

**LEGO** mindstorms<sup>®</sup>  
EV3



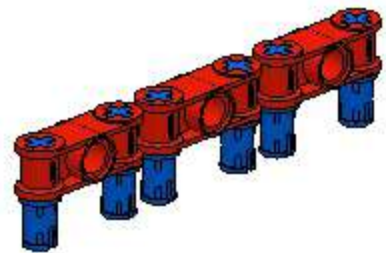
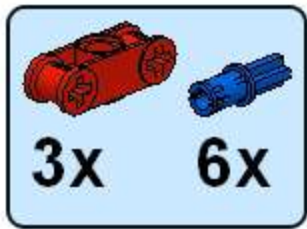
# BANNER PRINT3R

Model Design  
and Programming Instructions  
by: **Ralph Hempel**

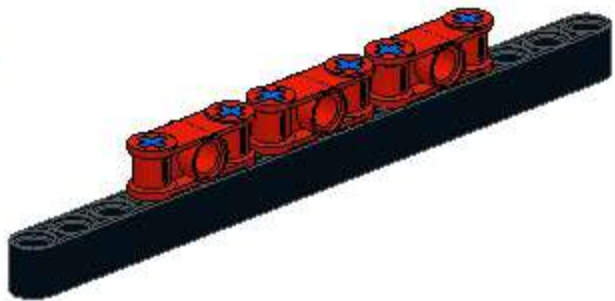
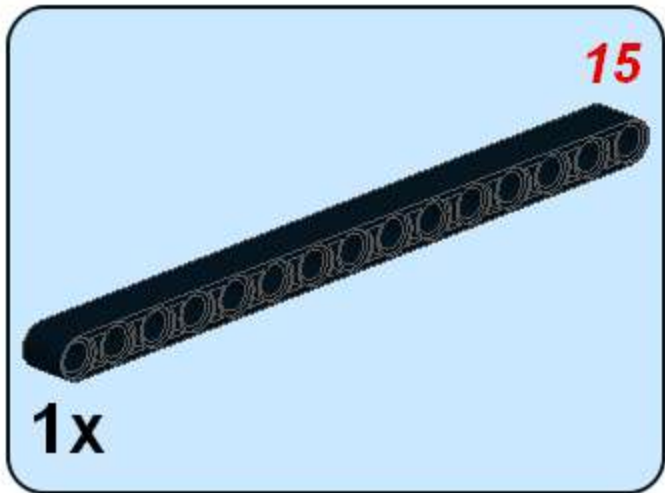
Building Instructions  
by: **Ralph Hempel &  
Phillippe "Philo" Hurbain**

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BANNER PRINT3R design, building and programming instructions ©2013 Ralph Hempel, made for The LEGO Group.

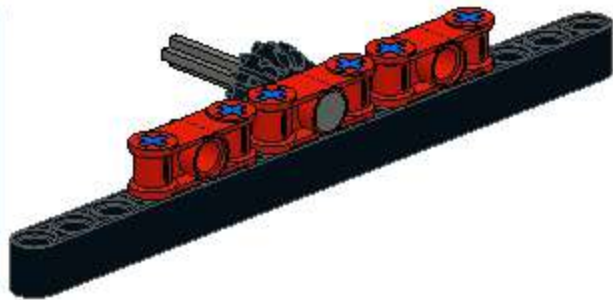
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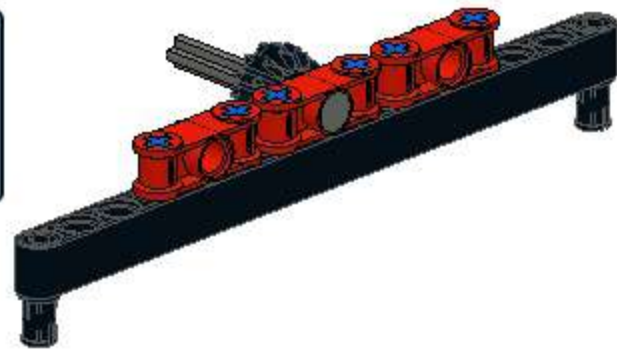
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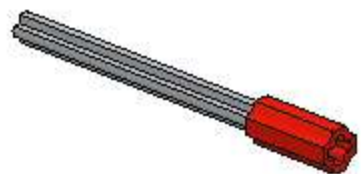
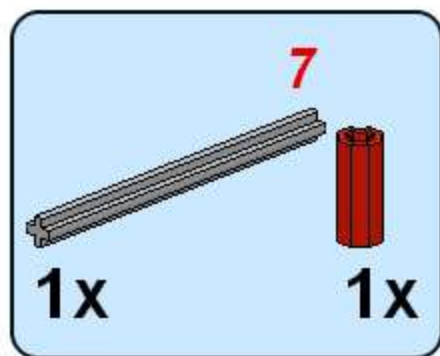
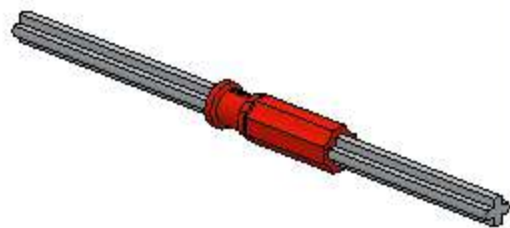
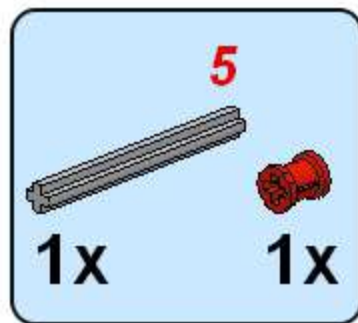
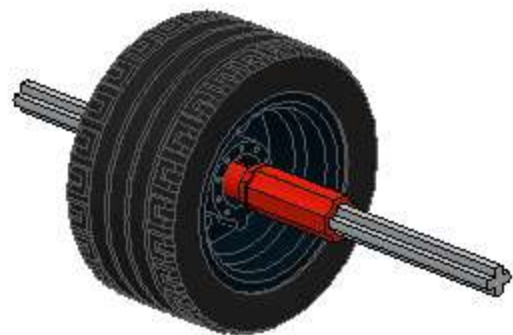
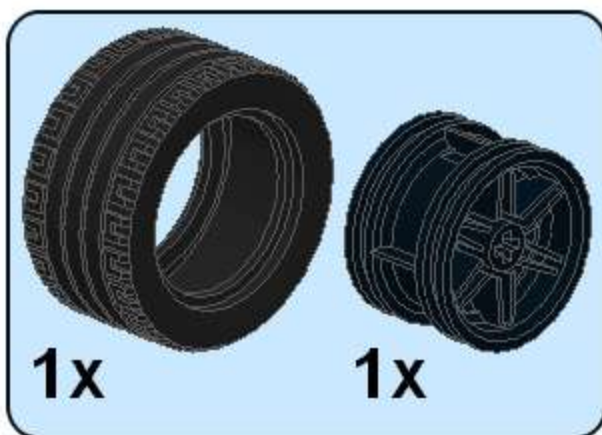
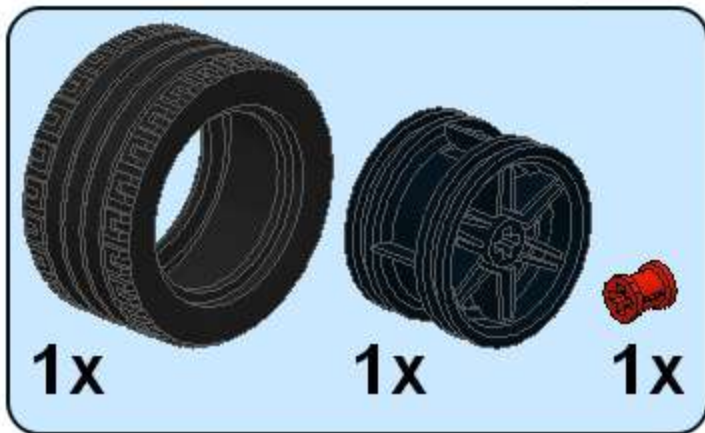
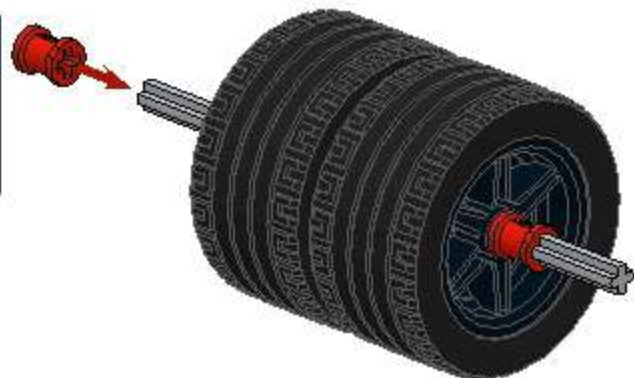


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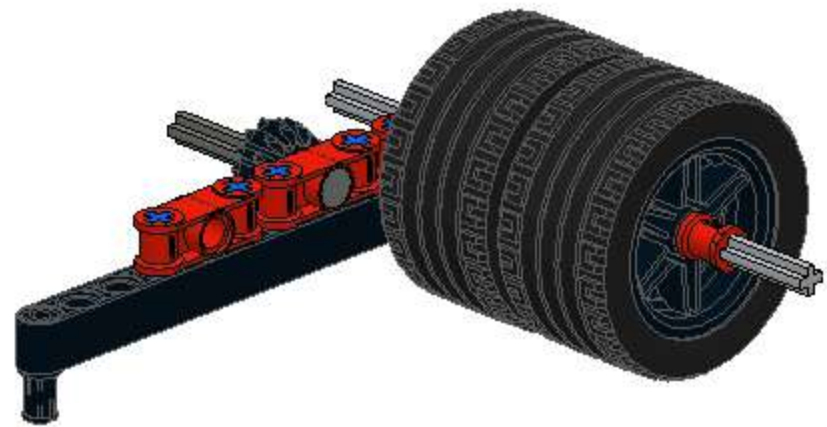


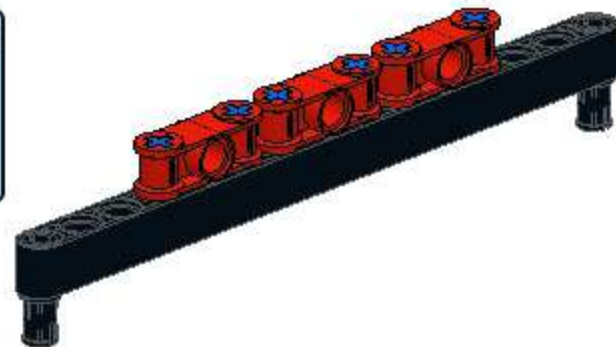
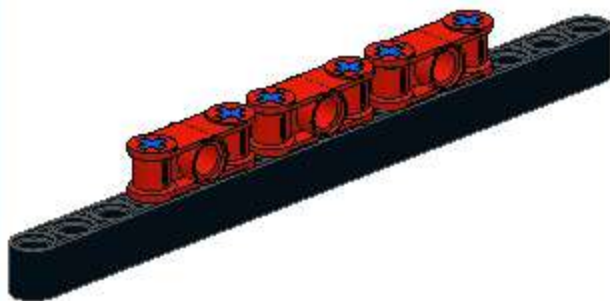
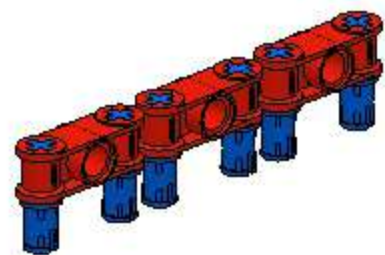
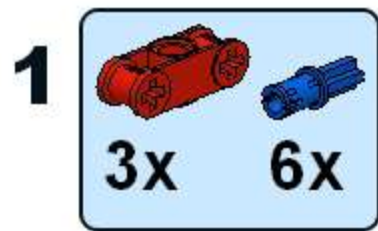
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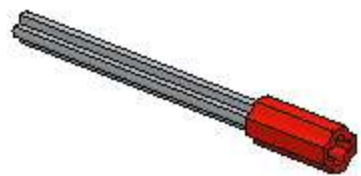
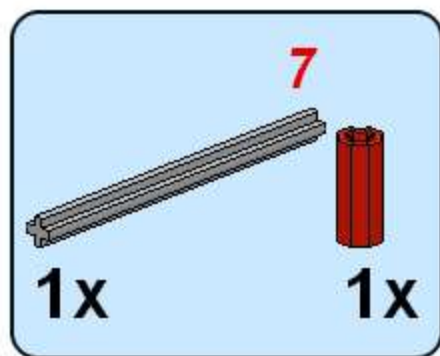
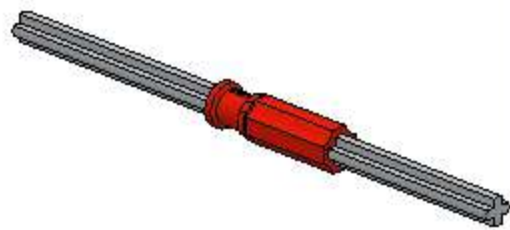
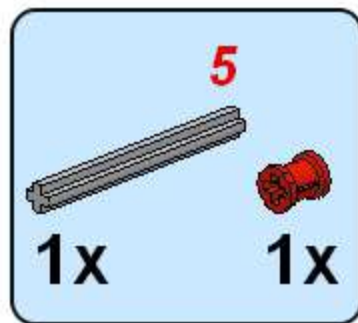
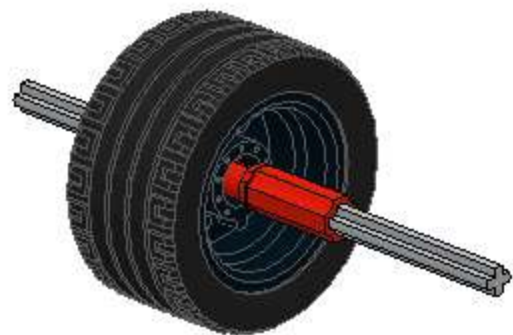
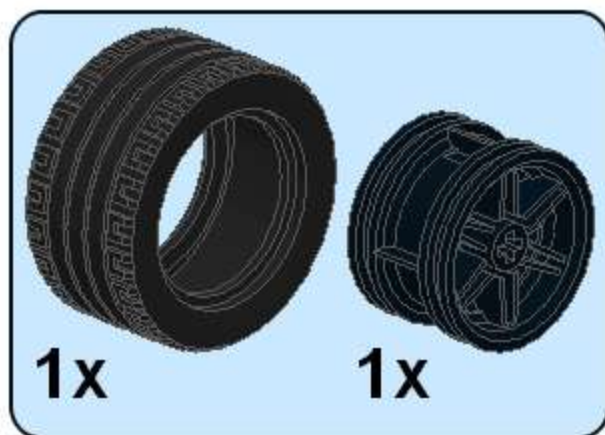
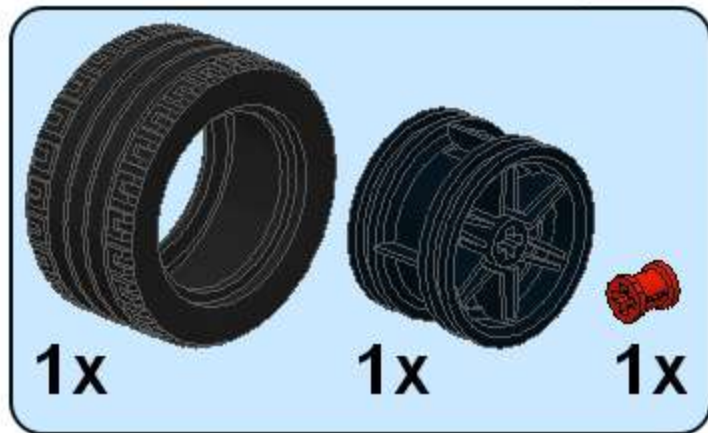
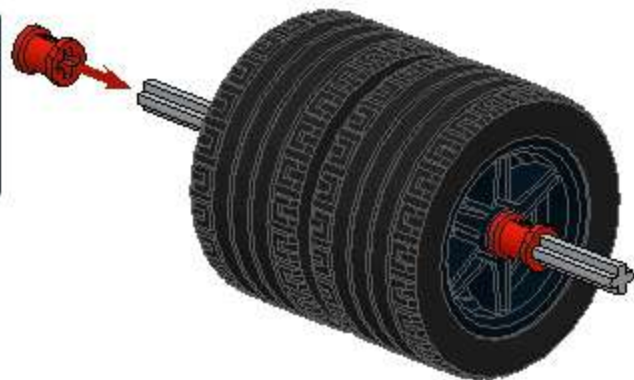


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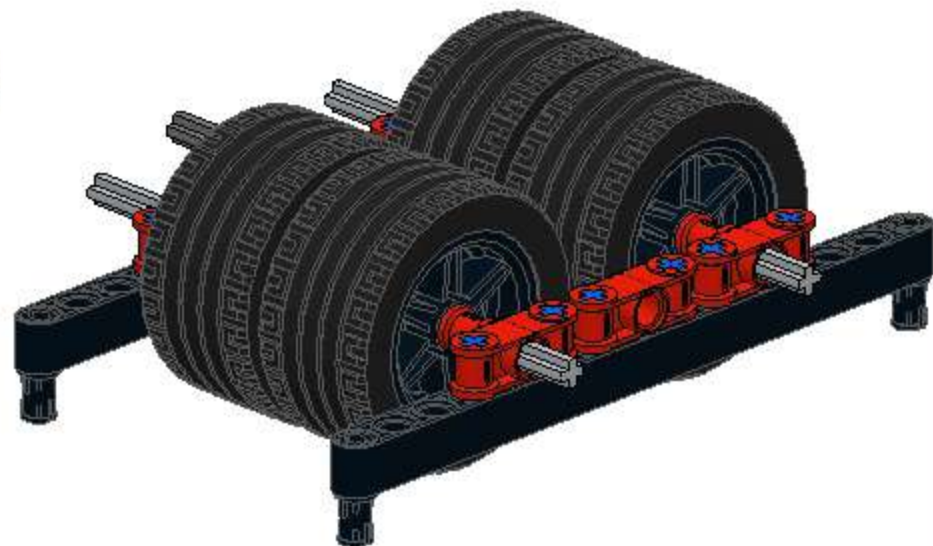
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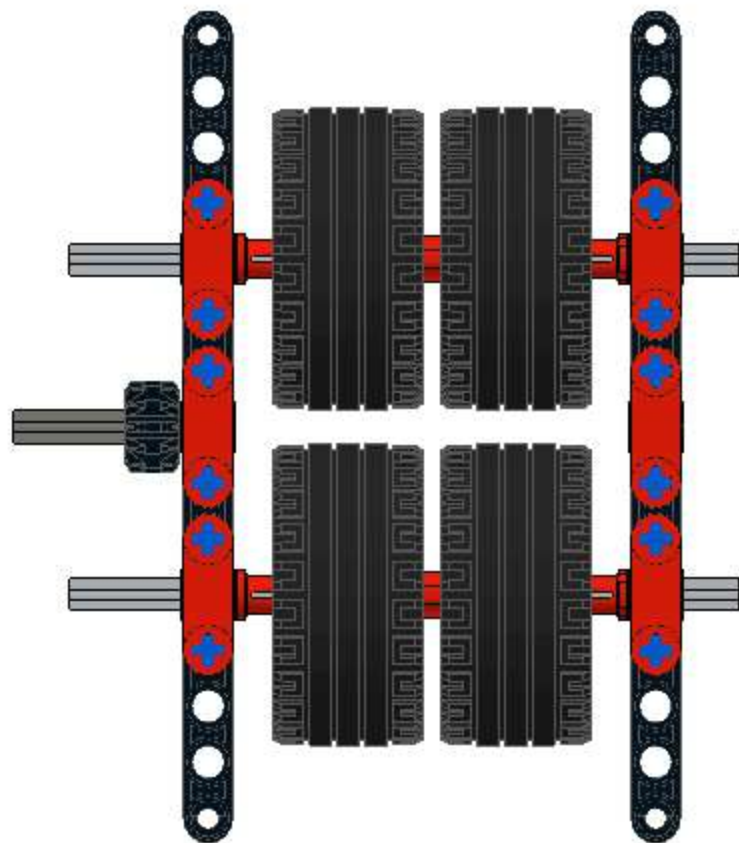


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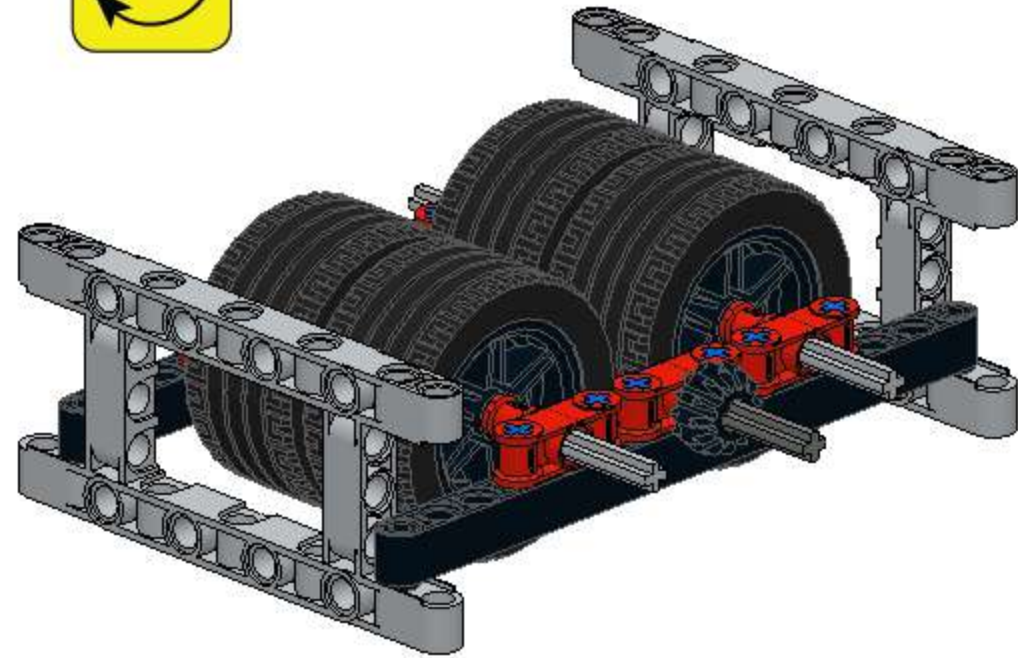
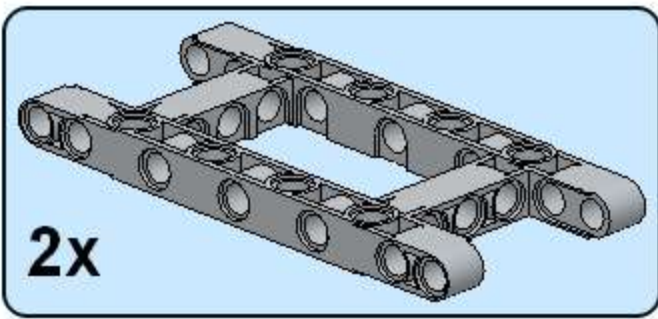


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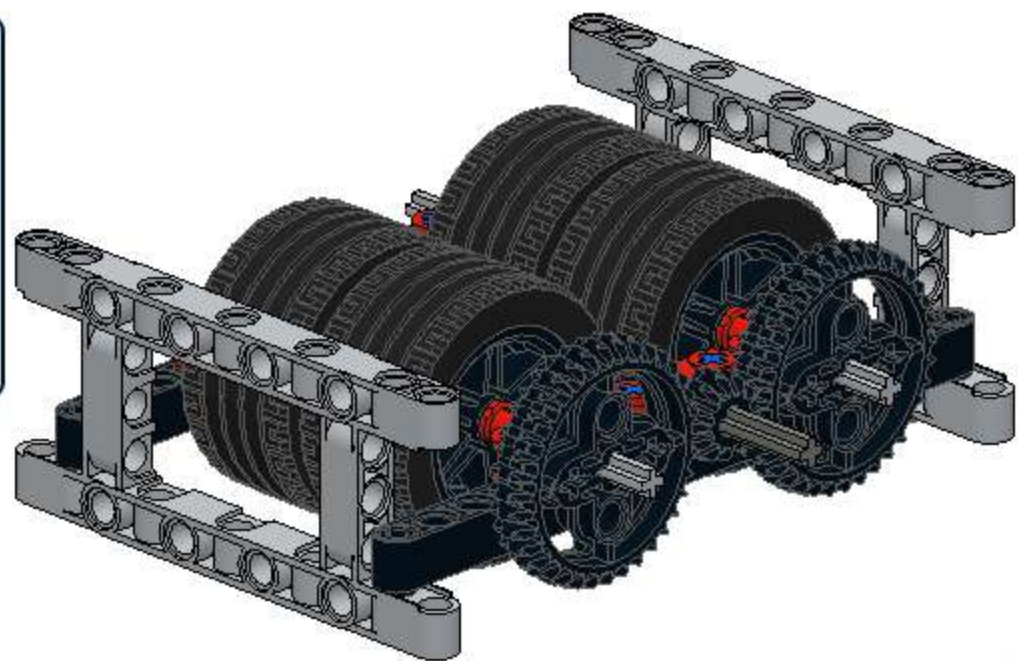
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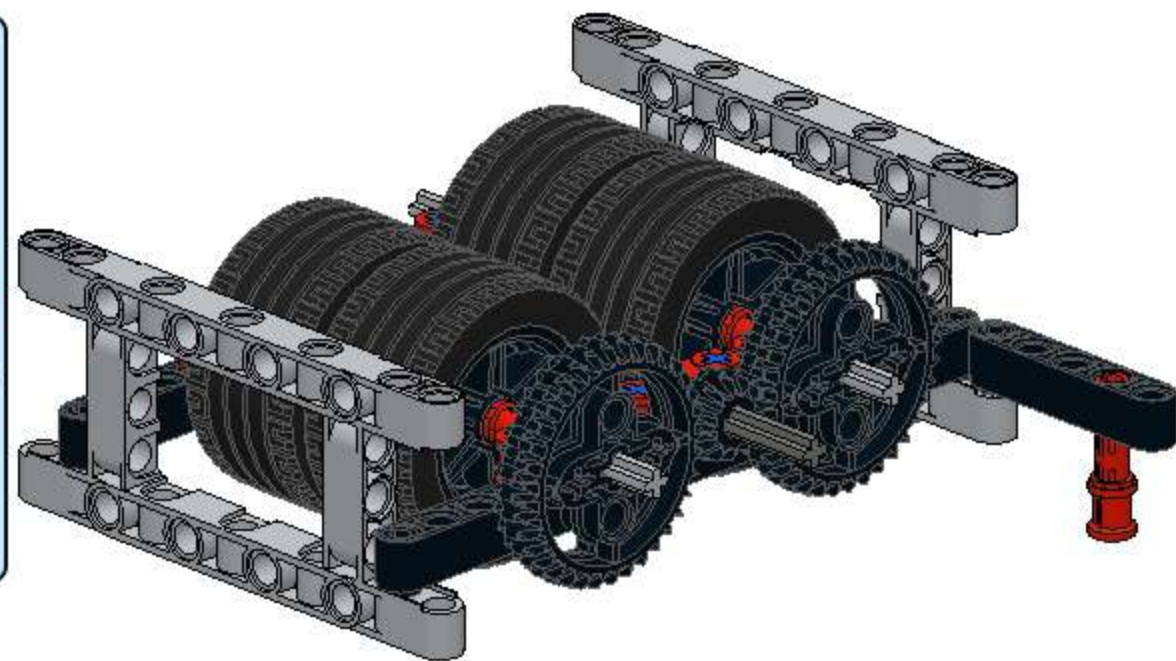
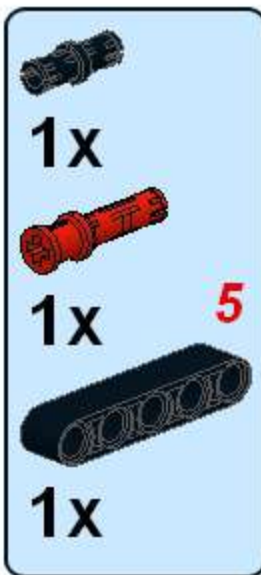




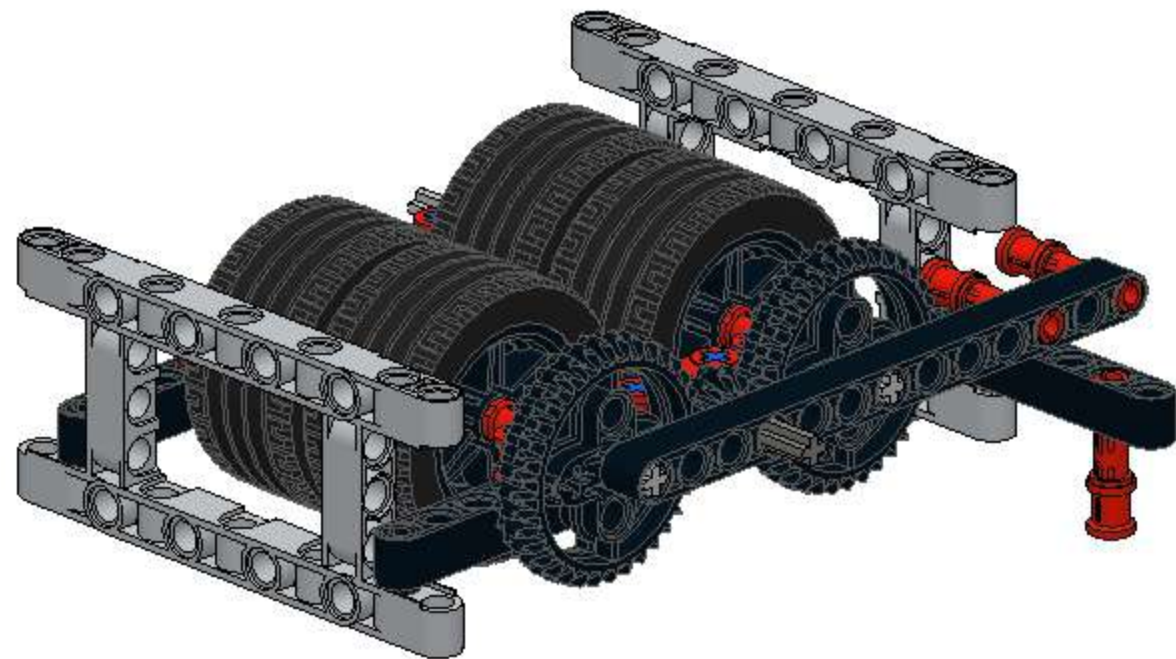
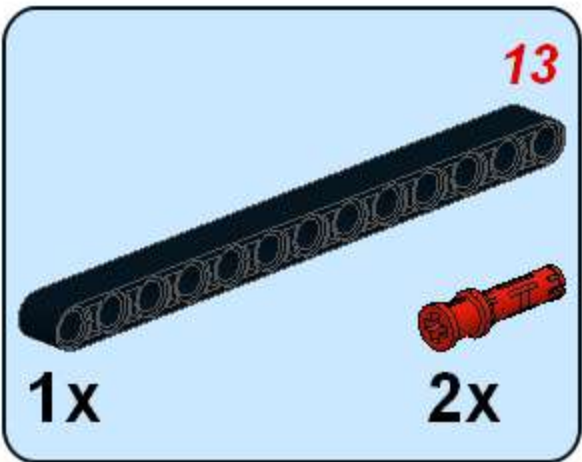
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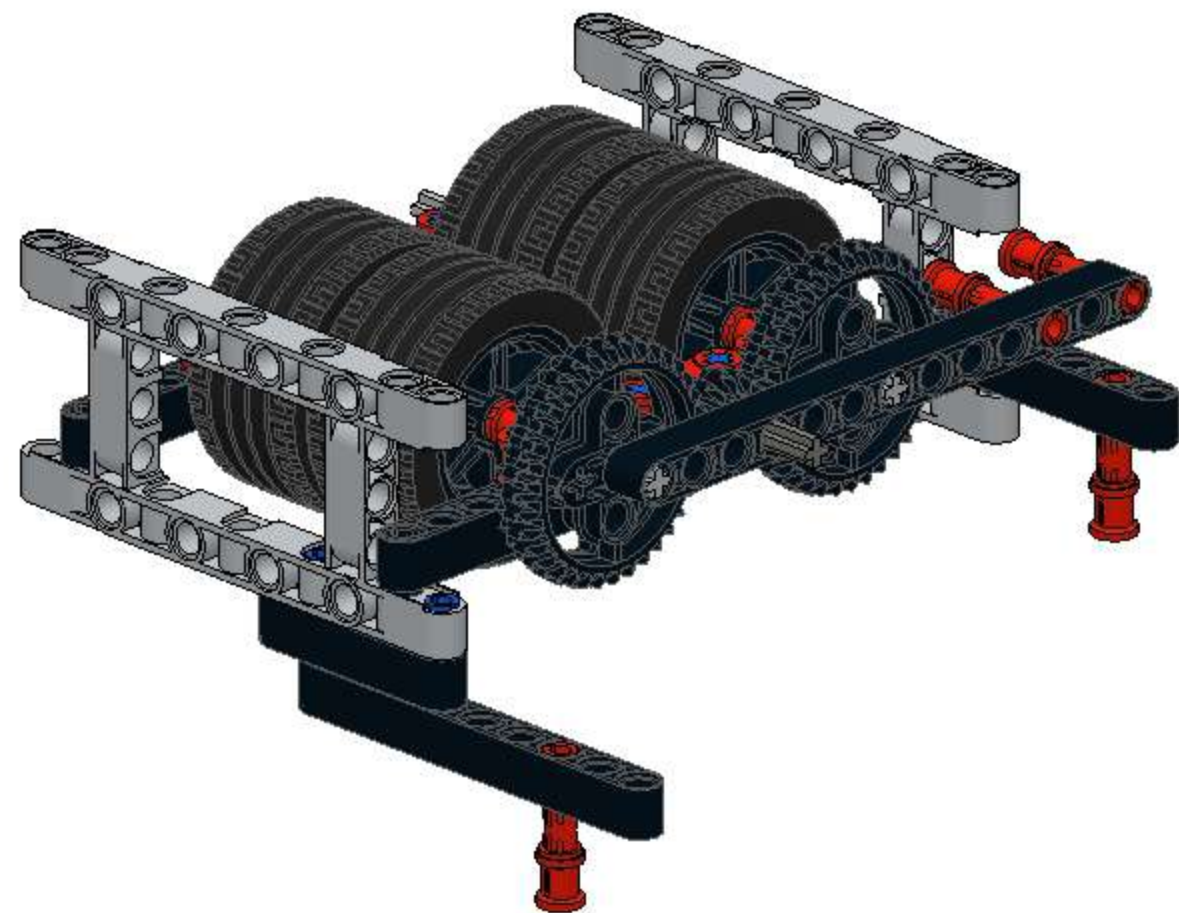
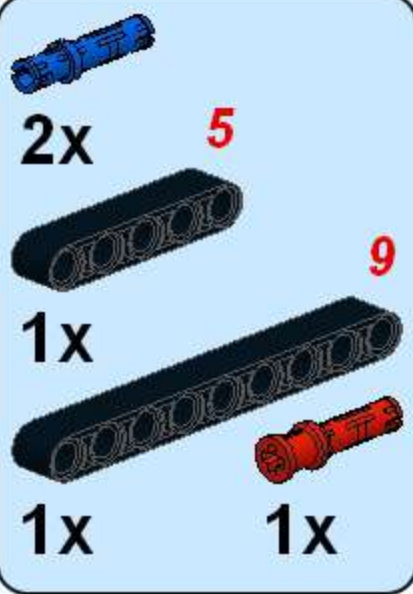
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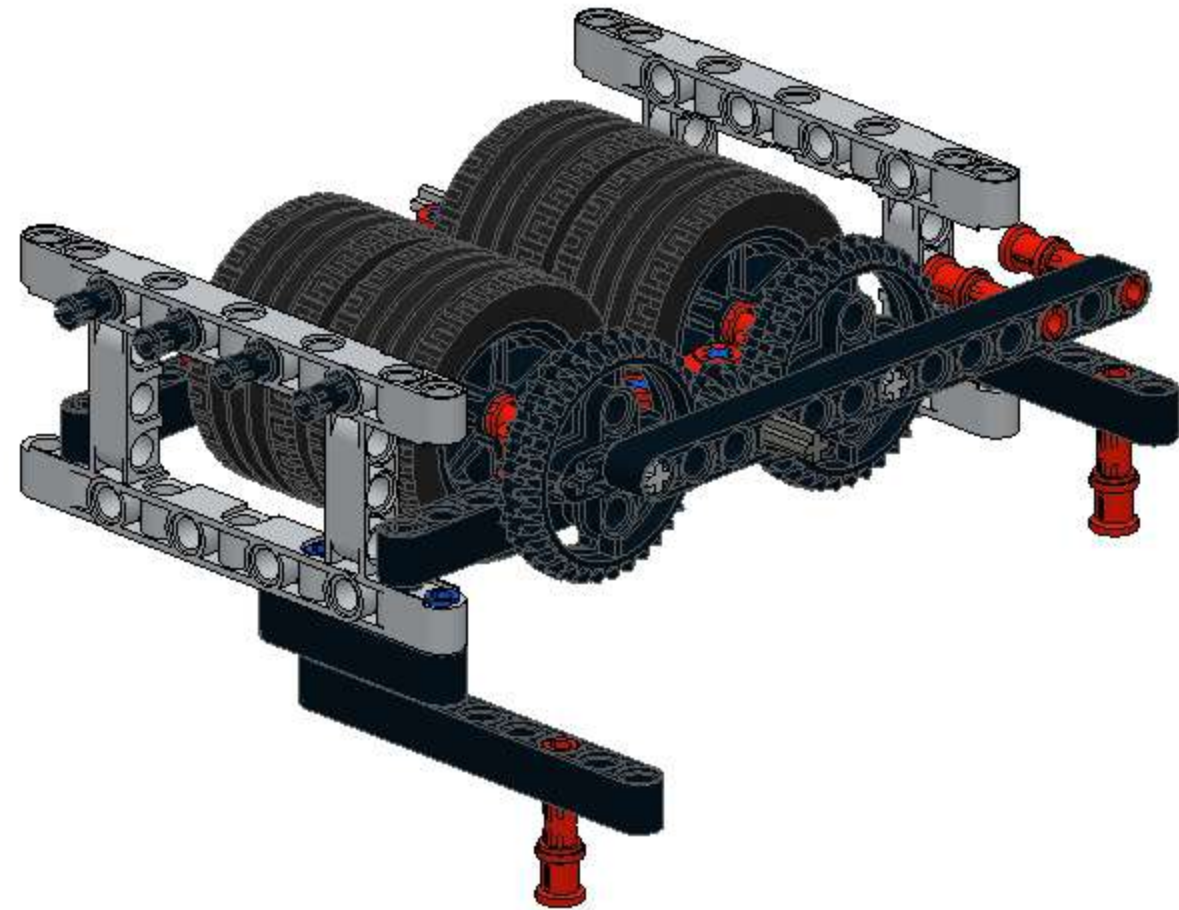
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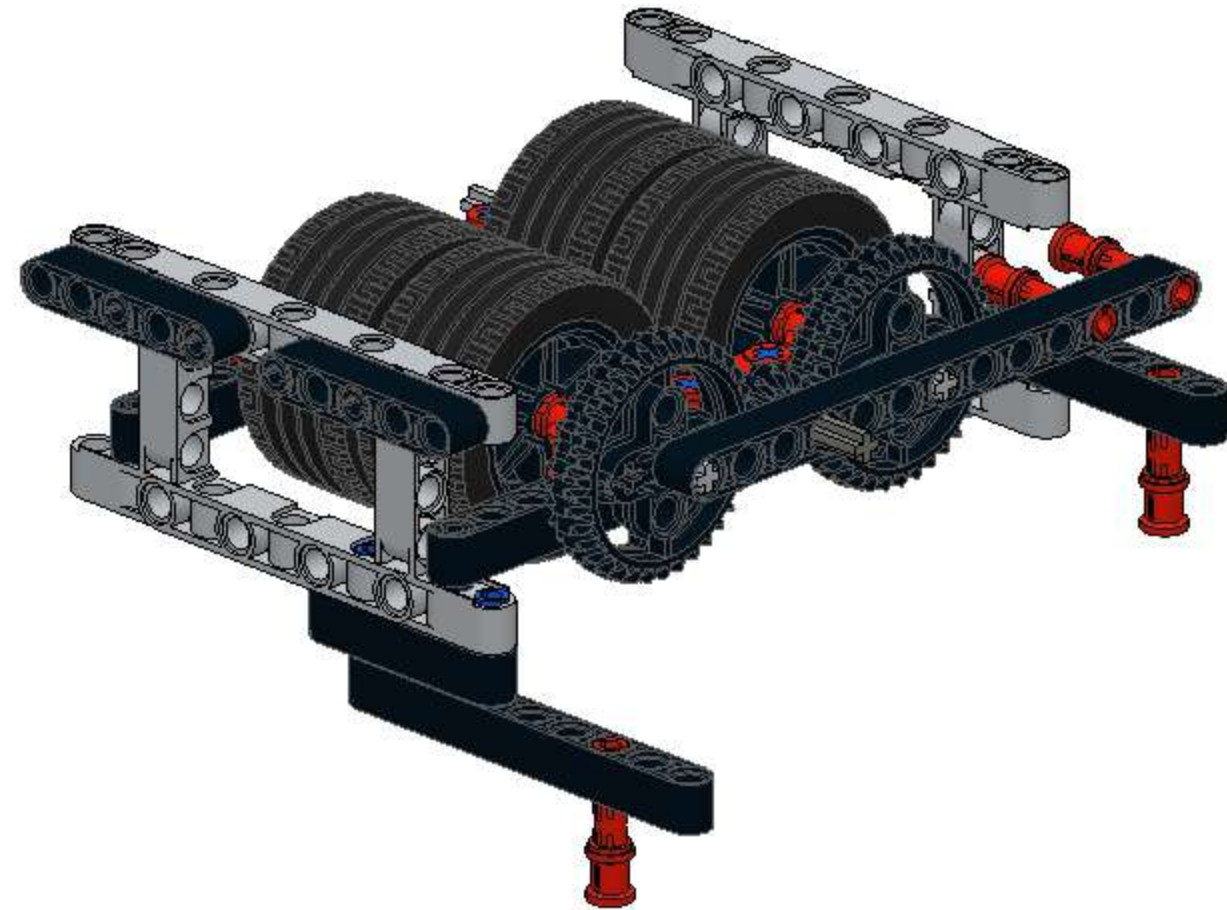
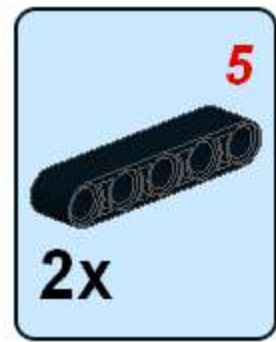
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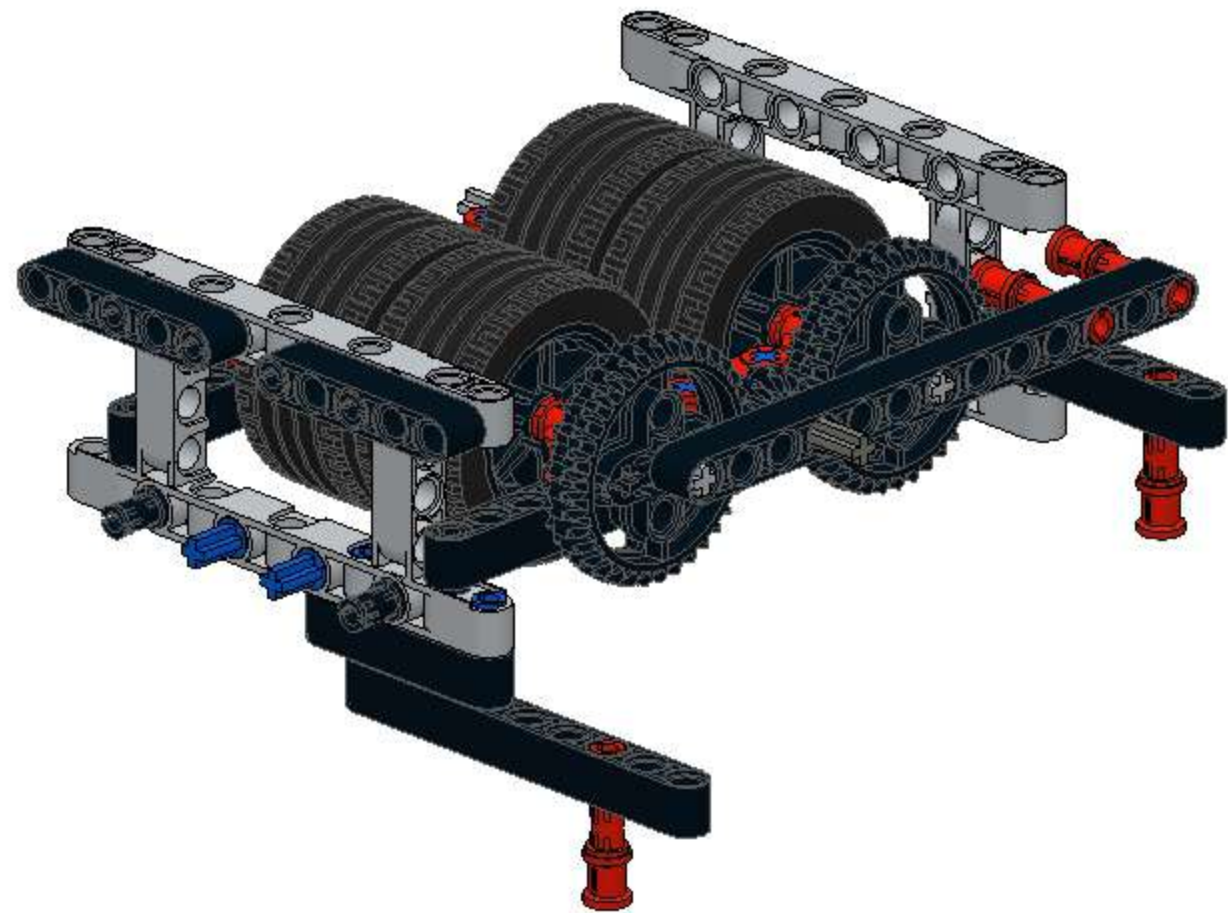
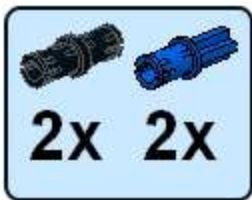
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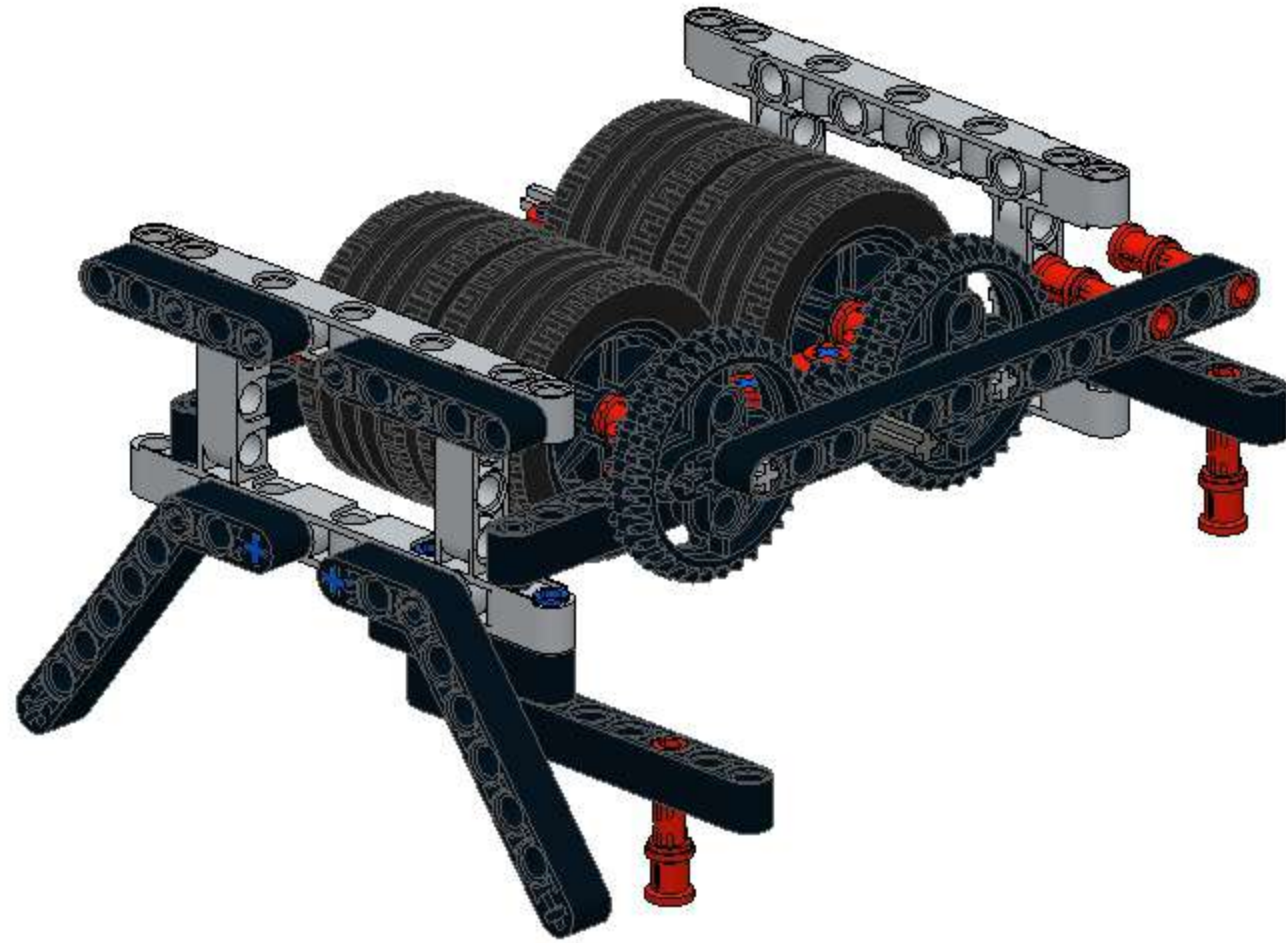
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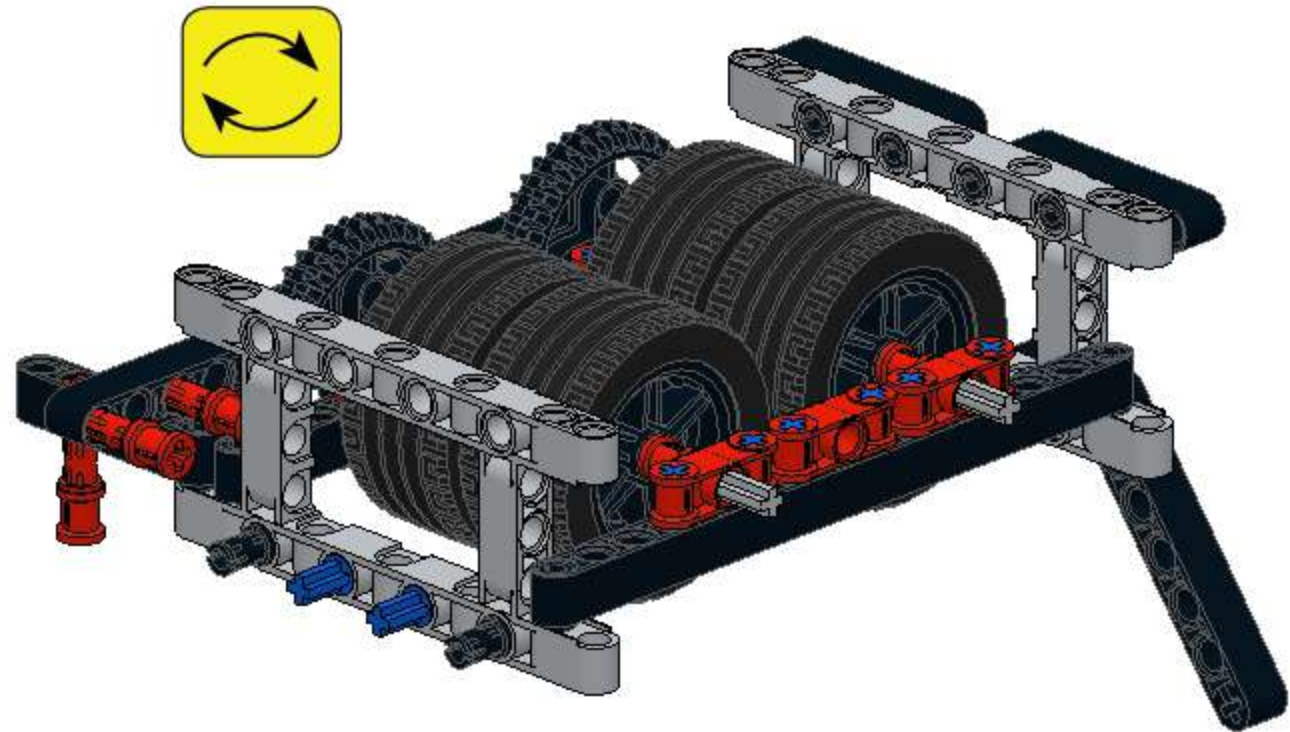
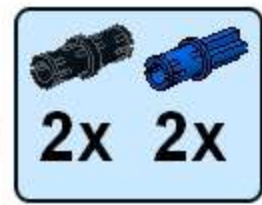
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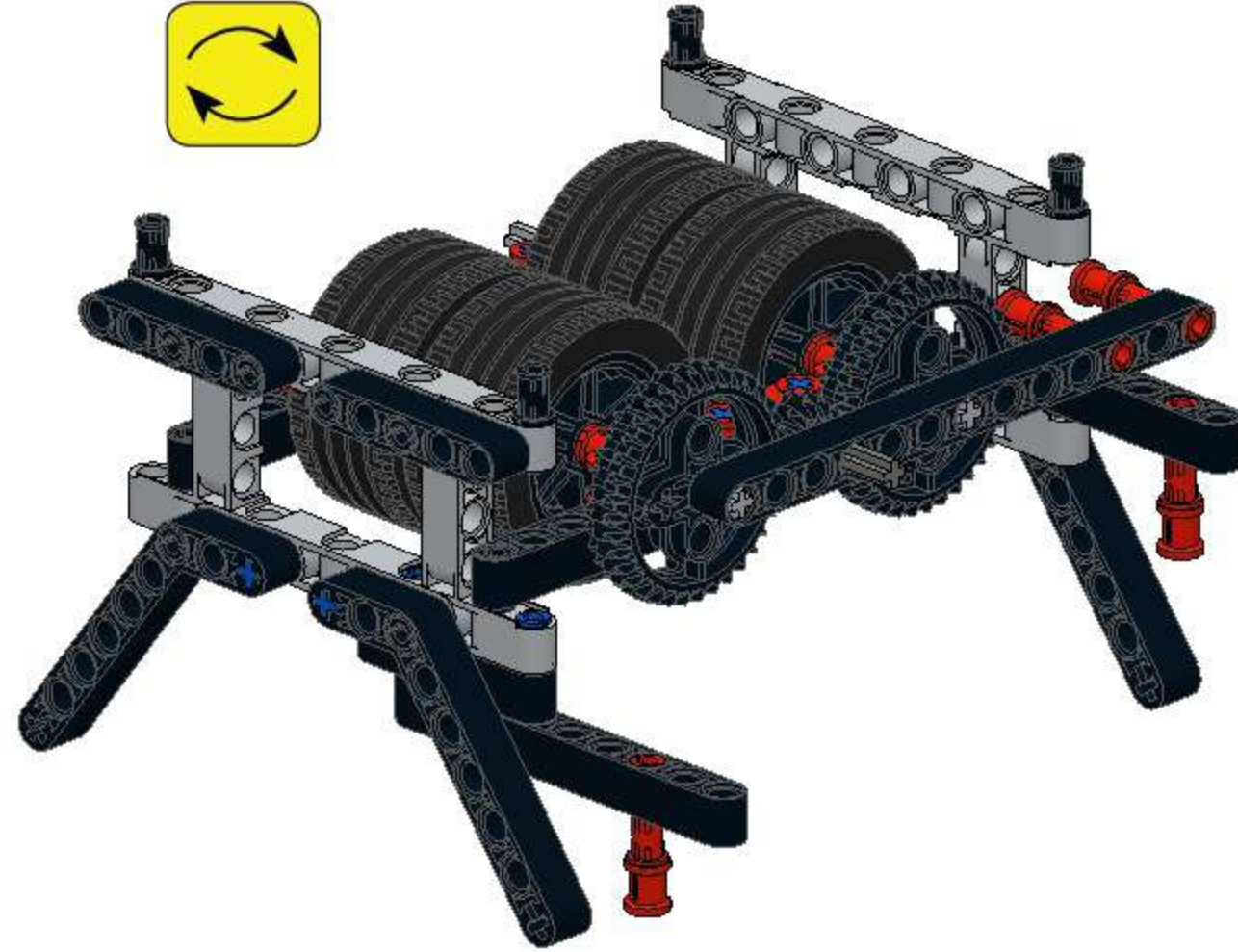




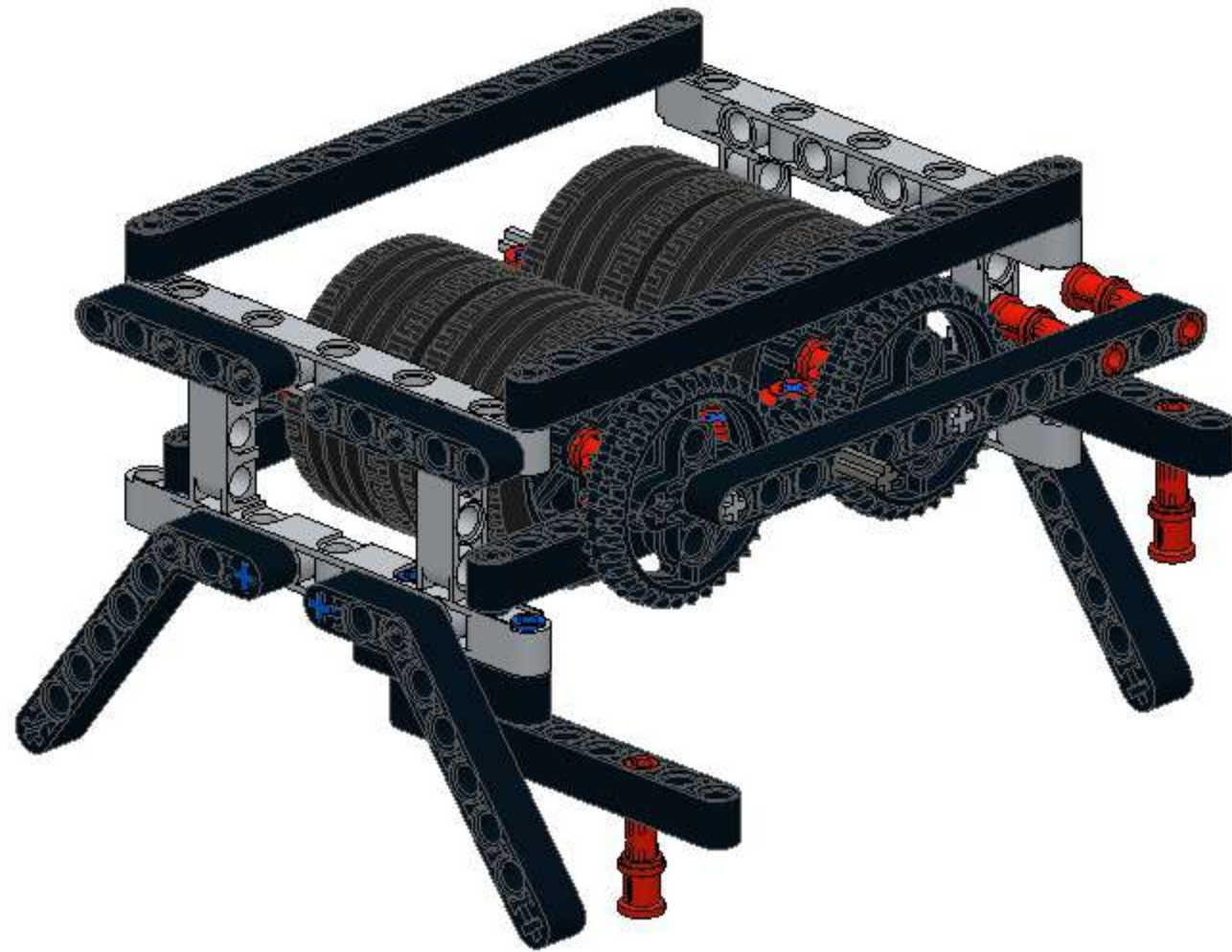
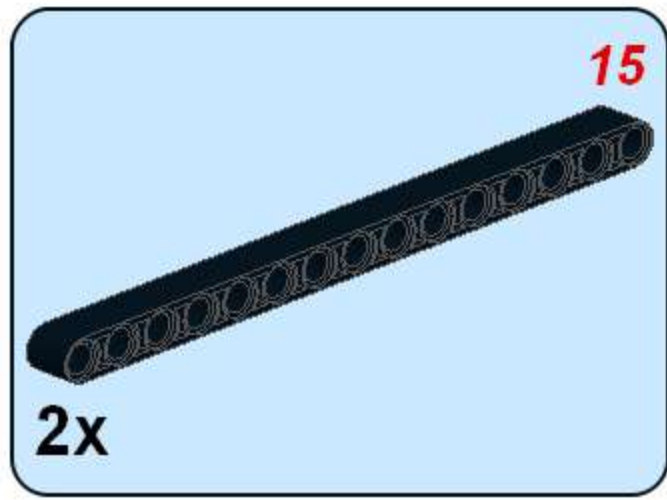
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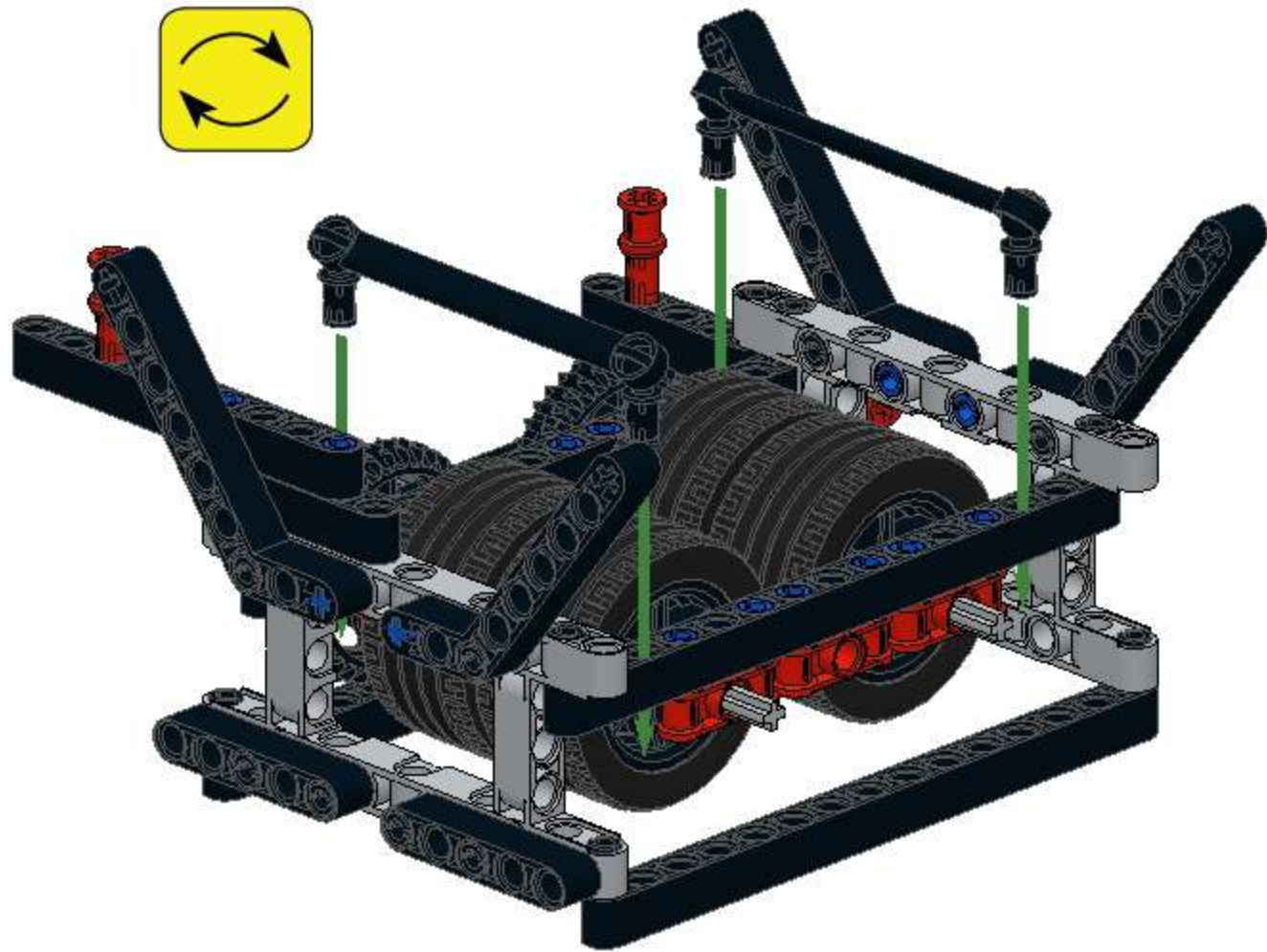
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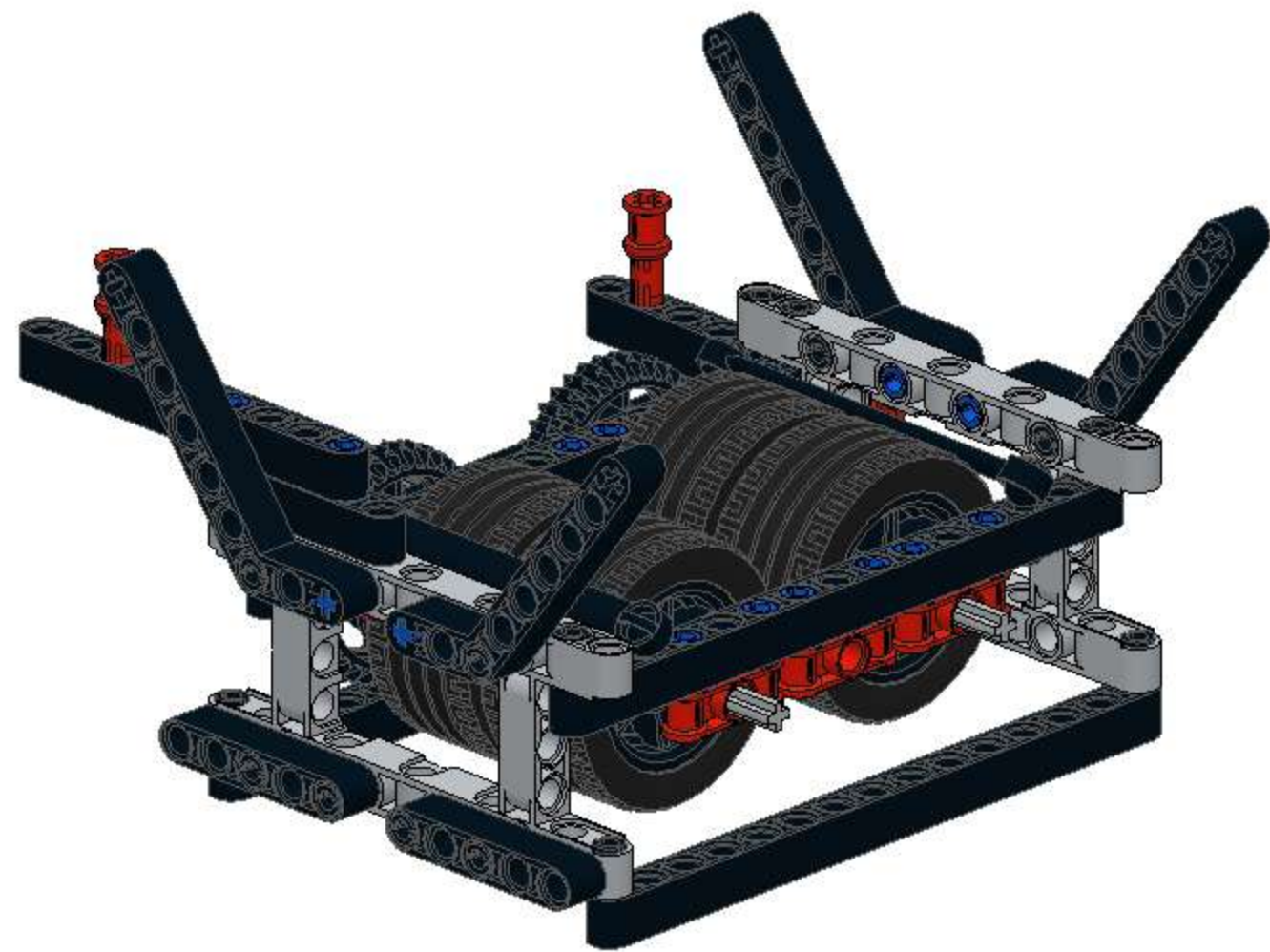
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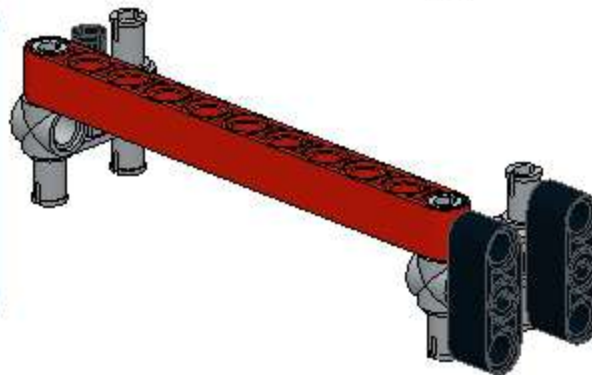
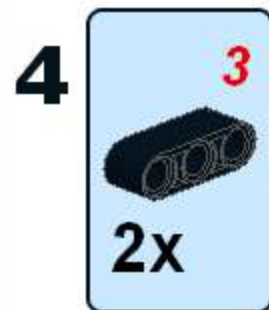
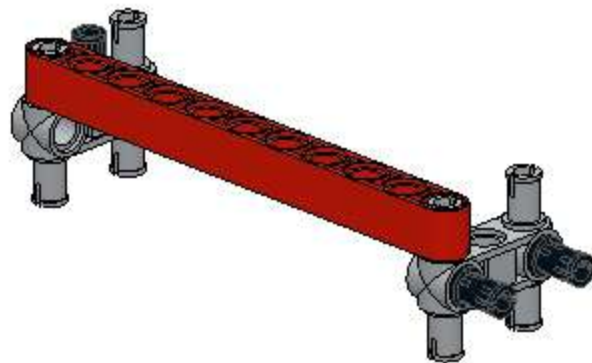
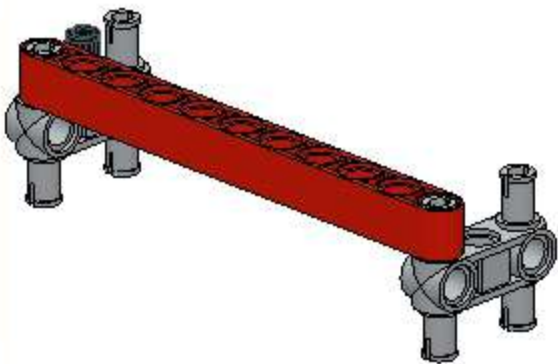
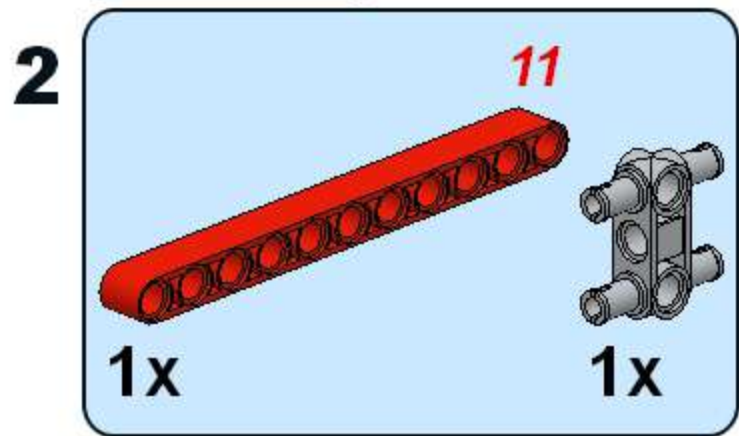
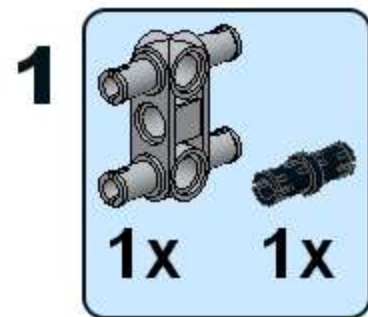


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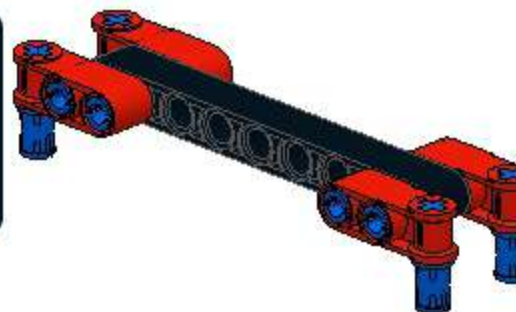
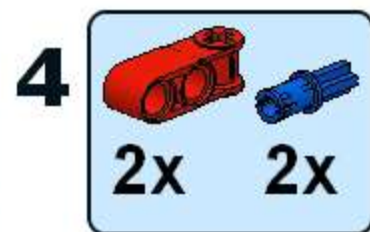
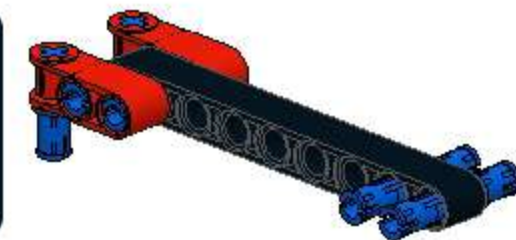
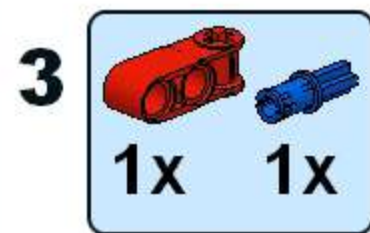
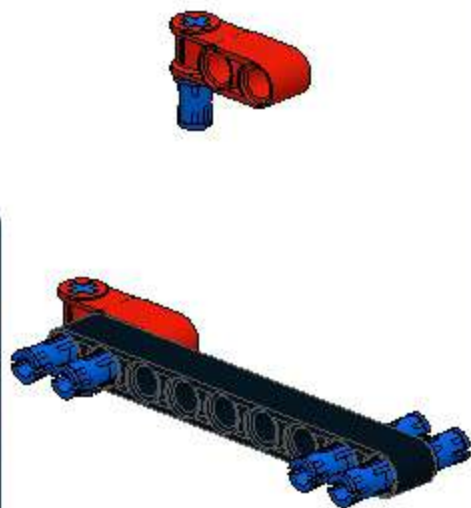
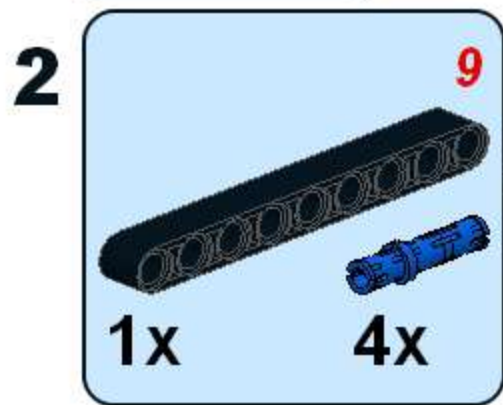
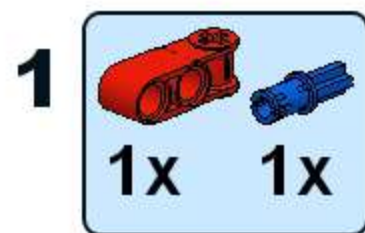
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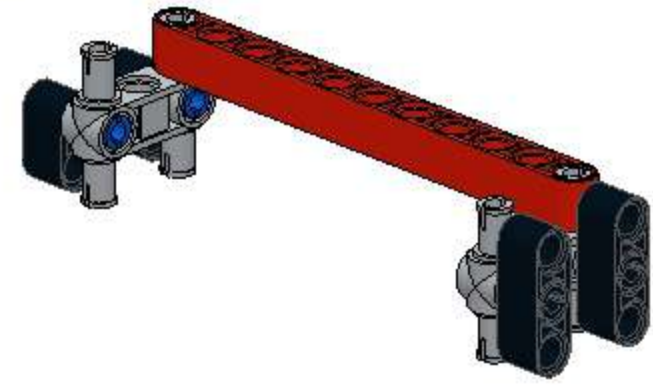
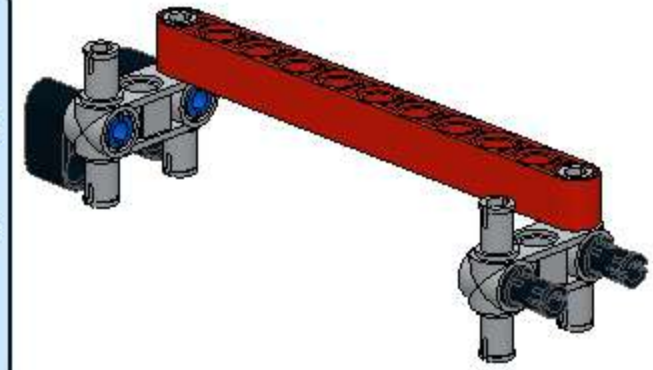
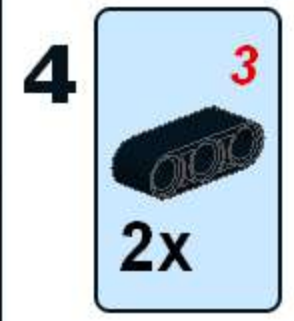
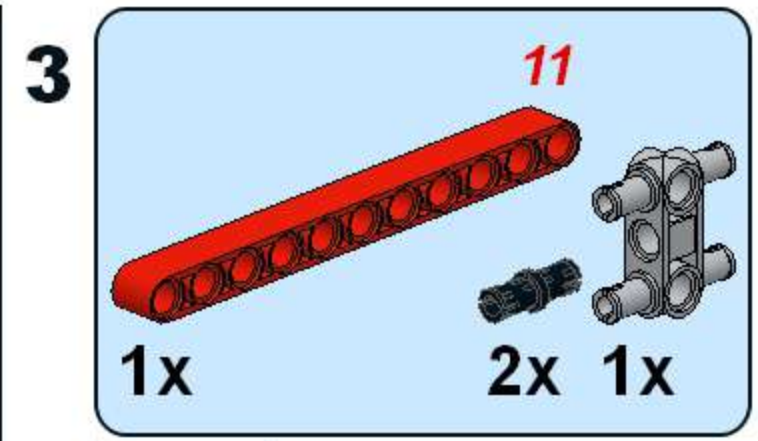
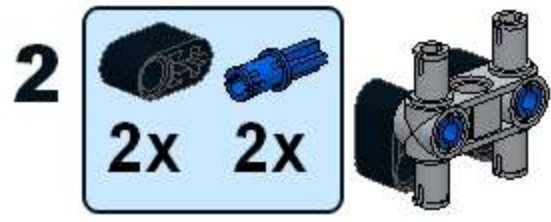
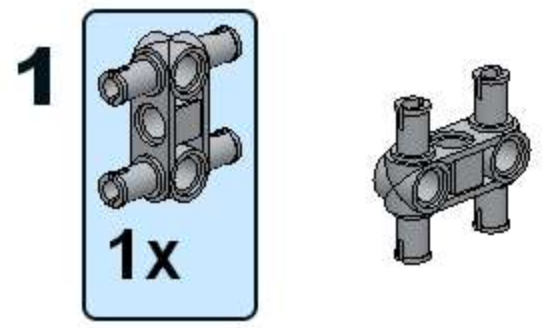




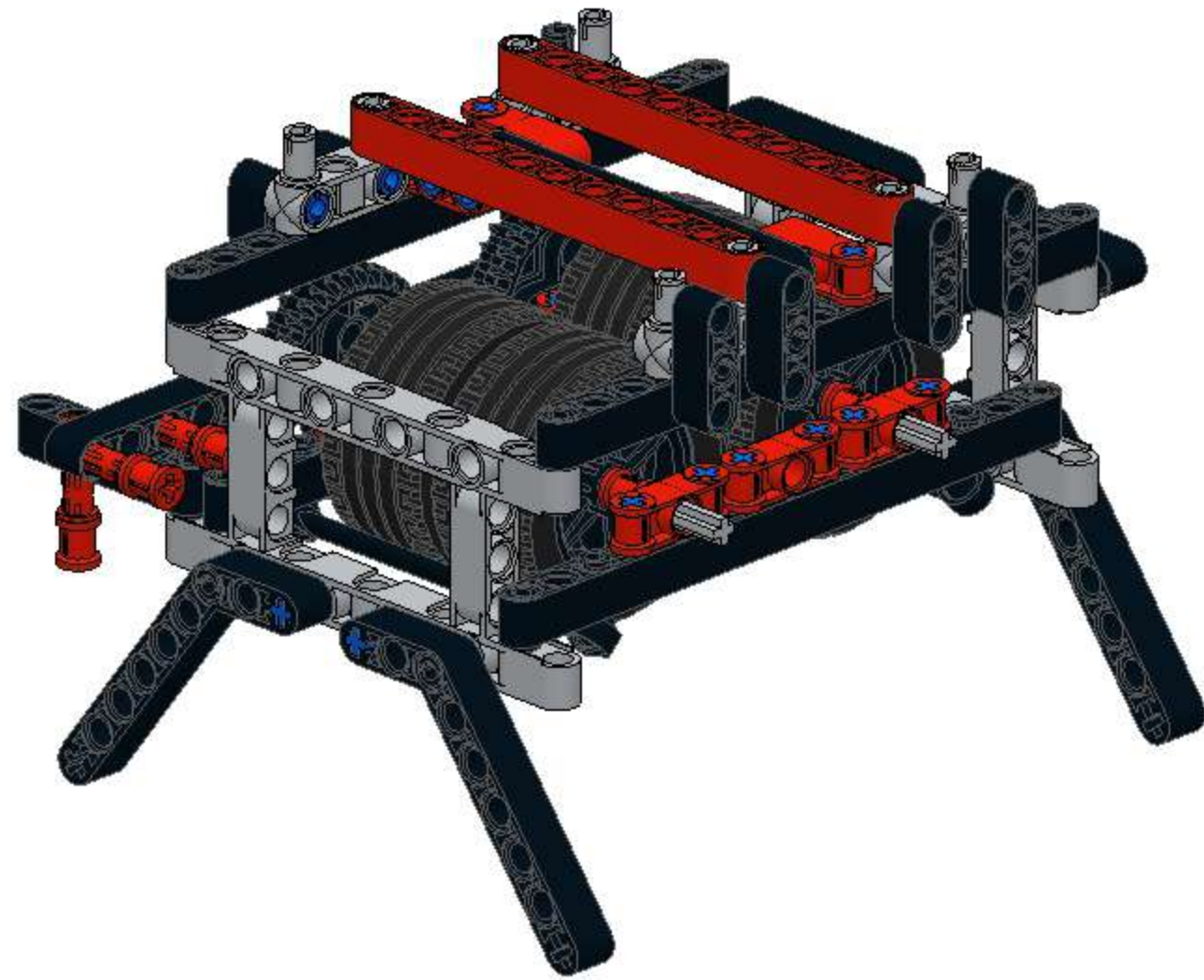


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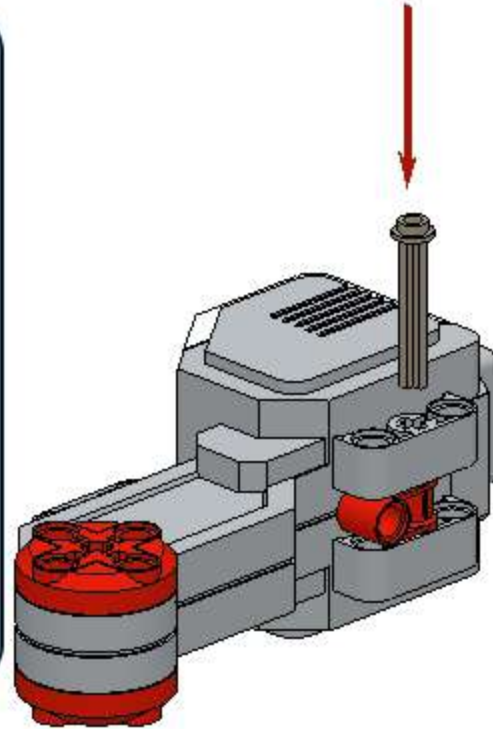
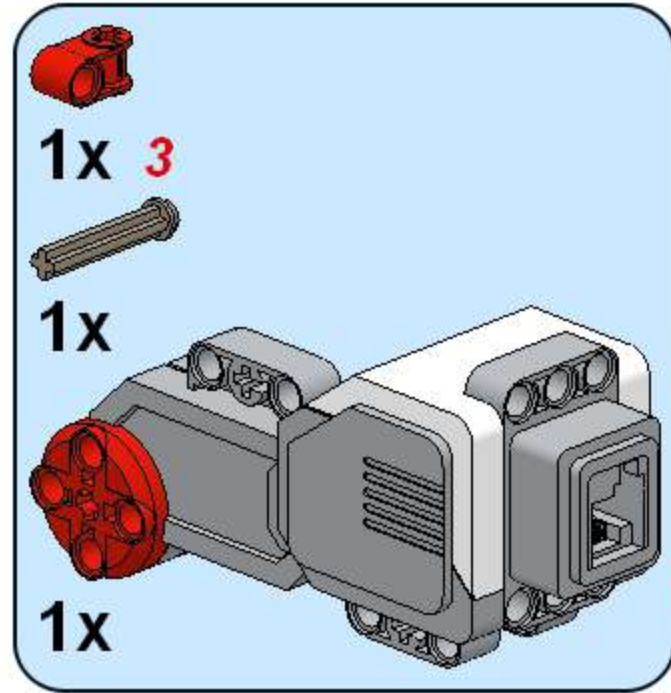




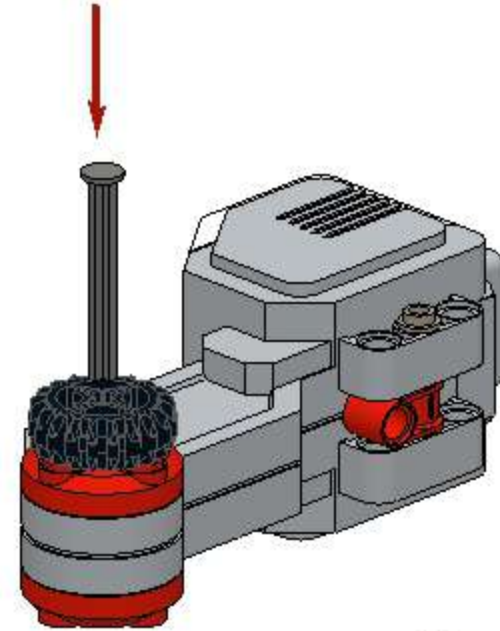
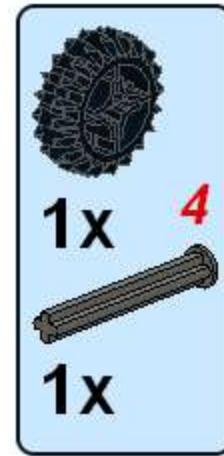
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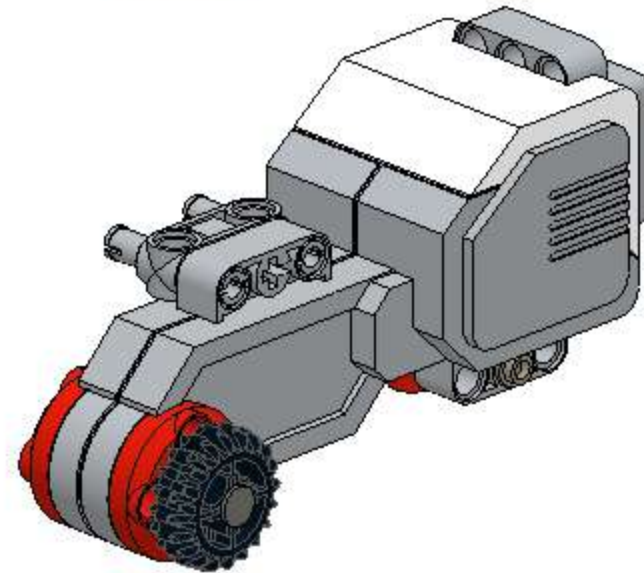
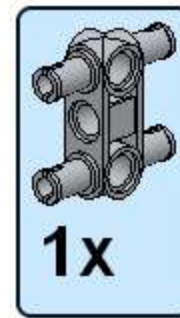
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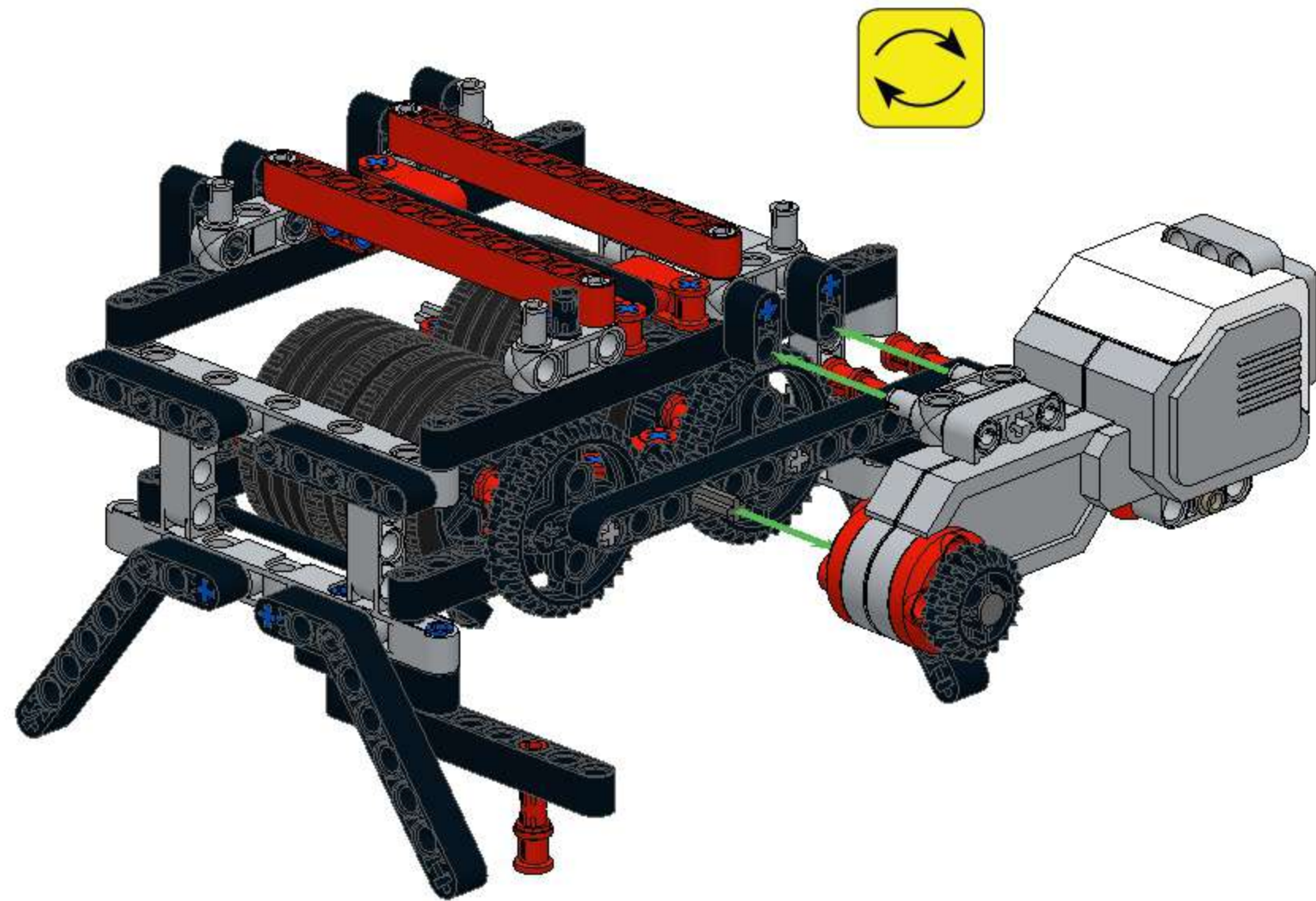
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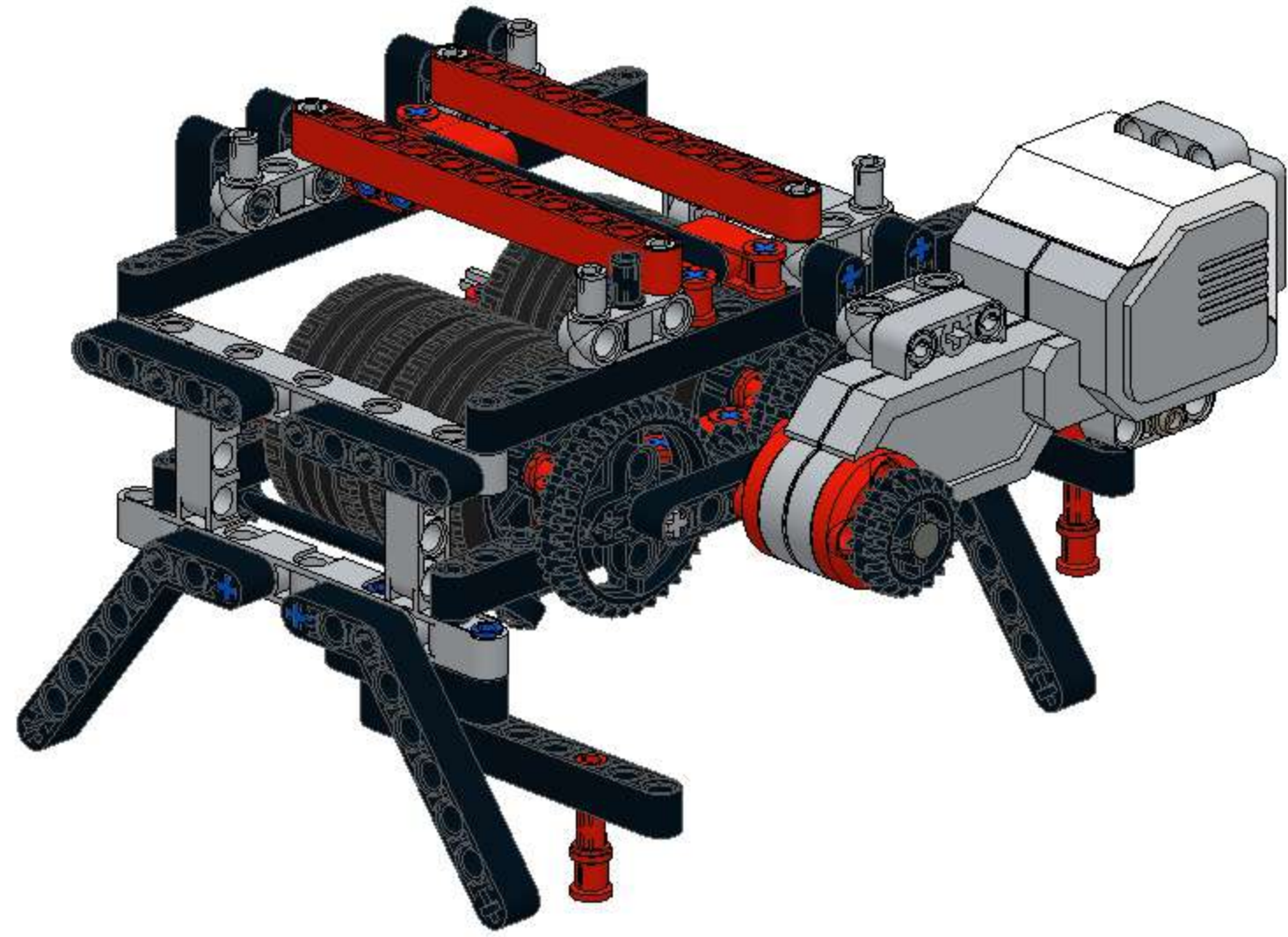
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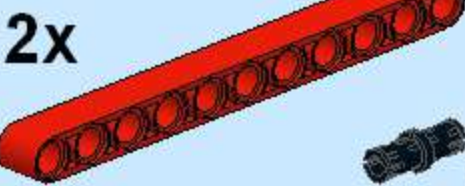

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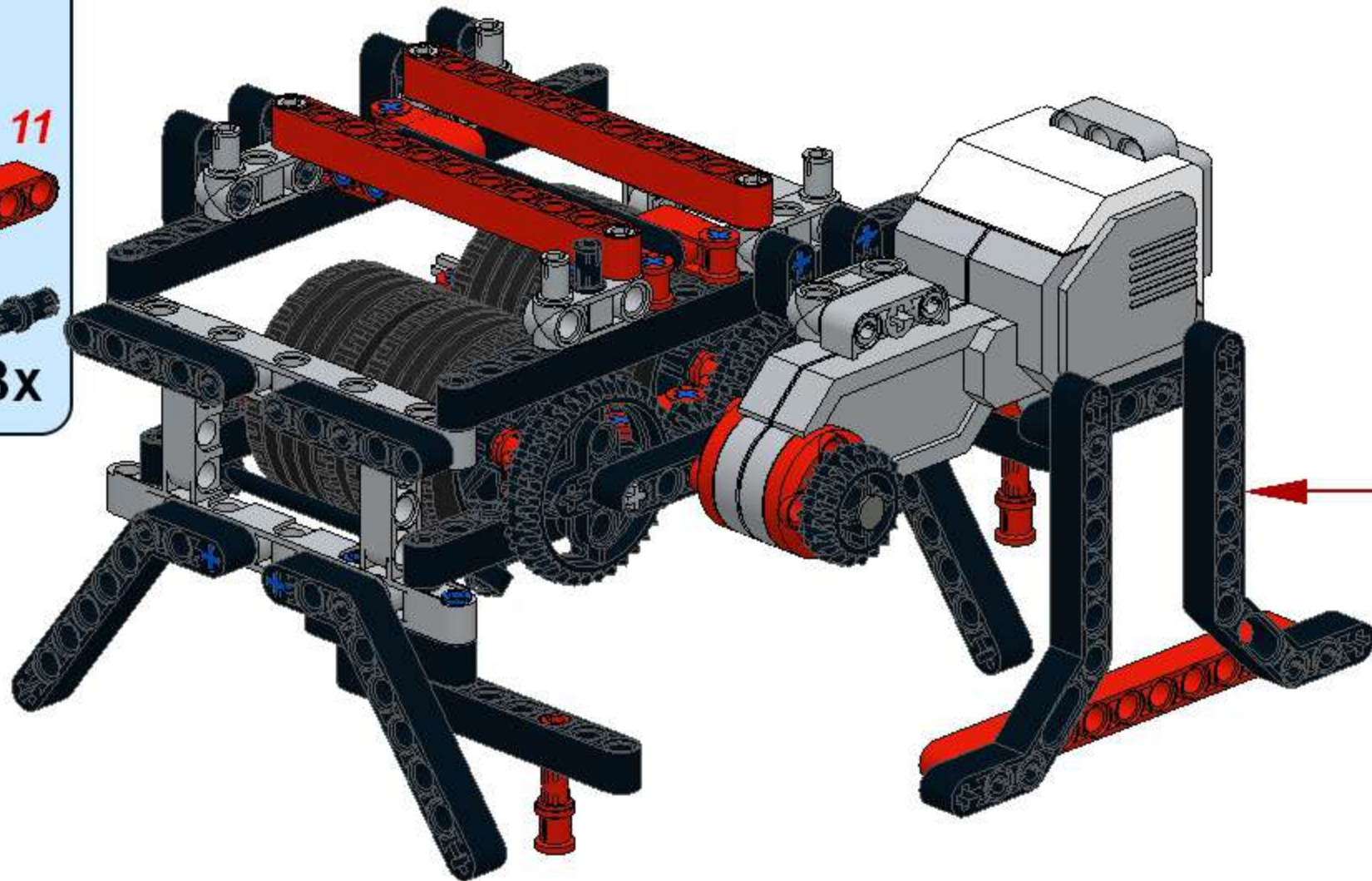



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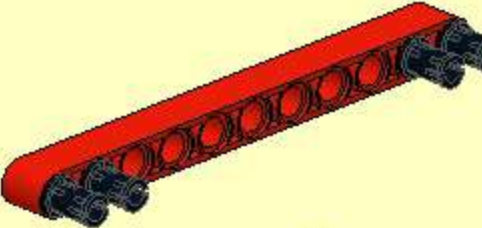
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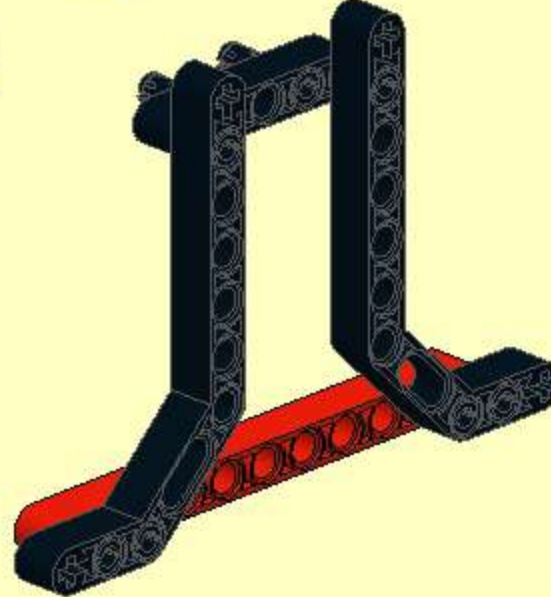
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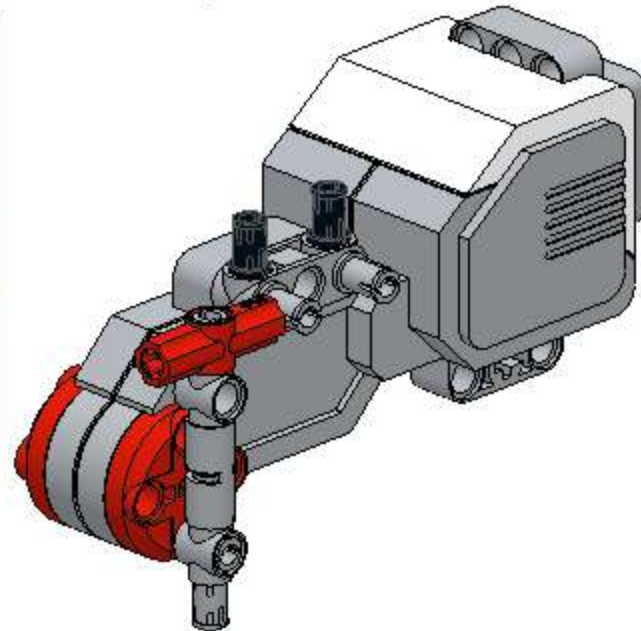
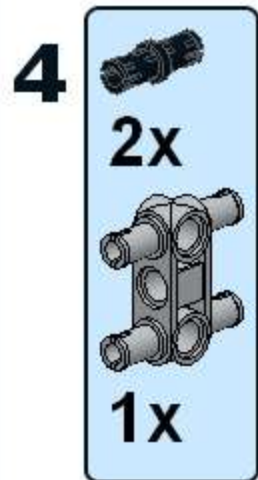
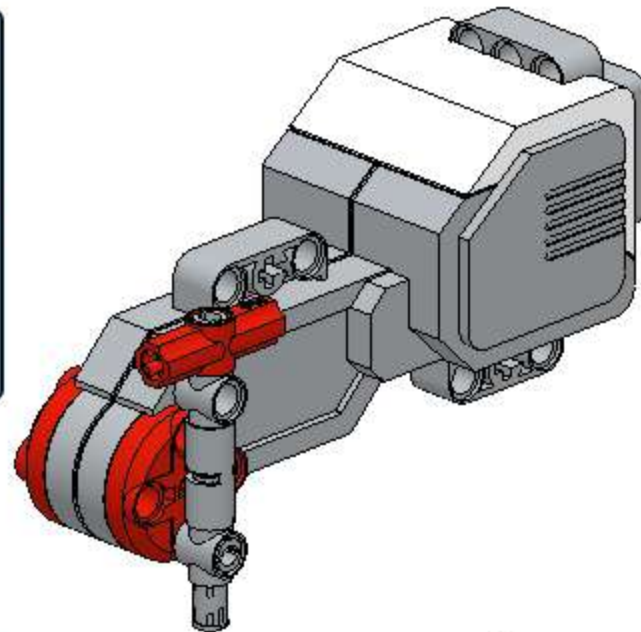
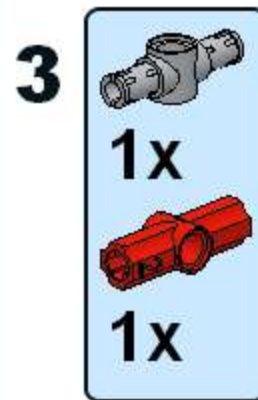
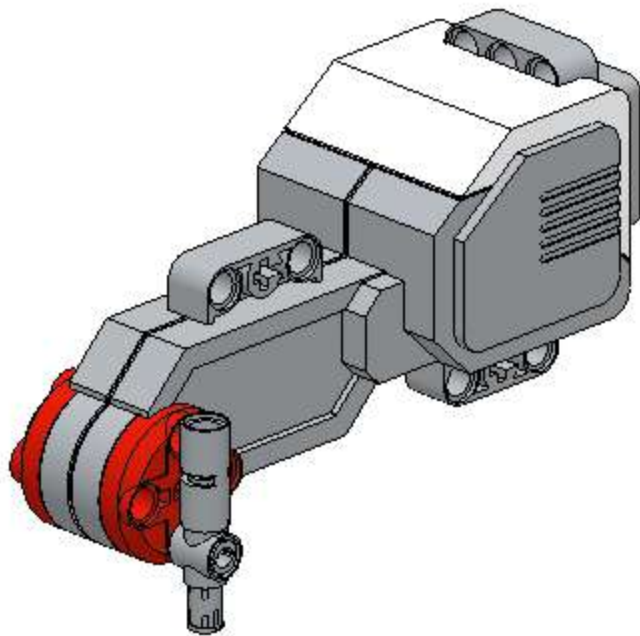
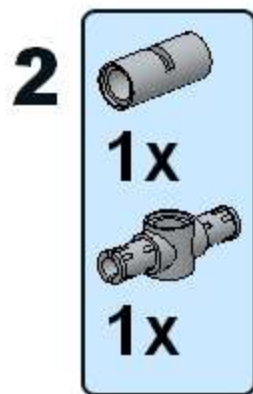
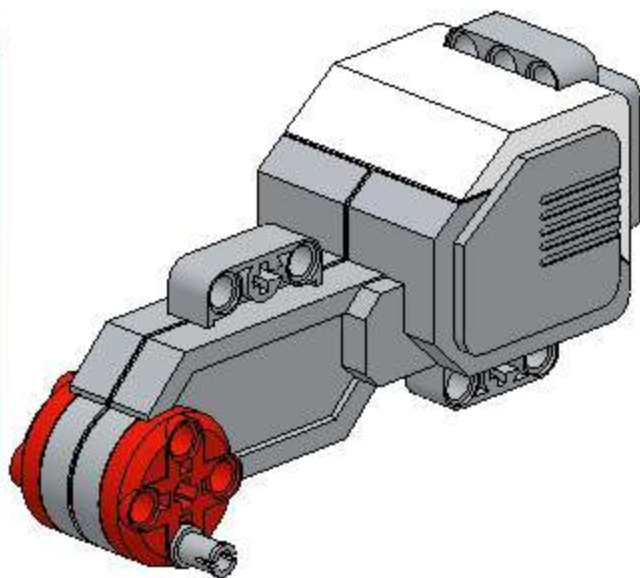
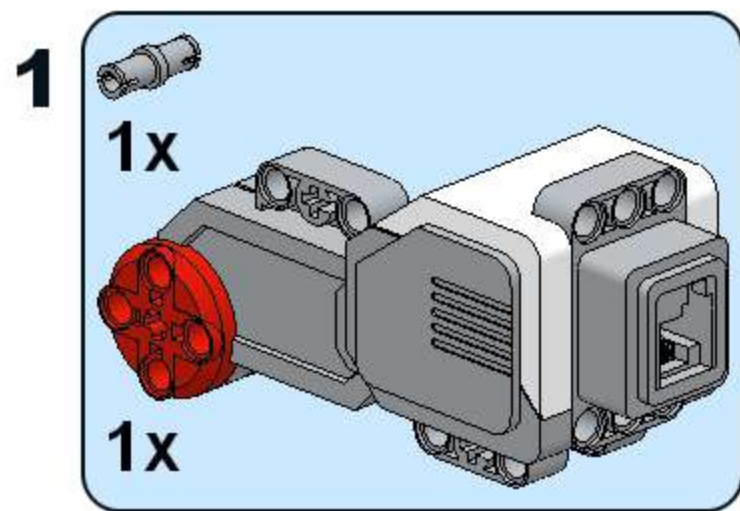


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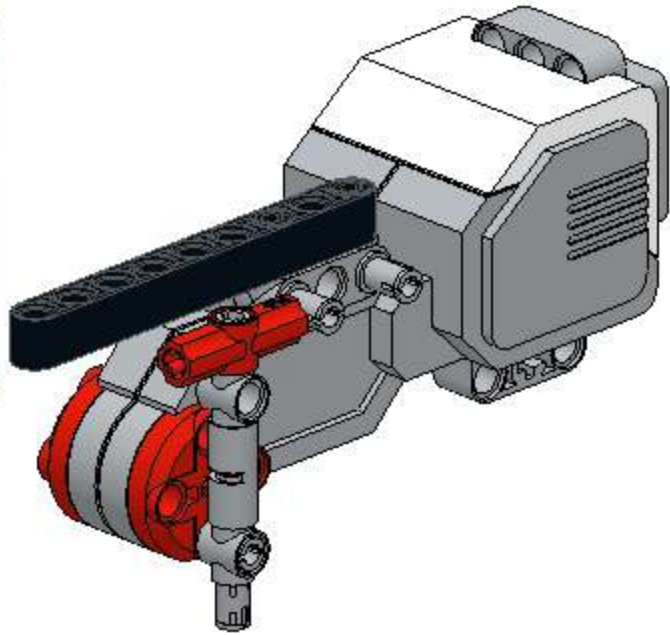
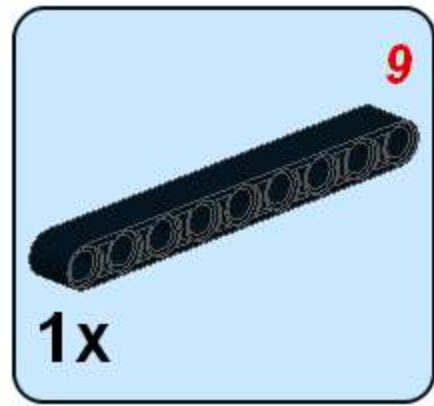
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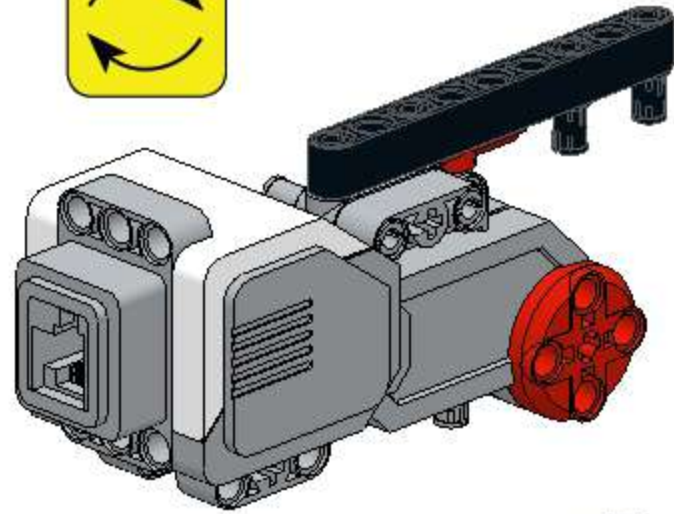




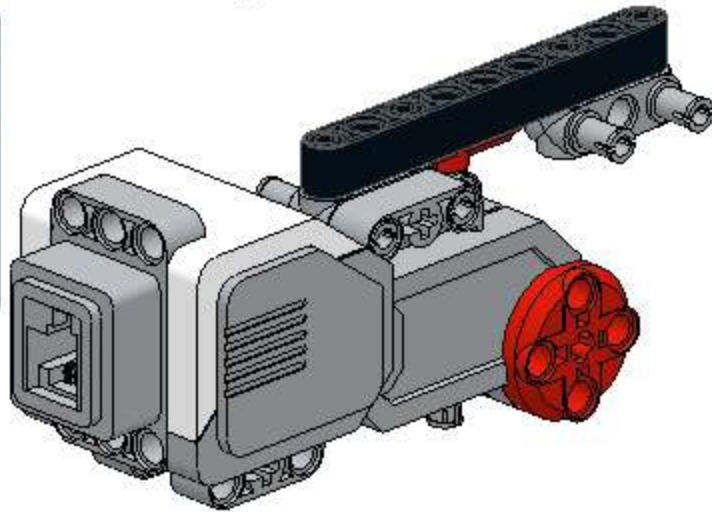
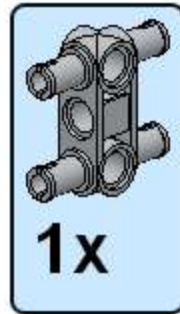
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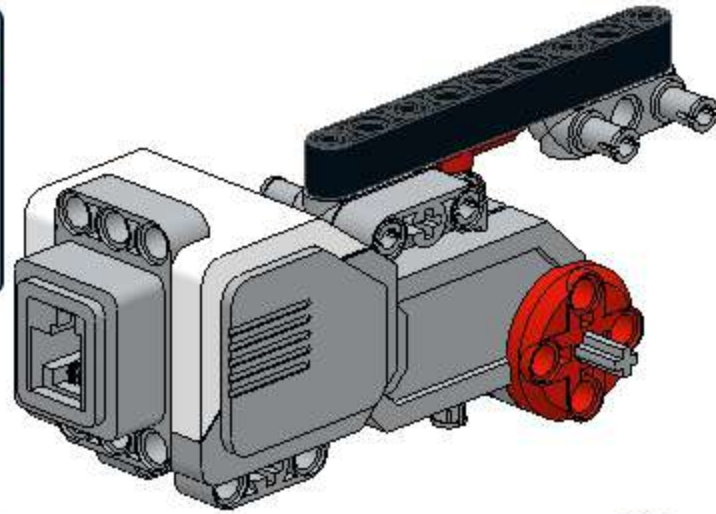
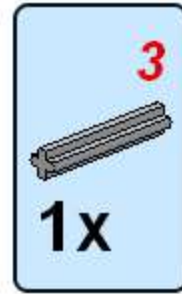
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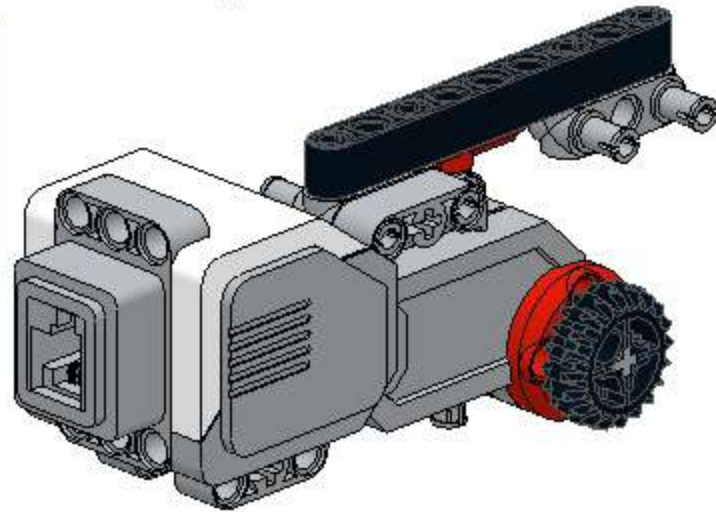
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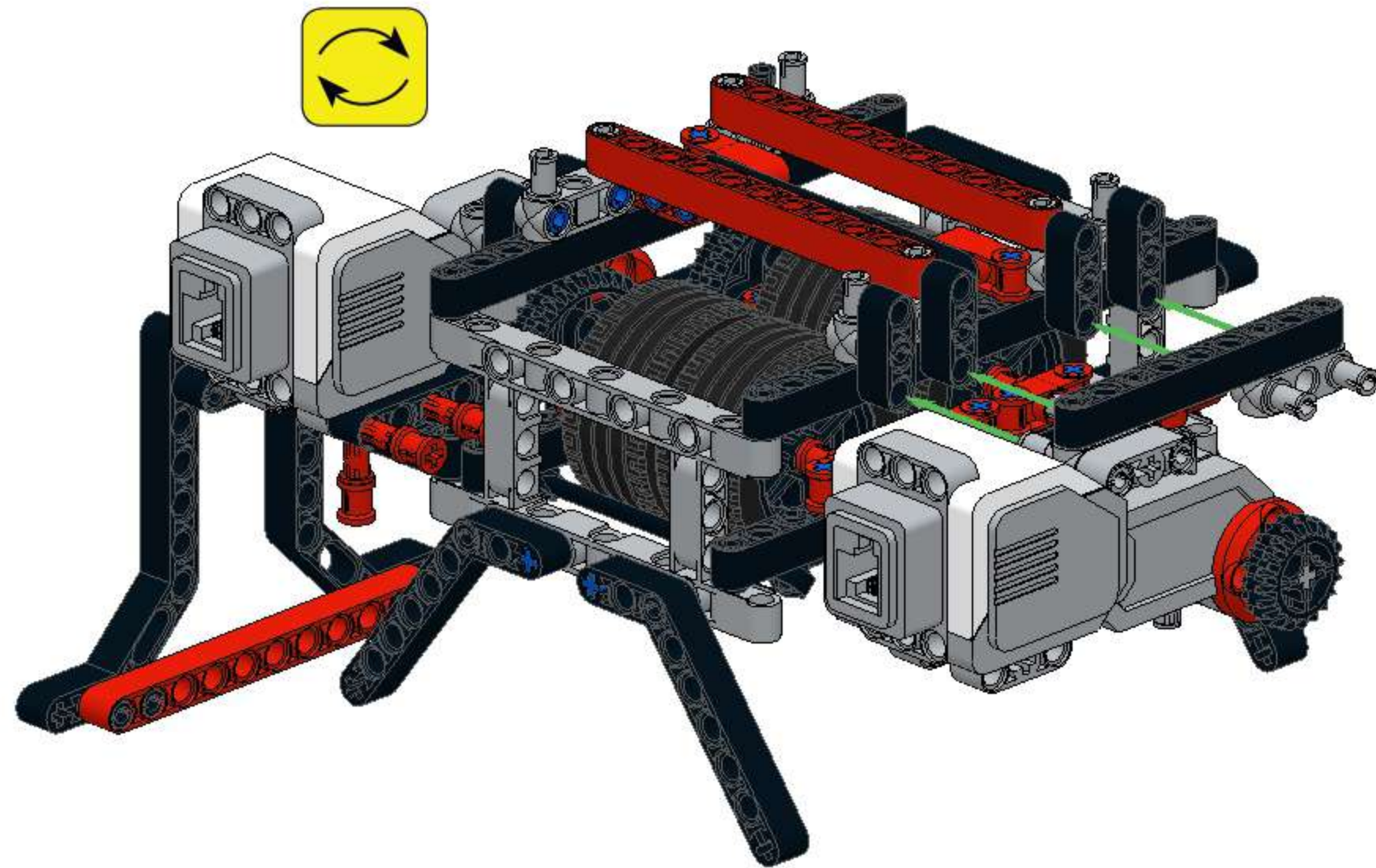
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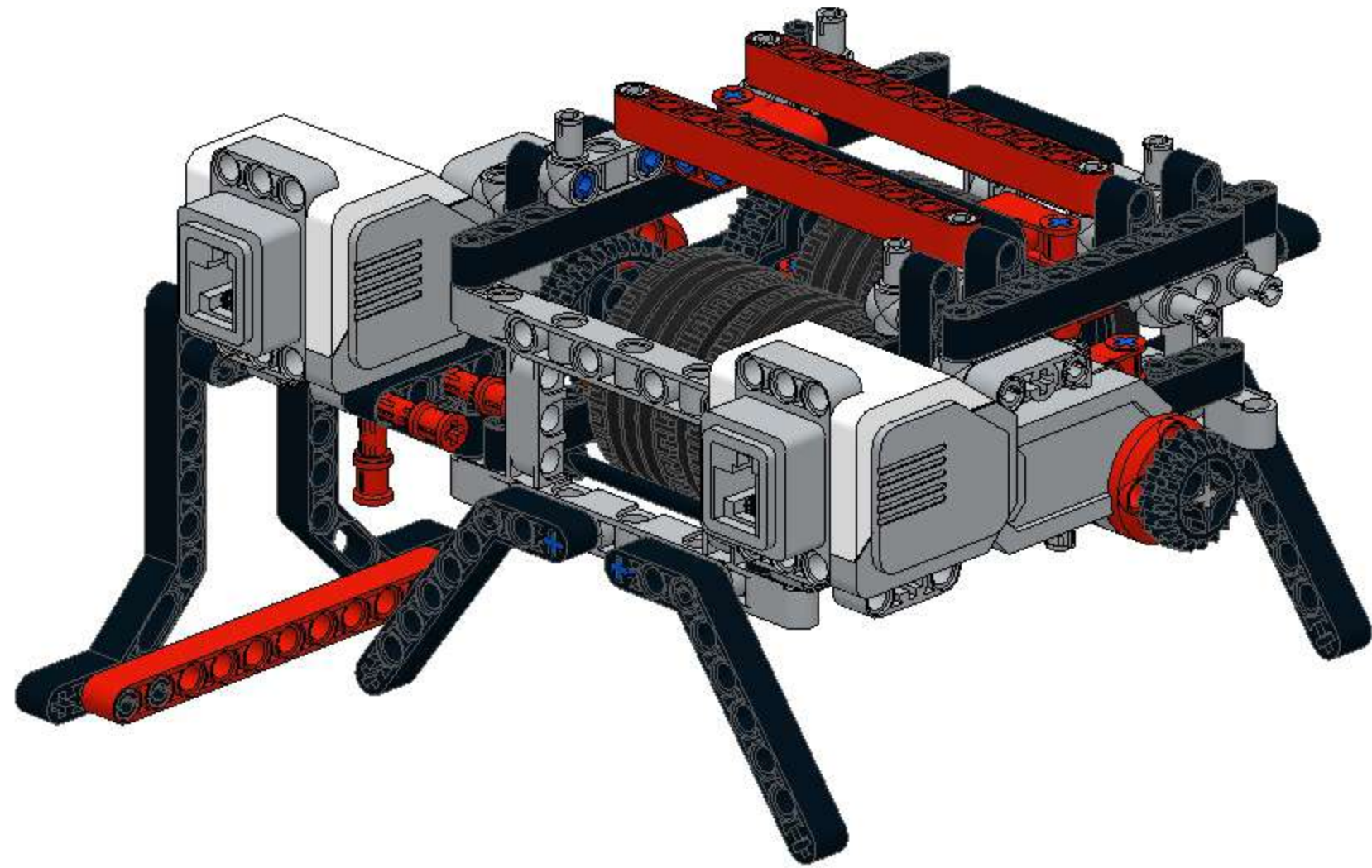
9



25



26



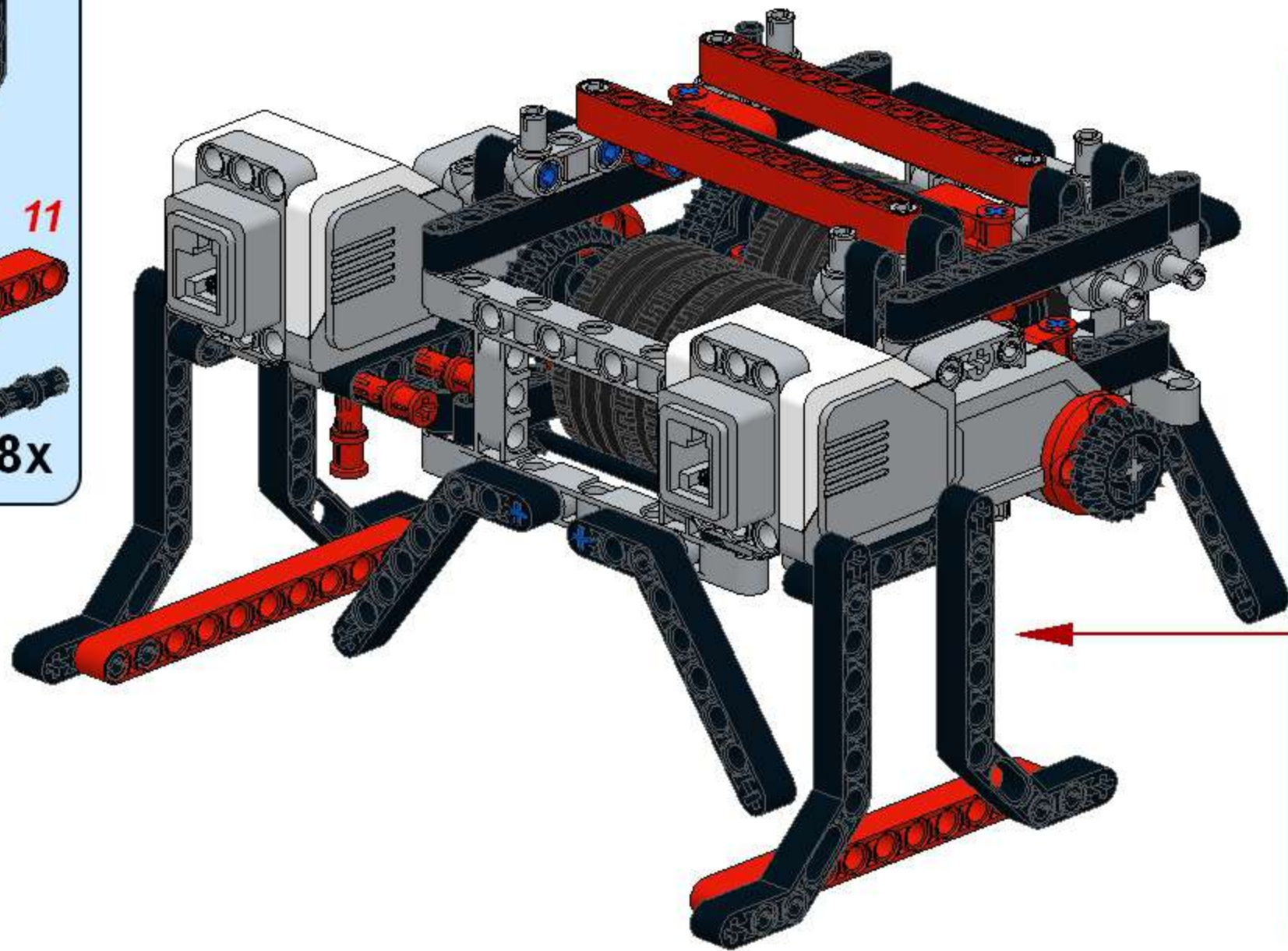
# 27

1x <sup>5</sup>

2x <sup>11</sup>

1x

8x

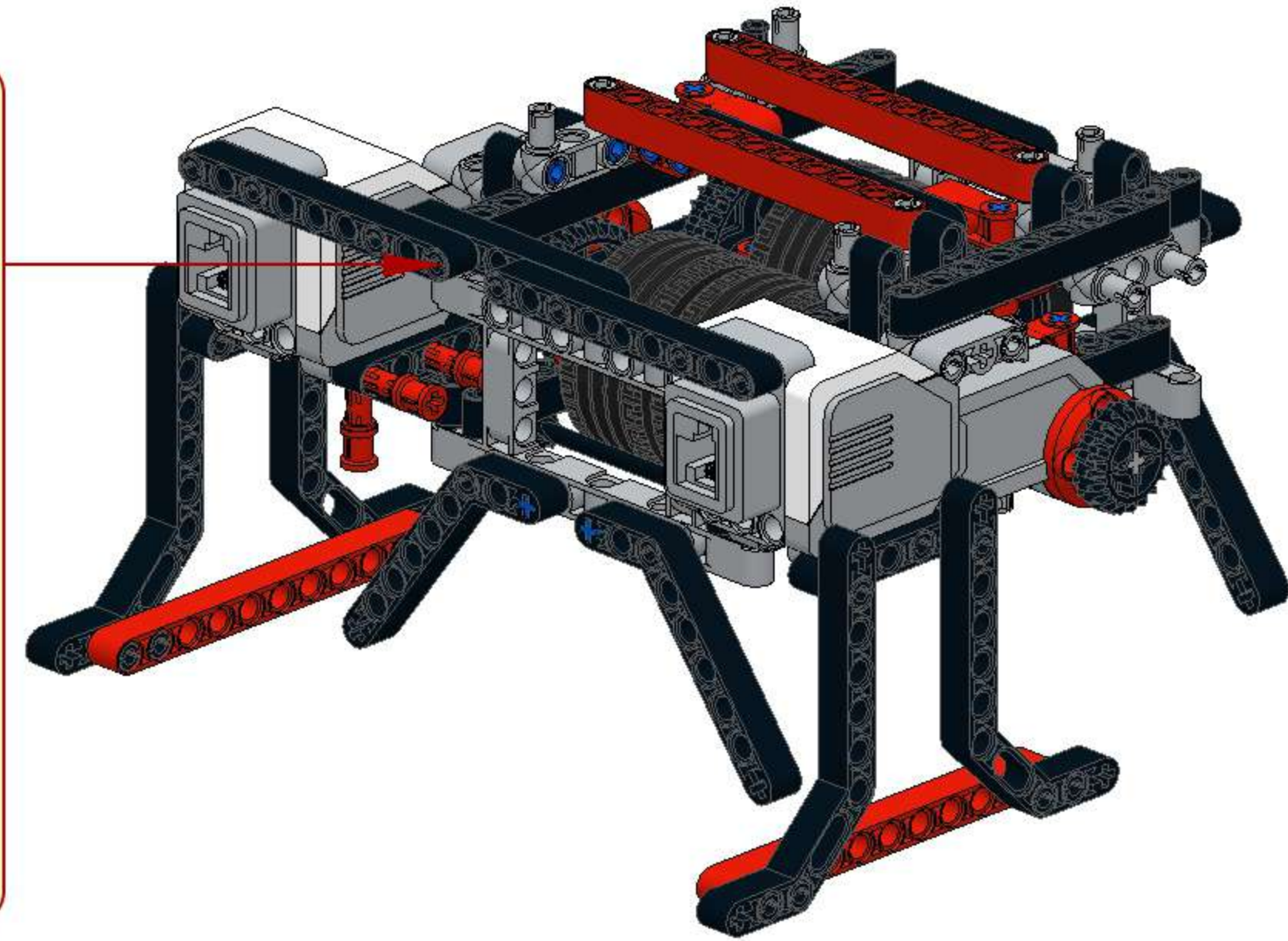
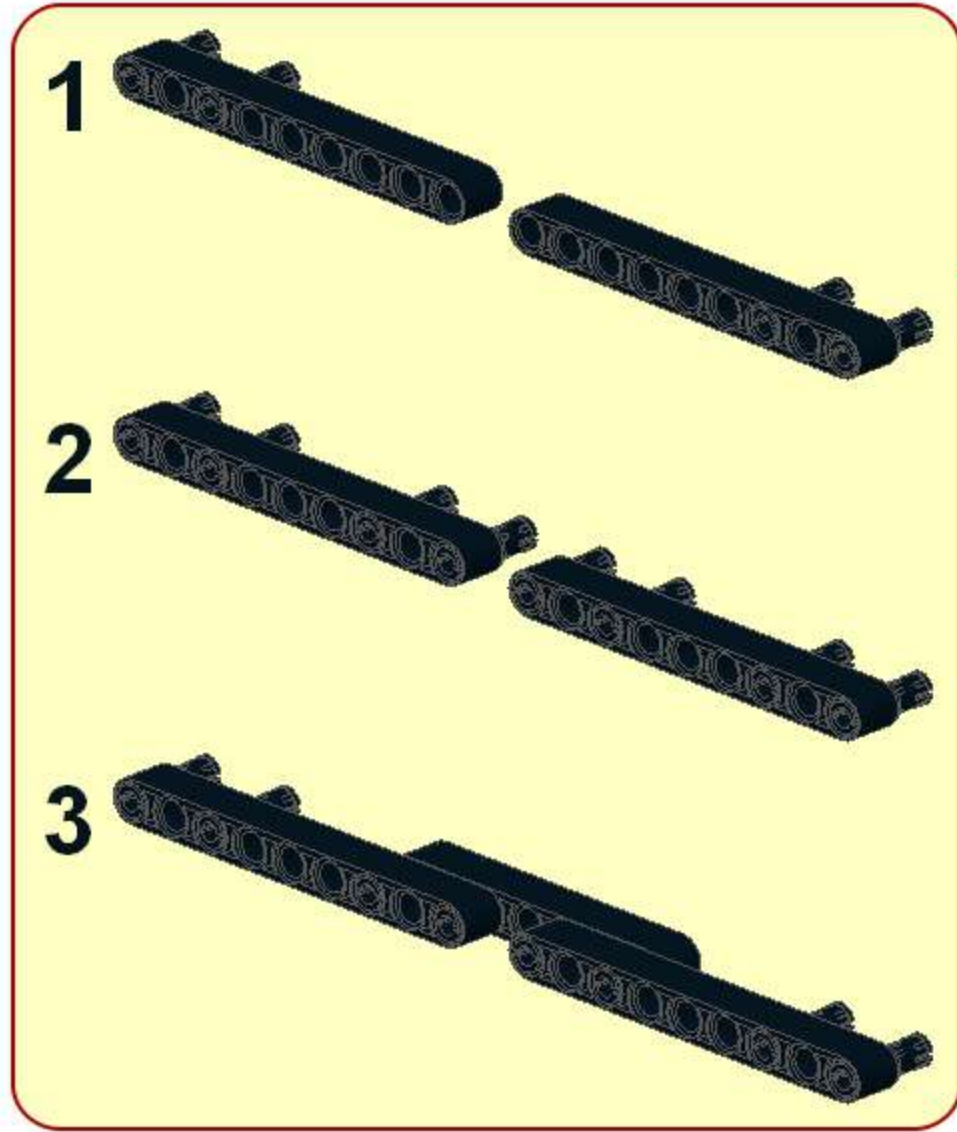
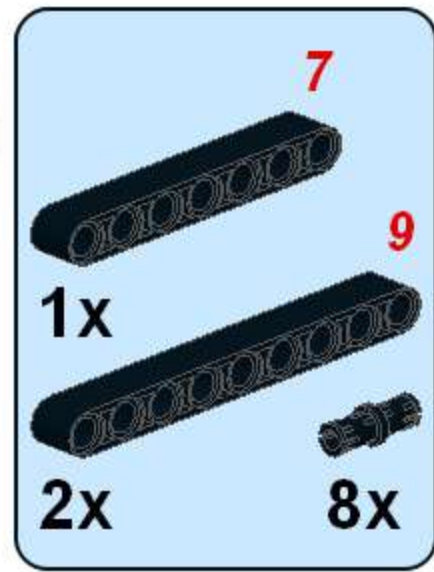


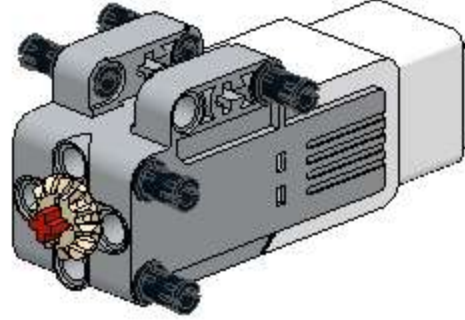
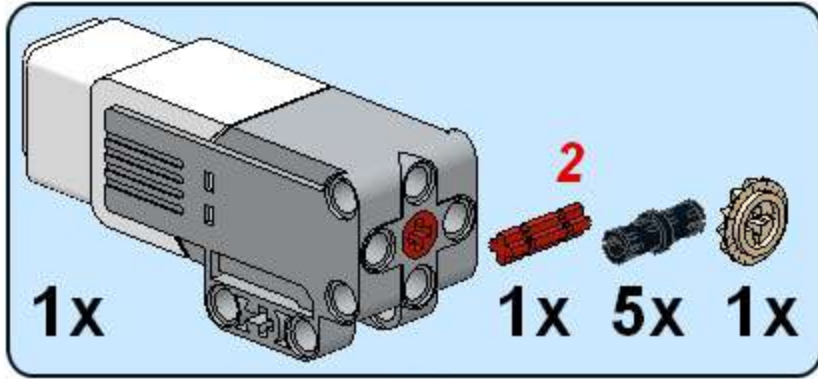
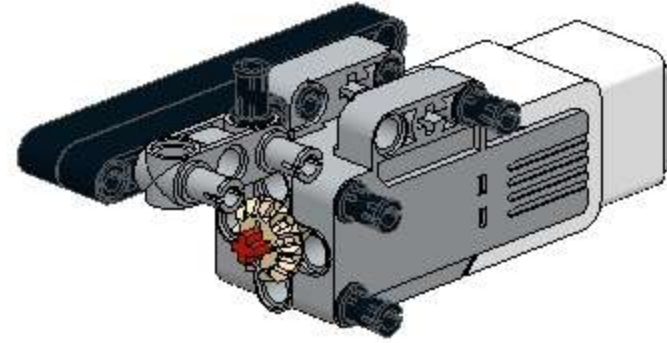
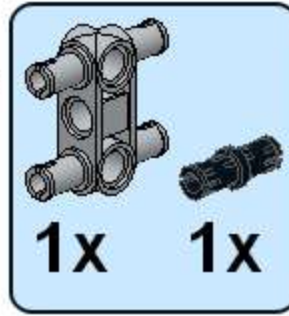
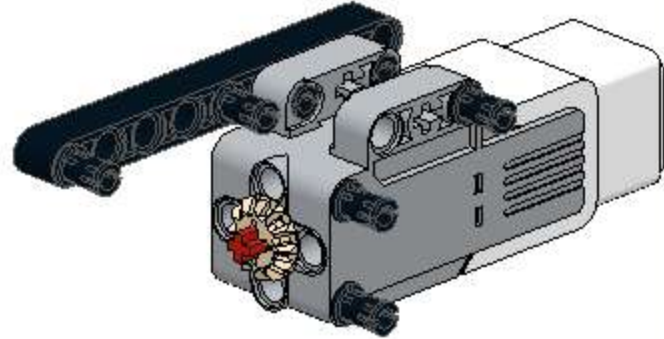
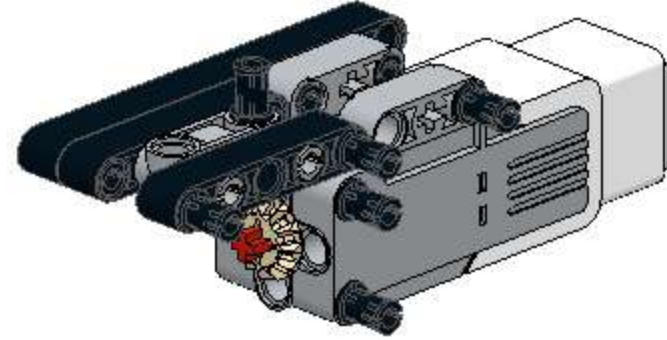
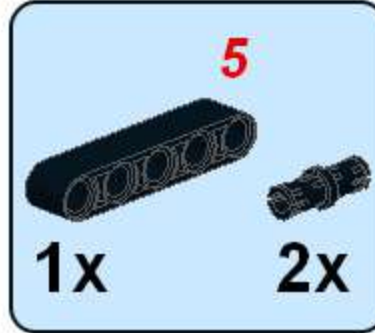
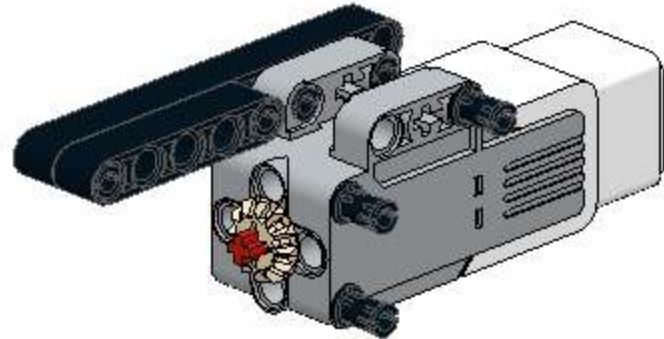
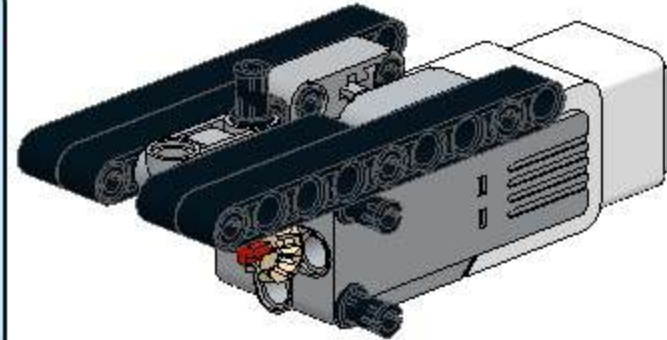
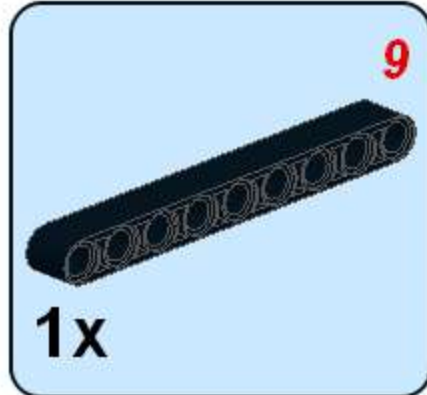
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2

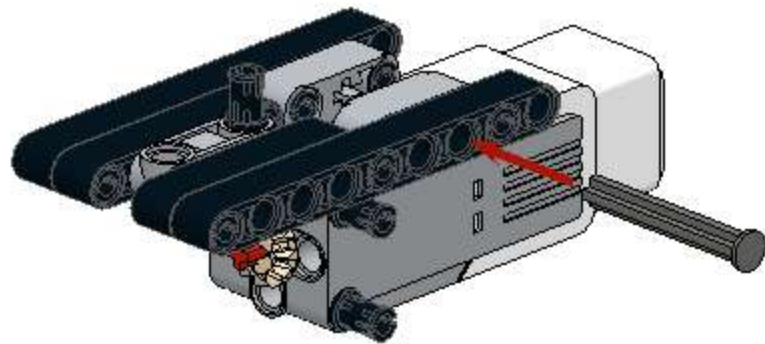
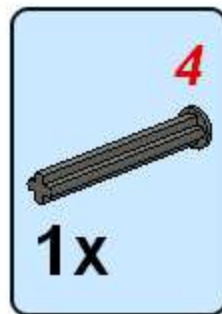
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# 28

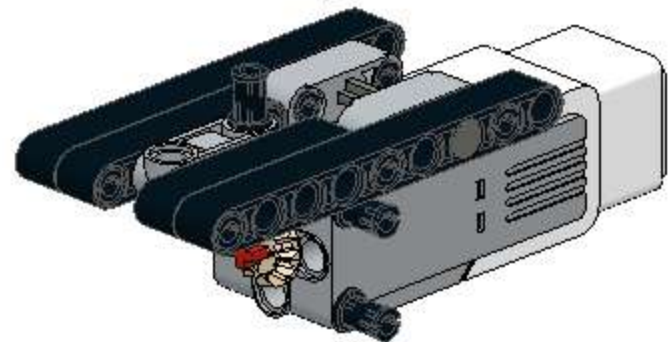


**1****4****2****5****3****6**

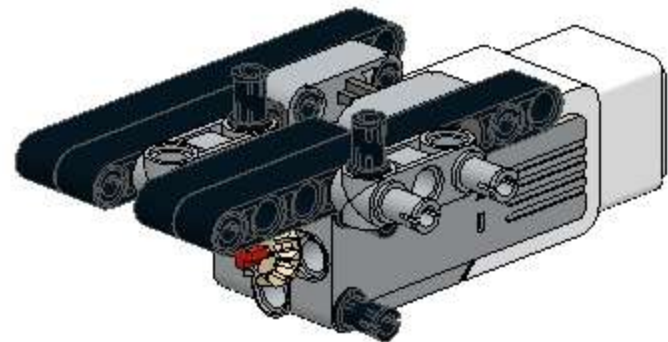
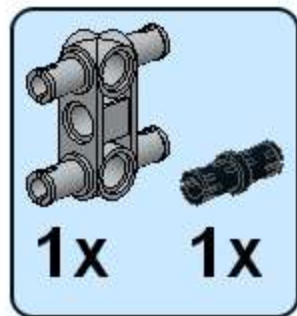
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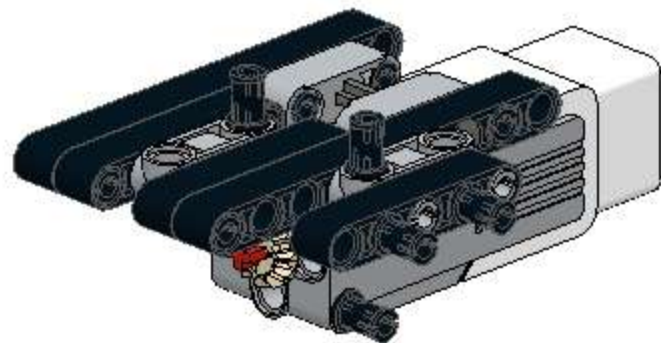
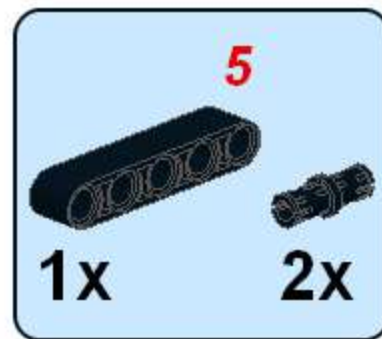
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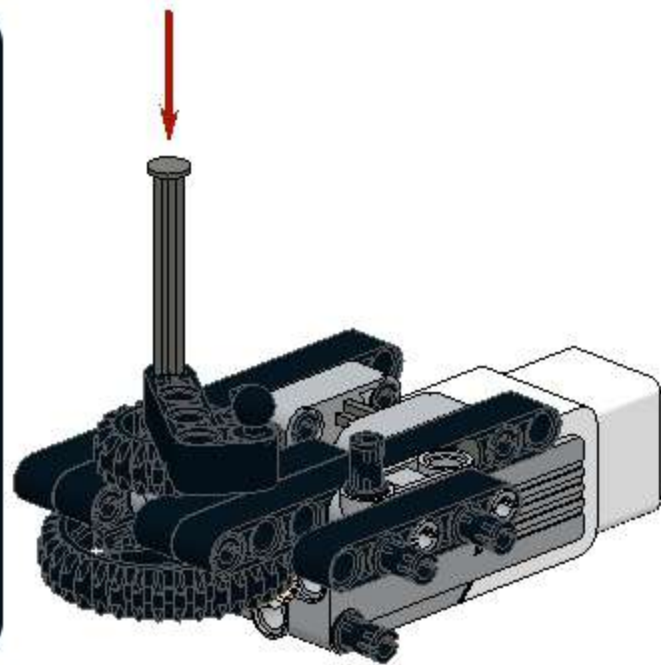
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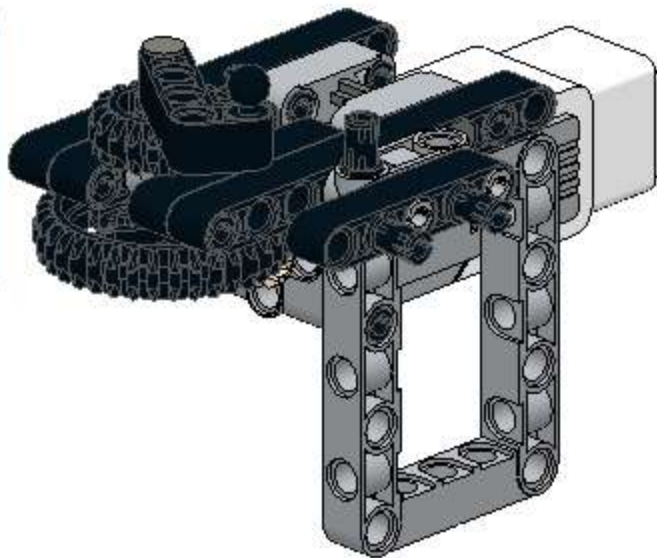
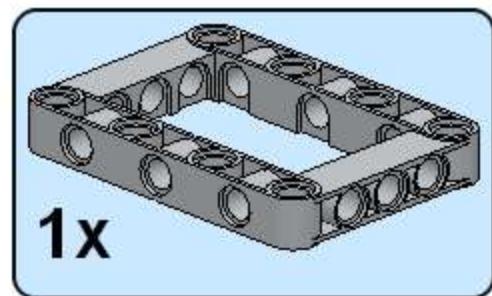
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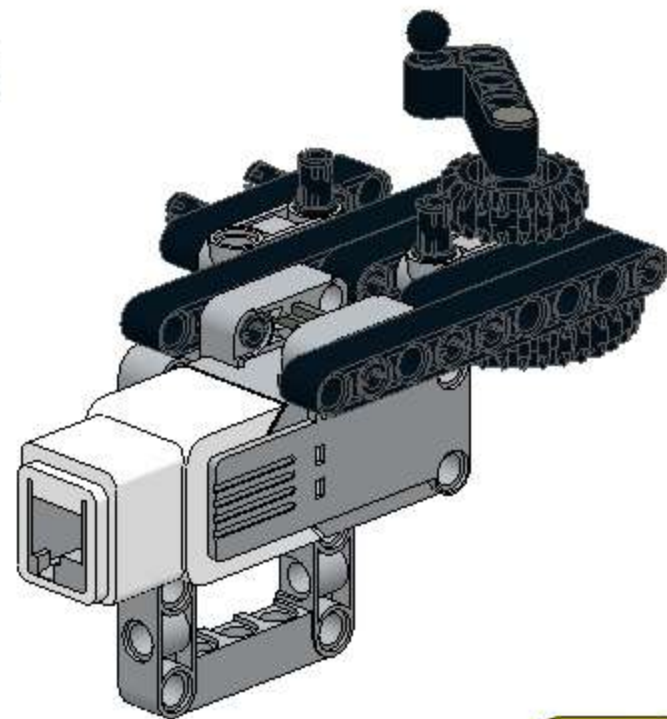
11



**12**

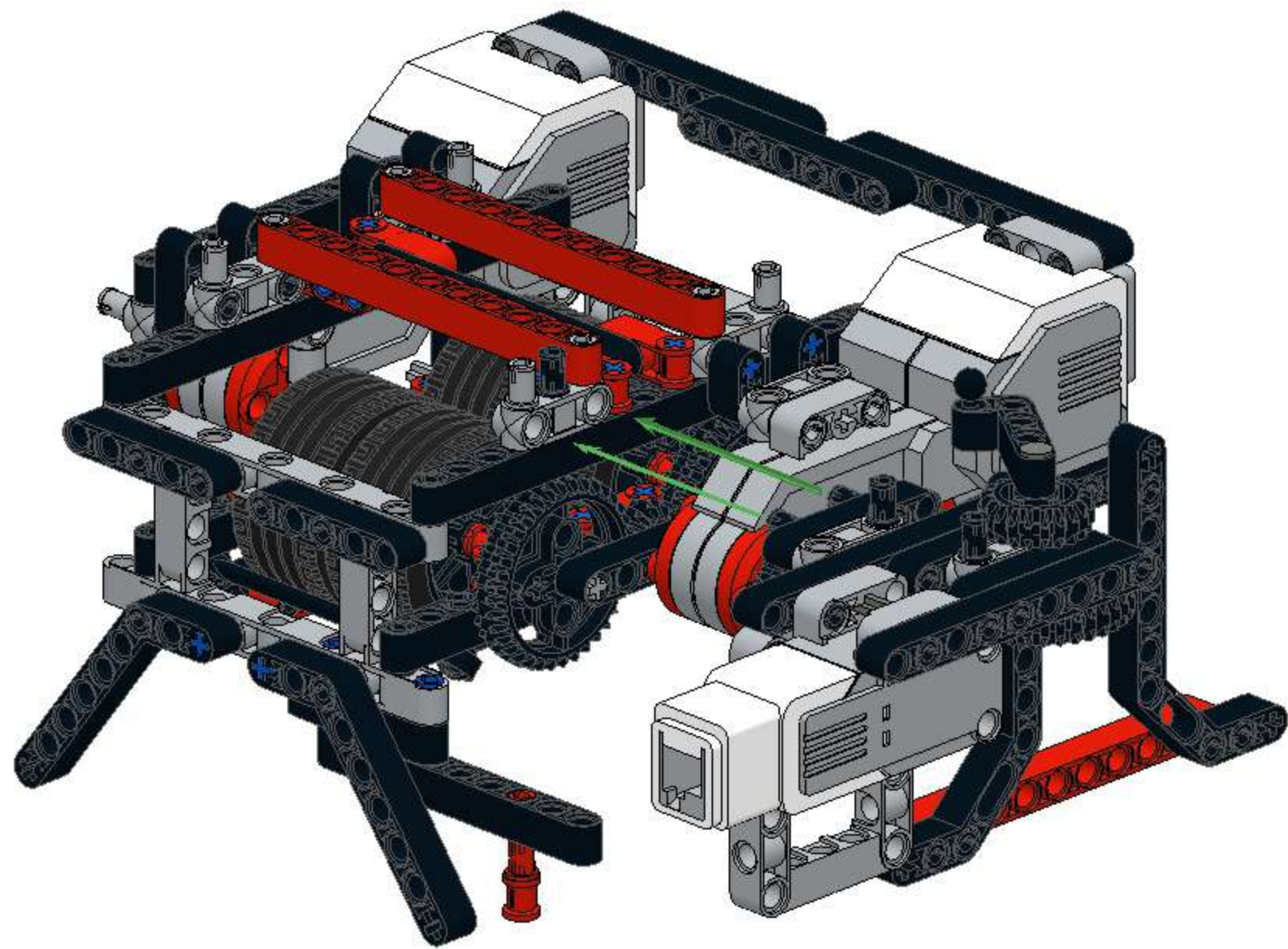


**13**

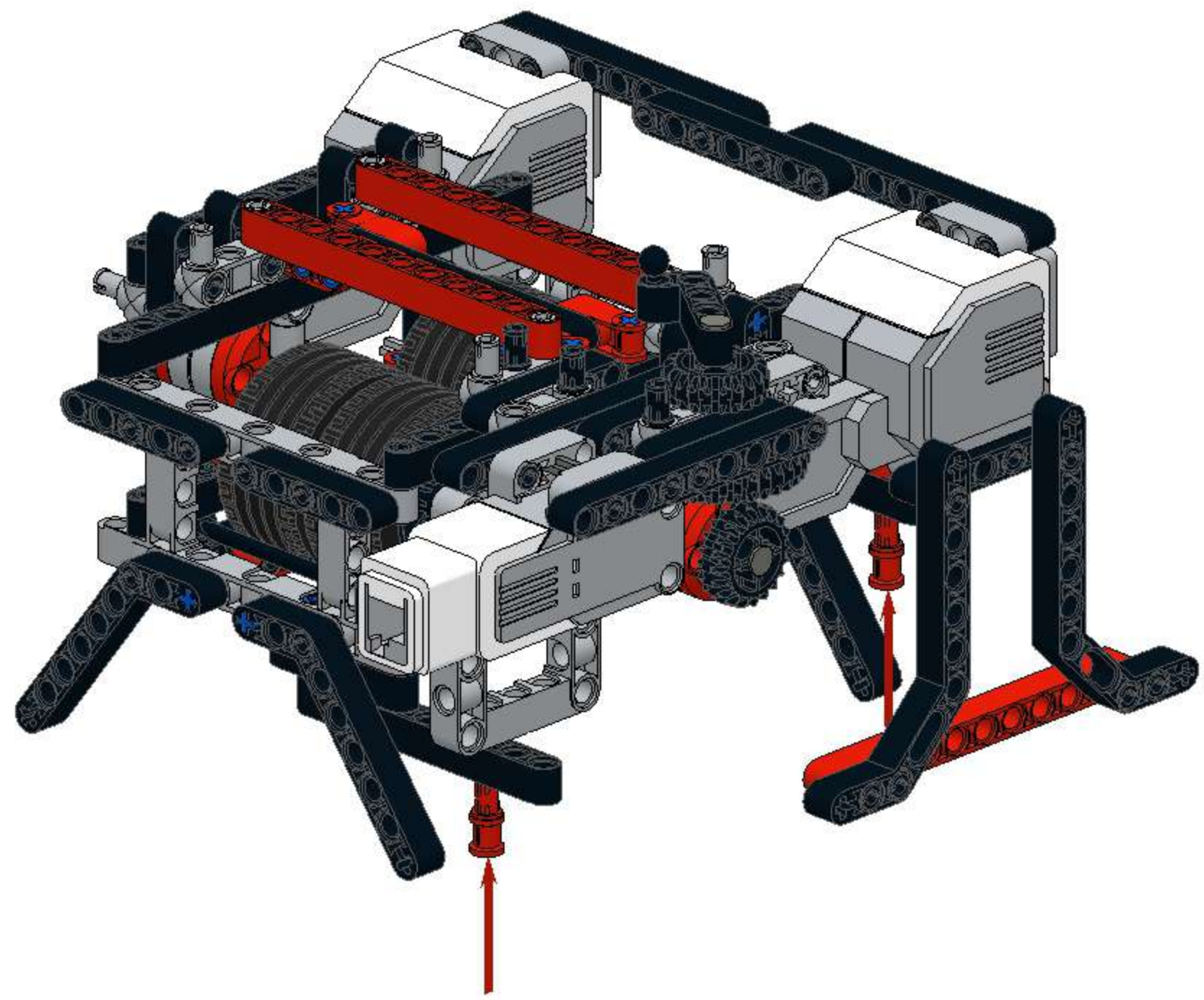




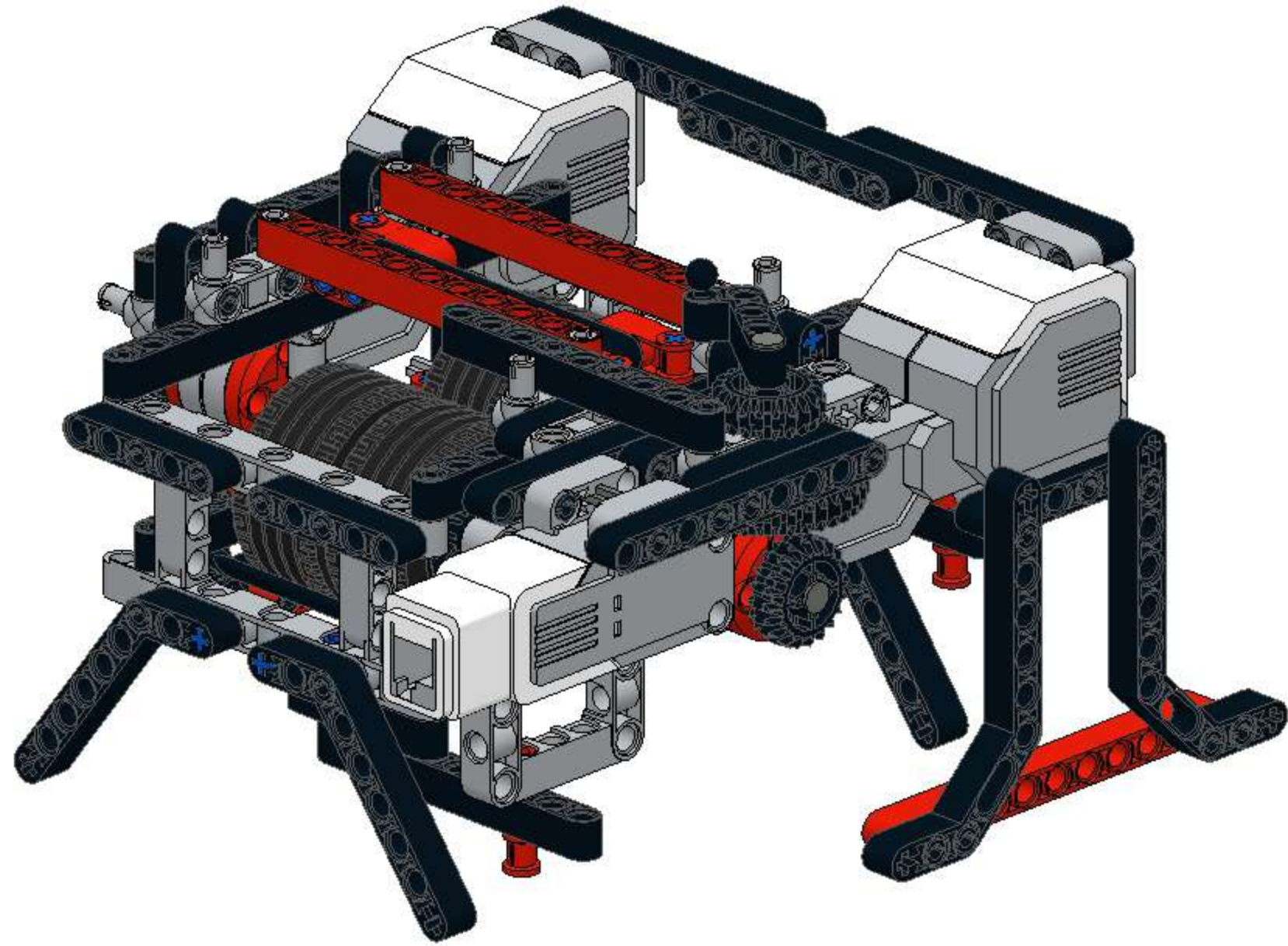
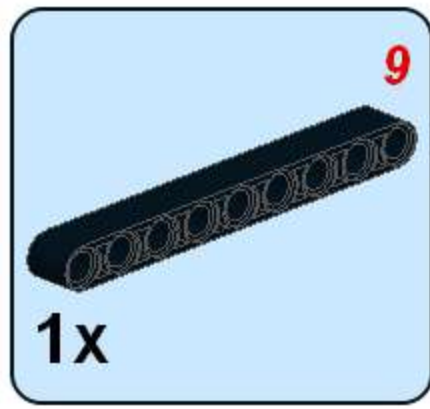
29



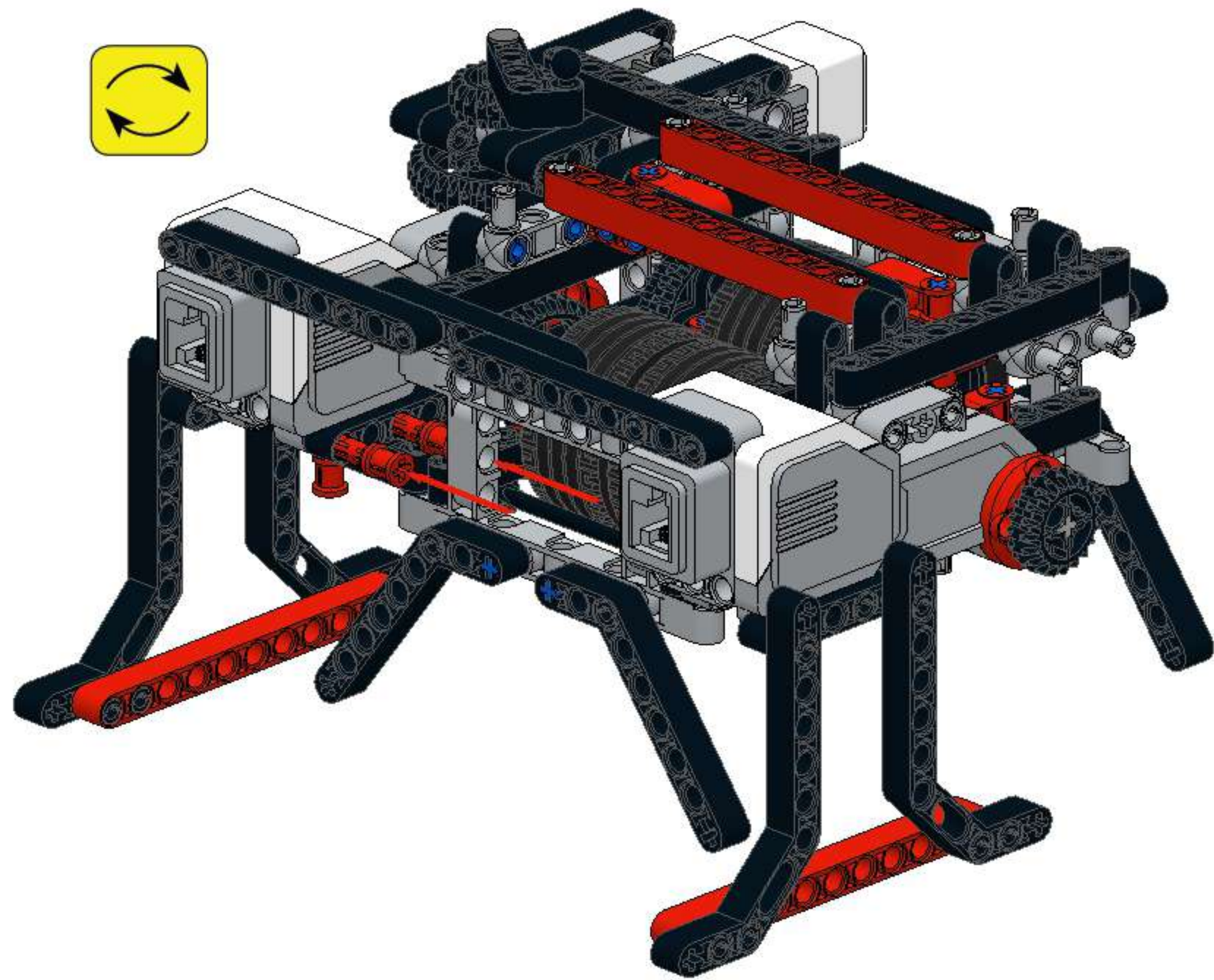
30



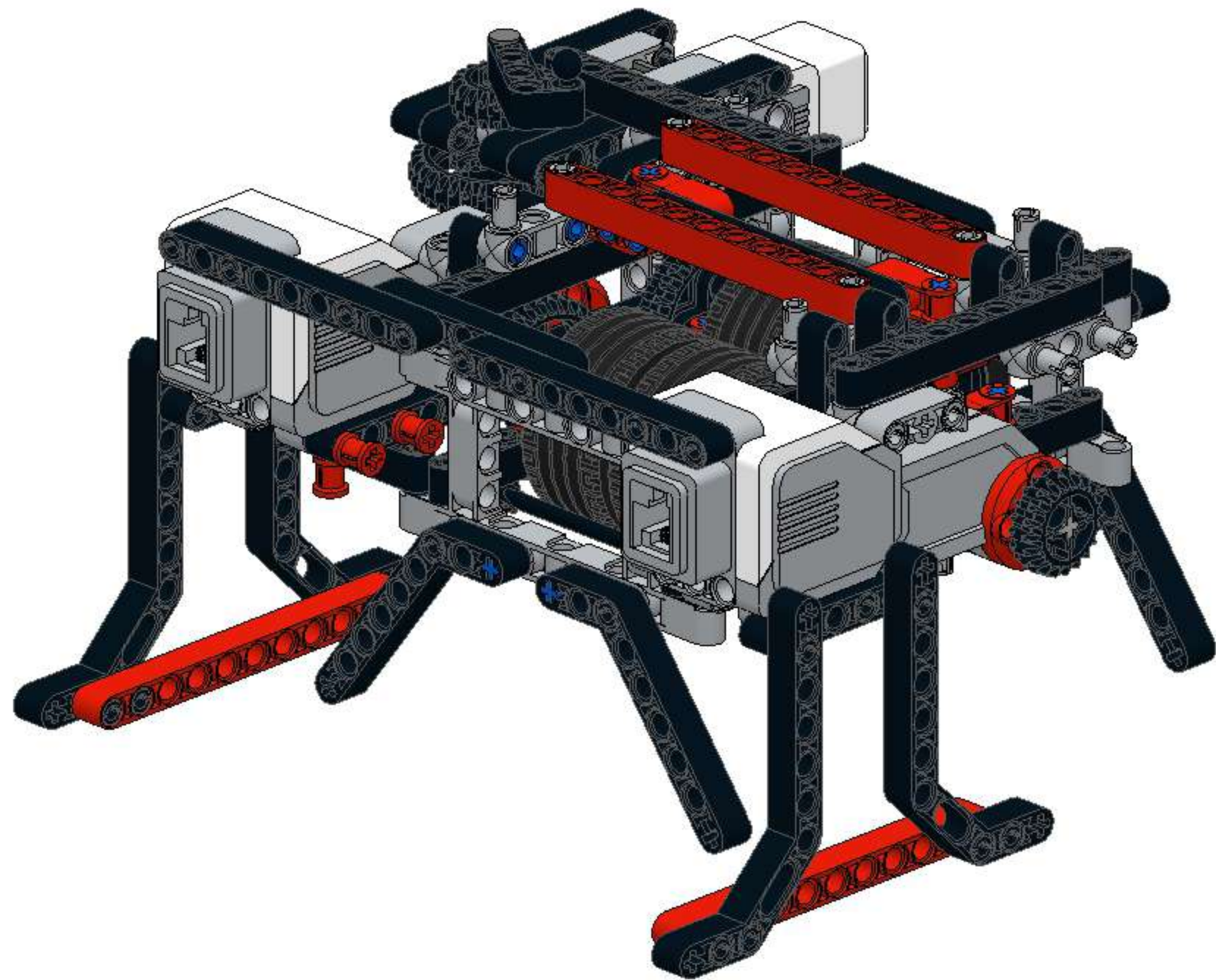
# 31



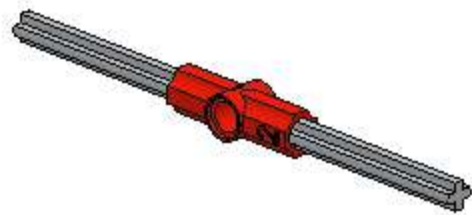
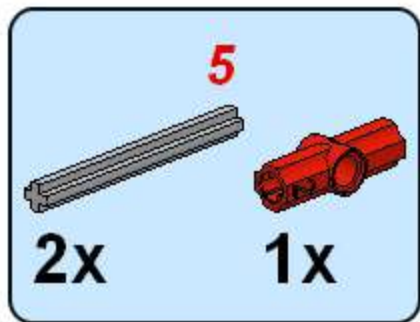
32



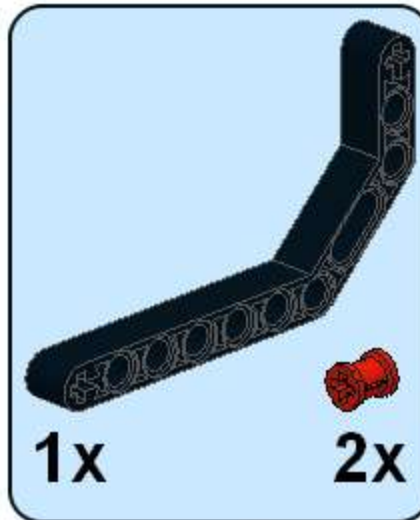
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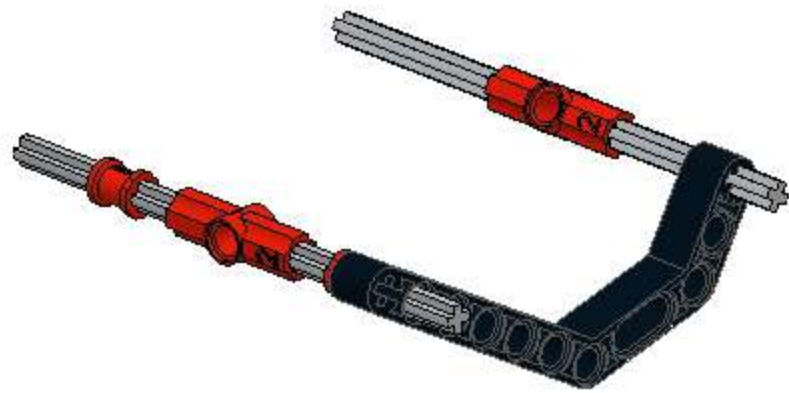
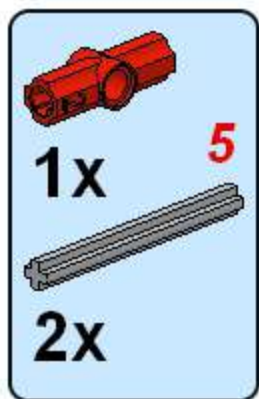
**1**



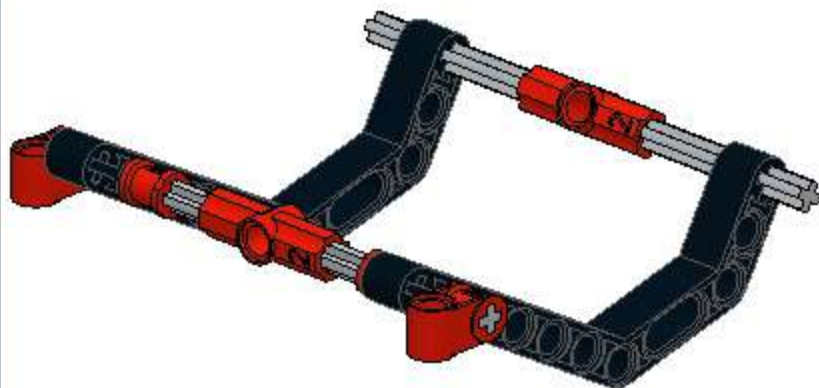
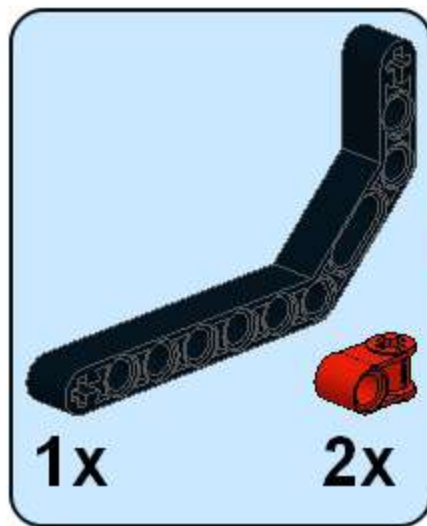
**2**



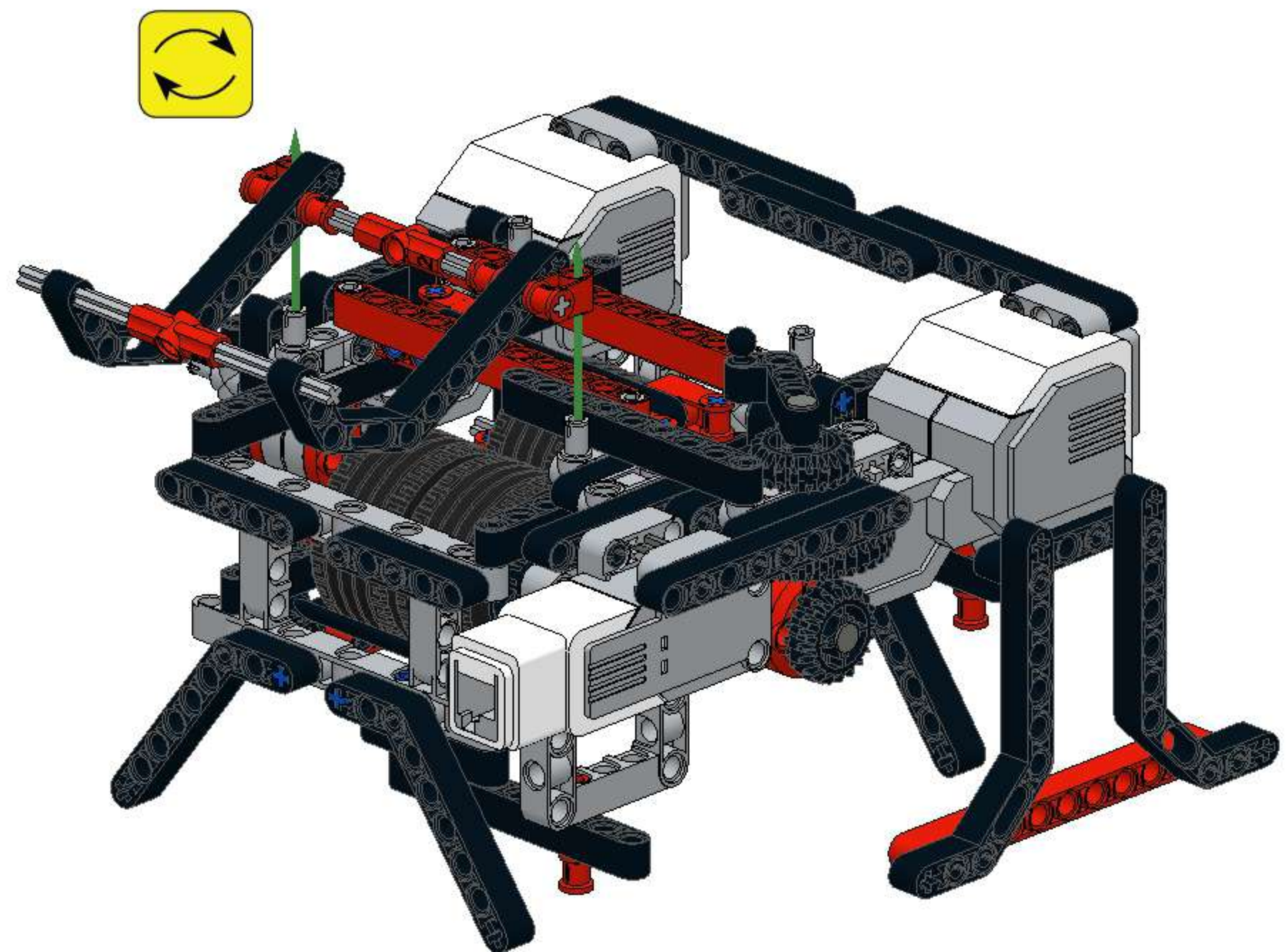
**3**



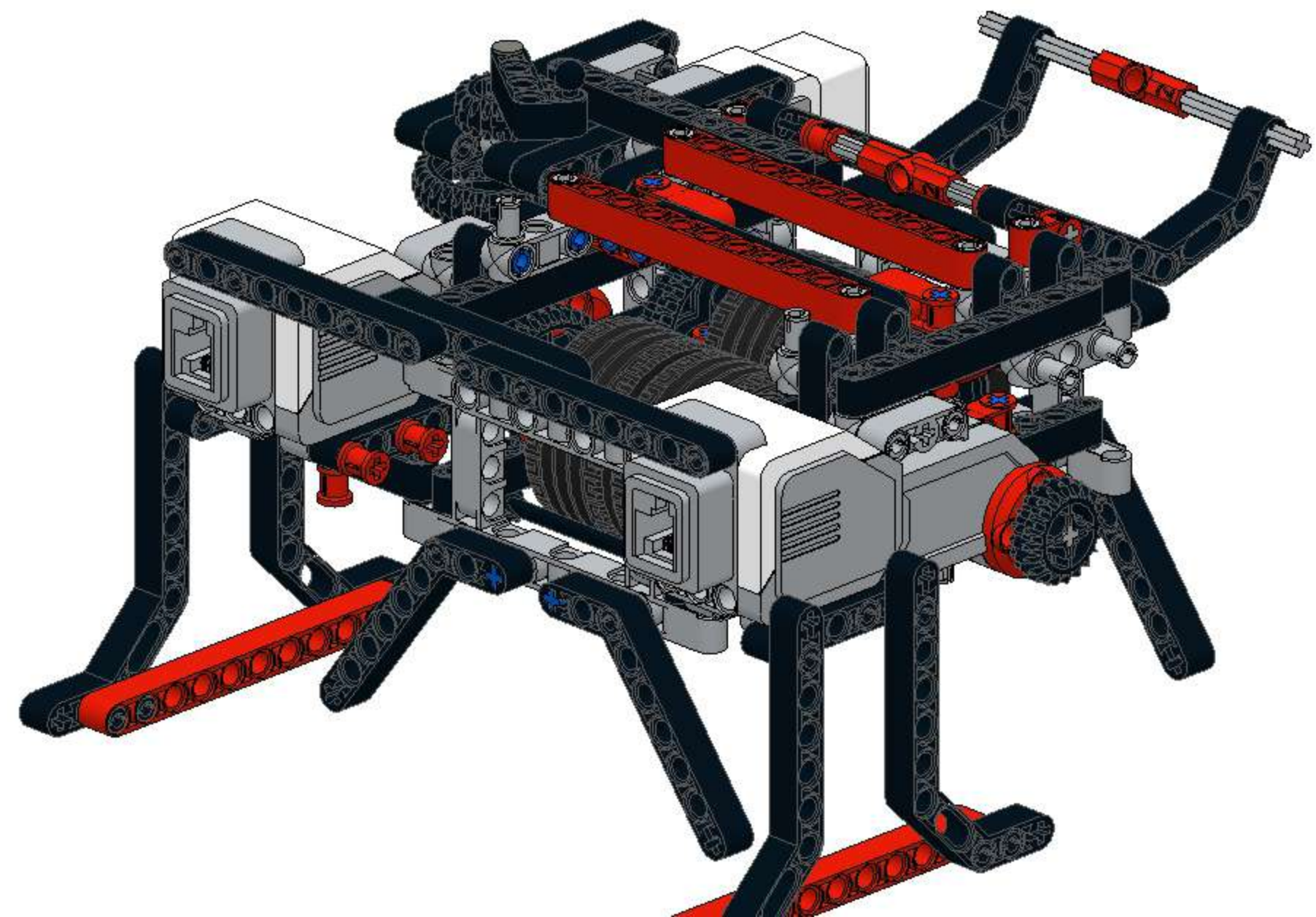
**4**



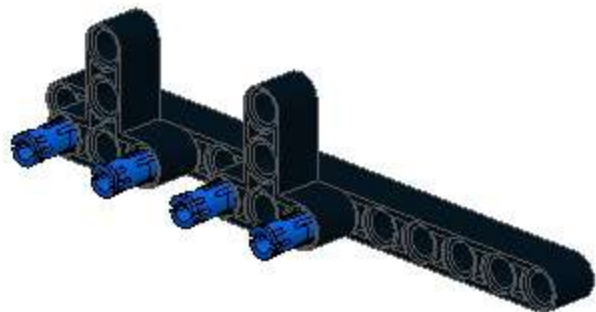
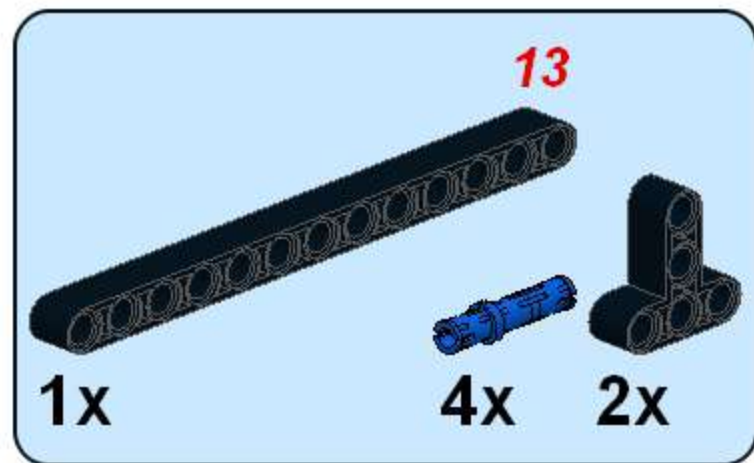
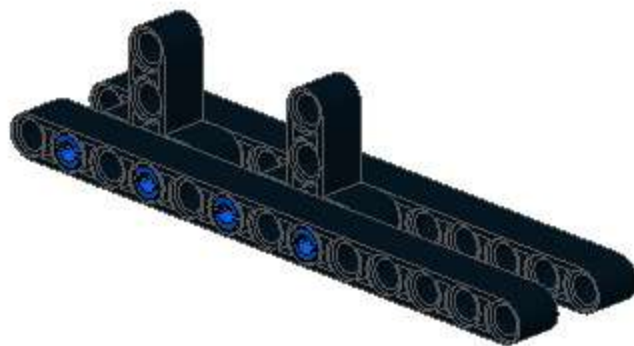
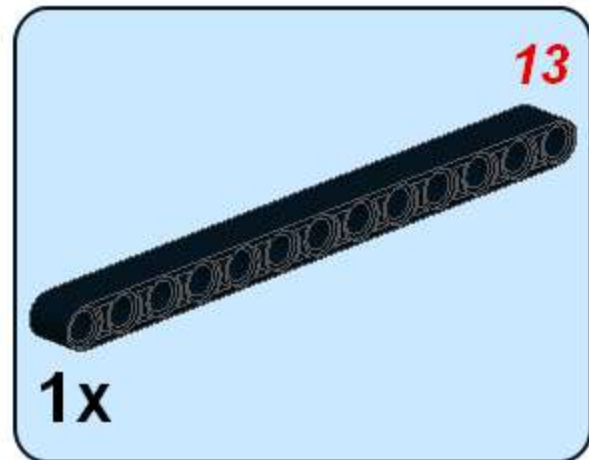
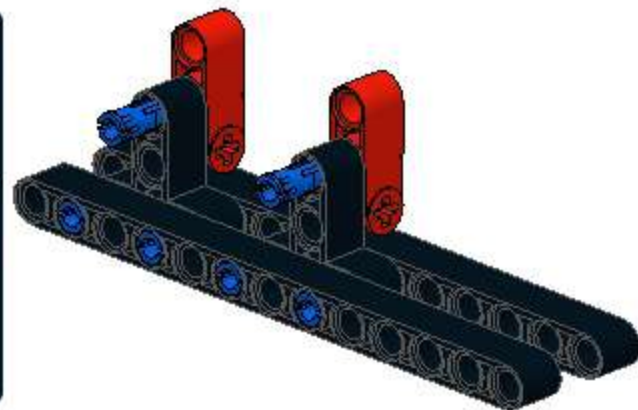
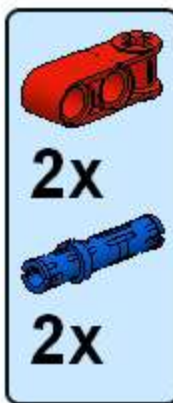
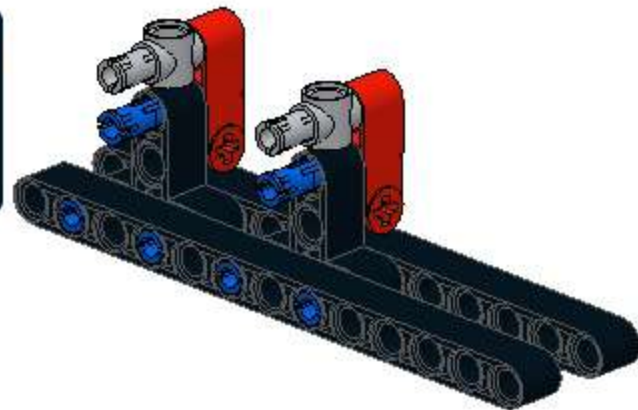
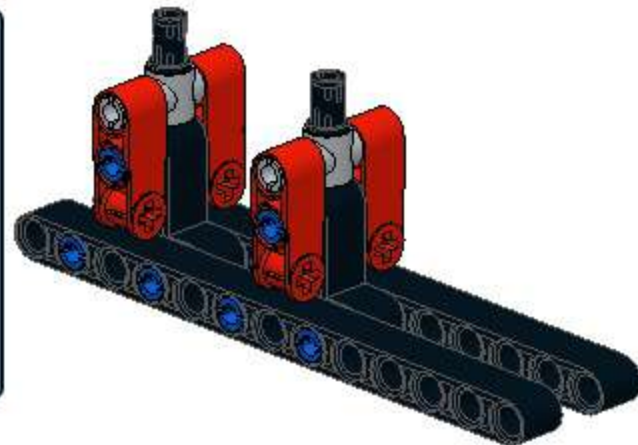
34



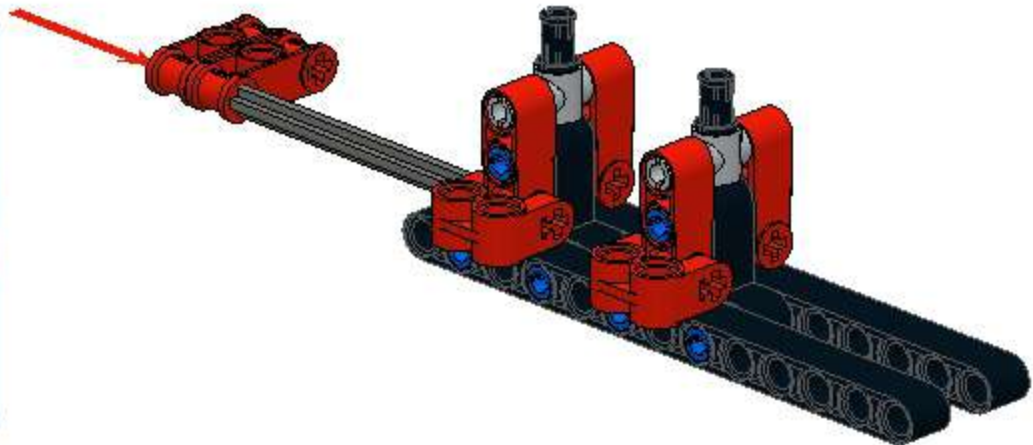
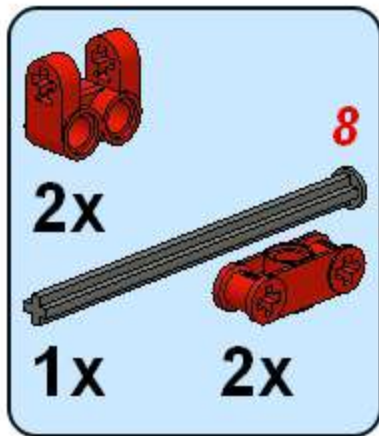
35



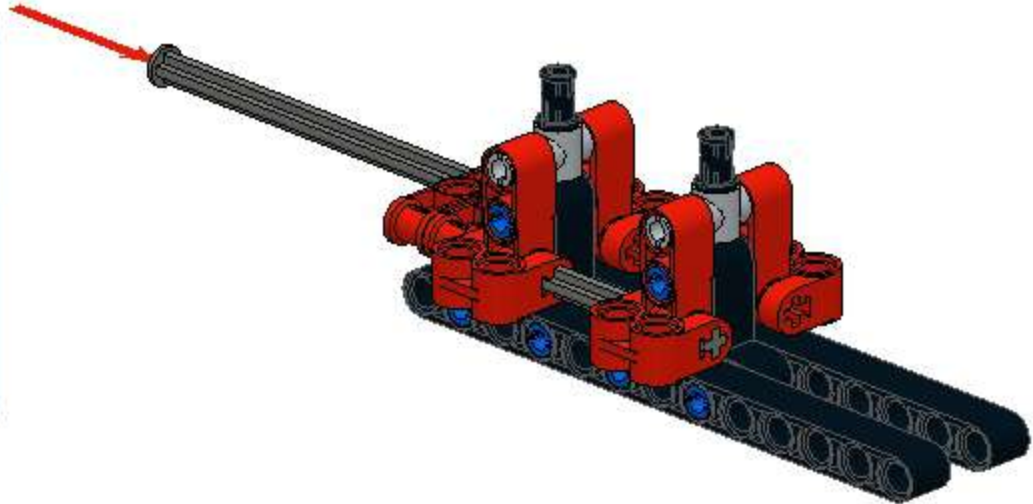
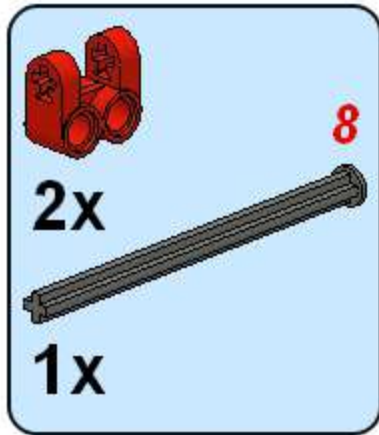


**1****2****3****4****5**

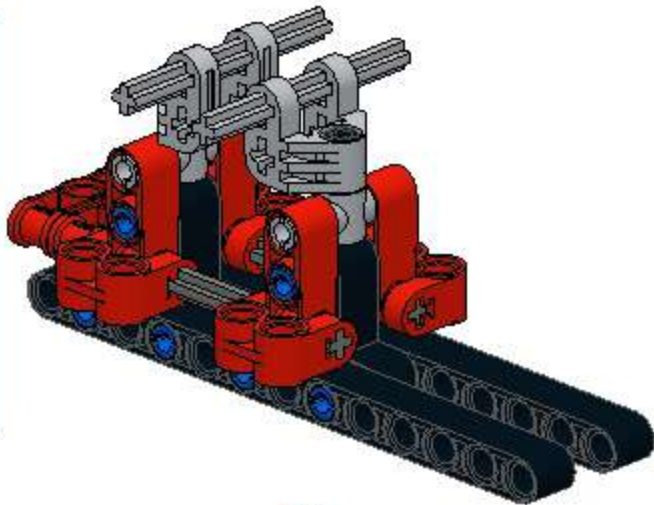
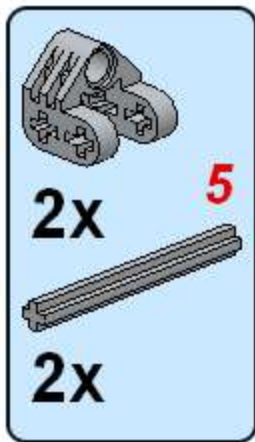
6



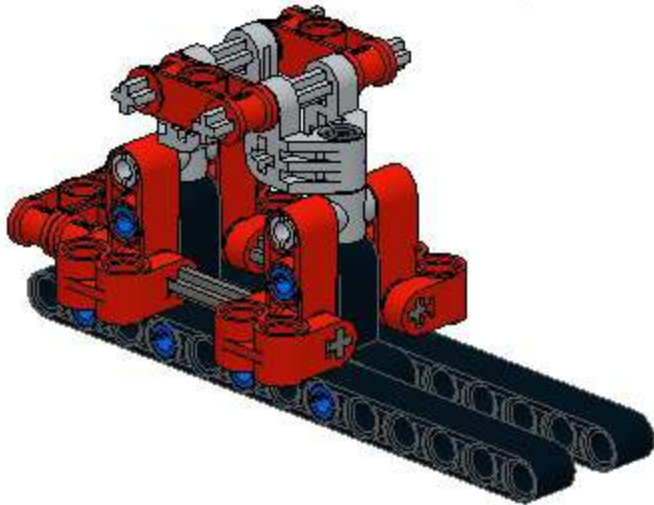
7



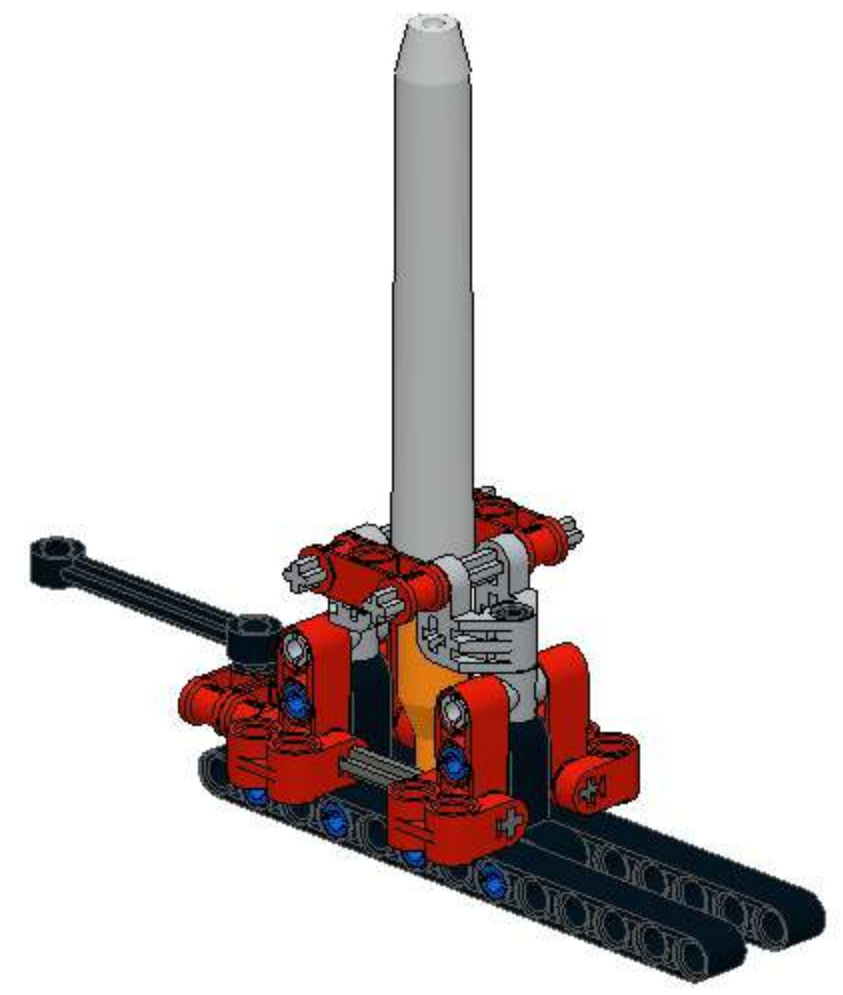
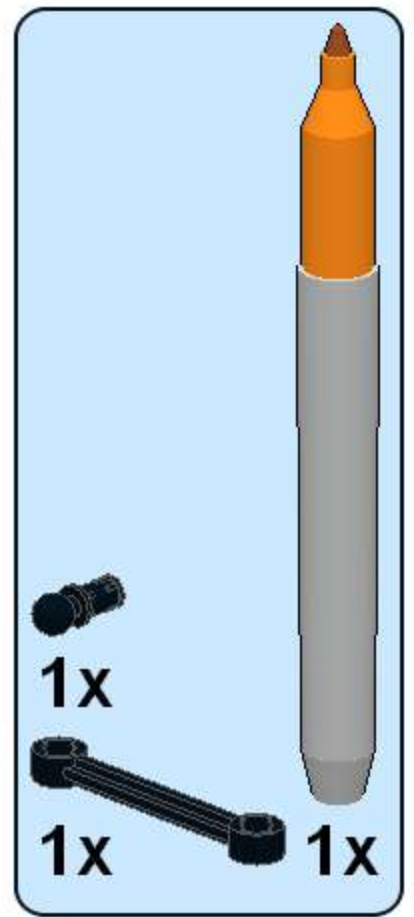
8



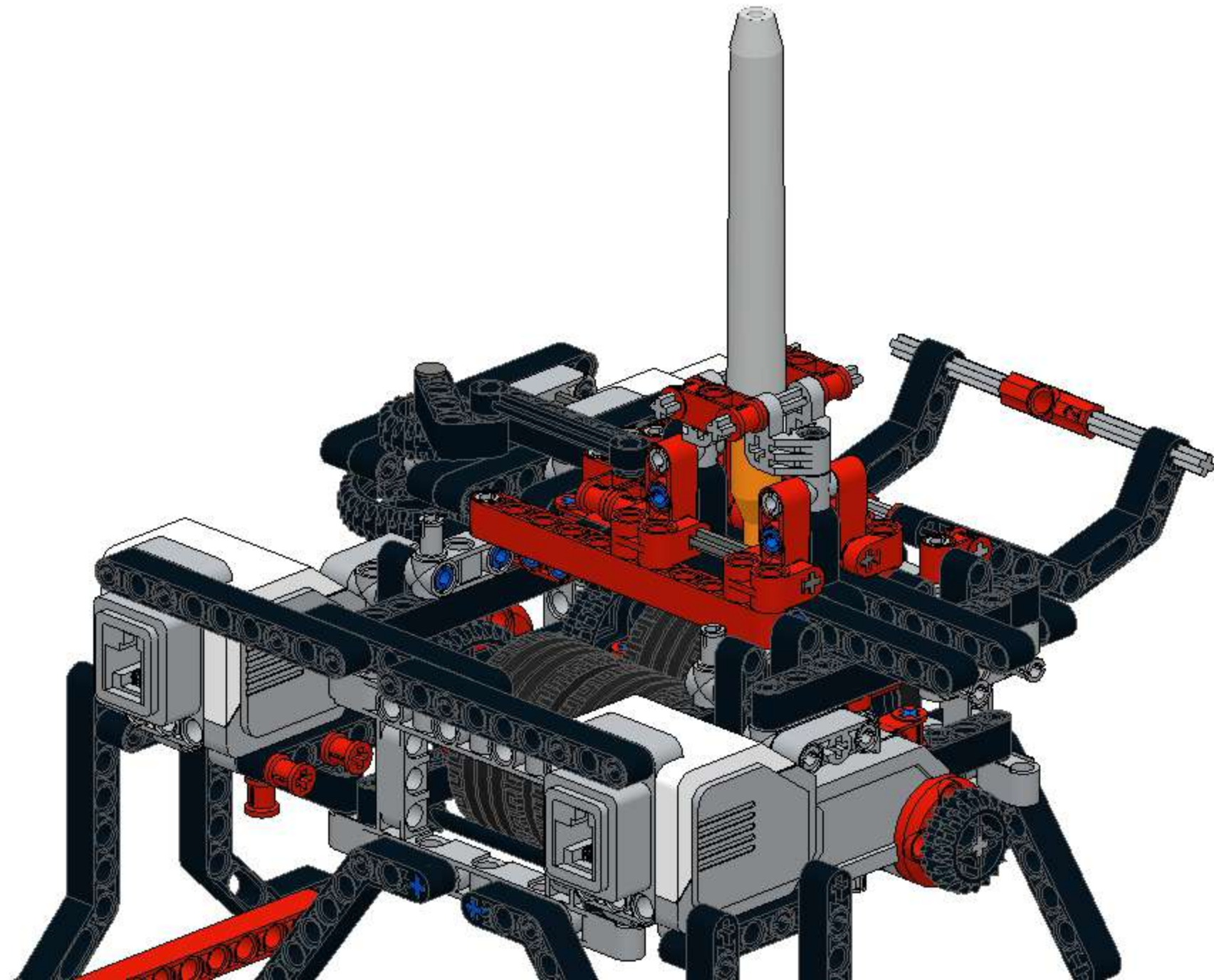
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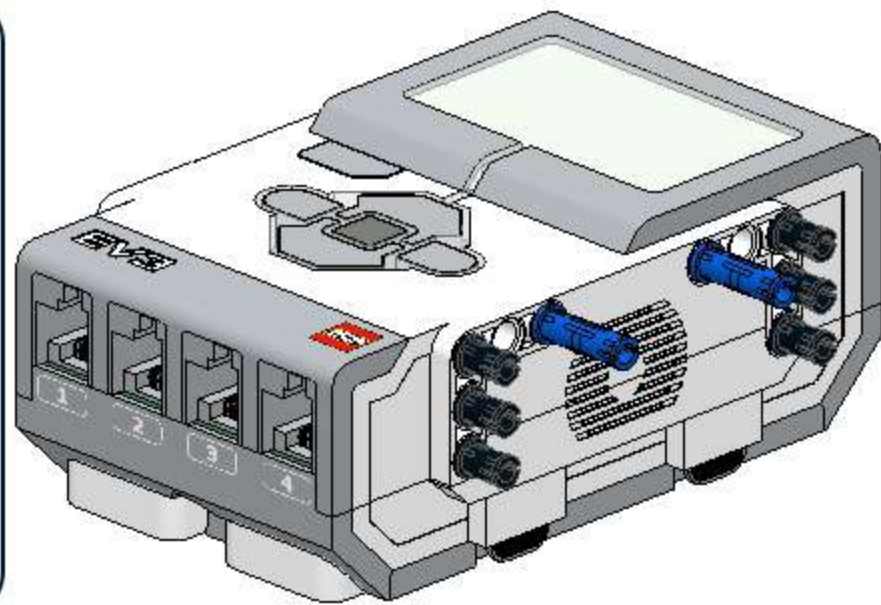
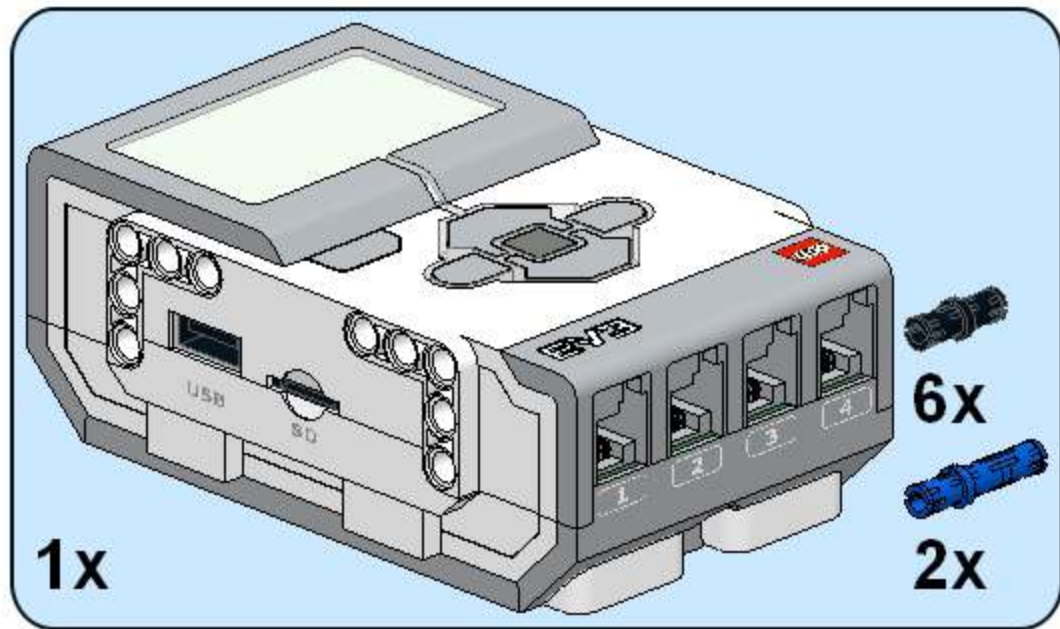
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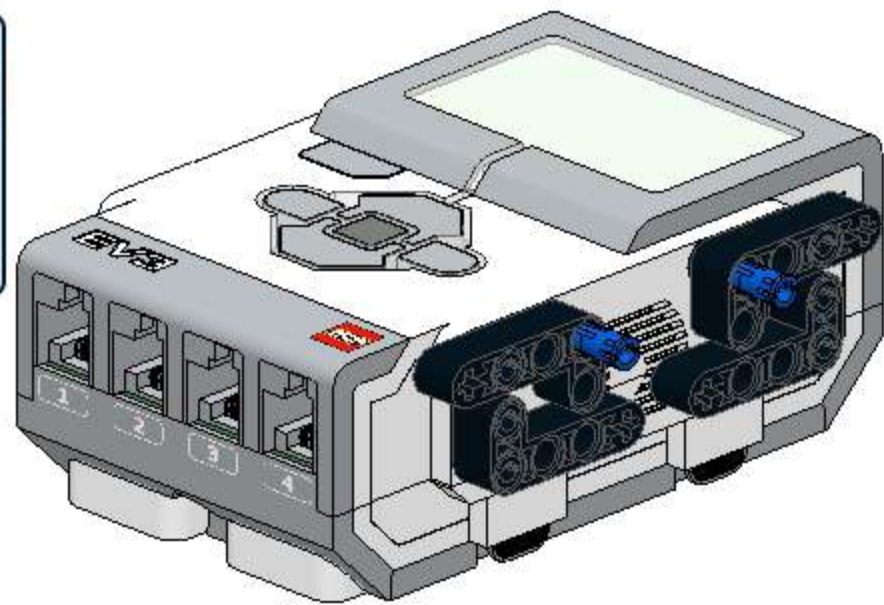
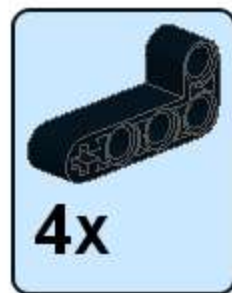
36



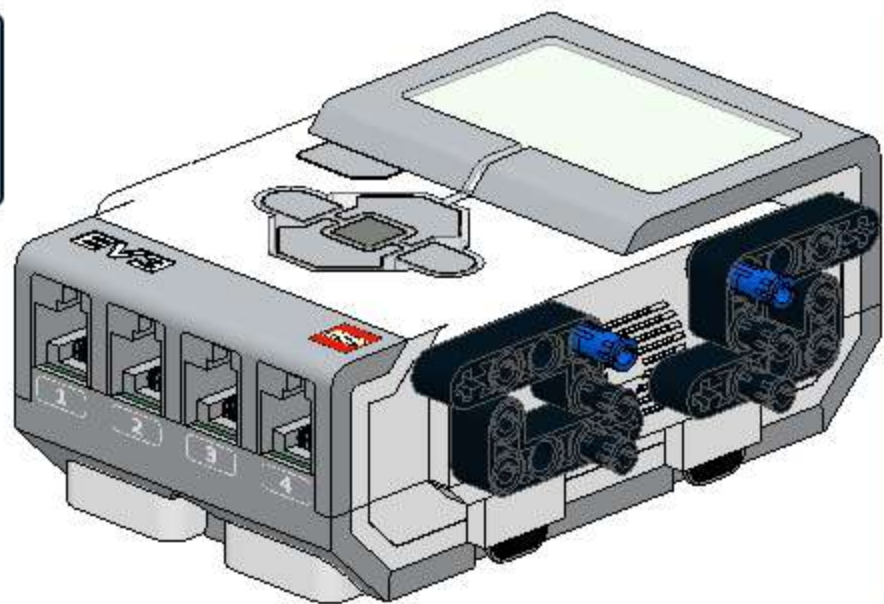
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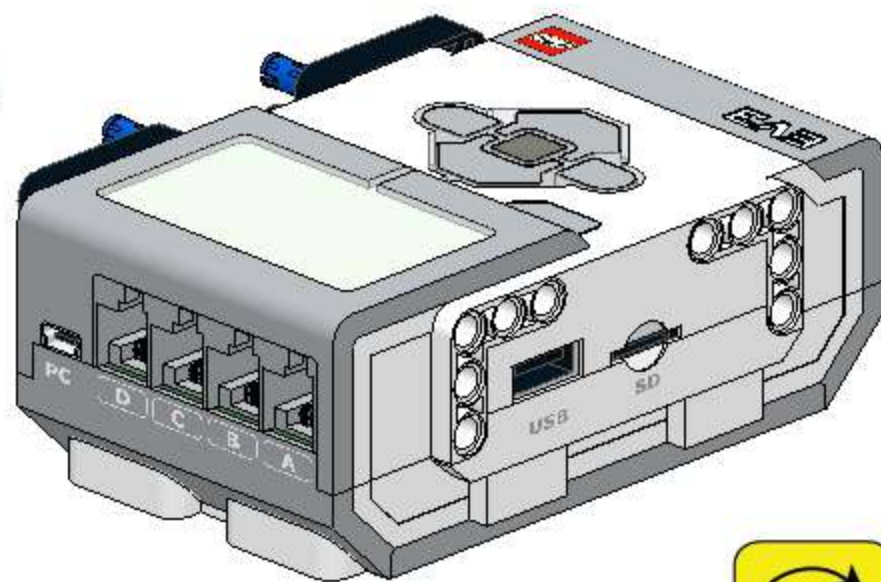
2



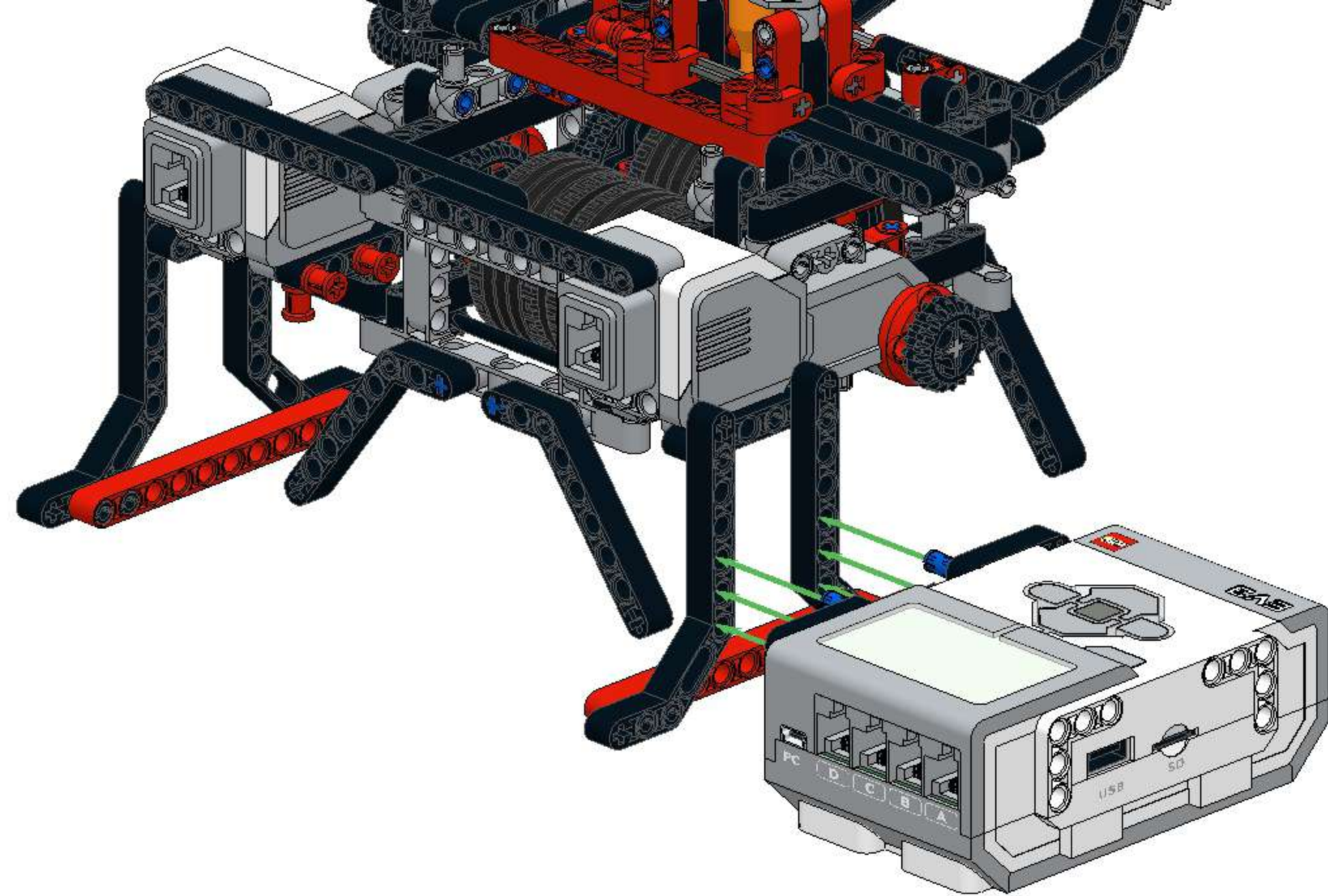
**3**  
4x



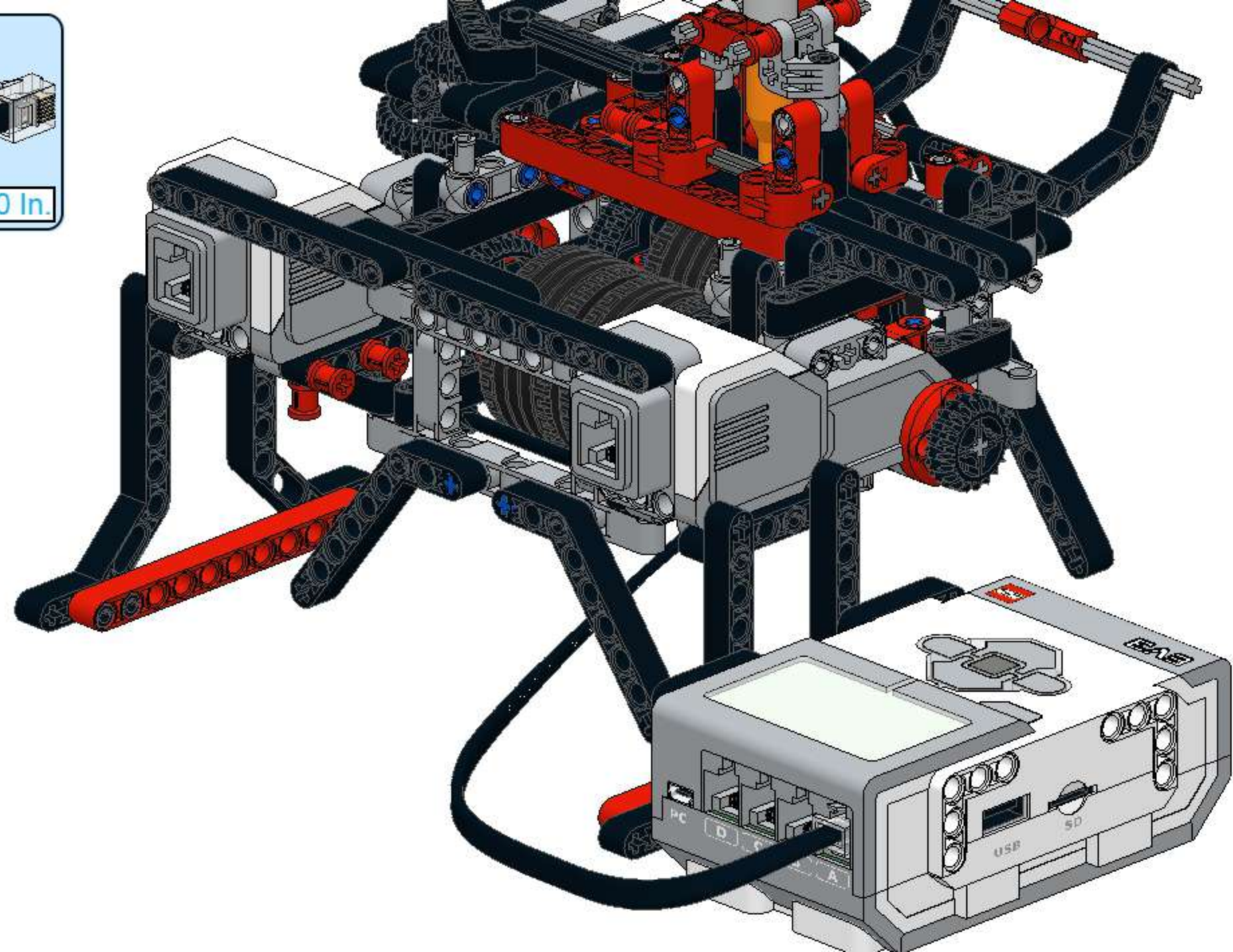
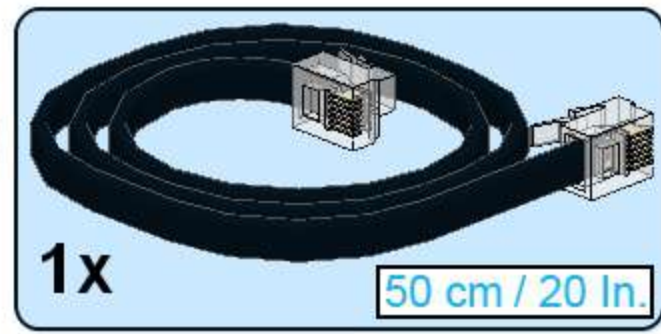
**4**



37

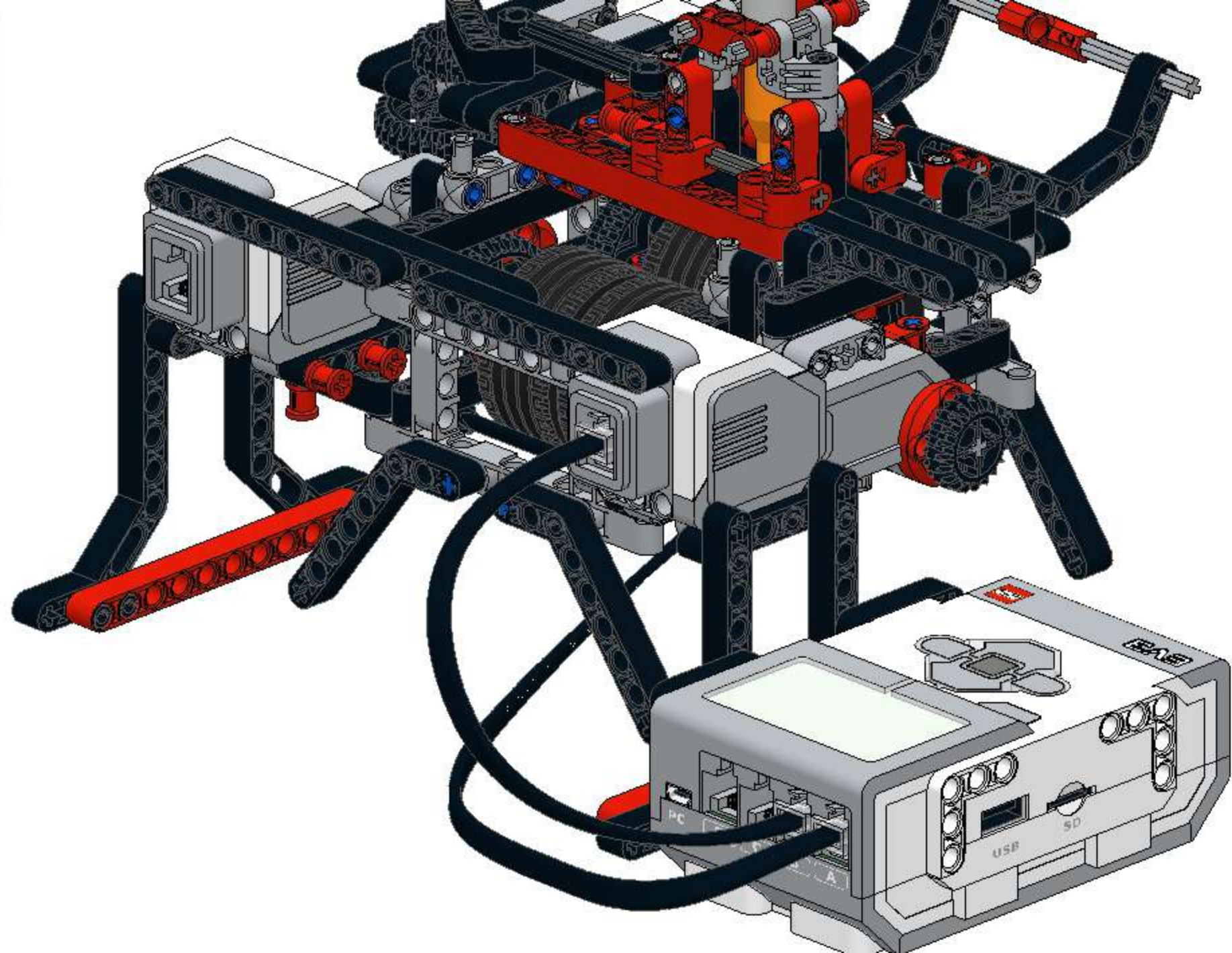
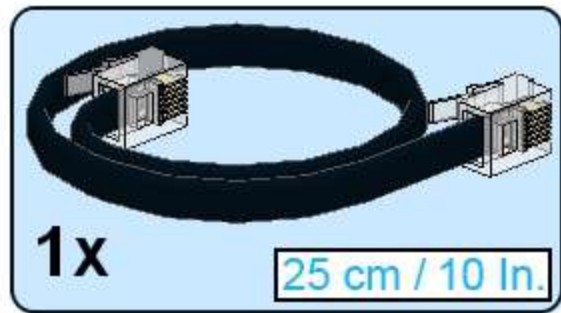


38

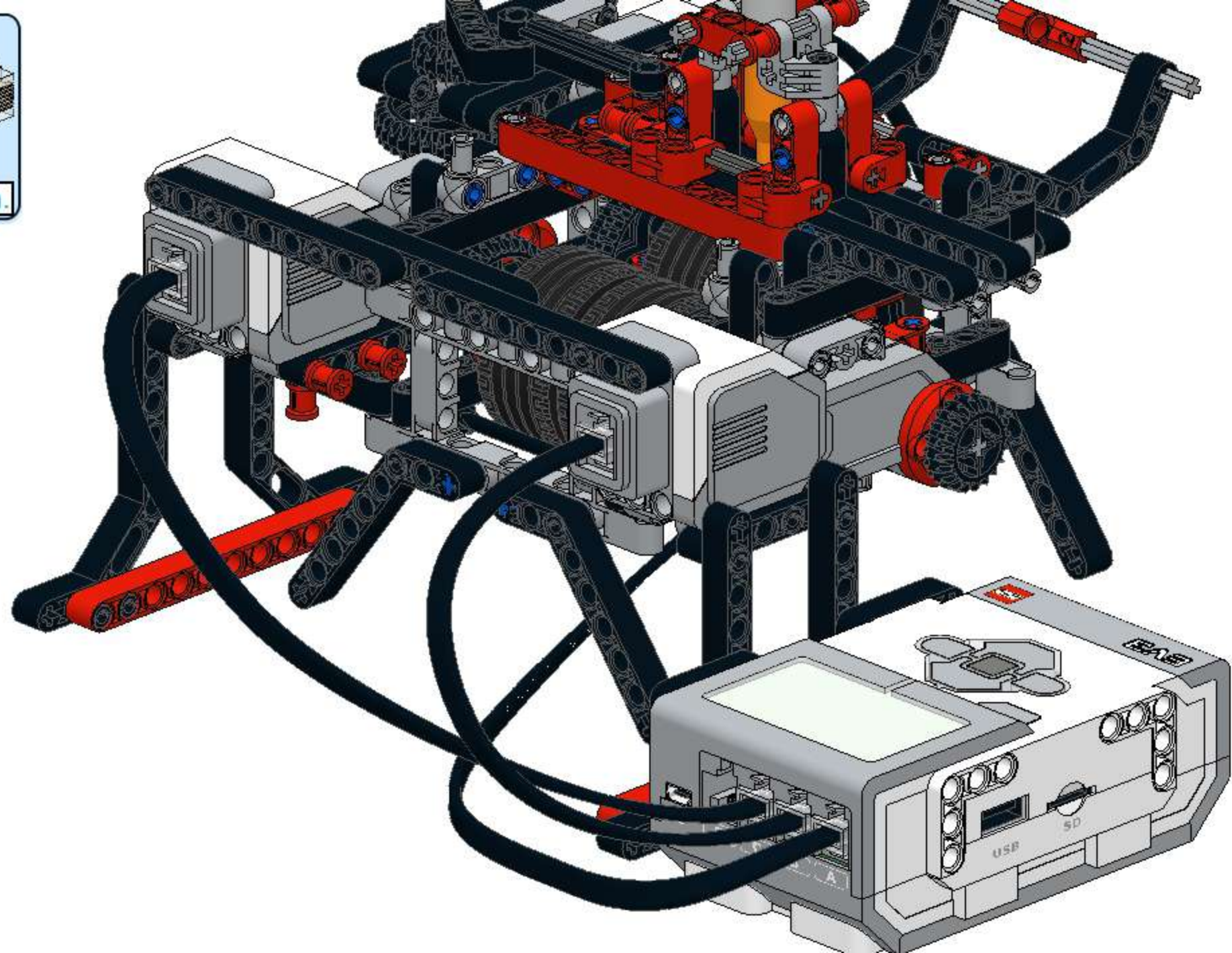
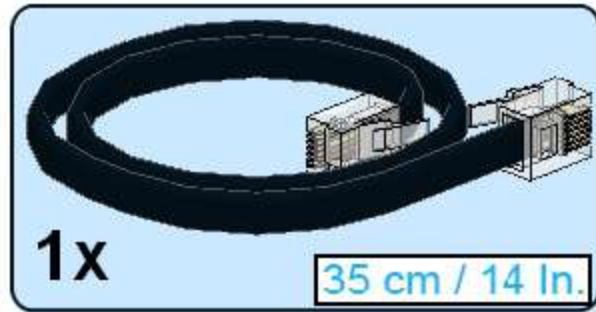




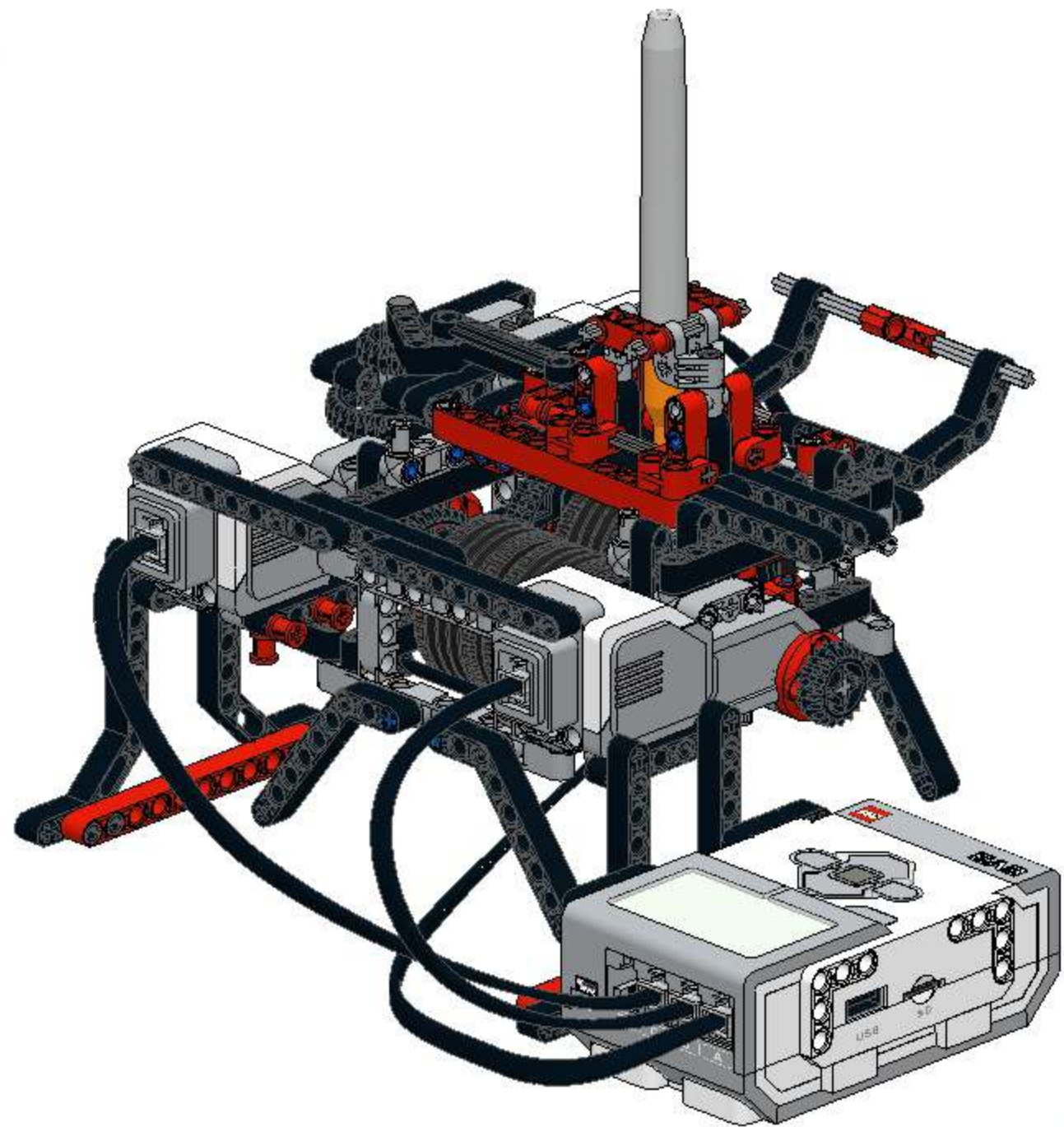
39



40



41



42

