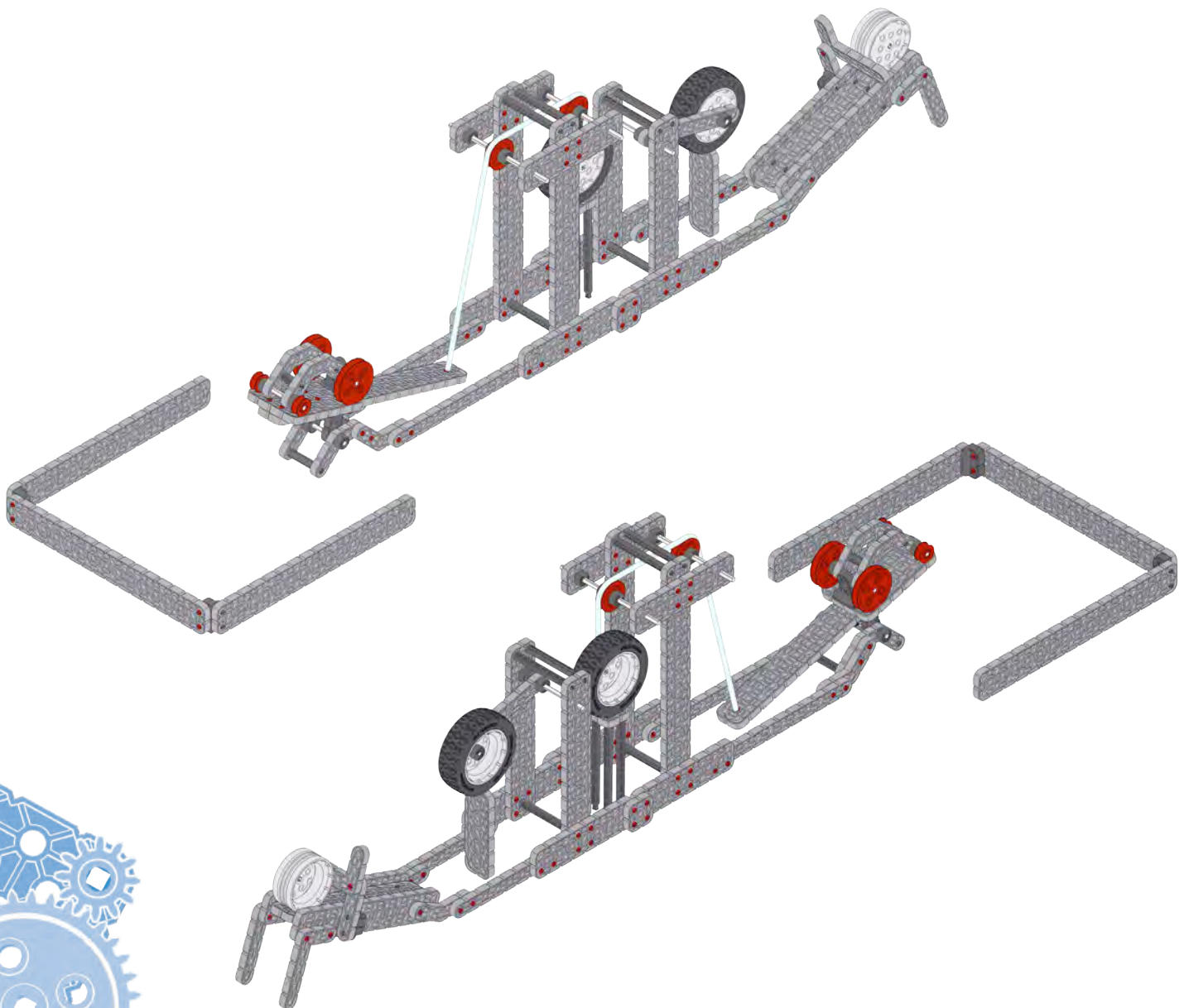




Sample Chain Reaction Device Instructions

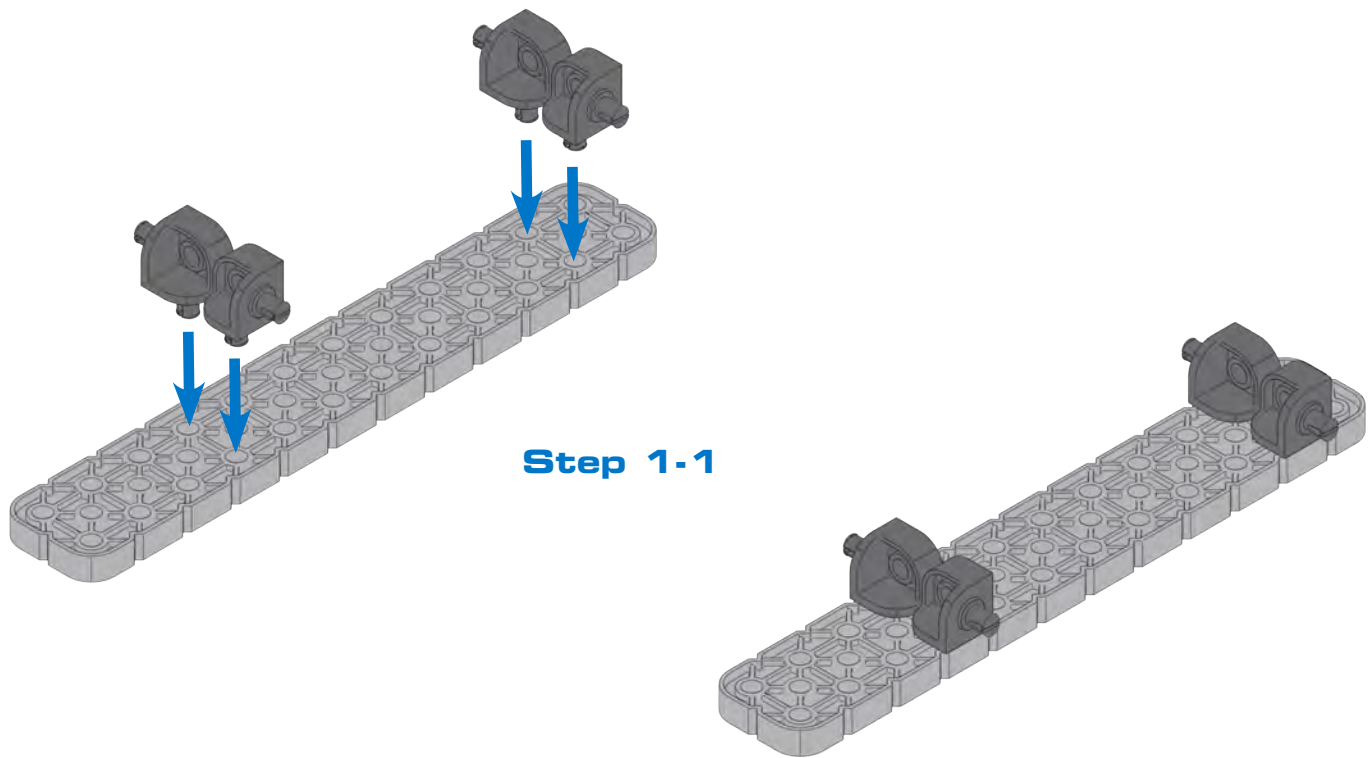
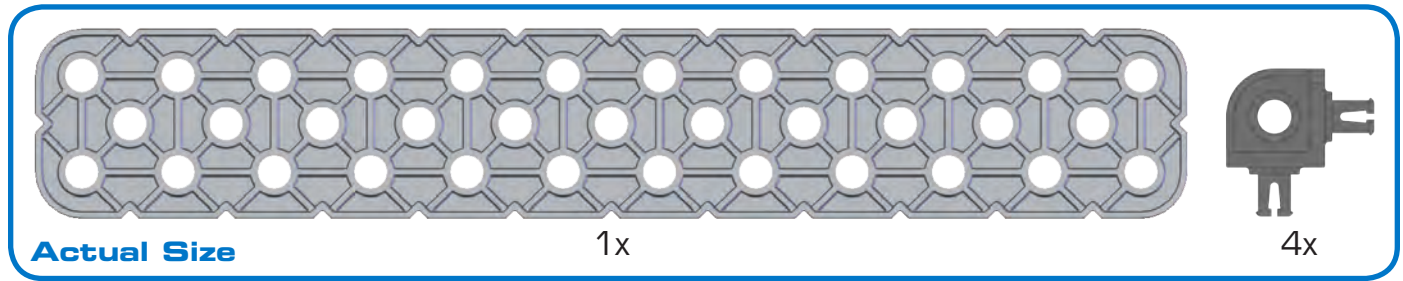


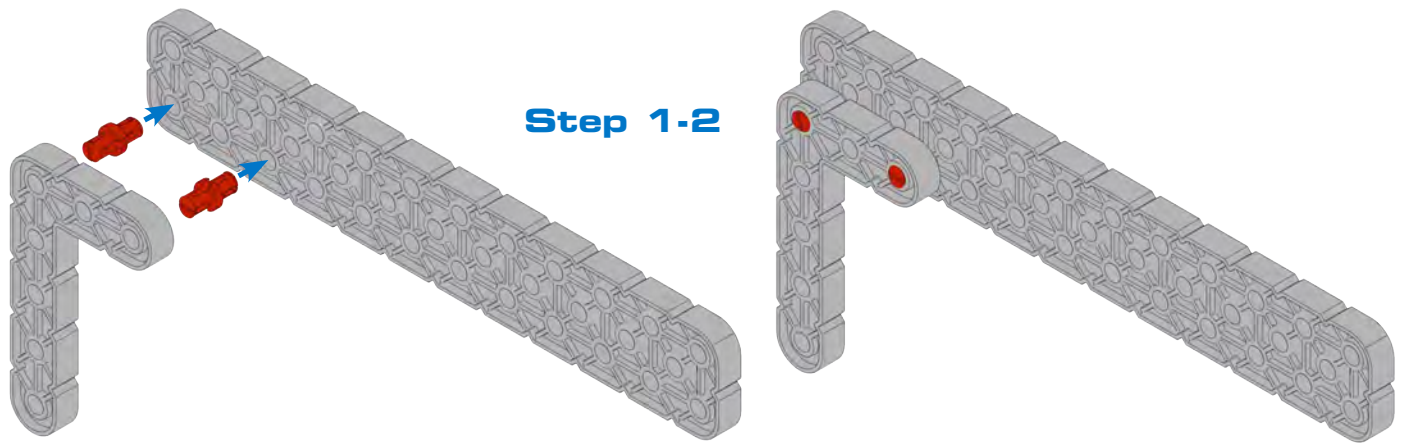
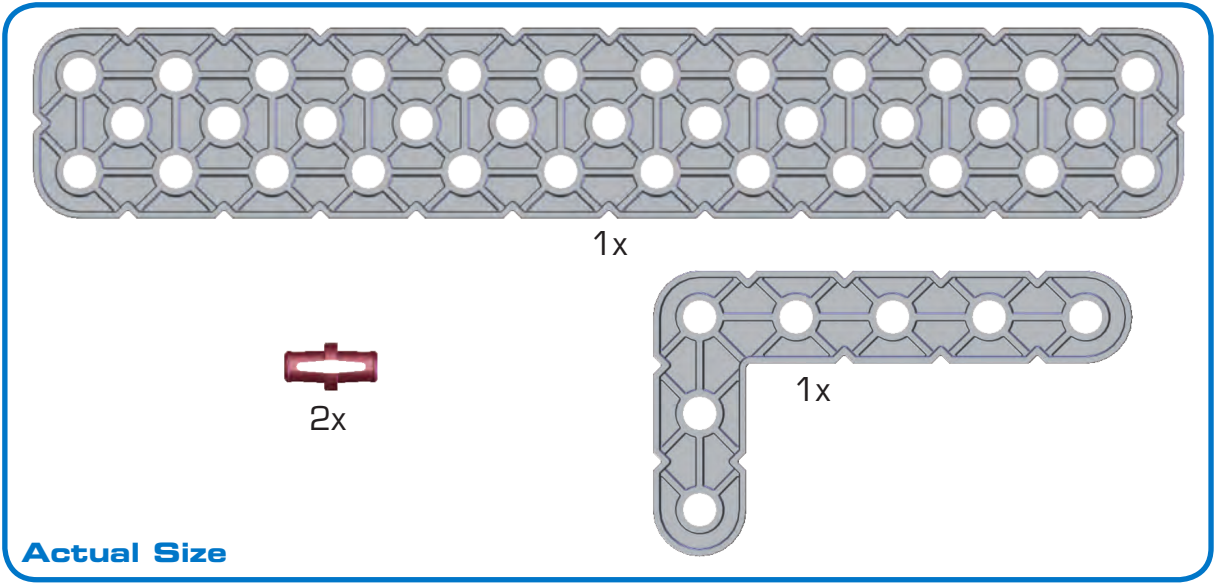
Sample Chain Reaction Device Assembly: Parking the Car

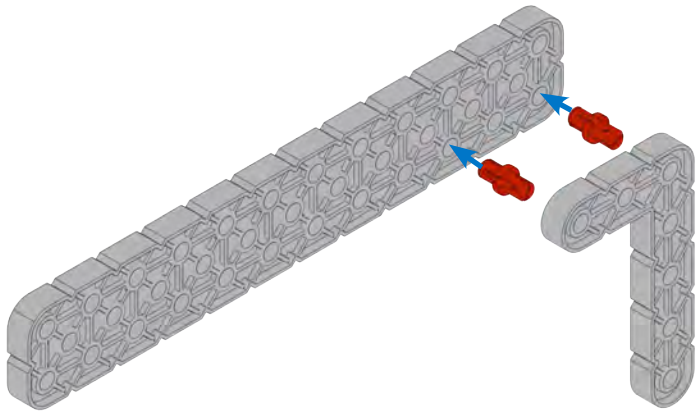
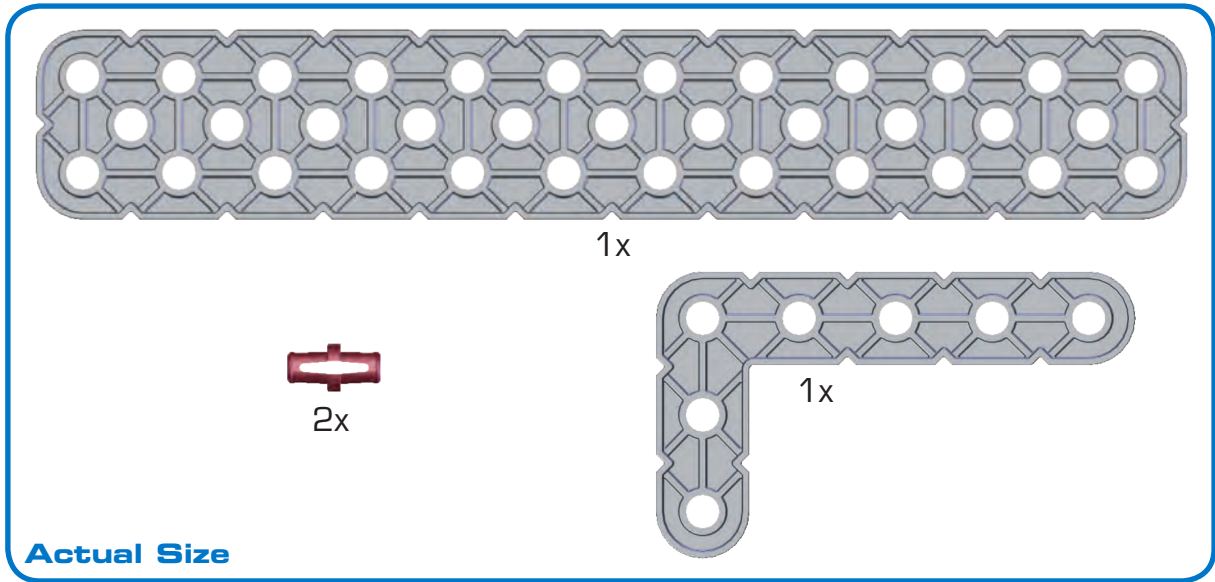
Note for Teachers: This sample Chain Reaction Device is built using the Inclined Plane, Pulley, and Pendulum from the Simple Machines & Motion Sample Assemblies. The Lever in this sample Chain Reaction Device has its own assembly instructions, however this lever can also be created by modifying the lever that is part of the Simple Machines & Motion Sample Assemblies as well.

Inclined Plane

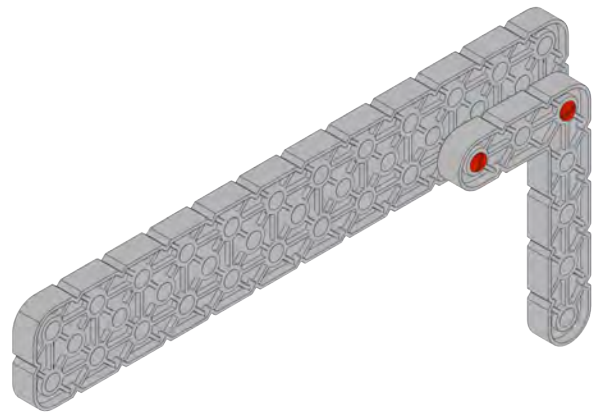
1. Inclined Plane







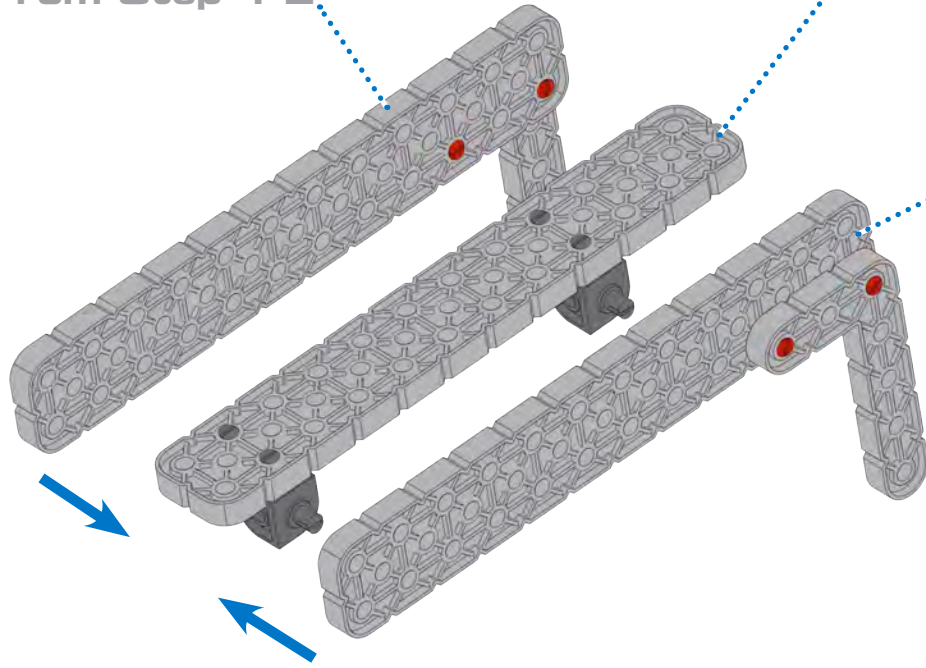
Step 1-3



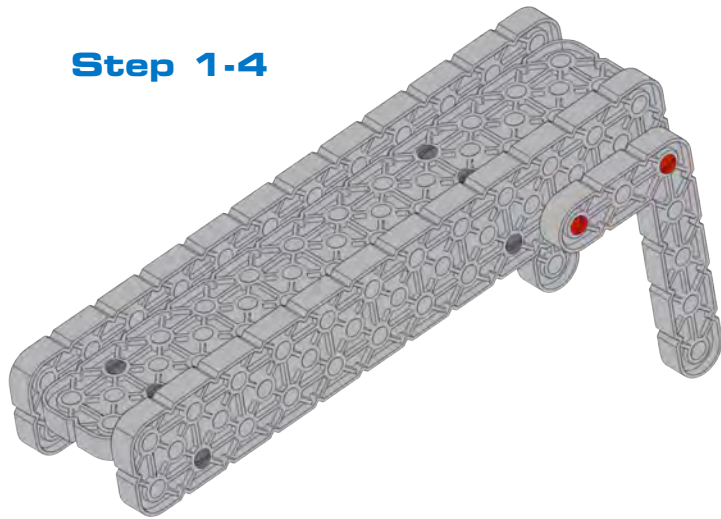
From Step 1-2

From Step 1-1

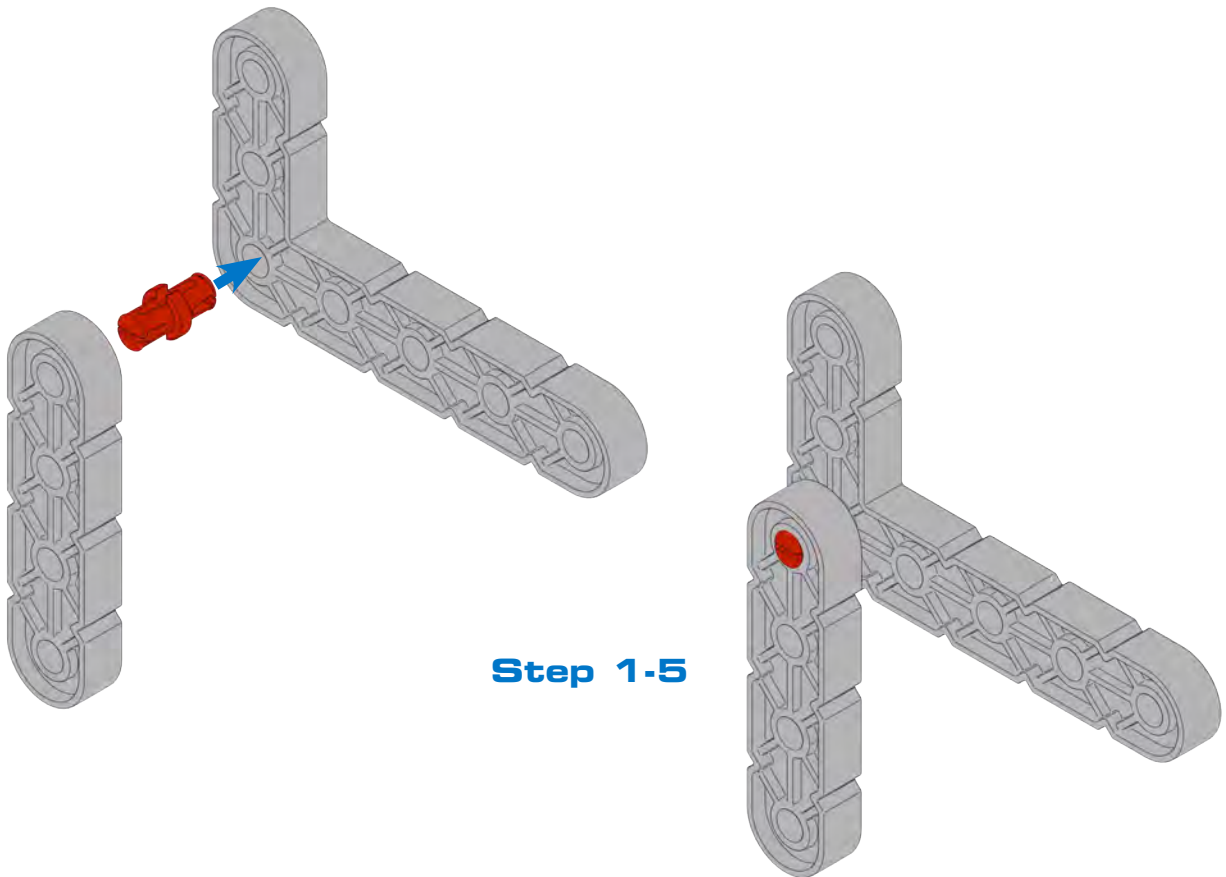
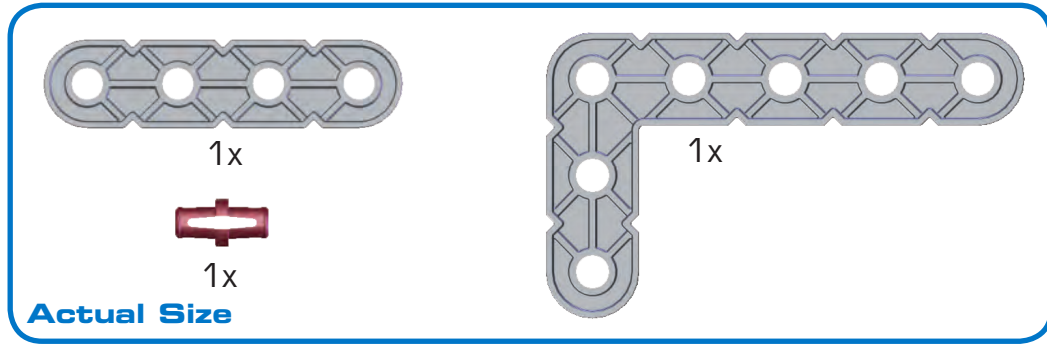
From Step 1-3

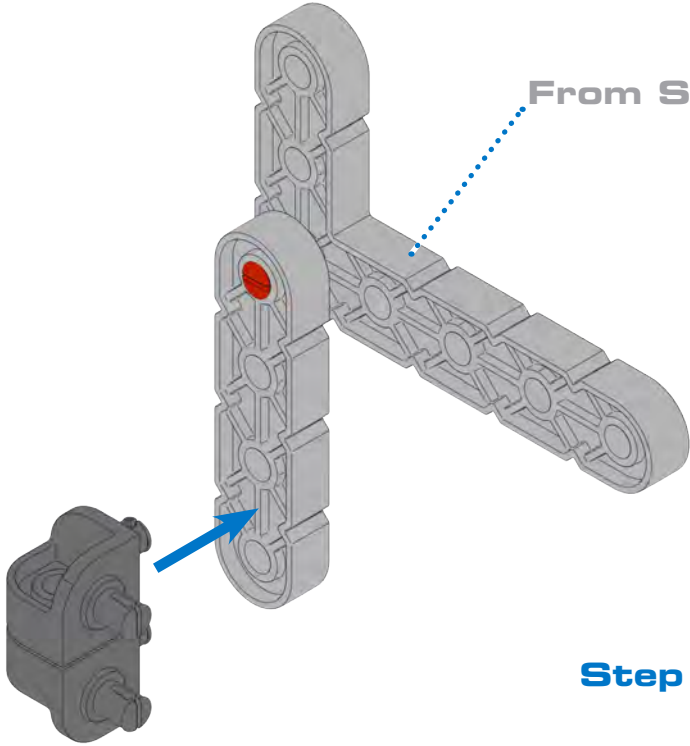
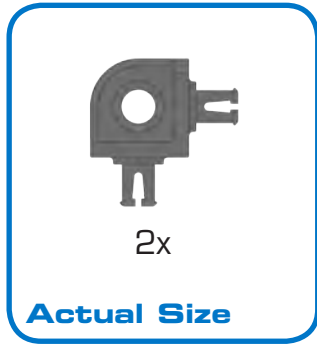


Step 1-4



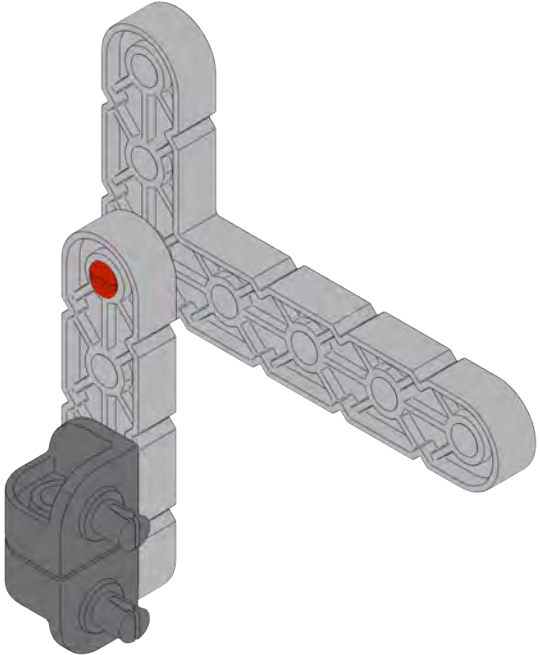
2. Gate/Trigger Mechanism for Inclined Plane

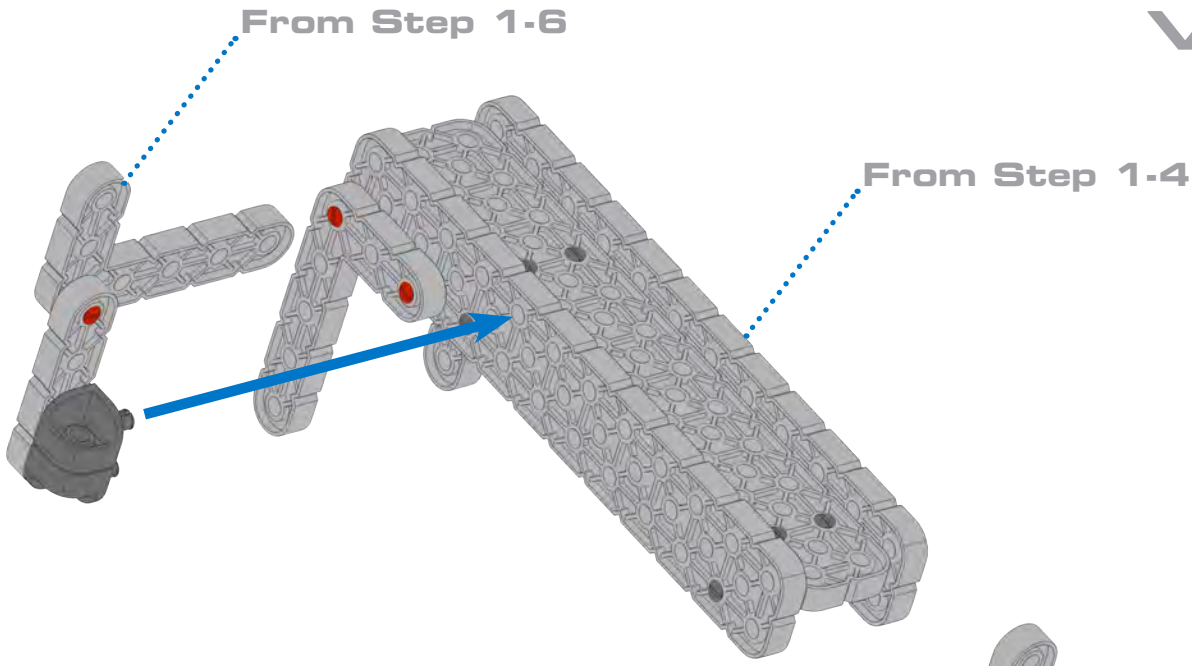




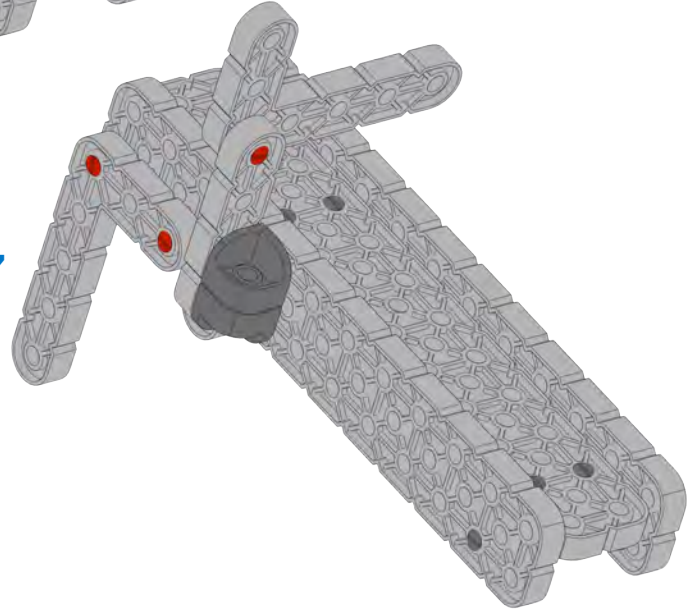
From Step 1-5

Step 1-6



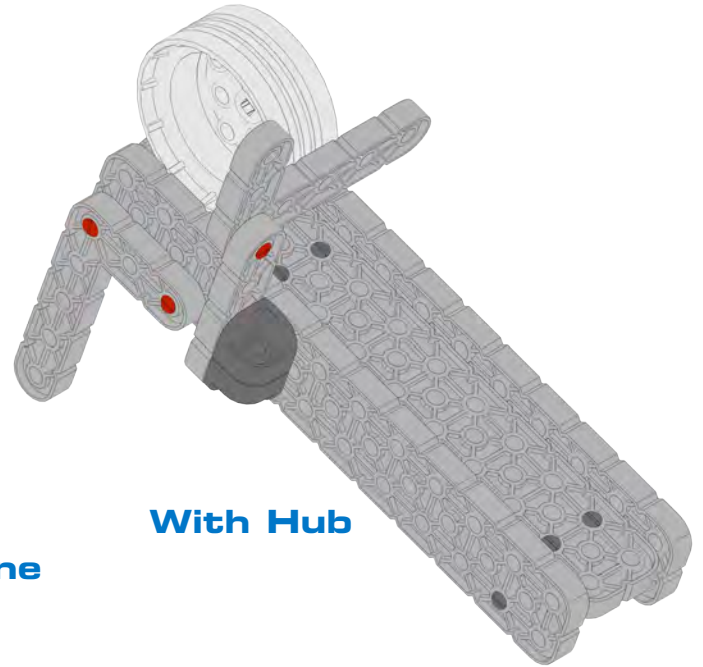


Step 1-7



Without Hub

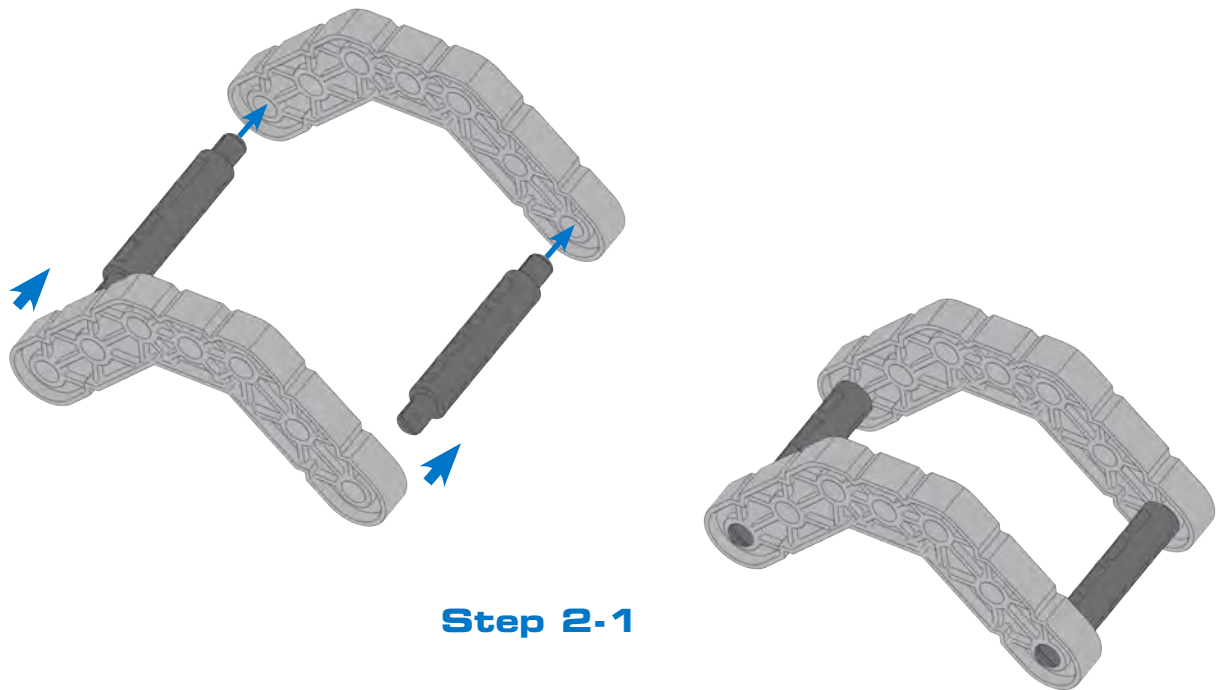
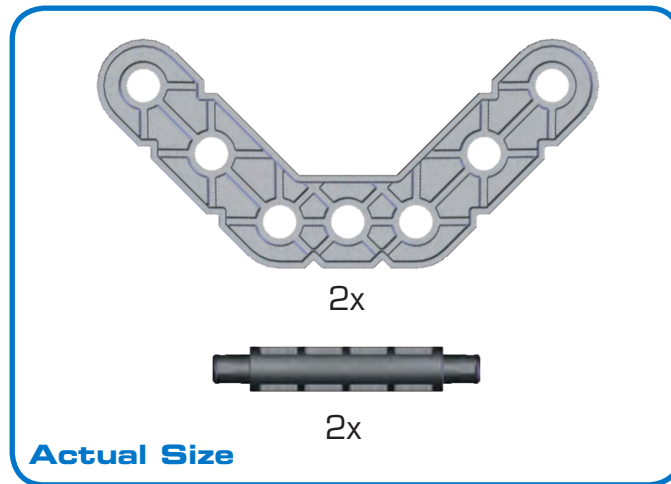
Inclined Plane

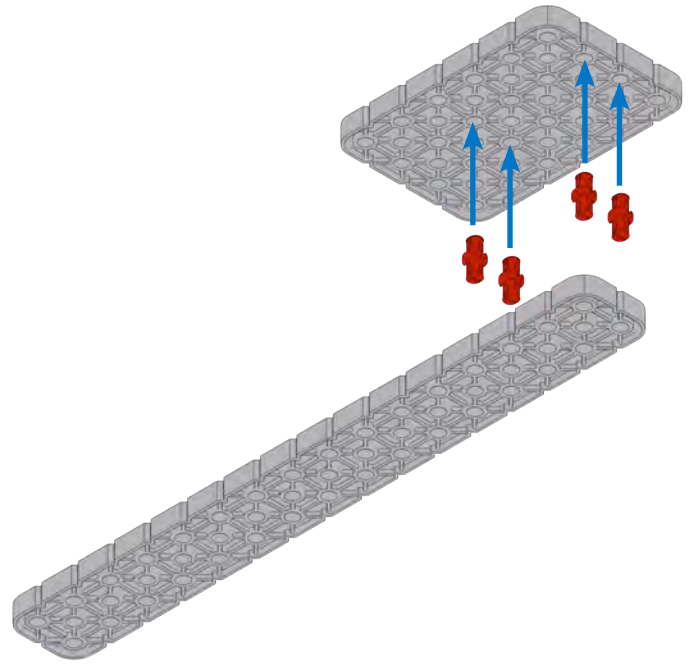
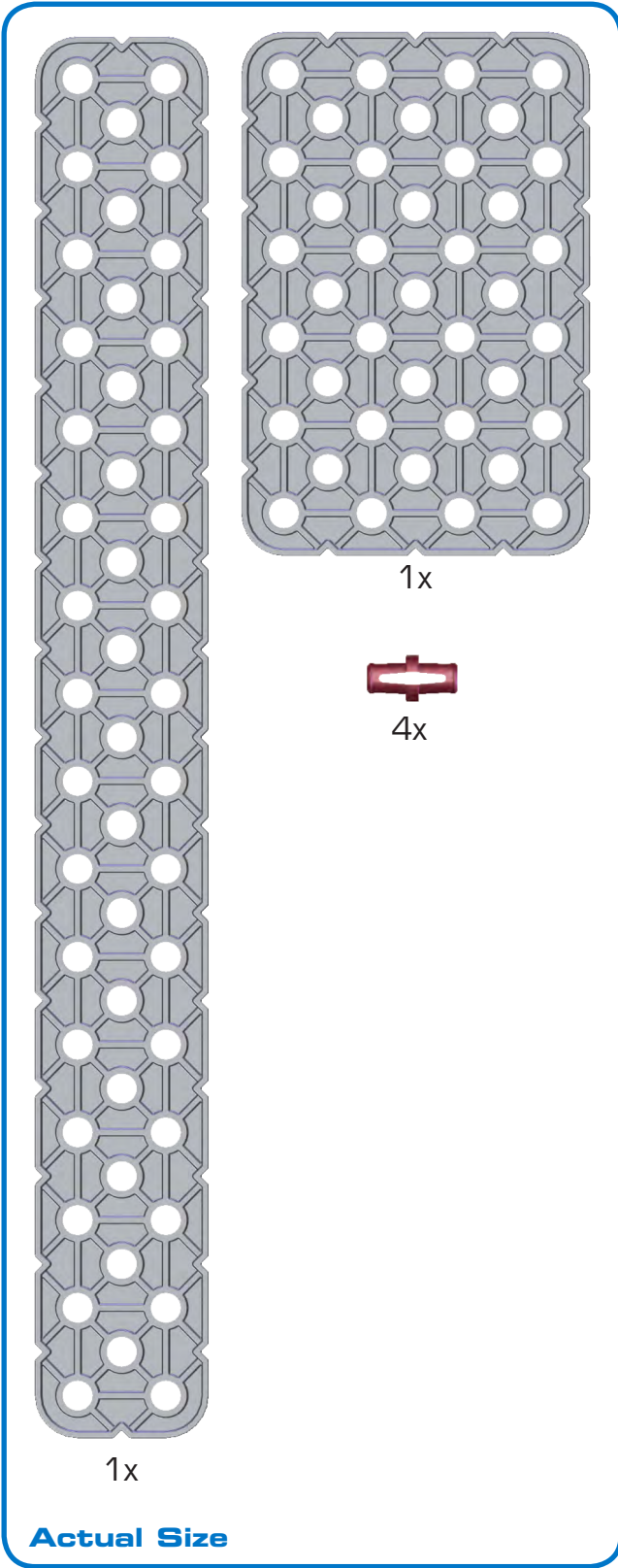


With Hub

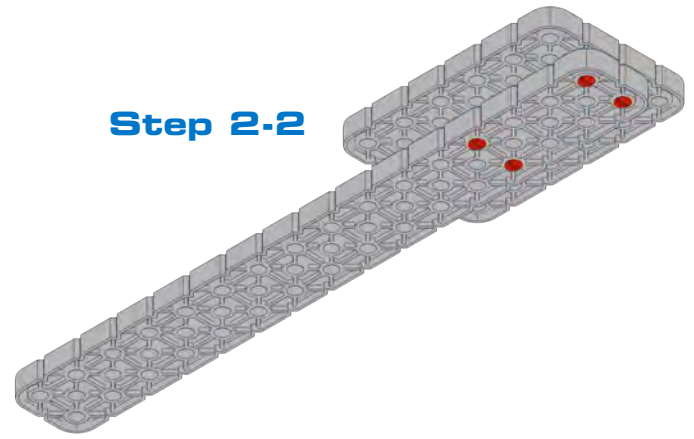


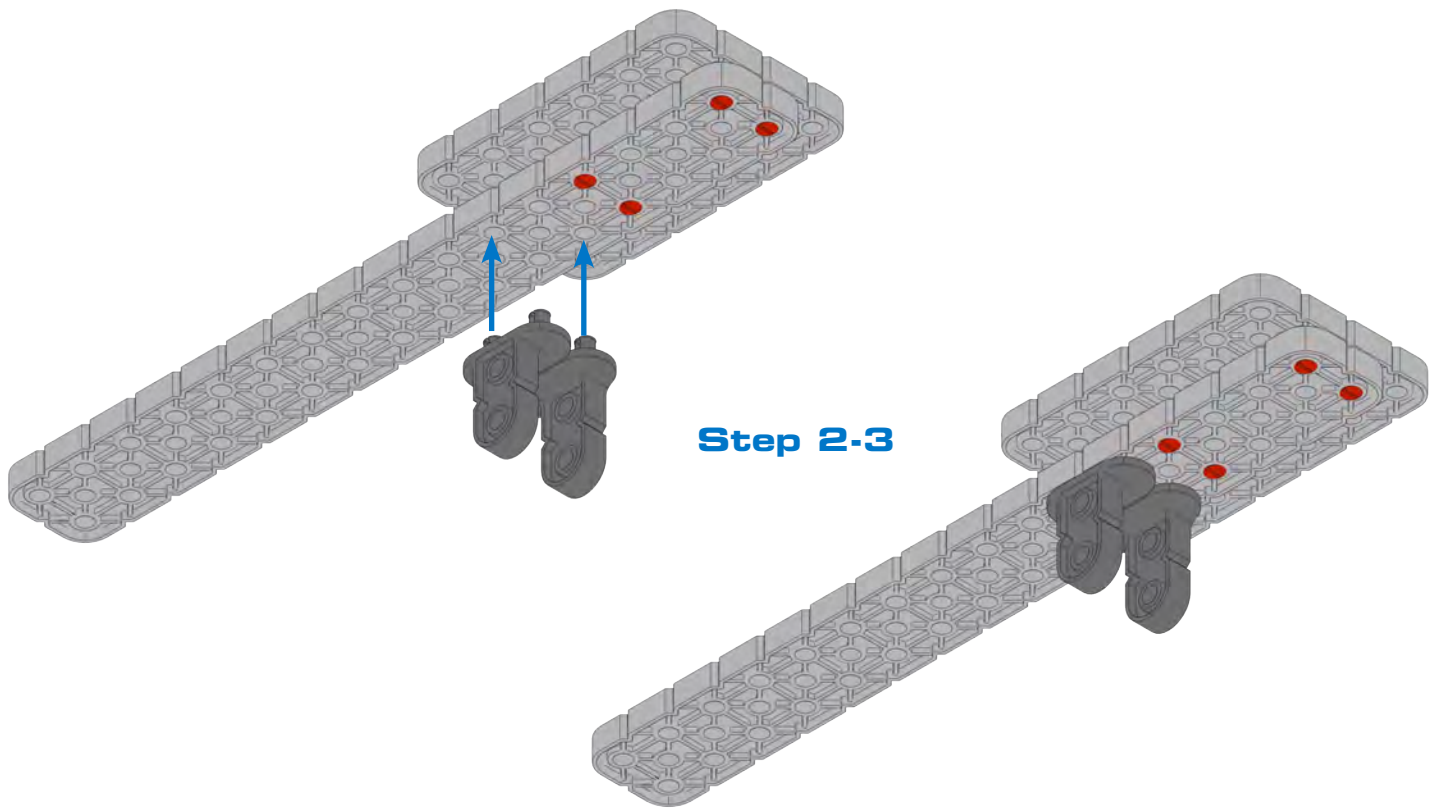
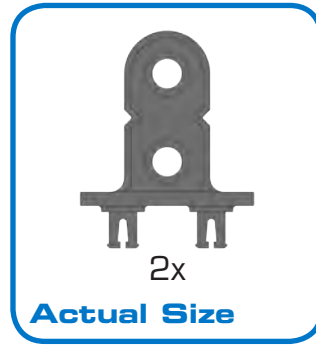
Lever

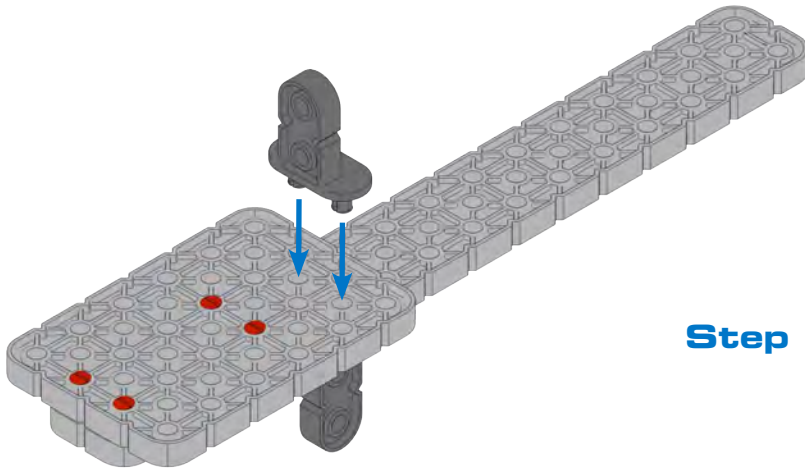
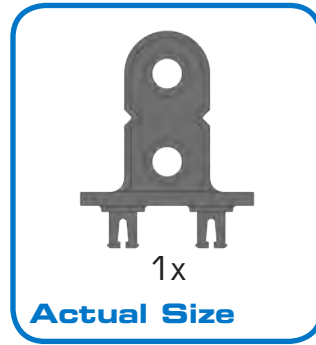




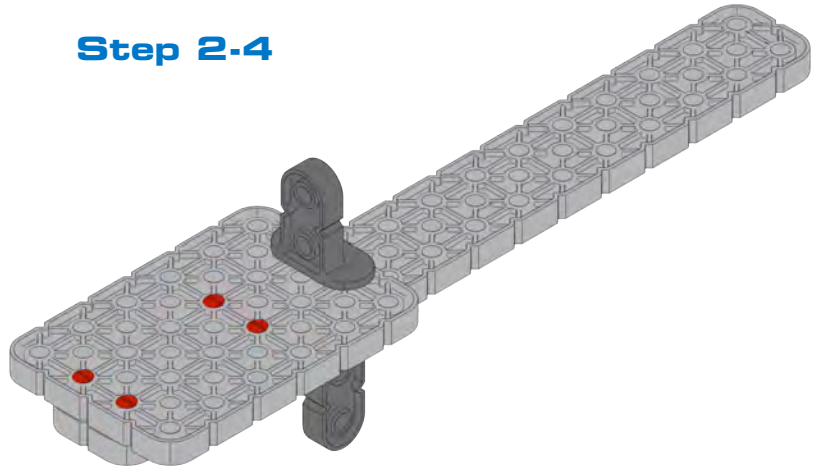
Step 2-2

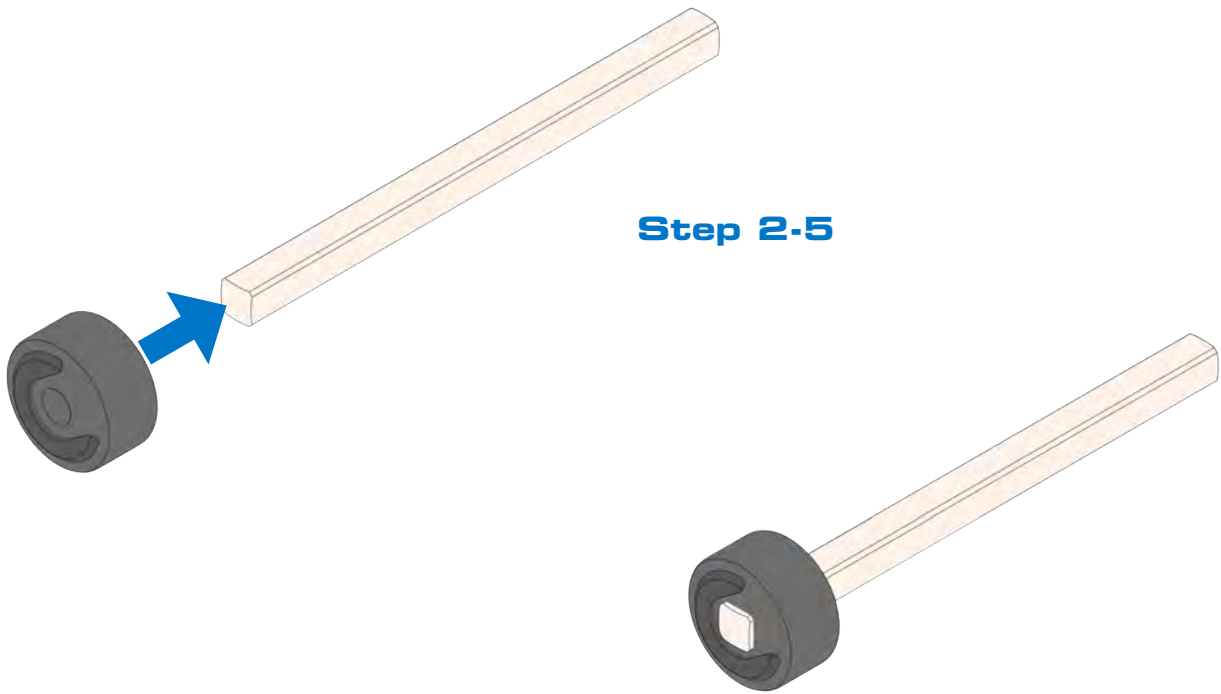
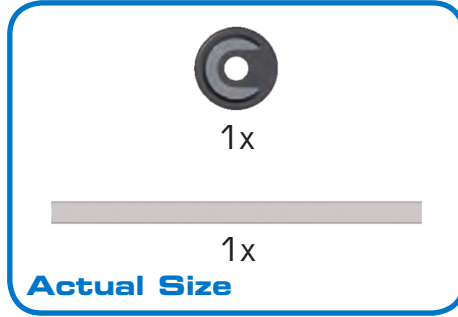


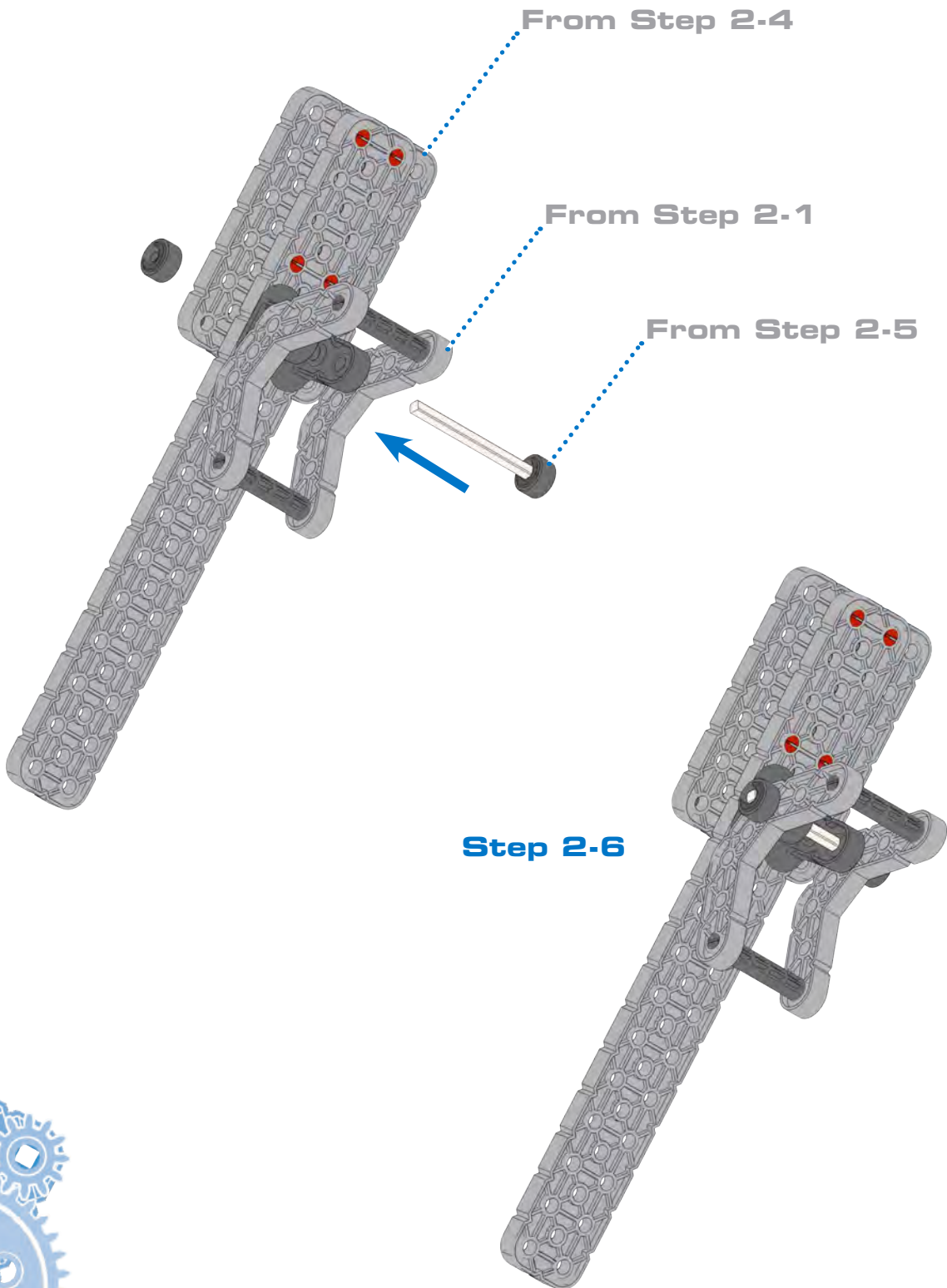
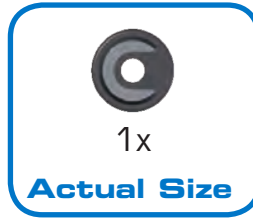




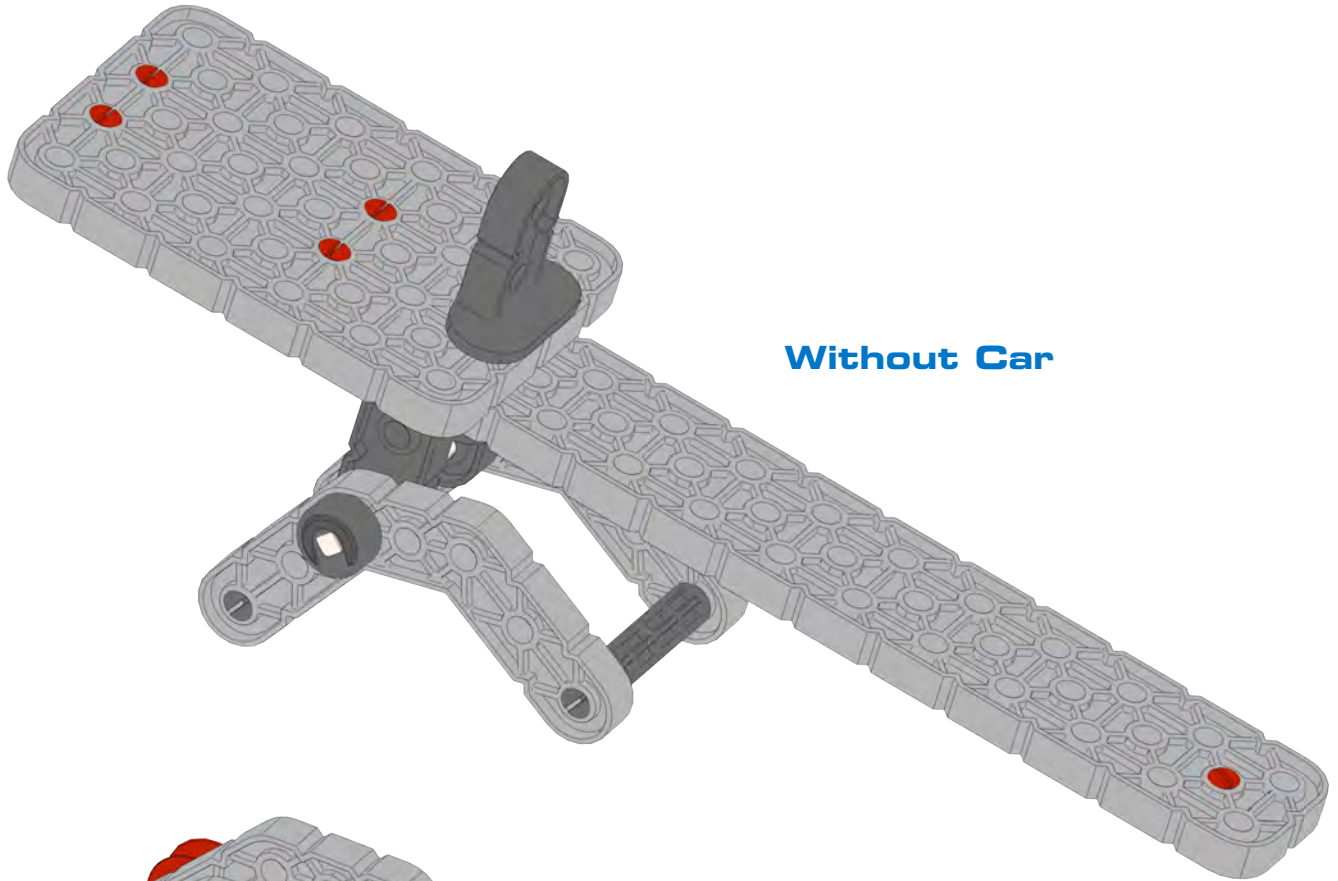
Step 2-4



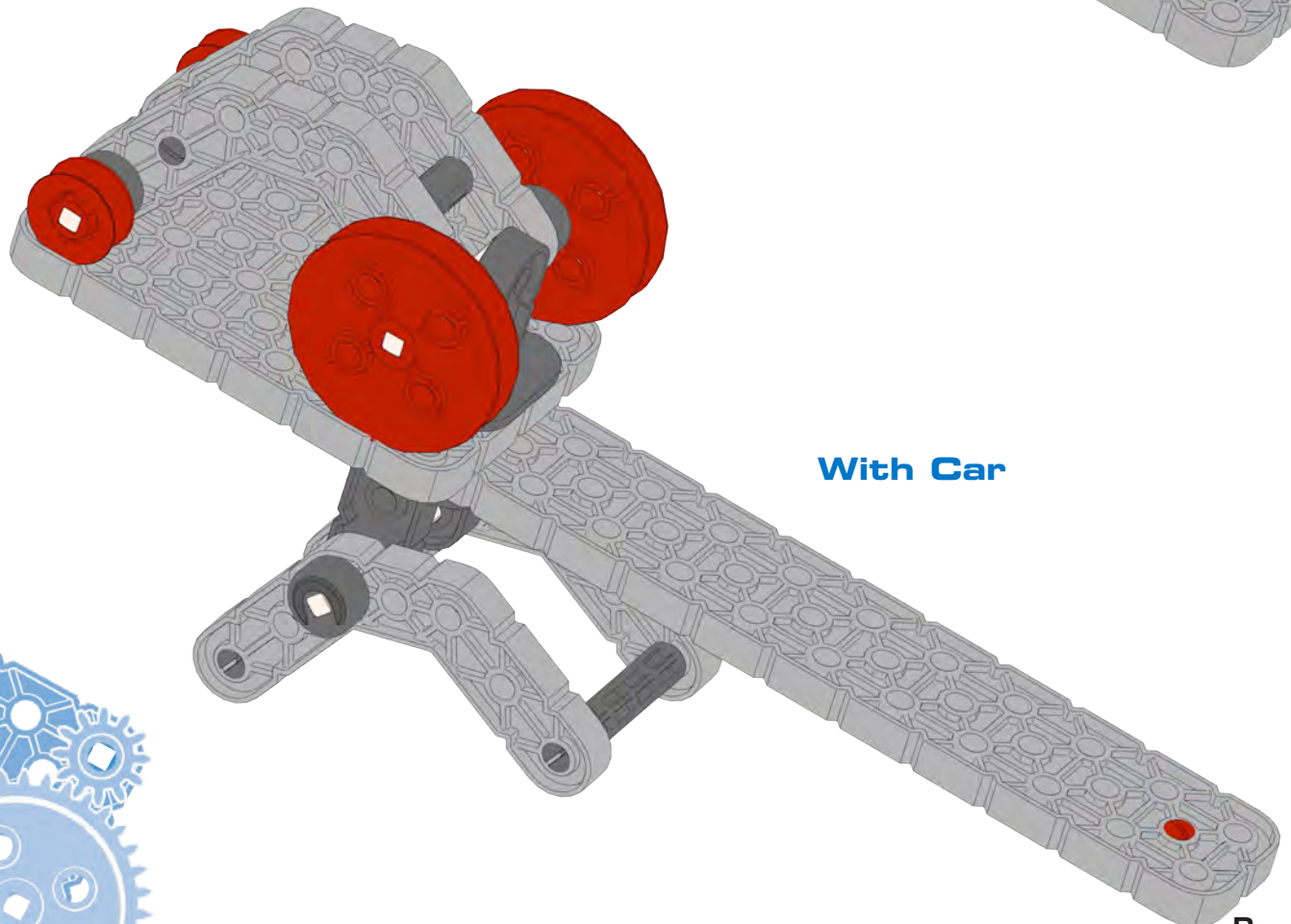




Lever



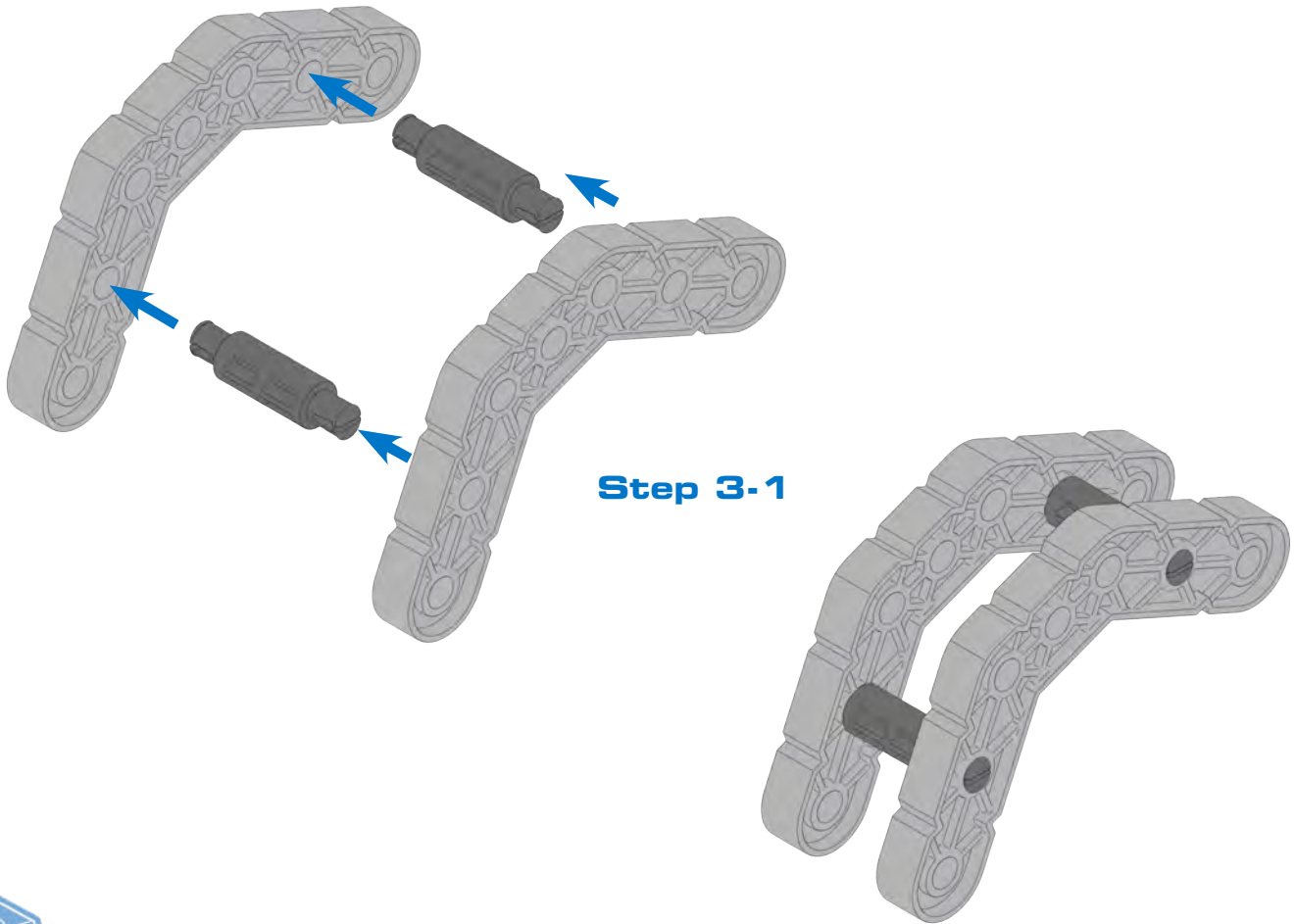
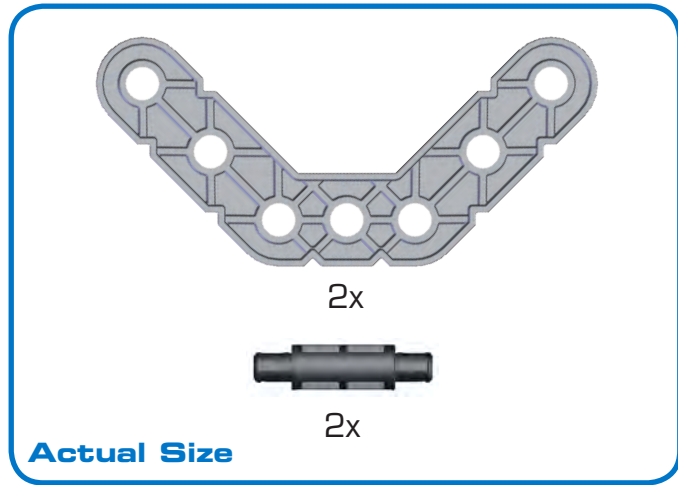
Without Car

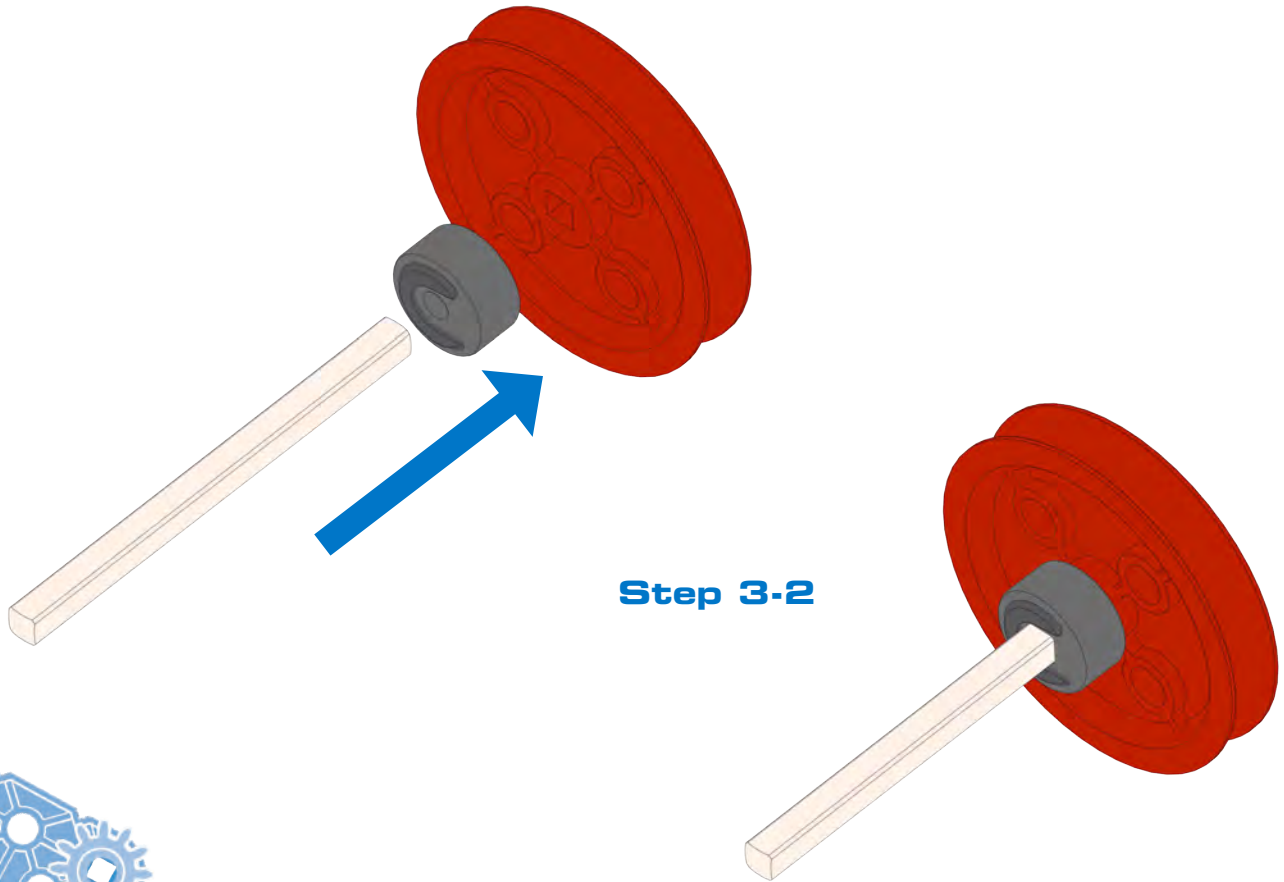
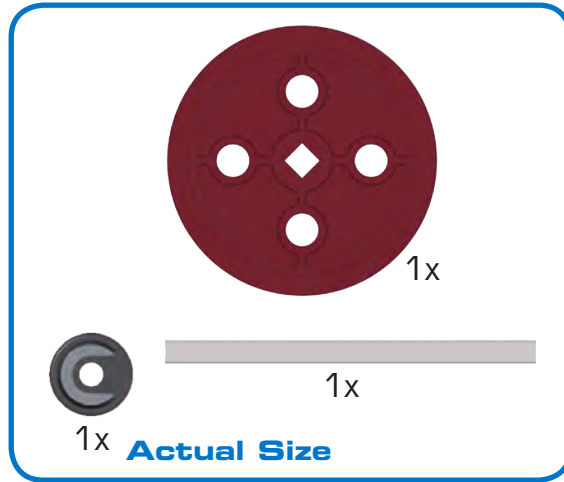


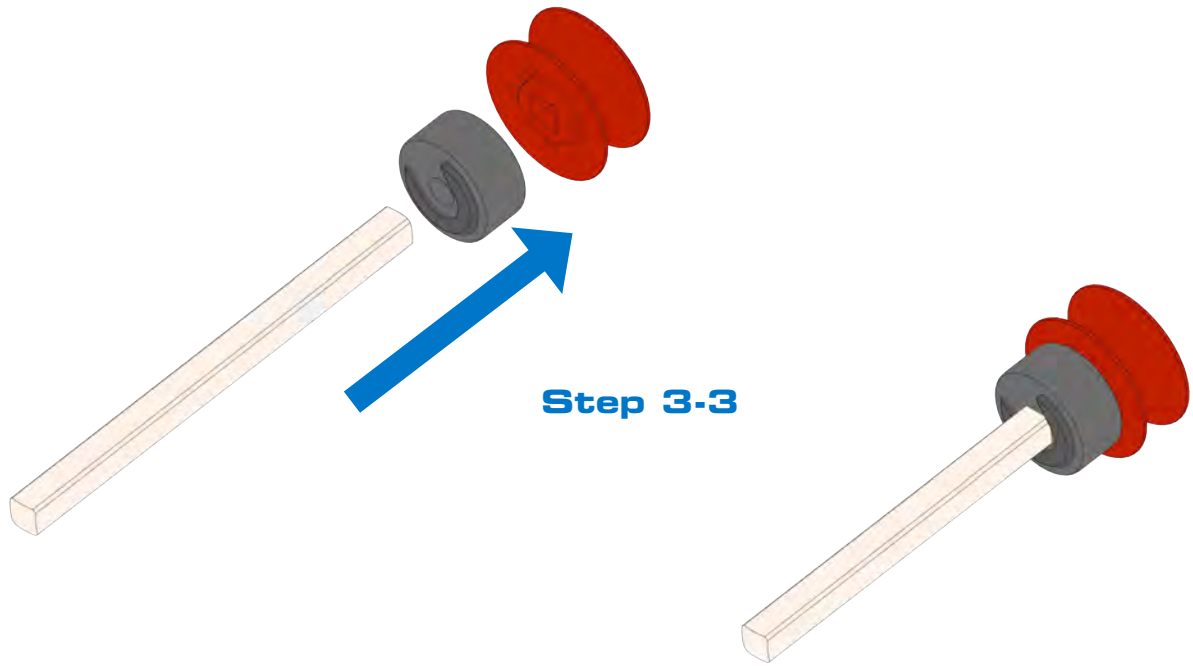
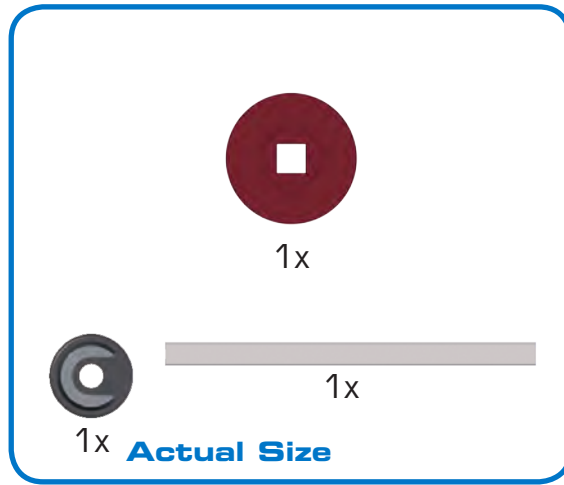
With Car

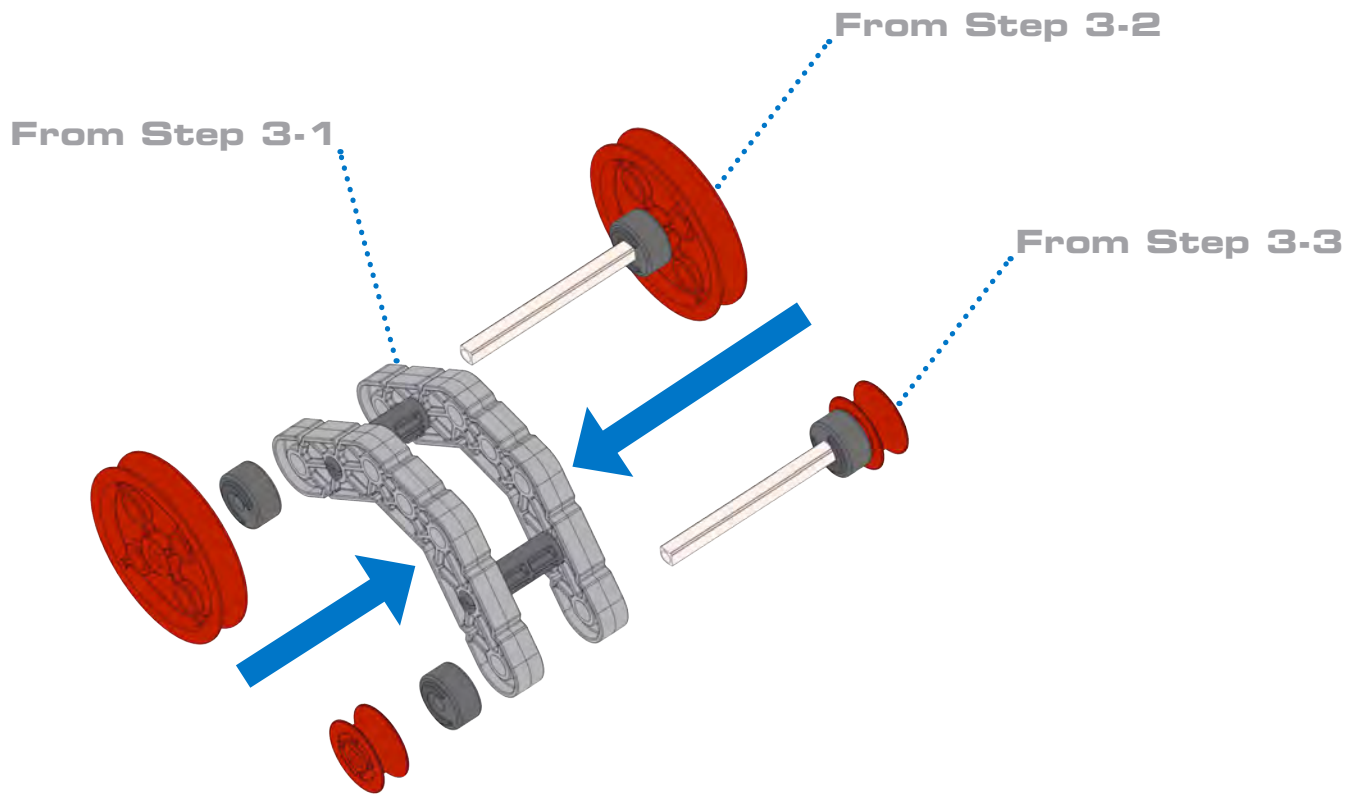
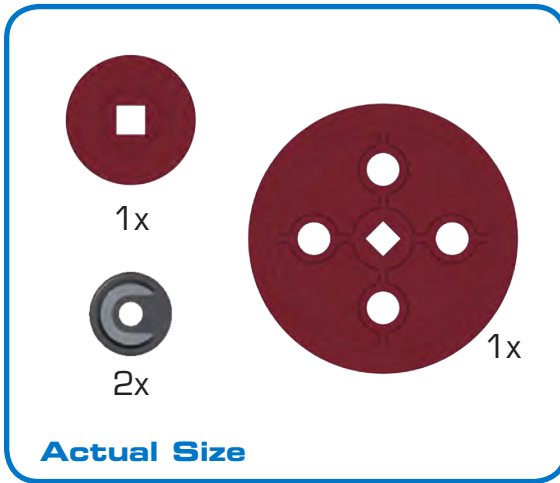


Car for Parking in Chain Reaction Challenge

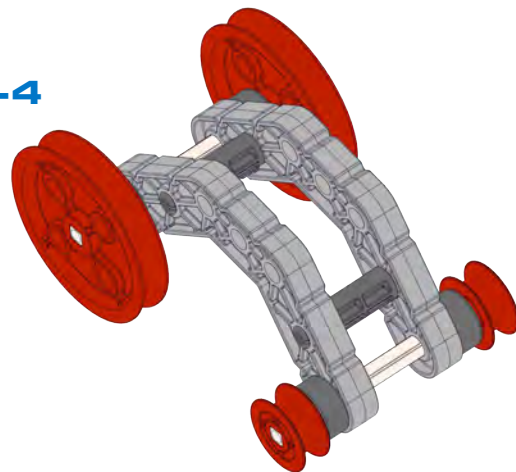




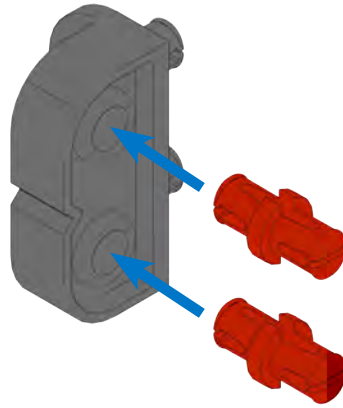
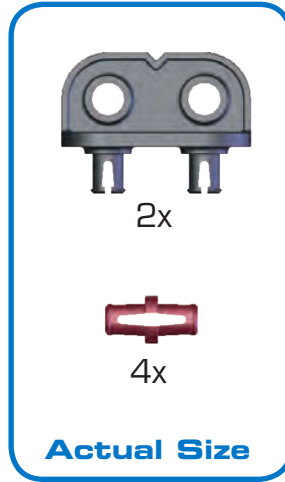




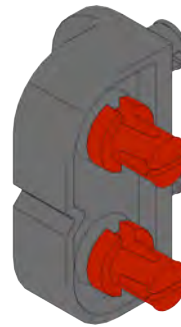
Step 3-4



Garage for Parking the Car in Chain Reaction Challenge

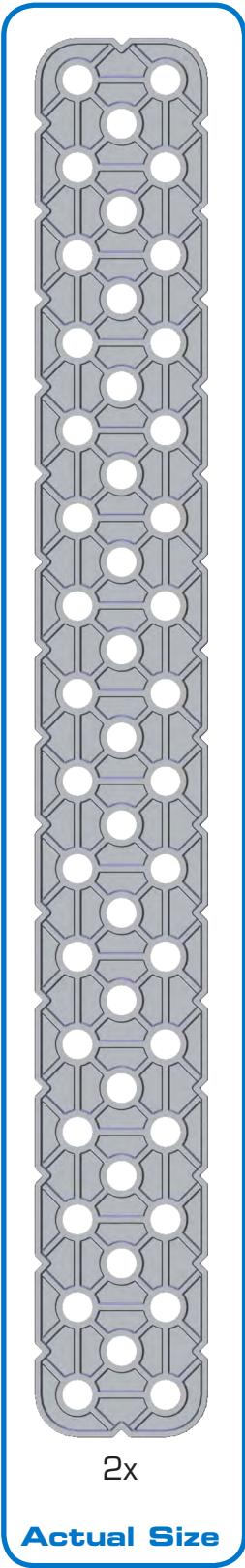


Step 4-1

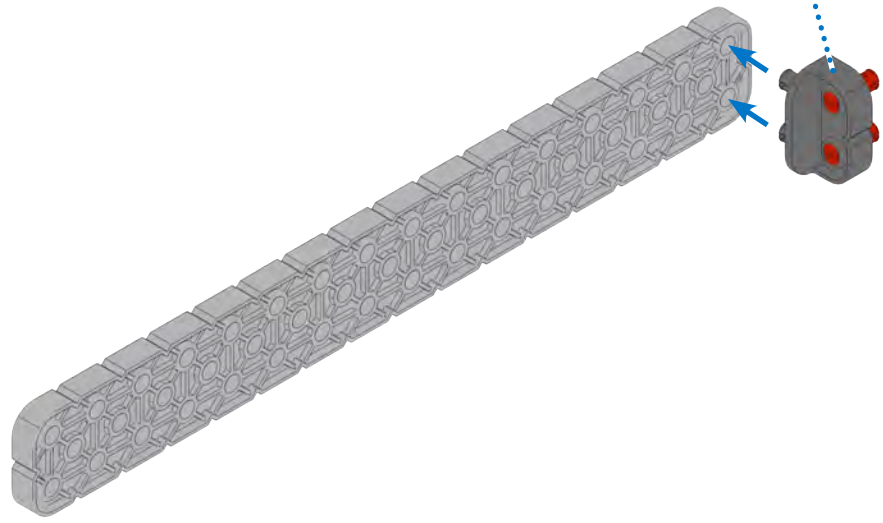


Make (2x)





From Step 4-1

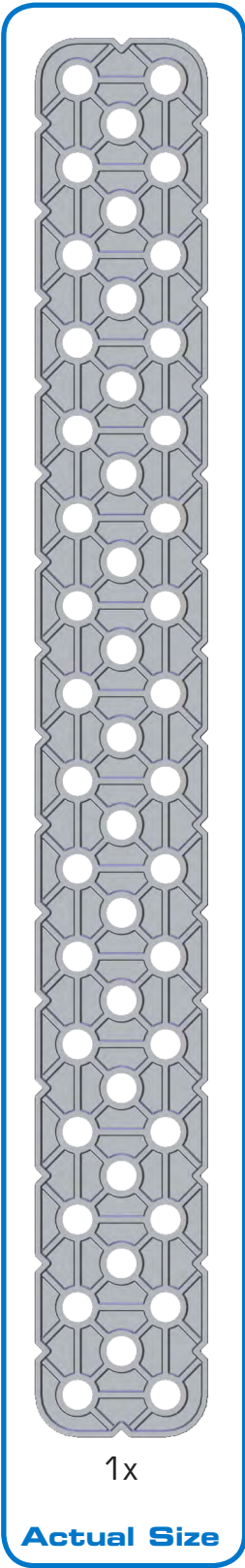


Step 4-2

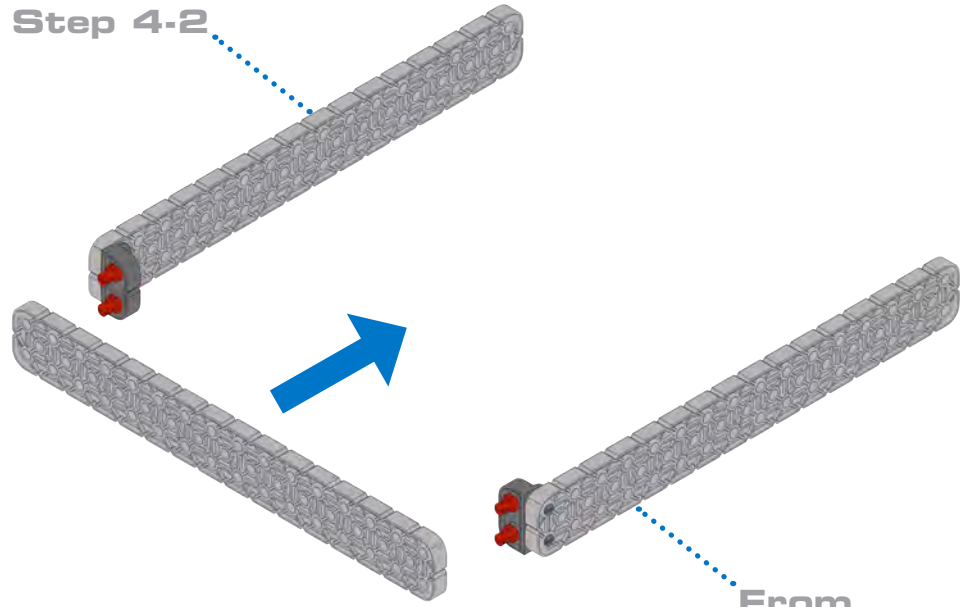


Make (2x)

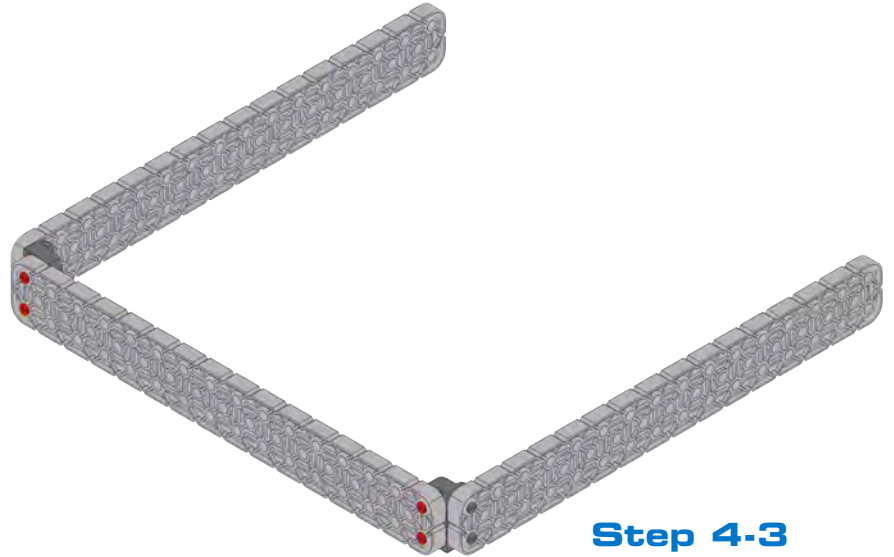




From Step 4-2

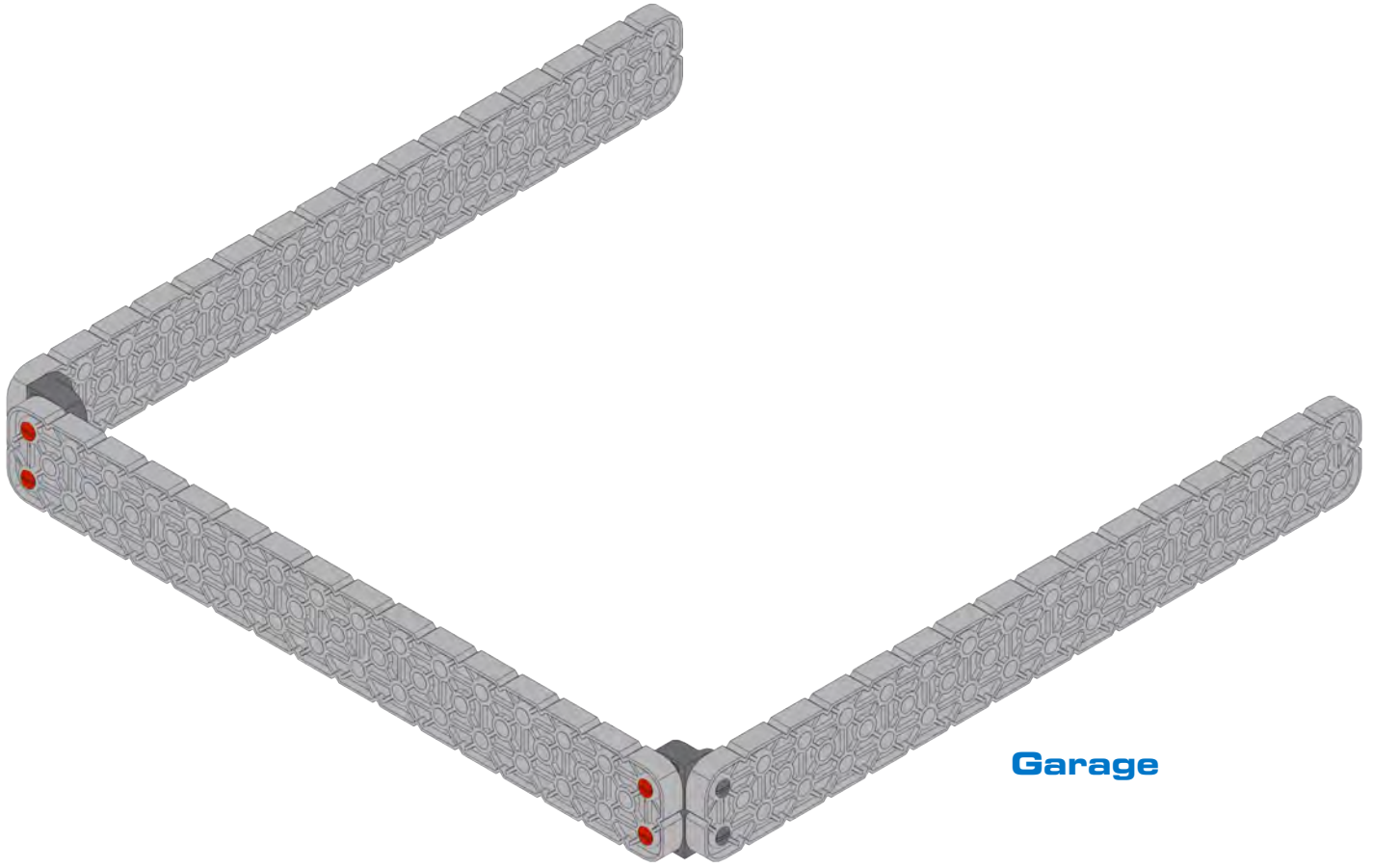


From Step 4-2



Step 4-3

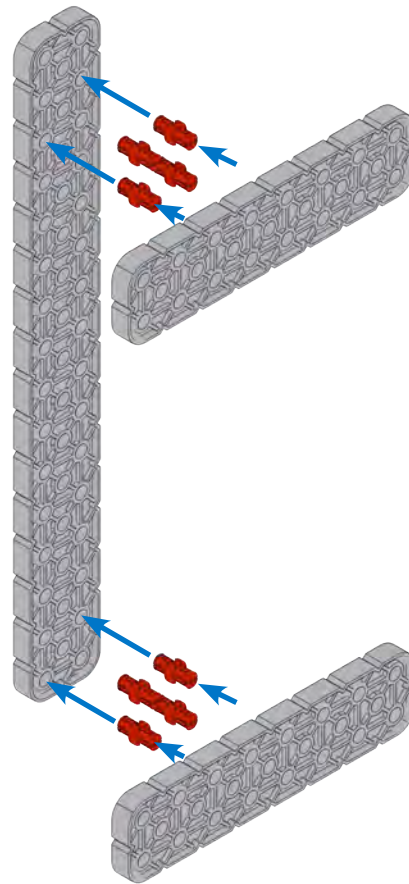
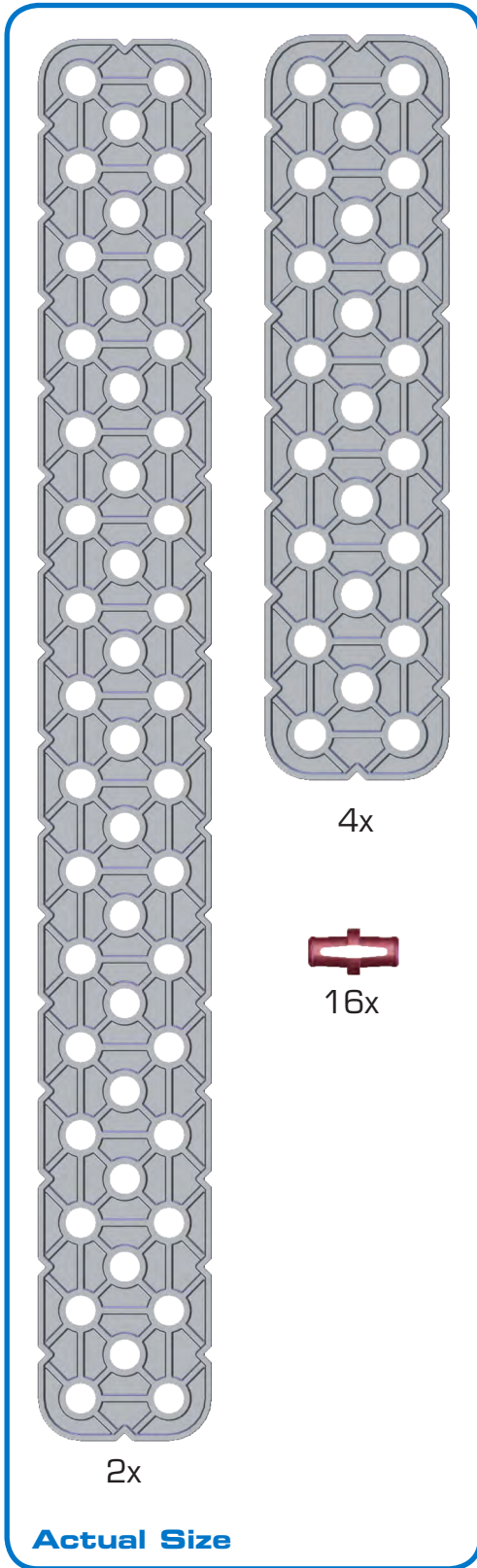




Garage

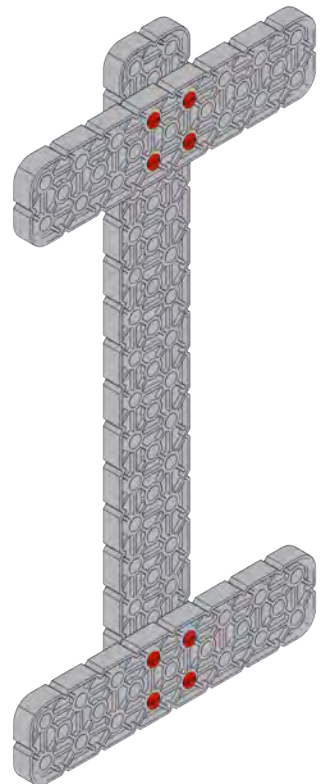


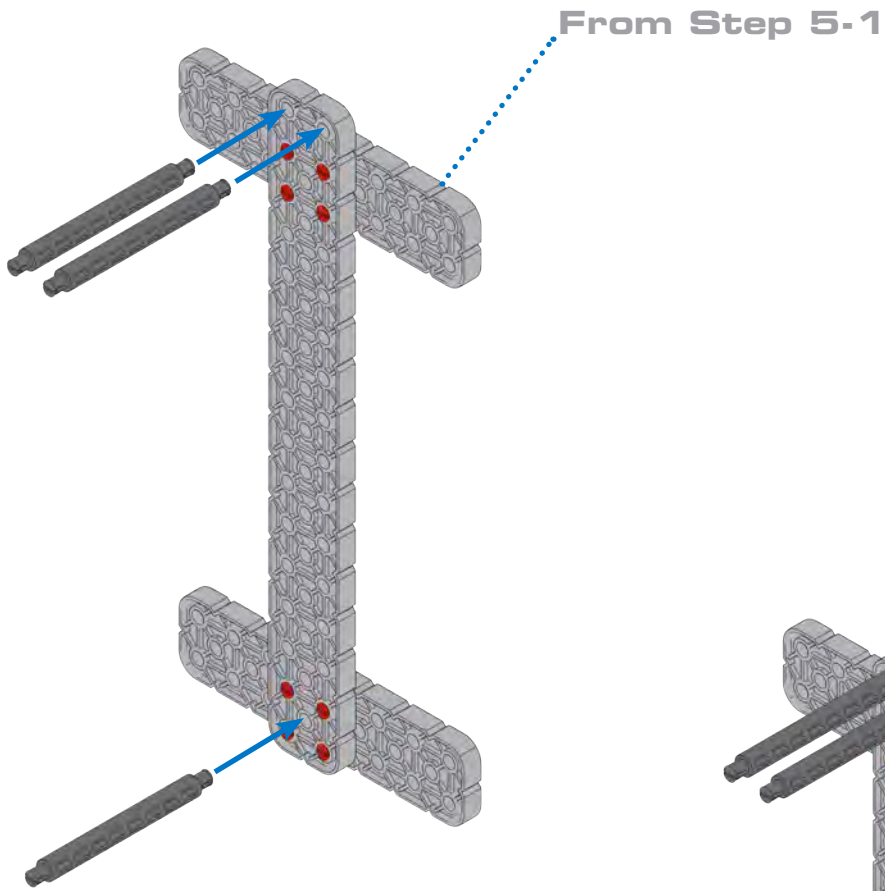
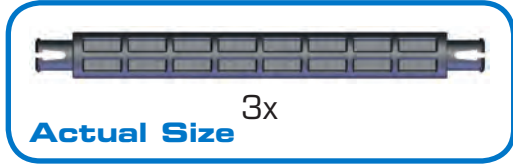
Pulley



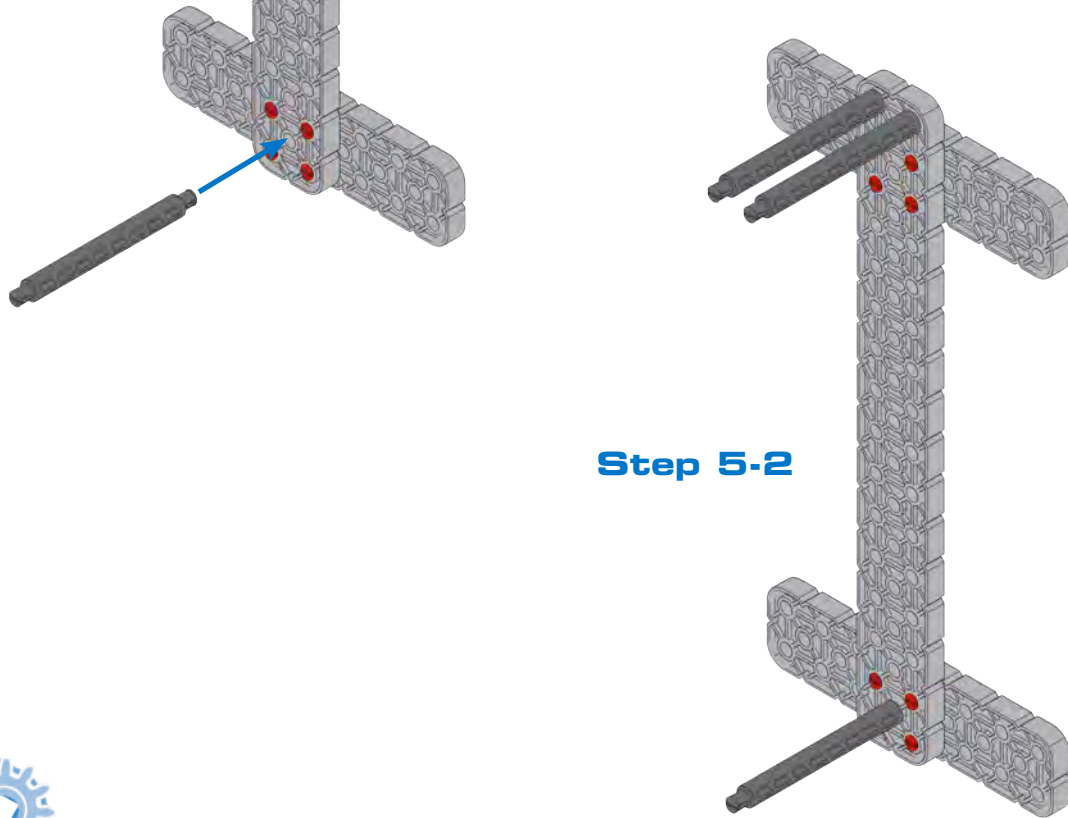
Step 5-1

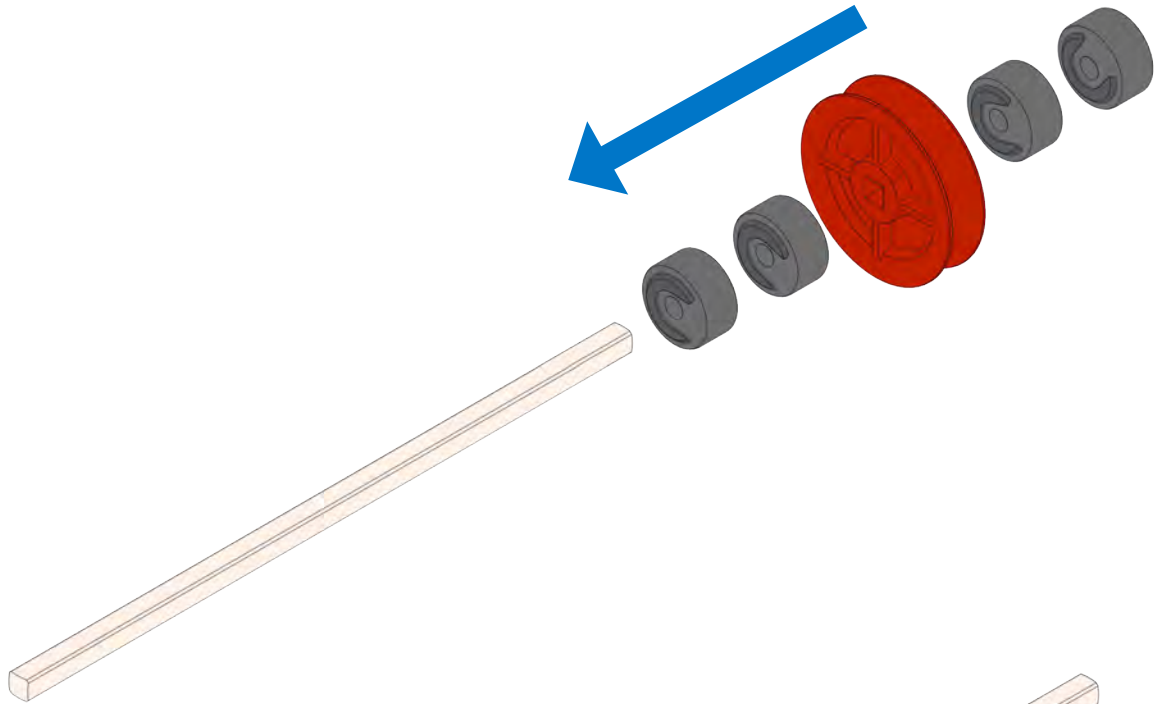
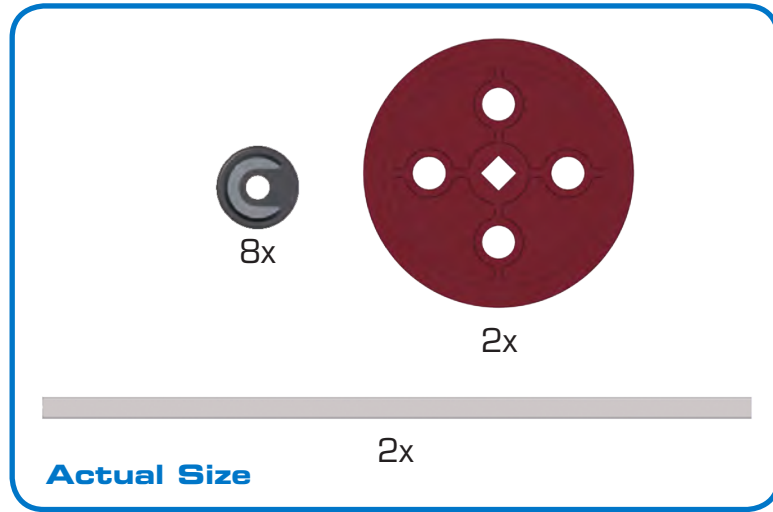
Make (2x)



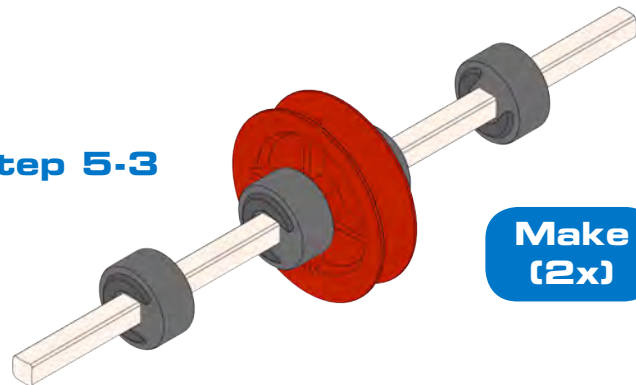


Step 5-2



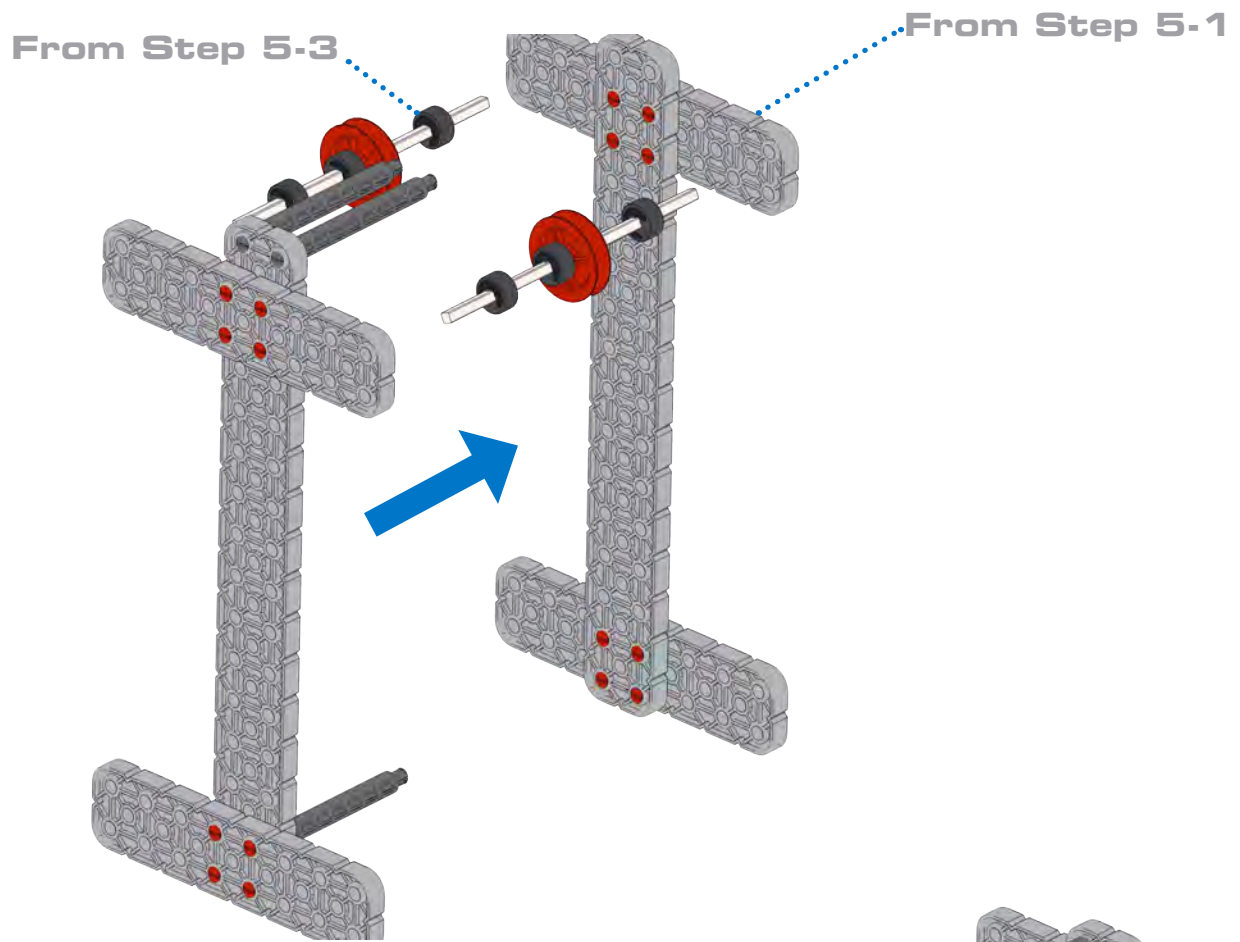


Step 5-3

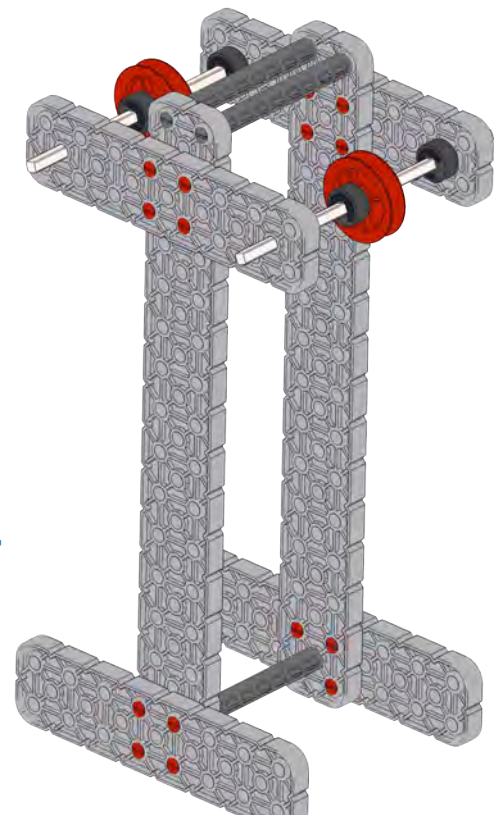


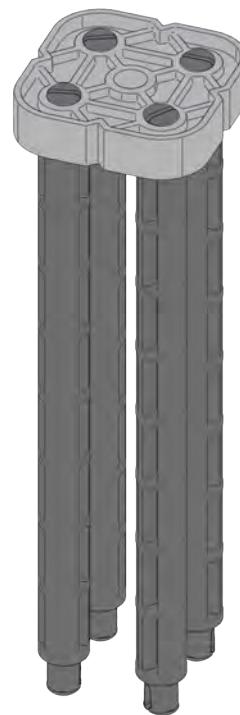
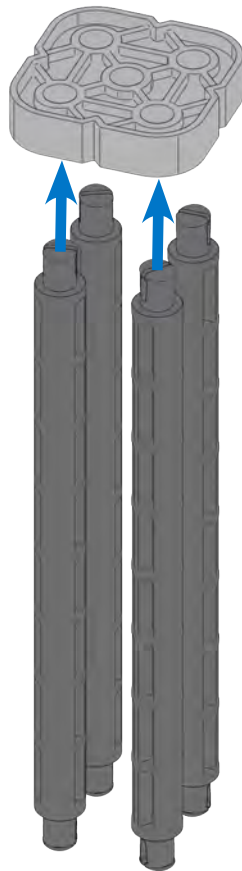
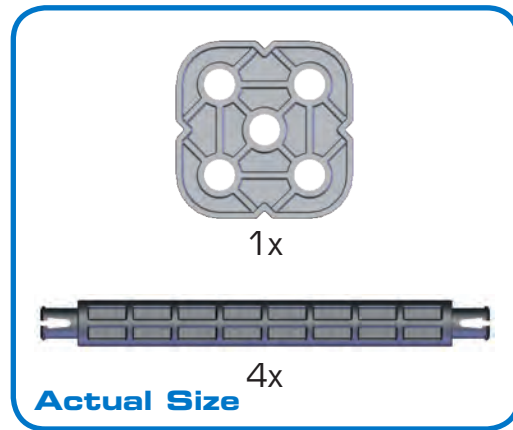
Make (2x)





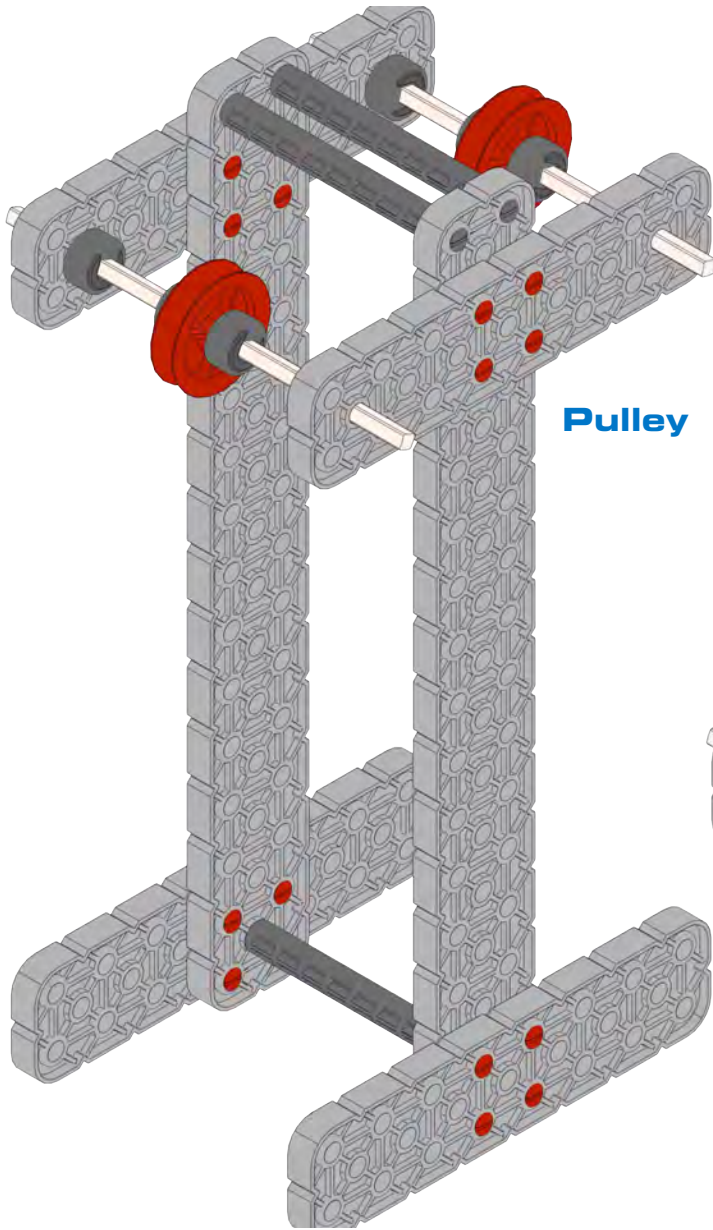
Step 5-4



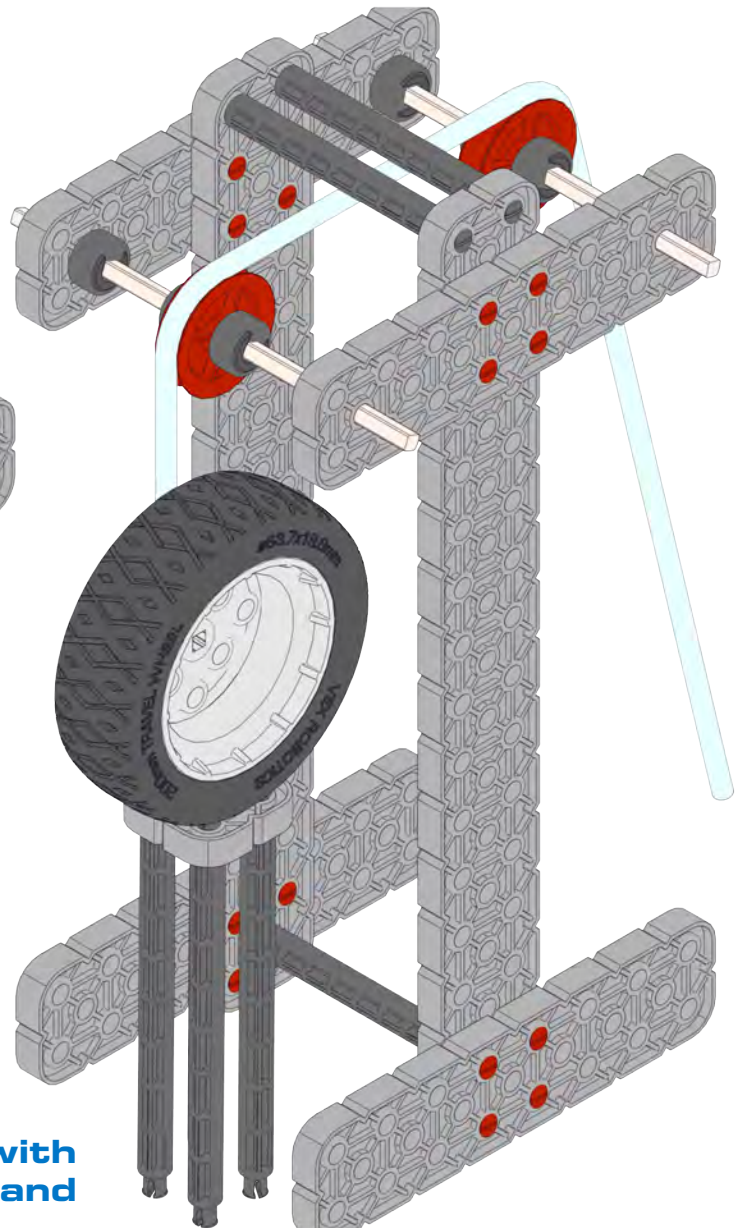


Step 5-5





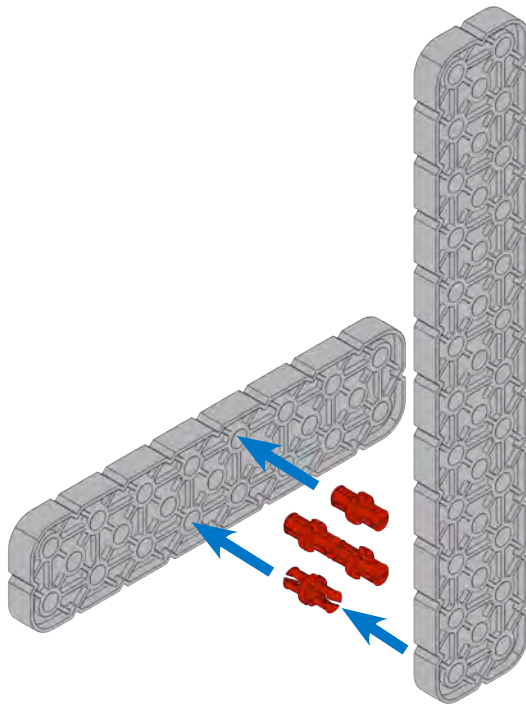
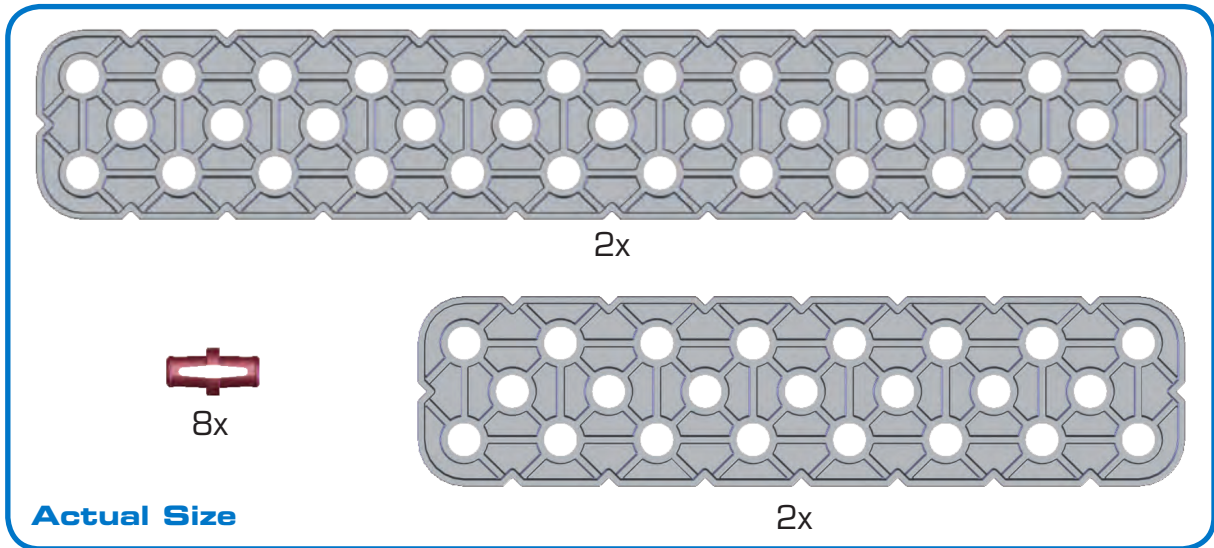
Pulley



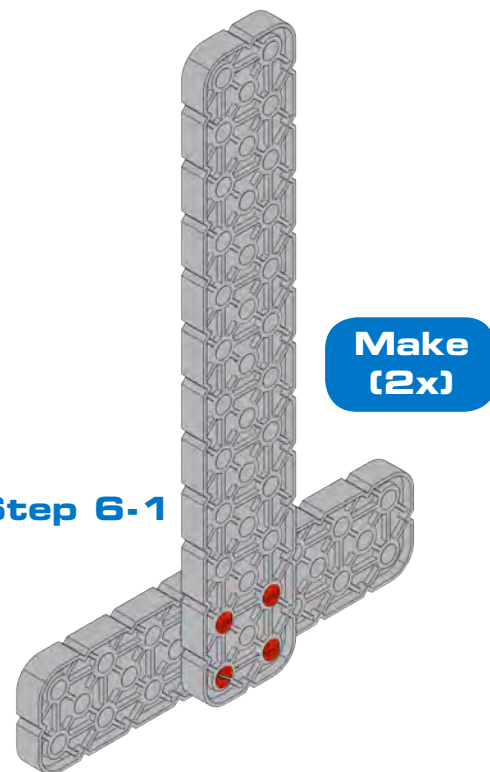
Pulley with
Wheel Stand

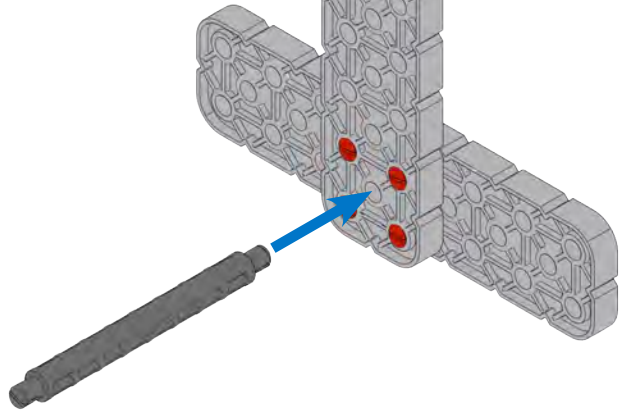
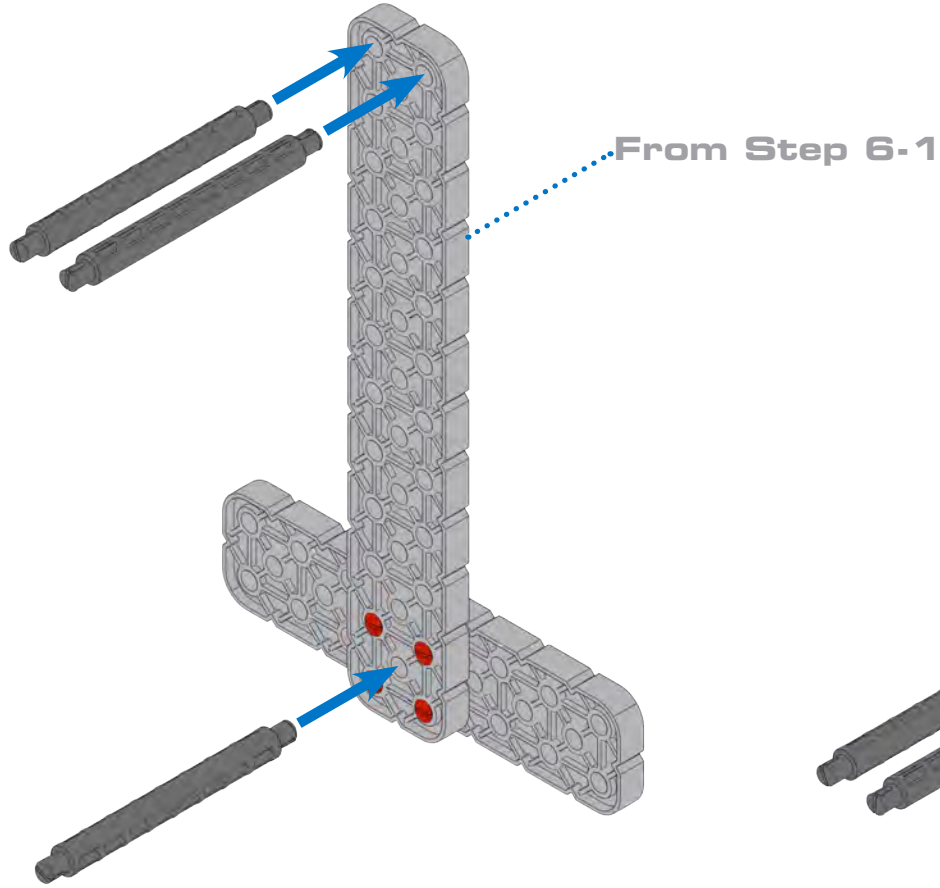
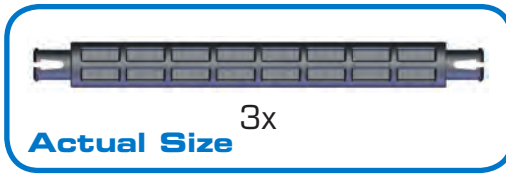


Pendulum

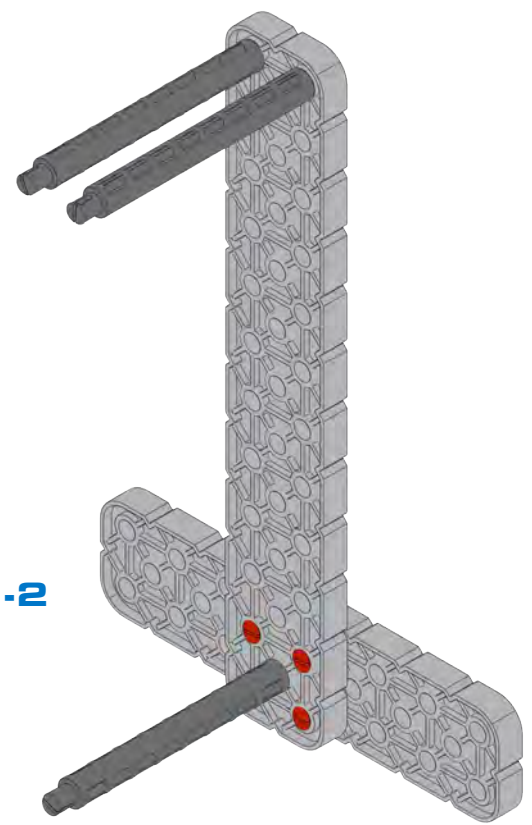


Step 6-1

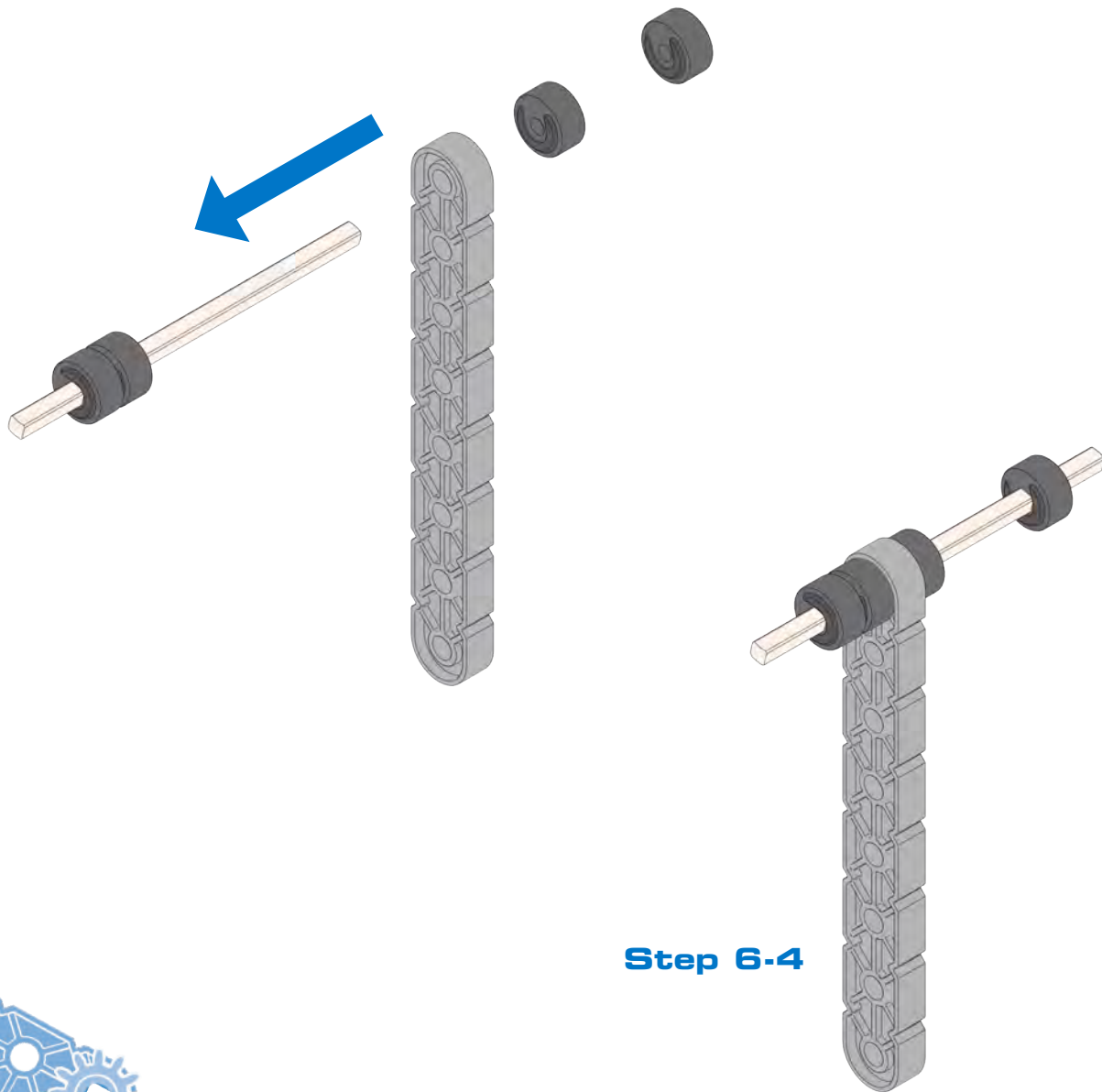
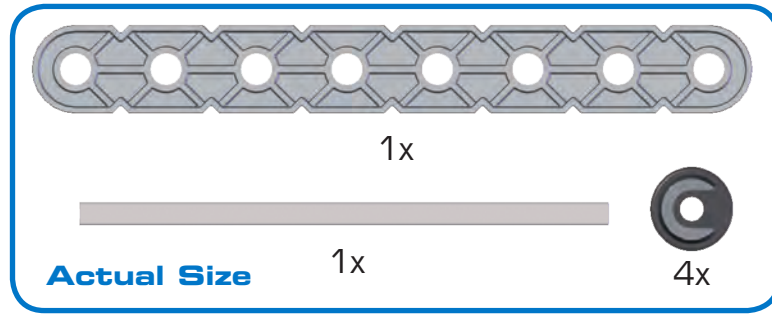




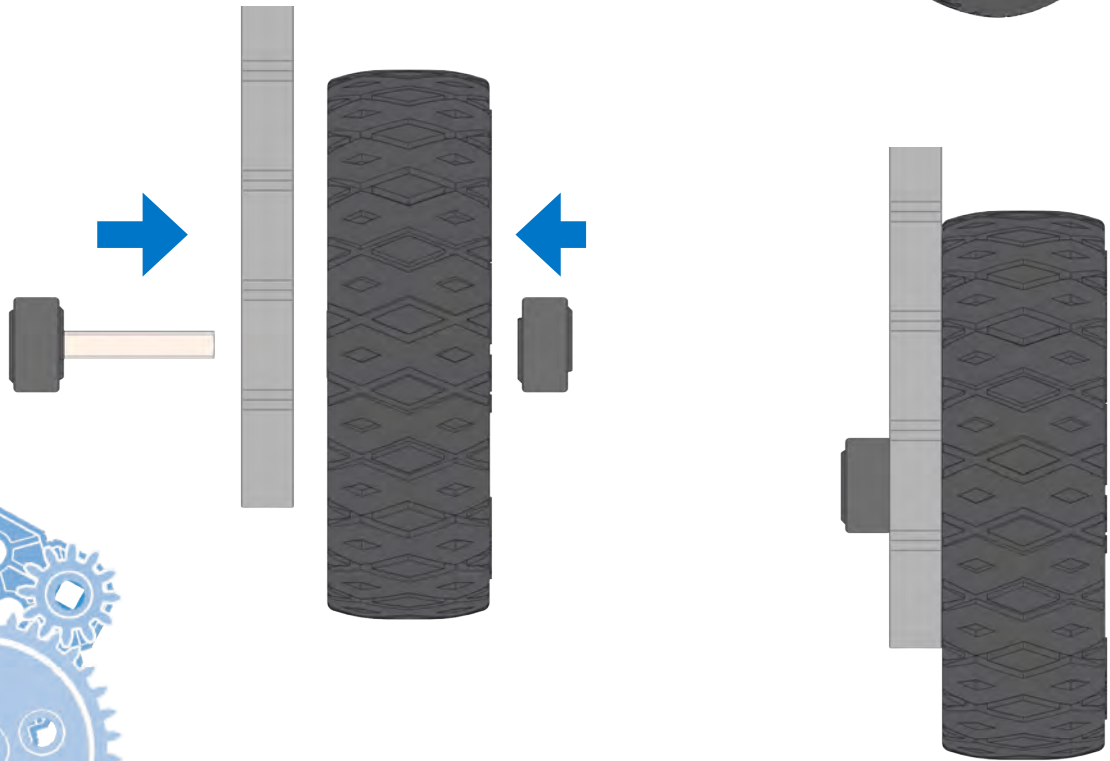
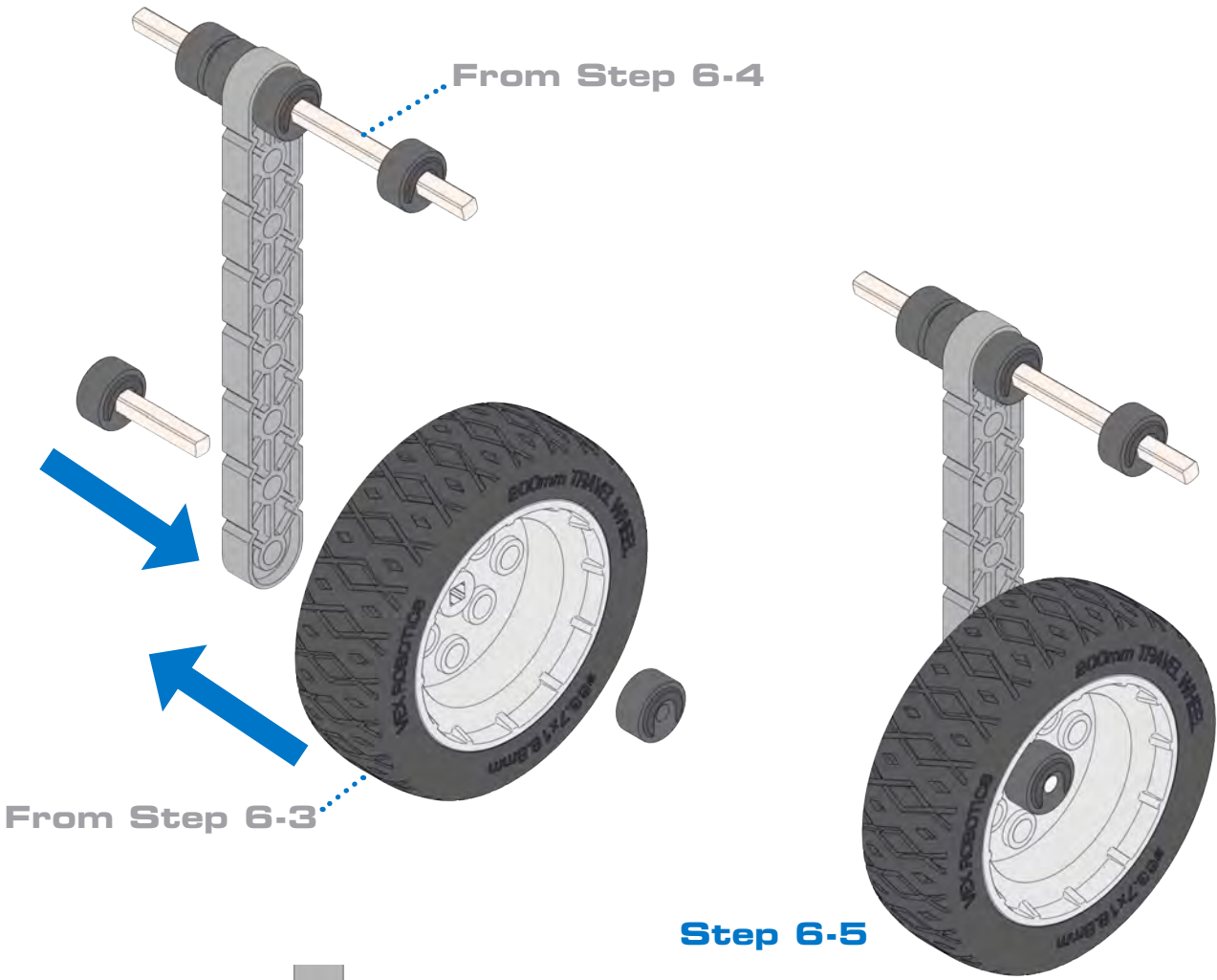
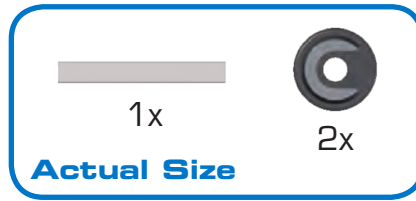
Step 6-2



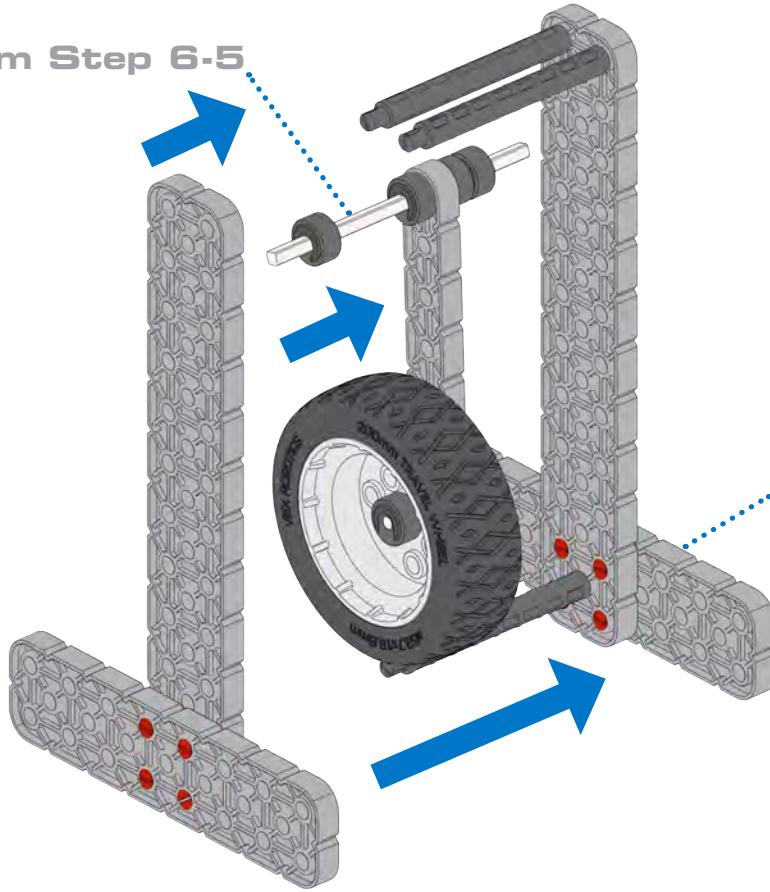




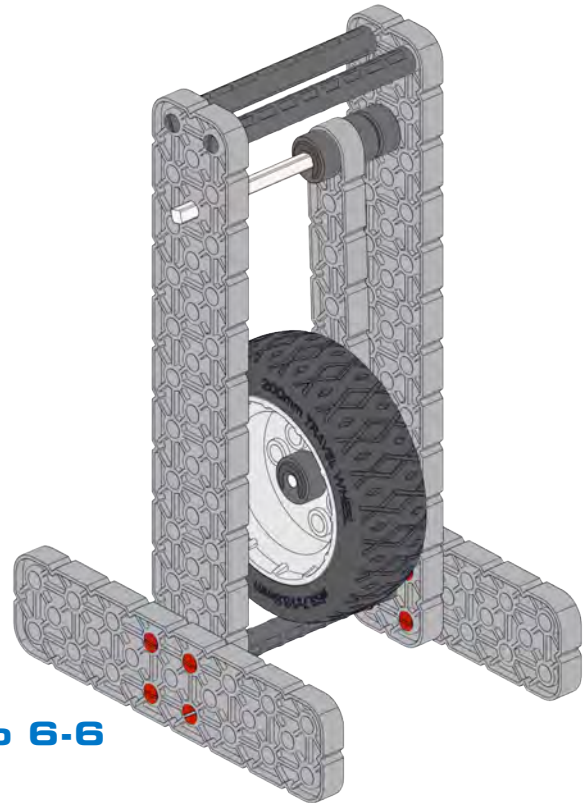
Step 6-4



From Step 6-5



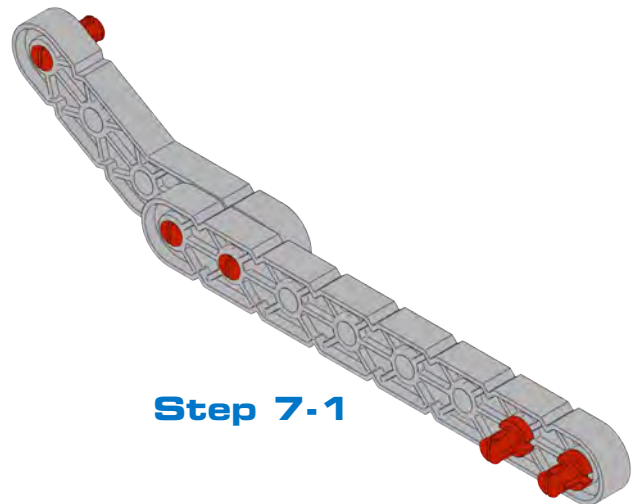
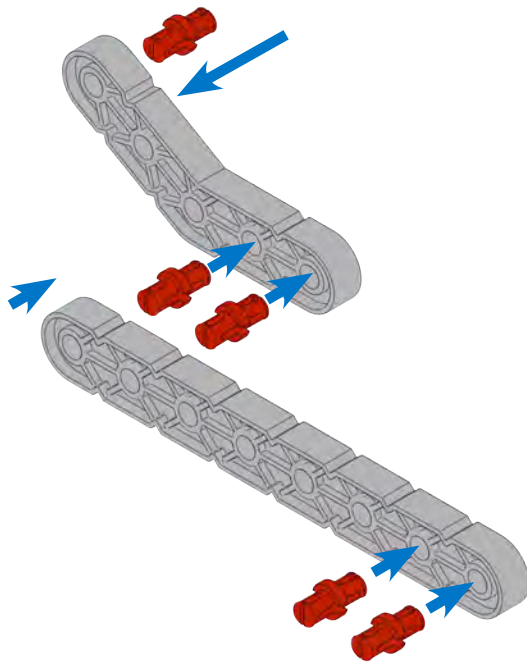
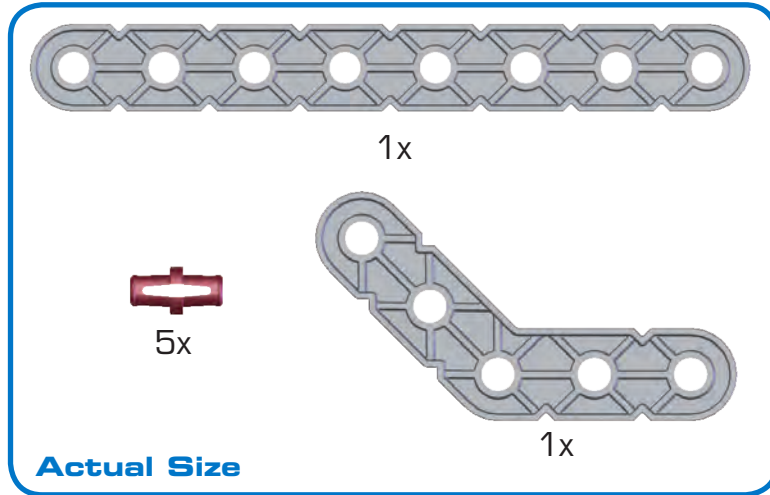
From Step 6-2



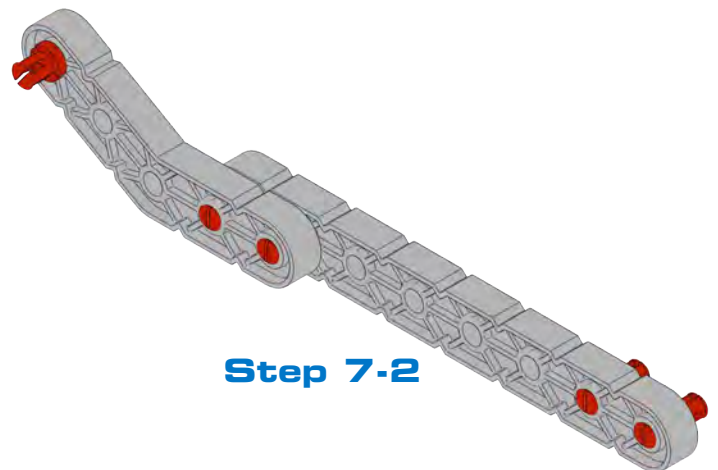
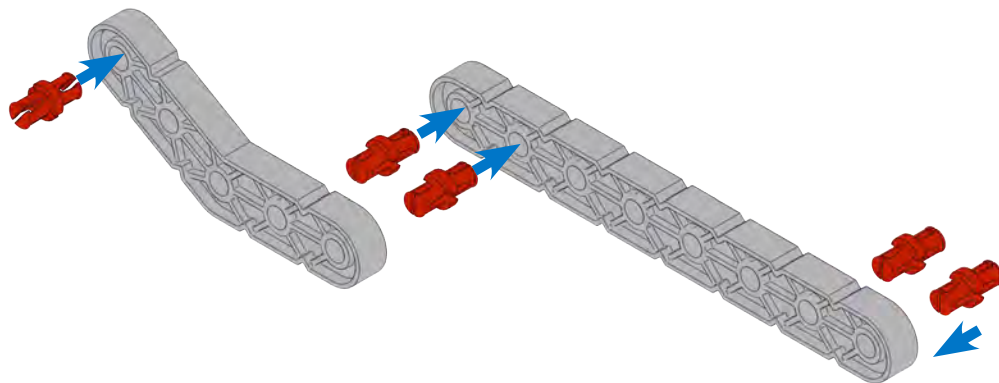
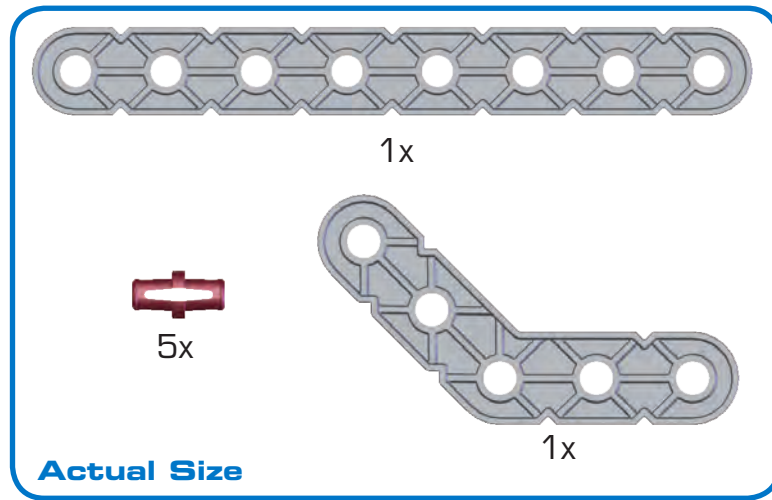
Step 6-6

Connecting Simple Machines & Pendulum

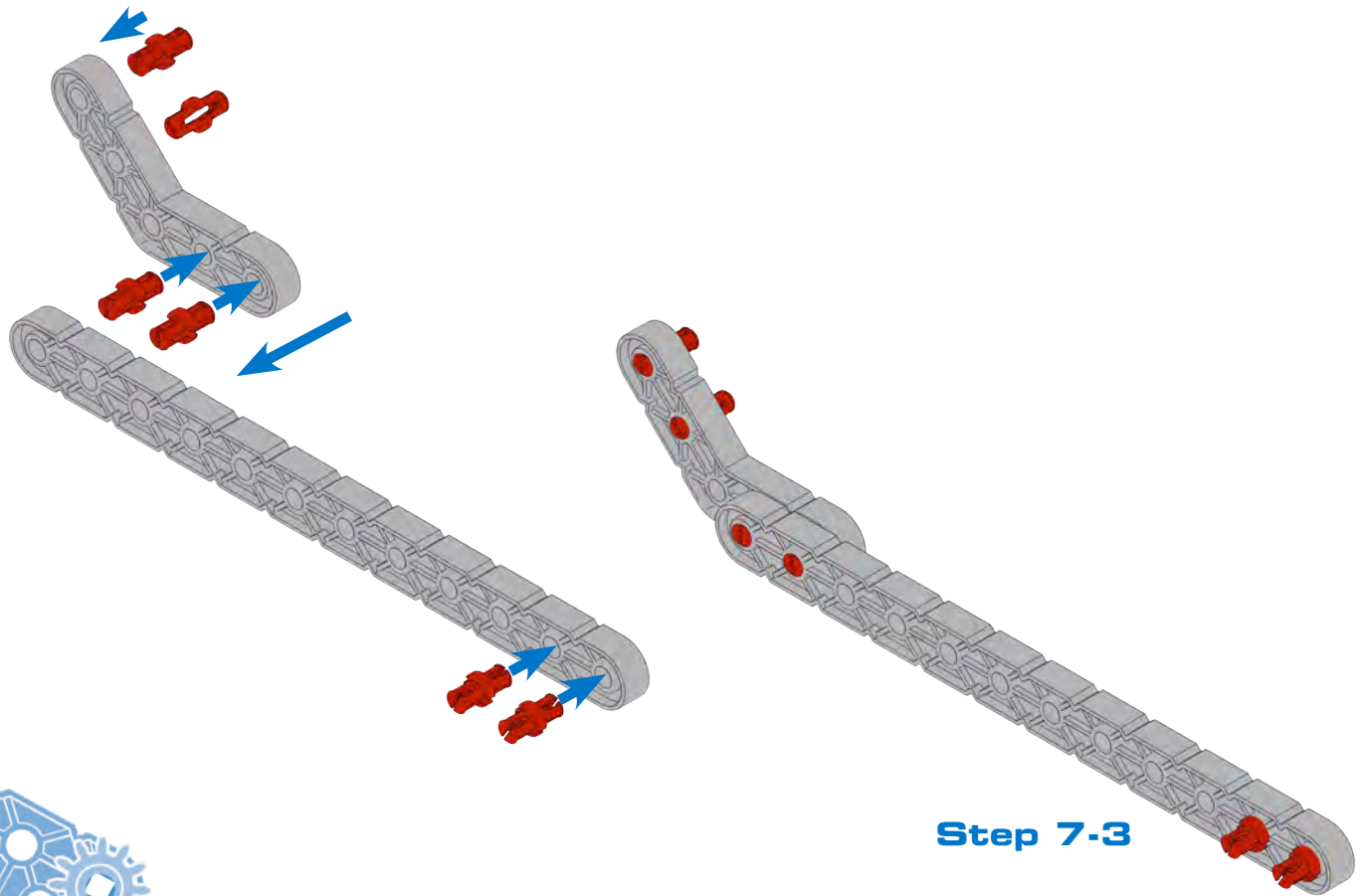
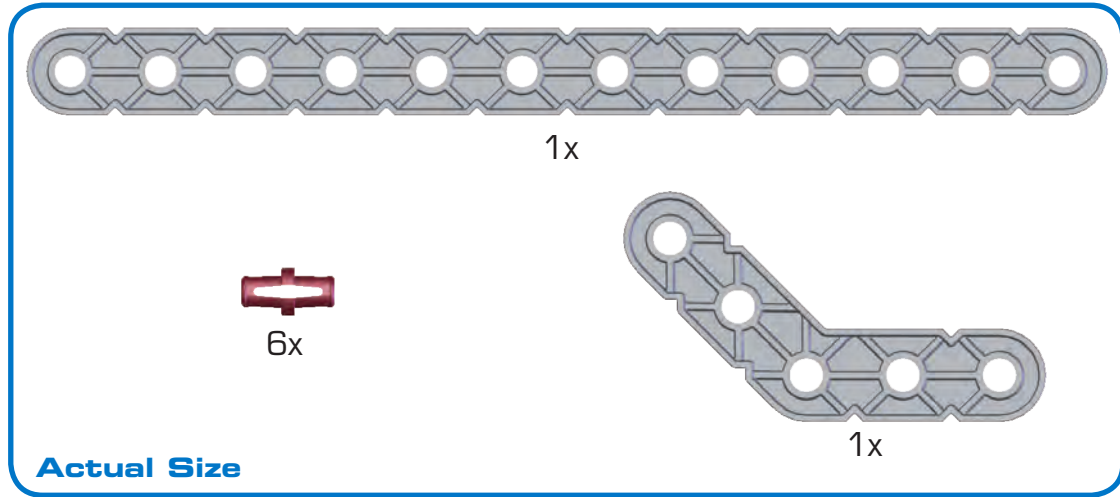
1. Left Inclined Plane to Pendulum Connector



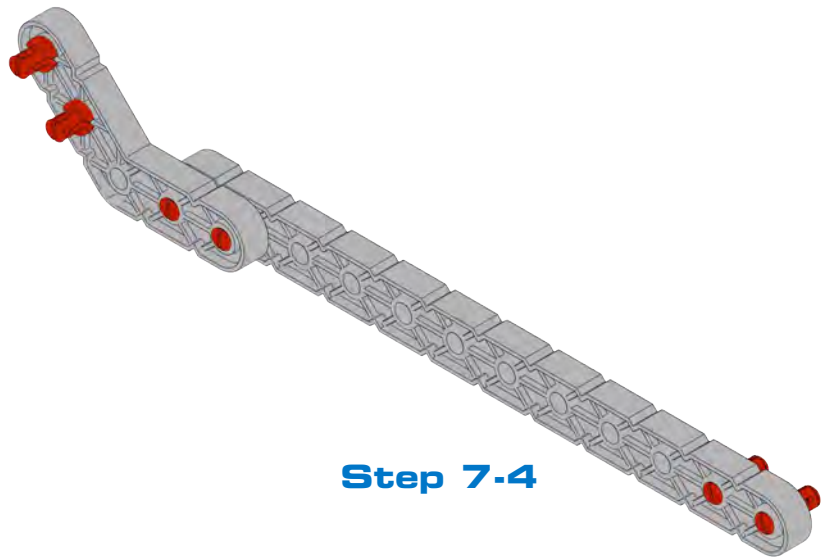
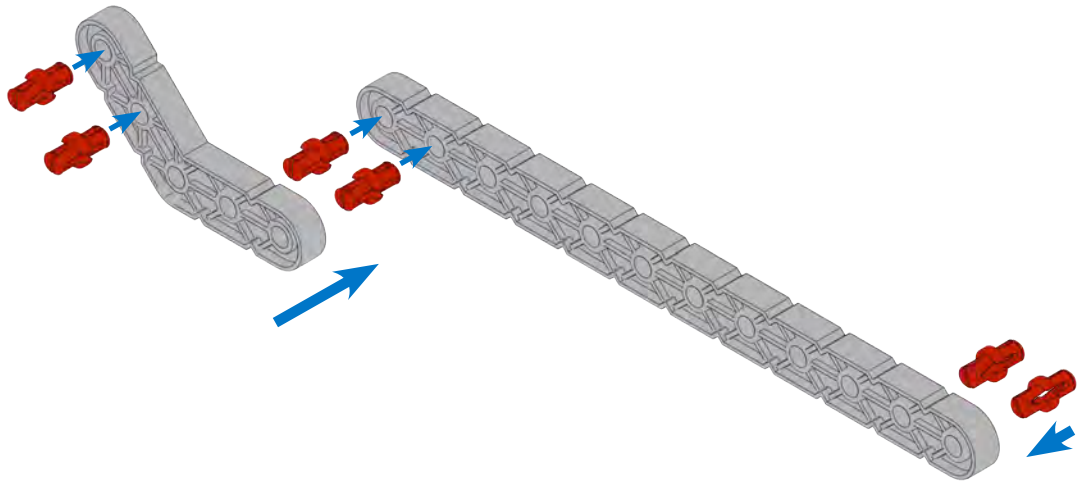
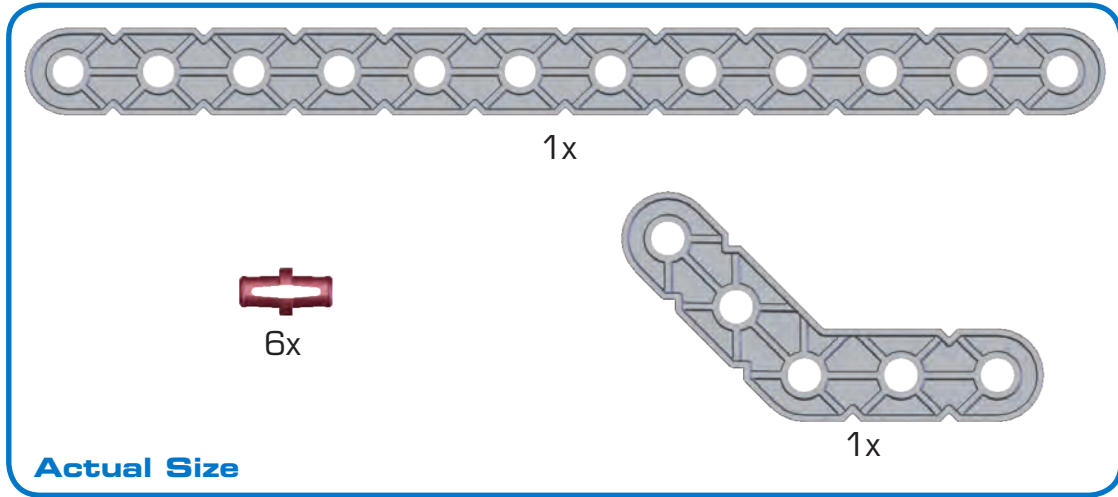
2. Right Inclined Plane to Pendulum Connector



3. Left Pulley to Lever Connector

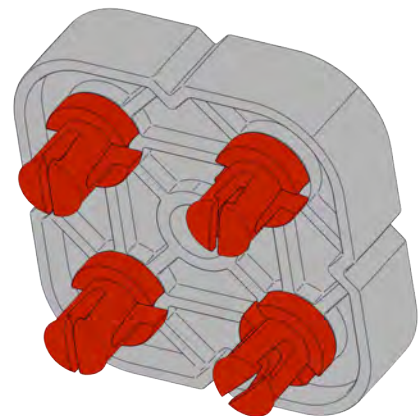
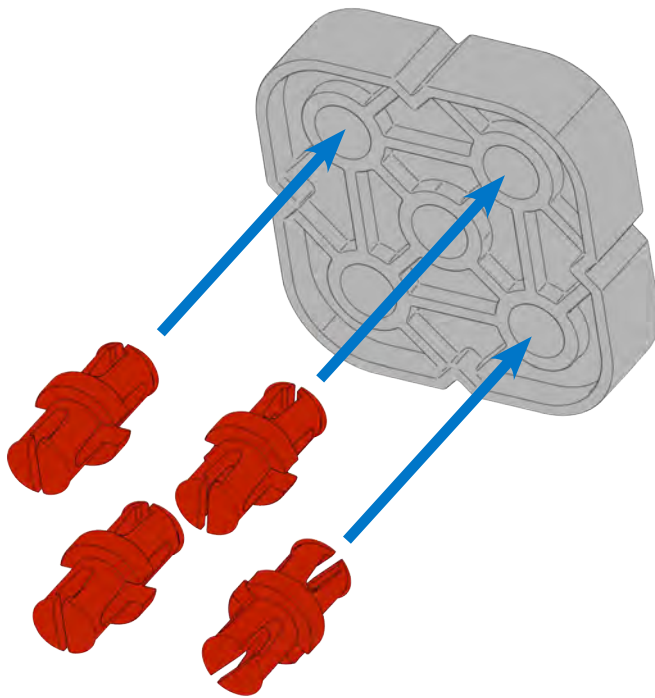
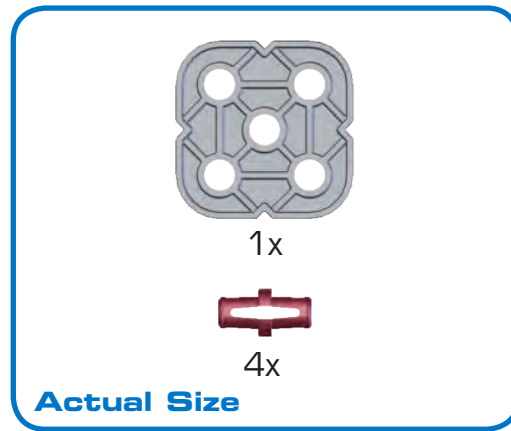


4. Right Pulley to Lever Connector



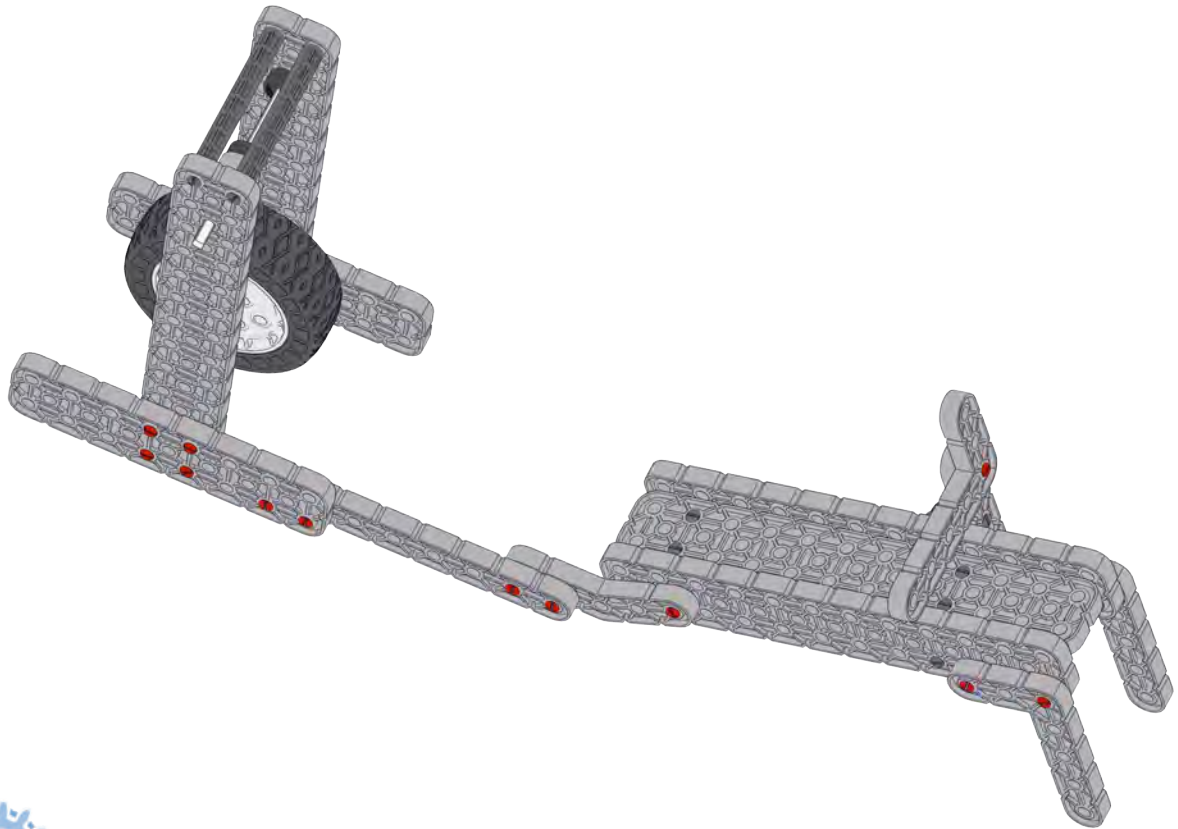
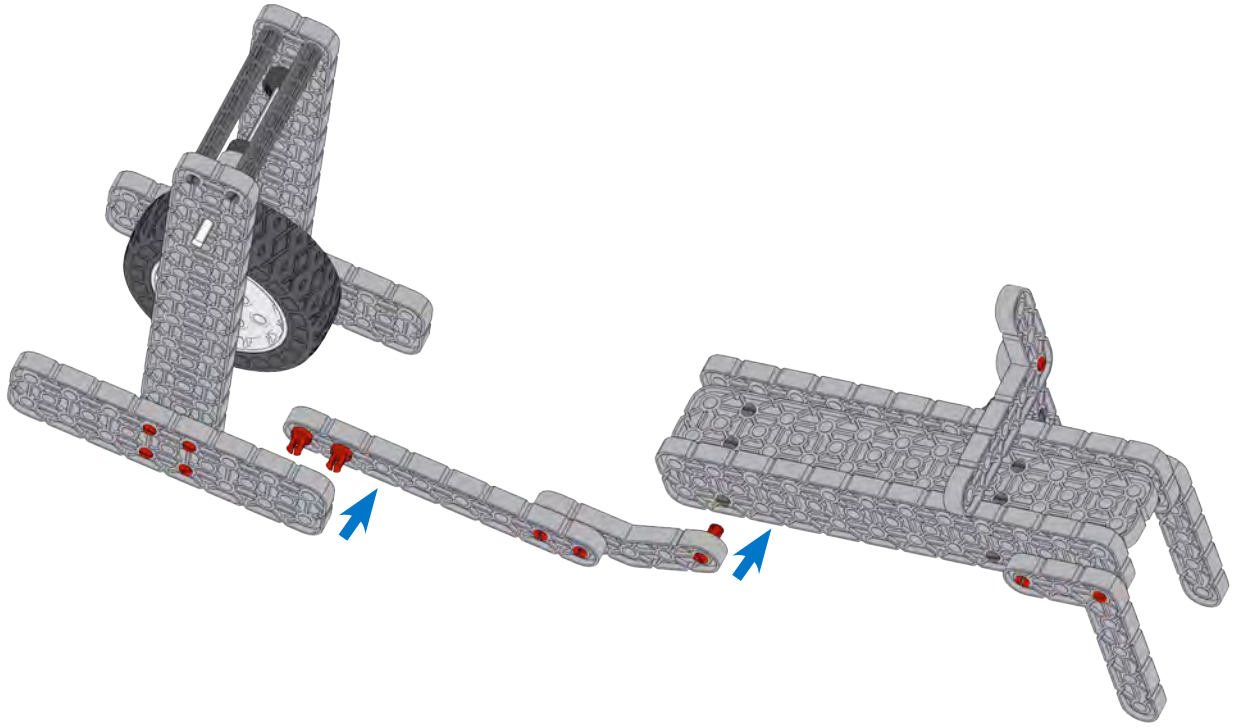
Step 7-4

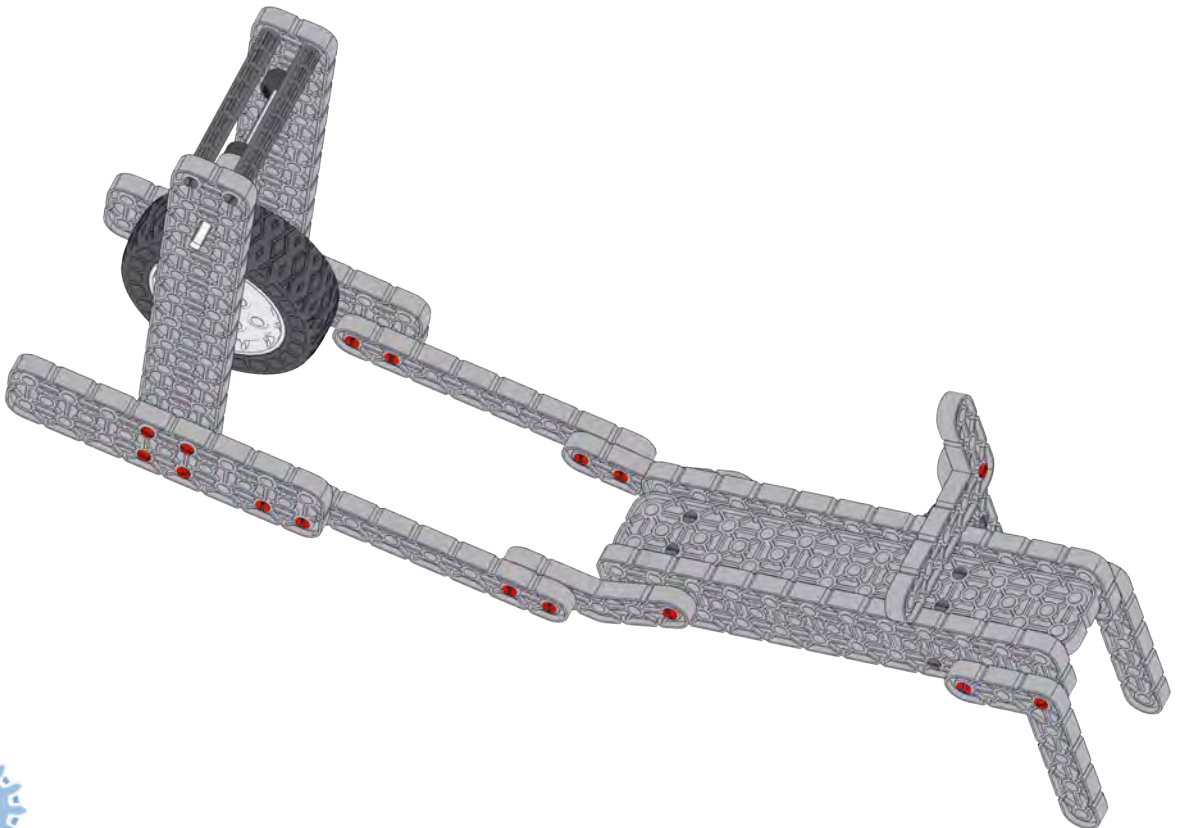
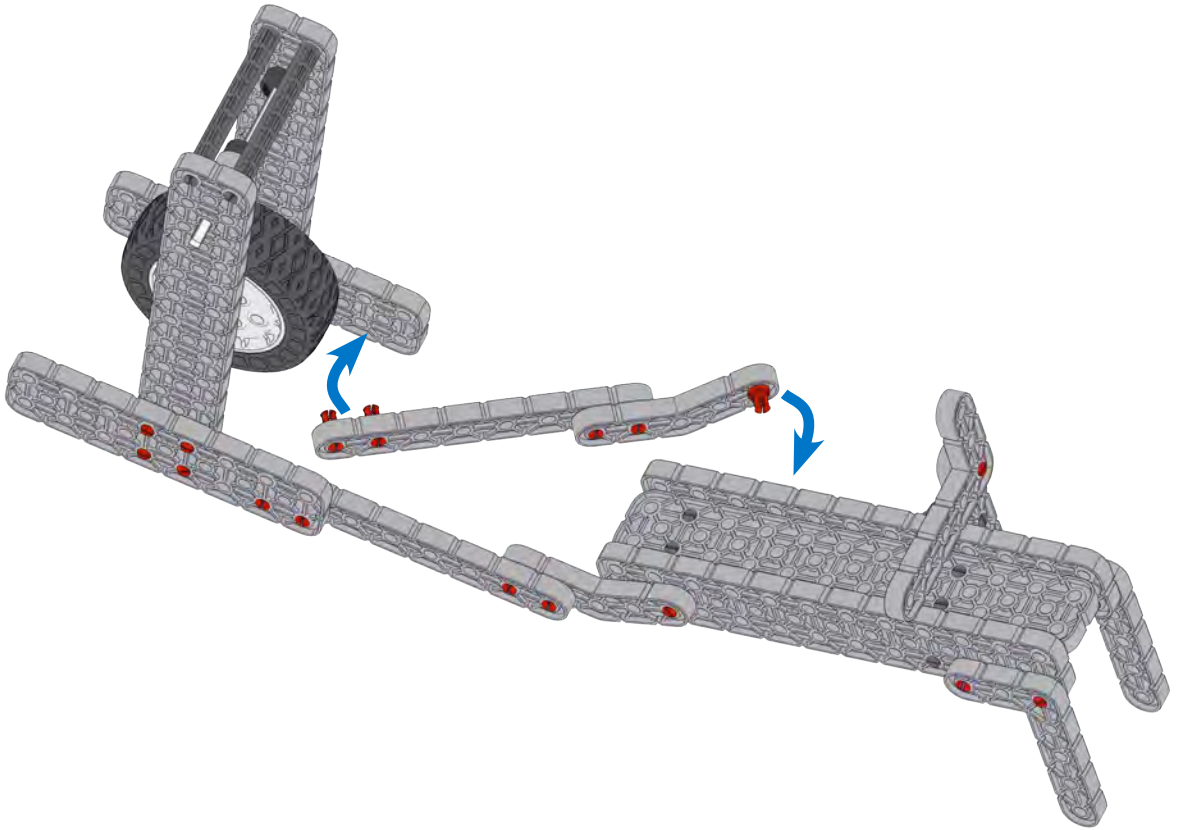
5. Pendulum to Pulley Connector

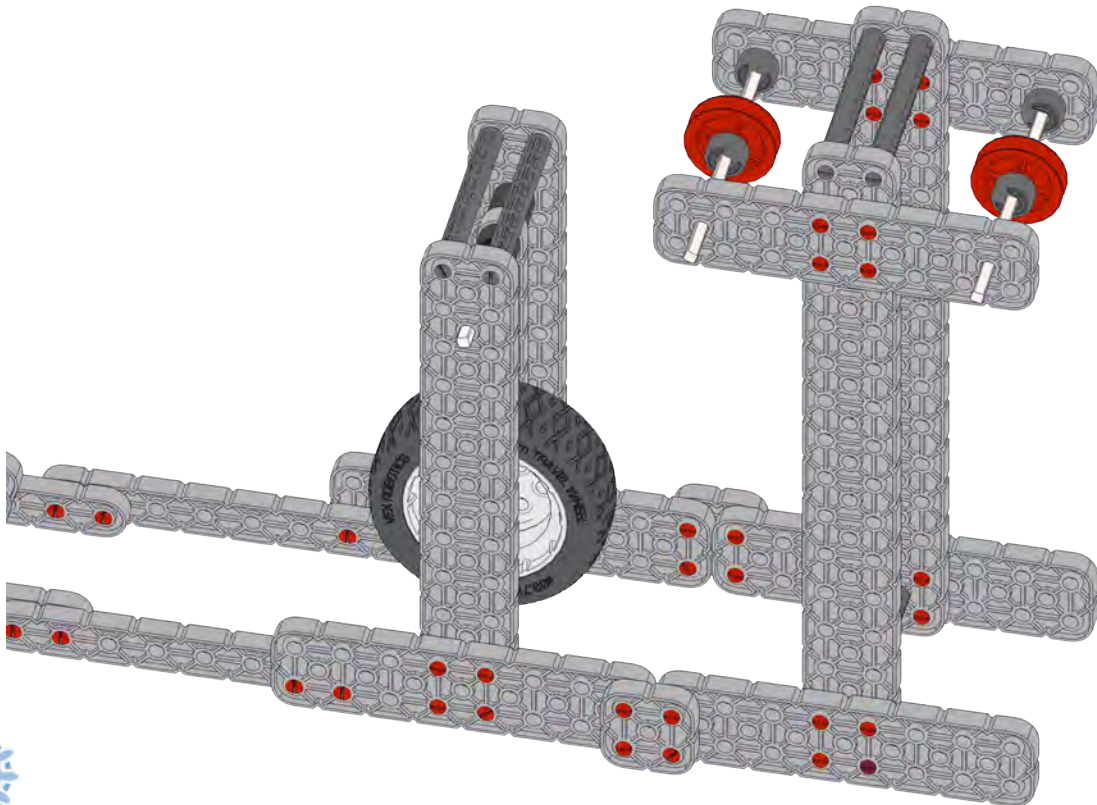
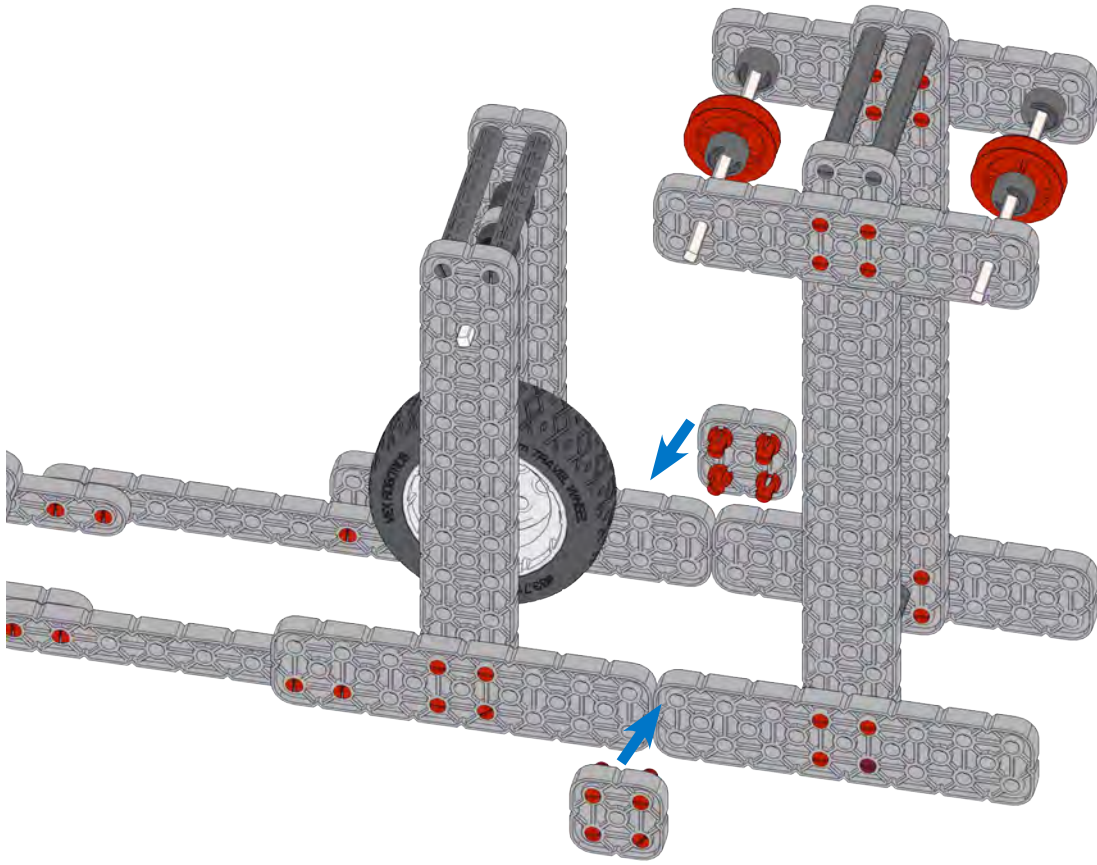


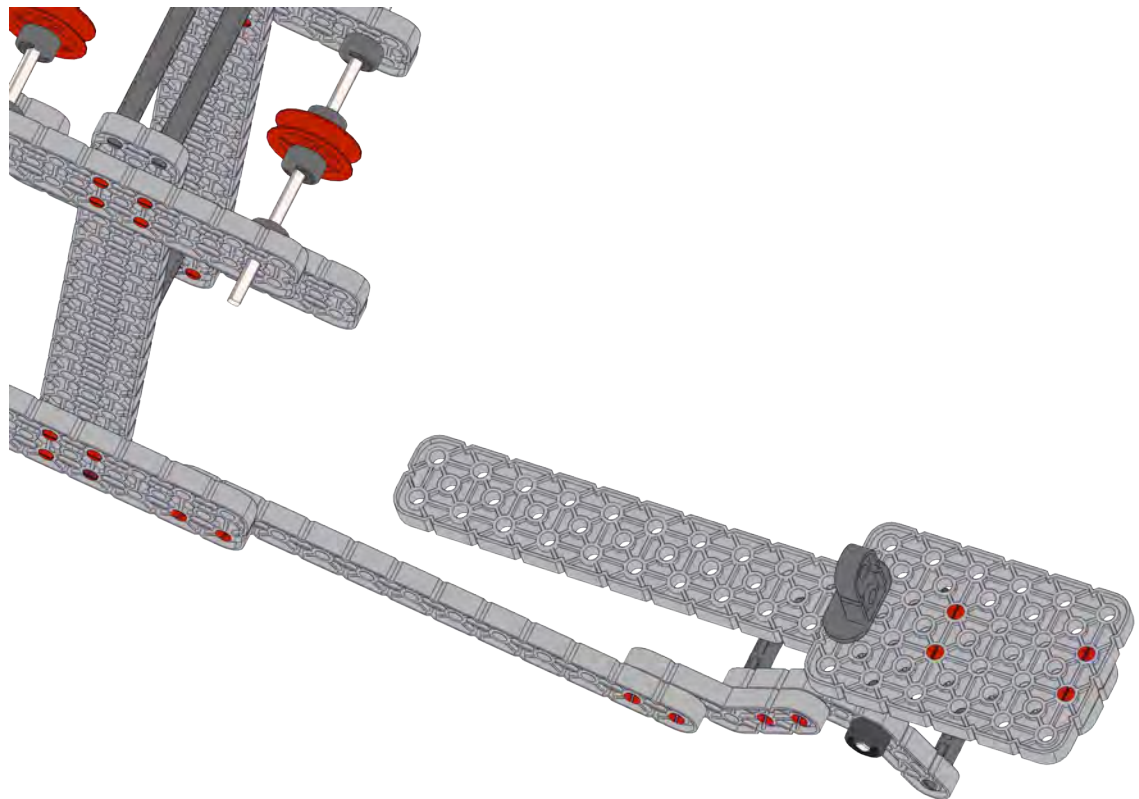
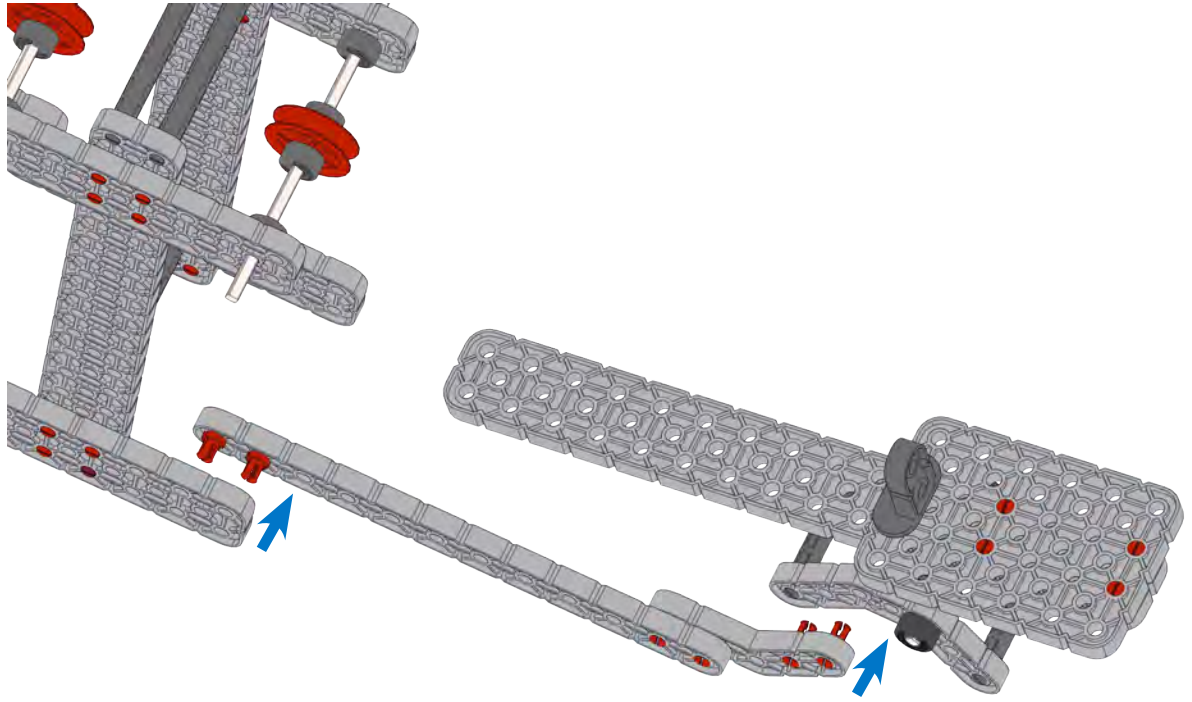
Step 7-5

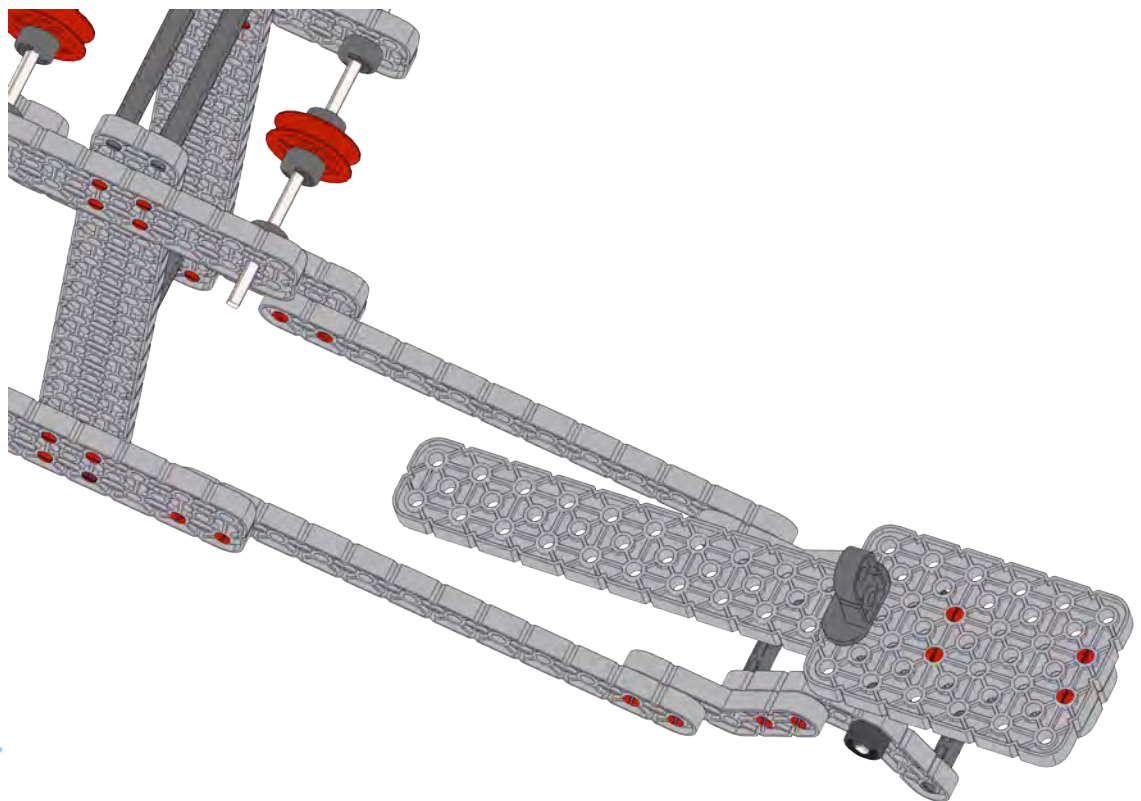
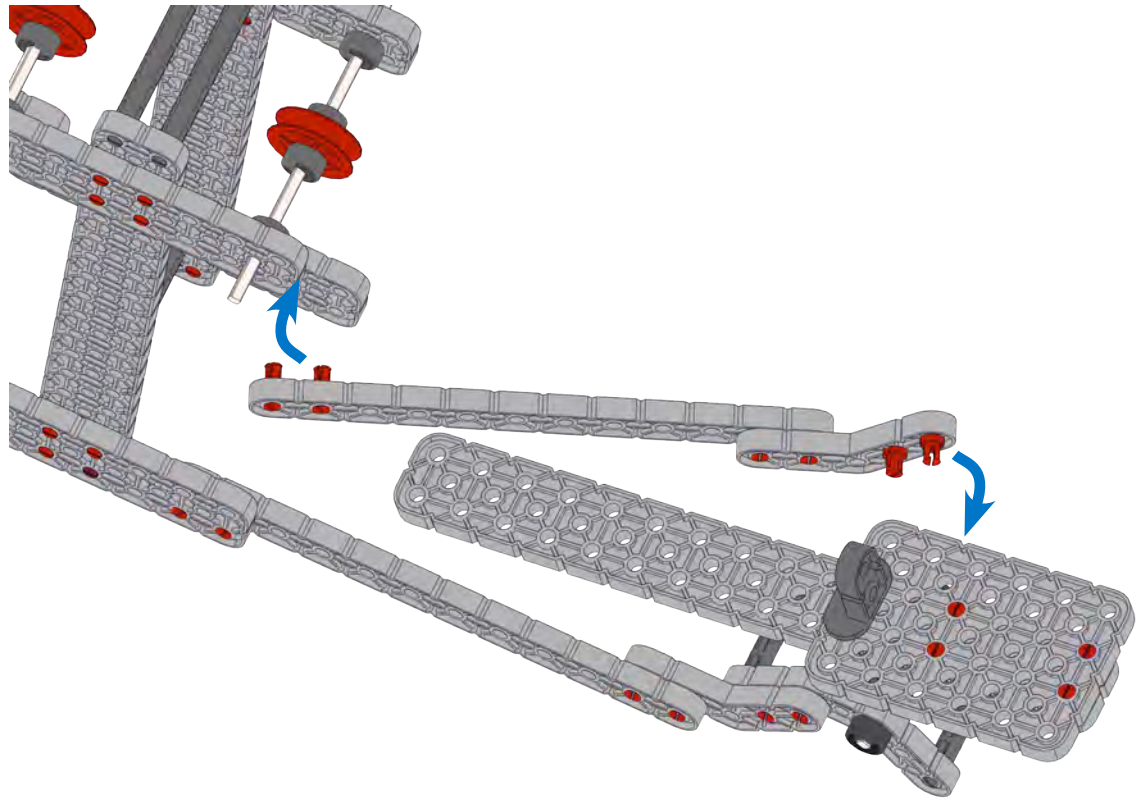
Connecting Stages of the Device

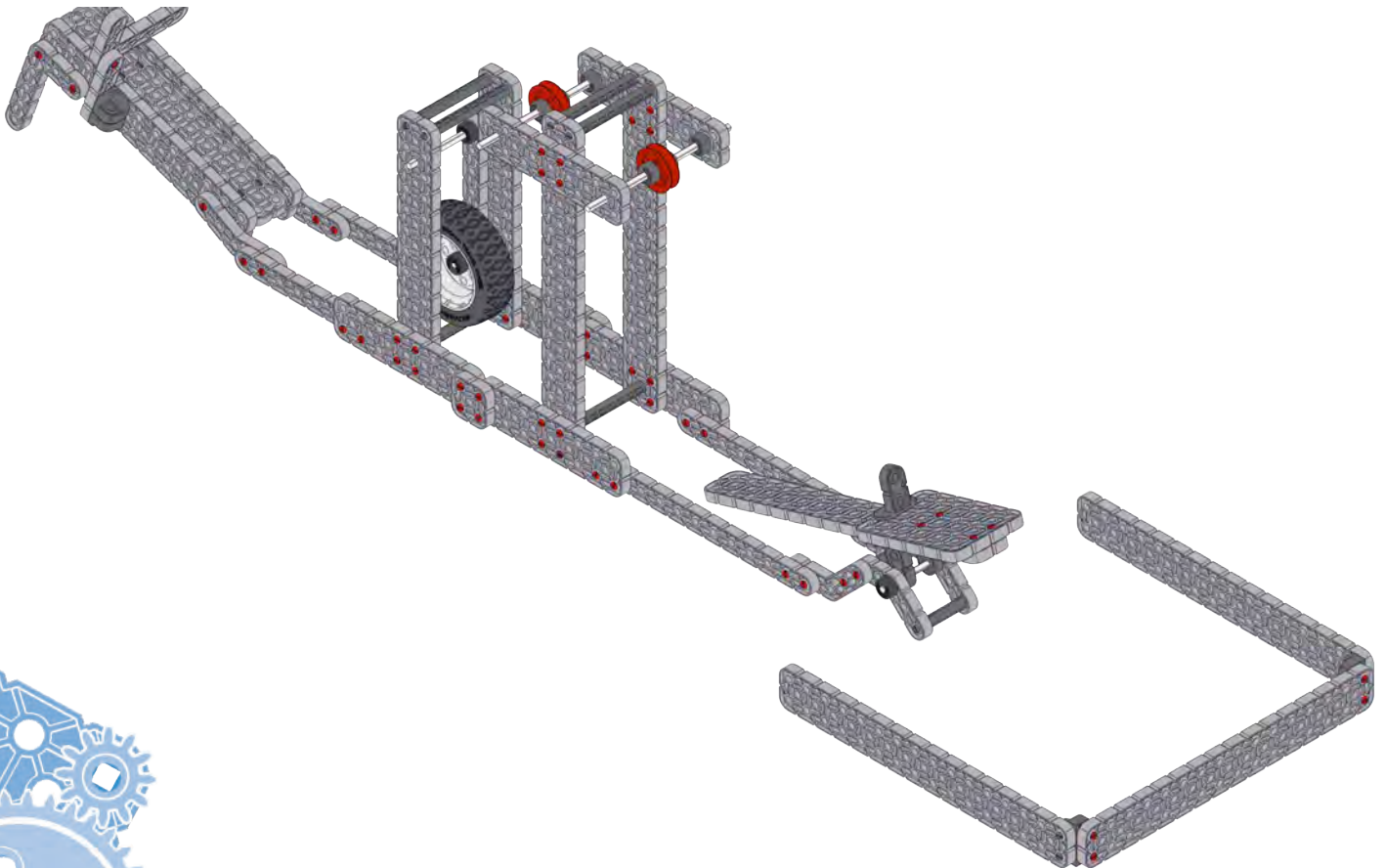
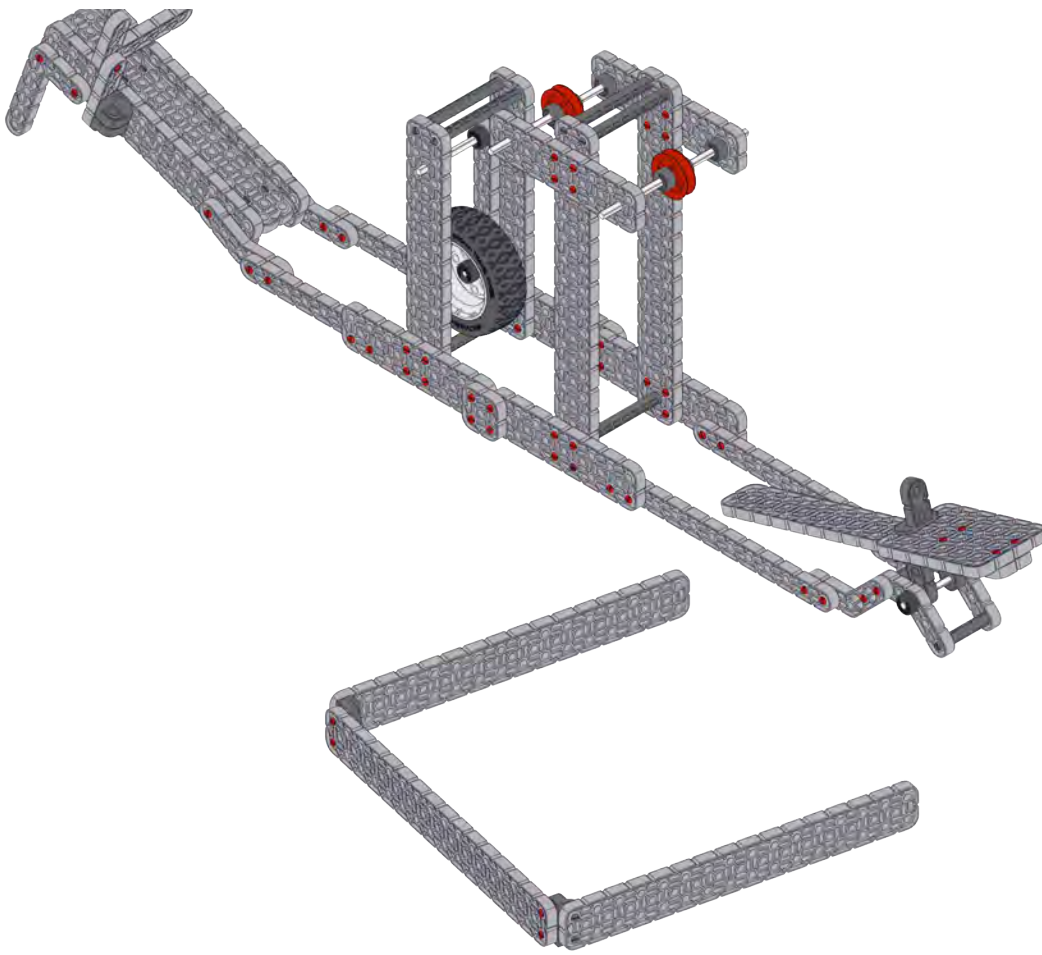




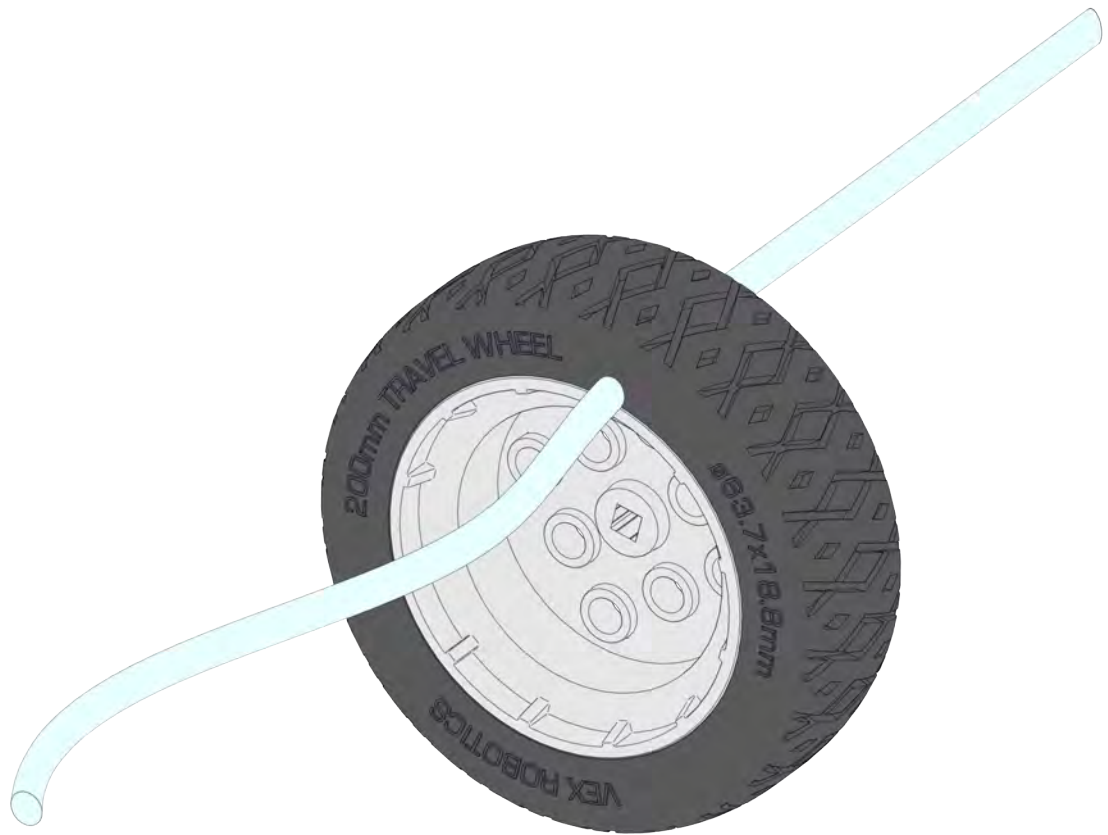
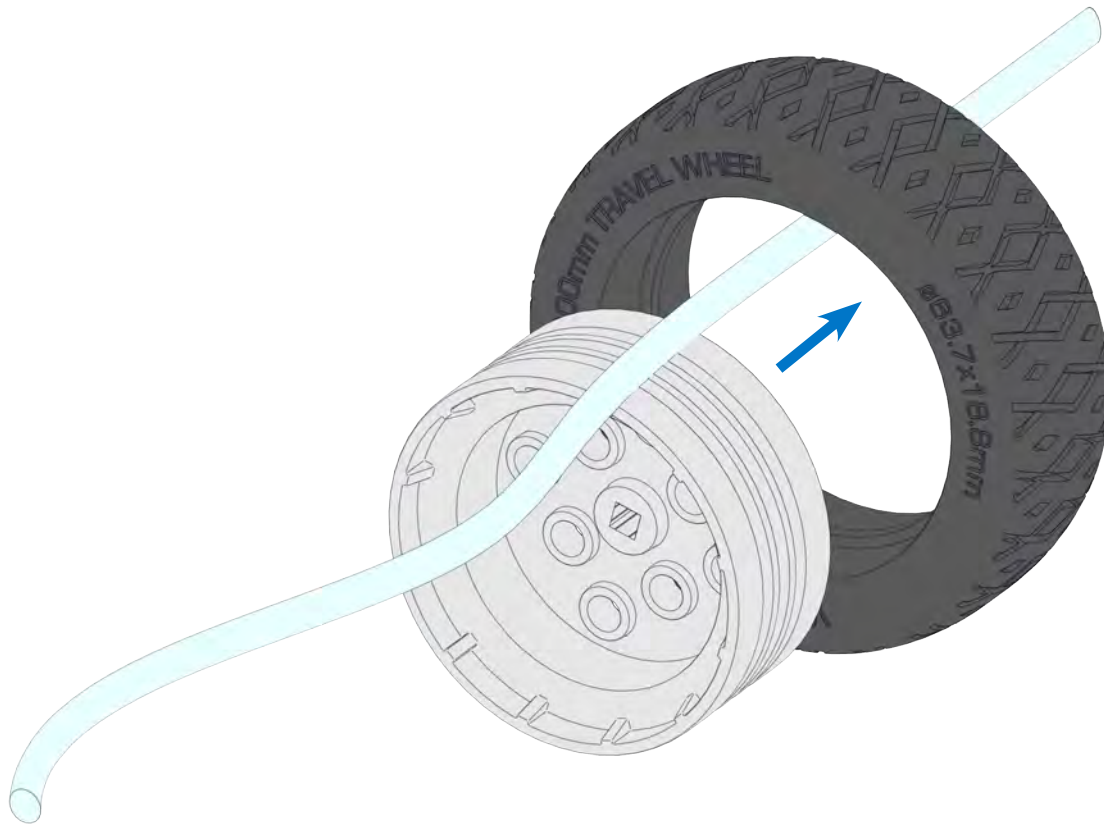




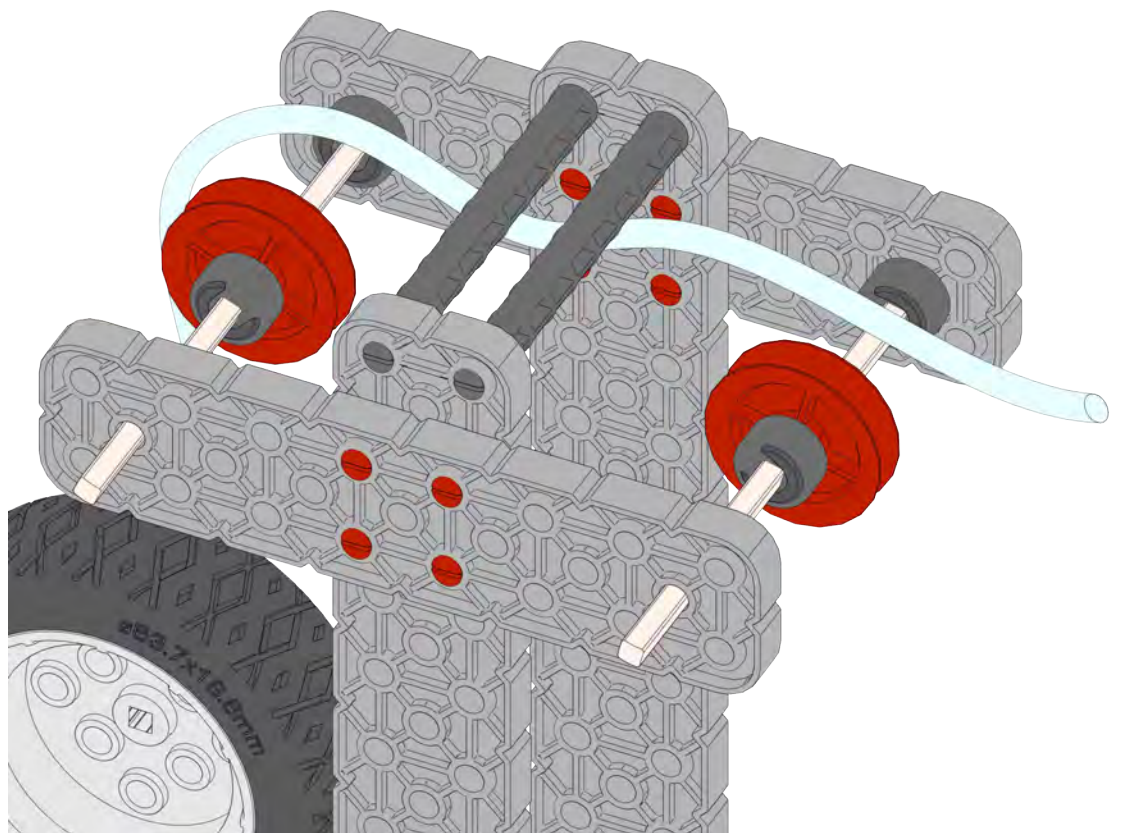
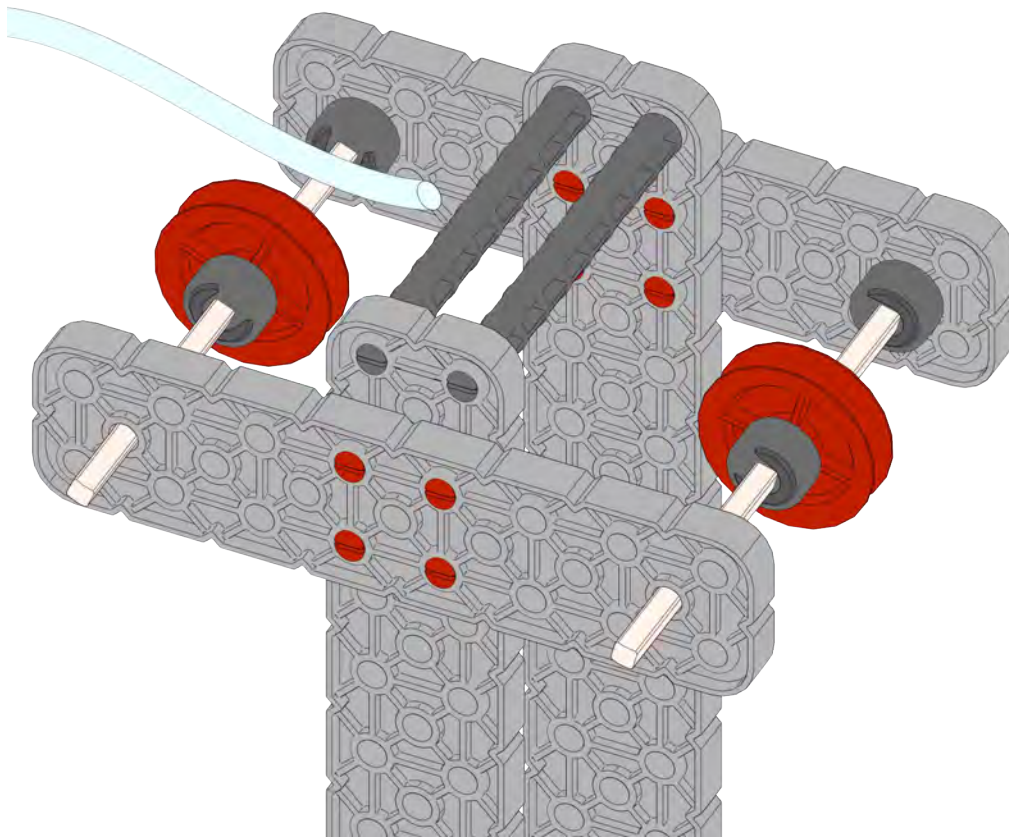




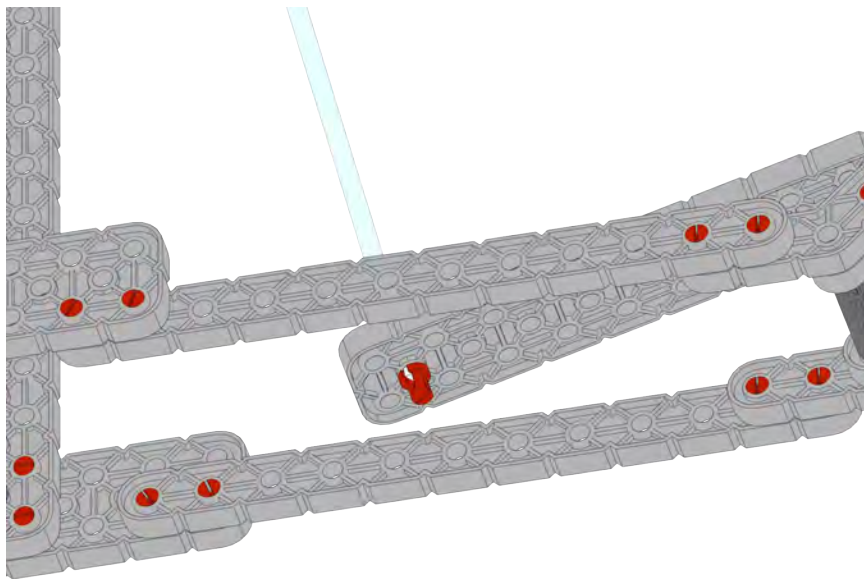
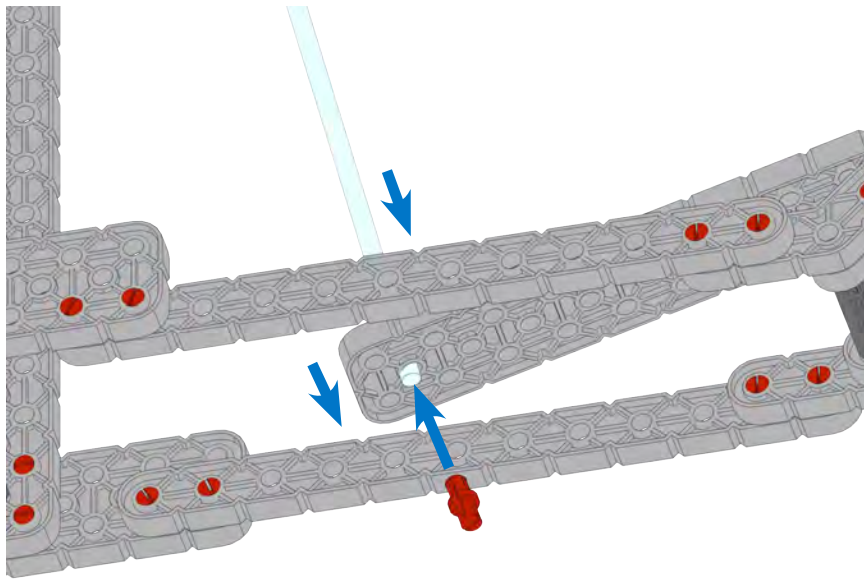
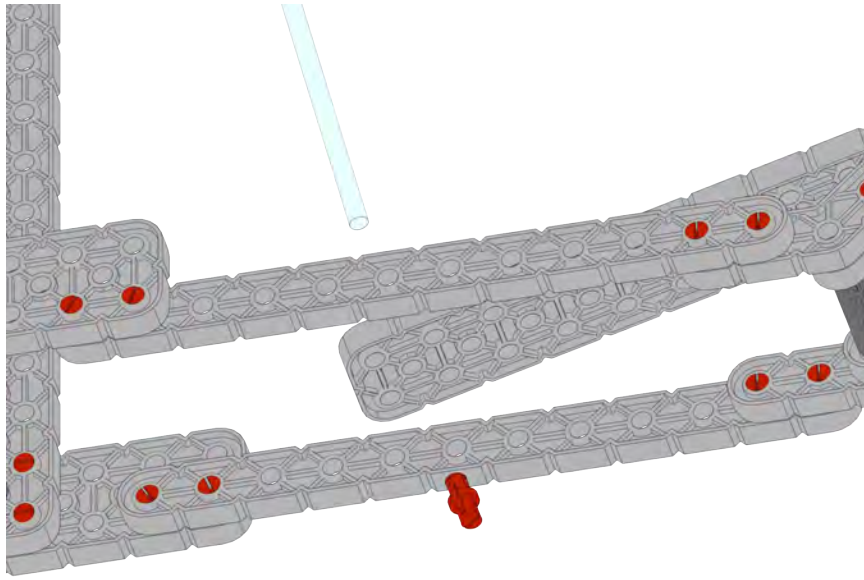
Trap one end of an 18" piece of string between wheel hub and tire

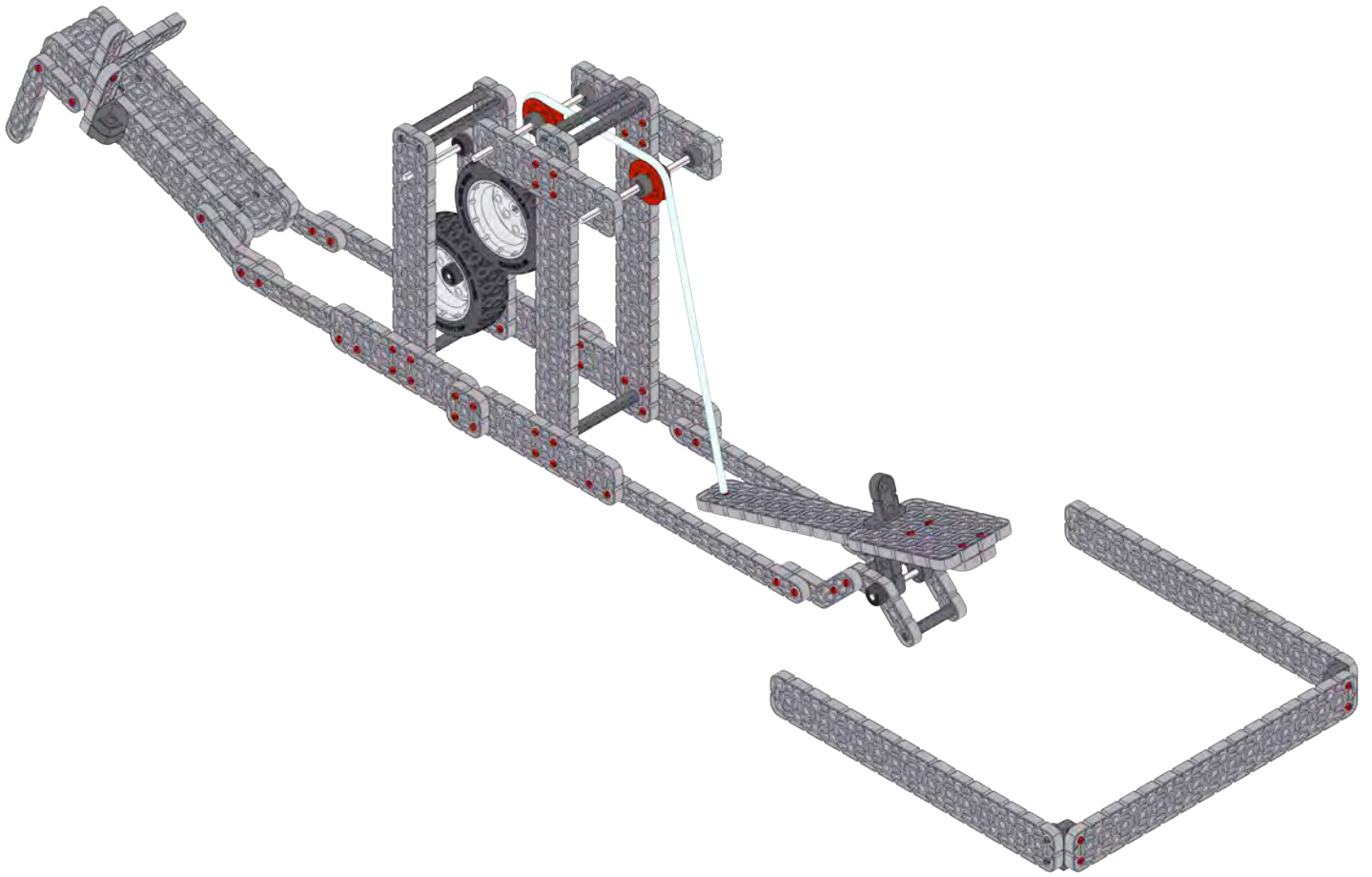


Position string on pulleys



Push opposite end of string through bottom center hole in lever beam and trap in place with a 1x1 connector pin



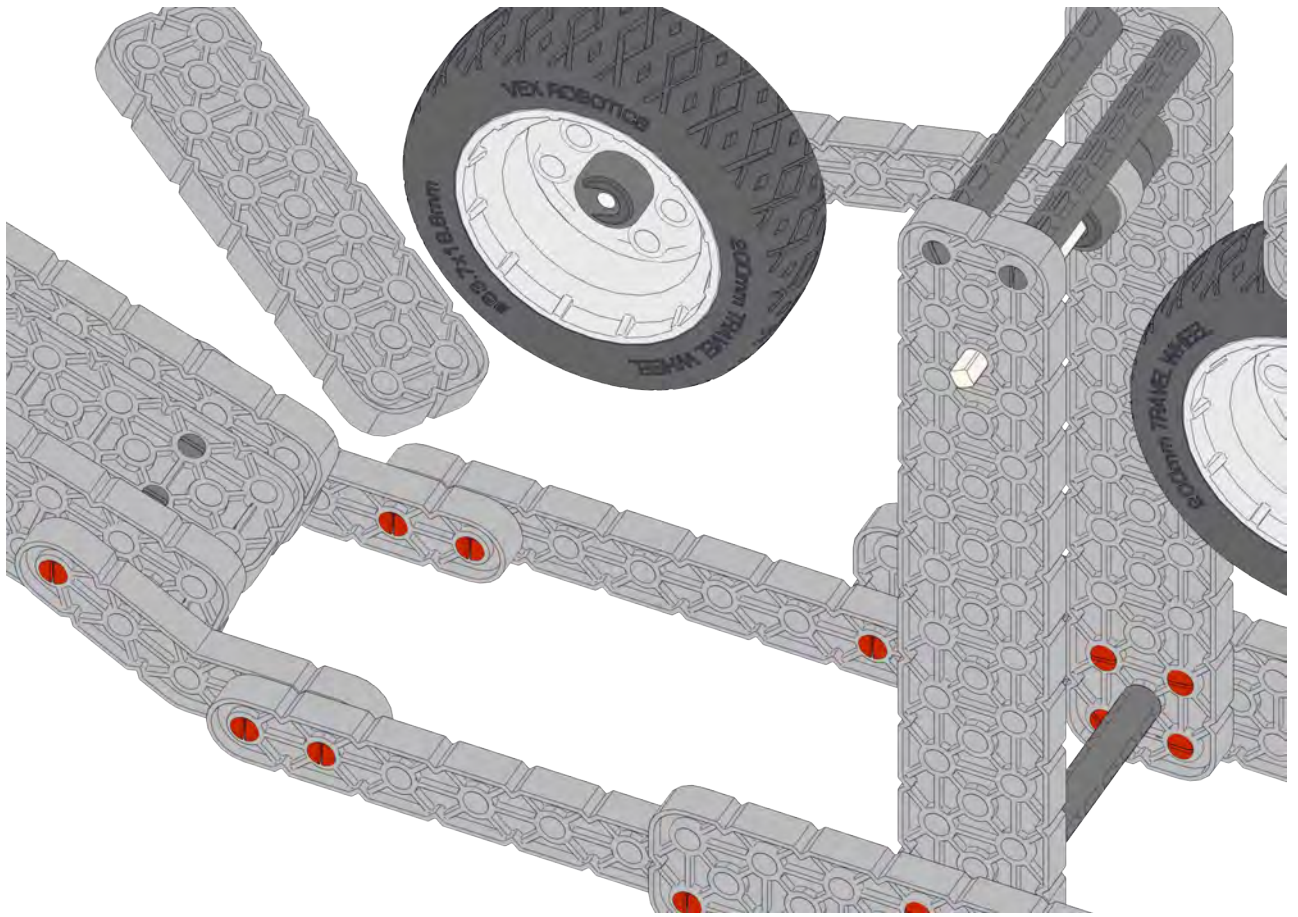


Setup

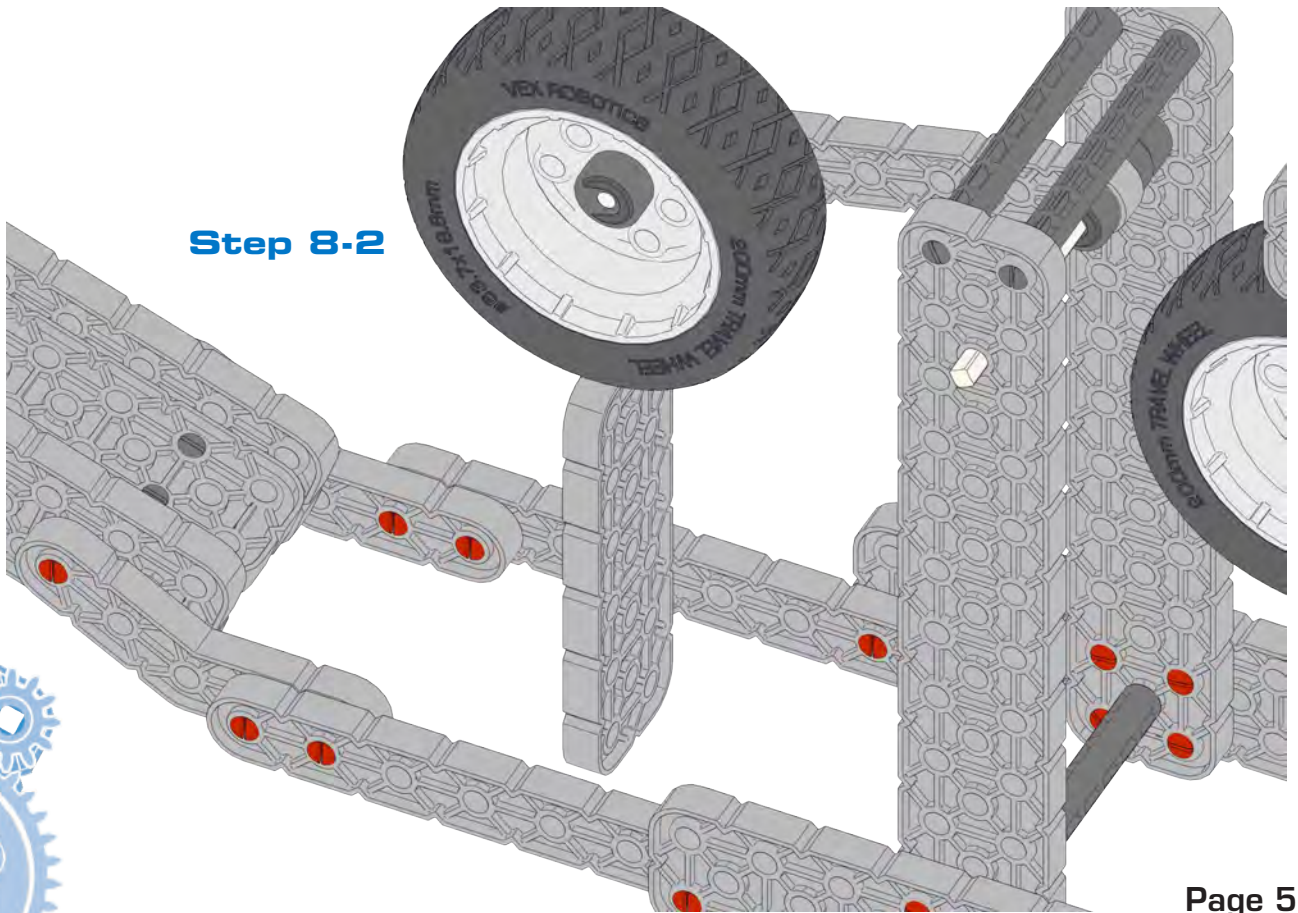


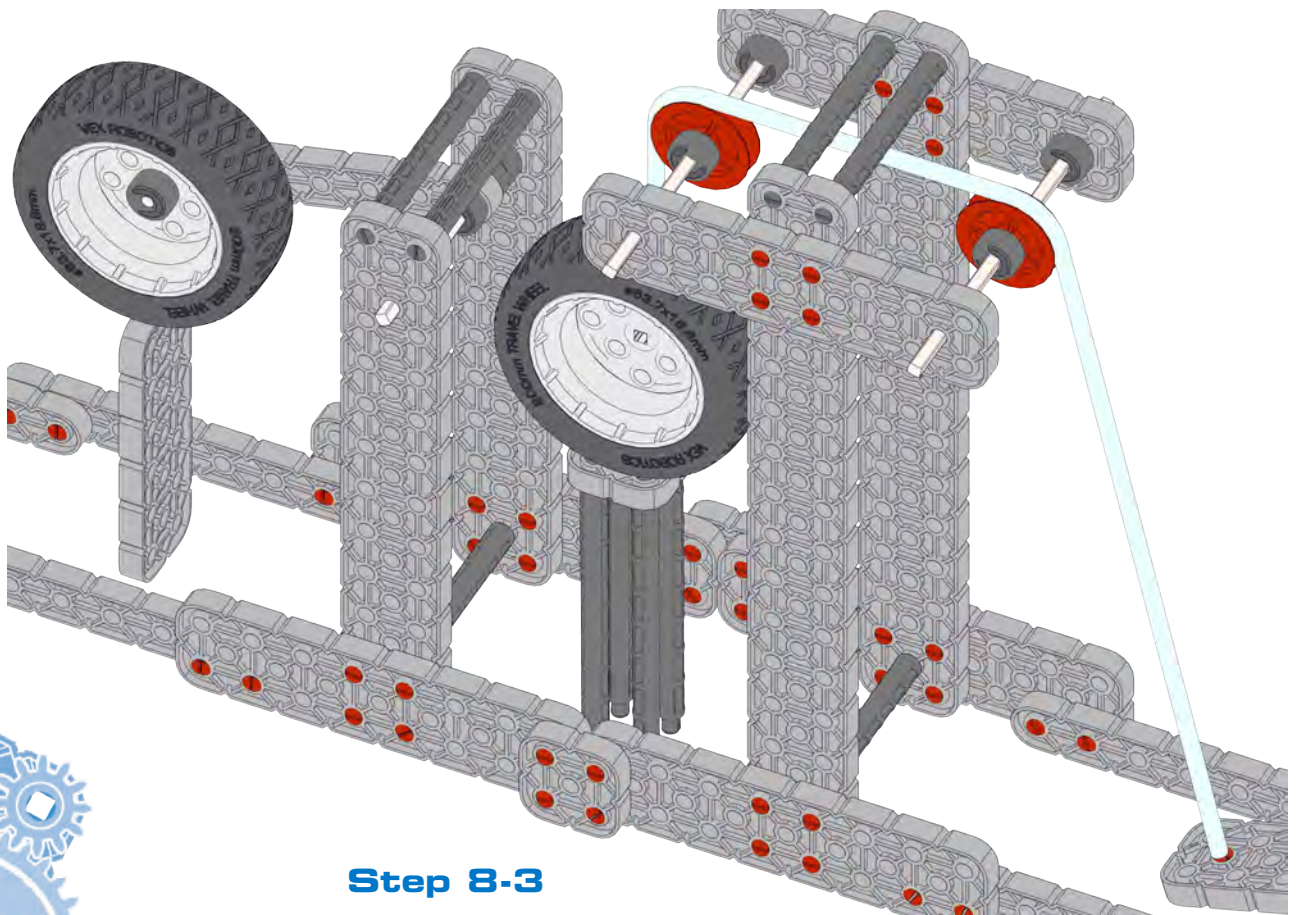
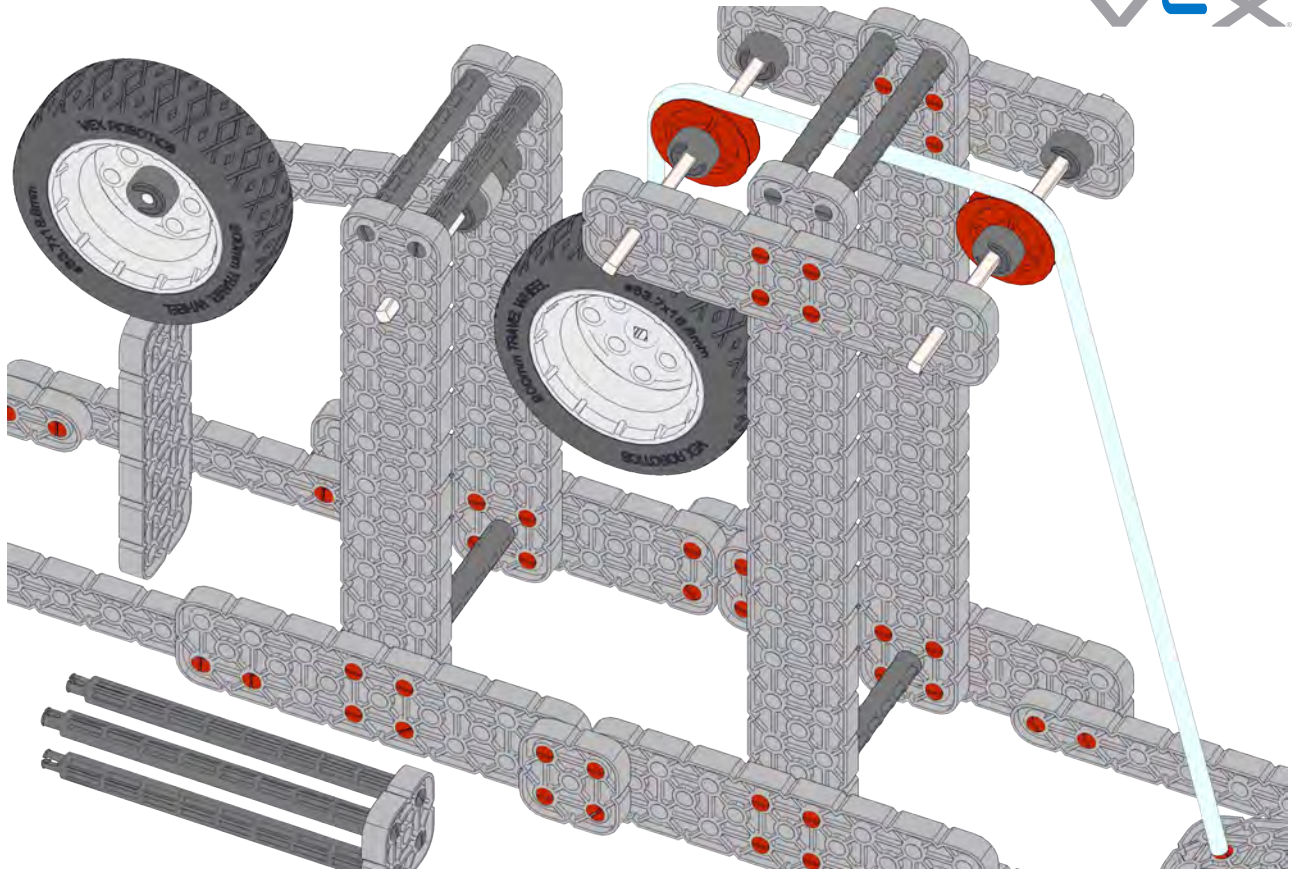
Step 8-1



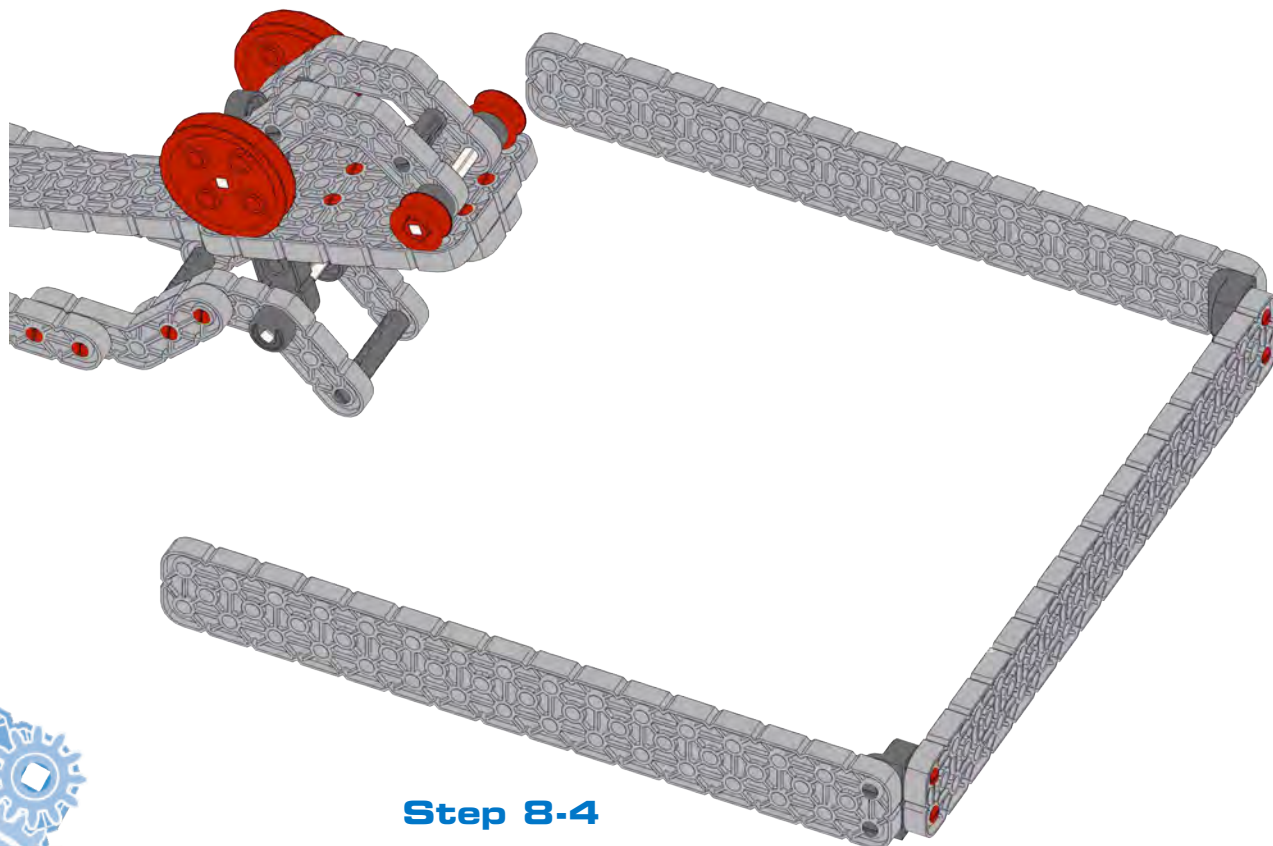
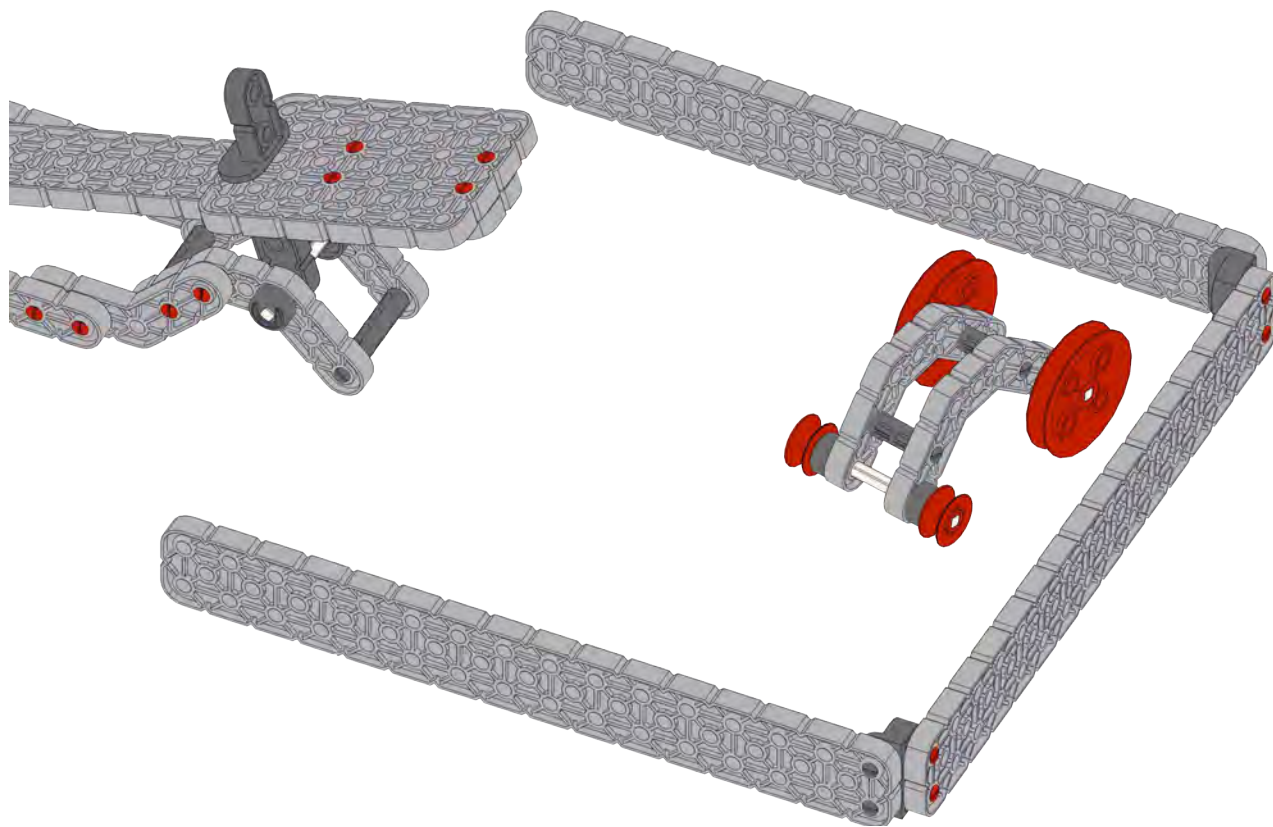


Step 8-2





Step 8-3



Step 8-4

Views of Final Device Assembly

