

Artec® Robo

T. REX

Download software and guides from our homepage!

<http://www.artec-kk.co.jp/artecrobo>

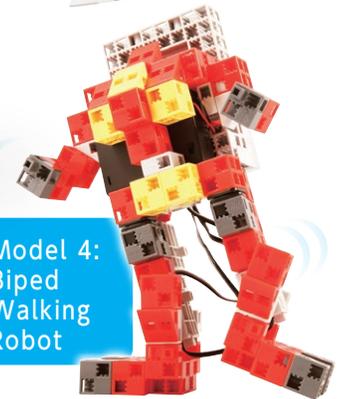
Get instructions for even more robots!



Model 1:
Bipedal T. REX



Model 3:
Robo Kong



Model 4:
Biped Walking Robot

Assembly Instructions

Model 2: Real Action T. REX



For ages

8+

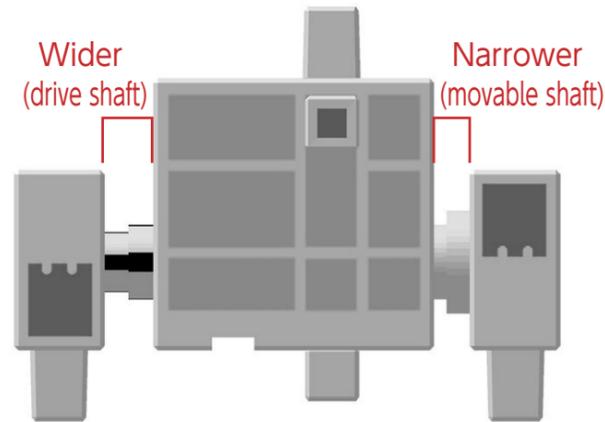
Artec PAT.P

Handling the Servomotor

1 Orientation

The photo to the right shows the servomotor facing you. There are two shafts, the one with the wider space is the drive shaft and the one with the narrower space is the movable shaft.

★ When turning the drive shaft by hand, do so very slowly and gently. Excessive pressure when turning may cause damage to the servomotor.



2 Calibration and Setting Connector Numbers

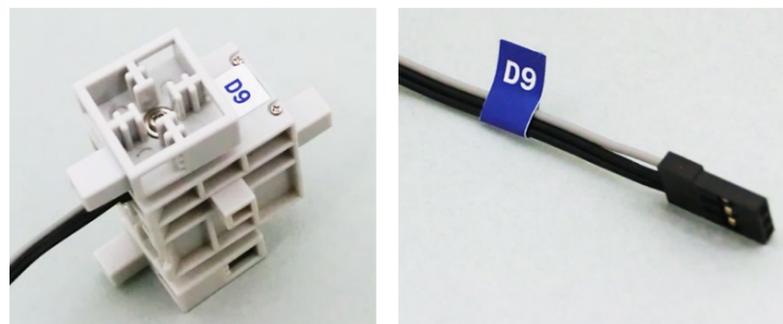
Before building your robot, read **6. Using Servomotors** in the **Studuino Icon Programming Environment Guide** (download from <http://www.artec-kk.co.jp/artecrobo/>) for instructions on how to calibrate your servomotor.

Building your robot without calibrating your servomotor may cause damage or improper functionality.

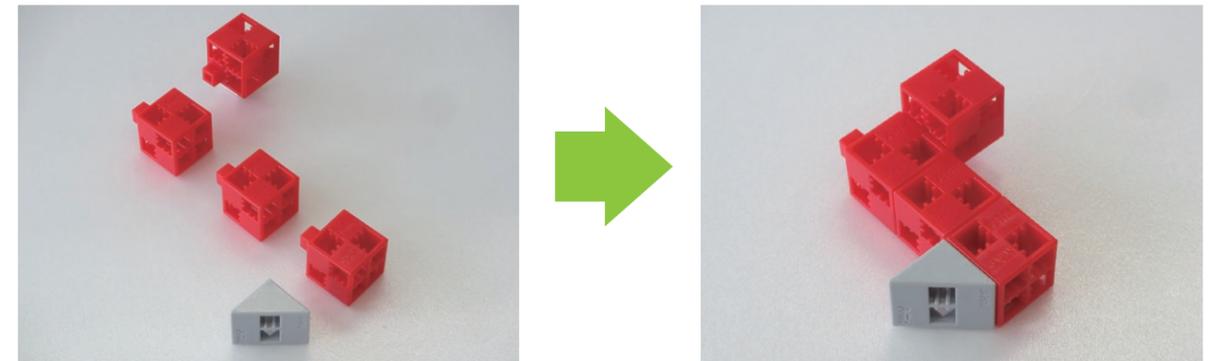
★ Do not change the connector or the servomotor after calibration. Servomotor calibrations are unique to each servomotor.

Attaching Number Stickers

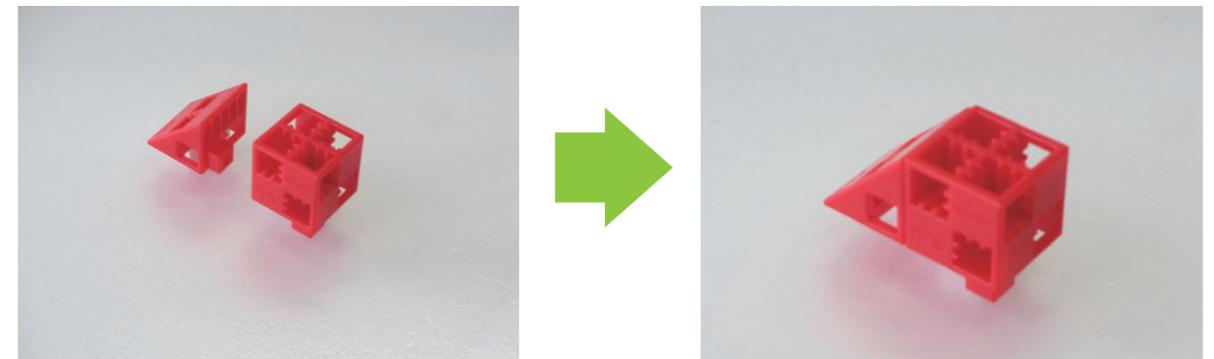
After calibration, we recommend putting a sticker on the connector used for the servomotor so it can be easily identified.



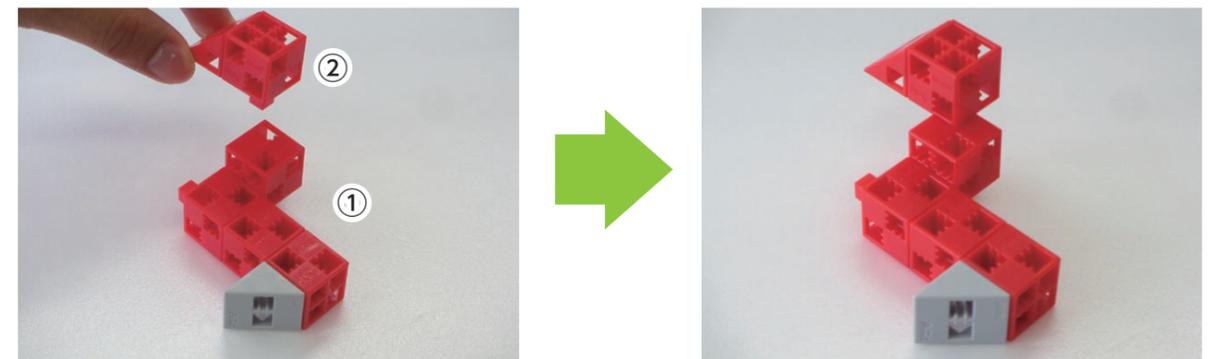
① Assemble the blocks as shown in the picture.



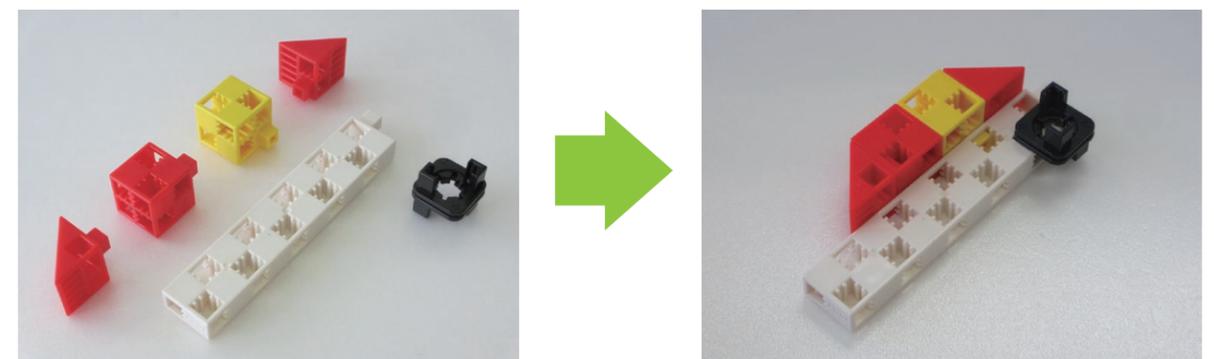
② Assemble the blocks as shown in the picture.



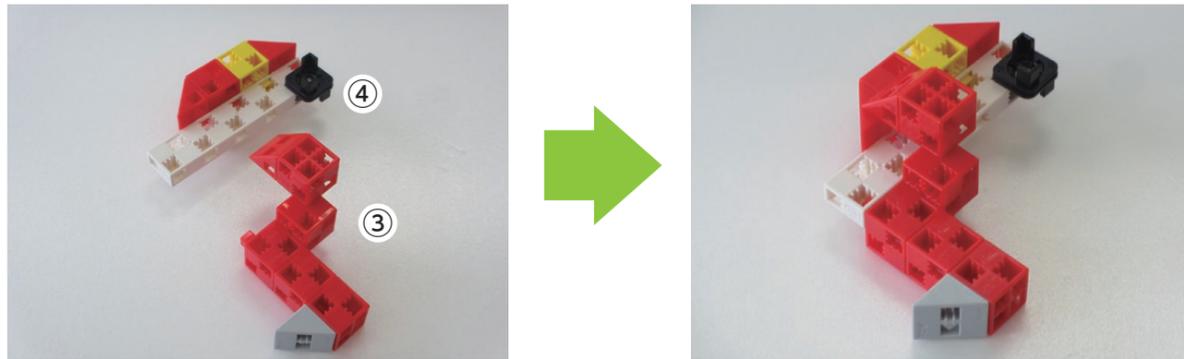
③ Attach part ② to part ① as shown.



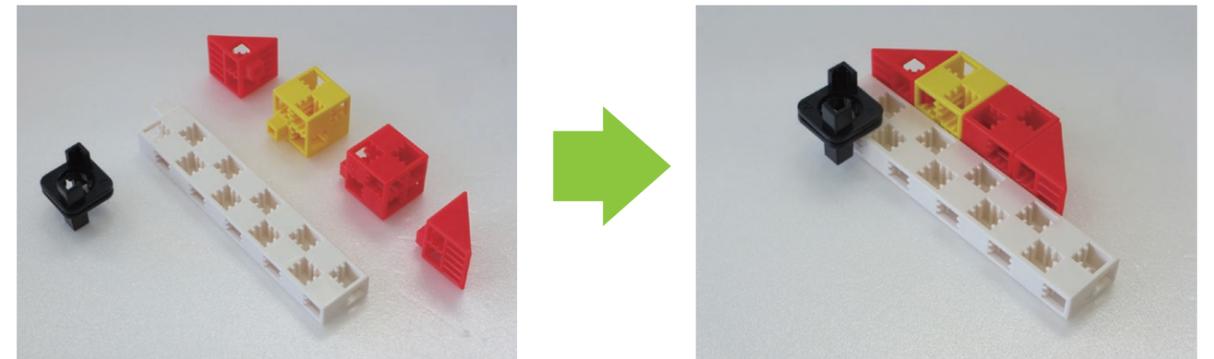
④ Assemble the blocks as shown in the picture.



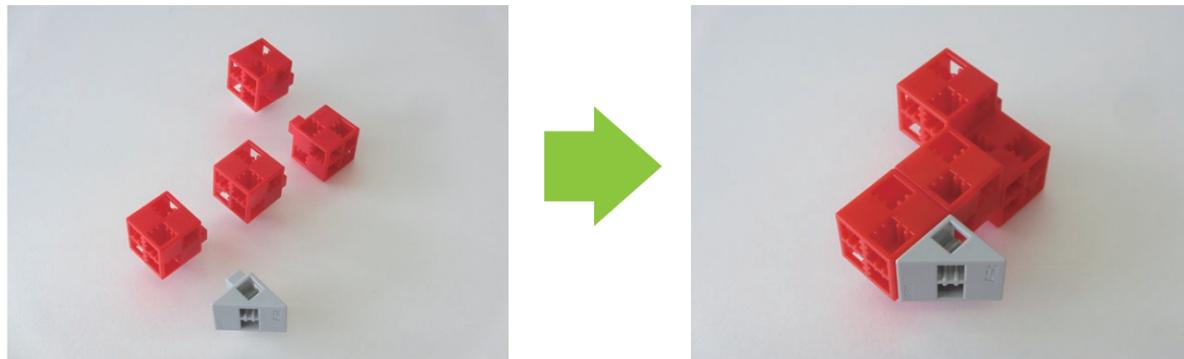
⑤ Attach part ④ to part ③ as shown.



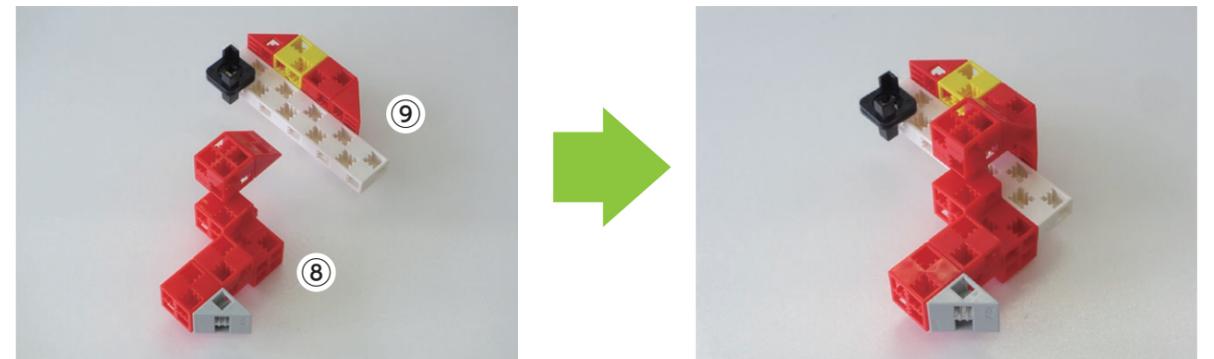
⑨ Assemble the blocks as shown in the picture.



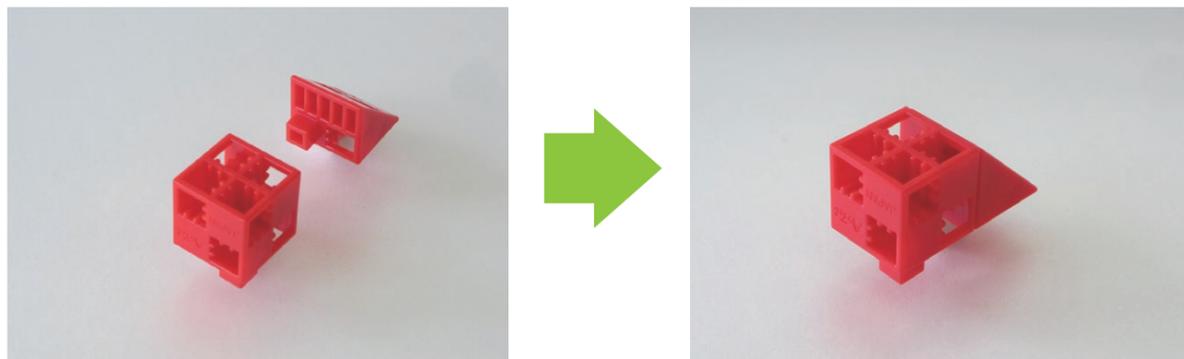
⑥ Assemble the blocks as shown in the picture.



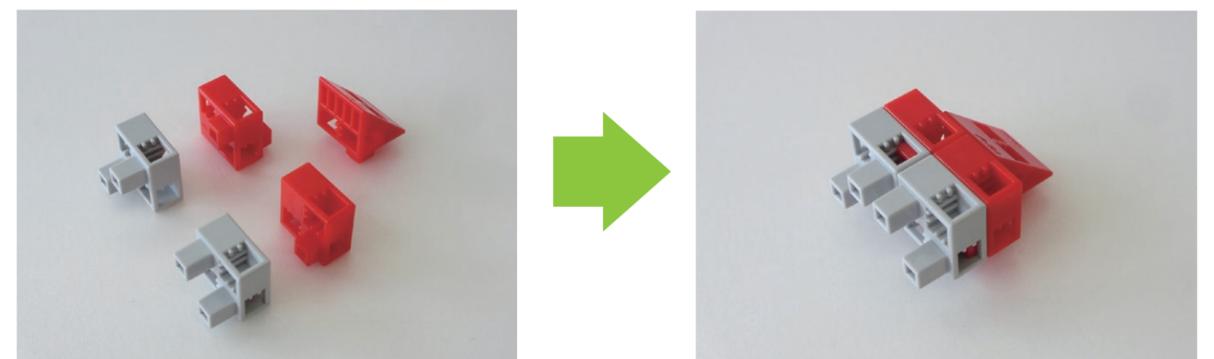
⑩ Attach part ⑨ to part ⑧ as shown.



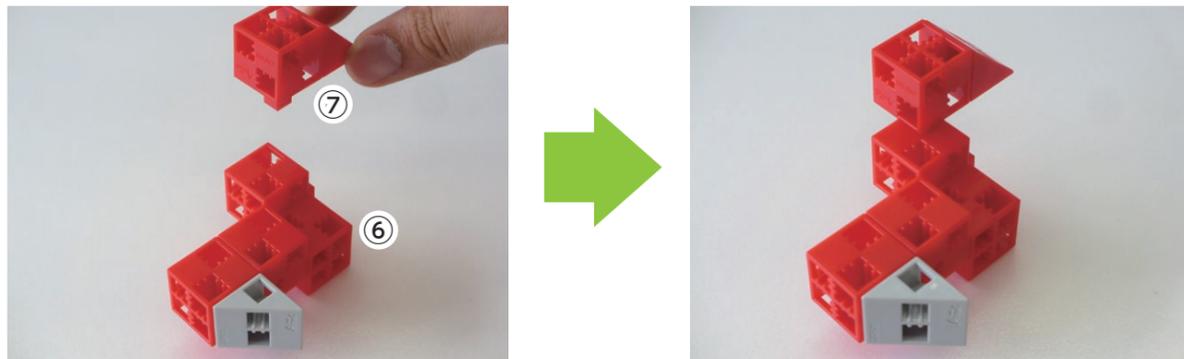
⑦ Assemble the blocks as shown in the picture.



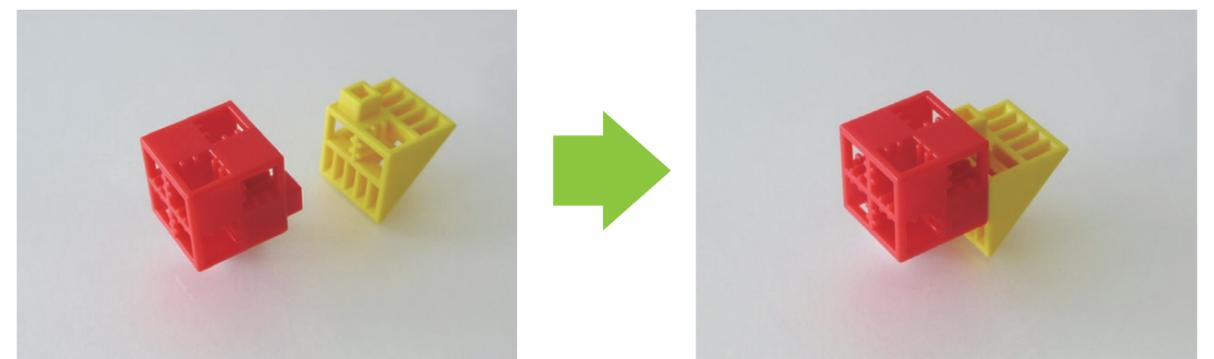
⑪ Assemble the blocks as shown in the picture.



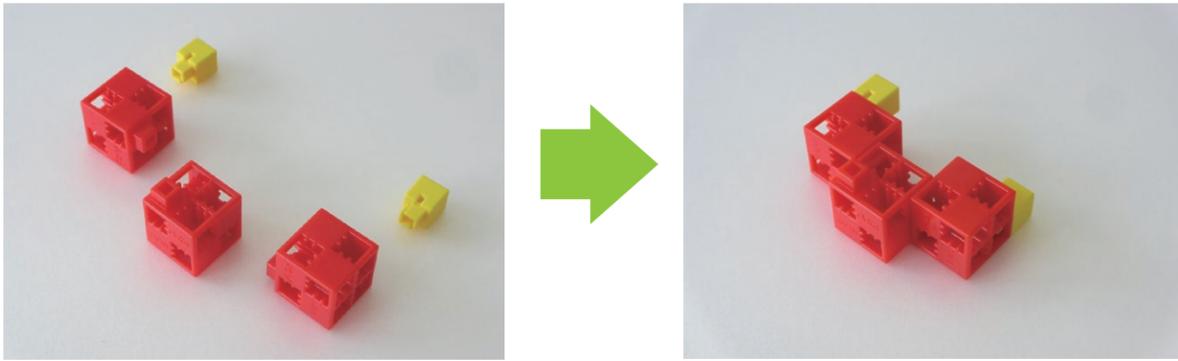
⑧ Attach part ⑦ to part ⑥ as shown.



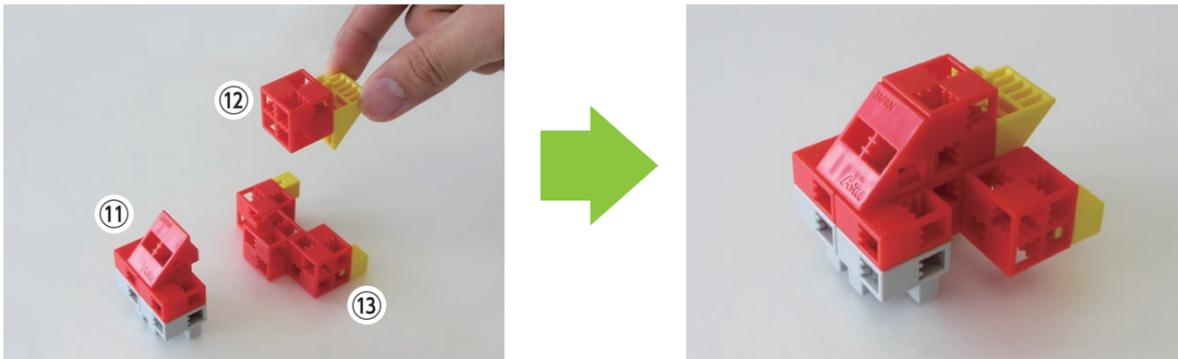
⑫ Assemble the blocks as shown in the picture.



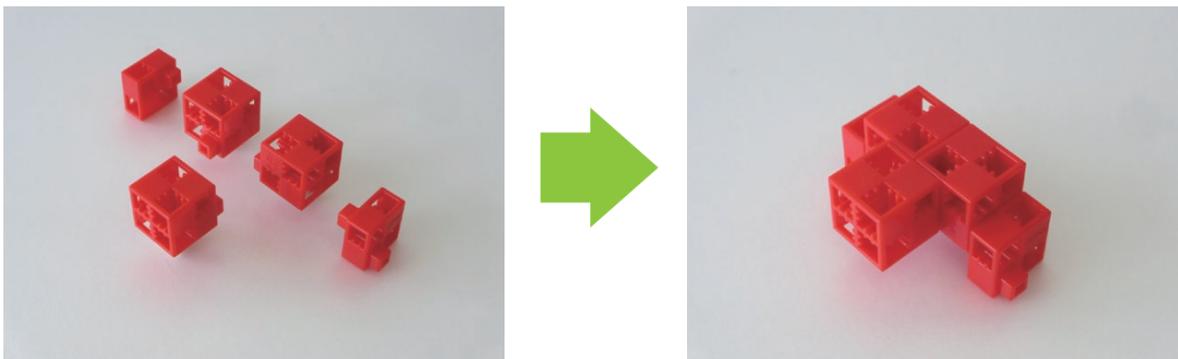
⑬ Assemble the blocks as shown in the picture.



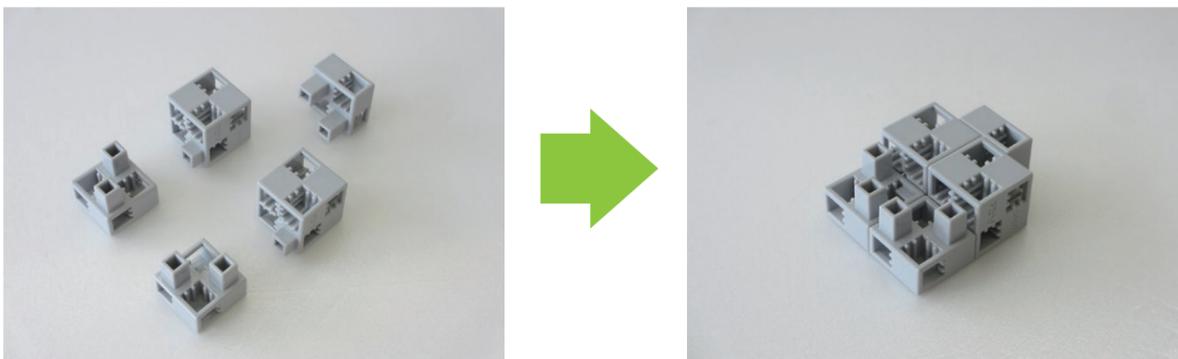
⑭ Assemble parts ⑪, ⑫ and ⑬ as shown in the picture.



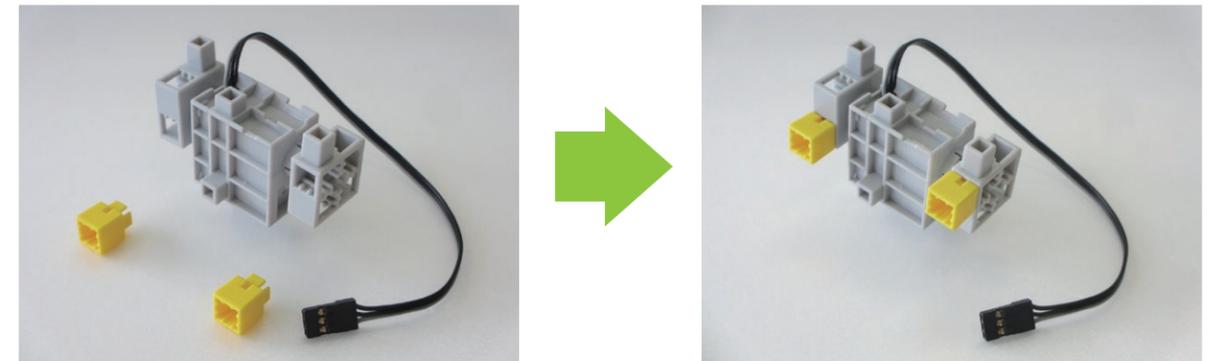
⑮ Assemble the blocks as shown in the picture.



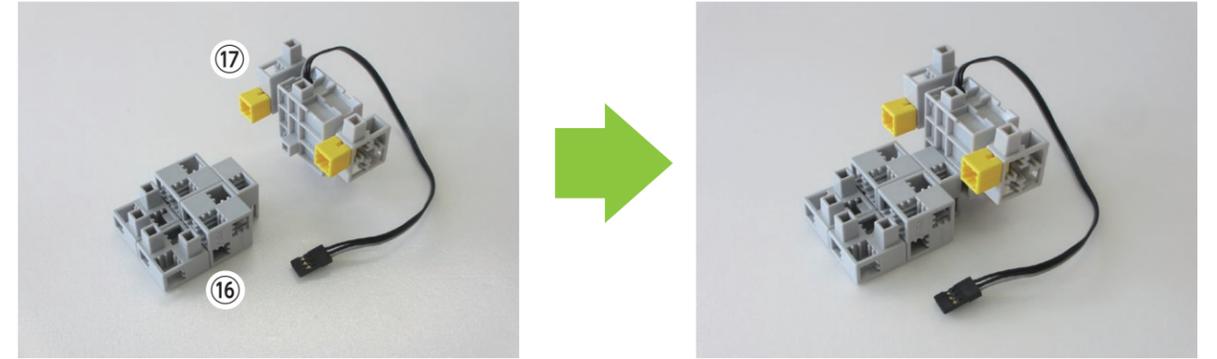
⑯ Assemble the blocks as shown in the picture.



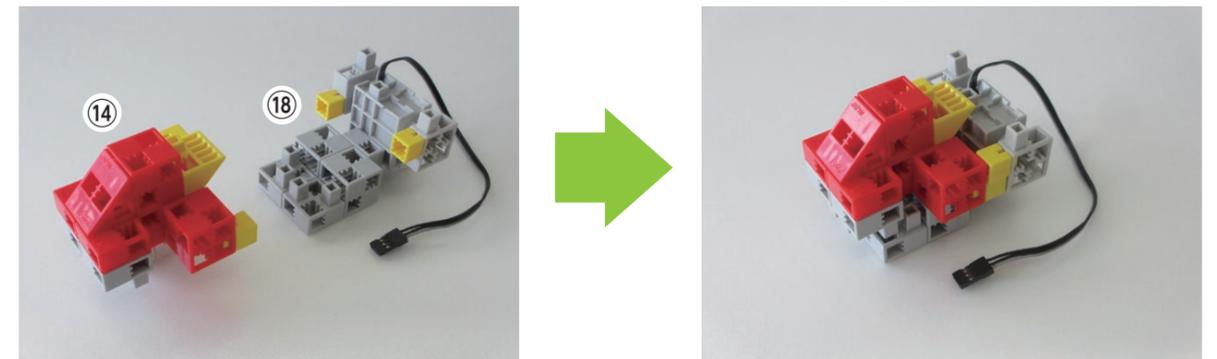
⑰ Add the block shown in the picture to a servomotor.



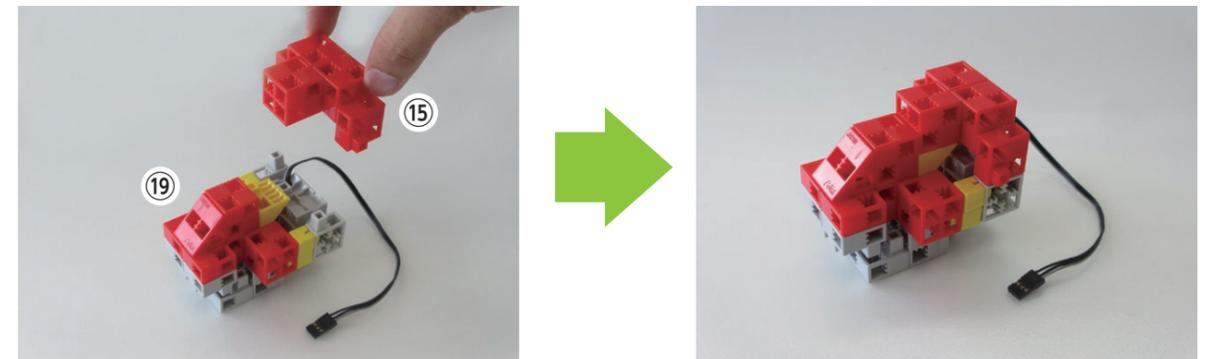
⑱ Attach part ⑰ to part ⑱ as shown.



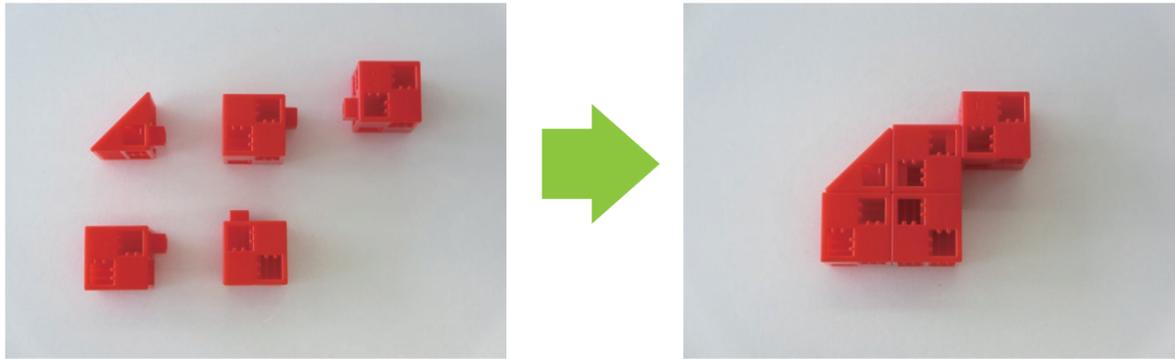
⑲ Arrange parts ⑱ and ⑭ as shown in the picture. (do not insert the studs)



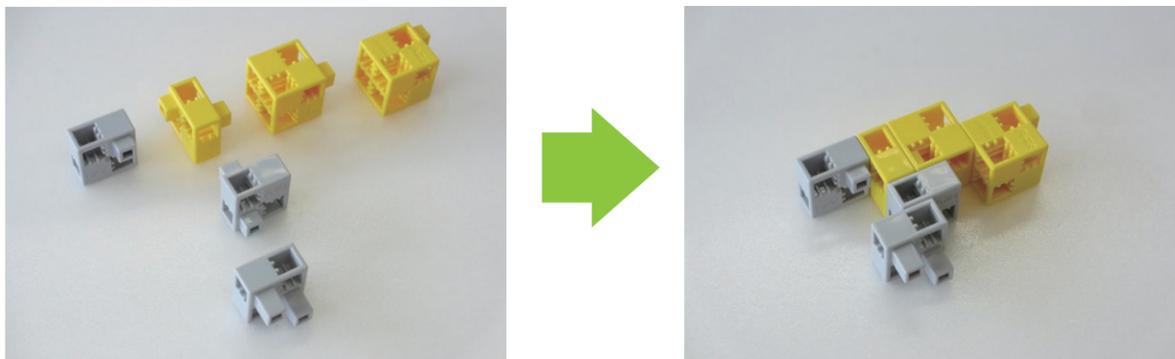
⑳ Attach part ⑮ to part ⑲ as shown.



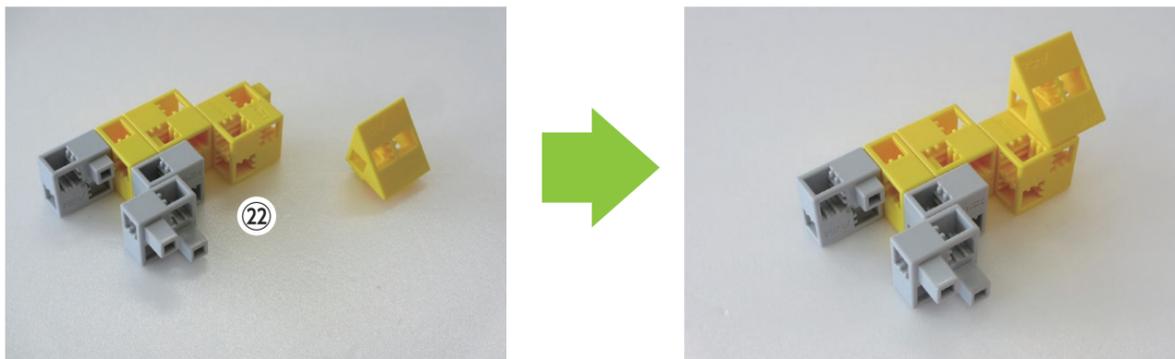
⑳ Assemble the blocks as shown in the picture.



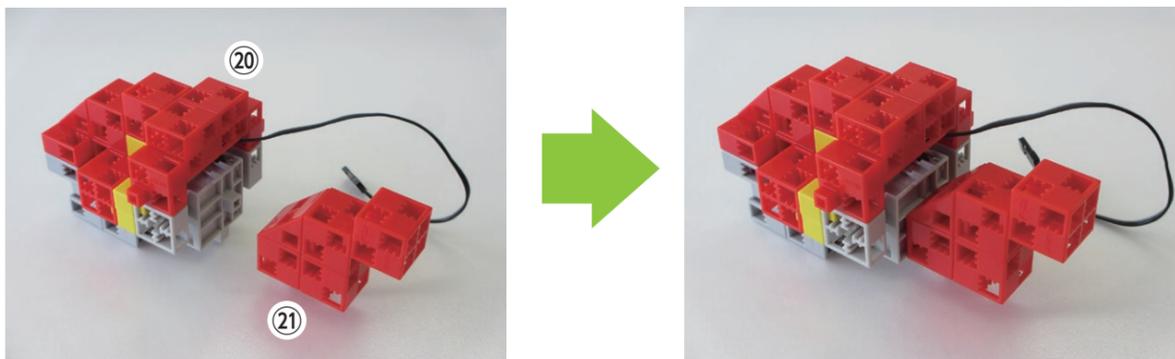
㉑ Assemble the blocks as shown in the picture.



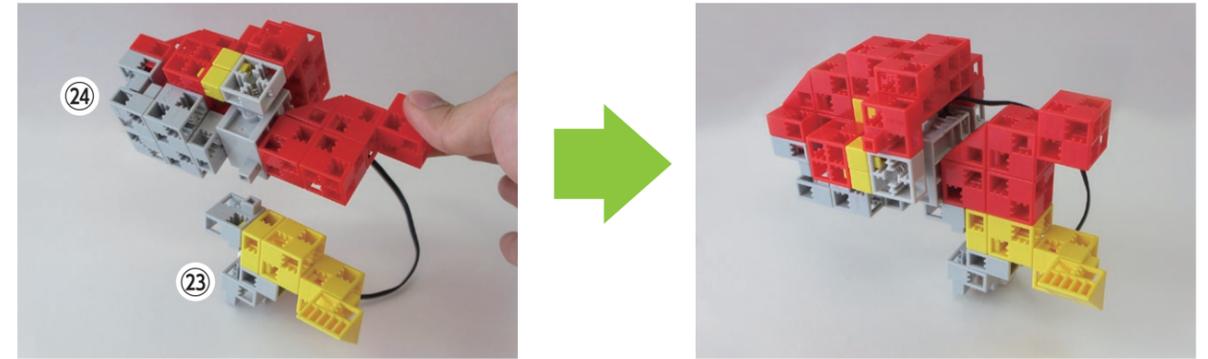
㉒ Add the blocks shown in the picture to ㉑.



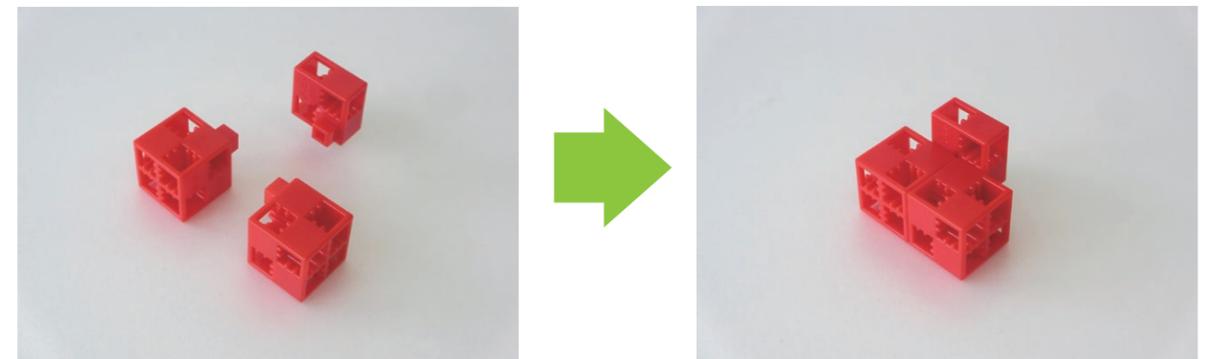
㉓ Attach part ㉒ to part ㉑ as shown.



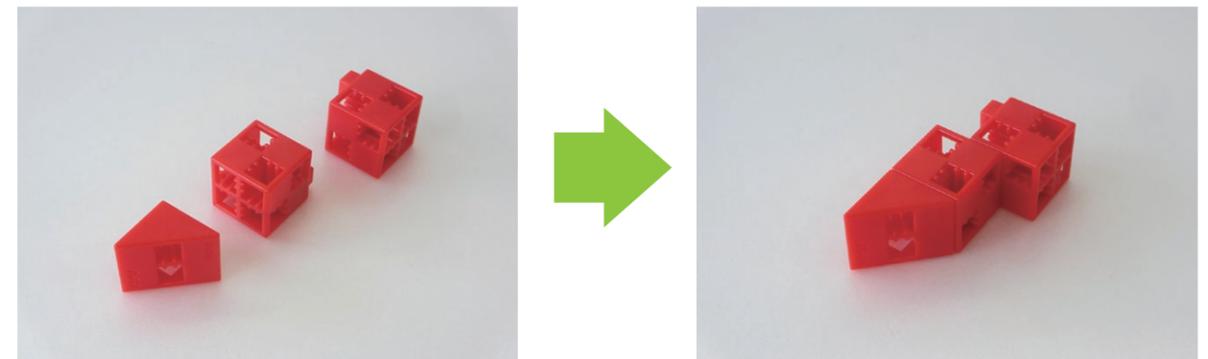
㉔ Attach part ㉓ to part ㉒ as shown.



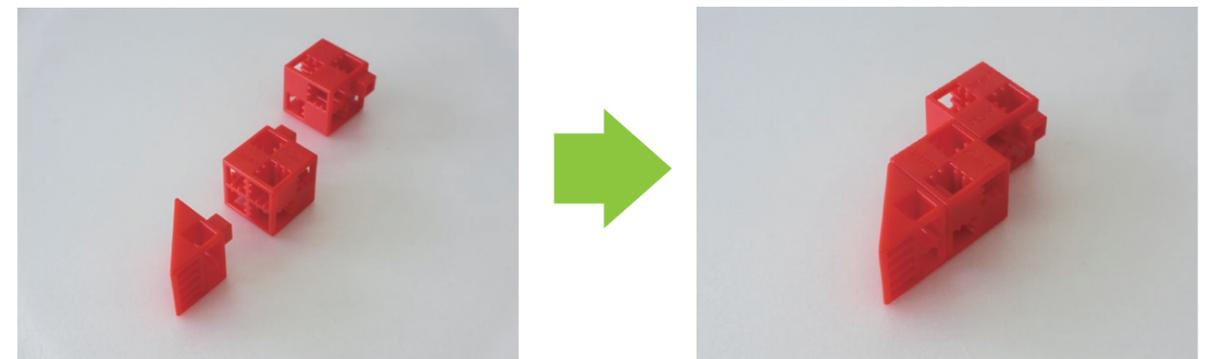
㉕ Assemble the blocks as shown in the picture.



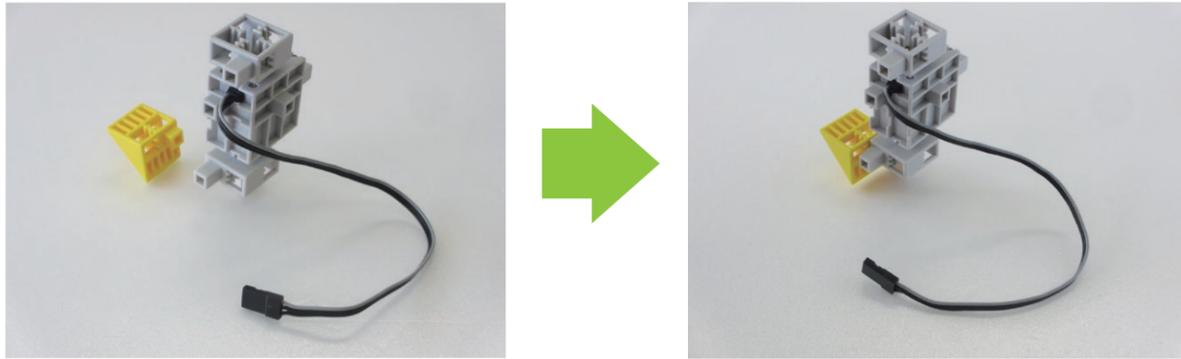
㉖ Assemble the blocks as shown in the picture.



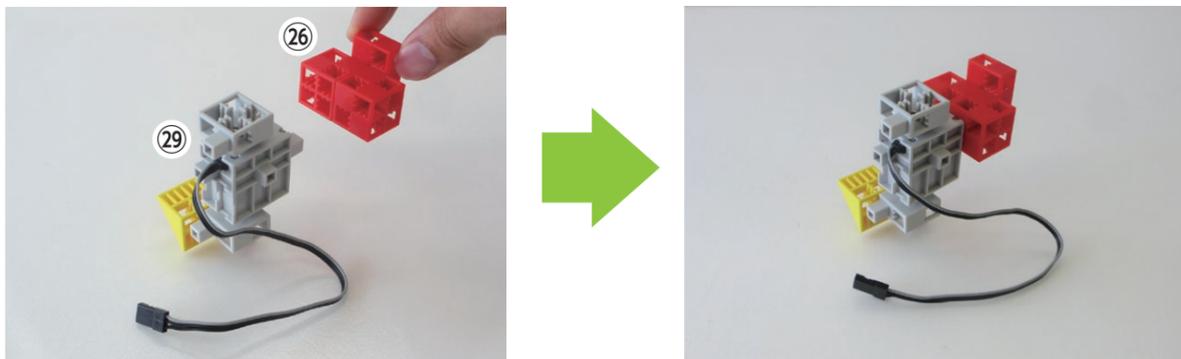
㉗ Assemble the blocks as shown in the picture.



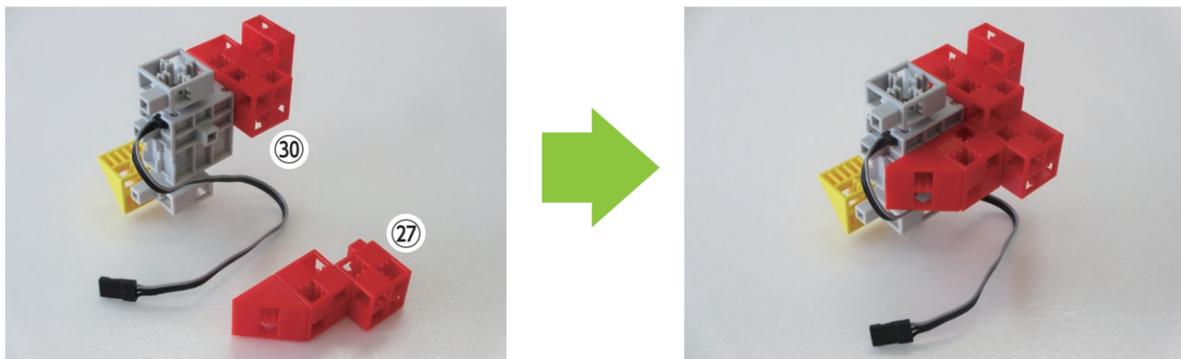
②⑨ Add the blocks shown in the picture to the servomotor.



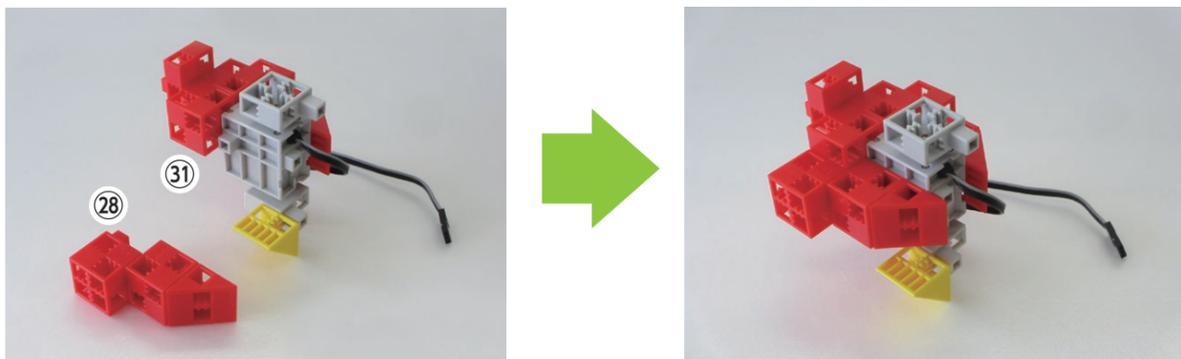
③⑩ Attach part ②⑥ to part ②⑨ as shown.



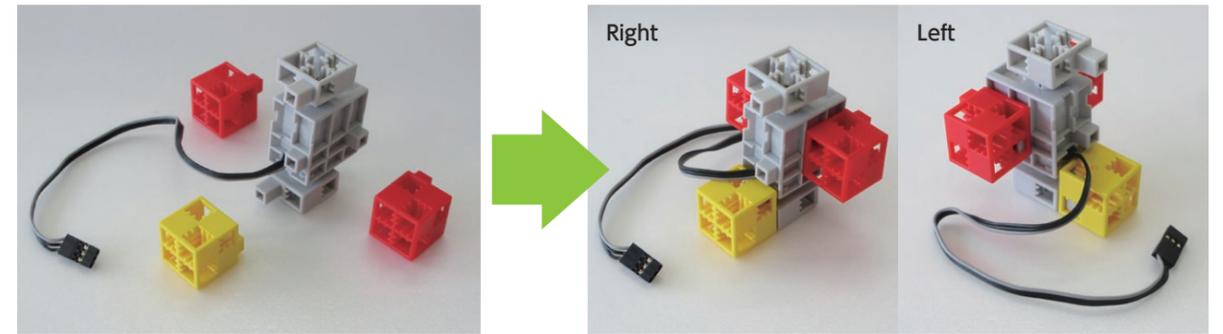
③⑪ Attach part ②⑦ to part ③⑩ as shown.



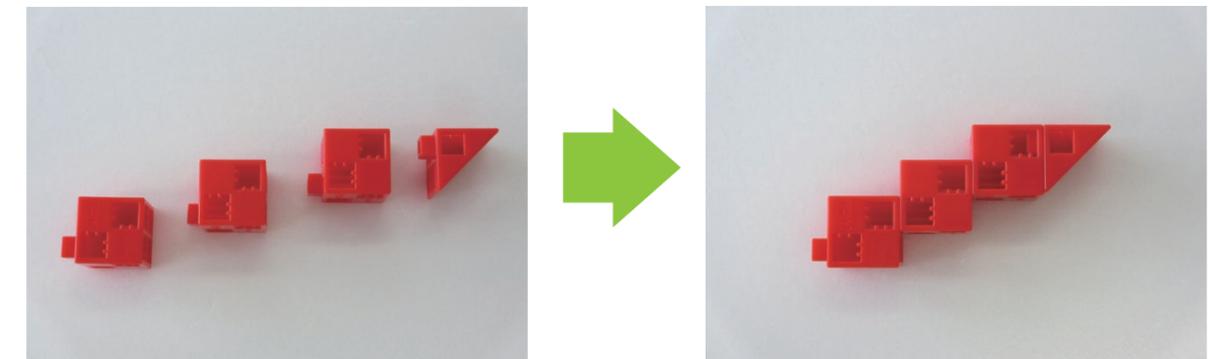
③⑫ Attach part ②⑧ to part ③⑪ as shown.



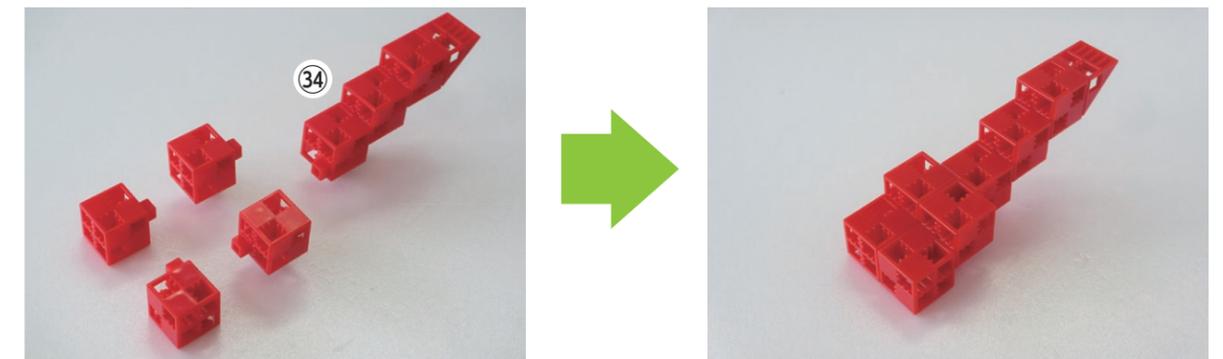
③⑬ Add the blocks shown in the picture to the servomotor.



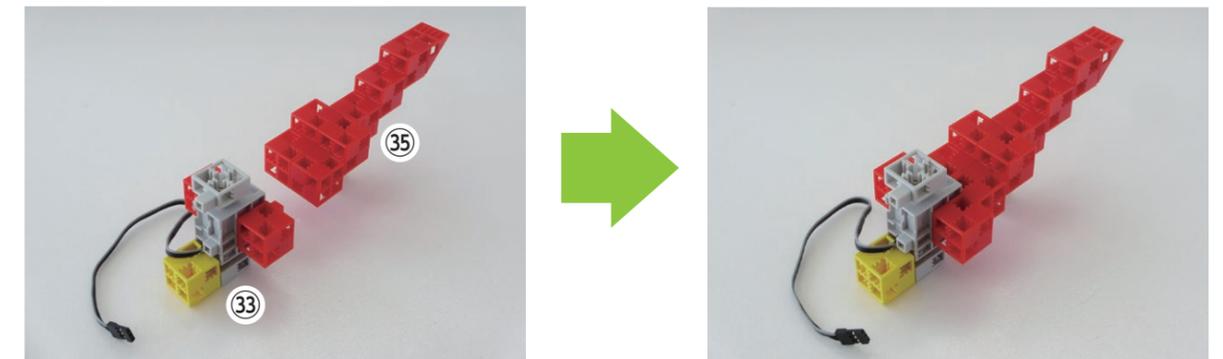
③⑭ Assemble the blocks as shown in the picture.



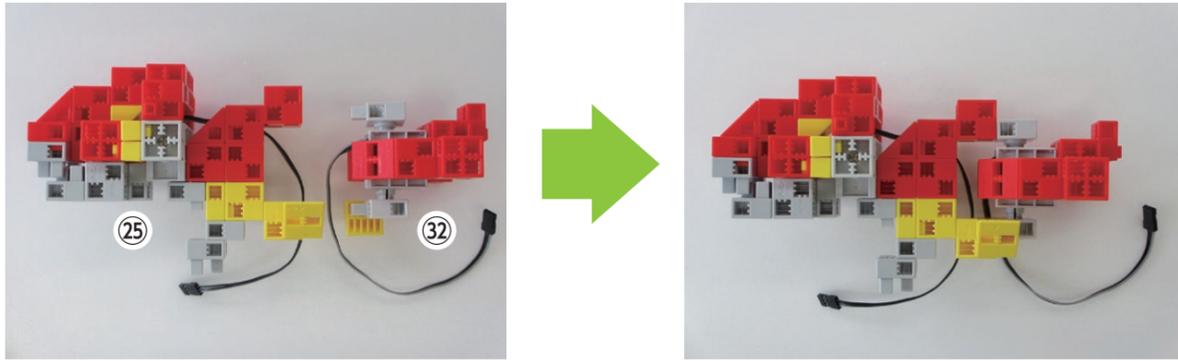
③⑮ Add the blocks shown in the picture to ③⑭.



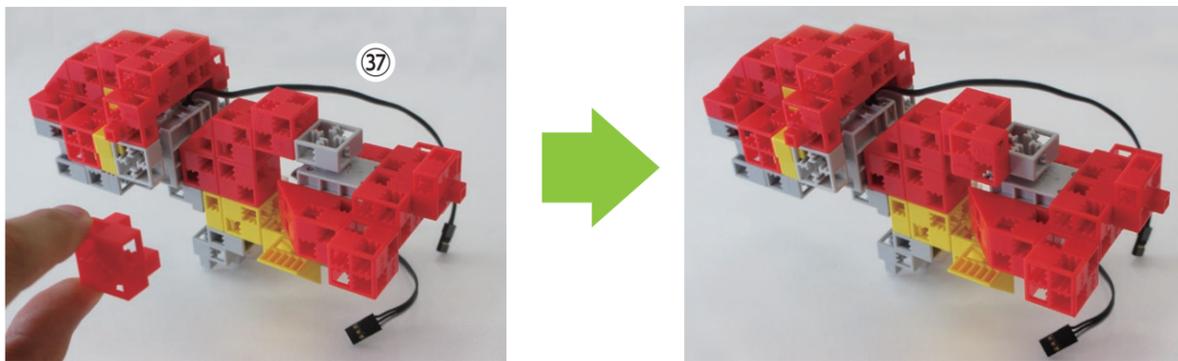
③⑯ Attach part ③⑮ to part ③⑬ as shown.



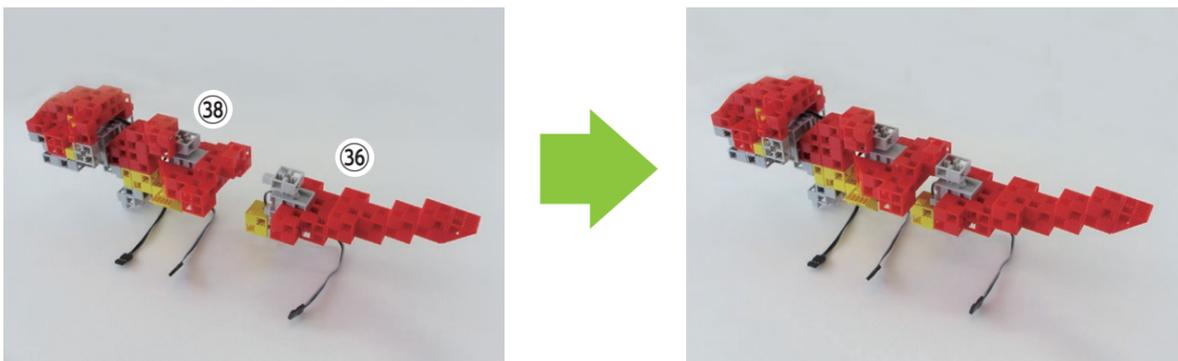
③⑦ Attach part ③② to part ③⑤ as shown.



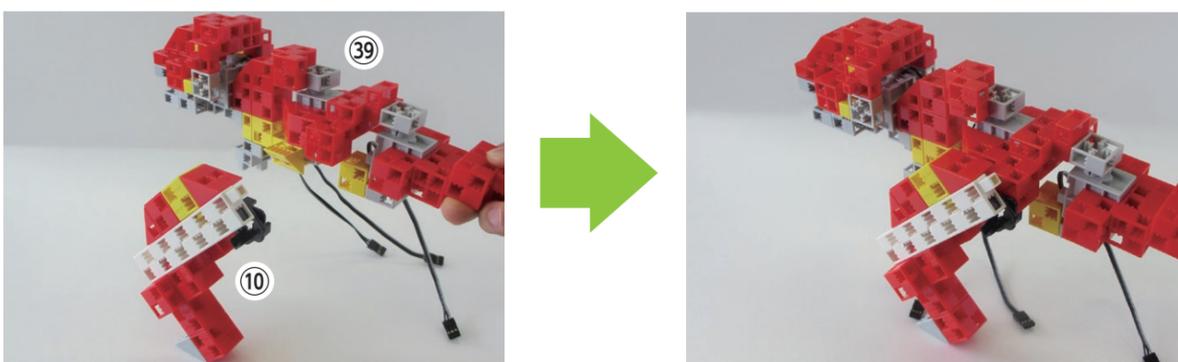
③⑧ Add the blocks shown in the picture to ③⑦.



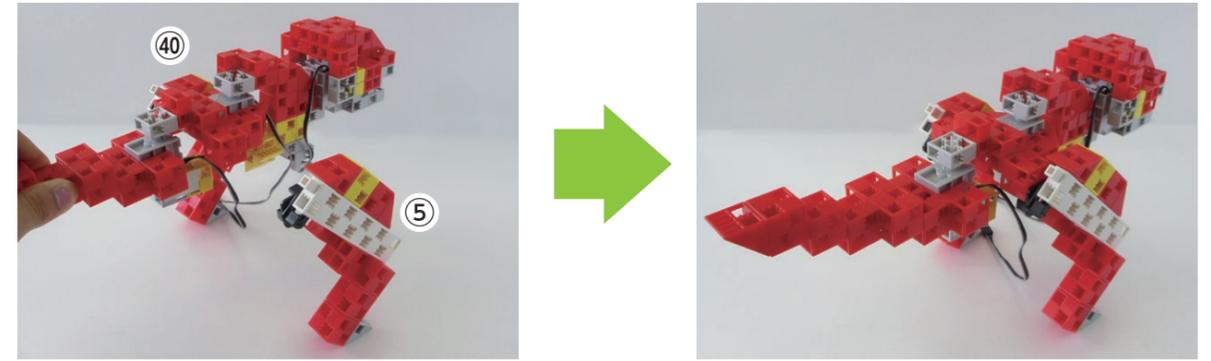
③⑨ Attach part ③⑥ to part ③⑧ as shown.



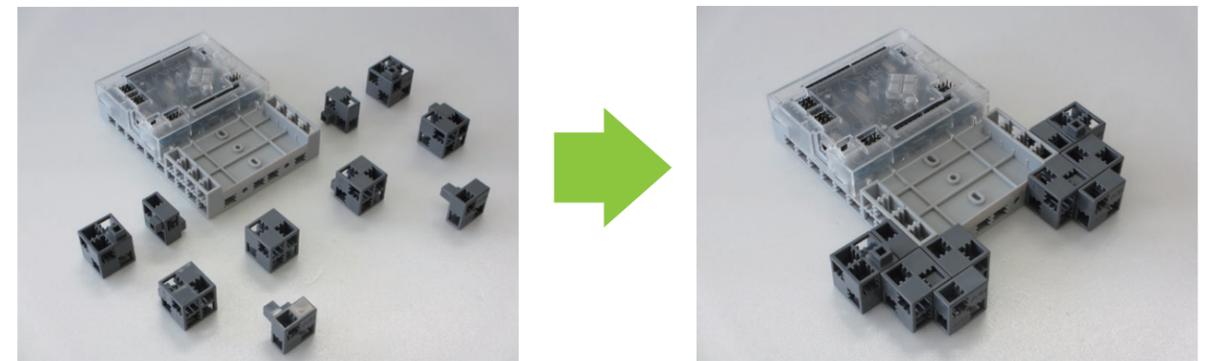
④① Attach part ④① to part ④① as shown.



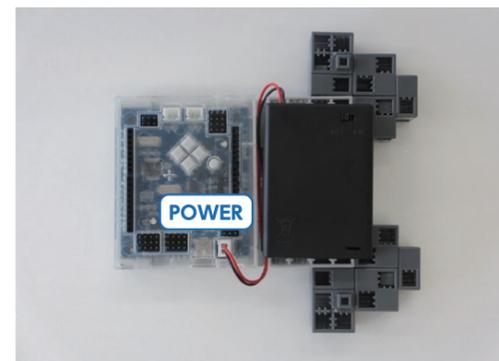
④① Attach part ④① to part ④① as shown.



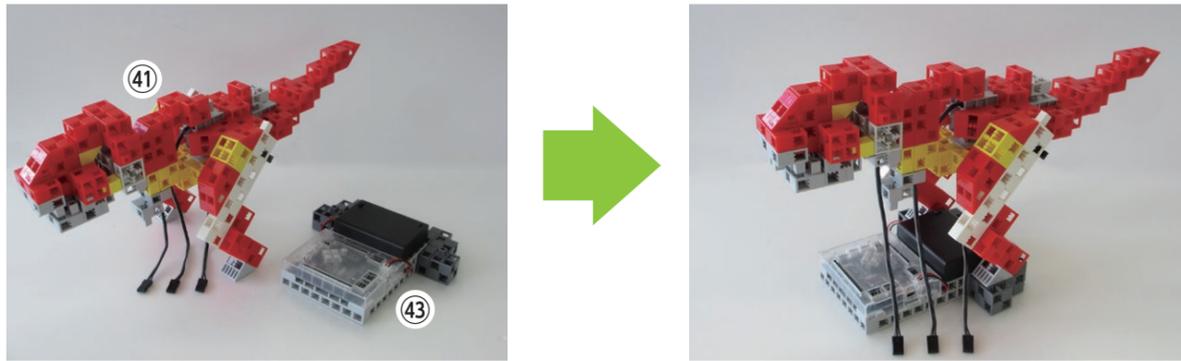
④② Add the blocks shown in the picture to the circuit board mount.



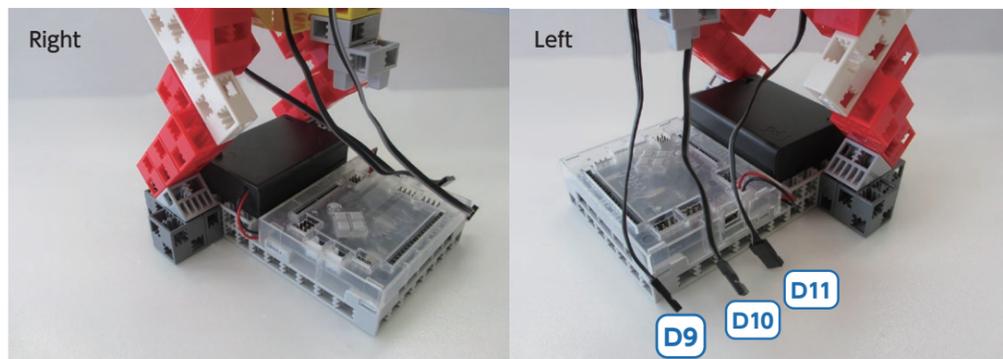
④③ Add the battery box to the circuit board mount and connect the wires as shown.



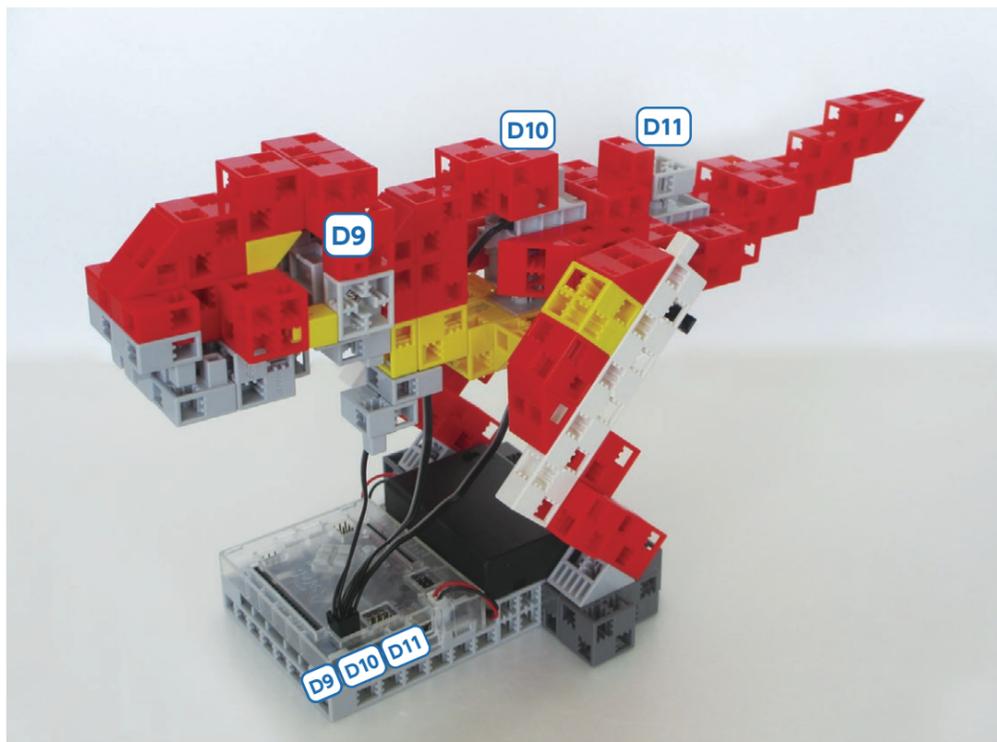
④④ Attach part ④① to part ④③ as shown.



④⑤ Connect the wires to the circuit board as shown.



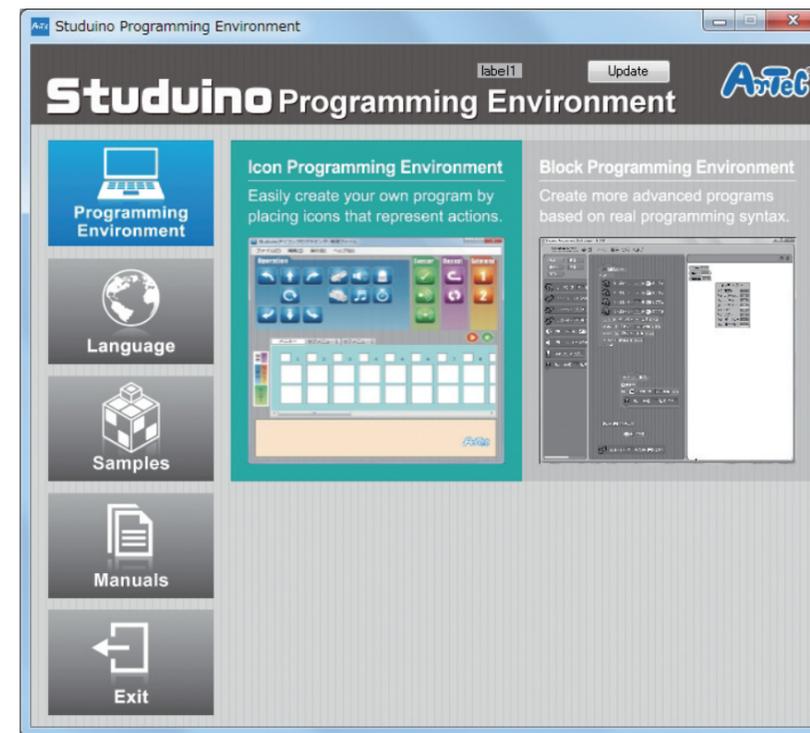
[Finished!]



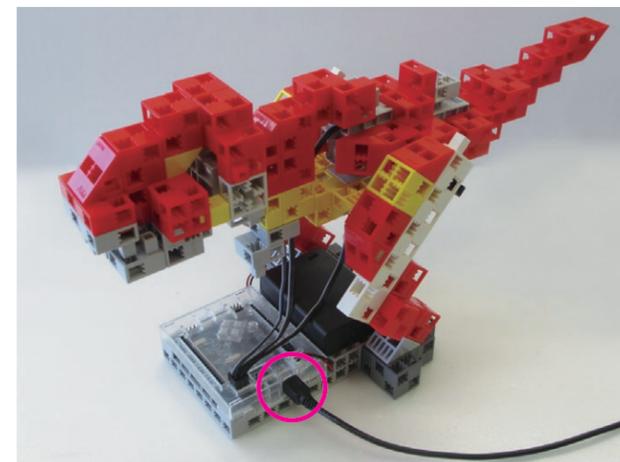
[Programming Your Robot]

Download your programming software from the Artec homepage at http://www.artec-kk.co.jp/studuino/download_en.html.

① Click on Start → Artec and open **Studuino Programming Environment**.
Choose **Icon Programming Environment**.

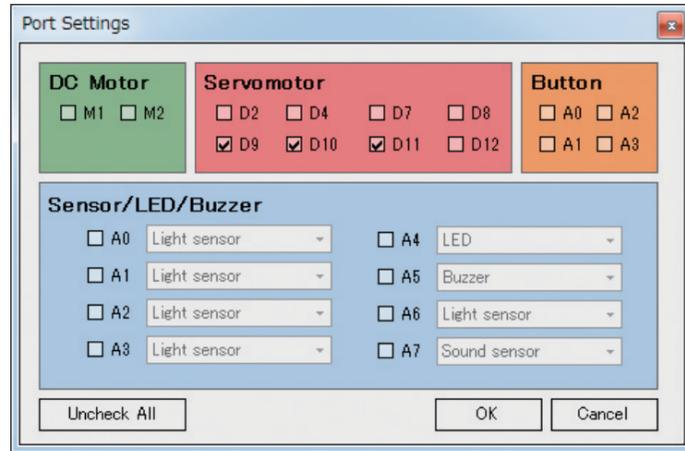


② Use a USB cable to connect your circuit board mount to your PC.

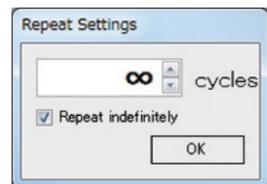


③ Choose your port settings.

Tick the boxes for D9, D10, and D11 in the Port Settings dialog box.

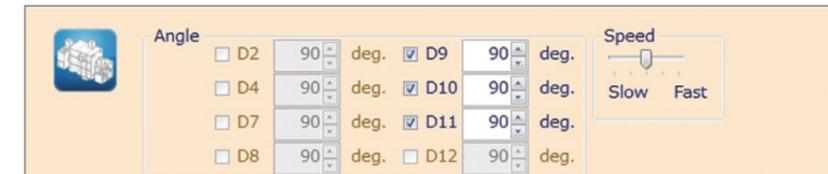


④ Place the icons you see in the picture below.

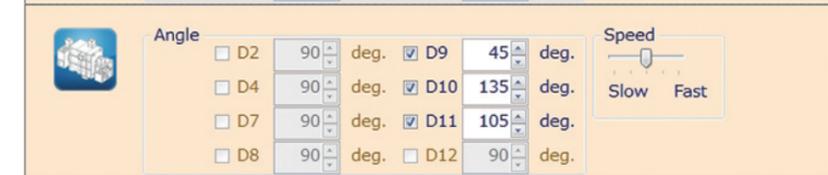


Click Repeat indefinitely in the Repeat Settings dialog.

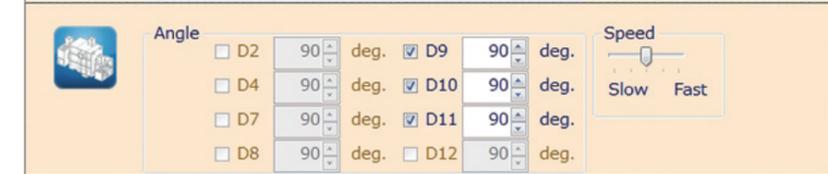
1



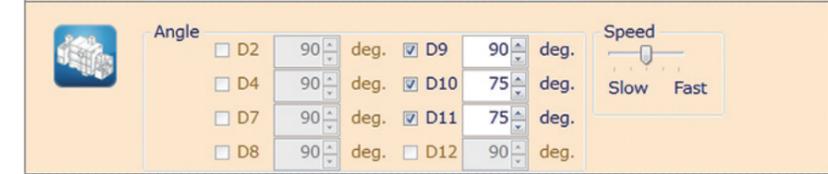
2



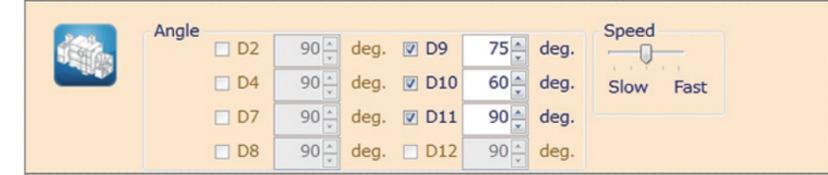
3



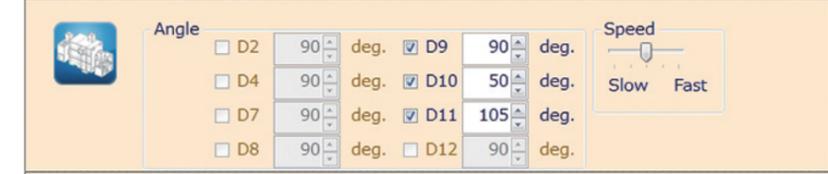
4



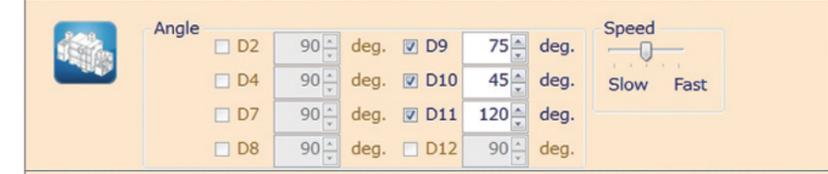
5



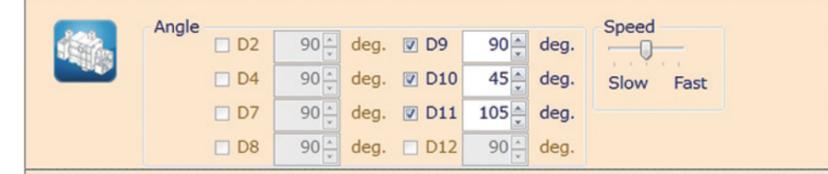
6



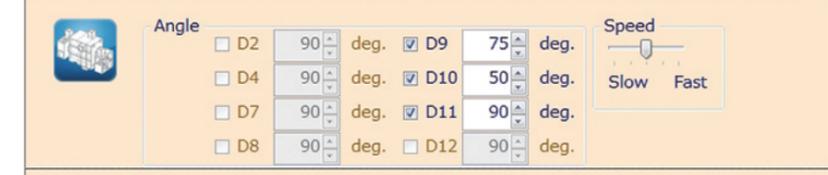
7



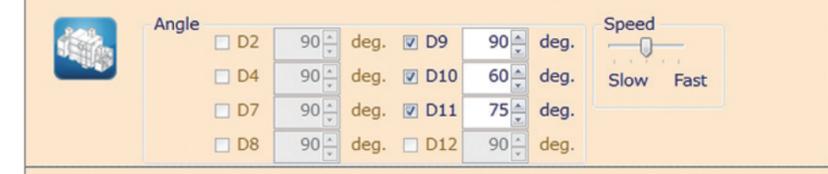
8



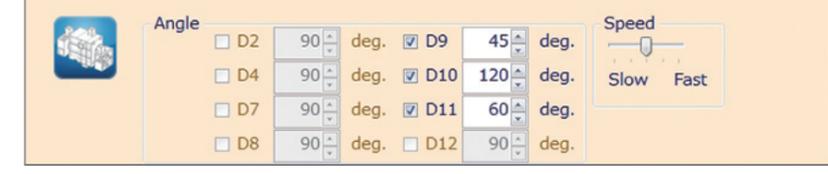
9



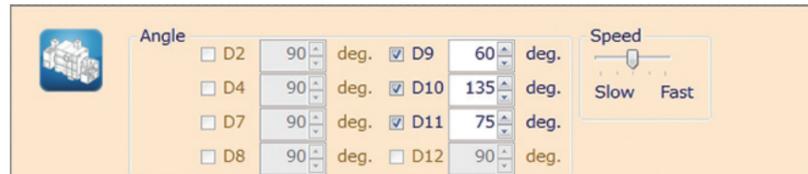
10



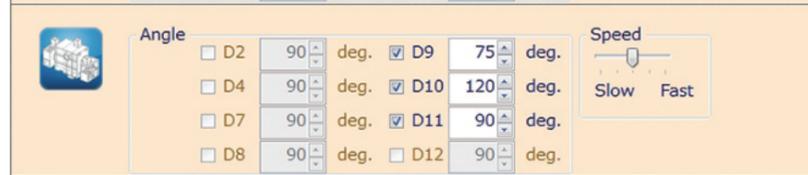
11



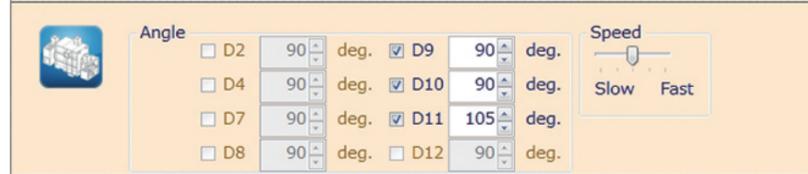
12



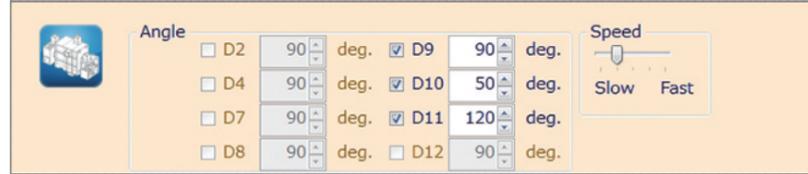
13



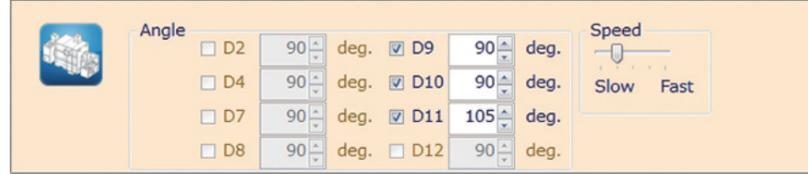
14



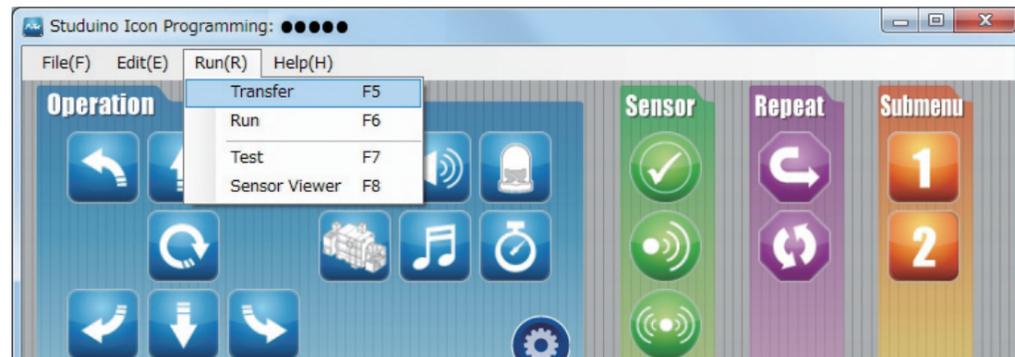
15



16



⑤ After sending the program to your circuit board, check that your robot is operating correctly by turning it on.



Having trouble?

- Check to make sure you've assembled your robot correctly.
- Make sure that the cables have been properly inserted.
- Read **6. Using Servomotors** in the **Studuino Icon Programming Environment Guide** (download from <http://www.artec-kk.co.jp/artecrobo/>) for instructions on how to calibrate your servomotor.

Artec Co., Ltd.

Address: 3-2-21 Kitakamei-cho, Yao-shi, Osaka
581-0066 Japan

E-mail: export@artec-kk.co.jp

Website: www.artec-kk.co.jp/en

ArTeC[®] is a registered trademark of Artec Co., Ltd. in multiple countries including Japan, South Korea, Canada, and the USA.