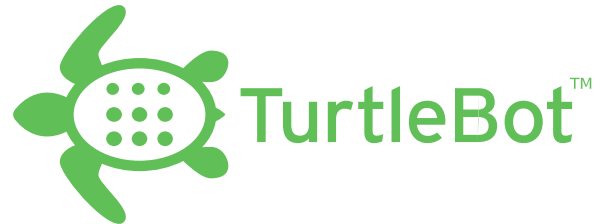

TurtleBot Assembly Instructions

TurtleBot 2

Includes

- 1x Kobuki Mobile Platform
- 1x Set of Laser Cut Discs
- 1x Set of Base standoffs
- 1x Small Parts Kit
- 1x USB Installer



TurtleBot 2 BOM

Item	QTY	PART NUMBER	DESCRIPTION
1	14	<u>IHE-0103-0340-1001</u>	M4 x 16mm 0.7mm Pitch Flanged Socket Cap Screw
2	2	IHE-0103-4540-1000	M4 x 16mm 0.7mm Pitch Knurl Style Thumbscrew
3	1		Yujin Robot iCLEBO Kobuki
4	1	<u>IHE-0102-000C-0000</u>	Turtlebot 2 Disc 1
5	1	<u>IHE-0102-000D-0000</u>	Turtlebot 2 Disc 2
6	1	<u>IHE-0102-000E-0000</u>	Turtlebot 2 Disc 3
7	6	IHE-0100-0005-2700	Turtlebot M-F Standoff – 39.2mm [~1.5in]
8	4	IHE-0100-0003-3300	Turtlebot M-F Standoff – 50.8mm [2in]
9	4	IHE-0100-0004-CB00	Turtlebot M-F Standoff – 203.2mm [8in]
10	2	IHE-0100-0007-5300	Kinect Standoff
11	1	IHE-0A03-0000-0000	Kinect Sensor
12	1	IHE-0800-0001-0000	Metric Hex 3.0mm Allen Wrench 2.5in Length
13	1	<u>IHE-0A02-0001-0000</u>	Turtlebot 2 Laptop [varies by model]
14	1		Laptop Charging Cable [varies by model]
15	1		Kinect USB and Power Cable
16	1		Power Adapter and Power Cord [US, UK, EU, AU]
17	1		Turtlebot 2 USB Installer

Detach for Assembly Use

The TurtleBot2 features vertical stack construction. Below, an exploded view of the TurtleBot2's assembly outlines the basics of the process.



STEP 1:

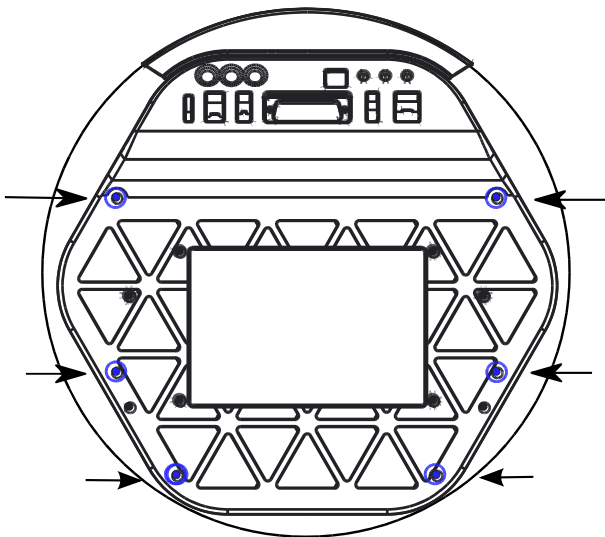
Needed:

Item No.	Qty.
3	1
7	6

The Kobuki Base has 6 locations where the ~1.5in Standoffs are fastened.

39.2mm M-F Standoff Locations
[IHE-0100-0005-2700]

Fasten the Standoffs to the Kobuki Base
in the locations illustrated by the drawing.
Done properly, the base should now
resemble the picture below:

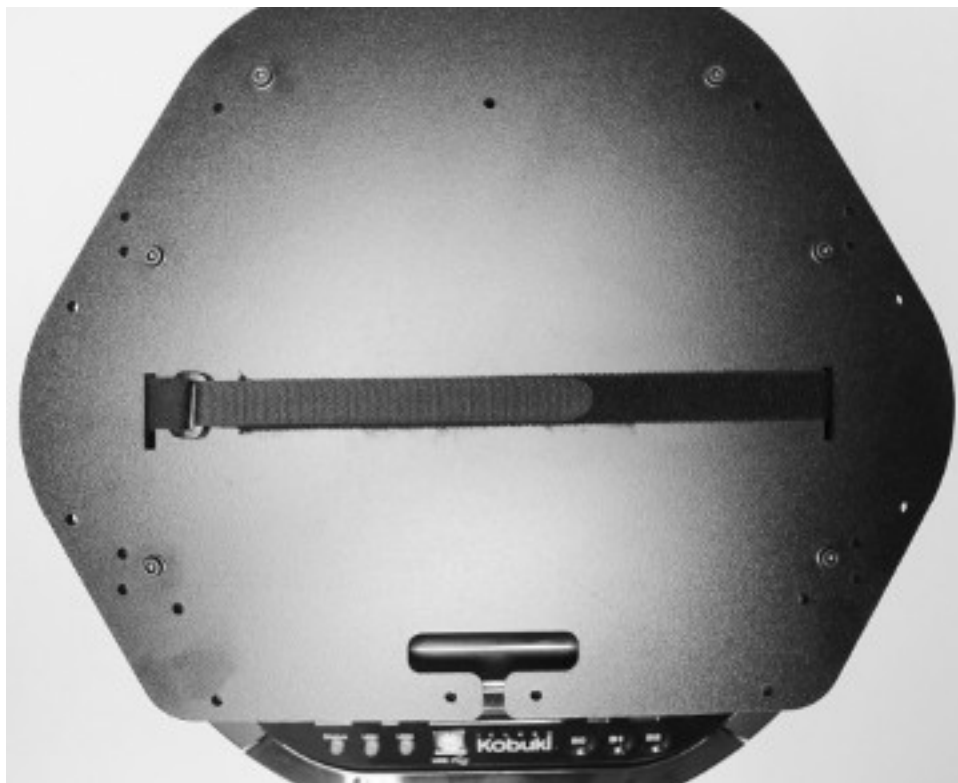


STEP 2:

Needed:

Item No.	Qty
1	6
4	1
12	1

Place Disc1 on top of the standoffs, with the bar code facing down. Orient and fasten using 6 M4 screws. Refer to the picture for reference.

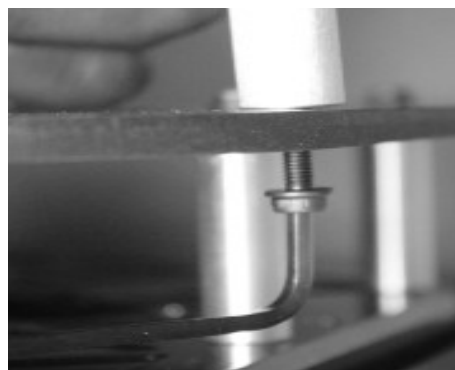


Step 3

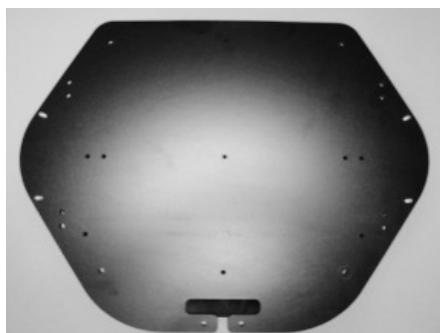
Needed:

Item No.	Qty.
1	4
5	1
8	4
12	1

Fasten the 2in standoffs to the four outermost posts on the left and right using the M4 screws.



Then, place Disc 2 on top of the 2in standoffs, bar code facing down.



Step 4

Needed:

Item No.	Qty.
2	2
10	2
11	1

Locate the two outside holes on the modified Kinect and fasten the two Kinect Standoffs until they are flush with the surface.

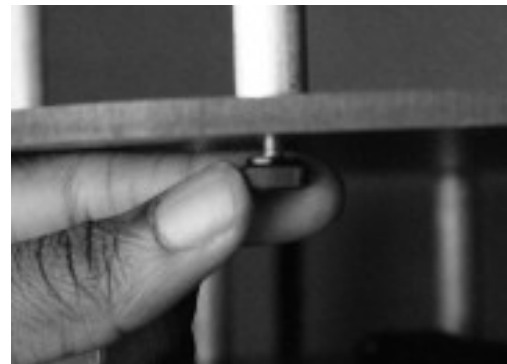


Before



After

Place Kinect Assembly in it's location on top of Disc 2 and fasten using the two M4 Thumbscrews.



Step 5
Needed:

Item No.	Qty.
1	4
6	1
9	4

Fasten the 4 8in Standoffs to the threads protruding from Disc 2.



Place Disc 3 atop the 4 standoffs, orient c, and fasten with 4 M4 screws.

Congratulations, Your TurtleBot2 has been assembled!

