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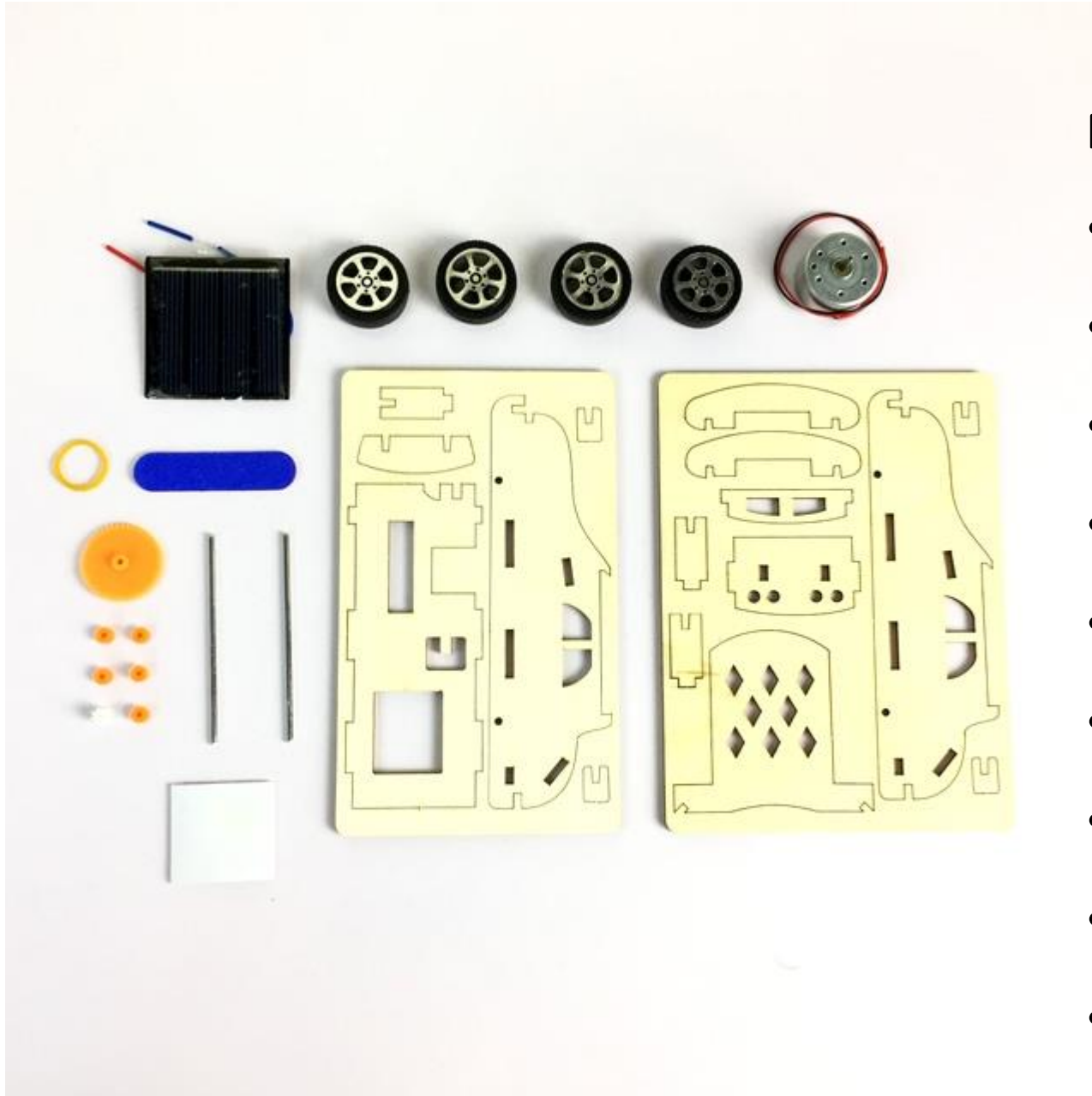
# DIY Solar Powered Wooden Car STEM Kit

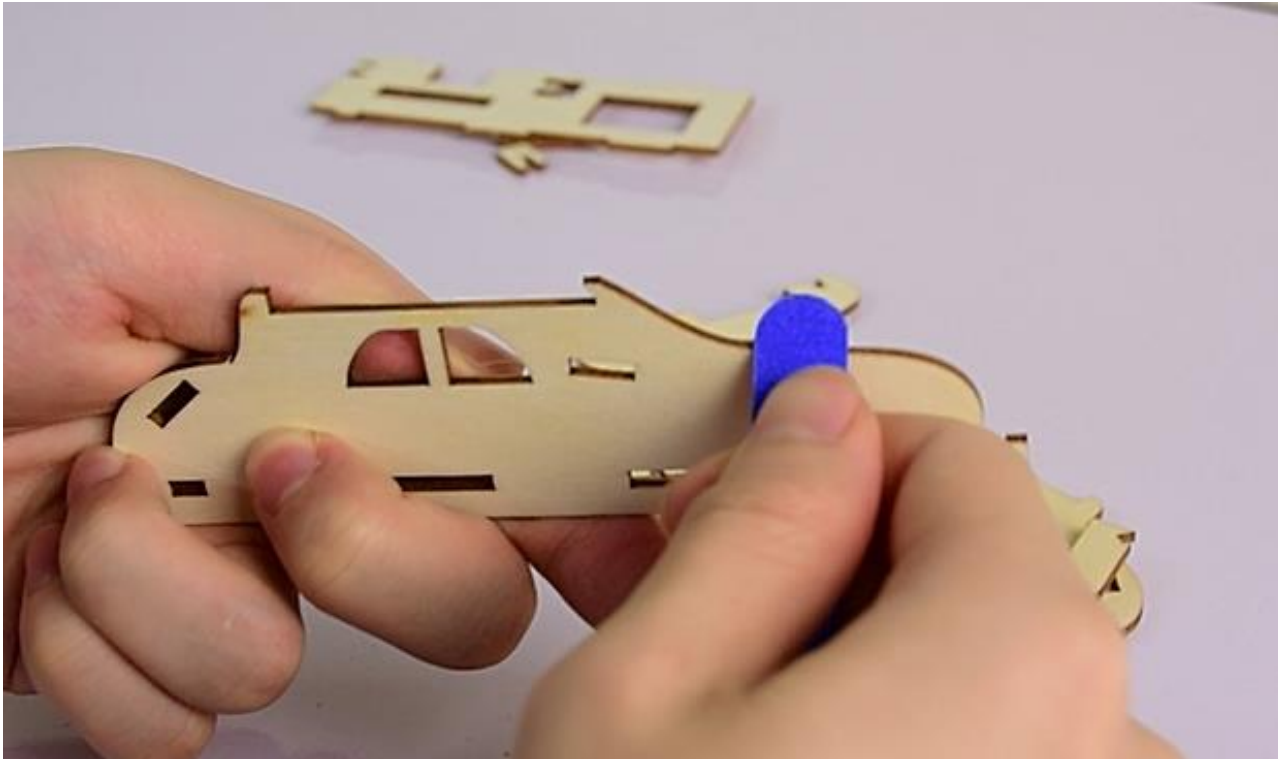
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## Packing List:

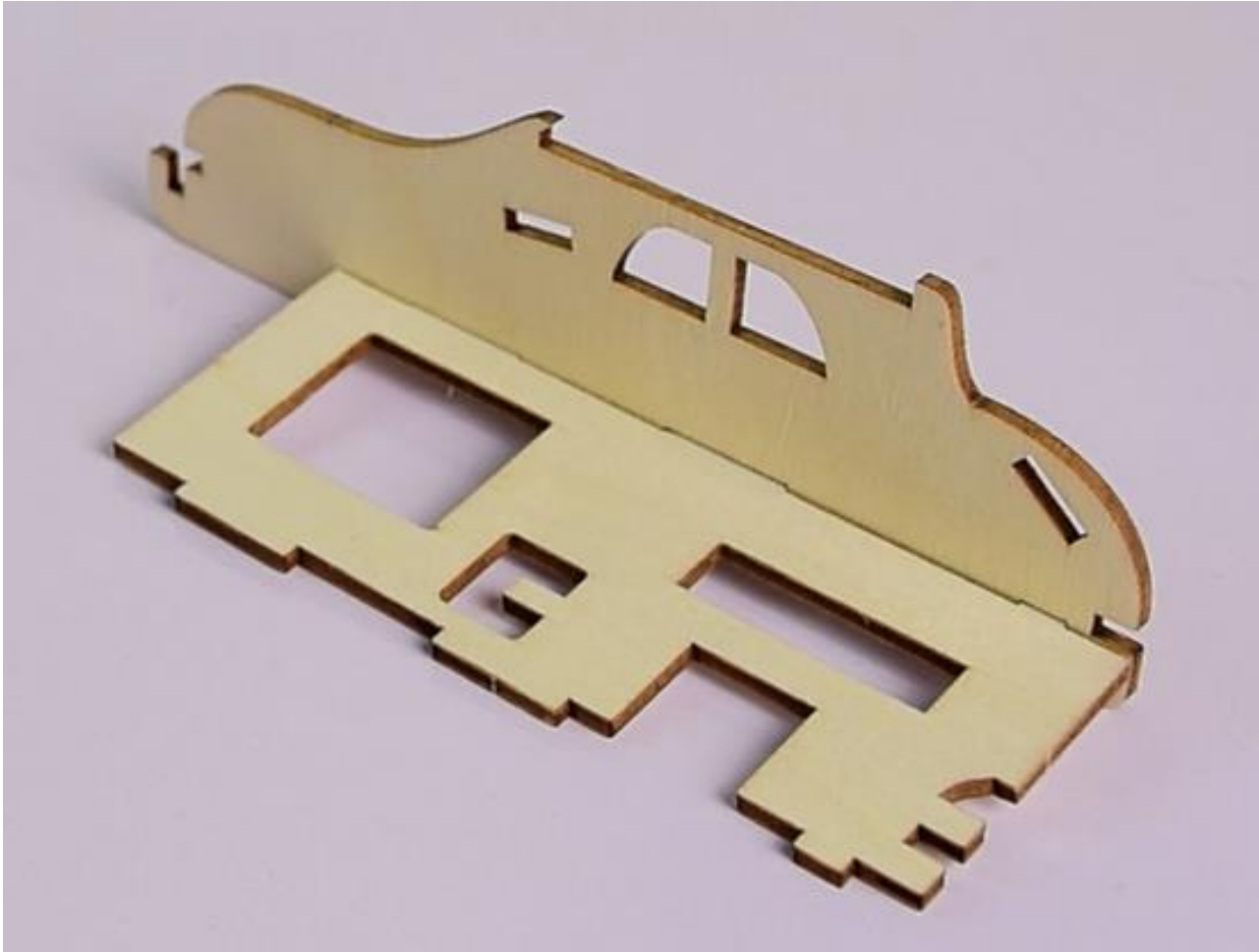
- Wooden parts for the car body
- 1 x Solar Panel
- 4 x Plastic wheels for the car
- 1 x Small DC Motor
- 1 x Small plastic gear
- 1 x Rubber band
- 2 x small iron rod as the shaft for wheel
- Some double-sided tape
- Sanding filer





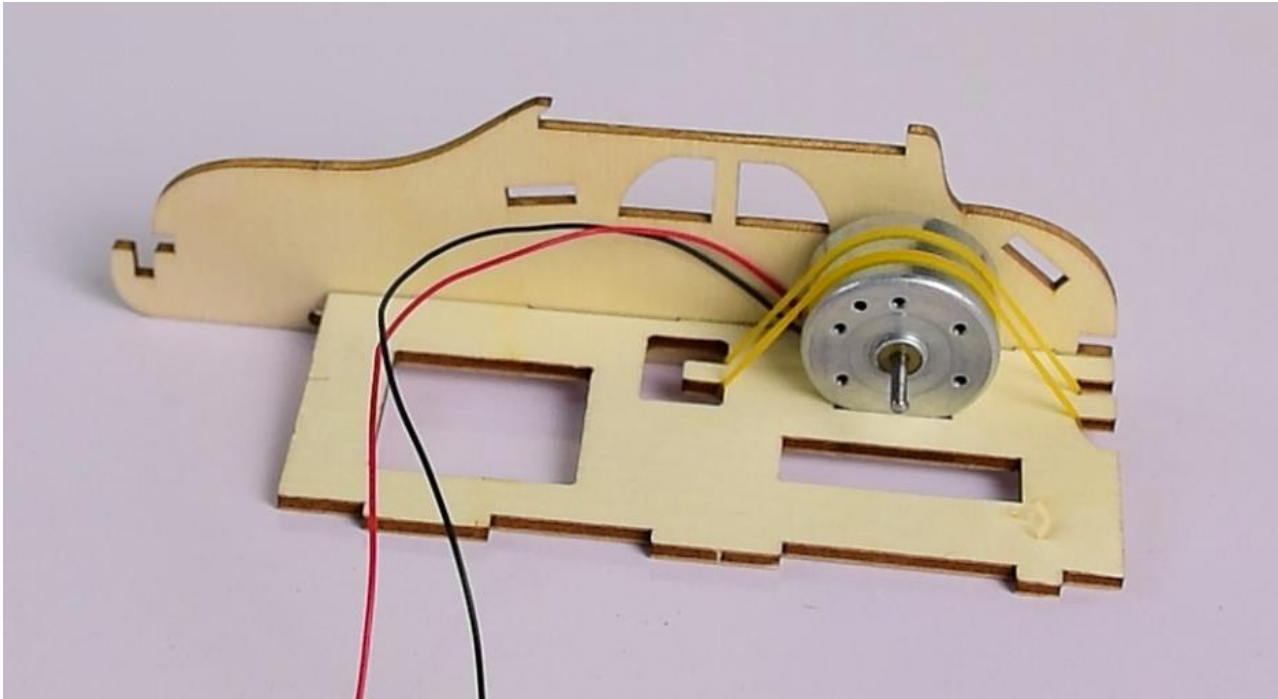
## Step 1:

Remove the wooden pieces of the car structure and sand it using the sanding filer



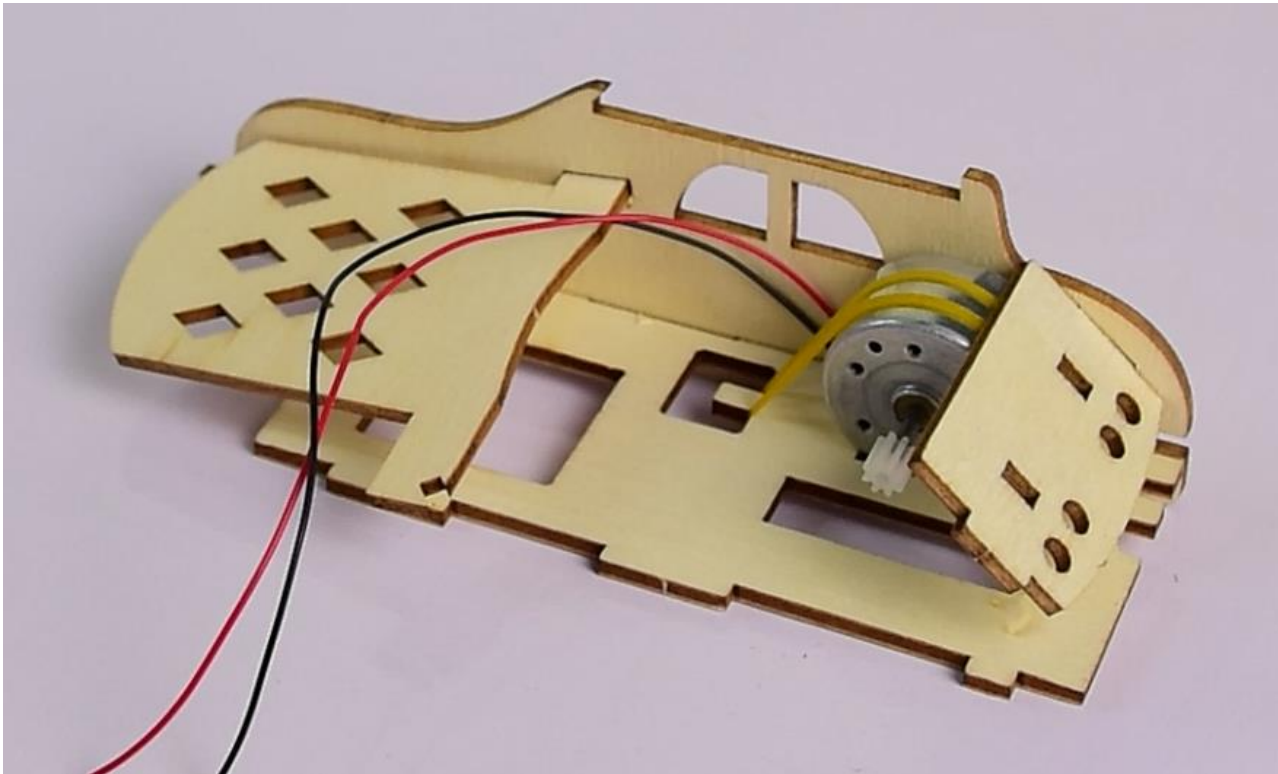
## Step 2:

Join the car wooden structures together as shown in the image.



## Step 3:

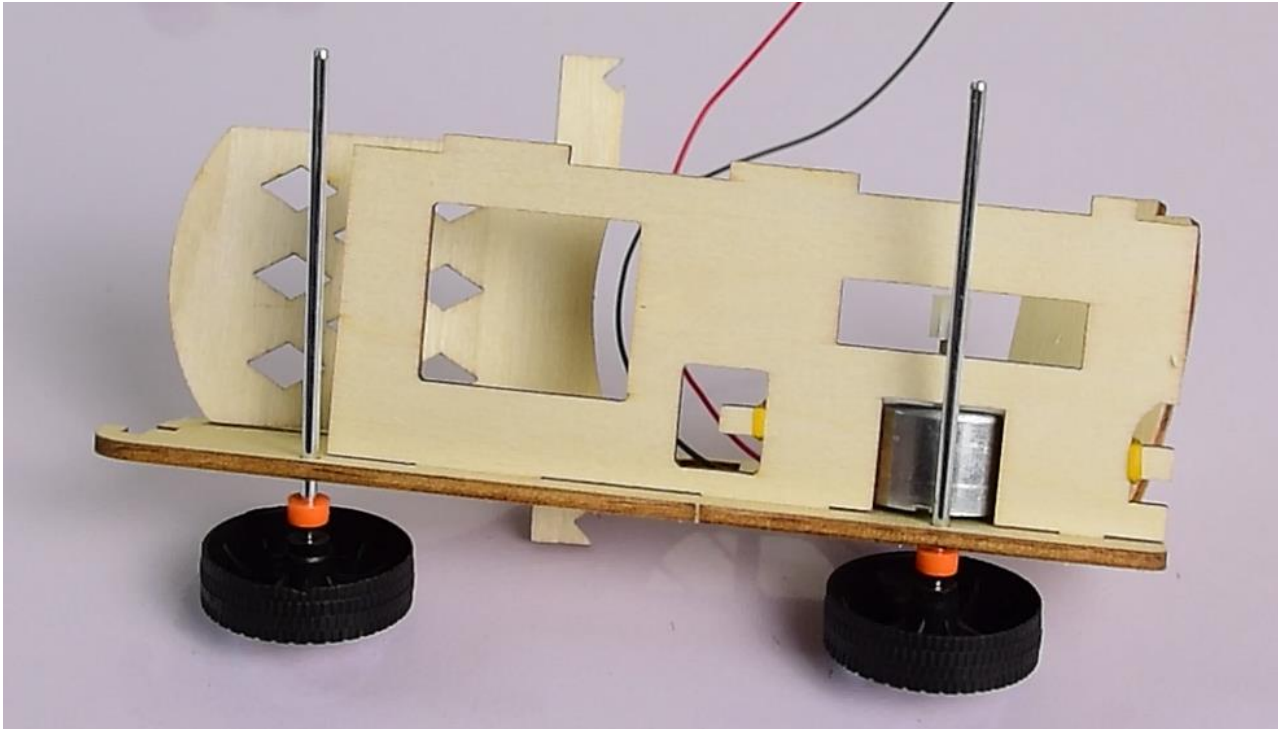
Place the DC motor as shown and hold it down using a rubber band.



## Step 4:

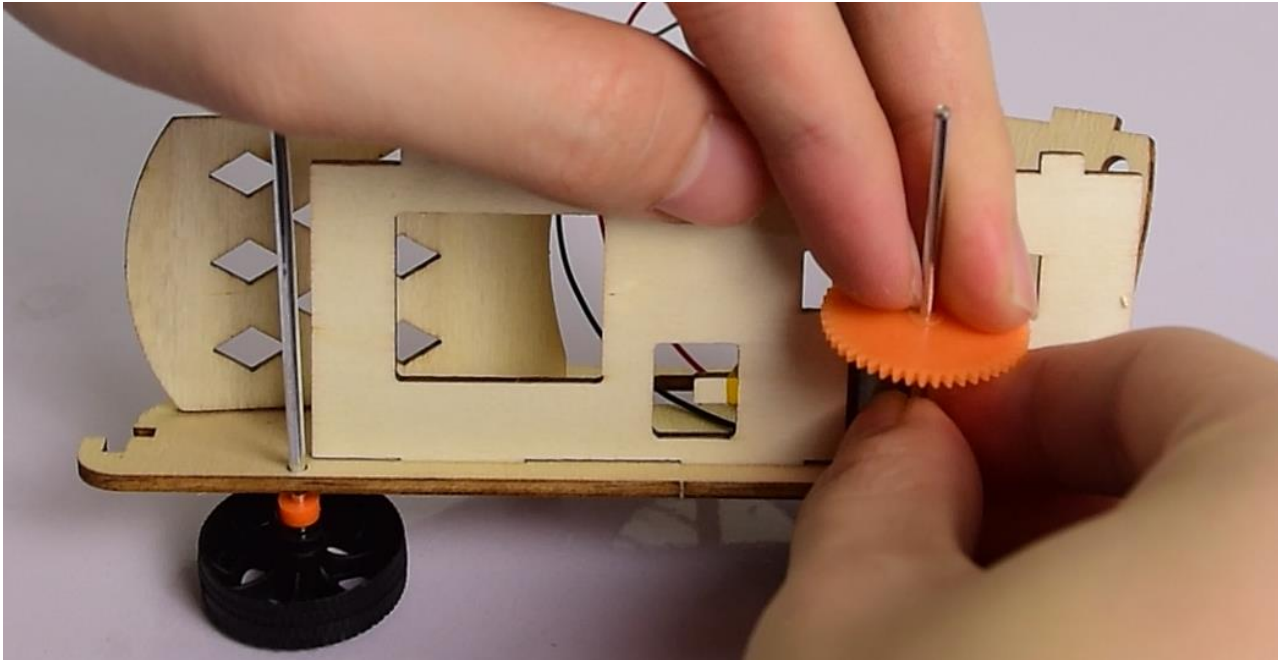
Connect the gear on the DC motor's shaft (metal rod). Join the front and back part of the wooden car as shown in the image.





## Step 5:

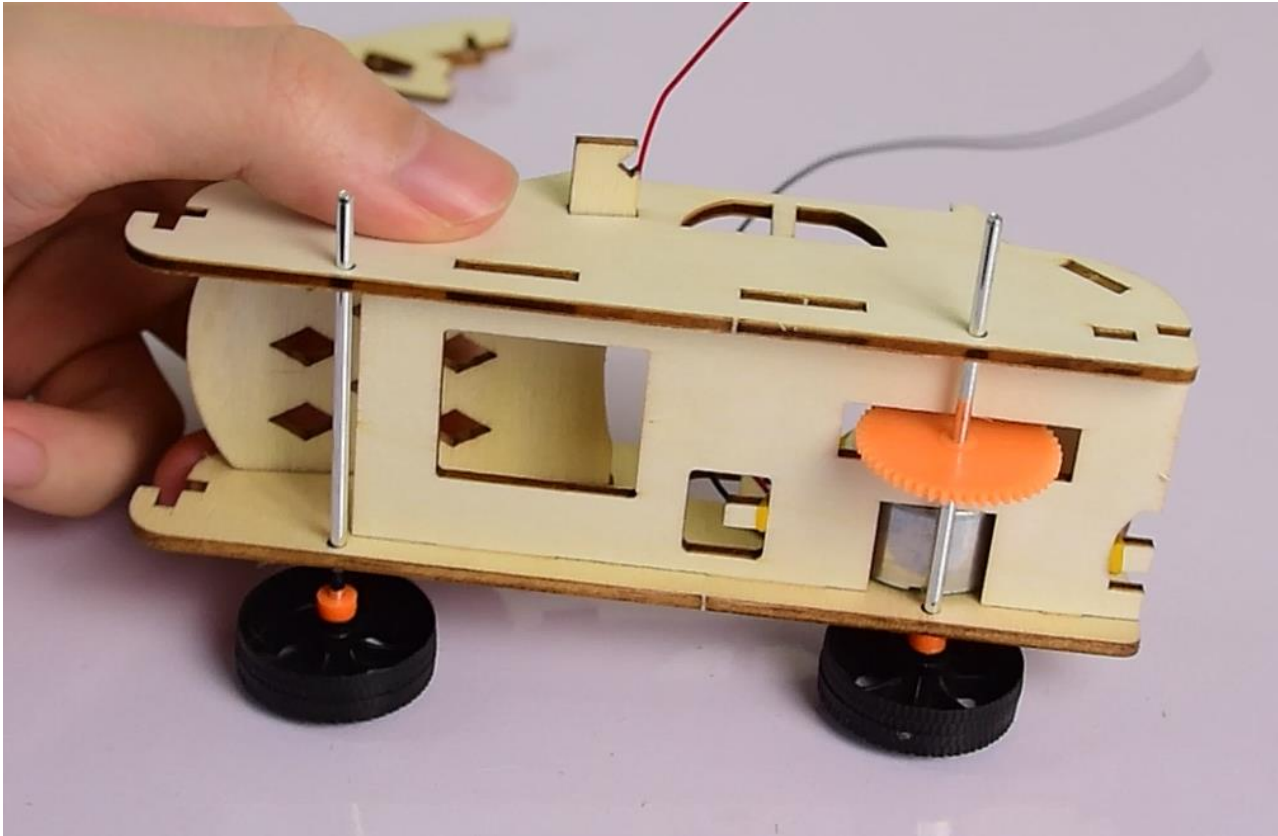
Carefully turn the car to the side and slide two long metal rods through the side of the car. Attach the orange stopper next to the black wheels on the metal shaft.



## Step 6:

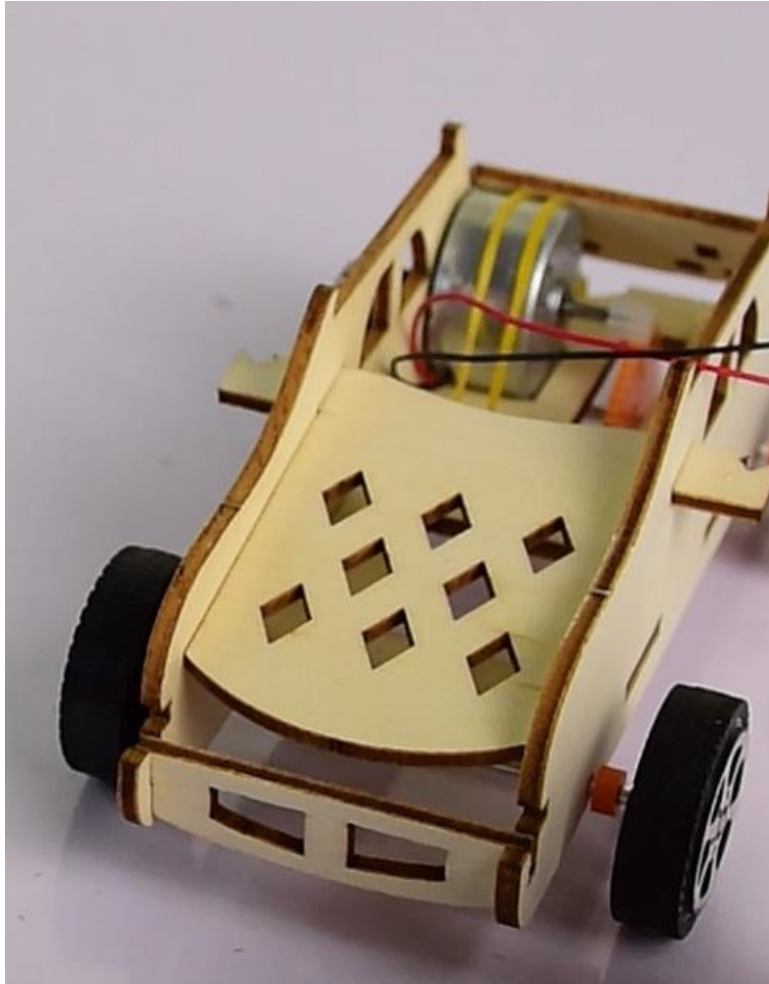
Slide the orange gear through the metal shaft. Make sure the orange gear is touching the white gear that was attached on the DC motor.



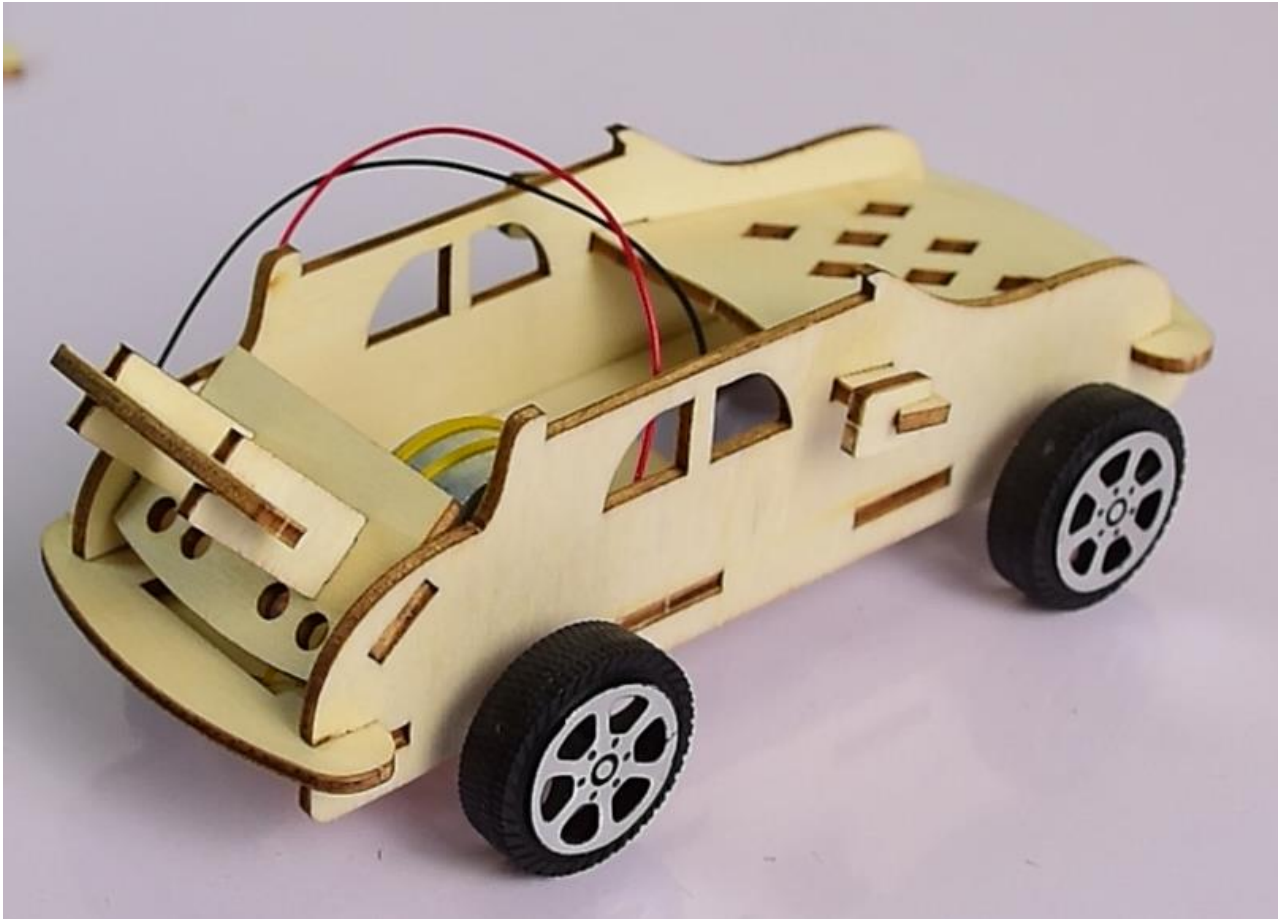


## Step 7:

Carefully snap the other side of the wooden car structure.

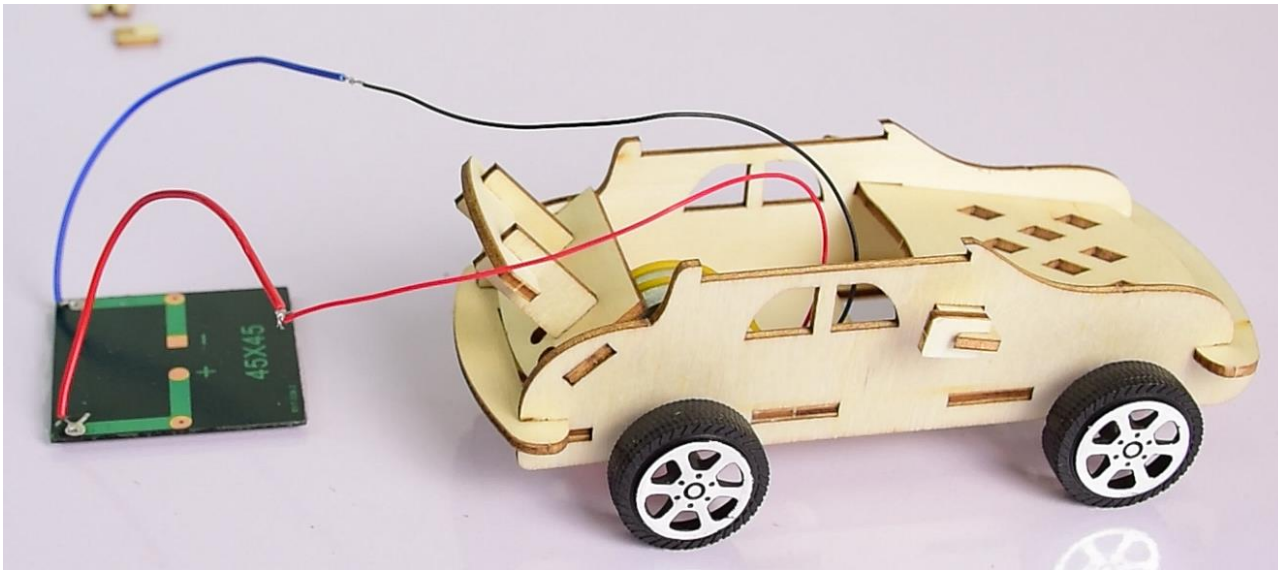


Step 8: Attach the two pieces of bumper of the wooden car.



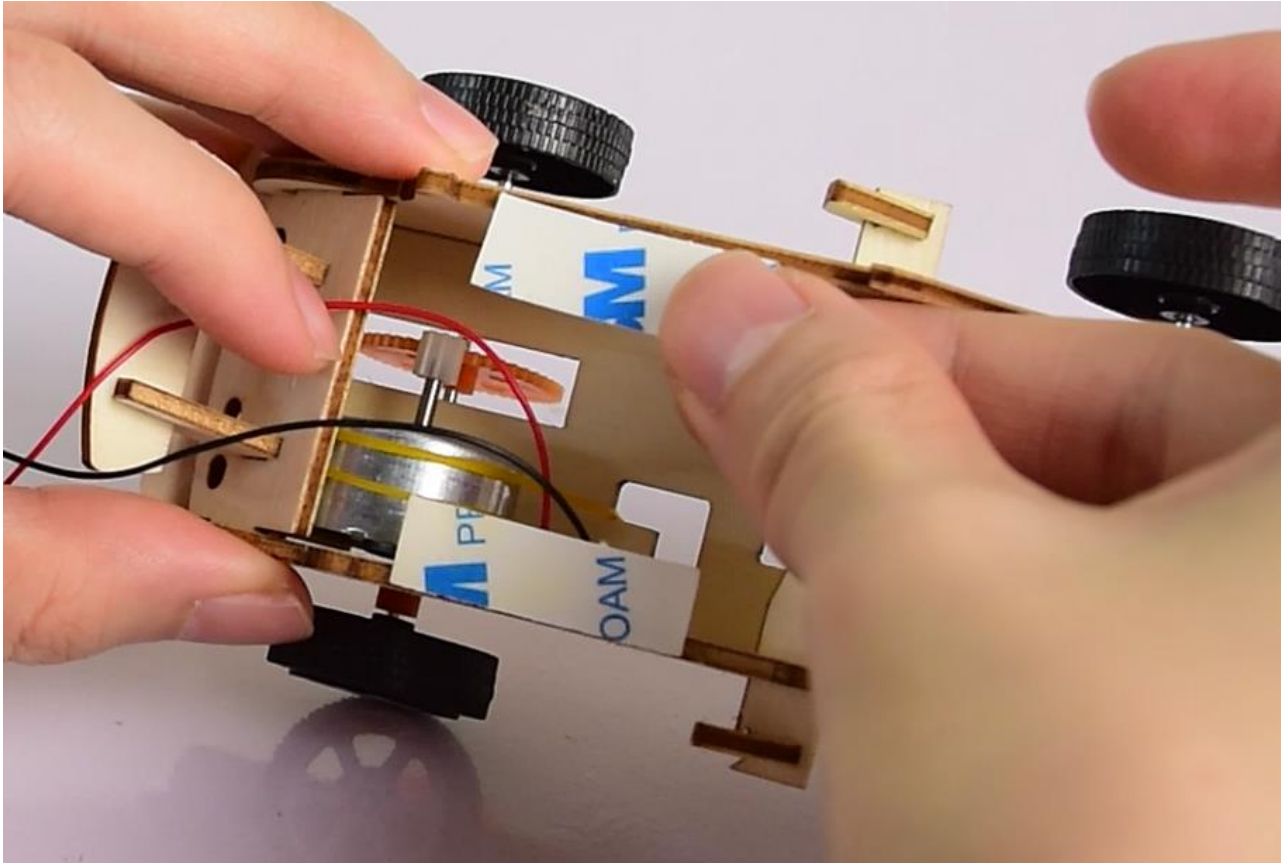
## Step 9:

Connect the back bumper together with the wooden spoiler of the vehicle as shown in the image.



## Step 10:

Hook the solar panel wires directly to the DC motor as shown.



## Step 11:

Apply two pieces of double sided tape at the side roof of the car.





## Step 12:

Attach the solar panel above the roof and you're ready to go!

### **Test:**

Place the vehicle under direct sunlight to generate enough electricity to drive the vehicle forward.