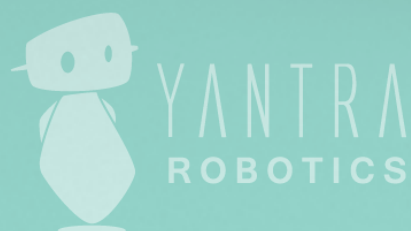
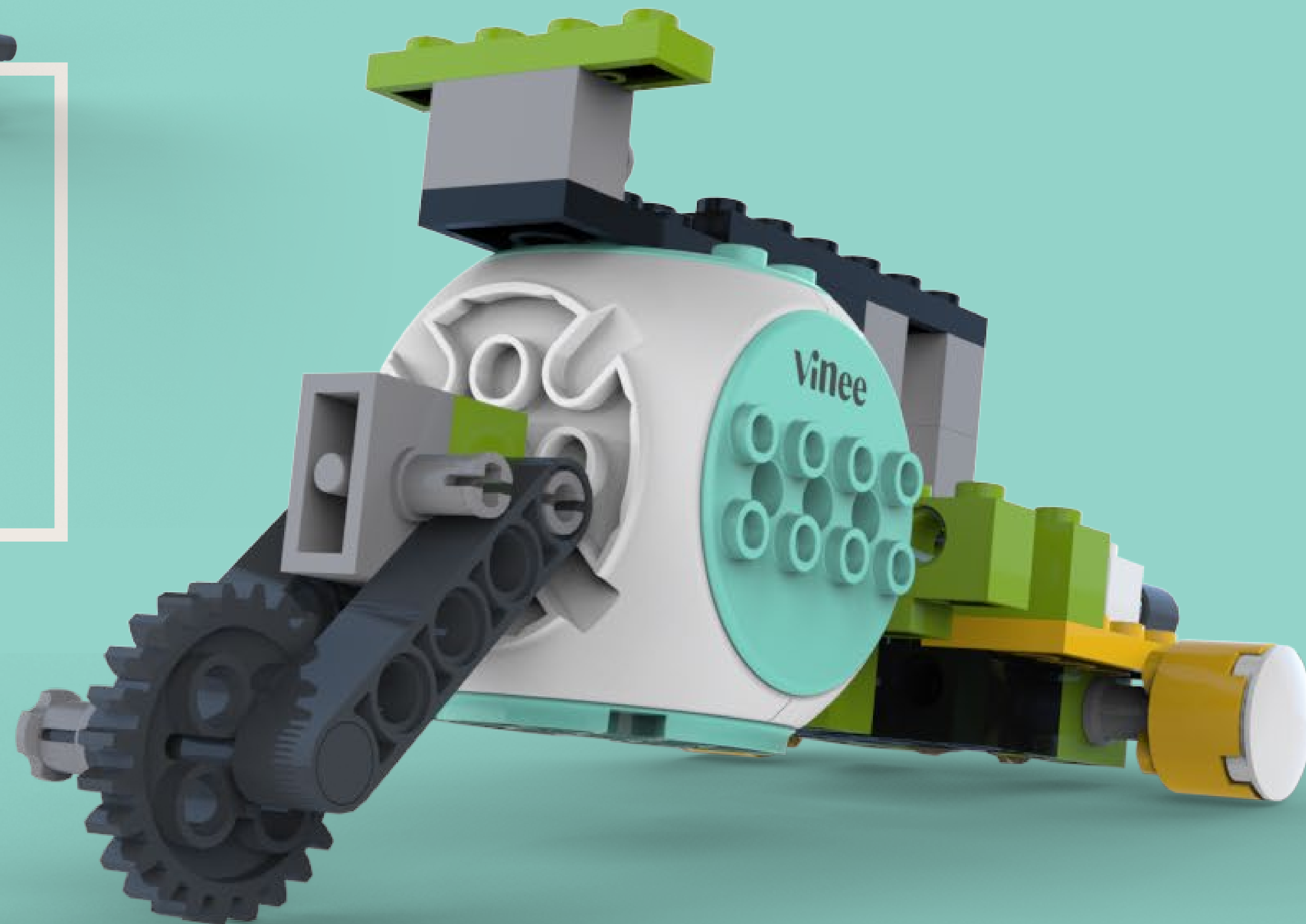
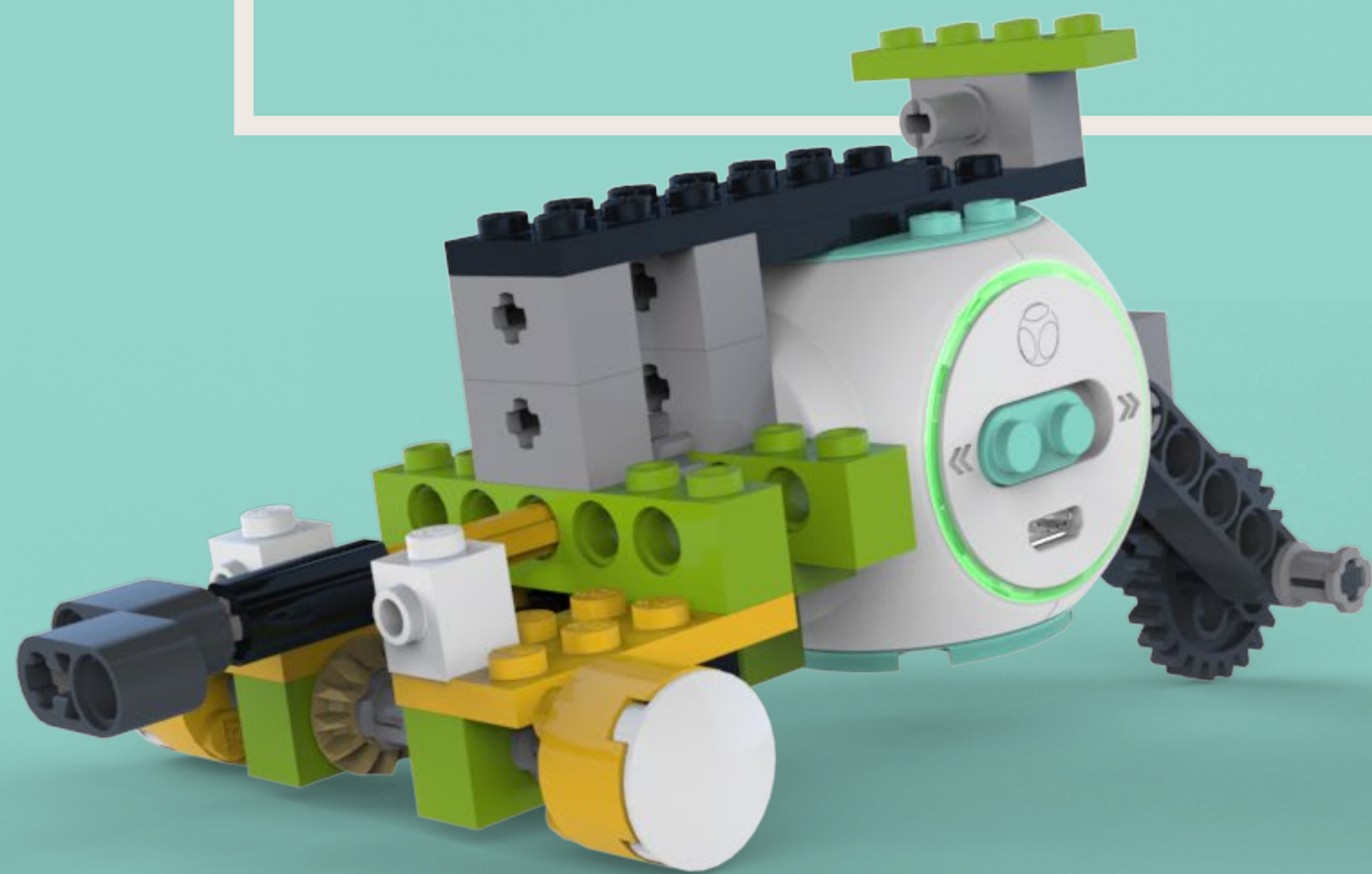


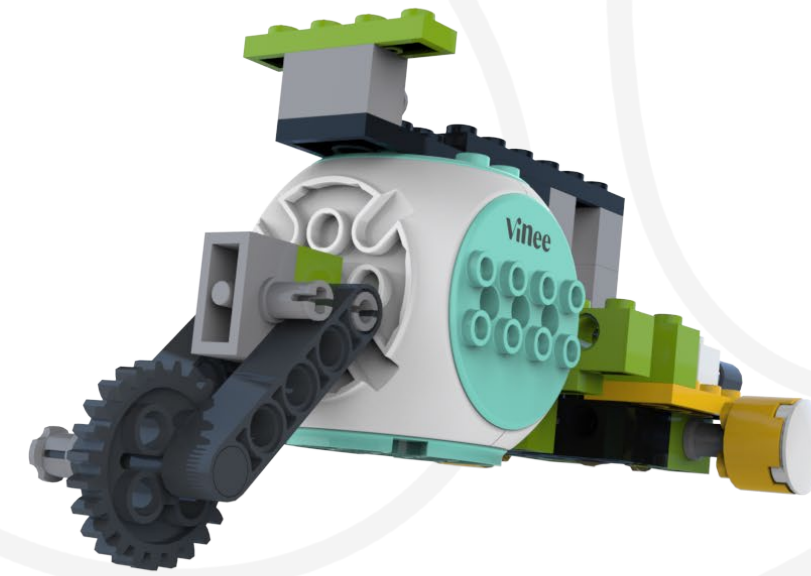
Start  
Building!

# Chopper



# Chopper

## Parts In This Build



## Description:

The chopper uses Bevel Gears to transfer the motor power into the direction of the “wheel” axle. Observe how Bevel Gears’ teeth can mesh at a 90° angle and how the beveled teeth allow power to shift from one direction to another.

## ViNee Set:

Essential

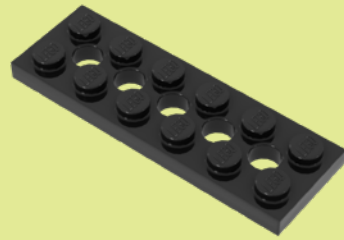
## Learn:

- Bevel Gear





1



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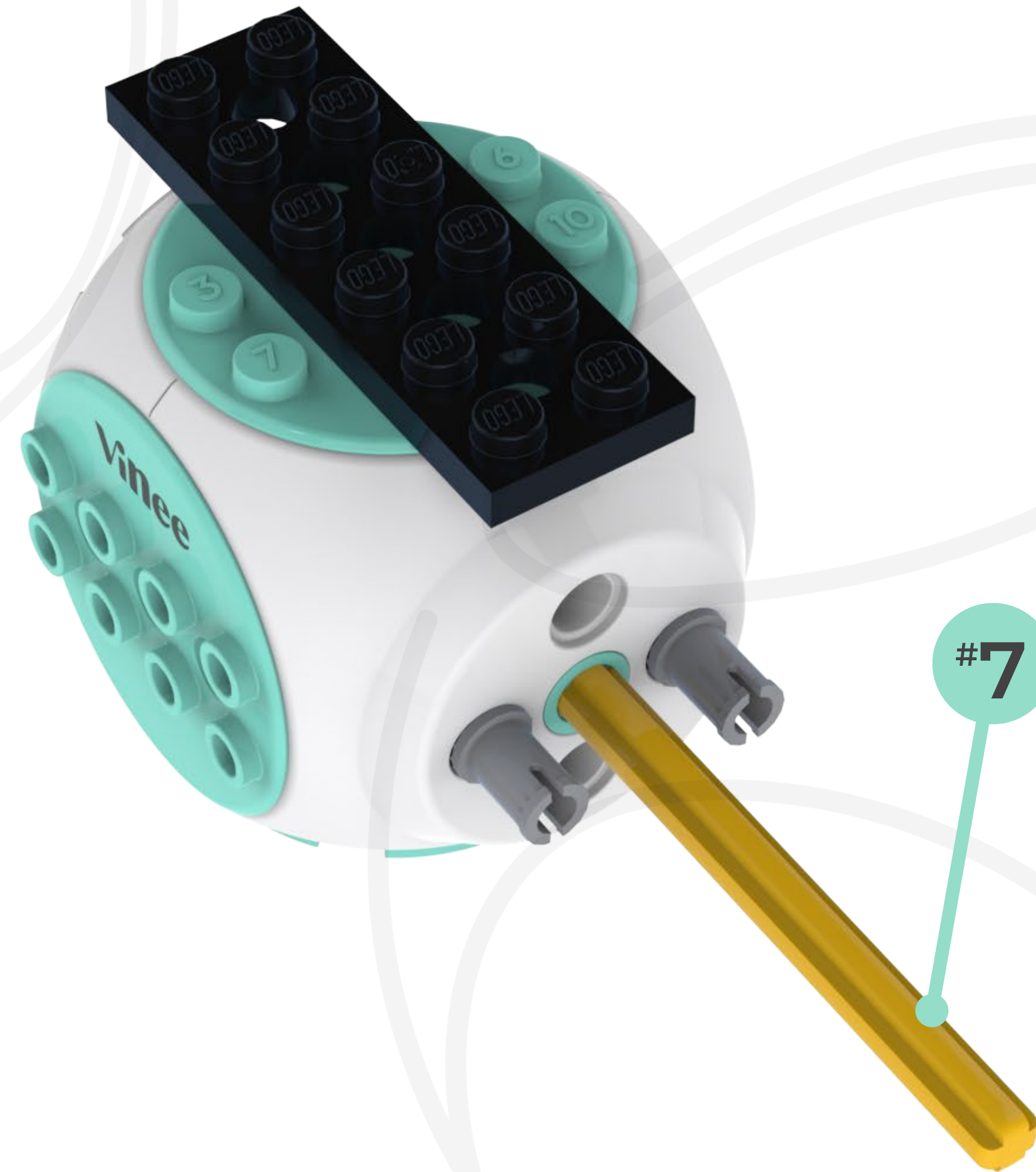




2



#7

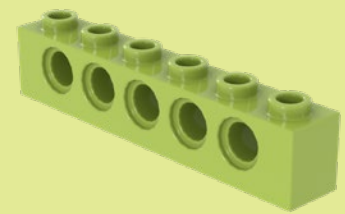


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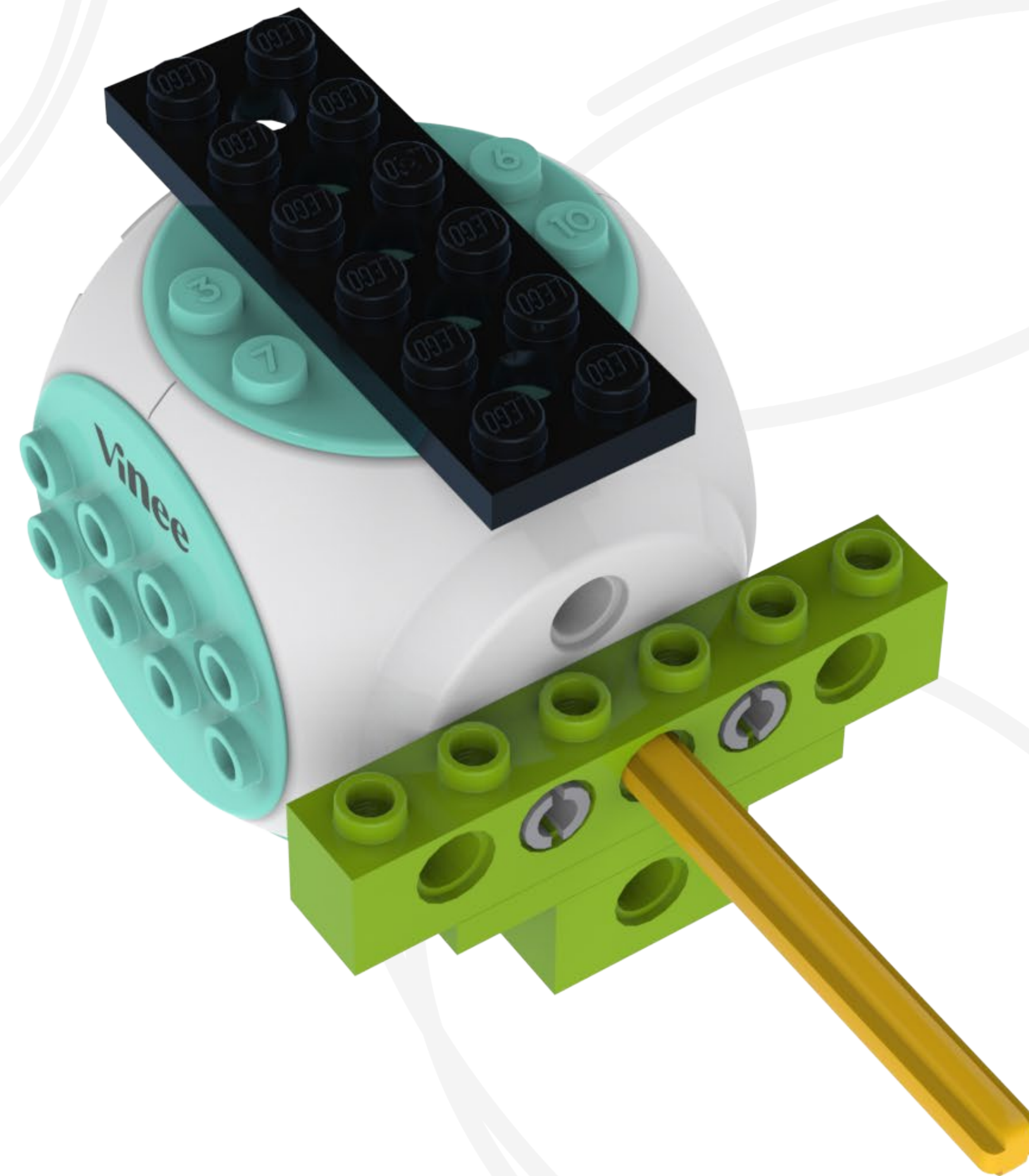
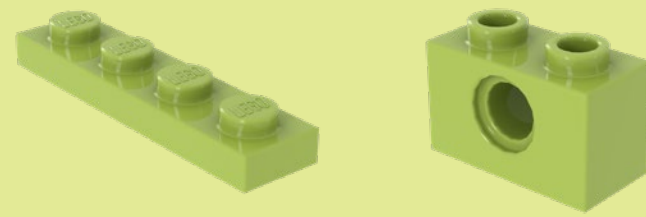


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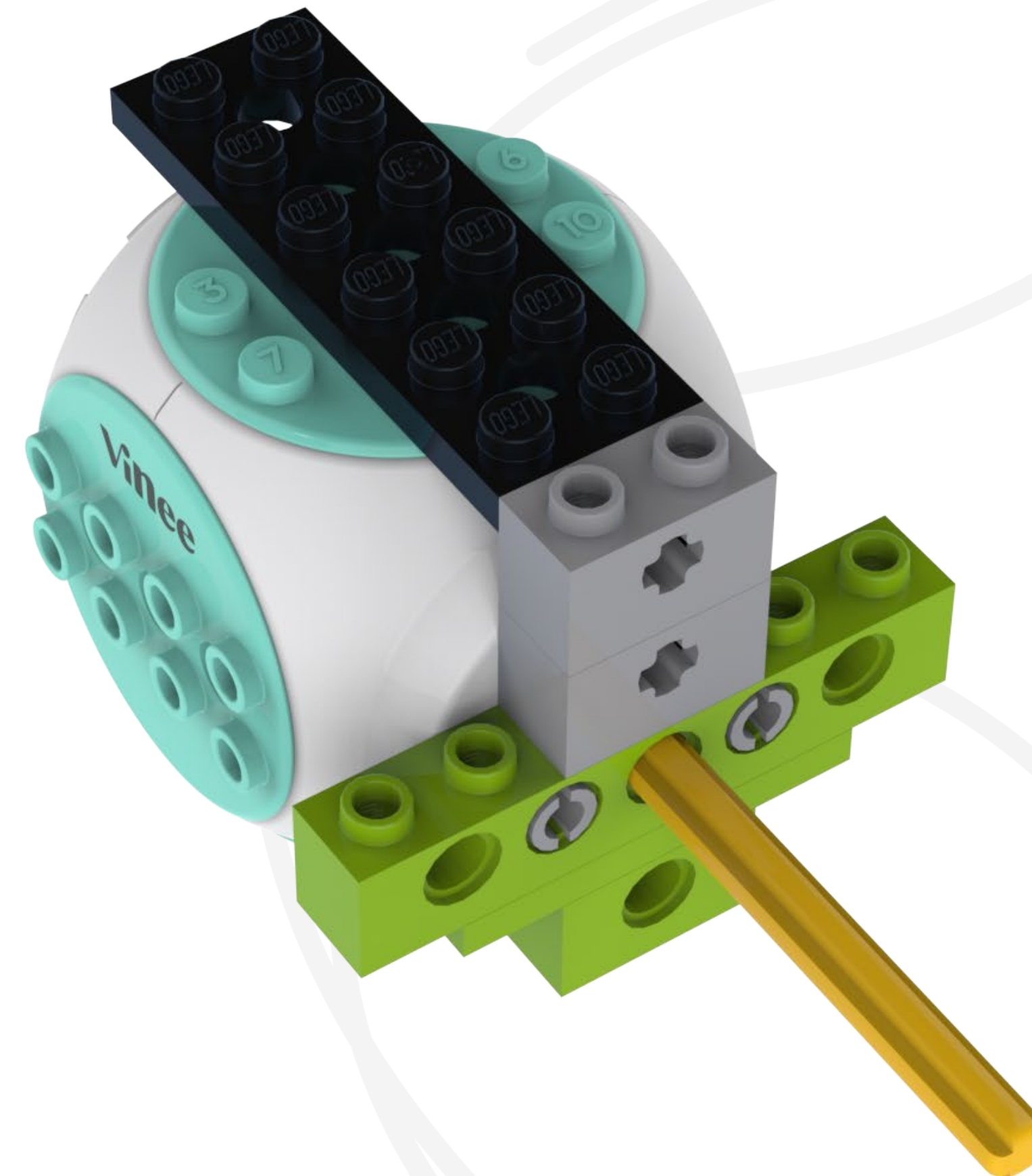
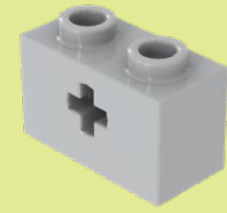
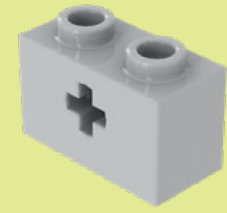


4





5









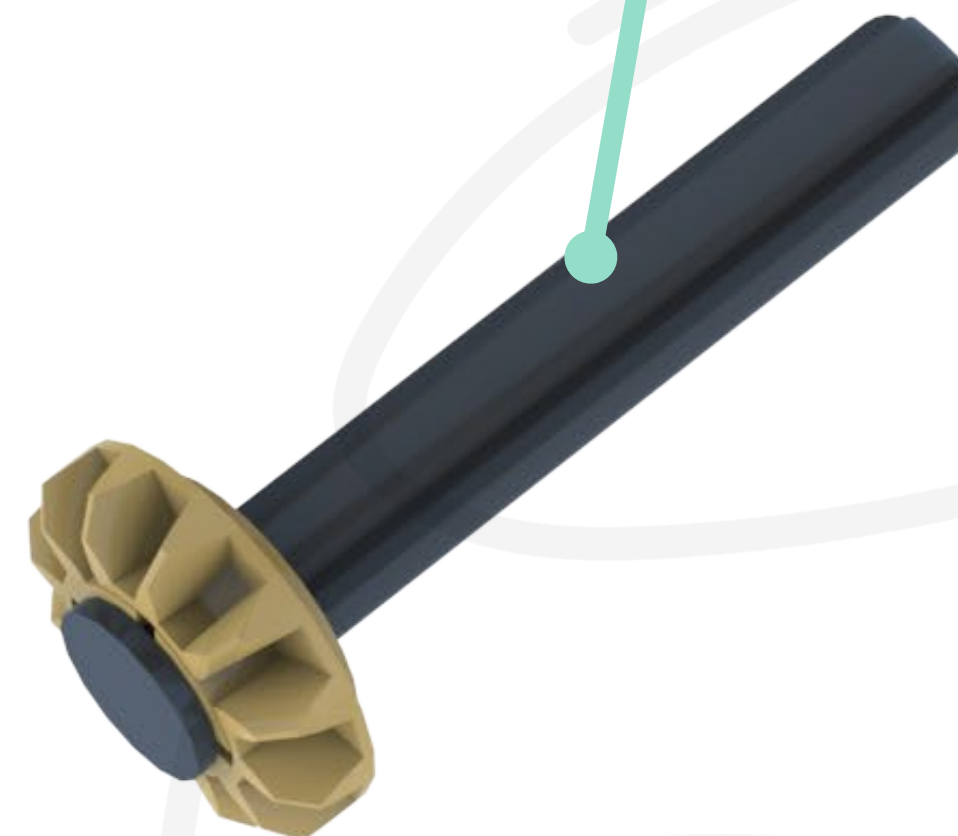
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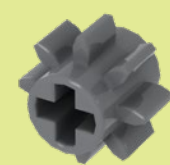
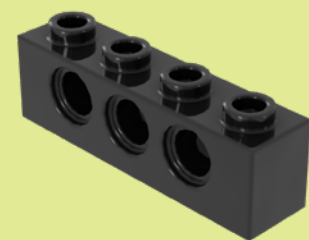
New Assembly!

#4



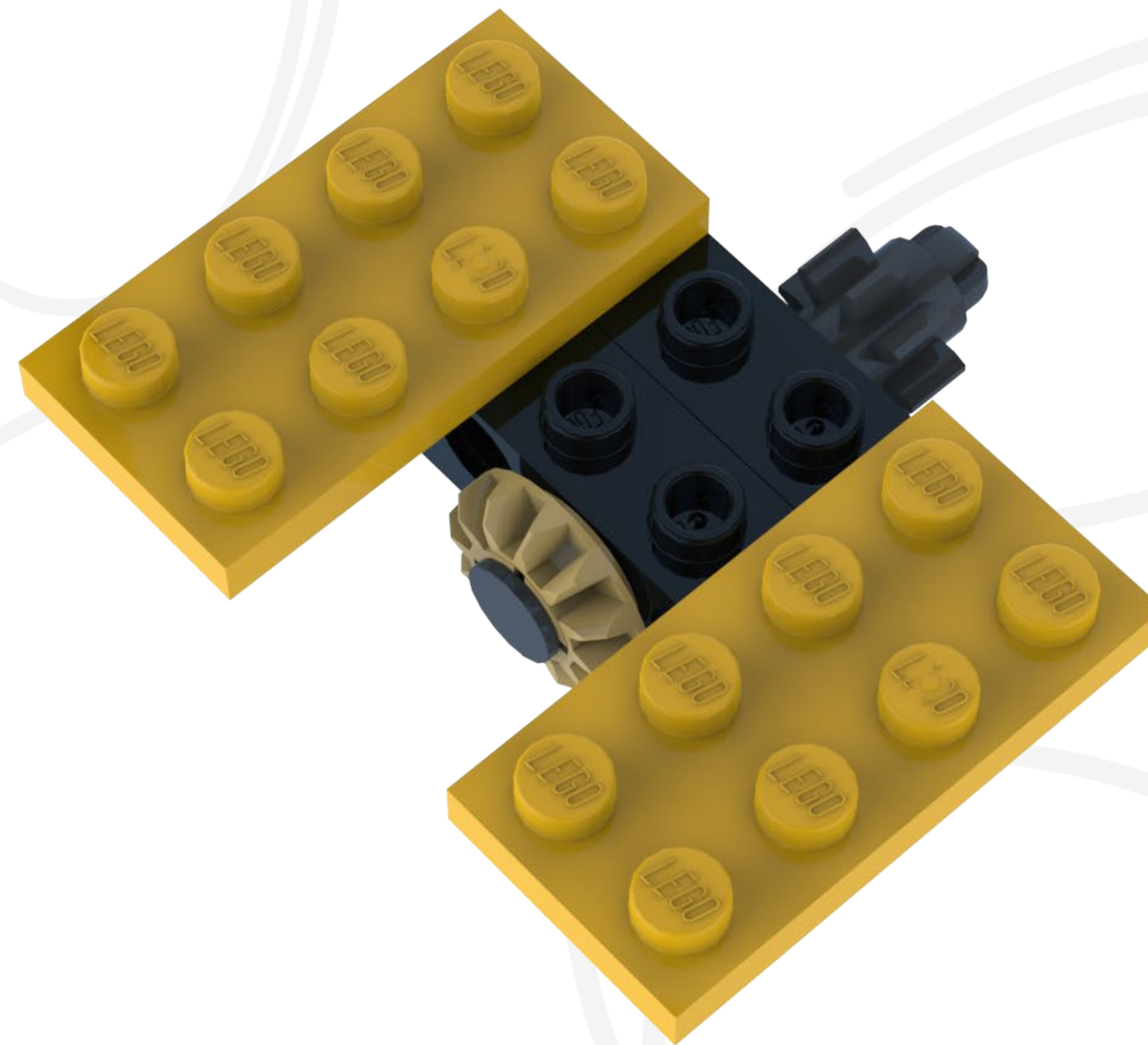


8





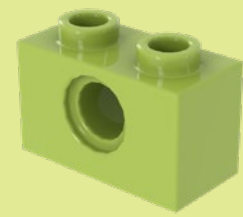
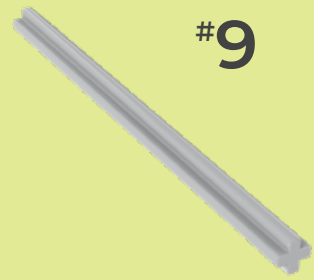
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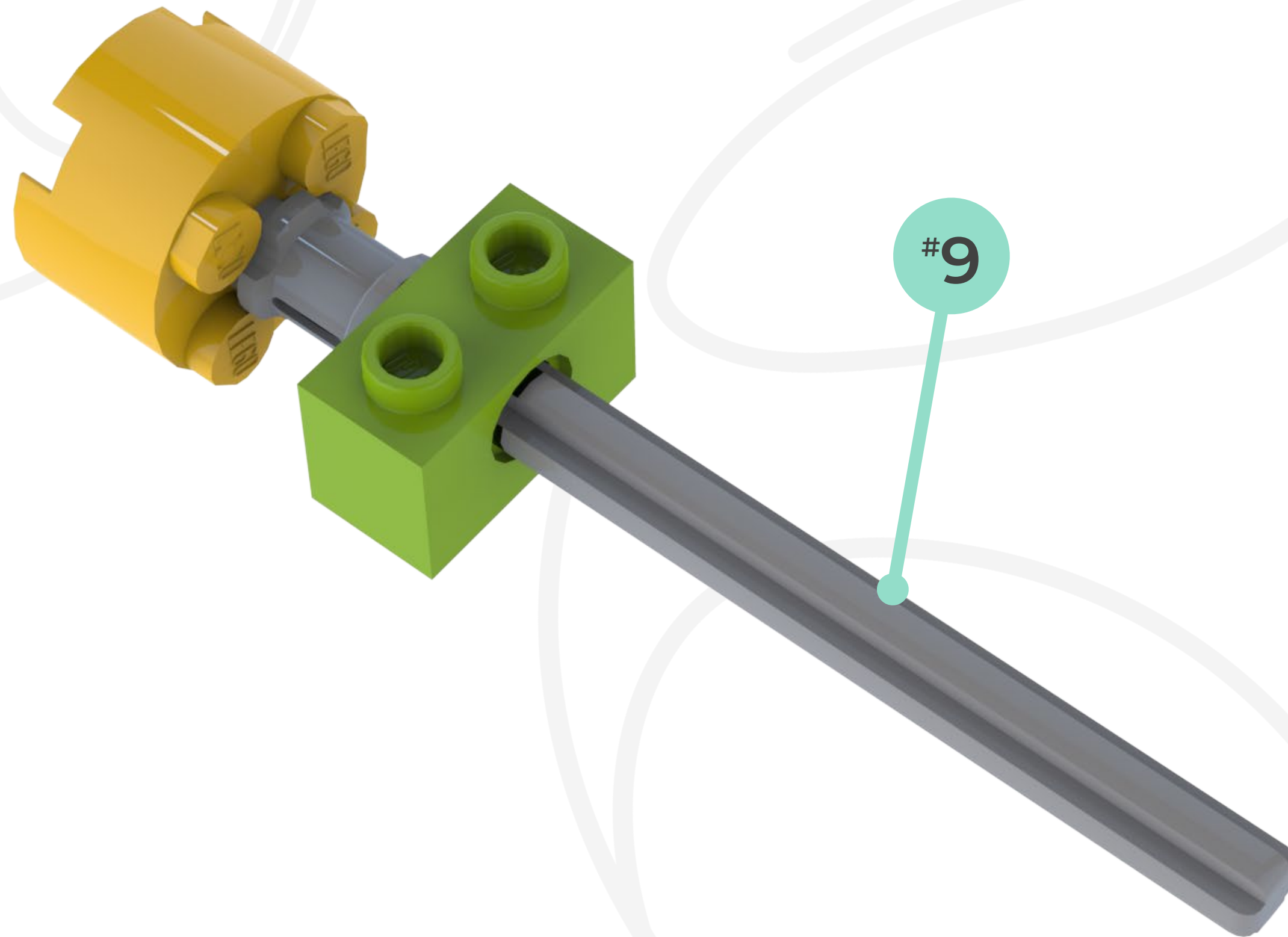


# 10

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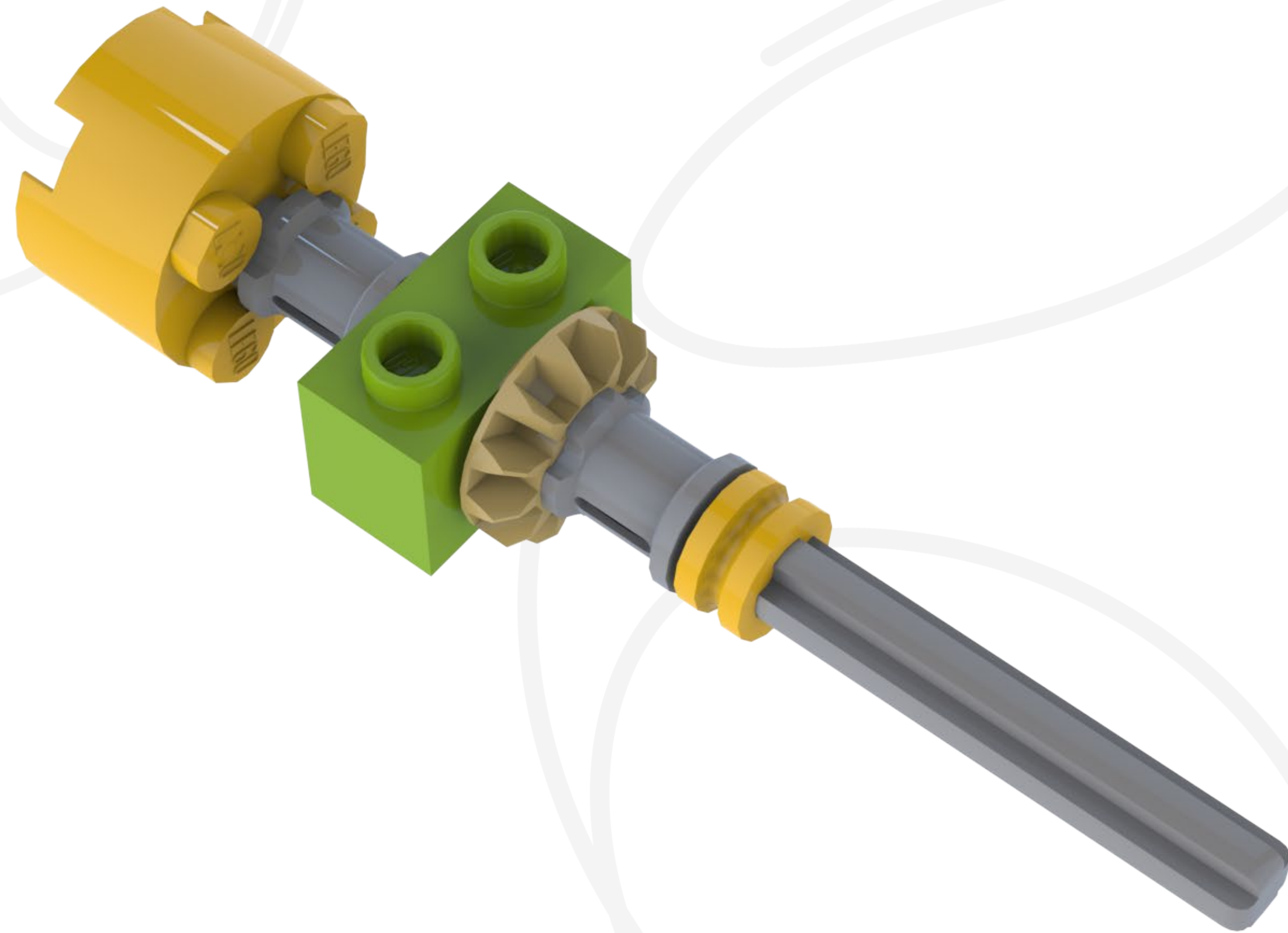


## New Assembly!



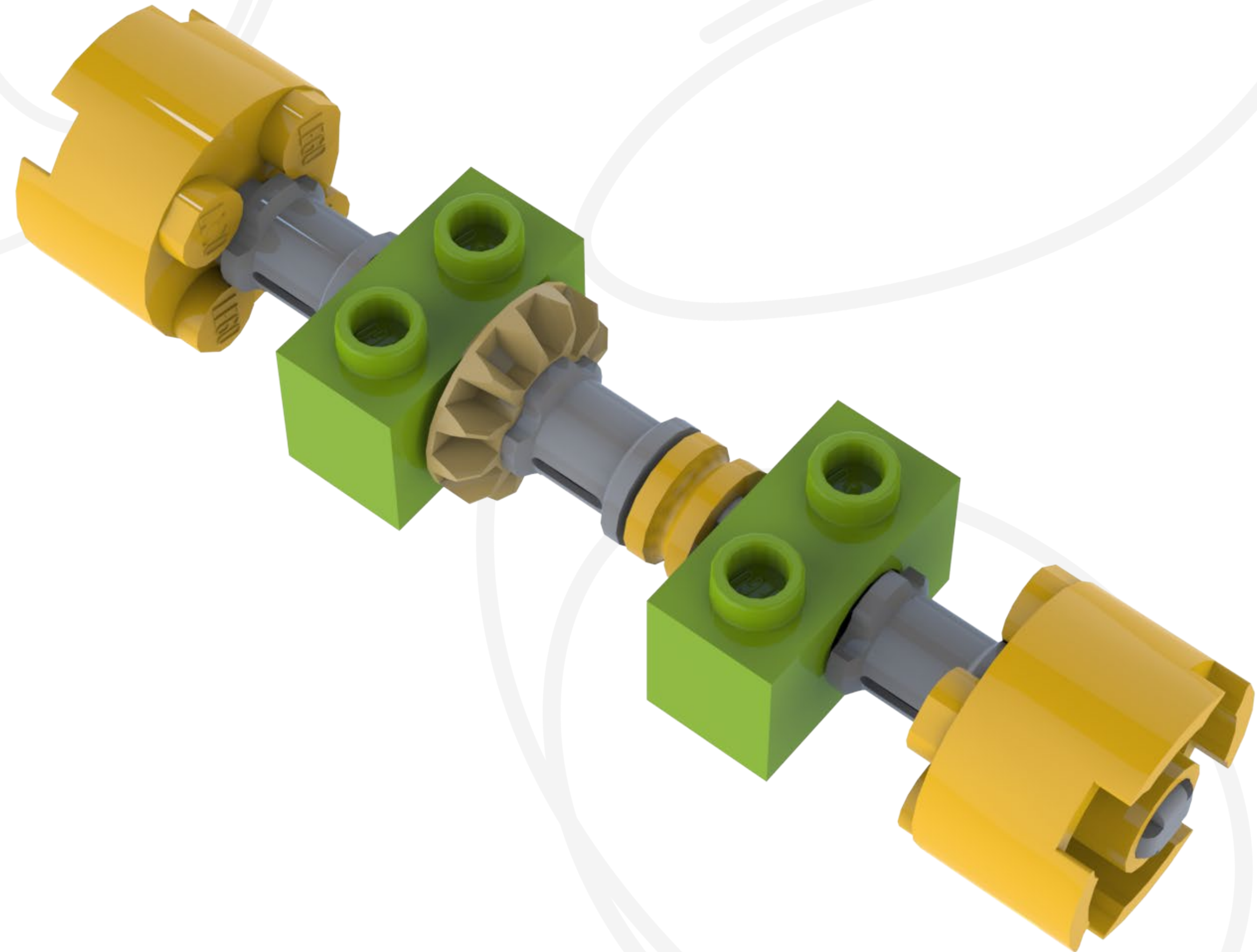
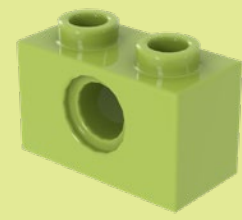


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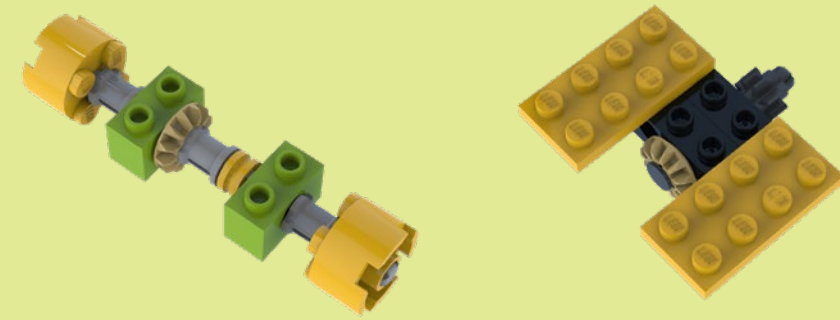


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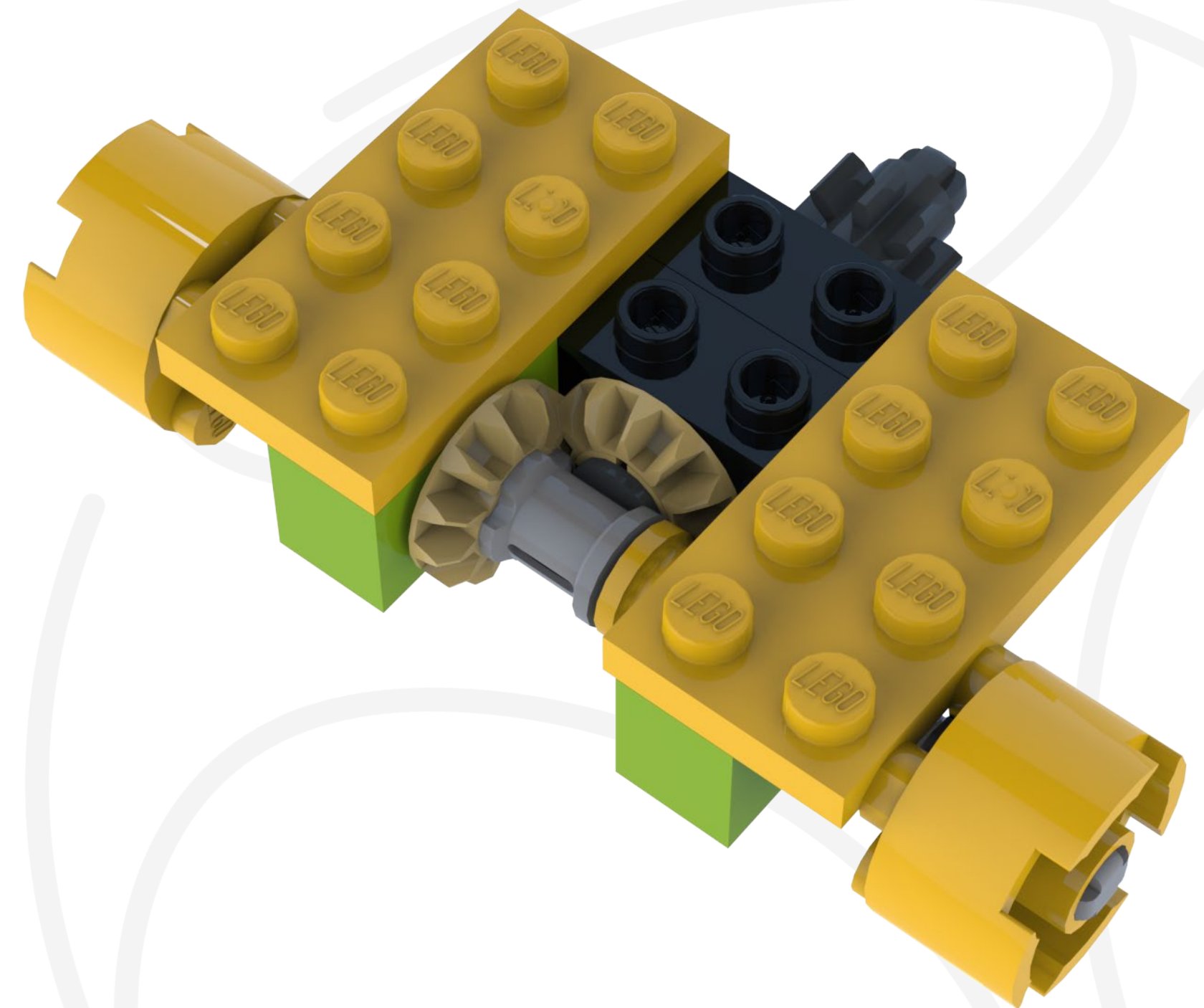
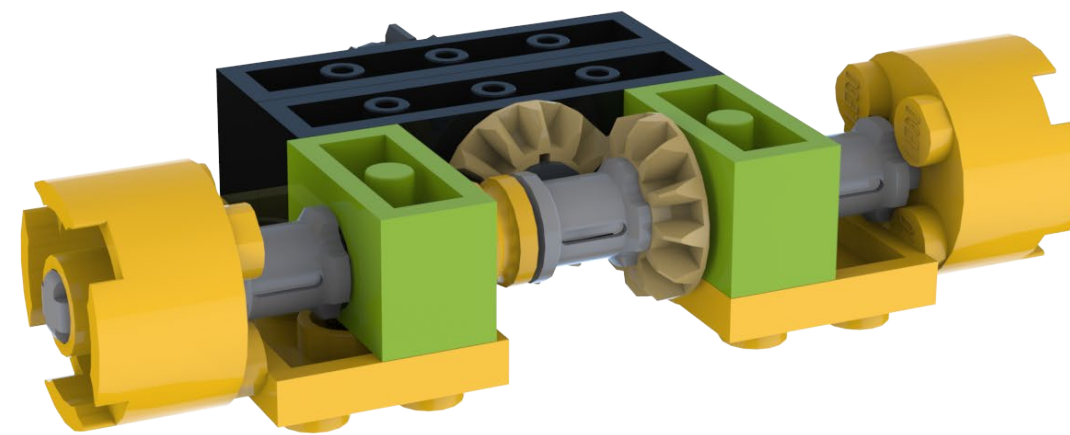
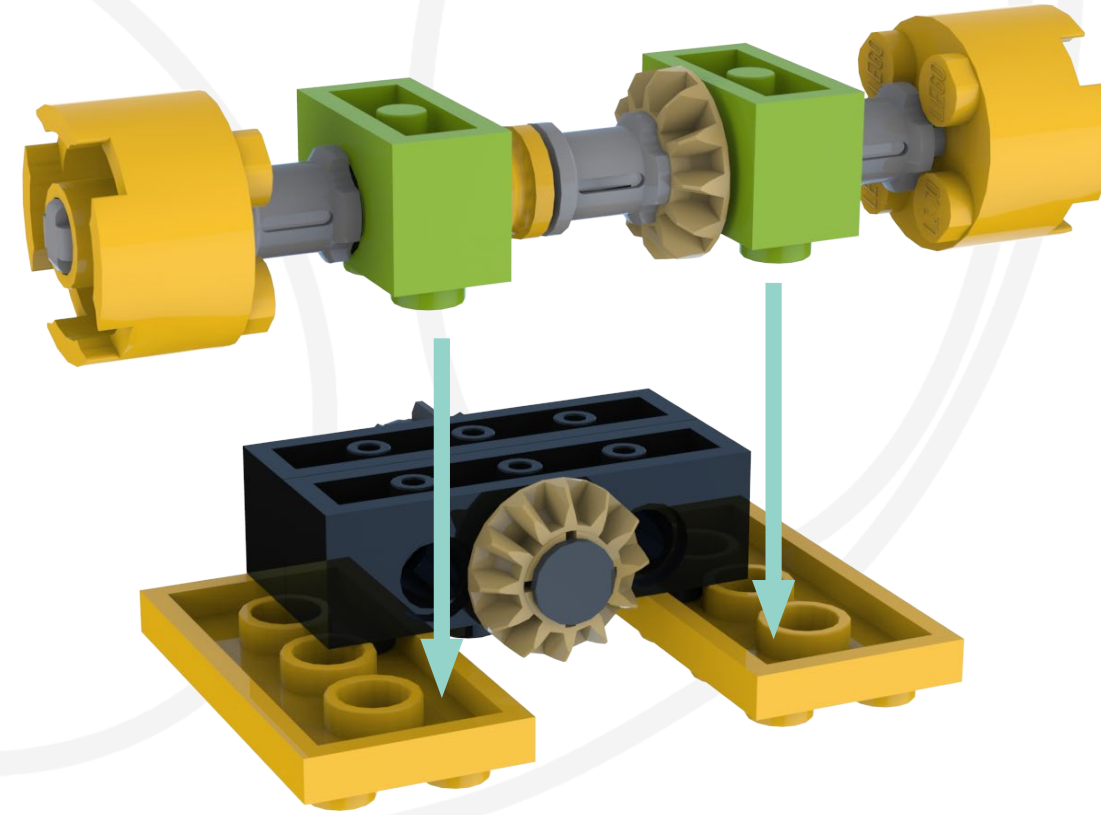




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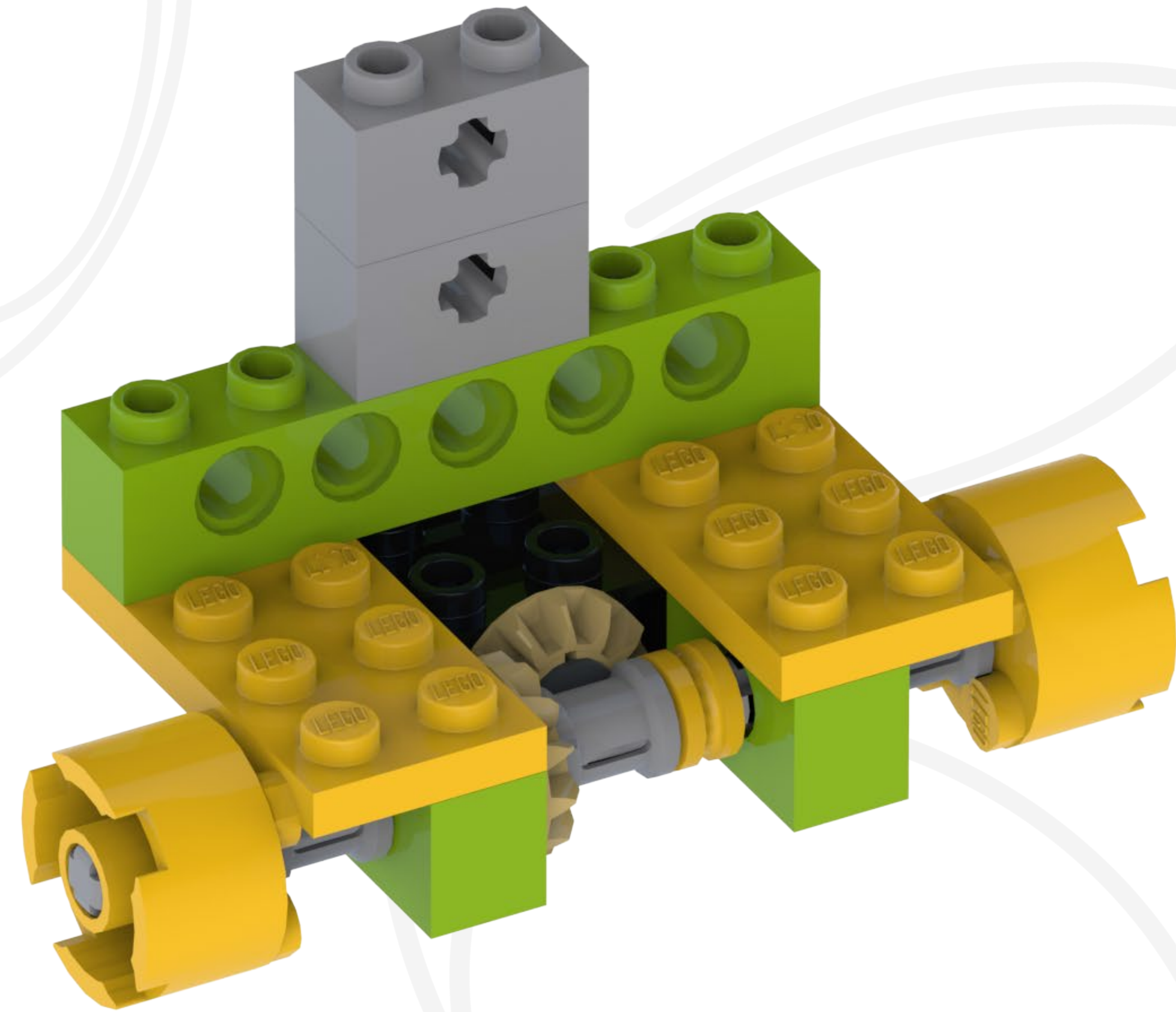
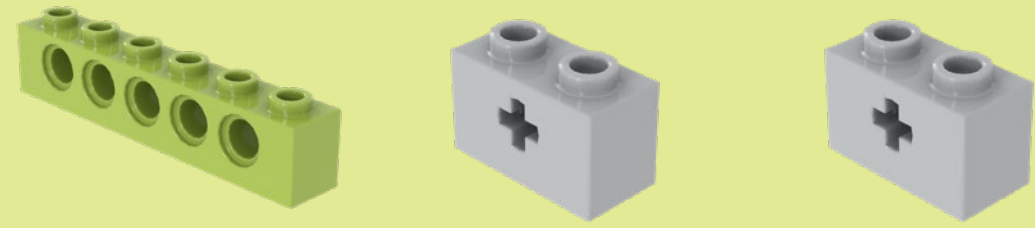


Attach!



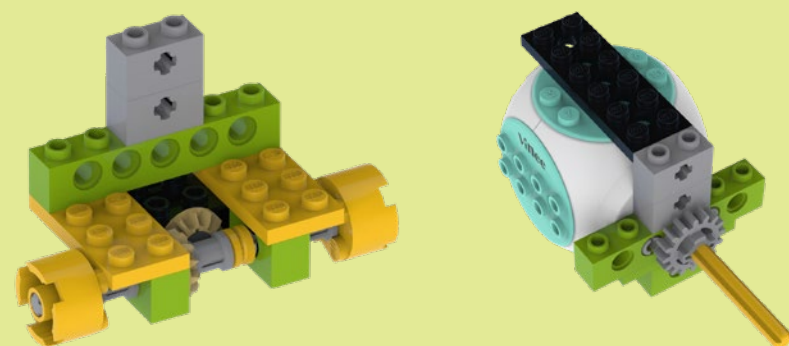


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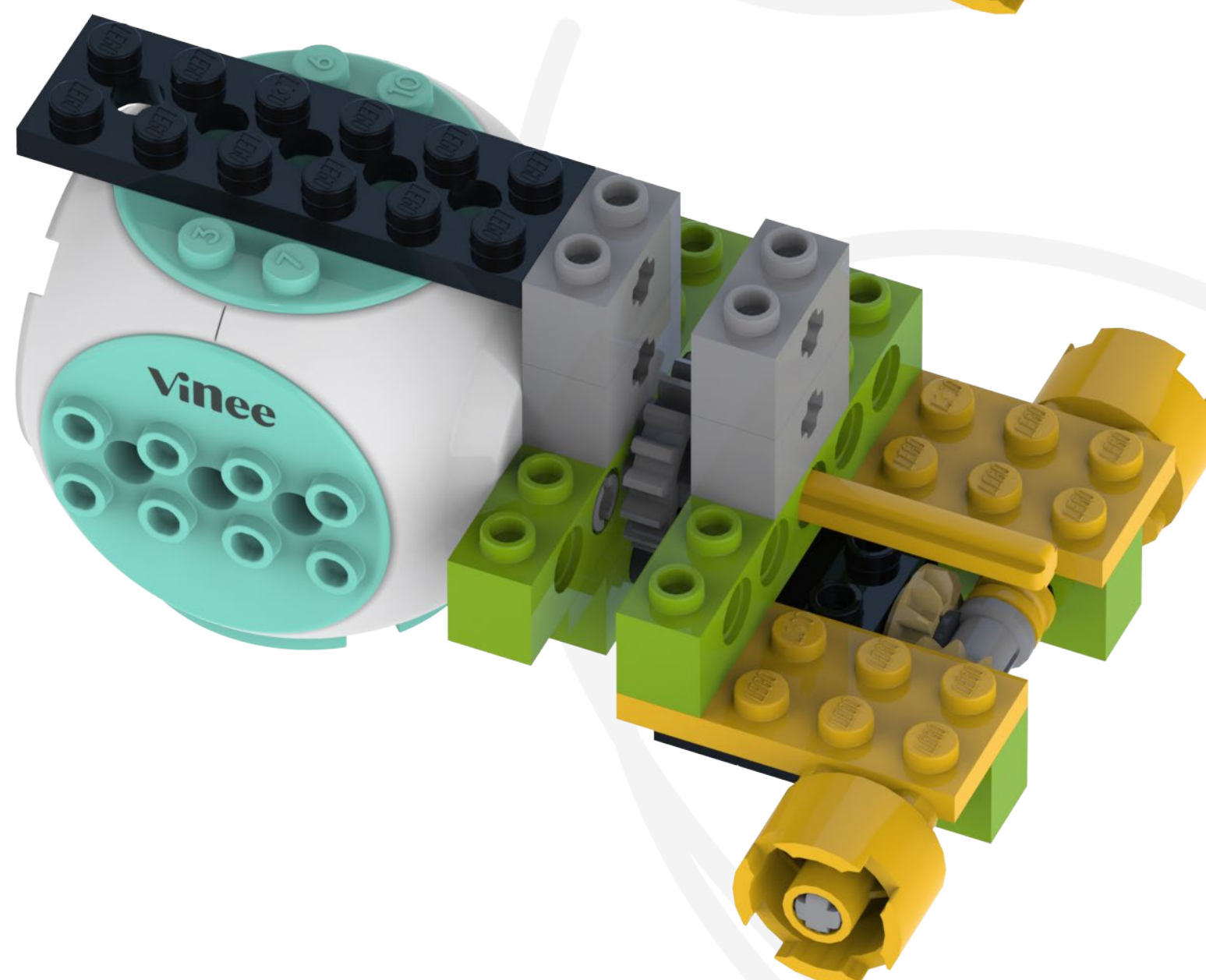
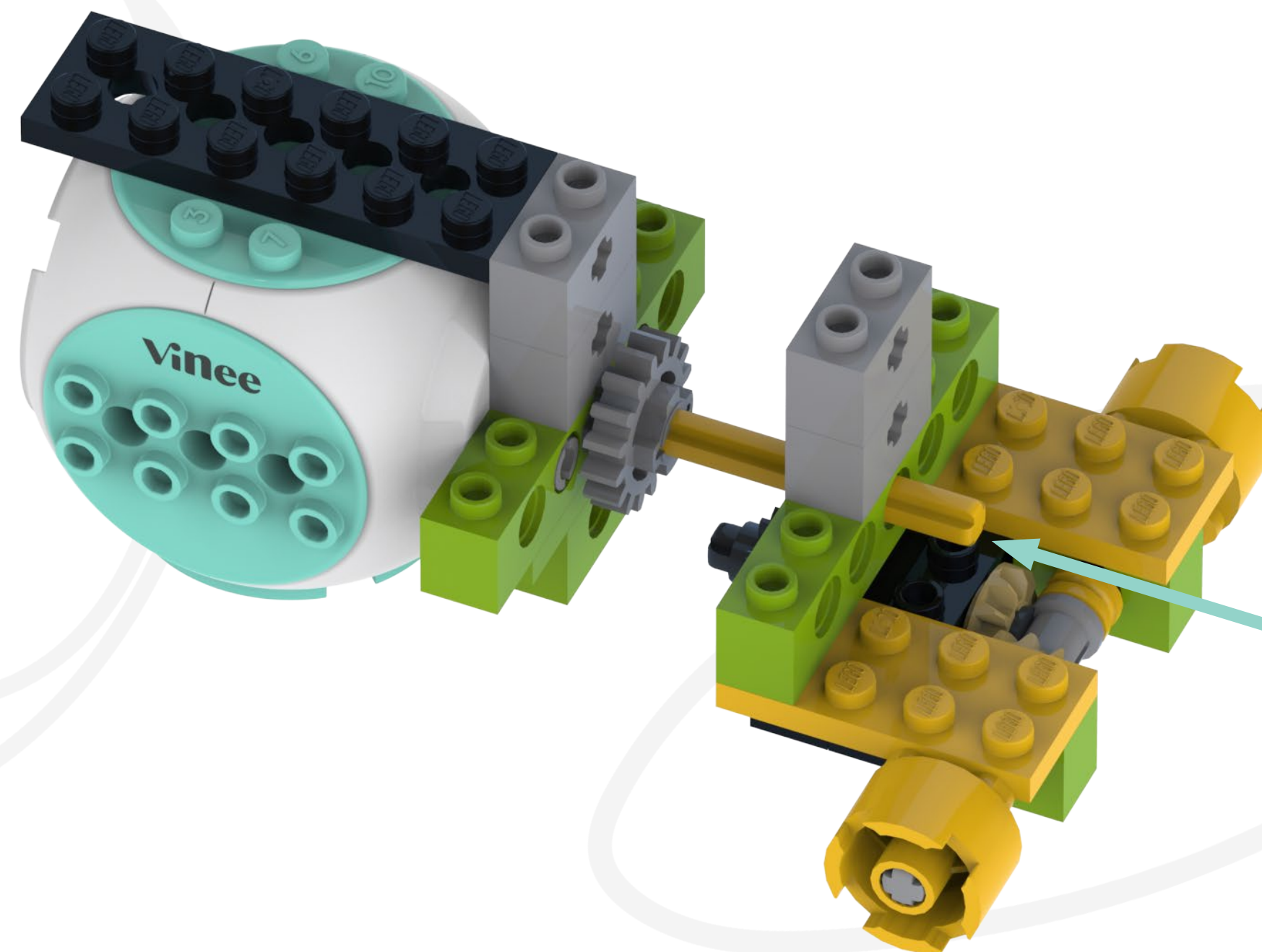




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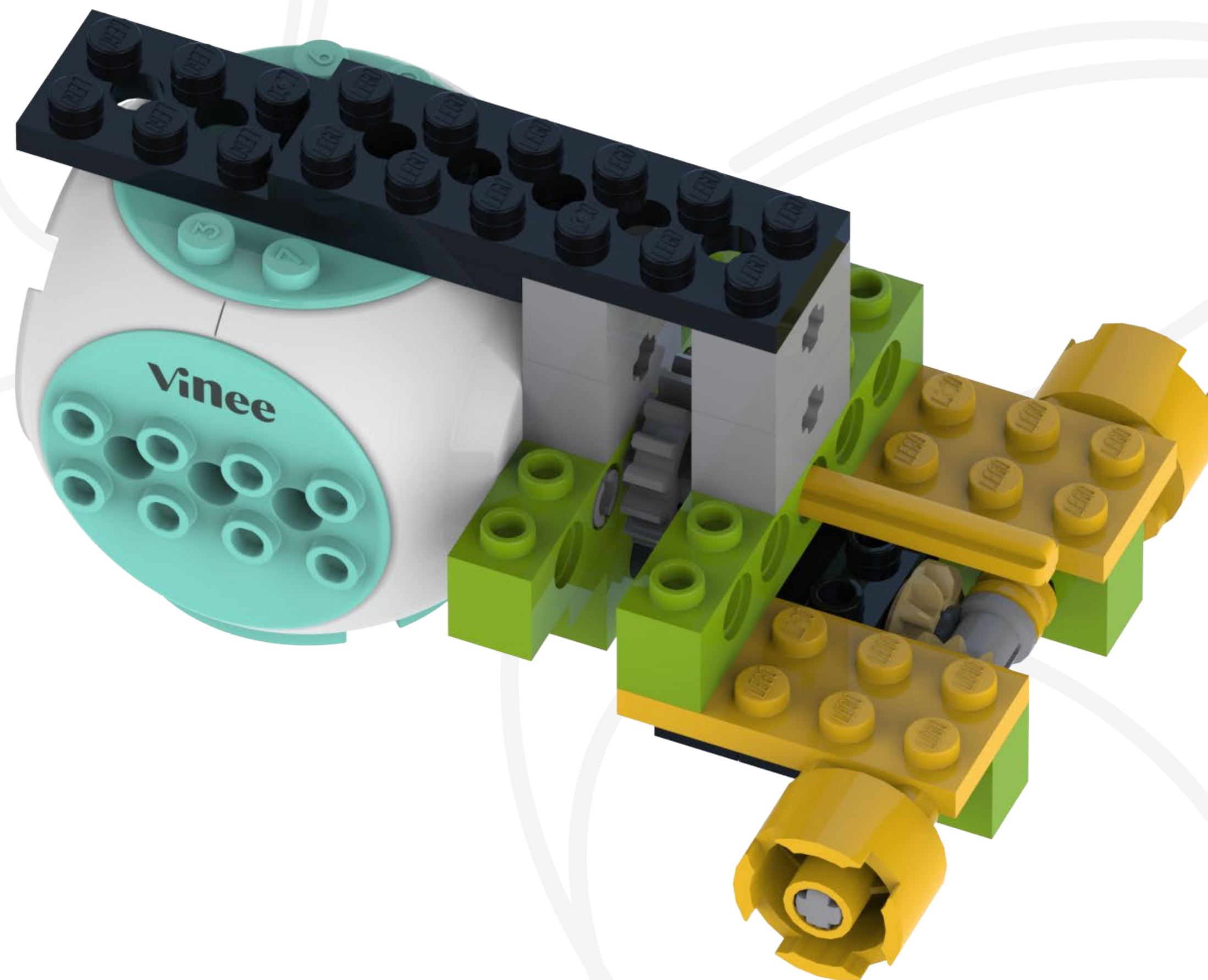
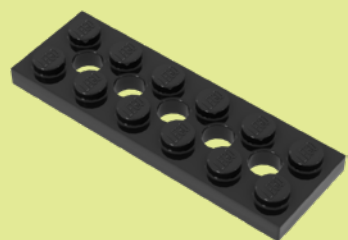


Attach!



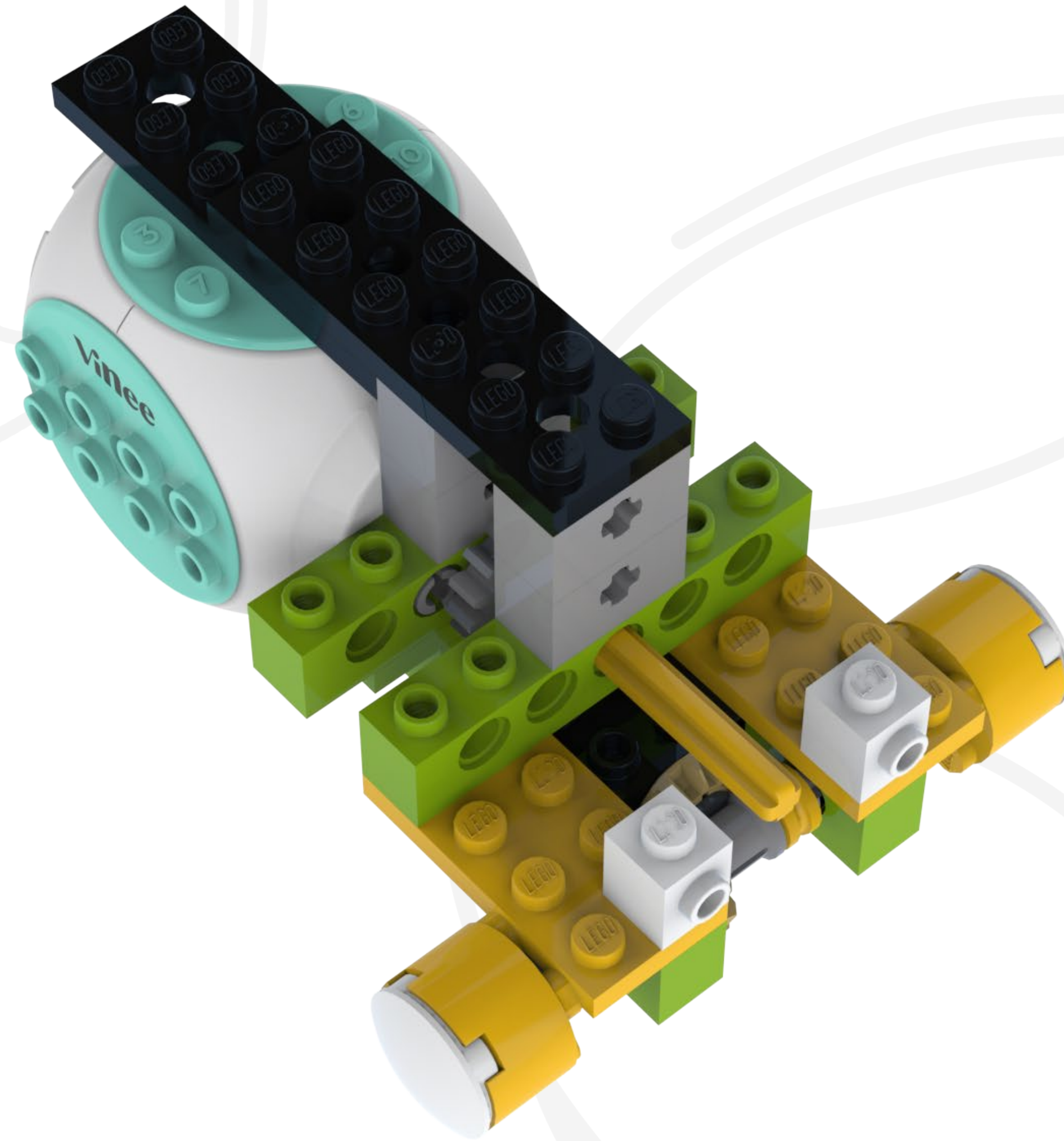


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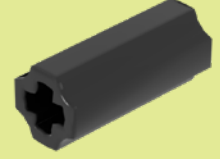


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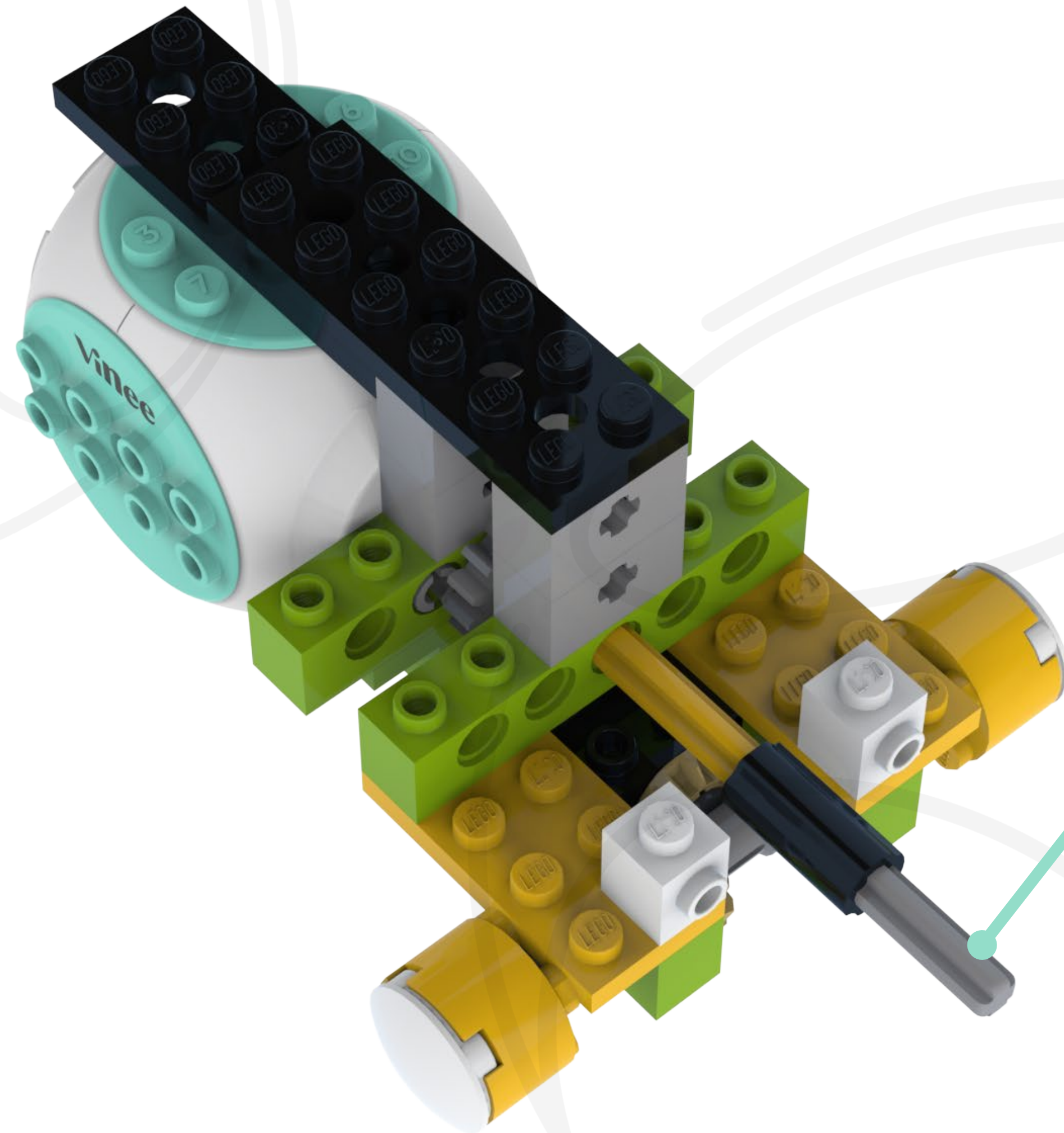




18



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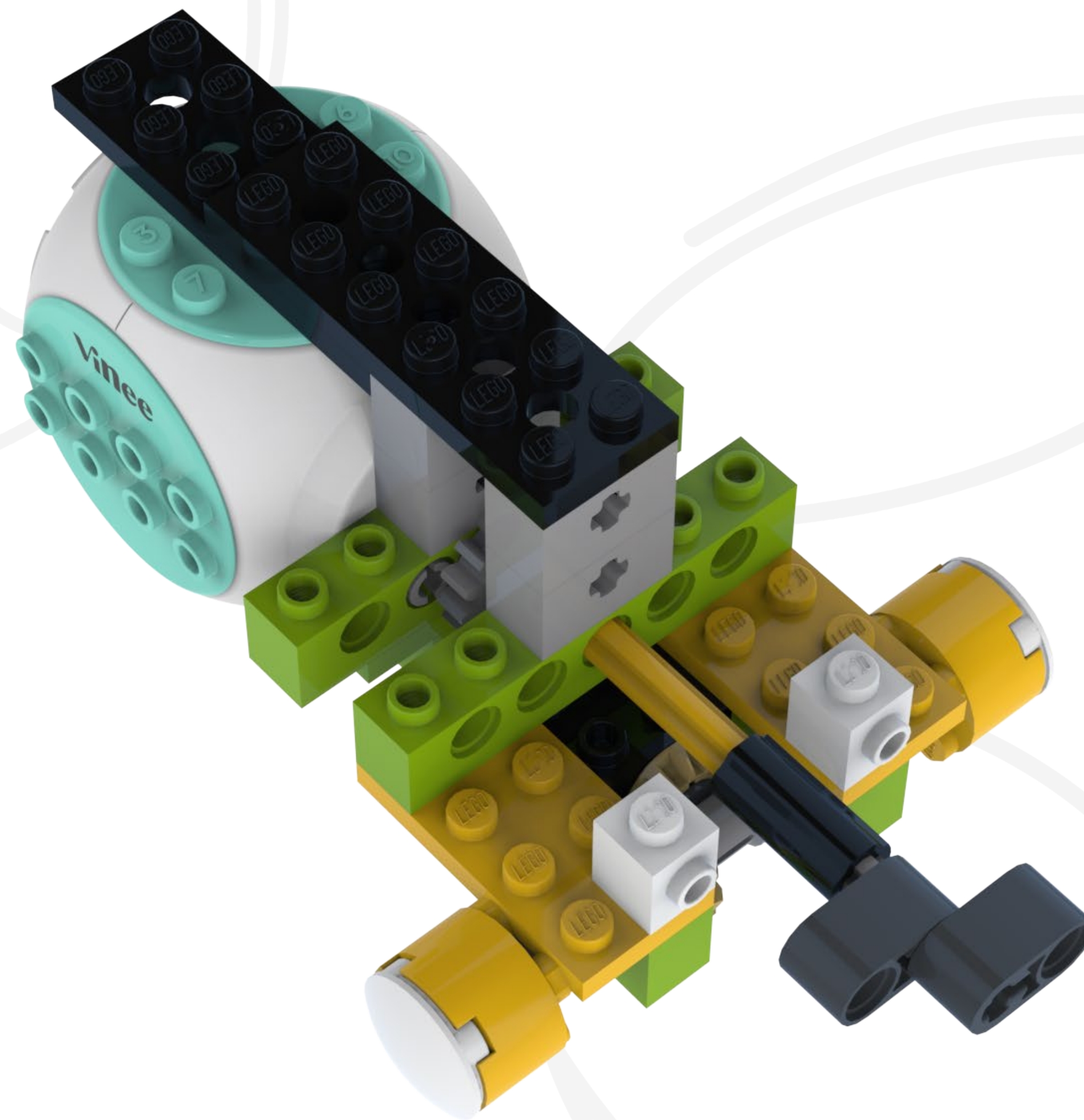


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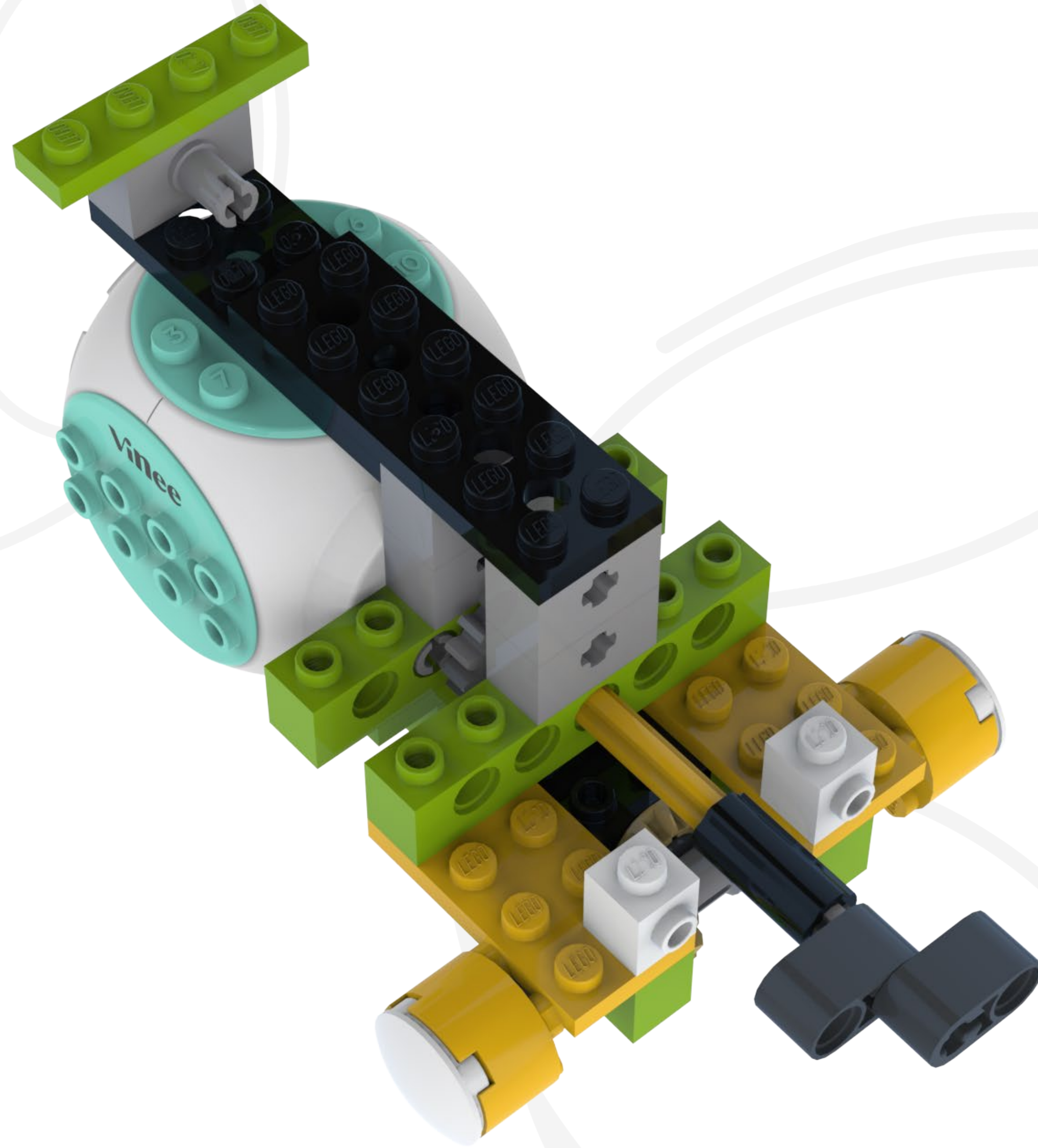
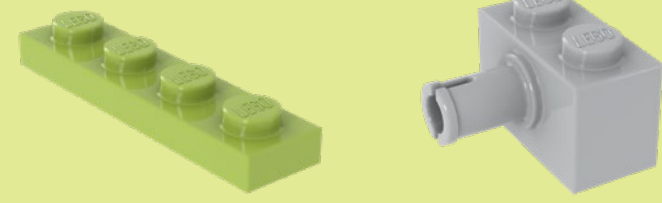


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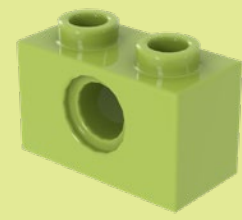


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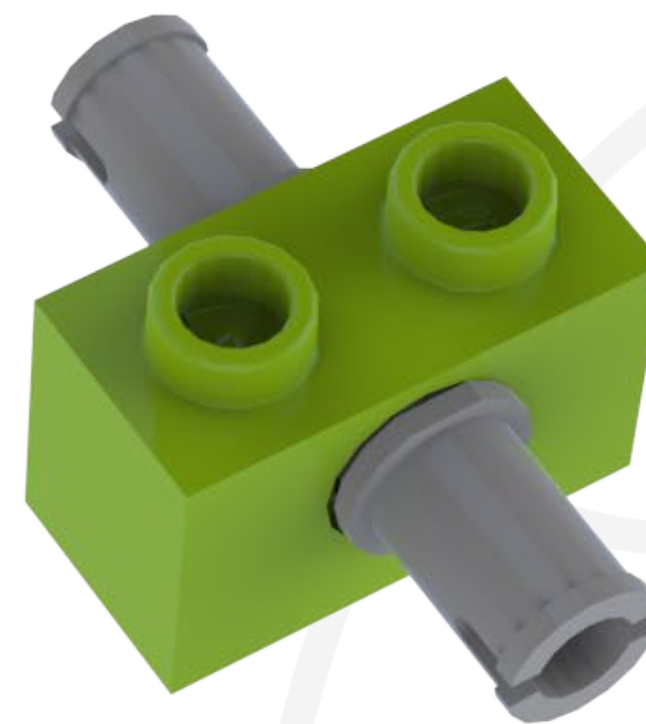




**21**

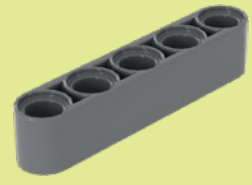


**New Assembly!**





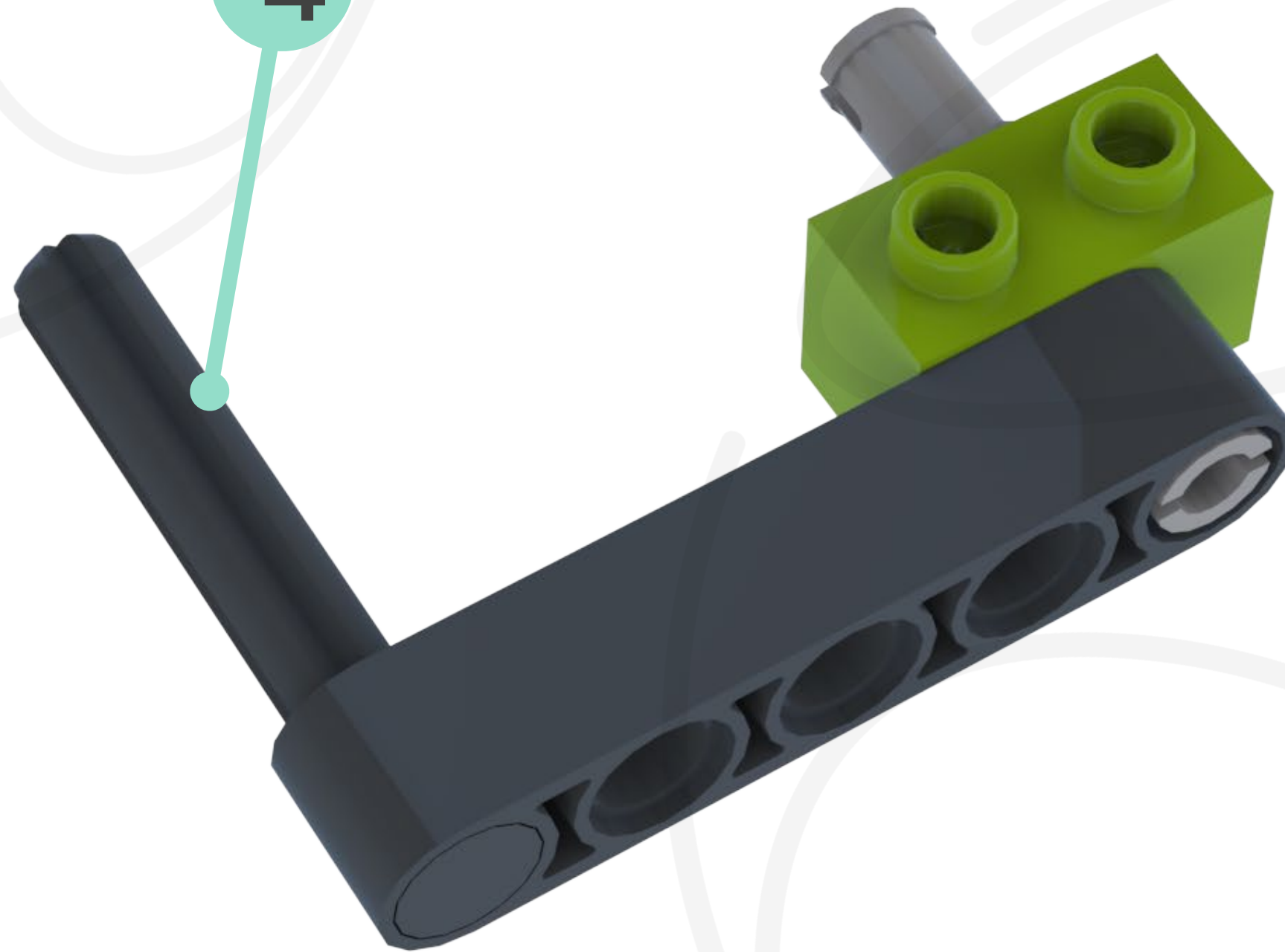
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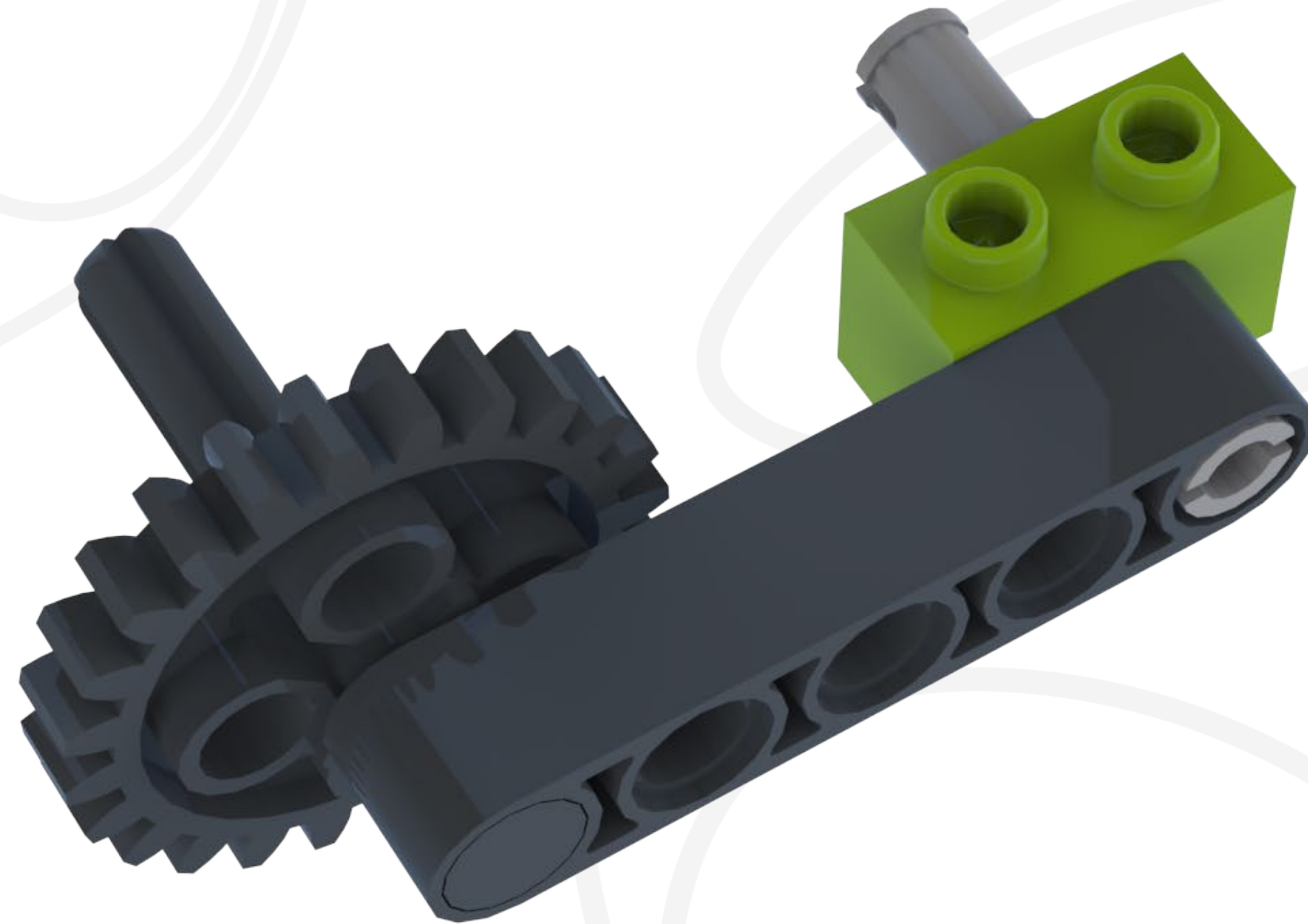


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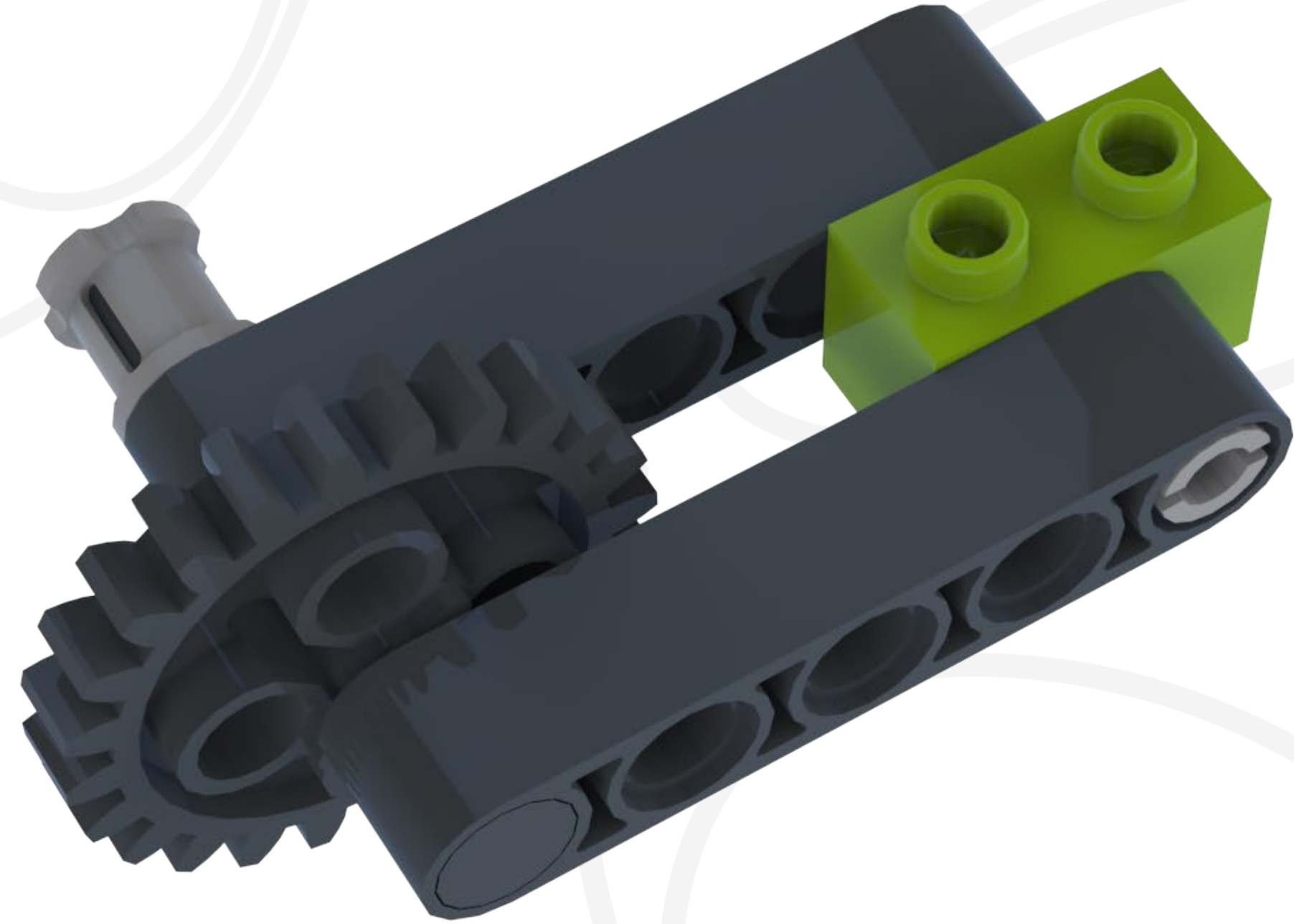
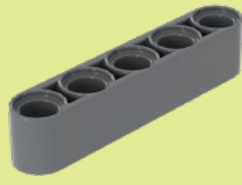


23





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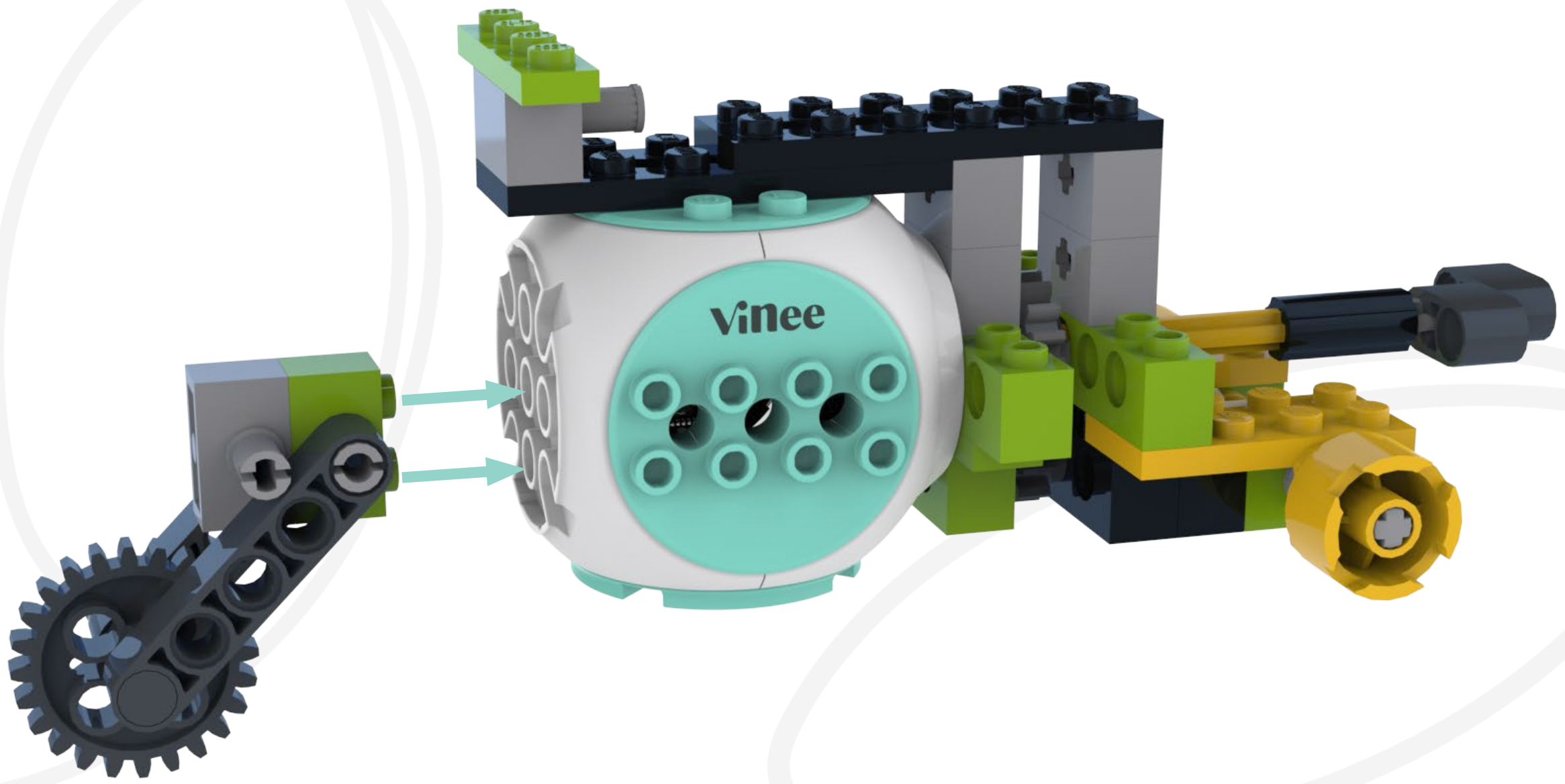




# 26




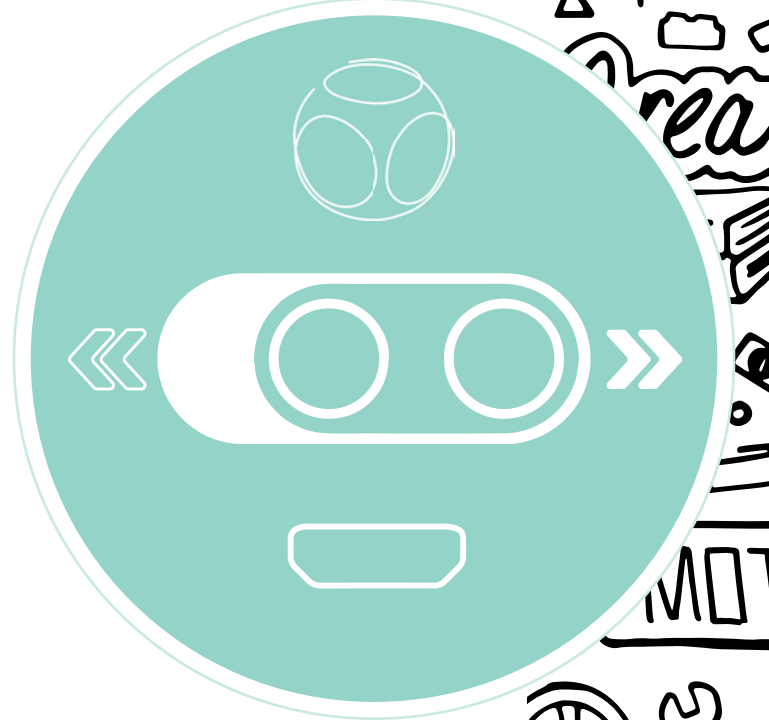
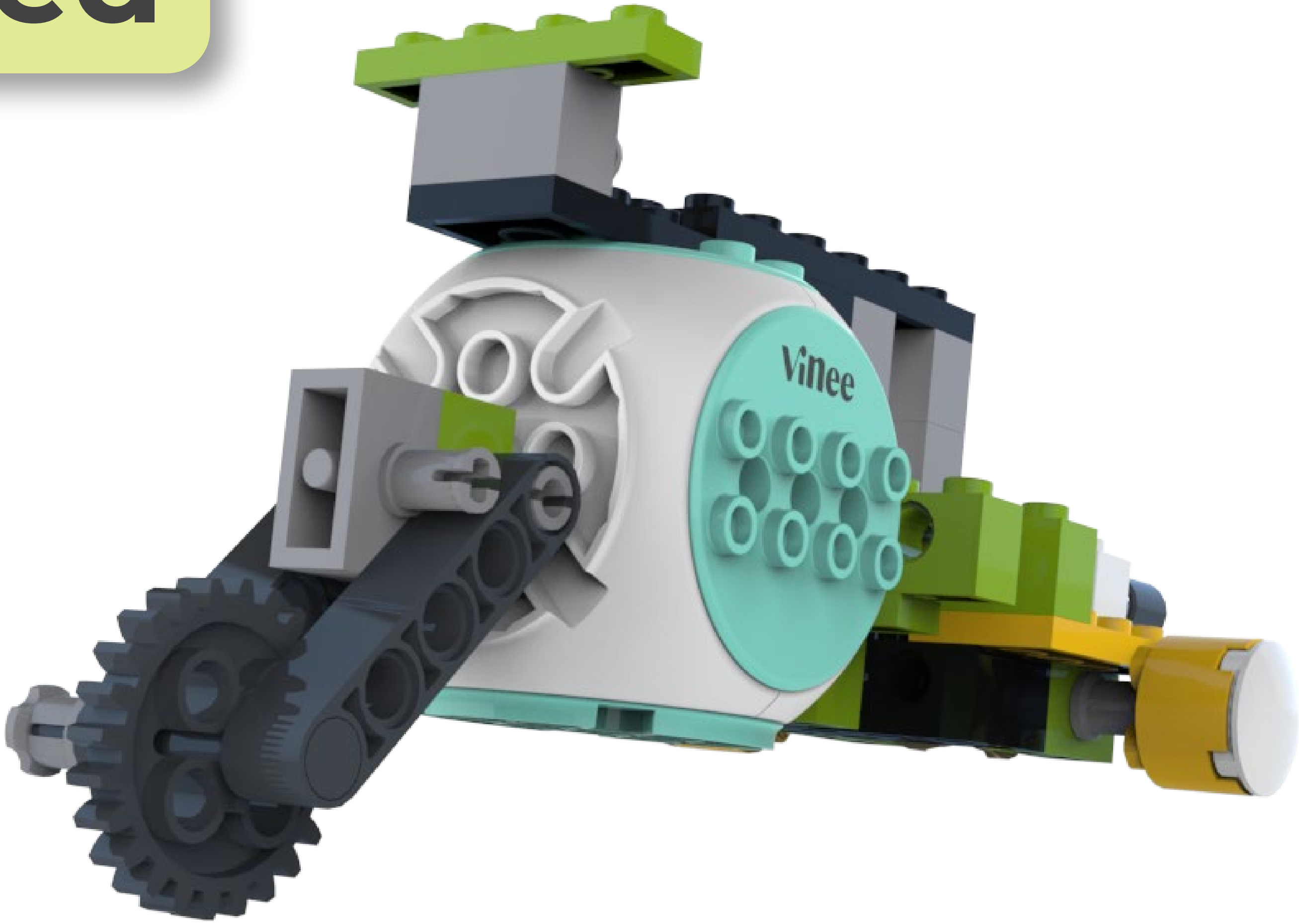
**Attach!**





# ! Finished

  
Make sure your robot is correct before turning it on.





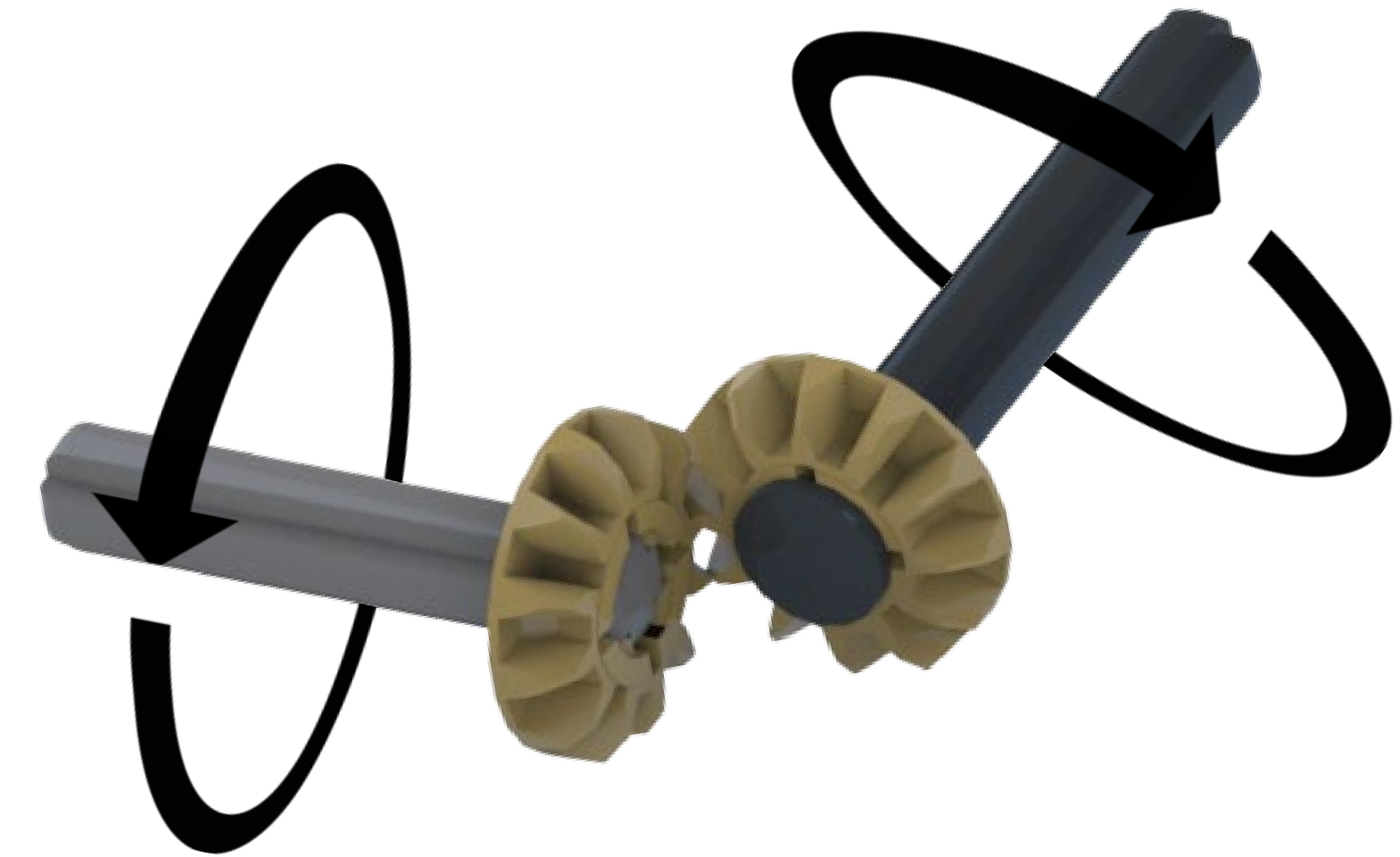
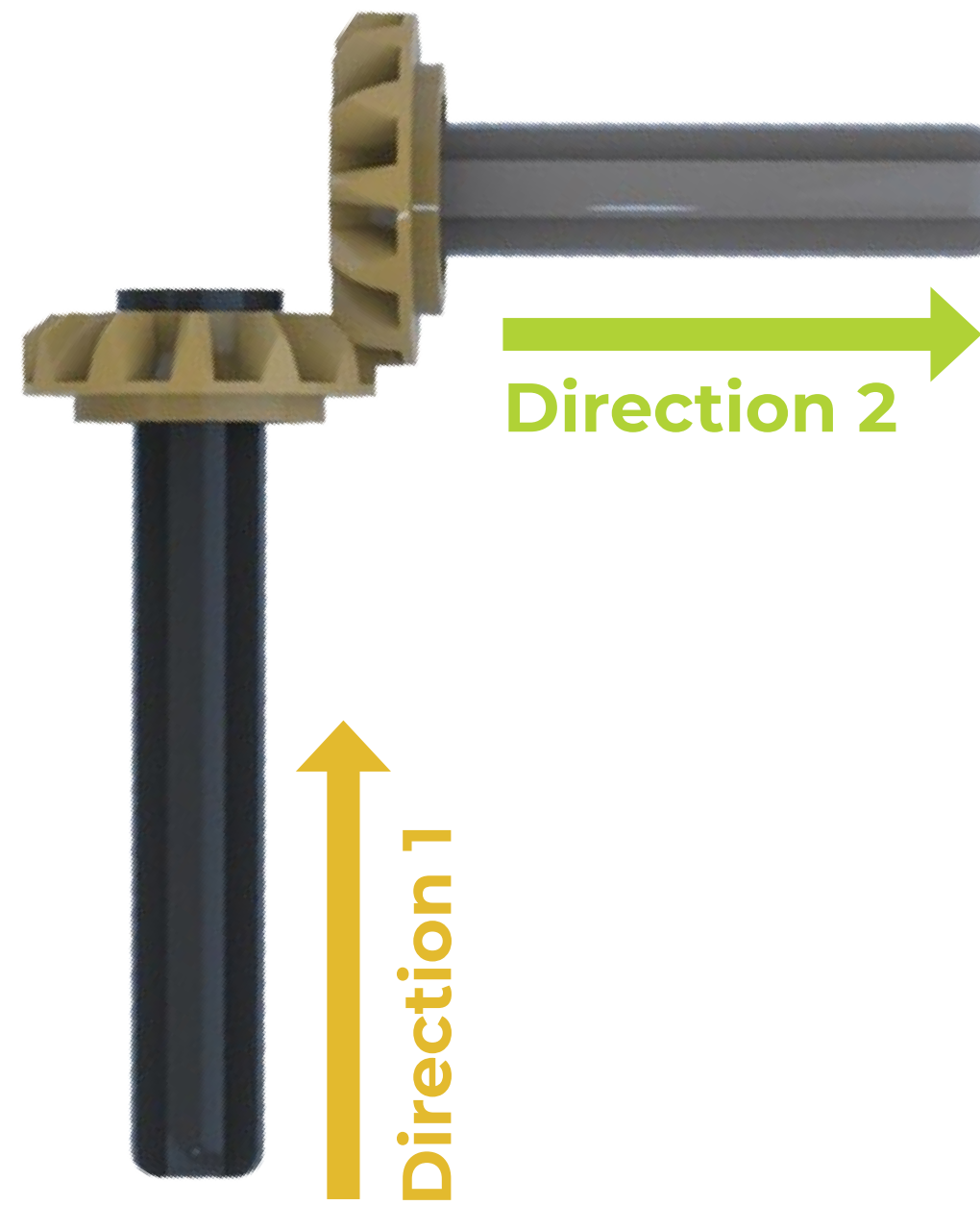
# Learn

## Bevel Gears

Bevel Gears are used to shift power from one direction to another.

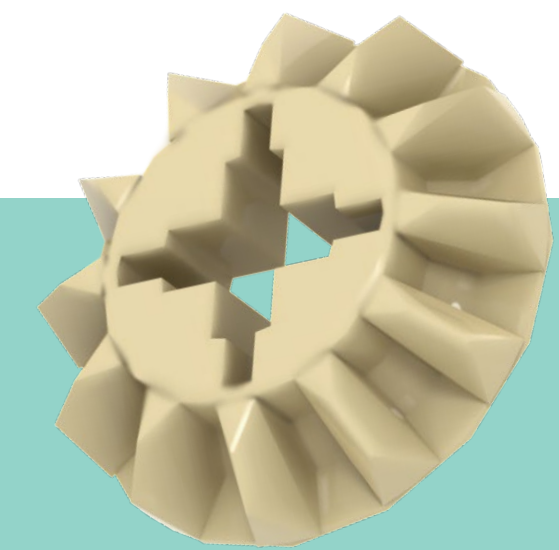
They are called Bevel Gears because their teeth are shaped with a bevel (cut at an angle).

Instead of meshing side by side, two or more bevel gears can mesh at 90° angles to change the direction of motion.



# Task

1. Identify the Bevel Gears on your build.
2. How does it look different from the other gears?
3. Can you identify another gear concept used in this build?  
Hint: it uses different sized gears!
4. Is there a way you can adjust the gears so that the Chopper drives slower?





You've been  
working hard!



**vinee**

