

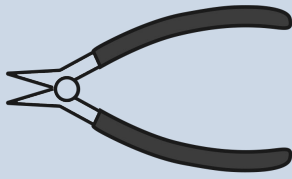


The Crazy Factory

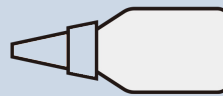
Assembly Guide

Version 1.0

Tools you'll need



Diagonal Cutters



Instant Glue



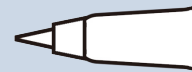
Tweezers



Black electrical Tape

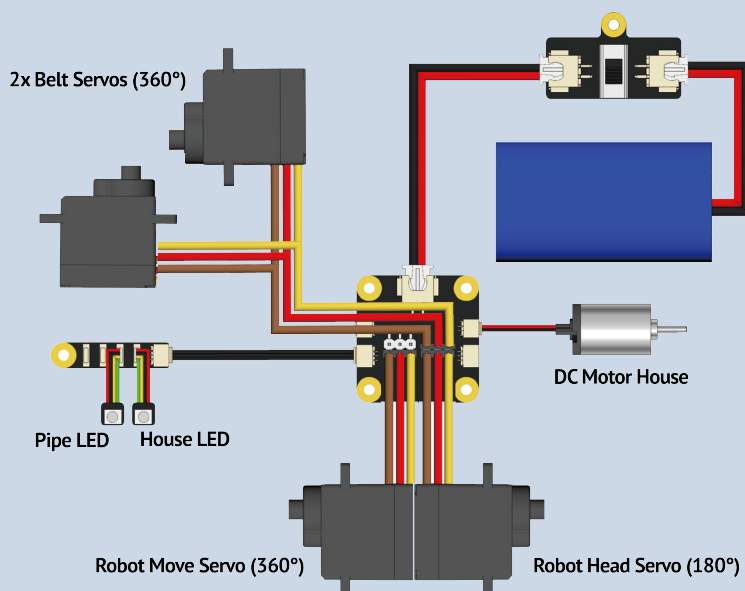


H1.5 Hex Driver



Lubricant

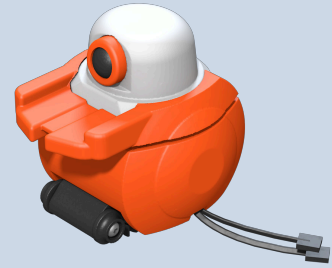
- **Important:** Test every component before installation. Check all gears and belts thoroughly before final assembly: first by hand, then using the servos.
- **Gluing:** Always test-fit before applying glue.
- **Controller:** Build a basic controller modeled after the [official remote](#) or the [joystick](#) (take the JSON file from the joystick page). At this stage, simply connect the raw electronics. Install the supplied JSON file to be able to test each component as you assemble the Factory.
- **Belts:** Three lengths (20 / 24 / 30 segments). Check before assembly.
- **Screws on gears & wheels:** Tighten the screws fully to ensure stability. Then loosen it by one full turn so the gear or wheel can spin freely.
- **Recharge:** To recharge the Battery, check **Page 36** of this booklet.
- **Screws on Servos:** In the Servo-package are screws to tighten the Servo-Arm if needed. You can use that on every Servo, if you feel it is too loose.
- All black Gears have a Letter on it, to find the right gear.



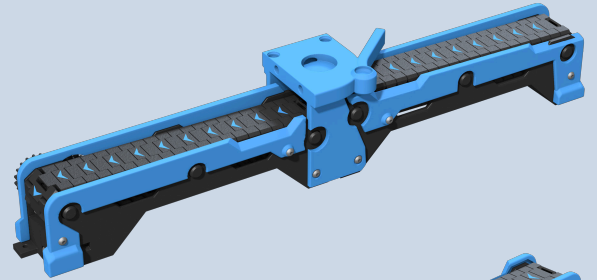
Overview

Page 4 The Base (Part 1-3)

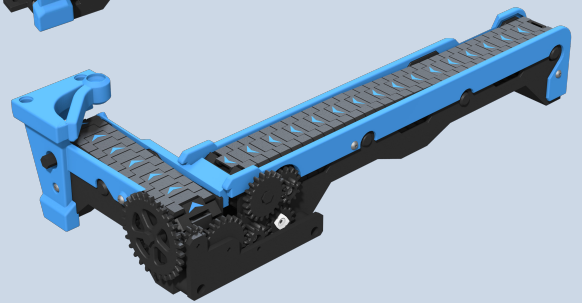
Page 7 The Robot (Part 4-5)



Page 10 Front Conveyor (Part 6-9)



Page 21 Back Conveyors (Part 10-12)



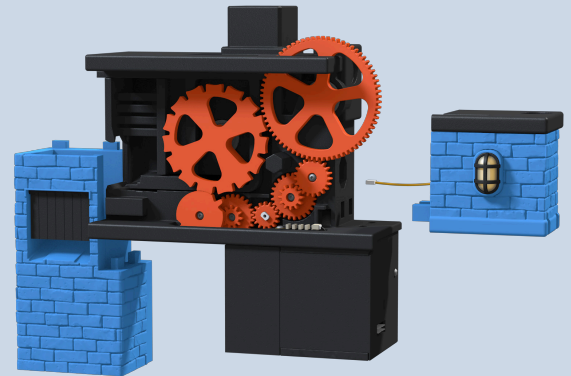
Page 28 Motorblock (Part 13)

Page 29 Main Building (Part 14-16)

Page 37 Side Buildings (Part 17)

Page 40 Rollers (Part 18)

Page 41 Centerpipe (Part 19)



Page 43 Backwall (Part 20)

Page 44 Frontwall & Logo (Part 21)

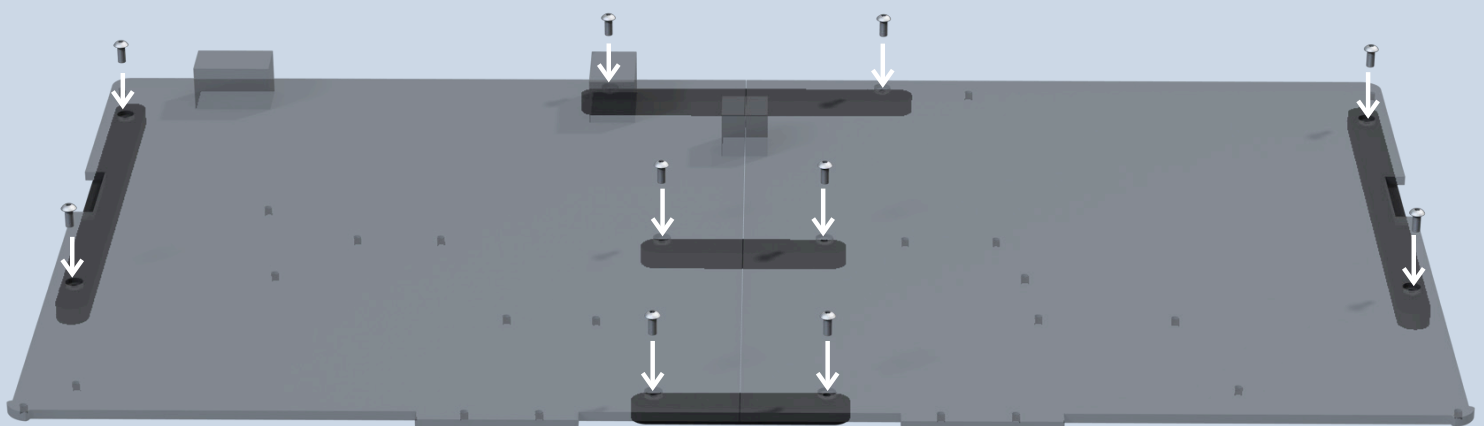
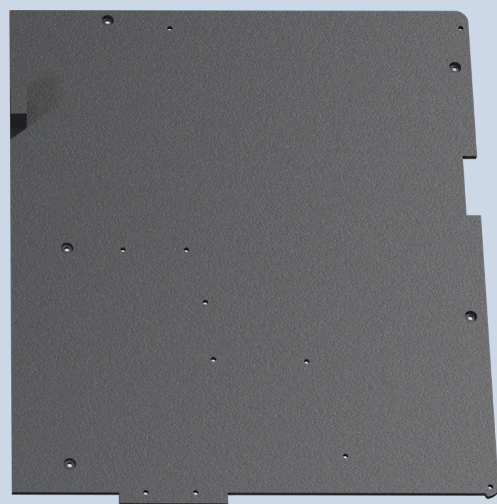
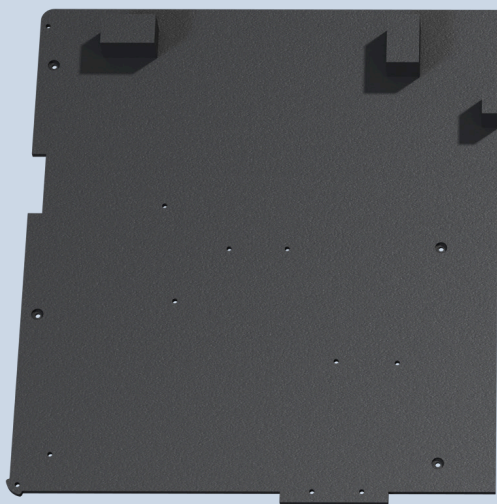
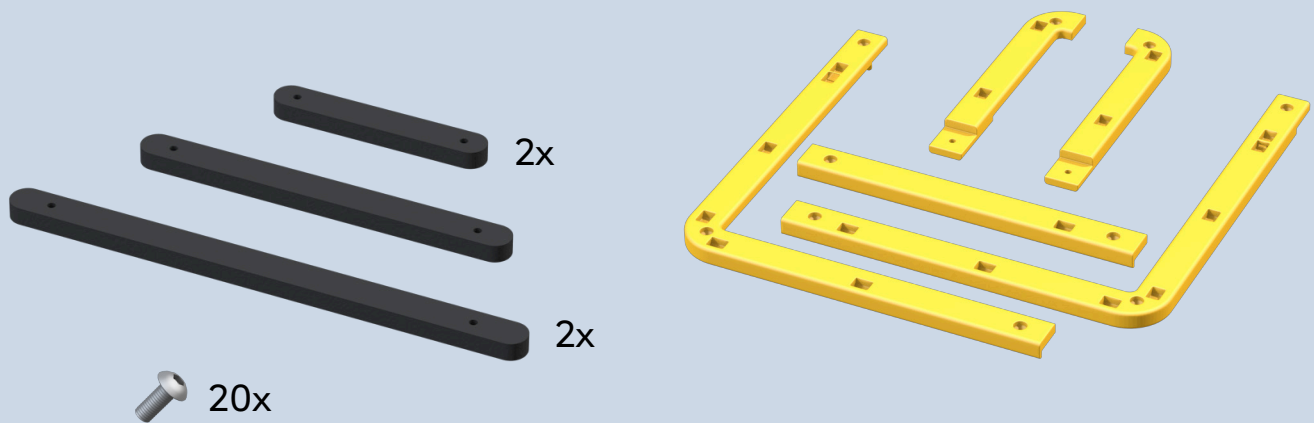


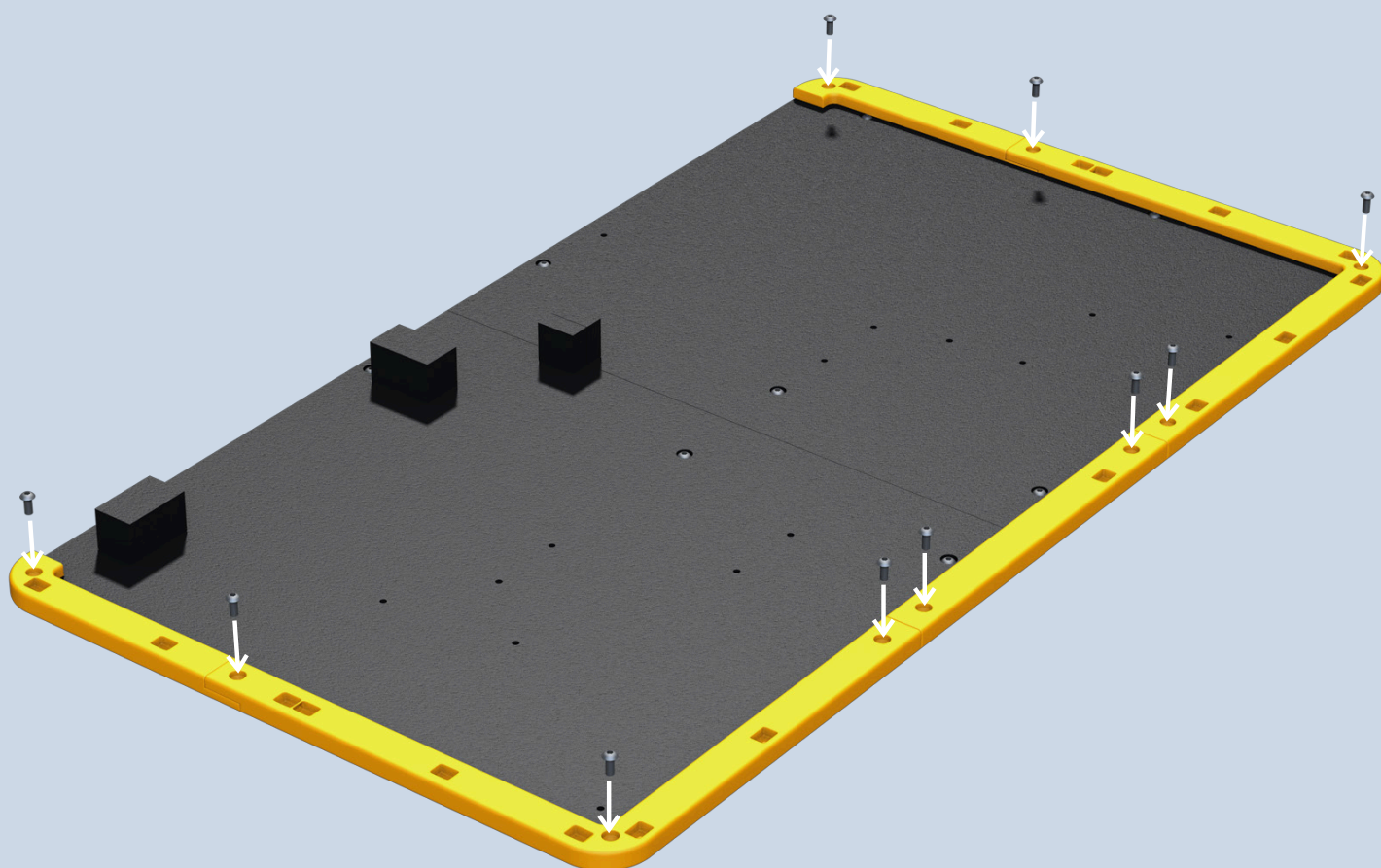
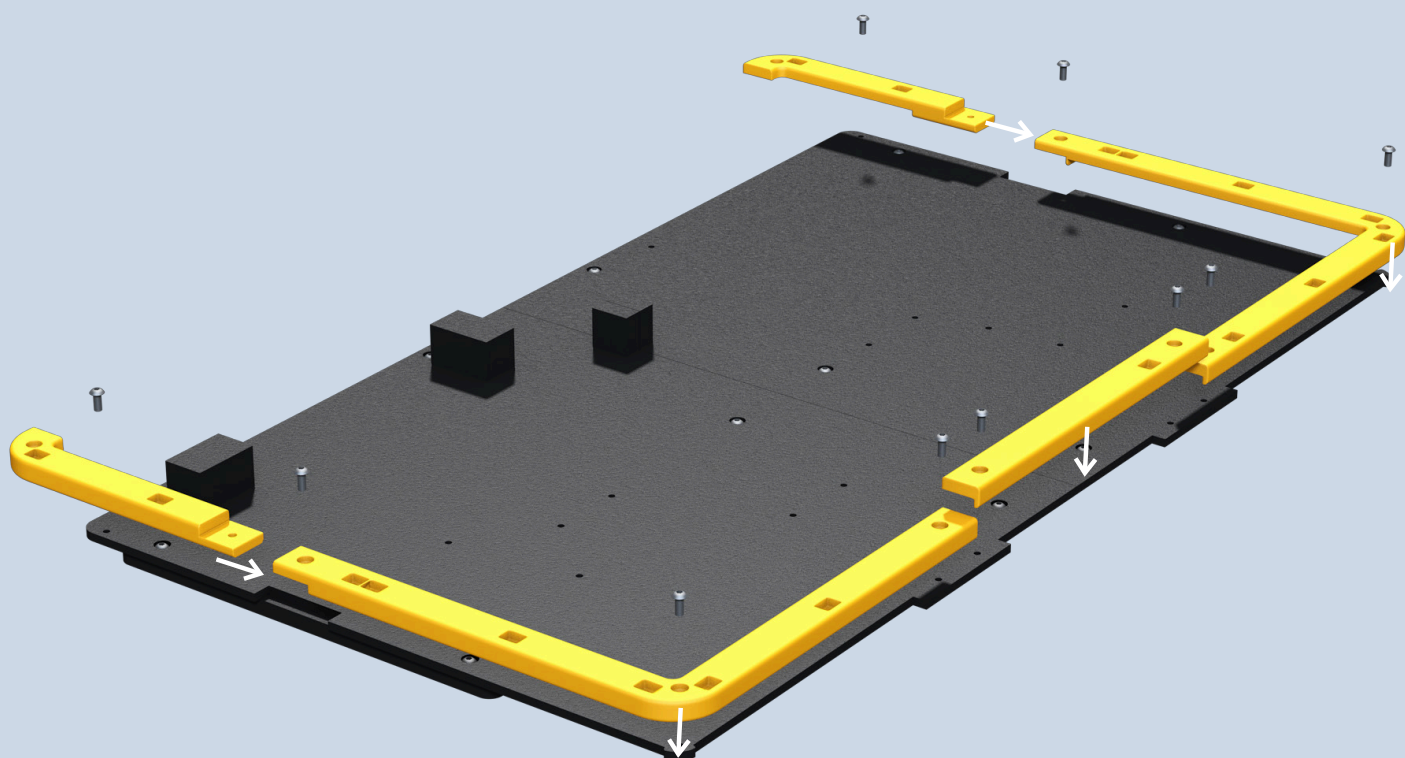
Page 46 Main assembly (Part 22-23)

Page 53 Details (Part 24)

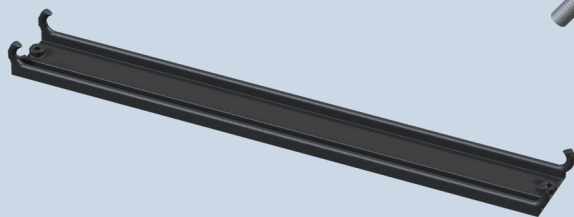


Part 1: The Base

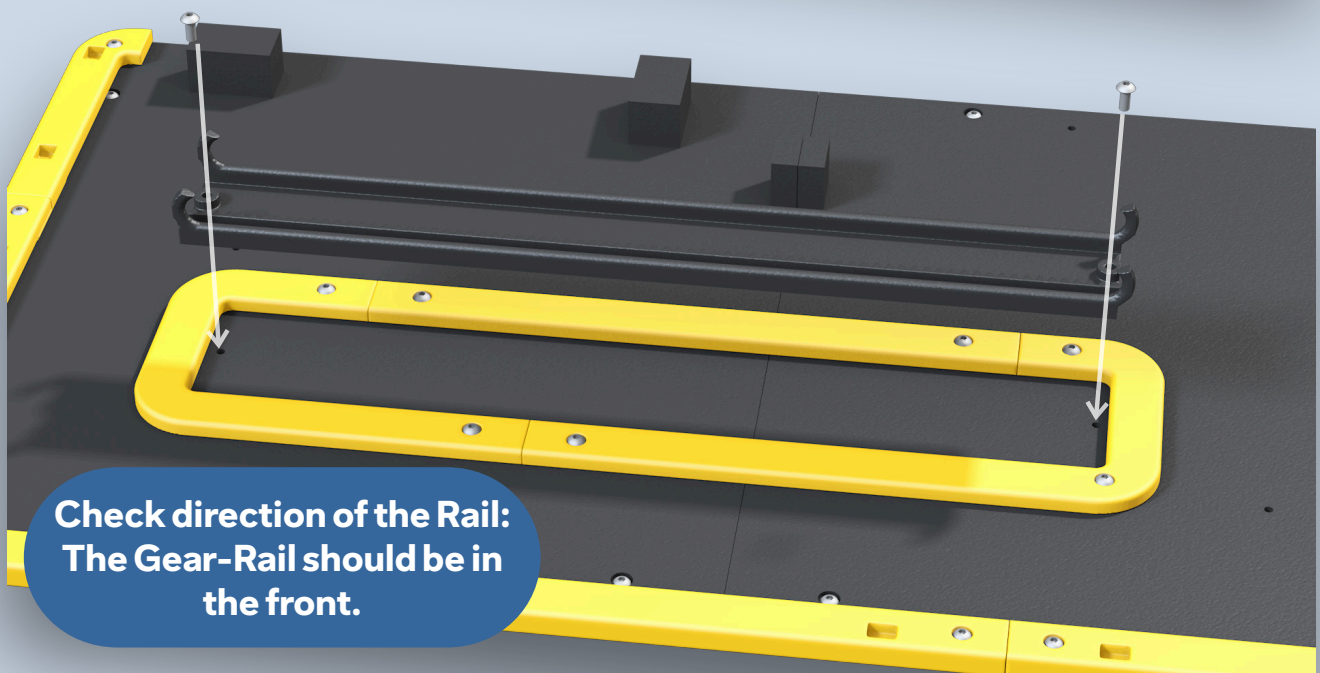
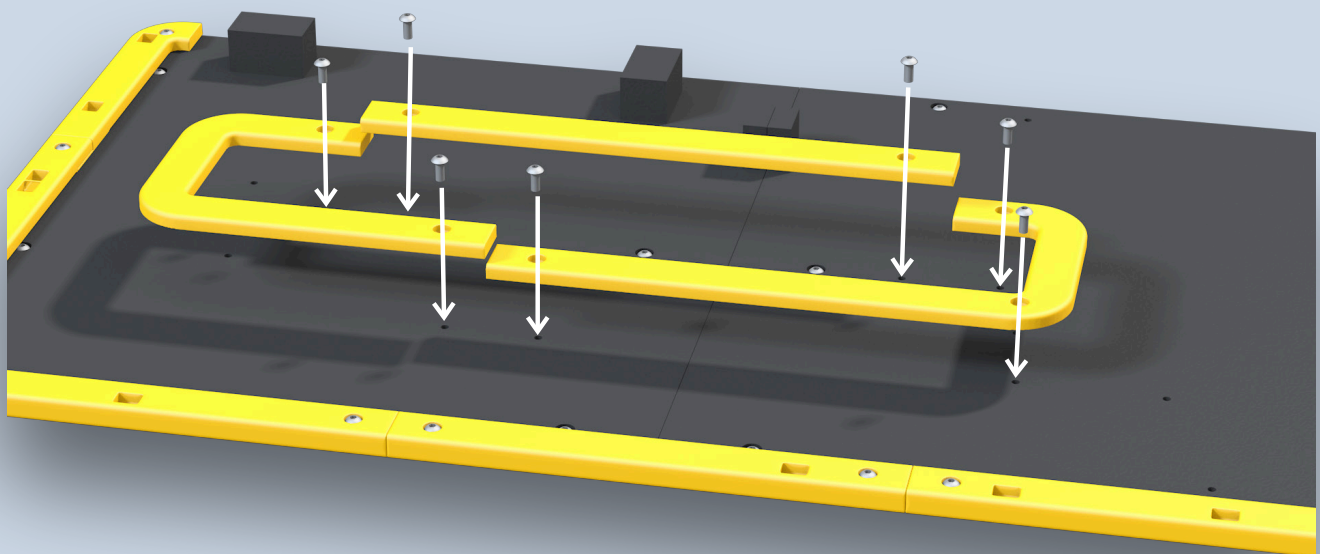
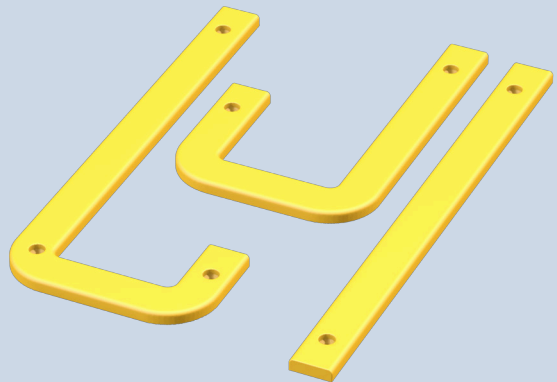




Part 2: The Rail

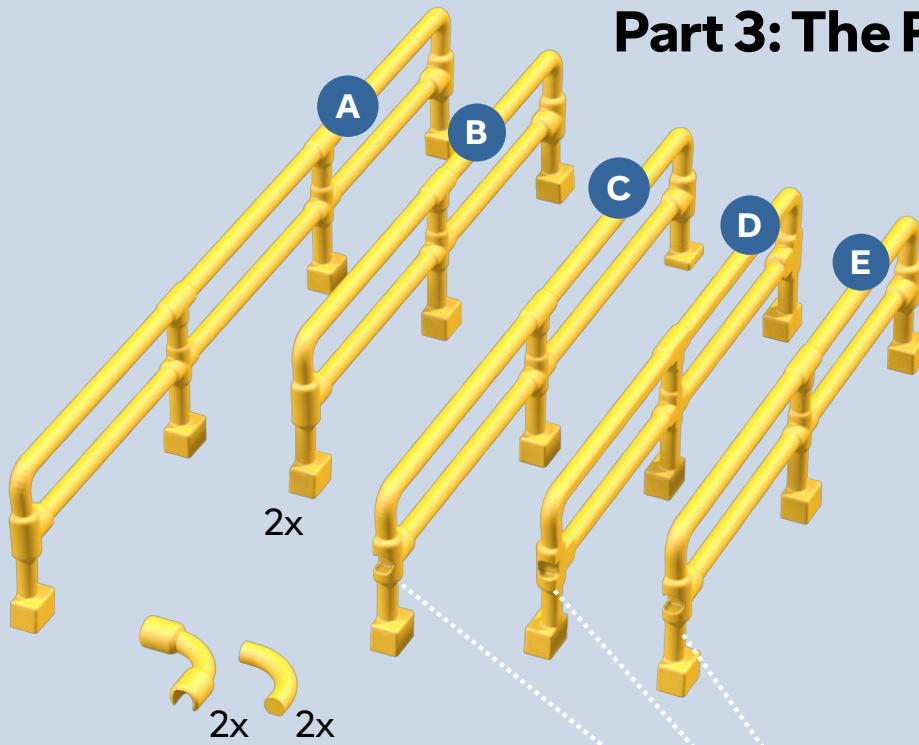


 9x

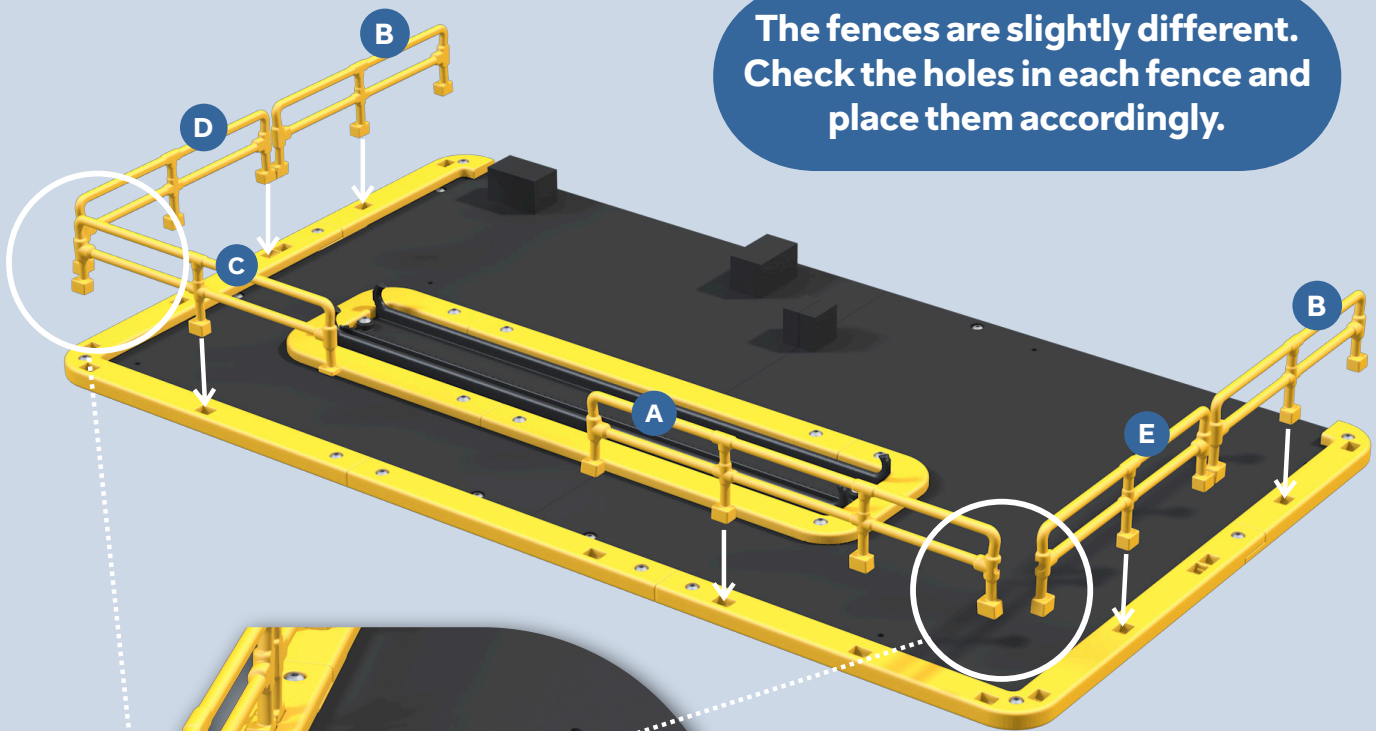


**Check direction of the Rail:
The Gear-Rail should be in
the front.**

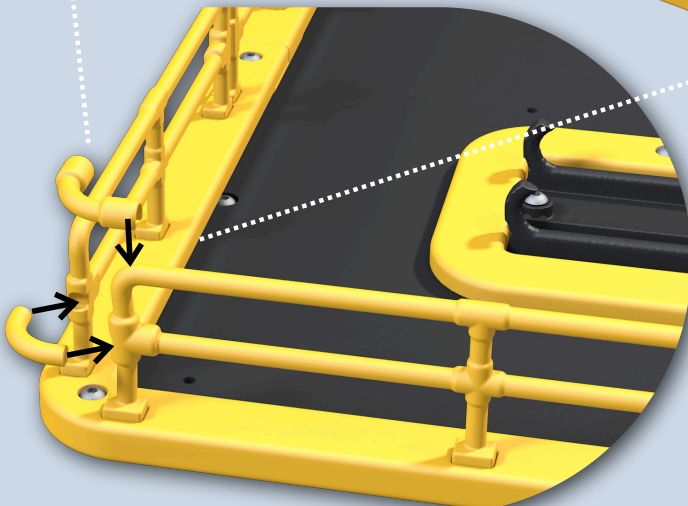
Part 3: The Railings



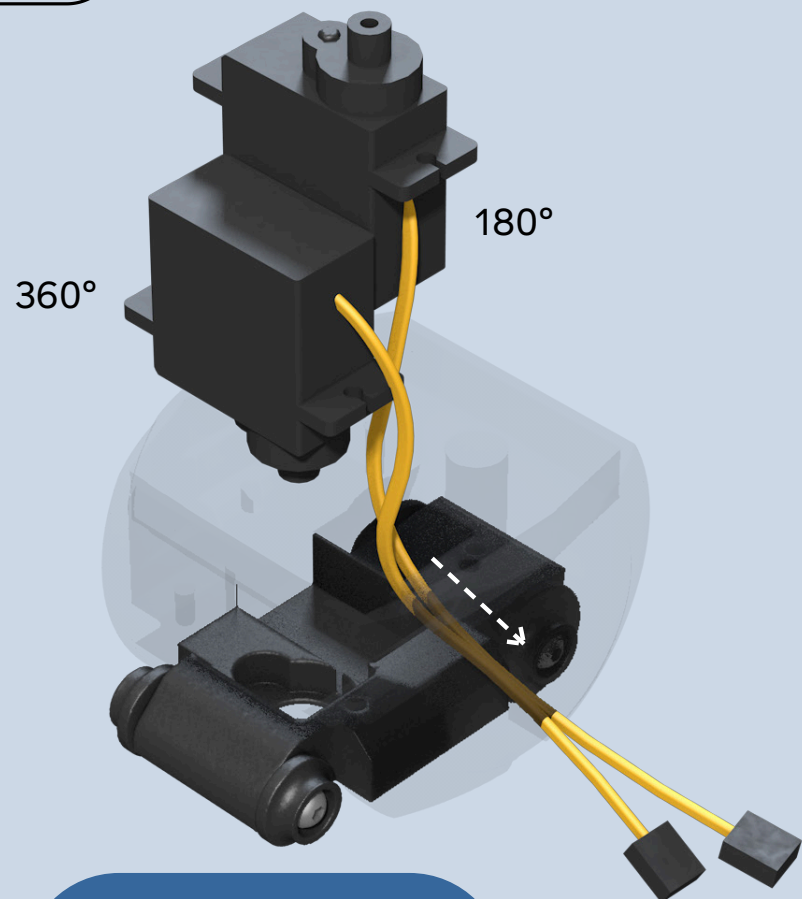
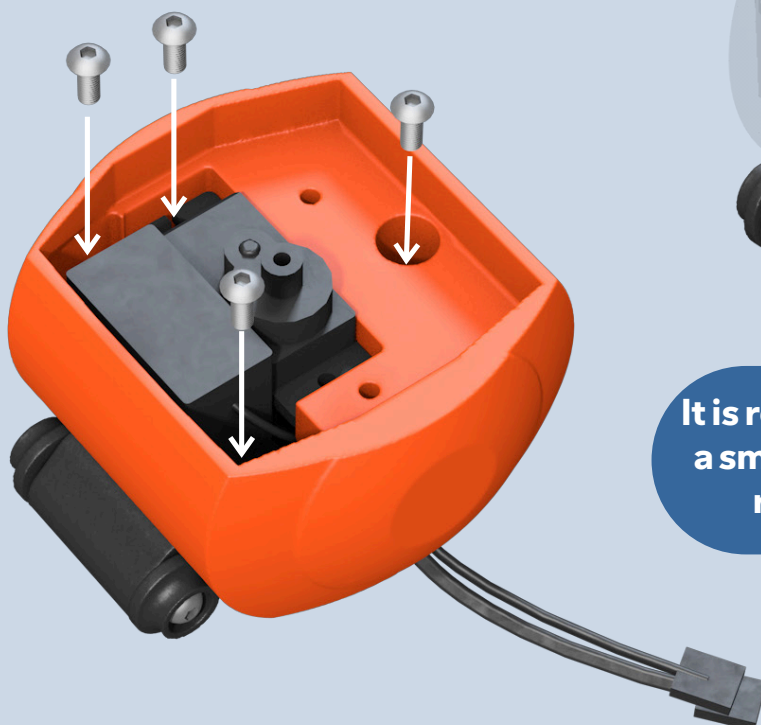
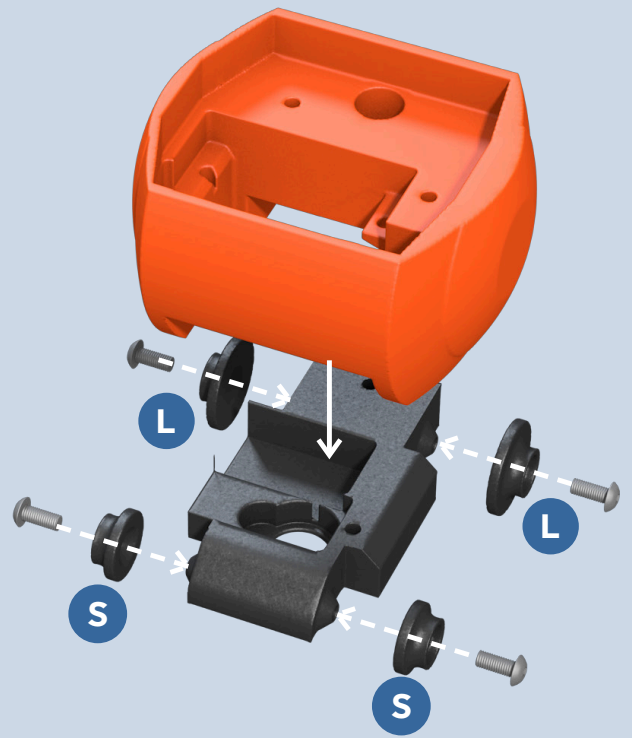
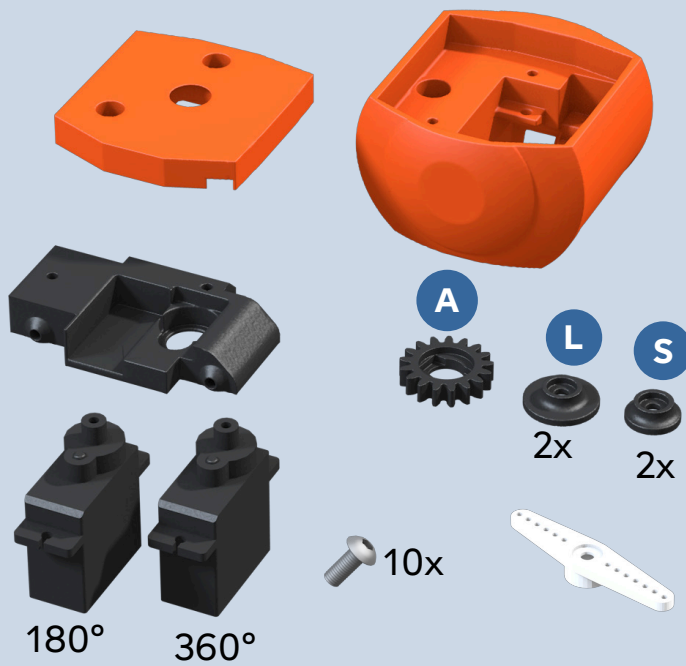
The fences are slightly different. Check the holes in each fence and place them accordingly.



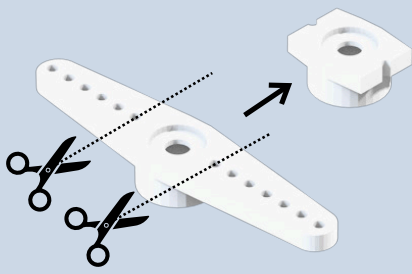
If the edges do not hold firmly in place, apply a small amount of glue.



Part 4: The Robot



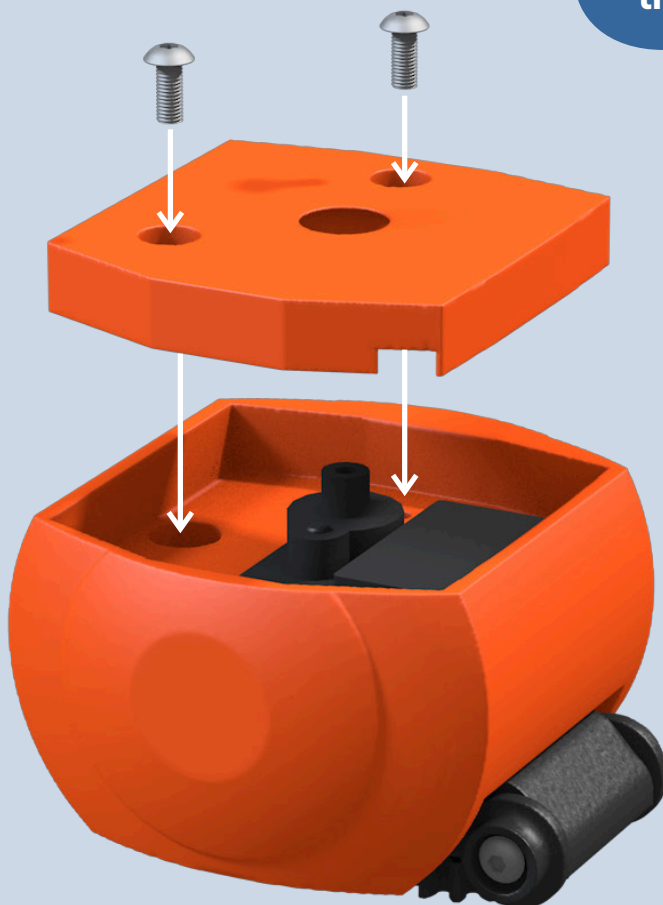
It is recommended to use a small tape to mark the robot head plug.



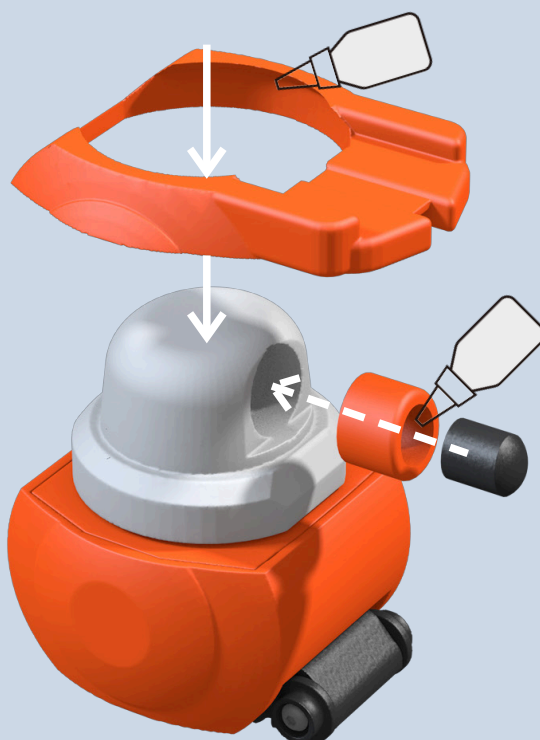
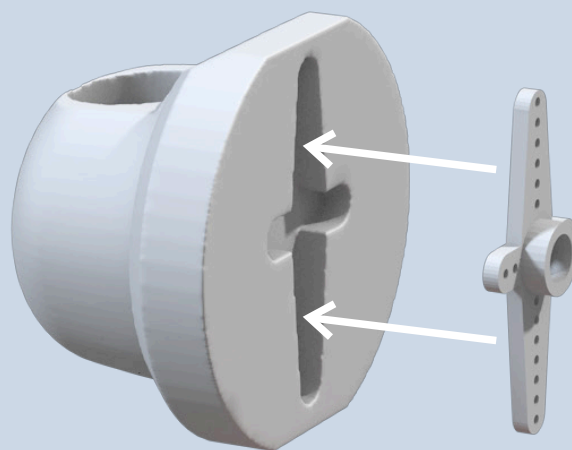
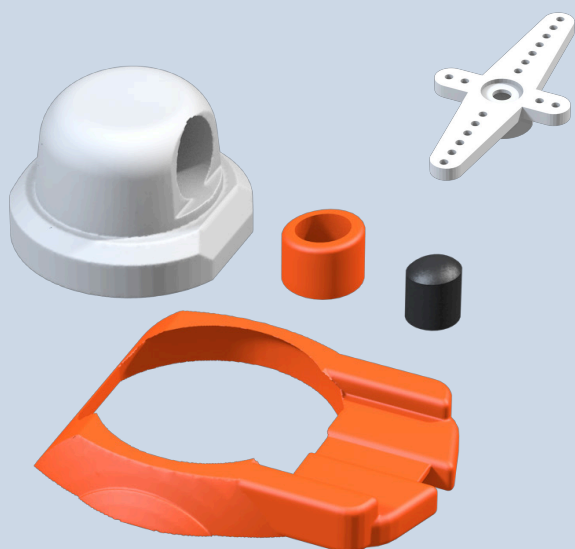
Cut through the holes with a diagonal cutter.



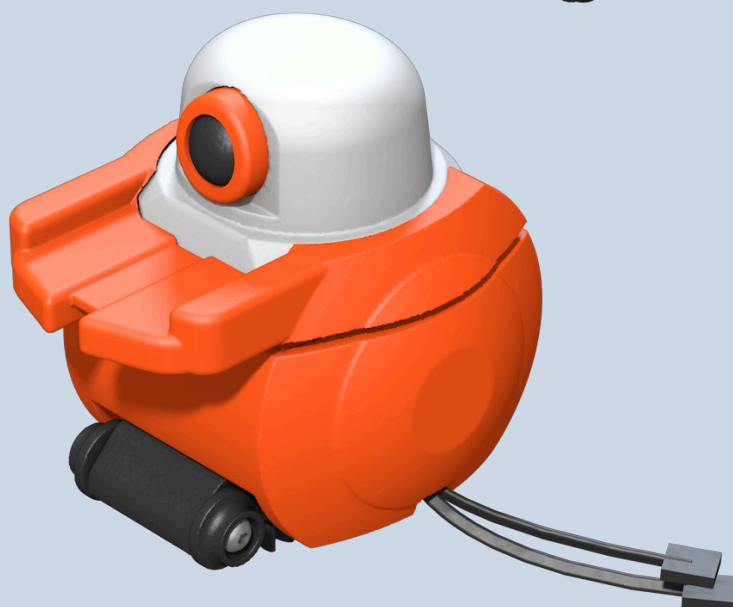
If the gear doesn't hold, you can use the screw in the servo package.



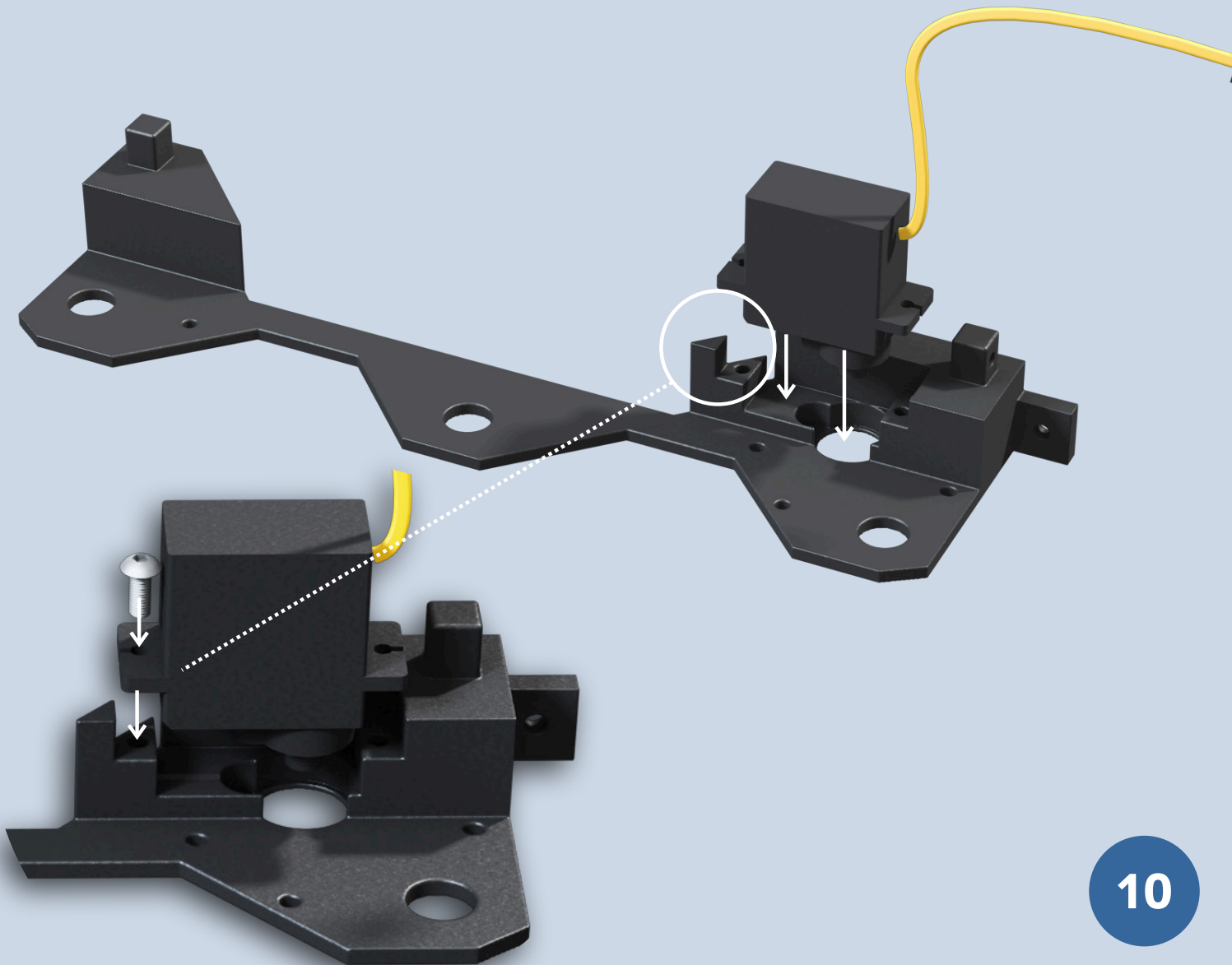
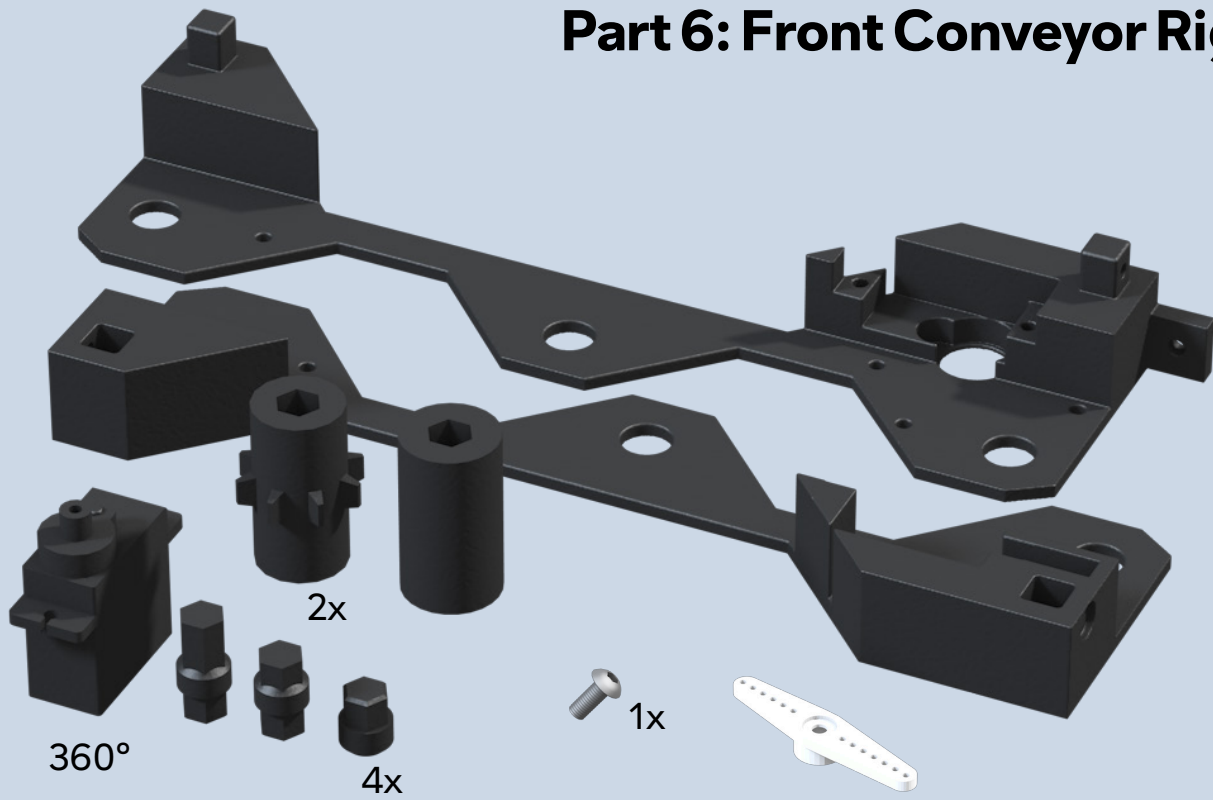
Part 5: The Robot Head

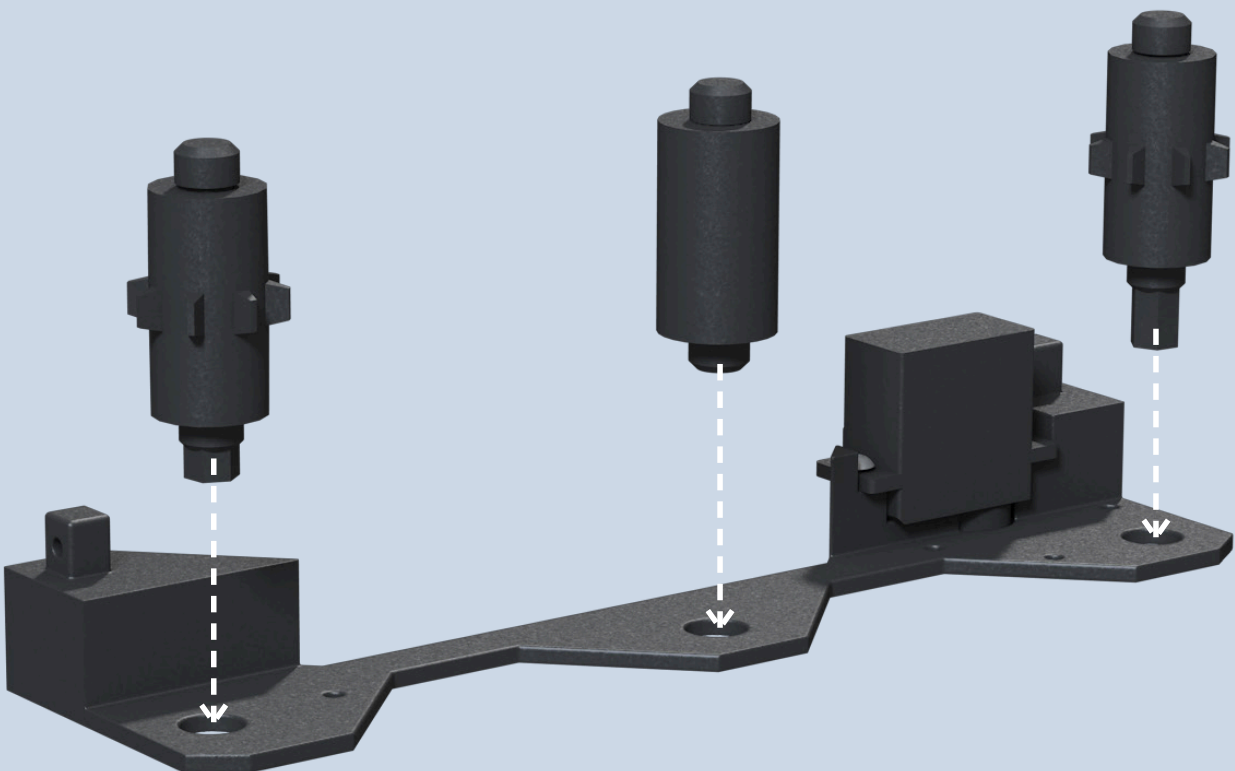
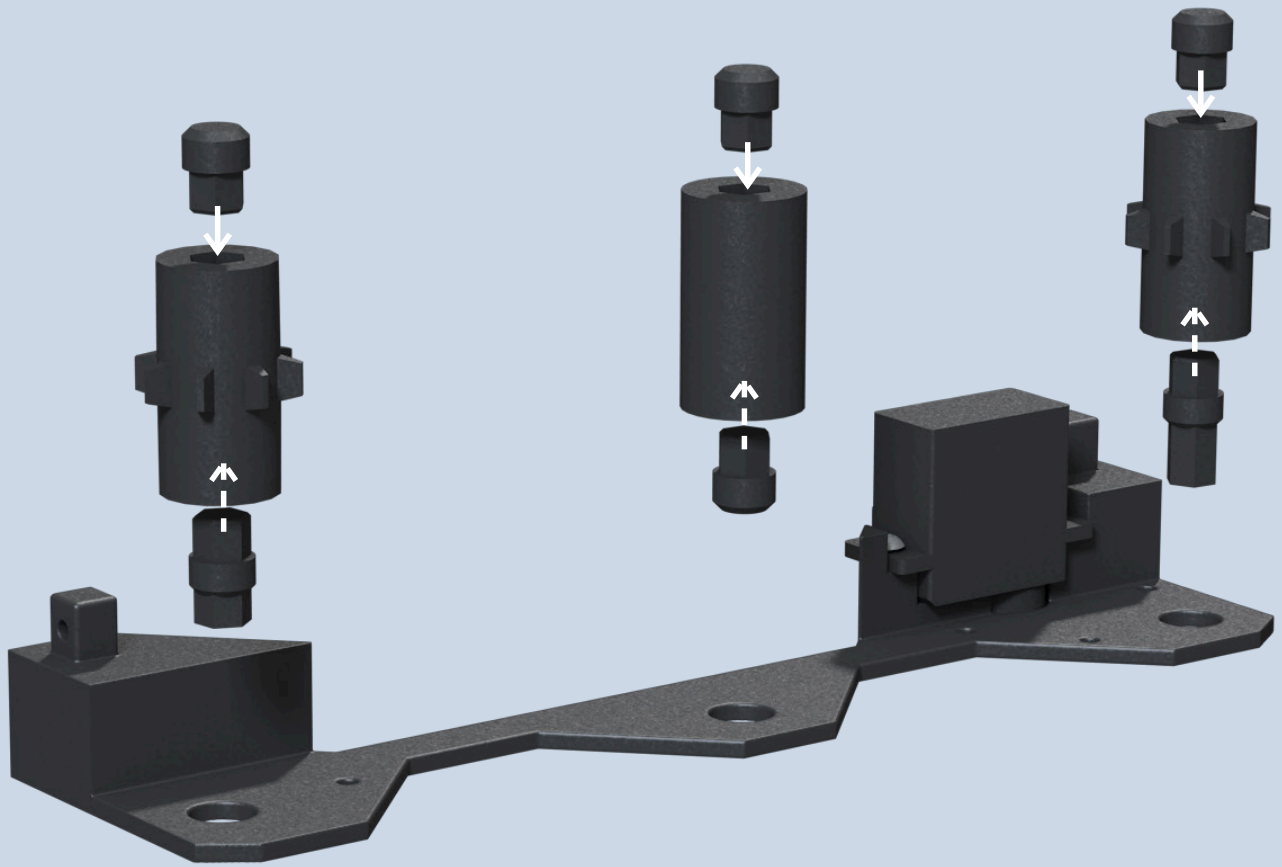


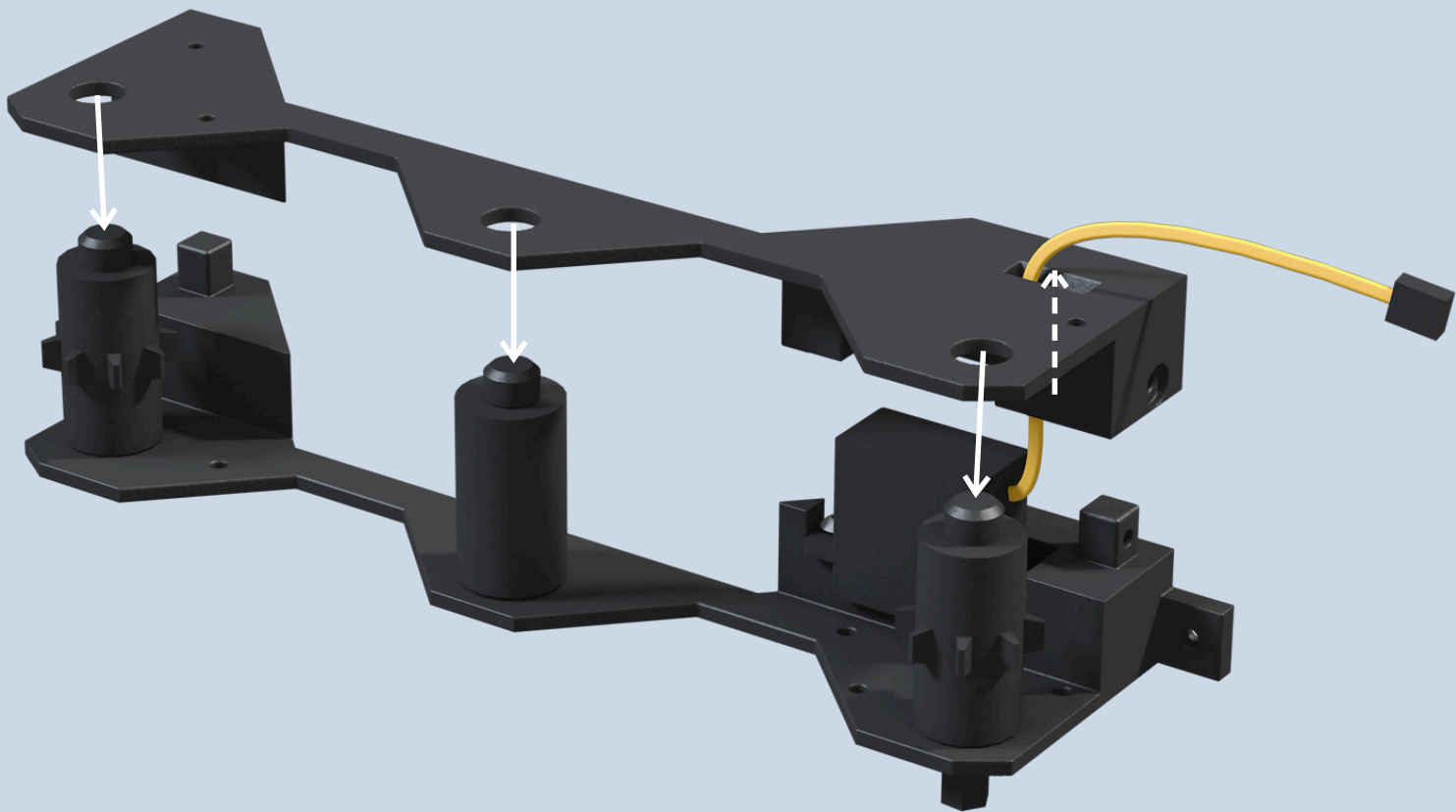
You can now test the robot's functions on the rail. Connect it to the ports shown on page 1.



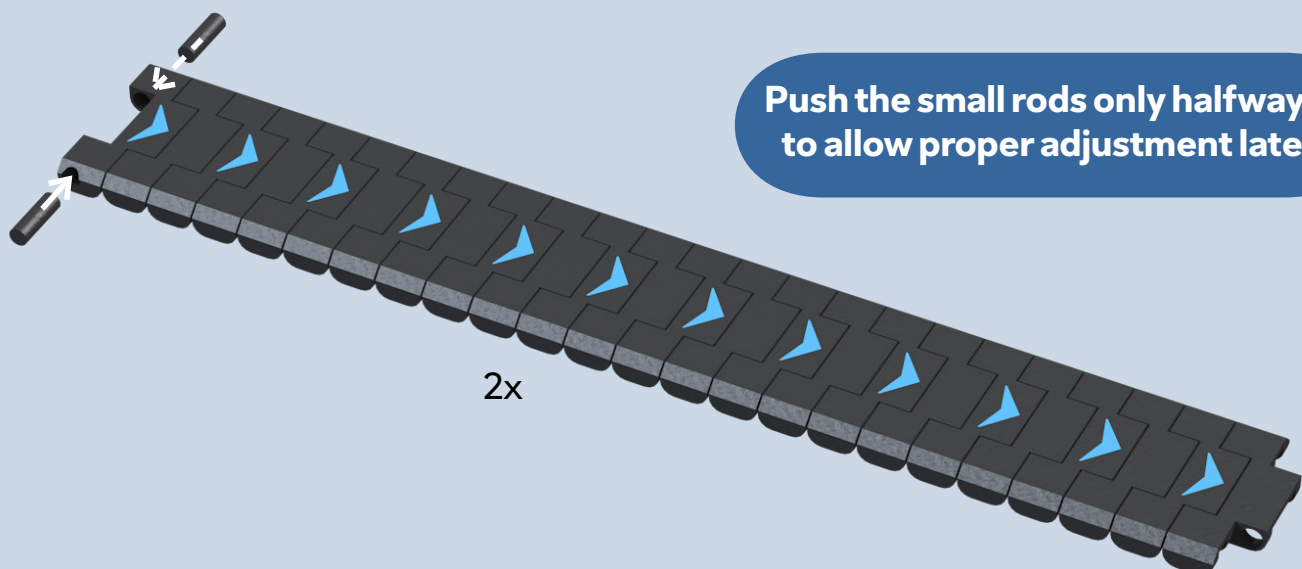
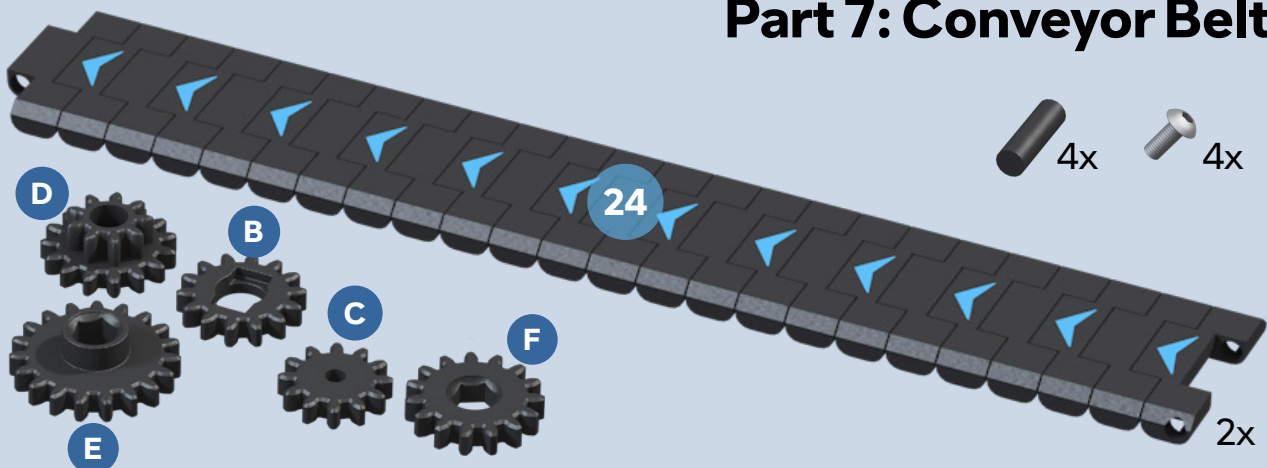
Part 6: Front Conveyor Right





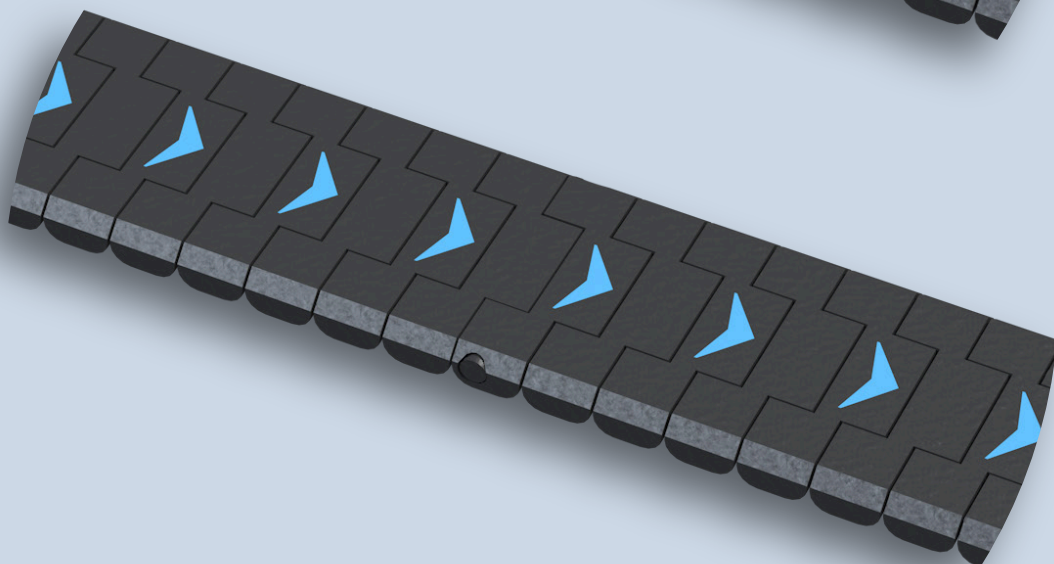
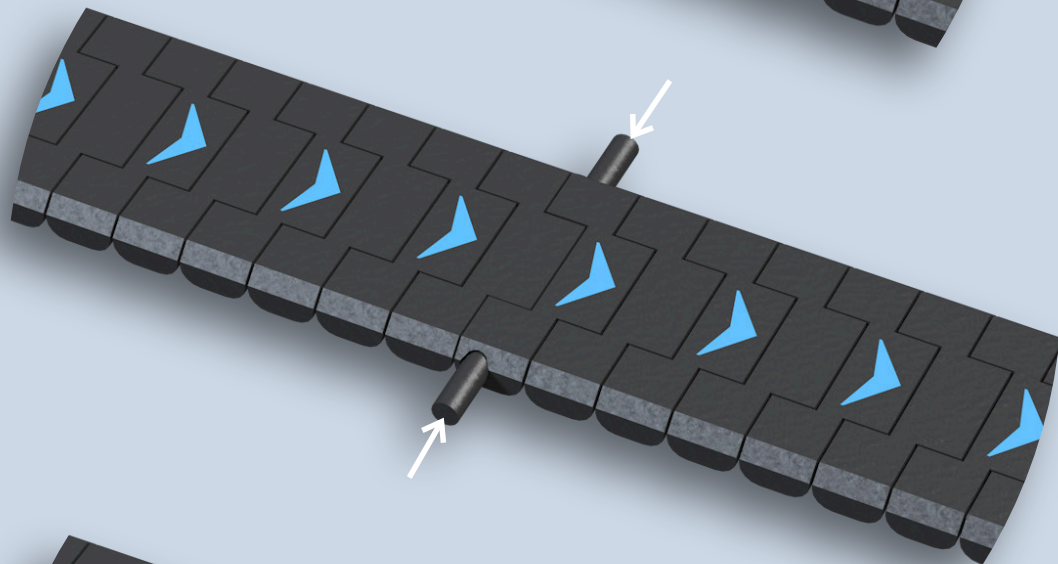
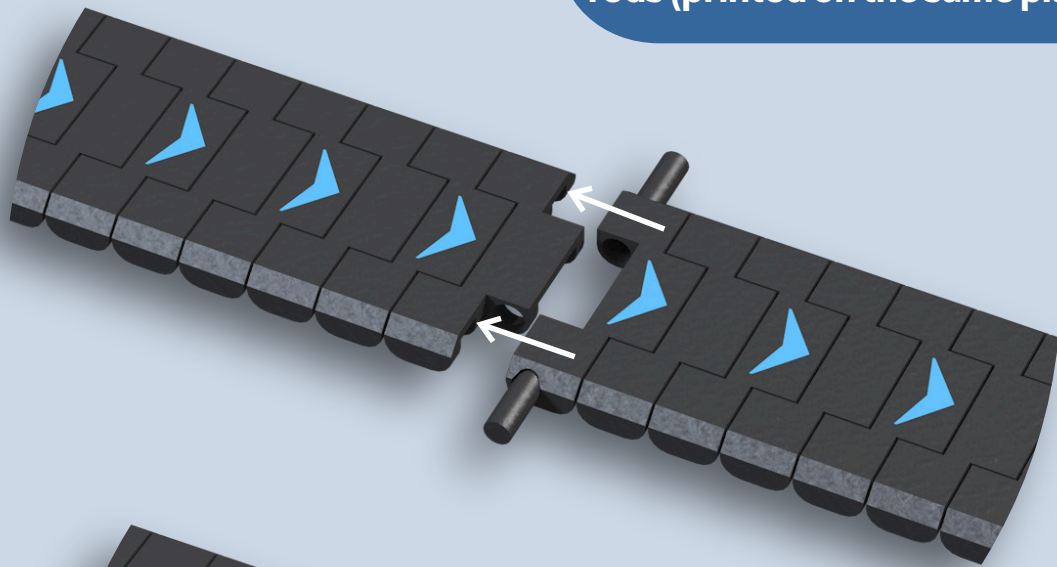


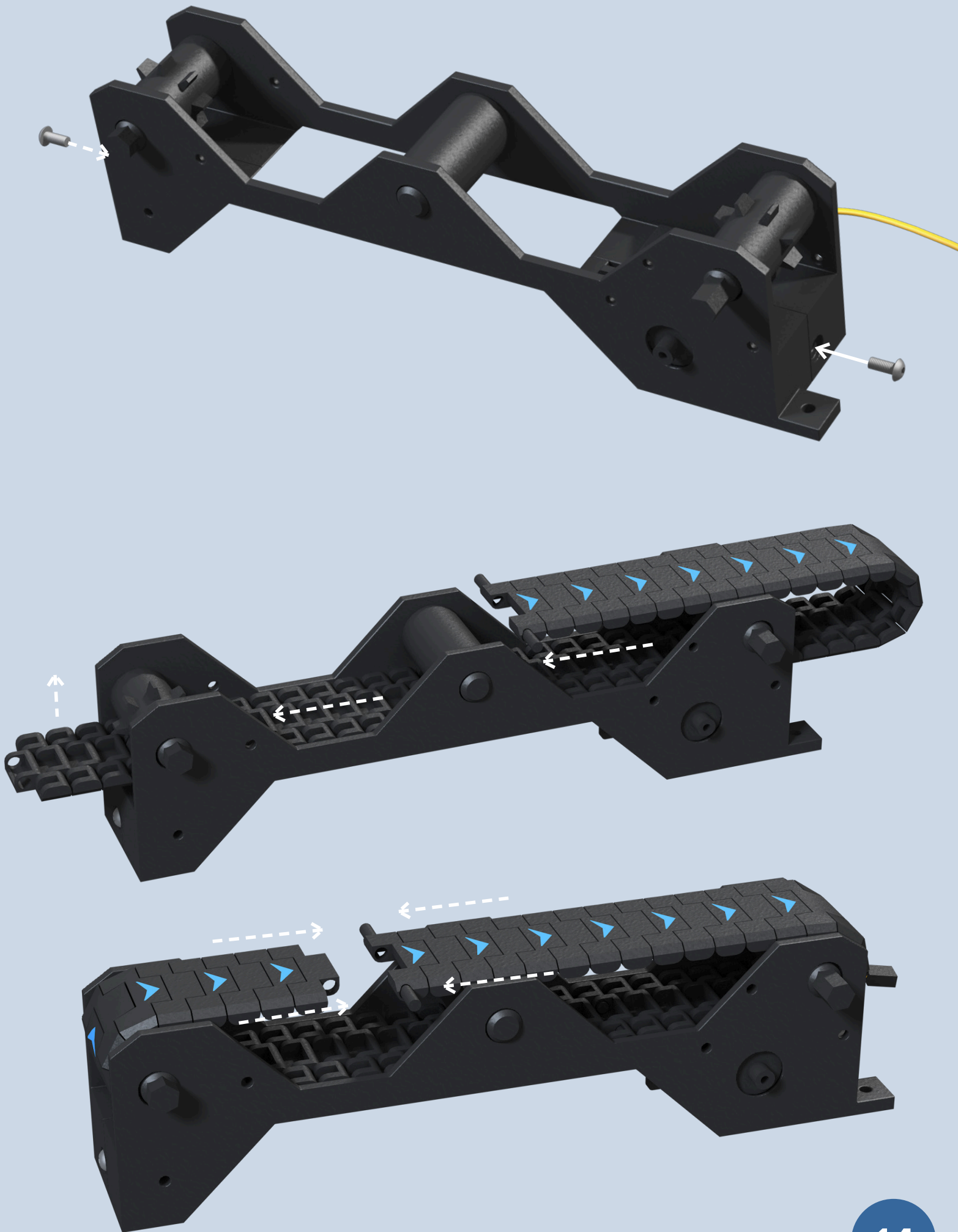
Part 7: Conveyor Belts

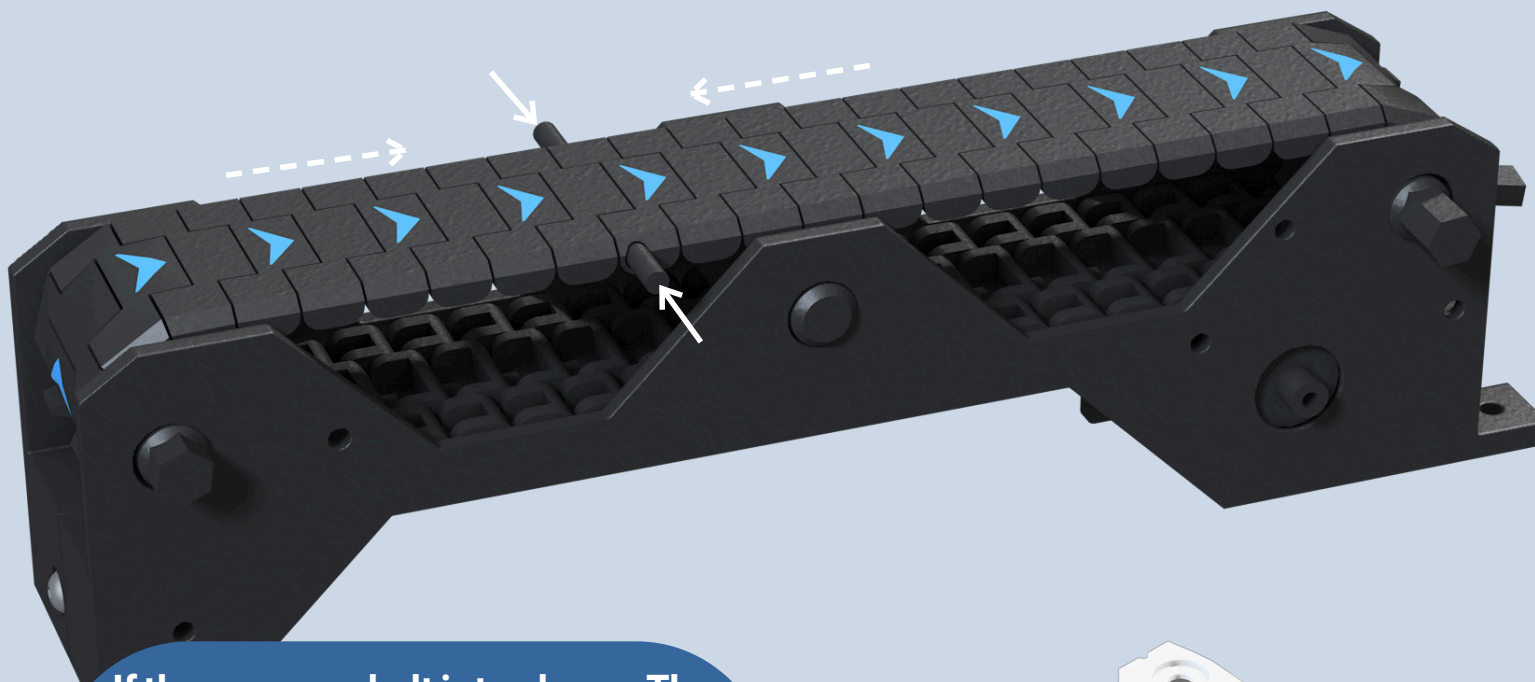


Push the small rods only halfway in to allow proper adjustment later.

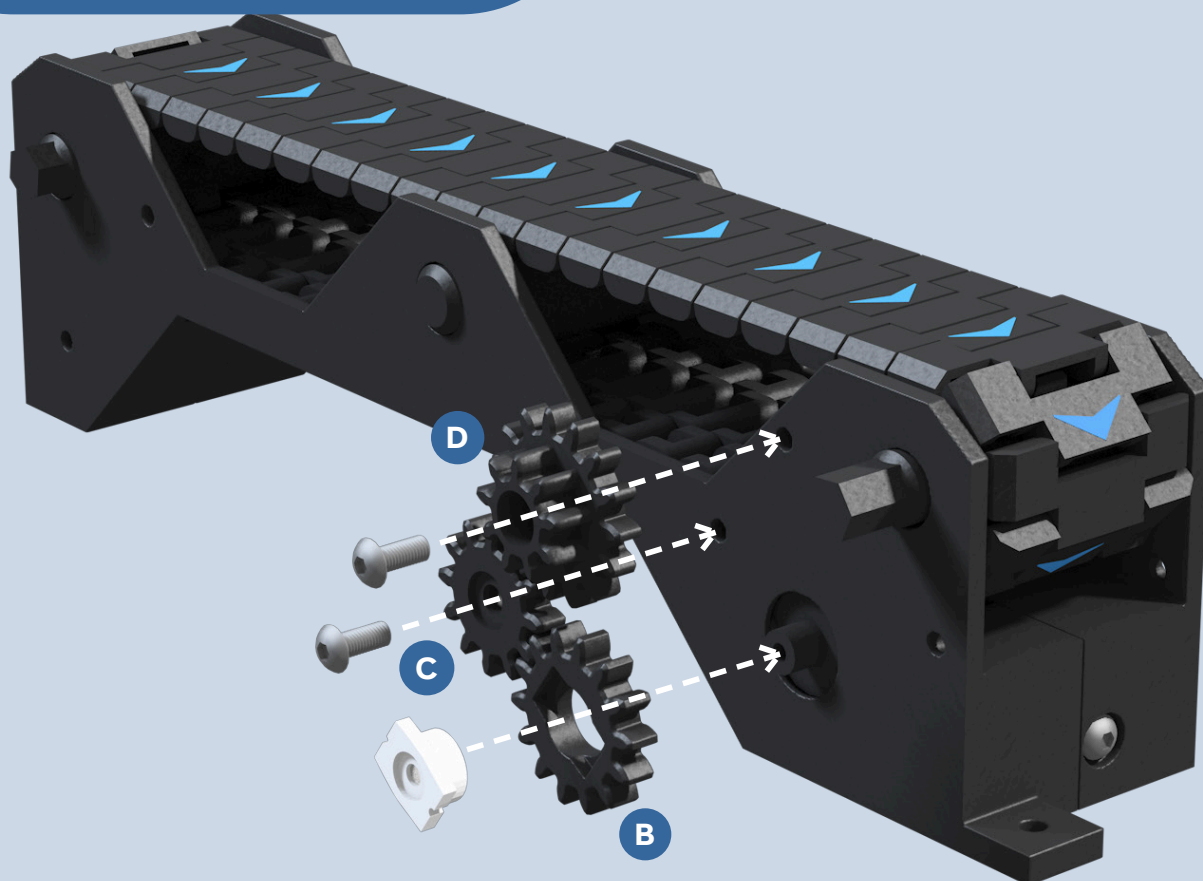
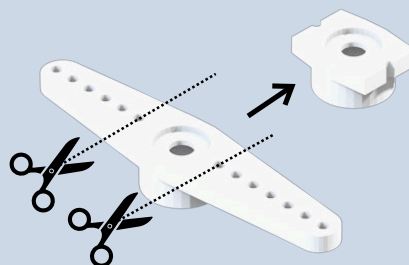
If the small rods don't hold good enough, take the optional long rods (printed on the same plate).

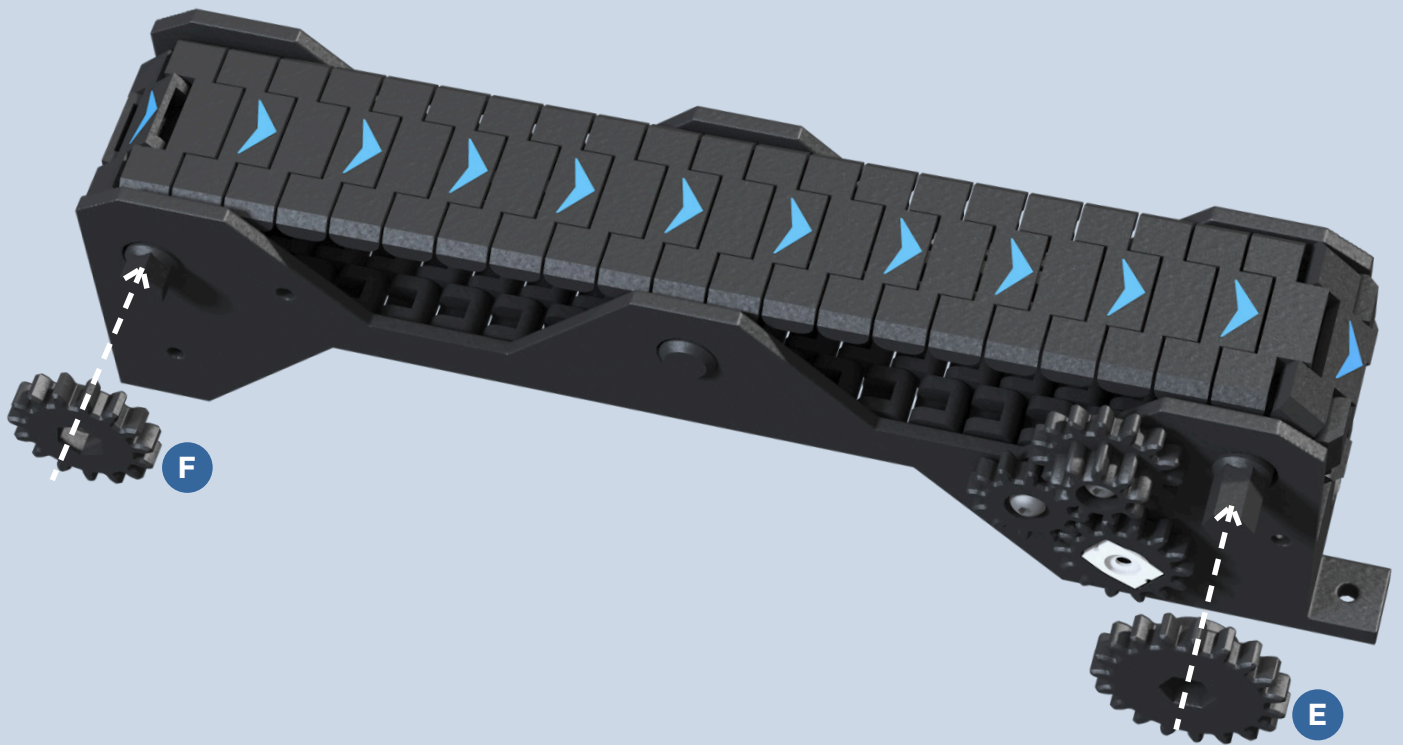
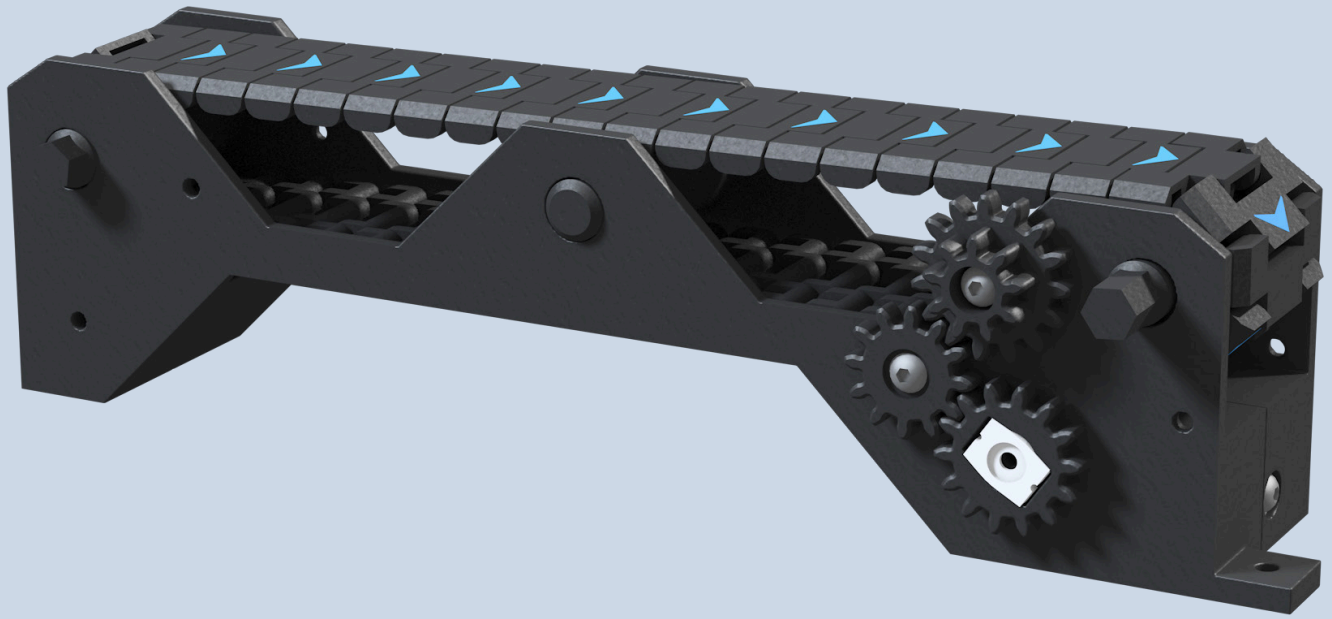






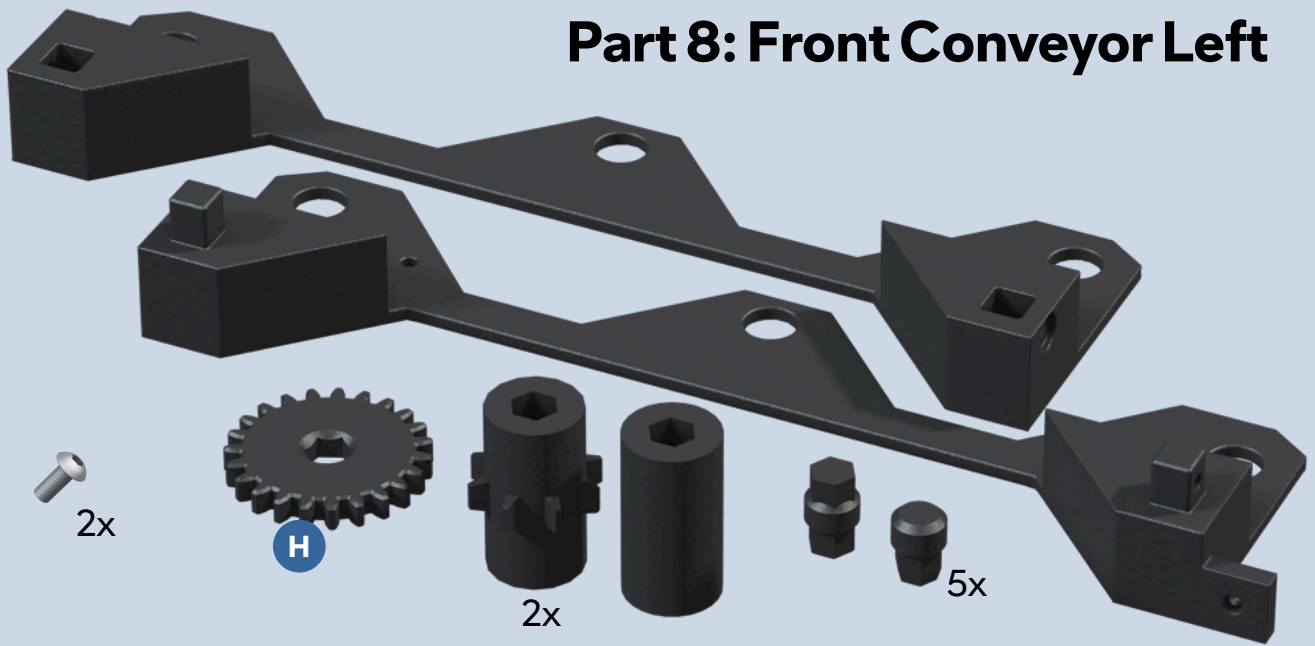
If the conveyor belt is too loose: The conveyor belt segments are modular and can be pulled apart easily. Simply grip them firmly and pull them apart. You can then remove one or two segments and clip the belt back together to check if the fit improves.



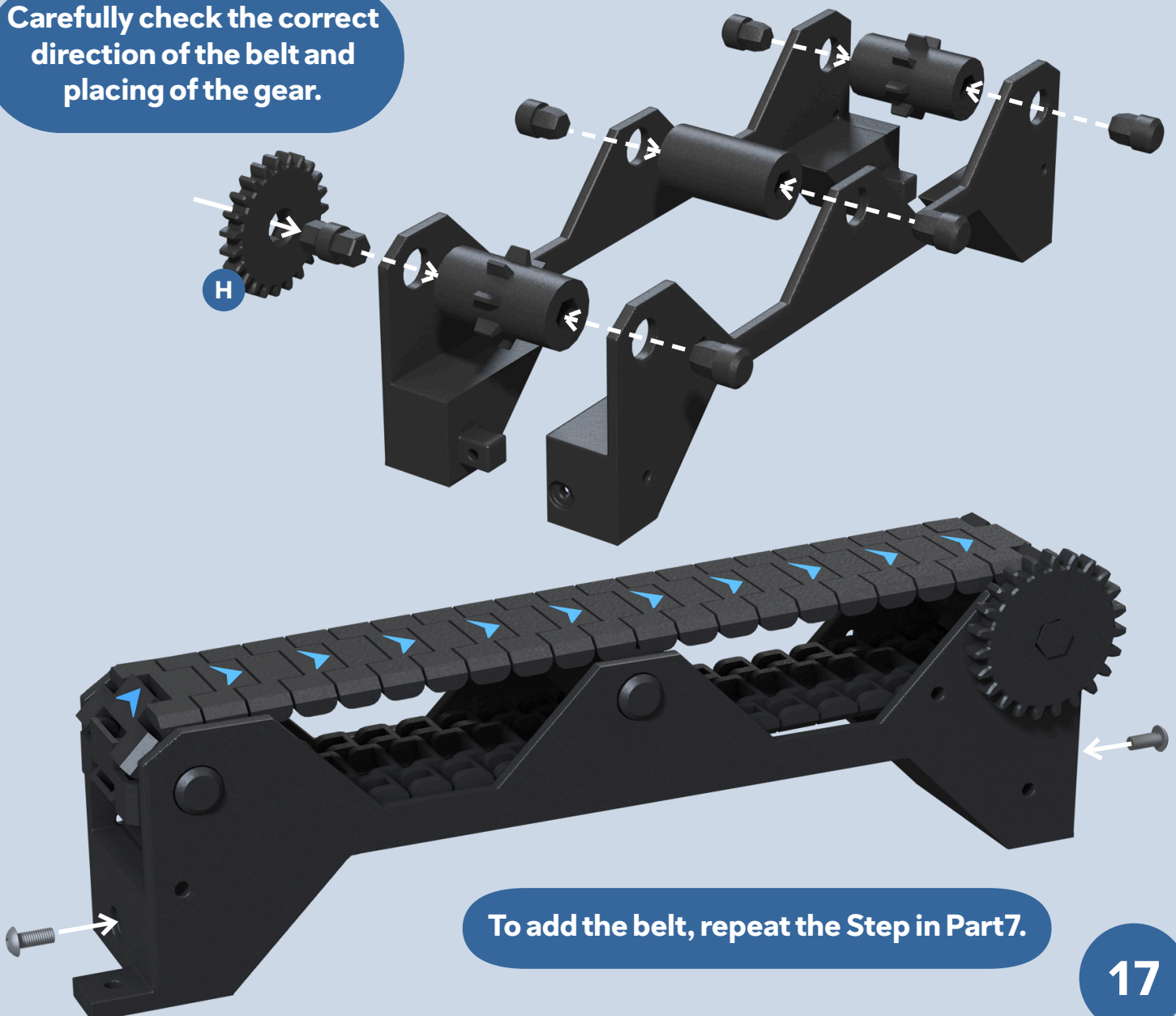


TEST IT: Remove the gear from the servo shaft and move the belt and gears by hand. If the movement feels heavy, try to locate the friction point. Check whether any screws are tightened too much, or apply a small amount of lubricant if necessary.

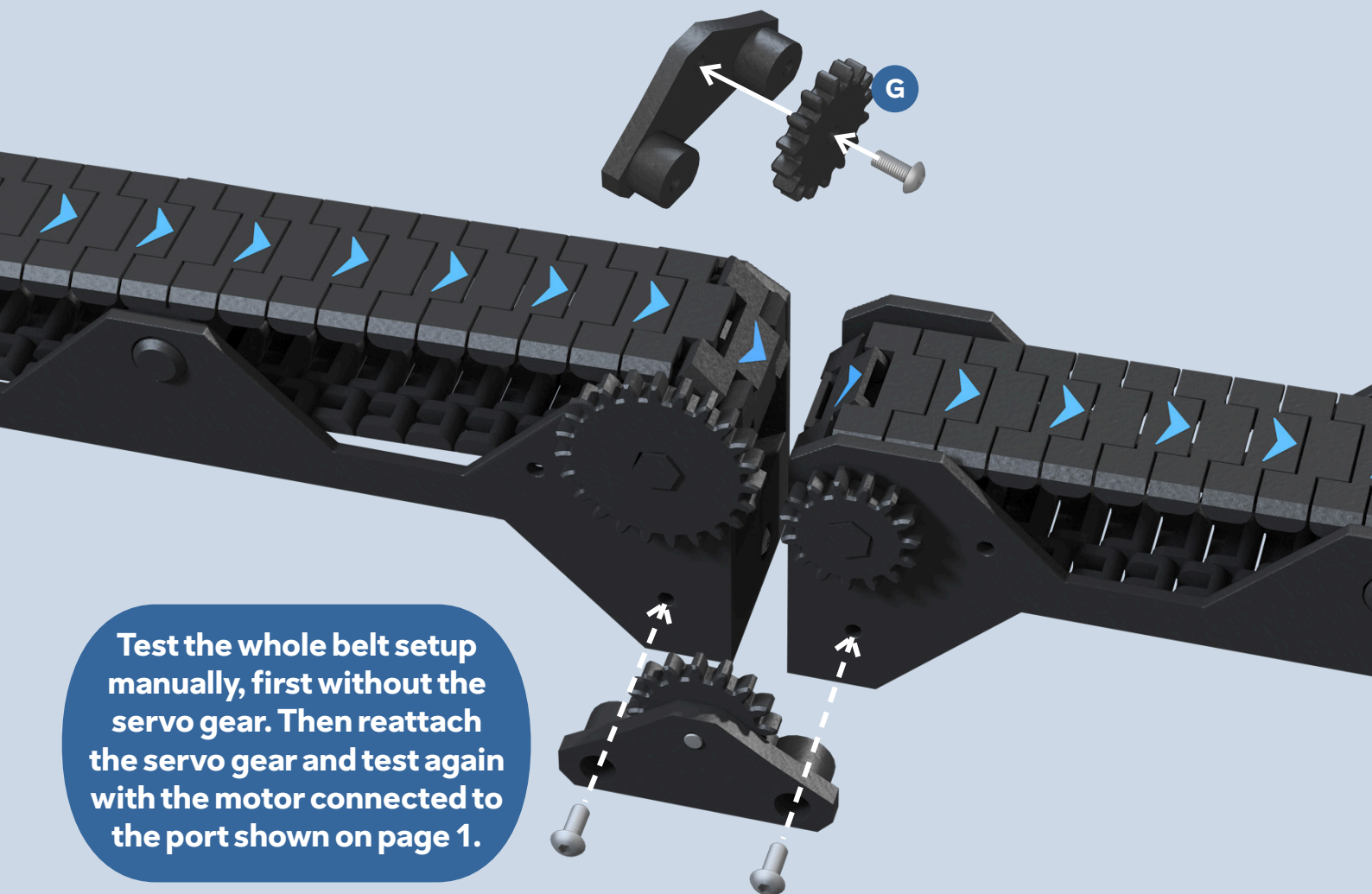
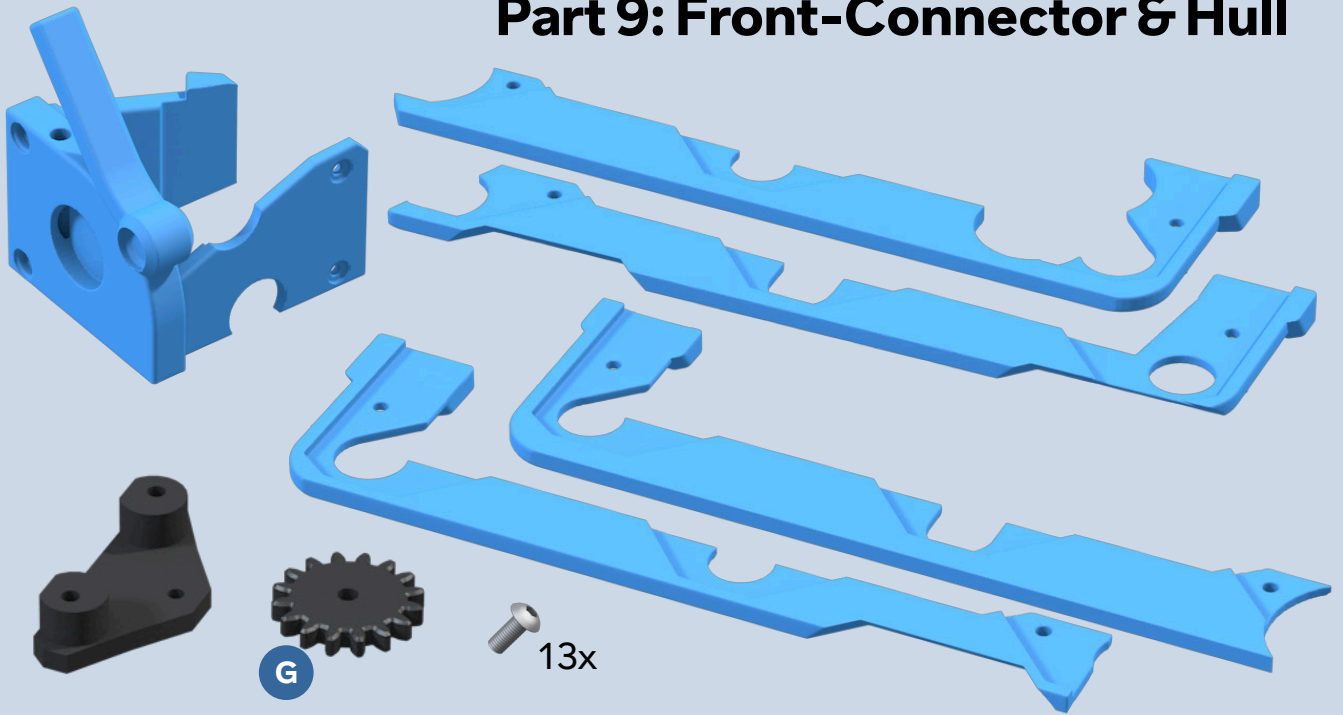
Part 8: Front Conveyor Left

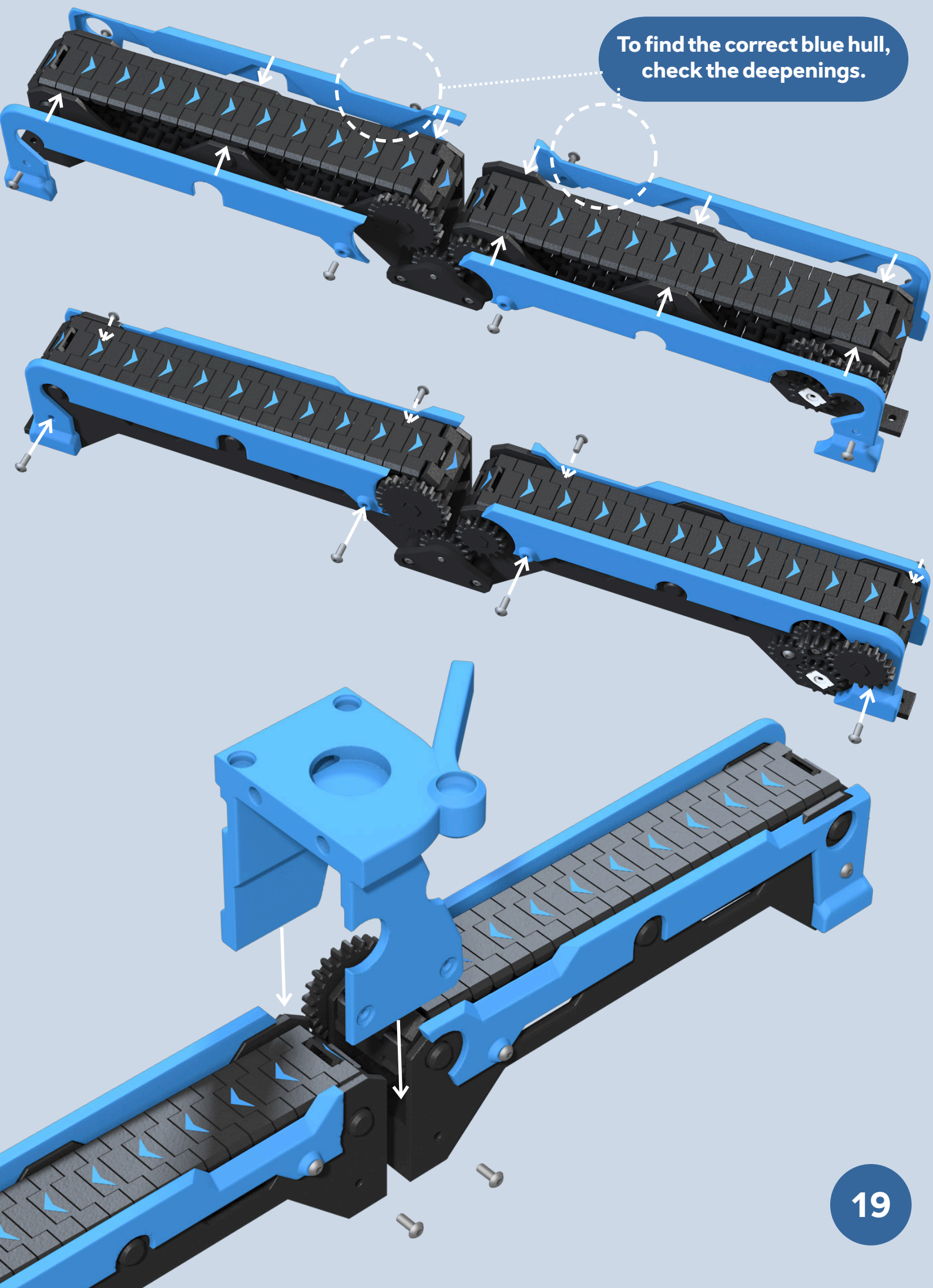


Carefully check the correct direction of the belt and placing of the gear.

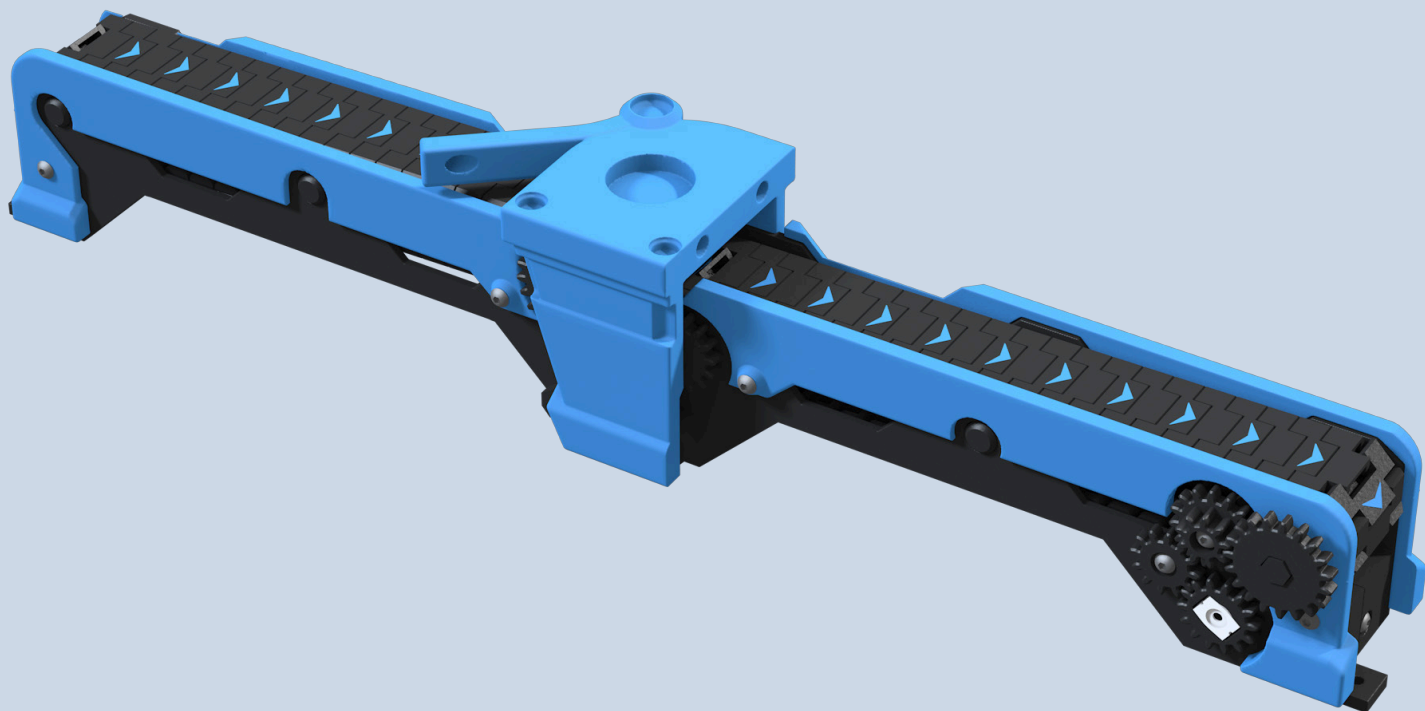
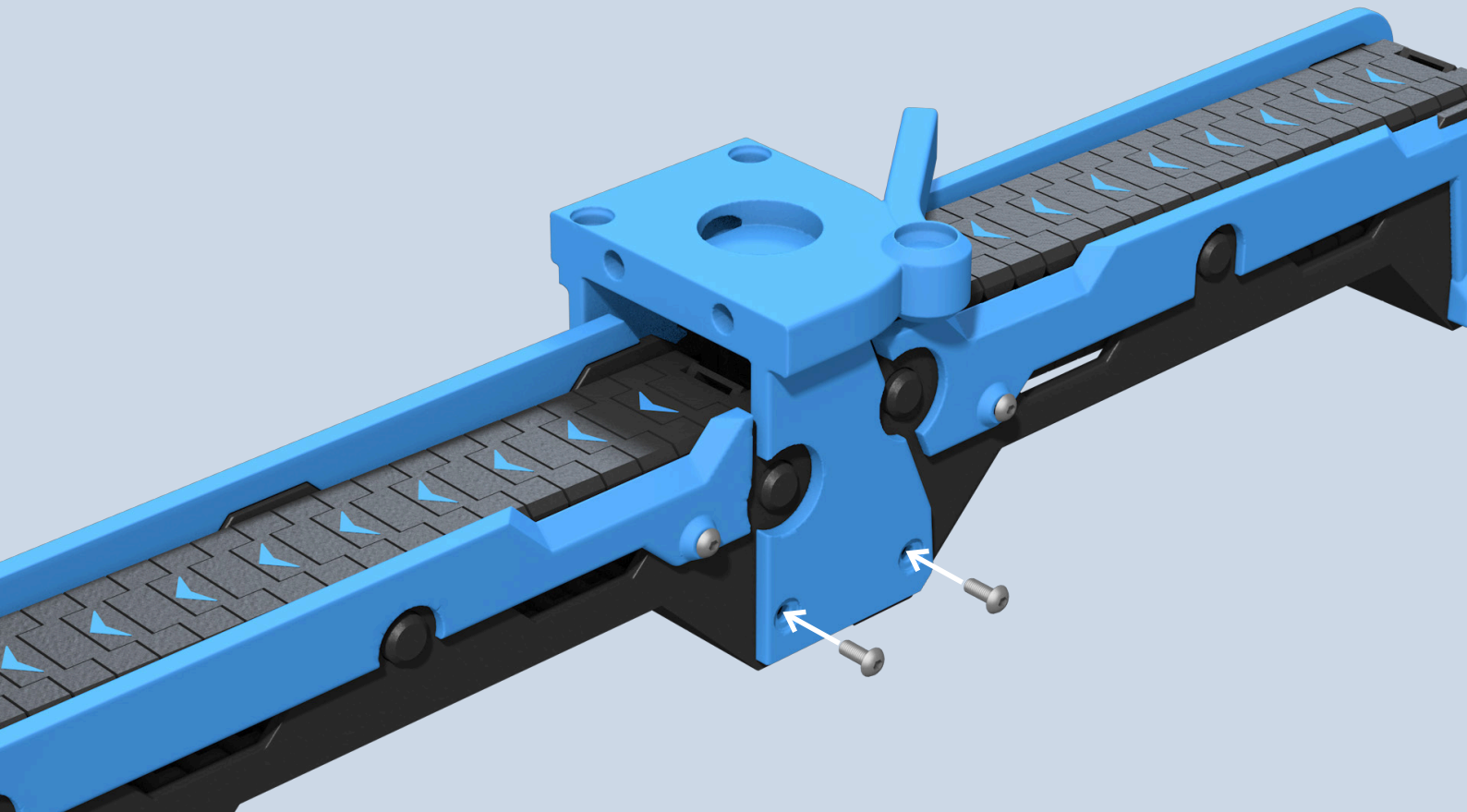


Part 9: Front-Connector & Hull



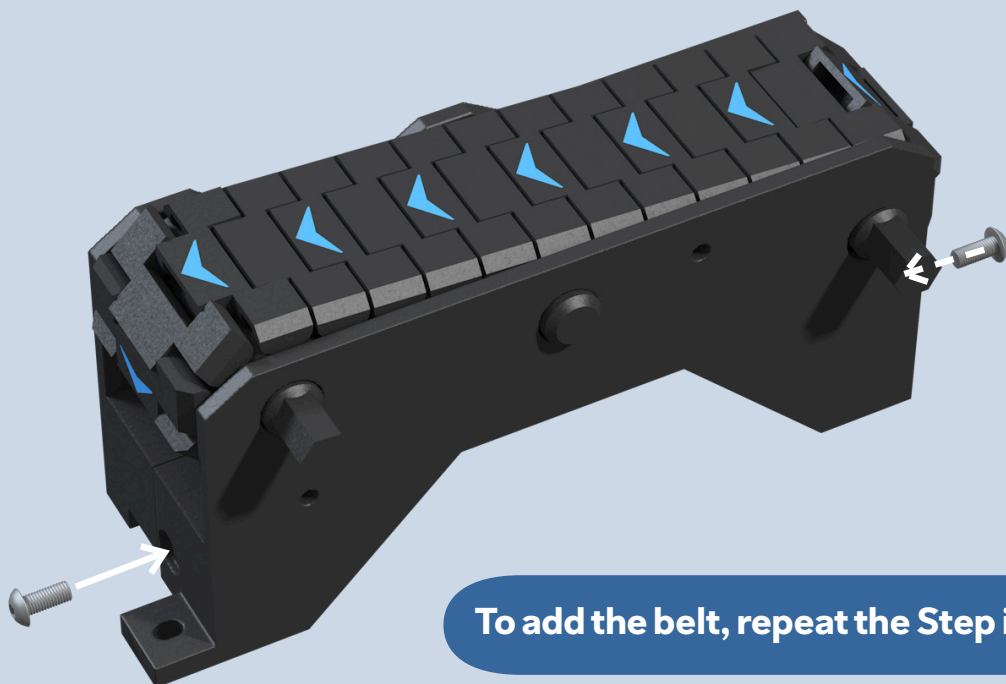


To find the correct blue hull,
check the deepening.

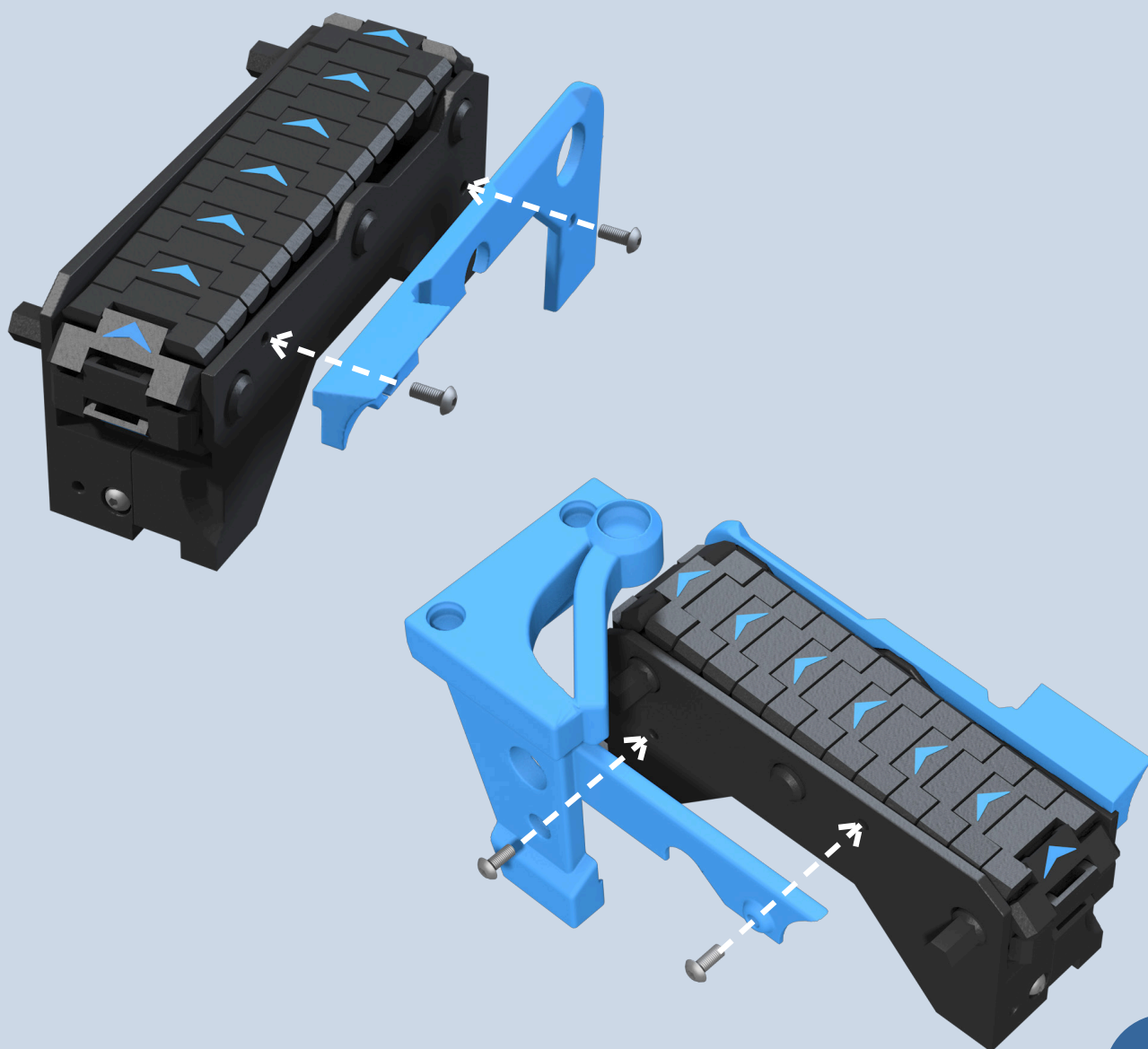


30

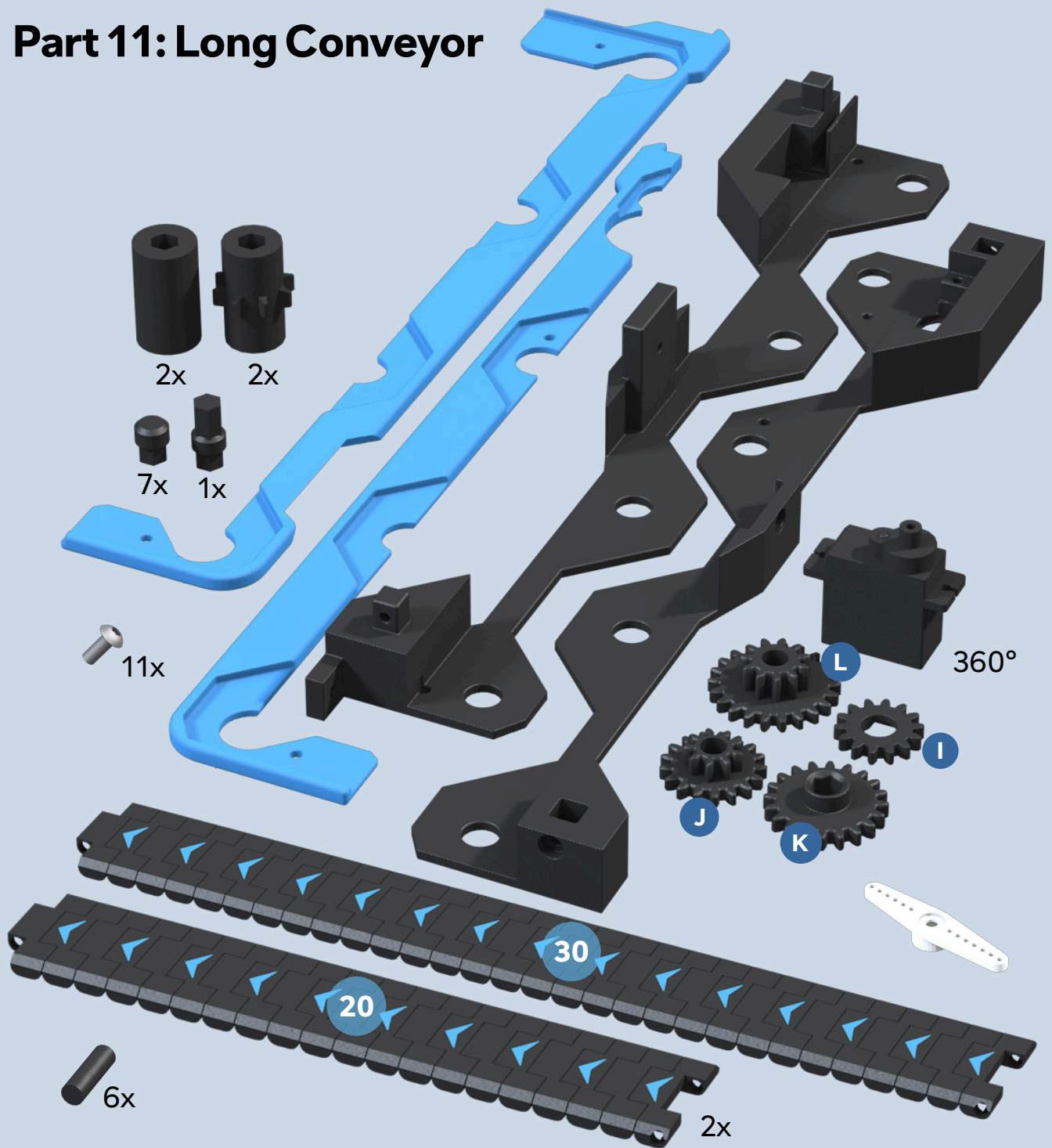




To add the belt, repeat the Step in Part 7.

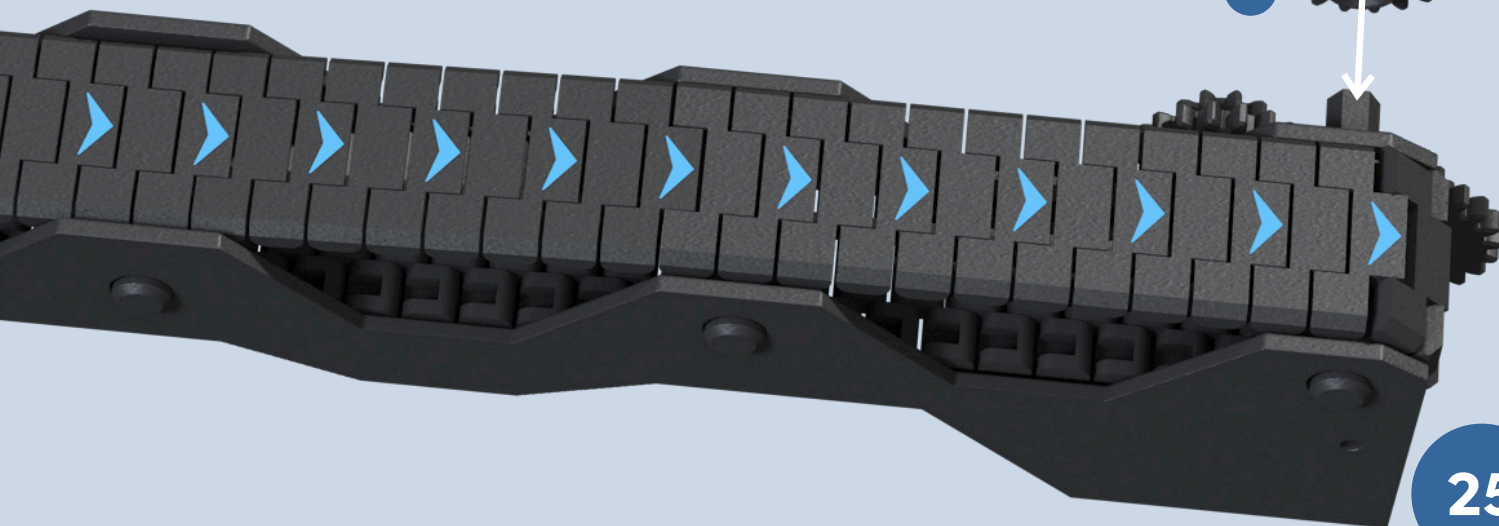
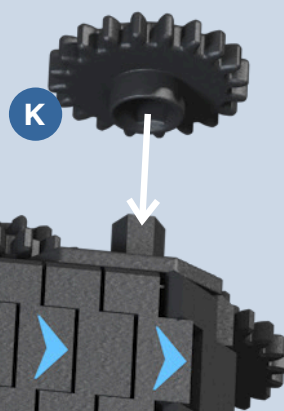
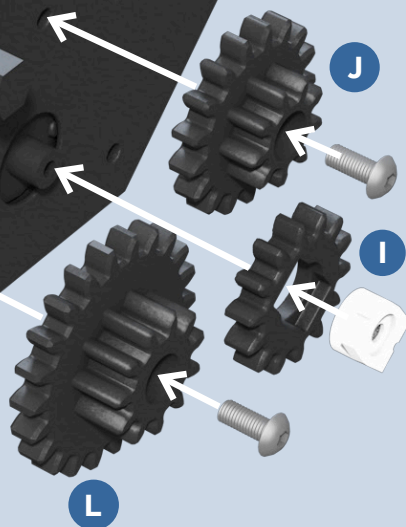
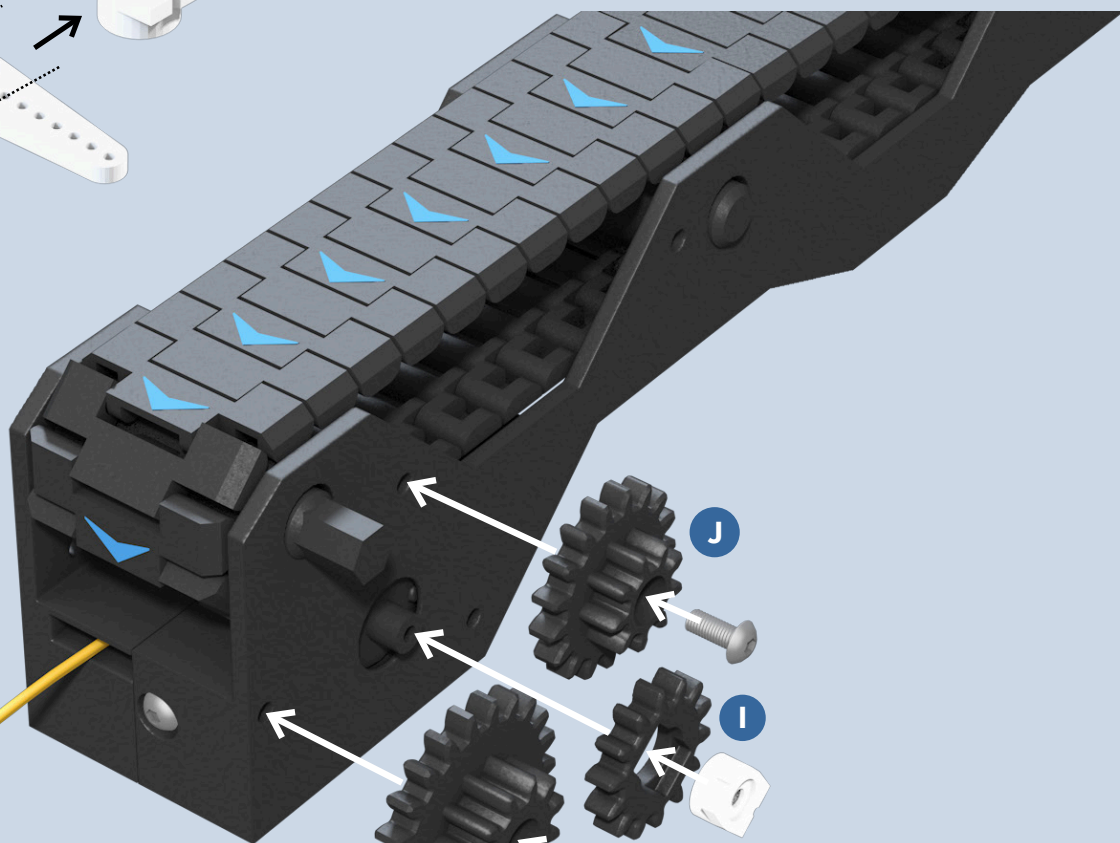
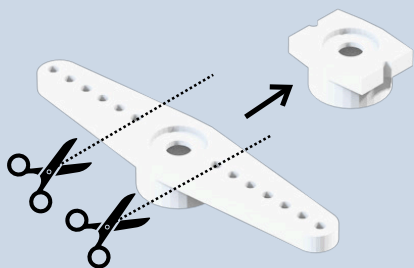
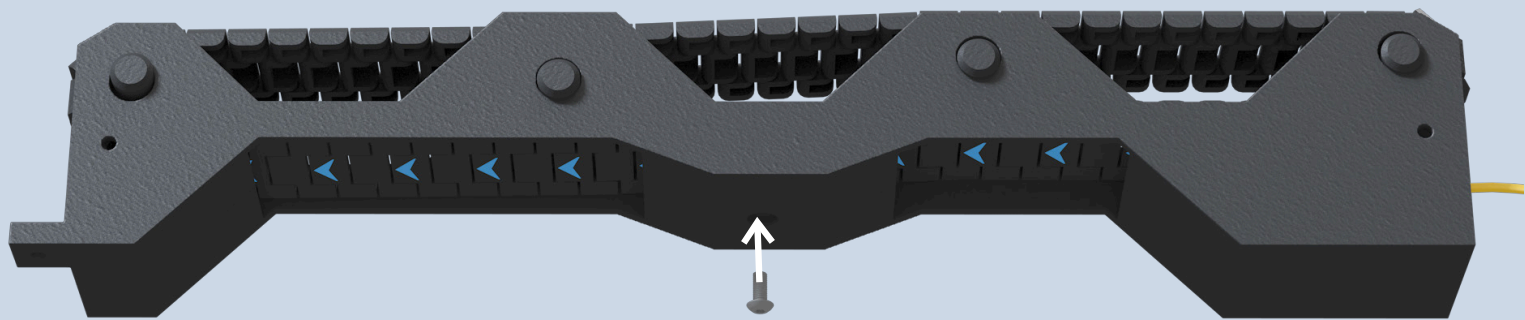


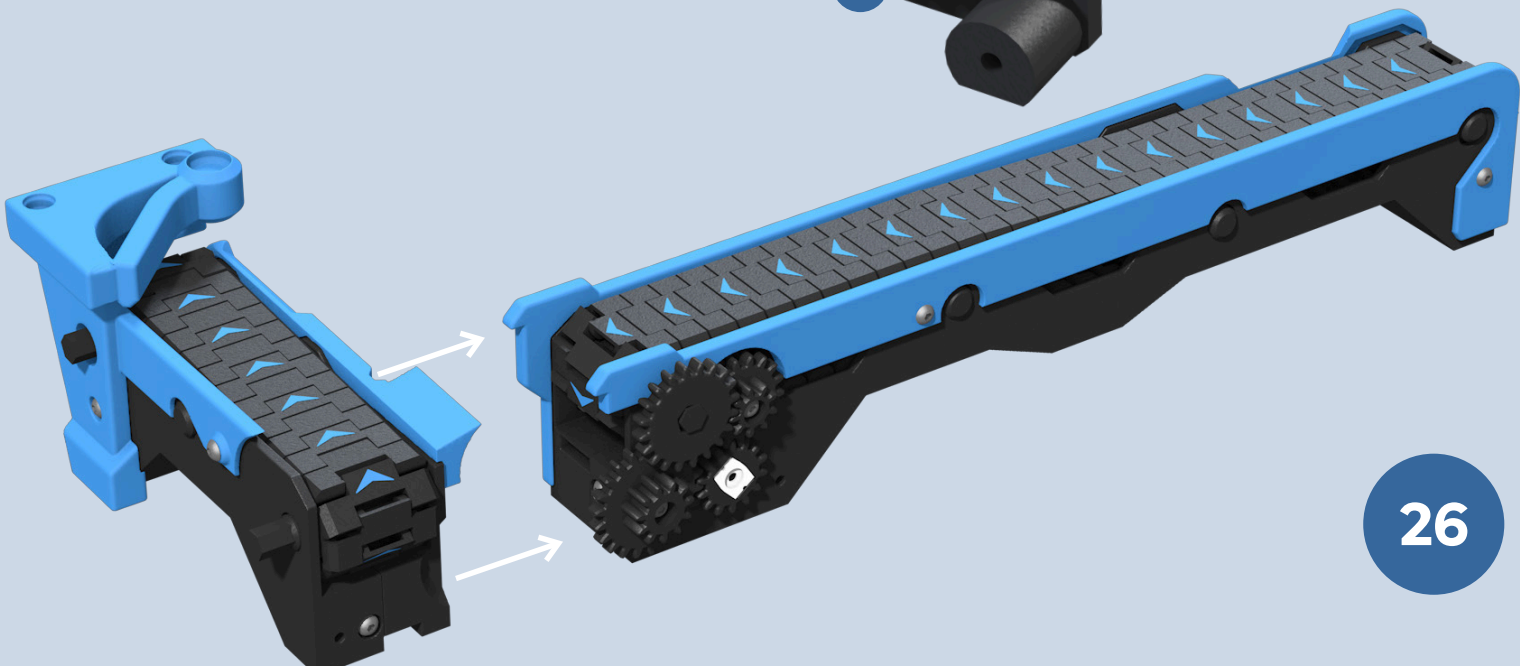
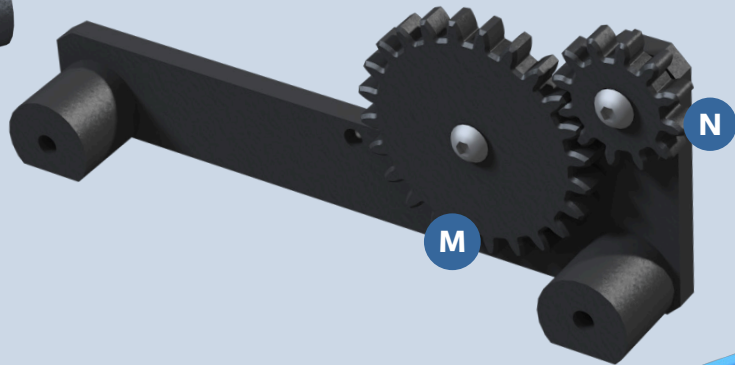
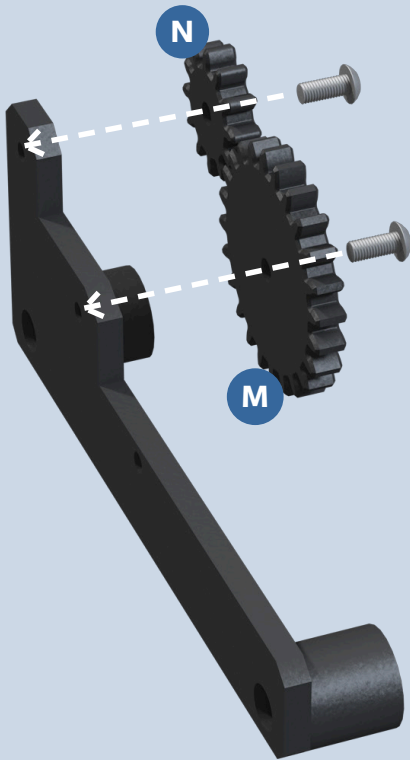
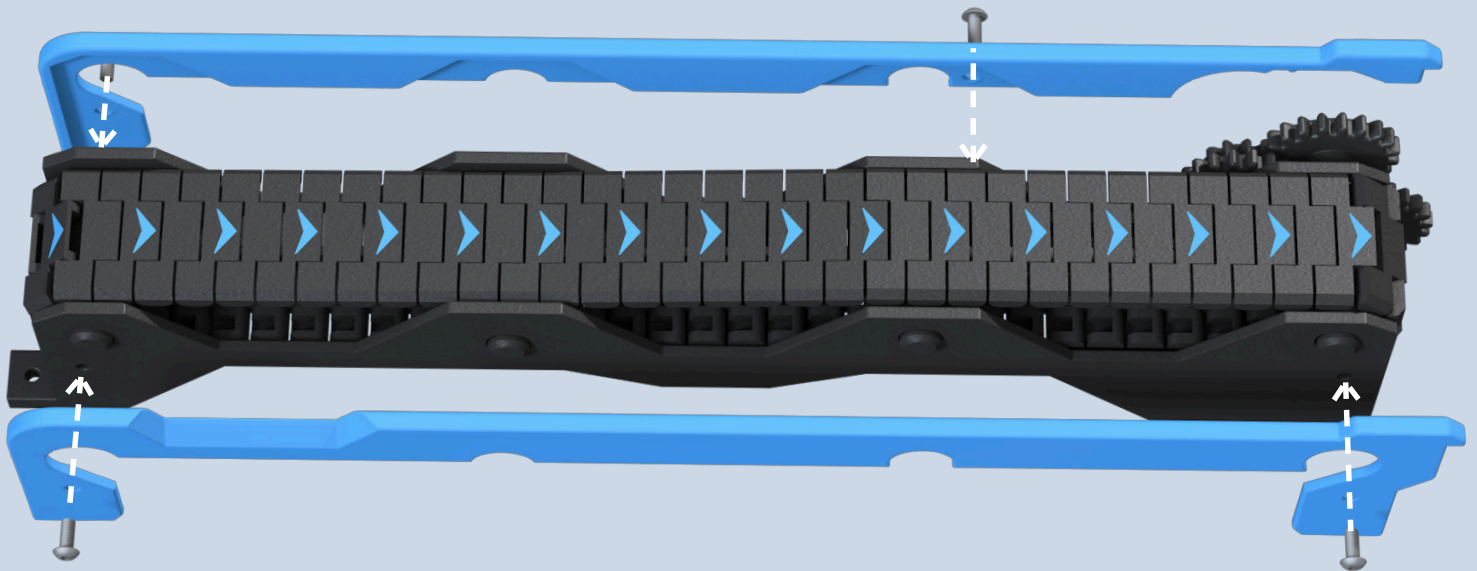
Part 11: Long Conveyor





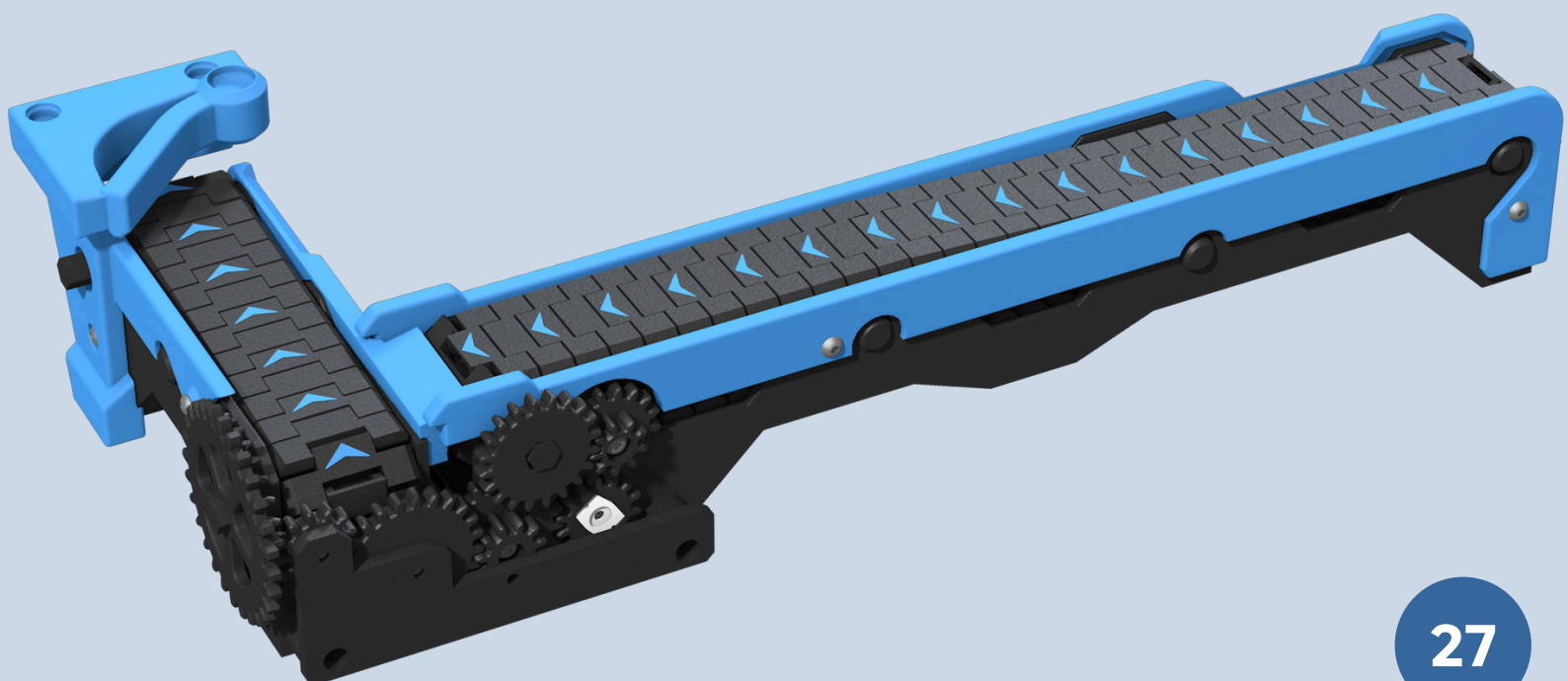
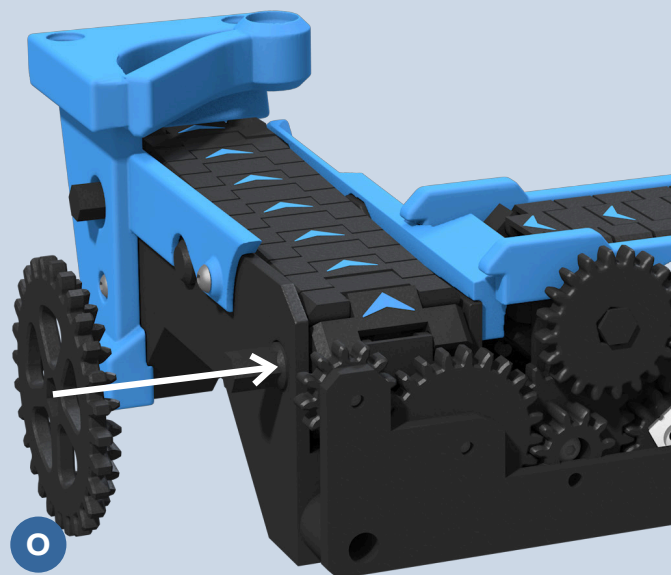
To add the belt, repeat the Step in Part7. First connect the 3 belts (30/20/20), then place it in the conveyor and connect it.



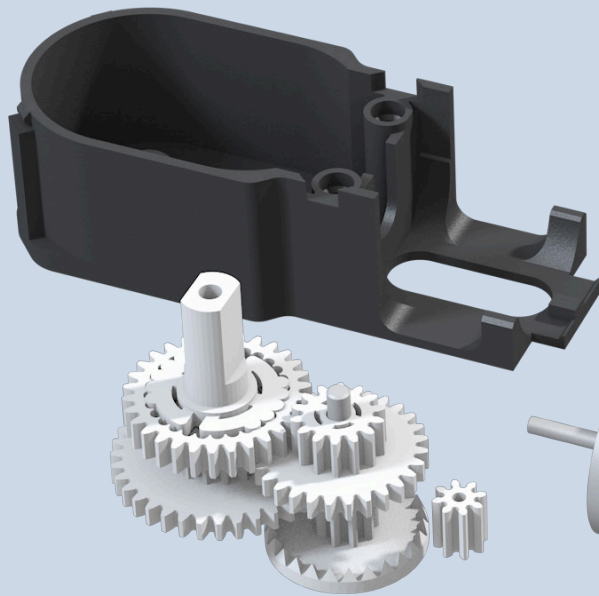




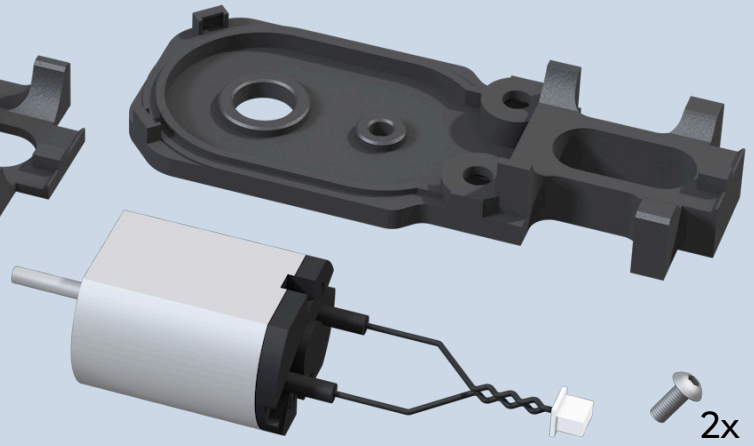
Test the conveyor belt setup
and apply lubricant to any parts
that need it.



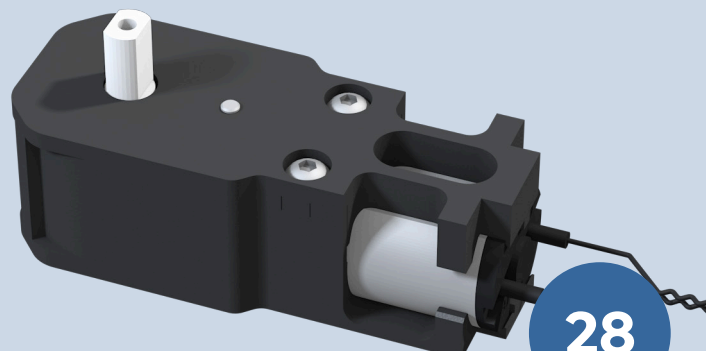
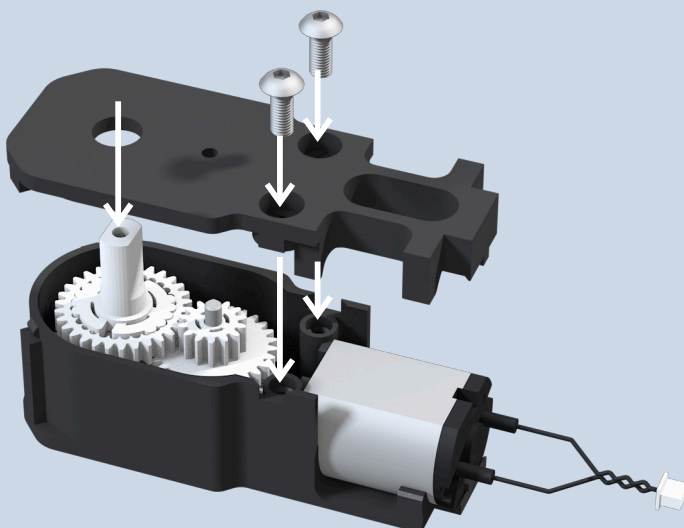
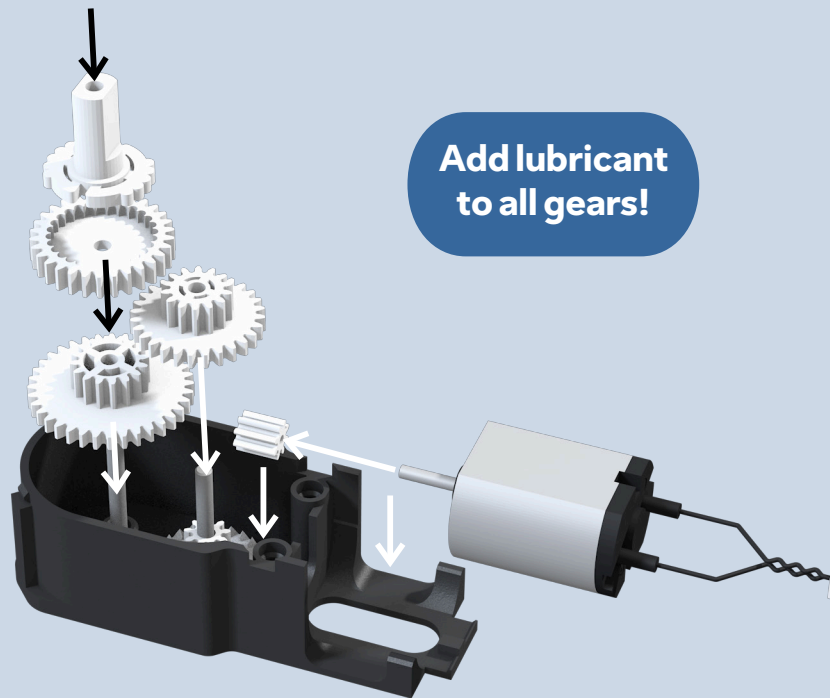
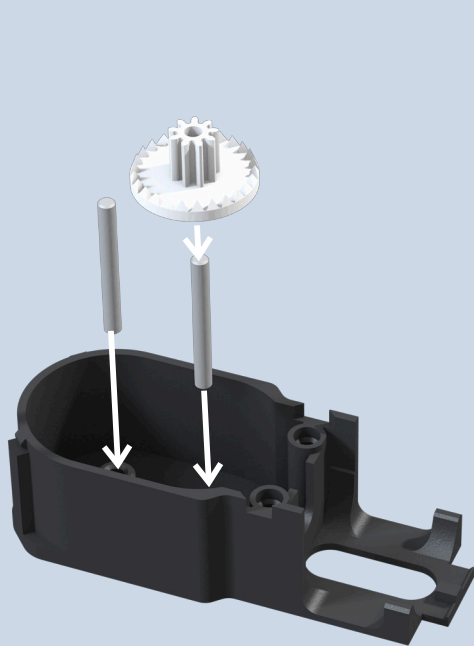
Part 13: Motorblock



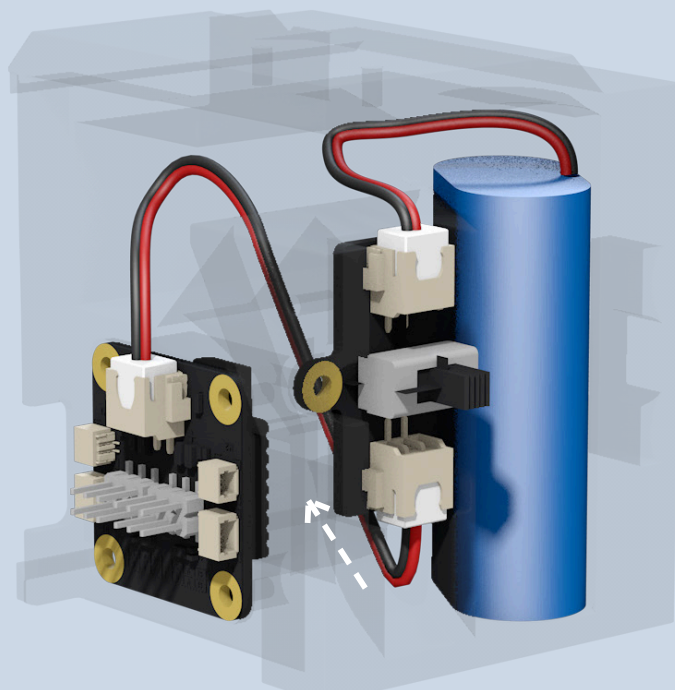
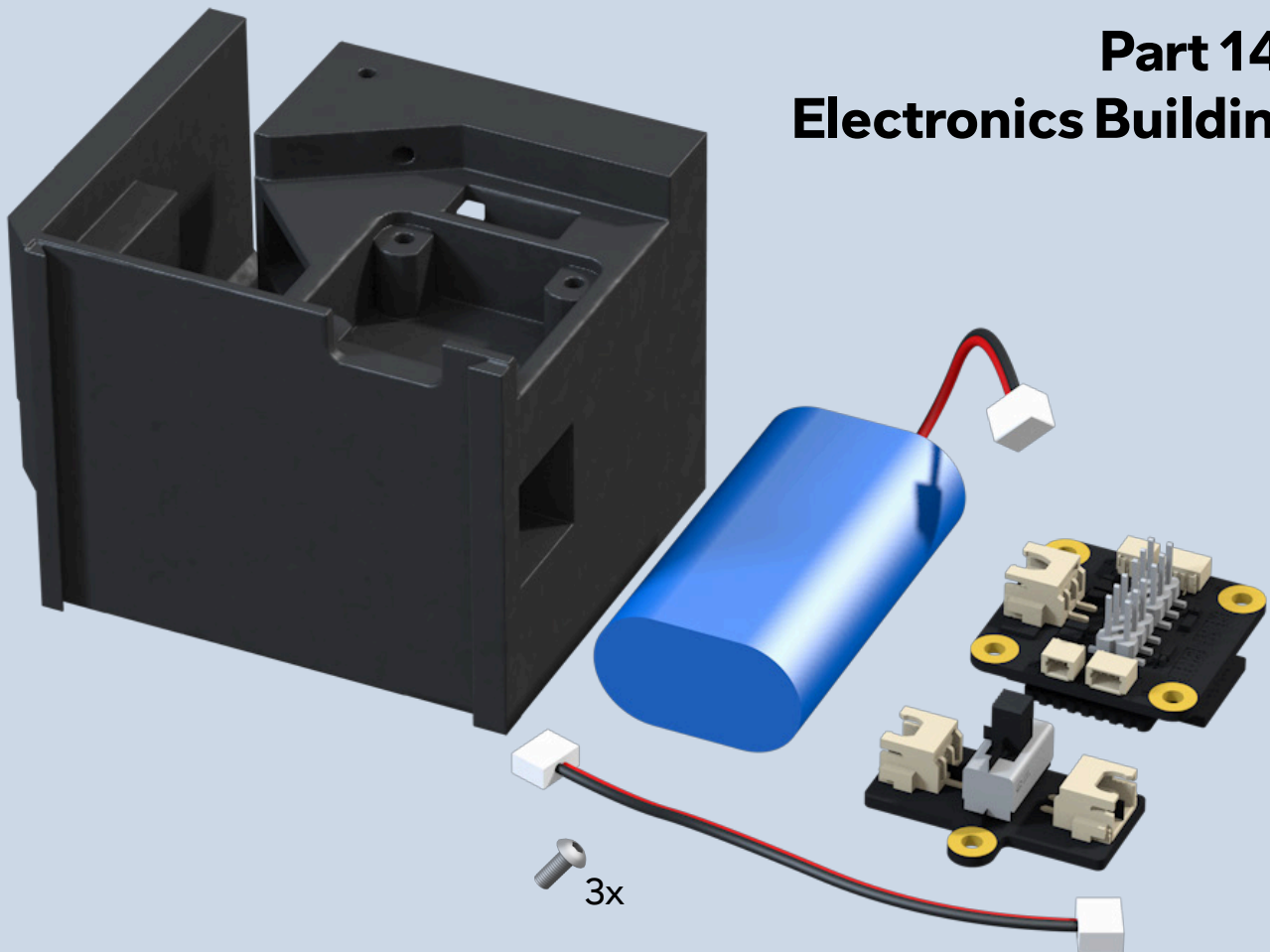
1:48 Reduction Gear Kit



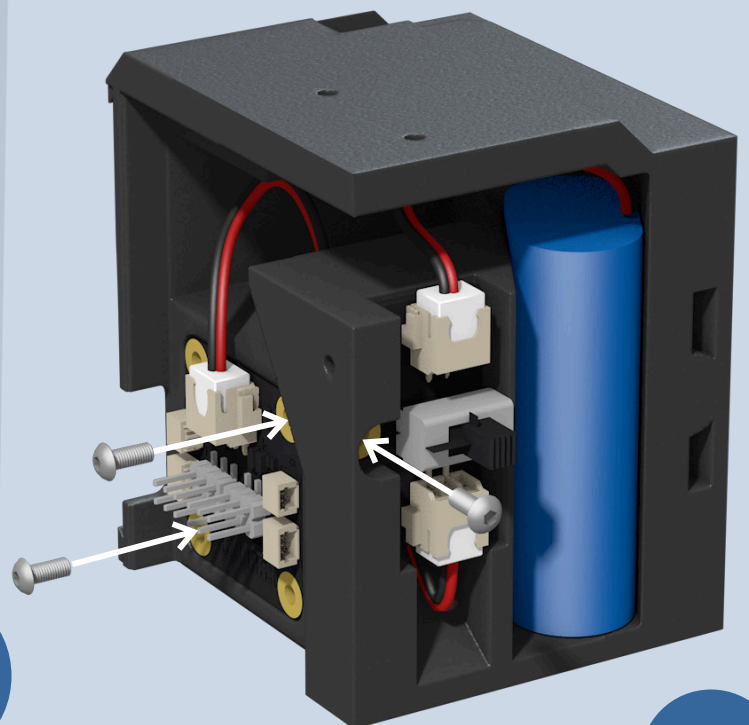
030 DC Motor



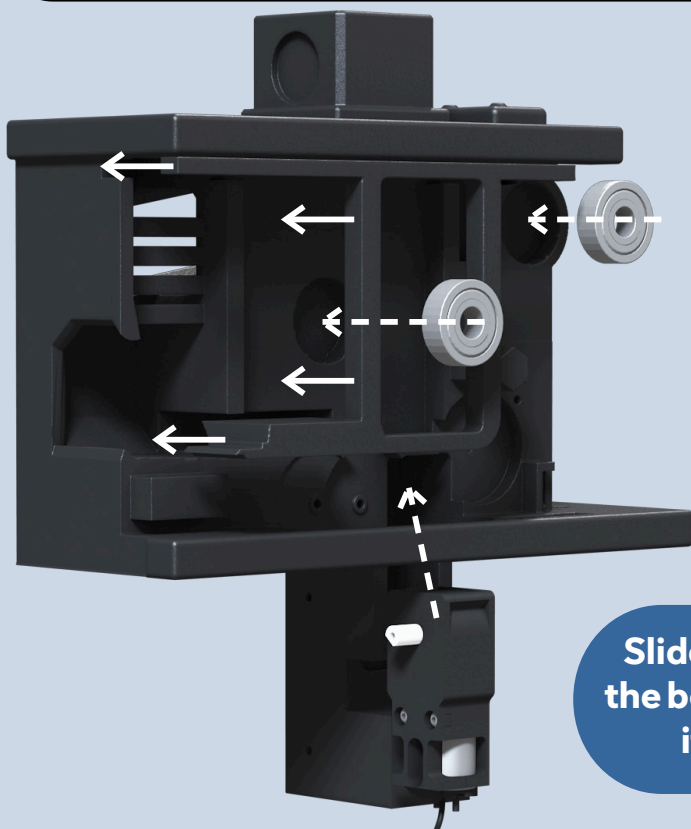
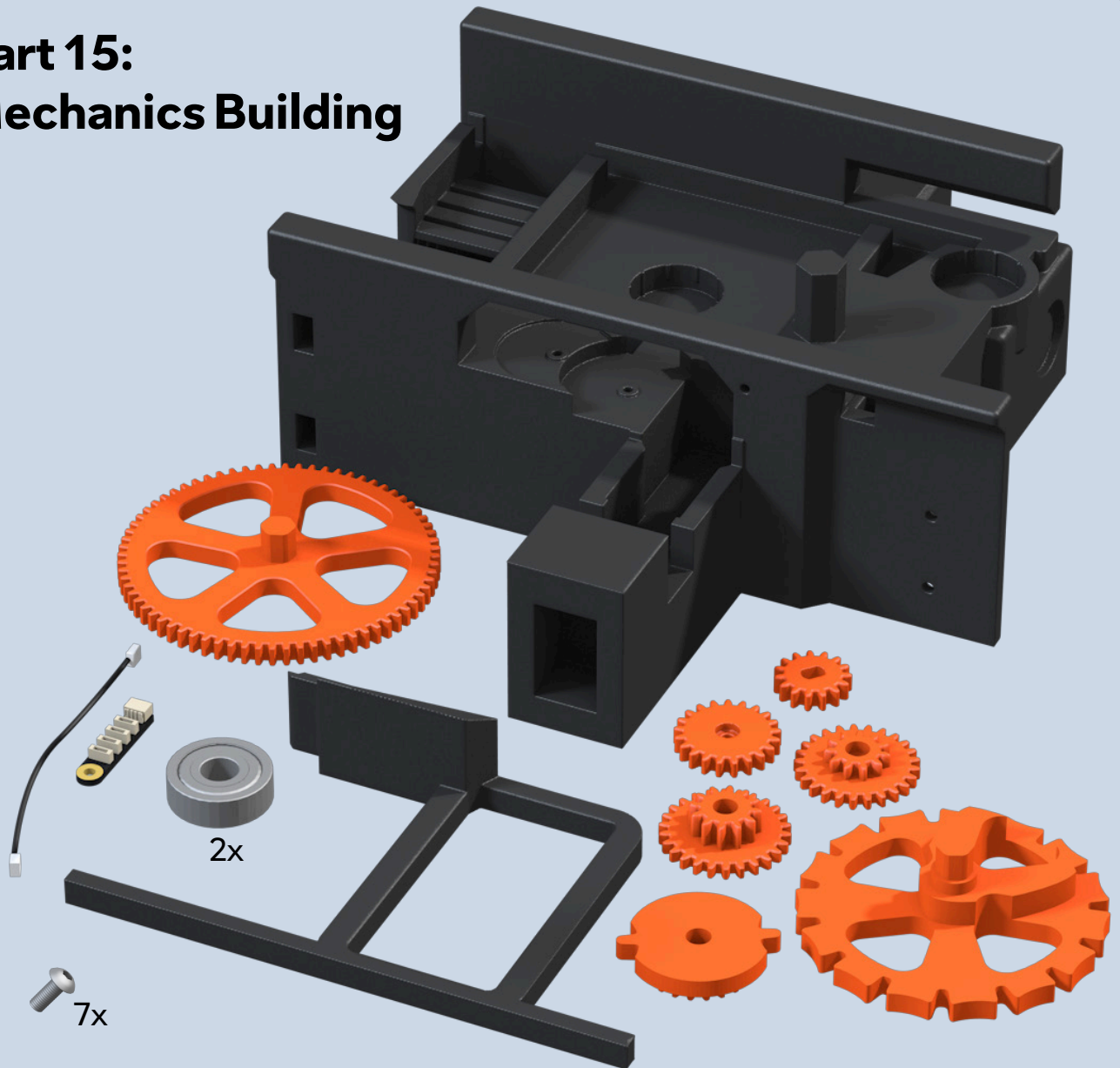
Part 14: Electronics Building



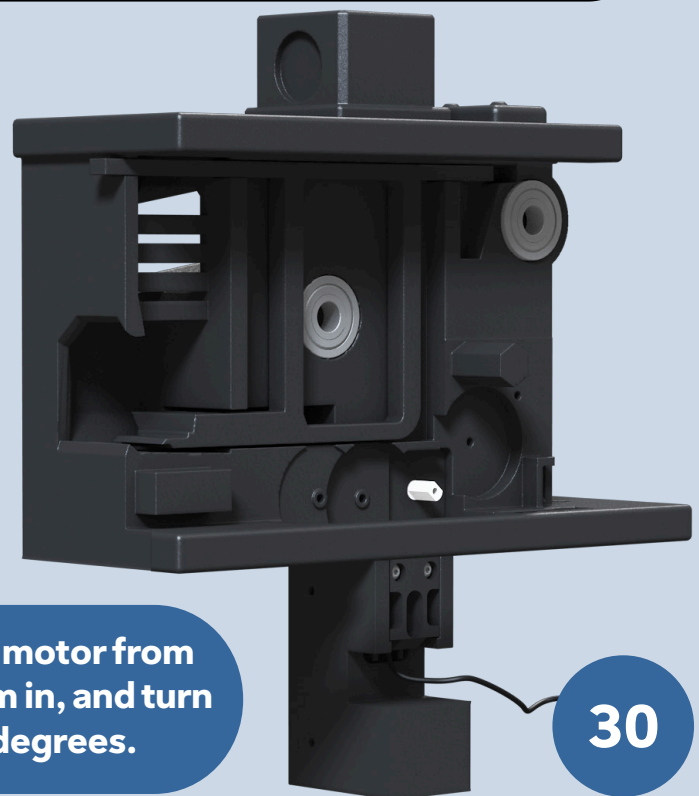
Route the cable through the cable channel, connect all electronics, and secure everything in place.

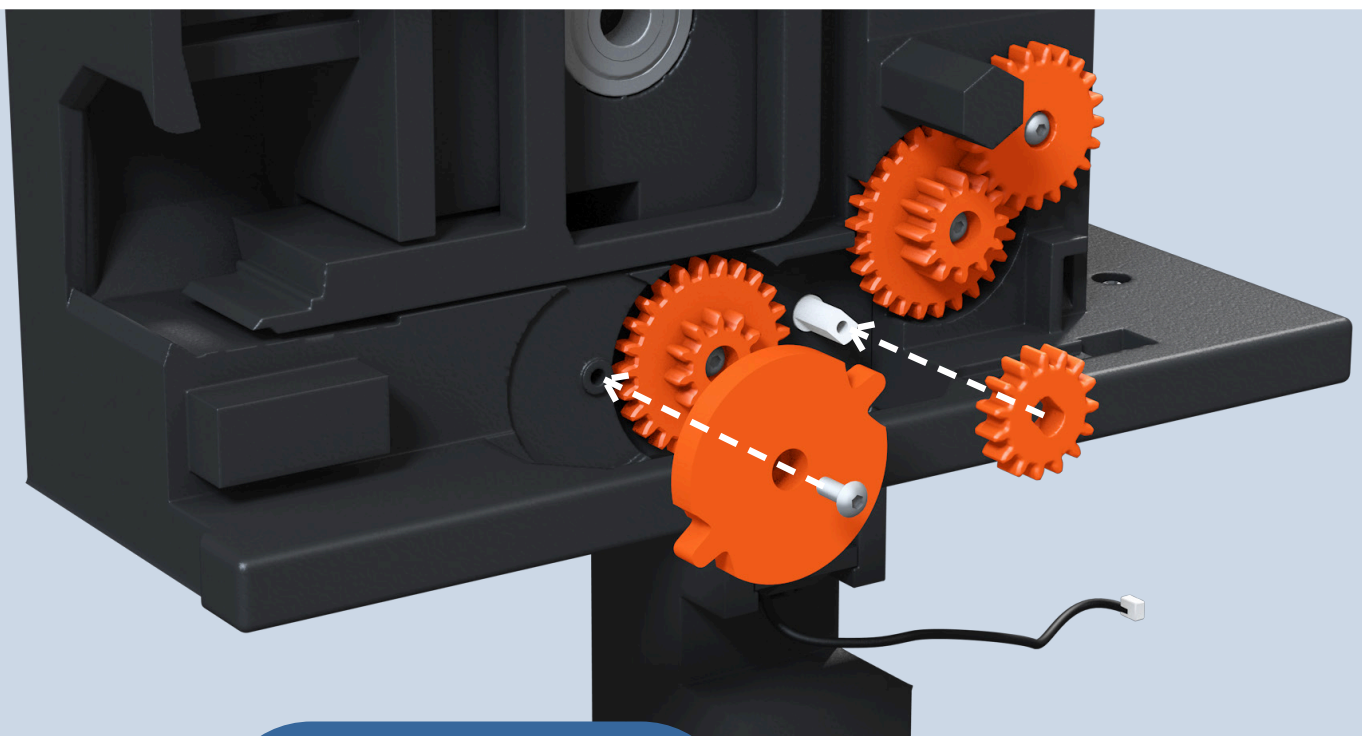
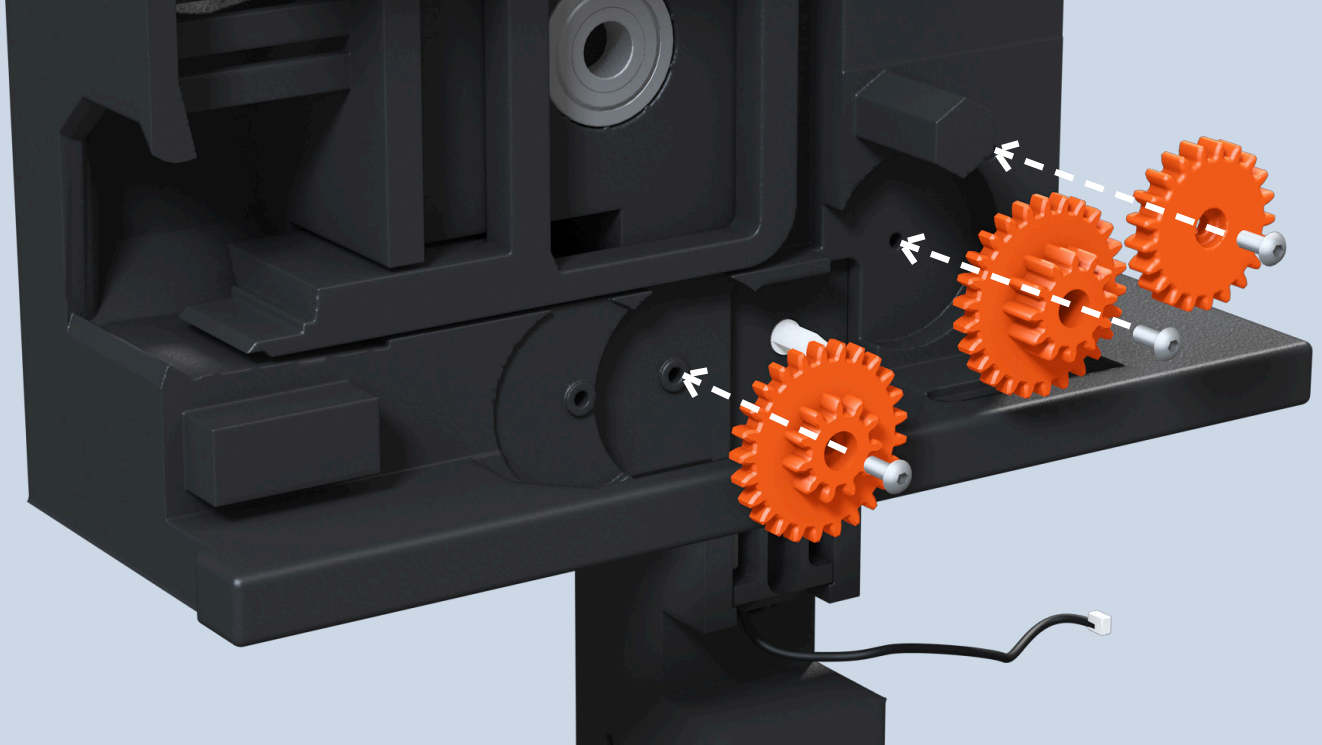


Part 15: Mechanics Building



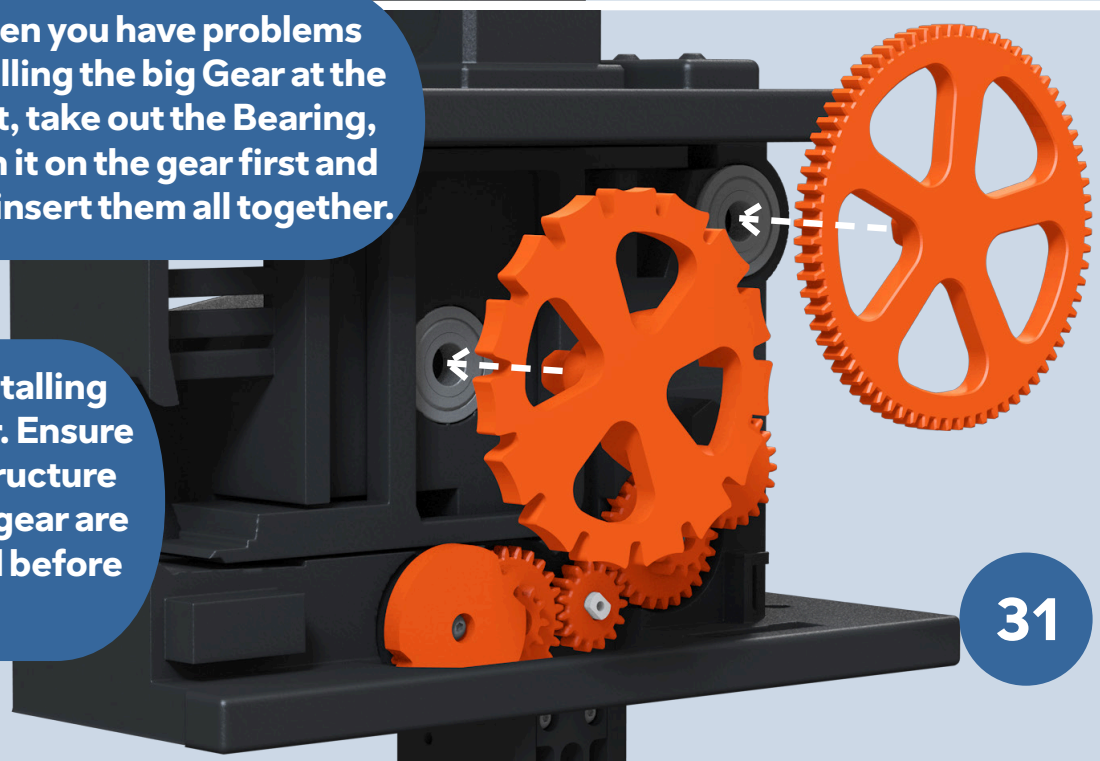
Slide the motor from
the bottom in, and turn
it 90 degrees.





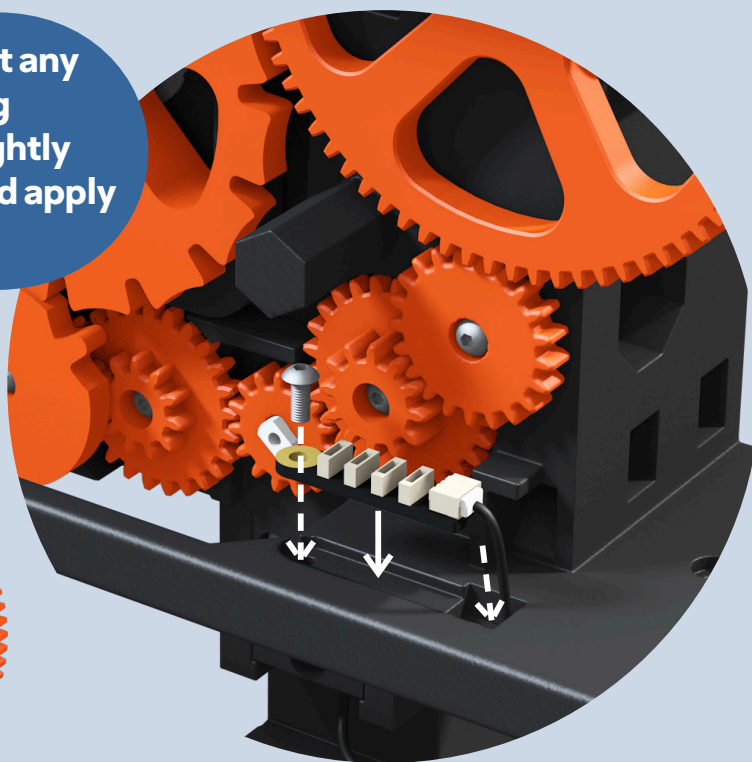
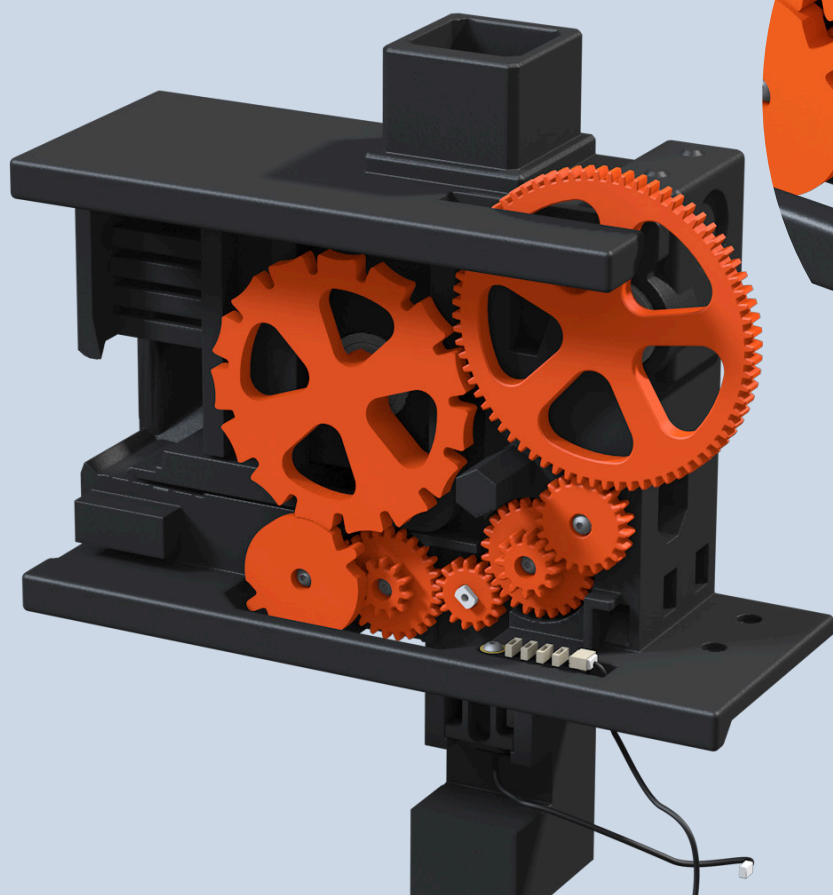
When you have problems installing the big Gear at the right, take out the Bearing, push it on the gear first and then insert them all together.

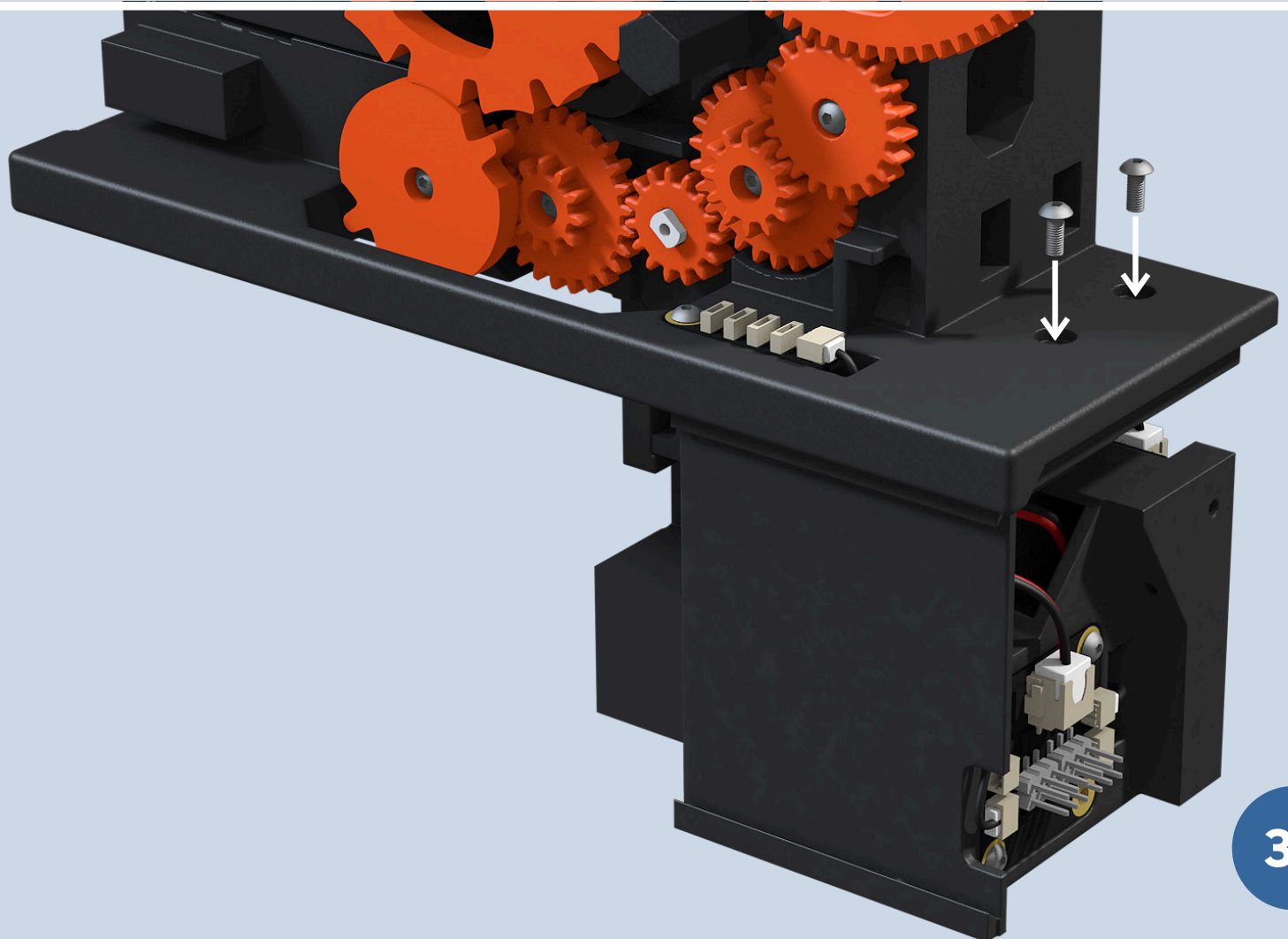
Be careful when installing the large middle gear. Ensure the black moving structure and the bottom-left gear are precisely positioned before pushing it in.

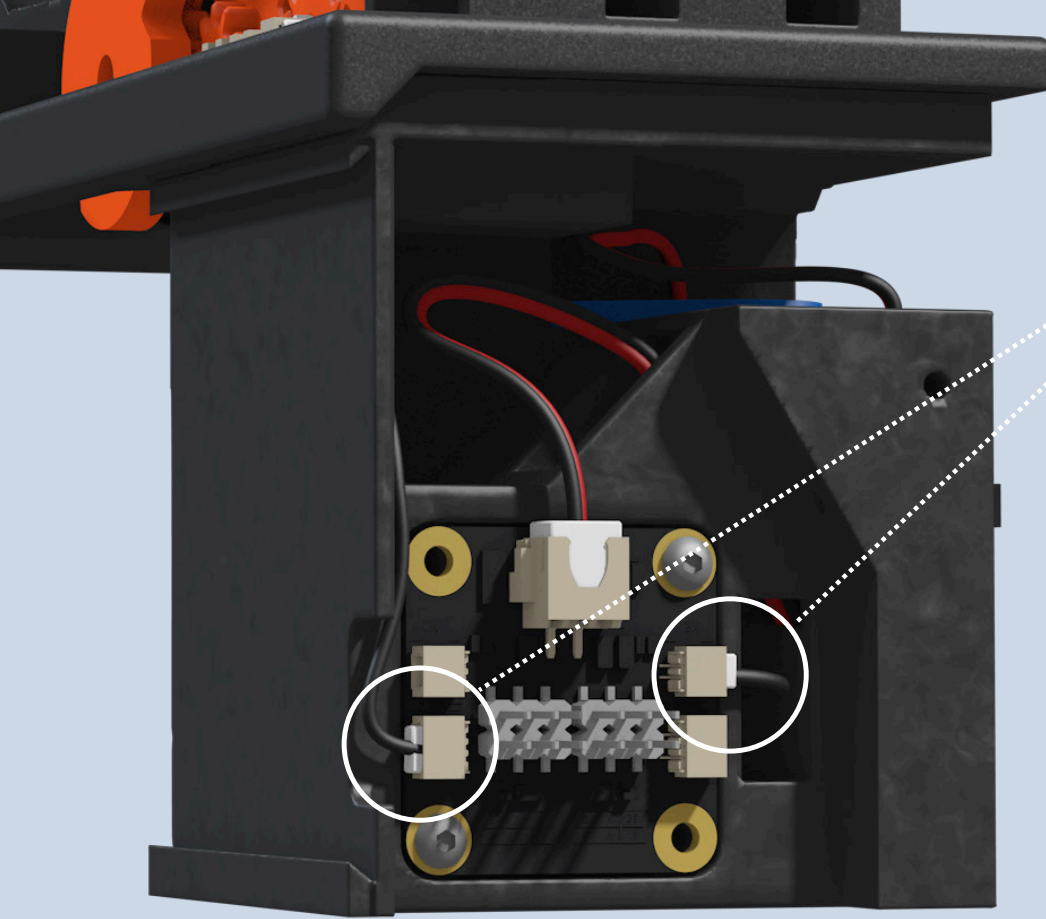




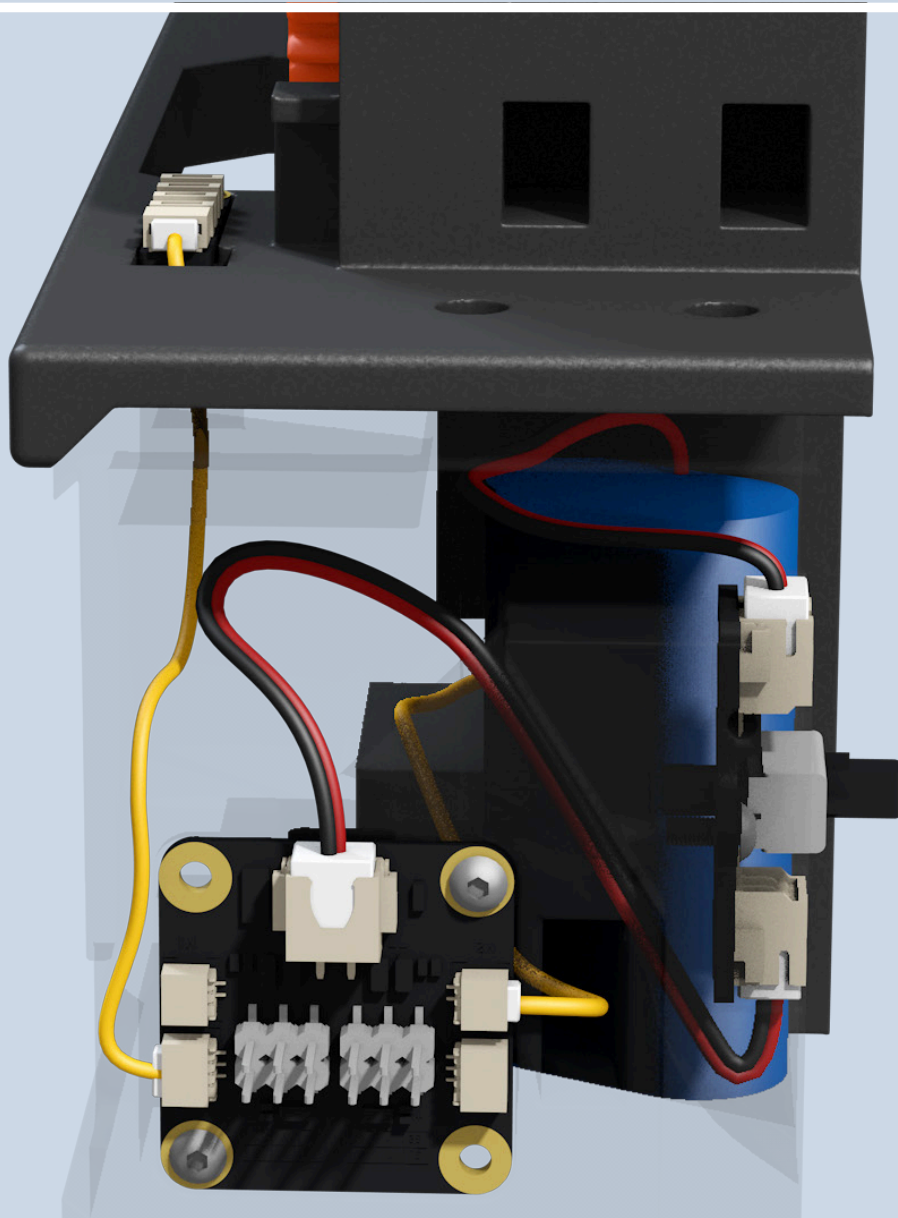
These two gears must fit together without any gap. If a big gap occurs due to printing inaccuracies, reprint the smaller gear slightly larger using your slicer. Test the function and apply lubricant as needed.



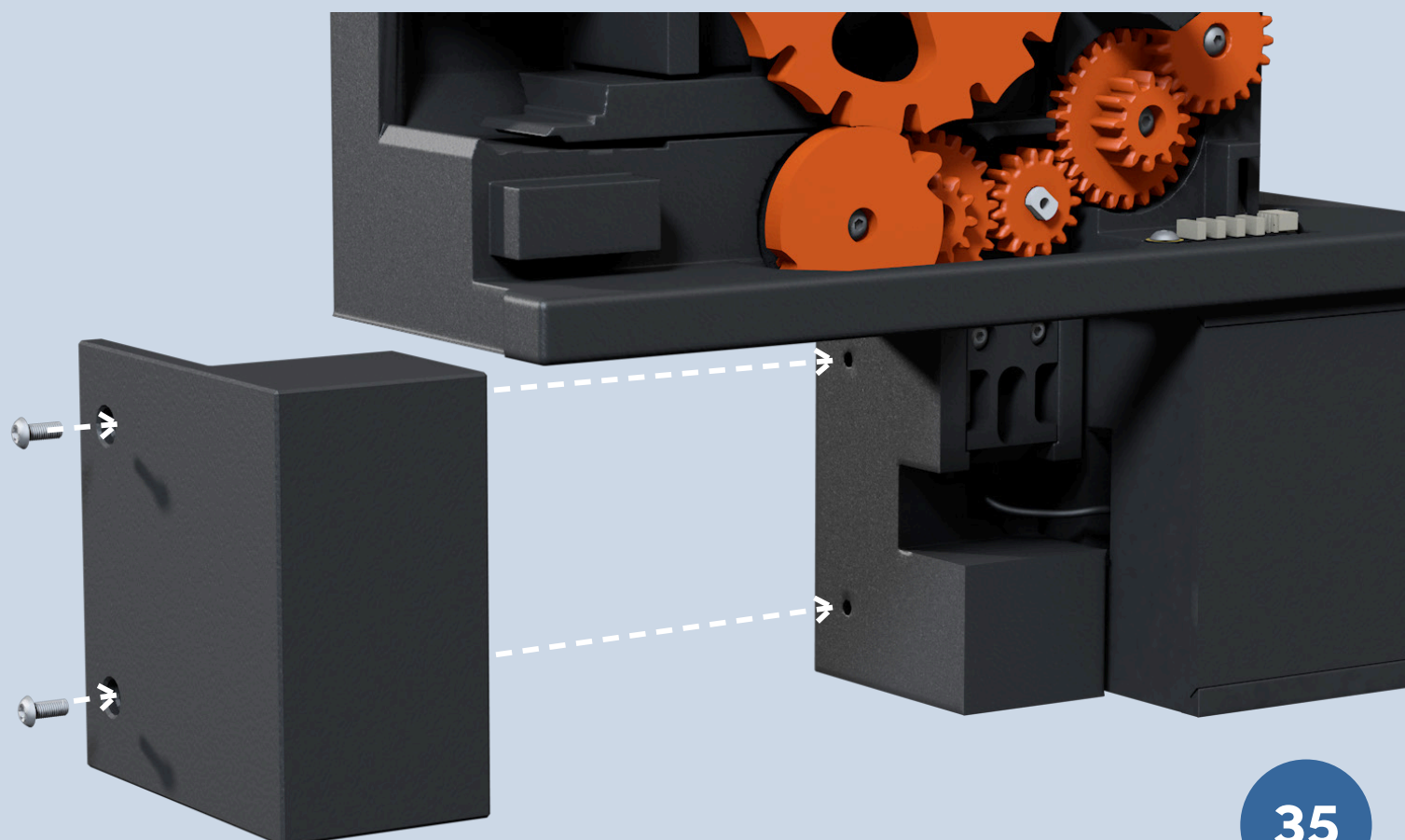
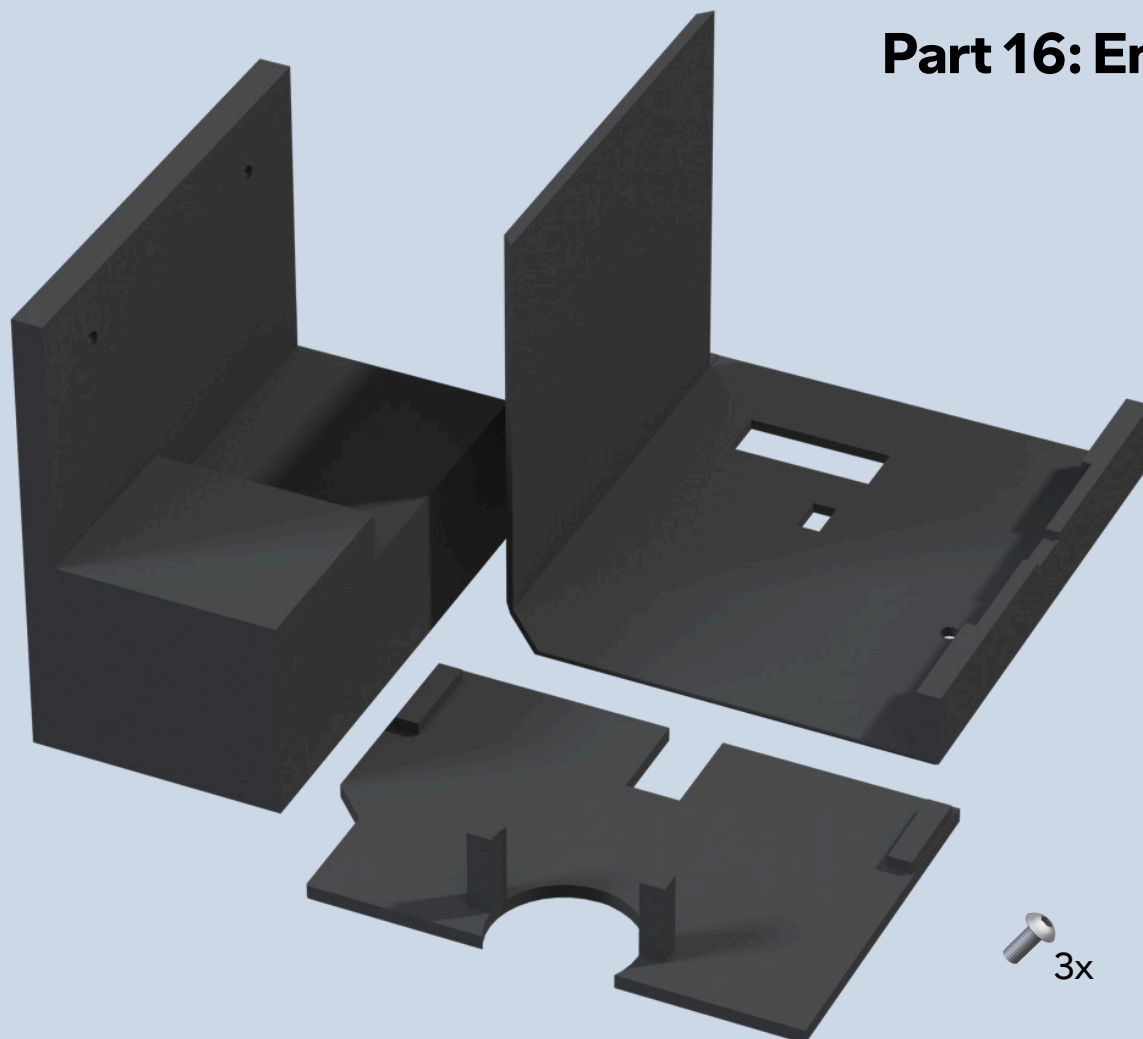


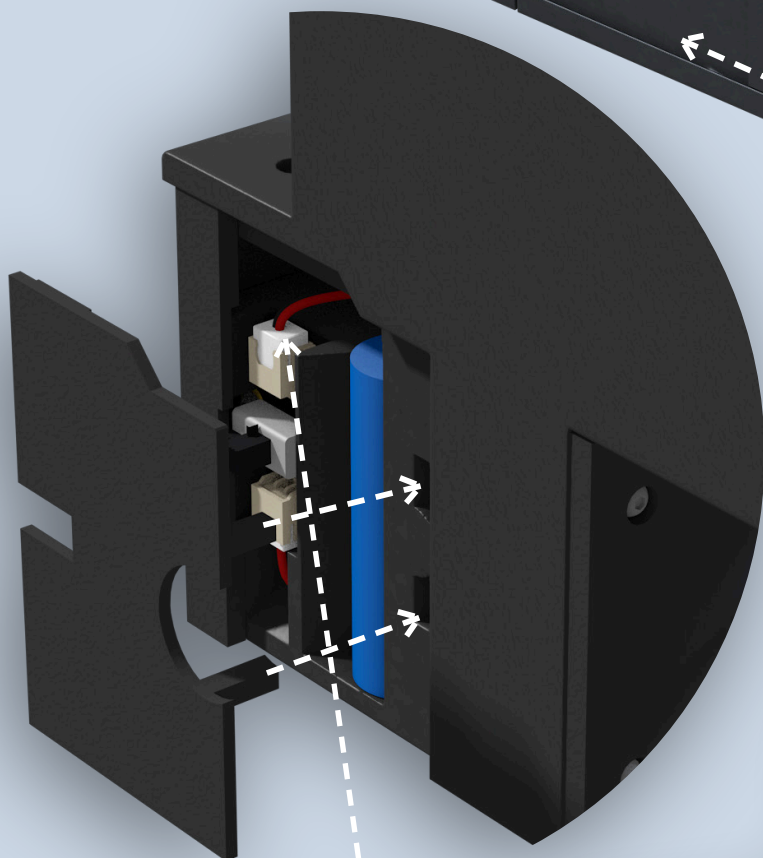
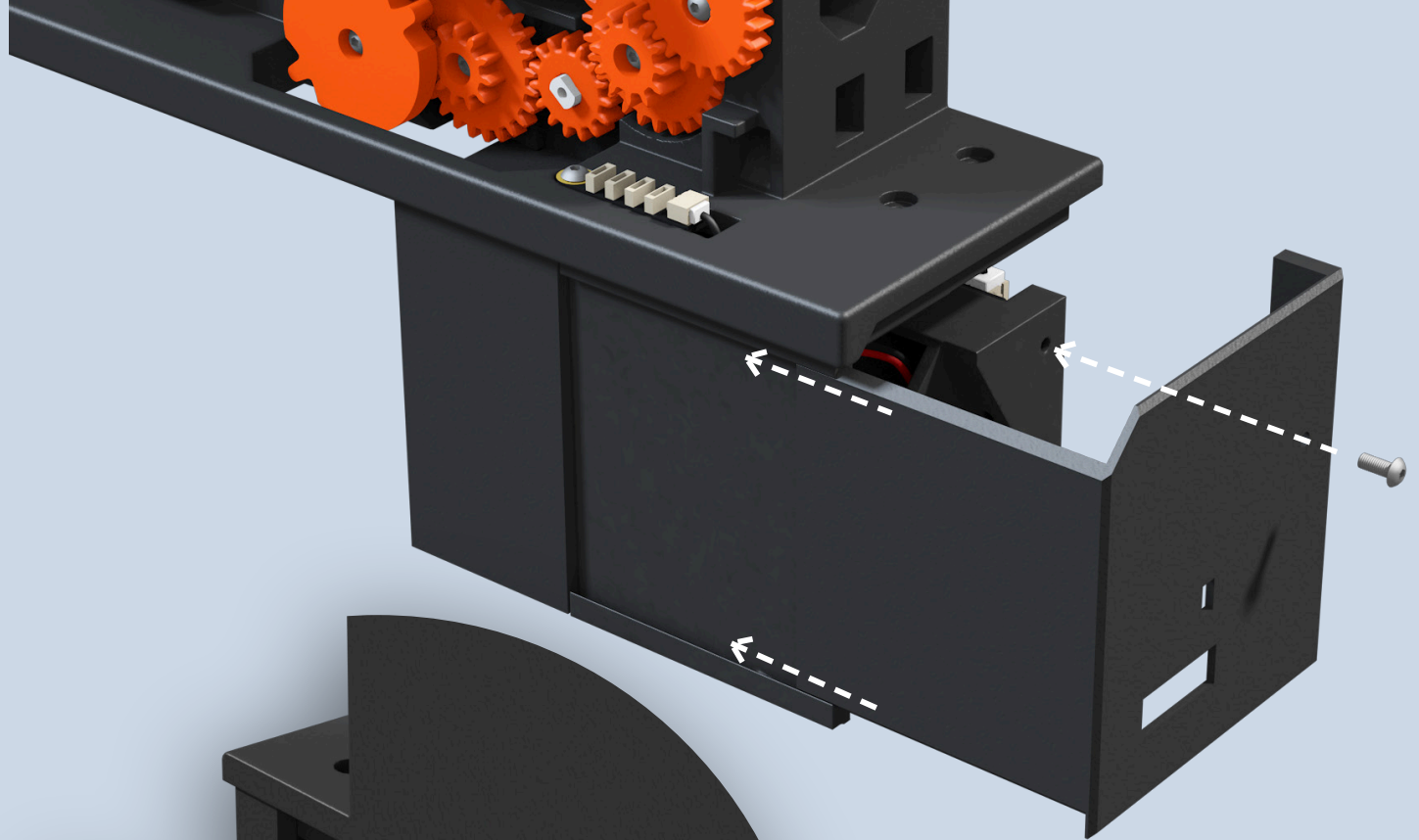


Use the tweezers to
grab the cables und
plug it in.



Part 16: Enclosing

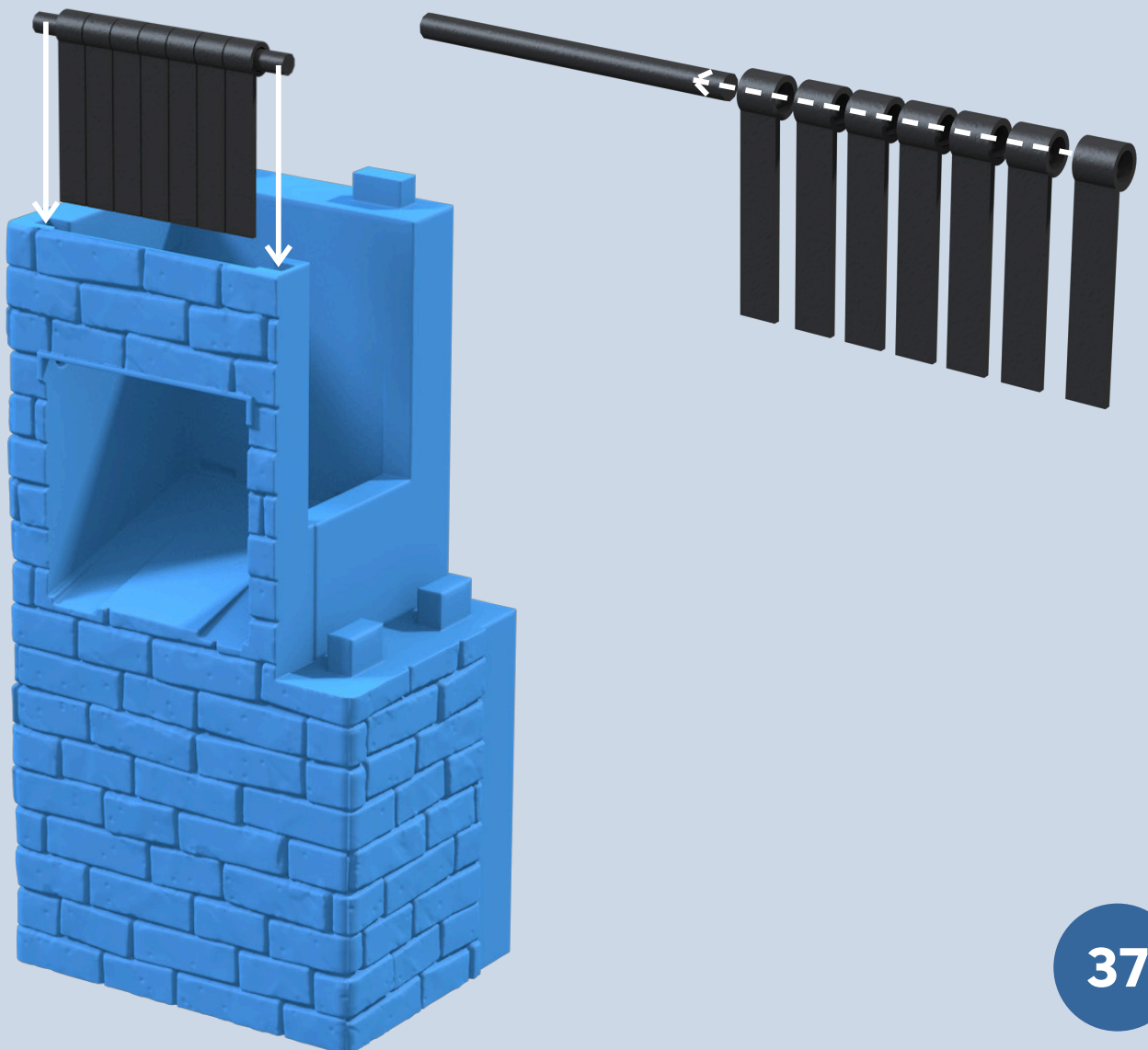
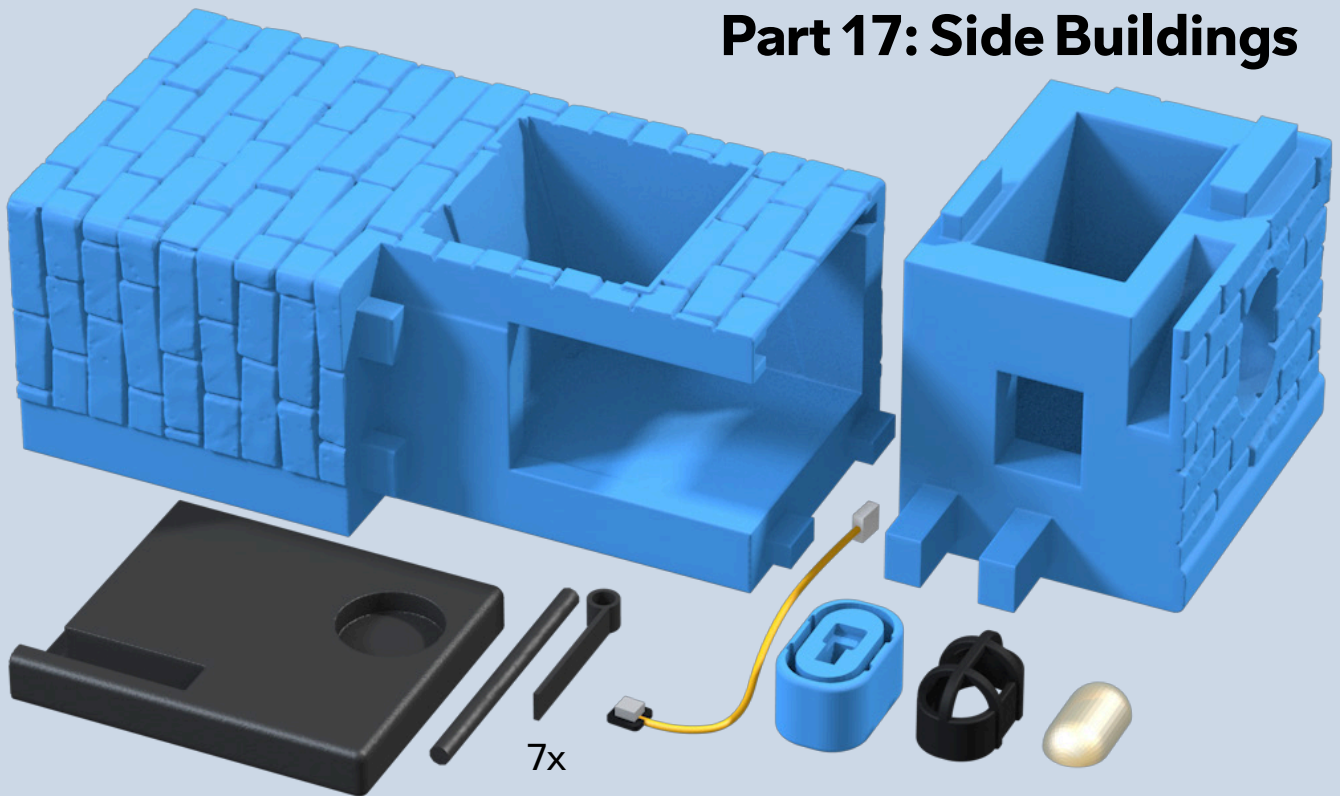


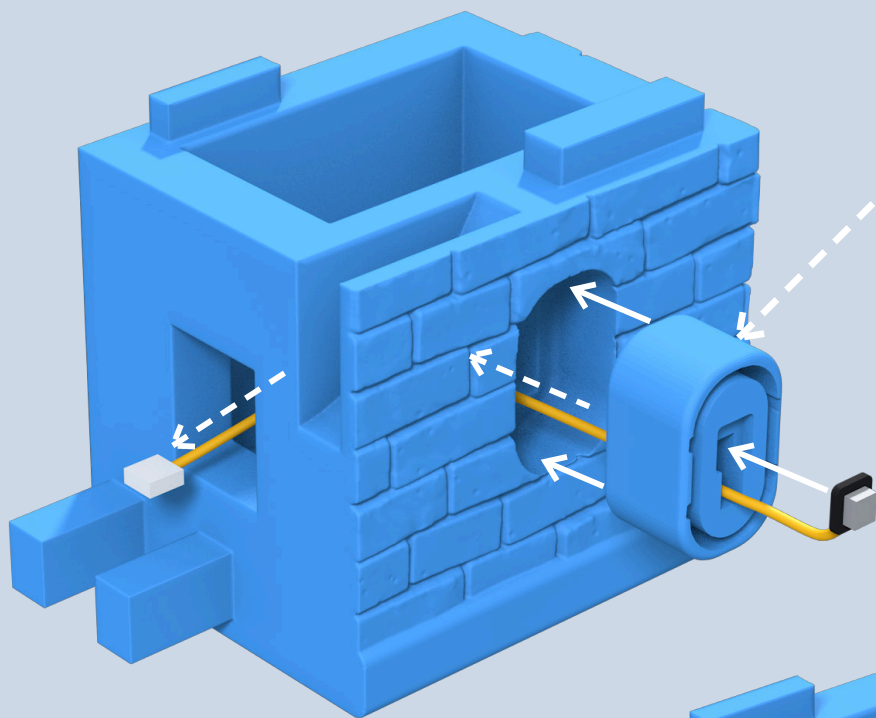


To recharge the factory battery:
Remove this cover, unplug the cable, and take out
the battery. Then recharge it using the cable
included in the CyberBrick box.

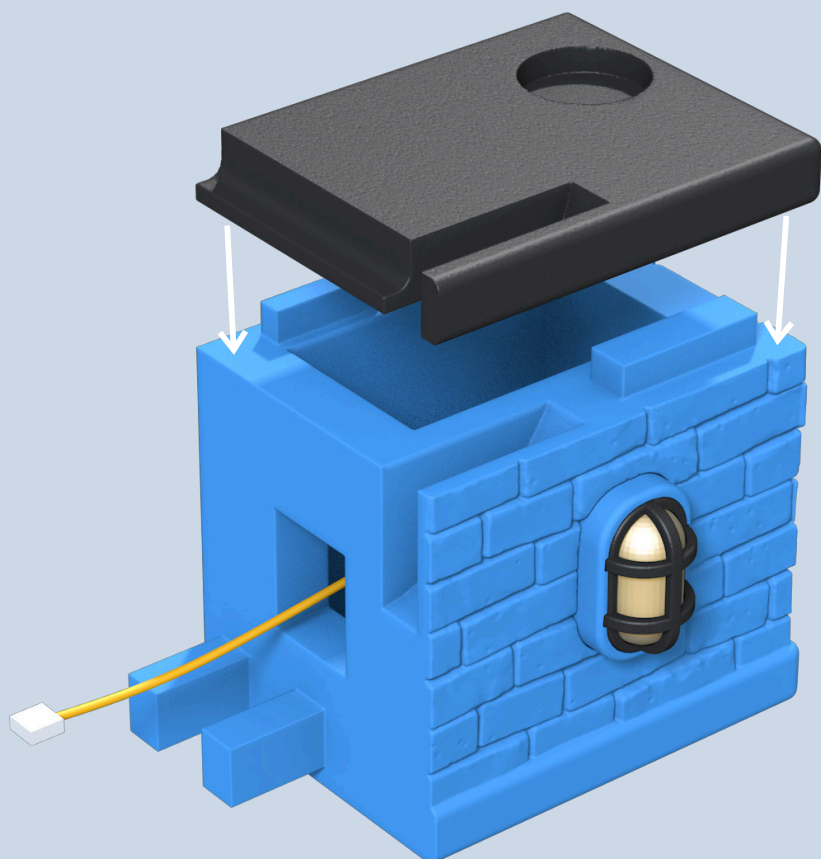
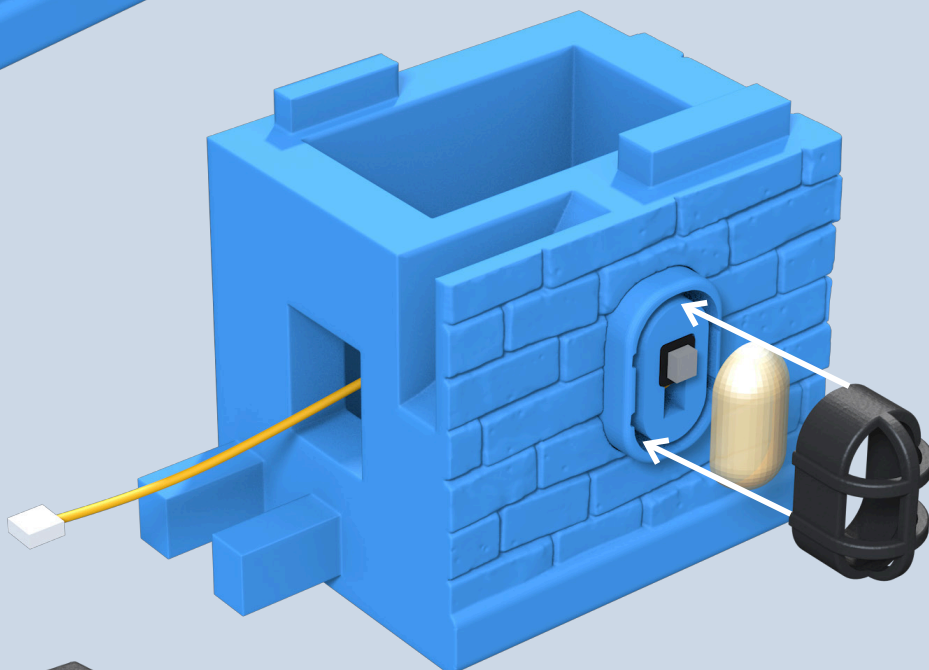


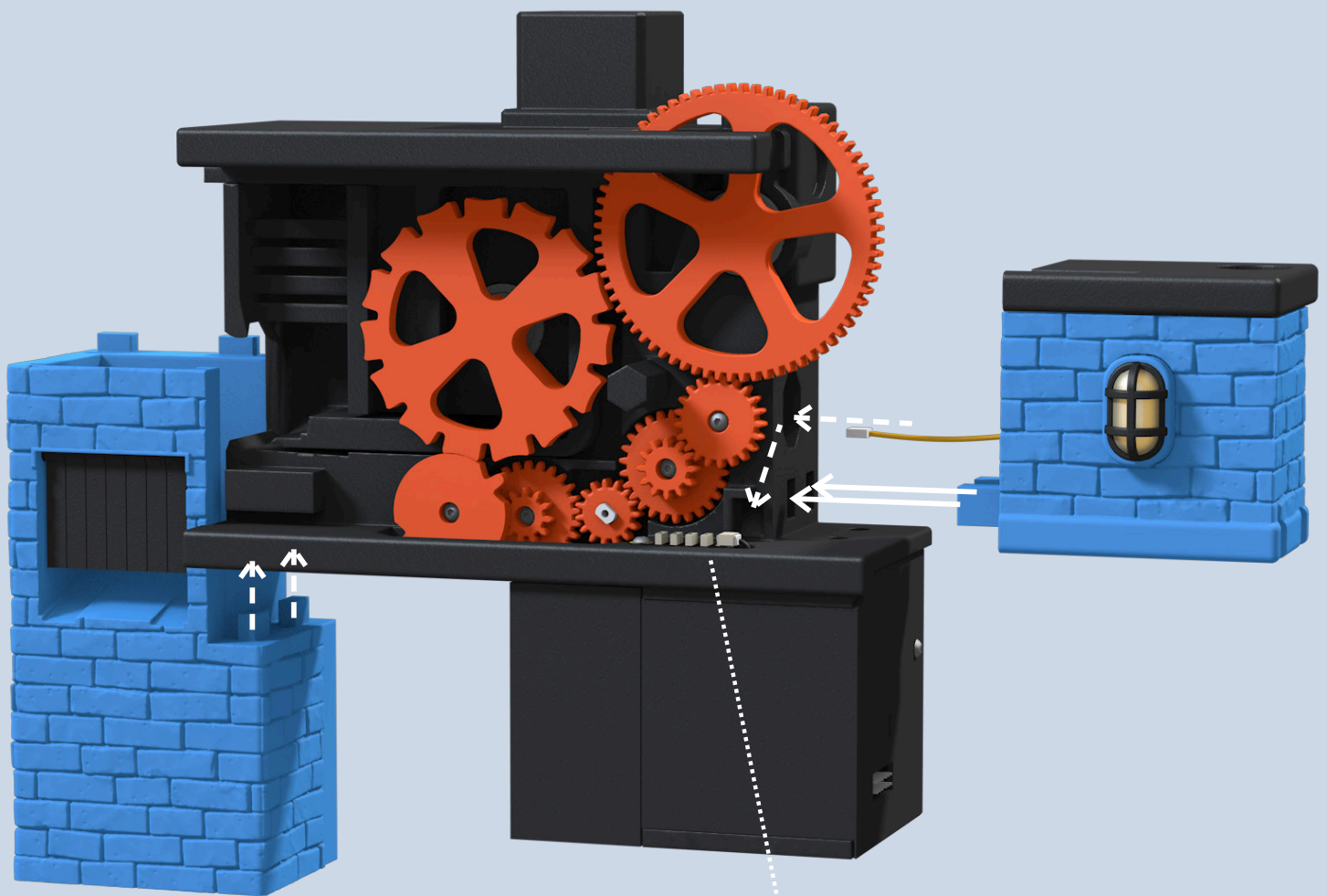
Part 17: Side Buildings



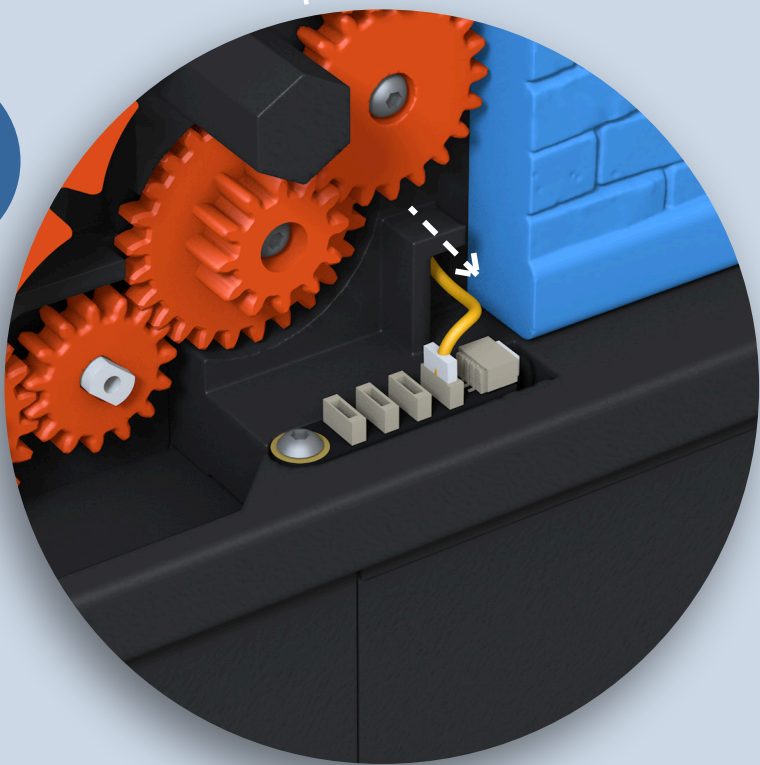


Use glue, if this part
doesn't hold tight.

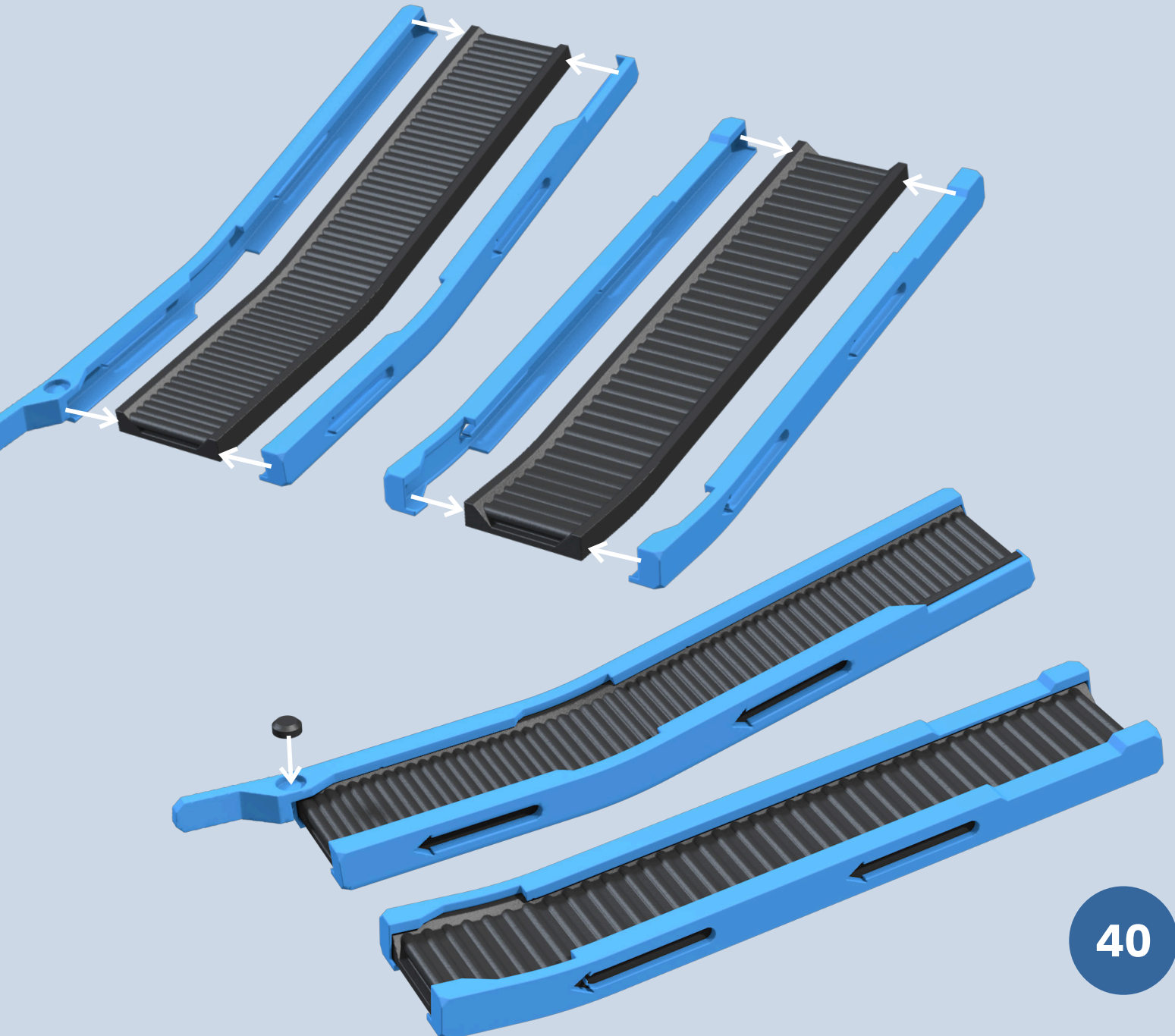
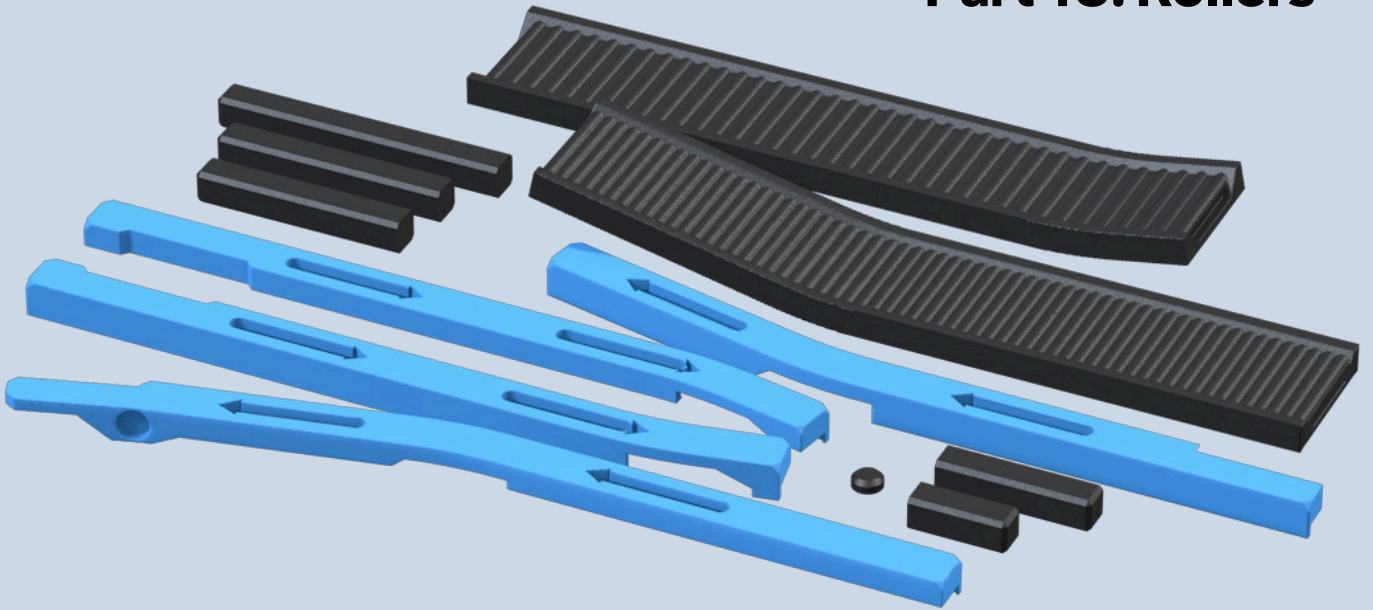


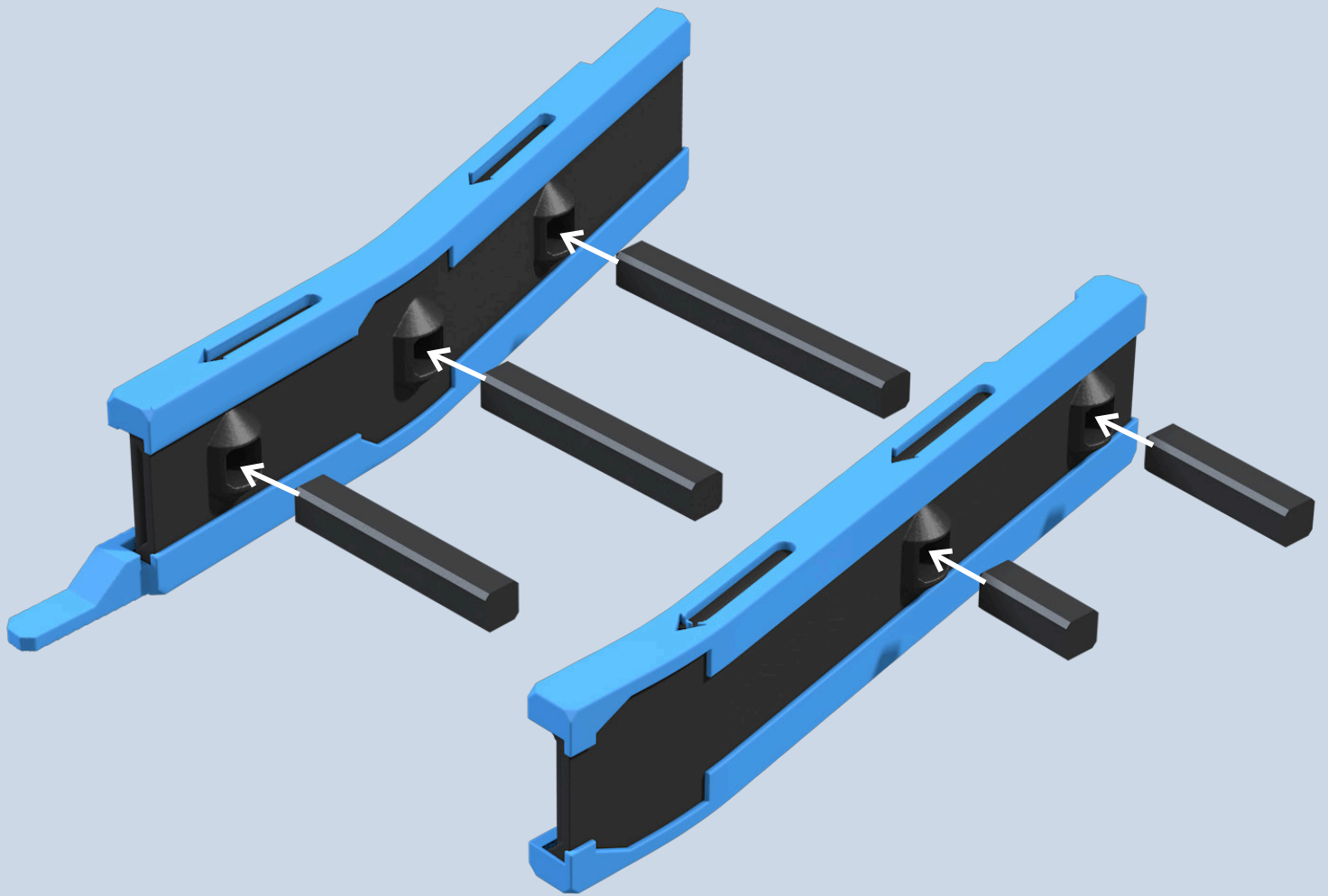


Use the tweezers to grab the cable and plug it into the first port.

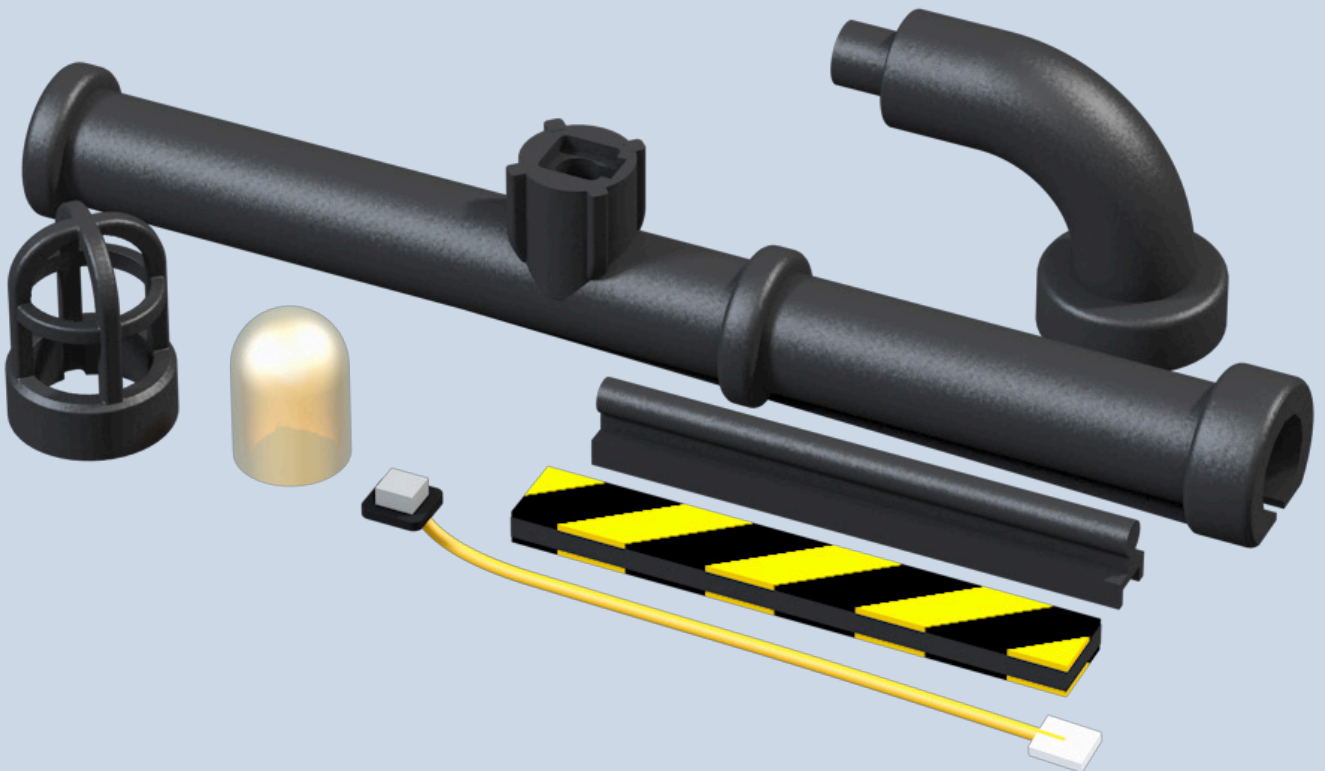


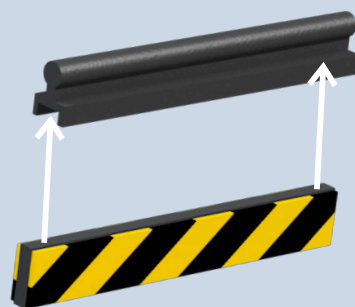
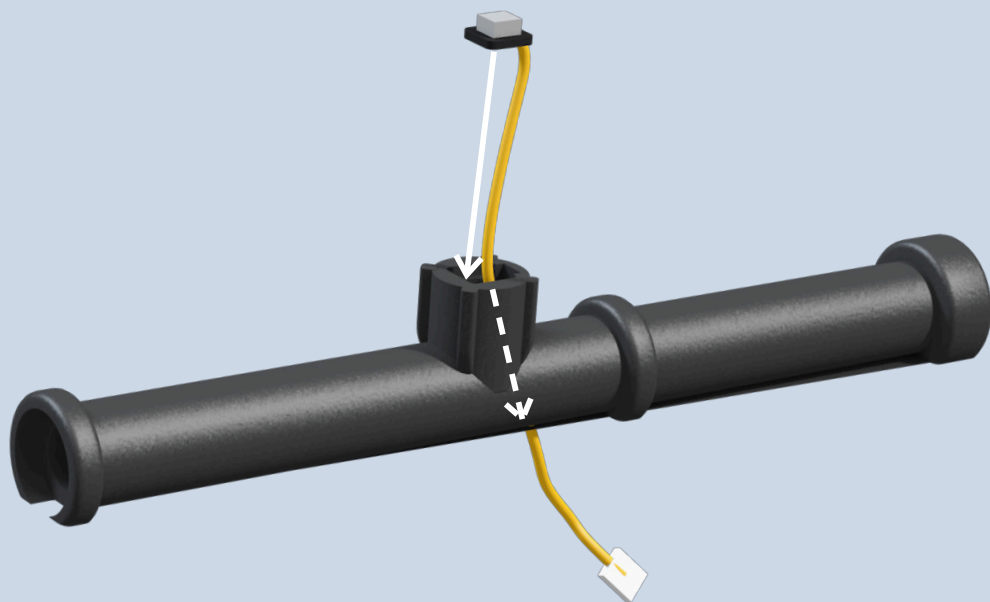
Part 18: Rollers



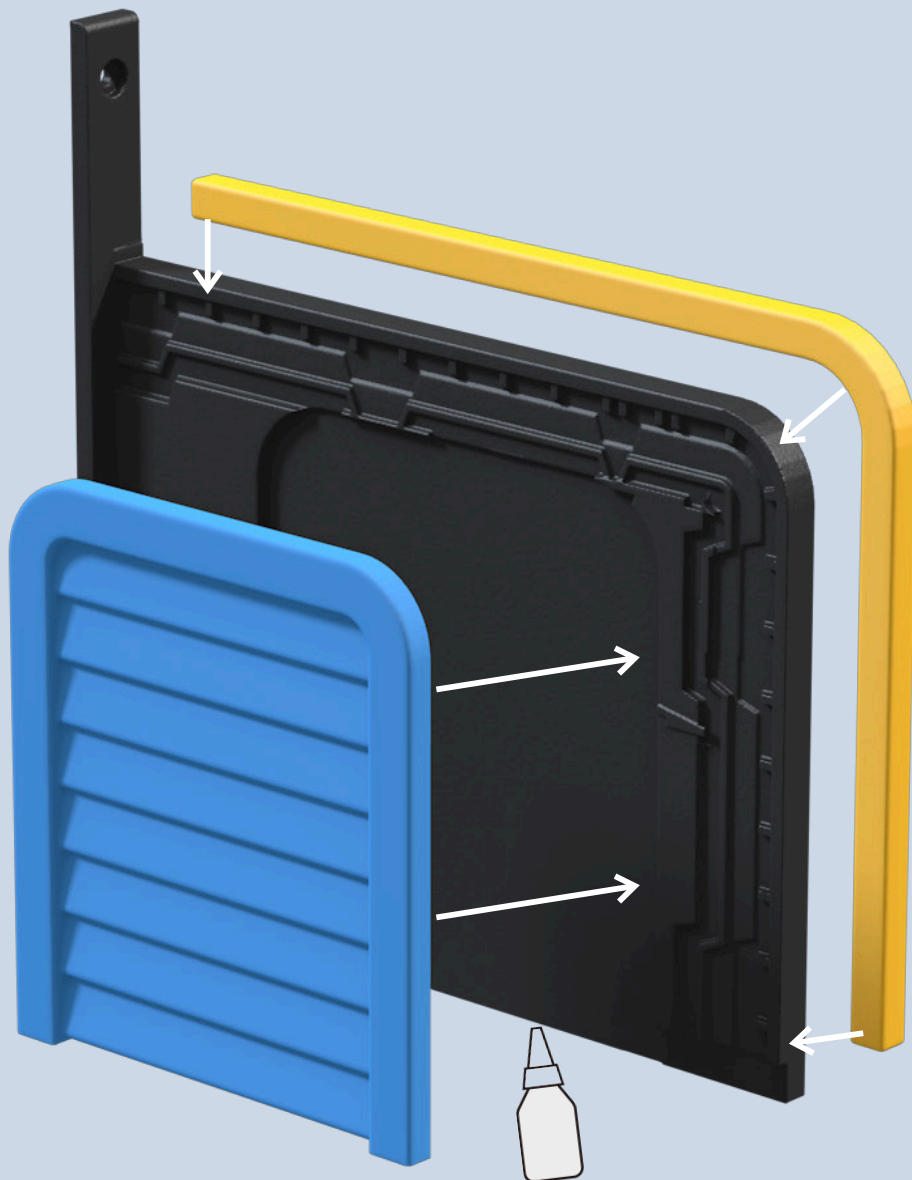
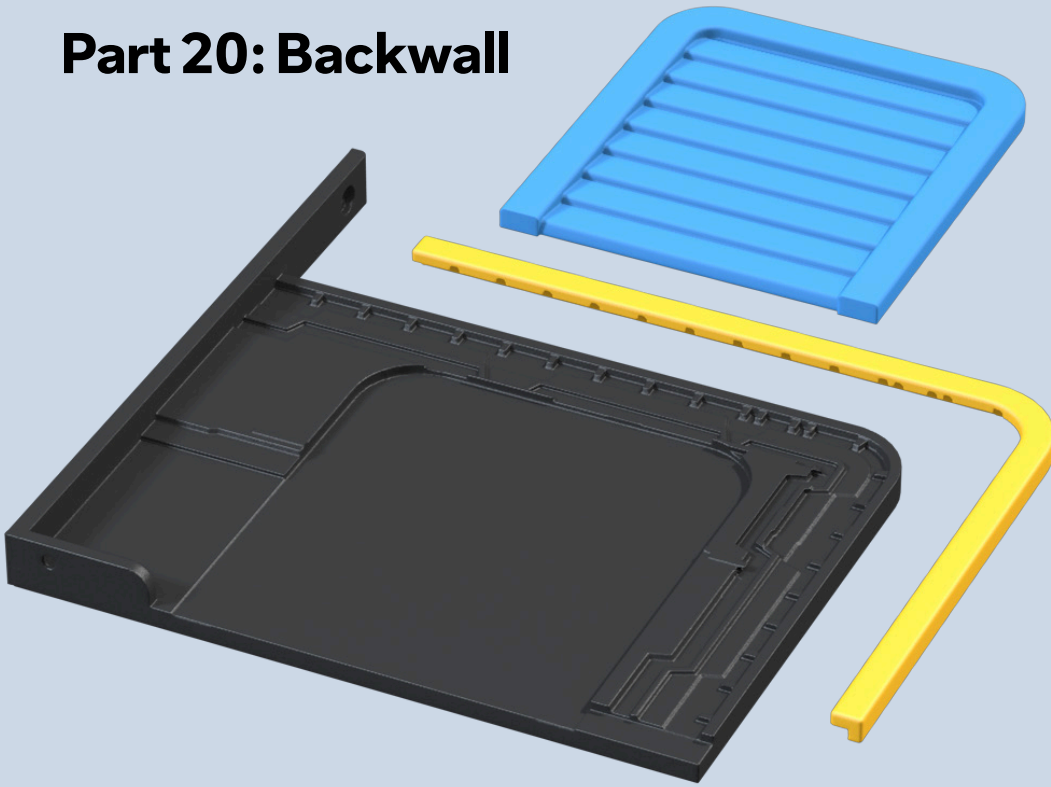


Part 19: Centerpipe

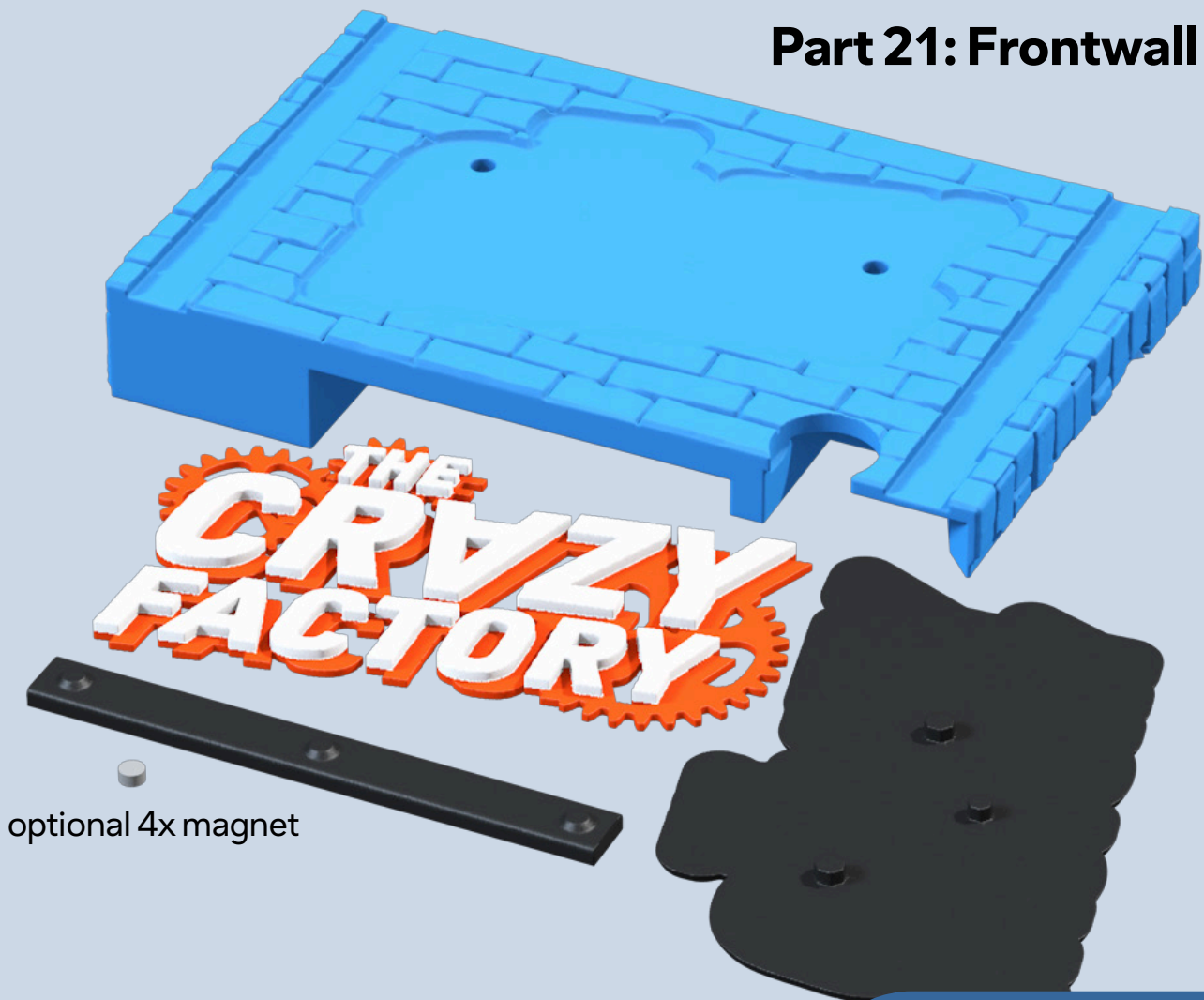




Part 20: Backwall

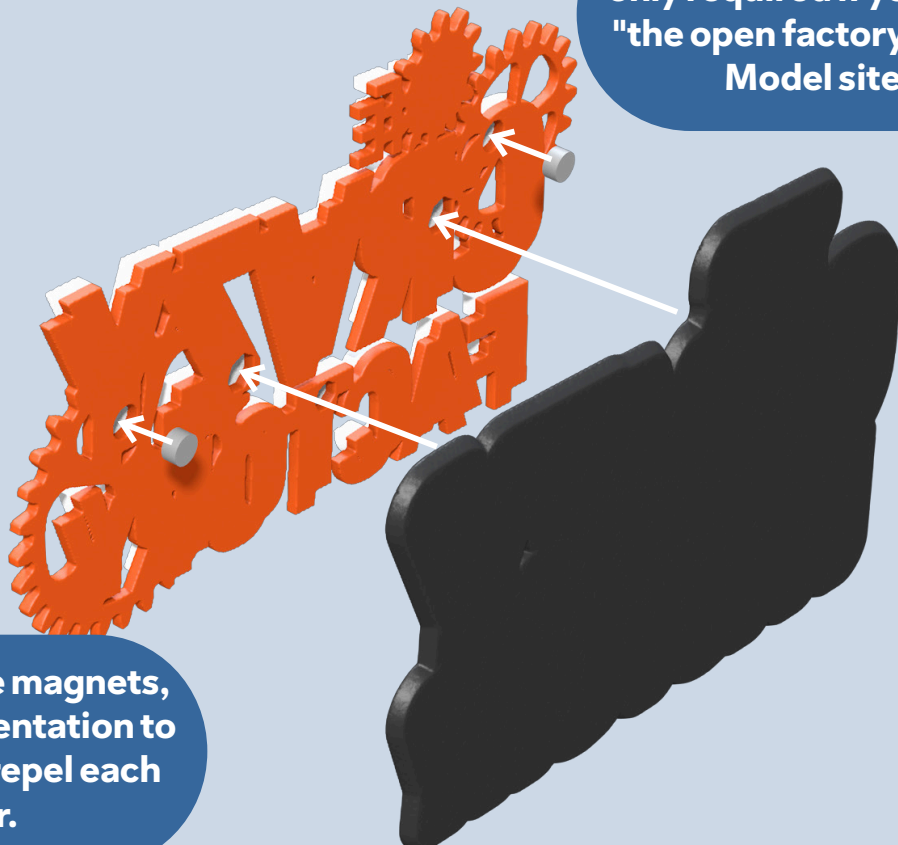


Part 21: Frontwall



optional 4x magnet

The magnets are optional and only required if you plan to use "the open factory". Check the Model site for it.

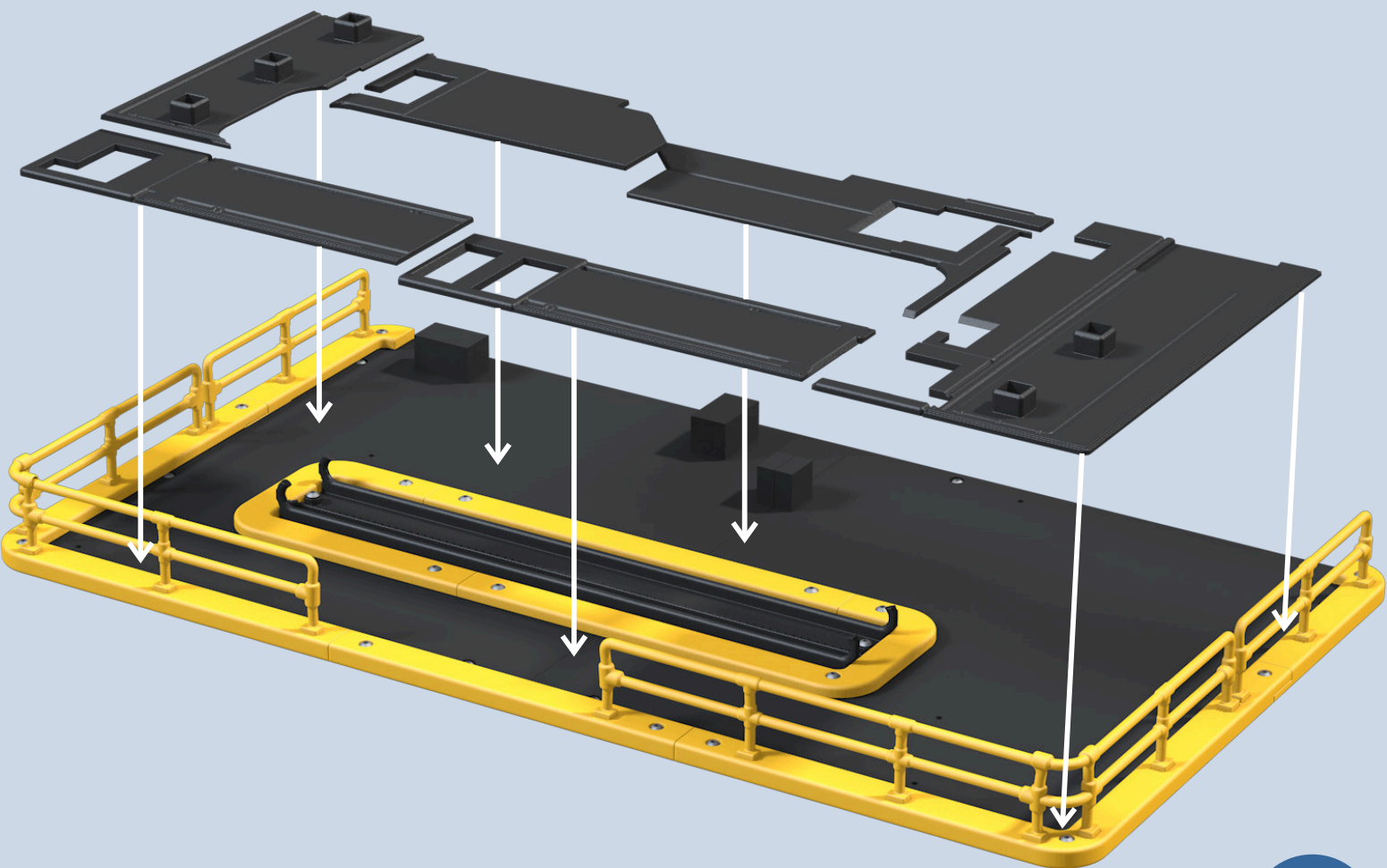
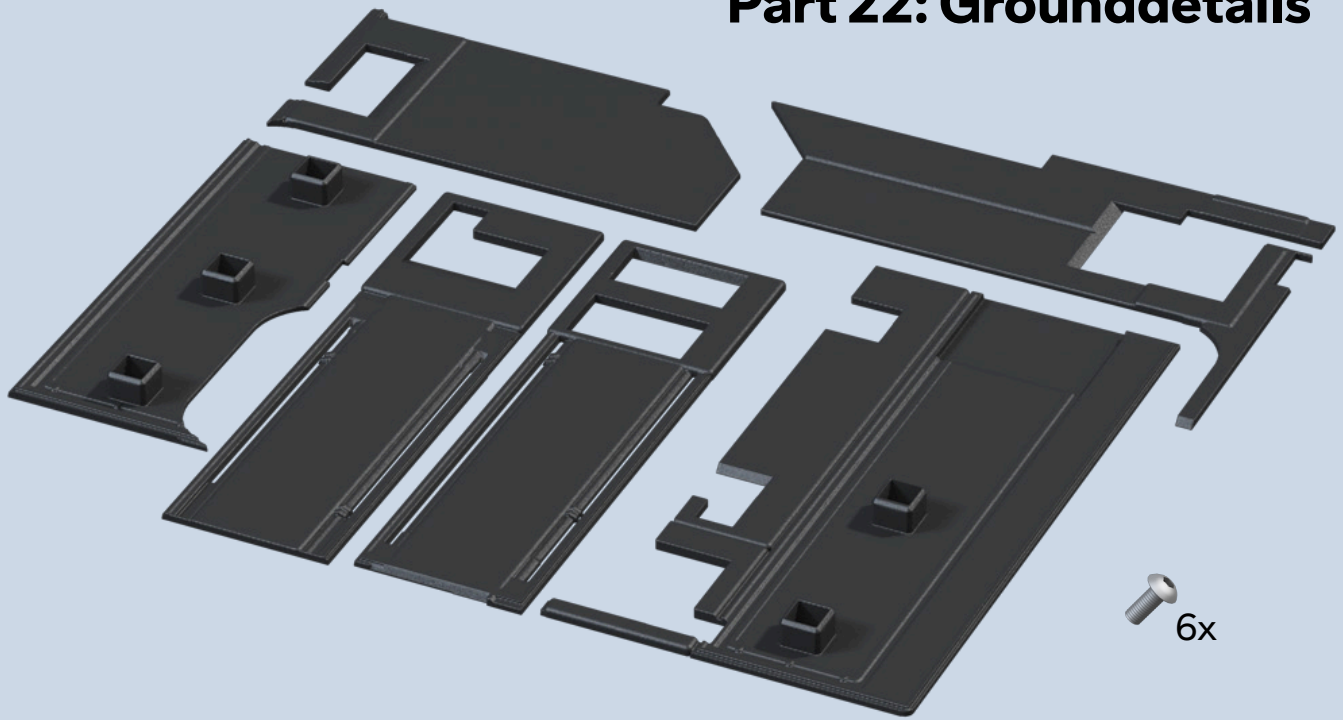


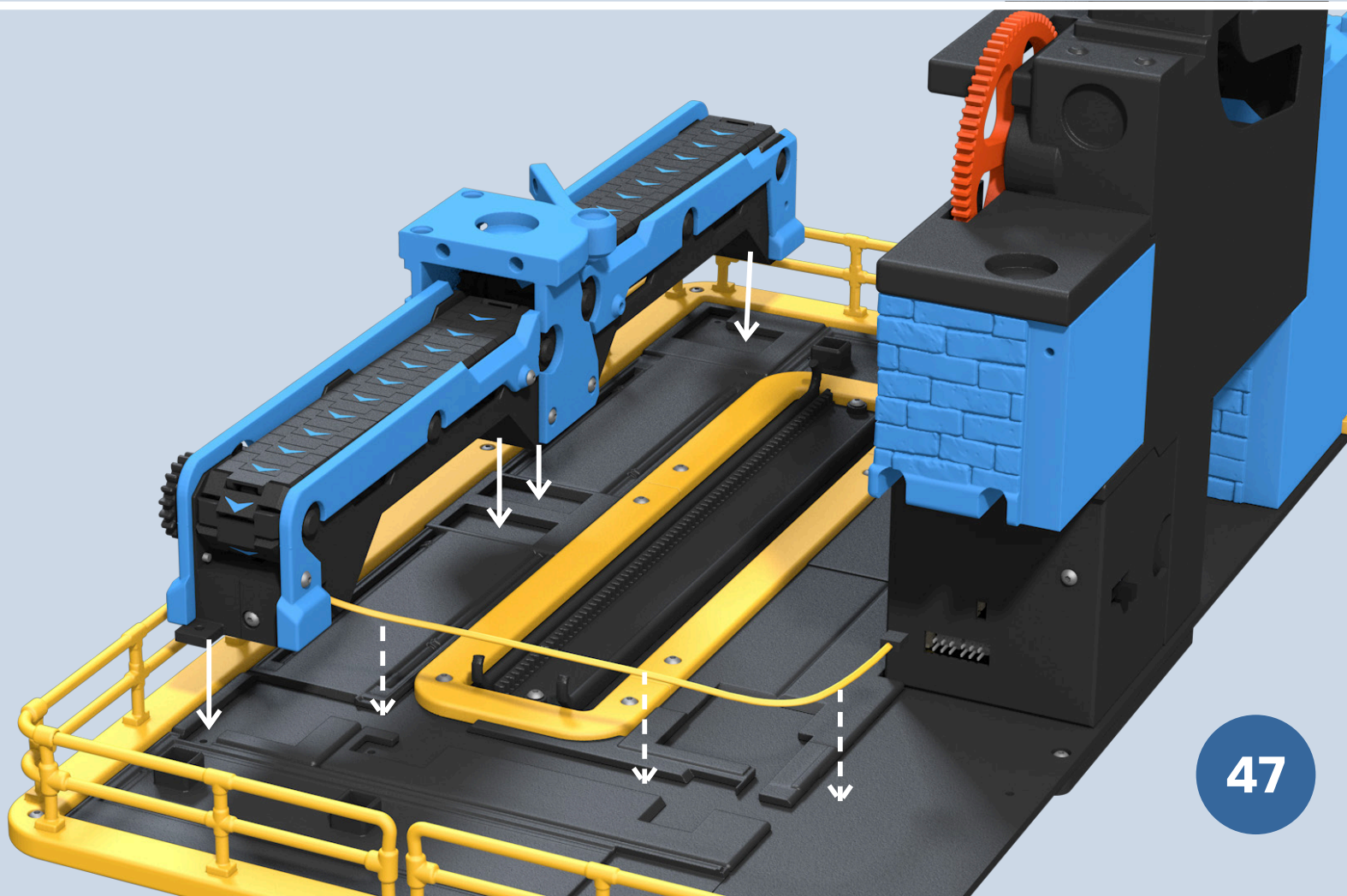
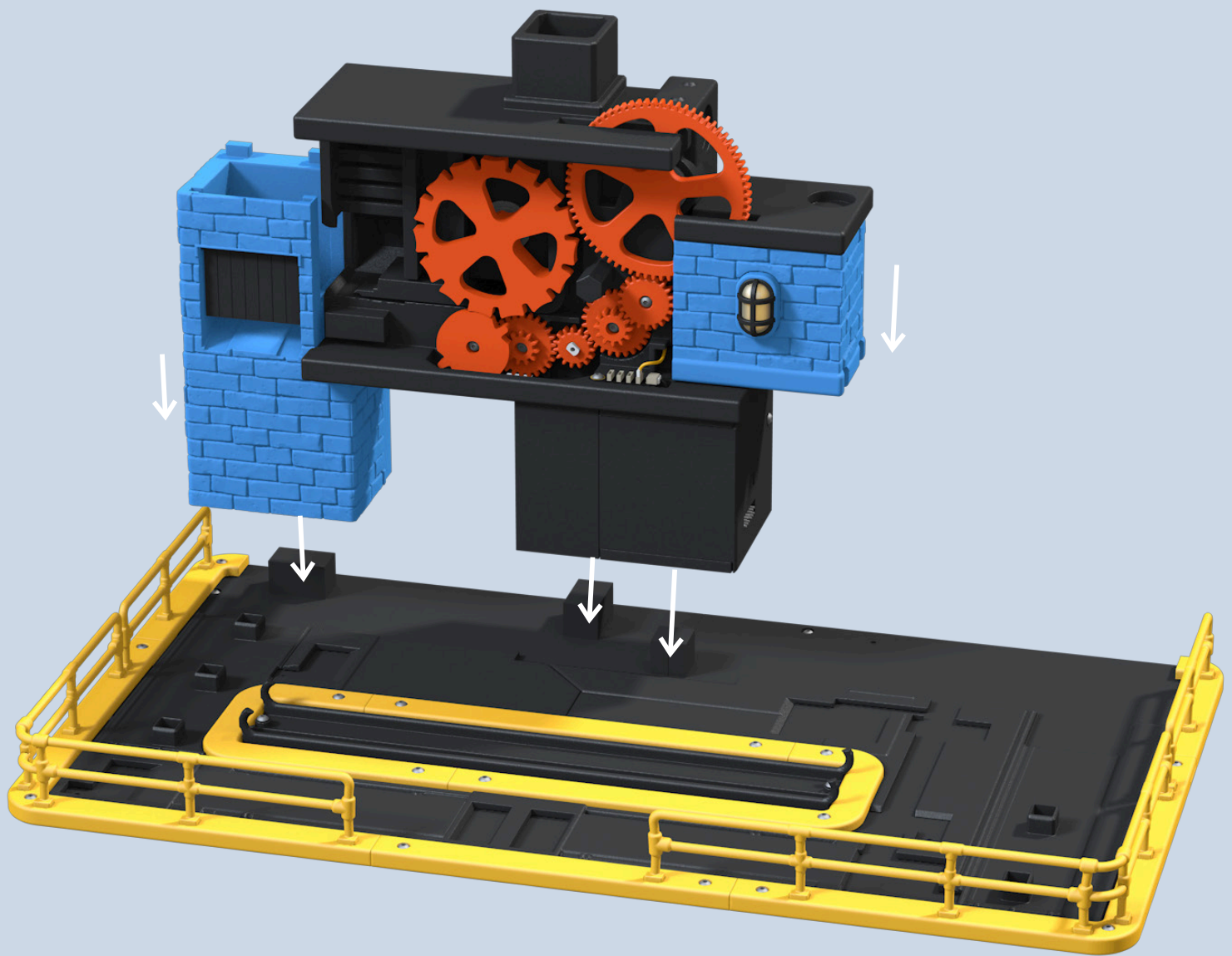
When installing the magnets, first verify their orientation to ensure they don't repel each other later.

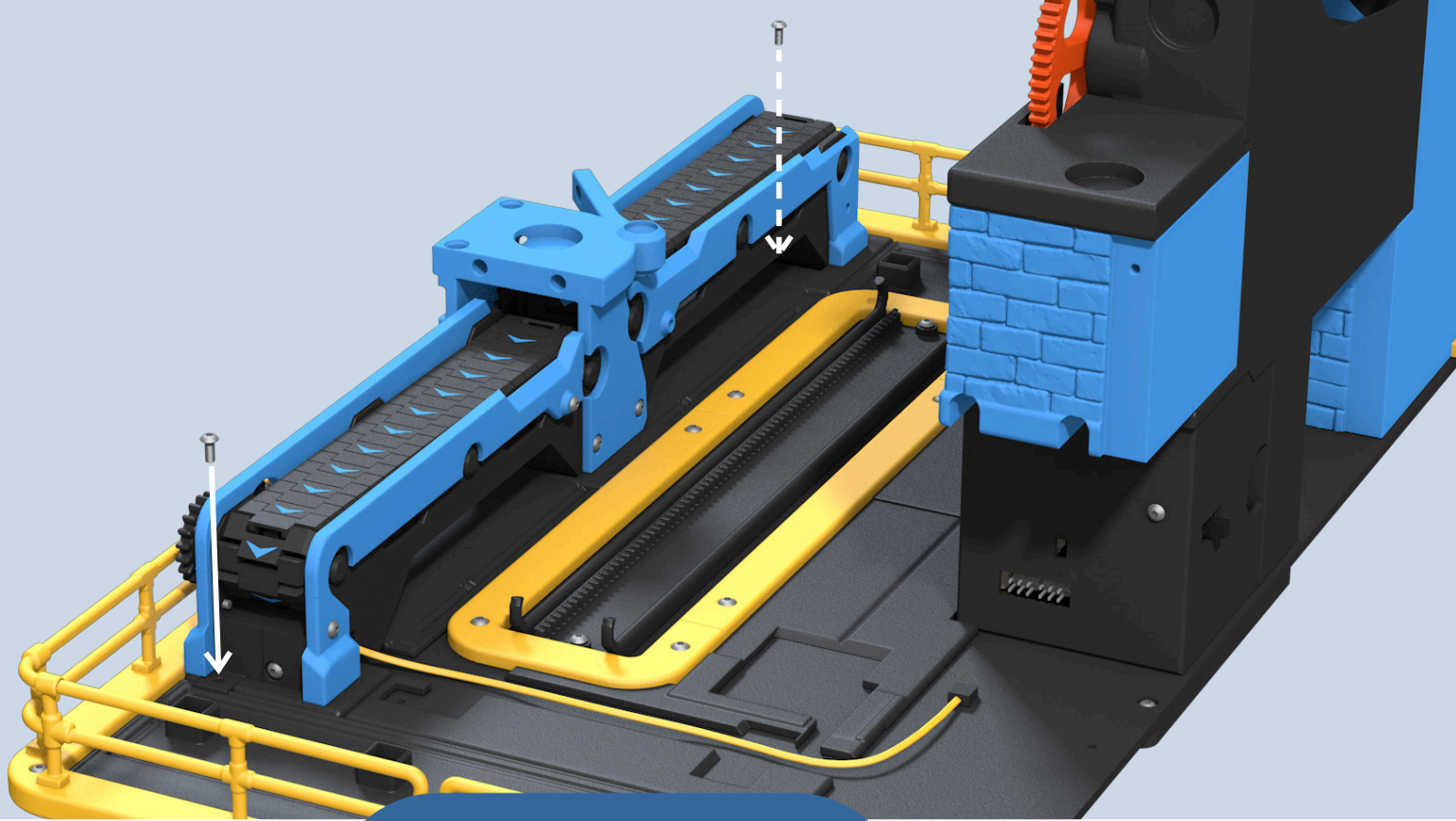
Use glue, if you don't install the magnets.



Part 22: Grounddetails

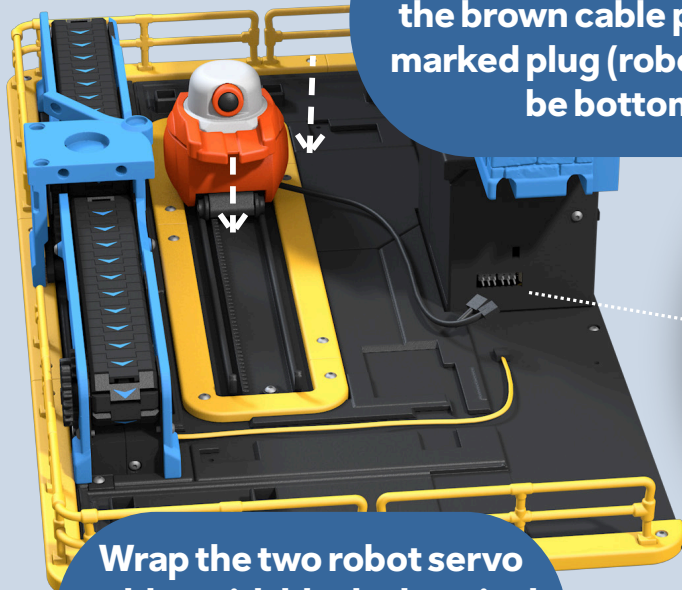




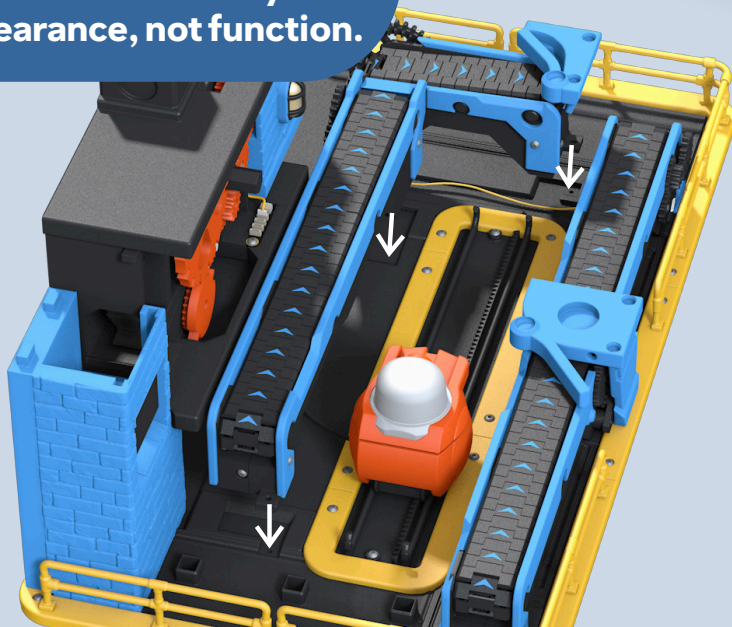
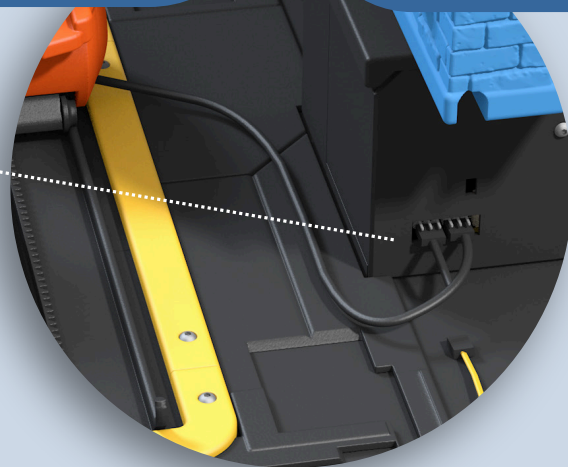


Connect the two cables to the two bottom connectors, ensuring the brown cable points left. The marked plug (robot head) should be bottom right.

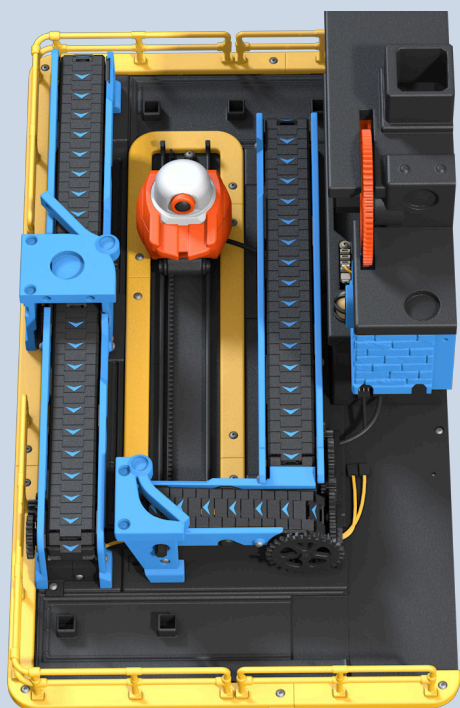
Now it is time to check, if the robot behaves correctly. Start your module and check the robots function.



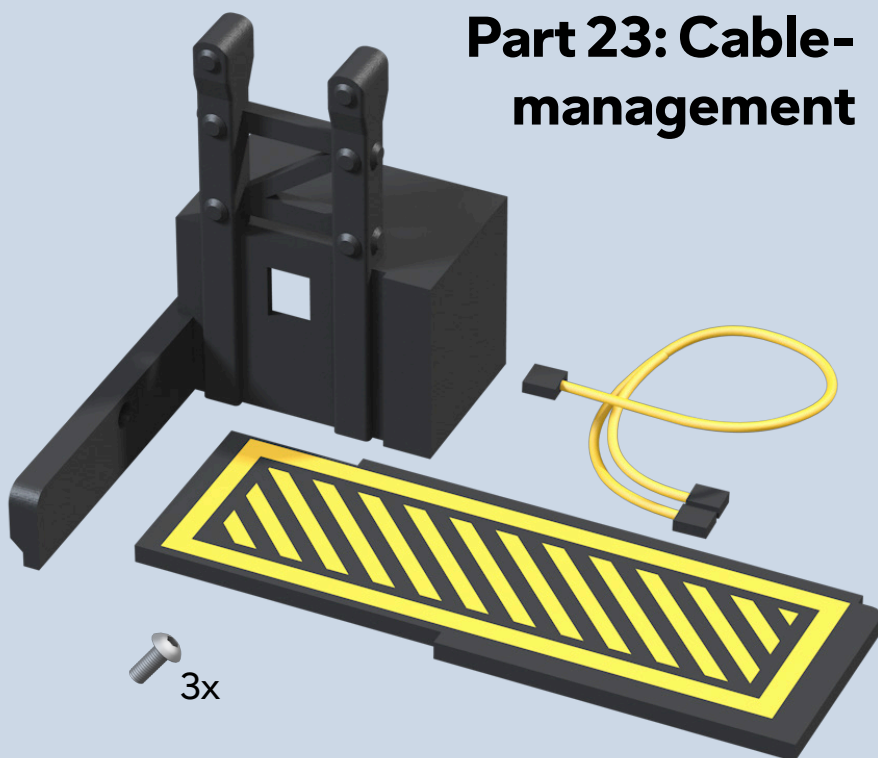
Wrap the two robot servo cables with black electrical tape—this is mainly for appearance, not function.



When installing the large conveyor, route both servo cables through the channel and push the conveyor left and right until it sits perfectly in the plate recesses. Use two screws to lock the conveyors in place.



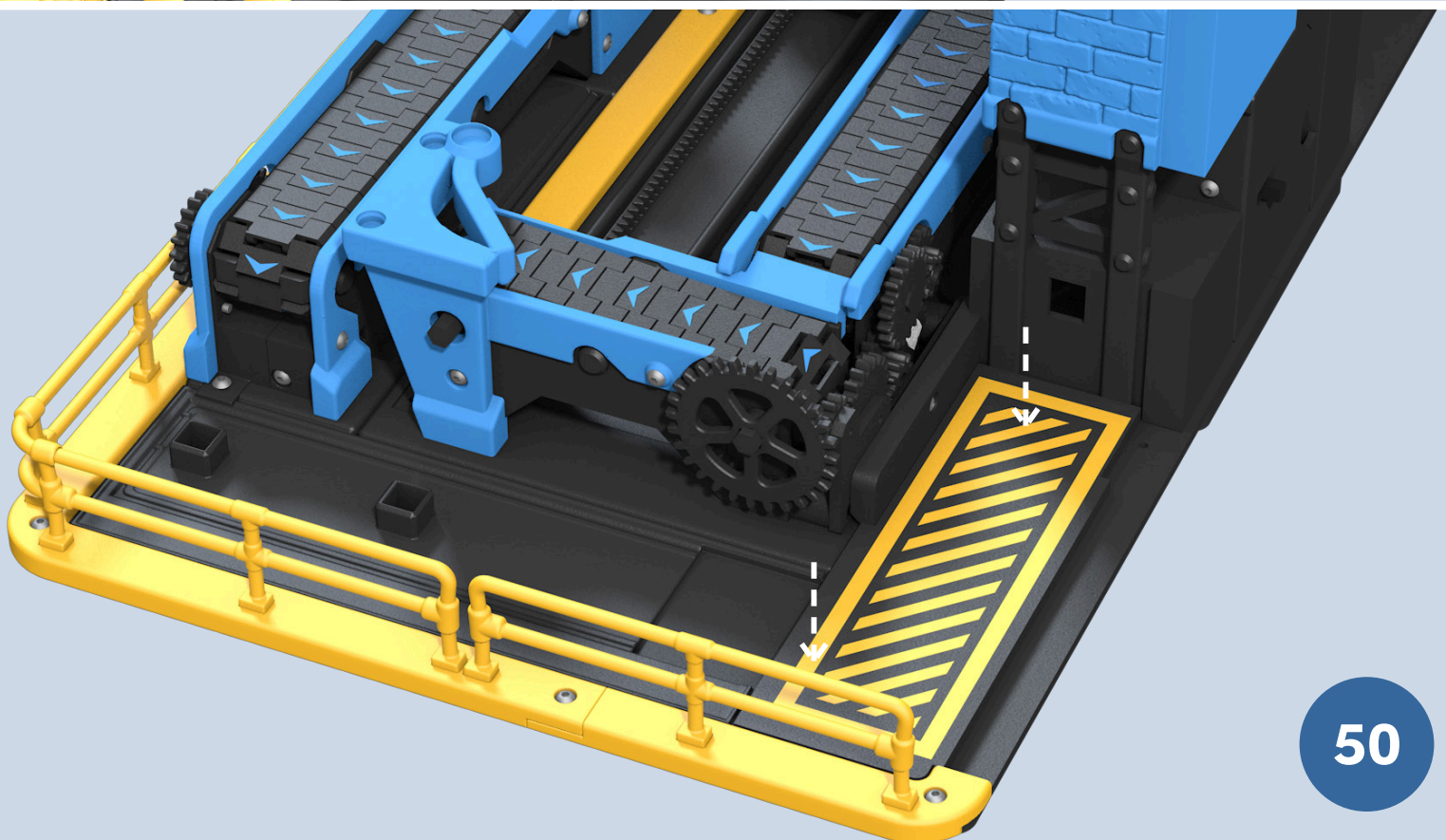
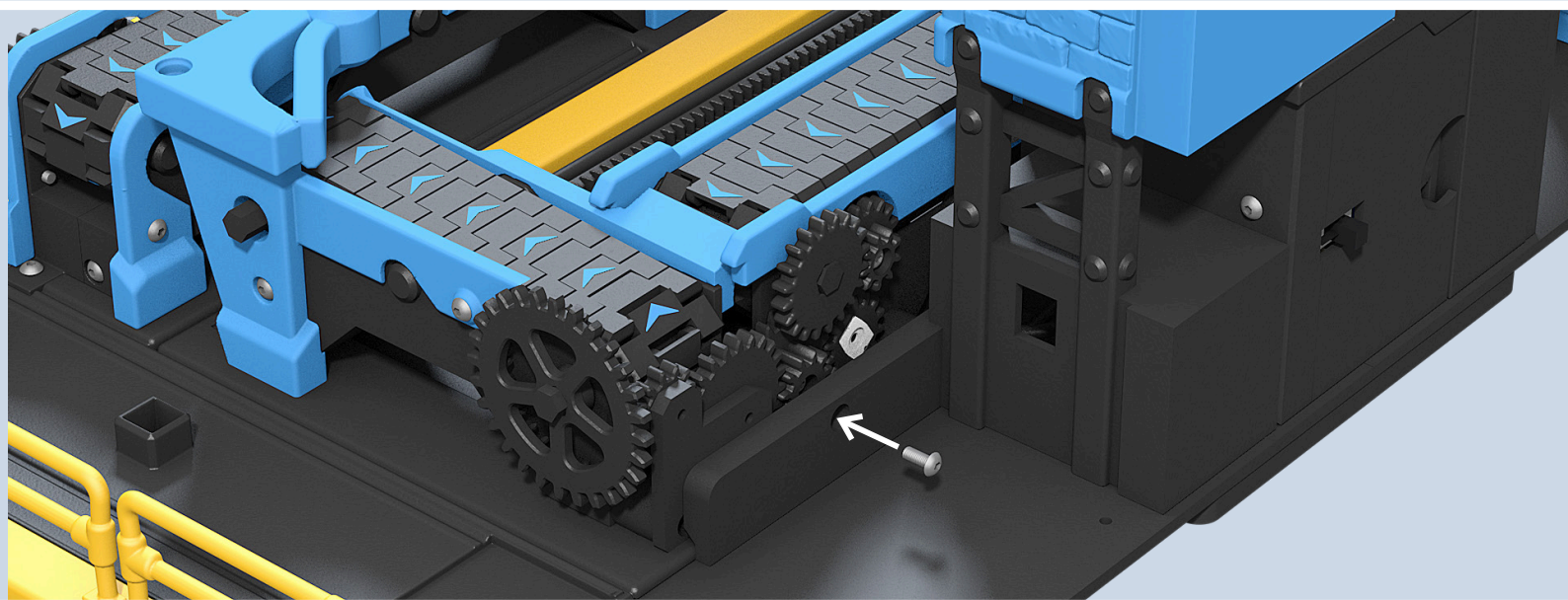
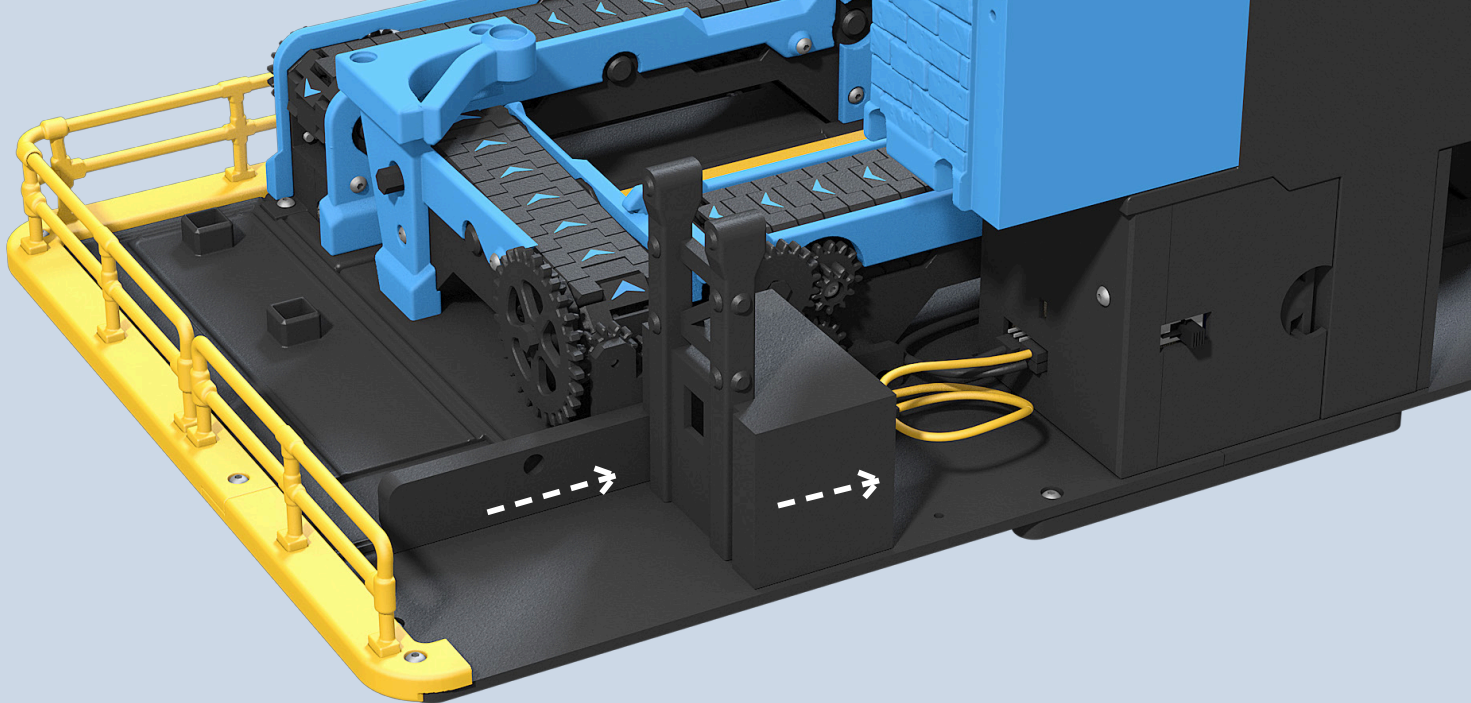
Part 23: Cable-management

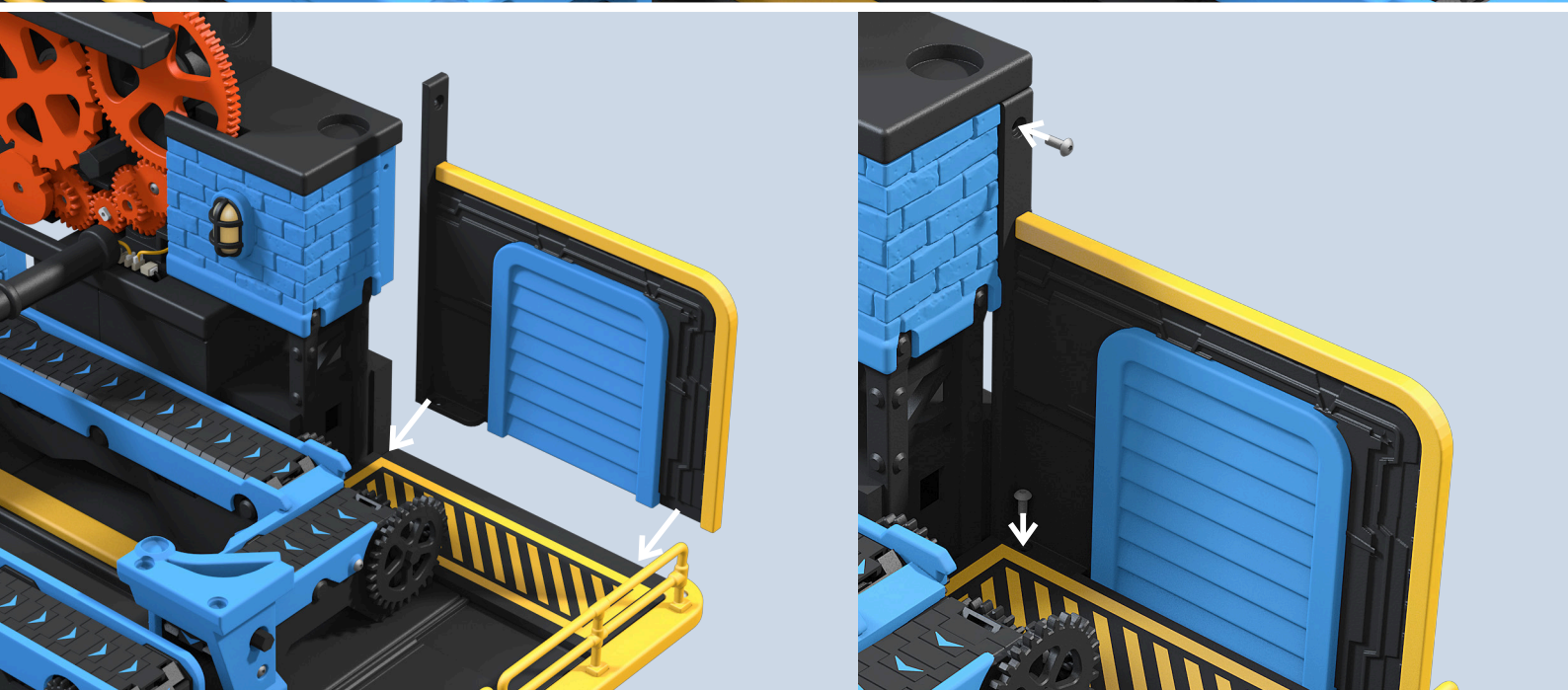
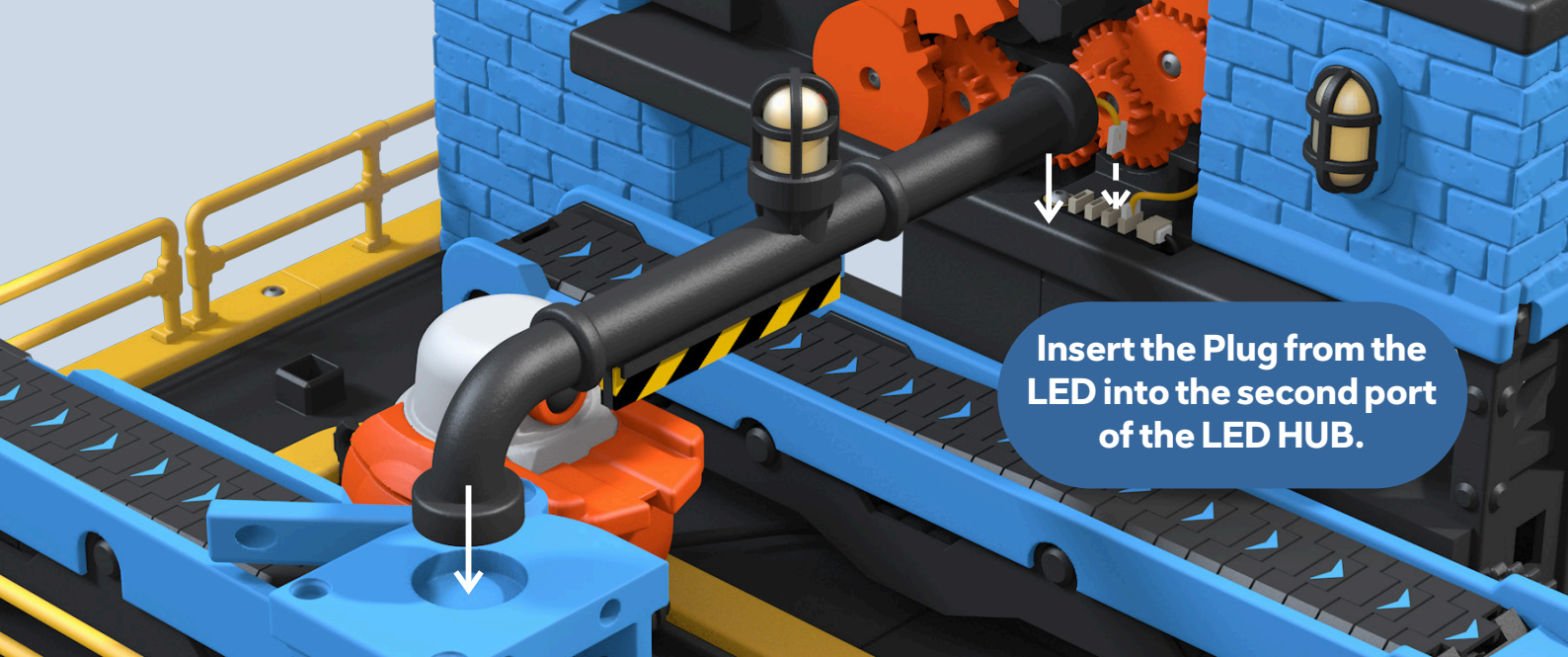


Connect the Y-cable to the upper right port, making sure the brown wire points left.

Connect the two servo cables to the Y-Cable.

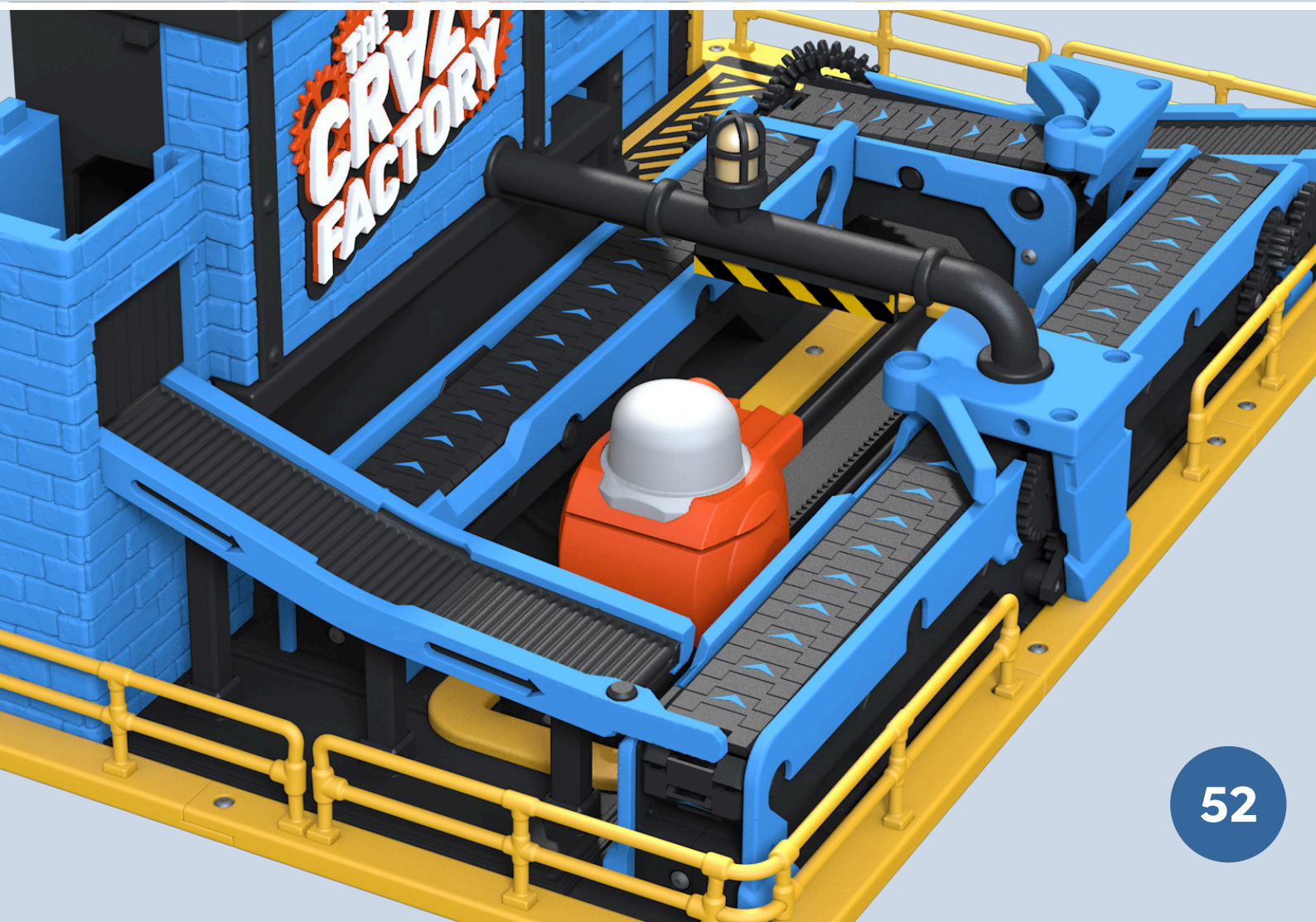
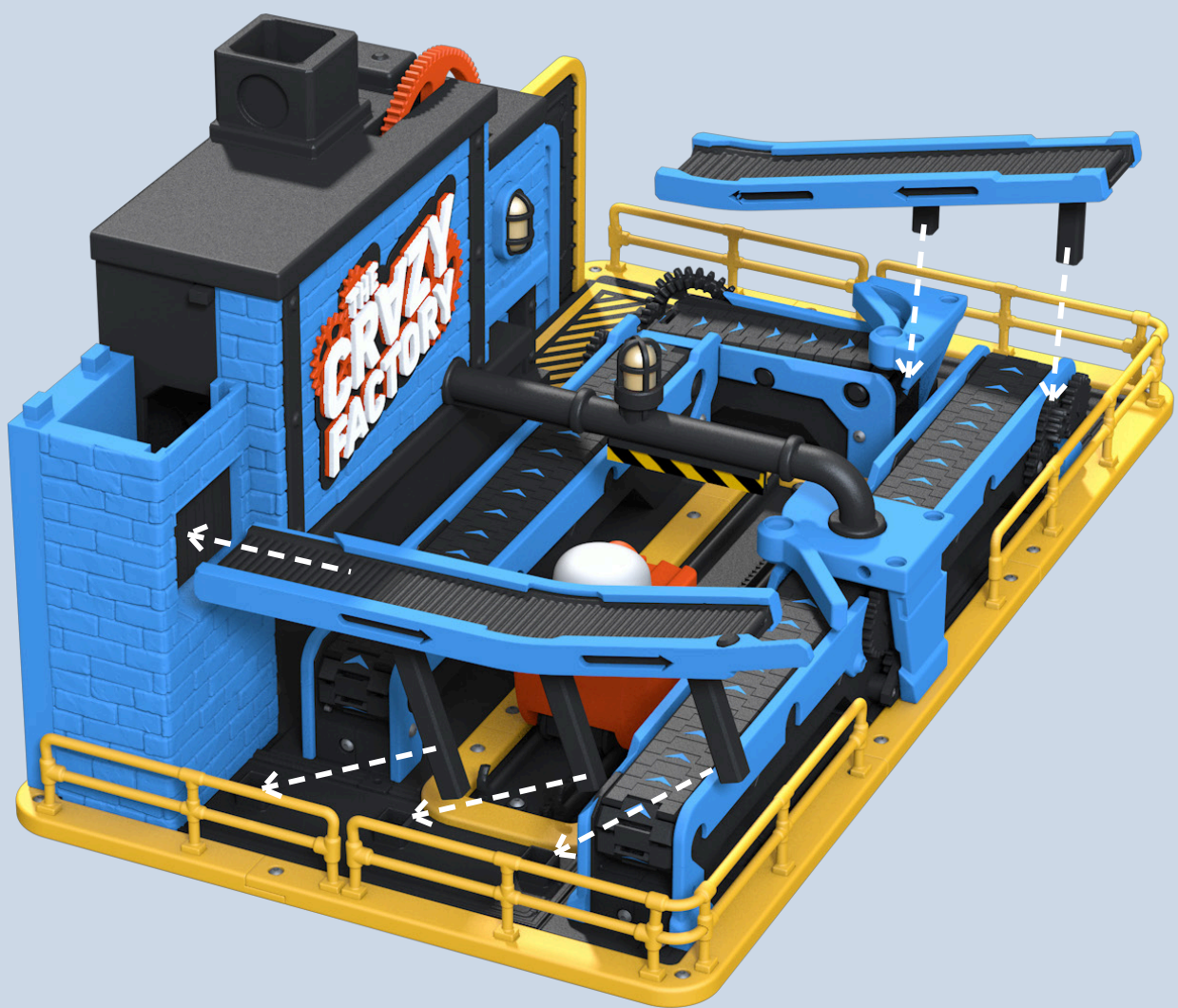
Push all cables neatly into the channel and cable organizer.





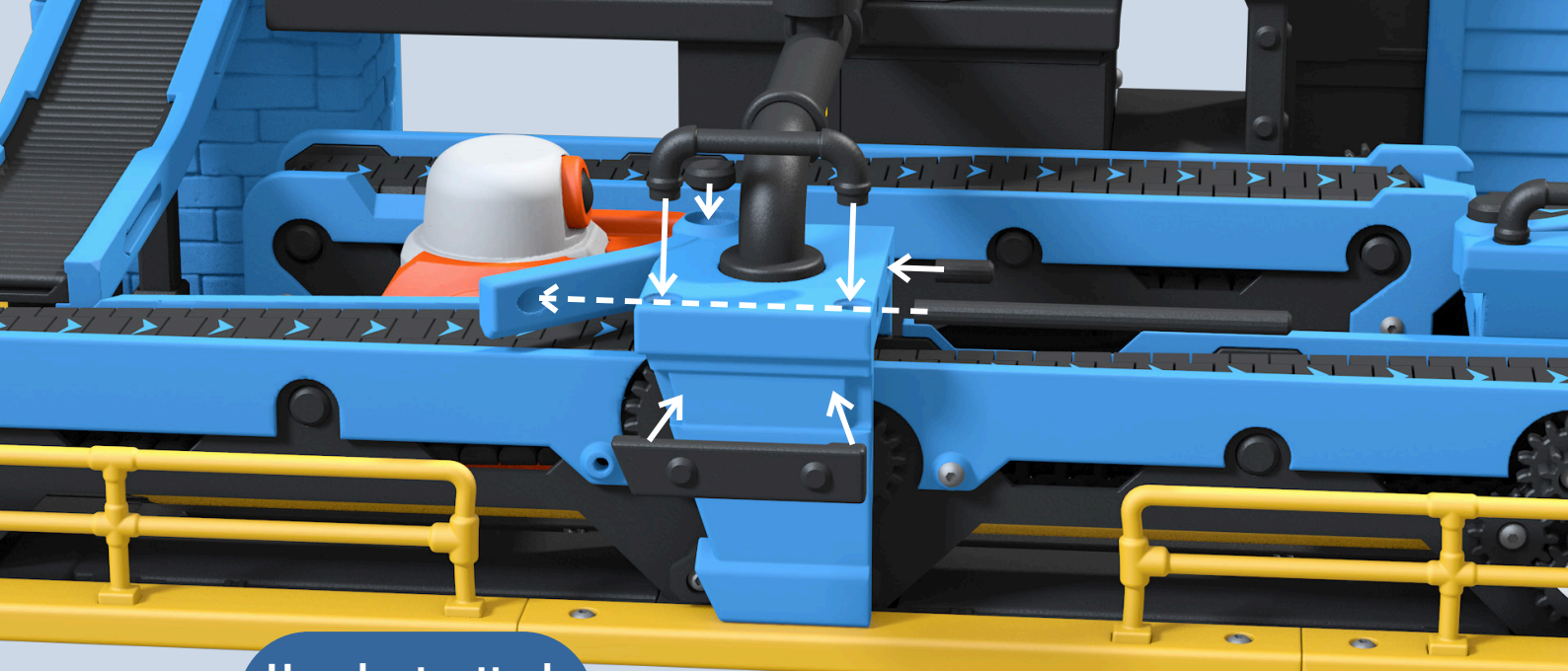
Push the frontwall over the pipe, and then back to the building.





Part 24: Details





Use glue to attach
all these parts.

