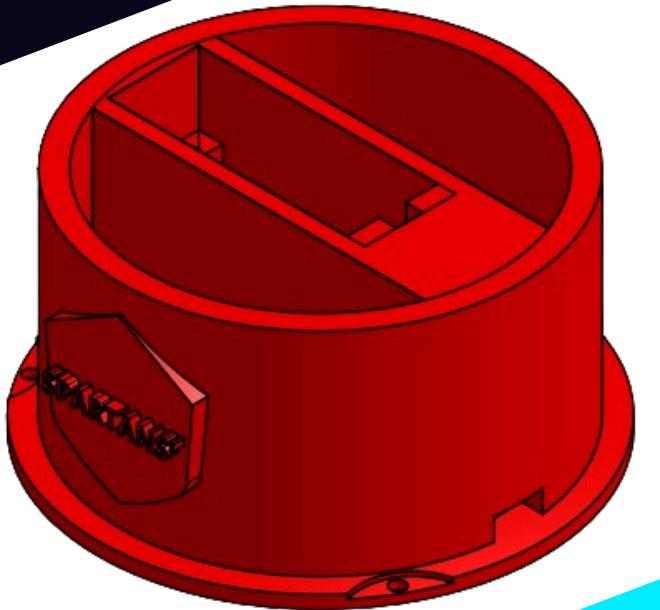
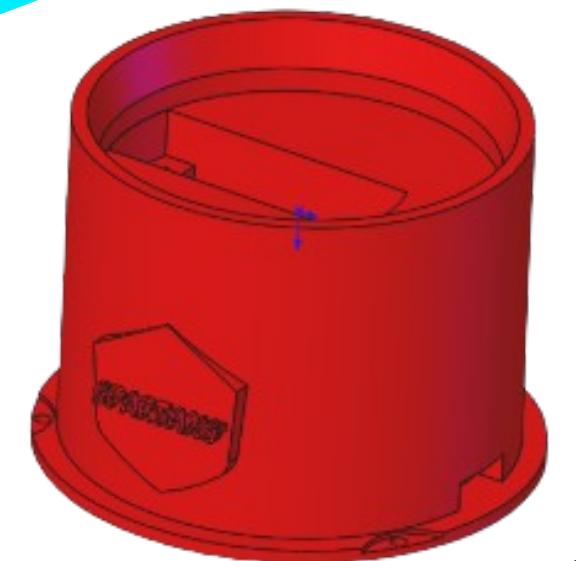


ROBOKIT

# ROBOKIT

RE-DESIGN BY GROUP 6



**ORIGINAL****ALTERED****BASE**

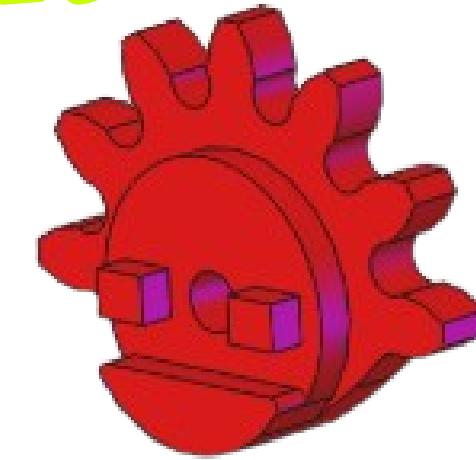
The height of the base has been increased to provide better overall stability, and additional structural supports have been integrated into the baseplate to enhance its strength and ensure improved load-bearing capacity.

# GRIPPER

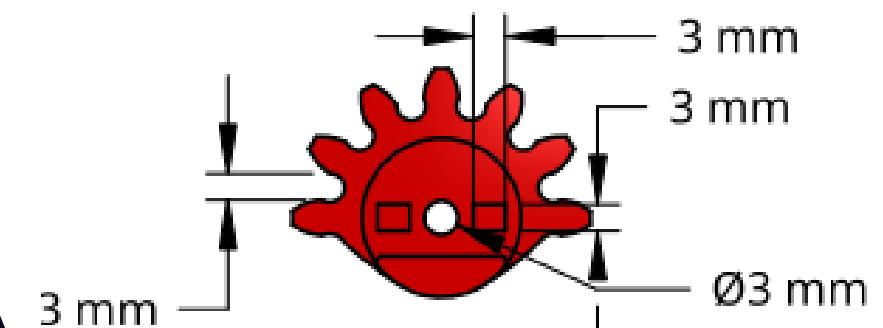
## Gripper Part 1

- The altered version could be optimized for aesthetics, better fit, or improved functionality.
- The base platform may provide more stability or ease of assembly.
- Adjusting the hole shape might help with better alignment or reduced friction during use.

ALTERED



ORIGINAL

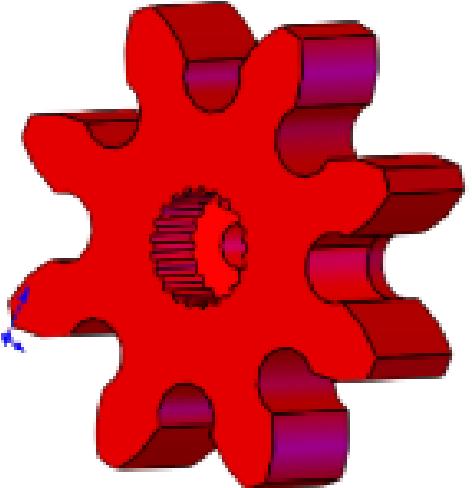


# GRIPPER

## Gripper Part 2

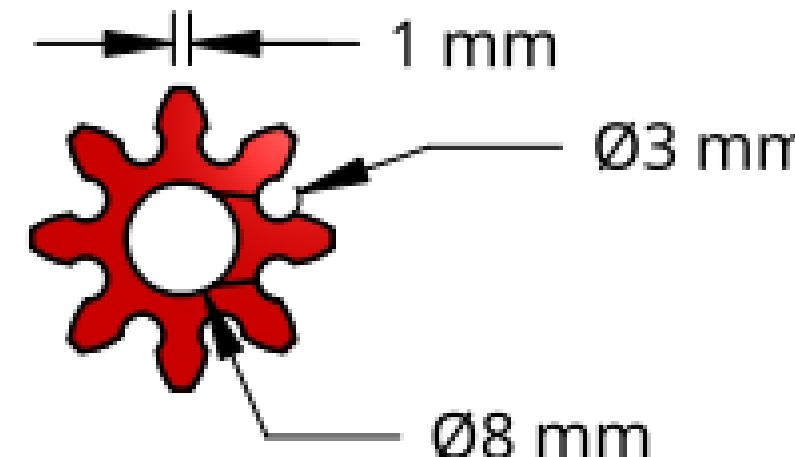
The central diameter of the gear has been reduced to minimize weight and compact the design, while additional teeth have been incorporated around its perimeter to enhance grip and improve mechanical engagement and support during operation.

**ALTERED**



**2**

**ORIGINAL**

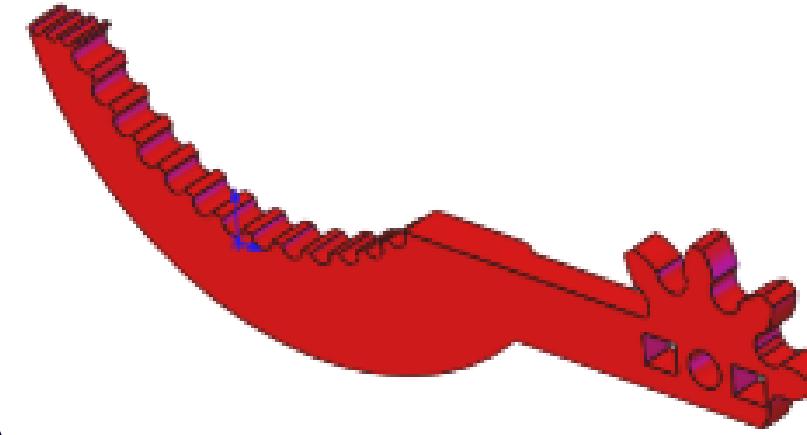


# GRIPPER

## Gripper Part 3

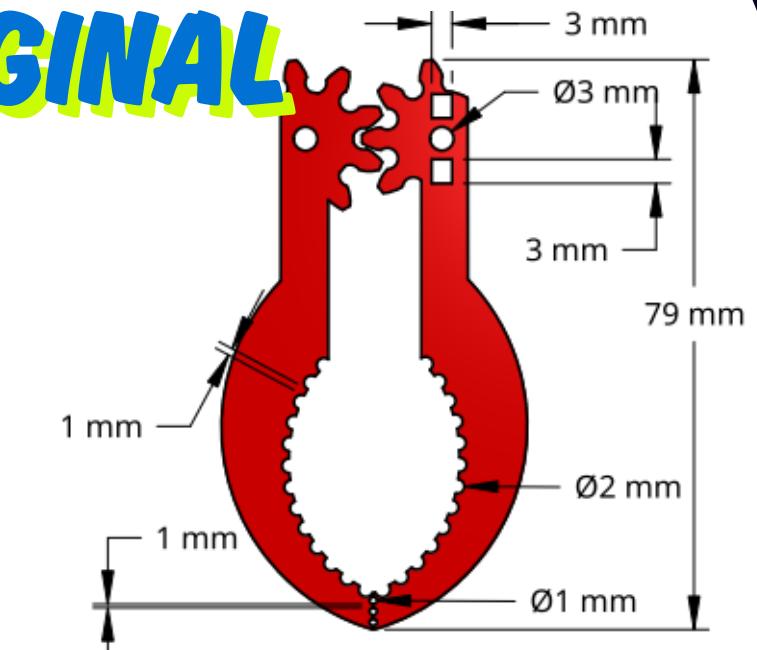
- The curved design in the altered version seems to improve functionality in rotational or grabbing tasks, possibly allowing for:
- Better angular reach
- Smoother engagement with circular or irregular objects
- The altered design could also enhance aesthetics or mechanical efficiency.

### ALTERED



### 3

### ORIGINAL



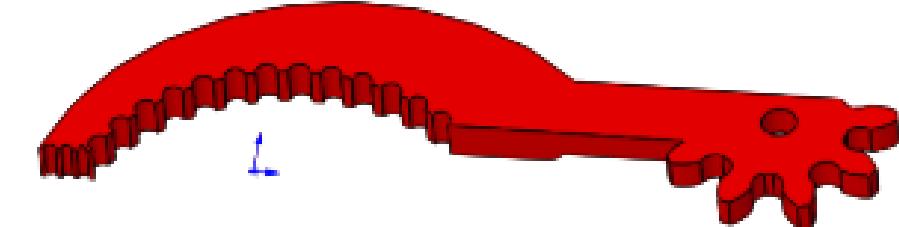
# GRIPPER

## Gripper Part 4

- Simplification: fewer parts, easier to print or assemble.
- Improved range of motion: smoother and wider arc when rotating.
- Function shift: from gripping to maybe sweeping, rotating, or guiding.

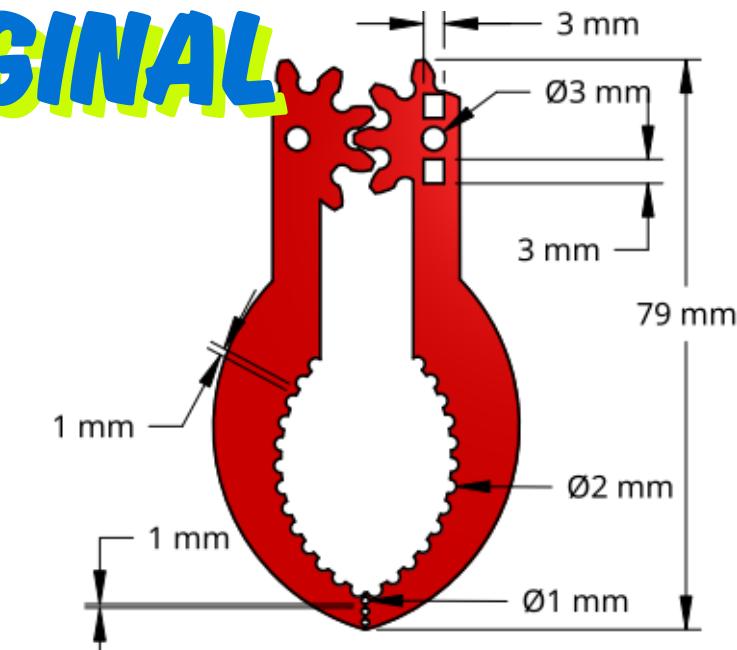
The transition from a dual-arm gripper to a single curved component signals a functional shift—perhaps for use in a rotating arm, rack-and-pinion setup, or claw-like application.

## ALTERED



## 4

## ORIGINAL



# GRIPPER

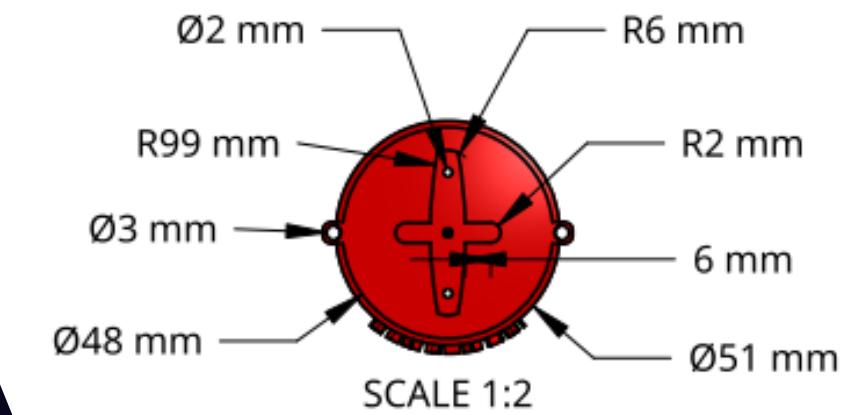
## Gripper Part 5

- Handle Added: The altered design has a rectangular handle on top that the original doesn't have.
- Text Engraved: The altered version includes some text on the side.
- Slight Shape Changes: The altered one looks a bit more refined or cleaned up.

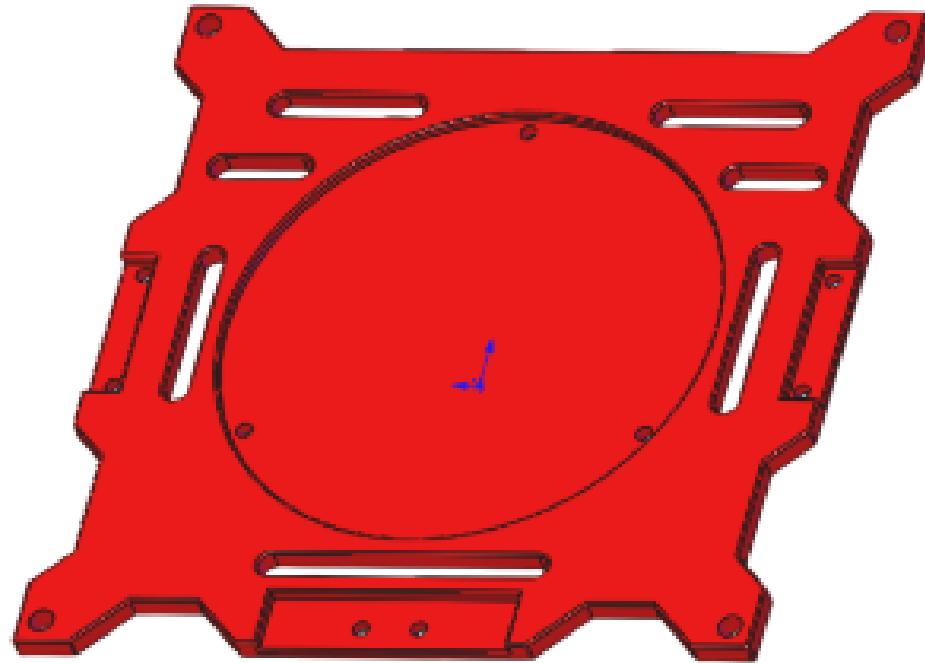
ALTERED



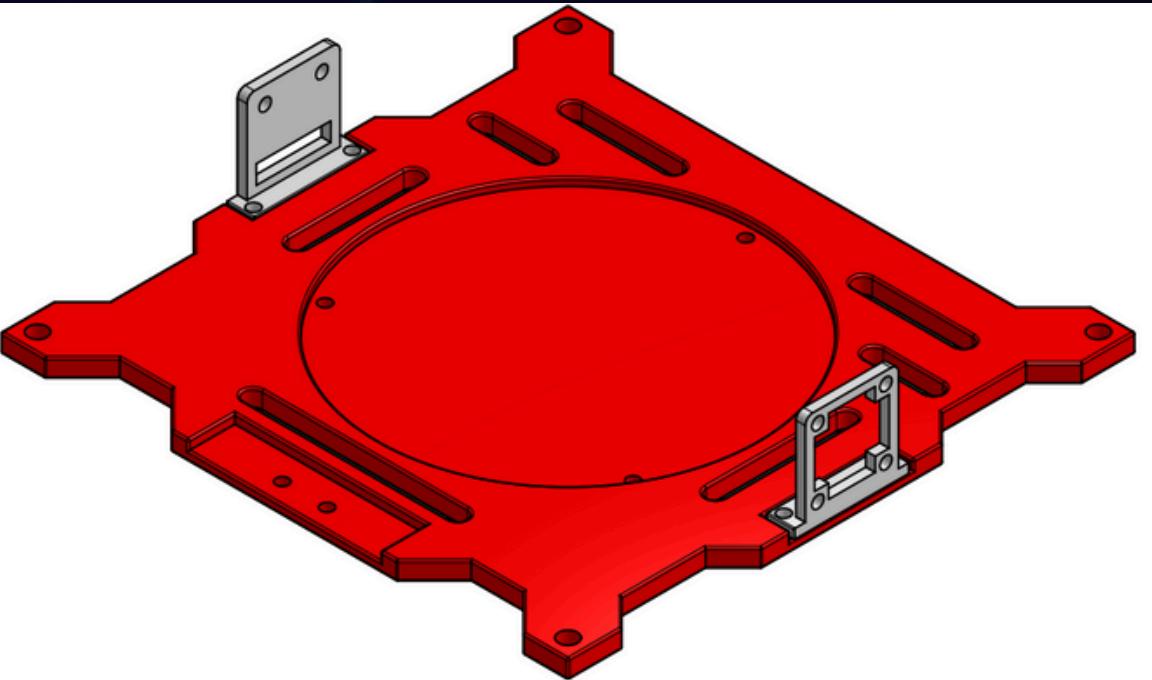
ORIGINAL



5

**ALTERED**

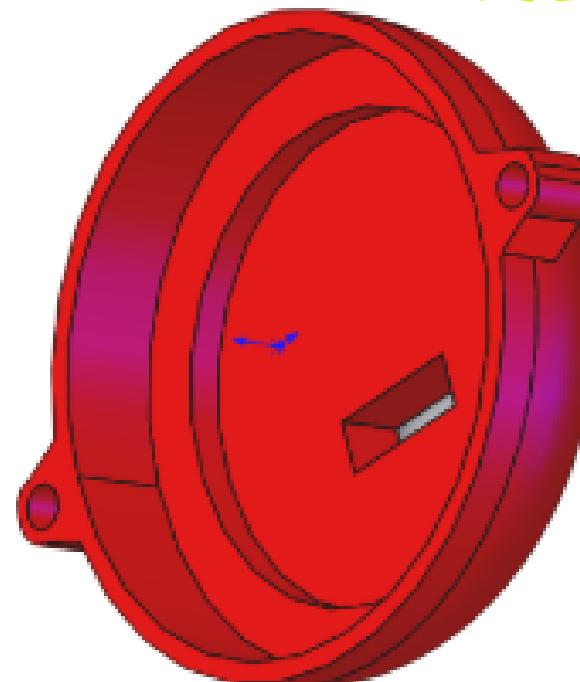
# SENSOR PLATE

**ORIGINAL**

- Cutouts Changed: The slots and cutouts around the edges have been slightly changed in shape and position in the altered design.
- Cleaner Look: The altered version looks simpler and more uniform, possibly for easier manufacturing or a different mounting method.

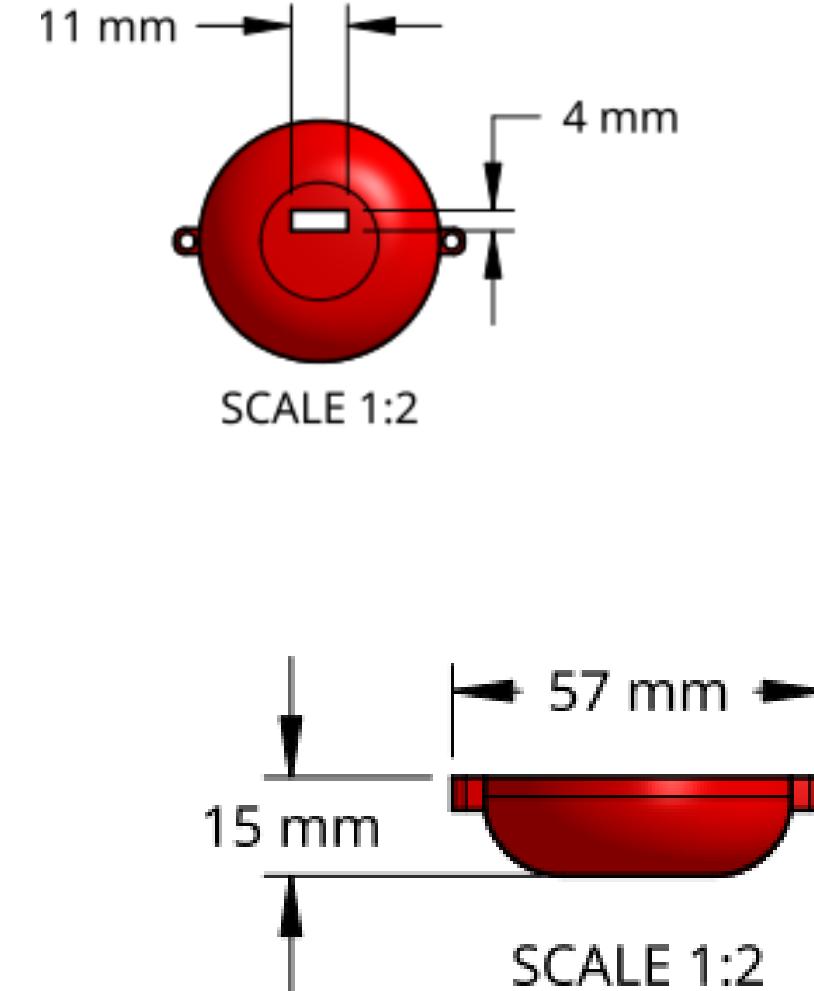
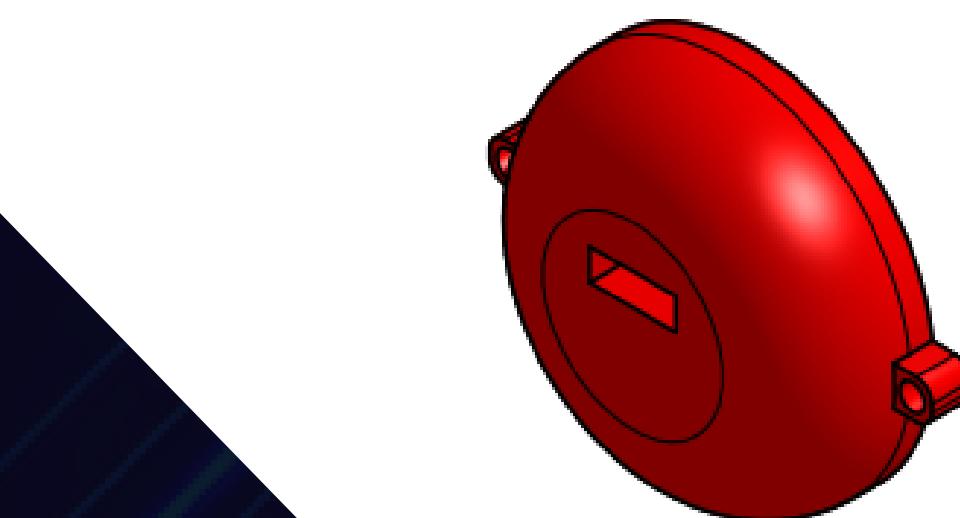
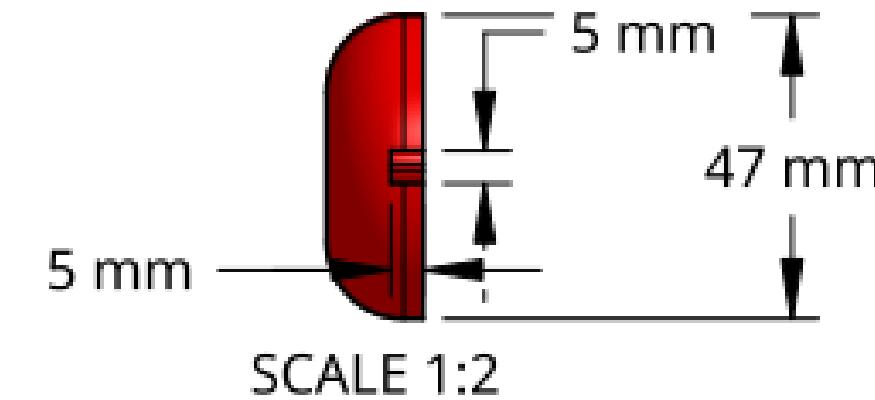
ROBOKIT

LID



ALTERED

ORIGINAL



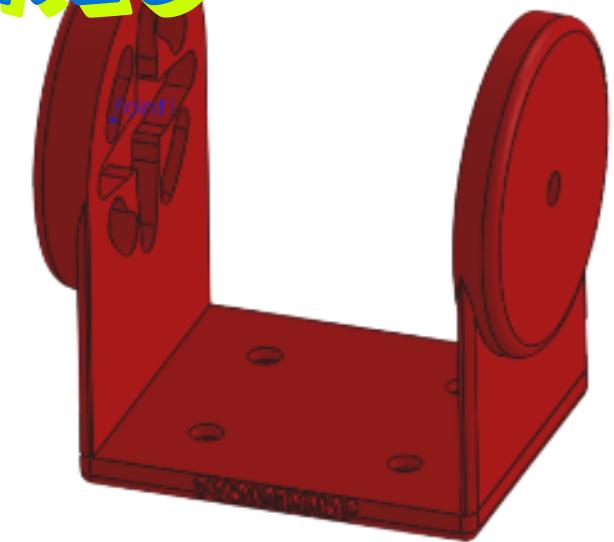
The section surrounding the screw hole has been reinforced with increased thickness to provide additional structural support, ensuring greater durability and resistance to stress during assembly and usage.

# CONNECTOR

## Connector 2

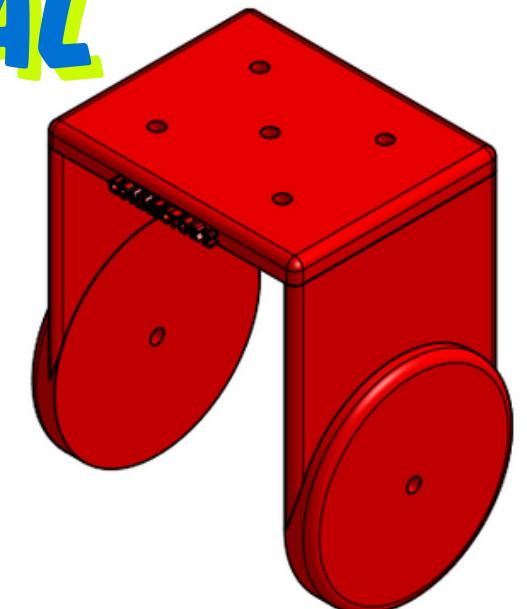
Additional holes have been added to the design, reinforcing the existing ones to further improve stability and ensure a more secure connection during the motor's operation.

**ALTERED**



**2**

**ORIGINAL**

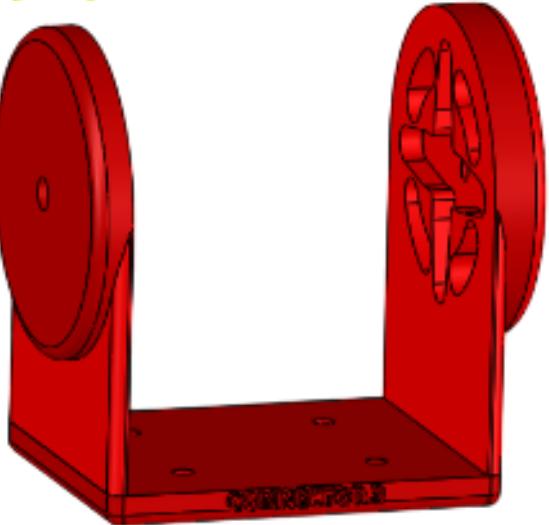


# CONNECTOR

## Connector 3

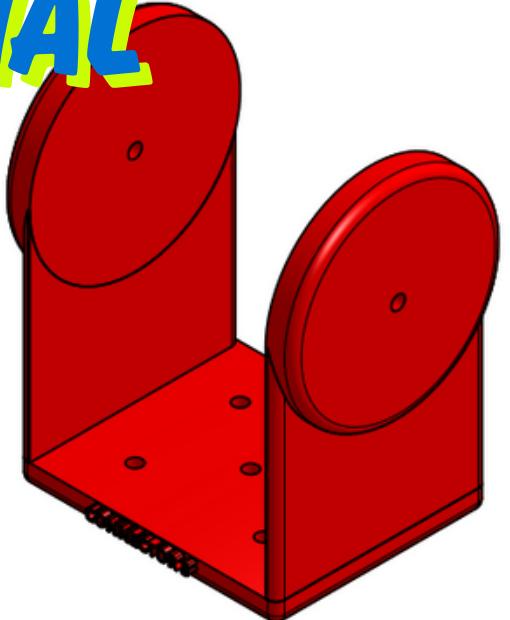
(Similar to Connector 2) Additional holes have been added to the design, reinforcing the existing ones to further improve stability and ensure a more secure connection during the motor's operation.

**ALTERED**

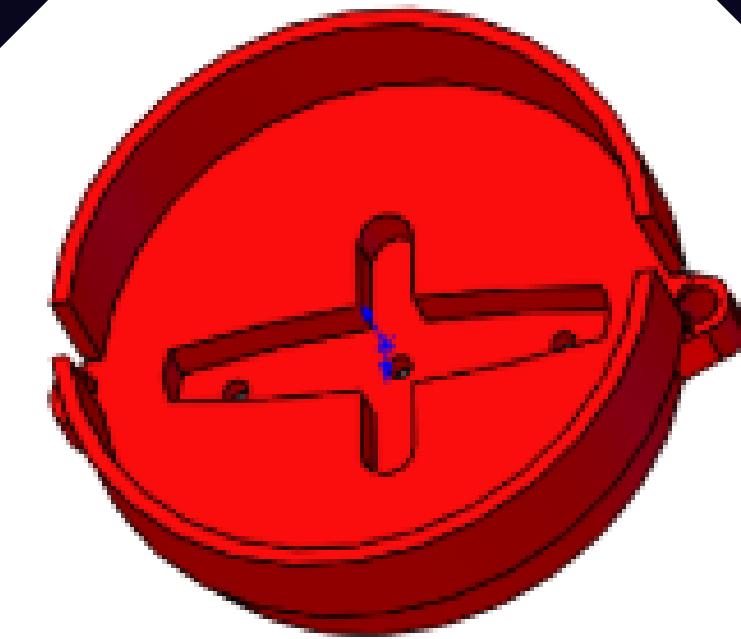


**3**

**ORIGINAL**



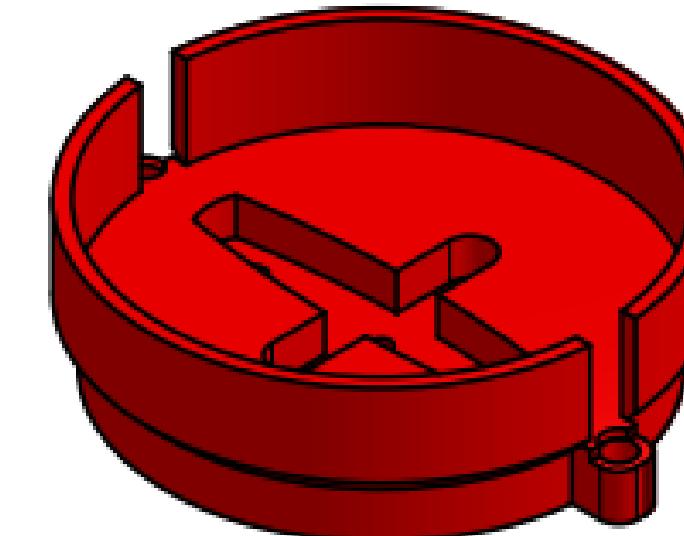
# MODULAR



**ALTERED**

The screw holes have been thickened to reinforce the structure, improving durability and preventing breakage during assembly.

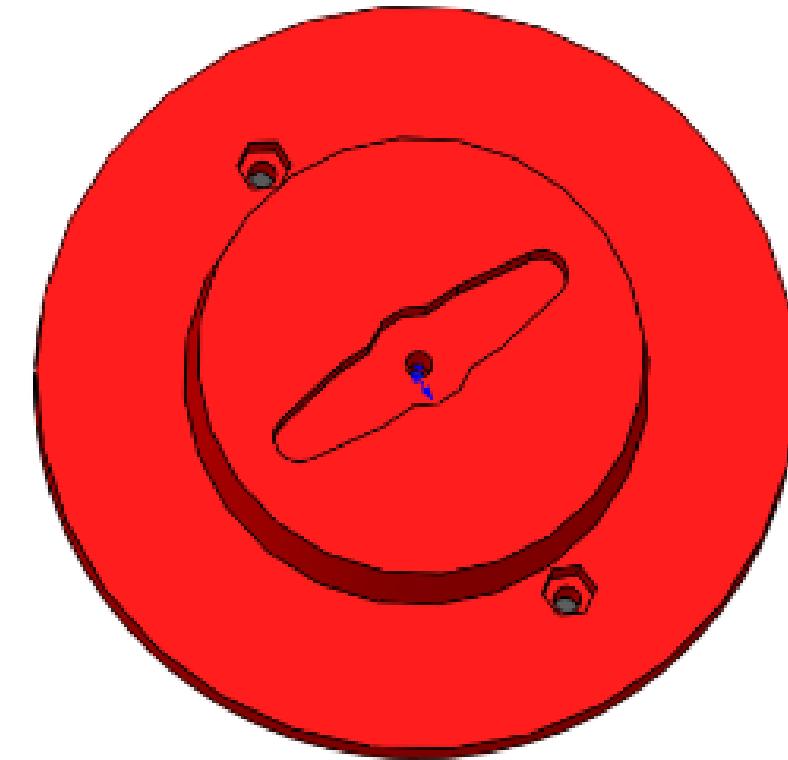
**ORIGINAL**



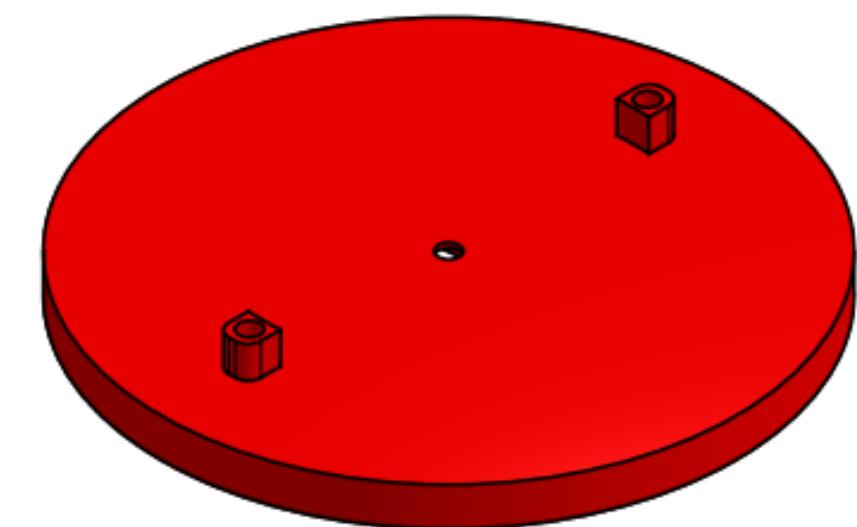
# BASEPLATE ALTERATE

A “keyhole” has been added to enhance stability, preventing movement and ensuring a more secure connection when the motor is in motion.

**ALTERED**



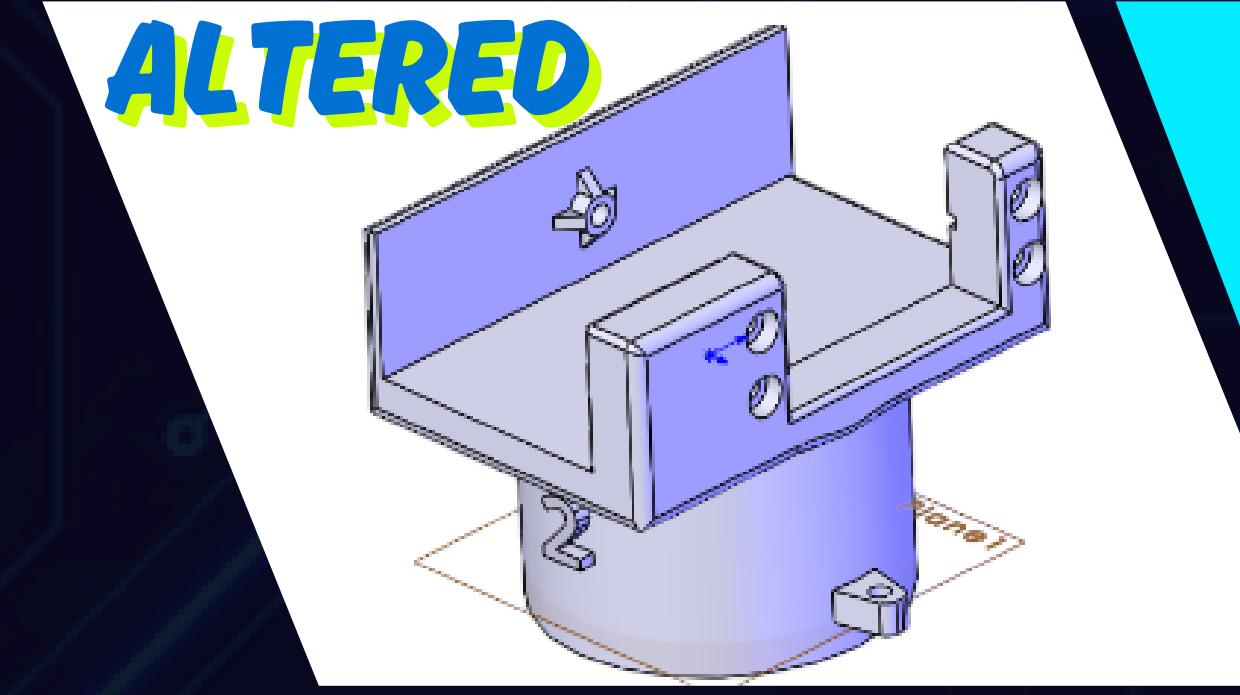
**ORIGINAL**



# JOINT

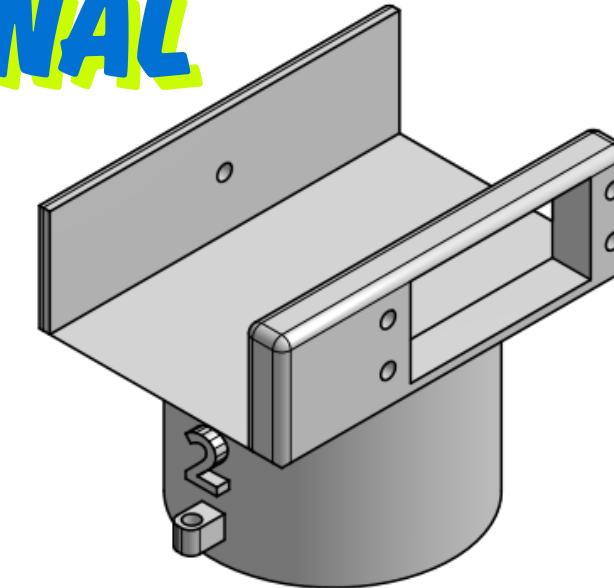
## Joint 2

The screw holes has been repositioned to the side, and the upper frame for the motor has been removed to allow for better access and stability. Additional support has been added to the screw hole for the connected joint, and the hole has been deepened to ensure the screw doesn't stick out, providing a cleaner and more secure assembly.



2

## ORIGINAL

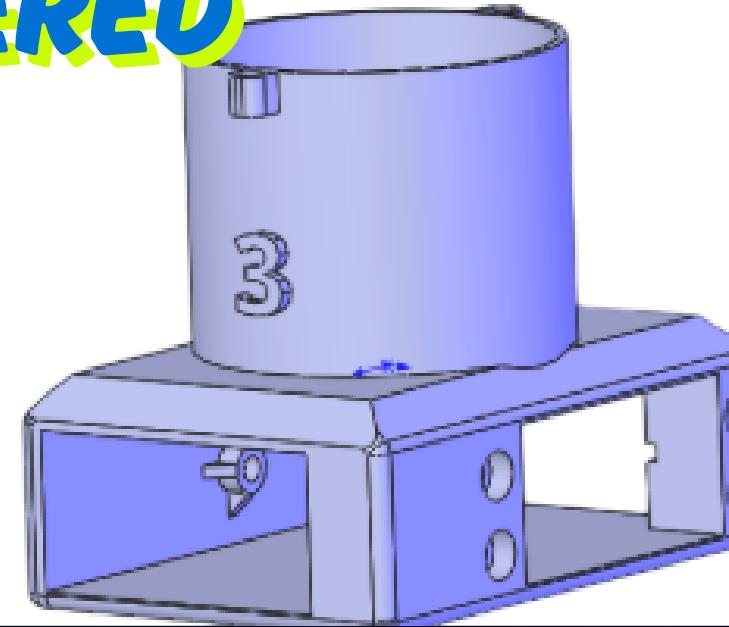


# JOINT

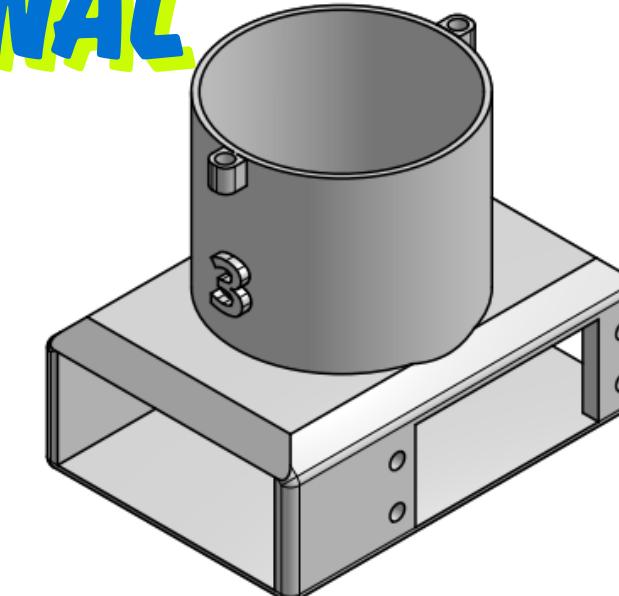
## Joint 3

The screw hole has been thickened for added durability, and additional support has been added to the screw hole for the connector, ensuring a more secure and stable assembly when moving. Deeper holes have also been added for the screw to prevent it from sticking out.

**ALTERED**



**ORIGINAL**



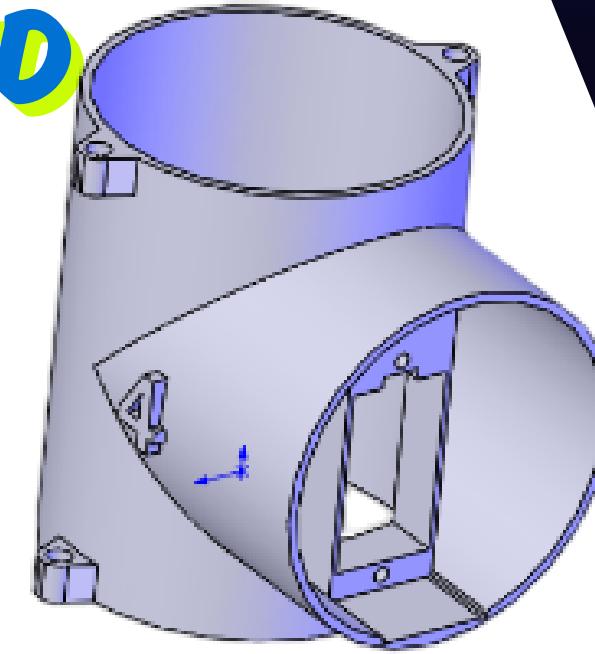
**3**

# JOINT

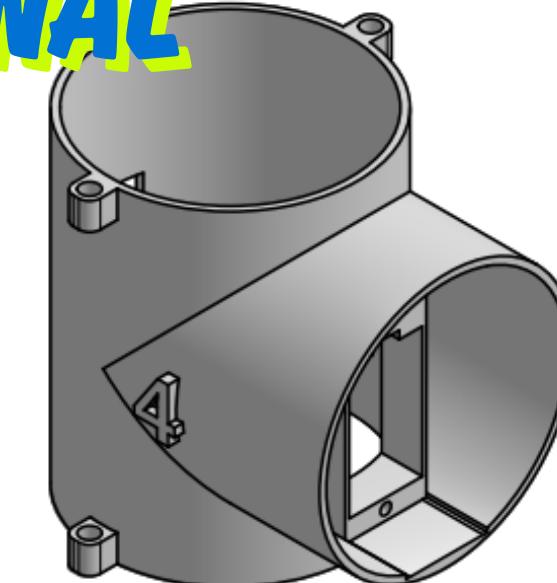
## Joint 4

The screw holes has been thickened to prevent breakage during assembly, ensuring greater durability and a more secure fit.

**ALTERED**



**ORIGINAL**



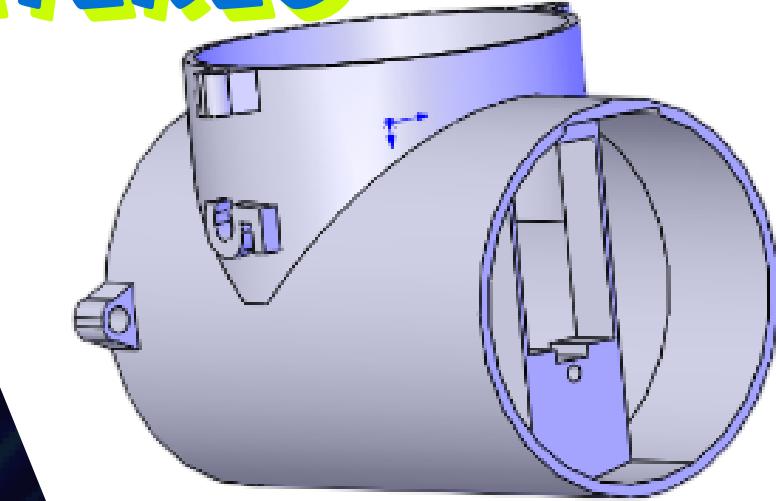
**4**

# JOINT

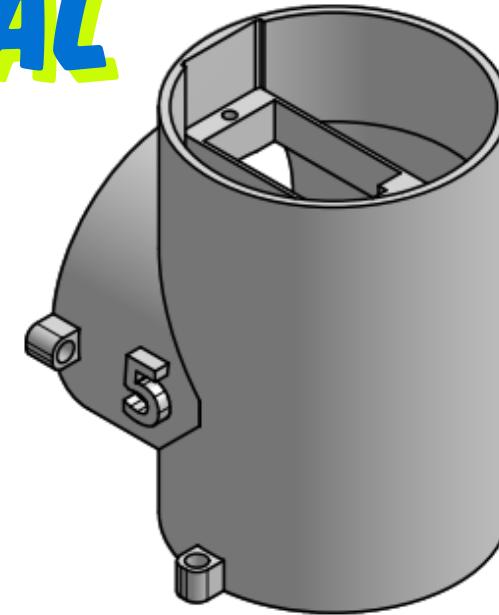
## Joint 5

The screw holes have been thickened to enhance durability and prevent breakage during assembly, ensuring a more secure connection.

**ALTERED**



**ORIGINAL**



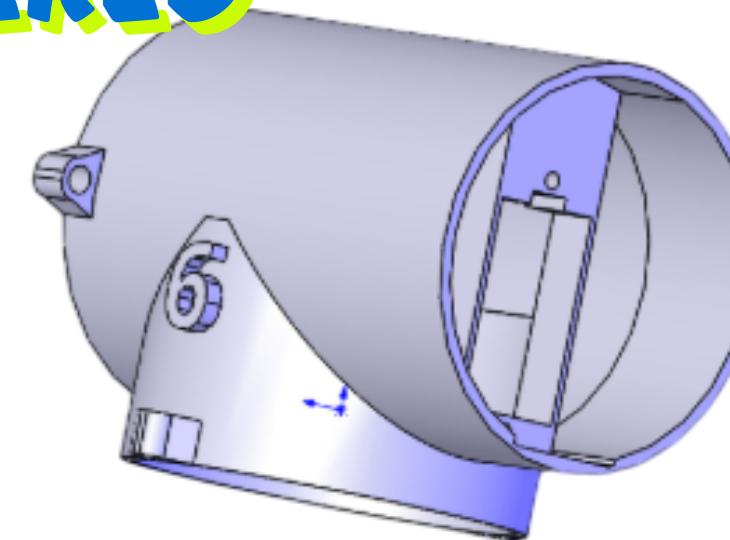
**5**

# JOINT

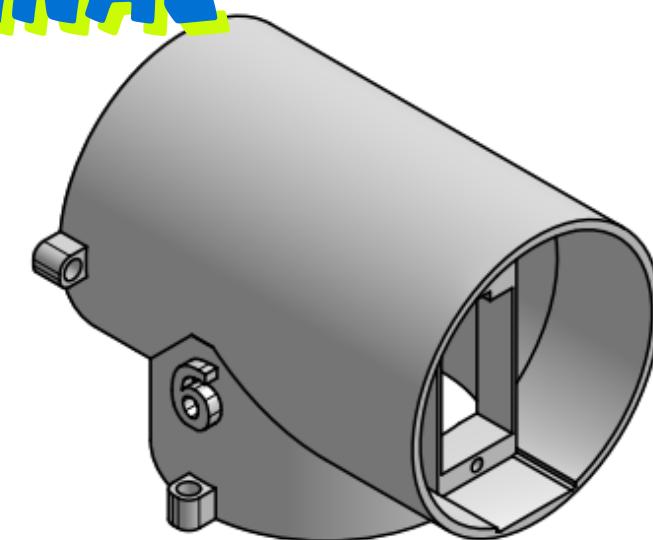
## Joint 6

The screw holes have been thickened to enhance durability and prevent breakage during assembly, ensuring a more secure connection.

**ALTERED**



**ORIGINAL**



**6**