EST 2014

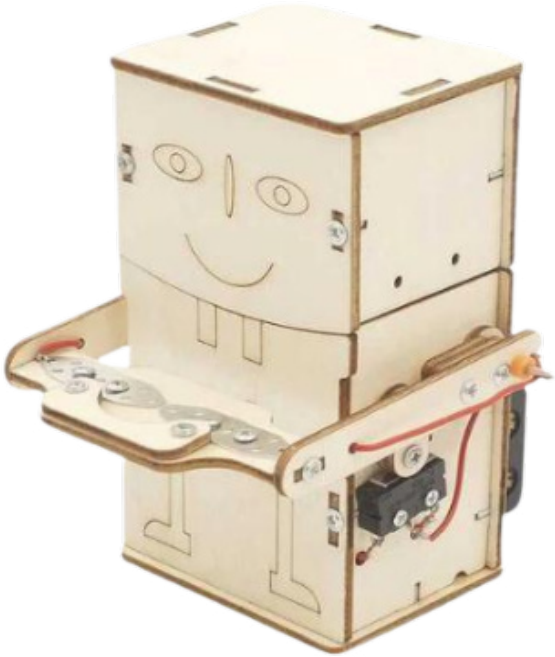
BOT SHOP

LET THE FUN BEGIN

Hello Coin stealing robot

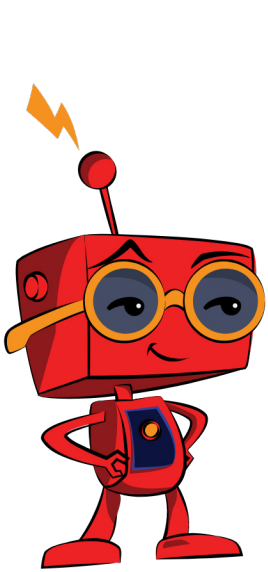
Discover the Joy's of a
Mechanical Friend

Batteries
NOT
included



level

Coin stealing robot



Hey there, little creator!

I'm a coin stealing robot, i swallows coins.

I'm a storage piggy bank. As long as you put a coin between y hands, i will swallow the coin into my body, and then return with both my hands to wait for the next coin. Isn't it amazing?

Let's see what we need and how to prepare:

How to get prepare:

- Before you start, you need to find a safe and clean place to work.
- If you have any questions or need help, you can ask your parents, a grownup or teacher and they will assist you.

Have fun!

Some things to keep in mind:

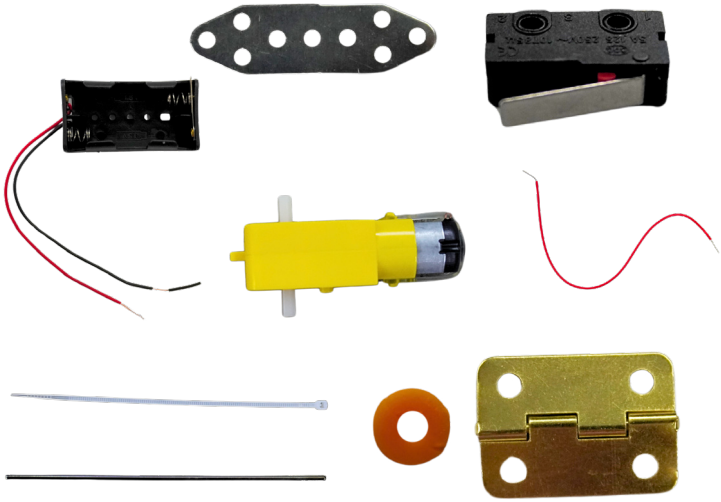
- *Be careful:* When you open the package with the parts, be careful not to drop or lose any small parts. They are very important for your model. If you lose a piece, your model might not work!

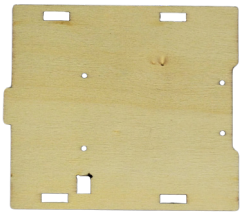
- *Read and follow:* If you want to make your model easily, you need to read the instructions well and follow the steps.

Remember to get your own 2 x AA batteries for the coin stealing robot?

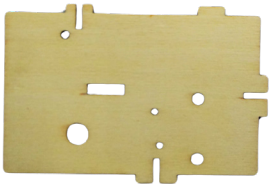
What is in the BOX

- 24 wooden parts
- 11 small screws
- 24 medium screws
- 3 long screws
- 2 brackets
- 3 shafts
- 5 orange fixing rings
- 1 motor
- 1 hinge
- 3 red wire
- 1 battery holder
- 2 cable ties
- 1 switch
- 1 screwdriver

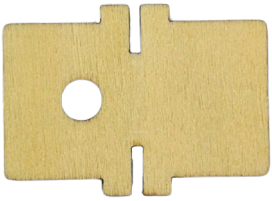




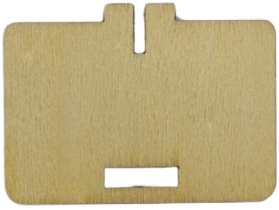
X 1 — 1



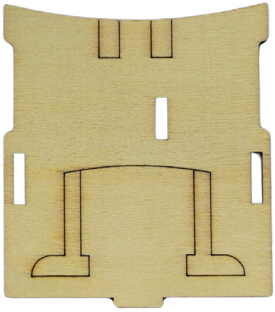
X 1 — 2



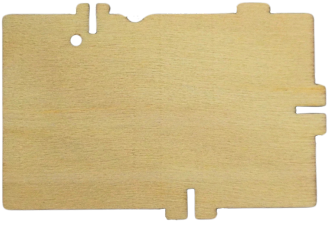
X 1 — 3



X 1 — 4

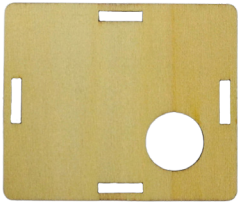


X 1 — 5



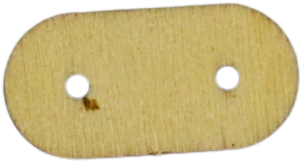
X 1 — 6

7 — 1 X



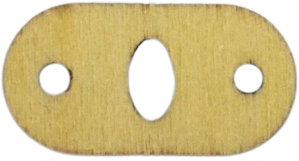
8 — 1 X

9 — 1 X

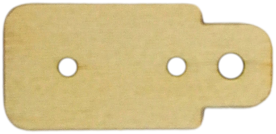


10 — 1 X

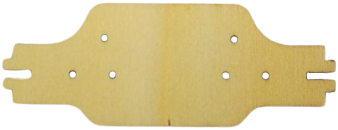
11 — 1 X



12 — 2 X



x 2 — 13



x 1 — 14

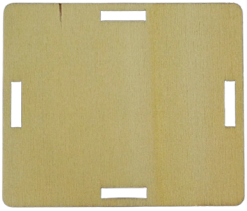
x 1 — 15

x 1 — 16

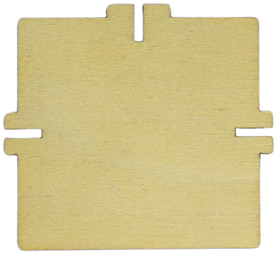
x 1 — 17

x 1 — 18

19 — 1 x

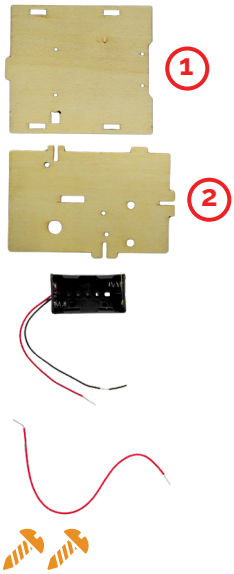


20 — 1 x

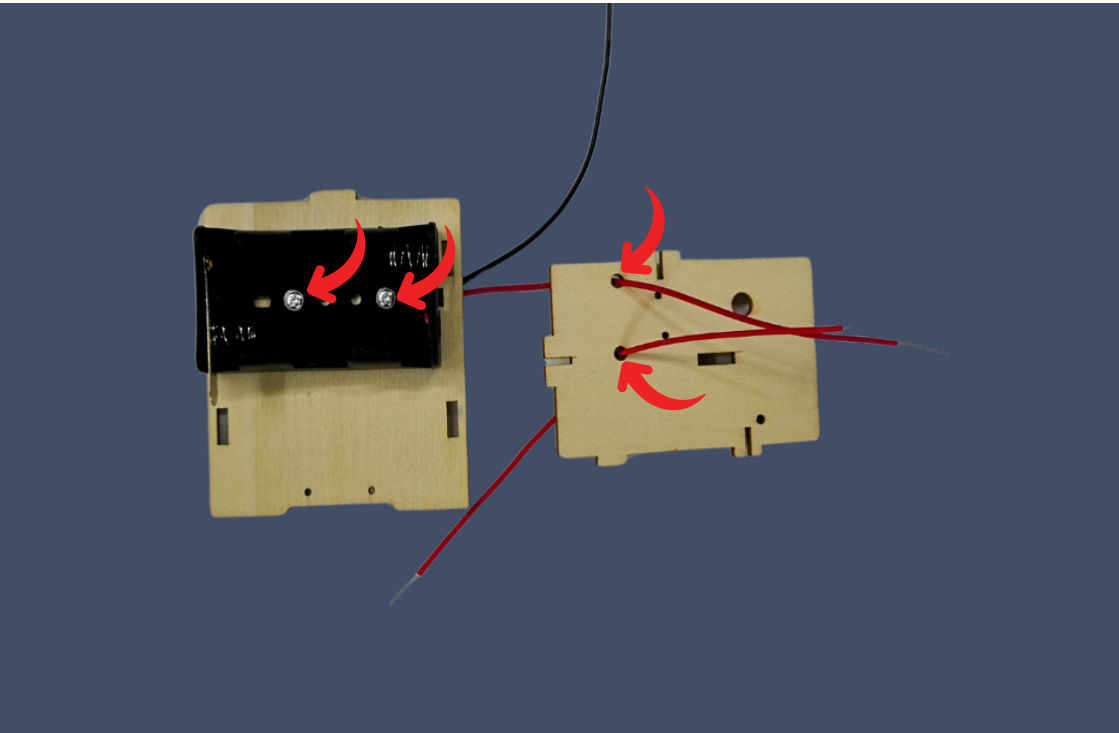


21 — 2 x

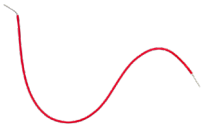
Step 1



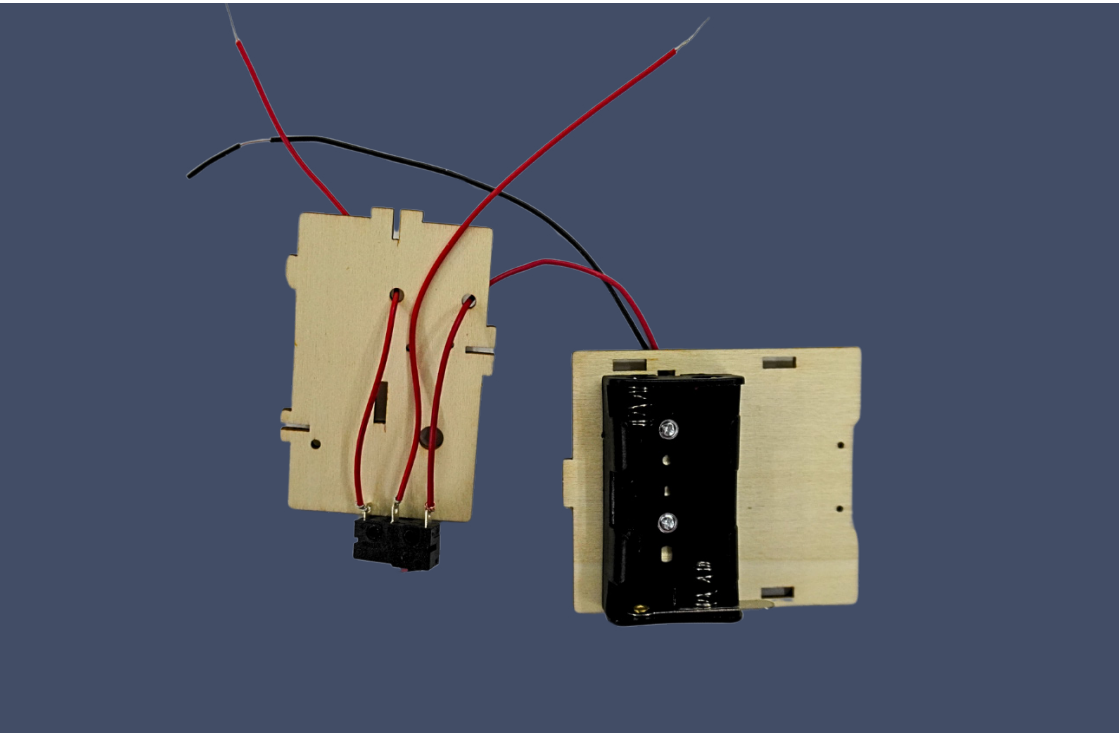
First, pass the battery holder's wire through the hole in Board 1. Then, guide the red wire from the battery holder through the hole in Board 2. Finally, insert the 15 cm red wire through the hole in Board 2.



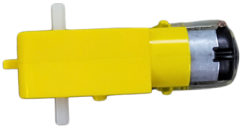
Step 2



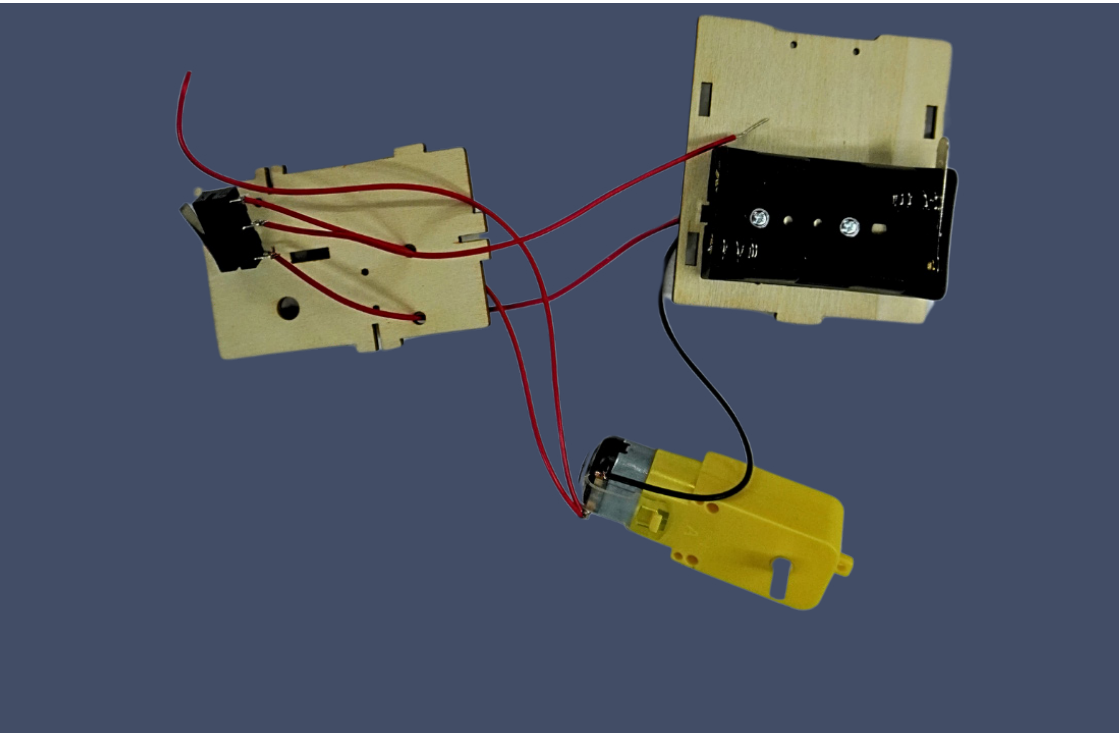
Following the picture, start by connecting the red wire from the battery holder to the first leg of the switch. Then, connect the 15 cm red wire to both the second and third legs of the switch.



Step 3

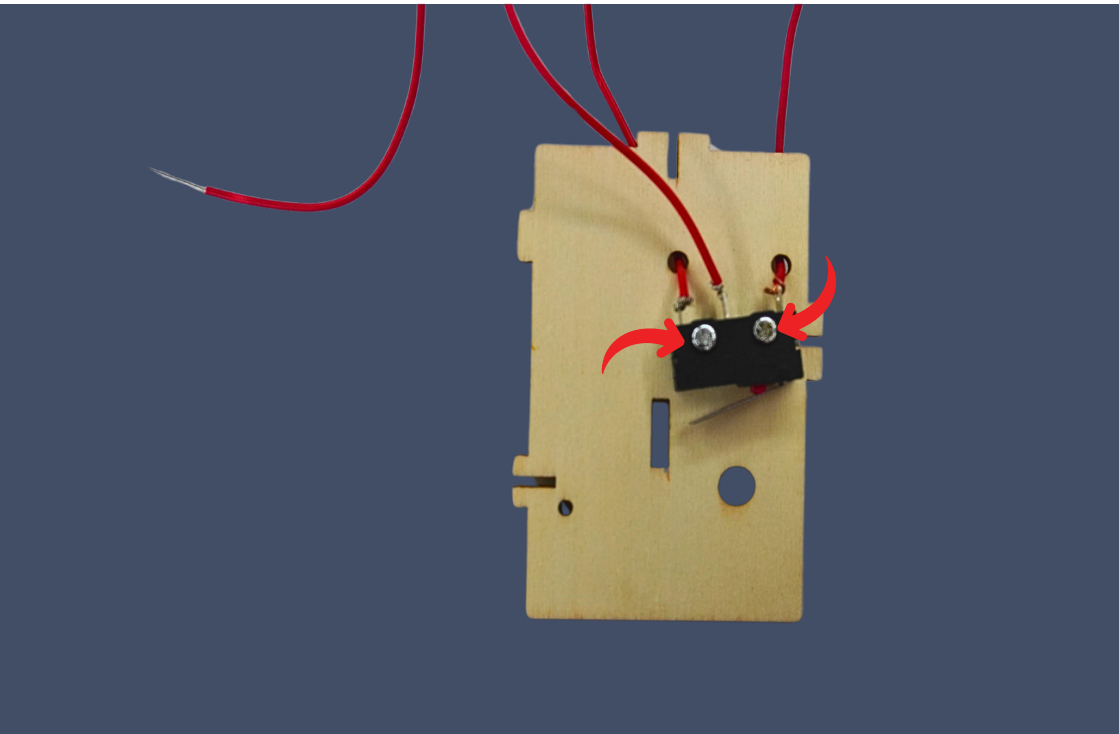


Start by connecting the red wire from the battery holder to the left pole of the switch. Attach a short red wire to the center pole of the switch, leaving the other end free for now. Then, connect the second short red wire from the right pole of the switch to the right pole of the motor. Next, connect the longer red wire to the same motor pole. Lastly, attach the black wire from the battery holder to the left pole of the motor. Follow the picture for reference.



Step 4

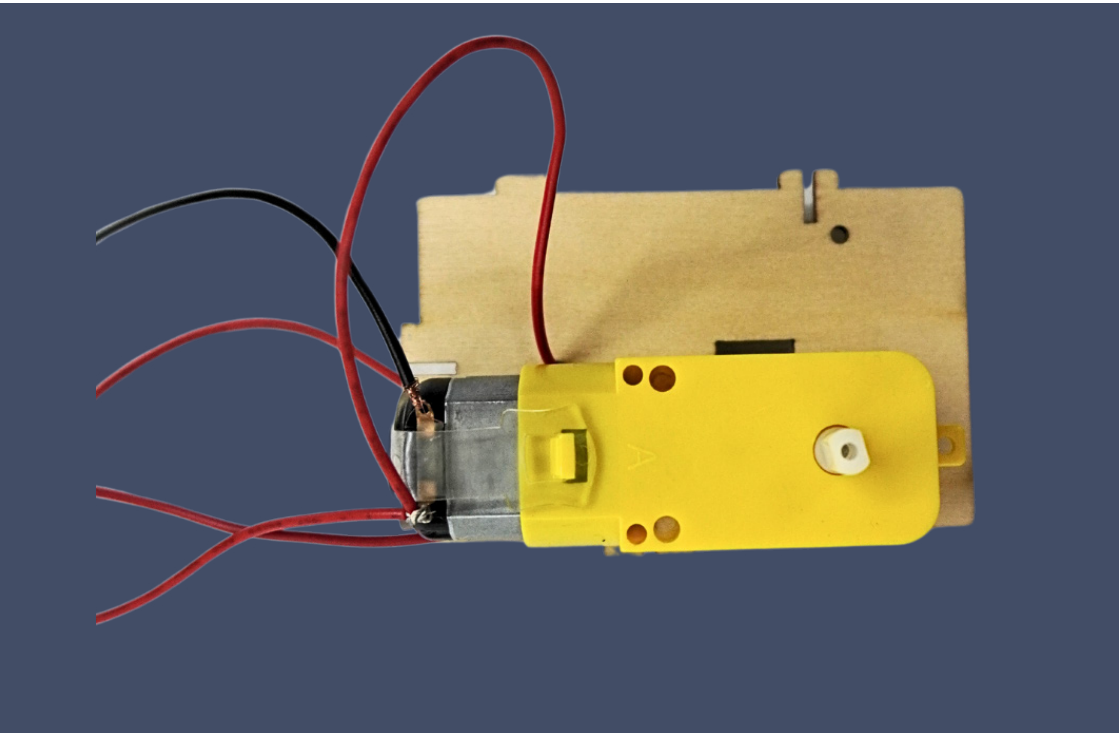
Attach the switch to board 2 using 10mm screws.



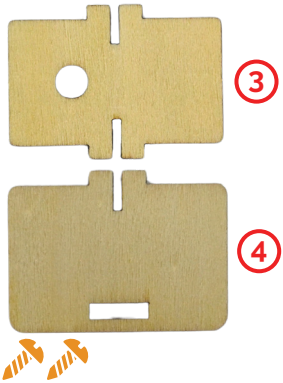
Step 5

Using the picture below as a guide, insert the motor's shaft into the hole on board 2.

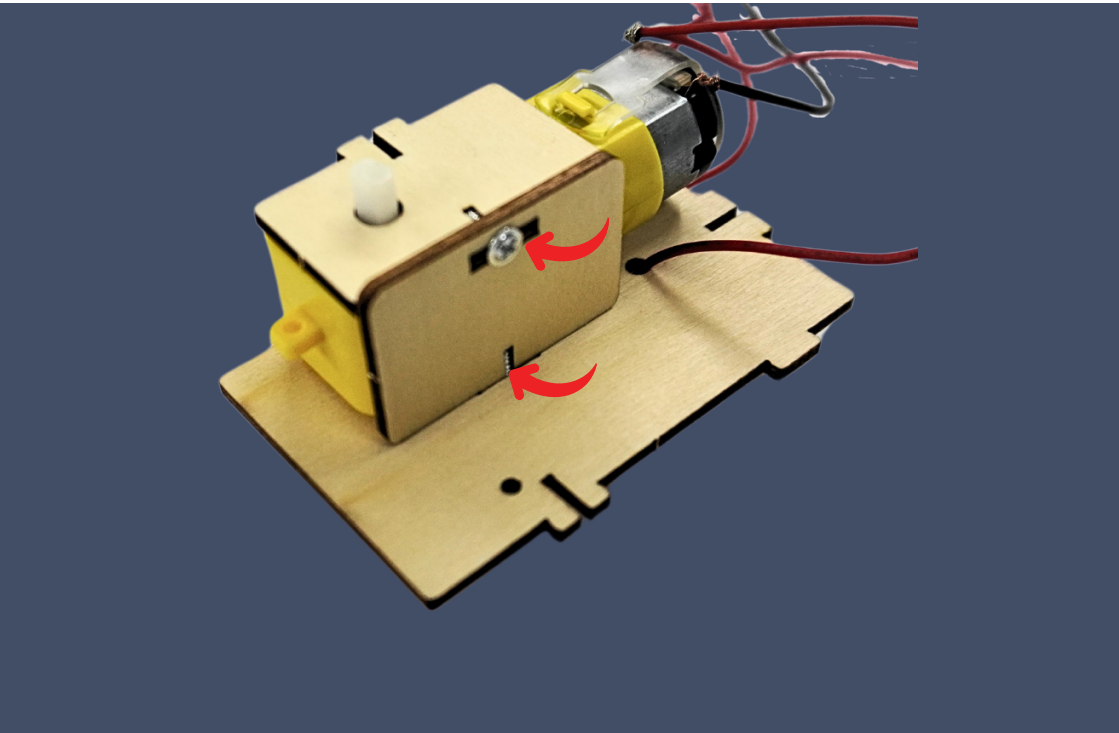
Make sure to carefully check the orientation of the motor's copper metal sheet.



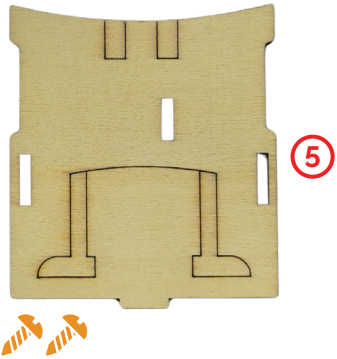
Step 6



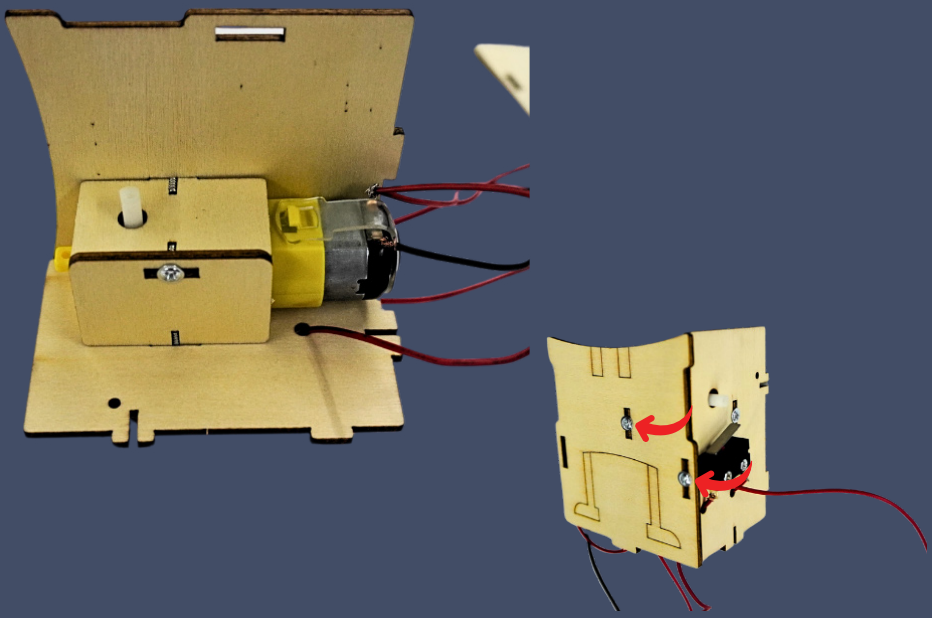
Following the picture below, start by attaching board 3 to the motor shaft. Then, use 7mm screws to secure board 4 to both board 2 and board 3.



Step 7

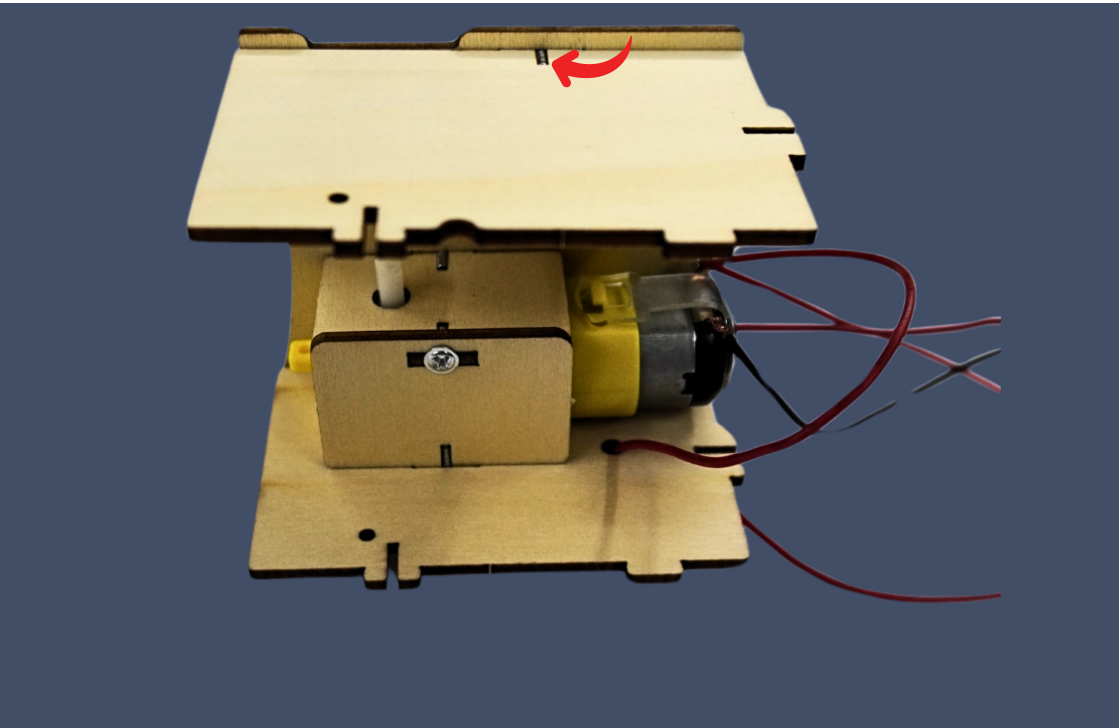


Using the picture below as a reference, secure board 5 to both board 2 and board 3 with 7mm screws.



Step 8

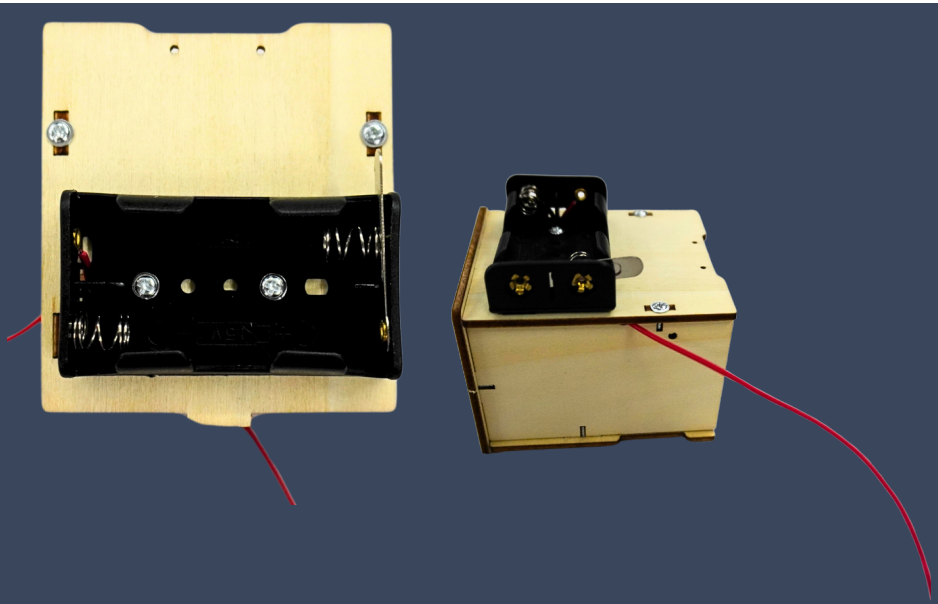
Using the picture below as a guide, attach board 6 to board 5 with 7mm screws.



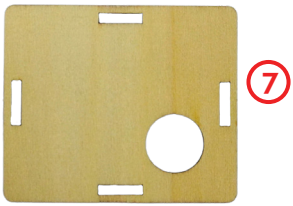
Step 9

Attach board 1 to both board 2 and board 6 using 7mm screws.
Secure the battery holder to board 1 using 4mm screws.

Keep in mind that the 20cm red wire should go through the hole on board 6.

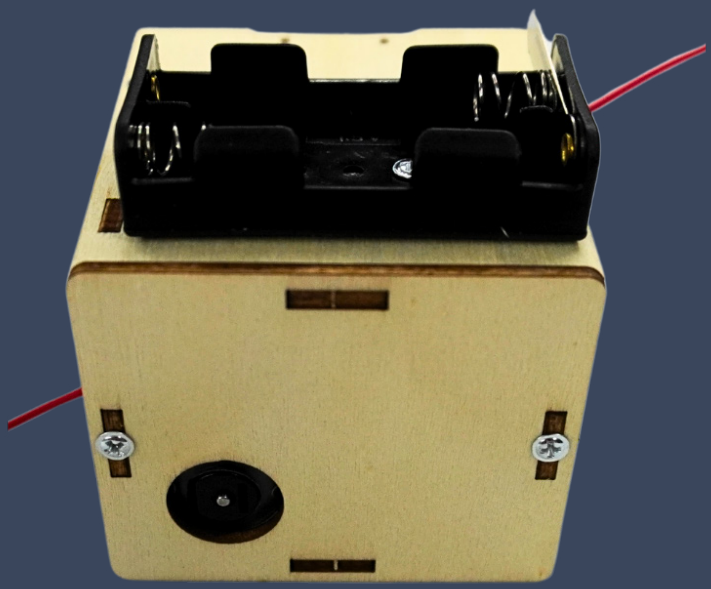


Step 10

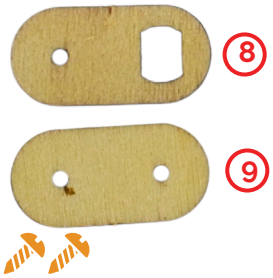


Start by using cable ties to organize the wires, then trim any excess ties with scissors. After that, secure board 7 using 7mm screws.

Please be careful when organizing the wires to avoid damaging them. The 20cm red wire can be left unarranged.

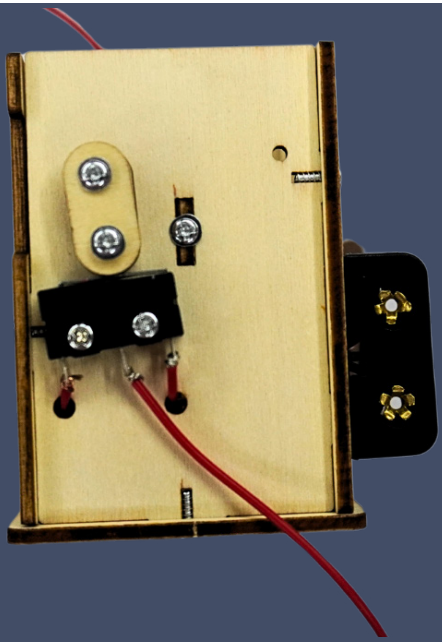


Step 11

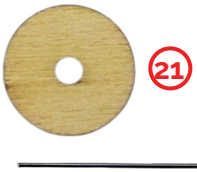


Attach board 8 and board 9 to the motor shaft using 7mm screws.

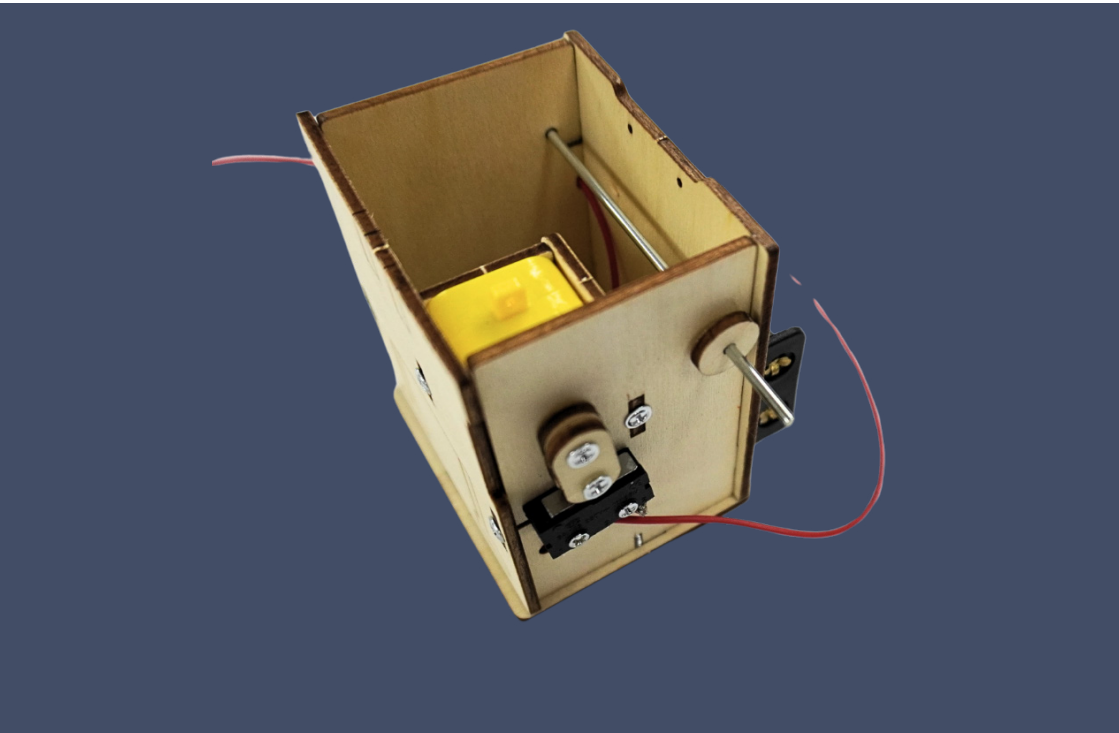
Remember that board 8 should be positioned inside, while board 9 goes on the outside. If installation is difficult, you can gently twist the shaft to make it easier.



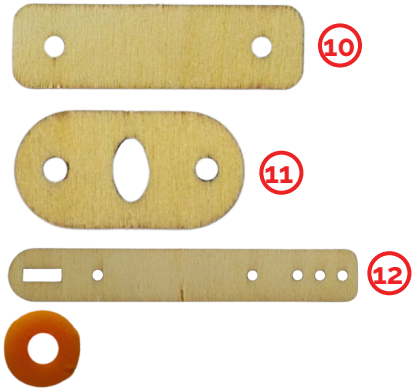
Step 12



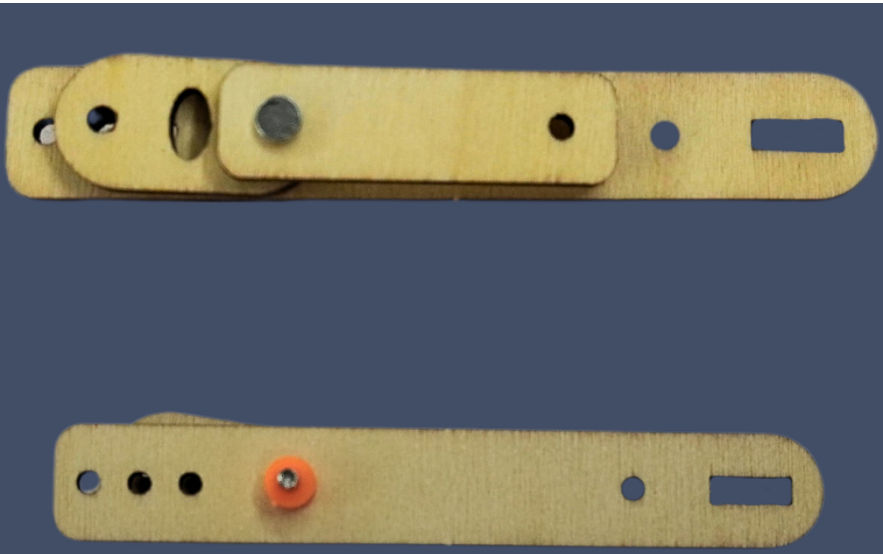
Using the picture below as a reference, first insert the 10cm shaft through the round holes of board 2 and board 6. Then, attach two board 21 pieces to both ends of the 10cm shaft.



Step 13

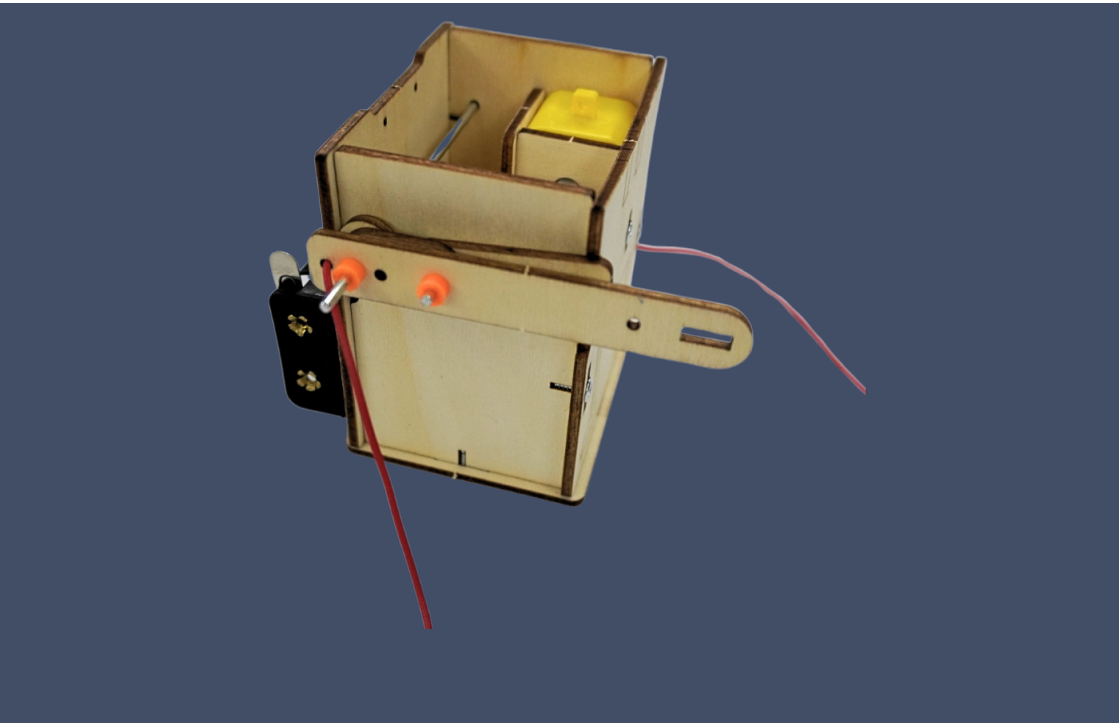


Using the hole positions shown in the picture below, insert the 1.3cm shaft through board 10, board 11, and board 12 in that order. Secure it at the other end with the orange fixing ring. This completes the assembly of the left arm.

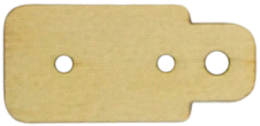


Step 14

Using the picture below as a guide, first pass the 20cm red wire through the round hole of the left arm on the 10cm shaft and secure it with the orange fixing ring. Make sure to leave a 1mm gap between the fixing ring and board 12, as this gap will help increase the rotation resistance.



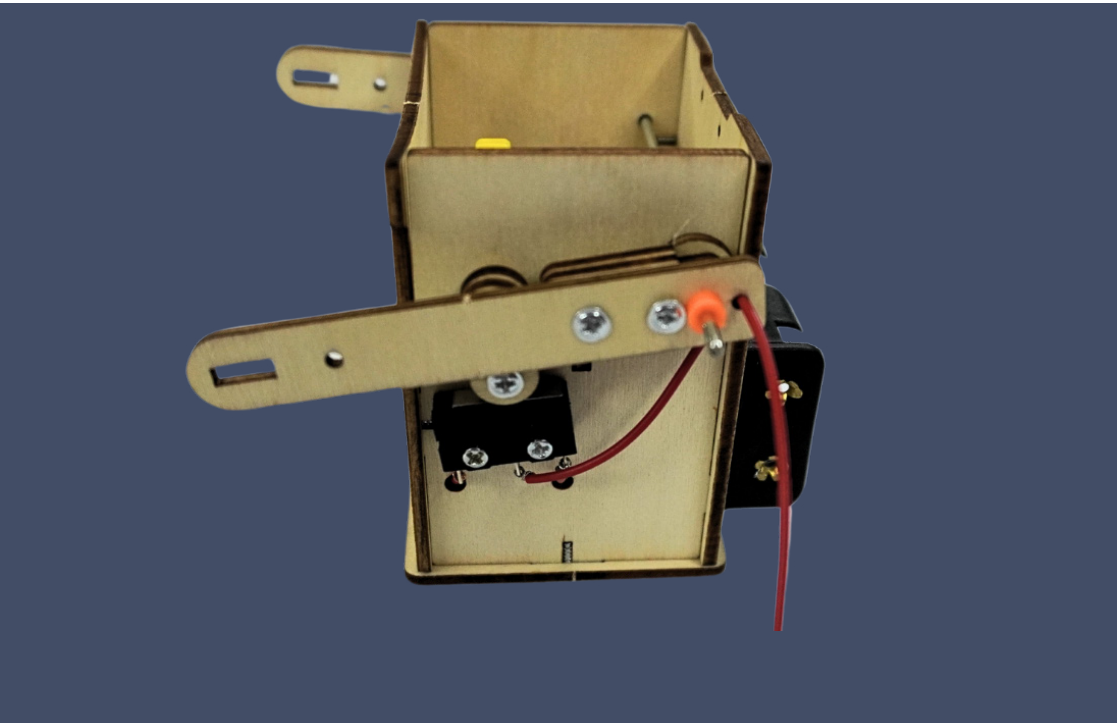
Step 15



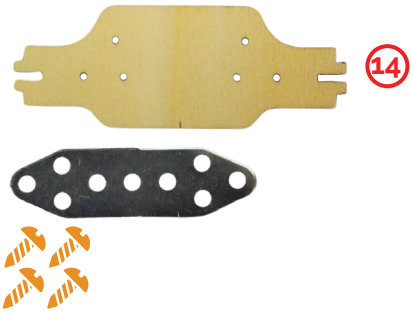
Check out the hole positions in the picture below! Assemble board 12 and the two board 13 units onto the right arm using 7mm screws.

Step 16

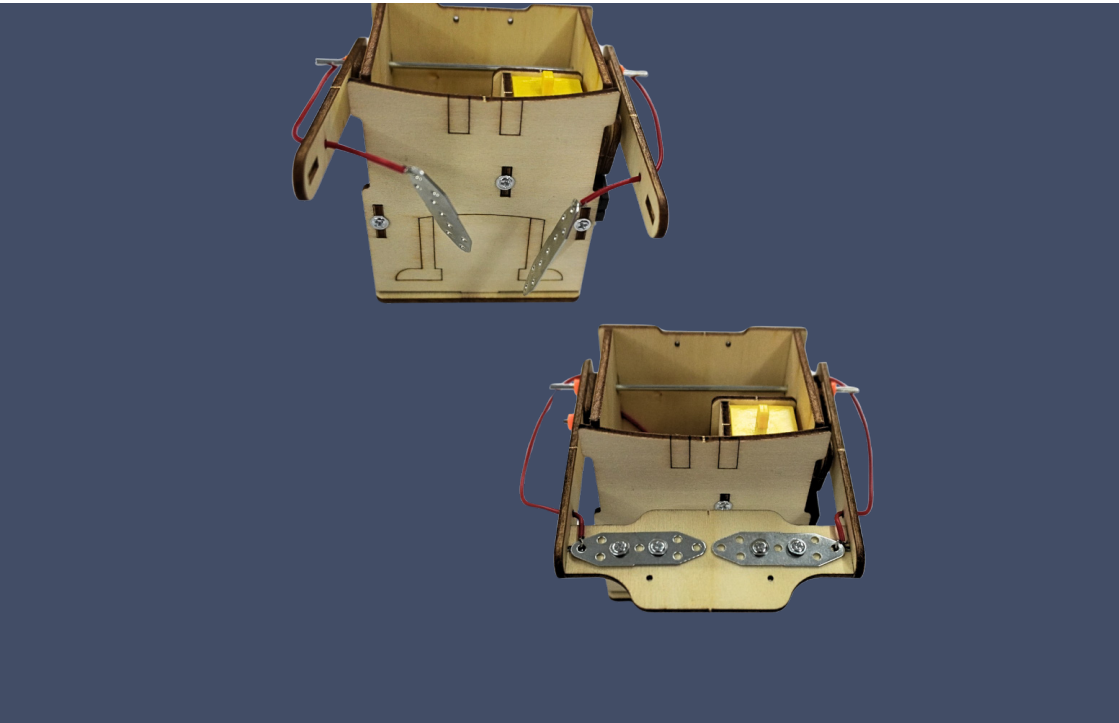
Using the picture below as a reference, first pass the 15cm red wire through the round hole of the right arm. Next, install the right arm onto the 10cm shaft and secure it with the orange fixing ring. Remember to leave a 1mm gap between the fixing ring and board 12, as this gap will help increase the rotation resistance.



Step 17

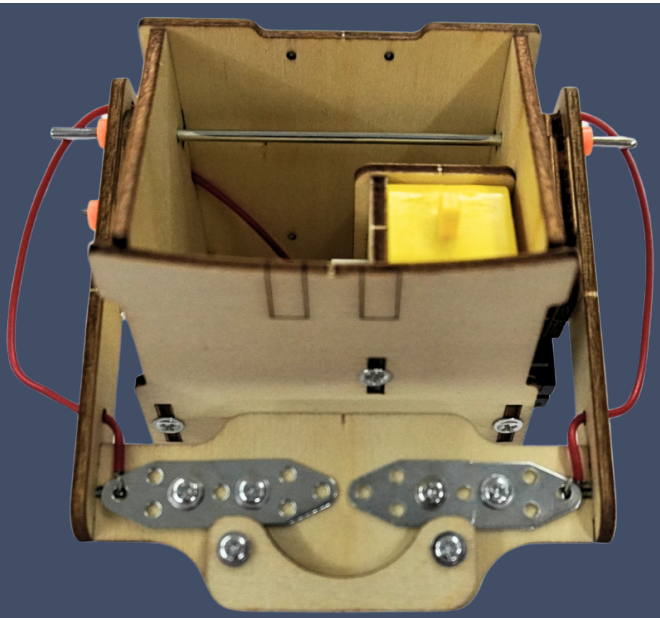


Using the picture below as a reference! Start by connecting one end of the red wire to the metal bracket. Then, secure the metal bracket onto board 14 using some 4mm screws.



Step 18

Use 7mm screws to attach board 15 to board 14.



Step 19

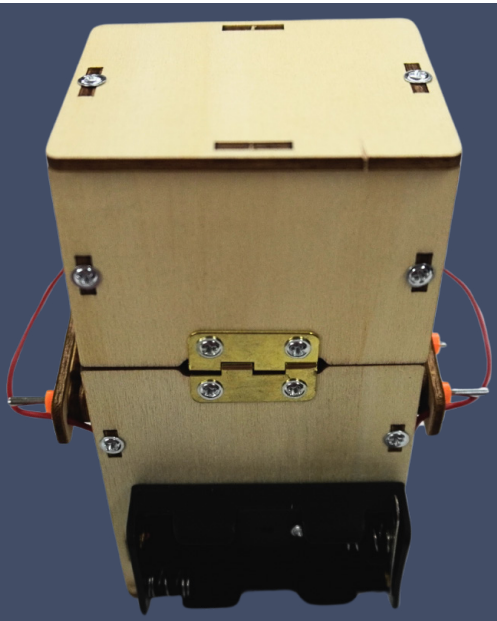
Check out the picture below! Install board 16, along with two board 17 units and board 18, using 7mm screws.

Step 20

Take a look at the picture below! Install board 19 using 7mm screws.

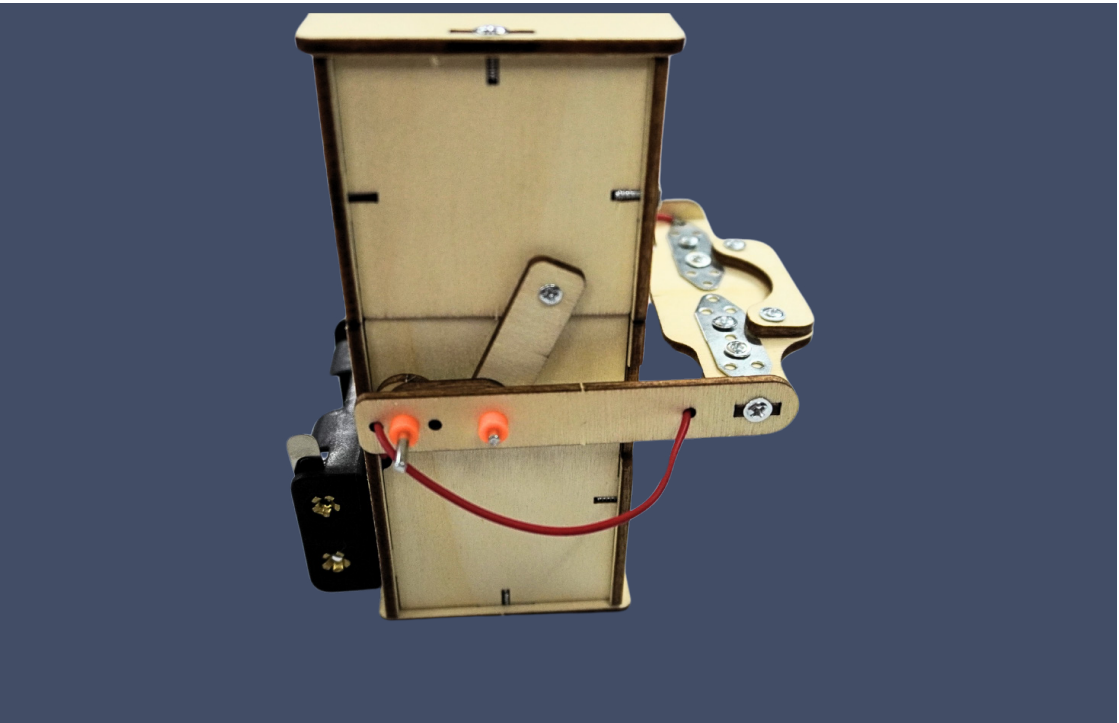
Step 21

Check out the picture below! Assemble the head and the body using 4mm screws and the hinges.



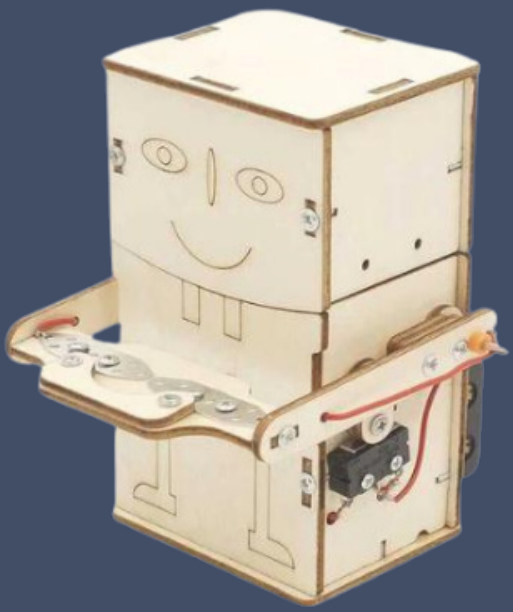
Step 22

Look at the hole positions in the picture below. Pass the 1.3mm shaft through board 10 and board 17, then secure it with an orange fixing ring on the other end. Be sure to leave a 1mm gap between the orange fixing ring and board 17, as having no gap can increase rotation resistance.



Step 23

Congratulations! The coin-stealing robot is complete! Simply place the batteries in the battery holder, turn on the switch, and give it a try by placing coins on the robot arm. Enjoy!

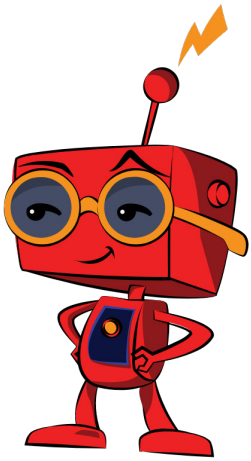


Now you have
your very own Coin stealer!

Finally, it's alive! Now we will become the best of friends!

If it doesn't want to work!?

- Check if the wiring is connected right. You might need to reconnect it.
- Check if the wire connection is loose. It is recommended to reconnect the wire.
- Check if the battery is low on power. You might need to change it.
- Check if the fixing ring is too tight. It is recommended to leave a gap of 1mm.



Science

Technology

Engineering

Arts

Mathematics

Here's how they help:

1. *Hands-On Learning:*
   Kids do experiments and projects, making learning fun.

2. *Problem-solving:*
   This makes your child think outside the box to solve a problem.

3. *Creative Thinking:*
   Arts and design are part of ***STEAM***, so kids get to be creative, and think of new ideas to build and create.

4. *Confidence:*
   Completing projects makes kids feel like they accomplished something, building confidence in creating more and unique things.

5. *Preparation:*
   STEAM skills are important for the future, so kids can use the skills they learn, to create a better future.

STEAM kits - help kids learn many skills they'll need in a fun and practical way.