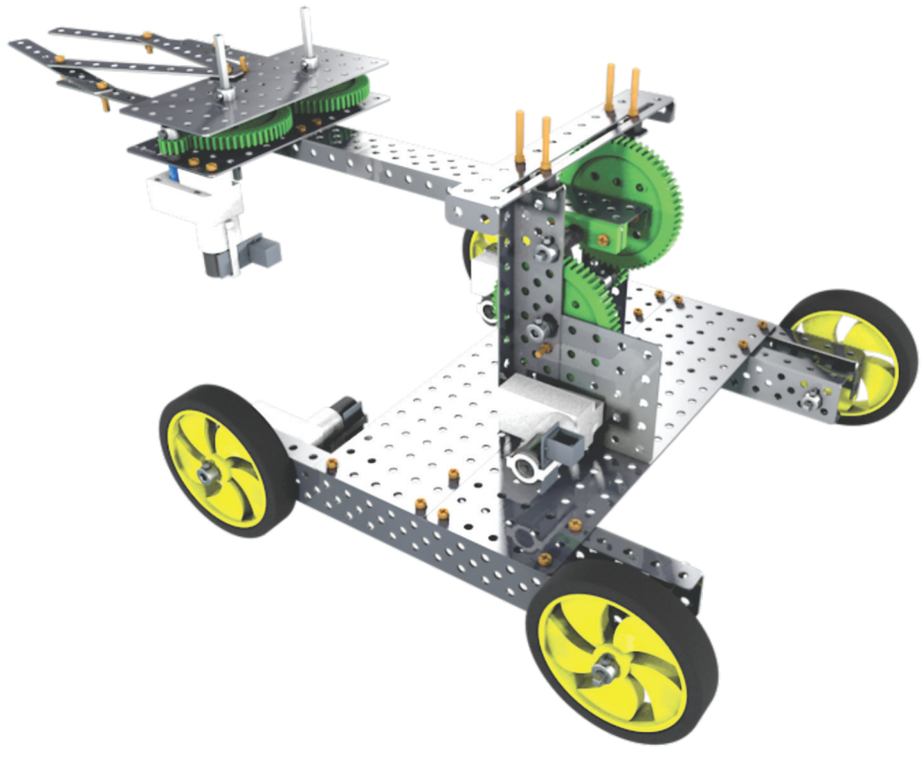
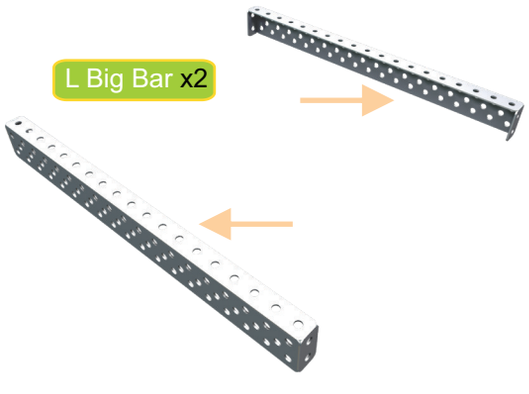
Robotic Arm



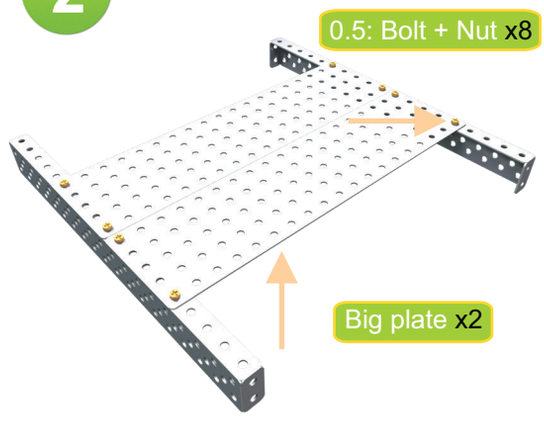
1



L Big Bar

1. When it is connected vertically it resembles a perpendicular line.

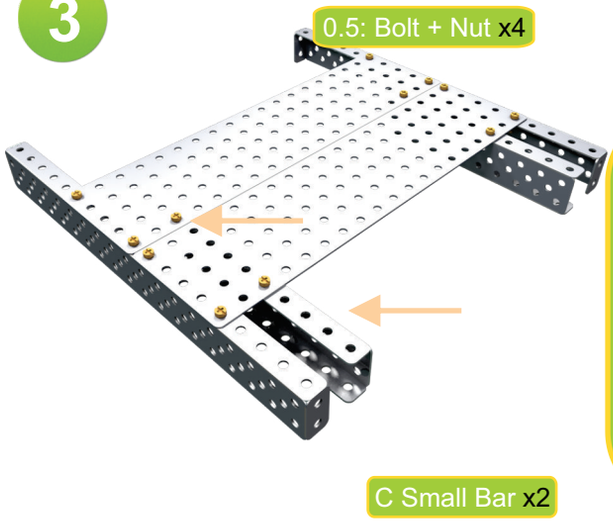
2



Big Plate

1. It is a smooth, flat, thin and rigid body of uniform thickness.

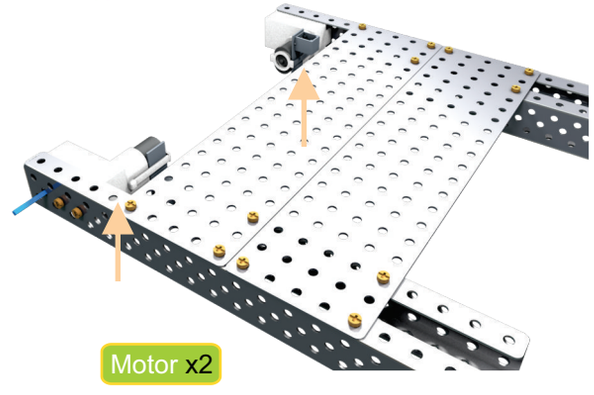
3



C Small Bar

1. These types of bars are used in construction of buildings and bridges.

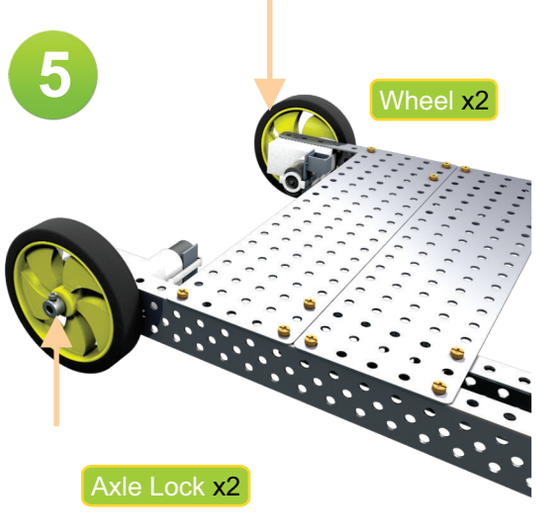
4



Motor

1. In case of electric motor, electrical energy is converted into mechanical energy i.e. one form of energy to another.

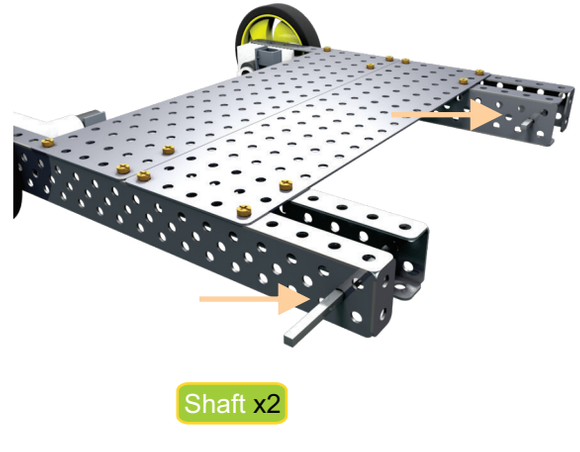
5



Axle Lock

1. The axle lock distributes the power equally to drive the device in a straight line.

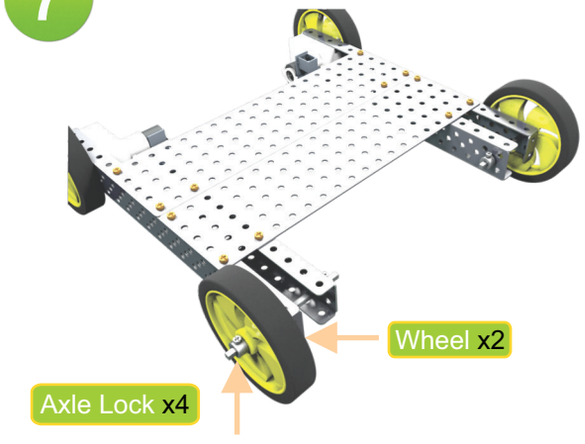
6



Shaft

1. It is a straight bar for transmitting motion and torque (i.e. twisting force).

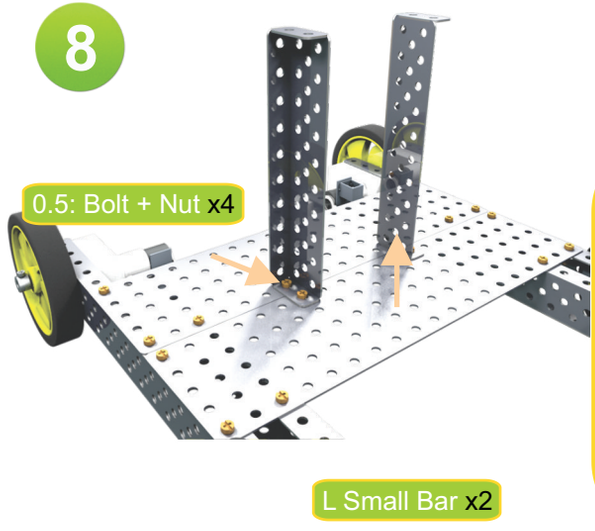
7



Wheel

1. A wheel is a device that allows heavy objects to be moved easily through rotating on an axle through its center.

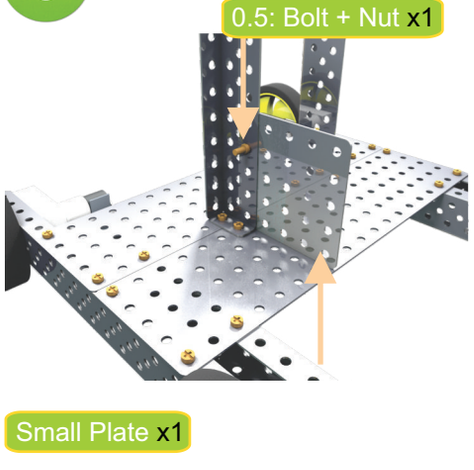
8



L Small Bar

1. In a triangle the longest side is called hypotenuse and can be calculated by Pythagoras theorem.

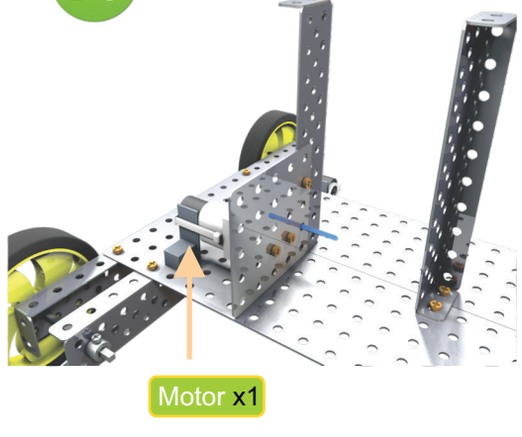
9



Small Plate

1. In this process a hot metal small bar is flattened and rolled on a surface giving shape.

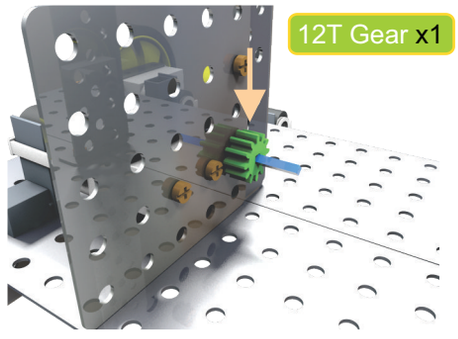
10



Motor

1. This law states that energy can neither be created nor destroyed, but can be transferred from one form to another.

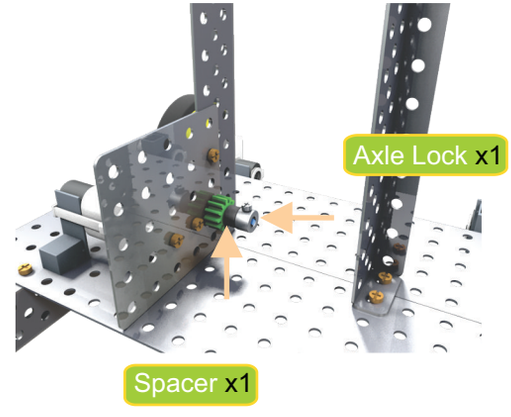
11



Gear

1. It helps to transmit motion or to change speed or direction.

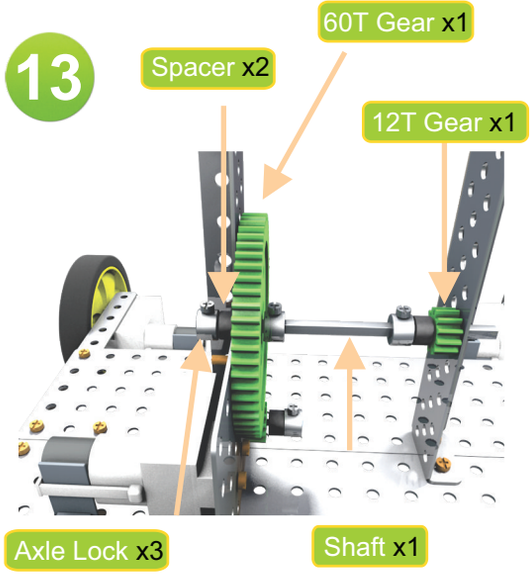
12



Axle Lock

1. The axle lock is actually a gear engagement system.

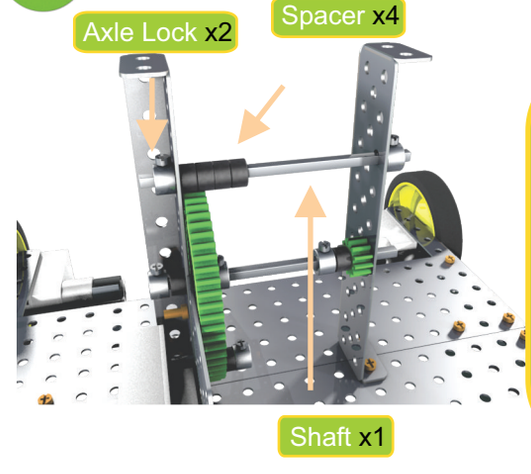
13



Shaft

1. It is a long vertical rod made of metal which has a revolving action.

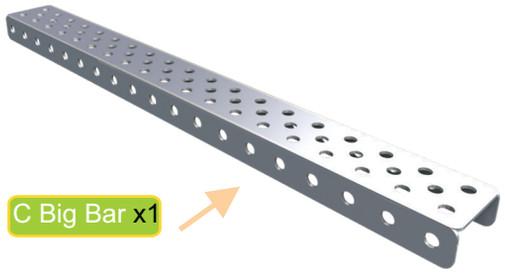
14



Axle Lock

1. This gear mechanism helps in movement of both front and rear axle together.

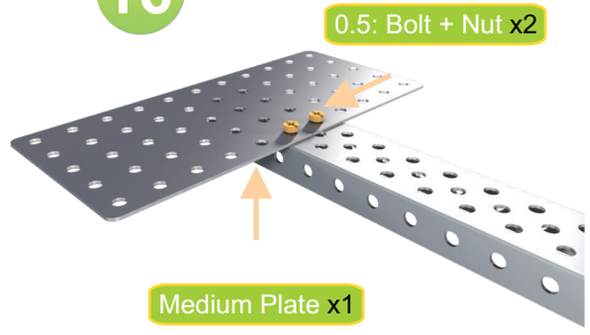
15



C Big Bar

1. It is used in the formation of a base or foundation.

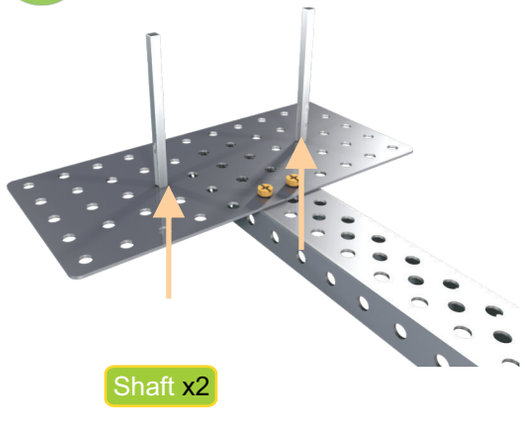
16



Medium Plate

1. The medium plate be comes a part of the intermediate stage, upon which half of the part is mounted and below which the other half part rests.

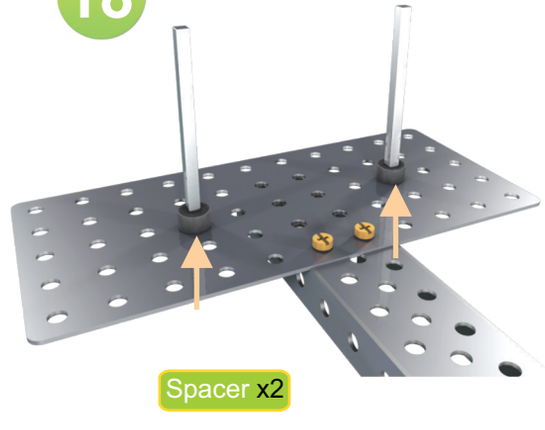
17



Shaft

1. This revolving rod is responsible for the motion of the device, such as vehicle, and all electrical devices which has a rotating motion.

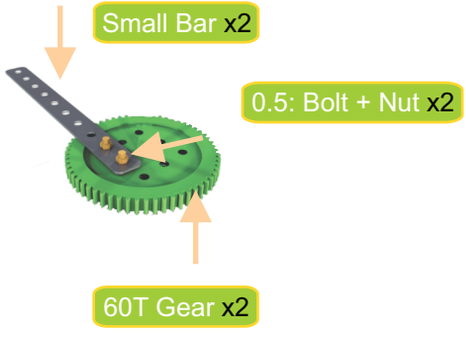
18



Spacer

1. Washers are usually metal or plastic.

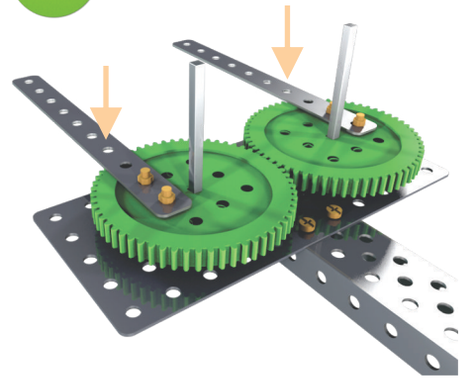
19



Gear

1. Gears transmit the exact or the increased velocity ratio, which is also called gear ratio.

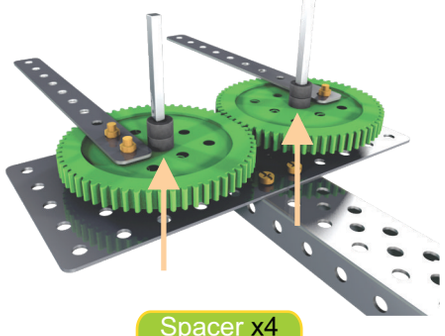
20



Small Bar

1. It is generally used as guard for mechanical purpose such as chassis building.

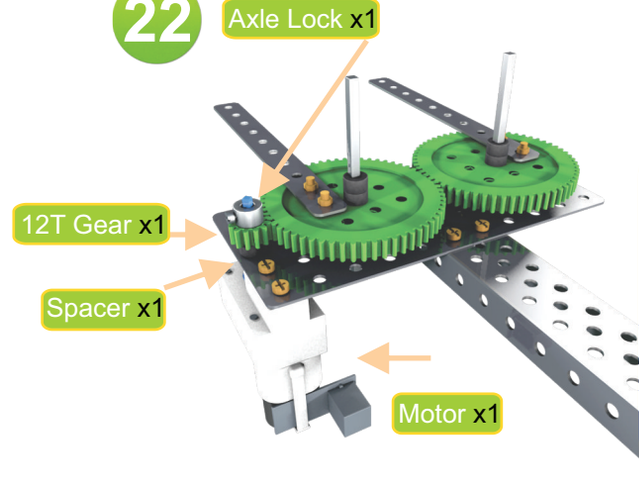
21



Spacer

1. High quality bolted joints require hardened steel washers to prevent the loss of pre-load due to Brinelling after the torque is applied.

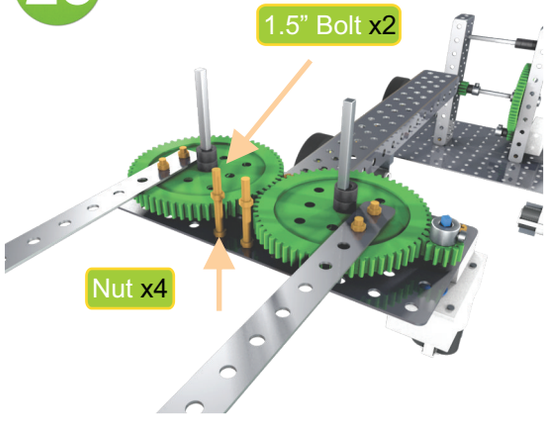
22



Axle Lock

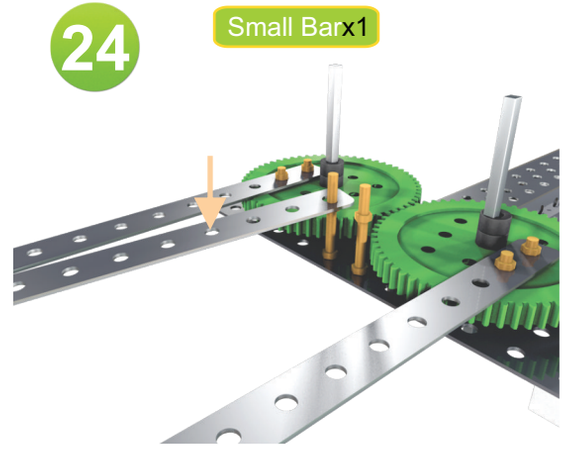
1.Without an axle lock, the wheel would not remain in fixed position.

23



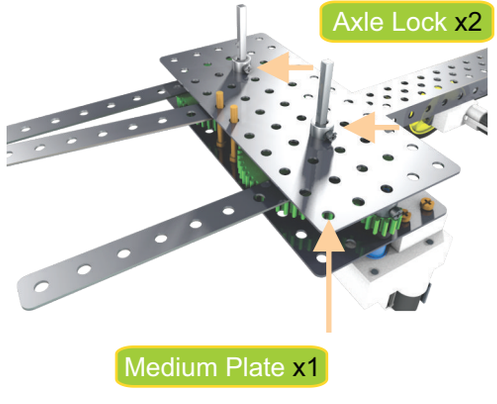
The small hole on the bars prevent heating effect, which can be generated due to operation of motor.

24



Motor uses magnet. Magnet has magnetic poles as North and South Pole.

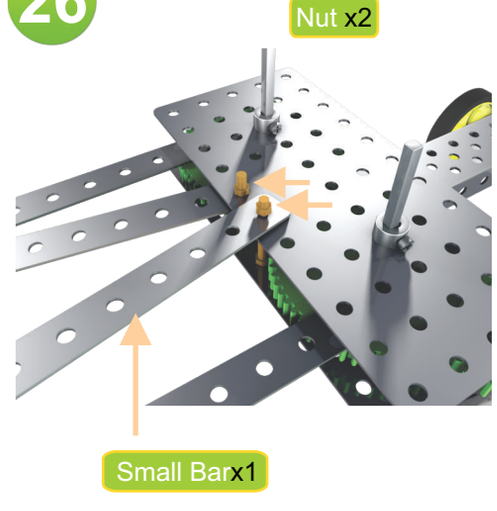
25



Axle Lock

1. Even airplanes use wheels and axles on their landing gear.

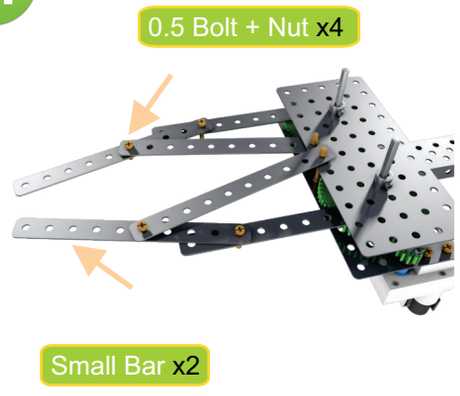
26



Small Bar

1. It helps in building the skeleton of the model.

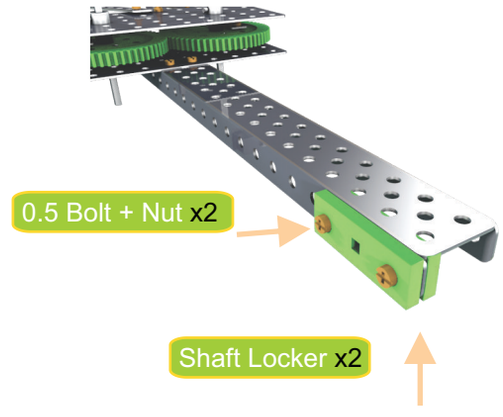
27



Small Bar

1. It can be use to make three dimensional arm as well.

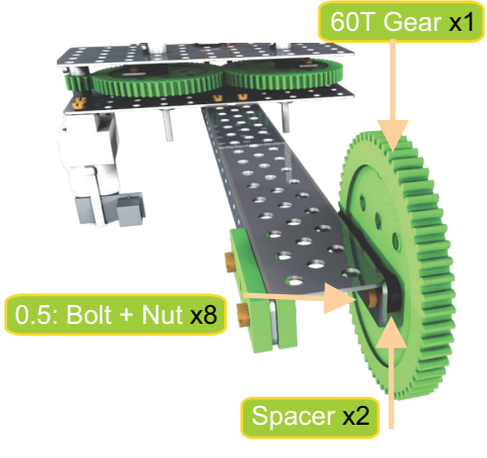
28



Shaft Locker

1. It is generally supported on bearings and carrying gear and wheels.

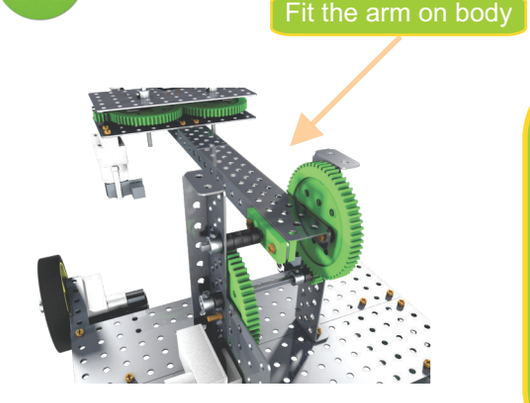
29



Gear

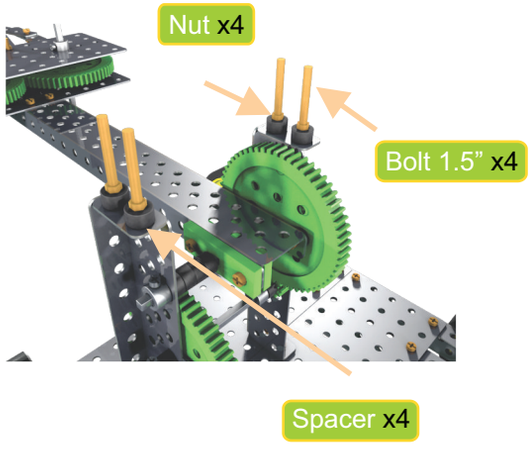
1. A gear is a rotating machine part having cut teeth, in order to transmit torque.

30



Connect the arm on Chassis

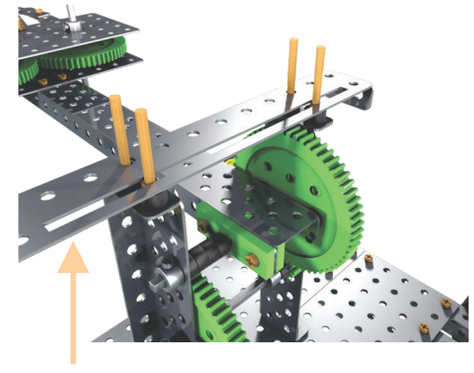
31



Bolt

1. Bolt generally made of metals like : alloy, steel, etc.

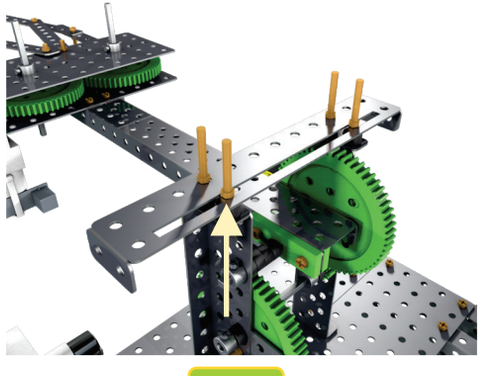
32



Slider Strip

1. Slider strips can be used for rack gears for linear motion.

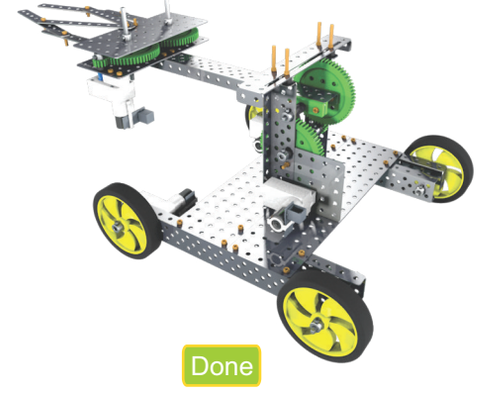
33



Nut

1. Nut reduces the vibration in robot body when it runs.

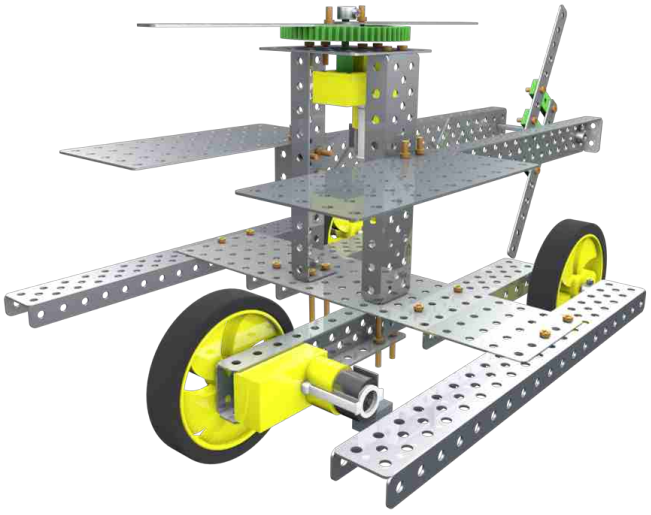
34



Done

1. Make all the power connections between motor and remote then Play.

#3 Helicopter



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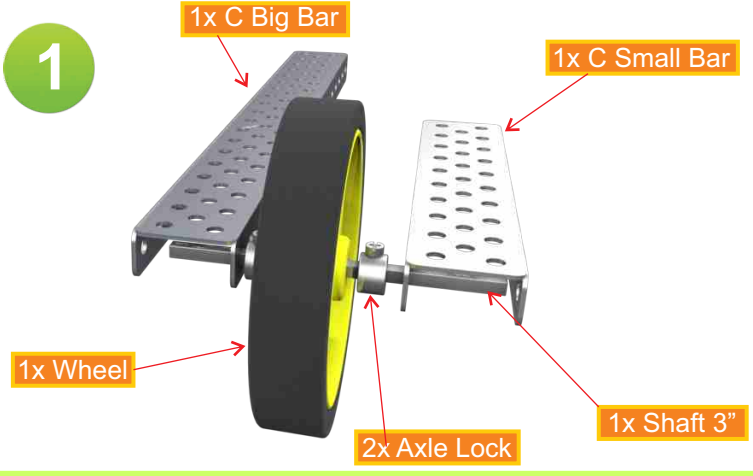
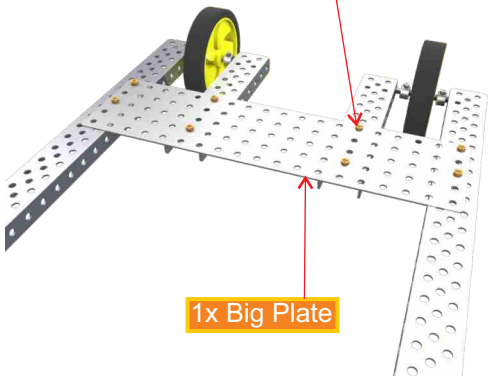


2

Make two (mirror) assemblies of step 1

3



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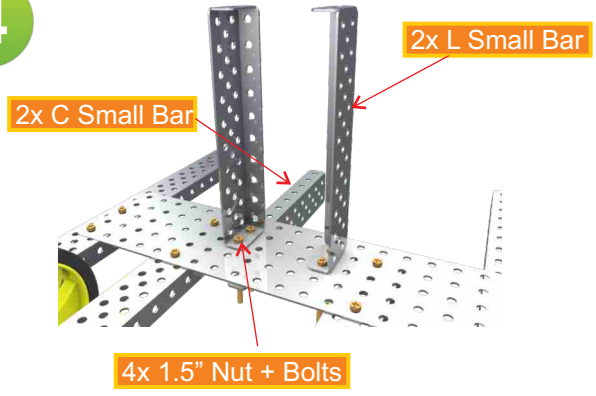

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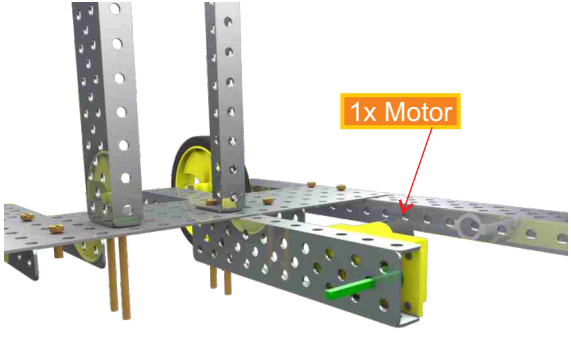

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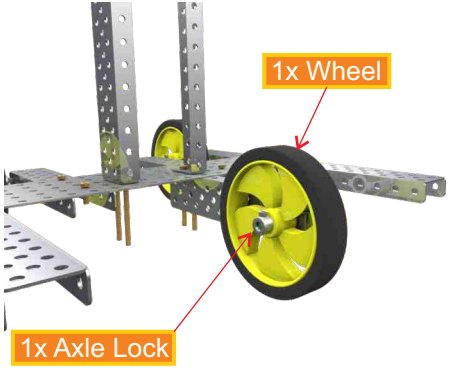

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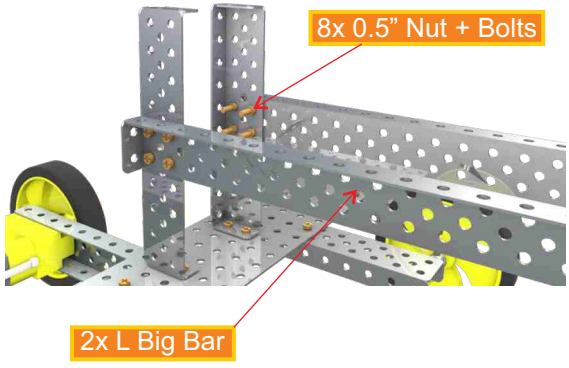

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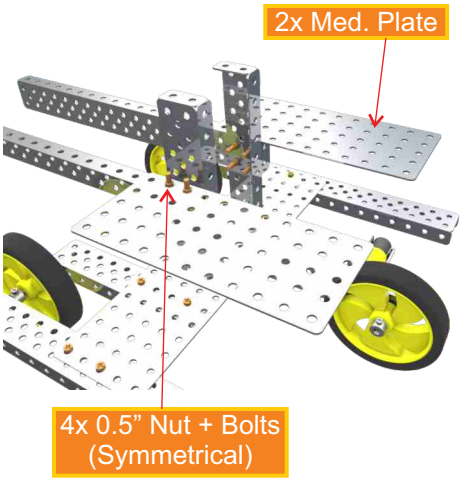

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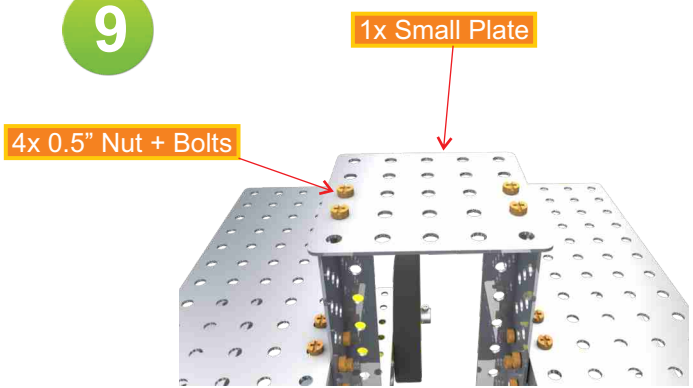

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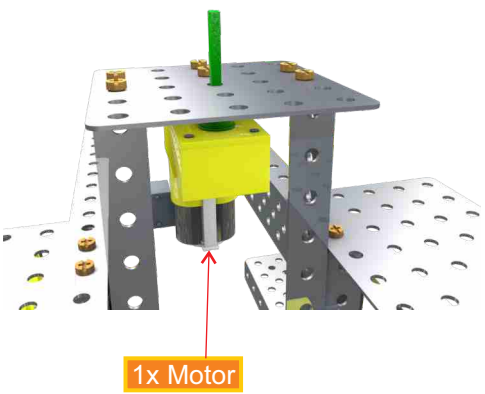

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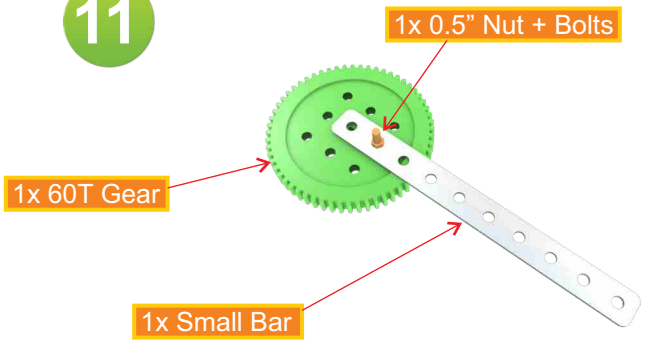

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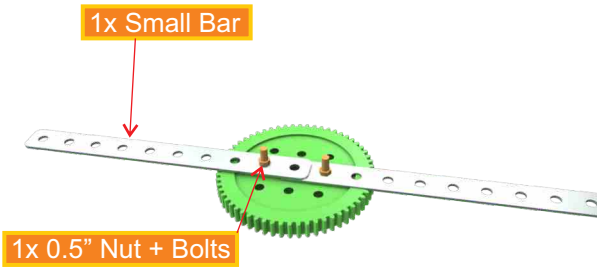

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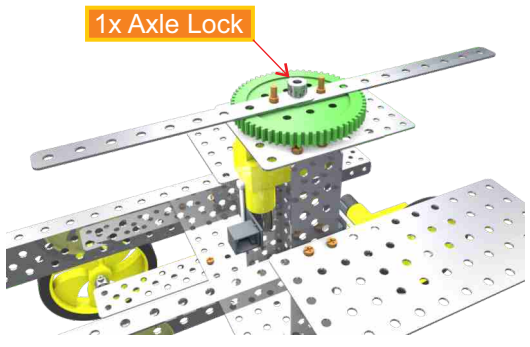

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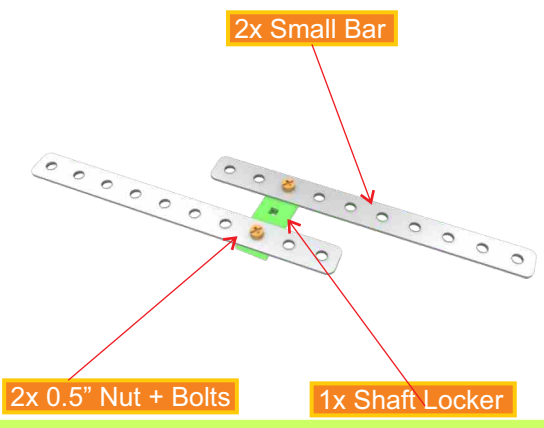

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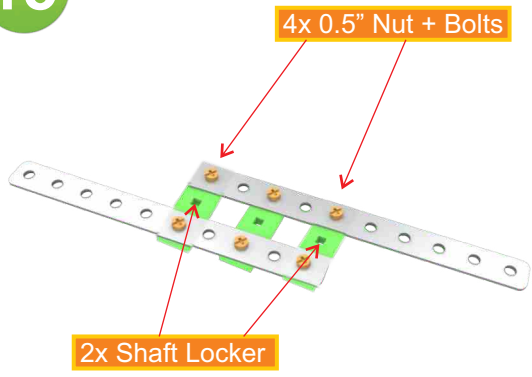

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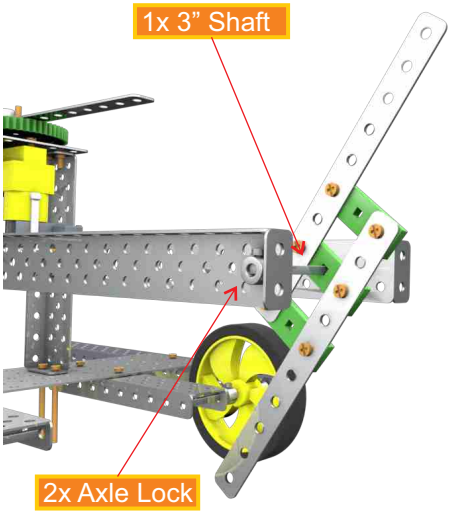

What did you learn?

_____

_____

_____

_____

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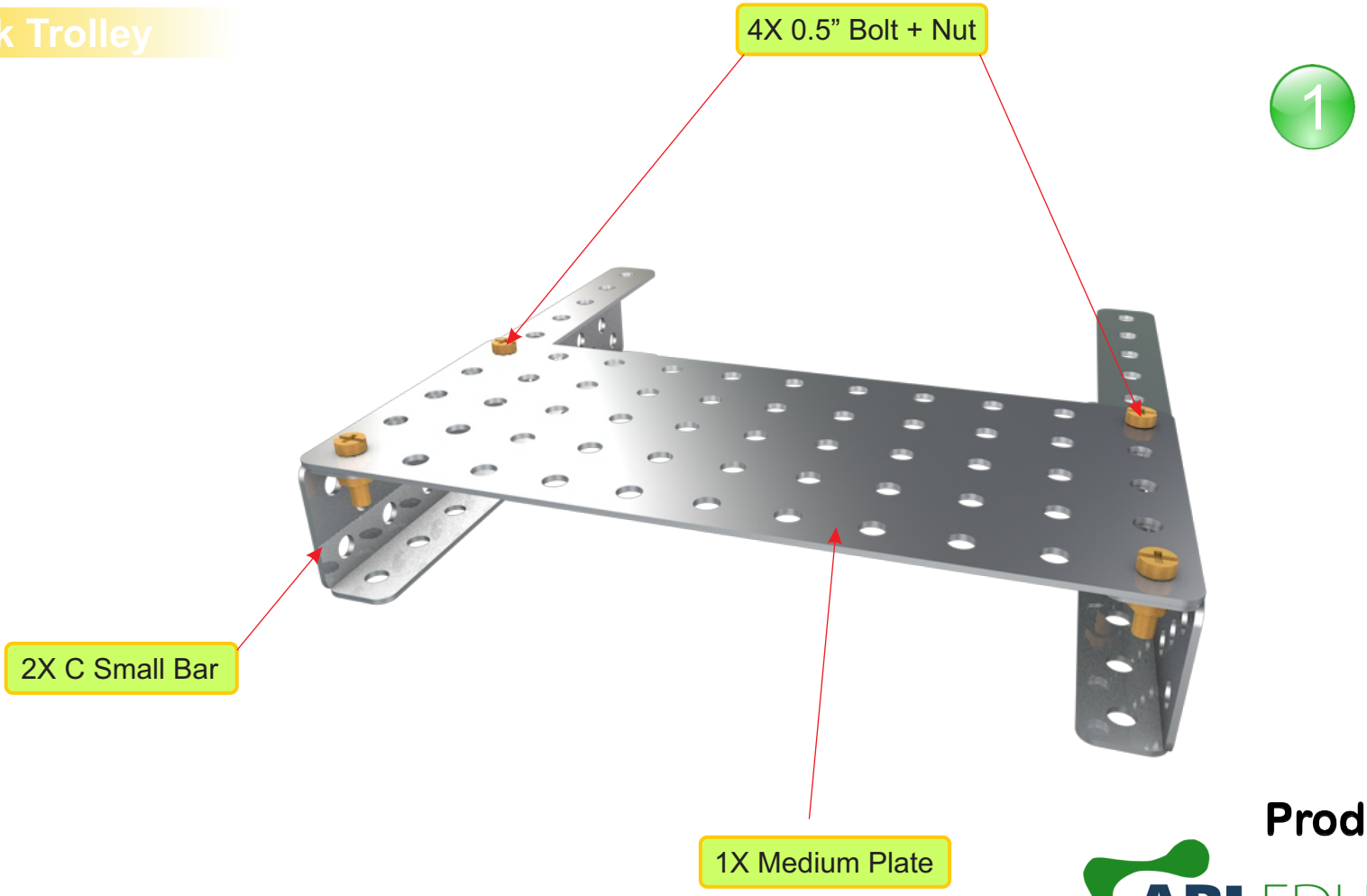
Truck Trolley



1

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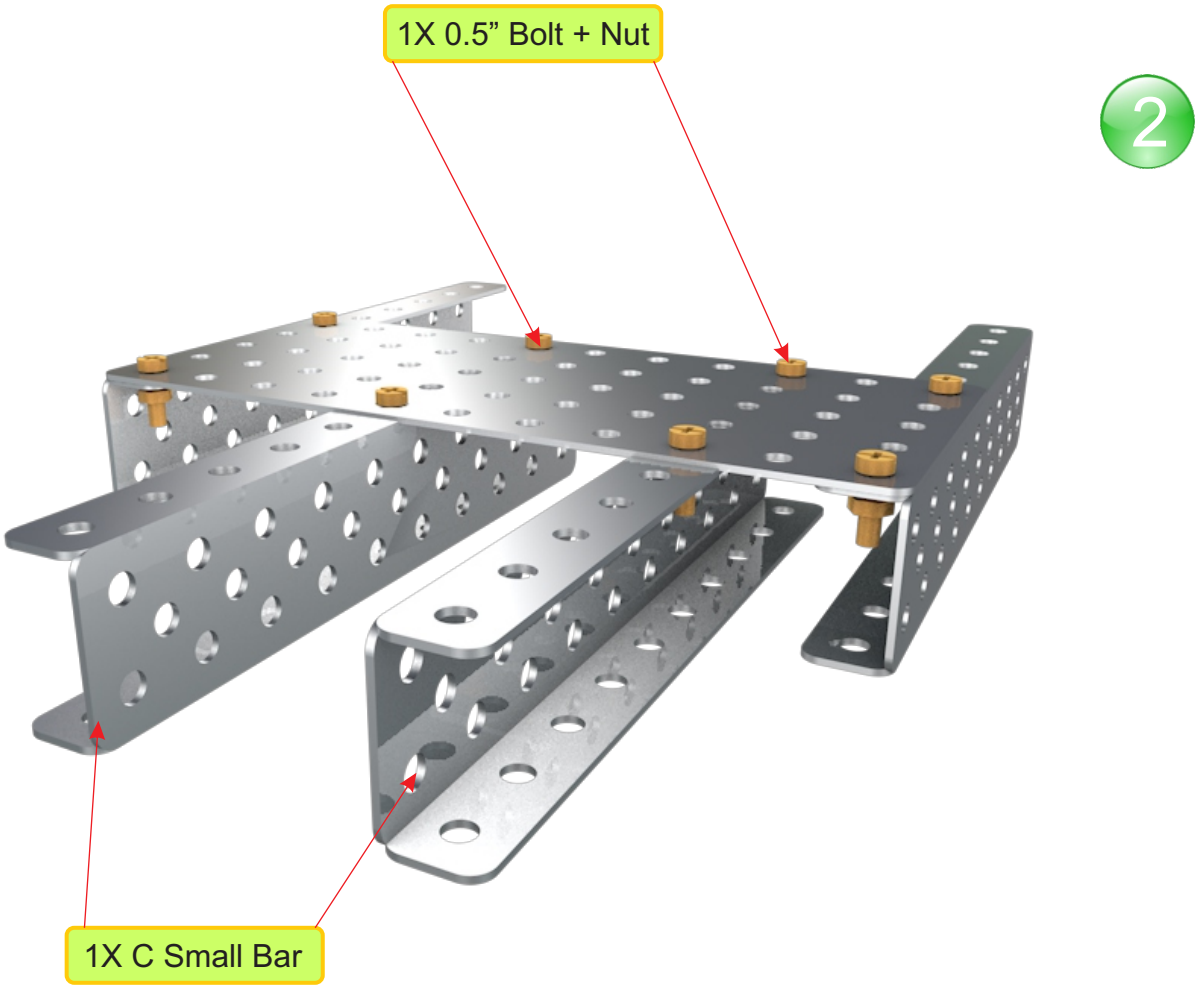

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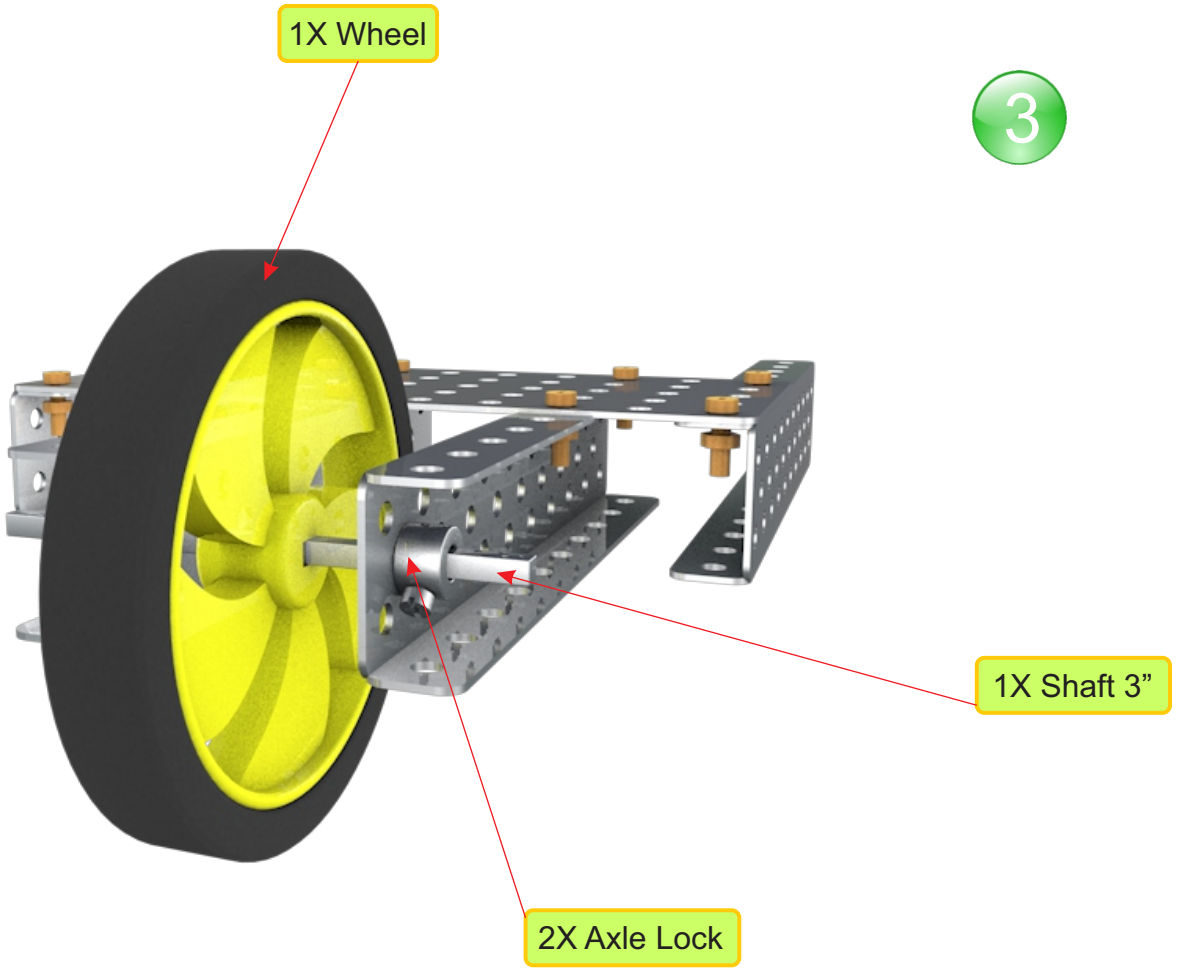
Truck Trolley



Truck Trolley

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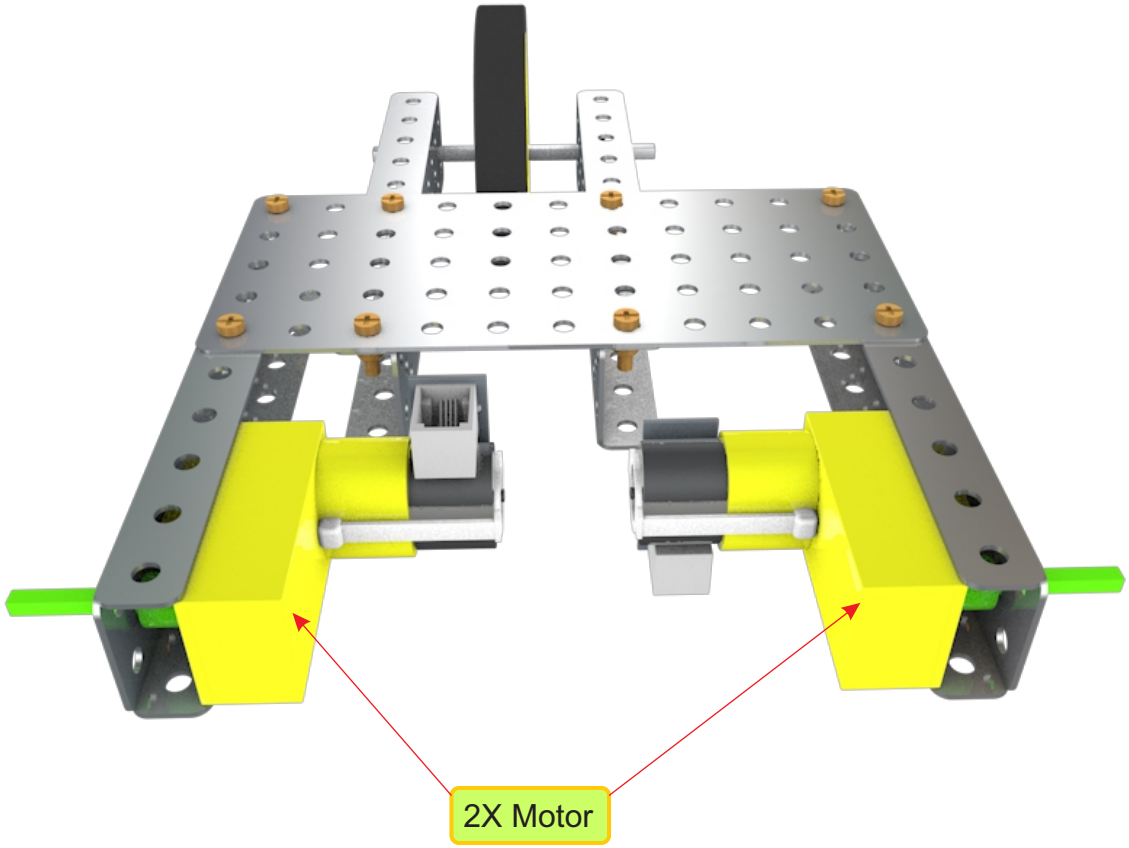

Truck Trolley

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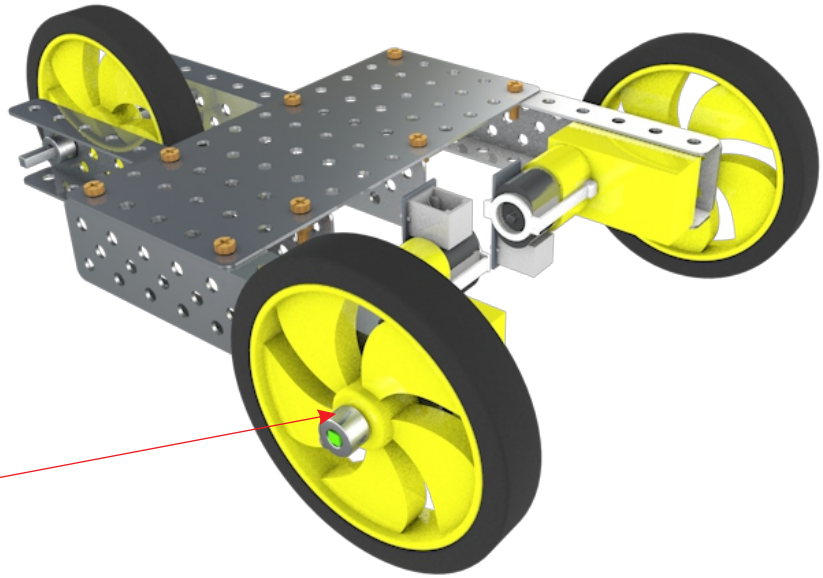
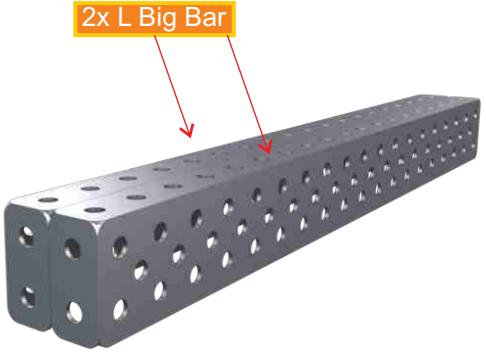


#4 Glider

1



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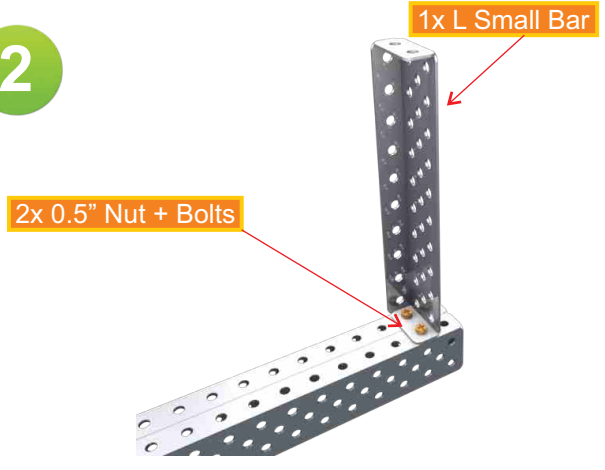

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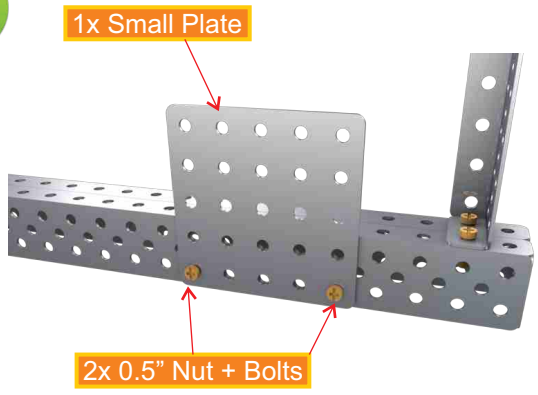

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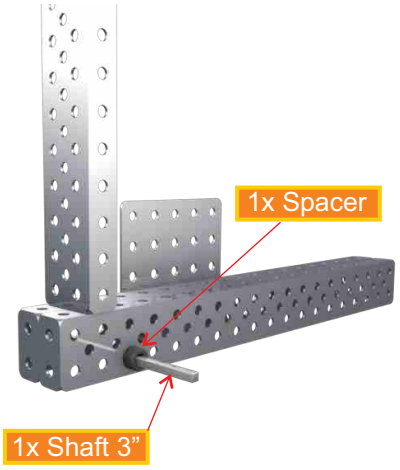

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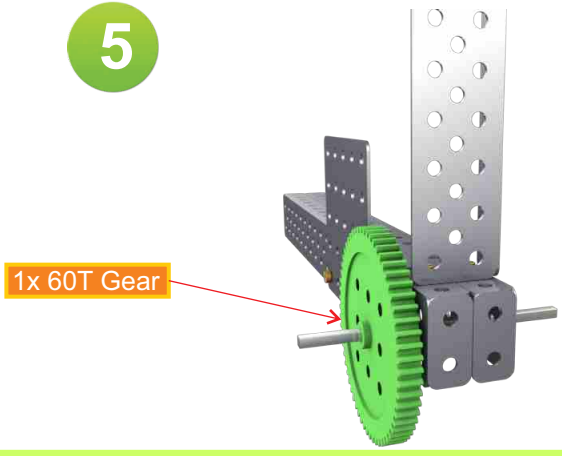

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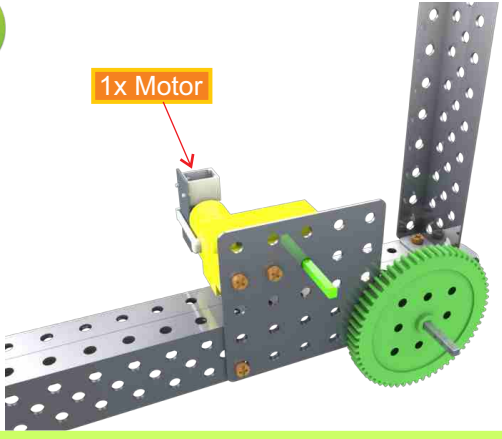

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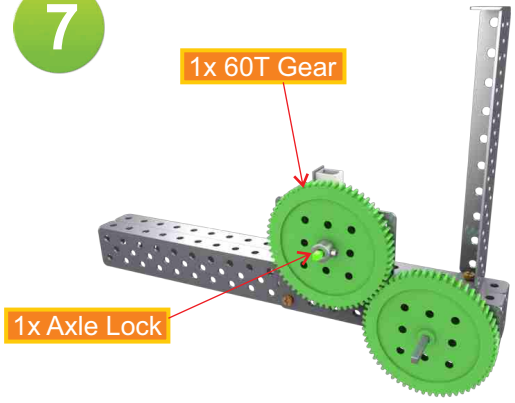

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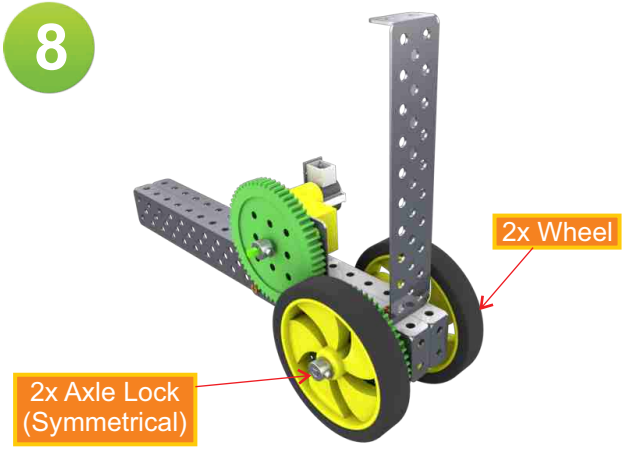

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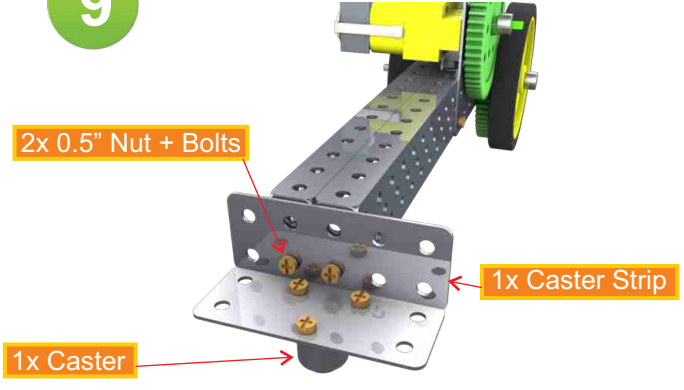

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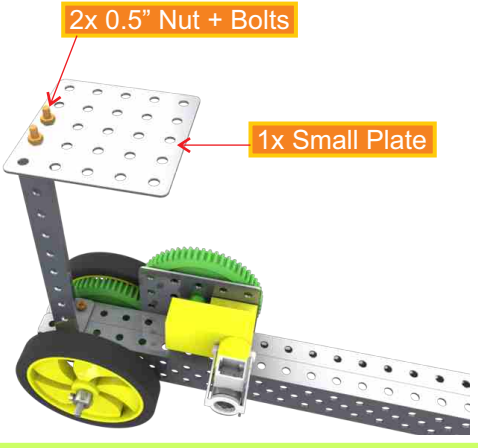

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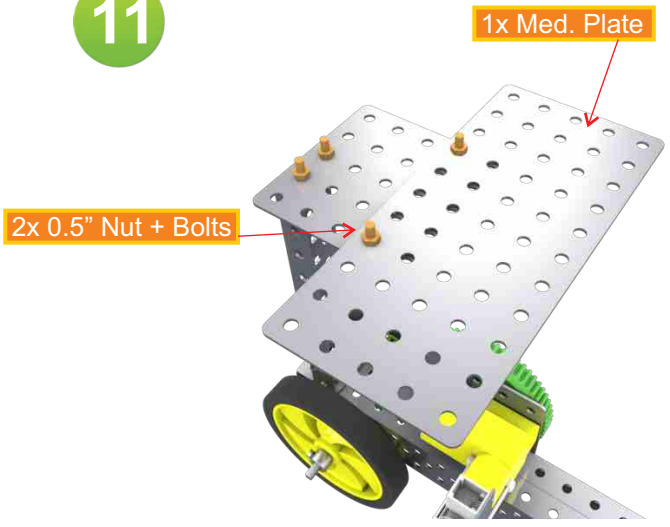

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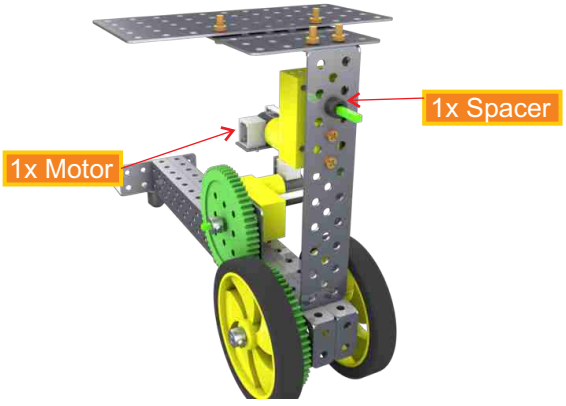

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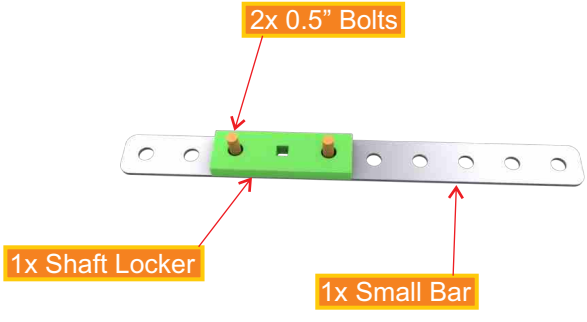

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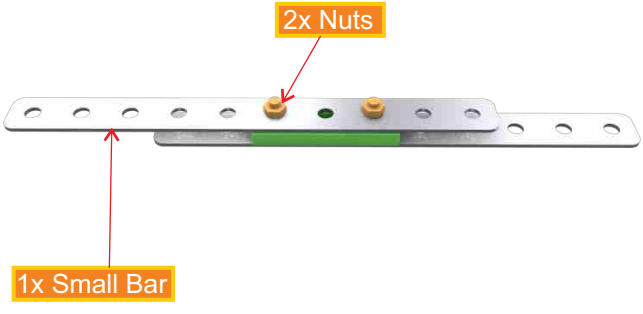

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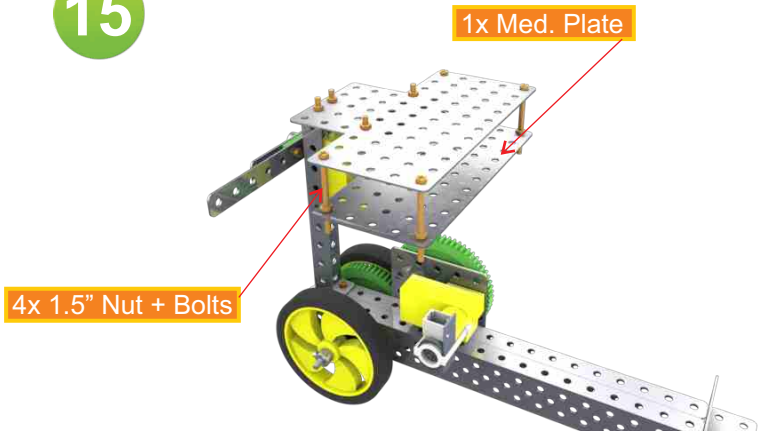

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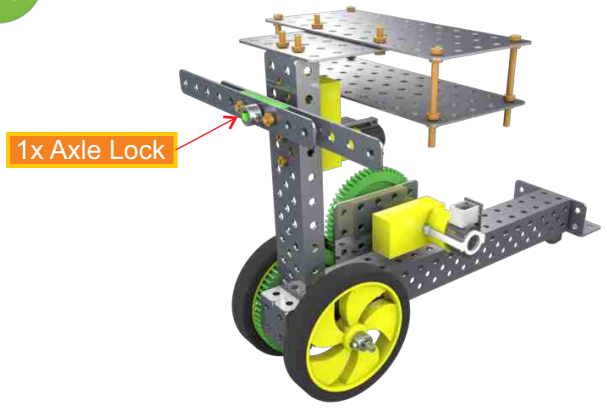

What did you learn?

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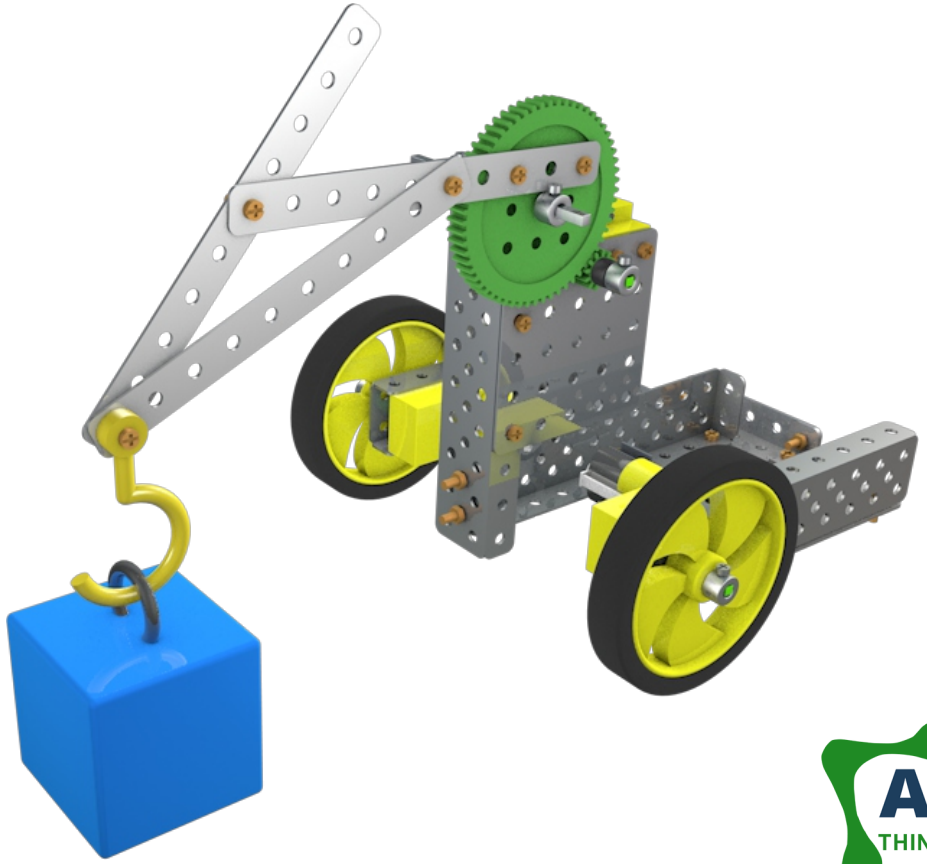
Crane



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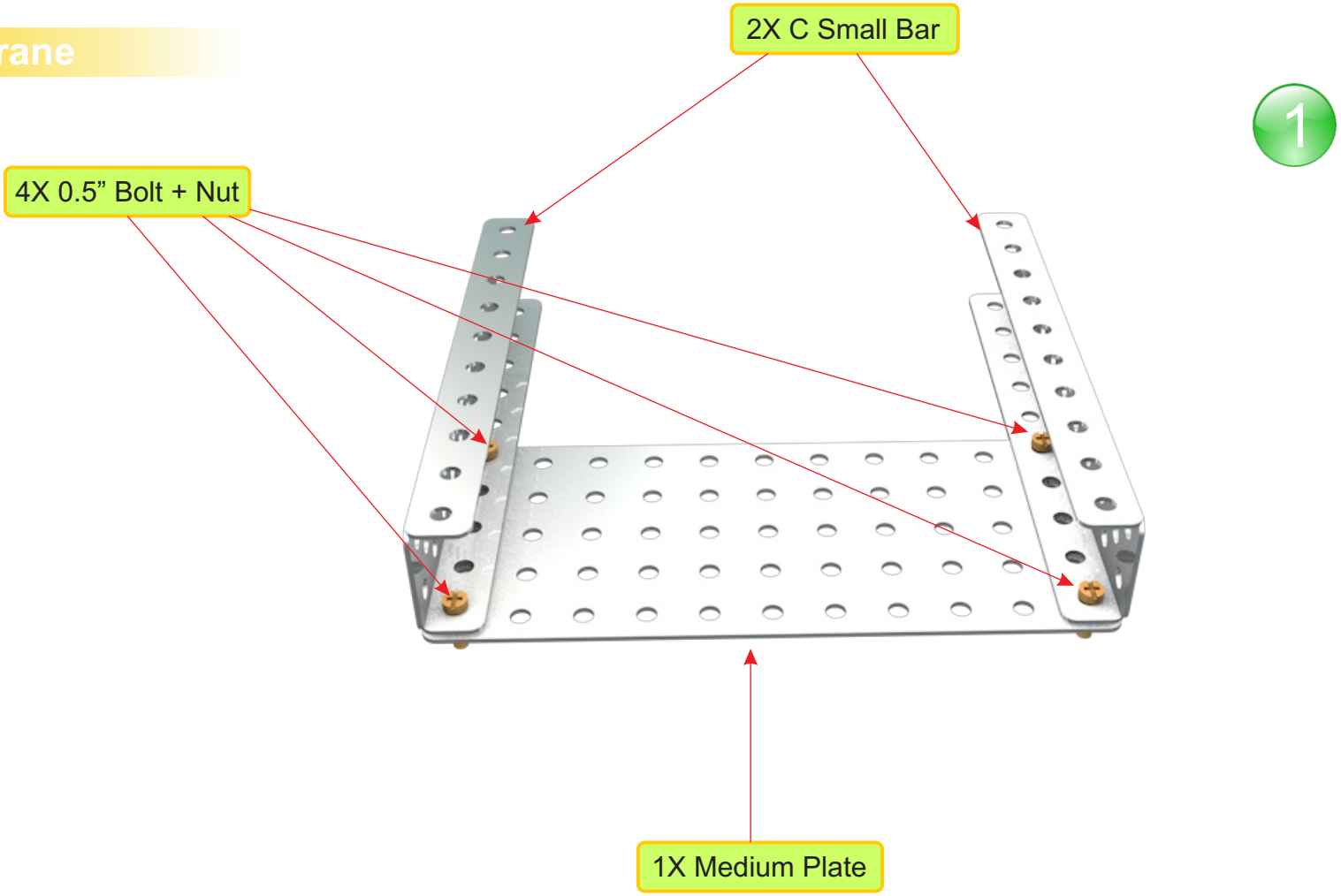
Crane



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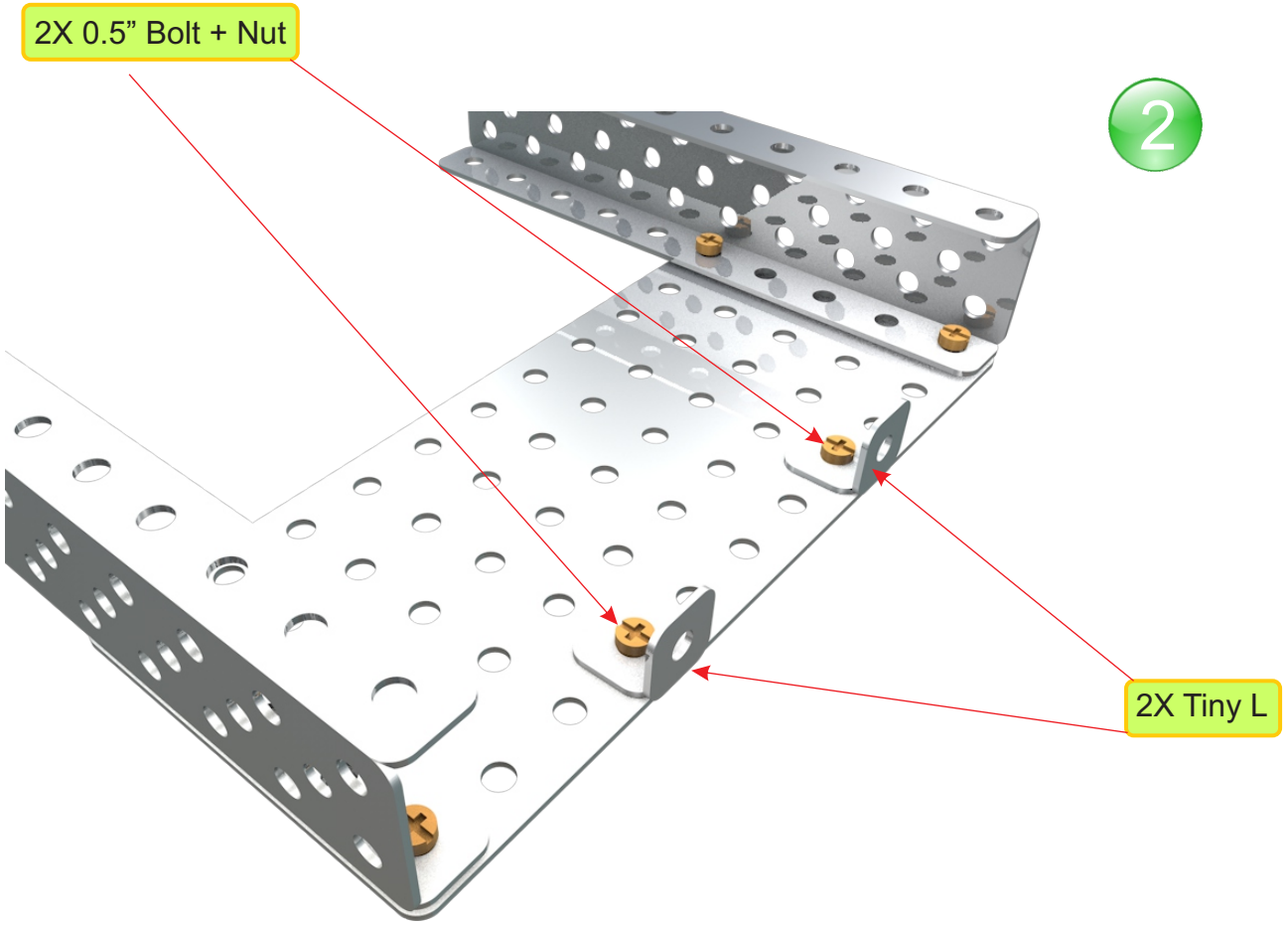

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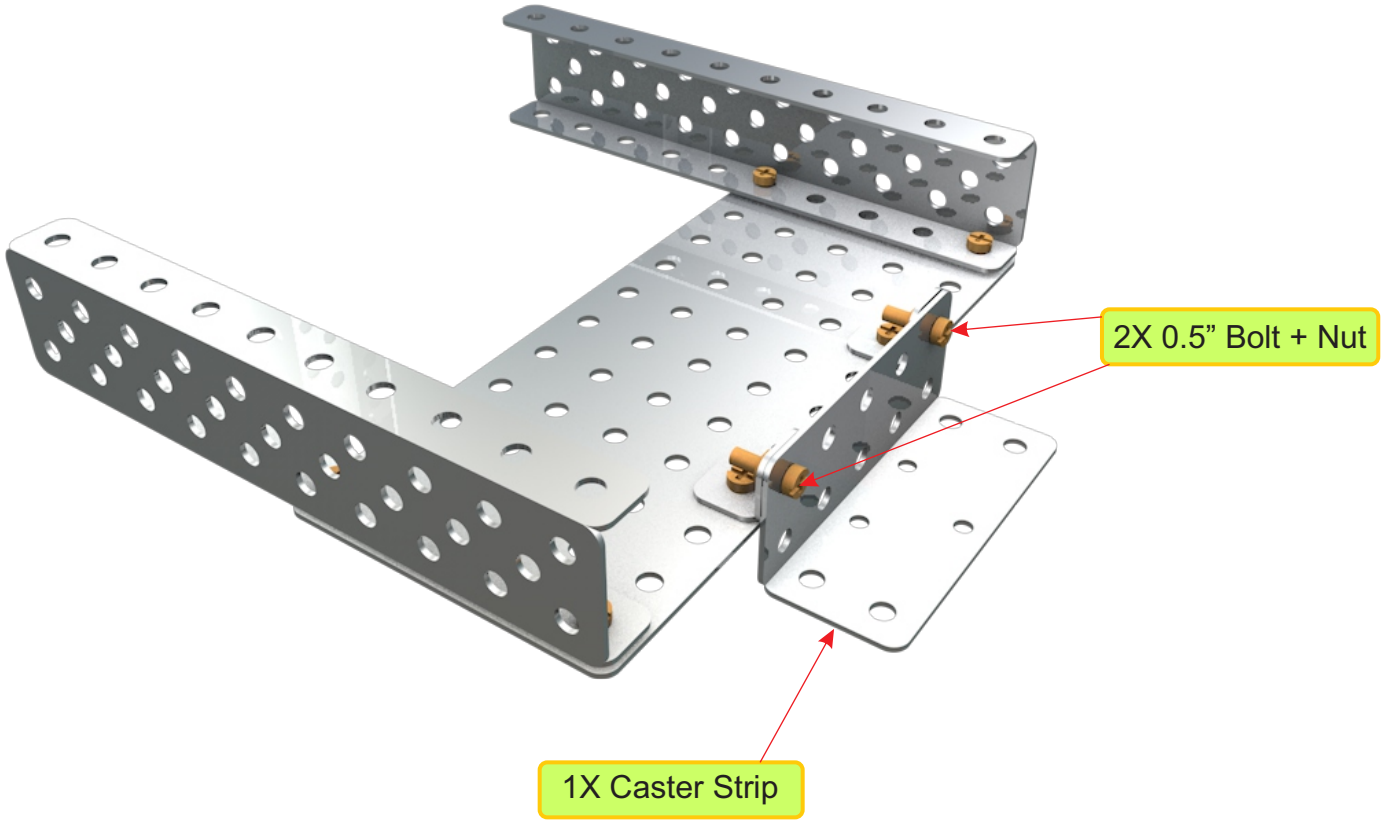

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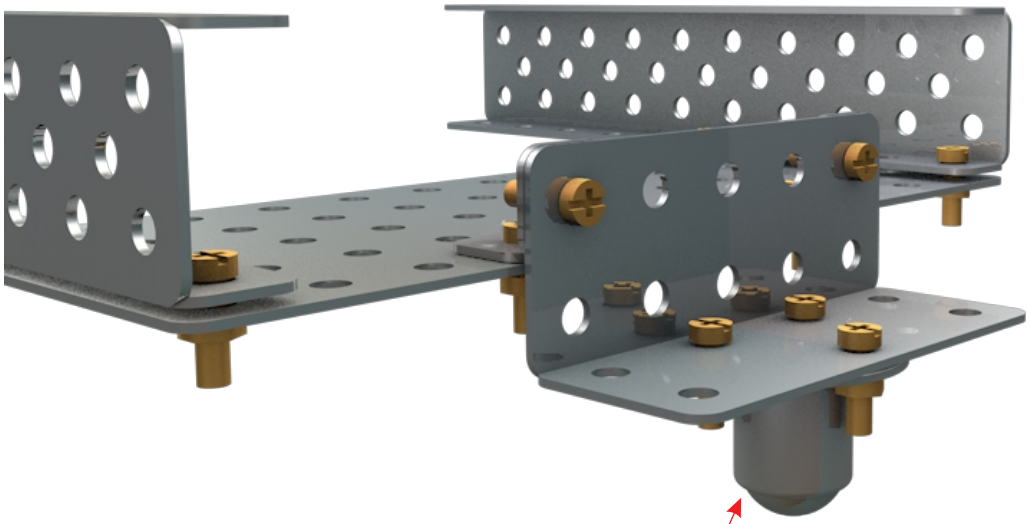

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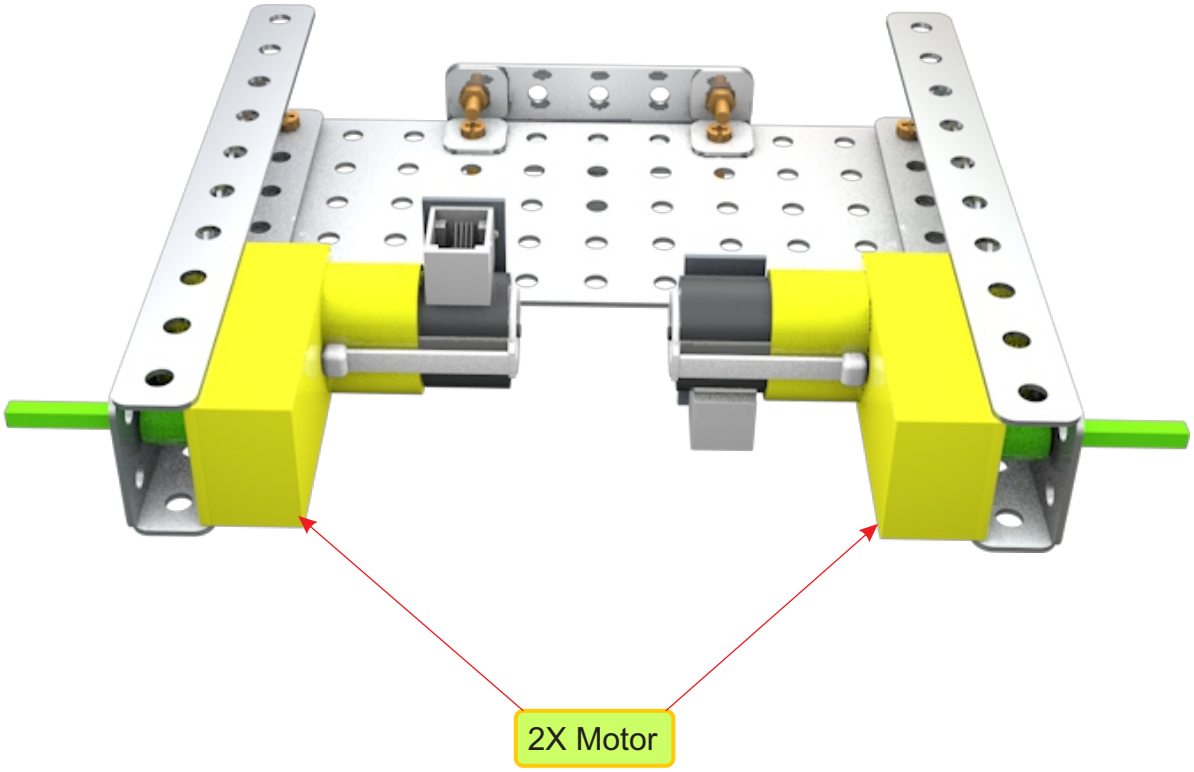

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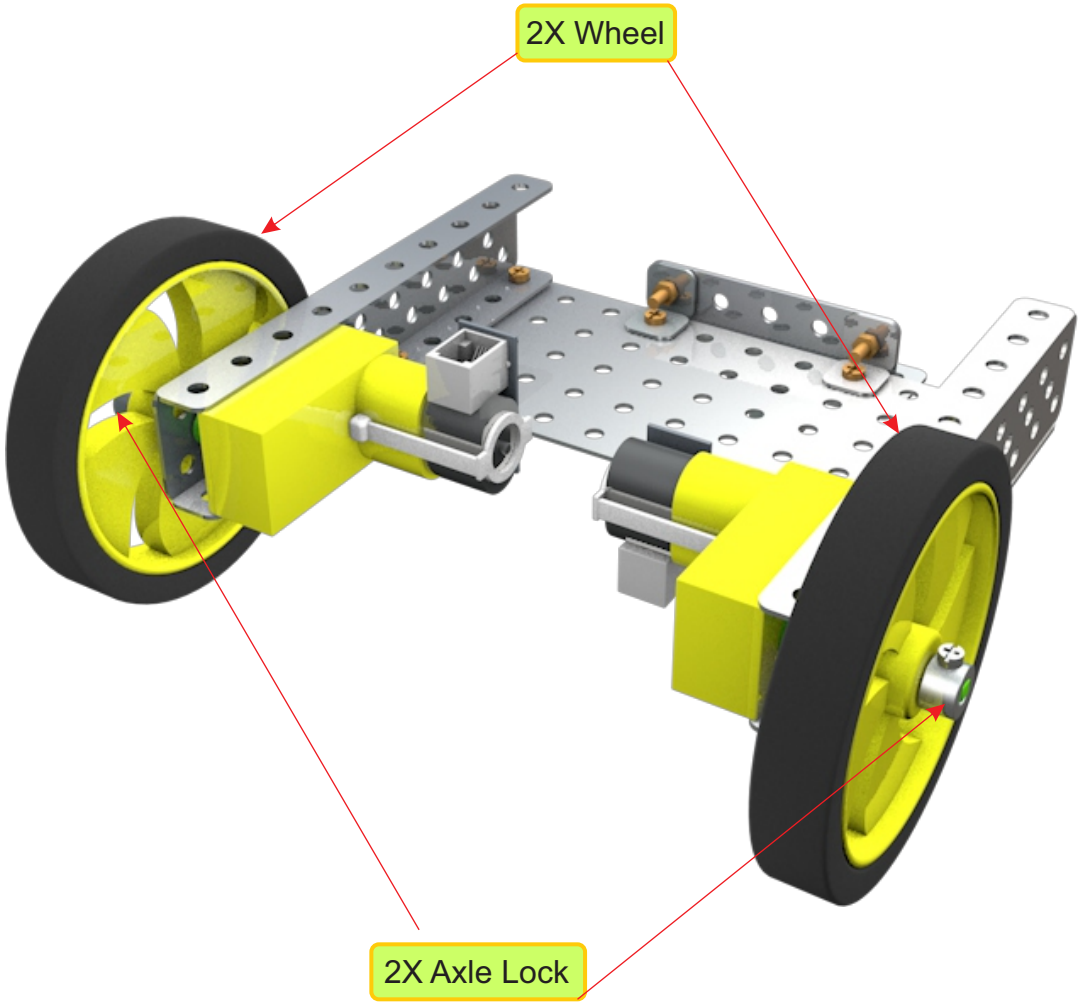

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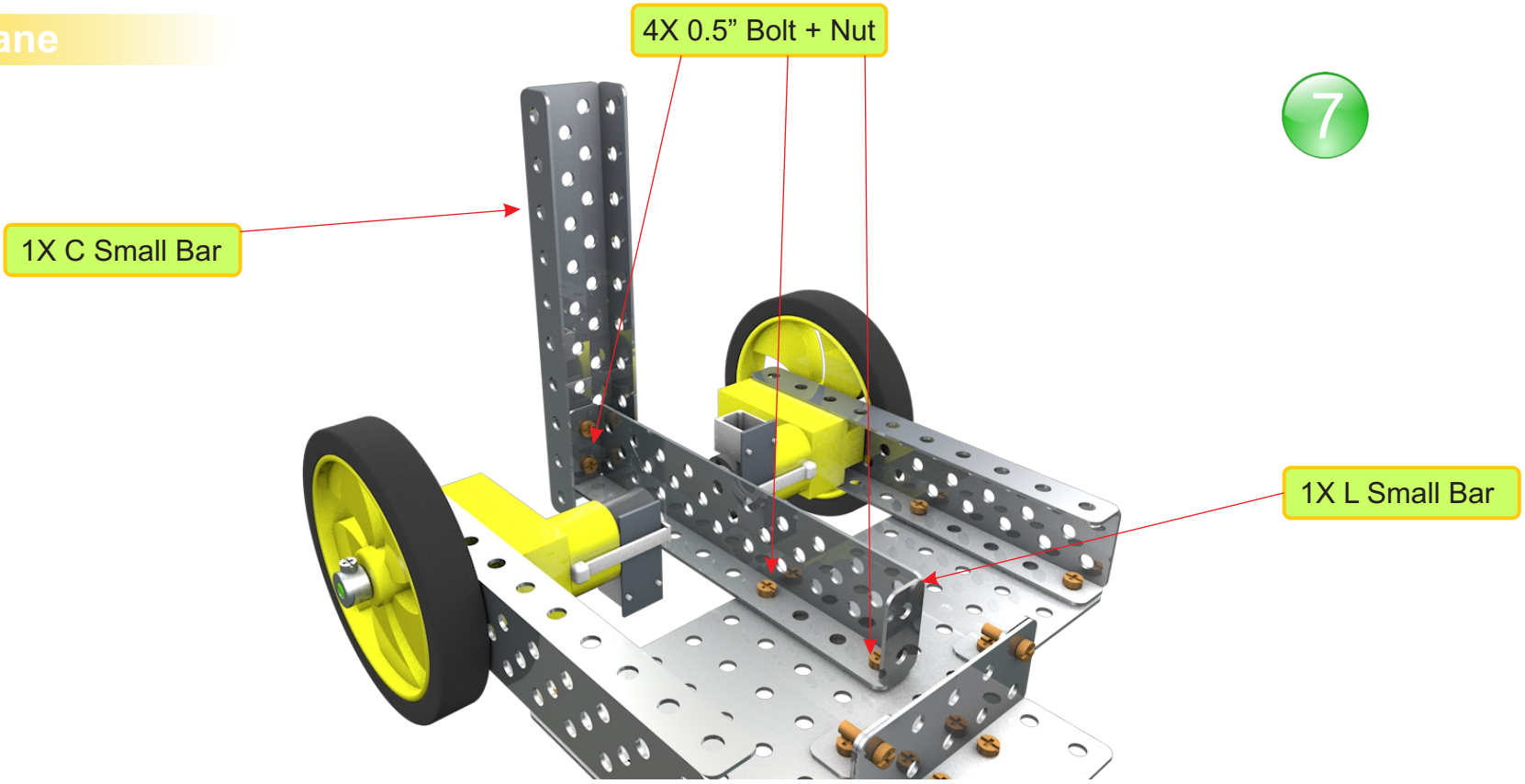
Crane



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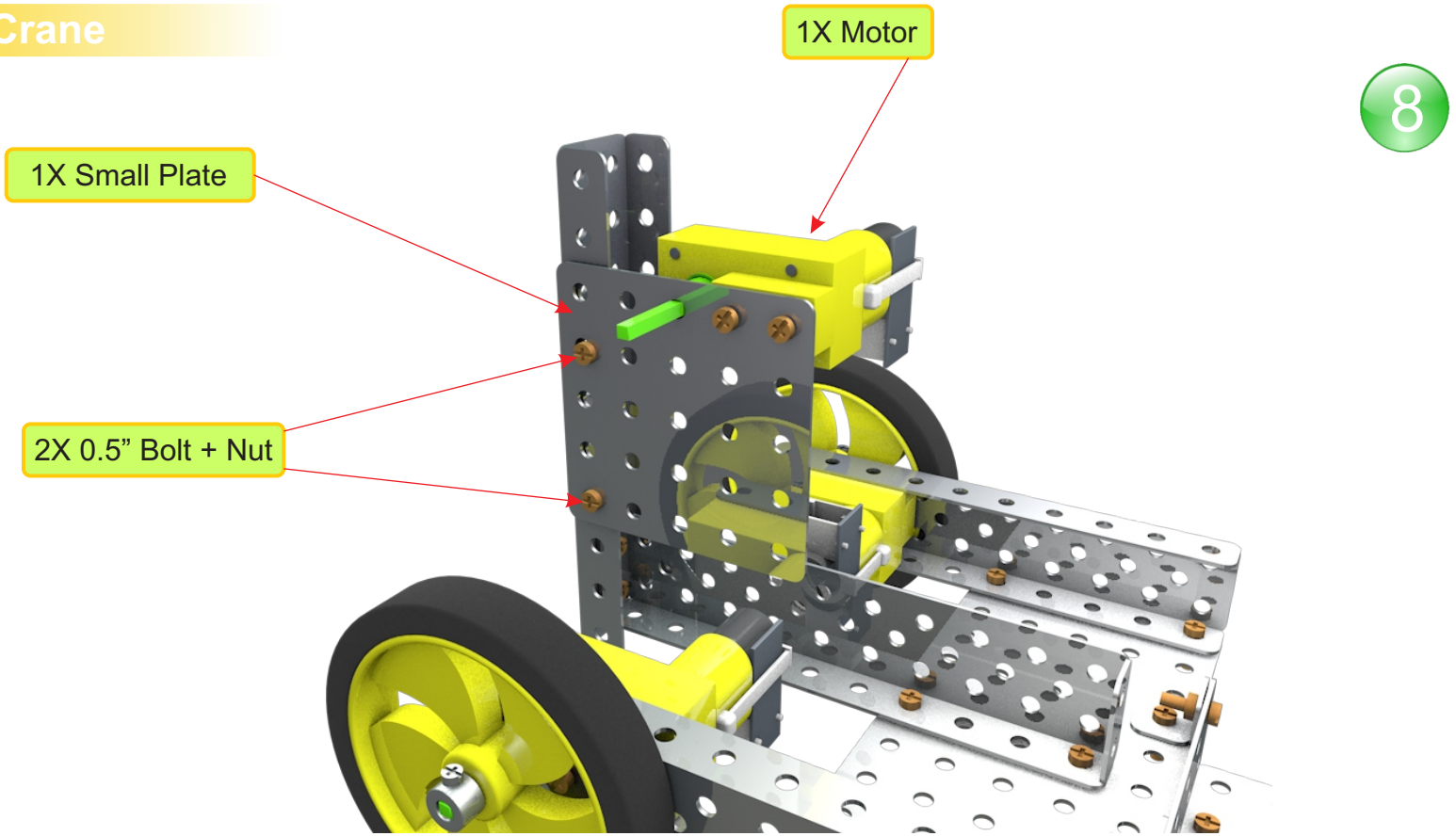

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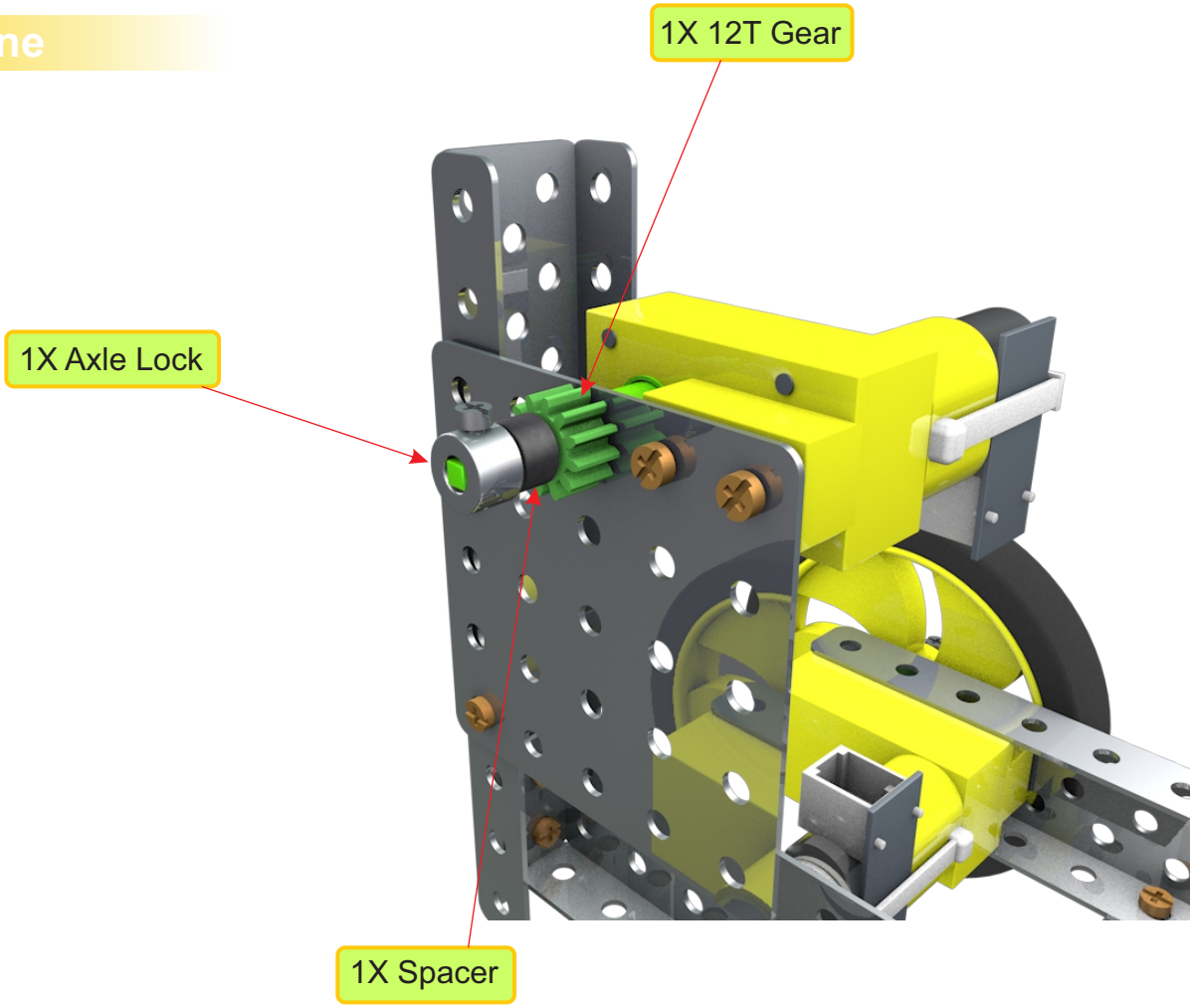

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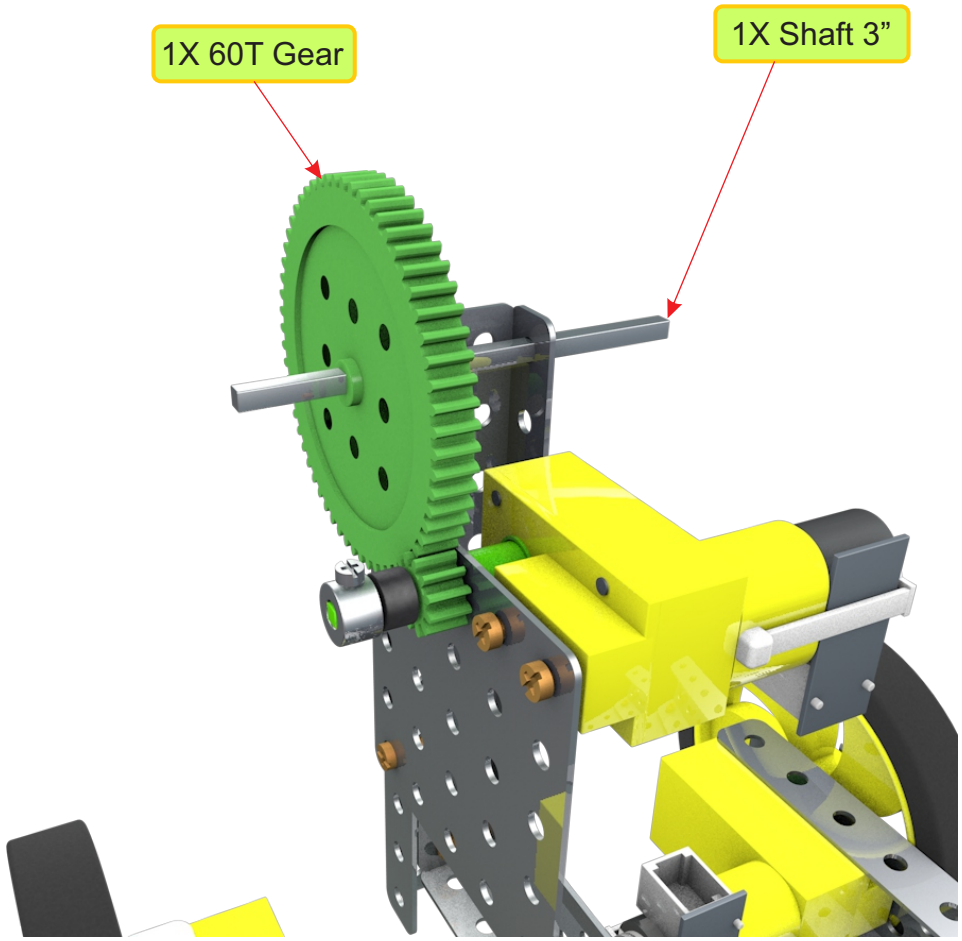

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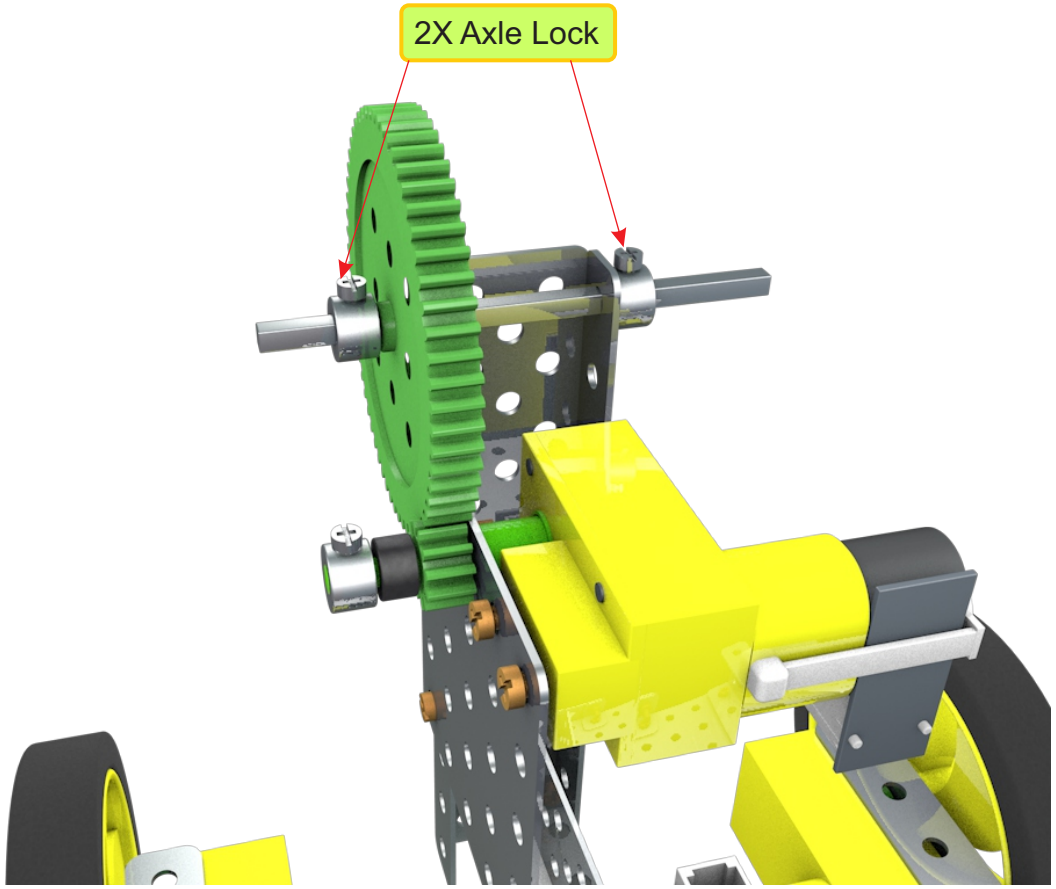

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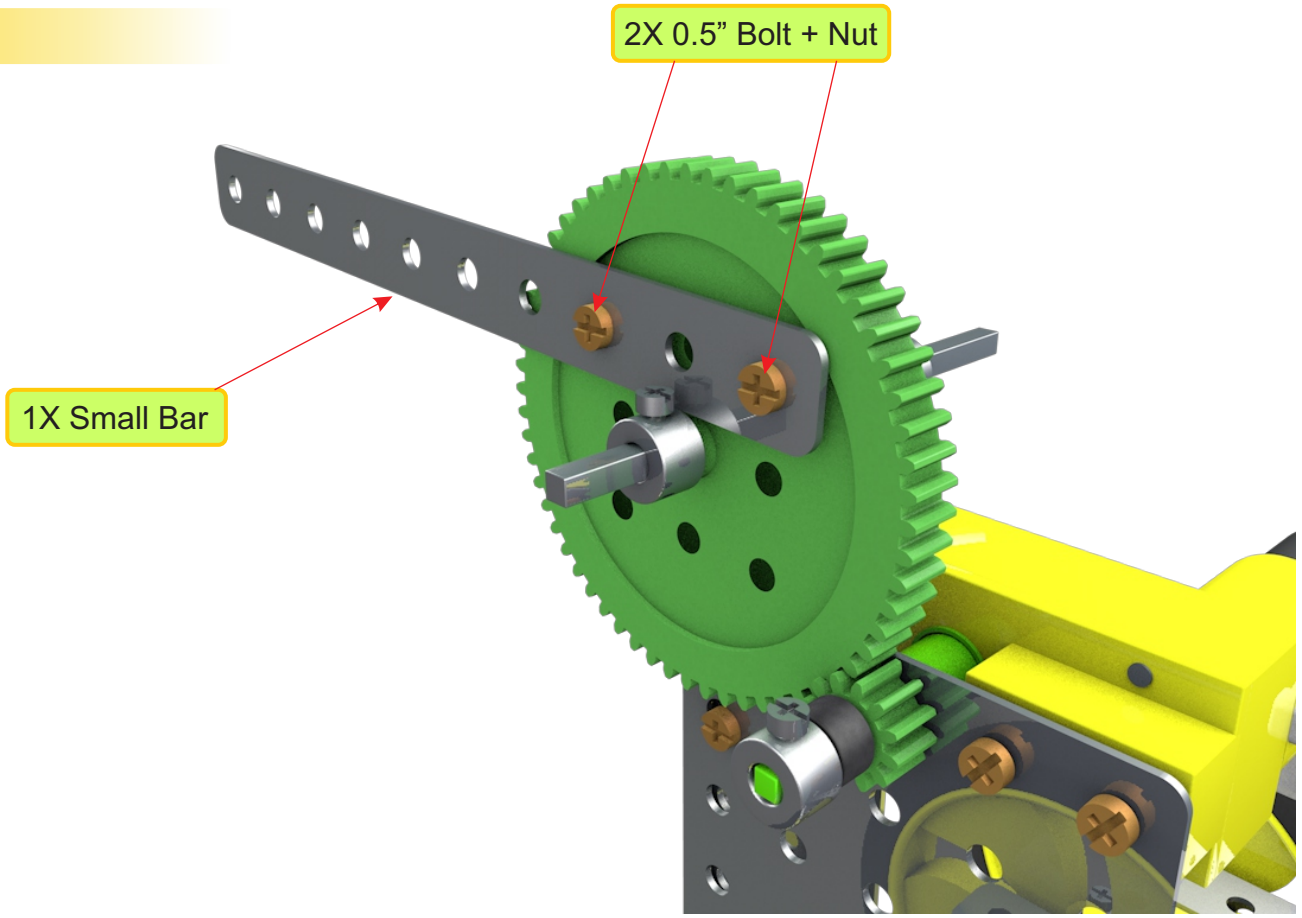

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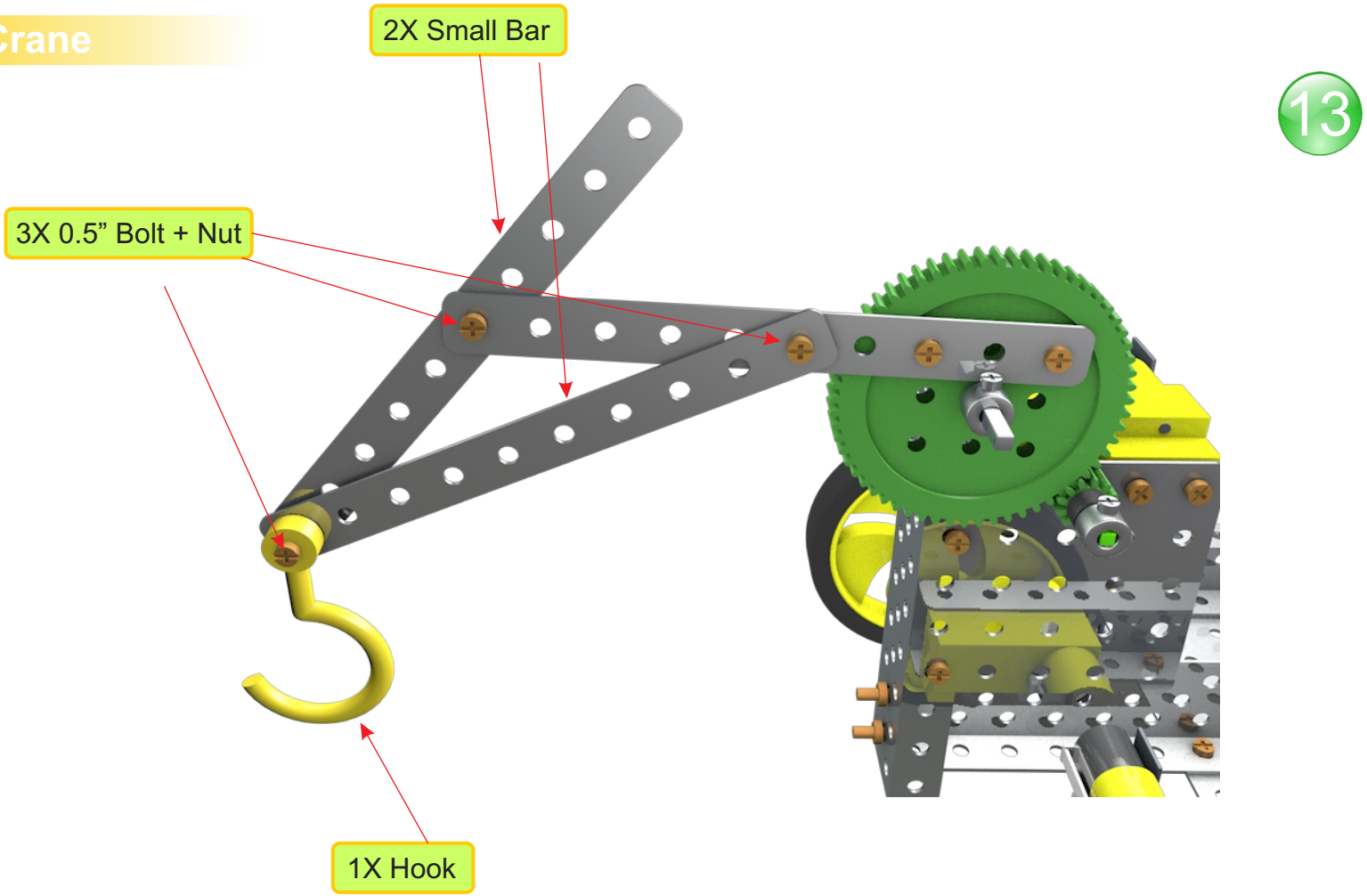

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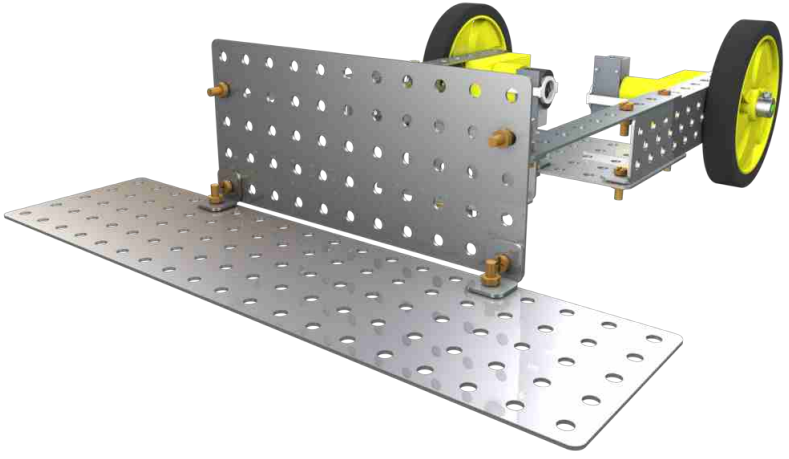
#2 Sweeper



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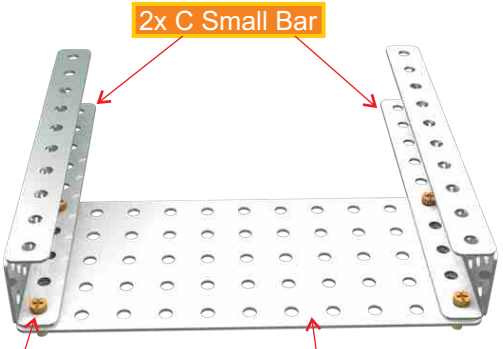

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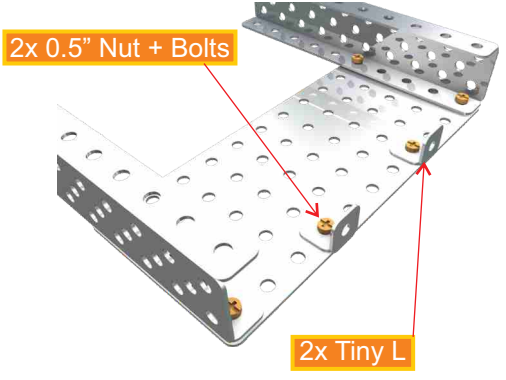

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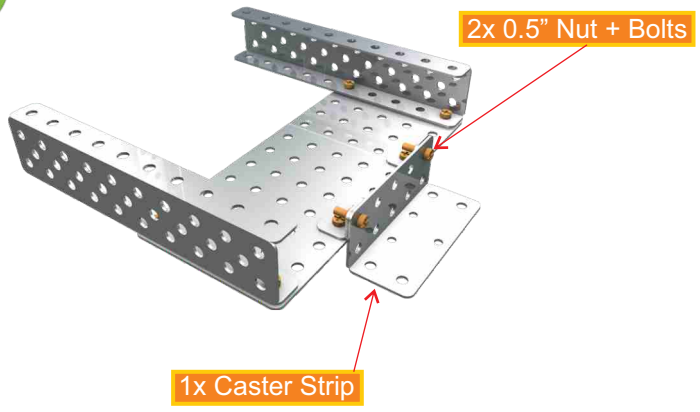

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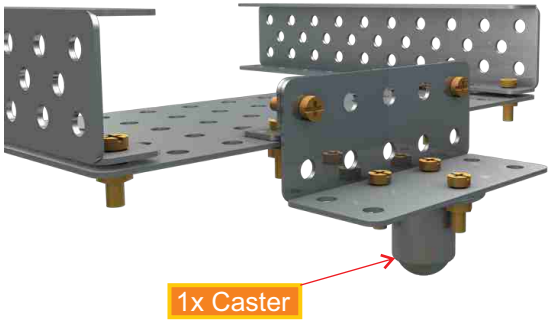

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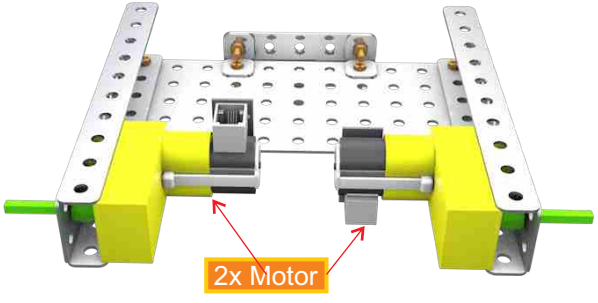

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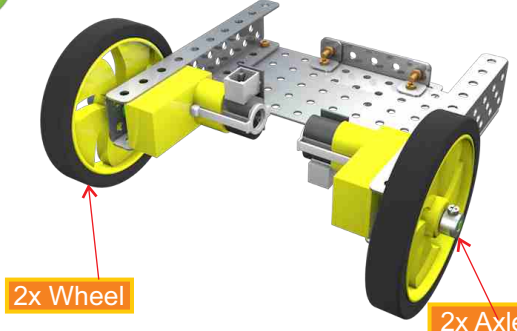

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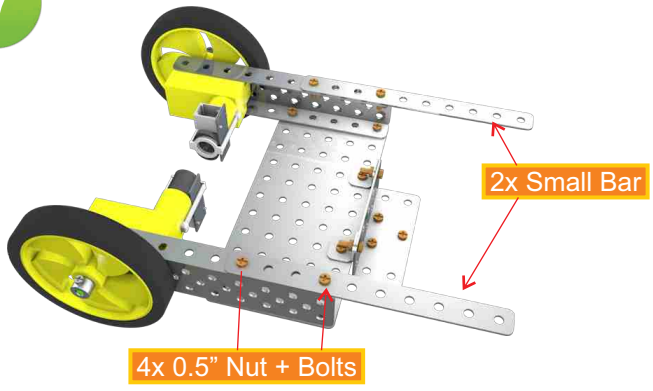

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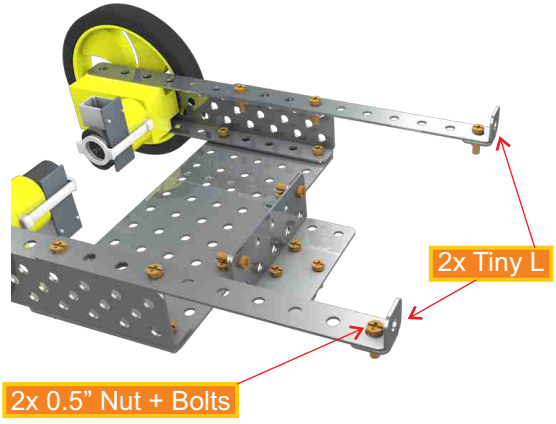

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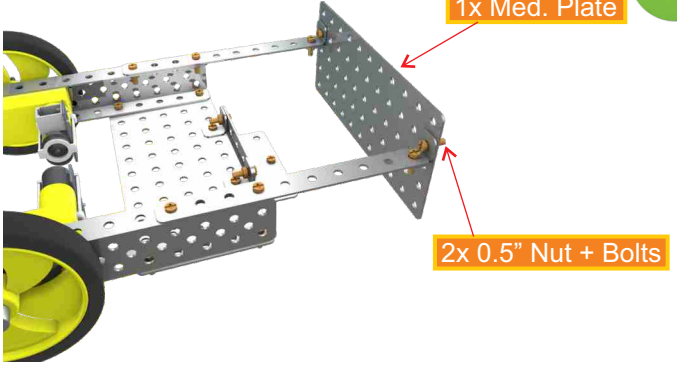

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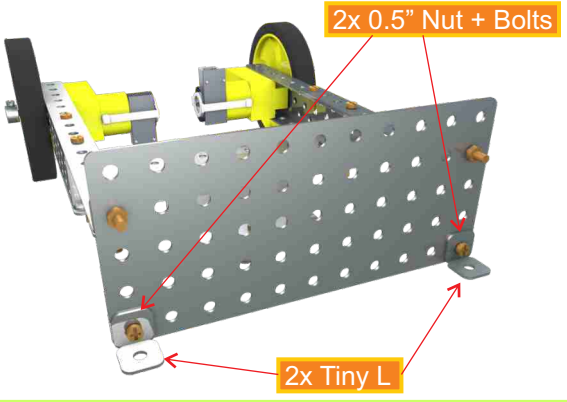

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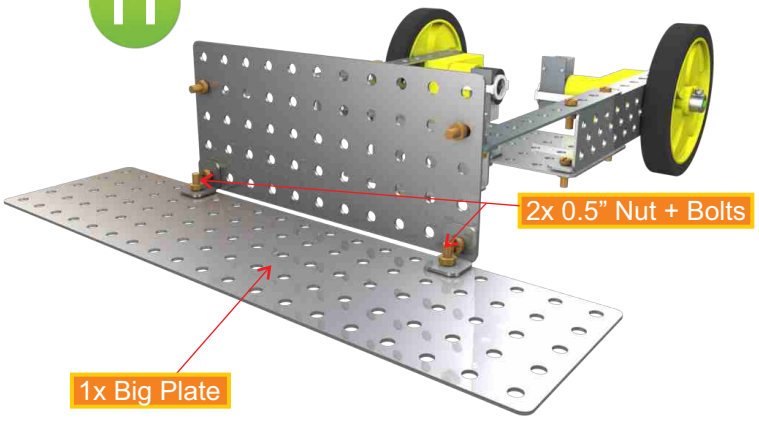

What did you learn?

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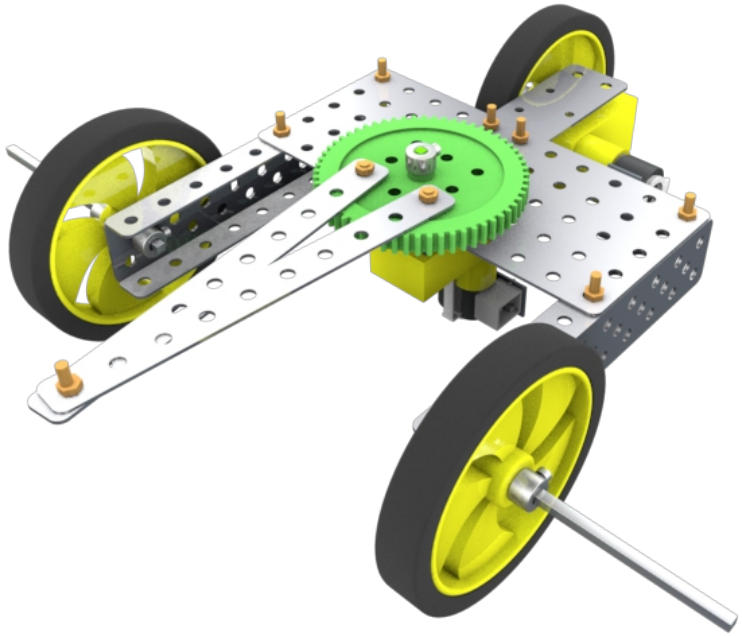

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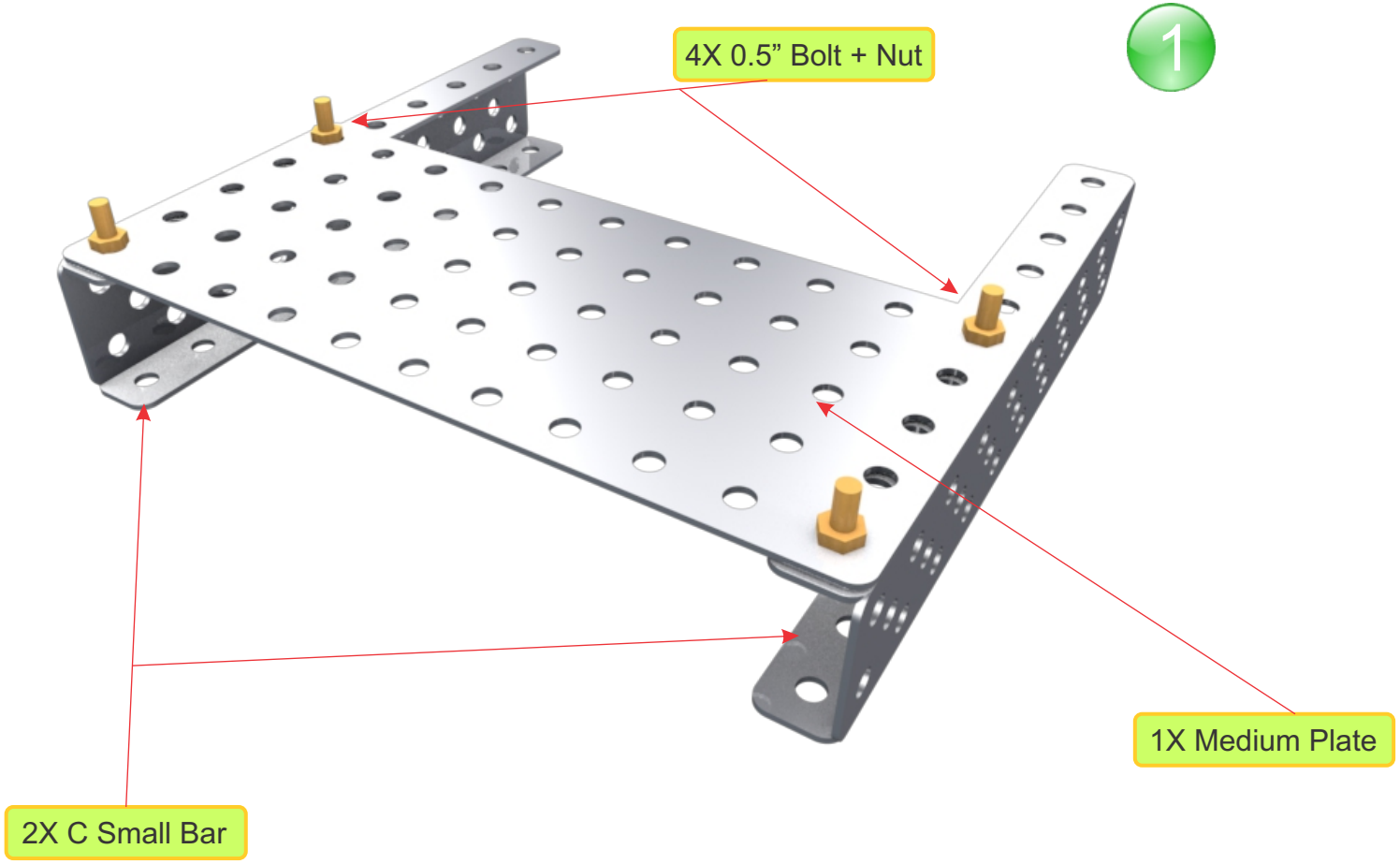

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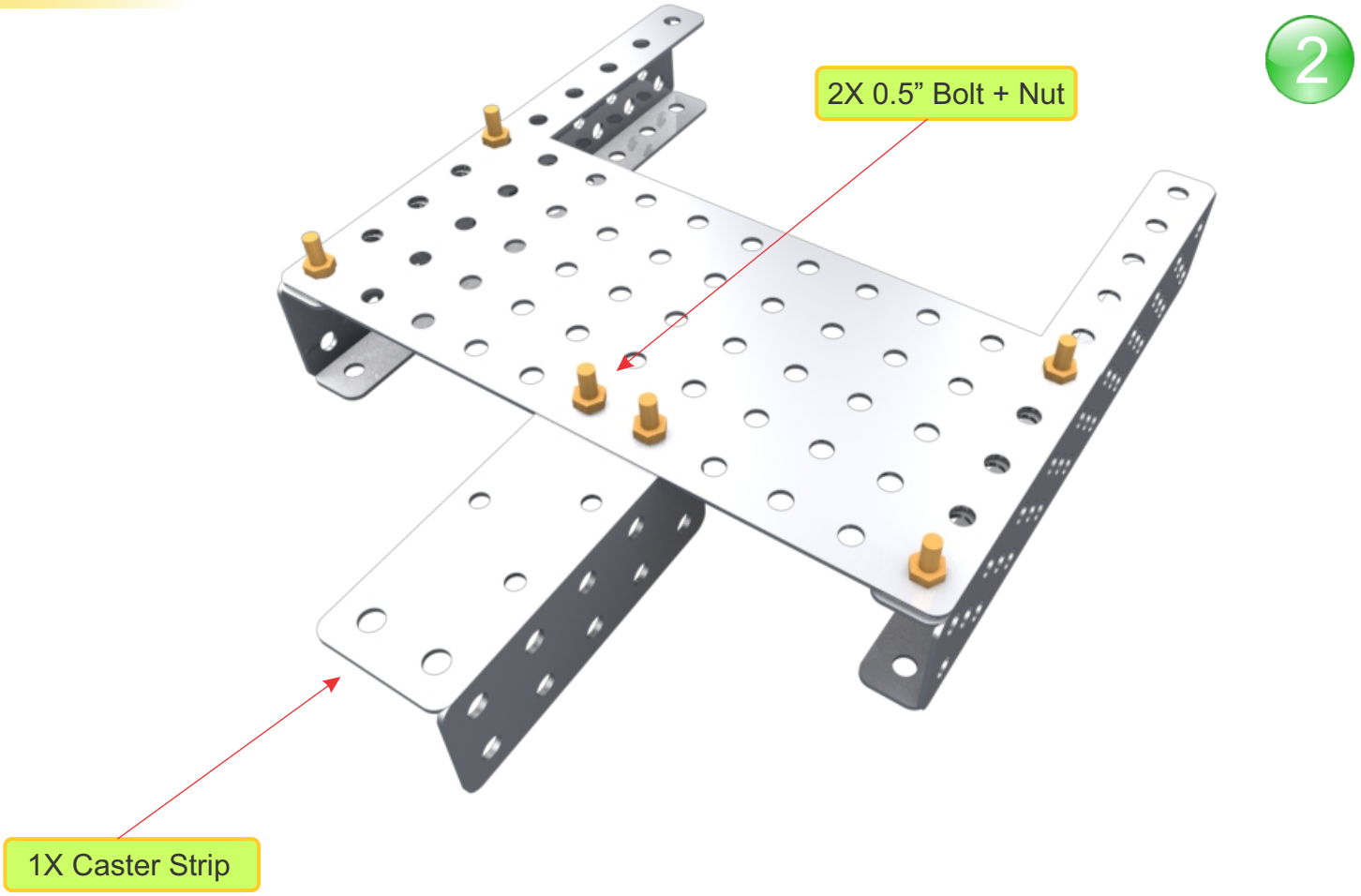

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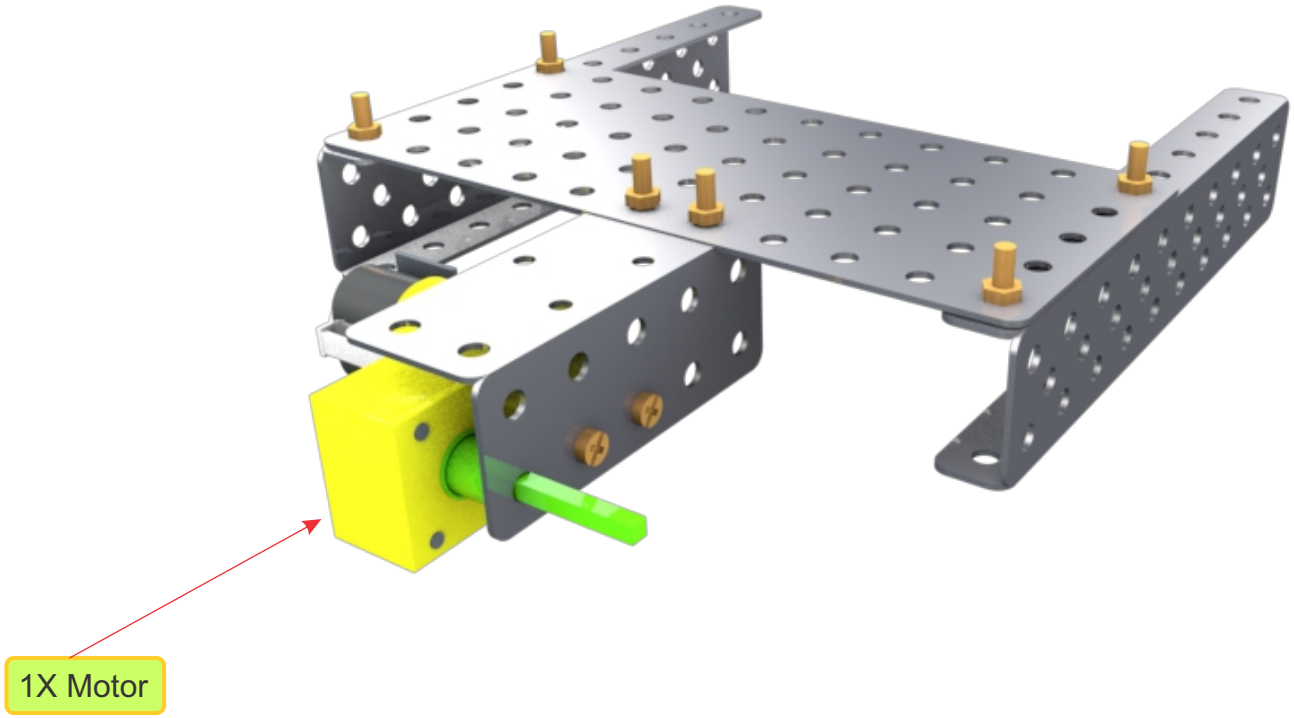

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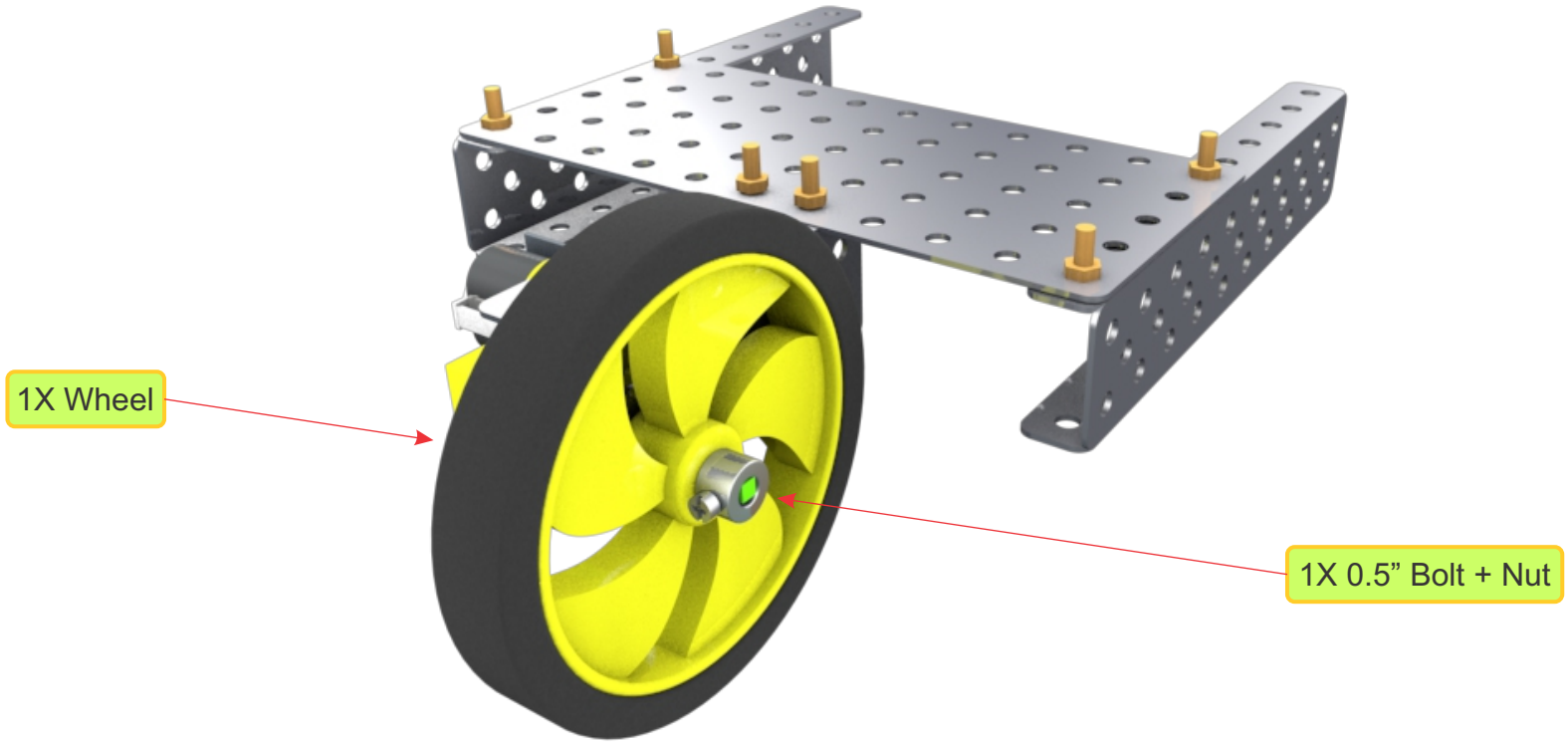

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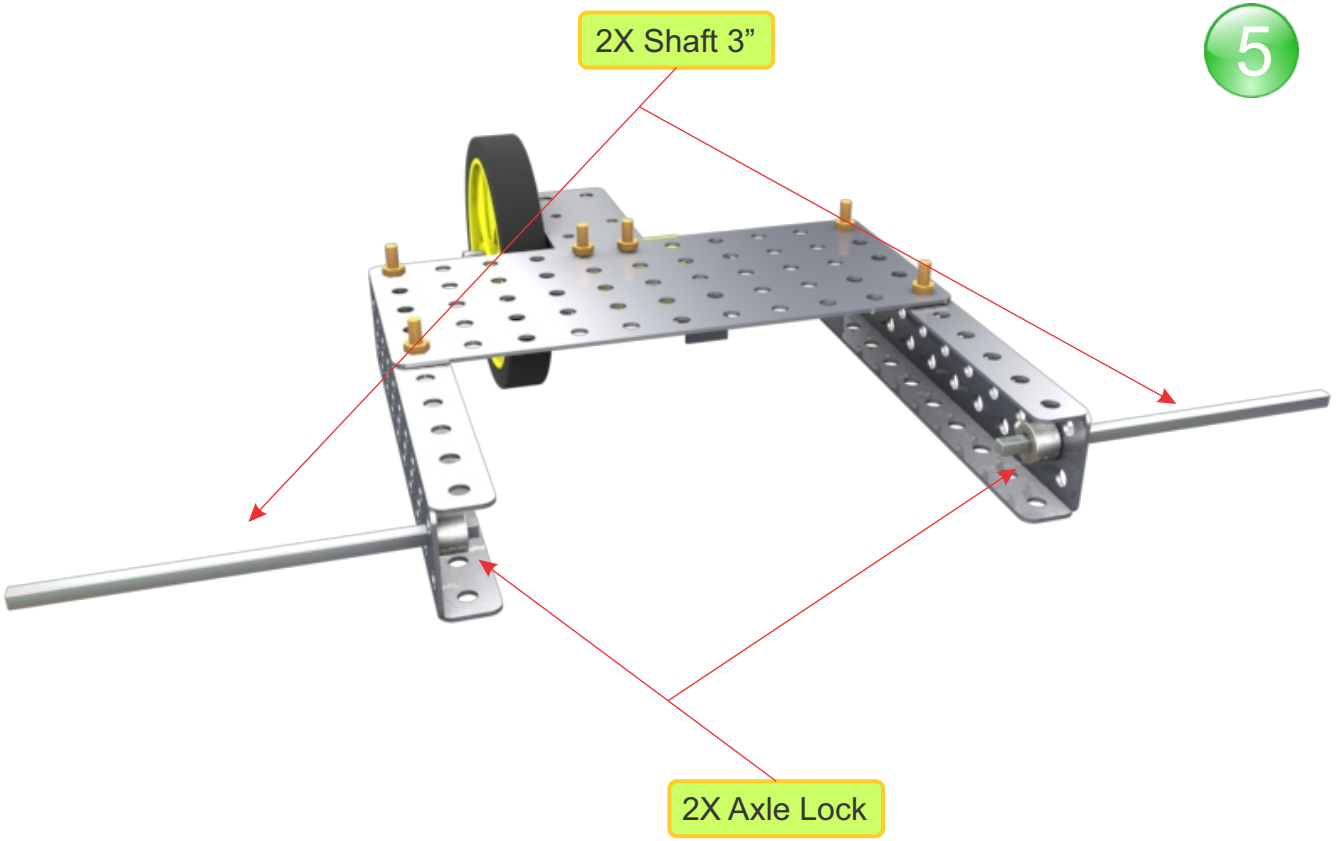

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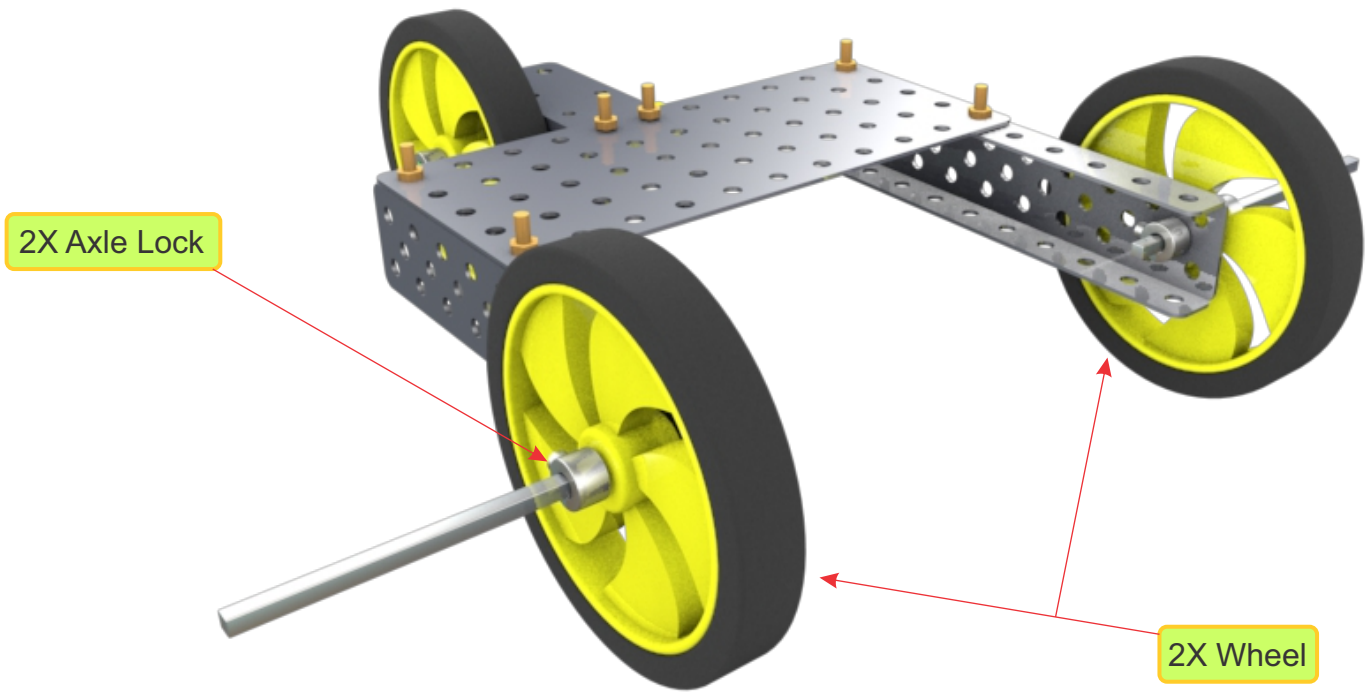

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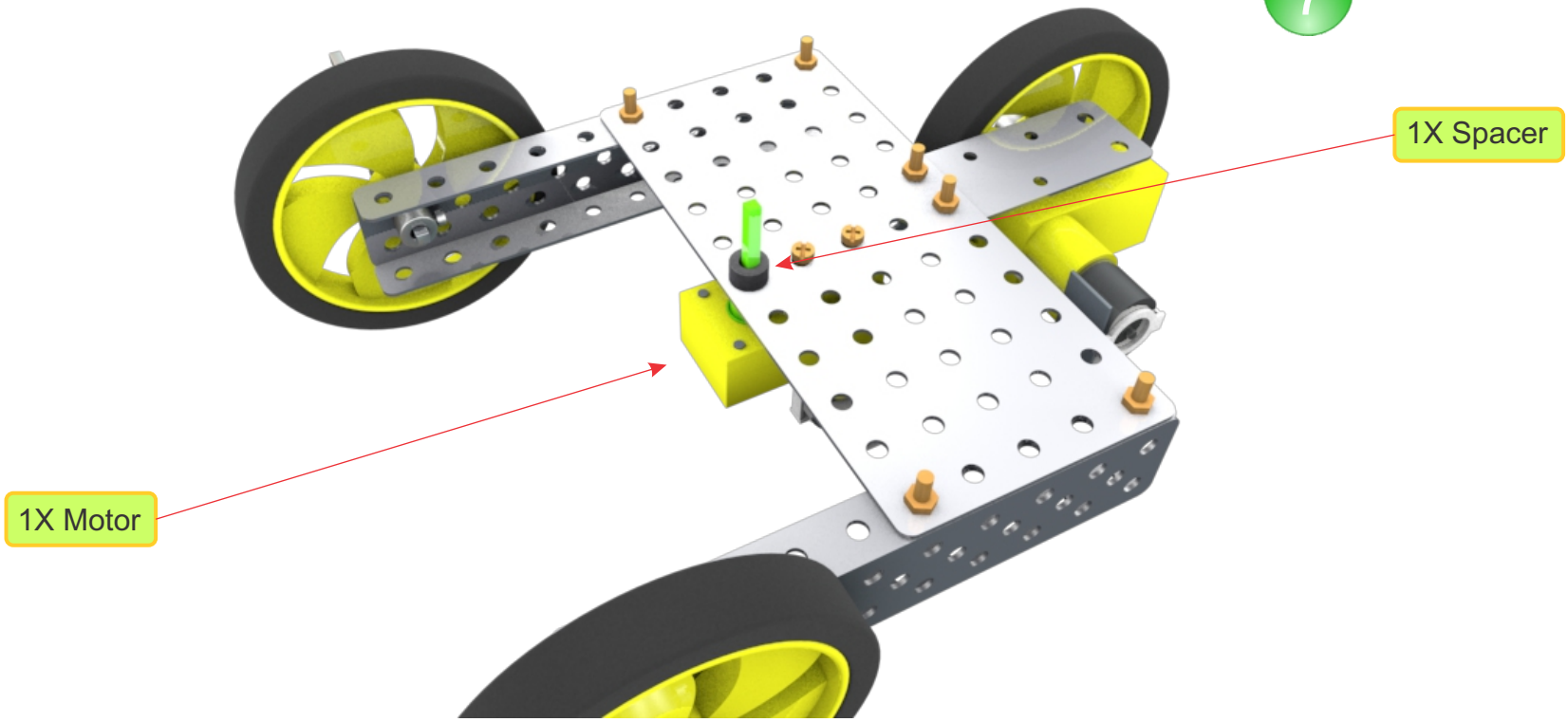

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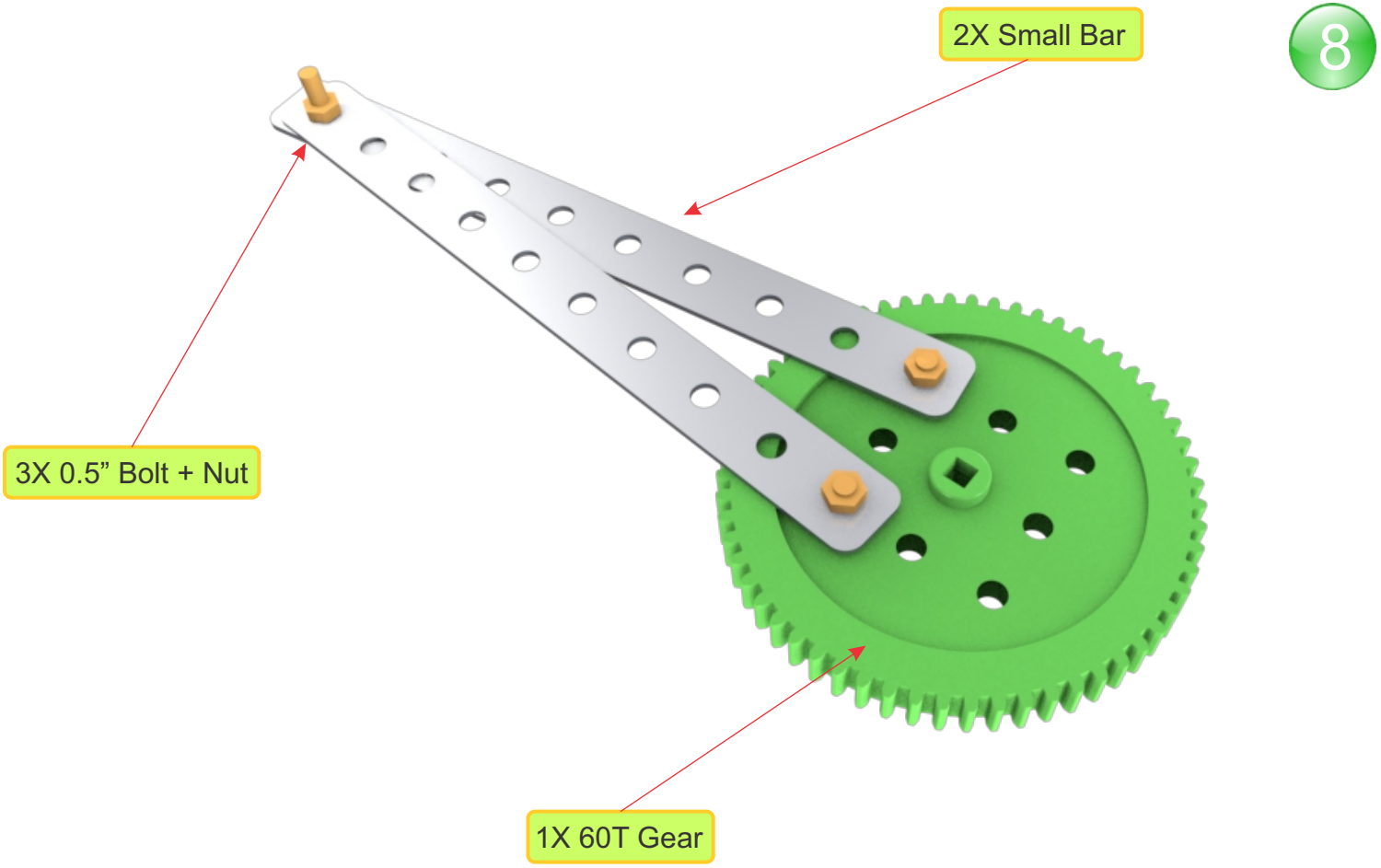

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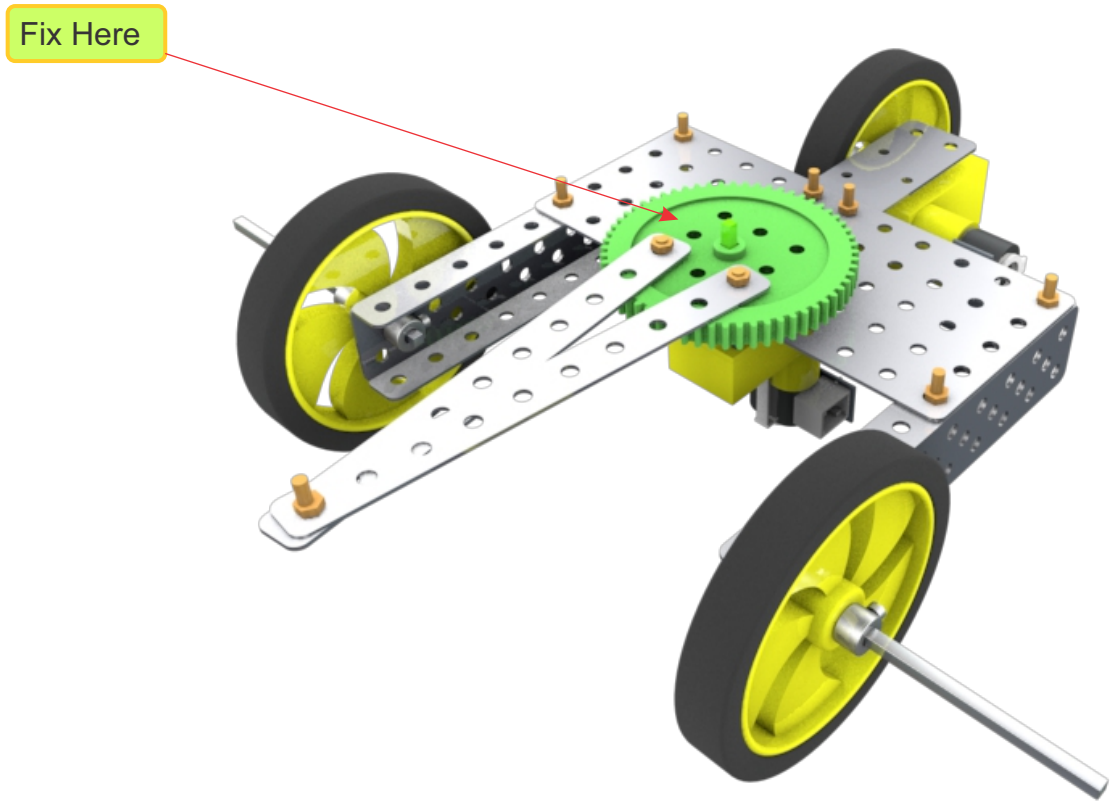

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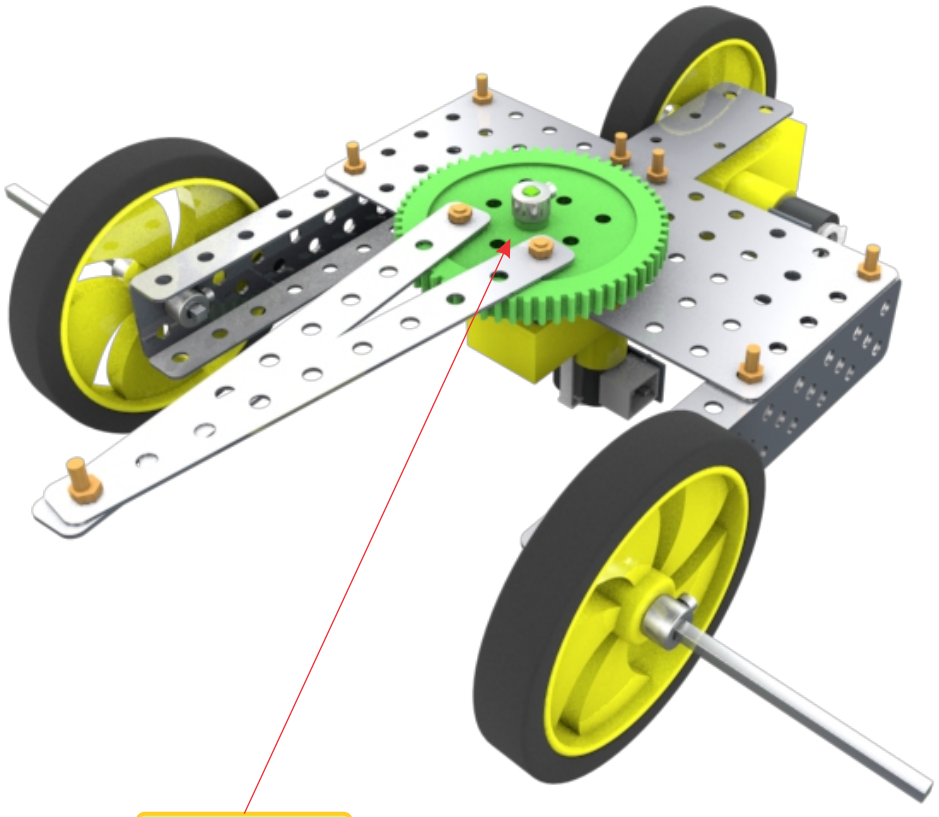
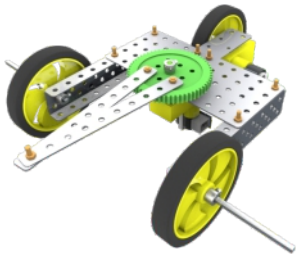
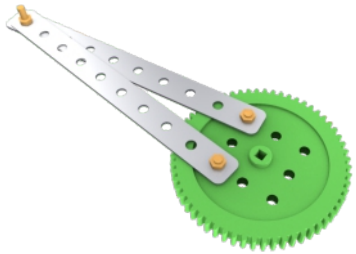
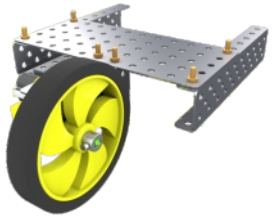
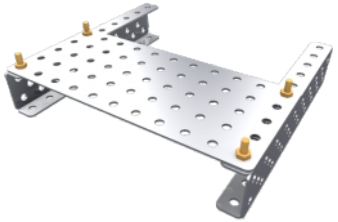


Disassemble









What did you learn?

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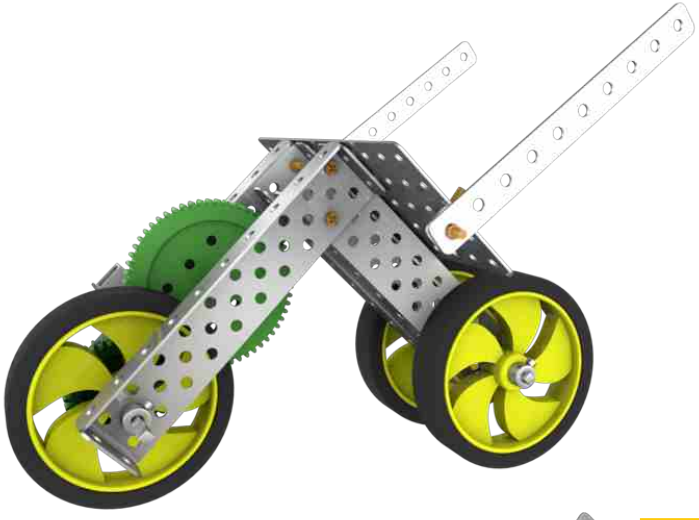
#1 Speedster



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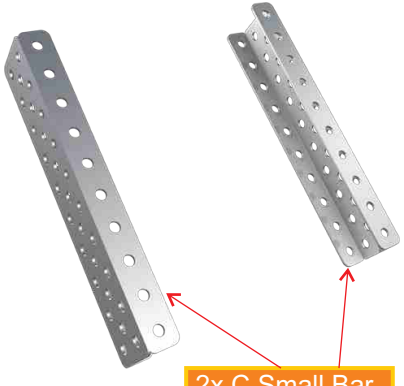

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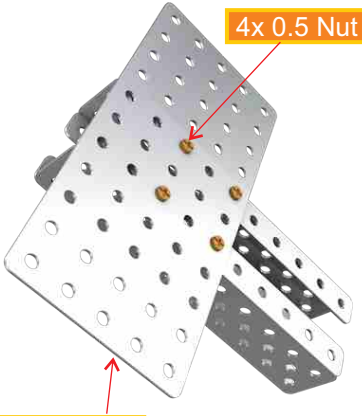

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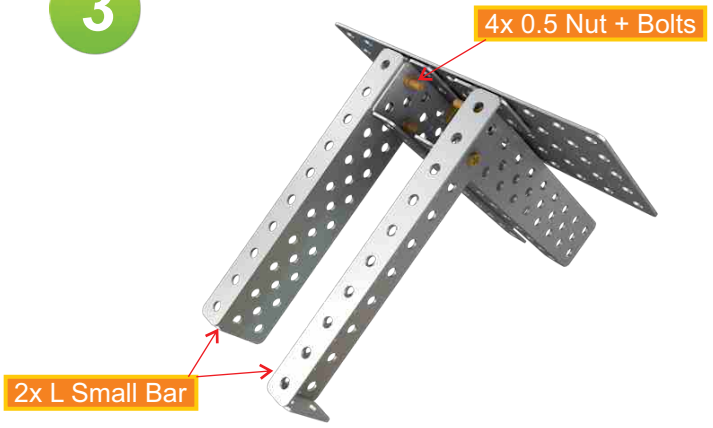

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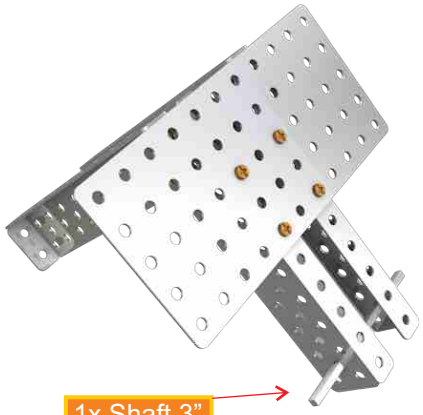

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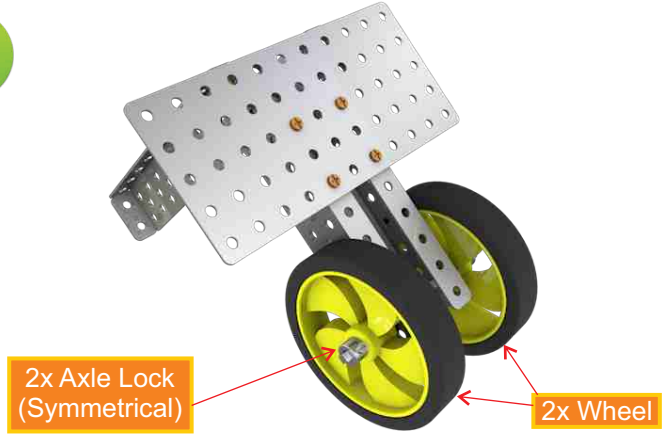

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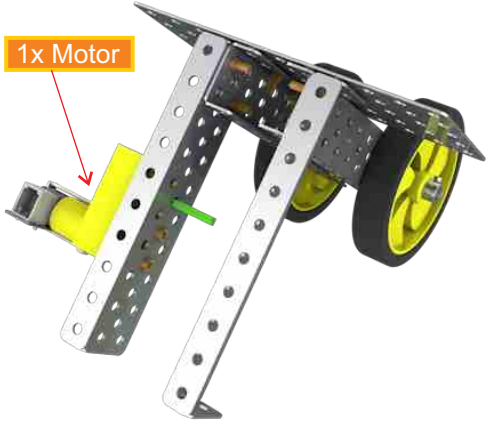

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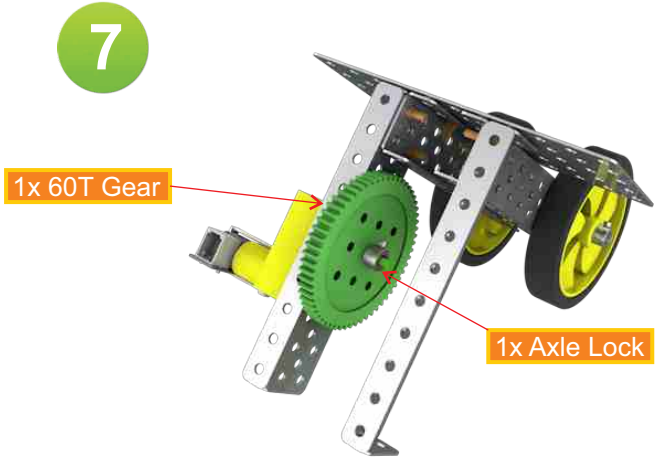

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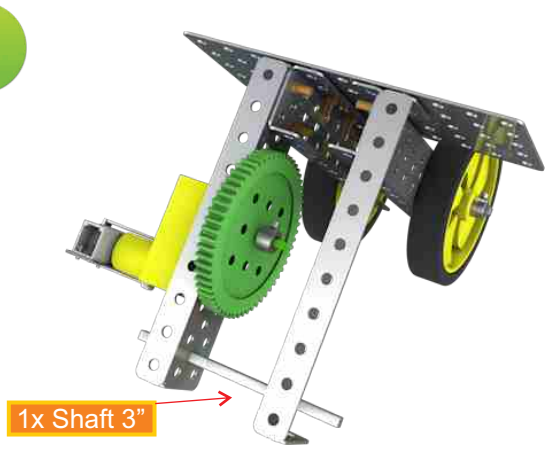

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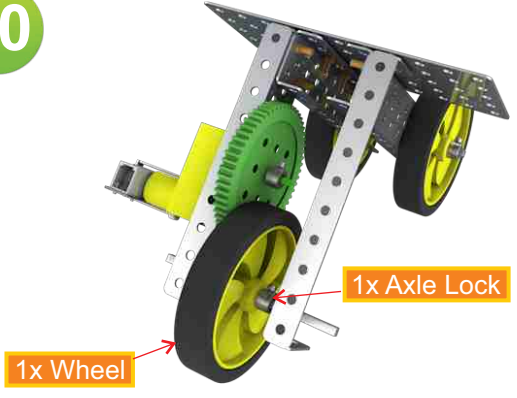

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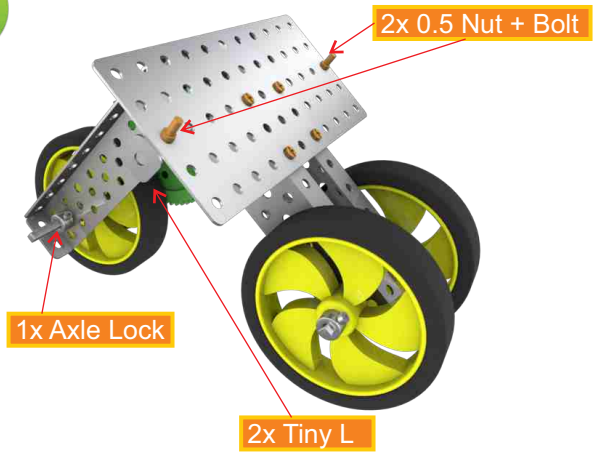

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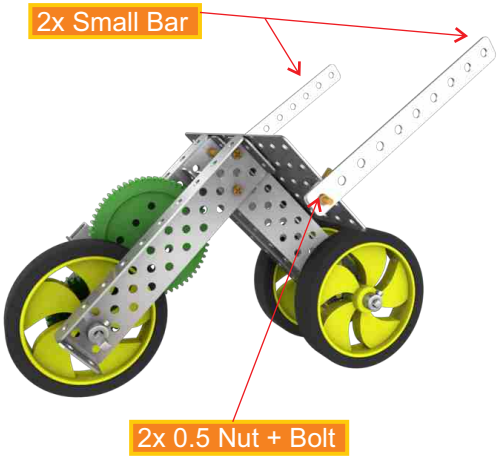

What did you learn?

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