

# ERS-1000

## SERVICE MANUAL

US Model

Ver. 1.0 2023.12



**Note:**

Be sure to keep your PC used for service and checking of this unit always updated with the latest version of your anti-virus software.  
In case a virus affected unit was found during service, contact your Service Headquarters.

**aibo**

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ENTERTAINMENT ROBOT

9-934-907-01

2023L33-1

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Sony Group Corporation

**SONY**<sup>®</sup>

## SPECIFICATIONS

**aibo****Movable parts**

Head: 3 axes  
 Mouth: 1 axis  
 Neck: 1 axis  
 Loins: 1 axis  
 Forepaws/Back paws (4): 3 axes  
 Ears (2): 1 axis  
 Tail: 2 axes  
 (22 axes in total)

**Buttons and switch**

Power button  
 Volume button (+, -)  
 Network switch

**LEDs**

Status LED, Network LED

**Displays**

OLED (eyes) (2)

**Cameras**

Front camera (1), SLAM camera (1)

**Terminals**

Charging pins, SIM card slot

**Sound**

Speaker, Microphones (4)

**Sensors**

6 axis detection systems (head, torso) (2)  
 (3 axis gyro/3 axis acceleration)  
 Motion sensor  
 Ranging sensors (2)  
 ToF sensor  
 Light sensor  
 Head sensor, Jaw sensor (Capacitive type touch sensor)  
 Back sensor (Pressure sensitive/capacitive type touch sensor)  
 Paw pads (4)

**Power consumption**

Approx. 14 W (in standard mode operation)

**Battery life**

Approx. 120 minutes (in standard mode operation)

**Dimensions (w/h/d)**

Approx. 180 x 293 x 305 mm (7.1 x 11.5 x 12.0 in.)  
 (not including the protruded parts)

**Mass**

Approx. 2.2 kg (77.6 oz)

**Operating temperature**

5 °C - 35 °C (41 °F - 95 °F)

**Communication system**

Mobile network communication feature (Data transmission): LTE  
 Wi-Fi: IEEE 802.11b/g/n

**Charging station (Charging stand, Charging mat)****Power supply**

19.5 V DC

**Output voltage**

19.5 V DC: 2.3 A (for charging aibo)

**Charging time**

Approx. 3 hours\*

**Dimensions (w/h/d)**

Charging stand: Approx. 171 x 29 x 74 mm (6.7 x 1.1 x 2.9 in.)  
 Charging mat: Approx. 392 x 24 x 284 mm (15.4 x 0.9 x 11.2 in.)

**Mass**

Charging stand: Approx. 101 g (3.6 oz)  
 Charging mat: Approx. 466 g (16.4 oz)

**Operating temperature**

5 °C - 35 °C (41 °F - 95 °F)

\* The charging time may vary depending on the condition, such as the activity of aibo or the ambient temperature.

**AC adapter****Input**

100 - 240 V AC (100 V AC for the power cord)  
 50 - 60 Hz, 1.2 A

**Output**

19.5 V DC, 2.3 A

**Operating temperature**

5 °C - 35 °C (41 °F - 95 °F)  
 (temperature gradient of 10 °C (50 °F)/hour or less)

**Dimensions (w/h/d)**

Approx. 92 x 41 x 27 mm (3.6 x 1.6 x 1.1 in.)

**Mass**

Approx. 165 g (5.8 oz)

**Connection cord length**

Power cord: Approx. 1 m (39.4 in.)

**Supplied accessories**

SIM card (inserted in aibo)  
 Charging station\* (ERA-1001)  
 \* Referred to when the charging stand is attached to the charging mat.  
 AC adapter  
 Power cord  
 Pink ball  
 Startup Guide  
 Safety Guide  
 Product key

Design and specifications are subject to change without notice.

## CHEMICALS

Some chemicals used for servicing are highly volatile. Their evaporation caused by improper management affects your health and environment, and wastes resources. Manage the chemicals carefully as follows.

- Store chemicals sealed in a specific place to prevent from exposure to high temperature or direct sunlight.
- Avoid dividing chemicals into excessive numbers of small containers to reduce natural evaporation.
- Keep containers sealed to avoid natural evaporation when chemicals are not in use.
- Avoid using chemicals as much as possible. When using chemicals, divide only required amount to a small plate from the container and use up it.

## EXTERIOR PARTS

Be careful to the following points for plastic parts used in this unit.

- Use a piece of cleaning paper or cleaning cloth for cleaning plastic parts. Avoid using chemicals. Even if you have to use chemicals to clean heavy dirt, don't use paint thinner, ketone, nor alcohol.
- Insert the specific screws vertically to the part when installing a plastic part. Be careful not to tighten screws too much.

### Caution

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type. Dispose of used batteries according to the instructions.

### 注意

如果电池更换不当会有爆炸危险。只能用同样类型或等效类型的电池来更换。务必按照说明处置用完的电池。

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\triangle$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
  - Keep the temperature of the soldering iron around 350°C during repairing.
  - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
  - Be careful not to apply force on the conductor when soldering or unsoldering.

## UNLEADED SOLDER

This unit uses unleaded solder.

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.

**(Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size.)



### LEAD FREE MARK

Be careful to the following points to solder or unsolder.

- Set the soldering iron tip temperature to 350°C approximately. If cannot control temperature, solder/unsolder at high temperature for a short time.
 

**Caution:** The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful! Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Be sure to control soldering iron tips used for unleaded solder and those for leaded solder so they are managed separately. Mixing unleaded solder and leaded solder will cause detachment phenomenon.

# 1. DISASSEMBLY & ASSEMBLY

## OPERATION NOTES

Make sure that the conductive side of a flexible board does not have any stain or foreign materials.

Do not touch the conductive side of flexible boards with bare hands.

Plug in a flexible board straight, fully into the connector until it reaches the end inside. (Fig. 1, Fig. 2, Fig. 3)

**OK**  
(The flexible board was plugged in straight and completely)

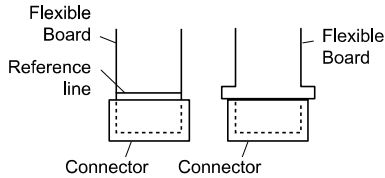


Fig. 1

**NG**  
(The flexible board was plugged in crooked.)

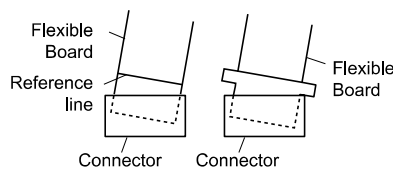


Fig. 2

**NG**  
(The flexible board was not plugged in completely.)

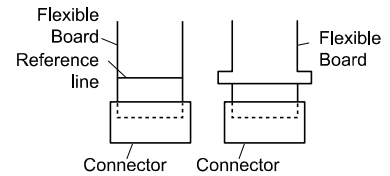
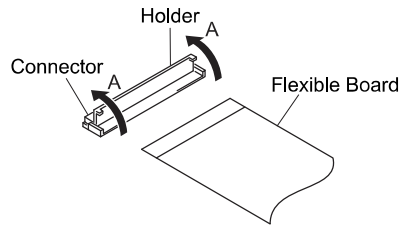
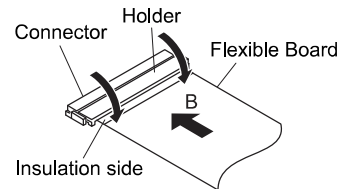


Fig. 3

When opening the connector's holder in direction A, do not open it with excessive force.

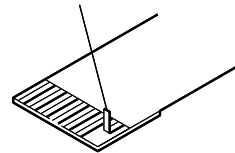


When closing the connector's holder, press it evenly while pushing a flexible board in direction B.



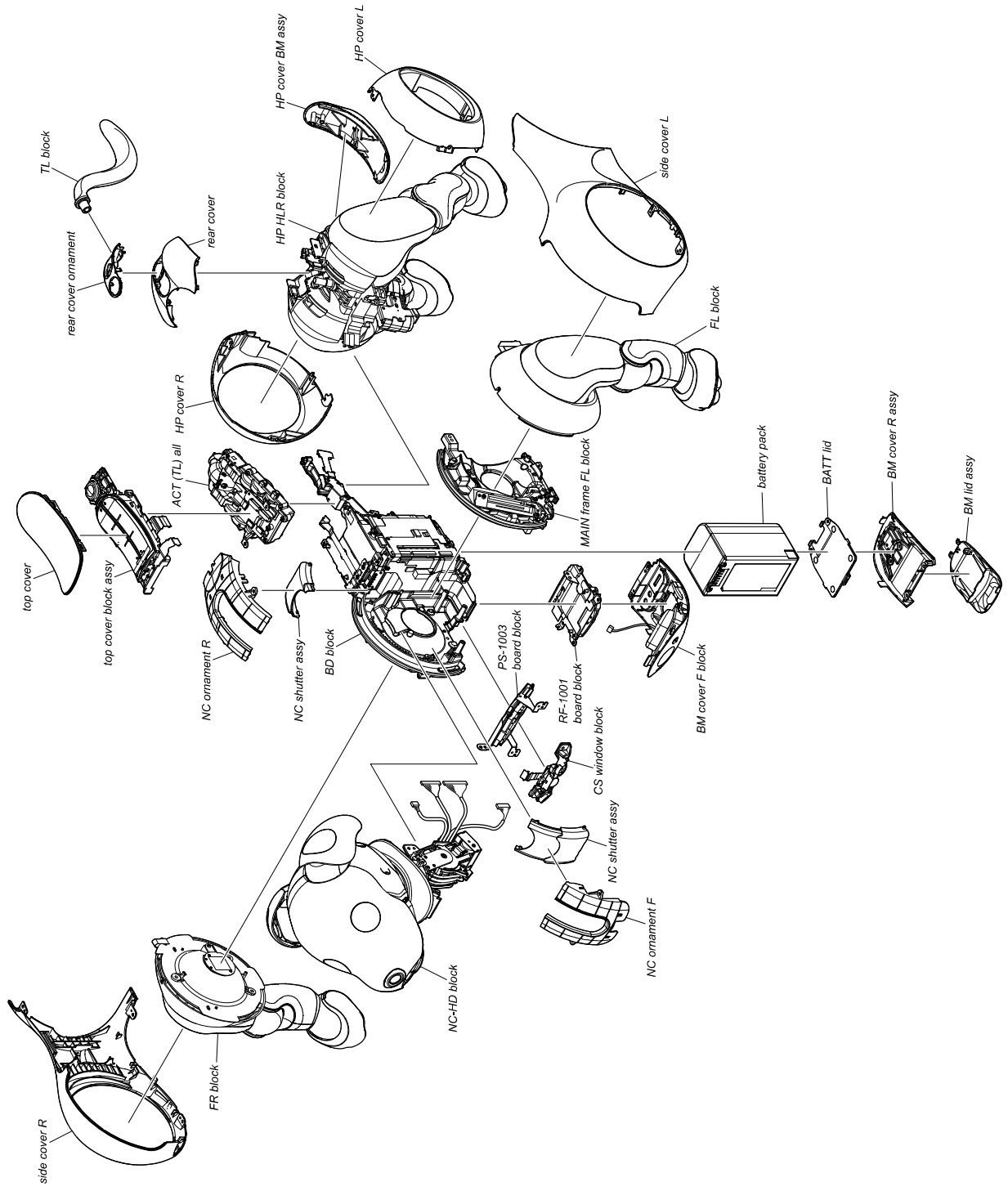
- Make sure that the flat cable and flexible board are not cracked or bent at the contact end.
- Do not apply excessive force to the gilded flexible board.

Cut and remove the part of gilt which comes off at the point.  
(Be careful or some pieces of gilt may be left inside)

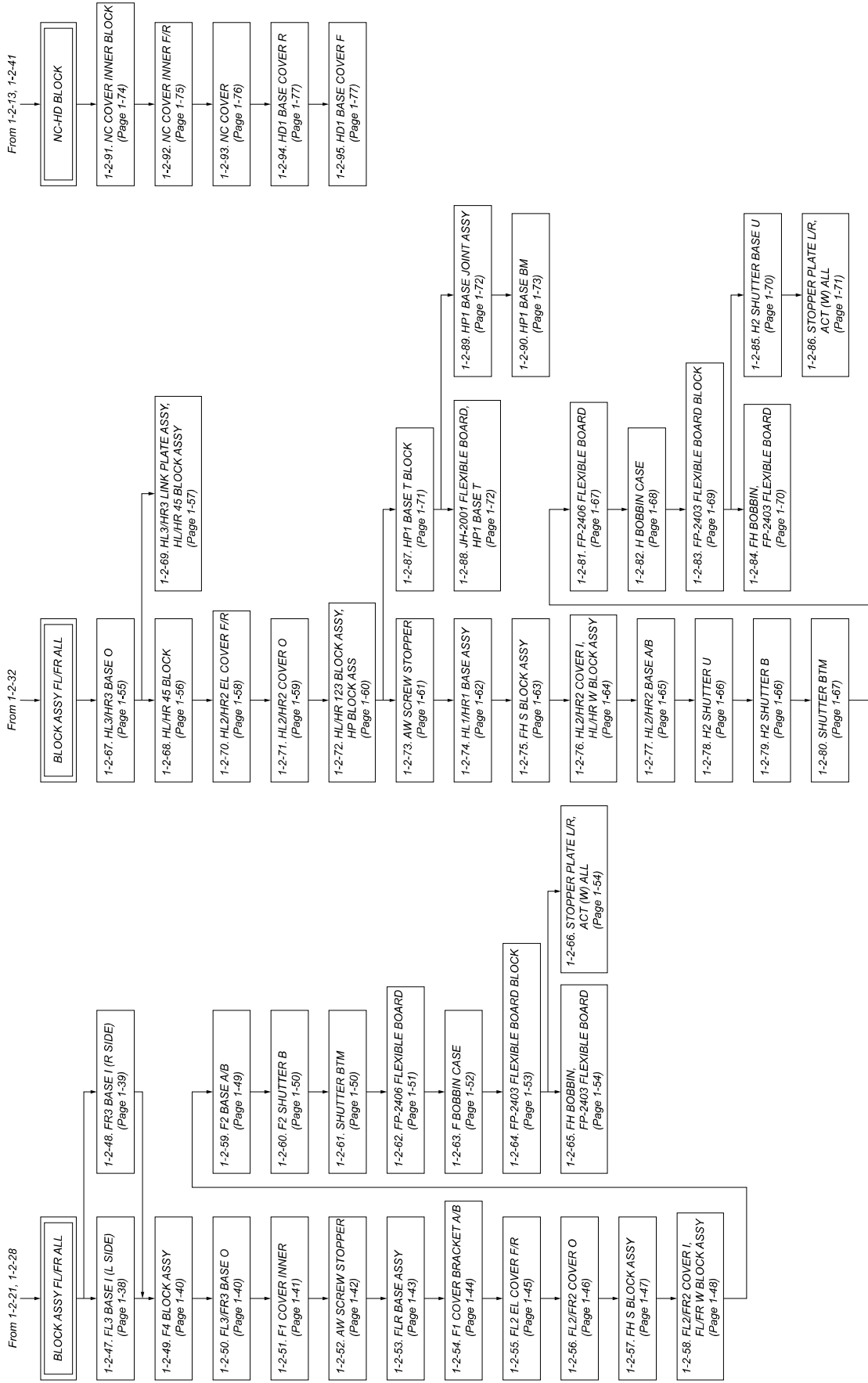


- The proper way to disconnect a connector is to grab the connector instead of the wires. If you pull on the wires, they might be broken.
- The proper way to connect a connector is to grab the connector instead of the wires. If you push on the wires, they might be broken.

1-1. CONSTITUTION DIAGRAM

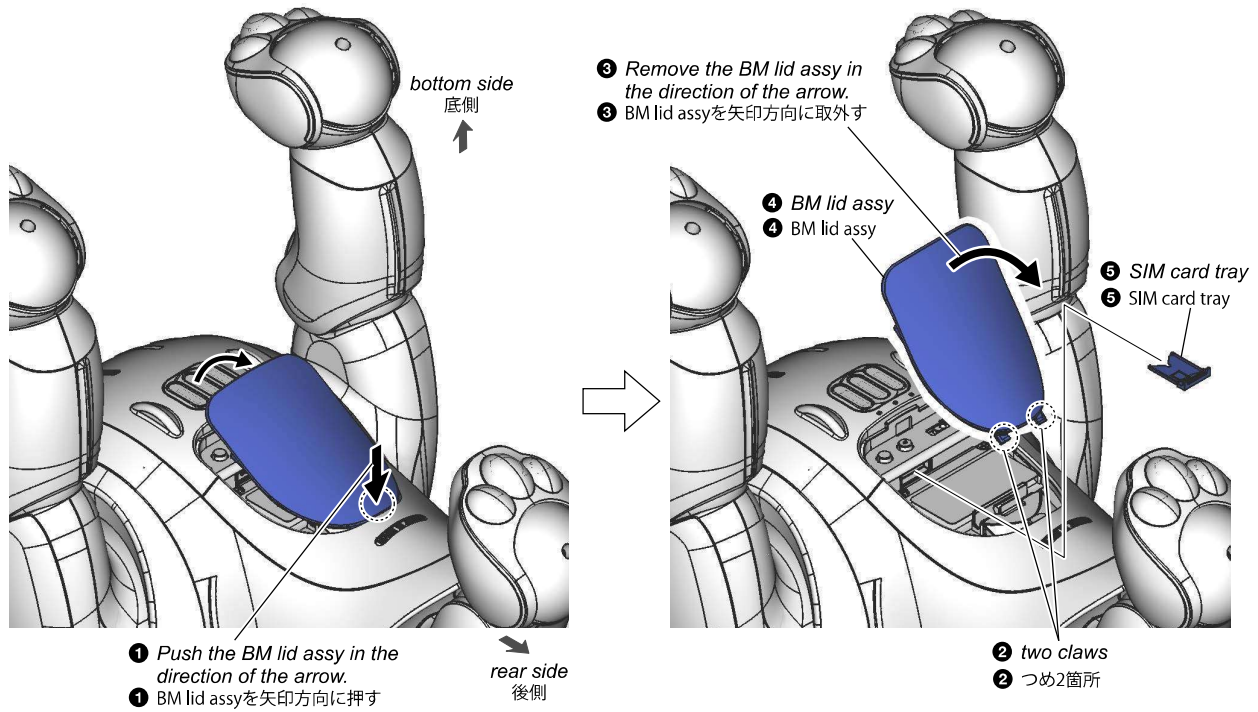






- Disassemble in the order indicated by the numbers assigned to the parts in the figures such as ❶.

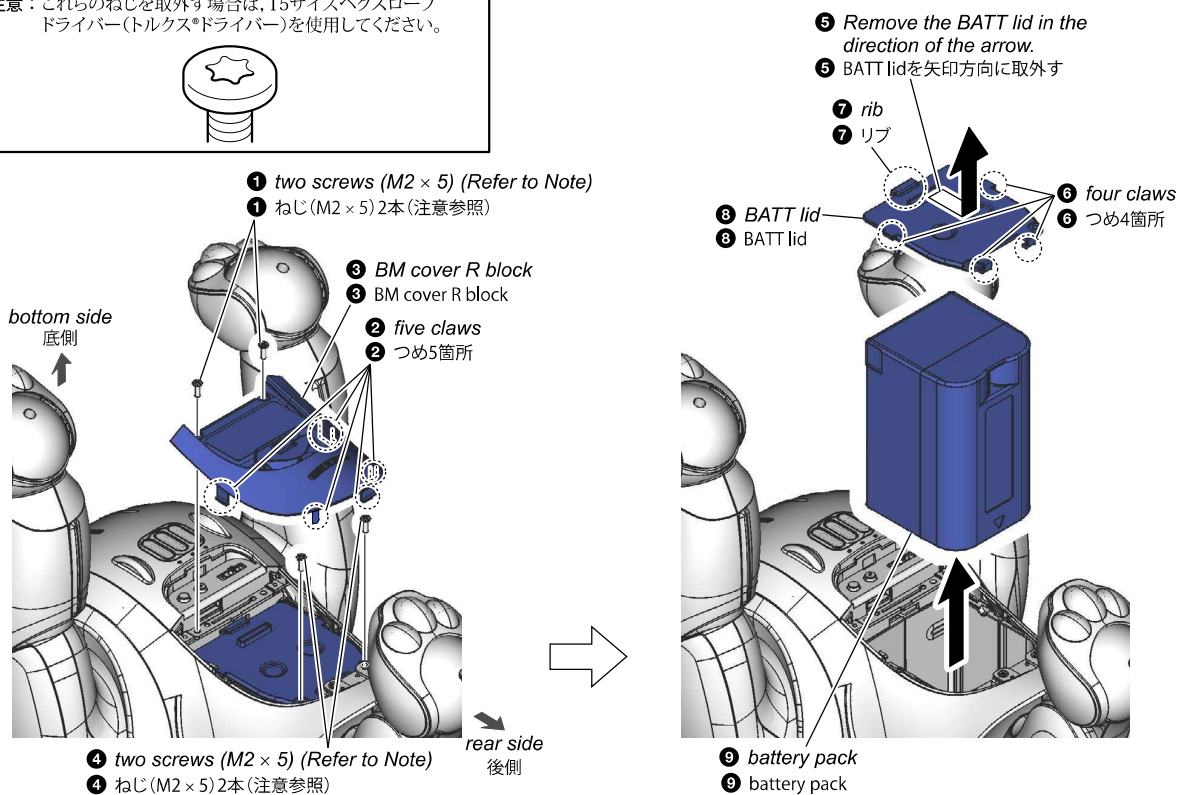
### 1-2-2. BM LID ASSY



### 1-2-3. BATTERY PACK

**Note:** When removing these screws, use the T5 screwdriver for screws with hexalobular (Torx®).

注意：これらのねじを取外す場合は、T5サイズヘクスローブドライバー(トルクス®ドライバー)を使用してください。

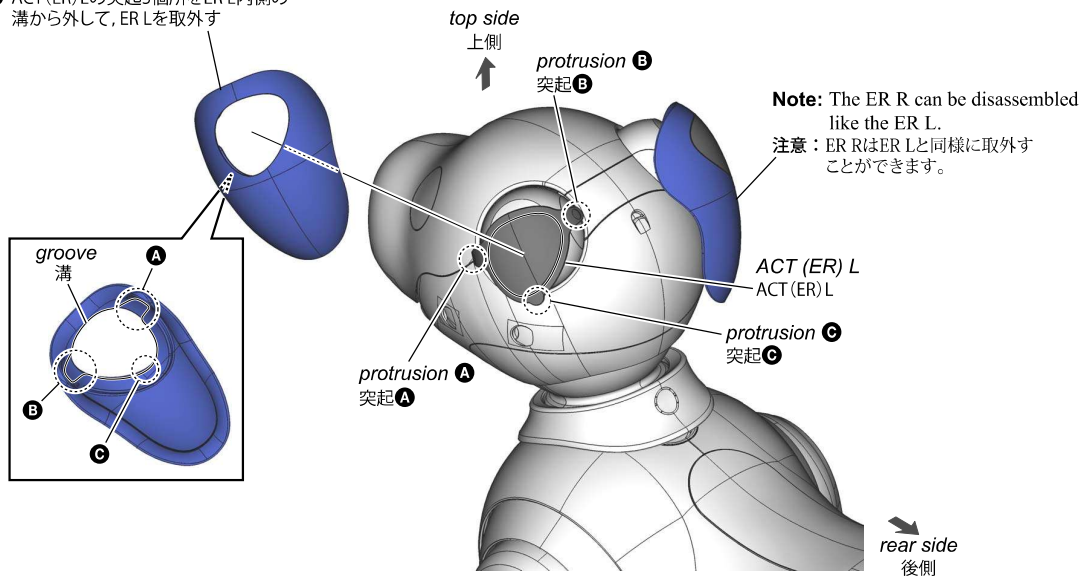




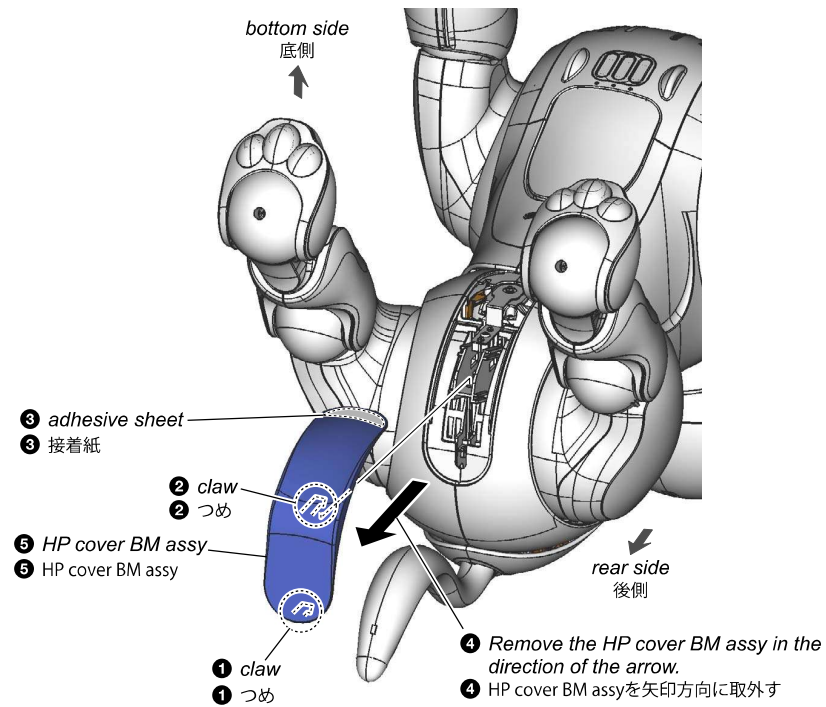
## 1-2-4. EARS L/R

① Remove the three protrusions of ACT (ER) L from the groove on the inner side of ER L and remove the ER L.

① ACT (ER) Lの突起3箇所をER L内側の溝から外して、ER Lを取外す

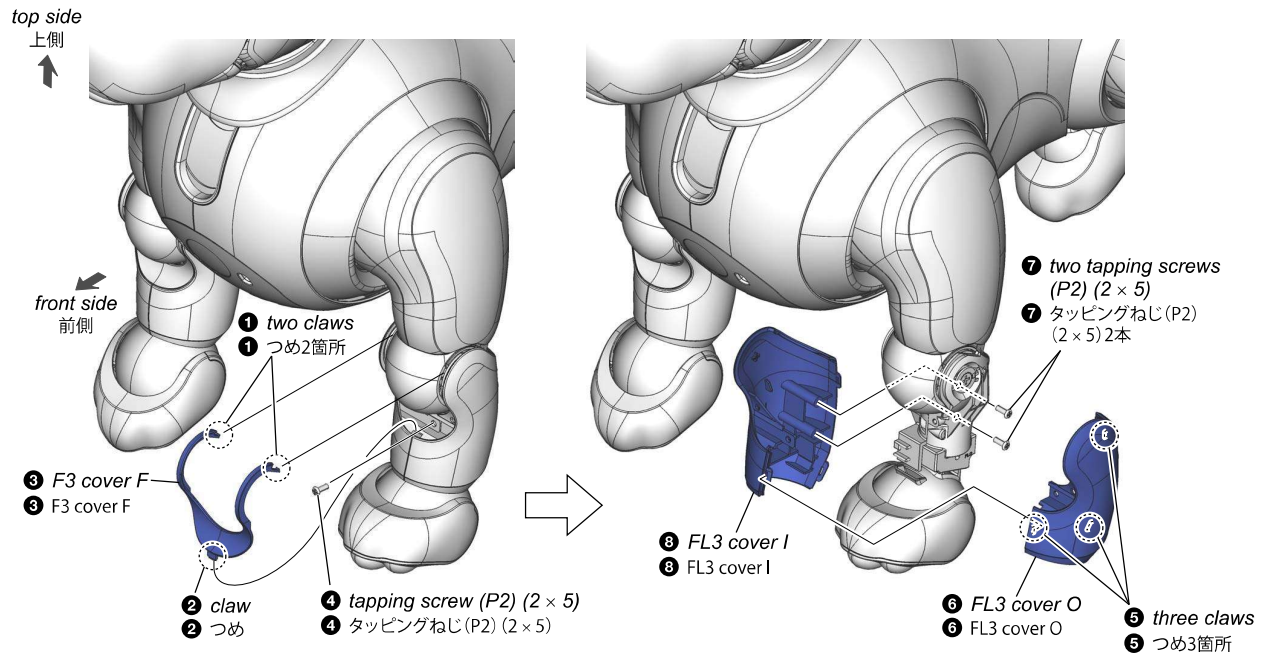


## 1-2-5. HP COVER BM ASSY



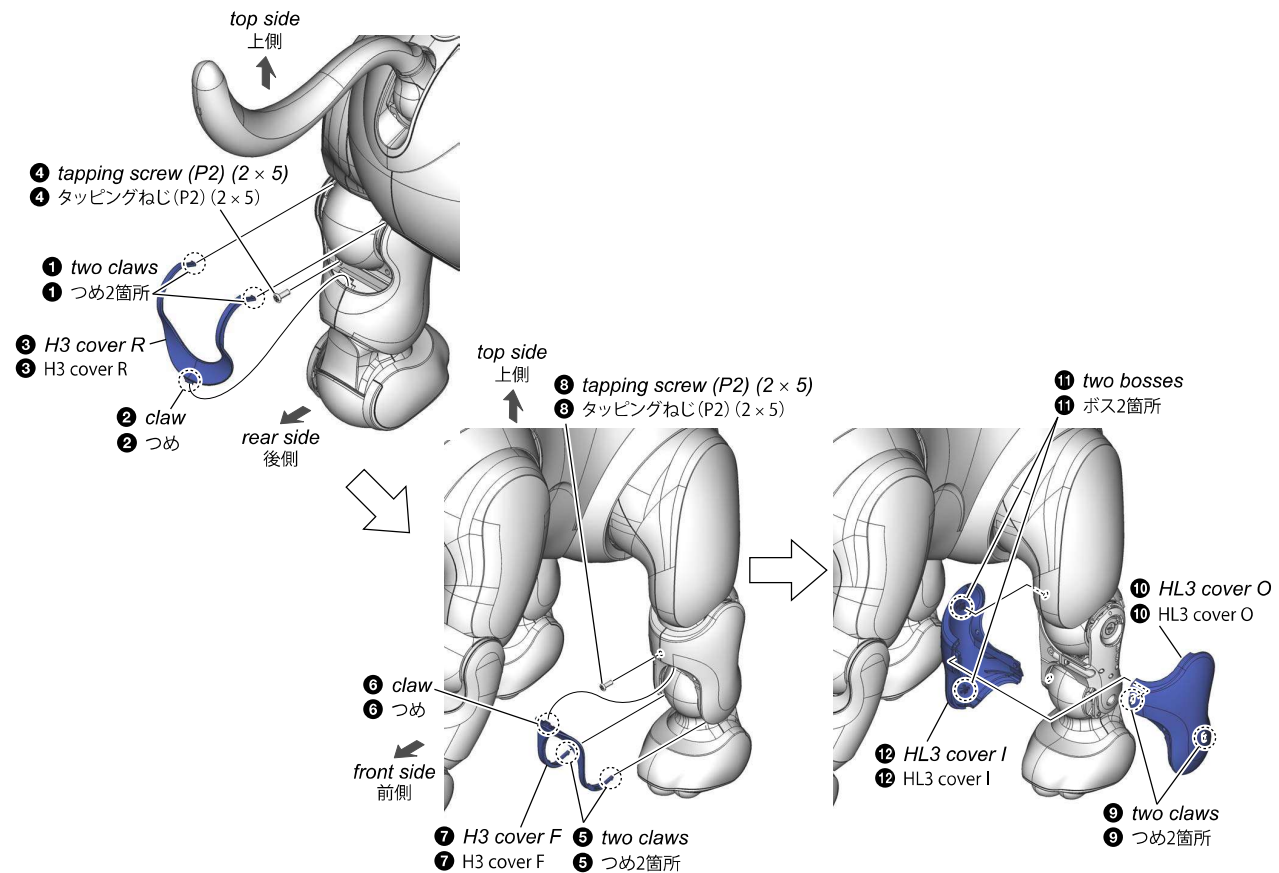
### 1-2-6. FL3/FR3 COVER

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.

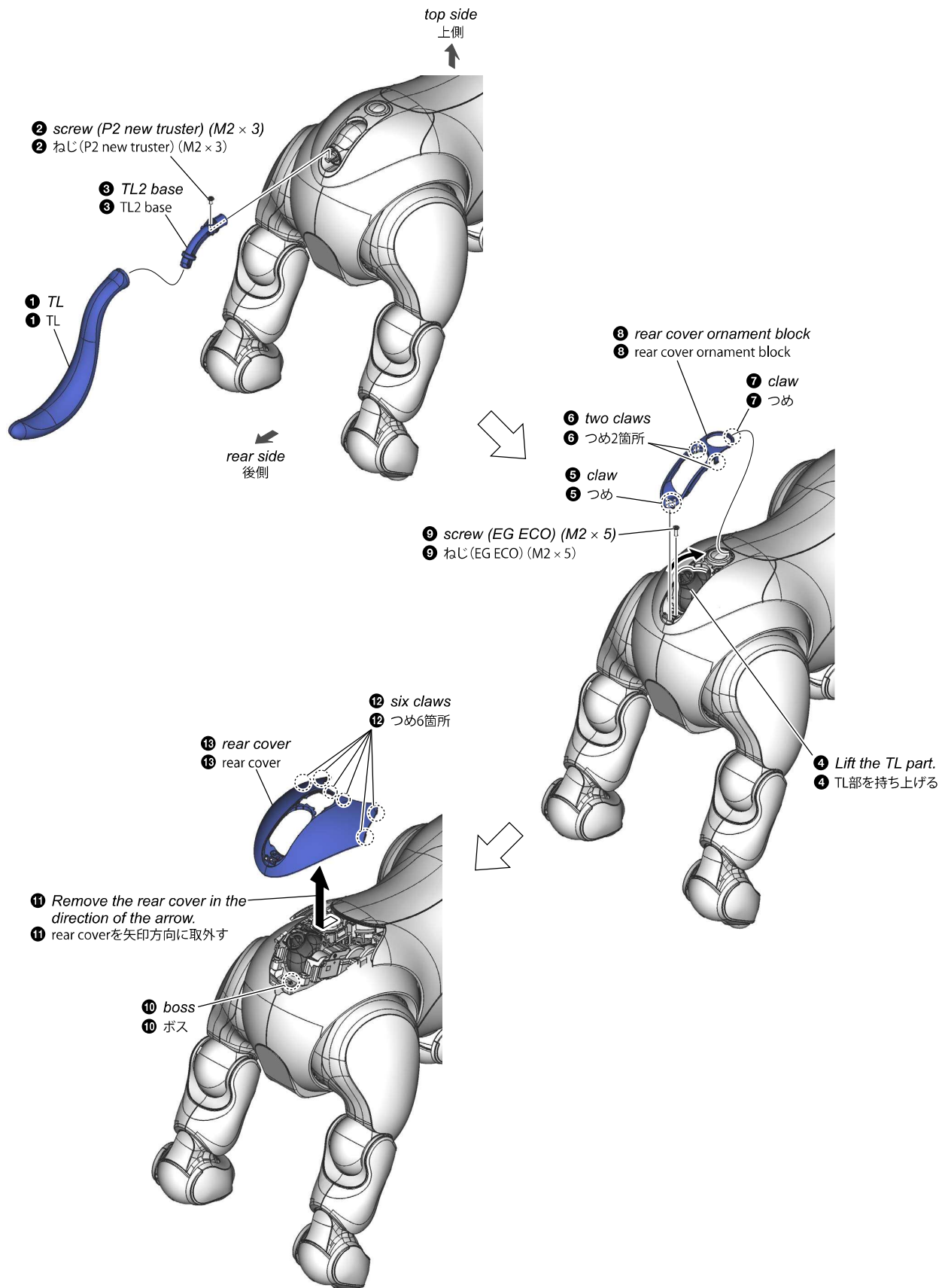


### 1-2-7. HL3/HR3 COVER

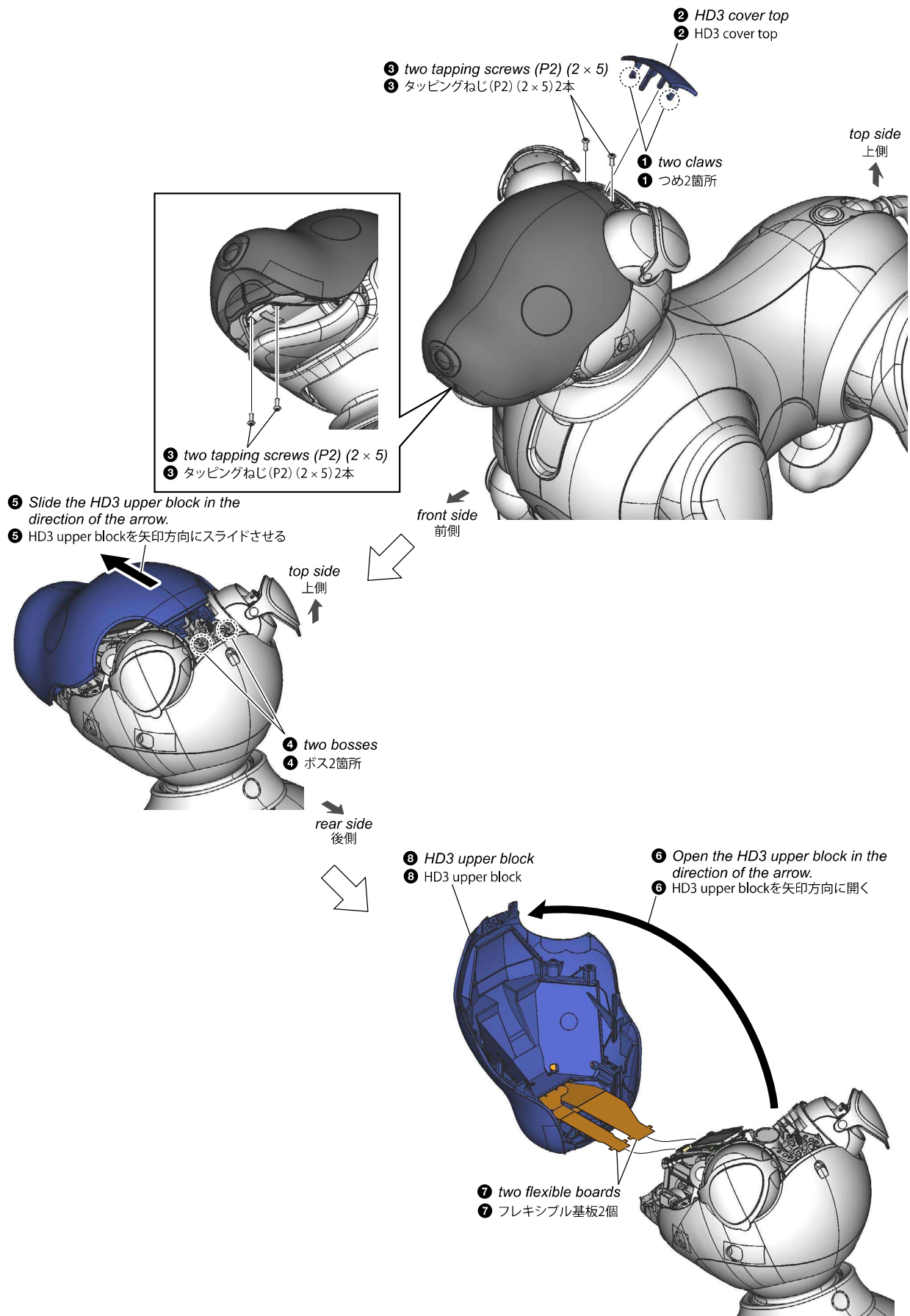
Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



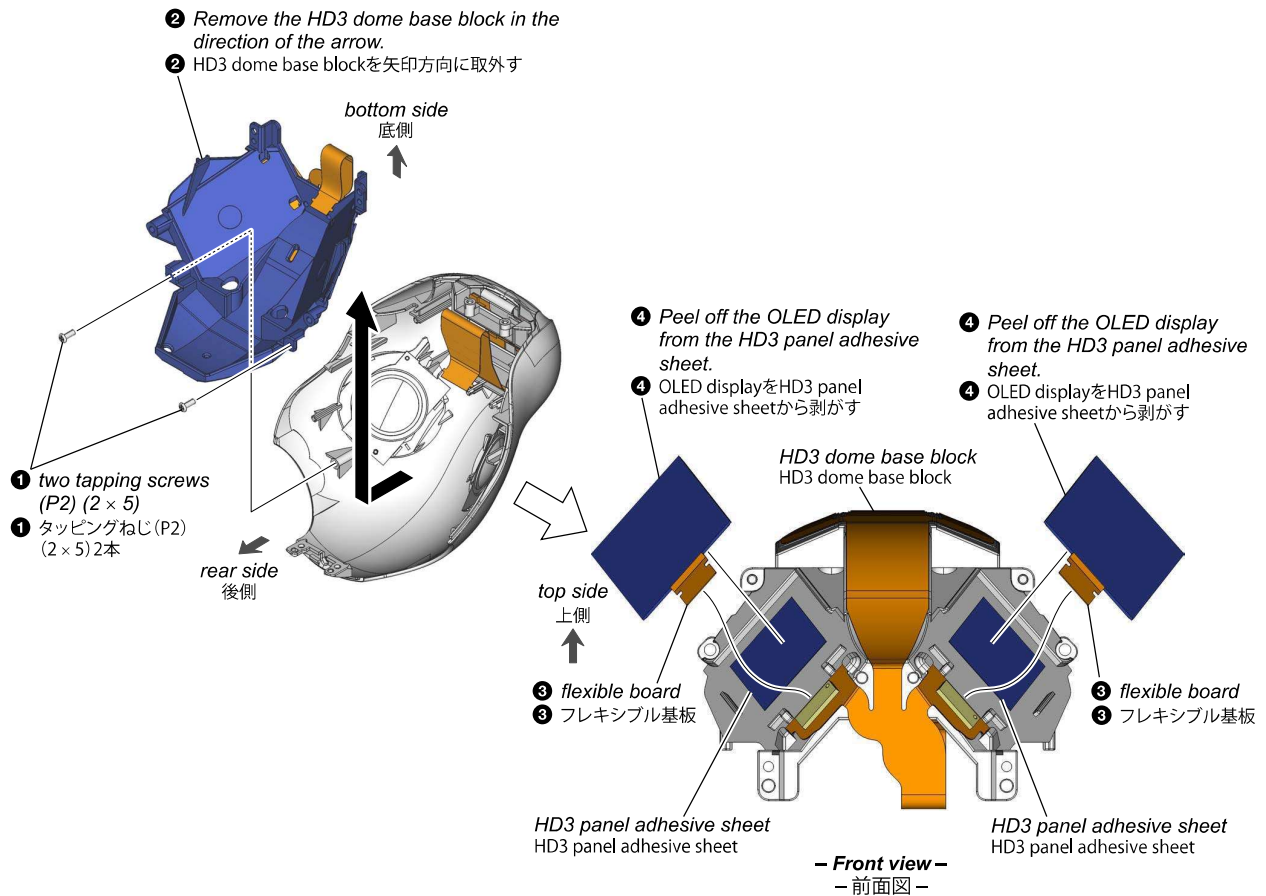
## 1-2-8. REAR COVER



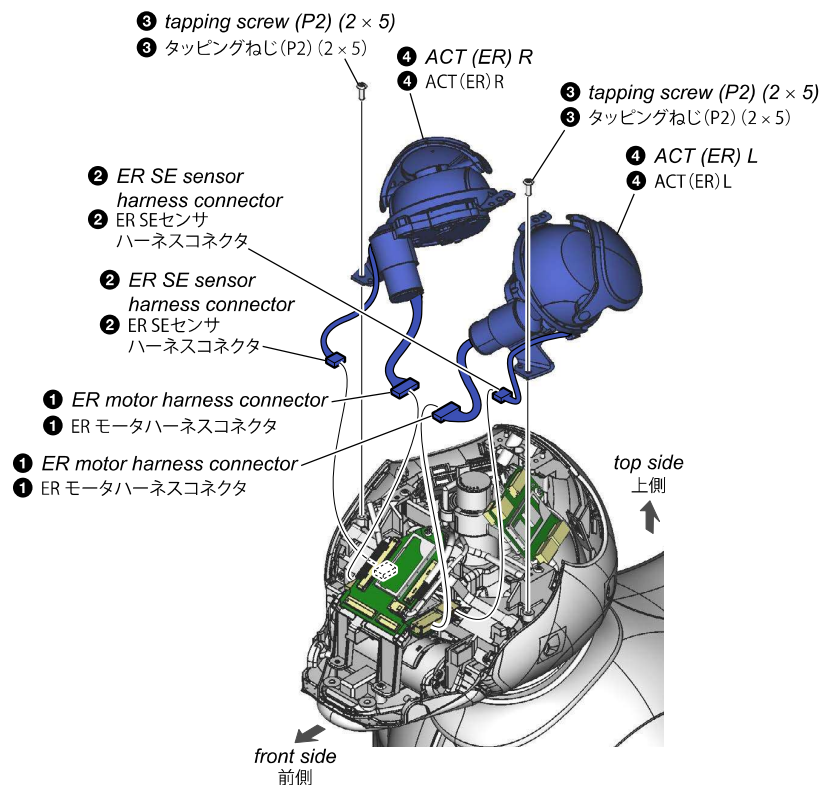
## 1-2-9. HD3 UPPER BLOCK



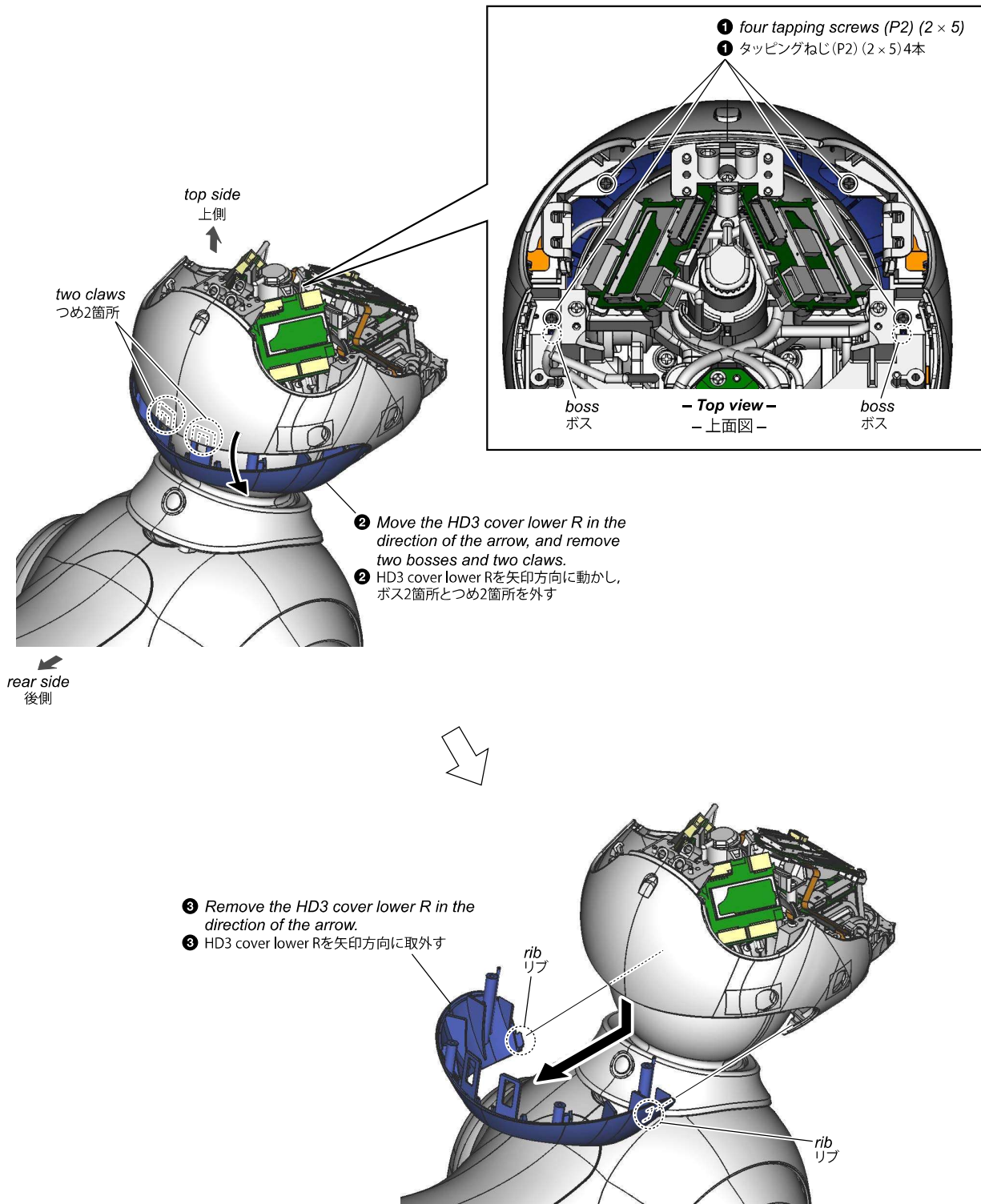
## 1-2-10. OLED DISPLAY



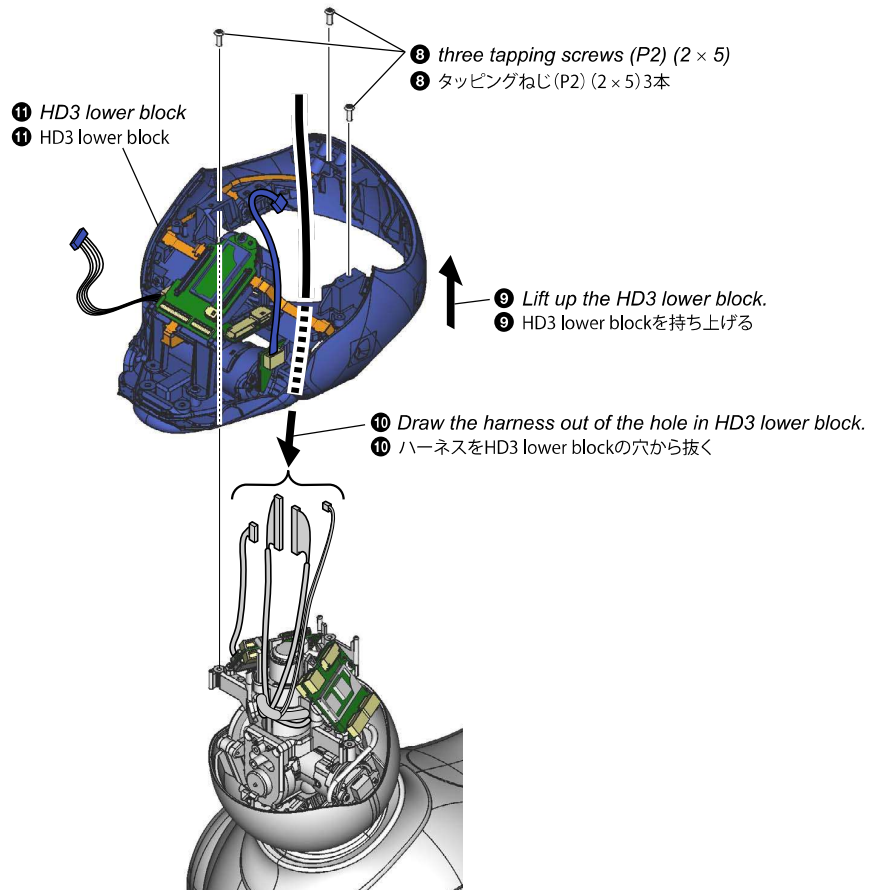
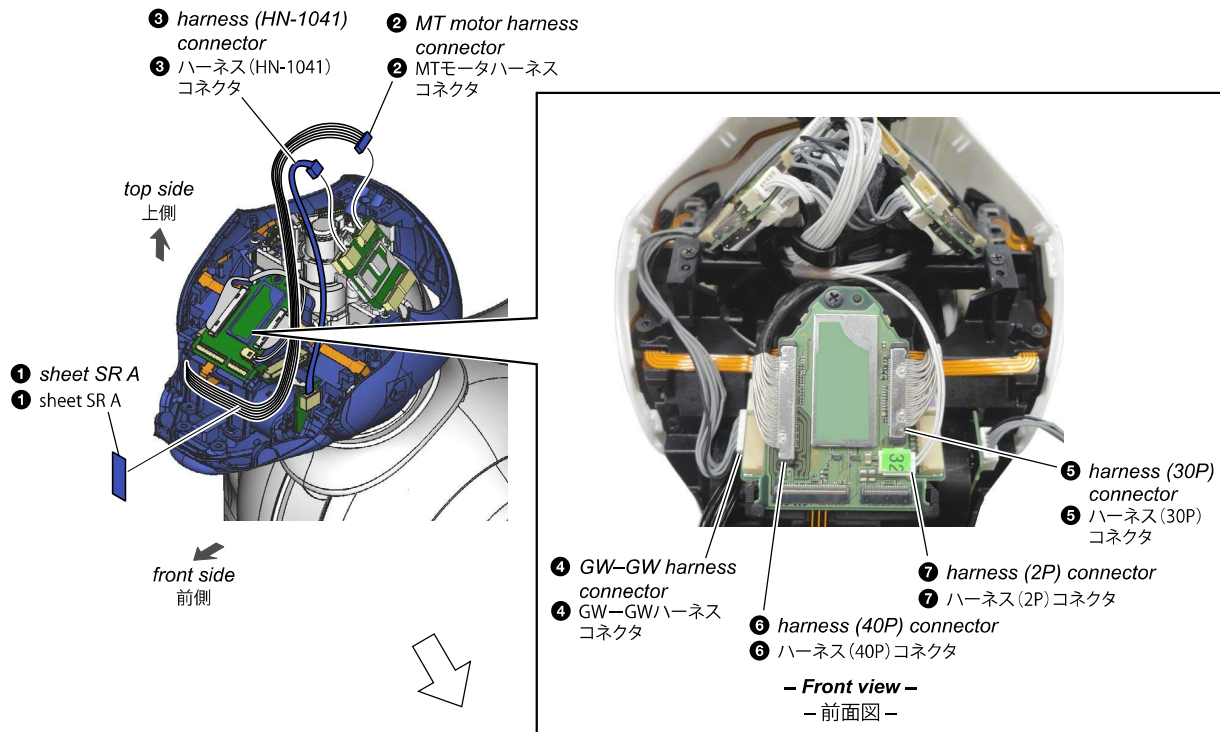
## 1-2-11. ACT (ER) L/R



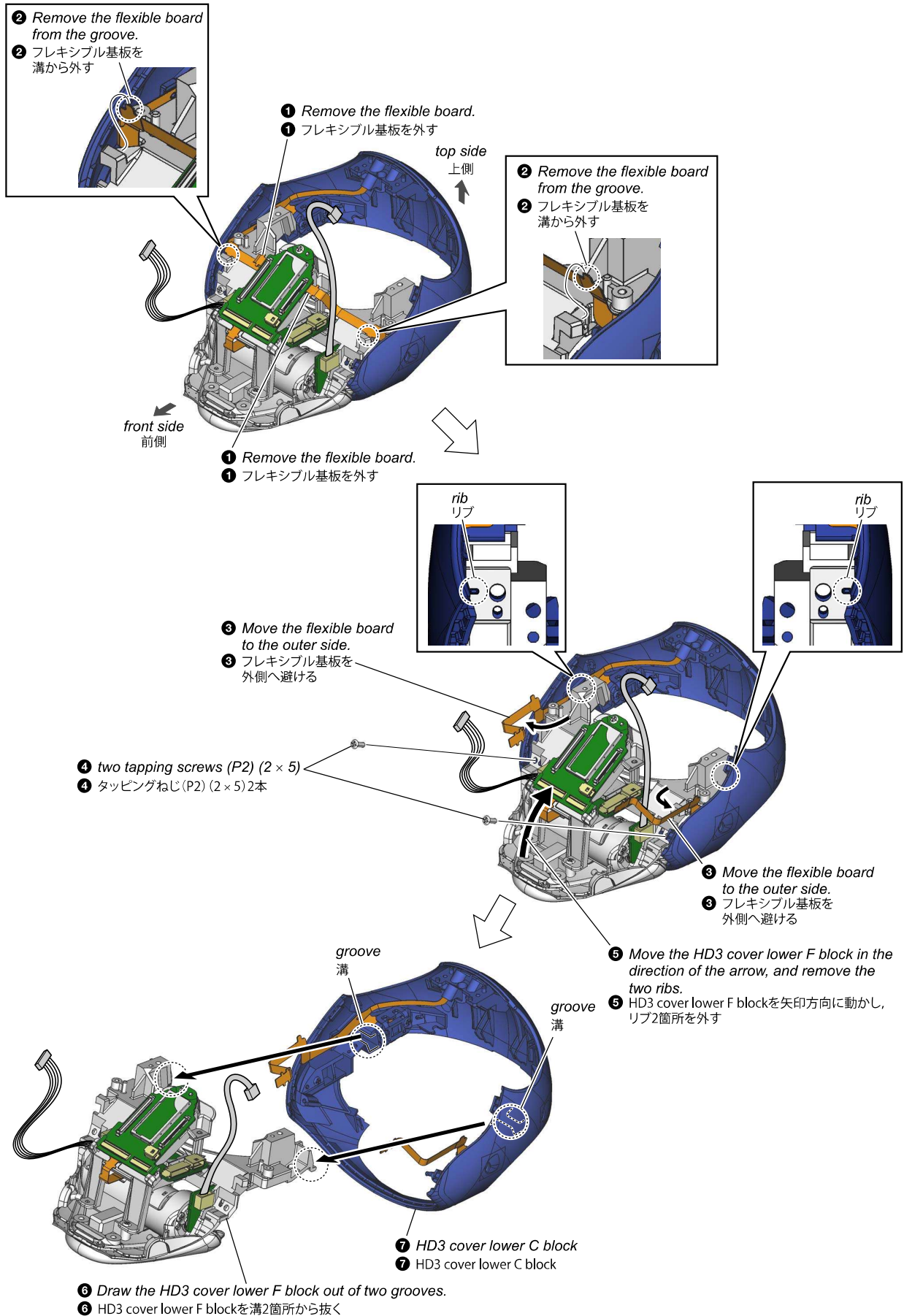
## 1-2-12. HD3 COVER LOWER R



## 1-2-13. HD3 LOWER BLOCK

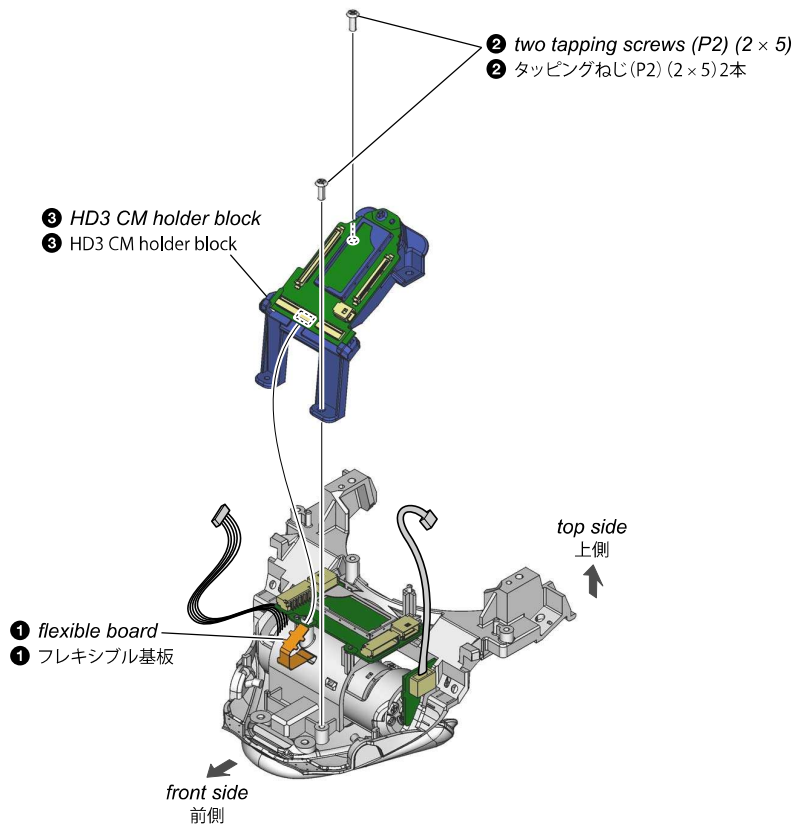


## 1-2-14. HD3 COVER LOWER C BLOCK

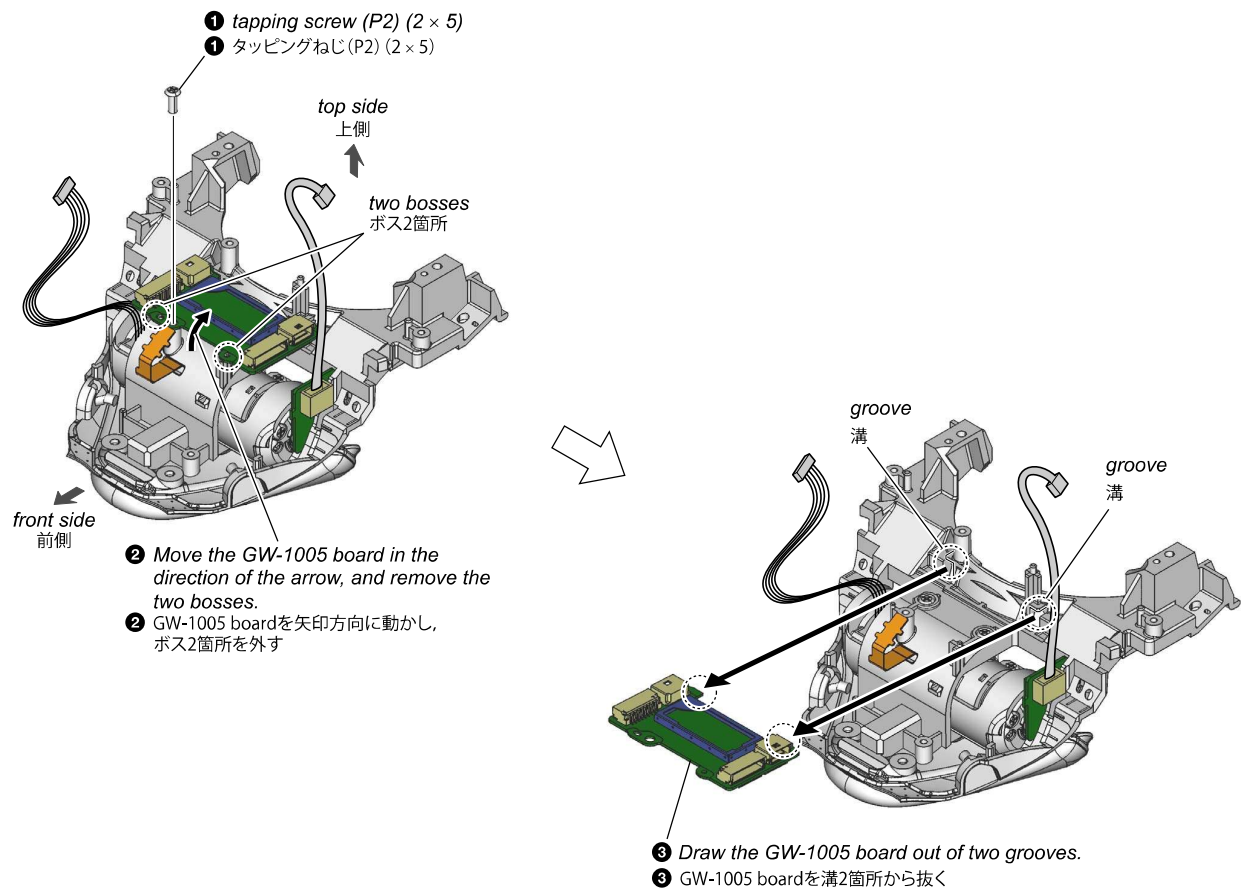




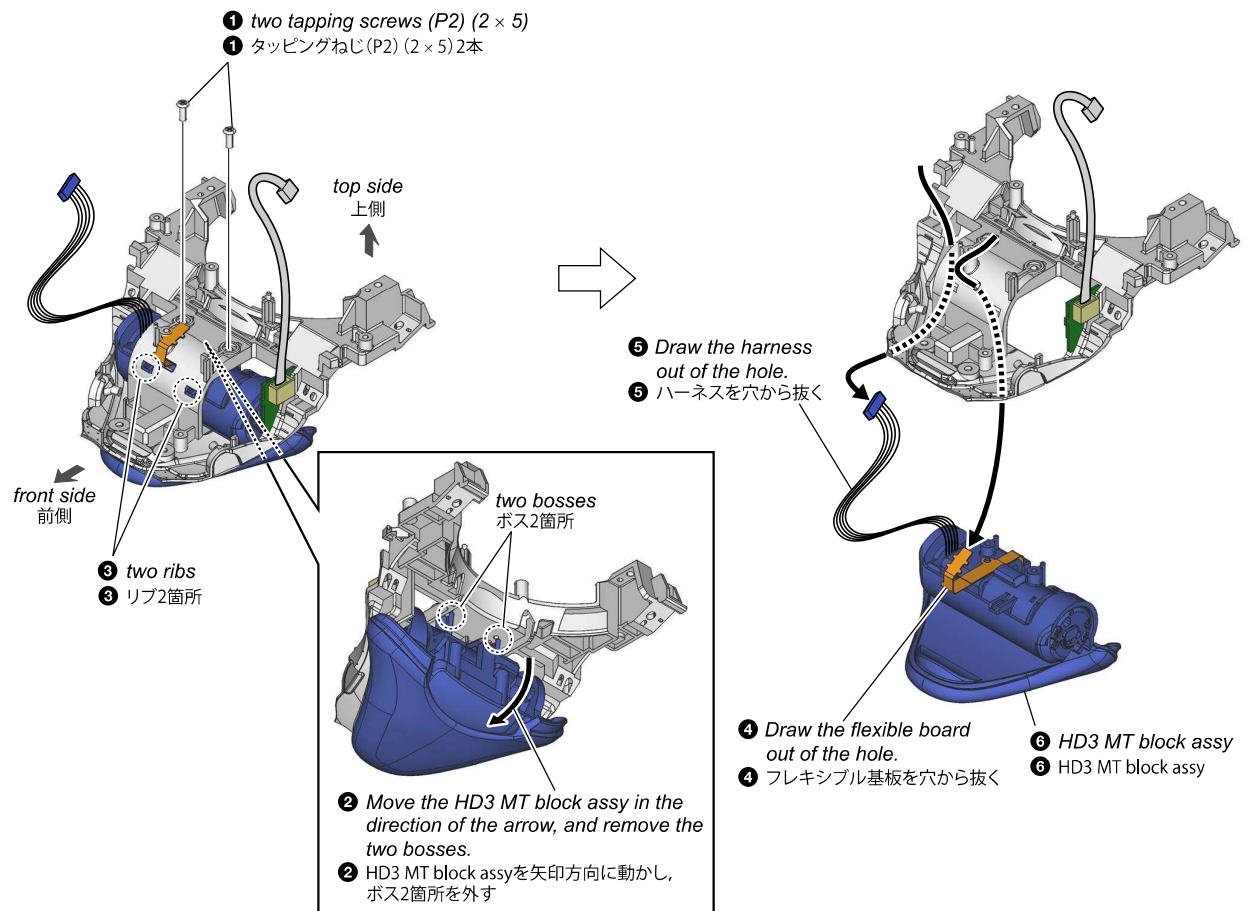
## 1-2-15. HD3 CM HOLDER BLOCK



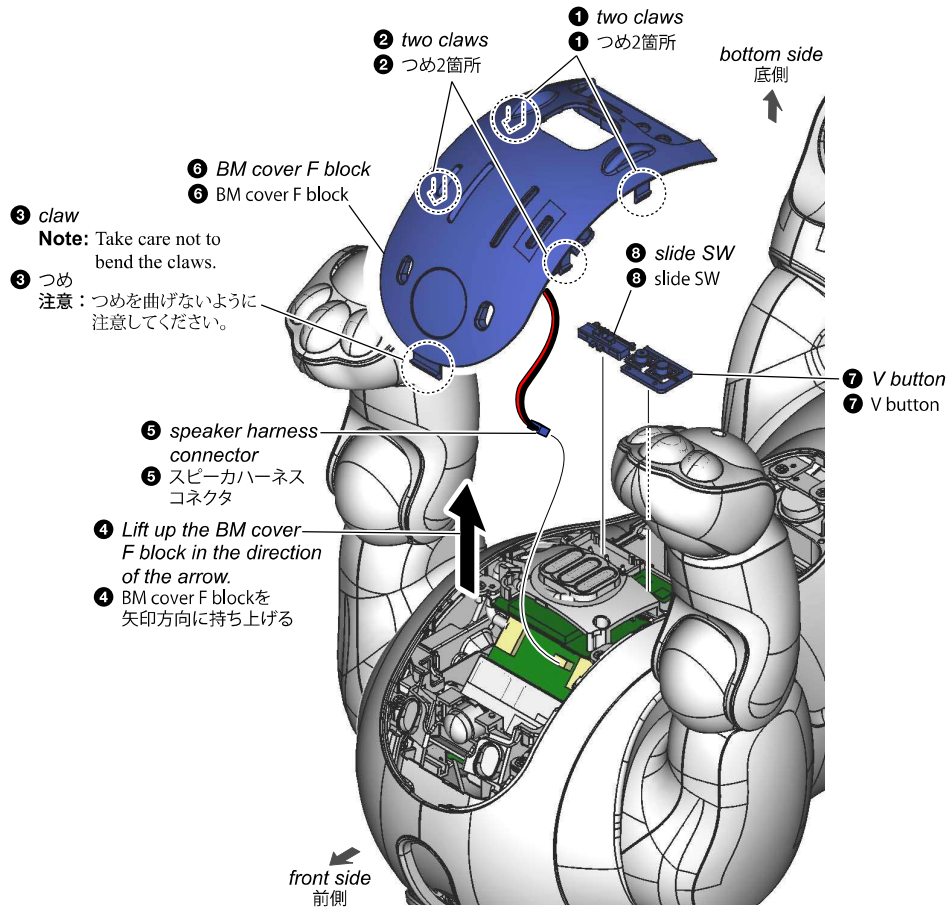
## 1-2-16. GW-1005 BOARD



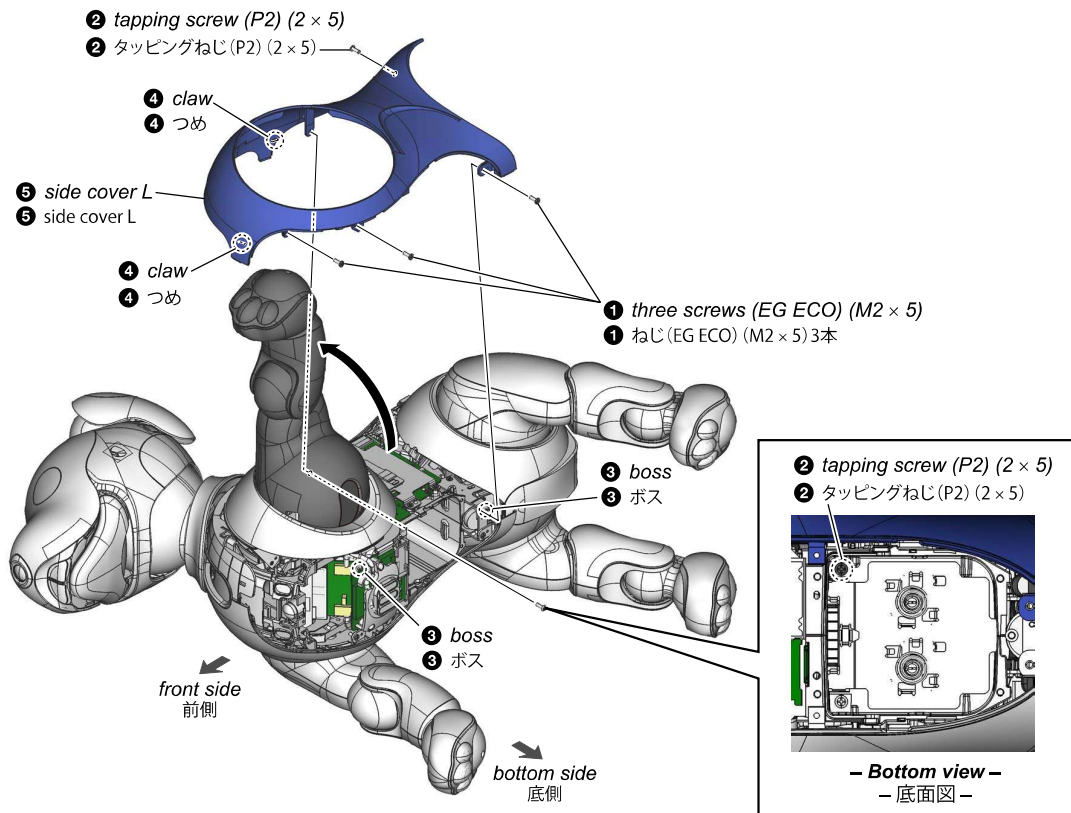
## 1-2-17. HD3 MT BLOCK ASSY



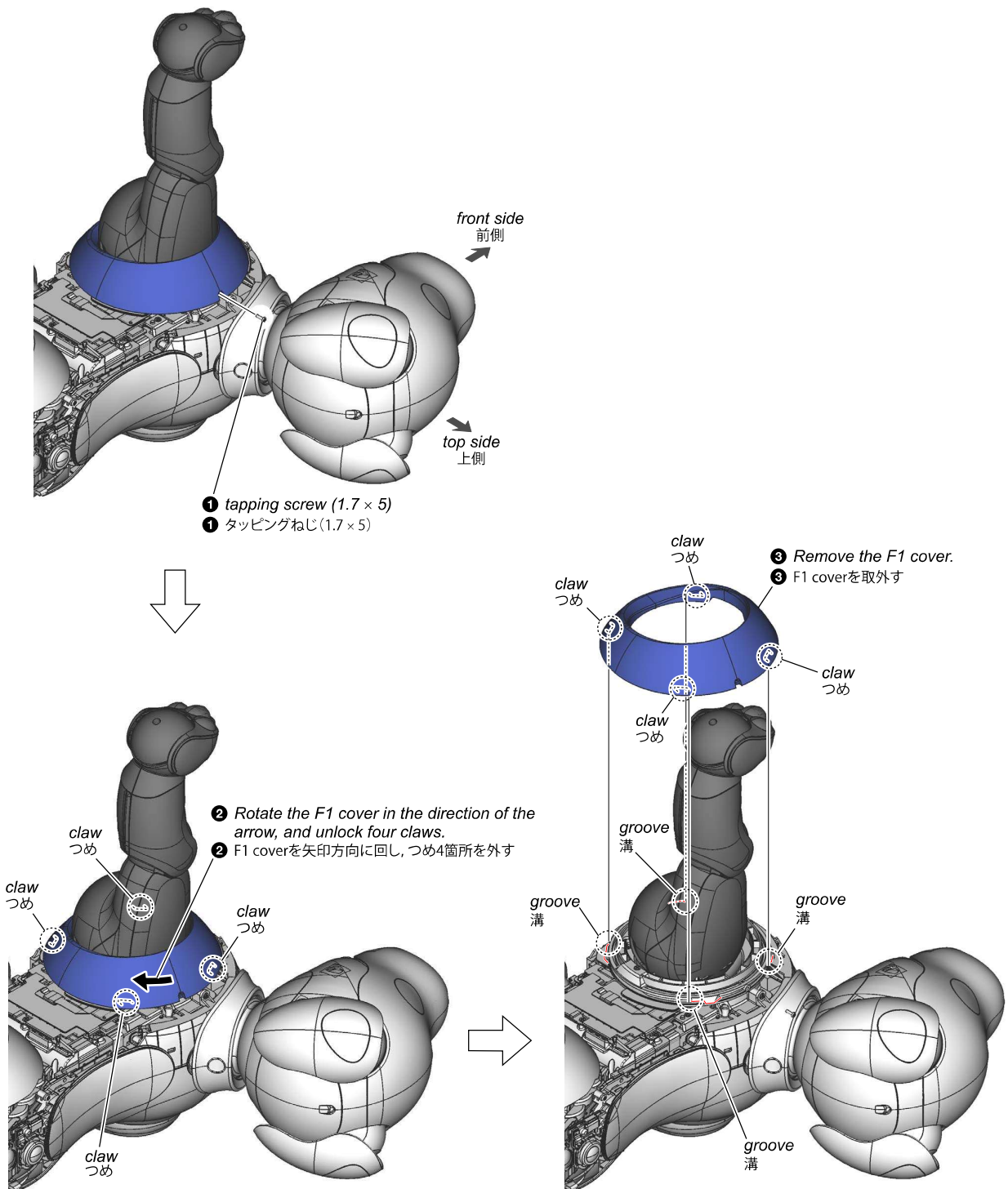
1-2-18. BM COVER F BLOCK



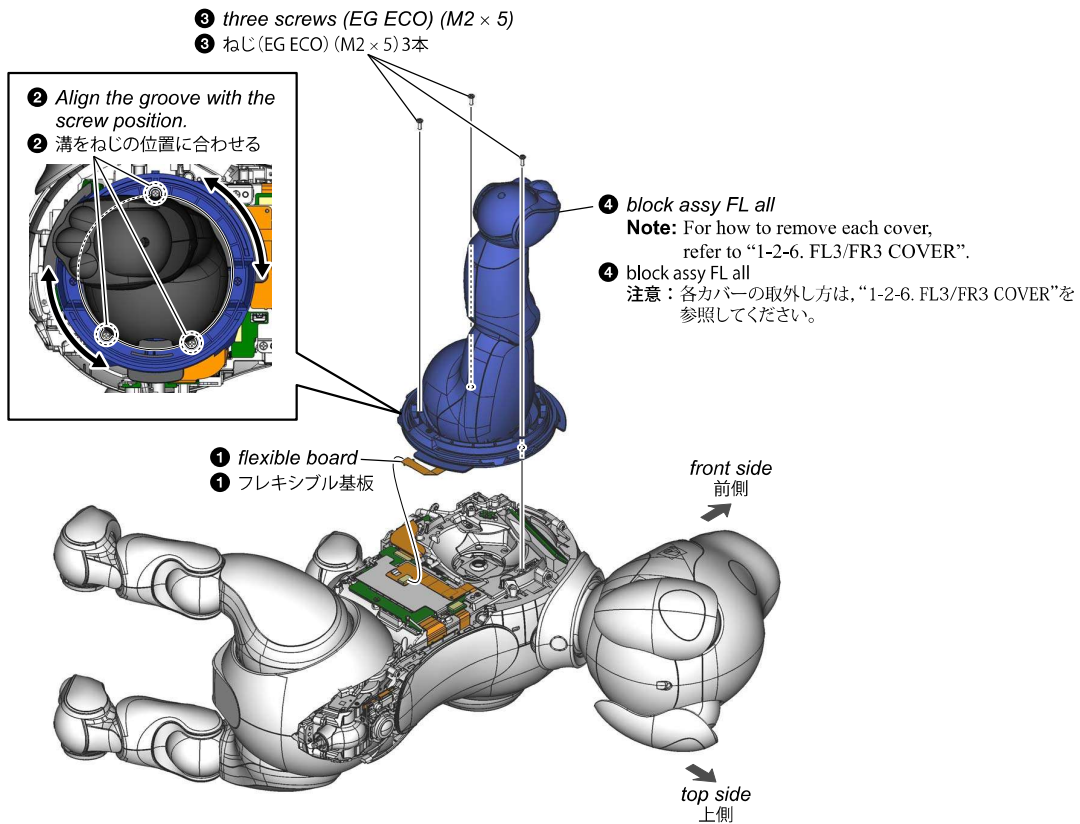
1-2-19. SIDE COVER L



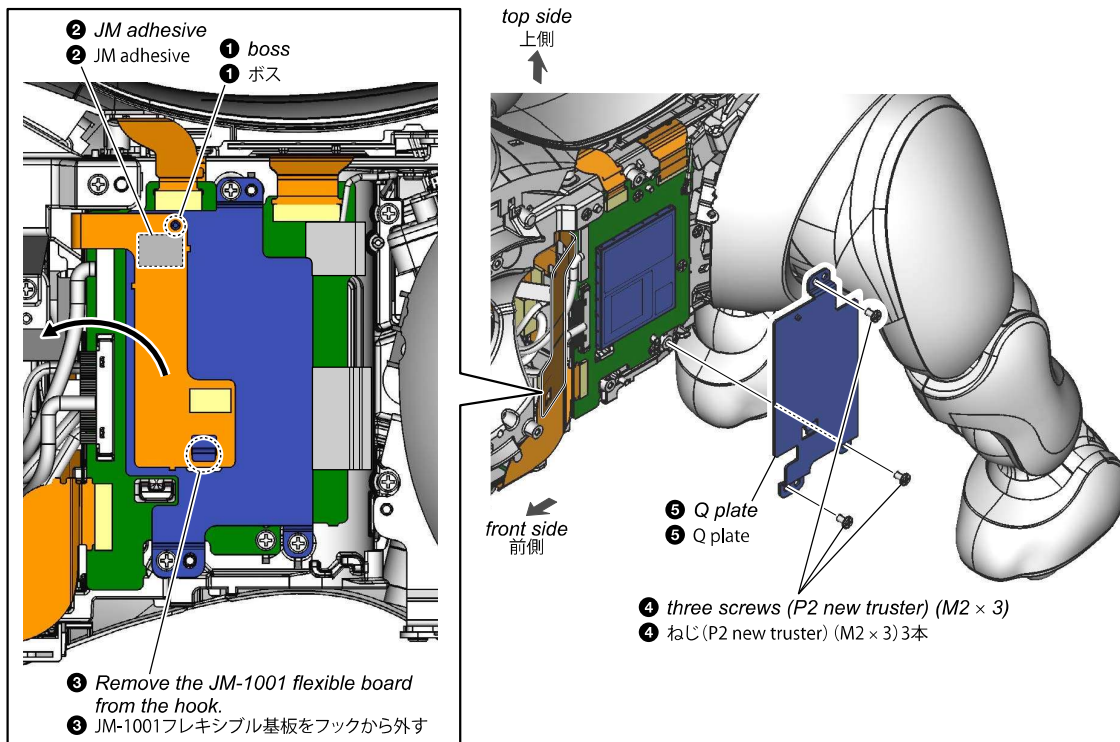
## 1-2-20. F1 COVER (L SIDE)



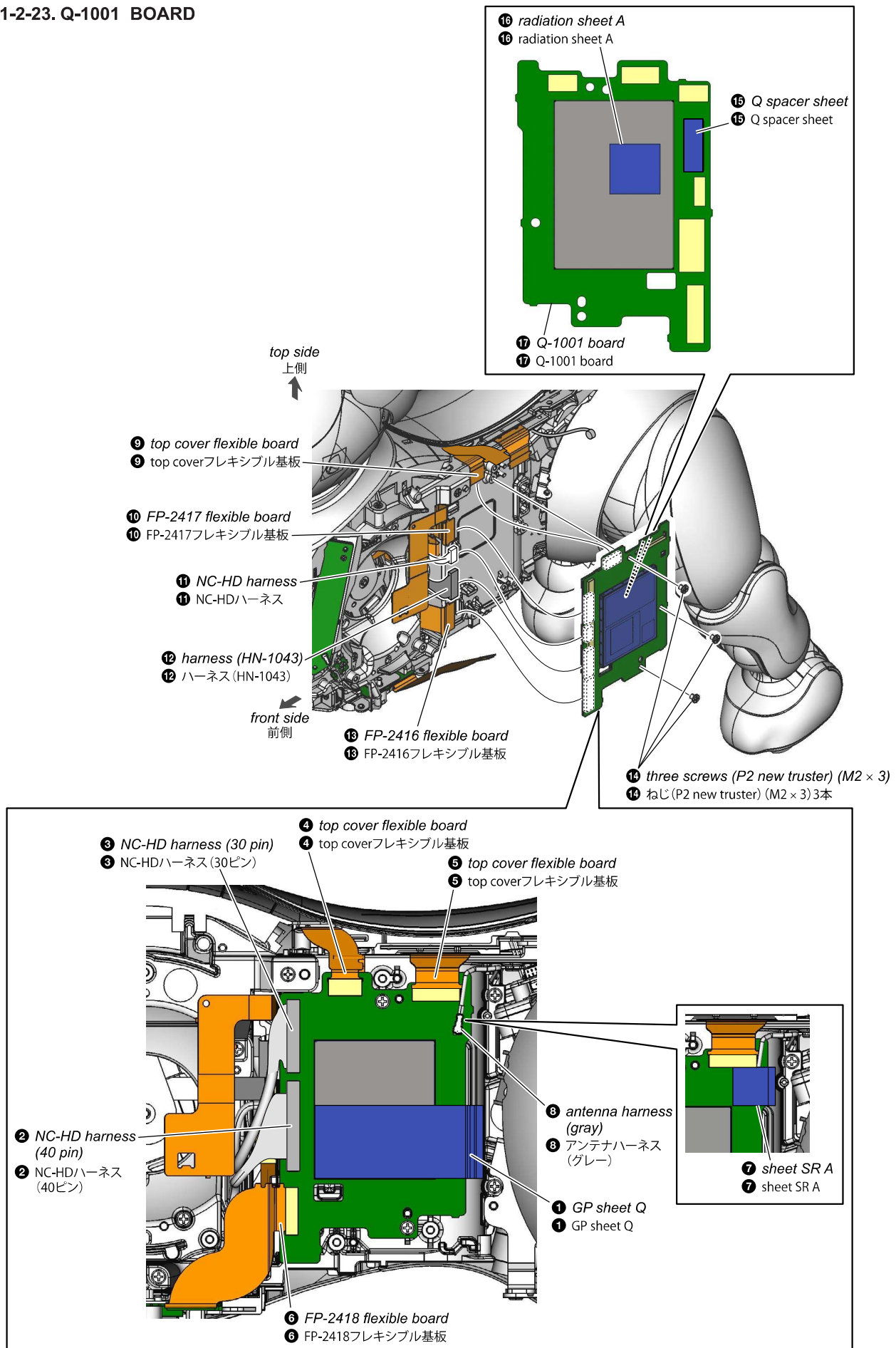
## 1-2-21. BLOCK ASSY FL ALL



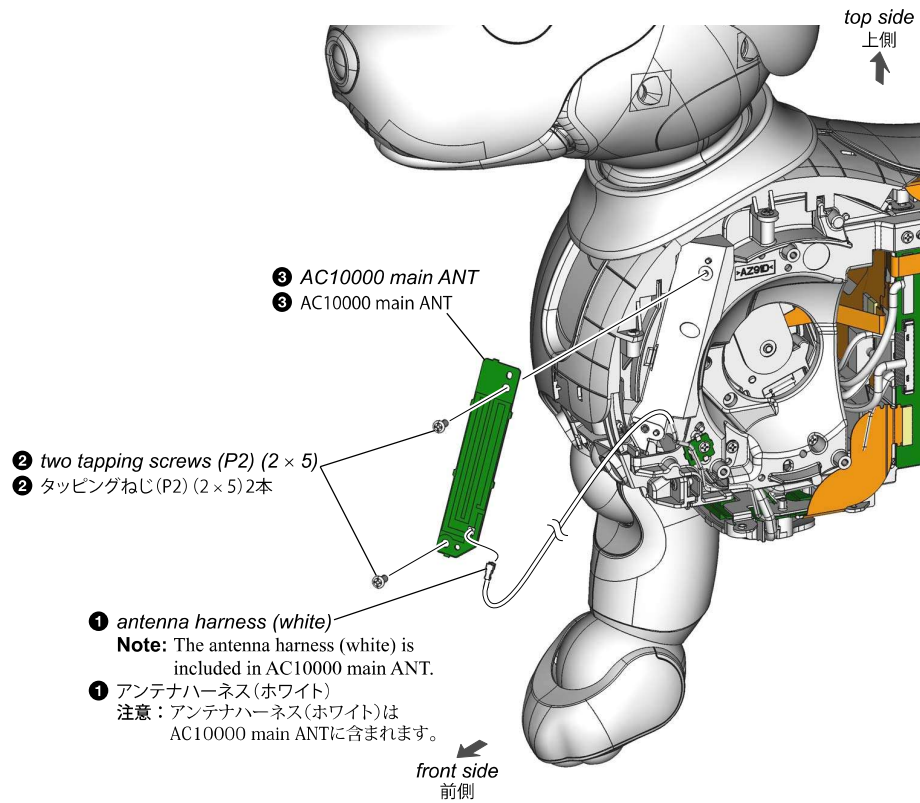
## 1-2-22. Q PLATE



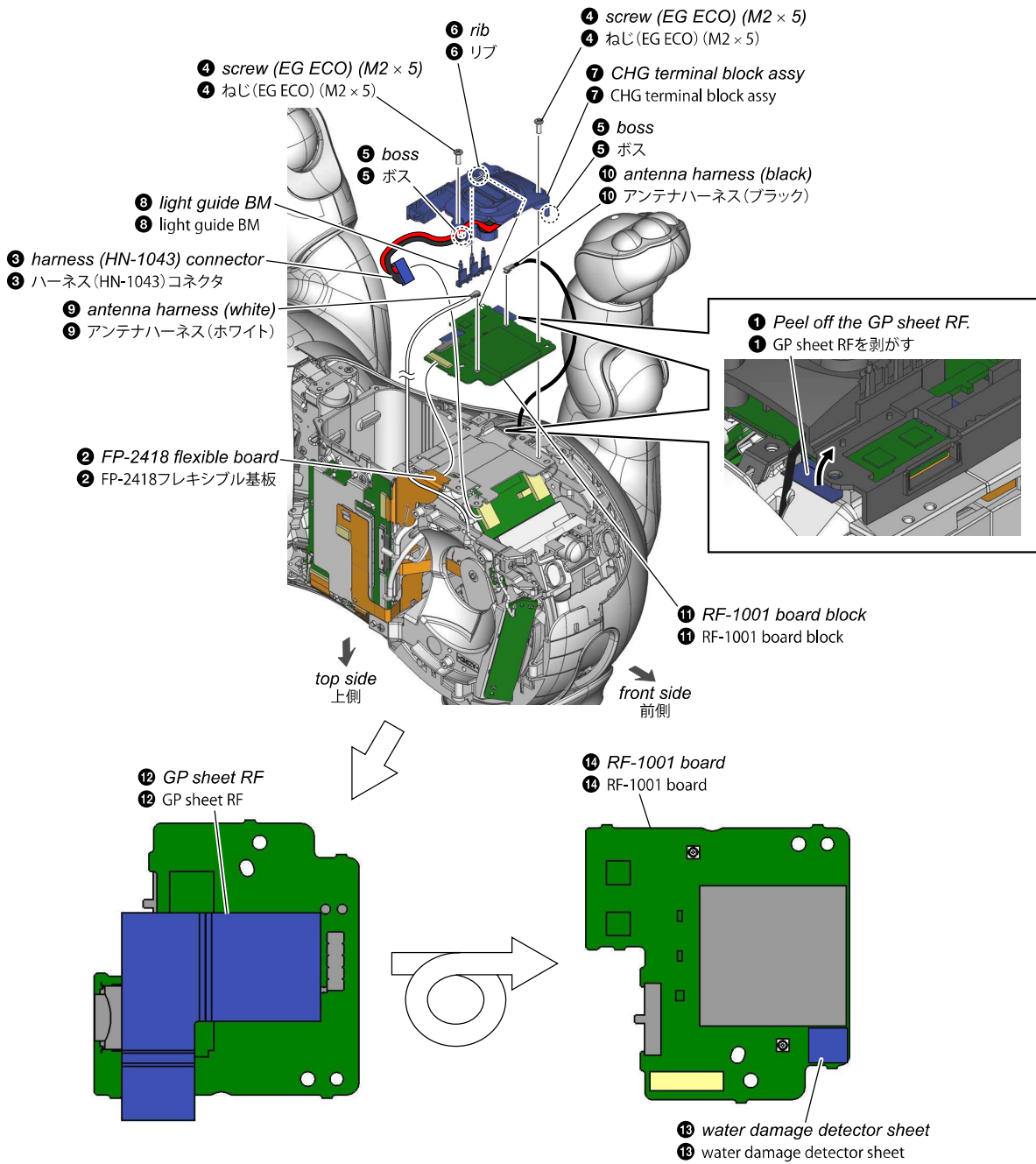
1-2-23. Q-1001 BOARD



## 1-2-24. AC10000 MAIN ANT

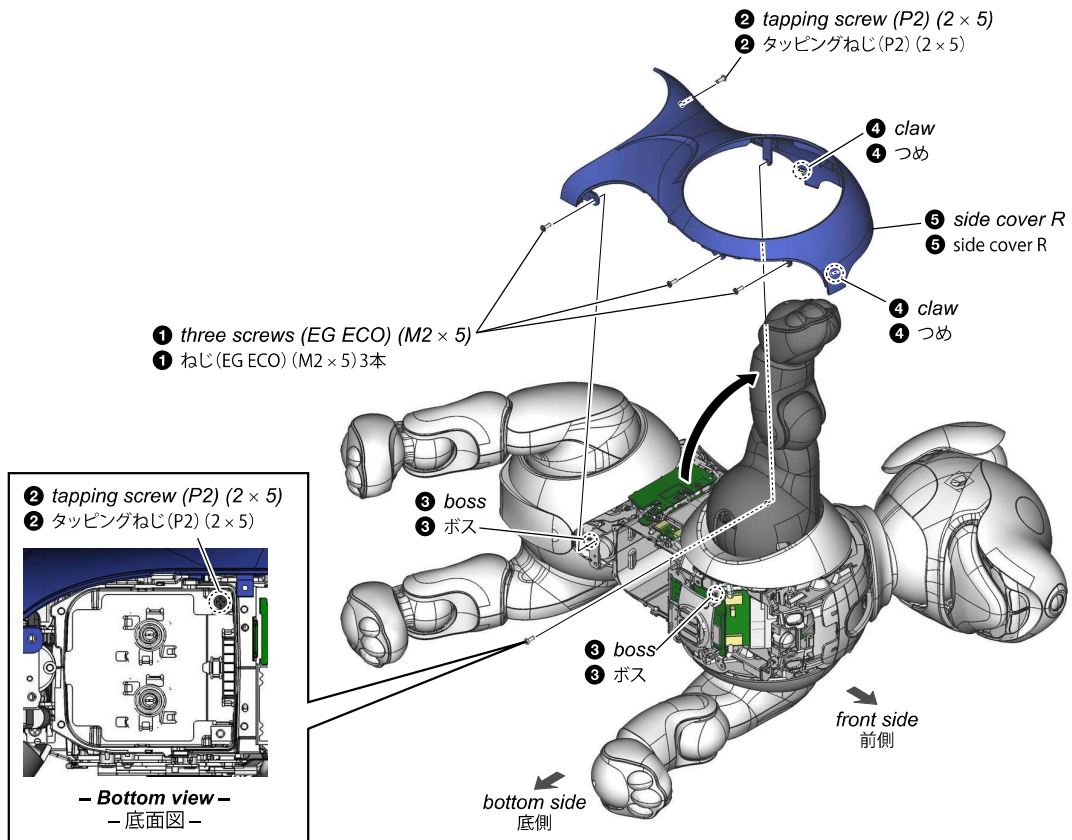


1-2-25. RF-1001 BOARD

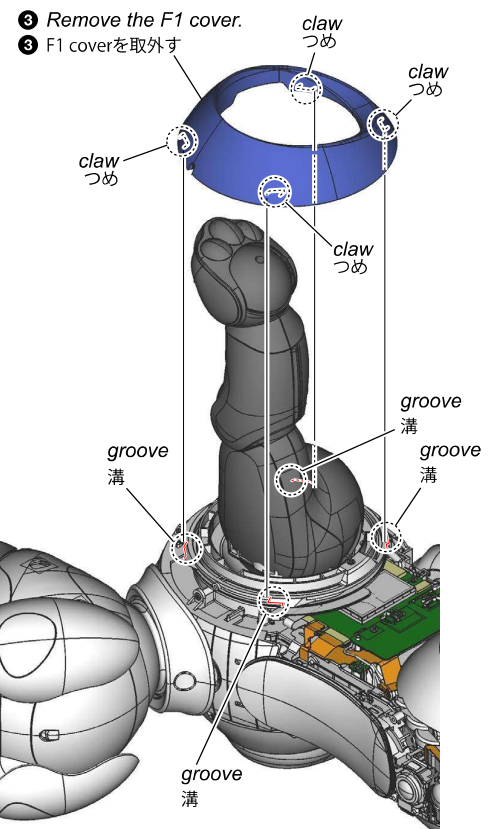
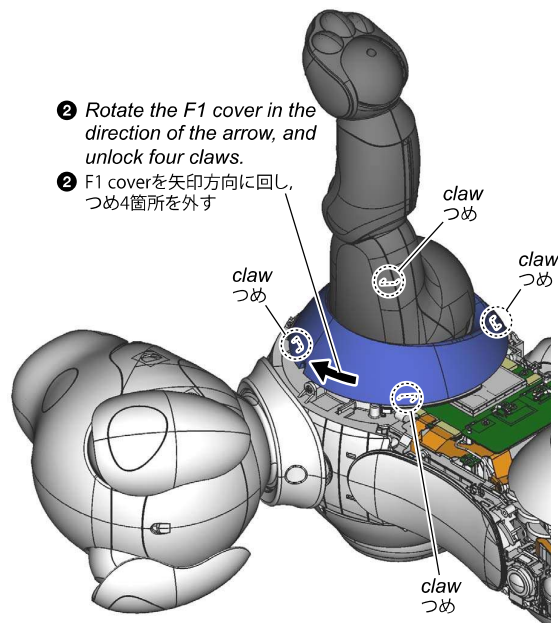
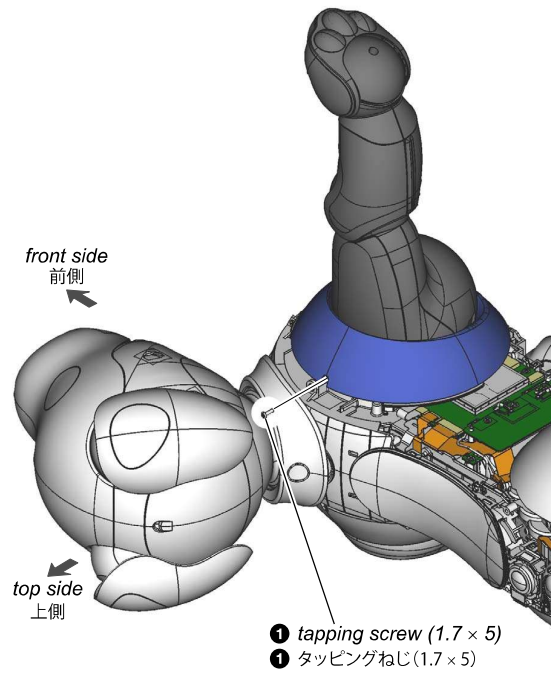




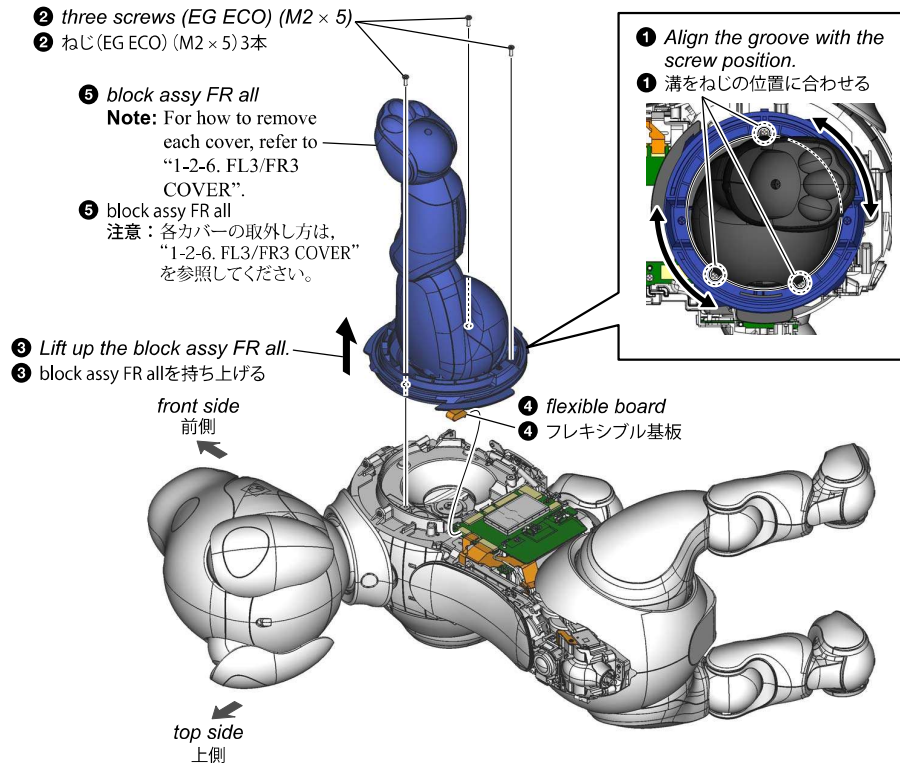
## 1-2-26. SIDE COVER R



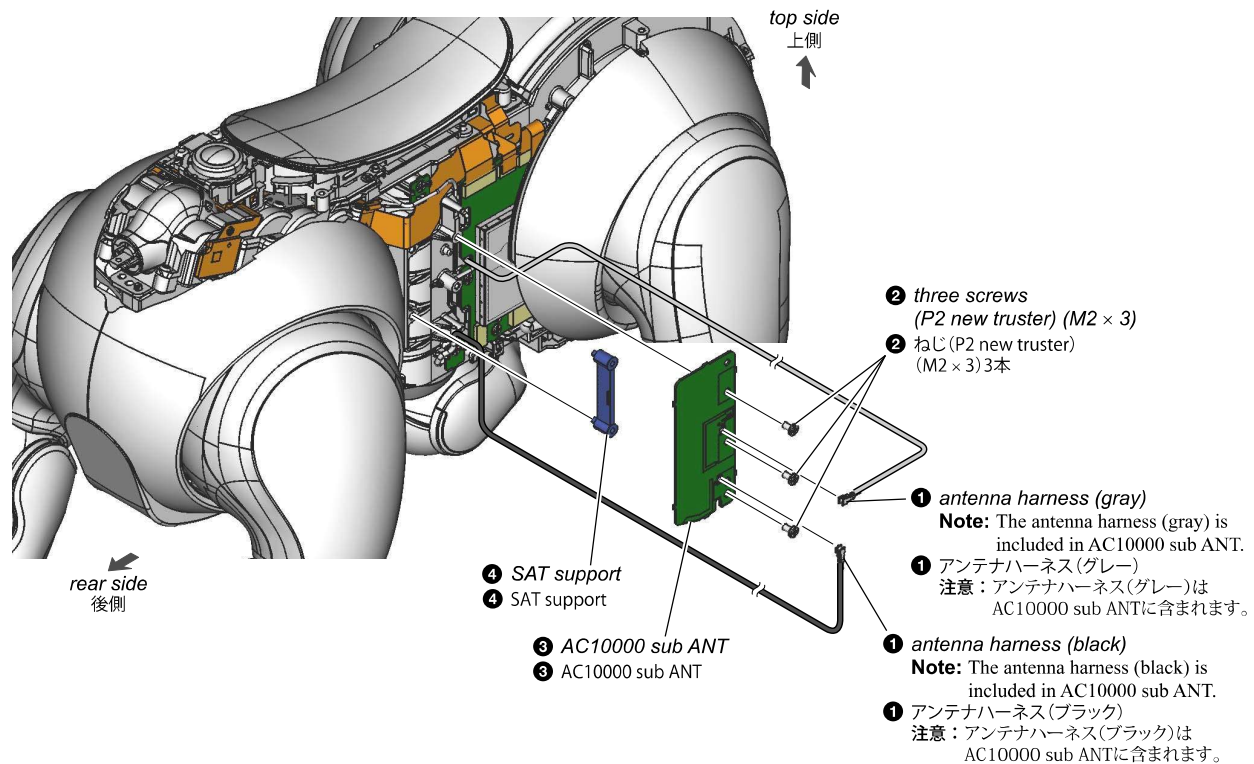
## 1-2-27. F1 COVER (R SIDE)



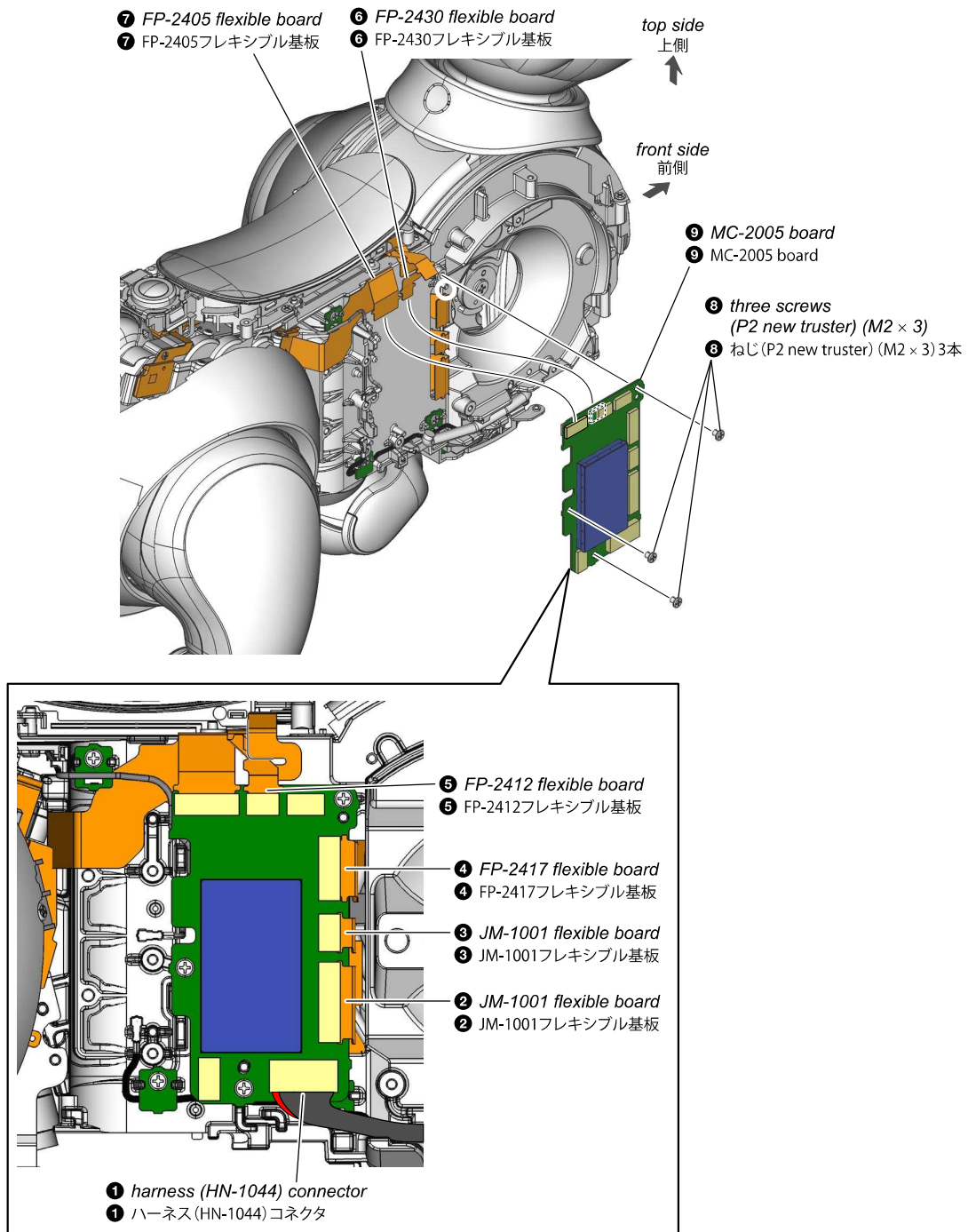
## 1-2-28. BLOCK ASSY FR ALL



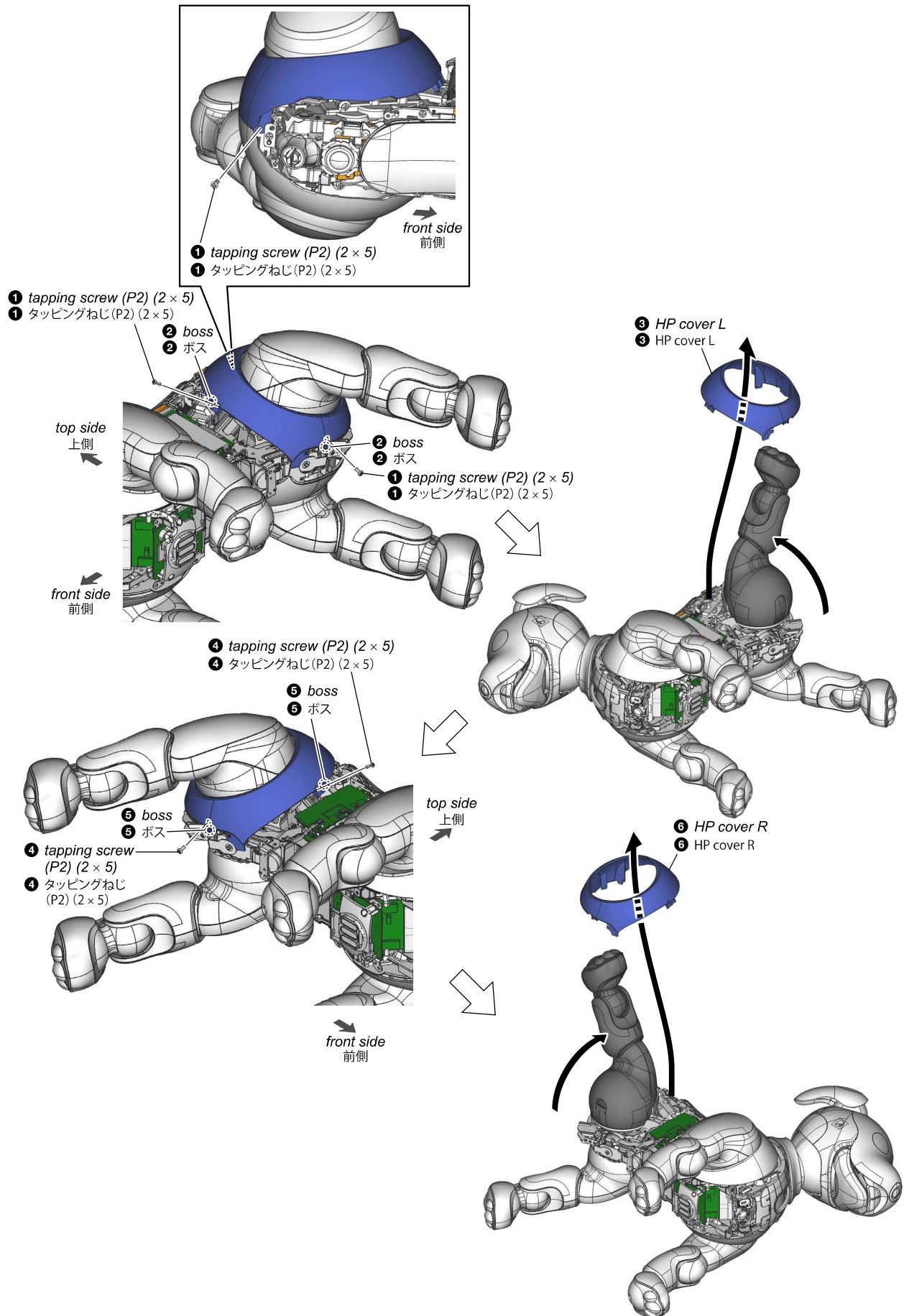
## 1-2-29. AC10000 SUB ANT



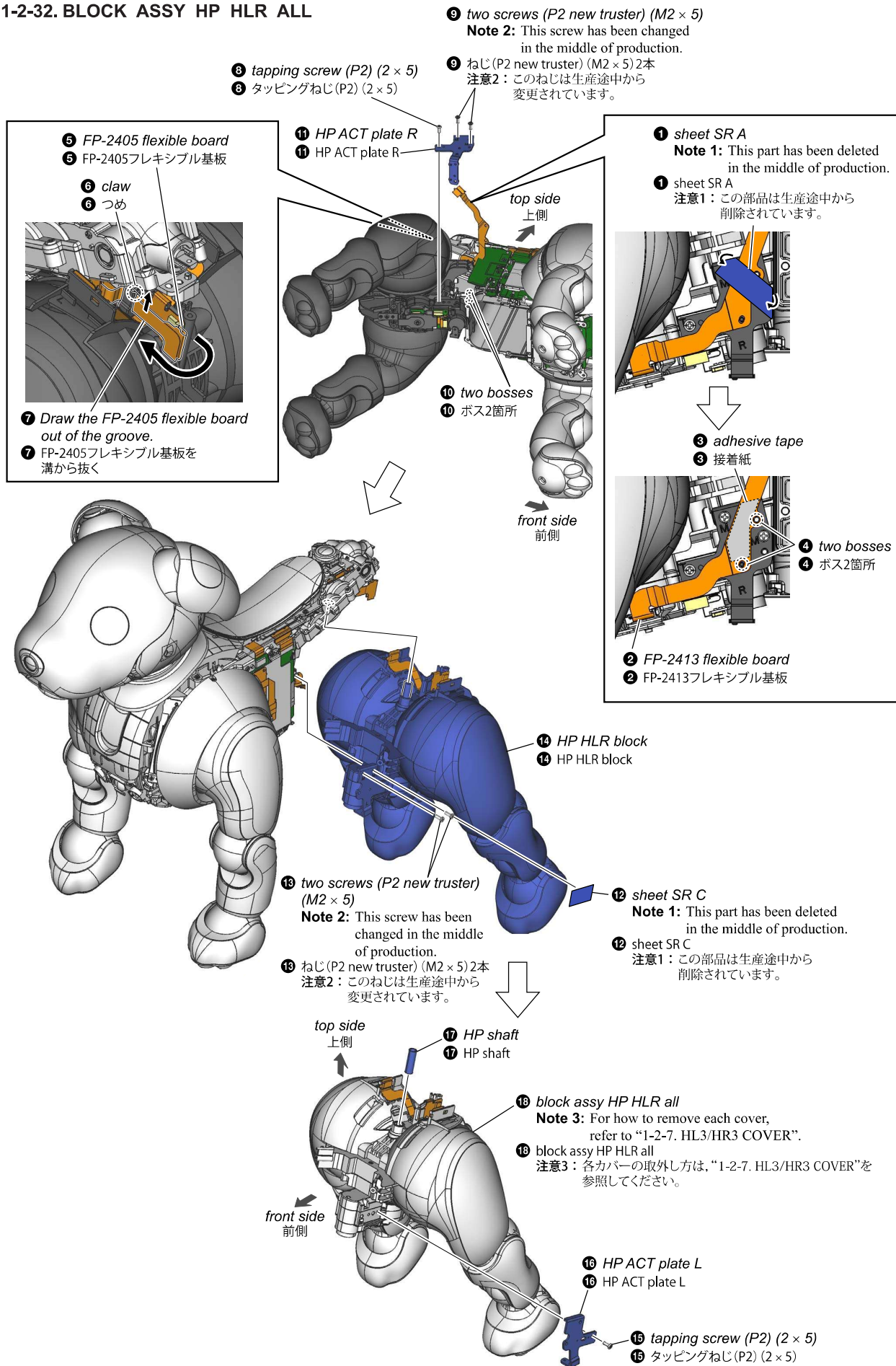
## 1-2-30. MC-2005 BOARD



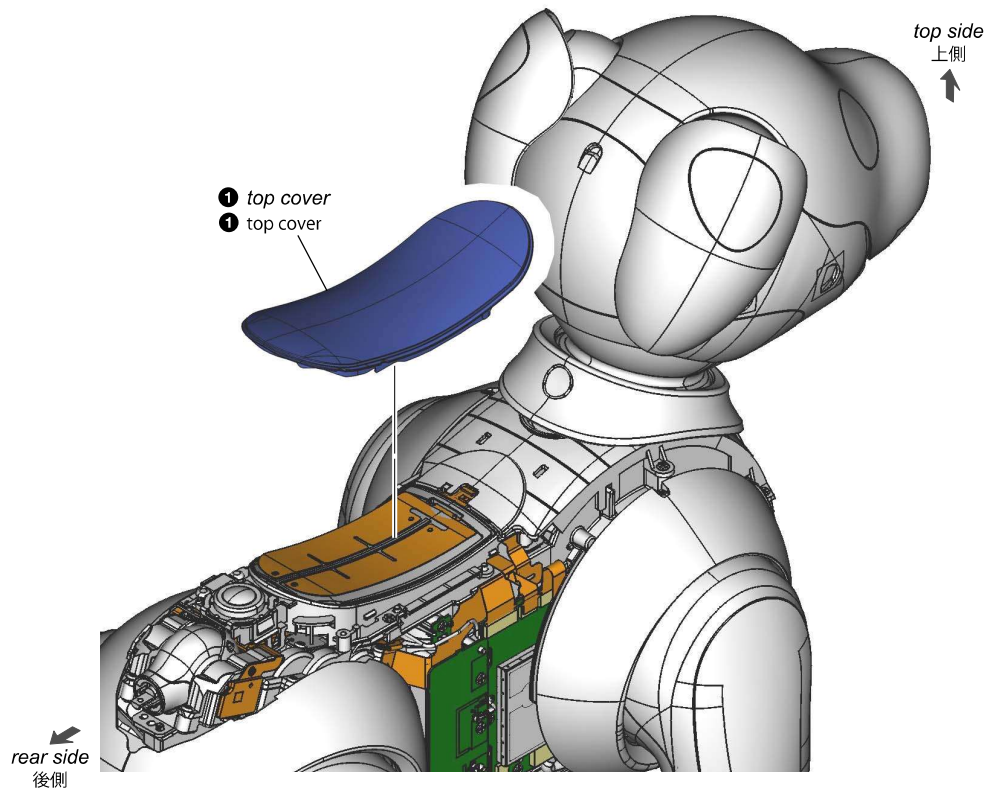
## 1-2-31. HP COVER L/R



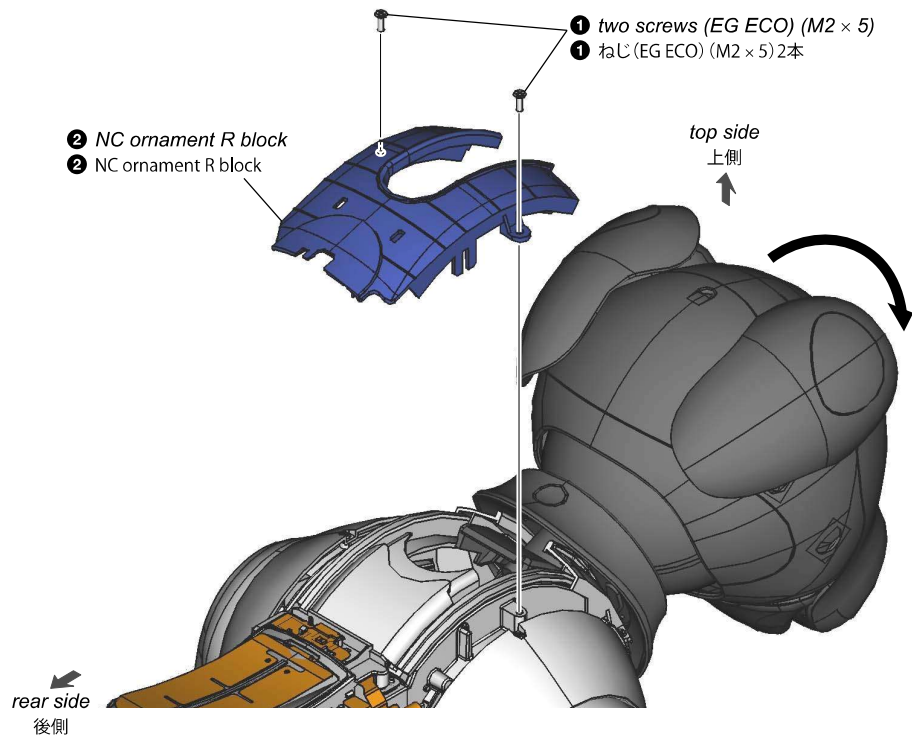
1-2-32. BLOCK ASSY HP HLR ALL



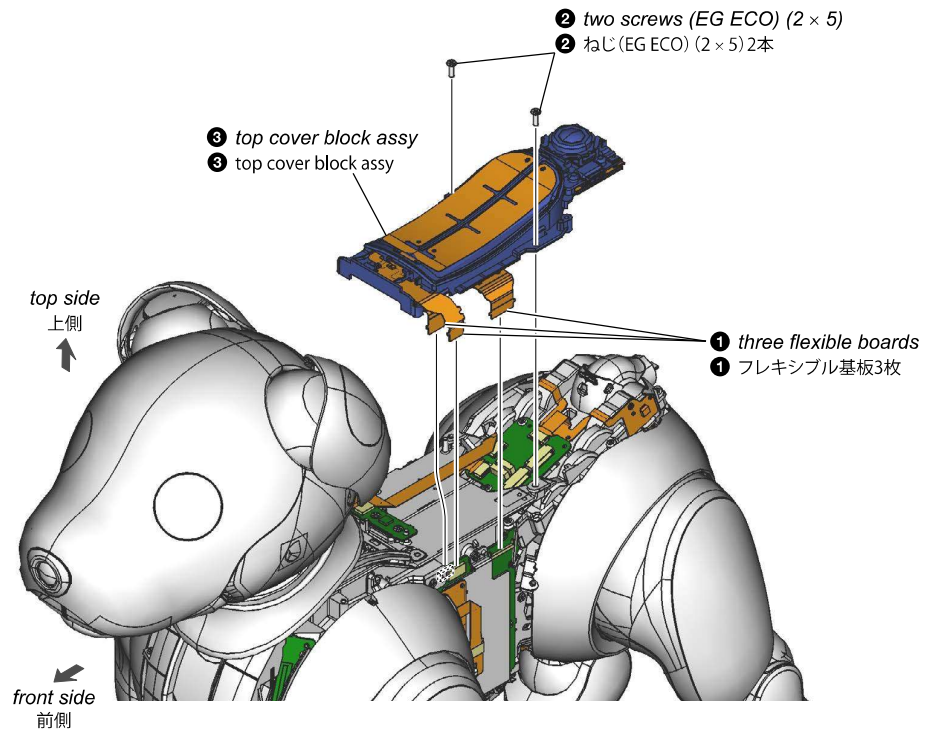
## 1-2-33. TOP COVER



## 1-2-34. NC ORNAMENT R

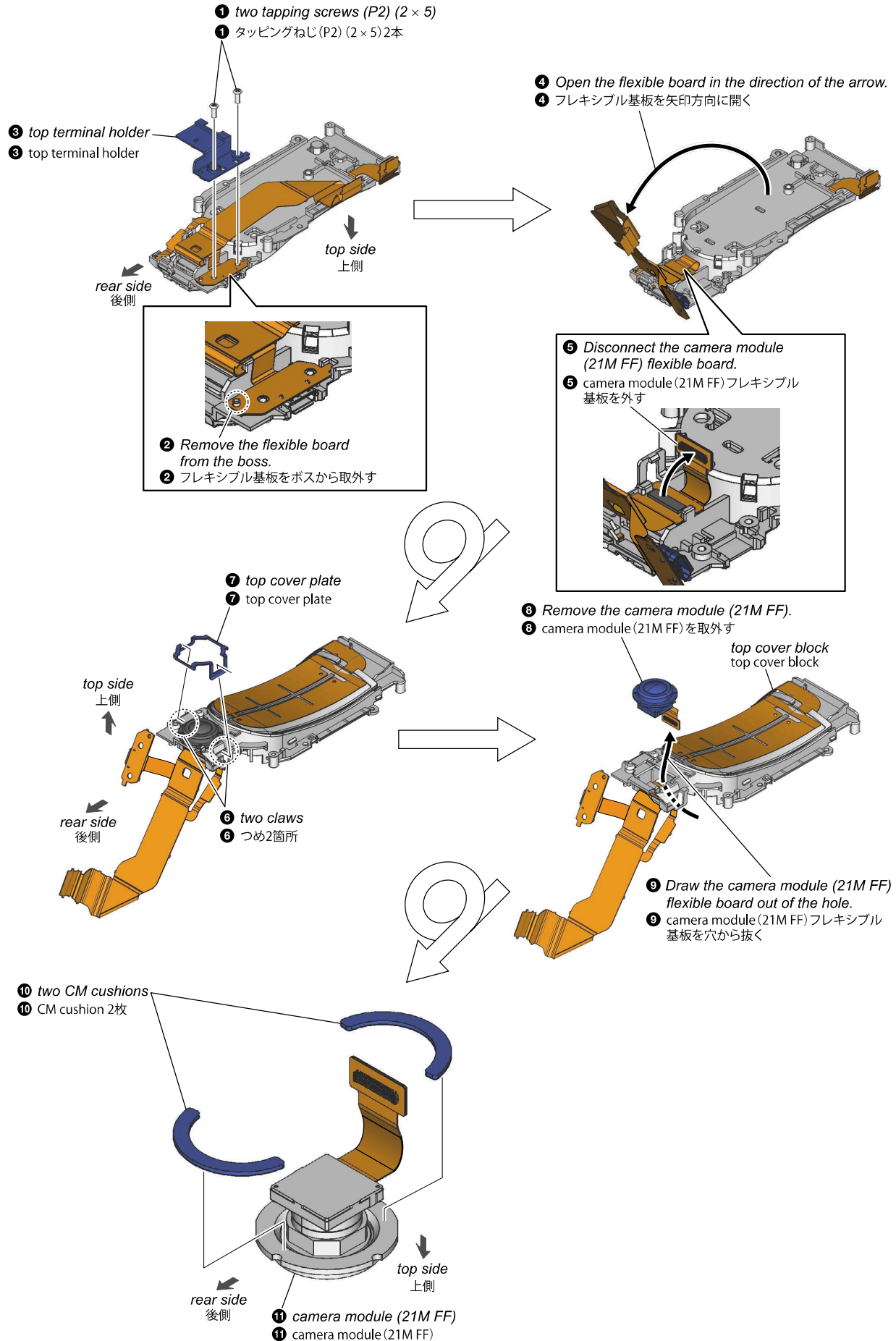


## 1-2-35. TOP COVER BLOCK ASSY

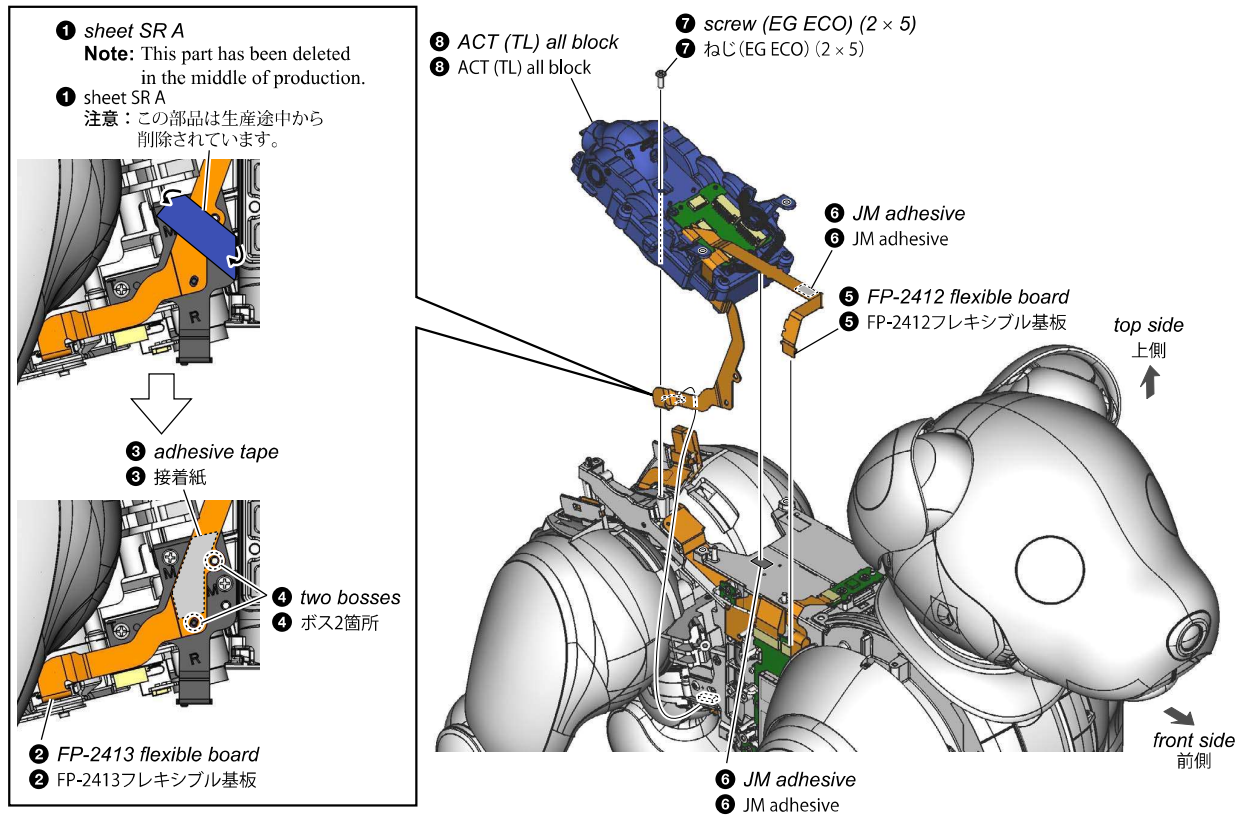




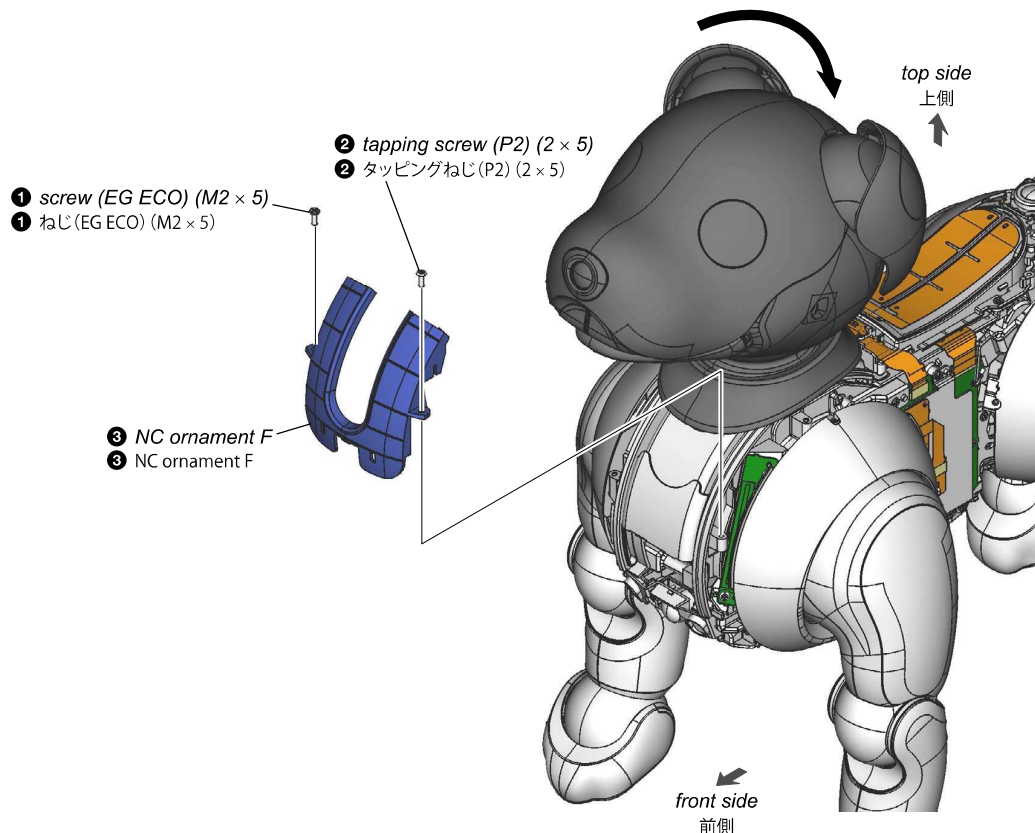
## 1-2-36. CAMERA MODULE (21M FF)



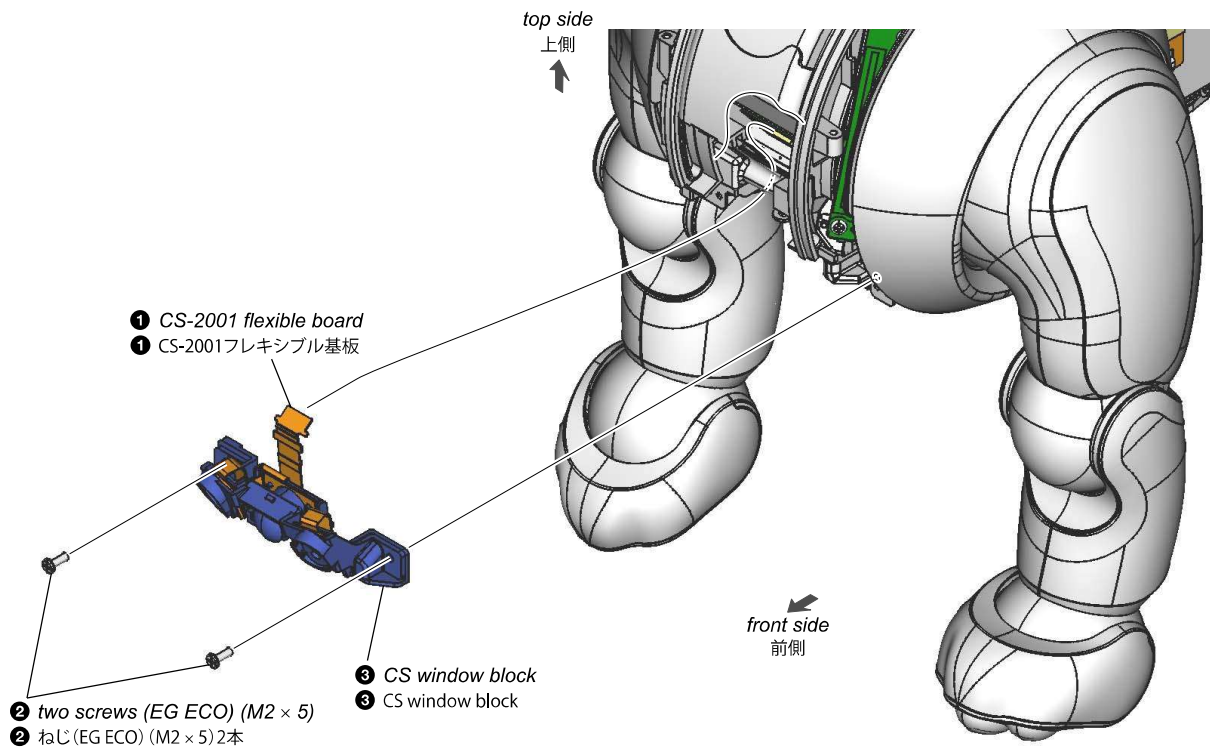
## 1-2-37. ACT (TL) ALL BLOCK



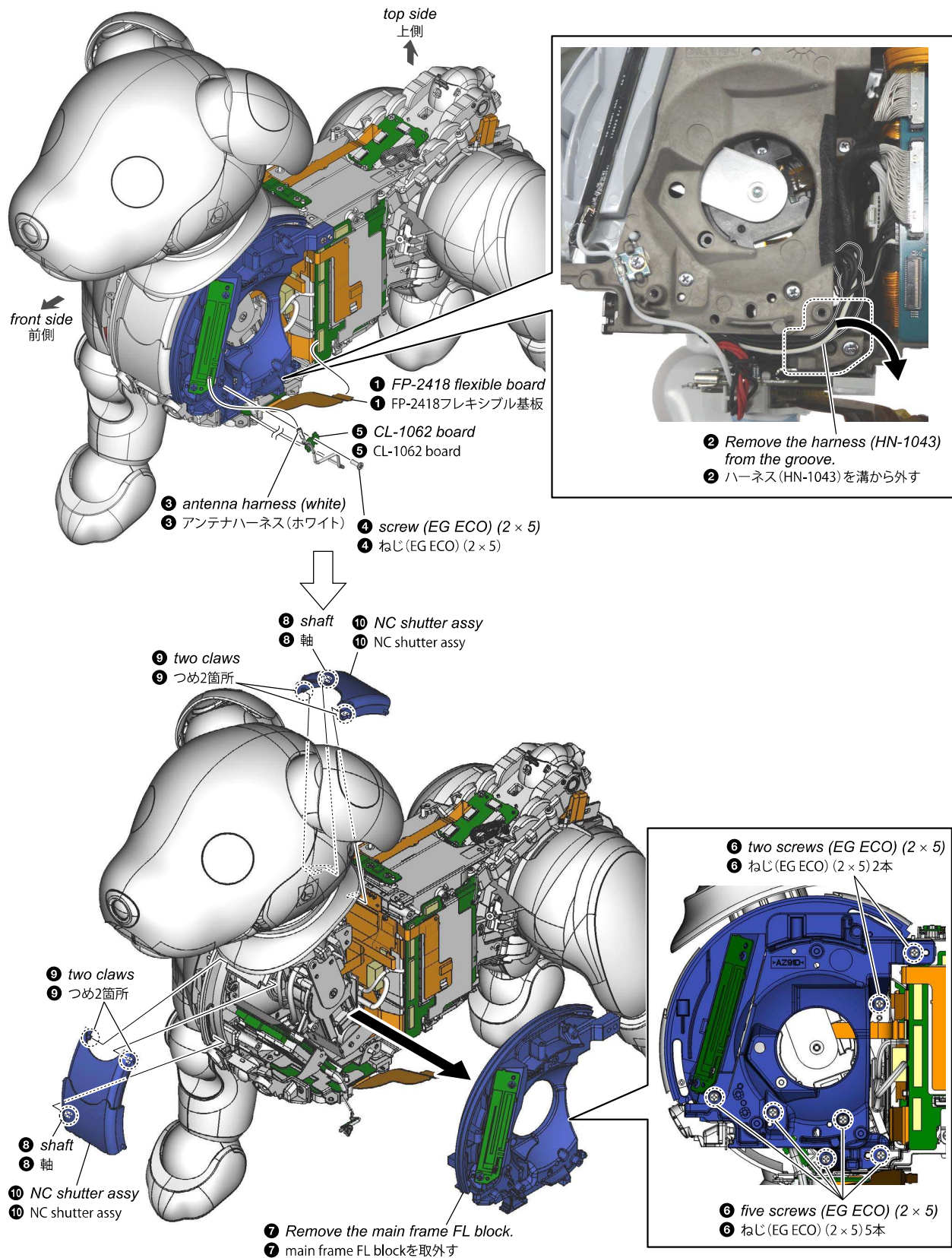
## 1-2-38. NC ORNAMENT F



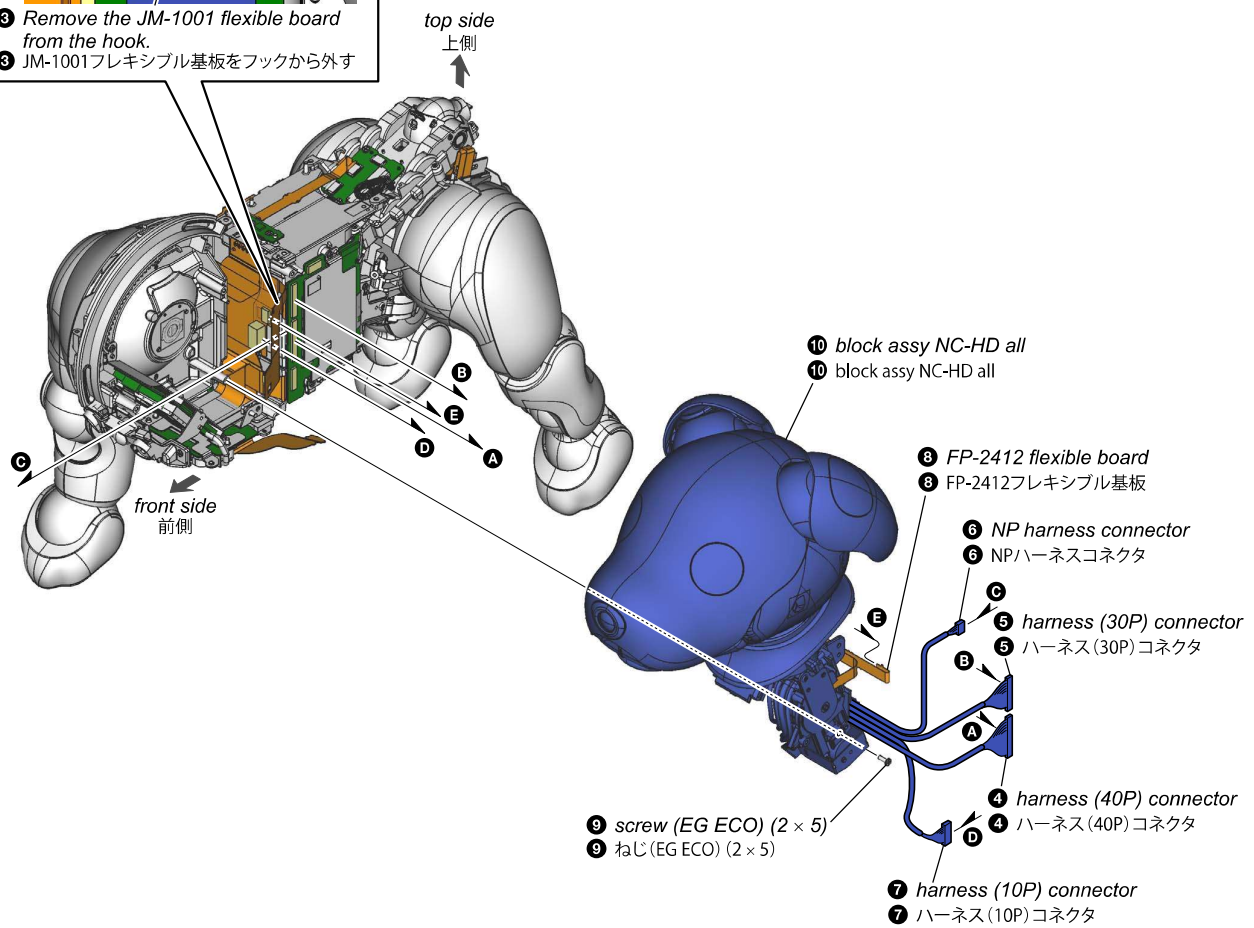
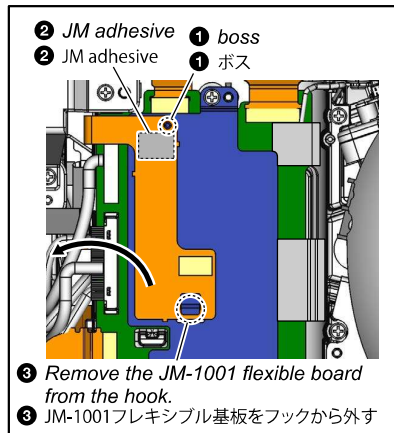
## 1-2-39. CS WINDOW BLOCK



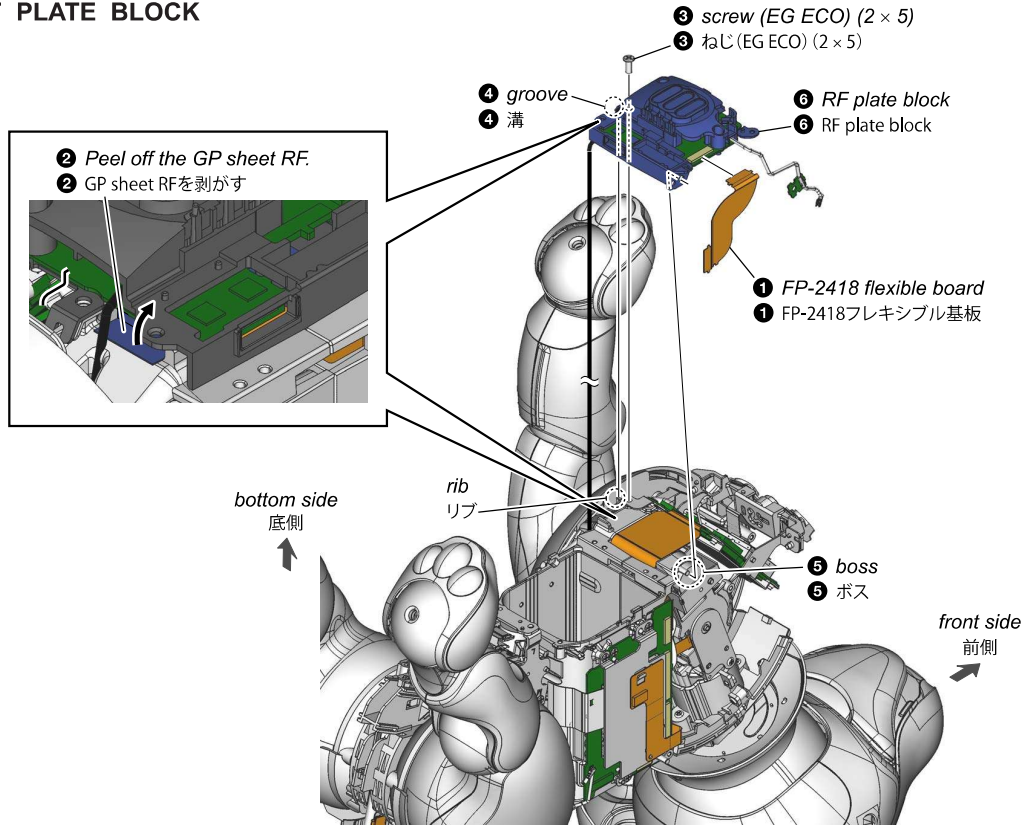
## 1-2-40. MAIN FRAME FL BLOCK



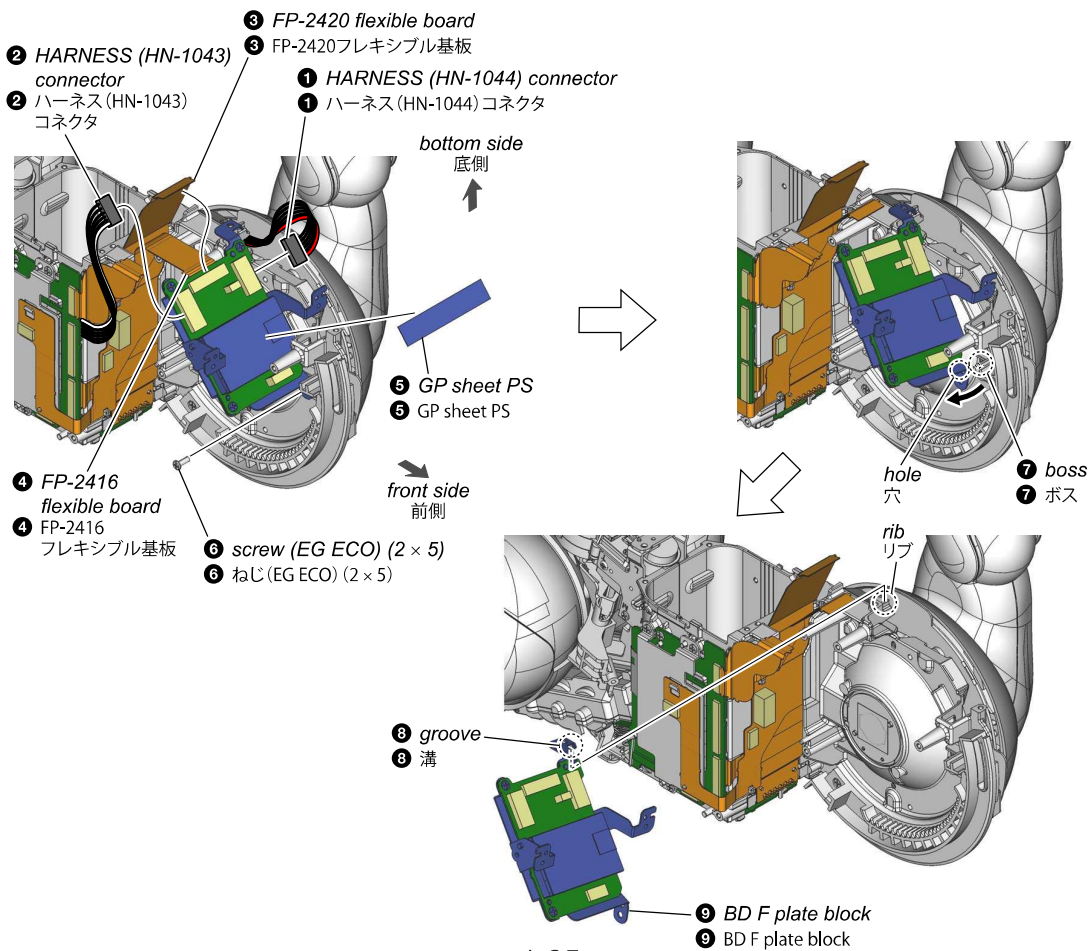
## 1-2-41. BLOCK ASSY NC-HD ALL



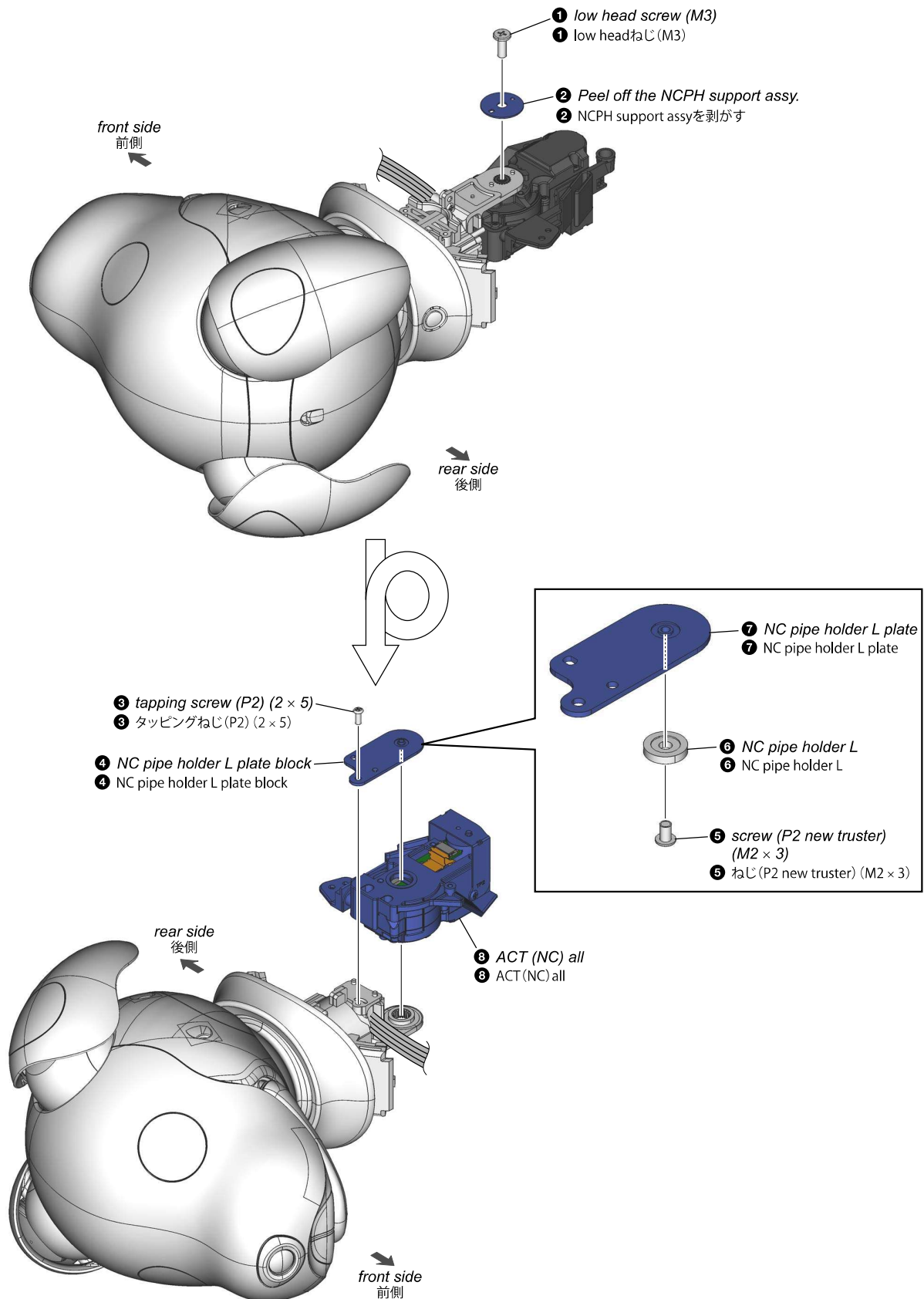
1-2-42. RF PLATE BLOCK



1-2-43. BD F PLATE BLOCK

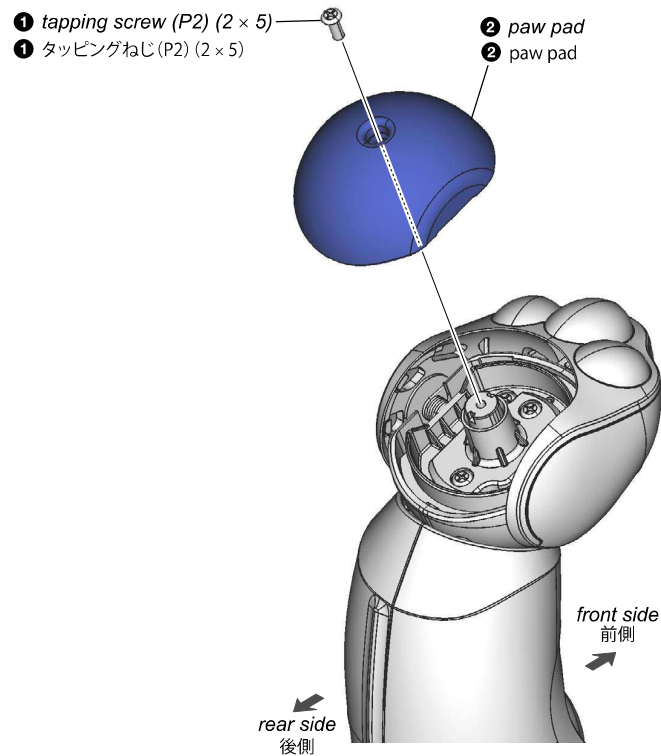


## 1-2-44. ACT (NC) ALL



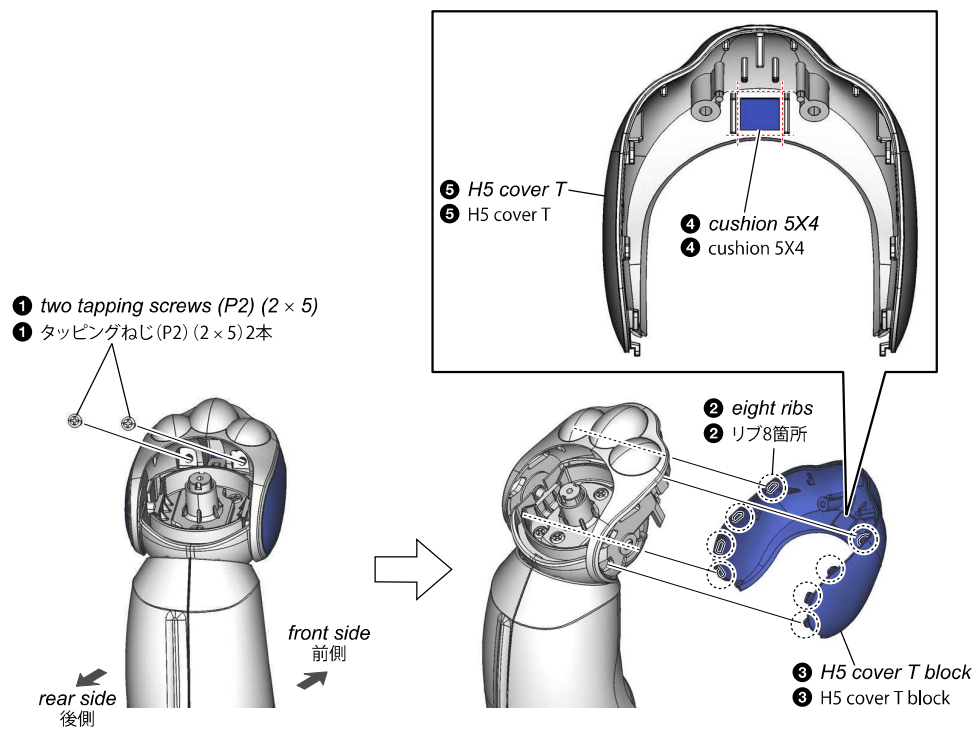
## 1-2-45. PAW PAD

**Note:** The illustration uses the left side, but there is no difference in disassembly for the front, rear, left and right.



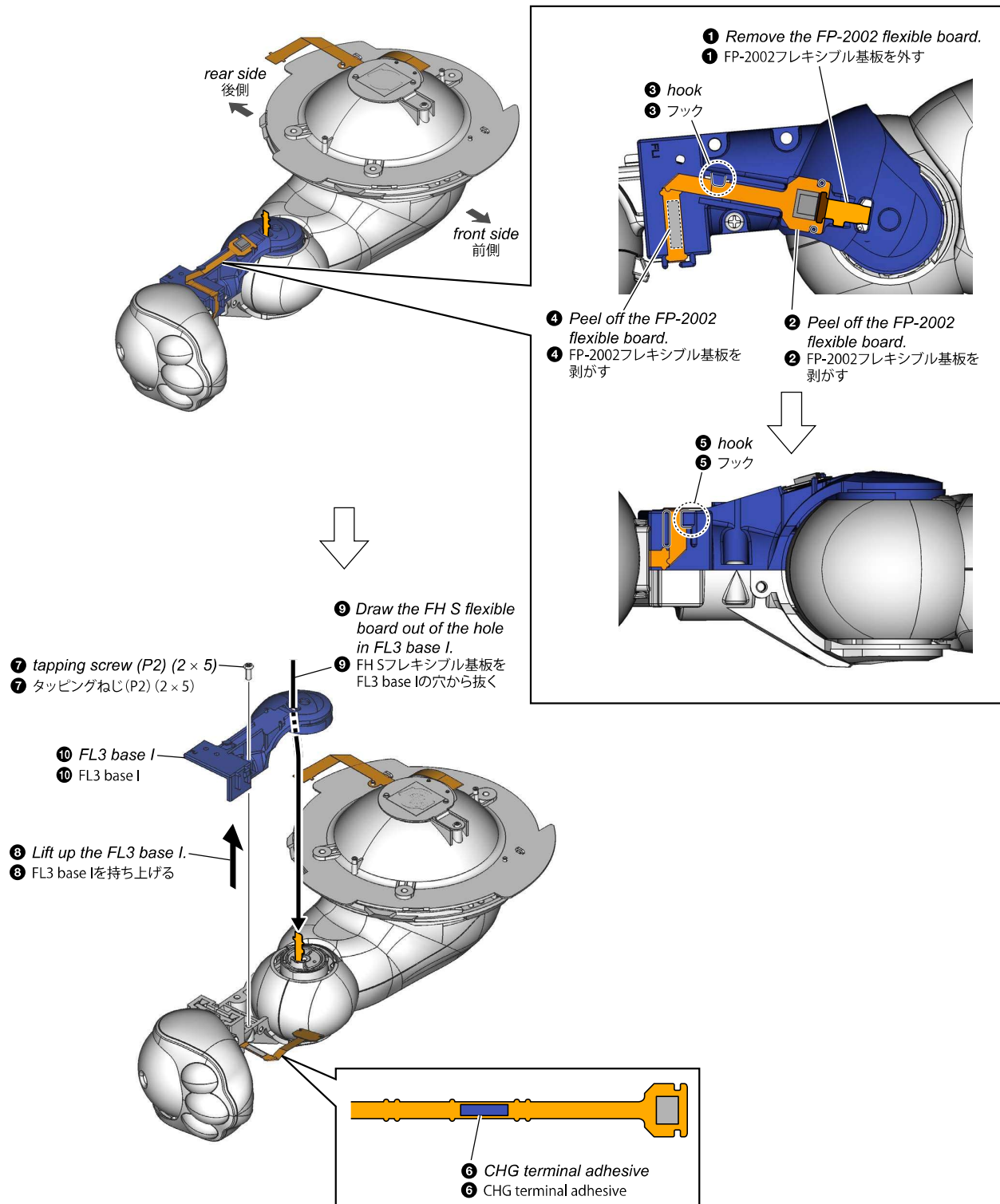
## 1-2-46. H5 COVER T

**Note:** The illustration uses the left side, but there is no difference in disassembly for the front, rear, left and right.

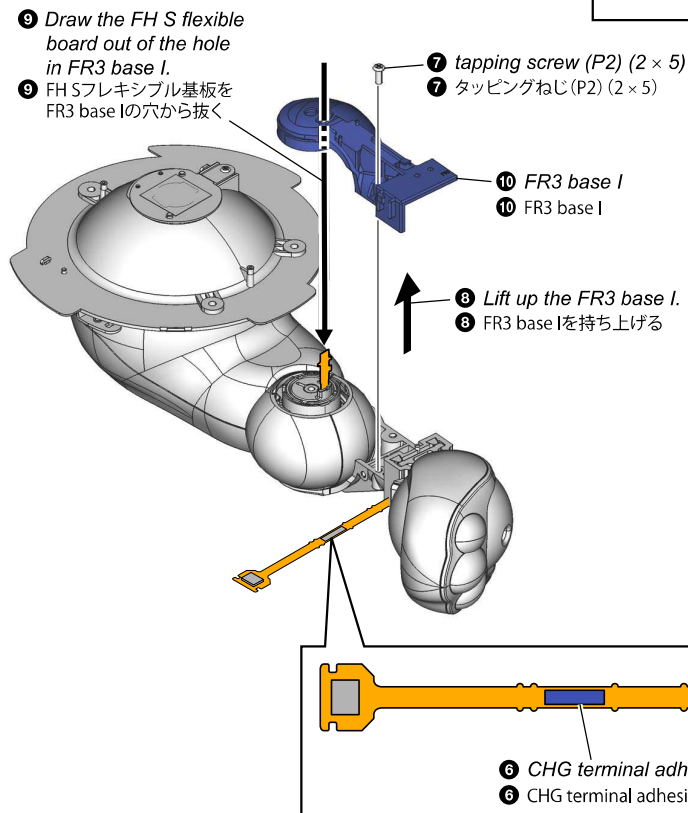
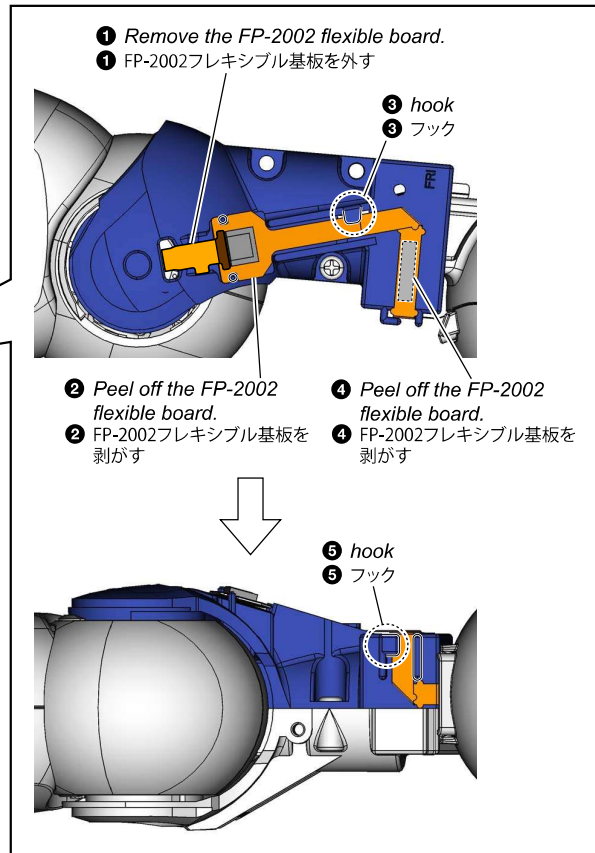
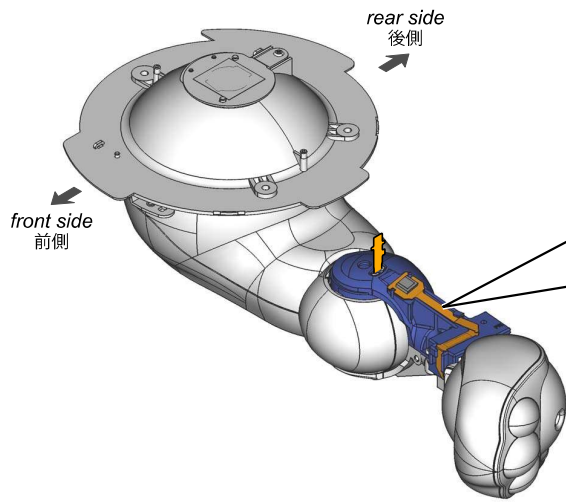




## 1-2-47. FL3 BASE I (L SIDE)

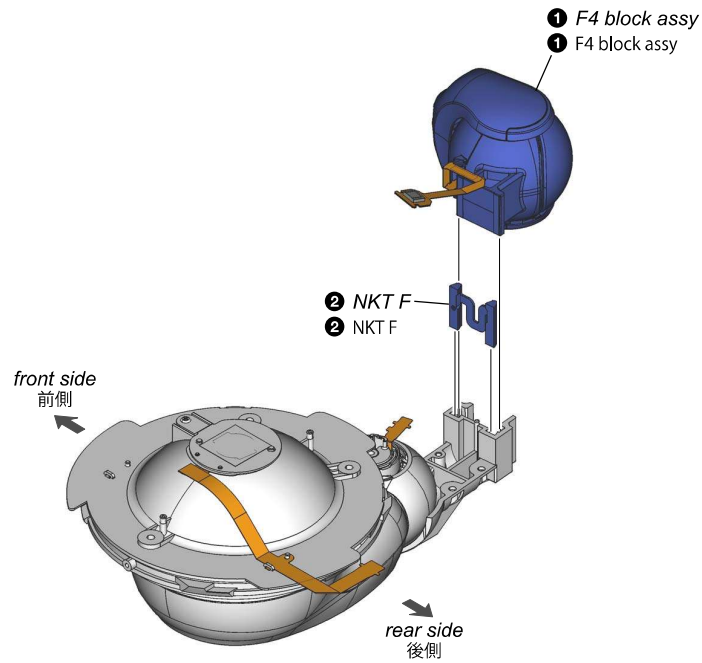


## 1-2-48. FR3 BASE I (R SIDE)



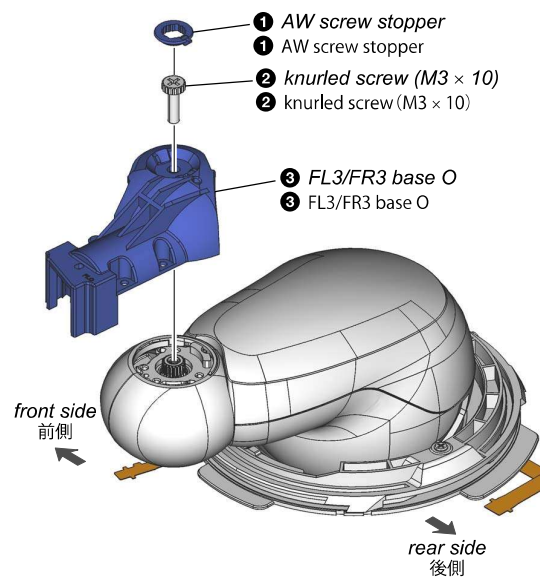
### 1-2-49. F4 BLOCK ASSY

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



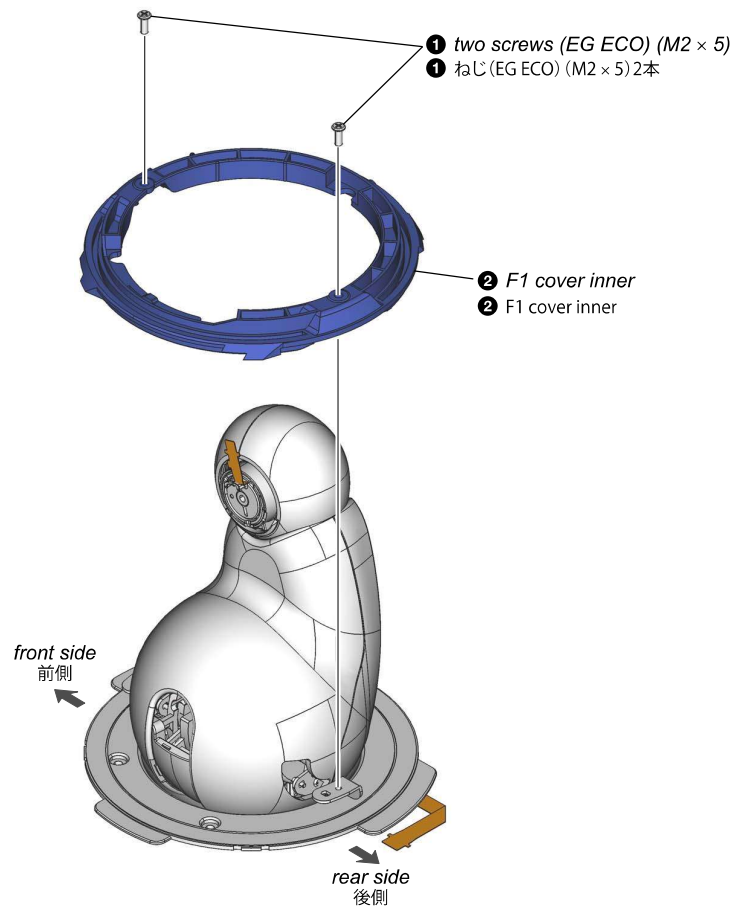
### 1-2-50. FL3/FR3 BASE O

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



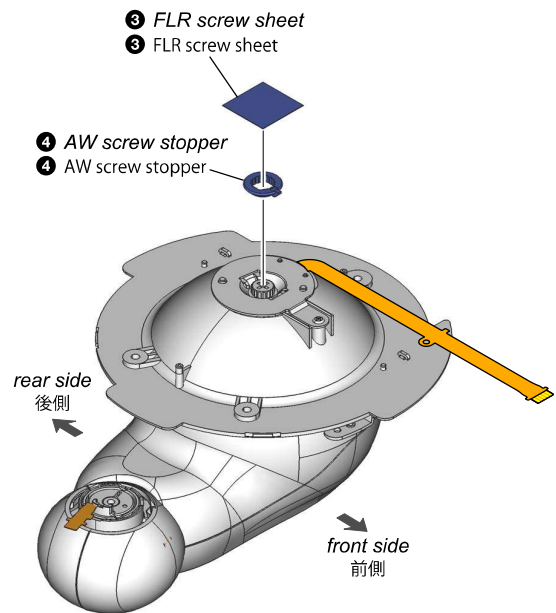
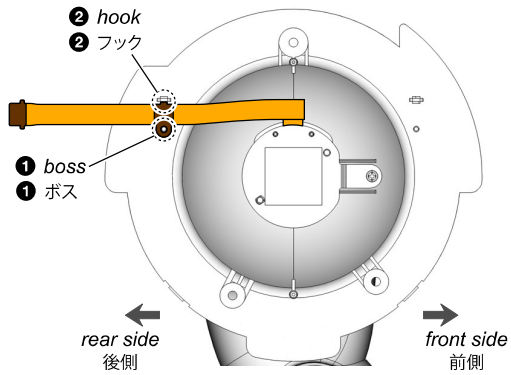
**1-2-51. F1 COVER INNER**

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.

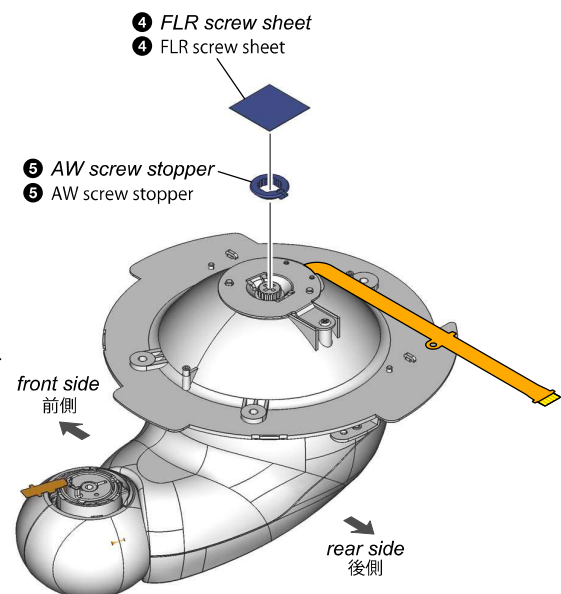
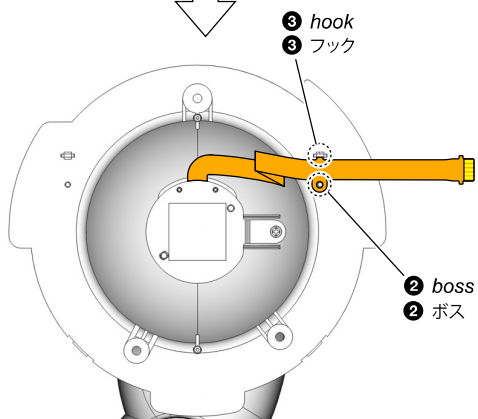
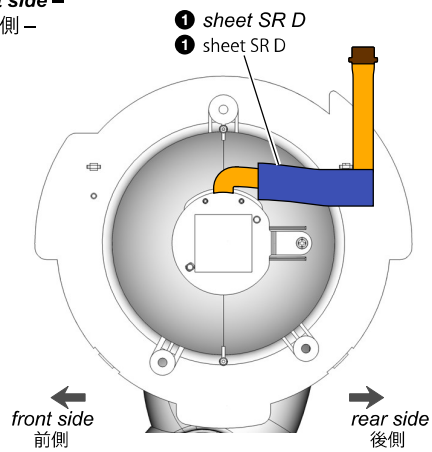


## 1-2-52. AW SCREW STOPPER

– Left side –  
– 左側 –

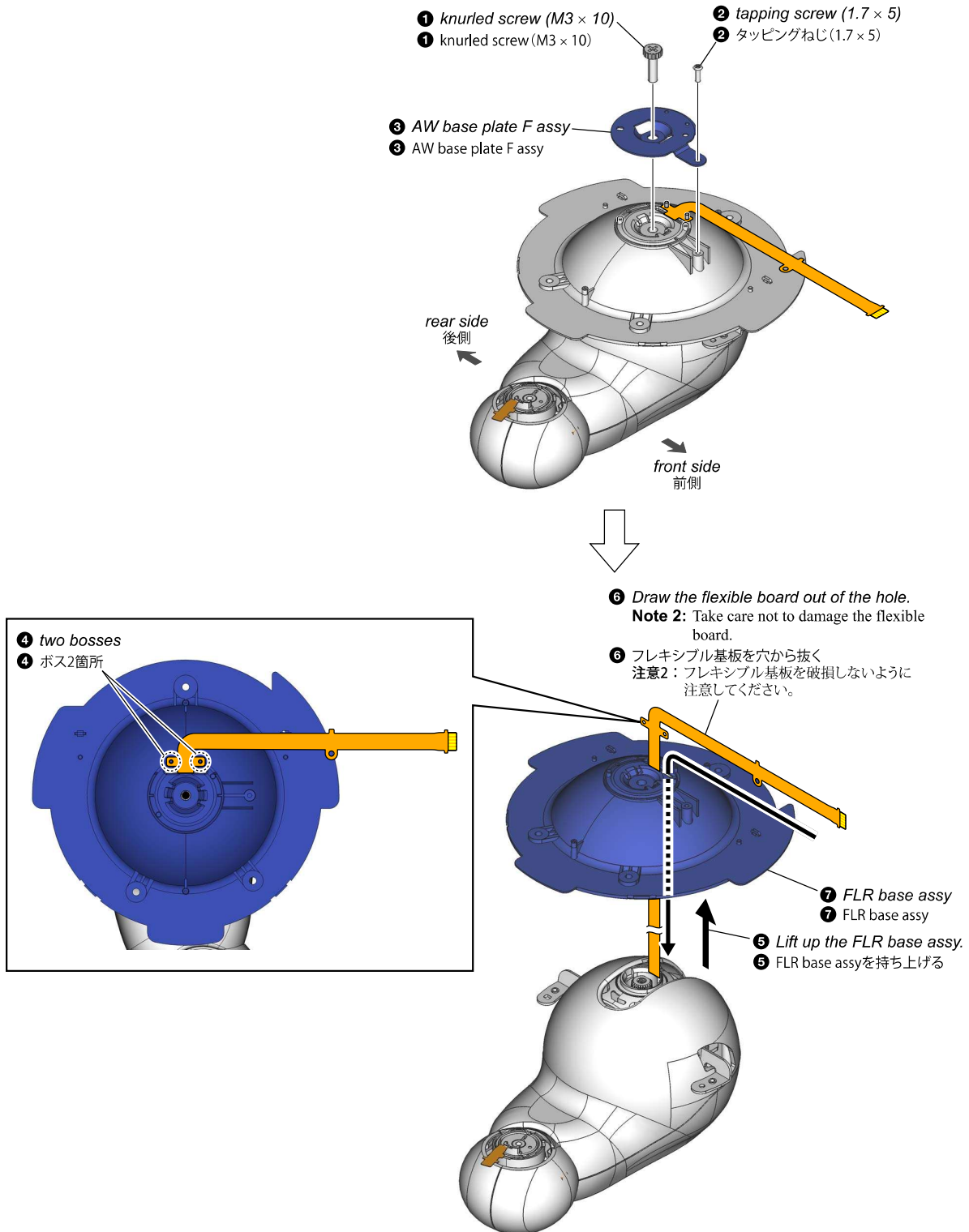


– Right side –  
– 右側 –

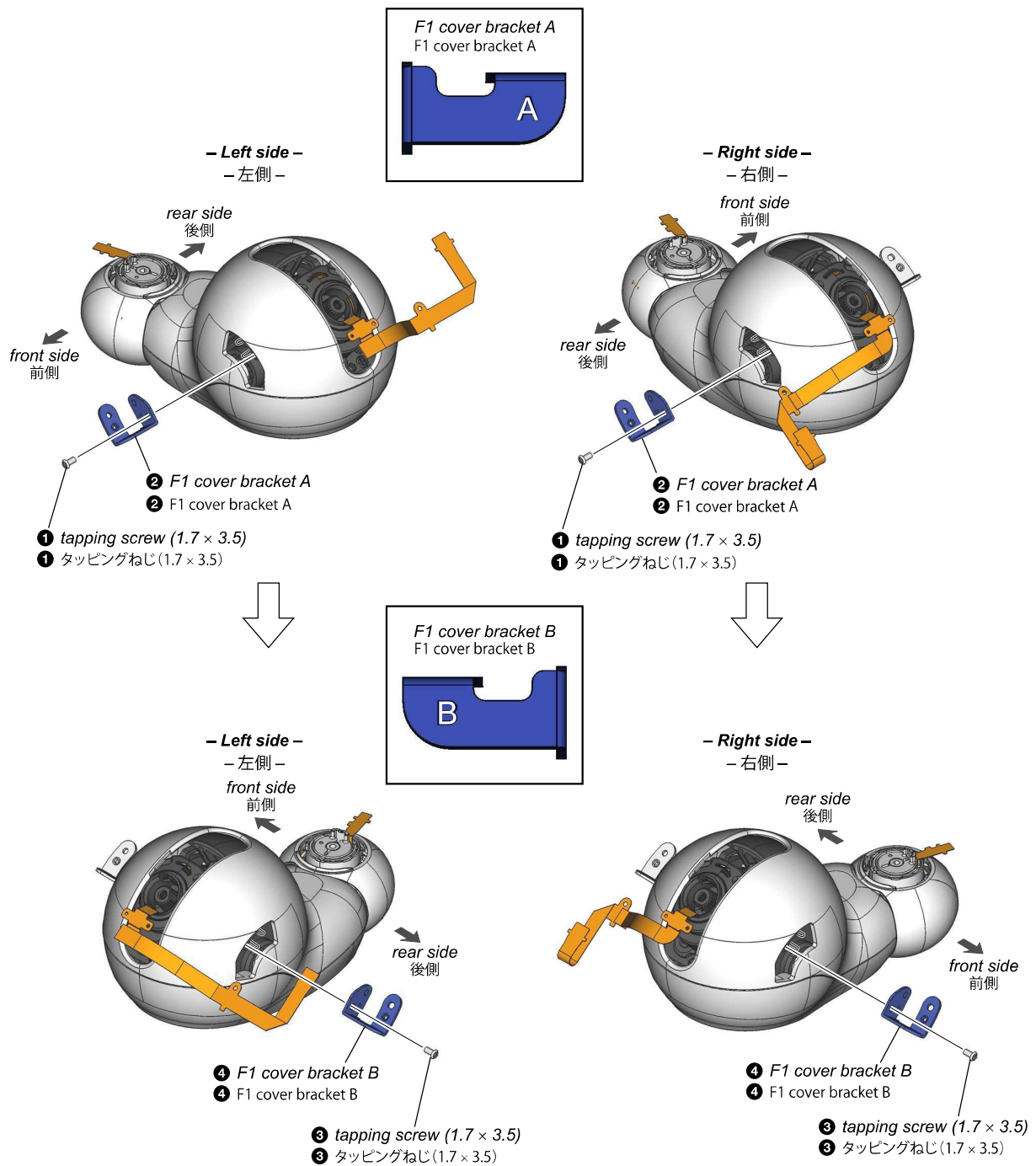


## 1-2-53. FLR BASE ASSY

**Note 1:** The illustration uses the left side, but there is no difference in disassembly for the left and right.

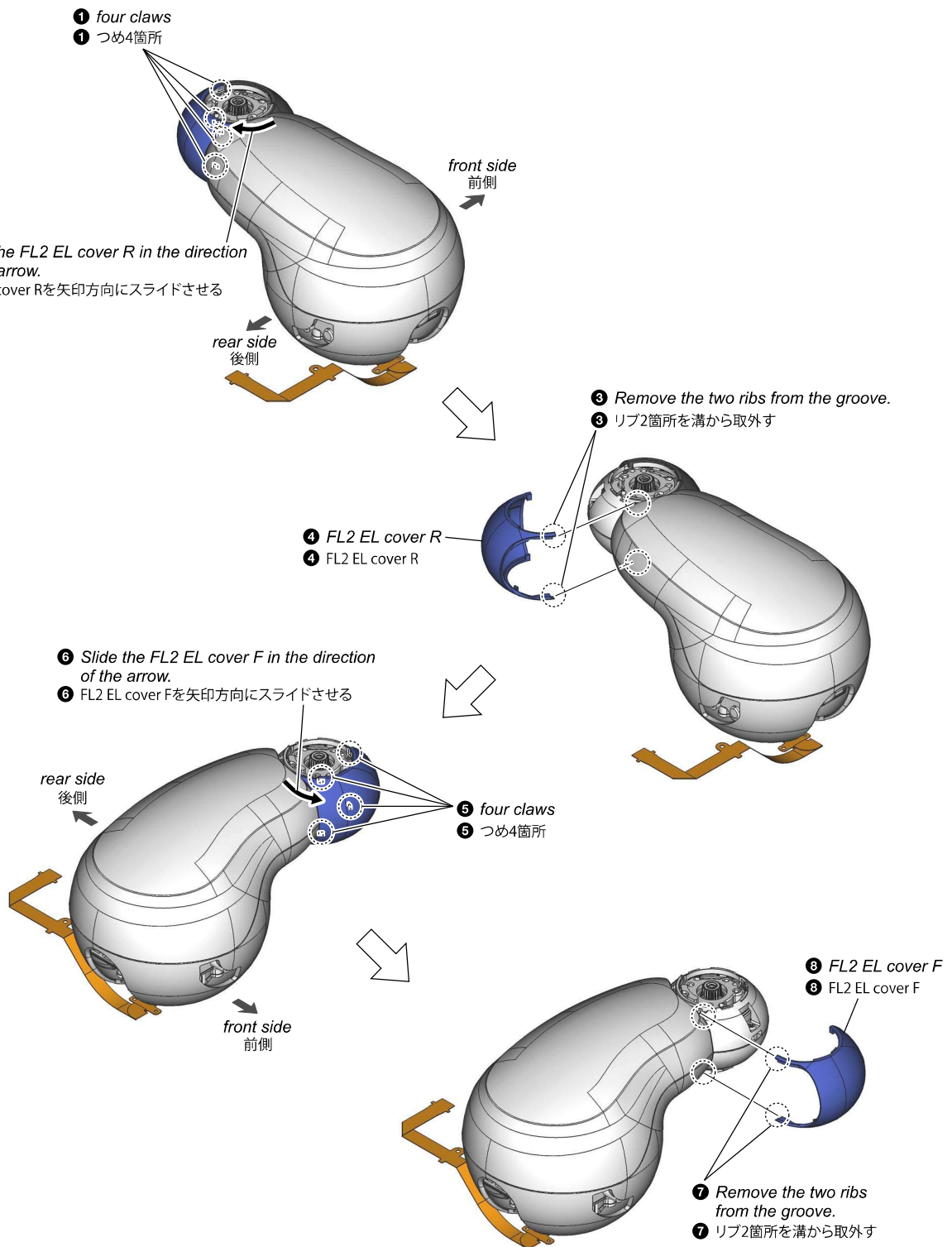


## 1-2-54. F1 COVER BRACKET A/B



## 1-2-55. FL2 EL COVER F/R

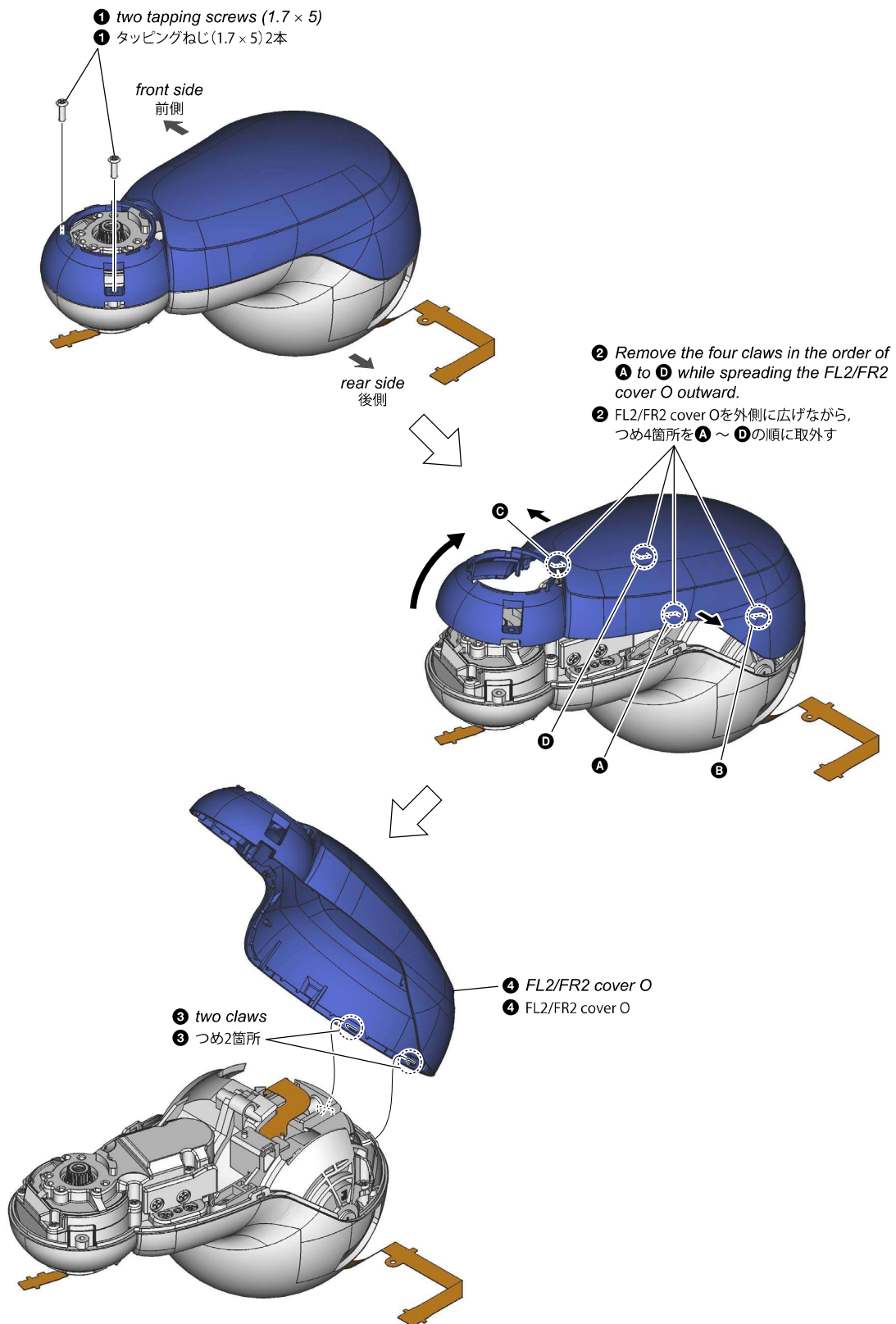
Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.





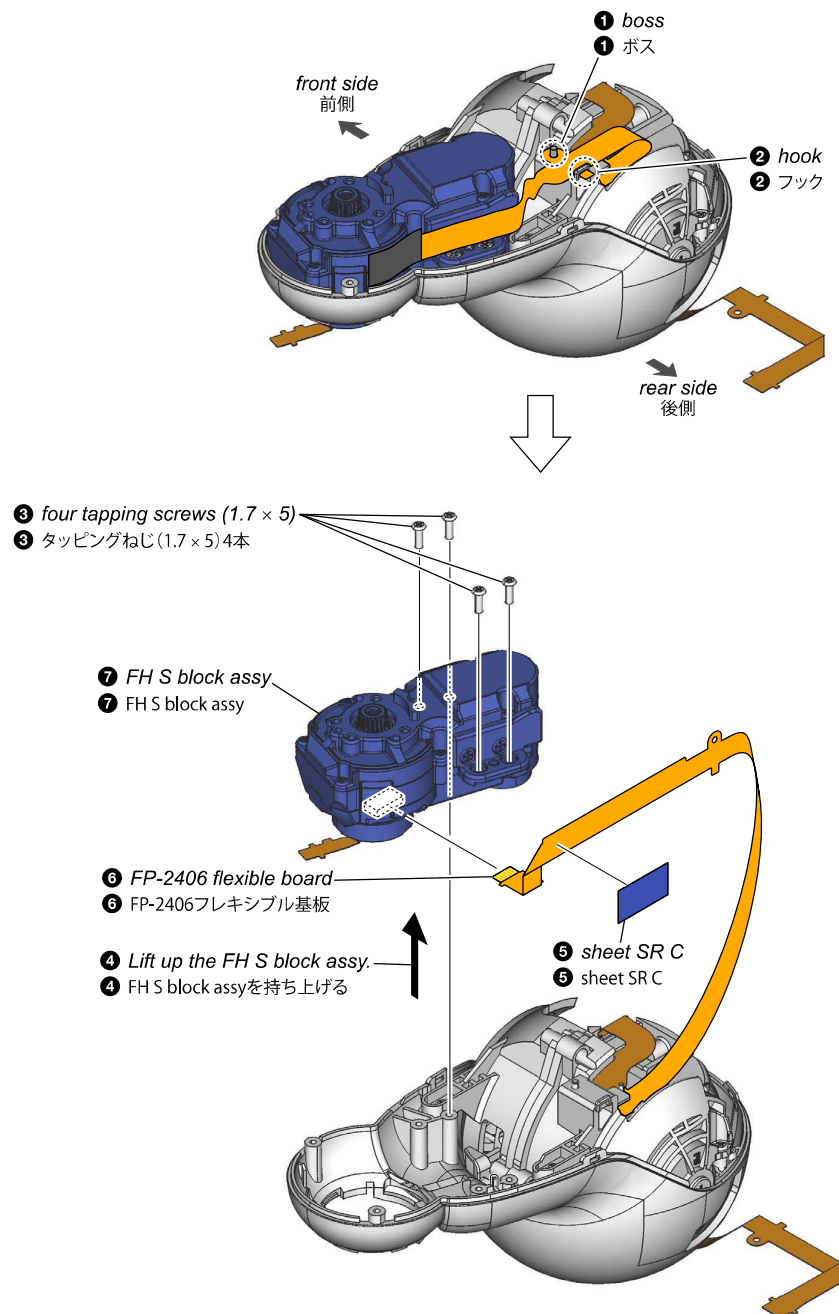
## 1-2-56. FL2/FR2 COVER O

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



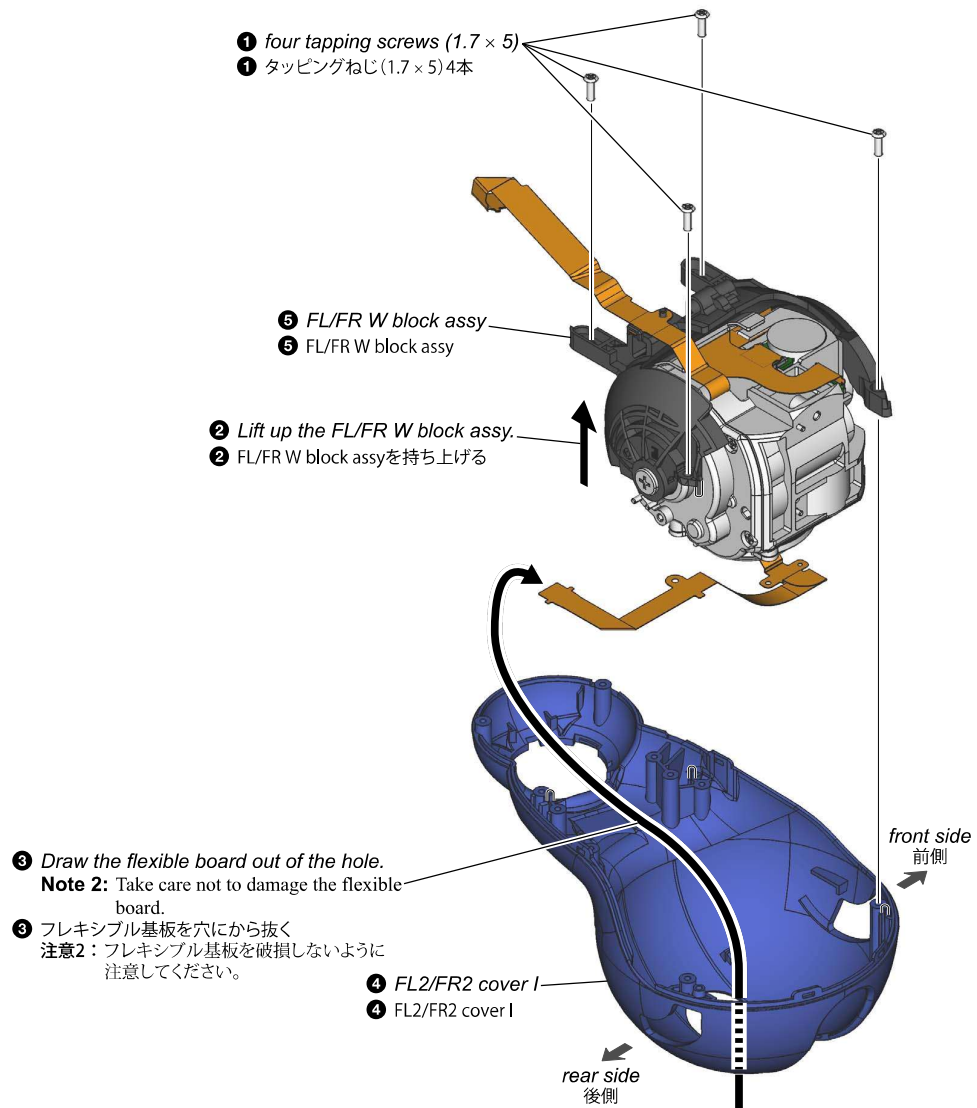
## 1-2-57. FH S BLOCK ASSY

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.

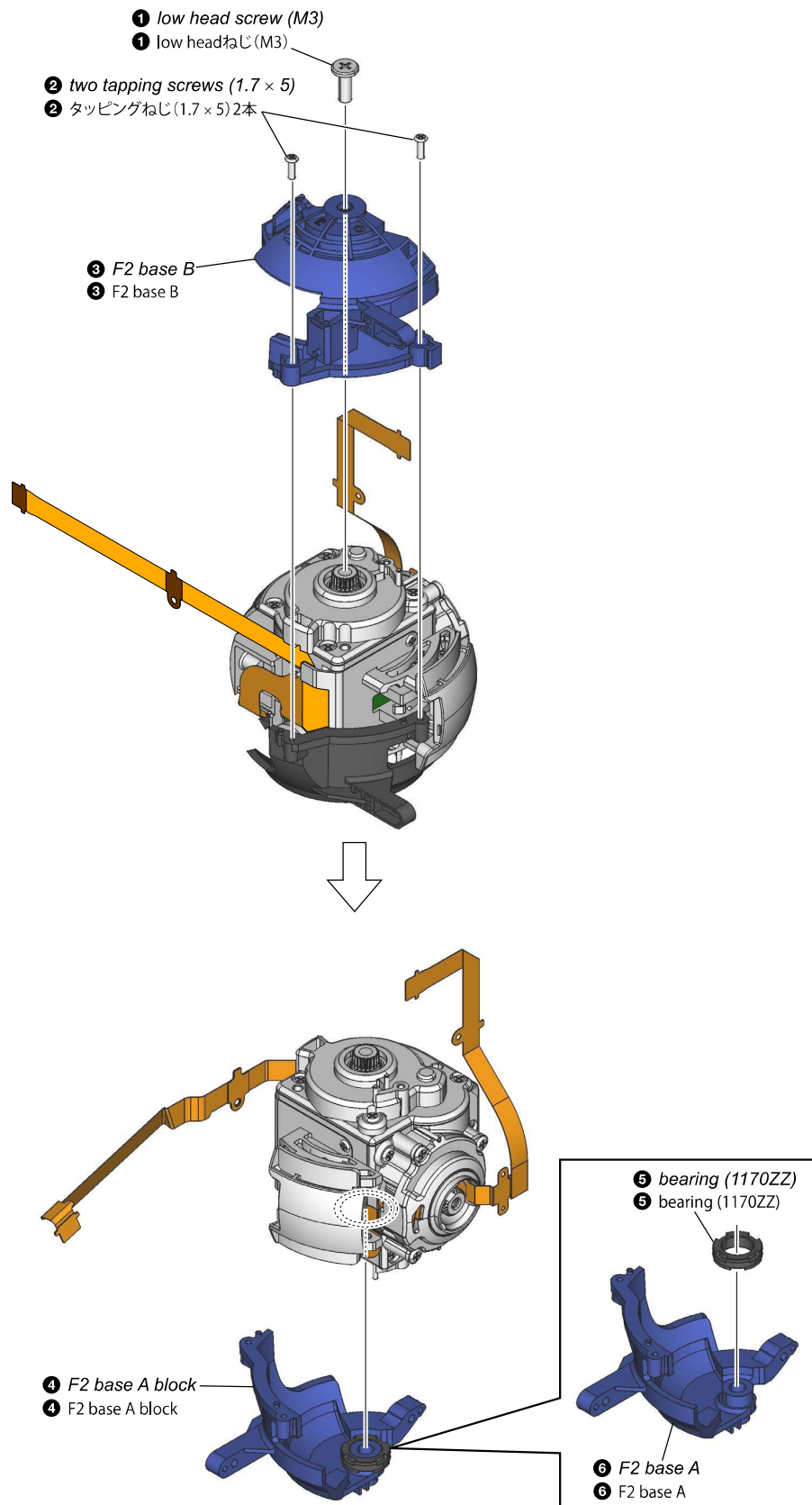


## 1-2-58. FL2/FR2 COVER I, FL/FR W BLOCK ASSY

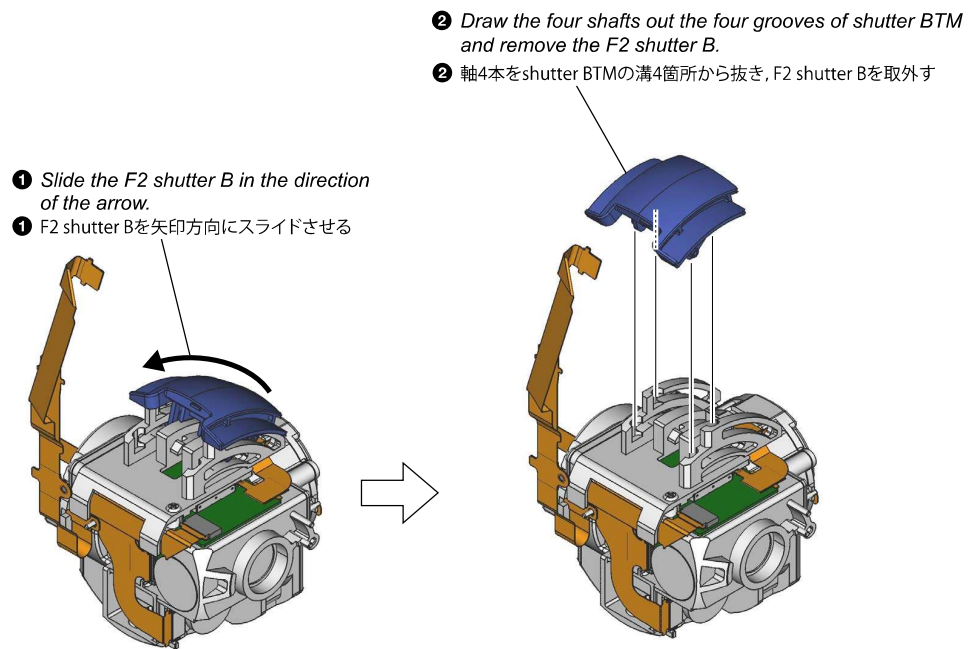
**Note 1:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



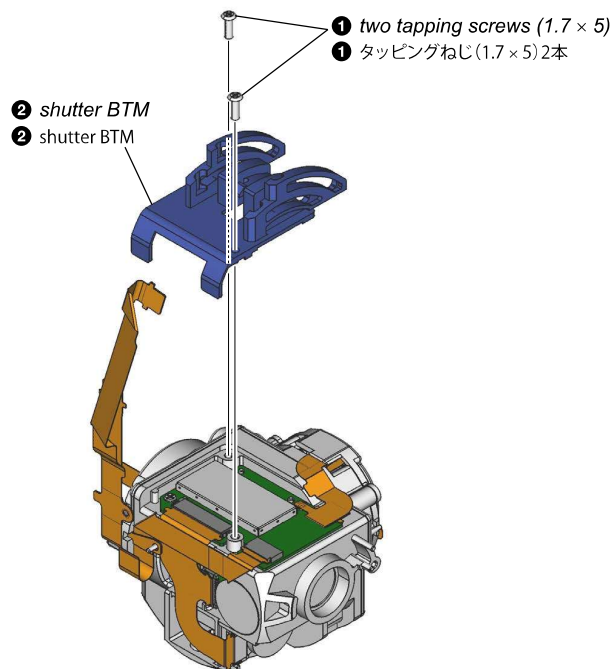
## 1-2-59. F2 BASE A/B



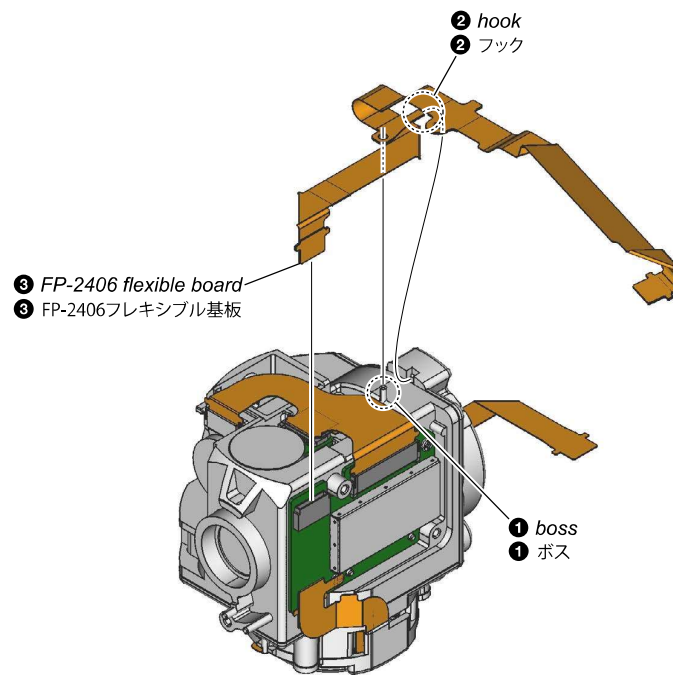
## 1-2-60. F2 SHUTTER B



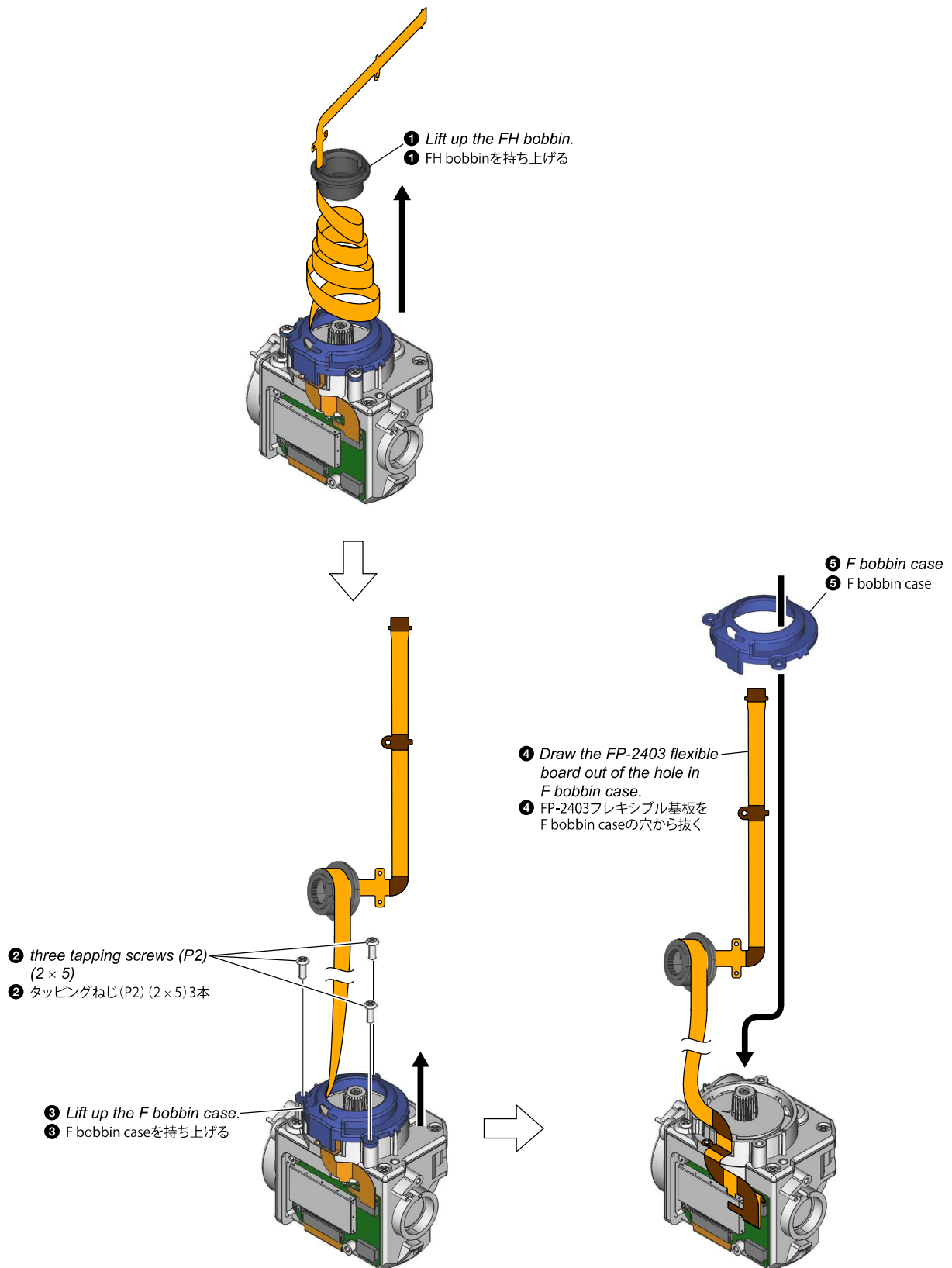
## 1-2-61. SHUTTER BTM



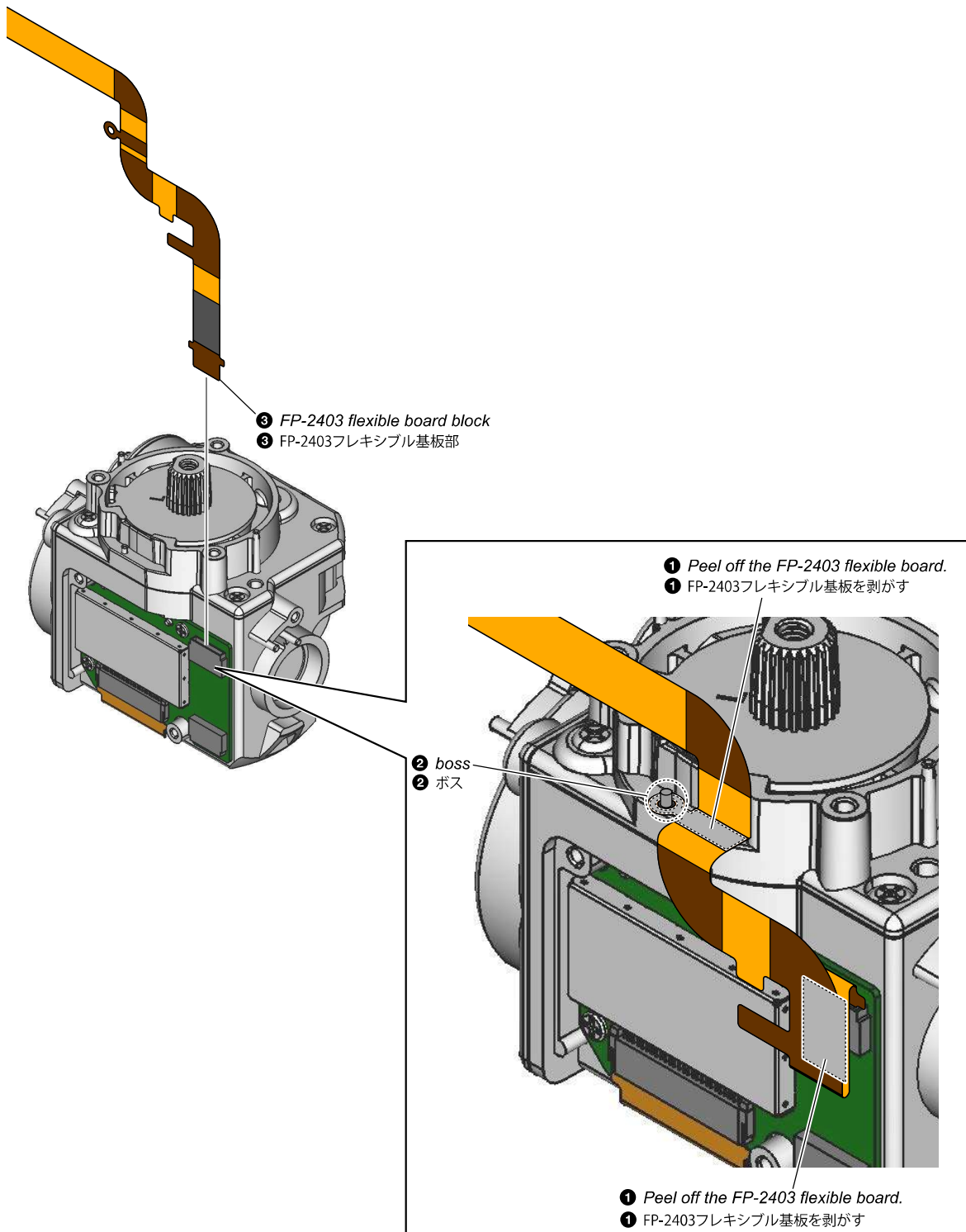
## 1-2-62. FP-2406 FLEXIBLE BOARD



## 1-2-63. F BOBBIN CASE

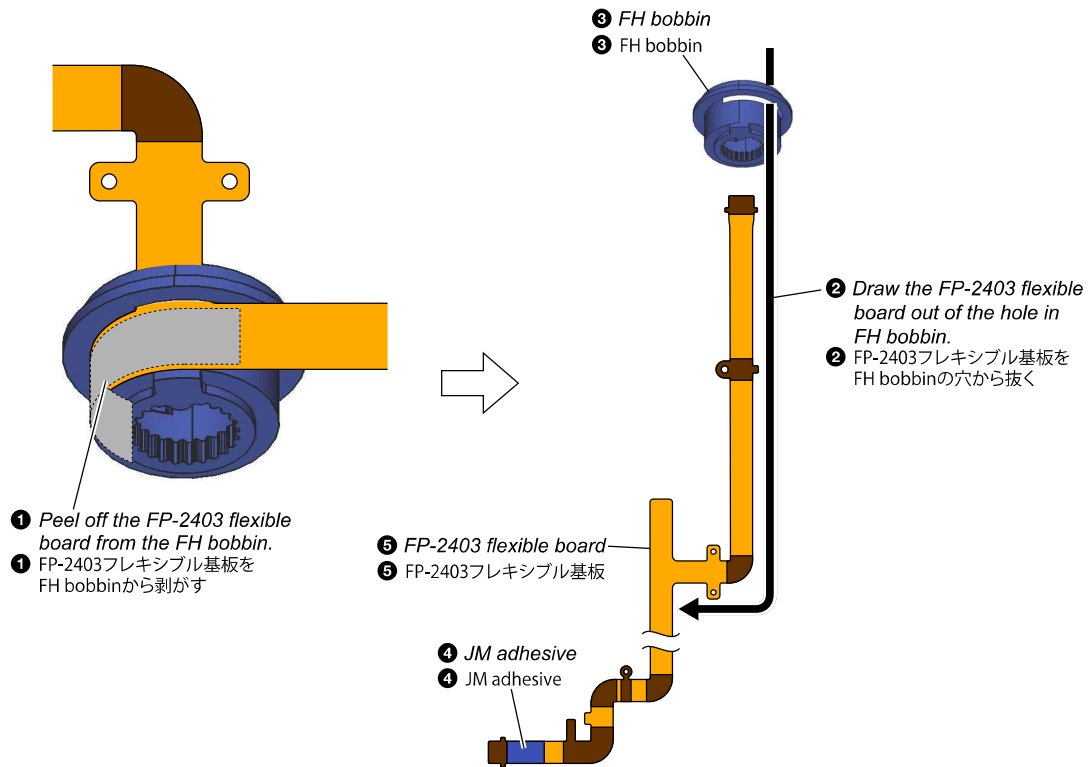


## 1-2-64. FP-2403 FLEXIBLE BOARD BLOCK



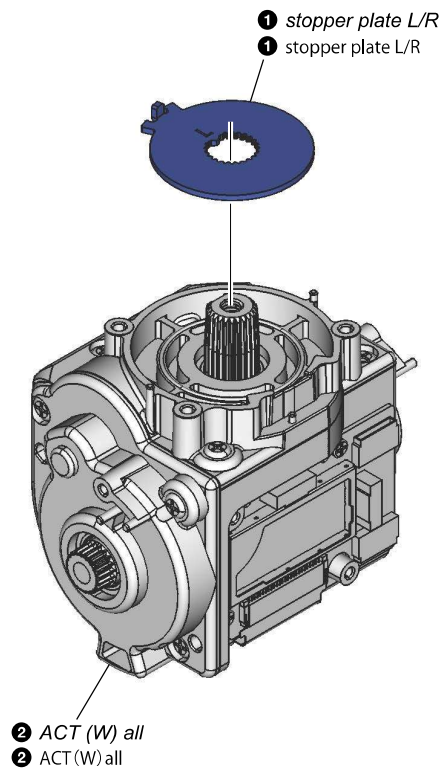


## 1-2-65. FH BOBBIN, FP-2403 FLEXIBLE BOARD



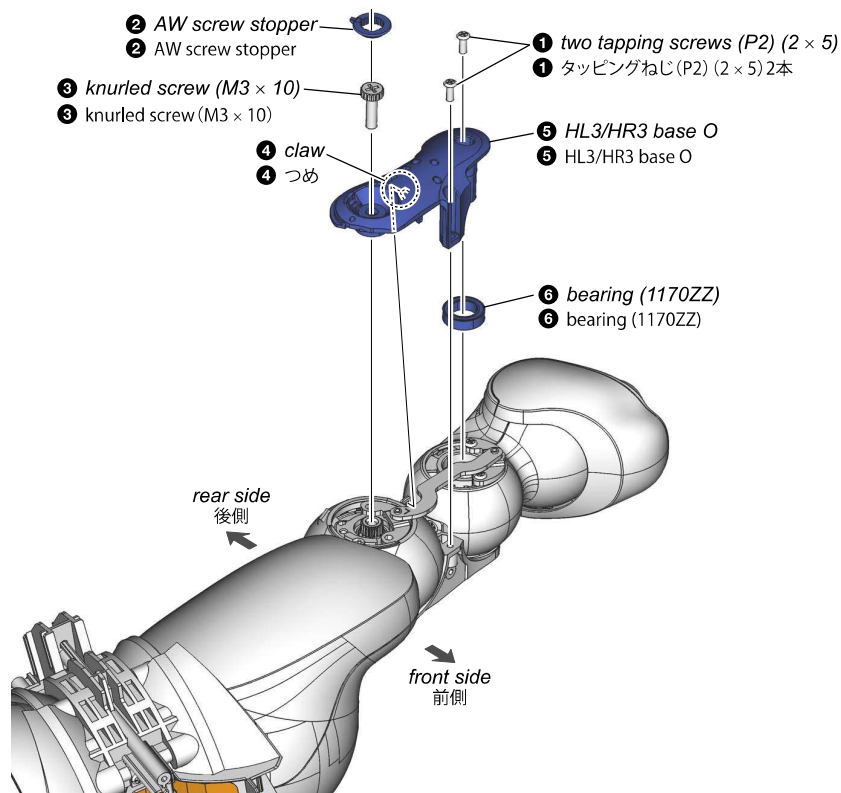
## 1-2-66. STOPPER PLATE L/R, ACT (W) ALL

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



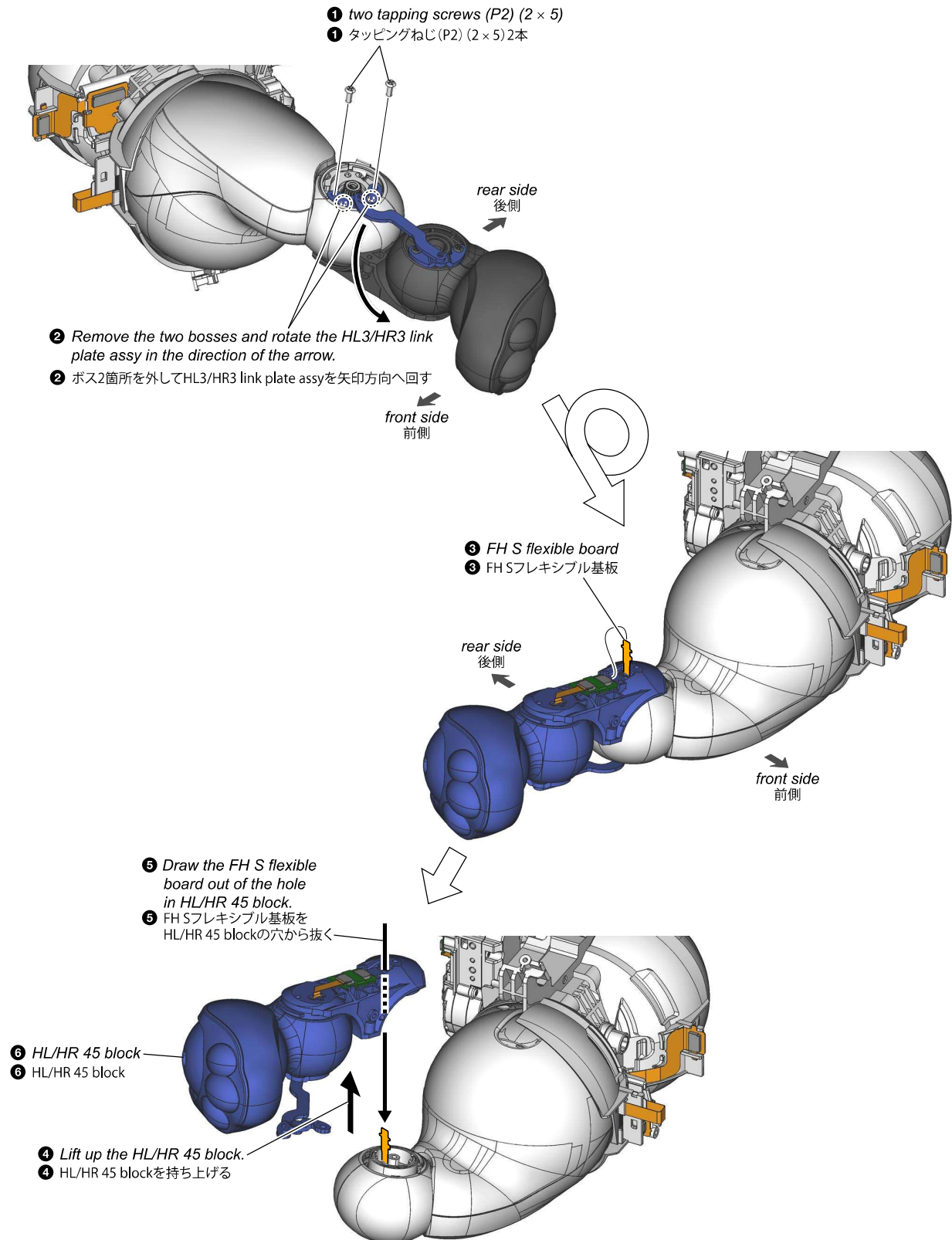
## 1-2-67. HL3/HR3 BASE O

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



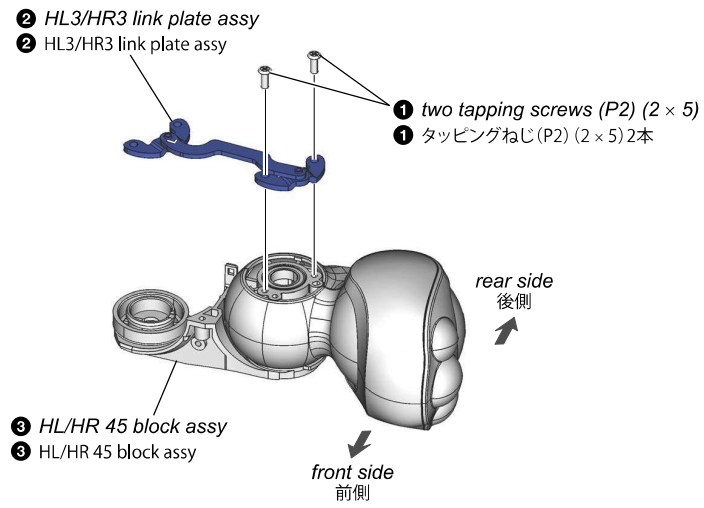
## 1-2-68. HL/HR 45 BLOCK

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



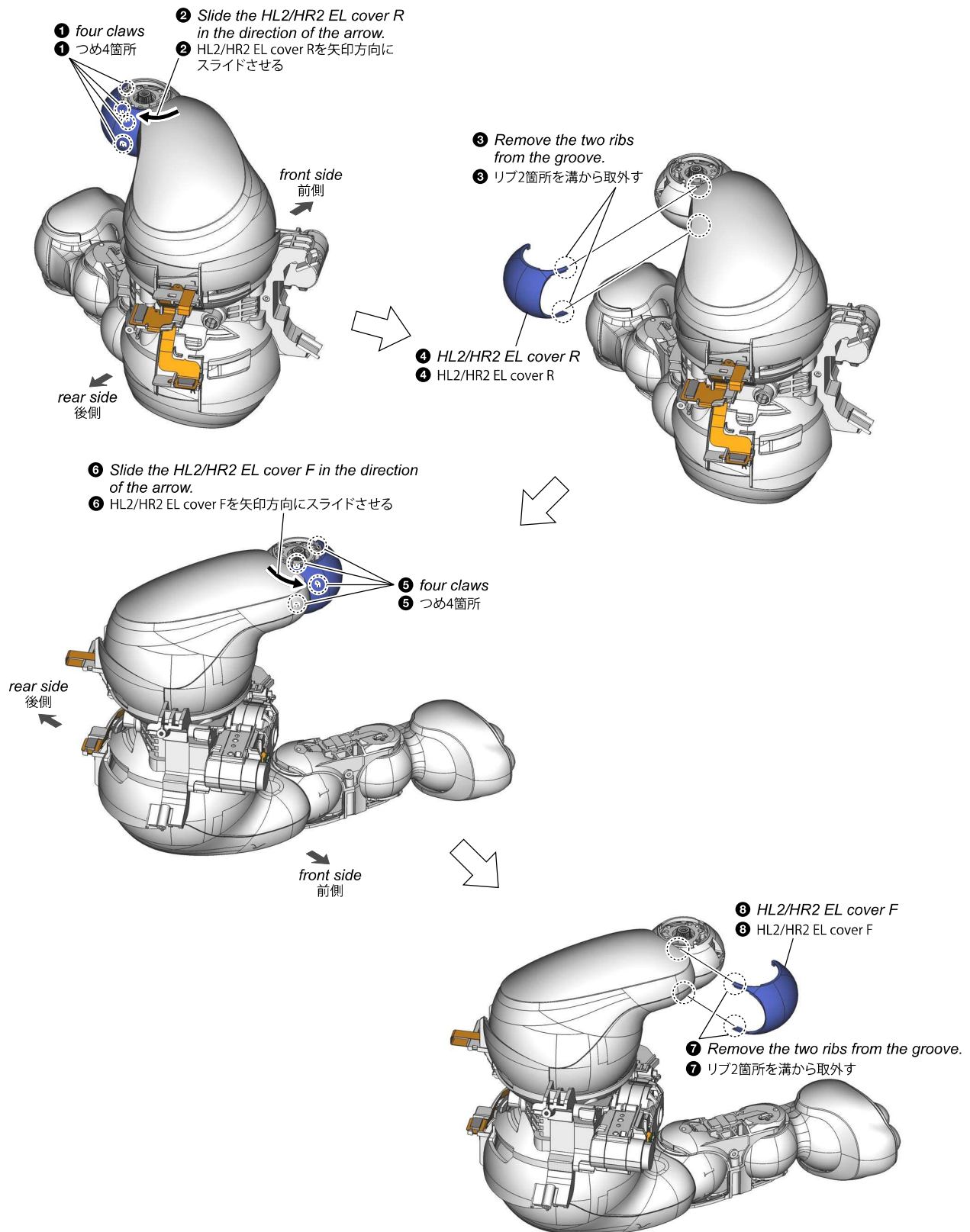
**1-2-69. HL3/HR3 LINK PLATE ASSY, HL/HR 45 BLOCK ASSY**

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



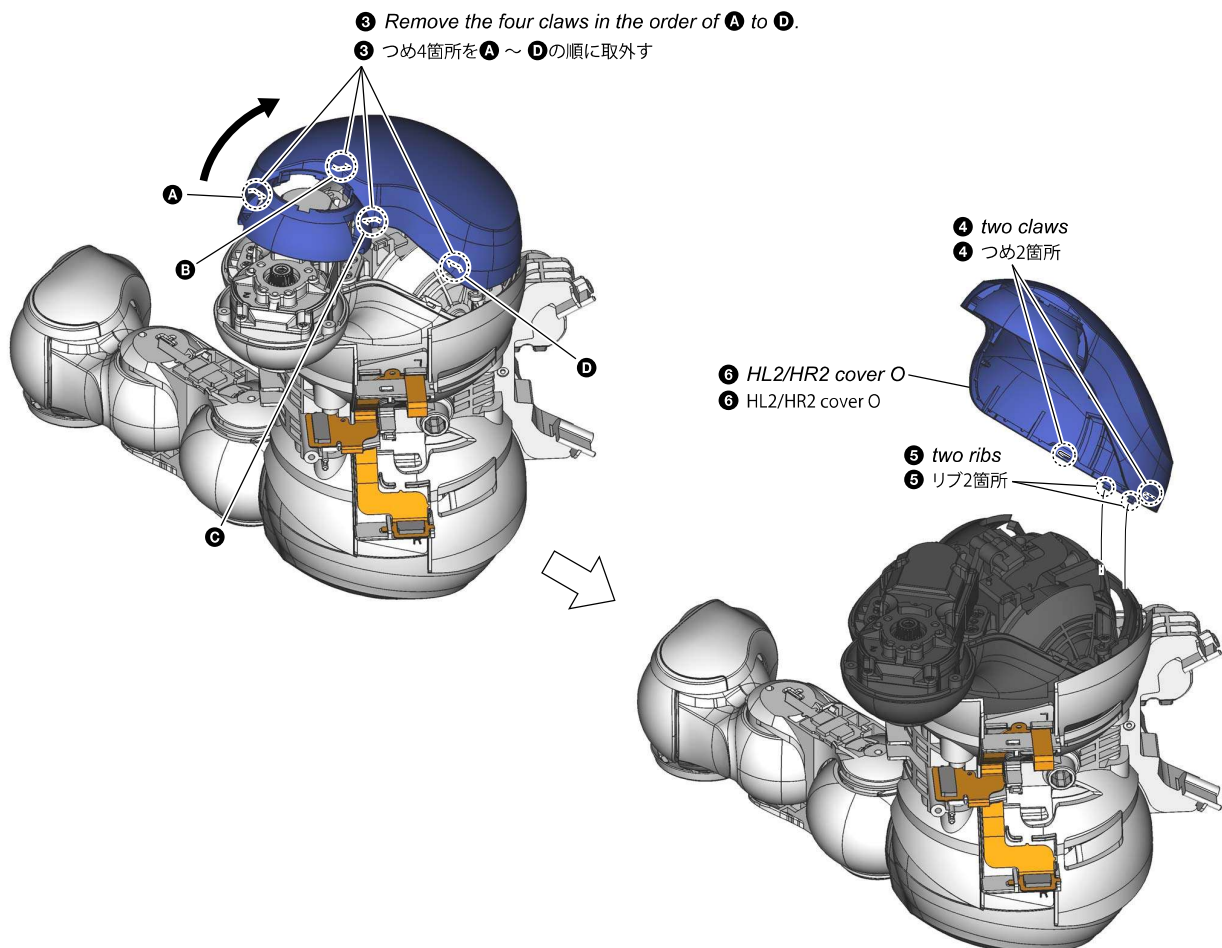
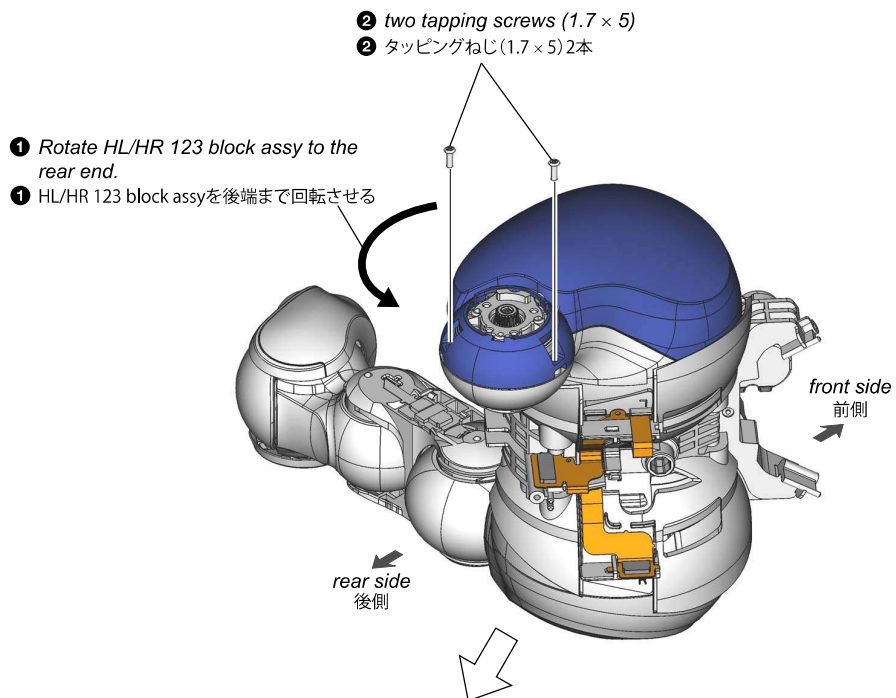
## 1-2-70. HL2/HR2 EL COVER F/R

**Note:** The illustration uses the left side, but there is no difference in disassembly for the left and right.



## 1-2-71. HL2/HR2 COVER O

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.

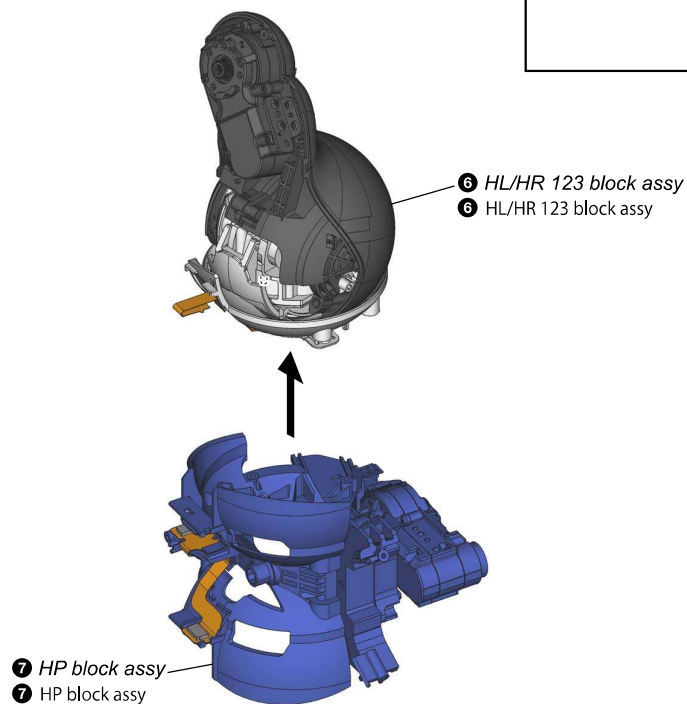
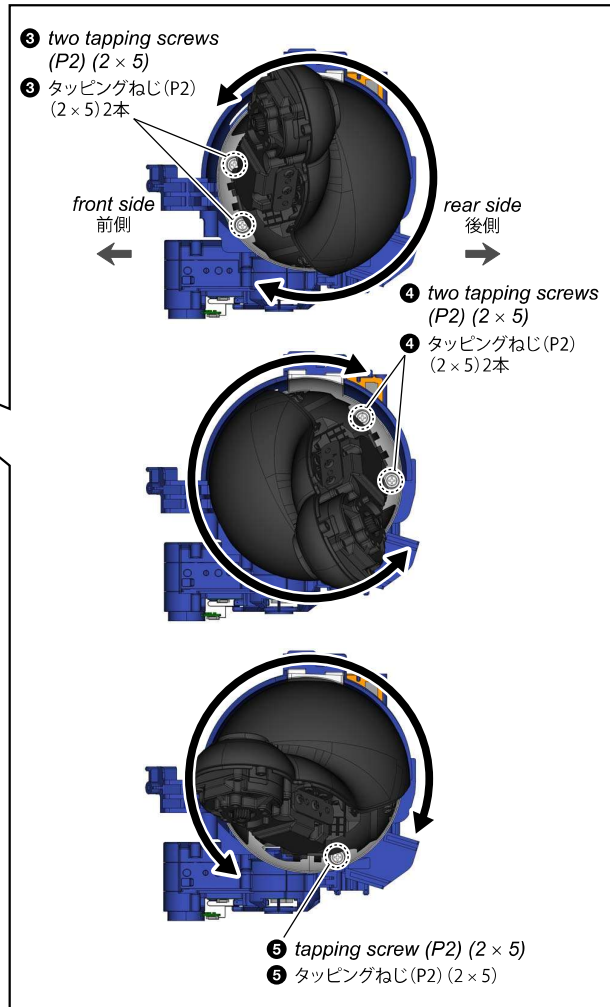
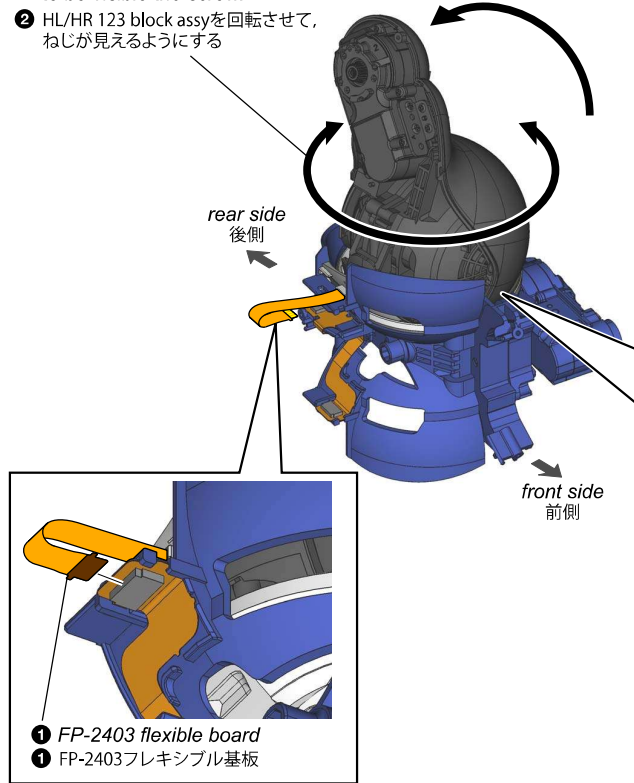


## 1-2-72. HL/HR 123 BLOCK ASSY, HP BLOCK ASSY

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.

- ② Rotate the HL/HR 123 block assy to be visible the screw.

- ② HL/HR 123 block assyを回転させて、ねじが見えるようにする



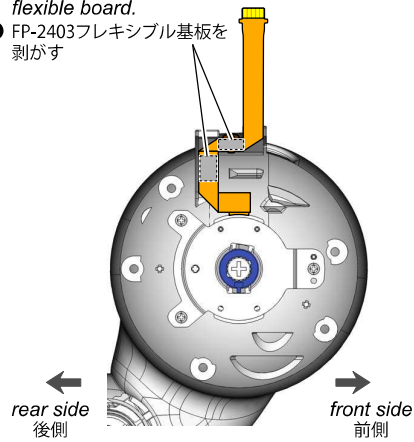
## 1-2-73. AW SCREW STOPPER

- Left side -

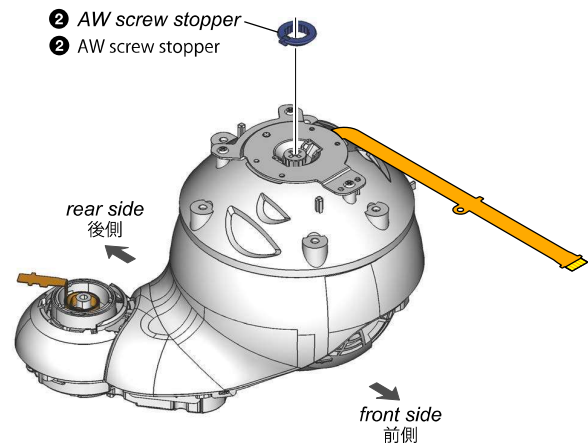
- 左側 -

- 1 Peel off the FP-2403 flexible board.

- 1 FP-2403フレキシブル基板を剥がす



- 2 AW screw stopper
- 2 AW screw stopper

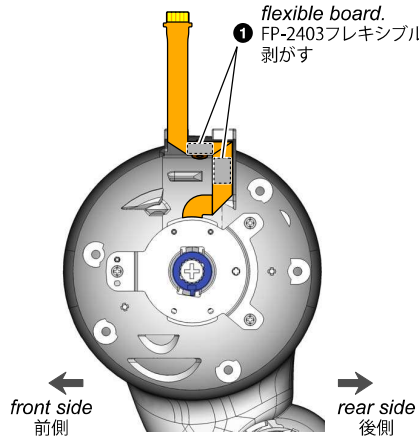


- Right side -

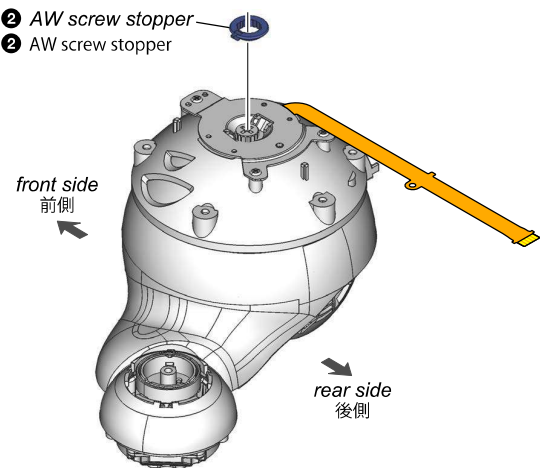
- 右側 -

- 1 Peel off the FP-2403 flexible board.

- 1 FP-2403フレキシブル基板を剥がす



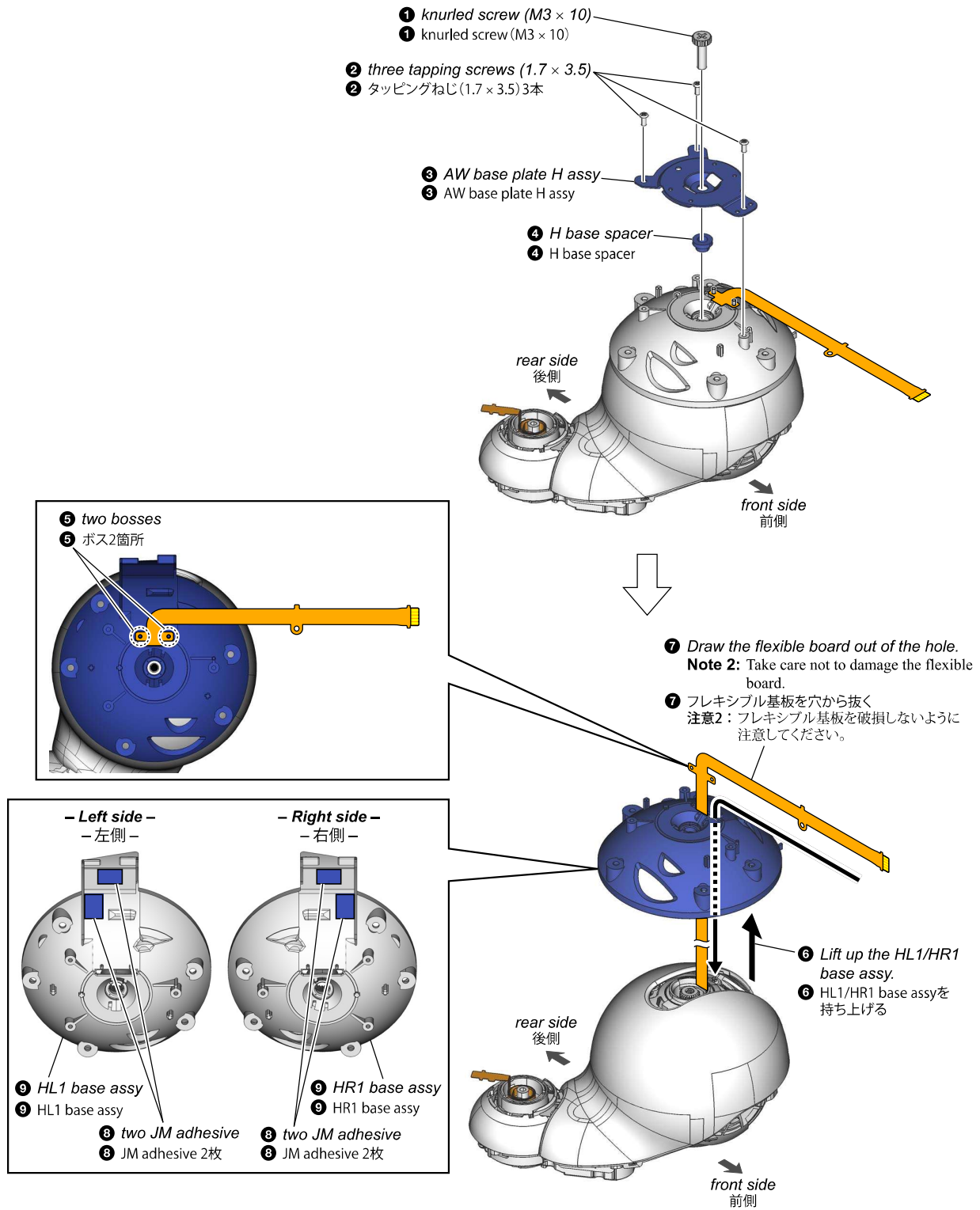
- 2 AW screw stopper
- 2 AW screw stopper





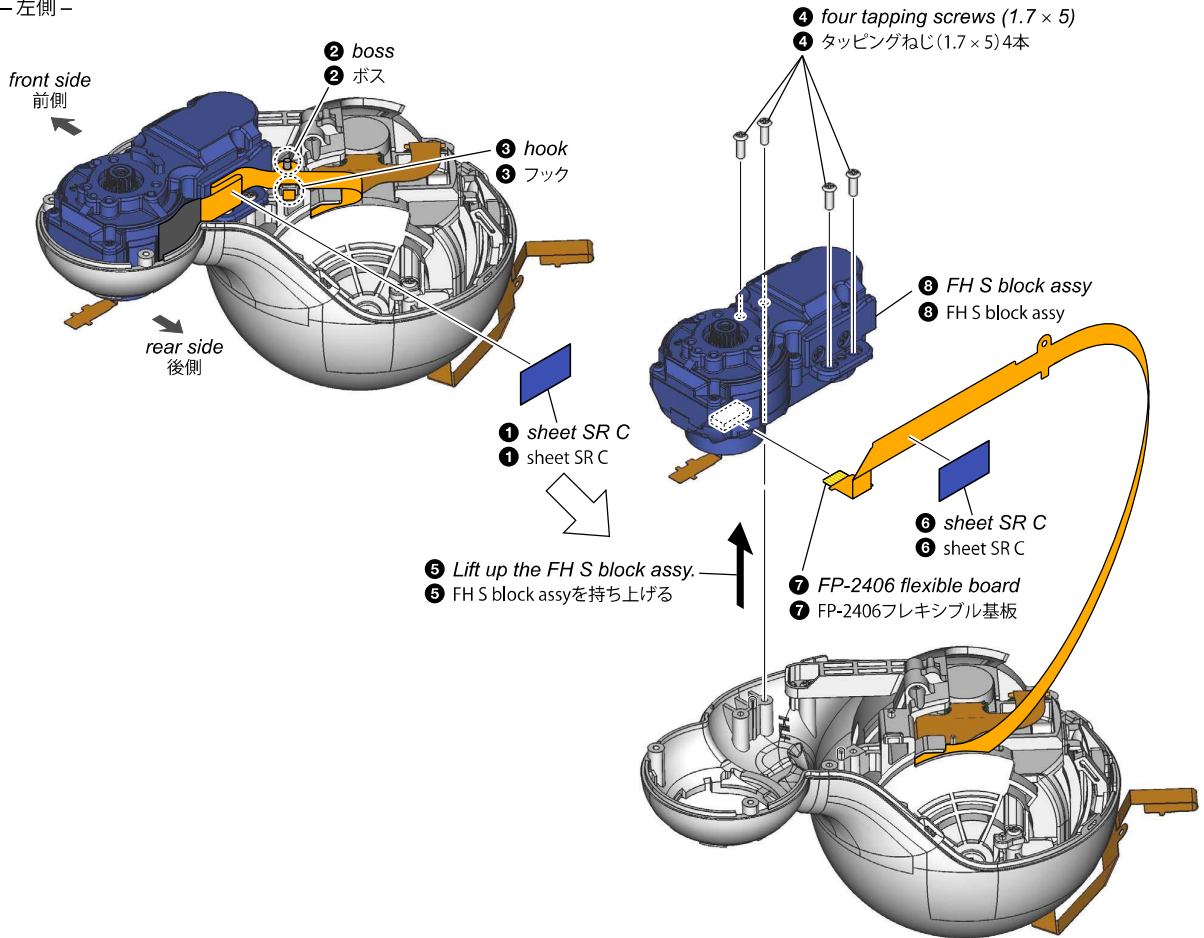
## 1-2-74. HL1/HR1 BASE ASSY

**Note 1:** The illustration uses the left side, but there is no difference in disassembly for the left and right.

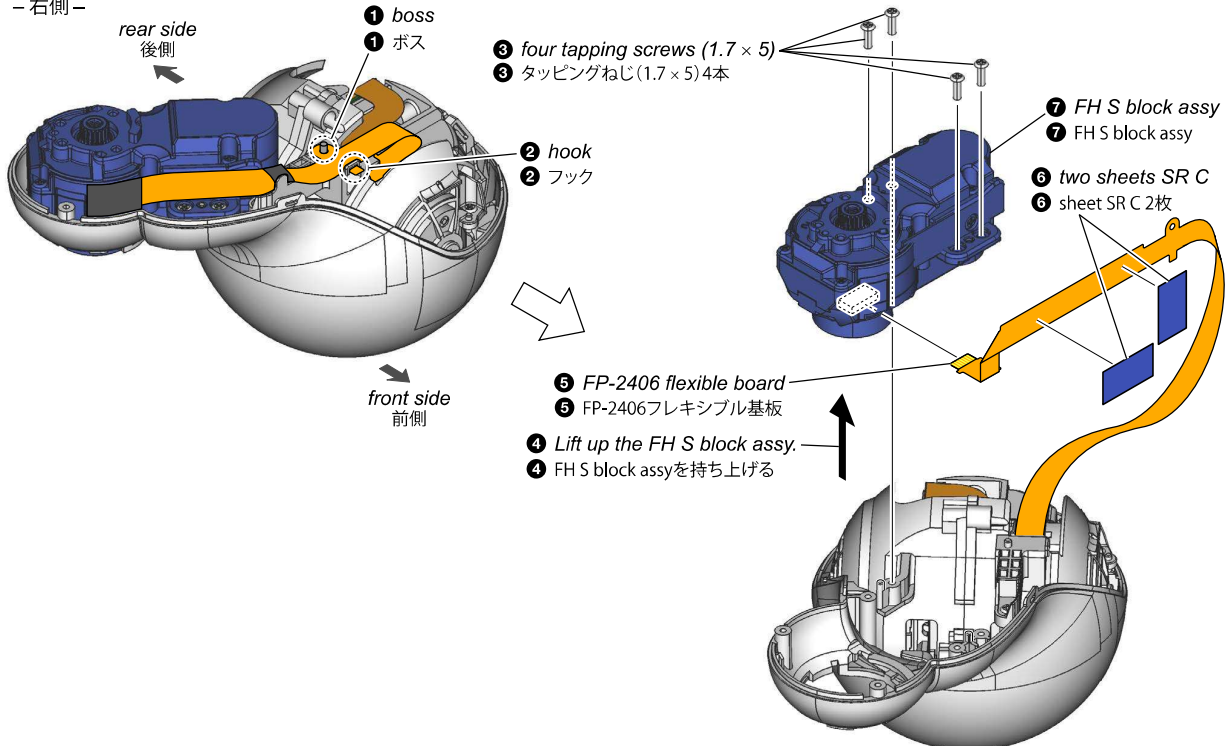


1-2-75. FH S BLOCK ASSY

- Left side -  
- 左側 -

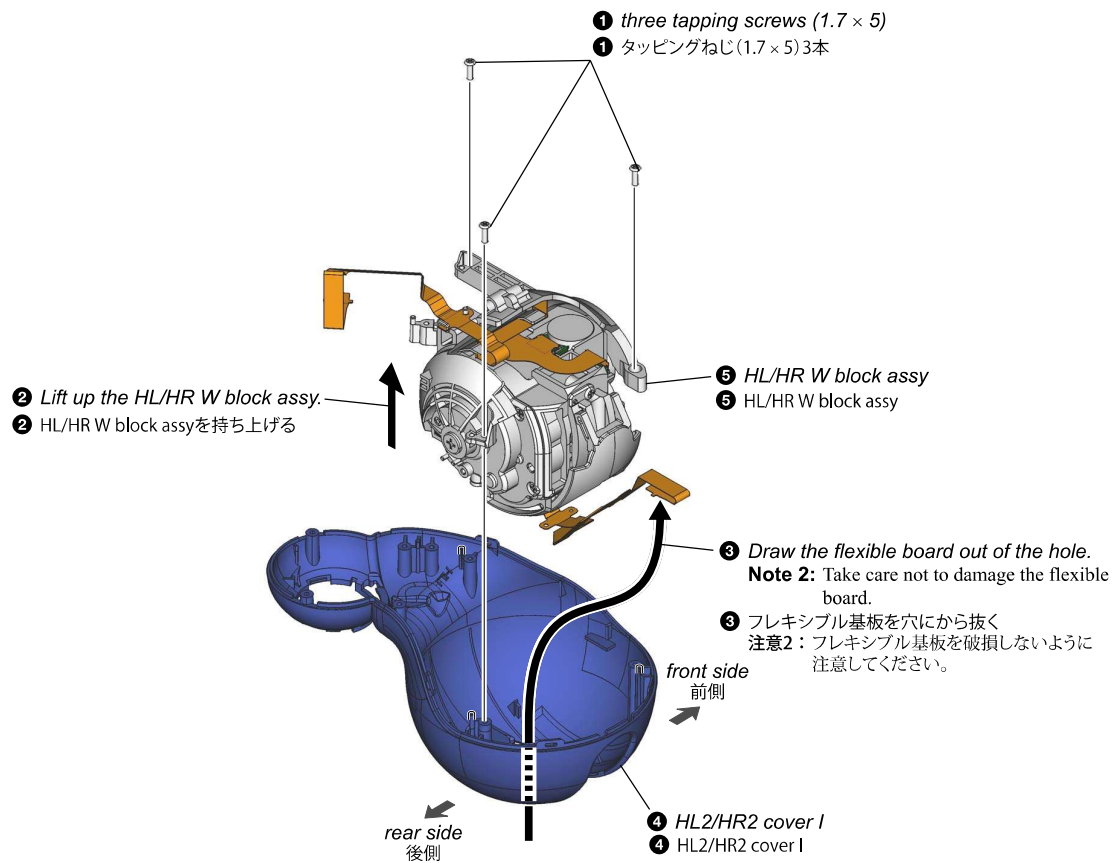


- Right side -  
- 右側 -



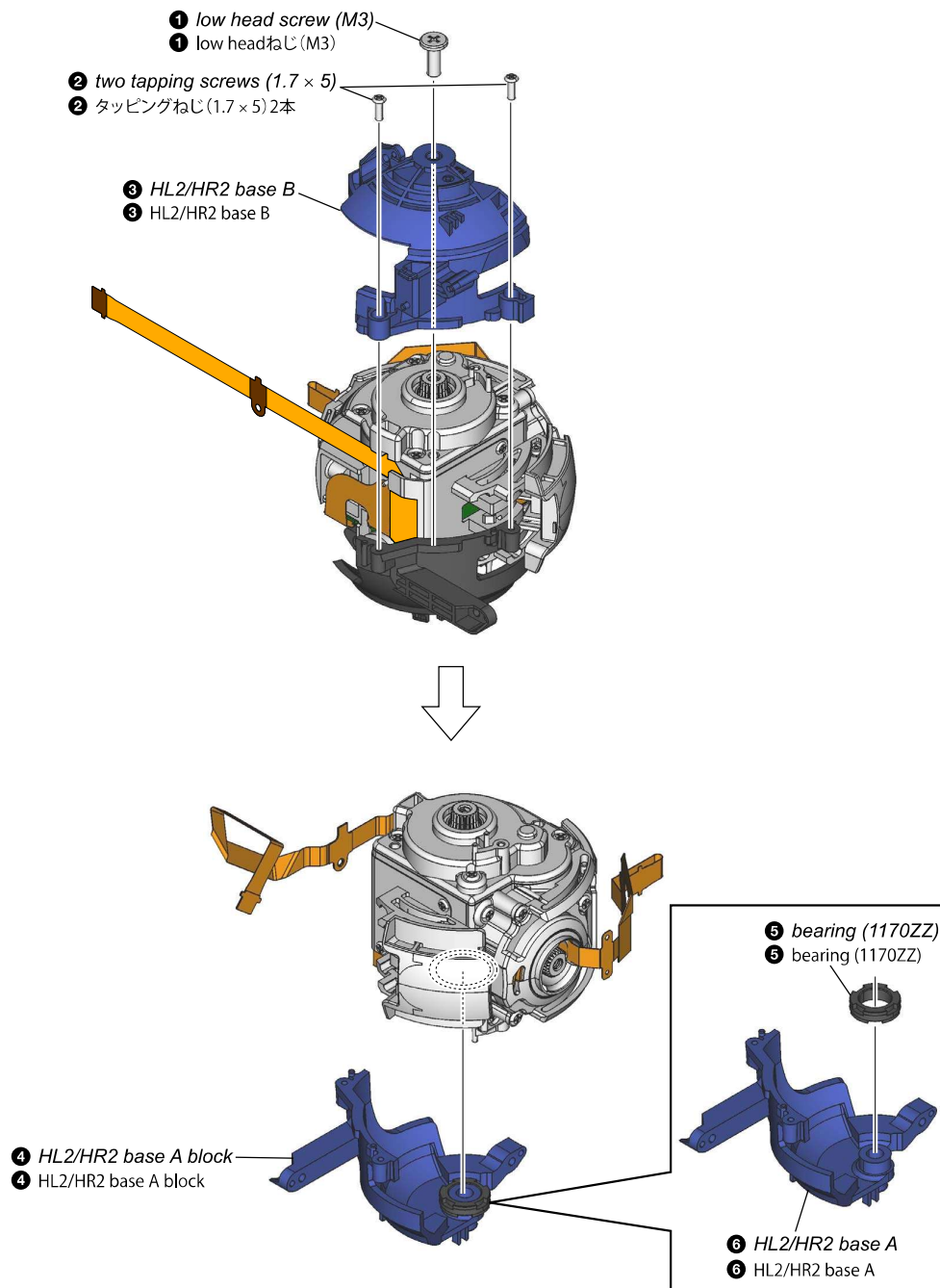
## 1-2-76. HL2/HR2 COVER I, HL/HR W BLOCK ASSY

**Note 1:** The illustration uses the left side, but there is no difference in disassembly for the left and right.

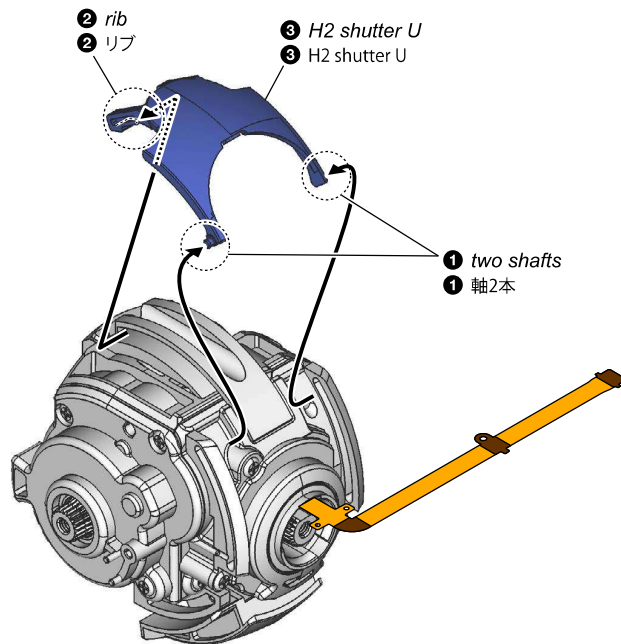


## 1-2-77. HL2/HR2 BASE A/B

Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



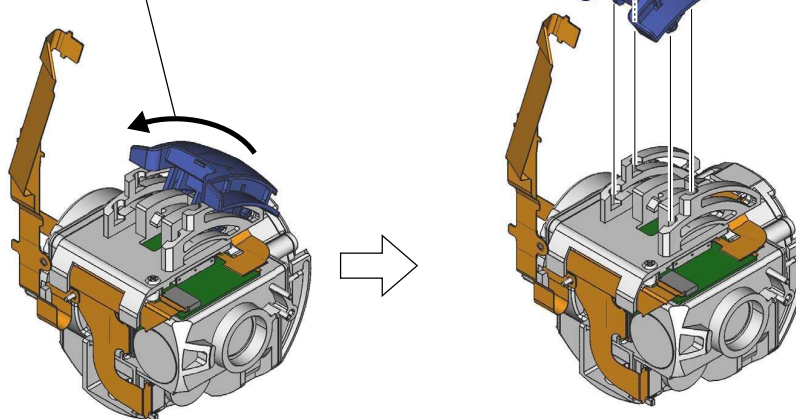
## 1-2-78. H2 SHUTTER U



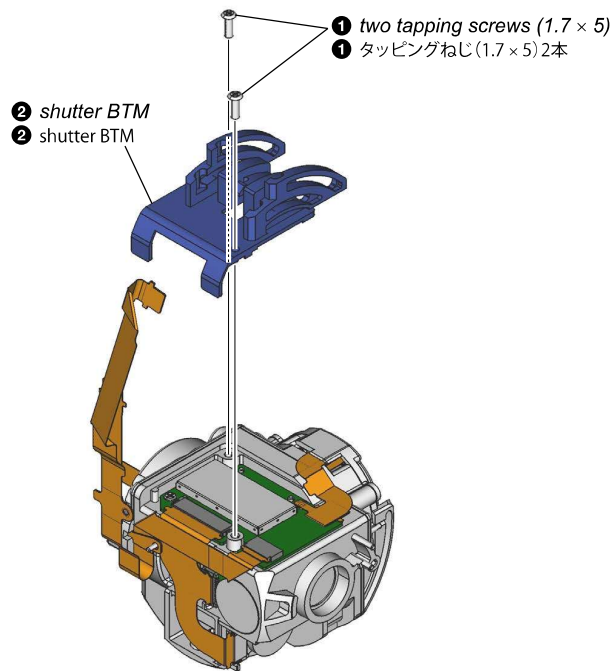
## 1-2-79. H2 SHUTTER B

- ② Draw the four shafts out the four grooves of shutter BTM and remove the H2 shutter B.  
② 軸4本を shutter BTM の溝4箇所から抜き、H2 shutter B を取外す

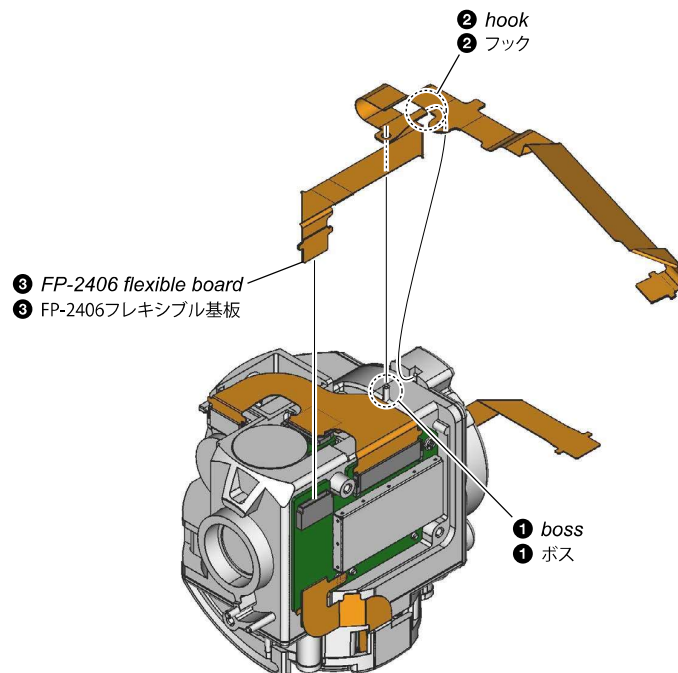
- ① Slide the H2 shutter B in the direction of the arrow.  
① H2 shutter B を矢印方向にスライドさせる



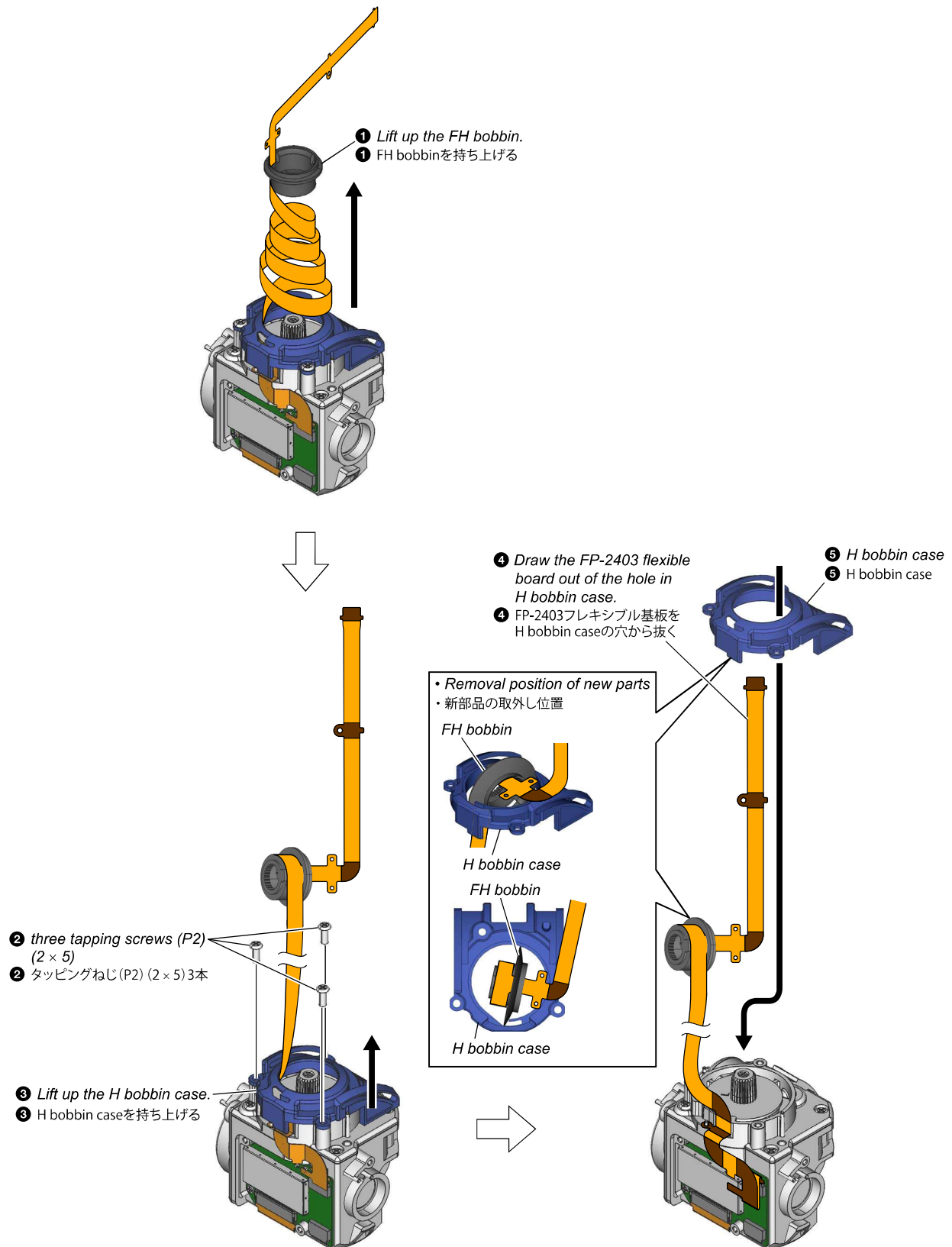
## 1-2-80. SHUTTER BTM



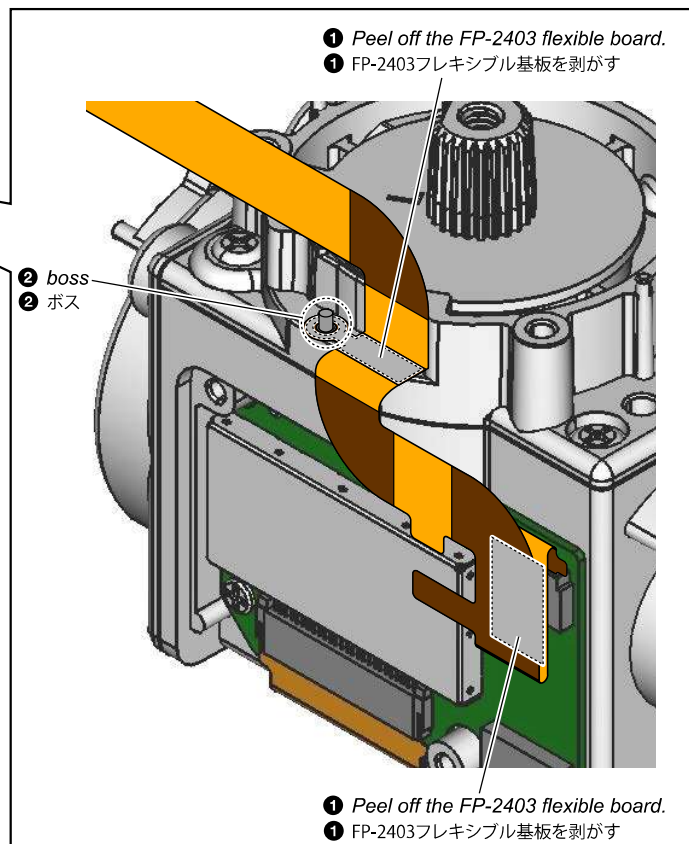
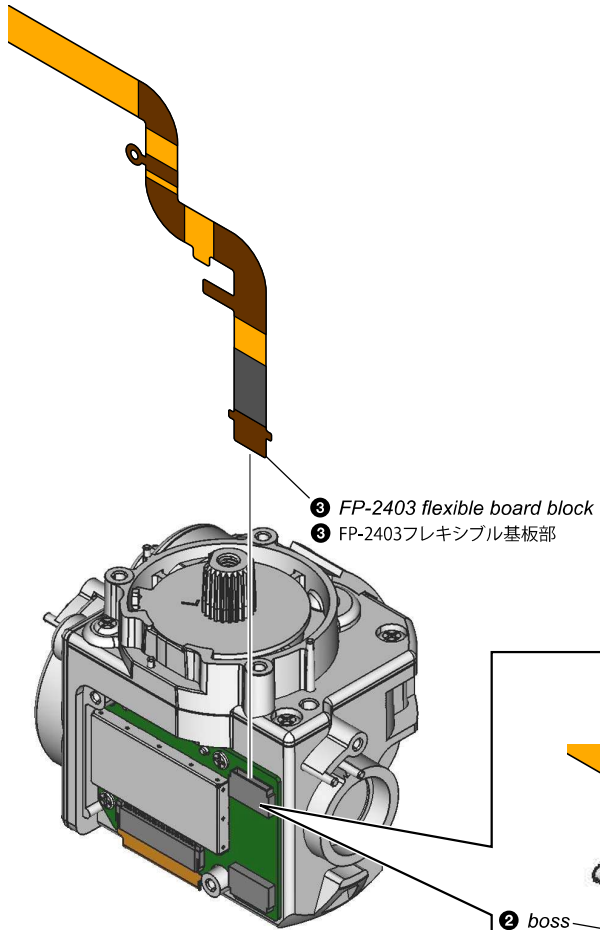
## 1-2-81. FP-2406 FLEXIBLE BOARD



## 1-2-82. H BOBBIN CASE

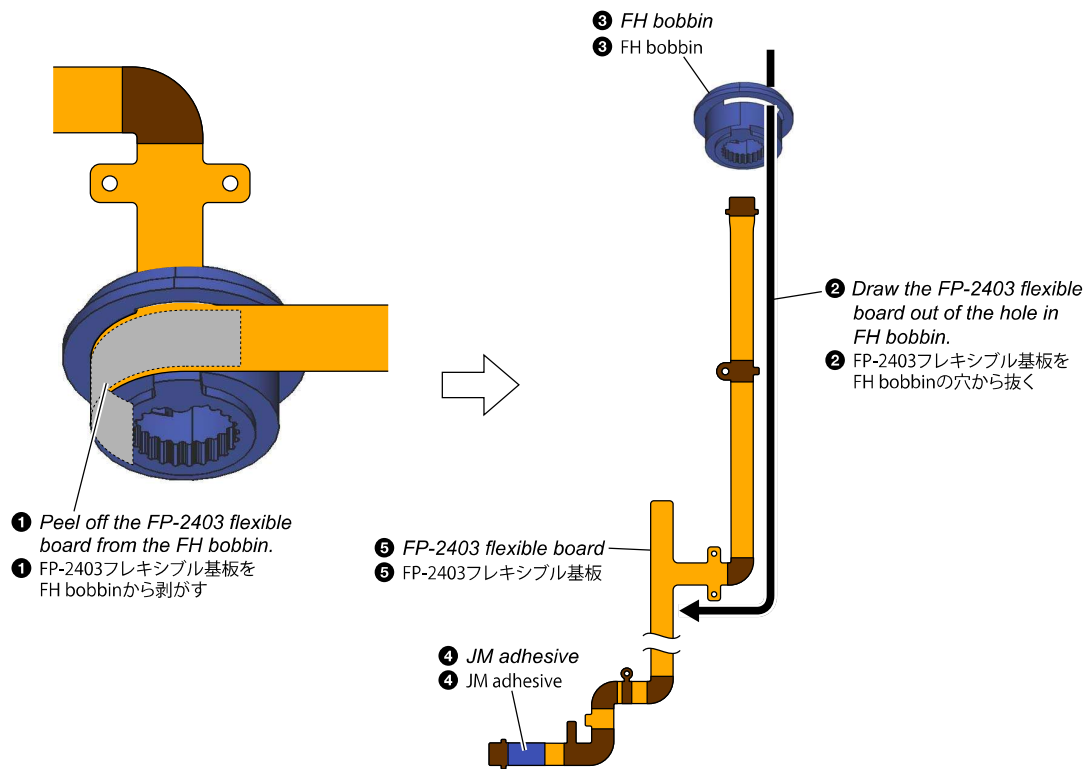


## 1-2-83. FP-2403 FLEXIBLE BOARD BLOCK

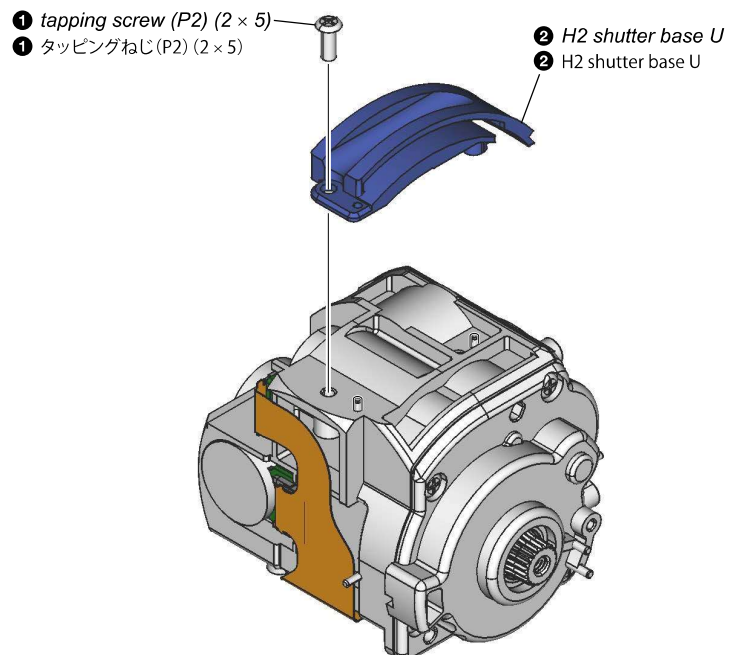




## 1-2-84. FH BOBBIN, FP-2403 FLEXIBLE BOARD

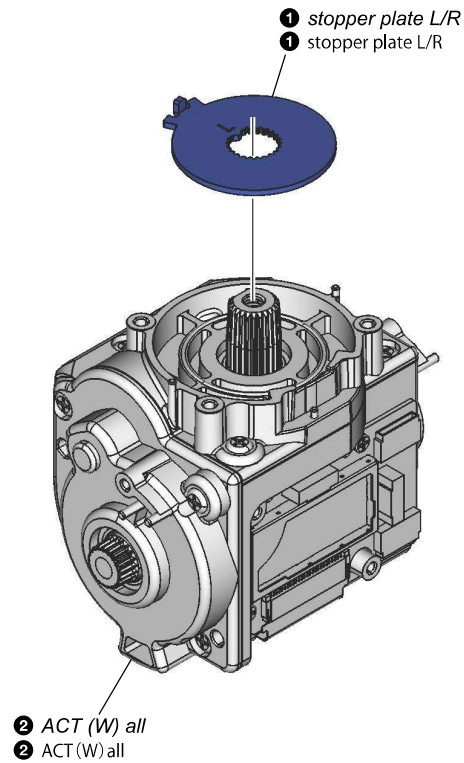


## 1-2-85. H2 SHUTTER BASE U

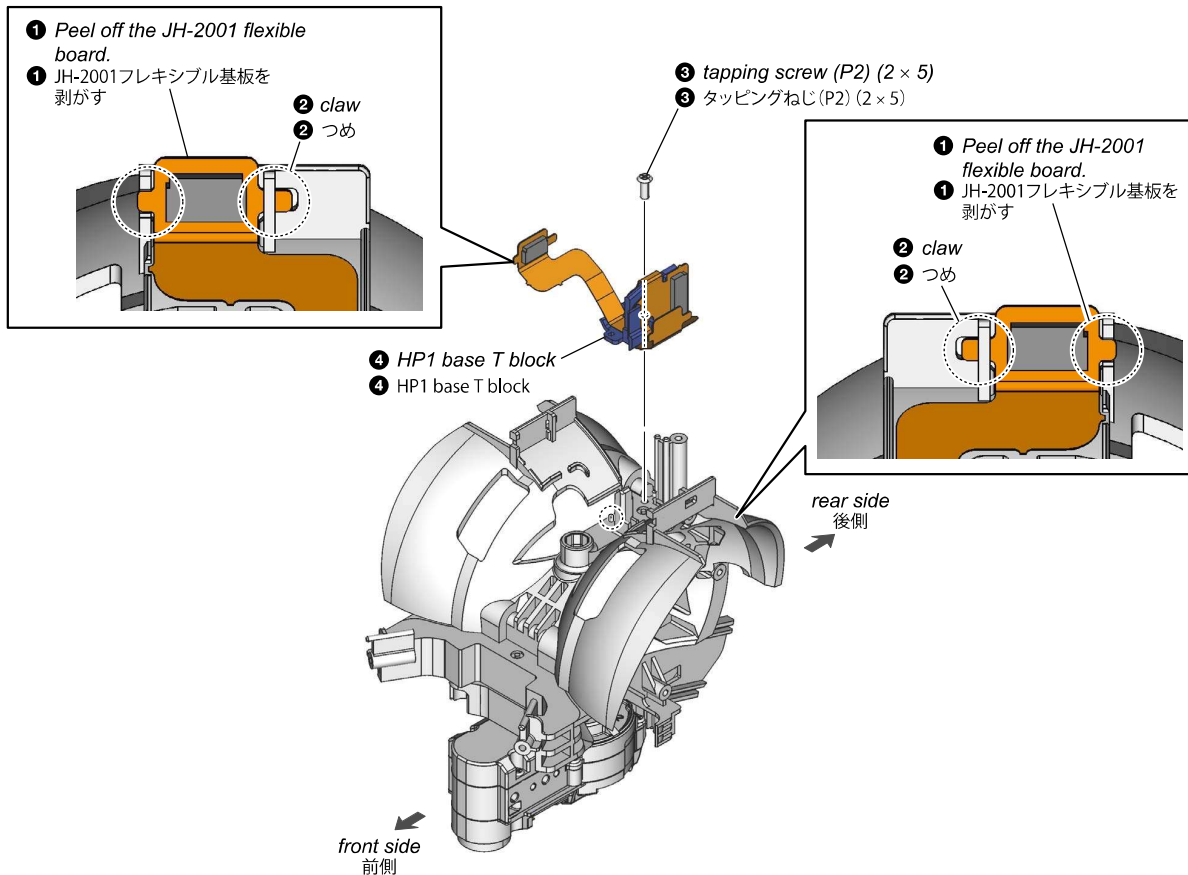


## 1-2-86. STOPPER PLATE L/R, ACT (W) ALL

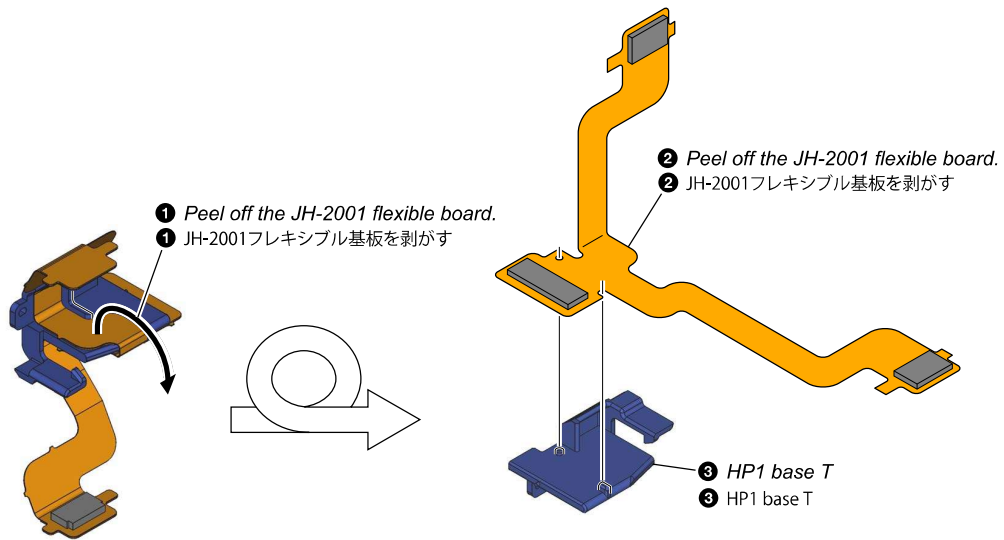
Note: The illustration uses the left side, but there is no difference in disassembly for the left and right.



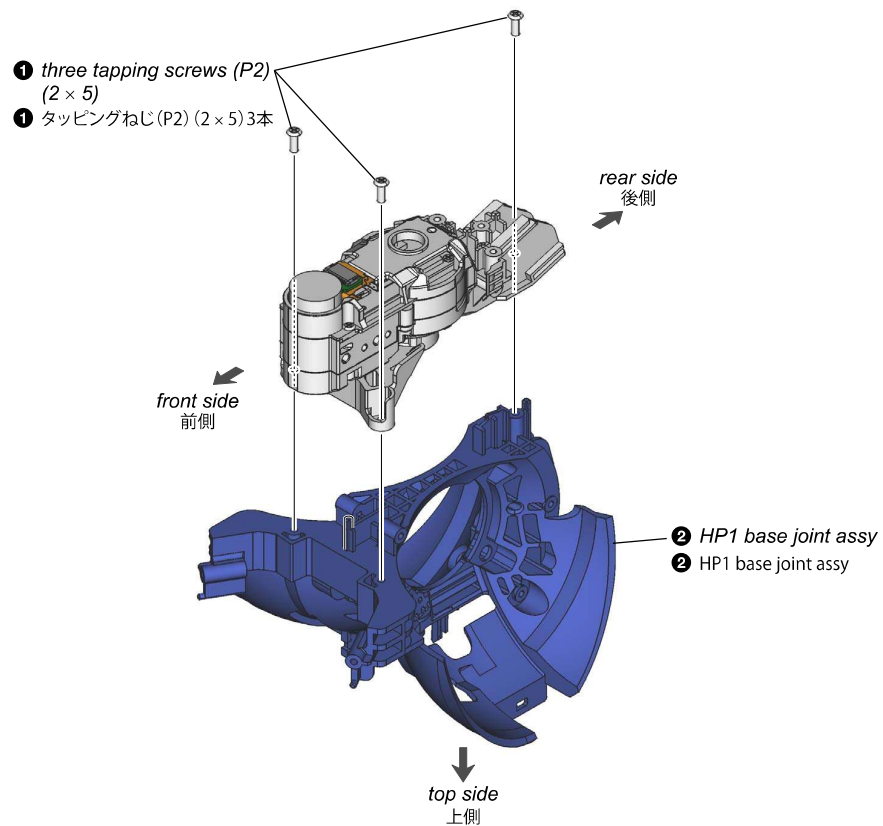
## 1-2-87. HP1 BASE T BLOCK



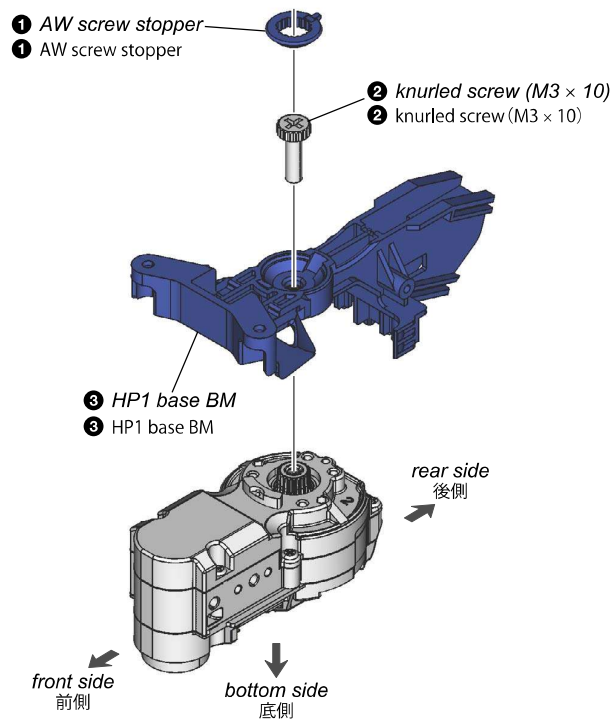
## 1-2-88. JH-2001 FLEXIBLE BOARD, HP1 BASE T



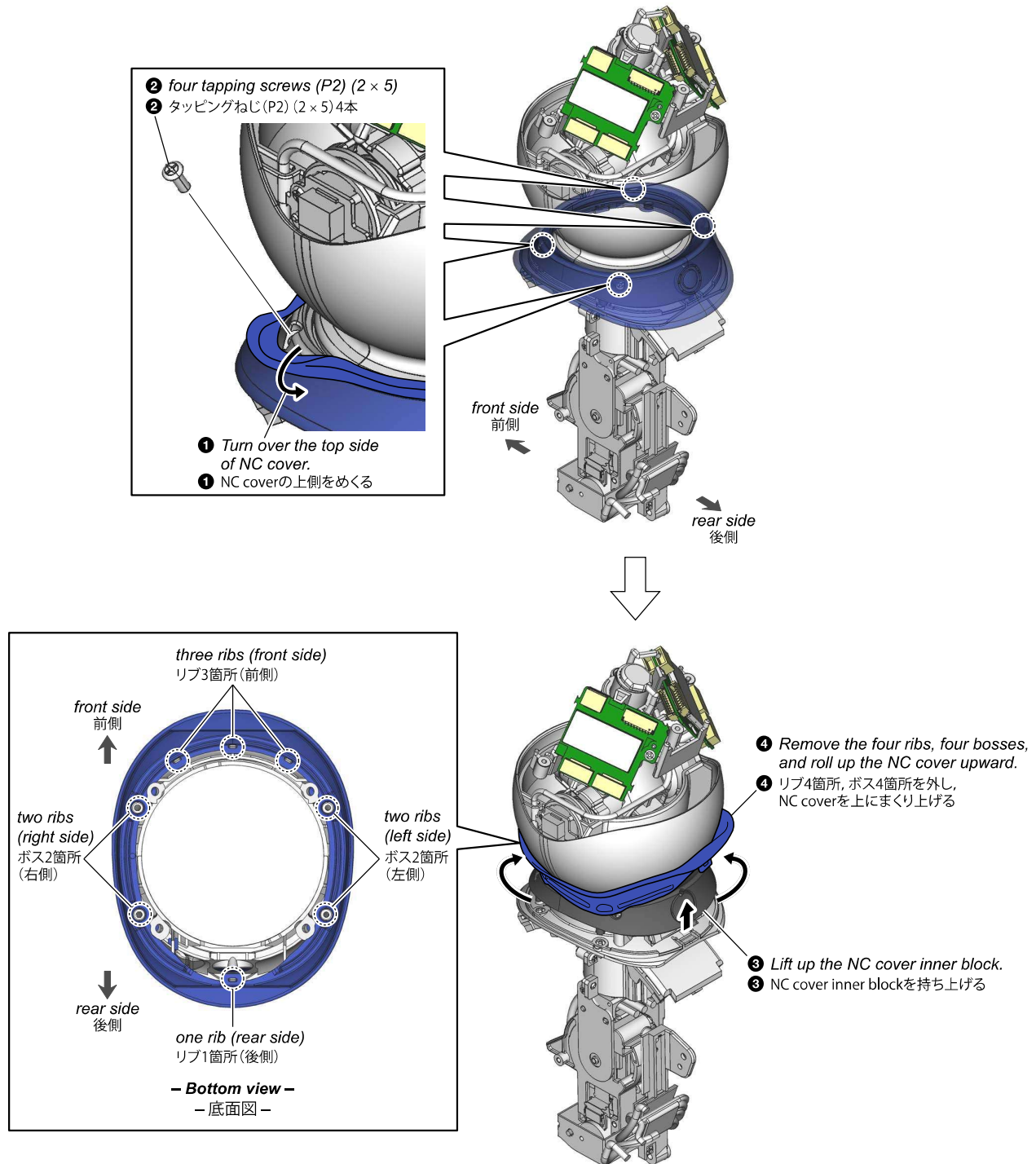
## 1-2-89. HP1 BASE JOINT ASSY



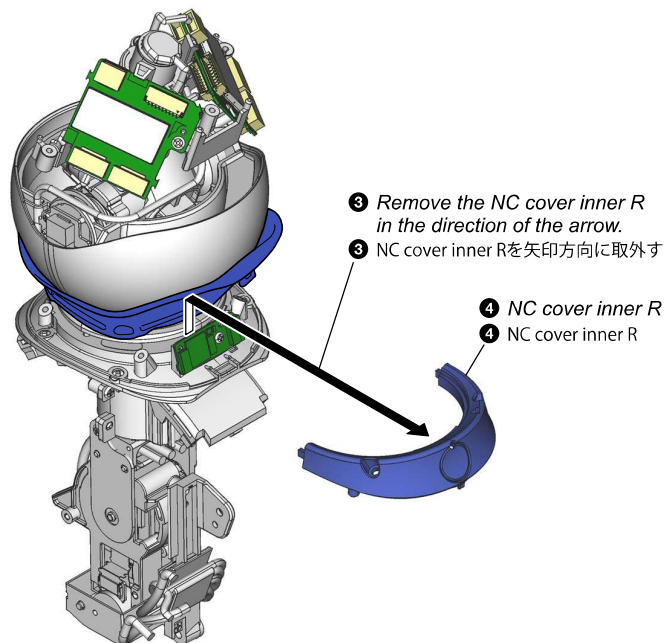
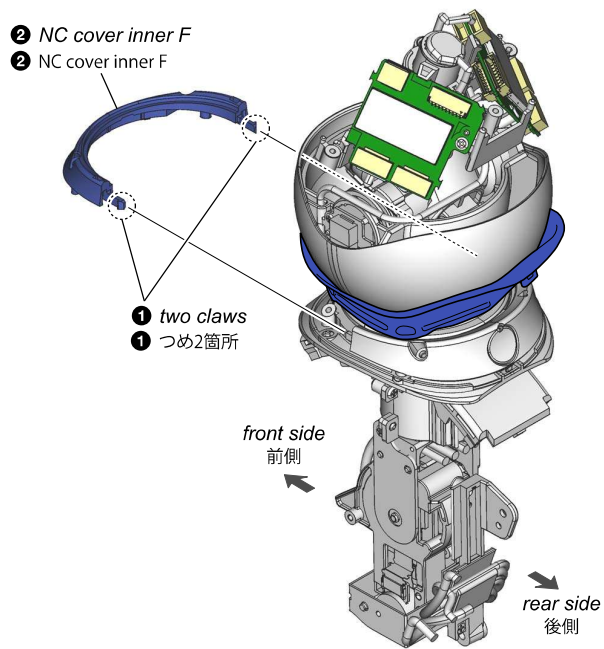
## 1-2-90. HP1 BASE BM



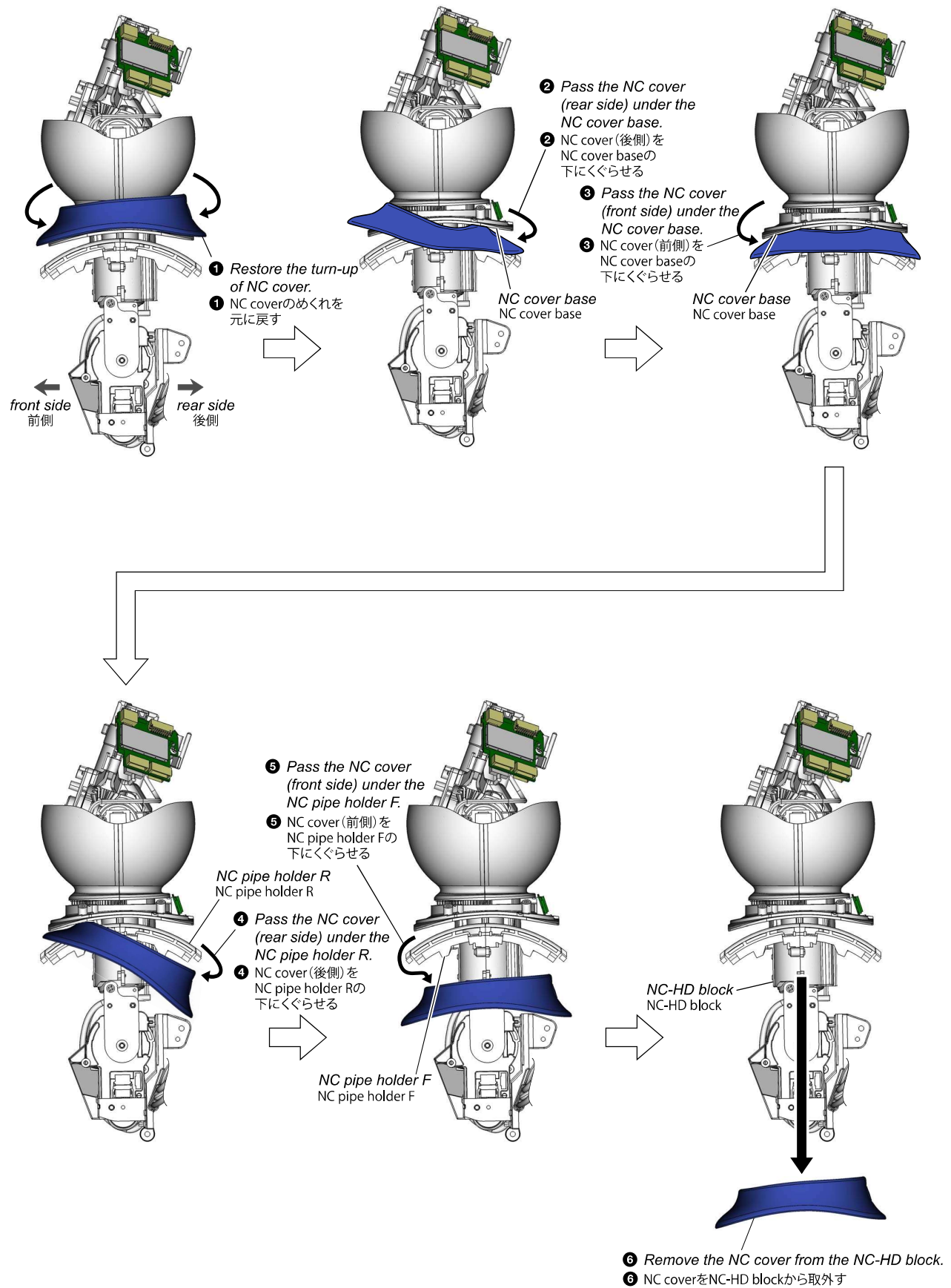
## 1-2-91. NC COVER INNER BLOCK



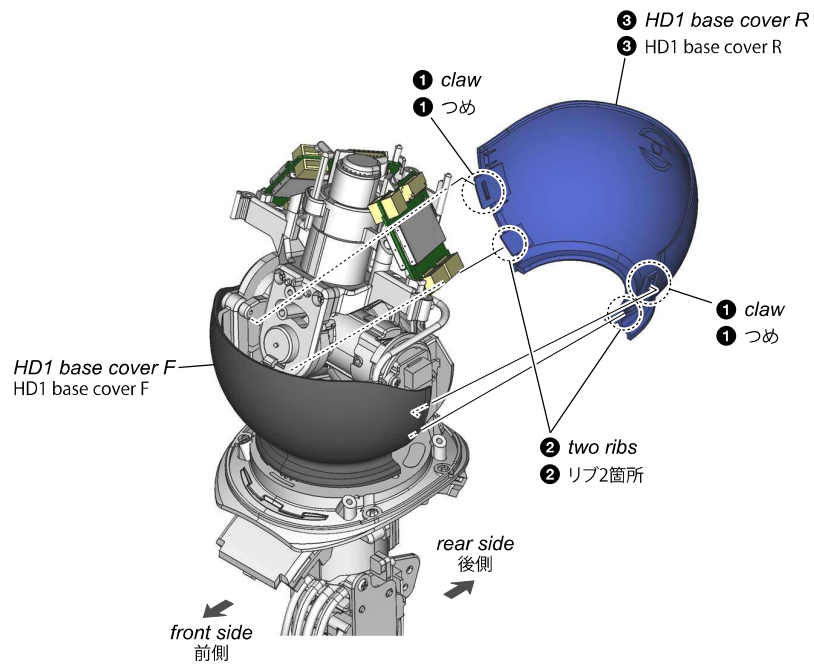
## 1-2-92. NC COVER INNER F/R



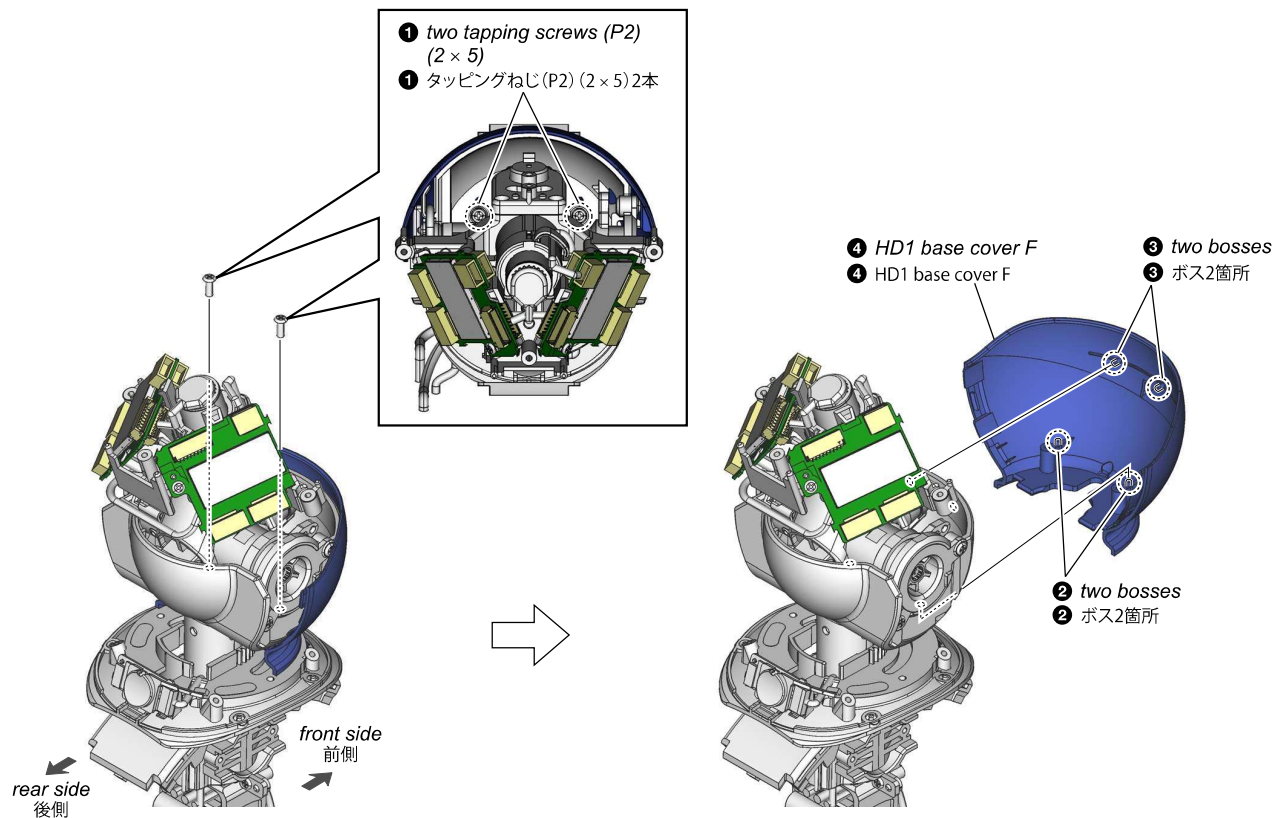
## 1-2-93. NC COVER



## 1-2-94. HD1 BASE COVER R



## 1-2-95. HD1 BASE COVER F

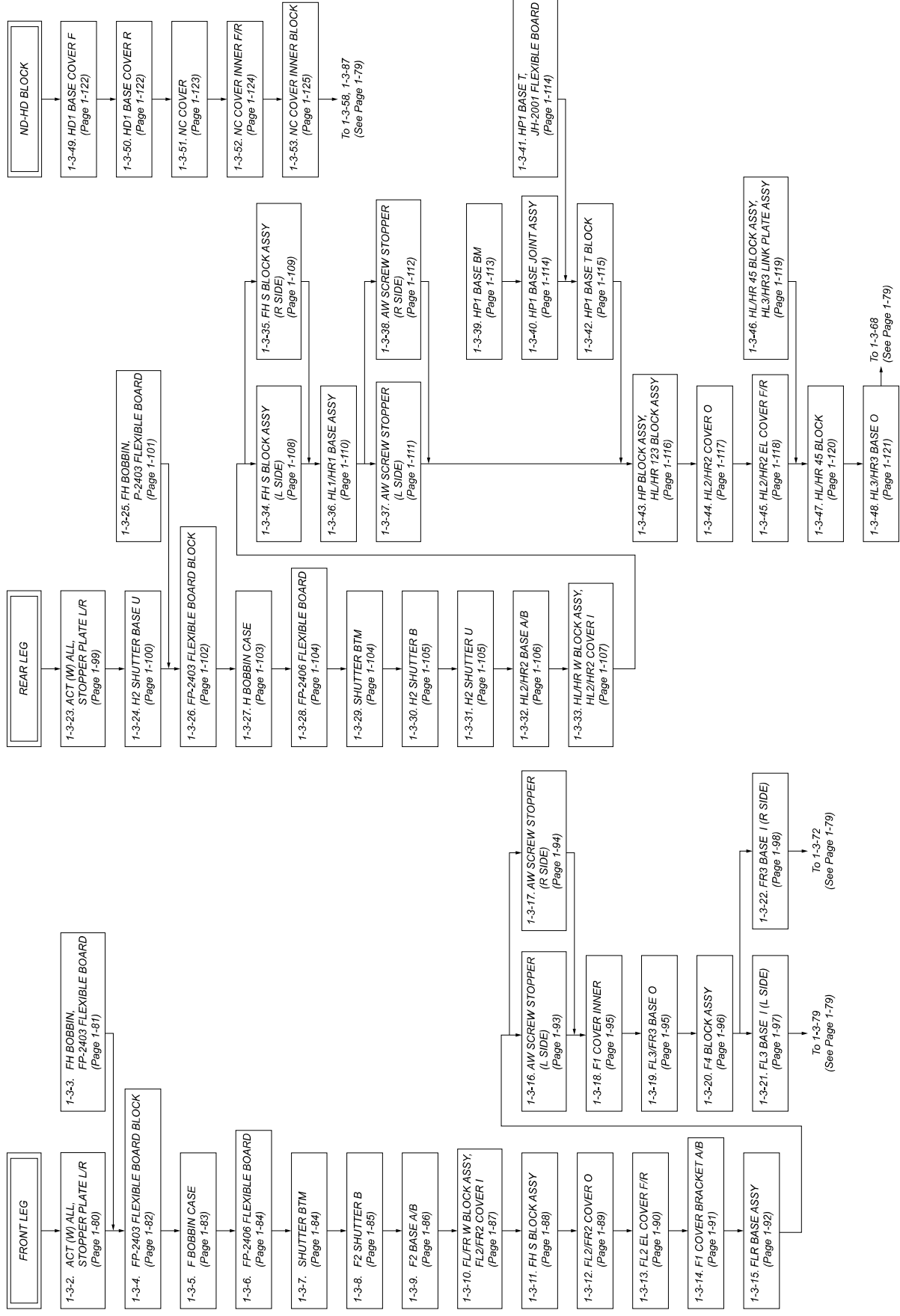


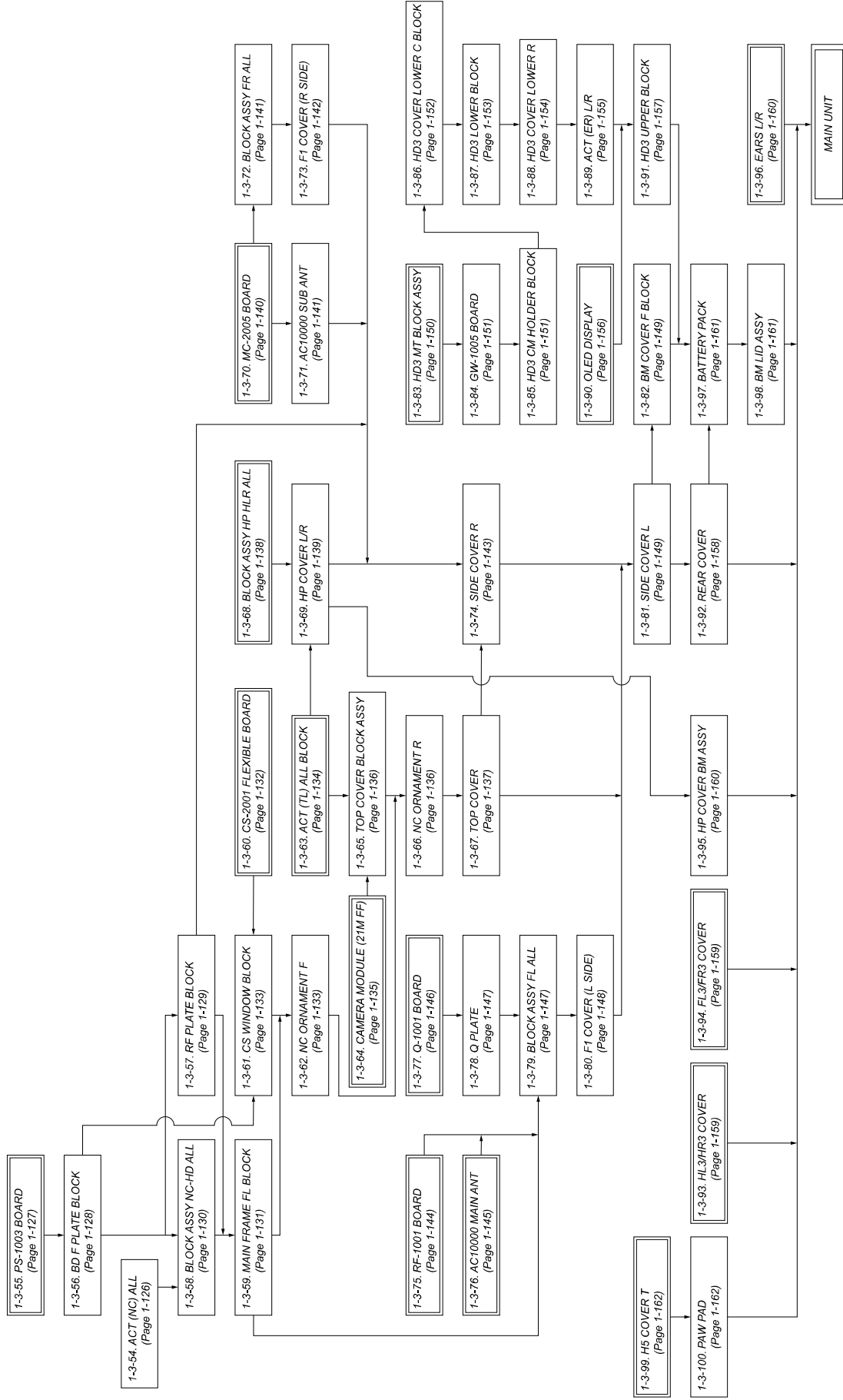


**1-3. ASSEMBLY**

• Assemble in the order shown in the flowchart below.

**1-3-1. ASSEMBLY FLOW**

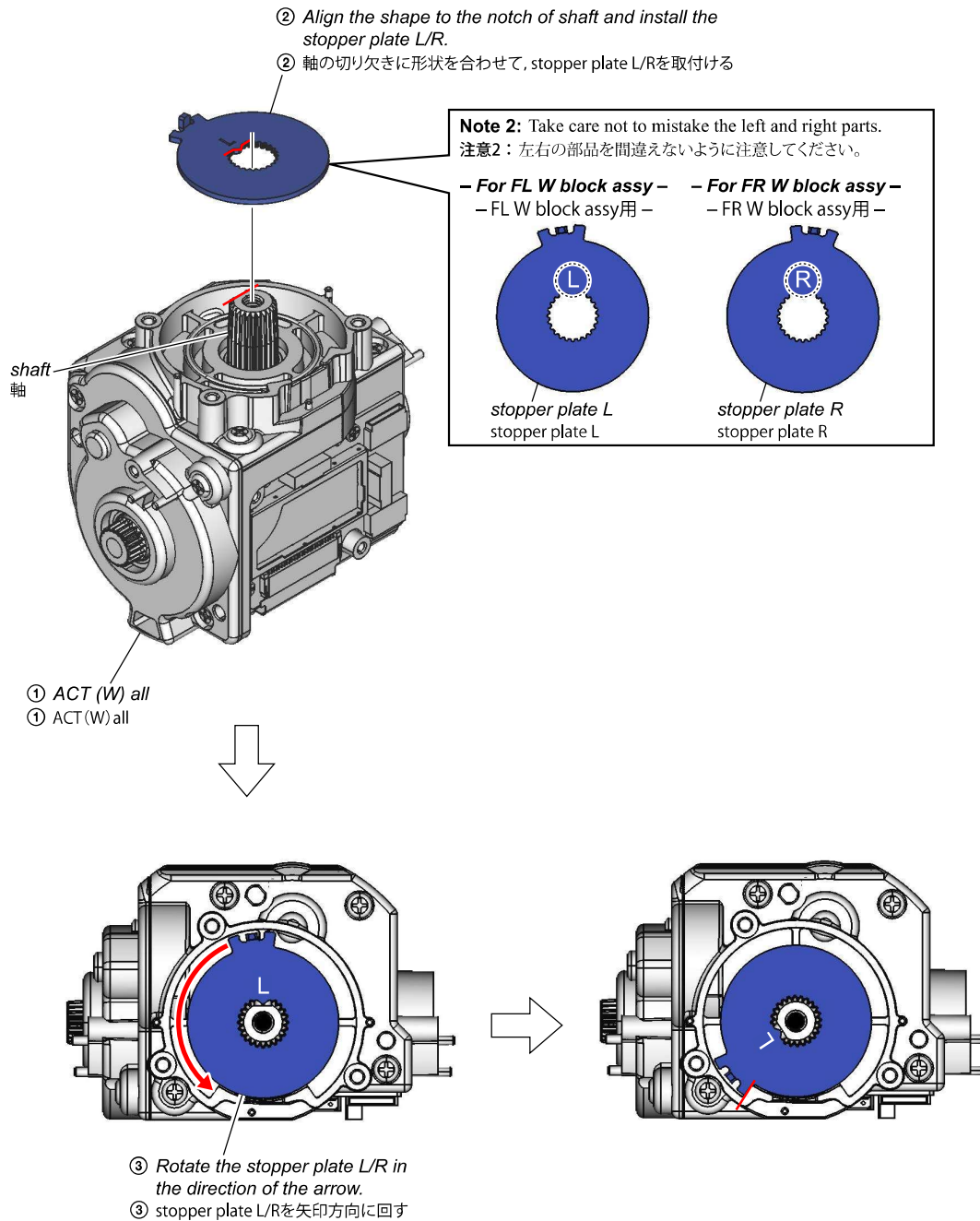




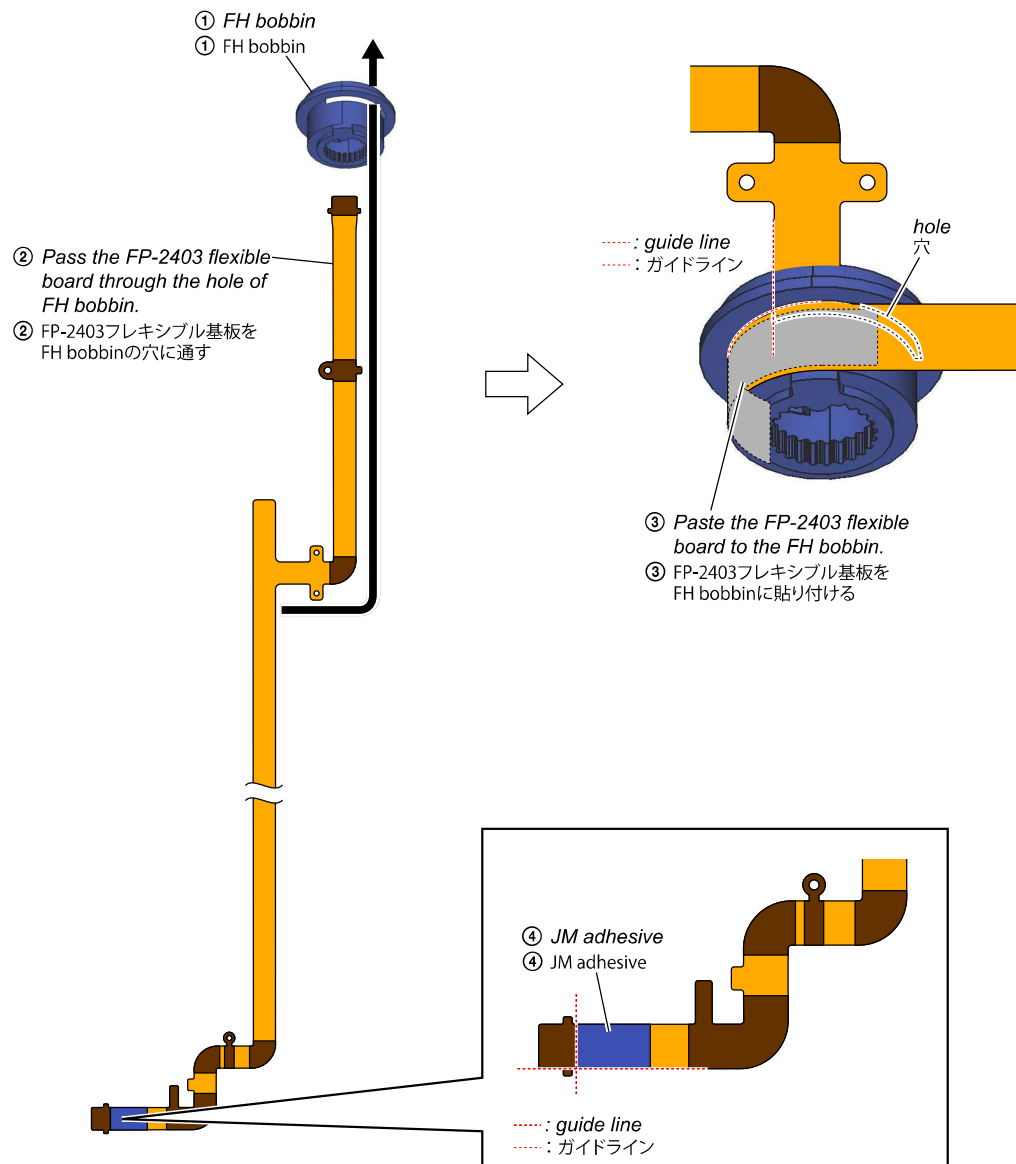
- Assemble in the order indicated by the numbers assigned to the parts in the figures such as ①.

### 1-3-2. ACT (W) ALL, STOPPER PLATE L/R

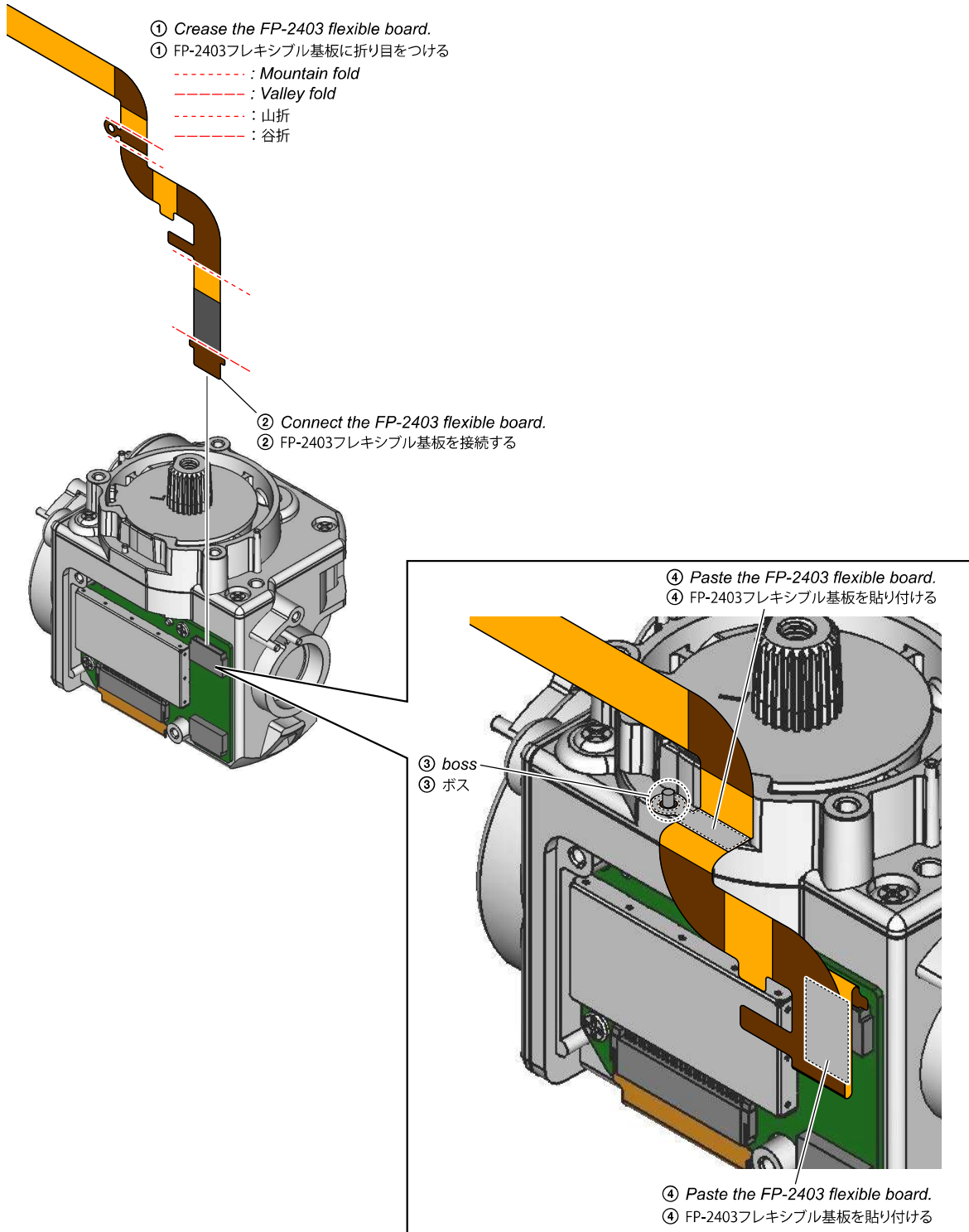
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



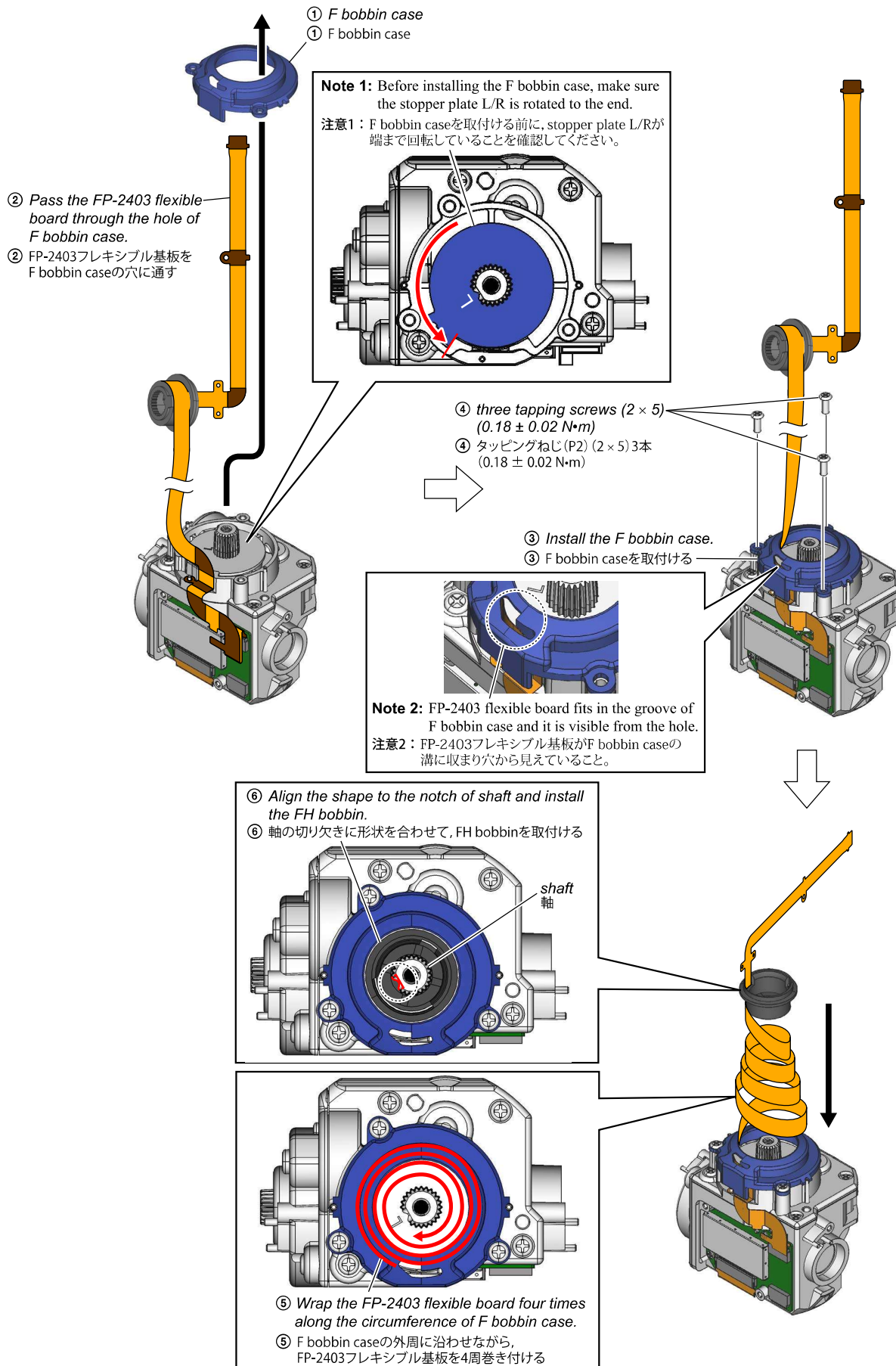
## 1-3-3. FH BOBBIN, FP-2403 FLEXIBLE BOARD



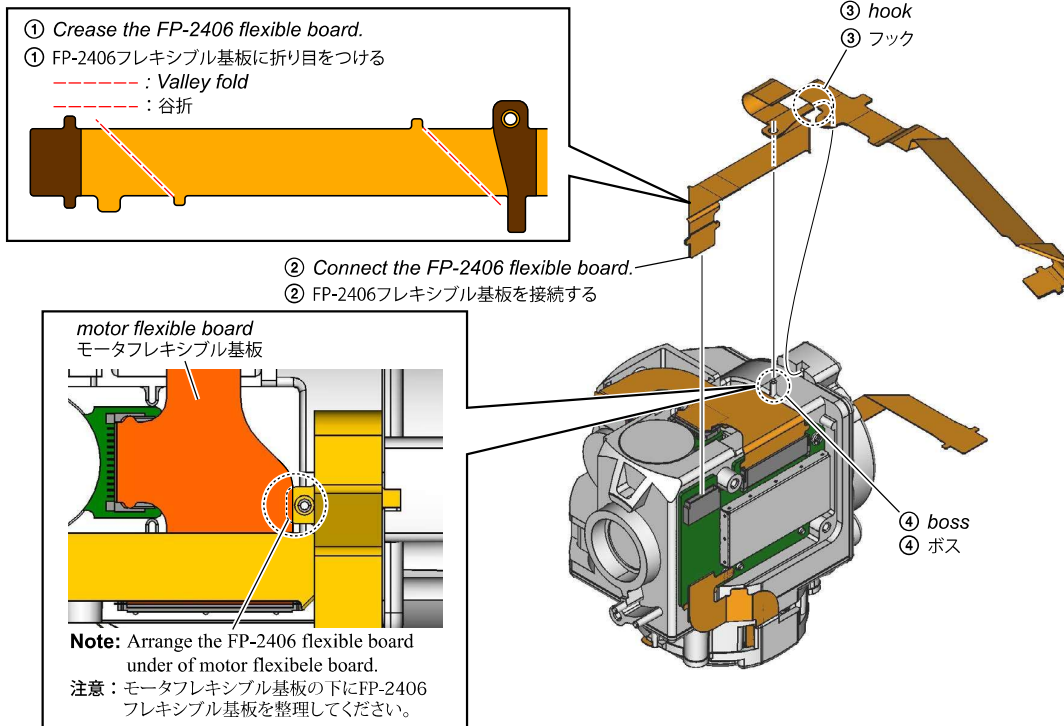
## 1-3-4. FP-2403 FLEXIBLE BOARD BLOCK



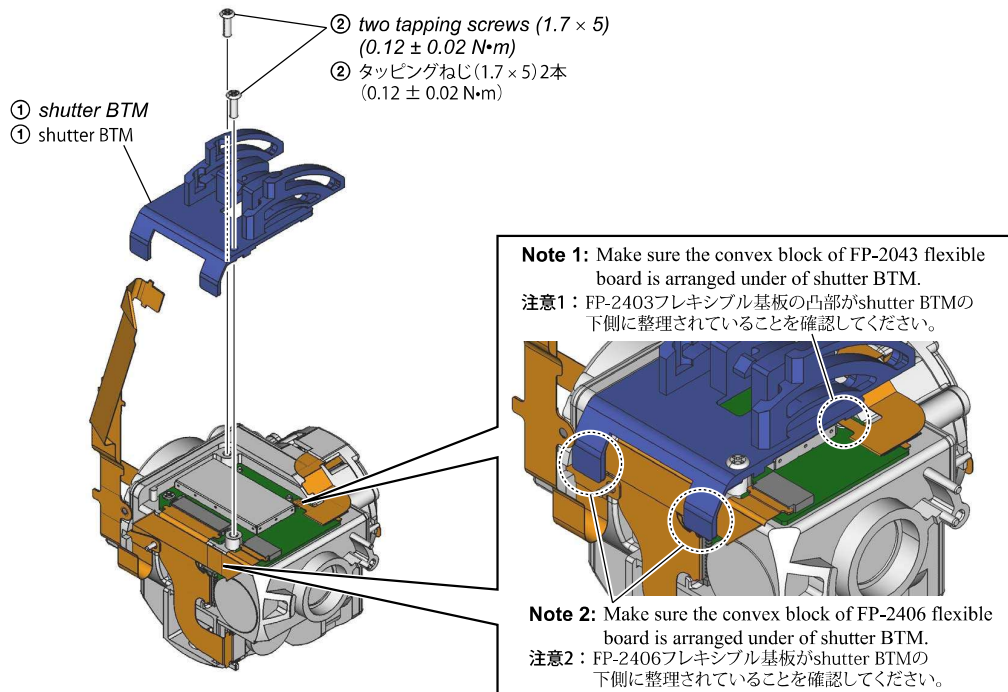
## 1-3-5. F BOBBIN CASE



## 1-3-6. FP-2406 FLEXIBLE BOARD

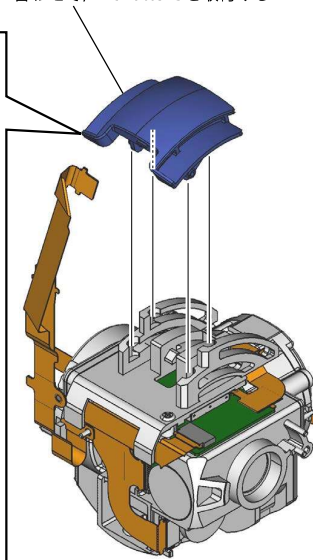
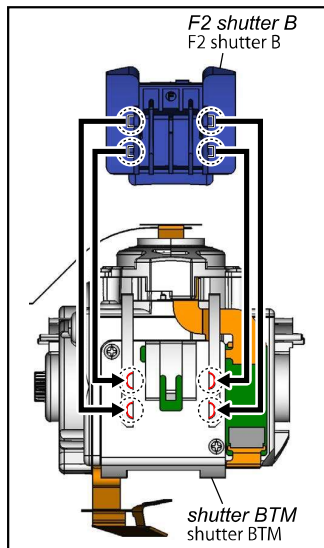


## 1-3-7. SHUTTER BTM

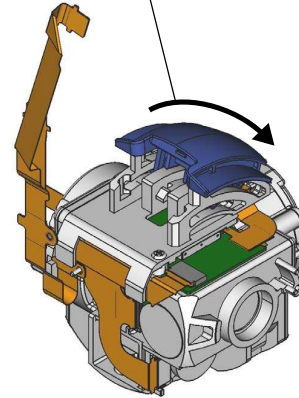


## 1-3-8. F2 SHUTTER B

- ① Align the four shafts to the four grooves of shutter BTM and install the F2 shutter B.  
 ① 軸4本をshutter BTMの溝4箇所に合わせて、F2 shutter Bを取付ける

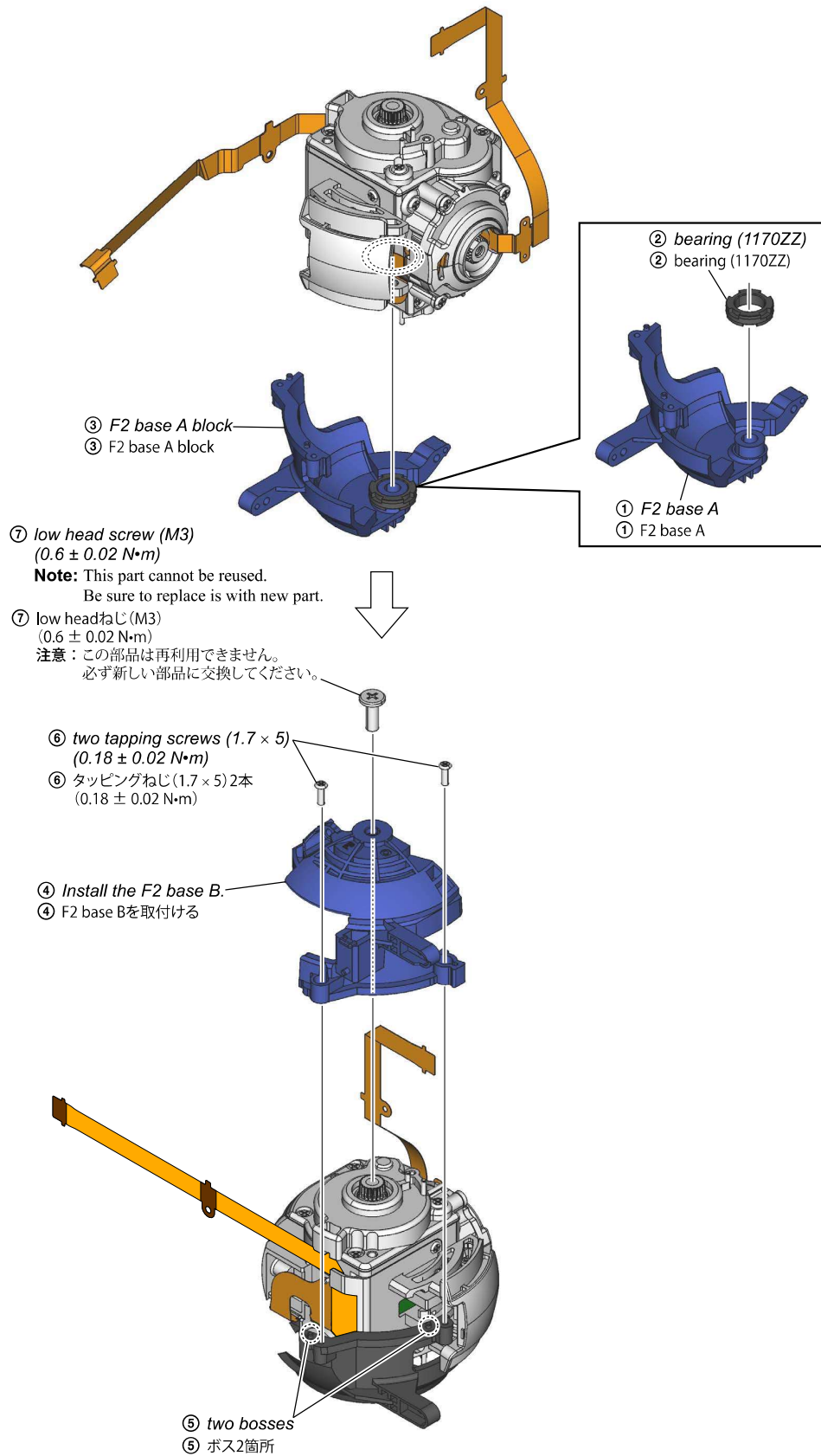


- ② Slide the F2 shutter B in the direction of the arrow.  
 ② F2 shutter Bを矢印方向にスライドさせる



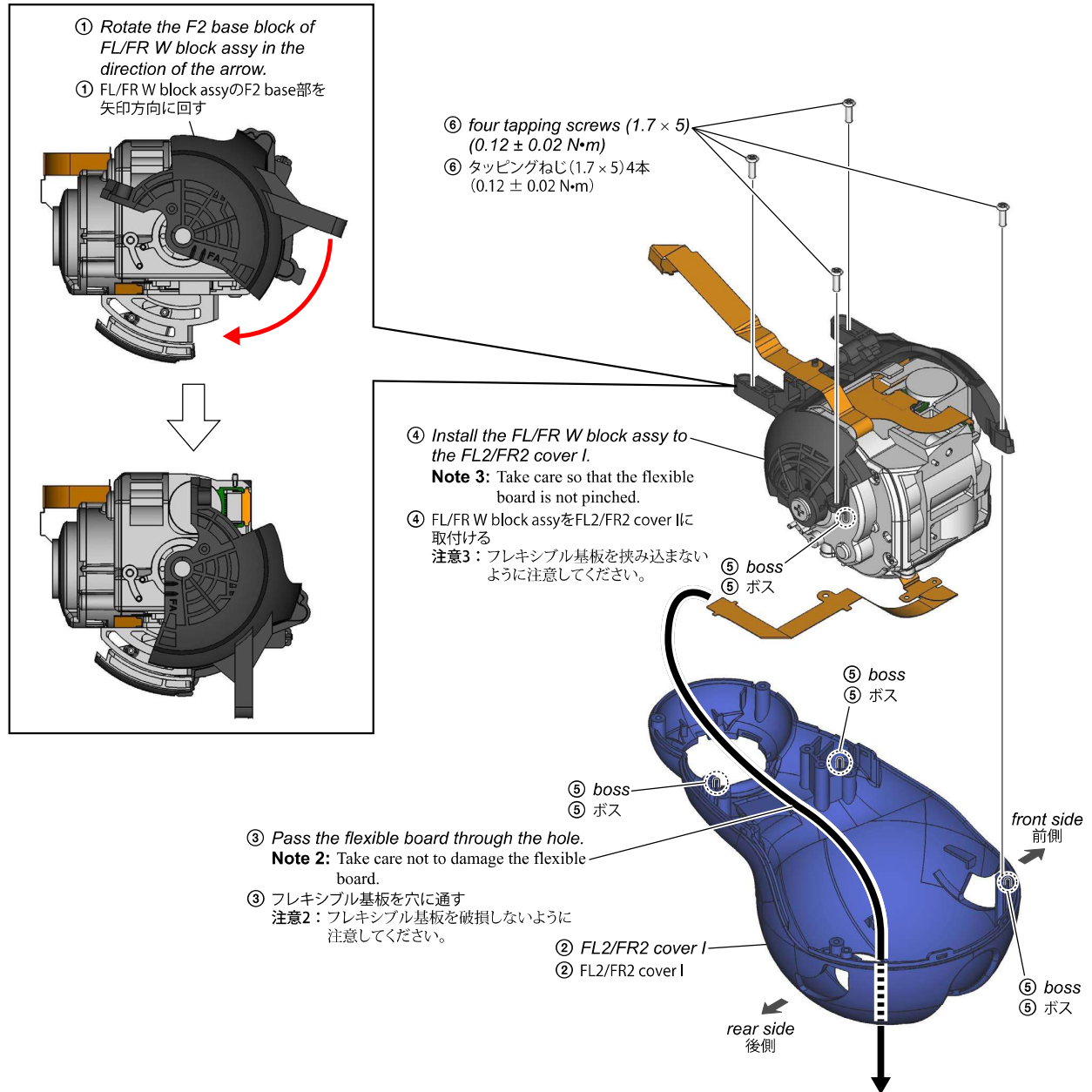


## 1-3-9. F2 BASE A/B



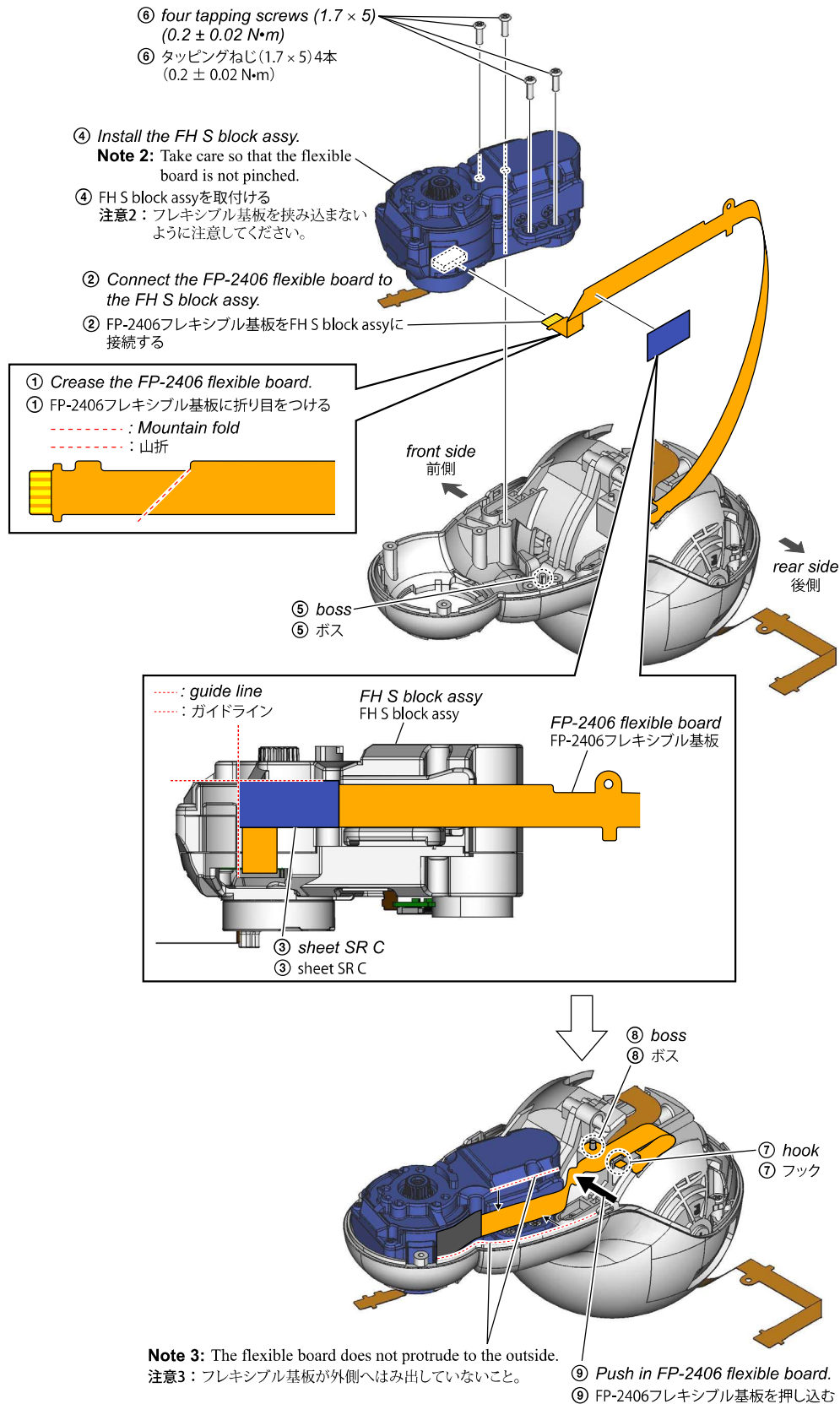
## 1-3-10. FL/FR W BLOCK ASSY, FL2/FR2 COVER I

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



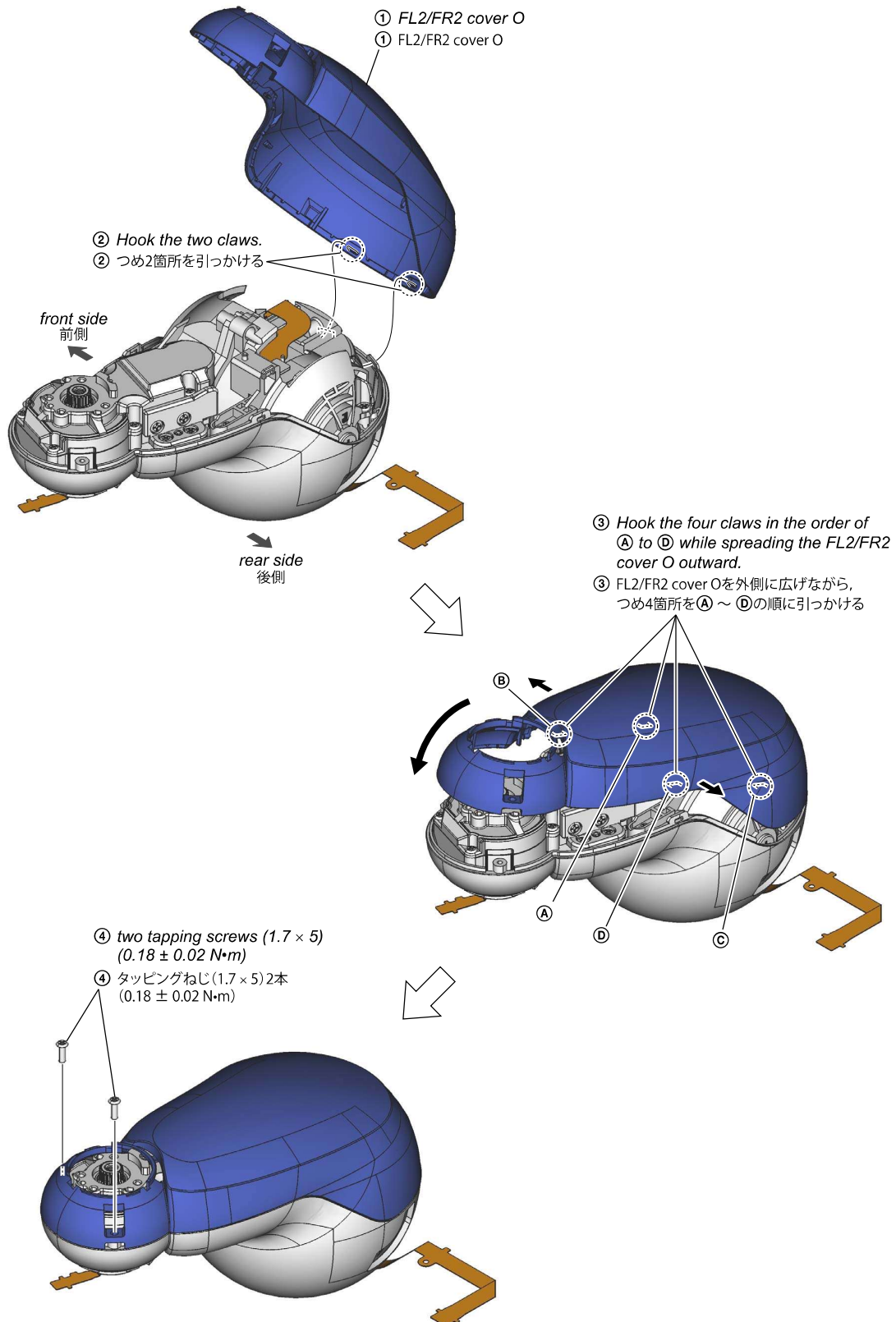
## 1-3-11. FH S BLOCK ASSY

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-12. FL2/FR2 COVER O

**Note:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-13. FL2 EL COVER F/R

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.

**Note 2:** Take care not to mistake the front and rear parts.  
 注意2：前後の部品を間違えないように注意してください。

– Front side –  
 – 前側 –

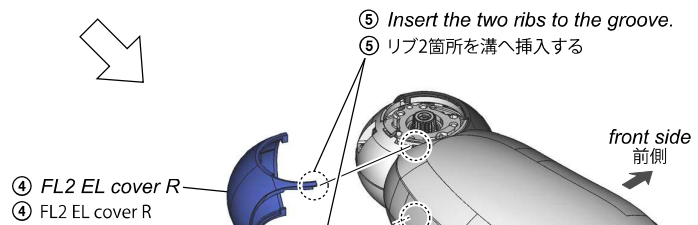
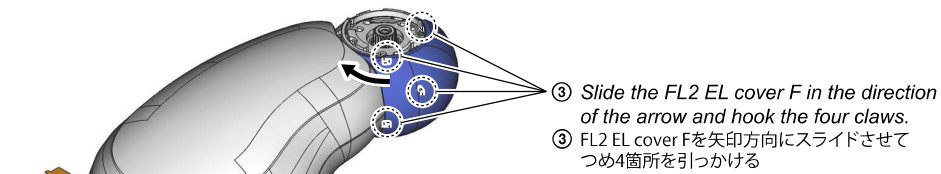
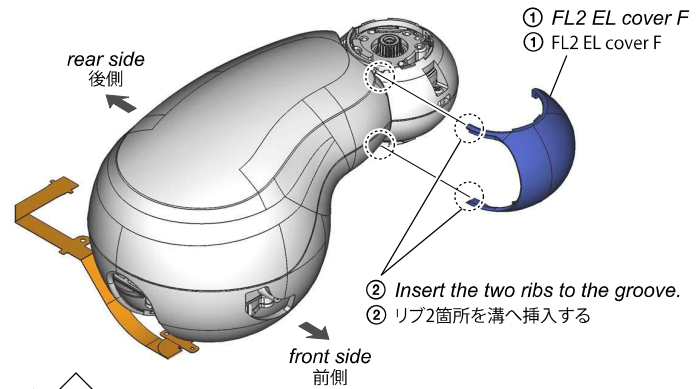


FL2 EL cover F  
 FL2 EL cover F

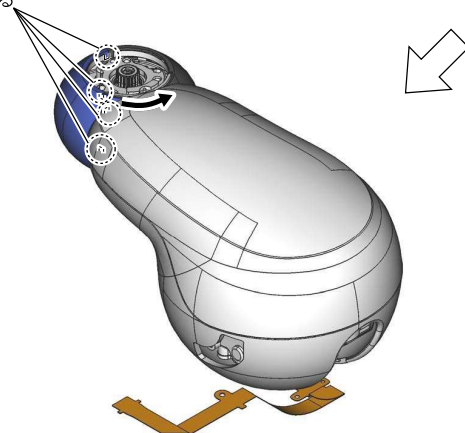
– Rear side –  
 – 後側 –



FL2 EL cover R  
 FL2 EL cover R

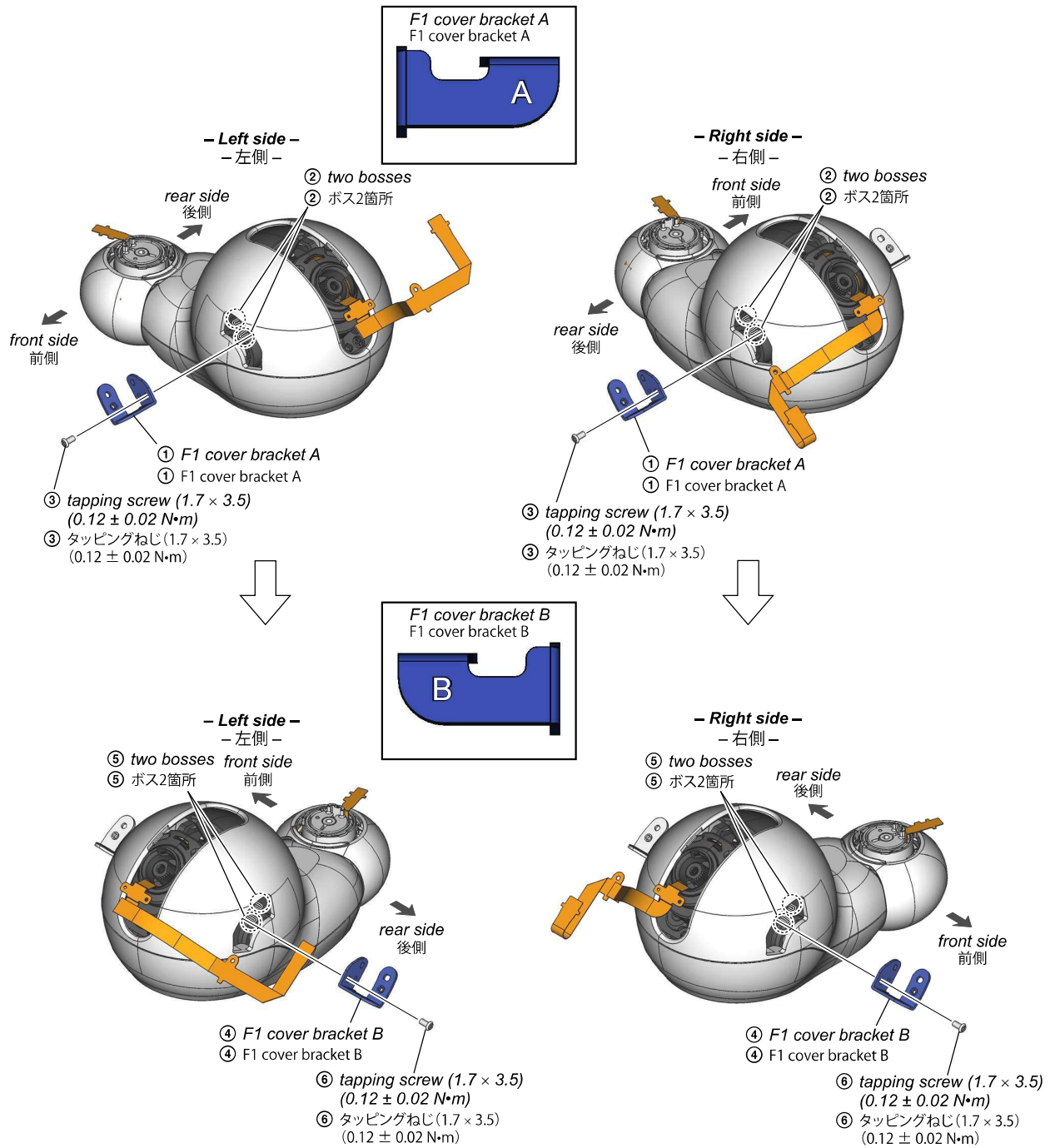


⑥ Slide the FL2 EL cover R in the direction of the arrow and hook the four claws.  
 ⑥ FL2 EL cover Rを矢印方向にスライドさせてつめ4箇所を引っかける



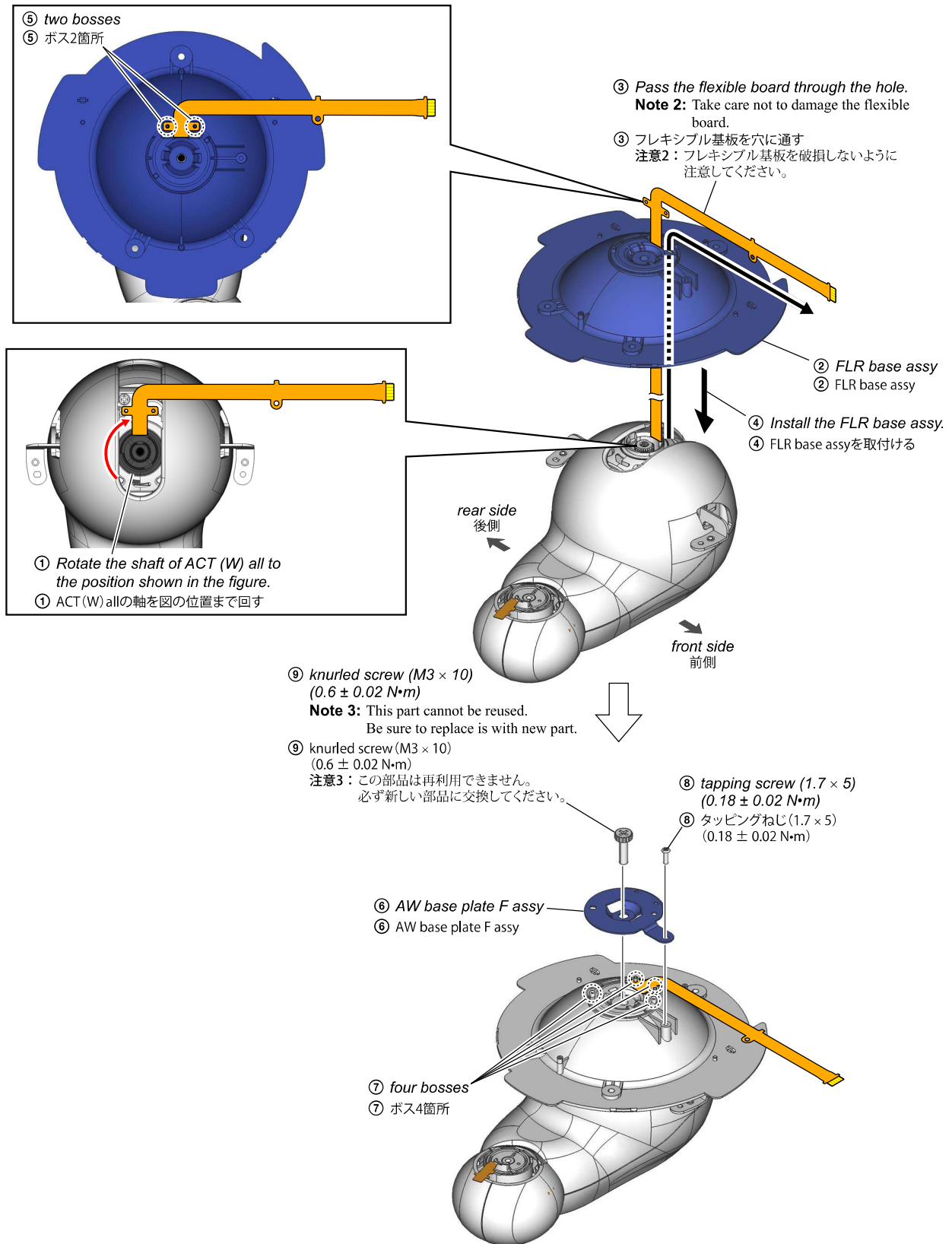
### 1-3-14. F1 COVER BRACKET A/B

**Note:** For F1 cover bracket, there is difference in front and rear direction of installing parts for the left and right.  
Take care not to mistake the installing position and install it.

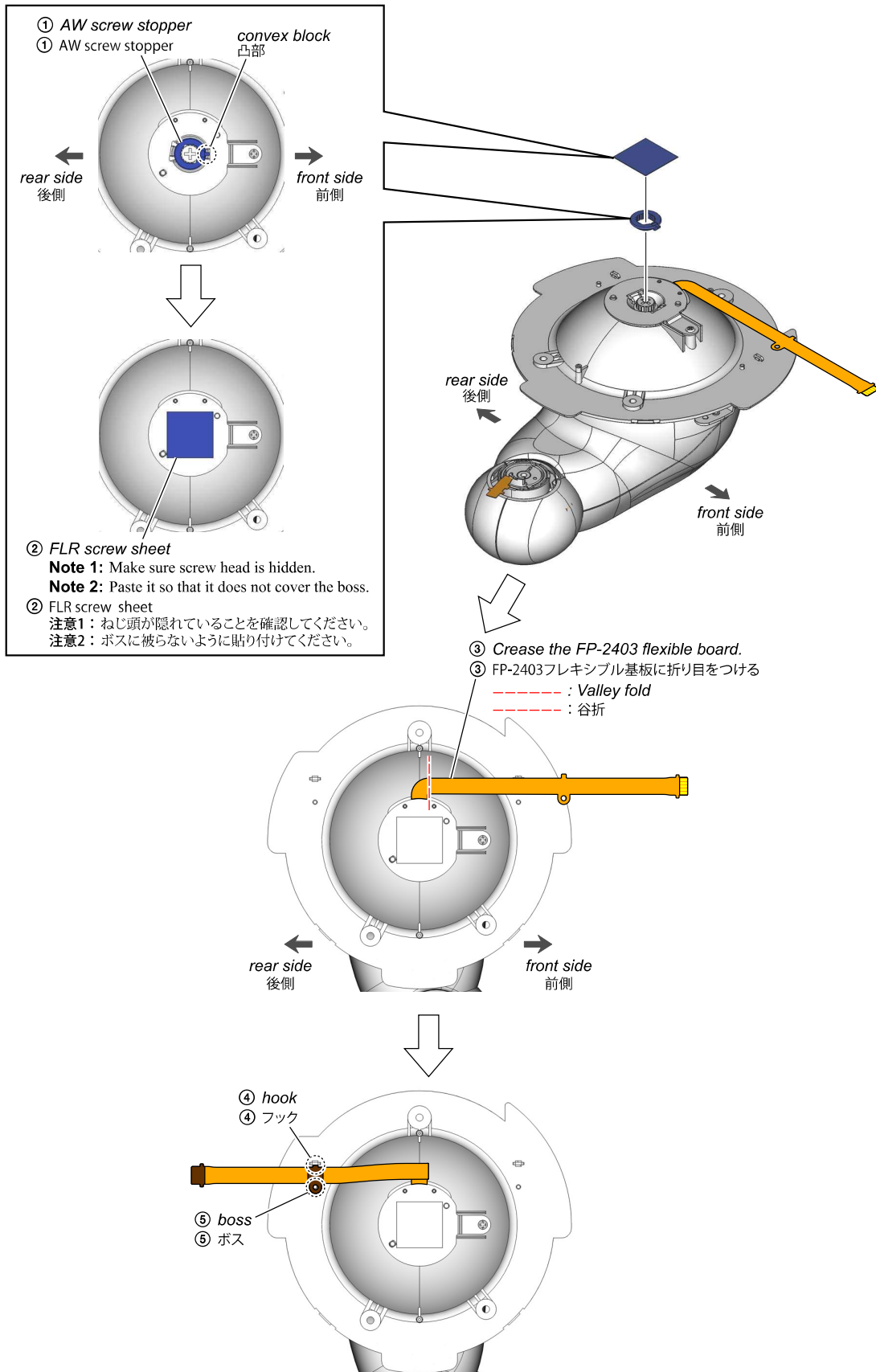


## 1-3-15. FLR BASE ASSY

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.

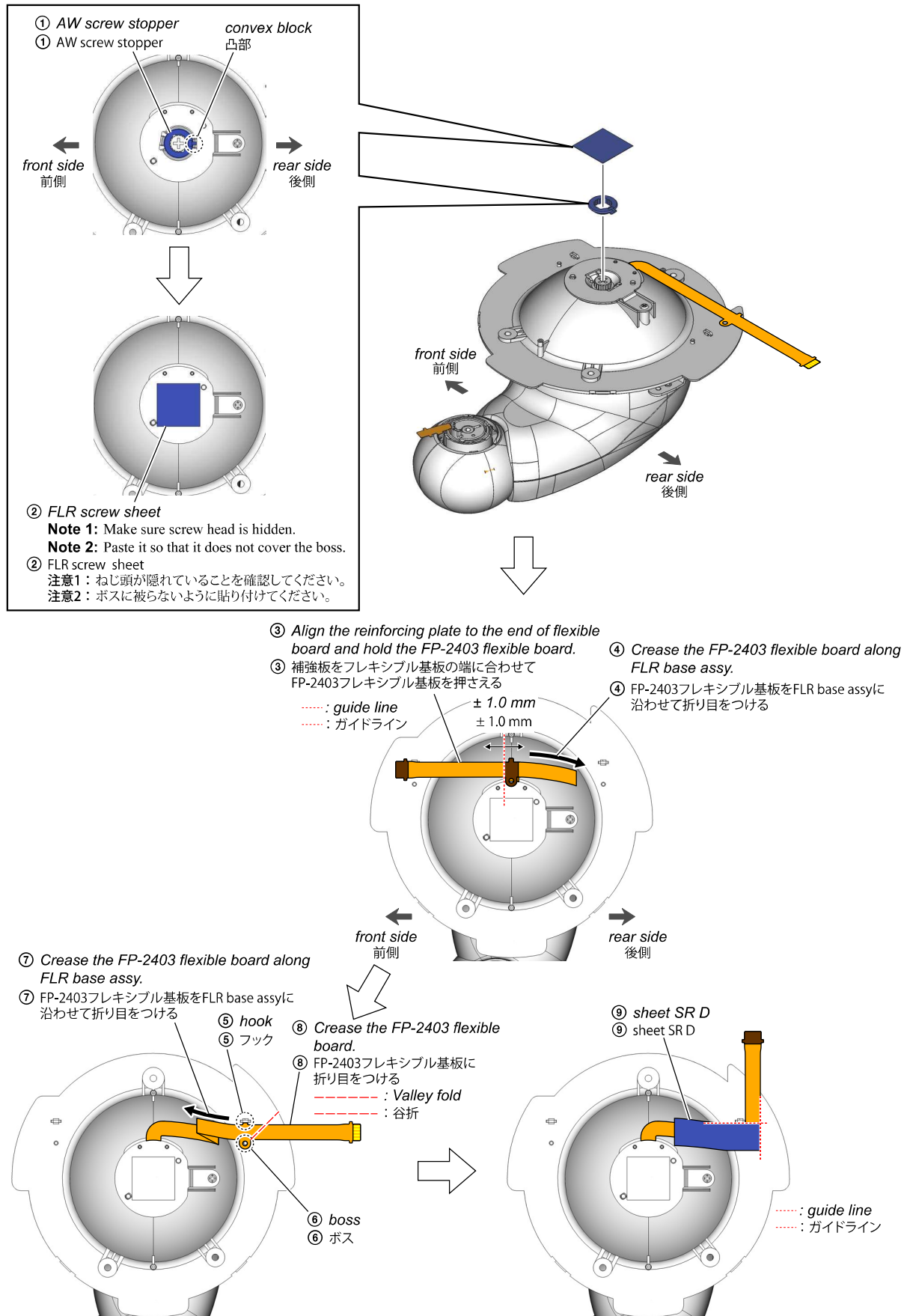


## 1-3-16. AW SCREW STOPPER (L SIDE)



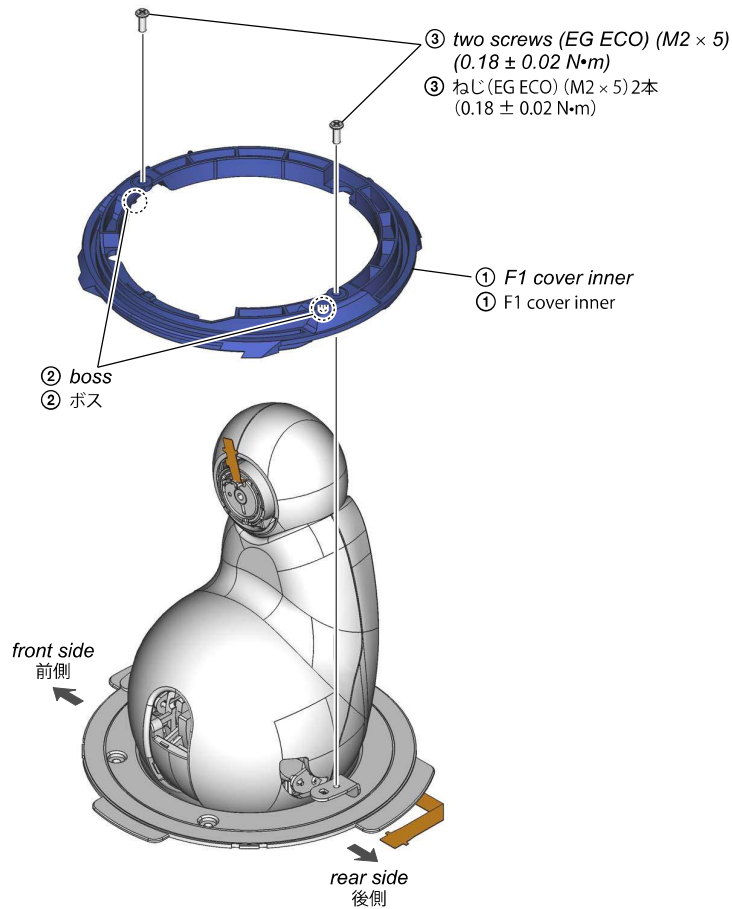


## 1-3-17. AW SCREW STOPPER (R SIDE)



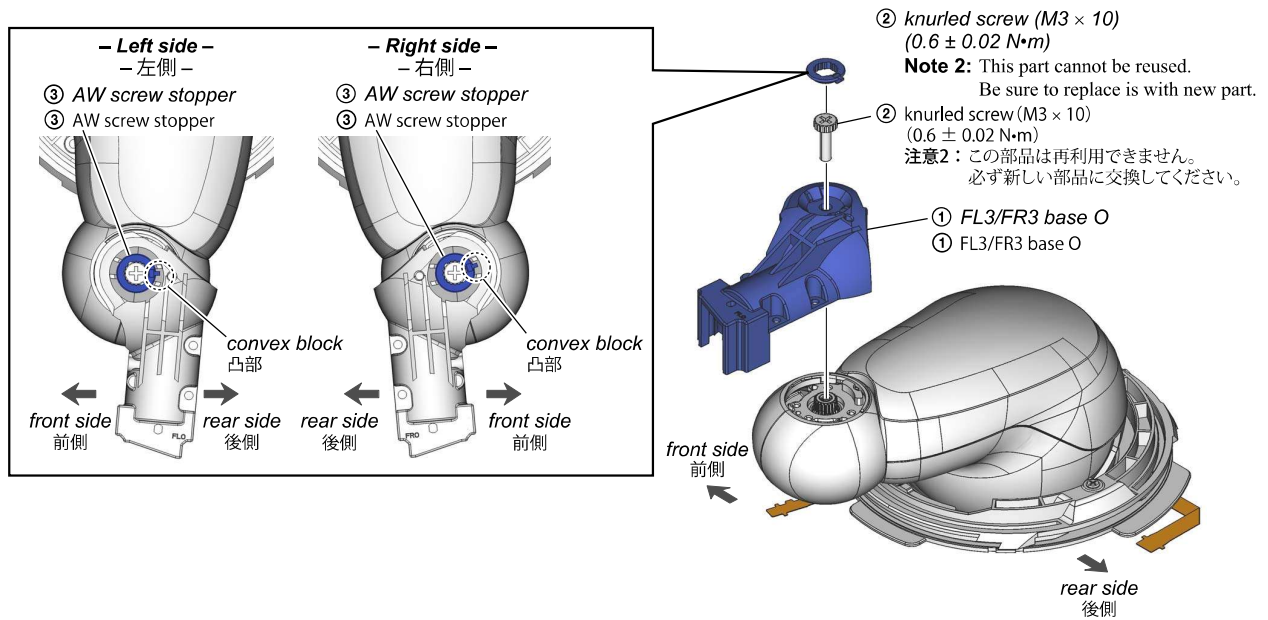
1-3-18. F1 COVER INNER

Note: The illustration uses the left side, but there is no difference in assembly for the left and right.



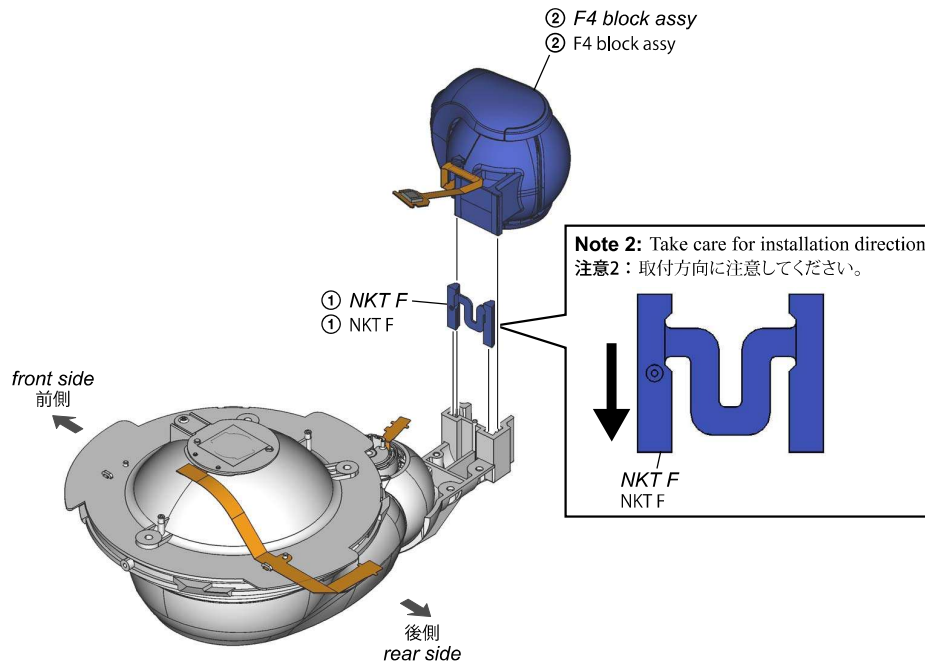
1-3-19. FL3/FR3 BASE O

Note 1: The illustration uses the left side, but there is no difference in assembly for the left and right.

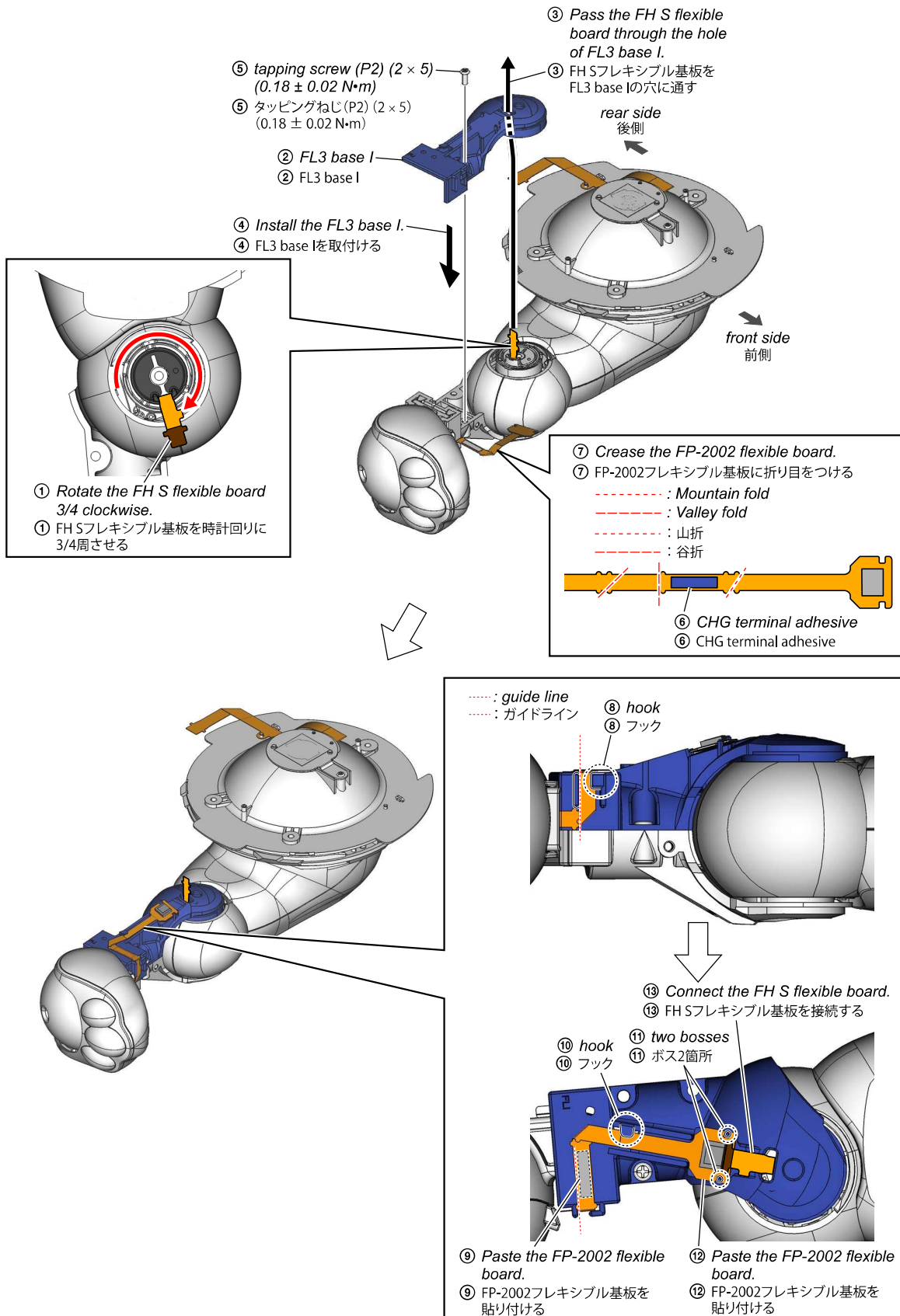


## 1-3-20. F4 BLOCK ASSY

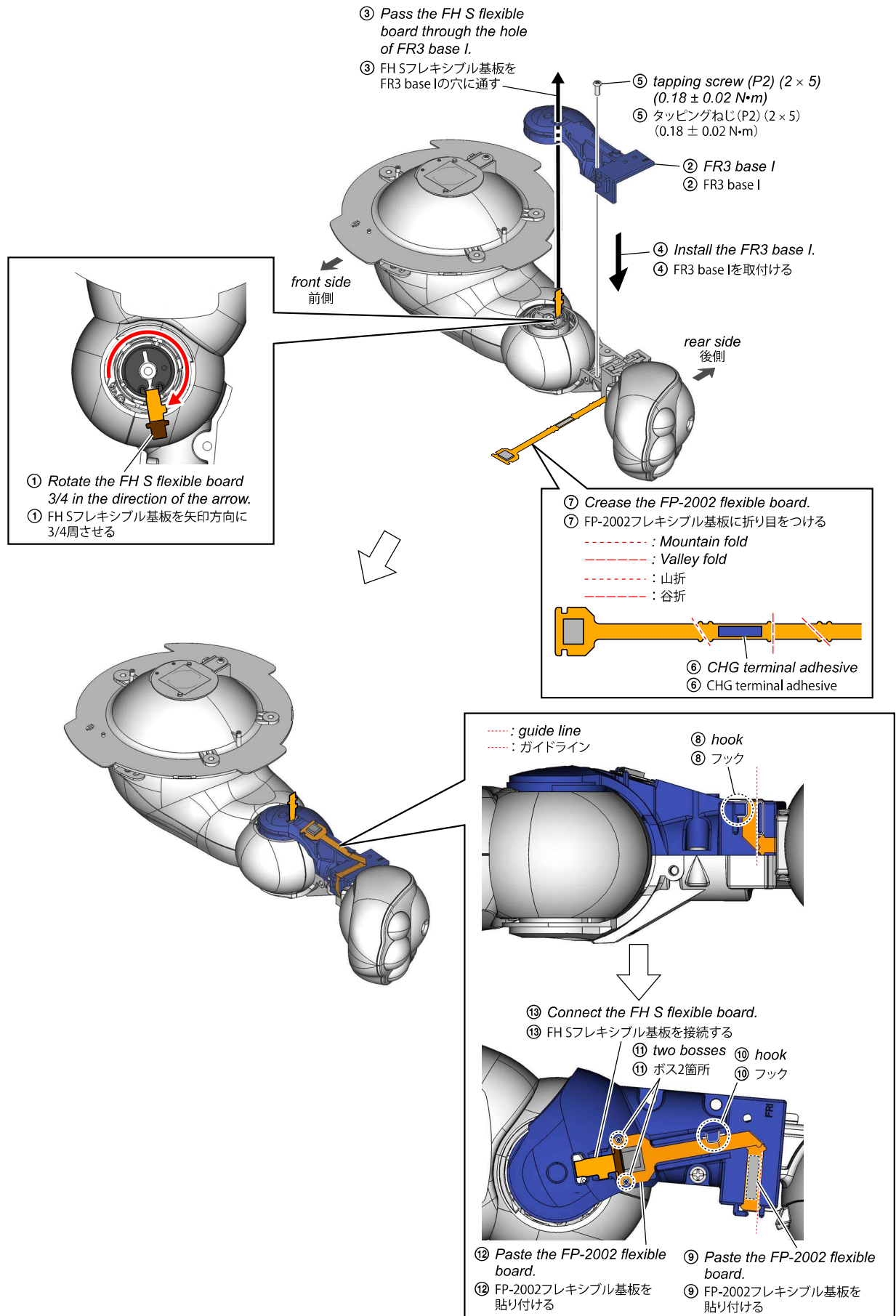
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-21. FL3 BASE I (L SIDE)

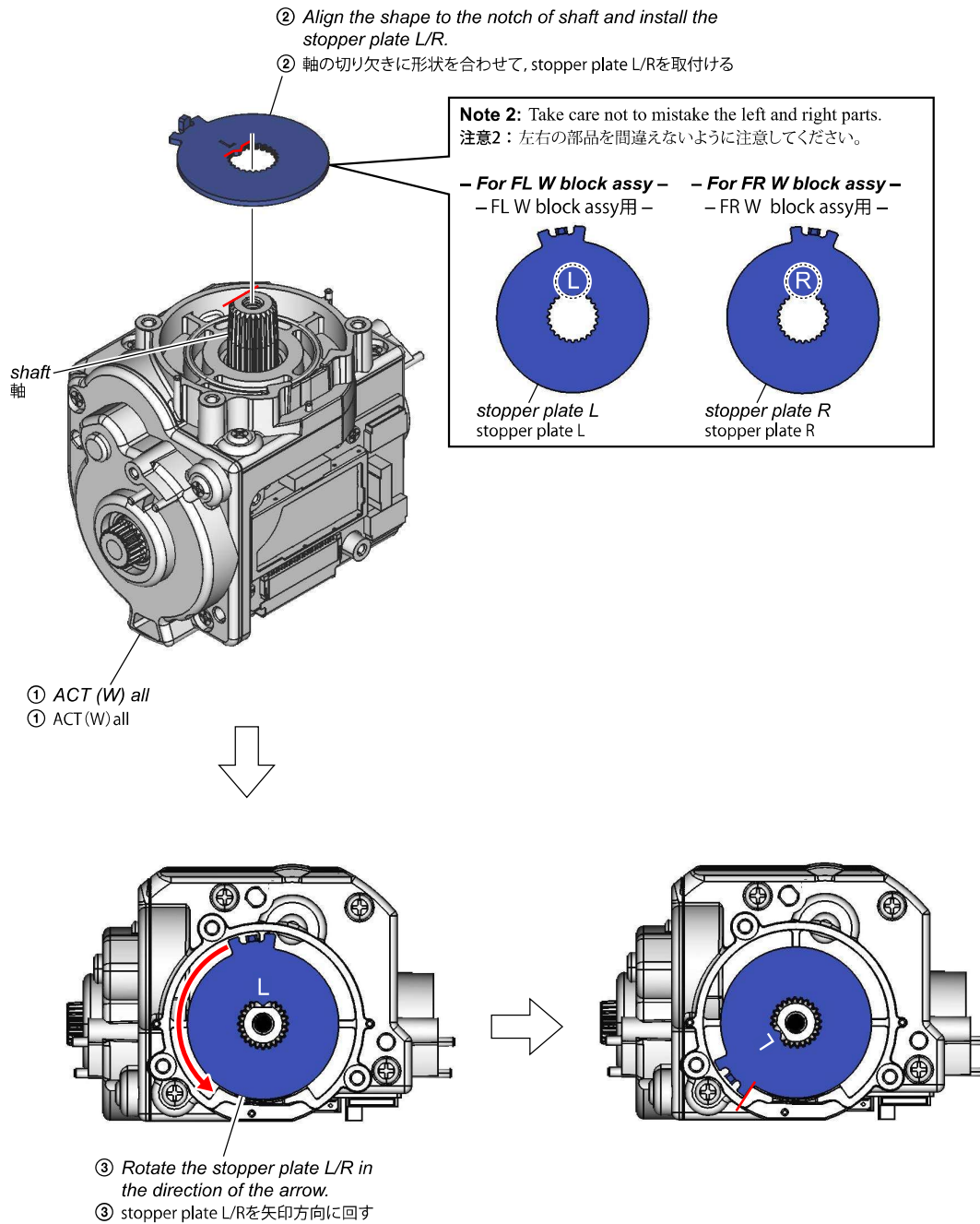


## 1-3-22. FR3 BASE I (R SIDE)

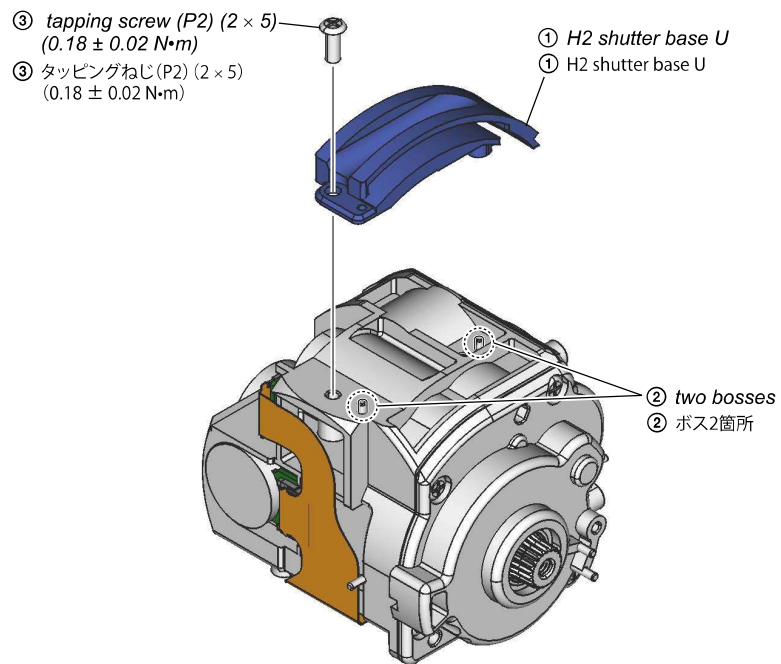


### 1-3-23. ACT (W) ALL, STOPPER PLATE L/R

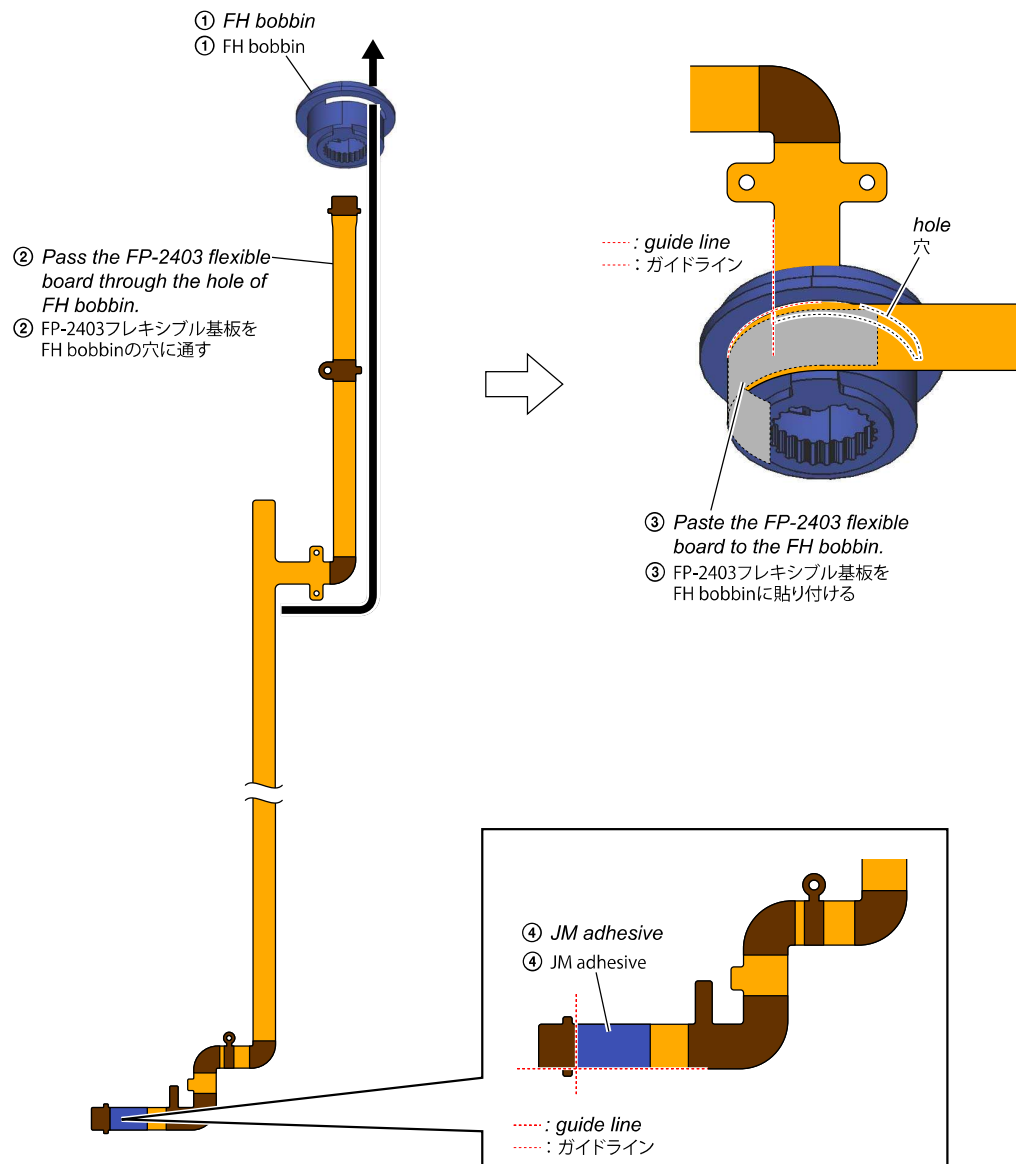
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-24. H2 SHUTTER BASE U

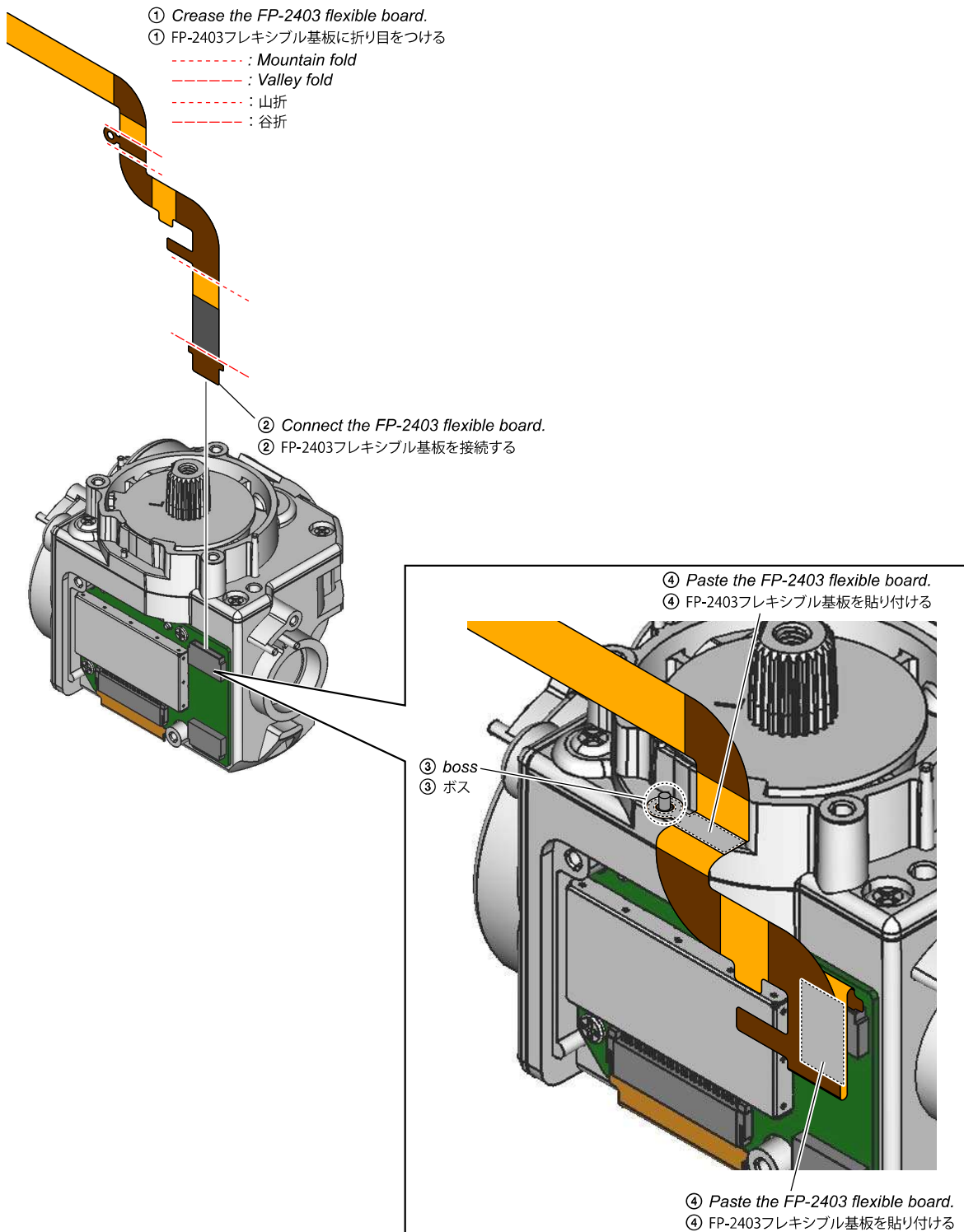


## 1-3-25. FH BOBBIN, FP-2403 FLEXIBLE BOARD

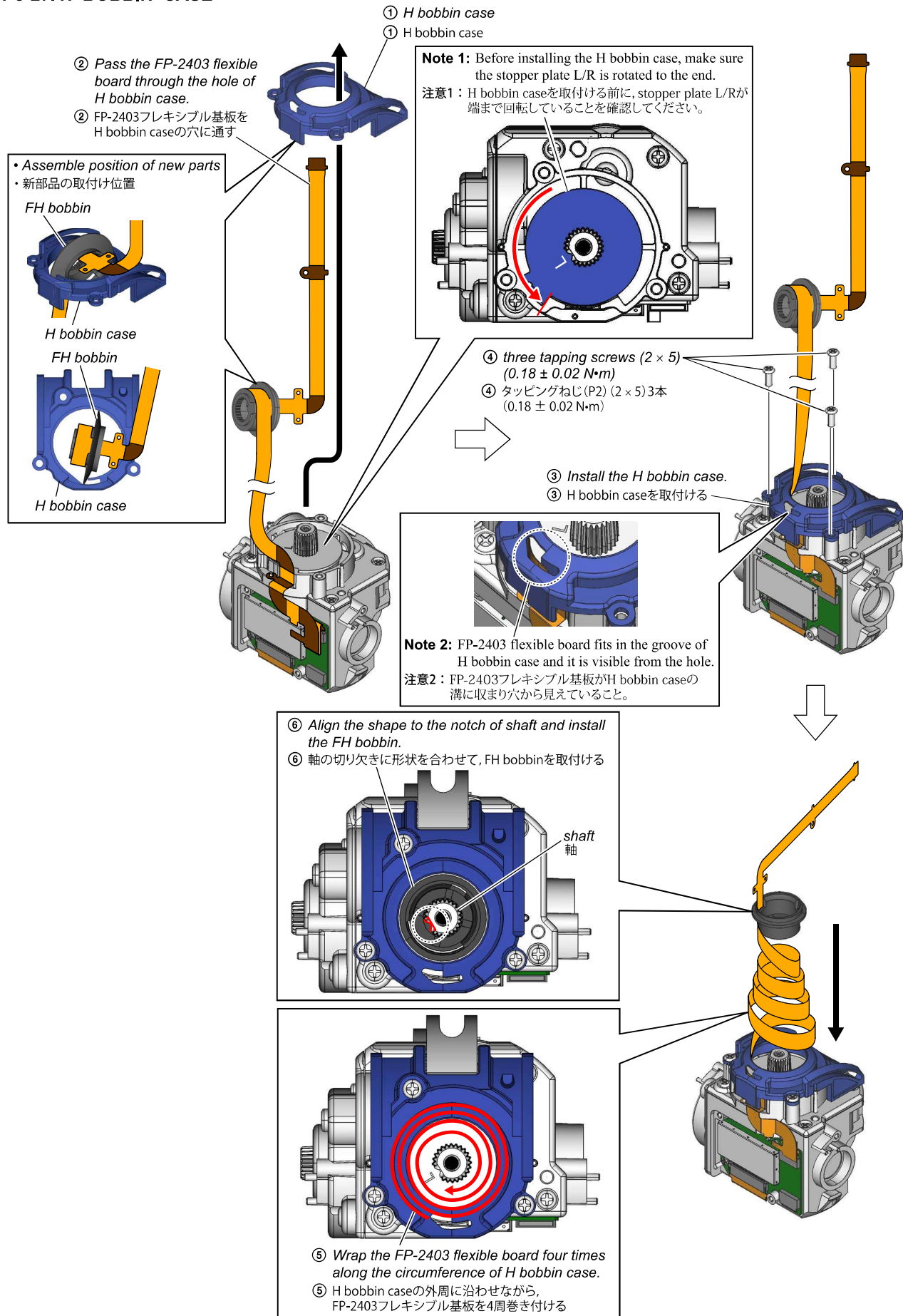




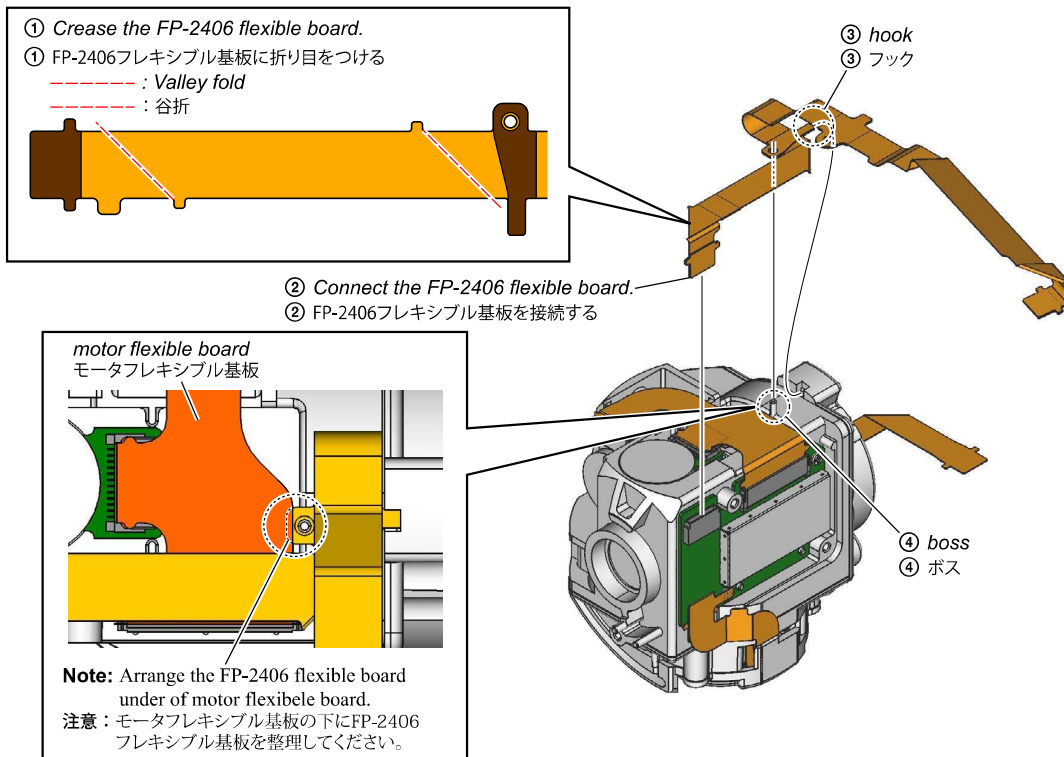
## 1-3-26. FP-2403 FLEXIBLE BOARD BLOCK



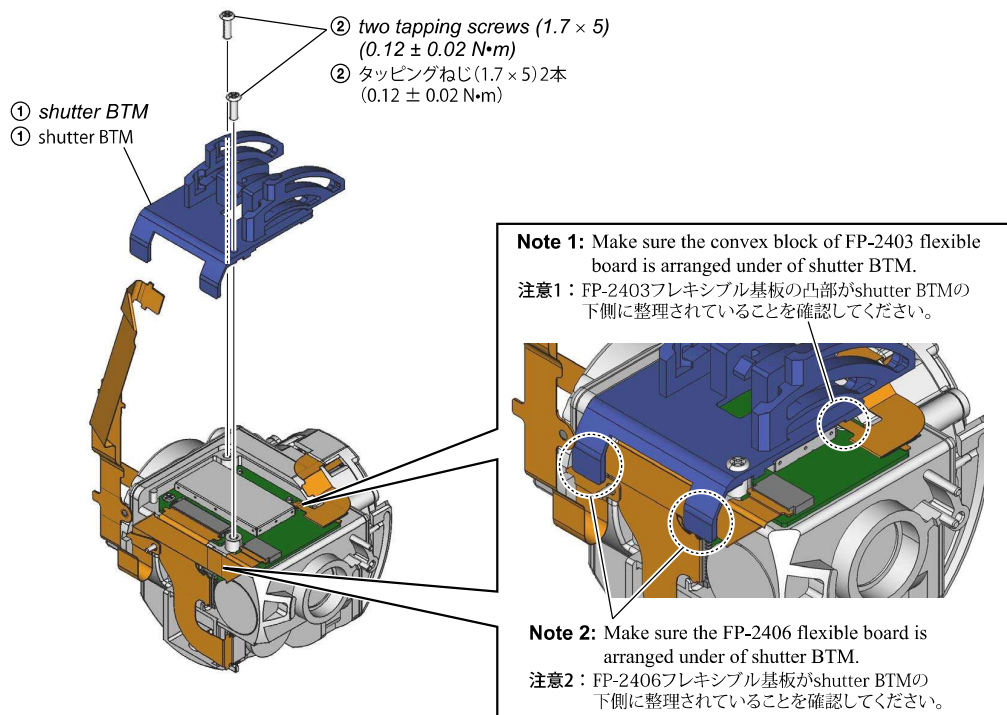
## 1-3-27. H BOBBIN CASE



## 1-3-28. FP-2406 FLEXIBLE BOARD

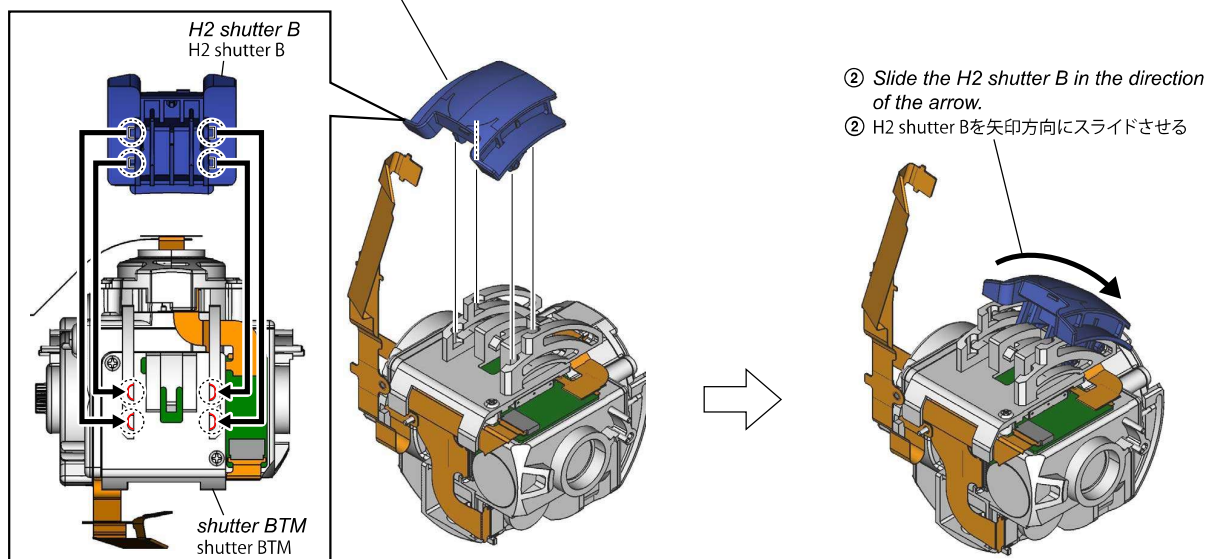


## 1-3-29. SHUTTER BTM



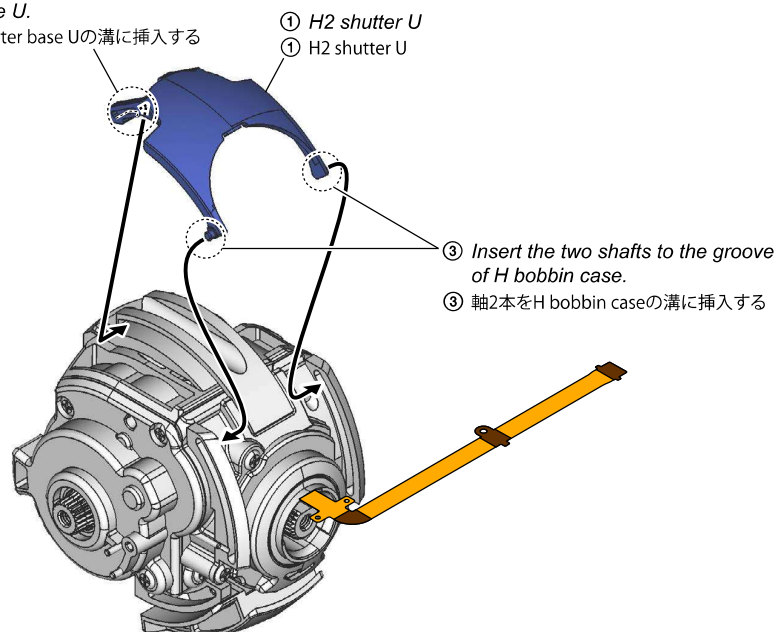
## 1-3-30. H2 SHUTTER B

- ① Align the four shafts to the four grooves of shutter BTM and install the H2 shutter B.  
 ① 軸4本をshutter BTMの溝4箇所に合わせて, H2 shutter Bを取付ける



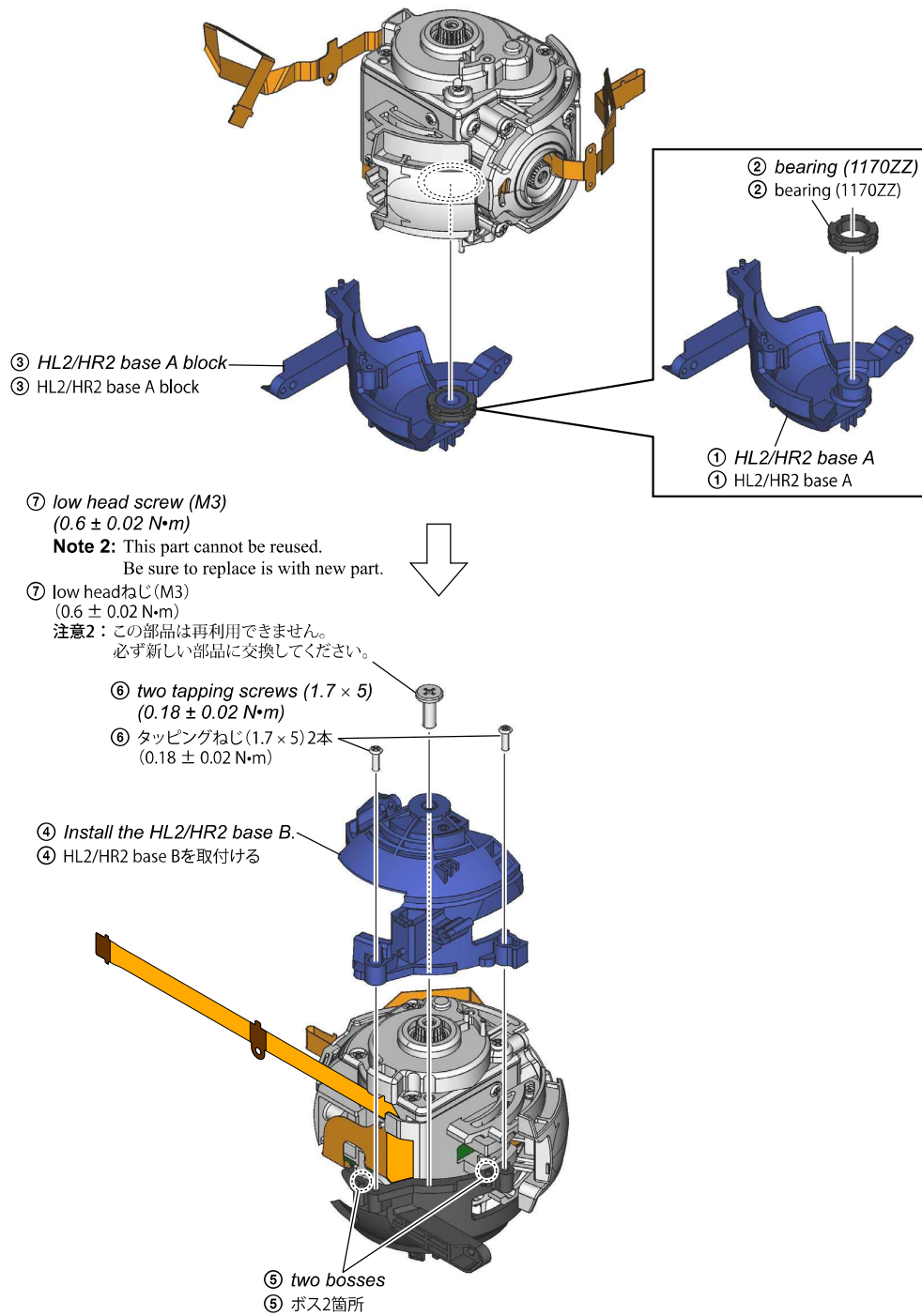
## 1-3-31. H2 SHUTTER U

- ② Insert the rib to the groove of H2 shutter base U.  
 ② リブをH2 shutter base Uの溝に挿入する



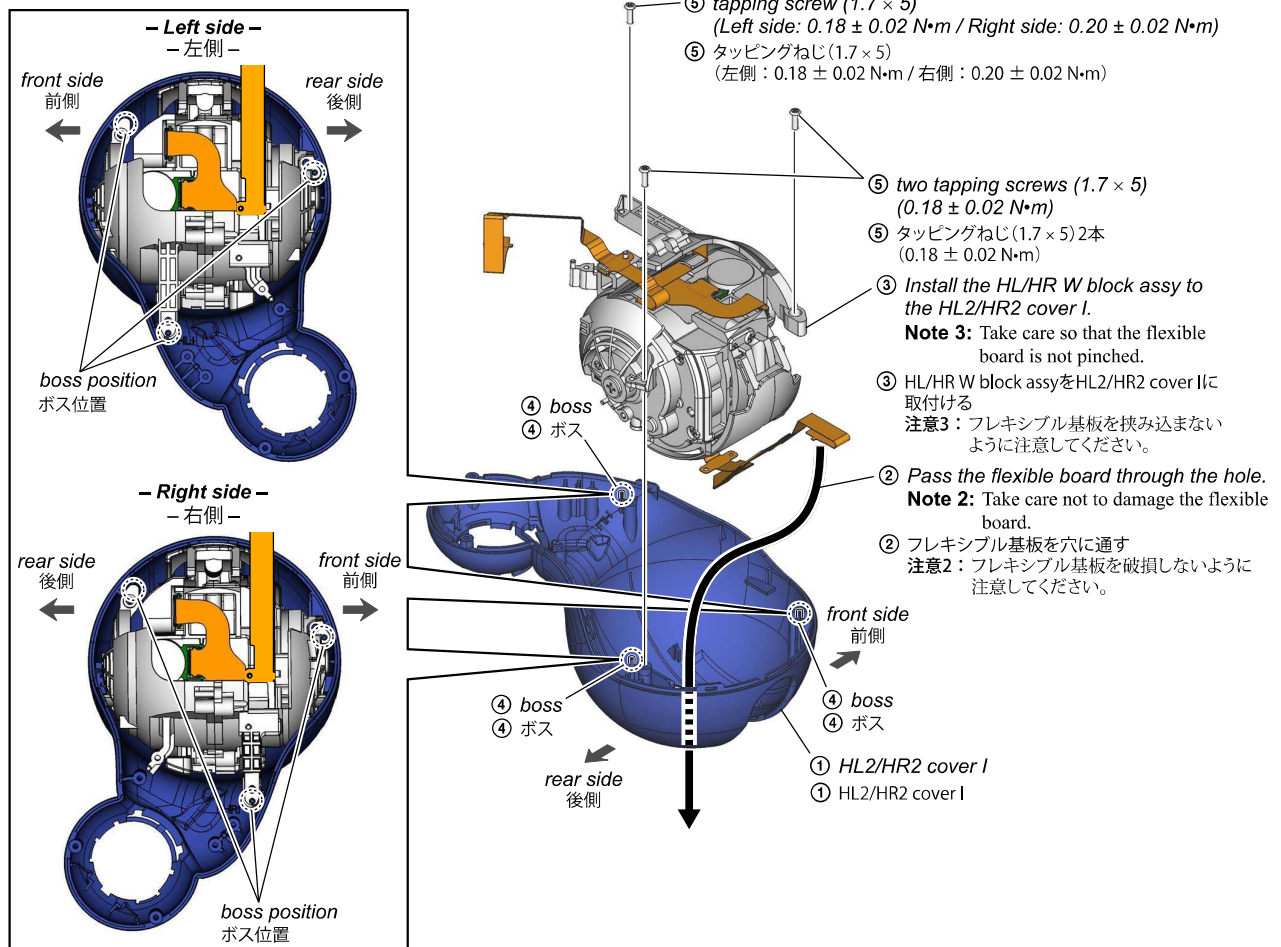
## 1-3-32. HL2/HR2 BASE A/B

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.

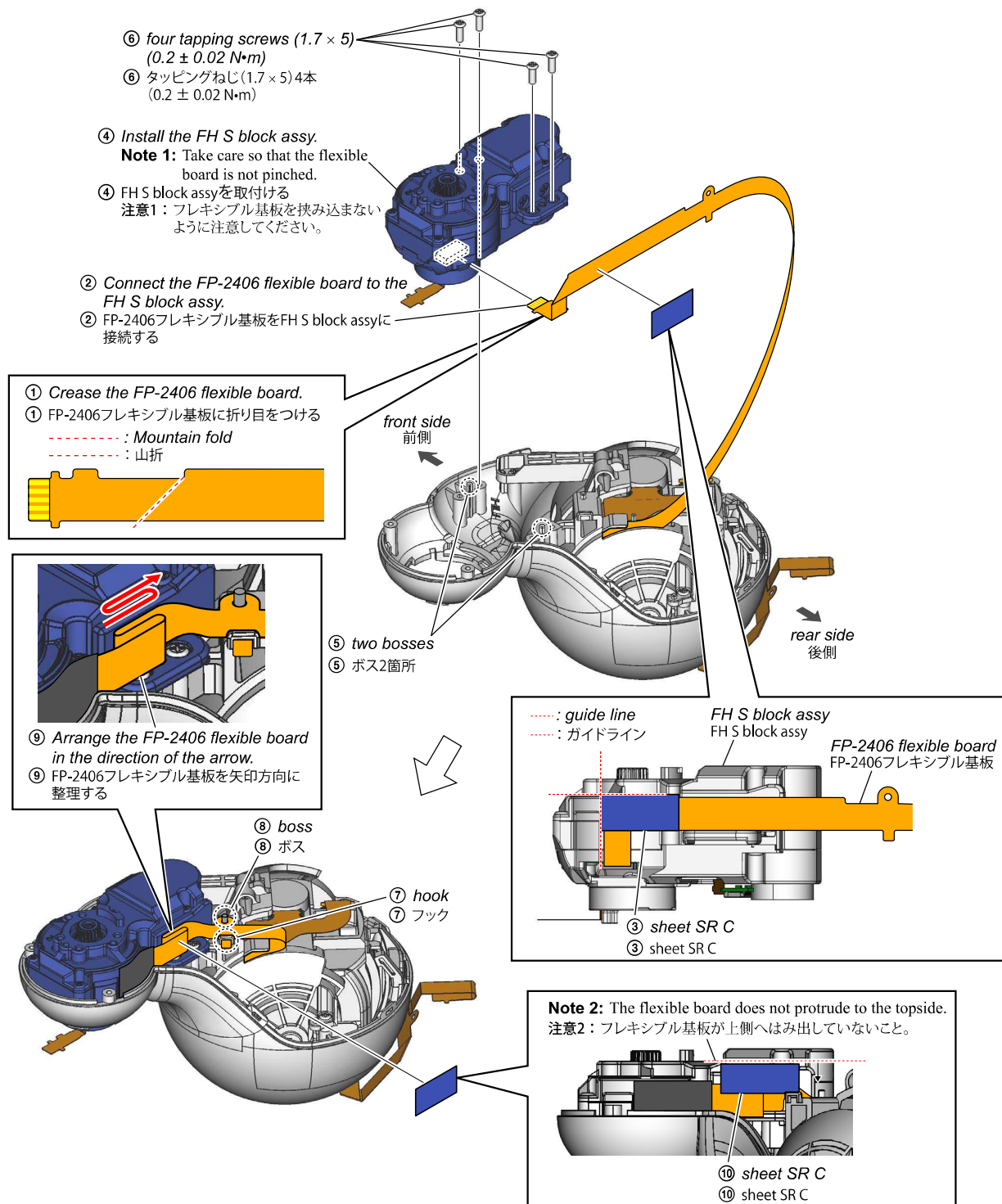


## 1-3-33. HL/HR W BLOCK ASSY, HL2/HR2 COVER I

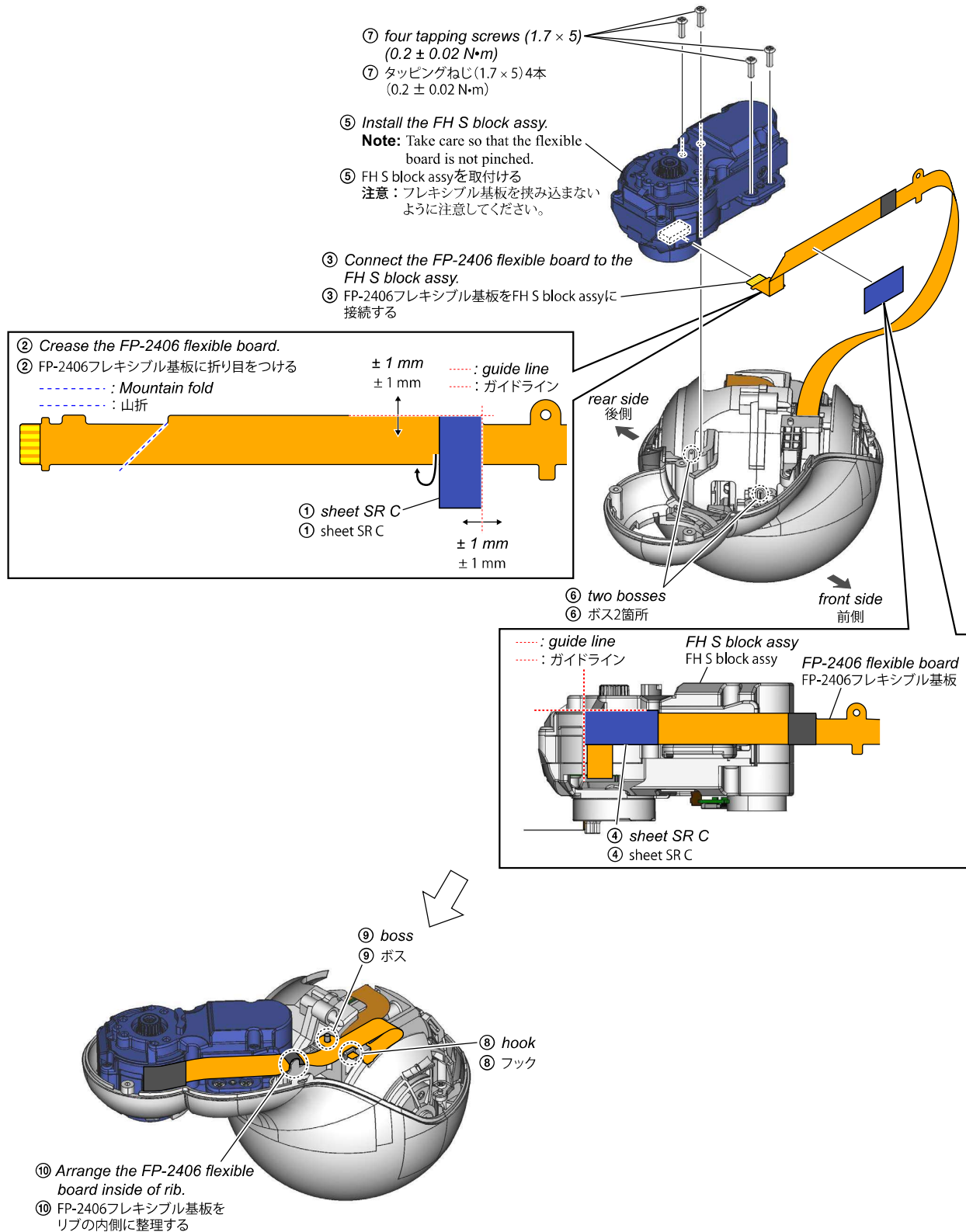
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-34. FH S BLOCK ASSY (L SIDE)



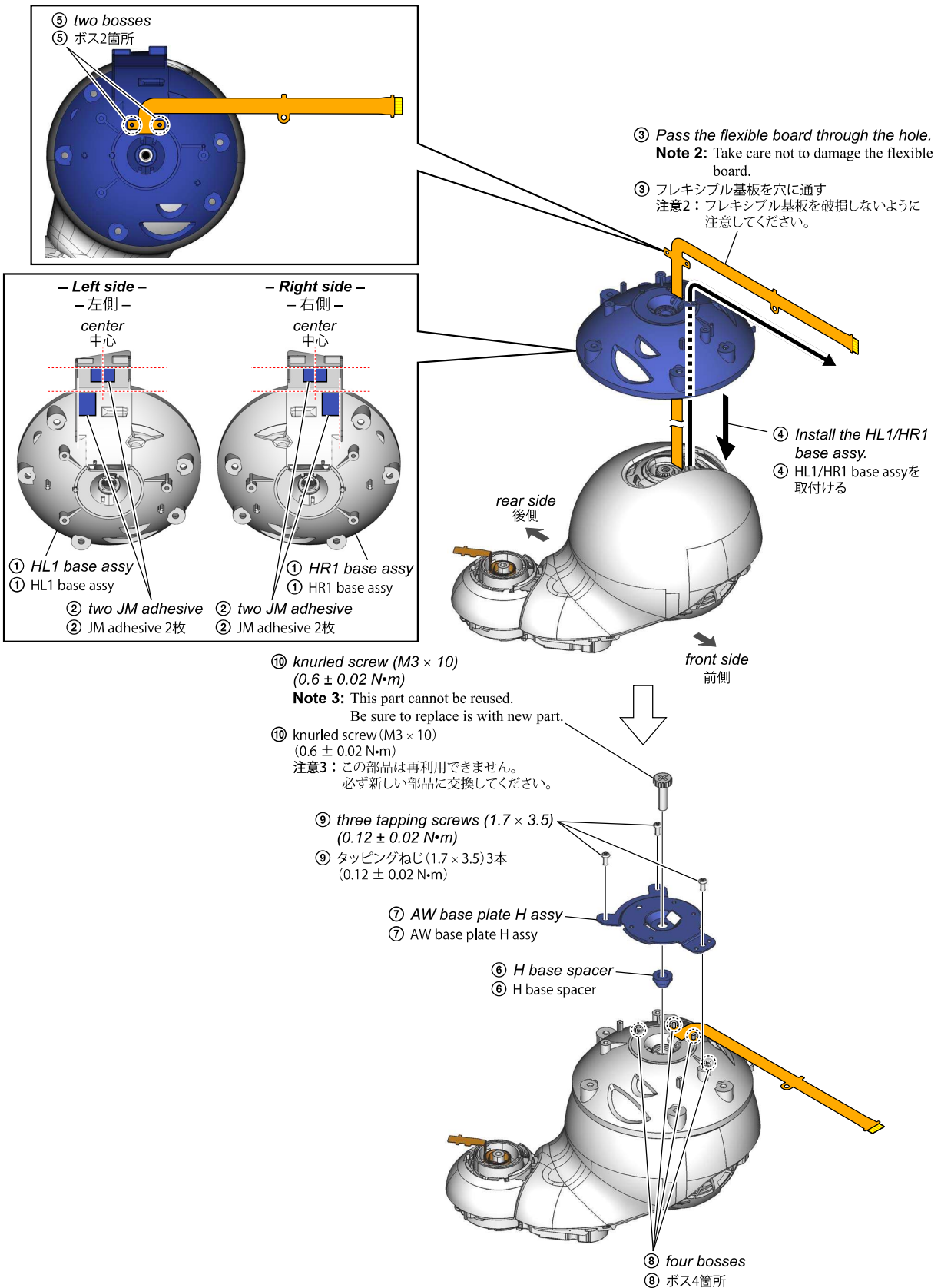
## 1-3-35. FH S BLOCK ASSY (R SIDE)



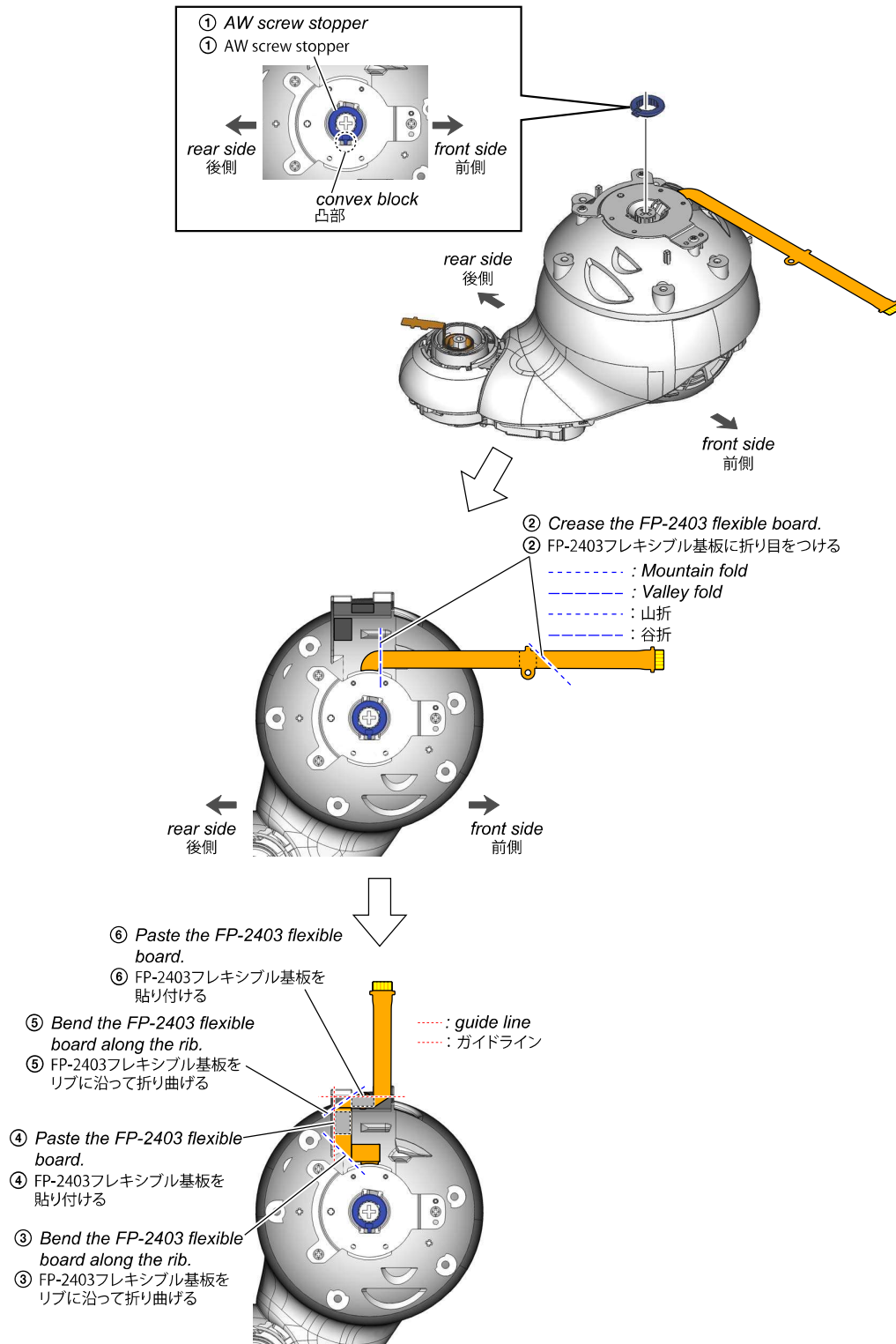


## 1-3-36. HL1/HR1 BASE ASSY

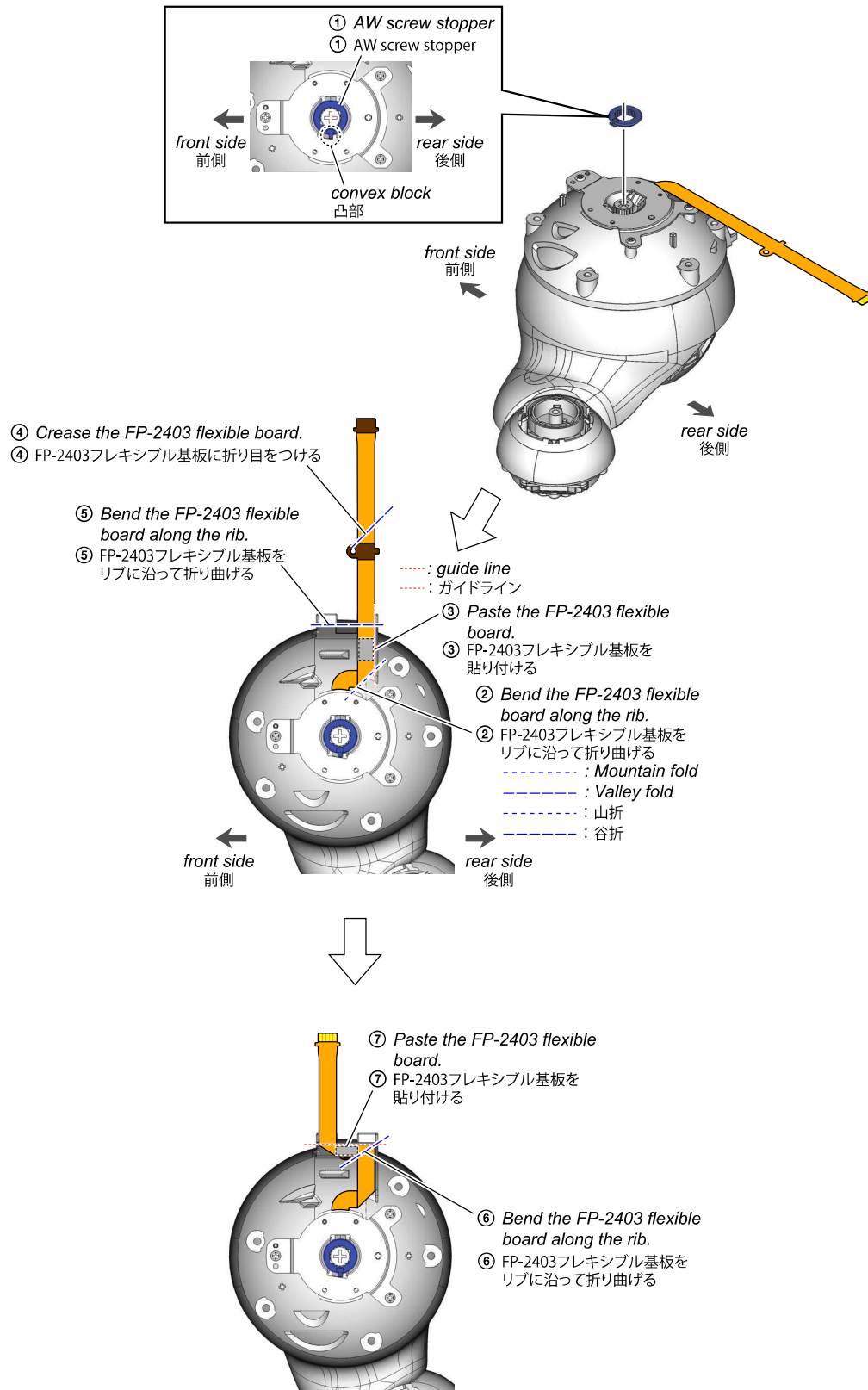
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



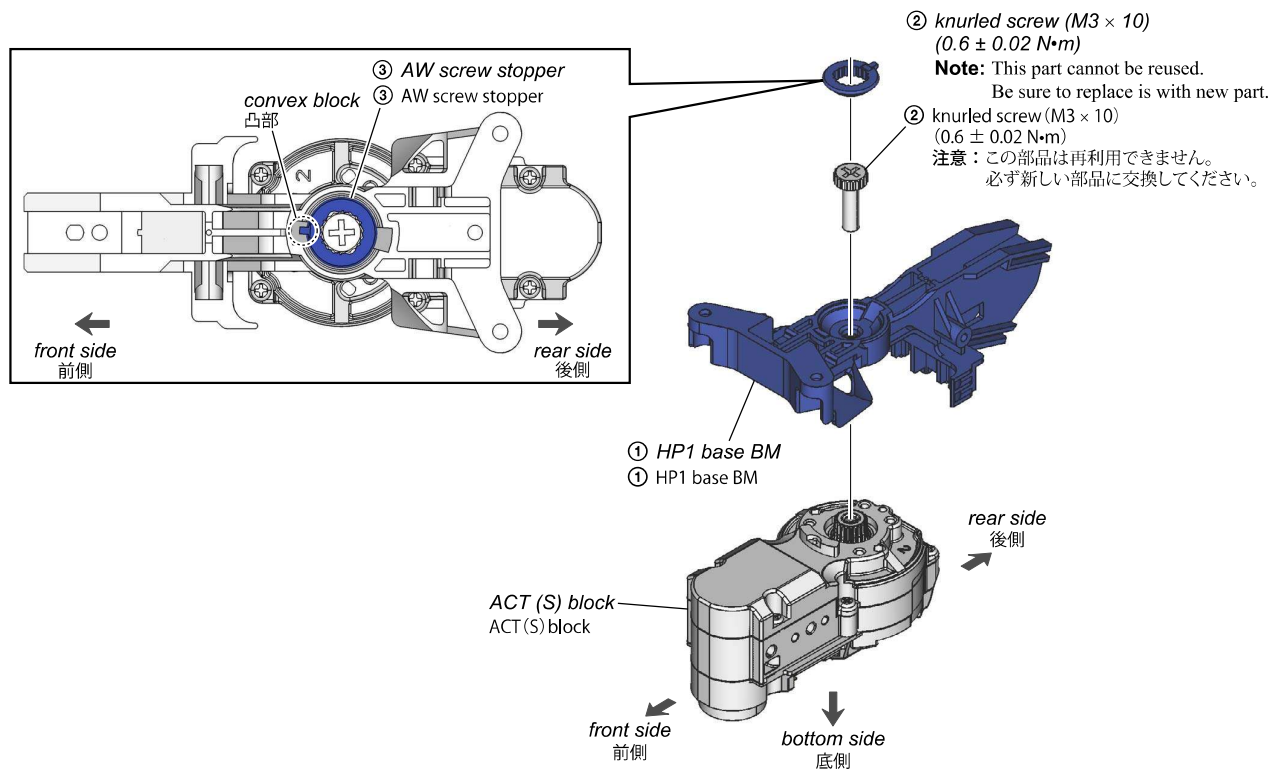
## 1-3-37. AW SCREW STOPPER (L SIDE)



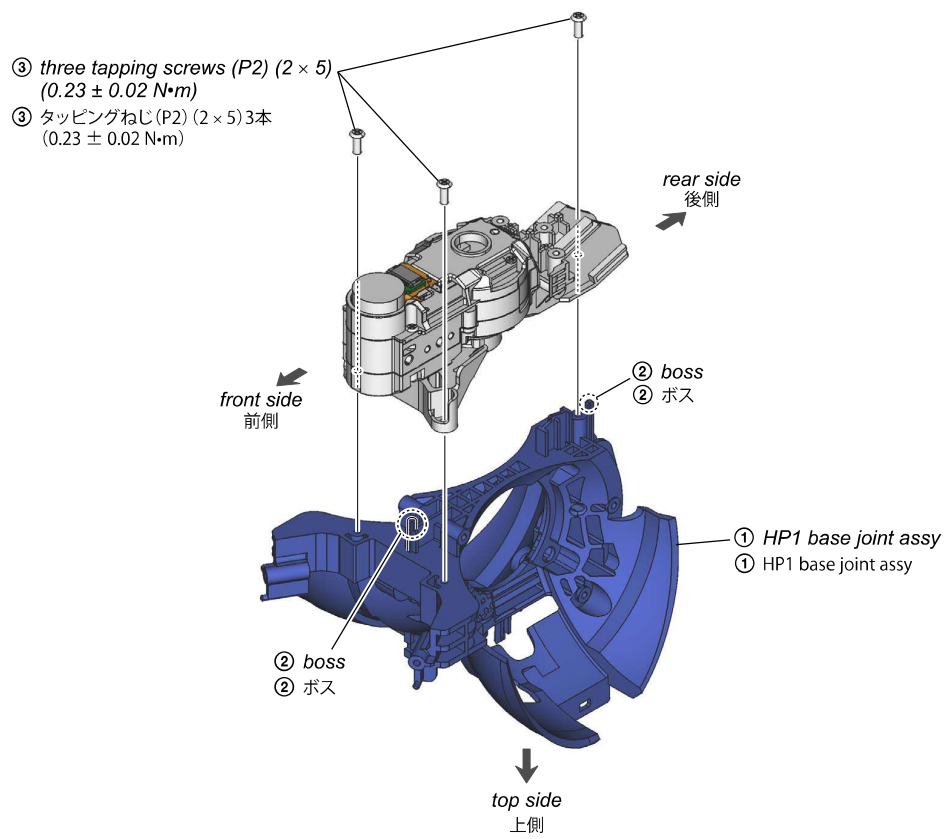
## 1-3-38. AW SCREW STOPPER (R SIDE)



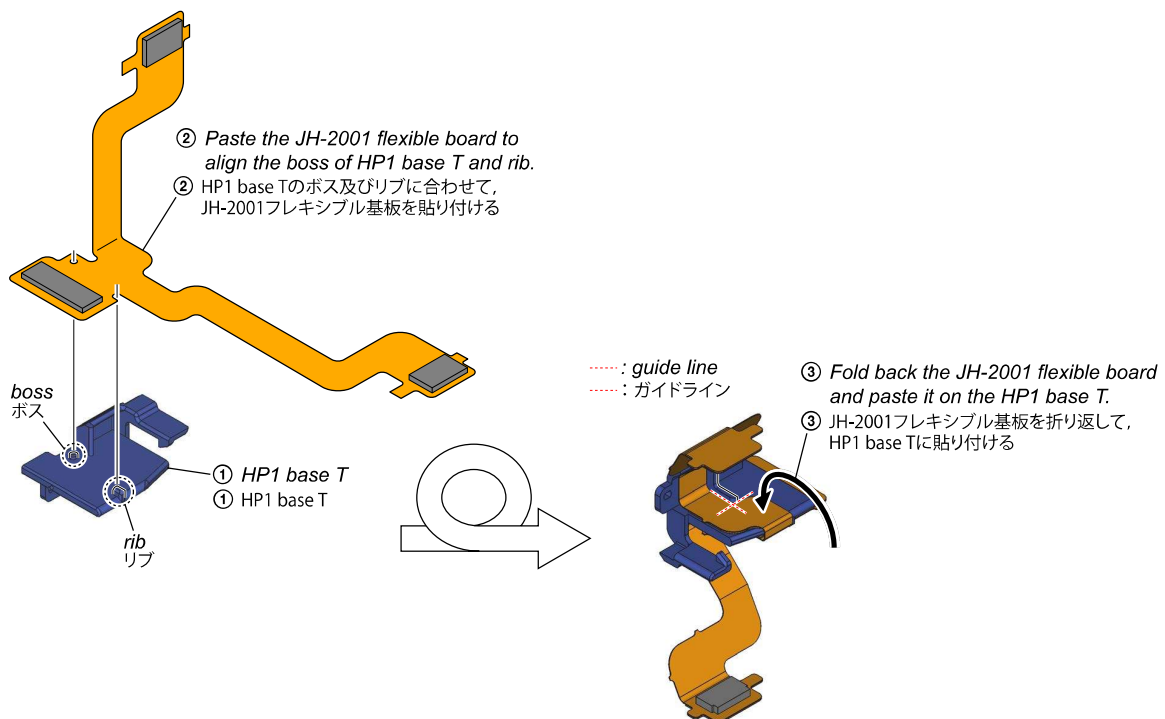
## 1-3-39. HP1 BASE BM



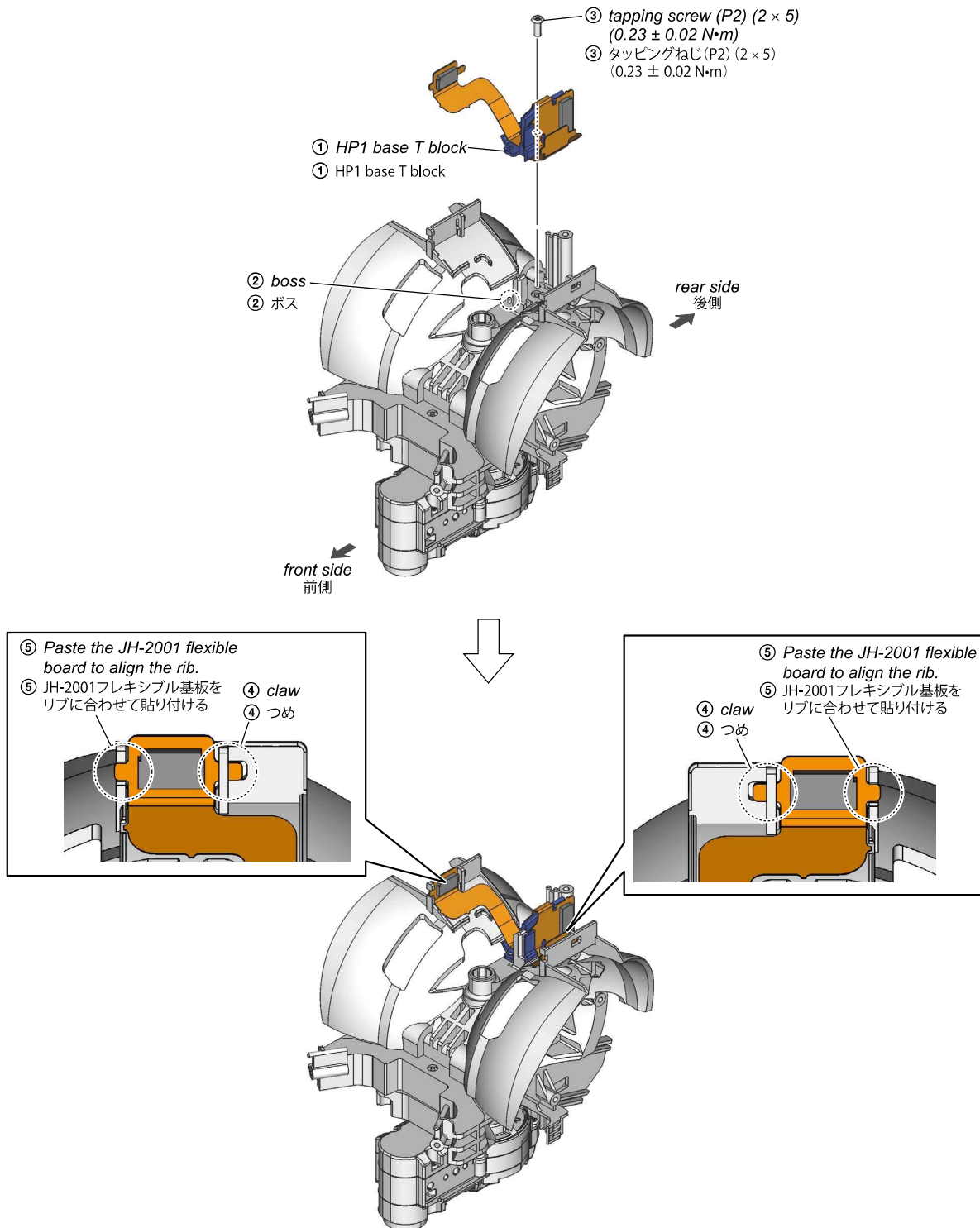
## 1-3-40. HP1 BASE JOINT ASSY



## 1-3-41. HP1 BASE T, JH-2001 FLEXIBLE BOARD

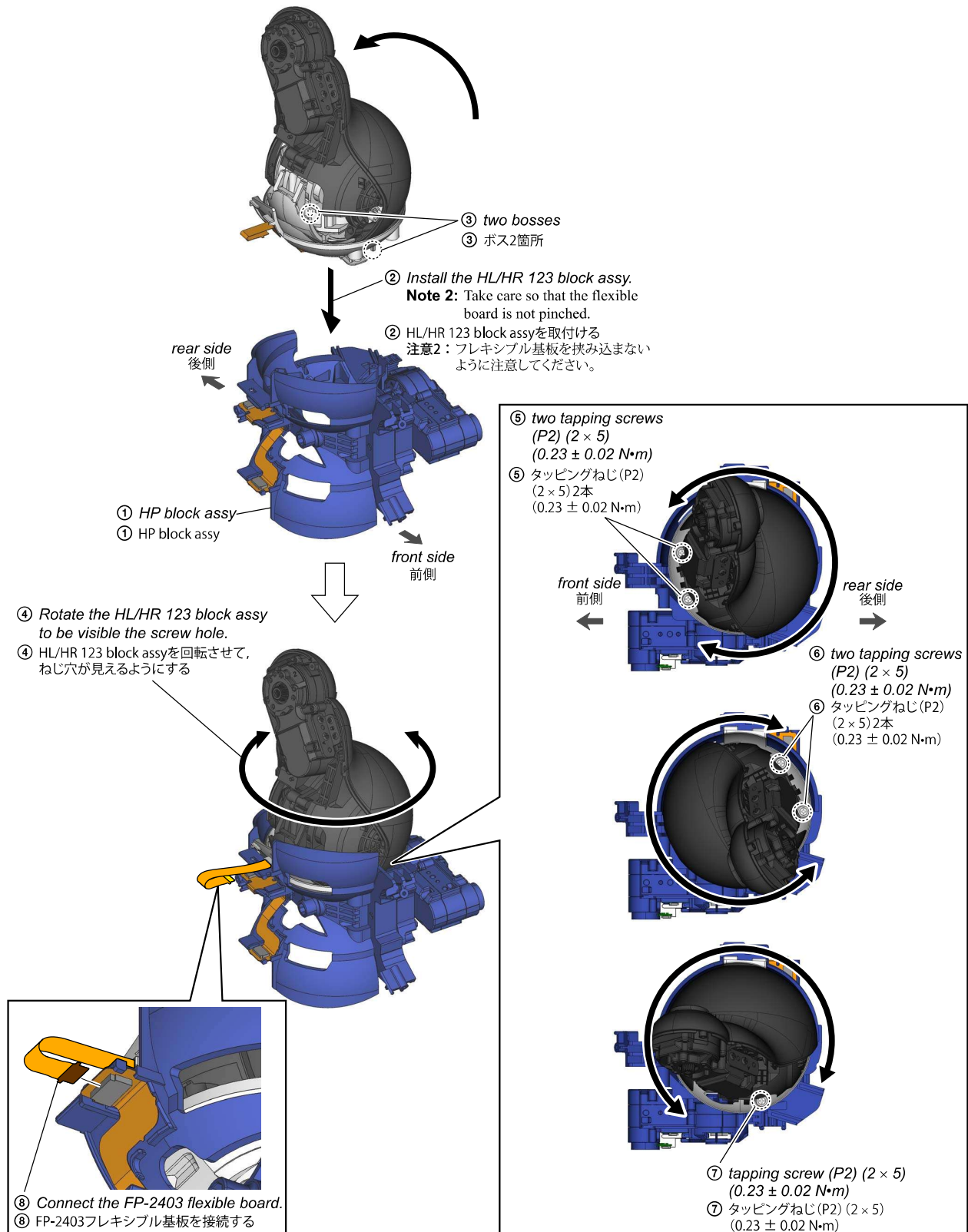


## 1-3-42. HP1 BASE T BLOCK



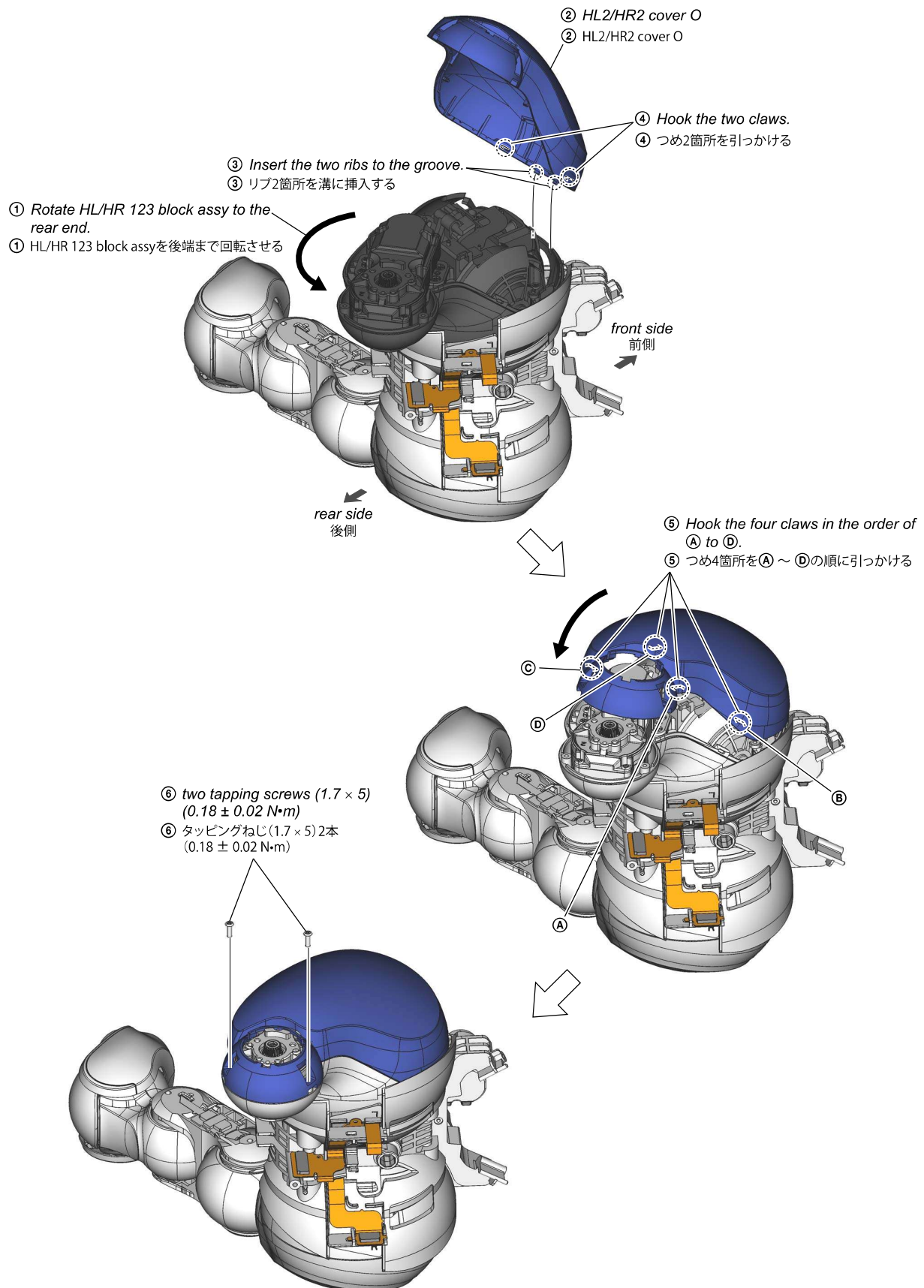
## 1-3-43. HP BLOCK ASSY, HL/HR 123 BLOCK ASSY

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-44. HL2/HR2 COVER O

Note: The illustration uses the left side, but there is no difference in assembly for the left and right.



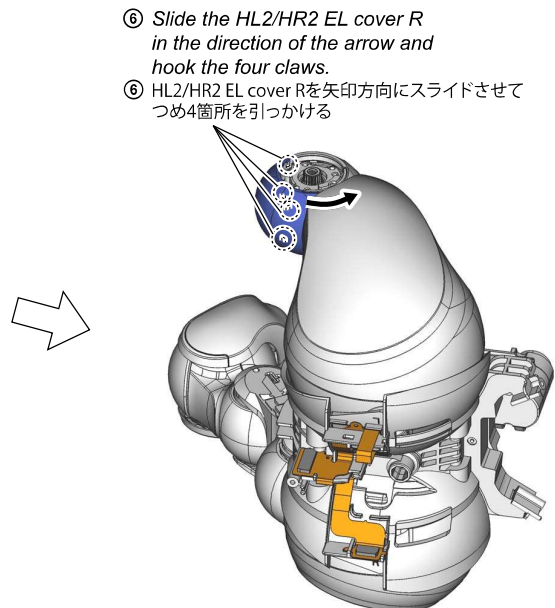
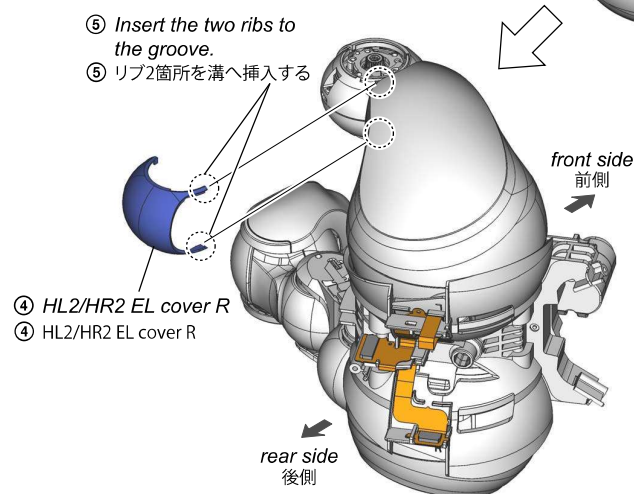
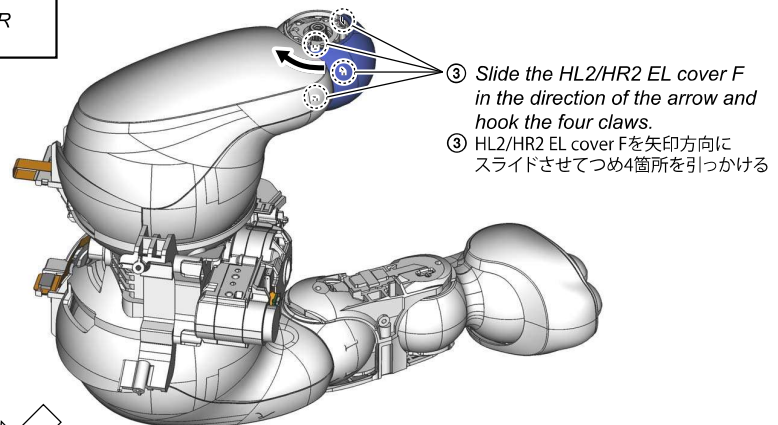
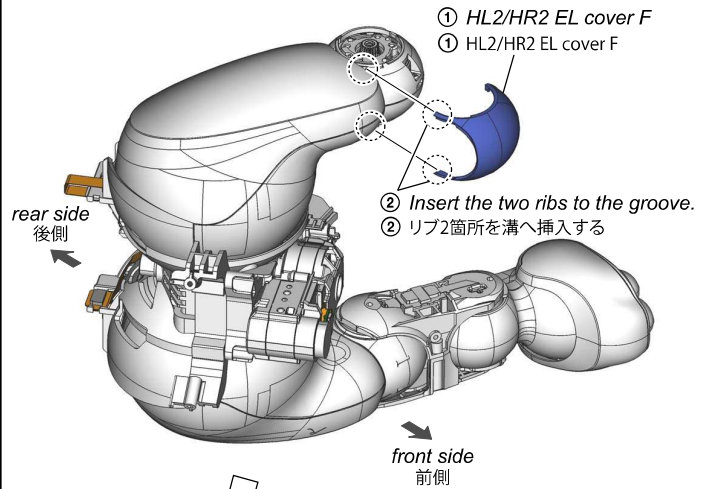
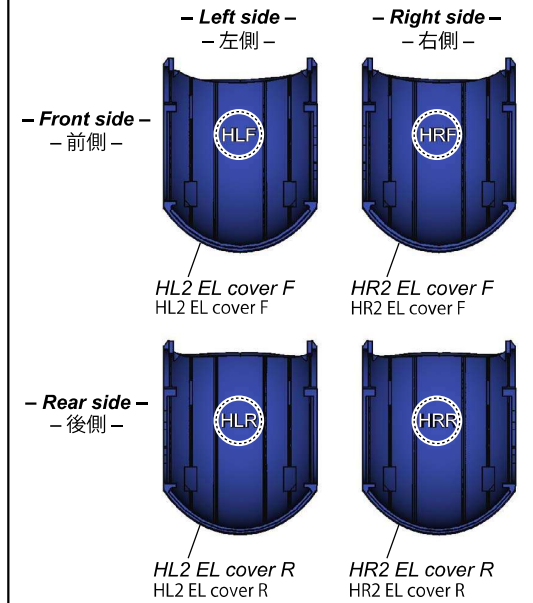


## 1-3-45. HL2/HR2 EL COVER F/R

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.

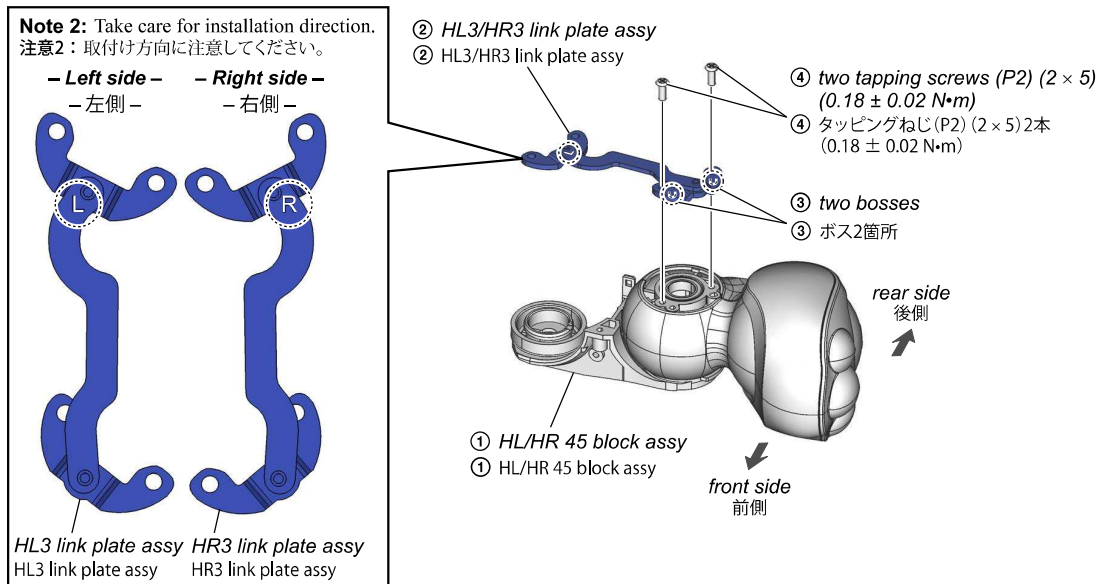
**Note 2:** Take care not to mistake the front, rear, left and right parts.

注意2：前後左右の部品を間違えないように注意してください。



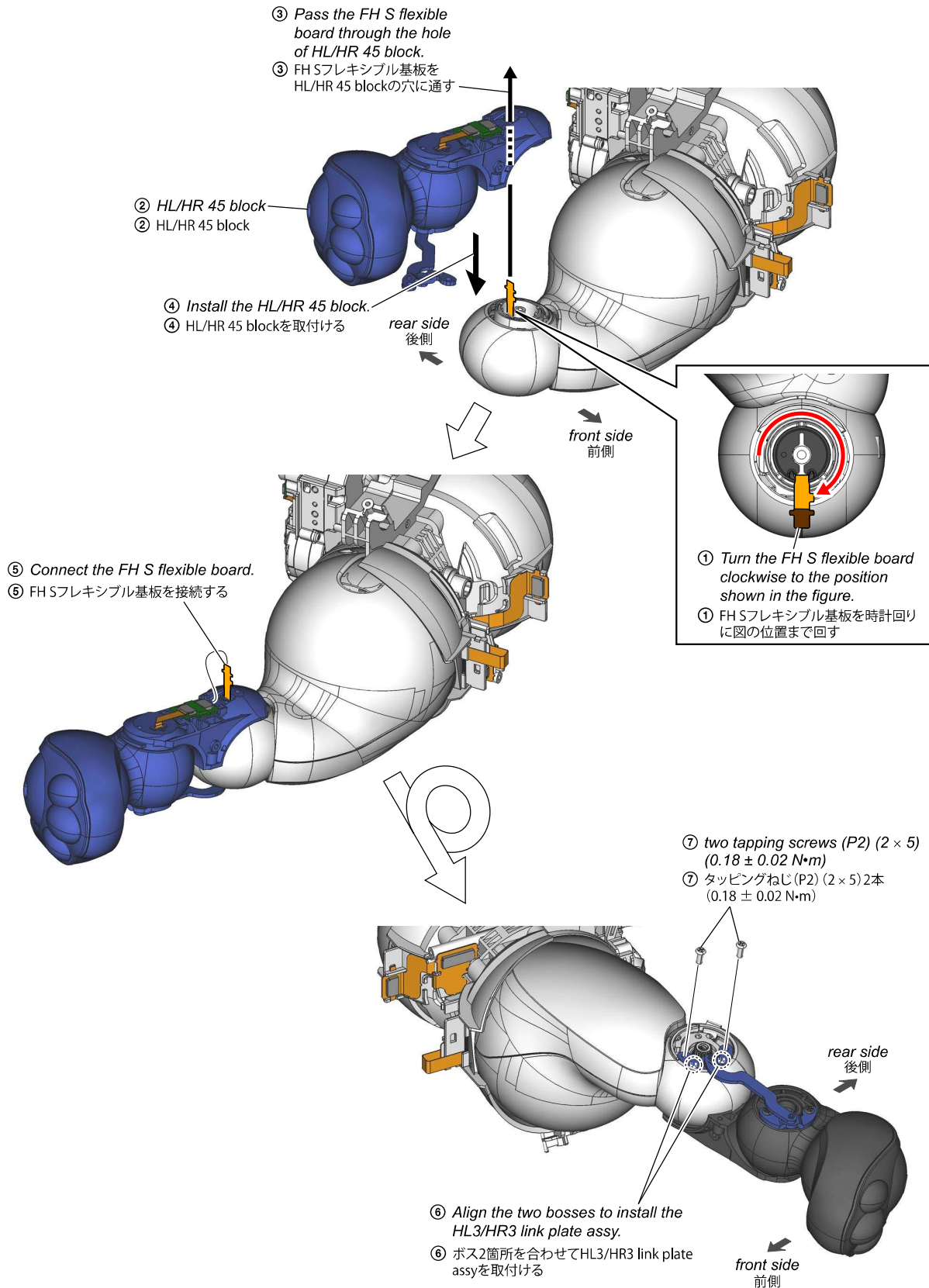
## 1-3-46. HL/HR 45 BLOCK ASSY, HL3/HR3 LINK PLATE ASSY

**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



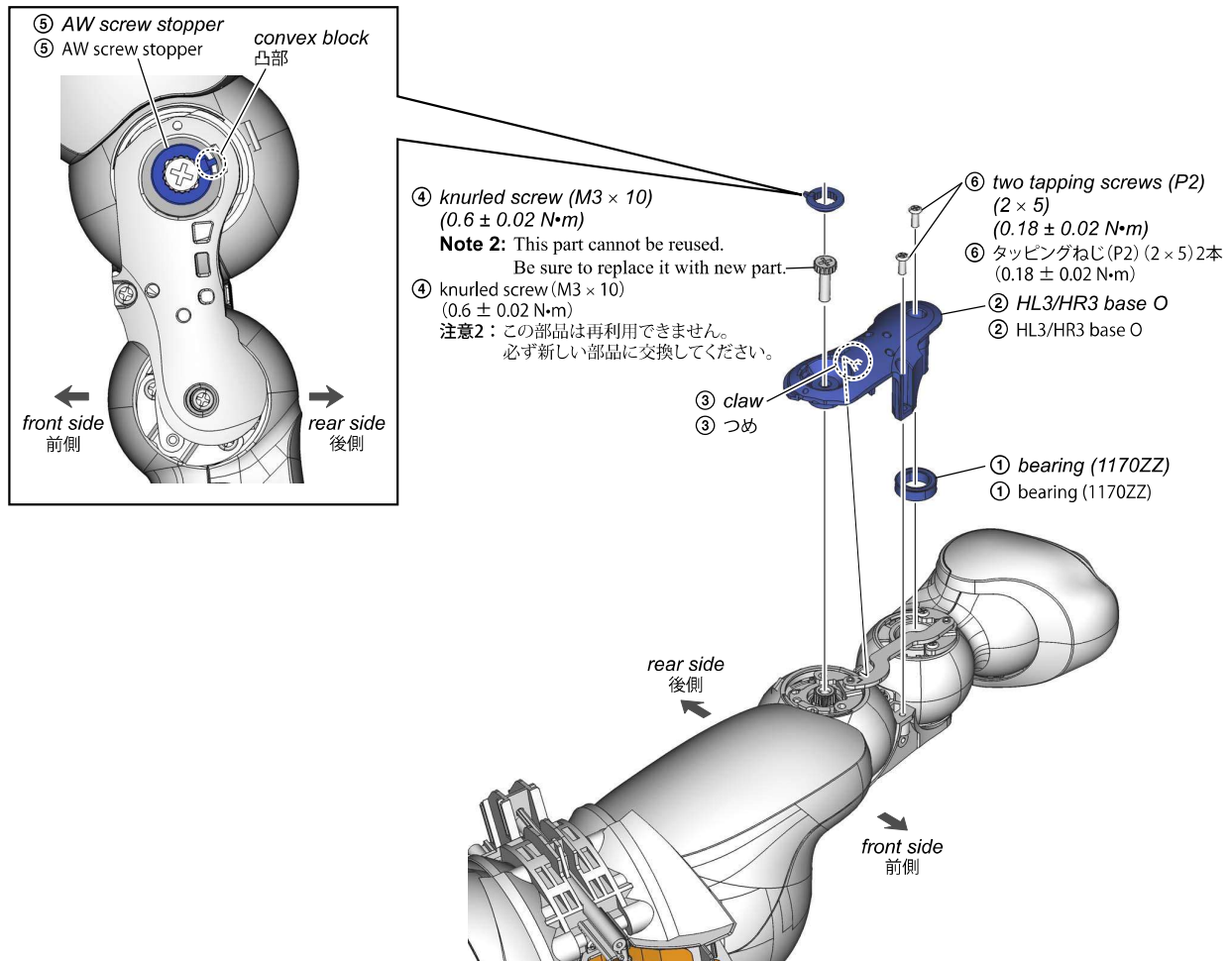
## 1-3-47. HL/HR 45 BLOCK

**Note:** The illustration uses the left side, but there is no difference in assembly for the left and right.

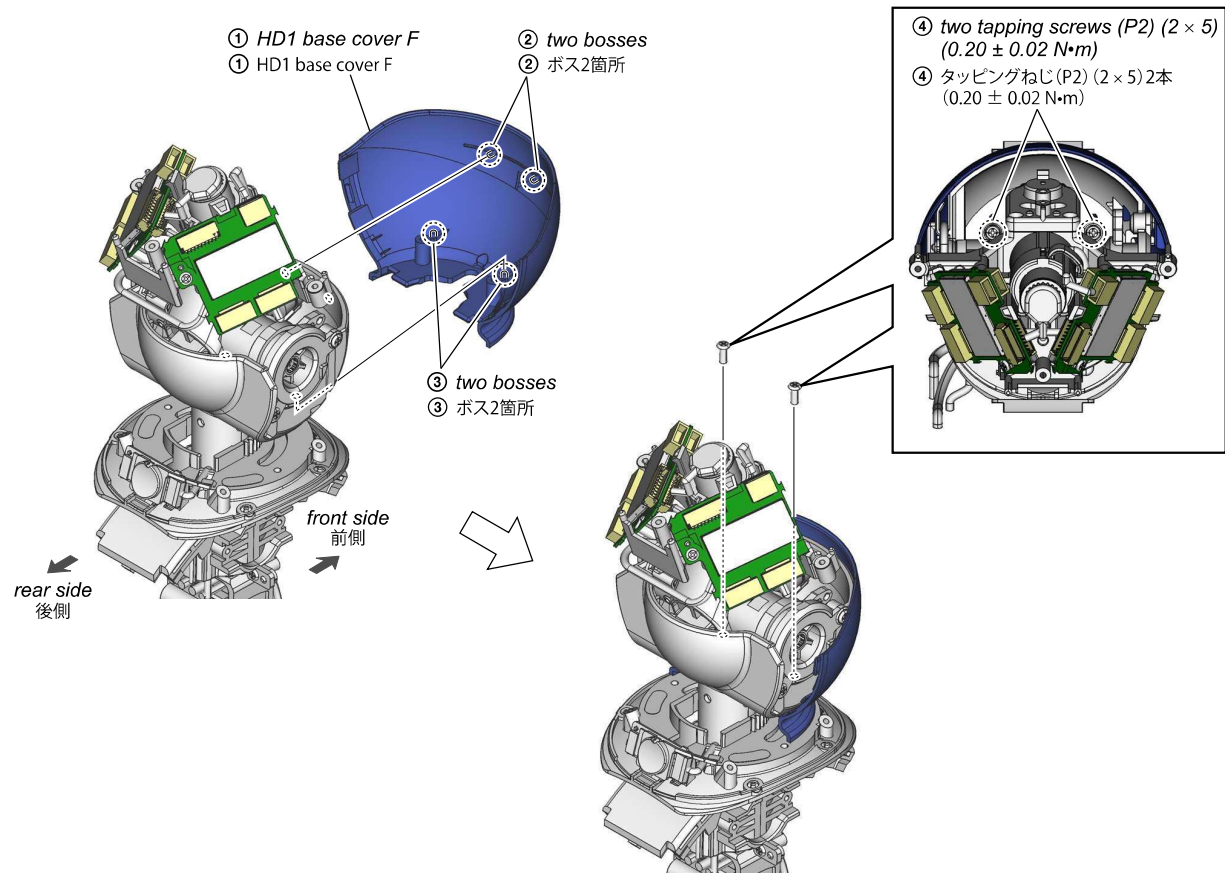


## 1-3-48. HL3/HR3 BASE O

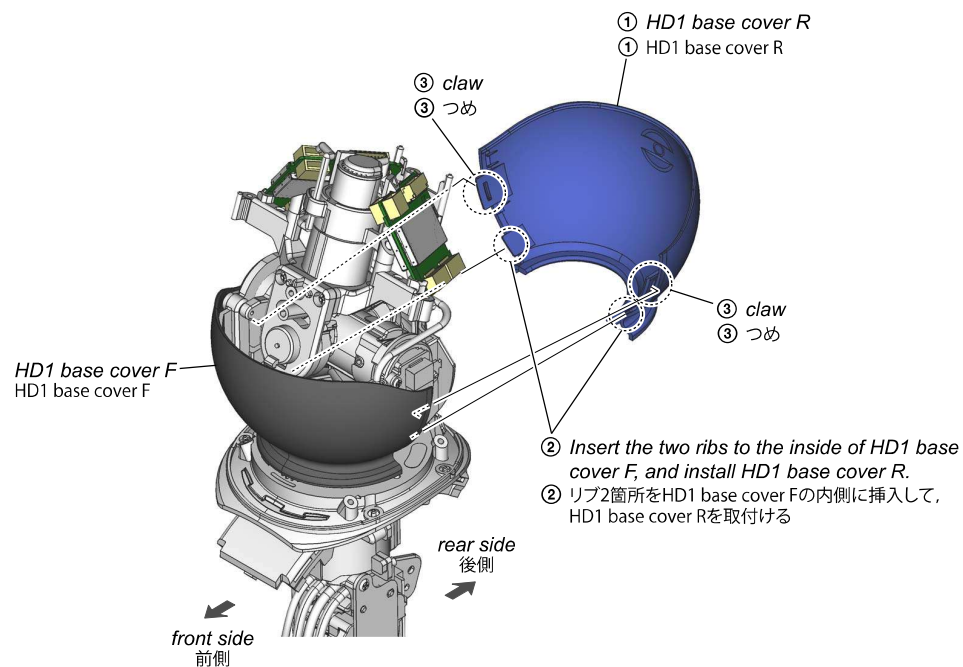
**Note 1:** The illustration uses the left side, but there is no difference in assembly for the left and right.



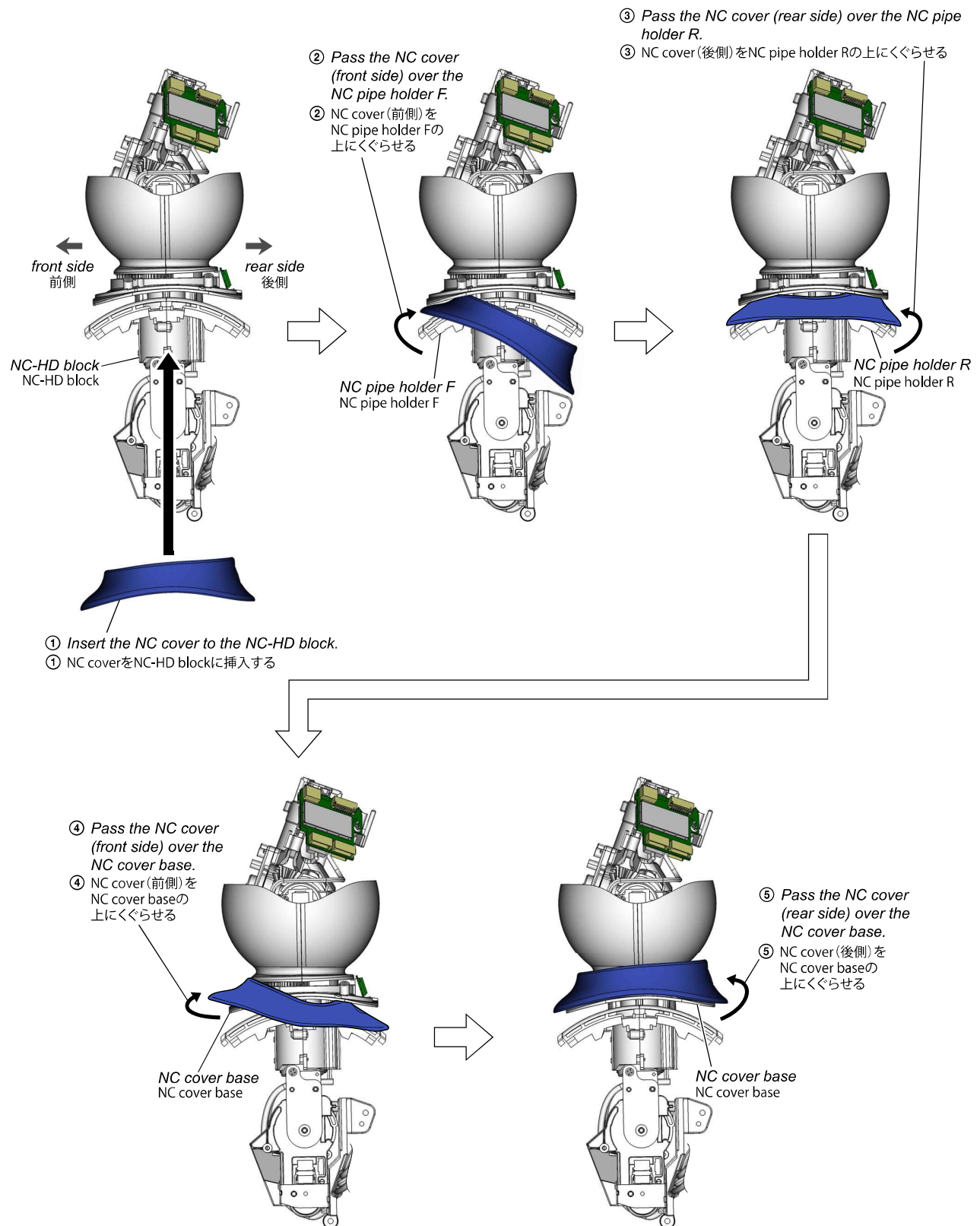
## 1-3-49. HD1 BASE COVER F



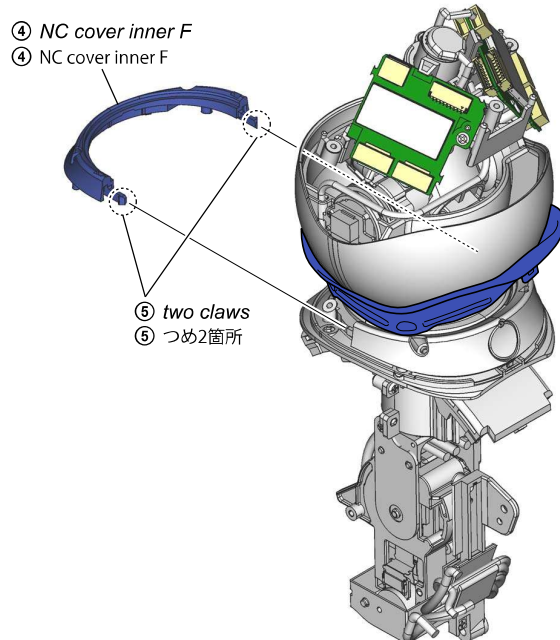
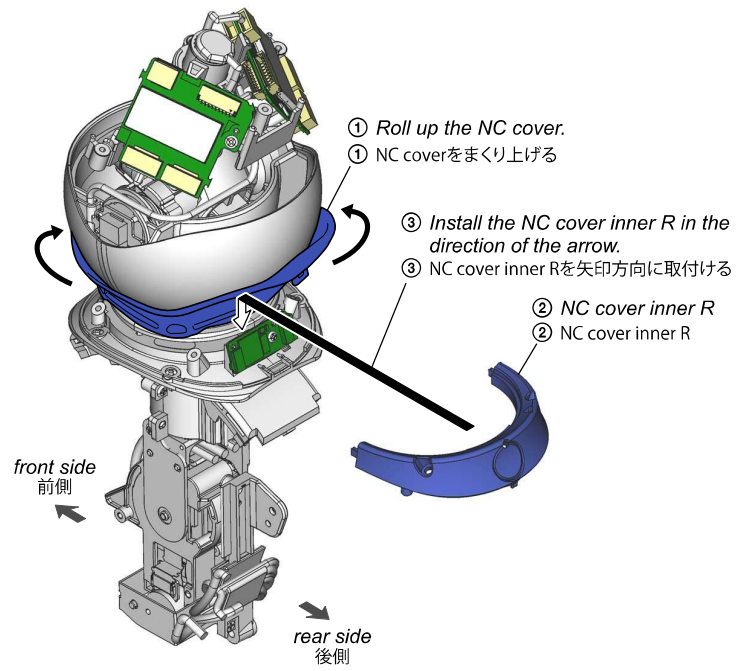
## 1-3-50. HD1 BASE COVER R



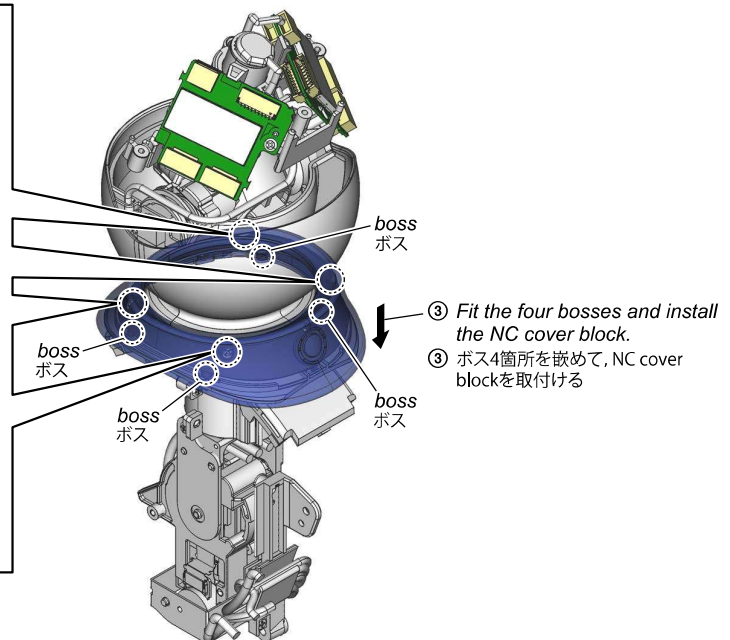
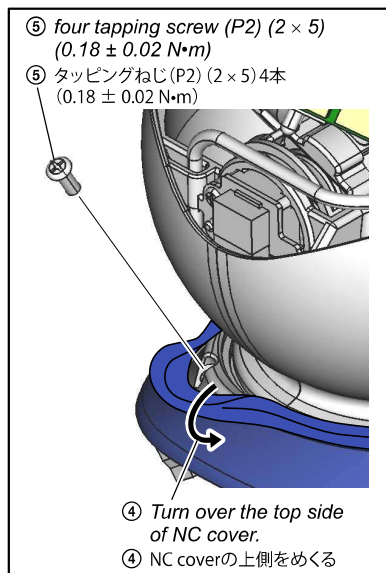
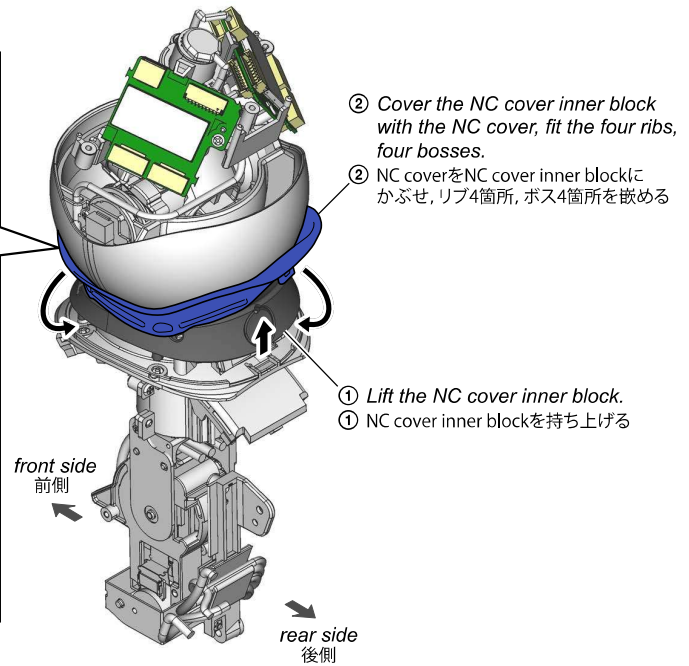
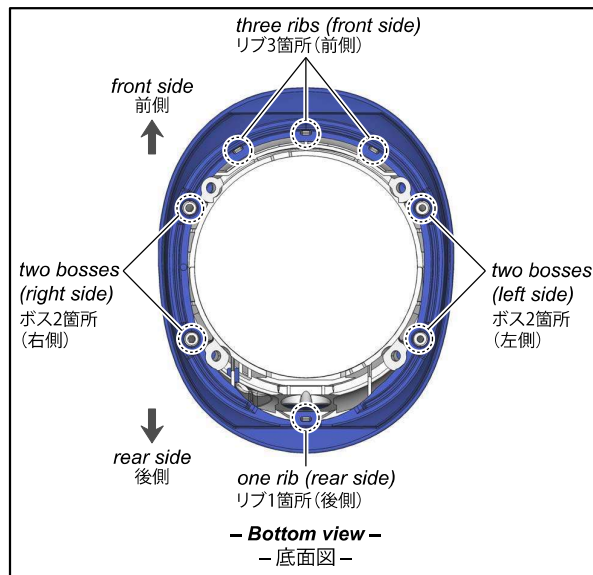
## 1-3-51. NC COVER



## 1-3-52. NC COVER INNER F/R

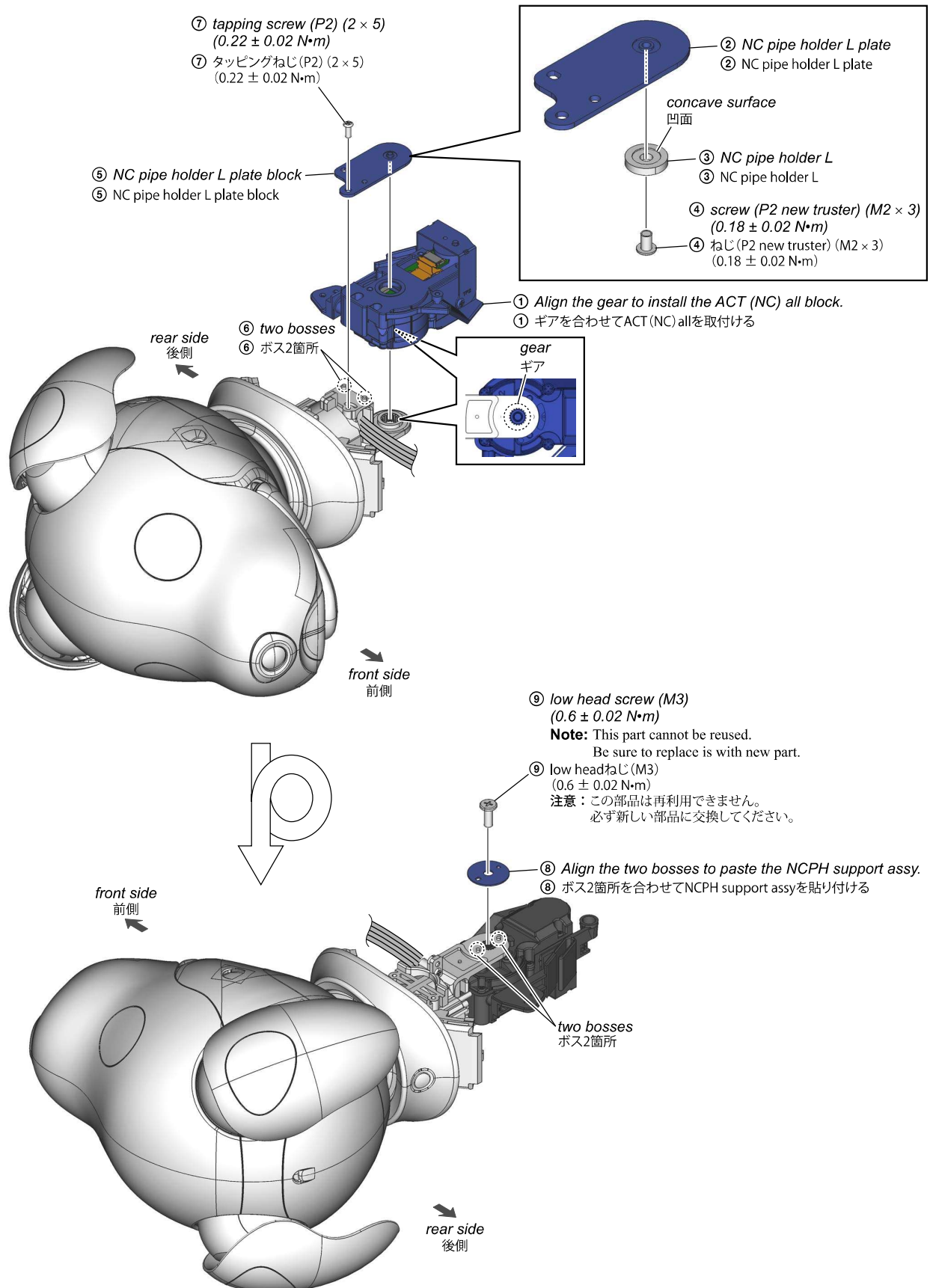


## 1-3-53. NC COVER INNER BLOCK

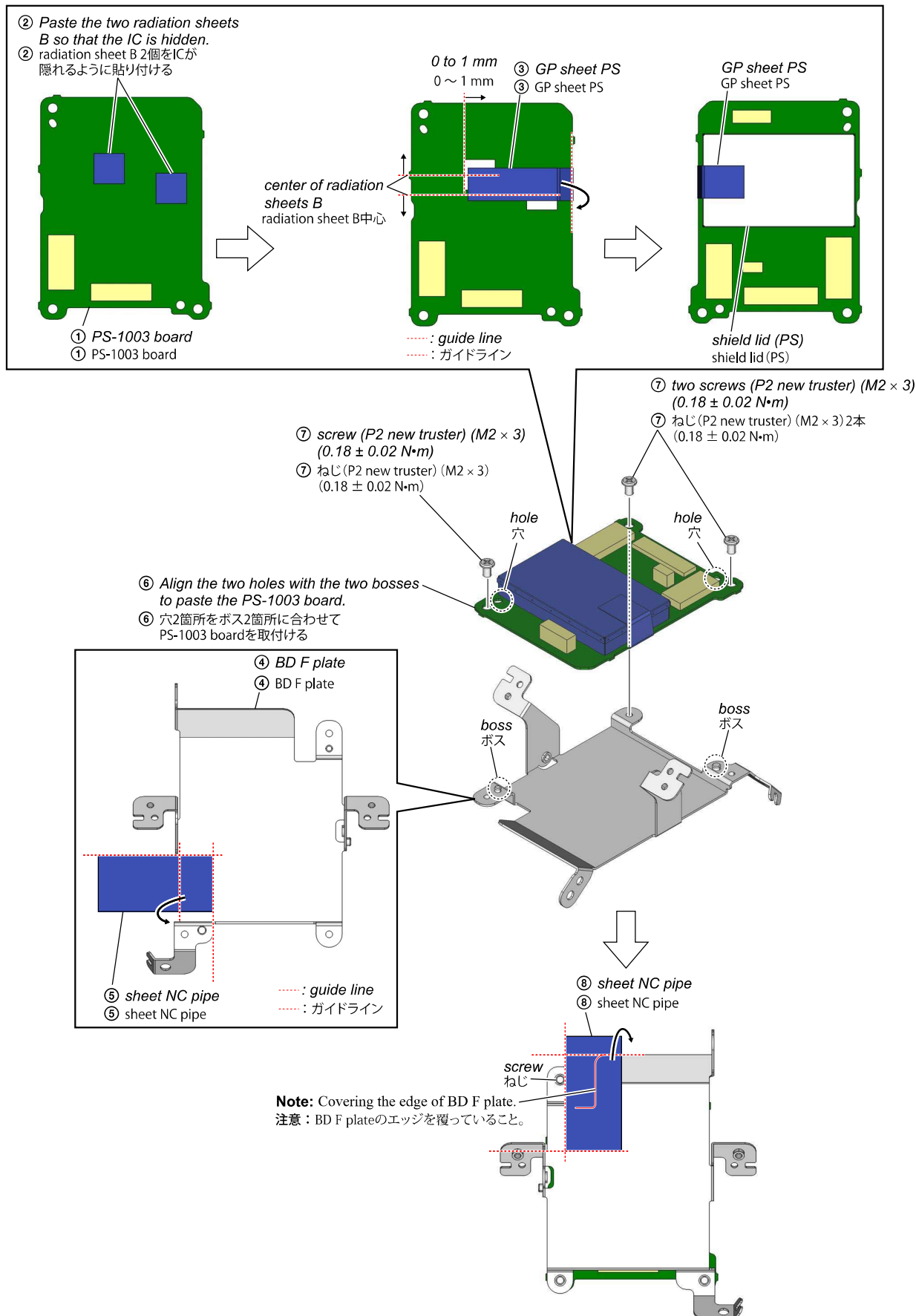




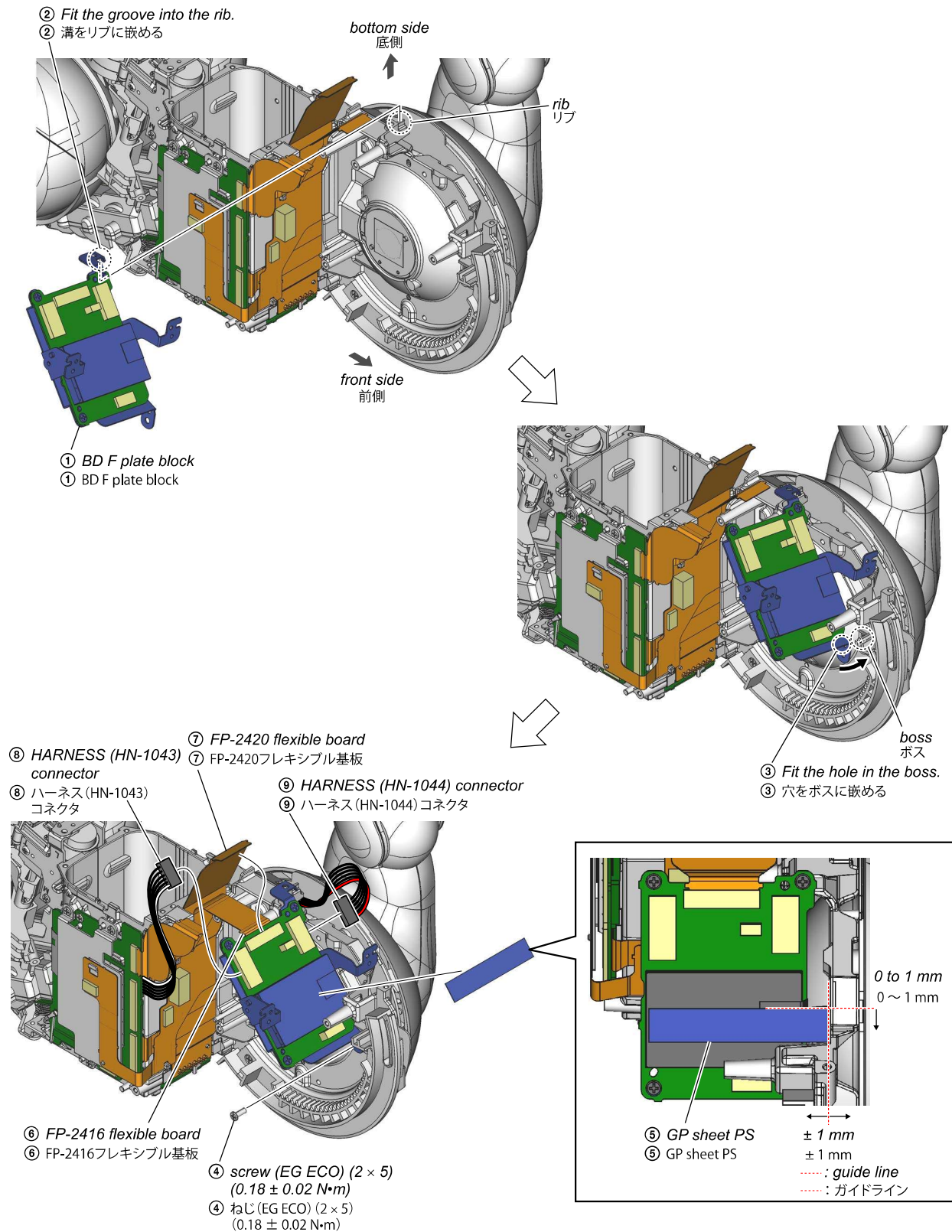
## 1-3-54. ACT (NC) ALL



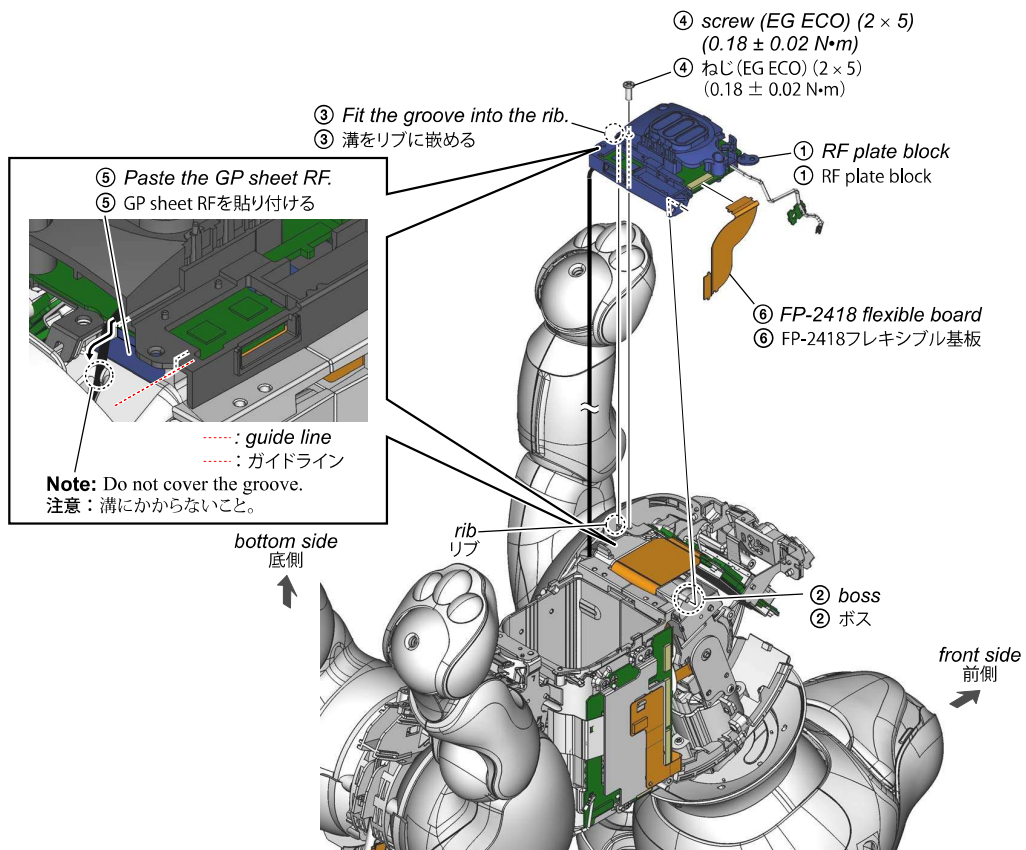
## 1-3-55. PS-1003 BOARD



## 1-3-56. BD F PLATE BLOCK

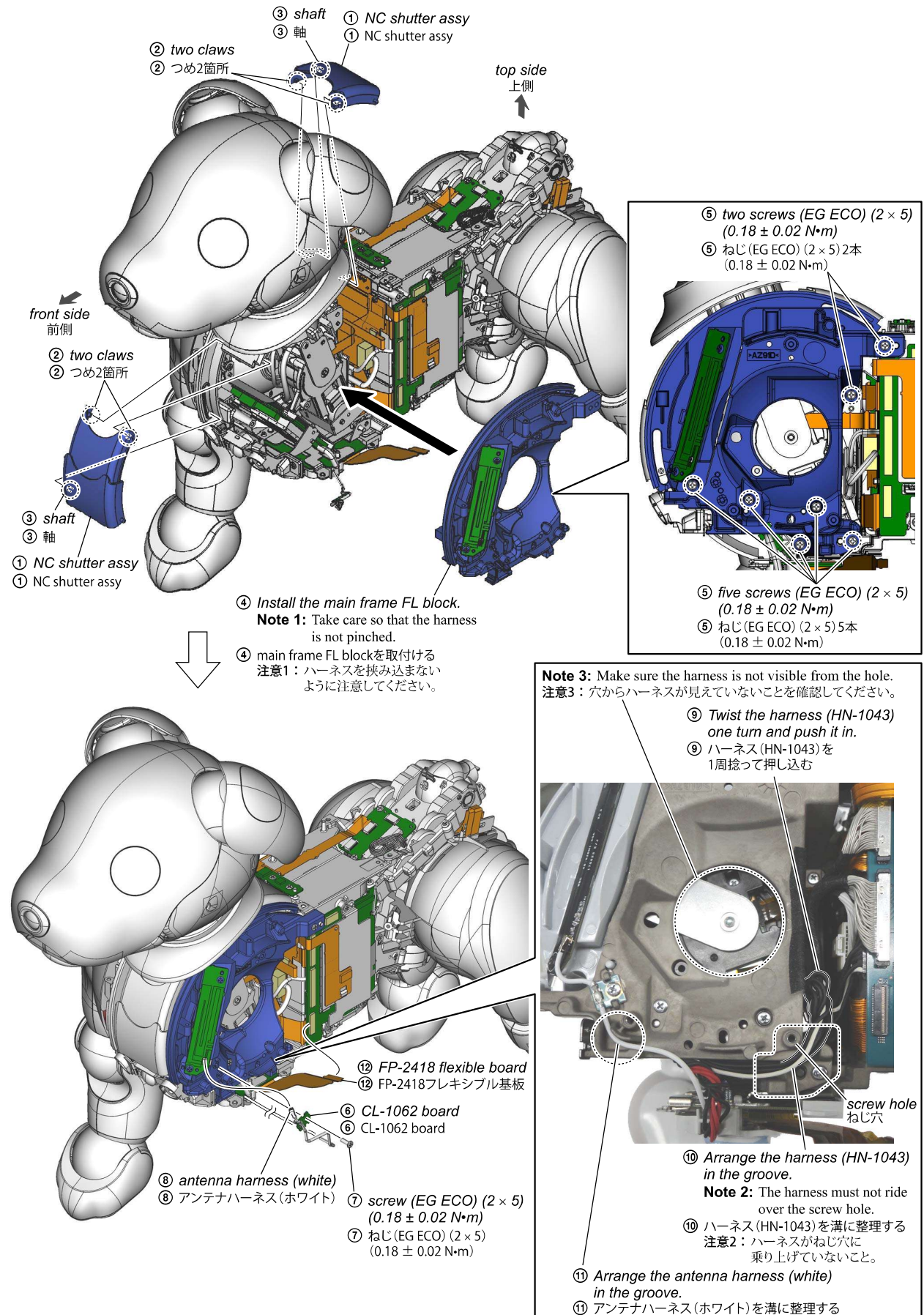


## 1-3-57. RF PLATE BLOCK





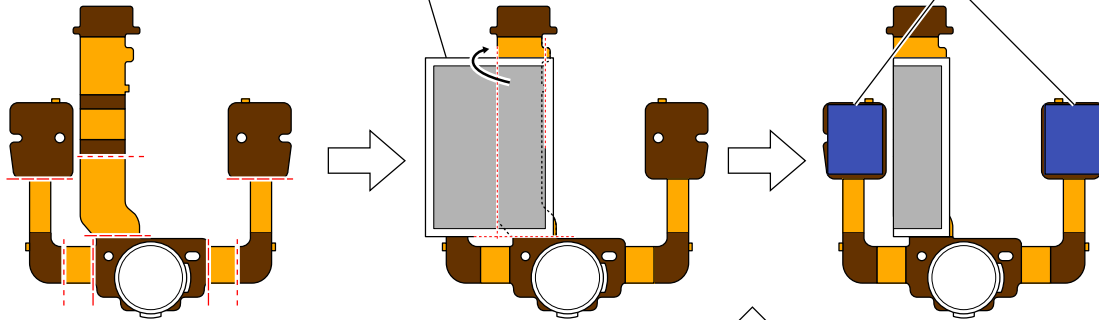
## 1-3-59. MAIN FRAME FL BLOCK



1-3-60. CS-2001 FLEXIBLE BOARD

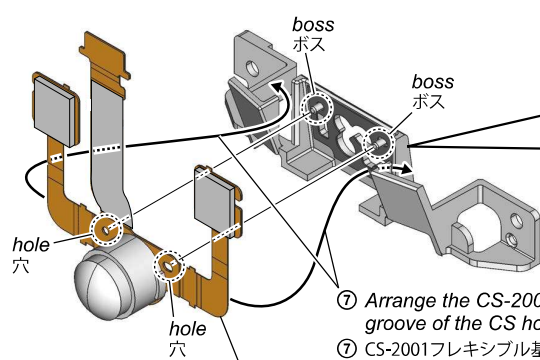
- ① Crease the CS-2001 flexible board.
- ① CS-2001フレキシブル基板に折り目をつける

----- : Mountain fold  
 ----- : Valley fold  
 ----- : 山折  
 ----- : 谷折

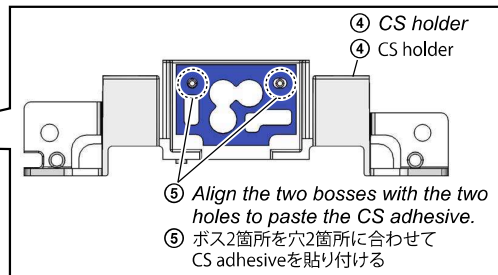


② shield sheet CS  
 ② shield sheet CS

- ③ CS cushion
- Note 1:** Do not extend beyond the outer shape of CS-2001 flexible board.
- ③ CS cushion
- 注意1: CS-2001フレキシブル基板の外形からはみ出さないこと。

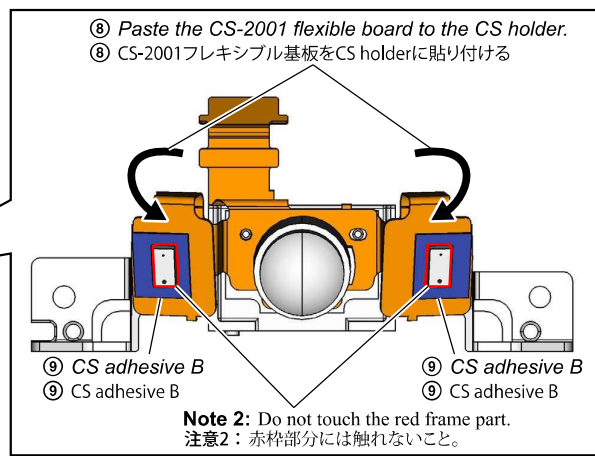
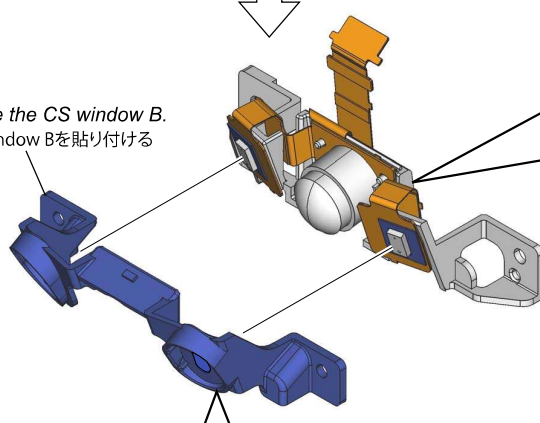


- ⑦ Arrange the CS-2001 flexible board into the groove of the CS holder.
- ⑦ CS-2001フレキシブル基板をCS holderの溝に整理する
- ⑥ Align the two bosses with the two holes to paste the CS-2001 flexible board.
- ⑥ ボス2箇所を穴2箇所に合わせてCS-2001フレキシブル基板を貼り付ける



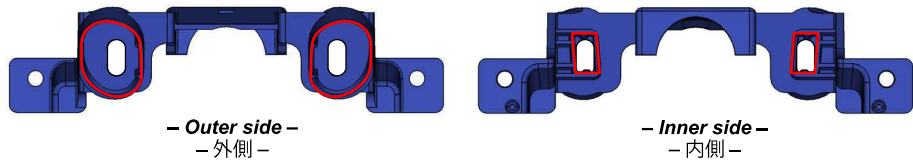
- ④ CS holder
- ④ CS holder
- ⑤ Align the two bosses with the two holes to paste the CS adhesive.
- ⑤ ボス2箇所を穴2箇所に合わせてCS adhesiveを貼り付ける

- ⑩ Paste the CS window B.
- ⑩ CS window Bを貼り付ける

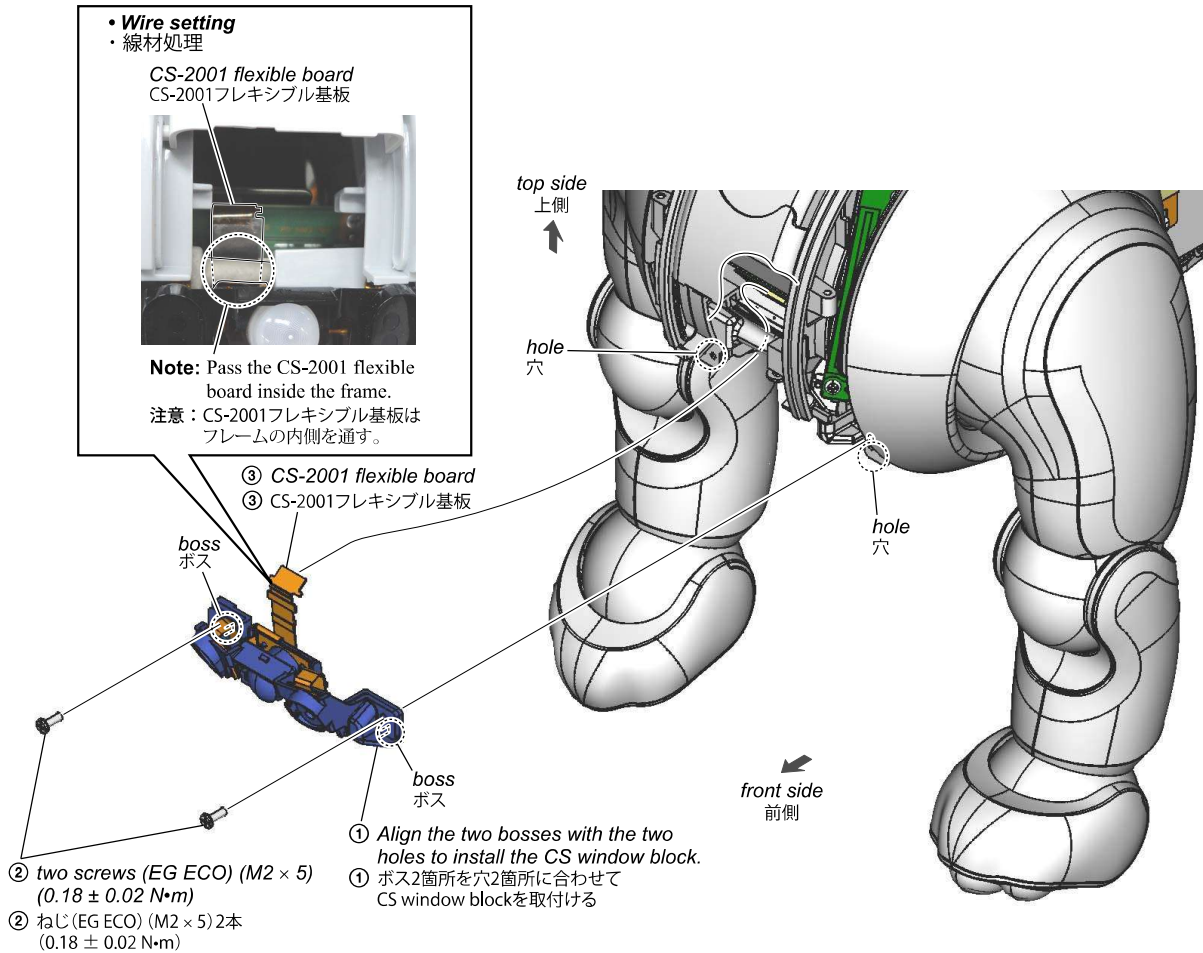


- ⑧ Paste the CS-2001 flexible board to the CS holder.
- ⑧ CS-2001フレキシブル基板をCS holderに貼り付ける
- ⑨ CS adhesive B
- ⑨ CS adhesive B
- ⑨ CS adhesive B
- ⑨ CS adhesive B
- Note 2:** Do not touch the red frame part.
- 注意2: 赤枠部分には触れないこと。

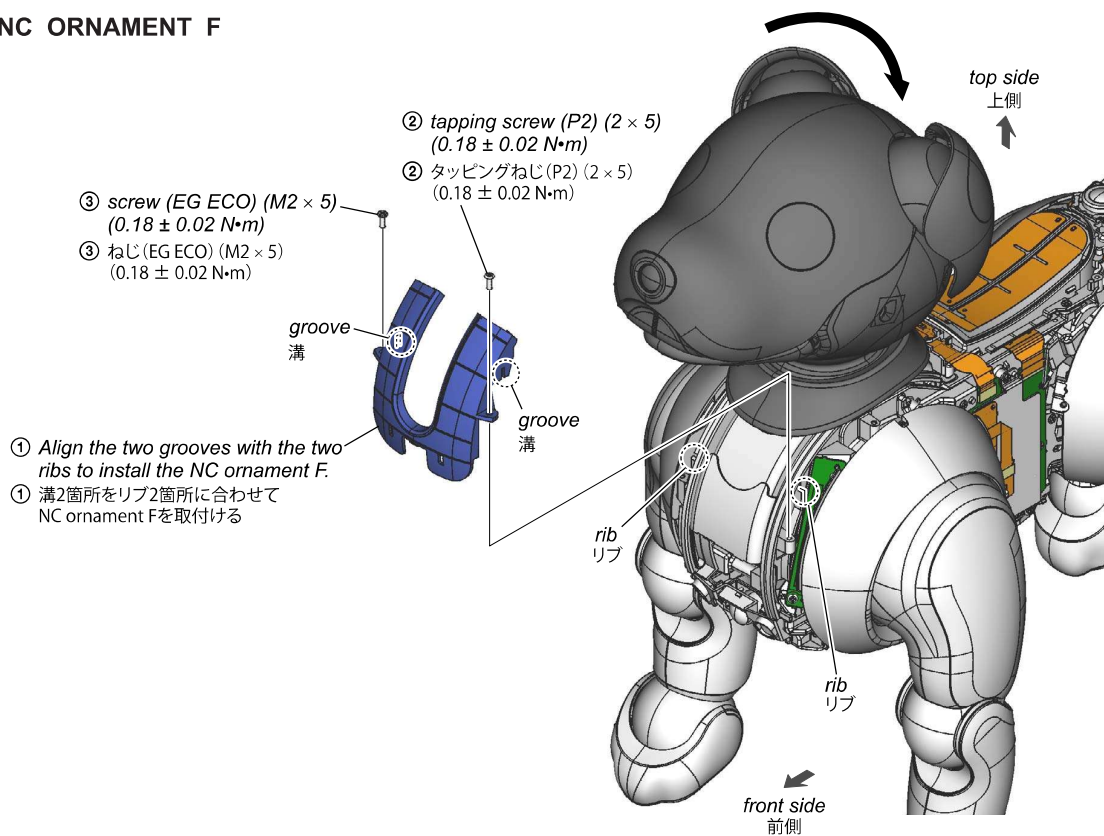
**Note 2:** Do not touch the red frame part.  
 注意2: 赤枠部分には触れないこと。



## 1-3-61. CS WINDOW BLOCK

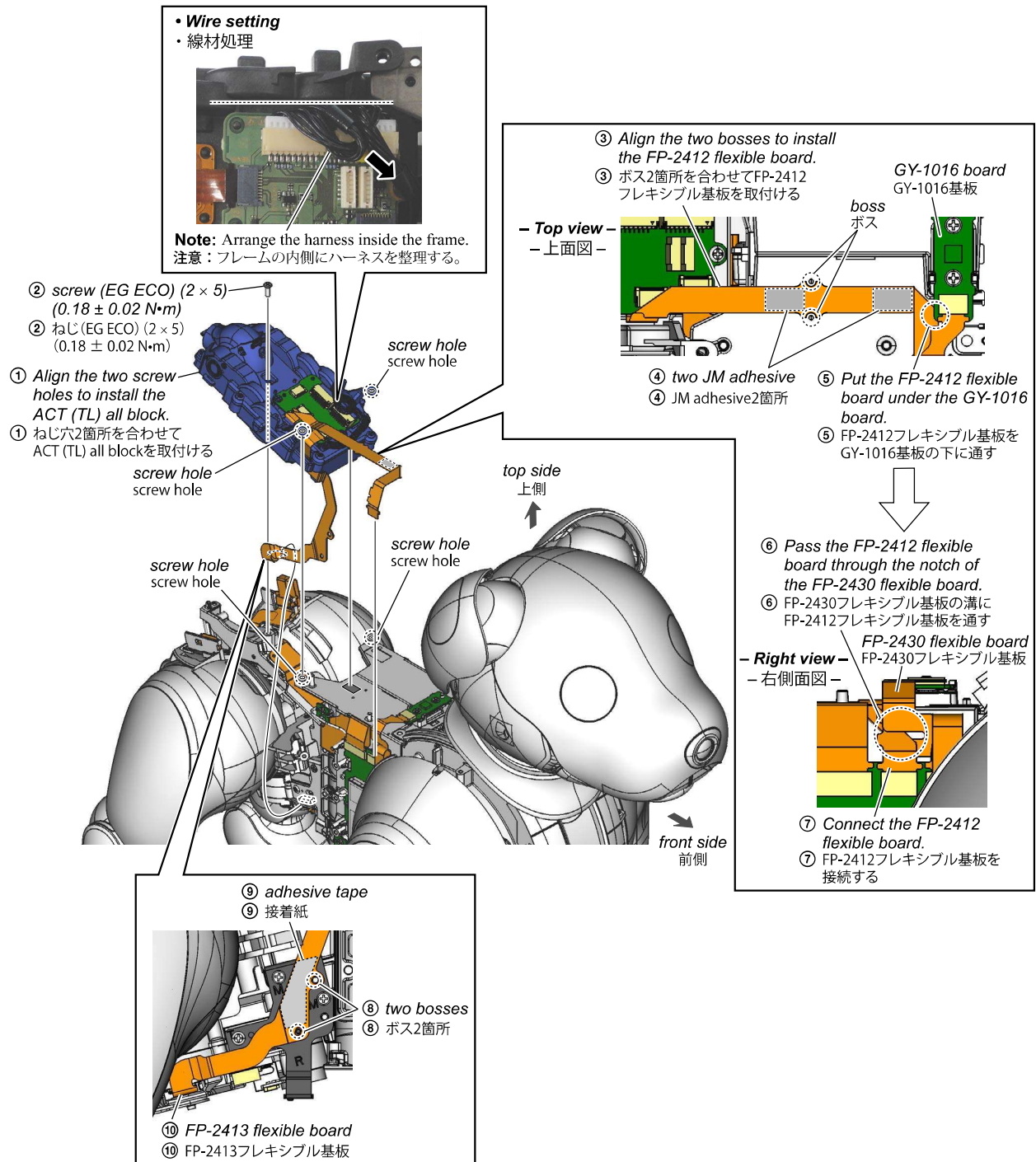


## 1-3-62. NC ORNAMENT F





## 1-3-63. ACT (TL) ALL BLOCK



## 1-3-64. CAMERA MODULE (21M FF)

**Note 3:** The CM cushion should not protrude from the outer shape.  
 注意3: CM cushionが外形からはみ出さないこと。

0 to 0.5 mm  
 0 ~ 0.5 mm

② two CM cushions  
 ② CM cushion 2枚

**Note 1:** The CM cushions should not overlap.  
 注意1: CM cushion同士が重ならないこと。

**Note 2:** The CM cushion should not block the cutout.  
 注意2: CM cushionが切り欠きを塞がないこと。

④ Install the camera module (21M FF).  
 ④ camera module (21M FF)を取付ける

top cover block  
 top cover block

top side  
 上側

rear side  
 後側

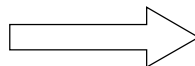
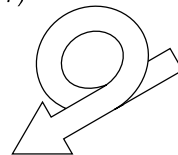
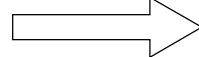
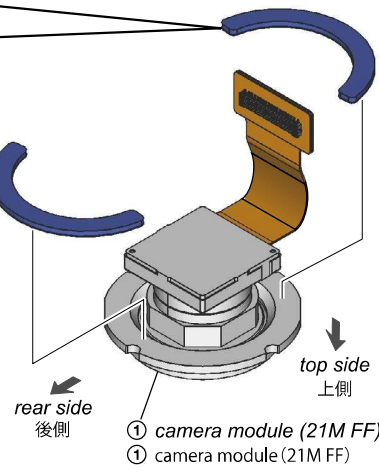
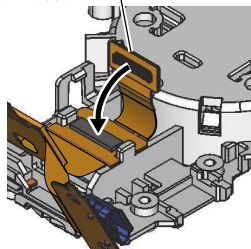
③ Pass the camera module (21M FF) flexible board through the hole.  
 ③ 穴にcamera module (21M FF) フレキシブル基板を通す

⑧ Fold the flexible board in the direction of the arrow.  
 ⑧ フレキシブル基板を矢印方向に折り曲げる

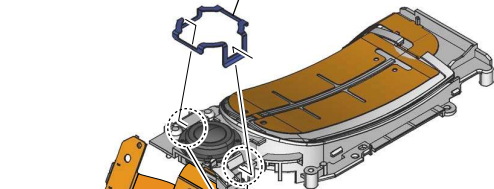
top side  
 上側

rear side  
 後側

⑦ Connect the camera module (21M FF) flexible board.  
 ⑦ camera module (21M FF) フレキシブル基板を接続する



⑤ top cover plate  
 ⑤ top cover plate



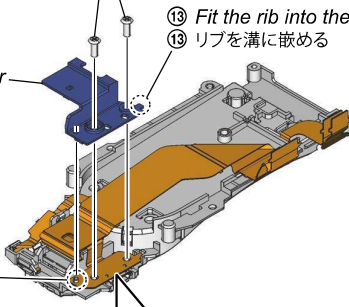
⑥ two claws  
 ⑥ つめ2箇所

⑭ two tapping screws (P2) (2 × 5)  
 (0.18 ± 0.02 N·m)  
 ⑭ タッピングねじ (P2) (2 × 5) 2本  
 (0.18 ± 0.02 N·m)

⑬ Fit the rib into the groove.  
 ⑬ リブを溝に嵌める

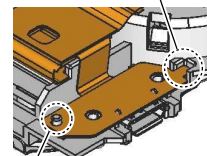
⑪ top terminal holder  
 ⑪ top terminal holder

⑫ boss  
 ⑫ ボス

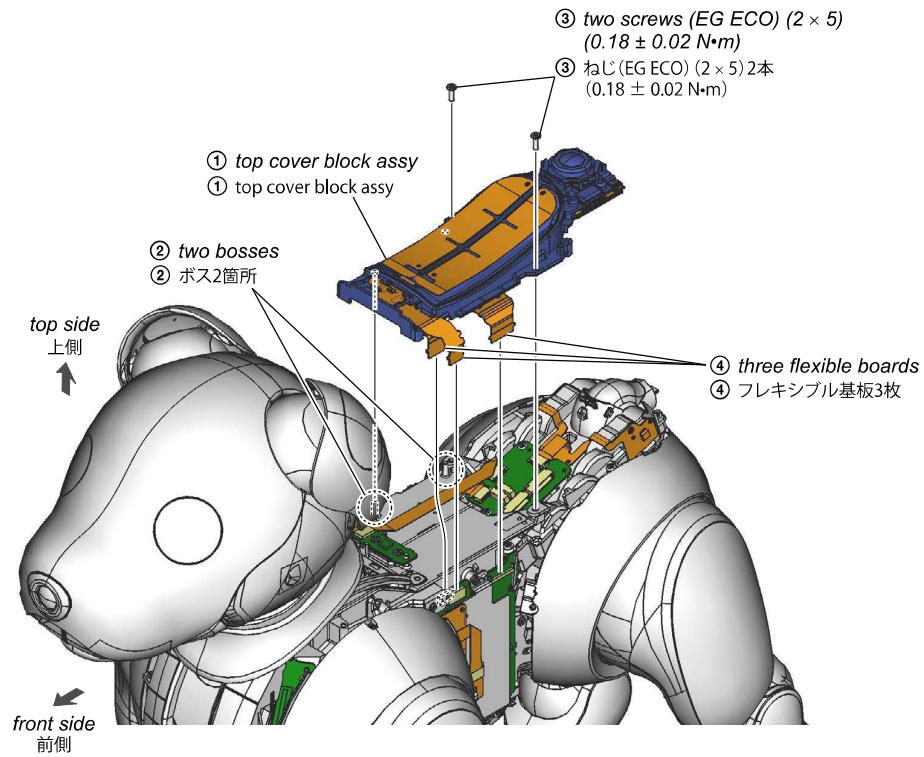


⑩ Fit the flexible board into the groove.  
 ⑩ フレキシブル基板を溝に嵌める

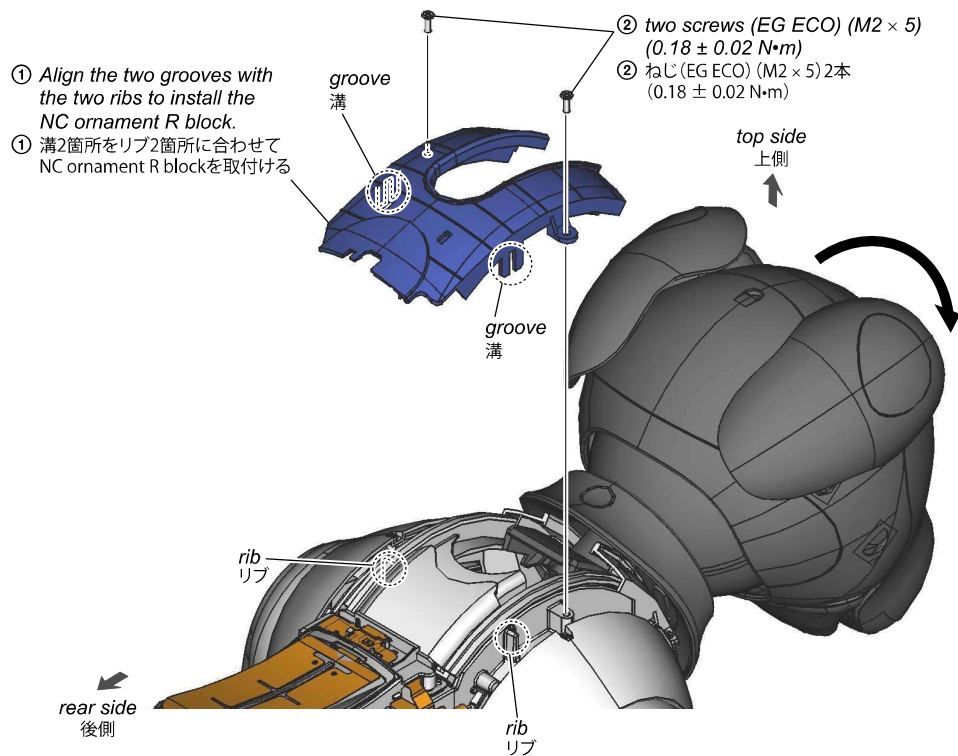
⑨ Install the flexible board to the boss.  
 ⑨ フレキシブル基板をボスに取付ける



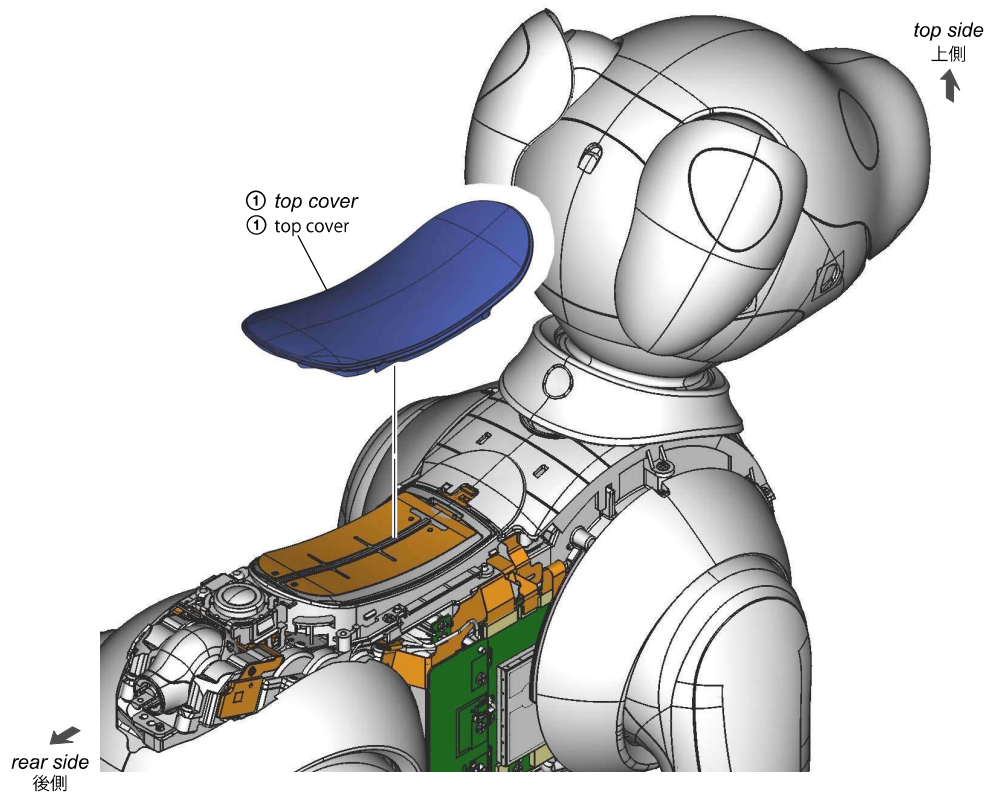
## 1-3-65. TOP COVER BLOCK ASSY



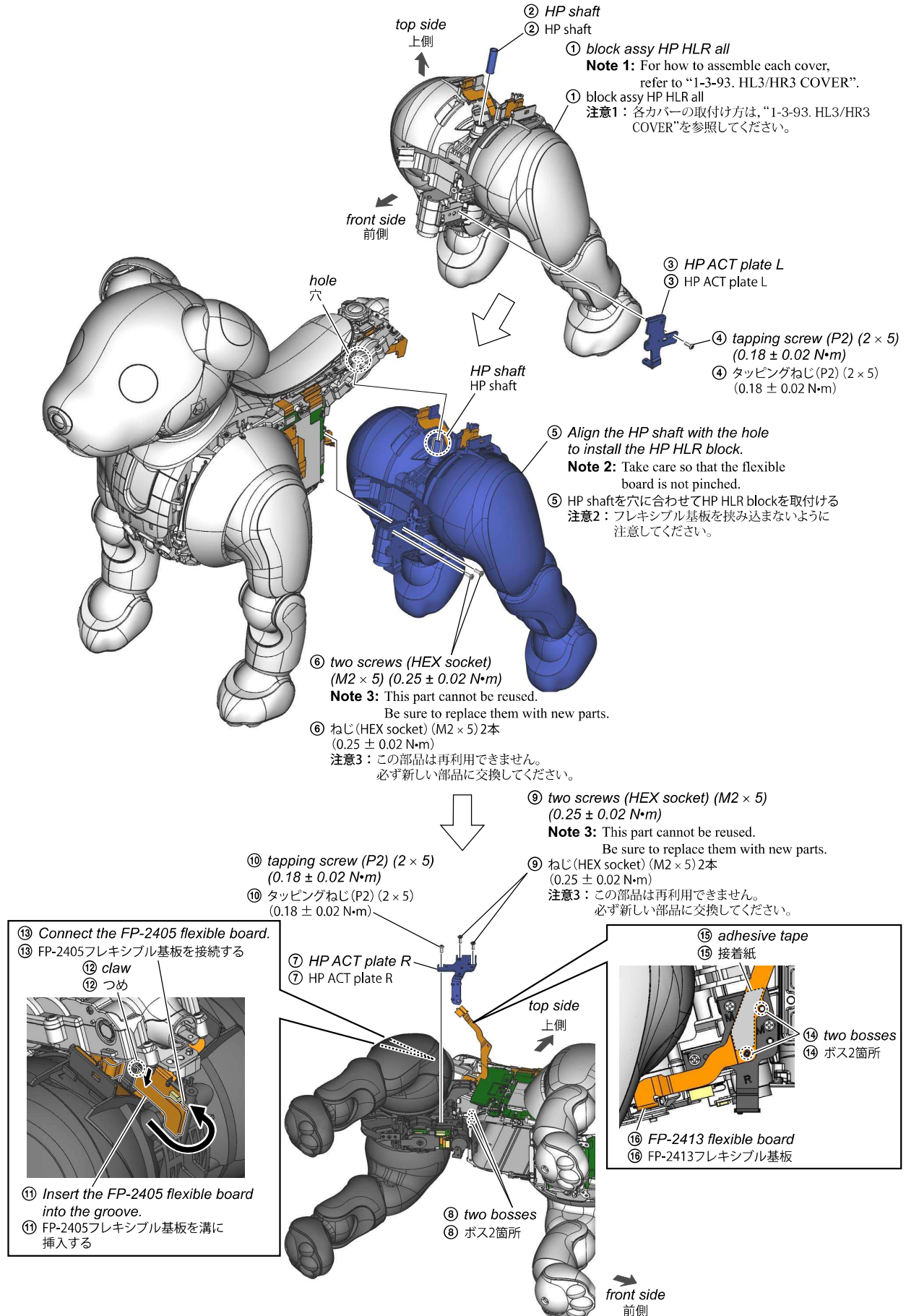
## 1-3-66. NC ORNAMENT R



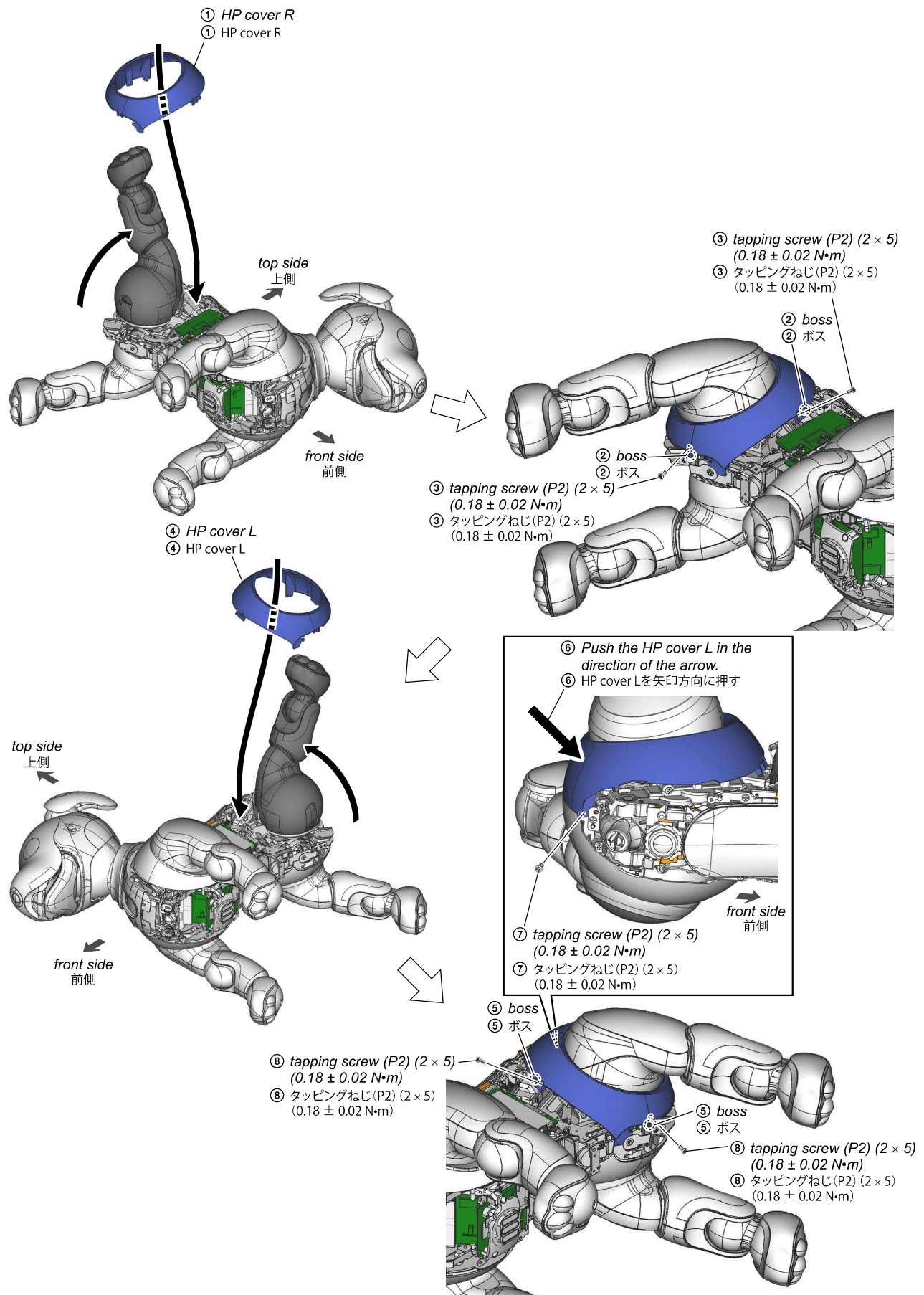
1-3-67. TOP COVER



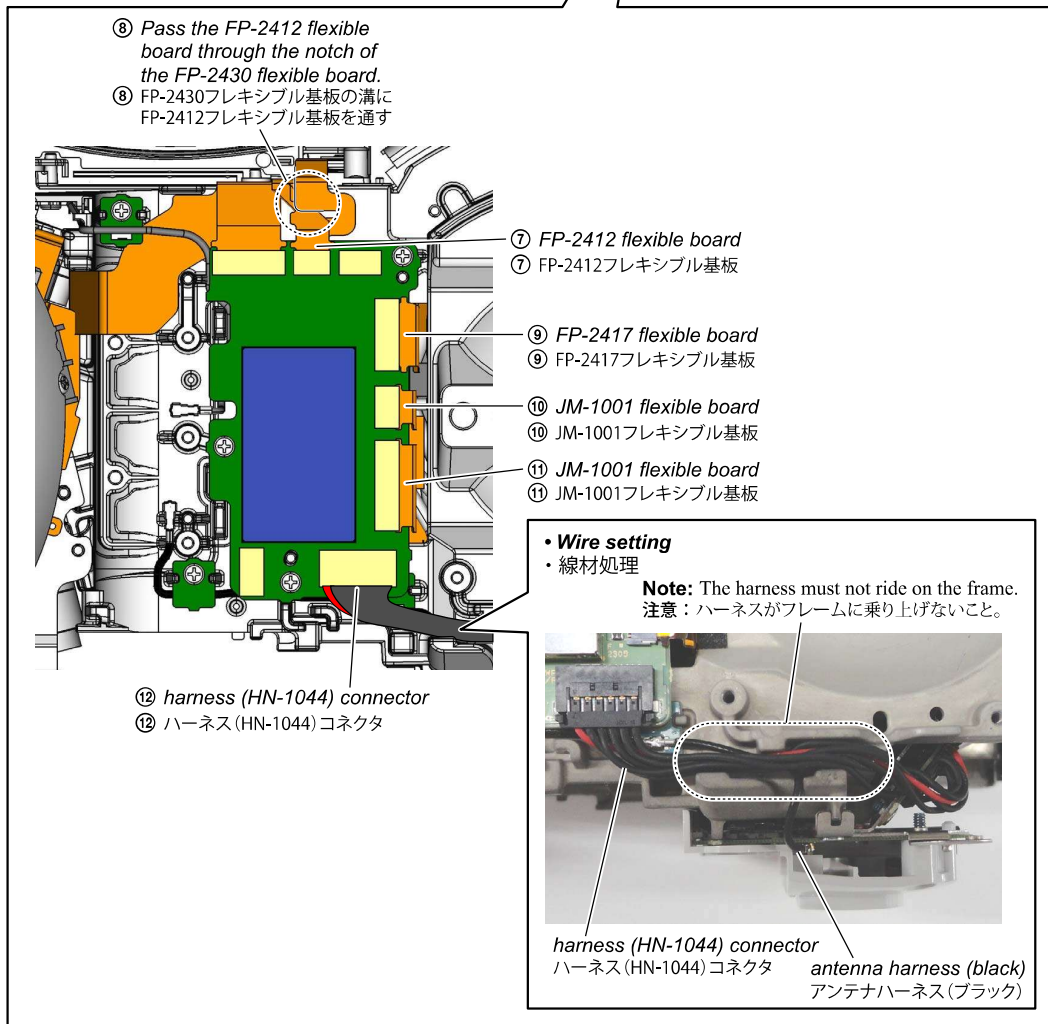
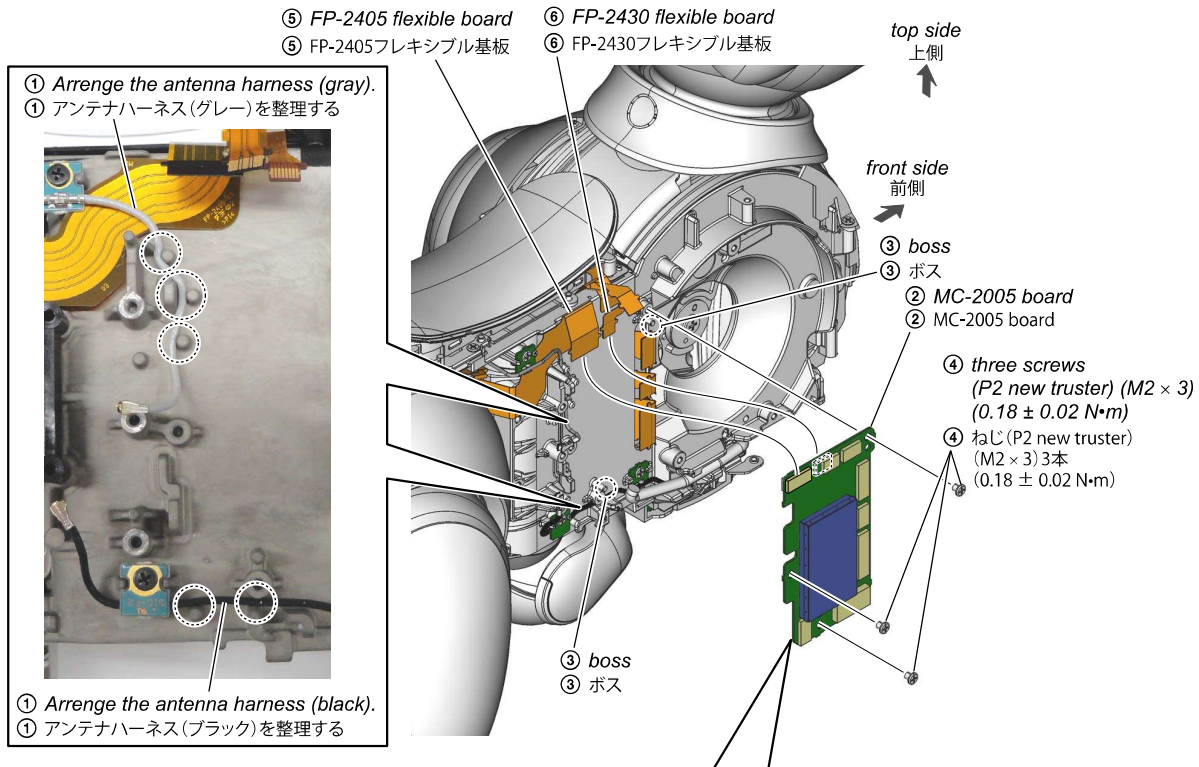
## 1-3-68. BLOCK ASSY HP HLR ALL



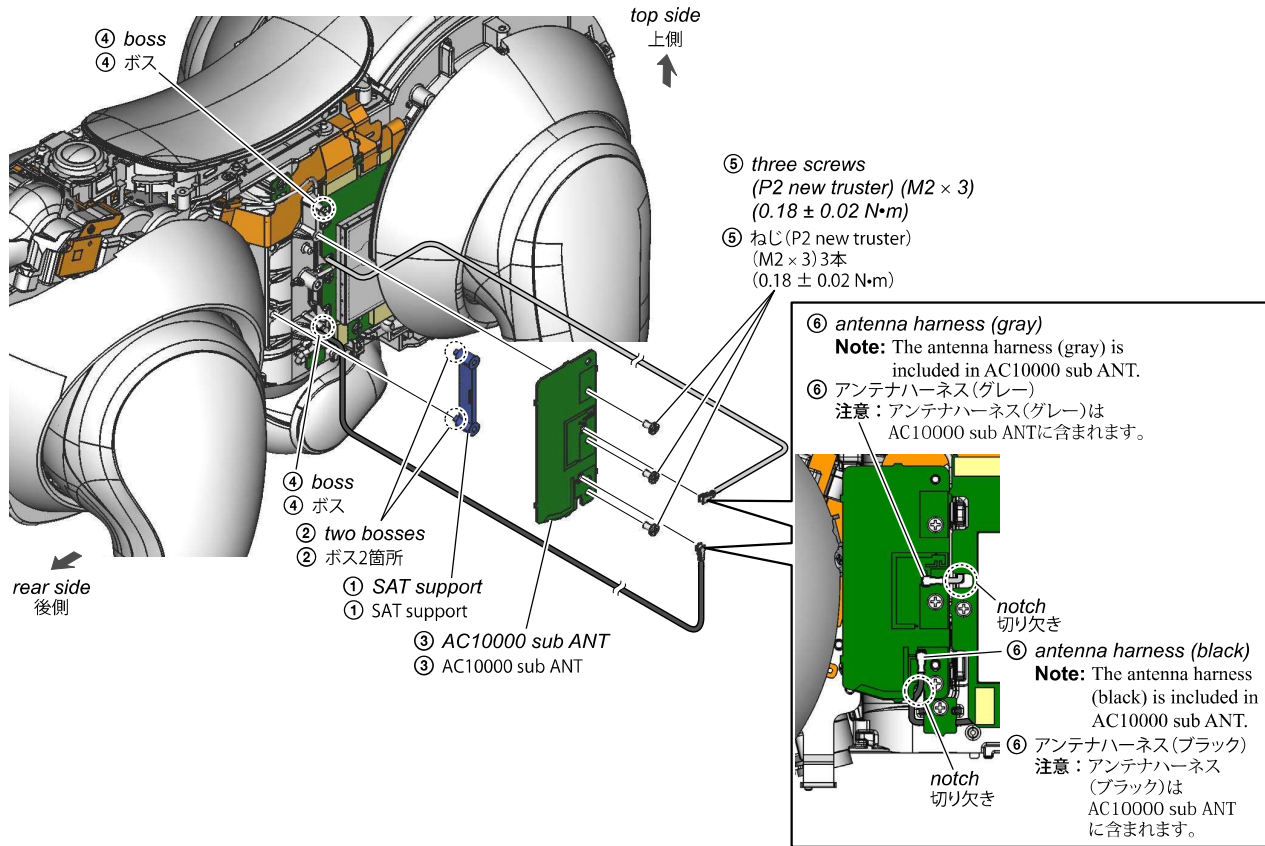
## 1-3-69. HP COVER L/R



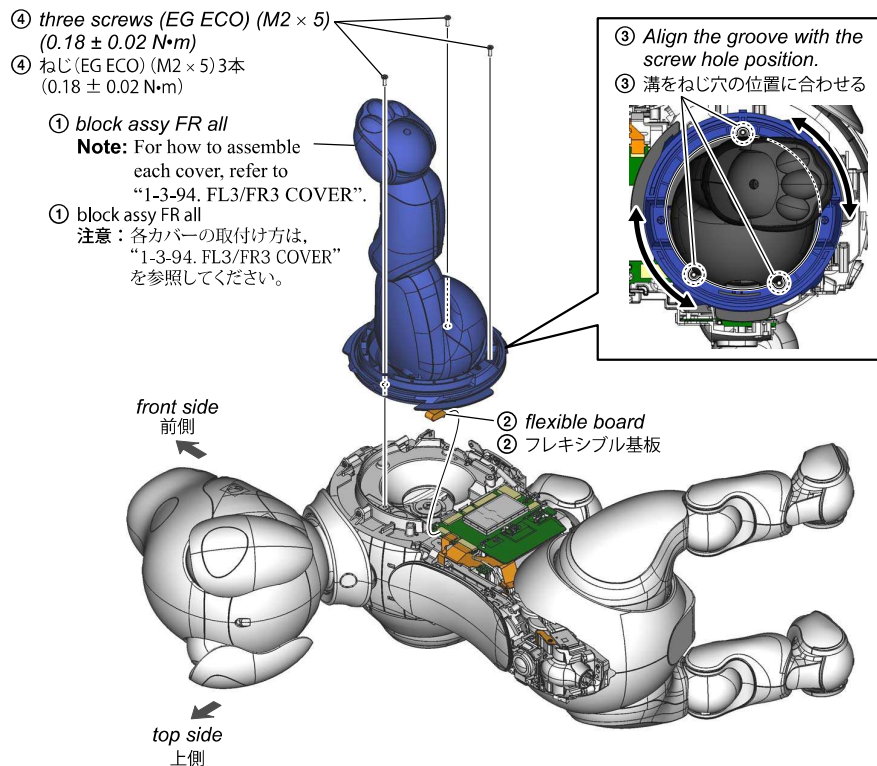
1-3-70. MC-2005 BOARD



1-3-71. AC10000 SUB ANT

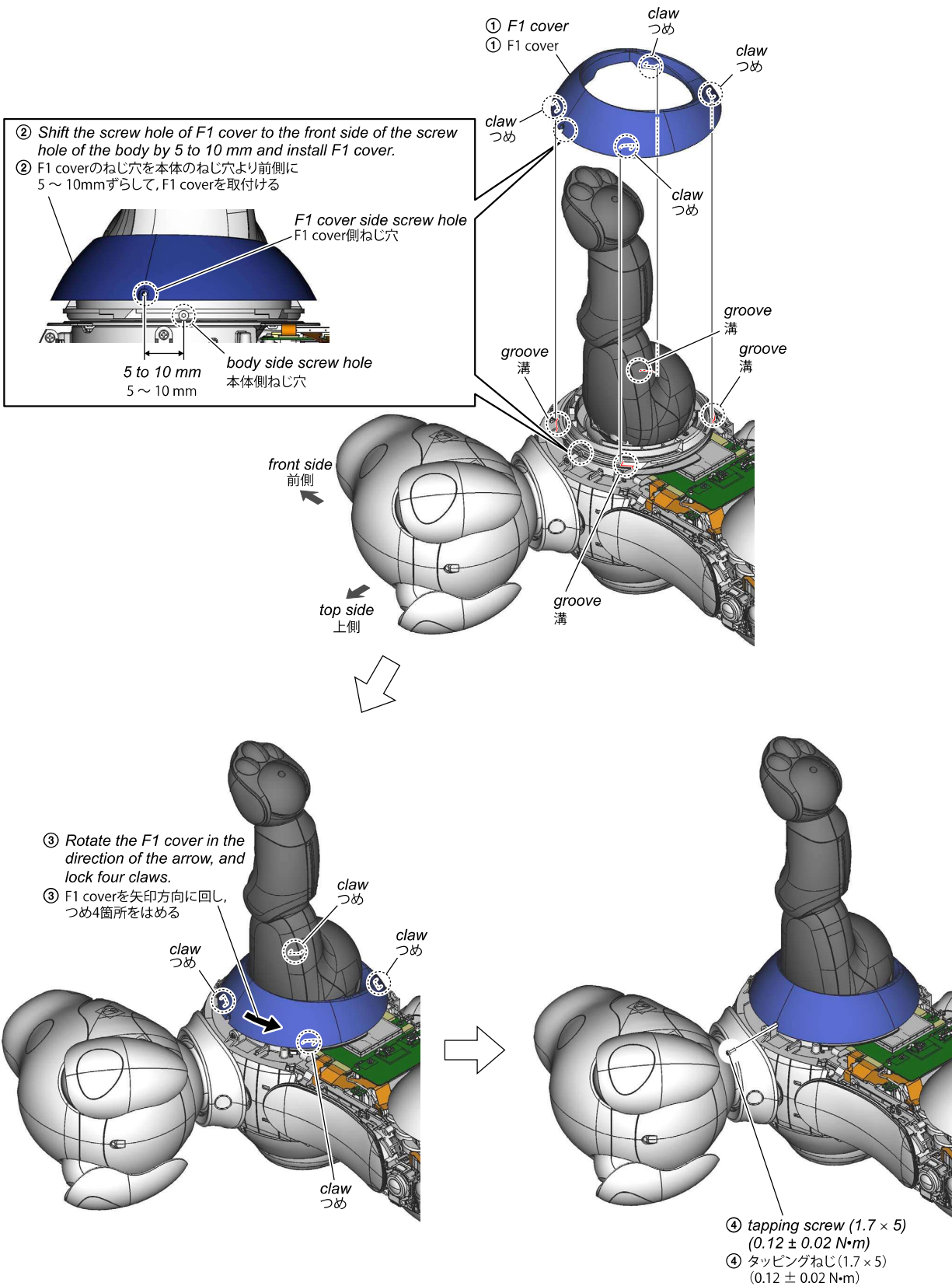


1-3-72. BLOCK ASSY FR ALL

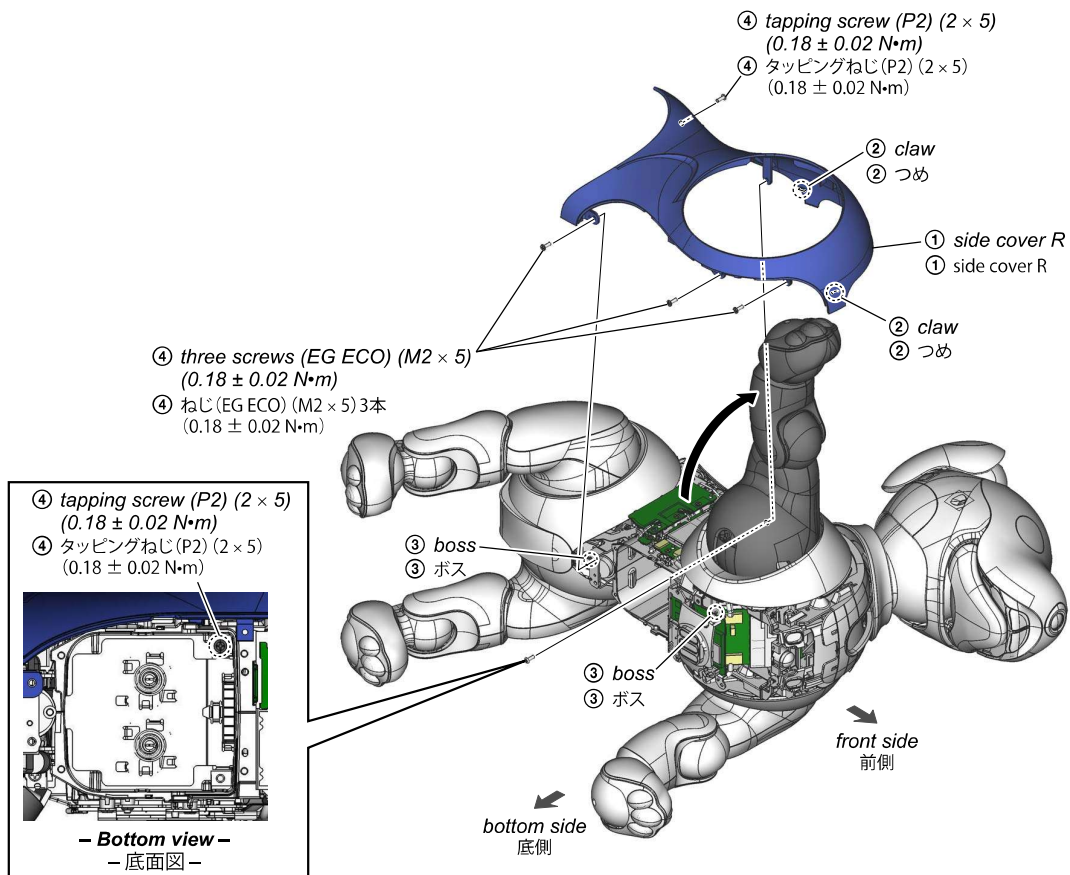




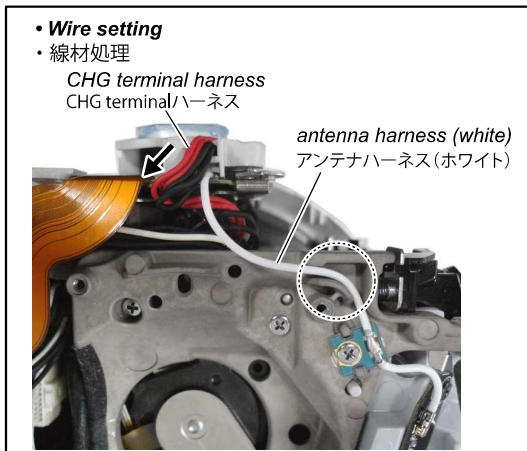
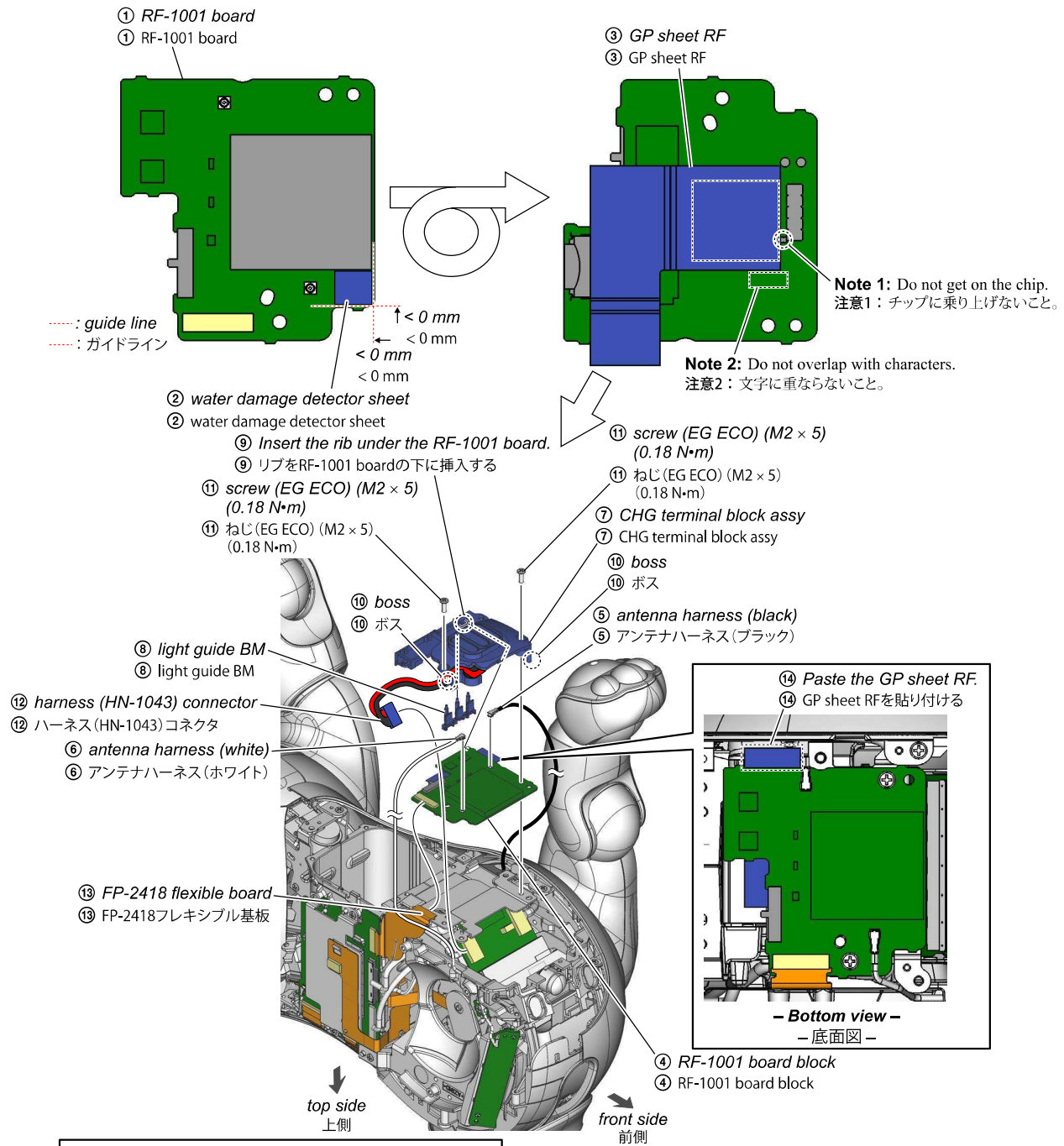
## 1-3-73. F1 COVER (R SIDE)



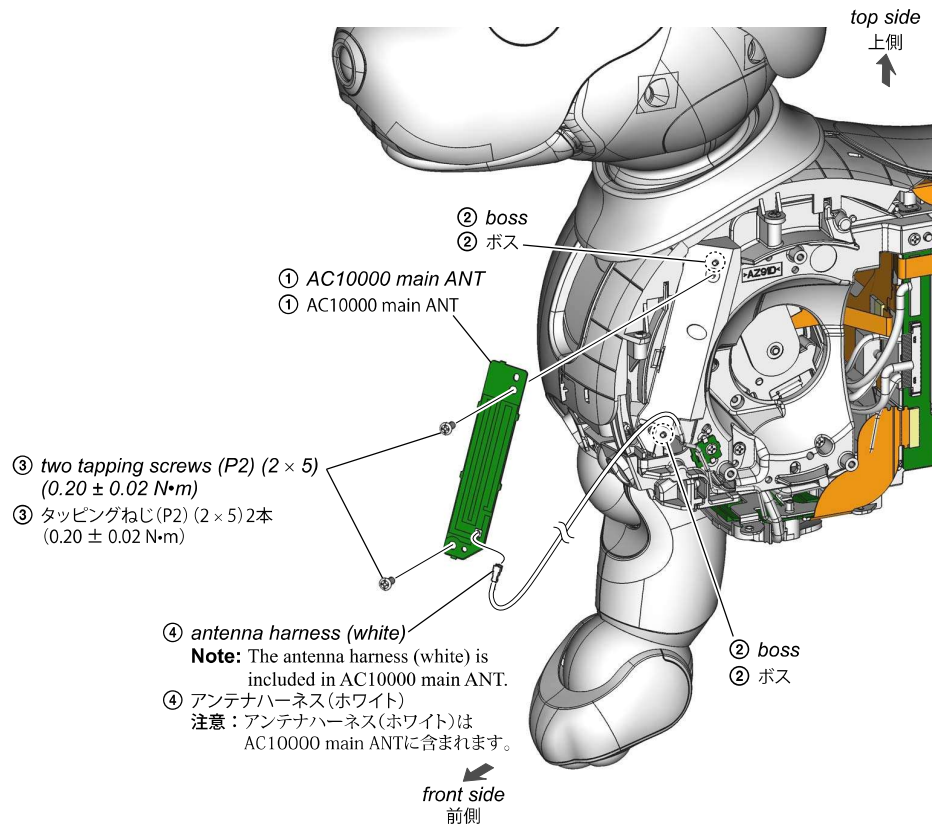
## 1-3-74. SIDE COVER R



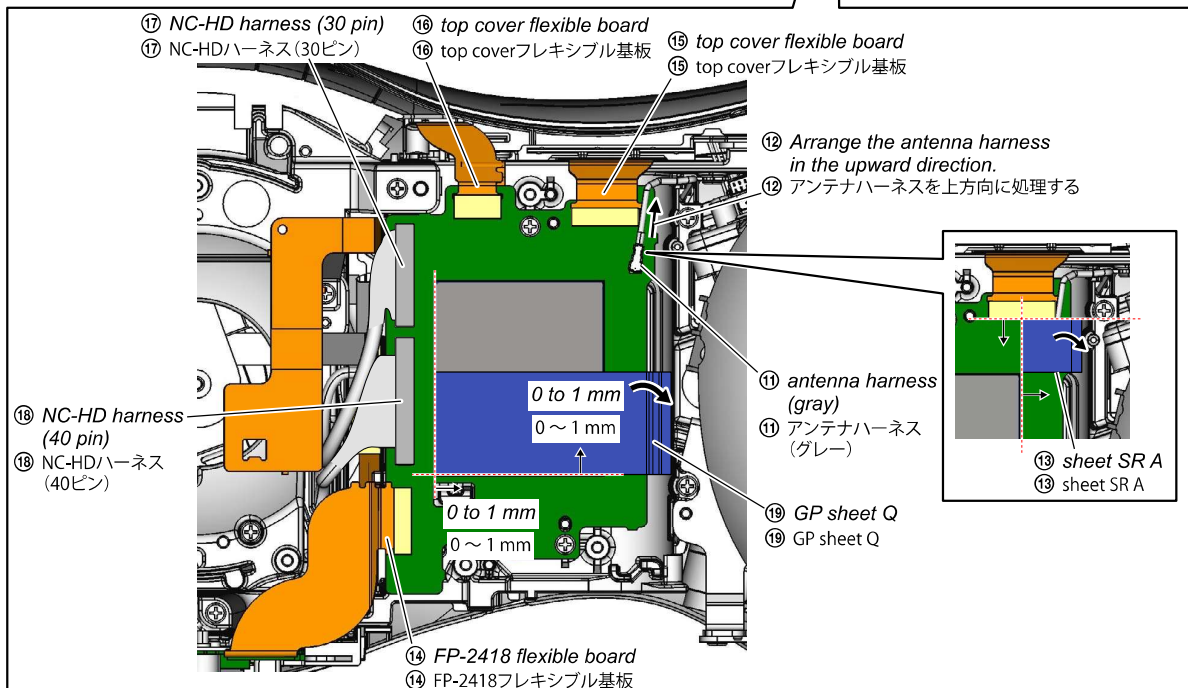
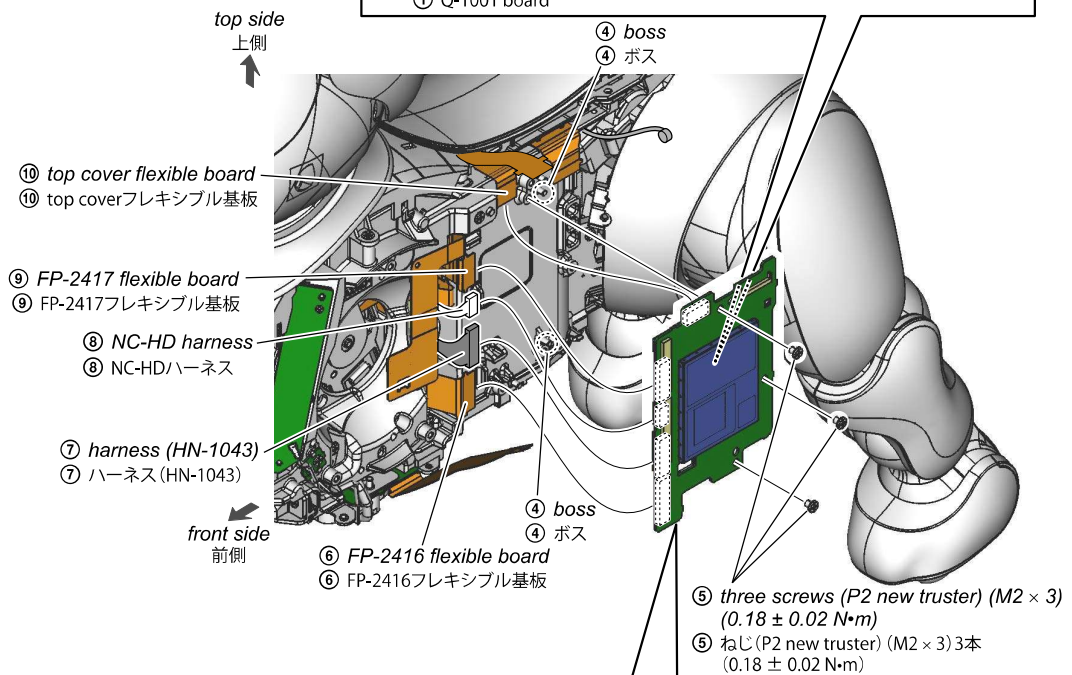
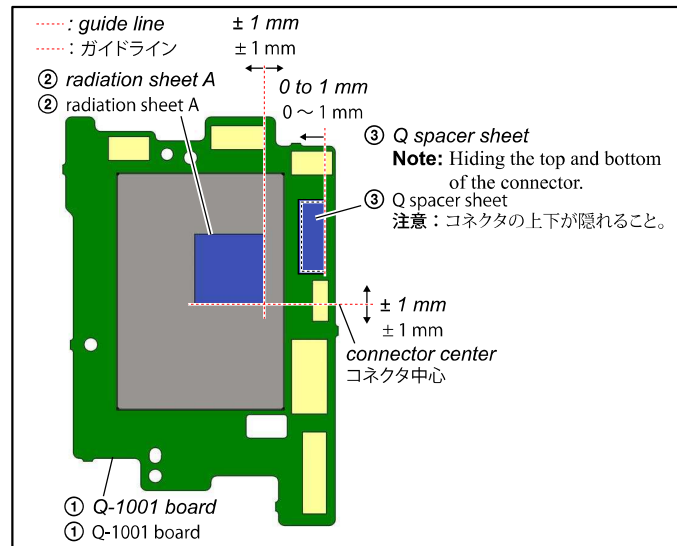
1-3-75. RF-1001 BOARD



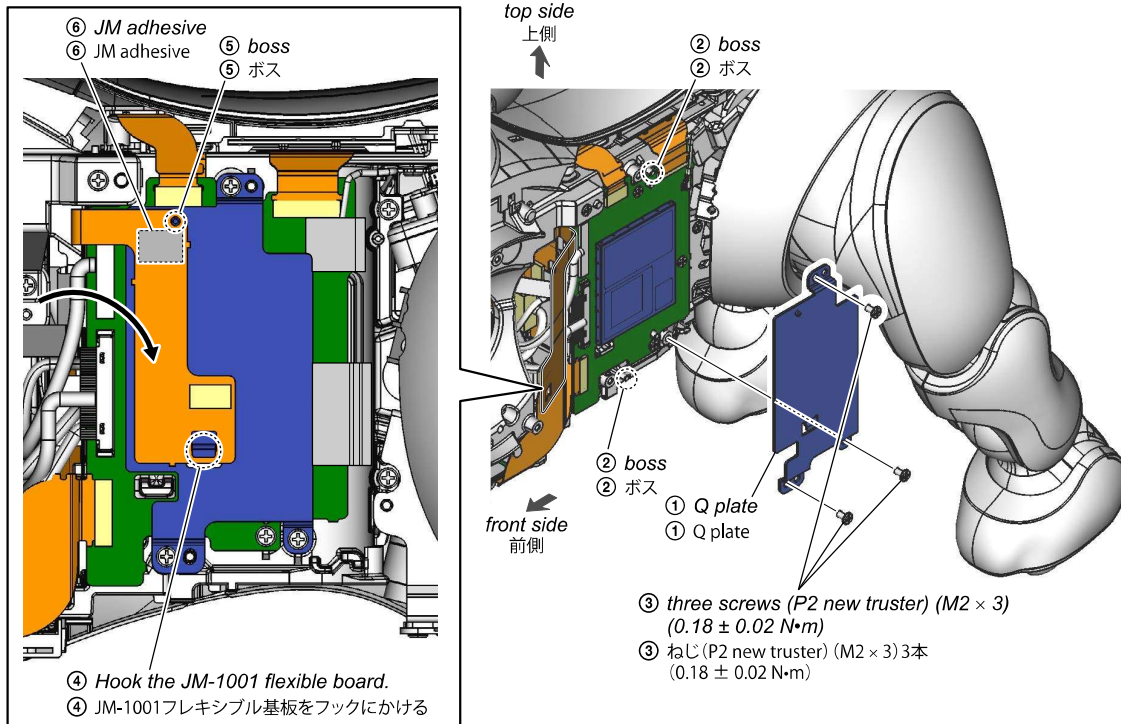
## 1-3-76. AC10000 MAIN ANT



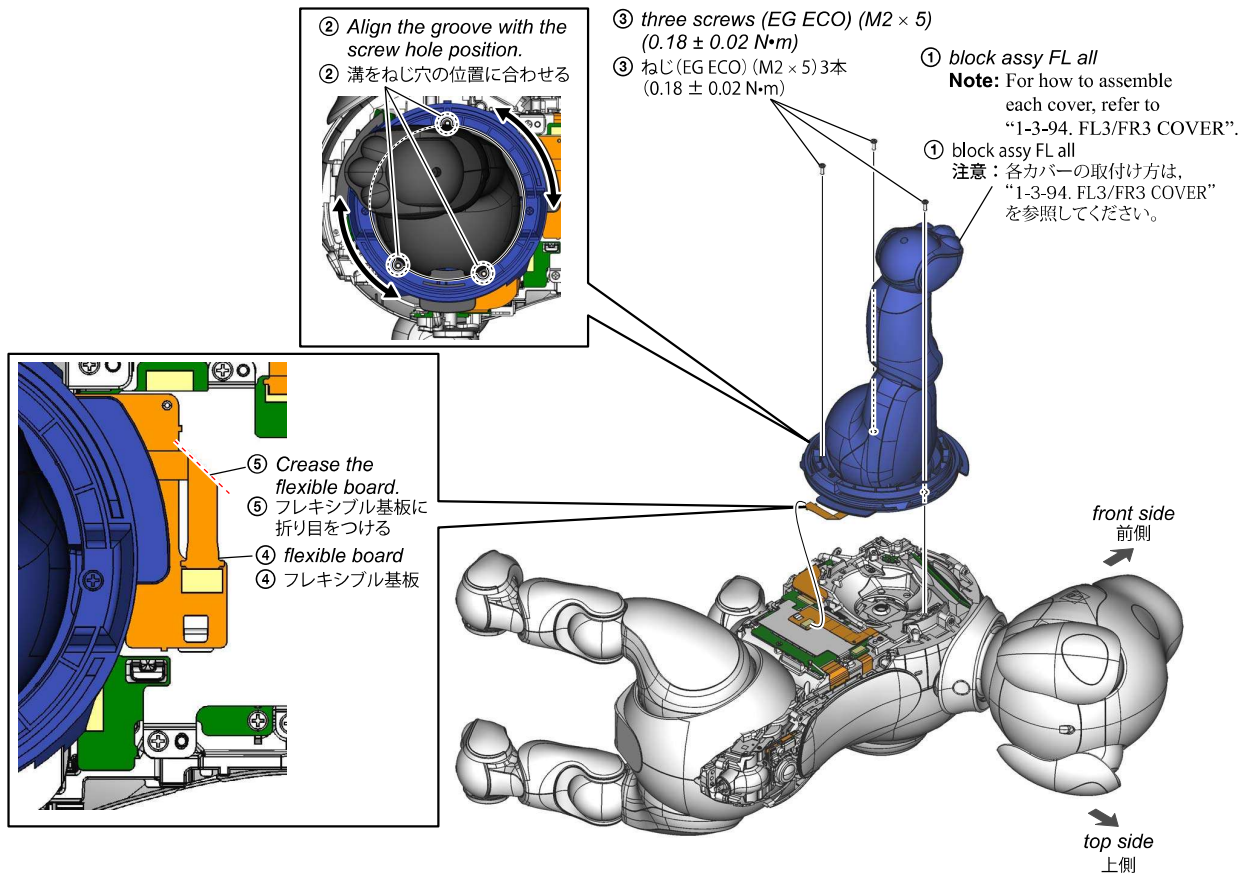
1-3-77. Q-1001 BOARD



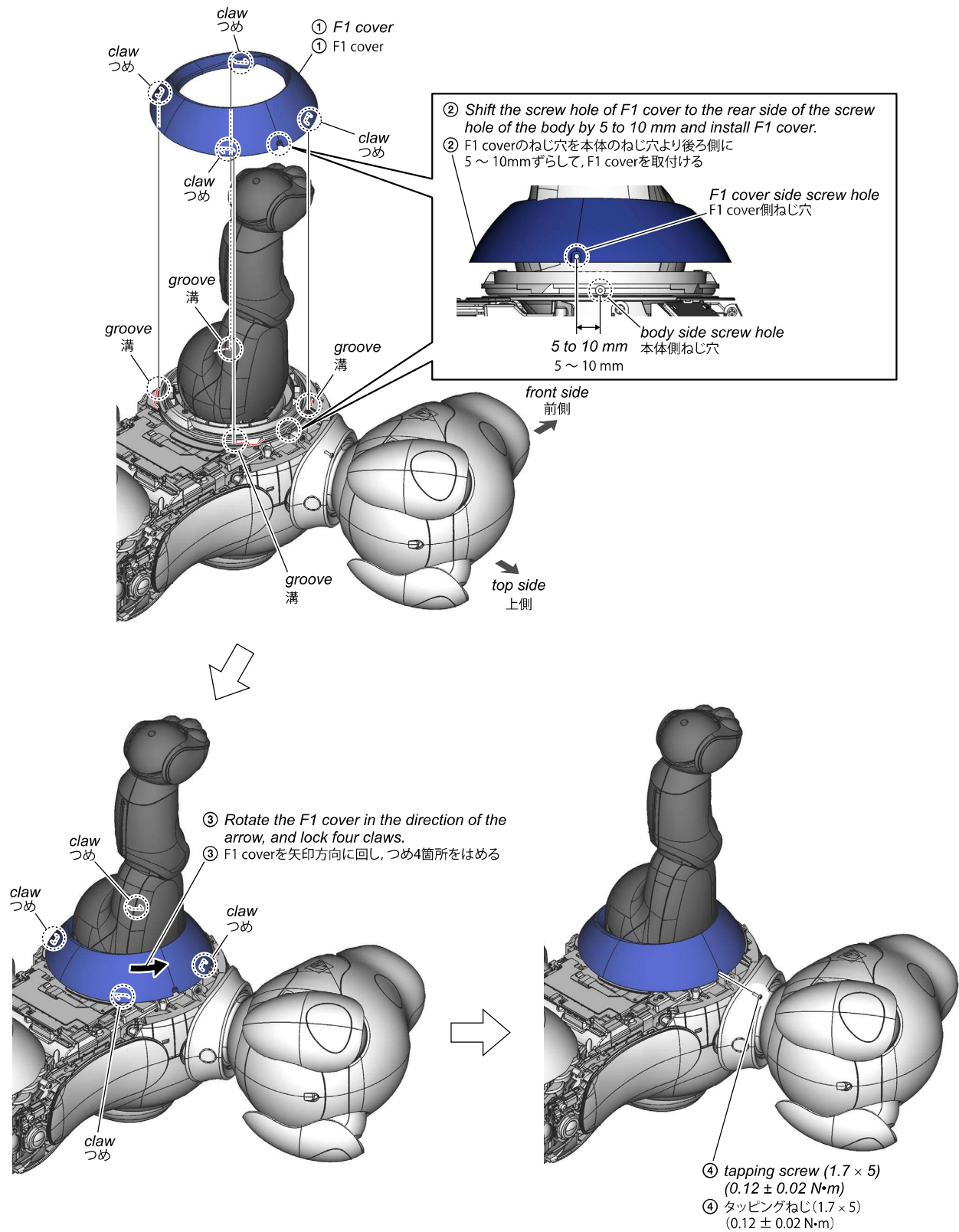
## 1-3-78. Q PLATE



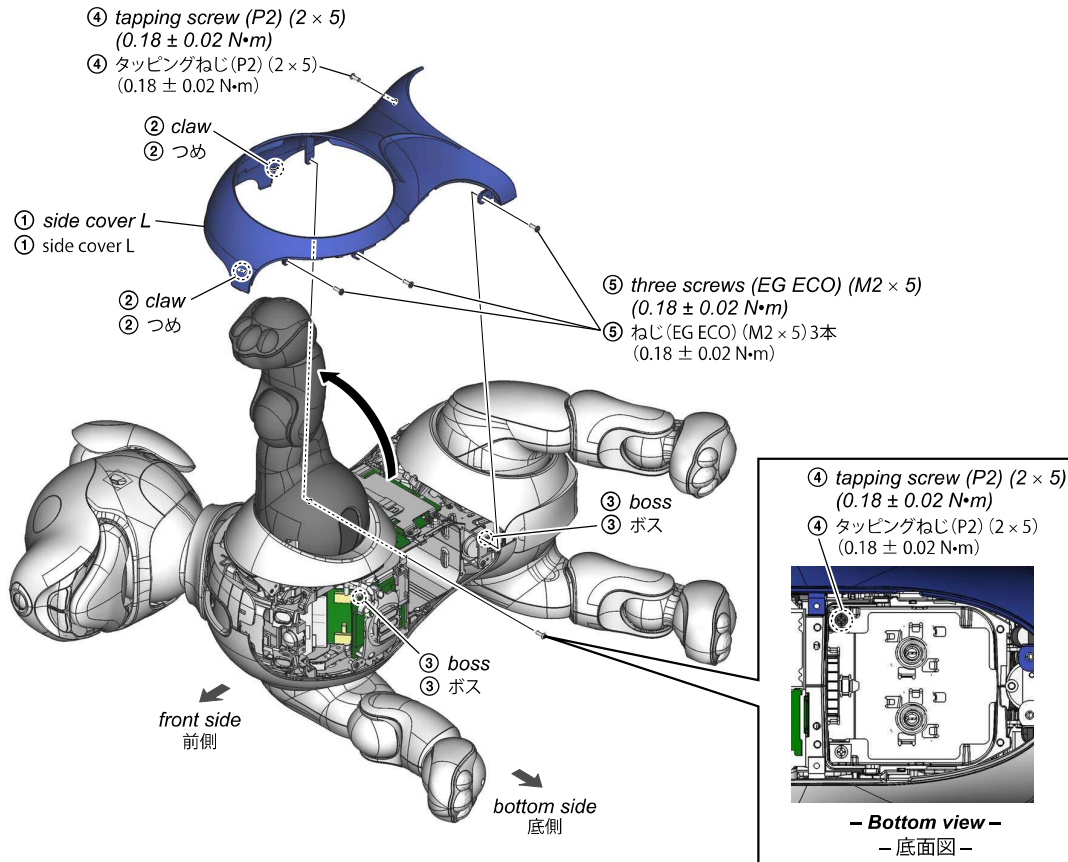
## 1-3-79. BLOCK ASSY FL ALL



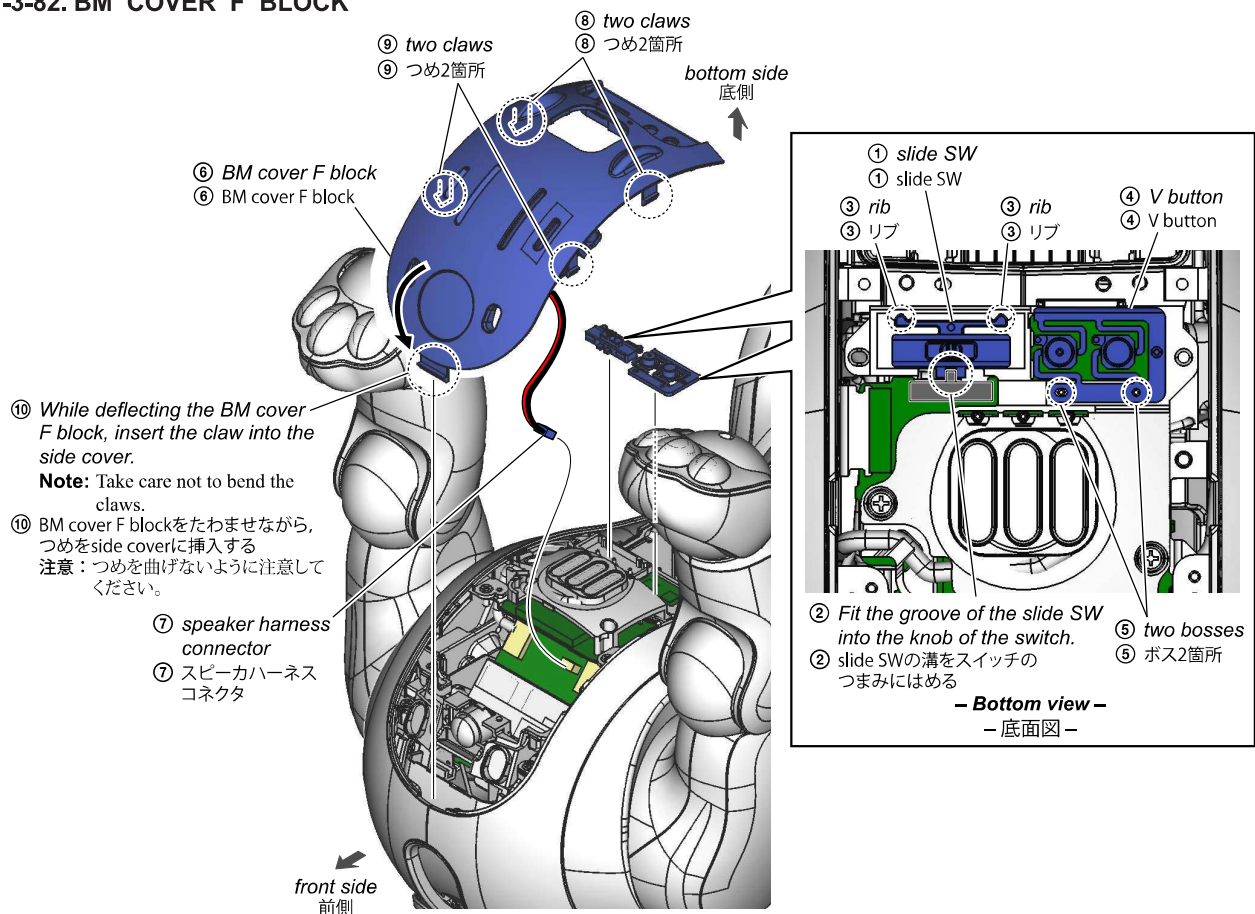
## 1-3-80. F1 COVER (L SIDE)



1-3-81. SIDE COVER L

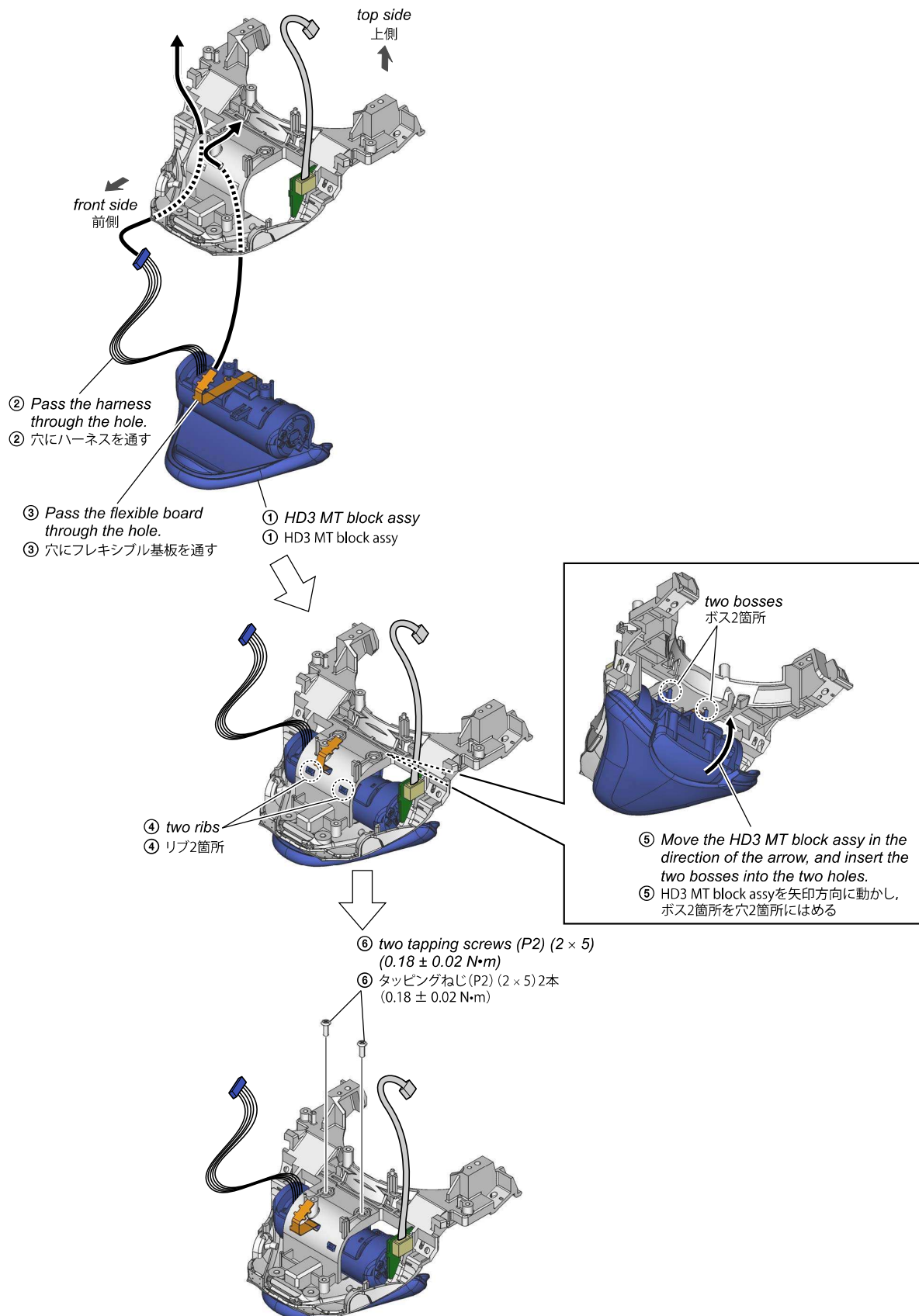


1-3-82. BM COVER F BLOCK

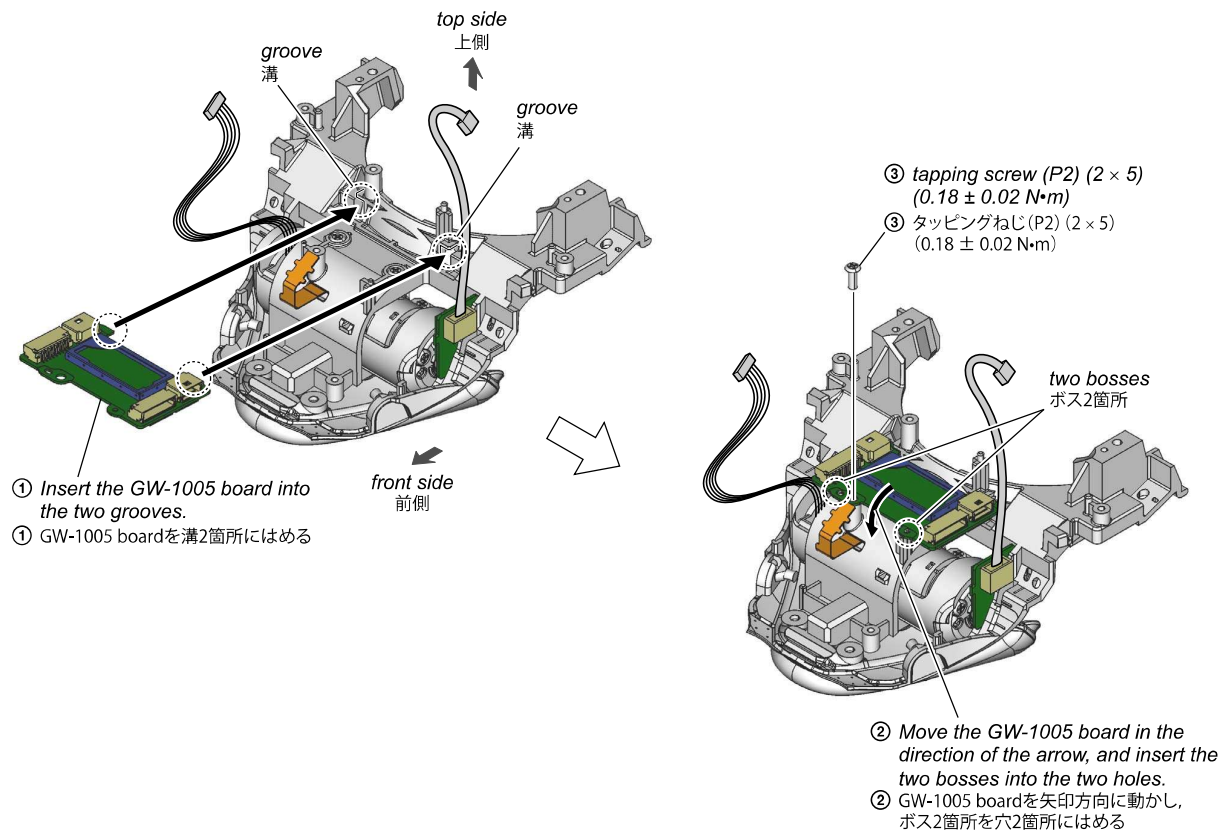




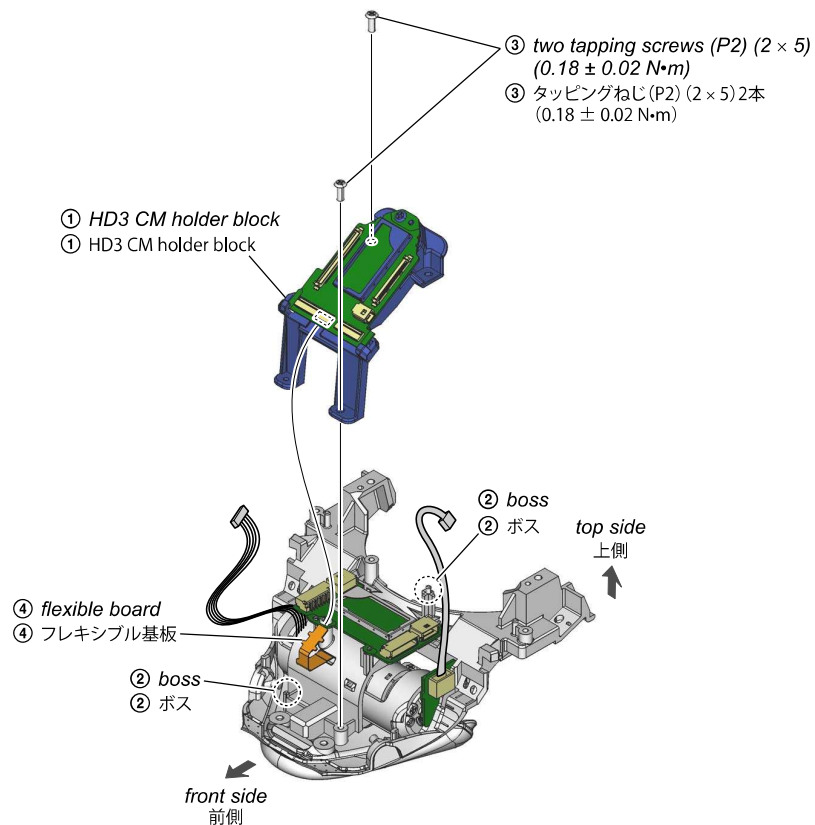
## 1-3-83. HD3 MT BLOCK ASSY



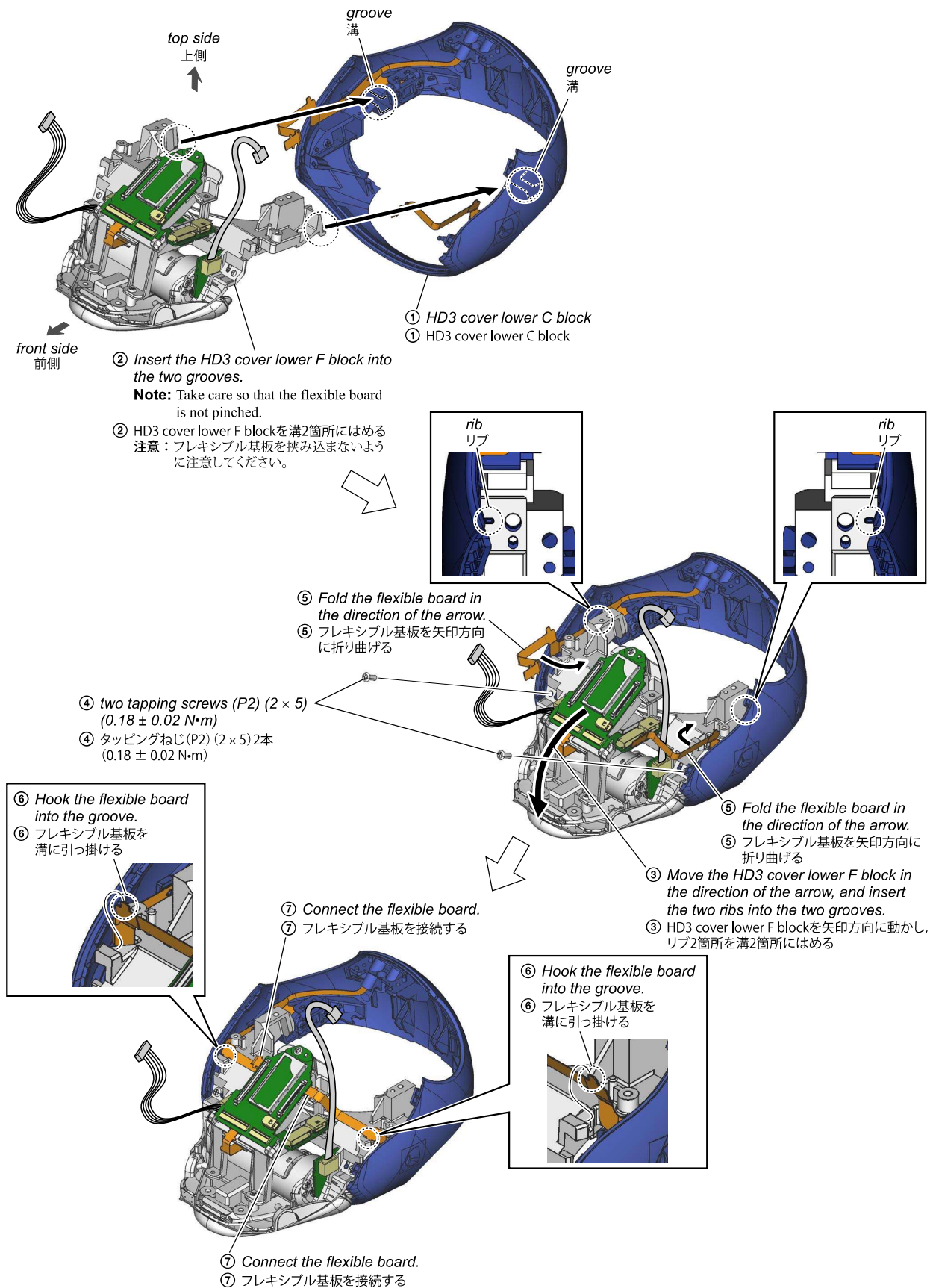
## 1-3-84. GW-1005 BOARD



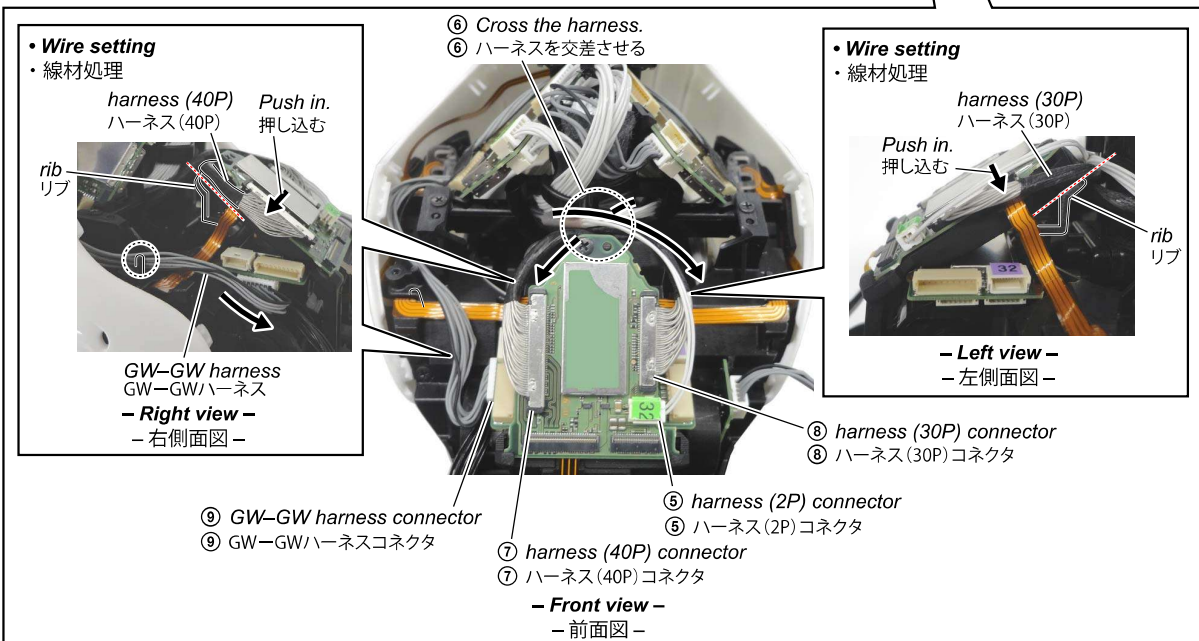
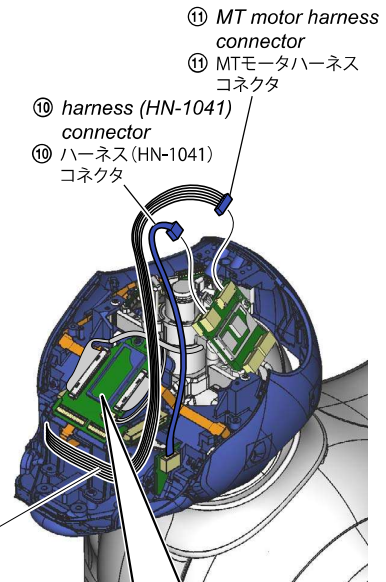
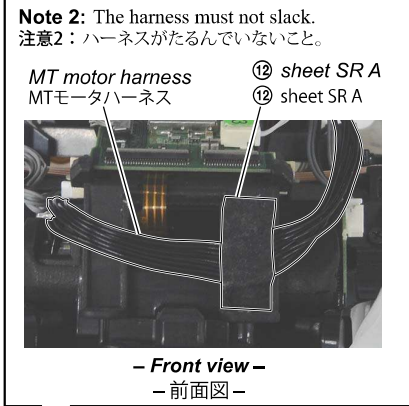
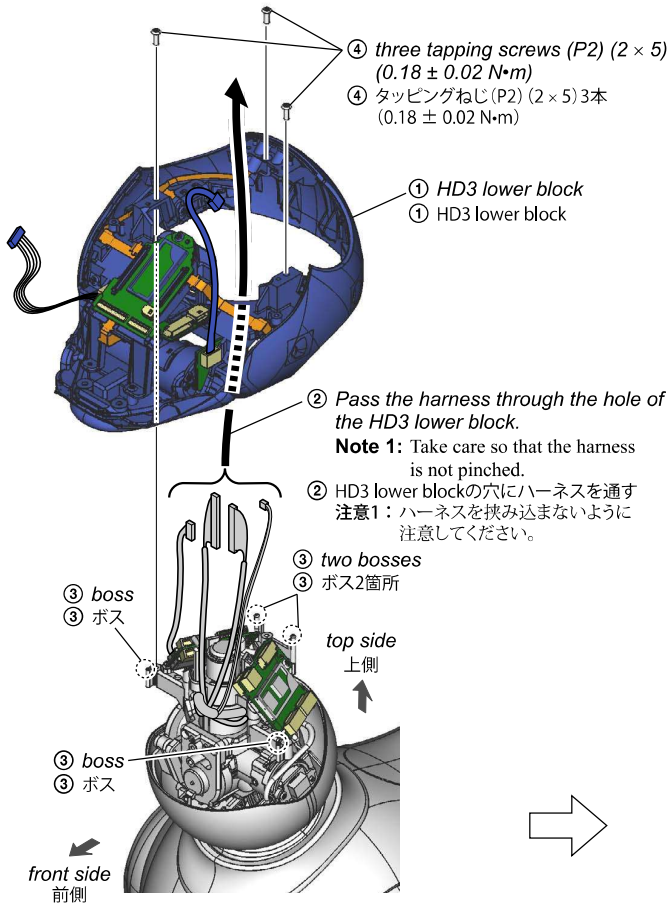
## 1-3-85. HD3 CM HOLDER BLOCK



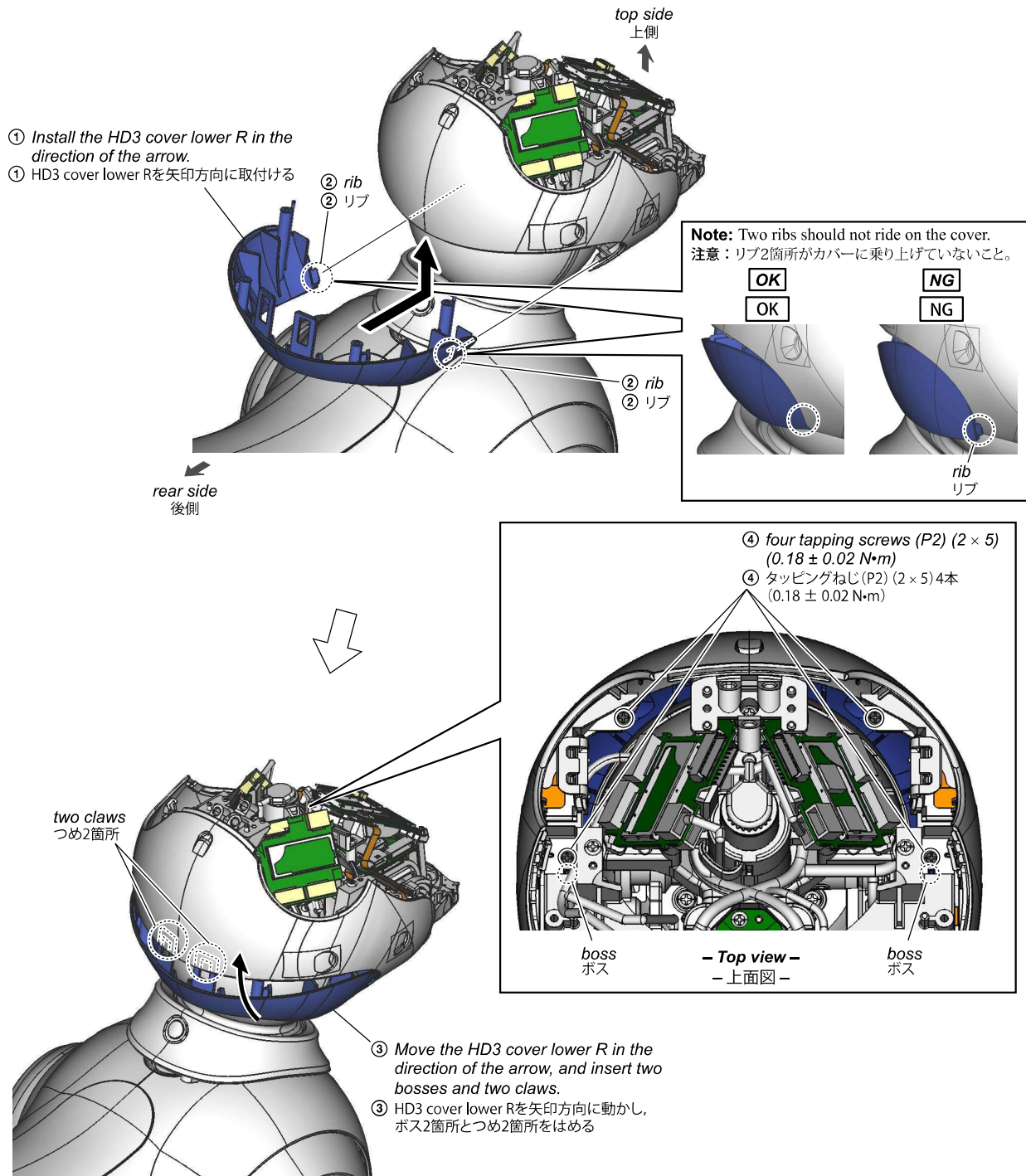
## 1-3-86. HD3 COVER LOWER C BLOCK



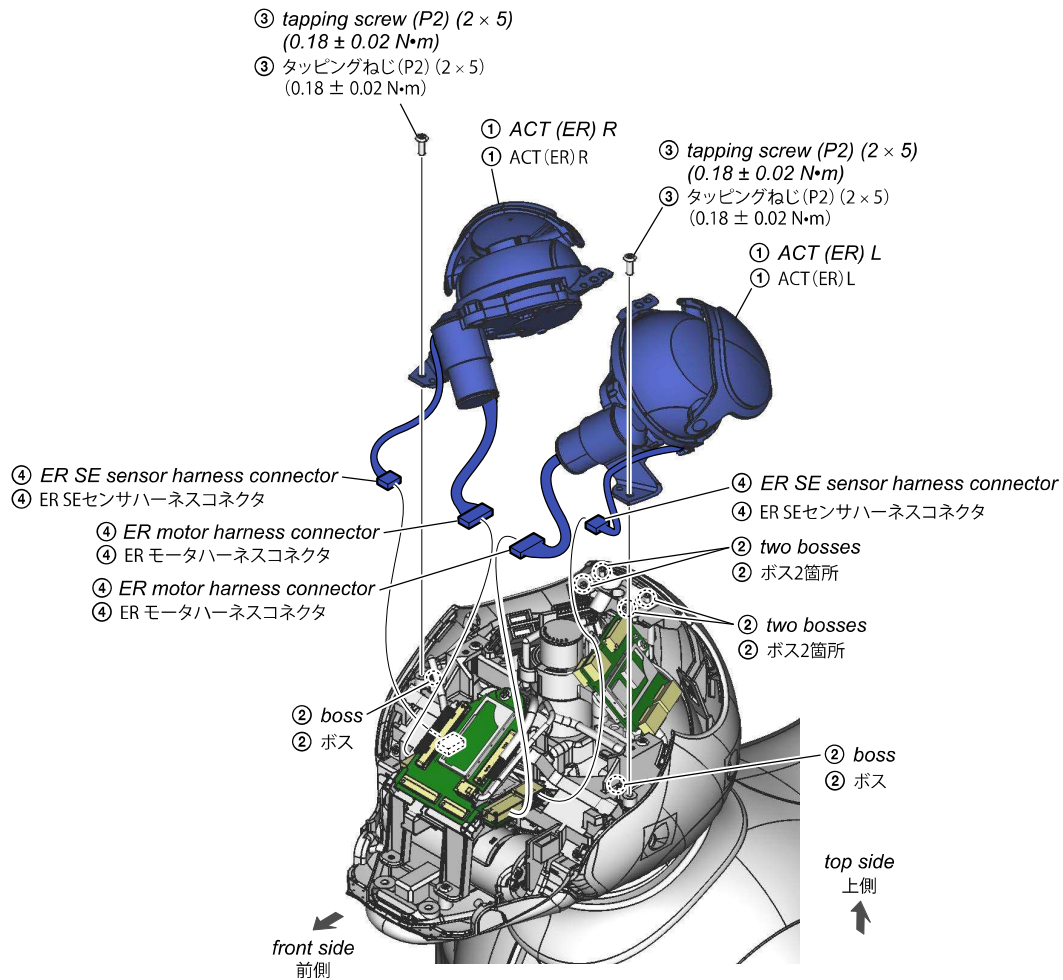
1-3-87. HD3 LOWER BLOCK



## 1-3-88. HD3 COVER LOWER R



1-3-89. ACT (ER) L/R



• Wire setting  
• 線材処理

– ACT (ER) R side –  
– ACT (ER) R側 –

**Note 1:** Harnesses must be stacked in the order of ① to ④.  
**注意1:** ハーネスは①～④の順番に重なっていること。

**Note 4:** The harness does not protrude to the outside of the cabinet.  
**注意4:** キャビネットの外側にハーネスがはみ出していないこと。

- ③ ER SE sensor harness
- ③ ER SEセンサーハーネス
- ① MIC flexible board
- ① MICフレキシブル基板
- ② GW-GW harness
- ② GW-GWハーネス

- ④ ER motor harness
- ④ ER モーターハーネス

– ACT (ER) L side –  
– ACT (ER) L側 –

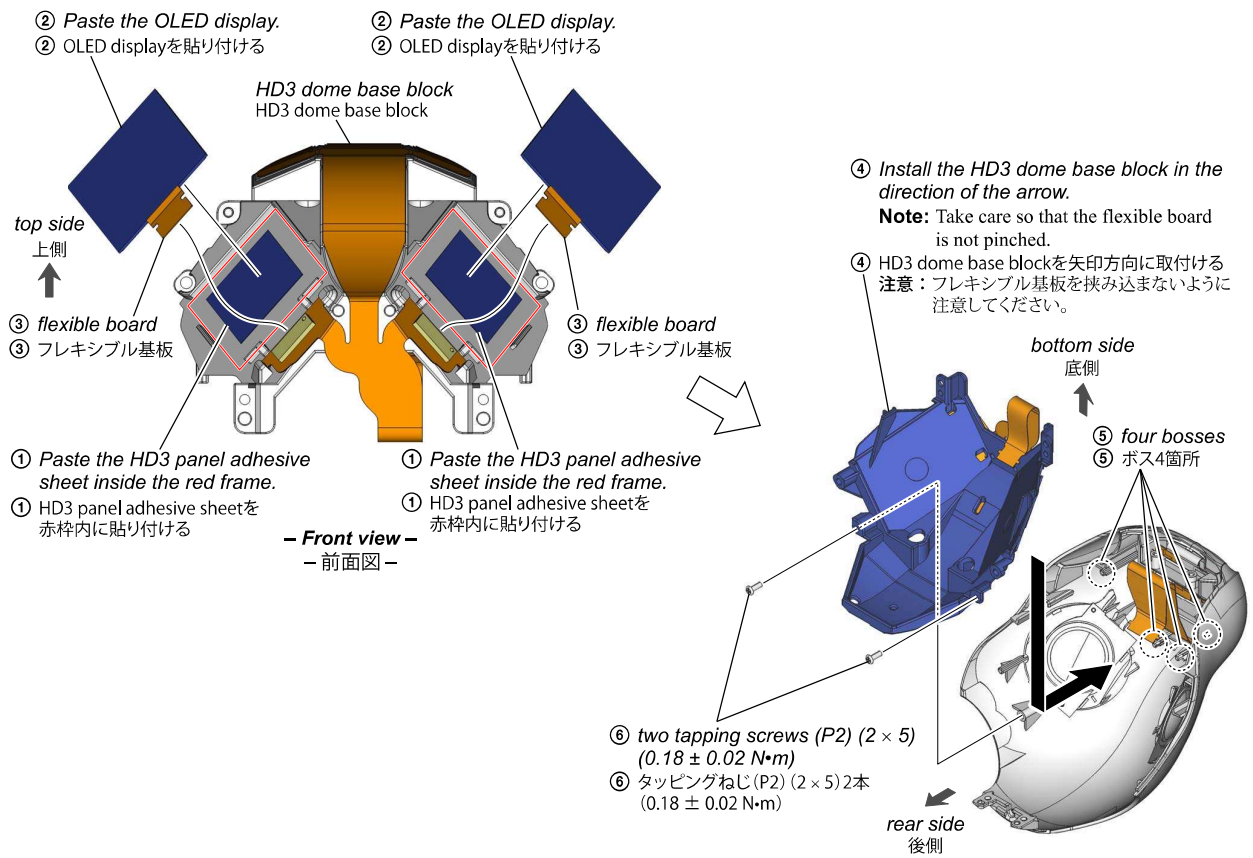
**Note 2:** Harnesses must be stacked in the order of ① to ⑤.  
**注意2:** ハーネスは①～⑤の順番に重なっていること。

**Note 3:** ⑤ must pass outside ③ and ④.  
**注意3:** ⑤が③及び④の外側を通っていること。

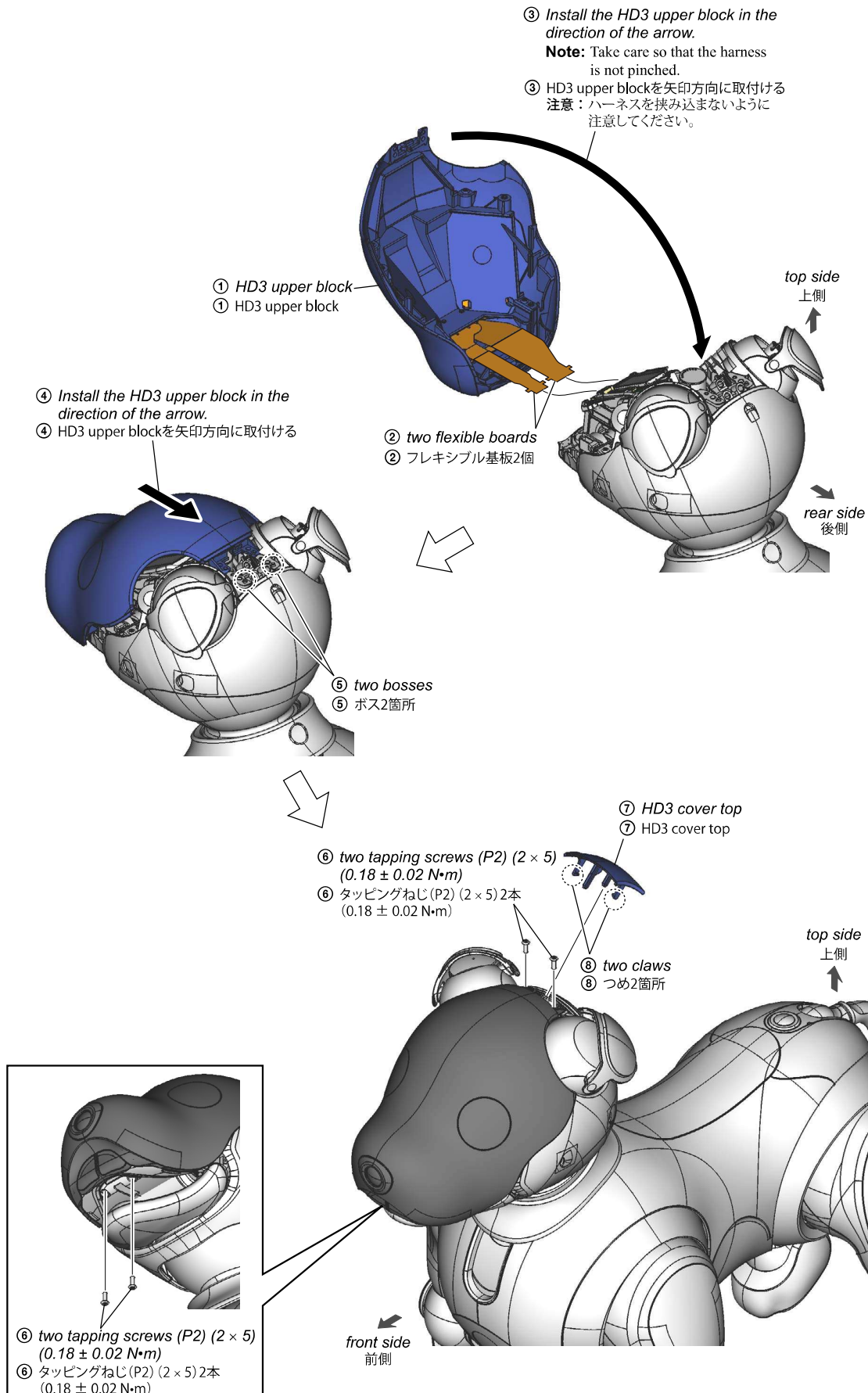
- ③ MT sensor harness
- ③ MTセンサーハーネス
- ② ER SE sensor harness
- ② ER SEセンサーハーネス
- ① MIC flexible board
- ① MICフレキシブル基板
- ④ ER motor harness
- ④ ER モーターハーネス
- ⑤ MT motor harness
- ⑤ MT モーターハーネス

**Note 4:** The harness does not protrude to the outside of the cabinet.  
**注意4:** キャビネットの外側にハーネスがはみ出していないこと。

## 1-3-90. OLED DISPLAY

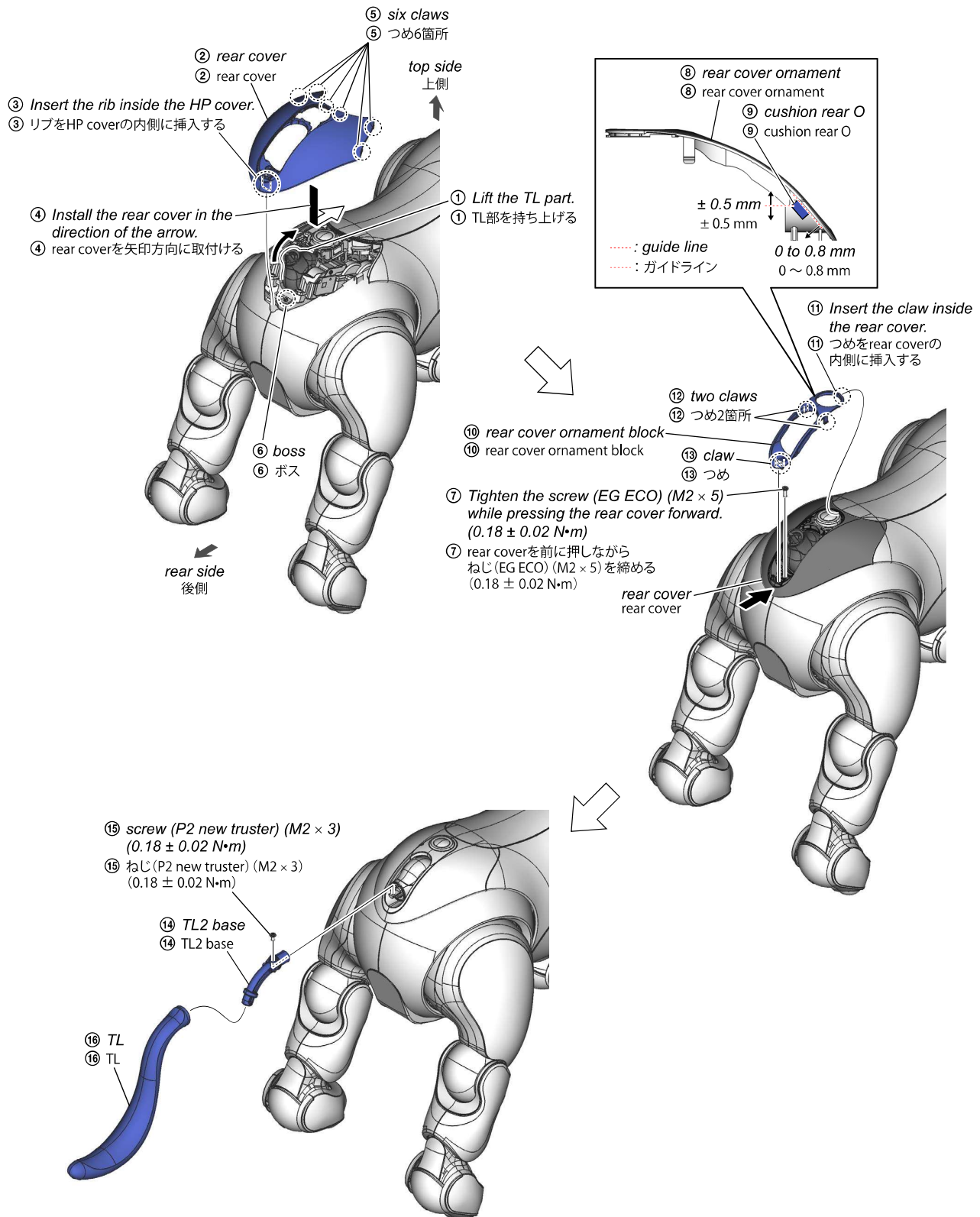


## 1-3-91. HD3 UPPER BLOCK



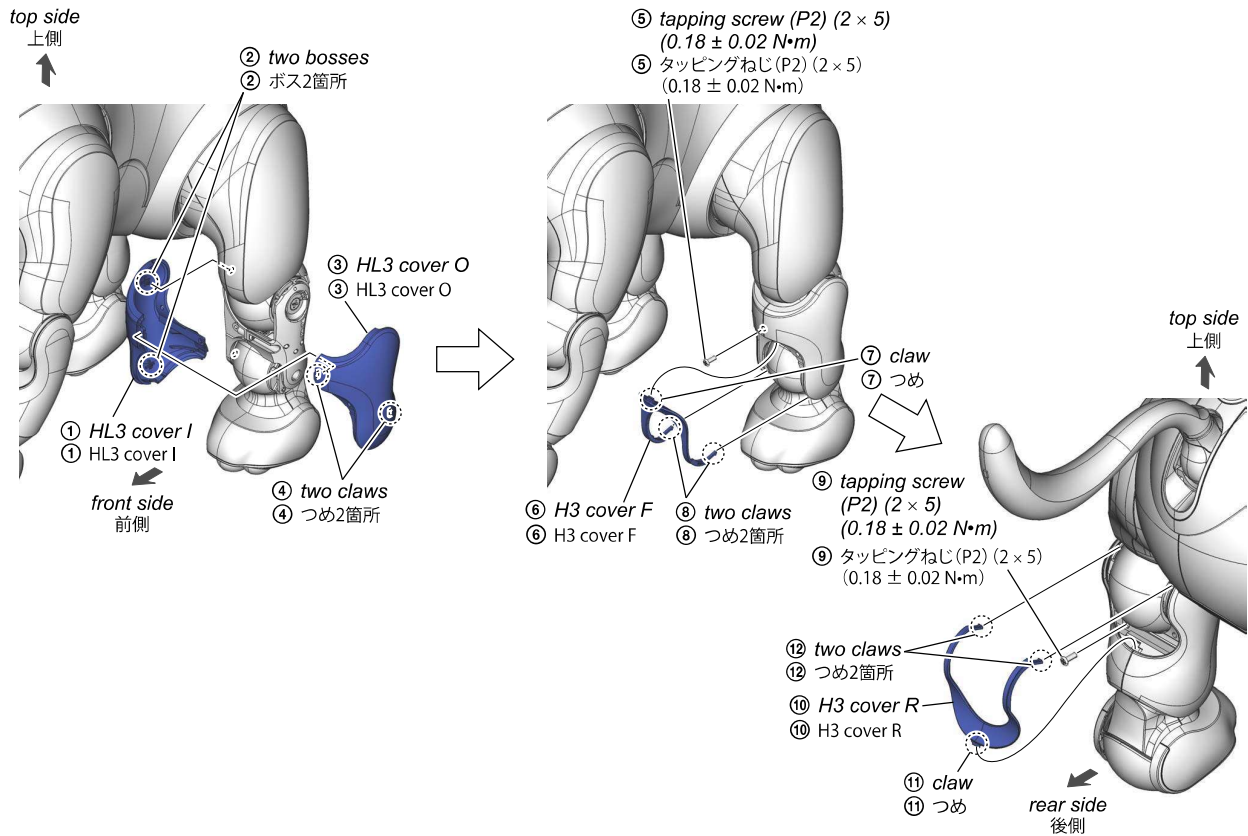


## 1-3-92. REAR COVER



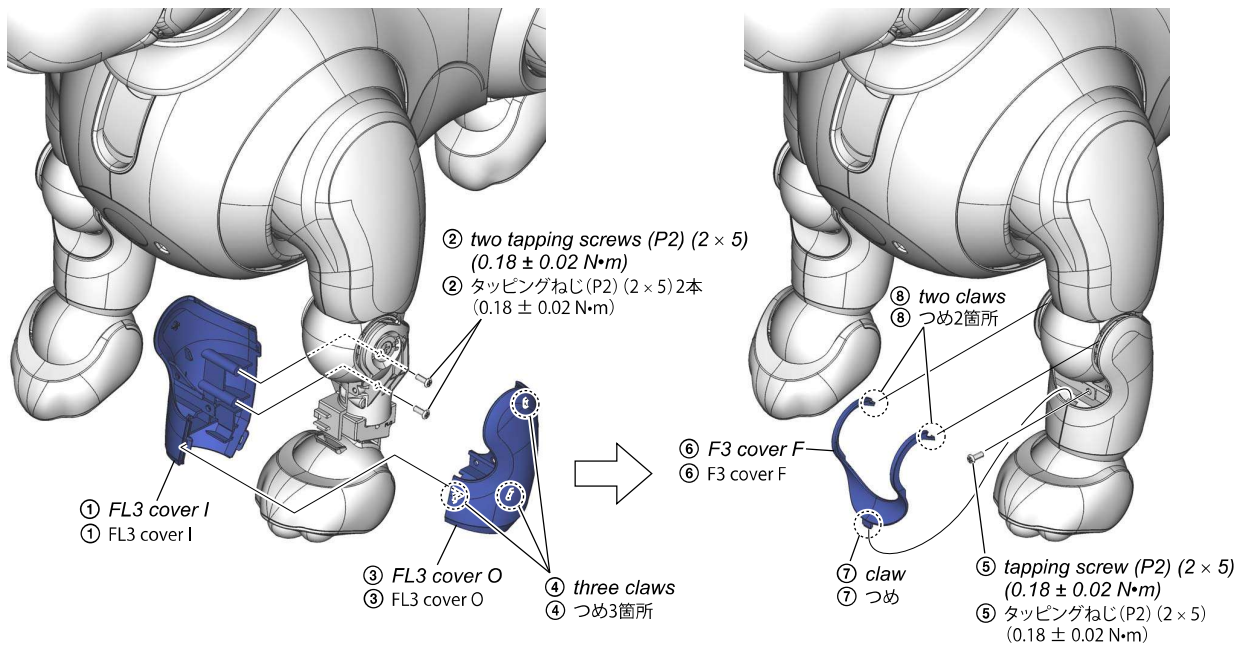
### 1-3-93. HL3/HR3 COVER

**Note:** The illustration uses the left side, but there is no difference in assembly for the left and right.

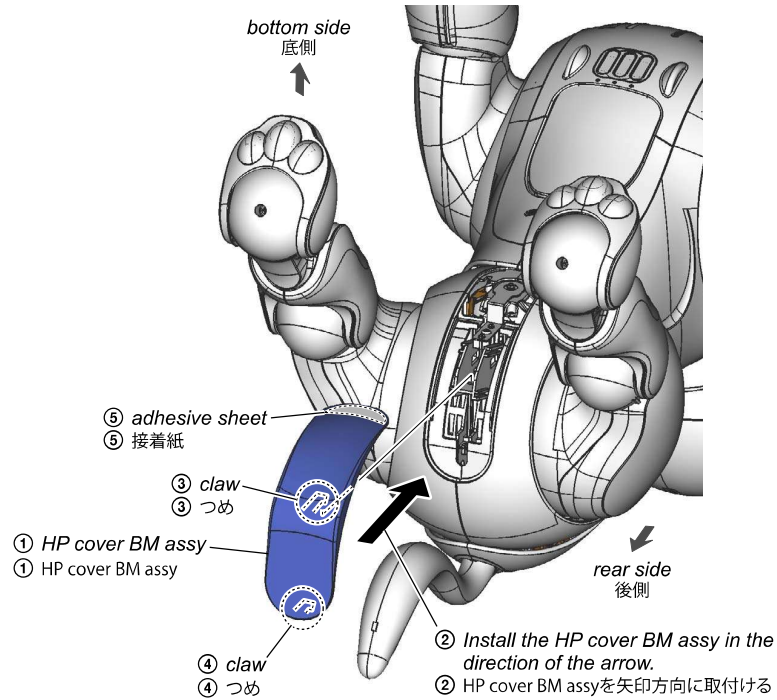


### 1-3-94. FL3/FR3 COVER

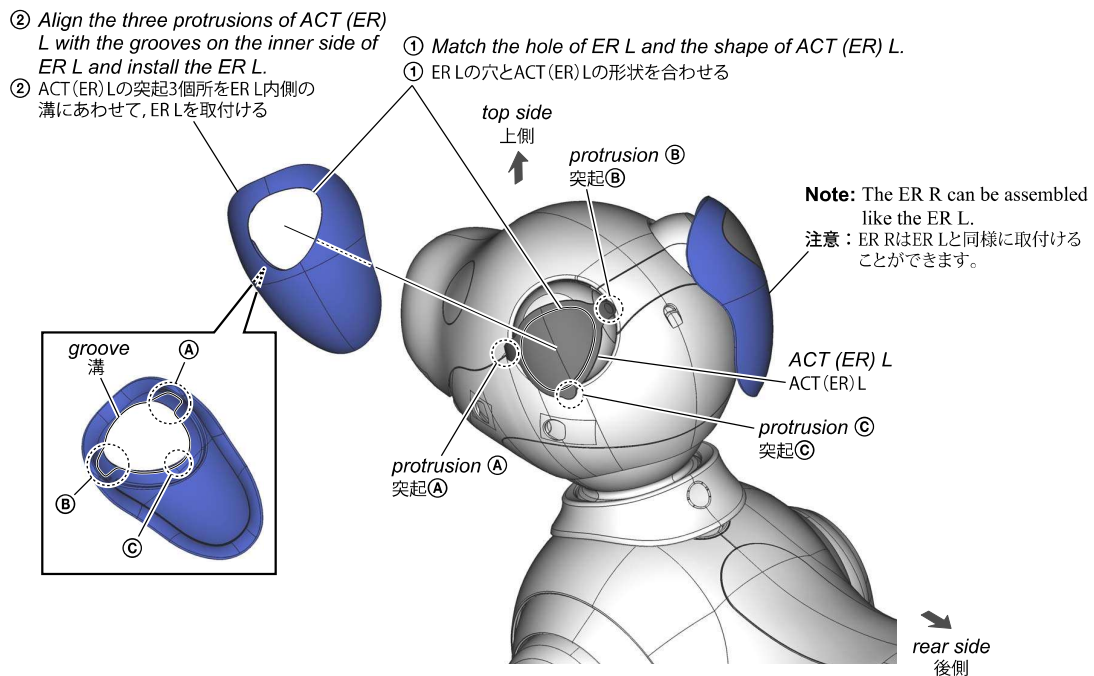
**Note:** The illustration uses the left side, but there is no difference in assembly for the left and right.



## 1-3-95. HP COVER BM ASSY




## 1-3-96. EARS L/R



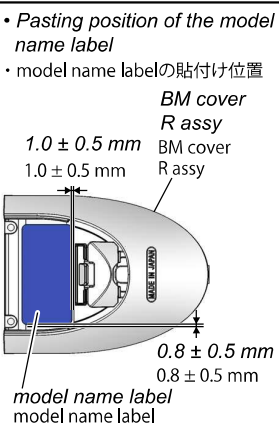
1-3-97. BATTERY PACK

**Note:** When tightening these screws, use the T5 screwdriver for screws with hexalobular (Torx®).

注意：これらのねじを締める場合は、T5サイズヘクスローブドライバー(トルクス®ドライバー)を使用してください。



• Pasting position of the model name label  
• model name labelの貼付け位置



BM cover R Assy  
BM cover R Assy

1.0 ± 0.5 mm  
1.0 ± 0.5 mm

0.8 ± 0.5 mm  
0.8 ± 0.5 mm

model name label  
model name label

⑨ two screws (M2 × 5) (Refer to Note)  
(0.18 ± 0.02 N·m)

⑨ ねじ (M2 × 5) 2本 (注意参照)  
(0.18 ± 0.02 N·m)

⑦ BM cover R block  
⑦ BM cover R block

⑧ five claws  
⑧ つめ5箇所

⑥ two screws (M2 × 5) (Refer to Note)  
(0.18 ± 0.02 N·m)

⑥ ねじ (M2 × 5) 2本 (注意参照)  
(0.18 ± 0.02 N·m)

④ rib  
④ リブ

② BATT lid  
② BATT lid

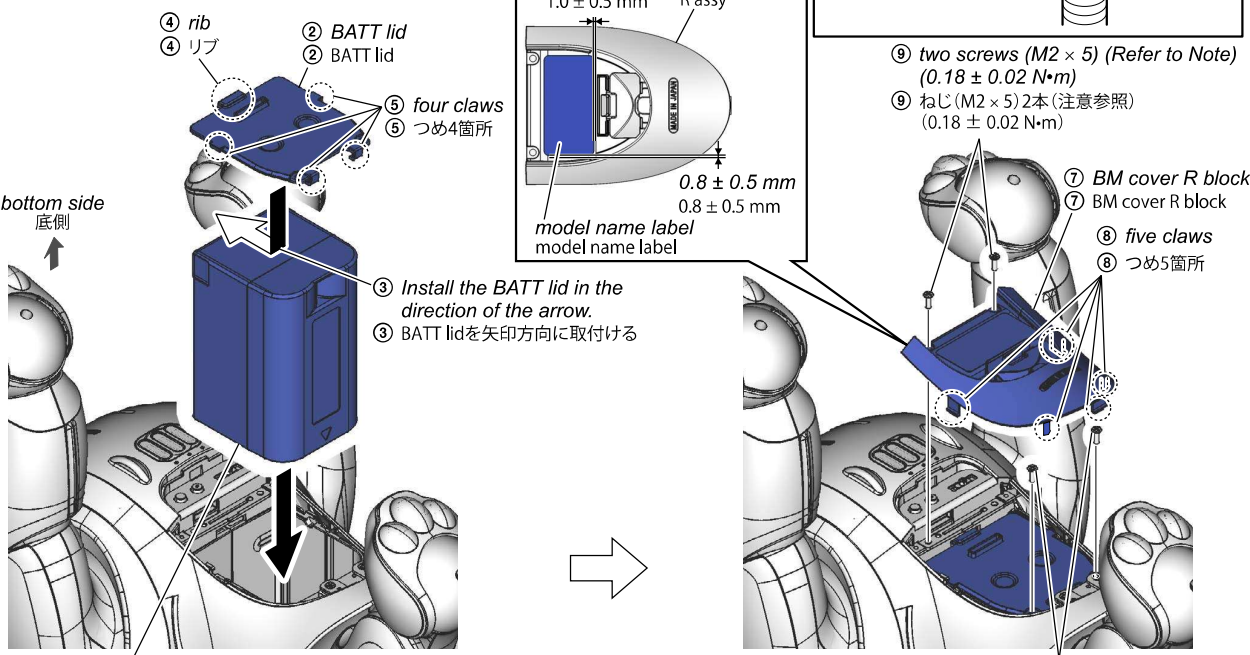
⑤ four claws  
⑤ つめ4箇所

bottom side  
底側

③ Install the BATT lid in the direction of the arrow.  
③ BATT lidを矢印方向に取付ける

① battery pack  
① battery pack

rear side  
後側



1-3-98. BM LID ASSY

② BM lid assy  
② BM lid assy

① SIM card tray  
① SIM card tray

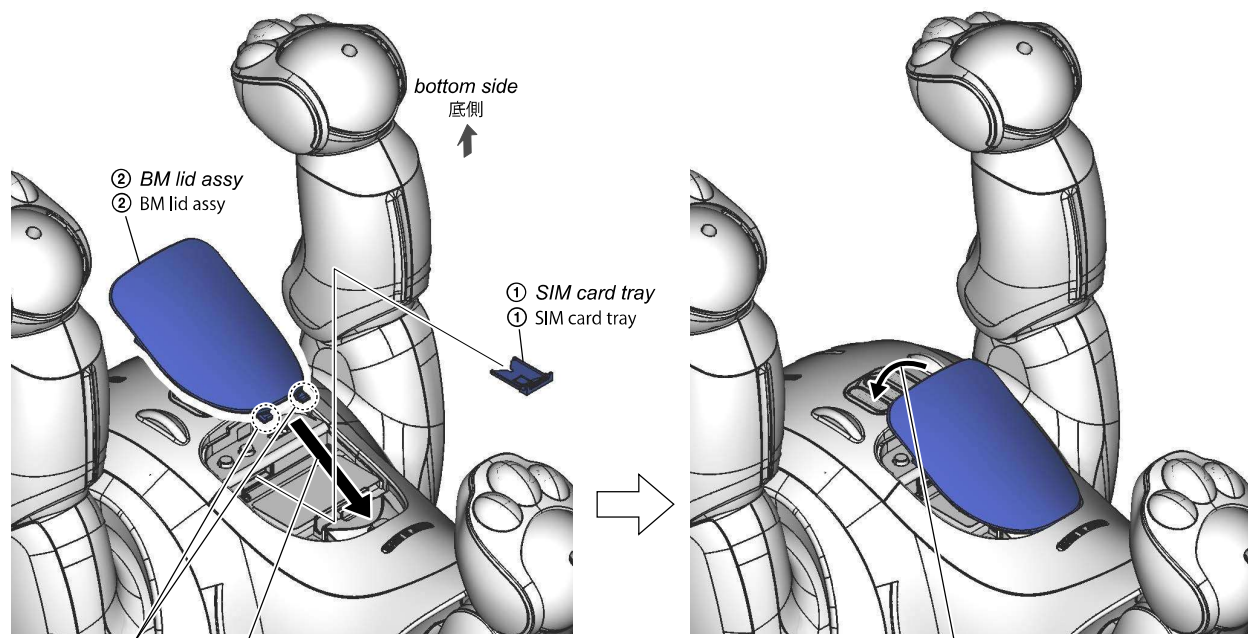
③ two claws  
③ つめ2箇所

bottom side  
底側

④ Insert the BM lid assy in the direction of the arrow.  
④ BM lid assyを矢印方向に挿入する

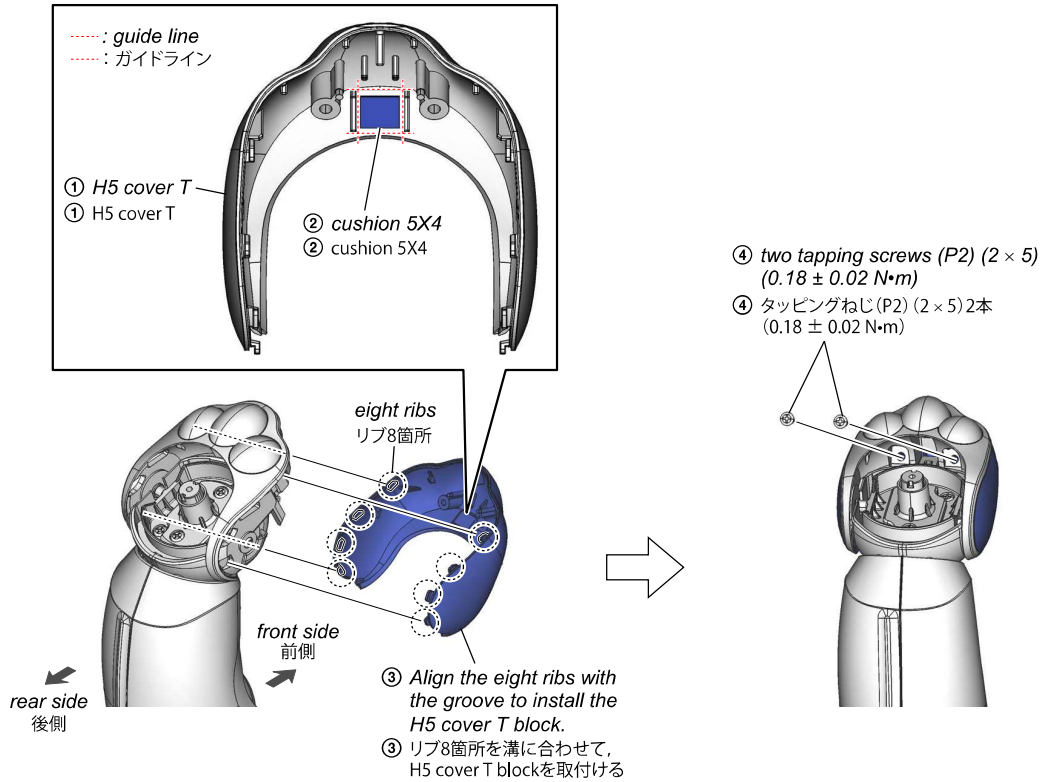
rear side  
後側

⑤ Install the BM lid assy in the direction of the arrow.  
⑤ BM lid assyを矢印方向に取付ける



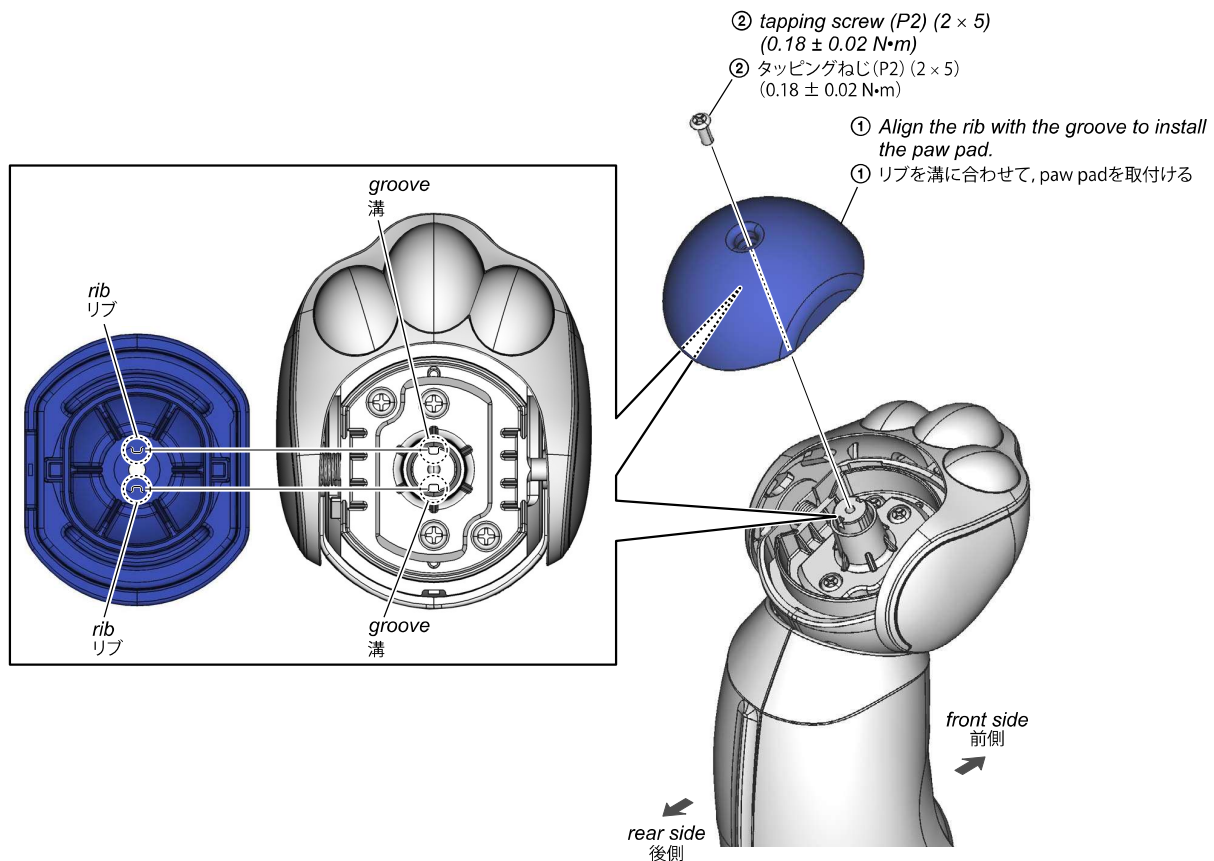
## 1-3-99. H5 COVER T

**Note:** The illustration uses the left side, but there is no difference in assembly for the front, rear, left and right.



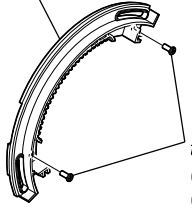
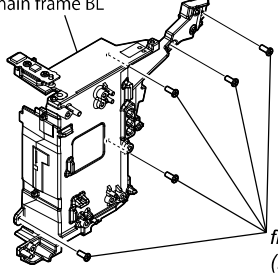
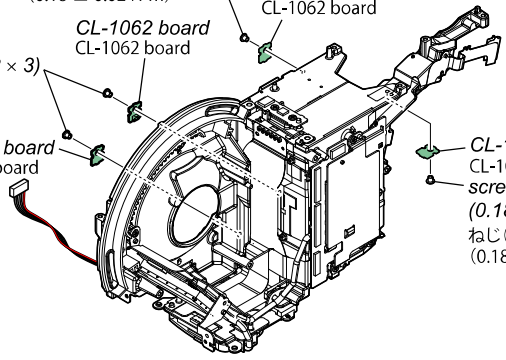
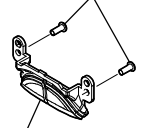
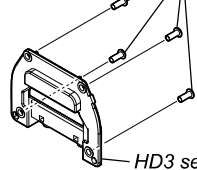
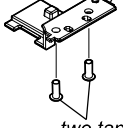
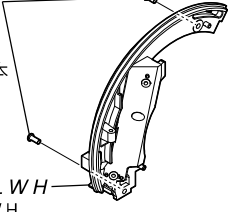
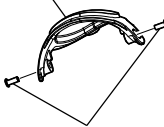
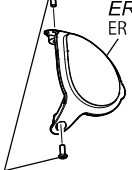
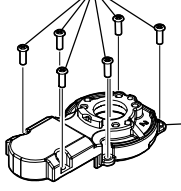
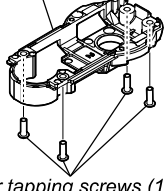
## 1-3-100. PAW PAD

**Note:** The illustration uses the left side, but there is no difference in assembly for the front, rear, left and right.



## 1-4. TORQUE VALUE OF OTHER SCREWS

Tighten screws while referring to the torque values below for screws not indicated in “1-3. ASSEMBLY”.

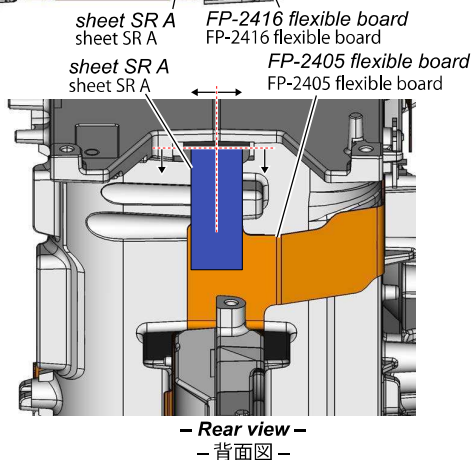
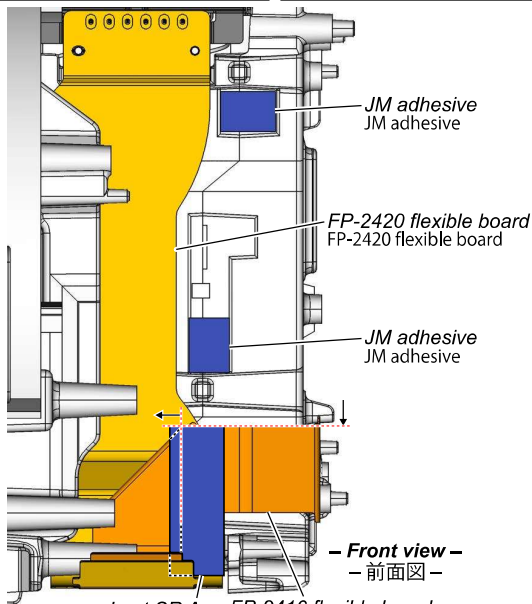
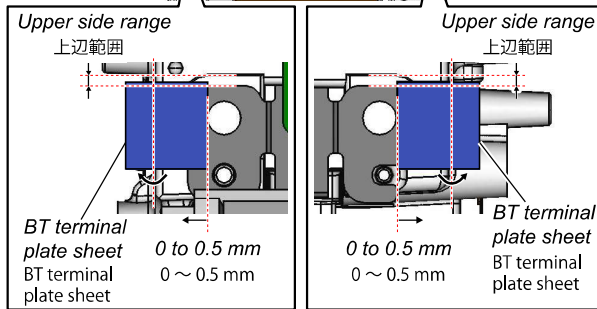
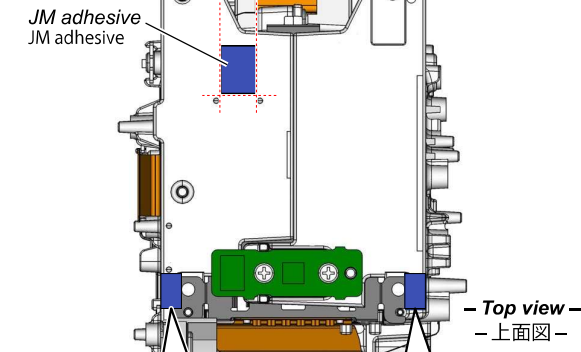
<p>NC shutter guide R W H NC shutter guide R W H</p>  <p>two screws (EG ECO) (M2 × 5) (0.18 N•m) ねじ (EG ECO) (M2 × 5) 2本 (0.18 N•m)</p>	<p>main frame BL main frame BL</p>  <p>five screws (EG ECO) (M2 × 5) (0.18 N•m) ねじ (EG ECO) (M2 × 5) 5本 (0.18 N•m)</p>	
 <p>two screws (P2 new truster) (M2 × 3) (0.18 ± 0.02 N•m) ねじ (P2 new truster) (M2 × 3) 2本 (0.18 ± 0.02 N•m)</p> <p>screw (P2 new truster) (M2 × 3) (0.18 ± 0.02 N•m) ねじ (P2 new truster) (M2 × 3) (0.18 ± 0.02 N•m)</p> <p>CL-1062 board CL-1062 board</p> <p>CL-1062 board CL-1062 board</p> <p>CL-1062 board CL-1062 board screw (P2 new truster) (M2 × 3) (0.18 ± 0.02 N•m) ねじ (P2 new truster) (M2 × 3) (0.18 ± 0.02 N•m)</p>		
<p>two tapping screws (P2) (2 × 5) (0.18 ± 0.02 N•m) タッピングねじ (P2) (2 × 5) 2本 (0.18 ± 0.02 N•m)</p>  <p>HD3 window HD3 window</p>	<p>four tapping screws (P2) (2 × 5) (0.18 ± 0.02 N•m) タッピングねじ (P2) (2 × 5) 4本 (0.18 ± 0.02 N•m)</p>  <p>HD3 sensor FPC holder HD3 sensor FPC holder</p>	<p>top terminal holder top terminal holder</p>  <p>two tapping screws (P2) (2 × 5) (0.18 ± 0.02 N•m) タッピングねじ (P2) (2 × 5) 2本 (0.18 ± 0.02 N•m)</p>
<p>two screws (EG ECO) (M2 × 5) (0.18 ± 0.02 N•m) ねじ (EG ECO) (M2 × 5) 2本 (0.18 ± 0.02 N•m)</p>  <p>NC shutter guide L W H NC shutter guide L W H</p>	<p>ER retainer R ER retainer R</p>  <p>two screws (EG lock) (M1.7 × 4) (0.18 ± 0.02 N•m) ねじ (EG lock) (M1.7 × 4) 2本 (0.18 ± 0.02 N•m)</p>	<p>ER retainer L ER retainer L</p>  <p>two screws (EG lock) (M1.7 × 4) (0.18 ± 0.02 N•m) ねじ (EG lock) (M1.7 × 4) 2本 (0.18 ± 0.02 N•m)</p>
<p>six tapping screws (1.7 × 5) (0.18 ± 0.02 N•m) タッピングねじ (1.7 × 5) 6本 (0.18 ± 0.02 N•m)</p>  <p>AS box cover AS box cover</p>	<p>M cover HP M cover HP</p>  <p>four tapping screws (1.7 × 5) (0.18 ± 0.02 N•m) タッピングねじ (1.7 × 5) 4本 (0.18 ± 0.02 N•m)</p>	

### 1-5. PASTING POSITION OF OTHER PARTS

Work while referring to the information below for pasting position not indicated in “1-3. ASSEMBLY”.

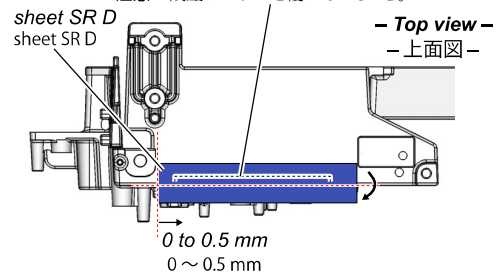
..... : guide line  
 ..... : ガイドライン

- **BD block**
- BD block

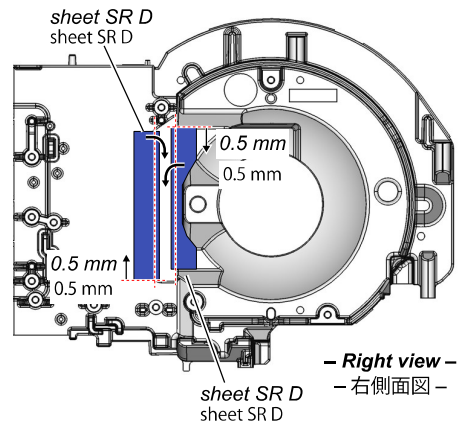


- **main frame BL**
- main frame BL

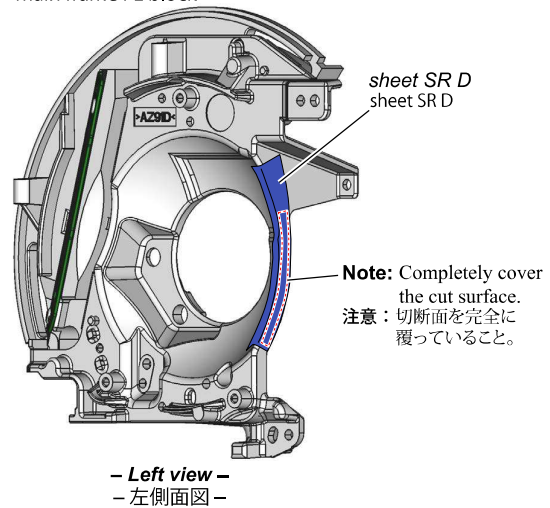
**Note:** Cover the edge of the step.  
 注意：段差のエッジを覆っていること。



- **main frame R**
- main frame R



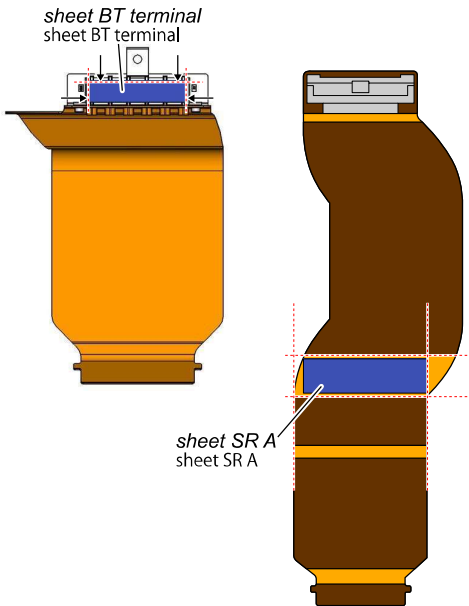
- **main frame FL block**
- main frame FL block



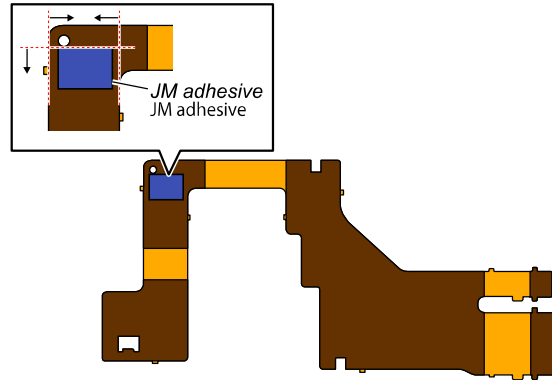
Continued on next page.

..... : guide line  
 ..... : ガイドライン

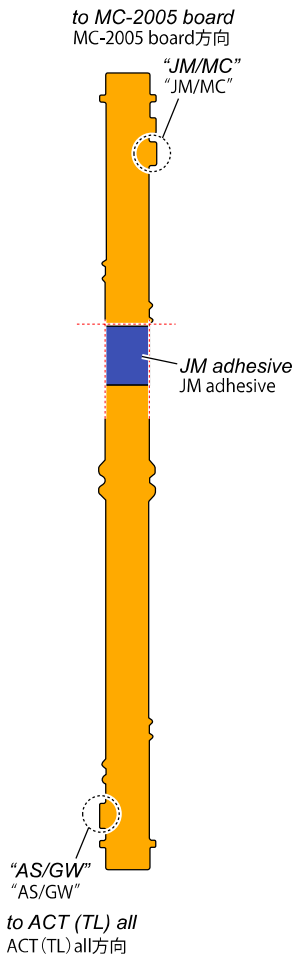
- **FP-2420 flexible board**
- FP-2420 flexible board



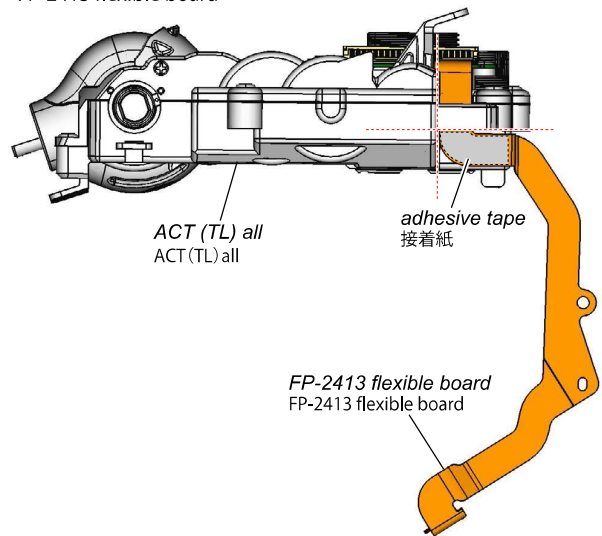
- **JM-1001 flexible board**
- JM-1001 flexible board



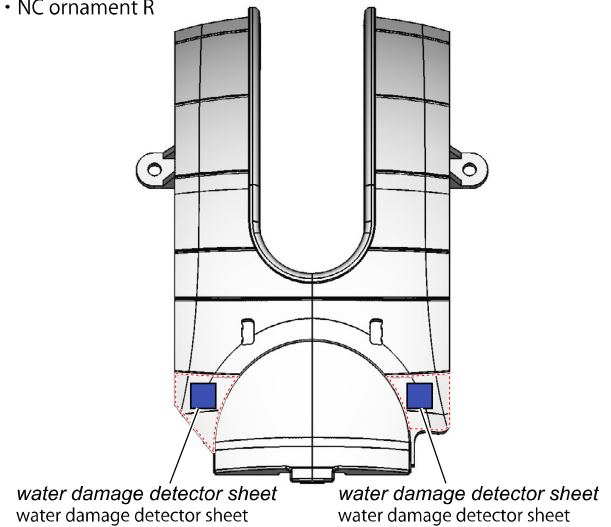
- **FP-2412 flexible board**
- FP-2412 flexible board



- **FP-2413 flexible board**
- FP-2413 flexible board



- **NC ornament R**
- NC ornament R

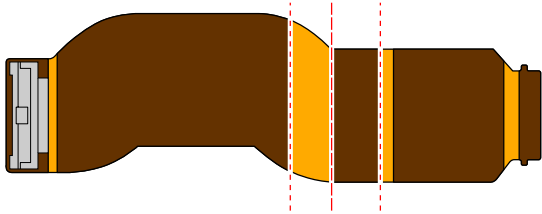




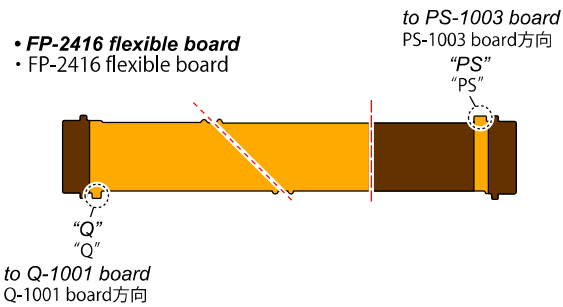
### 1-6. FLEXIBLE BOARD SETTING

- - - - - : Mountain fold
- - - - - : Valley fold
- - - - - : 山折
- - - - - : 谷折

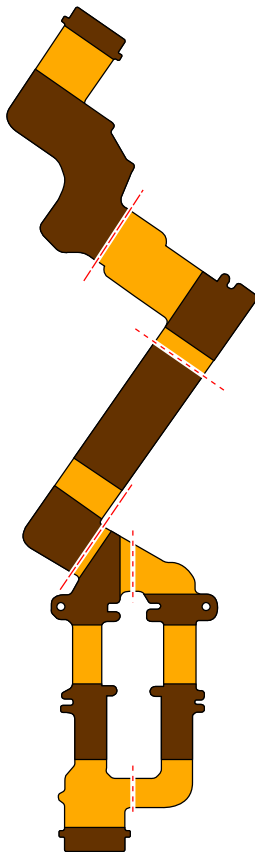
- **FP-2420 flexible board**
- FP-2420 flexible board



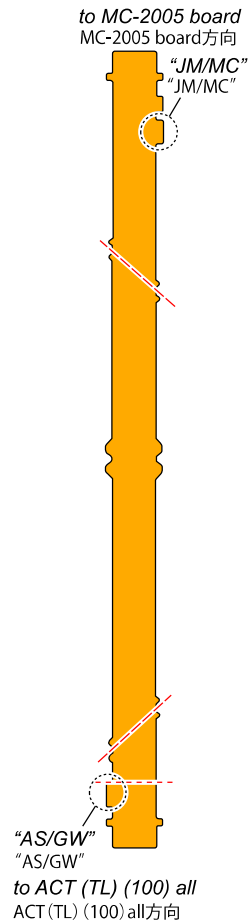
- **FP-2416 flexible board**
- FP-2416 flexible board



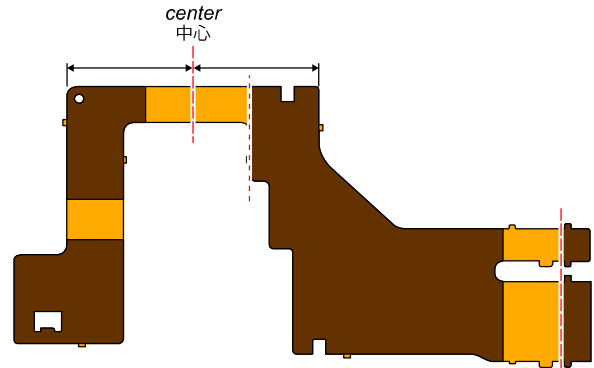
- **FP-2405 flexible board**
- FP-2405 flexible board



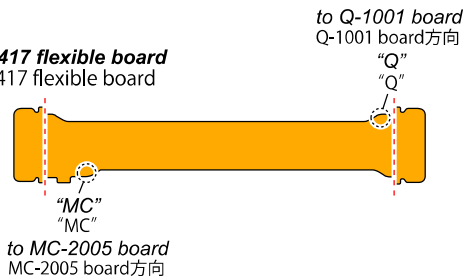
- **FP-2412 flexible board**
- FP-2412 flexible board



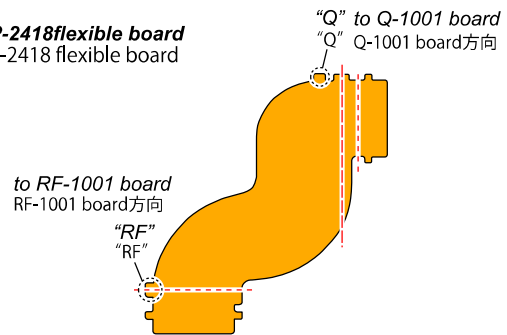
- **JM-1001 flexible board**
- JM-1001 flexible board



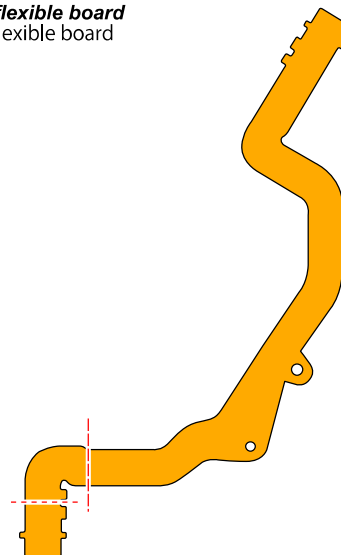
- **FP-2417 flexible board**
- FP-2417 flexible board



- **FP-2418 flexible board**
- FP-2418 flexible board



- **FP-2413 flexible board**
- FP-2413 flexible board



## 2. EXPLODED VIEWS

### Ordering information:

There are 3 kinds of parts described in this service manual.

1. The part which has reference number in the exploded view  
Available to purchase. Visit Encompass Web site <<https://sony.encompass.com/>>.
2. The part which has reference number with [C/R] in the exploded view (Calibration Required).  
Due to the unique nature of each aibo, repairs of these parts require recalibration in a central service center. These parts are not available to purchase. If you'd like to repair your aibo by using these parts, please contact to SONY <<https://www.sony.com/electronics/support>>.
3. N/A  
Not available to purchase.

### Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by mark  $\triangle$  or dotted line with mark are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

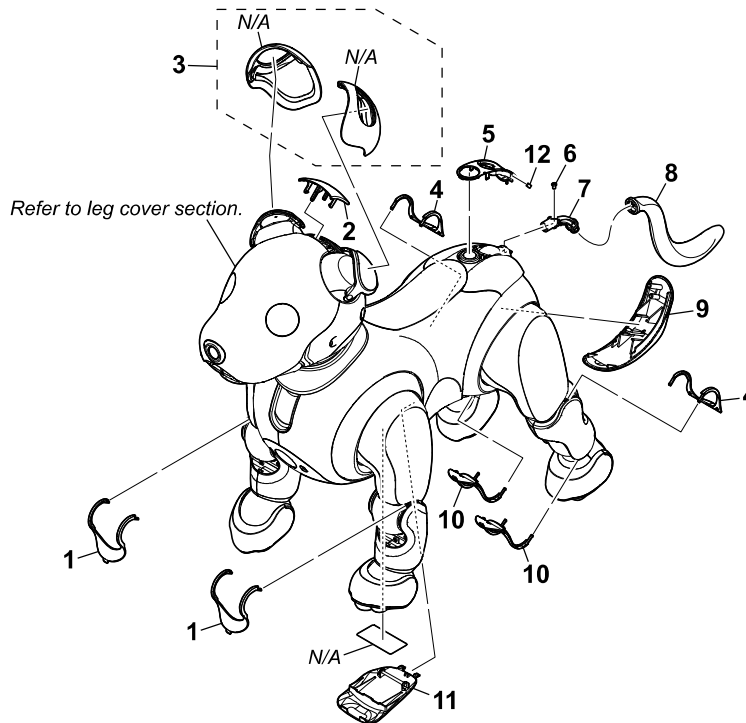
### Caution

Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type.  
Dispose of used batteries according to the instructions.

### 注意

如果电池更换不当会有爆炸危险。  
只能用同样类型或等效类型的电池来更换。  
务必按照说明处置用完的电池。

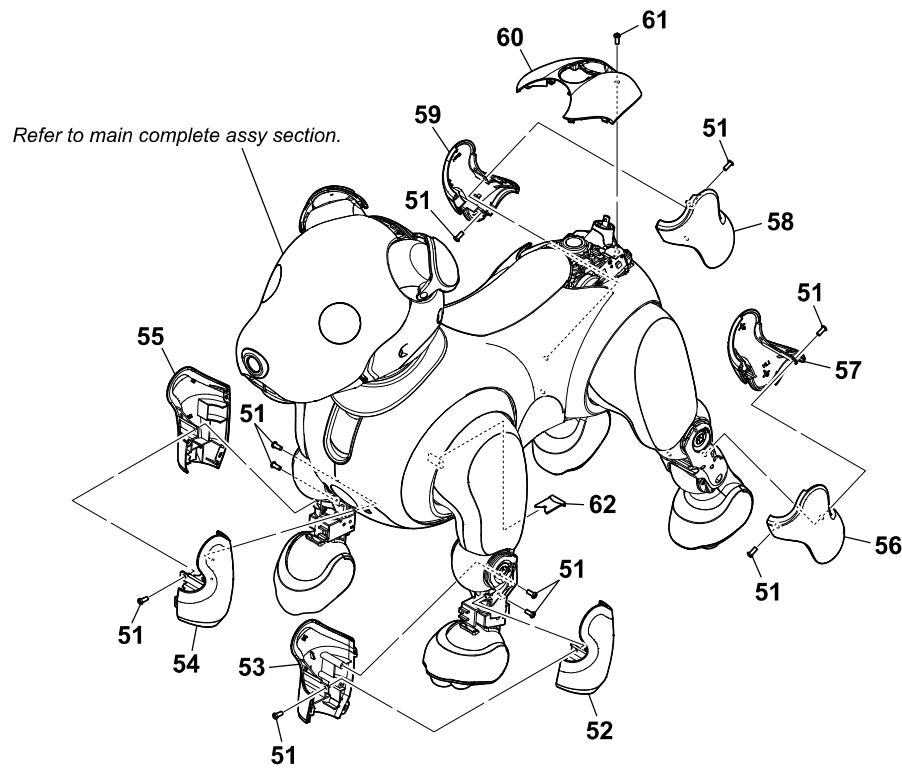
### 2-1. OVERALL SECTION



Ref. No.	Part No.	Description
1	4-725-174-02	F3 COVER F (100)
2	4-725-256-01	HD3 COVER TOP (100)
3	A-2216-647-B	EARS L/R (KIT)
4	4-725-228-02	H3 COVER R (100)
5	4-725-073-01	REAR COVER ORNAMENT (100)
6	4-724-875-11	SCREW (M2), NEW TRUSTER, P2 (L = 3 mm)

Ref. No.	Part No.	Description
7	4-725-144-01	TL2 BASE (100)
8	4-725-145-01	TL (100)
9	X-2596-573-1	HP COVER BM (100) ASSY
10	4-725-226-02	H3 COVER F (100)
11	X-2596-434-1	BM LID (100) ASSY
12	4-724-645-01	CUSHION REAR O (100)

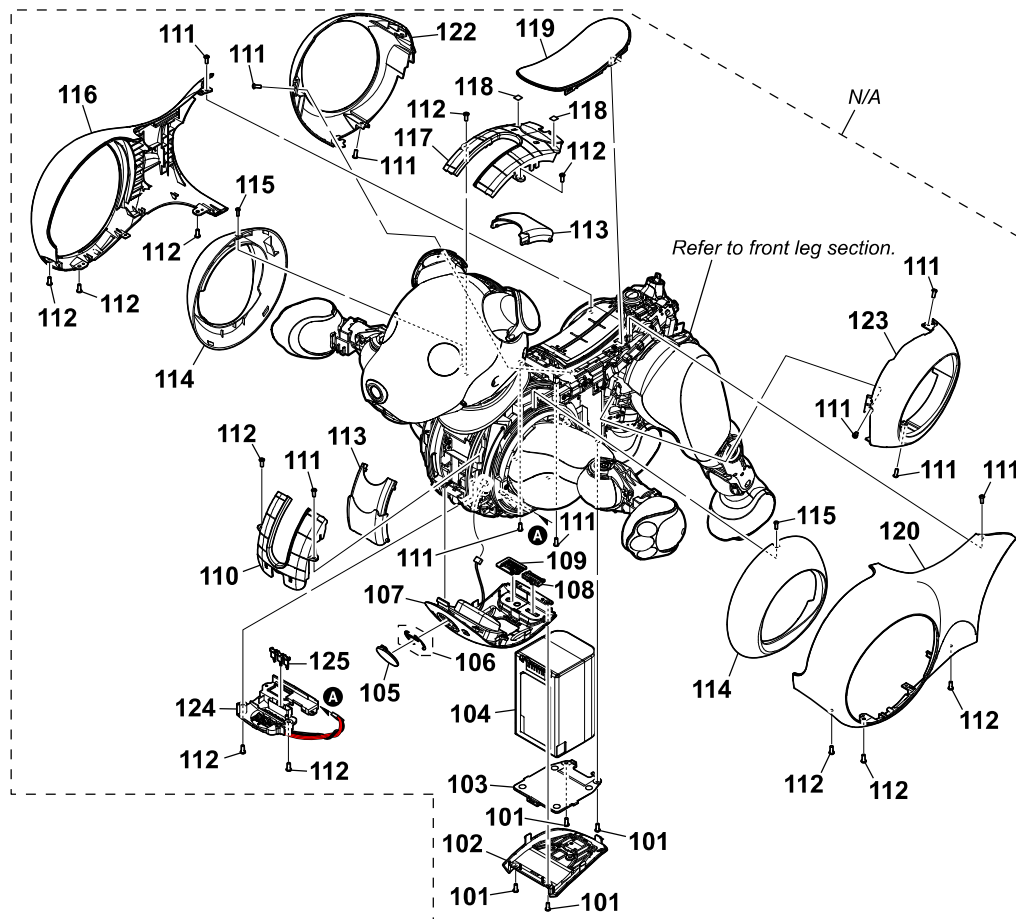
## 2-2. LEG COVER SECTION



Ref. No.	Part No.	Description
51	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
52	4-725-169-01	FL3 COVER O (100)
53	4-725-170-01	FL3 COVER I (100)
54	4-725-172-01	FR3 COVER I (100)
55	4-725-171-01	FR3 COVER O (100)
56	4-725-223-01	HL3 COVER O (100)

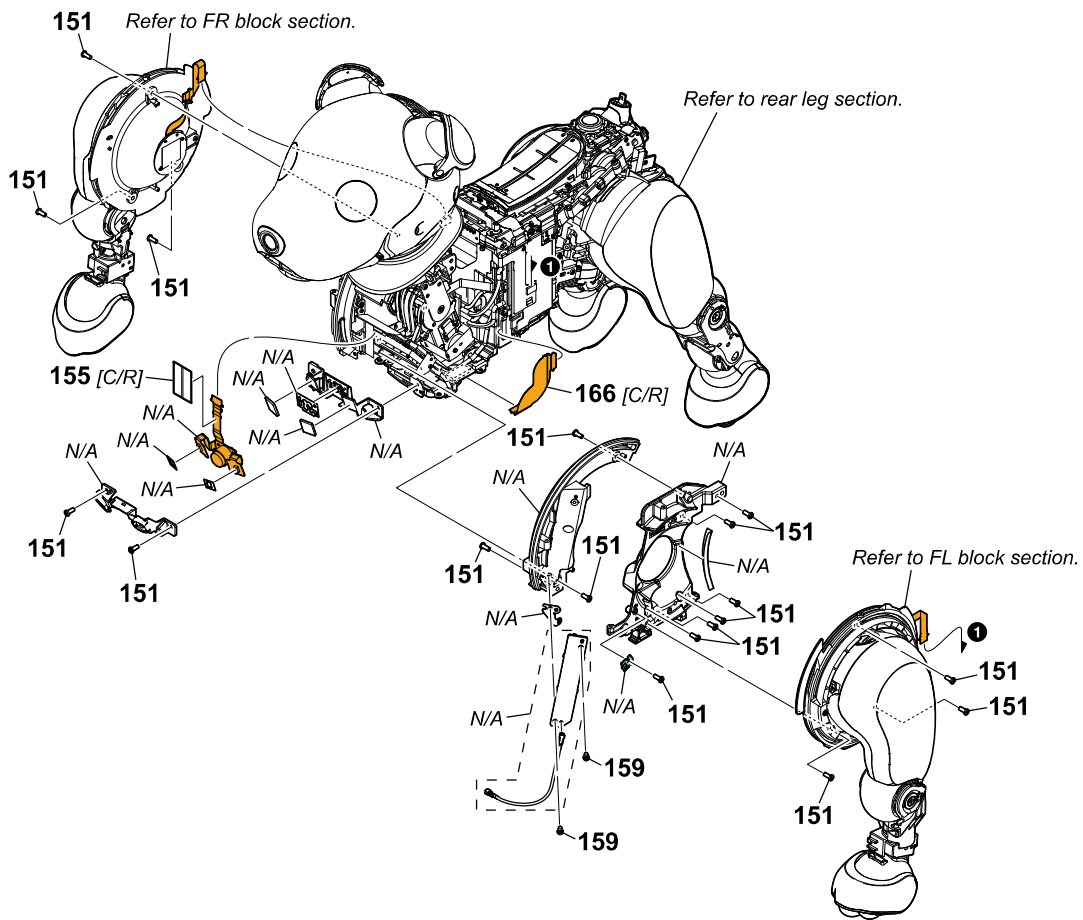
Ref. No.	Part No.	Description
57	4-725-224-02	HL3 COVER I (100)
58	4-725-227-01	HR3 COVER I (100)
59	4-725-225-01	HR3 COVER O (100)
60	4-725-072-02	REAR COVER (100)
61	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)
62	1-844-878-11	SIM CARD TRAY

## 2-3. MAIN COMPLETE ASSY SECTION



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
101	4-724-875-31	SCREW (M2), NEW TRUSTER, P2 (L = 5 mm)	113	X-2596-572-1	NC SHUTTER (100) ASSY
102	X-2596-433-1	BM COVER R (100) ASSY	114	4-725-150-01	F1 COVER (100)
103	4-725-100-01	BATT LID (100)	115	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
104	1-853-701-13	LI-ION BATTERY PACK (ERA-1010)	116	4-725-071-02	SIDE COVER R (100)
105	1-856-868-11	FILTER, OPTICAL (CS WINDOW A)	117	4-725-075-01	NC ORNAMENT R (100)
106	4-725-129-01	CS WINDOW ADHESIVE (100)	118	4-724-608-01	WATER DAMAGE DETECTOR SHEET
107	A-2192-910-A	BM COVER F (100) BLOCK ASSY	119	4-725-092-01	TOP COVER (100)
108	4-725-110-01	SLIDE SW (100)	120	4-725-070-02	SIDE COVER L (100)
109	4-725-111-01	V BUTTON (100)	122	A-5009-298-A	HP COVER R (100) ASSY
110	4-725-074-01	NC ORNAMENT F (100)	123	A-5009-297-A	HP COVER L (100) ASSY
111	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)	124	A-2192-908-A	CHG TERMINAL (100) BLOCK ASSY
112	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)	125	4-725-112-01	LIGHT GUIDE BM (100)

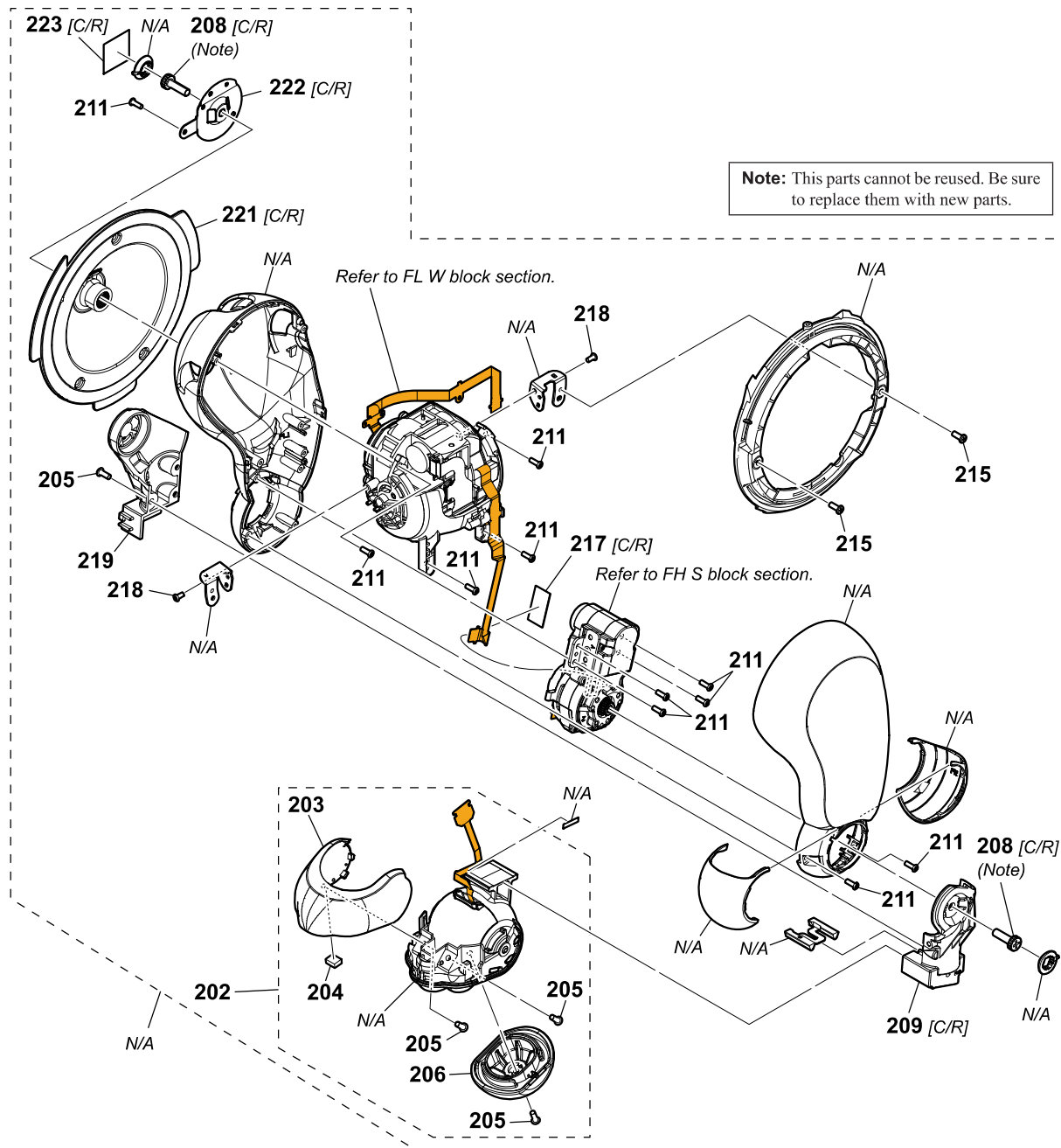
2-4. FRONT LEG SECTION



Ref. No.	Part No.	Description
151	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)
155[C/R]	4-724-868-01	SHIELD SHEET CS (100)

Ref. No.	Part No.	Description
159	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
166[C/R]	1-982-353-12	FP-2418 FLEXIBLE BOARD

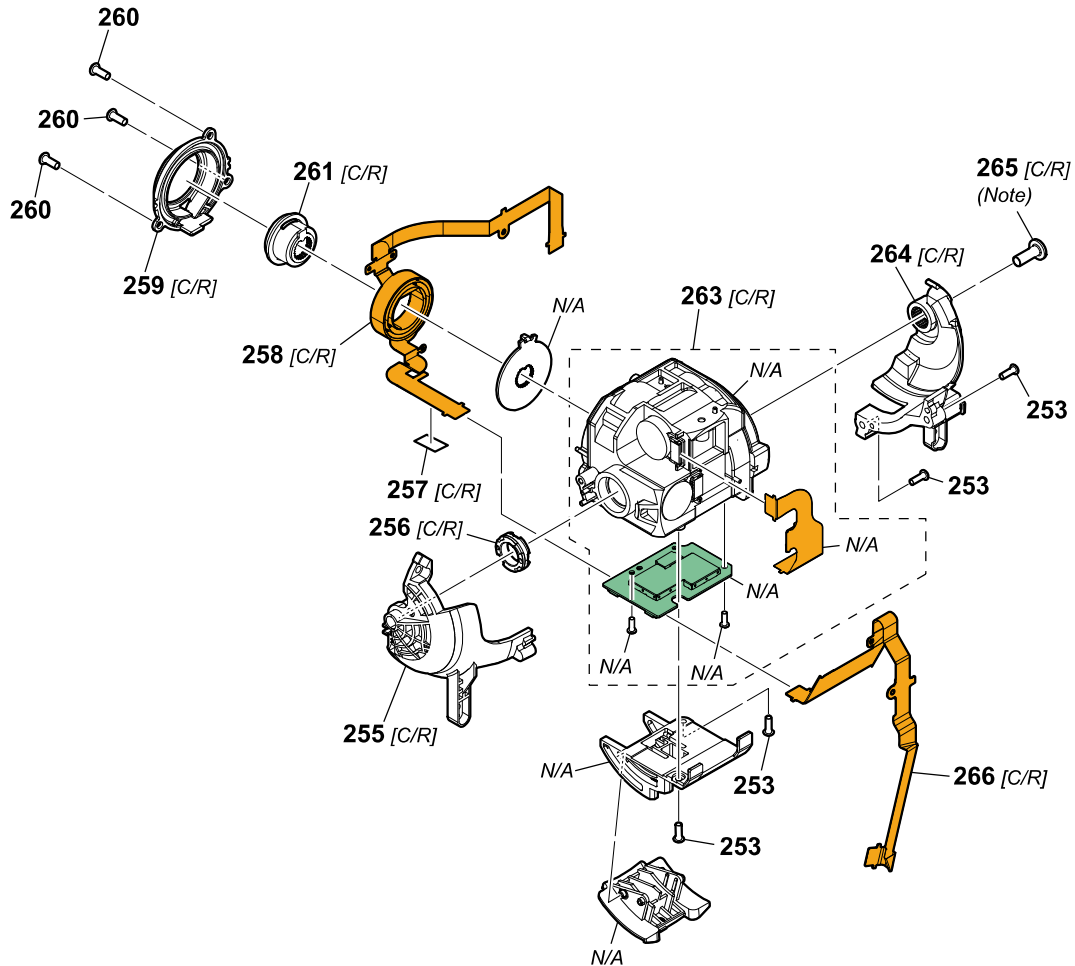
## 2-5. FL BLOCK SECTION



Ref. No.	Part No.	Description
202	A-2192-955-A	F4 (100) BLOCK ASSY
203	4-725-185-01	F4 COVER T (100)
204	4-738-886-02	CUSHION 5X4 (100)
205	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
206	X-2596-571-1	MB RUBBER COVER (100) ASSY
208[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)
209[C/R]	4-725-165-03	FL3 BASE O (100)
211	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)

Ref. No.	Part No.	Description
215	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)
217[C/R]	4-724-871-01	SHEET SR C (100)
218	3-080-204-01	SCREW, TAPPING, P2 (1.7 X 3.5 mm)
219	4-725-166-03	FL3 BASE I (100)
221[C/R]	X-2596-430-3	FLR BASE (100) ASSY
222[C/R]	X-2596-431-1	AW BASE PLATE F (100) ASSY
223[C/R]	4-725-137-01	FLR SCREW SHEET (100)

## 2-6. FL W BLOCK SECTION

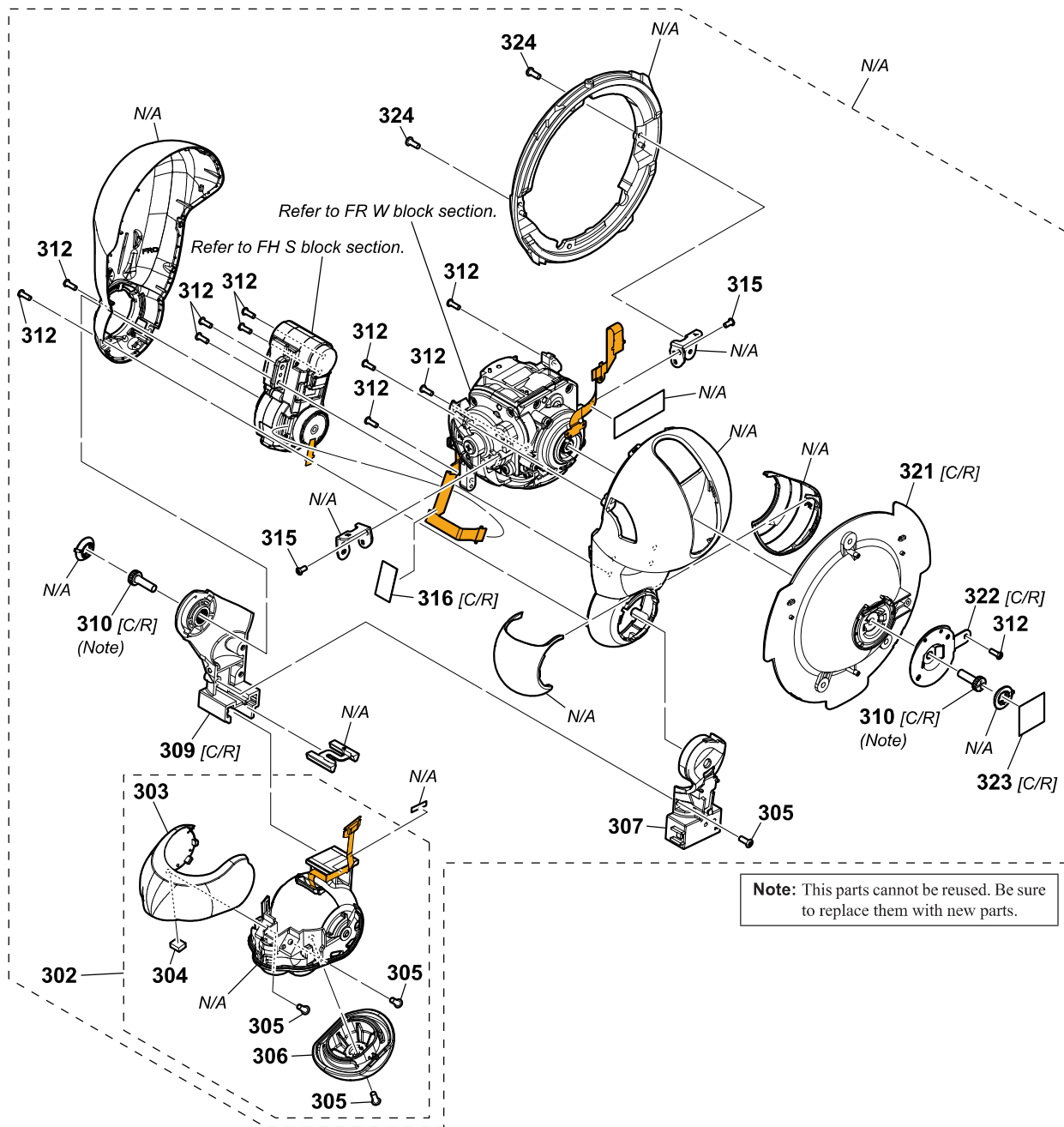


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
253	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
255[C/R]	4-725-155-05	F2 BASE A (100)
256[C/R]	4-724-903-01	BEARING (1170ZZ)
257[C/R]	4-725-127-01	JM ADHESIVE (100)
258[C/R]	1-982-328-12	FP-2403 FLEXIBLE BOARD
259[C/R]	4-724-915-01	F BOBBIN CASE (100)

Ref. No.	Part No.	Description
260	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
261[C/R]	4-724-917-02	FH BOBBIN (100)
263[C/R]	A-2192-928-A	ACT (W) (100) ALL
264[C/R]	4-725-156-07	F2 BASE B (100)
265[C/R]	4-724-887-11	LOW HEAD SCREW M3X8 (Note)
266[C/R]	1-982-331-12	FP-2406 FLEXIBLE BOARD

2-7. FR BLOCK SECTION

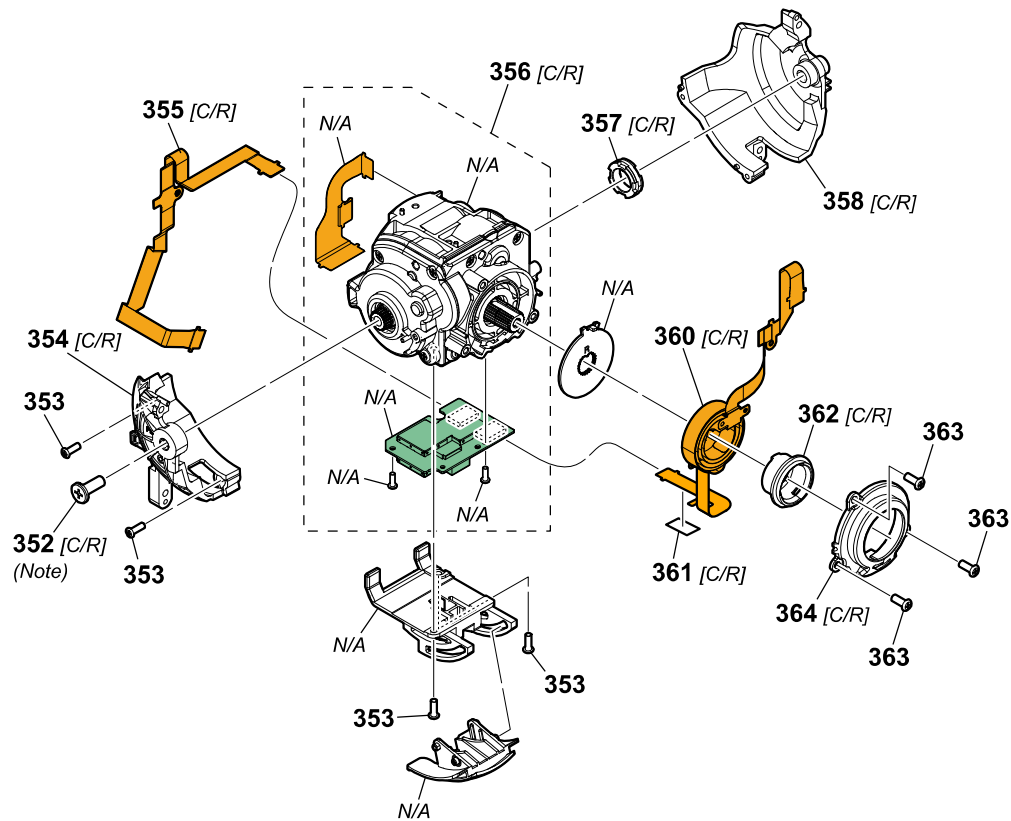


Ref. No.	Part No.	Description
302	A-2192-955-A	F4 (100) BLOCK ASSY
303	4-725-185-02	F4 COVER T (100)
304	4-738-886-02	CUSHION 5X4 (100)
305	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
306	X-2596-571-1	MB RUBBER COVER (100) ASSY
307	4-725-168-03	FR3 BASE I (100)
309[C/R]	4-725-167-03	FR3 BASE O (100)
310[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)

Ref. No.	Part No.	Description
312	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
315	3-080-204-01	SCREW, TAPPING, P2 (1.7 X 3.5 mm)
316[C/R]	4-724-871-01	SHEET SRC (100)
321[C/R]	X-2596-430-3	FLR BASE (100) ASSY
322[C/R]	X-2596-431-1	AW BASE PLATE F (100) ASSY
323[C/R]	4-725-137-01	FLR SCREW SHEET (100)
324	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)



## 2-8. FR W BLOCK SECTION

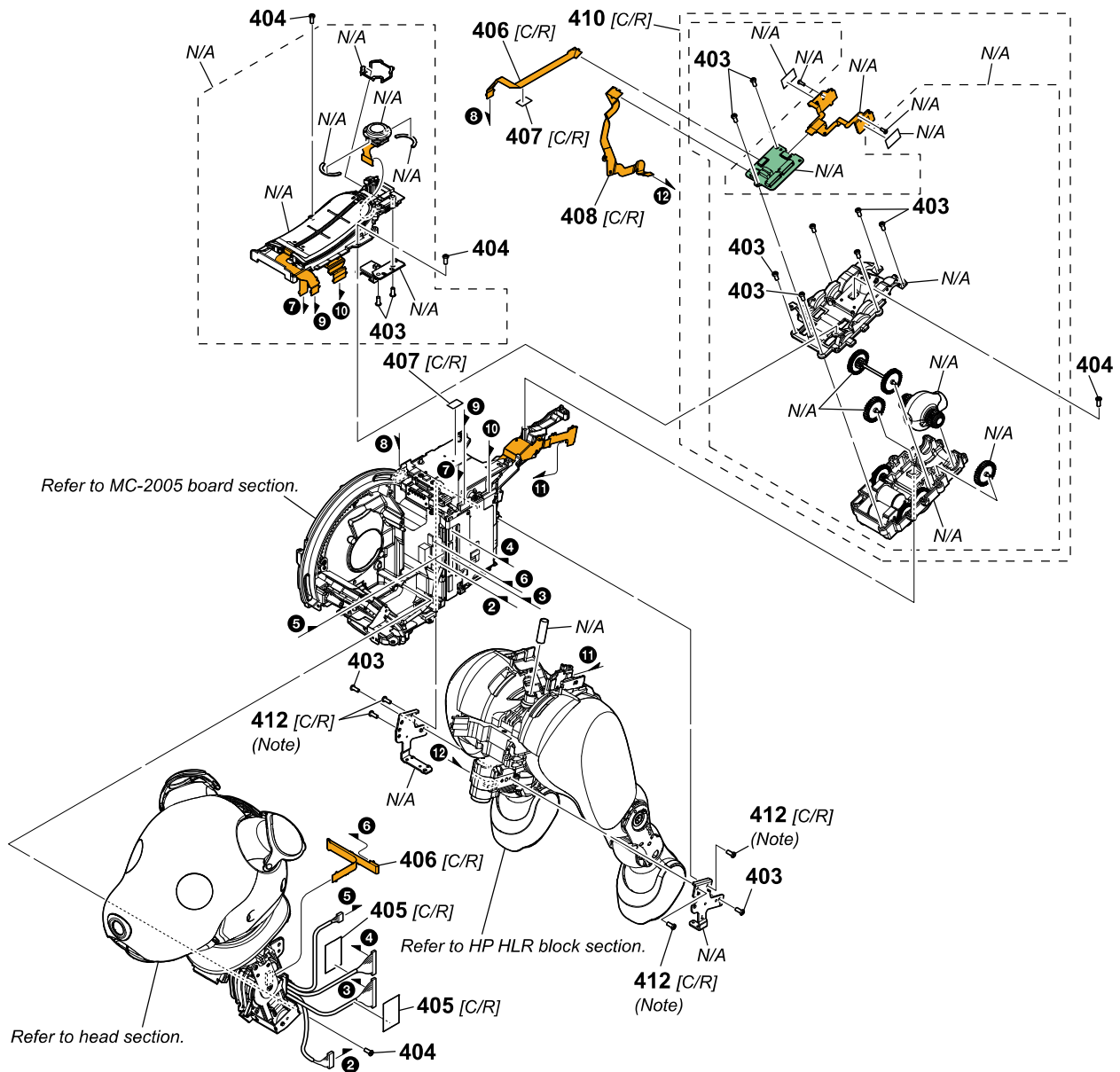


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
352[C/R]	4-724-887-11	LOW HEAD SCREW M3X8 (Note)
353	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
354[C/R]	4-725-156-07	F2 BASE B (100)
355[C/R]	1-982-331-12	FP-2406 FLEXIBLE BOARD
356[C/R]	A-2192-928-A	ACT (W) (100) ALL
357[C/R]	4-724-903-01	BEARING (1170ZZ)

Ref. No.	Part No.	Description
358[C/R]	4-725-155-05	F2 BASE A (100)
360[C/R]	1-982-328-12	FP-2403 FLEXIBLE BOARD
361[C/R]	4-725-127-01	JM ADHESIVE (100)
362[C/R]	4-724-917-02	FH BOBBIN (100)
363	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
364[C/R]	4-724-915-01	F BOBBIN CASE (100)

2-9. REAR LEG SECTION

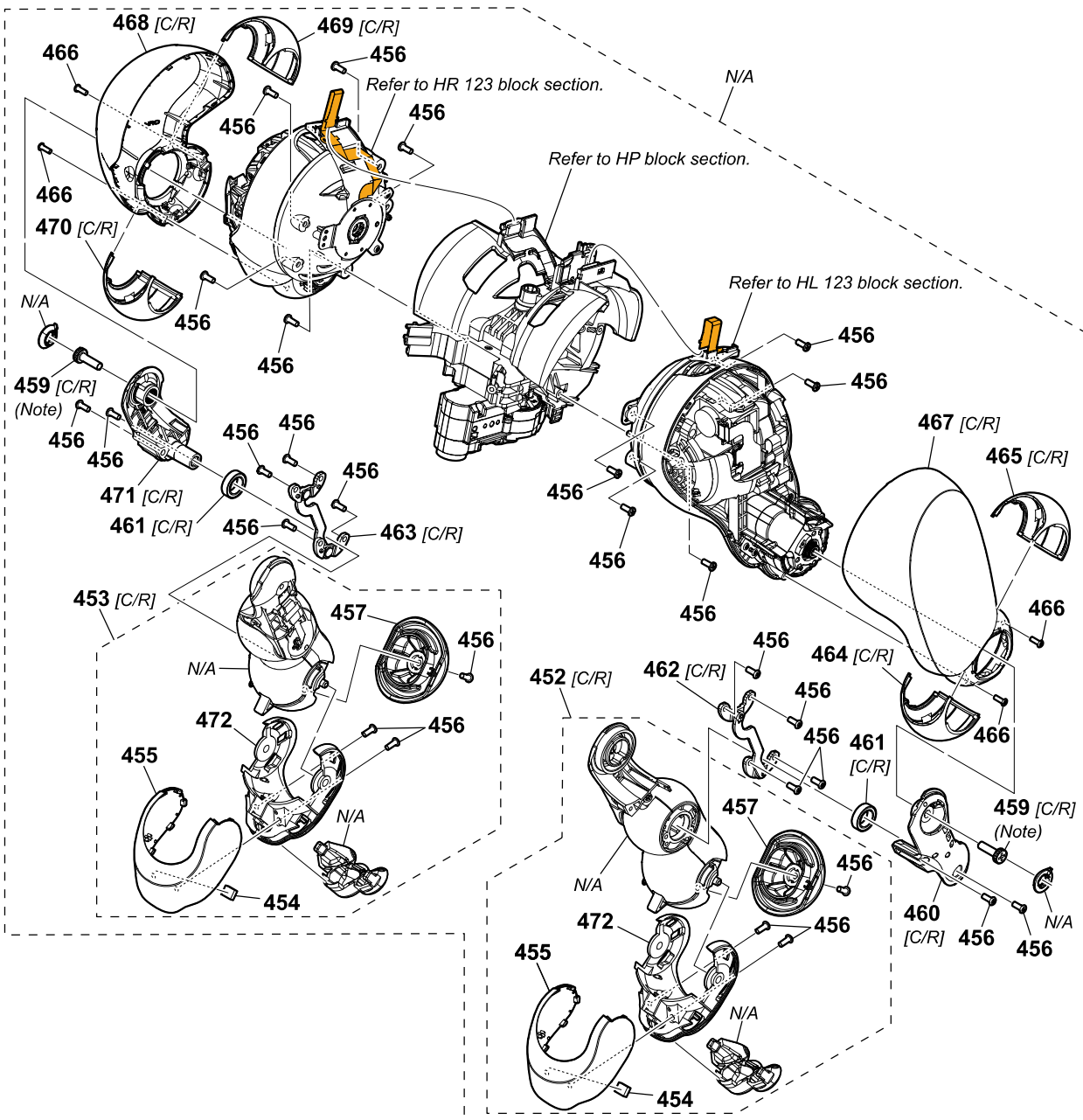


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
403	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
404	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)
405[C/R]	4-724-868-01	SHIELD SHEET CS (100)
406[C/R]	1-982-347-11	FP-2412 FLEXIBLE BOARD
407[C/R]	4-725-127-01	JM ADHESIVE (100)

Ref. No.	Part No.	Description
408[C/R]	1-982-348-11	FP-2413 FLEXIBLE BOARD
410[C/R]	A-2192-931-A	ACT (TL) (100) ALL
412[C/R]	4-747-988-01	SCREW (M2X5), HEX SOCKET (Note)

## 2-10.HP HLR BLOCK SECTION

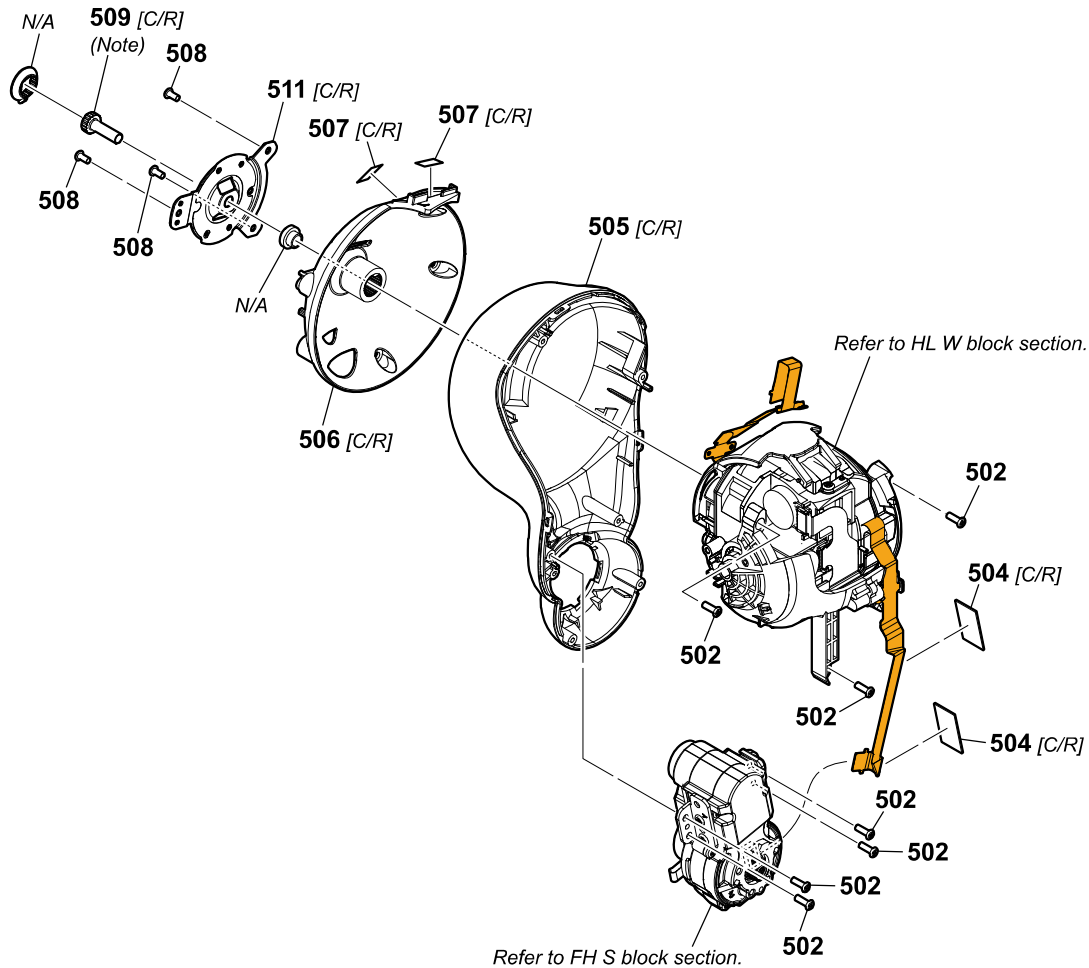


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
452[C/R]	A-2192-897-A	HL 45 (100) BLOCK ASSY
453[C/R]	A-2192-898-A	HR 45 (100) BLOCK ASSY
454	4-738-886-02	CUSHION 5X4 (100)
455	4-725-238-02	H5 COVERT (100)
456	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
457	X-2596-571-1	MB RUBBER COVER (100) ASSY
459[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)
460[C/R]	4-725-215-03	HL3 BASE O (100)
461[C/R]	4-724-903-01	BEARING (1170ZZ)
462[C/R]	X-2595-310-2	HL3 LINK PLATE ASSY (100)

Ref. No.	Part No.	Description
463[C/R]	X-2595-311-2	HR3 LINK PLATE ASSY (100)
464[C/R]	4-725-212-01	HL2 EL COVER F (100)
465[C/R]	4-725-211-01	HL2 EL COVER R (100)
466	3-078-890-21	SCREW, TAPPING
467[C/R]	4-725-205-02	HL2 COVER O (100)
468[C/R]	4-725-206-03	HR2 COVER O (100)
469[C/R]	4-725-214-01	HR2 EL COVER R (100)
470[C/R]	4-725-213-01	HR2 EL COVER F (100)
471[C/R]	4-725-217-03	HR3 BASE O (100)
472	X-2596-786-1	H5 COVER B (100) ASSY

## 2-11.HL 123 BLOCK SECTION

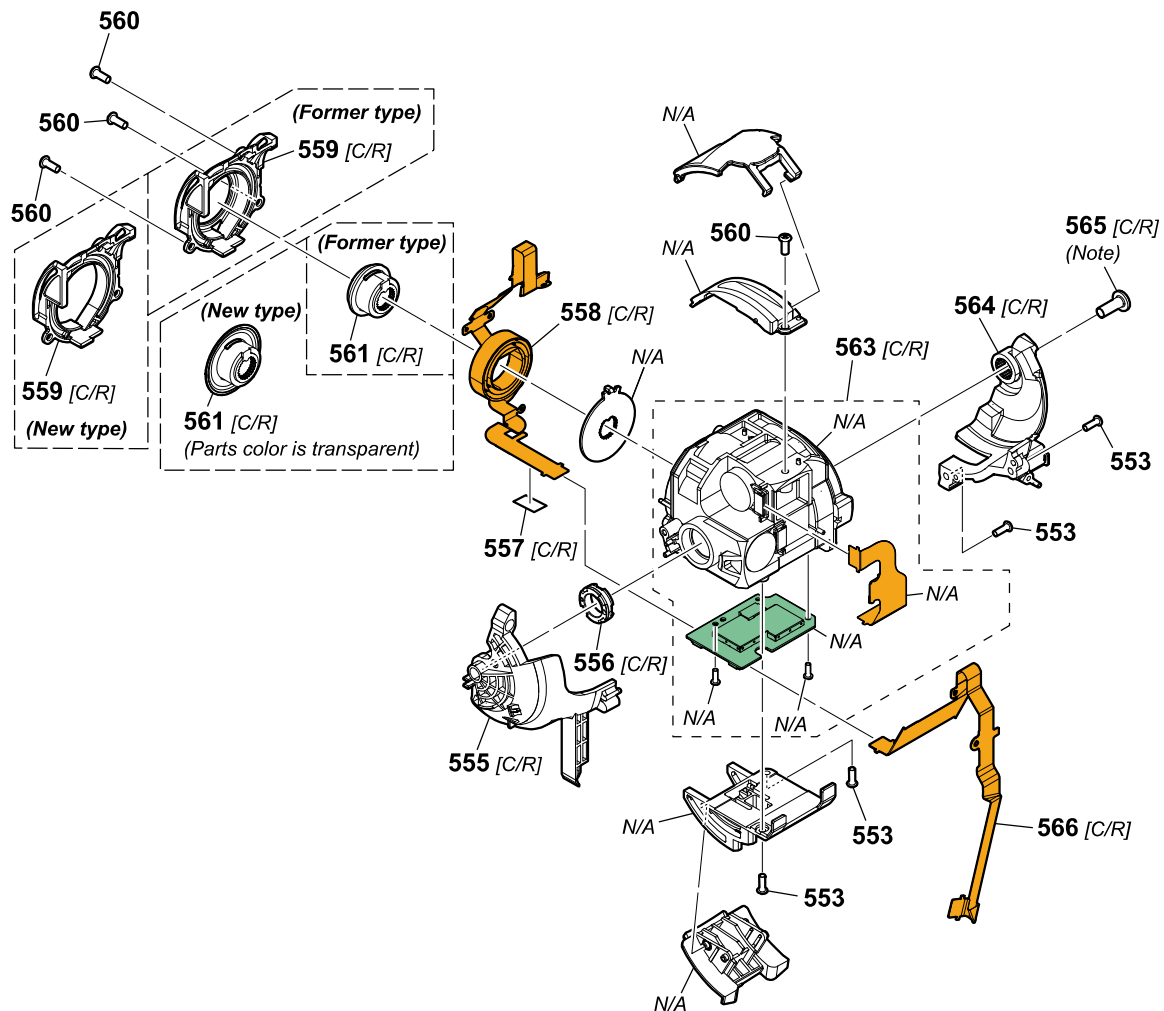


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
502	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
504[C/R]	4-724-871-01	SHEET SR C (100)
505[C/R]	4-725-204-01	HL2 COVER I (100)
506[C/R]	A-5009-299-A	HL1 BASE (100) ASSY
507[C/R]	4-725-127-01	JM ADHESIVE (100)

Ref. No.	Part No.	Description
508	3-080-204-01	SCREW, TAPPING, P2 (1.7 X 3.5 mm)
509[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)
511[C/R]	X-2596-432-1	AW BASE PLATE H (100) ASSY

## 2-12.HL W BLOCK SECTION

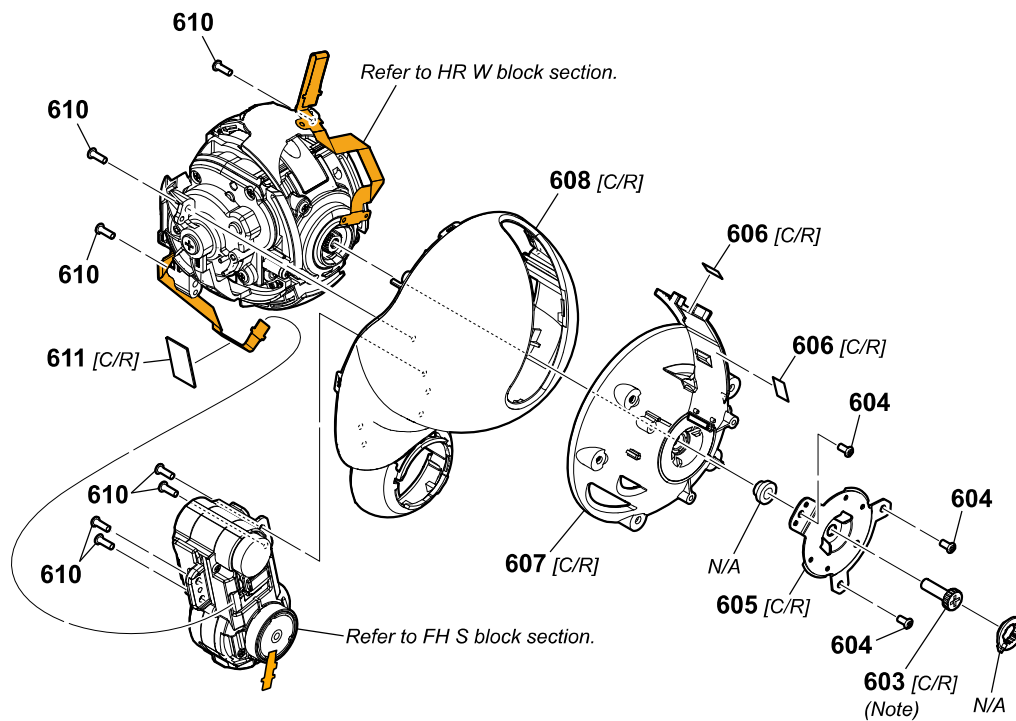


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
553	3-078-890-21	SCREW, TAPPING
555[C/R]	4-725-200-03	HL2 BASE A (100)
556[C/R]	4-724-903-01	BEARING (1170ZZ)
557[C/R]	4-725-127-01	JM ADHESIVE (100)
558[C/R]	1-982-328-12	FP-2403 FLEXIBLE PWB
559[C/R]	4-724-916-01	H BOBBIN CASE (100) (Former type)
559[C/R]	4-724-916-11	H BOBBIN CASE (100) (New type)

Ref. No.	Part No.	Description
560	3-080-206-21	SCREW, TAPPING, P2
561[C/R]	4-724-917-02	FH BOBBIN (100) (Former type)
561[C/R]	4-724-917-11	FH BOBBIN (100) (New type)
563[C/R]	A-2192-928-A	ACT (W) (100) ALL
564[C/R]	4-725-201-04	HL2 BASE B (100)
565[C/R]	4-724-887-11	LOW HEAD SCREW M3X8 (Note)
566[C/R]	1-982-331-12	FP-2406 FLEXIBLE PWB

## 2-13.HR 123 BLOCK SECTION

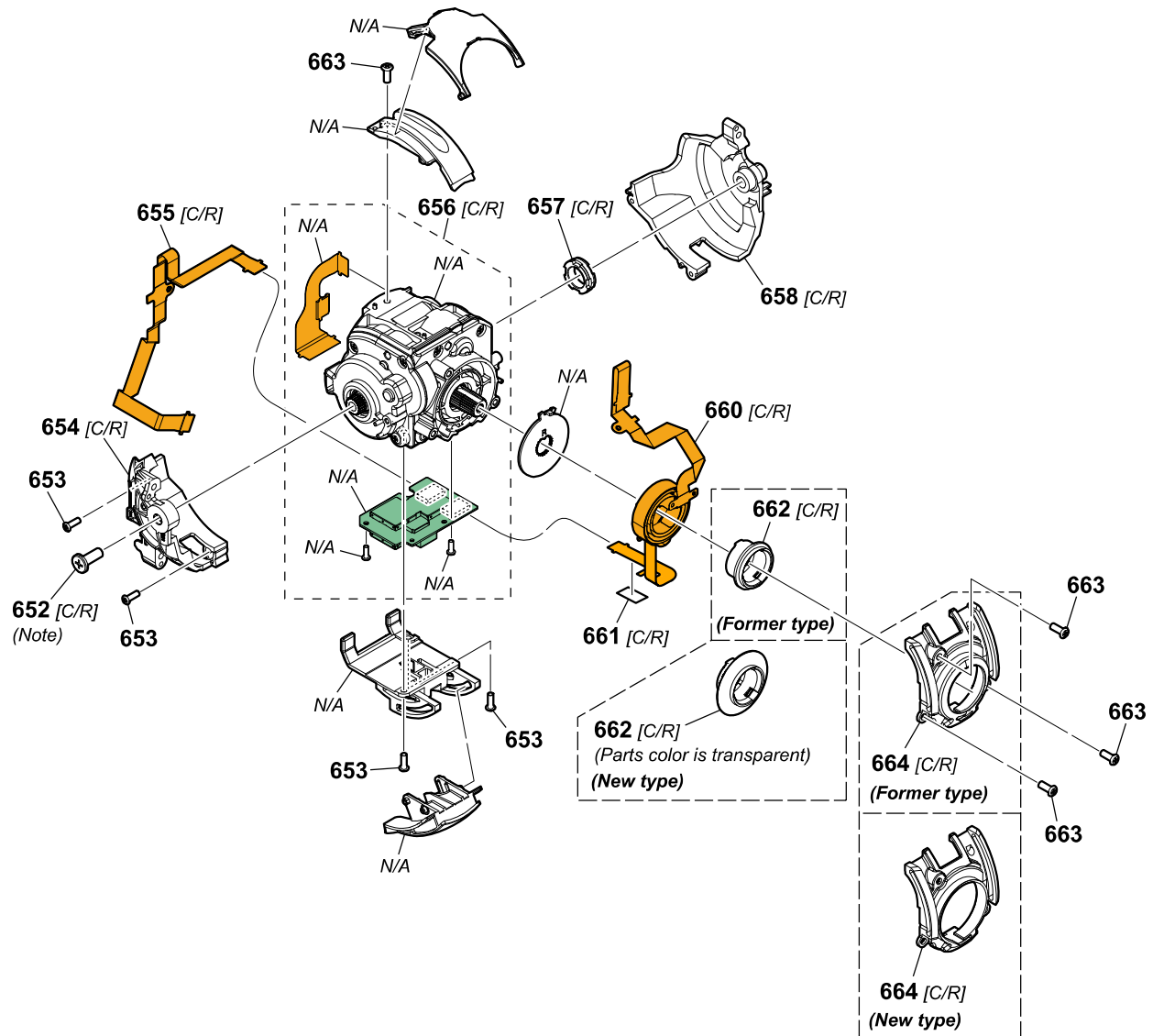


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
603[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)
604	3-080-204-01	SCREW, TAPPING, P2 (1.7 X 3.5 mm)
605[C/R]	X-2596-432-1	AW BASE PLATE H (100) ASSY
606[C/R]	4-725-127-01	JM ADHESIVE (100)
607[C/R]	A-5009-300-A	HR1 BASE (100) ASSY

Ref. No.	Part No.	Description
608[C/R]	4-725-207-01	HR2 COVER I (100)
610	3-078-890-21	SCREW, TAPPING
611[C/R]	4-724-871-01	SHEET SR C (100)

## 2-14.HR W BLOCK SECTION

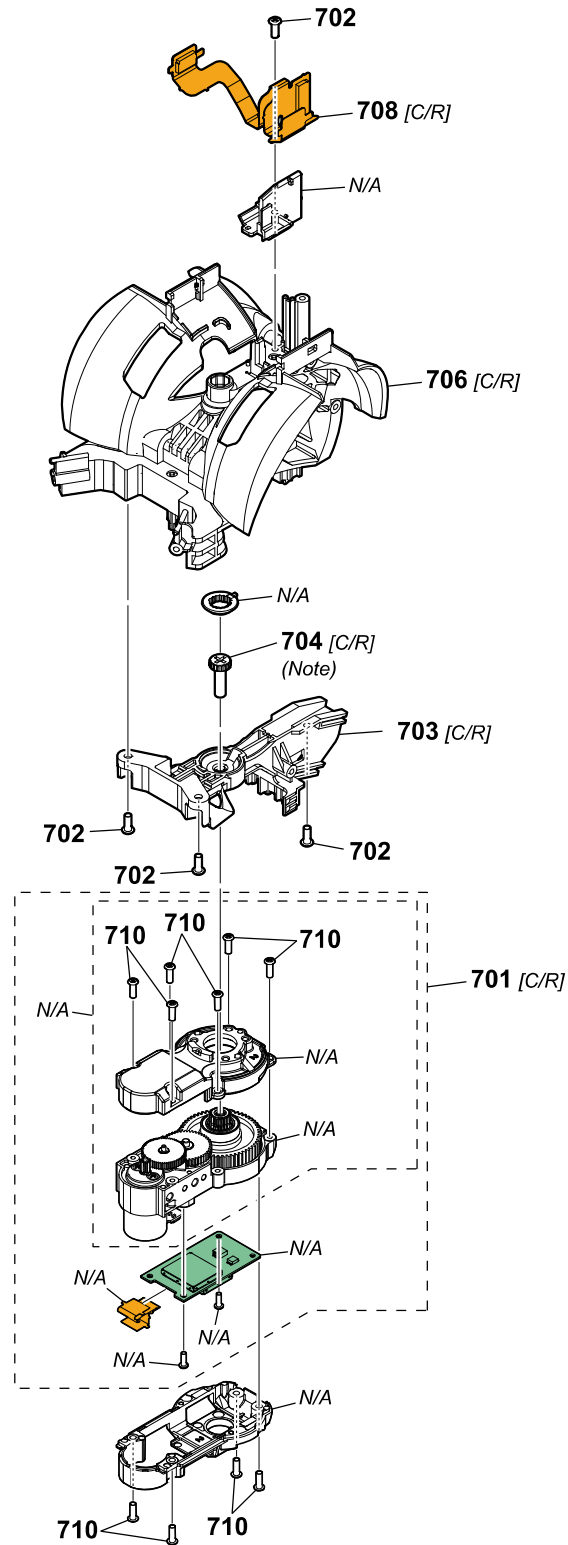


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
652[C/R]	4-724-887-11	LOW HEAD SCREW M3X8 (Note)
653	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)
654[C/R]	4-725-203-04	HR2 BASE B (100)
655[C/R]	1-982-331-12	FP-2406 FLEXIBLE BOARD
656[C/R]	A-2192-928-A	ACT (W) (100) ALL
657[C/R]	4-724-903-01	BEARING (1170ZZ)
658[C/R]	4-725-202-03	HR2 BASE A (100)

Ref. No.	Part No.	Description
660[C/R]	1-982-328-12	FP-2403 FLEXIBLE BOARD
661[C/R]	4-725-127-01	JM ADHESIVE (100)
662[C/R]	4-724-917-02	FH BOBBIN (100) (Former type)
662[C/R]	4-724-917-11	FH BOBBIN (100) (New type)
663	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
664[C/R]	4-724-916-01	H BOBBIN CASE (100) (Former type)
664[C/R]	4-724-916-11	H BOBBIN CASE (100) (New type)

2-15.HP BLOCK SECTION



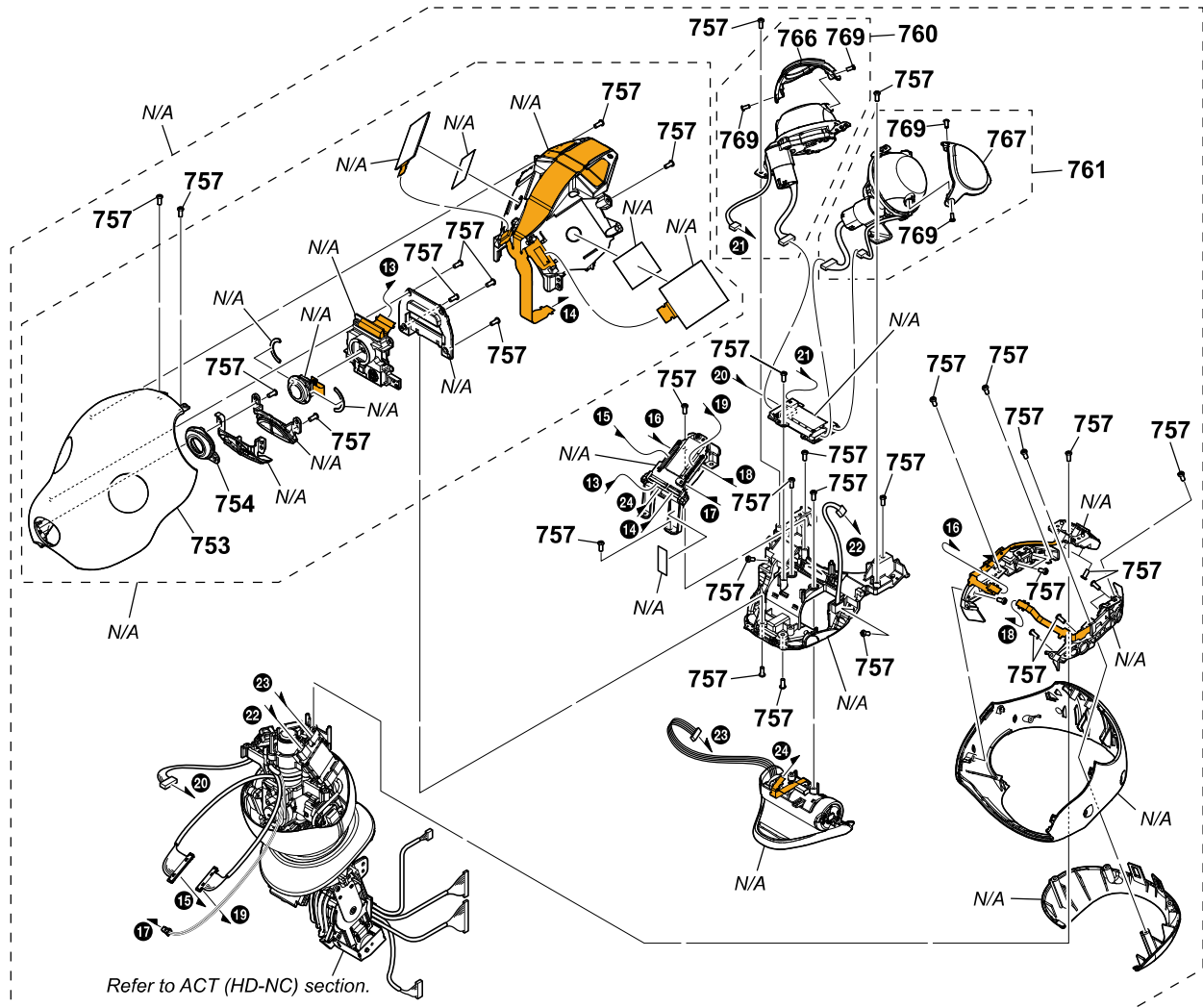
**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
701[C/R]	A-2192-926-A	ACT (S) (100) (NH) ALL
702	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
703[C/R]	4-725-192-02	HP1 BASE BM (100)
704[C/R]	4-724-886-01	KNURLED SCREW (100) M3X10 (Note)

Ref. No.	Part No.	Description
706[C/R]	A-5009-301-A	HP1 BASE JOINT (100) ASSY
708[C/R]	A-2199-102-A	JH-2001 FLEXIBLE BOARD, COMPLETE
710	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)



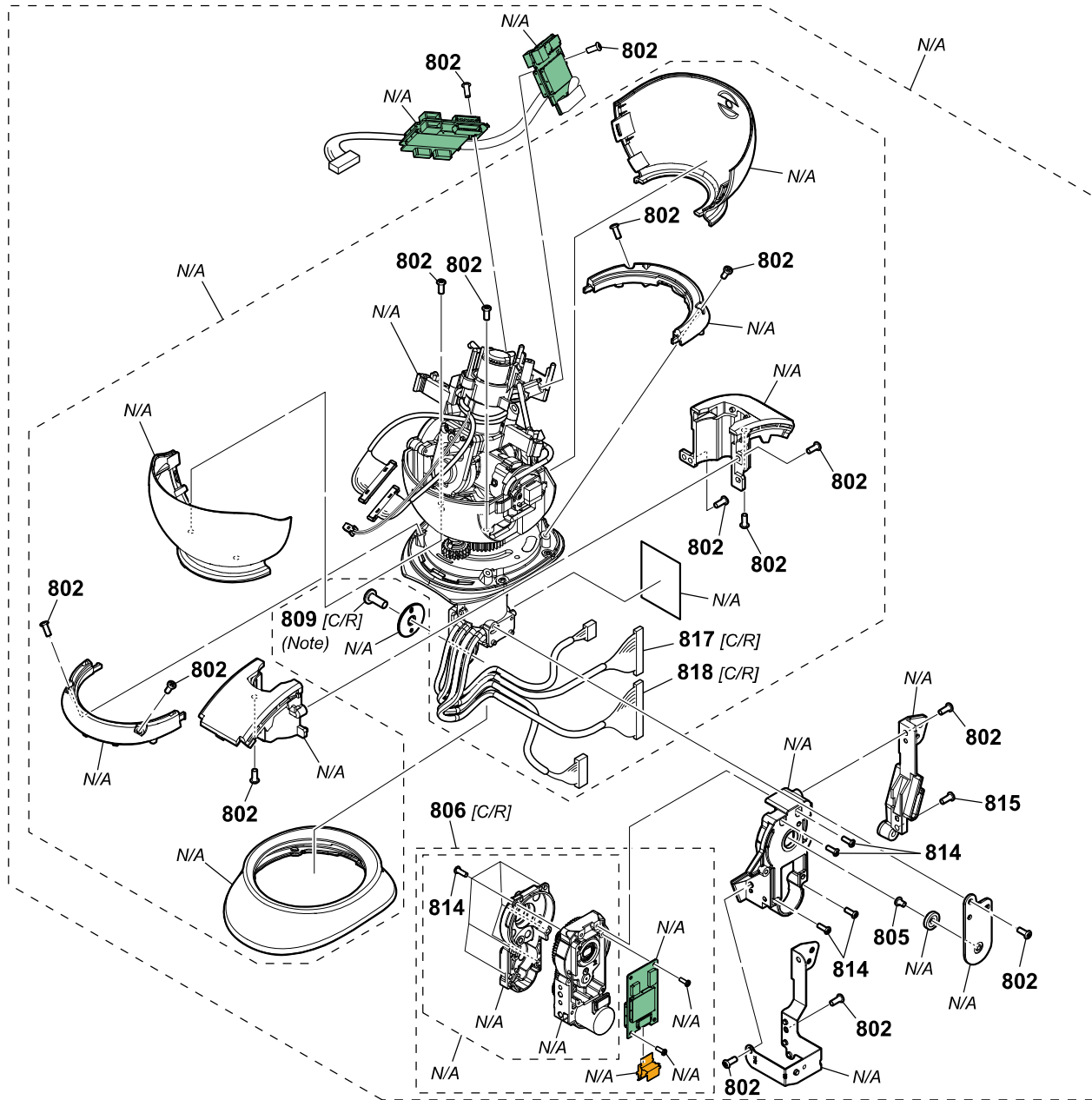
2-16.HEAD SECTION



Ref. No.	Part No.	Description
753	A-2224-940-A	FACE / EYES
754	4-725-248-02	HD3 UPPER F ORNAMENT (100)
757	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
760	A-2192-943-A	ACT (ER) R (100)
761	A-2192-941-A	ACT (ER) L (100)

Ref. No.	Part No.	Description
766	4-724-985-01	ER RETAINER R (100)
767	4-724-984-01	ER RETAINER L (100)
769	3-091-481-31	SCREW (M1.7 X 4 mm)

2-17.ACT (HD-NC) SECTION

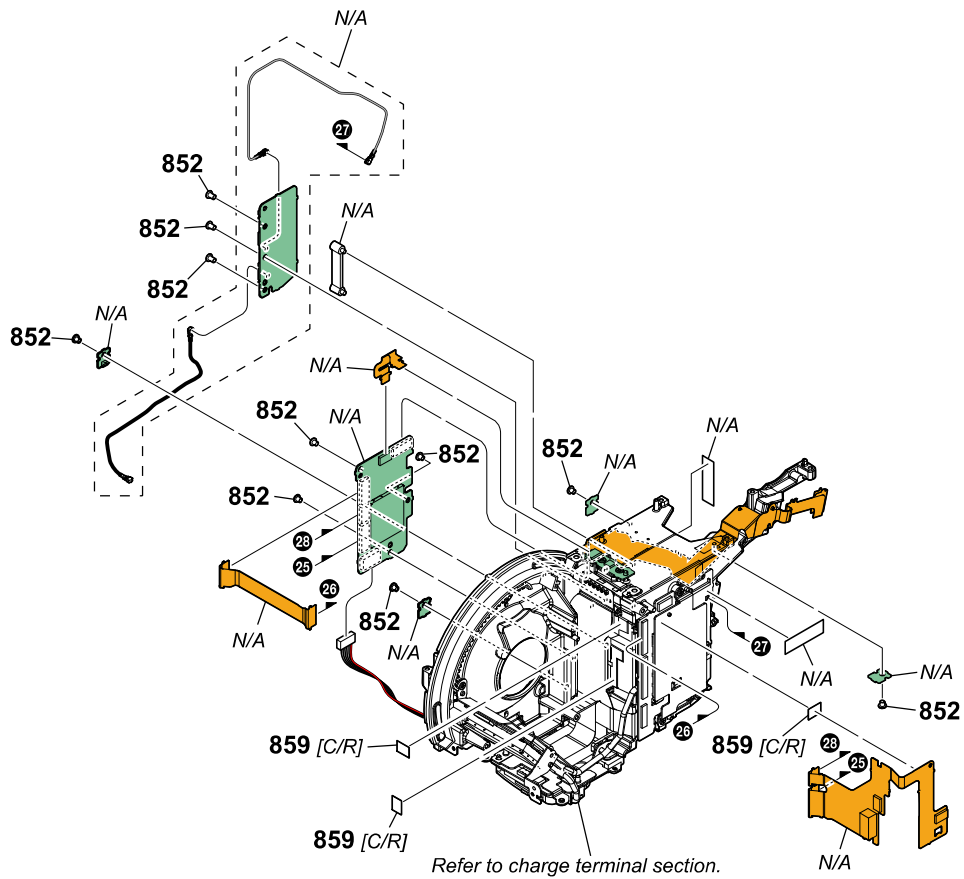


**Note:** This parts cannot be reused. Be sure to replace them with new parts.

Ref. No.	Part No.	Description
802	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)
805	4-724-875-11	SCREW (M2), NEW TRUSTER, P2 (L = 3 mm)
806[C/R]	A-2192-926-A	ACT (S) (100) (NH) ALL
809[C/R]	4-724-887-11	LOW HEAD SCREW M3X8 (Note)
814	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)

Ref. No.	Part No.	Description
815	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)
817[C/R]	1-971-637-11	HARNESS (SD-1013)
818[C/R]	1-971-638-11	HARNESS (SD-1014)

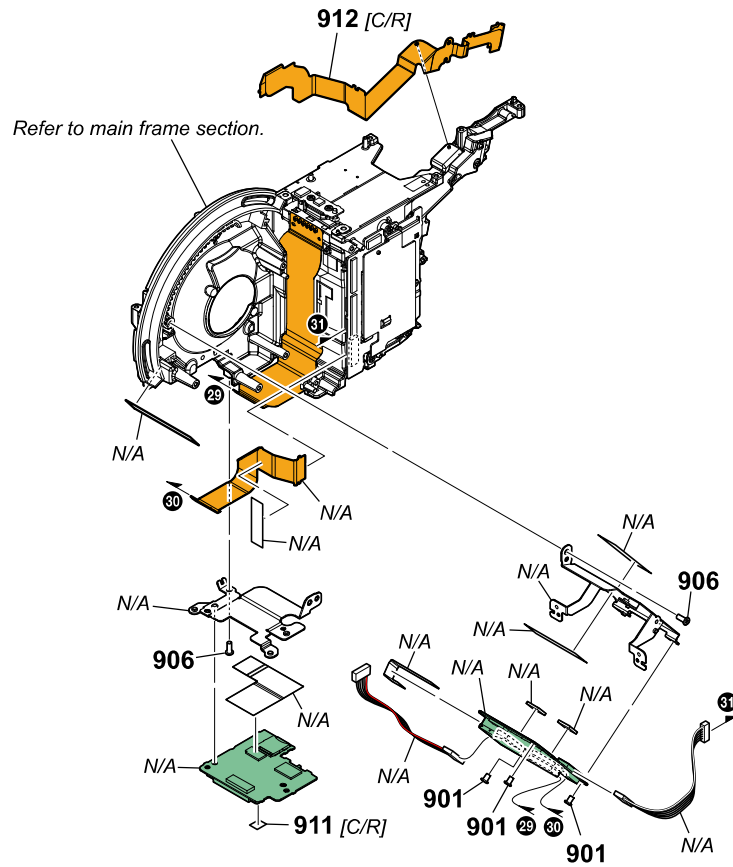
2-18.MC-2005 BOARD SECTION



Ref. No.	Part No.	Description
852	4-724-875-11	SCREW (M2), NEW TRUSTER, P2 (L = 3 mm)

Ref. No.	Part No.	Description
859[C/R]	4-725-127-01	JM ADHESIVE (100)

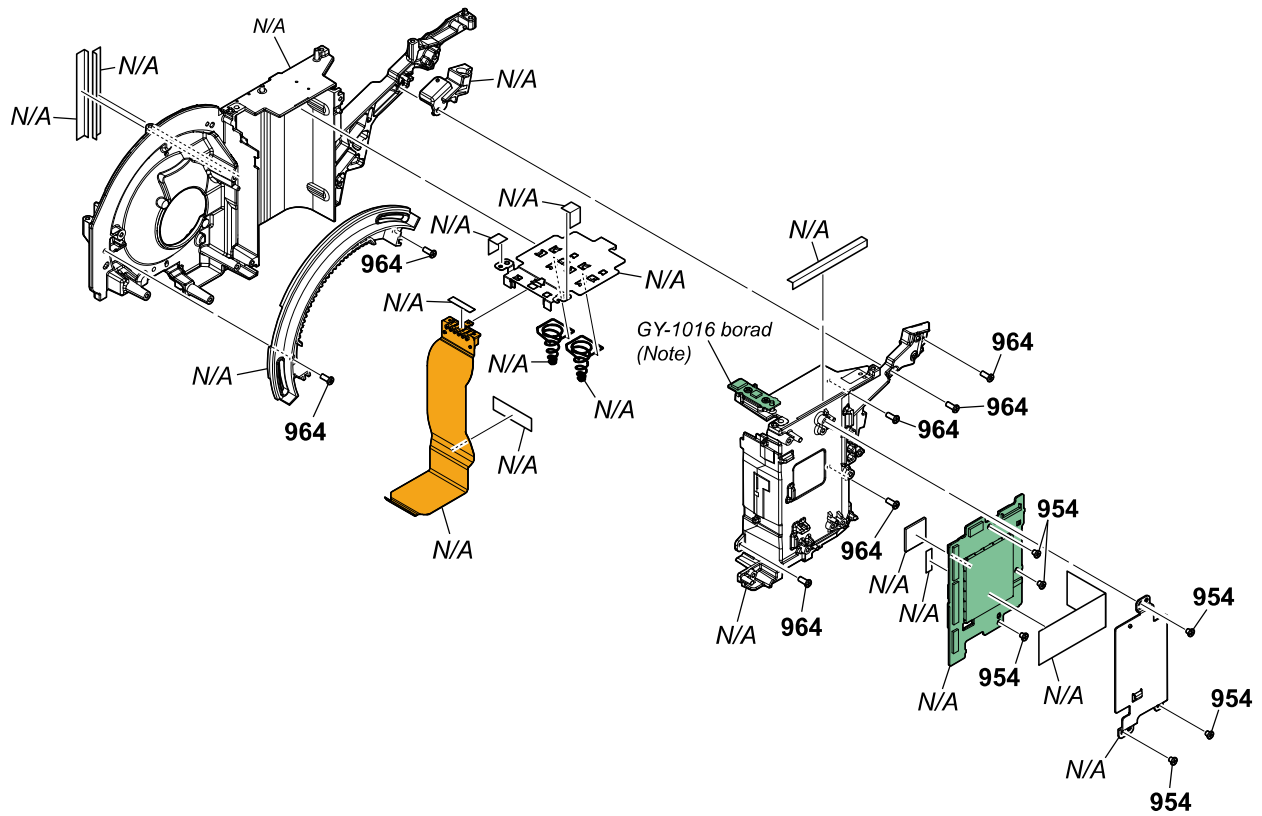
2-19.CHARGE TERMINAL SECTION



Ref. No.	Part No.	Description
901	4-724-875-11	SCREW (M2), NEW TRUSTER, P2 (L = 3 mm)
906	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)

Ref. No.	Part No.	Description
911[C/R]	4-724-608-01	WATER DAMAGE DETECTOR SHEET
912[C/R]	1-982-330-12	FP-2405 FLEXIBLE BOARD

2-20.MAIN FRAME SECTION

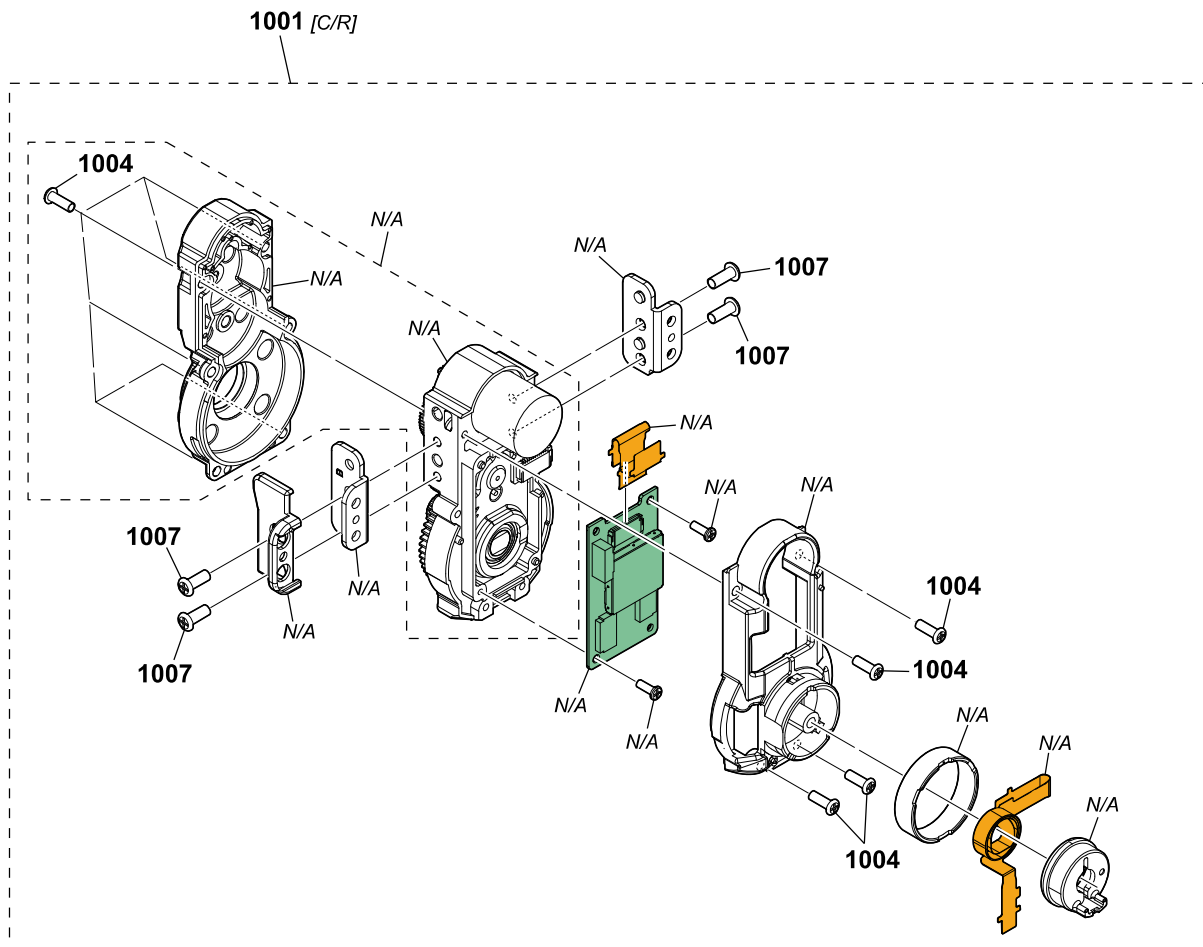


**Note:** GY-1016 board is prohibited to disassemble. Never remove it.

Ref. No.	Part No.	Description
954	4-724-875-11	SCREW (M2), NEW TRUSTER, P2 (L = 3 mm)

Ref. No.	Part No.	Description
964	2-342-356-11	SCREW (M2 (ECO, EG)) (L = 5 mm)

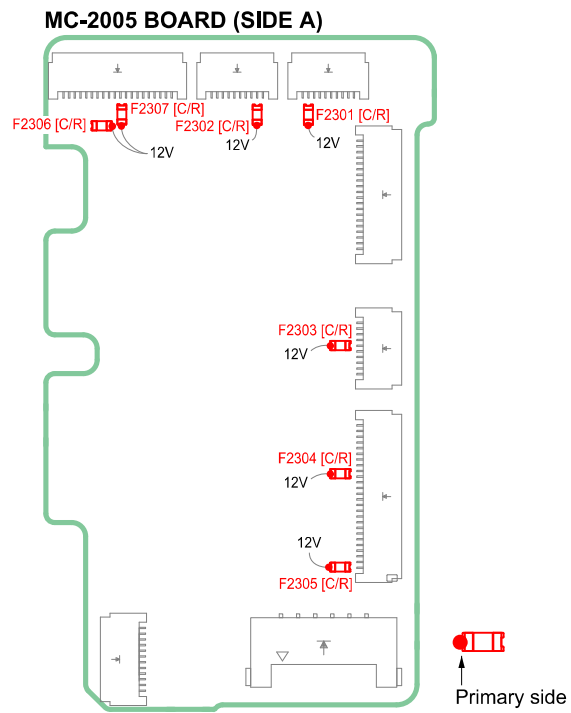
2-21.FH S BLOCK SECTION



Ref. No.	Part No.	Description
1001[C/R]	A-2192-902-A	FH S (100) BLOCK ASSY
1004	3-078-890-21	SCREW, TAPPING (1.7 X 5 mm)

Ref. No.	Part No.	Description
1007	3-080-206-21	SCREW, TAPPING, P2 (2 X 5 mm)

## 2-22. FUSE



Ref. No.	Part No.	Description
△ F2301[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2302[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2303[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2304[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2305[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2306[C/R]	1-523-395-11	FUSE (5A/32V)
△ F2307[C/R]	1-523-395-11	FUSE (5A/32V)

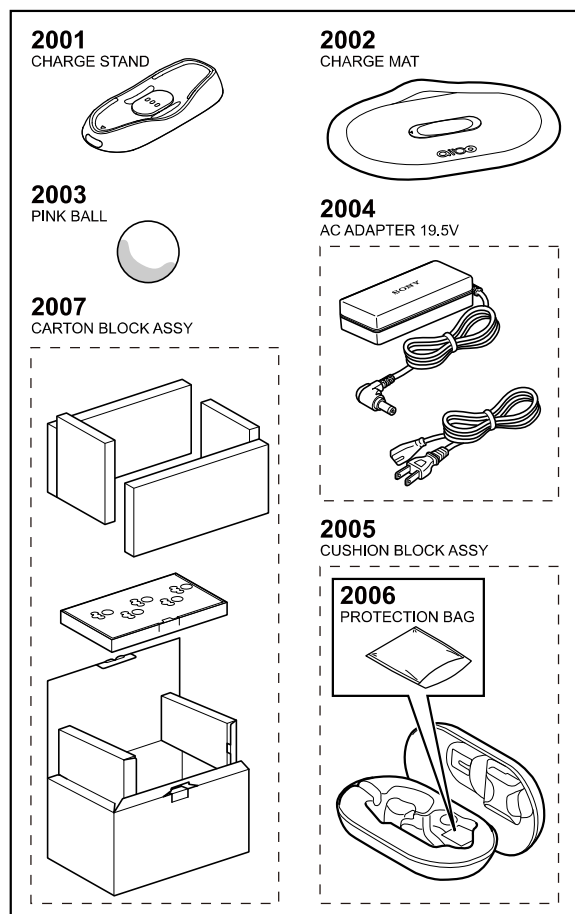
## 3. SUPPLIED ACCESSORIES

## ACCESSORIES &amp; PACKING PARTS

Ref. No.	Part No.	Description
2001	A-2192-914-A	ST BLOCK ASSY (ST100) (J) ALL (CHARGE STAND) (Japanese)
2001	A-5007-519-A	ST BLOCK ASSY (ST100) (JU) ALL (CHARGE STAND)
2002	A-2192-916-A	MT BLOCK ASSY (ST100) (CHARGE MAT)
2003	4-724-600-01	BALL (100) (PINK BALL)
△ 2004	A-2216-155-A	AC ADAPTER 19.5V (KIT) (Japanese)
△ 2004	A-2229-296-A	AC ADAPTER 19.5V (KIT_US) (US)
2005	A-2215-847-B	CUSHION BLOCK ASSY
2006	4-733-382-02	BAG, PROTECTION (MF)
2007	A-2229-712-A	CARTON BLOCK ASSY

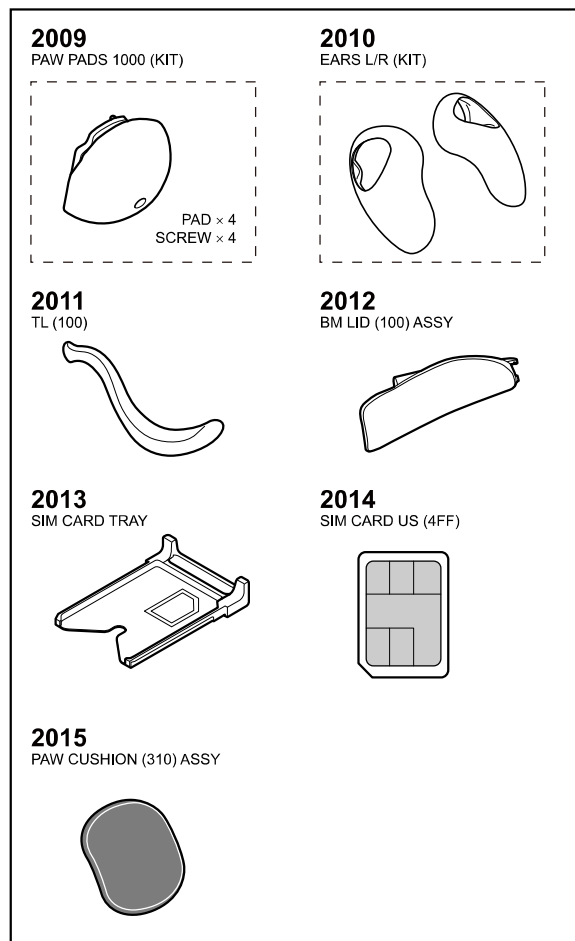
The components identified by mark △ or dotted line with mark are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



## CUSTOMER SUPPLIED PARTS OF MAIN UNIT

Ref. No.	Part No.	Description
2009	A-2216-073-A	PAW PADS 1000 (KIT)
2010	A-2216-647-B	EARS L/R (KIT)
2011	4-725-145-01	TL (100)
2012	X-2596-434-1	BM LID (100) ASSY
2013	1-844-878-11	SIM CARD TRAY
2014	1-510-065-11	SIM CARD US (4FF)
2015	X-2596-986-2	PAW CUSHION (310) ASSY





## Revision History

Ver.	Date	History	Contents
1.0	2023.12	Preliminary Version	—