

# Assembly Guide

## Forklift



MakerWorld

## **Charging Safety Instructions:**

- 1.The lithium battery in this product must be charged only with the included USB charger. It is recommended to connect the USB charger directly to a computer USB port. If using an external adapter, choose a standard USB charger with 5V 1-2A output. Do not use any charging device not officially recommended.
- 2.Never use mobile fast chargers or high-voltage/current adapters (such as 9V/12V), as this may result in device damage, overheating, or safety accidents.
- 3.When charging, ensure the device is placed in a well-ventilated, dry area away from flammable materials, and do not cover the device.
- 4.Do not charge in environments with high temperature, humidity, or direct sunlight.
- 5.Do not charge the device unattended.
- 6.If you notice abnormal conditions (such as overheating, deformation, odor, or smoke), stop charging immediately and contact customer service.
- 7.Do not disassemble or modify the product or charger yourself.

## **Disclaimer:**

The company assumes no responsibility for any device damage, malfunction, fire, personal injury, or other losses caused by the use of non-original or non-officially recommended chargers/cables, chargers with output above 5V or 2A, or charging in improper environments, in violation of this manual. Users must strictly follow the product's safety instructions to ensure personal and property safety.

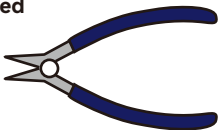
## Additional Tools You'll need



Transparent Tape



Instant Glue



Diagonal Cutters



Tweezers



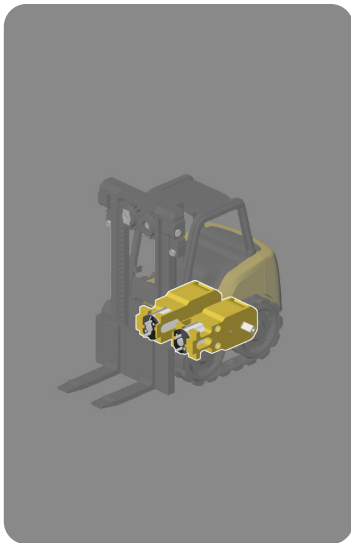
PH1 Philips Driver



H1.5 Hex Driver

- Please ensure safe use of sharp tools and instant glue; safety first in everything you do!
- The model contains many small parts. Please prepare a container to store them and prevent loss.
- For parts to be glued together, first assemble them loosely to check the fitting before applying glue.
- Depending on your assembly skills, the assembly time can vary from 1 to 3 hours. If you encounter any troubles, do not feel discouraged. Please leave a message on the model page or seek help in the community.
- Let's build it!

## Reduction Gearbox Assembly



2x



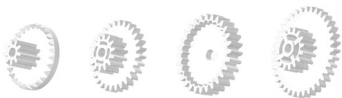
2x

Printed Parts





Find the accessories by referring to the name on the label.



1x

1x

1x

1x



1x



2x

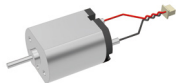


2x



1x

**1:48 Single-axis Plastic Reduction  
Gear Kit (1PCS) - LA016**



1x



1x

**Accessories**

**1:48 Single-axis Plastic Reduction  
Gear Kit (1PCS) - LA016**

**1:48单轴减速齿轮包 LA016**

Manufacturer: Shenzhen TuoZhu  
Technology Co., Ltd.

生产商: 深圳拓竹科技有限公司

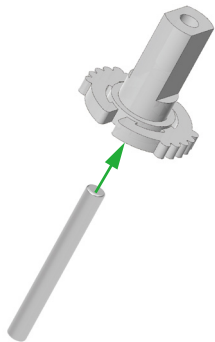


6

937285

502223

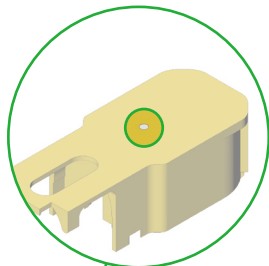
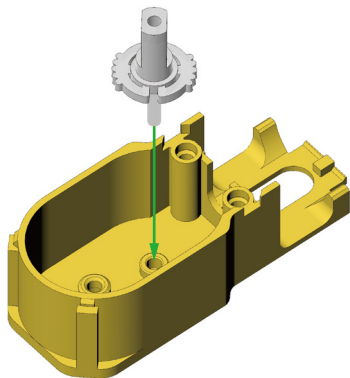
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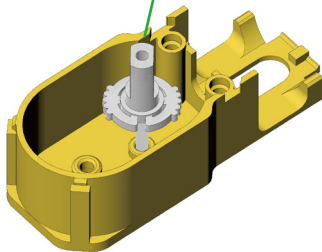
During **Steps 1-5**  
This accessory serves as an assembly aid.  
It will be used again in **Step 7**.



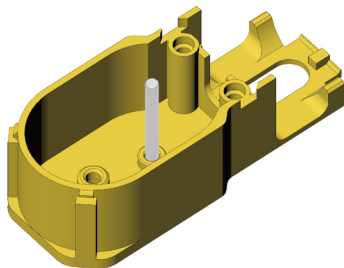
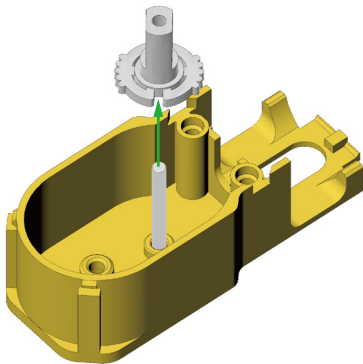
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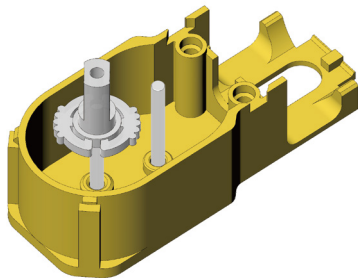
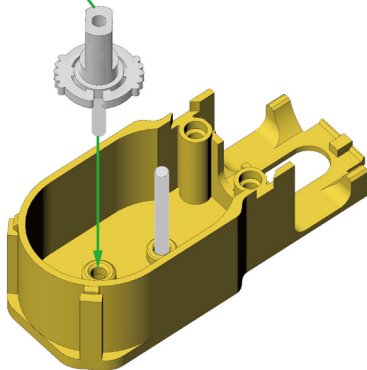
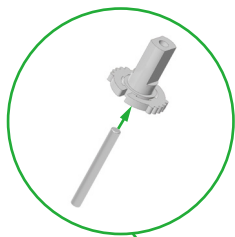
Check from the rear of the printed parts if the pin is fully seated.



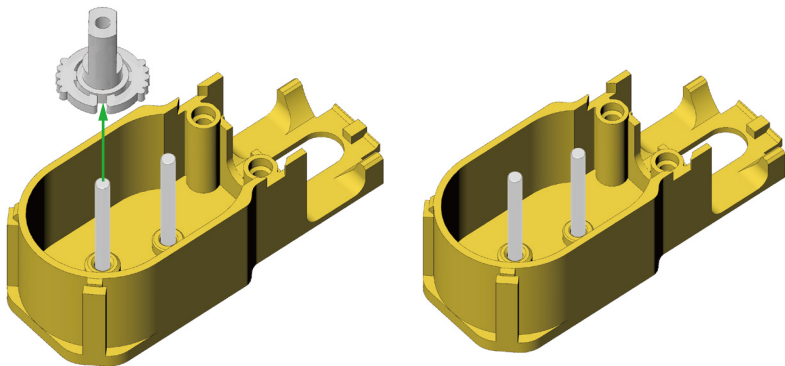
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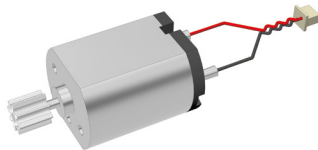
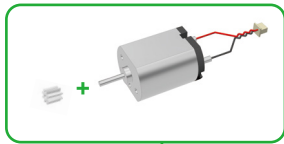
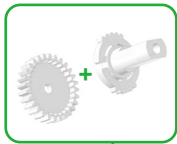
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5



6



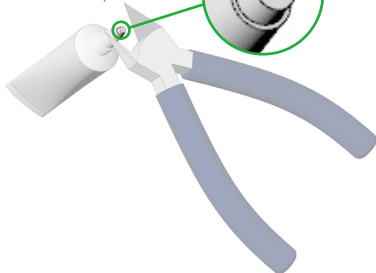
7



**Assemble the gears: Use lubricant.**

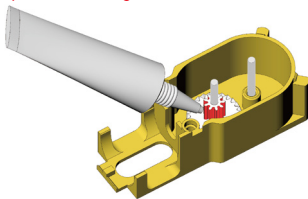
1

Open the lid and use diagonal cutters to cut it open.

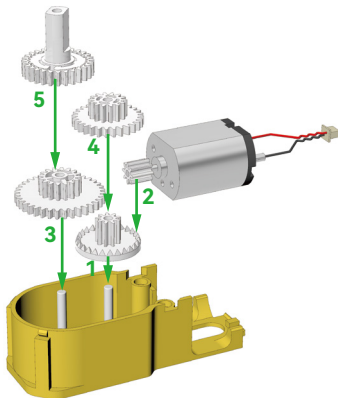
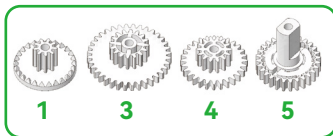


2

After assembling each gear, apply a small amount of lubricant to the highlighted position of the gear.

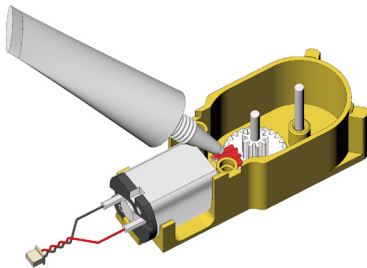


**Assembly the gears: Assembly sequence**

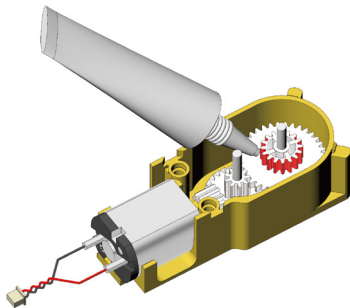




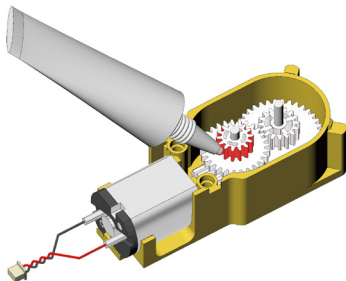
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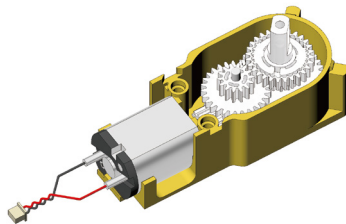
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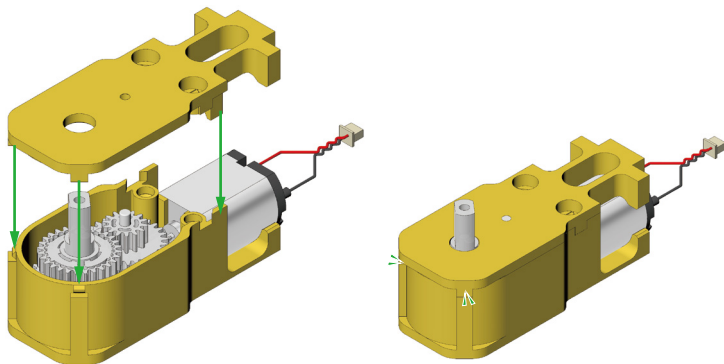
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6

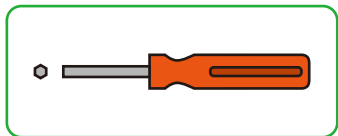


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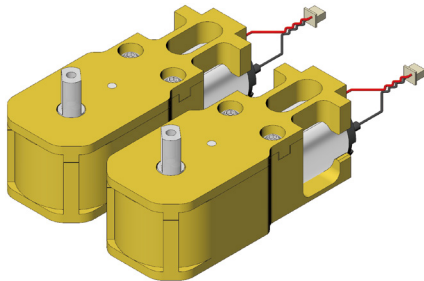
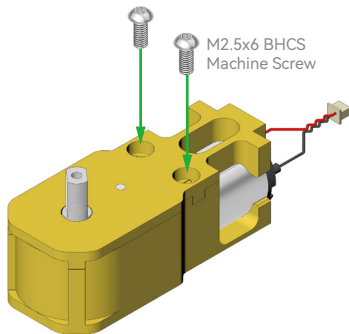


You will hear a 'click' when  
the parts are in place

9

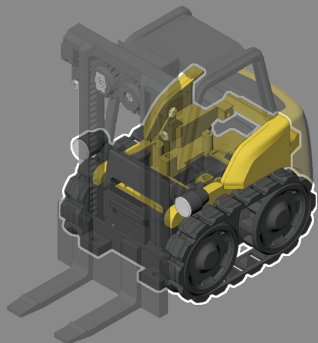


Please use H1.5 Hex Driver

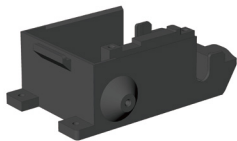


Repeat **Steps 1-9** to obtain **2** gearboxes

## Vehicle Body Assembly



1x



1x



2x



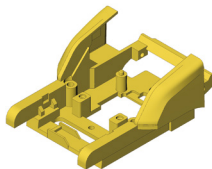
2x



4x



1x



1x

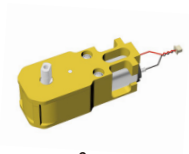


2x



2x

Printed Parts

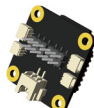


2x

**Completed assembled gearbox**



1x



Remote Control  
Receiver Assembly 1x



1x



10x

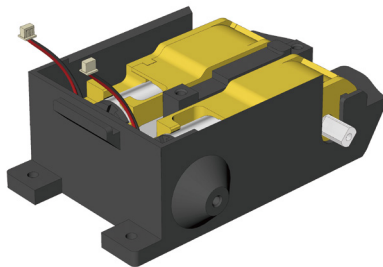
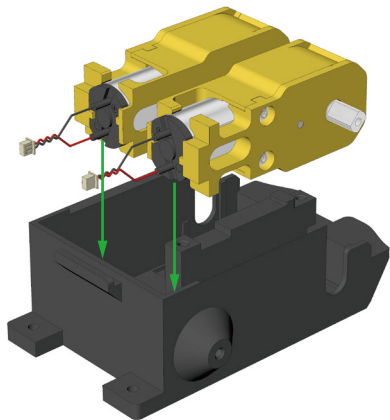


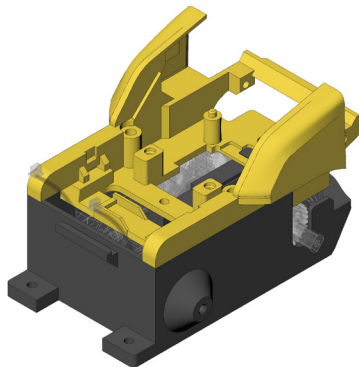
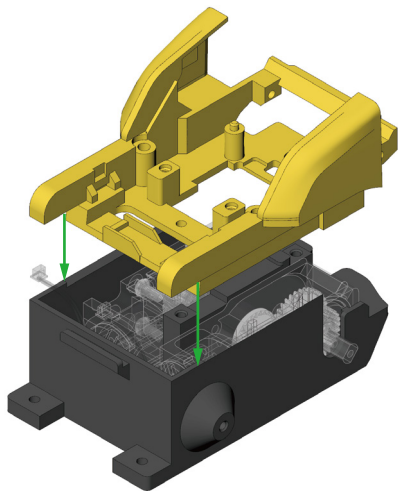
1x



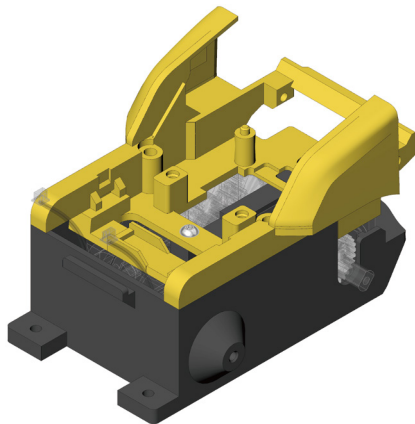
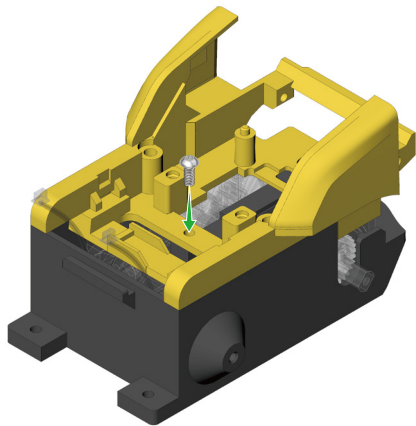
LED with IDC0.8 4PIN 2X

**Accessories**



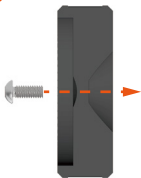


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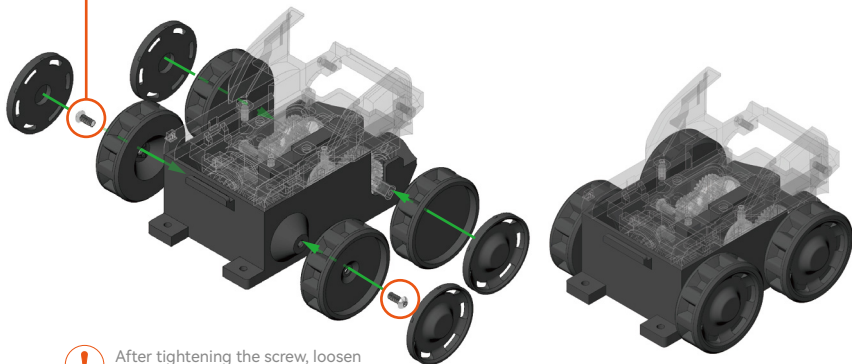




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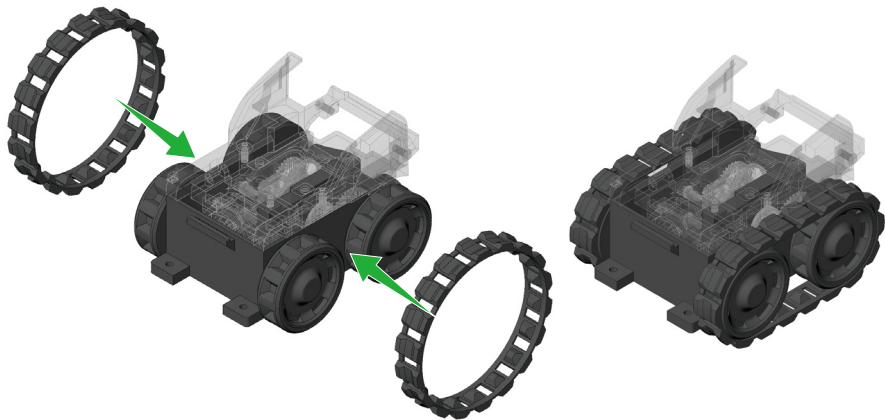


When installing the front wheel make sure to insert the screws from the side with the smaller groove.

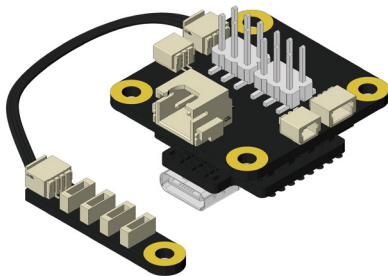
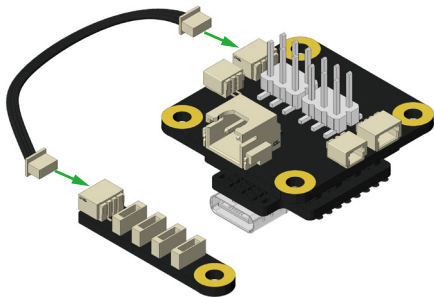


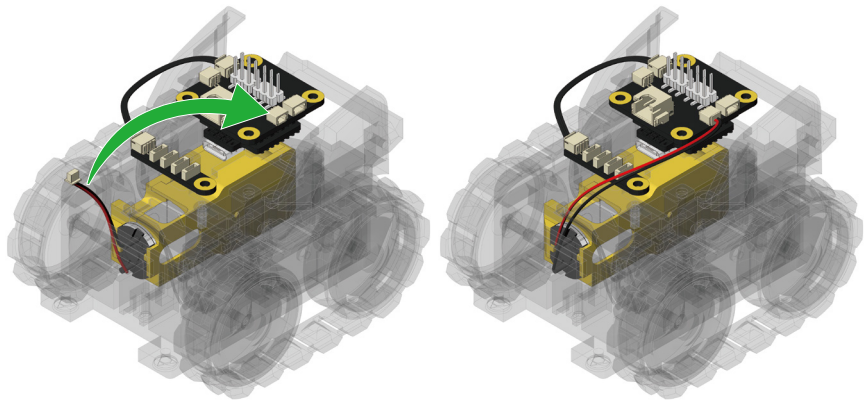
After tightening the screw, loosen it by **half to one** turn to ensure the front wheel can rotate smoothly

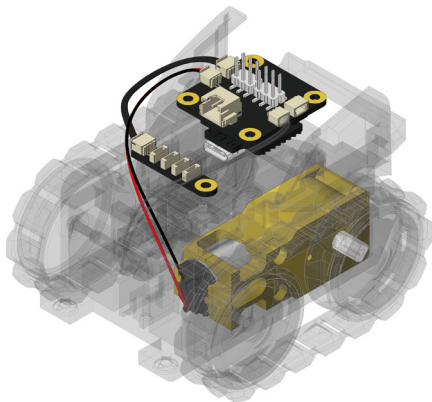
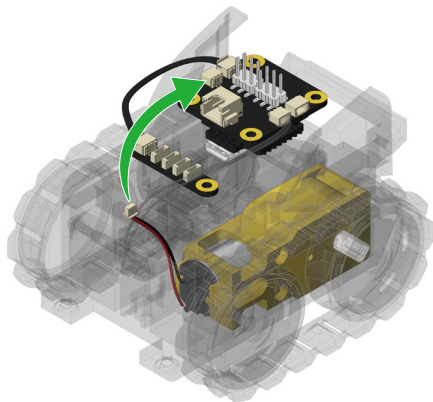
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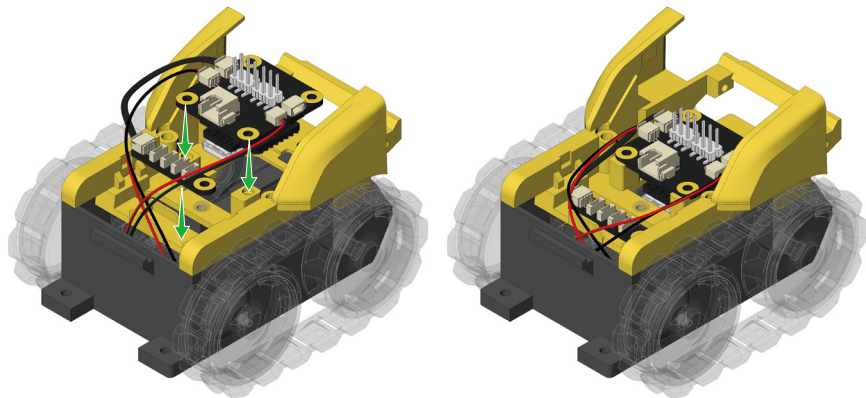


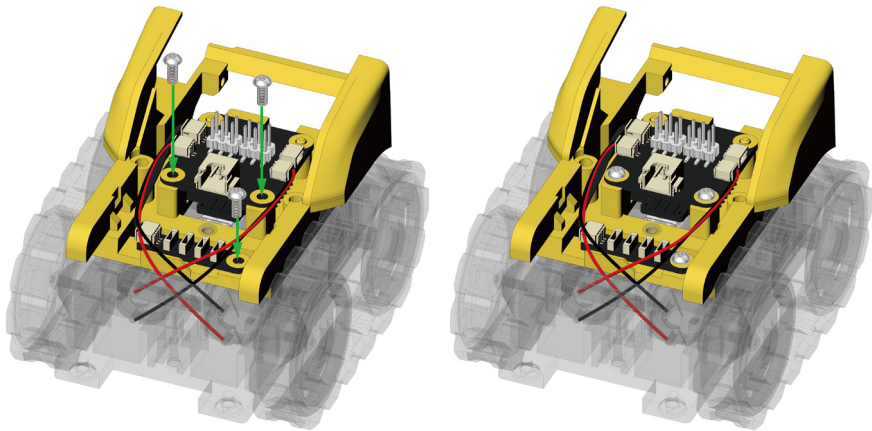
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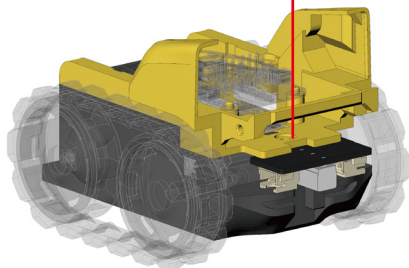
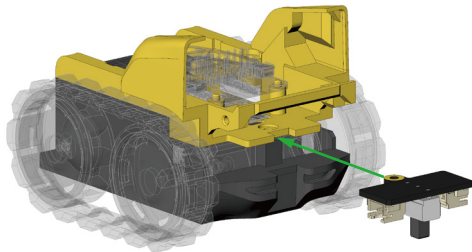
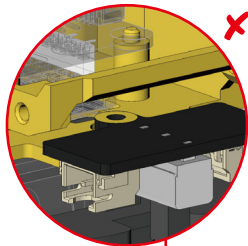
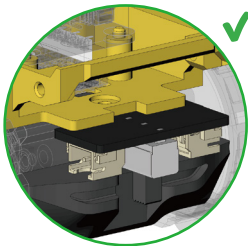




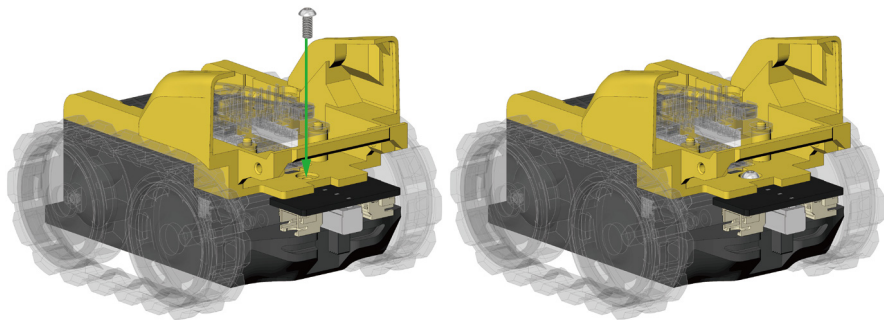


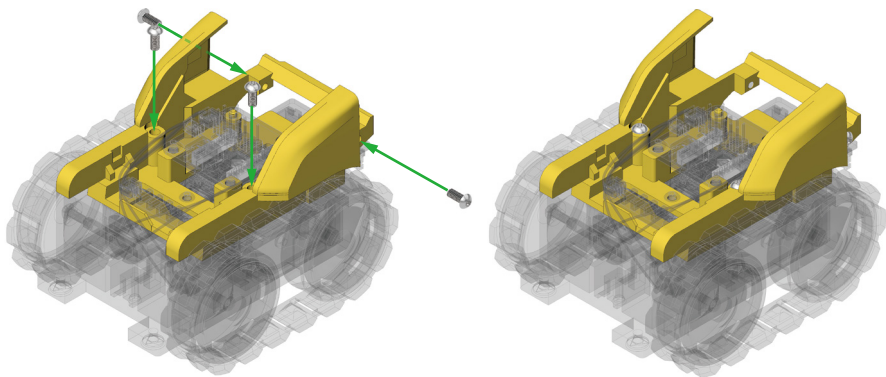


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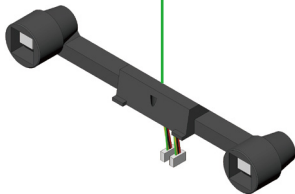
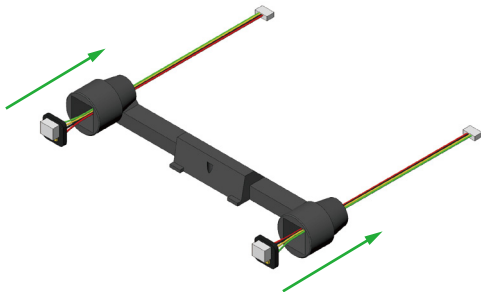
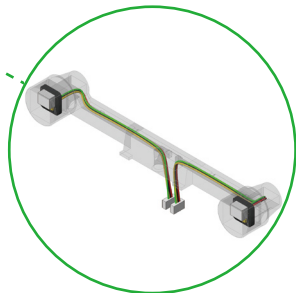
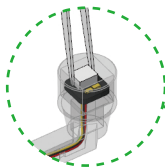


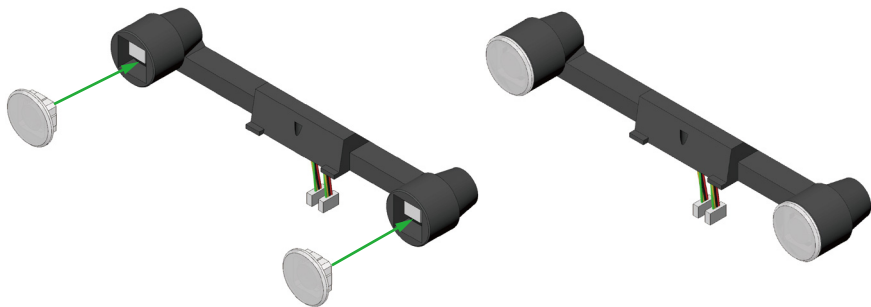


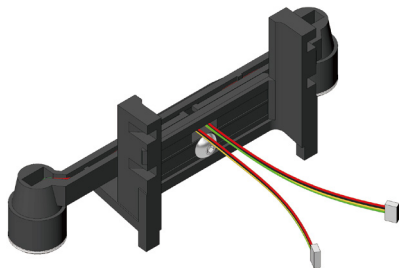
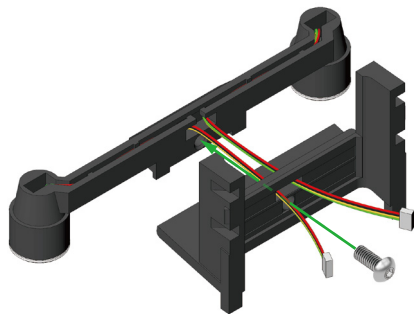
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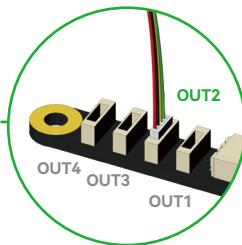
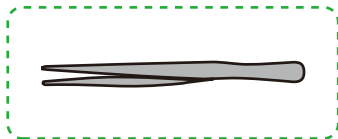
Use **tweezers** to gently place the LED board flat into the slot.



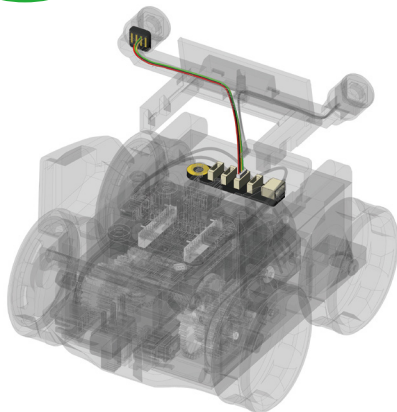
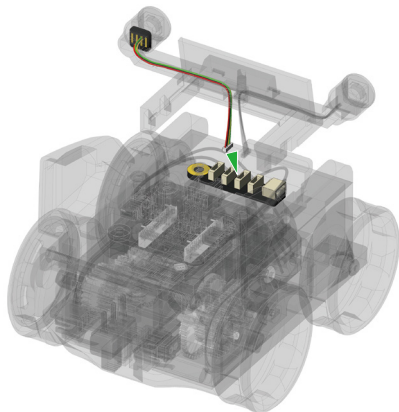


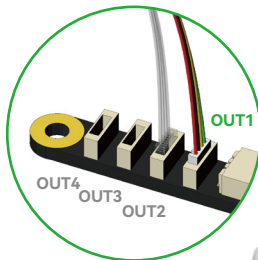


# 26

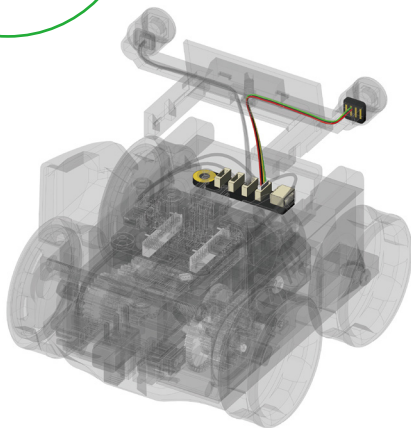
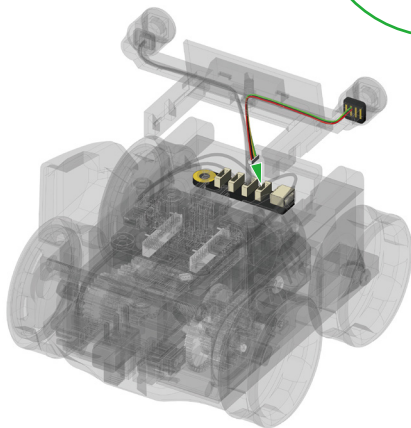


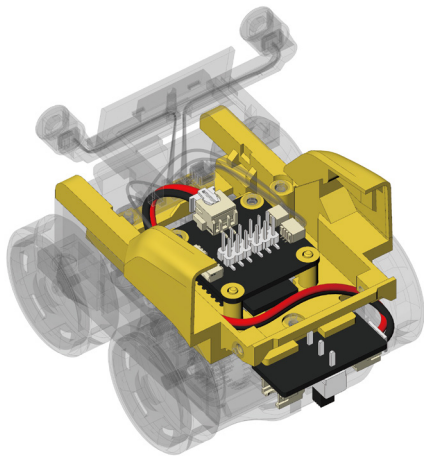
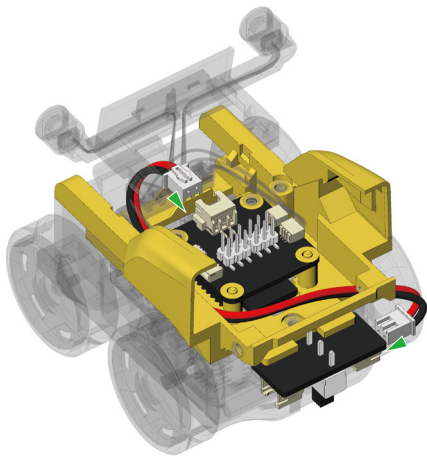
Use **tweezers** to insert the LED terminal into the **OUT2** slot and make sure the direction of the terminal matches the left diagram.





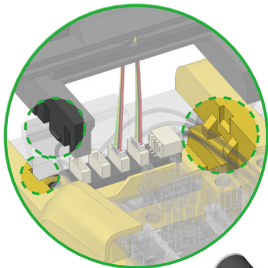
Use **tweezers** to insert the LED terminal into the **OUT1** slot and make sure the direction of the terminal matches the left diagram.



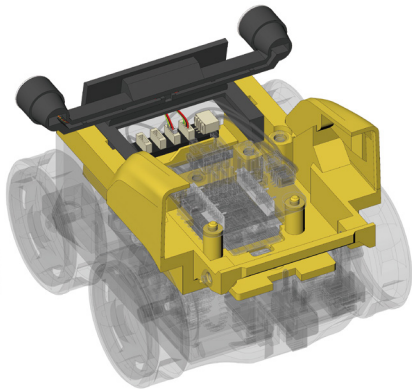
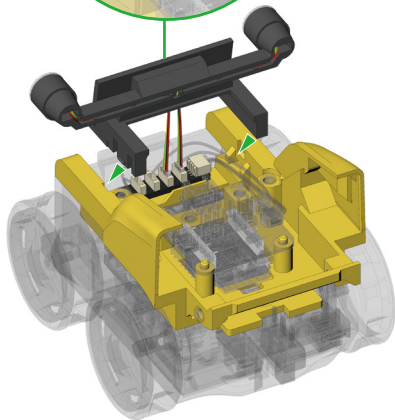




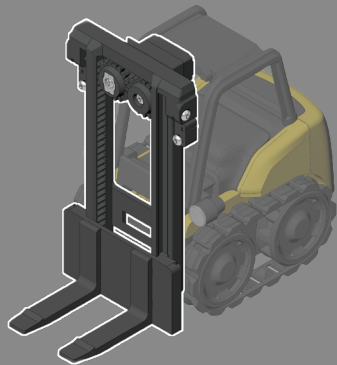
29



Pay attention to the assembly structure on the part and install it in the correct position.



## Front Fork Assembly



1x



1x



1x



2x



1x



1x

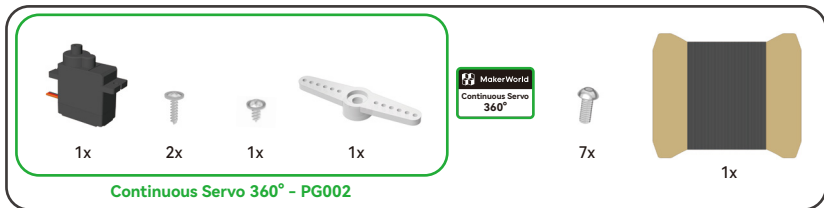


1x



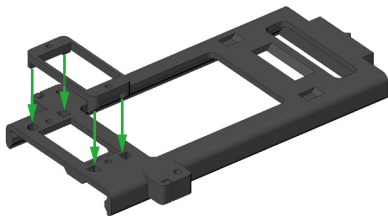
1x

Printed Parts

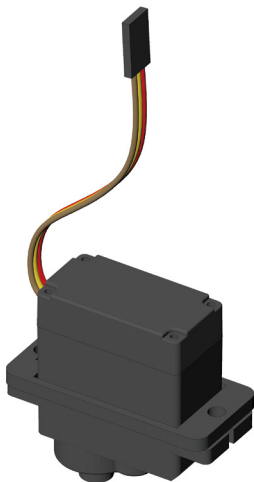
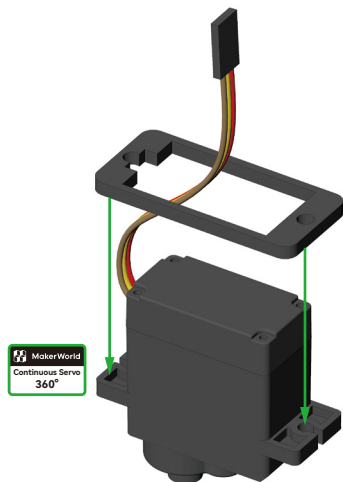


### Accessories

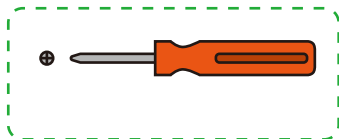
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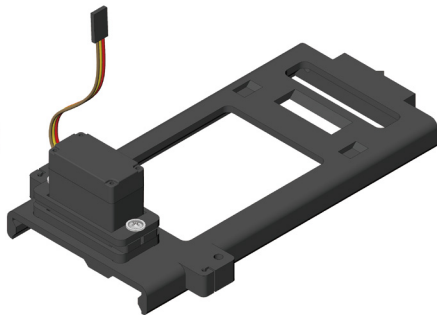
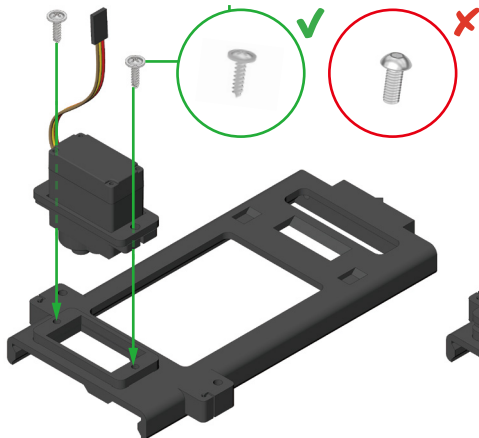
You will hear a 'click' when  
the parts are in place

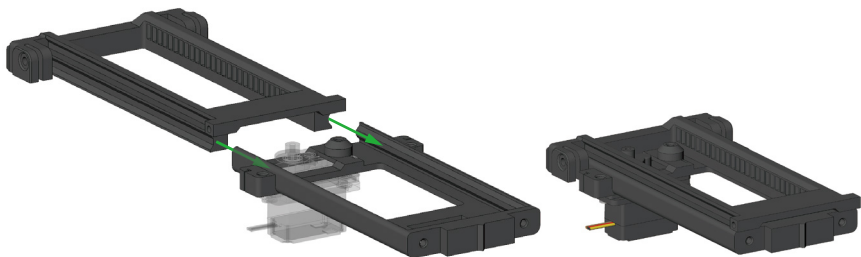


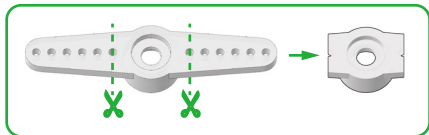
32



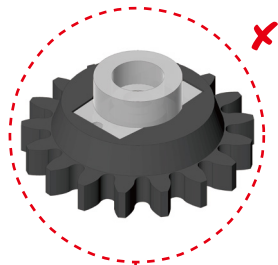
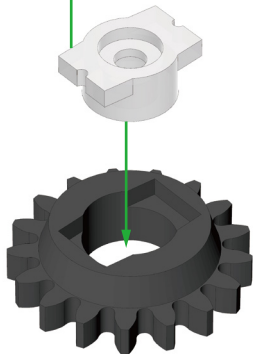
Please use PH1 Philips Driver



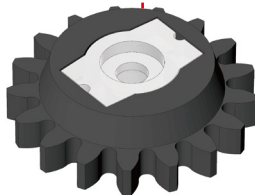




Trim the servo arm along the dashed line.

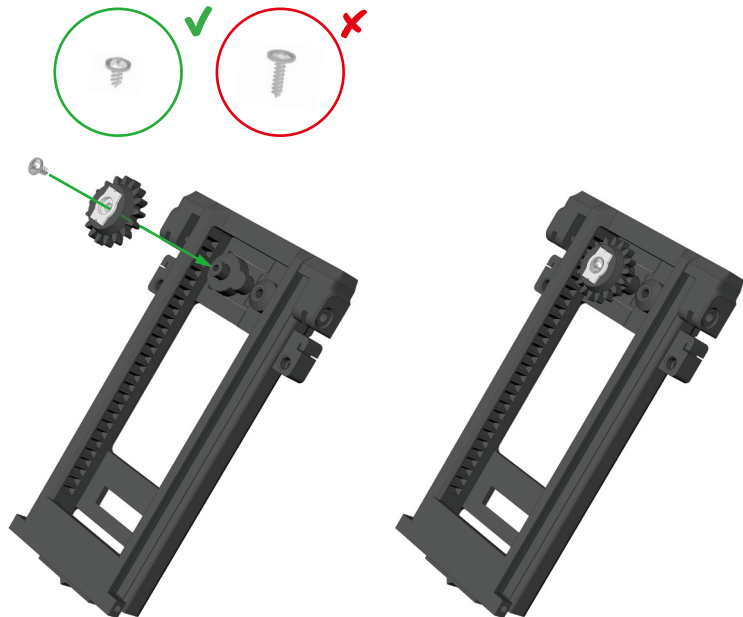


Be careful not to install the servo arm backwards.



Ensure that the trimmed rudder arm can fit in and will not rotate in the slot.

35

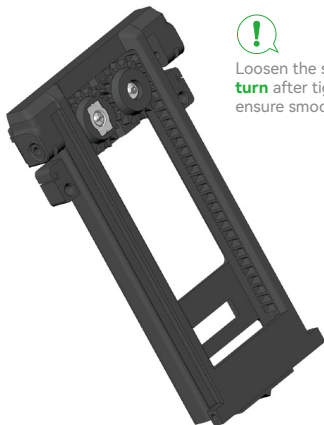
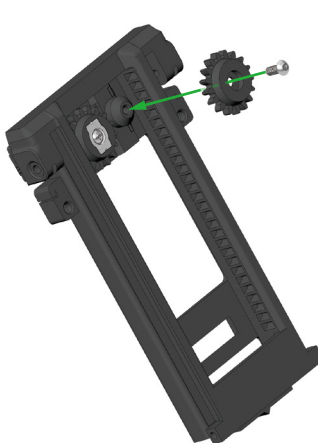




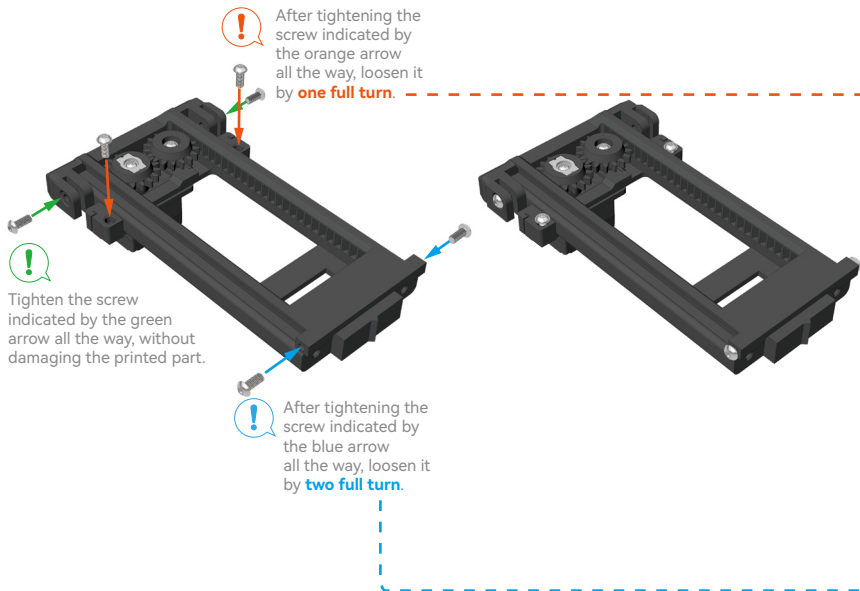
36



Please use H1.5 Hex Driver



Loosen the screw by **half a turn** after tightening to ensure smooth gear rotation.

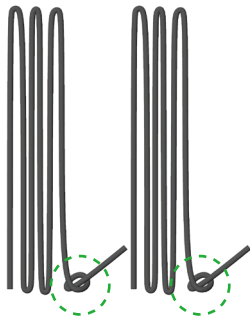
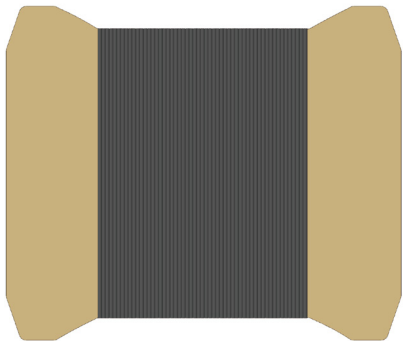




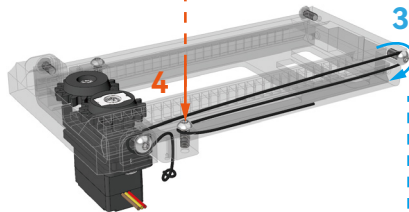
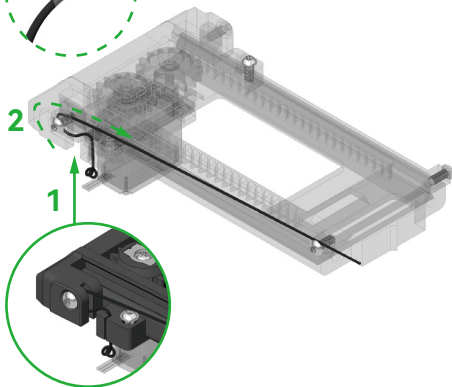
**Use the line card as a reference guide to cut the nylon rope.**

Cut two **30** cm long pieces of nylon rope and tie a knot at each end.

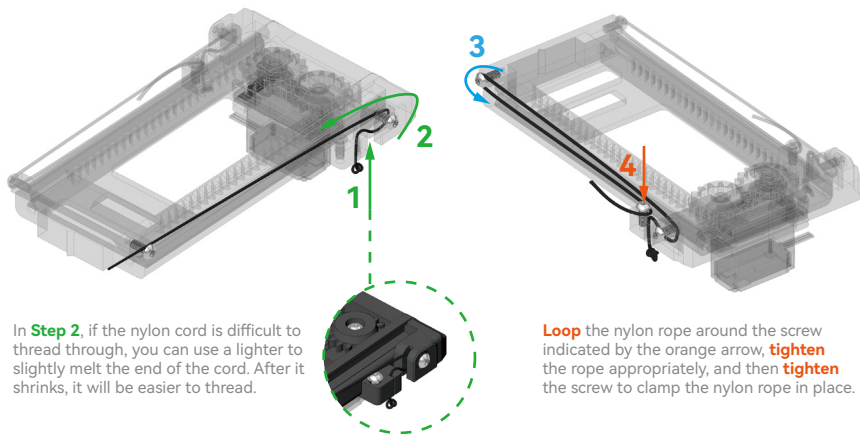
The length of the wire wound around the card **three times** is approximately **30** cm.

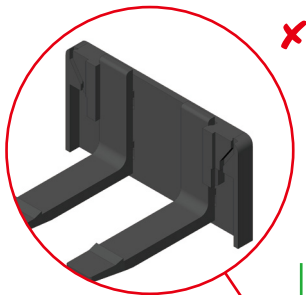


In Step 2, if the nylon rope is difficult to pass through the gap, wrap the end of the rope with transparent tape before inserting it.

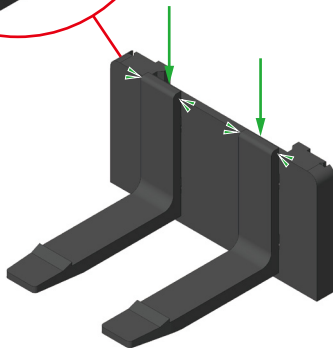
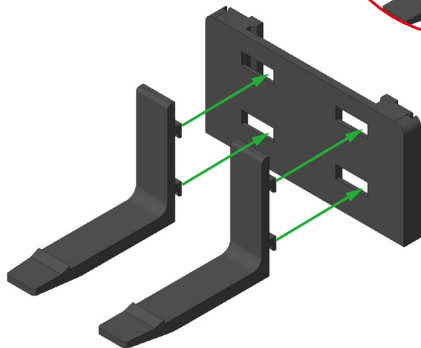


**Loop** the nylon rope around the screw indicated by the orange arrow, **tighten** the rope appropriately, and then **tighten** the screw to clamp the nylon rope in place.

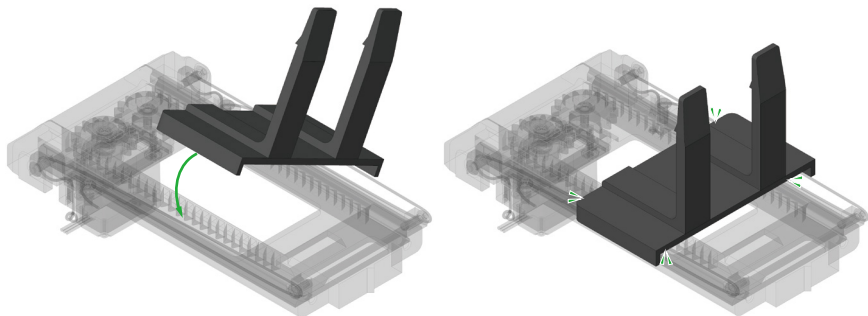




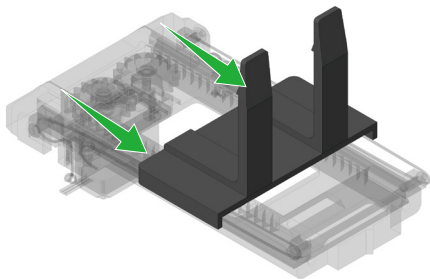
Make sure not to  
install it backwards.



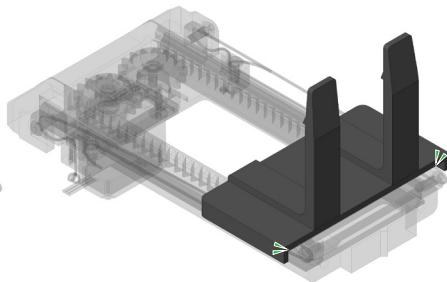
You will hear a 'click' when  
the parts are in place



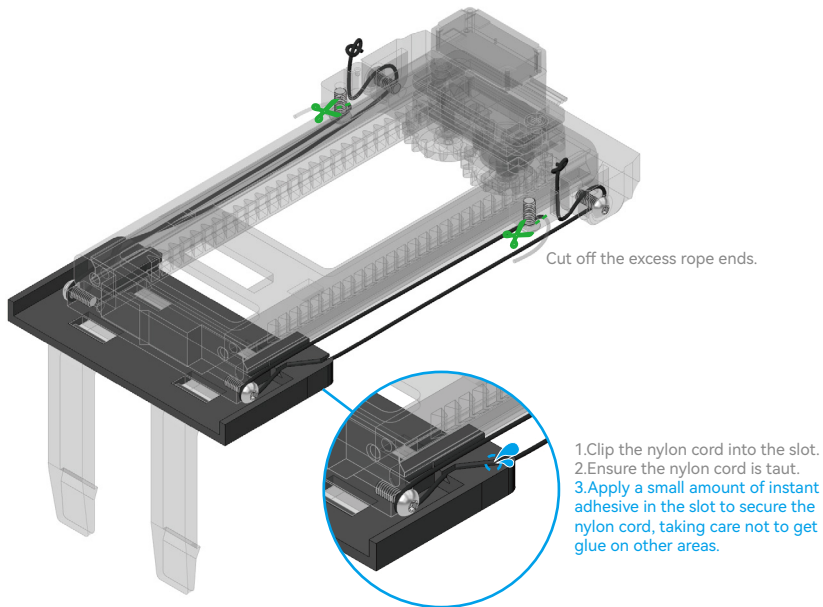
You will hear a 'click' when  
the parts are in place



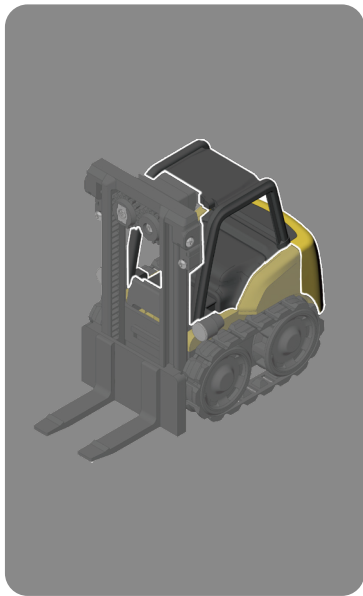
Push the fork







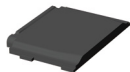
## Shell Assembly



1x



1x



1x



1x



1x



1x



1x



1x



1x

**Printed Parts**



1x

**Completed assembled front fork**



3x



4x2 mm Round Magnet 4x

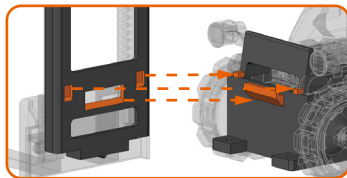
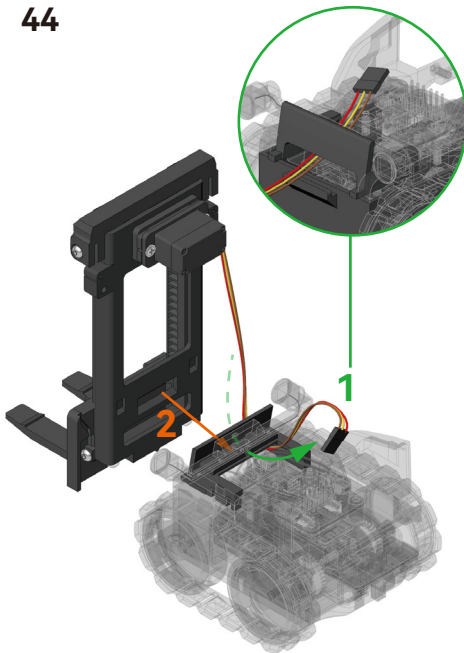


1x



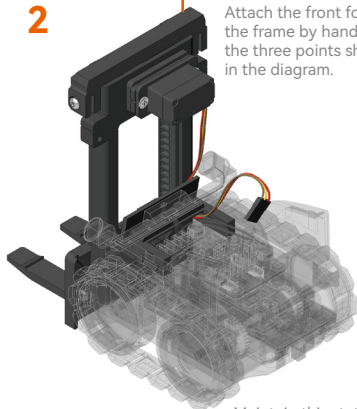
1x

**Accessories**

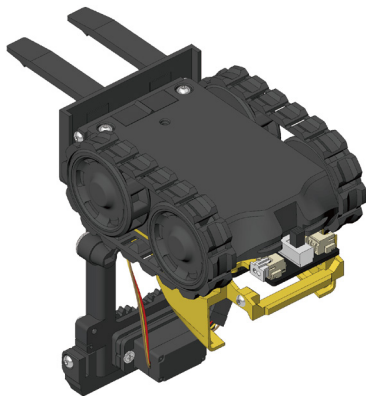
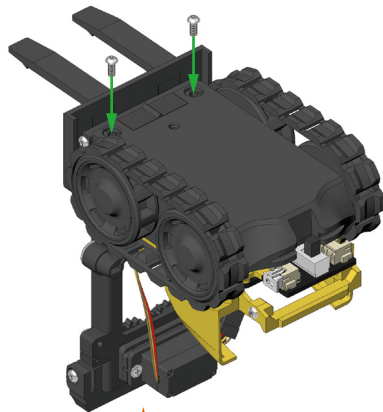


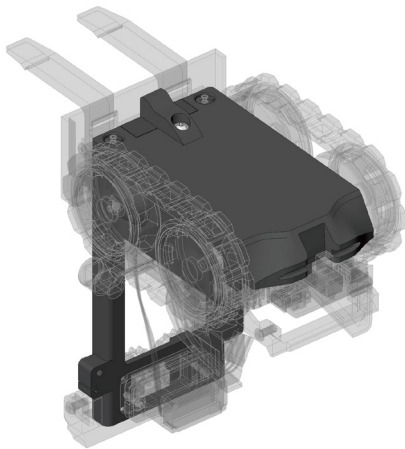
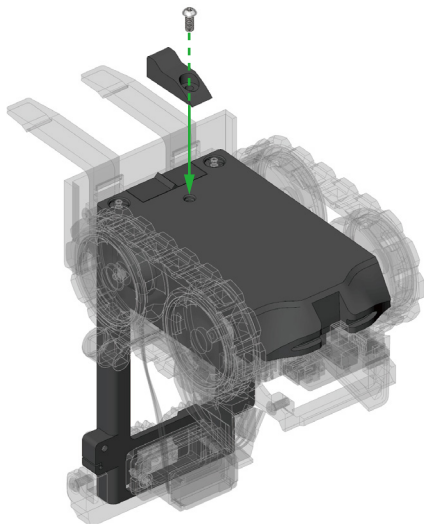
2

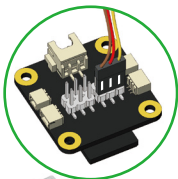
Attach the front fork to the frame by hand at the three points shown in the diagram.



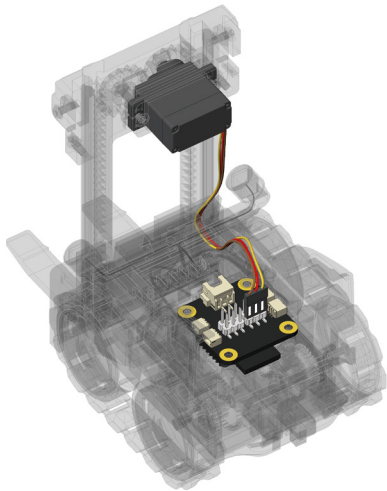
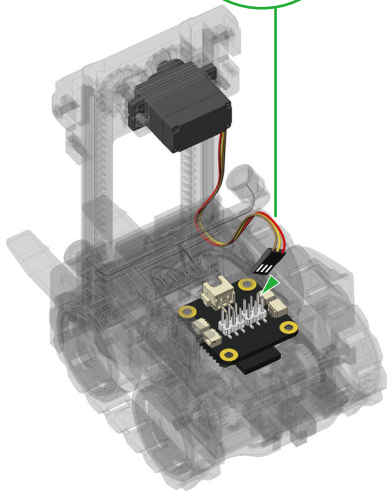
Maintain this state until the next step.

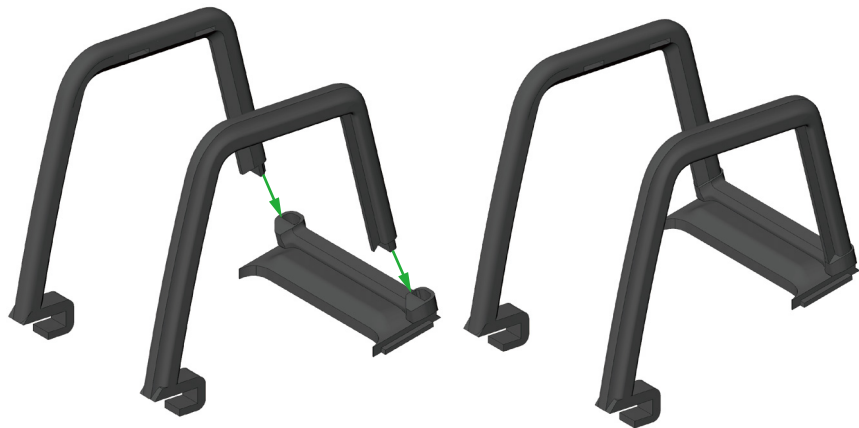




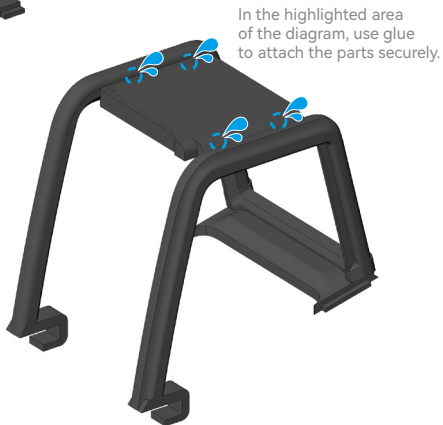
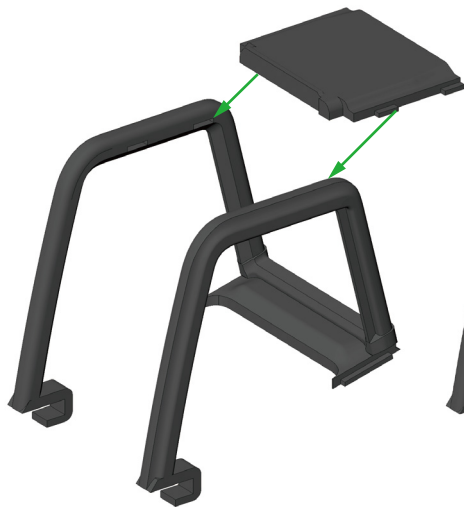


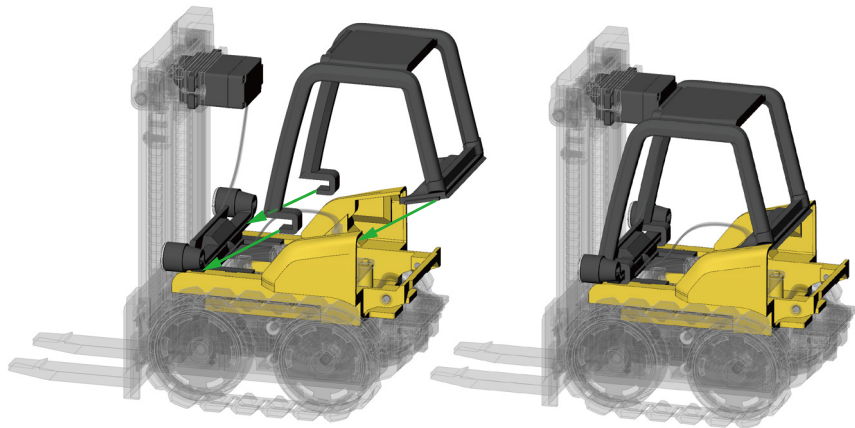
Connect the servo cable to the pin header S1 at the bottom right corner, and make sure the **brown**, **red**, and **yellow** wires are aligned with the correct pin positions.



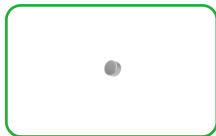




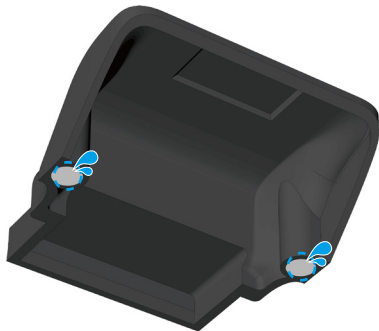
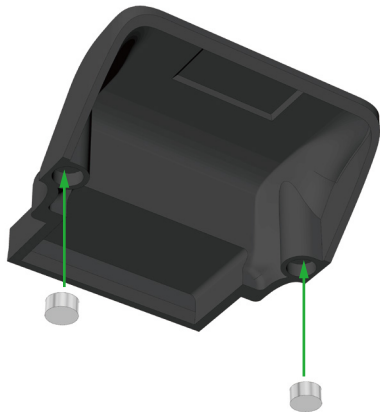




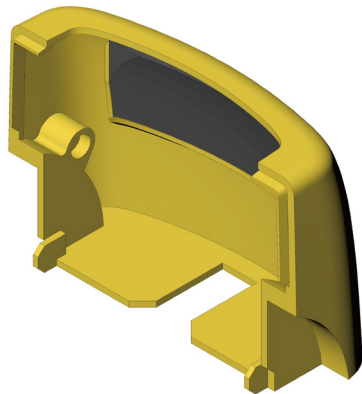
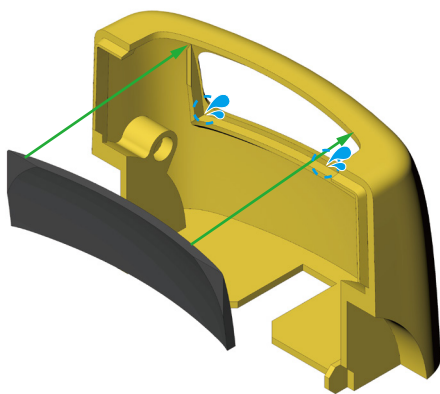
51



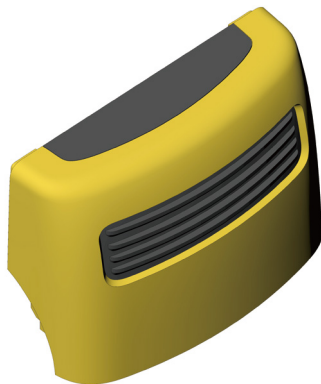
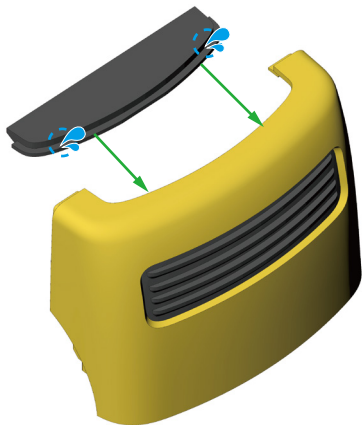
Please use 4x2 mm Round Magnet



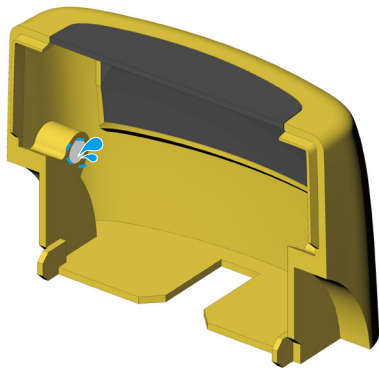
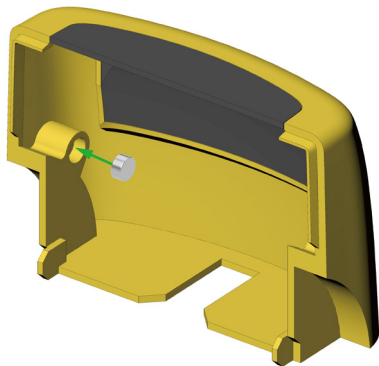
In the highlighted area  
of the diagram, use glue  
to attach the parts securely.



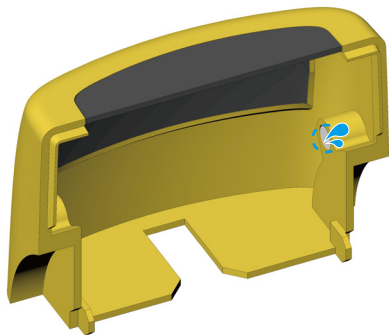
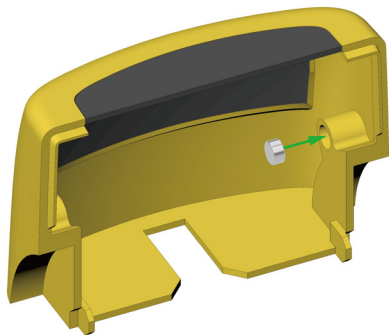
In the highlighted area  
of the diagram, use glue  
to attach the parts securely.



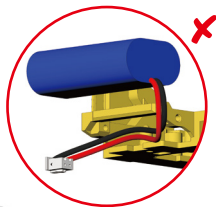
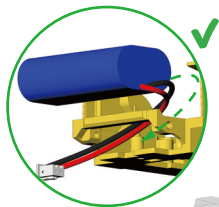
In the highlighted area  
of the diagram, use glue  
to attach the parts securely.



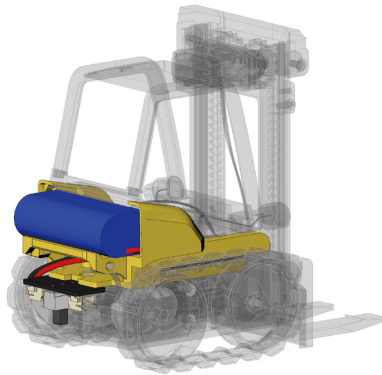
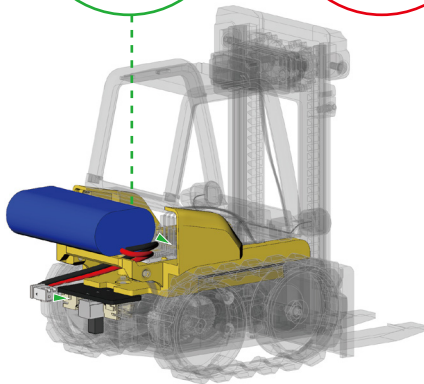
In the highlighted area  
of the diagram, use glue  
to attach the parts securely.



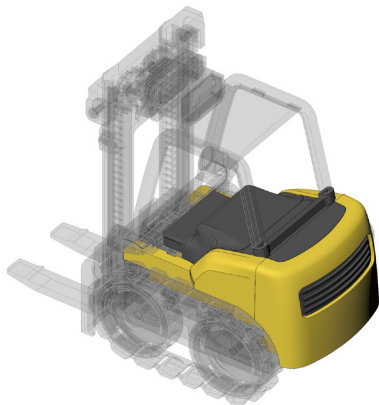
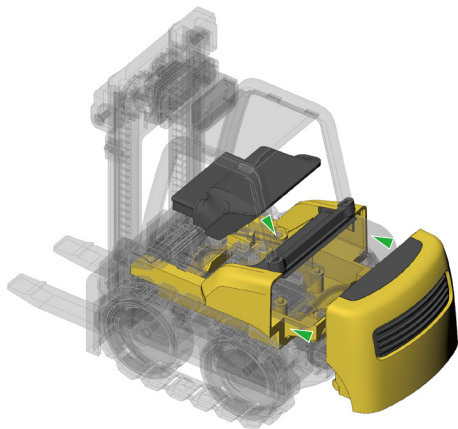
In the highlighted area  
of the diagram, use glue  
to attach the parts securely.

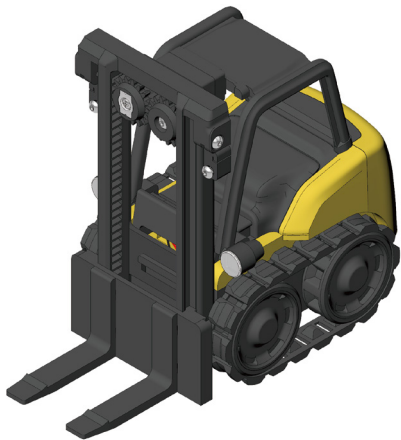


Pass the terminal through the printed part along the path shown in the diagram.

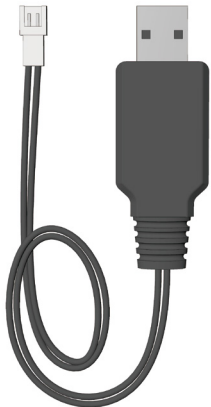






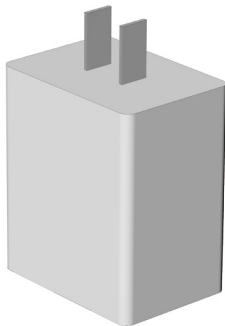


## Charging Process



USB Charger 1x

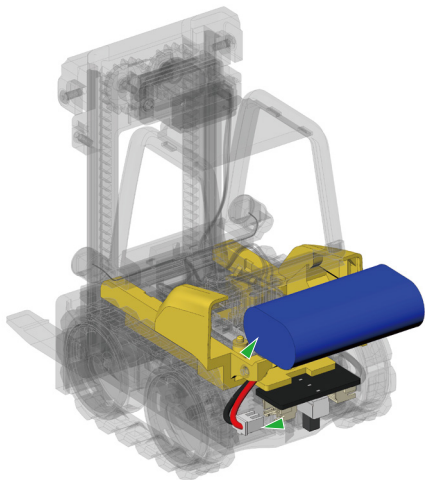
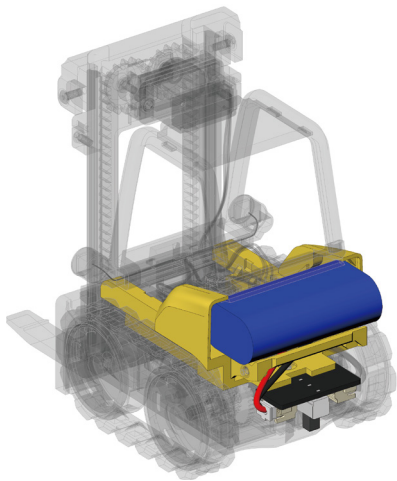
**Accessories**

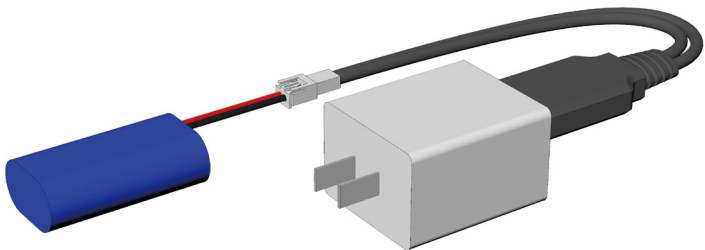
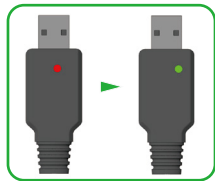


Power Adapter 5V 1-2A

**Not included**





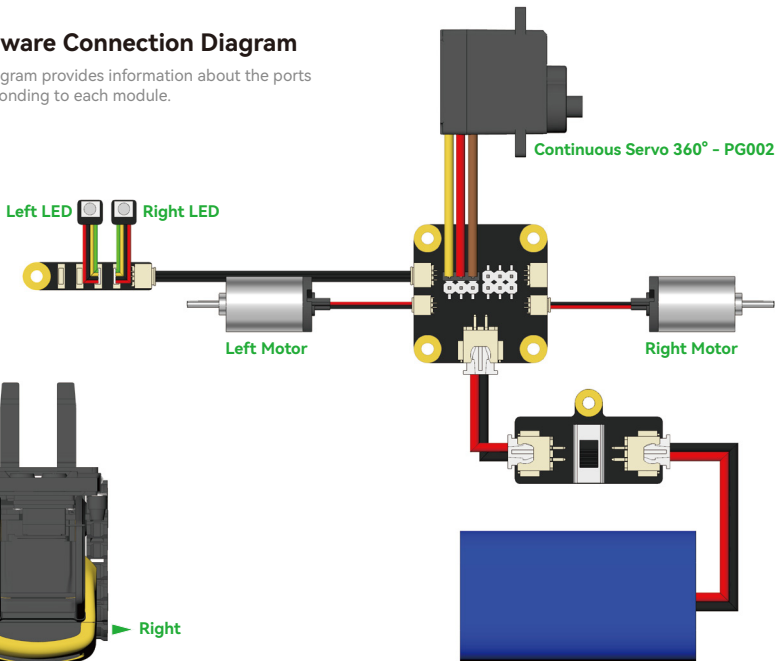


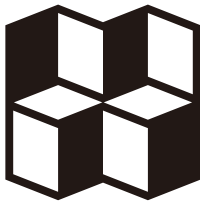
Use a 5V 1-2A power adapter to connect the USB charger as shown in the image to charge the battery. While charging, the red indicator on the power adapter remains solid; it turns solid **green** when charging is complete.

**Note: Please remove the battery from the model before charging!**  
**Do not leave the charging process unattended!**  
**Once charging is complete, promptly disconnect the power and remove the battery!**

## Hardware Connection Diagram

This diagram provides information about the ports corresponding to each module.





**MakerWorld**