# Assembly Instructions for Forklift Device

### 1 Introduction

These instructions will guide you through the steps needed to assemble a forklift device from the provided components.

#### 2 Tools Required

- $\bullet\,$  Small Phillips screwdriver
- ullet Soldering station

## 3 Parts Required

- fork \* 1
- gear box \* 2
- $\bullet \;\; {\rm rack} \; * \; 2$
- gear \* 2
- motor \* 2



Figure 1

## 4 Assembly Steps

Follow these steps to assemble your forklift device:

Step 1: **Prepare the Case:** Weld two 2.8mm screw nuts onto each gear box and two 2.5mm screw nuts onto each side of fork.



Figure 2

Step 2: Link fork: Link each side of fork with rack by two 2.8mm screws.



Figure 3

Step 3: Link gear: Link each motor output shaft with gear by two 2.5mm pins.





Figure 4 Figure 5

Step 4: Link gear and rack: Set up the each motor into the gear box and link each gear with rack.

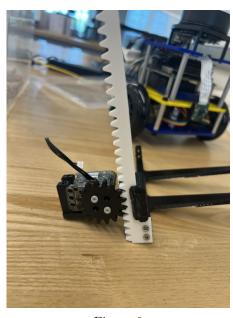




Figure 6 Figure 7

Step 5: Link the forklift with the robot: Link each gear box with robot by two 2.5mm screws.

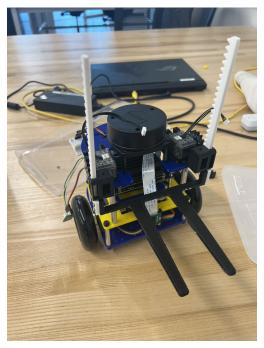


Figure 8

Step 6: Link signal cable with chip: Link each signal cable with chip by two pins.

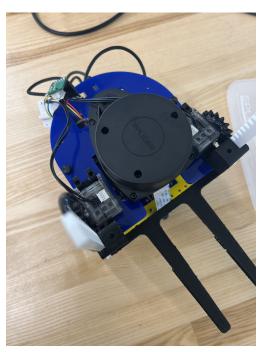


Figure 9

### 5 Testing

After assembly, test the forklift in various lifting conditions to ensure it operates correctly.