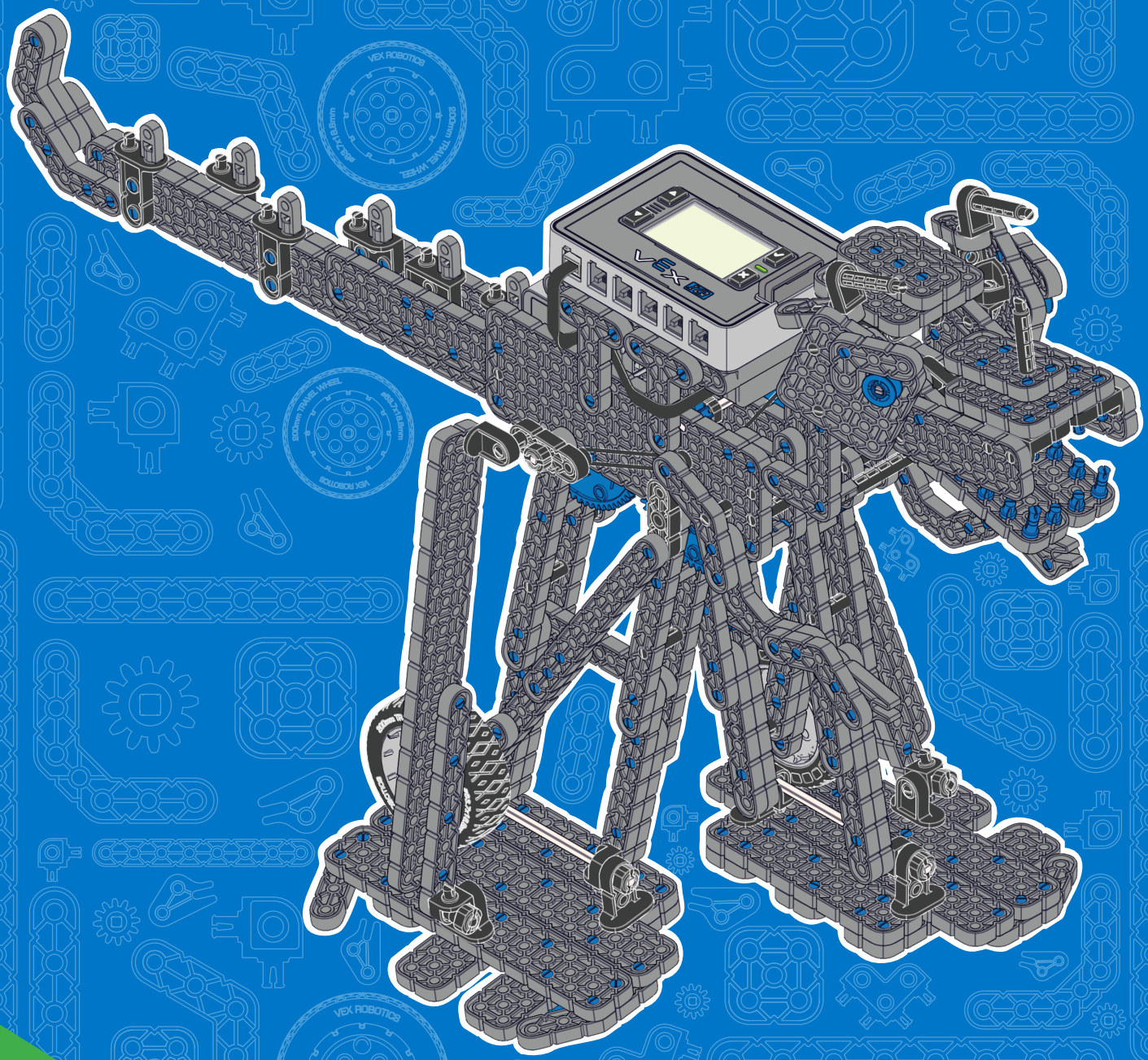
VEX IQ

V-Rex Build Instructions
Instructions de Construction de V-Rex



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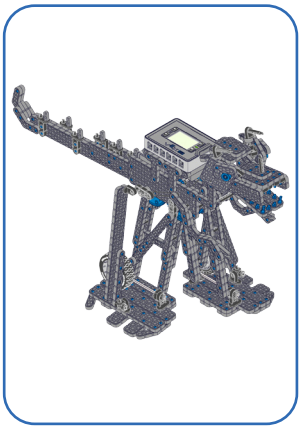

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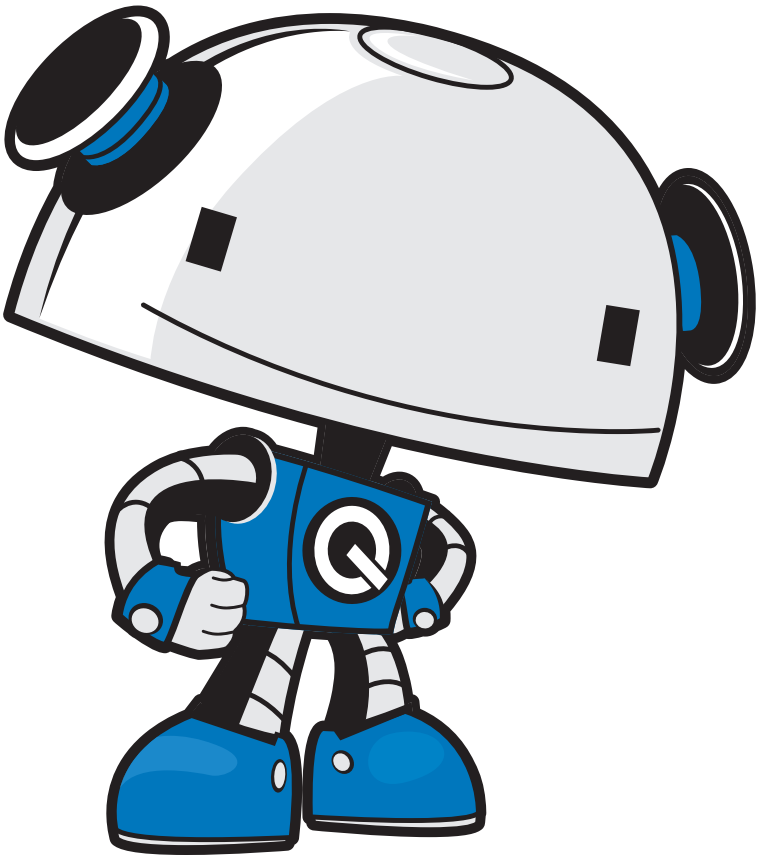
V-Rex



Do you like dinosaurs? I sure do, and had a great time building this one out of a VEX IQ Starter Kit! V-Rex can stand up and walk on its own two legs while also moving its arms, tail, and jaws. The amazing part, though, is that the V-Rex does all of that using just ONE Smart Motor, through some unique linkages and gear trains that you'll learn about while building!

Did you know that...

V-Rex was inspired by my favorite dinosaur, the Tyrannosaurus rex (or T-Rex). The T-Rex was one of the largest and most vicious creatures to ever walk the earth.

A T-Rex head could grow to 1.5 m (5 ft) long, almost as tall as an adult human! V-Rex's head is about 13 cm (5 in) long.

Just like V-Rex, a real T-Rex used its tail to keep its balance when moving around.

When running, a T-Rex could cover 4.5 m (15 ft) in one step. V-Rex only moves about 15 cm (6 in).

Aimez-vous les dinosaures? Bien sûr, et j'ai passé un beau moment à construire celui-ci avec un Kit VEX QI Starter! V-Rex peut se lever et marcher sur ses deux jambes tout en déplaçant ses bras, sa queue et sa mâchoire. Le plus étonnant, c'est que le V-Rex fait tout cela en utilisant un seul moteur Smart, à travers des liens uniques et de trains d'engrenages ce que vous apprendrez lors de la construction!

Saviez-vous que ...

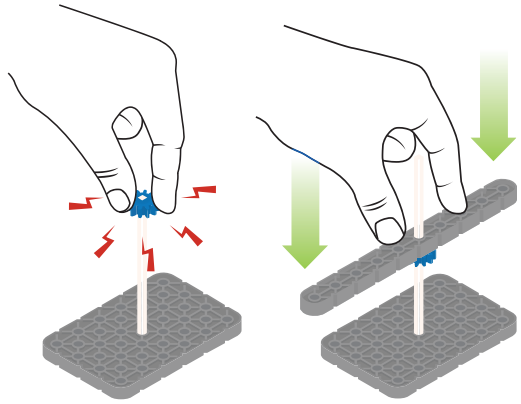
V-Rex a été inspiré par mon dinosaure préféré, le Tyrannosaurus rex (ou T-Rex). Le T-Rex était l'une des créatures les plus importantes et les plus vicieuses qui n'ait jamais marcher sur la terre.

Une tête de T-Rex pourrait atteindre 1,5 m, presque aussi grand qu'un humain adulte! La tête de V-Rex est d'environ 13 cm.

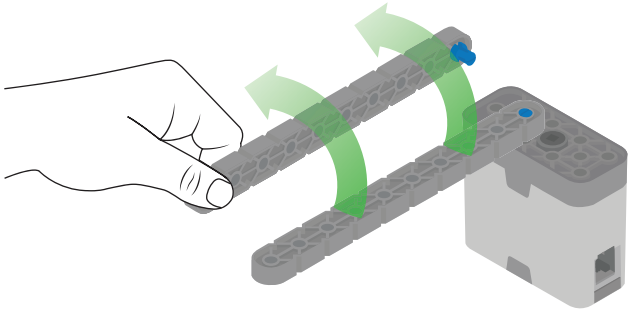
Tout comme V-Rex, un vrai T-Rex utilisait sa queue pour garder son équilibre en se déplaçant.

Lorsqu'il courrait, un T-Rex pouvait parcourir 4,5 m en un seul pas. V-Rex se déplace seulement de 15 cm.

VEX IQ Assembly Tips:
Conseils d 'Assemblage VEX IQ:

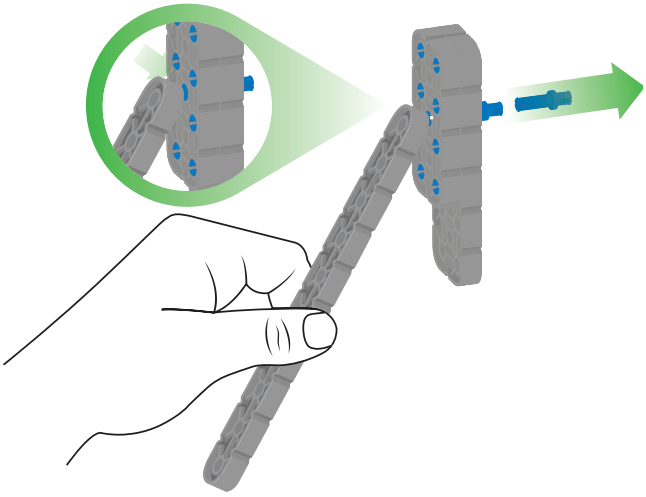


Use a 1x Beam for extra leverage when mounting small VEX IQ elements on shafts.
Utilisez une poutre pour aider à installer un petit élément VEX IQ sur un axe.



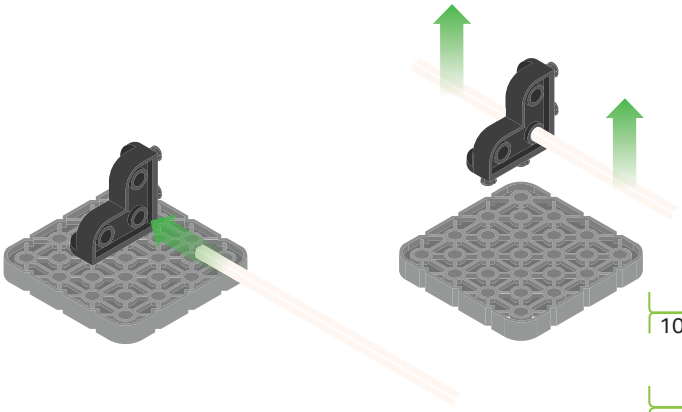
Connector Pins can be smoothly removed from Smart Motors, Sensors, or Robot Brains using a 1x Beam. Put the 1x Beam onto the pin and twist the Beam while pulling outward.

Les connecteurs peuvent être facilement retirés des moteurs Smart, Capteurs, ou Cerveau du robot en utilisant une poutre. Placer la poutre sur le connecteur et tourner la poutre en tirant vers l'extérieur.



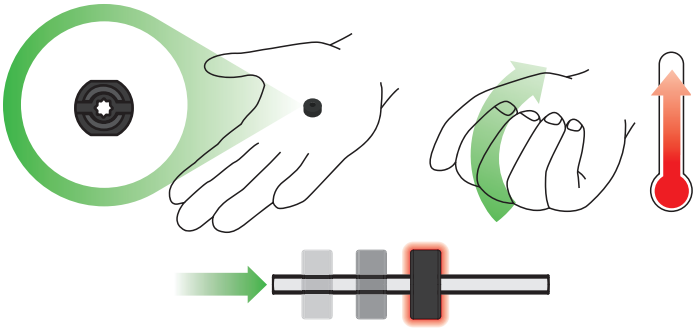
Quickly remove Connector Pins by pressing a VEX IQ Beam against the back of the Pin and pulling it out.

Poussez doucement le connecteur avec une poutre VEX IQ à l'arrière du connecteur pour le libérer.



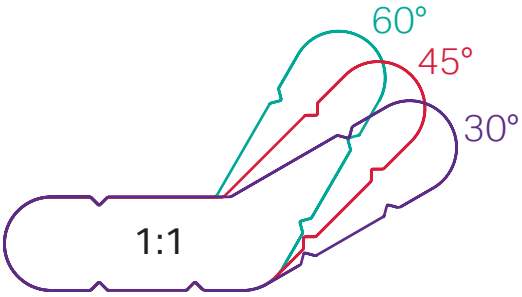
Easily remove Corner Connectors by placing a metal shaft through one of the holes and pulling outward.

Retirez facilement un connecteur d'angle en plaçant un axe dans un des trous et en tirant vers l'extérieur.



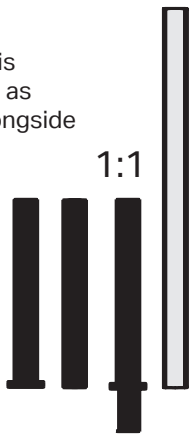
Rubber Shaft Collars become softer and easier to install if they are warmed by holding them in your hand for 15-30 seconds.

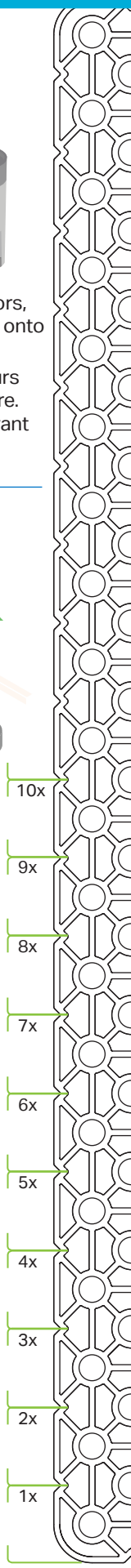
Les butées en caoutchouc deviennent plus souple et plus facile à installer si elles sont réchauffées les tenant dans votre main pendant 15-30 secondes.



The best way to measure an Angle Beam is to compare it against known angles (such as above). To measure Shaft length, set it alongside a VEX IQ Beam and count the notches.

La meilleure façon de mesurer un angle de faisceau est de comparer contre angles connus (comme ci-dessus). Pour mesurer la longueur de l'arbre, elle a mis à côté d'un VEXIQ Poutre et compter les encoches.

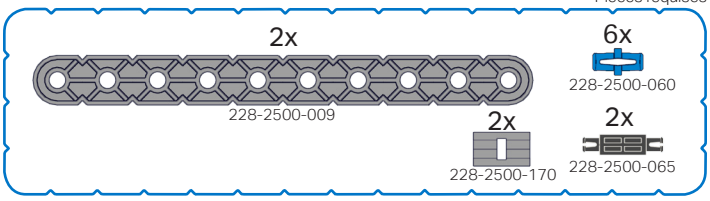


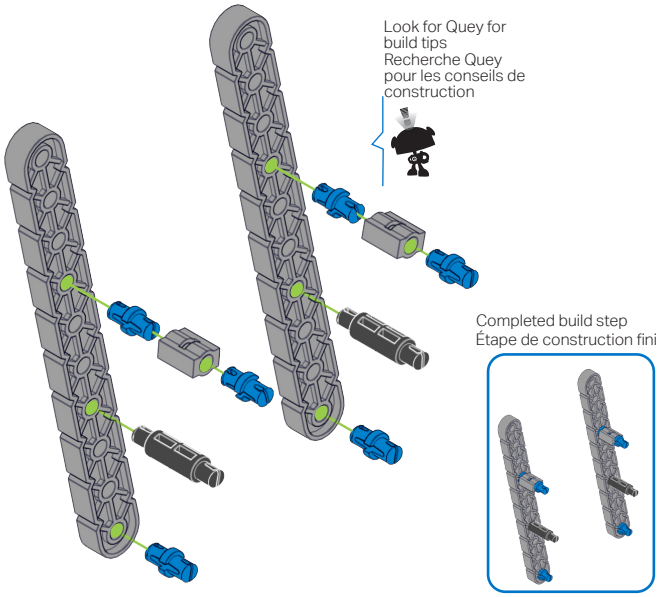


1 V-Rex

1

Required parts
Pièces requises





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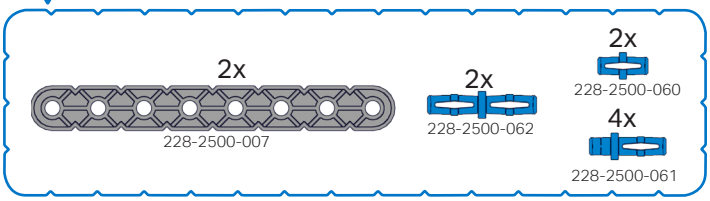

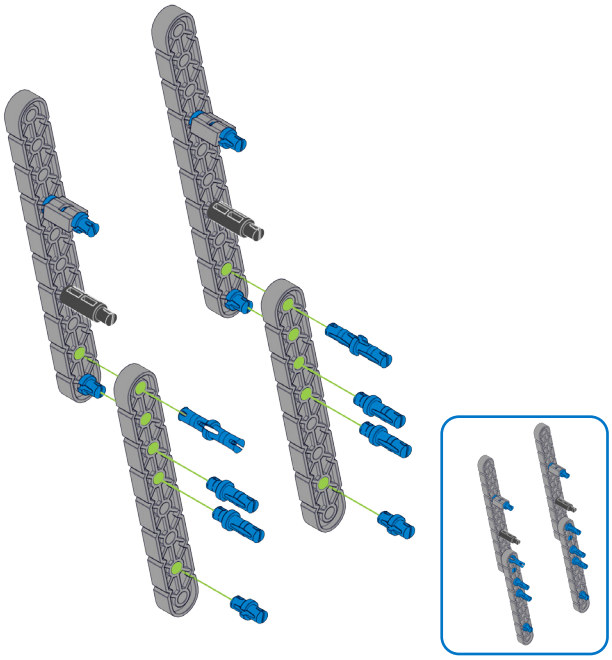

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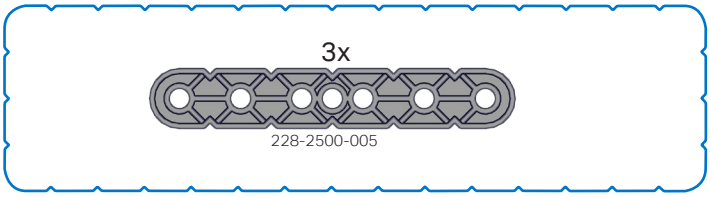

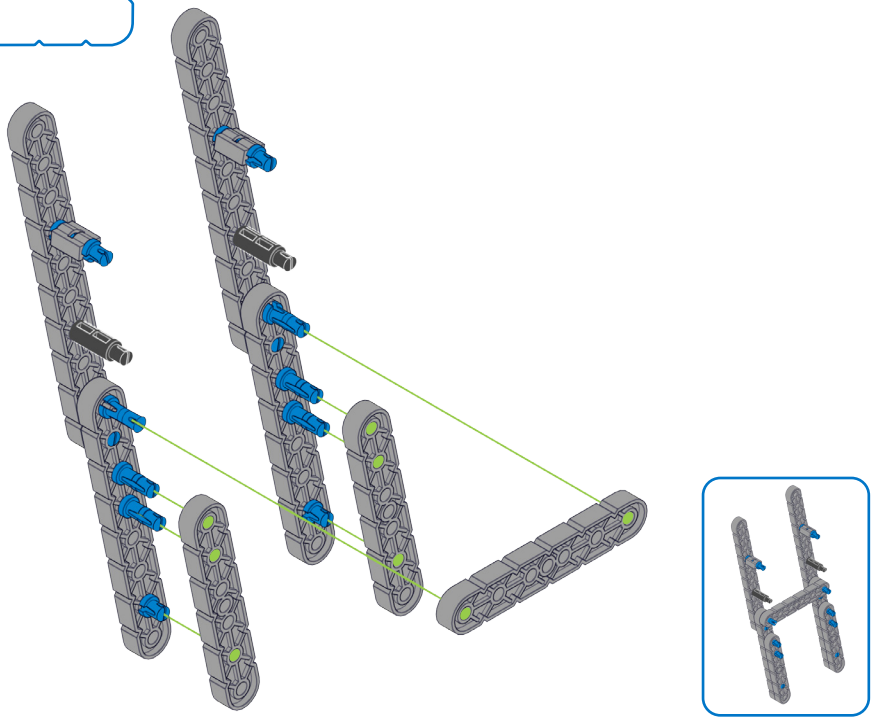

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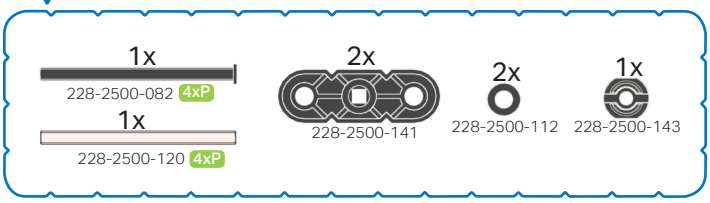
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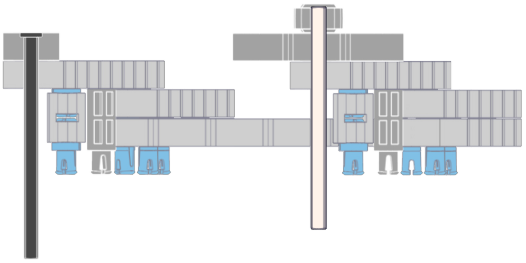
228-2500-143



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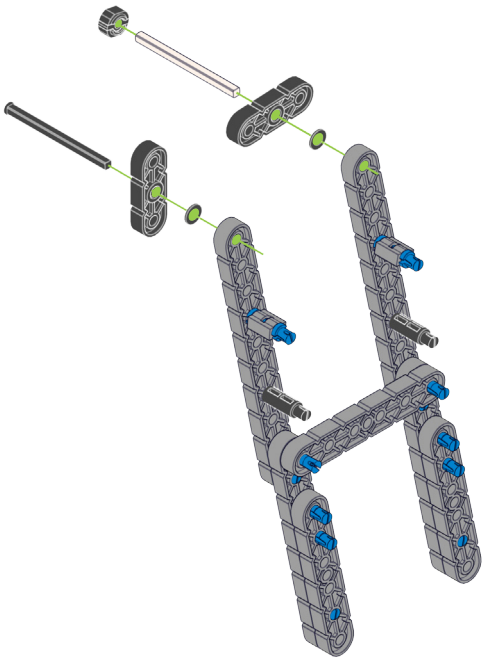

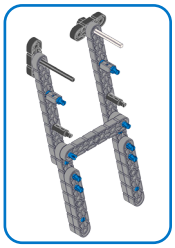

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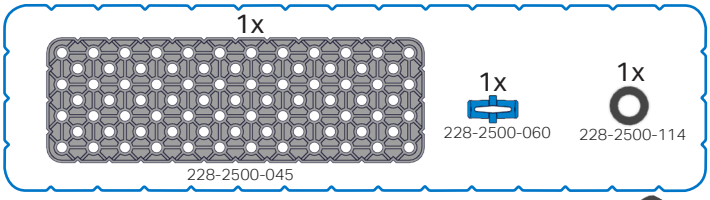
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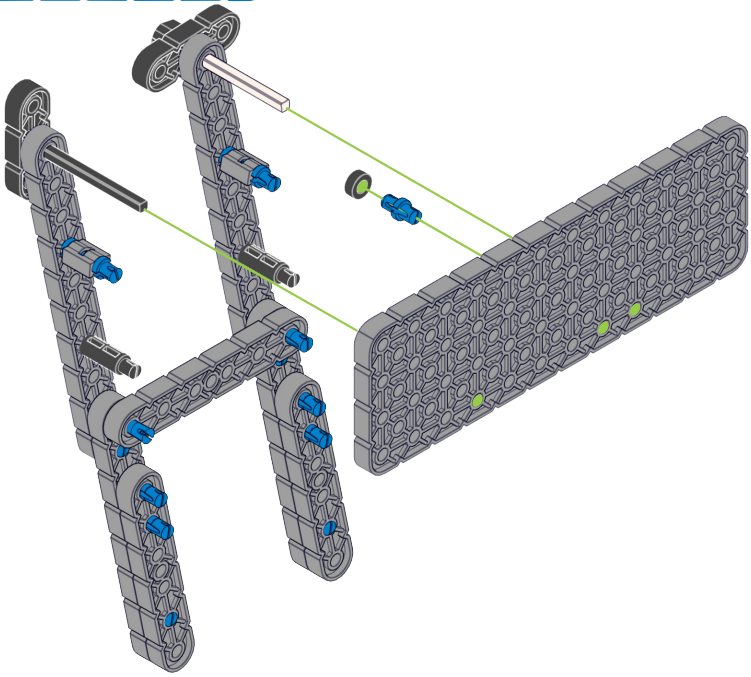

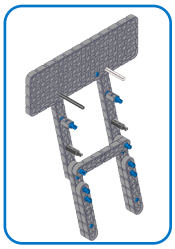

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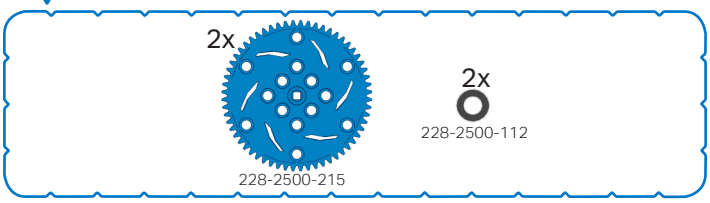
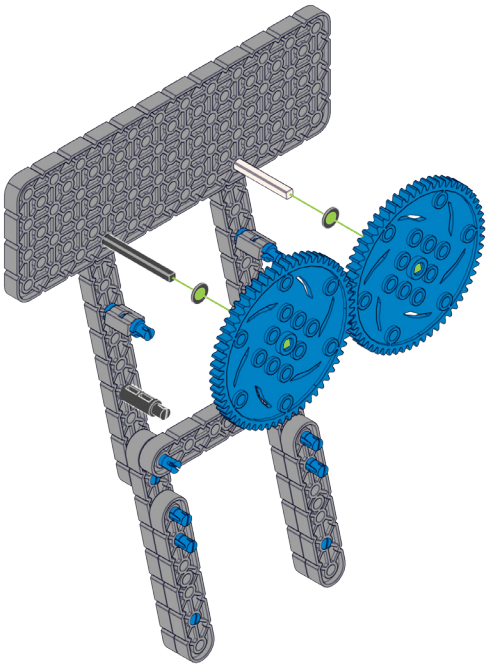
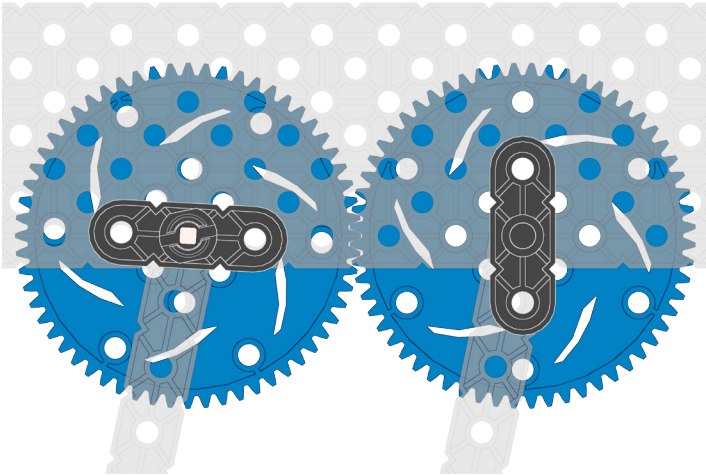
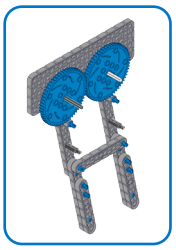






Make sure to line up the holes of 228-2500-141 and 228-2500-215 as shown

Assurez-vous d'aligner les trous de 228-2500-141 et 228-2500-215 comme montré



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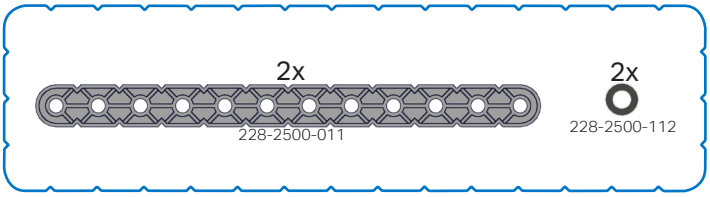

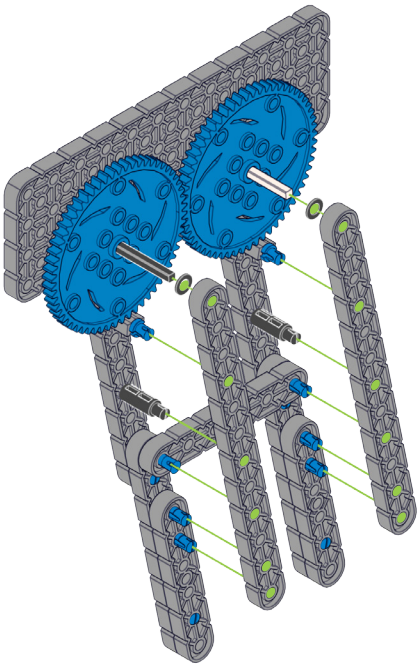

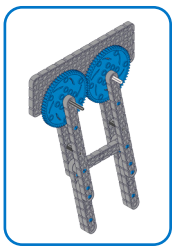

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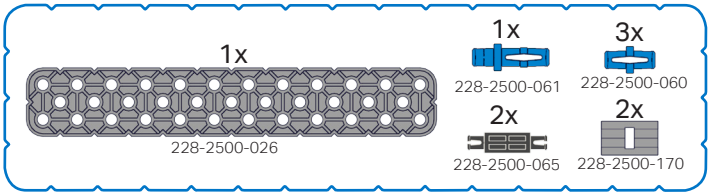

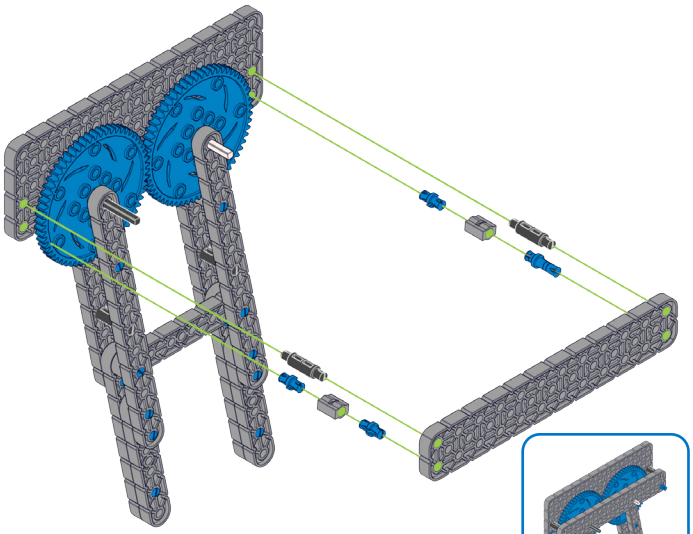

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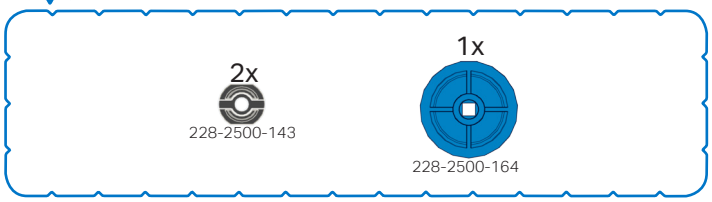
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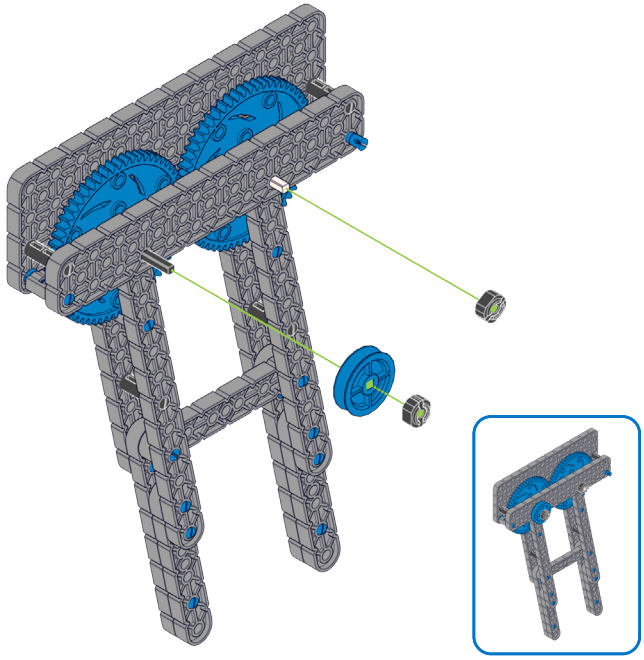

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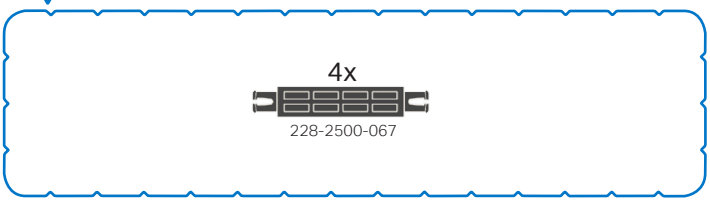
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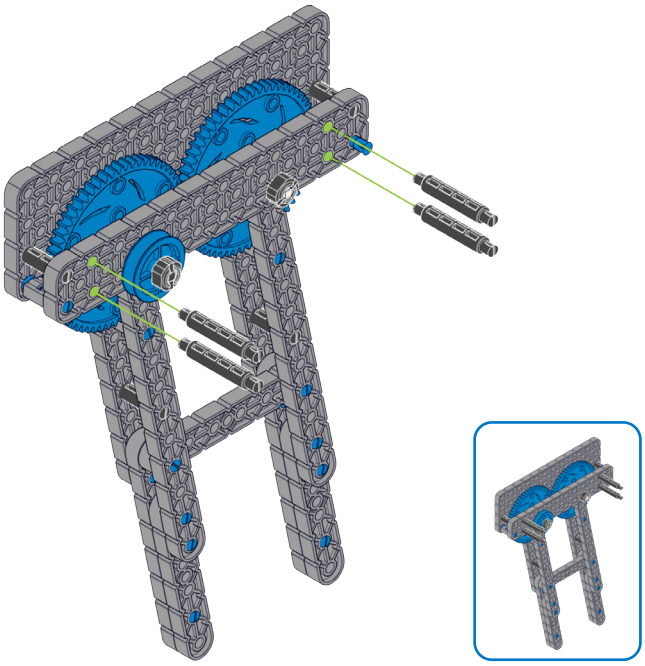

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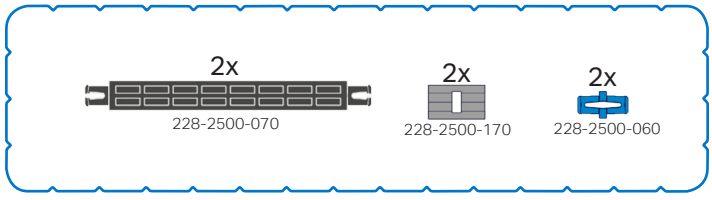
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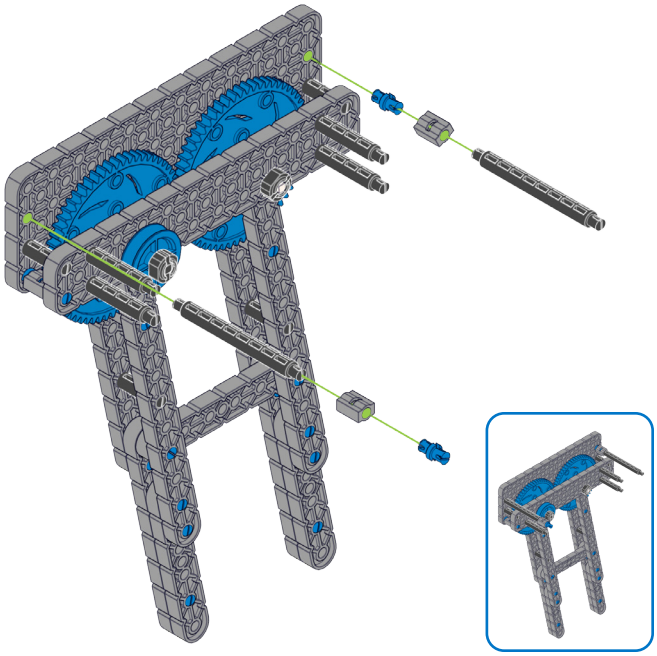

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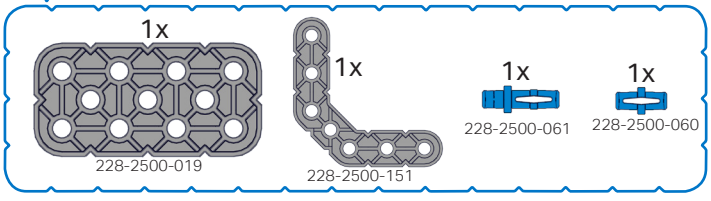
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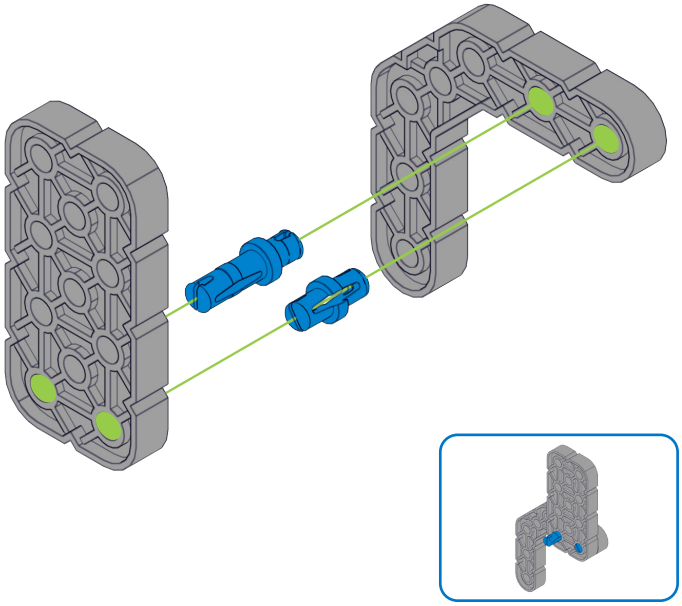

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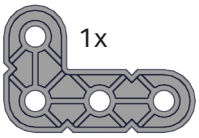
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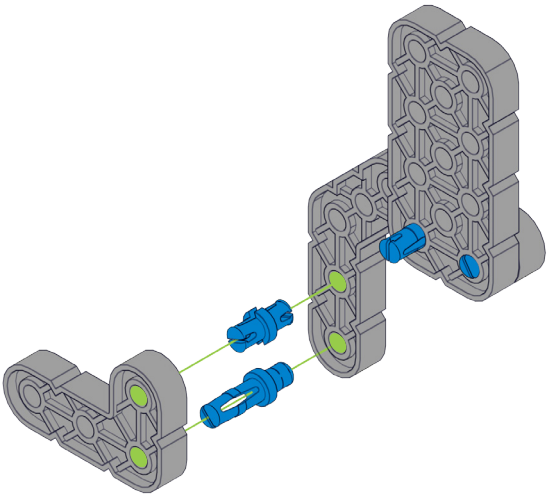

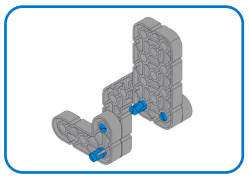

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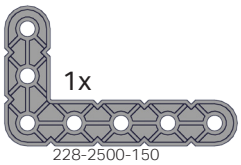
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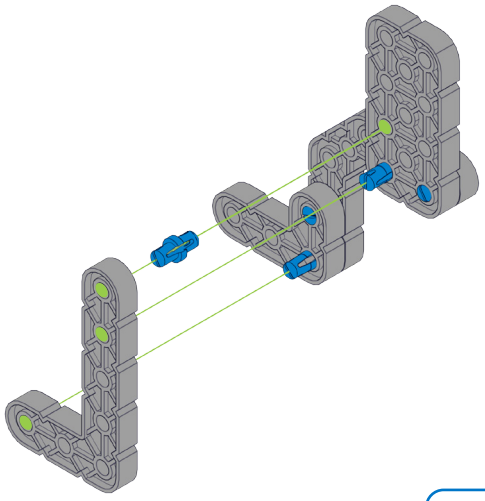

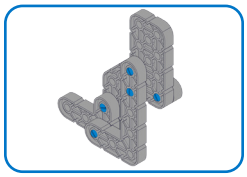

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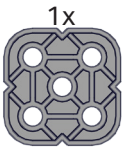
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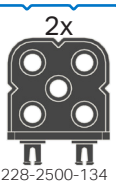
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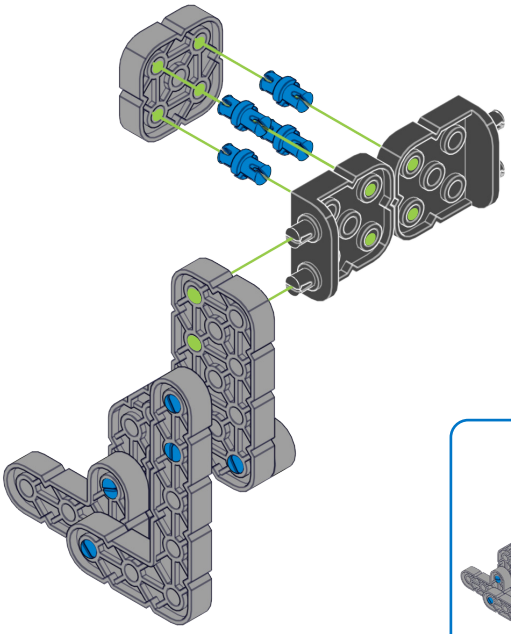

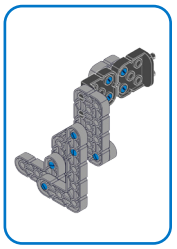

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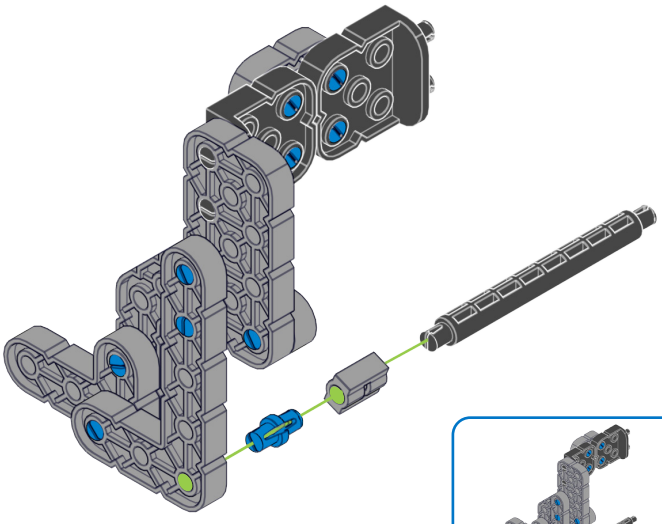

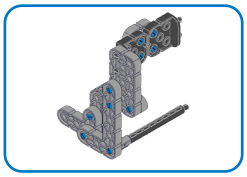

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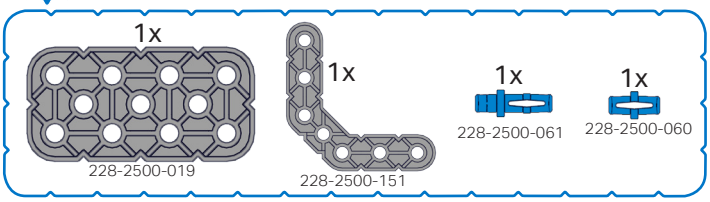

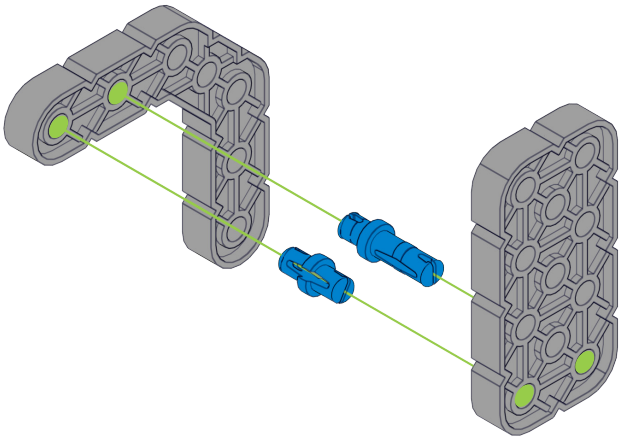

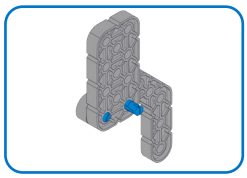

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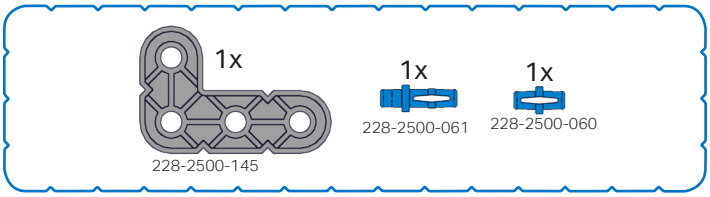

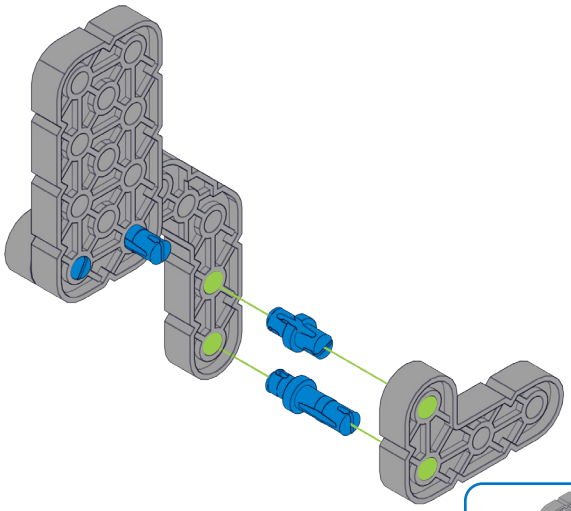

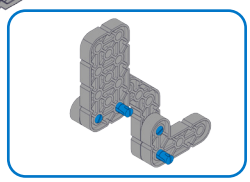

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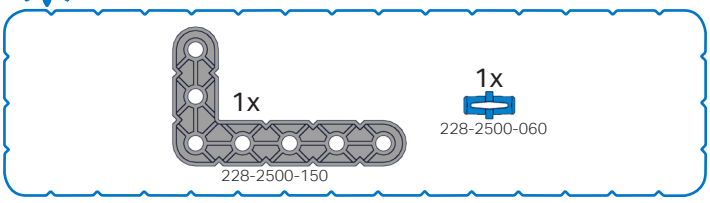

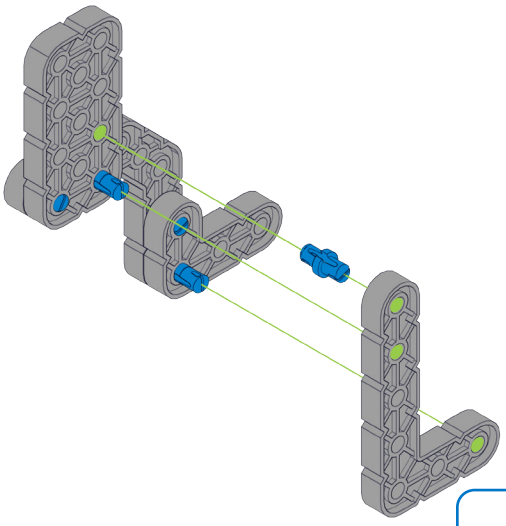

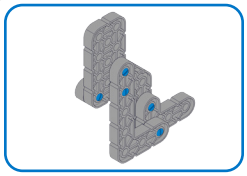

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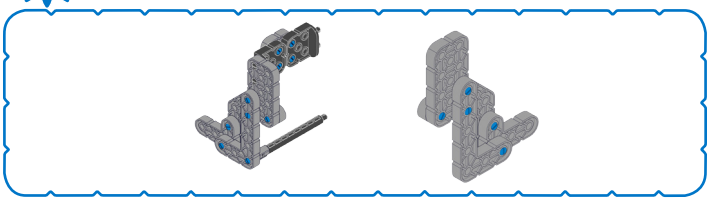
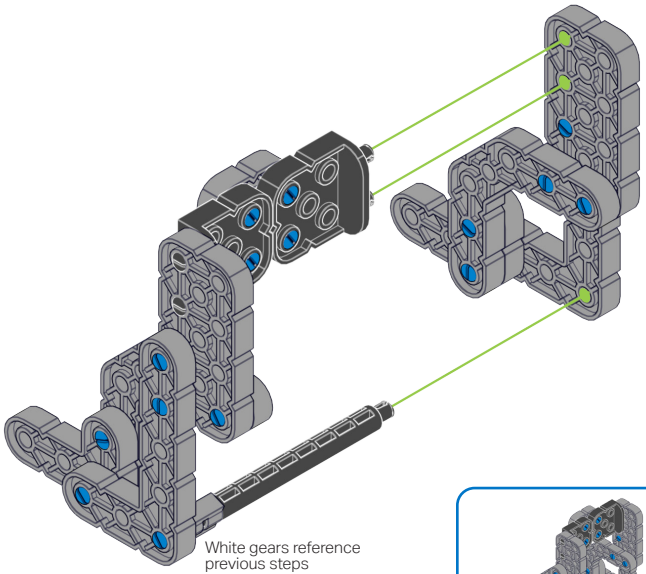
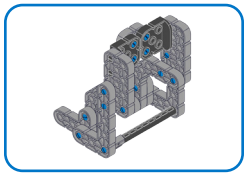




White gears reference previous steps
L'engrenage blanc fait référence à une étape précédente



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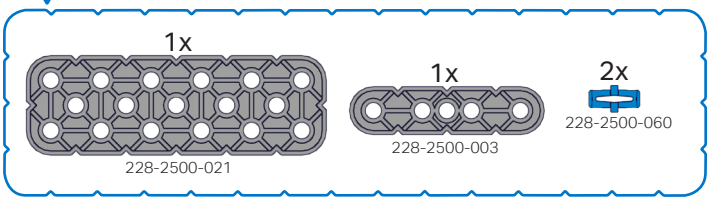
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1x
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2x
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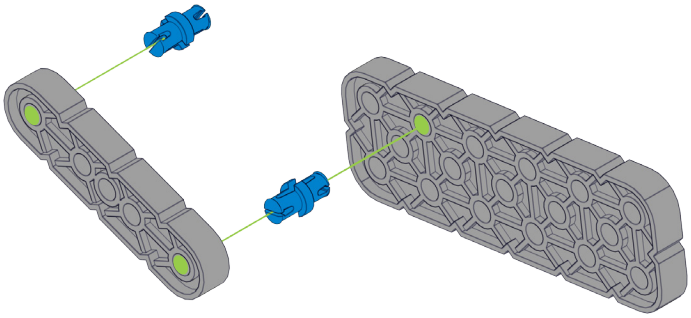

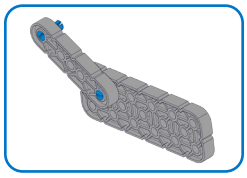

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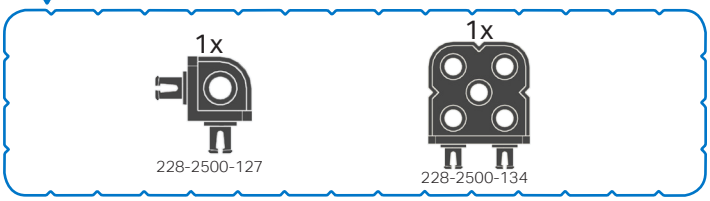
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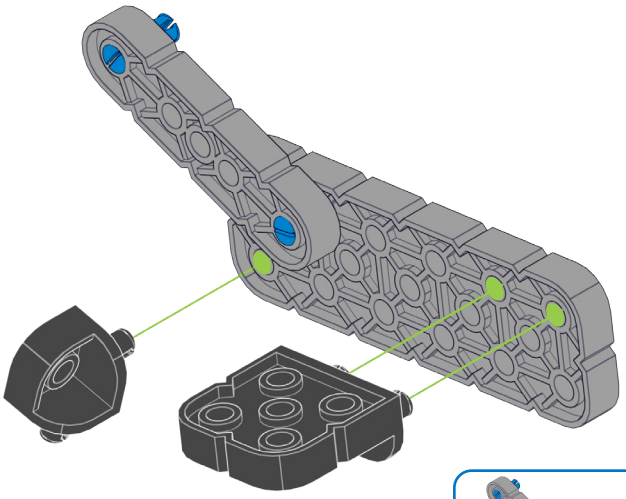

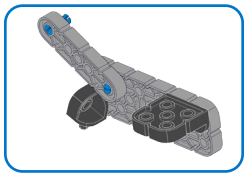

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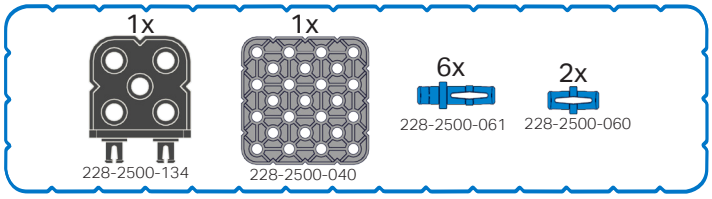
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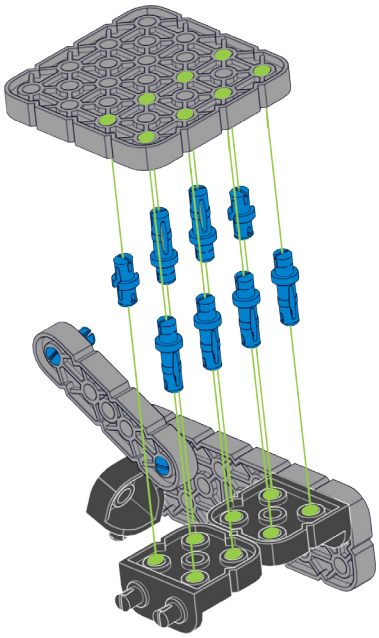
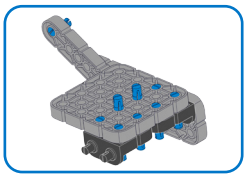
228-2500-060





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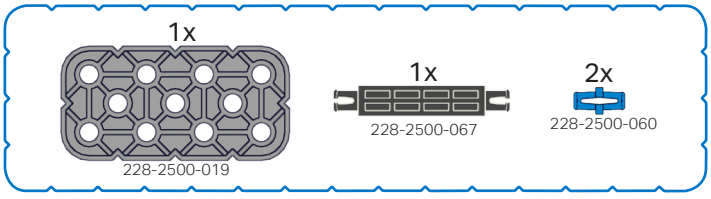
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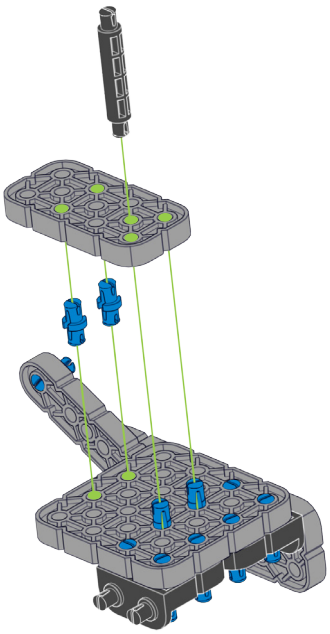

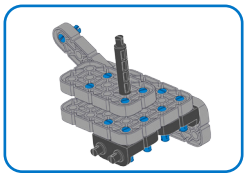

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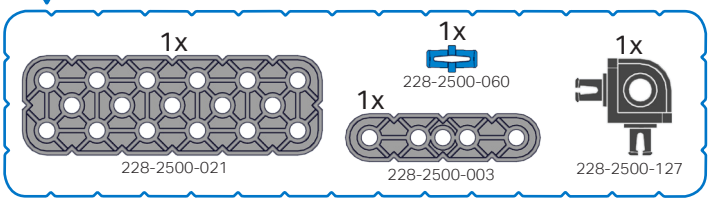
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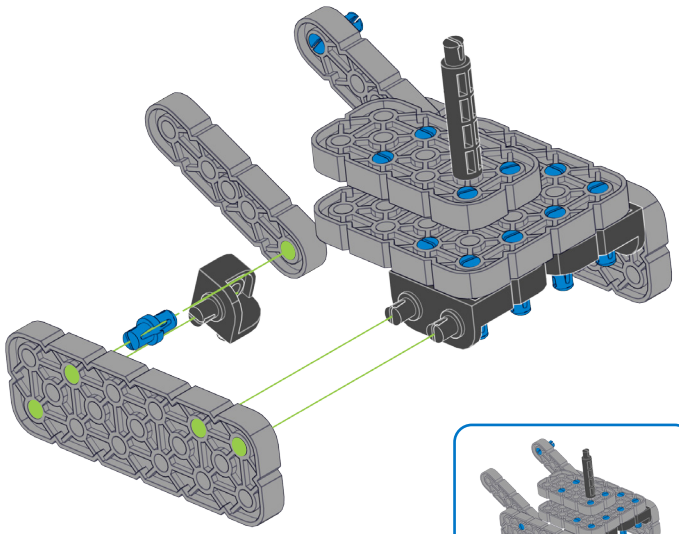

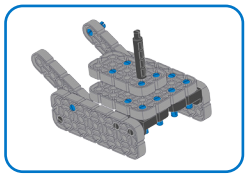

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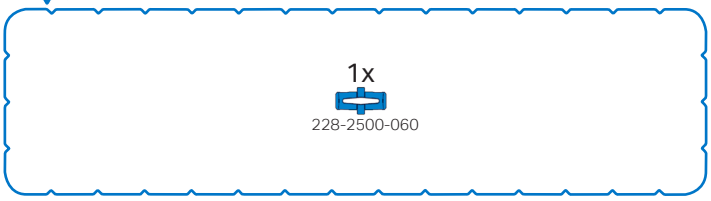
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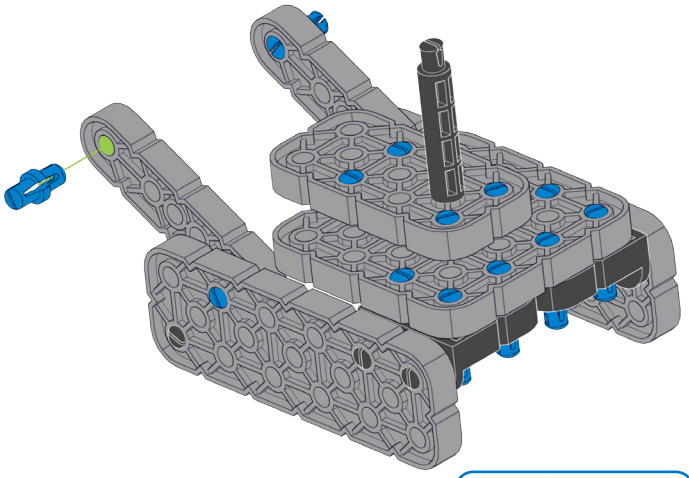

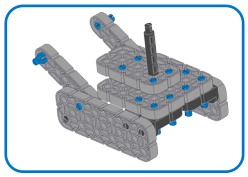

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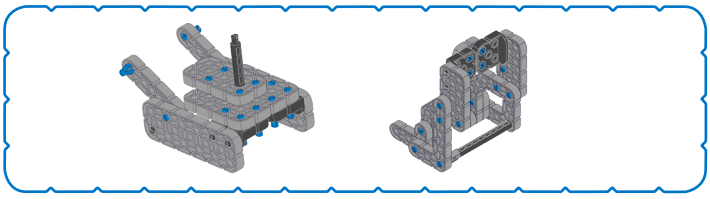

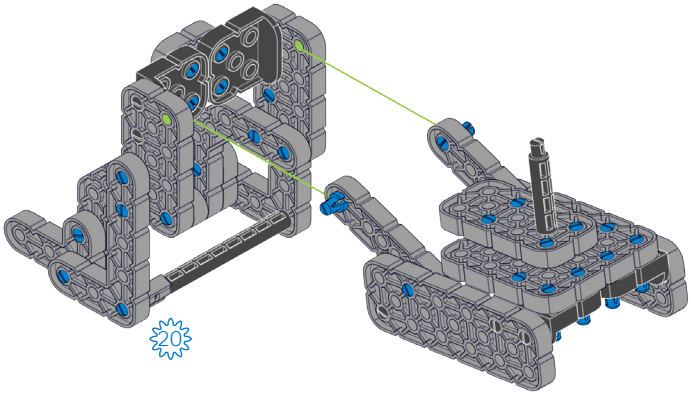
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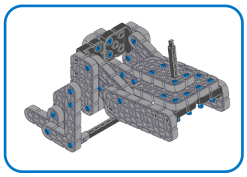

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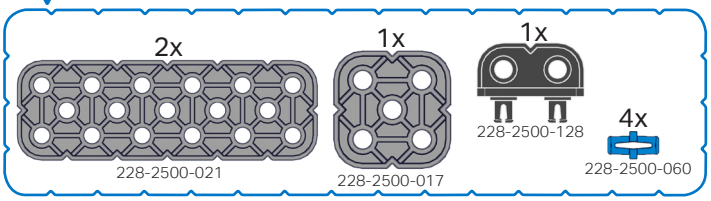
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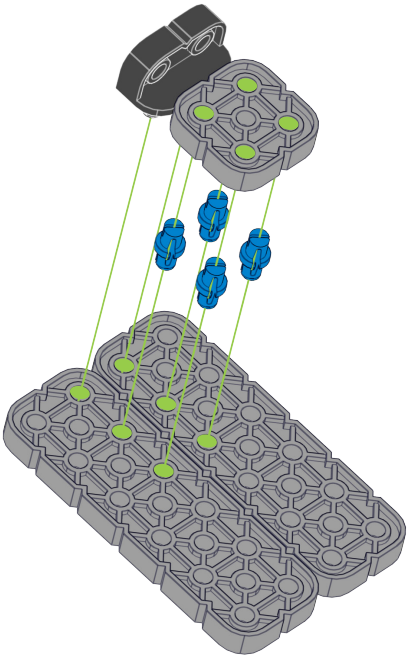

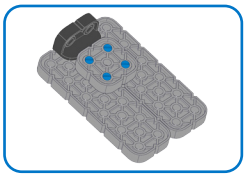

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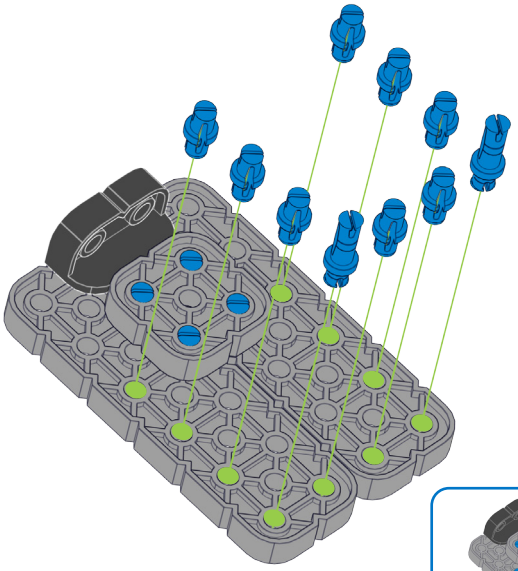

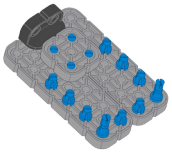

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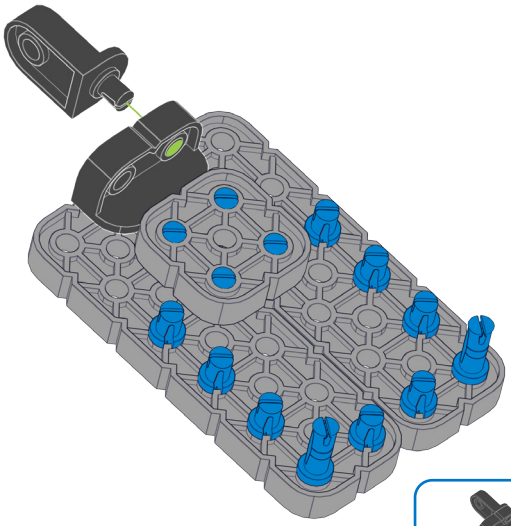

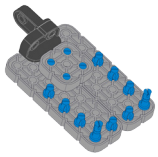

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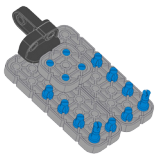

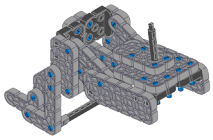

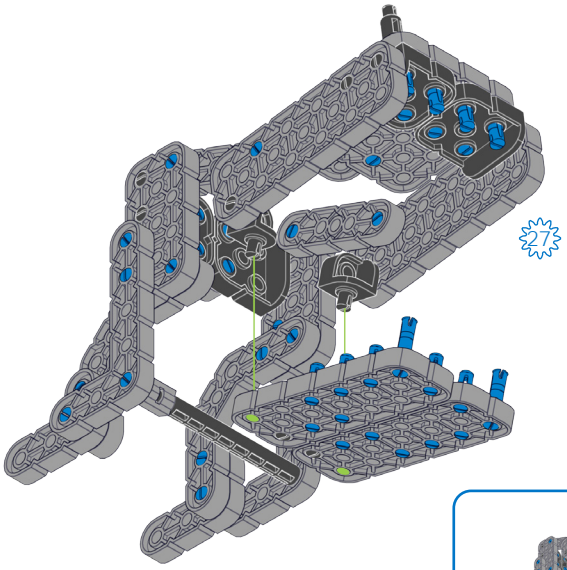

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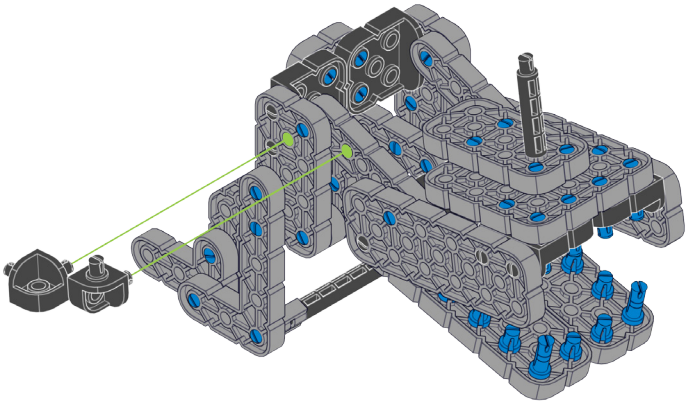

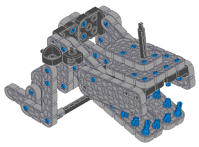

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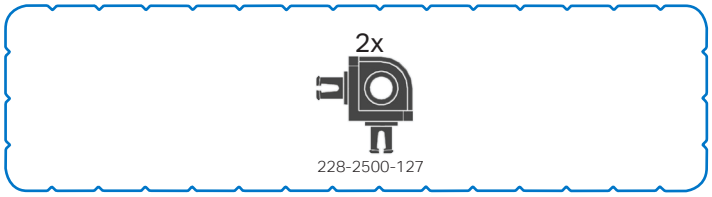
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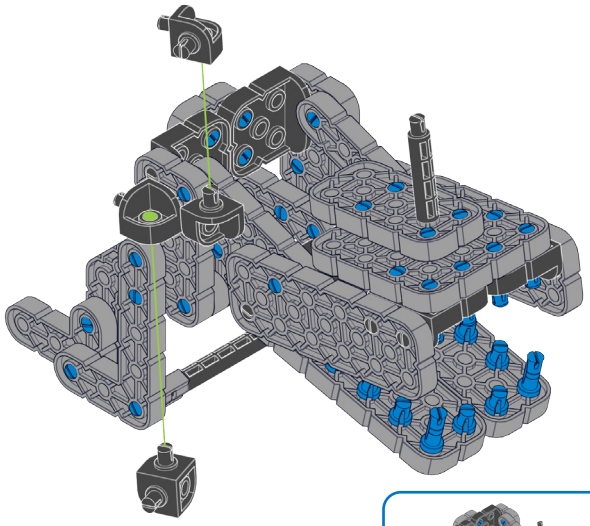

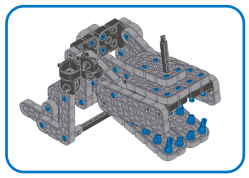

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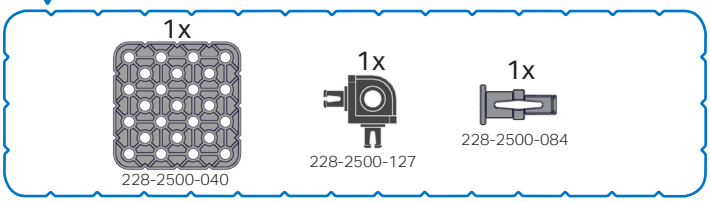
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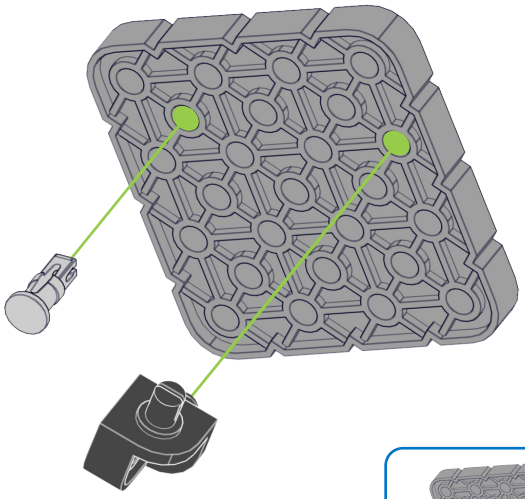

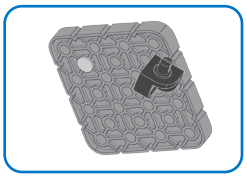

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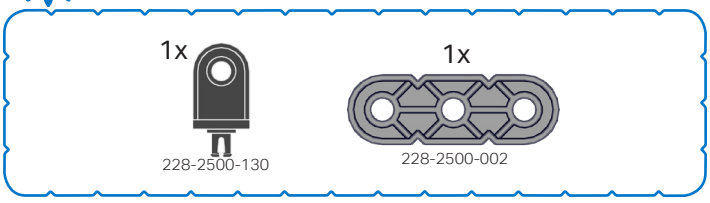
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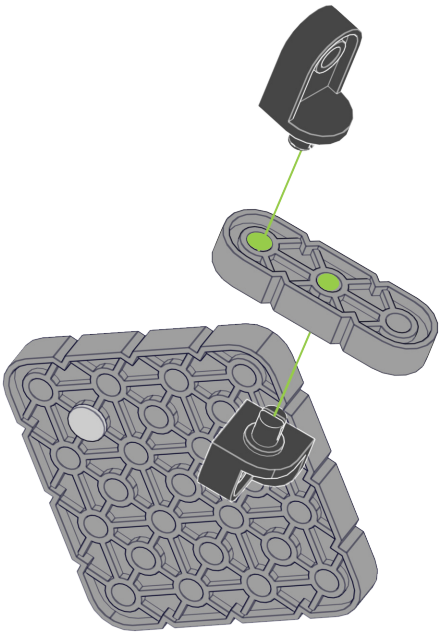

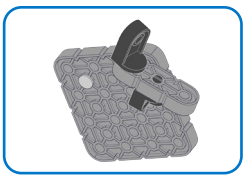

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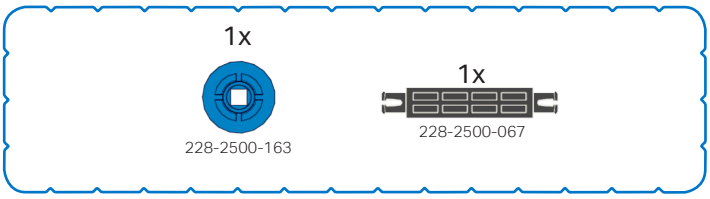
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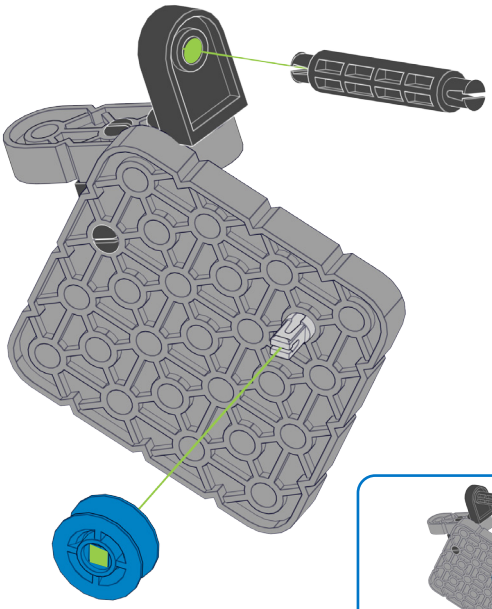

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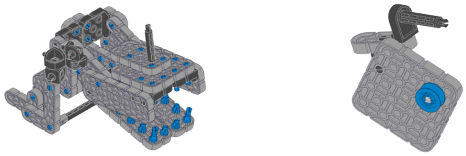

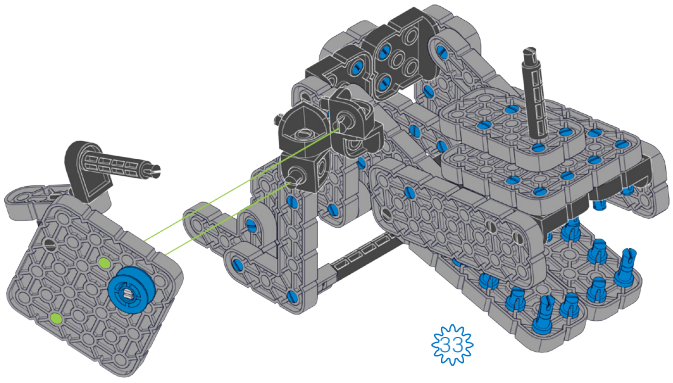

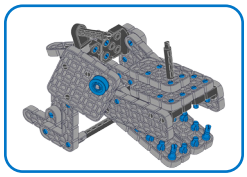

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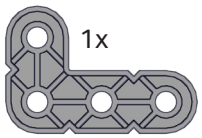
1x



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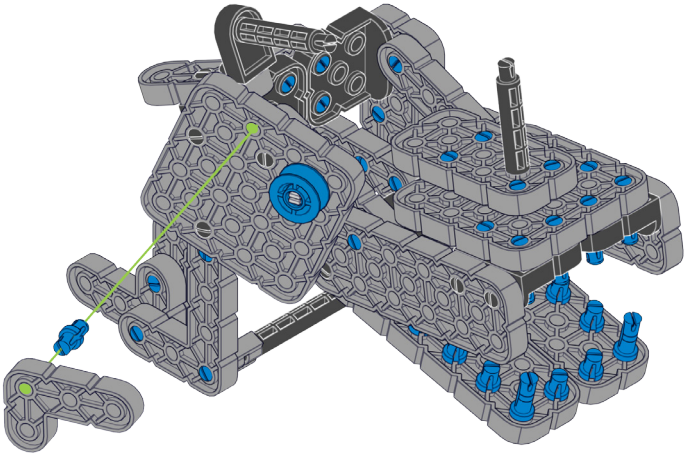

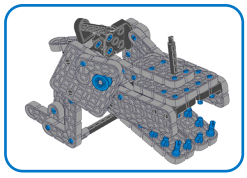

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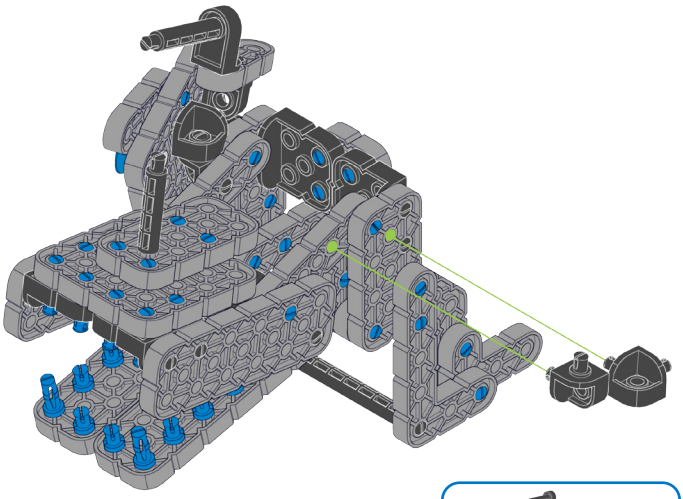

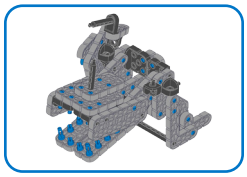

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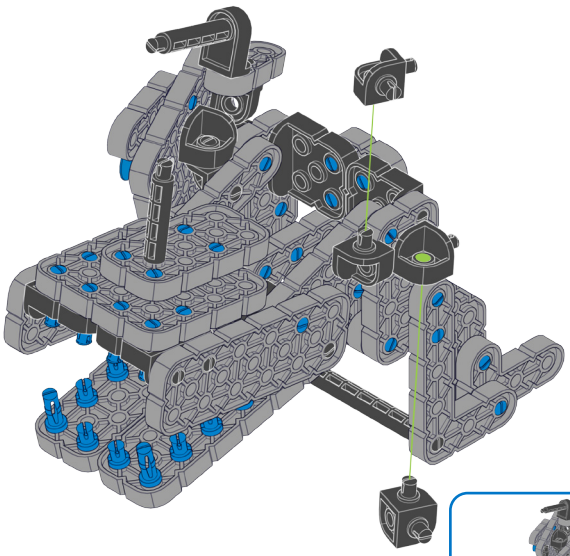

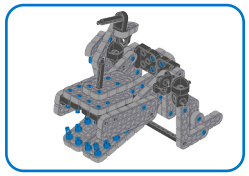

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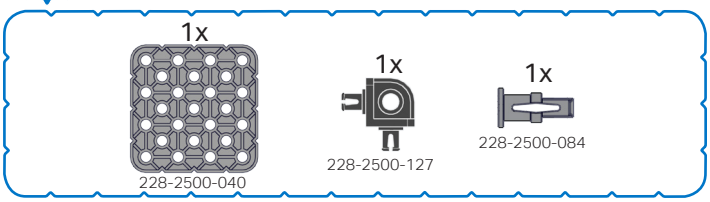
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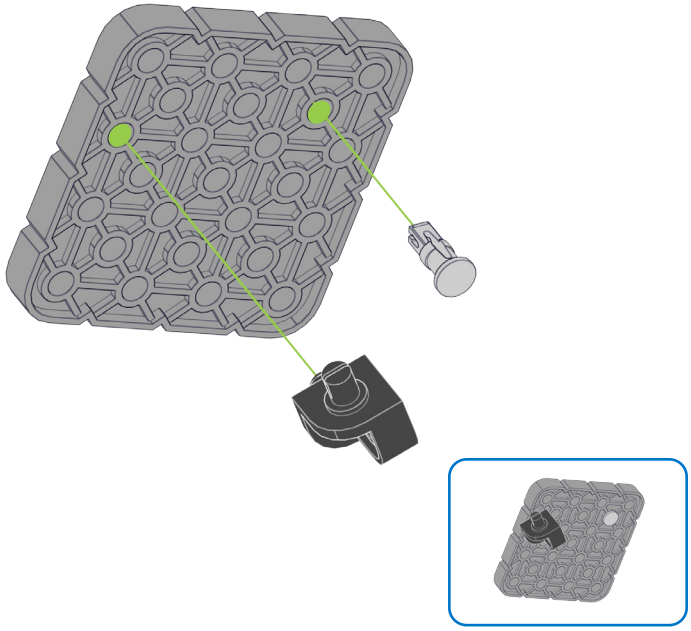

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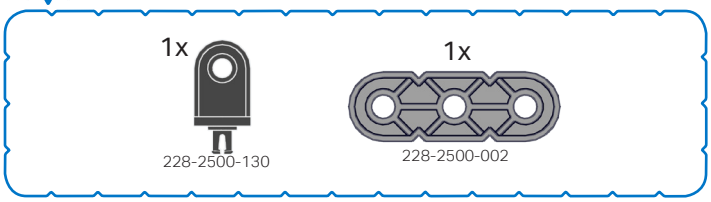
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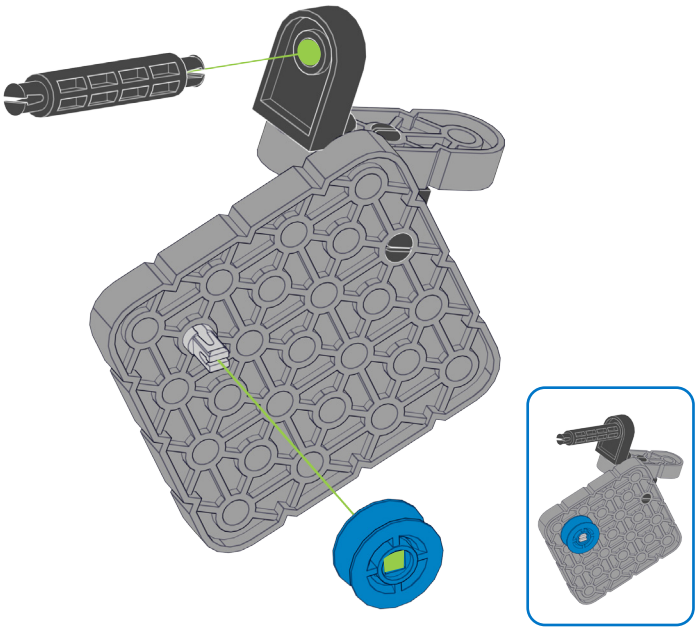

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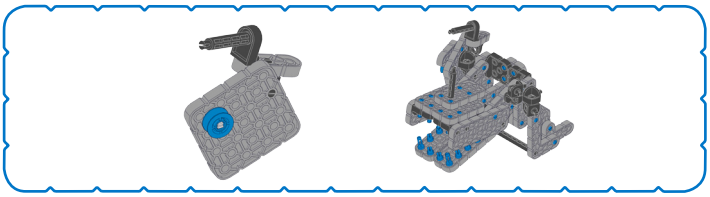

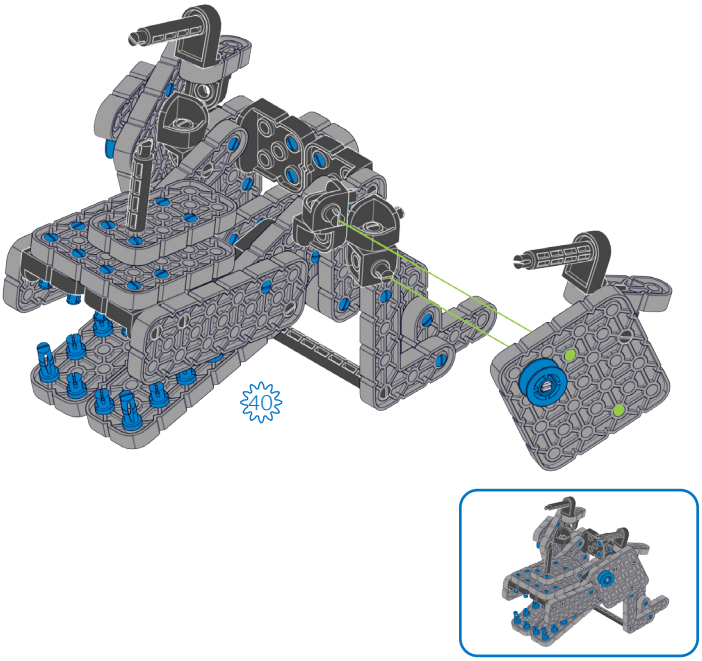
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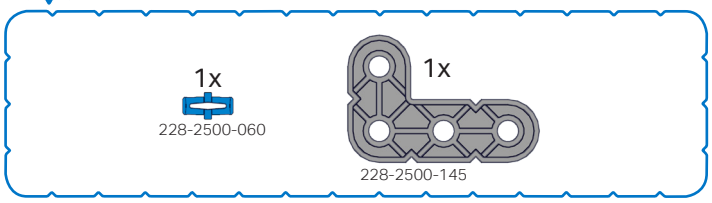
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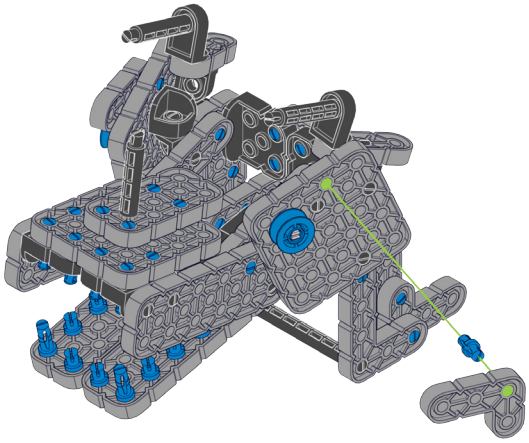

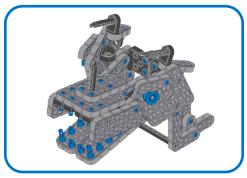

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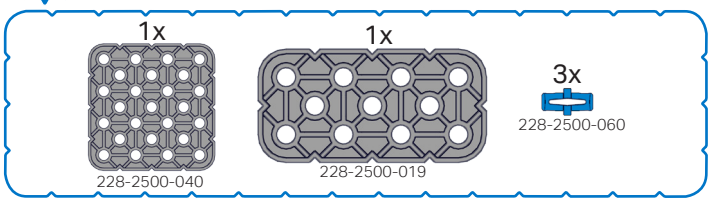
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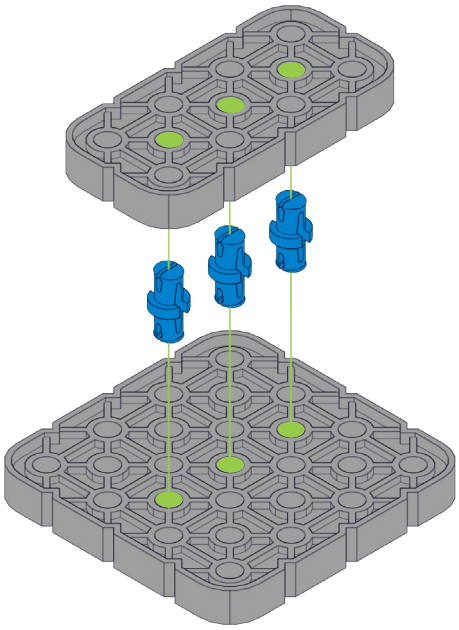

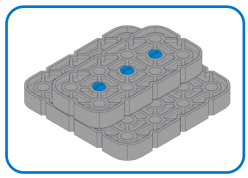

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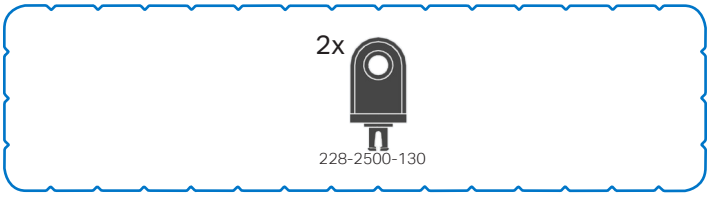
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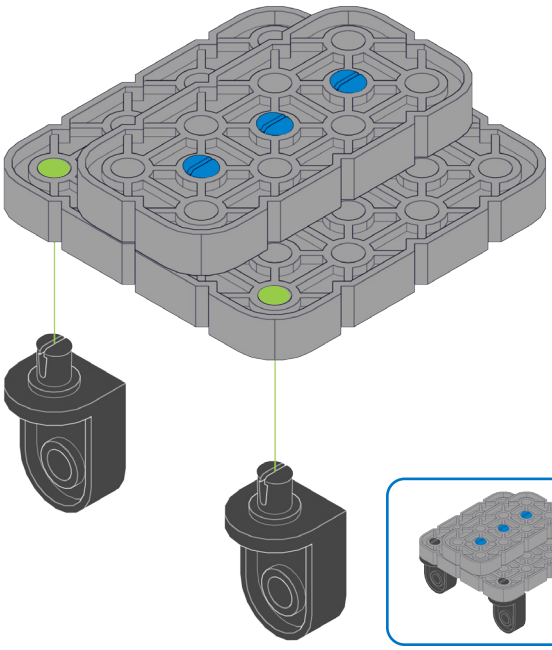

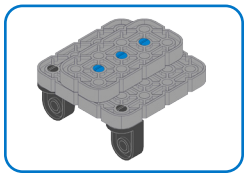

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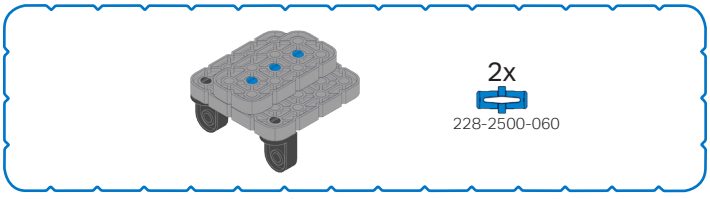
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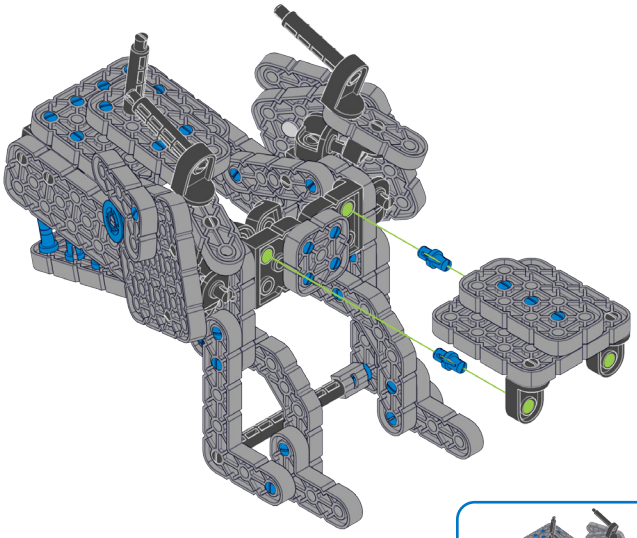

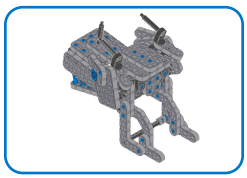

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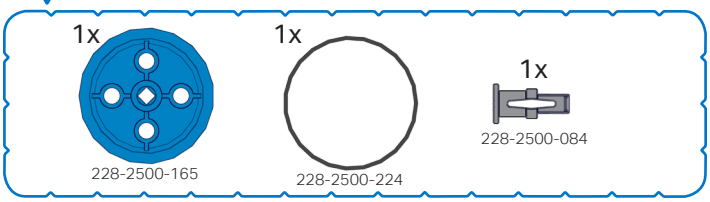
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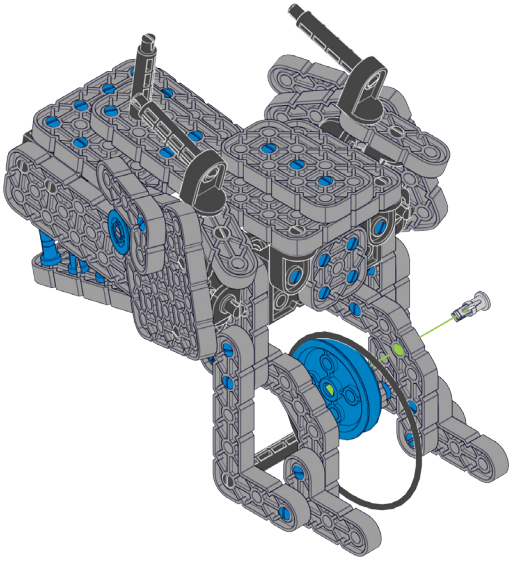

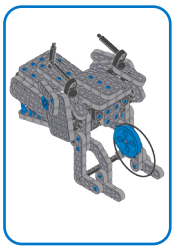

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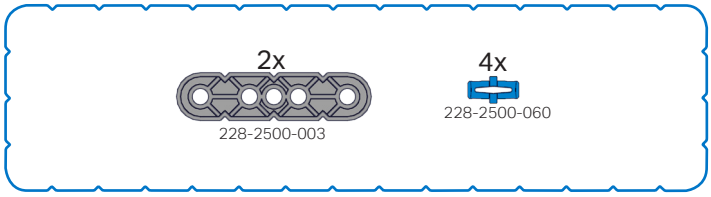
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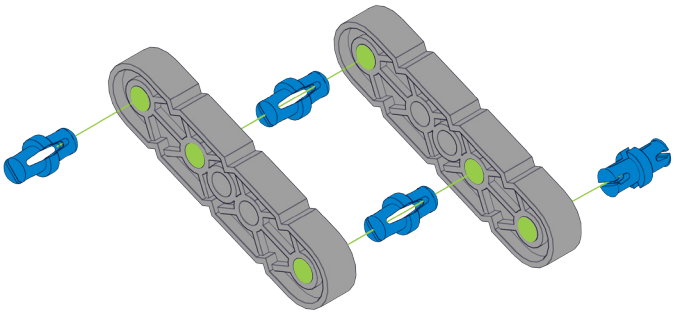

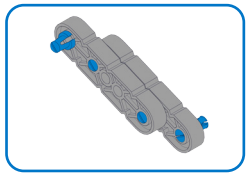

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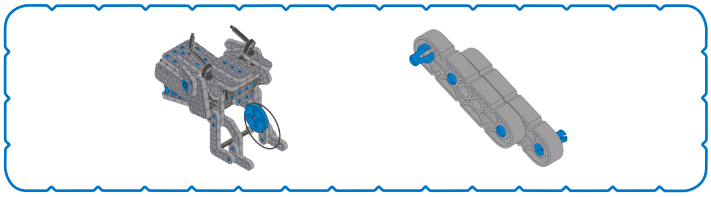
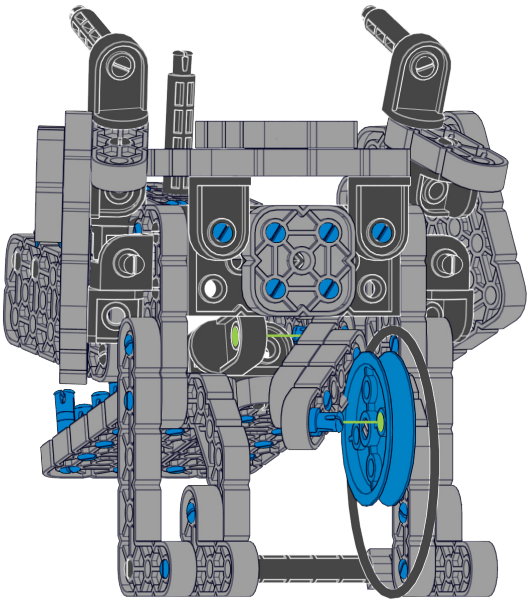
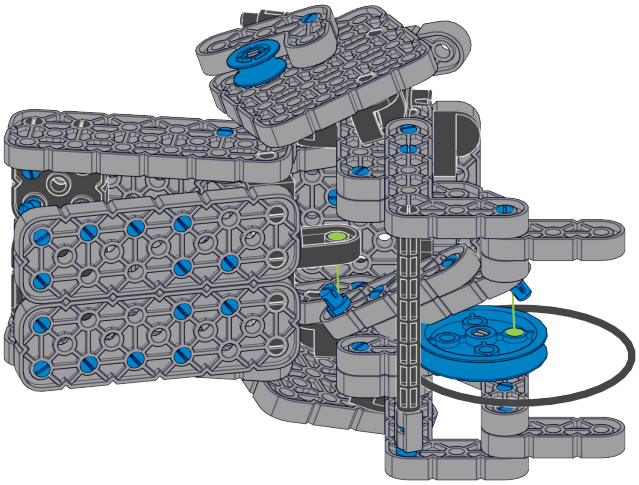
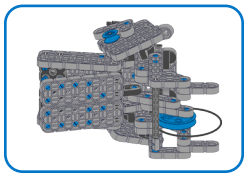


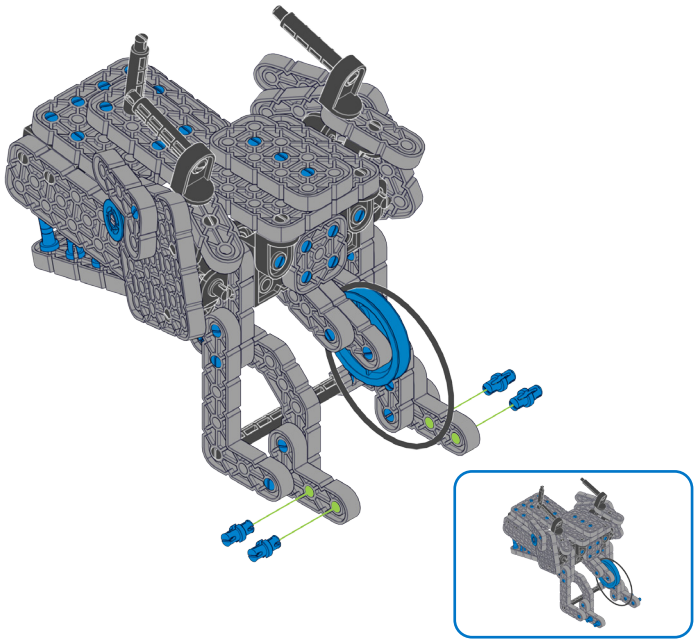






52

4x
228-2500-060



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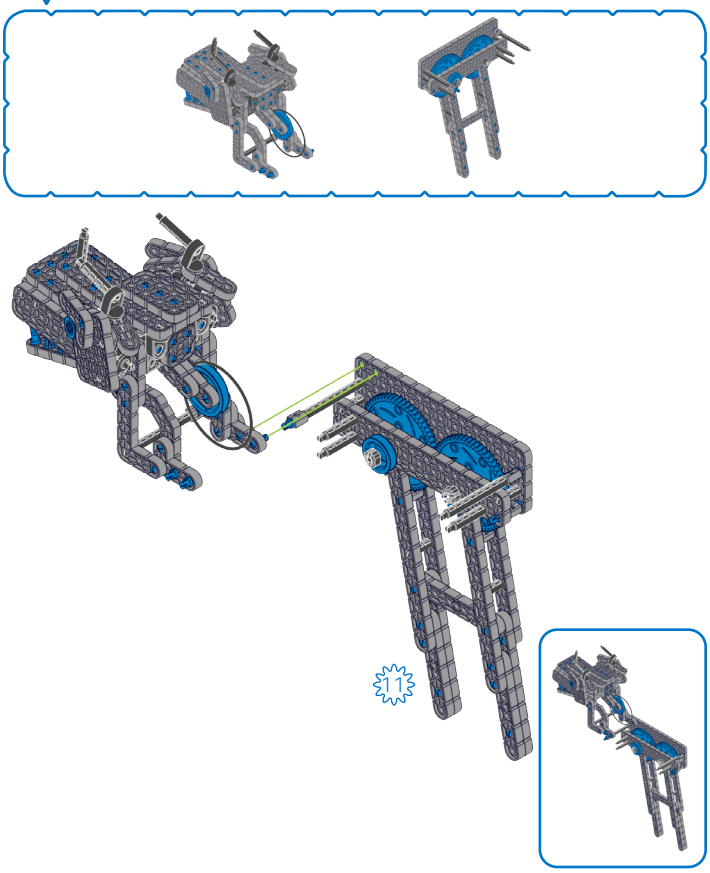

54

2x
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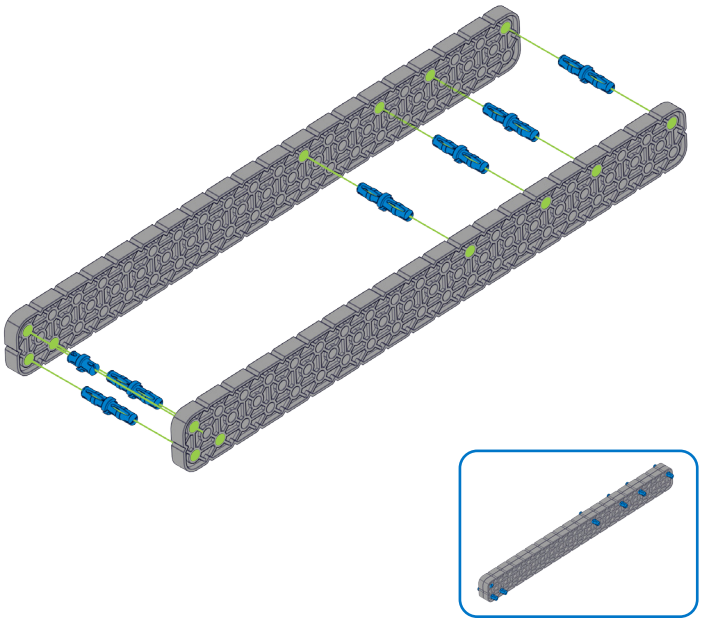
1x
228-2500-060

6x
228-2500-062



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1x
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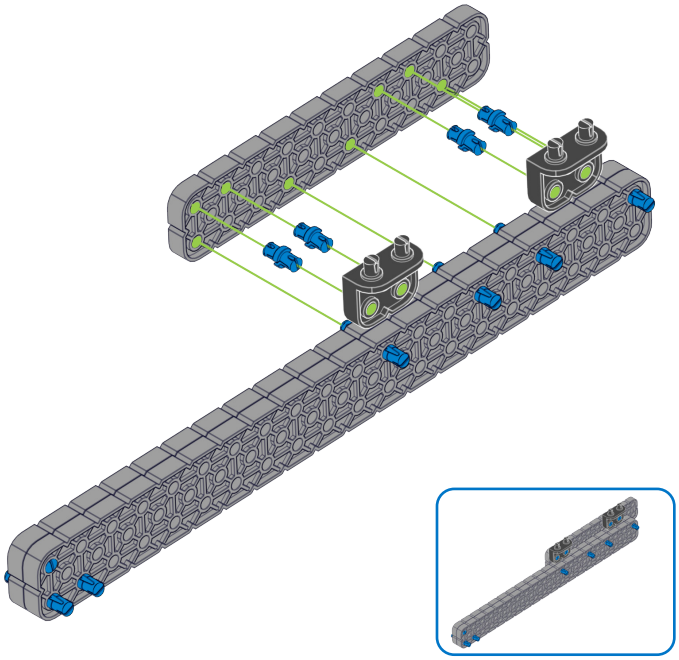
4x
228-2500-060

2x
228-2500-135



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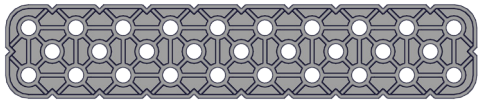

1x
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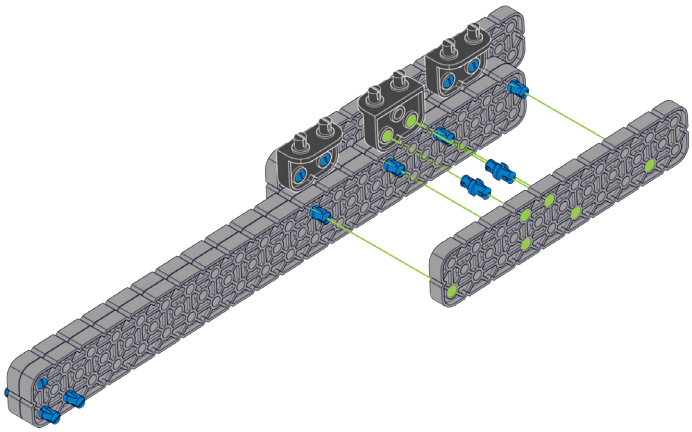
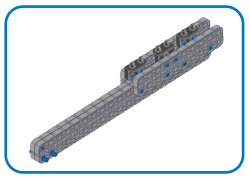
2x
228-2500-060

1x
228-2500-135





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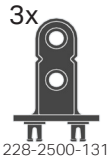

3x
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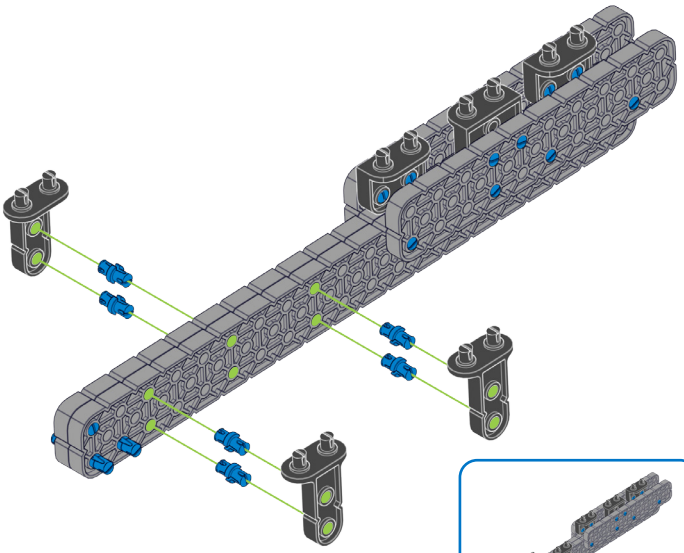
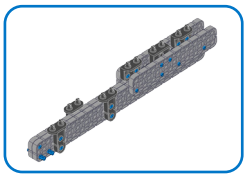
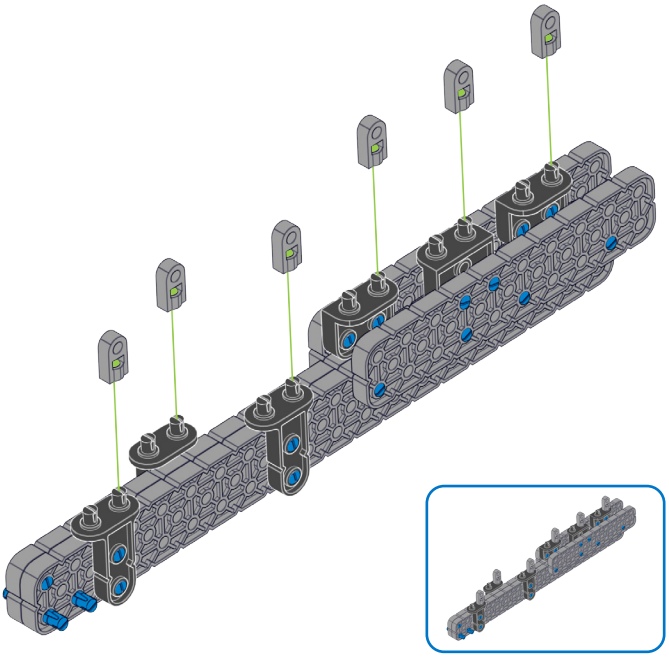
6x
228-2500-060

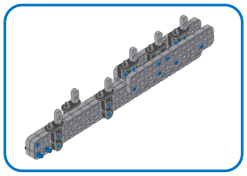




58

6x
228-2500-172





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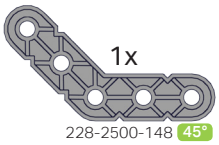
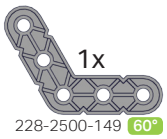
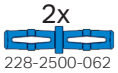


1x
228-2500-148 45°

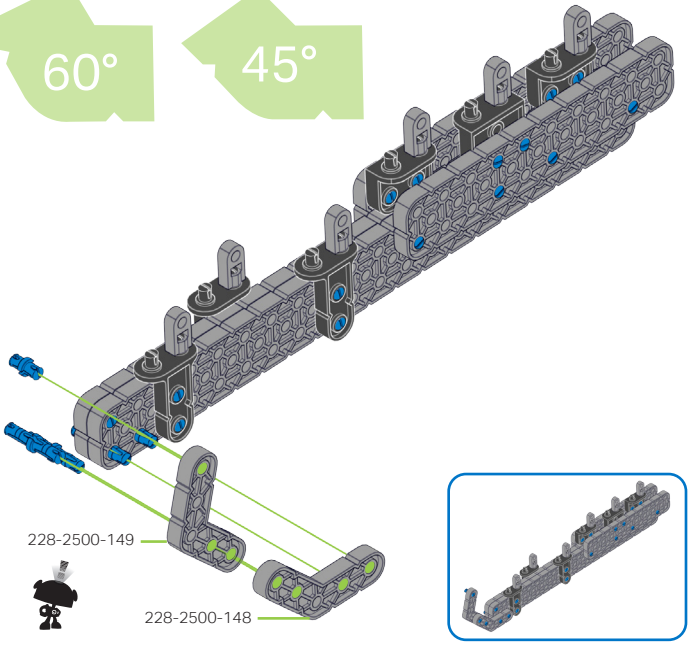


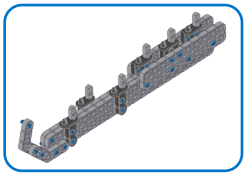
1x
228-2500-149 60°

1x
228-2500-060



2x
228-2500-062





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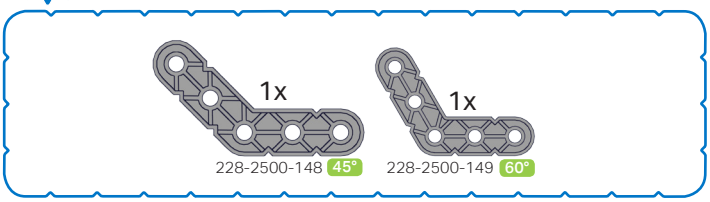
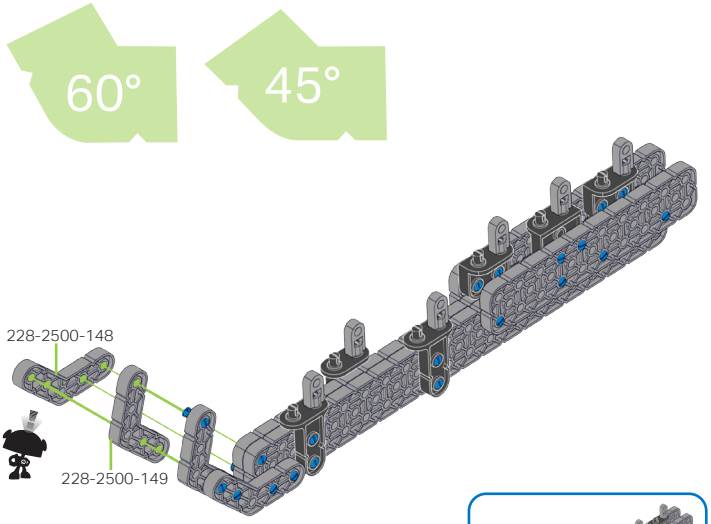
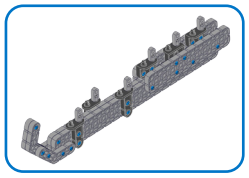

1x
228-2500-148 45°
1x
228-2500-149 60°


60°
45°
228-2500-148
228-2500-149



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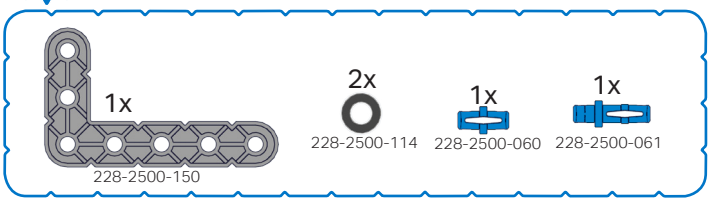
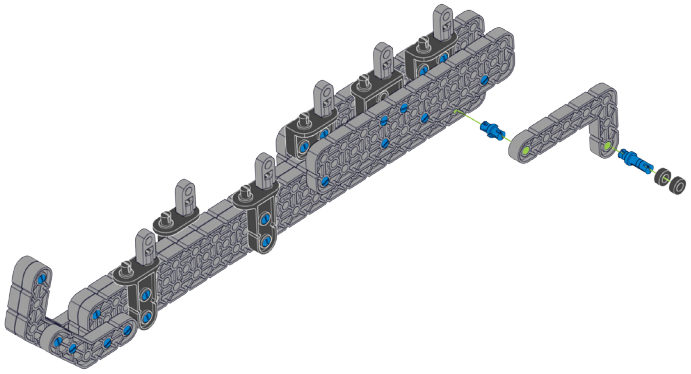
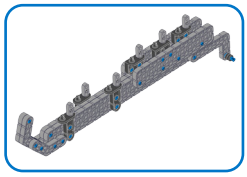

1x
228-2500-150
2x
228-2500-114
1x
228-2500-060
1x
228-2500-061





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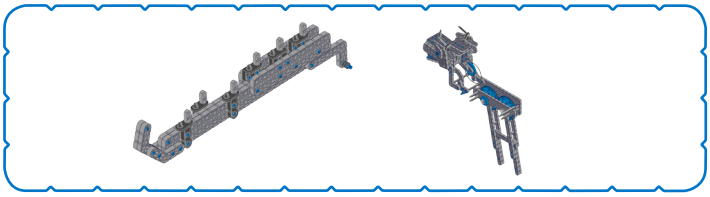

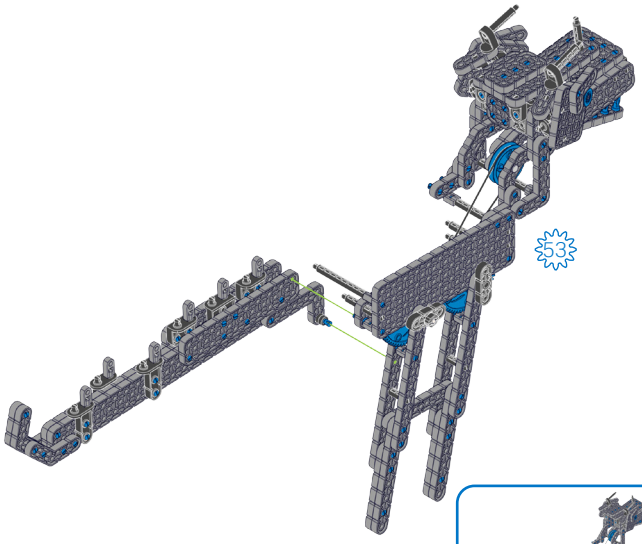
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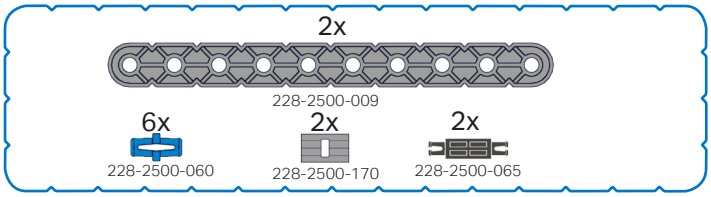
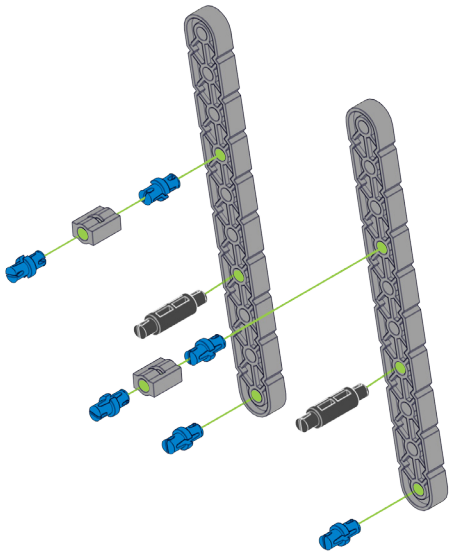
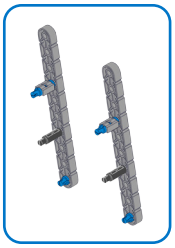
63


2x
228-2500-009
6x
228-2500-060
2x
228-2500-170
2x
228-2500-065





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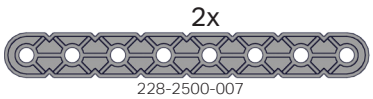
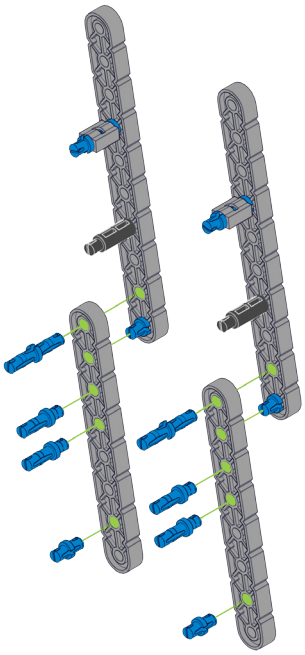
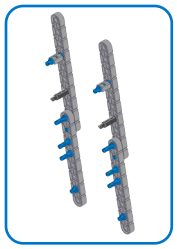

2x
228-2500-007

2x
228-2500-062

4x
228-2500-061

2x
228-2500-060





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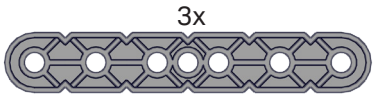
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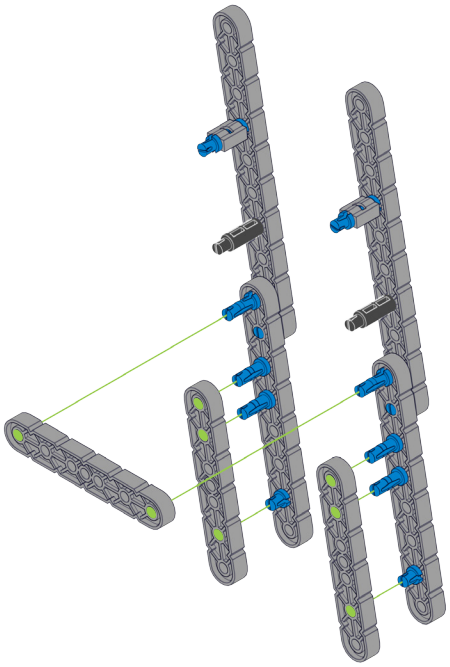
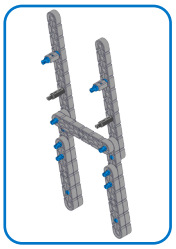
228-2500-005





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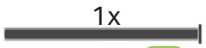
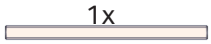

1x
228-2500-082 4xP

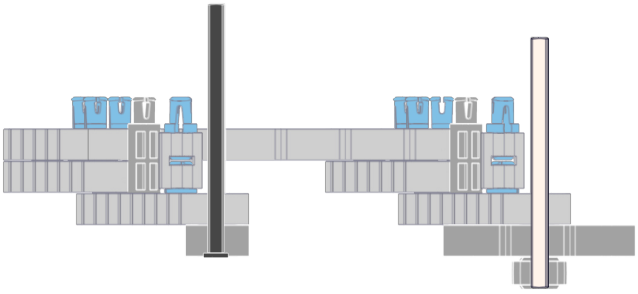

1x
228-2500-120 4xP

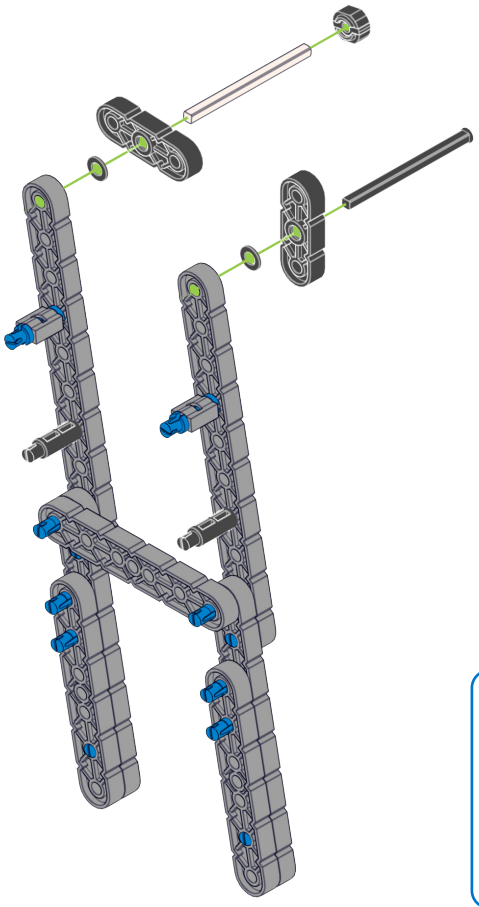
2x
228-2500-141

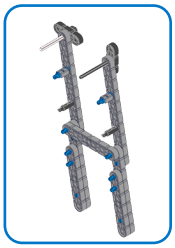
2x
228-2500-112

1x
228-2500-143

1:1







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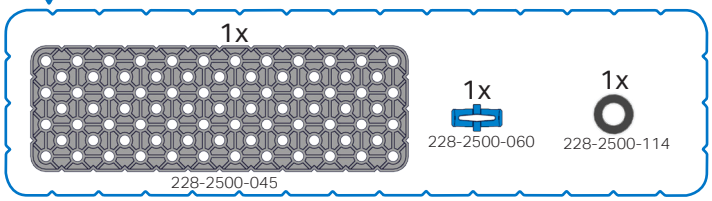
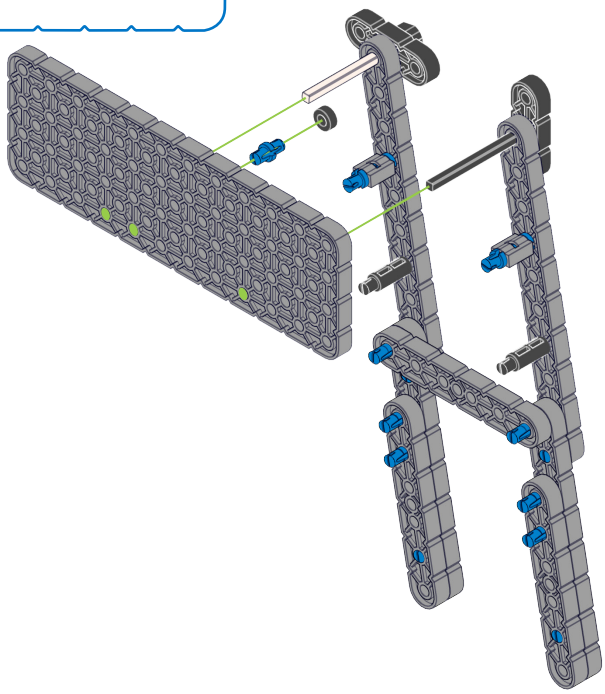
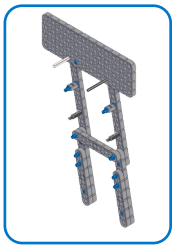
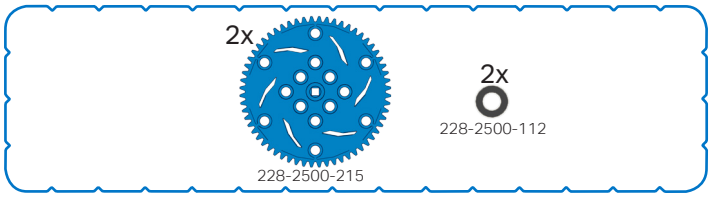
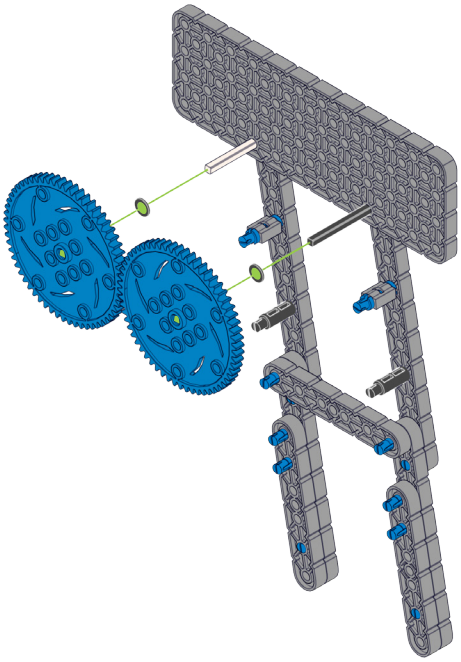


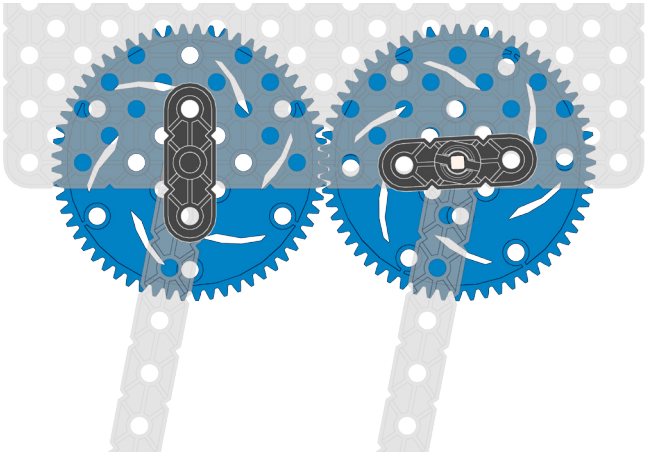




68

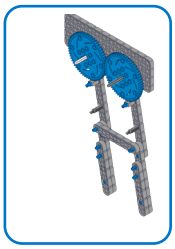




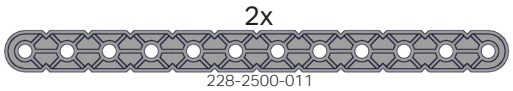


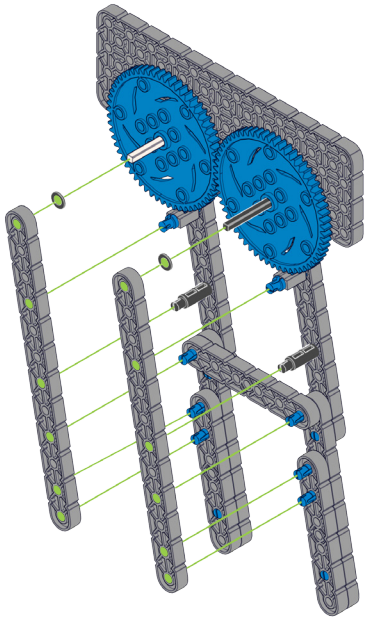
Make sure to line up the holes of 228-2500-141 and 228-2500-215 as shown

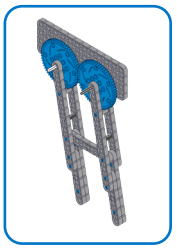
Assurez-vous d'aligner les trous de 228-2500-141 et 228-2500-215 comme montré



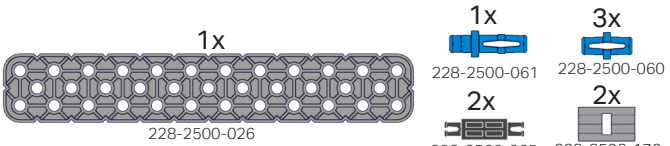
69


2x
228-2500-011
2x
228-2500-112





70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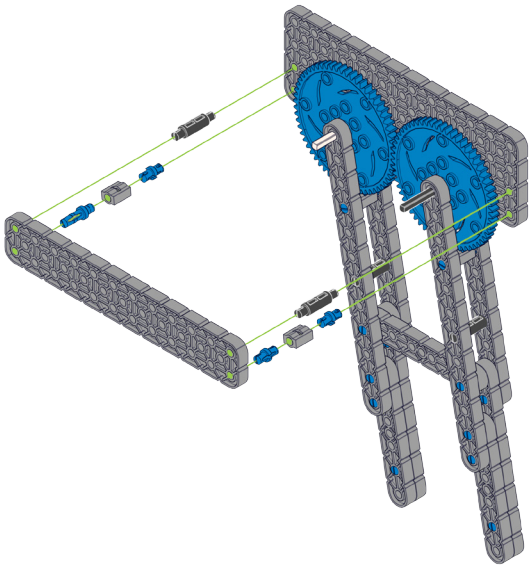
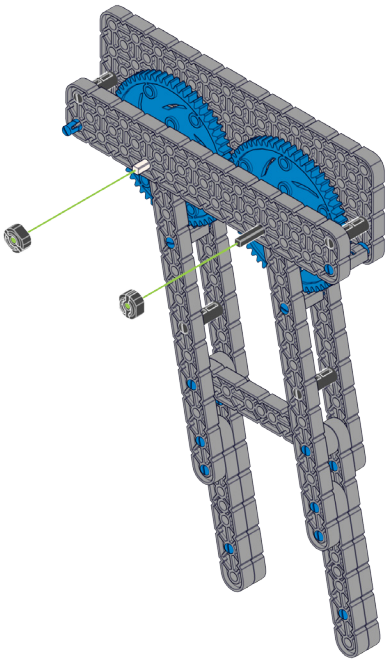
1x
228-2500-061
3x
228-2500-060
2x
228-2500-065
2x
228-2500-170



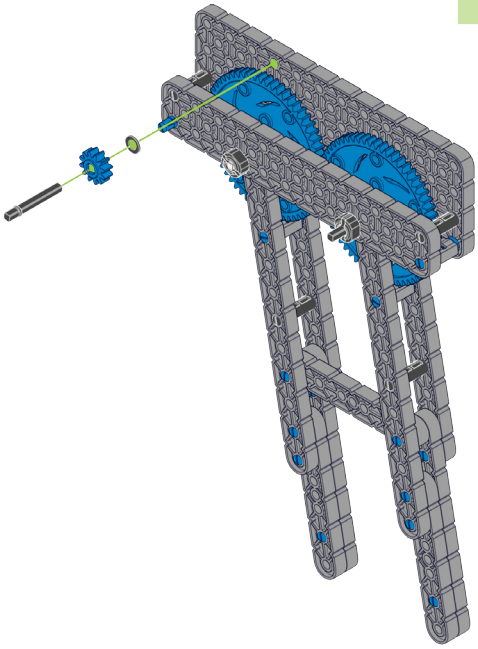
71

2x
228-2500-143



72

1x
228-2500-078 2xP
1x
228-2500-112
1x
228-2500-213

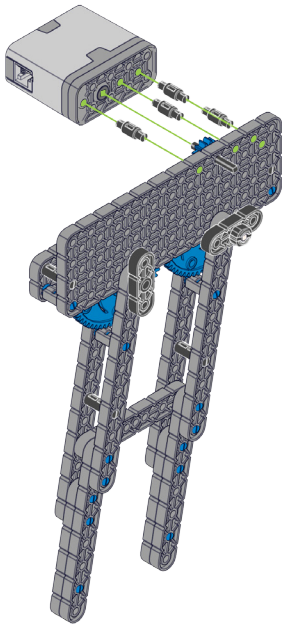


1:1

73

4x
228-2500-064

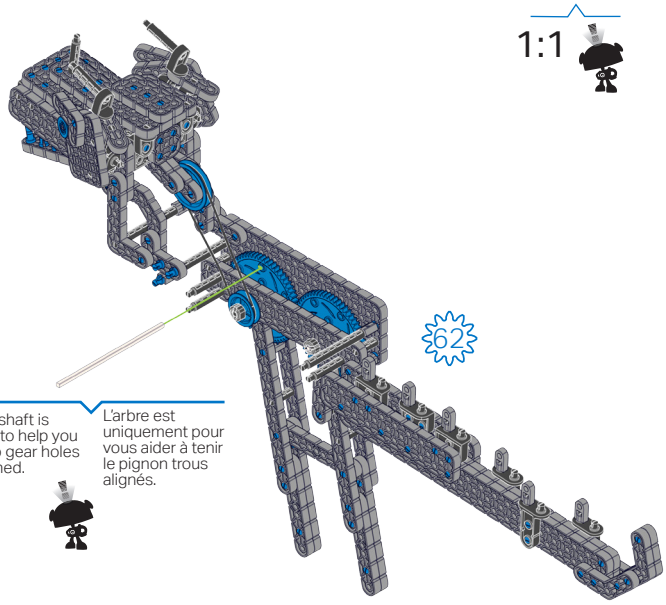
1x
228-2560



74

1x
228-2500-124 8xP

1:1



The shaft is only to help you keep gear holes alligned.

L'arbre est uniquement pour vous aider à tenir le pignon trous alignés.

75

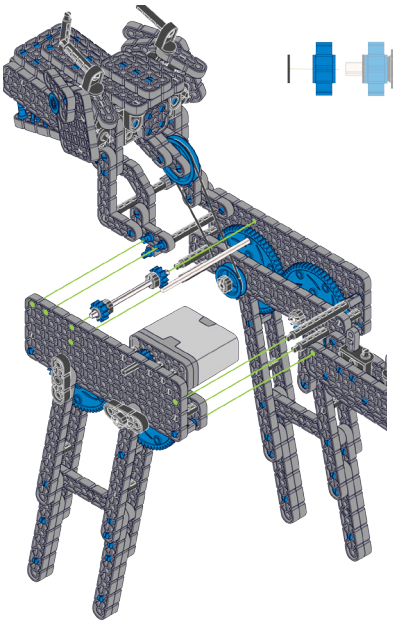
1x
228-2500-122 6xP

2x
228-2500-143

2x
228-2500-112

2x
228-2500-213

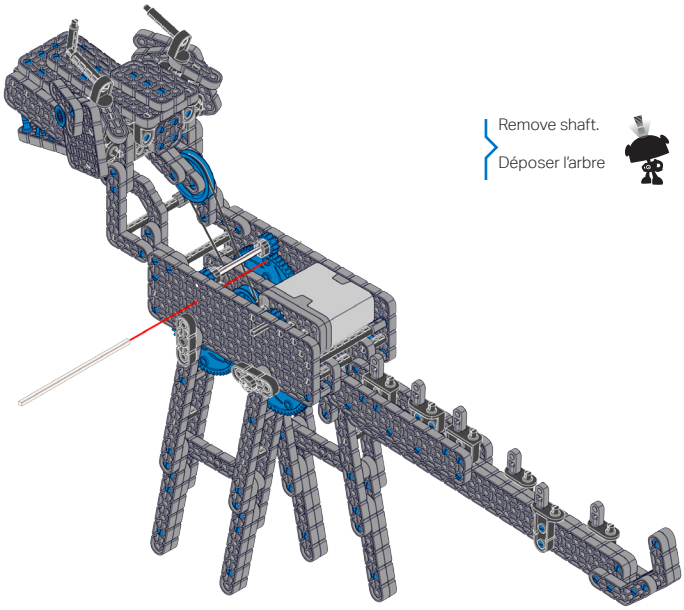
1:1



Make sure gears are exactly like step 6 and 68

Assurez-vous que les engrenages sont exactement comme aux étapes 6 et 68

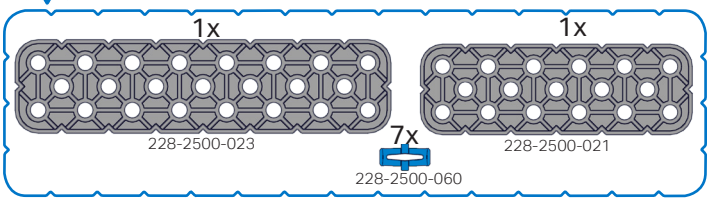
76

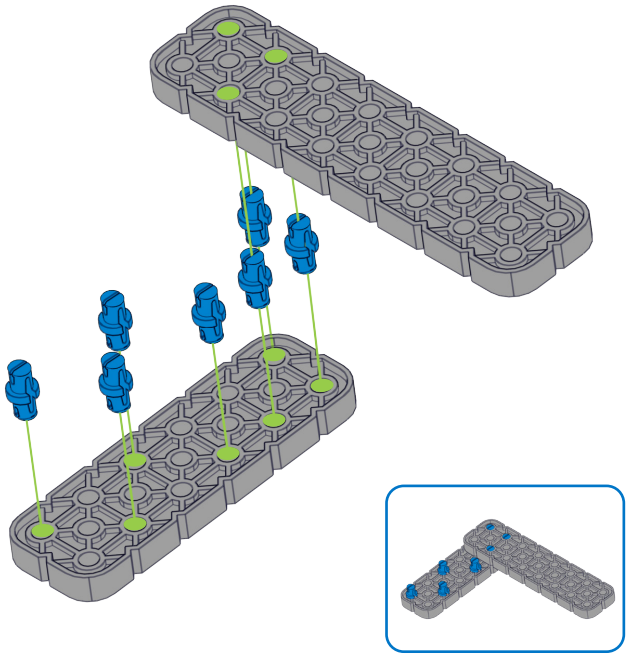


Remove shaft.

Déposer l'arbre

77


1x
228-2500-023
1x
228-2500-021
7x
228-2500-060



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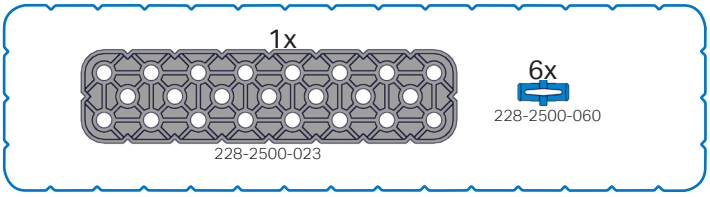
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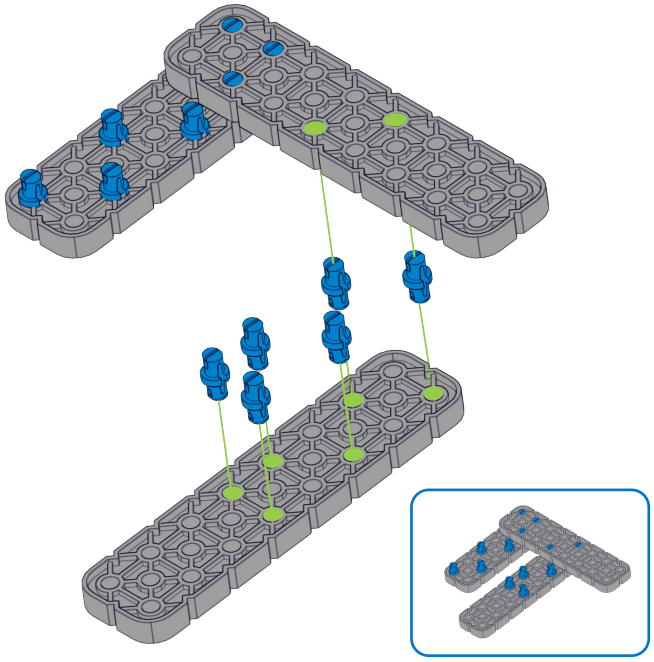
228-2500-023
6x
228-2500-060



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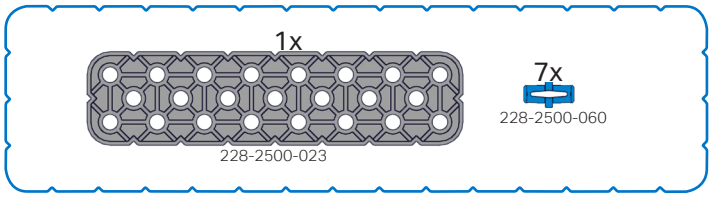
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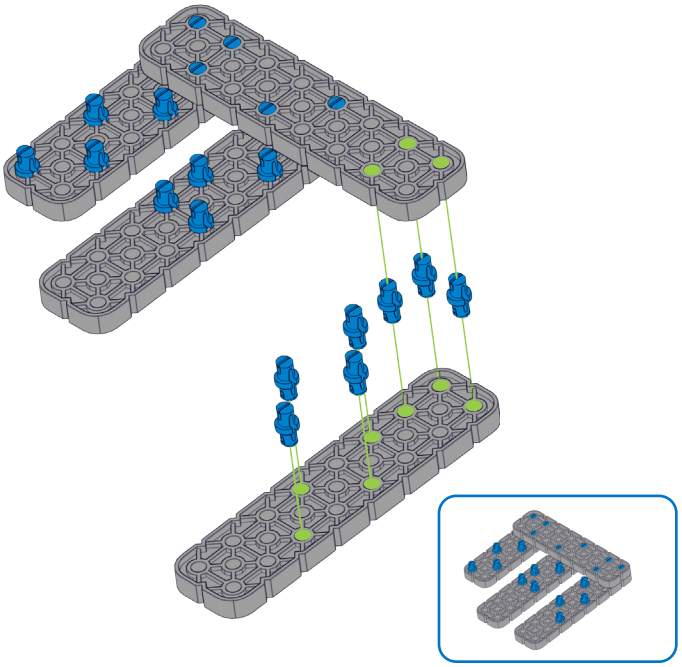

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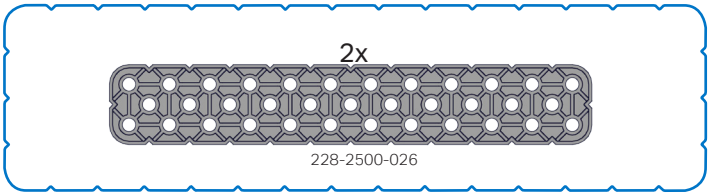
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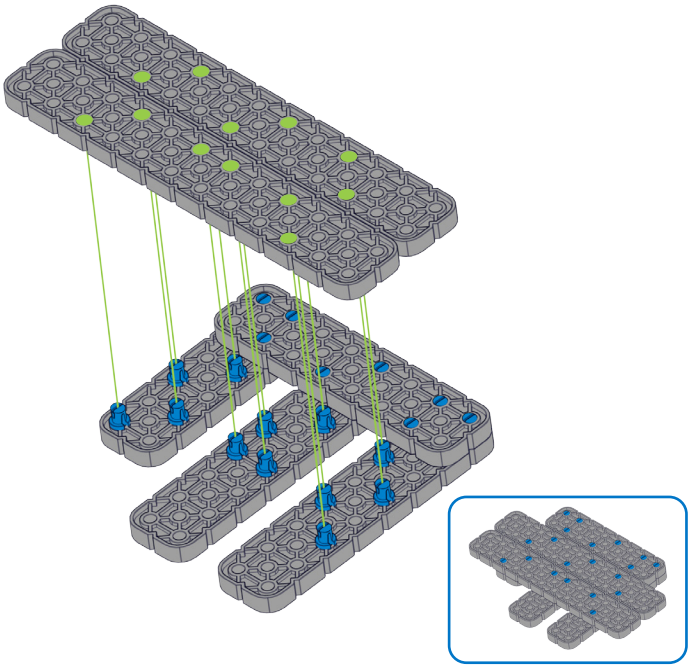

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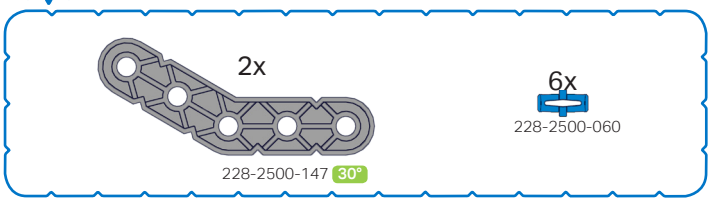
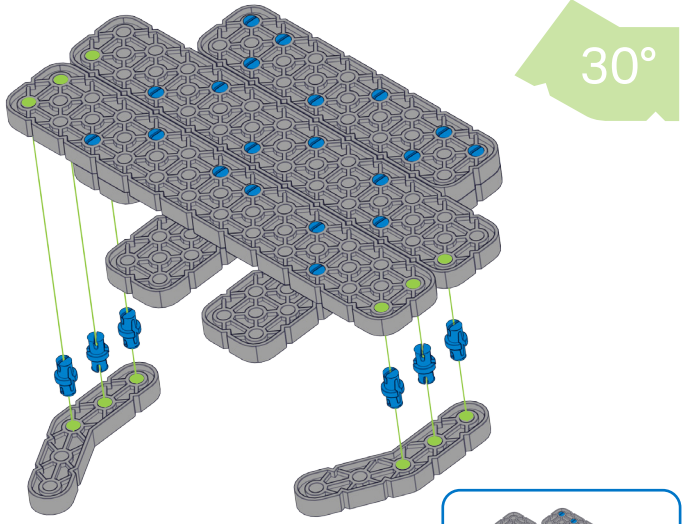

2x
228-2500-147 30°
6x
228-2500-060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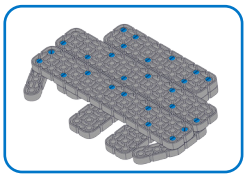

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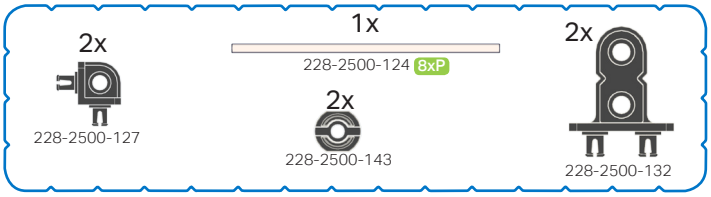
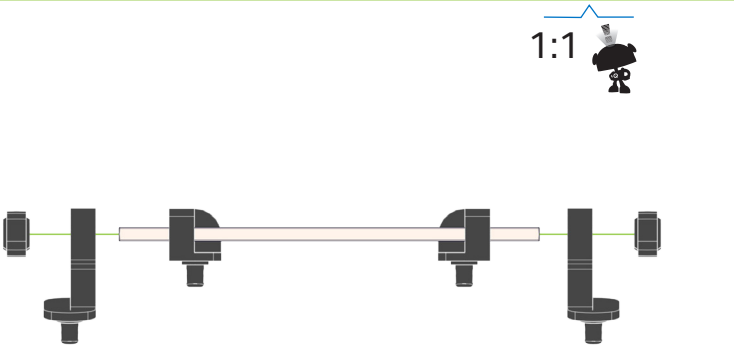

2x
228-2500-127
1x
228-2500-124 8xP
2x
228-2500-143
2x
228-2500-132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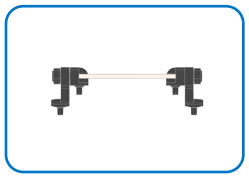

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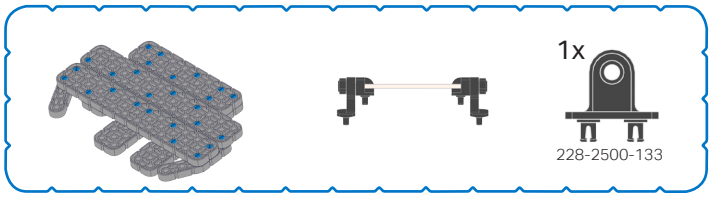
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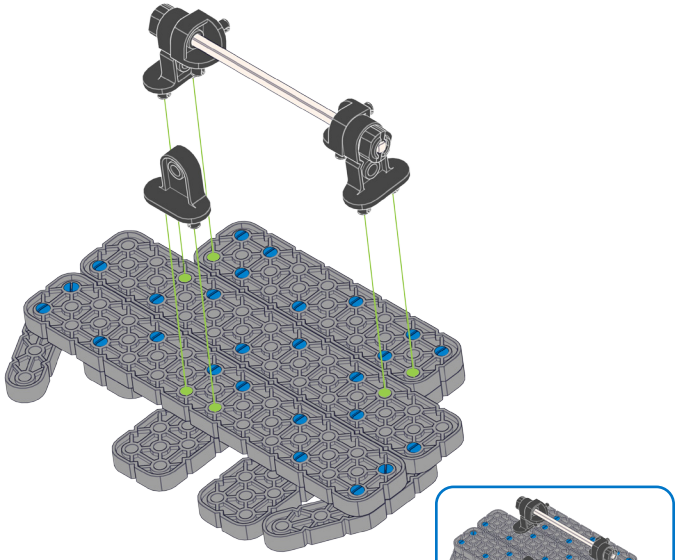

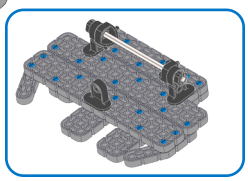

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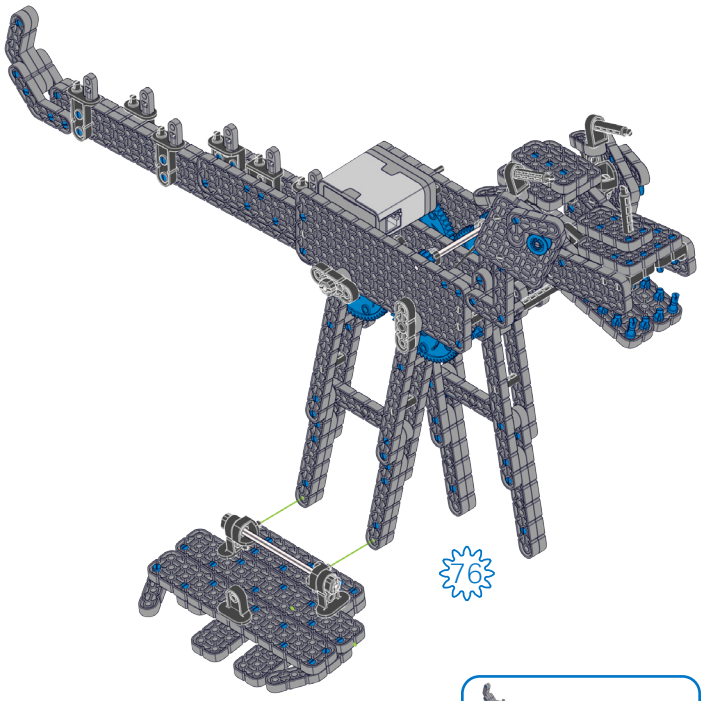
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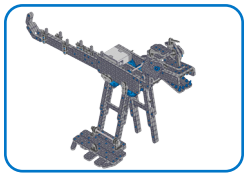

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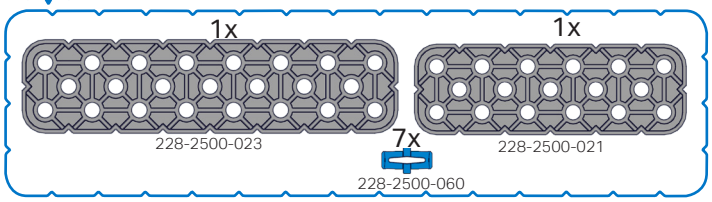
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1x
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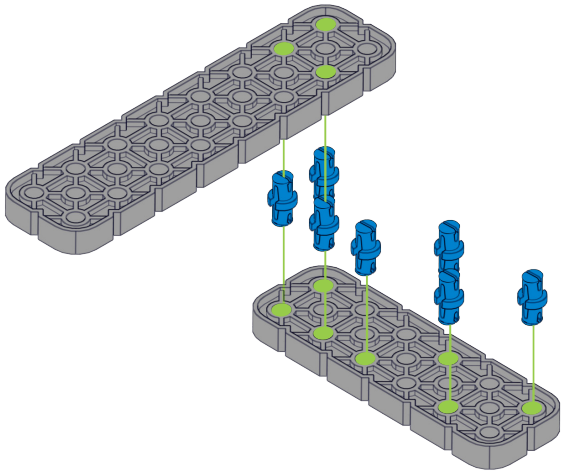
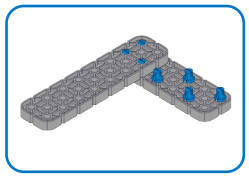
7x
228-2500-060





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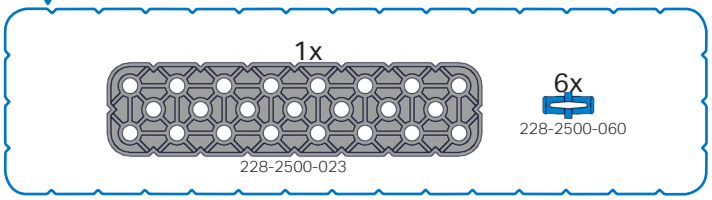
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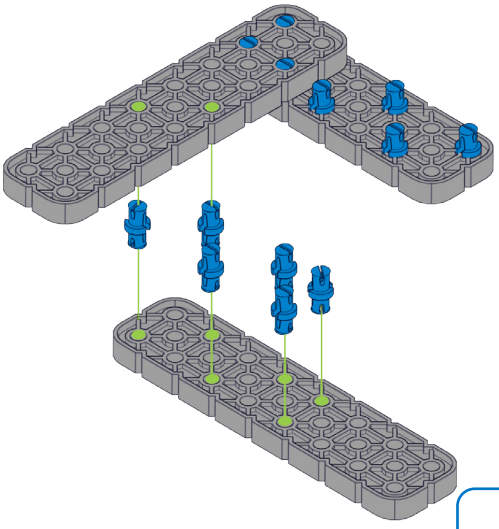

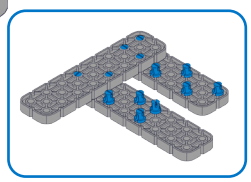

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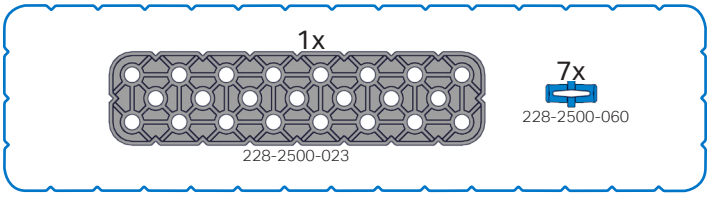
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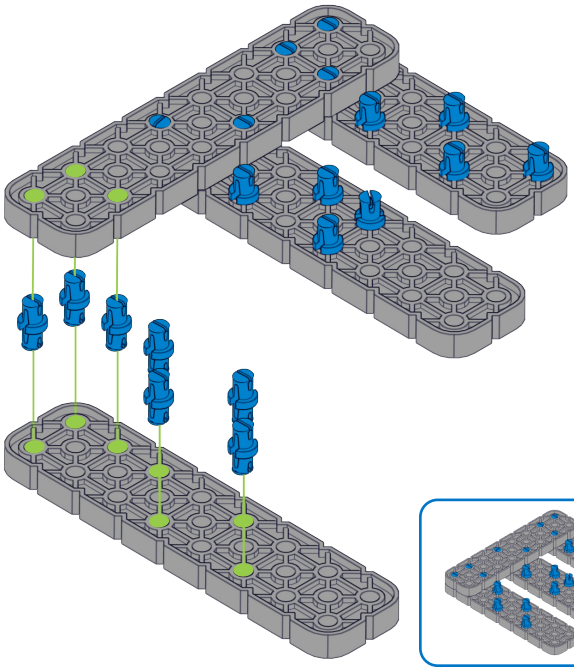

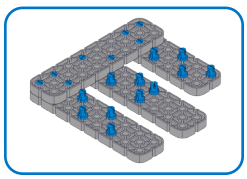

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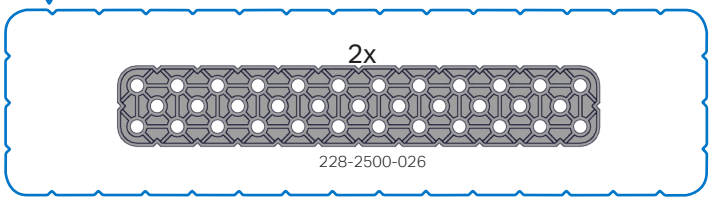
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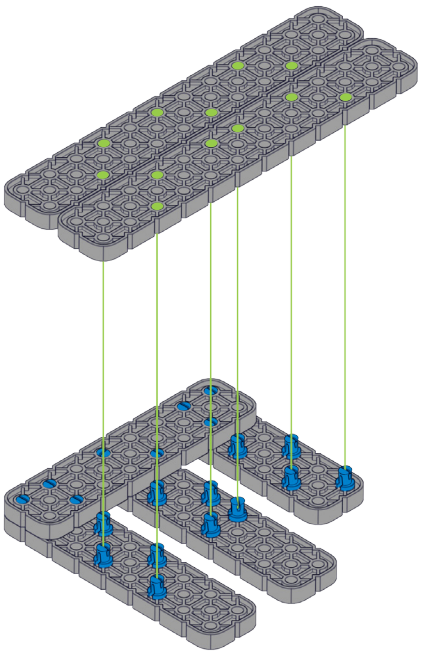

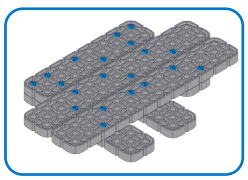

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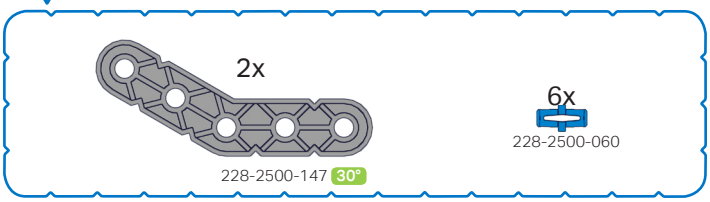
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228-2500-147 30°
6x
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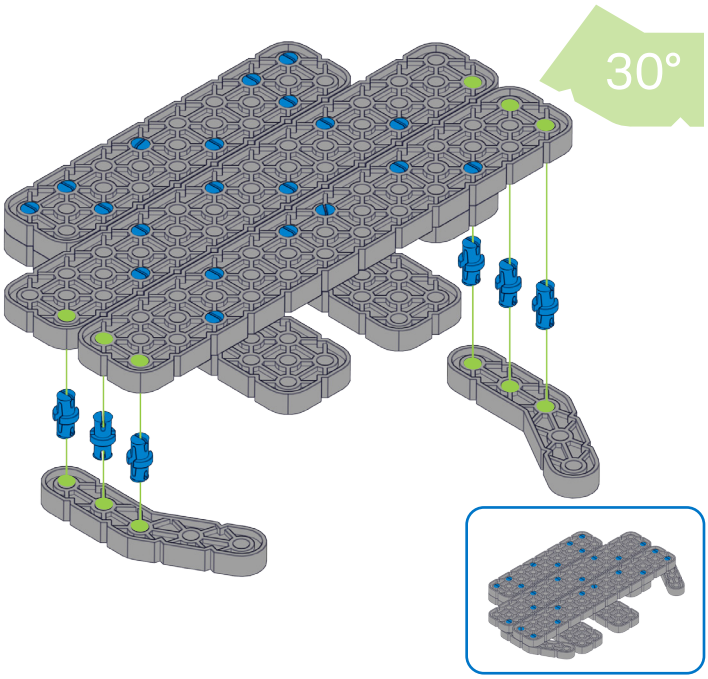
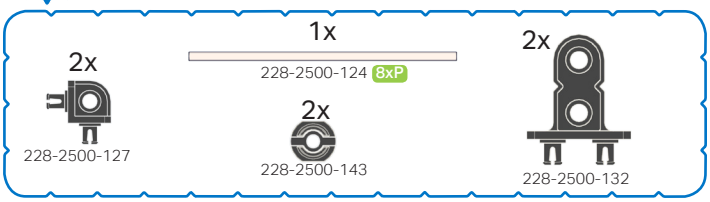

30°

90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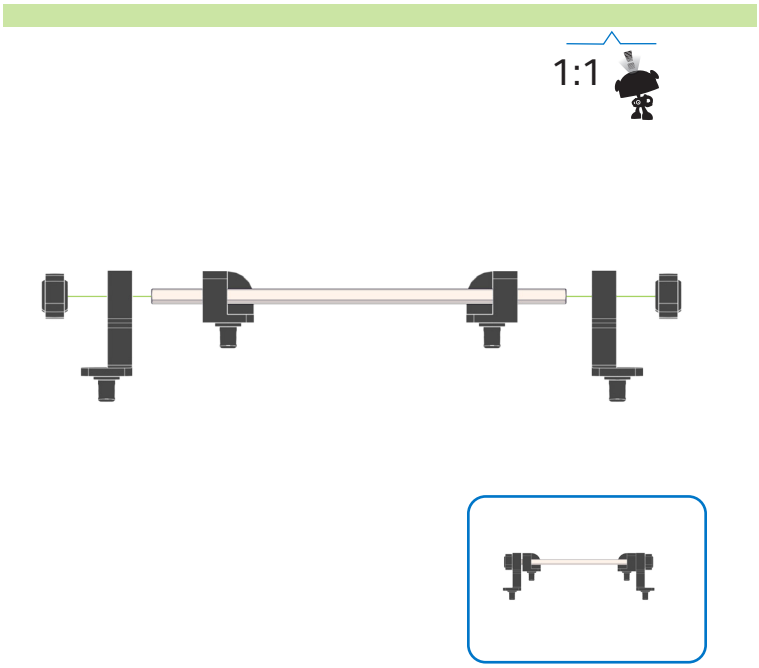
228-2500-127
1x
228-2500-124 8xP
2x
228-2500-143
2x
228-2500-132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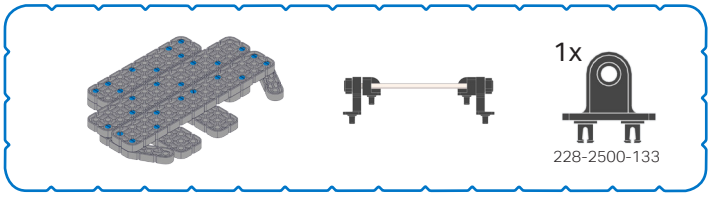
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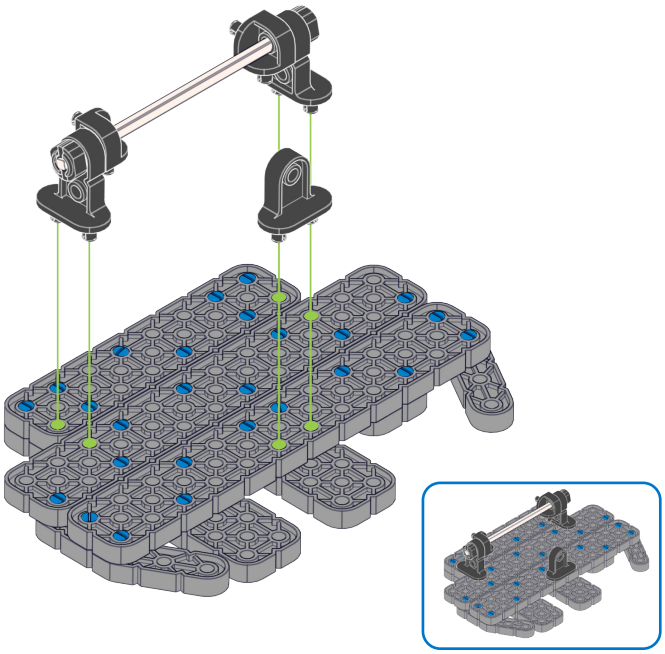

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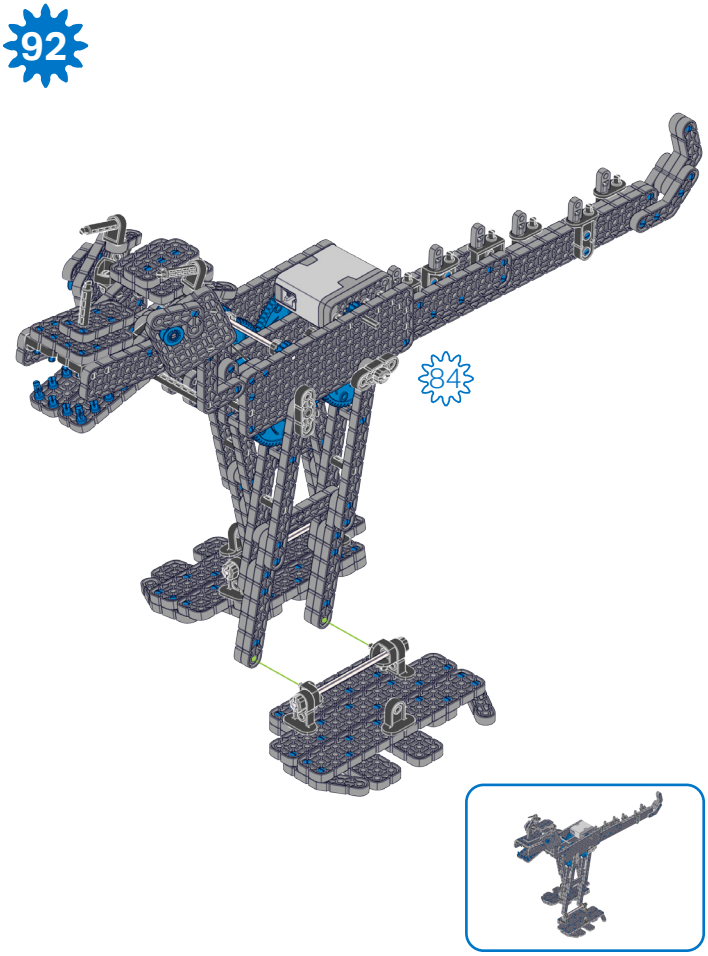
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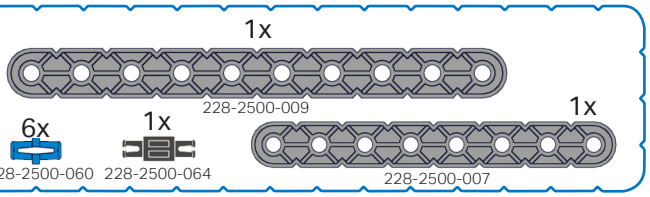
93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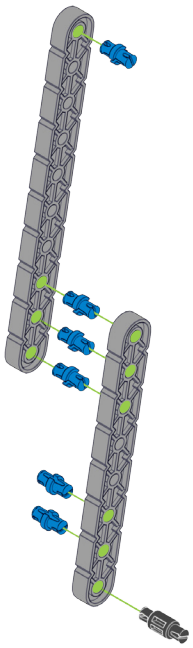

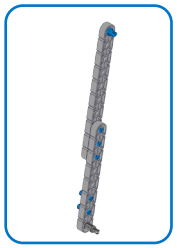

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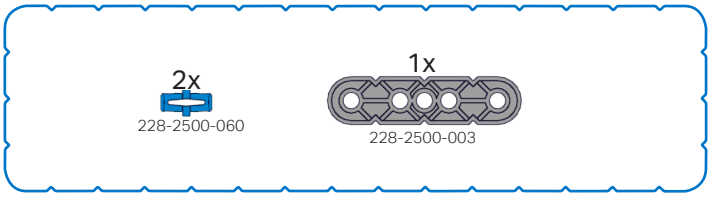
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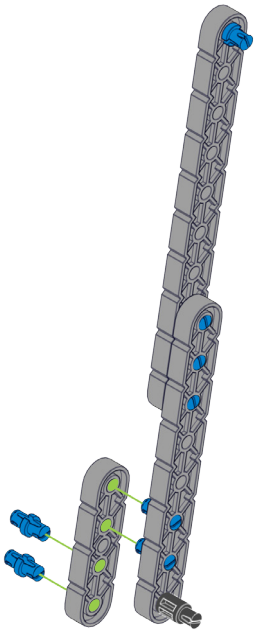

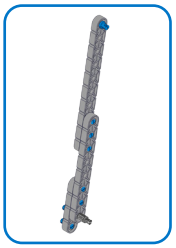

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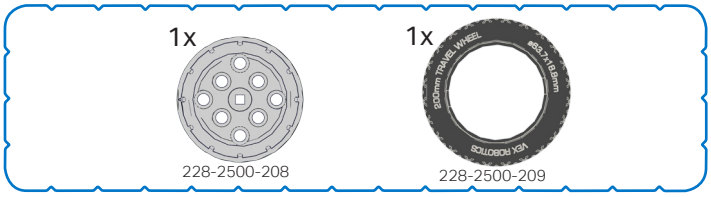
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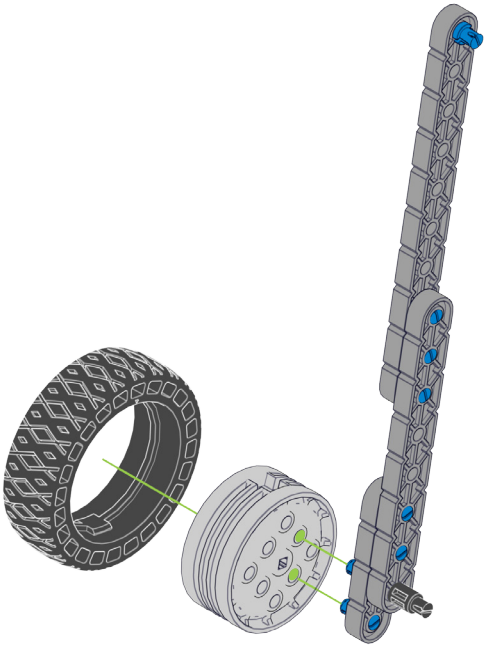

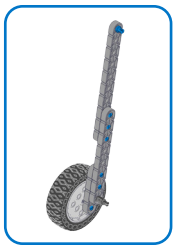

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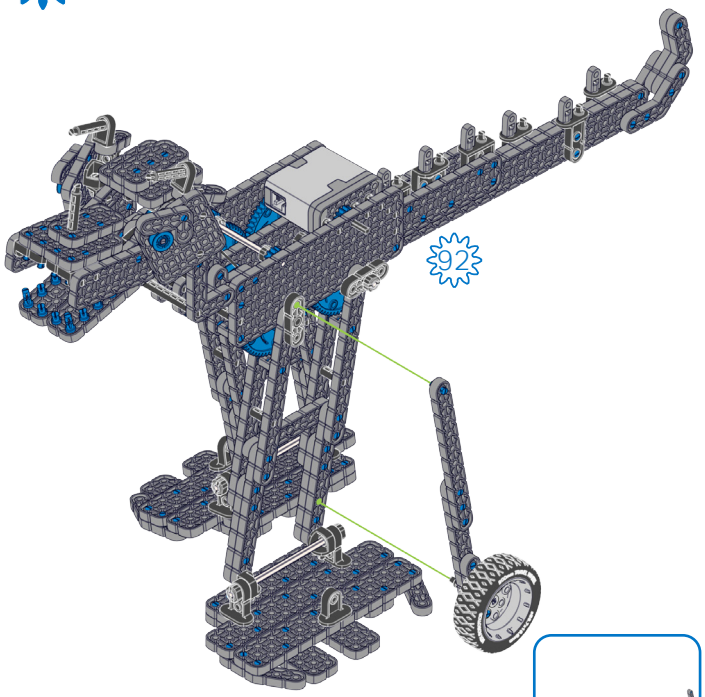
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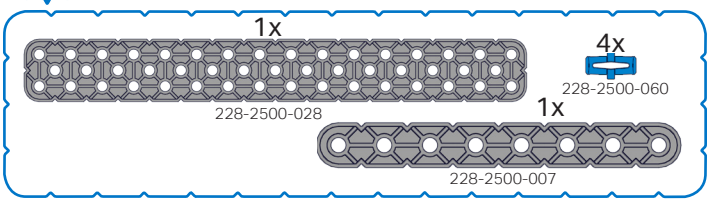
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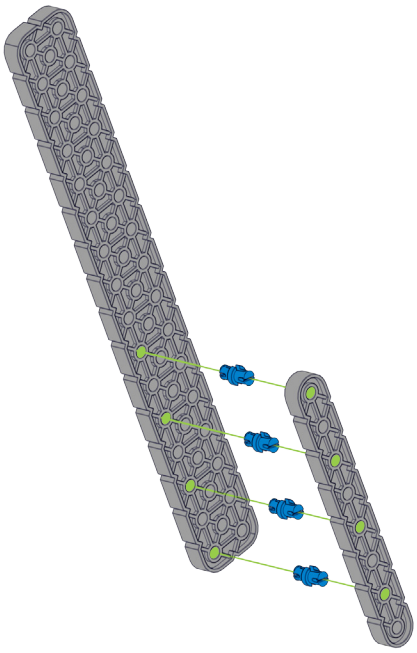

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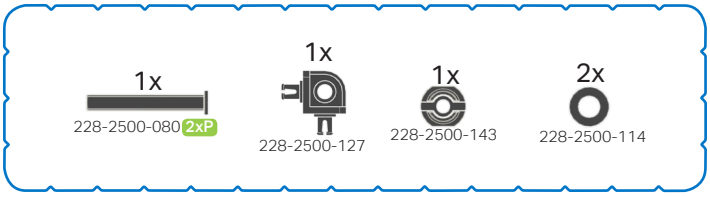
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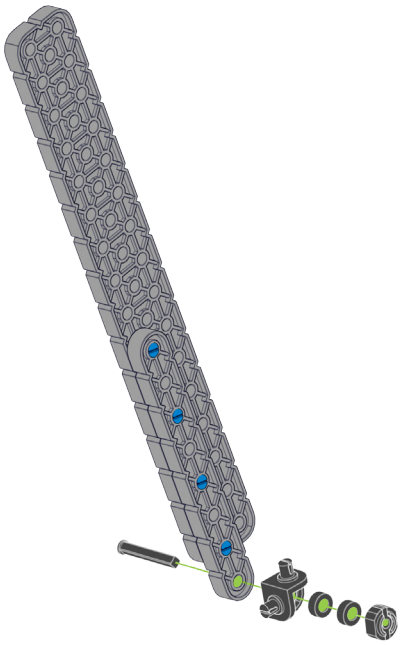
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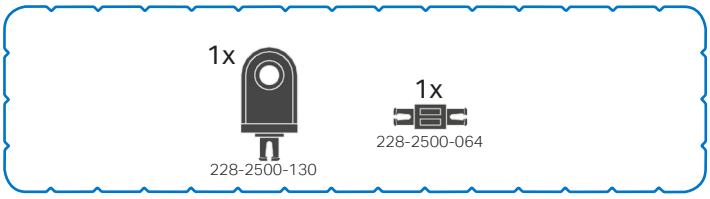
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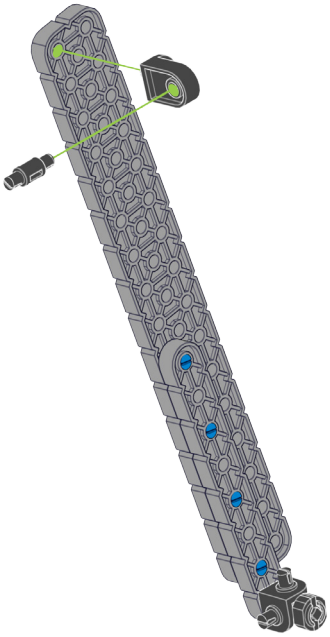

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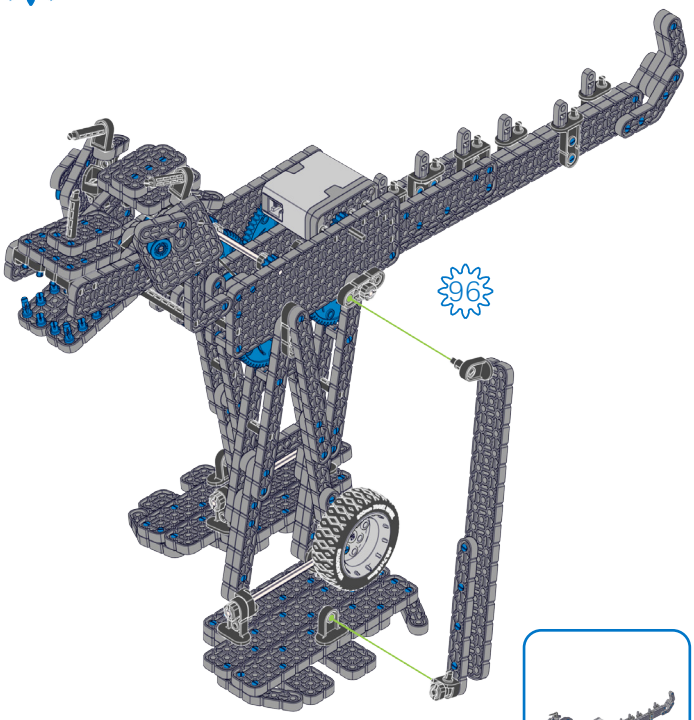
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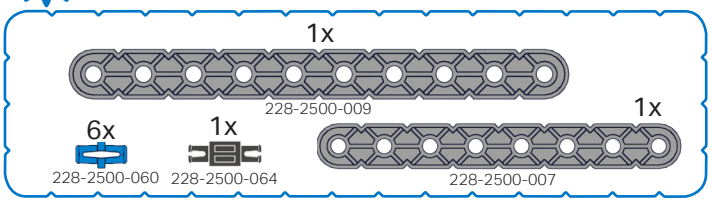

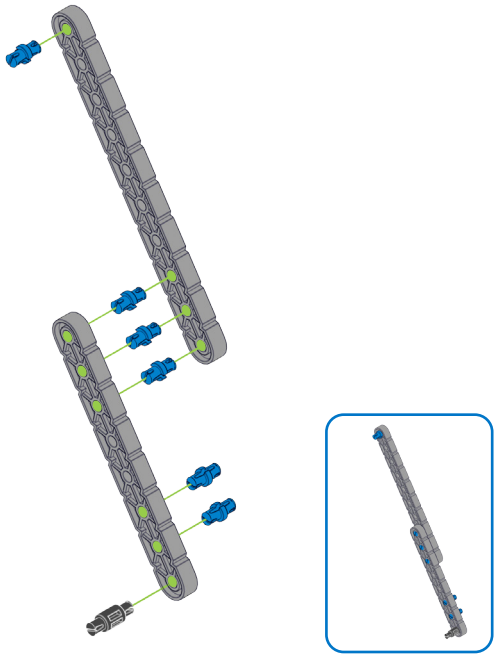

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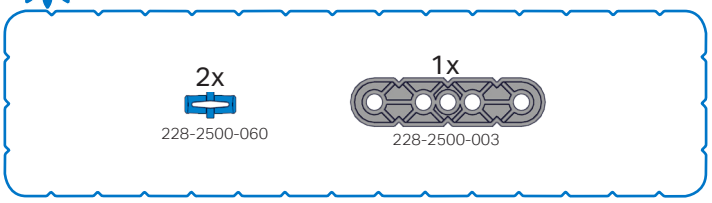

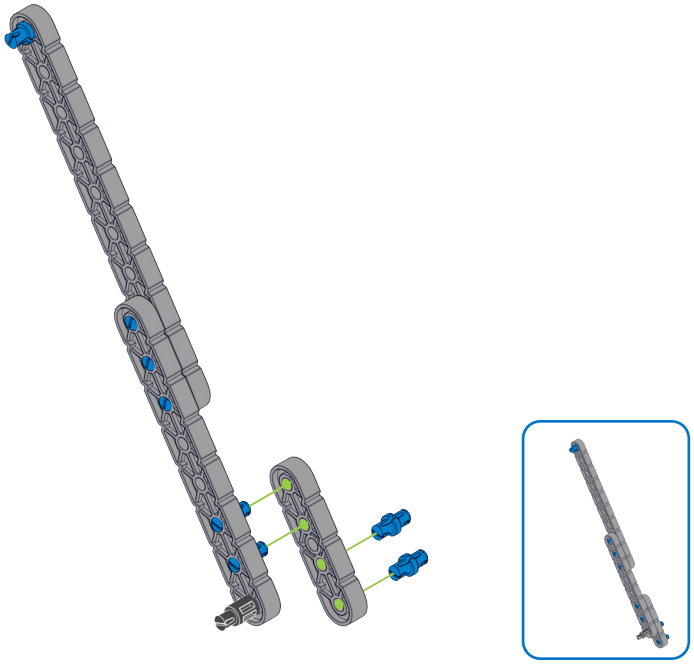

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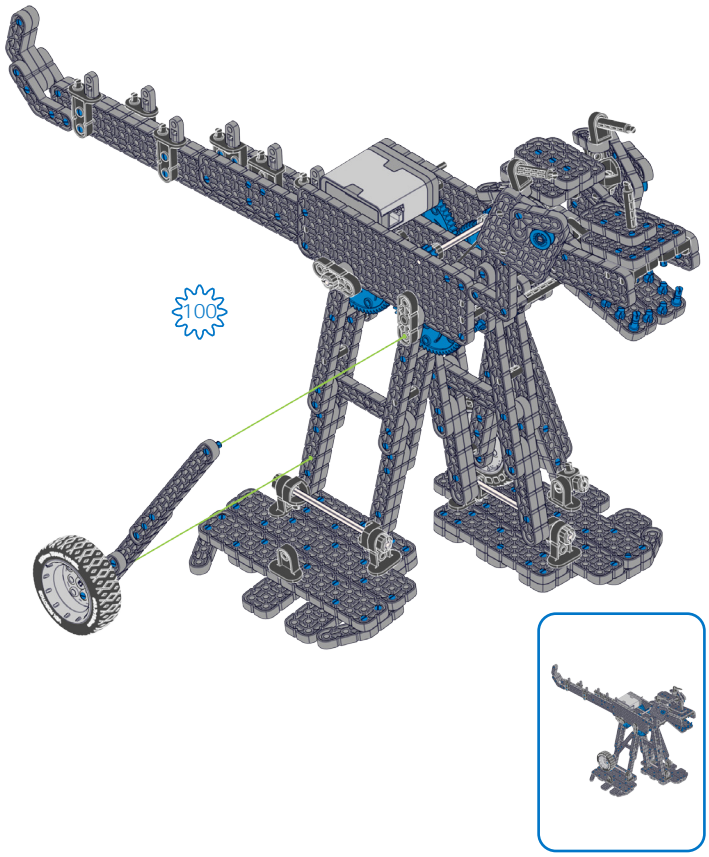

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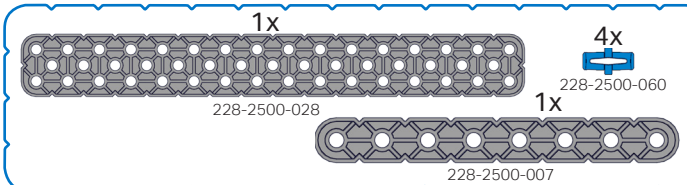

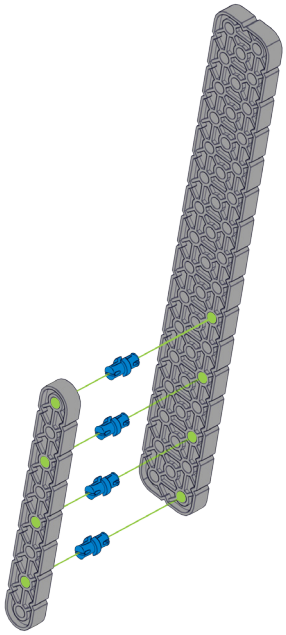

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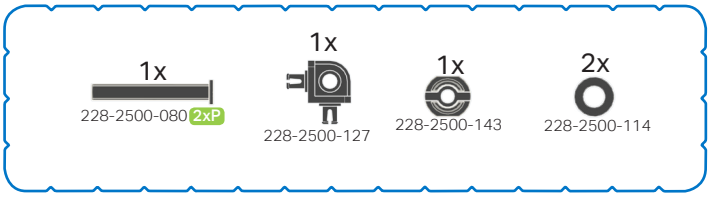

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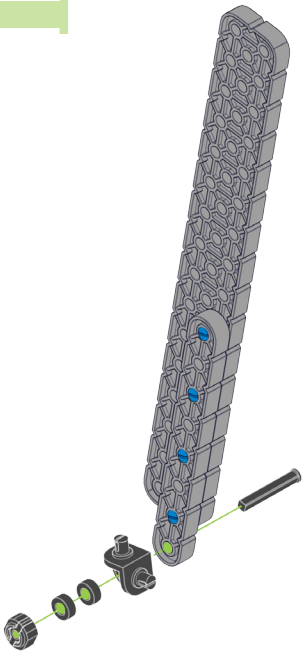

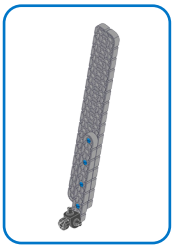

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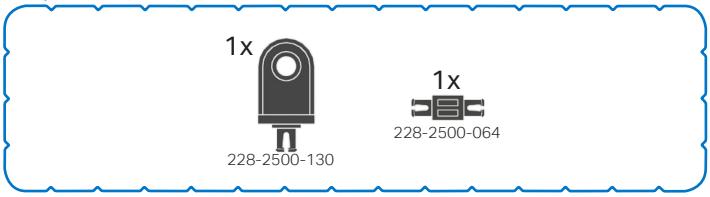

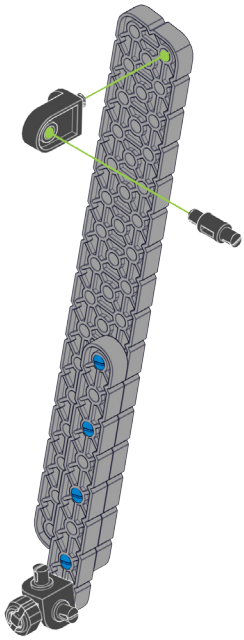

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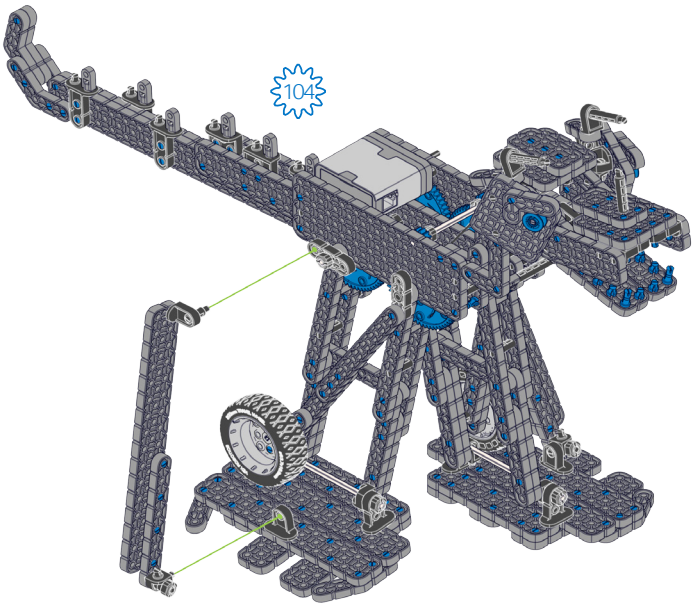

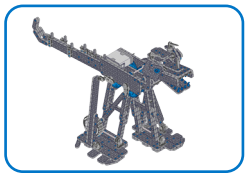

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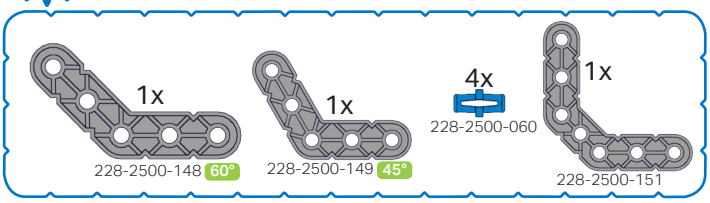

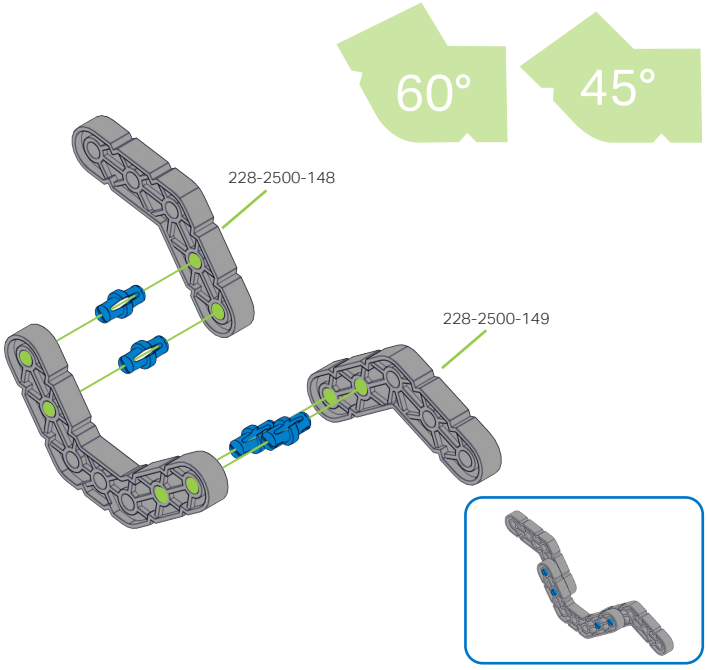

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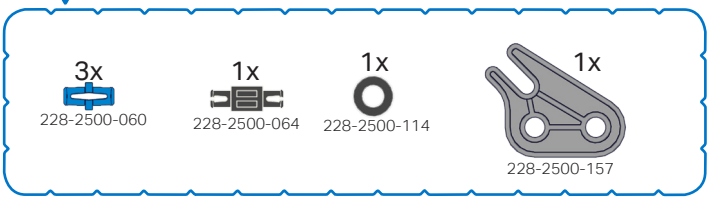

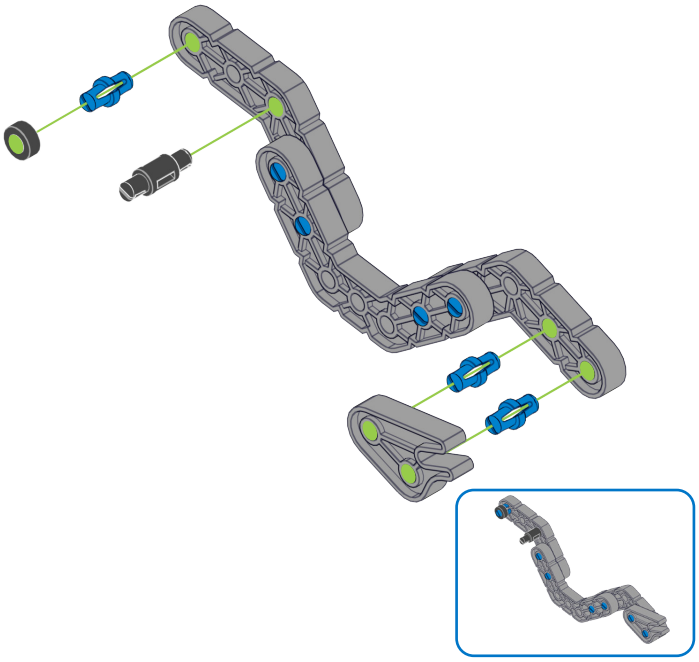

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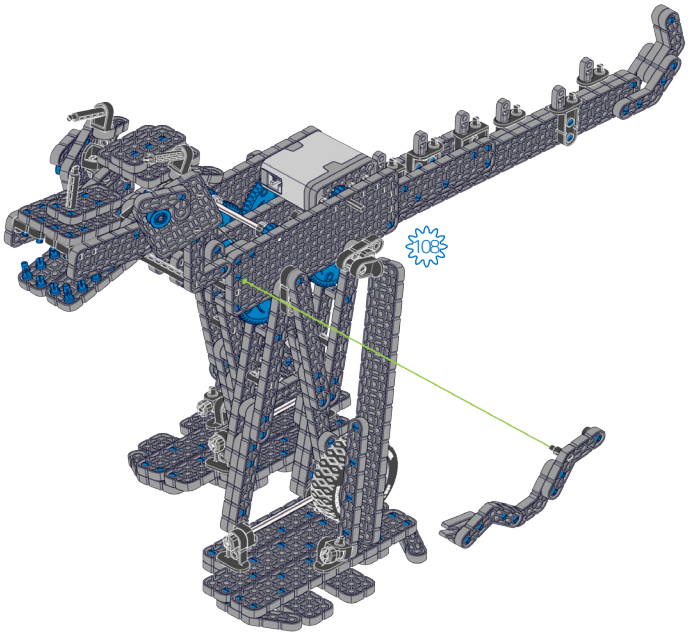

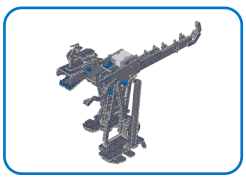

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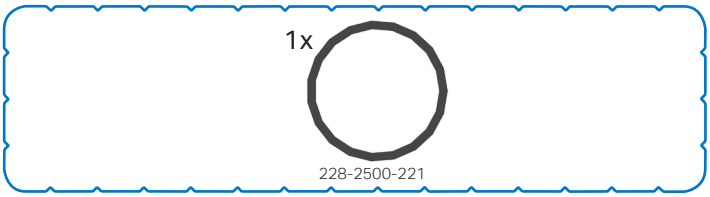

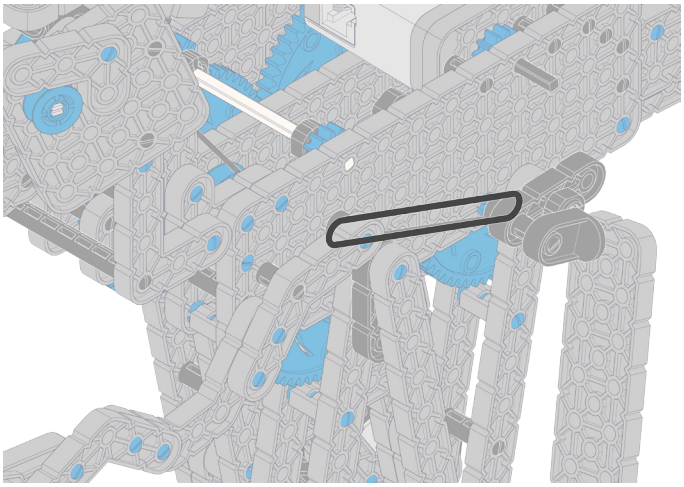

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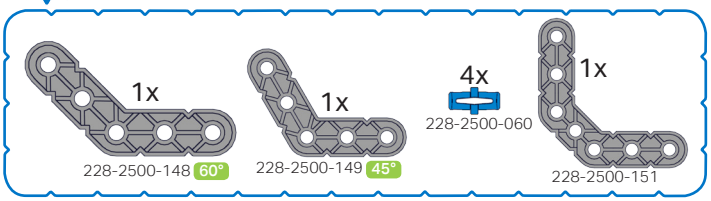

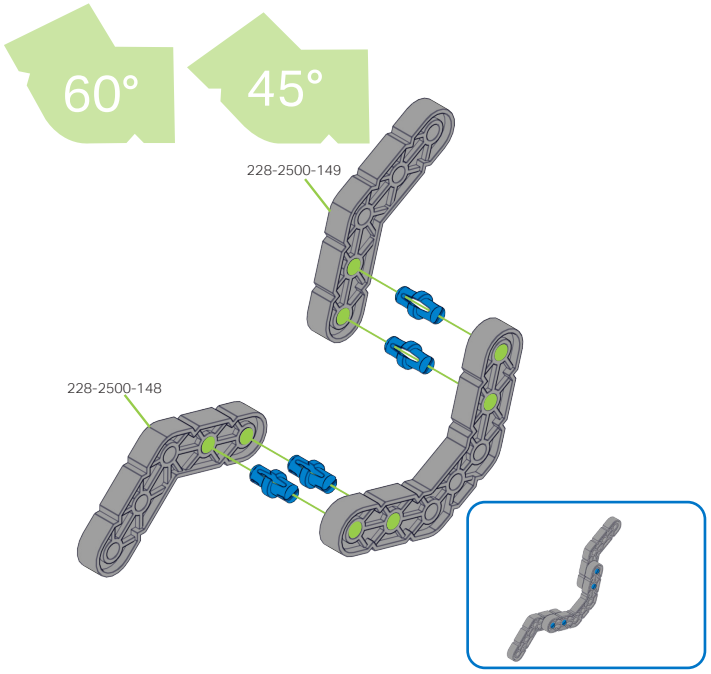

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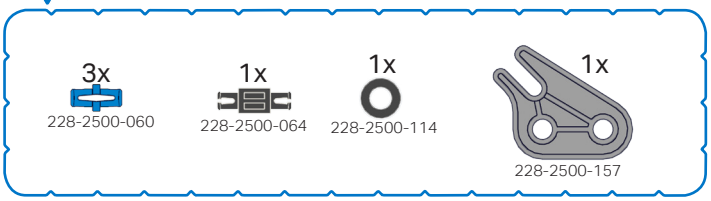

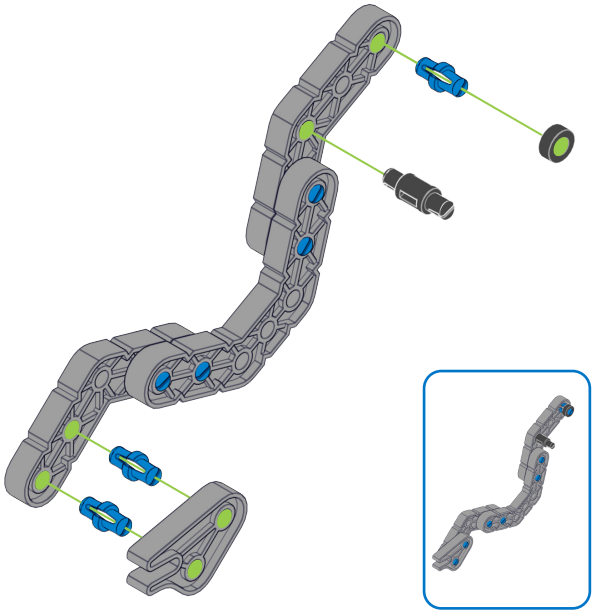

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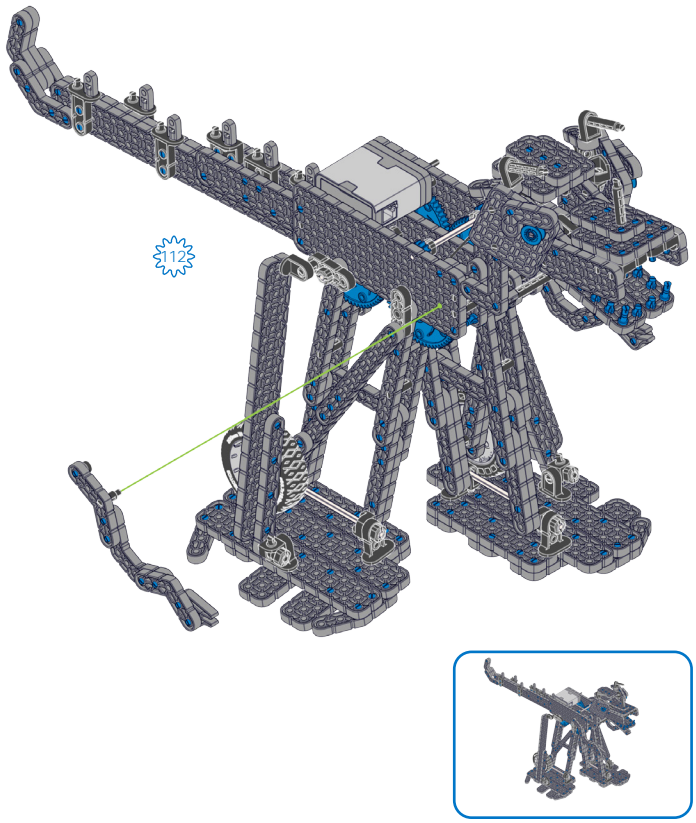

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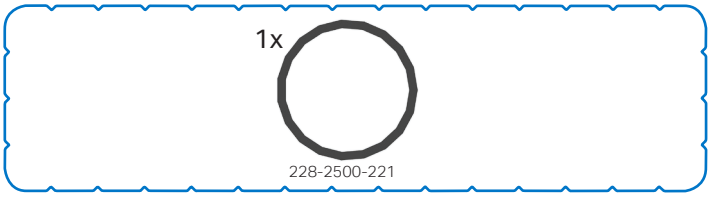

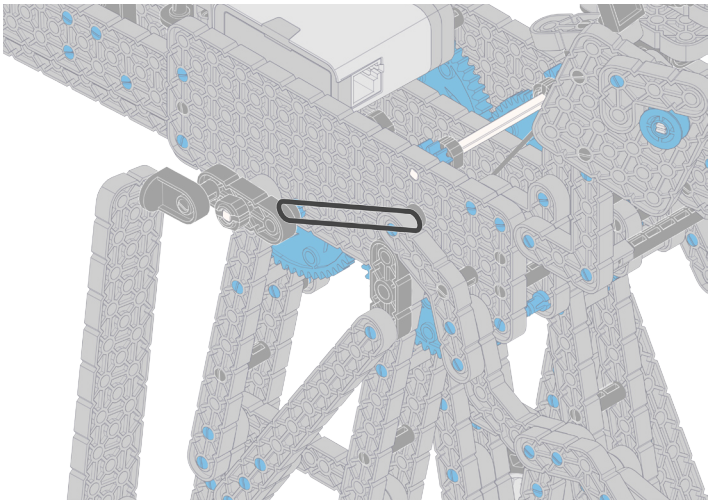

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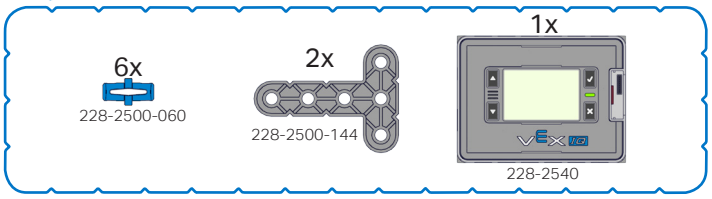
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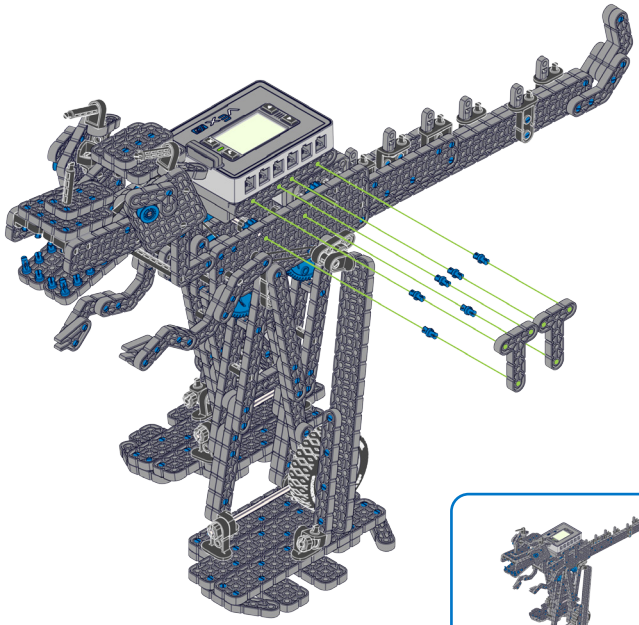

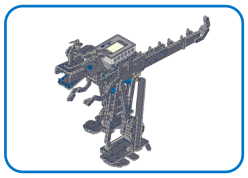

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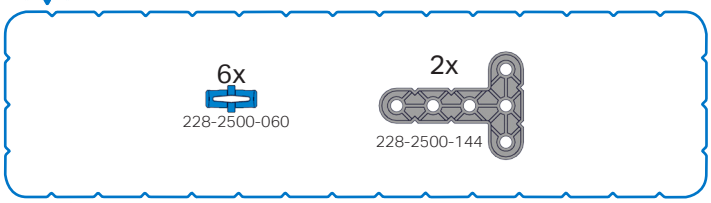
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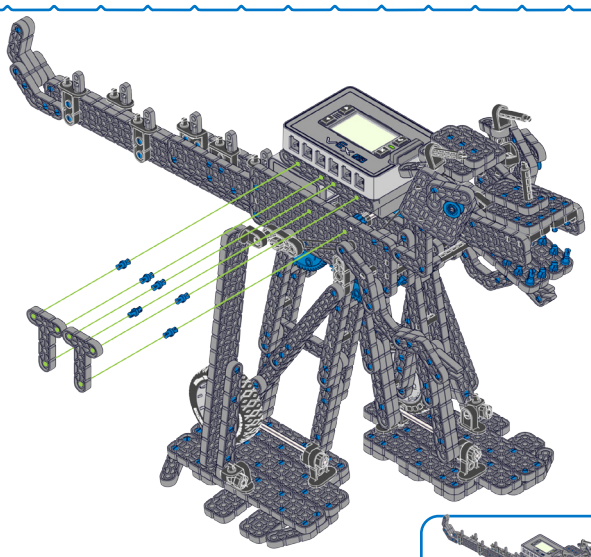

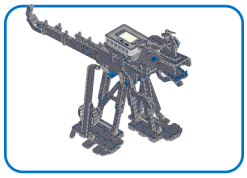

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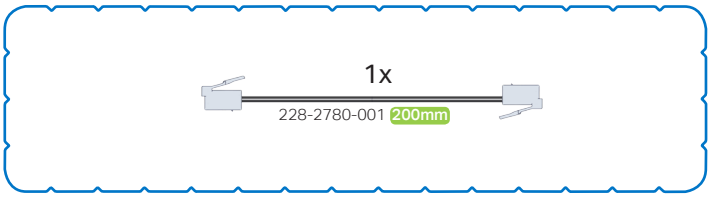
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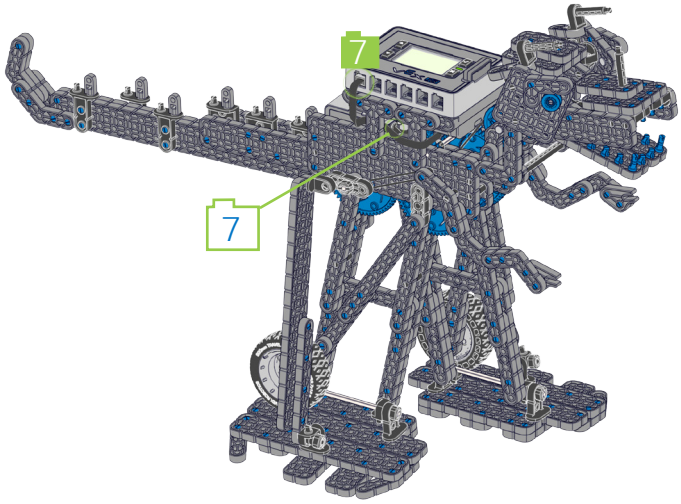
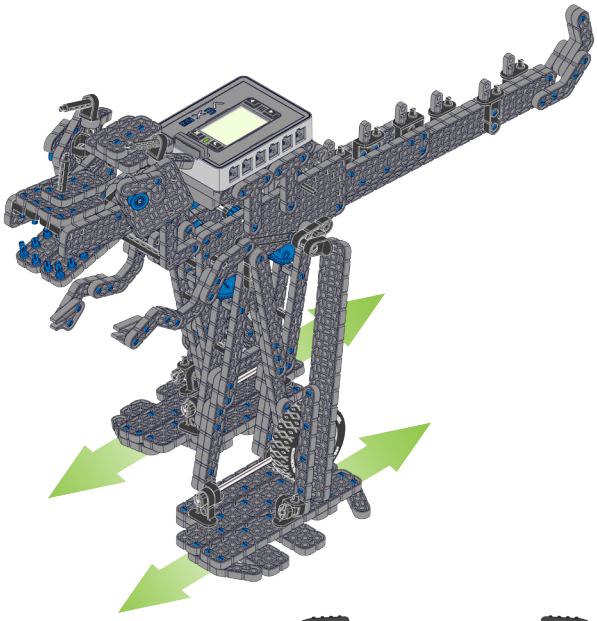
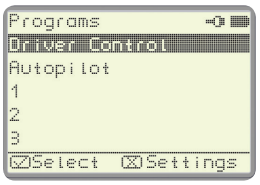

7
7

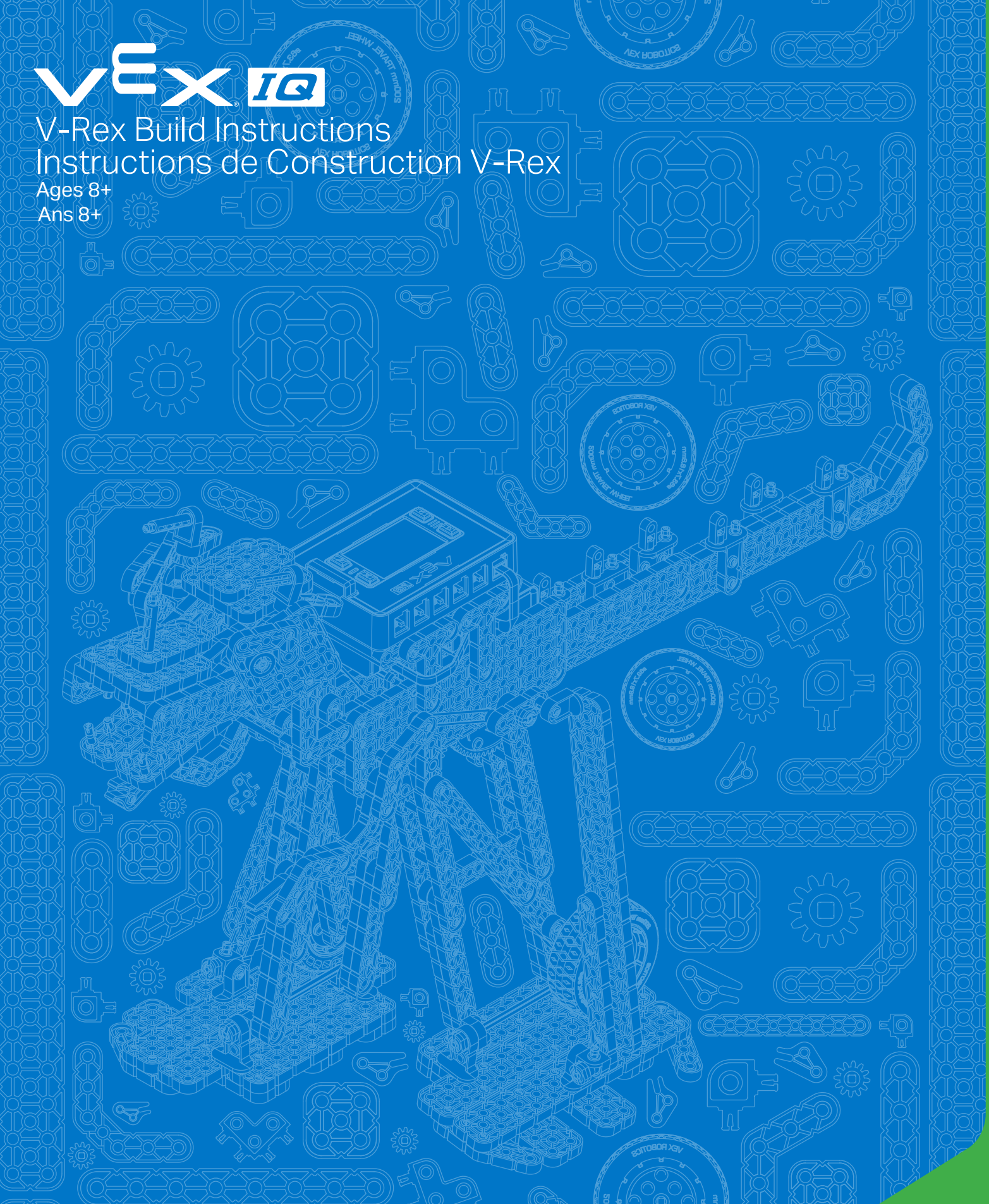



Programs
Driver Control
Autopilot
1
2
3
Select
Settings

Forward/
Backward
Marche Avant/
Marche Arrière

V-Rex Build Instructions
Instructions de Construction V-Rex

Ages 8+
Ans 8+



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Ce produit est uniquement destiné à être utilisé dans le cadre d'un système VEX IQ.

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