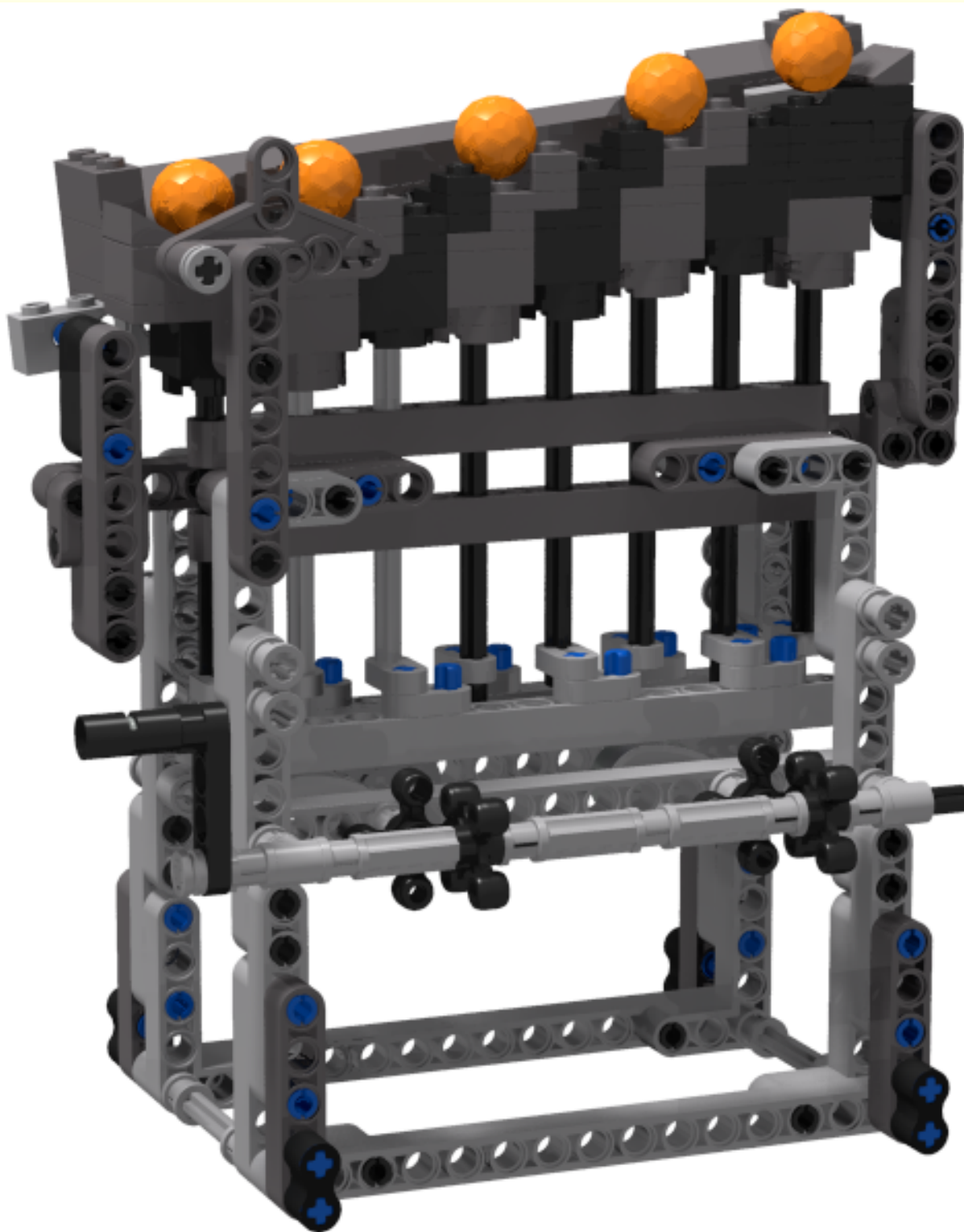
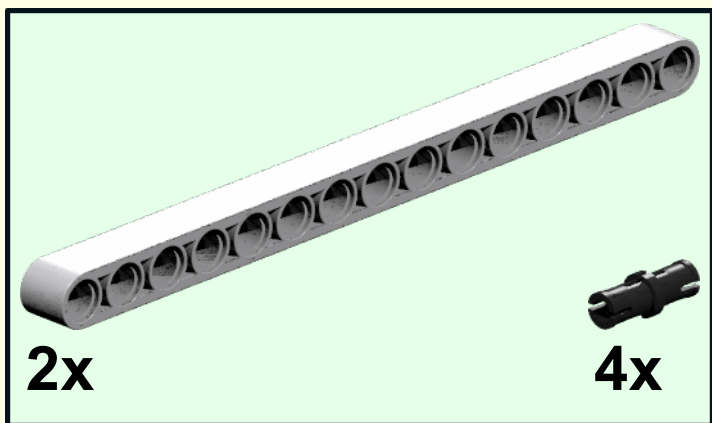


Pocket Great Ball Contraption

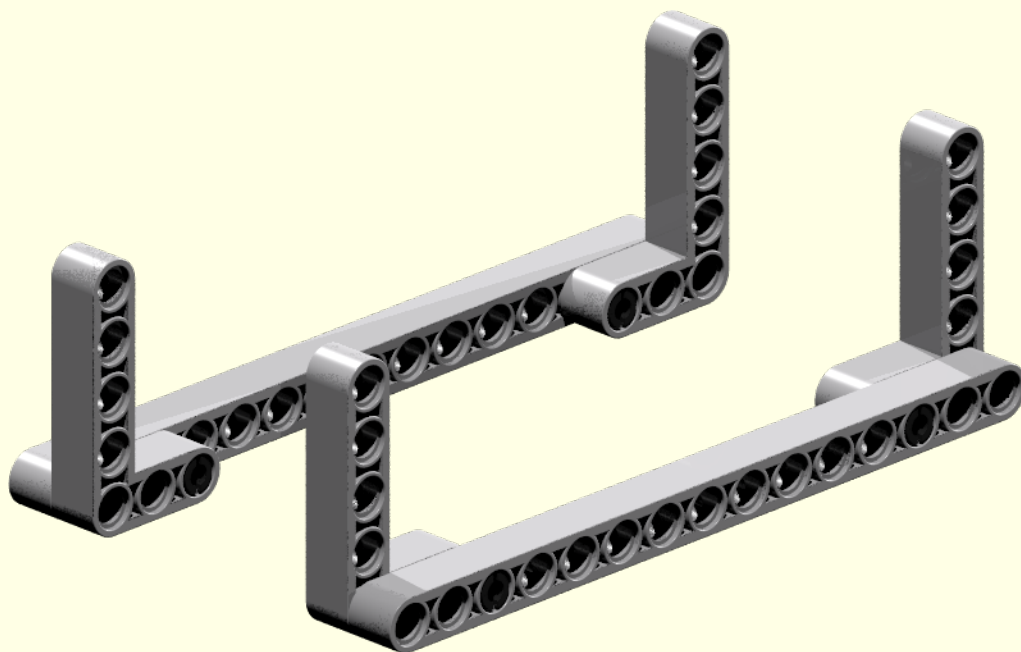
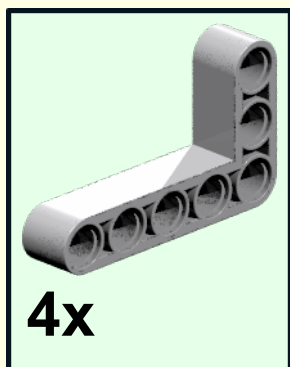


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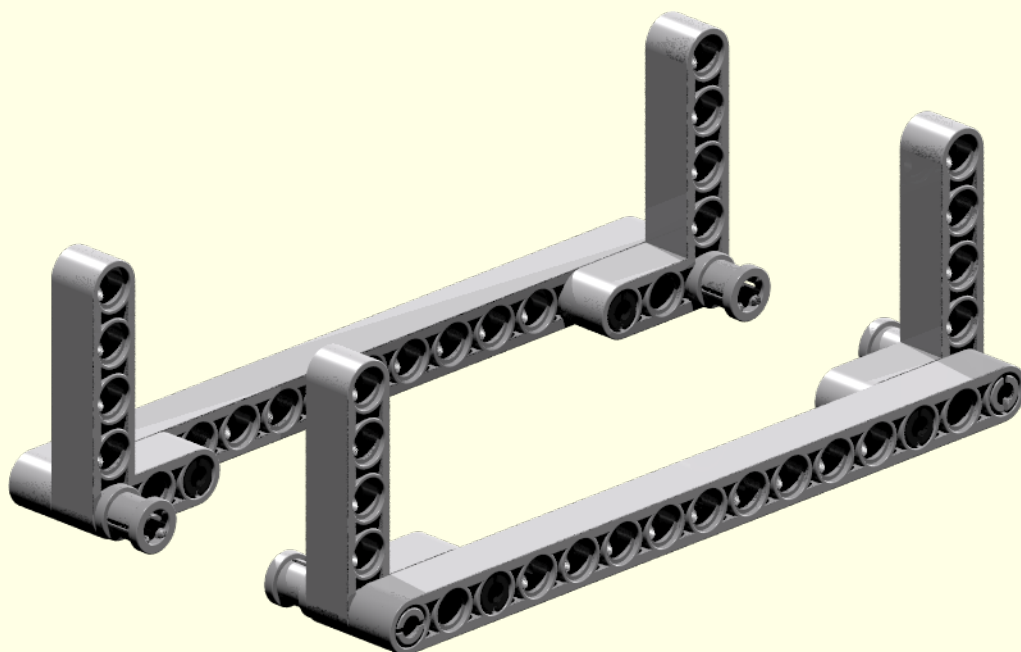
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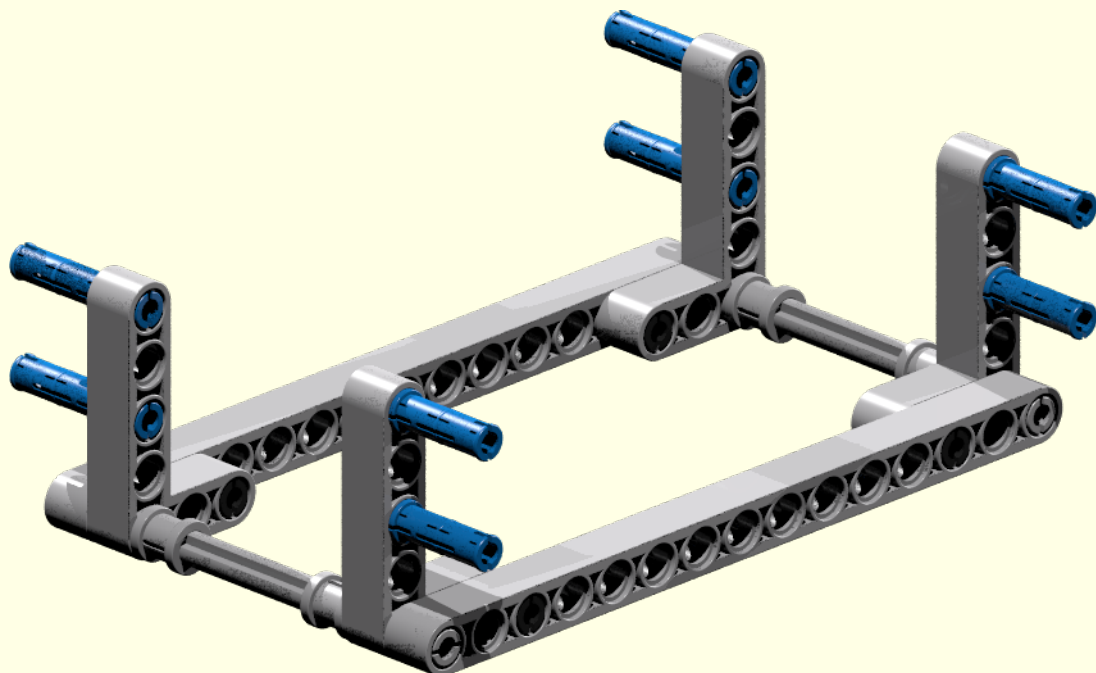
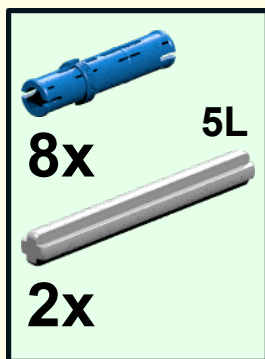
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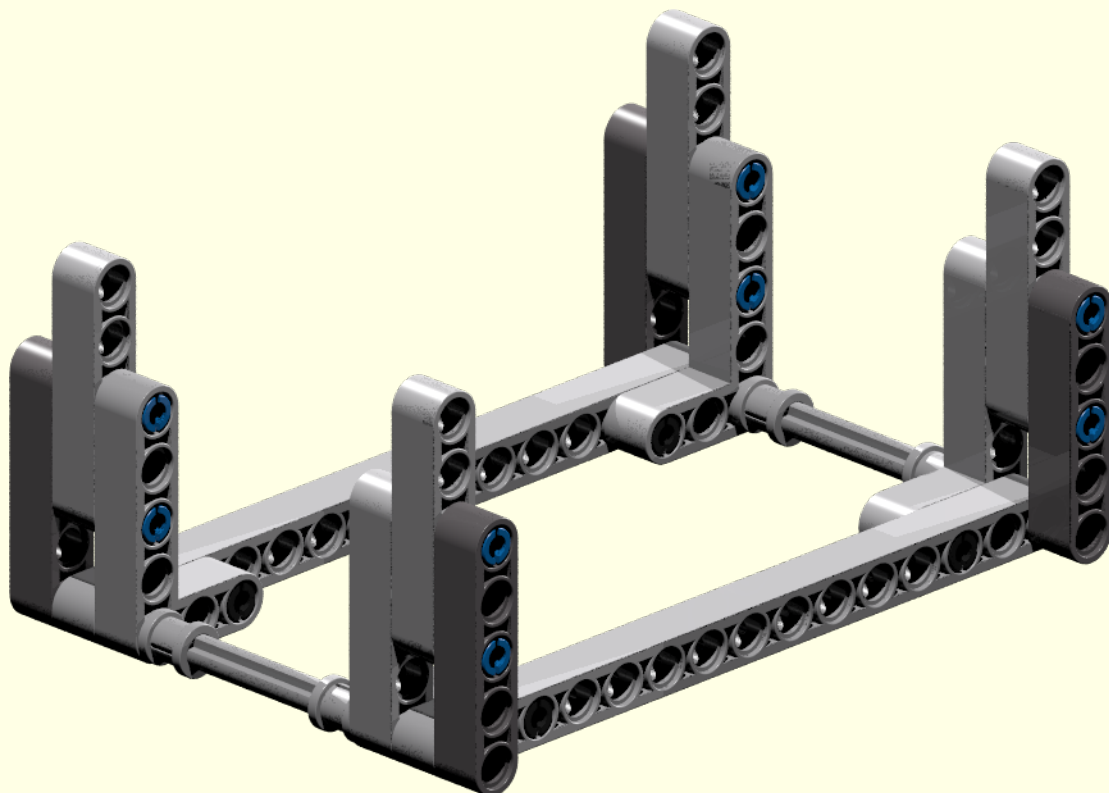
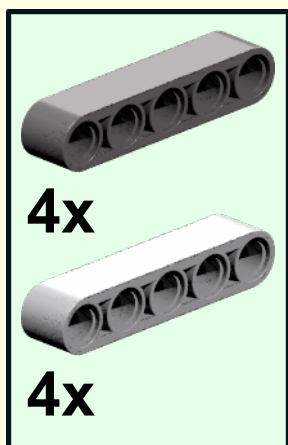
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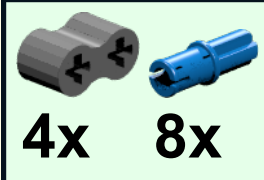
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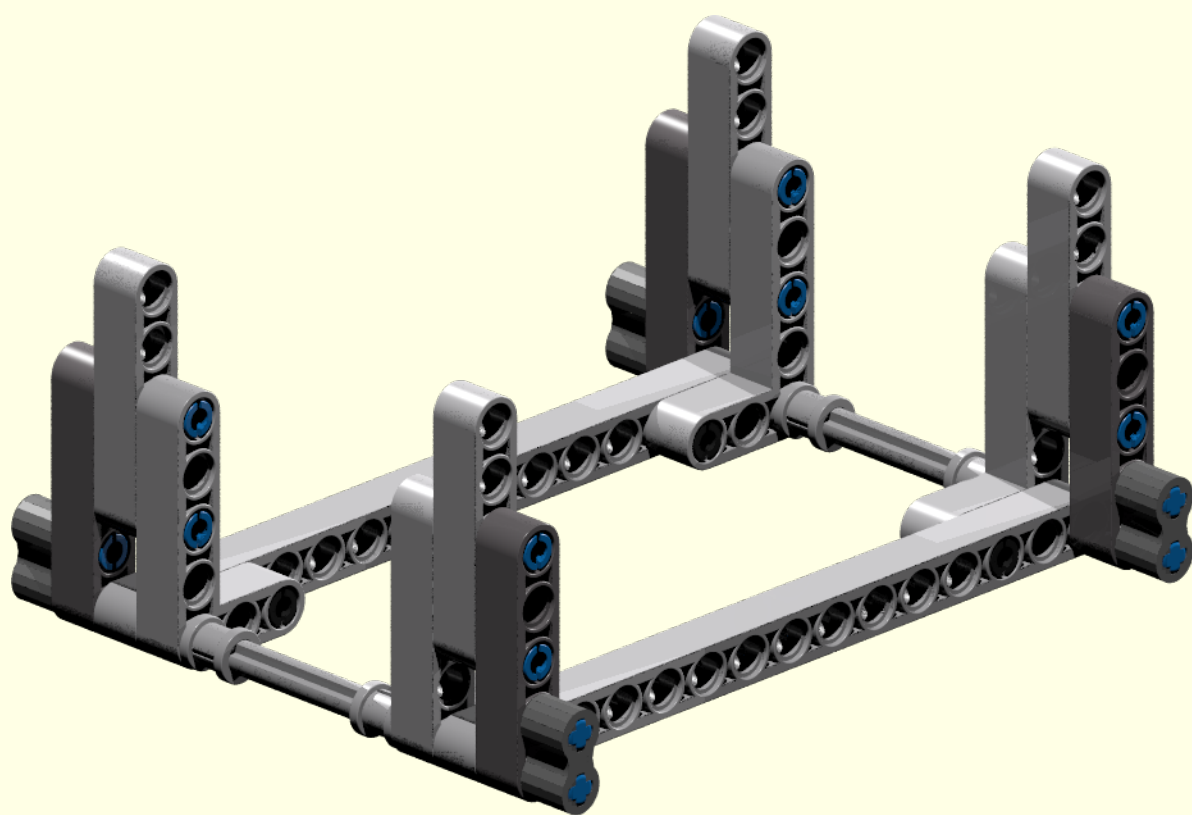
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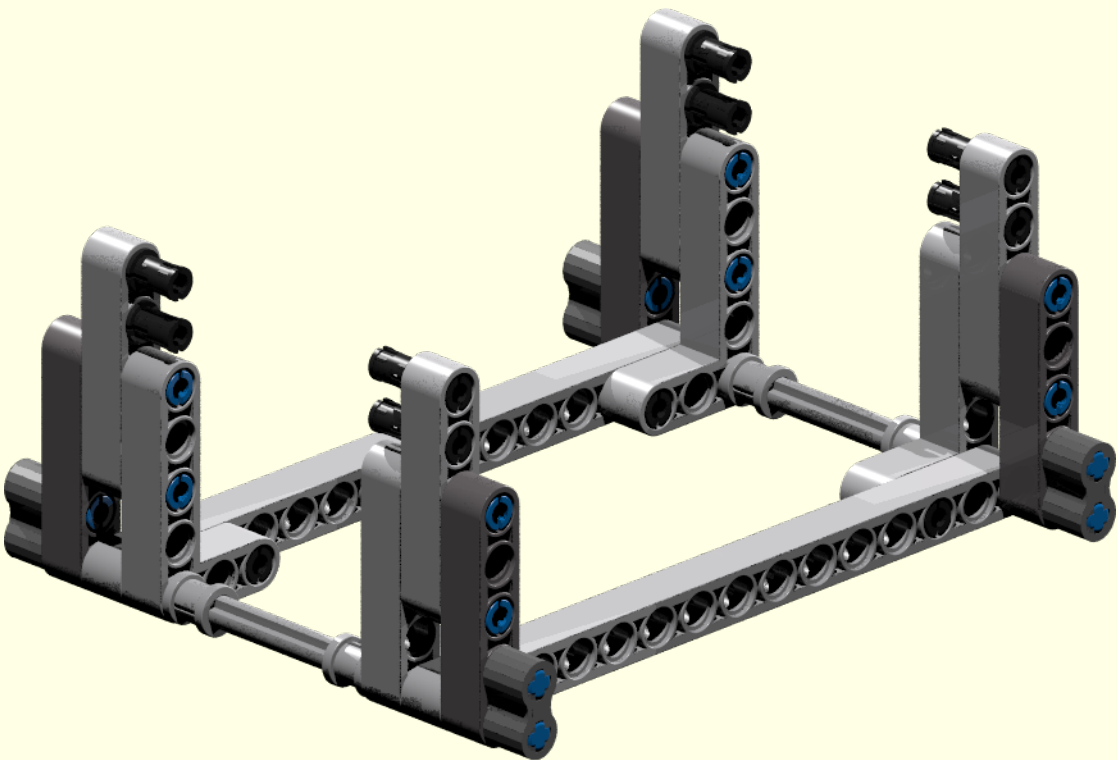
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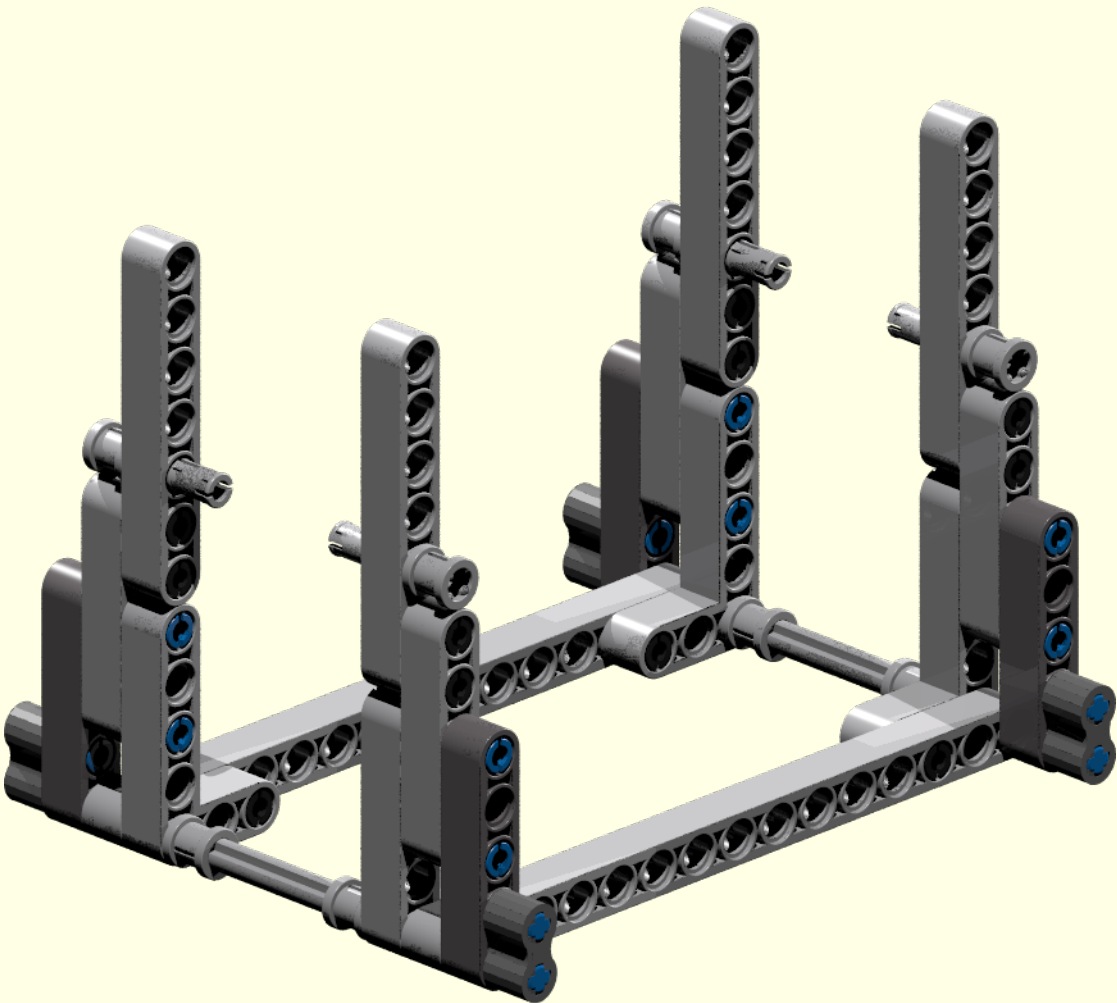
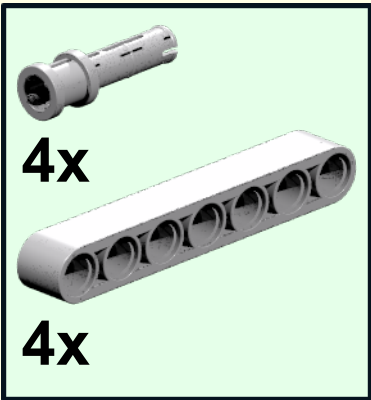
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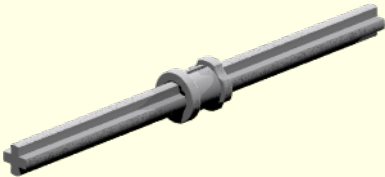
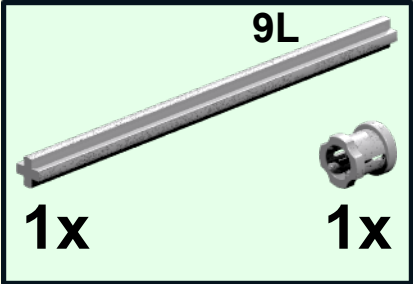
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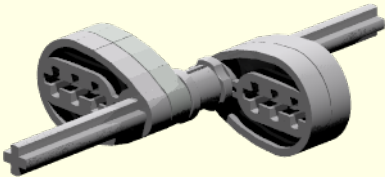
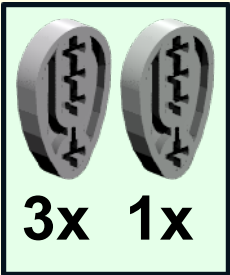
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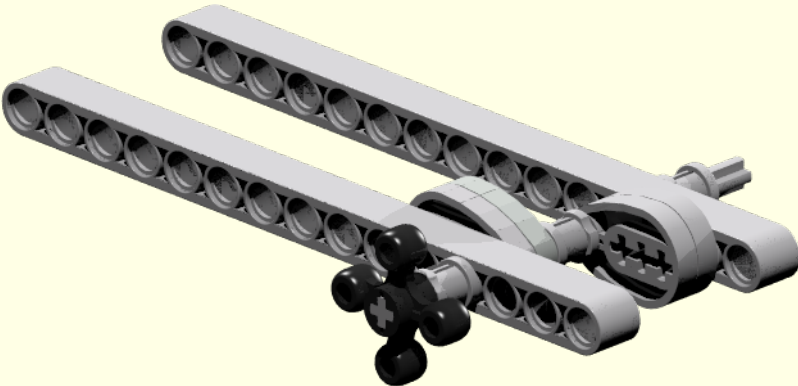
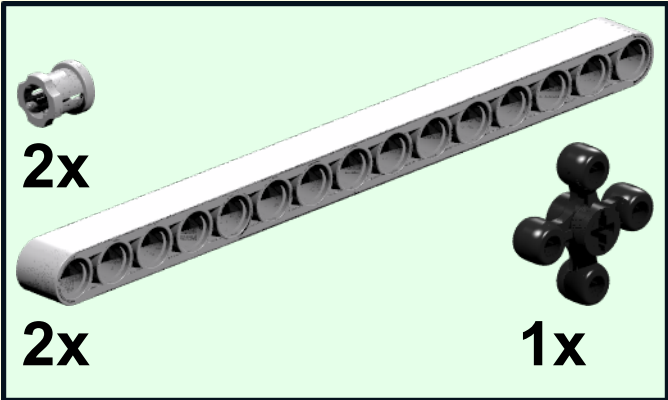
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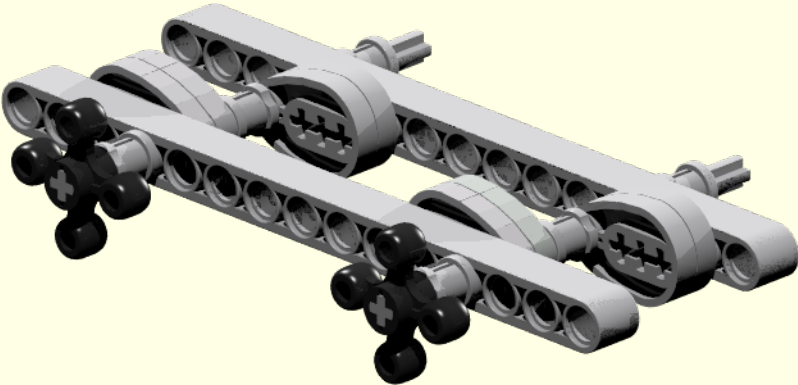
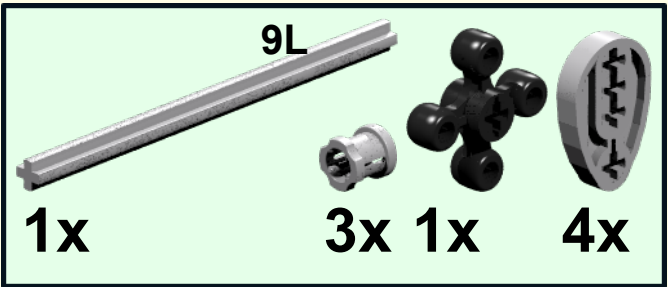
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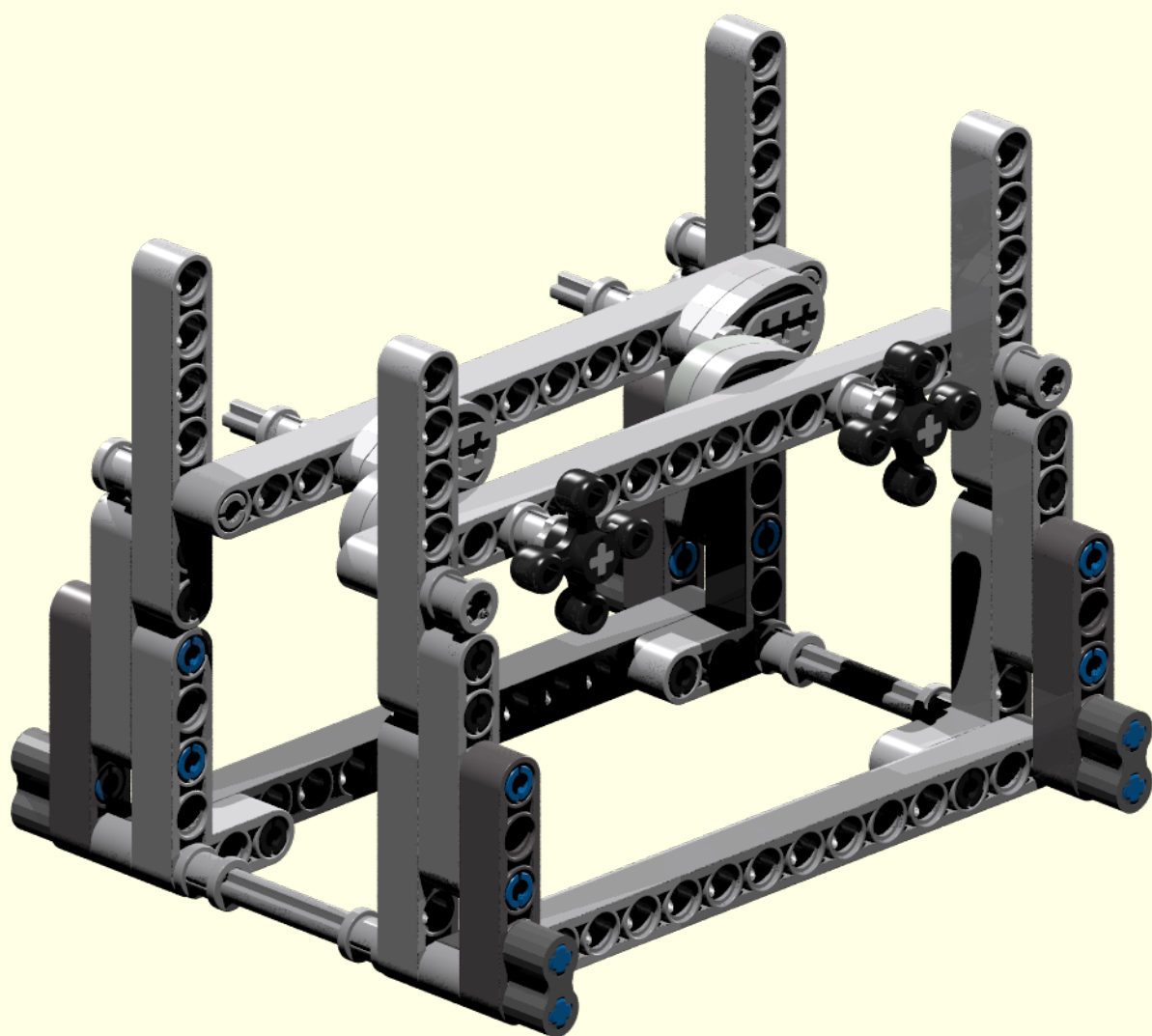


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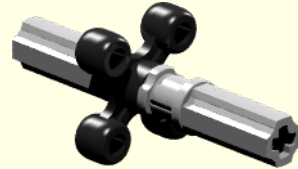
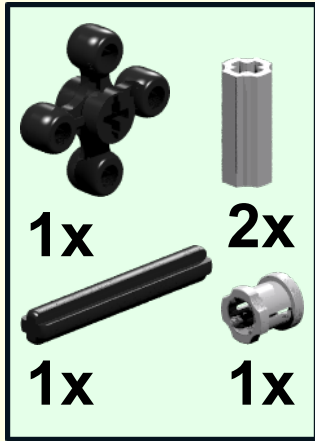


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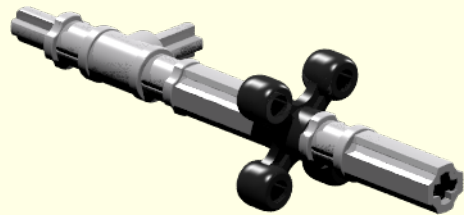
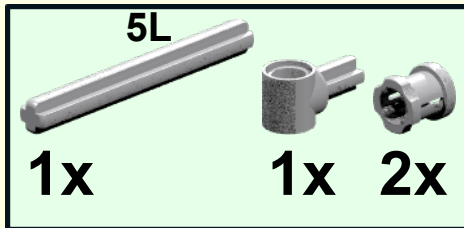




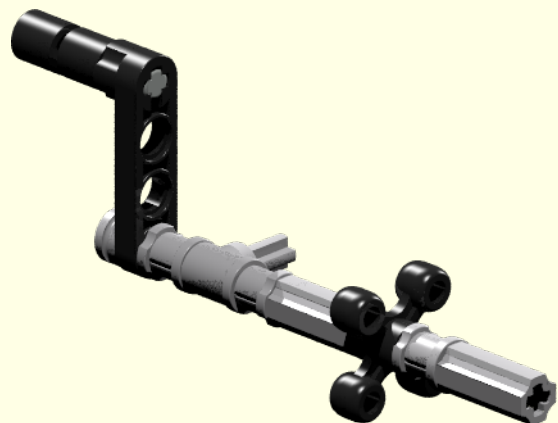
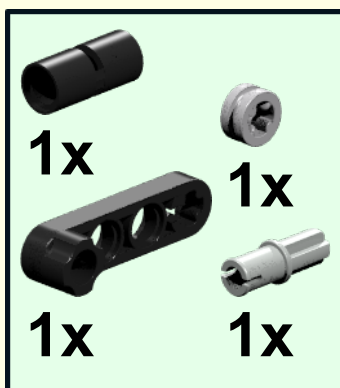
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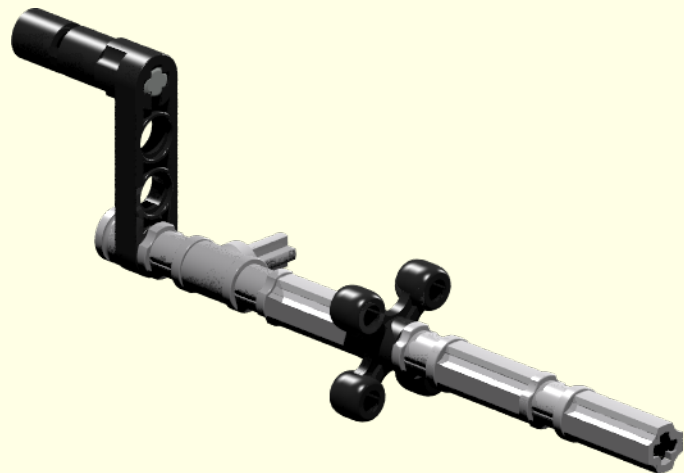
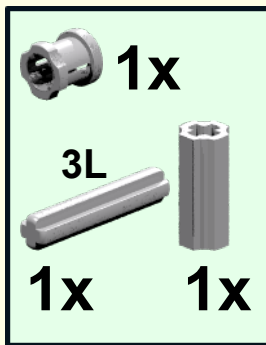
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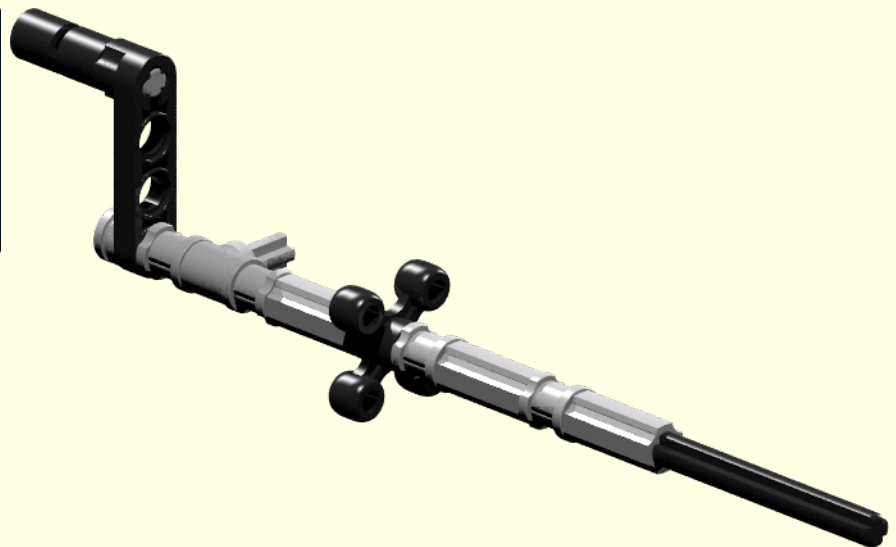
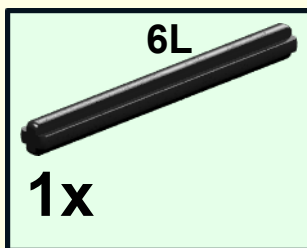
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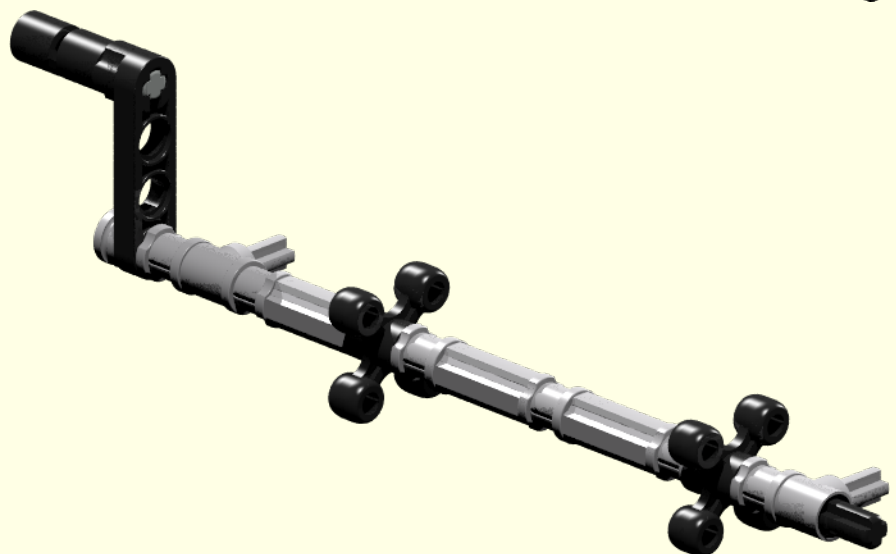
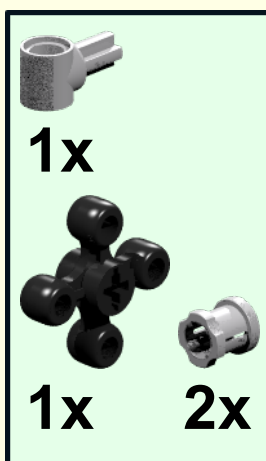
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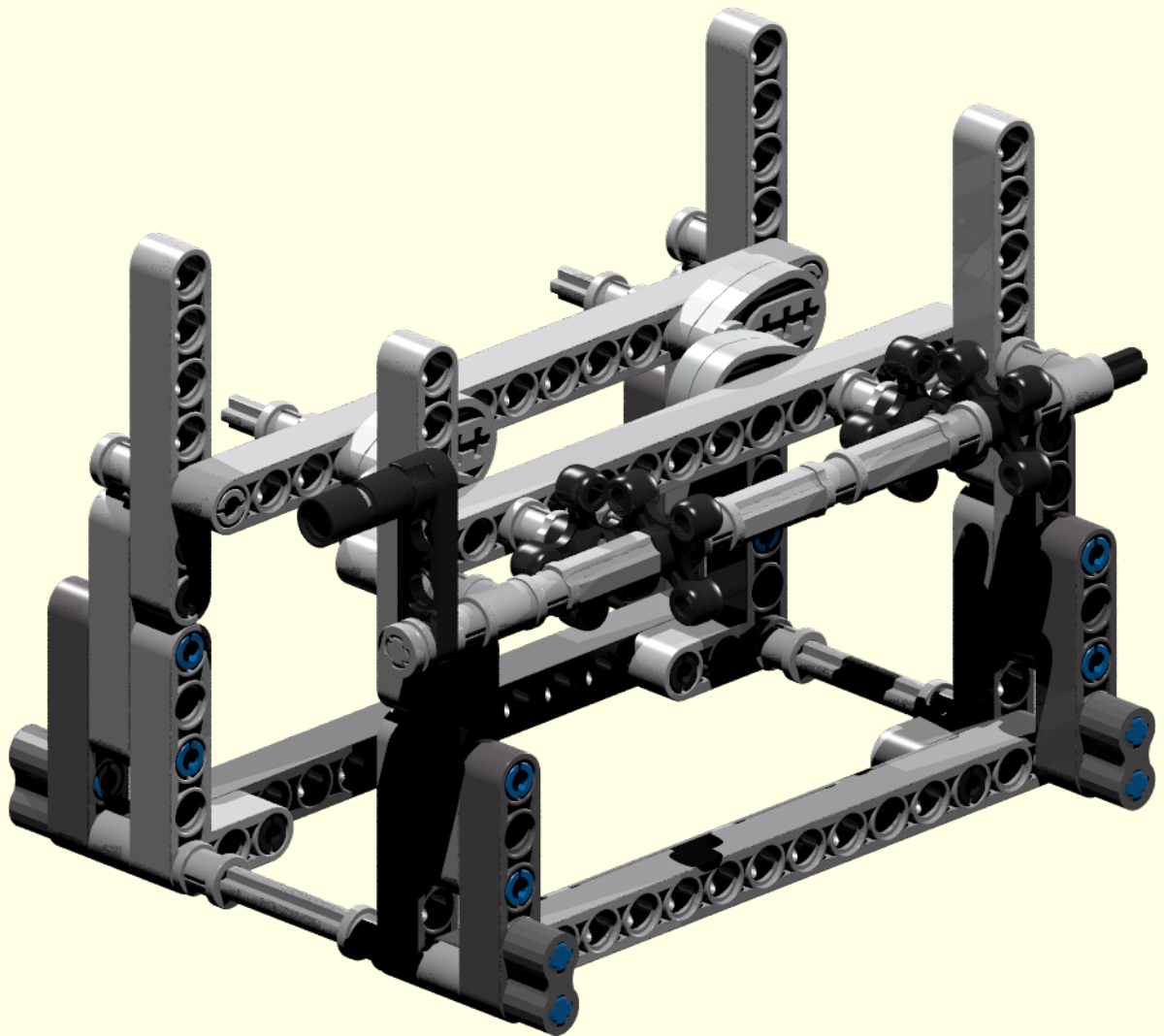


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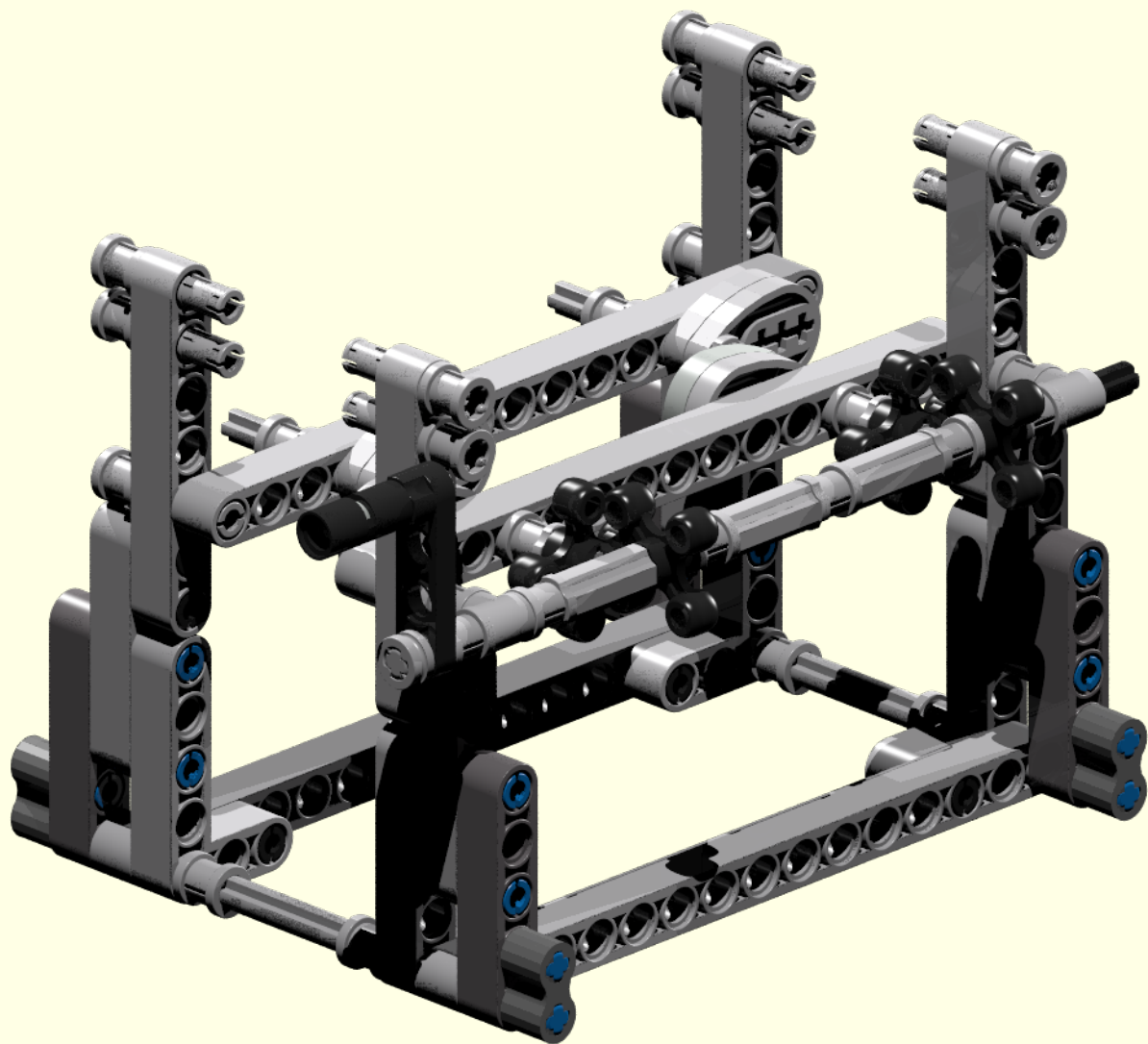


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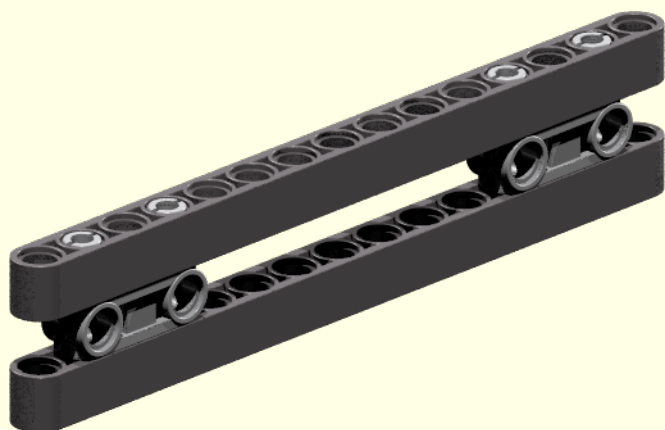
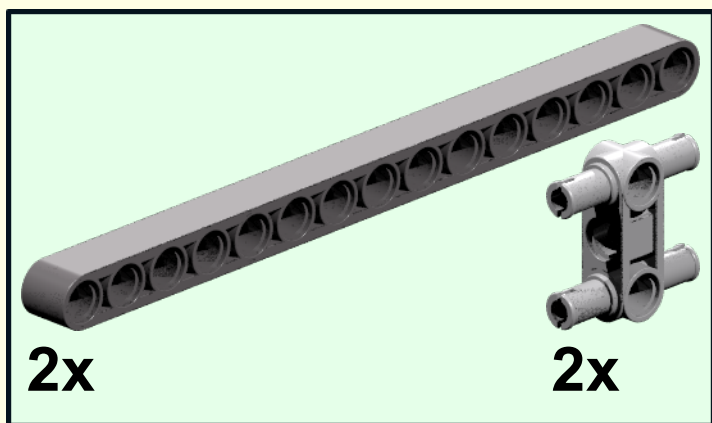




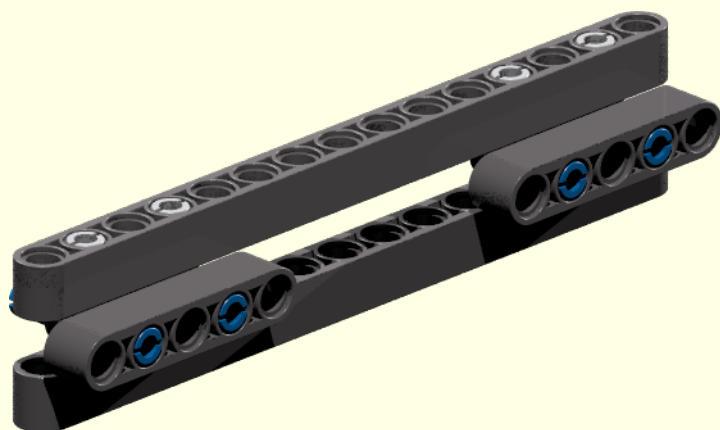
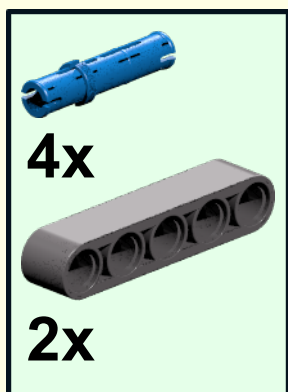
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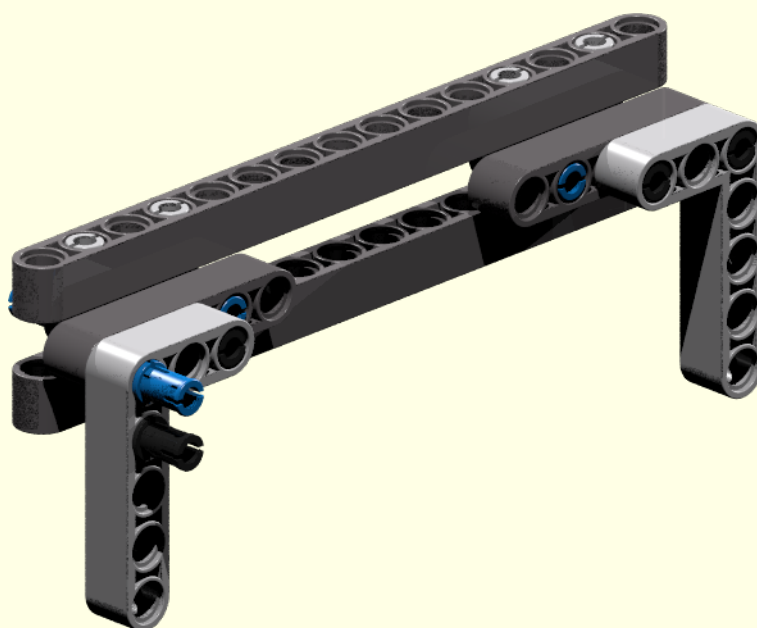
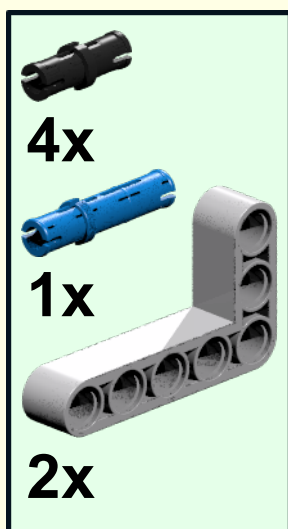
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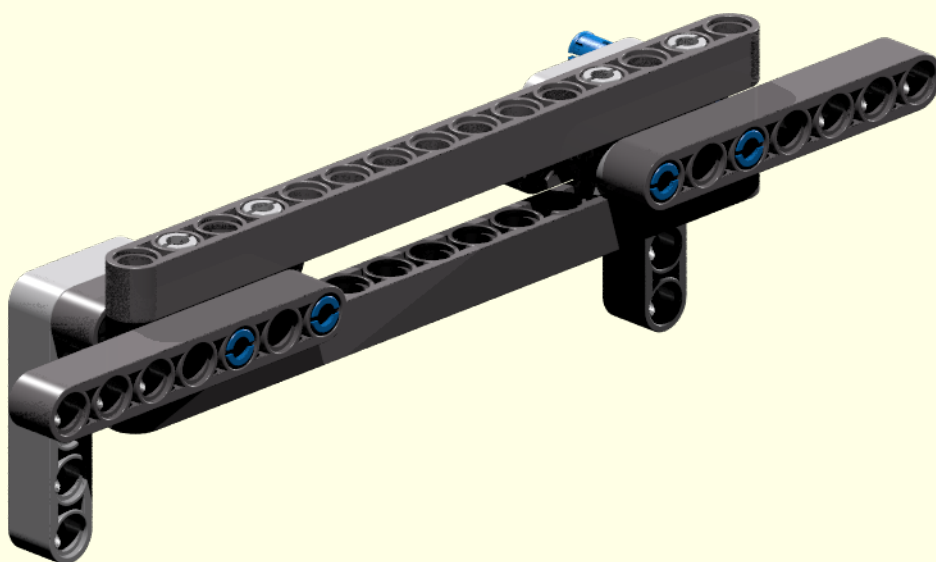
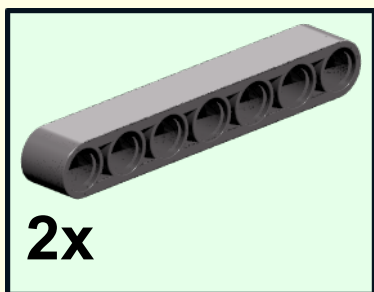
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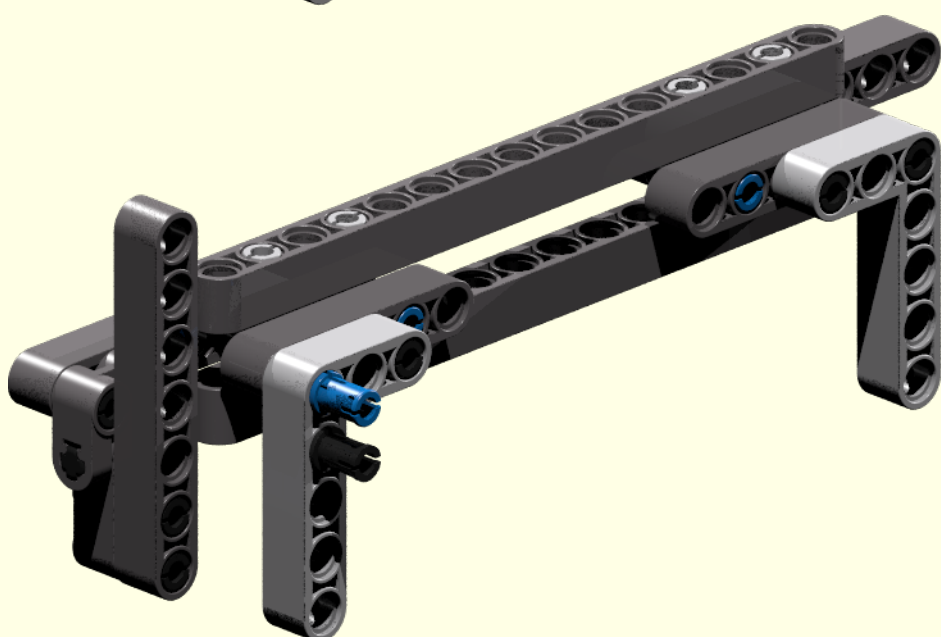
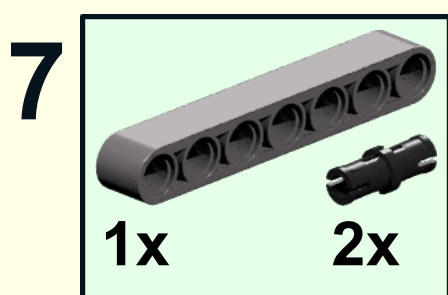
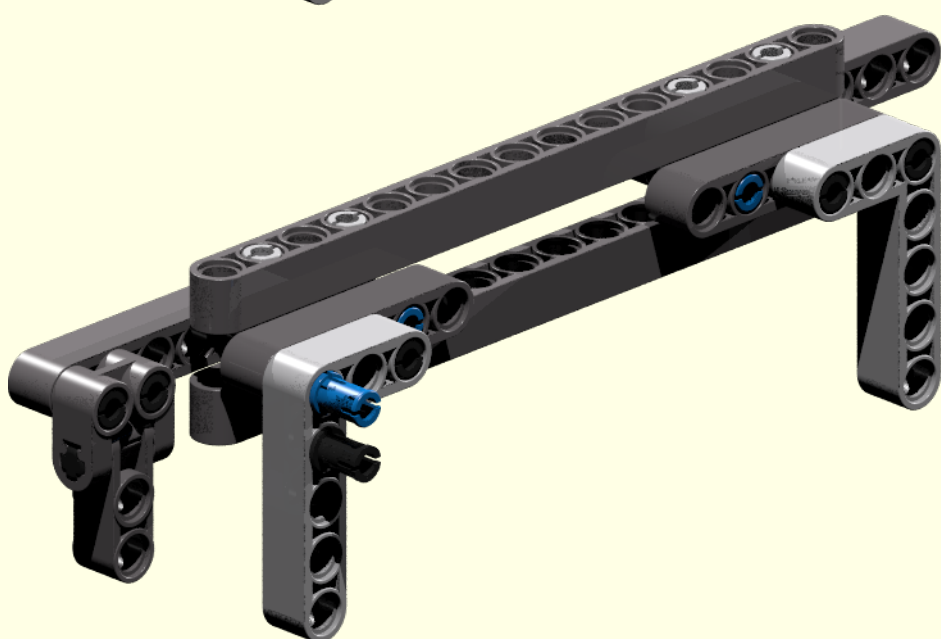
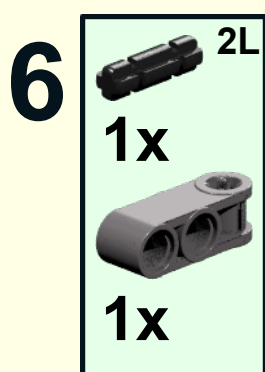
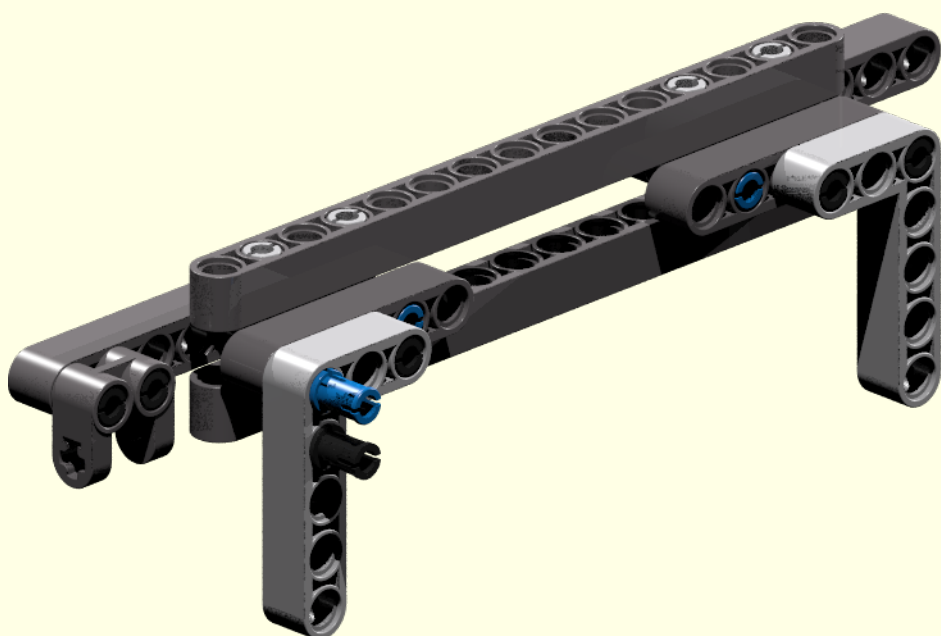
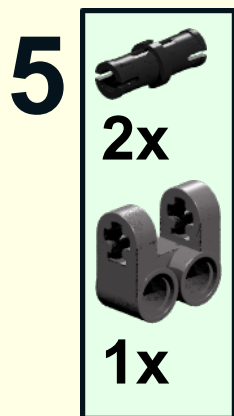


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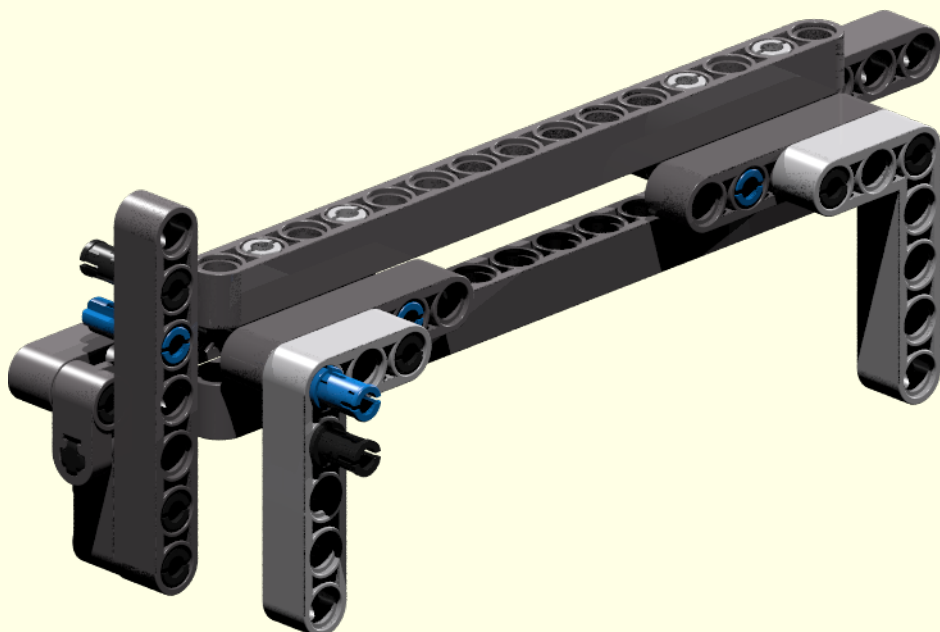


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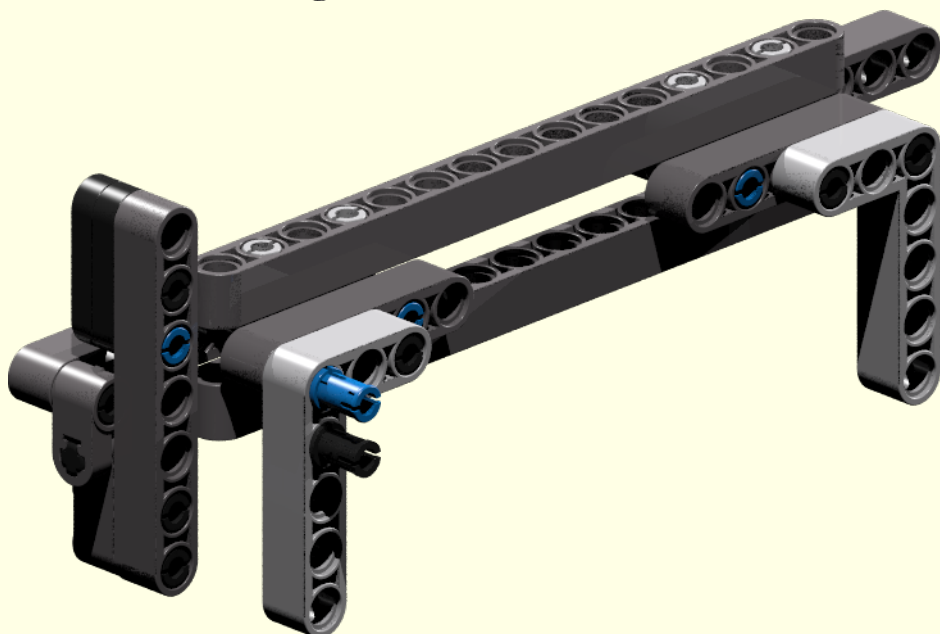




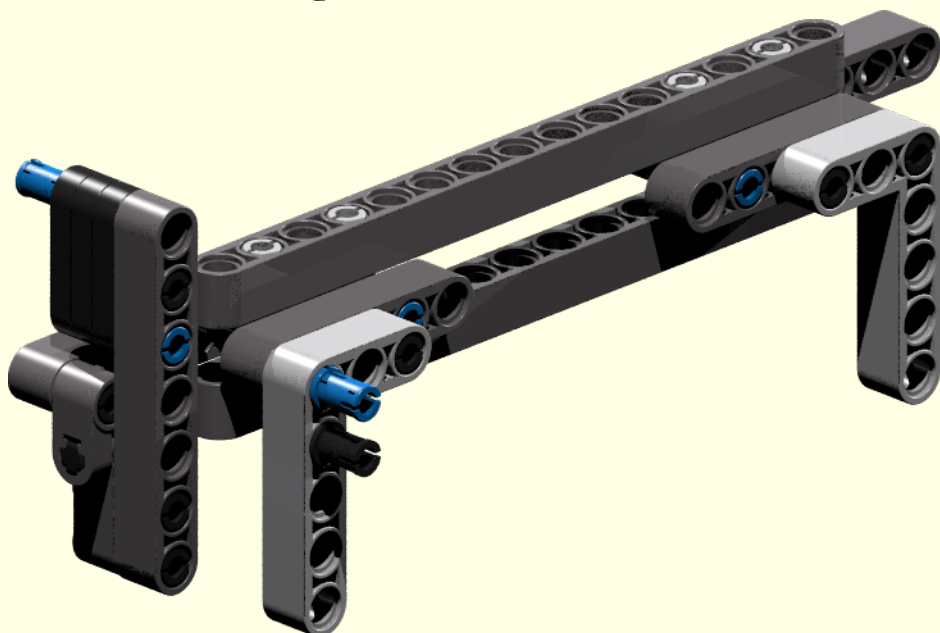
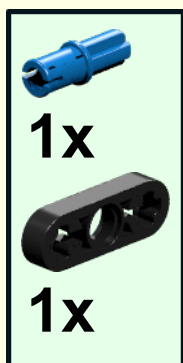
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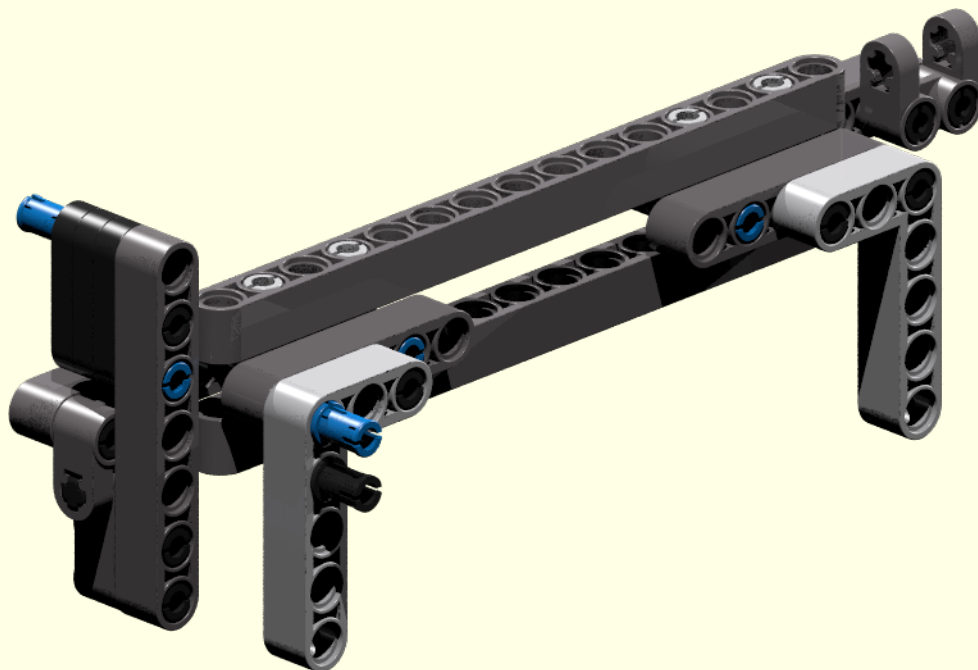
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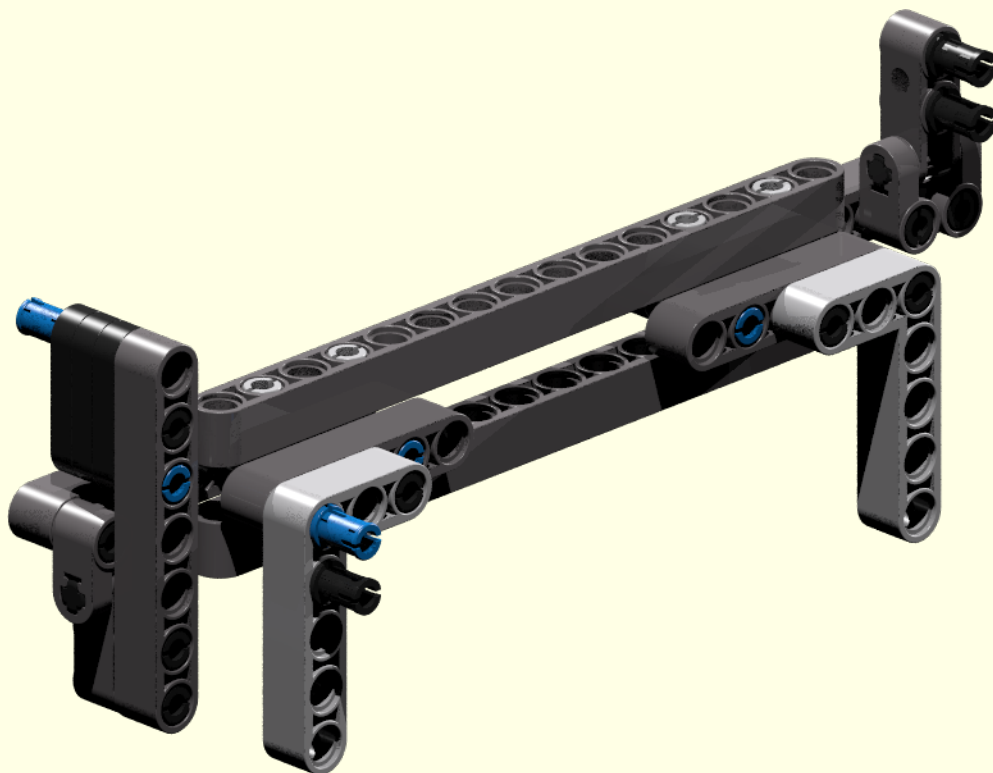
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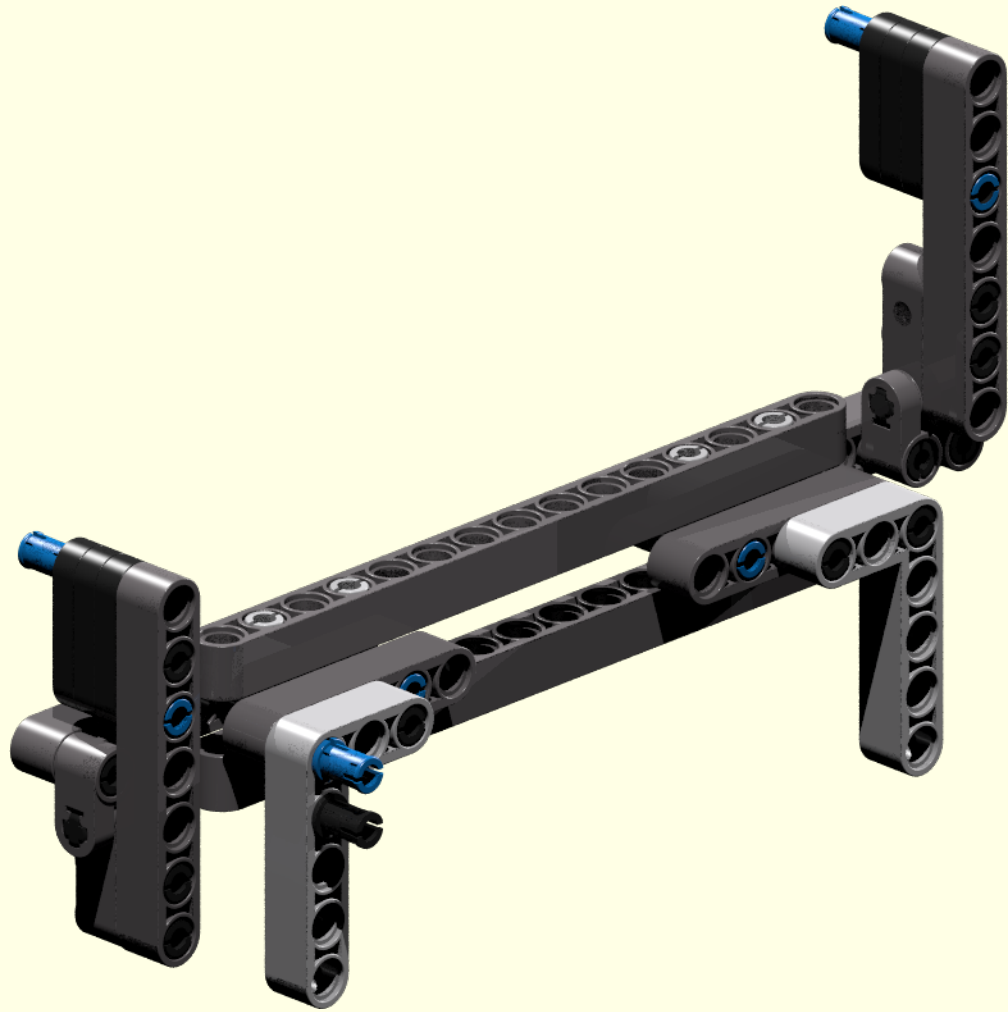
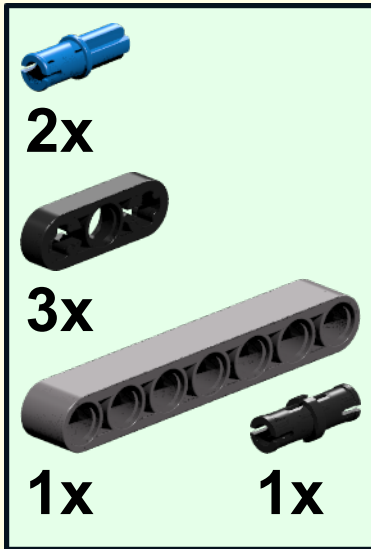
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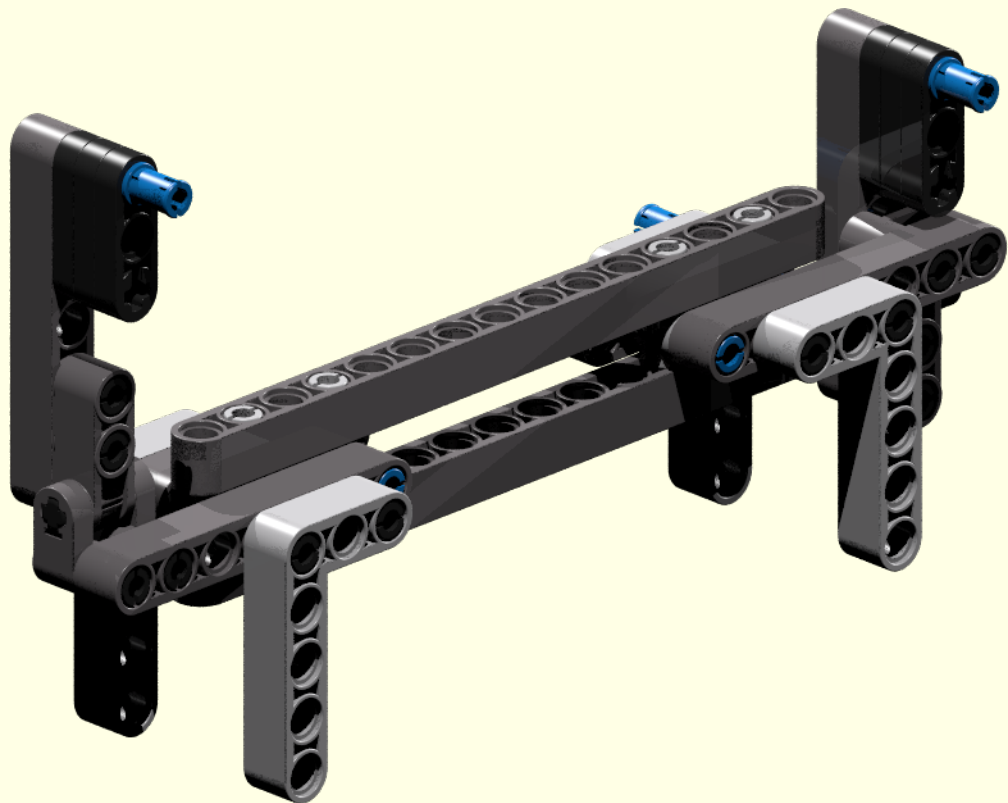
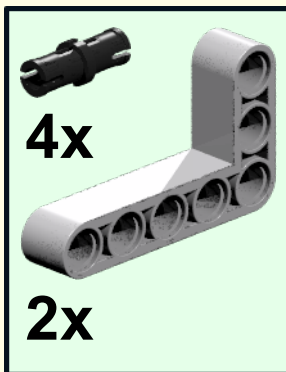
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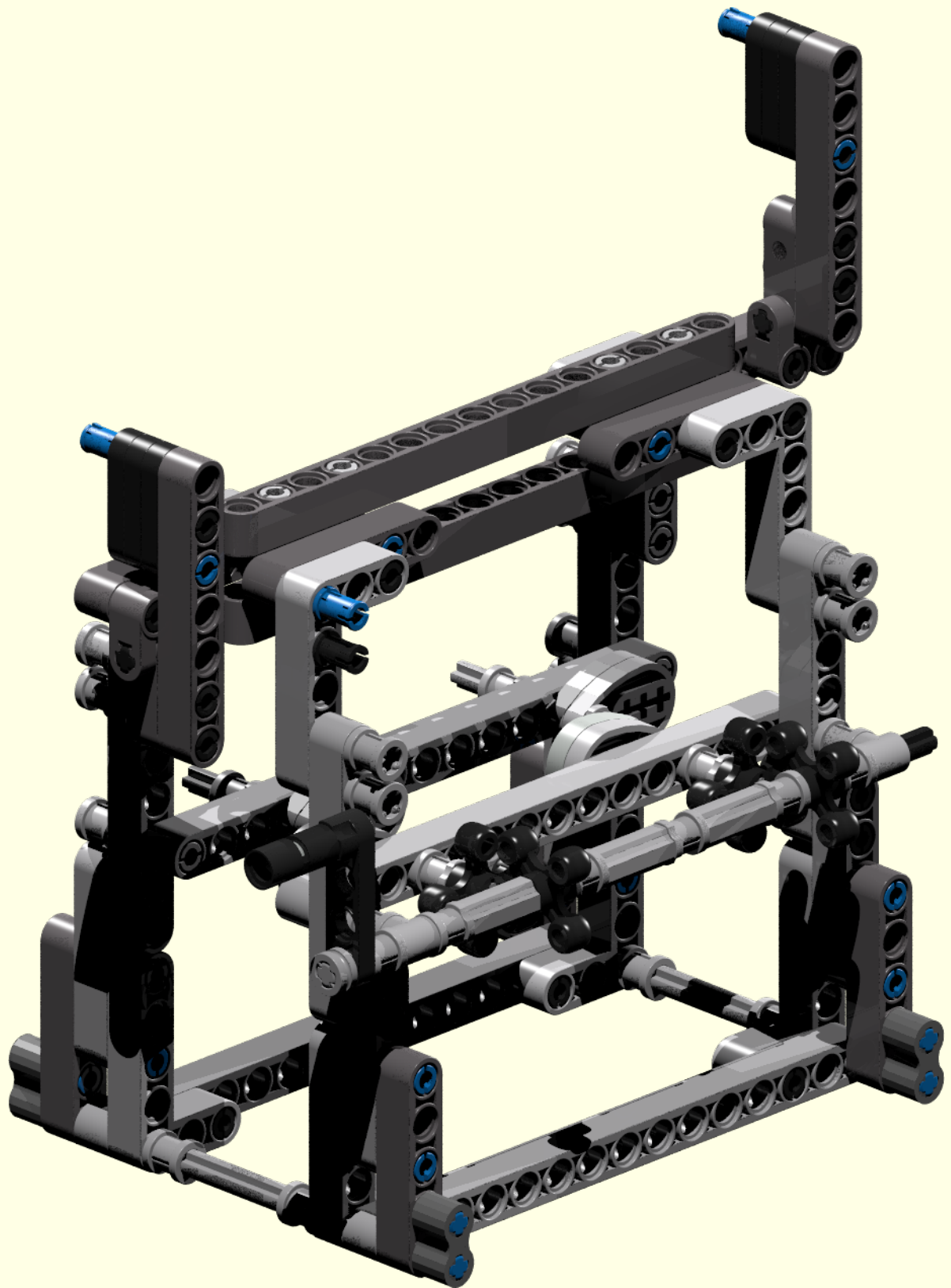


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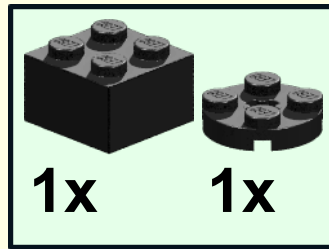


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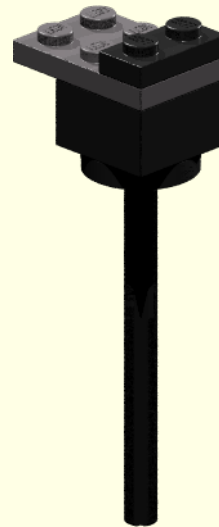
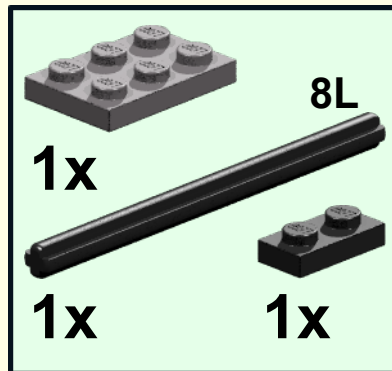




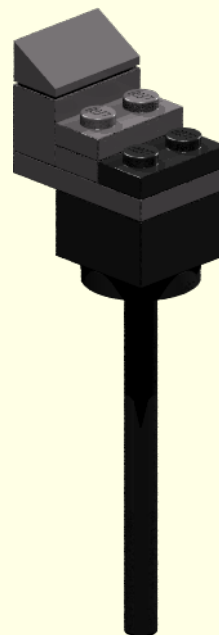
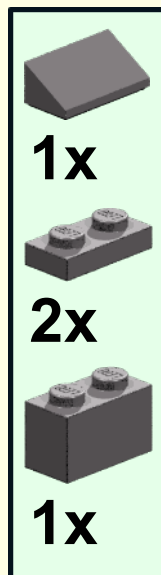
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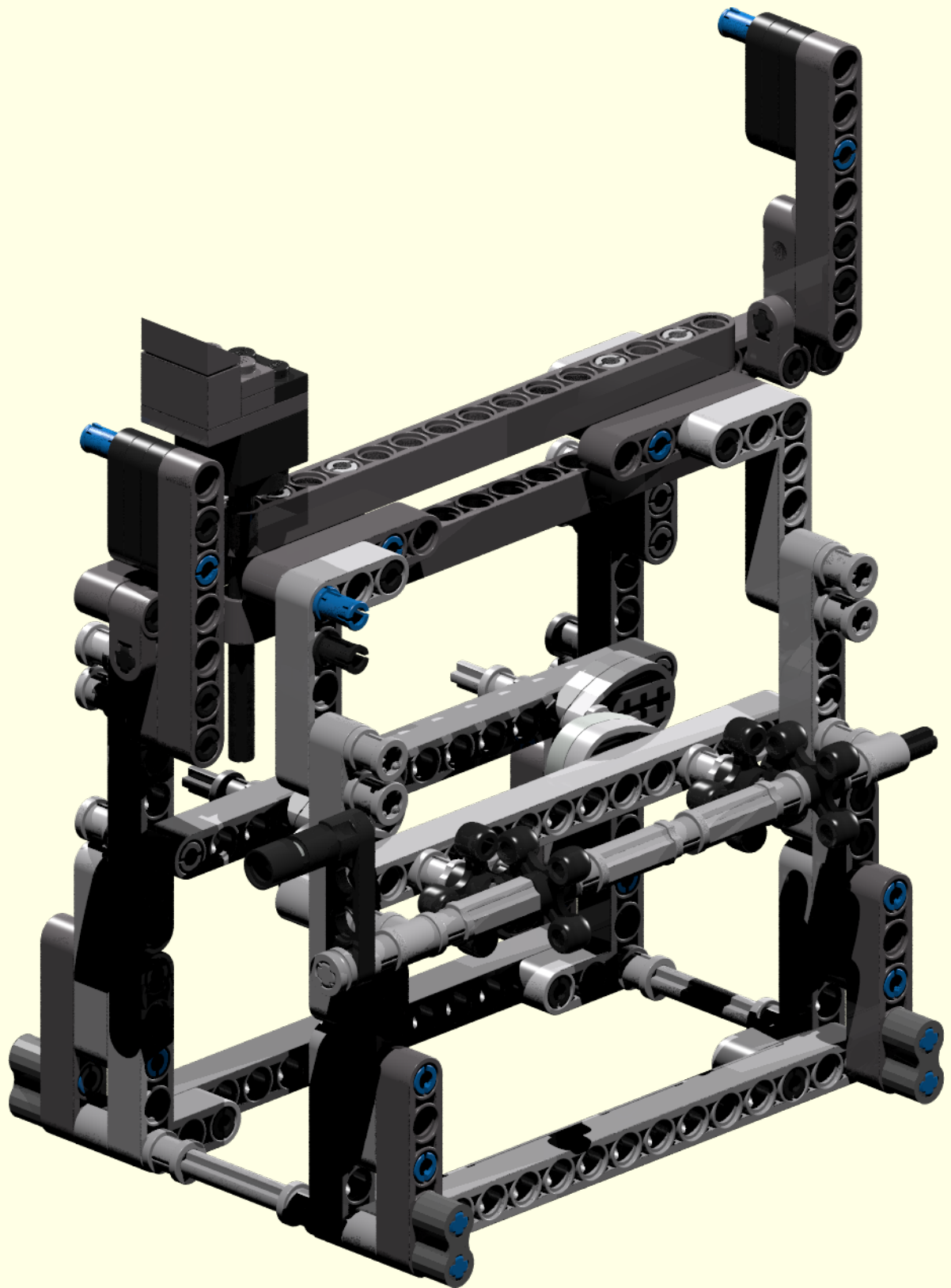


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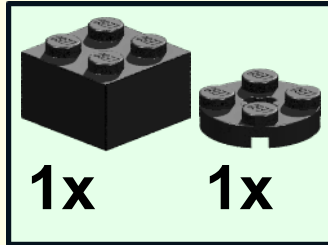


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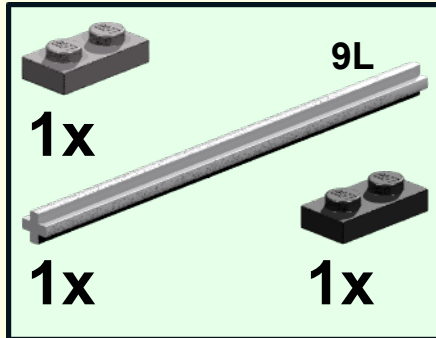




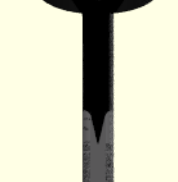
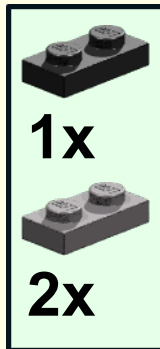
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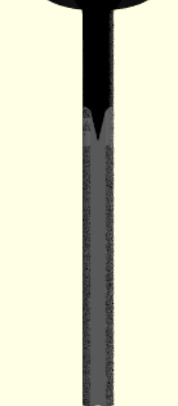
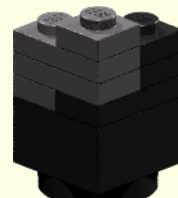
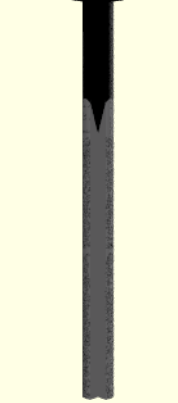
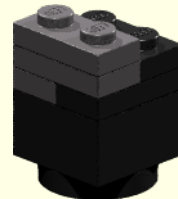
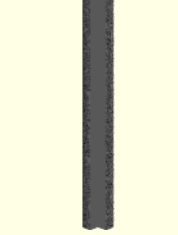
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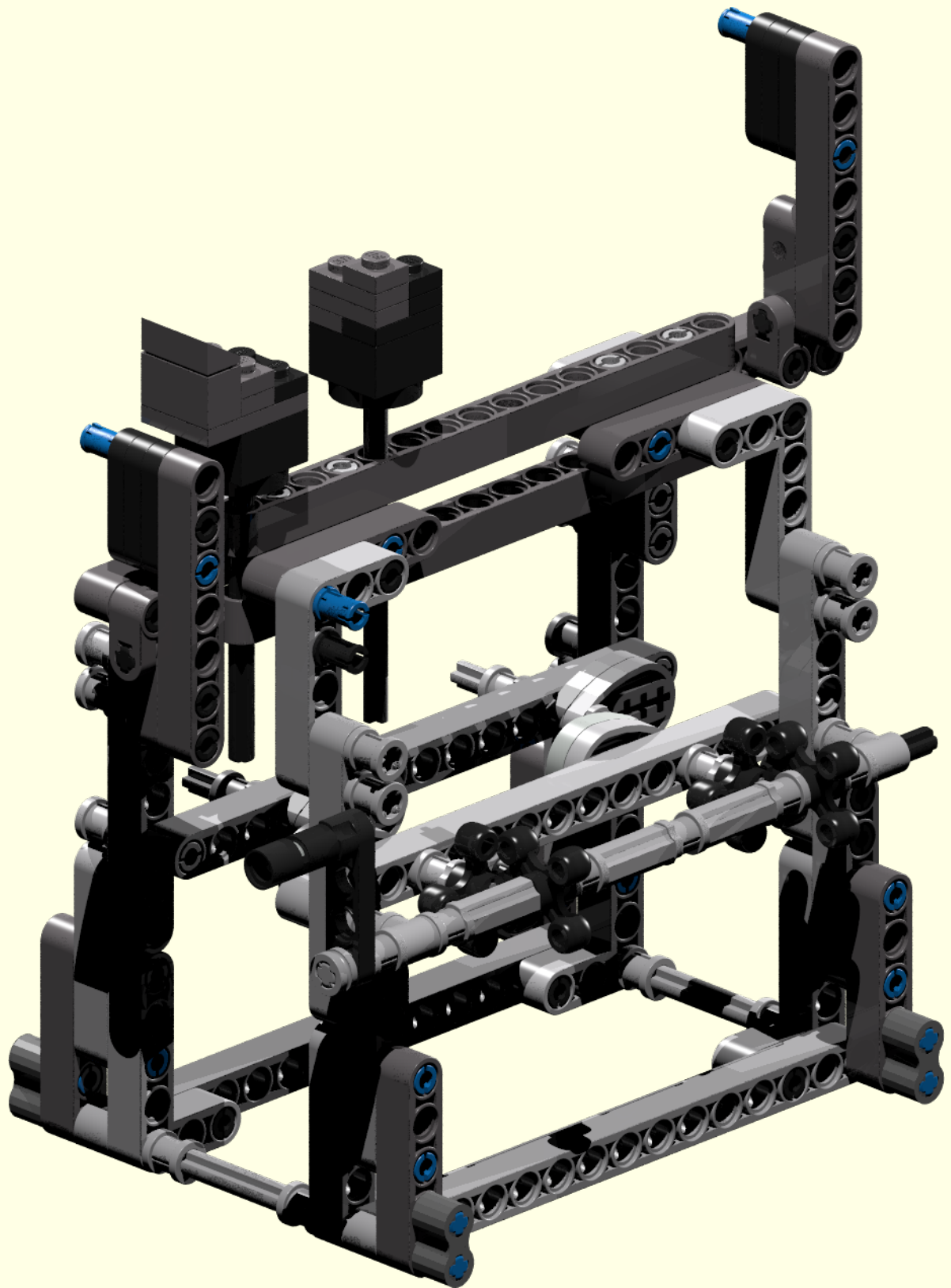


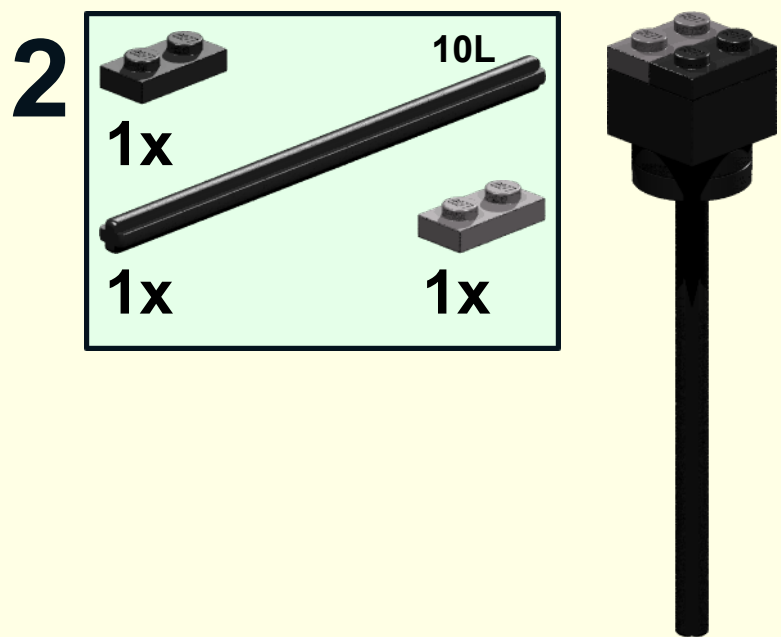
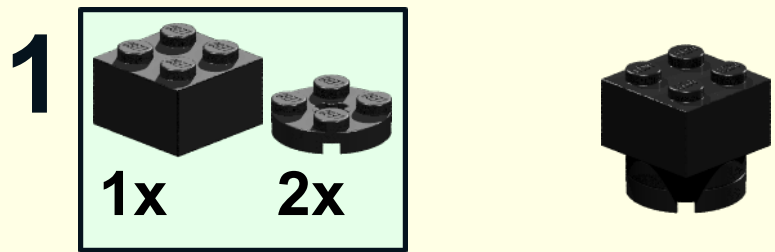
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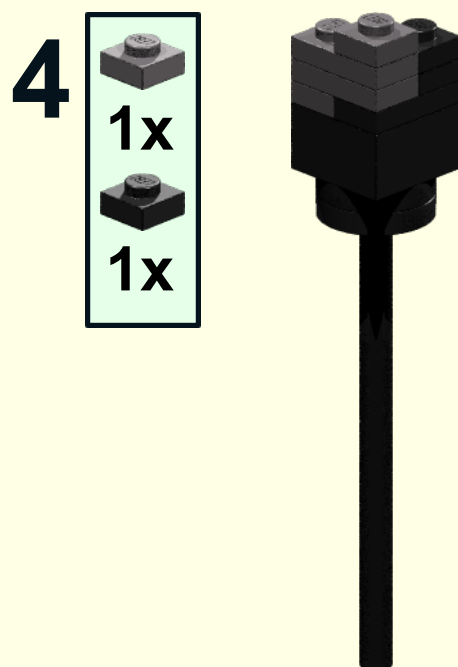
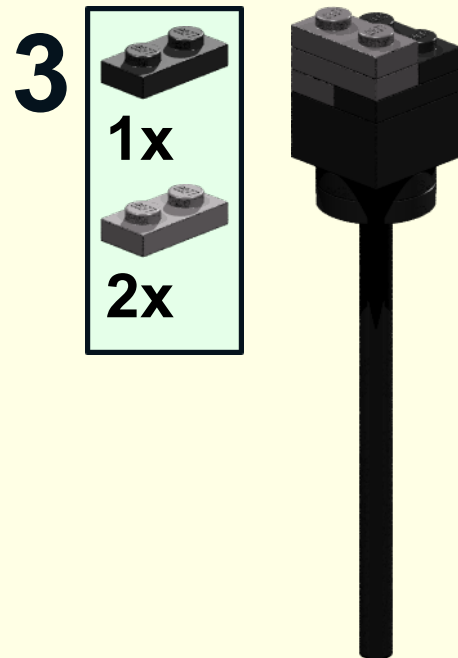


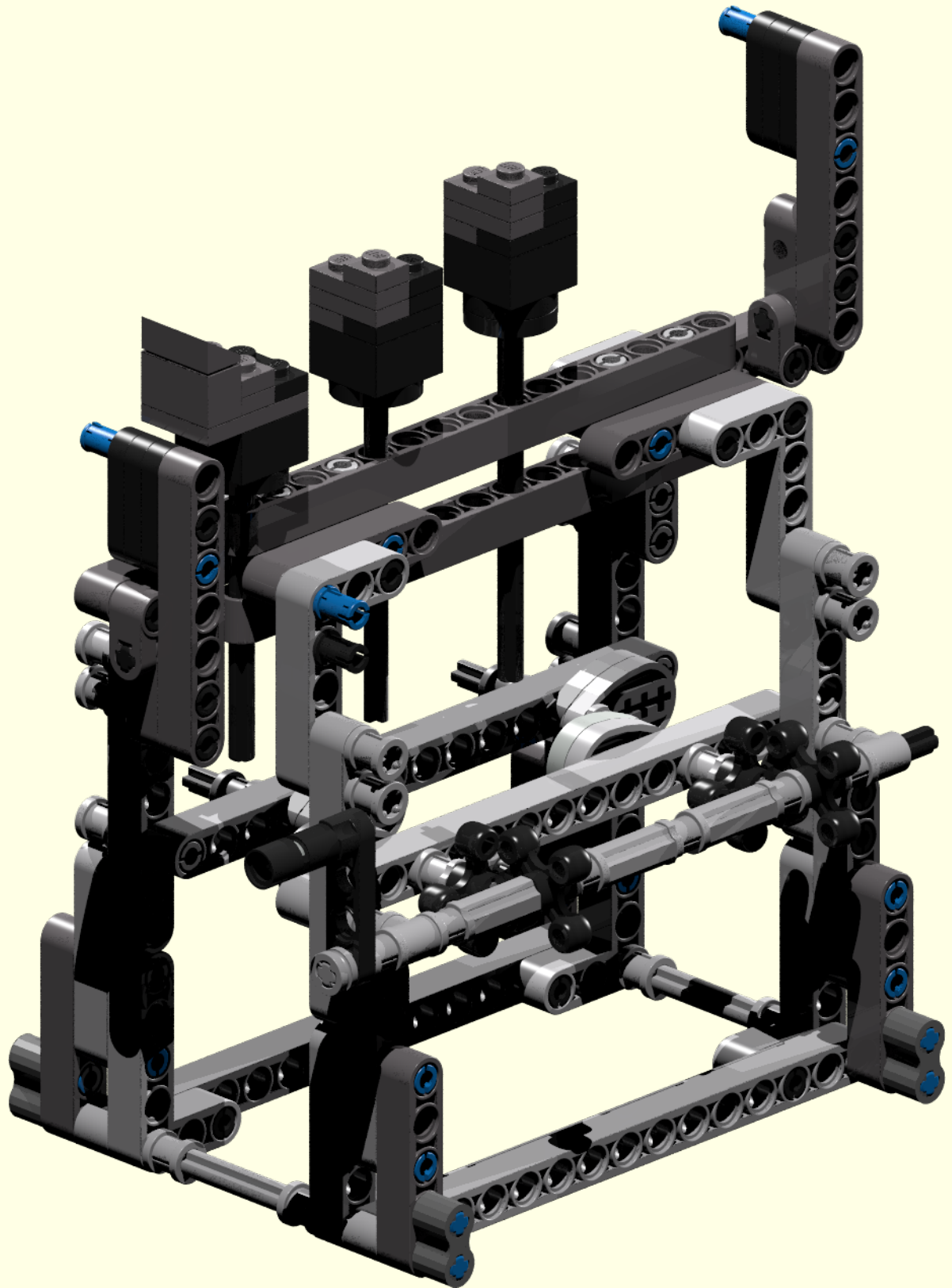
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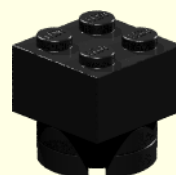
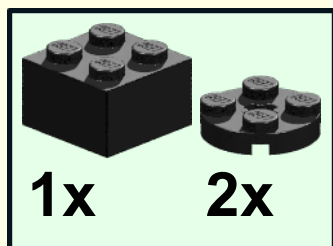




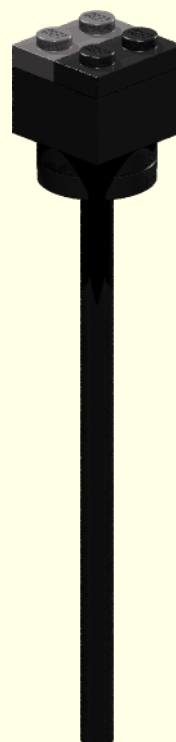
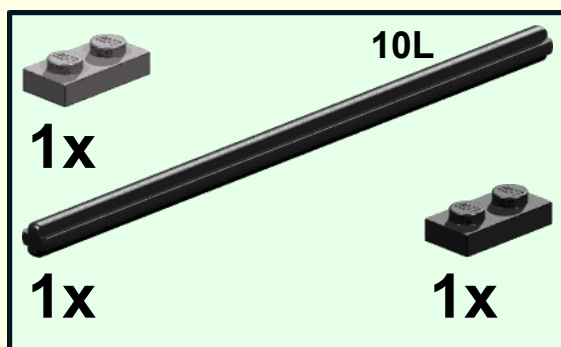




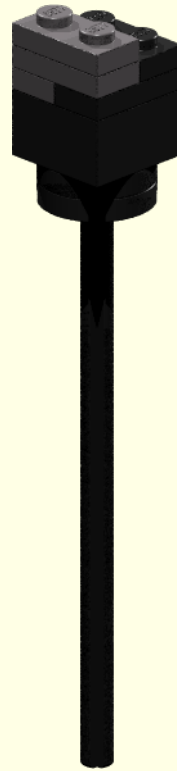
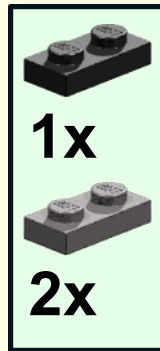
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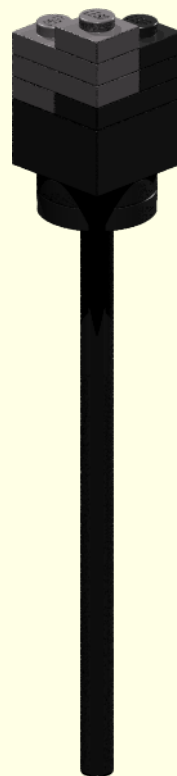
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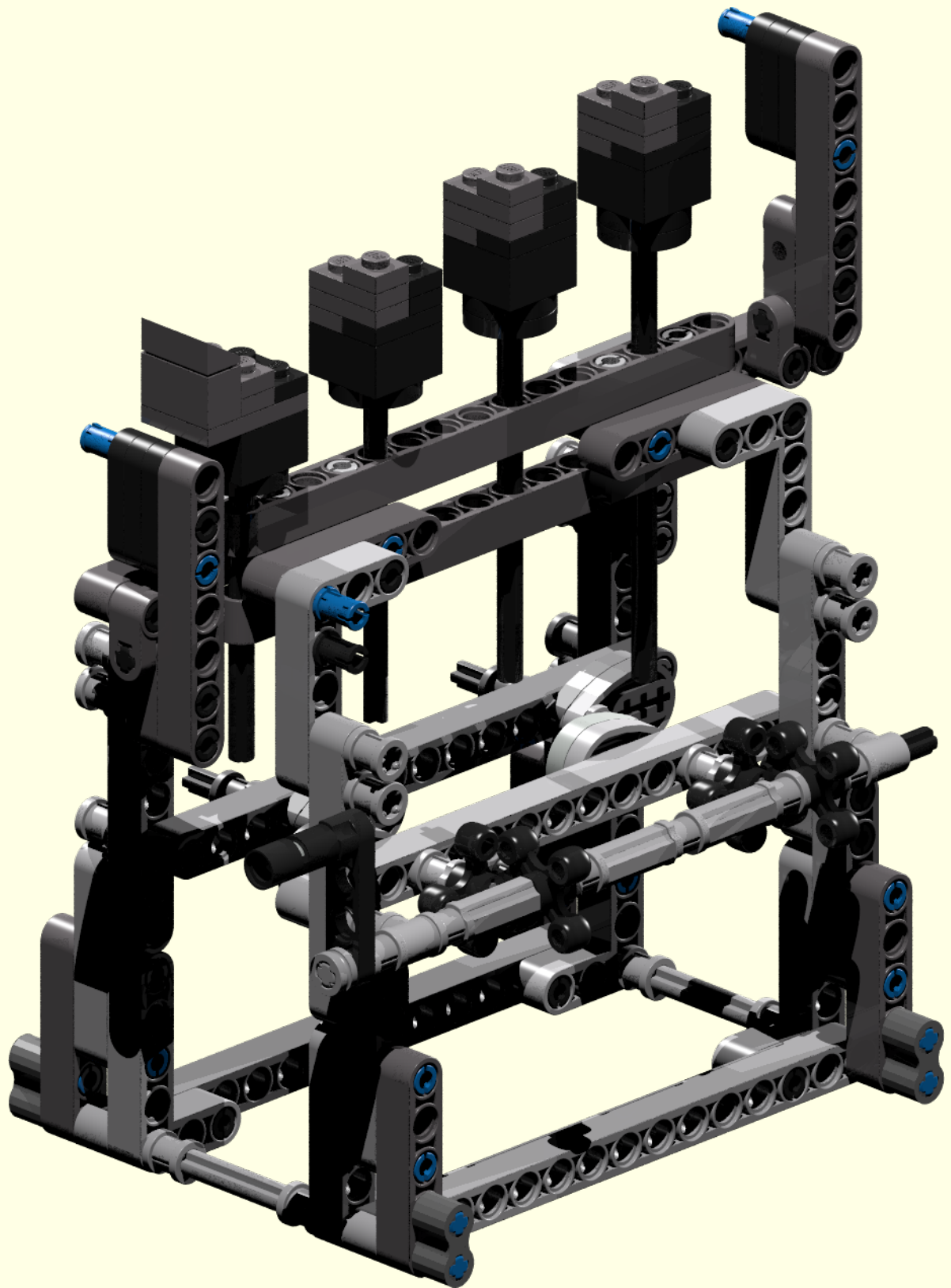


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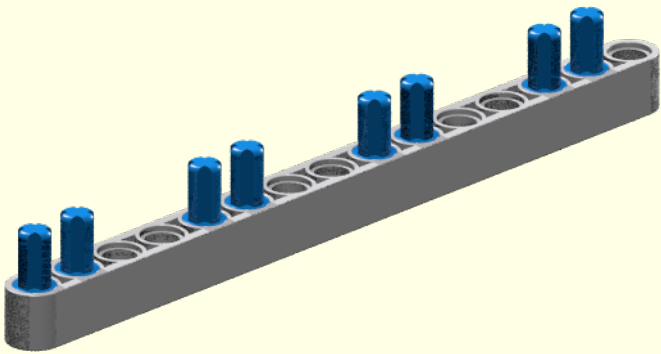
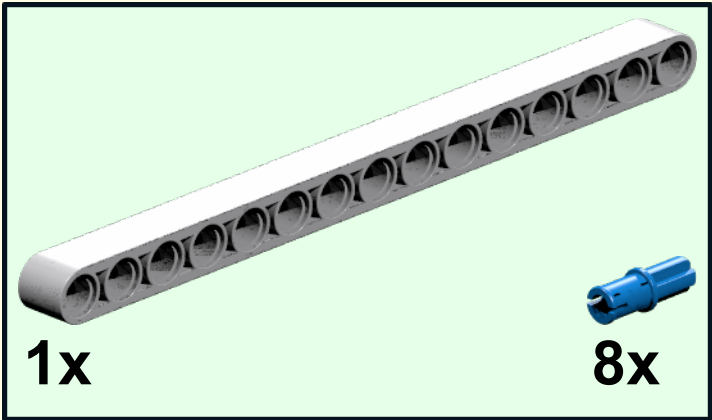


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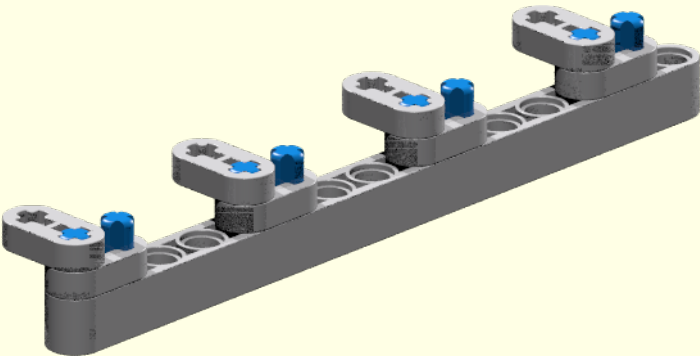


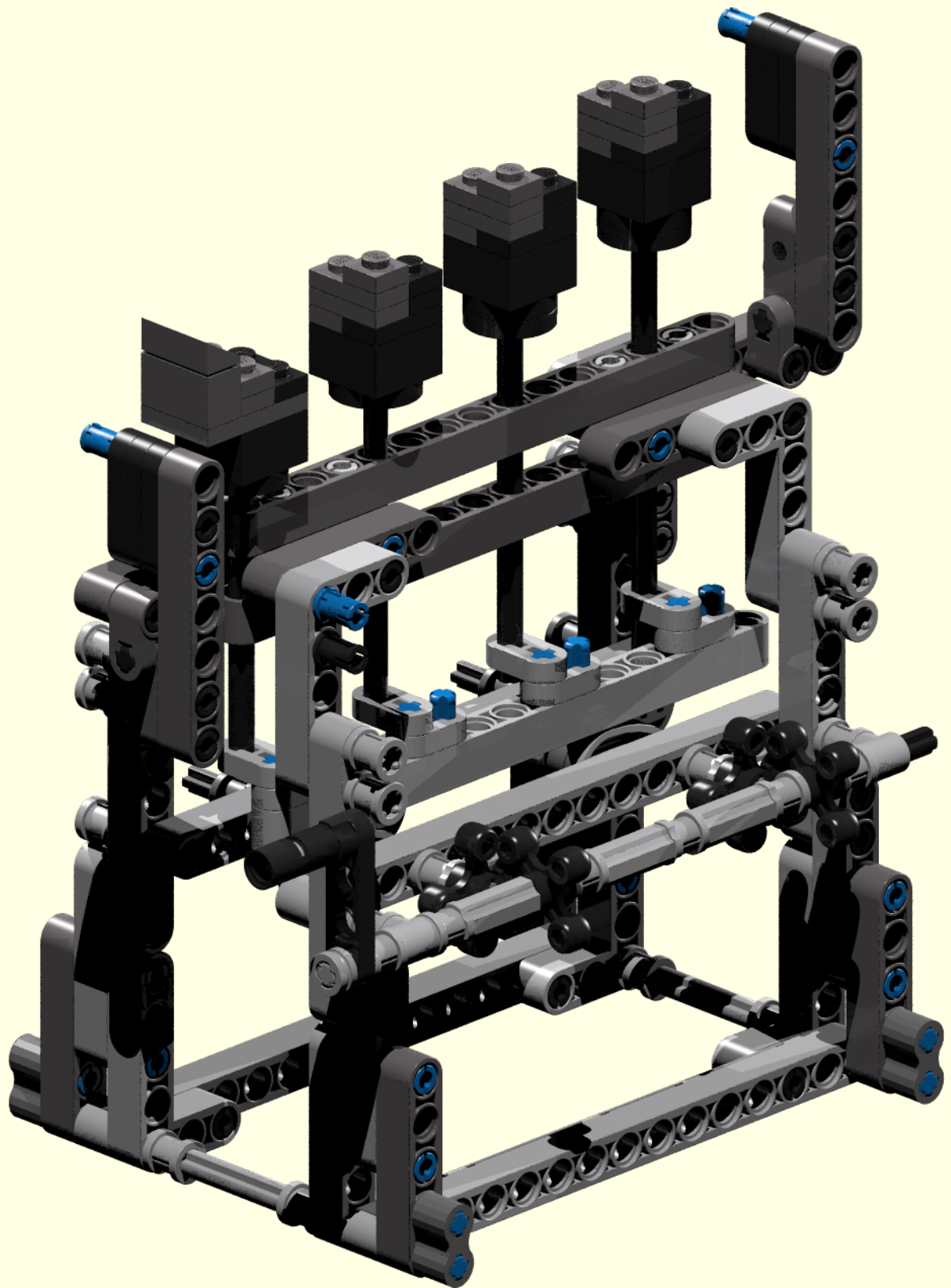


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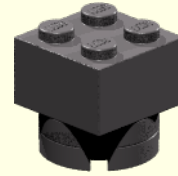
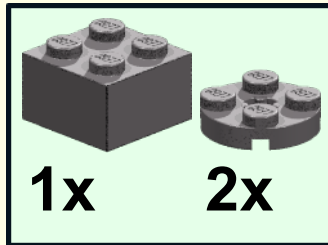


2

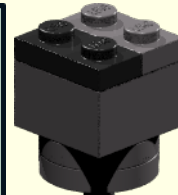
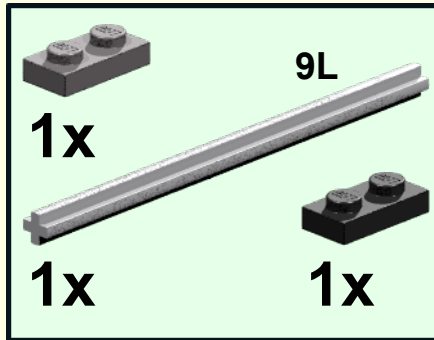




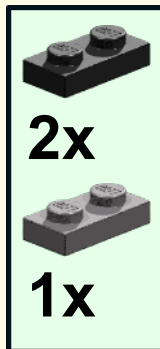
1



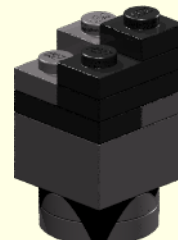
2



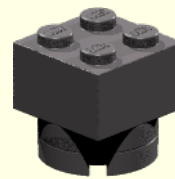
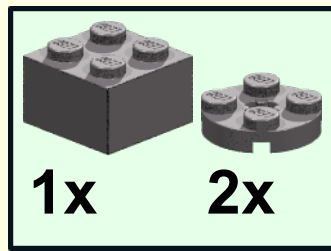
3



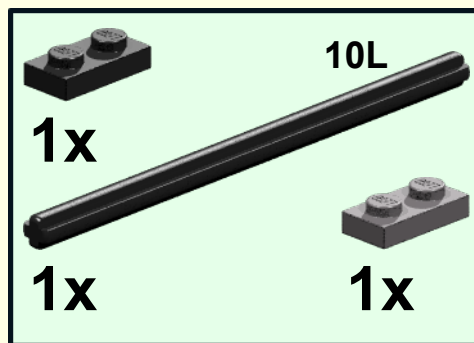
4

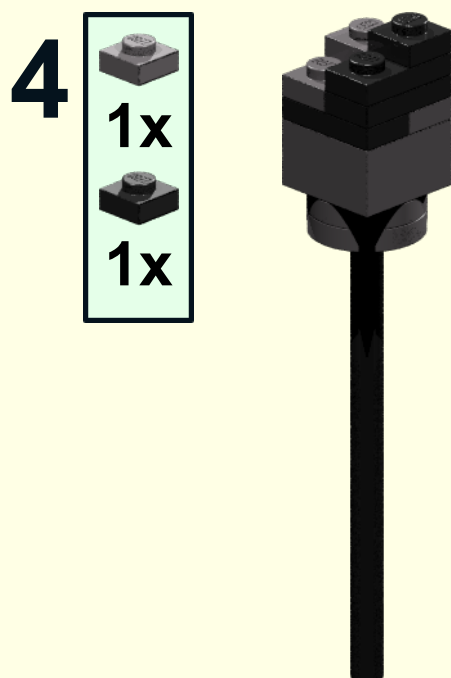
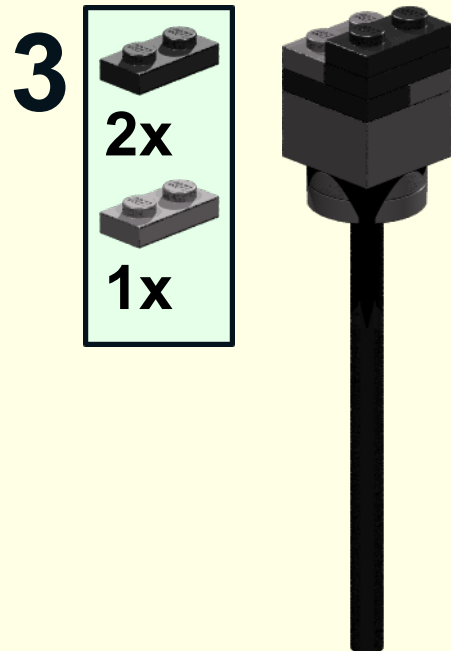


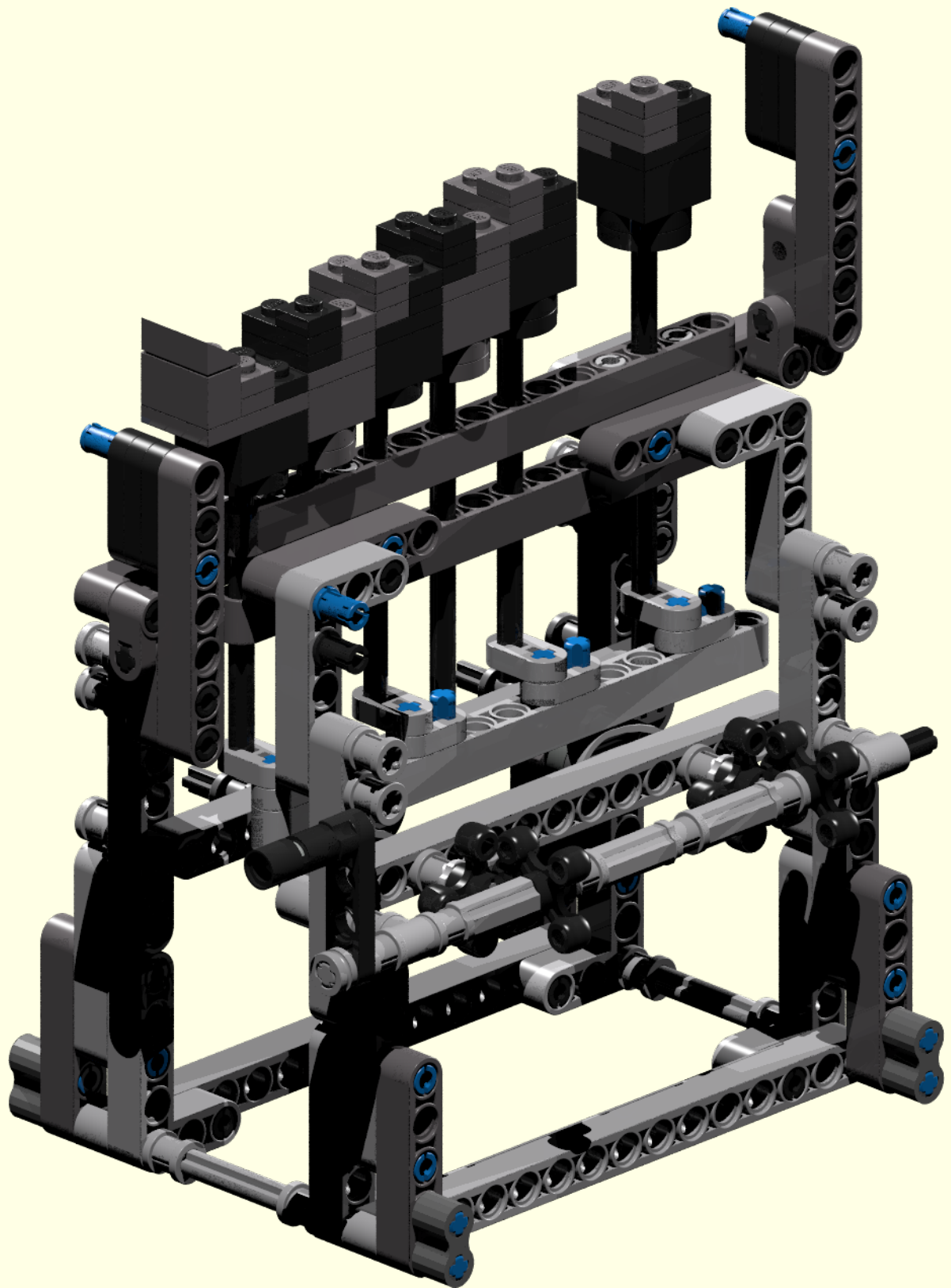
1



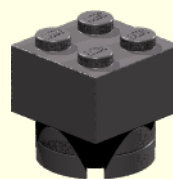
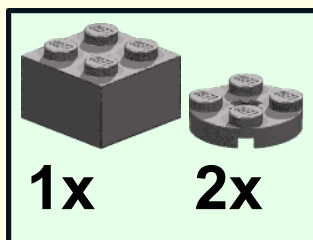
2



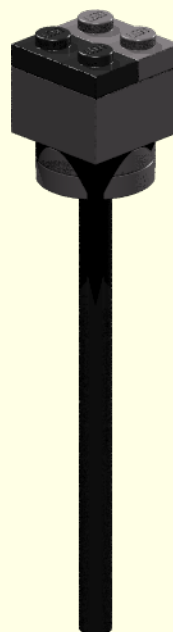
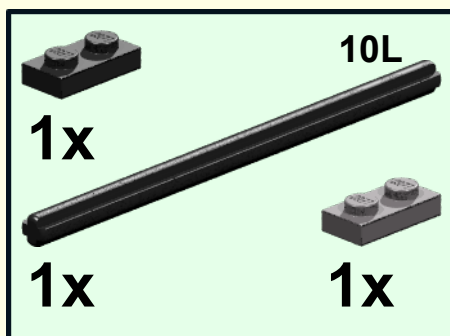




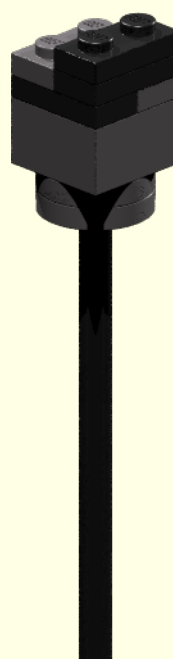
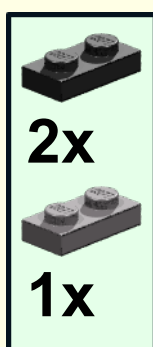
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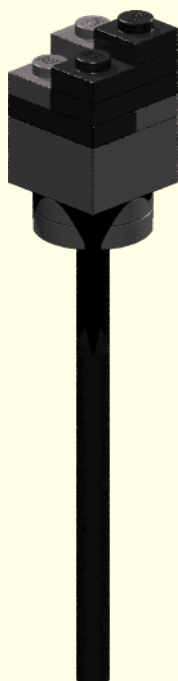
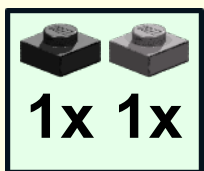
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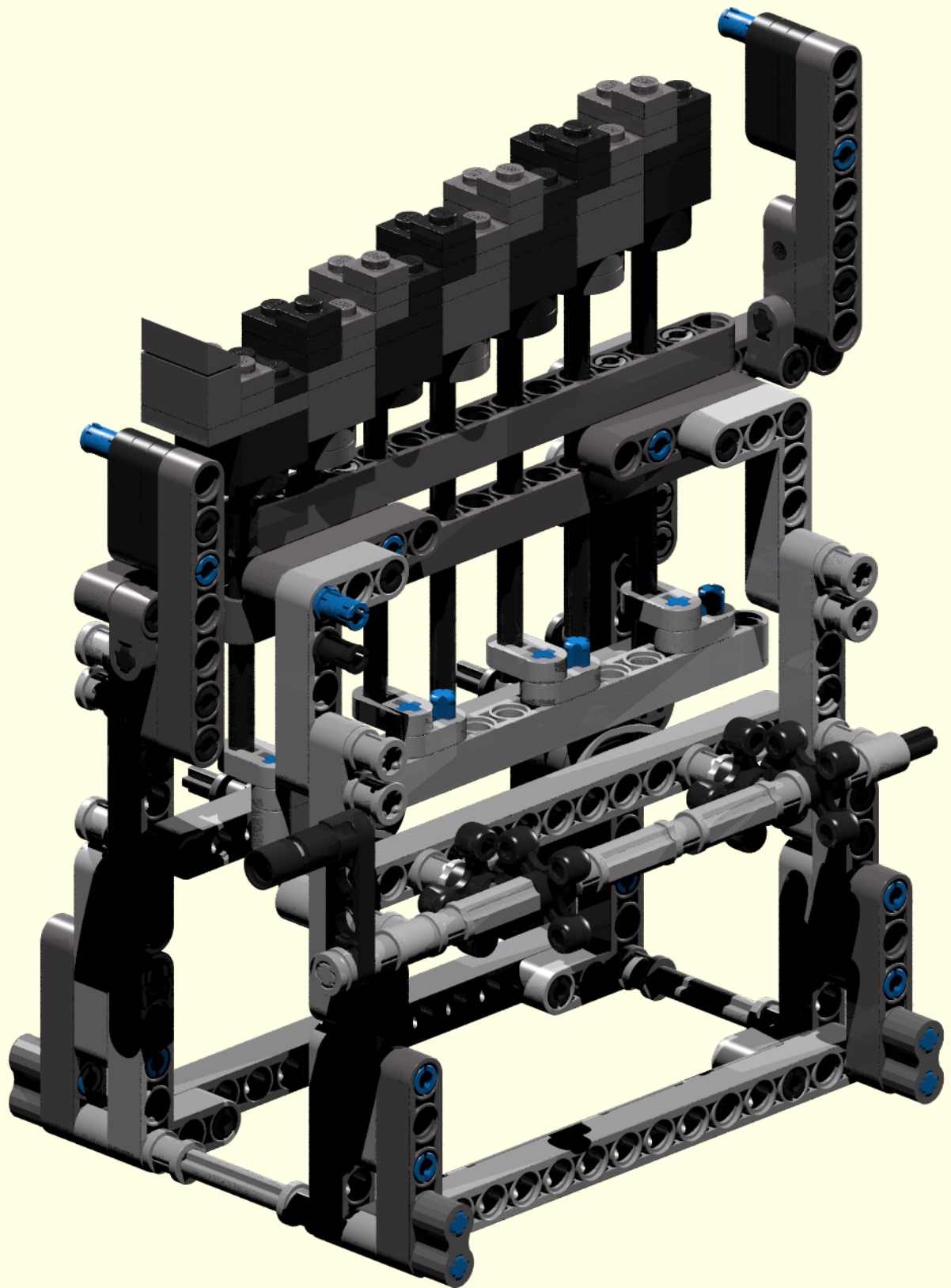


3

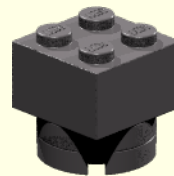
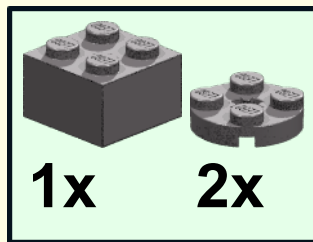


4

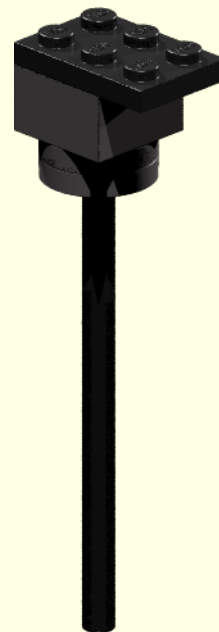
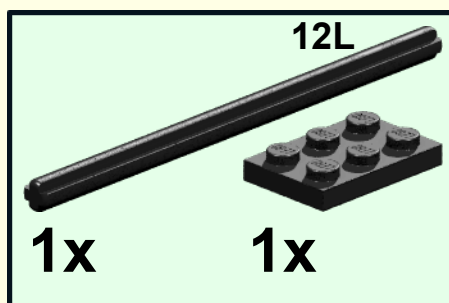




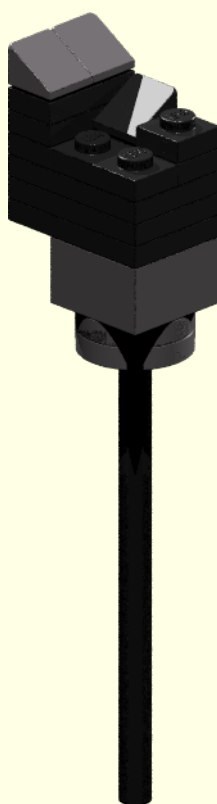
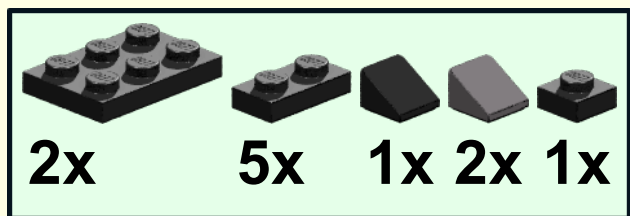
1

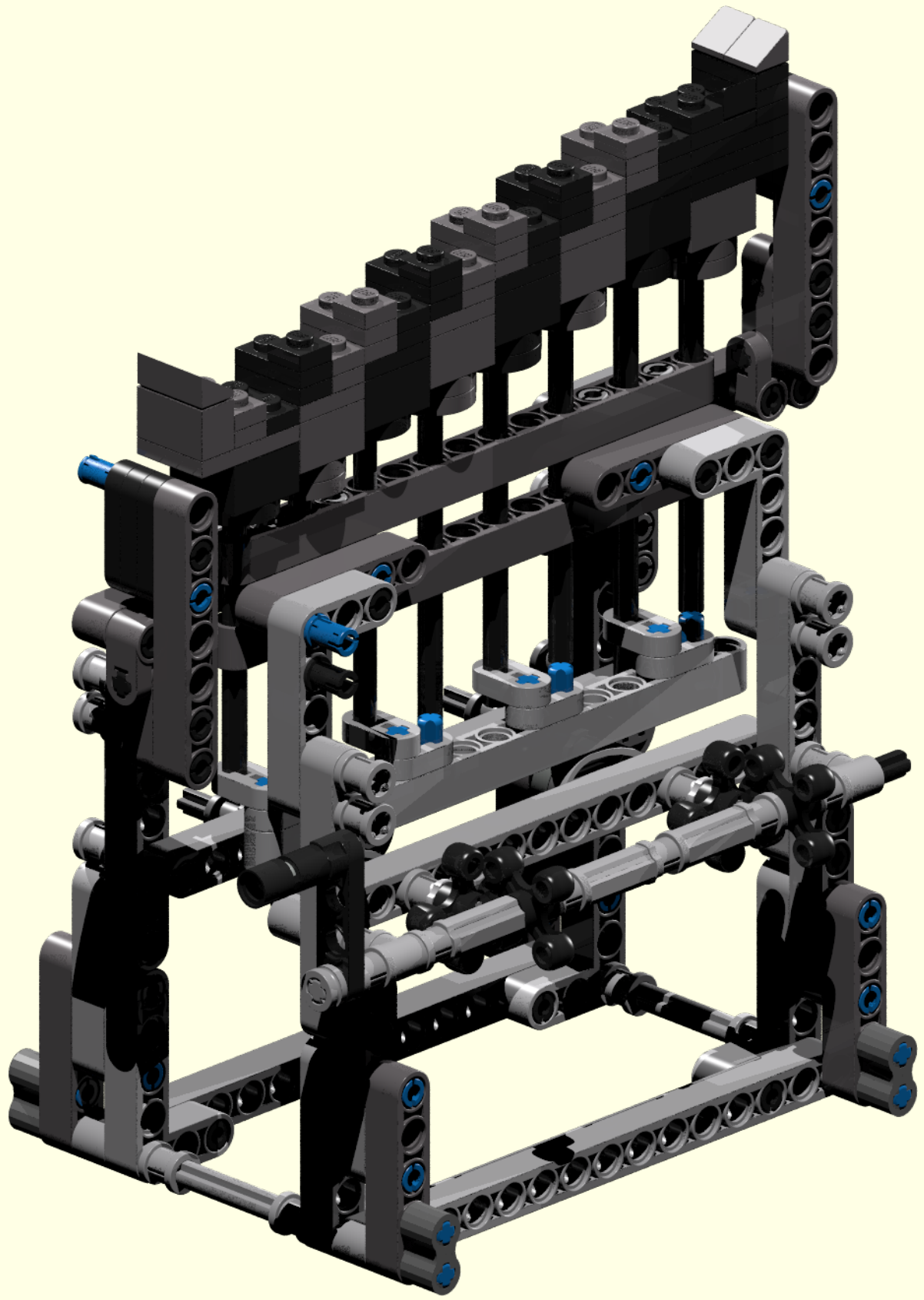


2

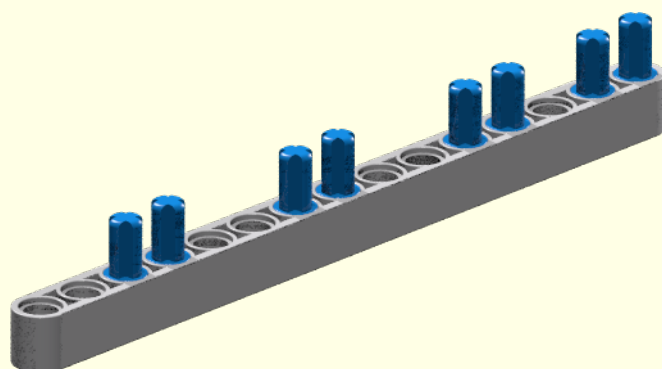
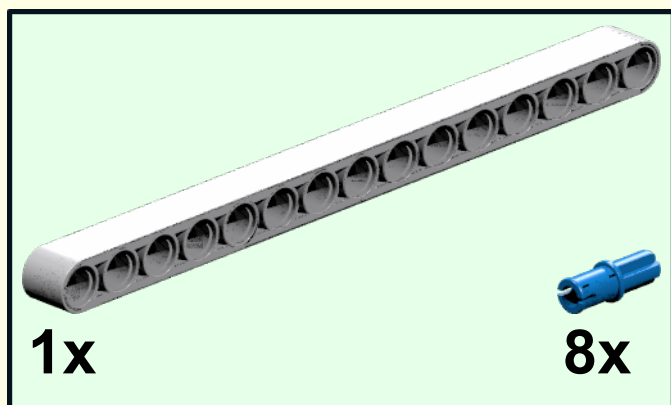


3

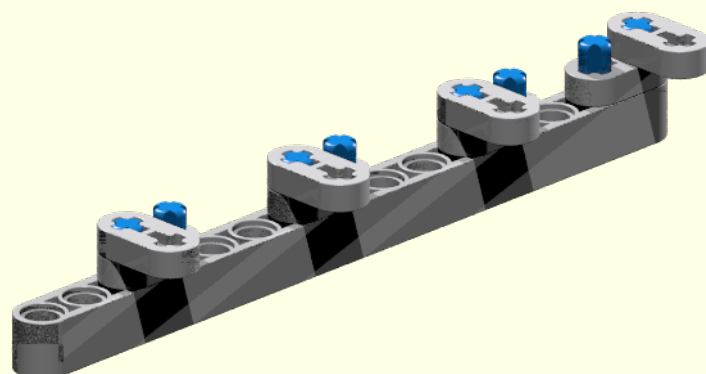
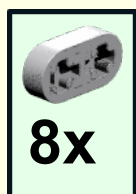


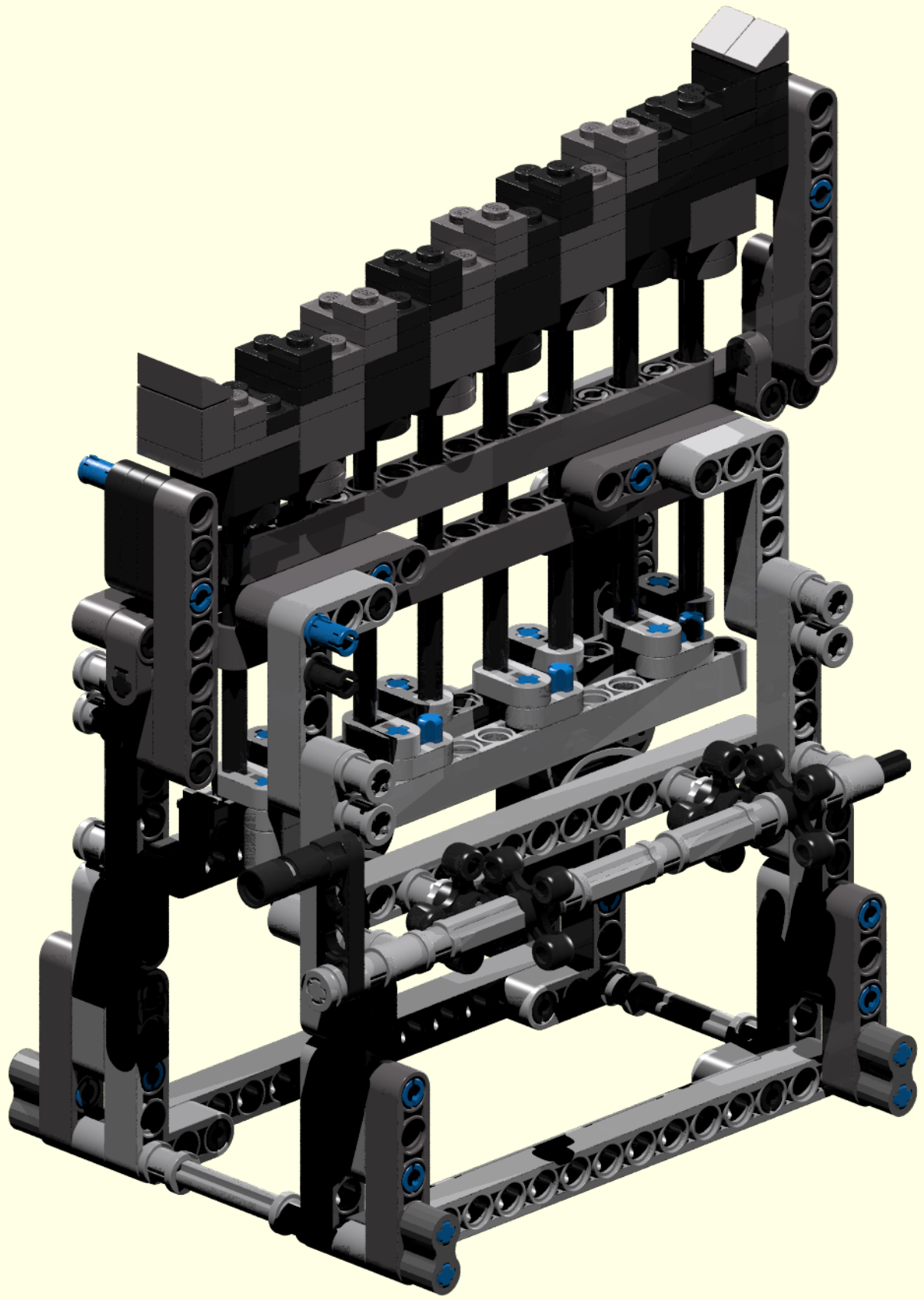


1



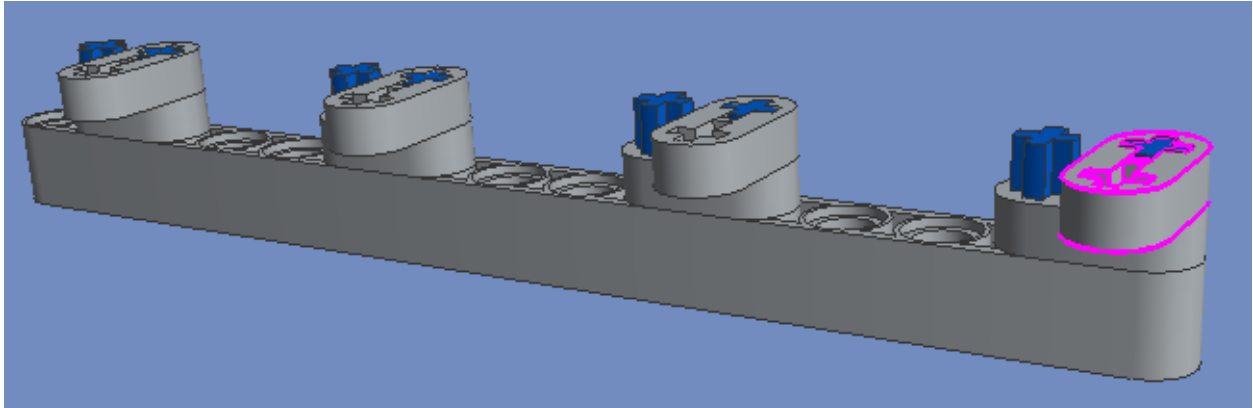
2



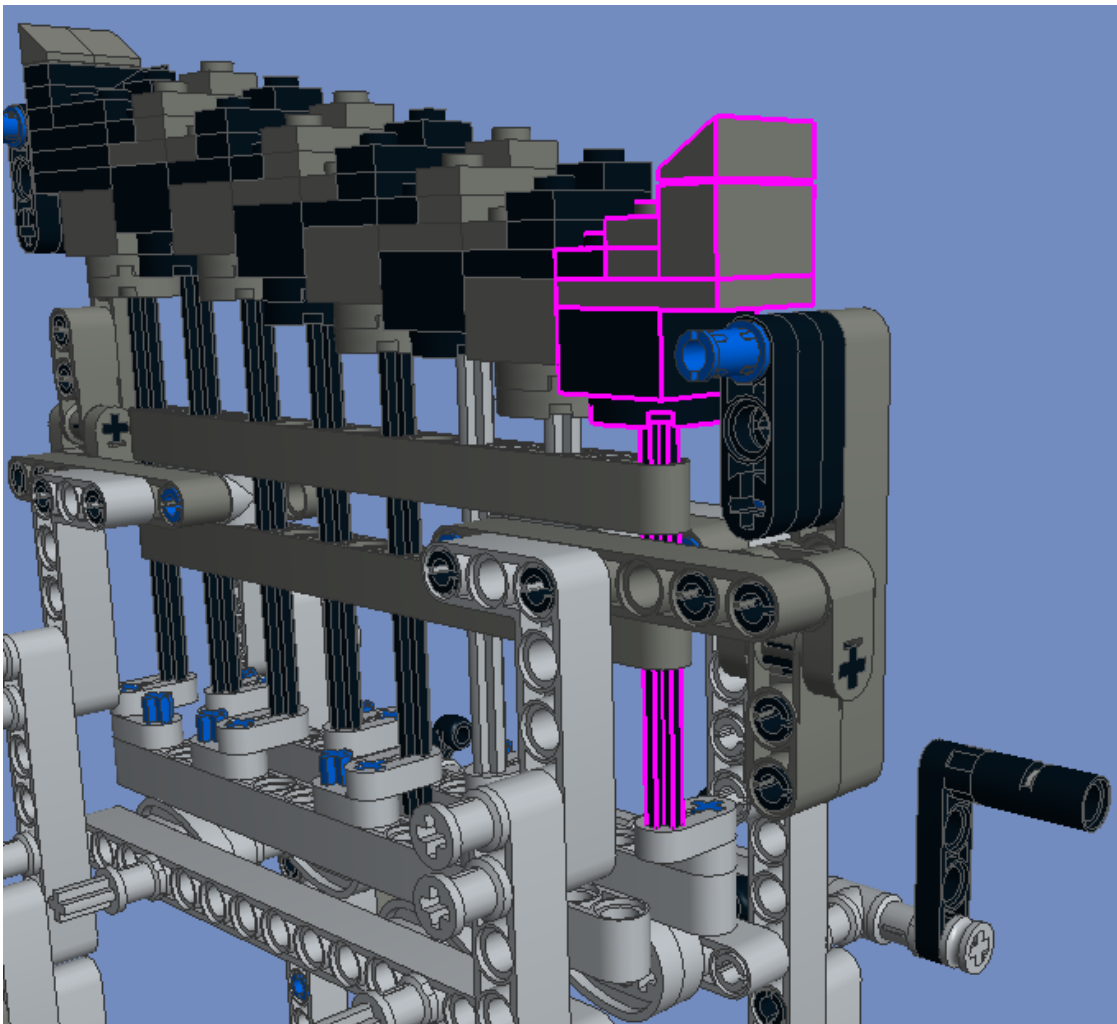


Calibrating the steps

Each step is lifted by an axle that is fitted through a thin 1x2 liftarm like the one highlighted below:



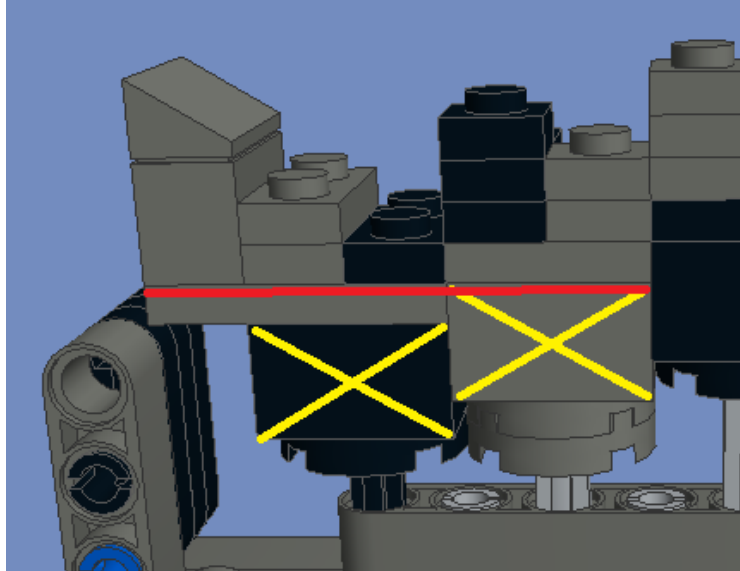
In the image below, the first step is shown with its axle flush with the bottom of the thin 1x2 liftarm. The axle does not protrude below the liftarm:



Calibrating the steps

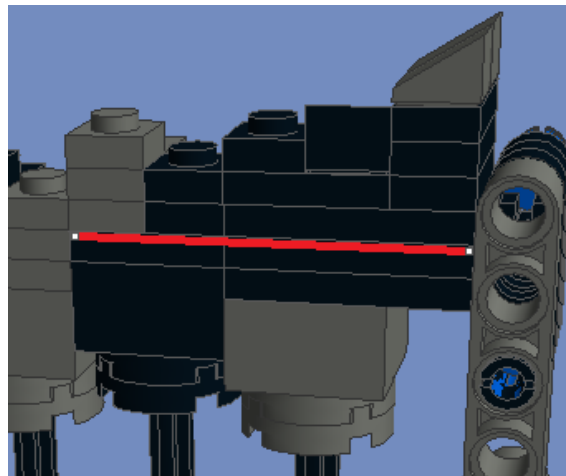
There is a repeating pattern of step heights for steps #1 through #7. Start with the cams horizontal so that the lifter assembly for the even numbered steps is even with the lifter assembly for the odd numbered steps.

The image below shows steps one and two. Each step has a 2x2 brick, identified with a yellow “X” and on top of that brick is a plate. Start with the black 2x2 brick of step #1 and the dark bluish gray plate on top of it. The top of that plate is flush (collinear) with the top of the dark bluish gray 2x2 brick of step #2, as indicated by the red line.



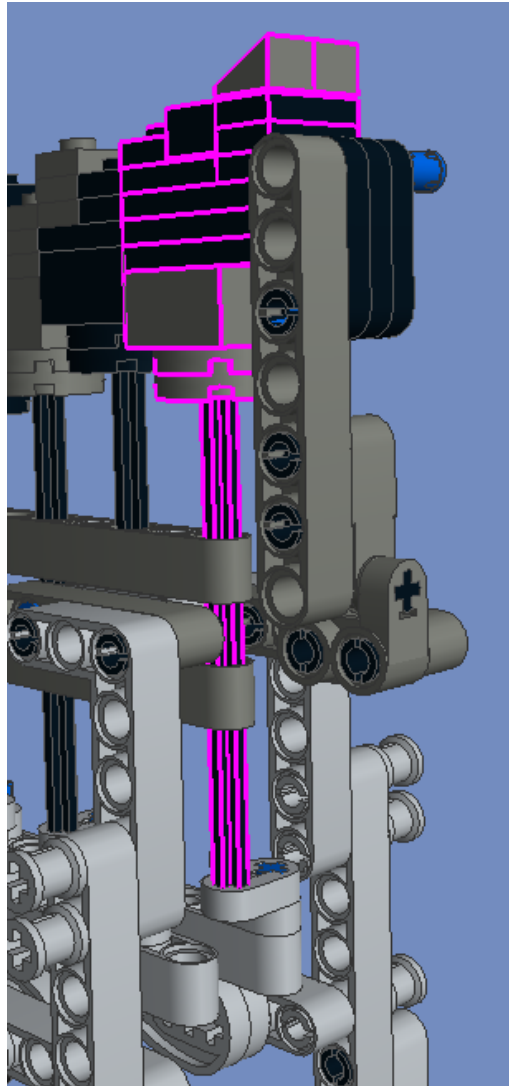
That pattern repeats for steps #2 through #7.

Step #8 is slightly different. It needs additional plates on top of the 2x2 brick because the longest axle in this build is 12 units long. The top of the plate from step #7 is flush with the top of the second plate above the 2x2 brick of step #8 as shown below:

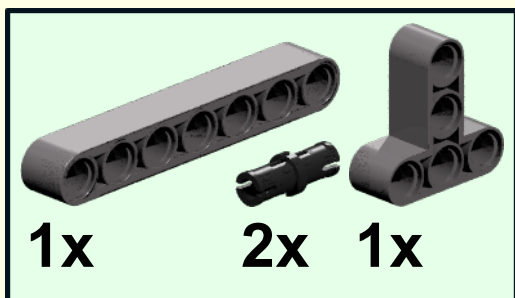


Calibrating the steps

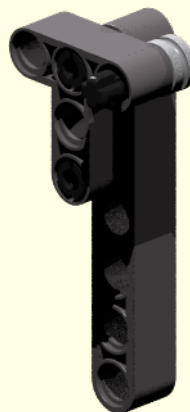
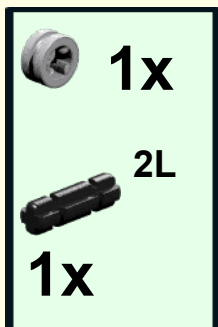
At the end of this calibration process, the axle of step #8 should be flush with the bottom of the thin 1x2 liftarm, just like step #1, as shown in the image below:



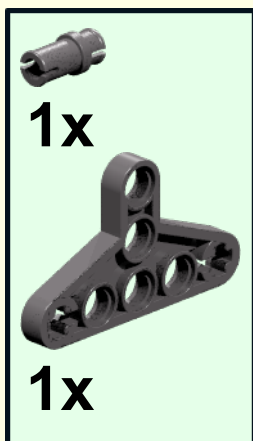
1

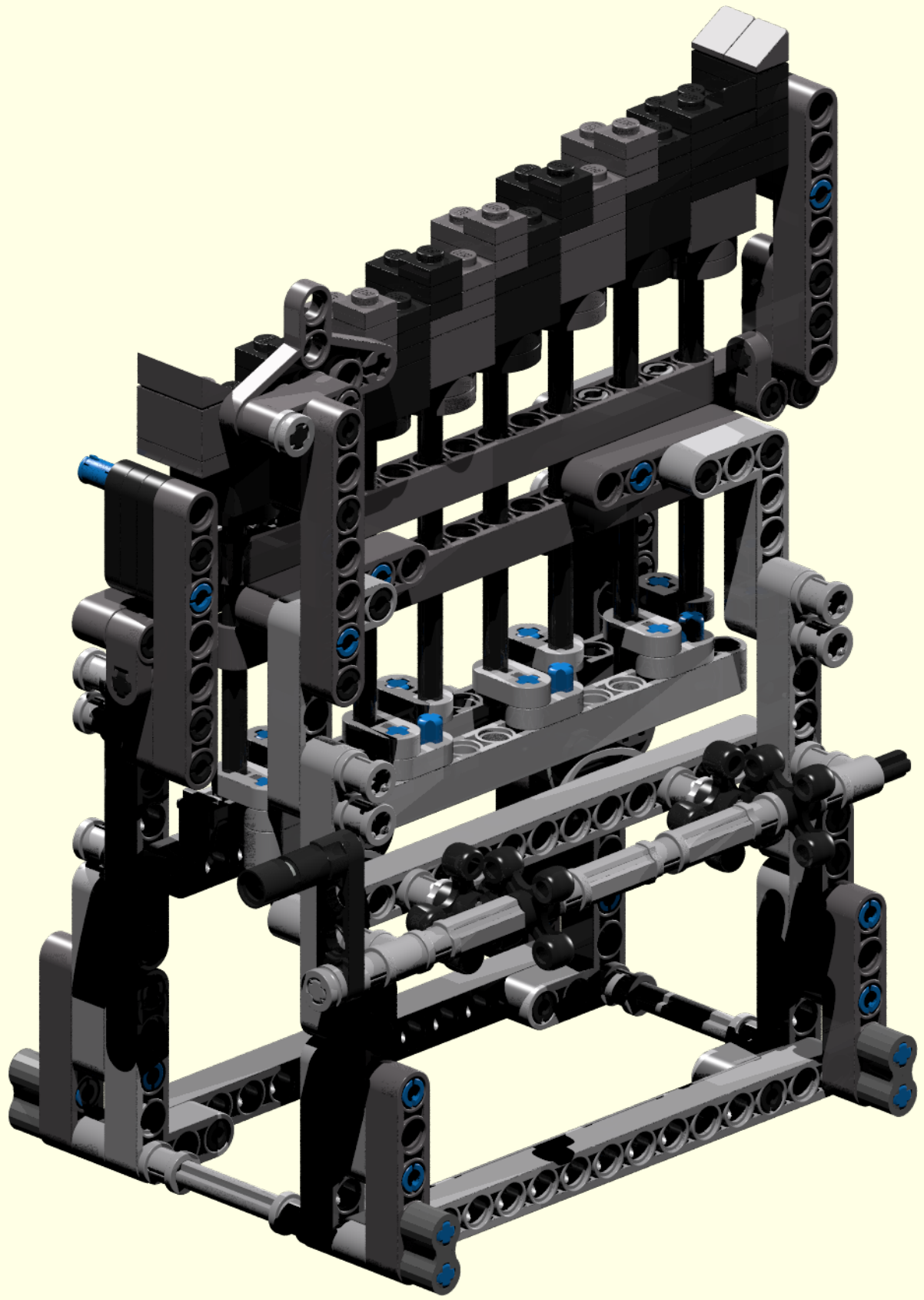


2

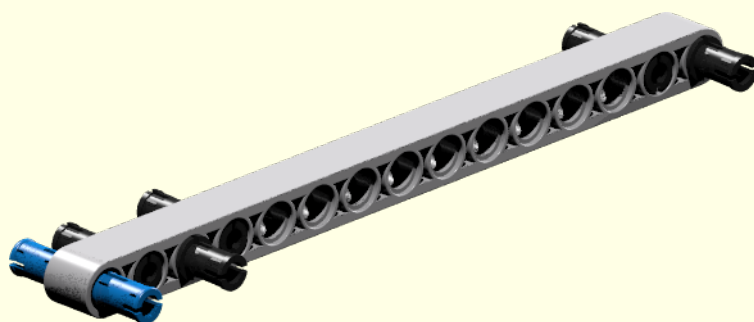
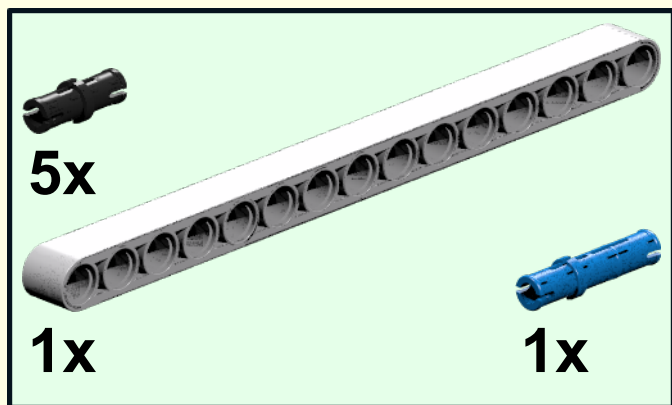


3

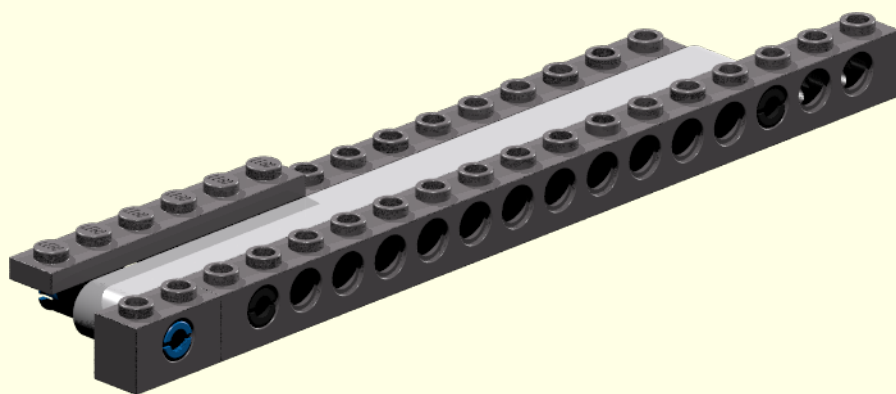
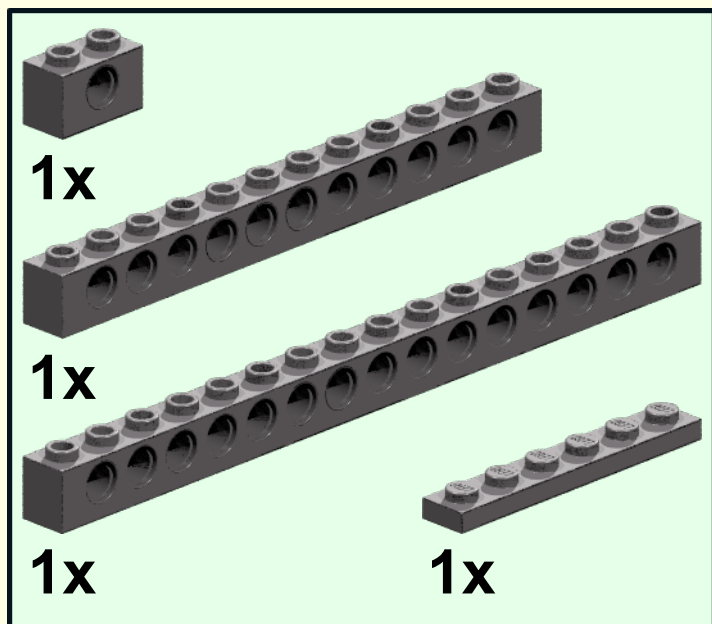




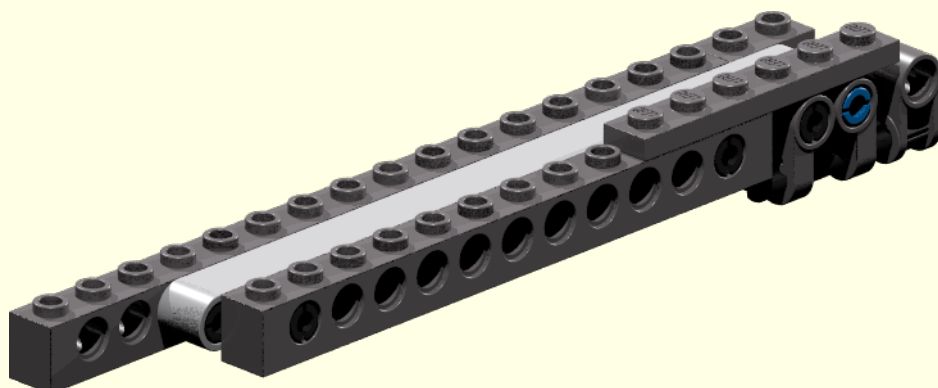
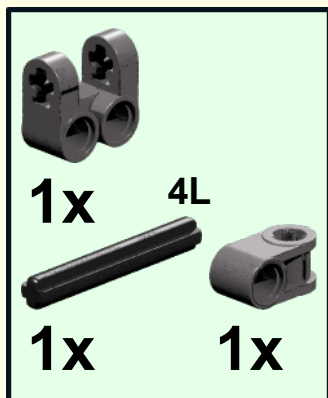
1



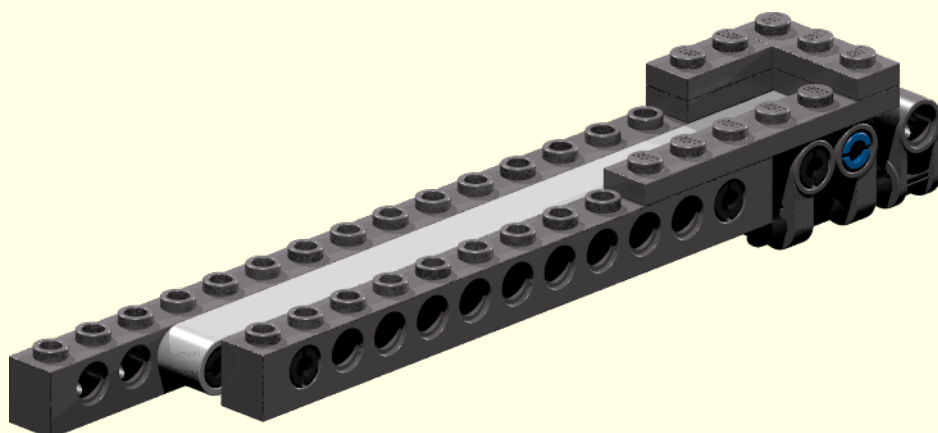
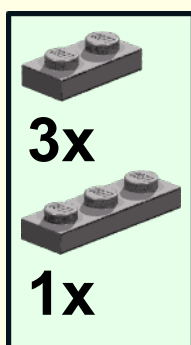
2



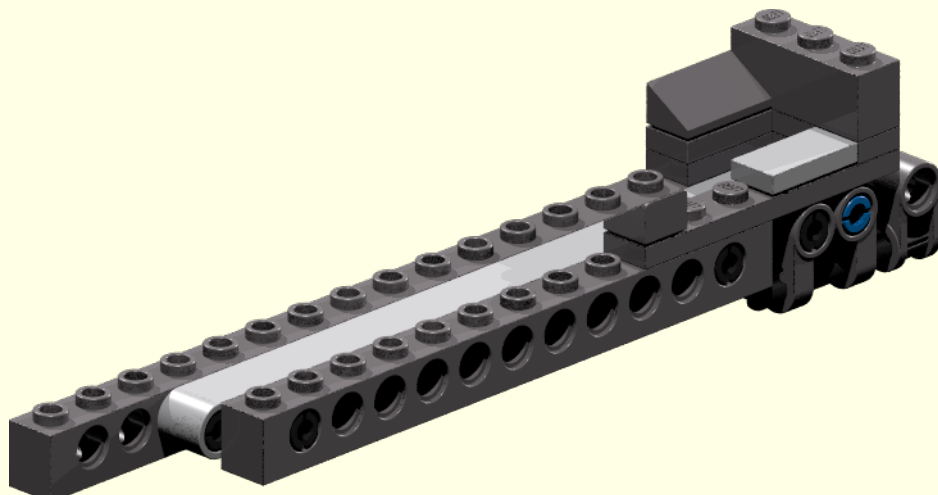
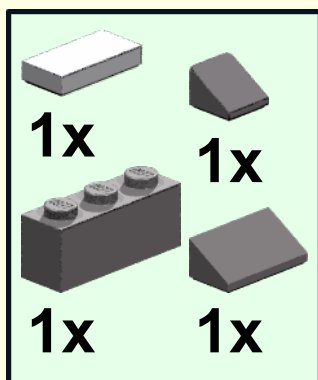
3



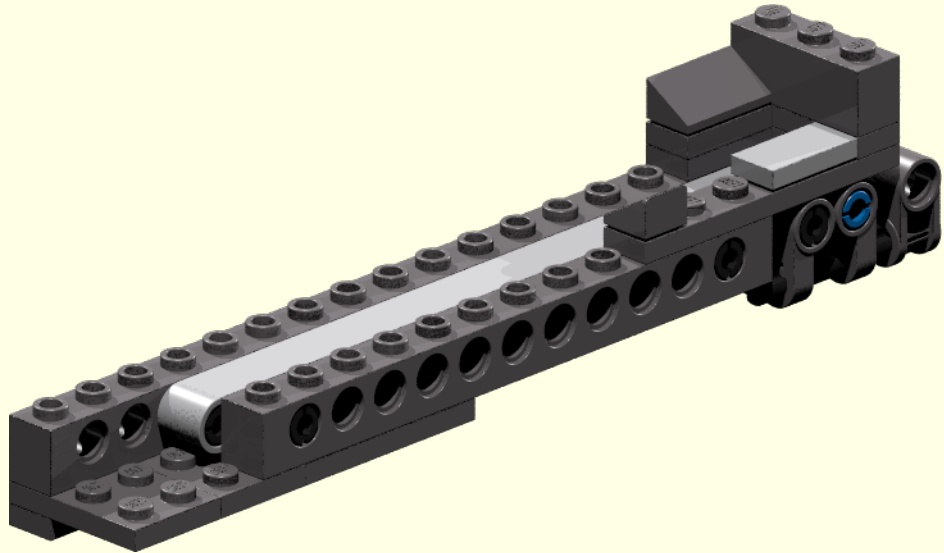
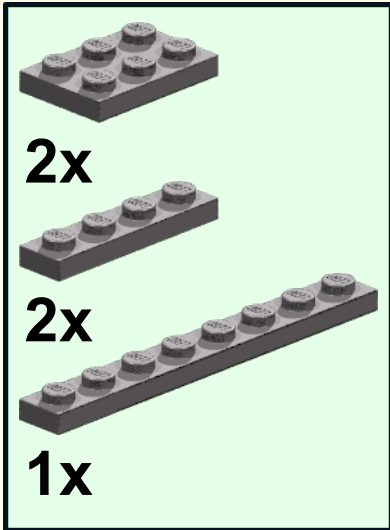
4



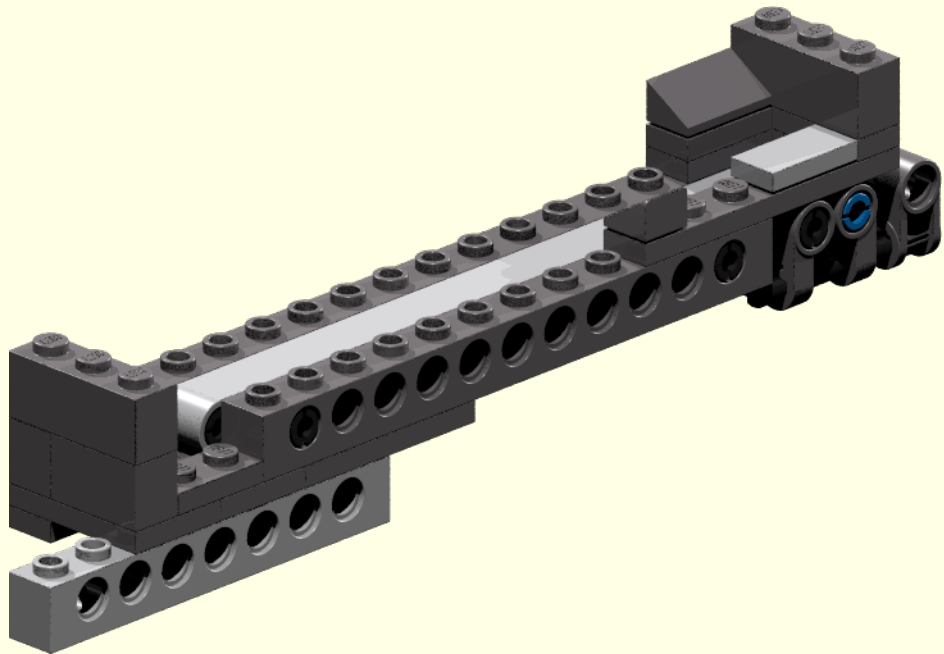
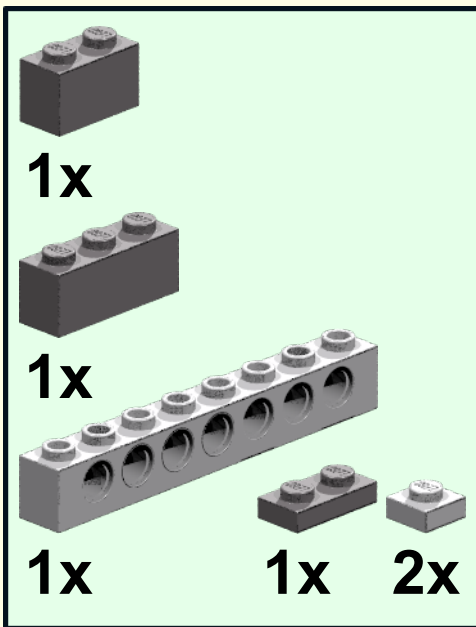
5



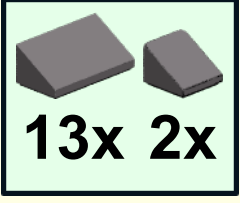
6



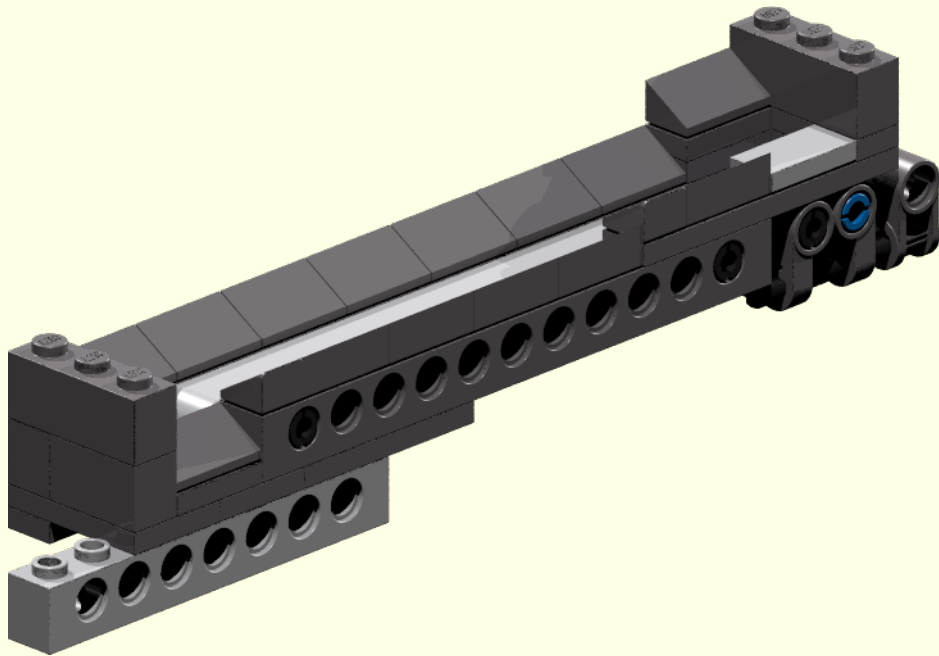
7

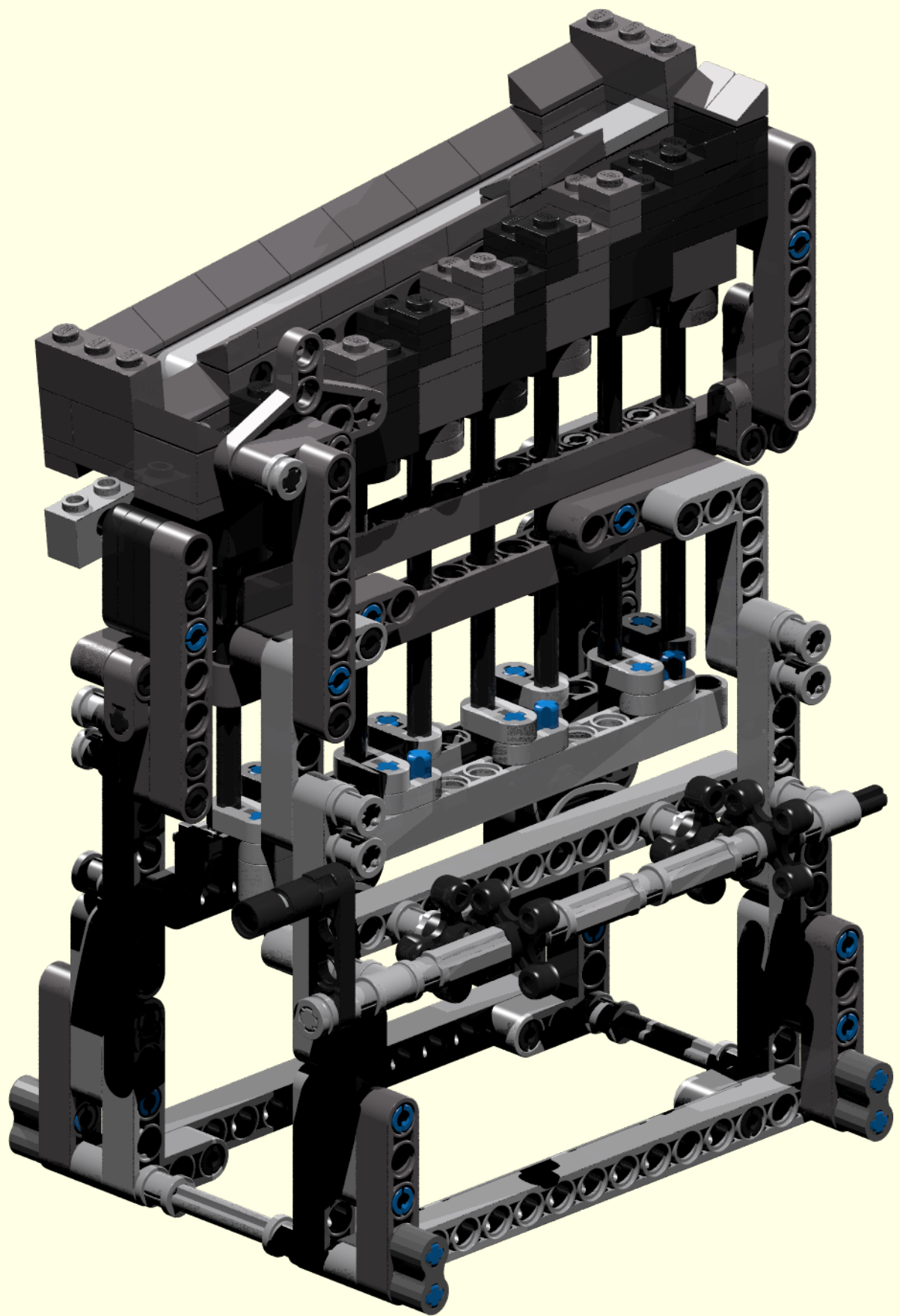


8



13x 2x

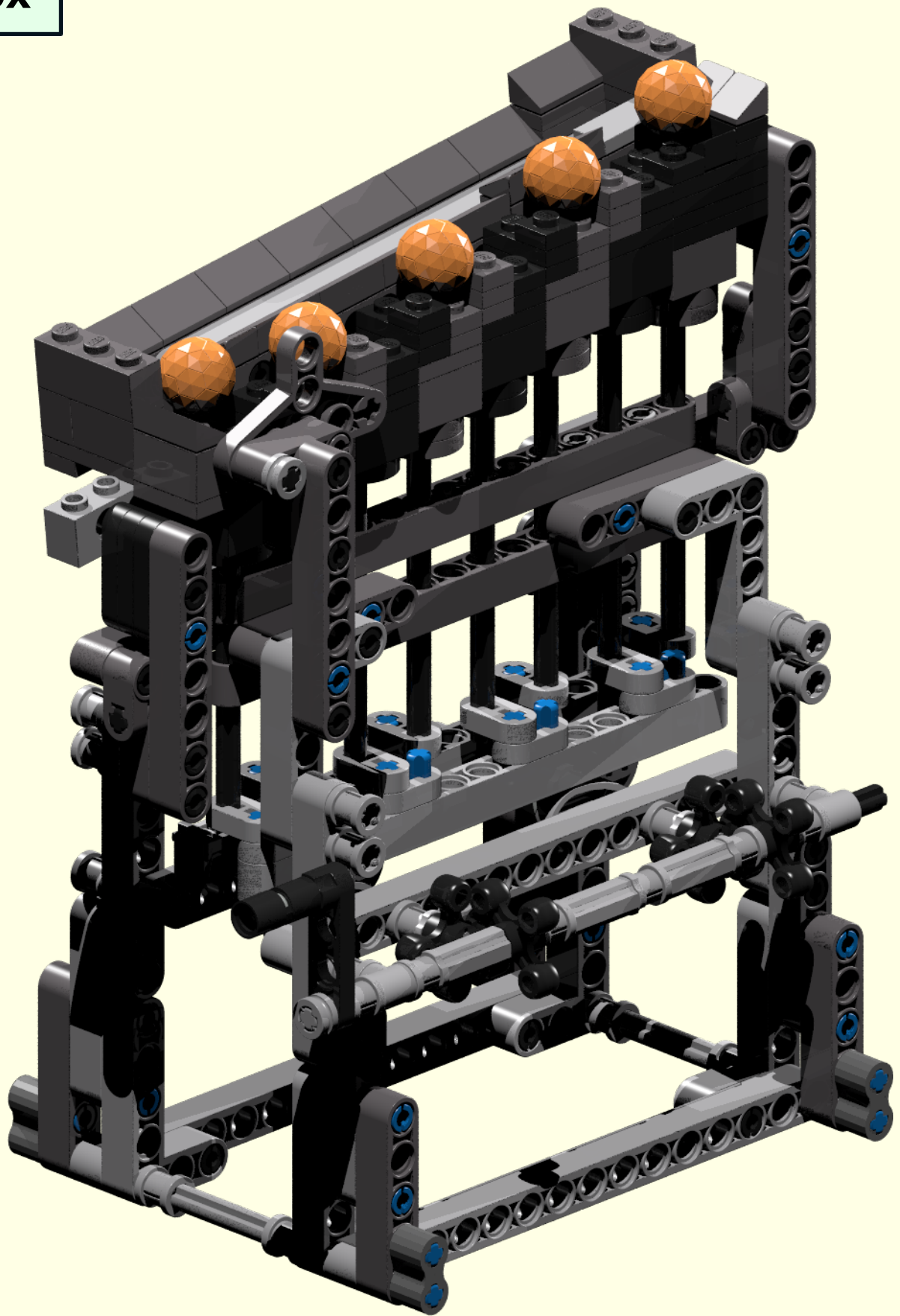


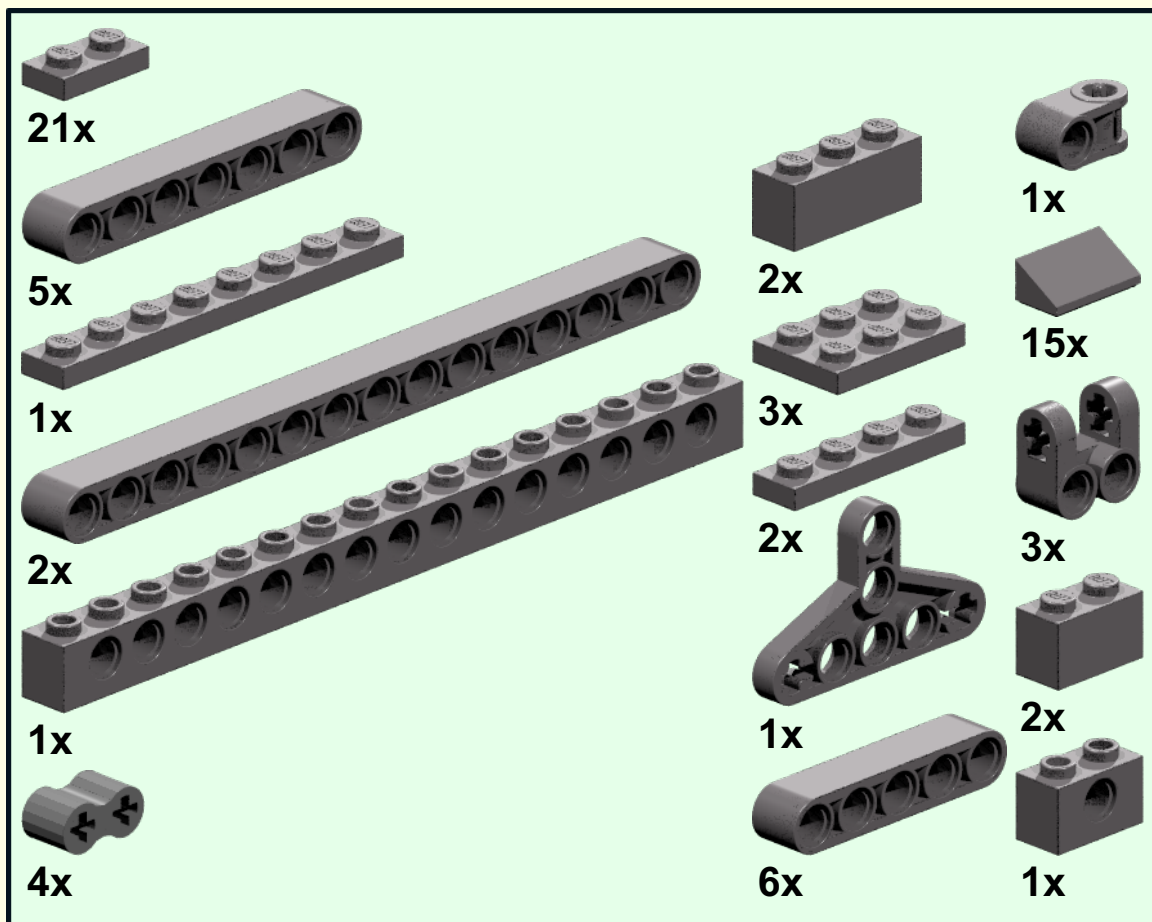


24



5x







12x



16x



1x



5L



9L

3x

4x

 $7x$ 

6x



5x



1x



8x

 $2x$ 

1x



1x



4x



1x



1x

