



MAKER WORKS TECHNOLOGY INC

No. 426, F/4, Gonglehuating Business Building, Xihu Road,
Xixiang Sub-district, Bao'an District, Shenzhen, 518102 China.

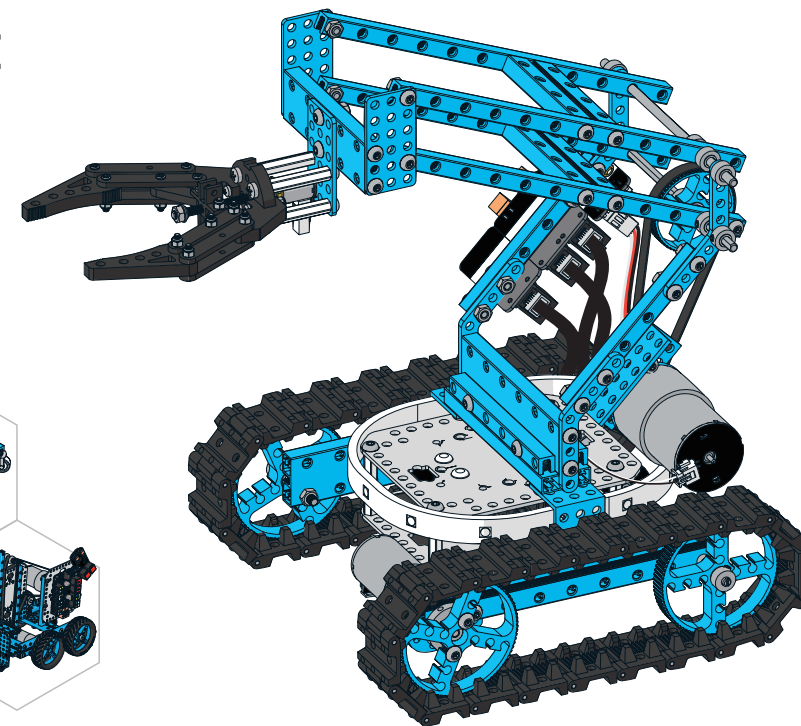
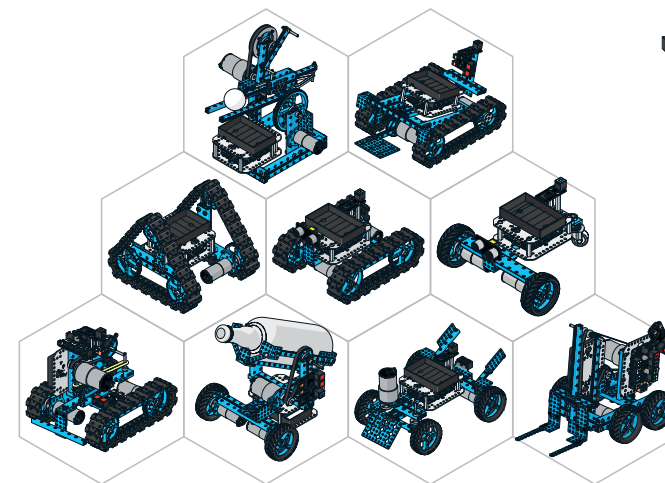
Please contact with us if you need some technique

support: support@makeblock.cc

www.makeblock.cc











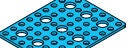
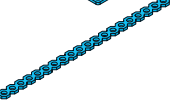














Ultimate Robot Kit
















Parts List













Pictures for reference only












- 2× Beam 0824-64 
- 2× Beam 0824-80 
- 3× Beam 0824-96 
- 2× Beam 0824-128 
- 2× Beam 0824-144 
- 4× Beam 0808-88 
- 4× Beam 0808-184 
- 4× Bracket 3×3 
- 1× Bracket 3×6 
- 4× Plate 3×6 
- 1× Plate 7×9 
- 8× Link Rod 

- 2× Bracket P3 
- 1× Caster Wheel 
- 2× DC Motor-25 
- 1× DC Motor-37 
- 2× DC Motor-25 Bracket 
- 1× DC Motor-37 Bracket 
- 3× Shaft Connector 4mm 
- 1× Timing Pulley 18T 
- 2× Timing Pulley 62T 
- 4× Timing Pulley 90T 
- 2× Timing Pulley Slice 90T 
- 1× Gear 16 

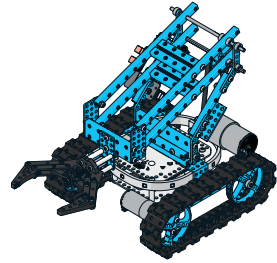
- 1× Gear 80 
- 4× Tire 68.5×22mm 
- 50× Track 
- 50× Track Axle 
- 1× Timing Belt 98MXL 
- 1× Timing Belt 240MXL 
- 2× D Shaft 4×56mm 
- 2× D Shaft 4×128mm 
- 6× Threaded Shaft 4×39mm 
- 10× Shaft Collar 4mm 
- 8× Flange Bearing 4×8×3mm 
- 1× Robot Gripper 

- 1× Hex Screwdriver 
- 1× Cross Screwdriver 
- 1× Wrench 
- 2× Hex Allen Key 
- 30× Screw M4×8 
- 40× Screw M4×14 
- 10× Screw M4×22 
- 10× Screw M4×30 
- 28× Nut M4 
- 2× Nut M8 
- 30× Nylon Lock Nut M4 
- 10× Screw M3×8 
- 16× Headless Set Screw M3×5 

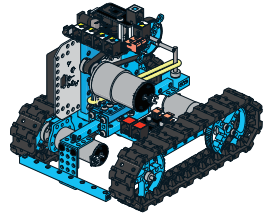
- 6× Nylon Stud M4×30 
- 16× Plastic Rivet R4060 
- 12× Plastic Rivet R4120 
- 50× Plastic Ring 4×7×2mm 
- 2× BaseBracket 
- 1× Battery Holder for (6) AA 
- 4× Nylon Pulley with Bearing 
- 4× Plate 45° 
- 1× Disc D72 
- 2× Timing Belt Connector 
- 1× Makeblock Orion 
- 1× Me Dual Motor Driver 

- 1× Me Ultrasonic Sensor 
- 1× Me Bluetooth Module 
- 1× Me Line Follower 
- 1× Me Sound Sensor 
- 1× Me RJ25 Adapter 
- 1× LED RGB Strip-Addressable (0.5M) 
- 2× Micro Switch 
- 3× RJ25 Cable-20cm 
- 3× RJ25 Cable-35cm 
- 1× Micro USB Cable 
- 6× Rubber Ring 

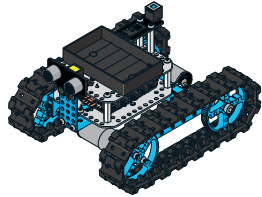
Robot Ideas



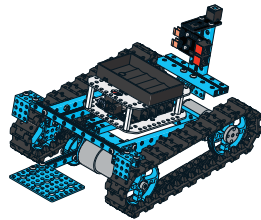
Robotic Arm Tank



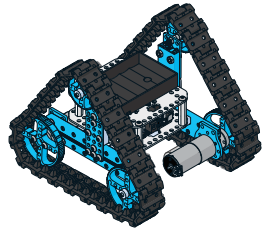
Attack Tank



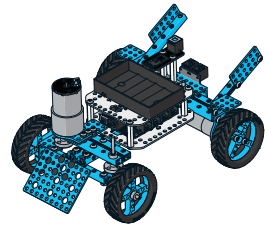
Robot Tank



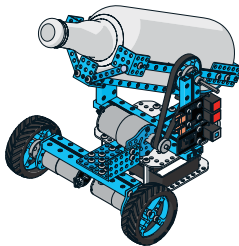
Sumo Tank



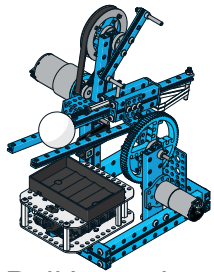
Triangular Tank



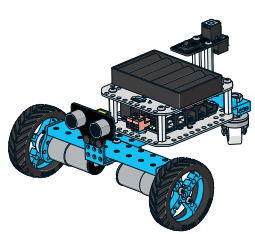
Skill Racing car



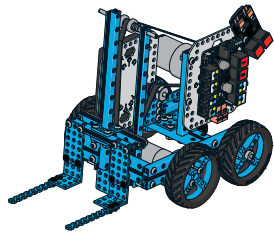
Drink Car



Ball Launcher

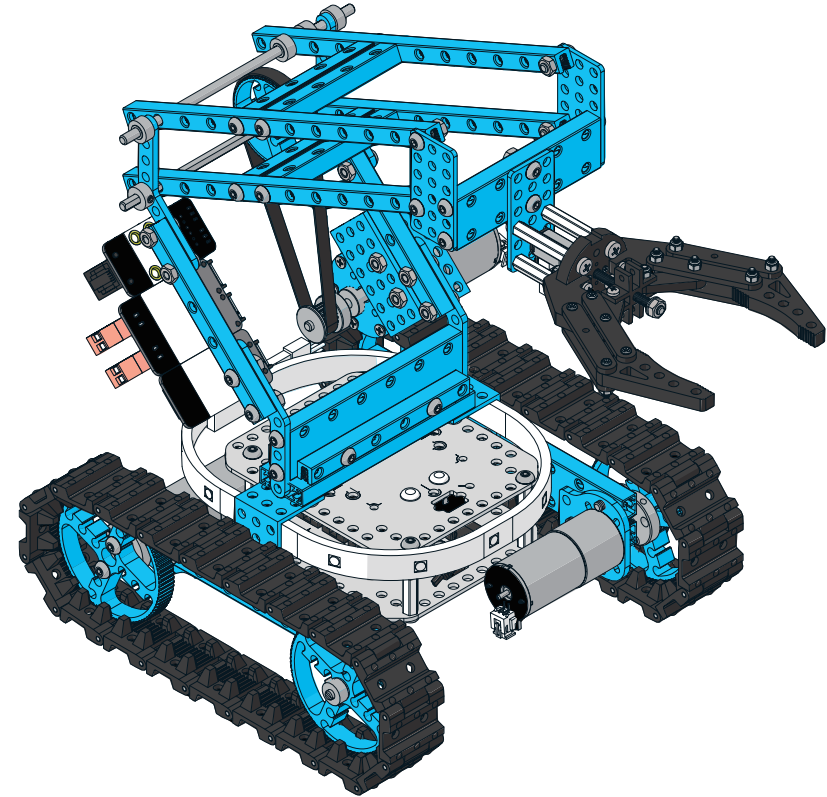


3-Wheeled Car



Forklift

Building the Robotic Arm Tank



Please visit

<https://grabcad.com/makeblock-1/projects>

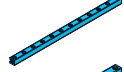
to view 3D models.

Parts List for the Robotic Arm Tank

1× Timing Belt 98MXL



4× Beam 0808-184



4× Beam 0808-88



1× Beam 0824-64



1× Beam 0824-80



2× Beam 0824-96



2× Beam 0824-144



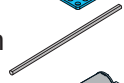
2× Bracket 3×3



1× Bracket 3×6



2× D Shaft 4×128mm



2× DC Motor-25



1× DC Motor-37



6× Flang Bearing 4×8×3mm



21× Nut 4mm



4× Nylon Lock Nut 4mm



1× DC Motor-37 Bracket



2× DC Motor-25 Bracket



4× Plate 45°



3× Plate 3×6



4× Plastic Ring 4×7×2



2× Plastic Rivet R4060



4× Plastic Rivet R4120



13× Headless Set Screw M3x5



8× Screw M3×8



29× Screw M4×8



40× Screw M4×14



3× Screw M4×30



2× Shaft Connector 4mm



10× Shaft Collar 4mm



2× Threaded Shaft 4×39



38× Track



38× Track Axle



1× Timing Pulley 18T



1× Timing Pulley 62T



4× Timing Pulley 90T



1× Me RJ25 Adapter



1× Me Dual Motor Driver



1× Me Bluetooth Module



4× Nylon Stud



1× Battery Holder for (6)AA



2× BaseBracket



1× Makeblock Orion



1× Robot Gripper



2× RJ25 Cable-20cm



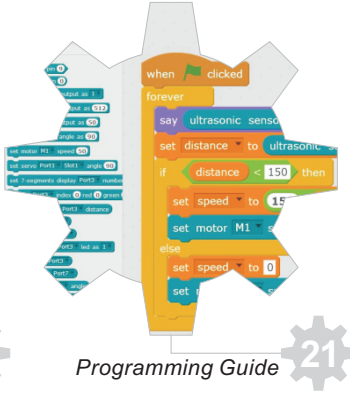
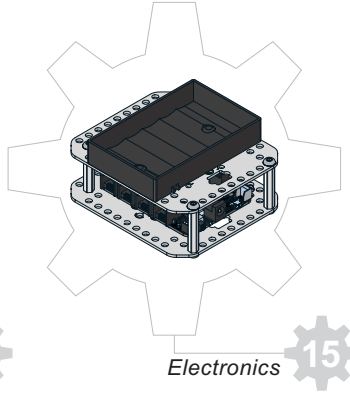
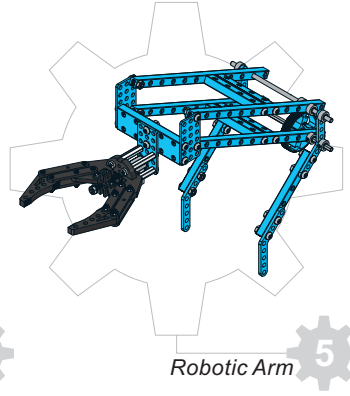
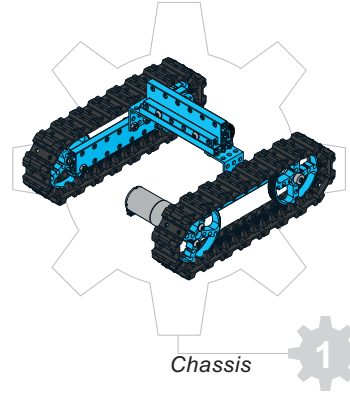
2× RJ25 Cable-35cm

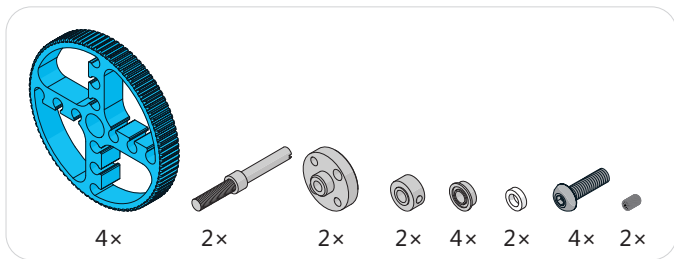


1× Micro USB Cable

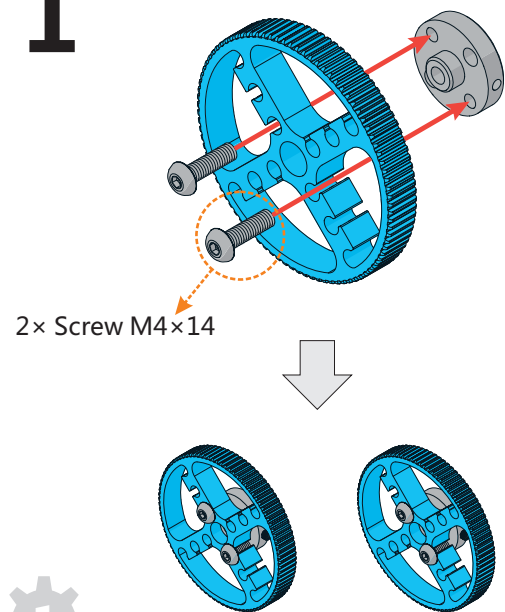


1× LED RGB Strip-Addressable (0.5M)

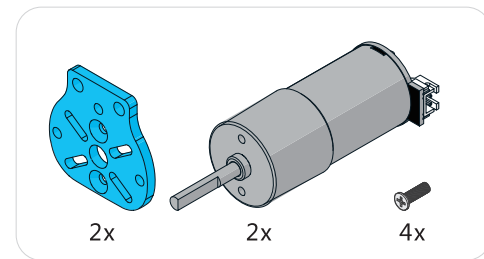
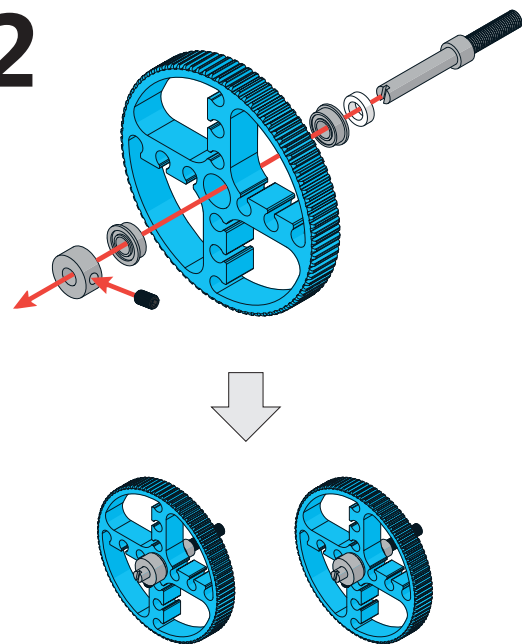




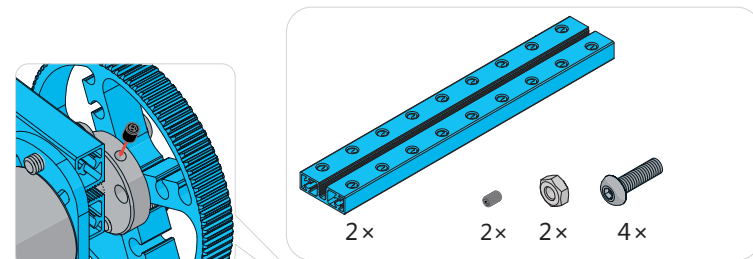
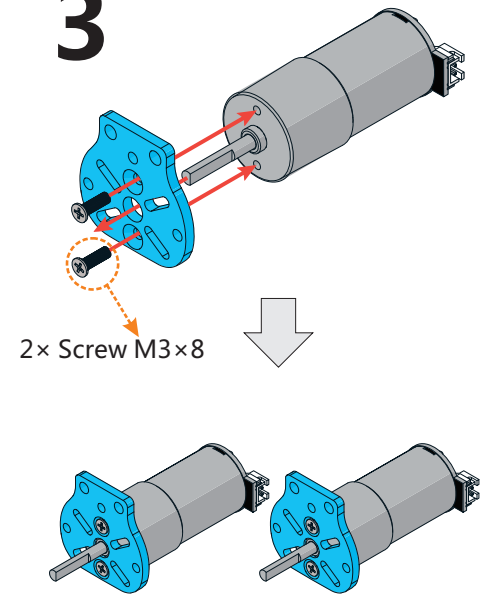
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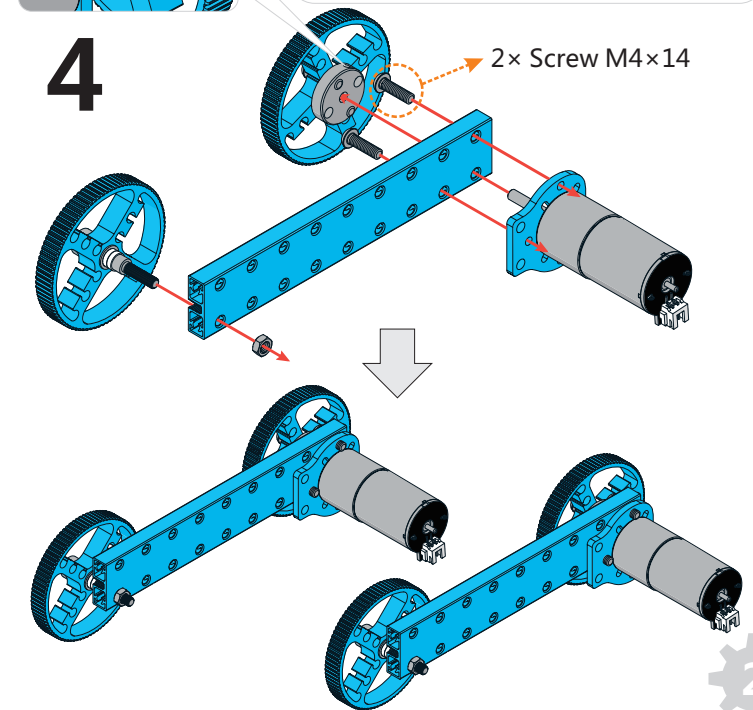
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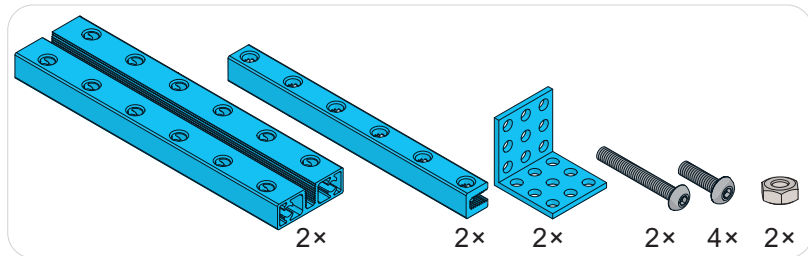


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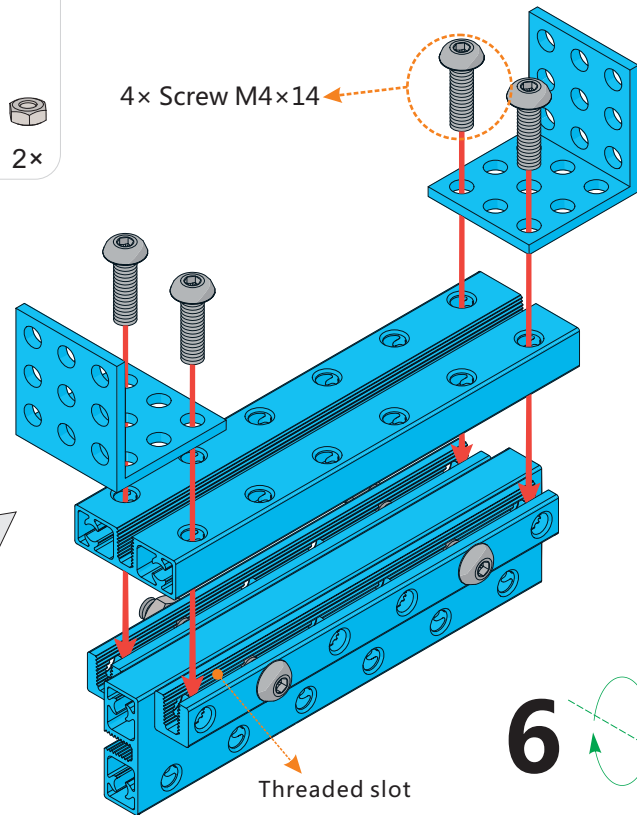
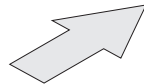
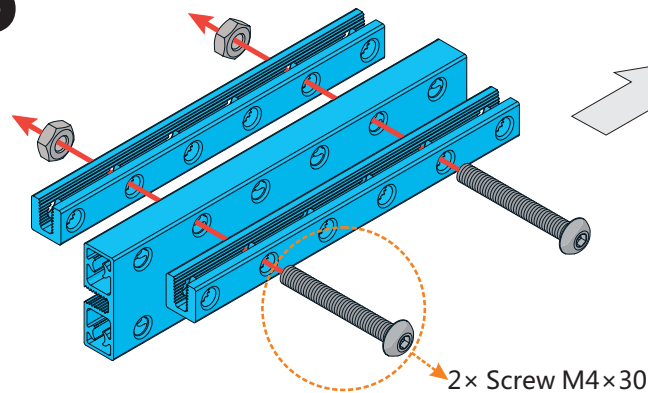


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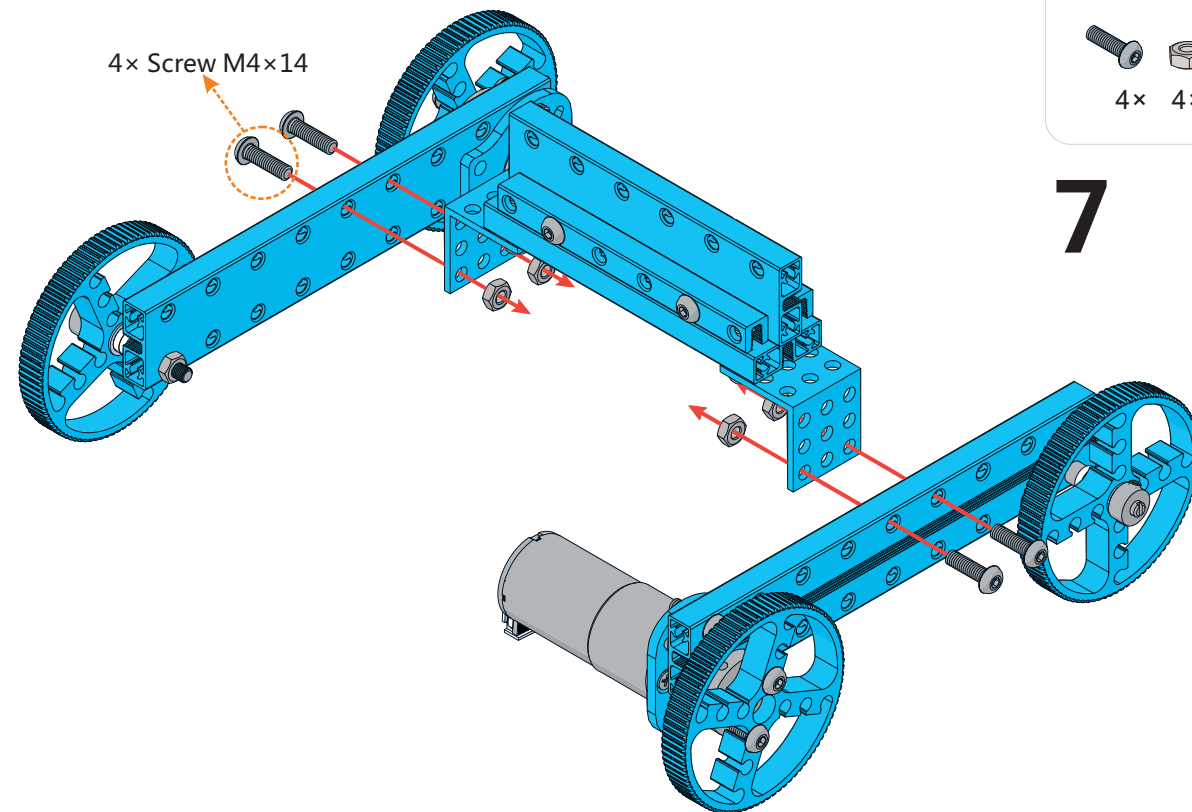




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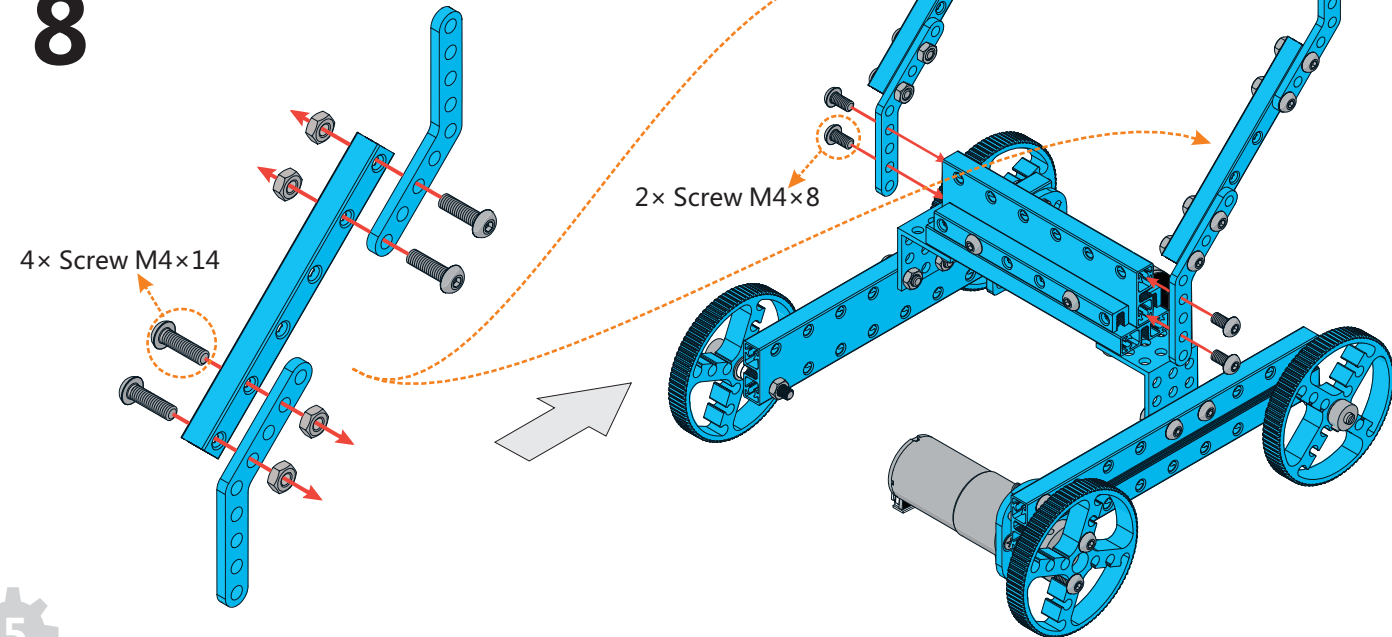
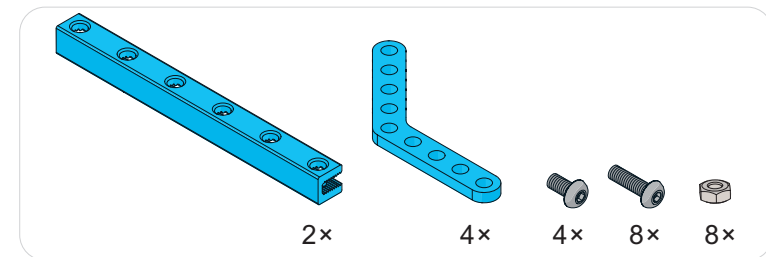
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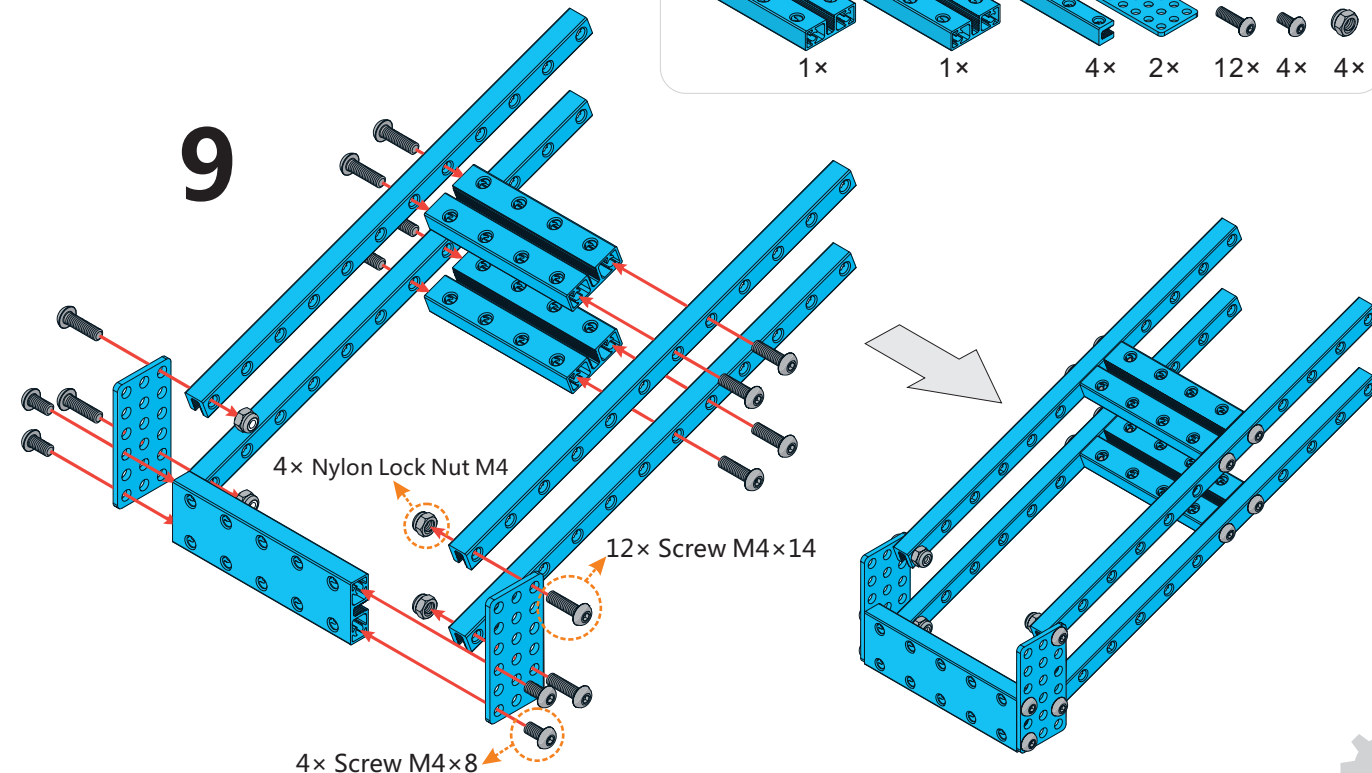
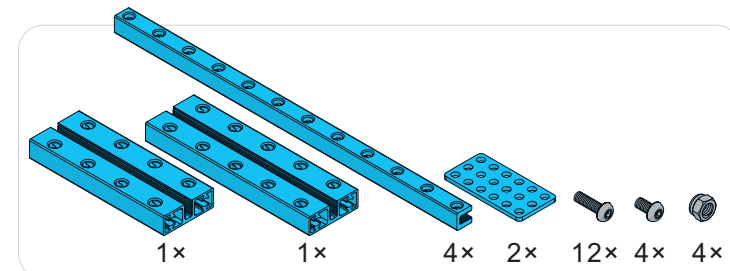
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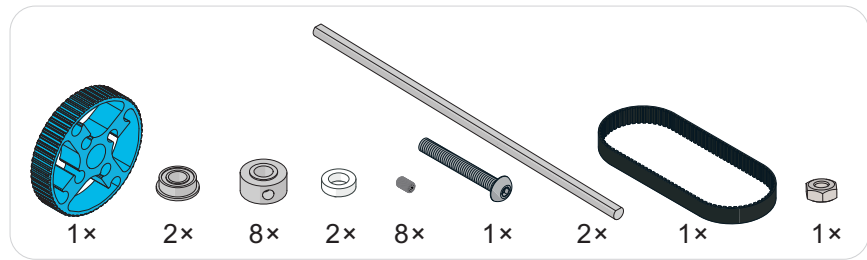


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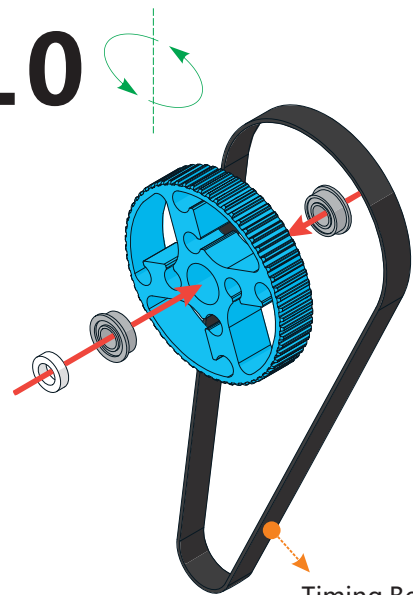


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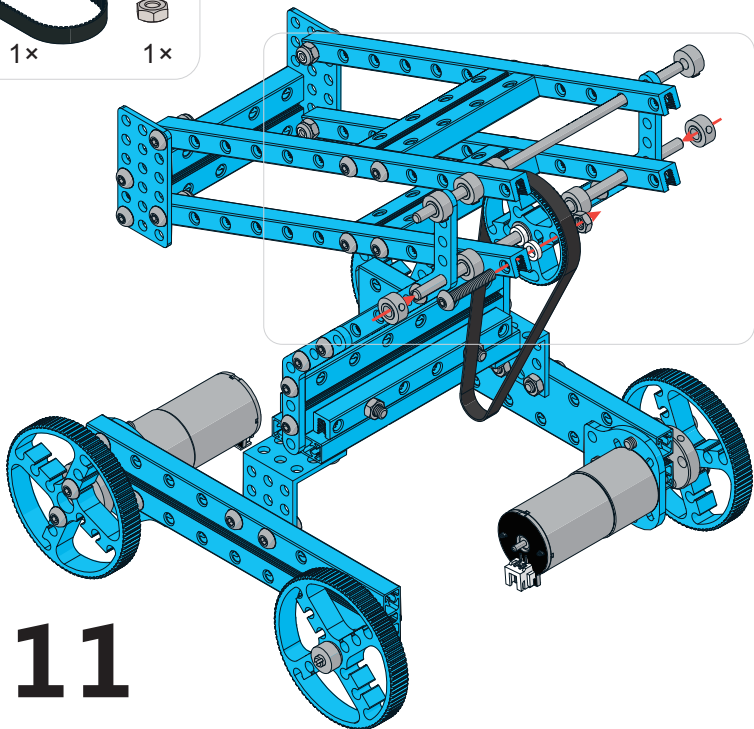




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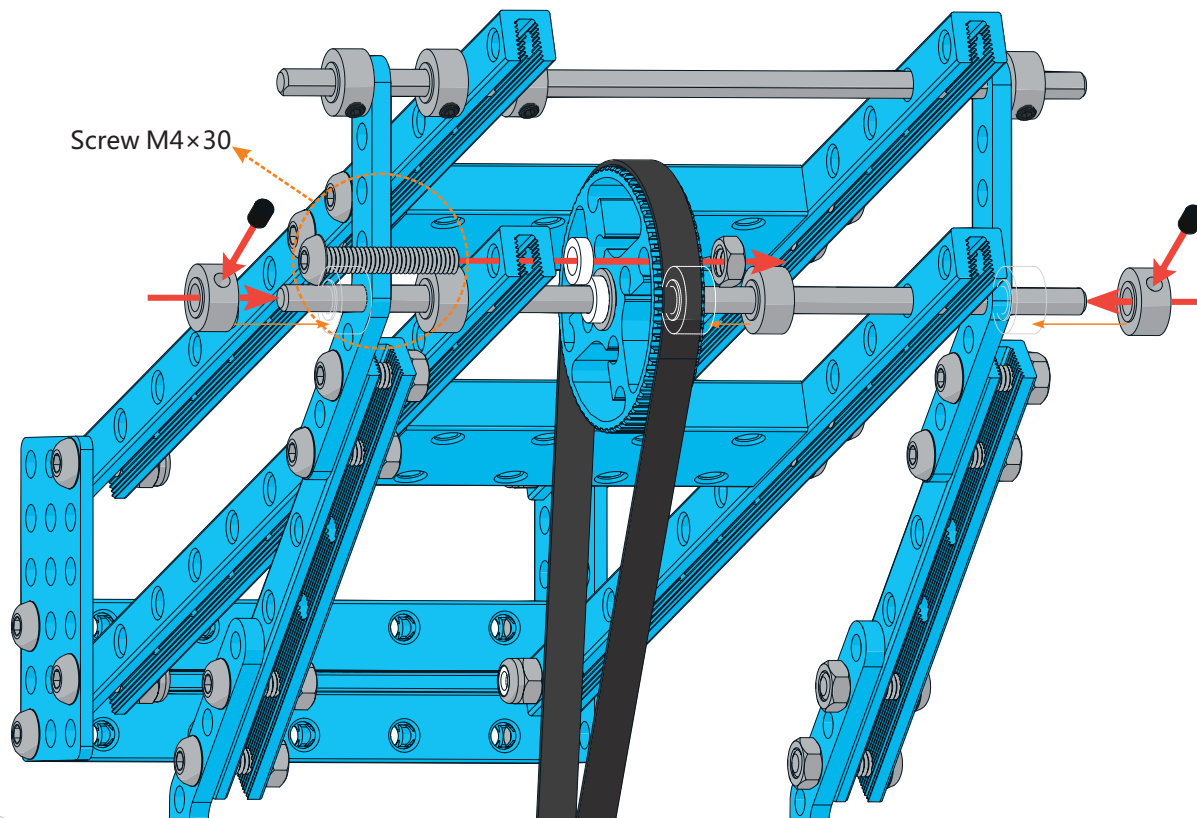


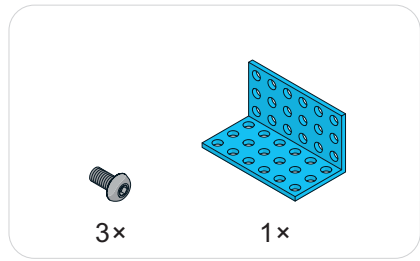
Timing Belt 98MXL



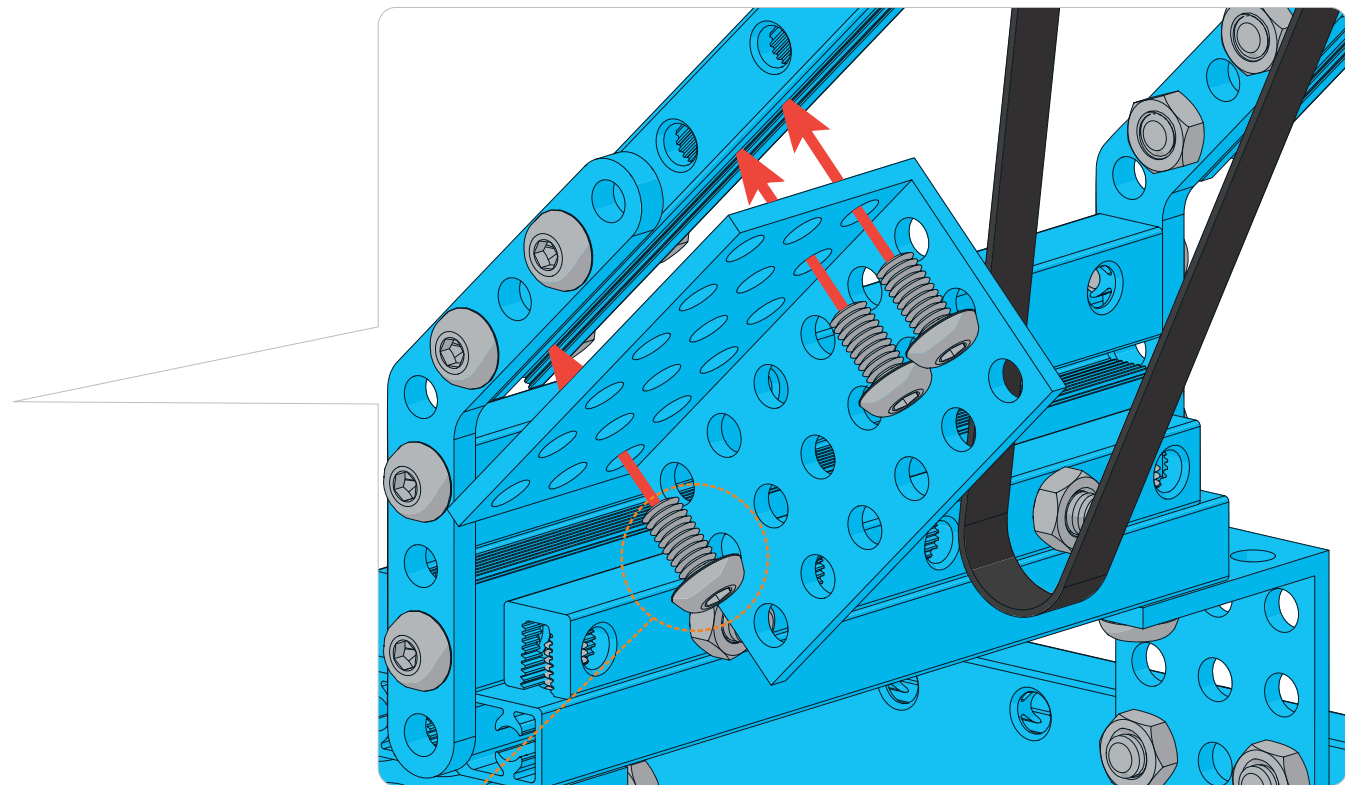
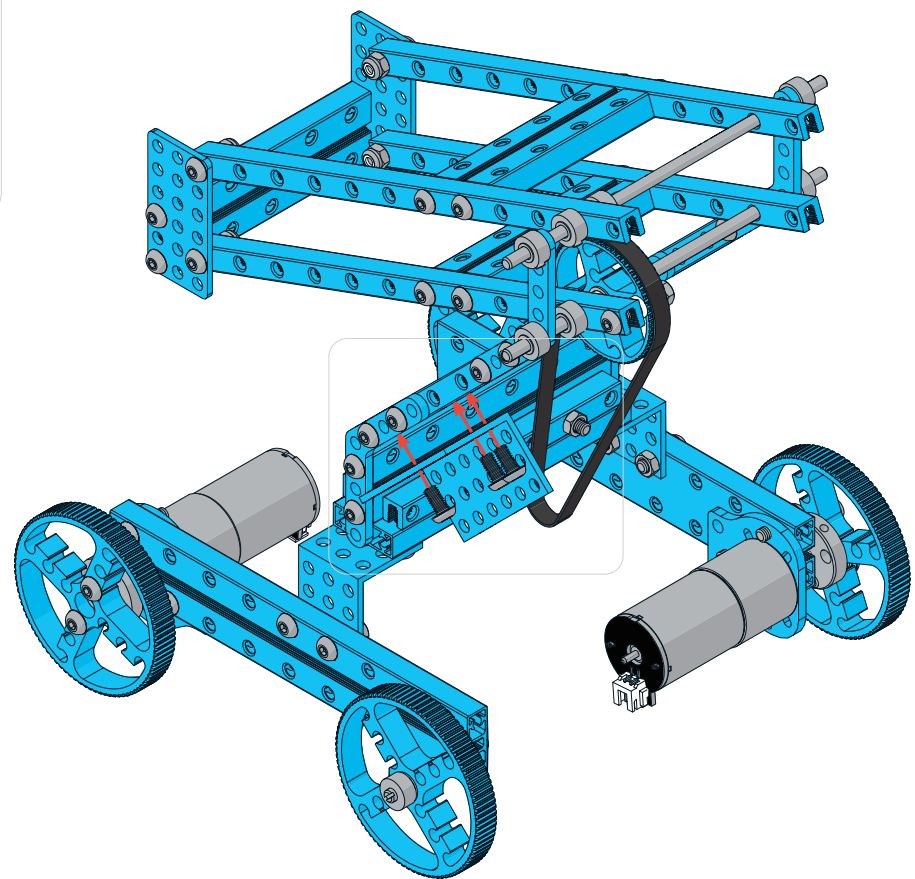
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Screw M4x30

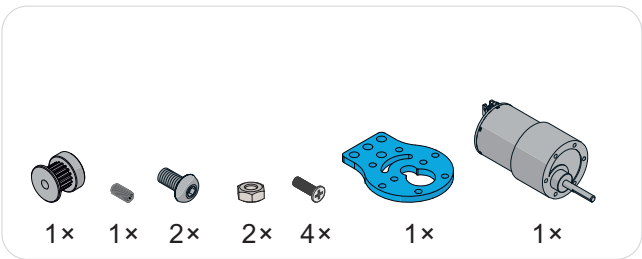




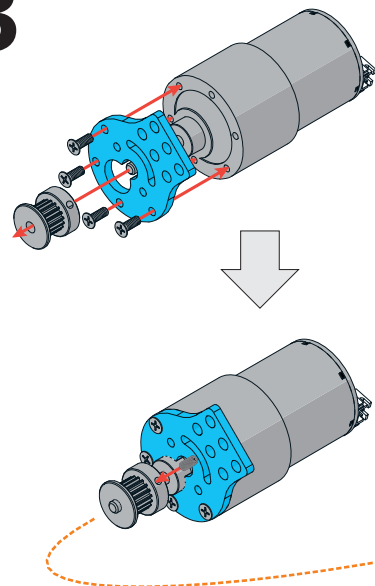
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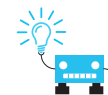
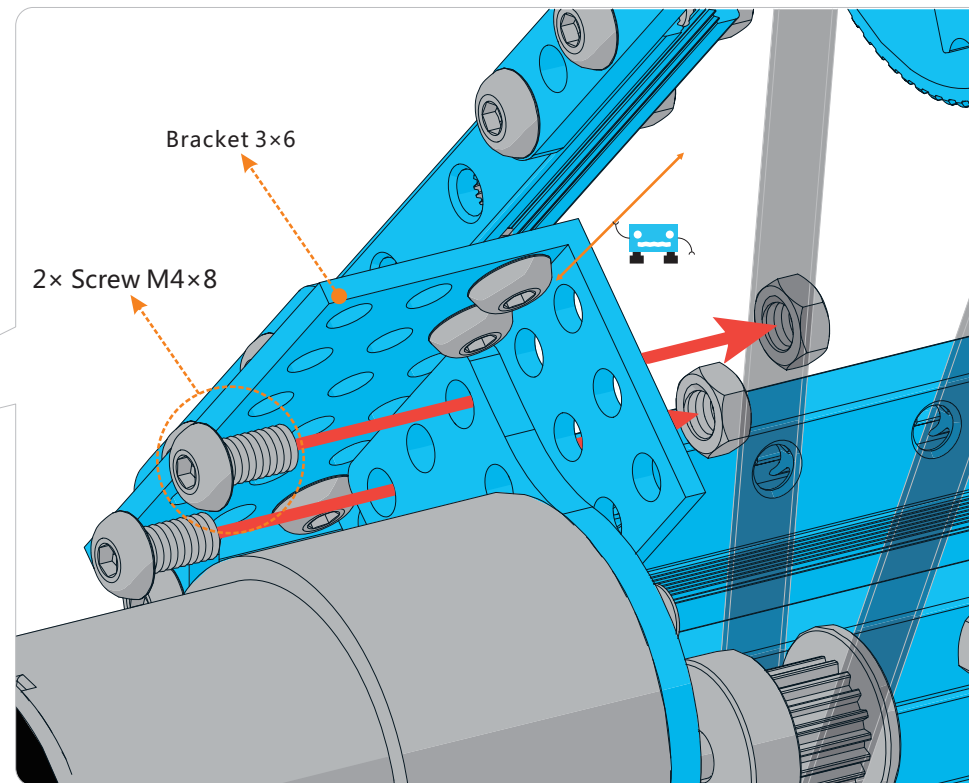
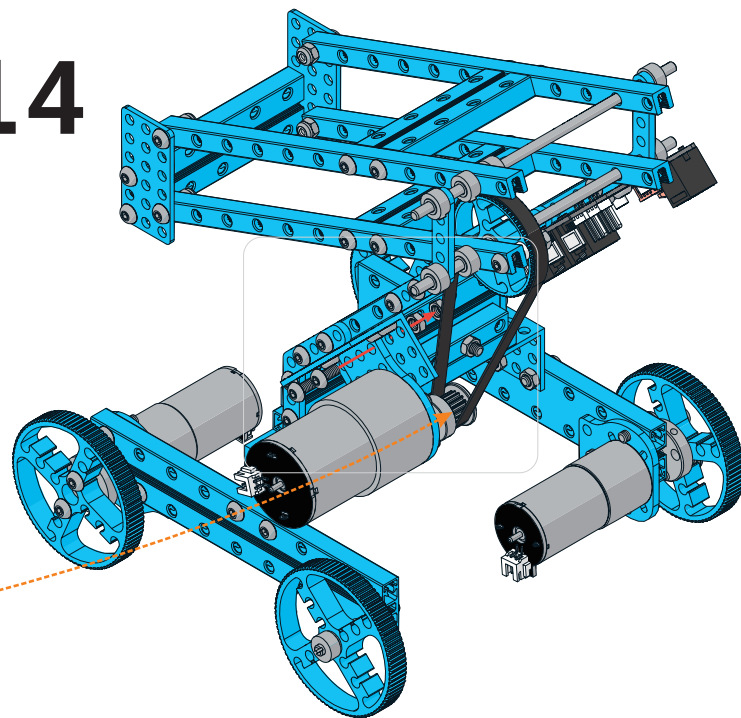
3x Screw M4x8



13



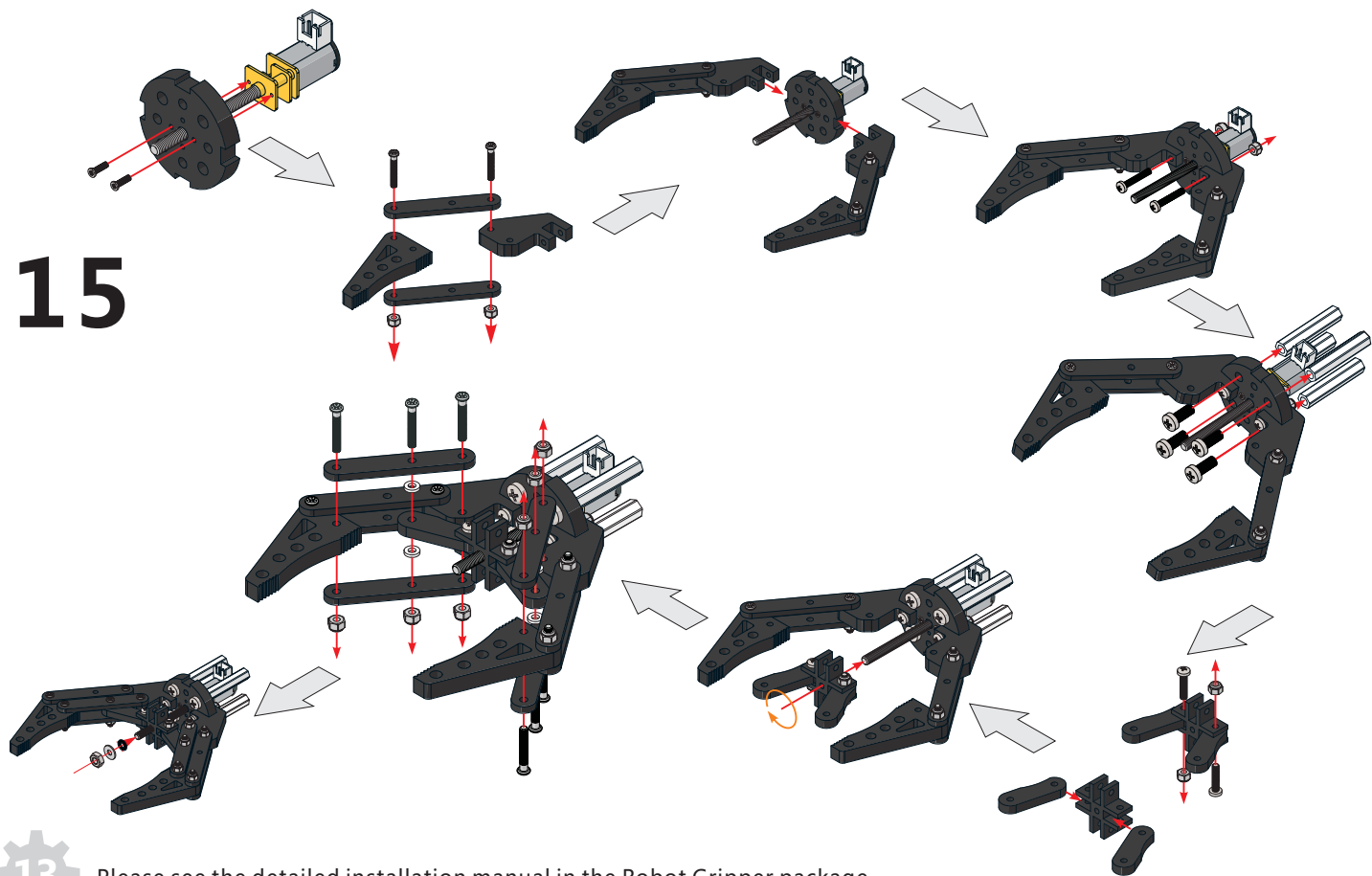
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You may need to adjust the position of Bracket 3x6 to tension the timing belt.

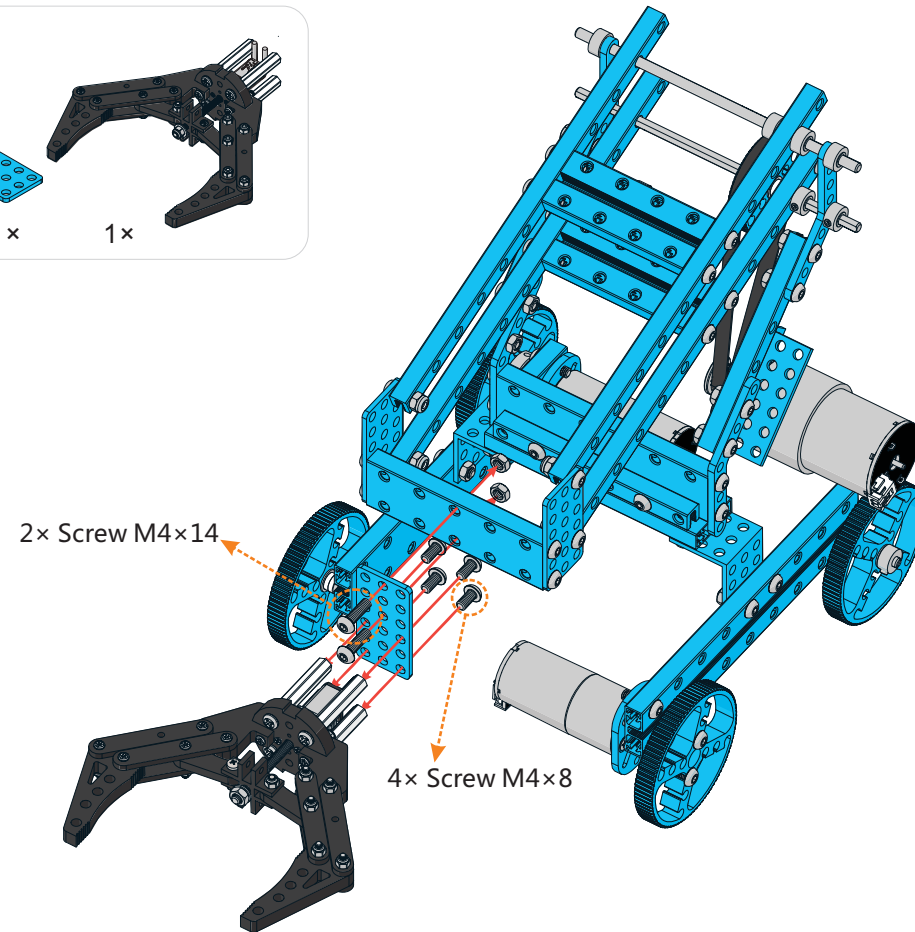
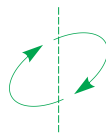
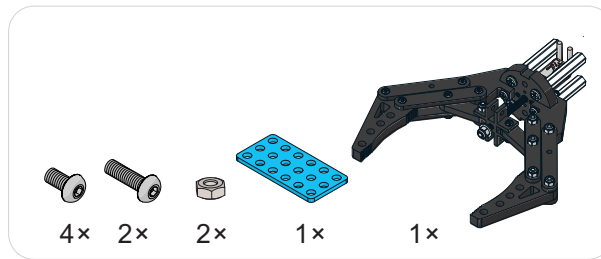


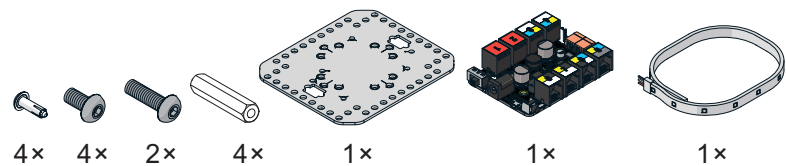
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Please see the detailed installation manual in the Robot Gripper package.

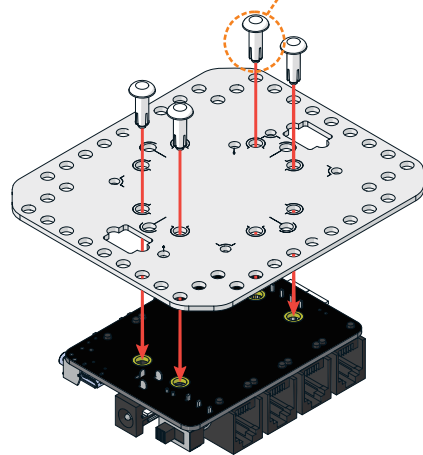
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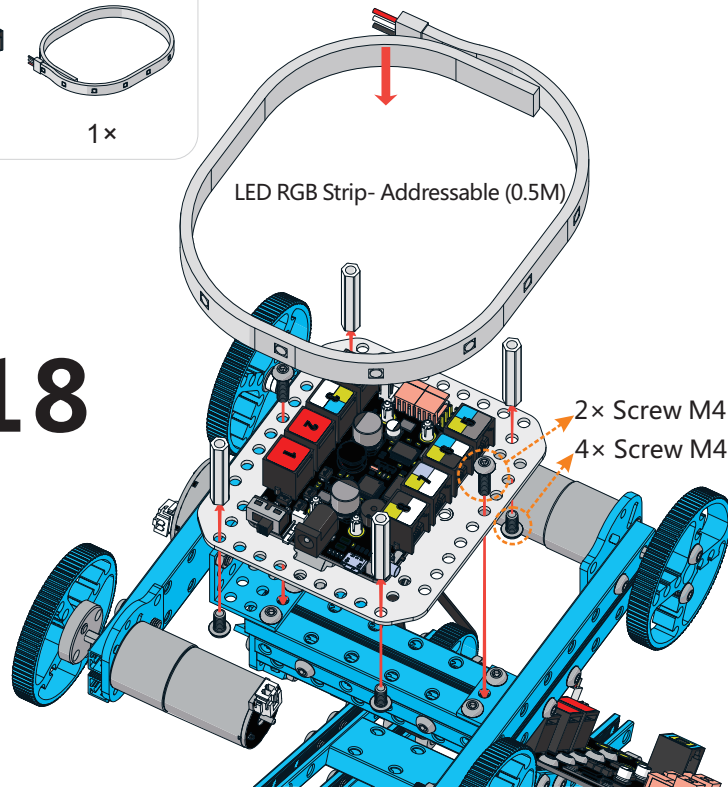
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4x Plastic Rivet R4120

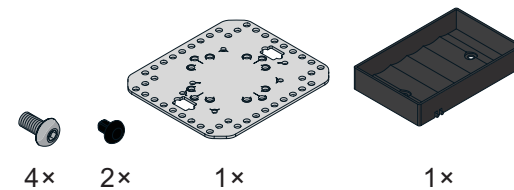


18

LED RGB Strip- Addressable (0.5M)



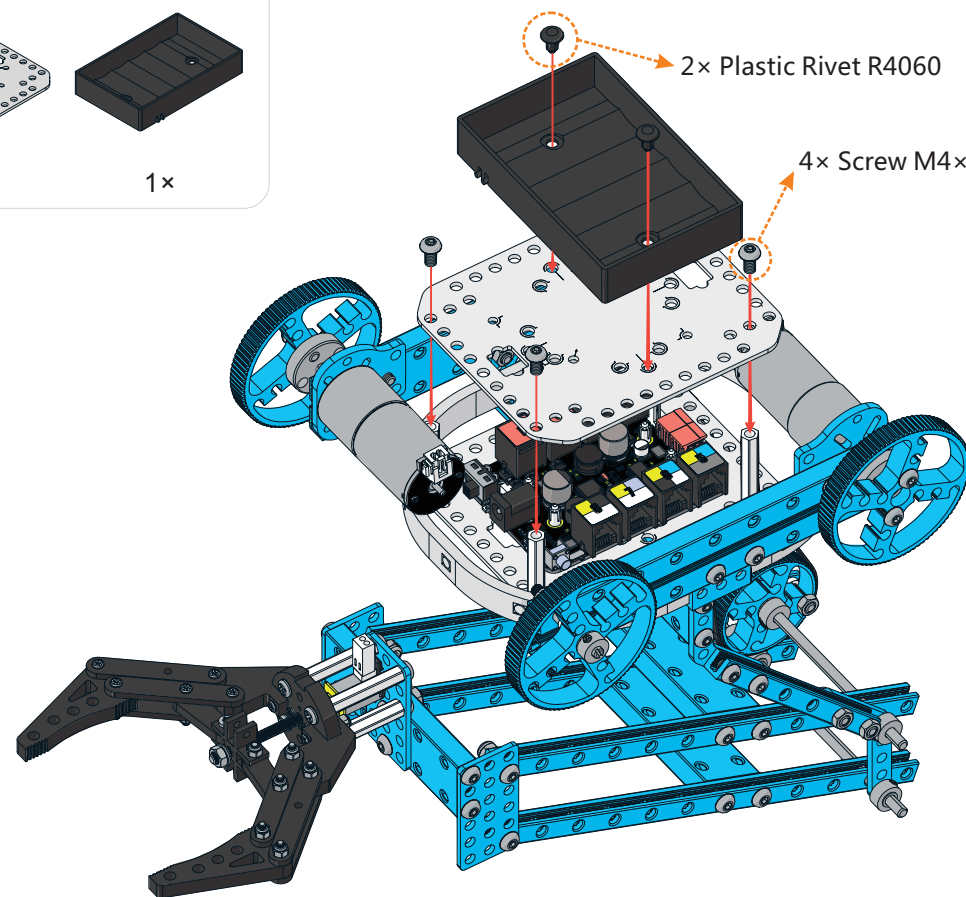
2x Screw M4x14
4x Screw M4x8

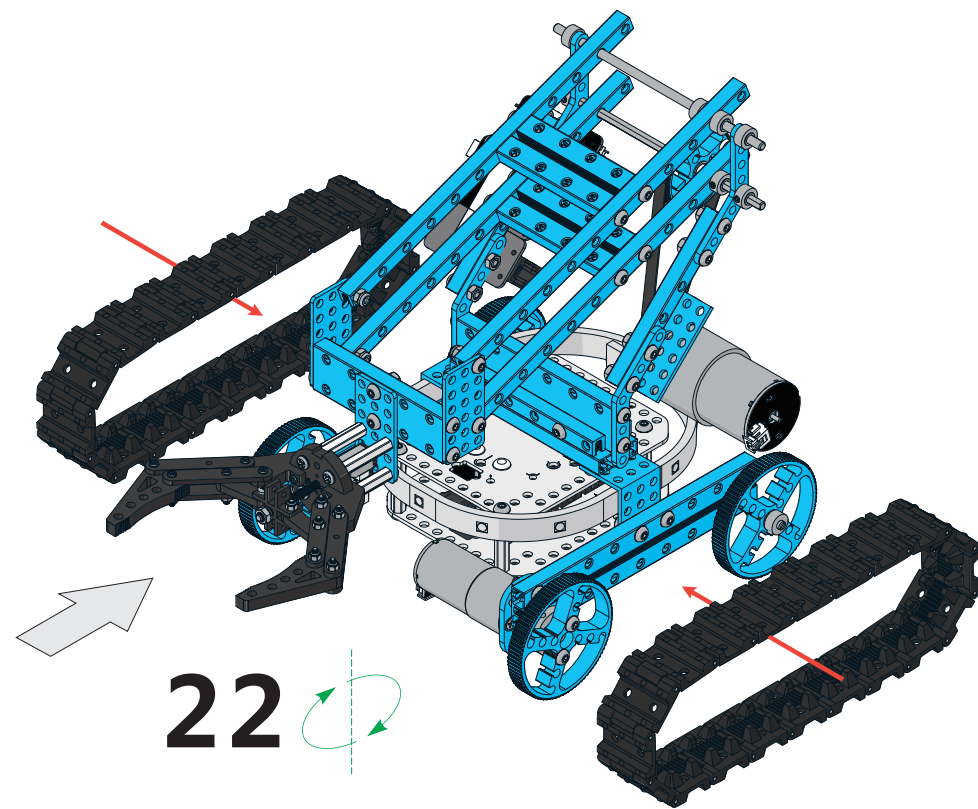
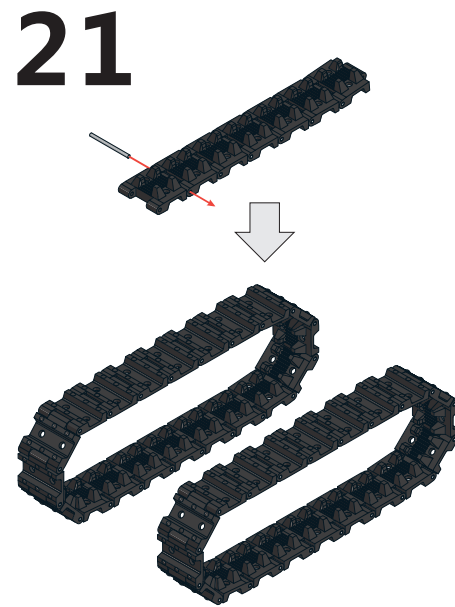
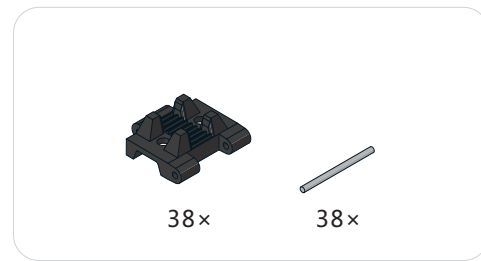
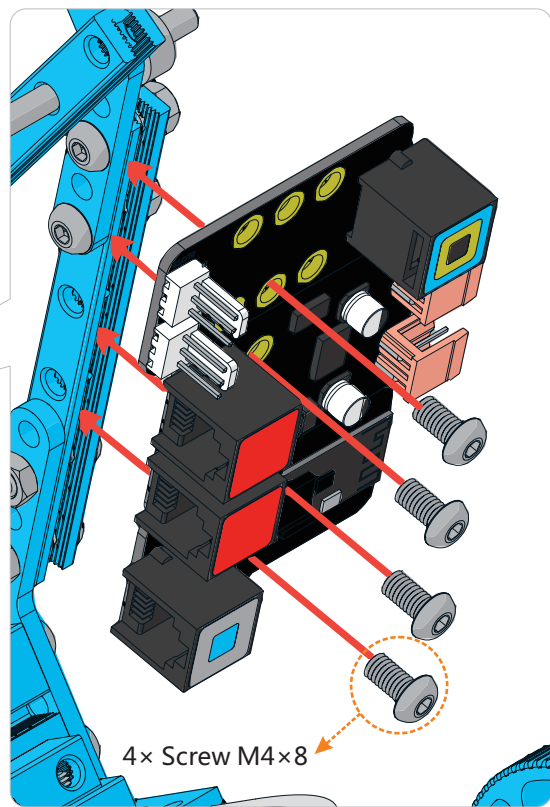
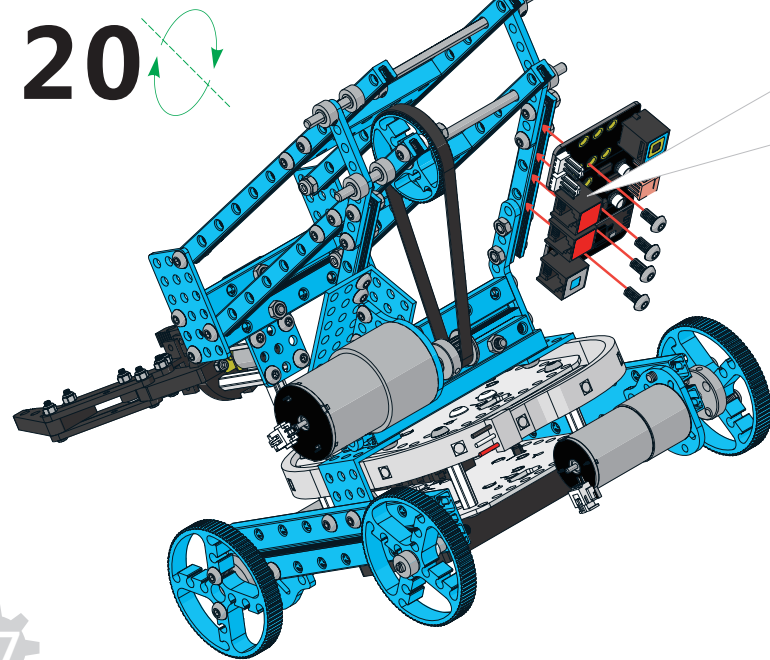
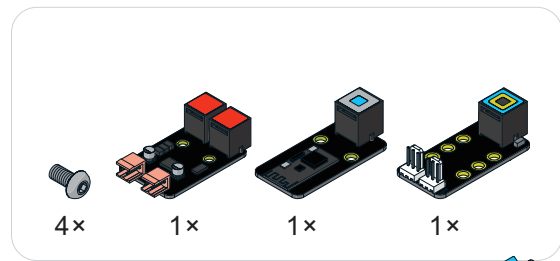


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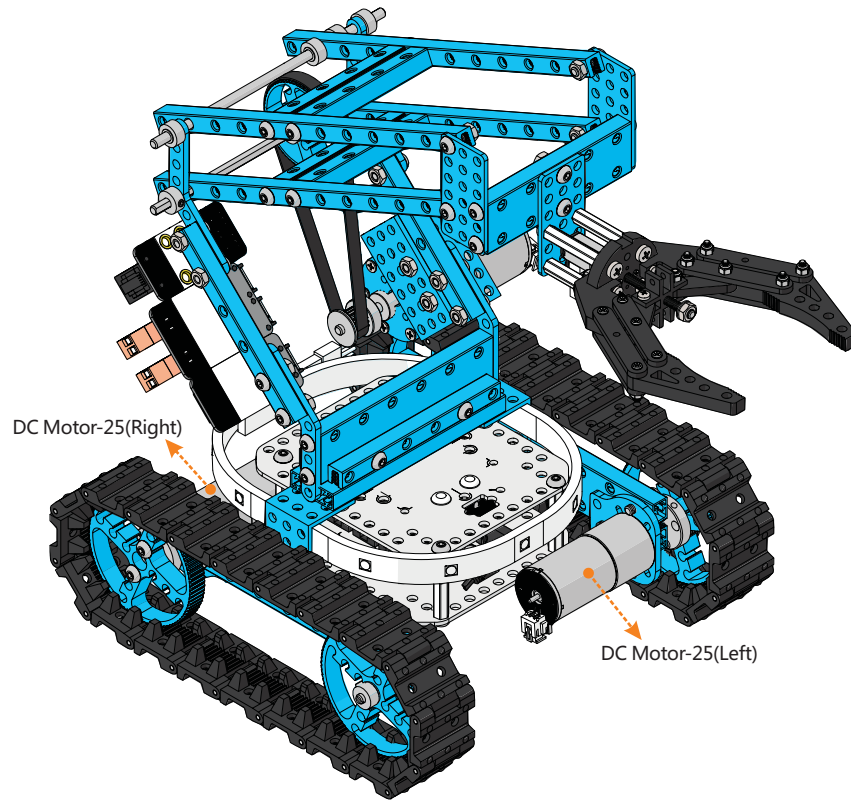
2x Plastic Rivet R4060

4x Screw M4x8



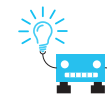
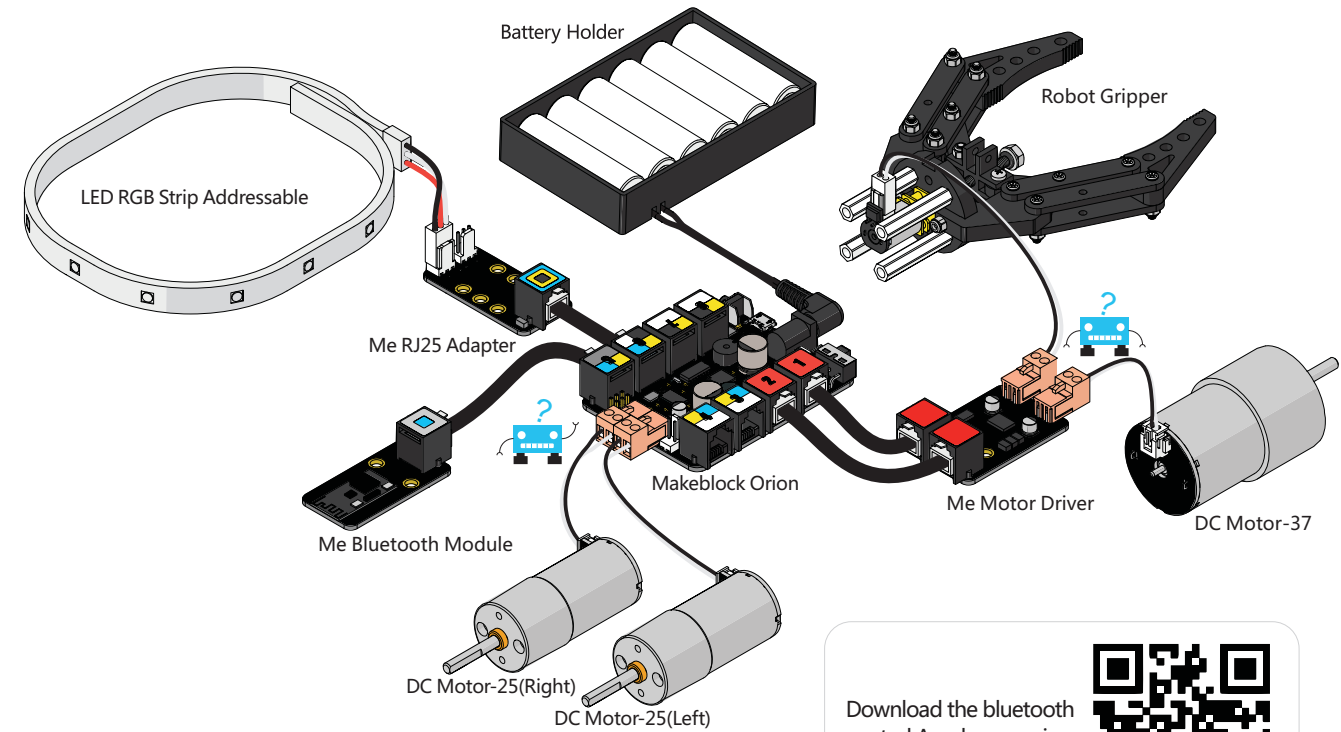


For additional robot ideas,
see the 3D models at www.makeblock.cc.



Wiring and Programming

To reduce the electromagnetic interference,
Please consider to add the magnetic ring to
the wire which connected to motors.



You may need to switch the order of two
wires to correct the rotation direction.

Download the bluetooth
control App by scanning
the QR code

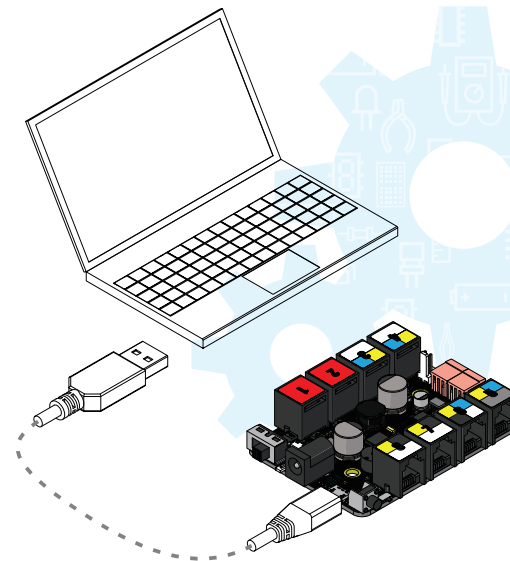


If you want to create advanced and customized programs, please refer to this part.

Programming Guide

Makeblock Orion Driver Installation

The USB interface of Makeblock Orion uses the chip CH340, you may need to install the chip CH340 drivers manually.

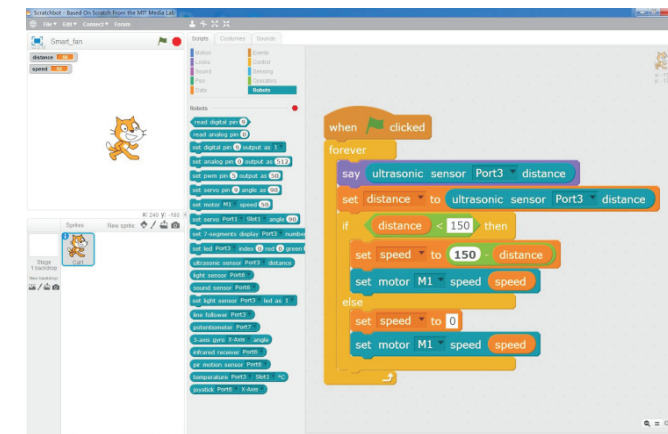


Visit the following URL for more details:
http://learn.makeblock.cc/driver_installation/

Working with Scratch

—Hack the Physical World

Makeblock platform supports graphical programming language Scratch, you can simply drag and joint the blocks to run your creations without difficult coding.



Visit the following URL for more details:
<http://learn.makeblock.cc/learning-scratch>

Scratch is a programming language and online community where you can create your own interactive stories, games, and animations — and share your creations with others around the world. In the process of designing and programming Scratch projects, young people learn to think creatively, reason systematically, and work collaboratively. Scratch is a project of the Lifelong Kindergarten group at the MIT Media Lab. It is available for free at <http://scratch.mit.edu>

Working with Arduino IDE

—Learn Programming the Fun Way



Learn and play at the same time!
Enjoy it your own way.

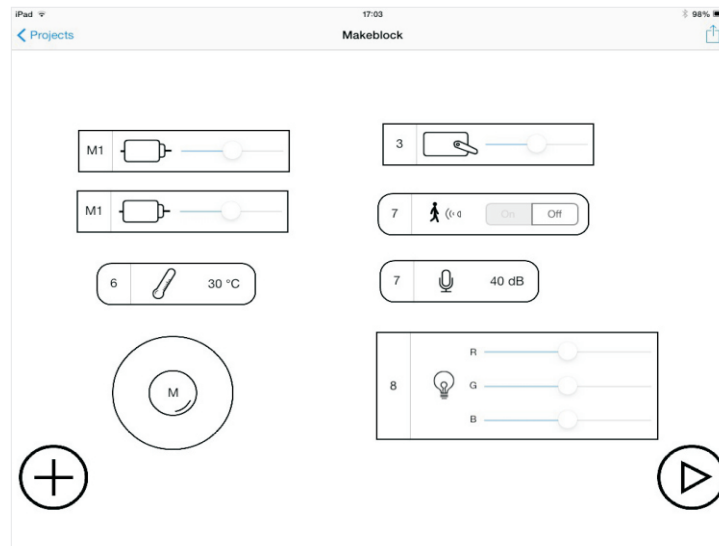
Visit the following URL for more details:
<http://learn.makeblock.cc/learning-Arduino>

Arduino is an open-source electronics prototyping platform based on flexible, easy-to-use hardware and software. The Arduino software consists of a development environment (IDE) and the core libraries. The IDE is written in Java and based on the Processing development environment. The core libraries are written in C and C++ and compiled using avr-gcc and AVR Libc.

Working with the Makeblock App

—Construct It Once, Control It Everywhere

Install the Makeblock app to control your creations with your Android or iOS device.



Visit the following URL for more details:
<http://learn.makeblock.cc/learning-APP>

Construct Your Dreams