SAMSUNG

DIGITAL CAMERA

NX500

SERVICE Manual

DIGITAL CAMERA

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1. Repair information

1-1 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) Repair obligation the period of the product

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 retaining service parts for camera and lenses for five years and three years for the accessories.**
(There are differences from country to country.)

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>

<table>
<tr><th colspan="3">Types of consumer damages</th><th colspan="2">Compensation</th></tr>
<tr><td rowspan="6">Failing to perform or failing to function properly under normal use</td><td colspan="2">Required for essential repair within 10 days after the purchase</td><td>Replace the product or refund</td><td>-</td></tr>
<tr><td colspan="2">Required for essential repair within one month after the purchase</td><td>Replace the product or repair at free of charge</td><td>Repair charges</td></tr>
<tr><td rowspan="3">Applicable to repair</td><td>Problem occurred twice due to same malfunction</td><td colspan="2">Free of charge</td></tr>
<tr><td>Problem occurred three times due to same malfunction</td><td rowspan="3">Replace the product or refund</td><td rowspan="2">Repair charges</td></tr>
<tr><td>Problem occurred four times due to some other malfunction</td></tr>
<tr><td>Not applicable to repair</td><td>Within the period with respect to retaining components</td><td>Replace the product at the cost of the depreciated value or refund its price added 10% of depreciation</td></tr>
<tr><td rowspan="2">Failing to perform or failing to function properly as a result of willful intent and negligence of customer</td><td colspan="2">Applicable repair</td><td colspan="2">Repair charges</td></tr>
<tr><td colspan="2">Not applicable to repair
(Except for defects or malfunction as a result of fire or flood or other natural disasters</td><td>Replacement charge</td><td>Repair charge and replace the product at the cost of the depreciated value</td></tr>
</table>

1-2 Precaution for disassembly and reassembly

CAUTION

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

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

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

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

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

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

<Table 1-3>

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

2. Product specifications

2-1 Specifications

Image Sensor	
Type(size) /Sensor size	BSI CMOS / 23.5 X 15.7 mm
Effective pixels / Total pixels	Approx. 28.2 mega-pixels / Approx. 30.7 mega-pixels
Lens Mount	
Type	Samsung NX Mount
Image Stabilization	
Type	Lens shift (depends on lens)
i-Function	
Features	Aperture value, shutter speed, exposure value, ISO, white balance, intelli-Zoom
Dust Reduction	
Supersonic drive	
Display	
Type (Size)	Super AMOLED with Touch Screen / 3.0” (Approx. 76.6 mm)
Resolution / Angle	1036 k dots / Flip (Up 180°), Tilt (Up 90°, Down 45°)
Focusing	
Type / Mode	Hybrid AF / Active AF, Single AF, Continuous AF, Manual Focus
Focusing point	Total AF point: 205 points (Phase Detection AF), 209 points (Contrast AF)
Shutter	
Speed	• Auto: 1/6,000 sec.–1/4 sec. • Manual: 1/6,000 sec.–30 sec. • Bulb (time limit: 8 min.)
Exposure	
ISO equivalent	Auto, 100–25600 (1 EV or 1/3 EV Step)
Drive Mode	
Mode	Single, Continuous, Timer, Bracket
Flash	
Type	External Flash (bundle with SEF8A)
Mode	Smart Flash, Auto, Auto Red-eye, Fill in, Fill-in Red, 1st Curtain, 2nd Curtain, Off
White Balanc	
Mode	Auto WB, Daylight, Cloudy, Fluorescent White, Fluorescent NW, Fluorescent Daylight, Tungsten, Tungsten (Auto), Flash WB, Custom Set, Color Temperature (Manual)
Dynamic Range Expansion	
Off/Smart Range+/HDR	

Effects	
Picture wizard	Standard, Vivid, Portrait, Landscape, Forest, Retro, Cool, Calm, Classic, Custom1, Custom2, Custom3
Smart filter	Vignetting, Miniature (H), Miniature (V), Watercolor, Selective Color (R/G/B/Y 4 Colors)
Photos	
Mode	Auto, Program, Aperture Priority, Shutter Priority, Manual, Custom, Samsung Auto Shot, Smart
Smart mode	Beauty Face, Landscape, Action Freeze, Rich Tones, Panorama, Waterfall, Silhouette, Sunset, Night, Fireworks, Light Trace, Multi Exposure
Video	
Format	MP4, AVI
Compression Video	HEVC, MJPEG (VGA only)
Frame rate	4096X2160 (24 fps), 3840X2160 (30 fps), 1920X1080, 1280X720, 640X480
Sound	Stereo
Playback	
Type	Single image, Thumbnails, Slide show, Movie
Editing	
Photos	Edit, Color, Portrait, Smart Filter
Movie	Still image capture, Time trimming
Storage	
External media	SD card, SDHC card, SDXC card (UHS-I supported)
Connectivity	
Wi-Fi	IEEE 802.11b/g/n
NFC	Yes
Bluetooth	Yes
Interface	
Digital output connector	Yes (USB 2.0)
Video output	HDMI (NTSC, PAL)
Power Source	
Capacity	1,130 mAh
Battery life (Shots, CIPA Standard)	370
Physical Specifications	
Dimensions (W X H X D)	4.7 X 2.5 X 1.7 in (119.5 X 63.6 X 42.5 mm)
Weight	Approx. 10 oz (287 g, without battery and memory card)
System Requirements	
Windows	Windows 7/8/8.1, Intel® 3rd Gen. i5 3.4 GHz or higher (equivalent AMD processor)
Macintosh	Mac OS 10.7 or higher

2-2 Product comparison

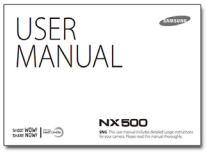
Spec \ Model	NX500	NX300M
Image		
Image Sensor	23.5 X 15.7 mm BSI CMOS	23.5 X 15.7 mm CMOS
Sensor	28M (VB2)	20M (CT3)
Effective Pixels	Approx. 28.2 mega-pixels	Approx. 20.3 mega-pixels
Total Pixels	Approx. 30.7 mega-pixels	Approx. 21.6 mega-pixels
Weight	287 g (without battery and memory card)	310 g (without battery and memory card)
Dimensions (W X H X D)	119.5 X 63.6 X 42.5 mm (without protrusions)	122 X 63.7 X 42.7 mm (without protrusions)
Display	Super AMOLED with Touch Screen 3.0" (Approx. 76.6 mm) AMOLED (104Megaxipel) Flip (Up 180°), Tilt (Up 90°, Down 45°) Tilt/ Flip-up	AMOLED with Touch Panel (C-type Touch Control Enabled) 3.31" (Approx. 84.0 mm) WVGA Tiltable (Up 180°, Down 45°) OLED Tilt/Flip
Touch	support (OCTA)	support (Air Gap)
Focusing	Phase Detection & Contrast AF	Phase Detection & Contrast AF
Angle of View	28 mm (35 mm film equivalent)	28 mm (35 mm film equivalent)
Shutter Speed	• Auto: 1/6,000 sec.–1/4 sec. • Manual: 1/6,000 sec.–30 sec. • Bulb (time limit: 8 min.) - EFS	• Auto: 1/6,000–30 sec. • Manual: 1/6,000–30 sec. (1/3 EV Step) • Bulb (time limit: 4 min)
Wi-Fi	IEEE 802.11b/g/n, 2.4GHz single band	2.4GHz, 5GHz dual band
NFC	support (Wired)	support (Tag)
Bluetooth	support	-
Video	QHD 30p	FHD 60p
ISO	- 1 Step: Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12800, ISO 25600 - 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, ISO 25600	- 1 Step: Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12800, ISO 25600 - 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, ISO 25600
Storage	SD card, SDHC card, SDXC card (UHS-I supported)	External memory (optional): SD card(2 GB guaranteed), SDHC card(up to 32 GB guaranteed), SDXC card, Class 6, 10, UHS-1
Image Stabilization	Lens shift (depends on lens)	Lens shift (depends on lens)
Power Source	Rechargeable battery: BP1130 (1130 mAh)	Rechargeable battery: BP1130 (1130 mAh)

* This specifications can change without notice to upgrade a performance.

2-3 Accessories information

• The illustrations may differ from your actual items.
• You can purchase optional accessories at a retailer or a Samsung service center. Samsung is not responsible for any problems caused by using unauthorized accessories.

	Image	Description	Part No.
Accessories		**Camera** (including the body cap and hot-hoe cover)	EV-NX500
		**Rechargeable Battery** BP1130	AD43-00206A
		**USB CABEL** CB5MU05E	AD39-00202A
	 **Strap**	**BLACK**	AD63-07021A
		WHITE	AD63-07021B

Image	Description	Part No.	Description	Part No.
 **Adaptor**	AD5055_EXP	GH44-02682A	AD5055_AUS	GH44-02676A
	AD5055_IL	GH44-02680A	AD5055_BRA	GH44-02669A
	AD5055_USA	GH44-02838A	AD5055_CHI	GH44-02657A
	AD5055_MX	GH44-02837A	AD5055_INDIA	GH44-02666A
	AD5055_UK	GH44-02671A	AD5055_ARG	GH44-02678A
 **Quick Start Guide**	QSG_S.CHI	AD68-08674A	QSG_NOR	AD68-08687A
	QSG_ENG	AD68-08673A	QSG_POR	AD68-08688A
	QSG_GER	AD68-08675A	QSG_SLO	AD68-08689A
	QSG_FRA	AD68-08676A	QSG_TUR	AD68-08690A
	QSG_SPA	AD68-08677A	QSG_UKR	AD68-08691A
	QSG_DUT	AD68-08678A	QSG_POL	AD68-08692A
	QSG_ITA	AD68-08679A	QSG_ENG (SEA)	AD68-08699A
	QSG_RUS	AD68-08680A	QSG_SPA (SEA)	AD68-08700A
	QSG_SWE	AD68-08681A	QSG_T.CHI	AD68-08693A
	QSG_DAN	AD68-08682A	QSG_IND	AD68-08698A
	QSG_CZE	AD68-08683A	QSG_VIT	AD68-08696A
	QSG_ARA	AD68-08684A	QSG_POR_BR	AD68-08697A
	QSG_FIN	AD68-08685A	QSG_THA	AD68-08694A
	QSG_HUN	AD68-08686A	QSG_HEB	AD68-08695A

* This page is Optional accessories .

	Image	Description	Model name	Note
		**Rechargeable Battery**	ED-BP1130	
Optional accessories		**Battery charger**	ED-BC3NX01	
		**FLASH**	ED-SEF580A	
			Metz 44 AF-1	
		**Case**	ED-CC3N90N	
		Remote Switch	ED-SR2NX02	
		**CABLE (USB+C)**	EA-CB5MU05E	
		**CABLE (HDMI)**	EA-CBHD10D	
		**PROTECTOR**	ED-LF405PT/KR	compatibility lens(2050)
			ED-LF43PT/KR	compatibility lens(30, 45, 16, 20)
			ED-LF52PT/KR	compatibility lens(60, 50200)
			ED-LF58PT/KR	compatibility lens(1855, 1224)
			ED-LF67PT/KR	compatibility lens(18200, 85)
		**ND Filter**	ED-LF405ND4/KR	compatibility lens(2050)
			ED-LF43ND4/KR	compatibility lens(30, 45, 16, 20)
			ED-LF52ND4/KR	compatibility lens(60, 50200)
			ED-LF58ND4/KR	compatibility lens(1855, 1224)
		**CPL Filter**	ED-LF43PL/KR	compatibility lens(30, 45, 16, 20)
			ED-LF52PL/KR	compatibility lens(60, 50200)
			ED-LF58PL/KR	compatibility lens(1855, 1224)

2-4 About the memory card

The memory capacity may differ depending on shooting scenes or shooting conditions. These capacities are based on a 4 GB SD card.

4 GB SD card:

Size			Quality						
			Super Fine	Fine	Normal	RAW	RAW + S.Fine	RAW + Fine	RAW + Normal
Photo	28M	6480X4320	256	471	809	84	63	71	76
	13.9M	4560X3040	475	815	1270	-	73	79	81
	7.1M	3264X2176	801	1253	1744	-	80	83	84
	3M	2112X1408	1379	1863	2259	-	84	86	86
	Burst		806	1259	1750	-	-	-	-
	23.6M	6480X3648	299	542	911	-	66	73	77
	11.9M	4608X2592	537	905	1376	-	75	80	82
	6.2M	3328X1872	879	1346	1832	-	81	83	85
	2.4M	2048X1152	1545	2008	2363	-	85	86	87
	18.7M	4320X4320	368	653	1064	-	70	76	79
	9.5M	3088X3088	642	1050	1537	-	77	81	83
	4.7M	2160X2160	1064	1553	2015	-	82	84	86
	2M	1408X1408	1668	2109	2431	-	85	86	87

Size			Quality		
				HQ	Normal
Video	4096X2160	24p/NTSC, PAL			
	3840X2160	30p/NTSC, 25p/PAL			
	1920X1080	60p/NTSC, 50p/PAL	Approx. 13’ 7”	Approx. 32’ 30”	Approx. 40’ 41”
	1920X1080	30p/NTSC, 25p/PAL	Approx. 32’ 38”	Approx. 64’ 4”	Approx. 80’ 16”
	1920X1080	24p/NTSC, PAL	Approx. 37’ 14”	Approx. 72’ 55”	Approx. 91’ 23”
	1920X1080	15p/NTSC, 12.5p/PAL*	Approx. 43’ 54”	Approx. 87’ 38”	Approx. 109’ 26”
	1280X720	60p/NTSC, 50p/PAL	-	Approx. 62’ 5”	Approx. 77’ 47”
	1280X720	30p/NTSC, 25p/PAL	-	Approx. 120’ 45”	Approx. 151’ 37”
	640X480	60p/NTSC, 50p/PAL	-	Approx. 162’ 39”	Approx. 204’ 33”
	640X480	30p/NTSC, 25p/PAL	-	Approx. 302’ 42”	Approx. 382’ 36”
	640X480, MJPEG	25p/PAL	-	Approx. 34’ 29”	Approx. 42’ 6”
	640X480, MJPEG	30p/NTSC	-	Approx. 40’ 36”	Approx. 49’ 22”

* This option is available only with some Smart Filter options.

• The figures above are measured without using the zoom function.

• Available recording time may vary if you use the zoom function.

• Several videos were recorded in succession to determine the total recording time.

• The maximum recording time is 29 minutes and 59 seconds per file. (20 minutes when you select 4096 X 2160 or 3840 X 2160)

2-5 About the battery

Battery specifications

Item	Description
Model	BP1130
Type	Lithium-ion battery
Cell capacity	1,130 mAh
Voltage	
Charging time (When the battery is completely discharged)	

* Charging the battery by connecting it to a computer may take longer.

Battery life

Shooting mode	Average time / Number of photos
Photos	Approx. 185 min/Approx. 370 photos
Videos	Approx. 115 min. (Record videos at 1920X1080 / 60p)

• The figures above are based on the CIPA test 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.

2-6 New Features - Bluetooth

This feature allows you to exchange files with other devices.
Set to connect your camera to a smart phone automatically via the Bluetooth feature. If the devices have previously been connected and you launch Samsung Camera Manager on the smart phone, they will connect via Bluetooth automatically.

3. Disassembly and reassembly

3-1 Disassembly

1. We provide the general support.
   : Samsung Authorized Service Center will provide courteous service on Samsung products for which they are authorized.
2. We provide the technical expertise support.
   : After replacing the parts such as Main PBA, CMOS, Shutter, Mount, it is required to adjust these parts with the equipment specified below.

For more detail information, refer to chapter 8 Adjustment.

<Table 3-1>

Repair Service	Part	Items to be adjusted	Required equipment
General support	LCD, Back-Cover, Top	-	-
Technical expertise support	LENS Mount, Front-Cover	CMOS Tilt	CMOS-Tilt equipment Shutter speed equipment Light box (5500K) Light box (3200K)
	ASSY-CMOS	CMOS Tilt, AWB etc. (Light box)	
	Shutter	Shutter Speed	
	MAIN PBA	AWB etc. (Light box)	

3-1-1 General support - Disassembly

1. Remove the **1 screw** on the left side, **2 screws** on the right side and **5 screws** on the bottom side.

Fig. 3-1

2. Open carefully the **locking** part to release the ASSY CASE FRONT as illustrated in image below. Then remove it.

Fig. 3-2

3. Remove the **FPCB** as illustrated in **Fig. A**.

CAUTION

Use extra care when removing the FPCB from the connector.

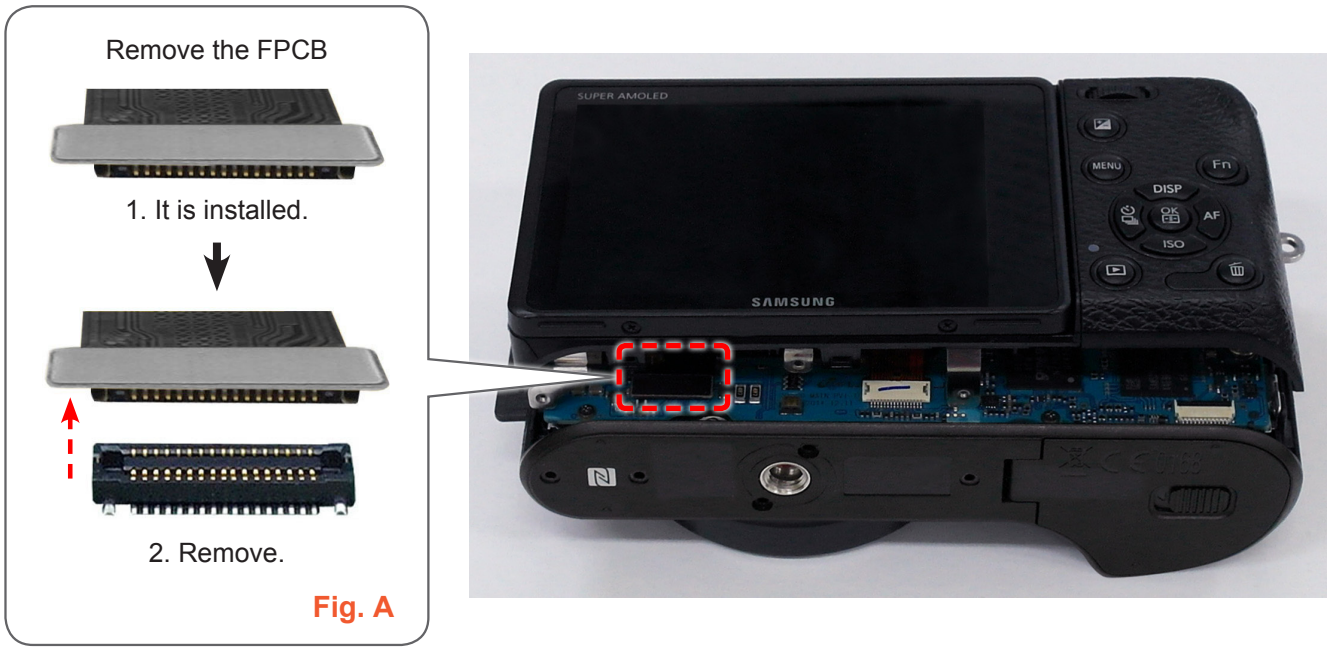


Fig. 3-3

4. Remove the **ASSY CASE FRONT**.

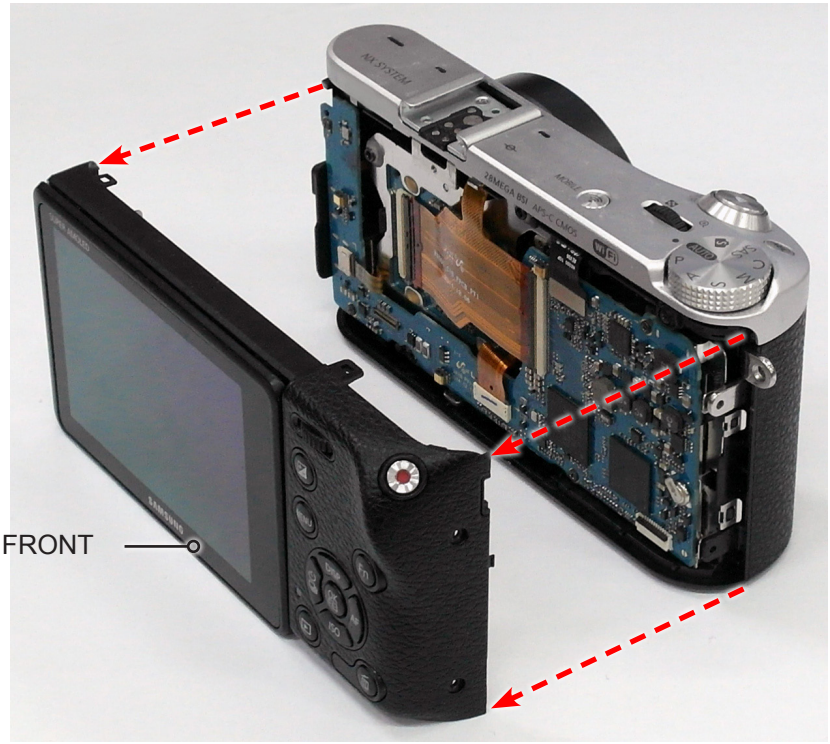
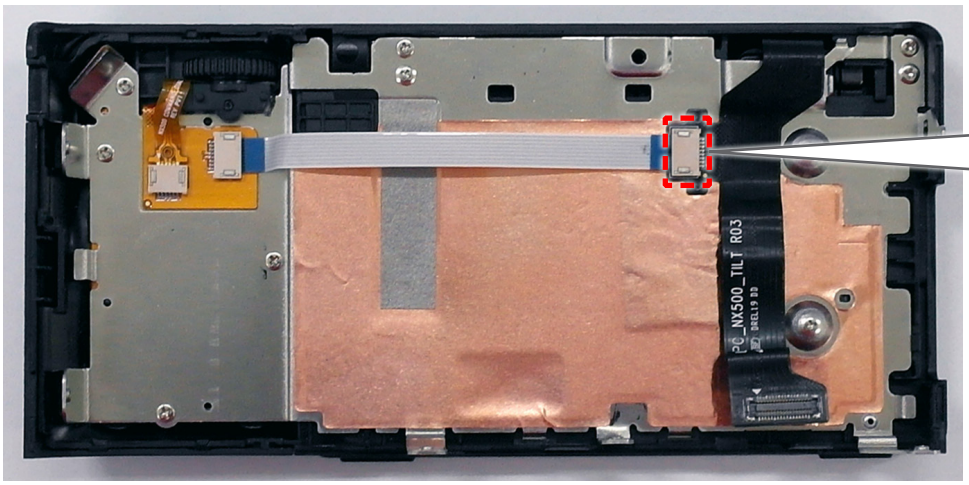


Fig. 3-4

5. Remove the **FPCB** as illustrated in **Fig. B**.

CAUTION

Use extra care when removing the FPCB from the connector.



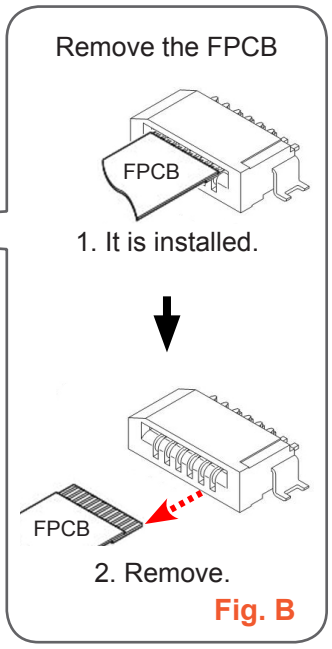


Fig. 3-5

6. Remove the **FPCB** that is attached on the FRAME FRONT.

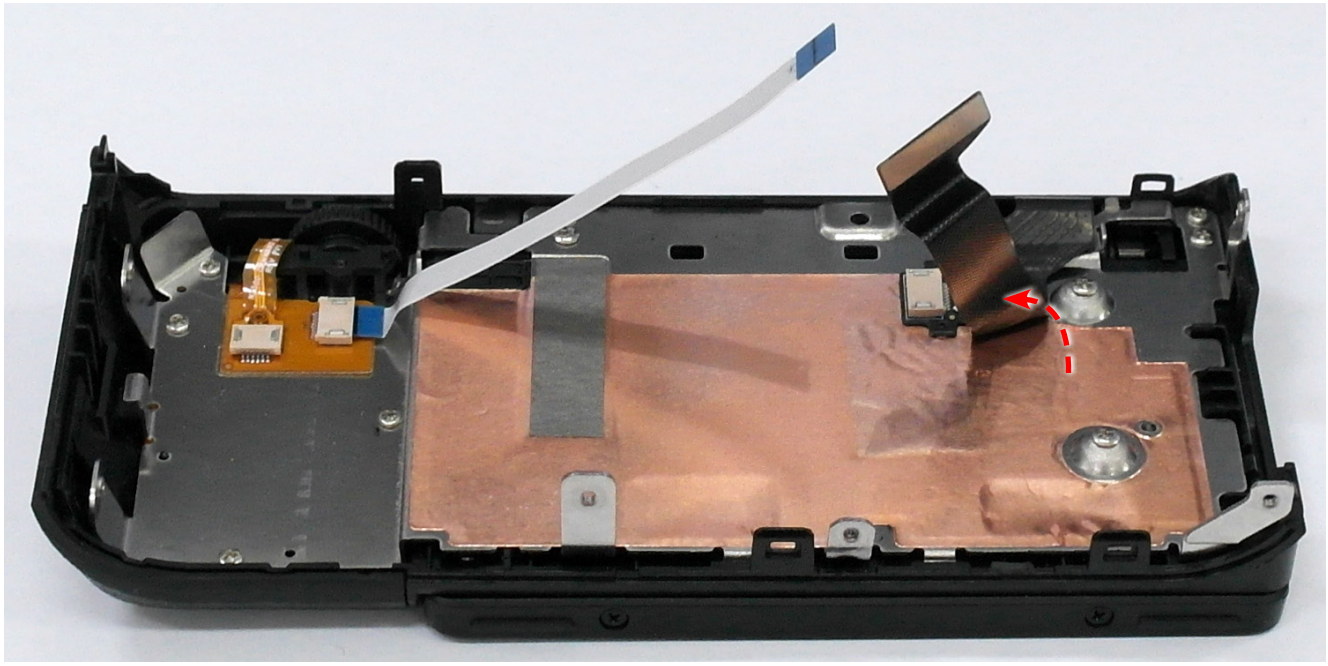


Fig. 3-6

7. Remove the **4 screws**.

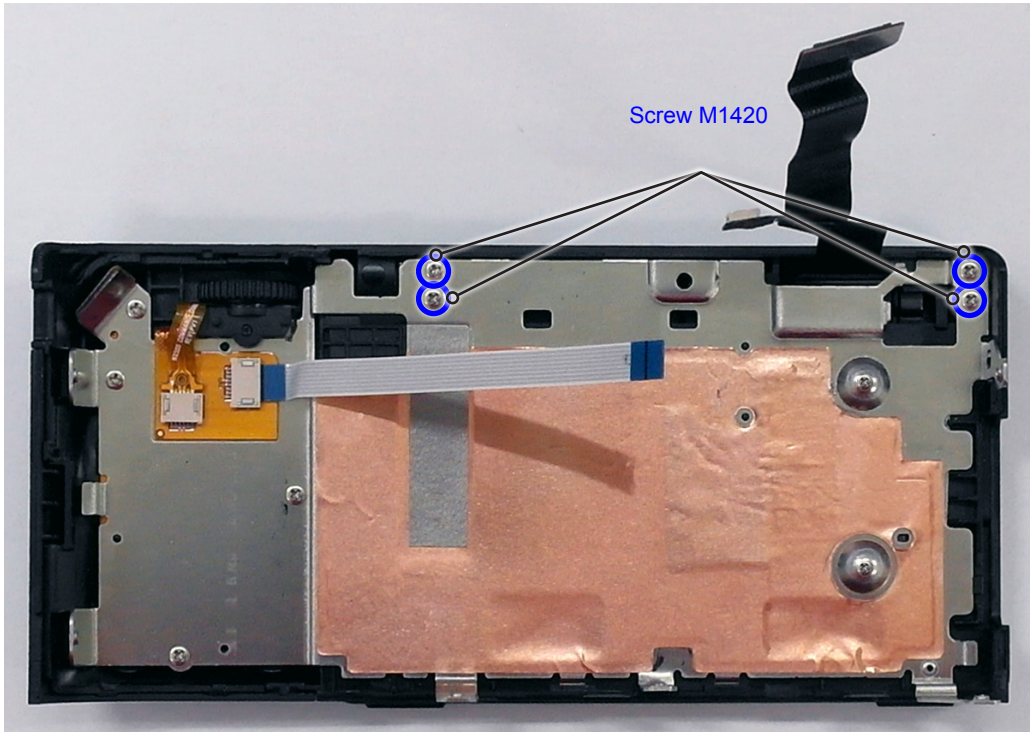


Fig. 3-7

8. Remove the **ASSY DISPLAY**.

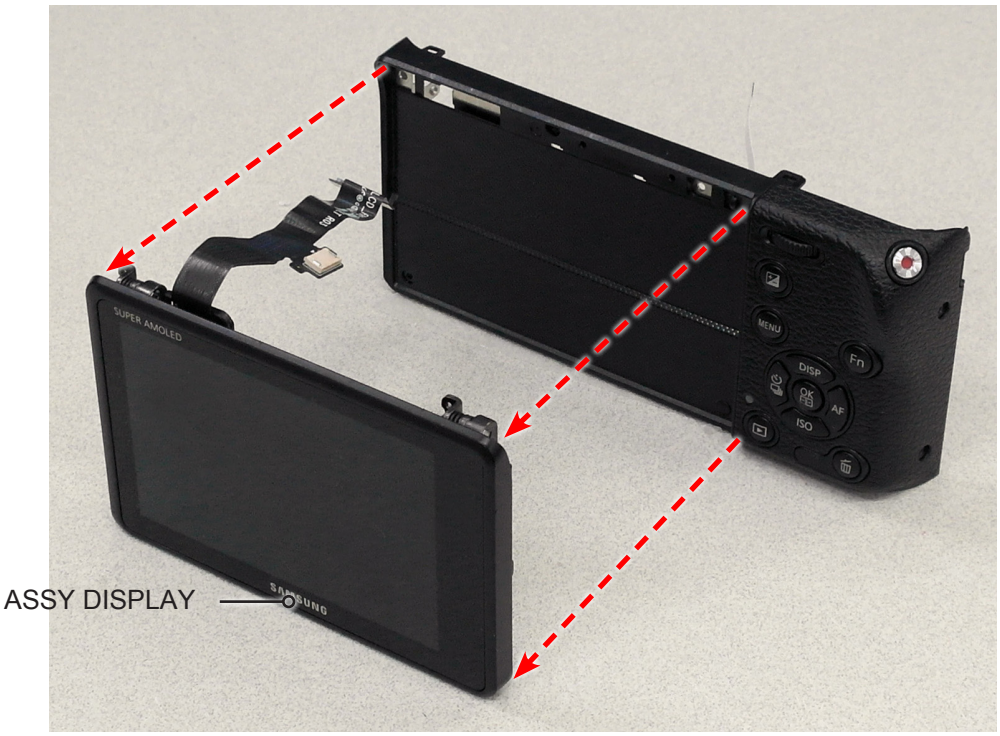


Fig. 3-8

9. Remove the **2 screws**.

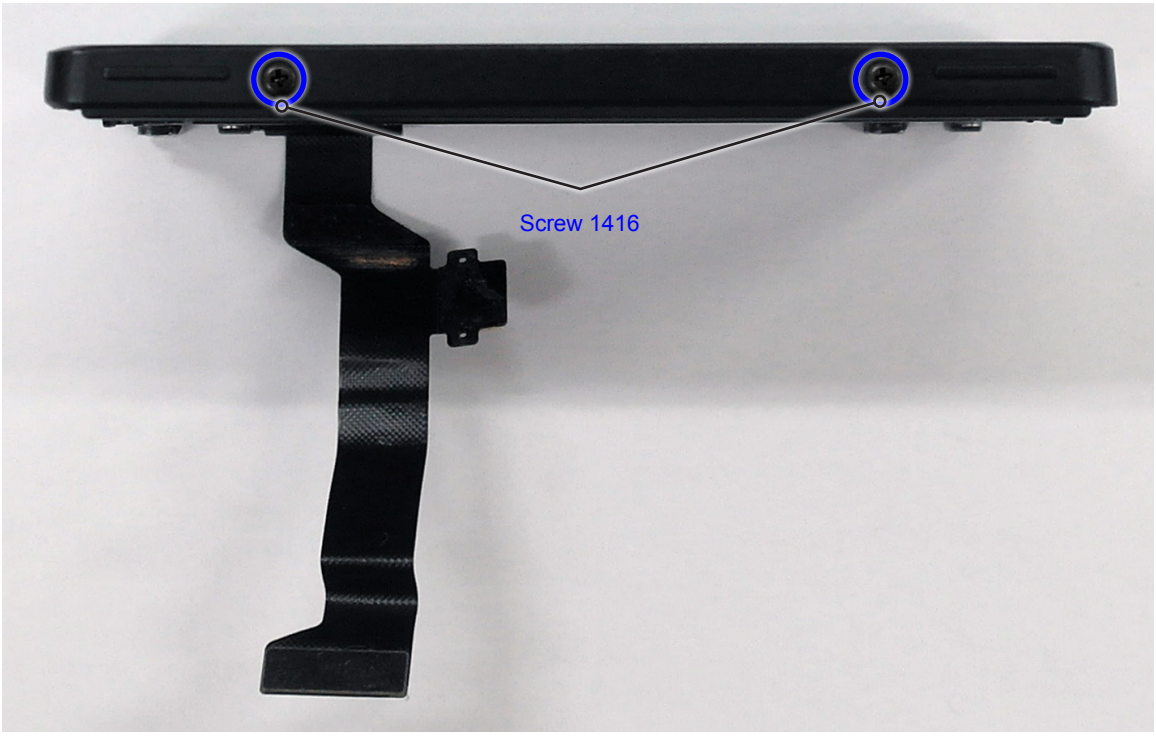


Fig. 3-9

10. Open the **ASSY HINGE**.

Fig. 3-10

11. Remove the **ASSY HINGE** as illustrated in **Fig. C**.

Raise a ASSY HINGE.

Fig. C

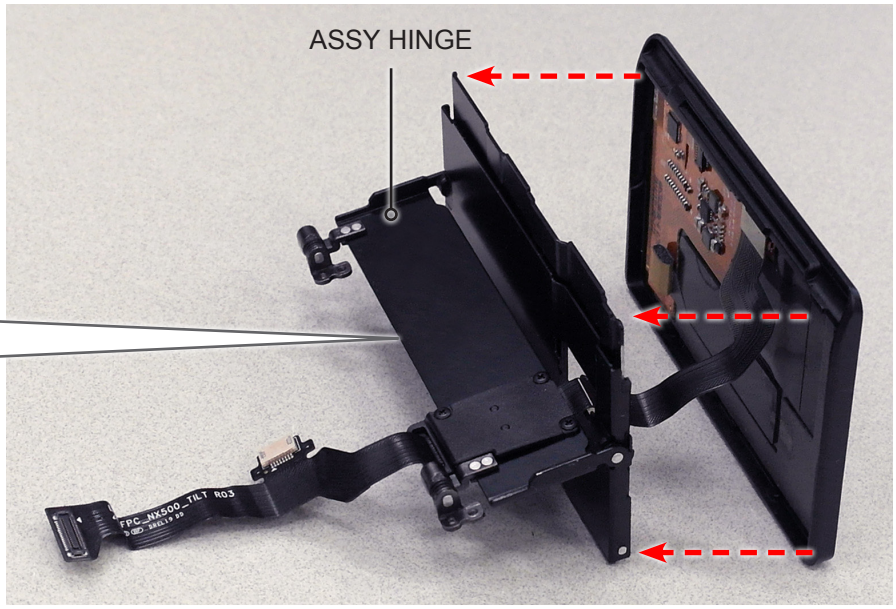


Fig. 3-11

12. Remove the **FPCB** as illustrated in **Fig. D**.

CAUTION

Use extra care when removing the FPCB from the connector.

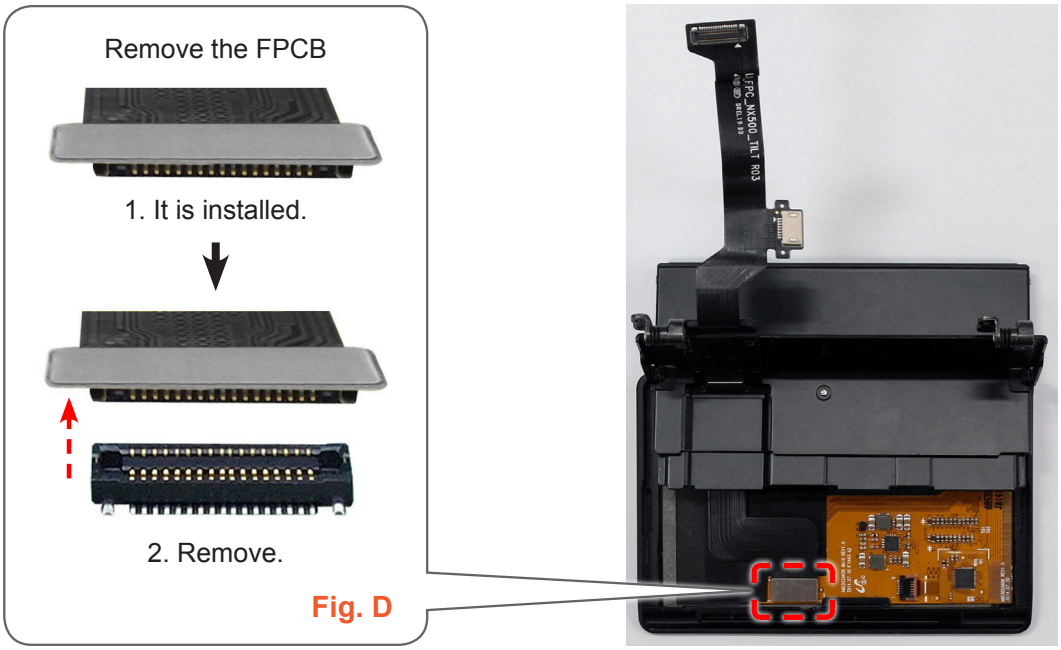


Fig. 3-12

13. Remove the **FPCB** from the connector as illustrated in Fig. E, Fig. F, Fig. G.
14. Remove the **4 screws**.

CAUTION

Use extra care when removing the FPCB from the connector.

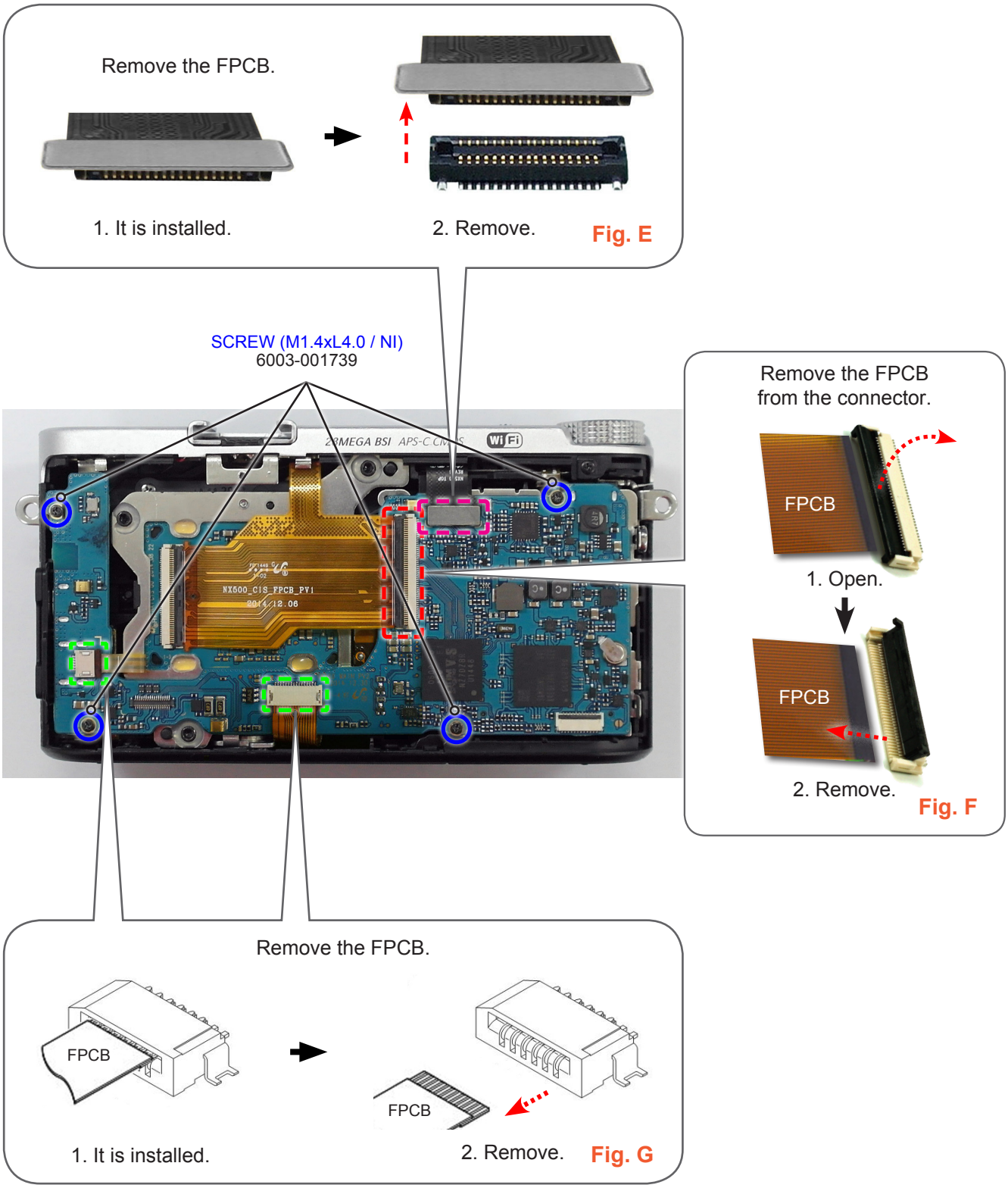


Fig. 3-13

15. Remove the **ASSY PCB MAIN**.

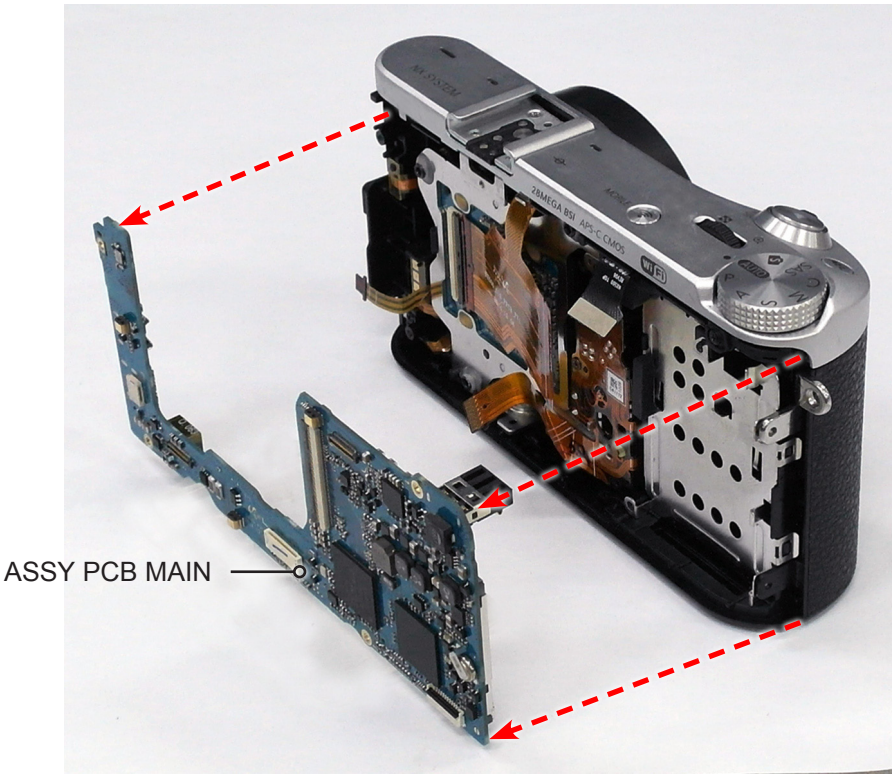
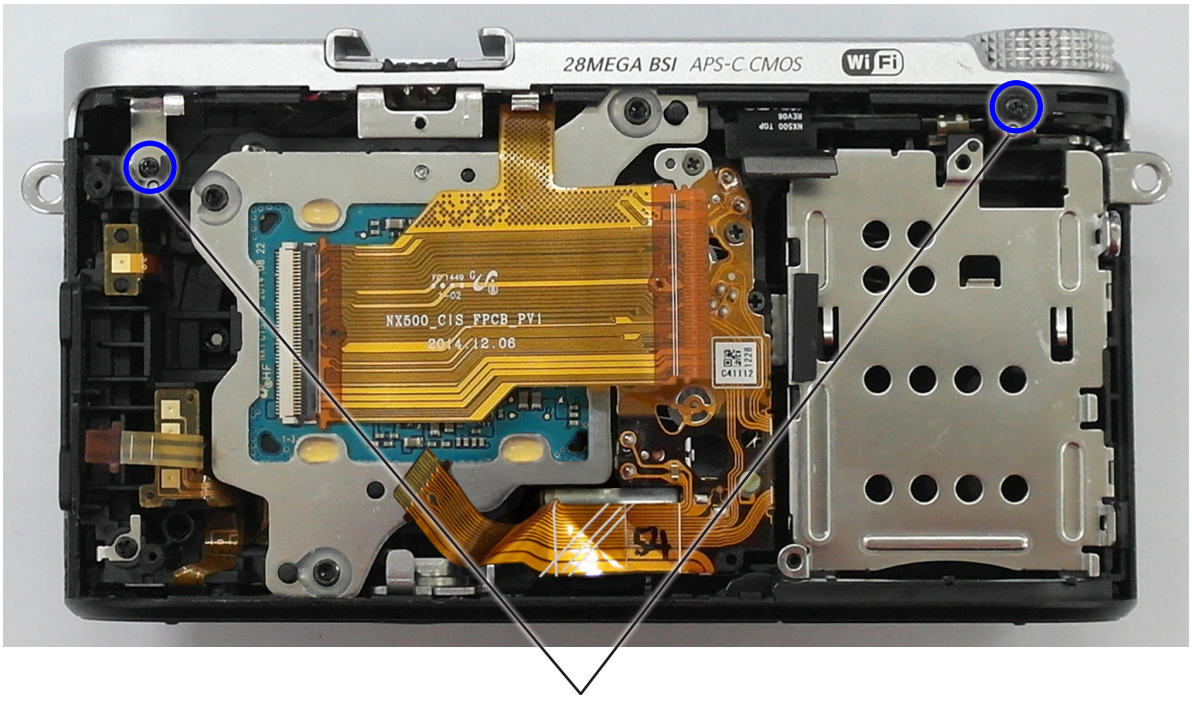


Fig. 3-14

16. Remove the **2 screw**.



SCREW (M1.4xL4.0 / NI)
6003-001739

Fig. 3-15

17. Remove the 2 **screws**.

Fig. 3-16

18. Remove the **ASSY TOP.**

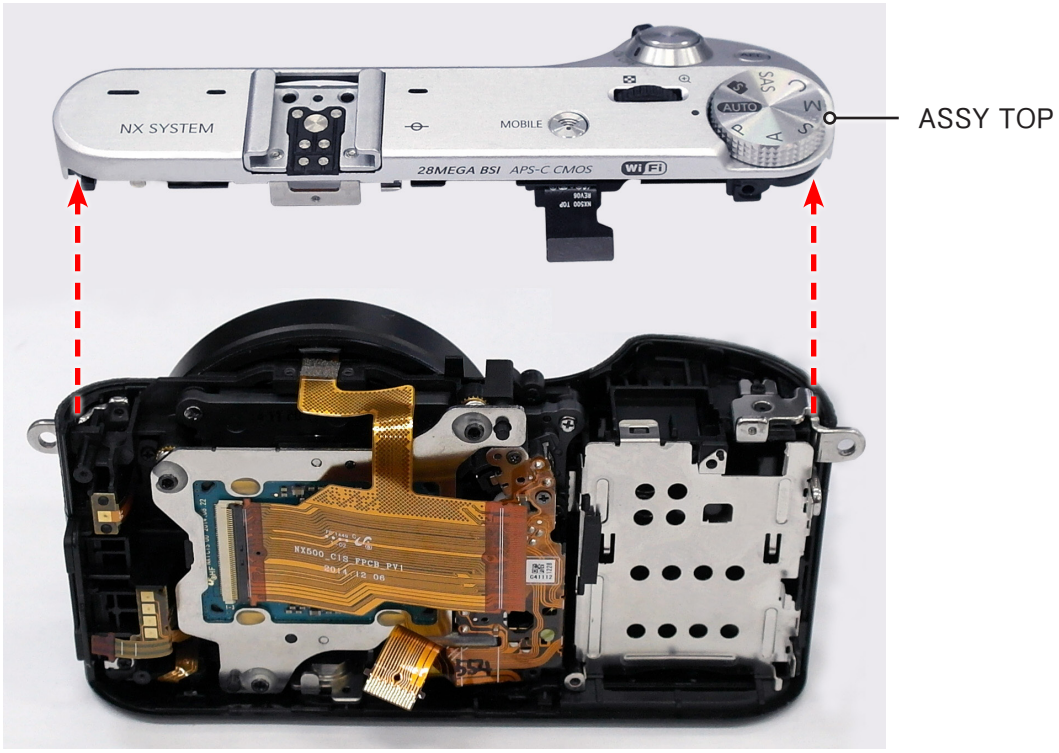


Fig. 3-17

19. Remove the 2 **screws**.

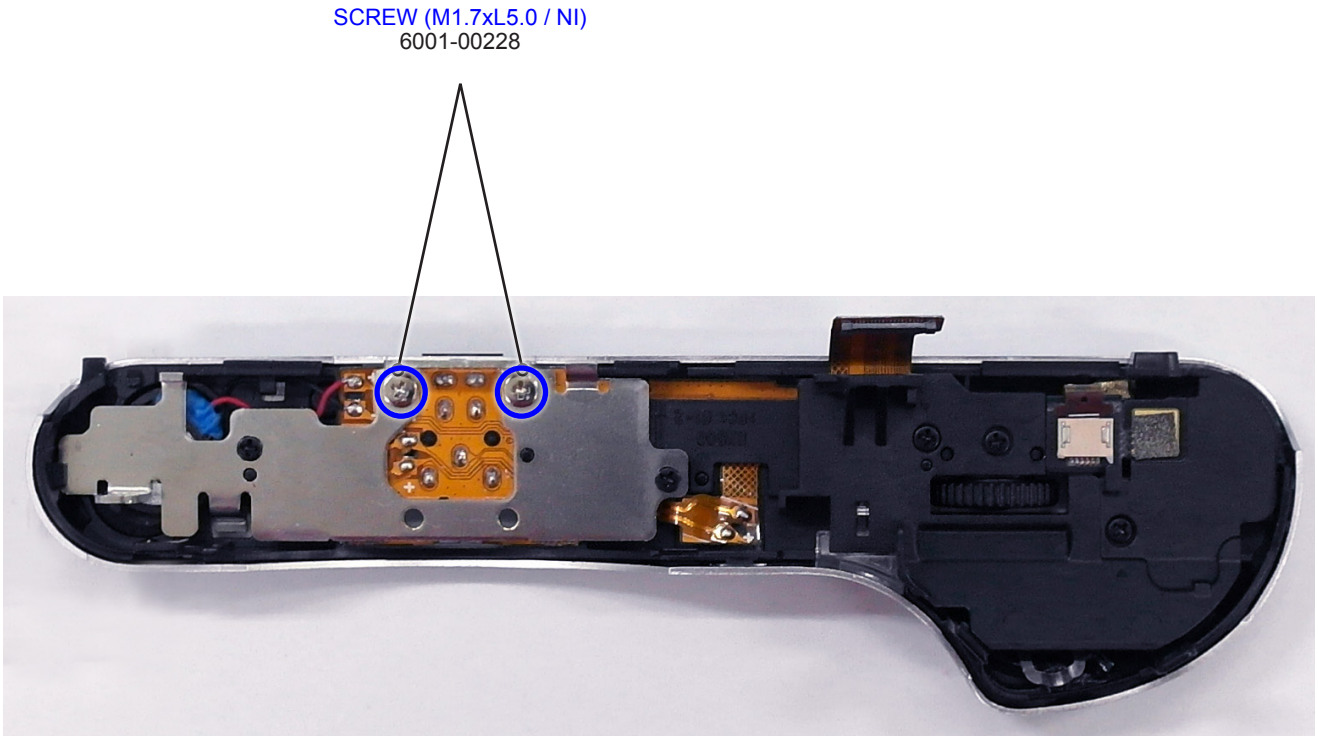


Fig. 3-18

20. Remove the **PLATE HOT SHOE**.

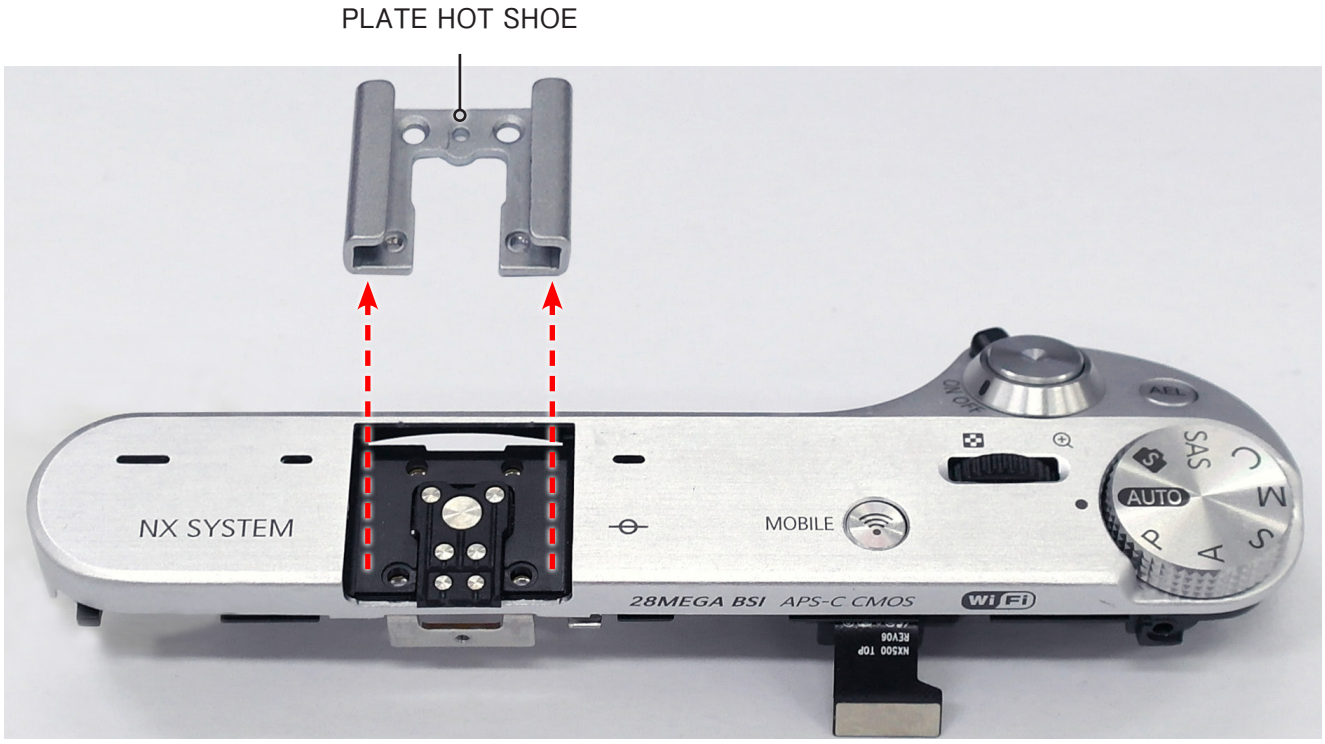


Fig. 3-19

21. Remove the **5 screws**.

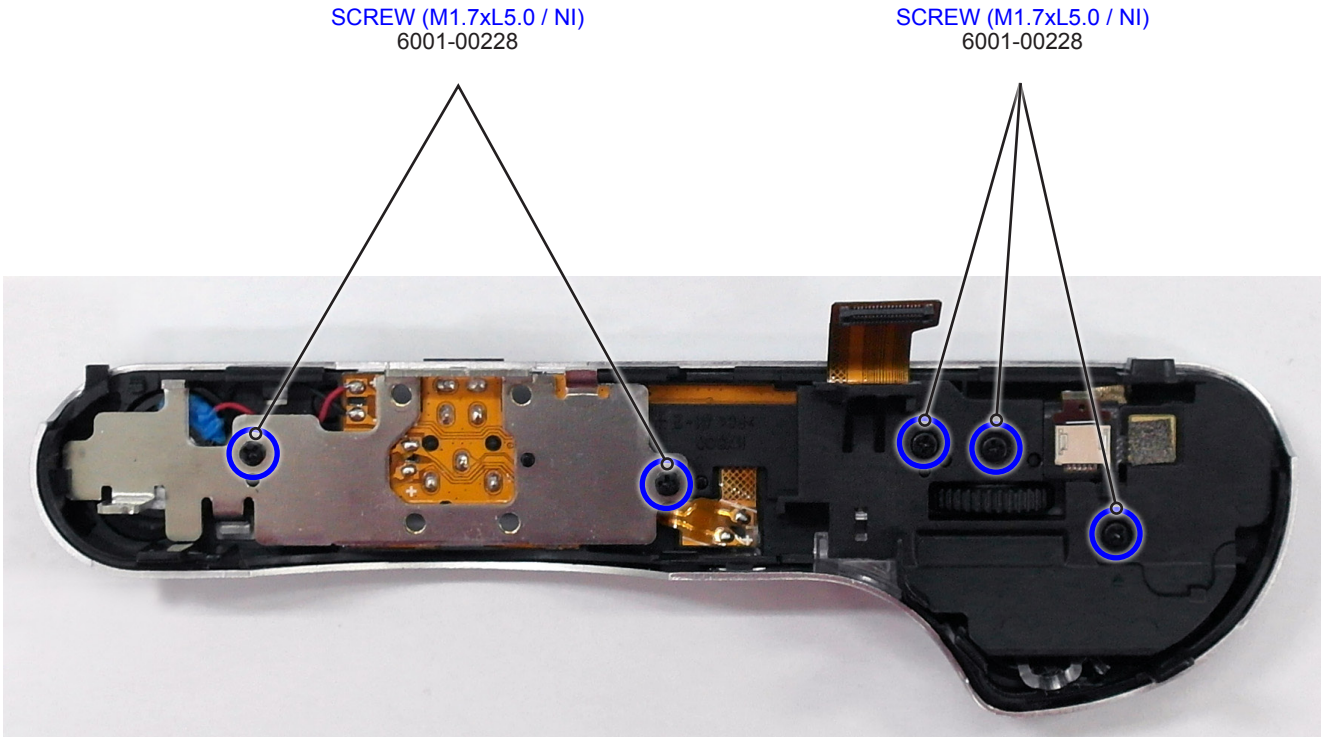


Fig. 3-20

22. Remove the **ASSY FPC TOP**.

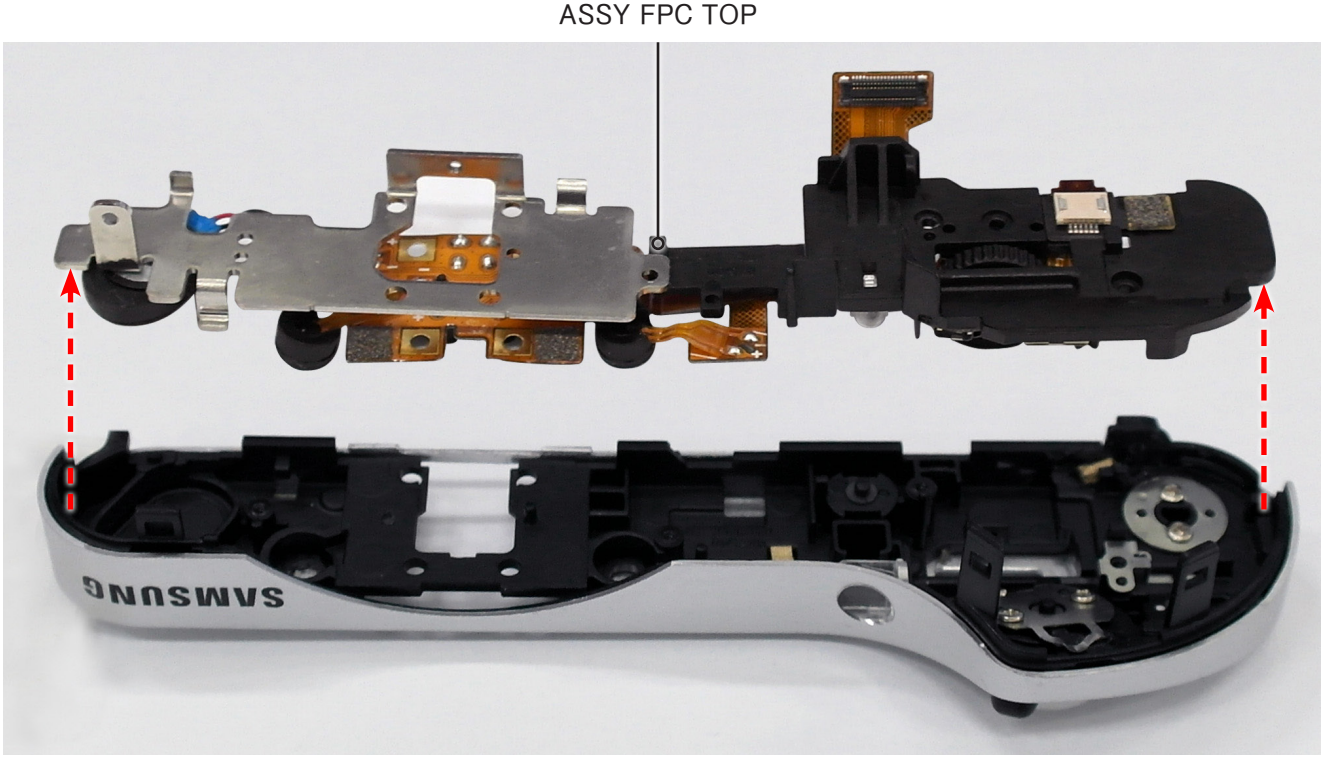


Fig. 3-21

3-1-2 Technical expertise support - Disassembly

1. Remove the **FPCB** from the connector as illustrated in **Fig. A**.

CAUTION

Use extra care when removing the FPCB from the connector.

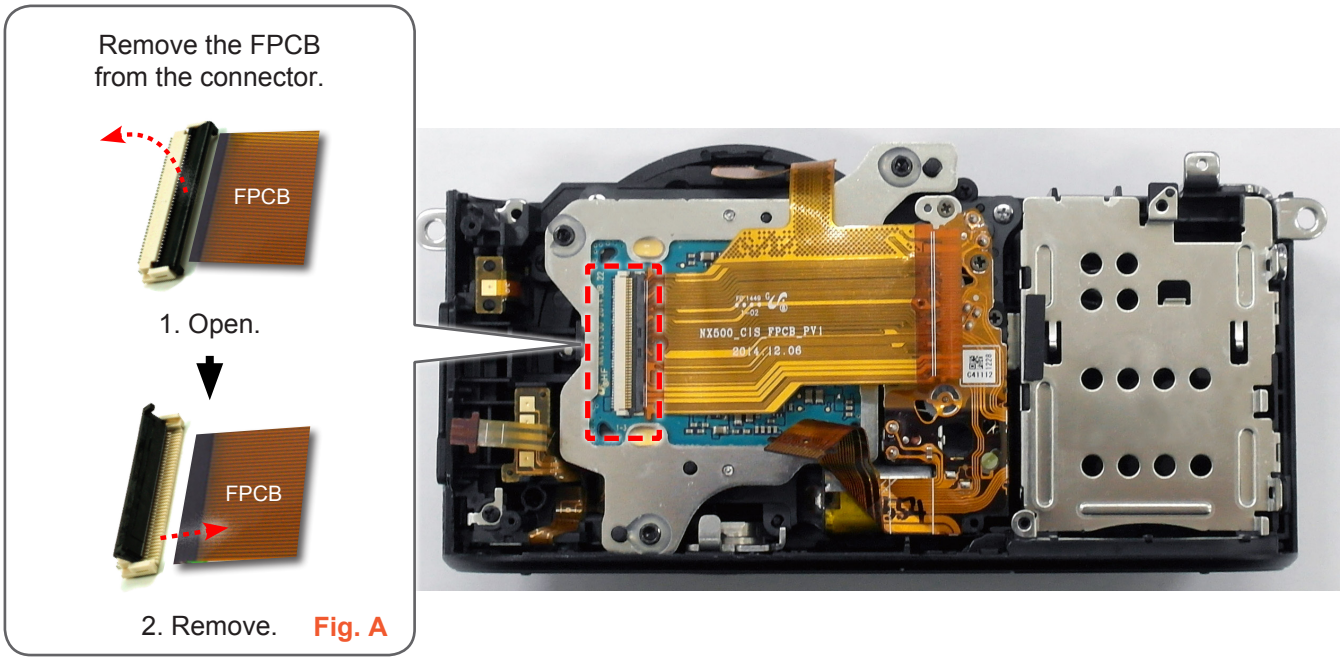


Fig. 3-22

2. Remove the **3 screws**.

SCREW (M1.7xL4.0 / BLACK)
6001-002279

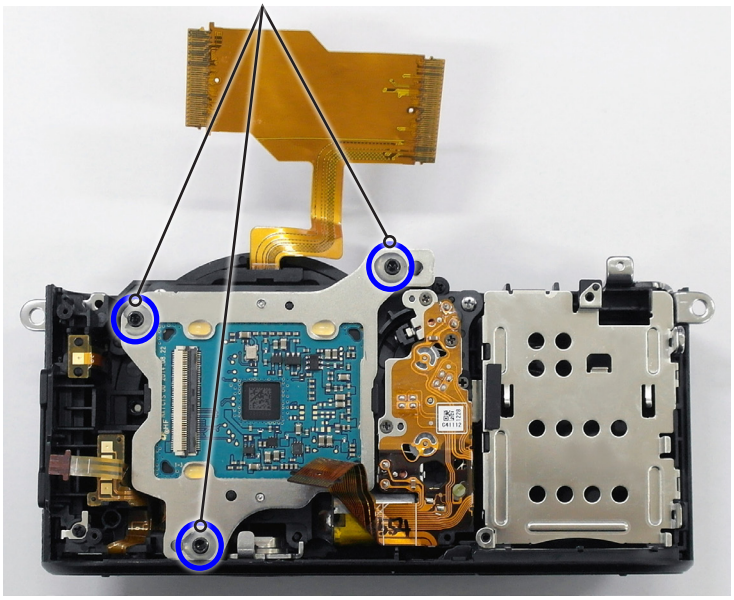


Fig. 3-23

3. Remove the following parts in the order indicated below.
① **ASSY CMOS SUB**
② **SPRING-CS**

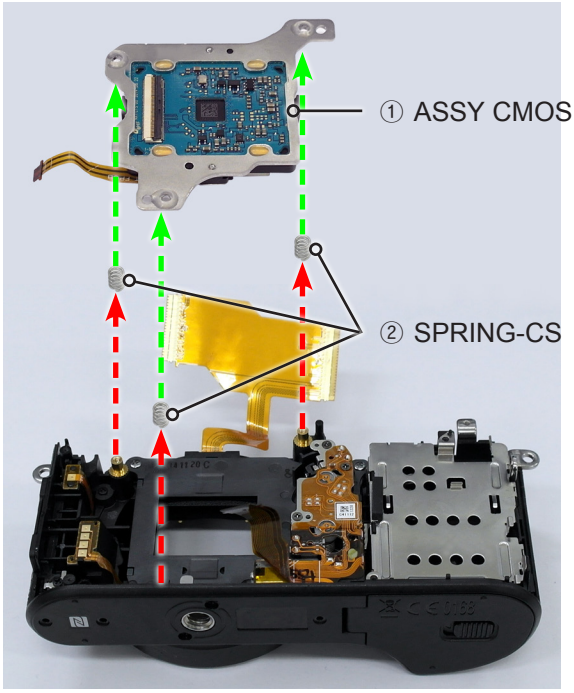


Fig. 3-24

4. Remove the **TRIPOD** as illustrated in **Fig. B**.

Raise a TRIPOD.

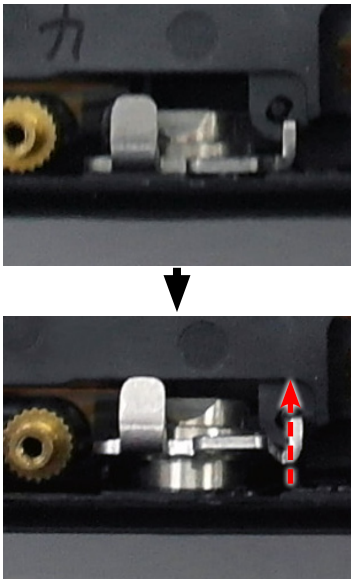


Fig. B

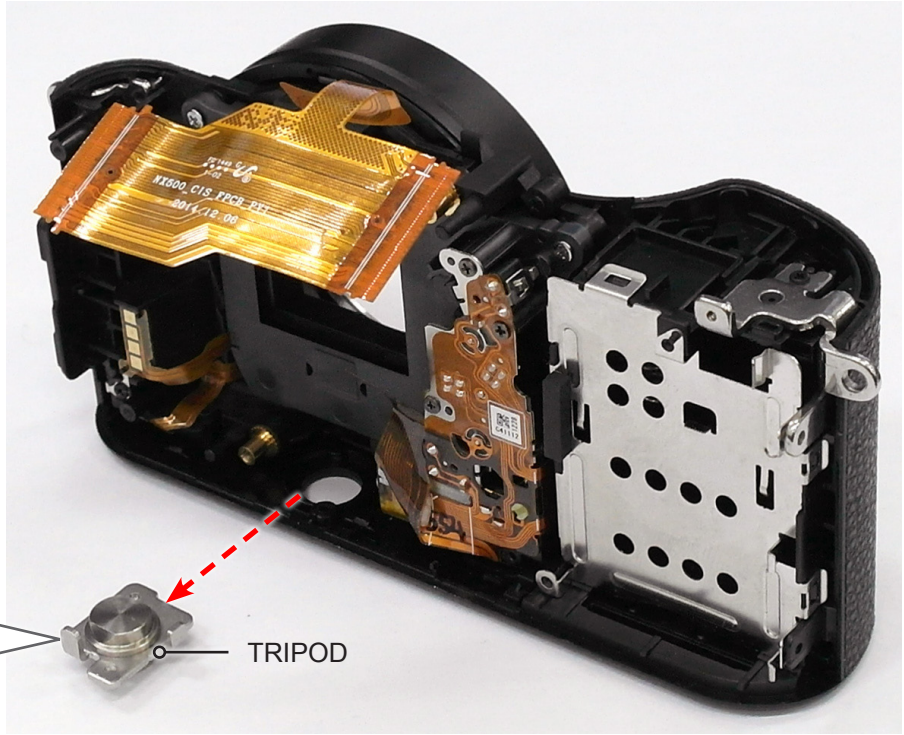


Fig. 3-25

5. Remove the **2 screws**.

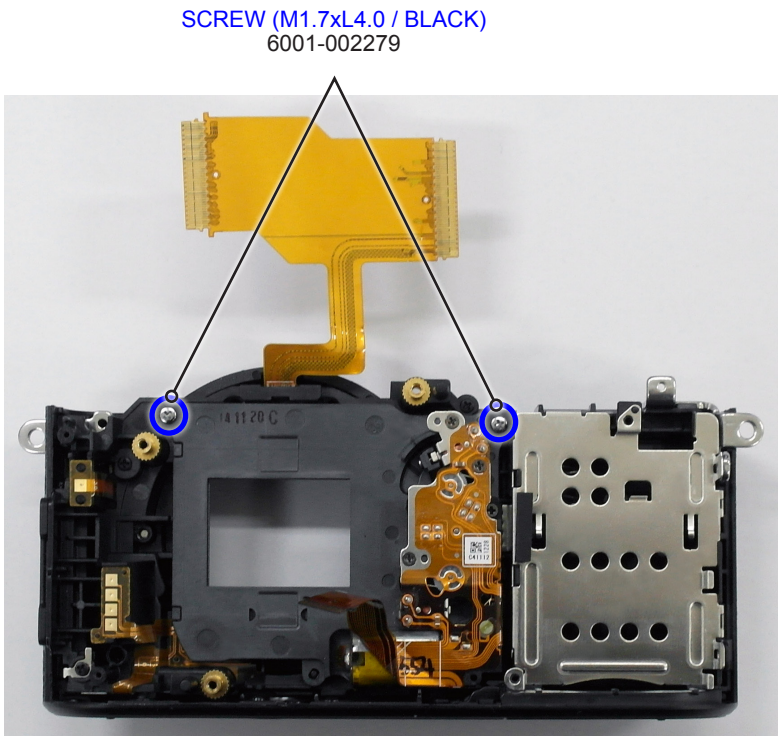


Fig. 3-26

6. Remove the **ASSY SHUTTER**.

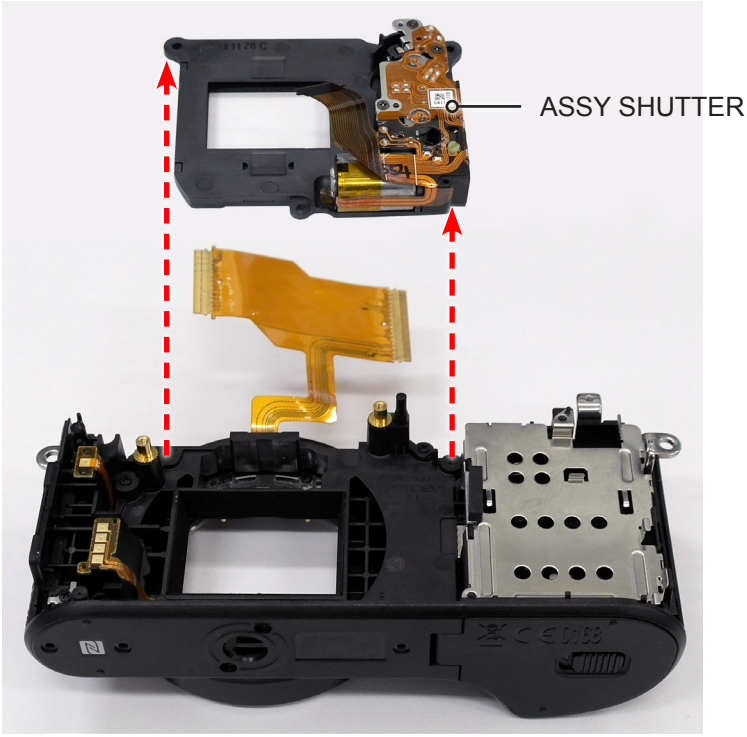
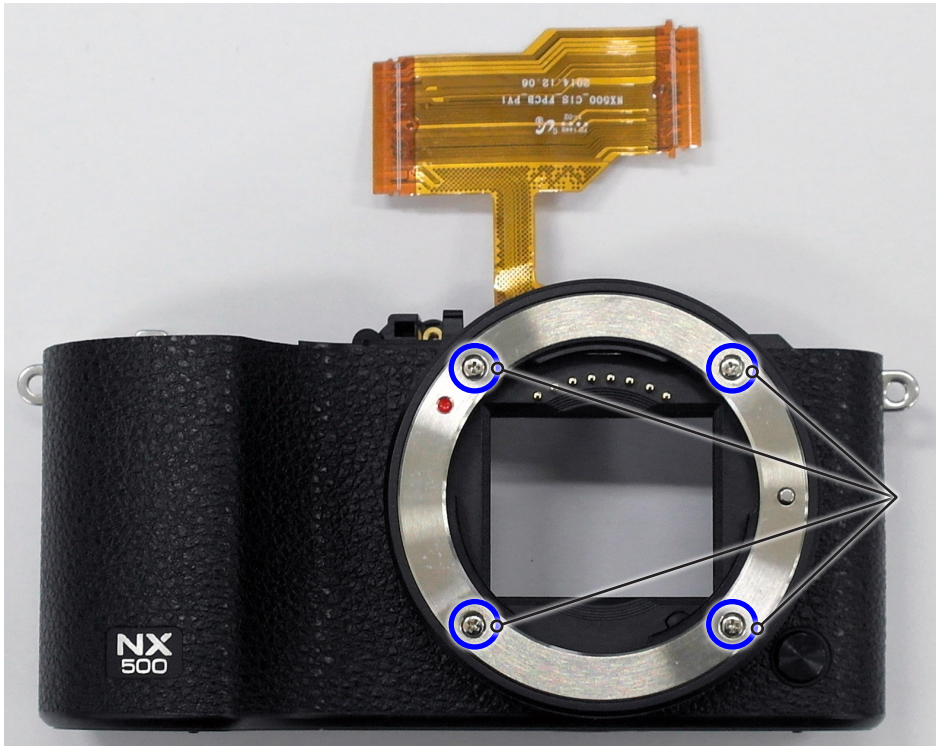


Fig. 3-27

7. Remove the **4 screws**.



SCREW(2070_TAP_SL)
6003-001777

Fig. 3-28

8. Remove the following parts in the order indicated below.
① **PLATE-MOUNT LENS**
② **MOUNT-INNER**
③ **PLATE-MOUNT SPRING**
④ **SHAFT-LENS DETECT**
⑤ **SPRING-CS**

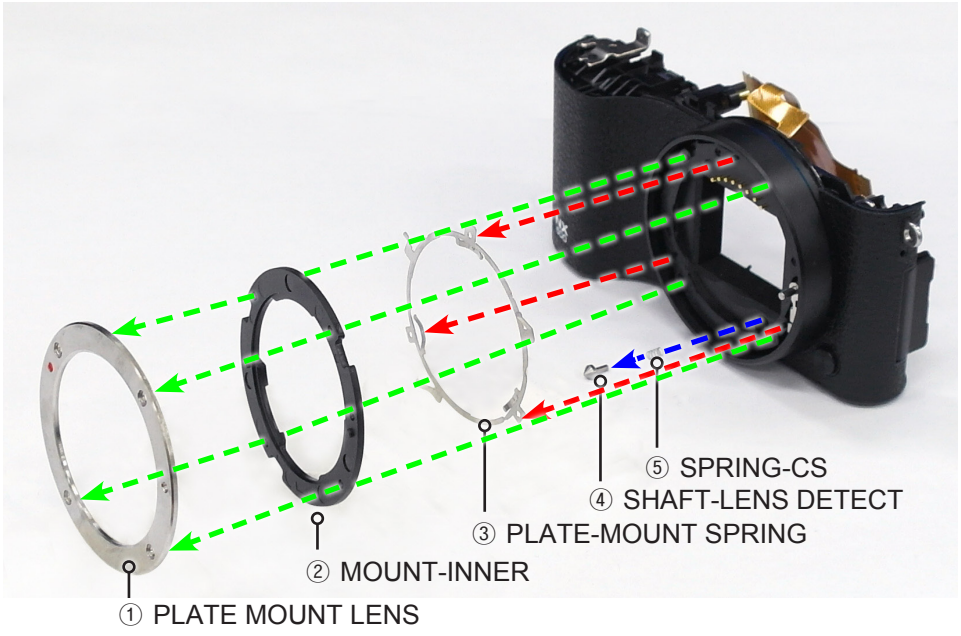


Fig. 3-29

9. Remove the **2 screws**.

SCREW(1430 TAP SL)
6003-001508

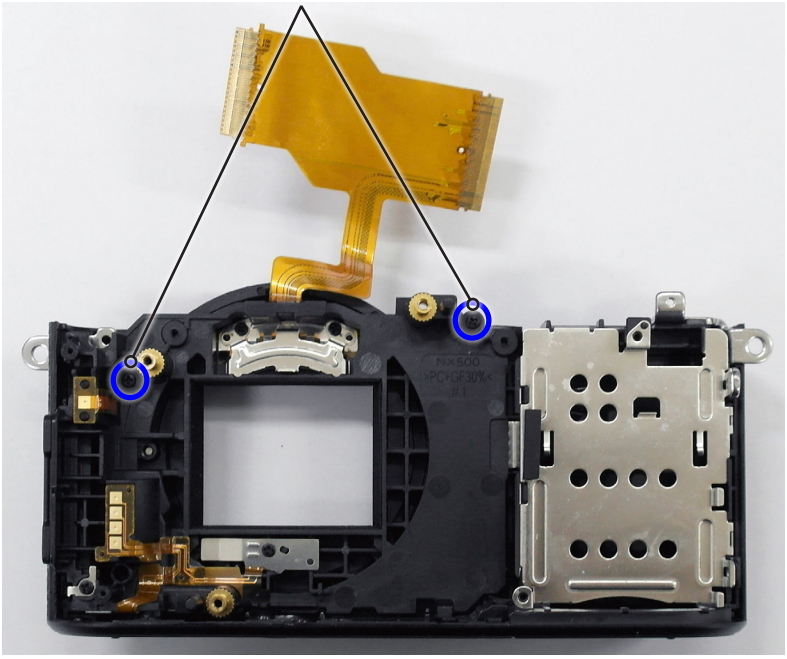


Fig. 3-30

10. Remove the **ASSY MOUNT**.

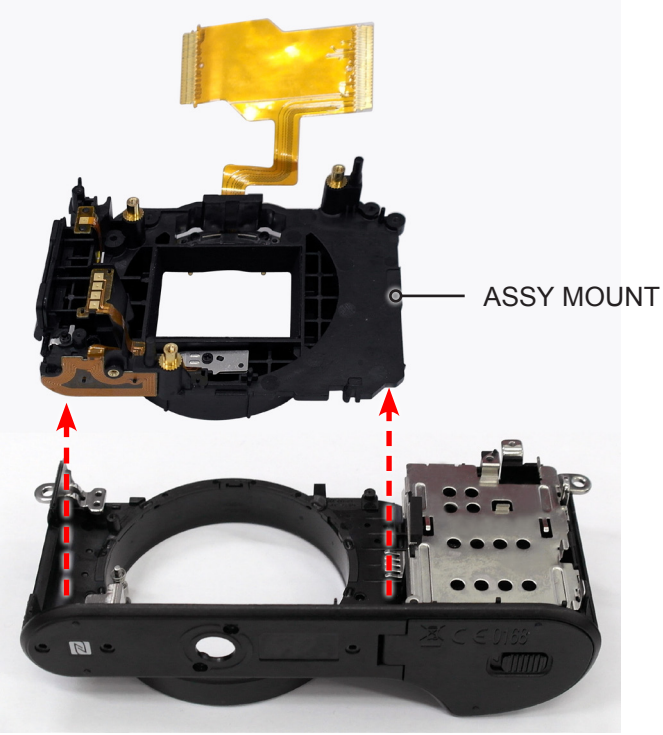


Fig. 3-31

11. Remove the **ASSY LENS UNLOCK**.

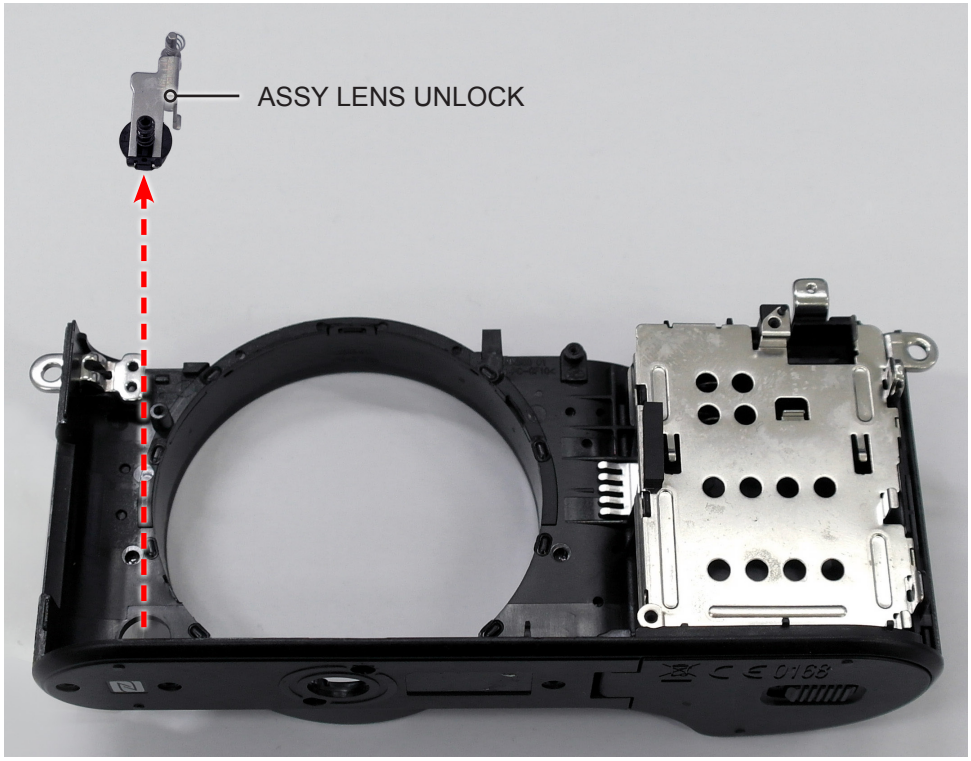


Fig. 3-32

12. Remove the following parts in the order indicated below.
① **SPRING SHAFT UNLOCK**
② **ICT SHAFT LENS UNLOCK**
③ **SPRING CS**
④ **LENS UNLOCK KEY**

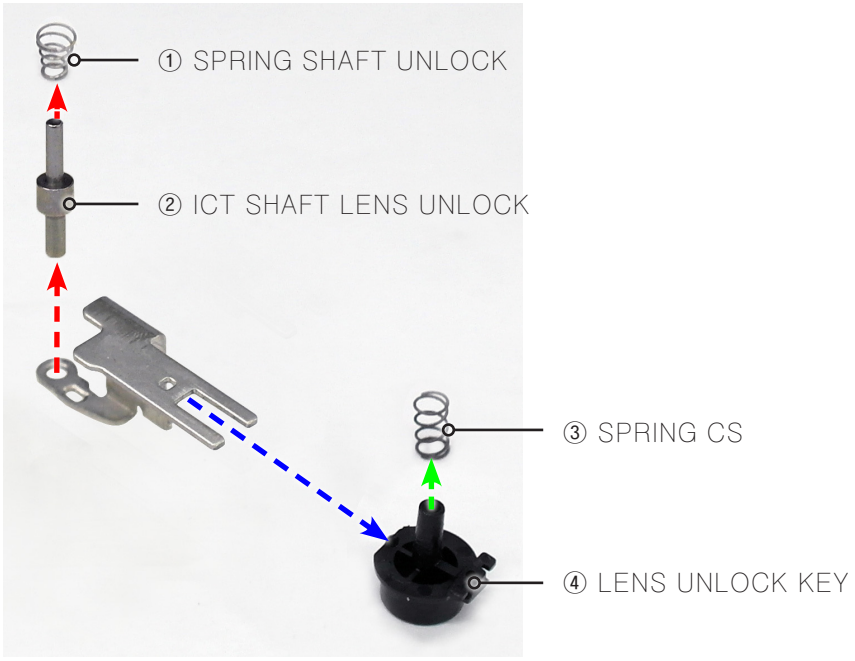


Fig. 3-33

13. Remove the **3 locking** parts marked in green circle as illustrated in **Fig. C**.
14. Remove the **PLATE CHAMBER**.

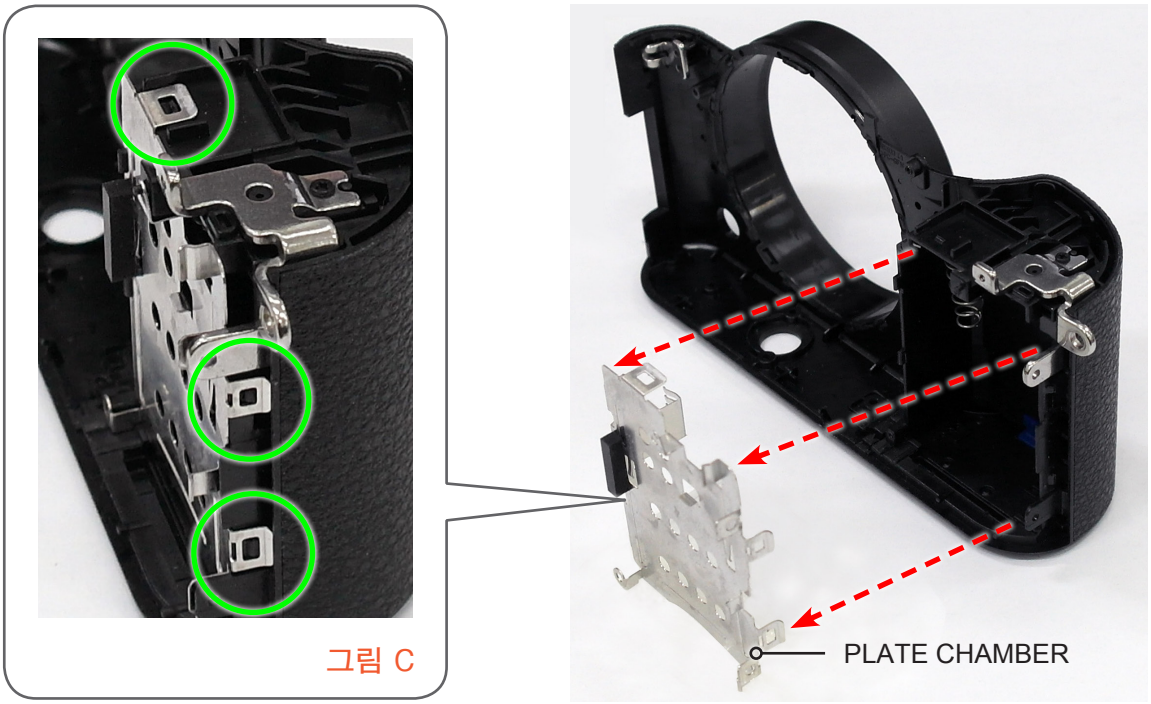


Fig. 3-34

15. Remove the **HOLDER STRAP R**.

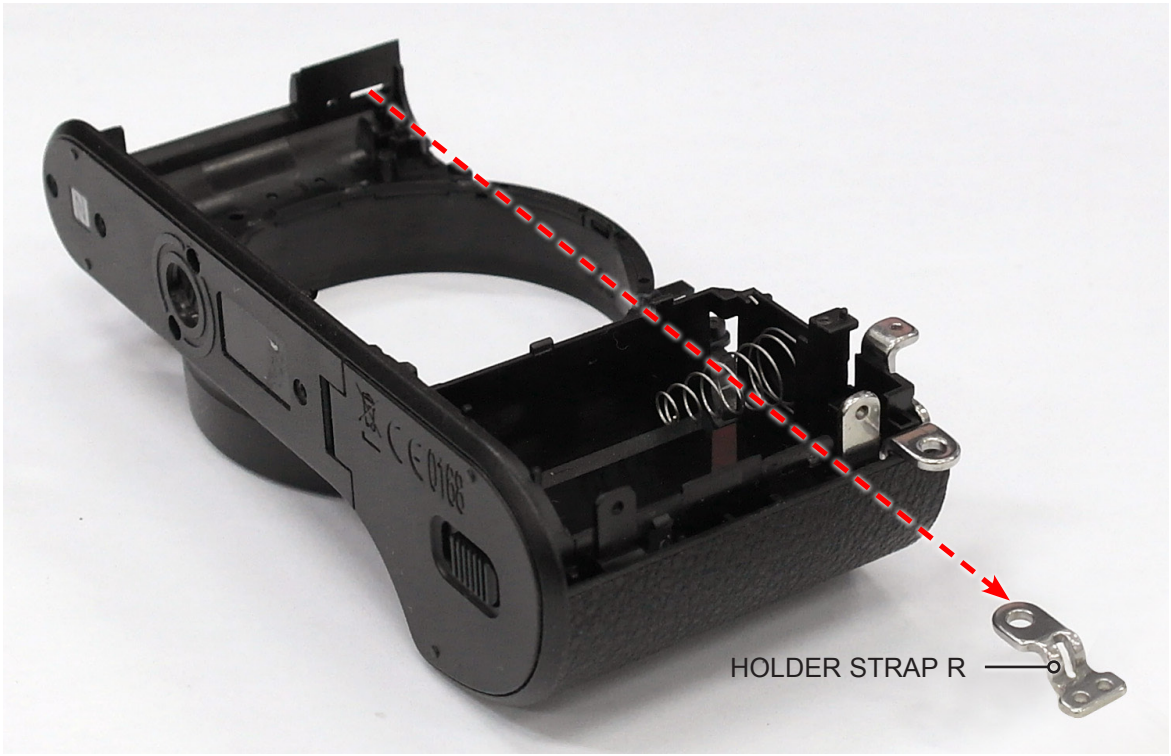


Fig. 3-35

16. Remove the **screws**.

Fig. 3-36

17. Remove the **HOLDER STRAP L**.

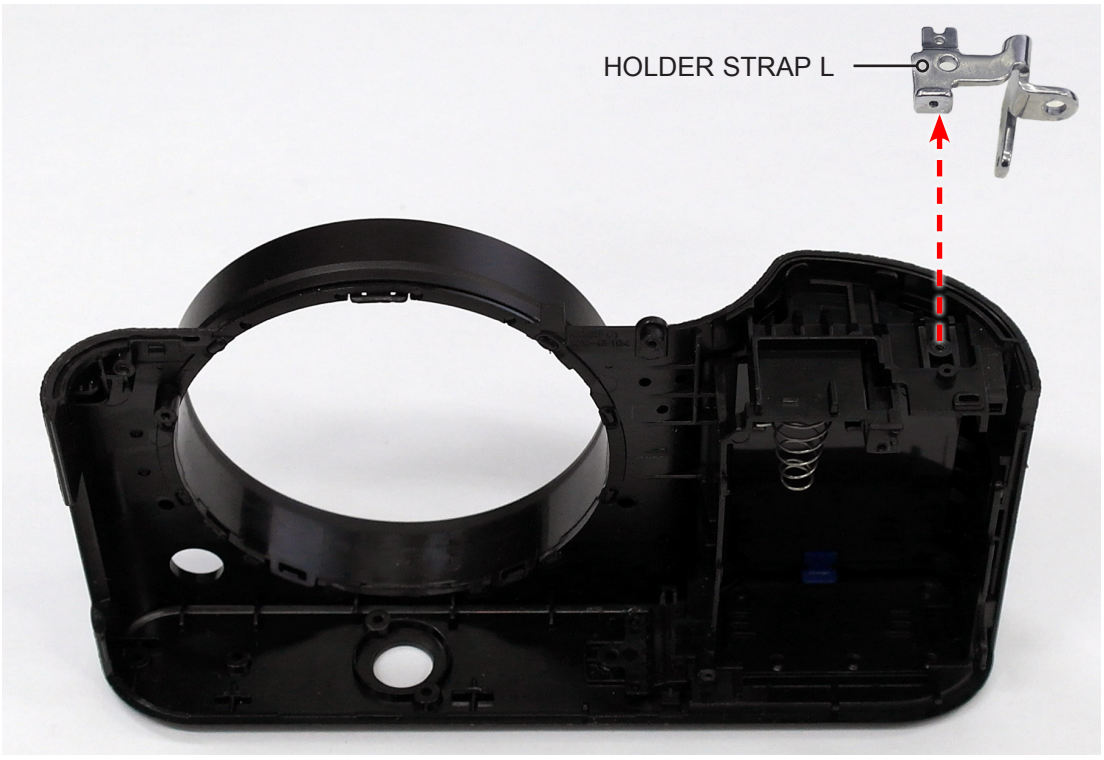


Fig. 3-37

3-2 Reassembly

3-2-1 Technical expertise support - Reassembly

1. Install the **HOLDER STRAP L**.

Fig. 3-38

2. Tighten the **screws**.

Fig. 3-39

3. Install the **HOLDER STRAP R**.

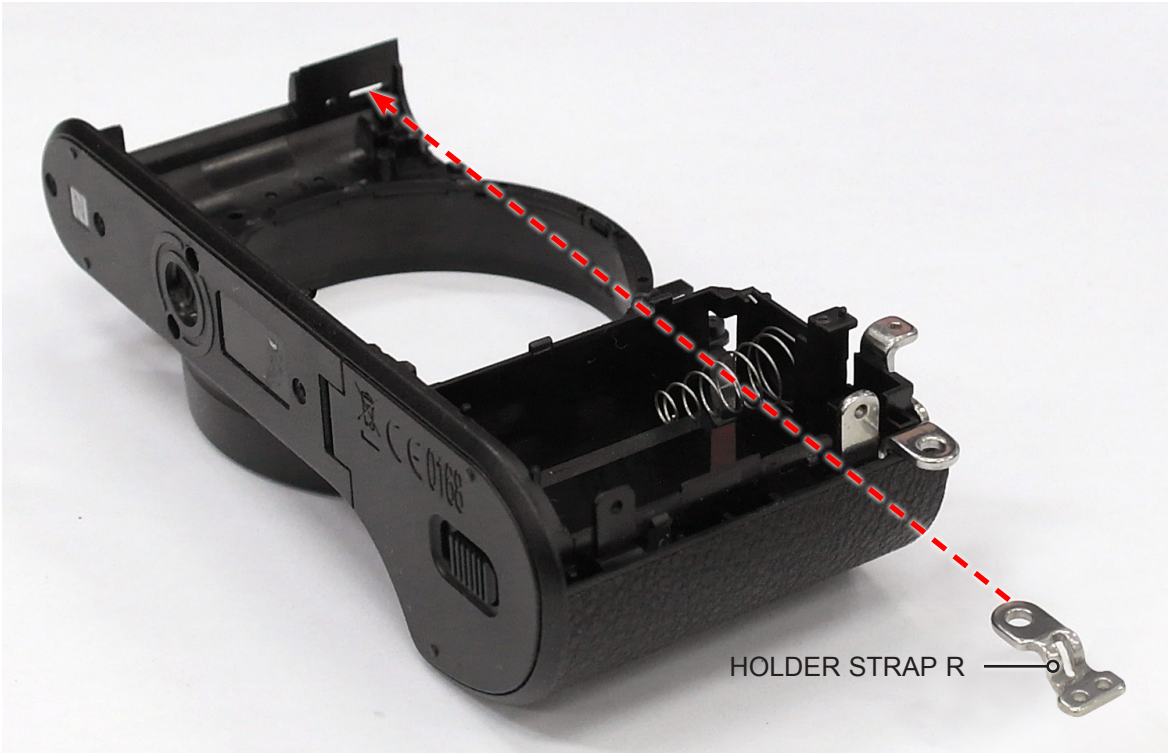


Fig. 3-40

4. Install the **PLATE CHAMBER**.

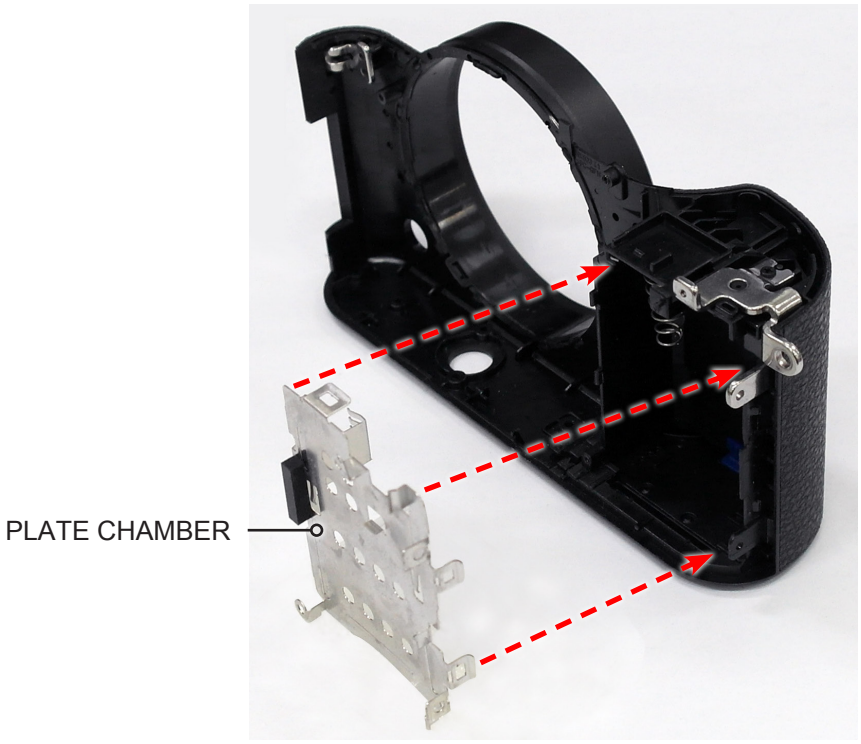


Fig. 3-41

5. Install the following parts in the order indicated below.
① **SPRING SHAFT UNLOCK**
② **ICT SHAFT LENS UNLOCK**
③ **SPRING CS**
④ **PLATE LENS UNLOCK & LENS UNLOCK KEY**

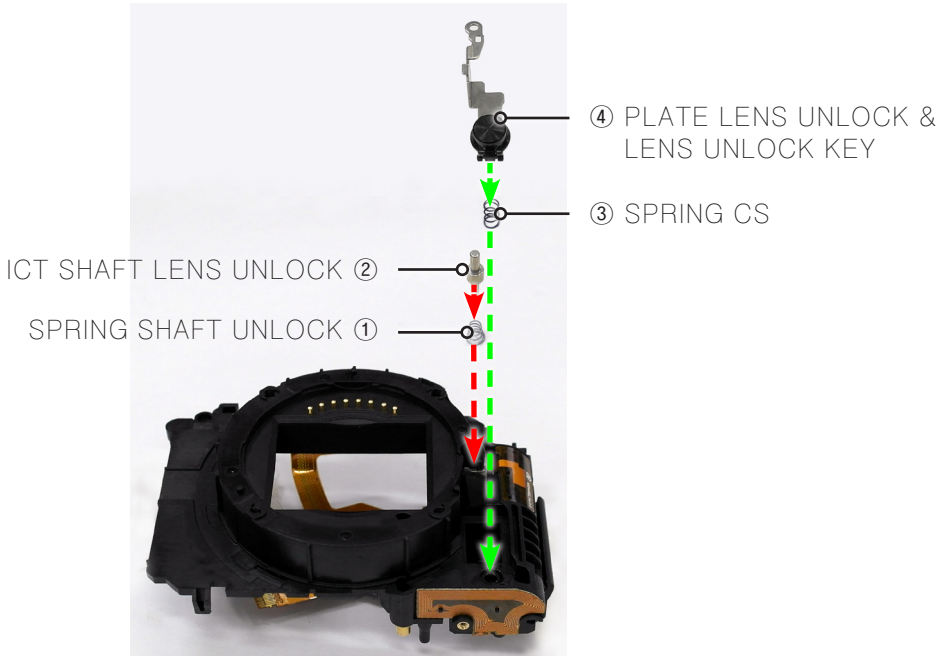


Fig. 3-42

6. Install the **ASSY CASE REAR**.

Fig. 3-43

7. Install the ASSY MOUNT.

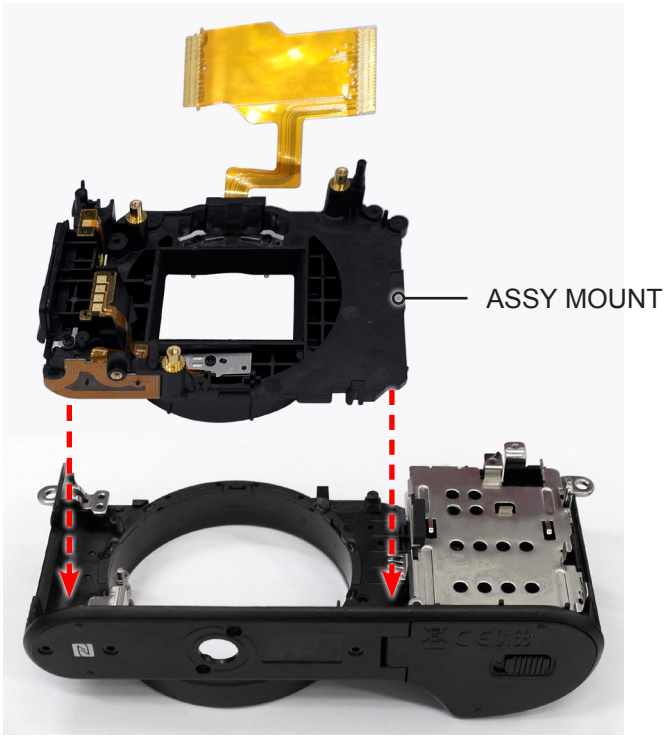


Fig. 3-44

8. Tighten the **2 screws**.

SCREW(1430 TAP SL)
6003-001508

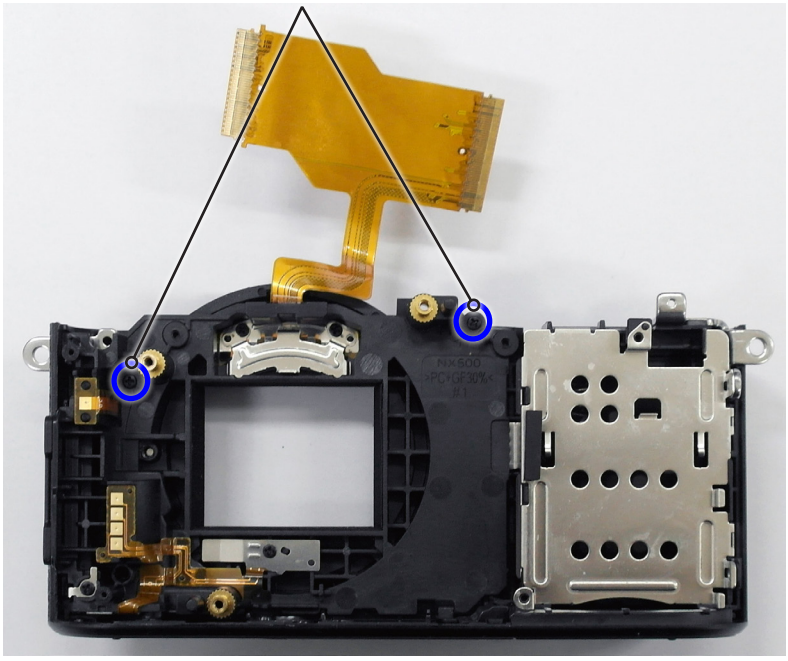


Fig. 3-45

9. Install the following parts in the order indicated below.
① **SPRING-CS**
② **SHAFT-LENS DETECT**
③ **PLATE-MOUNT SPRING**
④ **MOUNT-INNER**
⑤ **PLATE-MOUNT LENS**

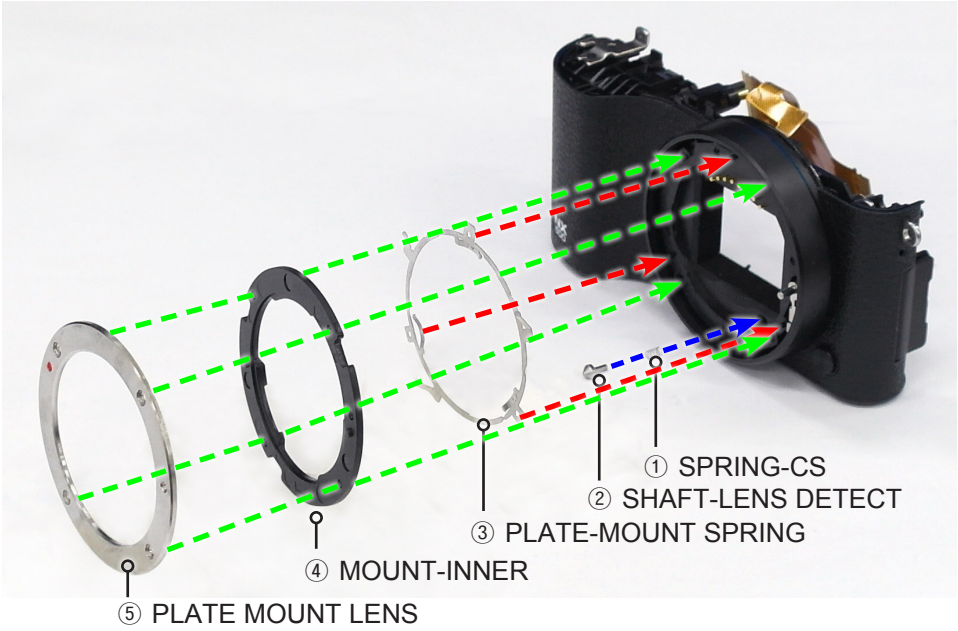


Fig. 3-46

10. Tighten the **4 screws**.

SCREW(2070_TAP_SL)
6003-001777

Fig. 3-47

11. Install the **ASSY SHUTTER**.

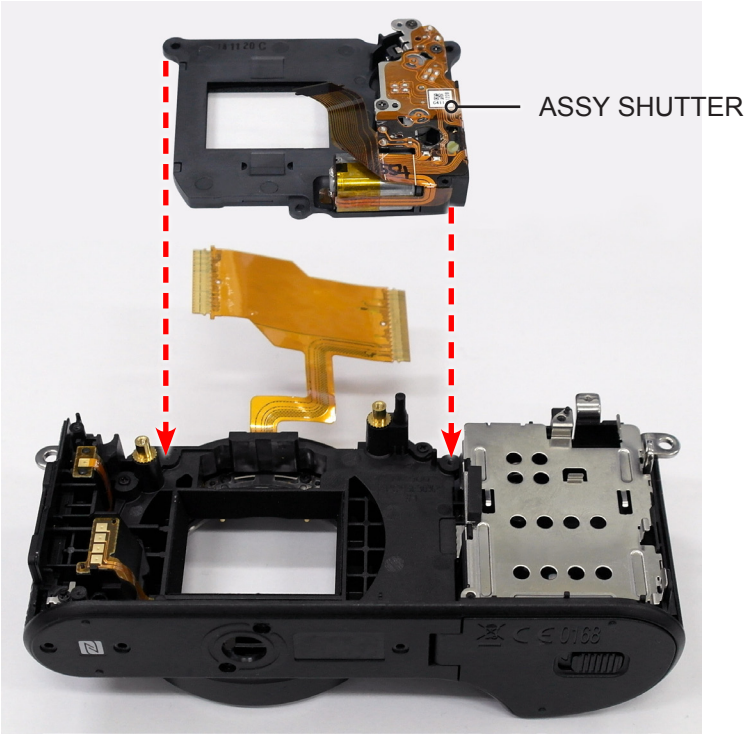


Fig. 3-48

12. Tighten the **2 screws**.

SCREW (M1.7xL4.0 / BLACK)
6001-002279

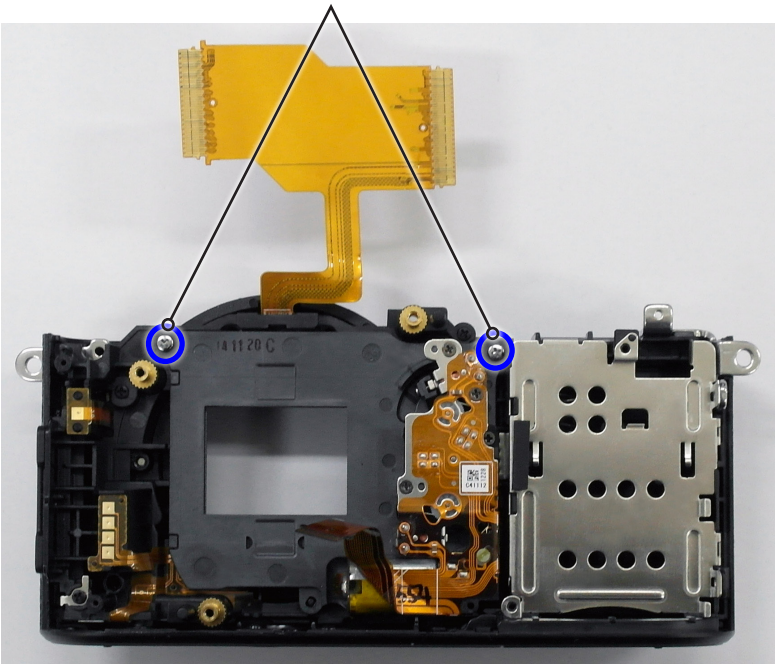


Fig. 3-49

13. Install the **TRIPOD** as illustrated in **Fig. A**.

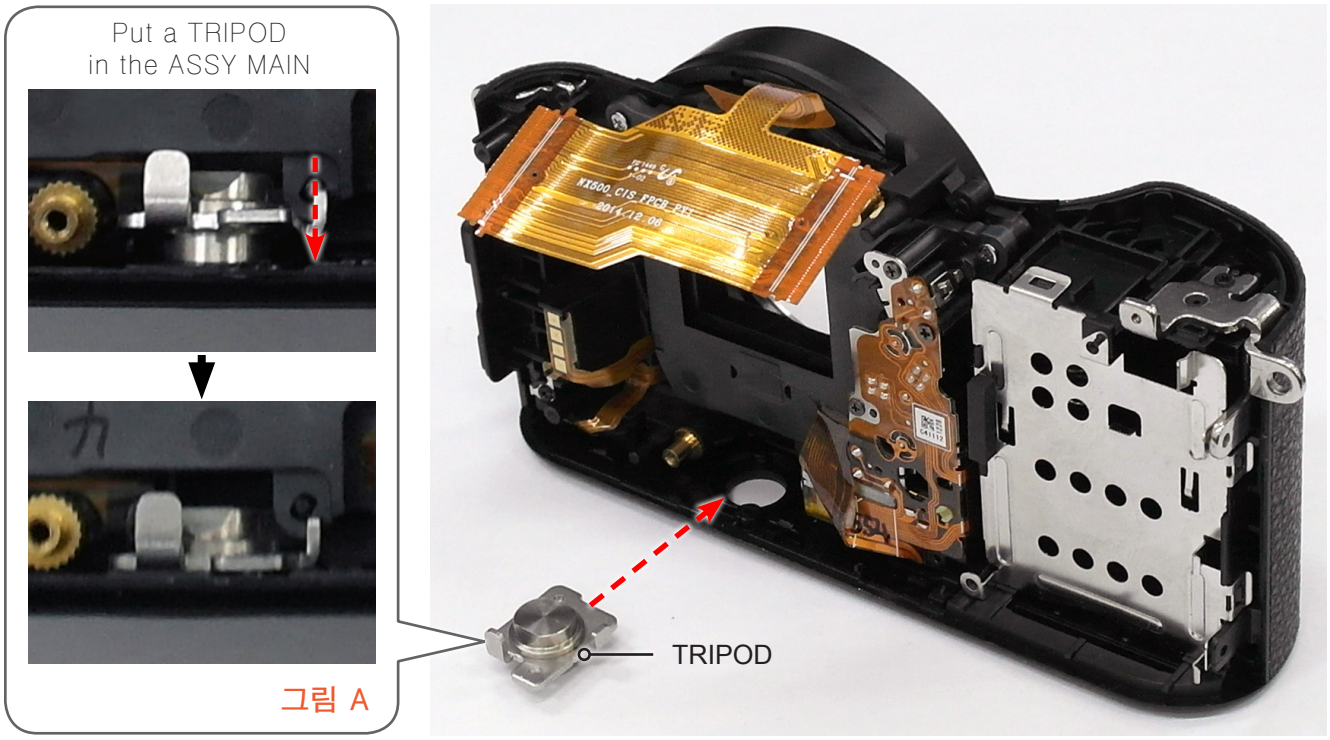


Fig. 3-50

14. Install the following parts in the order indicated below.
① **SPRING-CS**
② **ASSY CMOS SUB**

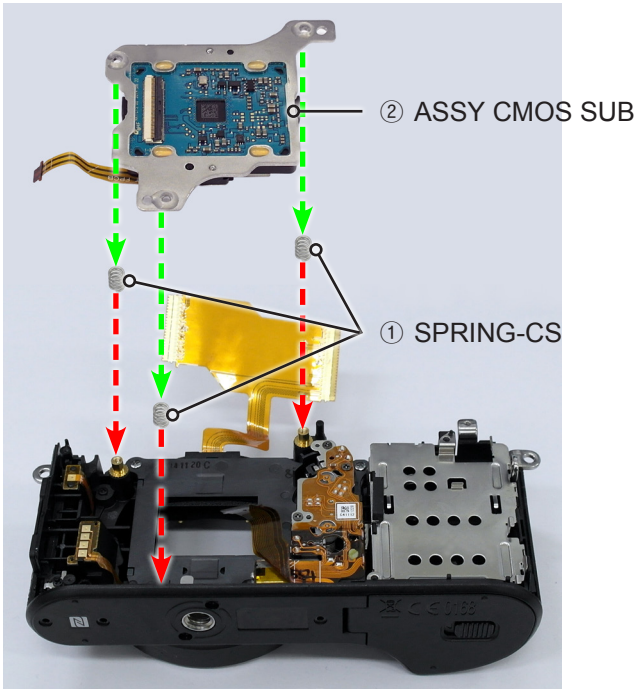


Fig. 3-51

15. Tighten the **3 screws**.

SCREW (M1.7xL4.0 / BLACK)
6001-002279

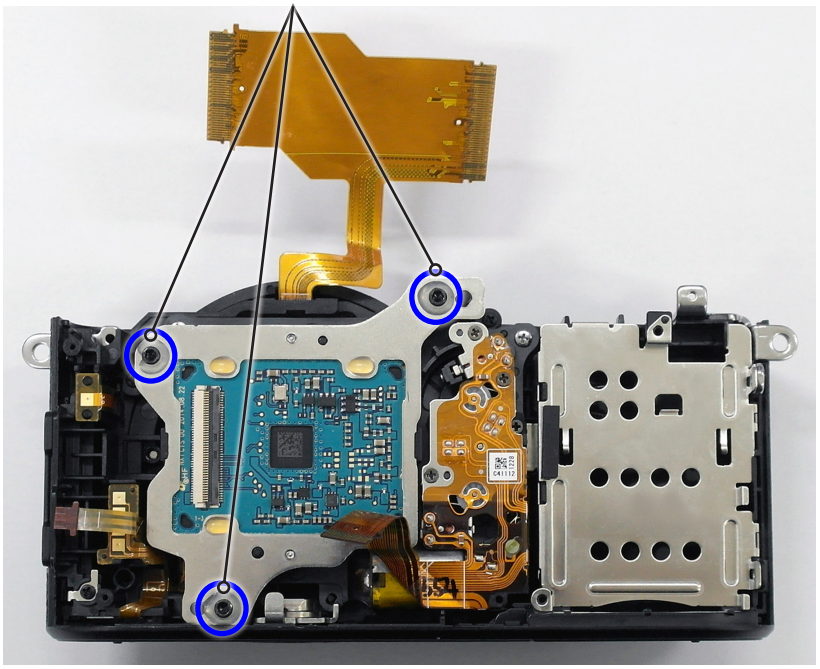


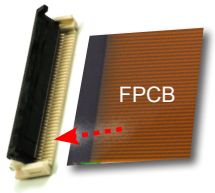
Fig. 3-52

16. Install the **FPCB** as illustrated in **Fig. B**.

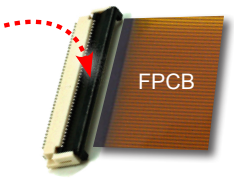
CAUTION

Use extra care when connecting the FPCB to the connector.

Connect the FPCB
to the connector.



1. Insatll.



2. Close.

Fig. B

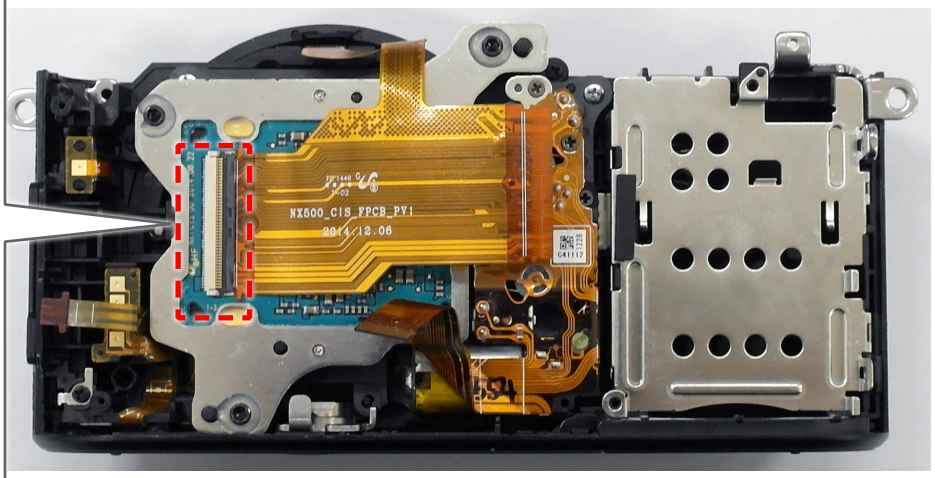


Fig. 3-53

3-2-2 General support - Reassembly

1. Install the **ASSY FPC TOP**.

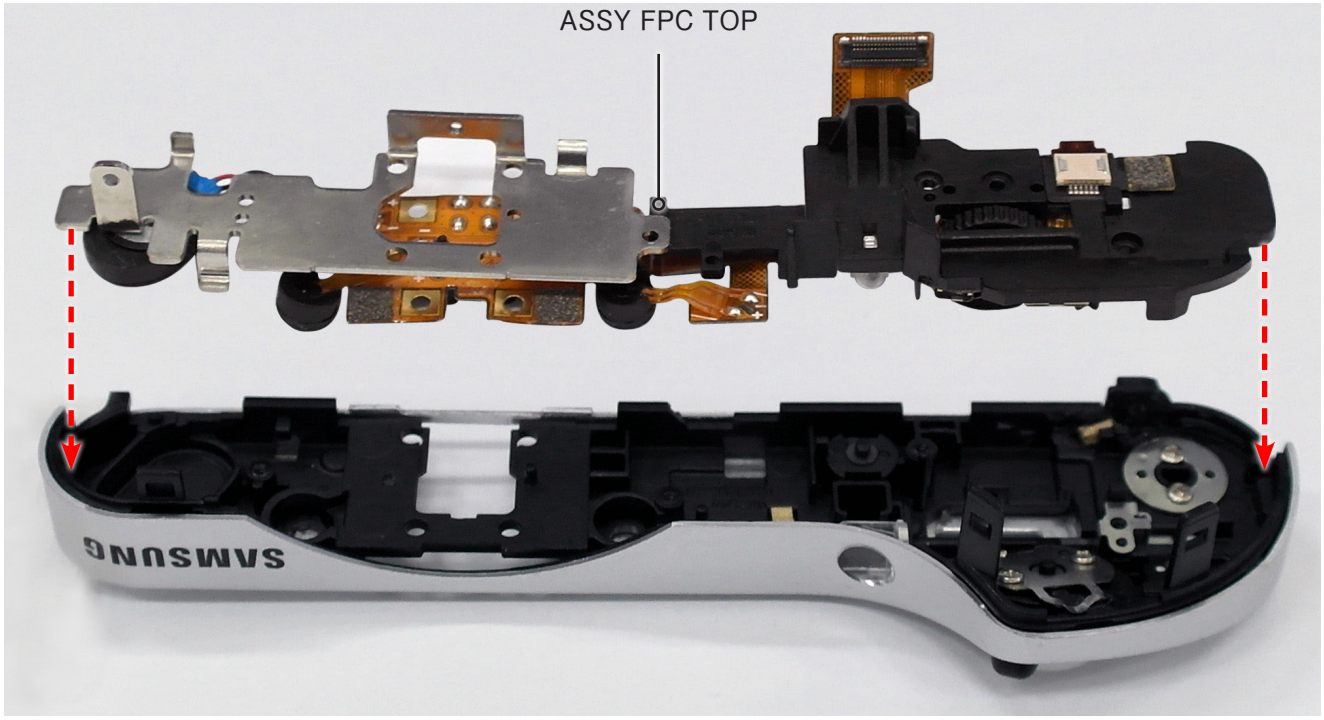


그림 3-54

2. Tighten the **5 screws**.

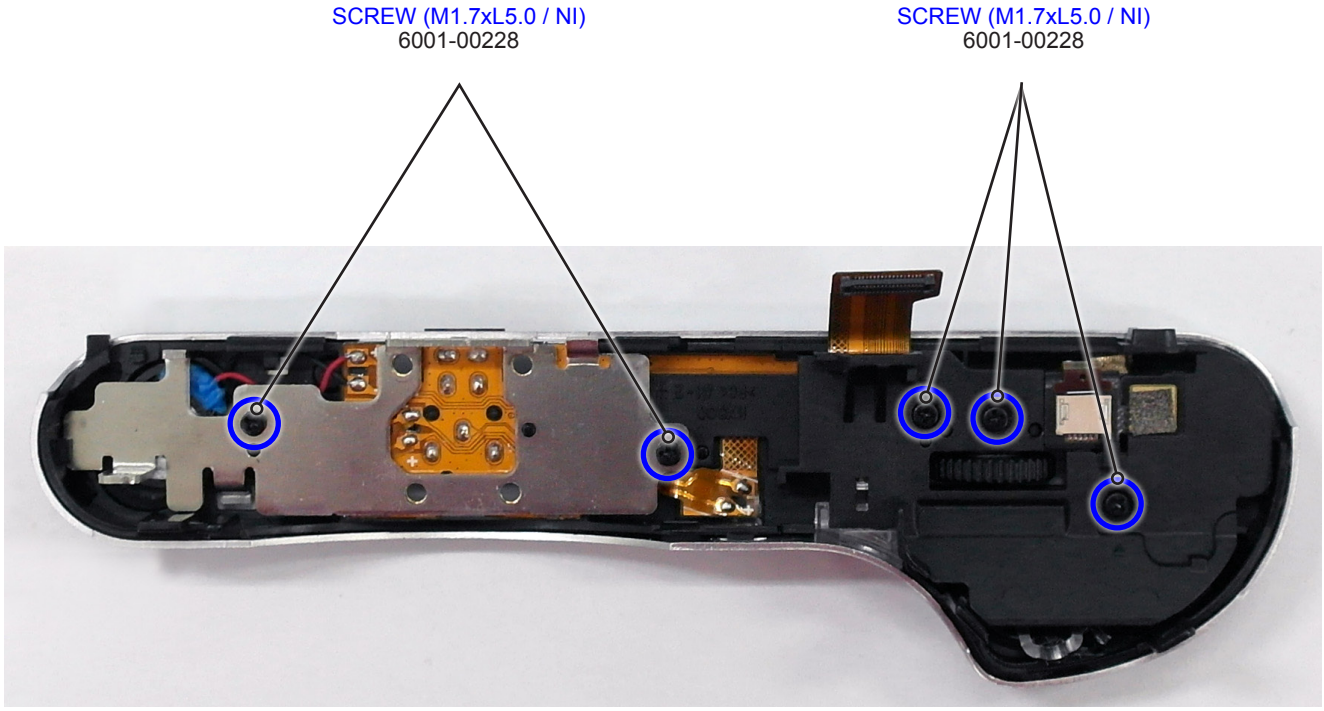


Fig. 3-55

3. Install the **PLATE HOT SHOE**.

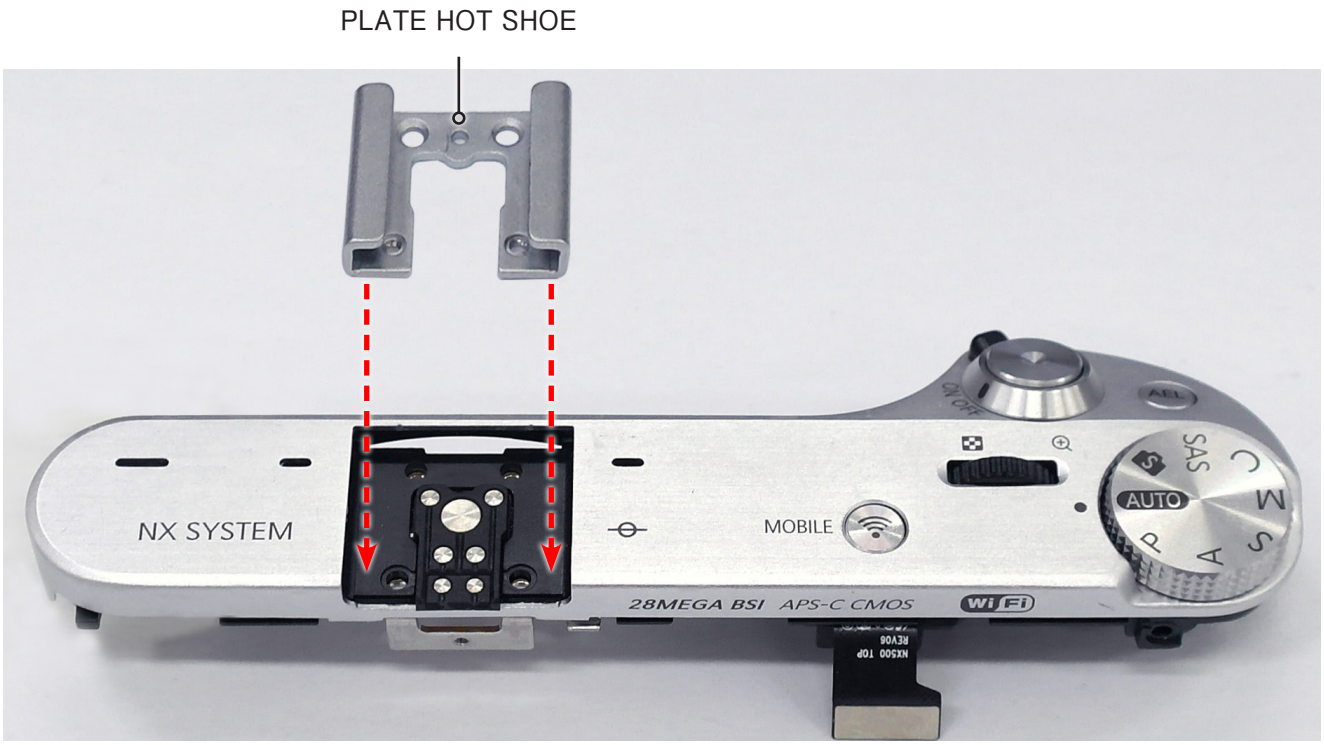


Fig. 3-56

4. Tighten the **2 screw**.

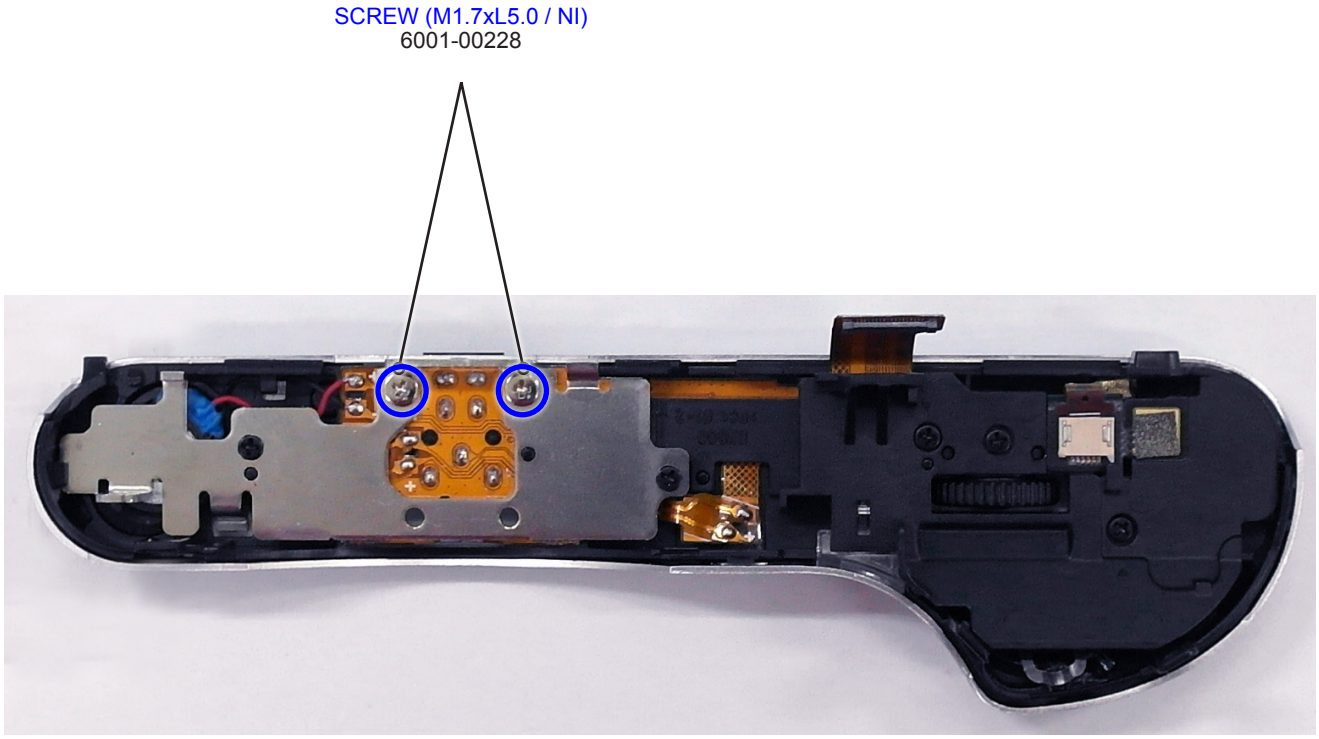


Fig. 3-57

5. Install the **ASSY TOP**.

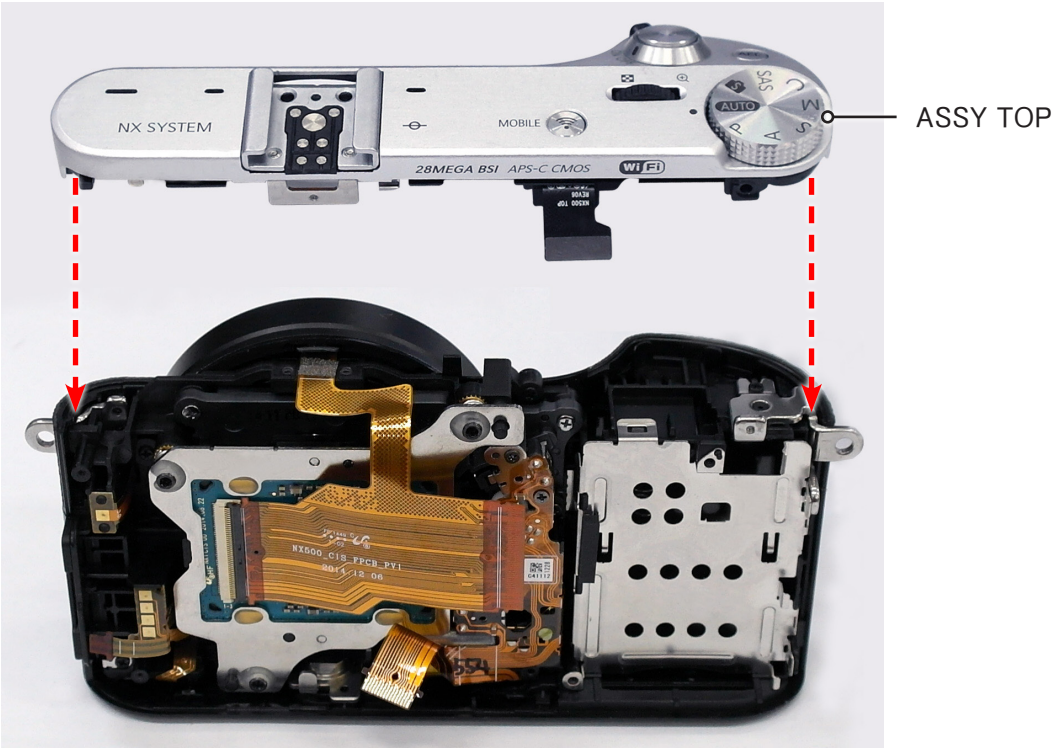


Fig. 3-58

6. Tighten the **2 screws**.

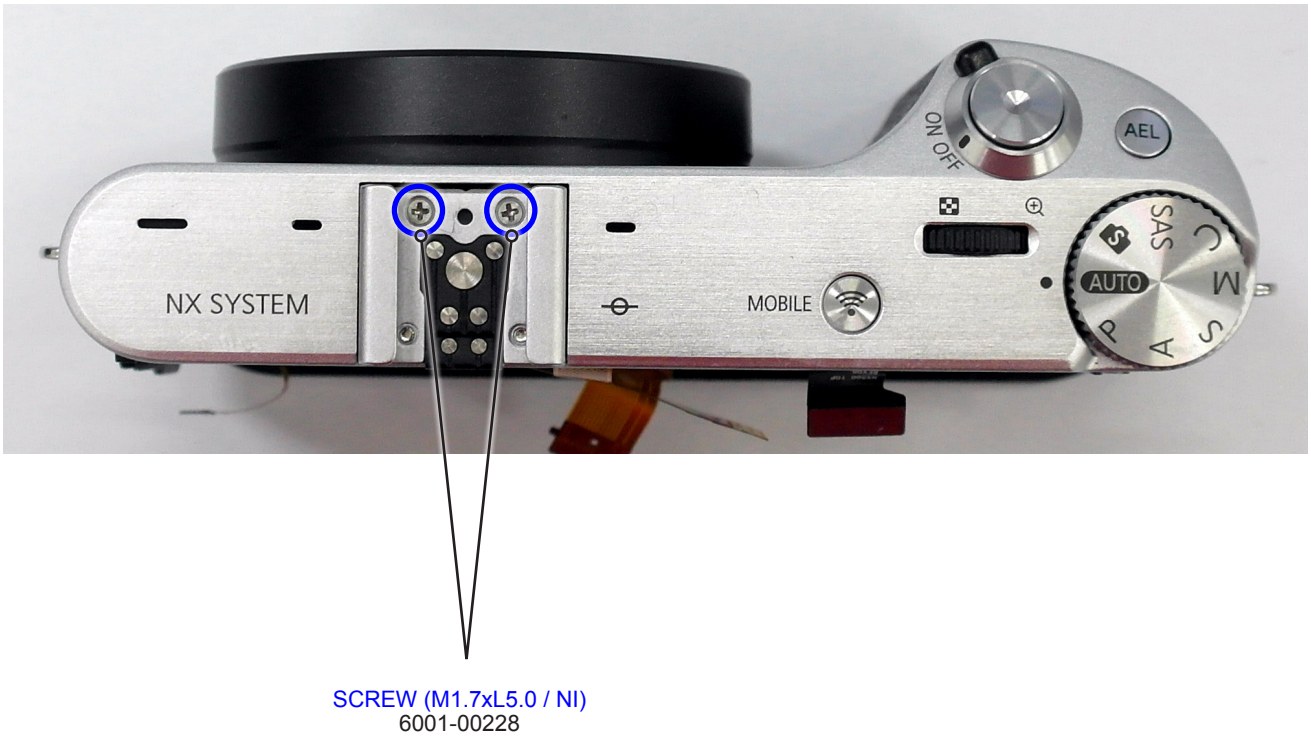
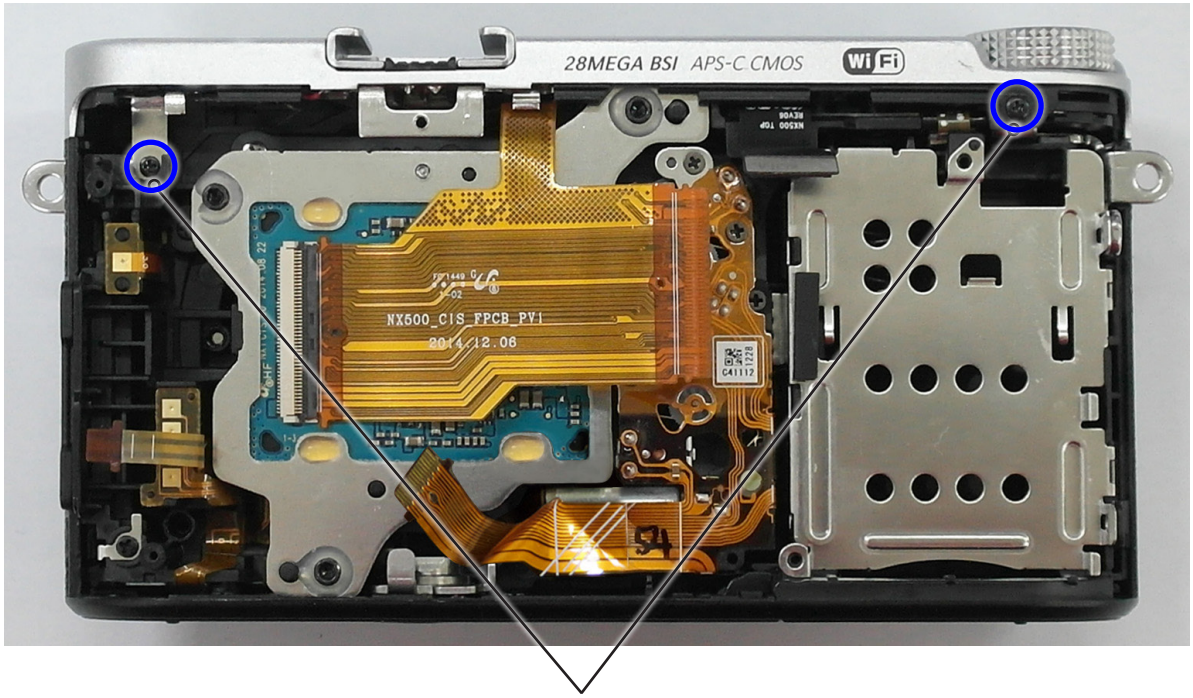


Fig. 3-59

7. Tighten the **2 screws**.



SCREW (M1.4xL4.0 / NI)
6003-001739

Fig. 3-60

8. Install the **ASSY PCB MAIN**.

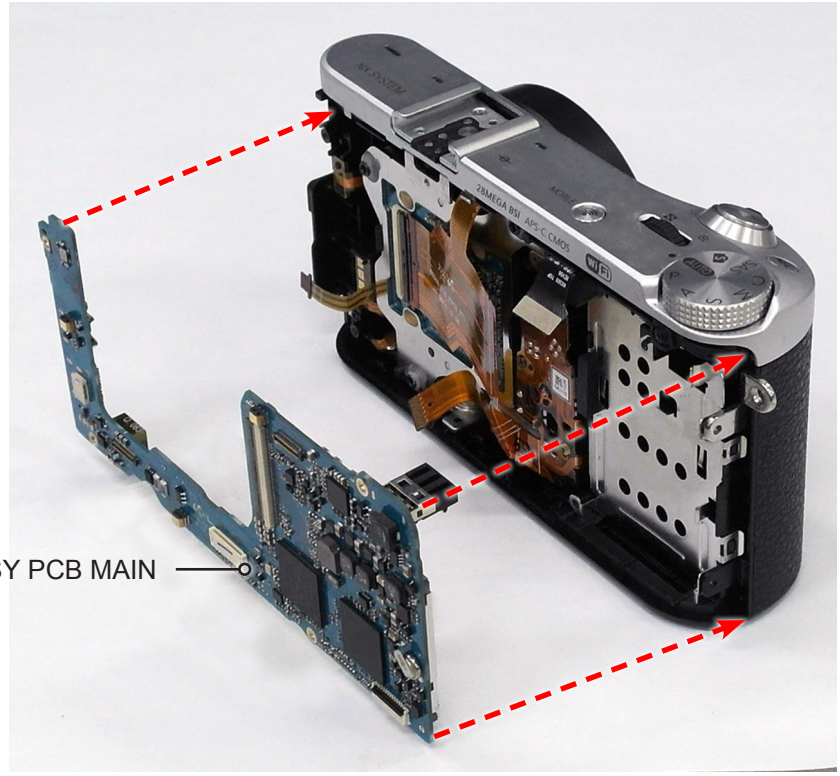


Fig. 3-61

9. Tighten the **4 screws**.
10. Connect the **FPCB** as illustrated in **Fig. A**, **Fig. B** and **Fig. C**.

CAUTION

Use extra care when connecting the FPCB to the connector.

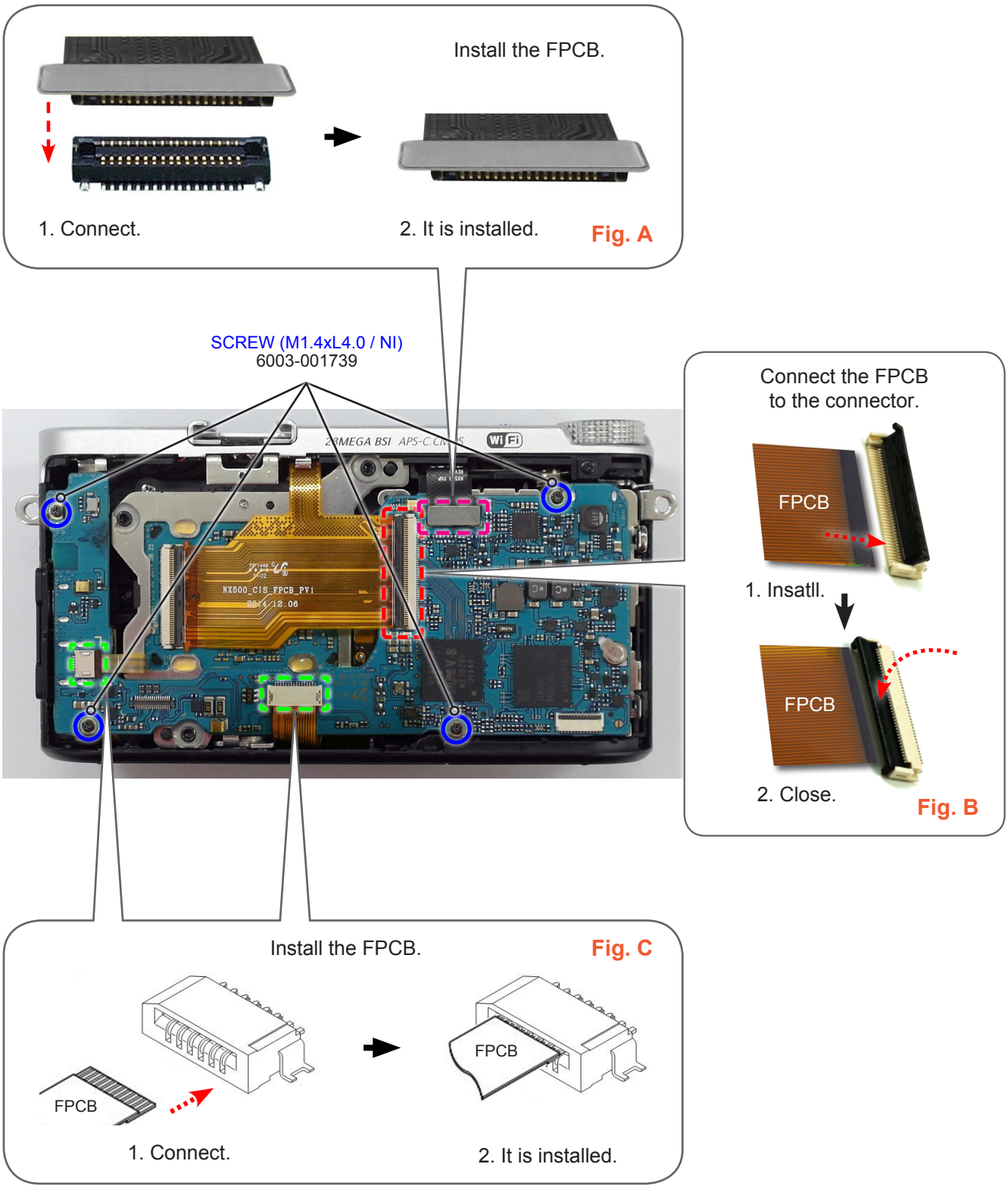


Fig. 3-62

11. Install the **FPCB** as illustrated in **Fig. D**.

CAUTION

Use extra care when connecting the FPCB to the connector.

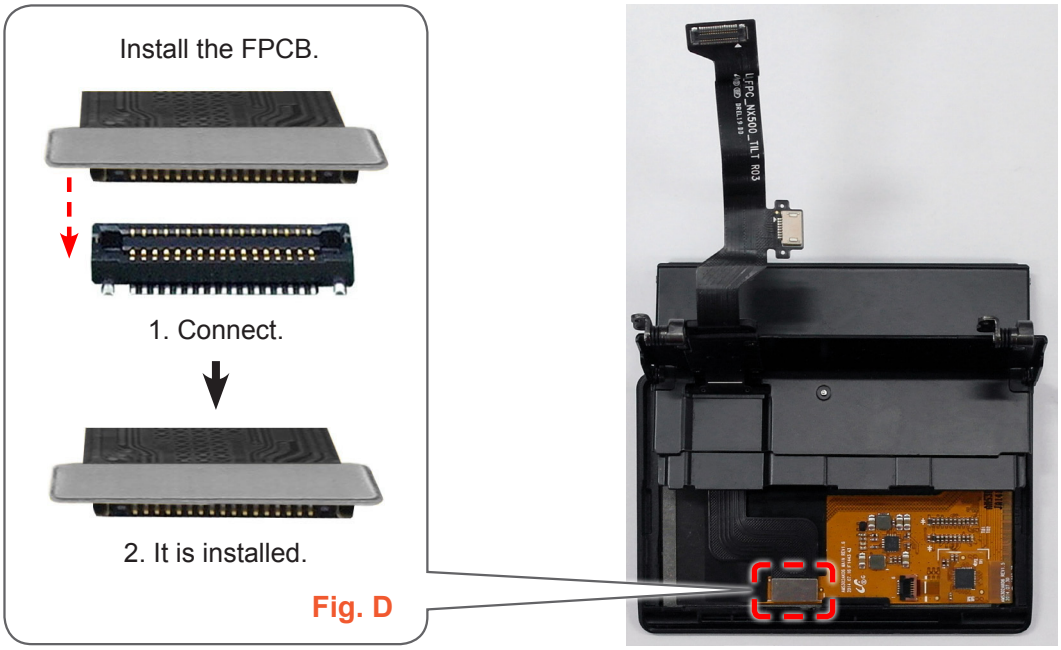


Fig. 3-63

12. Install the **ASSY HINGE** as illustrated in **Fig. E**.

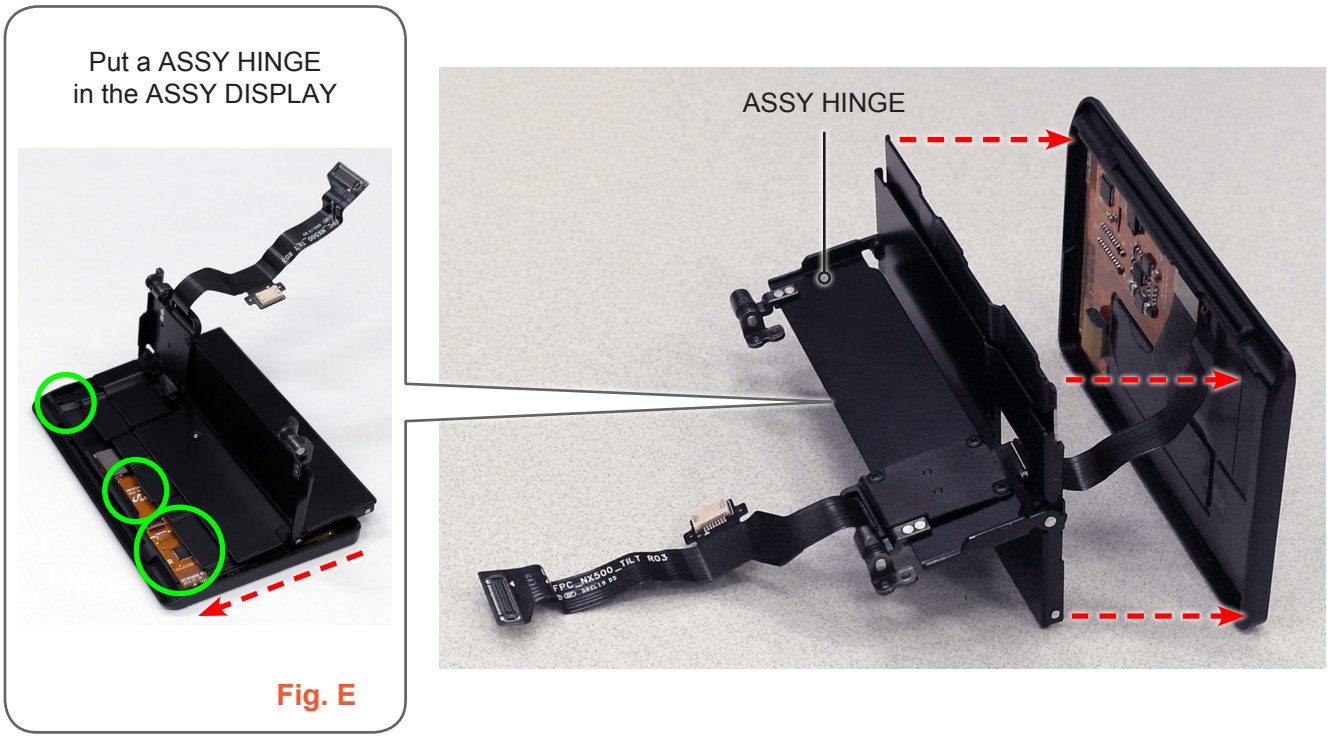


Fig. 3-64

13. Close the ASSY HINGE in the direction of the arrow.

Fig. 3-65

14. Tighten the **2 screws**.

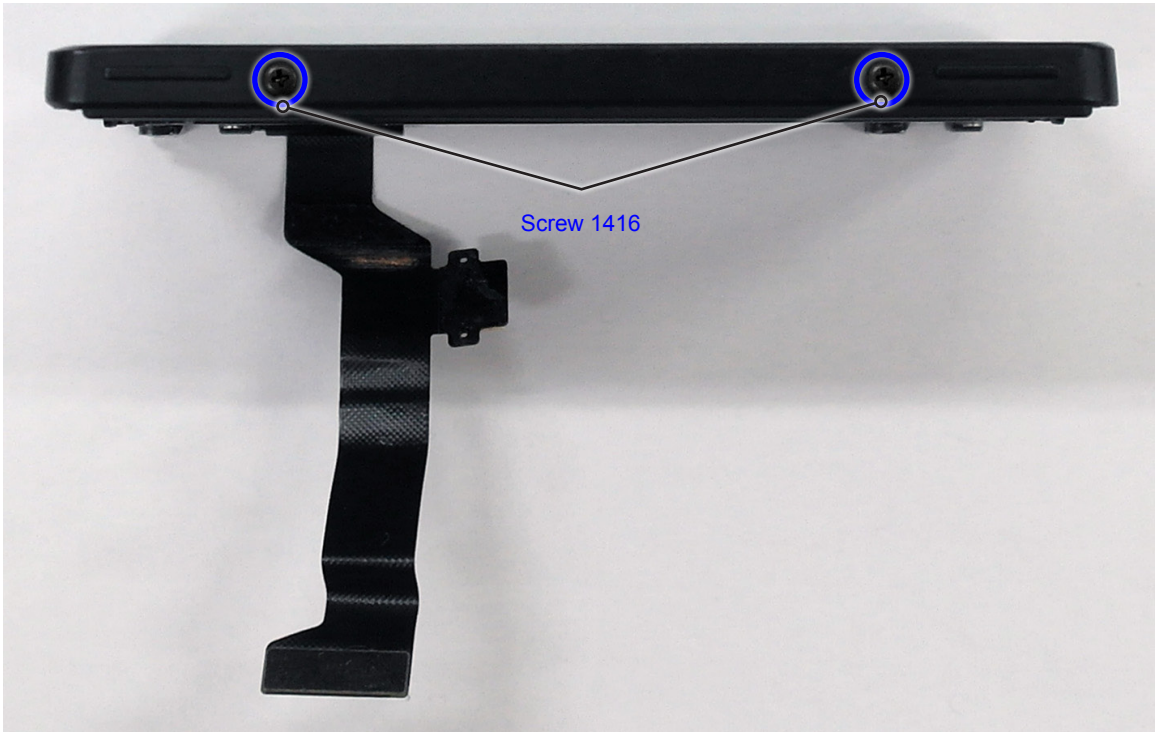


Fig. 3-66

15. Install the **ASSY DISPLAY**.

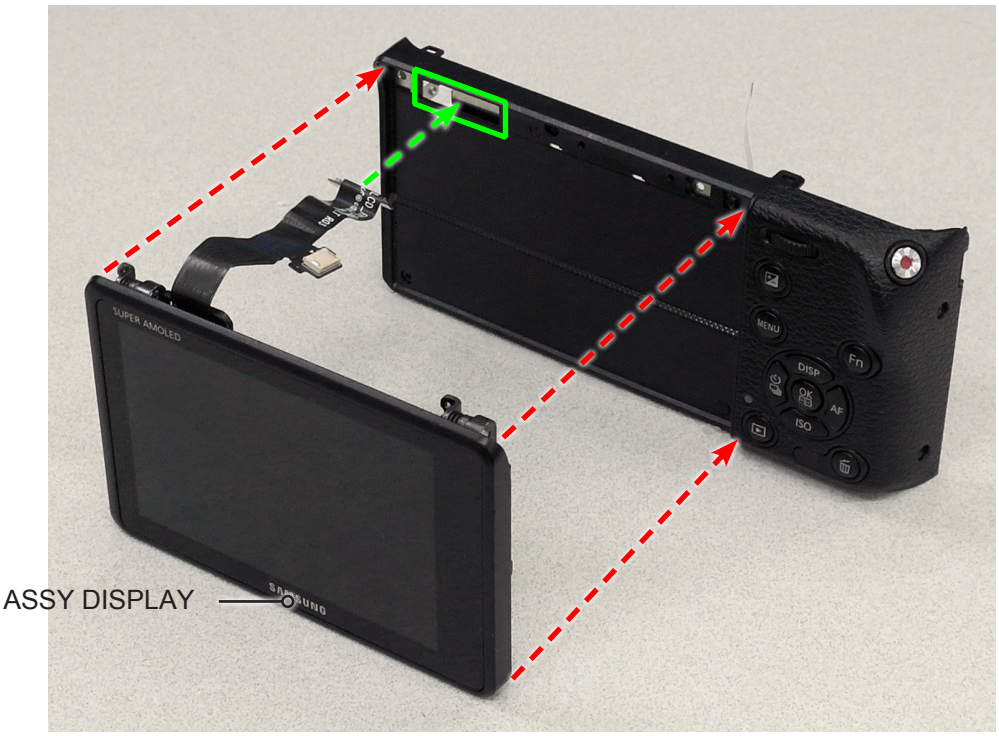


Fig. 3-67

16. Tighten the **4 screws**.

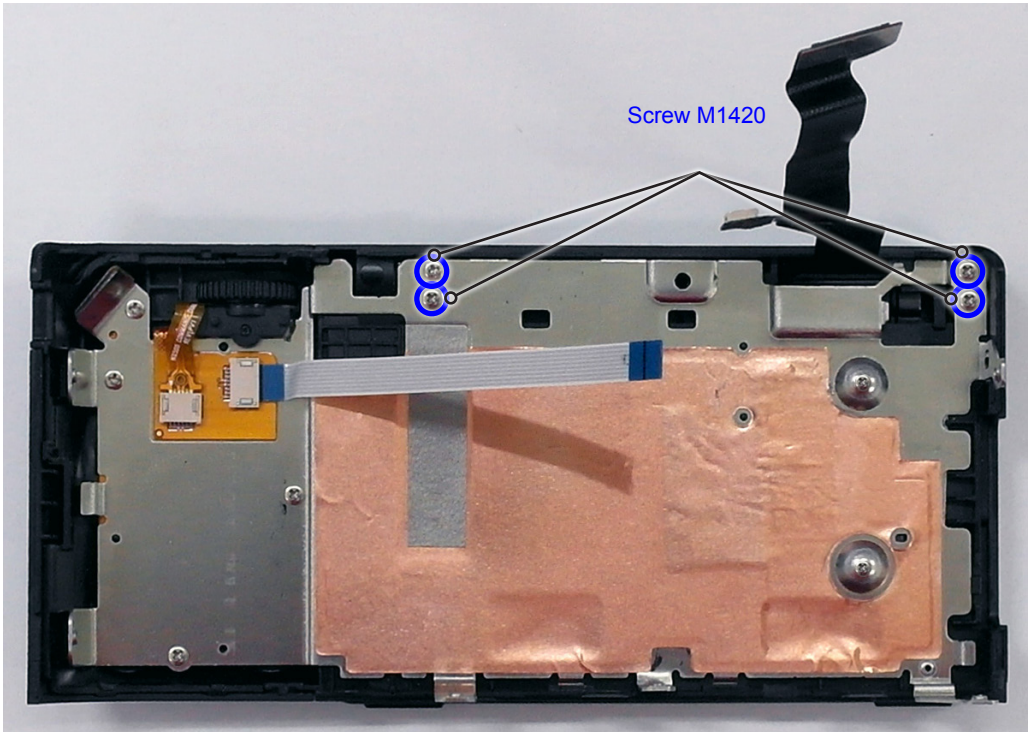


Fig. 3-68

17. Attach the **FPCB** on the FRAME FRONT.

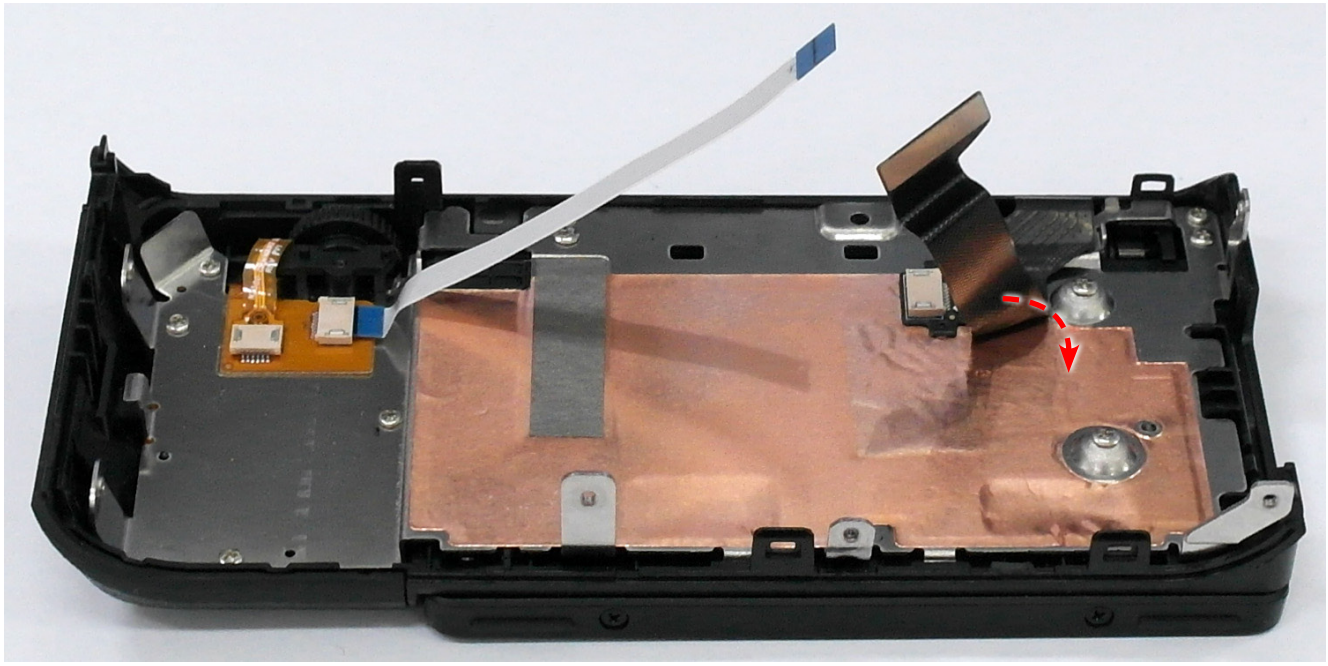


Fig. 3-69

18. Install the **FPCB** as illustrated in **Fig. F**.

CAUTION

Use extra care when connecting the FPCB to the connector.

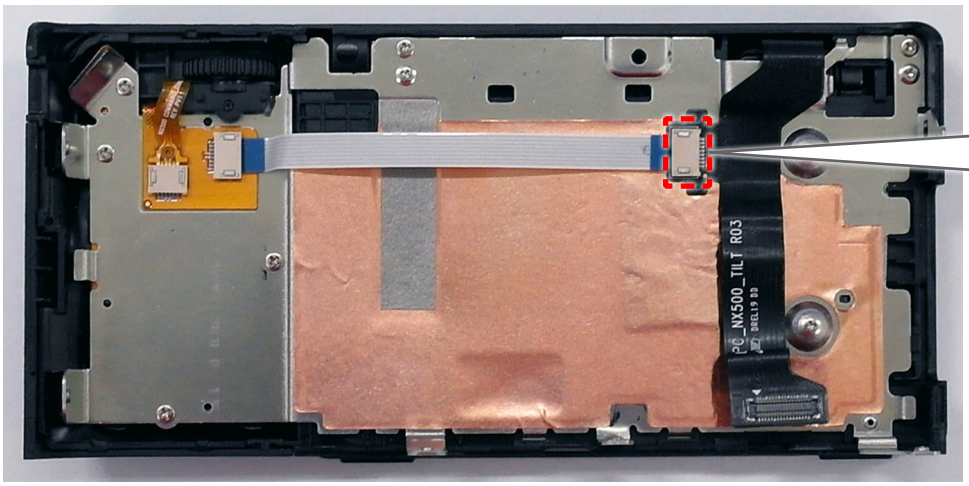


Fig. 3-70

19. Install the **FPCB** as illustrated in **Fig. G**.

CAUTION

Use extra care when connecting the FPCB to the connector.

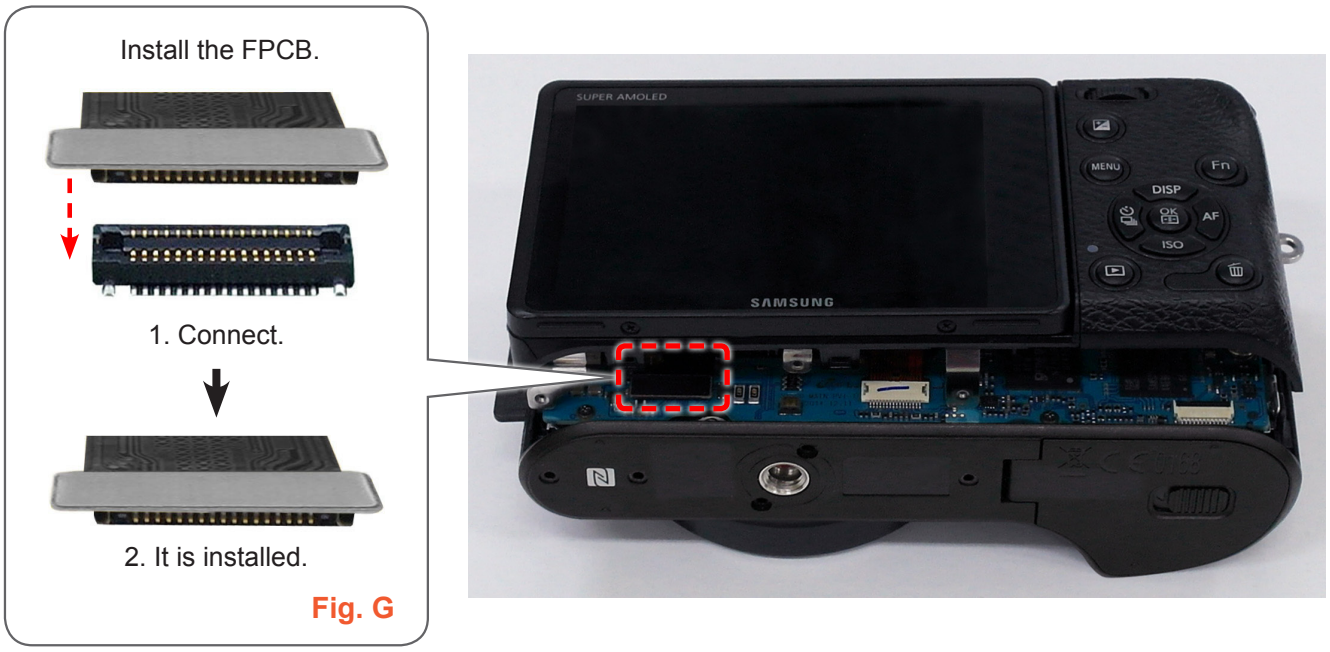


Fig. 3-71

20. Install the **ASSY CASE FRONT**.

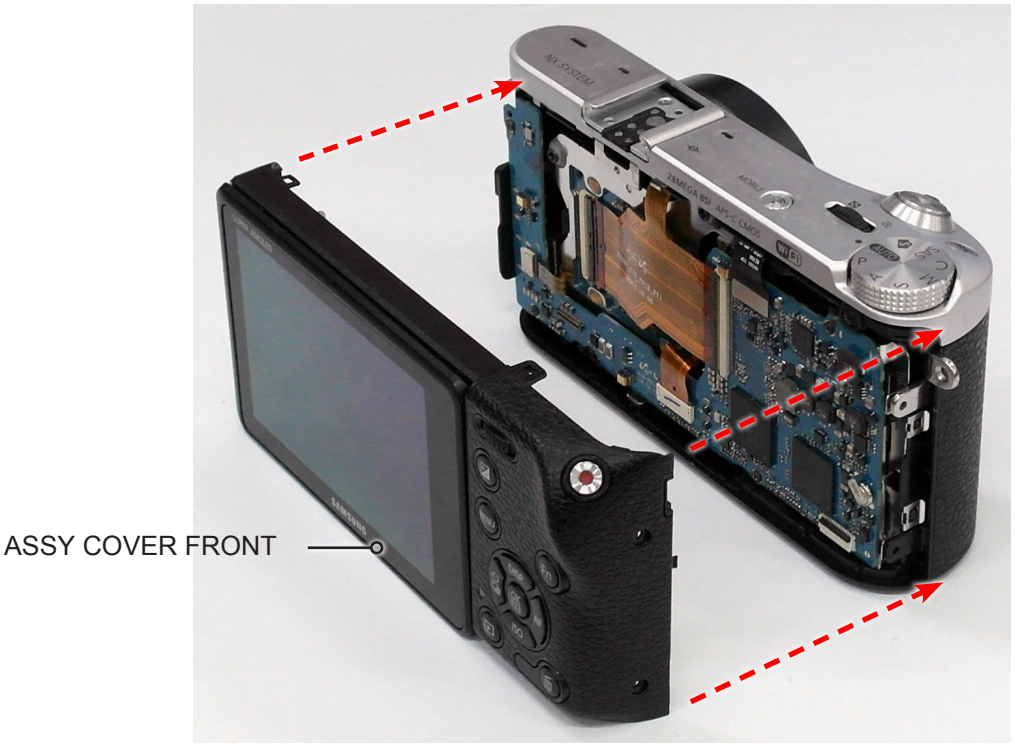


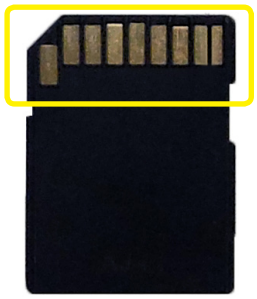
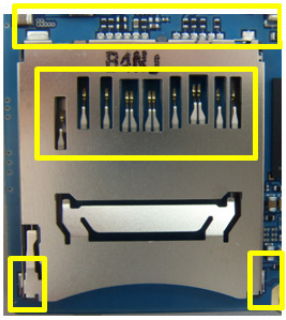
Fig. 3-82

21. Tighten the **1 screw** on the left side, **2 screws** on the right side and **5 screws** on the bottom side.

그림 3-73

4. Troubleshooting

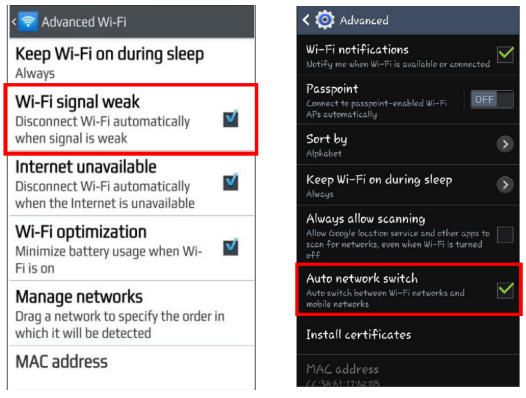
4-1 Regarding to memory card recognition

Symptom	Explanation/Solution	Note
Memory card is not recognized.	1) Check the PAD of SD card for damage or dirt. Place the memory card on a table in front of you with the metal contacts facing up. Scrub the contact area with your brush, wiping away any corrosion, dirt or grime on the contacts. Recheck if the SD card is being recognized.	
	2) Check the mechanical failure of SD card socket of Main PCB. Check the SMD and other surrounding components. Check, Bending the contact part of the card and SD card socket	

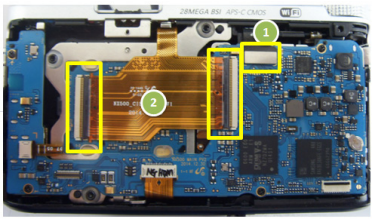
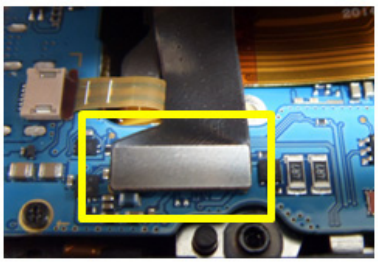
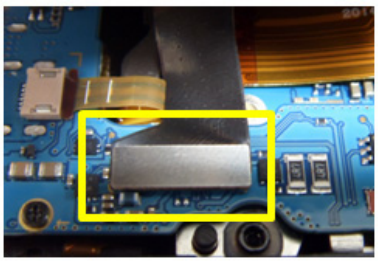
4-2 Regarding to WiFi connection

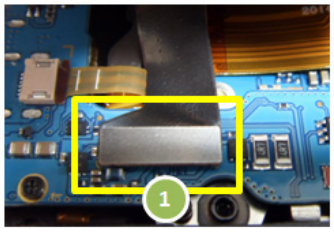
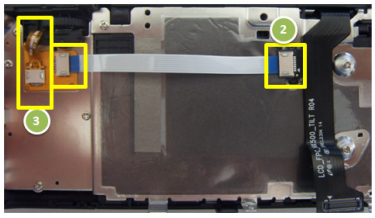
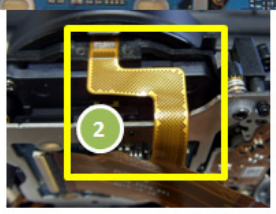
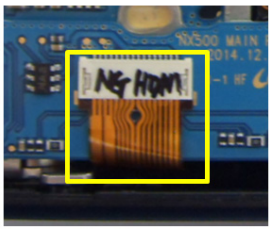
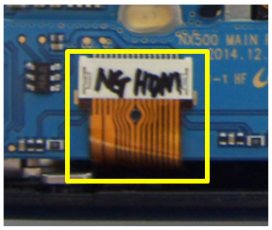
Situation	While using the Mobile Link, Remote Viewfinder, etc. functions, Smartphones and WiFi connectivity is terminated.
Cause	Upon receiving a strong signal WiFi from around, turns off the WiFi connection automatically from WiFi manager and automatically connect to WiFi of strong signal.
Measure	Disable the option from advanced settings on smartphone as shown in the figure below.

Reference

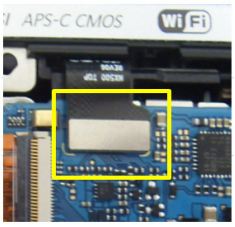
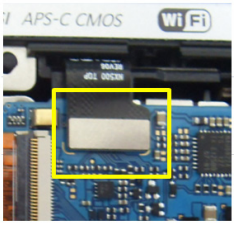
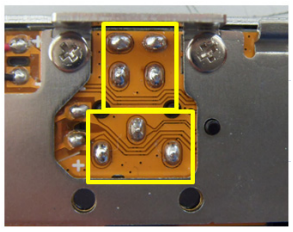


4-3 Regarding to MAIN PCB connection

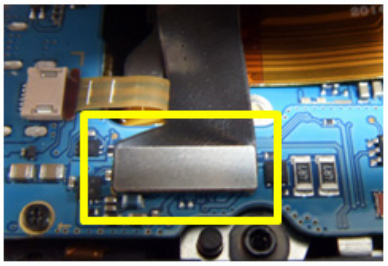
Symptom	Explanation/Solution	Note
1. Power does not work.	1) Check the connection between MAIN PCB and TOP PCB.	
	2) Check the connection between MAIN PCB and CIS FPCB. (On both sides of the CIS HPCB & MAIN HPCB)	
2. LCD displays black.	1) Check the connection of CIS FPCB.	
	2) Check the connection of LCD FPCB.	
3. Touch does not work.	1) Check the connection of LCD FPCB.	

Symptom	Explanation/Solution	Note
4. KEY button on the rear side does not work. (MENU, Fn, recording, playback, delete, 4-way direction button)	1) Check the connection between MAIN PCB and LCD FPCB	
	2) Check the connection between LCD FPCB on BACK COVER and KEY FPCB	
	3) Check the connection between KEY FPCB and Wheel FPCB	
5. LENS is not being recognized. (It displays saying "Les is not attached.")	1) Check the connection between MAIN PCB and CIS FPCB	
	2) Check the CIS FPCB.	
6. "Error01" appears on the screen.	1) Check the connection of SHUTTER FPC on MAIN PCB.	
7. When I turn on the camera, the shutter is malfunctioning itself.	1) Check the connection of SHUTTER FPCB on MAIN PCB.	

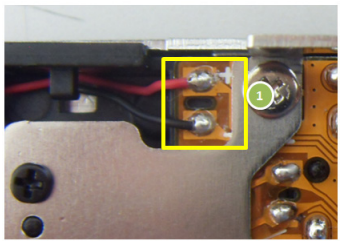
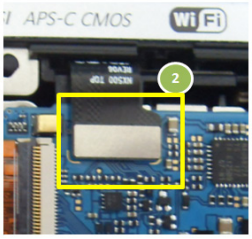
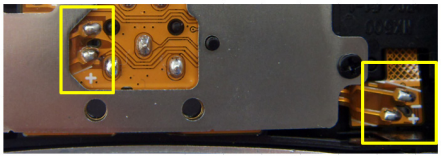
4-4 Regarding to TOP

Symptom	Explanation/Solution	Note
1. Power and Command Dial does not work.	1) Check the connection between MAIN PCB and TOP PCB.	
2. external flash does not work.	1) Check the connection between MAIN PCB and TOP PCB.	
	2) Check the soldering of HOTSHOE on TOP.	

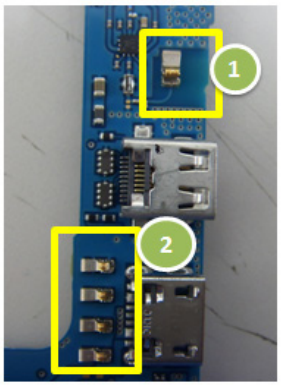
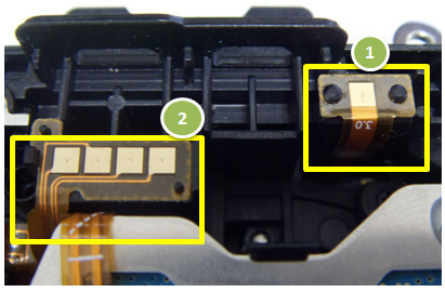
4-5 Regarding to image display

Symptom	Explanation/Solution	Note
1. It is displayed vertical and horizontal line noise and blurry images.	1) Check the connection of CIS FPCB.	
	2) Check the connection of LCD FPCB.	

4-6 Regarding to voice playback and recording

Symptom	Explanation/Solution	Note
1. Can not hear anything.	1) Check the soldering of speaker wire. - Whether it is connected negative or positive properly. - Whether the wire is down or wire soldering comes off.	
	2) Check the connection between MAIN PCB and TOP FPCB.	
2. There is sound when pressing button. However, voice recording does not work.	1) Check the soldering of embed MIC on TOP ASSY. - Whether it is connected negative or positive properly. - Where FPCB is torn.	

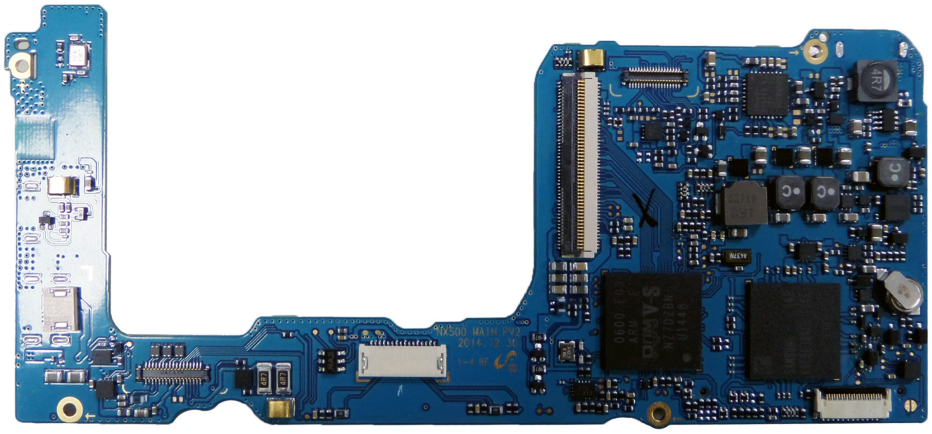
4-7NFC / BT-WIFI does not work.

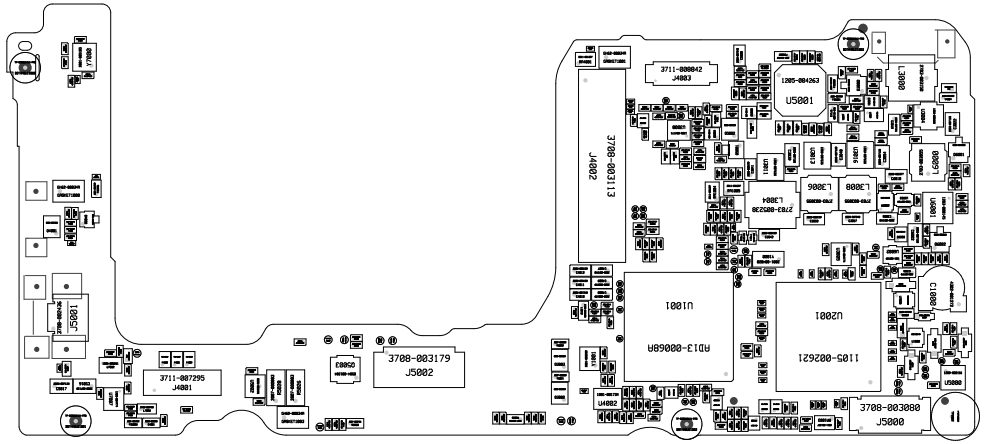
Symptom	Explanation/Solution	Note
1. BT-WiFi and NFC does not work.	1) Please check the condition (turbde, crooked or broken) of NFC / WIFI C - CLIP that is installed with MAIN	
	2) Please check damage, disconnection of BT-WIFI FPCB attached to COVER or connection with moudule (Antenna module is able to be checked after removal of shutter)	

5. PCB diagram

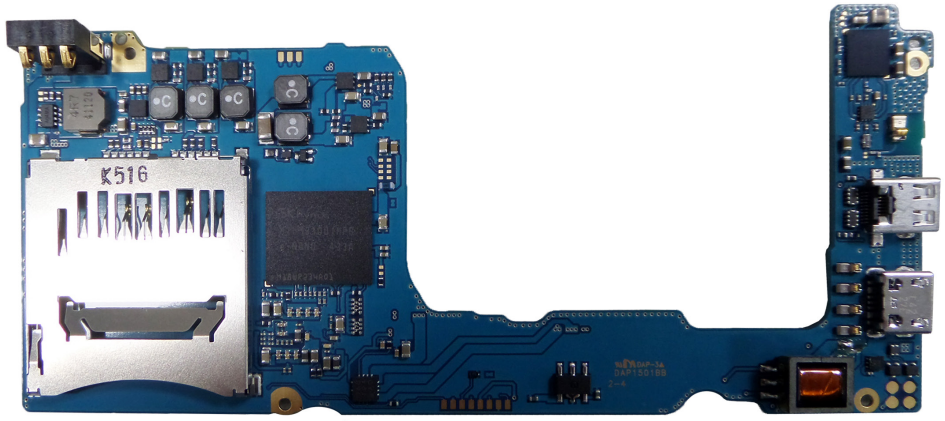
5-1 MAIN PCB

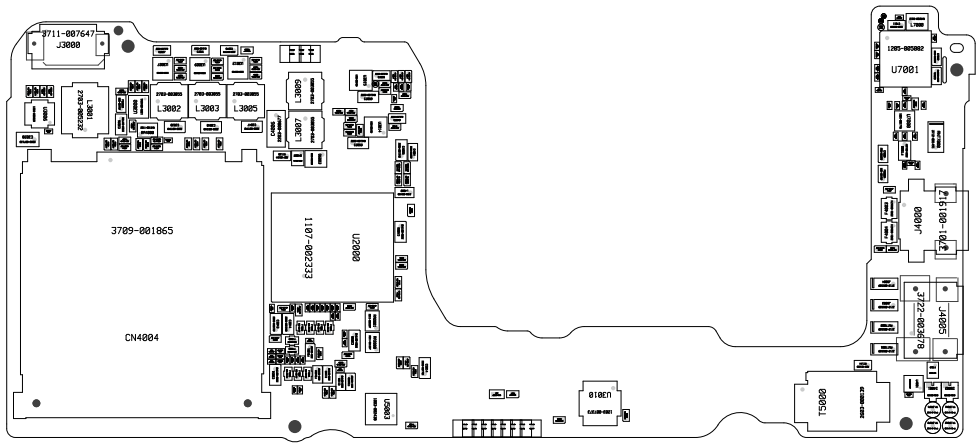
TOP





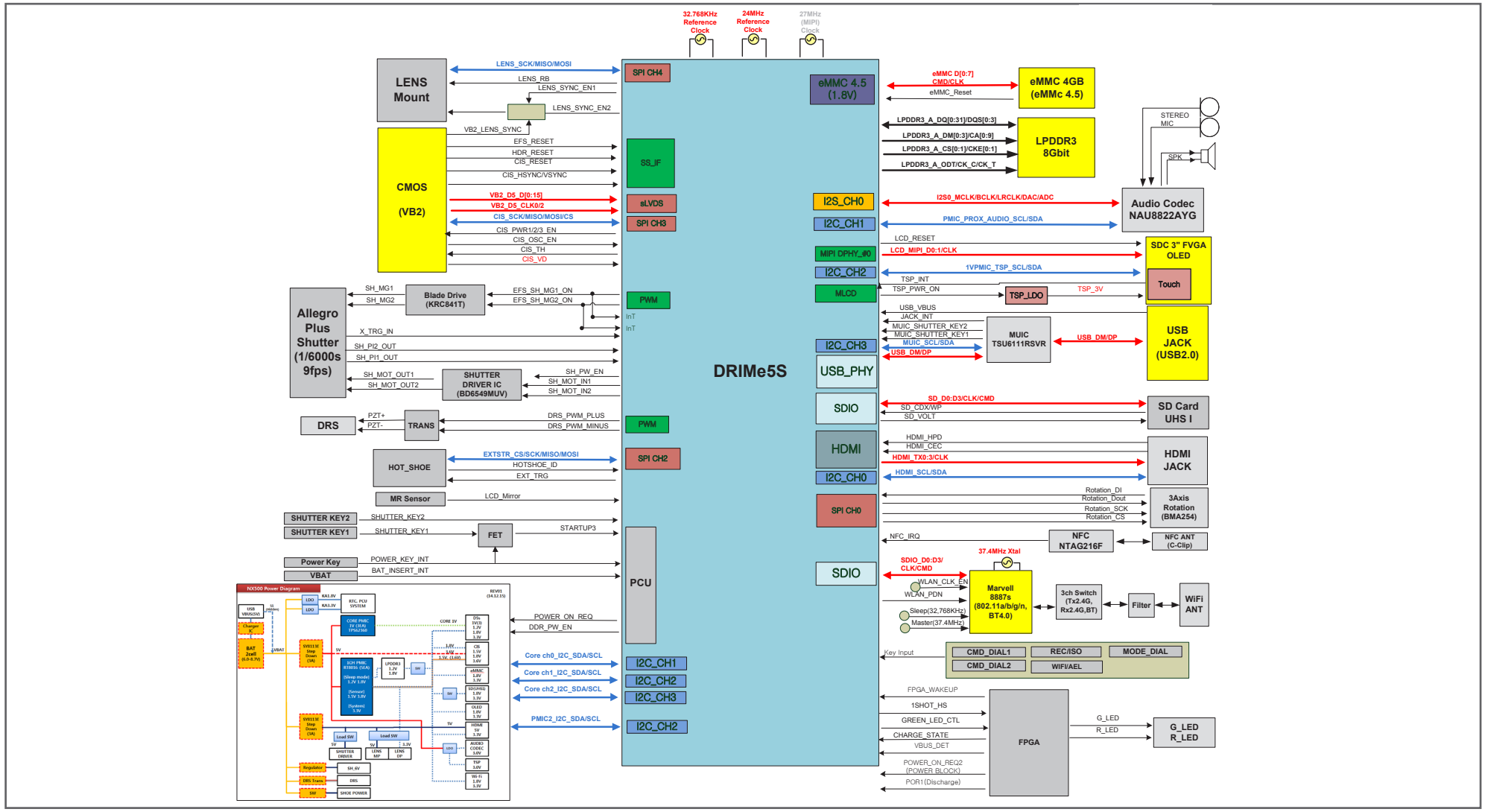
BOTTOM





6. Block diagram

6-1 MAIN



7. Firmware update

7-1 Product reset

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

1. Copy files such as nx_cs.adj into the root directory of the micro SD Card. Insert the micro SD Card into the camera.

2. ❶ First turn on the power of the camera. → 3. ❷ Select ‘Smart Auto’ mode.

Fig. 7-1

4. ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV + OK(Hold down EV button and press OK.)

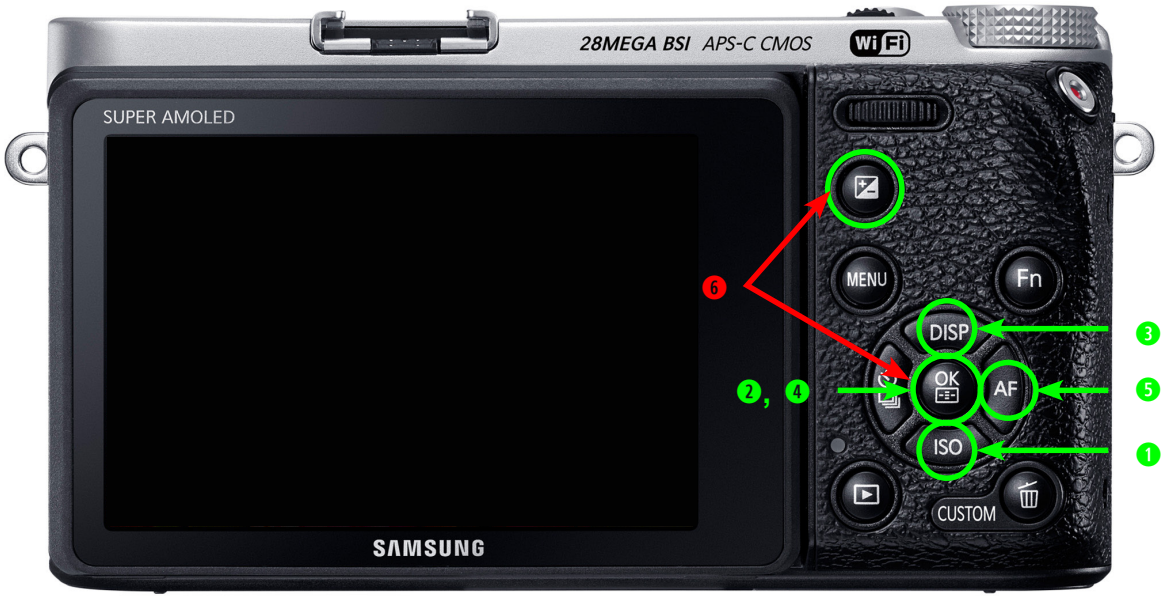


Fig. 7-2

5. Select “2. SYSTEM PARAMETER” and press the OK button.

Fig. 7-3

6. Select ““(1) FACTORY RESET” and press the OK button.

Fig. 7-4

7. Turn the camera off.

8. Turn the camera on and check if the initialization is complete.

7-2 Firmware update by using user menu

▪ This section describes how to update the latest version of firmware for camera body.

CAUTION

- **Make sure the battery is fully charged. Or use the AC adaptor.**
- **Since all the files stored in the internal memory will be deleted, ensure that important files are copied to other storage device.**

1. Copy the latest firmware file such as nx .bin into the root directory of the SD Card. Insert the SD Card into the camera.
   nx500.bin

2. Power on the camera.

3. Press Menu -> Go to Settings -> Select Device Information -> Select Software Update

4. Select the Body Firmware.

Fig. 7-5

5. Select Yes to begin the firmware update.

Fig. 7-6

CAUTION

■ **Firmware update will take about 5 minutes. It will reboot twice during the firmware update process. Screen seems to be turned off. During the update process please ensure that the camera is not turned off or operated. Once the update is complete, a confirmation screen will be displayed.**

Fig. 7-7

7-3 Firmware update by using user menu

▪ This section describes how to update the latest version of firmware for lens.

CAUTION

- **Make sure the battery is fully charged. Or use the AC adaptor.**
- **Since all the files stored in the internal memory will be deleted, ensure that important files are copied to other storage device.**

1. Copy the latest firmware file such as nx .bin into the root directory of the SD Card. Insert the SD Card into the camera.
   lens.bin

2. Power on the camera.

3. Press Menu -> Go to Settings -> Select Device Information -> Select Software Update

4. Select the Lens Firmware.

Fig. 7-8

5. Select Yes to begin the firmware update.

Fig. 7-9

CAUTION

■ **Firmware update will take about 5 minutes. It will reboot twice during the firmware update process. Screen seems to be turned off. During the update process please ensure that the camera is not turned off or operated. Once the update is complete, a confirmation screen will be displayed.**

Fig. 7-10

7-4 Body Firmware Update Using DEV Mode

▪ This section describes how to update the latest version of firmware for camera body.

CAUTION

- **Make sure the battery is fully charged. Or use the AC adaptor.**
- **Since all the files stored in the internal memory will be deleted, ensure that important files are copied to other storage device.**

1. Copy files such as nx_cs.adj into the root directory of the micro SD Card. Insert the micro SD Card into the camera.

2. ❶ First turn on the power of the camera. → 3. ❷ Select 'Smart Auto' mode.

Fig. 7-11

4. ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV + OK(Hold down EV button and press OK.)

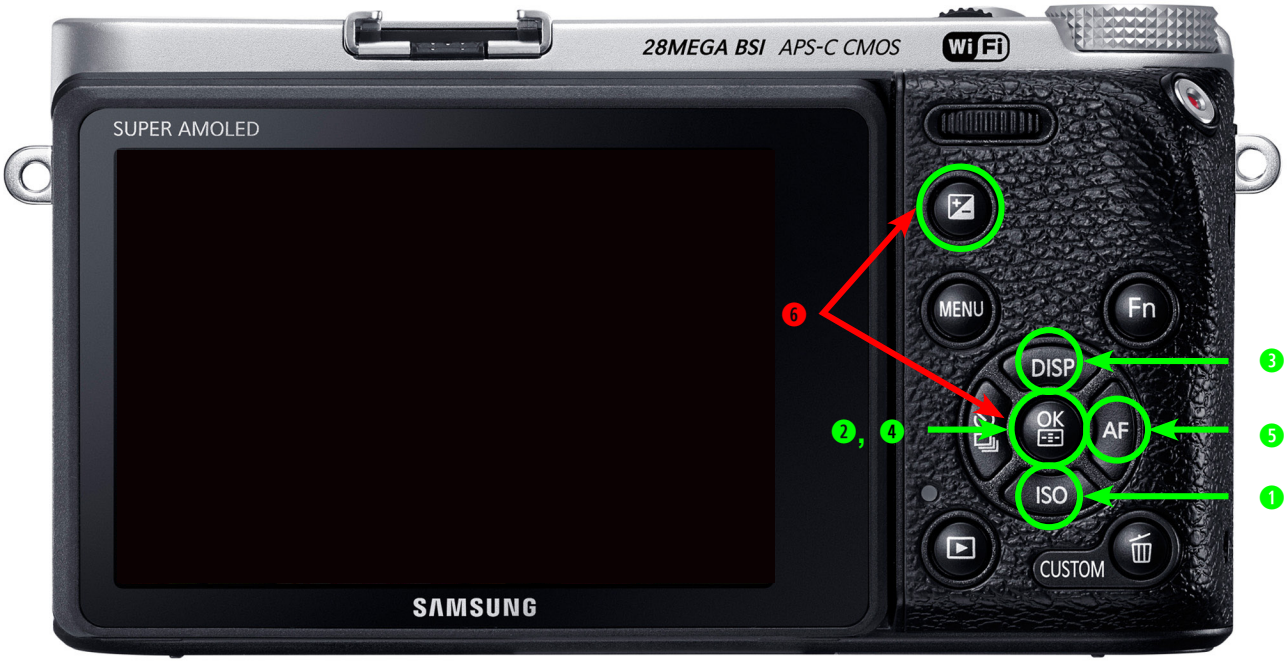


Fig. 7-12

5. Select “1. FW UPDATE” and press the OK button.

Fig. 7-13

6. Select “(1) BODY F/W UPDATE” and press the OK button.

Fig. 7-14

7. The monitor will display firmware information. Press the OK button to begin the update.

Fig. 7-15

8. It may take five minutes to update the firmware, and the camera will be rebooted twice during the update.

CAUTION

■ **Firmware update will take about 5 minutes. It will reboot twice during the firmware update process.**
Screen seems to be turned off. During the update process please ensure that the camera is not turned off or operated.
Once the update is complete, a confirmation screen will be displayed.

Fig. 7-16

7-5 Lens Firmware Update Using DEV Mode

▪ This section describes how to update the latest version of firmware for lens.

CAUTION

- **Make sure the battery is fully charged. Or use the AC adaptor.**
- **Since all the files stored in the internal memory will be deleted, ensure that important files are copied to other storage device.**

1. Copy files such as nx_cs.adj into the root directory of the micro SD Card. Insert the micro SD Card into the camera.

2. ❶ First turn on the power of the camera. → 3. ❷ Select 'Smart Auto' mode.

Fig. 7-17

4. ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV + OK(Hold down EV button and press OK.)

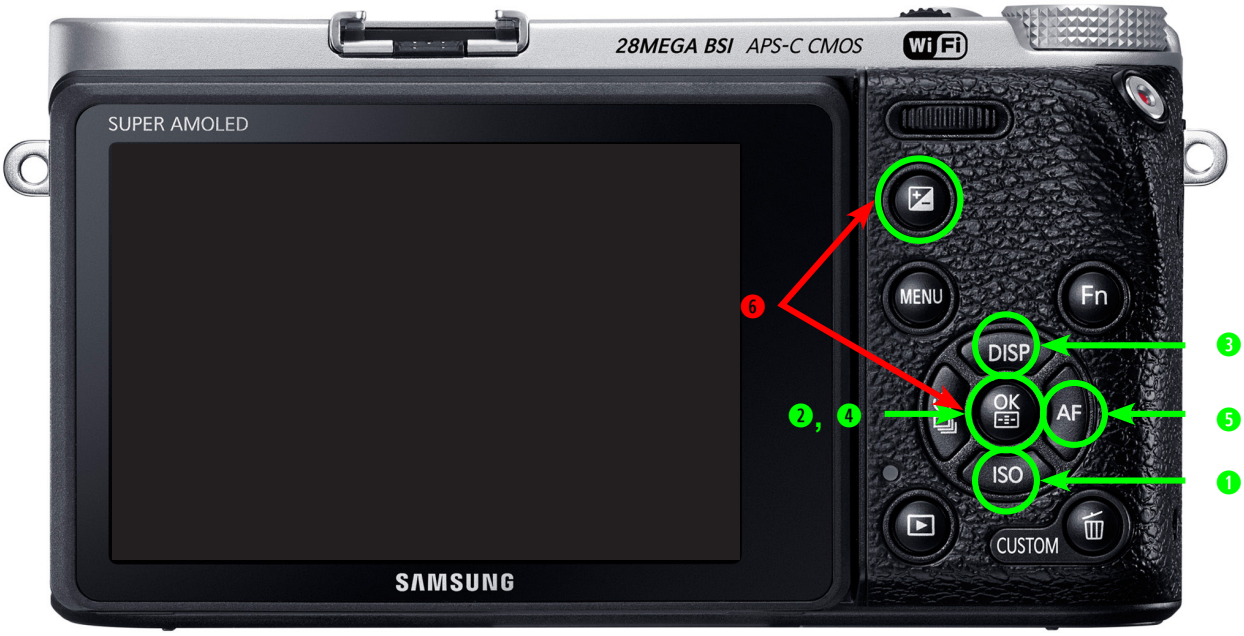


Fig. 7-18

5. Select "1. FW UPDATE" and press the OK button.

Fig. 7-19

6. Select "(2) LENS F/W UPDATE" and press the OK button.

Fig. 7-20

7. The monitor will display firmware information. Press the OK button to begin the update.

Fig. 7-21

8. It may take five minutes to update the firmware, and the camera will be rebooted twice during the update.

CAUTION

■ **Firmware update will take about 5 minutes. It will reboot twice during the firmware update process.**
Screen seems to be turned off. During the update process please ensure that the camera is not turned off or operated.
Once the update is complete, a confirmation screen will be displayed.

Fig. 7-22

7-6 How to recover the MAIN PCB

■ This section describes how to recover the MAIN PCB when camera stops functioning due to power failure or some other reasons during the firmware process.

CAUTION

It is not necessary to go over all the adjustment process again since the existing adjustment data is not deleted.

You will need

1. SD card
   - Cards with a capacity less than 1GB are recommended.
   - Occasionally a device may not read a SD card. Attempt to use different types of SD cards.
2. Tweezer (It is used to short out the TP on MAIN PCB.)
3. 2 recovery file
   downloader.bin , nx500.bin

MAIN PCB recovery instruction

1. Save recovery files(downloader.bin, nx500.bin) to memory card.
2. Remove the screws and remove the back cover.
   (Remove the cover LCD Fli and Remove the screws. : **Fig. A**)
3. Solder the TP spot in a red circle of the picture. **Fig. B**
   (Be careful. Open again later.)
4. Connect the connector of back cover to MAIN PCB.
   Insert the fully charged battery and SD card into the camera.
5. Short out opener pad, which is boot terminal point
   of TP with tweezer as indicated in red circle. It has been up.
   Then press the power button to turn on the camera.
6. LED will turn on when power is on. Then remove the tweezer.
7. LED will blink when tweezer is removed.
   Then MAIN PCB recovery process will proceed. It will takes about 2 to 3 minutes.
8. LED will turn off when the recovery process is complete.
9. Turn on the camera. You may resume using the camera.

Fig. 7-23

8. Adjustment

8-1 Professional Repair Center- Adjustment process guide

■ The necessary items are fixed according to replacing parts.

	Main PCB	CIS ASSY	Shutter	MOUNT ASSY	Equipment
F/W Upgrade	O	O	O	O	Every Service Cases
CIS Tilt adj.	-	O	O	O	TILT Adjustment
CIS Dot Data Input	O	O	-	-	Shutter Adjustment, CIS Dot Data File
Shutter adj.	O	-	-	-	Shutter Adjustment
ISO adj.	O	O	-	-	Light Box 3200K Master Lens
AWB adj.	O	O	-	-	
EFS	O	O	-	-	Light Box 3300K, LV16, 30mm Lens
VFPN & DEFECT adj.	O	O	-	-	Mount Cap
Color Shading adj.	O	O	-	-	Light Box 5500K 16-50mm PWZ Lens
GYRO	O	-	-	-	Script
COUNTRY CODE	O	-	-		Change Script
MAC ADDR, SERIAL NO, BLUE TOOTH ADDR	O	-	-	-	Change Script
PAF adj	O	O	-	-	PAF Light Box, Controller
WiFi ON/OFF	-	-	-	-	Special Request Only

<Table 8-1>

2. Adjustment Equipment
   - Light Source Box 1 : LV-1450DC (3200K±50, Lv12)
   - Light Source Box 2 : LSB-1/10 (5500K±100, Lv12)
   - Light Source Box 3 : For Compact DSC (3300K, Lv. 16)
   - Light Source Box 4 : PAF Light box & Controller
   - Master Lens
   - 30mm Lens
   - 16-50mm PWZ Lens
   - Tilt adjustment : RSM-5000 (only for CSC center)
   - Shutter adjustment : RFS-5910A (only for CSC center)

8-2 CIS TILT ADJ-Professional Repair Center

■ Proceed CMOS Tilt adjustment after replacing CMOS ASSY.

<How to Adjust>

1. Set the CIS Tilt adjustment tools. (Kyoritsu (RSM-5000))

2. Once you press the Start button, Tilt adjustment will complete automatically.

3. After adjustment completion, Apply glue on 3 screws to fix the screw position as illustrated in Fig. 8-1.

The screw for CMOS Tilt adjustment.

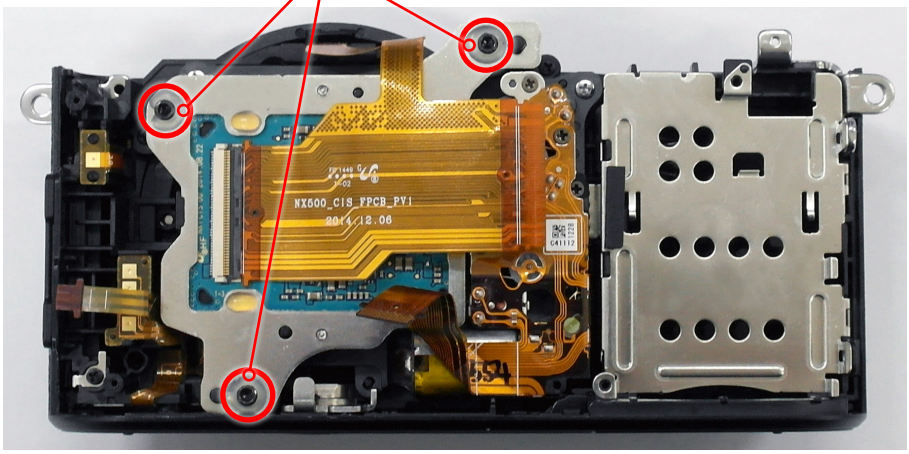


Fig. 8-1

<Adjustment Result>
Adjust specification for Mount side and FLANGE BACK side : 25.55mm(-35mm/+15mm)
Adjust specification for CMOS sensor TILT side from center: -30um/+30um

* Caution : The above three screws for NX1 & NXF1 & NX10/5/11 & NX100/200/300/300M & NX1000/2000/3000 may vary in model.

8-3 Program Installation-Professional Repair Center

■ Must be installed the following Program to prior to the CIS data input and Shutter Speed adjust.
■ If the programs are installed on the PC, then it doesn't need to install them again.

Required equipmentof

PC, Program(NX500_ShutterTester_Ver5.1.exe), USB cable

1. Unzip the "NXCISTEMP_NX500" on the C drive.

- Extract the "NXCISTEMP_NX500.zip" file to the c:\ directory such as C:\NXCISTEMP_NX500.
  Make sure to save "NXCISTEMP_NX500.zip" file to the above directory.
  PC program will search the CIS dot data in the above specified directory.

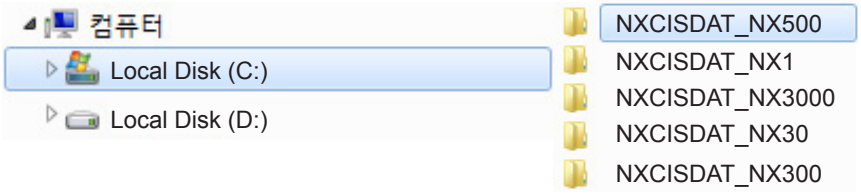


Fig. 8-2

2. Install the "vcredist_x86.exe " in the "CIS DOT data & Shutter speed" folder.

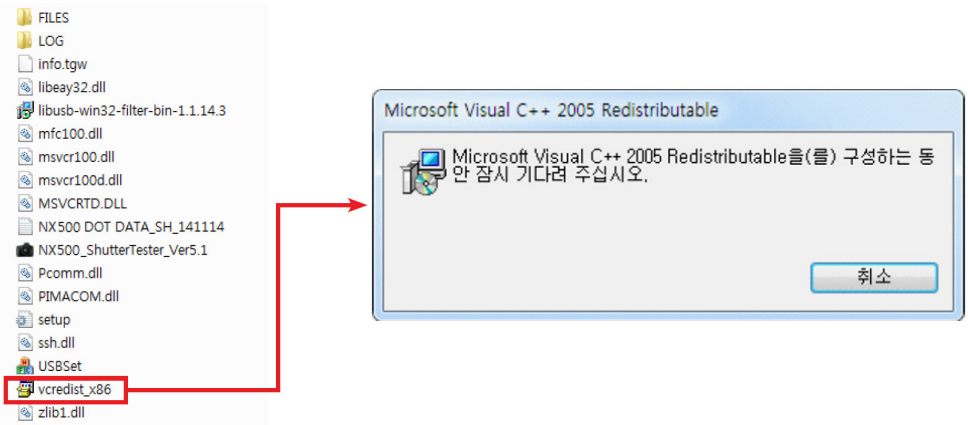


Fig. 8-3

3. Install the "libusb-win32-filter-bin-1.1.14.3.exe" in the "CIS DOT data & Shutter speed" folder.
   - The module for communications between the NX500 and PC.(Install only one time.)

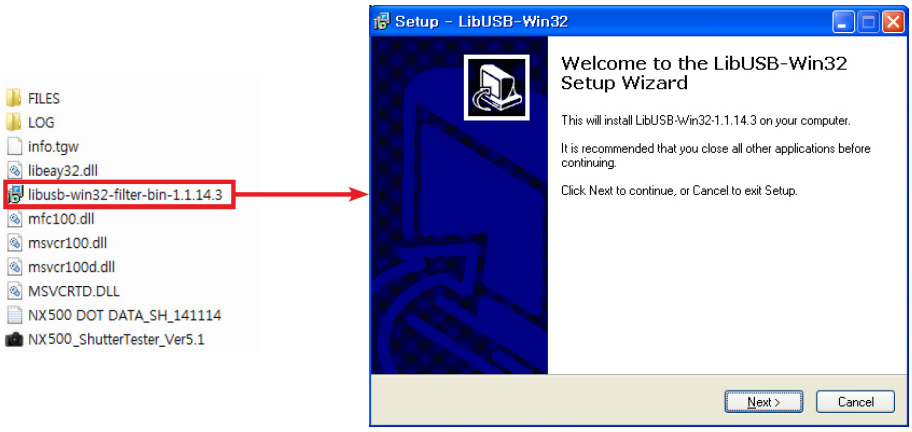


Fig. 8-4

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

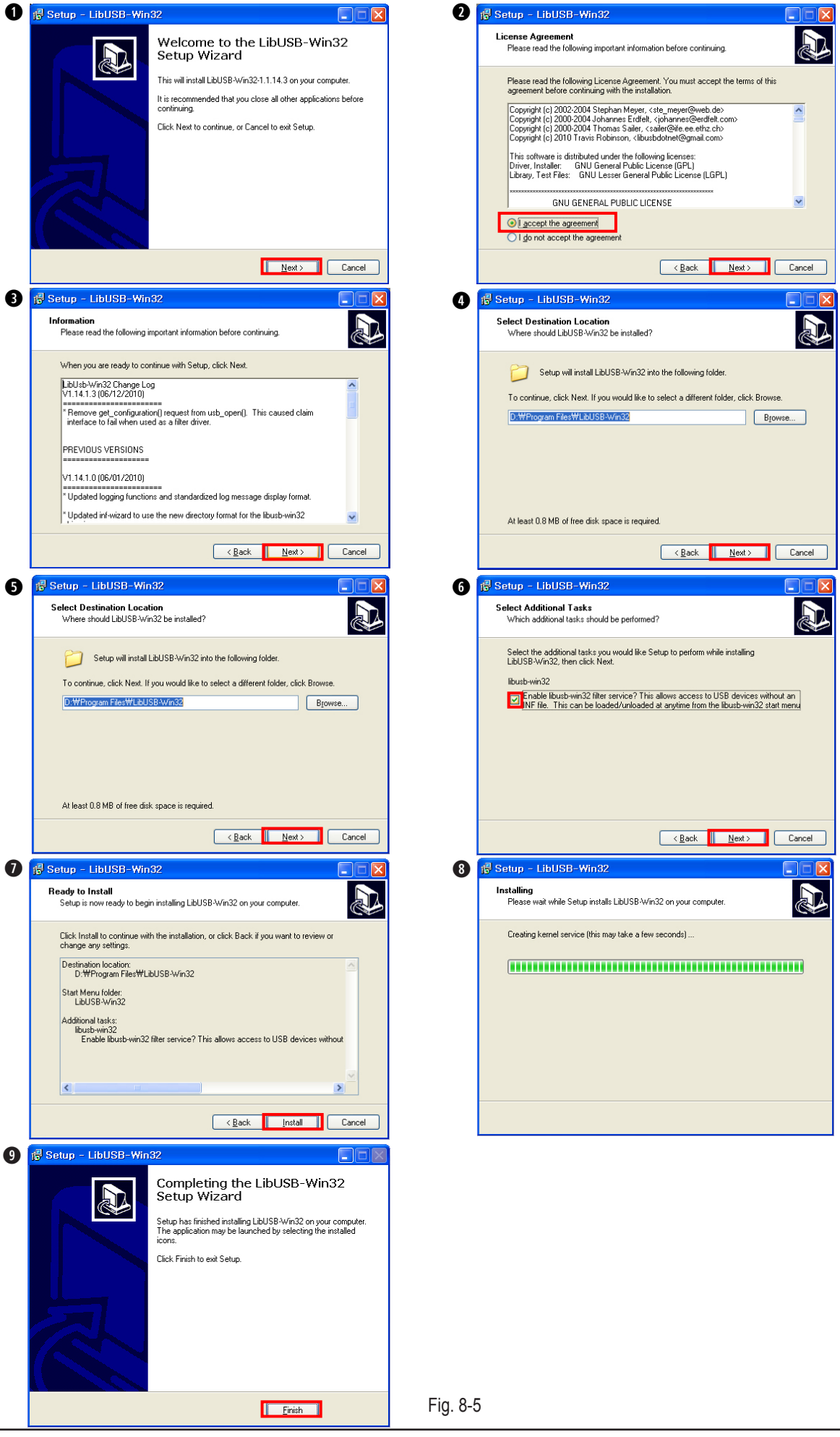


Fig. 8-5

8-4 CIS DOT DATA INPUT & SHUTTER ADJ-Professional Repair Center

■ 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 “NX500.ZIP” file to a directory on your PC and extract it.

Fig. 8-6

1) Navigate to the directory you extracted to and double click the “vcredist_x86.exe ” in the CIS DOT data & Shutter speed .

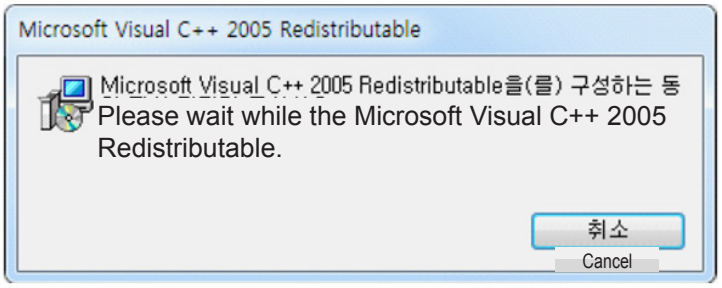


Fig. 8-7

2) Extract the “NXCISTEMP_NX500.zip” file to the c:\ directory such as C:\NXCISTEMP_NX500.
Make sure to save “NXCISTEMP_NX500.zip” file to the above directory.
PC program will search the CIS dot data in the above specified directory.

2. Double click the “libusb-win32-filter-bin-1.1.14.3.exe” to execute.
(Please refer to on page 8-8 for installing module between the NX SET and PC communications (PTP). Follow the .)

3. Download the “NX500.ZIP” file to a directory on your PC and extract it.

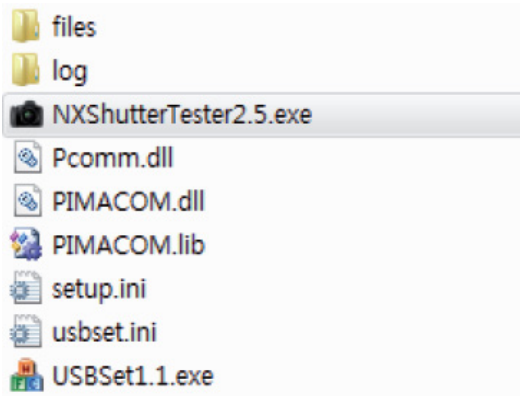


Fig. 8-8

4. Double click the “USBSet1.1.exe” to execute.

1) Connect the USB cable from your camera to the USB port on your computer when below window appears.)
(Make sure the “info.tgw” file is into SD card.)

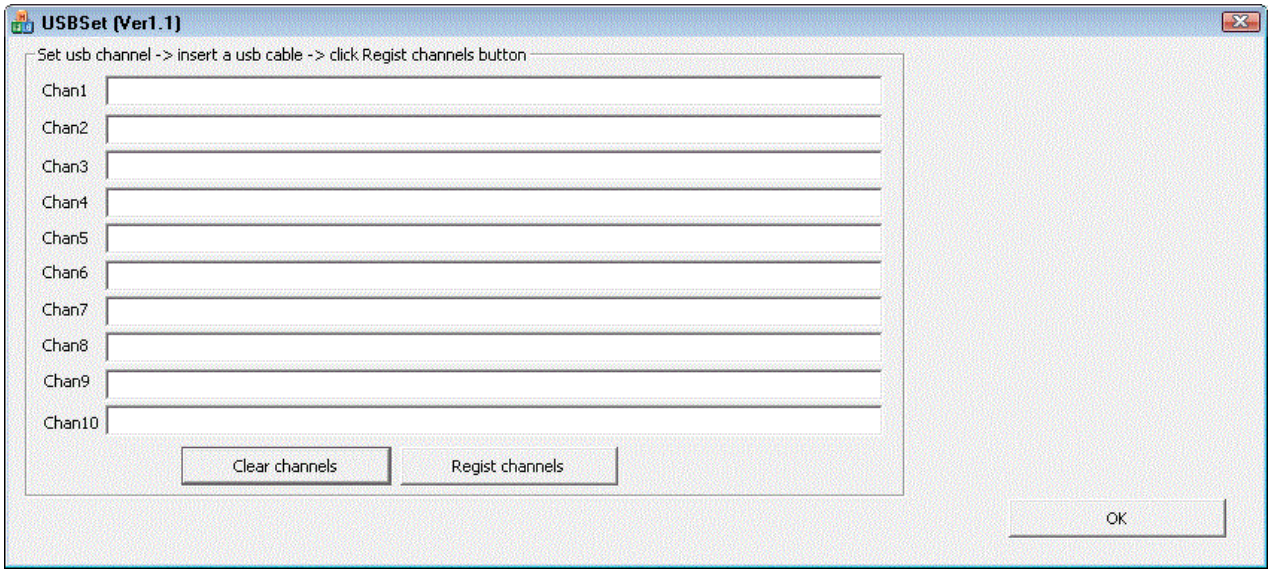


Fig. 8-9

2) When below window appears, turn on the computer and check the USB directory’s path.
Click the “Regist channels” button and then click the “OK” button.

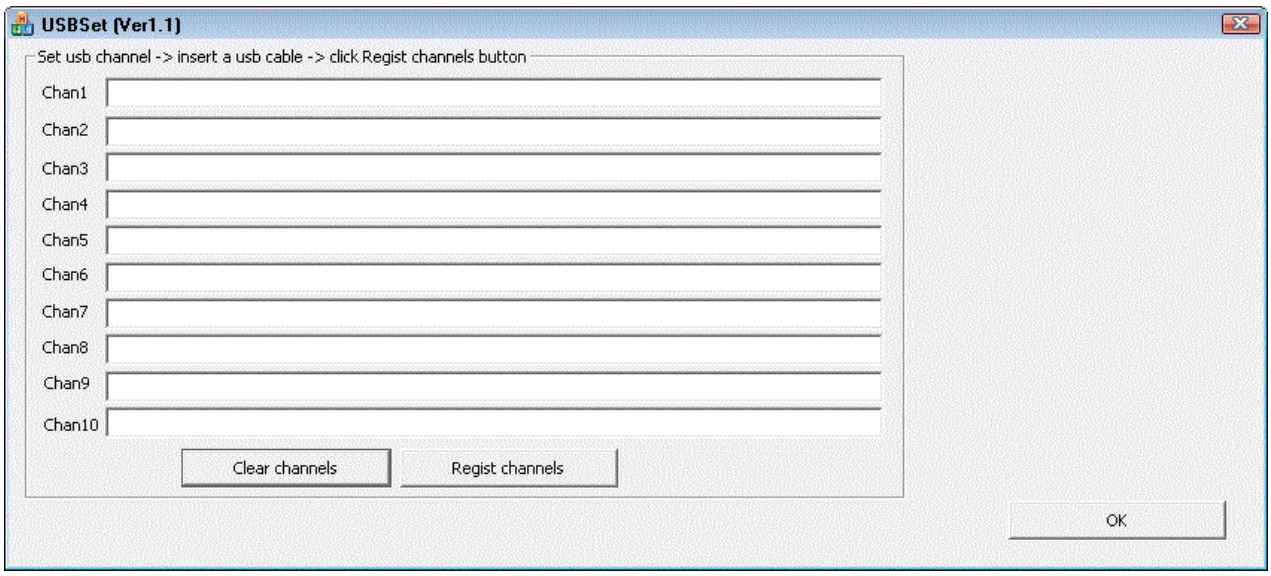
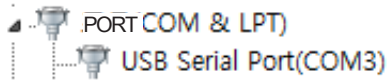


Fig. 8-10

3) Turn off the camera and then exit the USBSet1.1.exe.

5. Double click the “NXShutterTester.exe” to execute.

1) Connect the RFS-500 measuring equipment and your computer with USB cable. 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.

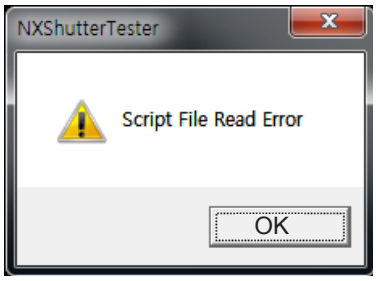


Fig. 8-11

3) It will attempt to download the “CIS DOT” file via FTP server.
Press the “OK” button to continue.

Fig. 8-12

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.

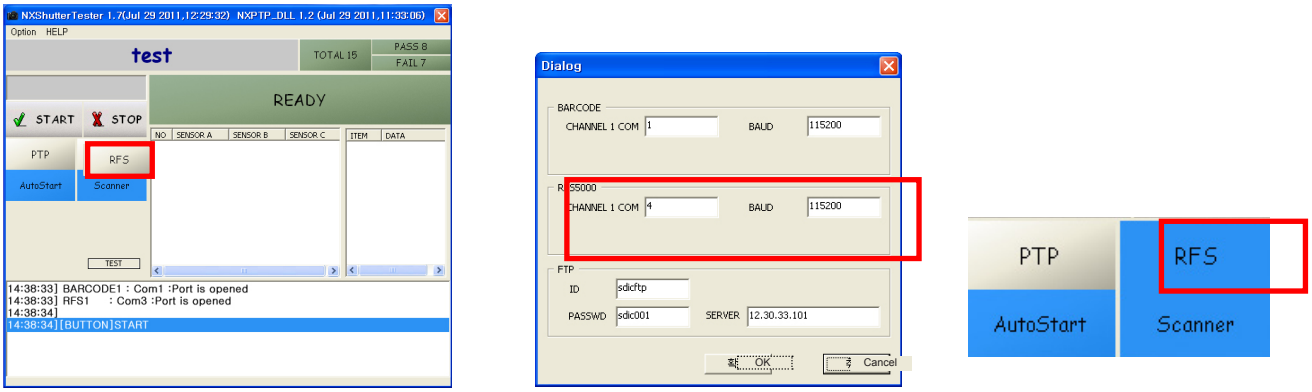


Fig. 8-13

5) Select the “Option” tab and click the “SCRIPT FILE OPEN”. Then click the “Open” to select the “shutter.txt”.
(Location: NX500 SHUTTER 2.5 \ Script \ shutter.txt)

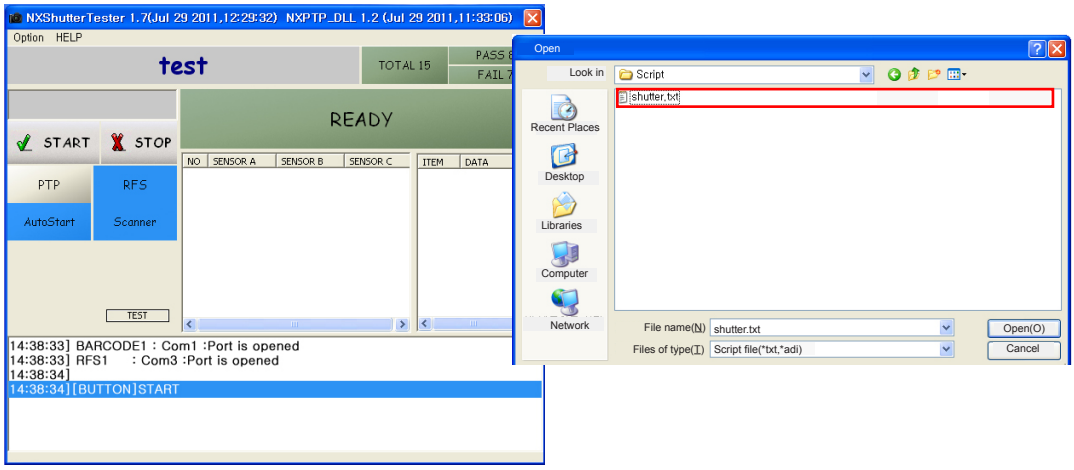
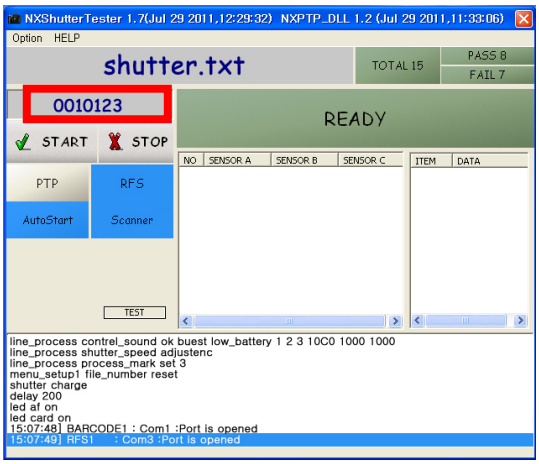
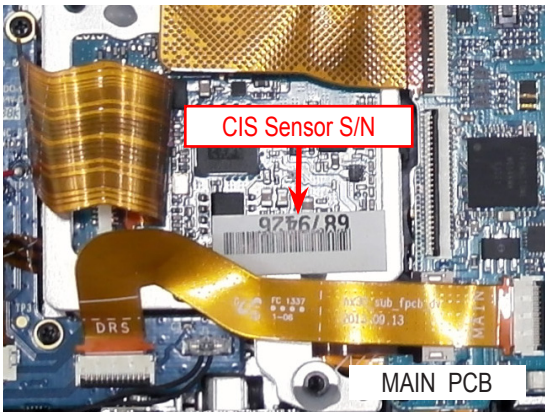


Fig. 8-14

6) Make sure there is the serial number file such as “0010123.sn” in the NXCISTEMP_NX500 folder.
- Type the serial number on the tap above the “STARAT” button.





- When there is no proper serial number file in the NXCISTEMP_NX500 folder, the error message will appear.

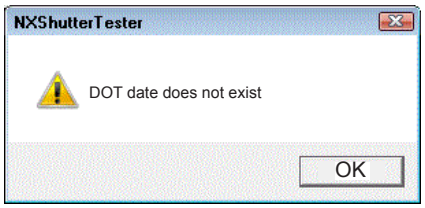


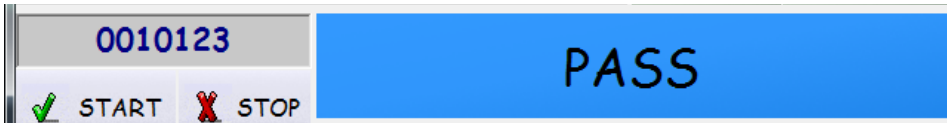
Fig. 8-15

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. 8-16

8) Connect the USB cable from your 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. 8-17

10) Navigate to the directory you extracted to the NXCISTEMP_NX500.zip” file such as C:\ CIS DOT_SHUTTER SPEED\NX500\NX500 SHUTTER 2.5\files\Ch1. Check whether the CSV file is created at the destination directory or not.

8-5 General Repair Center-Adjustment process guide

■ General Repair Center is after replacing the following parts, need to adjust the following items.
■ The table below provides information about the necessary adjustment process.

1. Please refer to the table information before beginning the adjustment process.

< **Table** 8-2>

	Main PCB	CIS ASSY	FRONT COVER	MOUNT ASSY	Equipment
F/W Upgrade	O	O	O	O	Every Service Cases
CIS DOT DATA	O	O	-	-	CIS Dot Data File
SIMPLE Shutter adj.	O	-	-	-	Light Box 5500K, 30mm Lens
ISO adj.	O	O	-	-	Light Box 3200K Master Lens
AWB adj.	O	O	-	-	
EFS	O	O	-	-	Light Box 3300K, LV16, 30mm Lens
VFPN & DEFECT adj.	O	O	-	-	Mount Cap
Color Shading adj.	O	O	-	-	Light Box 5500K 16-50mm PWZ Lens
GYRO	O	-	-	-	Script
COUNTRY CODE	O	-	-		Change Script
MAC ADDR, SERIAL NO, BLUE TOOTH ADDR	O	-	-	-	Change Script
PAF adj	O	O	-	-	PAF Light Box, Controller
WiFi ON/OFF	-	-	-	-	Special Request Only

2. Adjustment Equipment
- Light Source Box 1 : LV-1450DC (3200K±50, Lv12)
- Light Source Box 2 : LSB-1/10 (5500K±100, Lv12)
- Light Source Box 3 : For Compact DSC (3300K, Lv. 16)
- Light Source Box 4 : PAF Light box & Controller
- Master Lens
- 30mm Lens
- 16-50mm PWZ Lens

8-6 Program Installation-General Repair Center

■ Must be installed the following Program to prior to the CIS data input and Shutter Speed adjust.
■ If the programs are installed on the PC, then it doesn't need to install them again.

Required equipmentof

PC, Program(NX500_ShutterTester_Ver5.1.exe), USB cable

1. Unzip the "NXCISTEMP_NX500" on the C drive.

- Extract the "NXCISTEMP_NX500.zip" file to the c:\ directory such as C:\NXCISTEMP_NX500.
  Make sure to save "NXCISTEMP_NX500.zip" file to the above directory.
  PC program will search the CIS dot data in the above specified directory.

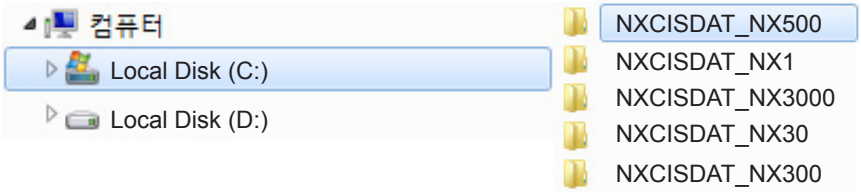


Fig. 8-18

2. Install the "vcredist_x86.exe " in the "CIS DOT data & Shutter speed" folder.

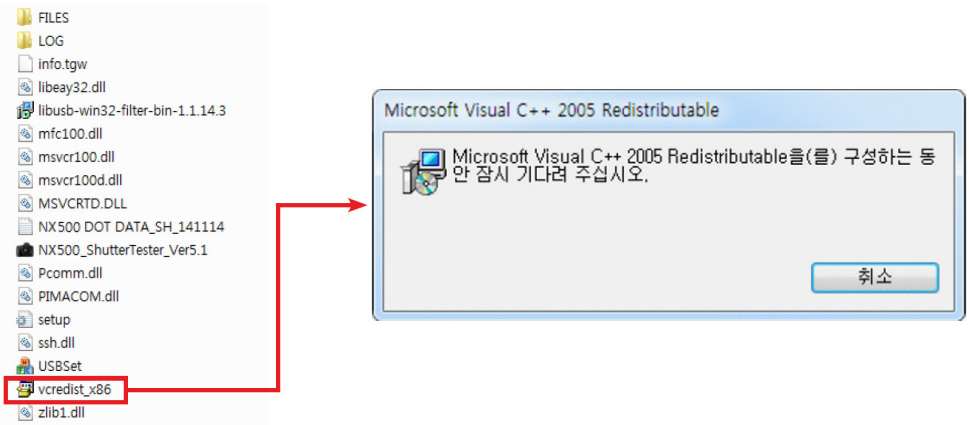


Fig. 8-19

3. Install the "libusb-win32-filter-bin-1.1.14.3.exe" in the "CIS DOT data & Shutter speed" folder.
   - The module for communications between the NX500 and PC.(Install only one time.)

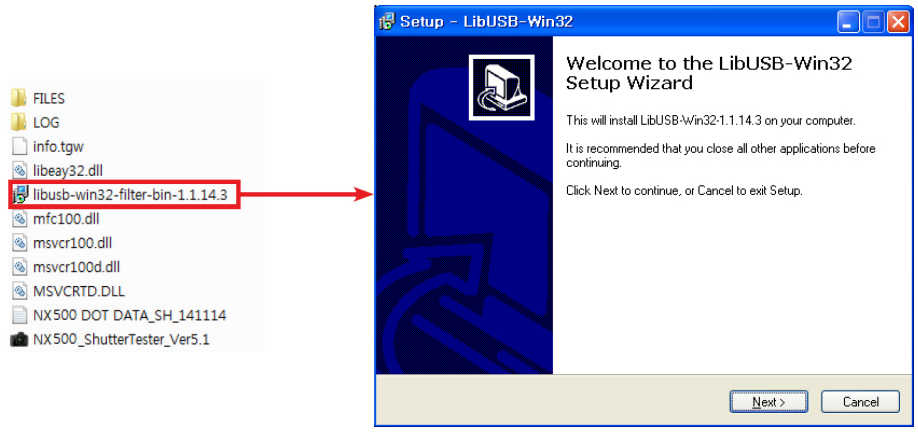


Fig. 8-20

8-7 CIS DOT DATA Input-General Repair Center

■ 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 “NX500.ZIP” file to a directory on your PC and extract it.

Fig. 8-21

1) Navigate to the directory you extracted to and double click the “vcredist_x86.exe ” in the CIS DOT data & Shutter speed .

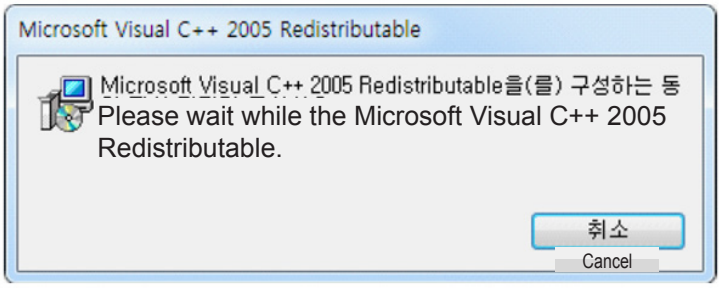


Fig. 8-22

2) Extract the “NXCISTEMP_NX500.zip” file to the c:\ directory such as C:\NXCISTEMP_NX500.
Make sure to save “NXCISTEMP_NX500.zip” file to the above directory.
PC program will search the CIS dot data in the above specified directory.

2. Double click the “libusb-win32-filter-bin-1.1.14.3.exe” to execute.
(Please refer to on page 8-8 for installing module between the NX SET and PC communications (PTP). Follow the .)

3. Download the “NX500.ZIP” file to a directory on your PC and extract it.

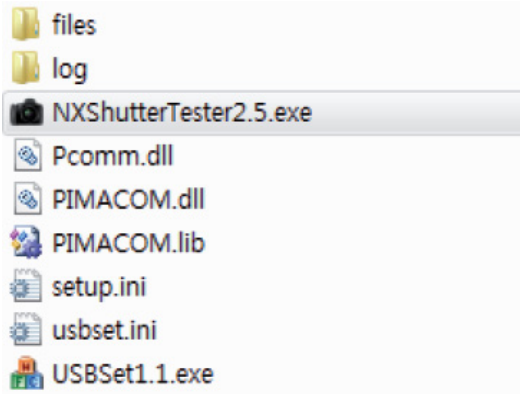


Fig. 8-23

4. Double click the “USBSet1.1.exe” to execute.

1) Connect the USB cable from your camera to the USB port on your computer when below window appears.)
(Make sure the “info.tgw” file is into SD card.)

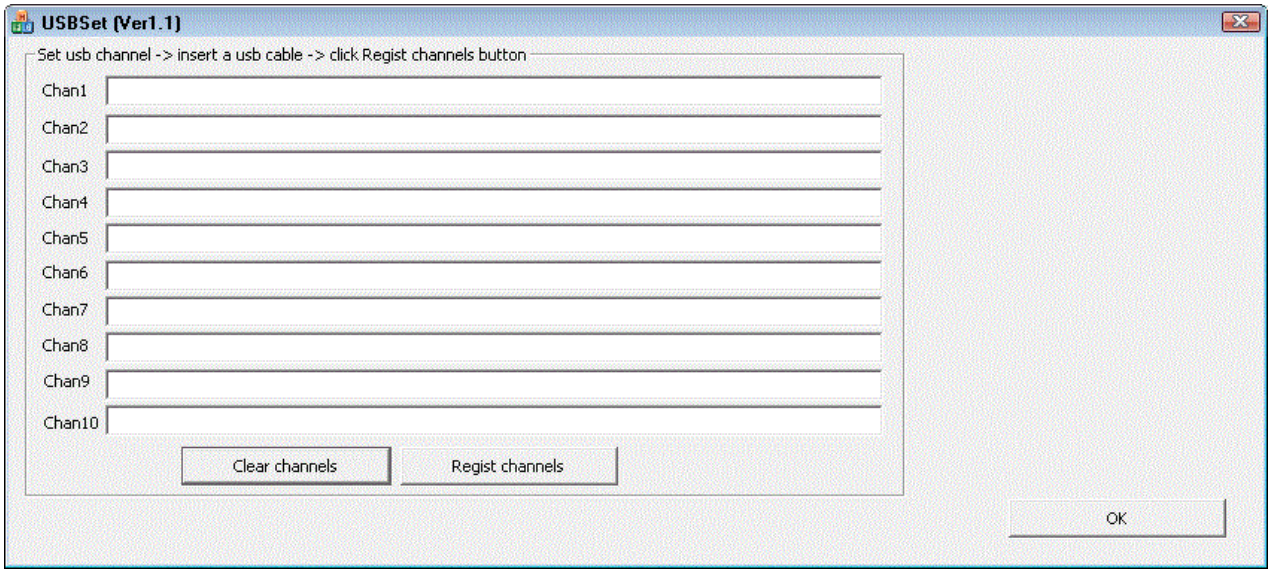


Fig. 8-24

2) When below window appears, turn on the computer and check the USB directory’s path.
Click the “Regist channels” button and then click the “OK” button.

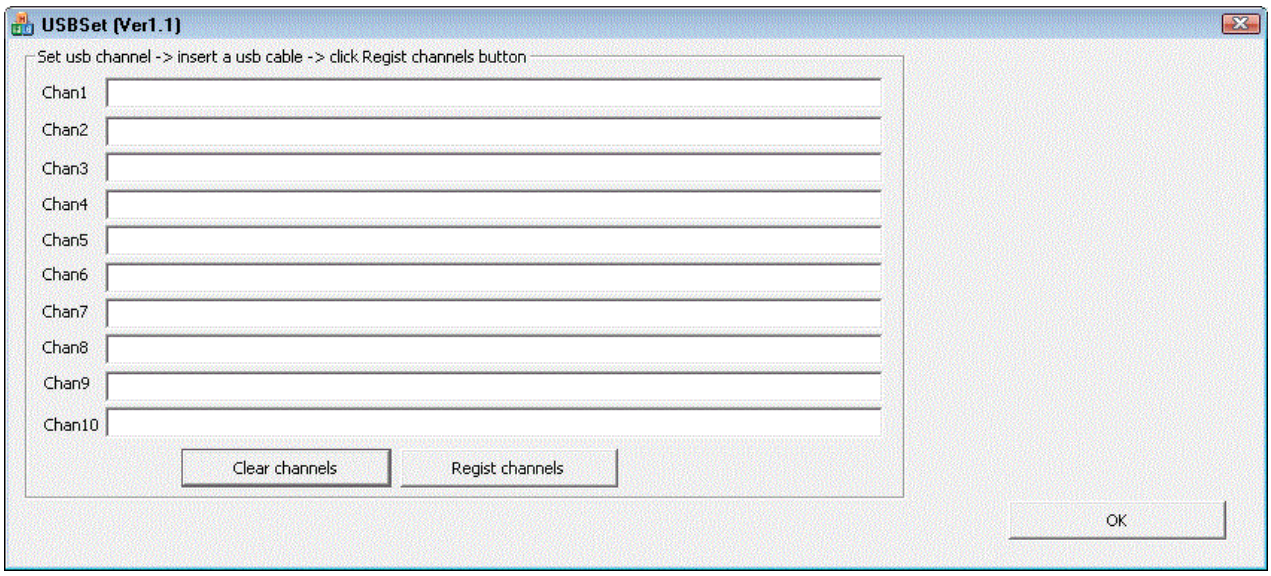
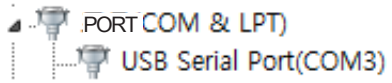


Fig. 8-25

3) Turn off the camera and then exit the USBSet1.1.exe.

5. Double click the “NXShutterTester.exe” to execute.

1) Connect the RFS-500 measuring equipment and your computer with USB cable. 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.

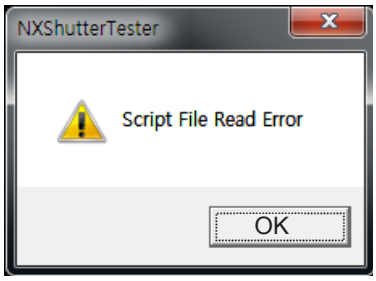


Fig. 8-26

3) It will attempt to download the “CIS DOT” file via FTP server.
Press the “OK” button to continue.

Fig. 8-27

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.

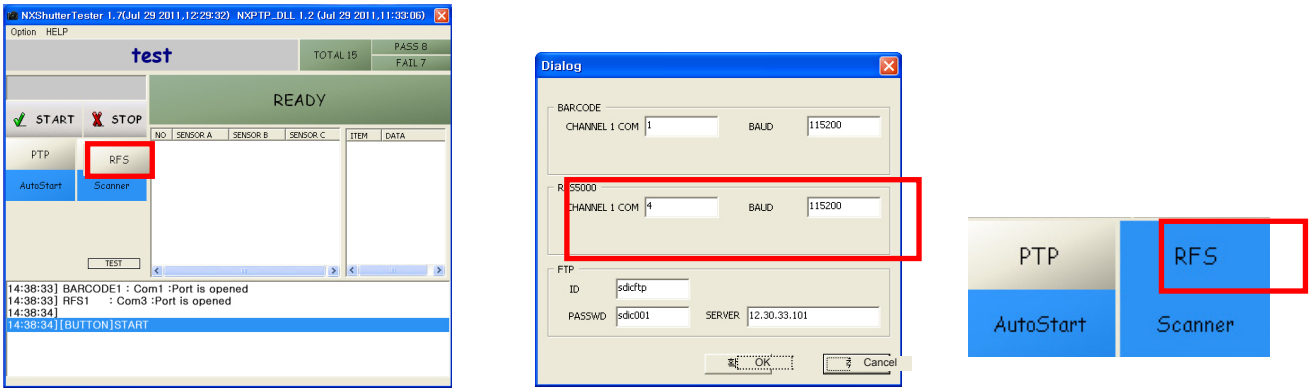


Fig. 8-28

5) Select the “Option” tab and click the “SCRIPT FILE OPEN”. Then click the “Open” to select the “shutter.txt”.
(Location: NX500 SHUTTER 2.5 \ Script \ shutter.txt)

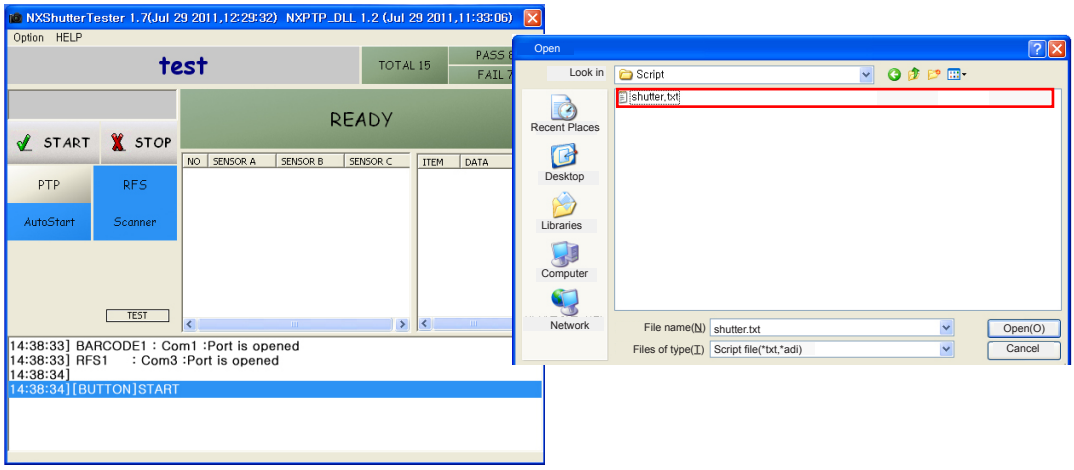
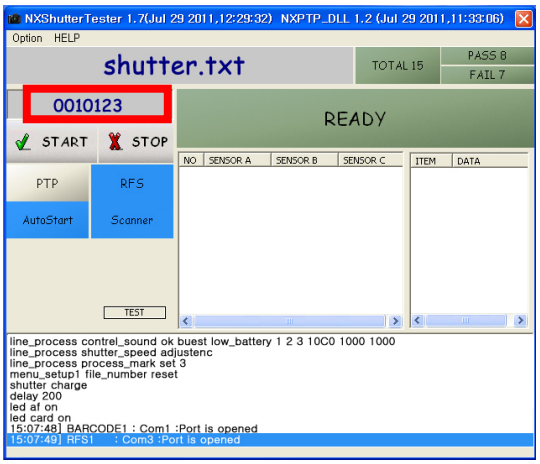
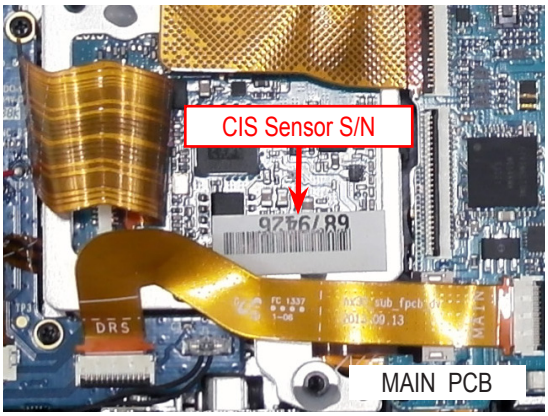


Fig. 8-29

6) Make sure there is the serial number file such as “0010123.sn” in the NXCISTEMP_NX500 folder.
- Type the serial number on the tap above the “STARAT” button.





- When there is no proper serial number file in the NXCISTEMP_NX500 folder, the error message will appear.

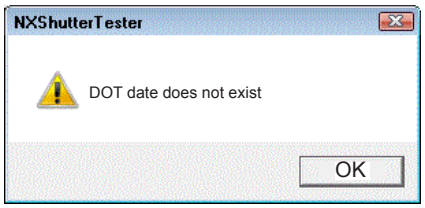


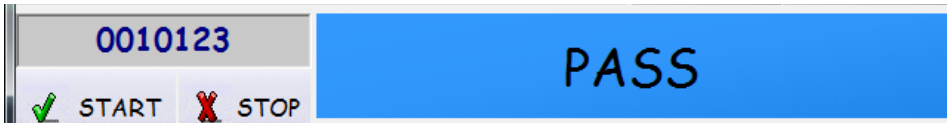
Fig. 8-30

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. 8-31

8) Connect the USB cable from your 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. 8-32

10) Navigate to the directory you extracted to the NXCISTEMP_NX500.zip” file such as C:\ CIS DOT_SHUTTER SPEED\NX500\NX500 SHUTTER 2.5\files\Ch1. Check whether the CSV file is created at the destination directory or not.

8-8 SIMPLE SHUTTER ADJ-General Repair Center

■ After replacing the MAIN PCB parts, adjust the SHUTTER SPEED value.

Required equipmentof

Light Box(5500K, LV12), 30mm Lens

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the 30mm lens to the camera and then setting(under 1~2cm) the camera to the Light source box of 5500K.

<Set up a camera in front of the Light Box>

Fig. 8-33

3. Enter the CS MODE.
   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK(Hold down EV button and press OK.)

4. When you select the Shutter, adjustment will automatically start.

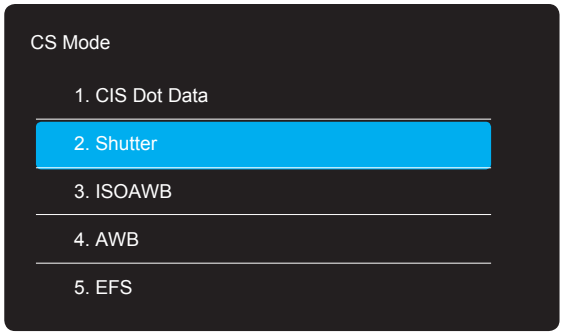


Fig. 8-34

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.
   - It takes 300 EA pictures for adjusting, this step needs about 5 mins.
   - After the adjustment is completed, please try to test the Shutter Speed.

8-9 SIMPLE SHUTTER SPEED TEST-General Repair Center

■ After the SIMPLE SHUTTER ADJ is completed, please try to test the shutter speed.

Required equipment

Light Box(5500K, LV12), 30mm Lens

<Adjustment method>

1. Checking current shutter speed.
   1) Making a Standard picture.
      Set up as below, then take one picture after fixing the camera in front of the Light Box.
      - Shooting mode : M Mode
      - AF mode : Manual Focus
      - Lens: 30mm, F5.6
      - Shutter speed : 1/250
      - ISO : 200

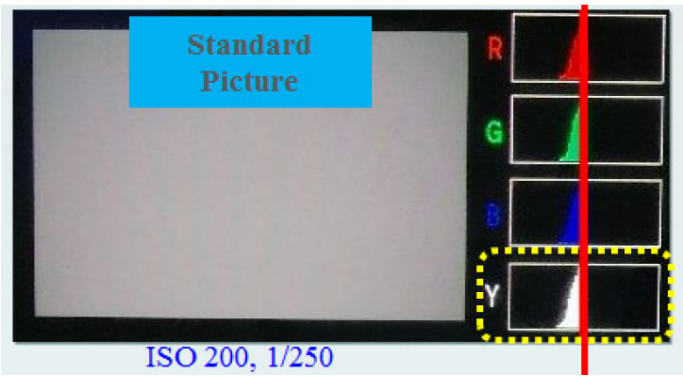


Fig. 8-35

   2) Making a Target Picture.
      Change Shutter speed and ISO, then take one picture.
      - Shutter speed: 1/4000
      - ISO : 3200

2. Checking current shutter speed.
   1) Press the Play button.
   2) Repeat to push DISP button until when Histogram is displayed on the LCD.

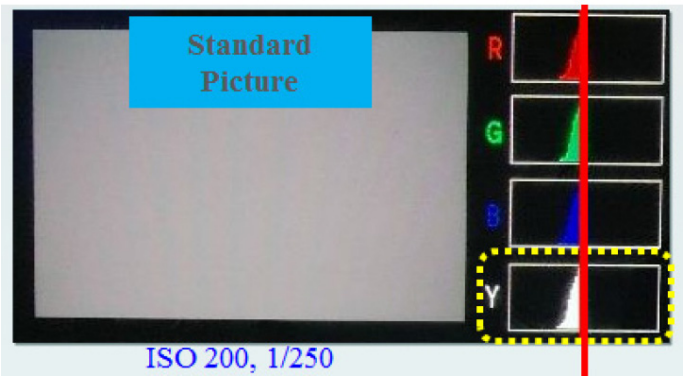


Fig. 8-36

8-10 Entering the CS Mode -Common Adjust

Describes how to enter to CS Mode the Camera.

1. Save the 'Adjustment, nx_cs.adj' file in the top-level folder of your SD card and insert the card into your camera.
   - The files inside the "Adjustment" folder as shown below.

Fig. 8-37

2. ❶ Turn the camera on.→ 3. ❷ Select 'Smart Auto' mode.

Fig. 8-38

4. Press the buttons in numerical order below.

❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

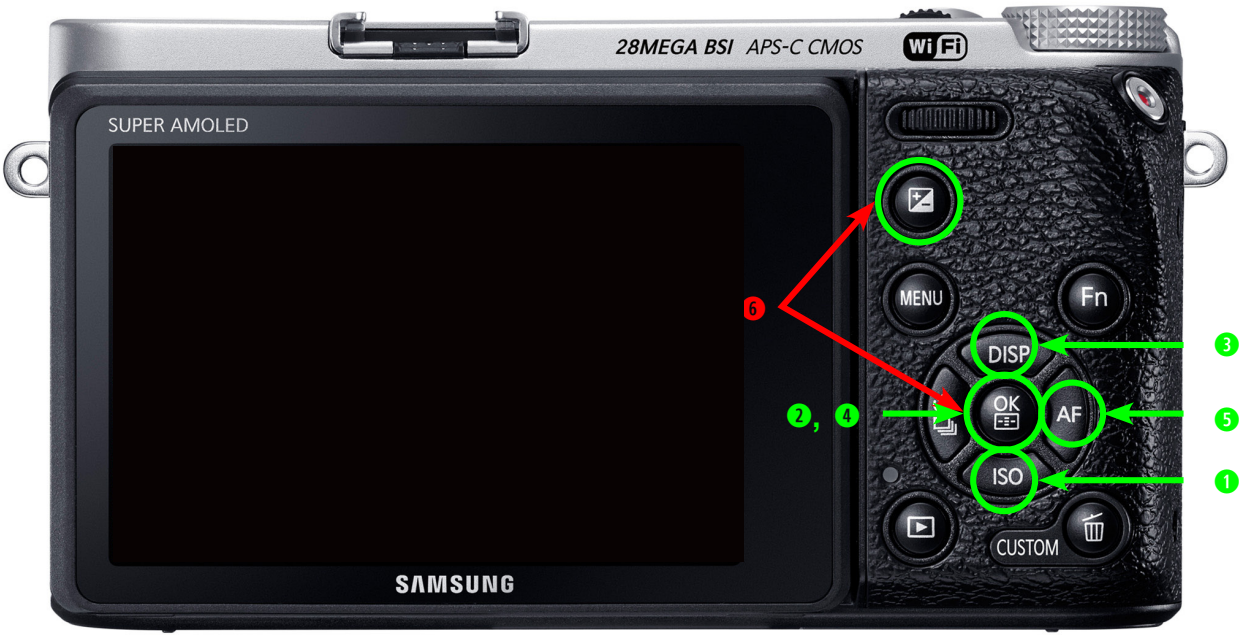


Fig. 8-39

5. Displayed the CS Mode as shown below.

Fig. 8-40

8-11 ISO ADJ- Common Adjust

■ This section describes how to proceed the adjustment relating to the image quality.

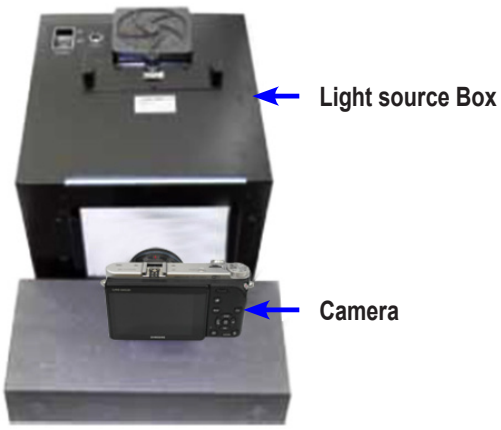
Required equipment

Light Box (3200K, LV12), Master Lens(F#5.6)

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the master lens to the camera and then setting(under 1~2cm) the camera to the Light source box of 3200K.



<Set up a camera in front of the Light Box>

Fig. 8-41

3. Enter the CS MODE.
   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up→ ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the ISO, adjustment will automatically start.

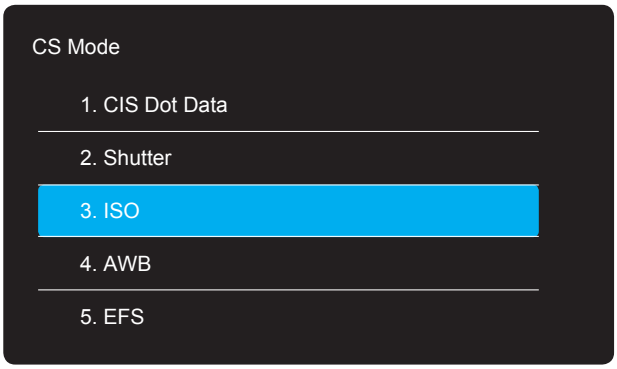


Fig. 8-42

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.

8-12 AWB ADJ-Common Adjust

■ This section describes how to proceed the adjustment relating to the image quality.

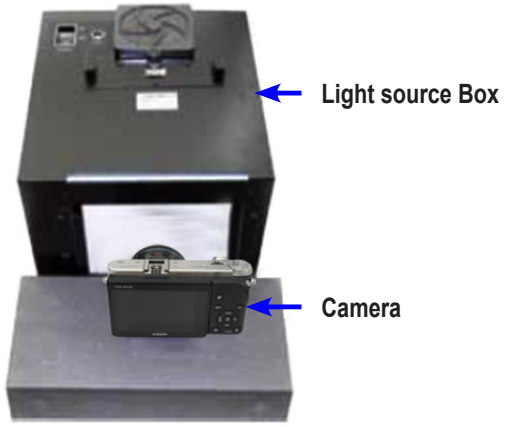
Required equipment

Light Box (3200K, LV12), Master Lens(F#5.6)

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the master lens to the camera and then setting(under 1~2cm) the camera to the Light source box of 3200K.



<Set up a camera in front of the Light Box>

Fig. 8-43

3. Enter the CS MODE.

   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the AWB, adjustment will automatically start.

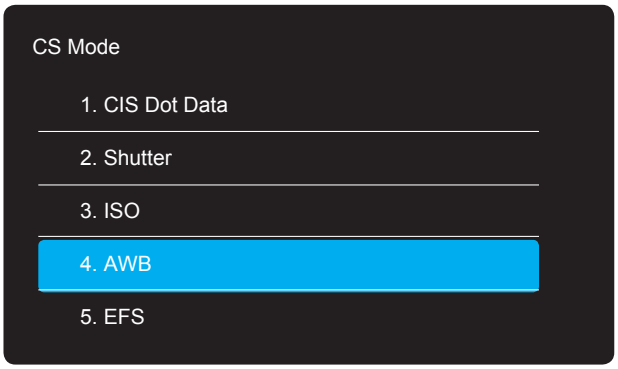


Fig. 8-44

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.

8-13 EFS ADJ-Common Adjust

■ Describes the how to adjustment associated for the Electron First Shutter properties.

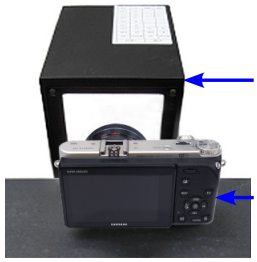
Required equipment

Light Box (For compact DSC, 3300K, LV16 ±0.2), 30mm Lens

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the 30mm lens to the camera and then setting(under 1~2cm) the camera to the Light source box of 3300K.



<Set up a camera in front of the Light Box>

Fig. 8-45

3. Enter the CS MODE.

   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the EFS, adjustment will automatically start.

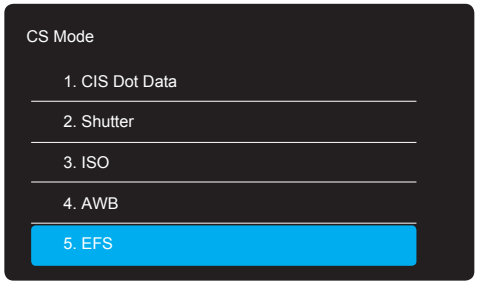


Fig. 8-46

5. If the adjustment is completed, “EFS SUCCESS!” message is displayed.

6. Check the adjustment result.
   - With Shutter speed of 1/4000s, MF focus, take a picture of LV16 of Light Box. Check if there’s horizontal noise on the image.

Fig. 8-47

8-14 VFPN & DEFECT ADJ -Common Adjust

■ This section describes how to correct the vertical noise & defect pixel according to CIS Temperature.

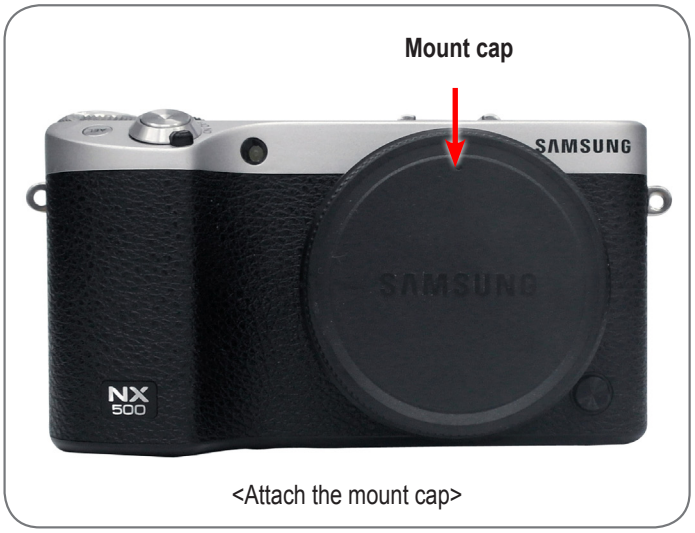
Required equipment

Mount Cap

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the mount cap to block the light.



<Attach the mount cap>

Fig. 8-48

3. Enter the CS MODE.

   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the VFPN&DEFEC, adjustment will automatically start.

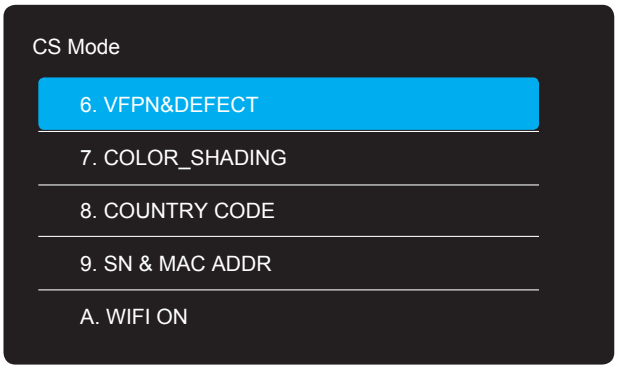


Fig. 8-49

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.

8-15 COLOR SHADING ADJ -Common Adjust

■ This section describes how to adjust the brightness and color deviation gap between center and around.

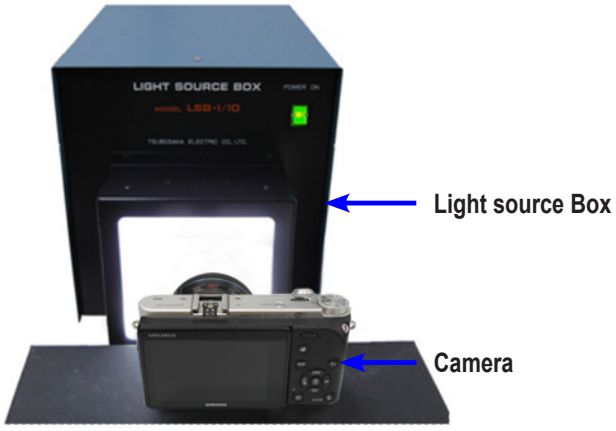
Required equipment

Light Box(5500K, LV12), 16-50mm Power Zoom Lens

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Install the 16-50mm Power Zoom Lens to the camera and then setting the camera to the Light source box of 5500K.



<Set up a camera in front of the Light Box>

Fig. 8-50

3. Enter the CS MODE.
   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the COLOR_SHADING, adjustment will automatically start..

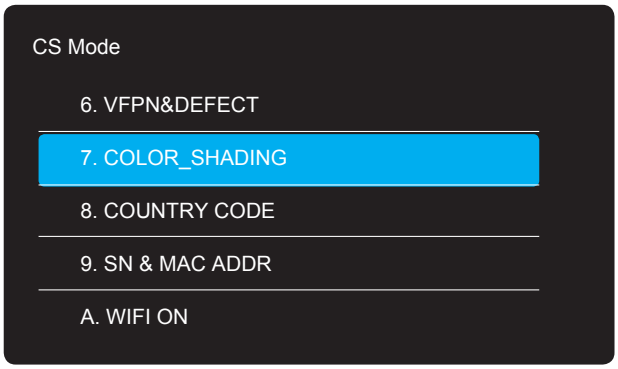


Fig. 8-51

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.

8-16 GYRO ADJ -Common Adjust

Required equipment

Adjustment files

<Adjustment method>

1. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

2. Enter the CS MODE.
   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

3. When you select the Defect, adjustment will automatically start.

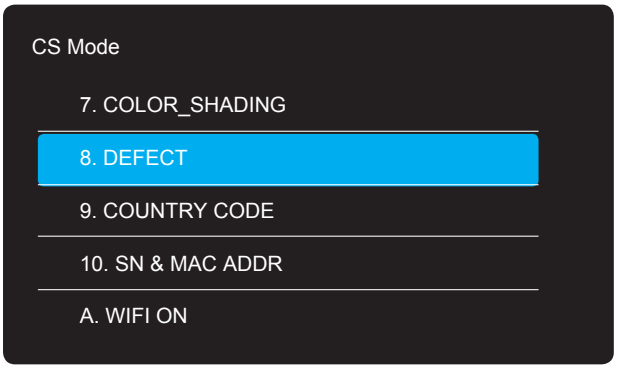


Fig. 8-52

5. If the adjustment is completed, “ADJ. Finished!”message is displayed.

8-17 COUNTRY CODE Setting-Common Adjust

■ It is required to reset up Wi-Fi setting for the specified country after replacing the Main PCB.

<Adjustment method>

1. Open "Country_code.adj"Scripts file and input country code as country code table.
- Country code, see page 8-30.

```
// change country_code :
//     sys_param shipment_country set [country_code]
//      ex. sys_param shipment_country set 55

start

osd clear

////// change here  /////////

sys_param shipment_country set 55

////////////////////////////////
```

Country Code
EX > sys_param shipment_country set 55
(korea code : 55)

Fig. 8-53

2. Insert the memory card containing the two adjustment files in below into the camera.
- Adjustment folder, nx_cs.adj files

3. Enter the CS MODE.

- Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the COUNTRY CODE, adjustment will automatically start.

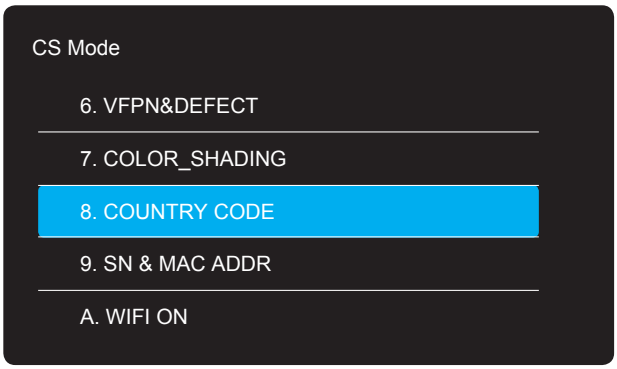


Fig. 8-54

5. If the setting is completed, "ADJ. Finished!" message is displayed.
- If the camera is not set region after replacing the Main PCB or is purchased from overseas, there are some issues as below.
1) User does not use SNS service country-specific.
2) Do not support multiple languages for display and input when using Wi-Fi.
3) Wi-Fi telecommunication speed may be down.

8-18 SN & Mac ADDR Setting -Common Adjust

■ It is required to input Serial number and Mac Address after replacing the Main PCB.

<Adjustment method>

1. Open “Sn_mac.adj”Scripts file and input serial number and Mac address.

```
//---------------------- Input the Serial No. here.
//                       ❶ 제품라벨의 시리얼번호 15자리를 입력하세요.
line_process product_number set ABC123456789ABC
delay 500

//---------------------- Input the Network certification Number No. here
//                         Scan barcode on the S/N label, and input 12digit number.
//                       ❷ S/N 바코드를 Scan하여 12자리 네트웍인증번호를 입력하세요.
sys_serial set 012345678901
delay 500

//---------------------- Write the MAC address here.
//                       ❸ MAC address 12자리를 입력하세요.
wifi addr_set 2013e0f72e02
delay 500

//---------------------- Write the BLUETOOTH MAC address here.
//                       ❹ 블루투스 MAC address 12자리를 입력하세요
bluetooth addr_set 2013e0f72e01
```

Fig. 8-55

2. Insert the memory card containing the two adjustment files in below into the camera.
   - Adjustment folder, nx_cs.adj files

3. Enter the CS MODE.

   - Smart Auto mode → ❶ Down → ❷ OK → ❸ Up → ❹ OK → ❺ Right → ❻ EV+ OK (Hold down EV button and press OK.)

4. When you select the SN & MAC ADDR, adjustment will automatically start.

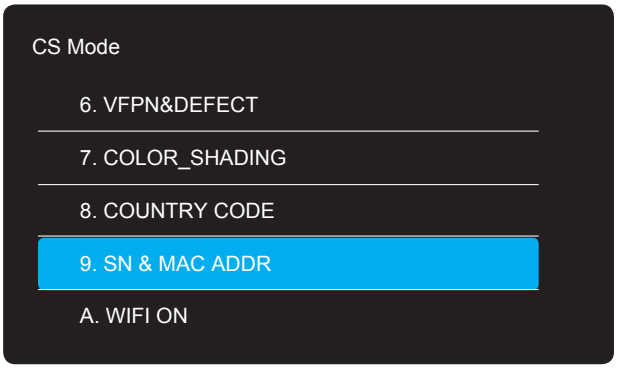


Fig. 8-56

5. If the setting is completed, “ADJ. Finished!” message is displayed.
- When the original Mac address is gone and is changed to new one, please change SSID of NFC tag as new Mac address.

8-19 PAF Adjustment ADJ-Common Adjust

■ This section describes how to adjust deviation of PAF sensor.

Required equipment

PAF Light Box, PC, PAF Light Controller, USB to Serial Cable

<Adjustment method>

1. Connecting.
   1) Copy “info.tgw” file to SD card and insert the SD card into the camera.
   2) Please connect camera to PAF equipment and connect USB cable.

Fig. 8-57

2. Run PAF program.(DITester.exe)

3. Read Script file.
   - ❶ Select LOG2 → ❷ Script Load → ❸ NX500_CH2_PAF.txt PAT Script → Close and open the program again.
     ❹ If the script is loaded correctly, then the script name is on channel 2.

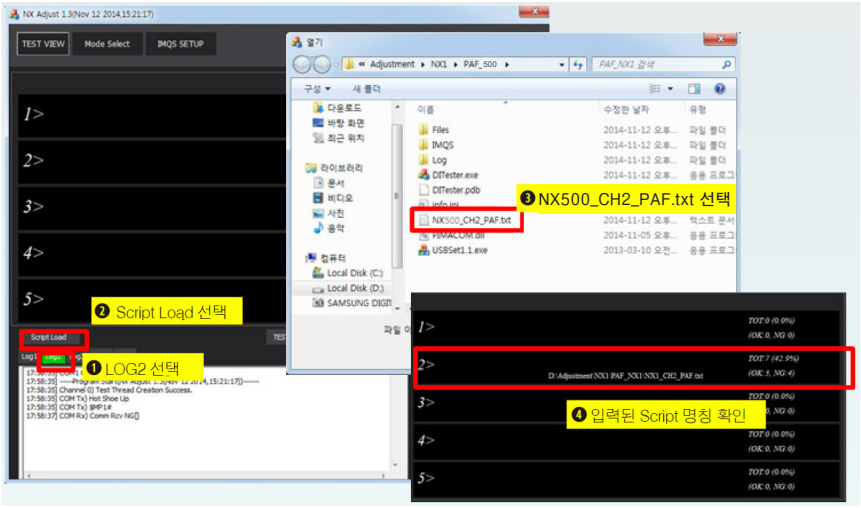
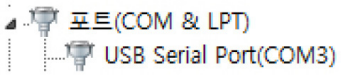


Fig. 8-58

4. USB to serial port setting.
   1) After installing USB to serial cable driver, please connect cable to PC.
   2) Check COM port number in device manger



   3) Select “SETUP VIEW” and then Change COM port number in second channel and its speed as 9600.
   4) Close and open the program again.

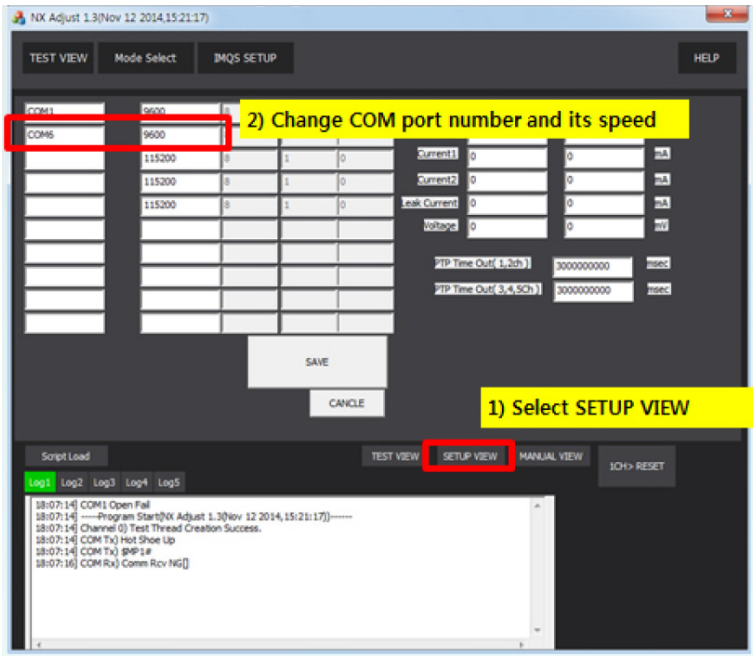
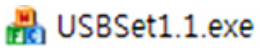


Fig. 8-59

5. Execute USBSet1.1.exe.



6. Cut USB ID → Click “Clear channels” → Click “Regist channels” → Paste to Channel 2 in USB ID → Click “OK”.

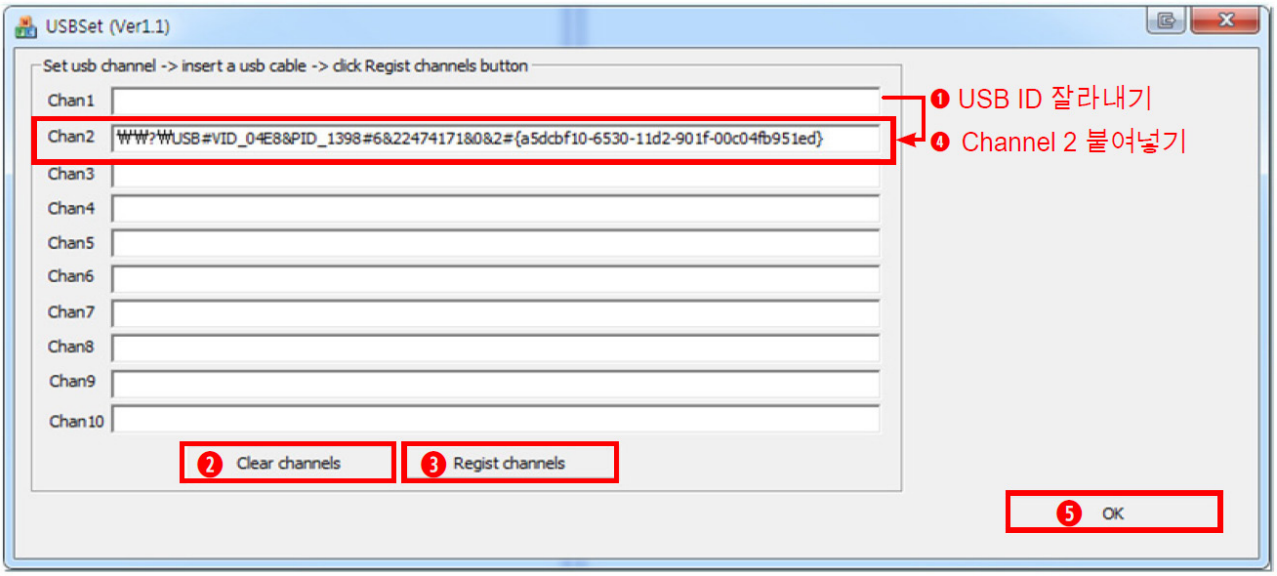


Fig. 8-60

7. Execute PAF adjustment Program.

8. When turning on the camera, the process will proceed automatically.

9. When it finishes normally, then there is a final message, “PAF Adjust done“ with green screen at camera
   And there is PASS message on the PC program.

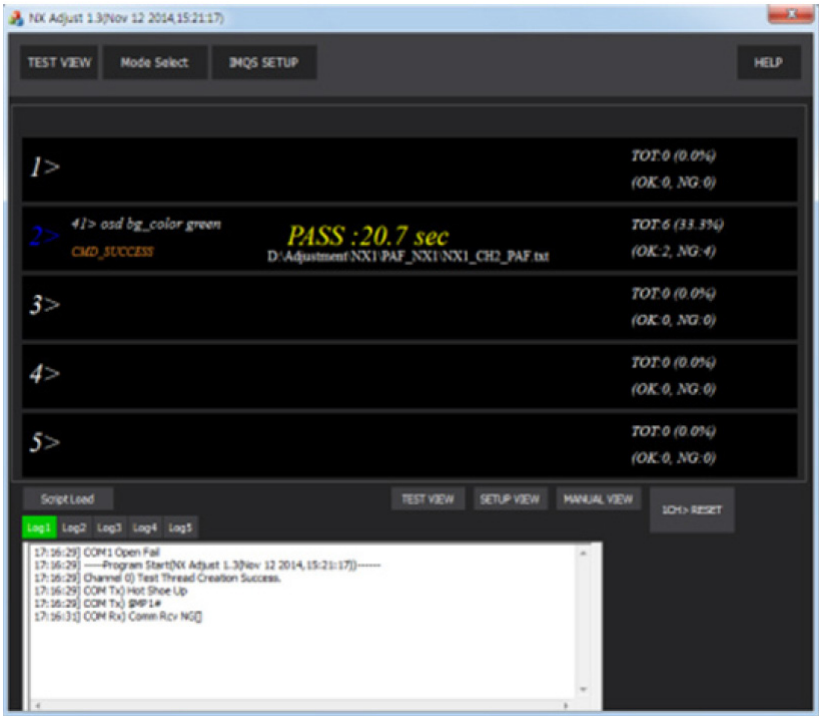


Fig. 8-61

8-20 How to uninstall WI-FI Function-Common Adjust

<Adjustment method>

1. Select WIFI ON from the CS MENU.

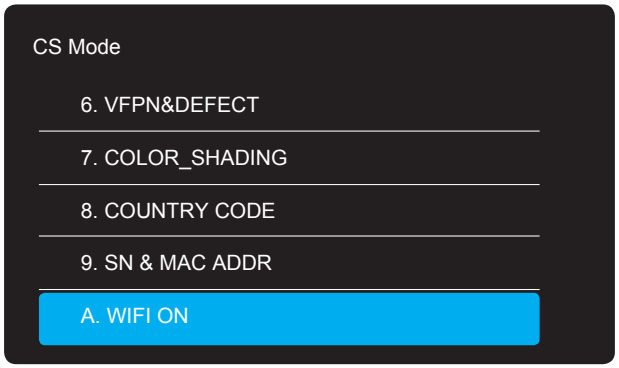


Fig. 8-62

2. When ON / OFF switch appears, the switch is select to OFF.
   - If you select OFF, the Wi-Fi is turned off.

<Country code>

No	Country	Code
-	DEFAULT	- - -
1	AFGHANISTAN	001
2	ALBANIA	002
3	ALGERIA	003
4	ANGOLA	004
5	ARGENTINA	005
6	ARMENIA	006
7	AUSTRALIA	007
8	AUSTRIA	008
9	AZERBAIJAN	009
10	BANGLADESH	010
11	BENIN	011
12	BOSNIA ANDHERZEGOVINA	012
13	BRAZIL	013
14	BULGARIA	014
15	BURKINA_FASO	015
16	CAMEROON	016
17	CANADA	017
18	CANARY	018
19	CAPEVERDE	019
20	CHILE	020
21	CHINA	021
22	COLOMBIA	022
23	CONGO	023
24	CROATIA	024
25	CYPRUS	025
26	CZECHREPUBLIC	026
27	DENMARK	027
28	DJIBOUTI	028
29	EGYPT	029
30	ERITREA	030
31	ETHIOPIA	031
32	FRANCE	032
33	GABON	033
34	GAMBIA	034
35	GEORGIA	035
36	GERMANY	036
37	GHANA	037
38	Greece	038
39	GSS_CO	039
40	GUINEA	040
41	Guinea-Bissau	041
42	HONGKONG	042
43	HUNGARY	043
44	INDIA	044
45	INDONESIA	045
46	IRAN	046
47	IRAQ	047
48	ISRAEL	048
49	ITALY	049
50	IVORY COAST	050
51	JAPAN	051
52	JORDAN	052
53	KAZAKHSTAN	053
54	KENYA	054
55	KOREA	055
56	Kyrgyzstan	056
57	LAS_PALMAS	057
58	LATVIA	058
59	LEBANON	059
60	LIBERIA	060
61	LIBYA	061
62	MACEDONIA	062
63	MADAGASKAR	063
64	MALAWI	064
65	MALAYSIA	065
66	MALI	066
67	MAURITANIA	067
68	MAURITIUS	068
69	MAYOTTE	069
70	MEXICO	070
71	MONGOLIA	071
72	MONTENEGRO	072
73	MOROCCO	073
74	MOROCCO	074
75	MYANMA	075
76	NAMIBIA	076
77	NEPAL	077
78	NETHERLANDS	078
79	NEW_ZEALAND	079
80	NIGERIA	080
81	PAKISTAN	081
82	PALESTINE	082
83	PALESTINE	083
84	PARAGUAY	084
85	PARAGUAY	085
86	PHILIPPINES	086
87	POLAND	087
88	PORTUGAL	088
89	REUNION	089
90	ROMANIA	090
91	RUSSIA	091
92	RWANDA	092
93	SAMPLE	093
94	SAUDI_ARABIA	094
95	SEBJ	095
96	SECD	096
97	SEGZ	097
98	SENEGAL	098
99	Serbia	099
100	SESH	100
101	SESY	101
102	SIEL(CALCUTTA)	102
103	SIEL(CHENNAI)	103
104	SIEL(DELHI)	104
105	SIEL(MUMBAI)	105
106	SIERRALEONE	106
107	SINGAPORE	107
108	SINGER_SRI	108
109	SLOVAKIA	109
110	SLOVENIA	110
111	SLOVENIA	111
112	SOUTH_AFRICASPAIN	112
113	SPAIN	113
114	SRI_LANKA	114
115	SRILANKA	115
116	SUDAN	116
117	SWEDEN	117
118	SWITZERLAND	118
119	SYRIA	119
120	TAIWAN	120
121	TAJIKISTAN	121
122	TANZANIA	122
123	THAILAND	123
124	TOGO	124
125	TUNISIA	125
126	TURKEY	126
127	TURKMENISTAN	127
128	U.A.E	128
129	UGANDA	129
130	UKRAINE	130
131	UNITED_KINGDOM	131
132	UNITED_STATES	132
133	UNITEDARABEMIRATES	133
134	URUGUAY	134
135	UZBEKISTAN	135
136	VIETNAM	136
137	YUGOSLAVIA	137
138	ZAMBIA	138
139	ZIMBABWE	139

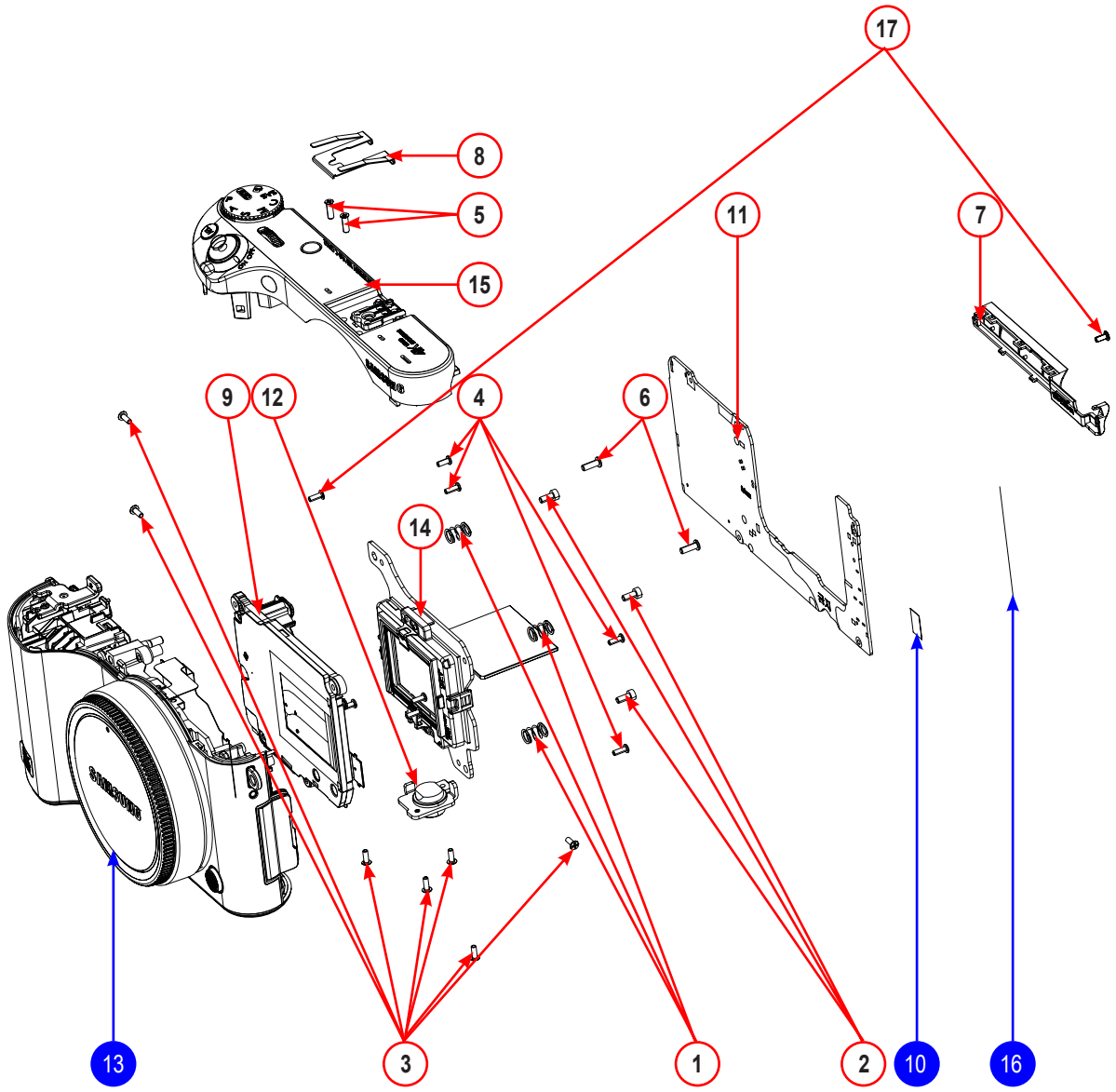
<Table 8-3>

9. Exploded view and parts list

9-1 ASSY BODY

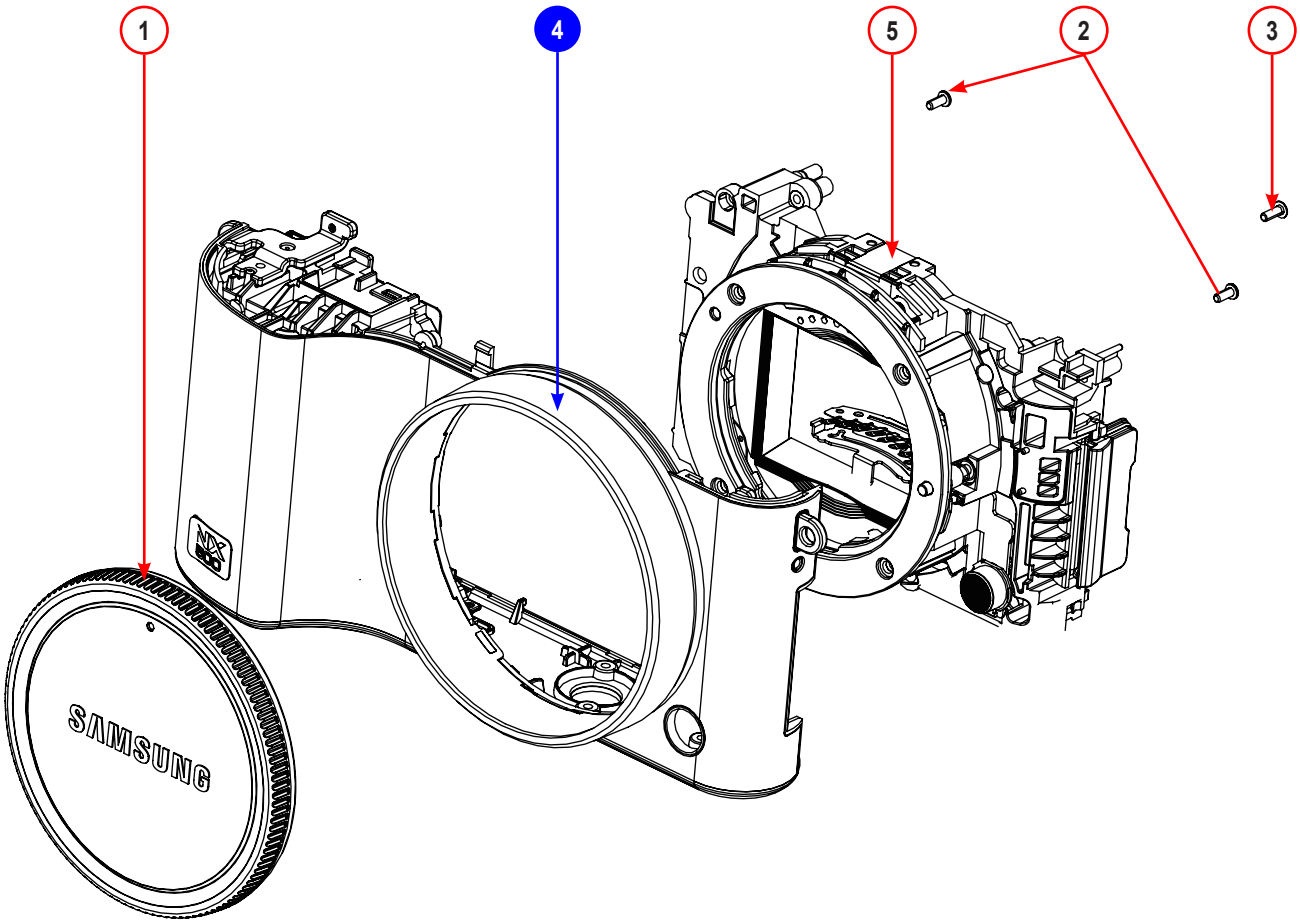
▪ The Exploded view and parts list of the service manual, Please reference the only BASIC MODEL code.
later on derivative model, please refer to the EV(Exploded View) of the GSPN.

Parts Service Information	Availability
SA	Service is available.
SNA	Service is not available.



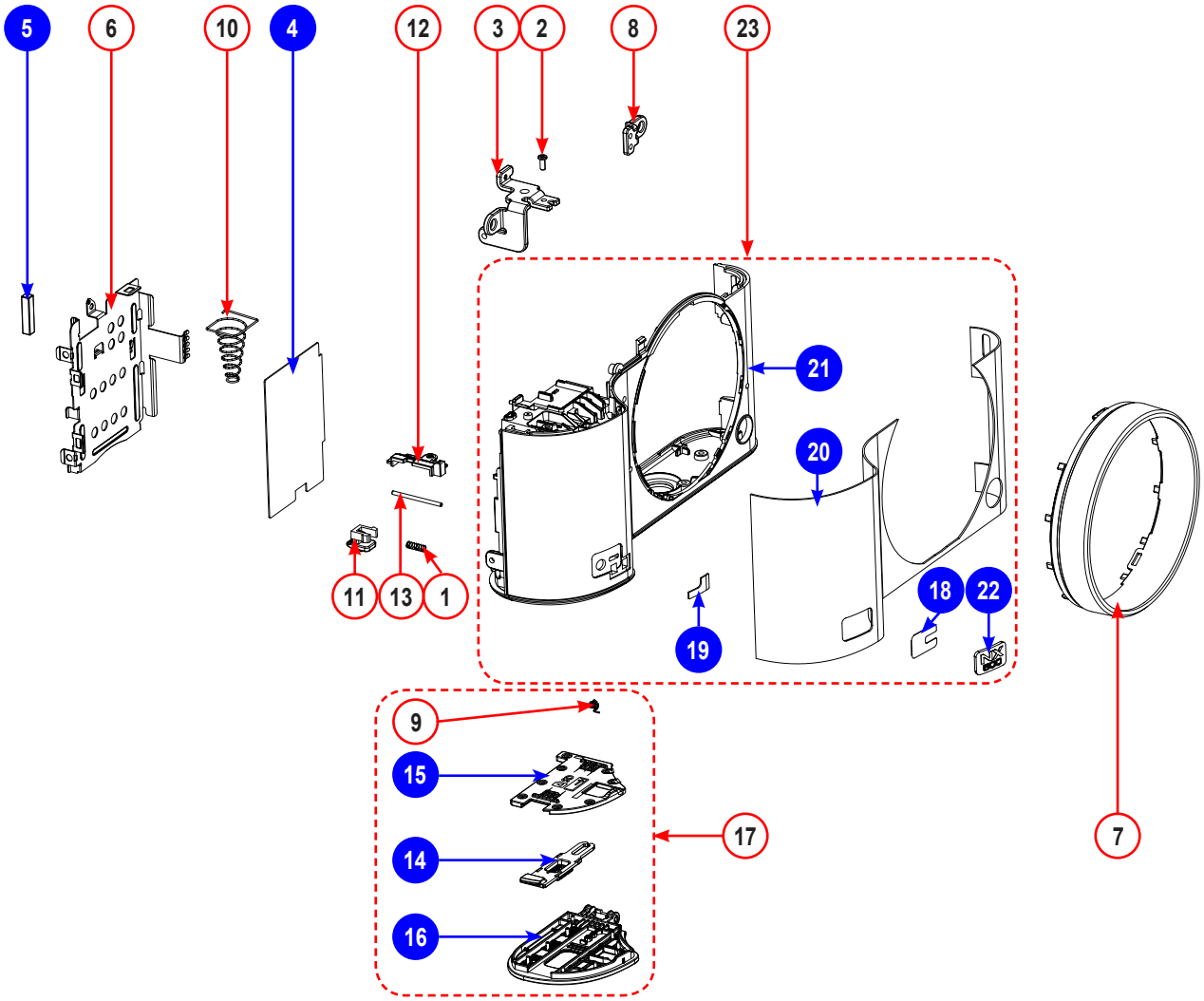
Loc. No.	Parts No.	Description	Qty	Available	Remark
1	6107-002736	ADJUST SPRING	3	SA	
2	6001-002279	SCREW 1740 HEX MACHINE	3	SA	
3	6001-003216	SCREW 1440 MACHINE	9	SA	BLACK, BROWN
			2		WHITE
4	6003-001659	SCREW 1440 TAPTYPE	5	SA	
5	6003-001862	SCREW 1755 TAPTYPE	2	SA	
6	6003-001796	SCREW 1750 TAPTYPE	2	SA	
7	AD61-06548A	CASE FRONT SUB_BK	1	SA	BLACK
	AD61-06548B	CASE FRONT SUB_WH			WHITE
	AD61-06548C	CASE FRONT SUB_BN			BROWN
8	AD61-06063A	Plate Spring Shoe(□□)	1	SA	
9	AD97-24197A	ASSY SHUTTER	1	SA	
10	AD63-06472A	SHEET MAIN FRAME A	1		
11	AD92-02282A	MAIN PCB	1	SA	
12	AD61-06561A	PLATE TRIPOD	1	SA	
13	AD97-24568A	ASSY MAIN_BK	1	SNA	BLACK
	AD97-24568B	ASSY MAIN_WH			WHITE
	AD97-24568C	ASSY MAIN_BN			BROWN
14	AD97-24571A	ASSY CMOS	1	SA	
15	AD97-24572A	ASSY TOP-NX500_BLK	1	SA	
16	AD97-24573A	ASSY FRONT-NX500_BK	1	SNA	BLACK
	AD97-24573B	ASSY FRONT-NX500_WH			WHITE
	AD97-24573C	ASSY FRONT-NX500_BN			BROWN
17	6001-003217	SCREW 1440 MACHINE	7	SA	WHITE

9-2 ASSY MAIN



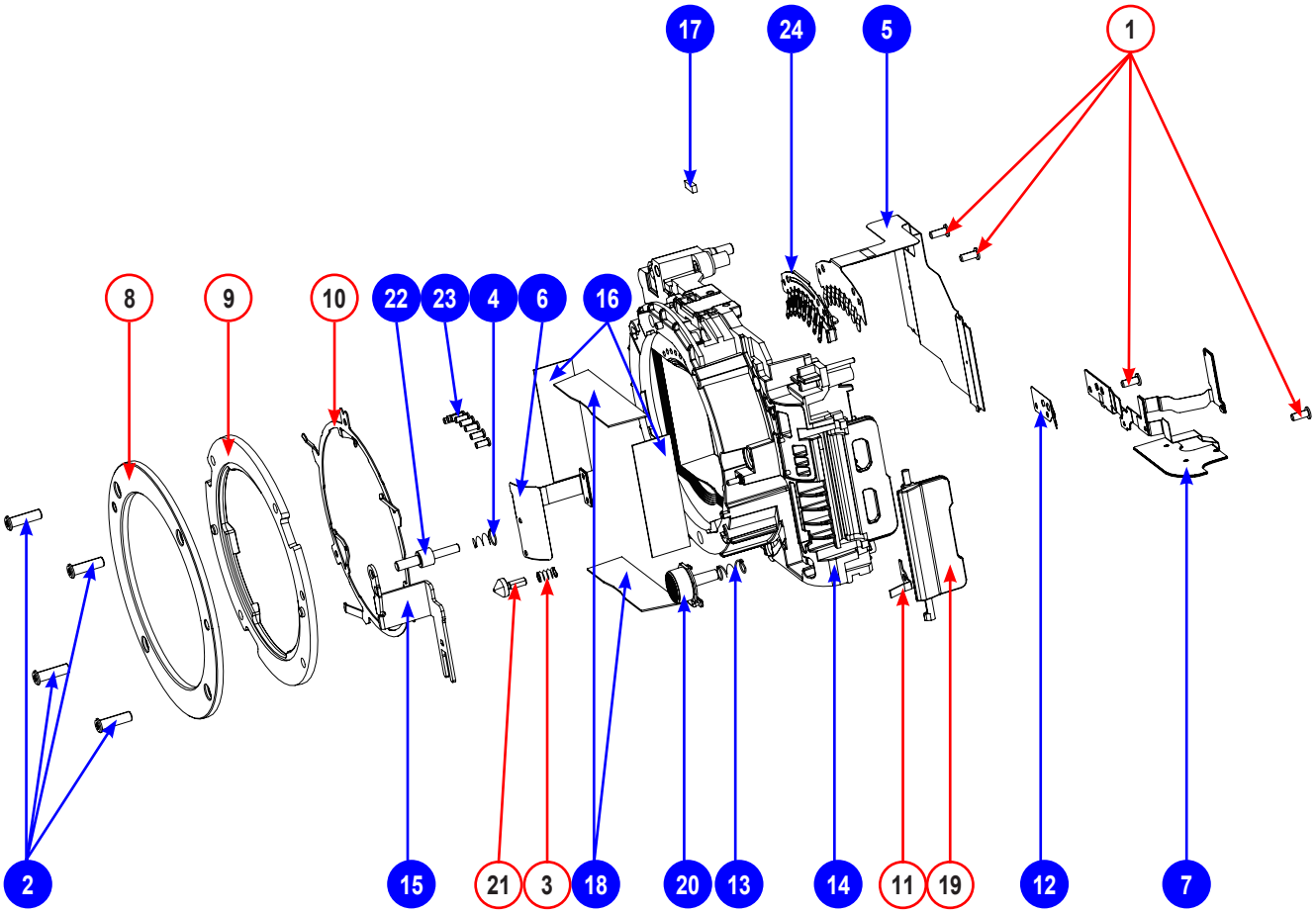
Loc. No.	Parts No.	Description	Qty	Available	Remark
1	AD67-02616A	CAP MOUNT_BK	1	SA	BLACK
	AD67-02616B	CAP MOUNT_WH			WHITE
	AD67-02616A	CAP MOUNT_BN			BROWN
2	6003-001630	SCREW T1435	2	SA	
3	6001-003216	SCREW M1440	1	SA	BLACK, BROWN
	6001-003217				WHITE
4	AD97-24569A	ASSY REAR_BK	1	SNA	BLACK
	AD97-24569B	ASSY REAR_WH			WHITE
	AD97-24569C	ASSY REAR_BN			BROWN
5	AD97-24604A	ASSY HOLDER-MOUNT_BK	1	SA	BLACK
	AD97-24604B	ASSY HOLDER-MOUNT_WH			WHITE
	AD97-24604C	ASSY HOLDER-MOUNT_BN			BROWN

9-3 ASSY REAR



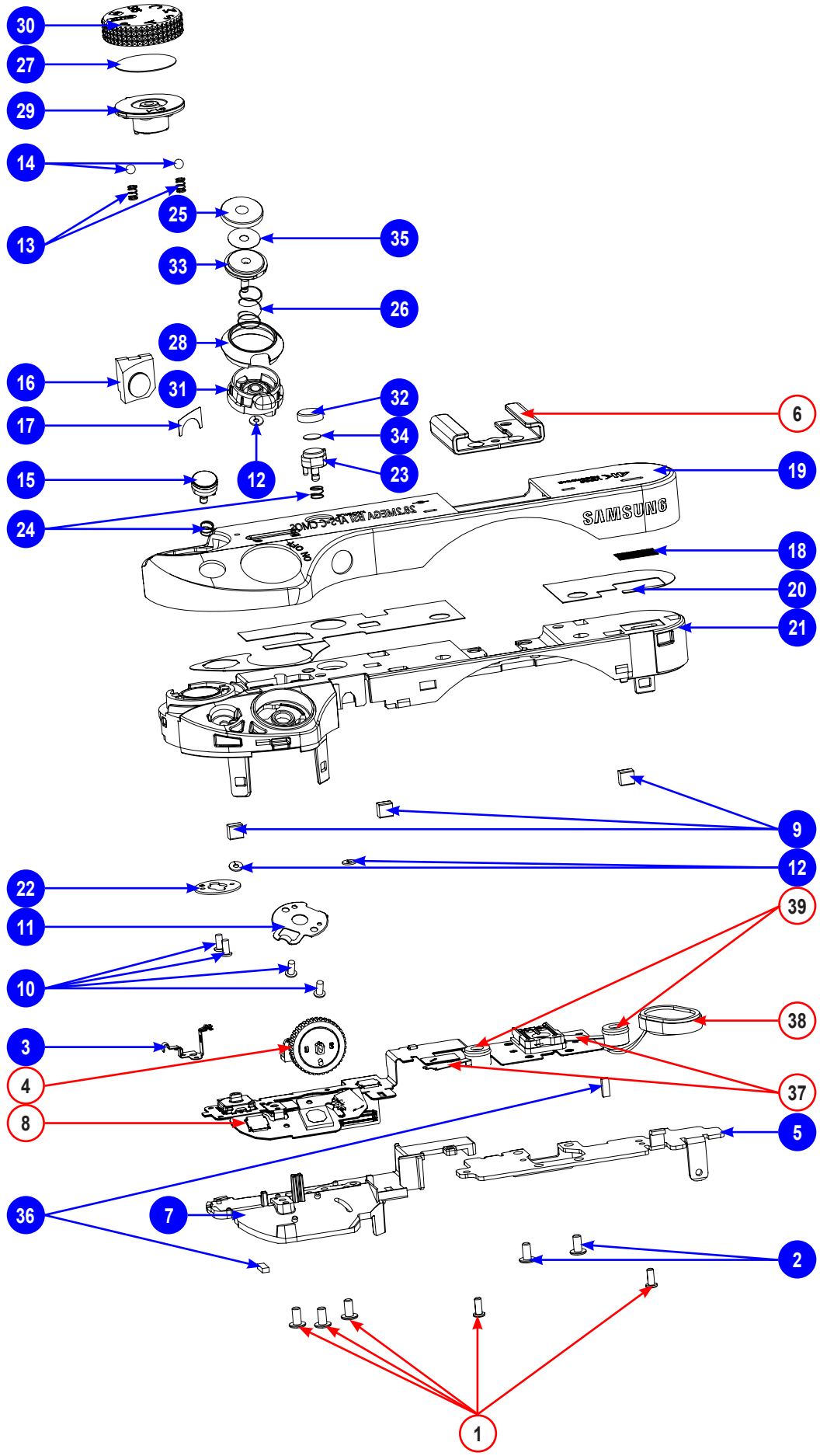
Loc. No.	Parts No.	Description	Qty	Available	Remark
1	6107-001828	SPRING-CS	1	SA	
2	6003-001630	SCREW-TAPTYPE	1	SA	
3	AD61-06558A	HOLDER-STRAP R	1	SA	
4	AD02-00357A	TAPE SHIELD-CHAMBER_BLK	1	SNA	
5	AD02-00379A	TAPE PORON-CHAMBER	1	SNA	
6	AD61-06560A	PLATE-CHAMBER BATTERY	1	SA	
7	AD64-04200A	DECO RING-BK	1	SA	BLACK, BROWN
	AD64-04200B	DECO RING-WH			WHITE
8	AD61-06559A	HOLDER-STRAP L	1	SA	
9	AD61-05245A	SPRING ETC-COVER BATTERY	1	SA	
10	6107-003085	SPRING-CS	1	SA	
11	AD66-01074A	LEVER-BATTERY LOCK	1	SA	
12	AD63-08079A	COVER-BATTERY AXIS	1	SA	
13	AD61-05863A	HINGE-COVER BATTERY	1	SA	
14	AD64-04199A	LOCKER-BATTERY COVER_BK	1	SNA	BLACK
	AD64-04199B	LOCKER-BATTERY COVER_WH			WHITE
	AD64-04199C	LOCKER-BATTERY COVER_BN			BROWN
15	AD63-08078A	COVER BATTERY-INNER_BK	1	SNA	BLACK
	AD63-08078B	COVER BATTERY-INNER_WH			WHITE
	AD63-08078C	COVER BATTERY-INNER_BN			BROWN
16	AD63-08077A	COVER BATTERY-BLK	1	SNA	BLACK
	AD63-08077B	COVER BATTERY-WH			WHITE
	AD63-08077C	COVER BATTERY-BN			BROWN
17	AD97-24570A	ASSY COVER-BATTERY_NX500_BK	1	SNA	BLACK
	AD97-24570B	ASSY COVER-BATTERY_NX500_WH			WHITE
	AD97-24570C	ASSY COVER-BATTERY_NX500_BN			BROWN
18	AD02-00373A	TAPE DOUBLE FACE BADGE	1	SNA	
19	AD02-00396A	TAPE PET-COVER BADGE	1	SNA	
20	AD63-08080A	SHEET-REAR_BLK	1	SNA	BLACK
	AD63-08080B	SHEET-REAR_WH			WHITE
	AD63-08080C	SHEET-REAR_BN			BROWN
21	AD61-06557A	CASE-REAR_BLK	1	SNA	BLACK
	AD61-06557B	CASE-REAR_WH			WHITE
	AD61-06557C	CASE-REAR_BN			BROWN
22	AD64-04201A	BADGE-NX500_BLK	1	SNA	BLACK
	AD64-04201B	BADGE-NX500_WH			WHITE
	AD64-04201C	BADGE-NX500_BN			BROWN
23	AD98-15394A	ASSY CASE-REAR_SUB_BLK	1	SA	BLACK
	AD98-15394B	ASSY CASE-REAR_SUB_WH			WHITE
	AD98-15394C	ASSY CASE-REAR_SUB_BN			BROWN

9-4 ASSY HOLDER MOUNT



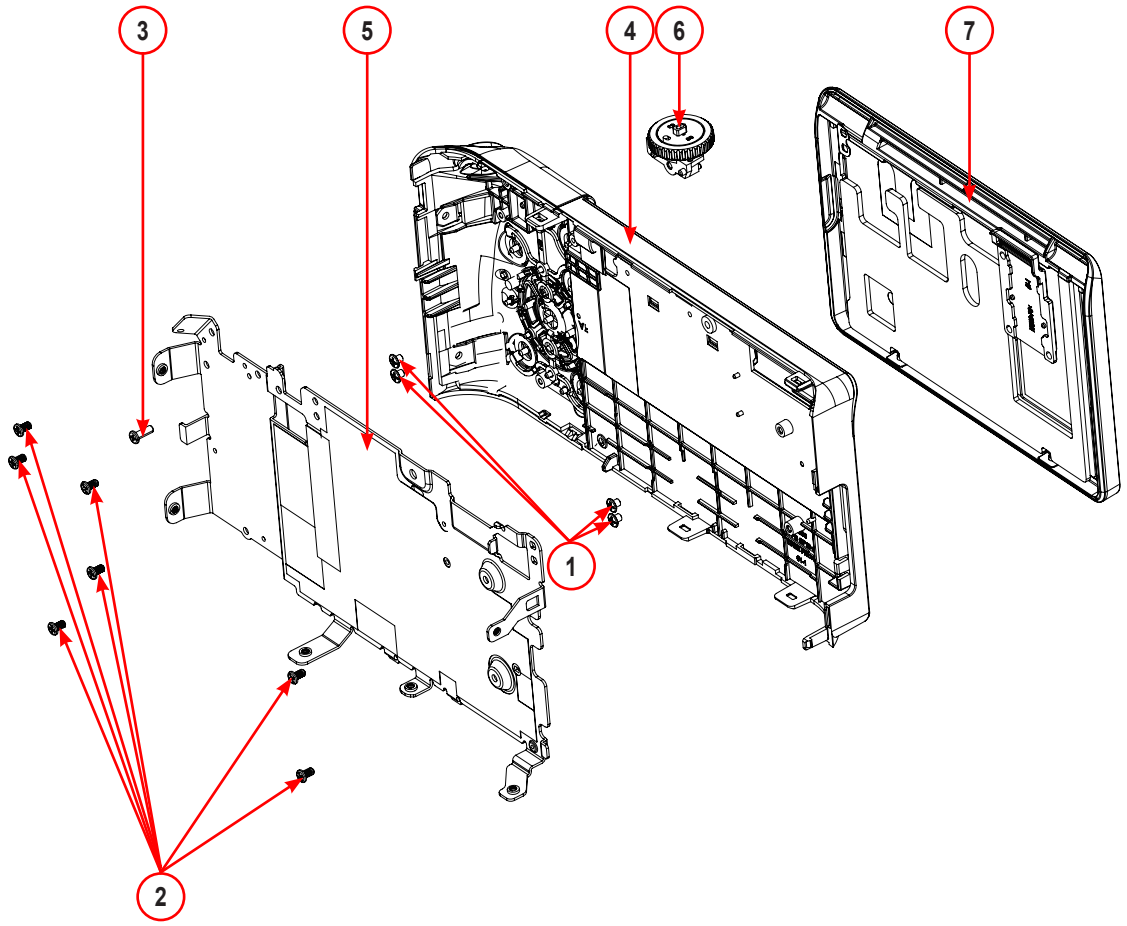
Loc. No.	Parts No.	Description	Qty	Available	Remark
1	6003-001630	SCREW-TAPTYPE	4	SA	
2	6003-001777	SCREW-TAPTYPE	4	SNA	
3	6107-001781	SPRING-CS	1	SA	
4	6107-003649	SPRING-CS	1	SNA	
5	AD41-02122A	FPC-CIS LENS_NX500	1	SNA	
6	AD42-00085A	FPCB ANTENNA CHIP-WIFI ANTENNA_NX500	1	SNA	
7	AD42-00086A	FPCB ANTENNA CHIP-NFC TAG	1	SNA	
8	AD61-05284A	PLATE-MOUNT LENS	1	SA	
9	AD61-05307A	MOUNT-INNER	1	SA	
10	AD61-05314A	PLATE-MOUNT SPRING	1	SA	
11	AD61-06286A	PLATE-SOCKET	1	SA	
12	AD61-06361A	PLATE-DETECT	1	SNA	
13	AD61-06394A	SPRING ETC-BUTTON LENS UNLOCK	1	SNA	
14	AD61-06554A	HOLDER-MOUNT	1	SNA	
15	AD61-06555A	PLATE-LENS UNLOCK	1	SNA	
16	AD63-06306A	SHEET-ABSORB B	2	SNA	
17	AD63-07476A	CUSHION-SHIELD FOAM _ FRONT	1	SNA	
18	AD63-07955A	SHEET-ABSORB	2	SNA	
19	AD63-08076A	COVER-JACK_BL	1	SA	BLACK
	AD63-08076B	COVER-JACK_WH			WHITE
	AD63-08076C	COVER-JACK_BN			BROWN
20	AD64-04198A	KEY-LENS UNLOCK_BLK	1	SNA	
21	AD66-00945A	SHAFT-LENS DETECT	1	SA	
22	AD66-01128A	SHAFT-LENS UNLOCK	1	SNA	
23	AD67-02943A	CONTACT-INTERFACE	8	SNA	
24	AD97-24388A	ASSY-PLATE IF	1	SNA	

9-5 ASSY CASE TOP



Loc. No.	Parts No.	Description	Qty	Available	Remark
1	6003-001630	Screw T1435	5	SA	
2	6001-001914	SCREW 1735 MACHINE	2	SNA	
3	AD61-06564A	PLATE-GOUND TOP	1	SNA	
4	AD90-06547A	ASSY-COMMAND DIAL_BLK	1	SA	
5	AD61-06544A	PLATE-HOT SHOE_BOTTOM	1	SNA	
6	AD61-05411B	PLATE-HOT SHOE_SL	1	SA	
7	AD61-06540A	HOLDER-INNER TOP	1	SNA	
8	AD59-00265A	ASSY FPCB-NX500_TOP	1	SA	
9	AD02-00389A	CONDUCTIVE GASKET-TOP-NX500	2	SNA	
10	6003-001508	SCREW 1430 TAPTYPE	4	SNA	
11	AD61-05892A	PLATE POWER LEVER	1	SNA	
12	6031-001628	WASHER PLAIN	3	SNA	
13	AD61-05497A	SPRING ETC MODE DIAL	2	SNA	
14	AD64-01738A	KNOB MODE DIAL CLICK BALL	2	SNA	
15	AD64-04190A	KEY AEL	1	SNA	
16	AD64-04193A	WINDOW DISPLAY-AF	1	SNA	
17	AD02-00351A	TAPE DOUBLE FACE AF WINDOW	1	SNA	
18	AD63-06857A	MESH SPEAKER	1	SNA	
19	AD61-06543A	CASE-TOP	1	SNA	
20	AD02-00352A	TAPE DOUBLE FACE COVER TOP	1	SNA	
21	AD61-06539A	HOLDER-TOP	1	SNA	
22	AD61-05383A	PLATE MODE DIAL	1	SNA	
23	AD64-04194A	KEY WIFI	1	SNA	
24	AD61-06582A	SPRING ETC KEY	2	SNA	
25	AD67-02537D	CAP-BUTTON SHOT_NX500	1	SNA	
26	6107-001788	SPRING-CS	1	SNA	
27	AD63-07154A	T/SHEET-KNOB MODE DIAL	1	SNA	
28	AD67-03025A	CAP LEVER POWER	1	SNA	
29	AD64-04192A	KNOB MODE DIAL	1	SNA	
30	AD67-03024A	CAP MODE DIAL	1	SNA	
31		LEVER-POWER_BLK	1	SNA	
32	AD67-02695C	CAP-BUTTON WIFI_NX500	1	SNA	
33	AD64-03842A	BUTTON SHOT	1	SNA	
34	AD63-07083A	T/SHEET BUTTON WIFI	1	SNA	
35	AD63-06451A	T/SHEET-BUTTON SHOT	1	SNA	
36	AD63-07476A	CUSHION-SHIELD FOAM _ FRONT	2	SNA	
37	3003-001198	MIC-CONDENSER	2	SA	
38	3001-002641	SPEAKER	1	SA	
39	AD67-02581A	RUBBER-MIC;WB250F,RUBBER	2	SA	

9-6 ASSY FRONT



Loc. No.	Parts No.	Description	Qty	Available	Remark
1	6001-003214	SCREW 1416 MACHINE	4	SA	
2	6003-001674	SCREW 1425 TAPTYPE	7	SA	
3	6003-001659	SCREW 1440 TAPTYPE	1	SA	
4	AD97-24574A	ASSY FRONT-SUB_NX500_BK	1	SA	
	AD97-24574B	ASSY FRONT-SUB_NX500_WH			
	AD97-24574C	ASSY FRONT-SUB_NX500_BN			
5	AD97-24606A	ASSY FRAME FRONT	1	SA	
6	AD90-06547A	ASSY-COMMAND DIAL_BLK	1	SA	
7	AD97-24605A	ASSY HINGE-DISPLAY_BK	1	SA	
	AD97-24605B	ASSY HINGE-DISPLAY_WH			
	AD97-24605C	ASSY HINGE-DISPLAY_BN			

Area	Web Site
Europe, MENA, CIS, Africa	https://gspn1.samsungcsportal.com
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N.America, S.America	https://gspn3.samsungcsportal.com

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