How-To
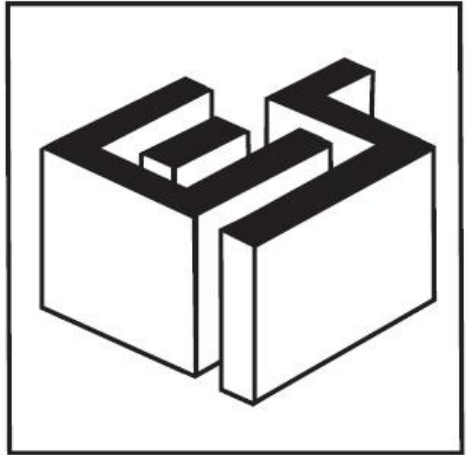# Assemble AI Car

Assemble AI Car

William Tan
Section Head/Artificial Intelligence,
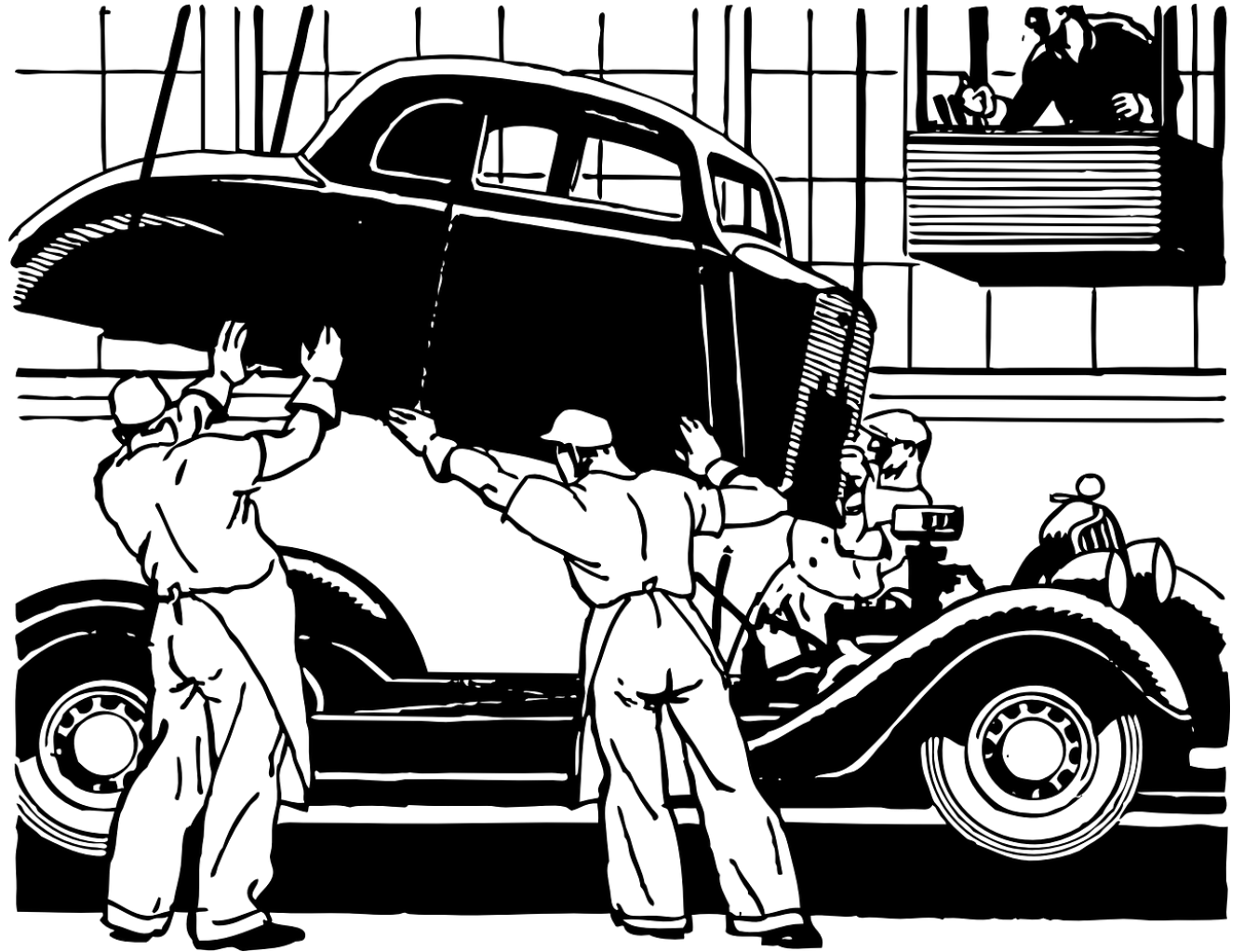### School of Electronics & Info-Comm Technology

Scope

- Objectives
- Assembly Steps

Objectives

- At the end of this training, students will
  - Assembled their AI Car

Assemble AI Car

AI Car Building Guide

1. Offline Guide (This PDF)
2. YouTube Video Guide: [AI Car Building Guide](#)

Part List

Different type of wire lengths:
Blue: Long
Grey: Middle
Black: Short

Two pins cable: Use with switch
(*Not applicable for AI Car building*)

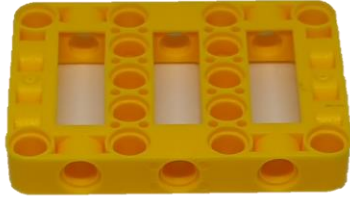While during building the AI Car, you are freely to decide the lengths of wire to use

Step 1: Motors Base Plate

Parts:

Qty: 2

(11 holes)

Qty: 1

Qty: 2

Qty: 14

Bottom view

Top view

Step 2: Servo Motors

Blue: Long

Black: Short

Parts:

Qty: 2

Qty: 2

Qty: 2
ID-1 & ID-2
Take note on the ID

Black/Blue
Qty: 2

Qty: 4

ID-01   ID-02

Will connect to uKit Explore main board

ID-01   ID-02

Assemble AI Car

College West

Make2Learn Espace
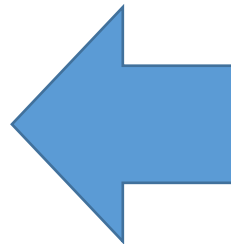
Step 3: Motors with Base Plate

Parts:

Step 1 Part

Step 2 Part
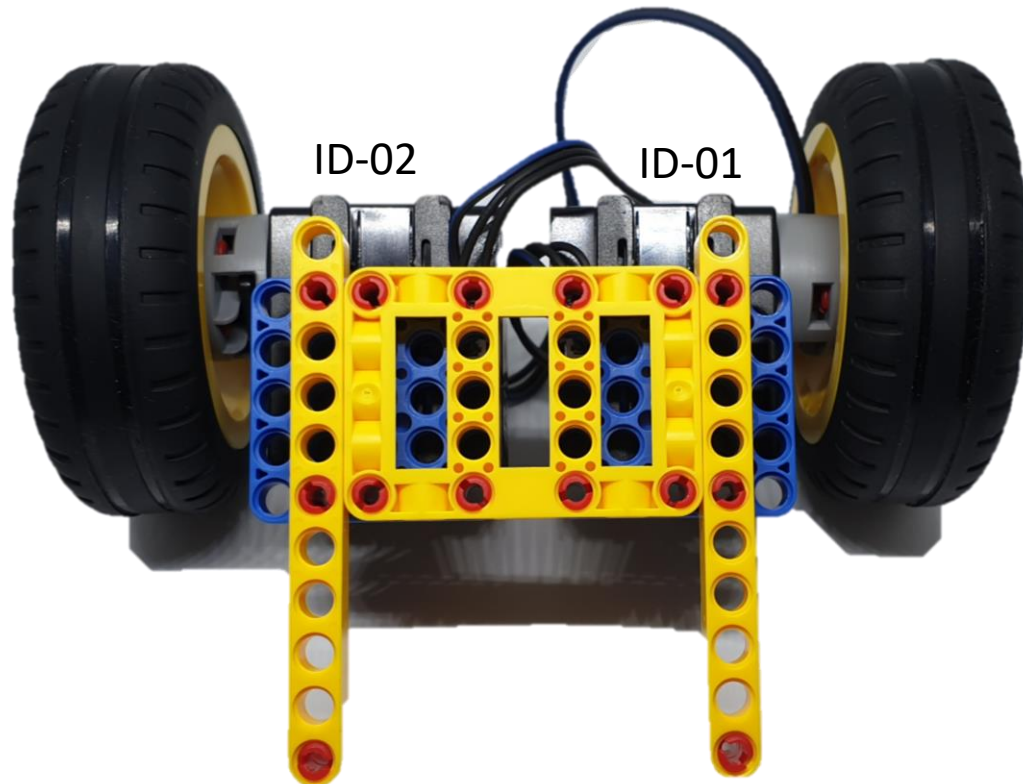
ID-02   ID-01
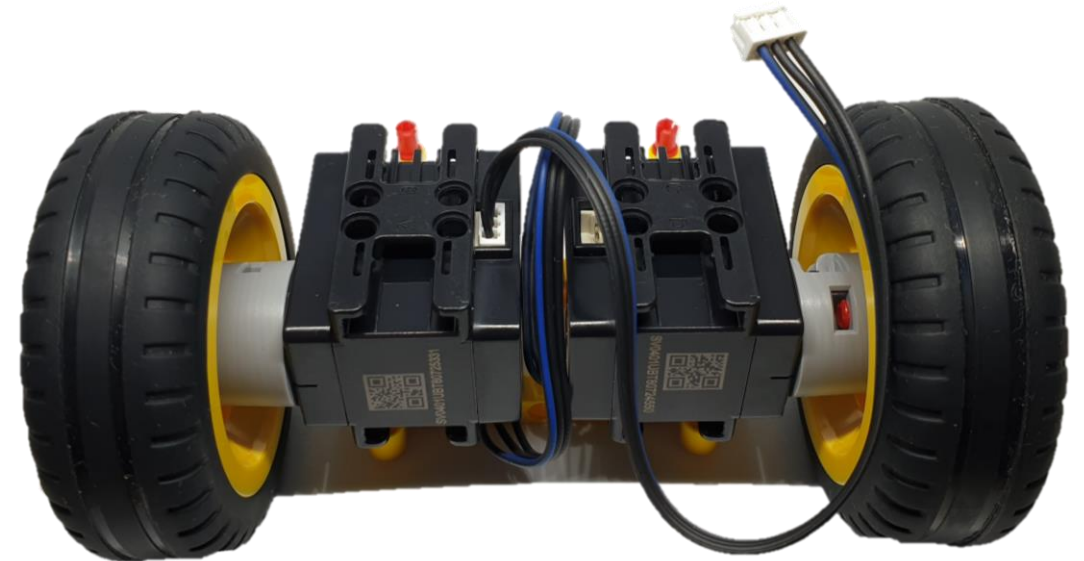
Bottom View

ID-02   **ID-01**

Top Rear View

Assemble AI Car

Step 4: Motors Top Plate

Parts:

Qty: 1
(11 holes)

Qty: 2

Qty: 2

Qty: 8
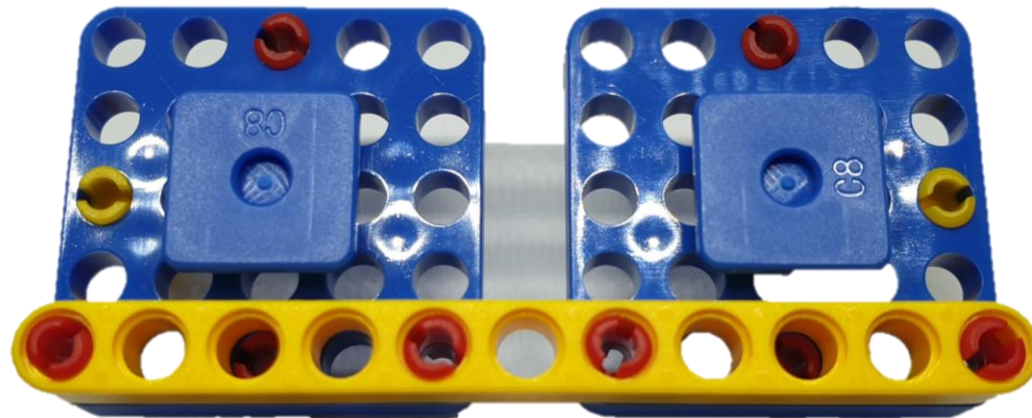
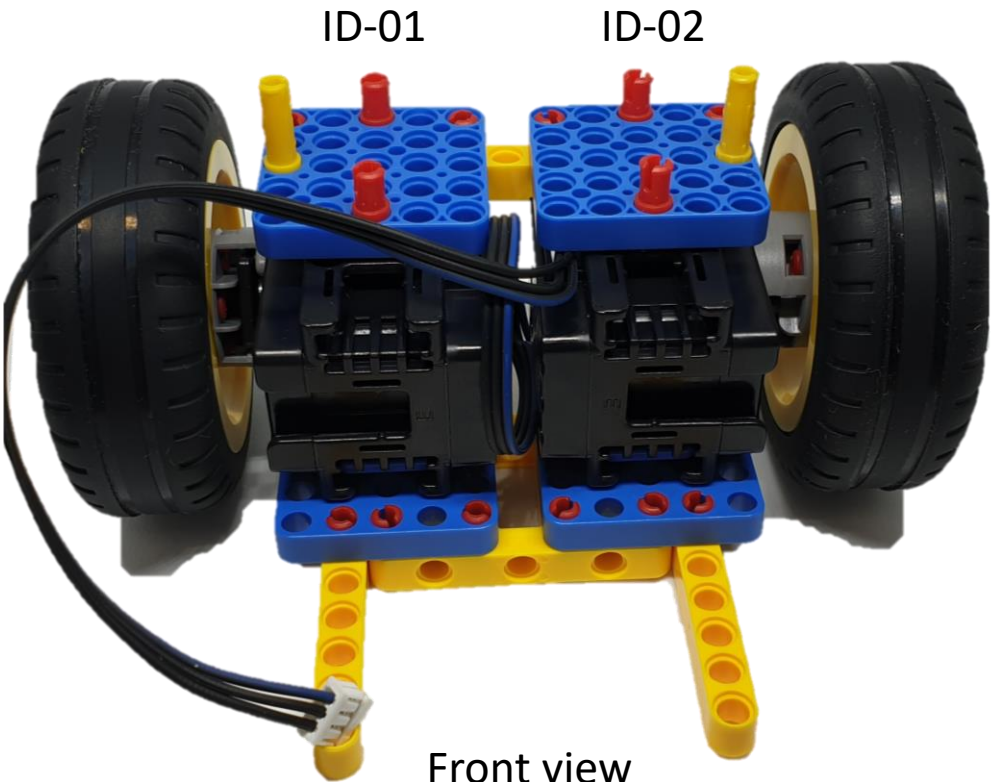Bottom view

Top view

Step 5: Motors with Top Plate

Parts:
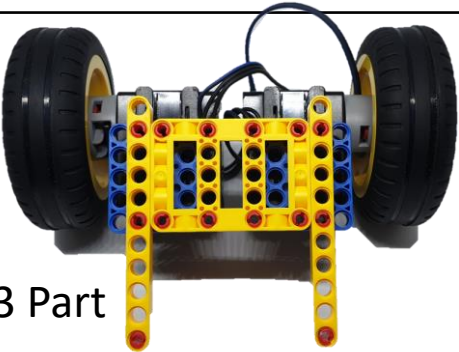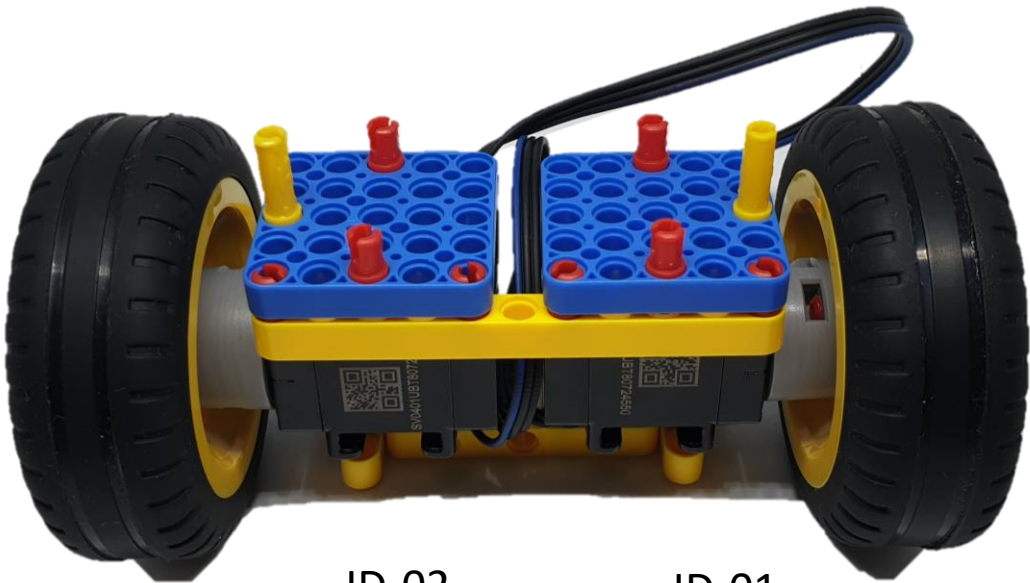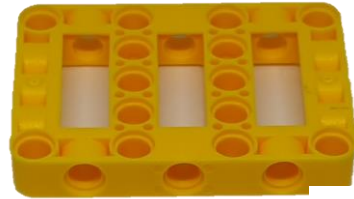
Step 3 Part

Step 4 Part

ID-01   ID-02

Front view

ID-02   ID-01
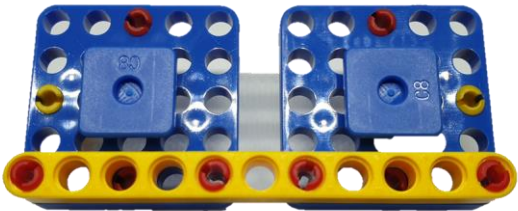
Rear view

Step 6: Arduino Board and Mount

Parts:

Qty: 3

Qty: 6

Qty: 4

Qty: 1

Qty: 1

Qty: 1

Qty: 1

*Please refer to **Step 6 Video Guide** to assemble the top and bottom acrylic*

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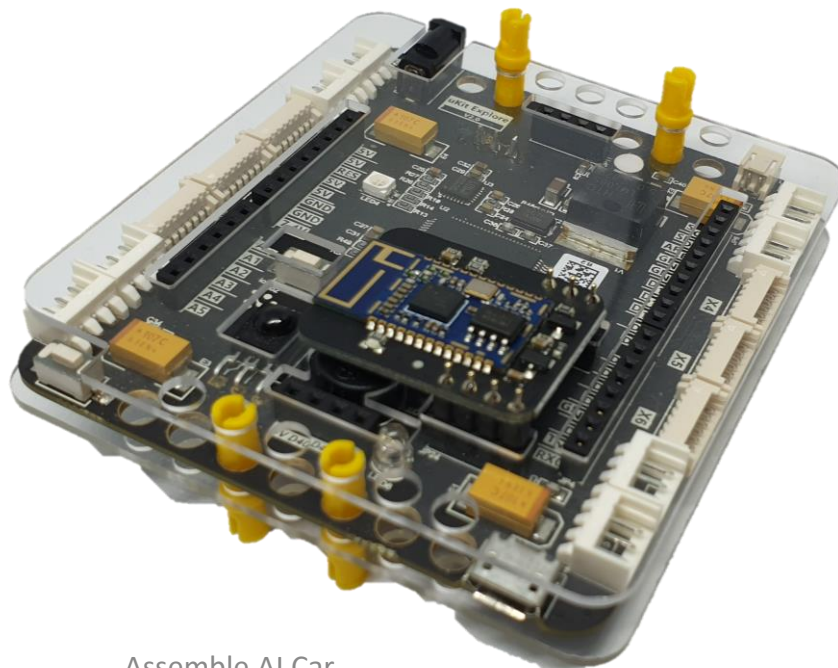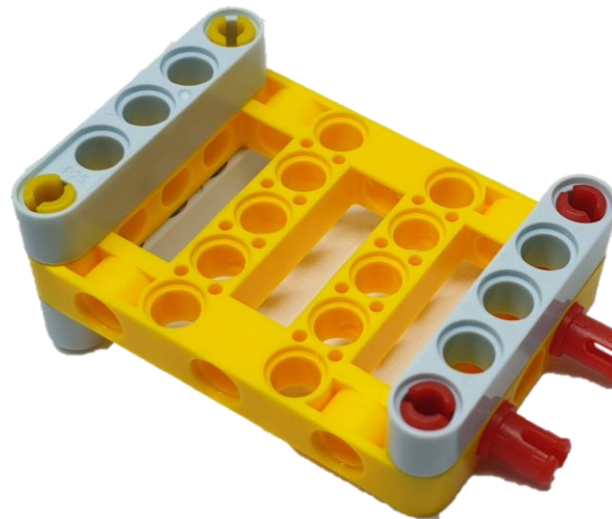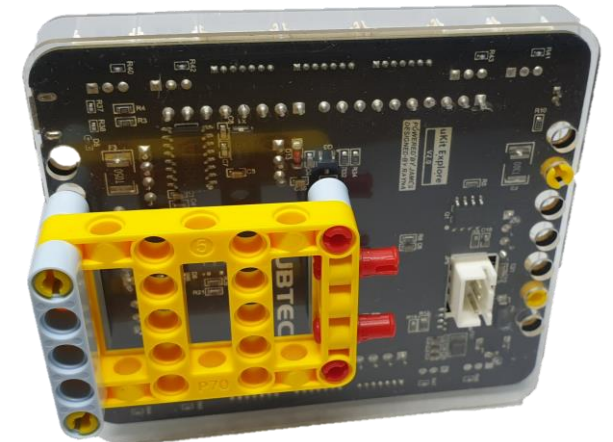
Assemble AI Car

Step 7: Eye LED Lamp & Button

Parts:

Qty: 1

Qty: 1
*Optional

Qty: 2
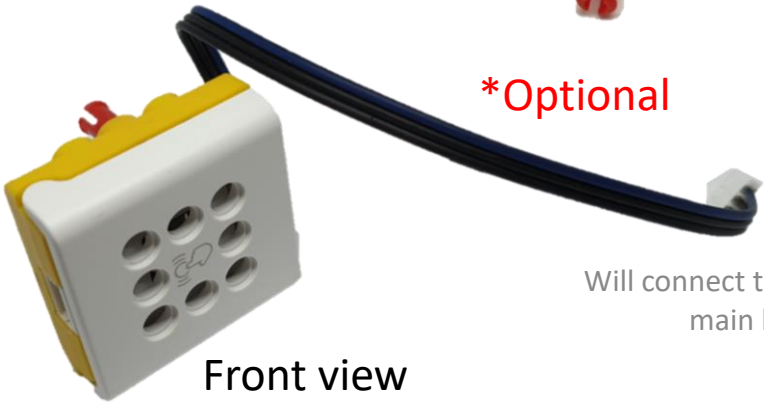Blue or Grey

Qty: 4

Will connect to uKit Explore main board

Rear view

ID-01

Front view

Assemble AI Car
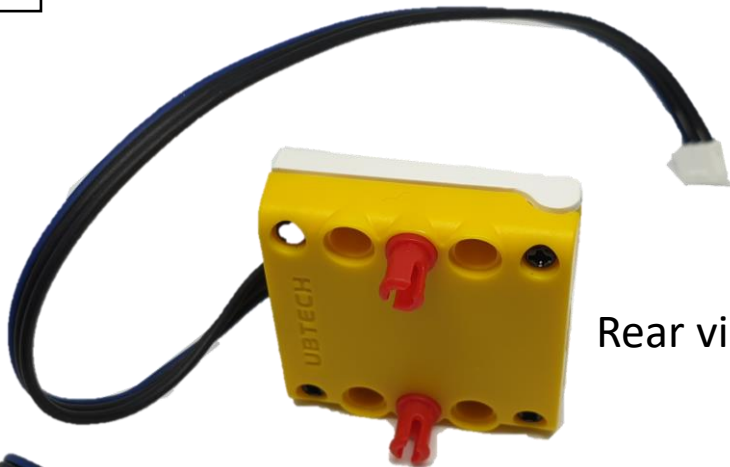
Rear view

*Optional

Front view

Will connect to uKit Explore main board

Step 8: Mobile Holder part 1

Qty: 2

Qty: 16

Qty: 2

(9 holes)   Qty: 3

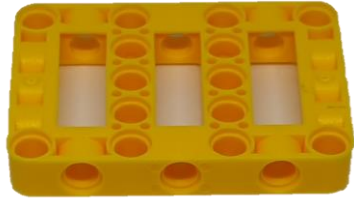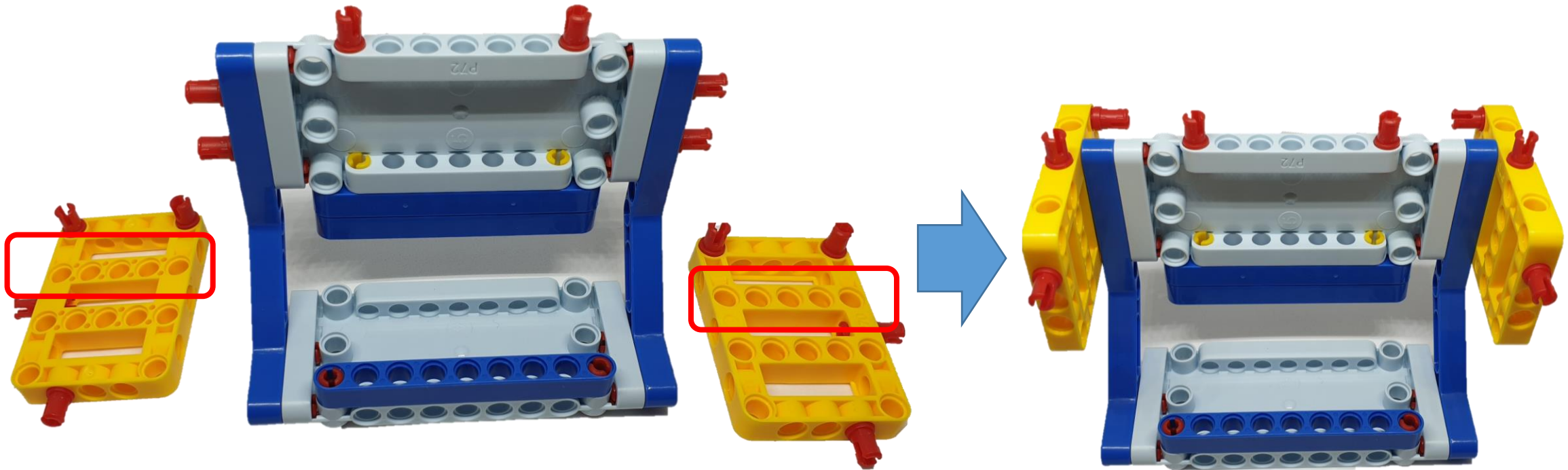Qty: 2
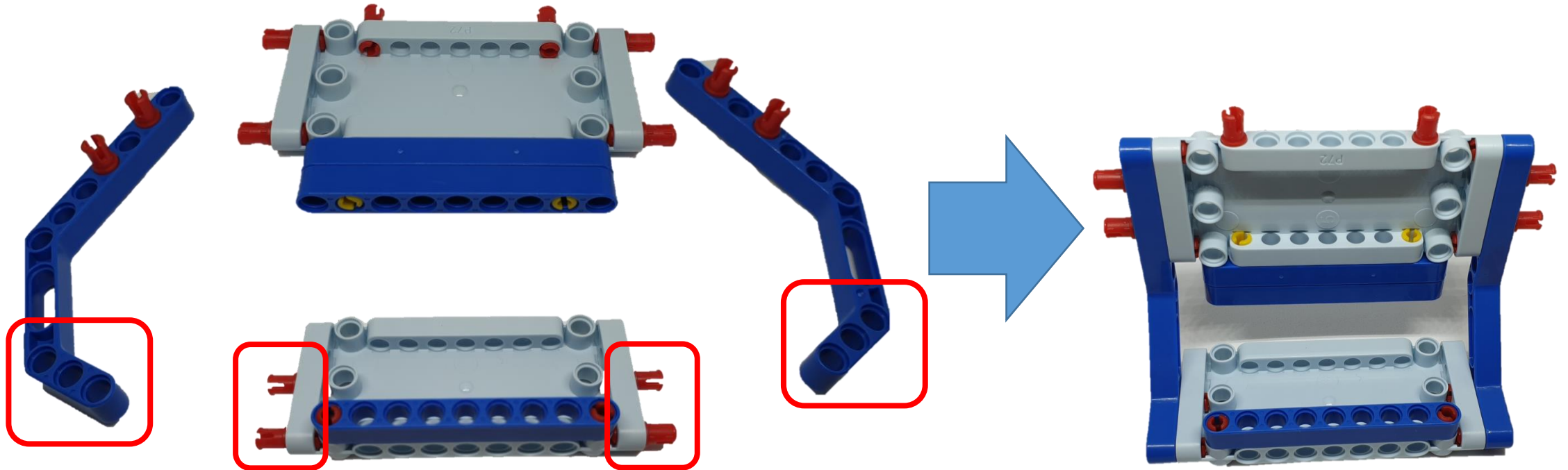
Assemble AI Car

Step 9: Mobile Holder Part 2

Parts:

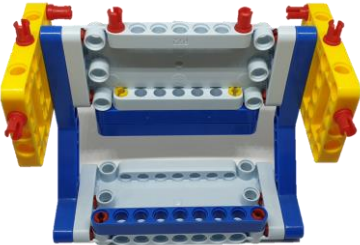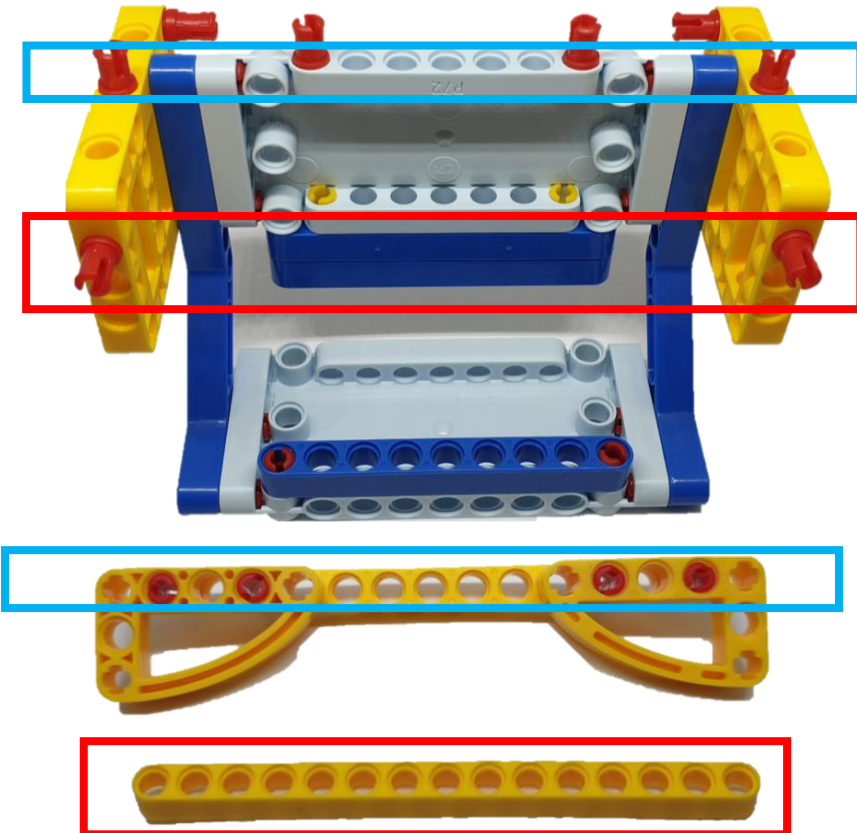Step 8 Part

Qty: 2

Qty: 8

Slot in position

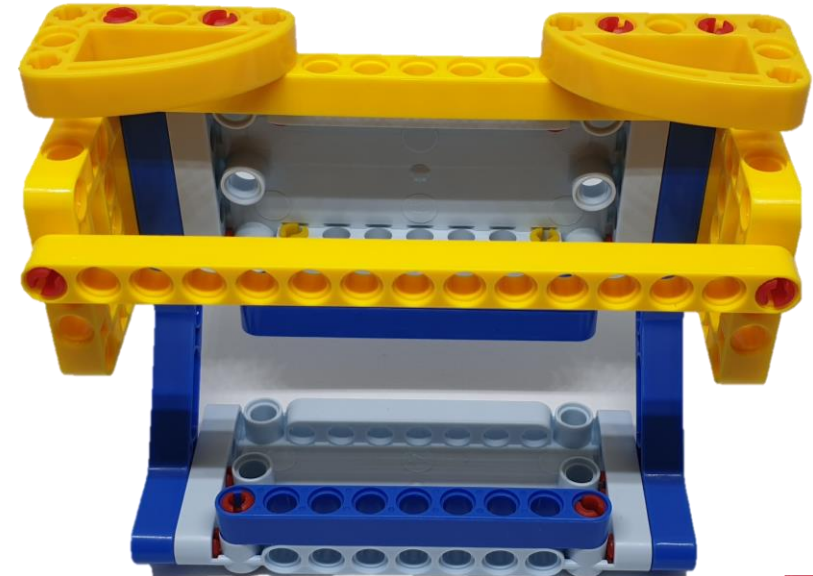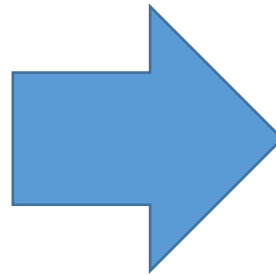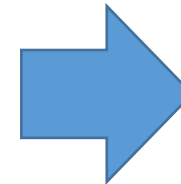# Step 10: Mobile Holder Part 3

Parts:

Qty: 2

Qty: 4

Qty: 2

(15 holes)

Step 9 Part

Assemble AI Car

Step 11: Mobile Holder Part 4

Parts:

Qty: 2   Qty: 4

Qty: 2

Qty: 2

Qty: 4

Qty: 1

Step 10 Part
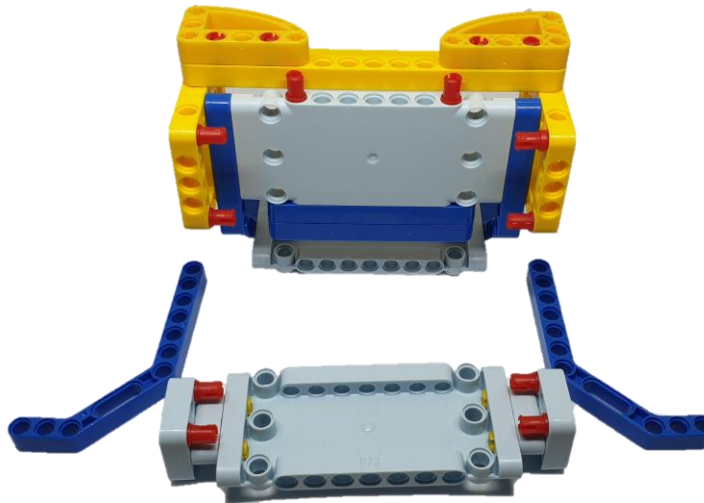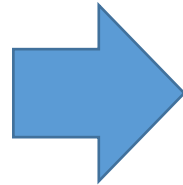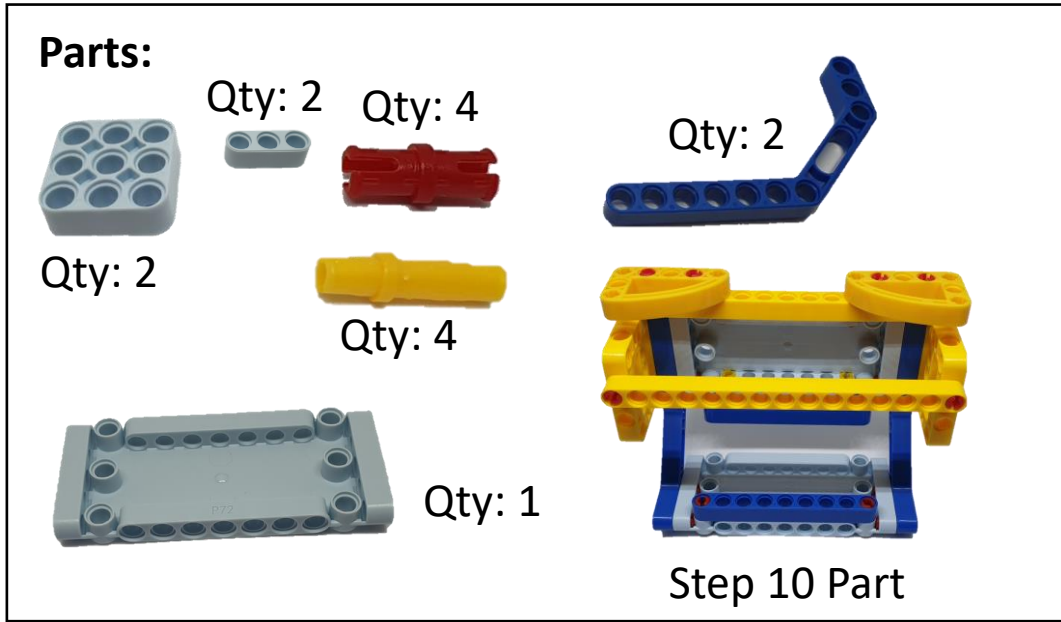
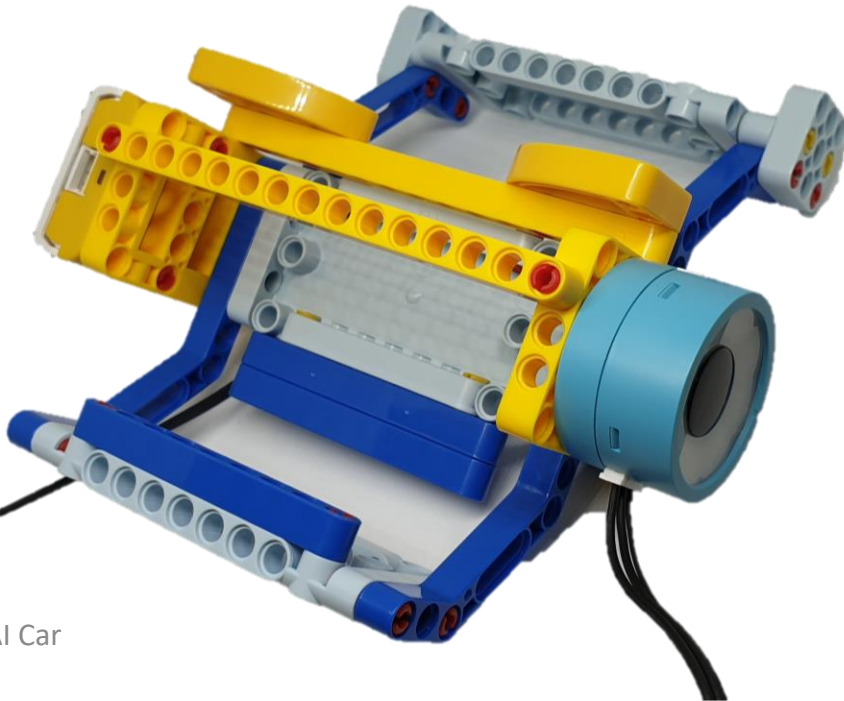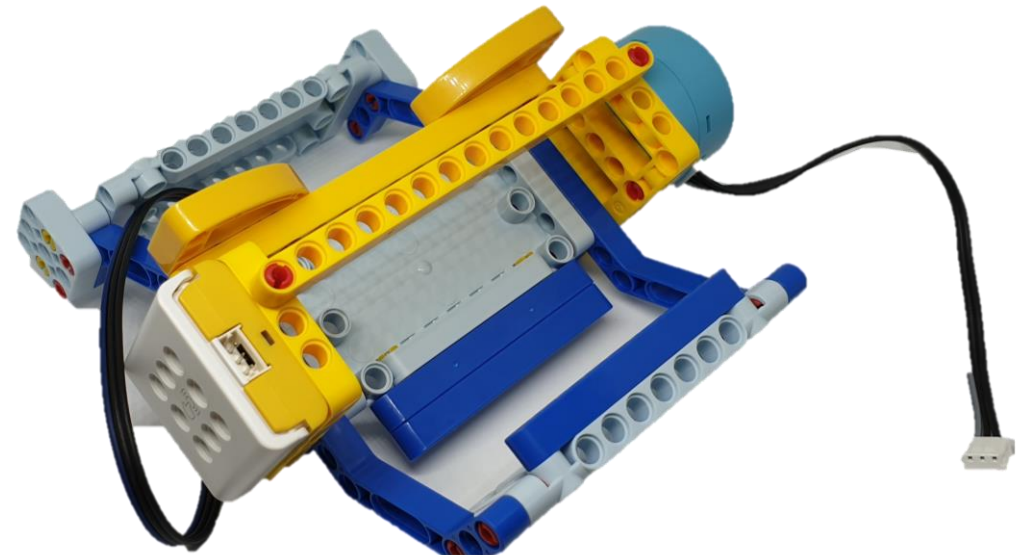# Step 12: Put in the LED Lamp and Button

Parts:

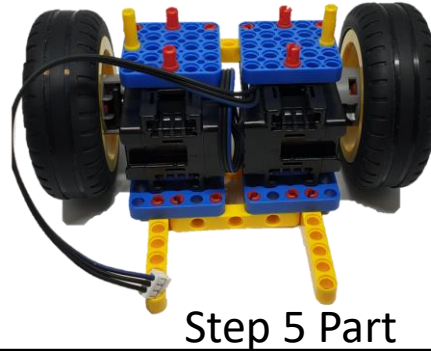Step 7 Parts
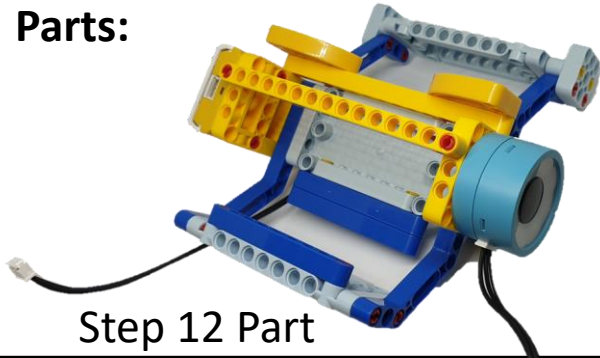
*Optional

Step 11 Part

View 1
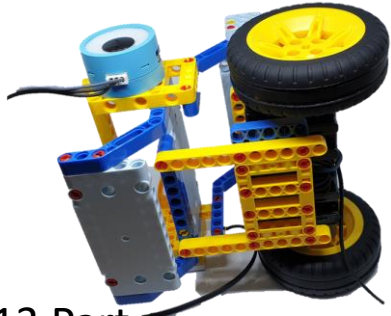
Assemble AI Car

View 2
*Optional (button/touch sensor)

Step 13: Assemble Motors with Mobile Holder

Parts:

Step 12 Part

Step 5 Part

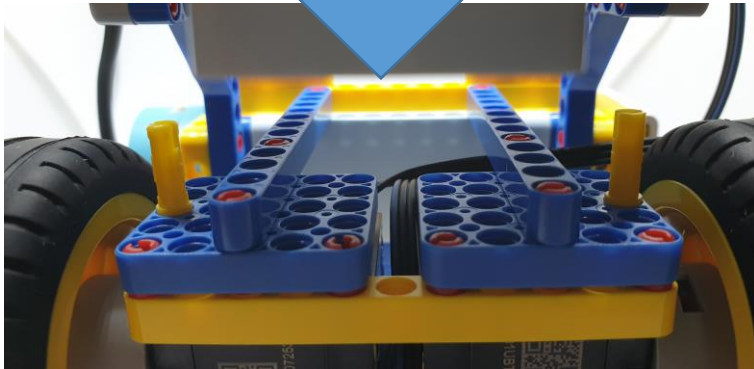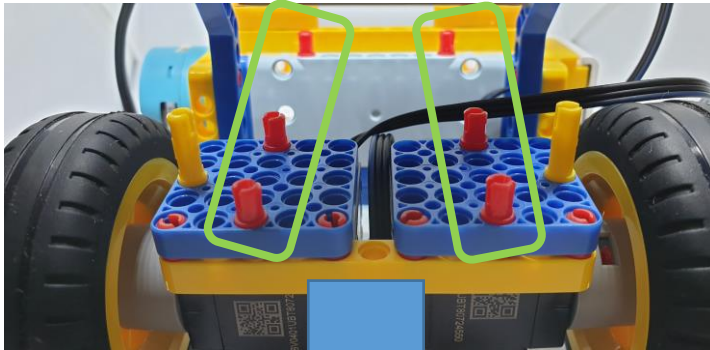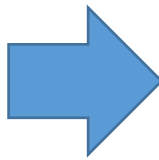# Step 14: Secure Motors with Mobile Holder

Parts:

Step 13 Part
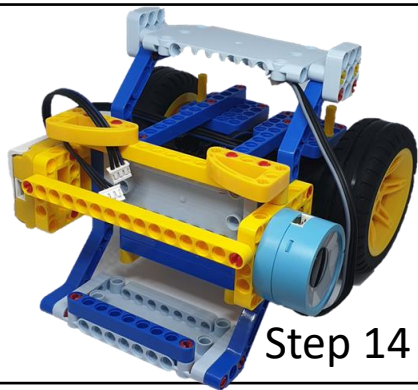
Qty: 2
(13 holes)

Assemble AI Car
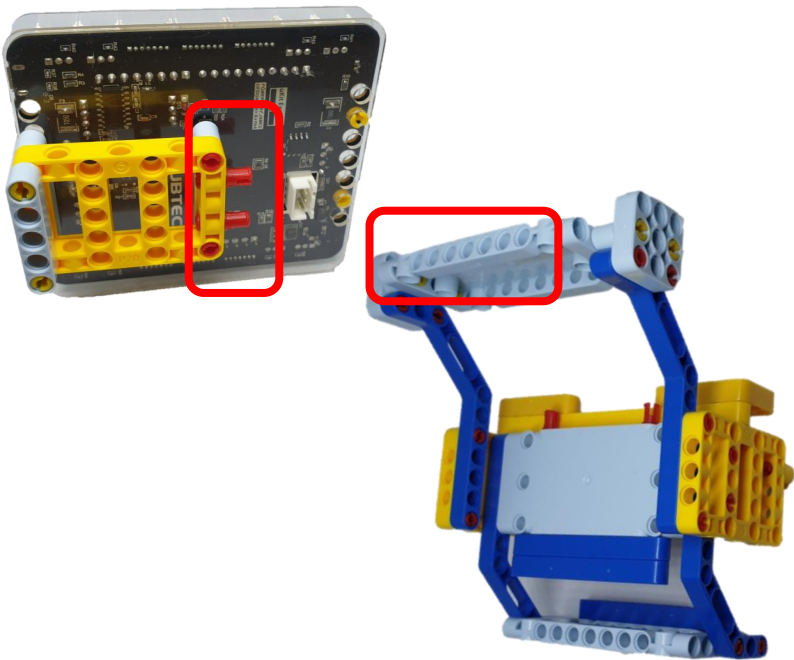
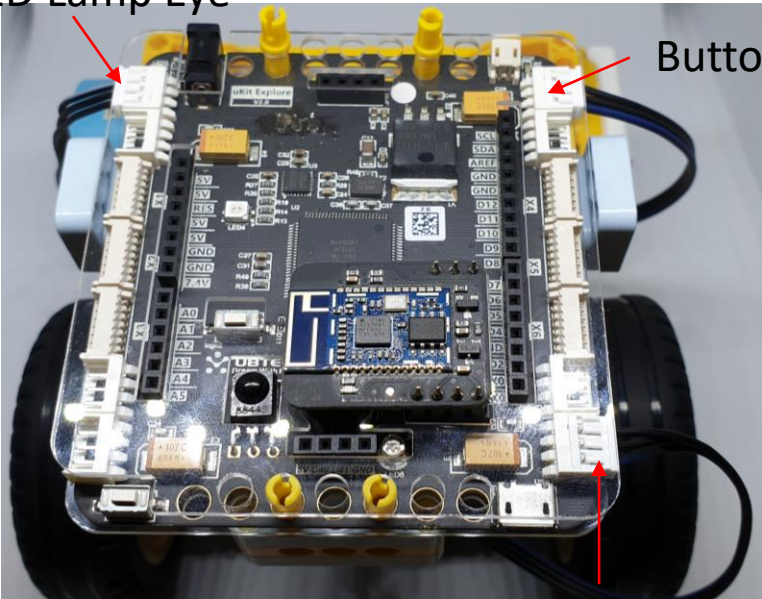# Step 15: Assemble Arduino board with Car
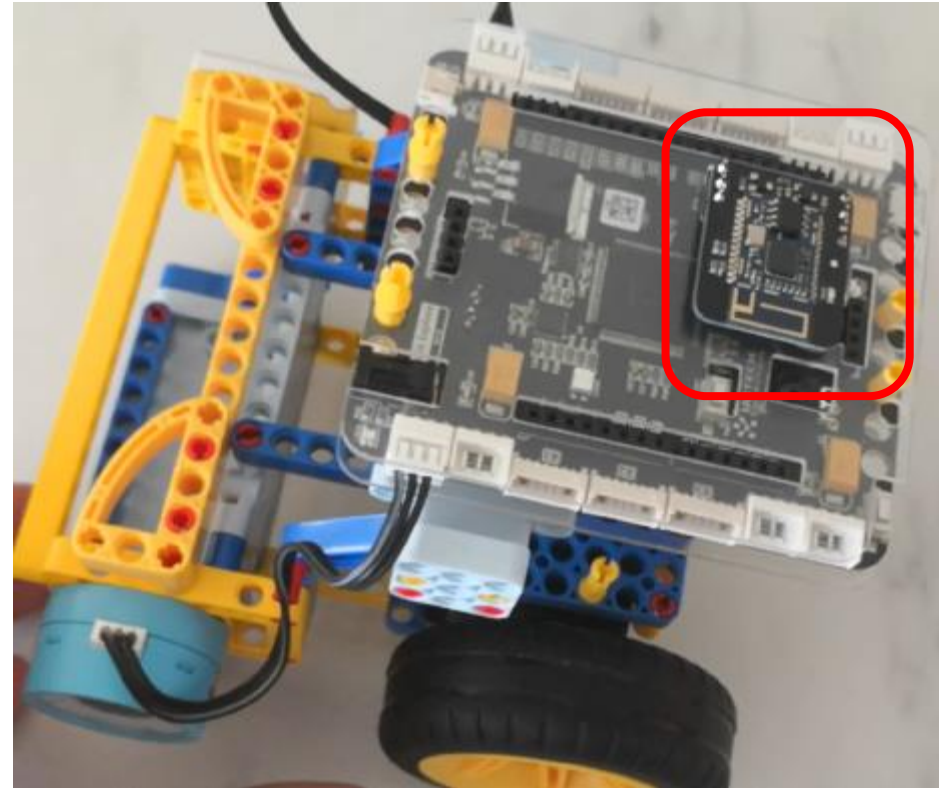
Parts:
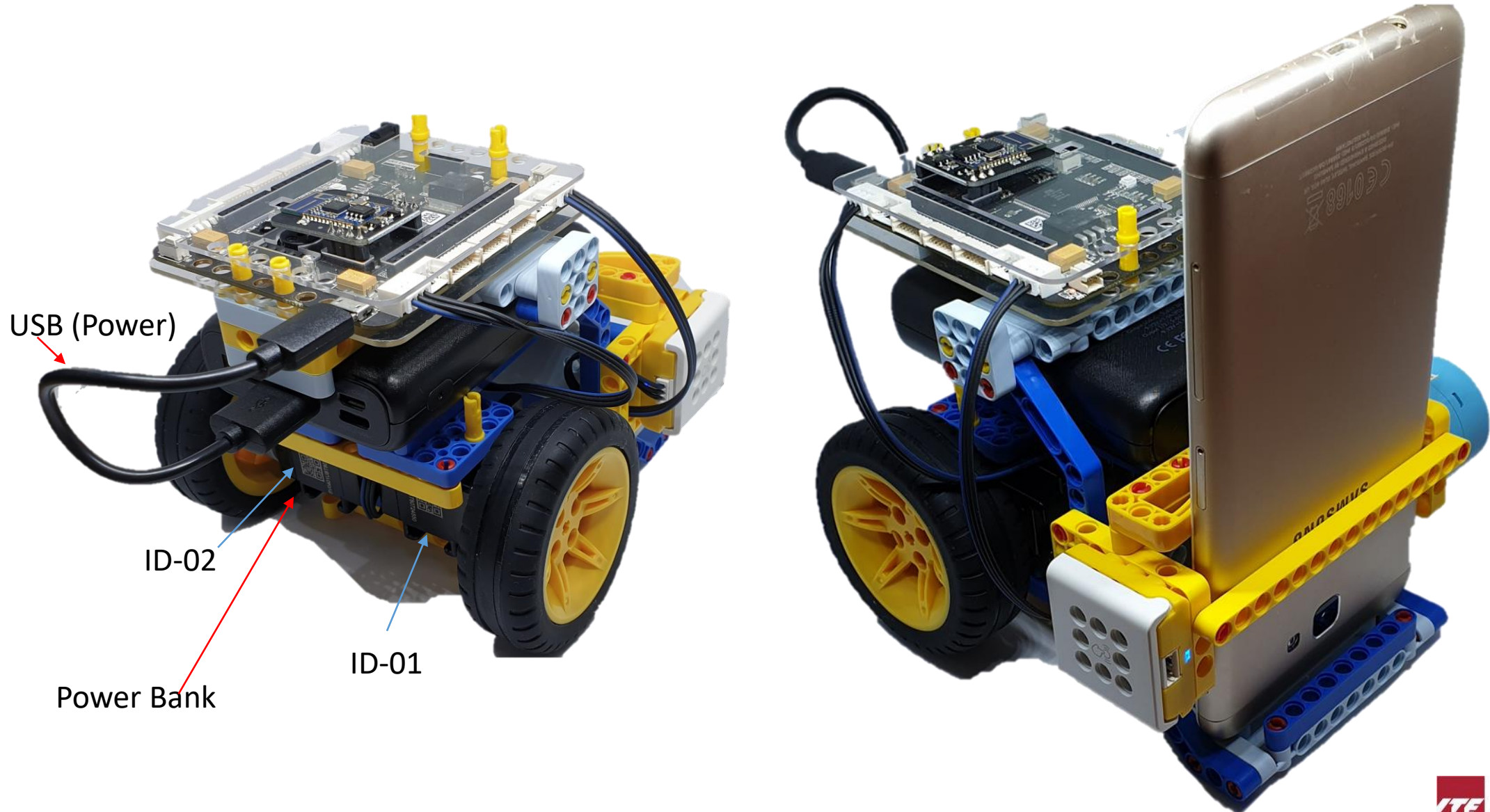

Step 6 Part

Step 14 Part

LED Lamp Eye

Button

Servo Motors cable

Step 16: Putting on Bluetooth Module

Step 17: Power Bank and Mobile phone

USB (Power)

ID-02

Power Bank

ID-01

Assemble AI Car

You did it!

Congratulations