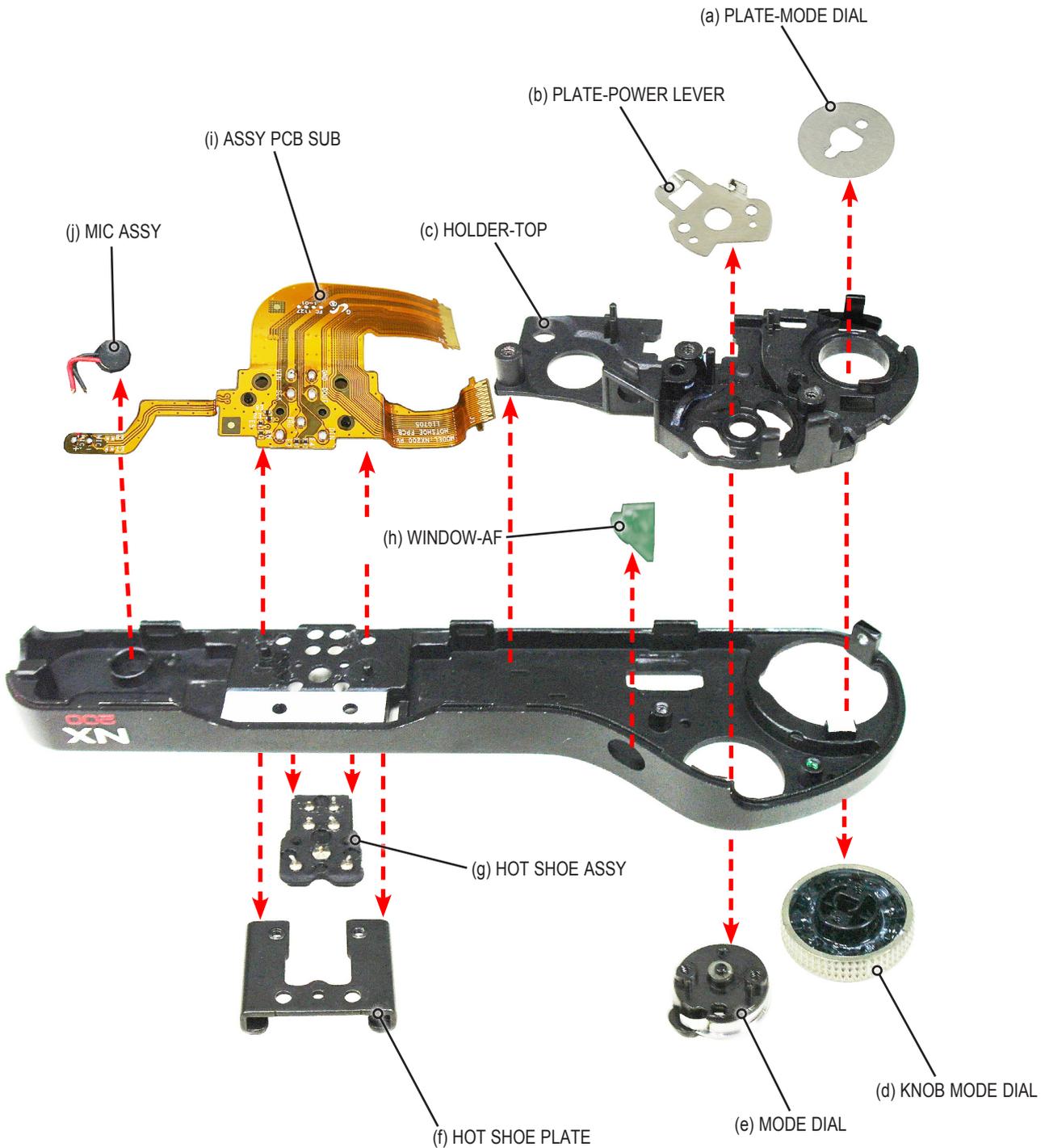
19. Removing the screws.

Remove the 6 screws.



20. Removing the ASSY TOP.

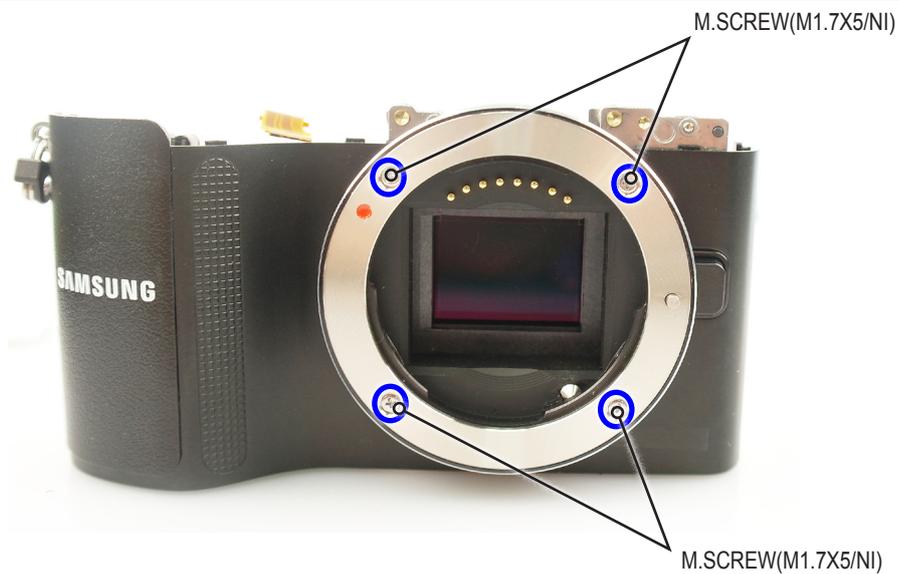
- (a) Remove the PLATE-MODE DIAL.
- (b) Remove the PLATE-POWER LEVER.
- (c) Remove the HOLDER-TOP.
- (d) Remove the KNOB MODE DIAL.
- (e) Remove the MODE DIAL.
- (f) Remove the HOT SHOE PLATE.
- (g) Remove the HOT SHOE ASSY.
- (h) Remove the WINDOW-AF.
- (i) Remove the ASSY PCB SUB.
- (j) Remove the MIC ASSY.



3-2-2 Technical expertise support – Disassembly

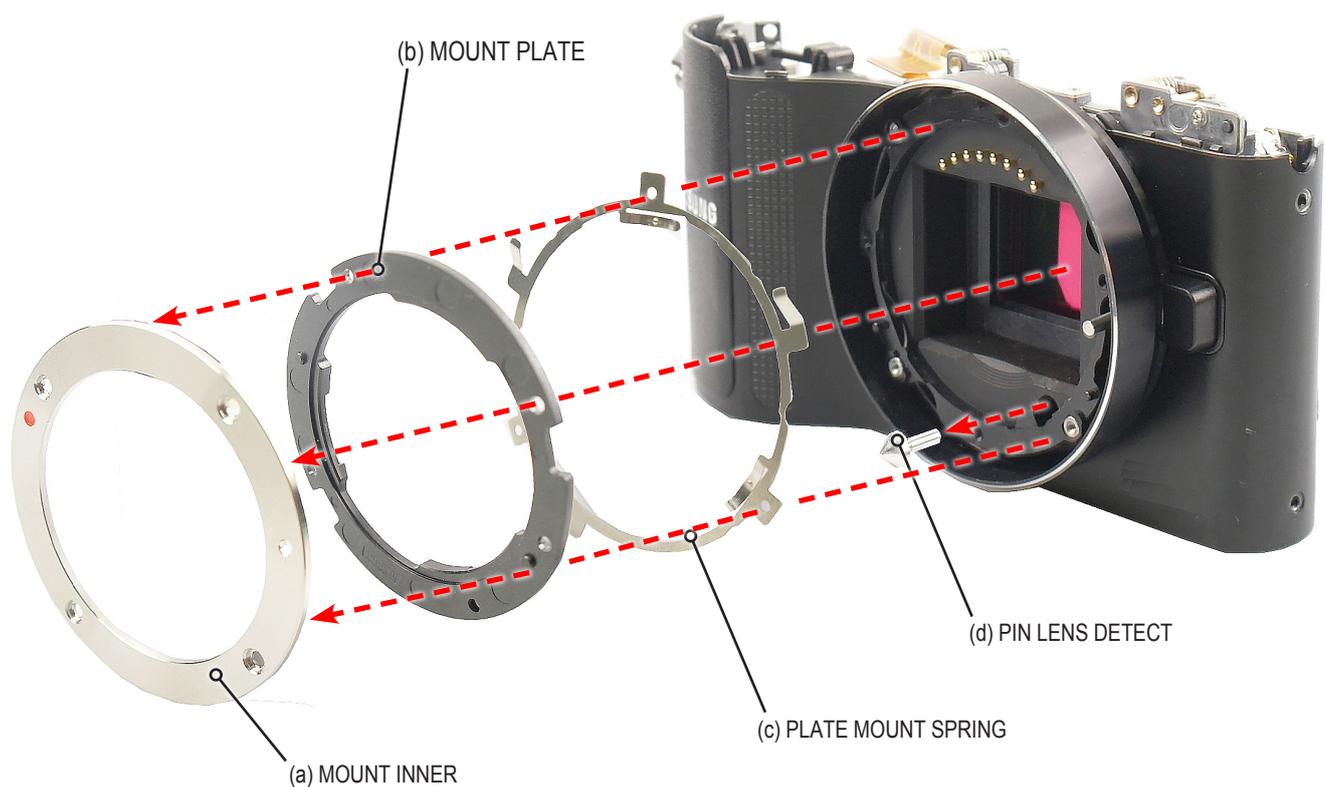
1. Removing the screw.

Remove the 4 screws.



2. Removing the ASSY FRONT.

- (a) Remove the MOUNT INNER.
- (b) Remove the MOUNT PLATE.
- (c) Remove the PLATE MOUNT SPRING.
- (d) Remove the PIN LENS DETECT.



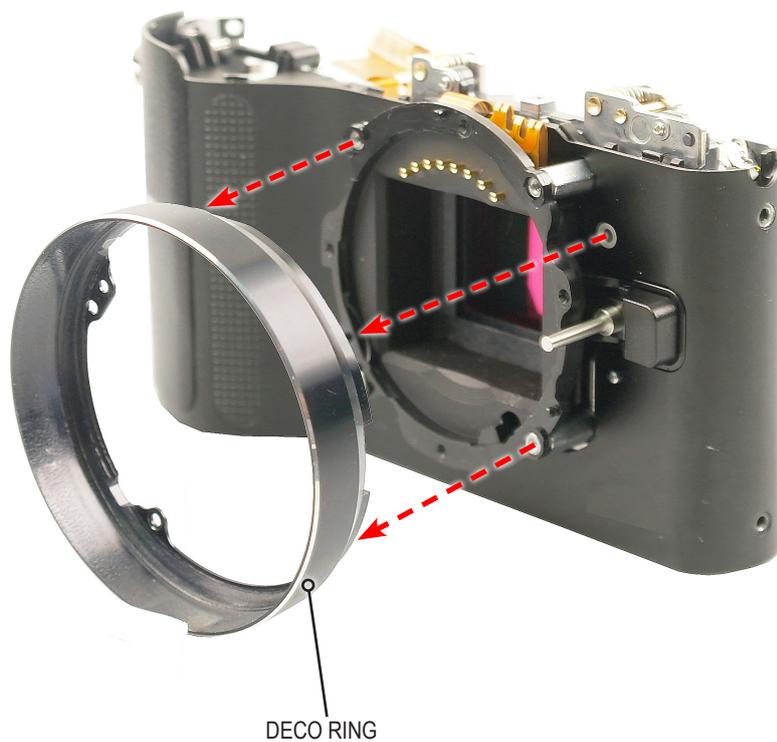
3. Removing the screw.

Remove the 3 screws.



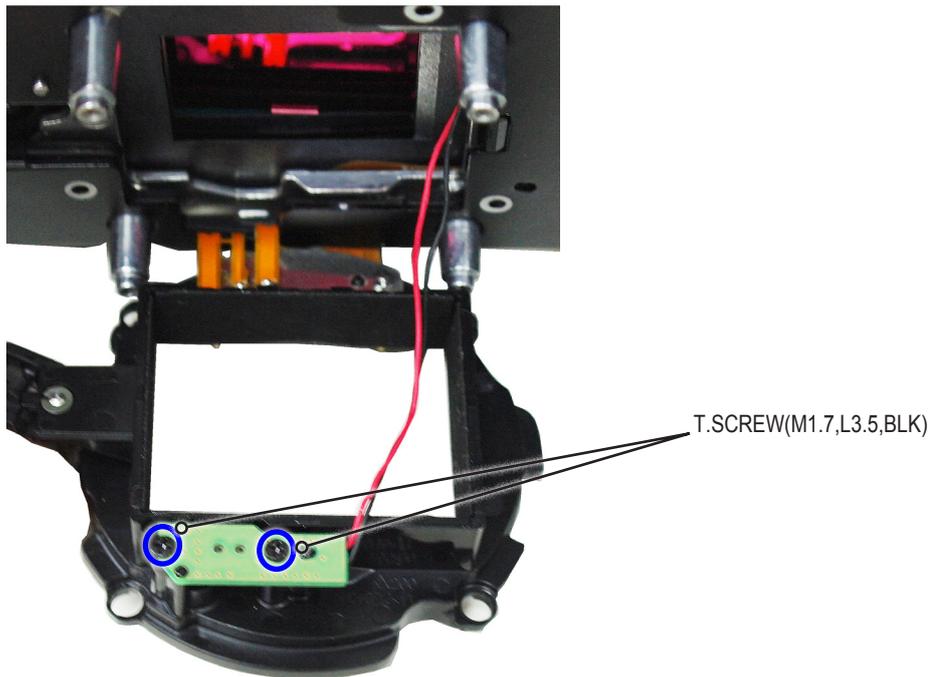
4. Removing the DECO RING.

Remove the DECO RING.



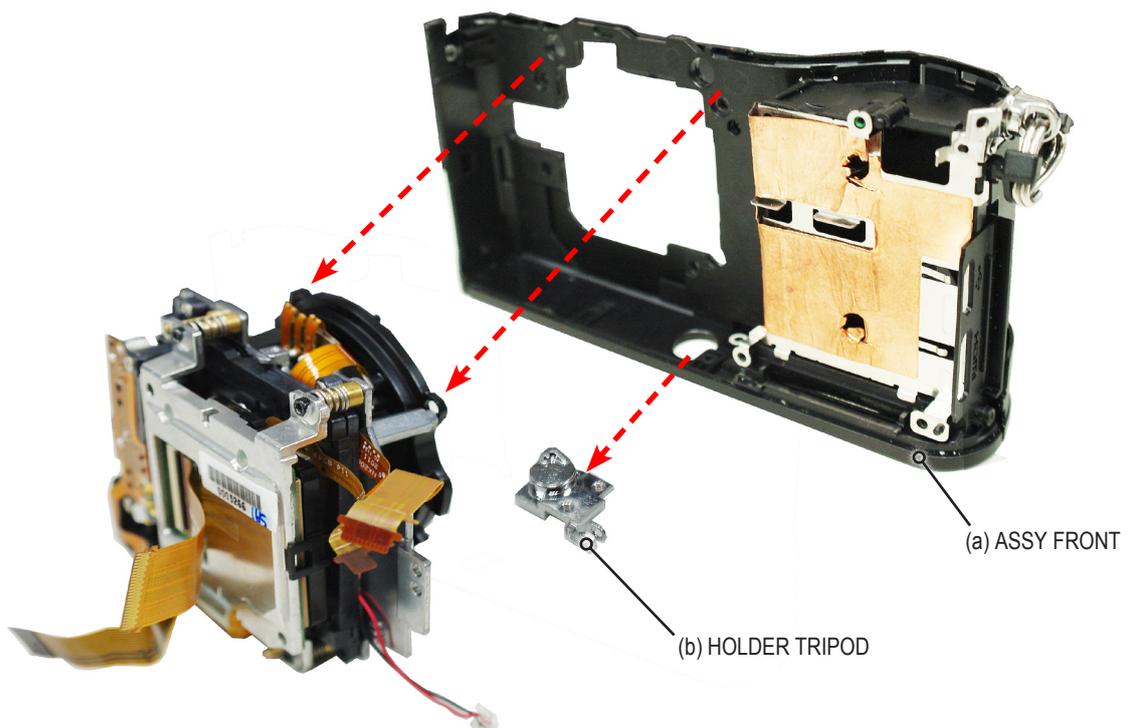
5. Removing the screw.

Remove the 2 screws.



6. Removing the ASSY FRONT and HOLDER TRIPOD.

- (a) Remove the ASSY FRONT.
- (b) Remove the HOLDER TRIPOD.

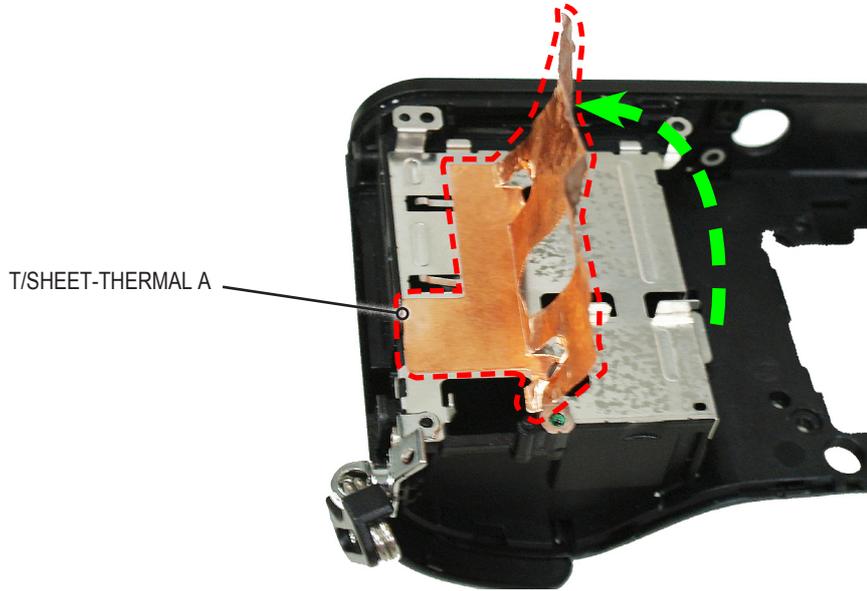


7. Removing the T/SHEET-THERMAL A and screws.

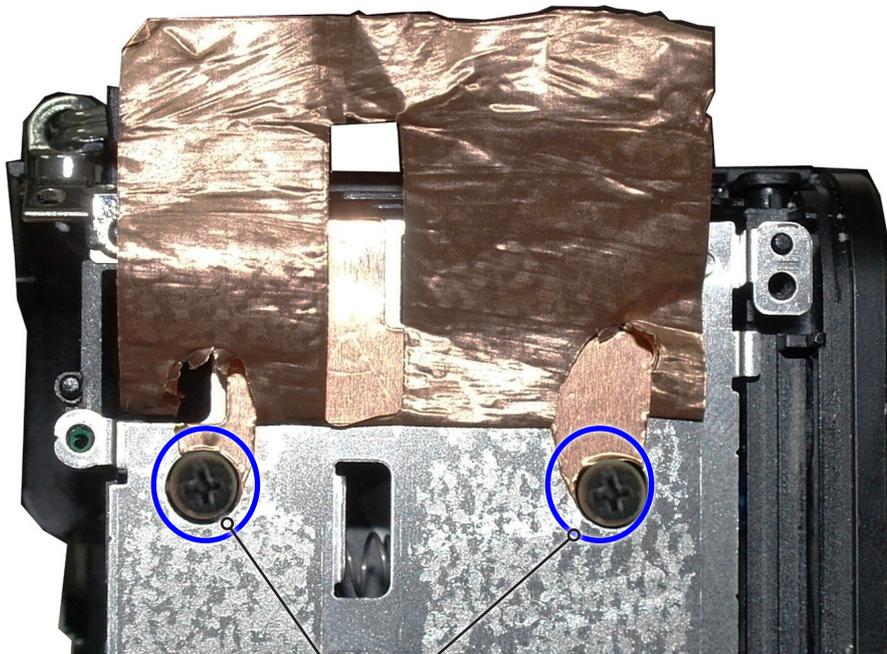
(a) Remove the T/SHEET-THERMAL A .

CAUTION

Use care not to tear the T/SHEET-THERMAL A when removing.



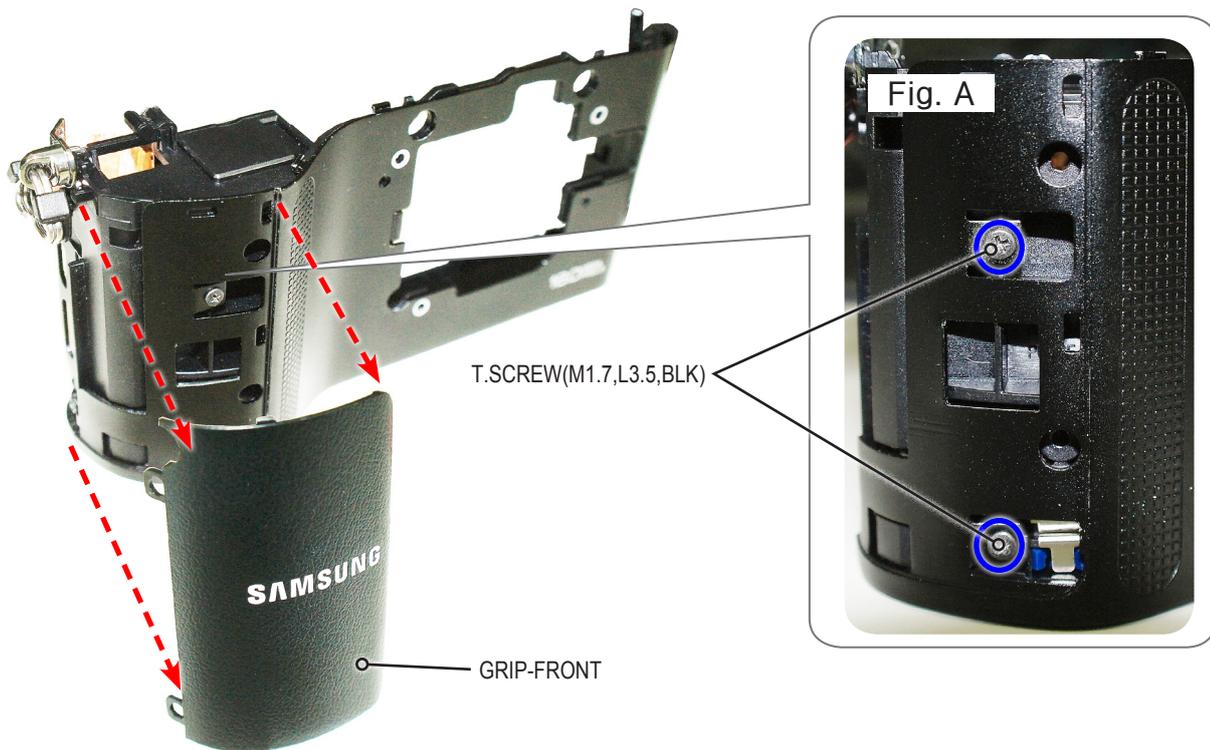
(b) Remove the 2 screws.



T.SCREW(M1.7,L3.5,BLK)

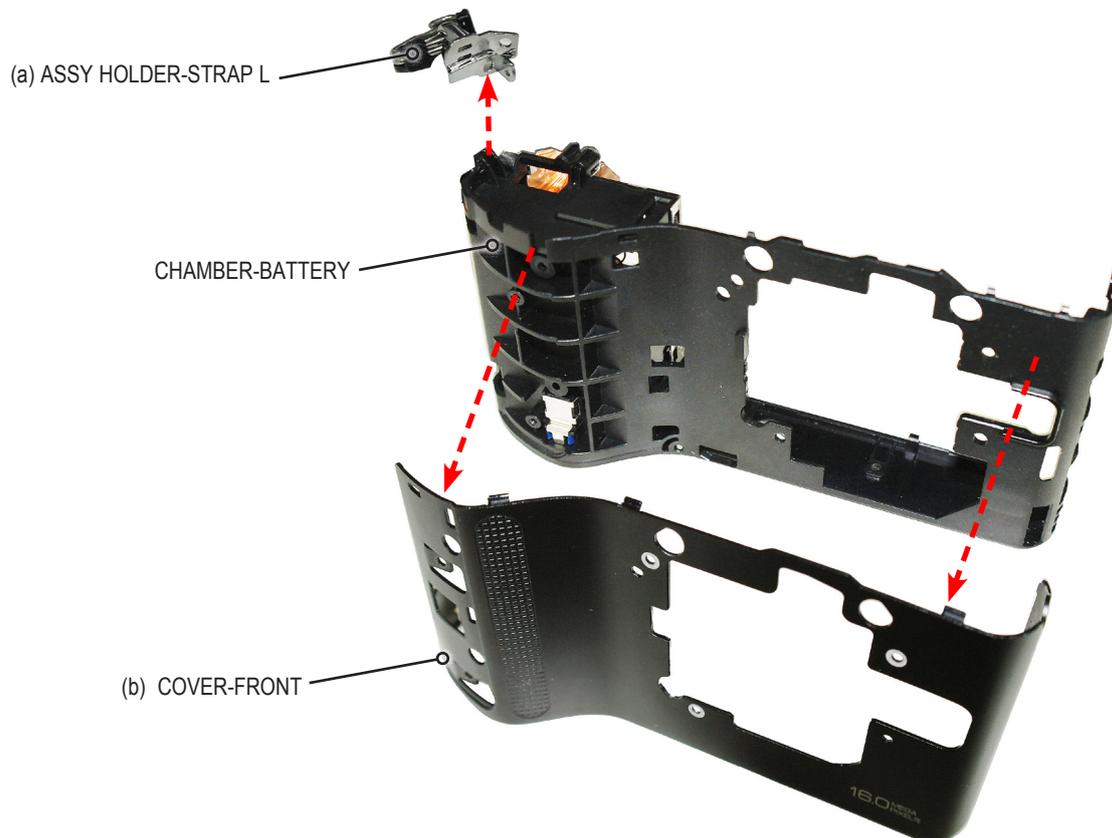
8. Removing the GRIP-FRONT and screws.

Remove the GRIP-FRONT and 2 screws as illustrated in "Fig. A".



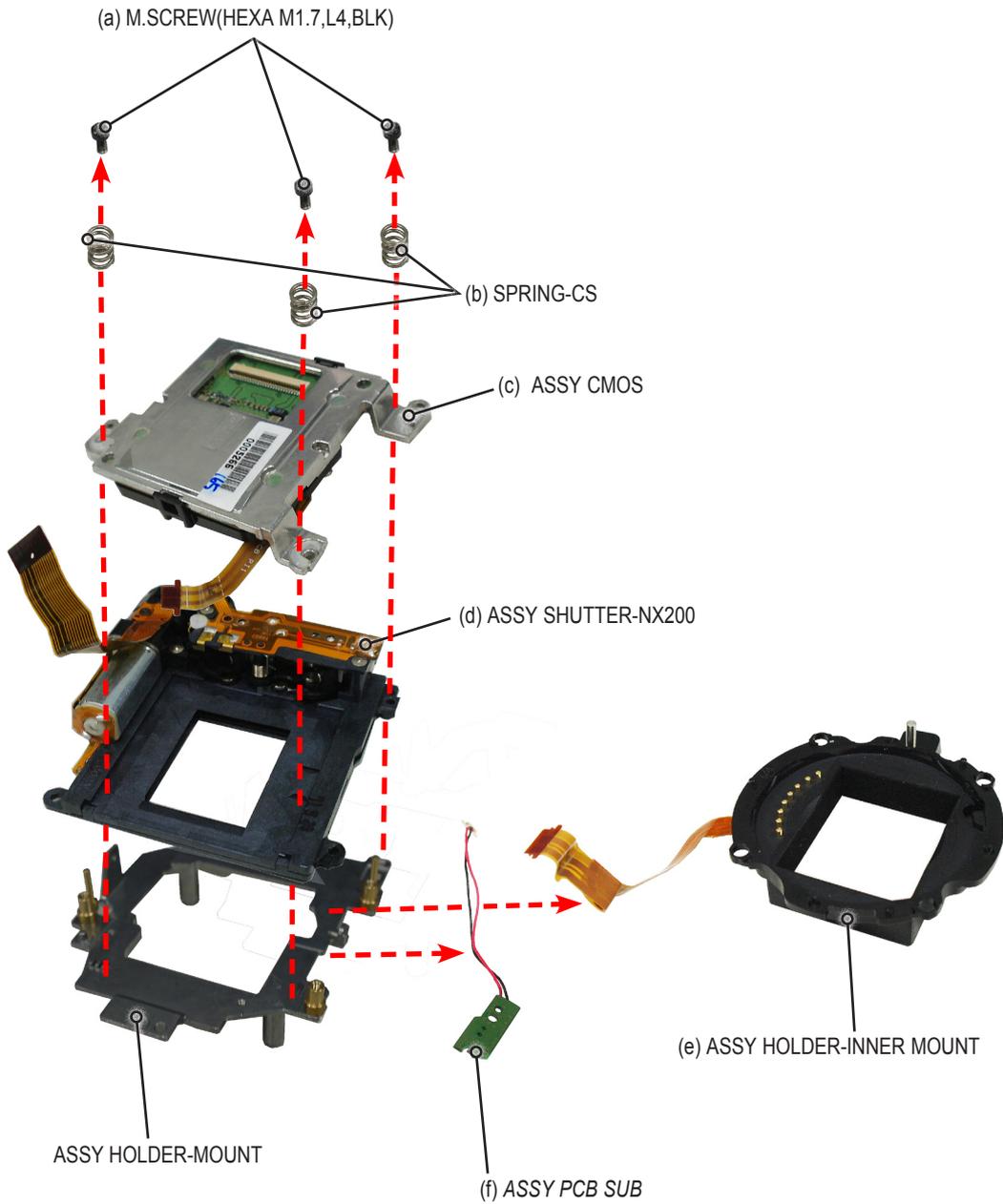
9. Removing the ASSY HOLDER-STRAP L / COVER-FRONT.

- (a) Remove the ASSY HOLDER-STRAP L.
- (b) Remove the COVER-FRONT from the CHAMBER-BATTERY.



10. Removing the ASSY CMOS.

- (a) Remove the 3 screws.
- (b) Remove the 3 SPRING-CS.
- (c) Remove the ASSY CMOS.
- (d) Remove the ASSY SHUTTER-NX200.
- (e) Remove the ASSY HOLDER-INNER MOUNT.
- (f) Remove the ASSY PCB SUB.

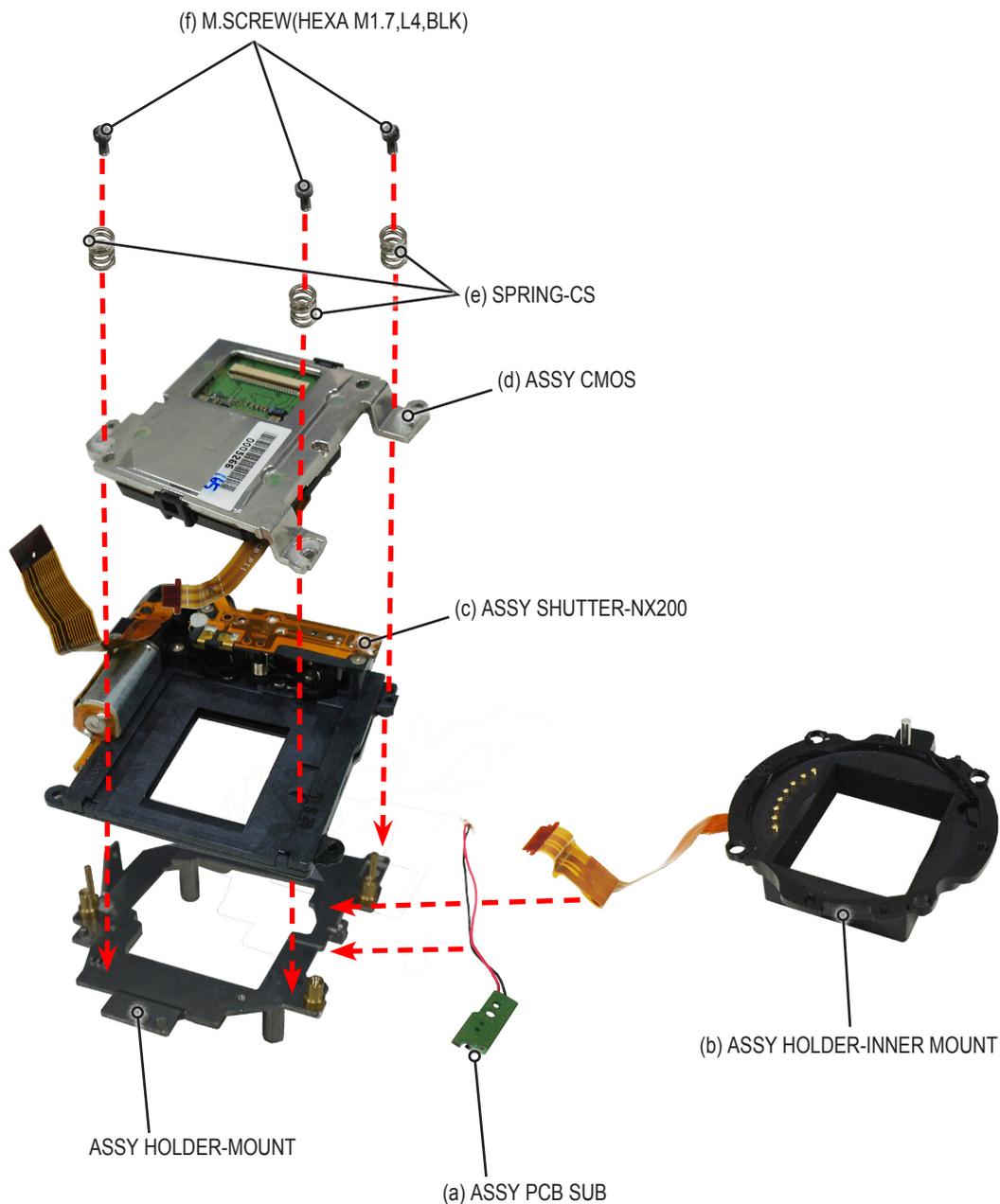


3-3 Reassembly

3-3-1 Technical expertise support - Reassembly

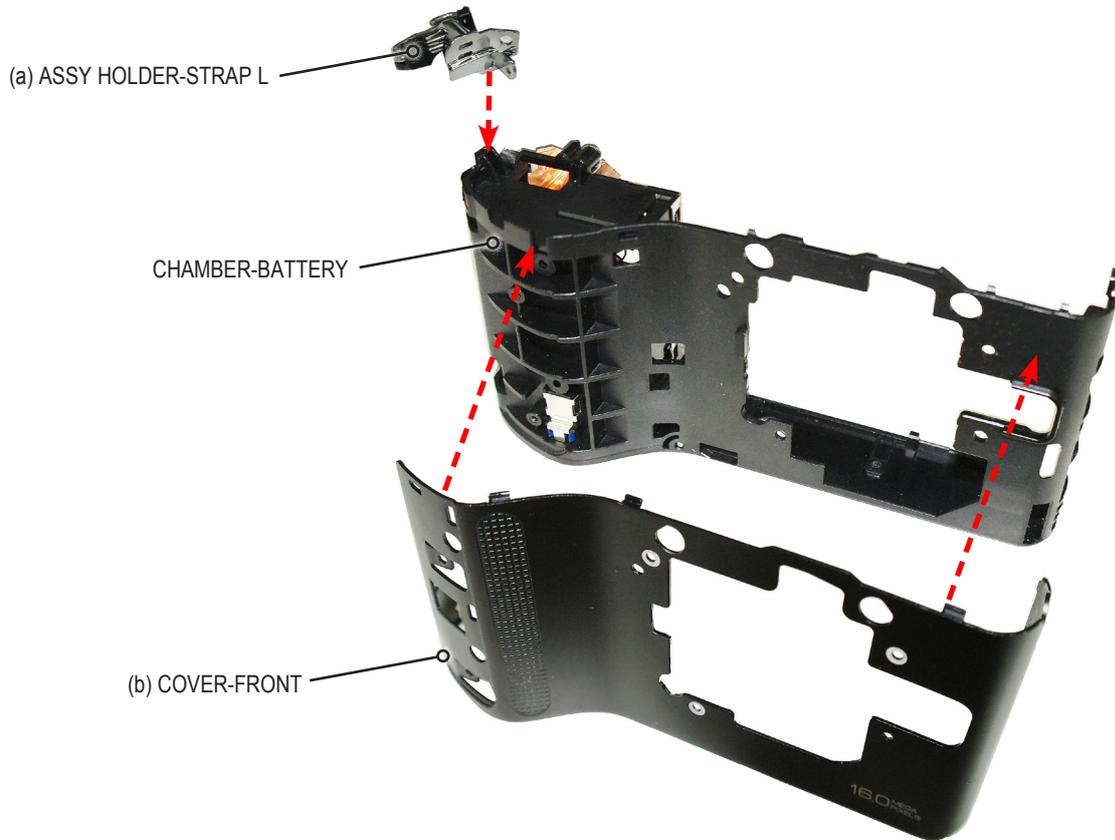
1. Installing the ASSY CMOS.

- (a) Install the ASSY PCB SUB.
- (b) Install the ASSY HOLDER-INNER MOUNT.
- (c) Install the ASSY SHUTTER-NX200.
- (d) Install the ASSY CMOS.
- (e) Install the 3 SPRING-CS.
- (f) Tighten the 3 screws.



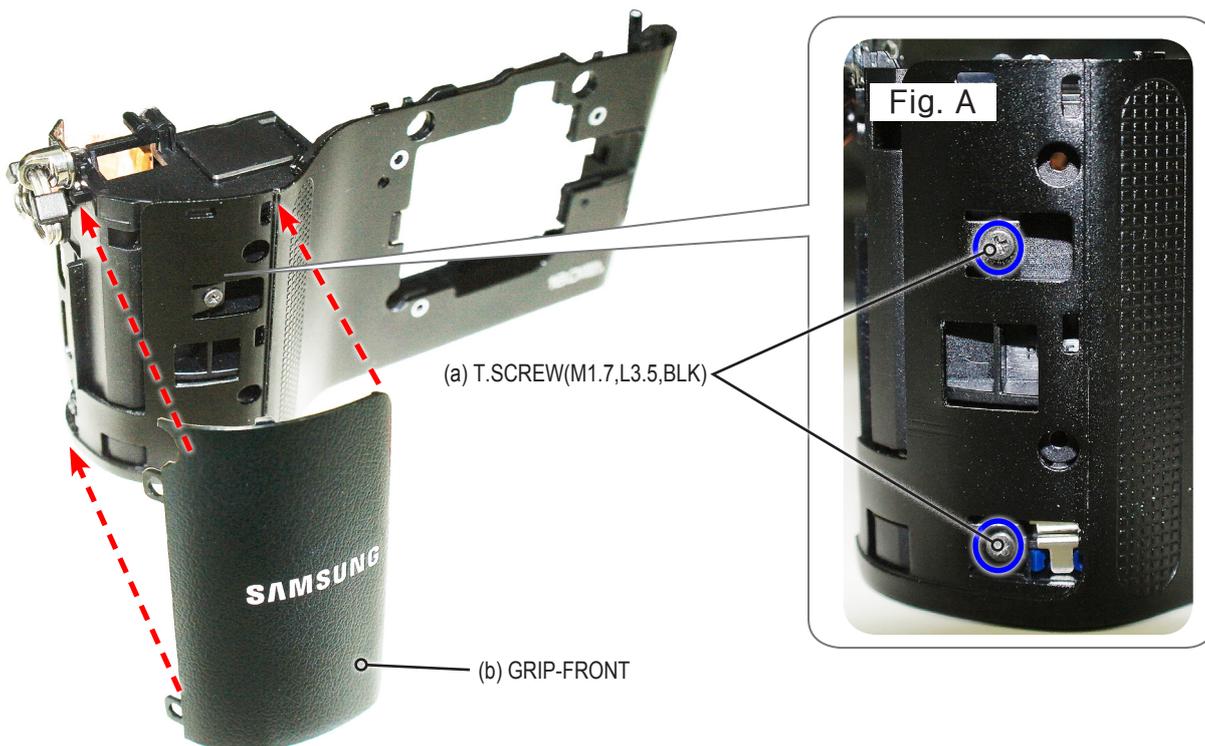
2. Installing the ASSY CHAMBER.

- (a) Install the ASSY HOLDER-STRAP L.
- (b) Install the COVER-FRONT to the CHAMBER-BATTERY.



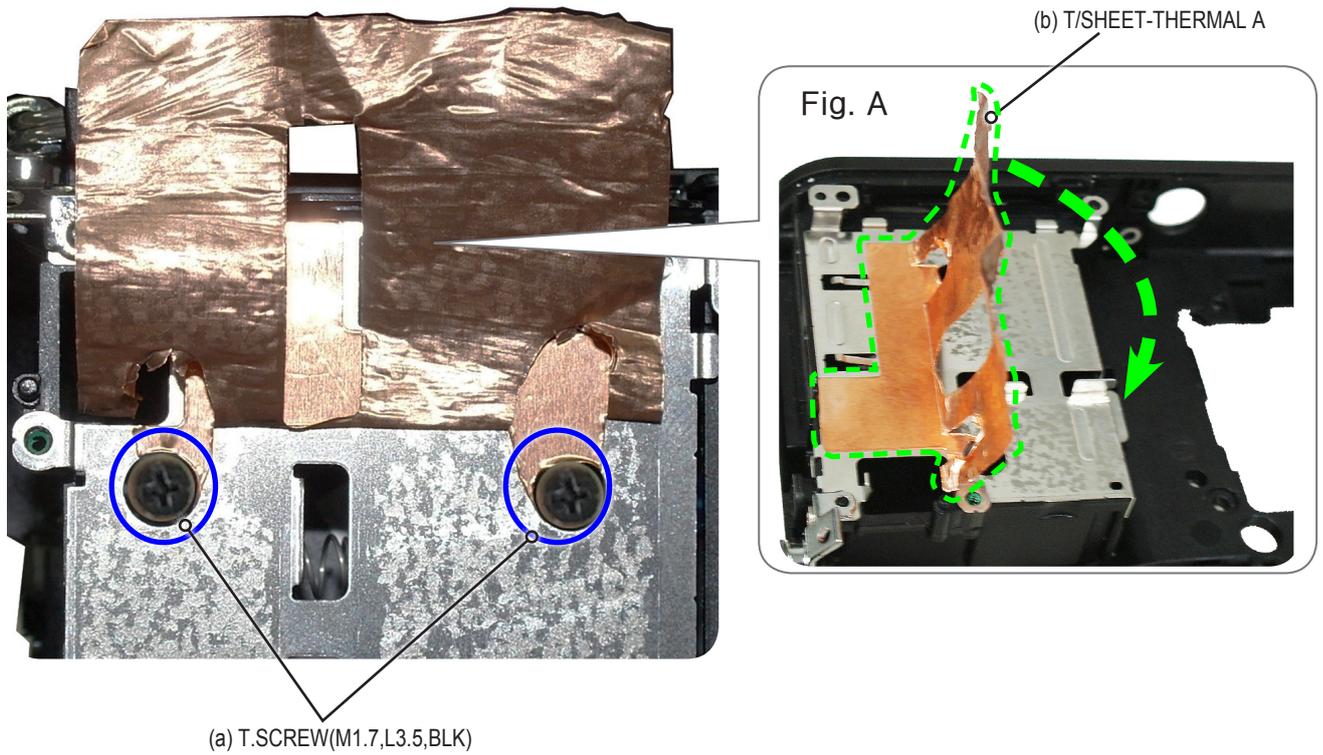
3. Tightening the screws and install the GRIP-FRONT.

Install the GRIP-FRONT and Tightening the 2 screws as illustrated in "Fig. A".



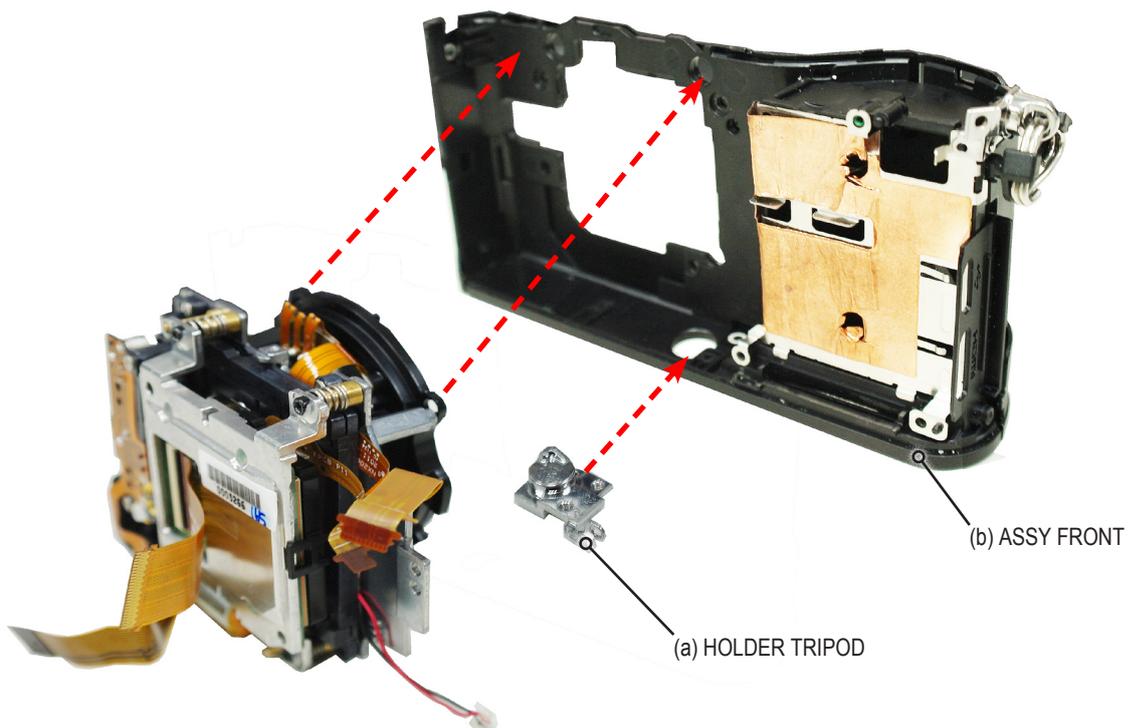
4. Tightening the screws and attaching the T/SHEET-THERMAL A.

After tightening the 2 screws and attach the T/SHEET-THERMAL A in the direction of the "Fig.A" arrow.



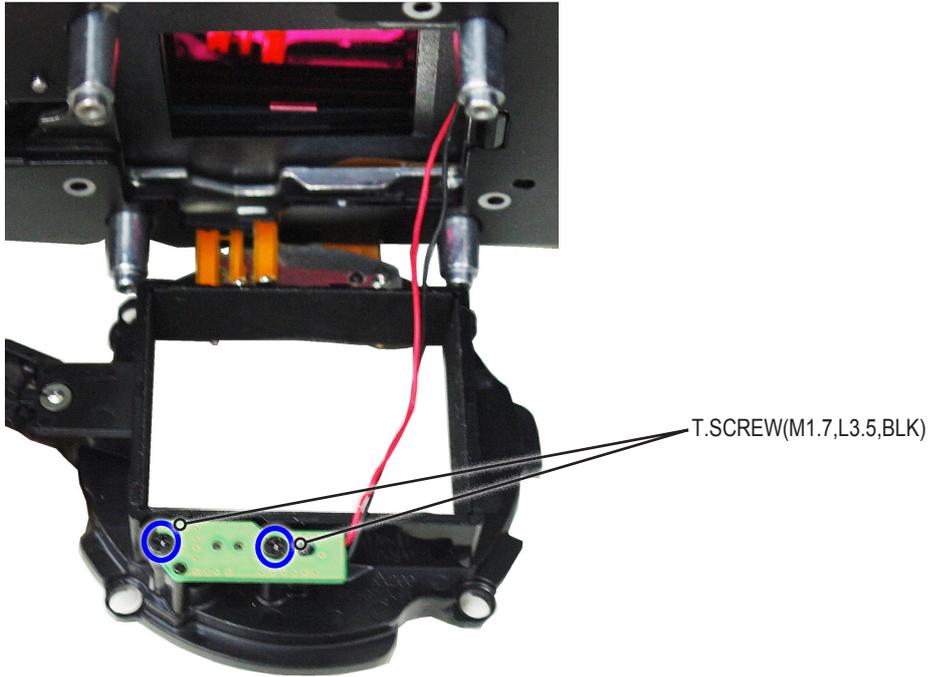
5. Installing the ASSY FRONT and HOLDER TRIPOD.

Install the ASSY FRONT and HOLDER TRIPOD.



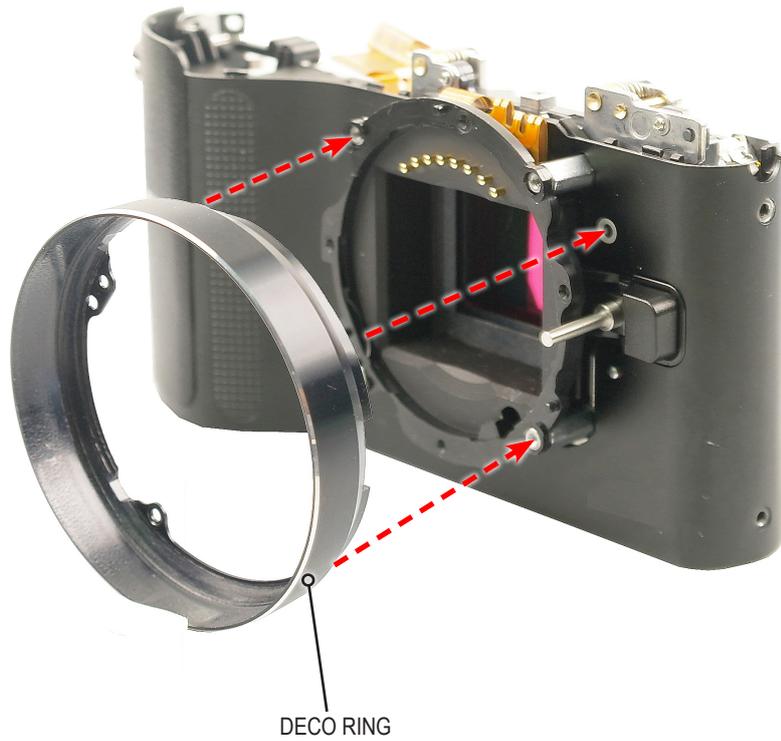
6. Tightening the screws.

Tighten the 2 screws.



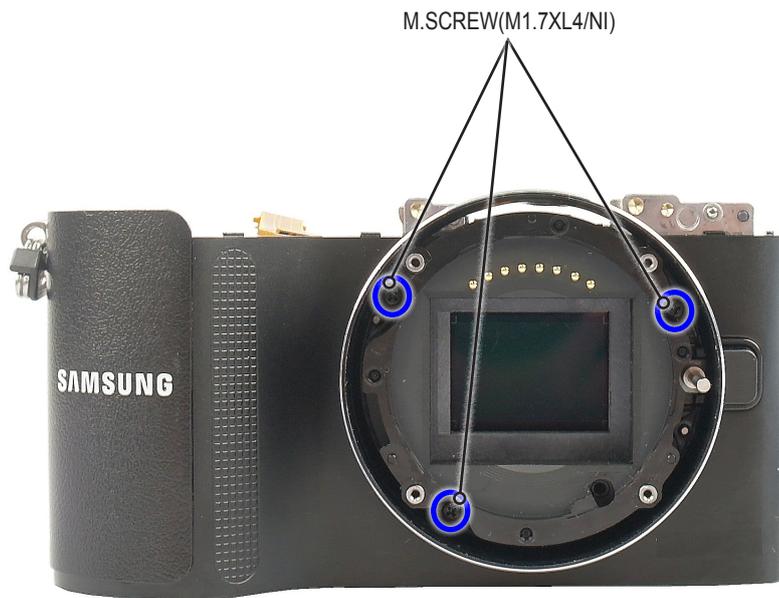
7. Installing the DECO RING.

Install the DECO RING.



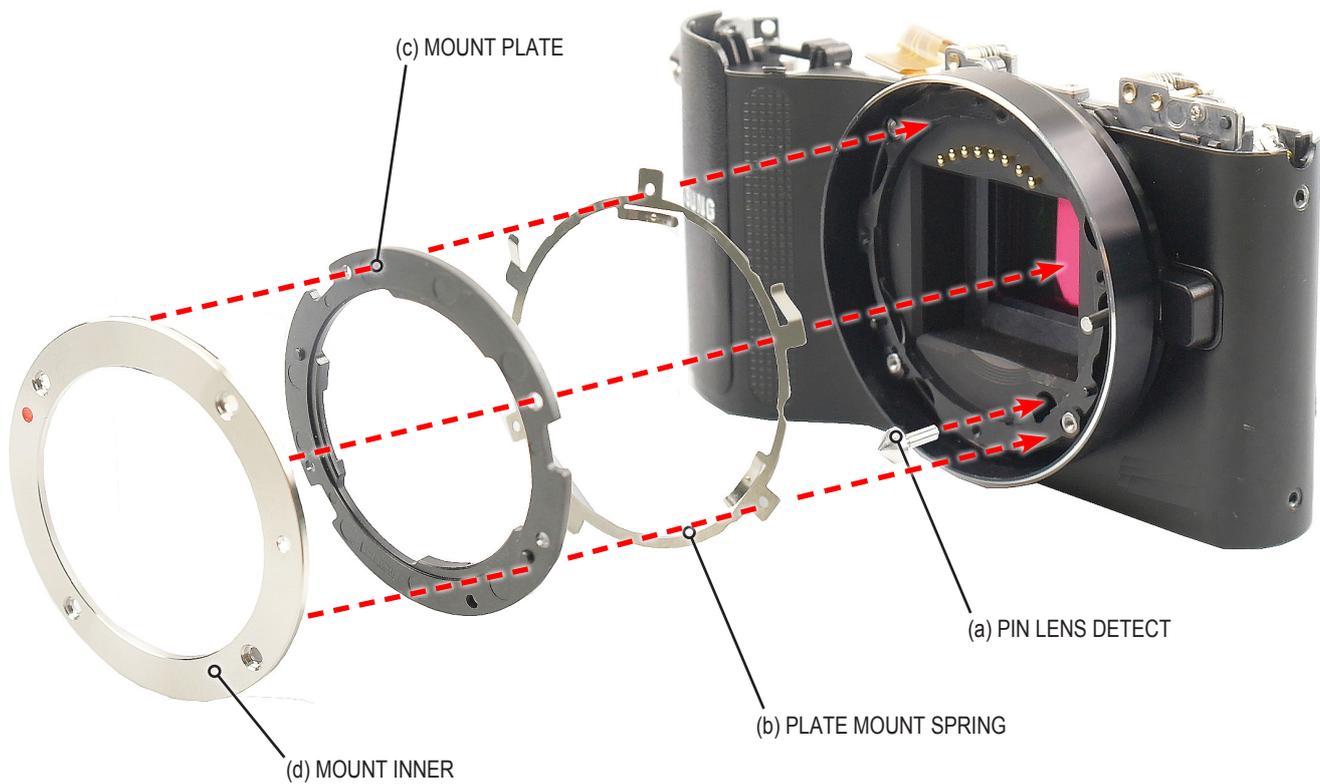
8. Tightening the screws.

Tighten the 3 screws.



9. Installing the ASSY FRONT.

- (a) Install the PIN LENS DETECT.
- (b) Install the PLATE MOUNT SPRING.
- (c) Install the MOUNT PLATE.
- (d) Install the MOUNT INNER.



10. Tightening the screws.

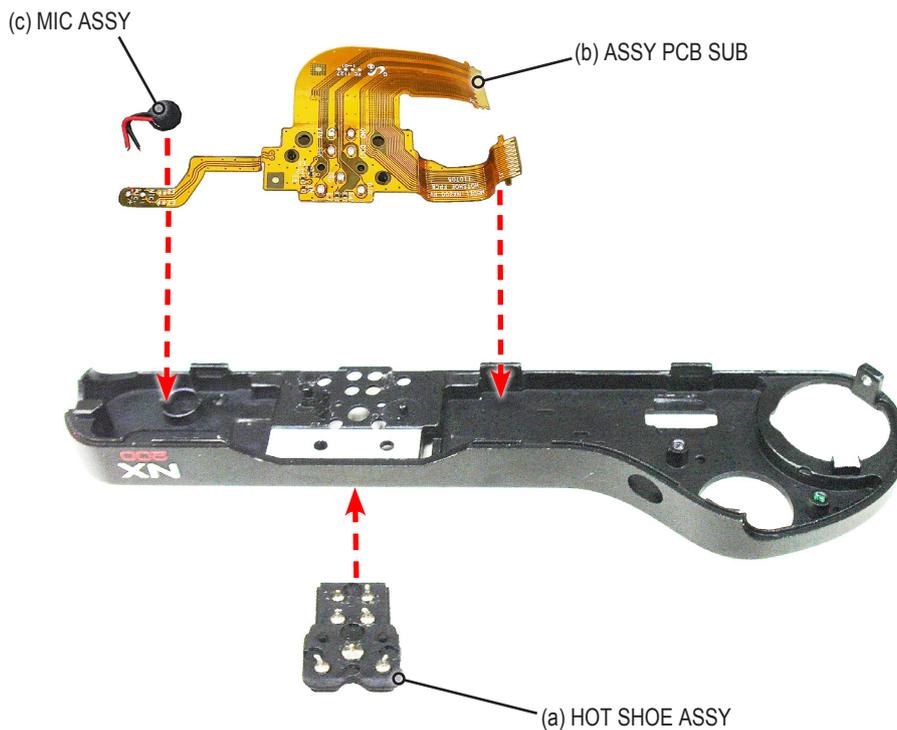
Tighten the 4 screws.



3-3-2 General support - Reassembly

1. Installing the ASSY TOP.

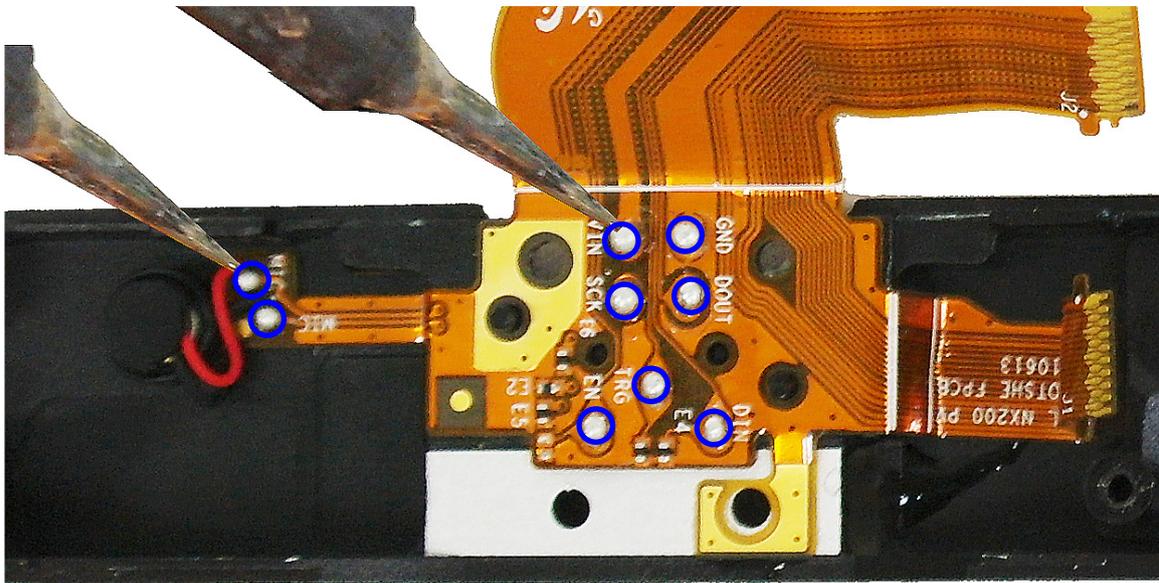
- (a) Install the HOT SHOE ASSY.
- (b) Install the ASSY PCB SUB.
- (c) Install the MIC ASSY.



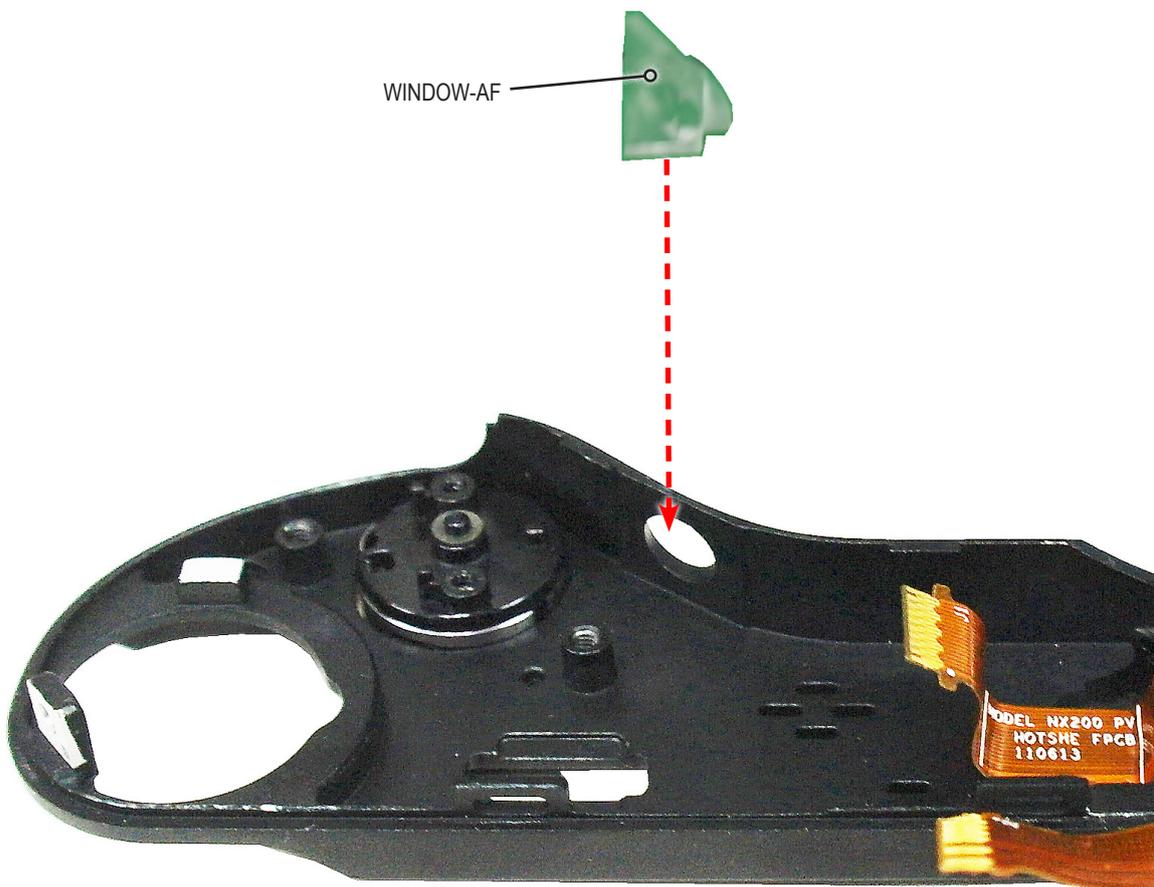
(d) Solder to the 9 specified locations by the blue circle.

CAUTION

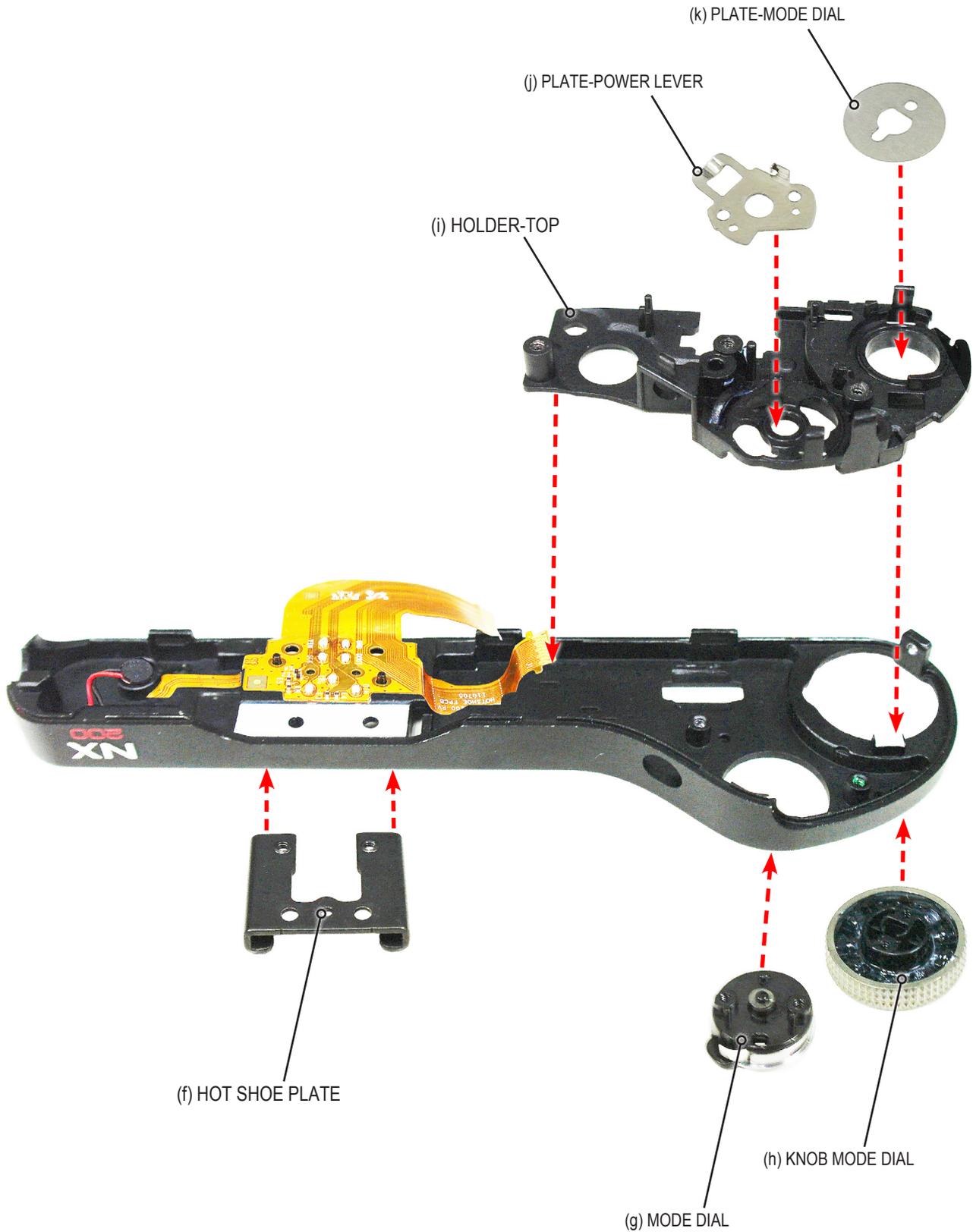
Be especially careful not to touch the surrounding circuitry and components when soldering on the ASSY PCB SUB.



(e) Install the WINDOW-AF.

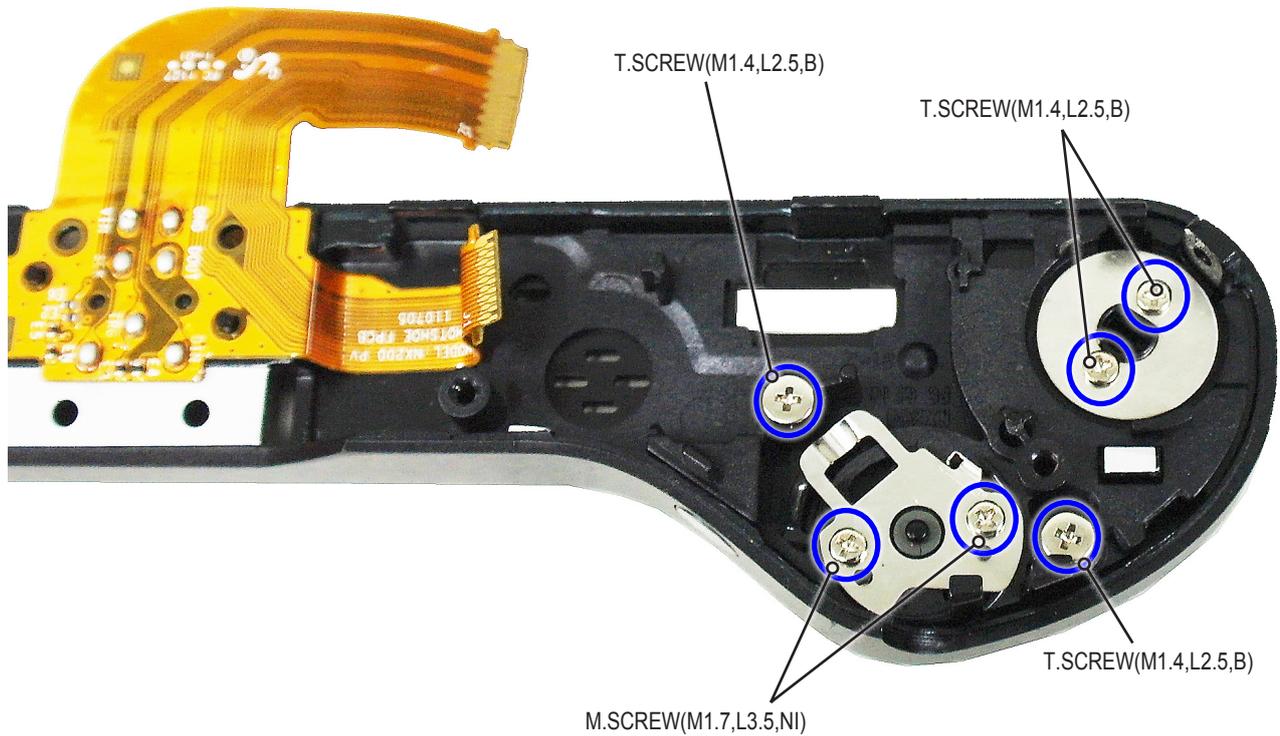


- (f) Install the HOT SHOE PLATE.
- (g) Install the MODE DIAL.
- (h) Install the KNOB MODE DIAL.
- (i) Install the HOLDER-TOP.
- (j) Install the PLATE-POWER LEVER.
- (k) Install the PLATE-MODE DIAL.



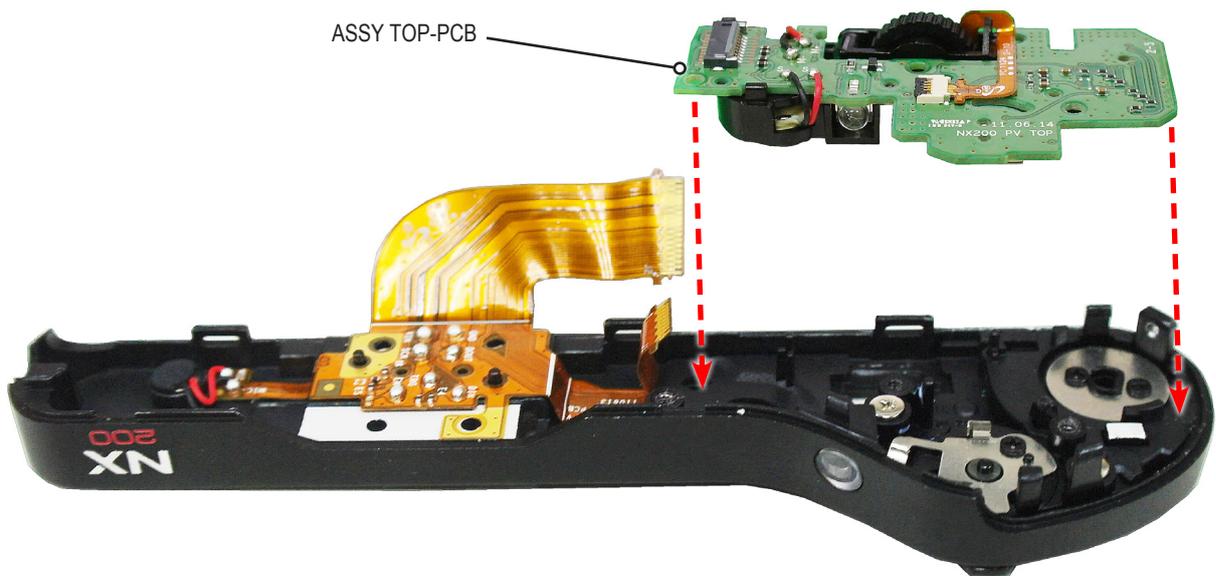
2. Tightening the screws.

Tighten the 6 screws.



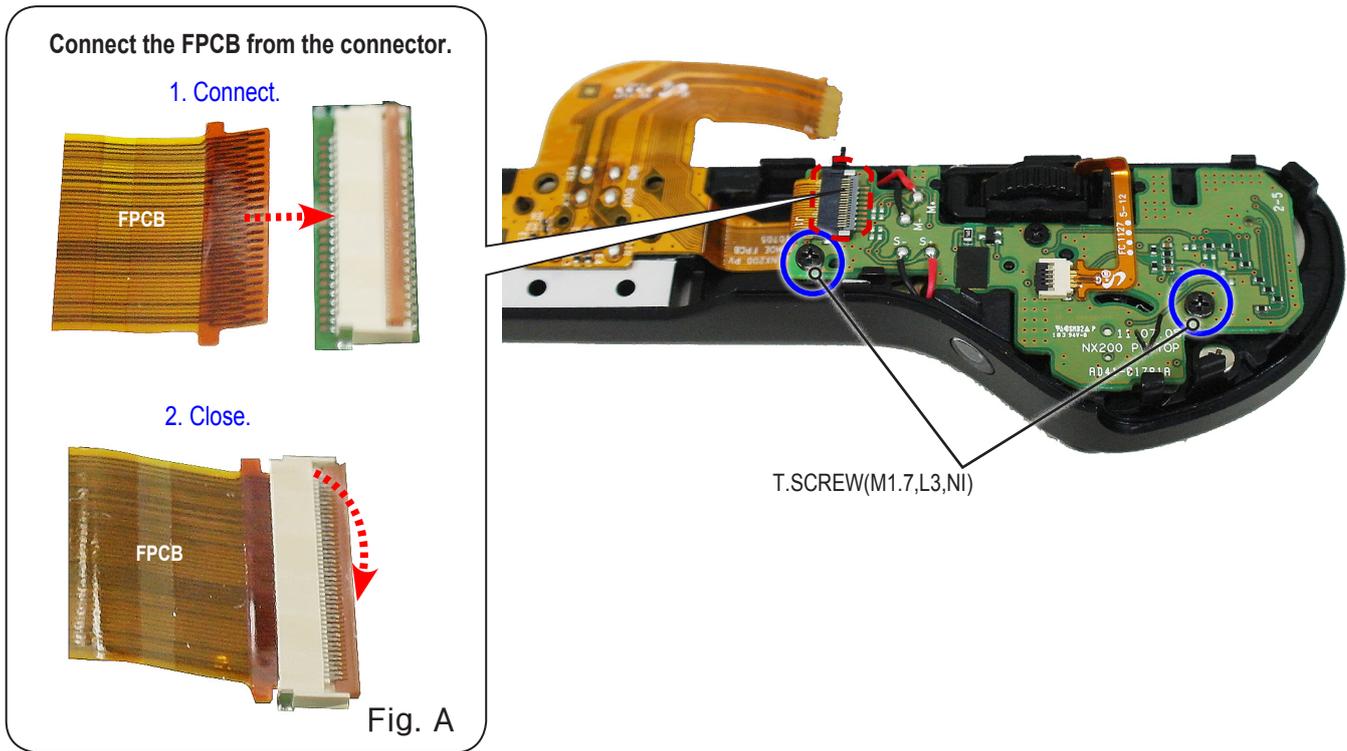
3. Installing the ASSY TOP-PCB.

Install the ASSY TOP-PCB.



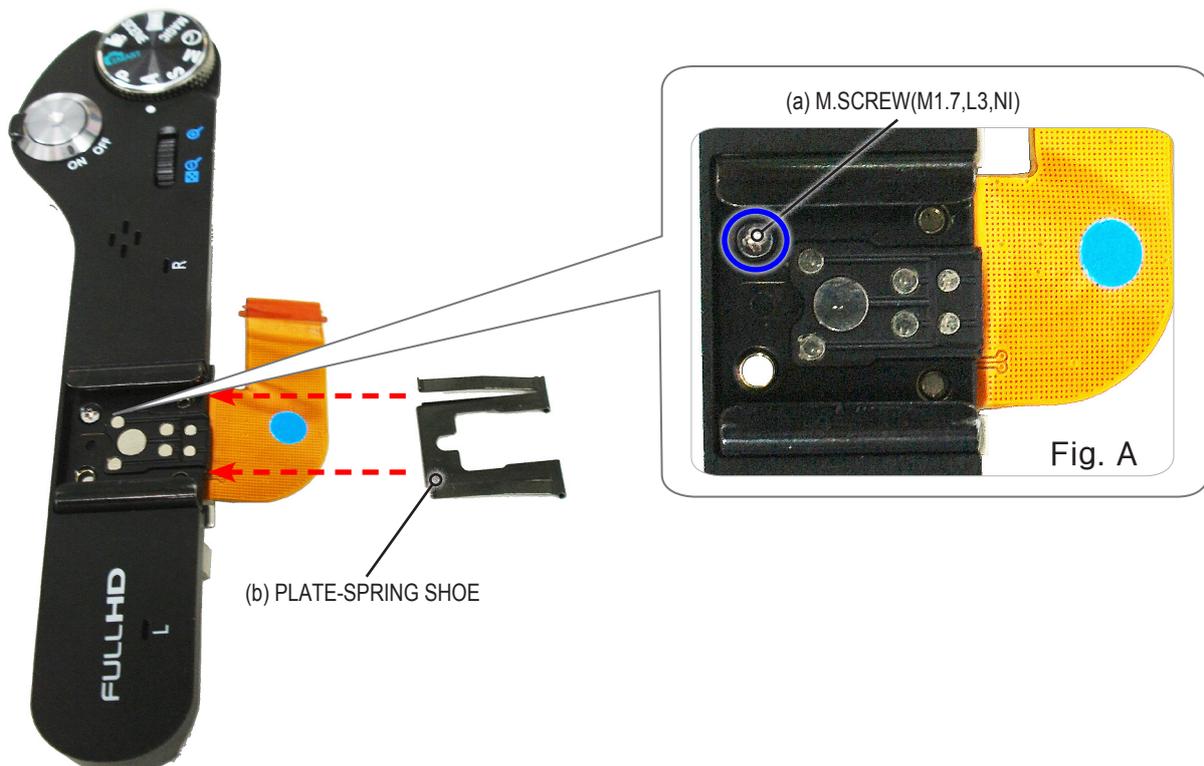
4. Installing the screw and FPCB.

After tightening the 2 screws, connect the FPCB as illustrated in "Fig. A".



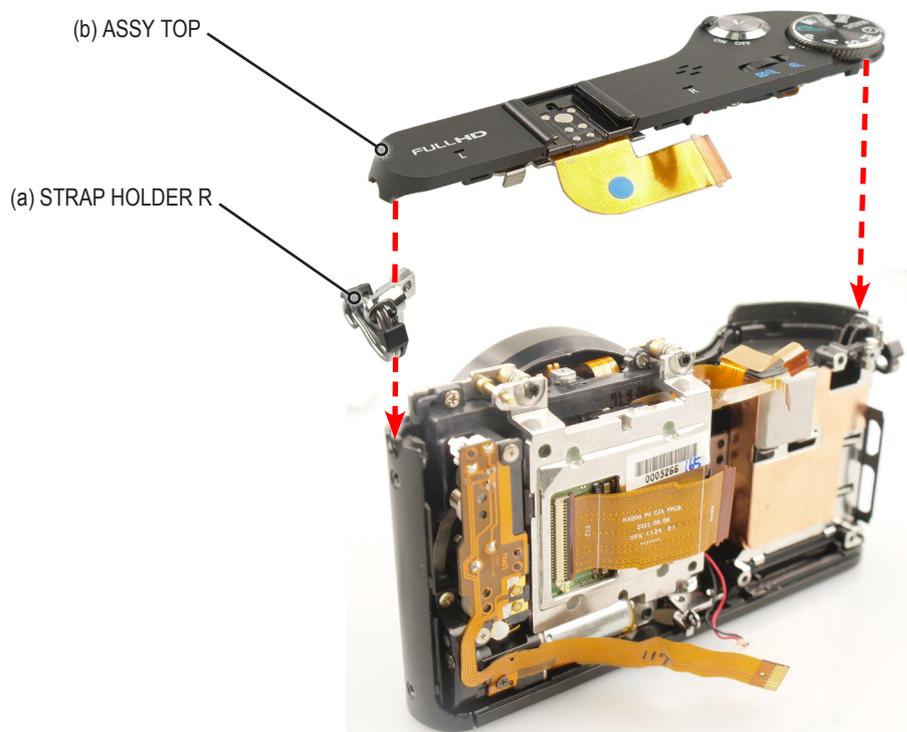
5. Tightening the screw and then installing the PLATE-SPRING SHOE.

Tighten the screw as illustrated in "Fig. A" below and then install the PLATE-SPRING SHOE.



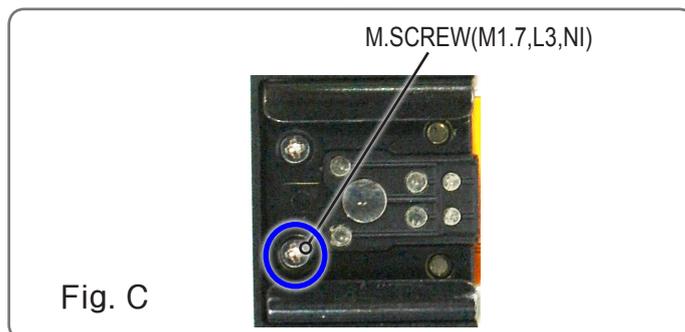
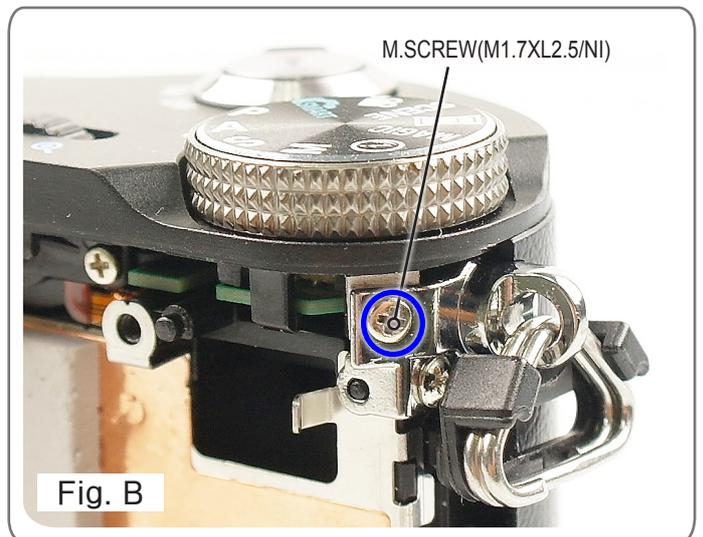
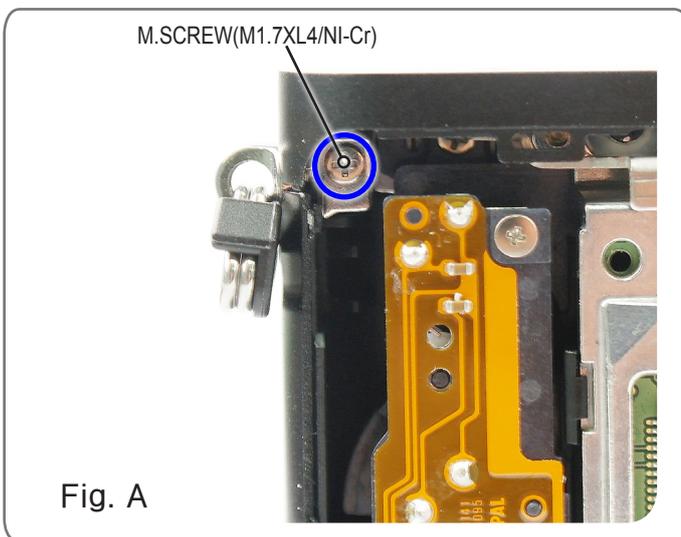
6. Installing the STRAP HOLDER R and ASSY TOP.

- (a) Install the STRAP HOLDER R.
- (b) Install the ASSY TOP.



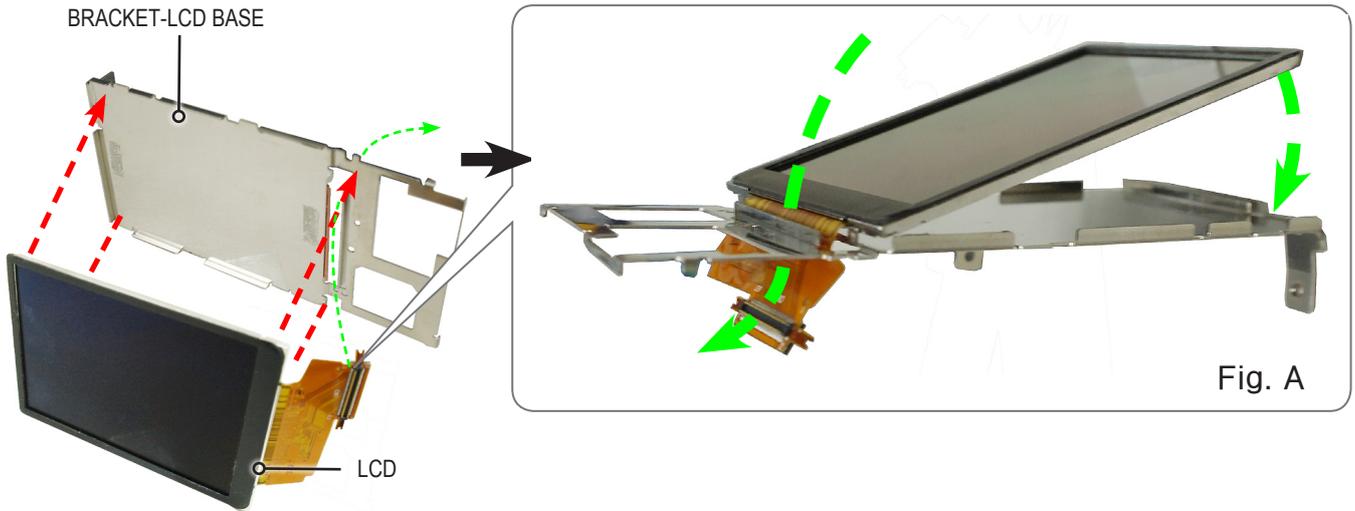
7. Tightening the screws.

Tighten the 3 screws as illustrated in "Fig. A", "Fig.B", "Fig.C".



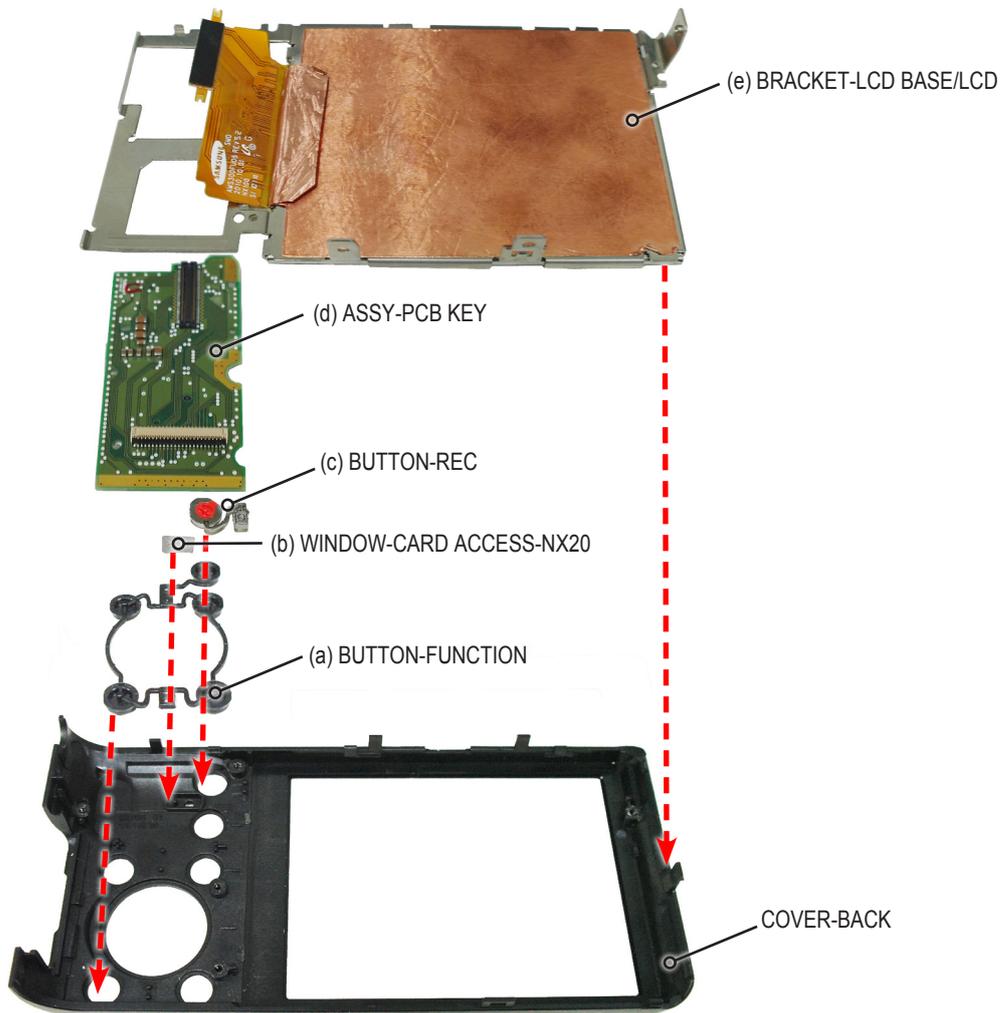
8. Installing the LCD and BRACKET-LCD BASE.

Insert the LCD FPCB through the groove of the BRACKET-LCD BASE in the direction of the arrow as illustrated in "Fig. A". Then, install the LCD.



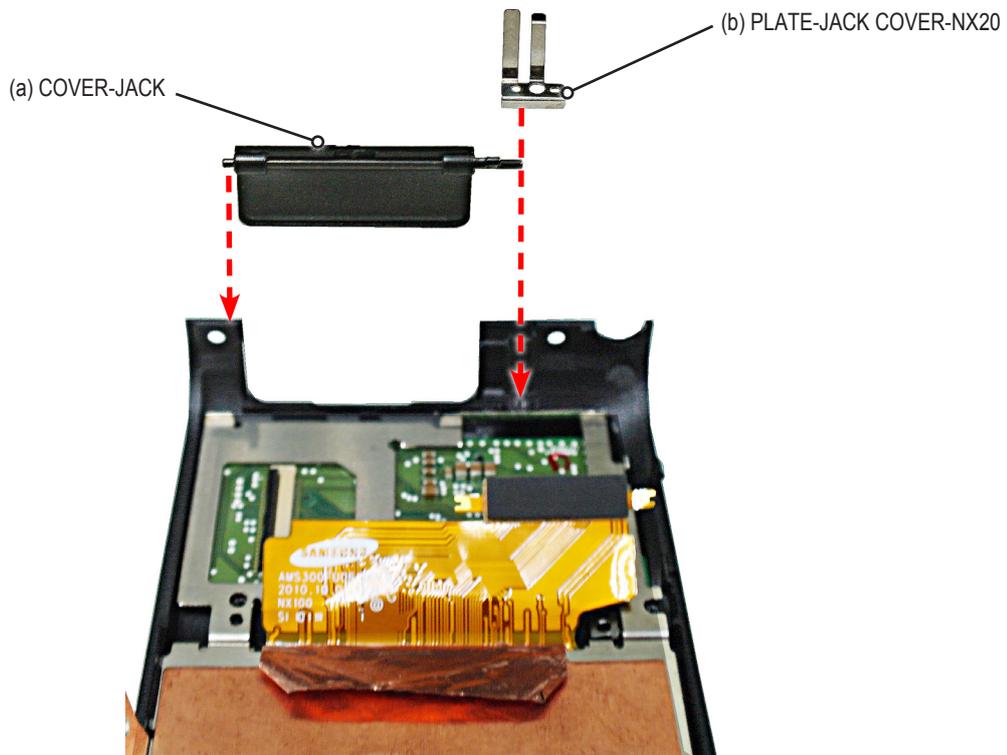
9. Installing the ASSY BACK COVER.

- (a) Install the BUTTON-FUNCTION.
- (b) Install the WINDOW-CARD ACCESS-NX20.
- (c) Install the BUTTON-REC.
- (d) Install the ASSY-PCB KEY.
- (e) Install the BRACKET-LCD BASE/LCD.

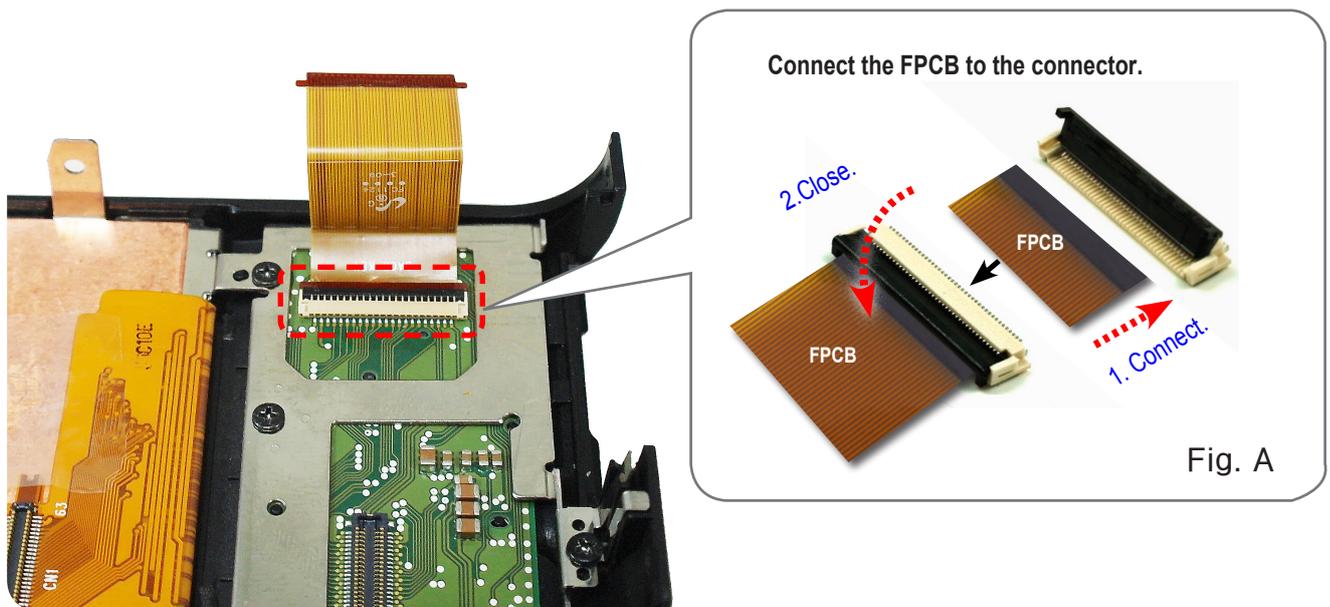


10. Installing the COVER-JACK and PLATE-JACK COVER-NX20.

- (a) Install the COVER-JACK.
- (b) Install the PLATE-JACK COVER-NX20.

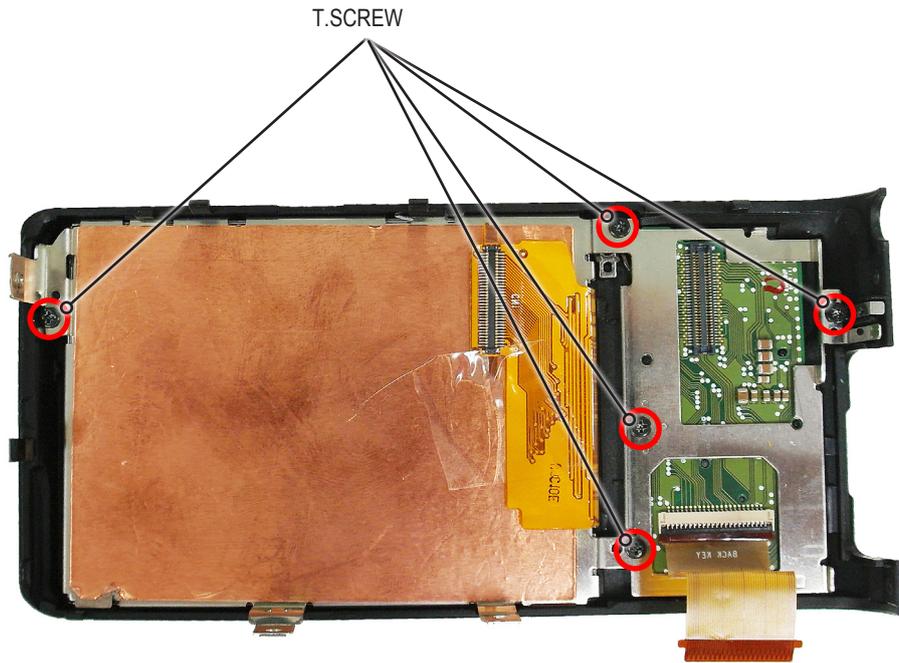


- (c) Connect the FPCB to the connector as illustrated in "Fig. A".



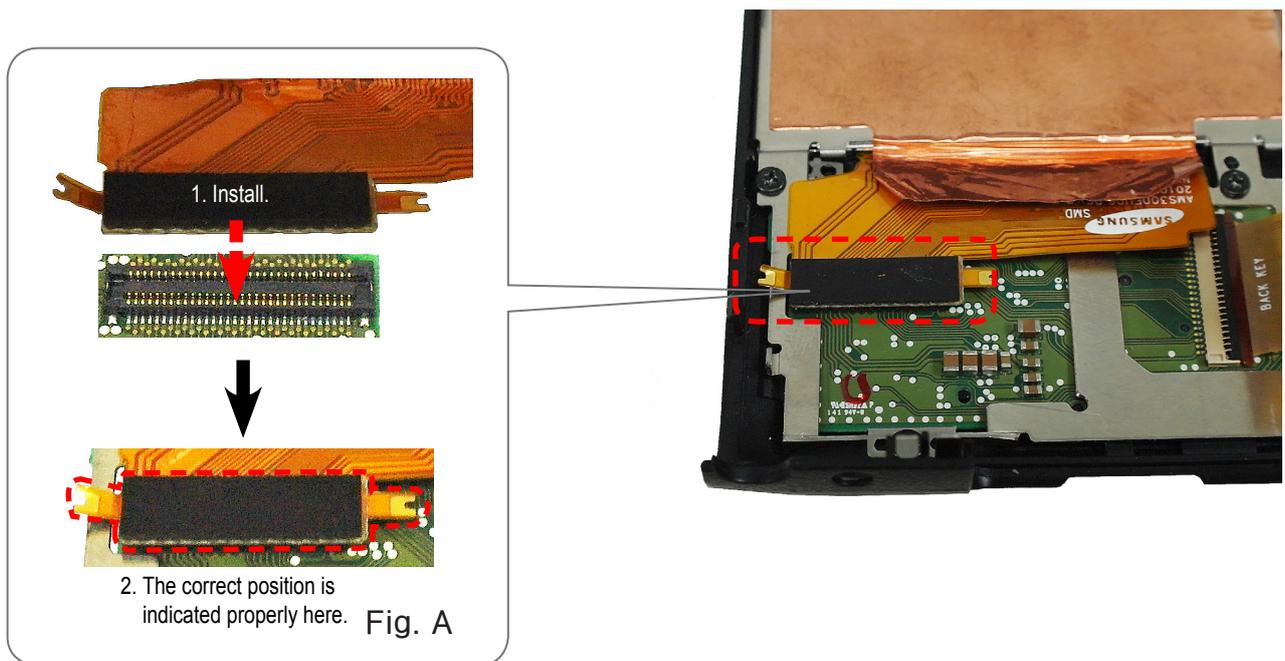
11. Tightening the screws.

Tighten the 5 screws.



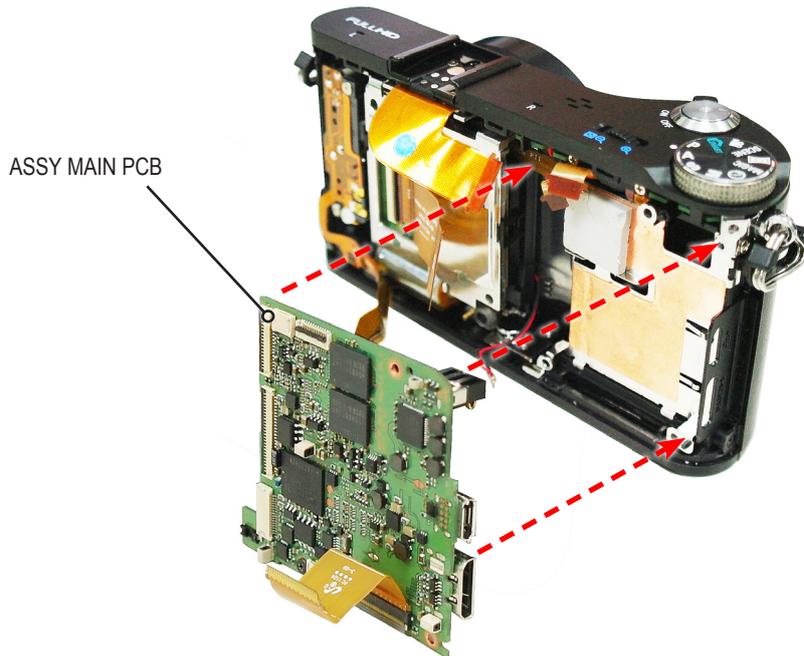
12. Installing the LCD connector.

Install the LCD connector as illustrated in "Fig. A".



13. Installing the ASSY MAIN PCB.

Install the ASSY MAIN PCB.

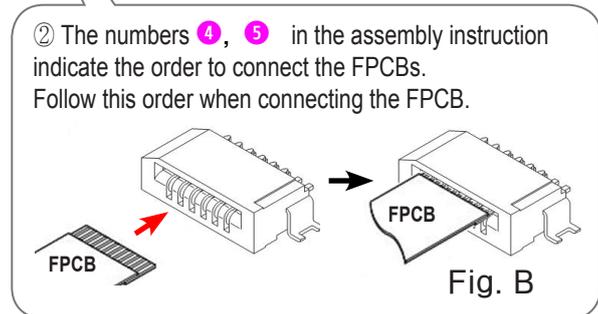
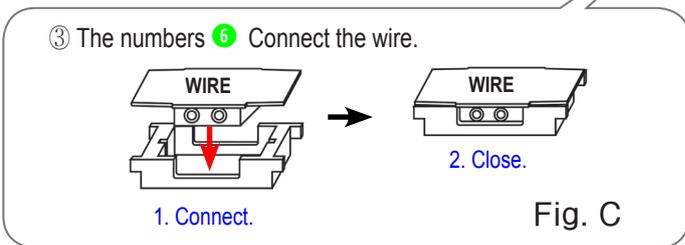
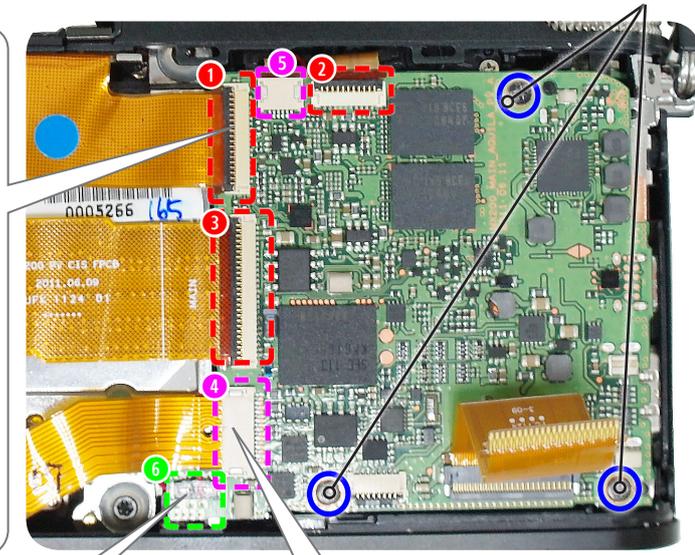
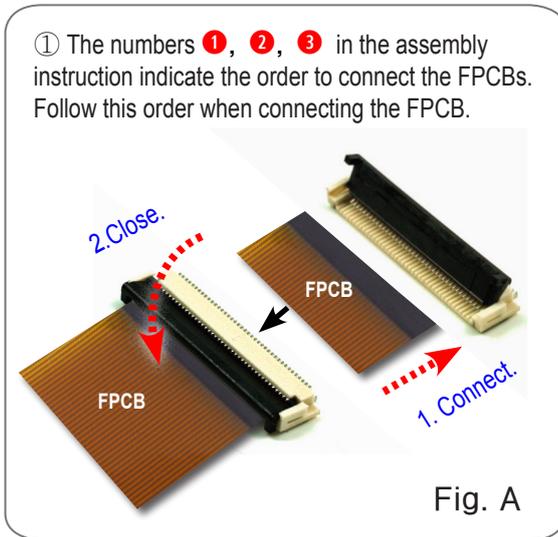


14. Tightening the screws and connecting the FPCB.

- (a) Tightening the 3 screws.
- (b) Refer to "Fig. A", "Fig. B" and "Fig. C" below. Connect the 5 FPCBs and wire.

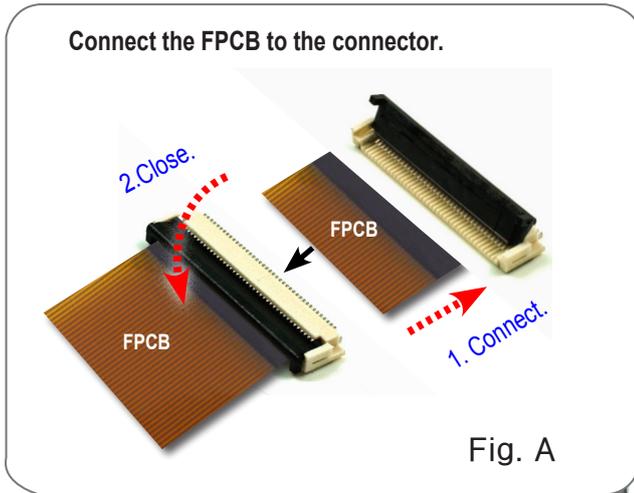
CAUTION
 Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.

T.SCREW(M1.7XL4/NI)



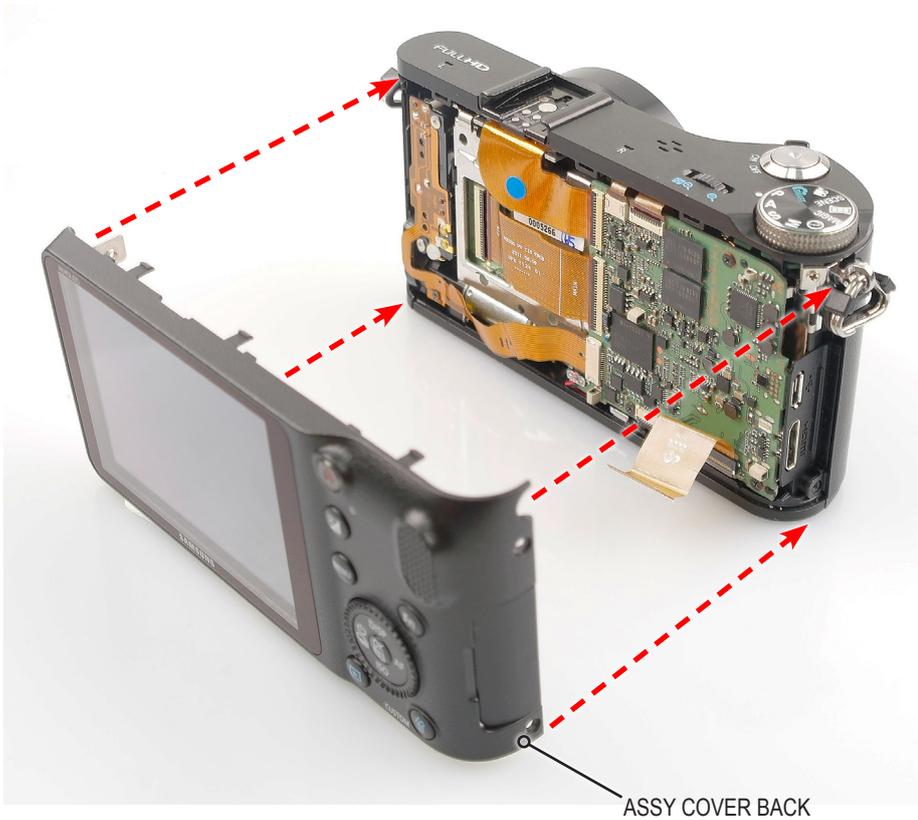
15. Connecting the LCD FPCB.

Connect the FPCB to the connector as illustrated in "Fig. A".



16. Installing the ASSY BACK COVER.

Install the ASSY BACK COVER.



17. Tightening the screws.

(a) Tighten the 2 screws on the left side.



(b) Tighten the 2 screws on the right side and 3 screws on the bottom side of the camera body.

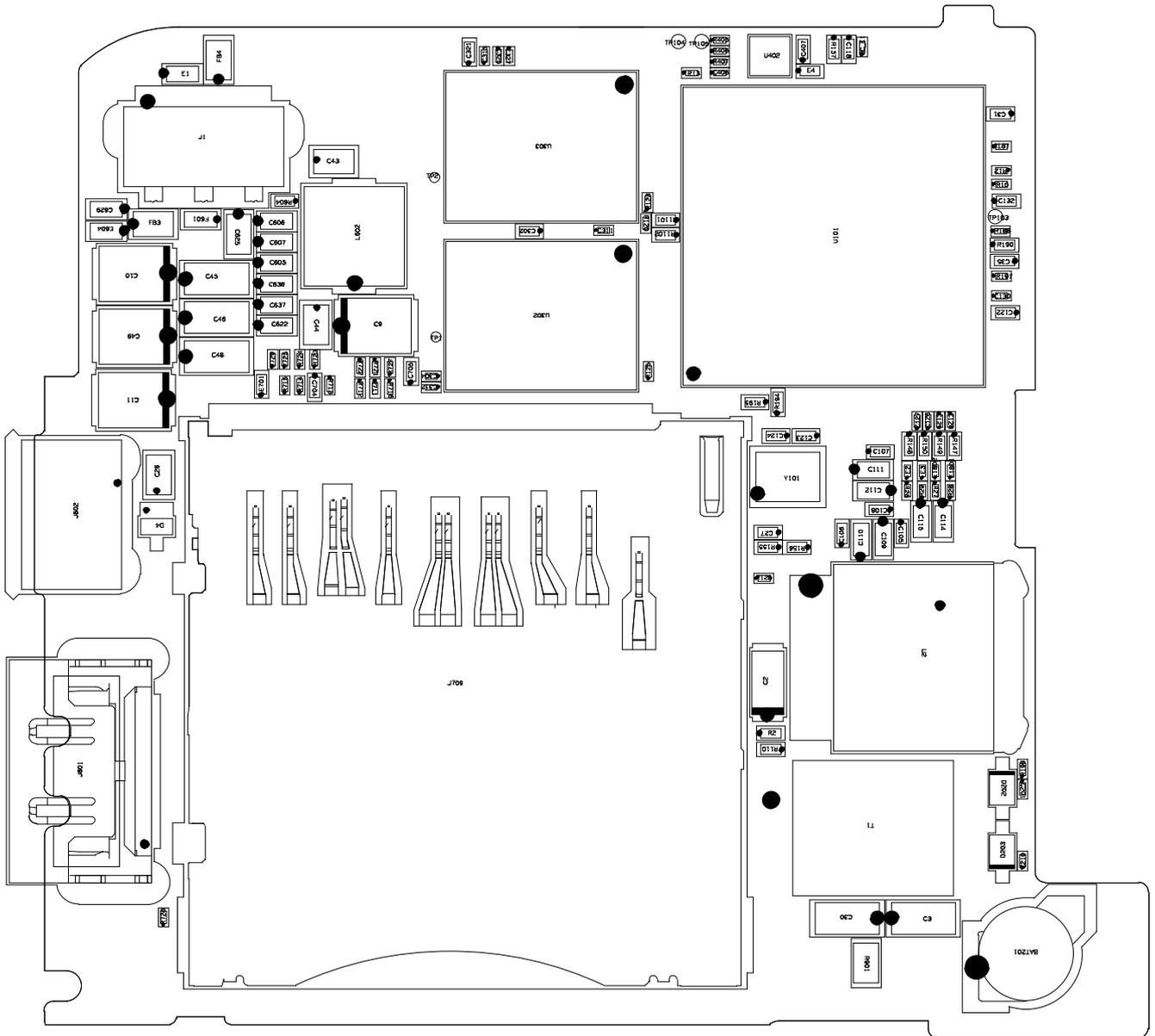


(c) Install the COVER-HOT SHOE.



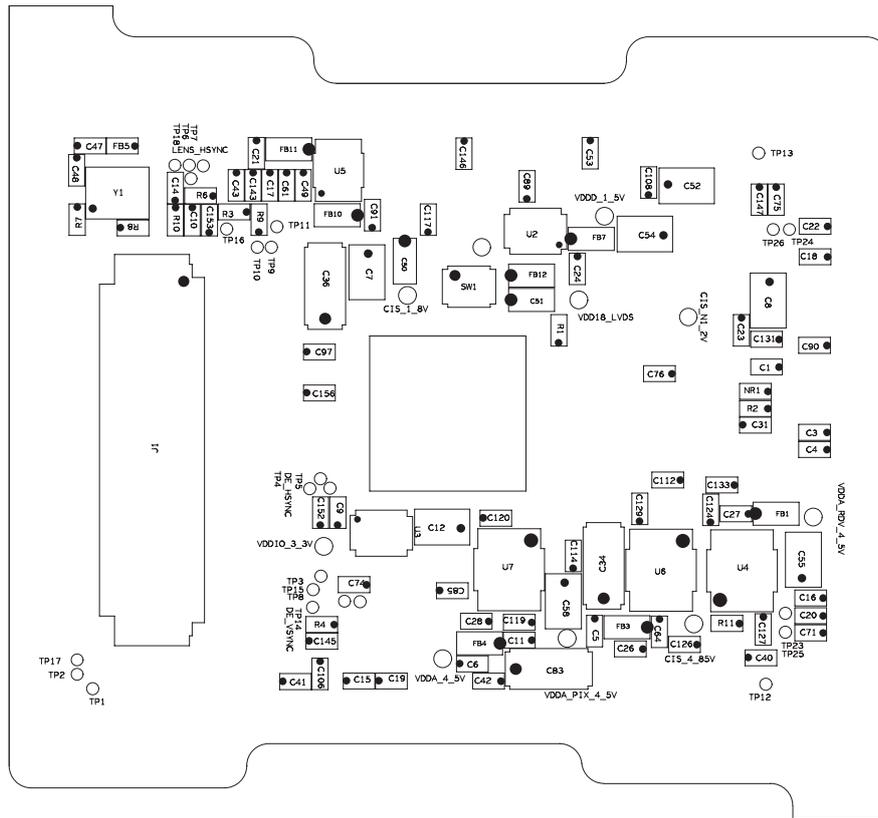
4-2 Main PCB(Bottom)

BOTTOM



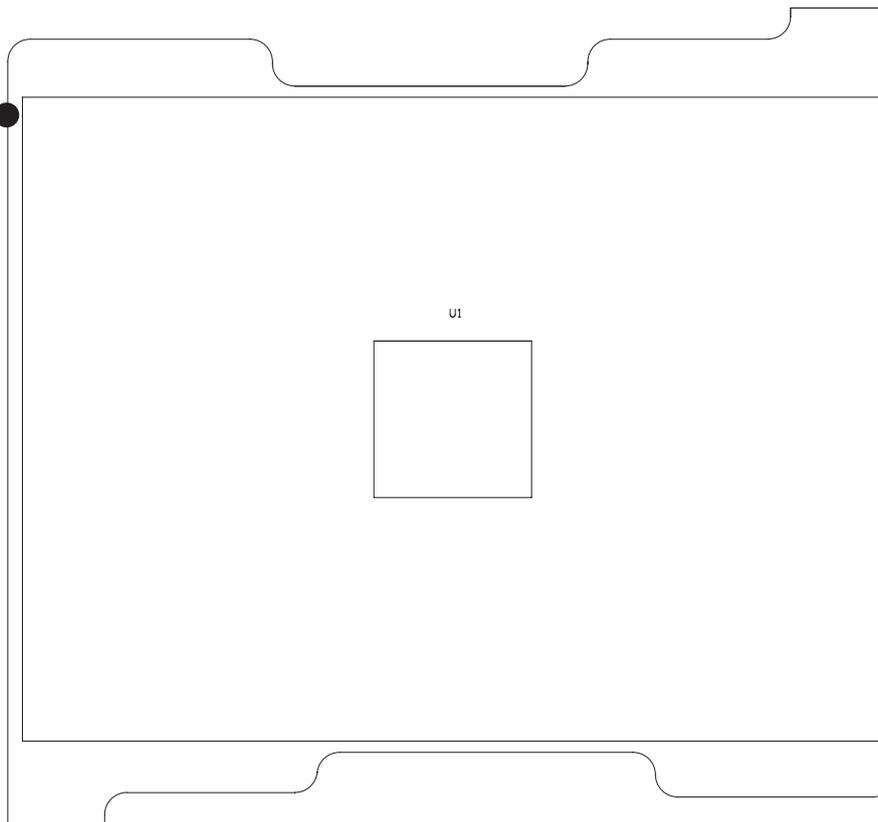
4-3 CIS PCB(Top)

TOP



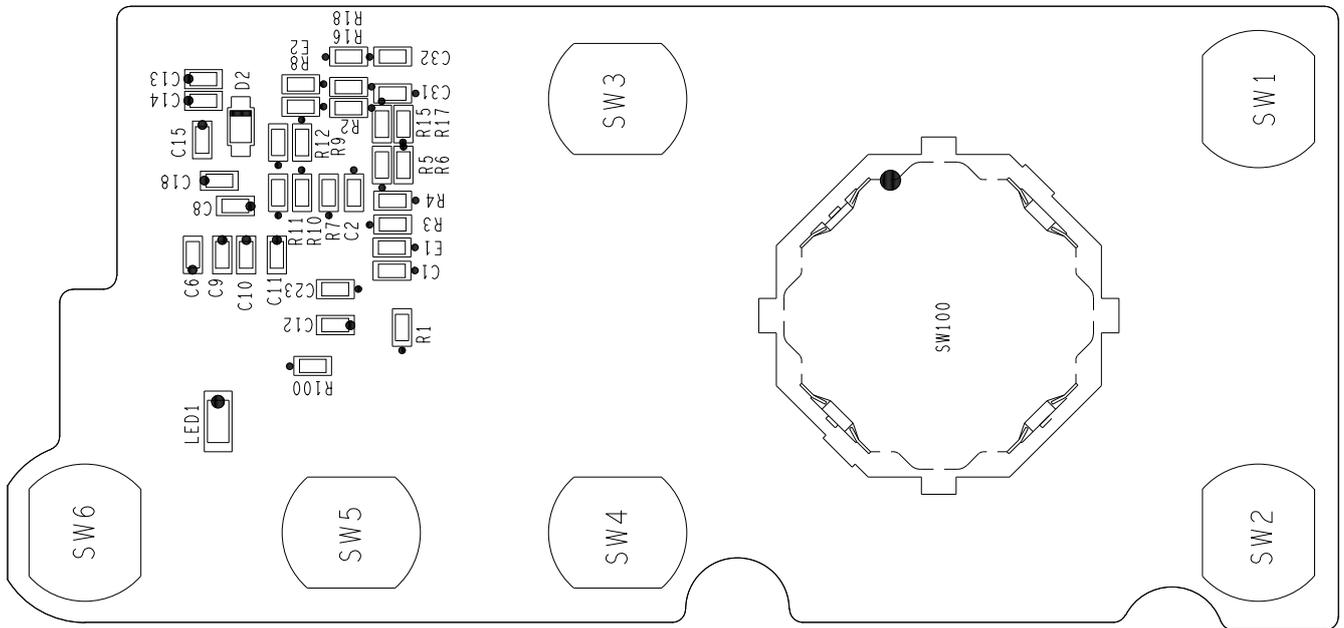
4-4 CIS PCB(Bottom)

BOTTOM



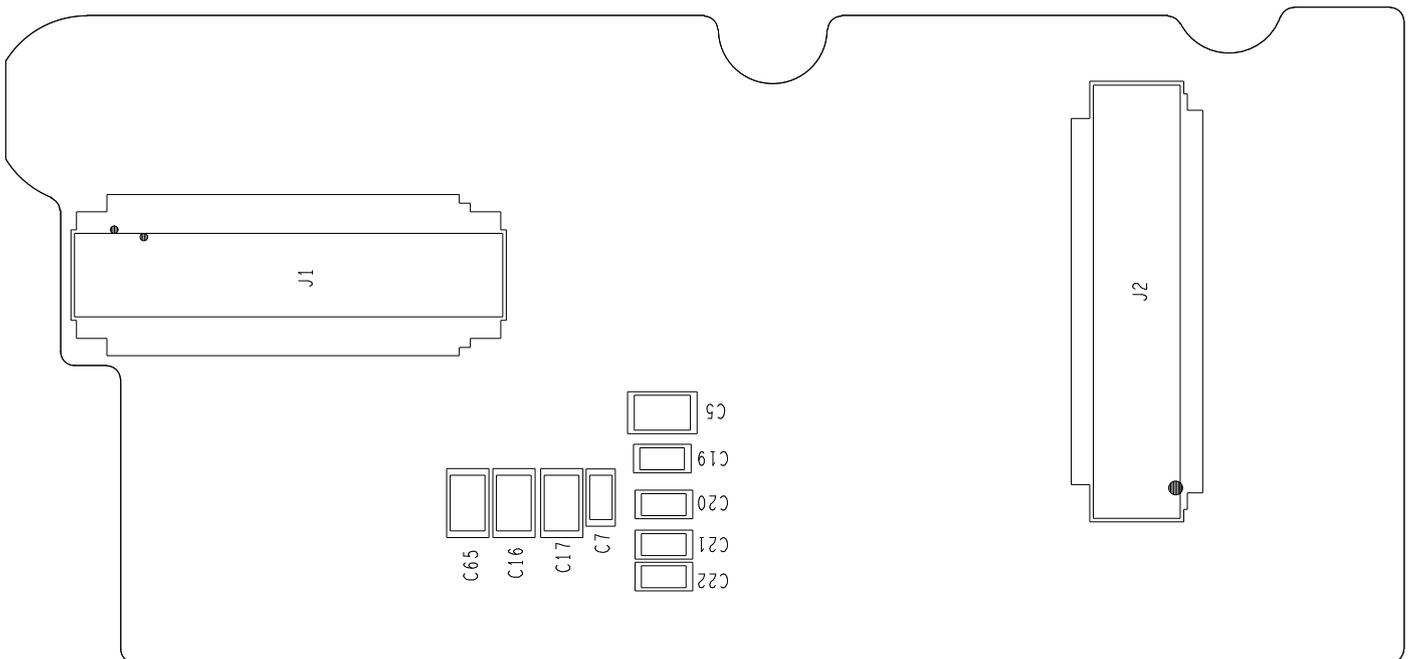
4-5 Back PCB(Top)

TOP



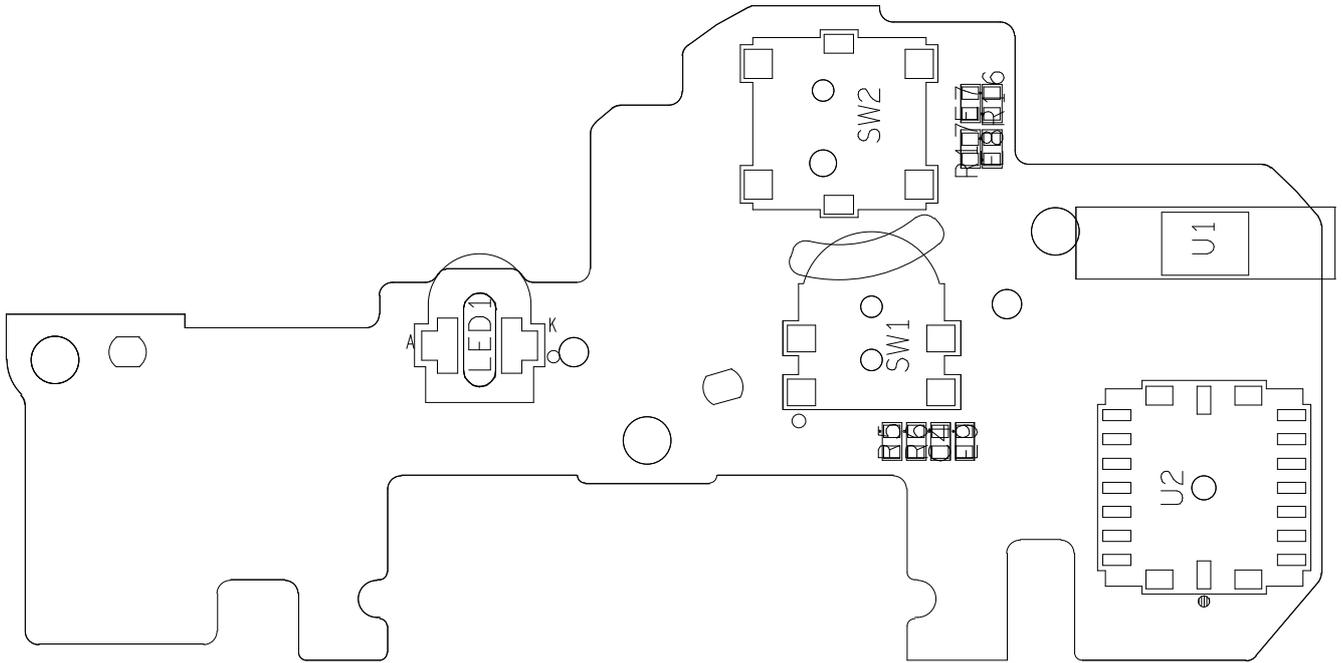
4-6 Back PCB(Bottom)

BOTTOM



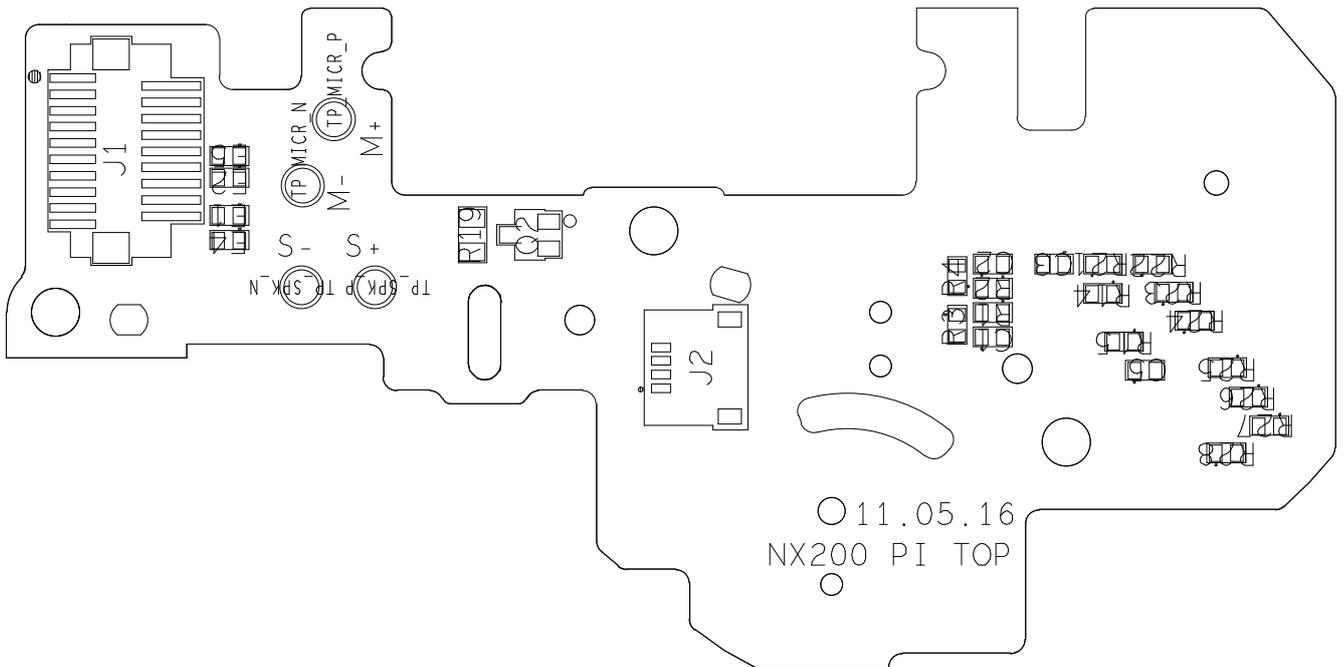
4-7 Top PCB(Top)

TOP



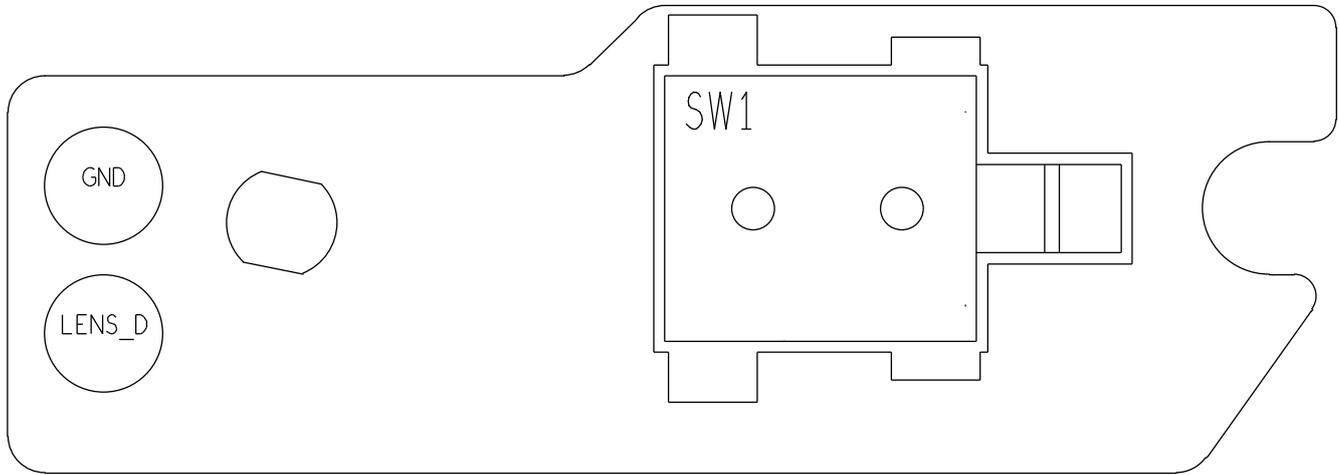
4-8 Top PCB(Bottom)

BOTTOM



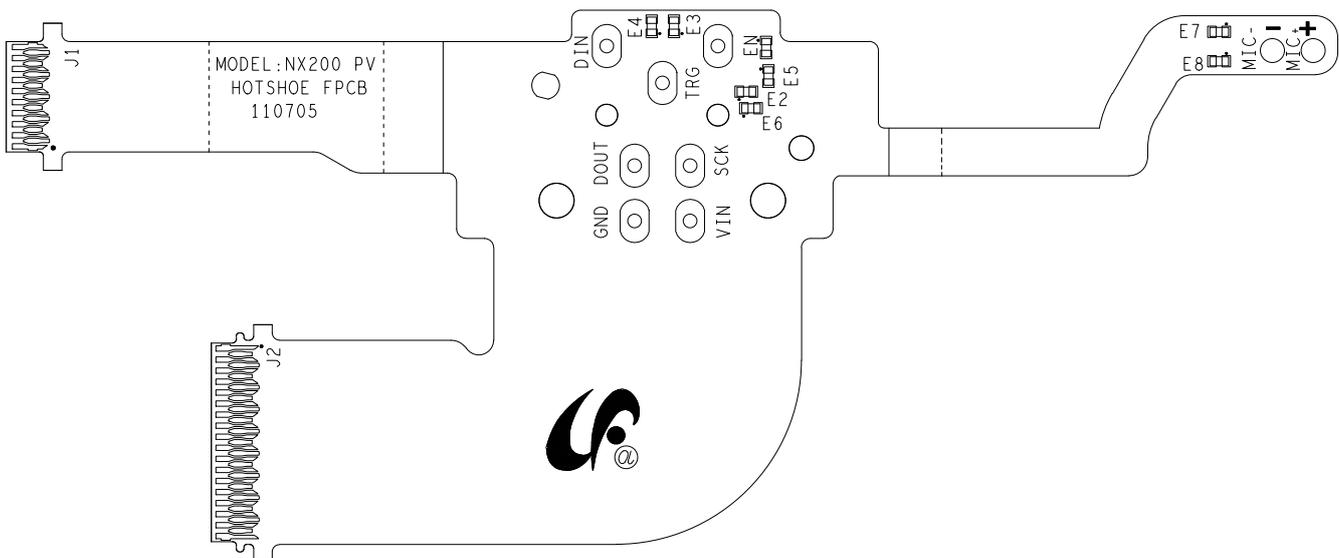
4-9 Lens DET PCB

TOP

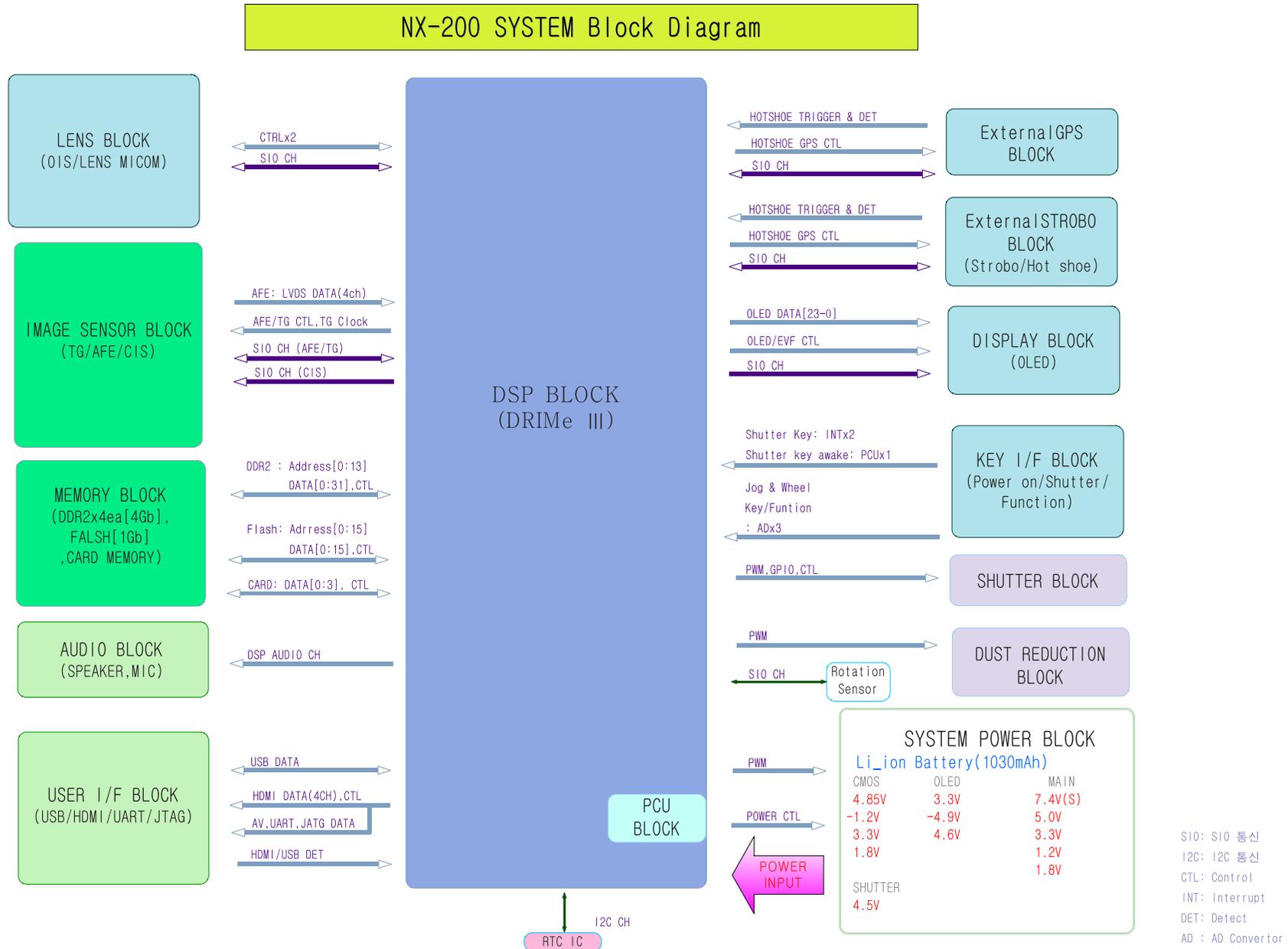


4-10 Hot shoe PCB

TOP



5. Block diagram



6. Firmware update

6-1 Product reset



▪ This describes how to reset the camera to factory default setting.

1. First turn on the power of the camera.



Fig. 6-1

2. Select the "Smart Auto mode"



Fig. 6-2

3. Press these buttons in sequence :

- ① UP
- ② OK
- ③ DOWN
- ④ OK
- ⑤ RIGHT
- ⑥ EV+OK (Press OK button while pressing EV button.)



Fig. 6-3

4. Select the mode "2. SYSTEM PARAMETER "and press the OK button.



Fig. 6-4

5. Select the mode "(1) FACTORY RESET "and press the OK button.



Fig. 6-5

6. Power off the camera.

7. Turn the power of the camera on again to check whether it has been reset.

6-2 F/W Upgrade by using user menu



▪ Describes how to upgrade the firmware of the camera body.

1. Insert the SD card which has the firmware file into the camera.

- F / W file name : **nx200.bin, nx200.Rom**

2. Use AC adaptor or the fully recharged battery for power supply.

Upgrade can only be made when the battery level is full(3 bars).

3. First turn on the power of the camera.



Fig. 6-6

4. Press the Menu button.



Fig. 6-7

5. Use the arrow keys to move tab "Settings 3" and select the "Firmware Update" item. (Press the OK button)



Fig. 6-8

Firmware update

6. Select the mode "Body Firmware" and press the OK button.



Fig 6-9

7. Select the mode "Yes" and press the OK button.



Fig 6-10

8. Then the FULL Firmware upgrade will start. (Green LED will flash)

9. When the FULL Firmware upgrade is complete, the camera will automatically be turned off.



Fig 6-11

6-3 Upgrade procedure by using C/S menu



▪ Describes how to upgrade the Body firmware.

< Method of Body F/W Upgrade >

1. Insert the SD card which has the firmware file into the camera.

- F / W file name : **nx200.bin**, **nx200.Rom**

2. Use AC adaptor or the fully recharged battery for power supply.

Upgrade can only be made when the battery level is full(3 bars).

3. First turn on the power of the camera.



Fig. 6-12

4. Select the "Smart Auto mode".



Fig. 6-13

5. Press these buttons in sequence :

- ① UP
- ② OK
- ③ DOWN
- ④ OK
- ⑤ RIGHT
- ⑥ EV+OK (Press OK button while pressing EV button.)



Fig. 6-14

6. Select the mode "1. FW UPDATE" and press the OK button.



Fig. 6-15

7. Select the mode "(1) BODY FW UPDATE" and press the OK button.



Fig. 6-16

8. Press the OK button again.



Fig. 6-17

9. Then the FULL Firmware upgrade will start. (Green LED will flash)

10. When the FULL Firmware upgrade is complete, the camera will automatically be turned off.



Fig 6-18

7. Adjustment

7-1 Basic guide for adjustment



- After replacing an electronic part, you must make changes for each adjustment item in the **NX200**.
- The following table shows the necessary adjustment item for replacing each part.

1. After replacing an electronic part, you must make adjustments for each item by referring to the following table.

<Table. 7-1>

	MAIN PCB	LCD PCB	CIS ASSY	TOP PCB	LENS Detect PCB	CIS Extension	LENS IF FPC ASSY	SHUTTER ASSY
FIRMWARE UPGRADE	O	X	X	X	X	X	X	X
TILT ADJ	O	X	O	O	O	X	O	O
INPUT CIS DOT DATA	O	X	O	O	X	X	X	X
SHUTTER CLOSE TIME ADJ	O	X	O	O	O	X	O	O
BATTERY LEVEL ADJ	O	X	O	O	O	X	O	O
ISO SENSITIVITY ADJ	O	X	O	O	O	X	O	O
AWB	O	X	O	O	O	X	O	O
CCD DEFECT PIXEL ADJ	O	X	O	O	O	X	O	O
VFPN ADJ	O	X	O	O	O	X	O	O
SERIAL NUMBER WRITING ADJ	O	X	O	X	X	X	X	X

2. Needed tools for adjustment

- Flange back & Tilt Adjustment : Kyoritsu (RSM-5000)
- Shutter speed Adjustment : Kyoritsu (RFS-5910)
- ISO & AWB Adjustment : Light Source Box. (3100K±100, Lv. 12.0±0.2)

3. Adjustment program file

- To adjust the CIS Dot & Shutter Speed, you need to CIS DOT_SHUTTER SPEED.ZIP software file.
- First of all, please un-zip the S/W and install it as below.
- 1) Please un-zip the attached S/W file on the root of C:
 - 2) Please run & install the 'NXCISTEMP_NX200' file.
 - 3) Please run & install the '2005vcredist_x86.exe' file.
 - 4) Please run & install the 'libusb-win32-filter-bin-1.1.14.3.exe' file.
 - 5) Please run & install the 'iNX200 SHUTTER 2.5.ZIP' file.
 - 6) Please run & install the 'USBSet1.1.exe' file.
 - 7) Please adjustment then, run the 'NXShutterSpeed.exe' program.

4. Executable file name for adjustment process

- The folder name is assigned according to the process name.
(In case of the shutter adjustment, copy the two files named "info.tgw" and "specified file name.adj" into the SD card.)
- Each folder contains the necessary executable file and it is named according to the each adjustment. Be sure to copy the two files named "info.tg" and "specified file name.adj" into the SD card accordingly.
 - 1 TGW is a file extension associated with 'Terragen World' by Planetside Software.
Terragen is a work-in-progress scenery generator for Windows and the Mac OS.
 - 2 TG is a file extension associated with NRC Inspection Manual Technical Guidance.

ISO ISO SENSITIVITY ADJ	nx200iso.adj
AWB ADJ	nx200awb.adj
CCD DEFECT PIXEL ADJ	nx200vfpn.ad
VFPN ADJ	nx200vfpn.adj
INPUT CIS DOT & Shutter Speed ADJ	info.tgw
SERIAL NUMBER WRITING ADJ	nx200serial.adj

5. Order to adjustment

- Follow these steps to begin the adjustment process.

1 Input the CIS DOT Data → 2 SHUTTER Adjustment → 4 ISO sensitivity Adjustment → 5 AWB Adjustment → 6 VFPN & DEFECT

7-2 Tester Mode

1. Turn on the camera and select the "SMART AUTO" mode by turning the button.

The numbers (1) ~ (6) indicate the order to press the button and follow these orders.

- TEST MODE : SMART MODE → ① UP → ② OK → ③ DOWN → ④ OK → ⑤ RIGHT → ⑥ EV+OK button at the same time.



Fig. 7-1

2. The contents of Tester Mode.

<Table. 7-2>

Menu	Detail menu	Function
1. FW UPDATE	(1) BODY FW UPDATE (2) LENS FW UPDATE (3) EXT. FLASH FW UPDATE (4) DSP FW UPDATE (5) RESET USERDATA	Do the upgrade firmware for each section. It's only CS firmware not customer's one. Update display screen.
2. SYSTEM PARAMETER	(1) FACTORY RESET (2) POWER OFF TEMP. (3) DISABLE CHINESE LANG (4) DISABLE DISPLAY SEVE (5) DISABLE POWER SEVE (6) DISABLE MOVIE REC LIMIT (7) NO LENS RELEASE ENABLE (8) DISABLE INT ERR POWER OFF	Factory reset mode setting.
3. ADJUSTMENT CONTROL	(1) AUTO START DISABLE (2) PTP AUTOMATION ENABLE (3) LINE PROCESS STEP (4) LINE PROCESS MARK (5) ADJUST DATA TO LOG FILE (6) ADJUST RESULT	(1) Prevent auto start mode when insert the adjustment file. (2) USB terminal PTP as recognized. (3) Setting of each adjustment procedure. (4) Confirm the former adjustment whether it is finish or not. (5) Save the result of adjustment. (6) Confirm the result of adjustment.
4. LENS CONTROL	(1) OIS ADJUSTMENT (2) ZOOM WIDE SET (3) ZOOM TELE SET (4) MR SENSOR ADJUST (5) LENS MOUNT INFO (6) LENS COMM SEVE	(1) OIS lens adjustment. (2) Fix the wide value of zoom lens. (3) Fix the tele value of zoom lens.

3. LENS CONTROL

(1) OIS ADJUSTMENT

- When you adjust the OIS function which have a OIS lens, you can adjust it.
- How to adjust

After combine the lens, enter the tester mode. Select the LENS CONTROL → OIS ADJUSTMENT → Press the OK button.

* **Caution** : Do not shake the camera when adjust it.

(2) ZOOM WIDE SET, ZOOM TELE SET

- When you adjust the position of zoom position, you can use it.
(After changing the PCB inside the lens or disassemble the mount, you must adjust it.)
- How to adjust

After combine the lens, enter the tester mode. Select the LENS CONTROL → ZOOM WIDE SET
→ Locate the zoom position to the Wide. → Select OK (In case of Tele, vise versa)

* **Caution** : Do not shake the camera when adjust it.

7-3 CIS TILT Adjustment



- If you change or disassemble the CMOS ASS'Y, you must do the CMOS Tilt adjustment.

<How to Adjust>

1. Prepare CIS Tilt adjustment tools. (Kyoritsu (RSM-5000))
2. Before Adjustment started, must be disassembled Top cover assy.
3. After pressing the Start button, Tilt adjustment procedure finished automatically.
4. After completing the adjustment, please bonding 3 screws and fix it as below.

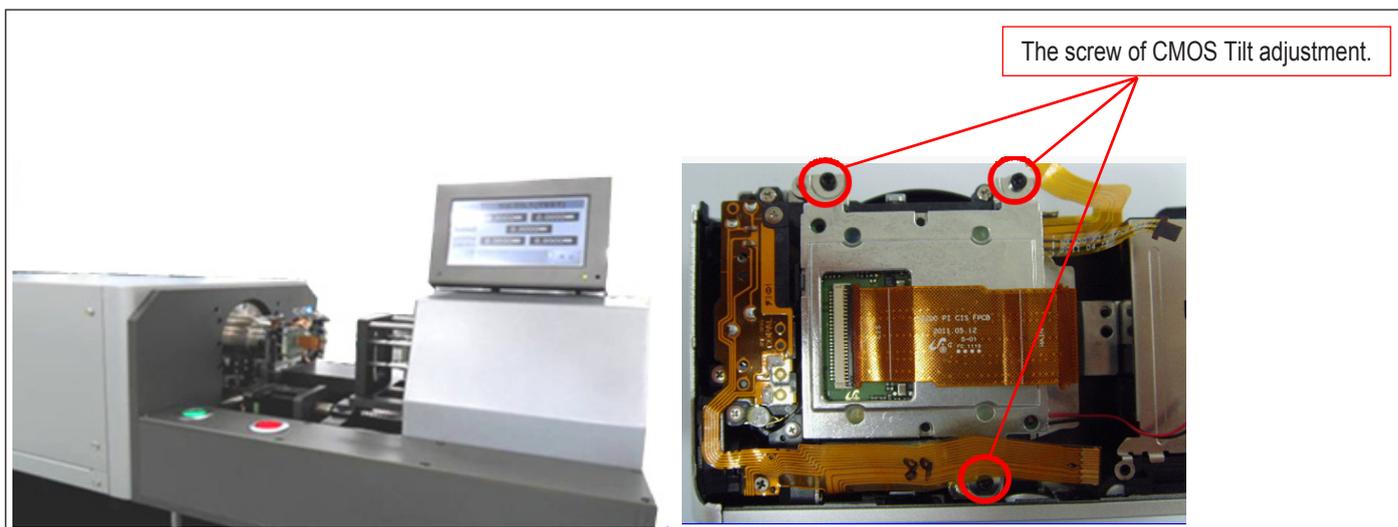


Fig. 7-2

<Adjustment Result>

FLANGE BACK Value of Mount & CMOS ASSY: 25.55mm(-35mm/+15mm)
Value of CMOS sensor area: -30um/+30um

* **Caution** : Adjusted 3 screw points of NX10/5/11 & NX100 & NX200 are different each other.

7-4 Input CIS DOT & Adjust the Shutter Speed



- It has stored DOT data in the EEPROM after replacing the main PCB or CMOS.
- It is required to adjust the Shutter Speed for incorporating an EEPROM storing the default adjustment values after replacing Shutter ASSY or Main PCB.

<How to Adjust>

1. Download the “CIS DOT_SHUTTER SPEED.ZIP” file to a directory on your PC and extract it..

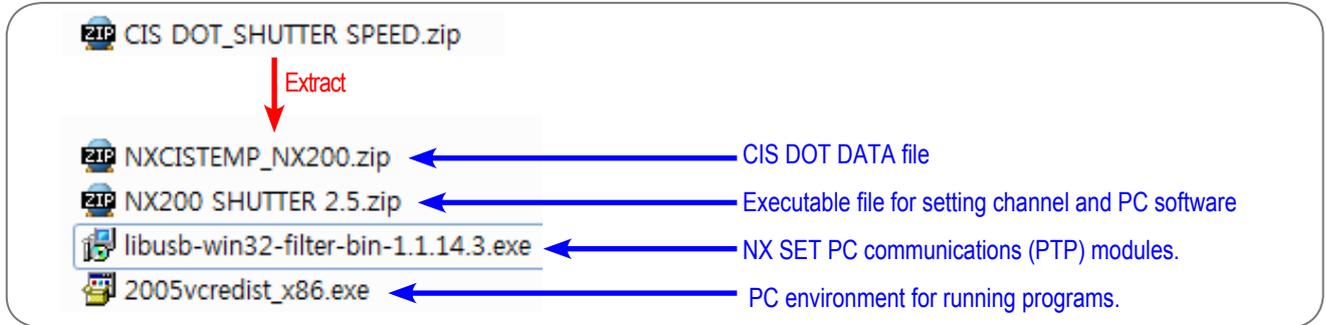


Fig. 7-3

1. Navigate to the directory you extracted to and double click the “2005vcredist_x86.exe”.
(A window will appear. After finishing installation the window will close.)

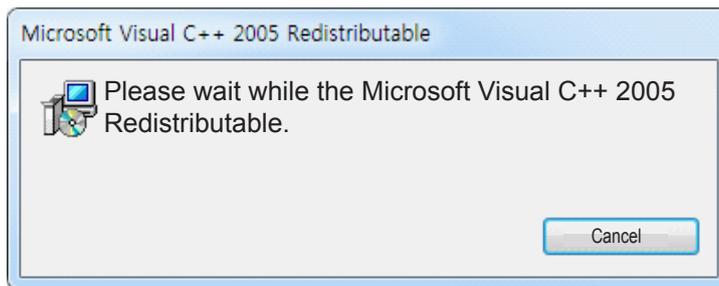


Fig. 7-4

2. Extract the “NXCISTEMP_NX200.zip” file to a directory such as C:\NXCISTEMP_NX200.

2. Double click the “libusb-win32-filter-bin-1.1.14.3.exe”.

(The installation will start. Please refer to the page 7-8 for installing module between the NX and PTP. Follow the installation screen directions.)

3. Download the “NX200 SHUTTER 2.5.ZIP” file to a directory on your PC and extract it.

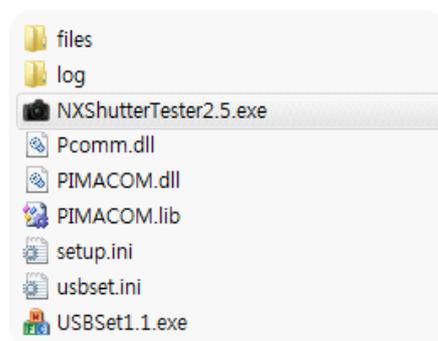


Fig. 7-5

4. Double click the "USBSet1.1.exe".

- 1 Make sure the "info.tgw" file on your SD card. A window will appear. (Connect the camera to the USB port on your computer.)

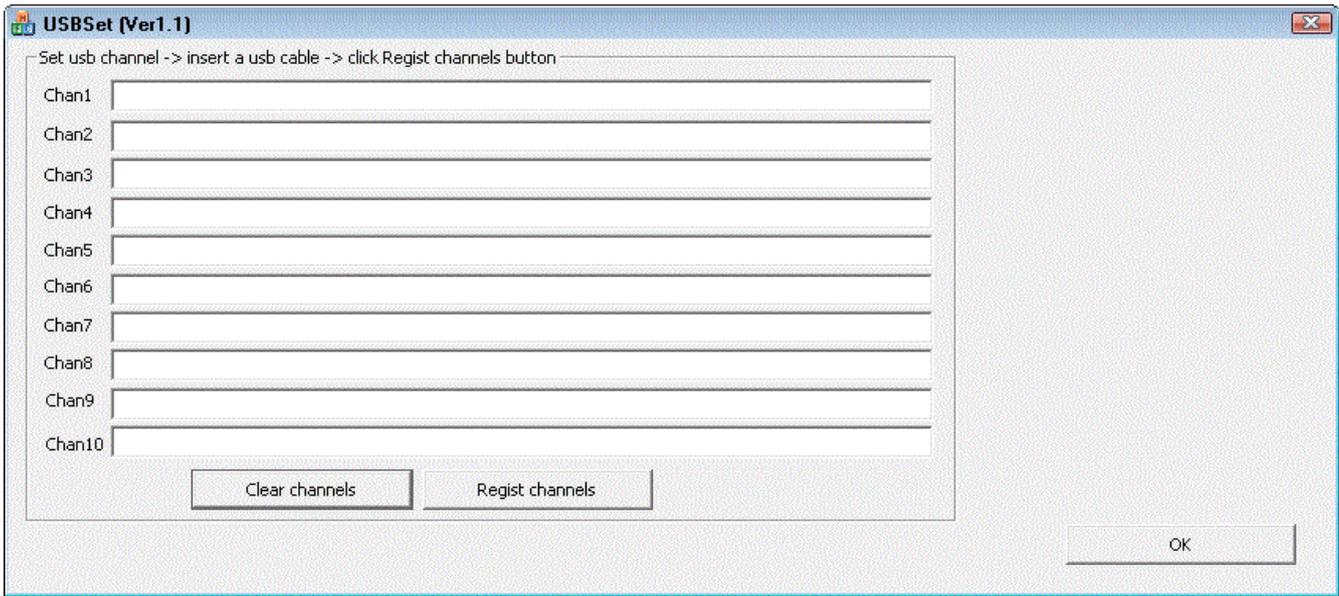


Fig. 7-6

- 2 When a window appears, turn on the computer and check the USB path directory. Click the "Register channels" button and then click the "OK" button.

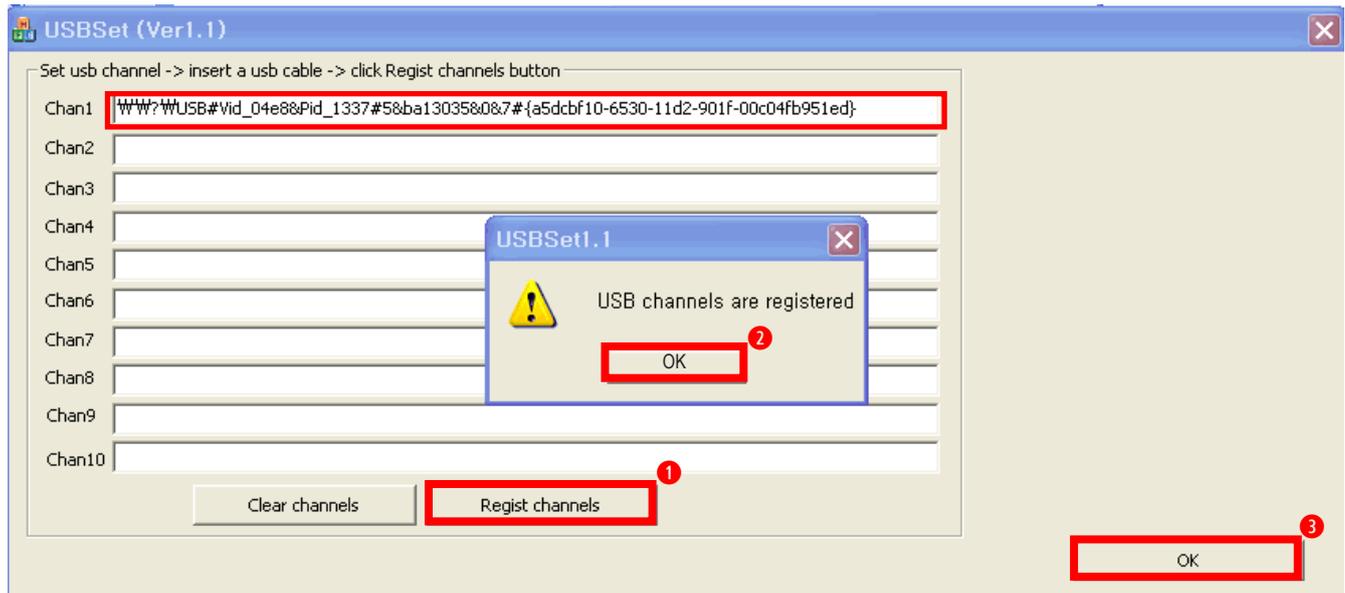
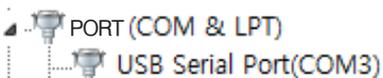


Fig. 7-7

- 3 Turn off the camera and then end the USBSet1.1.exe programs.

5. Double click the "NXShutterTester.exe".

- 1 Connect the RFS-500 measuring equipment to the USB port on your computer. Turn on the RFS-500. Right click on "My Computer" and click the "Manage", and then click the "Device Manager". The Device Manager opens as shown in Figure below. Check the connection status of the "COM" to the "Device Manager".



- 2 Error message may appear when it fails to load a script file.
Click the "OK" button.

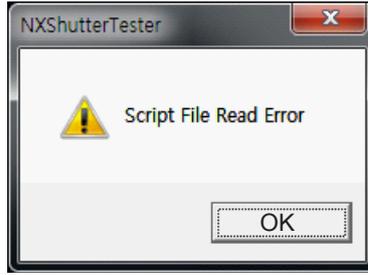


Fig. 7-8

- 3 It will attempt to download the "CIS DOT" file via FTP server.
Press the "OK" button to continue.



Fig. 7-9

- 4 When the "FPS" button is disabled, its button color is not blue. It indicates there is an error for in setting up the COM port.
Follow these steps to reset up the COM port. Select the "Option" tab and click the "SETTING" and then click the "COMPORT".
Set the new value for COM as illustrated below.
The "FPS" button becomes enabled, turning its button color is blue.

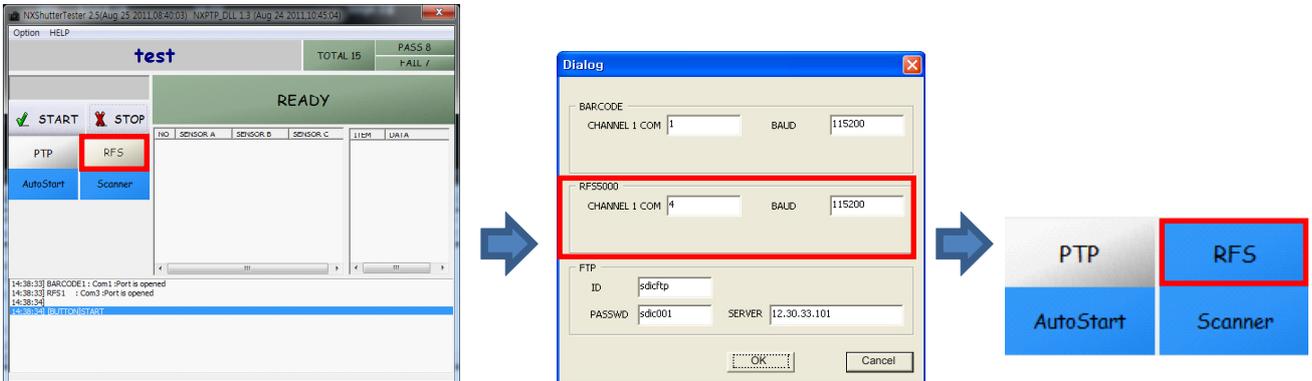


Fig. 7-10

- 5 Select the "Option" tab and click the "SCRIPT FILE OPEN". Then click the "Open" to select the "shutter.txt".
(Location: NX200 SHUTTER 2.5 \ Script \ shutter.txt)

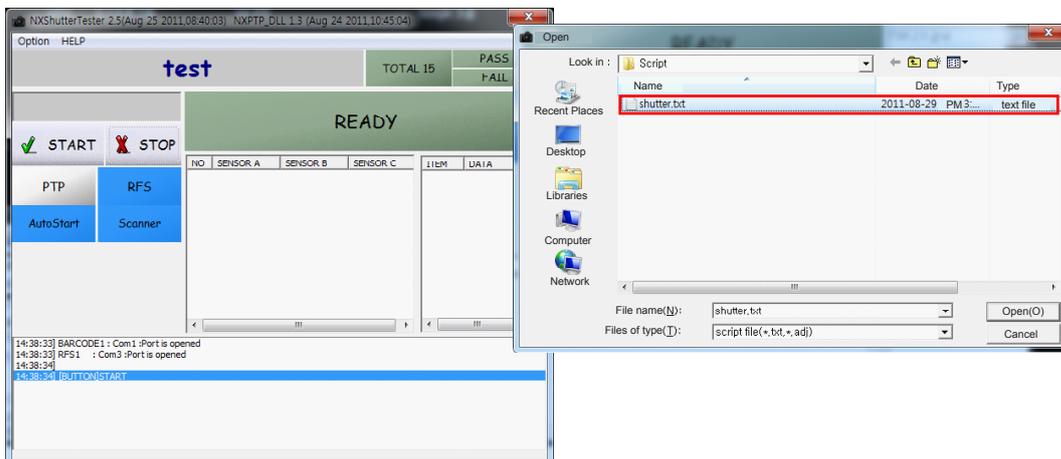
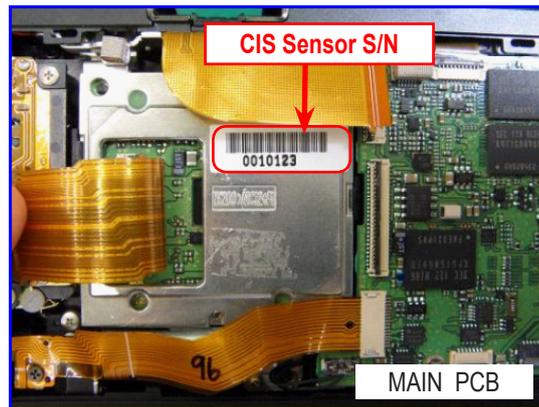
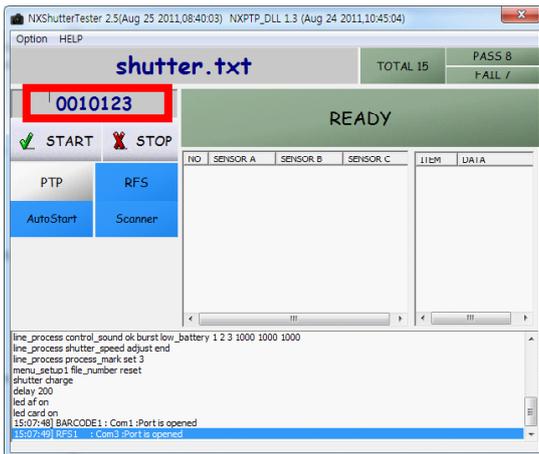


Fig. 7-11

Adjustment

- ⑥ Make sure there is the serial number file such as "0010123.sn" in the NXCISTEMP_NX200 folder.
 - Type the serial number on the tap above the "STARAT" button.



- When there is no proper serial number file in the NXCISTEMP_NX200 folder, the error message will appear.

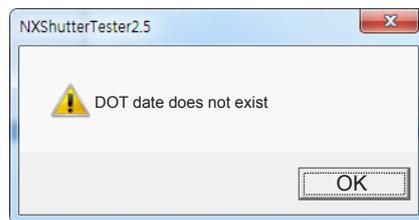


Fig. 7-12

- ⑦ It will automatically start the process when the "Auto Start" button color is blue, meaning the setting is activated. Press the "START" button when the "Auto Start" button color is gray, meaning the setting is inactivated. You may choose to activate (On)/inactivate (Off) this function by pressing "Auto Start" button.

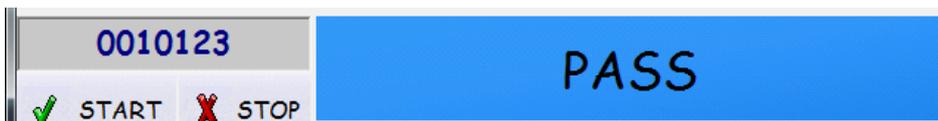


Fig. 7-13

- ⑧ Connect the camera to the USB port on your computer. Turn on the camera and press the "OK" button to begin the process.
 - During the PTP communication, the shutter speed value is set at a shutter speed of 1/2000 second and is to correspond with the measuring equipment.
 - The measuring equipment recognizes the shutter speed and PC read the shutter speed value. Finally the camera reads its value. (Measuring equipment -> PC -> Camera)
 - Camera picks the shutter speed at a shutter speed of 1/2000 second or less (0.488ms) and set it as an adjustment default value. The camera is shooting the shutter speed of 1/4000 second (0.269ms). The shutter speed value is set to correspond with the measuring equipment. The available shutter speed is set in the range between 1/2000 second (0.488ms) and 1/4000 second (0.269ms).
 - Once the adjustment process is complete, the value is stored in the NOR-Flash memory. The "PASS" message will be displayed.

⑨ Test Result

- When the adjustment process is successful, the "PASS" message will be displayed.



- When the process is not successful, the "FAIL" message will be displayed.

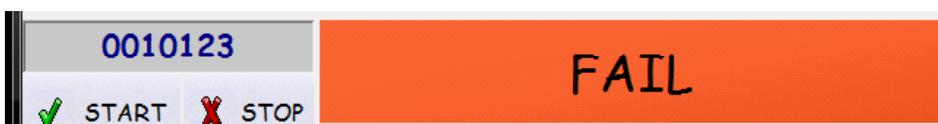


Fig. 7-14

- ⑩ Navigate to the directory you extracted to the NXCISTEMP_NX200.zip" file such as C:\ CIS DOT_SHUTTER SPEED\NX200\NX200 SHUTTER 2.5\files\Ch1. Check whether the CSV file is created at the destination directory or not.

<How to run "libusb-win32-filter-bin-1.1.14.3.exe">

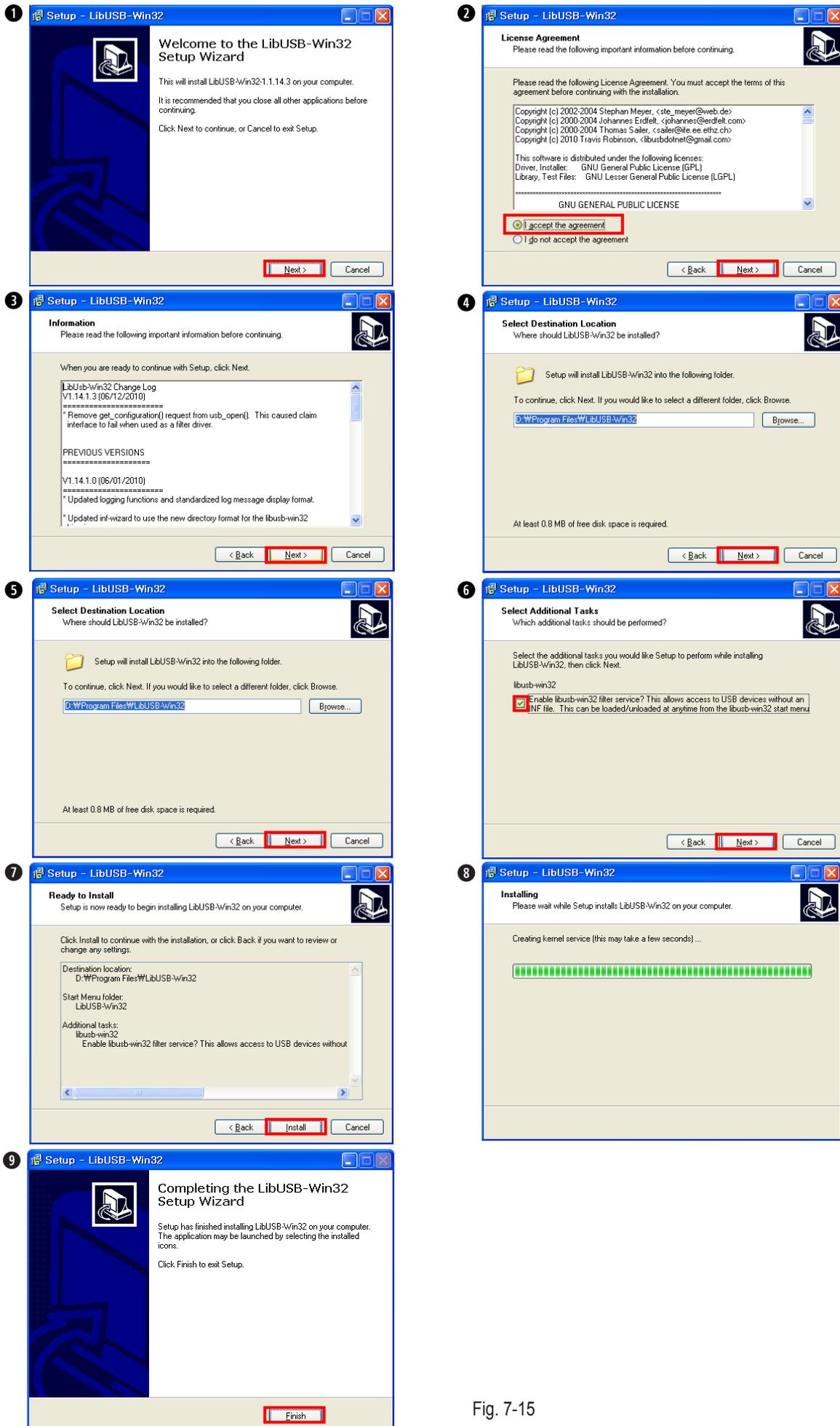


Fig. 7-15

7-5 ISO & AWB Low Adjustment



- Adjust the CMOS characteristics. (ISO sensitivity)

<How to adjust>

1. Prepare the Light Source Box.

- Color temperature: $3100\text{K} \pm 100$, Lv. 12.0 ± 0.2
- AWB(automatic white balance) color coordinate:
 - Lv: $653 \pm 50 \text{ cd/m}^2$
 - x : 0.4327 ± 0.002
 - y : 0.3998 ± 0.002

2. Insert the SD card to the camera which contained adjustment data.

- File name: ISO : nx200iso.adj + info.tg
AWB : nx200awb.adj + info.tg

3. After combine the master lens to the camera, attached to the Light Source Box.



Fig. 7-16

4. After turning on the camera, it will start automatically.

5. After completing the adjustment, camera turned off automatically.

<Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

7-6 VFPN, DEFECT PIXEL Adjustment



- Adjust the CMOS characteristics. (Noise of vertical line(VFPN), Dead Pixel)

<How to adjust>

1. Insert the SD card to the camera which contained adjustment data.
- File name: nx200.vfpn.adj + info.tg
2. Put the lens mount cap on the lens mount.
3. After turning on the camera, it will be start automatically.
4. After completing the adjustment, camera turned off automatically.

<Adjustment Result>

You can see the adjustment result by using Log File saved on the memory card. You can also confirm the ADJUSTMENT RESULT on the Tester mode.

7-7 To check the adjustment settings

<Camera Adjustment Procedures>>

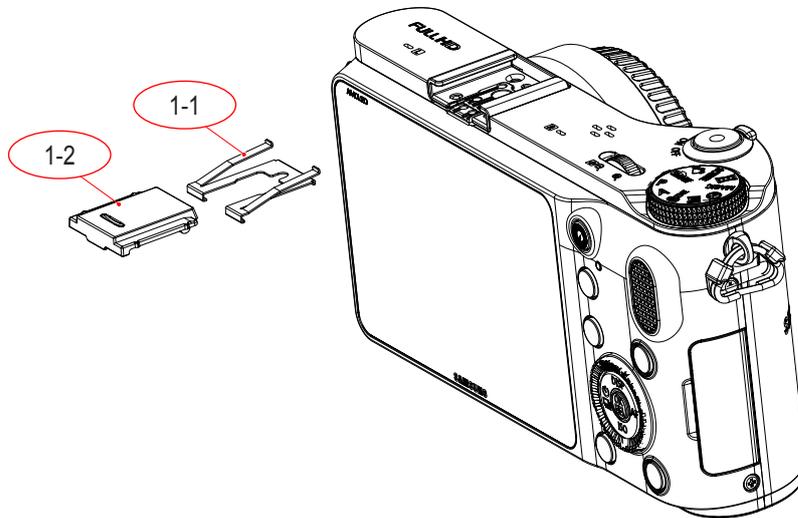
1. Insert the SD card into the camera.
- File name: nx200datacheck.adj + info.tg
2. Turn the power switch on to begin the adjustment process.
3. Once the adjustment is complete, the camera will be turned off automatically.
- When the error screen appears displaying the following message, repeat the adjustment process specified below accordingly.

```
Flash Check
[MEM_CHK]ADJUST_ISO_SENSITIVITY_PROCESS_MARK
170 <= 0 <= 170
NG!
```

Fig. 7-17

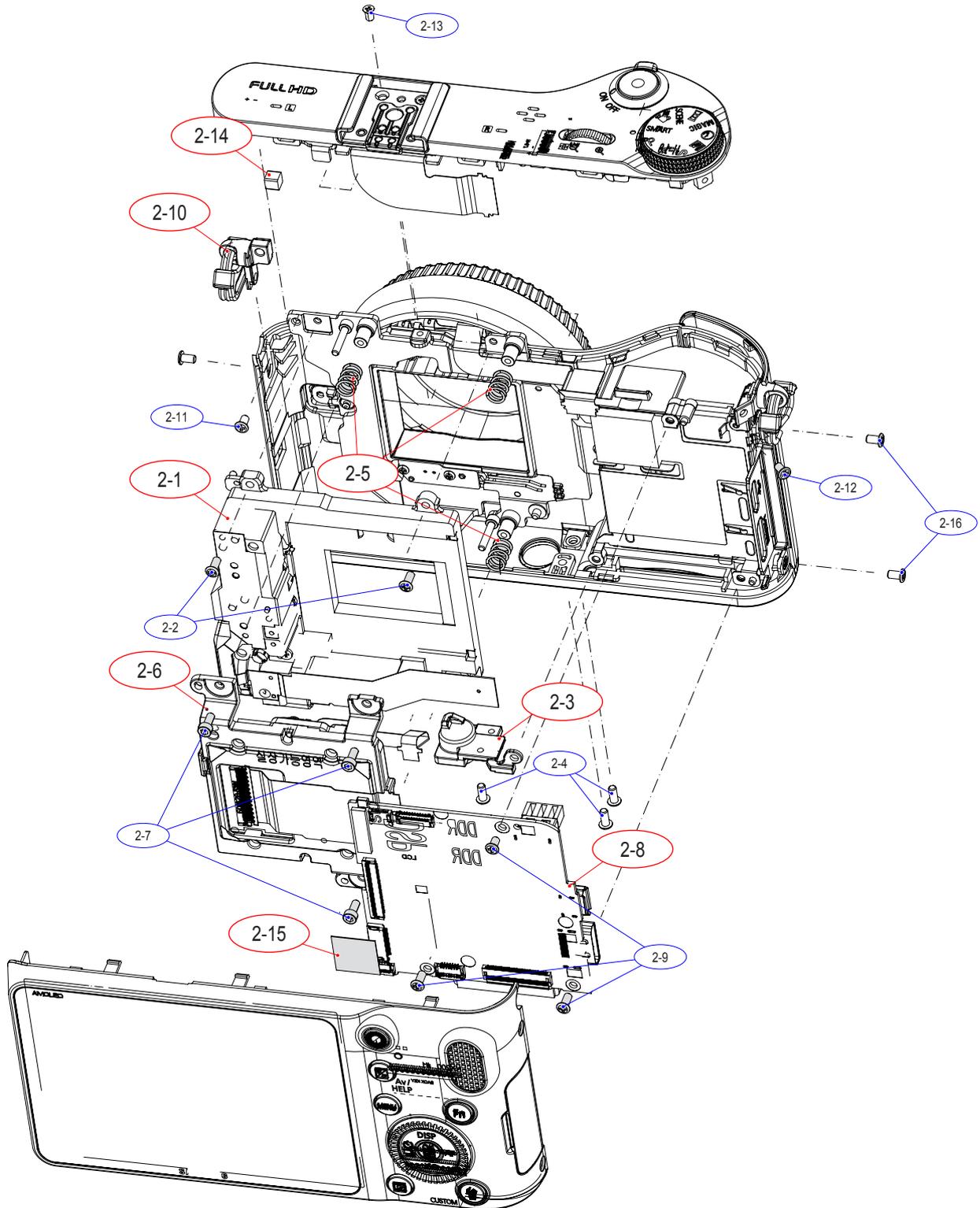
8. Exploded view and parts list

8-1 BODY ASSEMBLY



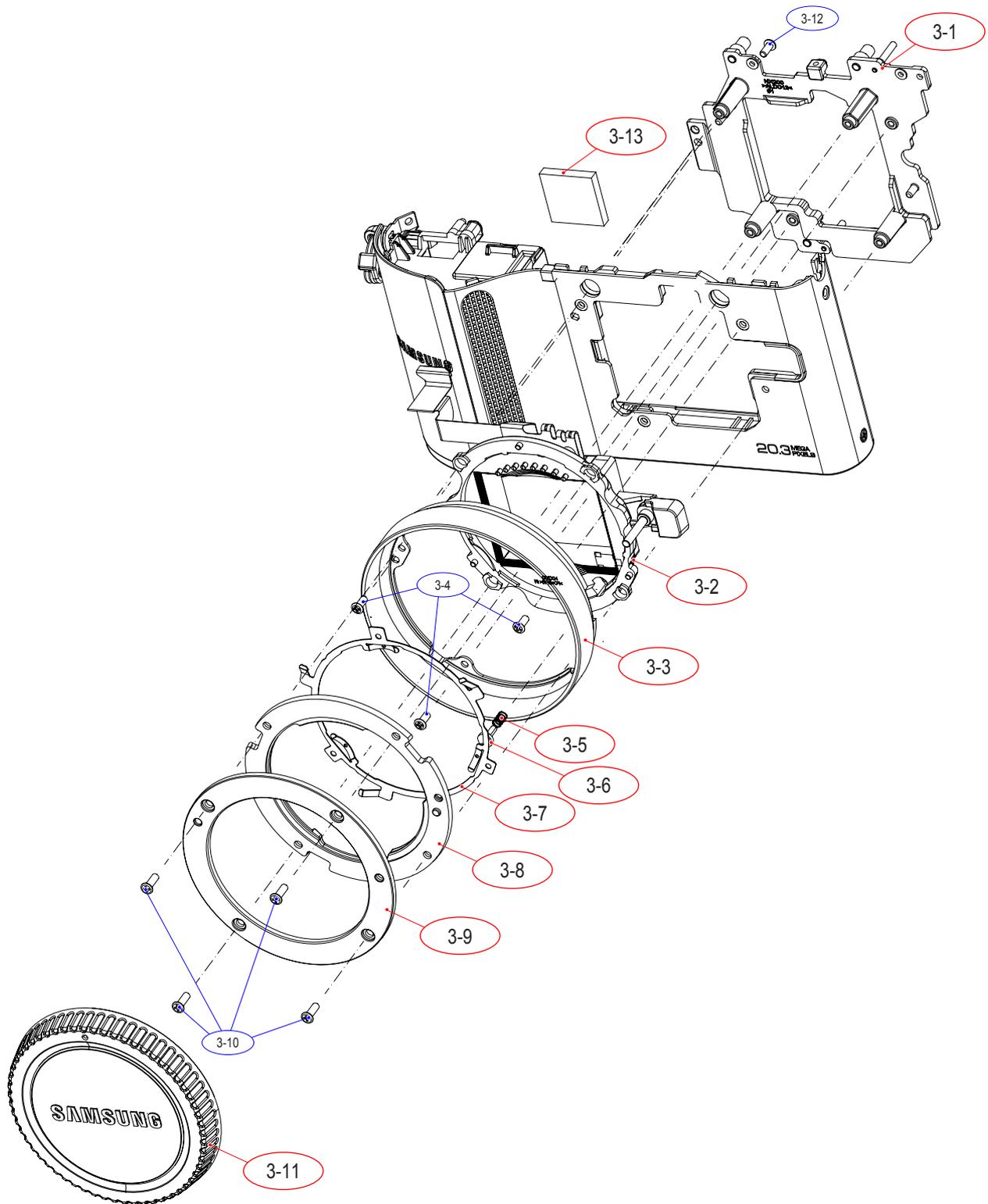
Loc. No	Parts No.	Description	Q ty	Available	Remark
1-1	AD61-04096A	PLATE-SPRING SHOE	1	0	
1-2	AD63-06184A	COVER-HOT SHOE	1	0	

8-2 BODY ASSEMBLY



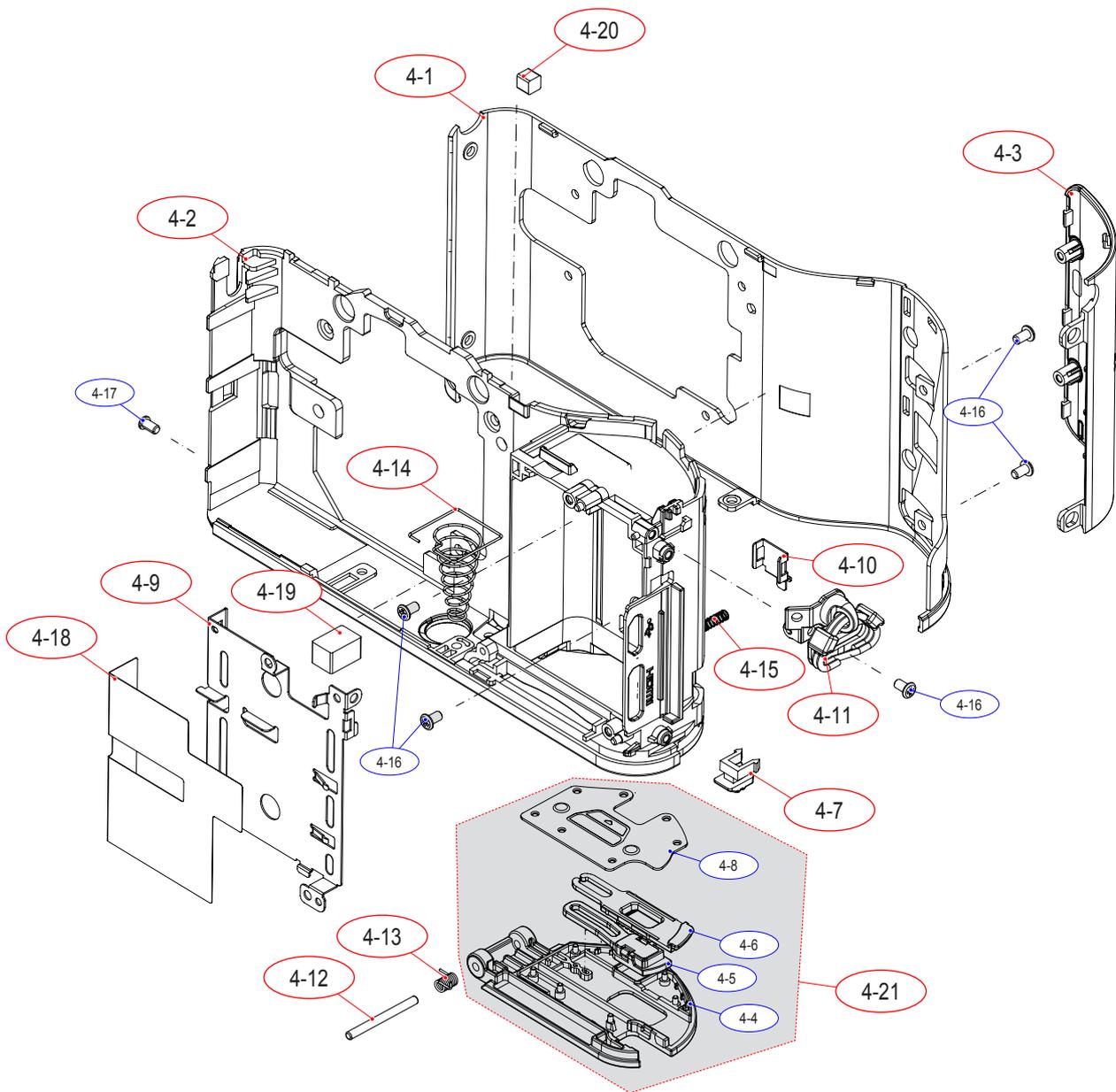
Loc. No	Parts No.	Description	Q ty	Available	Remark
2-1	AD97-21578A	ASSY SHUTTER-NX200	1	O	FOR Only KOREA, USA, CHINA, SEUK
2-2	6001-001719	SCREW-MACHINE	2	X	
2-3	AD61-05296A	HOLDER TRIPOD	1	O	FOR Only KOREA, USA, CHINA, SEUK
2-4	6001-001291	SCREW-MACHINE(CH(0.5	4	X	
2-5	6107-002736	SPRING-CS	3	O	FOR Only KOREA, USA, CHINA, SEUK
2-6	AD97-21548A	ASSY CMOS	1	O	FOR Only KOREA, USA, CHINA, SEUK
2-7	6001-002279	SCREW-MACHINE	3	X	
2-8	AD92-01750A	ASSY PCB MAIN	1	O	FOR Only KOREA, USA, CHINA, SEUK
2-9	6003-001490	SCREW-TAPTYPE	3	X	
2-10	AD97-21529A	ASSY HOLDER-STRAP R	1	O	
2-11	6001-002662	SCREW-MACHINE	1	X	
2-12	6001-001510	SCREW-MACHINE	1	X	
2-13	6001-002282	SCREW-MACHINE	1	X	
2-14	AD63-06483A	CUSHION SHIEL FOAM-A	1	O	
2-15	AD63-06528A	SHEET EMI	1	O	
2-16	6003-001703	SCREW-TAPTYPE	2	X	

8-3 FRONT ASSEMBLY



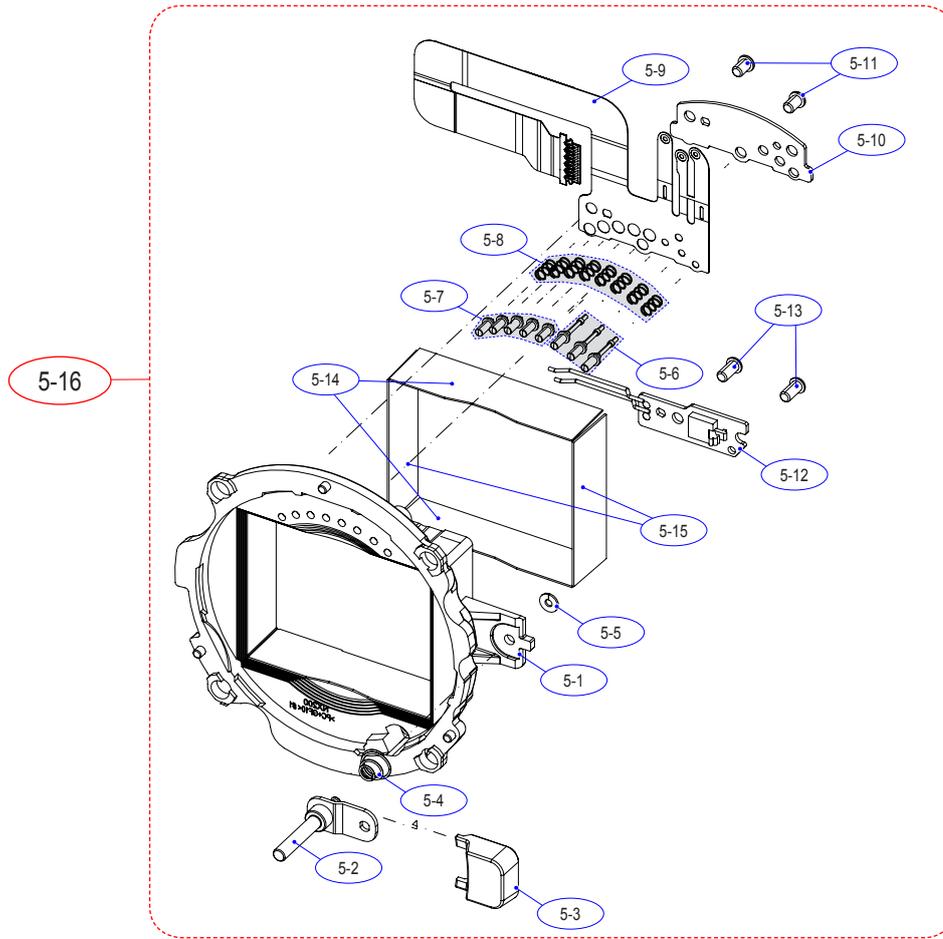
Loc. No	Parts No.	Description	Q ty	Available	Remark
3-1	AD97-21553A	ASSY HOLDER-MOUNT	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-2	AD97-21550A	ASSY HOLDER-INNER MOUNT	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-3	AD61-05350A	PLATE-DECO RING	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-4	6001-001719	SCREW-MACHINE	3	X	
3-5	6107-001781	SPRING-CS	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-6	AD66-00945A	SHAFT-LENS DETECT	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-7	AD61-05314A	PLATE-MOUNT SPRING-NX20	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-8	AD61-05307A	MOUNT-INNER	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-9	AD61-05284A	PLATE-MOUNT LENS	1	O	FOR Only KOREA, USA, CHINA, SEUK
3-10	6001-002662	SCREW-MACHINE	4	X	
3-11	AD67-01399A	CAP-MOUNT	1	O	
3-12	6001-001291	SCREW-MACHINE	1	X	
3-13	AD62-00188A	PAD GAP-CHAMBER	1	O	

8-4 CHAMBER ASSEMBLY



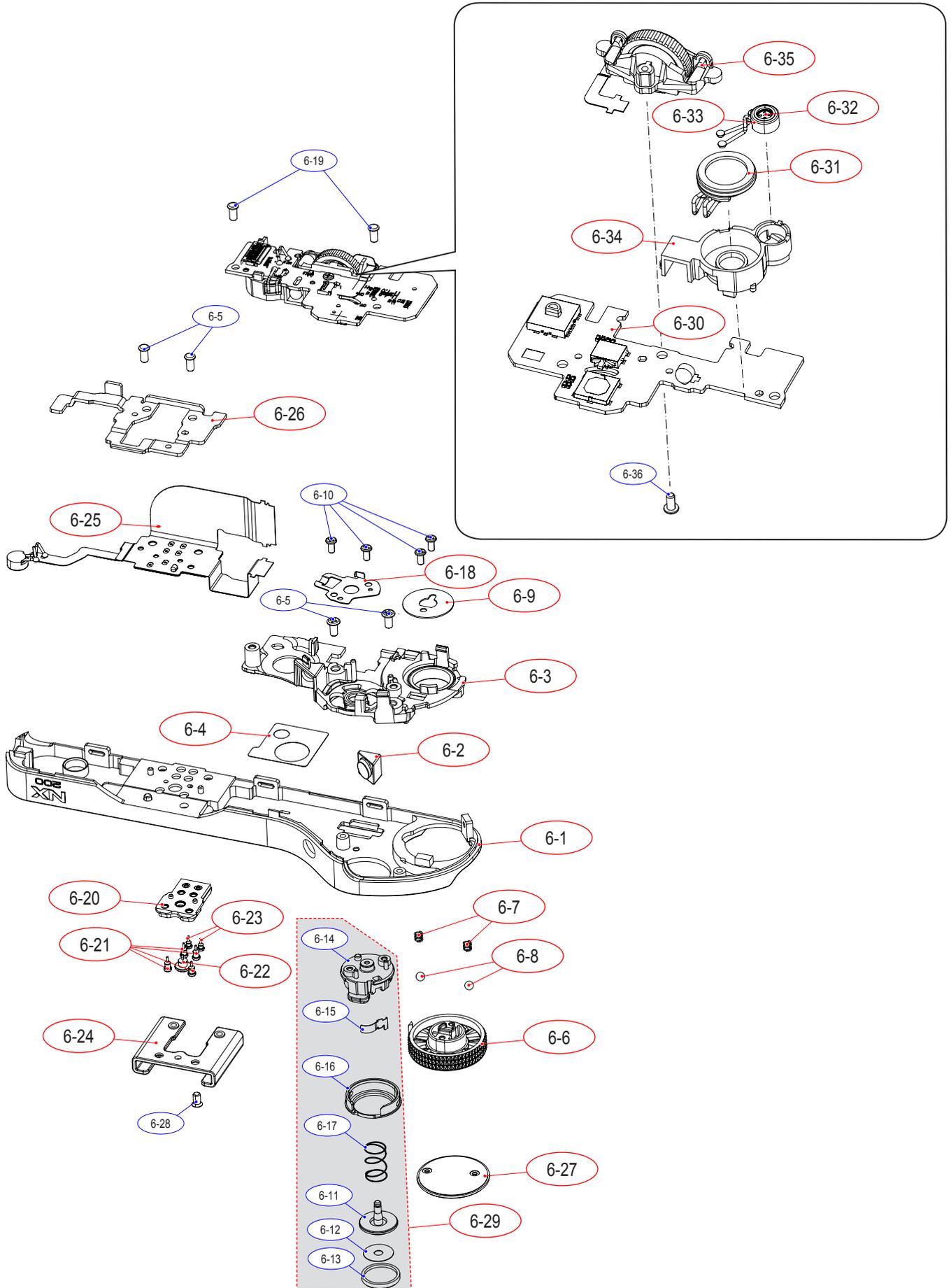
Loc. No	Parts No.	Description	Q ty	Available	Remark
4-1	AD63-06185A	COVER-FRONT	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-2	AD62-00176A	CHAMBER-BATTERY	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-3	AD63-06175A	GRIP-FRONT	1	O	
4-4	AD63-06179A	COVER-BATTERY	1	X	
4-5	AD63-06180A	COVER-DUMMY BATTERY	1	X	
4-6	AD66-00918A	LEVER-BATTERY COVER	1	X	
4-7	AD66-00802A	LEVER-BATTERY LOCK	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-8	AD61-05286A	PLATE-BATTERY COVER	1	X	
4-9	AD61-05287A	PLATE-BATTERY CHAMBER	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-10	AD61-05288A	PLATE-BATTERY LOCK LEVER	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-11	AD97-21554A	ASSY HOLDER-STRAP L	1	O	
4-12	AD66-00943A	SHAFT-BATTERY COVER	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-13	6107-002994	SPRING-TS	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-14	6107-003085	SPRING-CS	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-15	6107-002735	SPRING-CS(SUS30)	1	O	FOR Only KOREA, USA, CHINA, SEUK
4-16	6003-001641	SCREW-TAPTYPE	5	X	
4-17	6003-001637	SCREW-TAPTYPE	1	X	
4-18	AD63-06489A	T/SHEET-THERMAL A	1	O	
4-19	AD63-06484A	CUSHION SHIELD FOAM B	1	O	
4-20	AD63-06483A	CUSHION SHIELD FOAM A	1	O	
4-21	AD97-21708A	ASSY COVER-BATTERY_BK	1	O	FOR Only KOREA, USA, CHINA, SEUK

8-5 INNER MOUNT HOLDER ASSY



Loc. No	Parts No.	Description	Q ty	Available	Remark
5-1	AD61-05277A	HOLDER-INNER MOUNT	1	X	
5-2	AD97-21528A	ASSY-SHAFT LENS UNLOCK	1	X	
5-3	AD64-03372A	BUTTON-LENS UNLOCK	1	X	
5-4	6107-002627	SPRING-CS(SUS304WPB)	1	X	
5-5	6031-001628	WASHER-PLAIN	1	X	
5-6	AD67-01224A	CONTACT-IF POWER	3	X	
5-7	AD67-01225A	CONTACT-INTERFACE	5	X	
5-8	6107-001779	SPRING-CS(SWP-B)	8	X	
5-9	AD41-01774A	FPC	1	X	
5-10	AD61-04713A	PLATE-IF PIN	1	X	
5-11	6003-001679	SCREW-TAPTYPE	2	X	
5-12	AD92-01756A	ASSY PCB SUB	1	X	
5-13	6003-001641	SCREW-TAPTYPE	2	X	
5-14	AD63-06305A	SHEET-ABSORB A	2	X	
5-15	AD63-06306A	SHEET-ABSORB B	2	X	
5-16	AD97-21550A	ASSY HOLDER-INNER MOUNT	1	O	FOR Only KOREA, USA, CHINA, SEUK

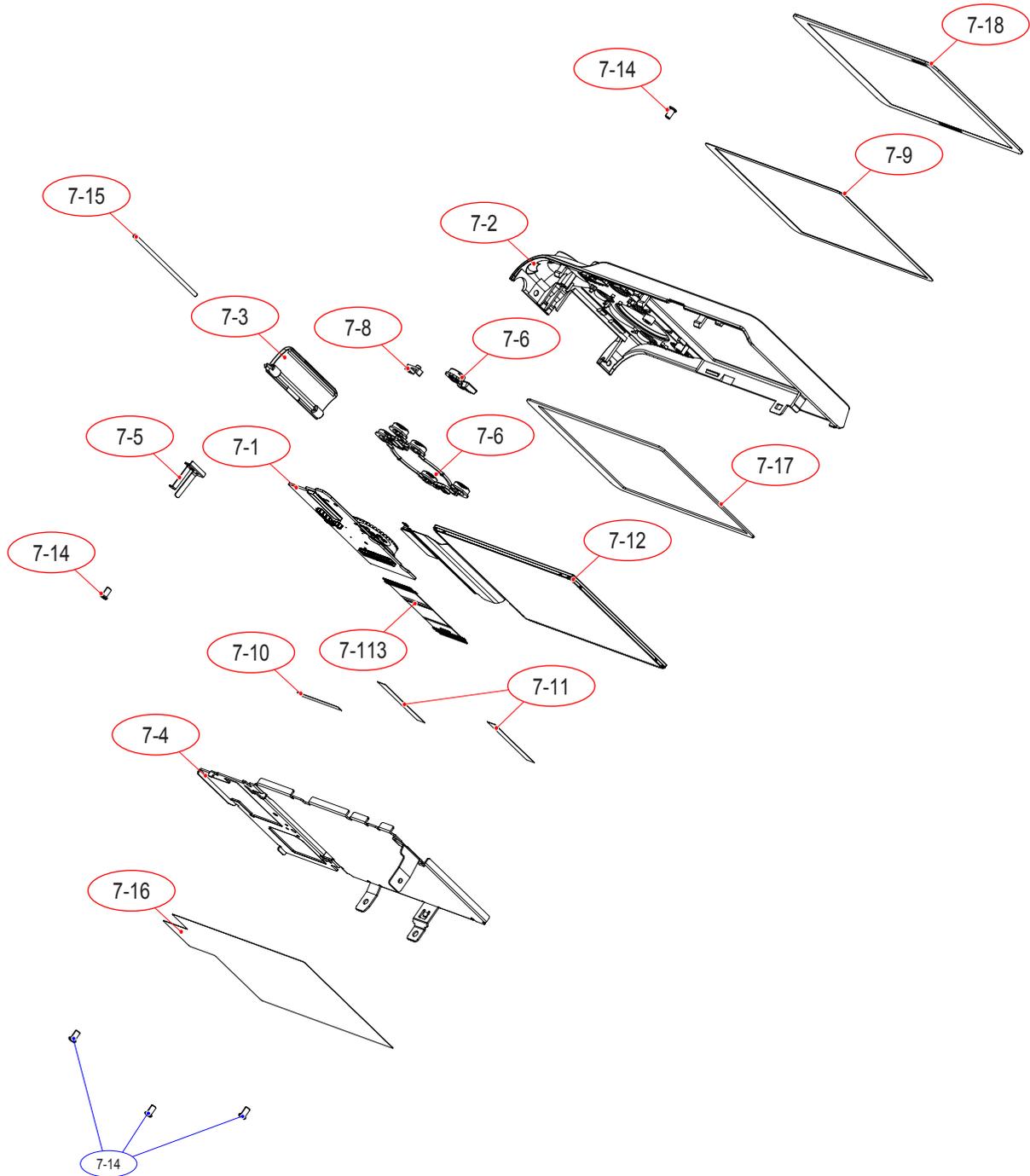
8-6 TOP COVER ASSEMBLY



Exploded view and parts list

Loc. No	Parts No.	Description	Q ty	Available	Remark
6-1	AD63-06363A	COVER-TOP	1	O	
6-2	AD64-03363A	WINDOW-AF	1	O	
6-3	AD61-05274A	HOLDER-TOP	1	O	
6-4	AD63-06506A	T/SHEET HOLDER TOP	1	O	
6-5	6001-001914	SCREW-MACHINE	4	X	
6-6	AD64-03367A	KNOB-MODE DIAL	1	O	
6-7	6107-002731	SPRING MODE DIAL	2	O	
6-8	AD64-01738A	KNOB MODE DIAL-CLICK BALL	2	O	
6-9	AD61-05309A	PLATE-MODE DIAL	1	O	
6-10	6003-001674	SCREW-TAPTYPE	4	X	
6-11	AD64-03365A	BUTTON-SHOT	1	X	
6-12	AD63-06451A	T/SHEET-BUTTON SHOT	1	X	
6-13	AD67-02286A	CAP-BUTTON SHOT	1	X	
6-14	AD66-00916A	LEVER-POWER	1	X	
6-15	AD61-05410A	PLATE-LEVER POWER GND	1	X	
6-16	AD67-02287A	CAP-LEVER POWER	1	X	
6-17	6107-001788	SPRING RELEASE	1	X	
6-18	AD61-05283A	PLATE-POWER LEVER	1	O	
6-19	6003-001490	SCREW-TAPTYPE	2	X	
6-20	AD61-05275A	BASE-HOT SHOE	1	O	
6-21	AD67-02280A	CONTACT-HOT SHOE A	4	O	
6-22	AD67-02281A	CONTACT-HOT SHOE B	1	O	
6-23	AD67-02282A	CONTACT-HOT SHOE C	2	O	
6-24	AD61-05411A	PLATE-HOT SHOE	1	O	
6-25	AD92-01753A	ASSY PCB SUB	1	O	
6-26	AD61-05289A	BRACKET-HOTSHOE BOTTOM	1	O	
6-27	AD67-02283A	CAP-MODE DIAL	1	O	
6-28	6001-002282	SCREW-MACHINE	1	X	
6-29	AD97-21572A	ASSY-LEVER POWER SUB	1	O	
6-30	AD92-01752A	ASSY TOP PCB	1	O	
6-31	3001-002568	SPEAKER	1	O	
6-32	3003-001159	MIC-CONDENSOR	1	O	
6-33	AD73-00367A	RUBBER-MIC	1	O	
6-34	AD61-05276A	HOLDER-SPEAKER MIC	1	O	
6-35	AD97-21551A	ASSY-COMMAND DIAL	1	O	
6-36	6003-001706	SCREW-TAPTYPE	1	X	

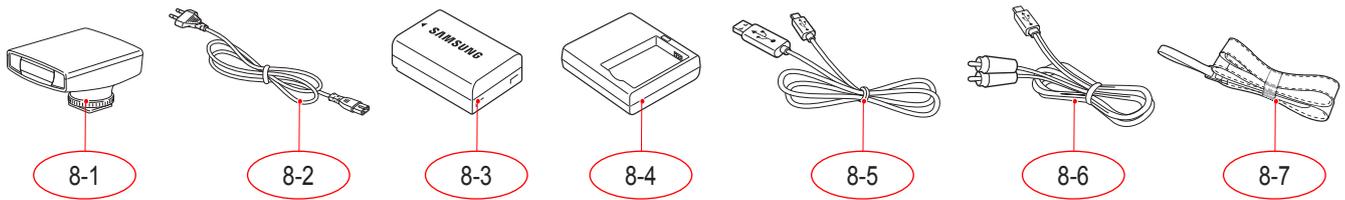
8-7 BACK COVER ASSEMBLY



Exploded view and parts list

Loc. No	Parts No.	Description	Q ty	Available	Remark
7-1	AD97-21552A	ASSY-PCB KEY	1	O	
7-2	AD63-06176A	COVER-BACK	1	O	
7-3	AD63-06178A	COVER-JACK	1	O	
7-4	AD61-05290A	BRACKET-LCD BASE	1	O	
7-5	AD61-05316A	PLATE-JACK COVER-NX20	1	O	
7-6	AD64-03369A	BUTTON-REC	1	O	
7-7	AD64-03370A	BUTTON-FUNCTION	1	O	
7-8	AD64-03385A	WINDOW-CARD ACCESS-NX20	1	O	
7-9	AD63-06279A	T/SHEET-OLED WINDOW-NX20	1	O	
7-10	AD63-06507A	T/SHEET-EMI A	1	O	
7-11	AD63-06508A	T/SHEET-EMI B	2	O	
7-12	AD07-00139A	OLED AM	1	O	
7-13	AD41-01776A	FPC	1	O	
7-14	6003-001637	SCREW-TAPTYPE	5	X	
7-15	AD66-00944A	SHAFT JACK COVER	1	O	
7-16	AD63-06488A	T/SHEET-THERMAL B	1	O	
7-17	AD63-06278A	cushion oled	1	O	
7-18	AD64-03407A	WINDOW_OLED-NX20	1	O	

8-8 PACKING ITEMS



Loc. No	Parts No.	Description	Q ty	Available	Remark
8-1	AD97-21562A	ASSY a-NX200_BK	1	0	
8-2	3903-000614	AC CODE CABLE_KOR-D1	1	0	
	3903-000611	AC CODE CABLE_CHINA	1	0	
	3903-000616	AC CODE CABLE_EXP-D1	1	0	
	3903-000618	AC CODE CABLE_USA-D1	1	0	
	3903-000613	AC CODE CABLE_UK	1	0	
	3903-000612	AC CODE CABLE_AUS-D1	1	0	
	3903-000617	AC CODE CABLE_BRA	1	0	
	3903-000610	AC CODE CABLE_ARG	1	0	
8-3	AD43-00202A	NX BATTERY(BP1030)	1	0	
8-4	AD44-00203A	NX CHARGER(BC1030)	1	0	
8-5	AD39-00190A	USB_CABLE_5PIN	1	0	
8-6	AD39-00191A	AV CABLE_5PIN	1	0	
8-7	AD63-04468A	STRAP_NX10	1	0	



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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