

# Grain Transport Farm Truck



# Introduction





## Motorized Grain Transport Trucks



## Manual Grain Transport Trucks



## Structure and Working Principle of Grain Transport Trucks

1. **Truck Body:** The main structure of the transport truck, carrying the grain and the total weight of the vehicle.
2. **Wheels:** The truck has front and rear wheels. The front wheels drive, while the rear wheels support the weight, reduce vibration, and enhance stability.
3. **Drive System:** The power source of the truck, which can use batteries or gasoline. It provides strong driving force, high speed, and easy operation.
4. **Control System:** Includes switches, motors, and other components. The driver controls direction, speed, and braking.
5. **Optional Components:** Additional multifunctional parts can be added, such as telescopic or manual unloading devices.

### Principle:

The grain transport truck is a motorized transport machine mainly composed of the truck body, wheels, drive system, control system, and optional components.



# Applications of Grain Transport Trucks

Grain transport trucks are mainly used in rural markets, for household use, and in grain depots. They allow fast and convenient transportation of grain, straw, and other materials. With continuous technological development, modern grain trucks now include intelligent control and automatic navigation systems, making their applications even broader.

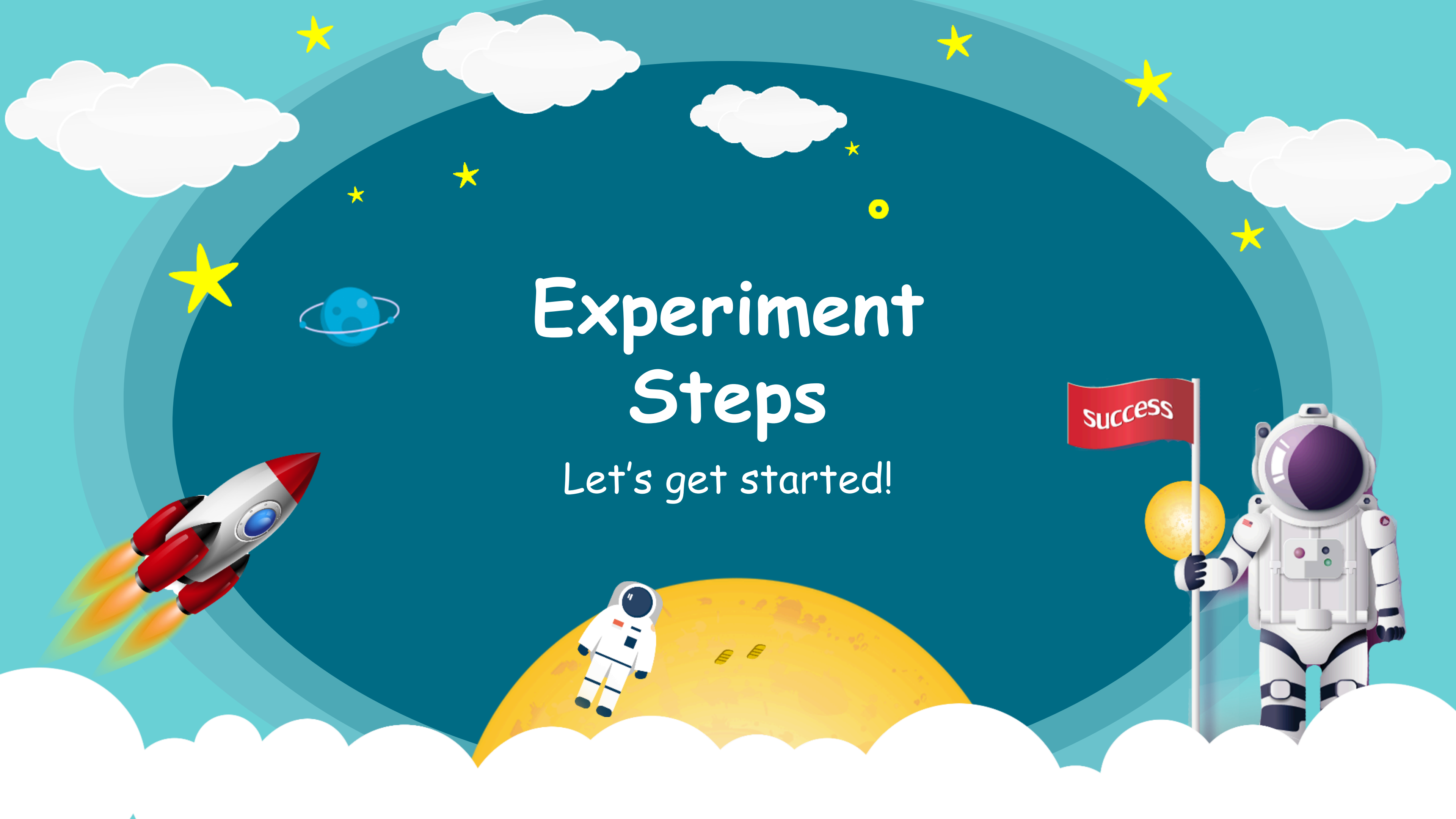


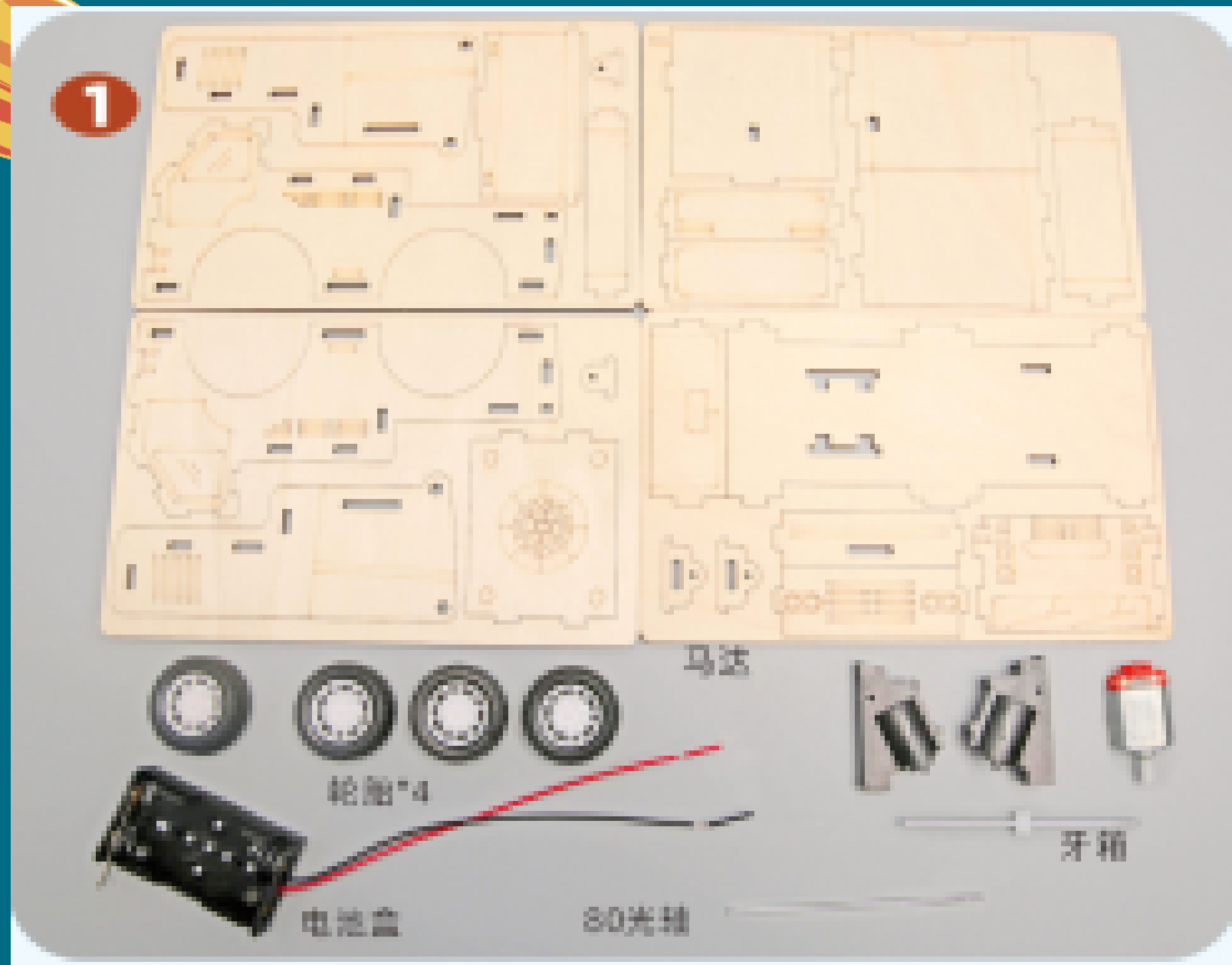
**Does everyone think grain transport trucks are meaningful?  
Let's make our own grain transport truck today!**



# Experiment Steps

Let's get started!

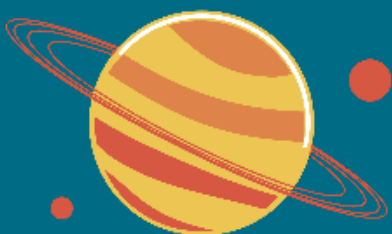




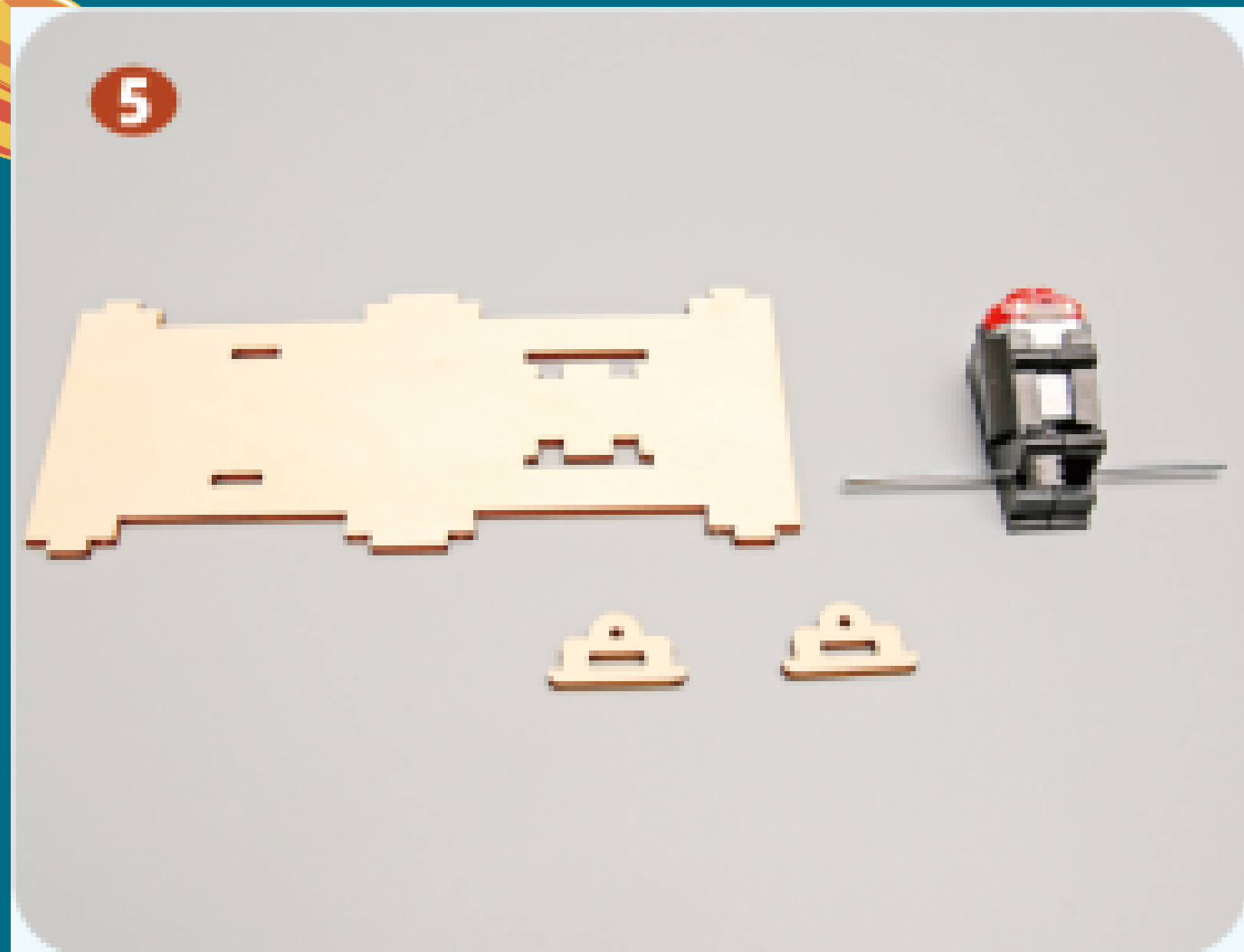
Recognize the materials

Prepare the parts as shown in the picture





Install the gear motor onto the shaft  
Note: The two gears must mesh properly.  
Ensure the gear teeth align and fit tightly.



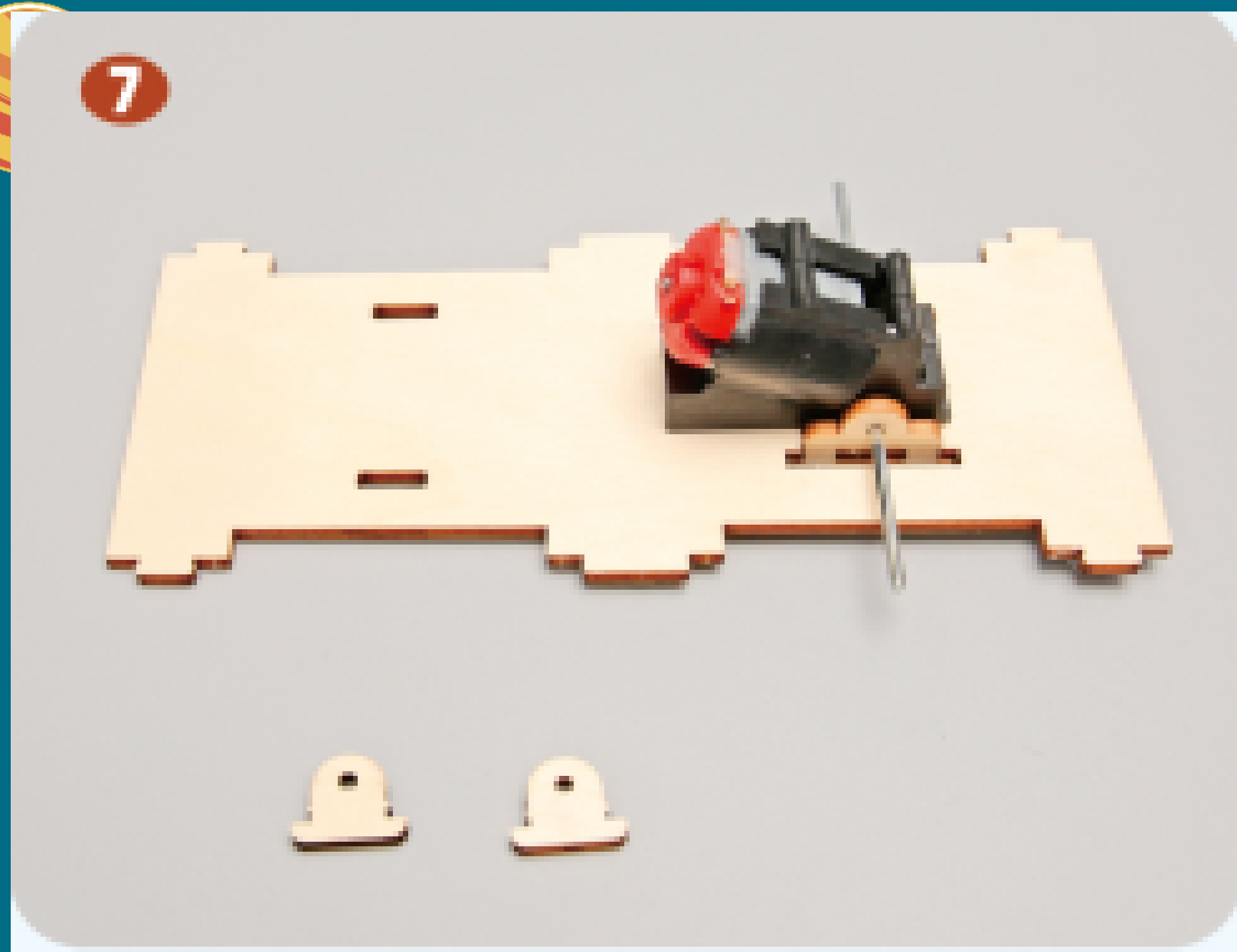
Prepare the parts as shown in the picture



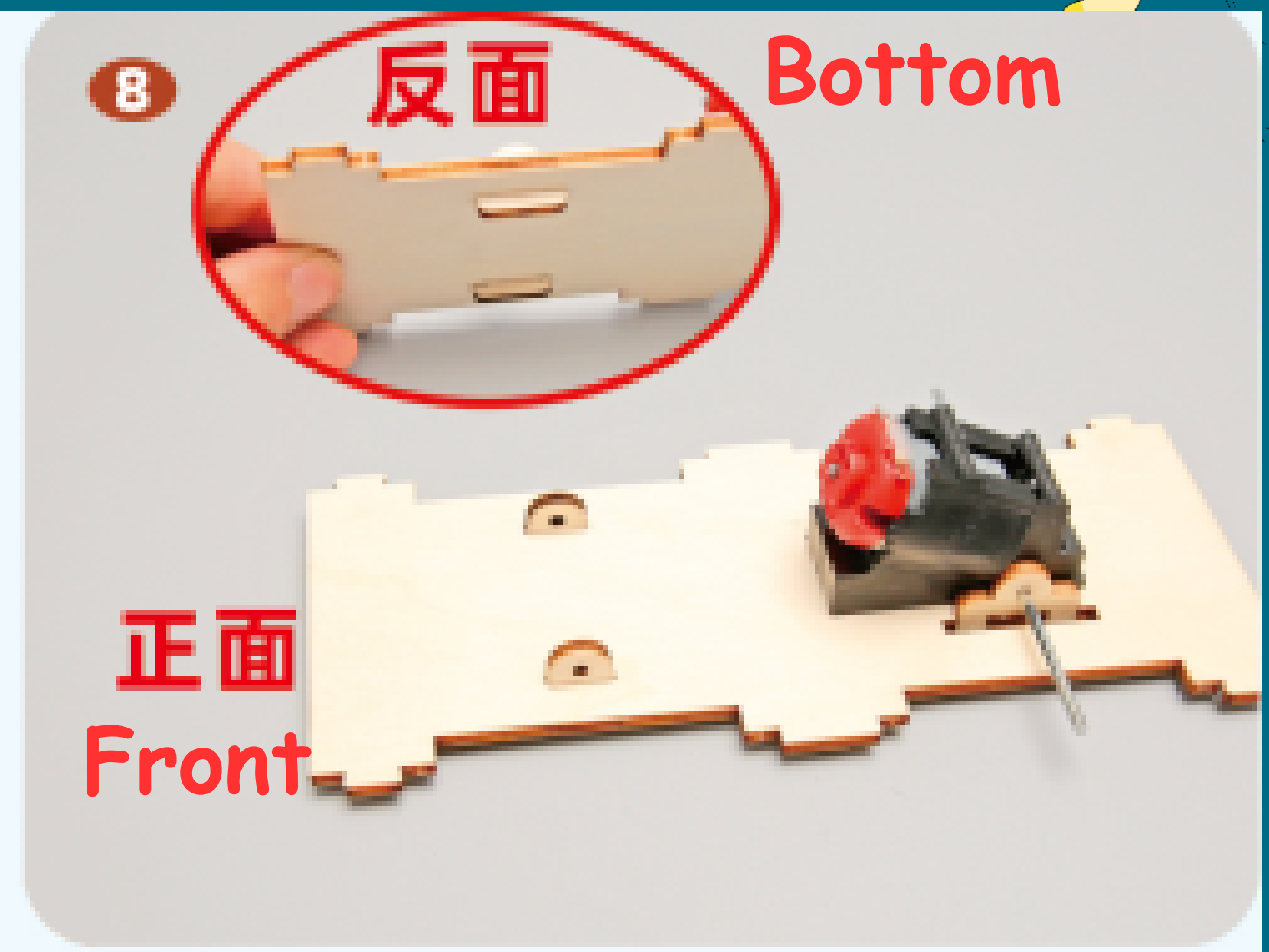
As shown in the picture, assemble it .

Attention: First insert the small board through both sides of the metal shaft.

Attention: Align the small boards on both sides with the slots to secure the motor.



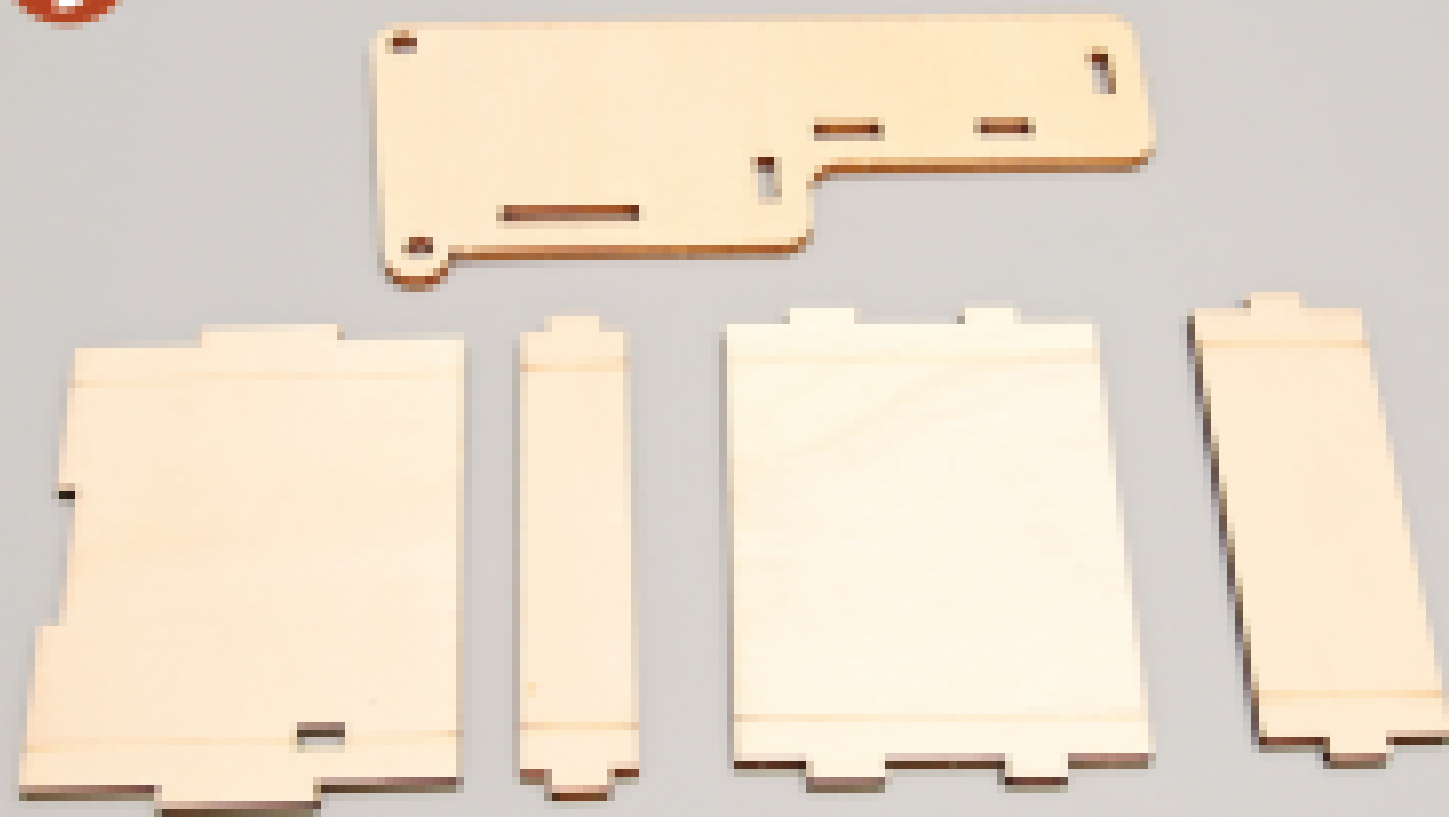
Prepare the parts as shown in the picture



Insert the small wooden part from the bottom side.



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注意每个木板的摆放朝向

Pay attention to the direction of each wooden board

Prepare and follow as per shown

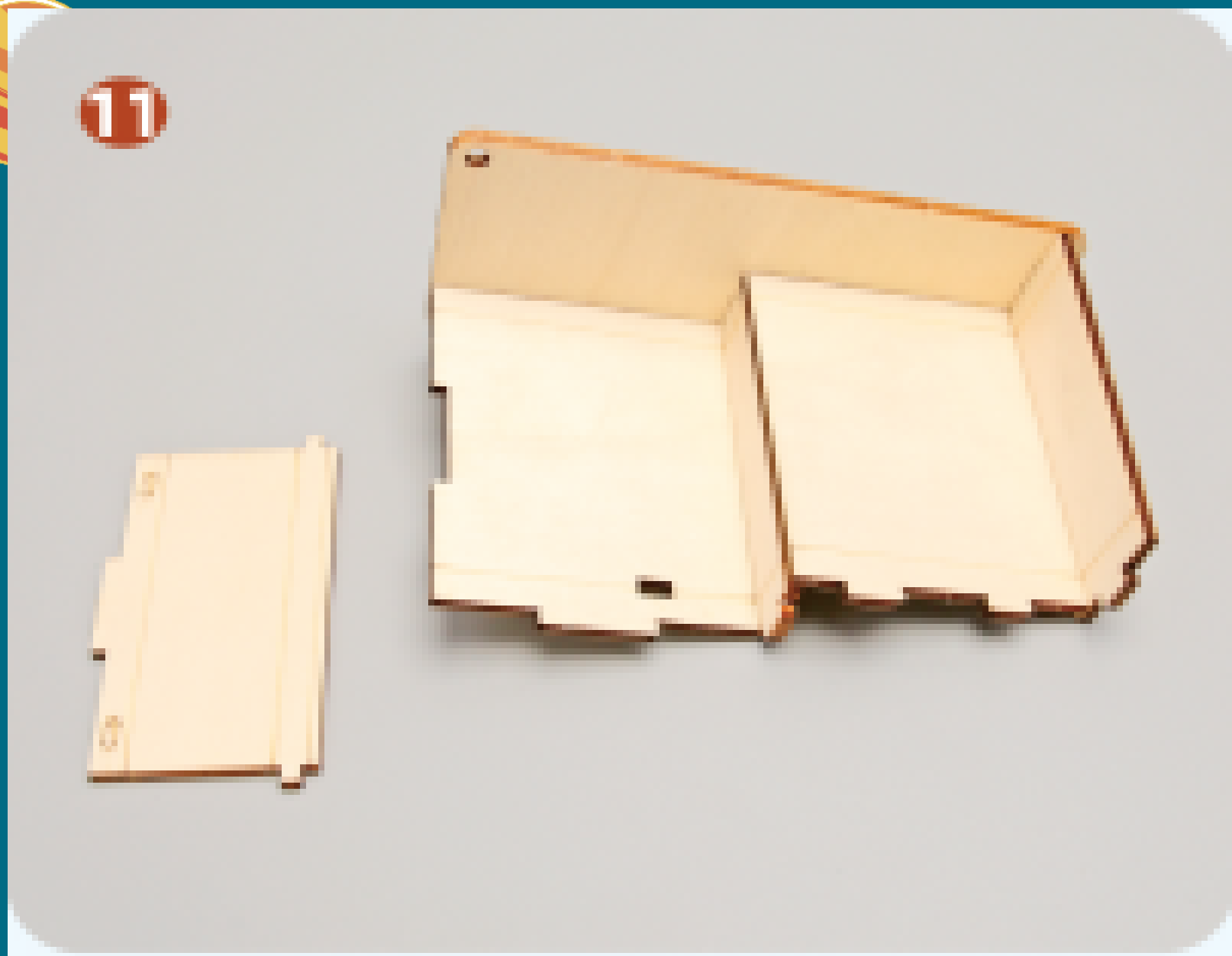
10

注意花纹面朝外



注意方孔位置

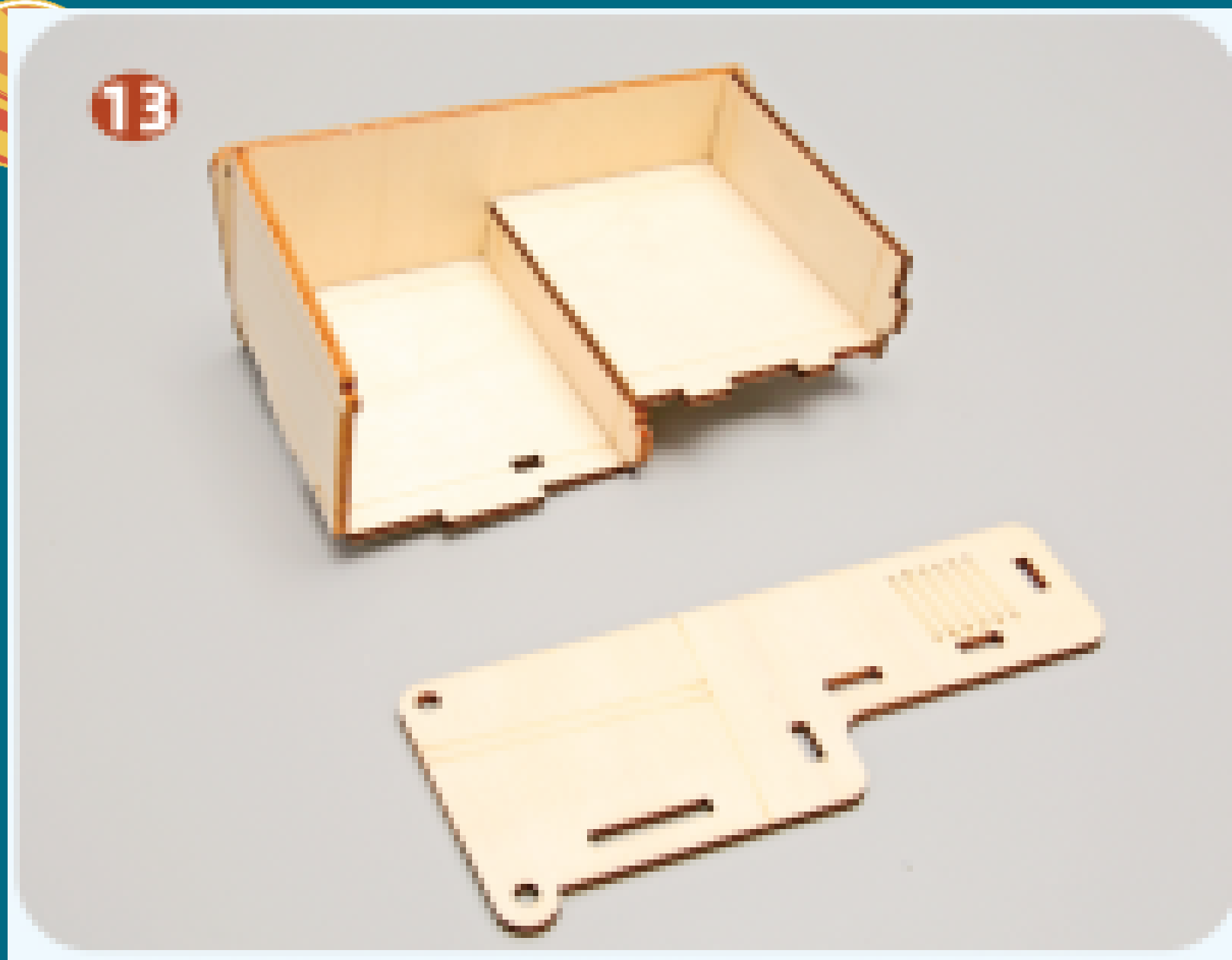
Assemble as shown



Prepare as shown



Assemble as shown

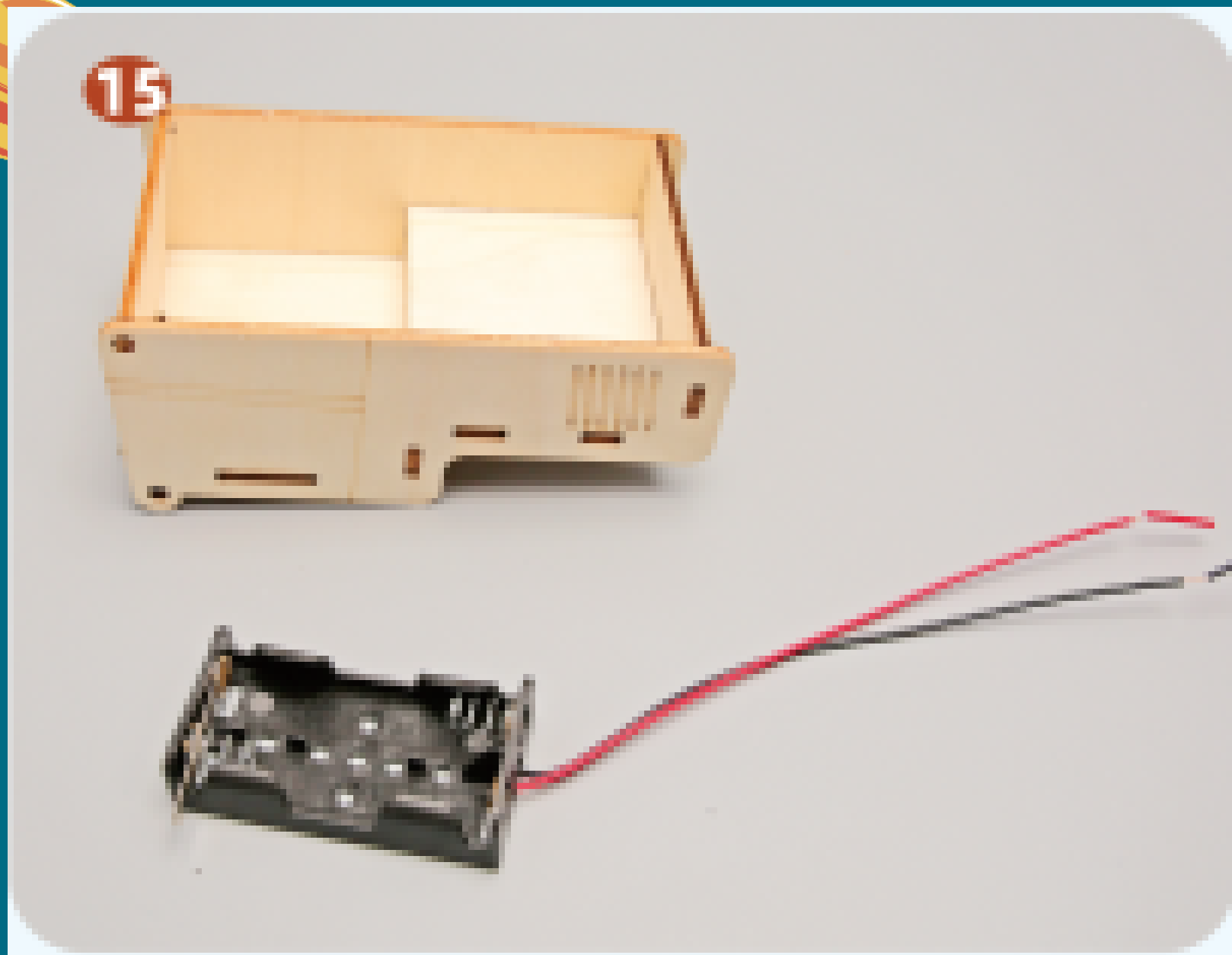


Prepare as shown

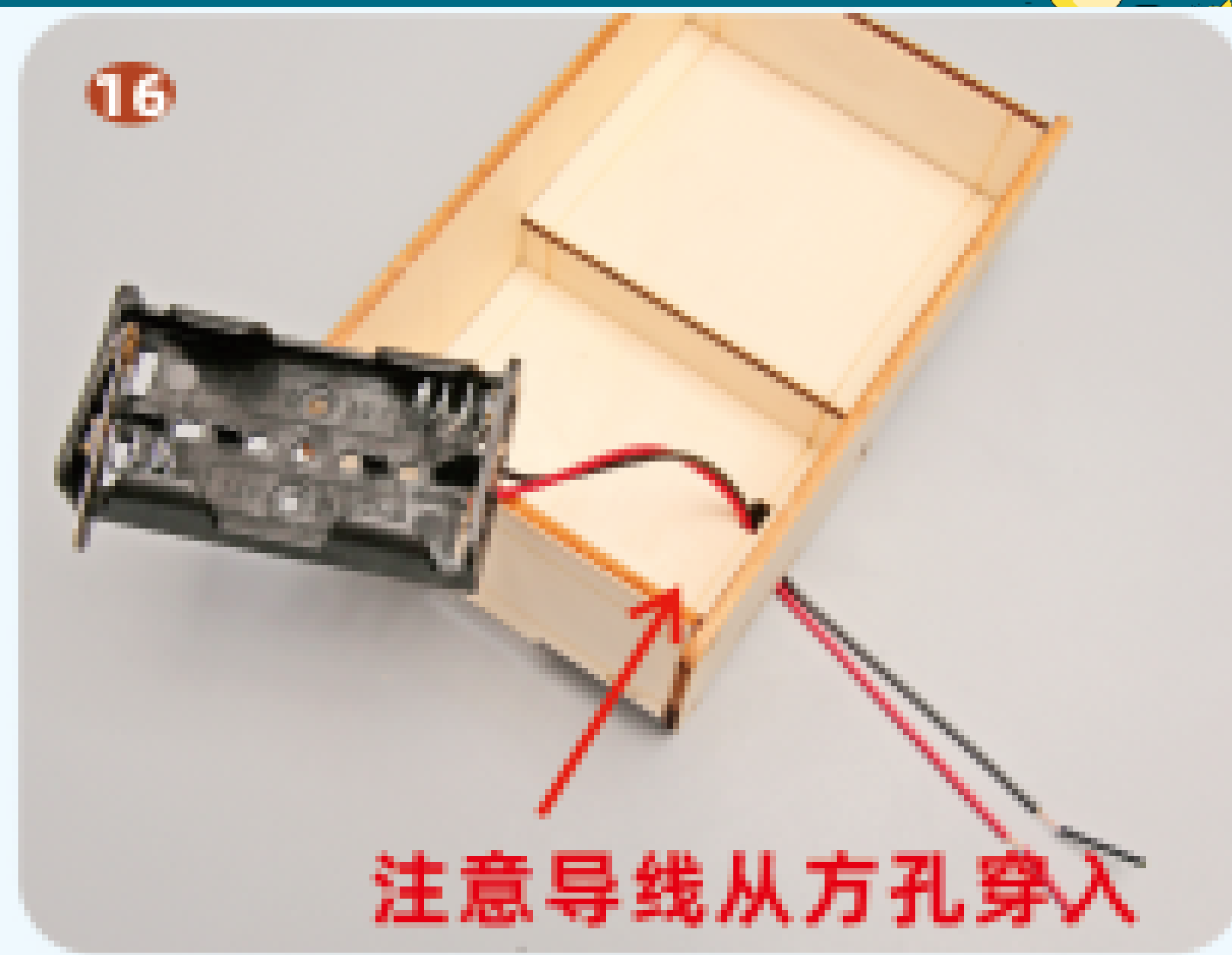


Assemble as shown





Prepare battery box



Pass the wires through the hole as shown.

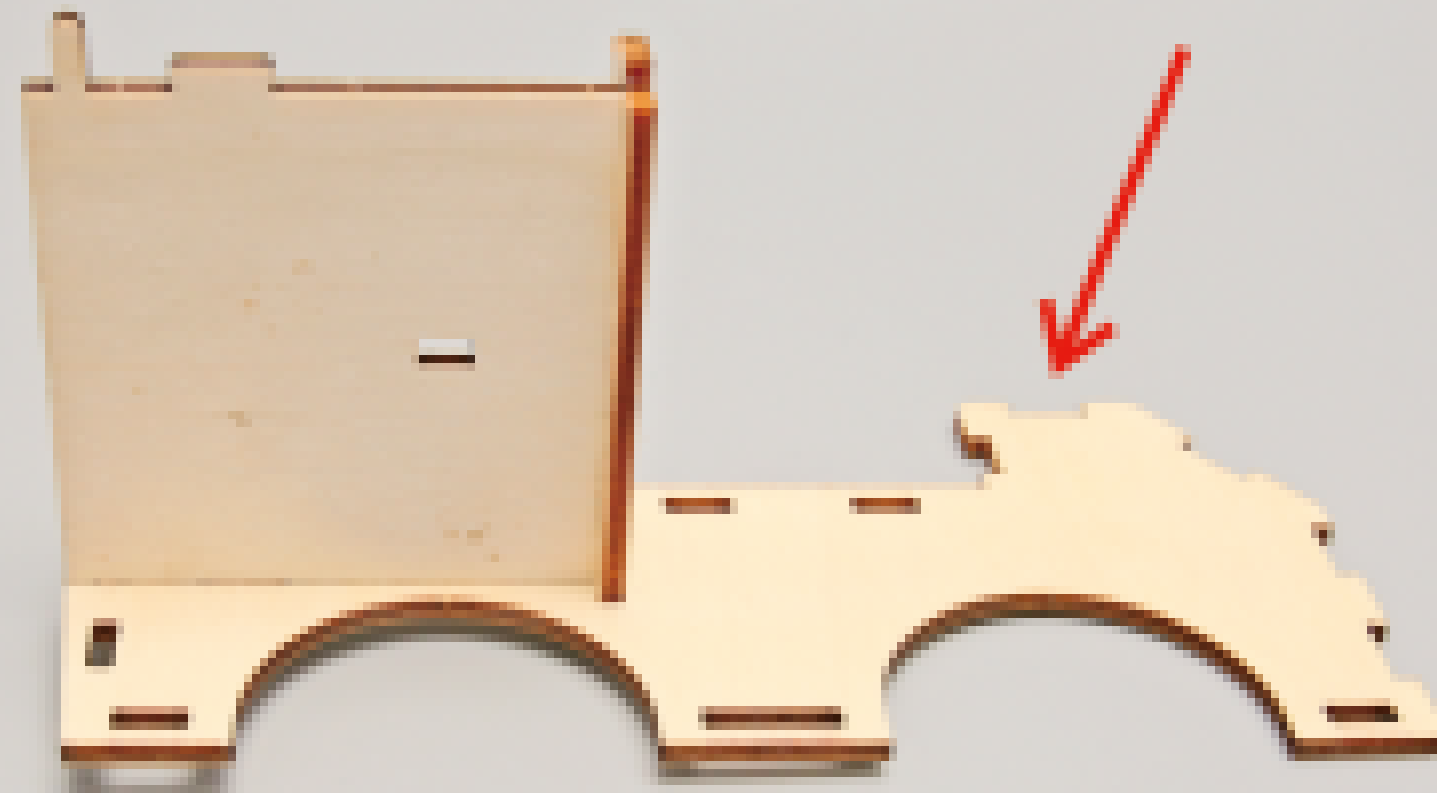
## 17 注意摆放朝向



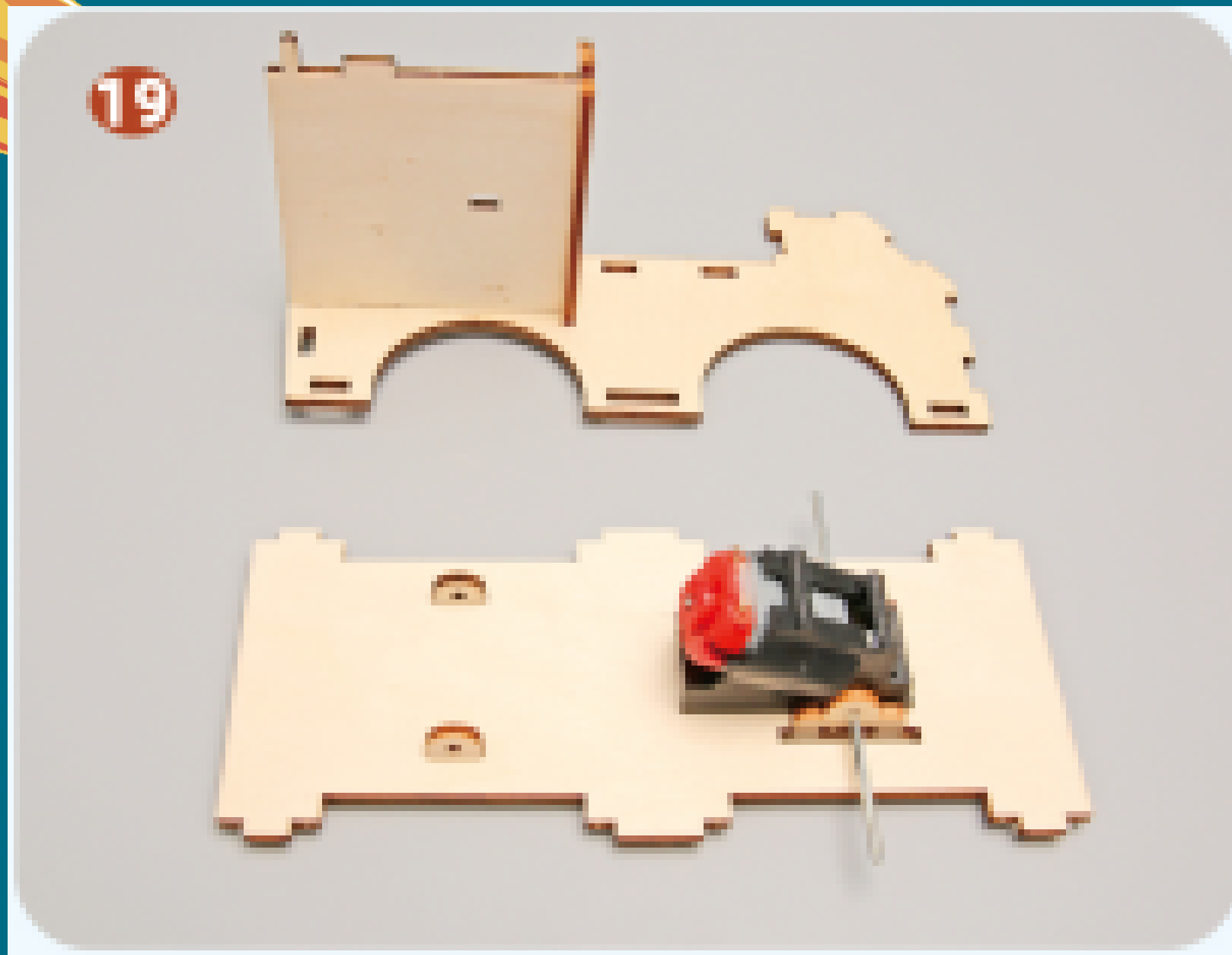
Pay attention to the direction of  
each wooden board  
Prepare and follow as per shown

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## 注意图案面朝下



Assemble as shown  
Be cautions on the direction wooden  
board

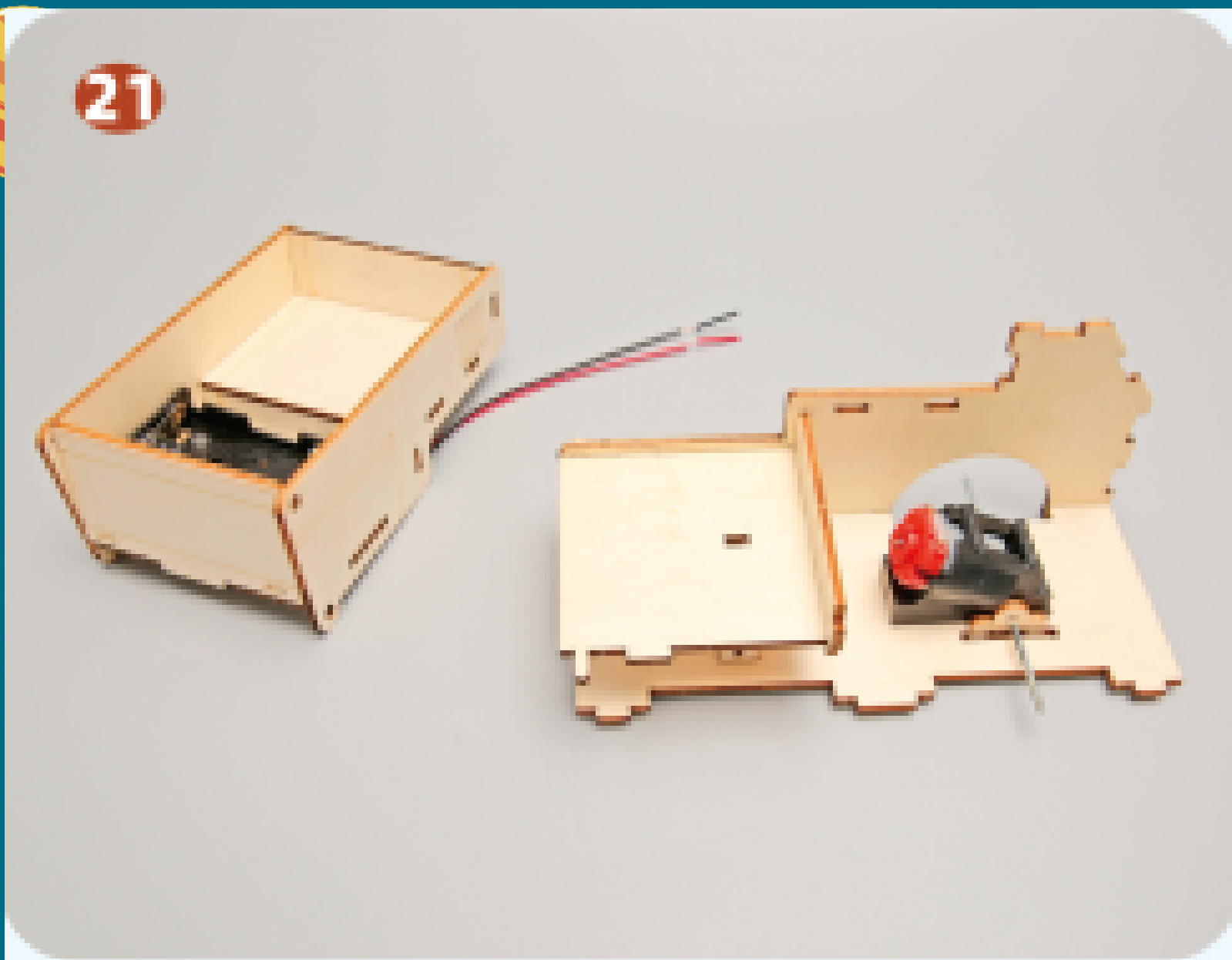


Prepare as shown

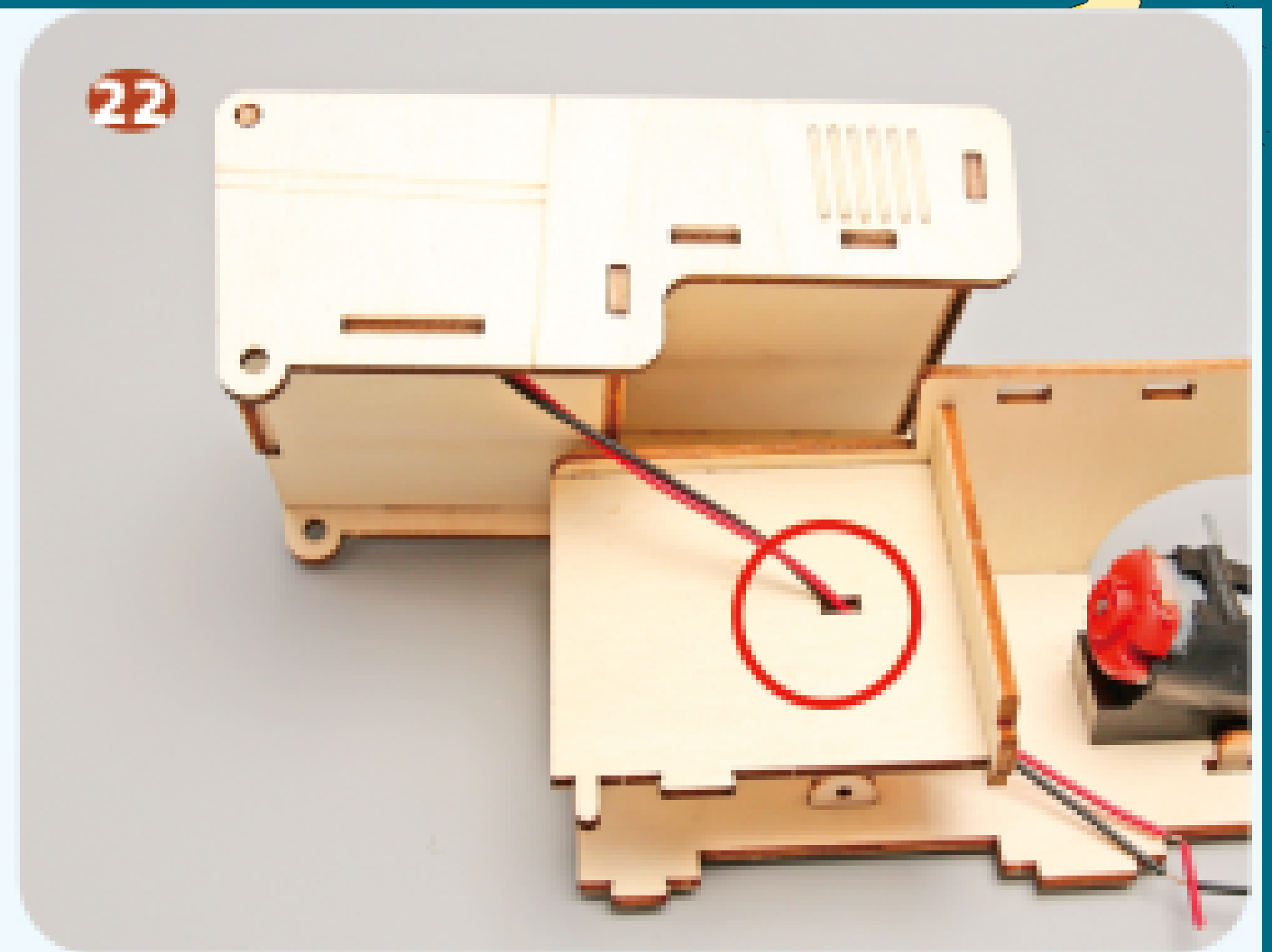


Attach the side panel to motor  
The side panel should face upward  
as shown

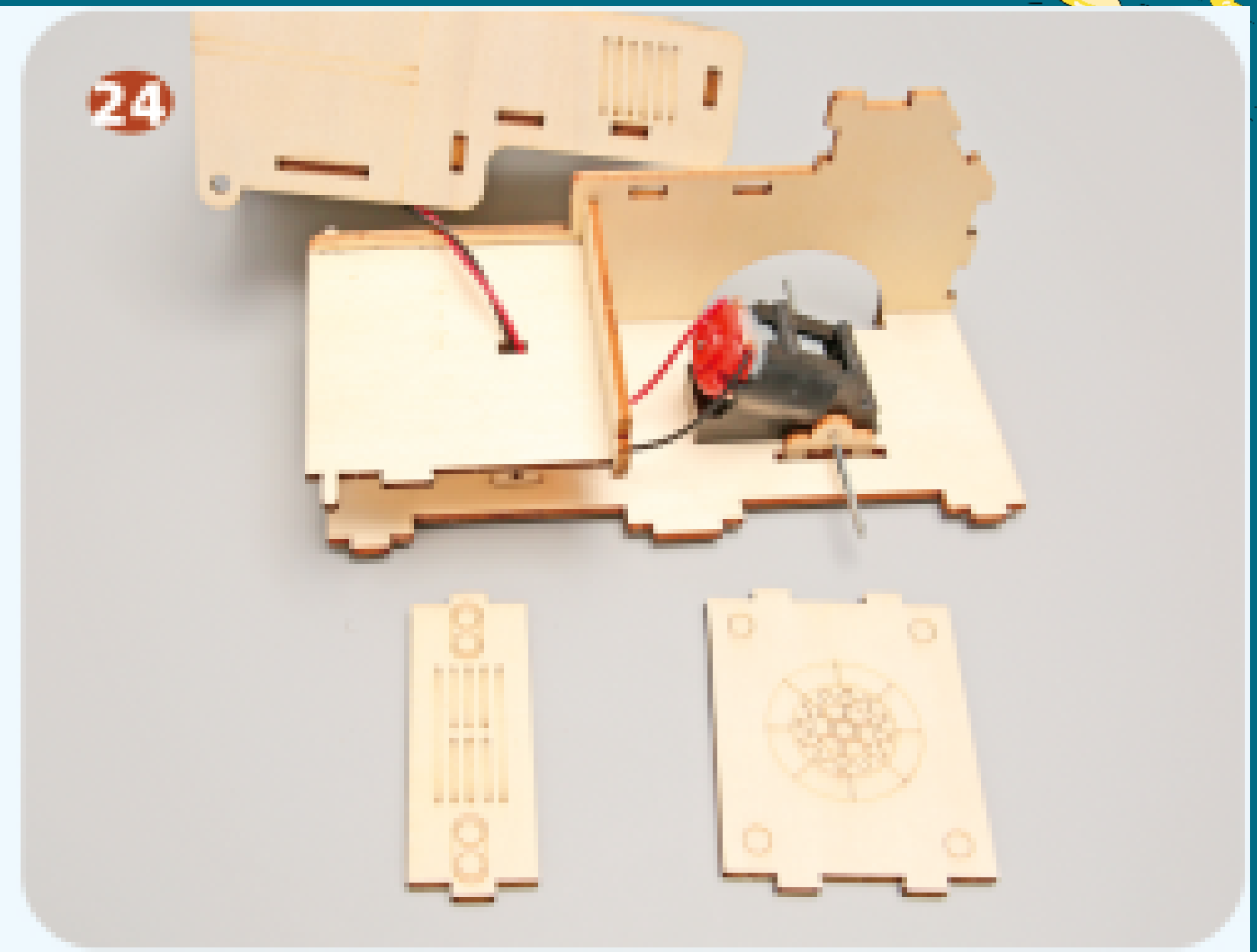
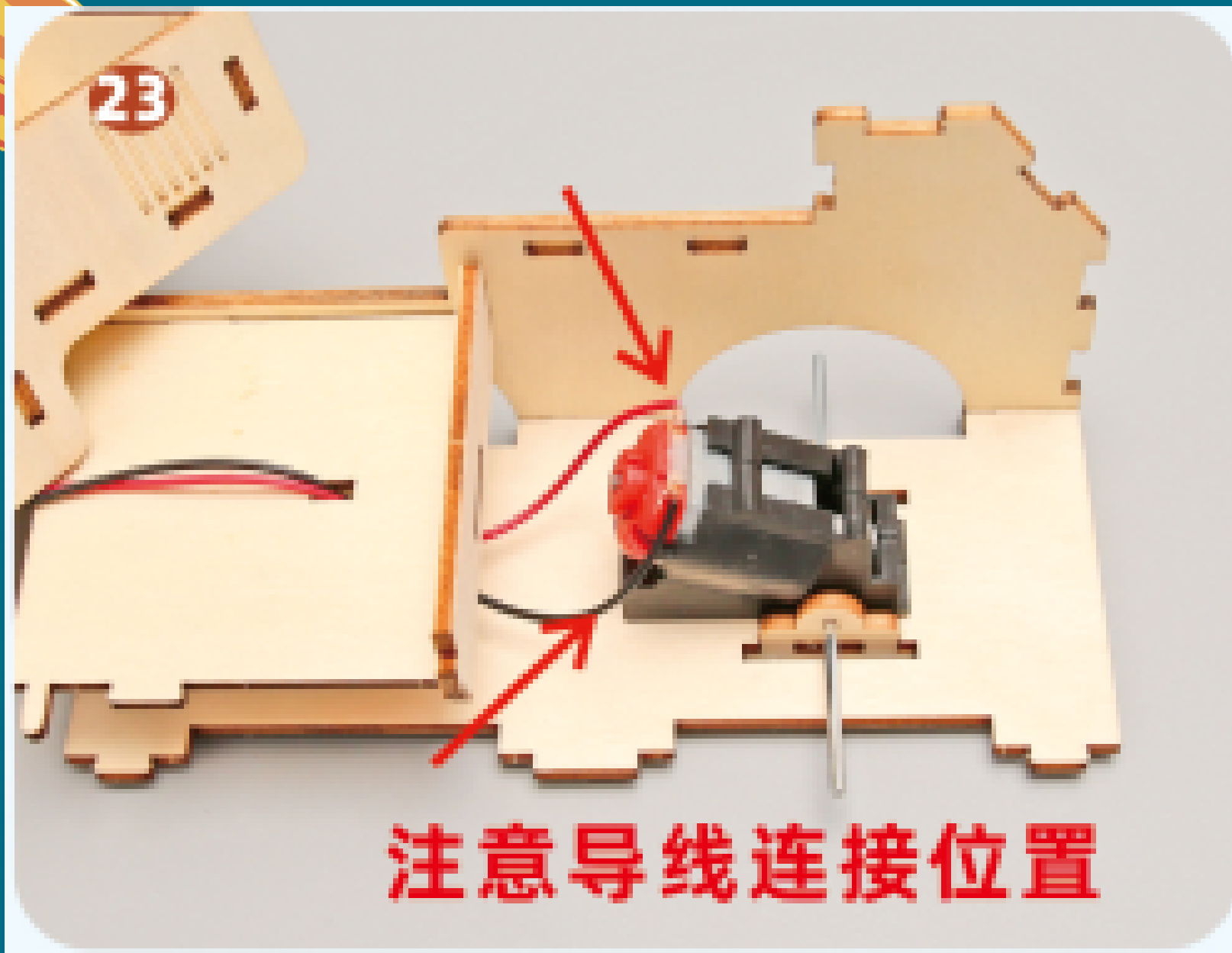




Prepare as shown

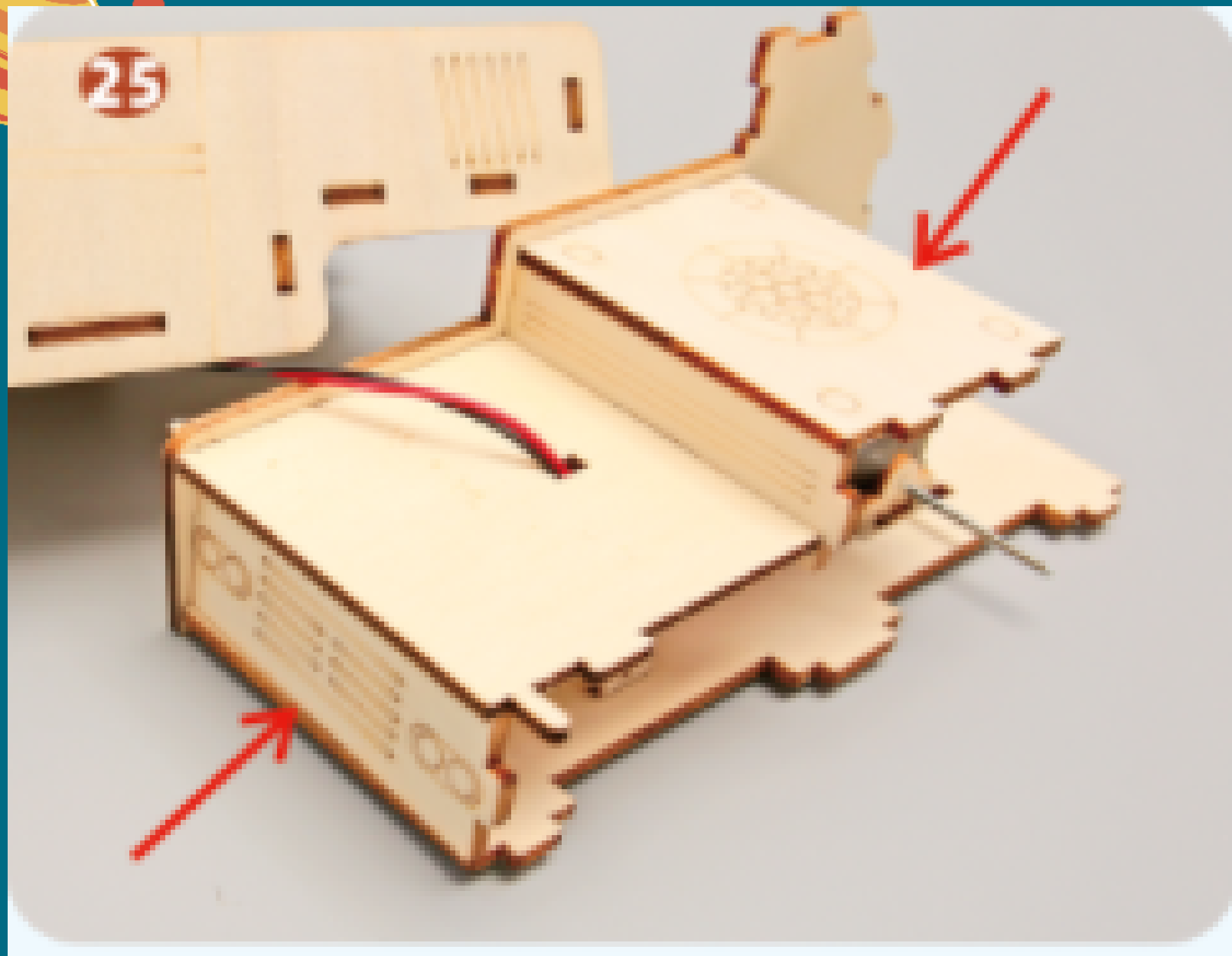


Pass the red and black wires through the hole as shown.

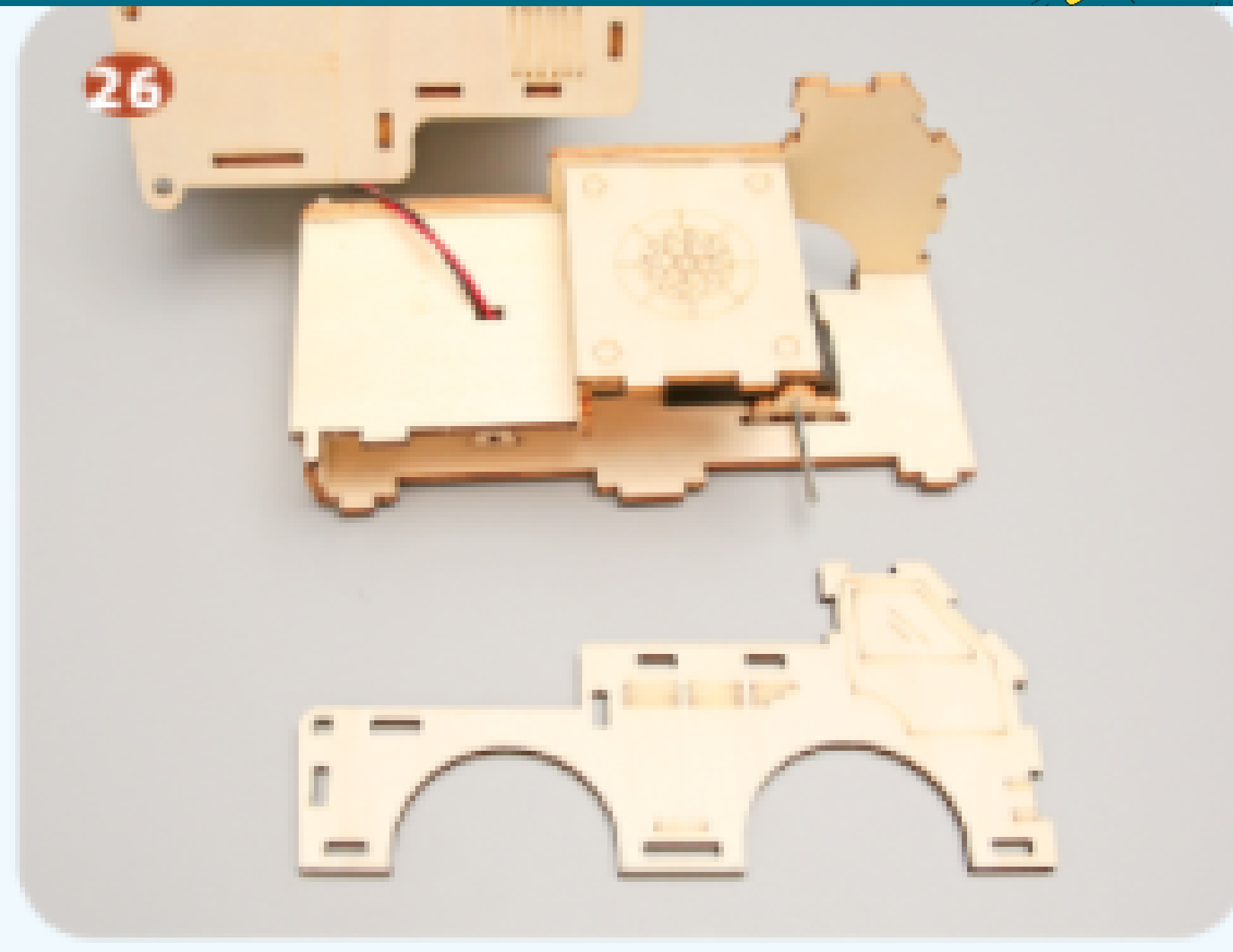


Connect the wires to the motor terminals  
Make sure the connections as shown.

Prepare as shown

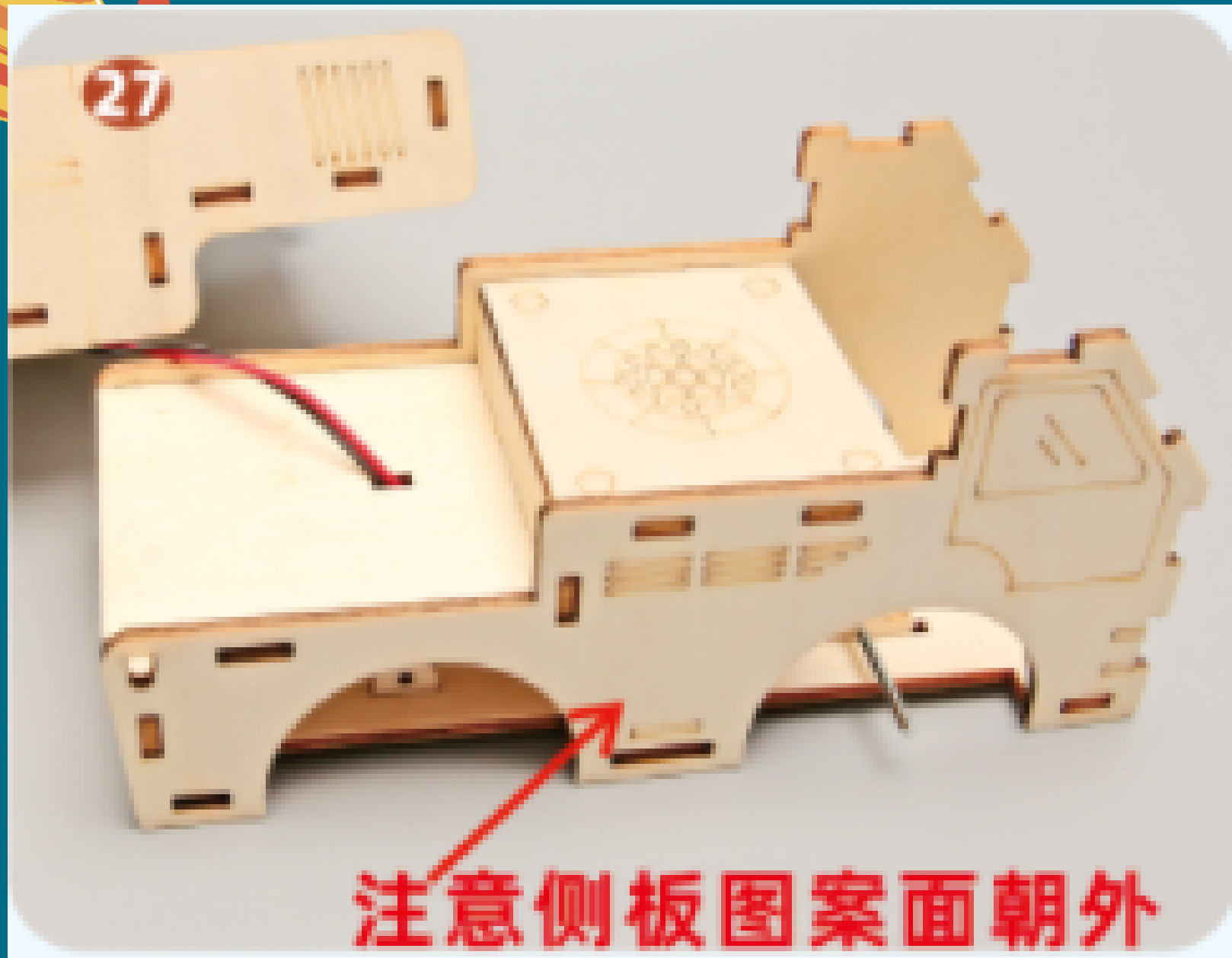


Assemble as shown



Prepare as shown





Install the side panels  
The engraved side should face outward.

Prepare as shown  
Place the numbered boards (1-4) in order.



Assemble following the number sequence



As shown in the picture, insert the truck bed into the base  
Make sure both sides of the truck bed are snapped in



如图准备好光轴和车轮

Prepare as shown



注意光轴安装位置

如图安装光轴和前后车轮，组装完成。

Assemble as shown

# Science Knowledge





## Scientific Principle:

The grain transport truck is powered by a battery.

When the switch on the battery box is turned on, electric current flows to the motor, causing it to rotate.

The motor drives the wheels, making the truck move forward.