PINGERBEE! – MORE THAN JUST PING PONG!

Made entirely of LEGO MINDSTORMS ROBOT INVENTOR 51515





Model designs by BINGOBRICKS Switzerland - bingobricks@bluewin.ch Building instructions available at www.rebrickable.com/users/Bingobricks/mocs

BINGOBRICKS is a private fan label of LEGO® MINDSTORMS. These instructions and the model they depict are in no way sponsored, endorsed, or authorized by the LEGO Group.

CATCH THE BALLS!

PINGERBEE will help you become a better table tennis player. Choose from different training programs and let PINGERBEE pass the balls to you! Sometimes high, sometimes flat, sometimes left, then right, just as you like it. But be careful of their sting!

Check out also my YouTube channel: https://www.youtube.com/c/BingobricksSwitzerland

NECESSARY PARTS

This model is completely built from one set of the **LEGO ROBOT INVENTOR (51515)**. You don't need any other parts from other sets to be able to build PINGERBEE. All you need additionally is a strong elastic band and a couple of ping pong balls in the official size of 40mm in diameter! Great, isn't it?

SOFTWARE

I also have the software for PINGERBEE ready for you that will make PINGERBEE alive. With this software you can play different training programs with different levels of difficulty. The program varies in different ball heights (flat or high balls), ball directions (left, right, middle) and frequencies of the ball kicks. PINGERBEE will also decide whether the ball should be shot high or flat based on the color of your table tennis balls. In addition, great light and sound effects ensure even more fun! And the best: There is even a software version to control PINGERBEE from your smartphone!



SHARE YOUR EXPERIENCE!

Show your friends how much fun you have with BUGRIDERI Share a picture or video clip of BUGRIDER in the Facebook group "LEGO MINDSTORMS ROBOT INVENTOR" or any other MINDSTORMS related group!





4x 18654 Black





4x 6628a Black 1x 32270 **Black**



2x 60483 Black

2x 32291 Black



1x 41678 Black

1x 22961 Black



7x 25214 Black 2x 32039 Black



8x 32523 Black



2x 32184 **Black**



1x 98585 Black



3x 32140 Black



4x 11478 Black



5x 32316 Black



11x 32526 Black

7x 32348

Black

1x 32498

Black





4x 32271 Black

10x 32524 Black



5x 64179 Black



1x 2569 Black



4x 39367c02 Black

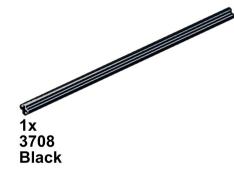


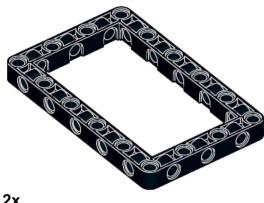
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1x 18938 Black

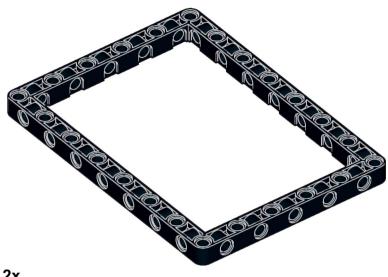




2x 39794 Black



5x 32278 Black



2x 39790 Black



2x 10928 Dark Bluish Gray



4x 11214 Dark Bluish Gray



2x 3648 **Dark Bluish Gray**



3x 55013 **Dark Bluish Gray**



6x 4265c **Light Bluish Gray**



1x 4274 **Light Bluish Gray**



5x 3713 **Light Bluish Gray**



14x 3673 Light Bluish Gray^{3x} 63869

Light Bluish Gray

Light Bluish Gray

7x

4519

6x 32184

1x 87082





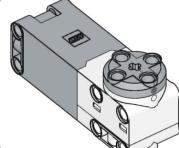
4x 32138 **Light Bluish Gray**



6x 48989 **Light Bluish Gray**



2x44294 8x **Light Bluish Gray** 32054 **Light Bluish Gray**



Light Bluish Gray

4x 54696c01 **Light Bluish Gray**



1x 18939

6x 18654 White



White



2x 60483 White



1x 32013 White



9x 15100 White



2x 11947 White

1x

11946

White

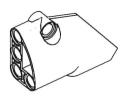


White

6x 32192 White



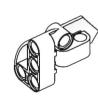
1x



2x 87080 White



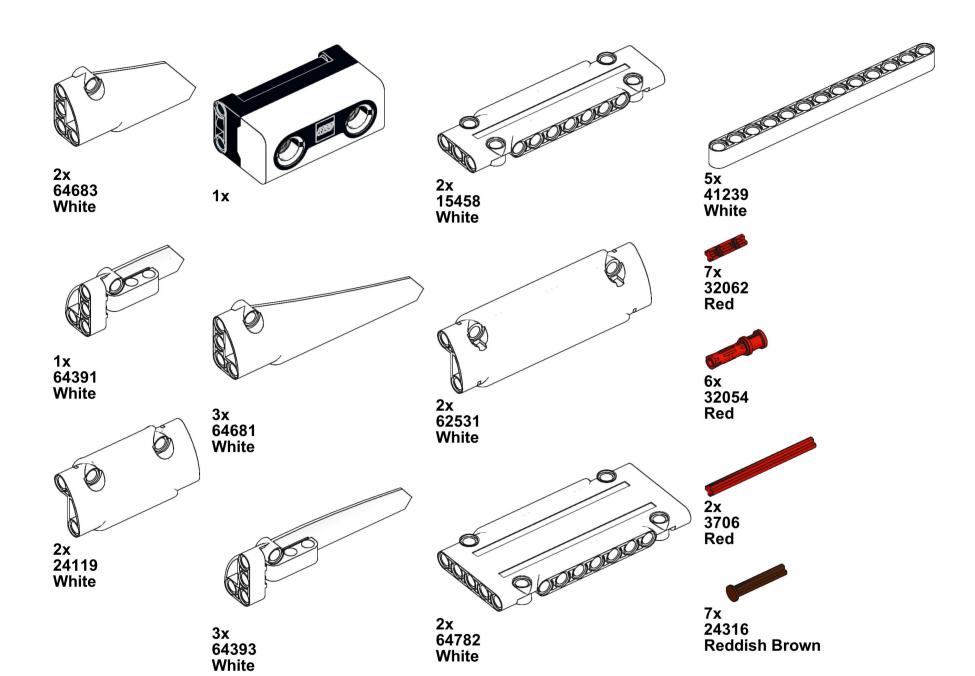


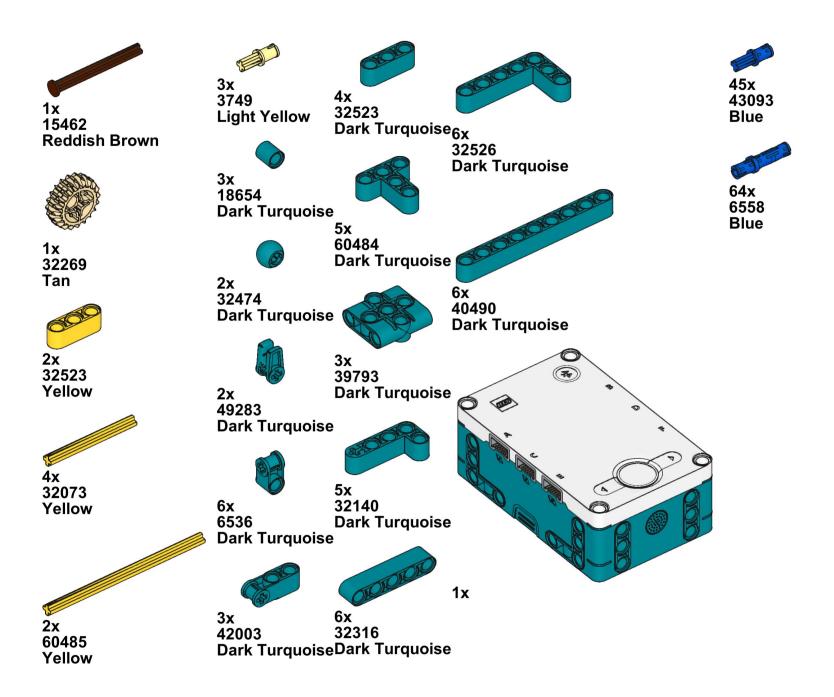


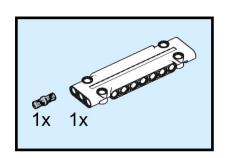
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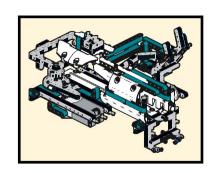


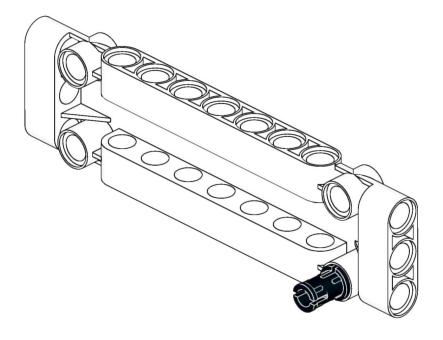
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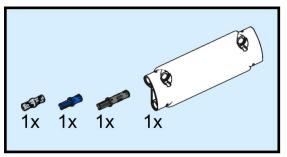


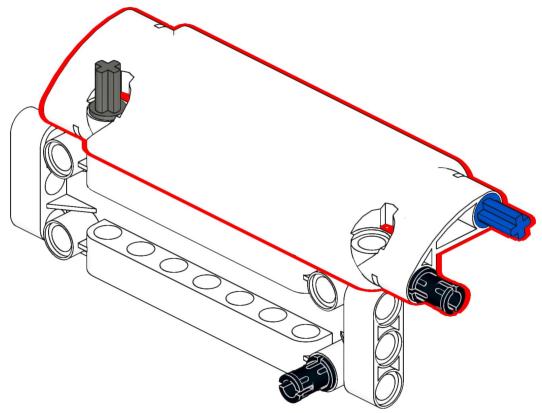




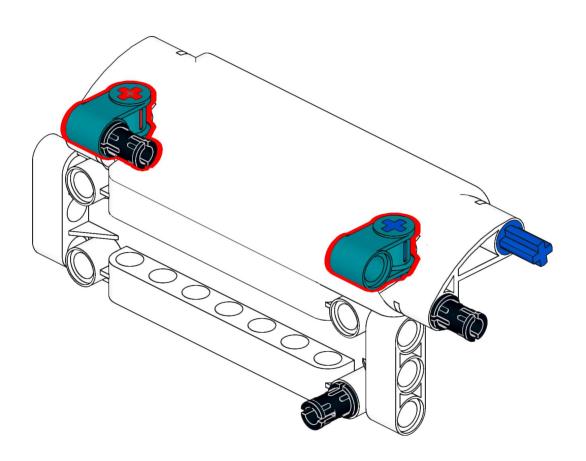


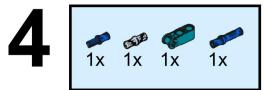


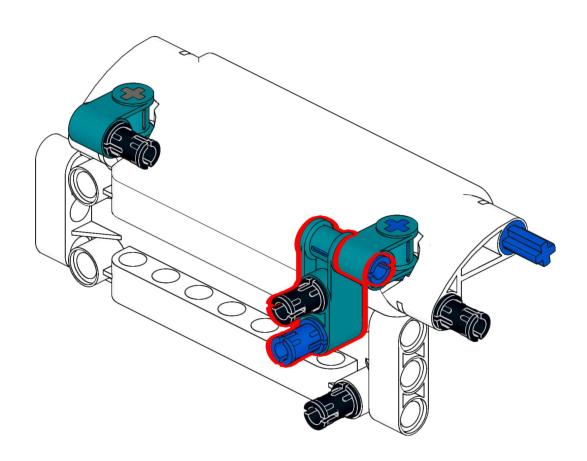


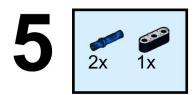


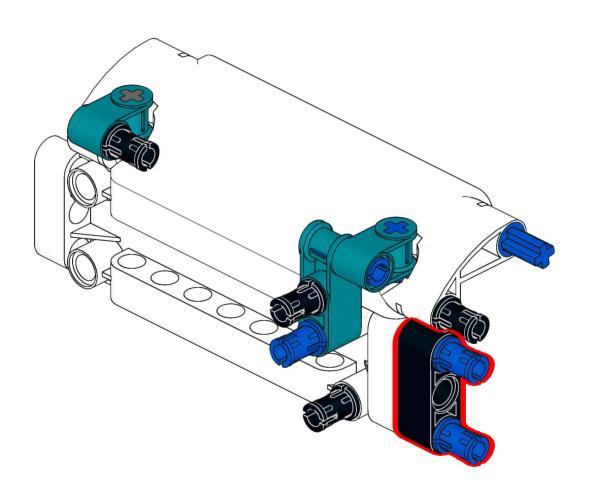


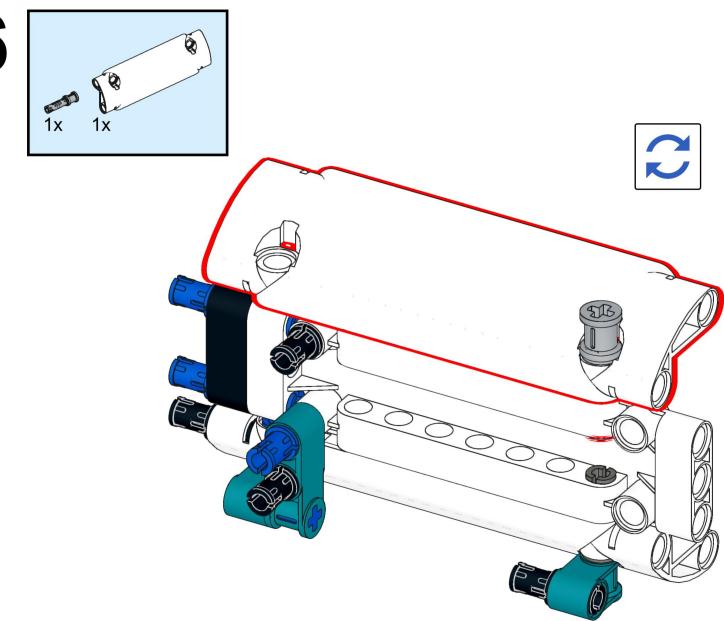


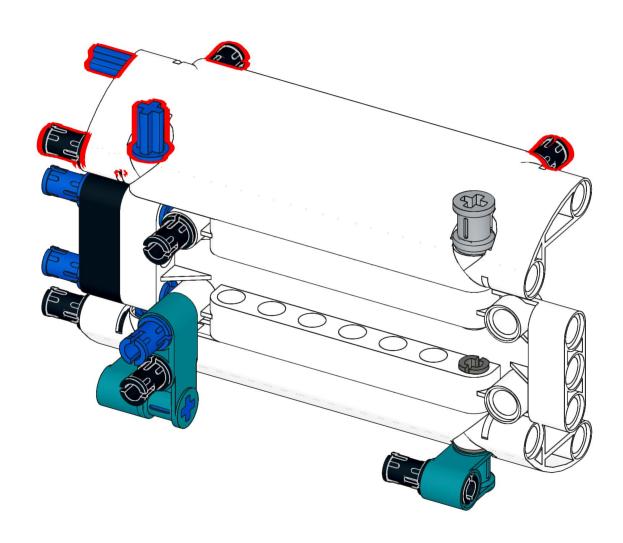




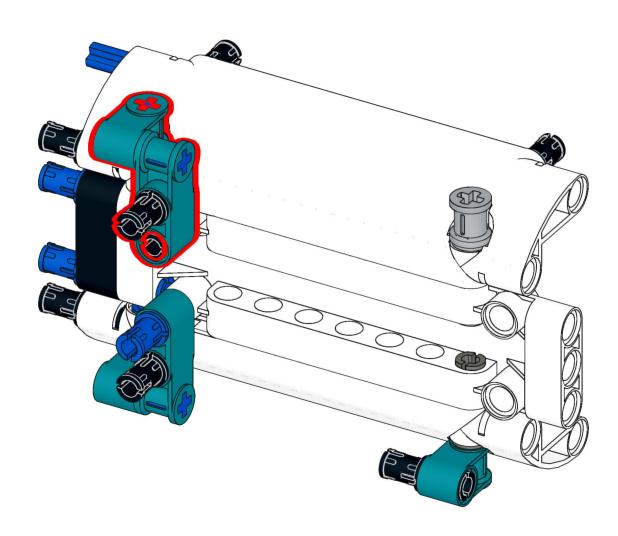


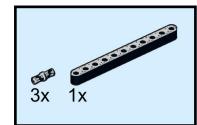


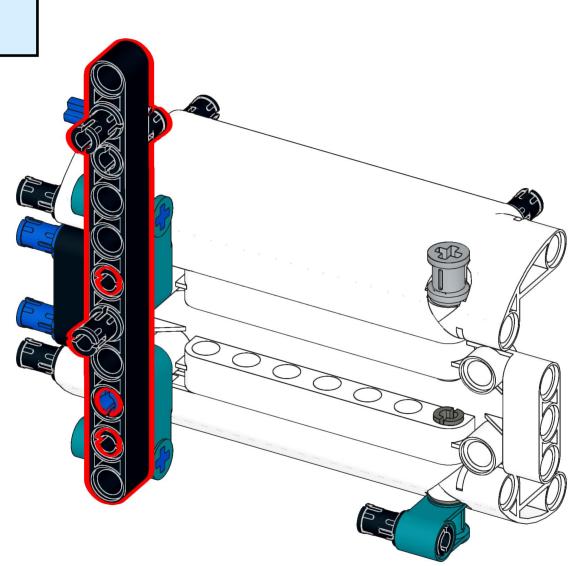


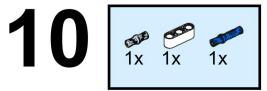


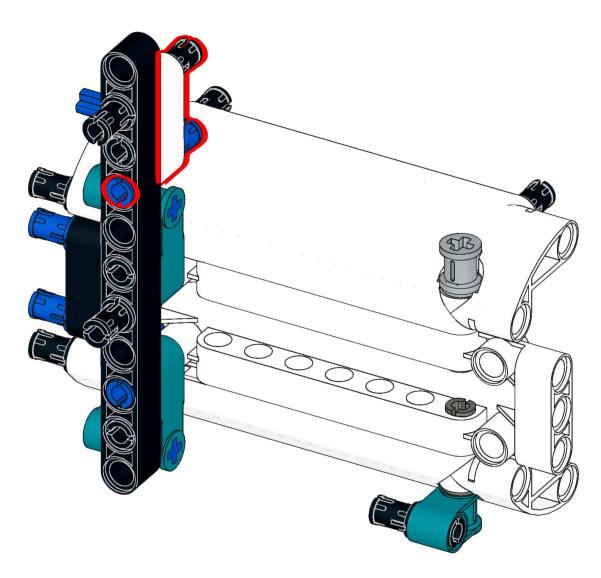


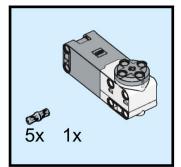


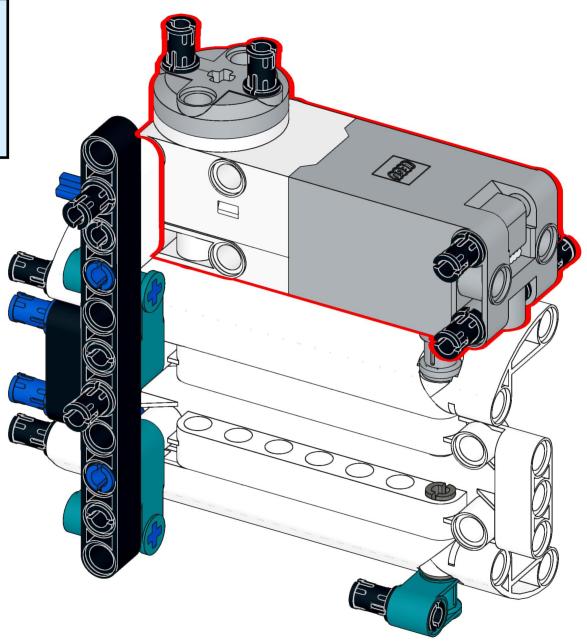


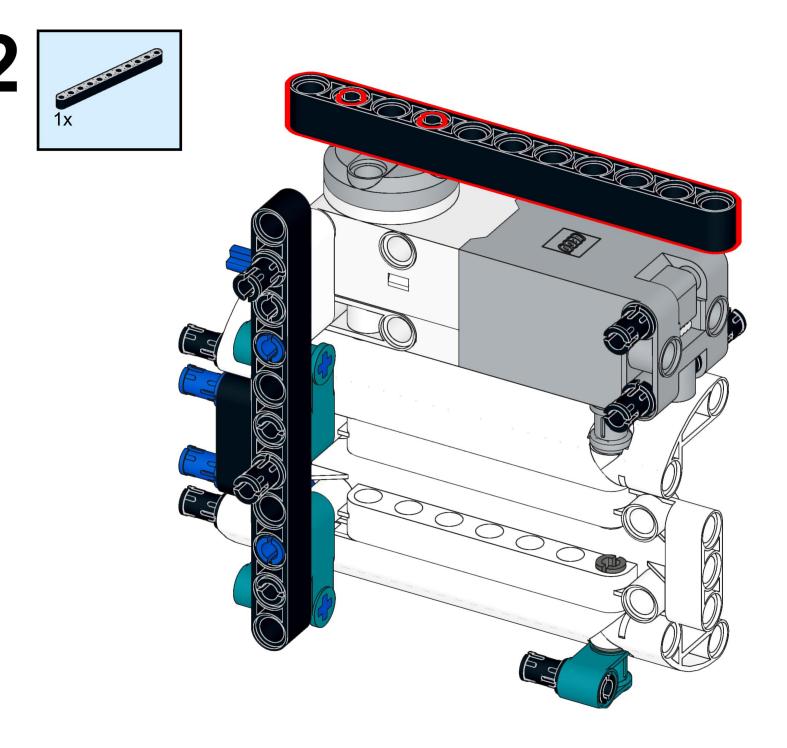


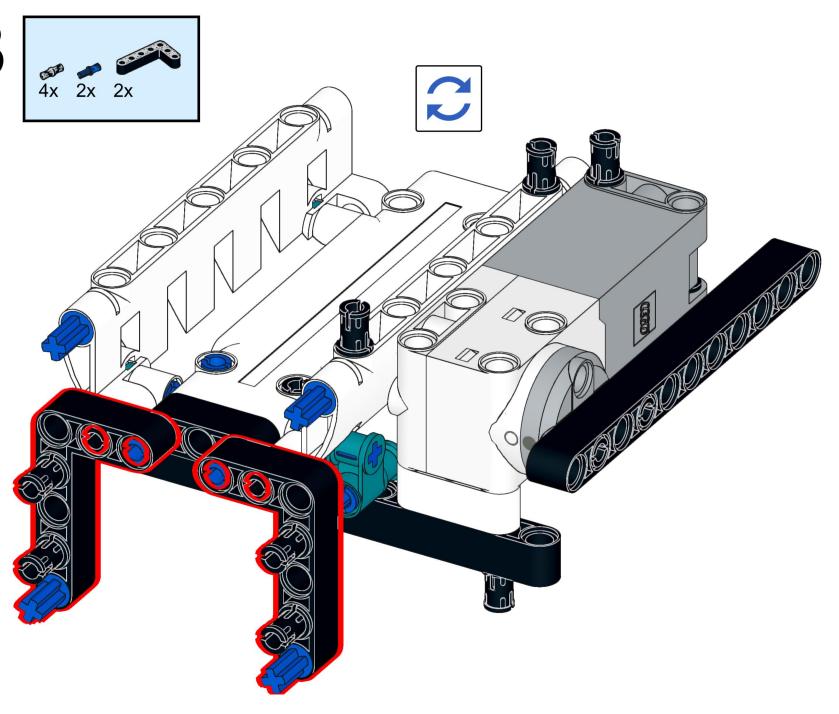


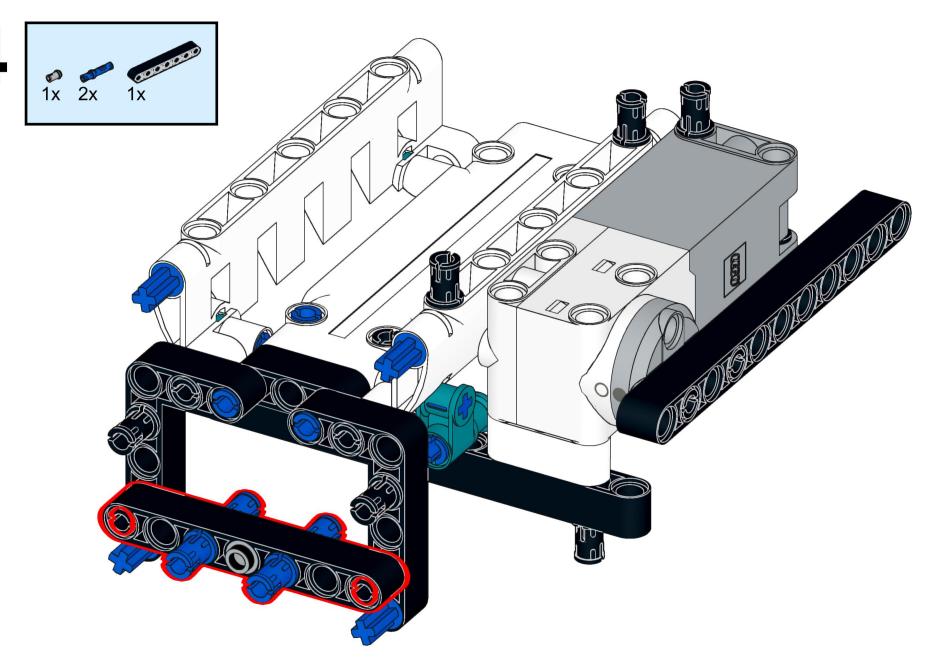




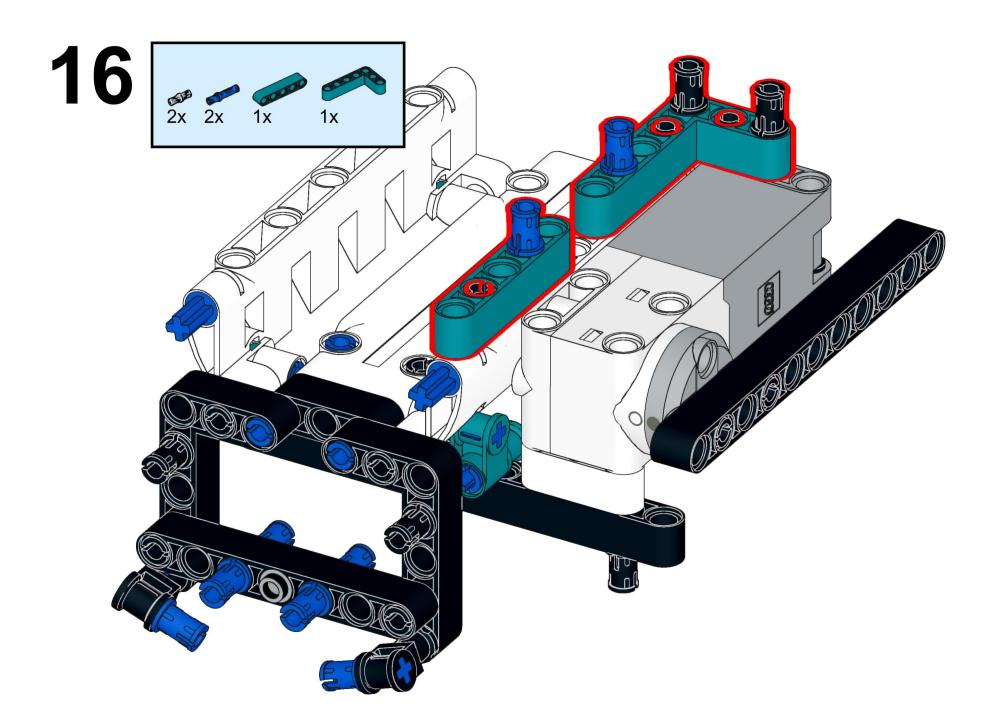




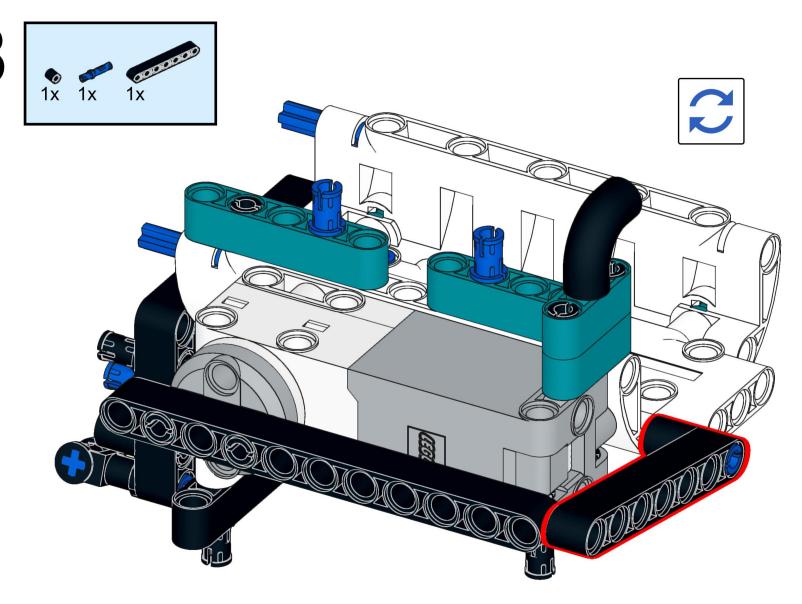




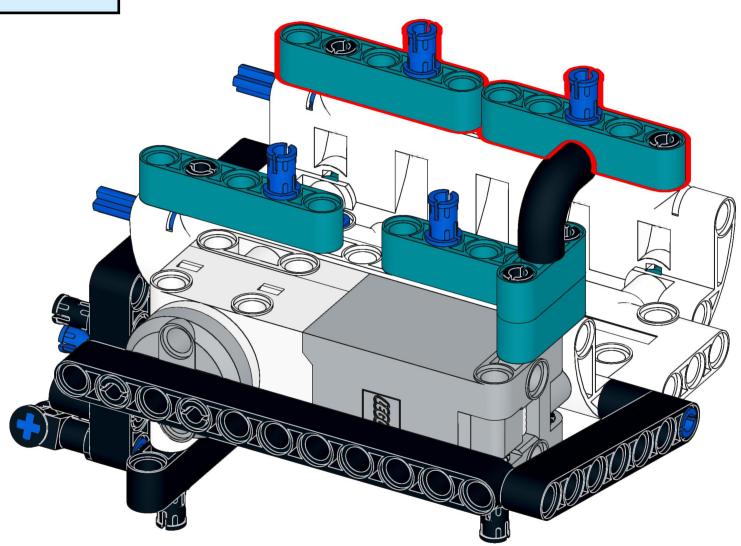
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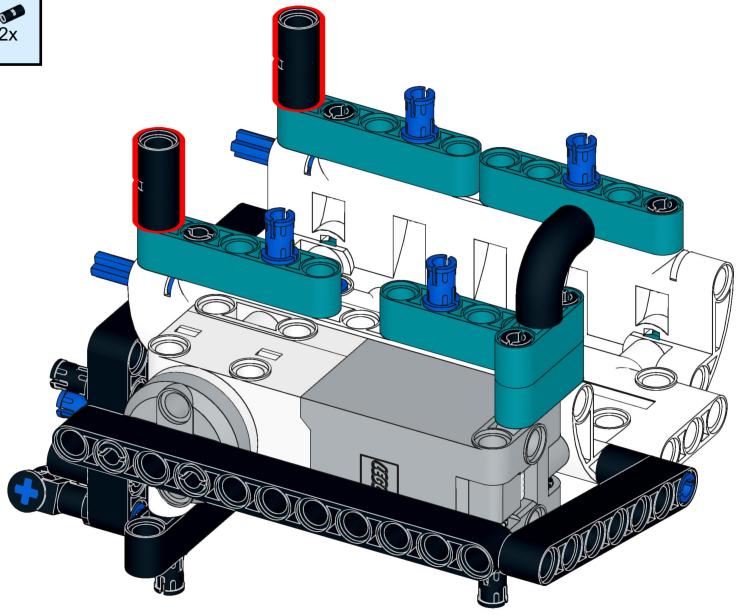
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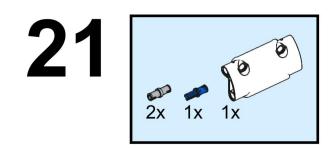


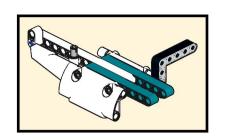


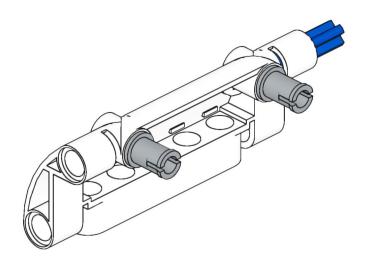


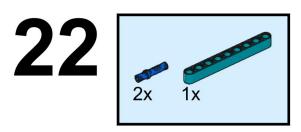


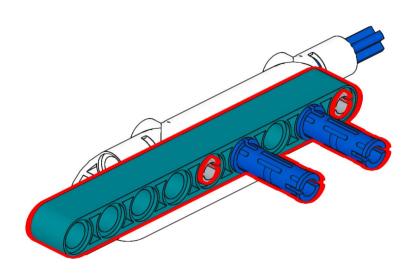


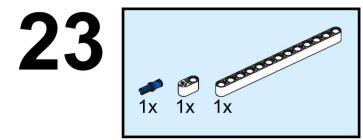


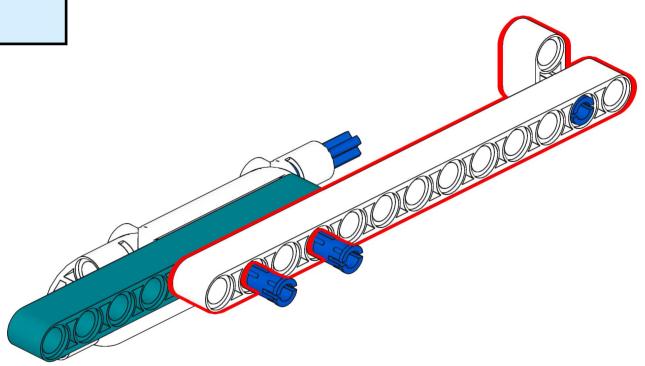




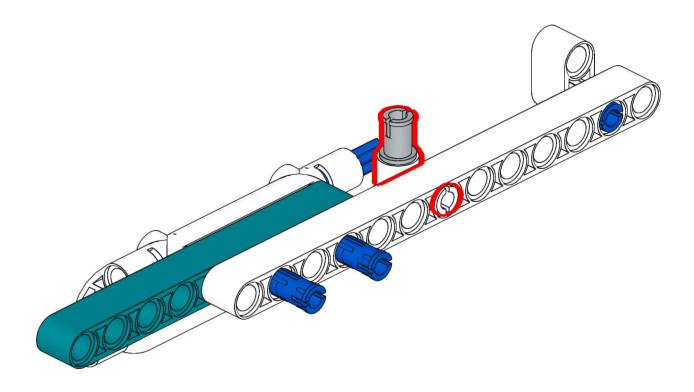




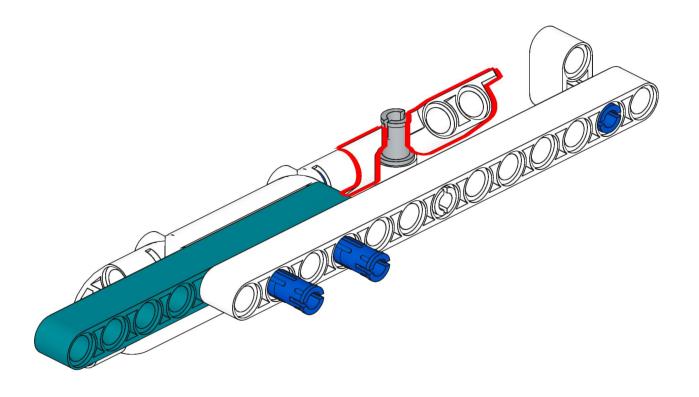


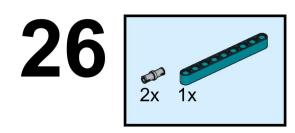


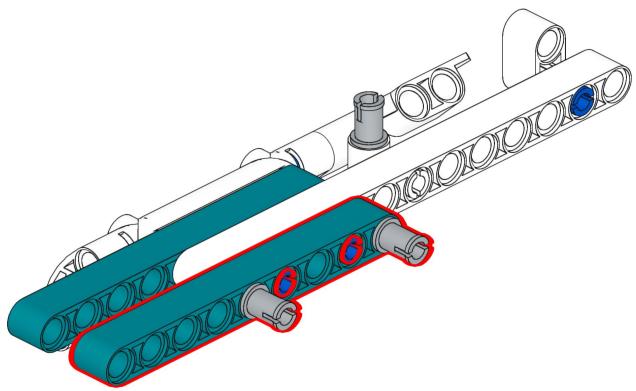


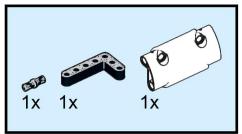


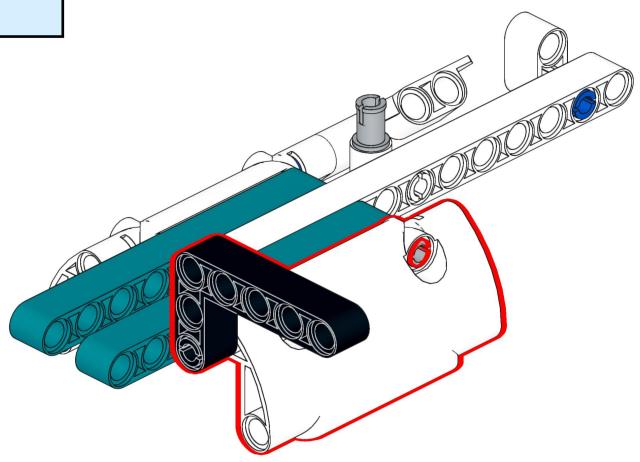
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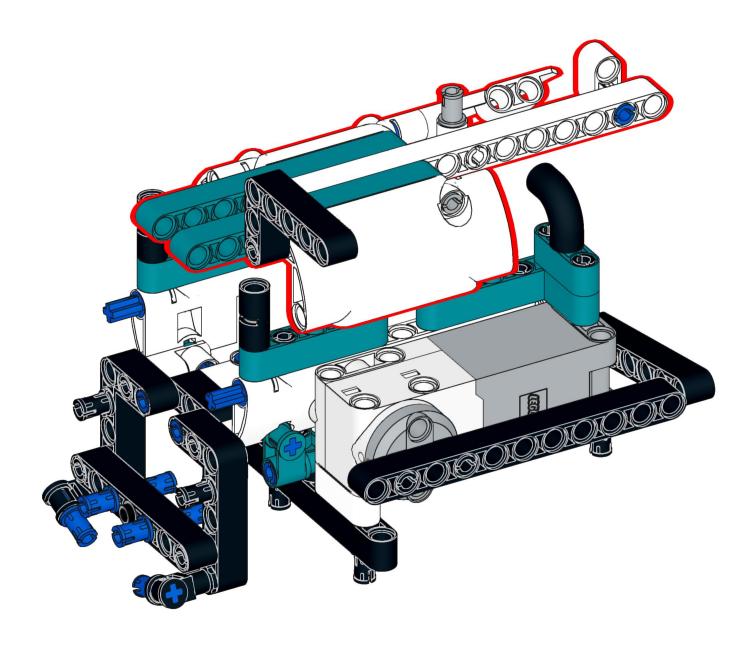


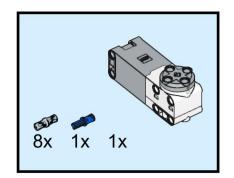


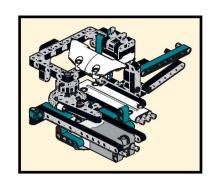


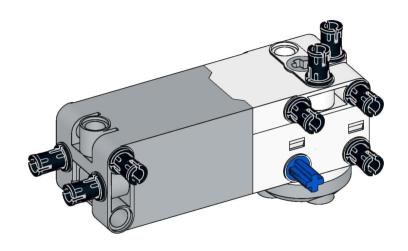


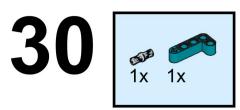


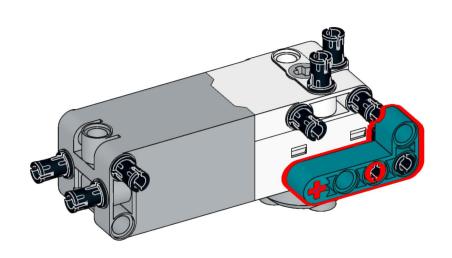


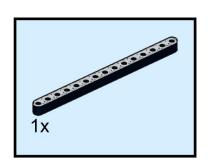


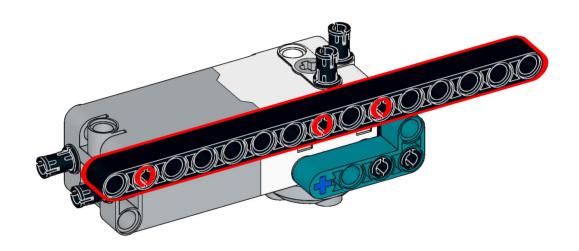


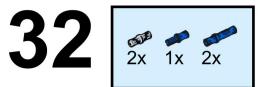


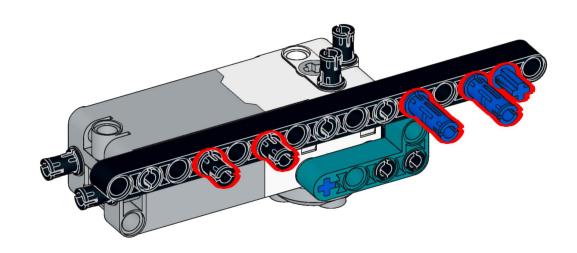




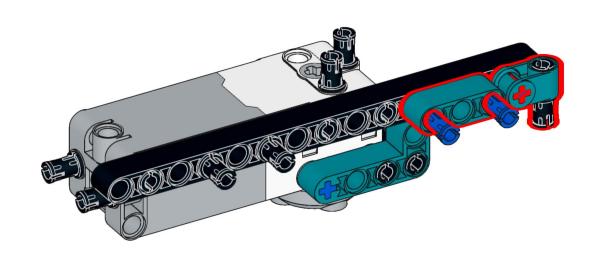


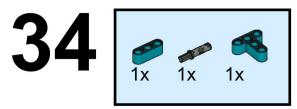


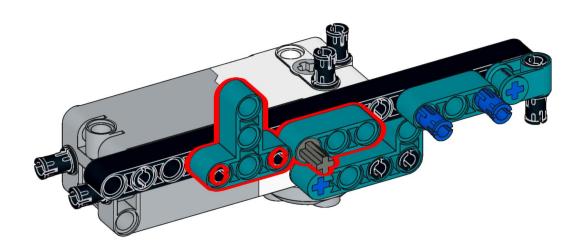




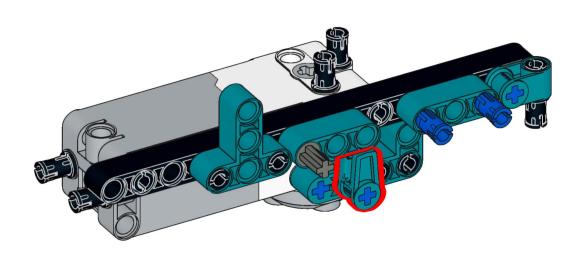




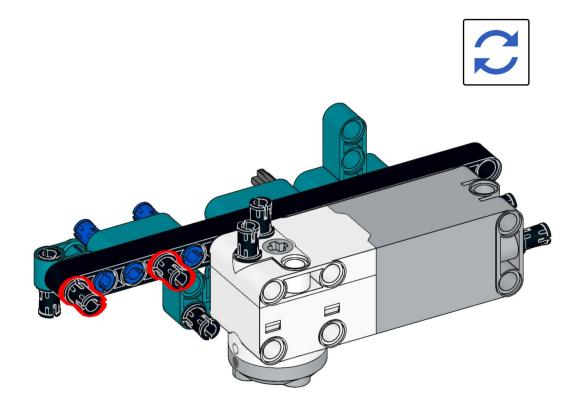




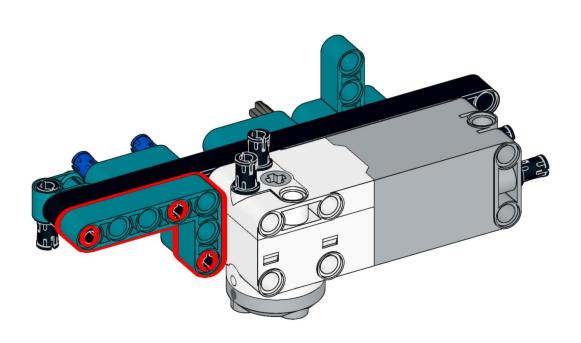
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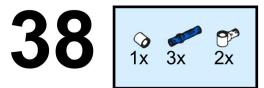


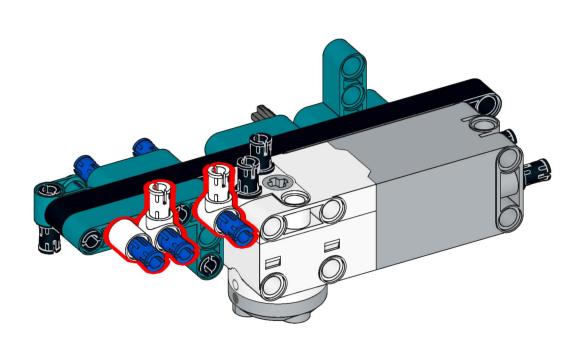
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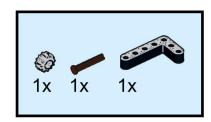


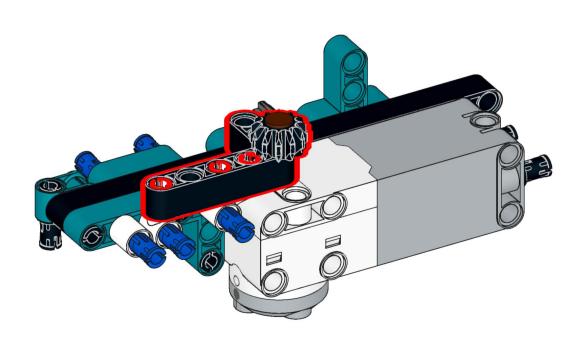
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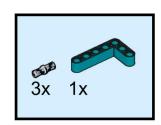


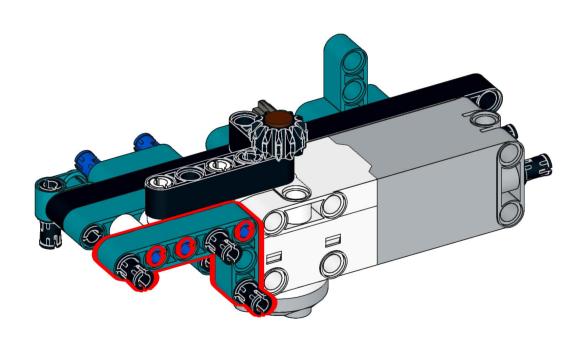


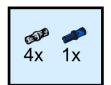


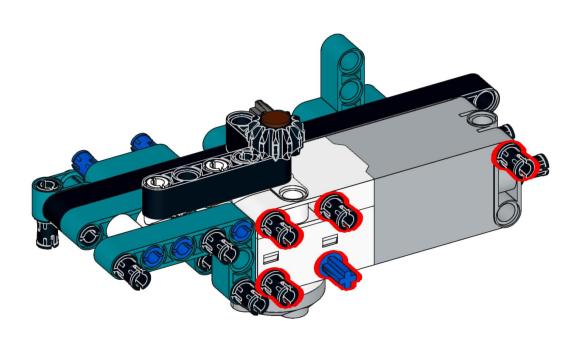




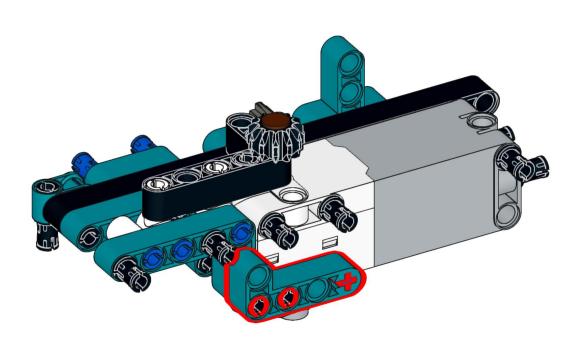


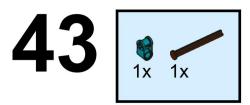


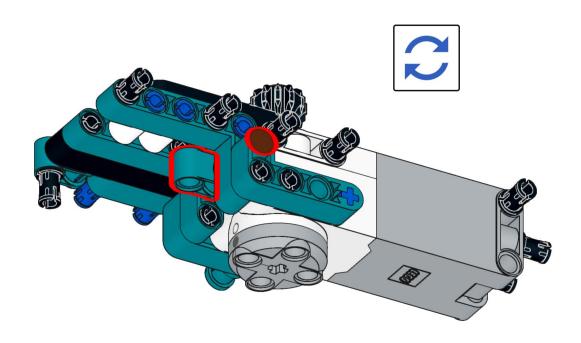


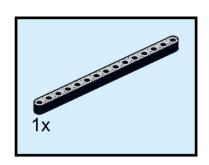


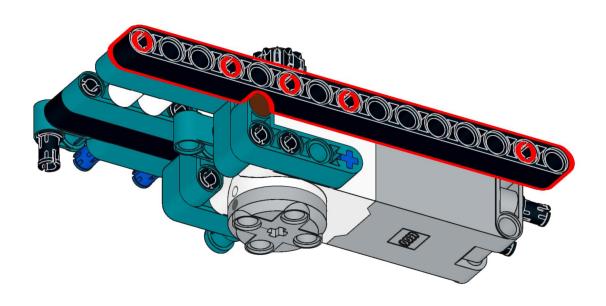
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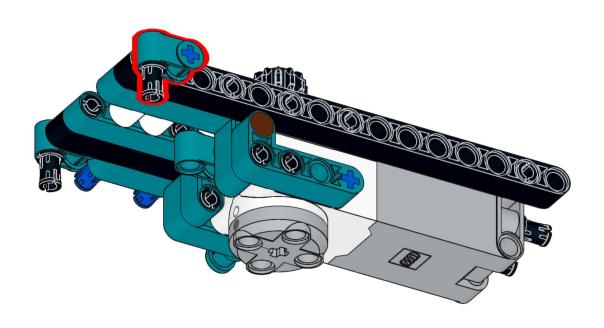


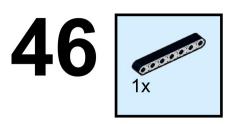


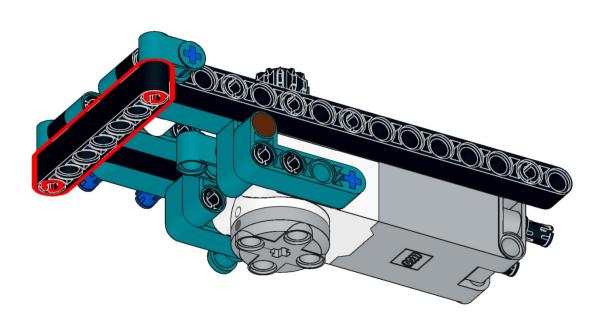


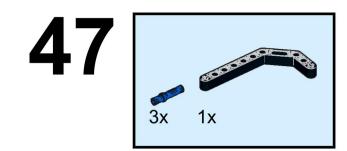




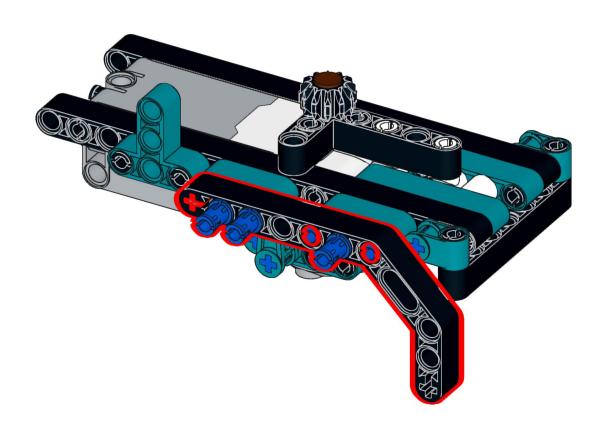


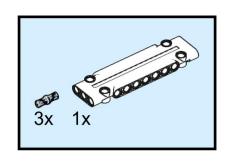


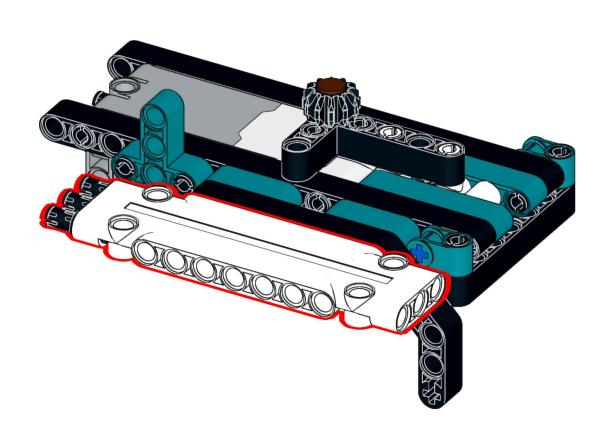


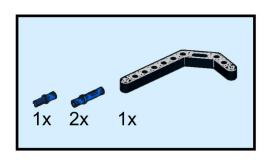


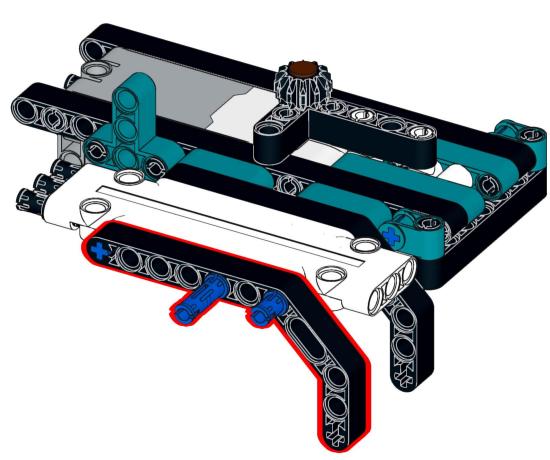


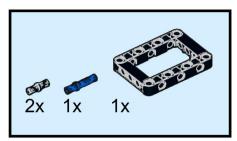


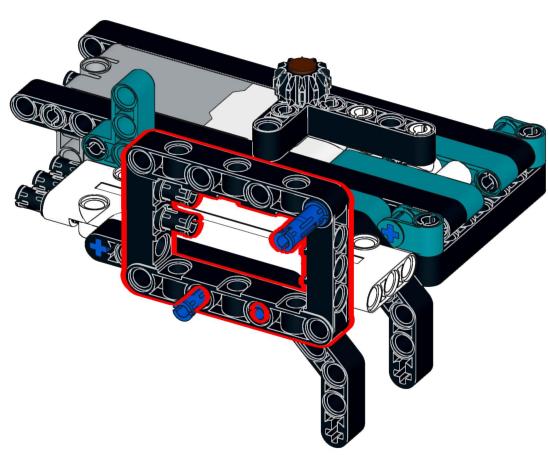


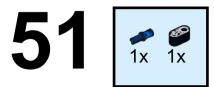


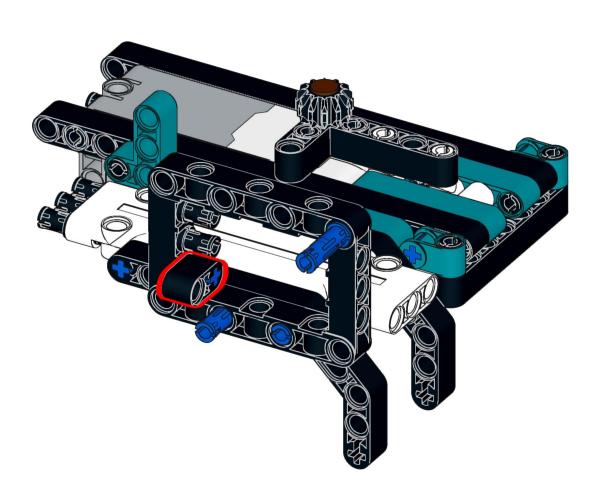


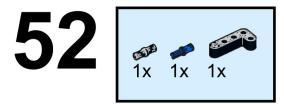


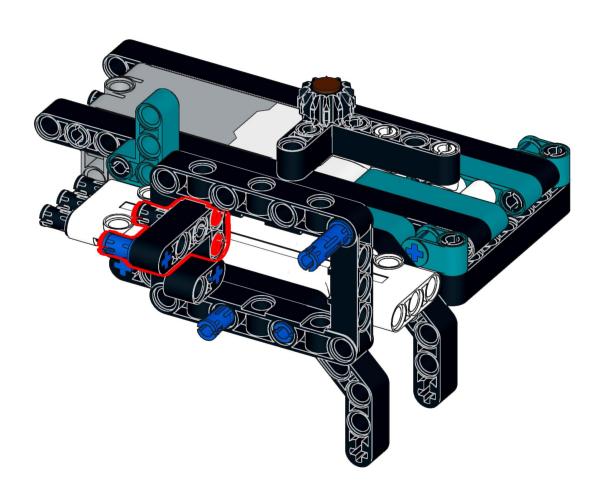


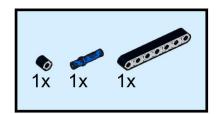




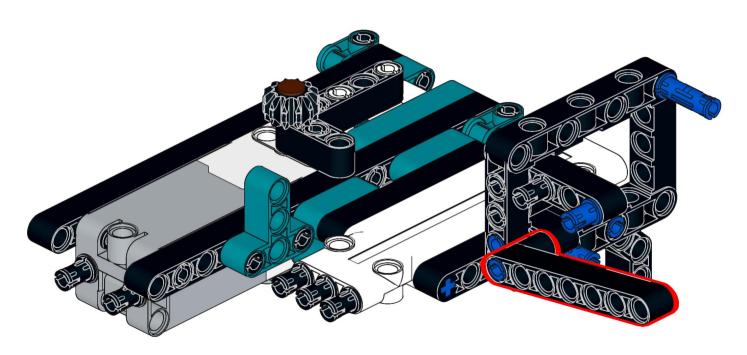


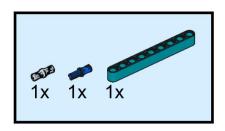


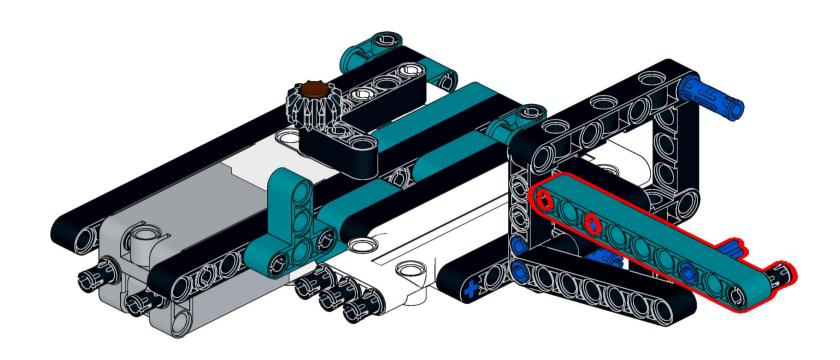




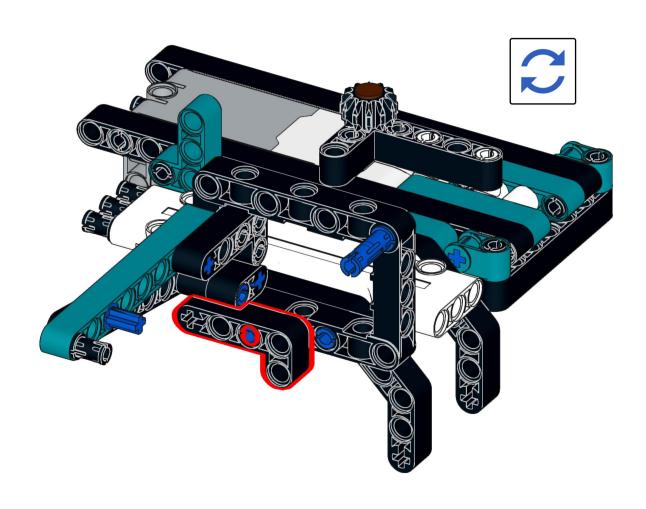


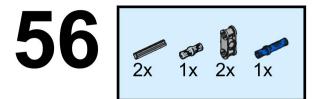


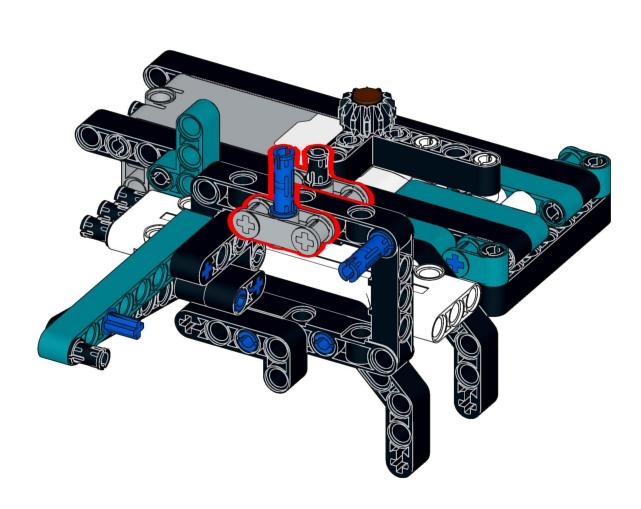


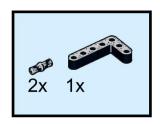


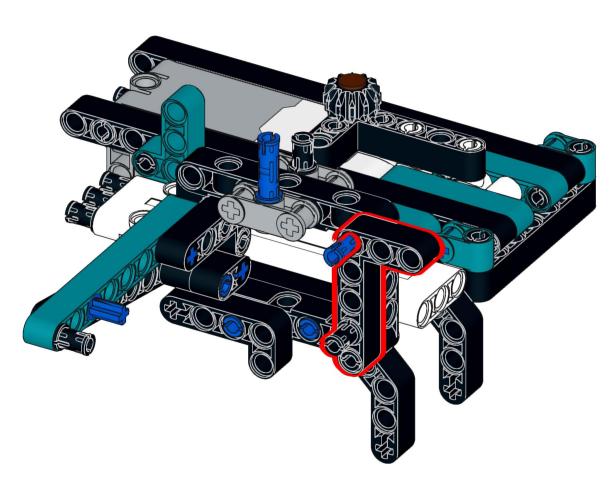
55 x

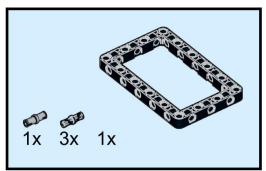


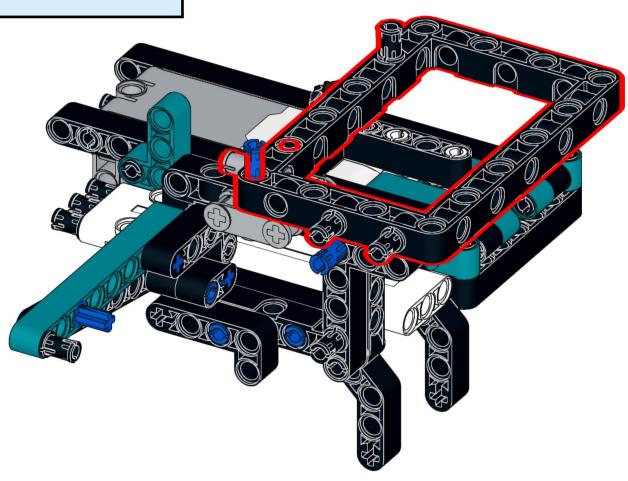


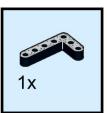


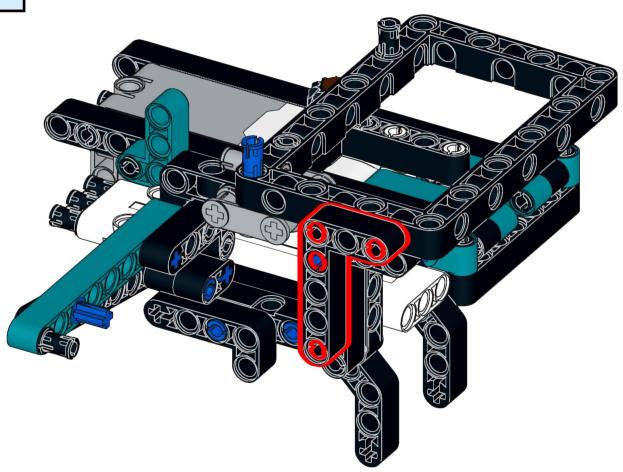


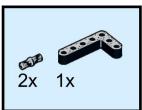


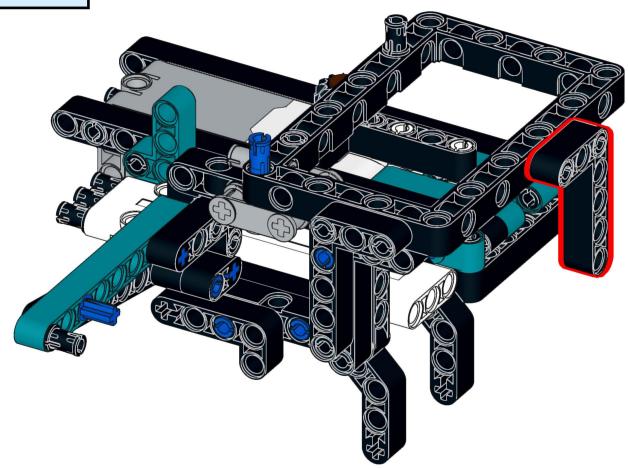


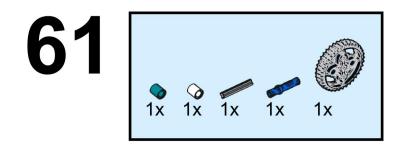


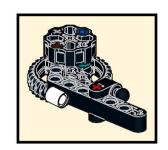




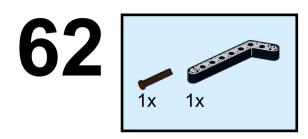


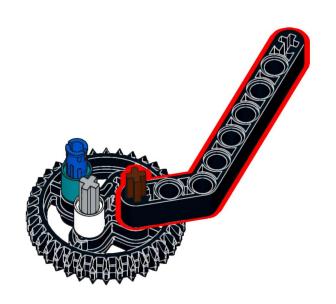


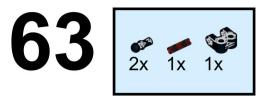














3 1x

1. Use a strong rubber band, approximately 5 cm in length.



2. Fold the rubber band half the lenght and pull it through the round connector pin.



3. Connect the rubber band on one end to the blue pin.

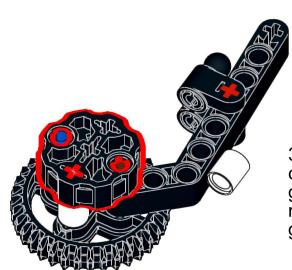




1. Connect the black round axle connector on the top.



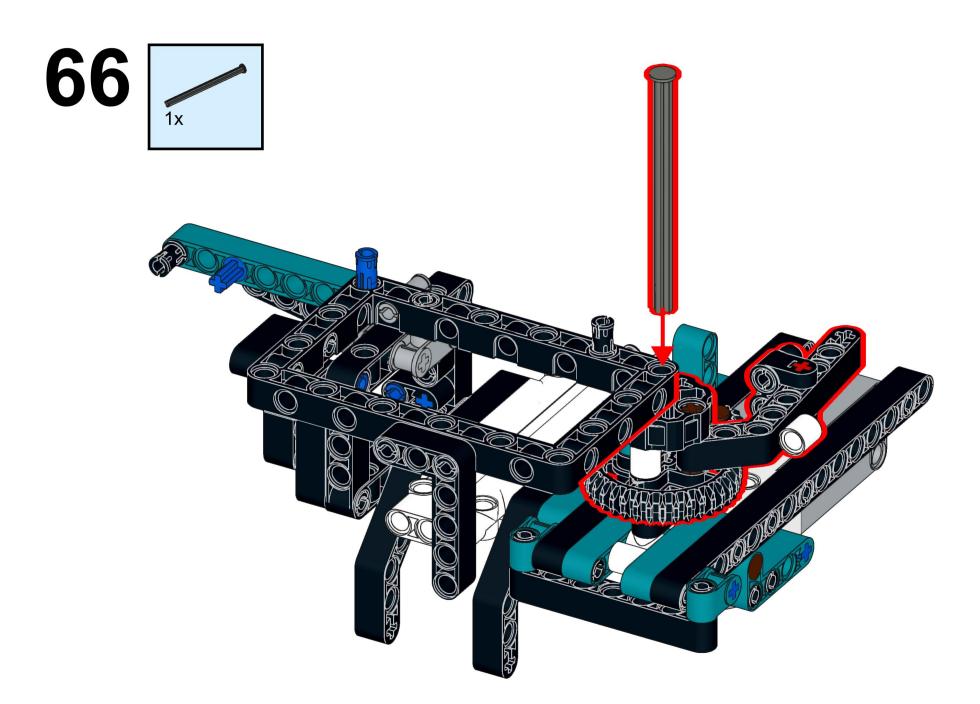
2. Bend the rubber band to the two knobs.

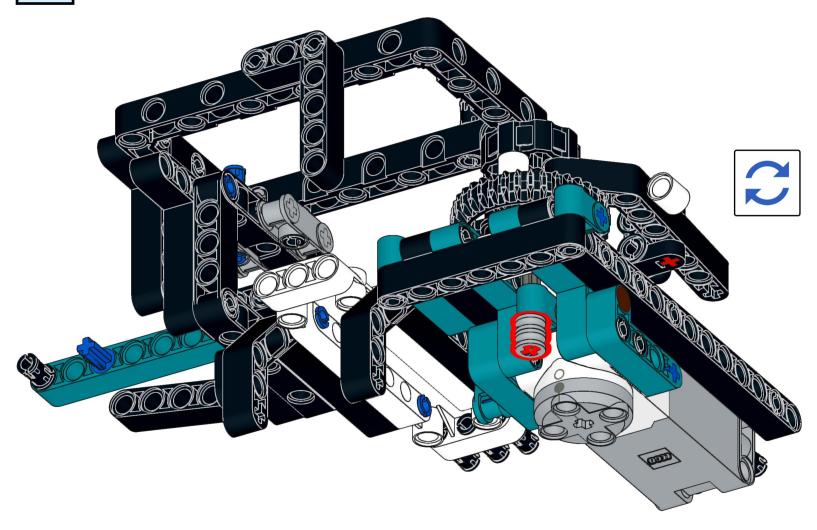


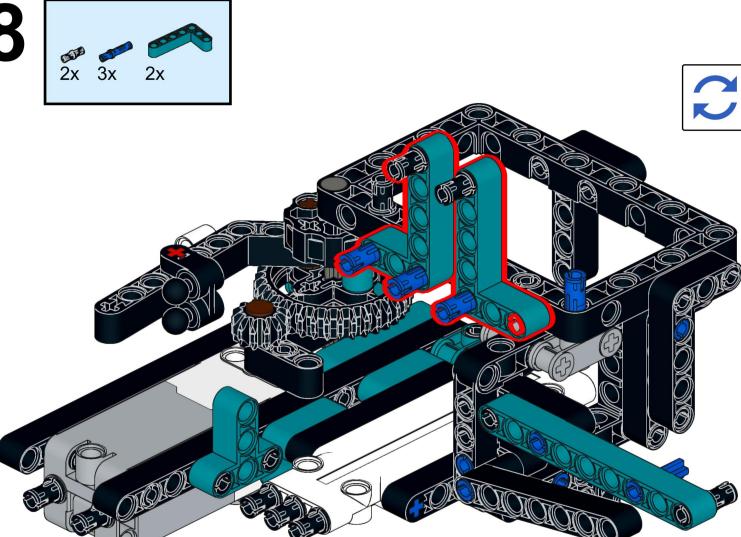
3. Push the white round connector pin to the gear. (It protects the rubber band from the gear.)

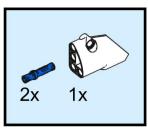


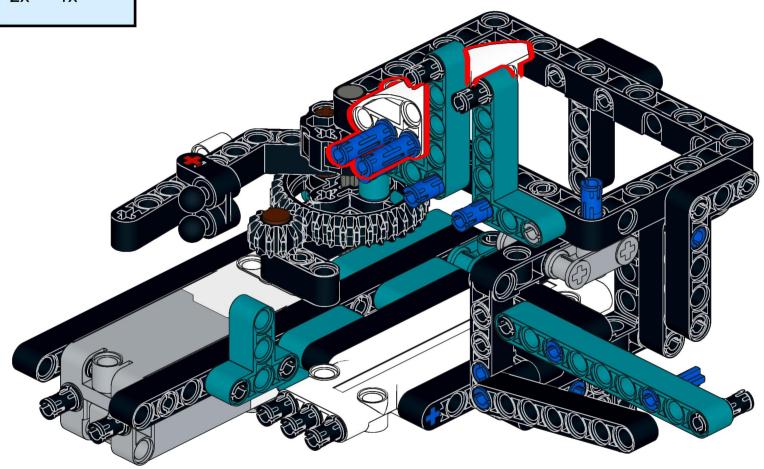


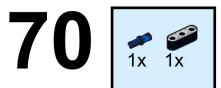


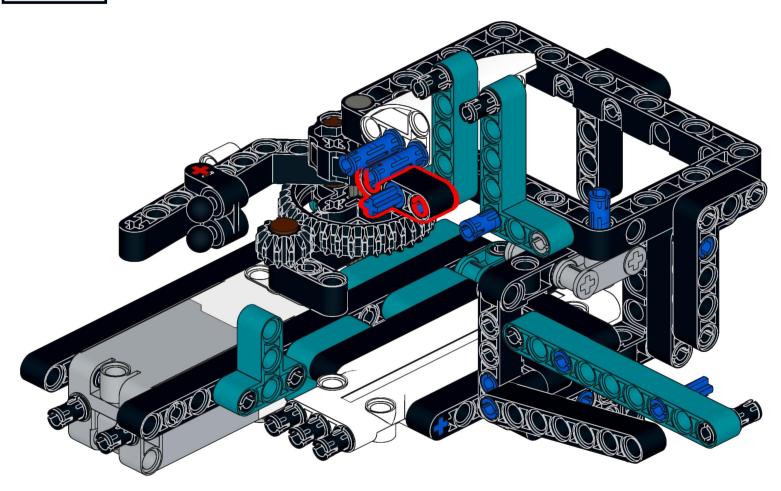


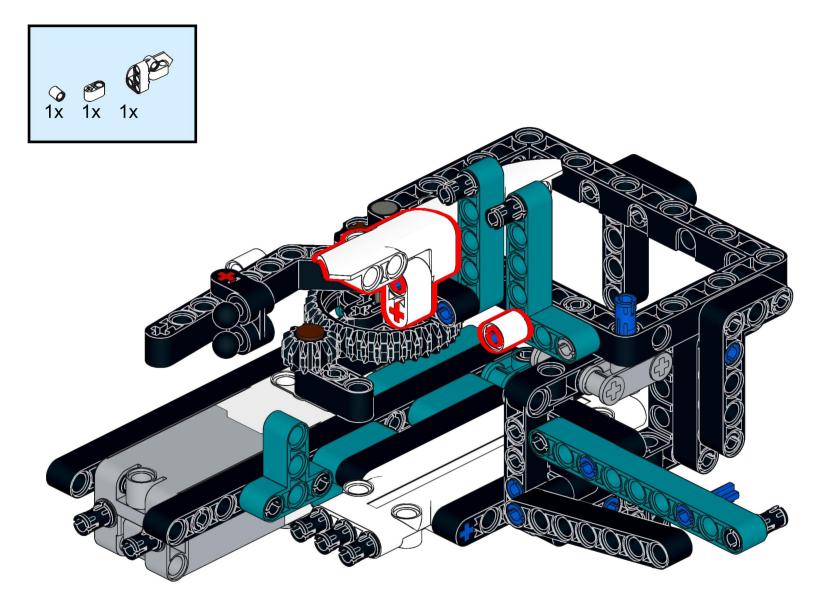


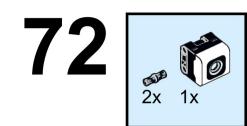


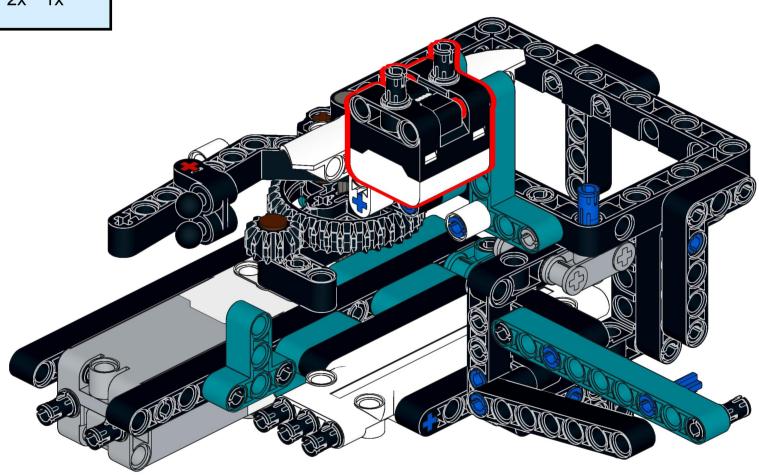


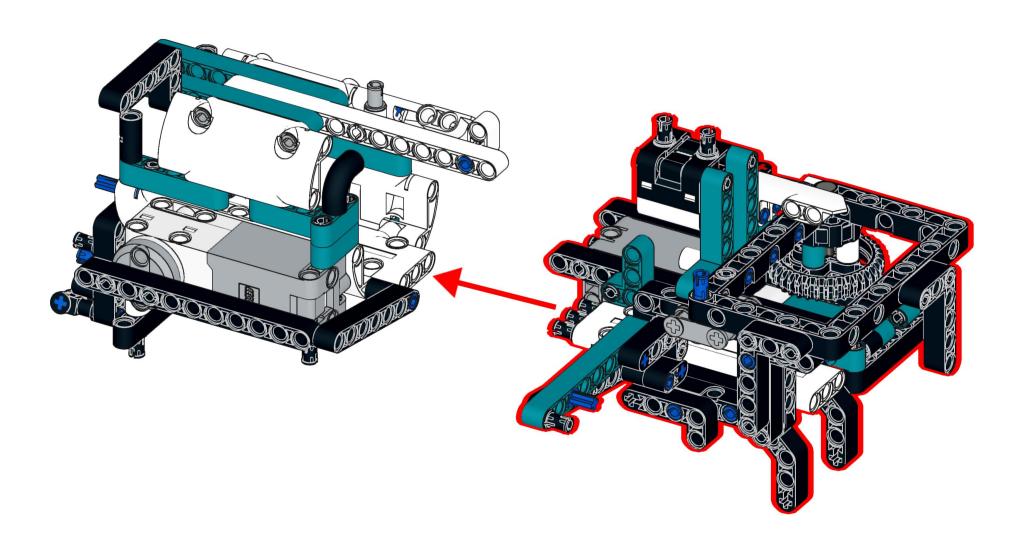




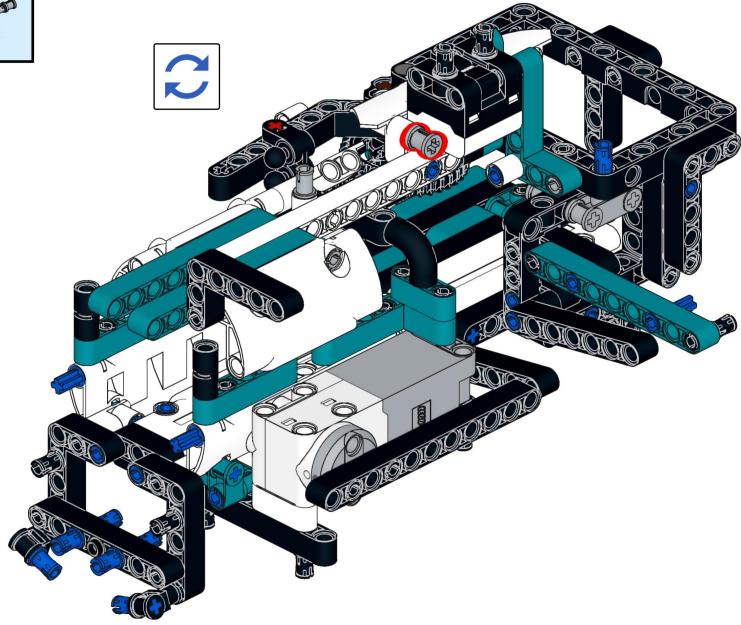


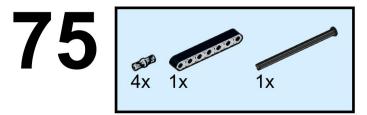


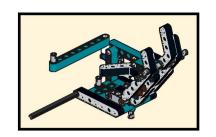


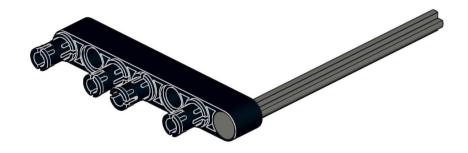


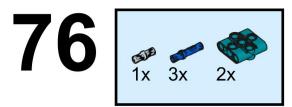


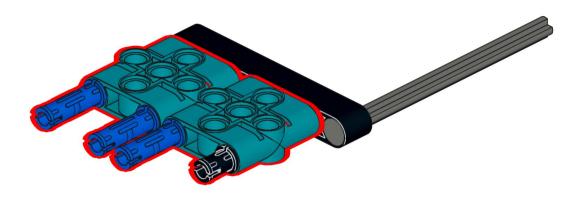




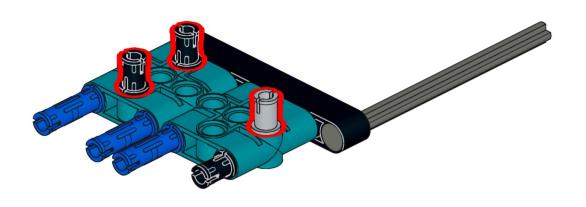


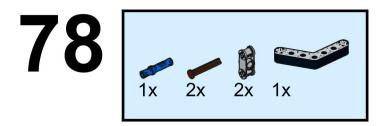


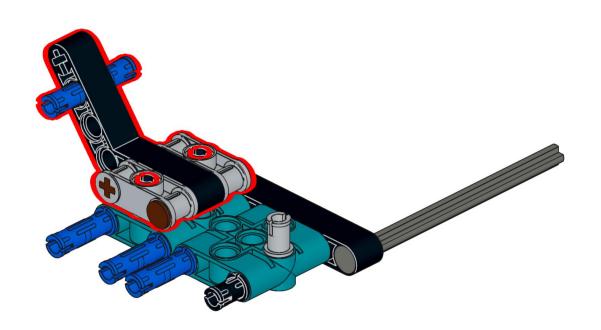


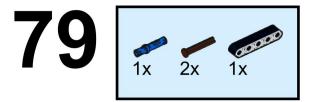


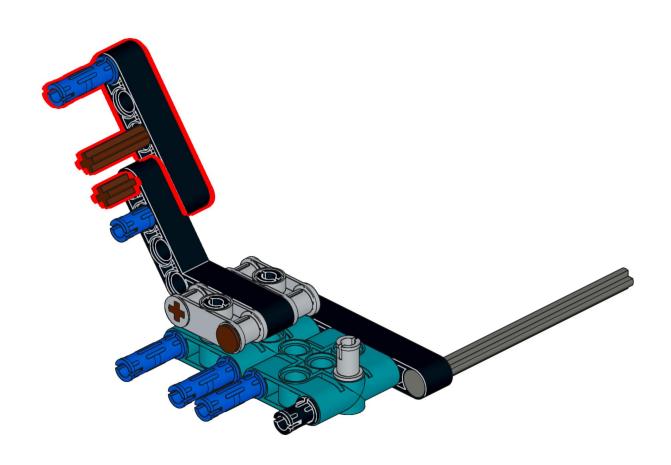
3x 1x

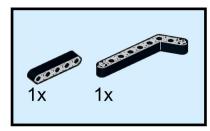




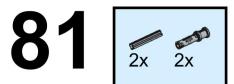


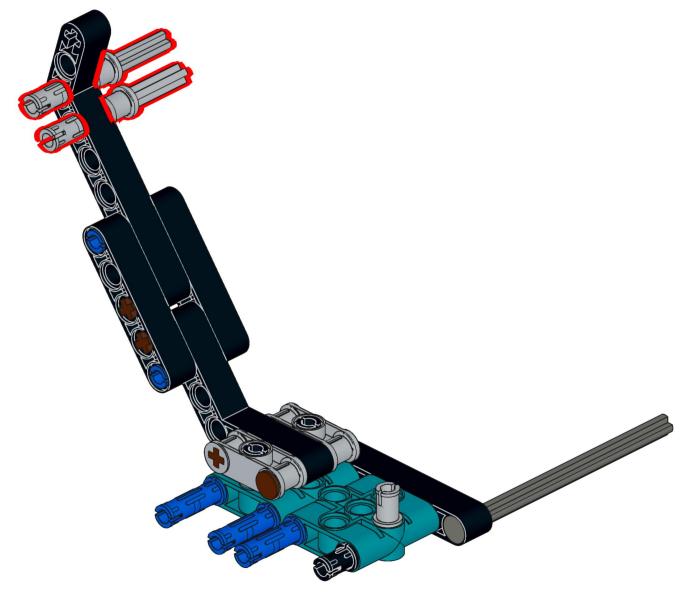


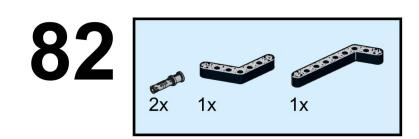


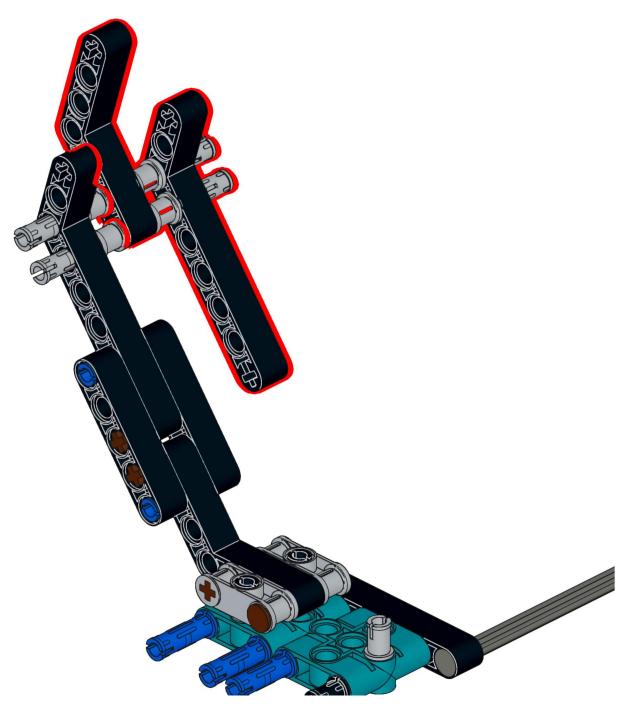


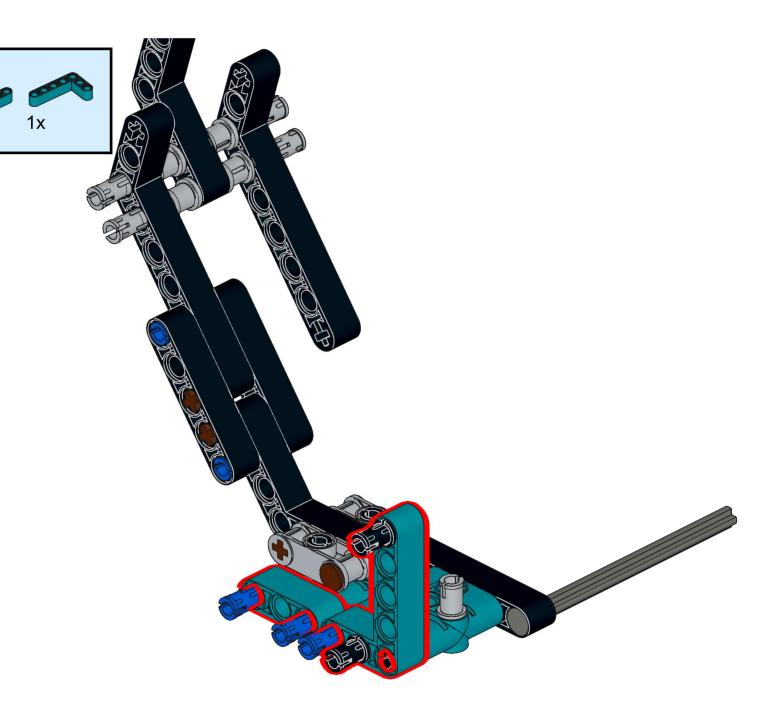


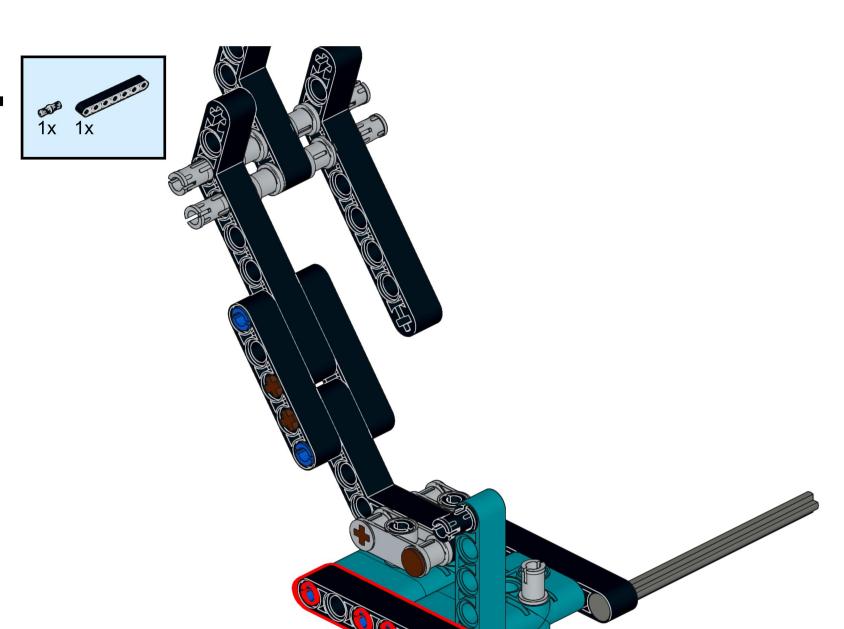


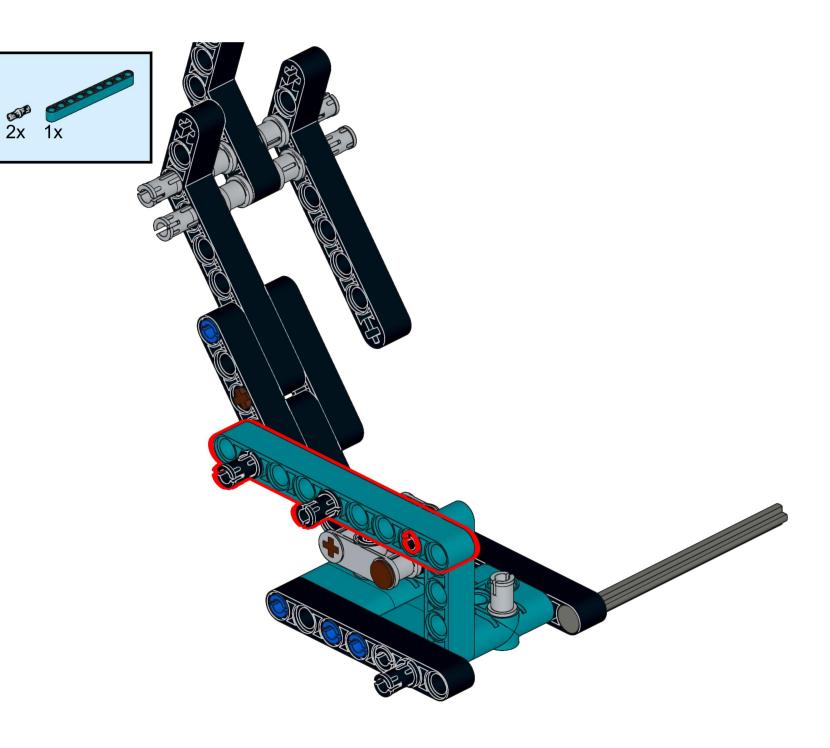




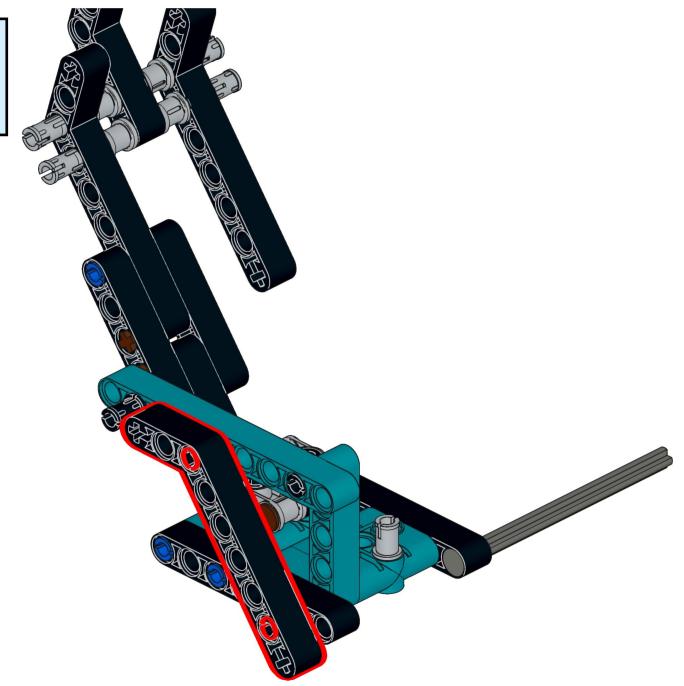


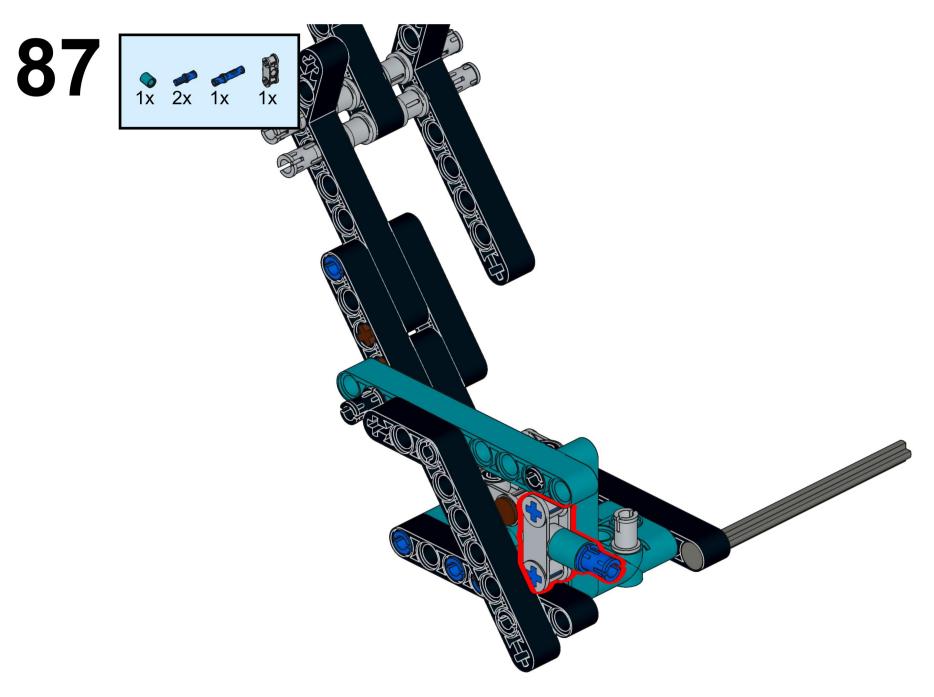


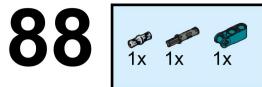


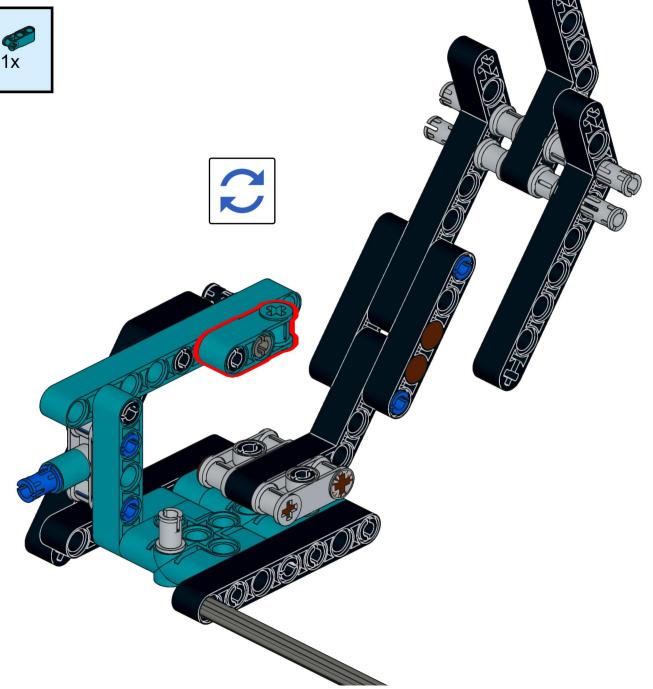


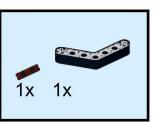


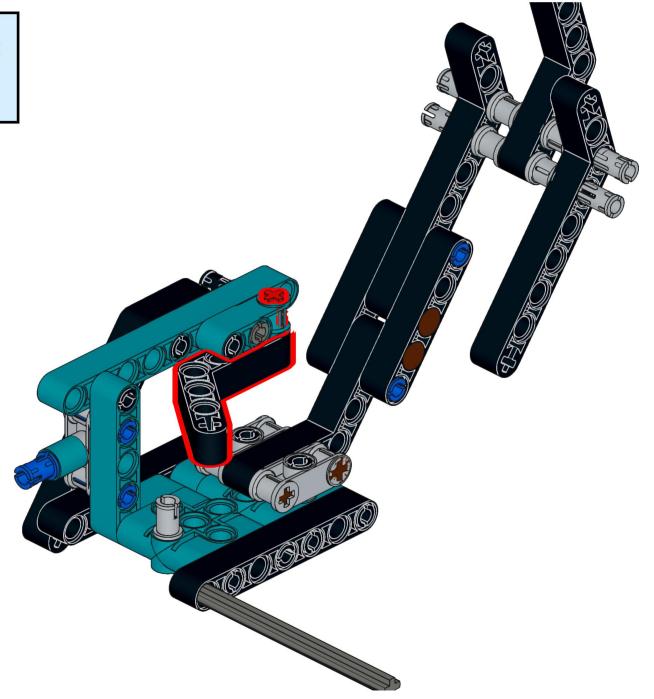


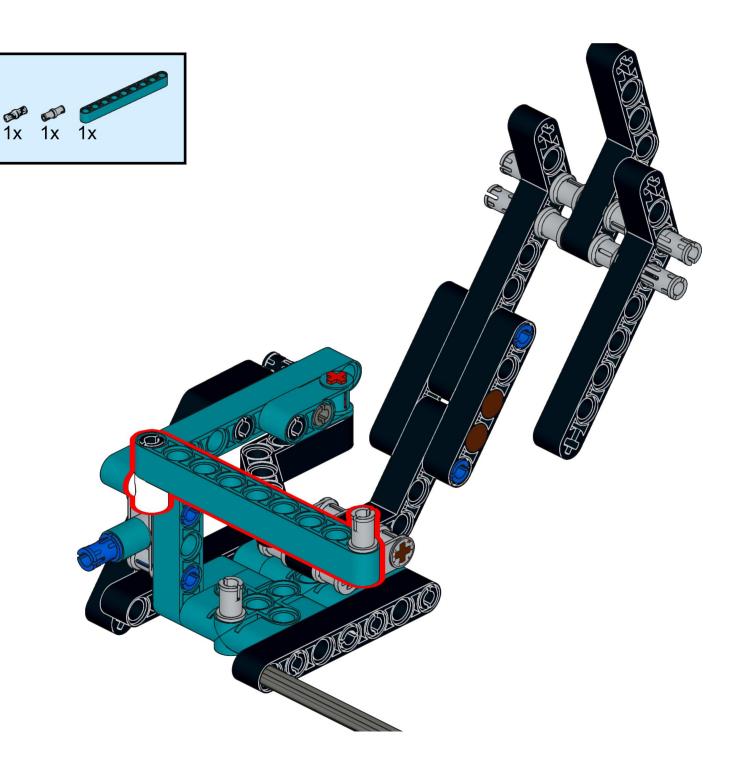


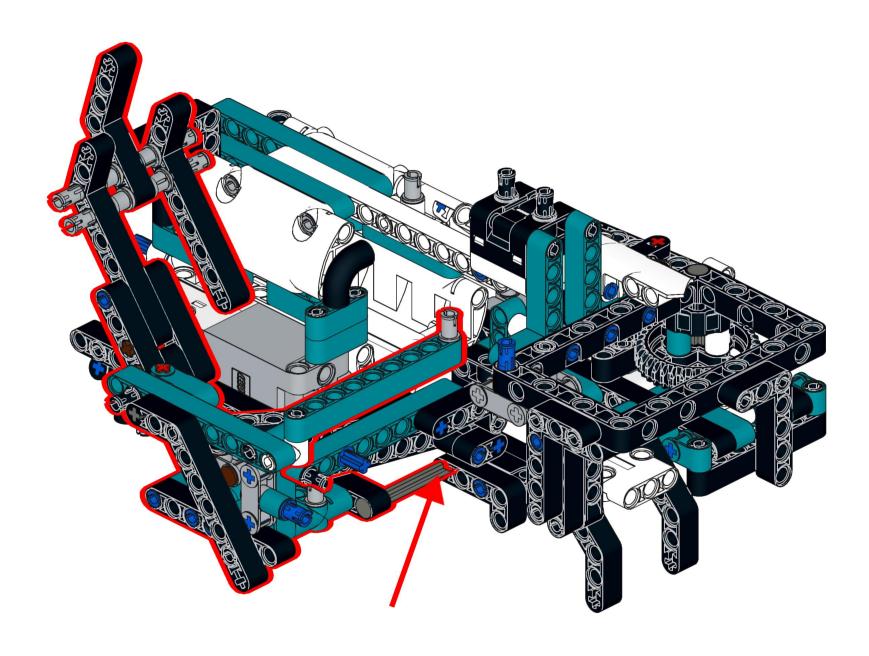


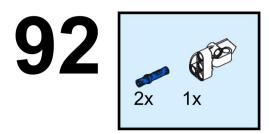


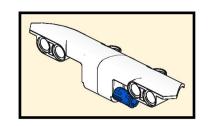


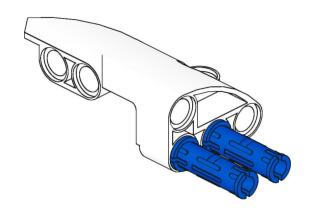




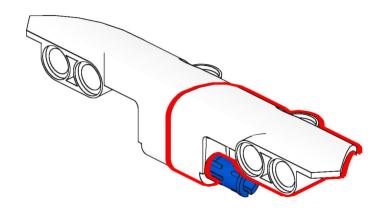


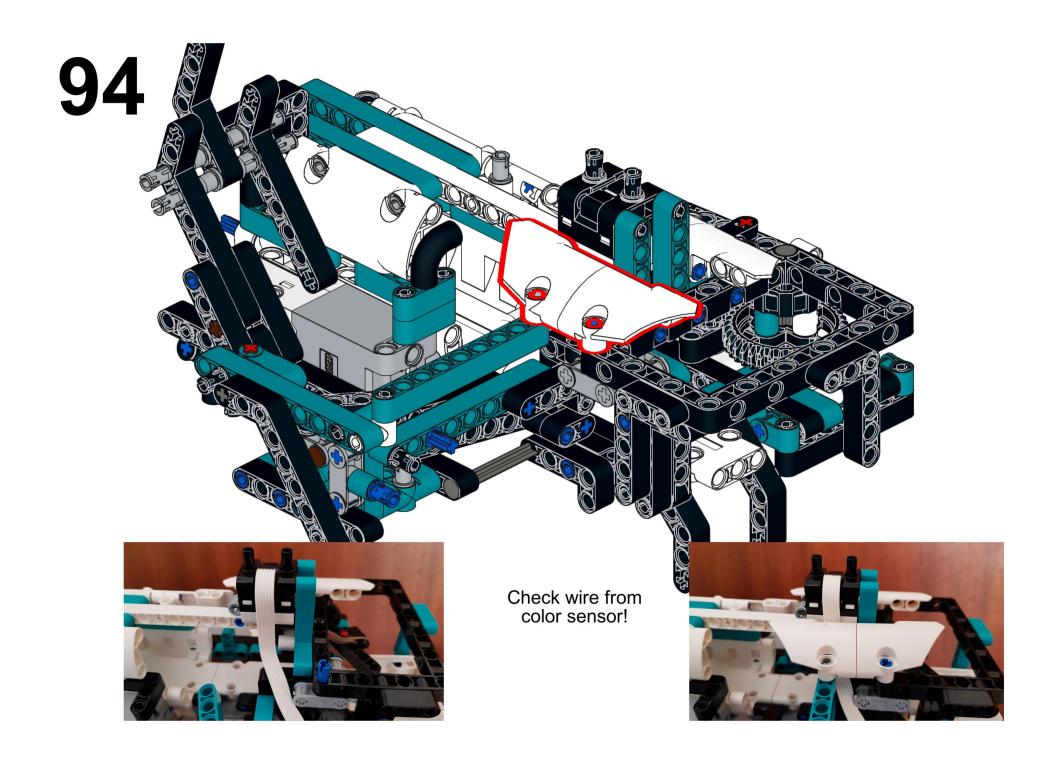


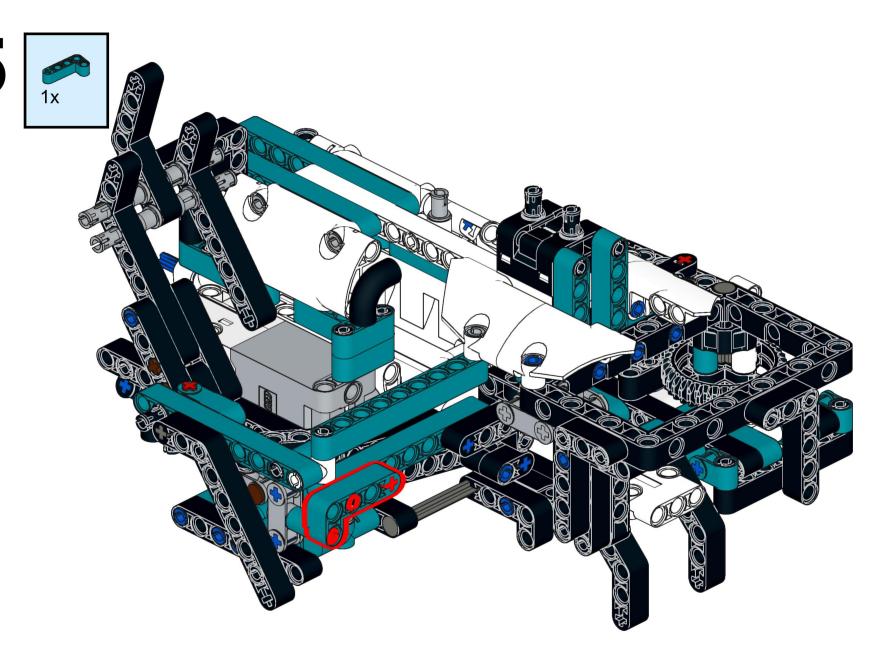


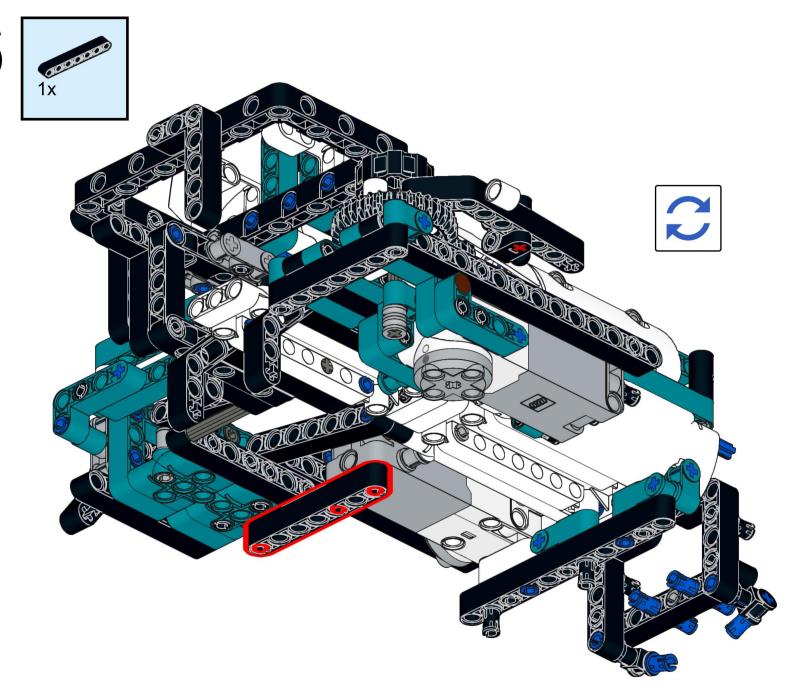


93 1x







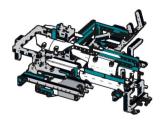


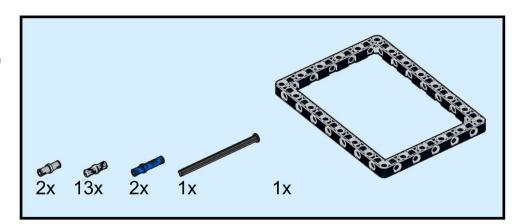
It's about half time. Time for a break.

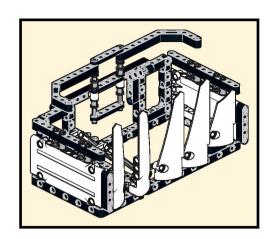
Would you buy me a coffee?

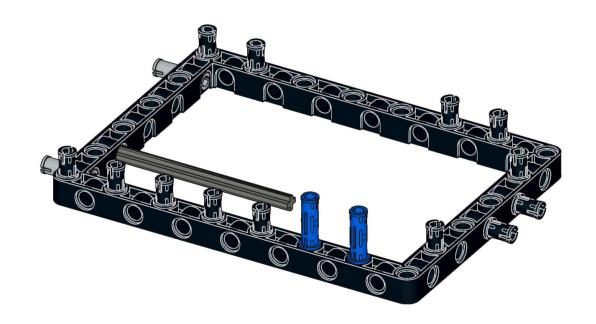


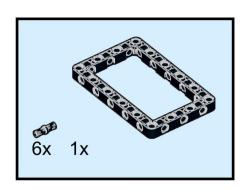
www.buymeacoffee.com/bingobricks

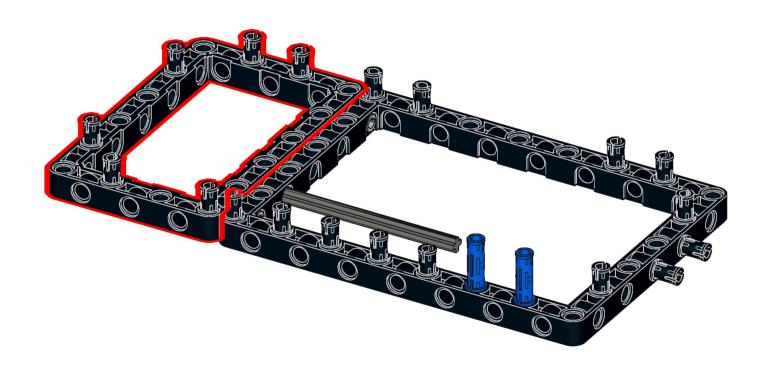


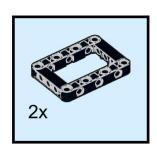




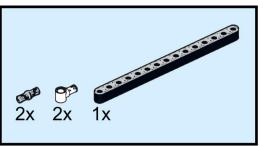




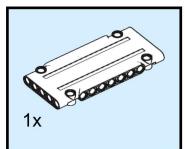


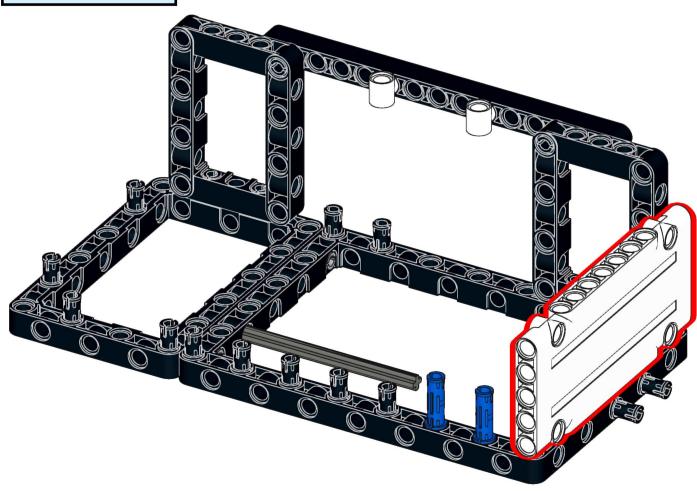


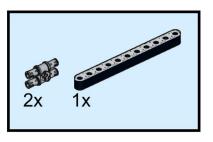


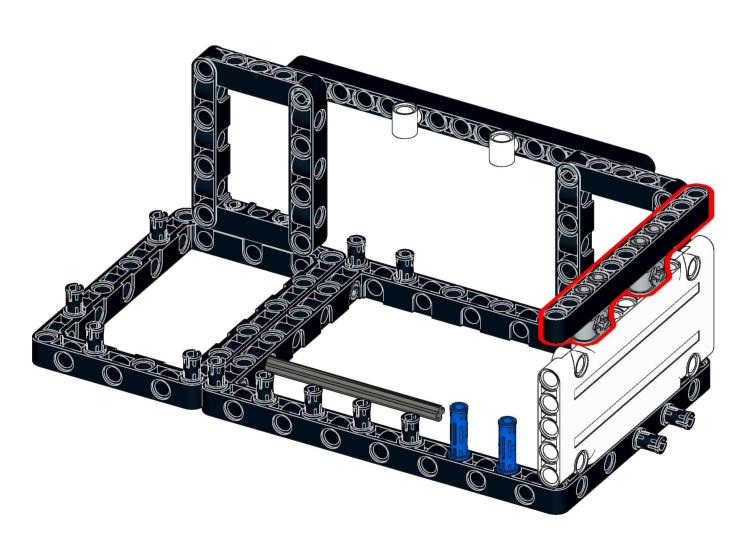




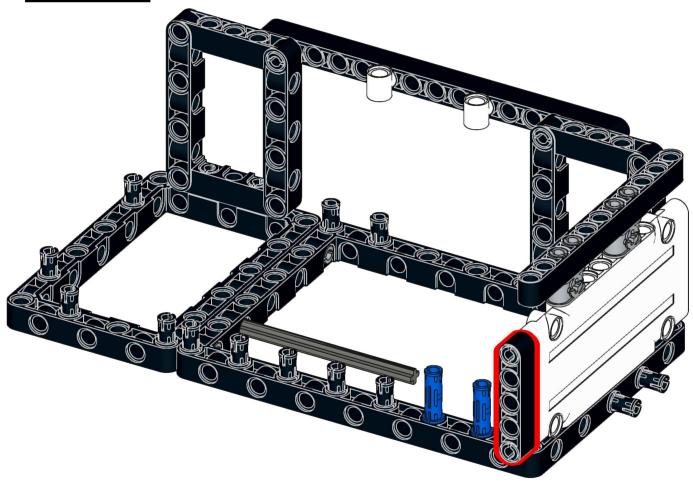


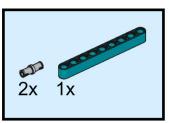


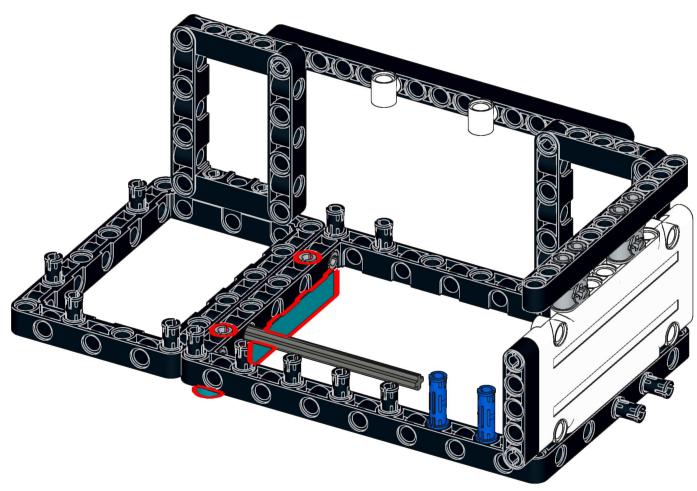


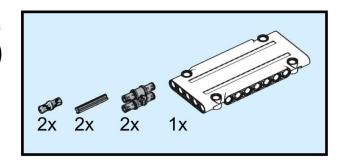


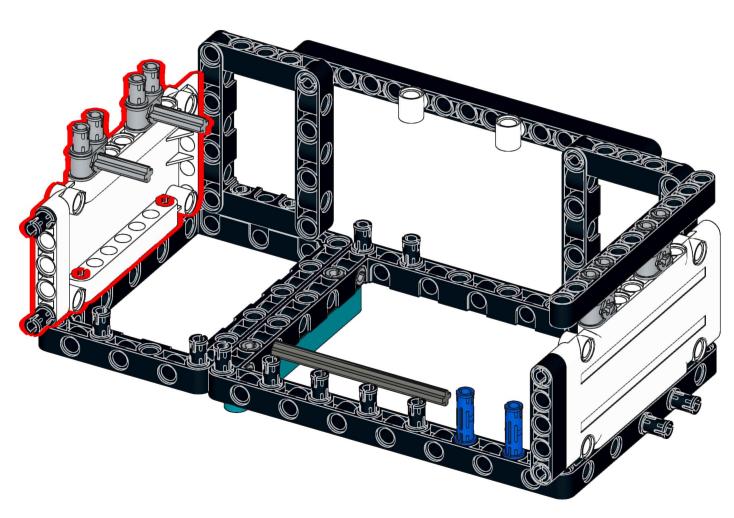


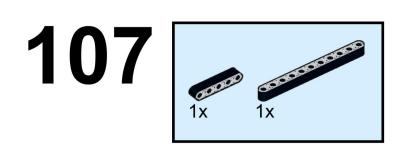


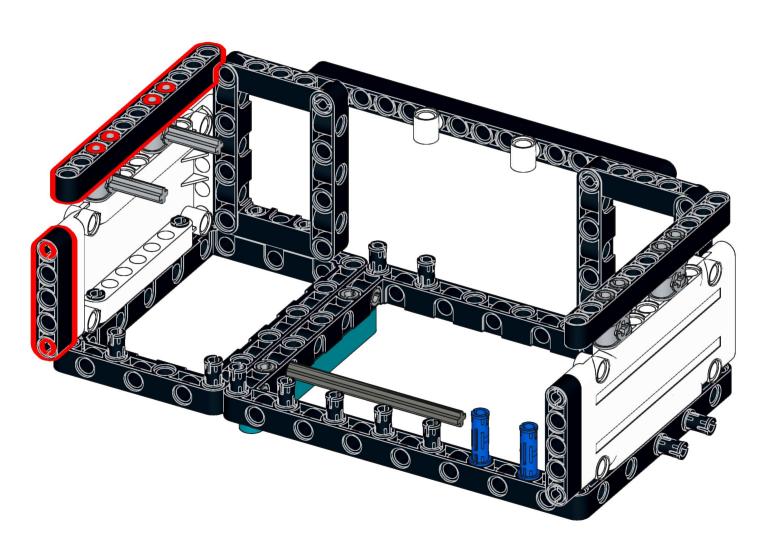


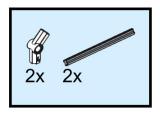


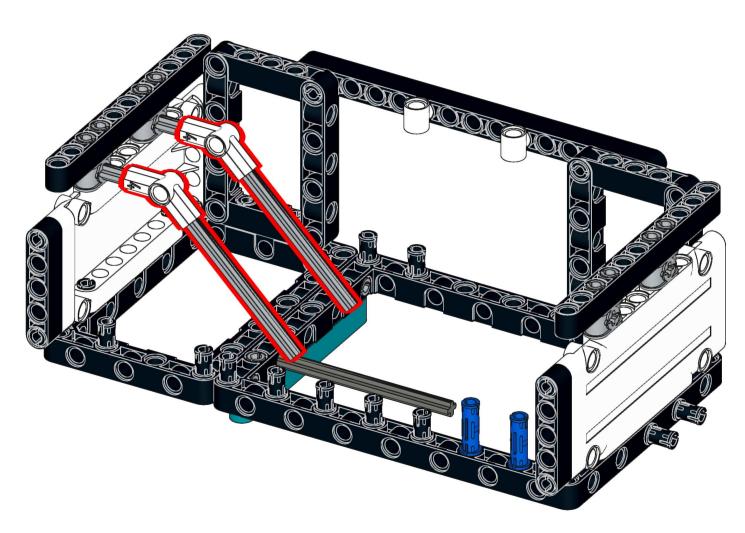


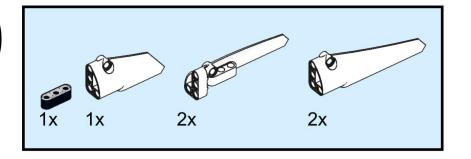


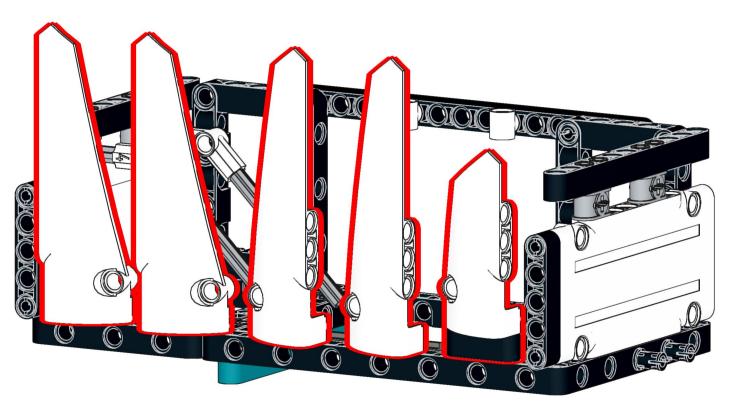


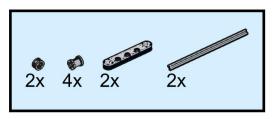


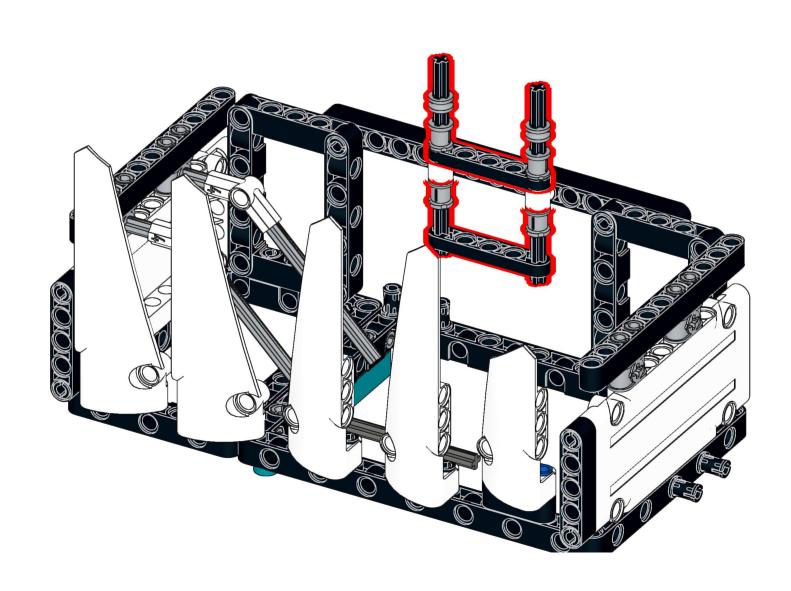


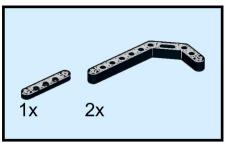


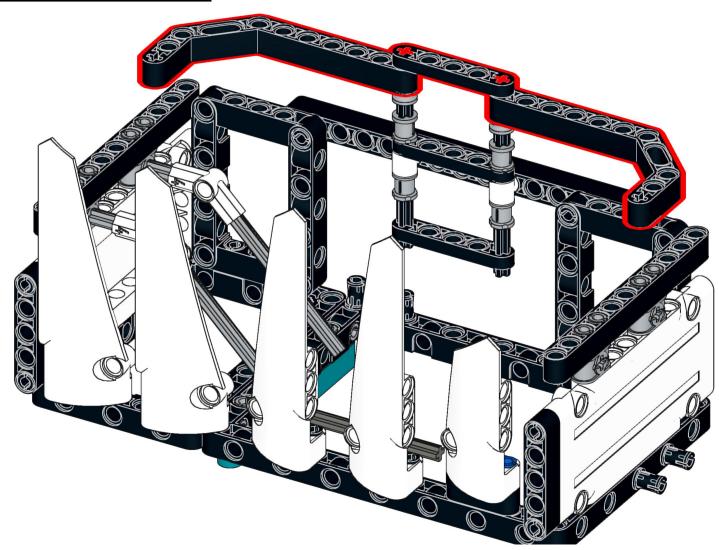


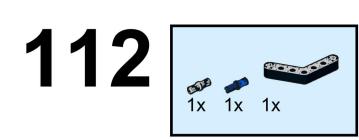


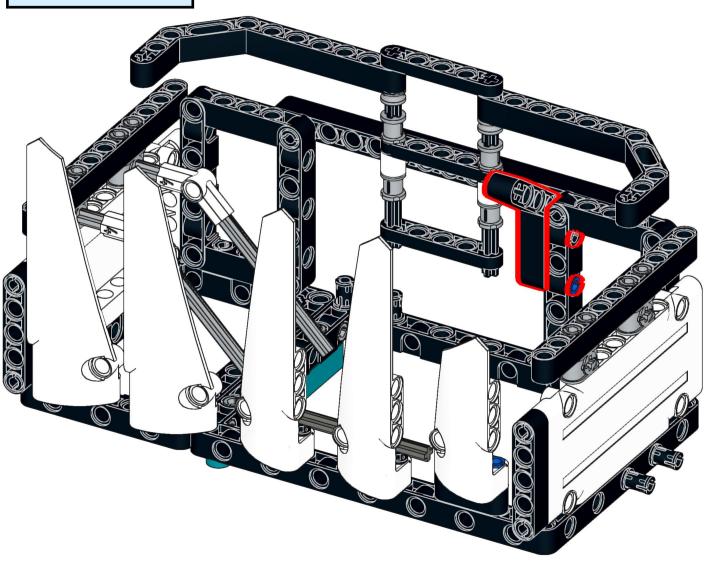




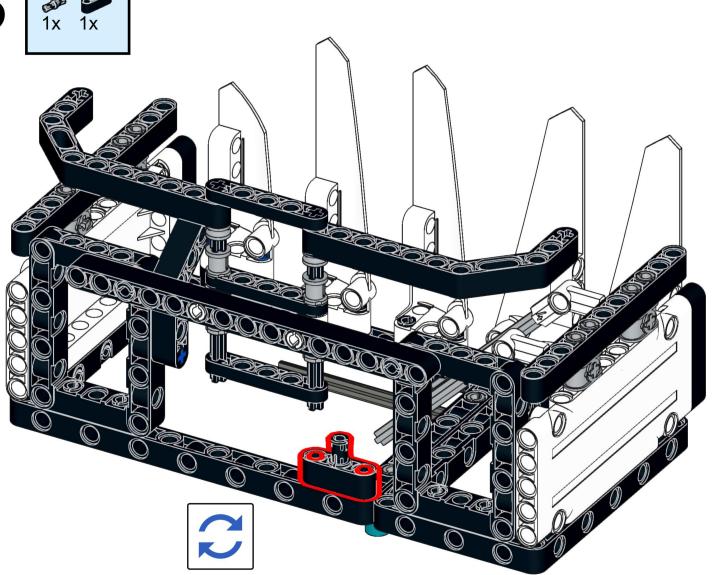


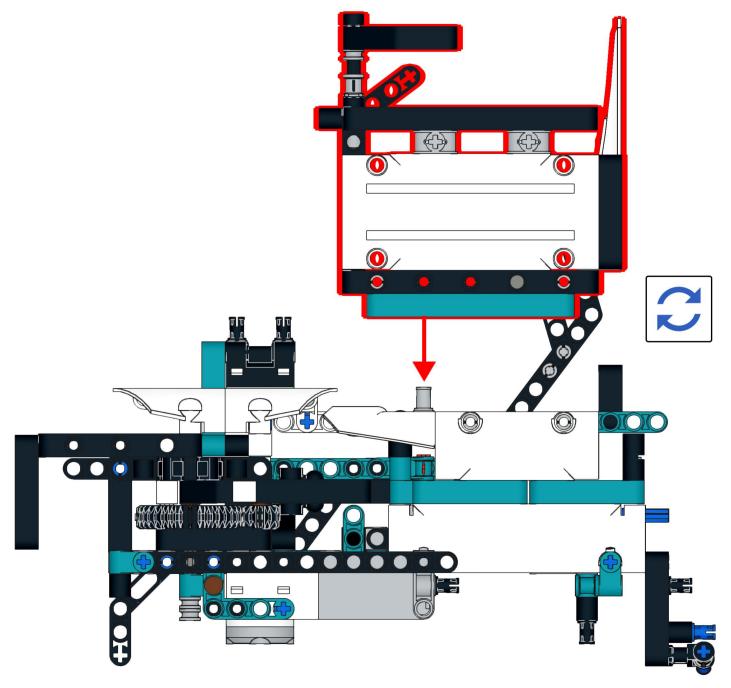


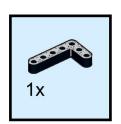


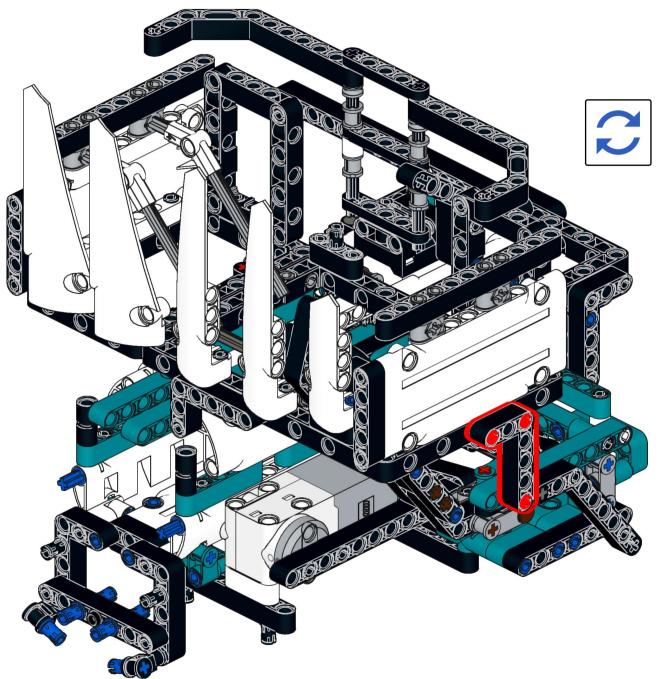


113 1x 1x



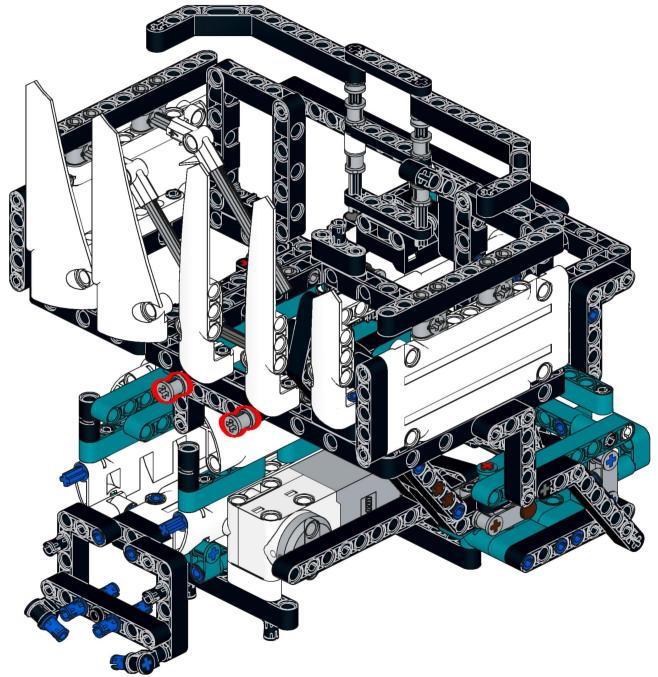


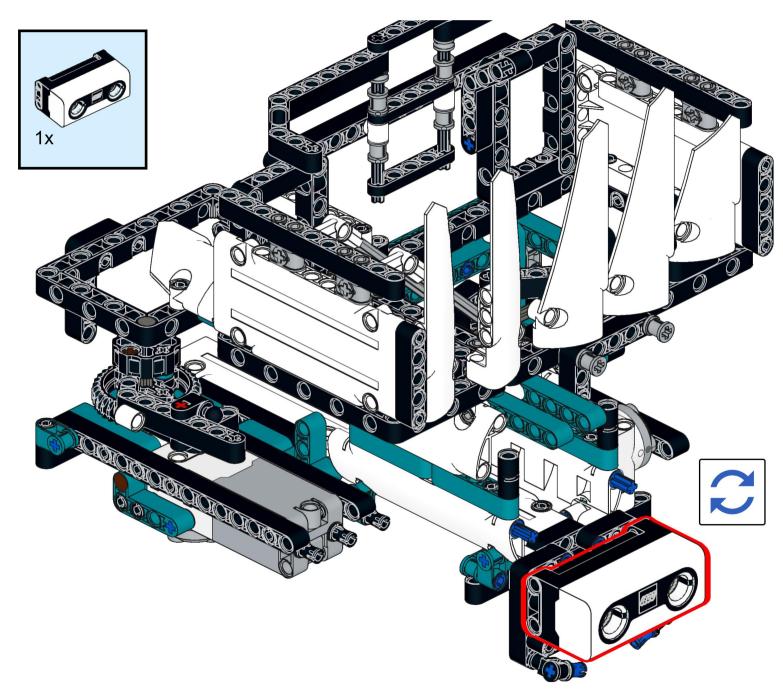


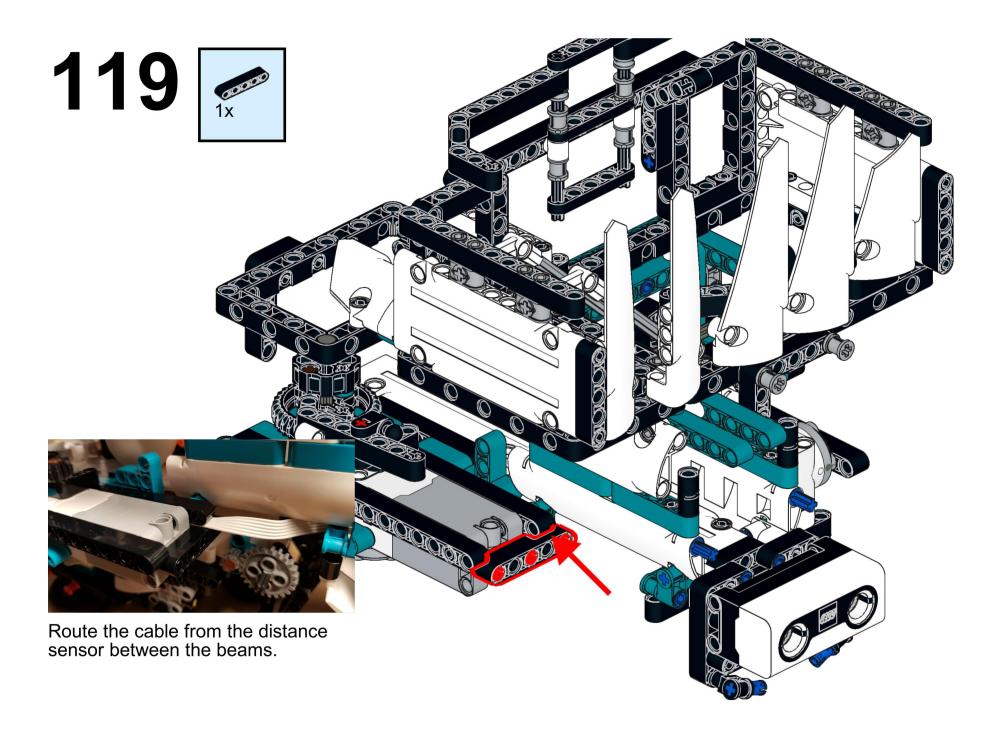


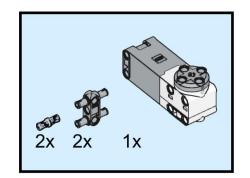
116 2x

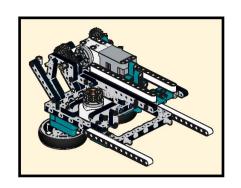


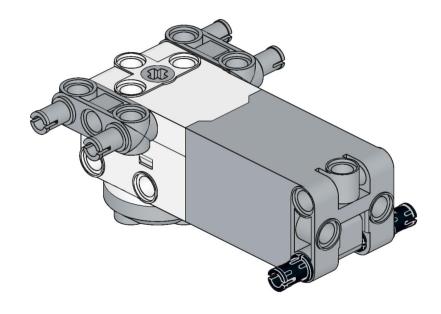


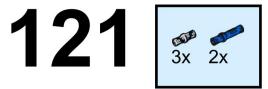


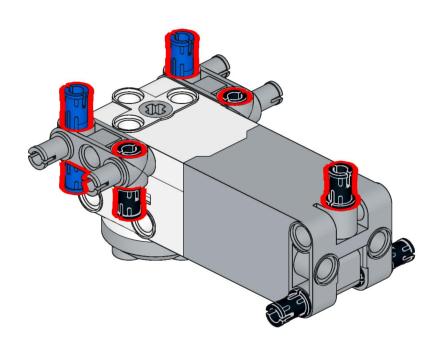


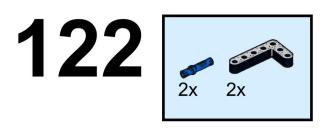


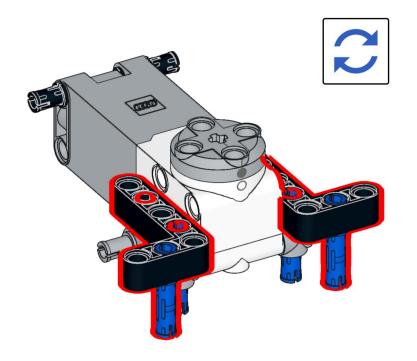






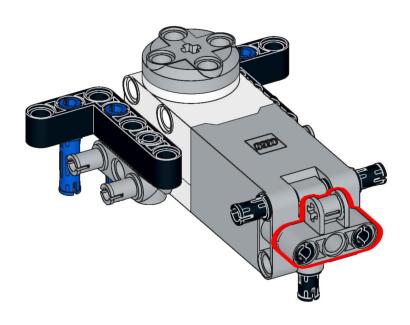


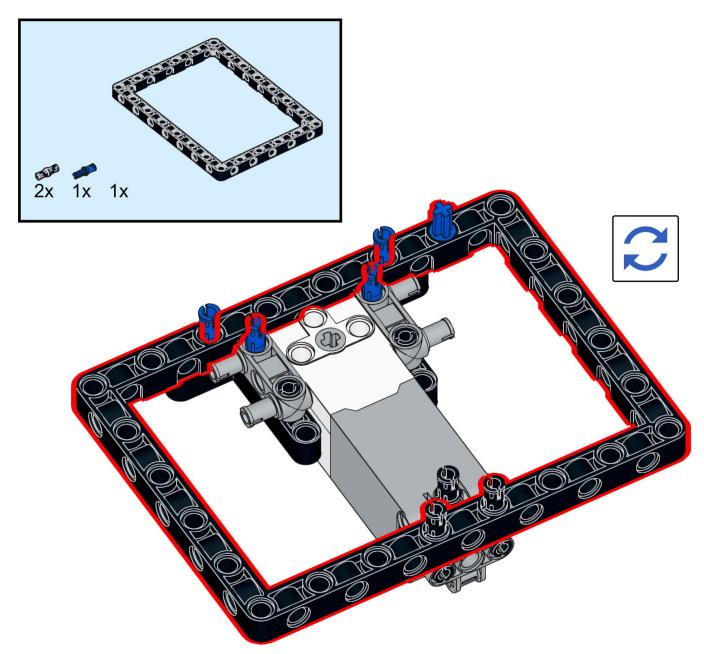


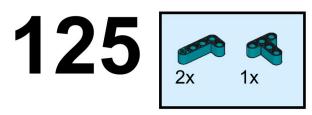


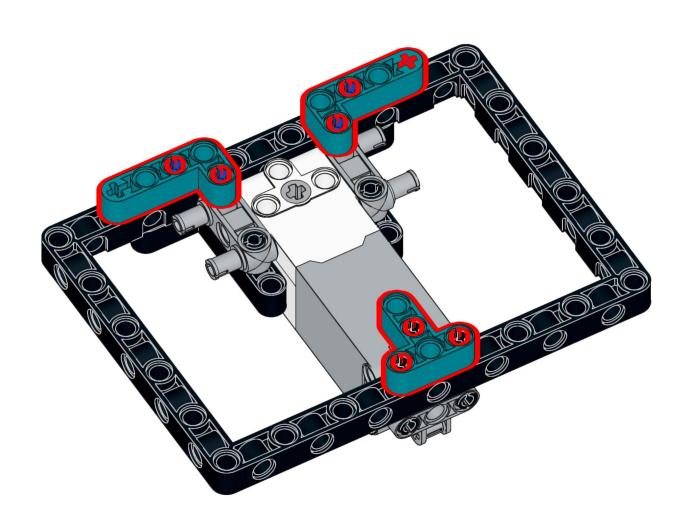


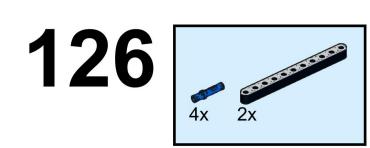


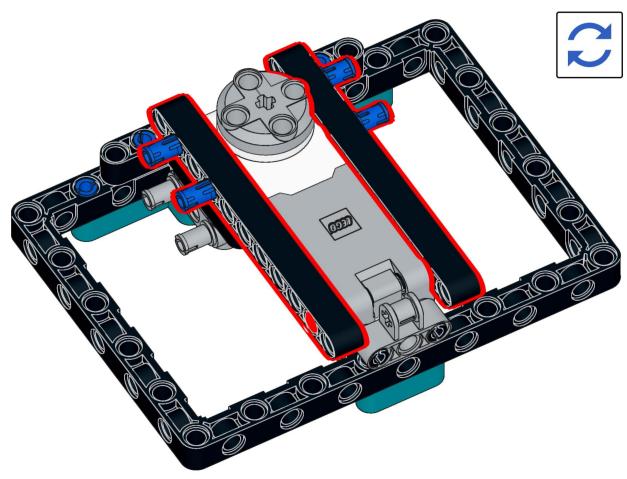


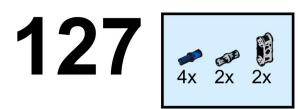


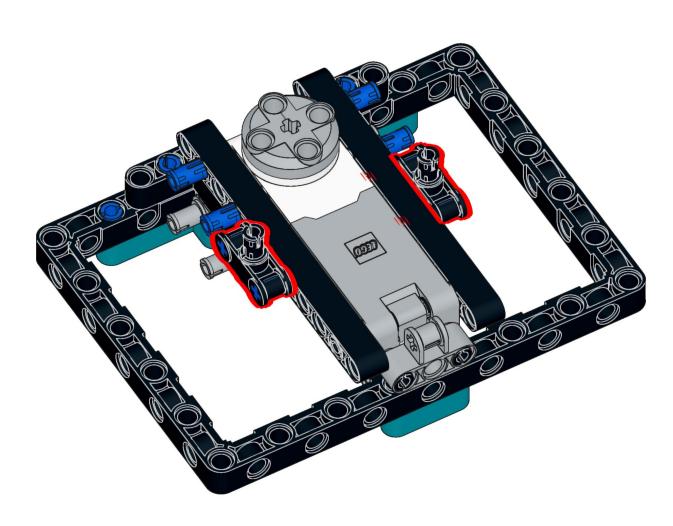






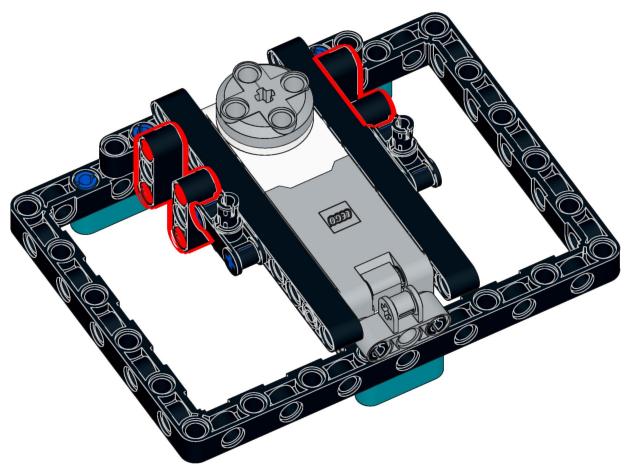


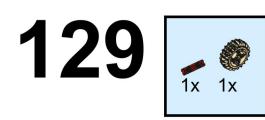


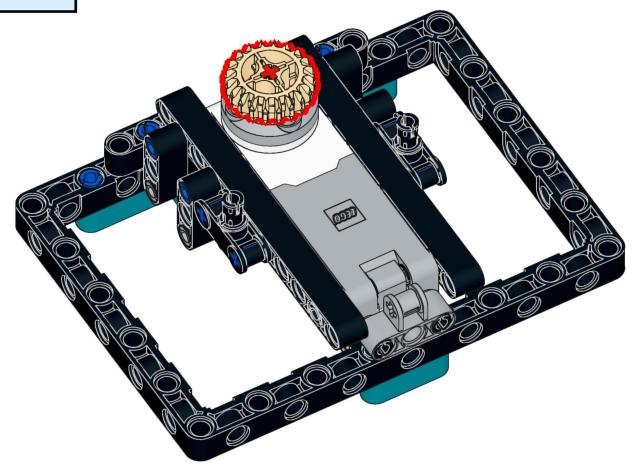


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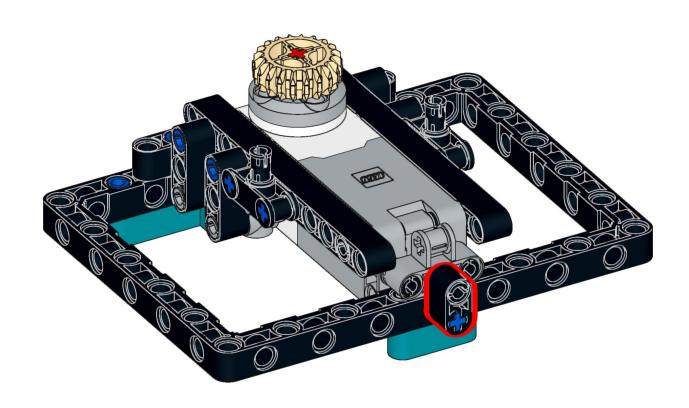


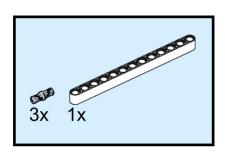


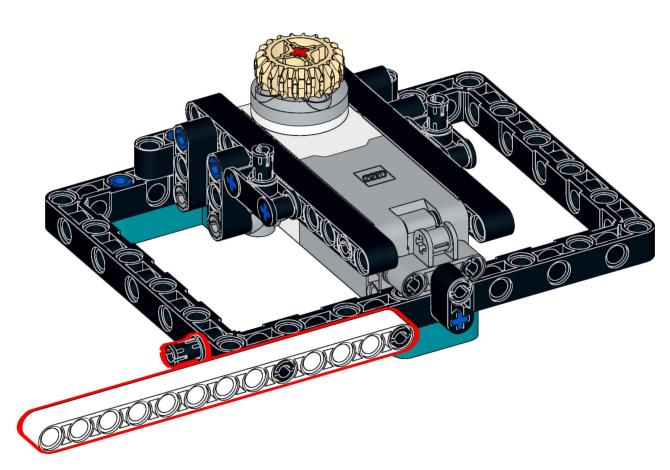


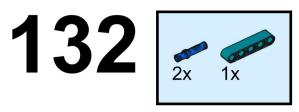


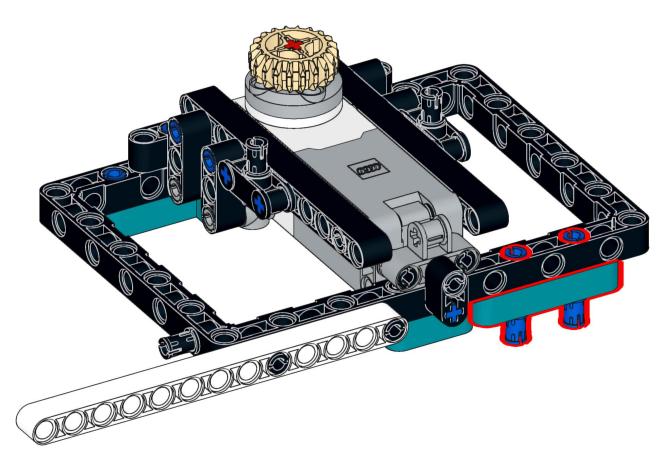


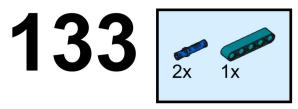


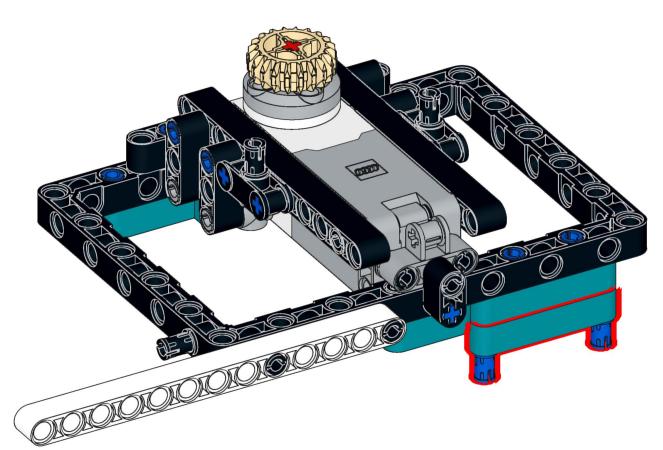


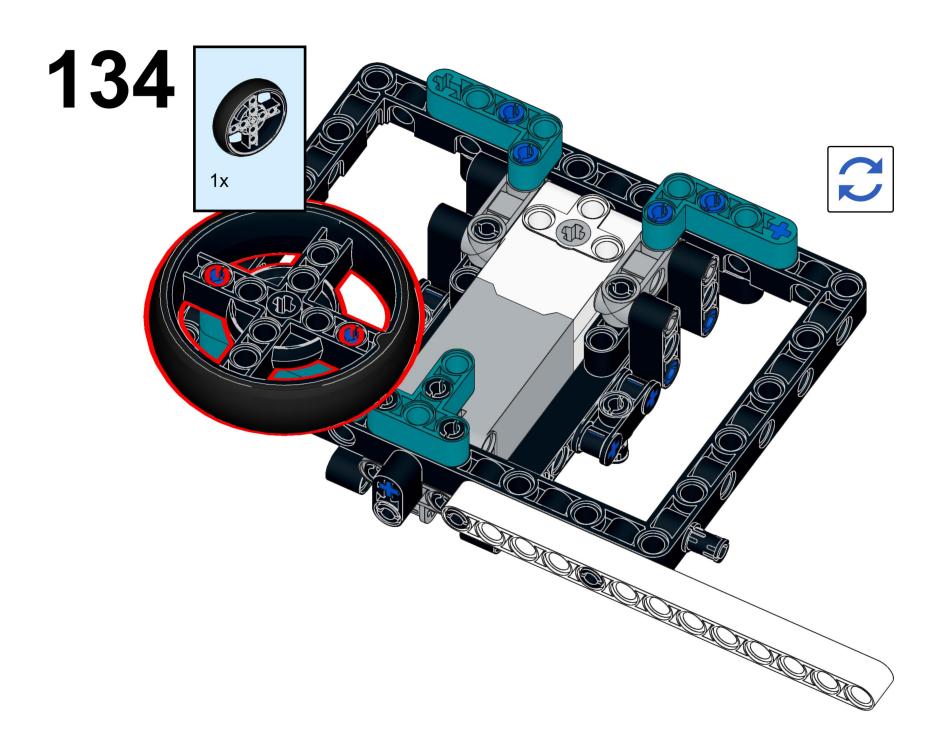


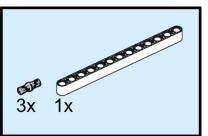


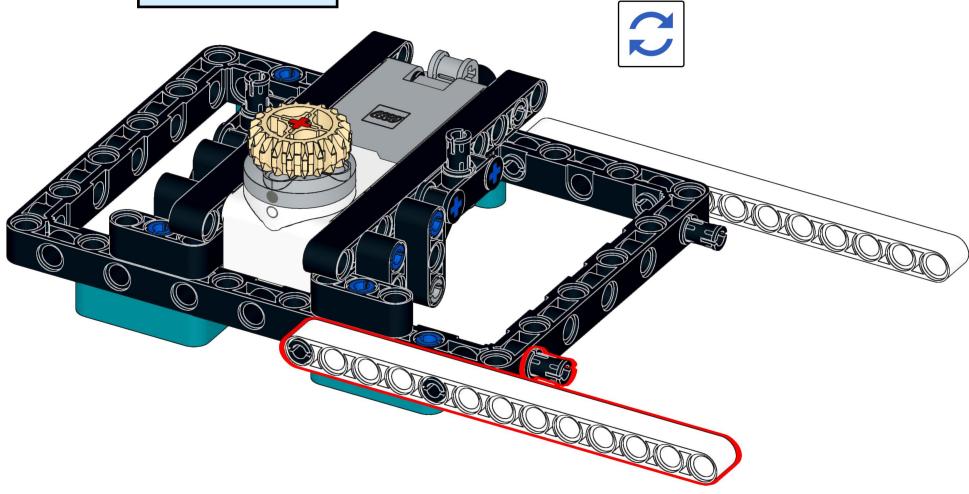




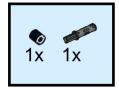


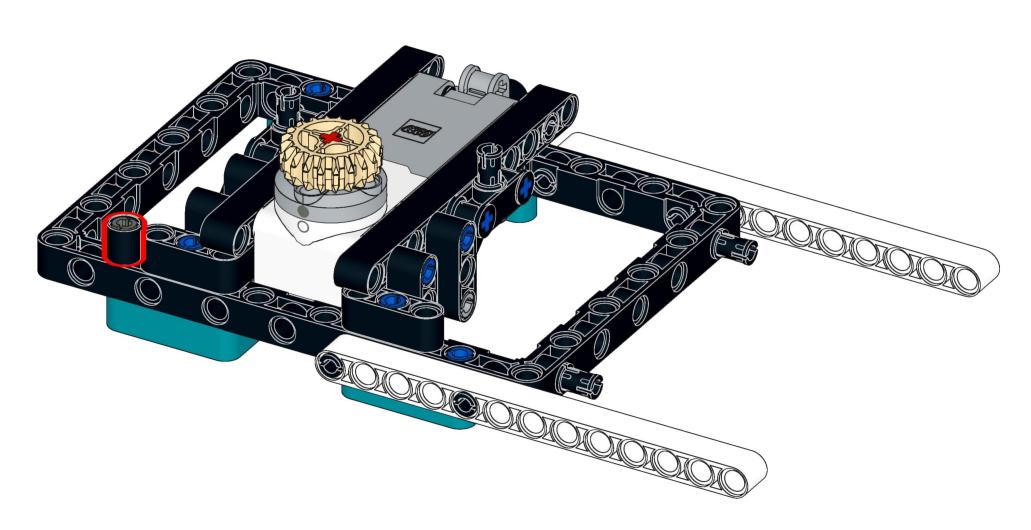


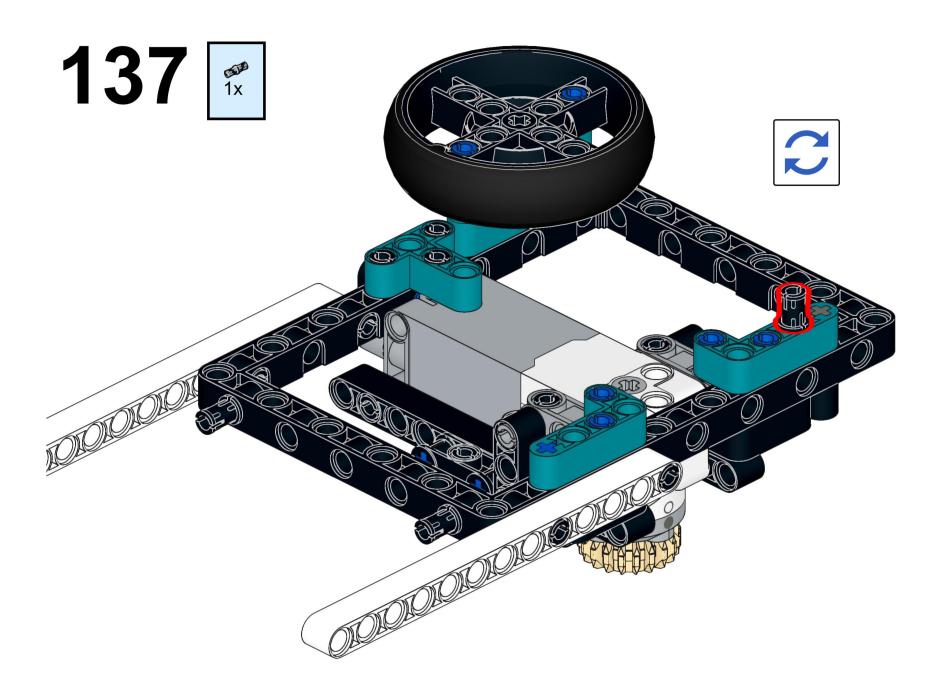


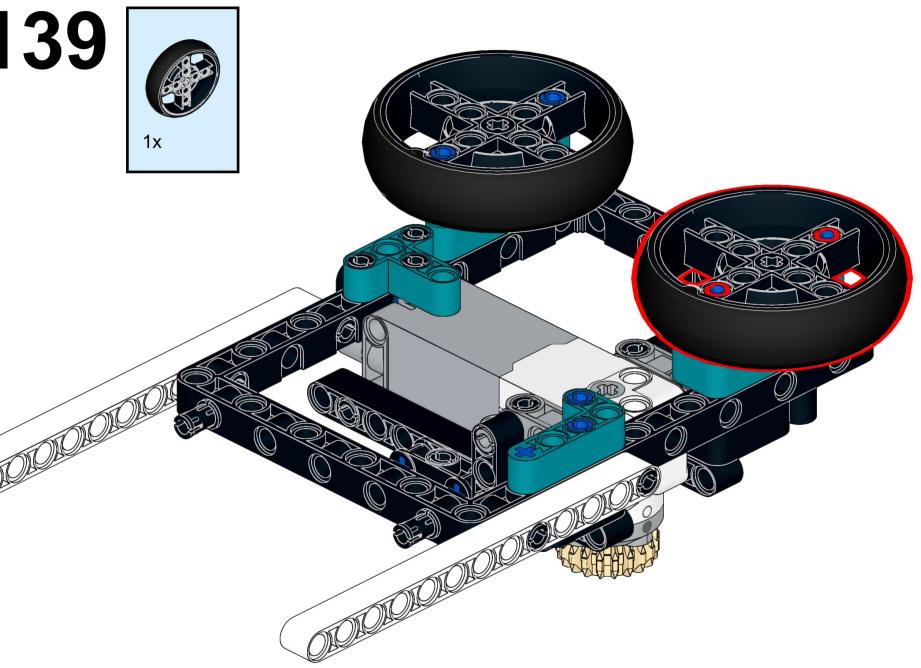


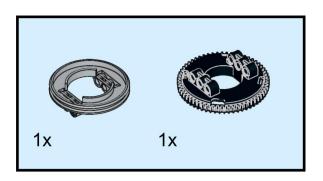
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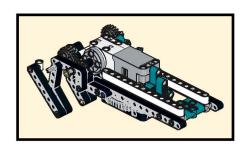


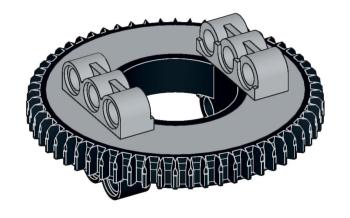


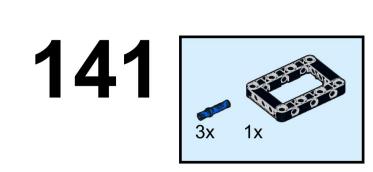


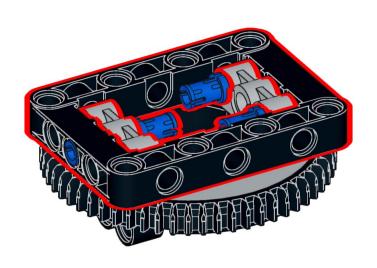




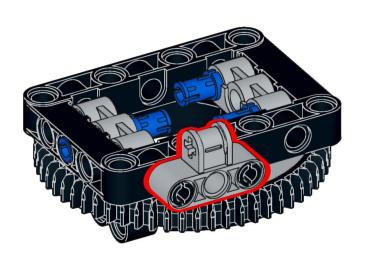


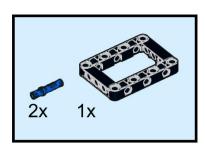


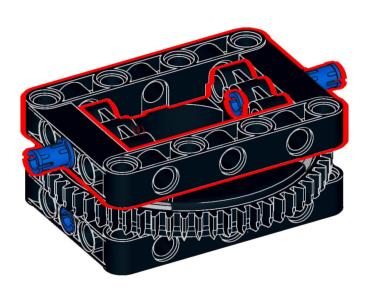






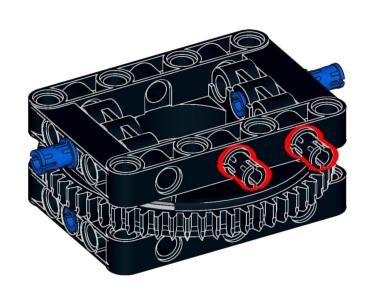


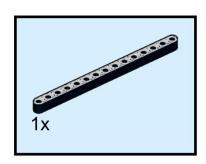


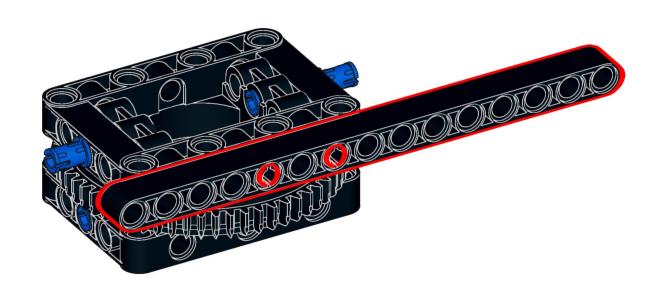




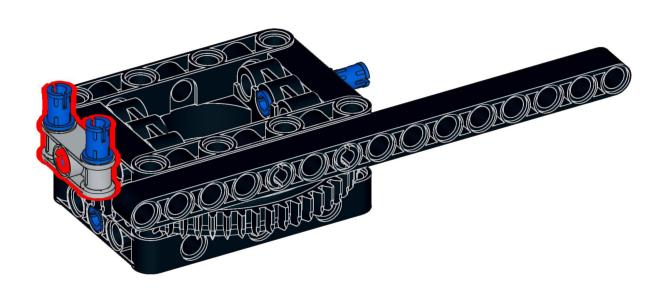
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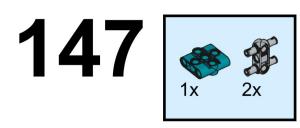


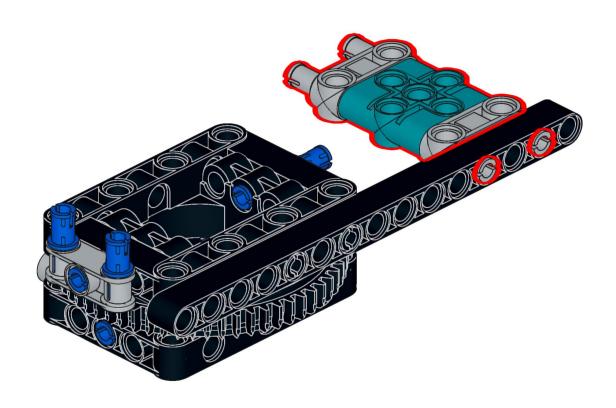




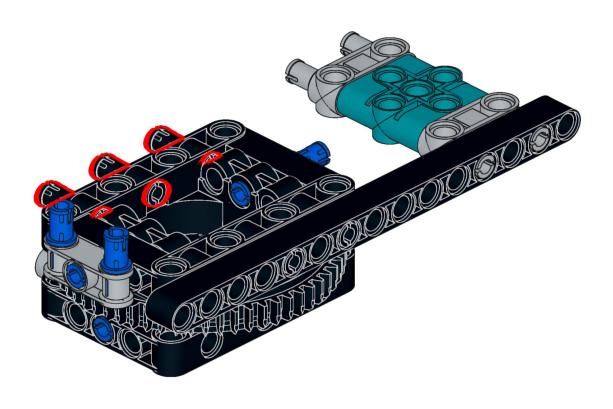


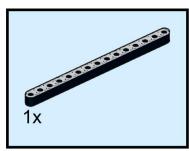


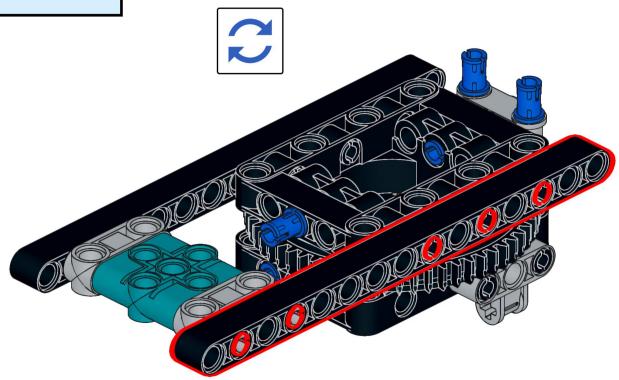


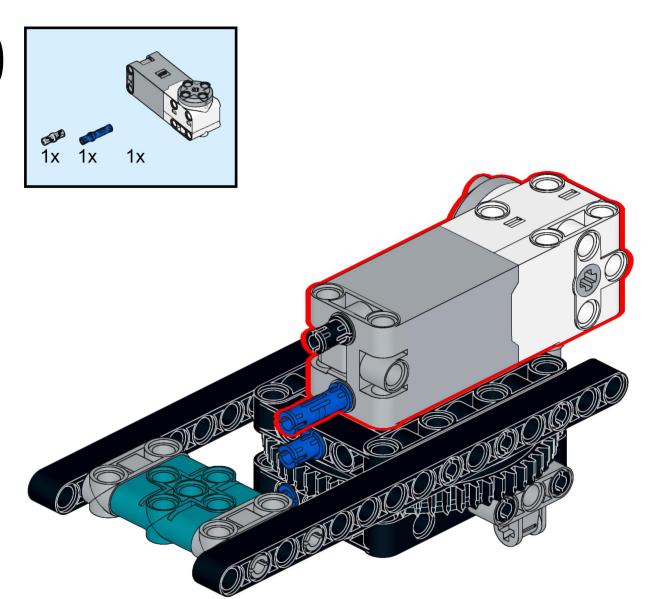


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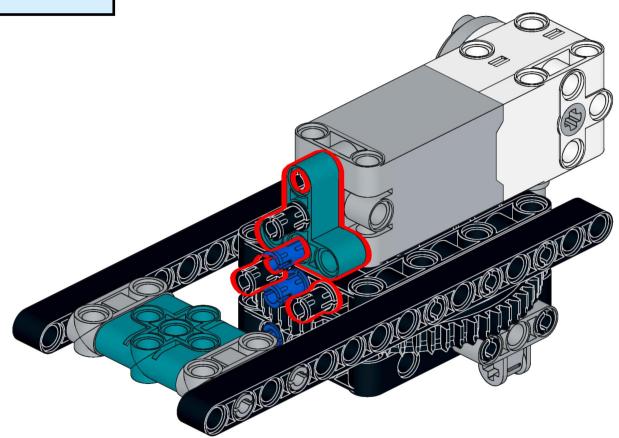




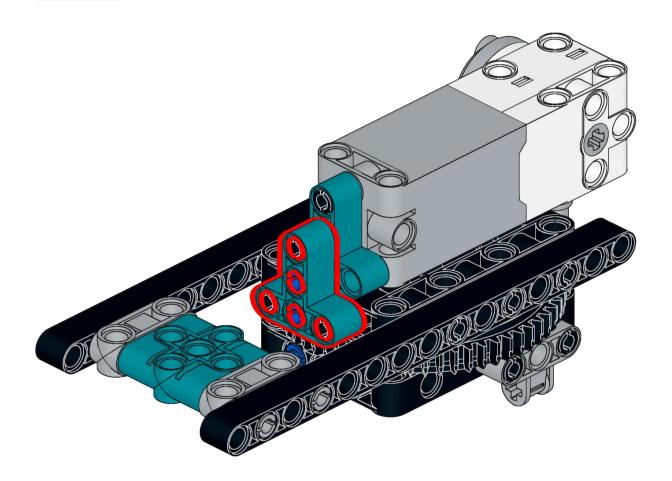




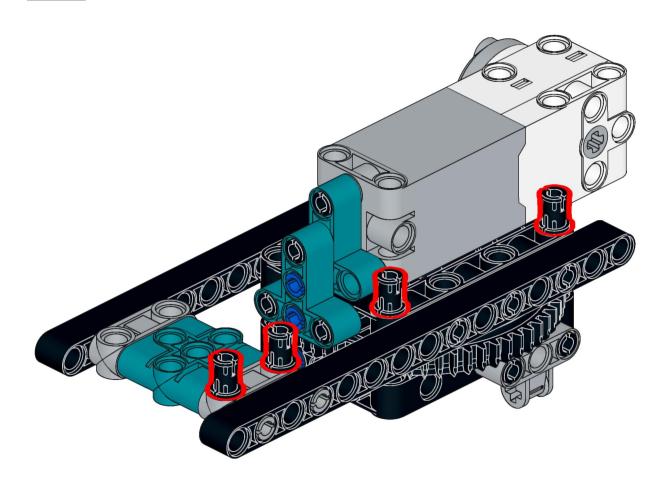


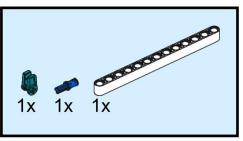


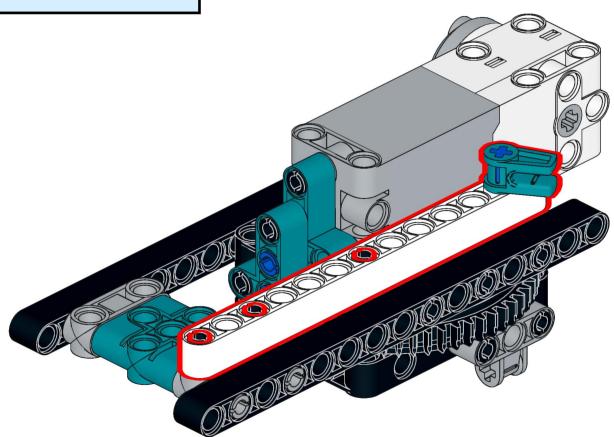
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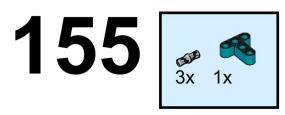


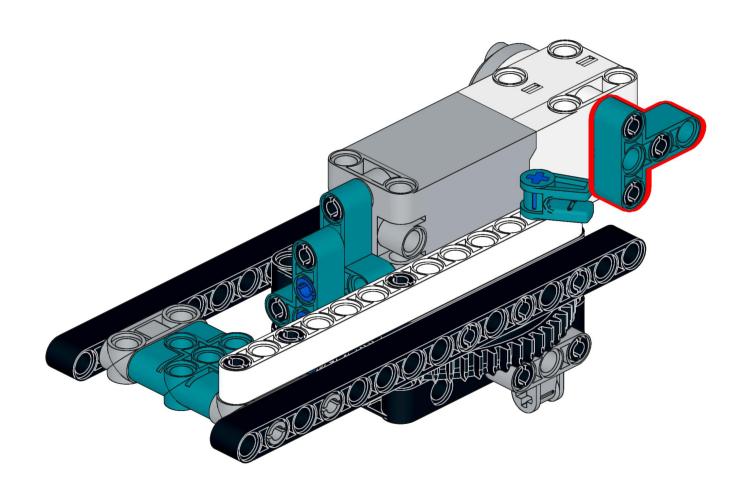
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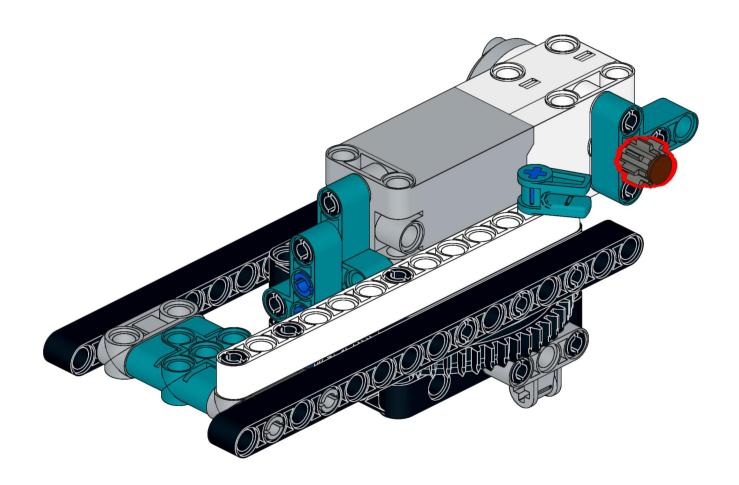


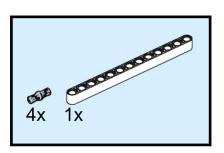




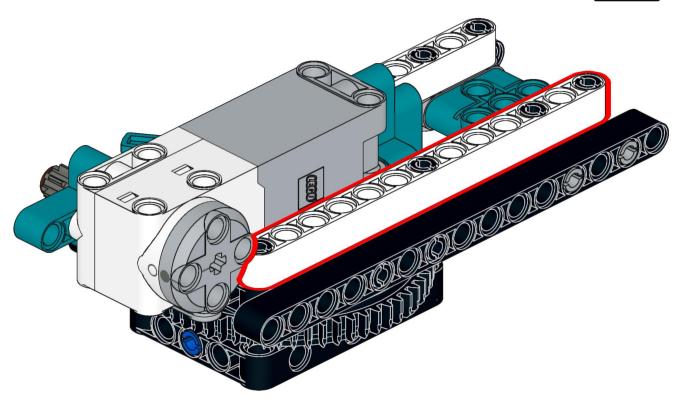




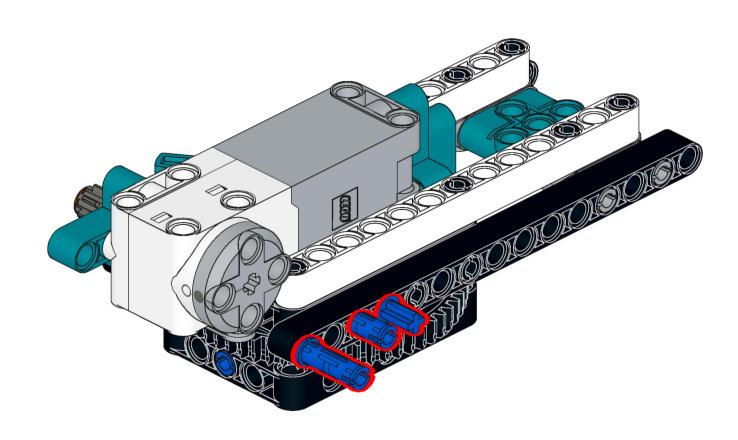


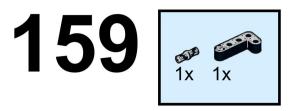


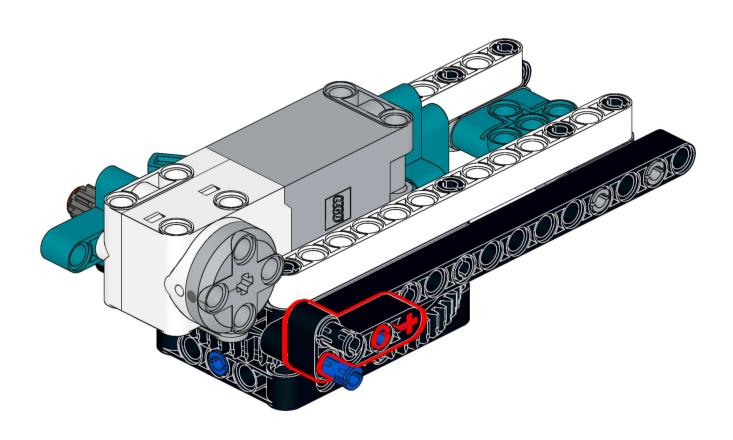


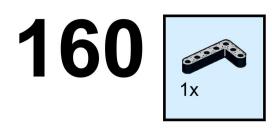


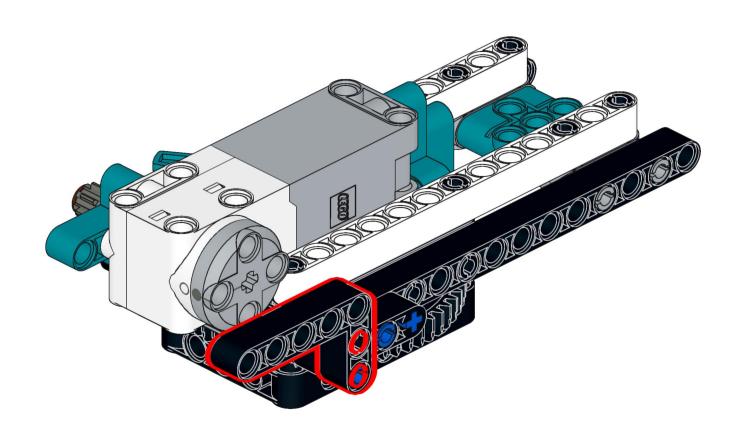


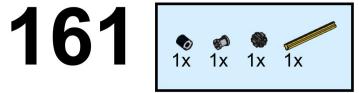


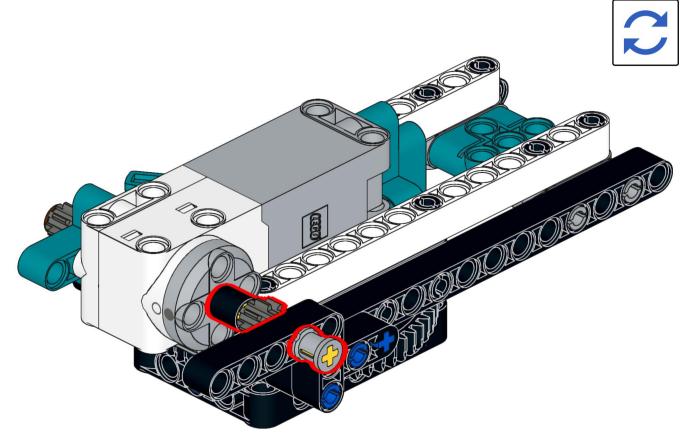




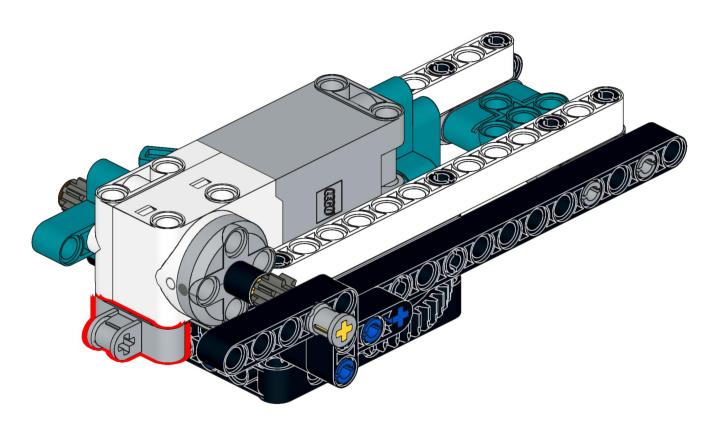




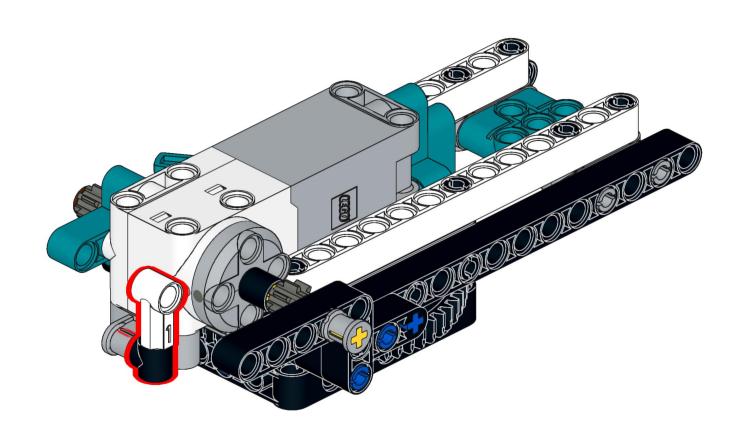


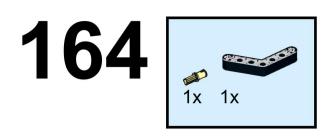


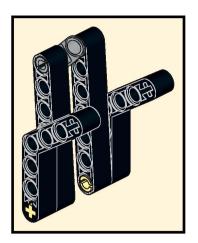




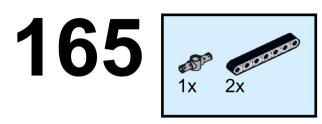




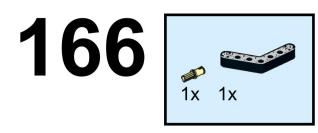




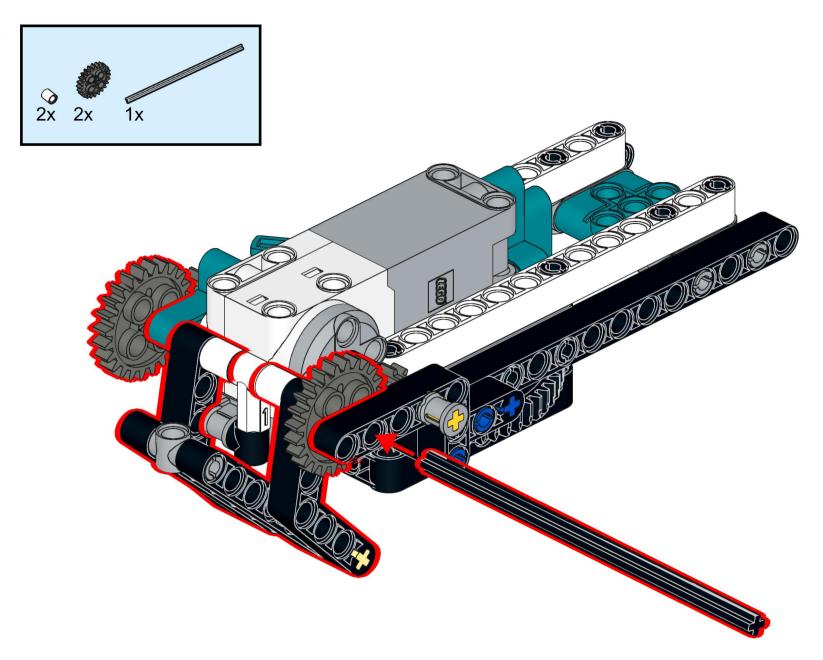


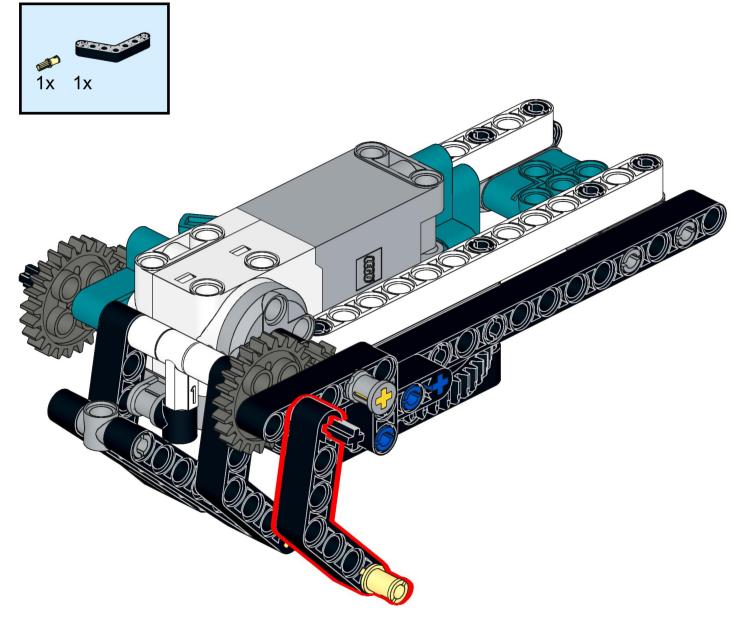


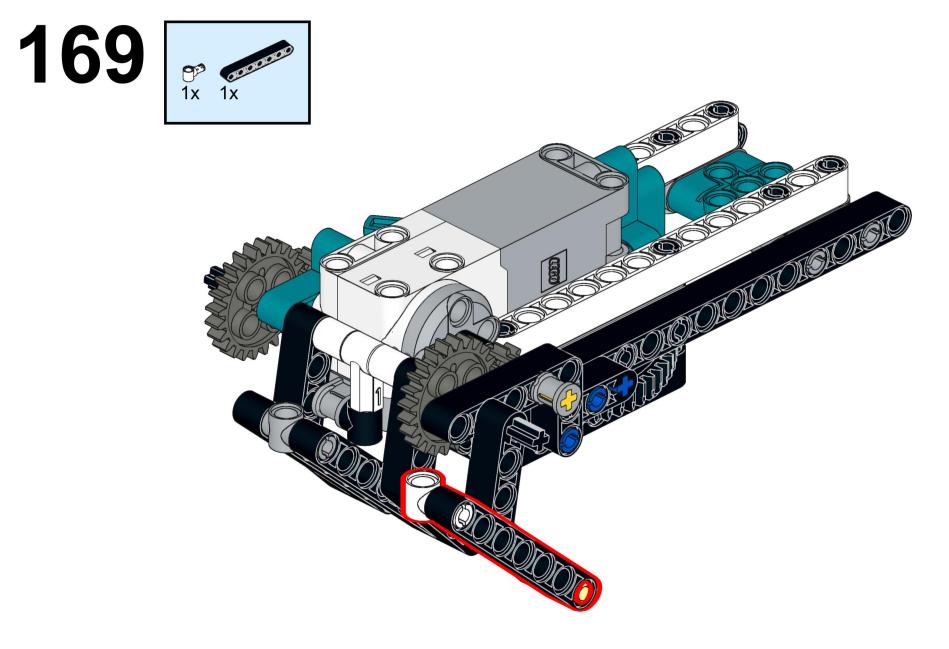


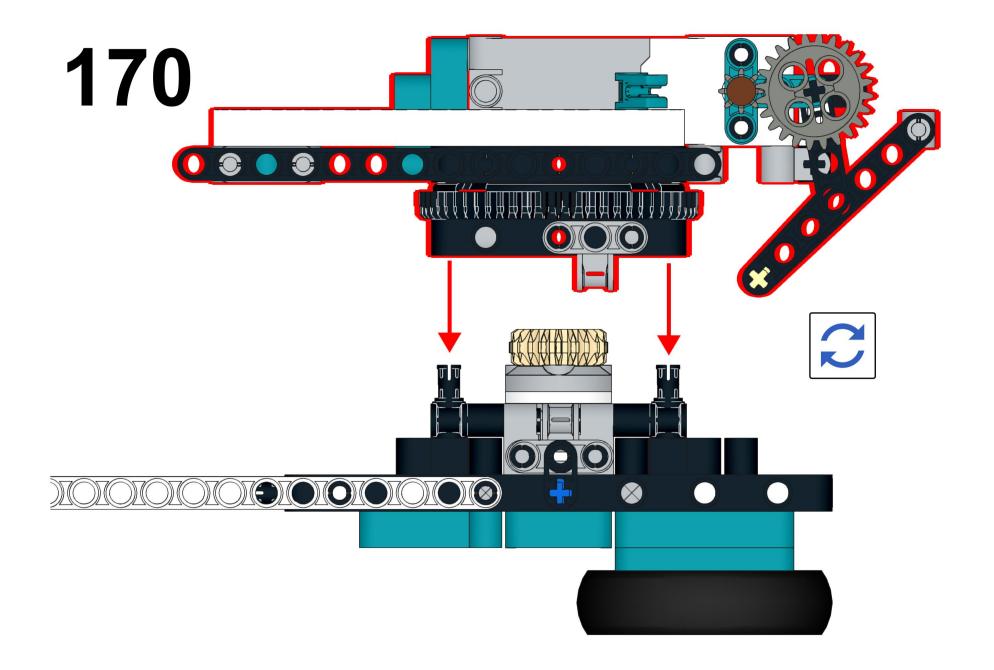


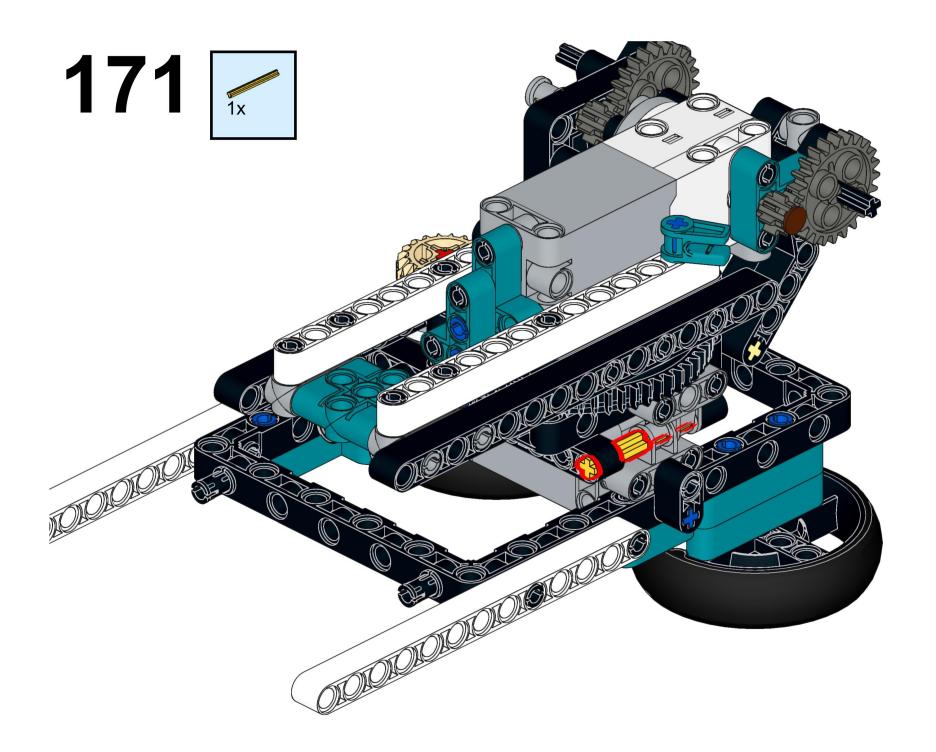


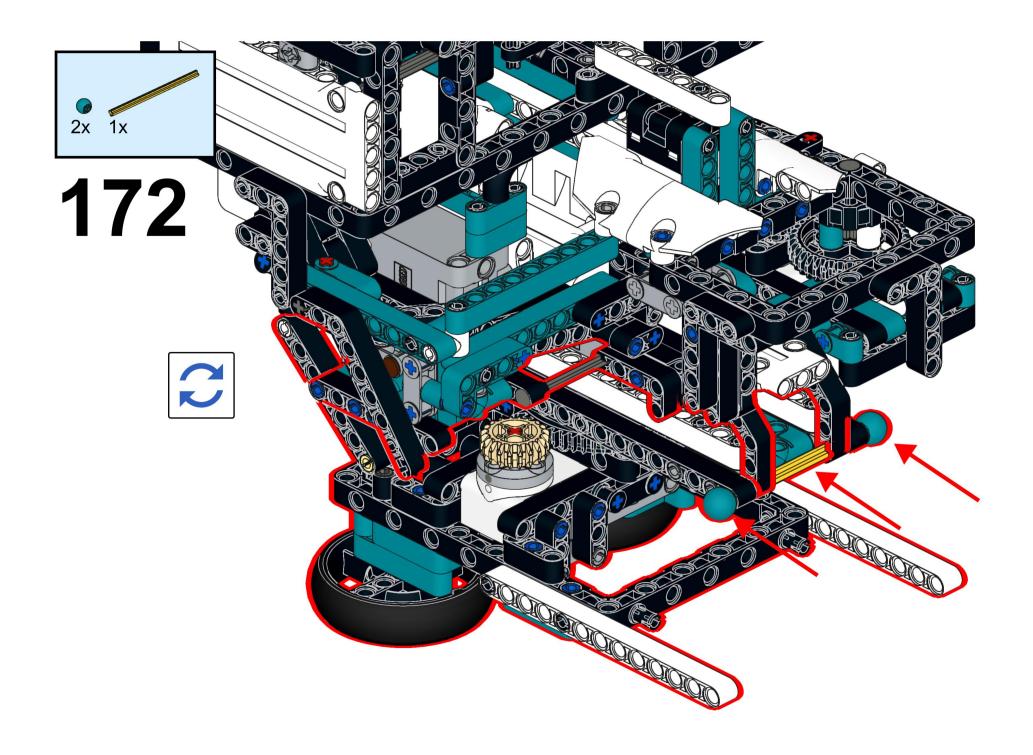


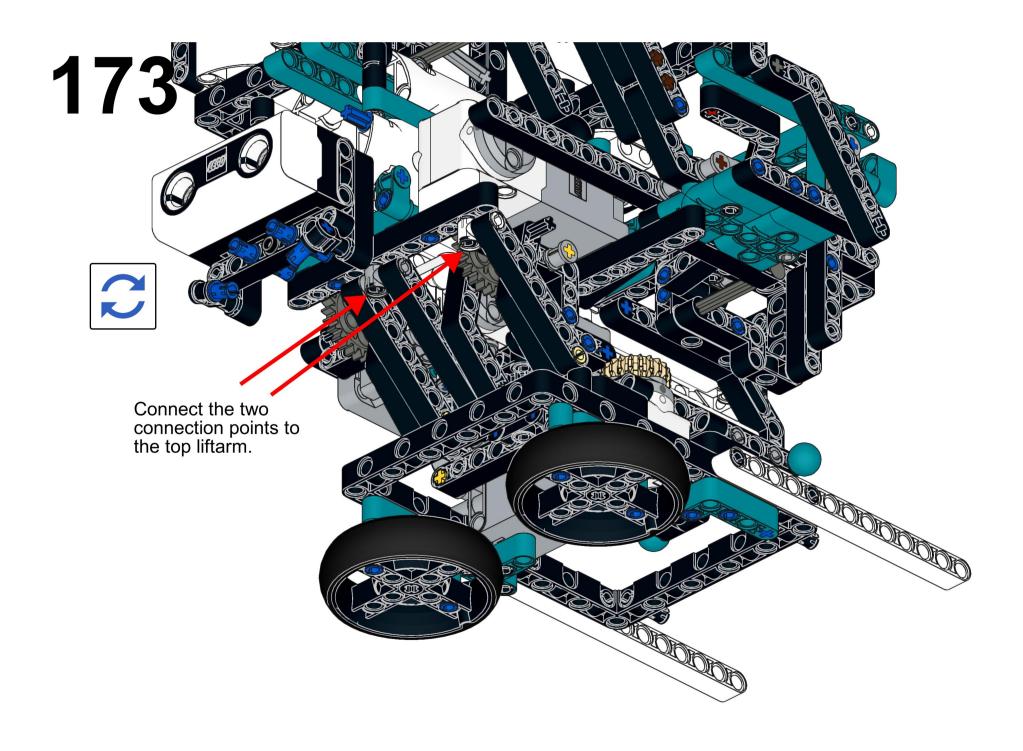


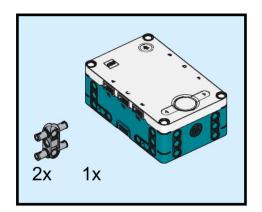


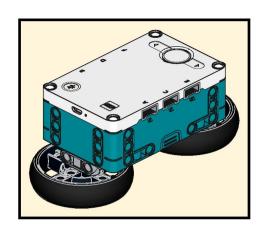


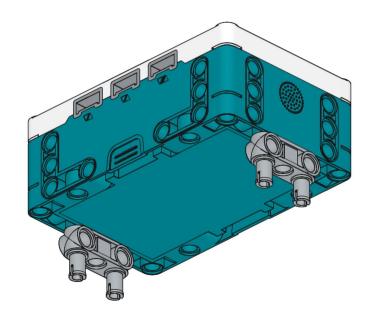




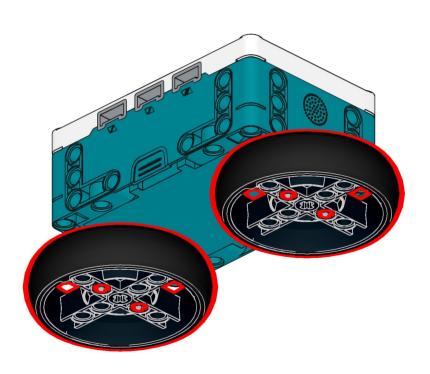


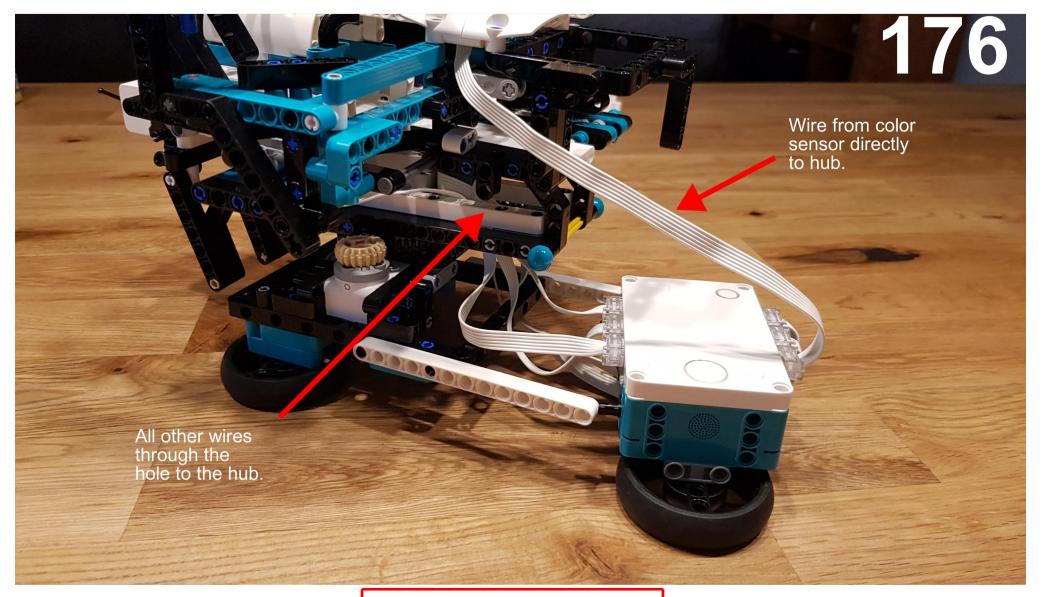






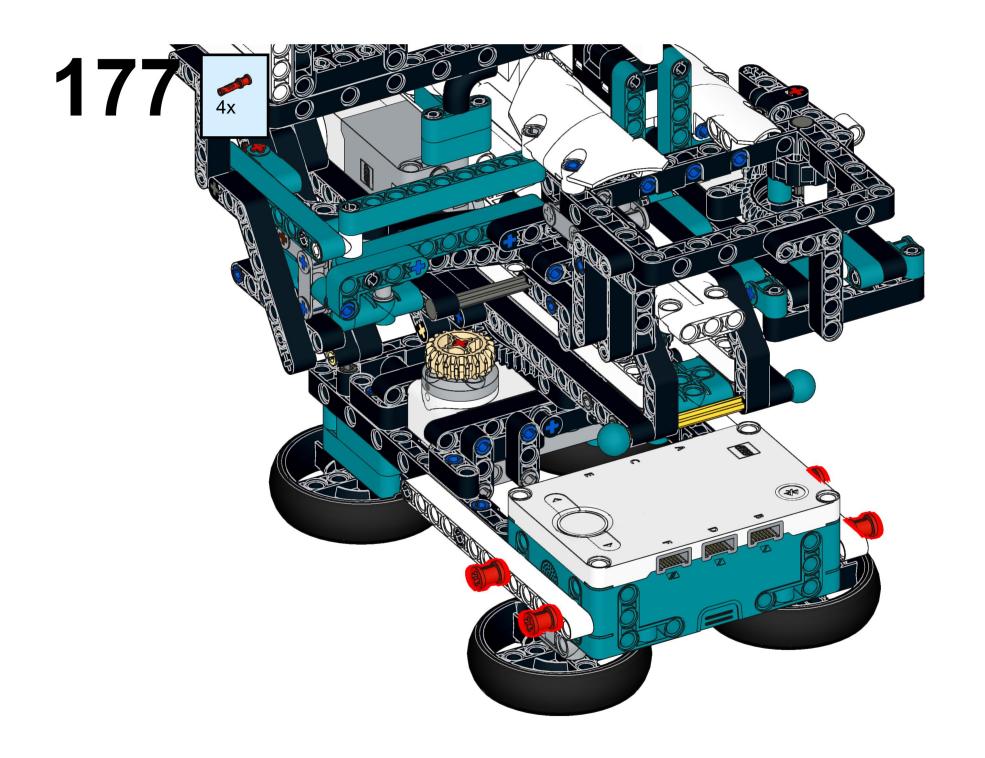


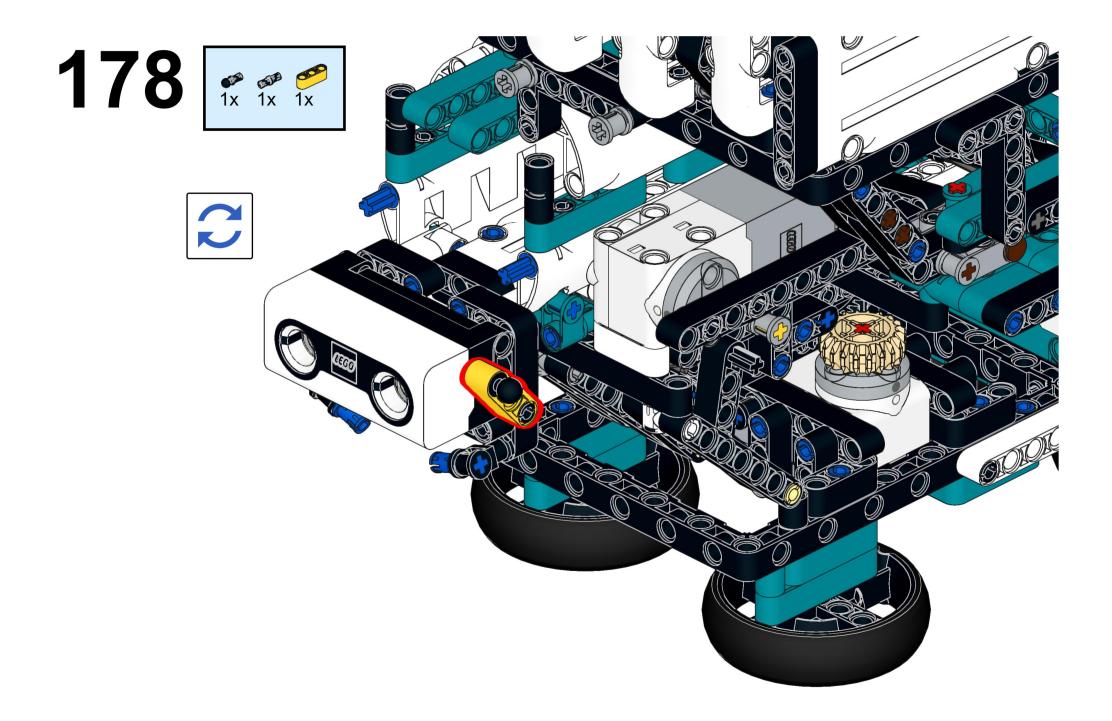


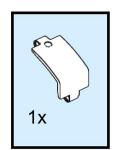


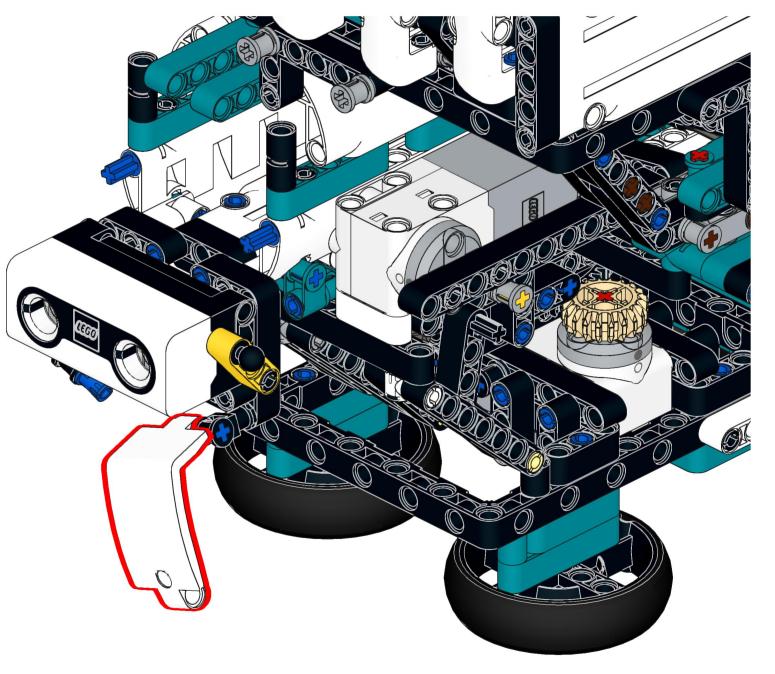
WIRE CONNECTIONS

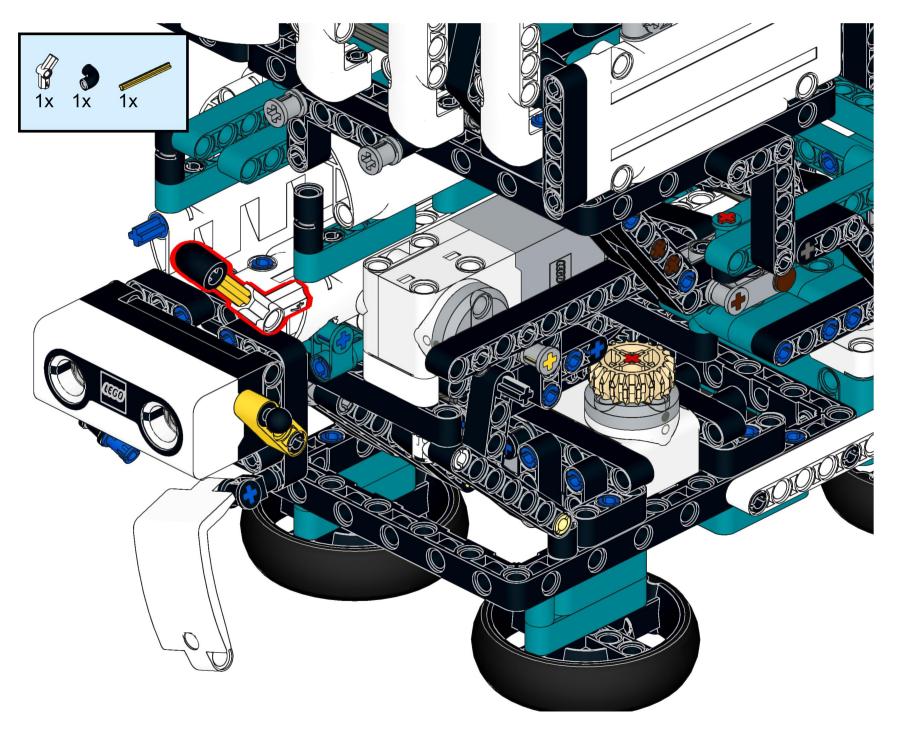
- A: Distance sensor
- B: Left/Right motor (turntable)
 C: Shooter motor
- D: Up/Down motor E: Basket motor
- F: Color sensor

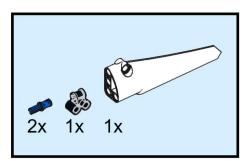


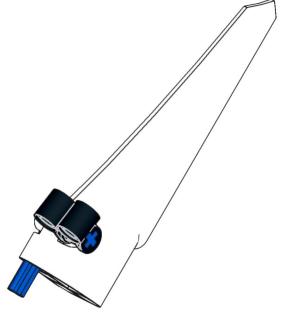


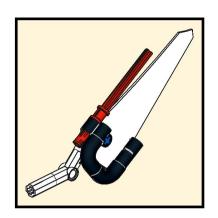


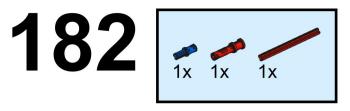


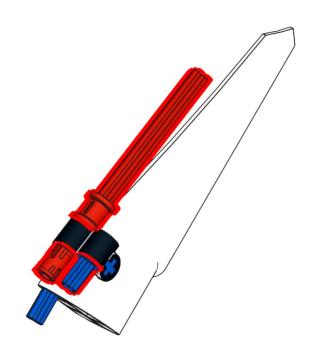


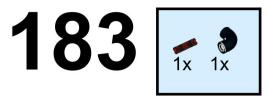


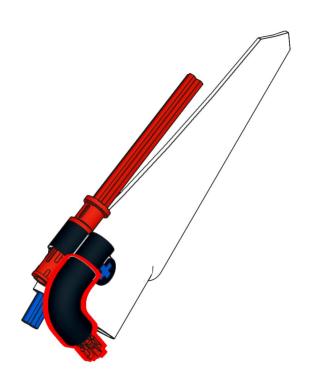




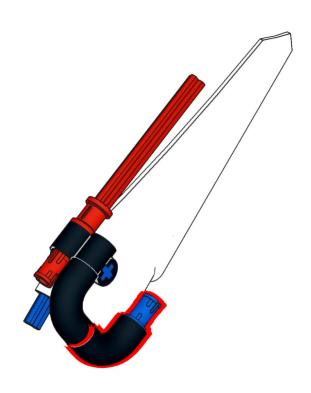


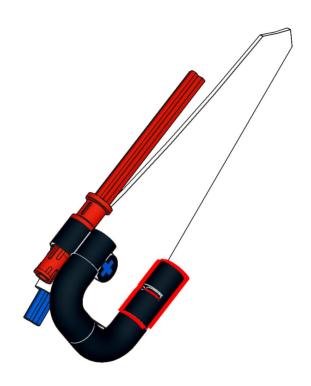






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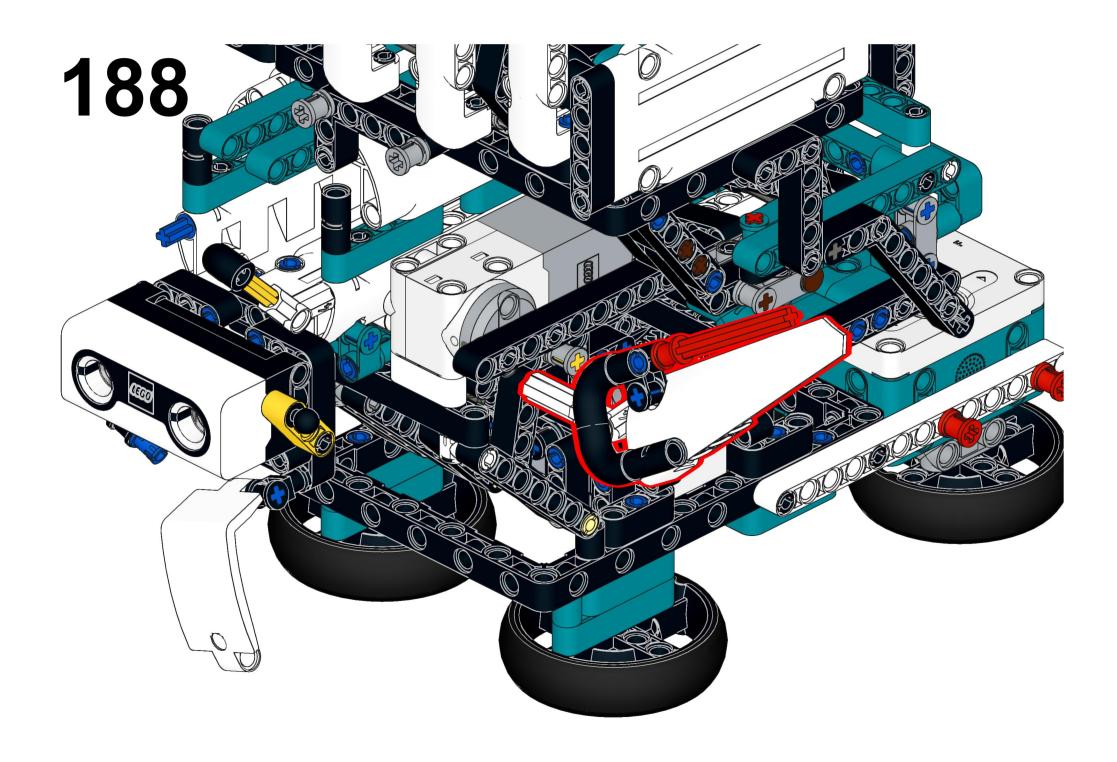


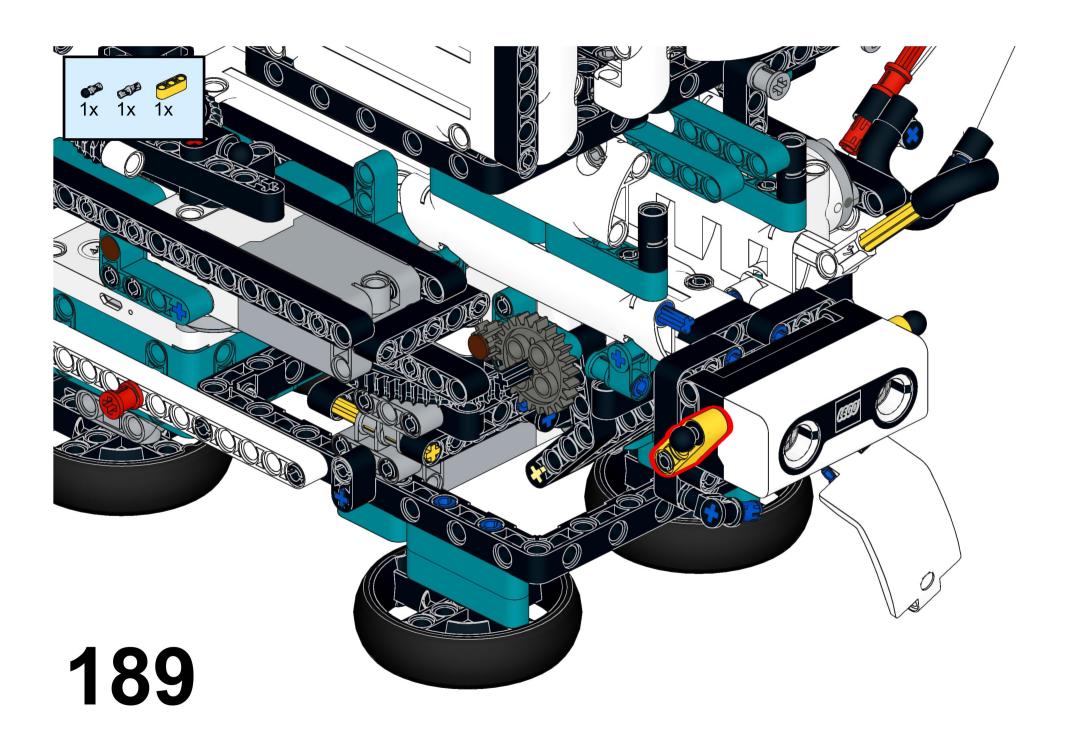


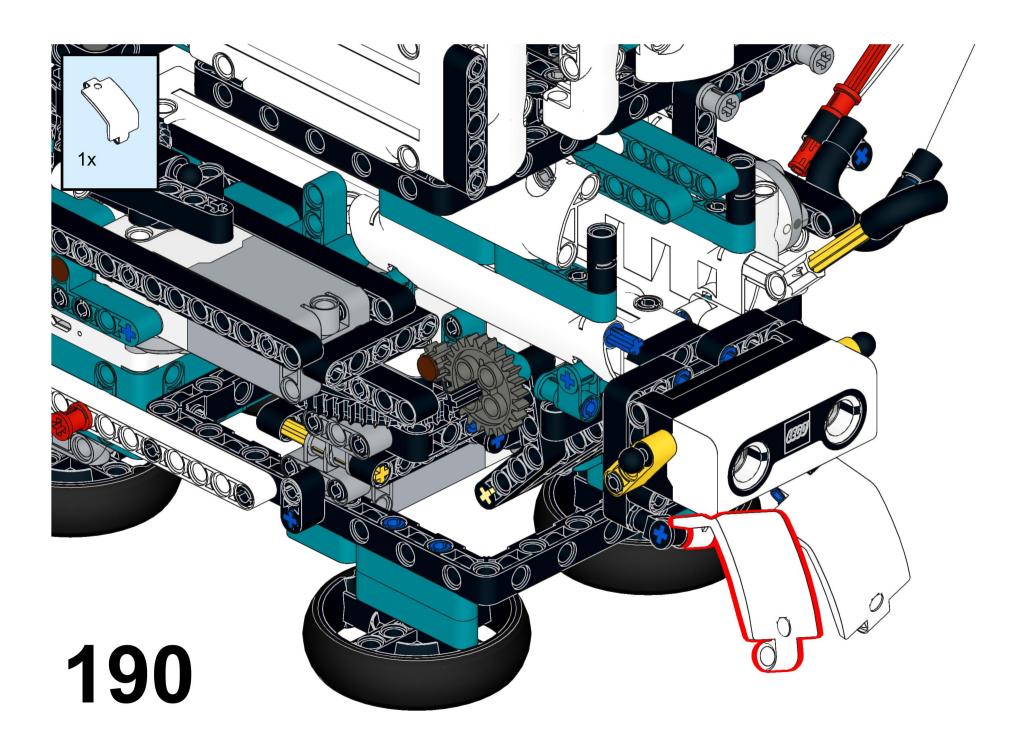
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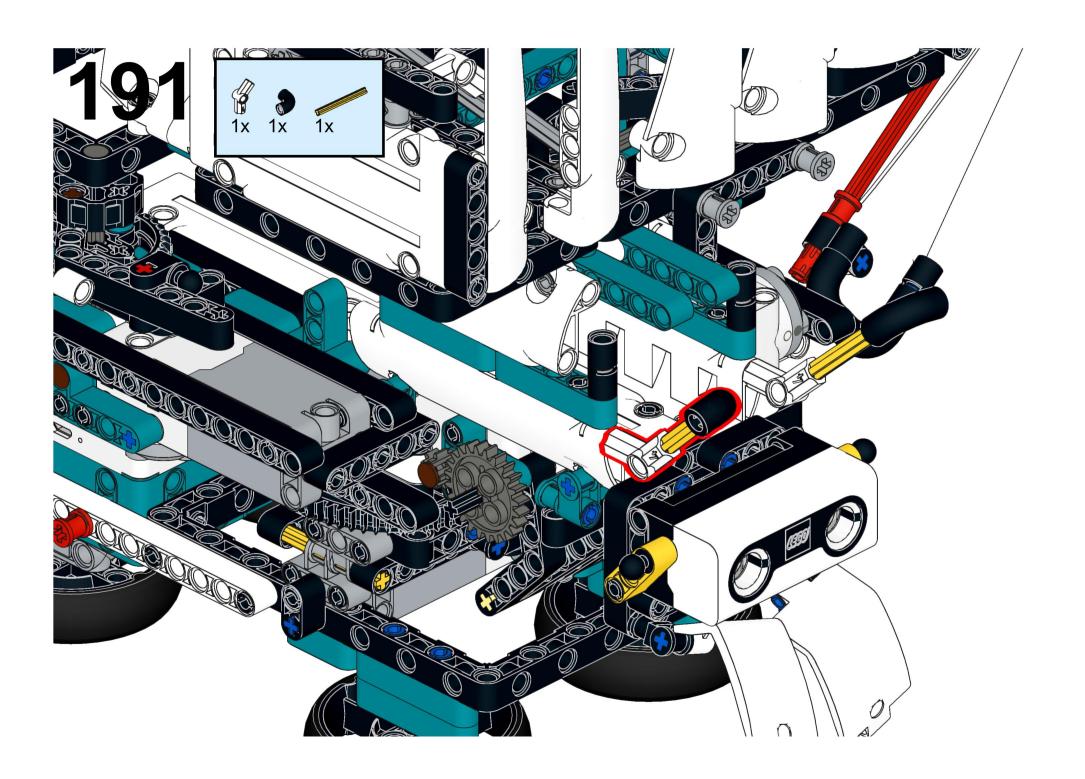


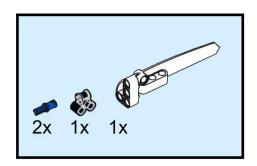


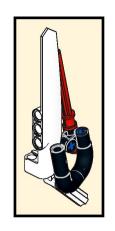


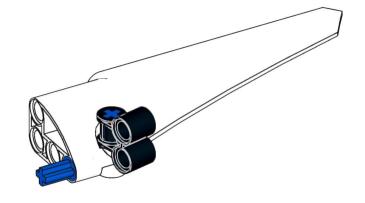


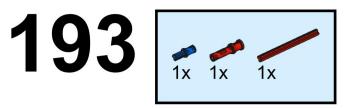


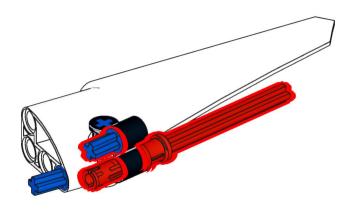




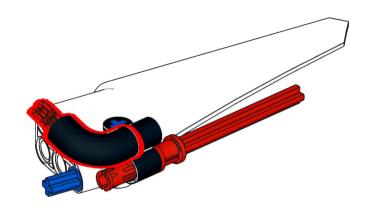




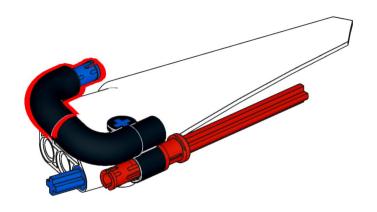


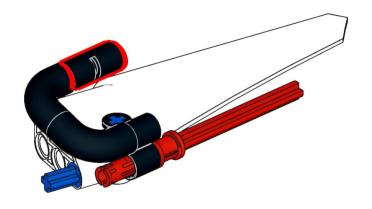


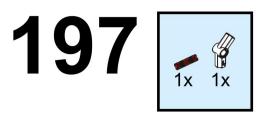
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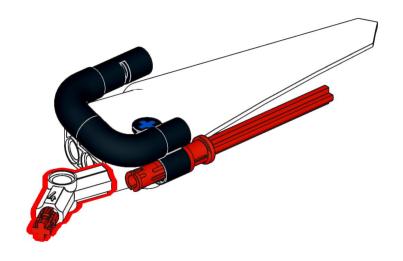


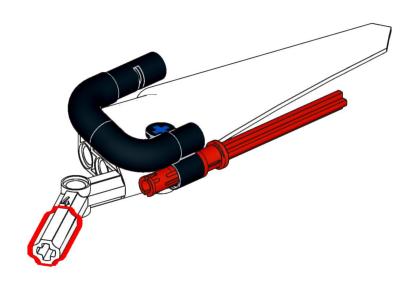
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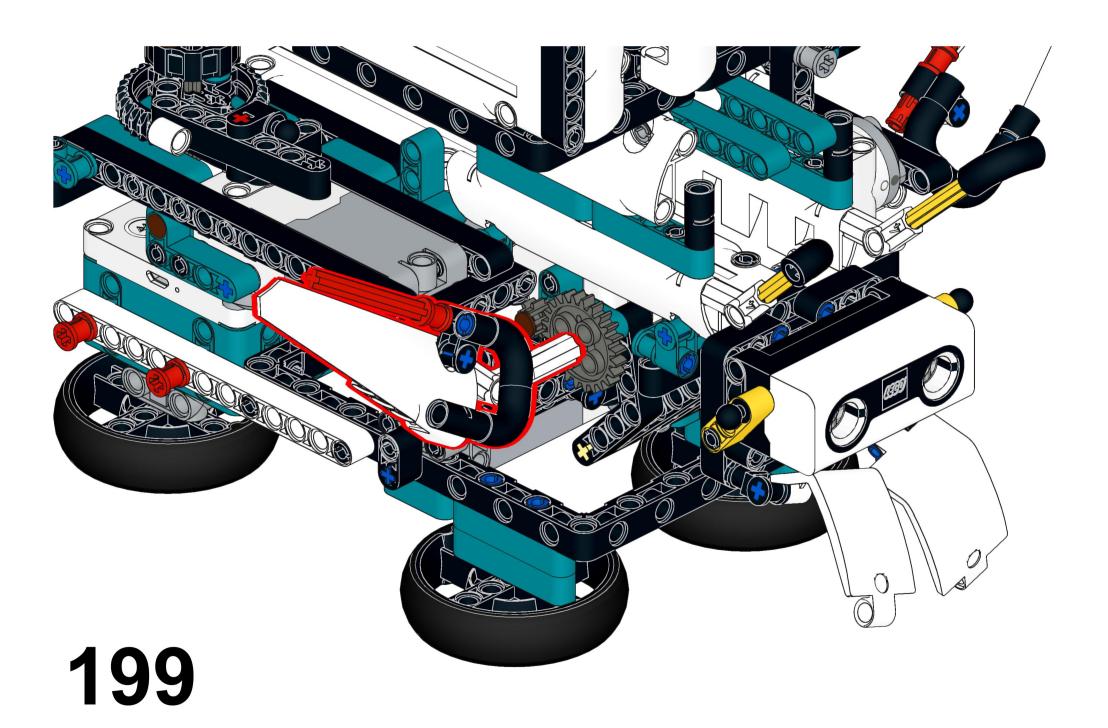




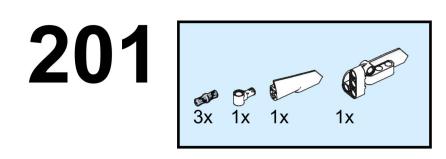


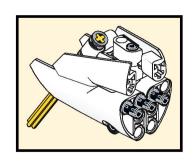


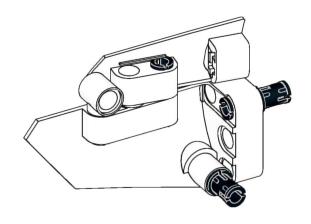


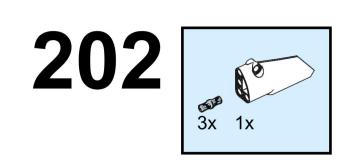


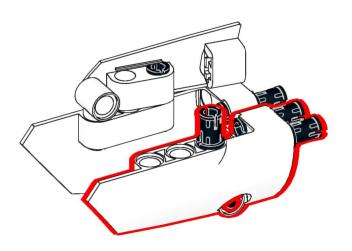
200 | 1x

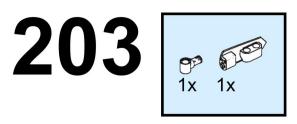


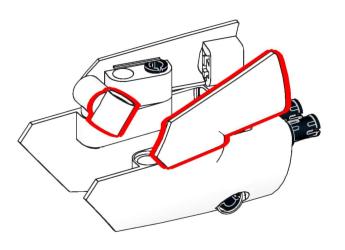


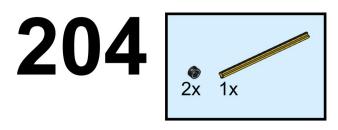


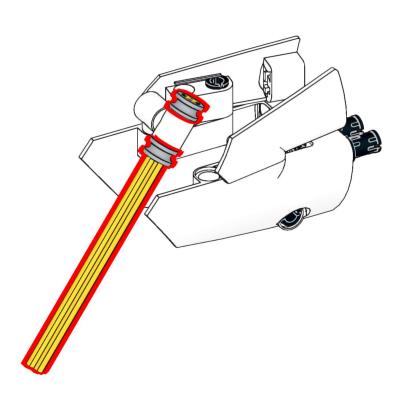




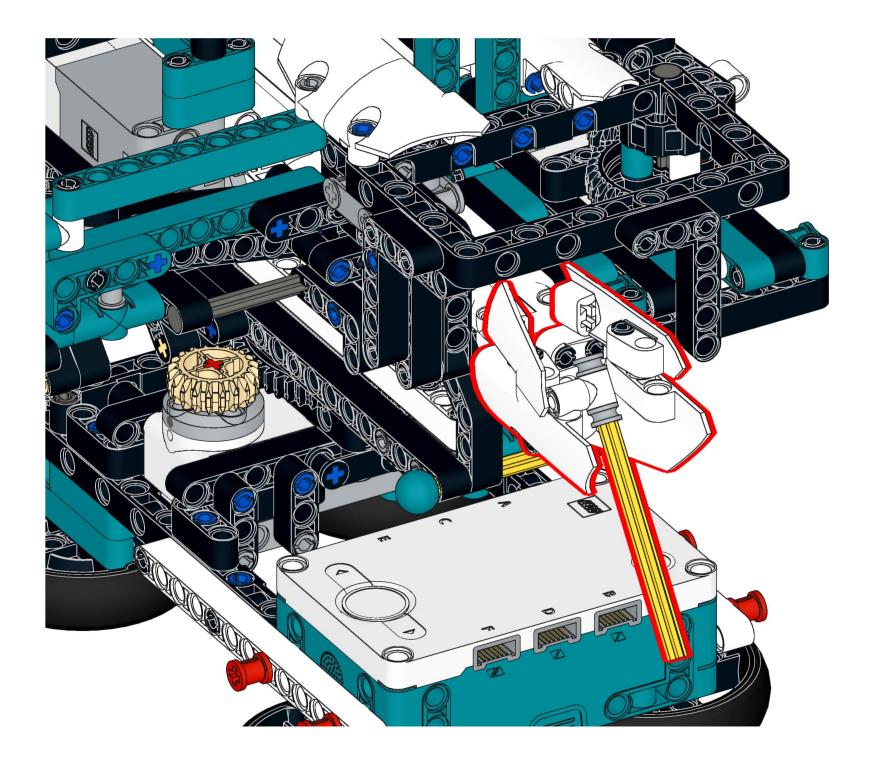


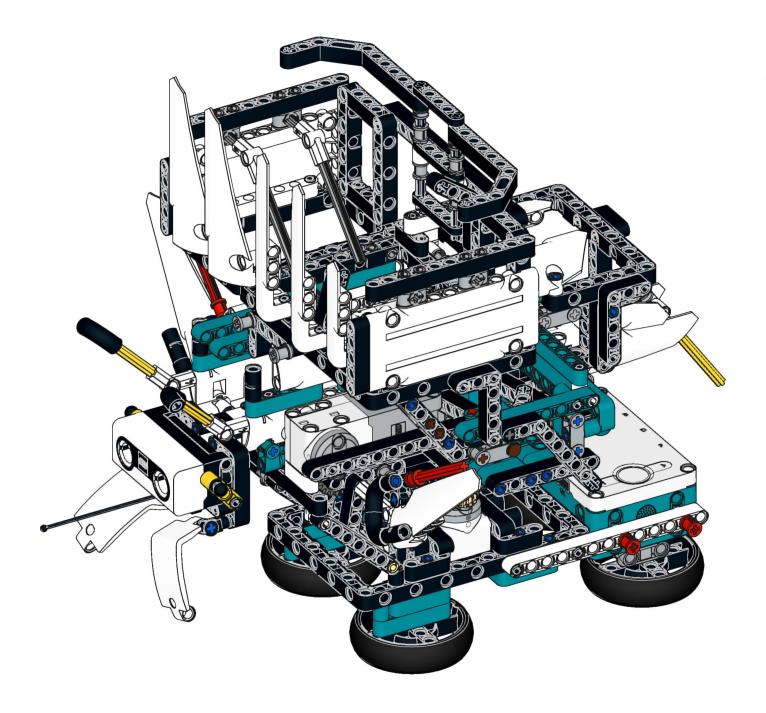










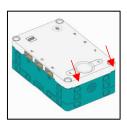


OPERATING INSTRUCTIONS

The easiest way to control PINGERBEE is using the software I wrote.

Watch the video on my Youtube channel to see how this works: https://www.youtube.com/c/BingobricksSwitzerland

The following instructions describe the most important functions of the software in brief:



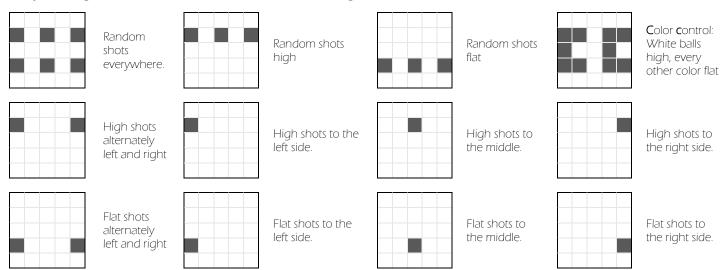
Use the buttons (left/right) on the hub to go through the program selection.



Hold your hands in front of the PINGERBEE distance sensor to start the program. ("ENTER")

TRAINING PROGRAMS

Choose one of the following training programs. Directions are meant in the line of fire. **Slowly flashing** dots indicate a low rate of fire. **Fast flashing** dots indicate a high rate of fire.



TAKE A LOOK AT ALL MODELS FROM BINGOBRICKS!



PINGERBEE!



More than just ping pong!

PINGERBEE is the RI51515 Version of PONG3R. No additional parts are required! It shots balls in different directions at various speed levels. Additionally, it has an extended ball basket for up to 12 balls and it comes with a lot of light and sound effects!

www.rebrickable.com/users/Bingobricks/mocs



BUGRIDER!



Beware of the beast!

BUGRIDER attacks everything that gets in front of his bared teeth. His rider recognizes all his enemies who approach him and his fearsome beast from the front or the side. BUGRIDER boldly finds its own way through your territory. If you want to make it a little easier for him, you can also let him follow a black line or control him directly with your smartphone. But beware of his most dangerous weapon: he can shoot his rubber bullets up to 10 meters in all directions!

www.rebrickable.com/users/Bingobricks/mocs



PONG3R!



The ultimate ping pong training machine!

PONG3R shots table tennis balls in different directions at various speed levels. Choose one of many exciting shooting programs to train your trick shots. PONG3R recognizes the color of the balls and will shot white balls flat and orange balls high!

www.rebrickable.com/users/Bingobricks/mocs



SLING3R! Multiple hits at once!



SLING3R attacks everything that comes before its eyes. With its tightly stretched rubber bands, it is able to hit several targets simultaneously from up to ten meters away!

SLING3R comes in two versions: Standard version and smartphone version!

www.rebrickable.com/users/Bingobricks/mocs



EL3VATOR!Let the marble race begin!



EL3VATOR! is a lift you can use for marble races.

This is a fan project of the original Marbula One by Jelle's Marble Runs.

www.rebrickable.com/users/Bingobricks/mocs



