

## Overview of the states in IndustReal

The binary code refers to whether a part is correctly located or not. The index of the code refers to these parts:

- 0 base
- 1 front chassis
- 2 front chassis pin
- 3 rear chassis
- 4 short rear chassis
- 5 front rear chassis pin
- 6 rear rear chassis pin
- 7 front bracket
- 8 front bracket screw
- 9 front wheel assy
- 10 rear wheel assy

All these names refer to the following parts:

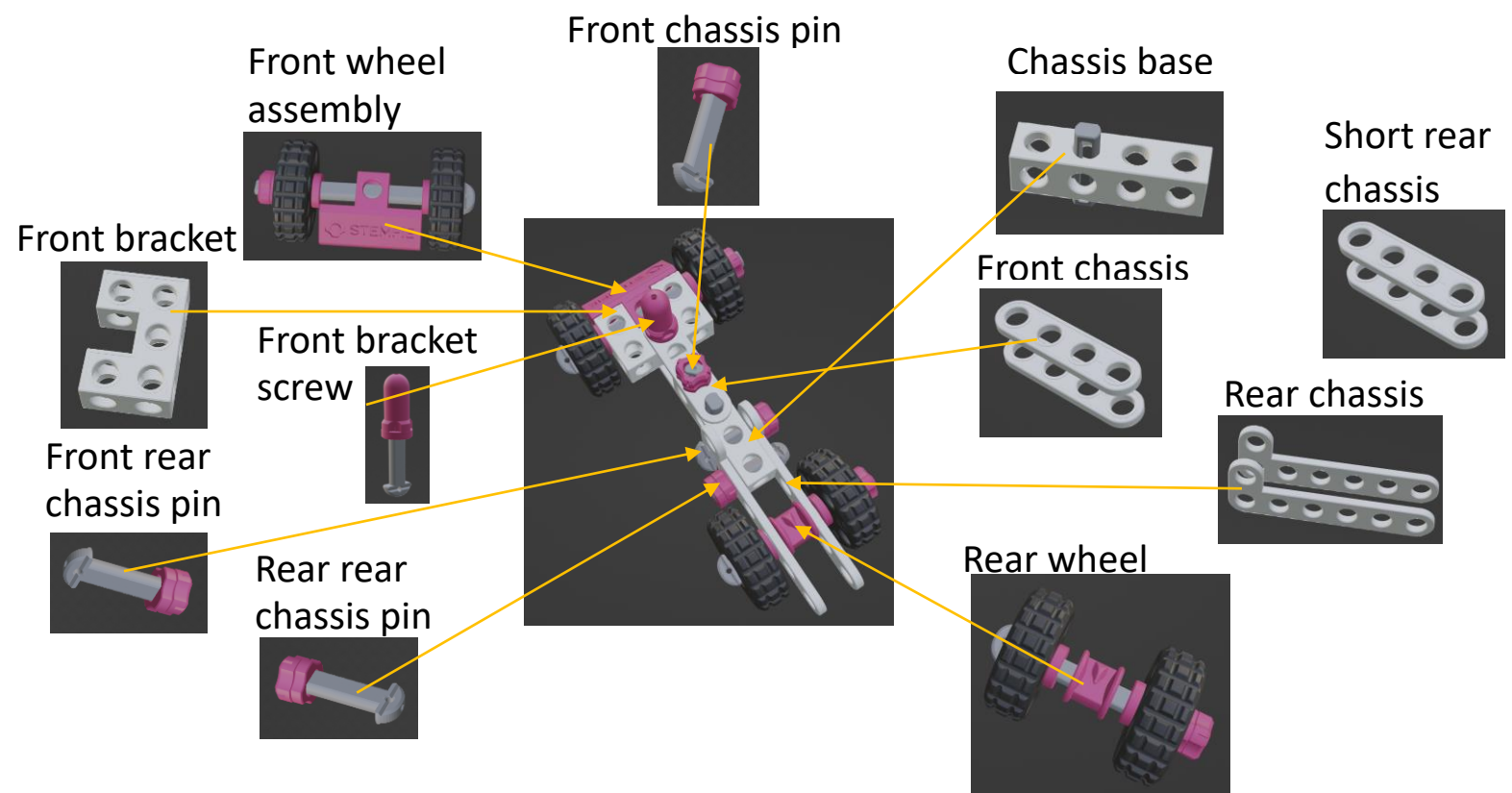

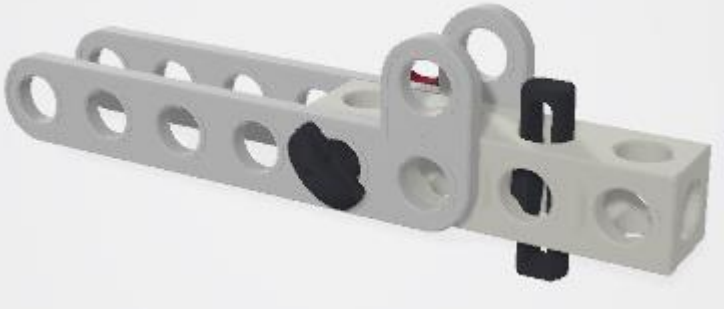

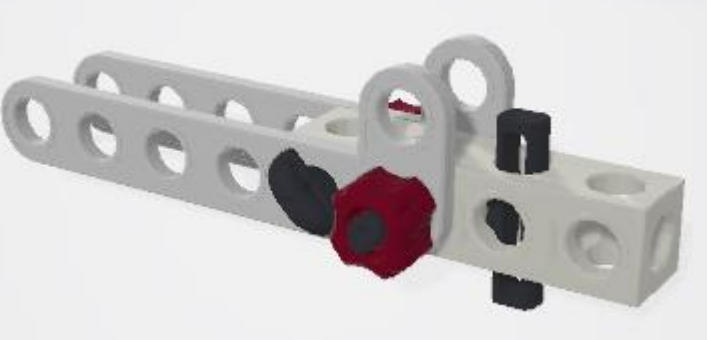
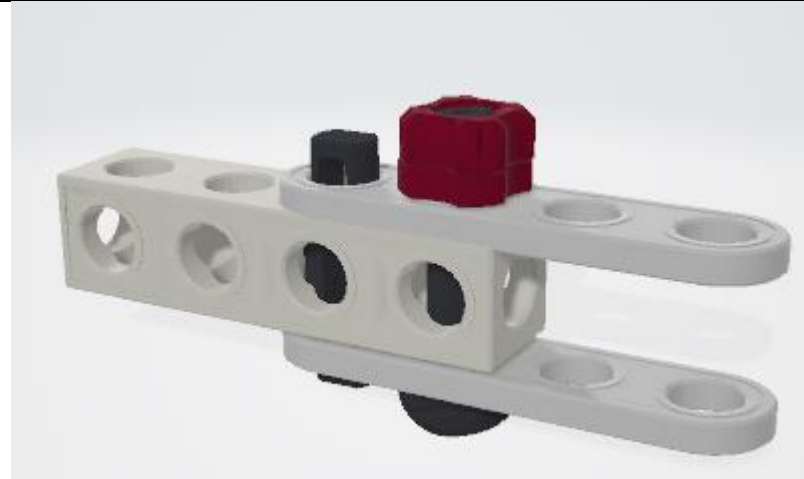
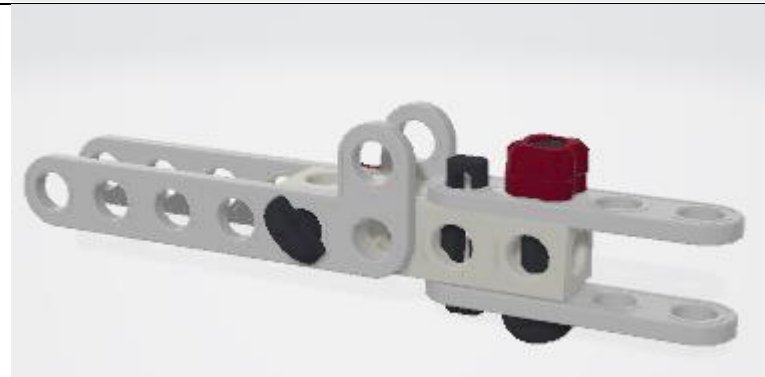
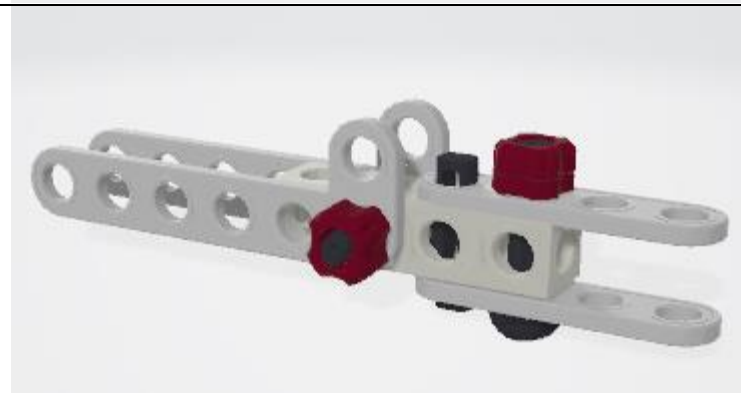
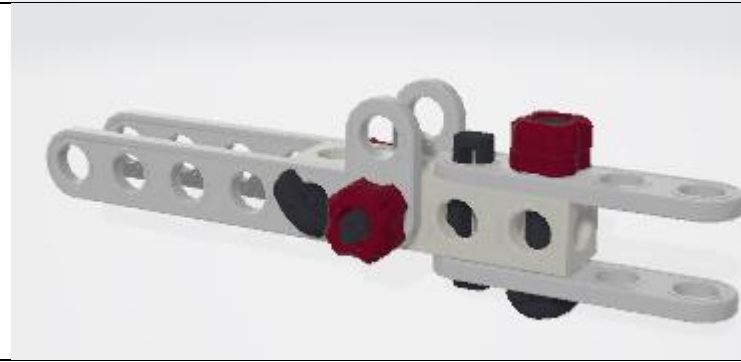
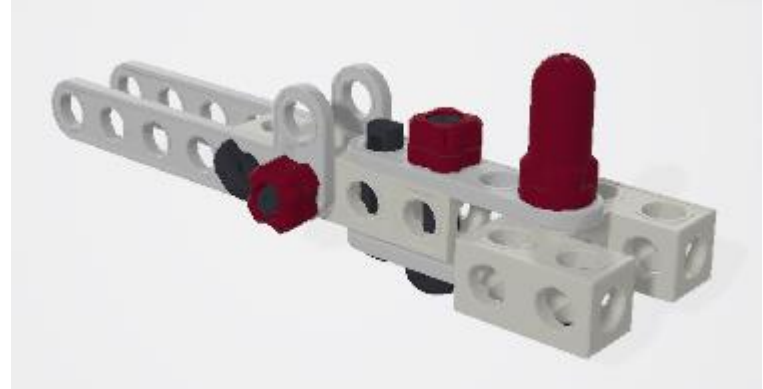
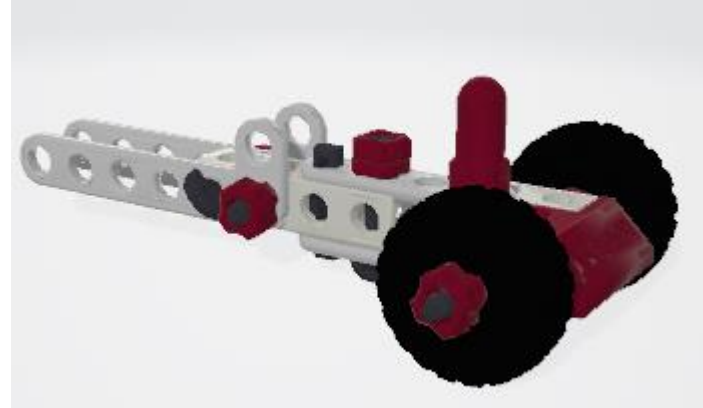
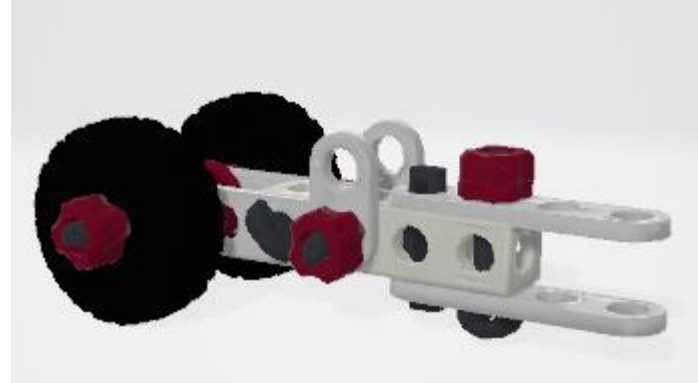
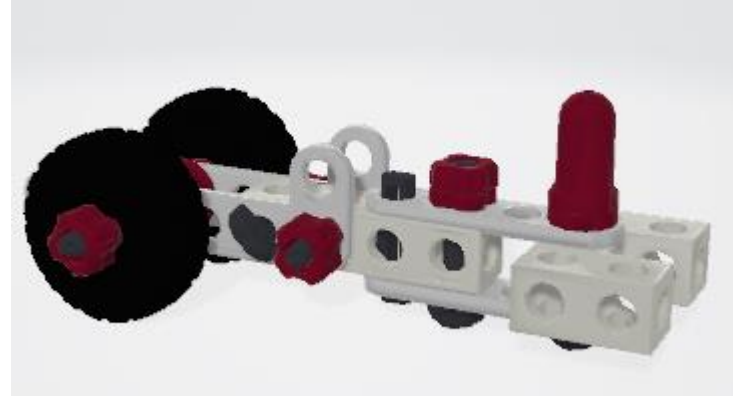
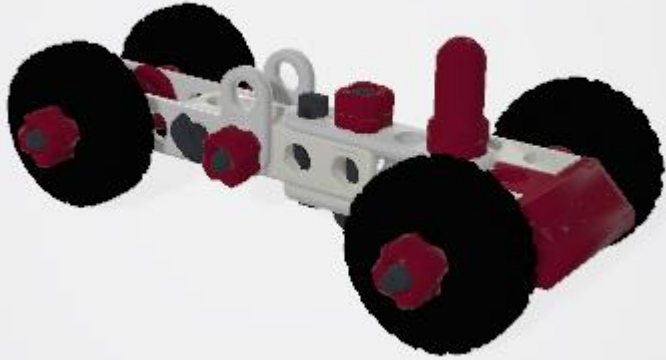
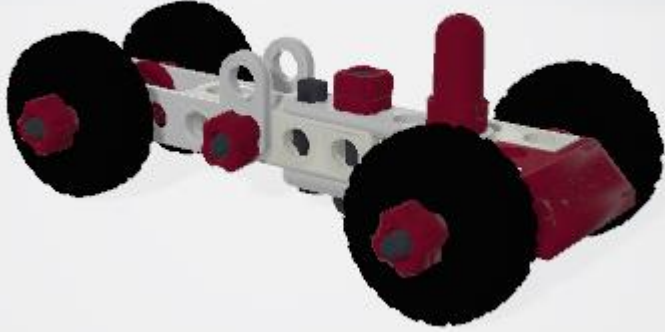
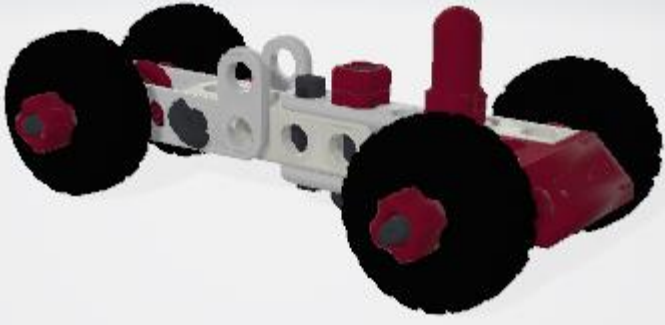

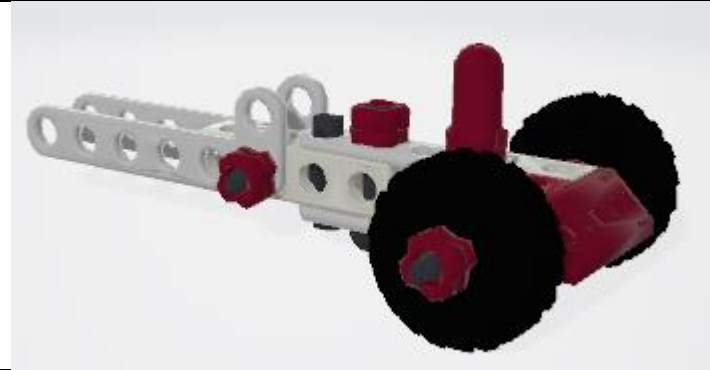
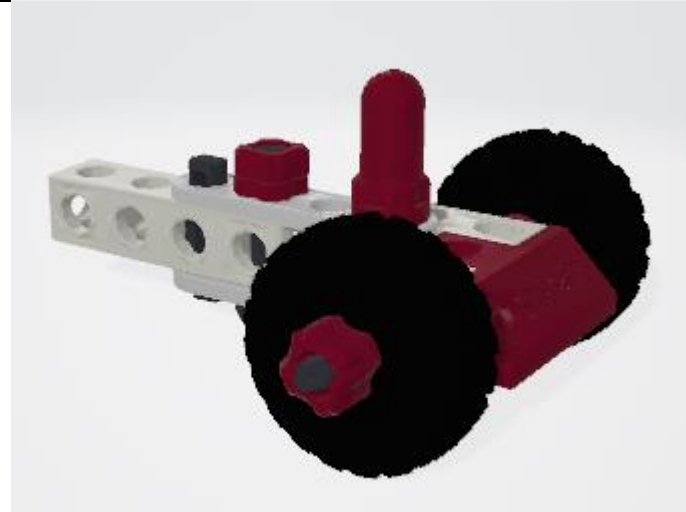
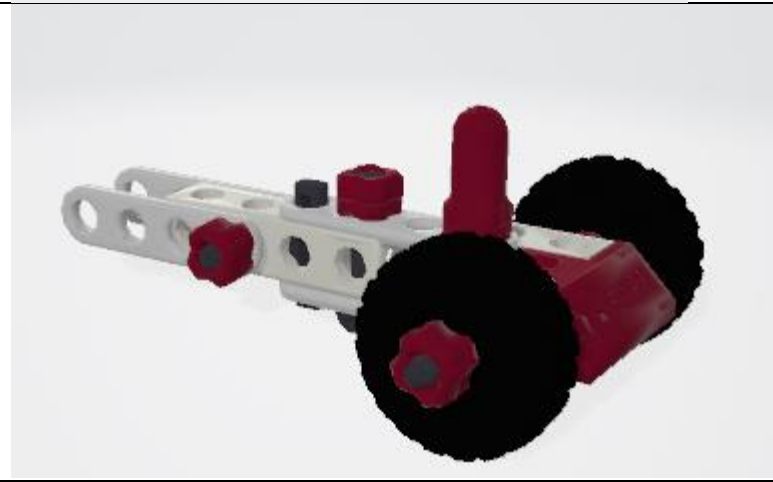


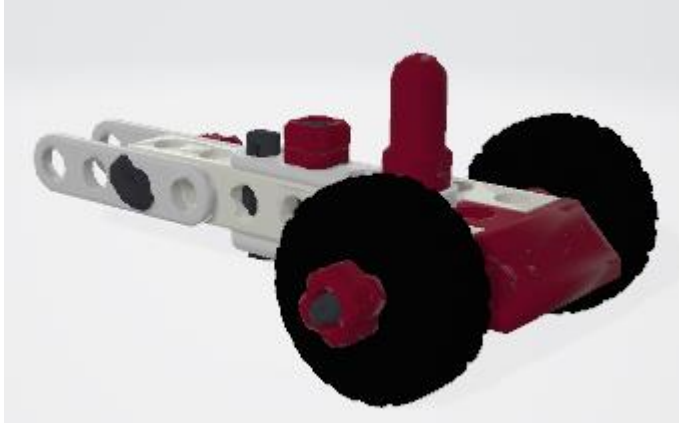
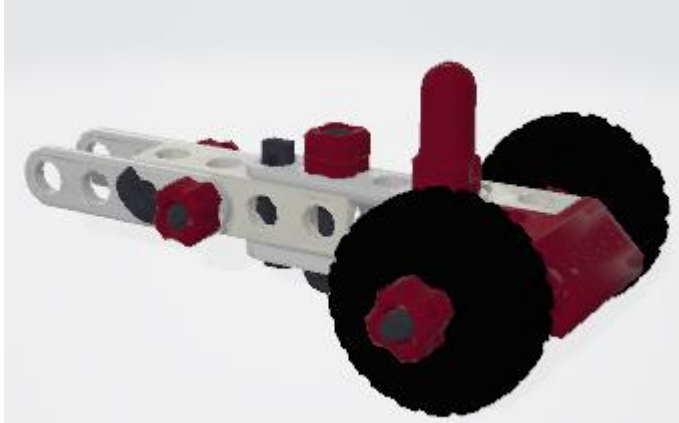
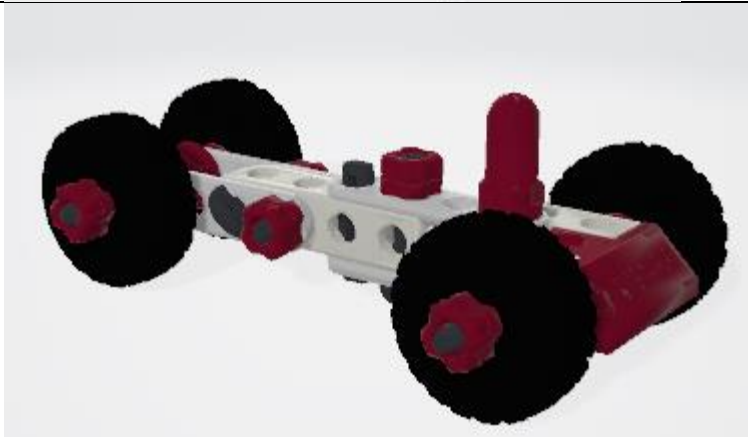
Image of state	Binary code	Name
	1000000000	state 1
	10010010000	state 2
	10010100000	state 3
	10010110000	state 4

 A LEGO assembly consisting of a grey 1x6 Technic beam with four circular holes. A black pin is inserted into the second hole from the left. A red 1x2 Technic connector is attached to the top of the beam, with its long end extending to the right. A black pin is also inserted into the third hole from the left.	11100000000	state 5
 A LEGO assembly consisting of a grey 1x6 Technic beam with four circular holes. A black pin is inserted into the second hole from the left. A red 1x2 Technic connector is attached to the top of the beam, with its long end extending to the right. A black pin is also inserted into the third hole from the left. A grey 1x4 Technic beam is attached to the top of the red connector, with its long end extending to the left.	11110010000	state 6
 A LEGO assembly consisting of a grey 1x6 Technic beam with four circular holes. A black pin is inserted into the second hole from the left. A red 1x2 Technic connector is attached to the top of the beam, with its long end extending to the right. A black pin is also inserted into the third hole from the left. A grey 1x4 Technic beam is attached to the top of the red connector, with its long end extending to the left. A red 1x2 Technic connector is attached to the bottom of the grey beam, with its long end extending to the left.	11110100000	state 7
 A LEGO assembly consisting of a grey 1x6 Technic beam with four circular holes. A black pin is inserted into the second hole from the left. A red 1x2 Technic connector is attached to the top of the beam, with its long end extending to the right. A black pin is also inserted into the third hole from the left. A grey 1x4 Technic beam is attached to the top of the red connector, with its long end extending to the left. A red 1x2 Technic connector is attached to the bottom of the grey beam, with its long end extending to the left.	11110110000	state 8

		11110111100	state 9
		11110111110	state 10
		11110110001	state 11
		11110111101	state 12

		1111011111	state 13
		1111010111	state 14
		1111001111	state 15
		1111001110	state 16

		11110101110	state 17
		11100001110	state 18
		11101101110	state 19

		11101011110	state 20
		11101111110	state 21
		11101111111	state 22