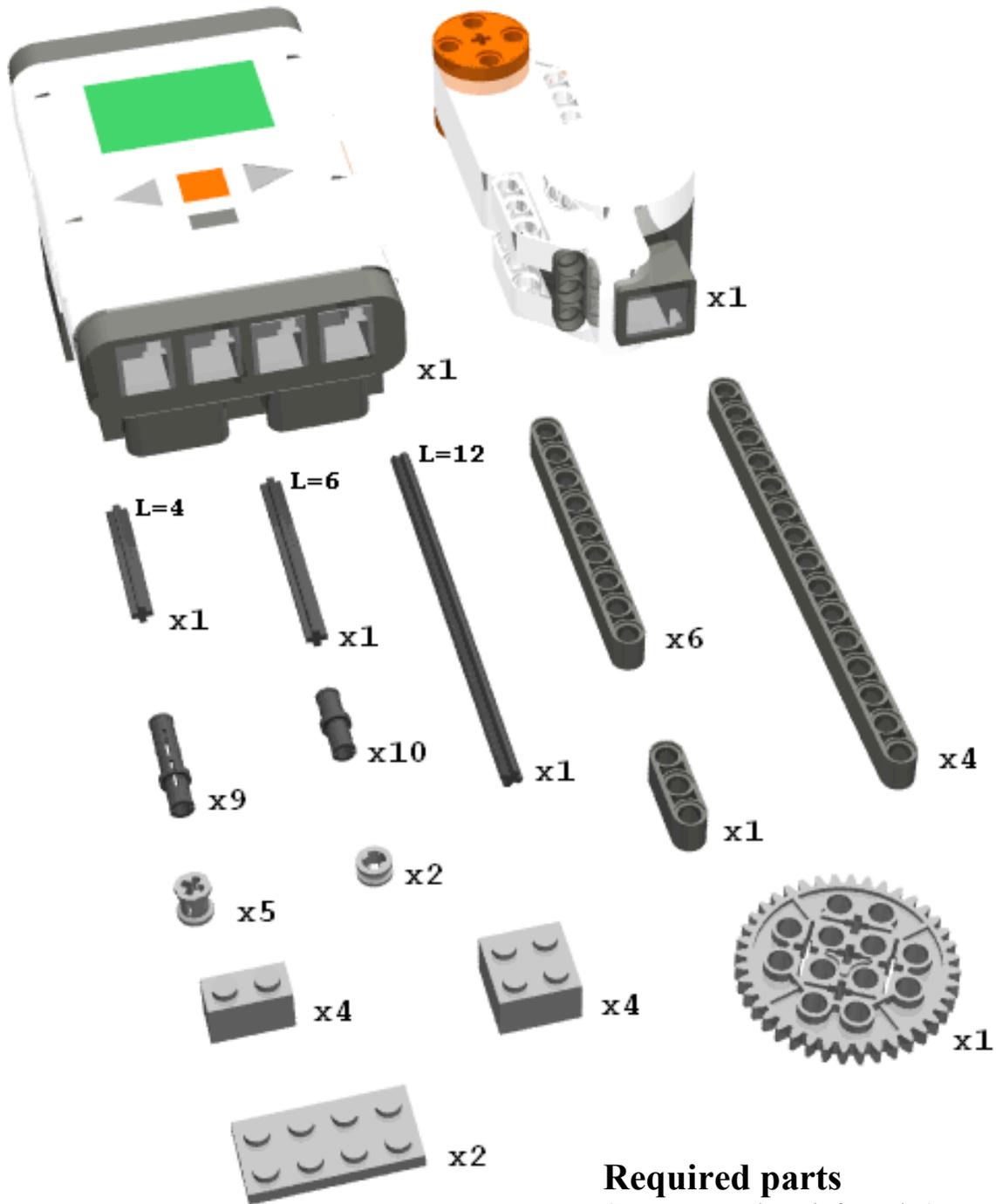
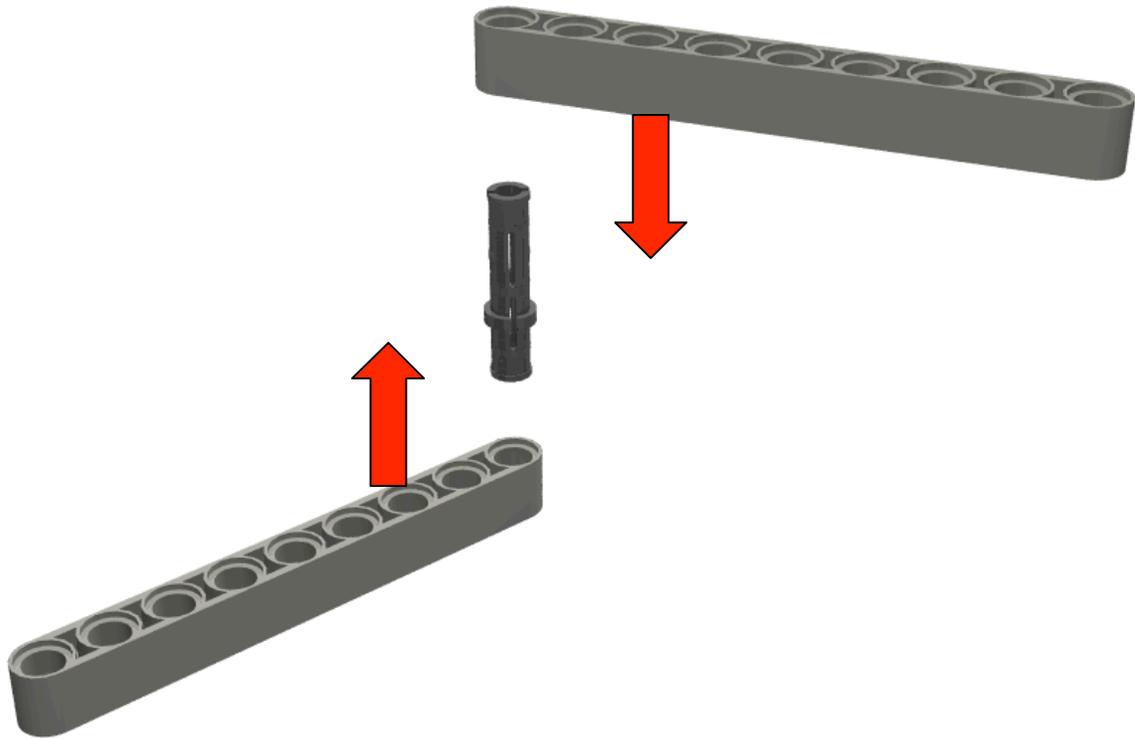


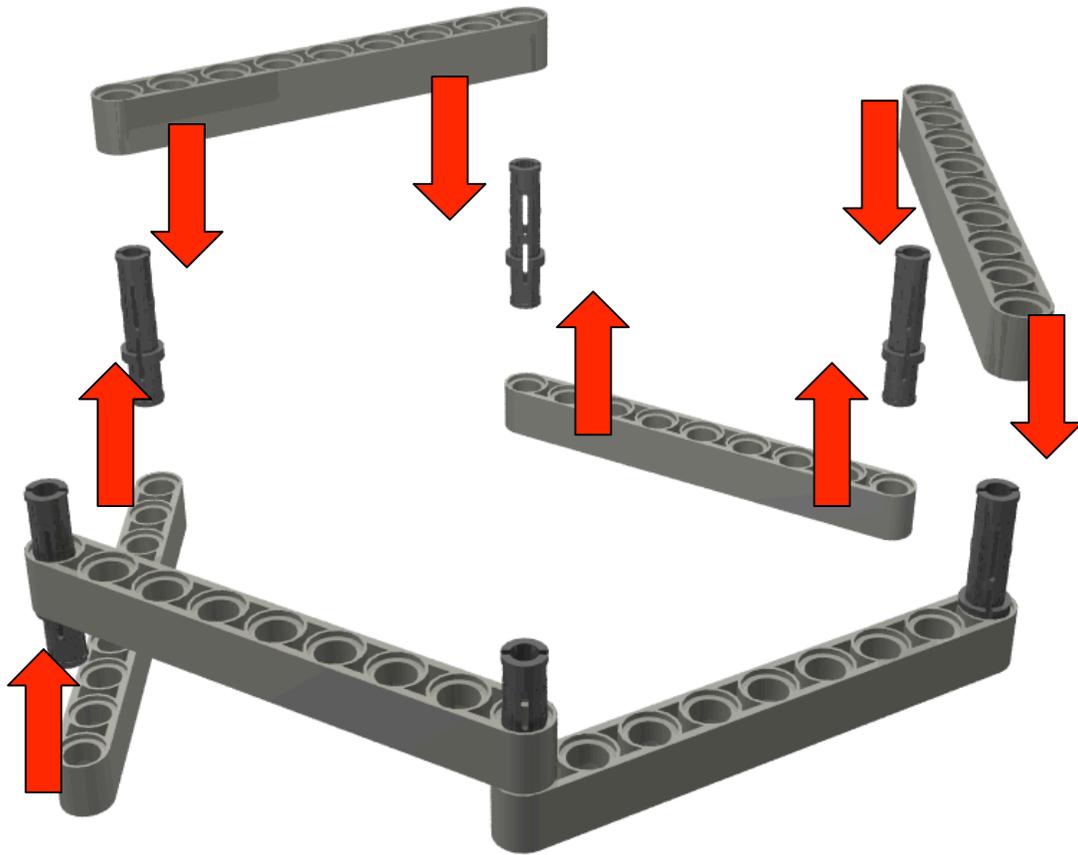
Merry-go-round Building Instructions



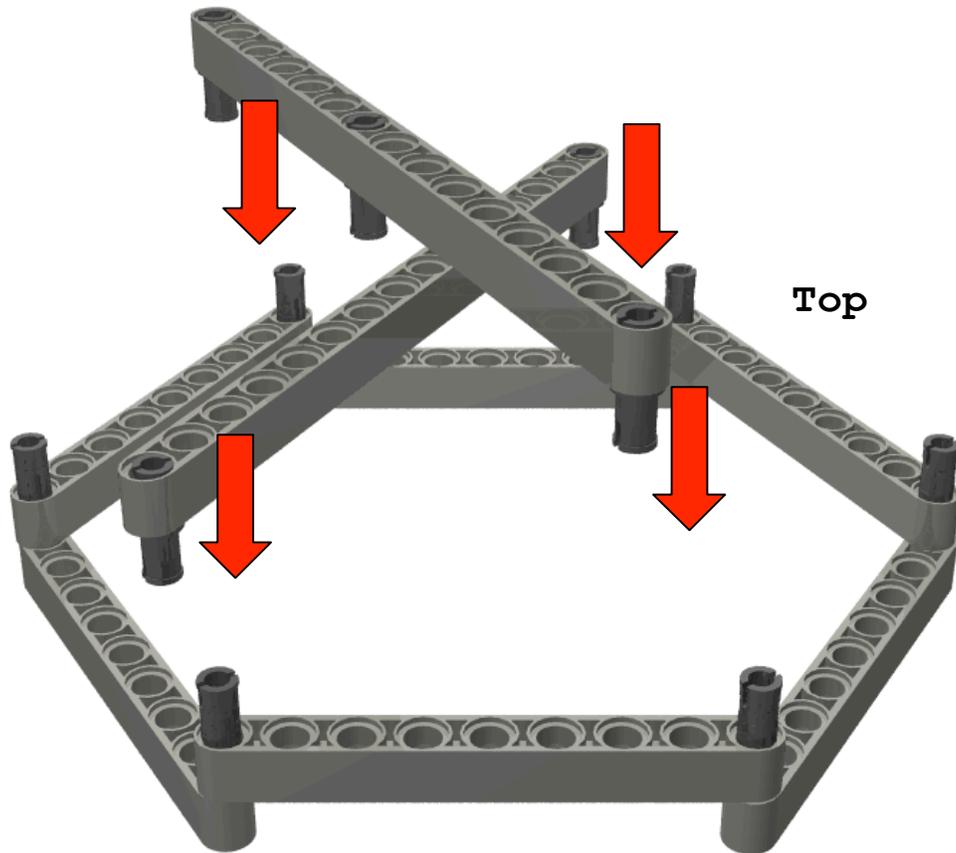
Required parts
 (L represents length for axles)



Attach the ends of two 9x1 beams using an extender pin.

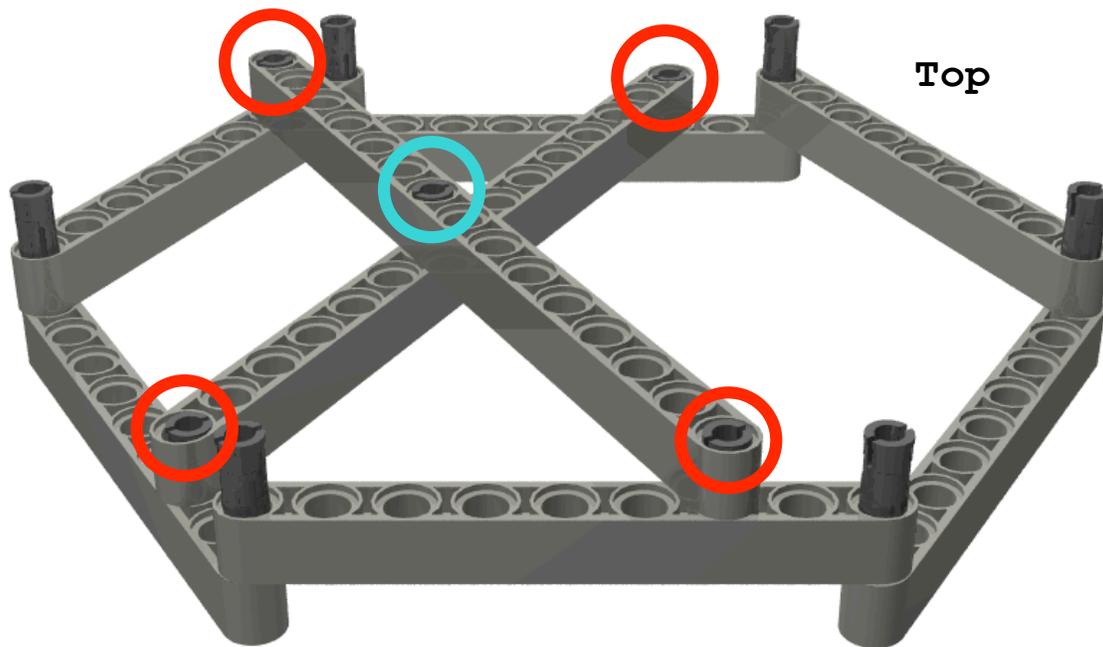


Continue connecting the ends of 9x1 beams using extender pins until a hexagon is formed. The extender pins should all be sticking out of the hexagon in the same direction. This end will be the top of the merry-go-round.



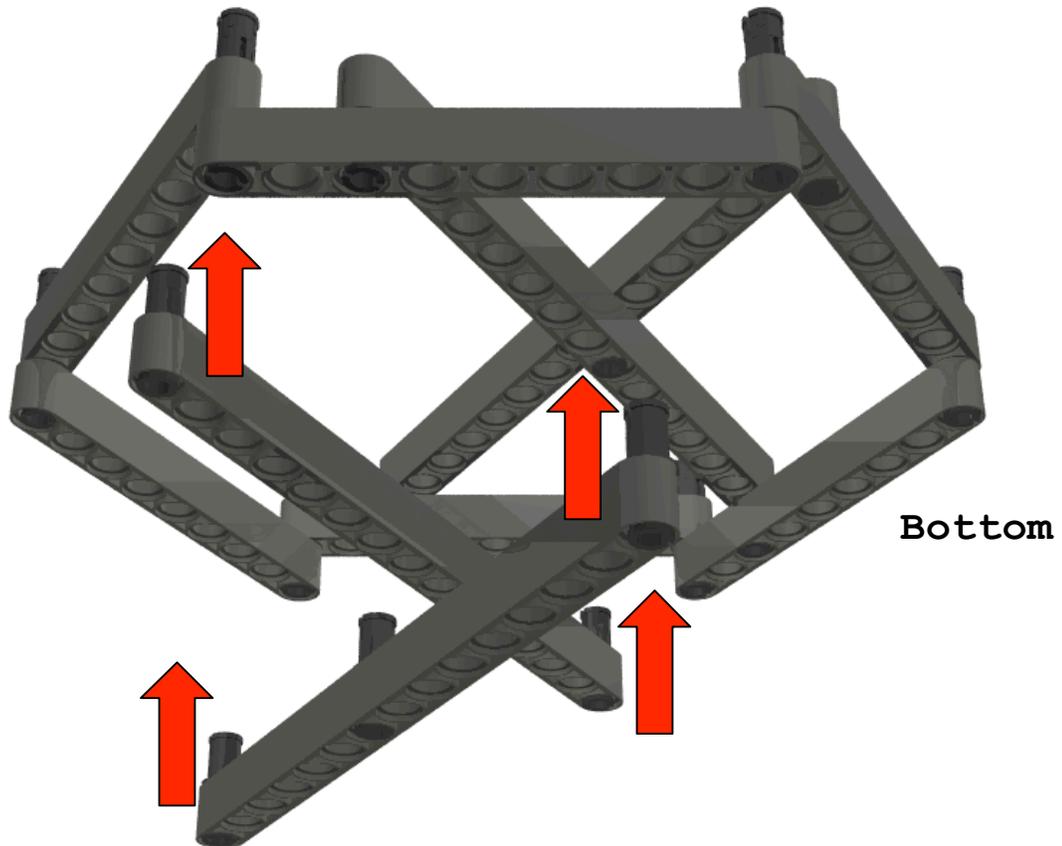
Use two 15x1 beams to brace the hexagon built in the previous step.

Frictionless pins should go in the 1st and 15th hole of one 15x1 beam and in the 1st 7th and 15th holes of the other 15x1 beam.



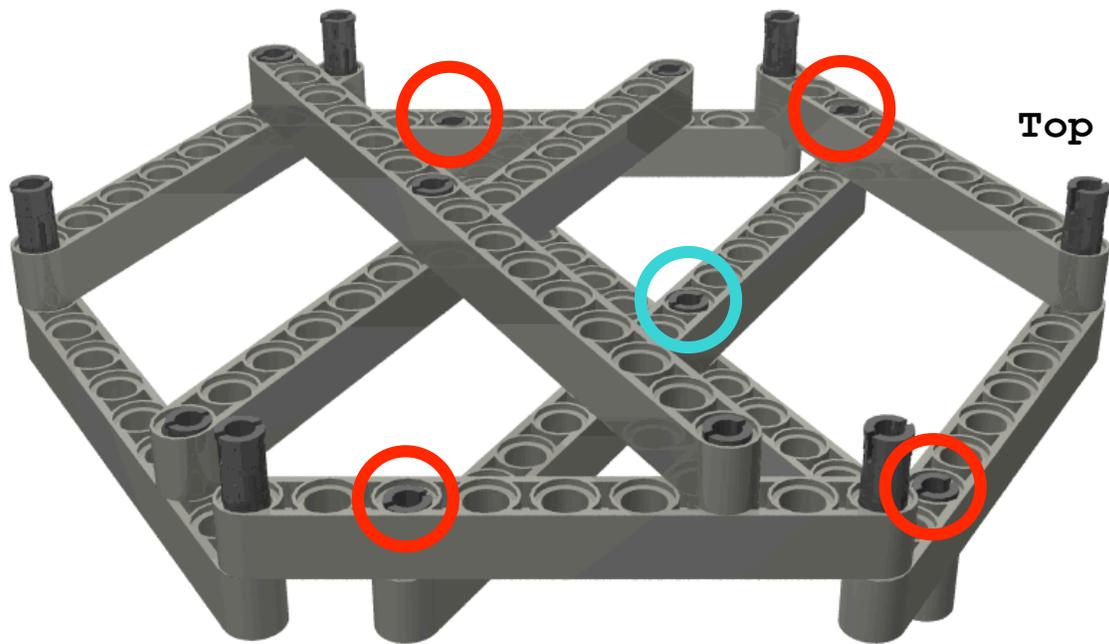
The holes where the 15x1 beams connect to the 9x1 beams are indicated in red.

The hole where the 15x1 beams connect to each other is indicated in blue.



Use two more 15x1 beams to brace the hexagon, this time from the bottom side.

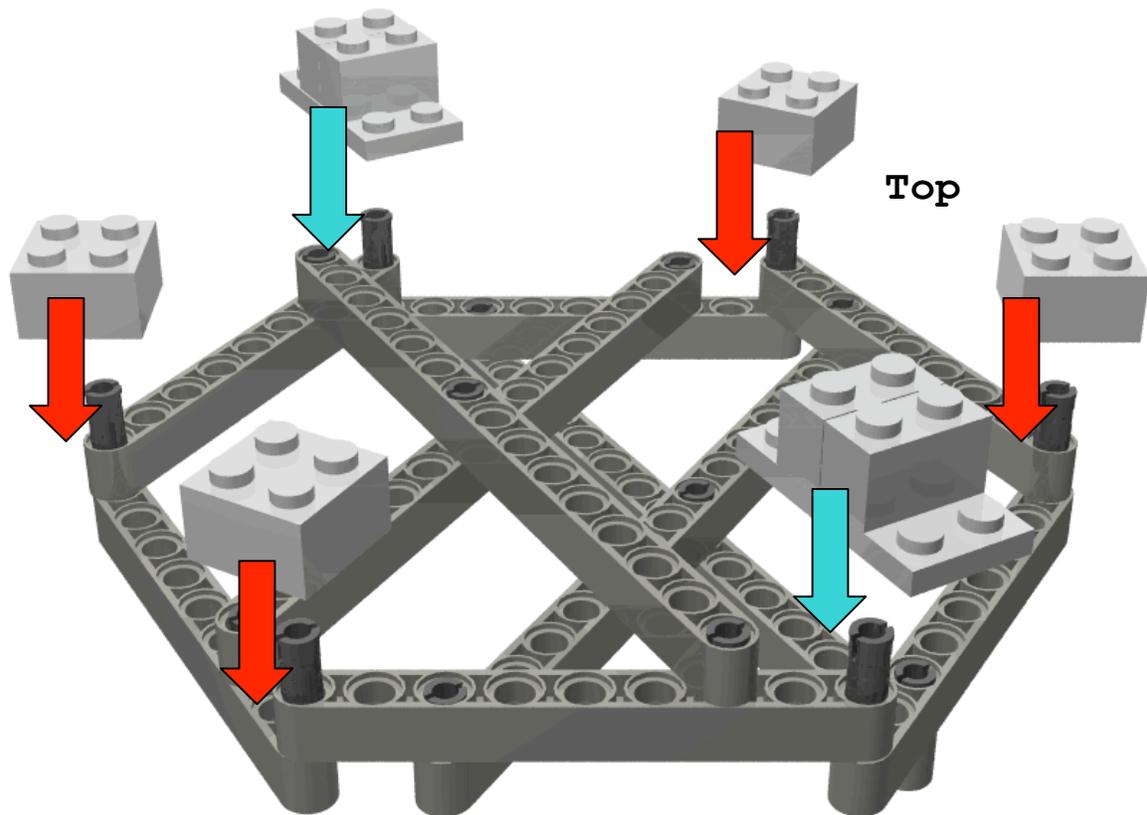
Again, frictionless pins go in the 1st and 15th hole of one 15x1 beam and in the 1st 7th and 15th holes of the other 15x1 beam.



The holes where the new 15x1 beams connect to the 9x1 beams are indicated in red.

The hole where the new 15x1 beams connect to each other is indicated in blue.

There are now two pairs of parallel 15x1 beams holding the hexagon's shape.

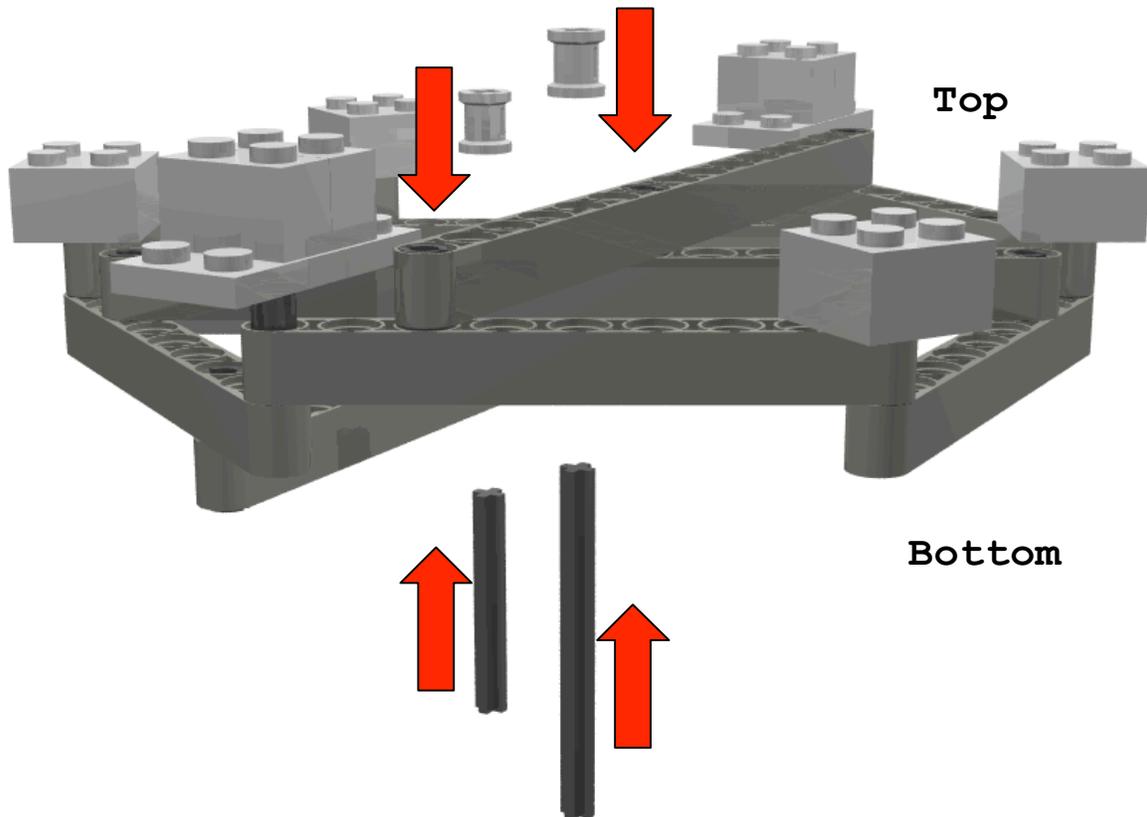


Attach four 2x2 bricks to the tops of four of the six extender pins (indicated with red arrows.) The extender pins should go through the hole in the center of the bottom sides of the 2x2 bricks.

Attach two 2x1 bricks side by side on the middle four studs of a 4x2 plate. (The 4x2 plates may have three holes through them, which are not shown.)

Repeat this process with two more 2x1 bricks and another 4x2 plate.

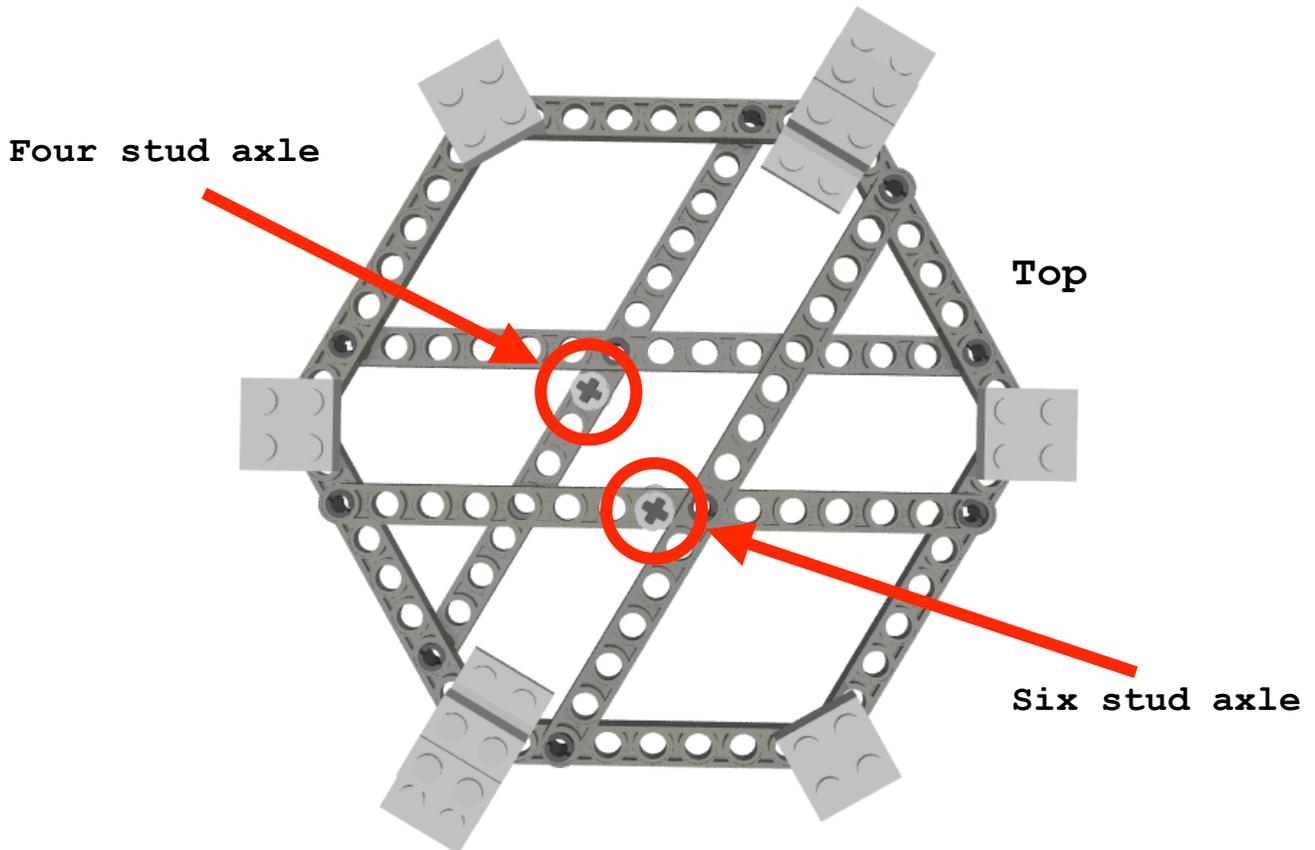
Attach the 4x2 plates to the tops of the remaining two 2x2 bricks (indicated with blue arrows.) The extender pins should go through the center hole of the three holes on the bottom of the 2x2 plates.



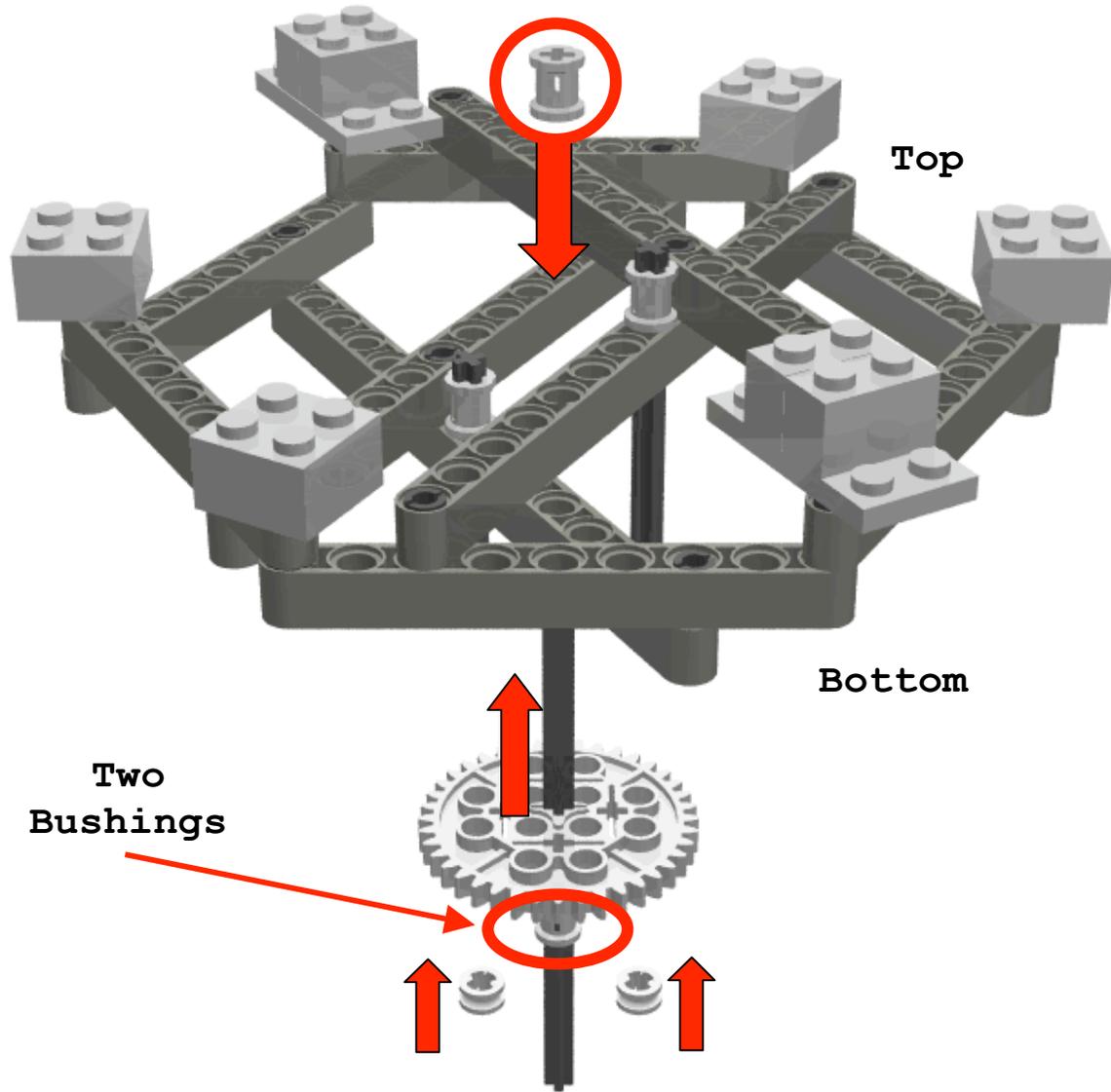
The hexagon is braced by four 15x1 beams. The 15x1 beams are layered one on top of the other, with one beam closest to the top and one closest to the bottom of the structure.

Slide a 4 stud axle through the 8th (center) hole of the 15x1 beam that is second from the bottom. Secure the 4 stud axle on the top with a bushing.

Slide a 6 stud axle through the 8th (center) hole of the 15x1 beam that is second from the top. Secure the 6 stud axle on the top with a bushing. This step may be made clearer by looking at the next diagram.

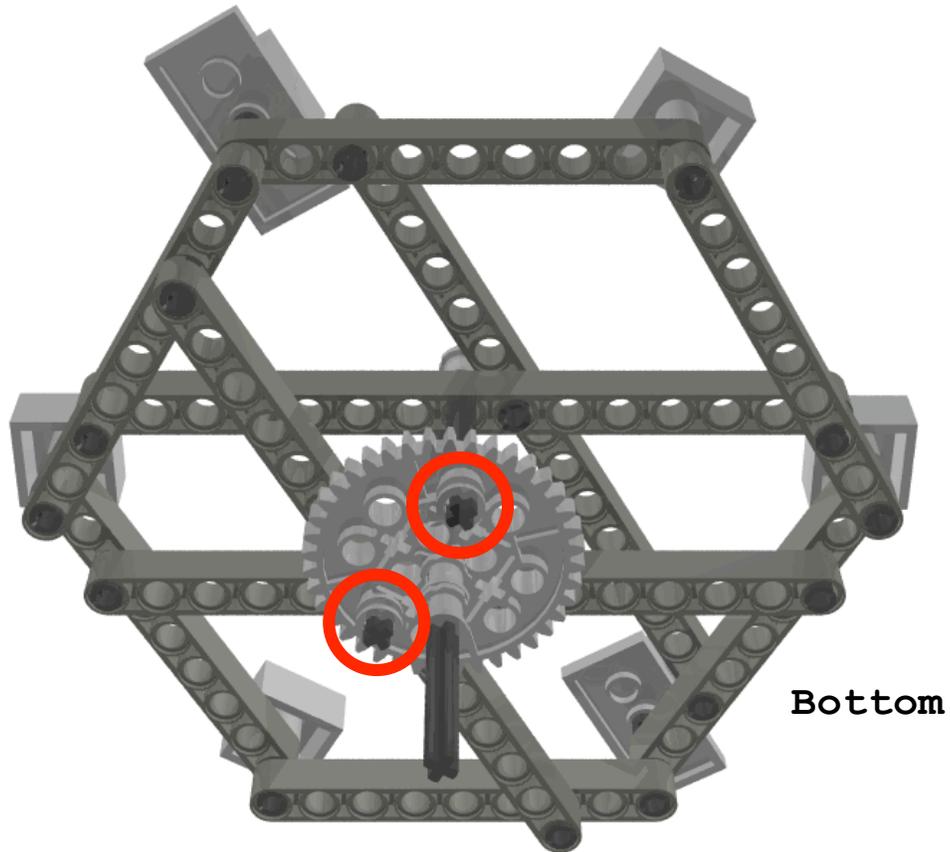


The holes where the four stud axle and 6 stud axle go are indicated. This image is viewed from above.

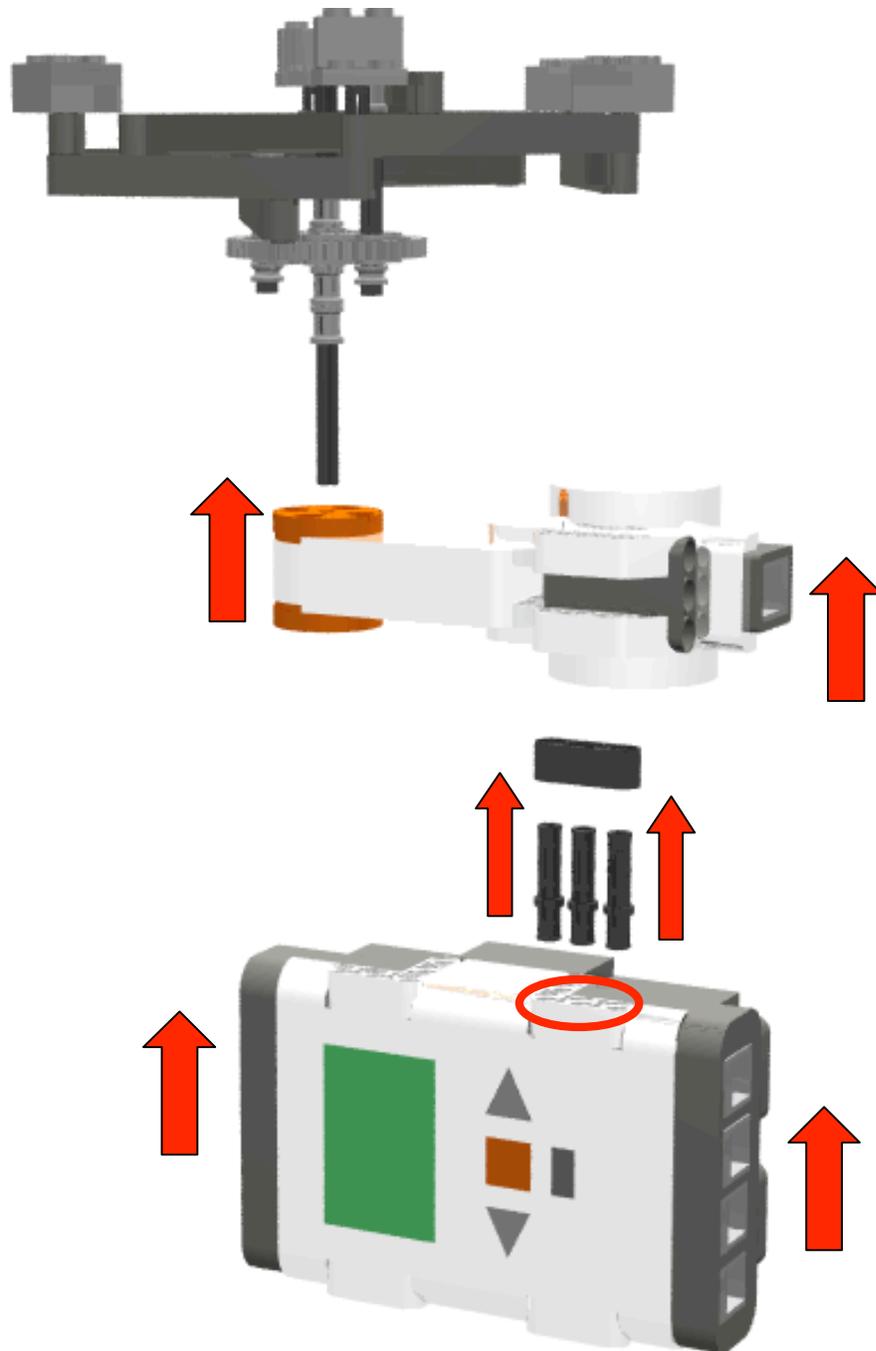


Slide a 12 stud axle through the center of a 40 tooth gear. Attach one bushing on the 12 stud axle above the gear and two bushings below the gear.

Slide the 4 stud axle and the 6 stud axle through holes on the gear. Secure the bottoms of the 4 stud axle and 6 stud axle with half bushings.

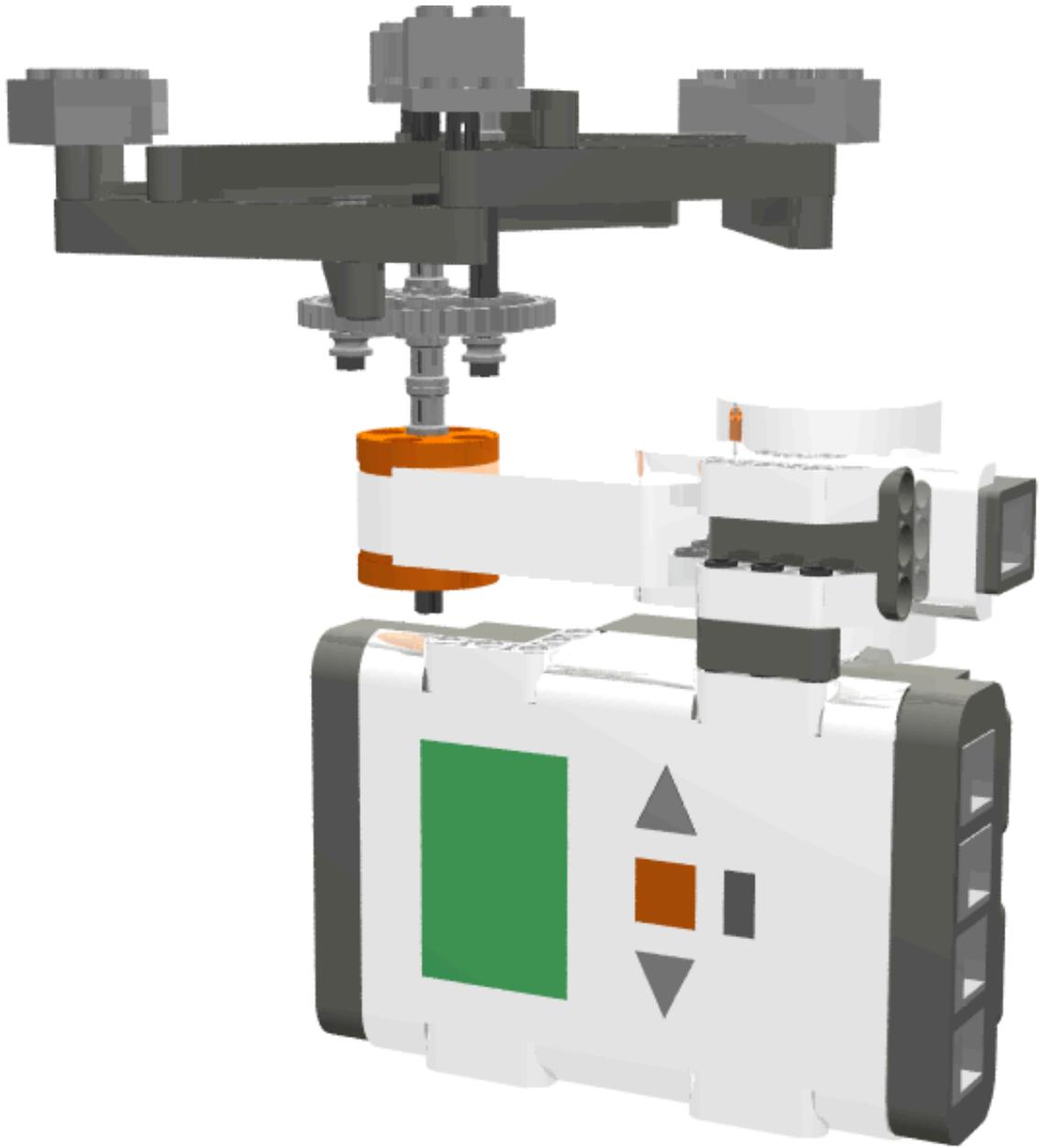


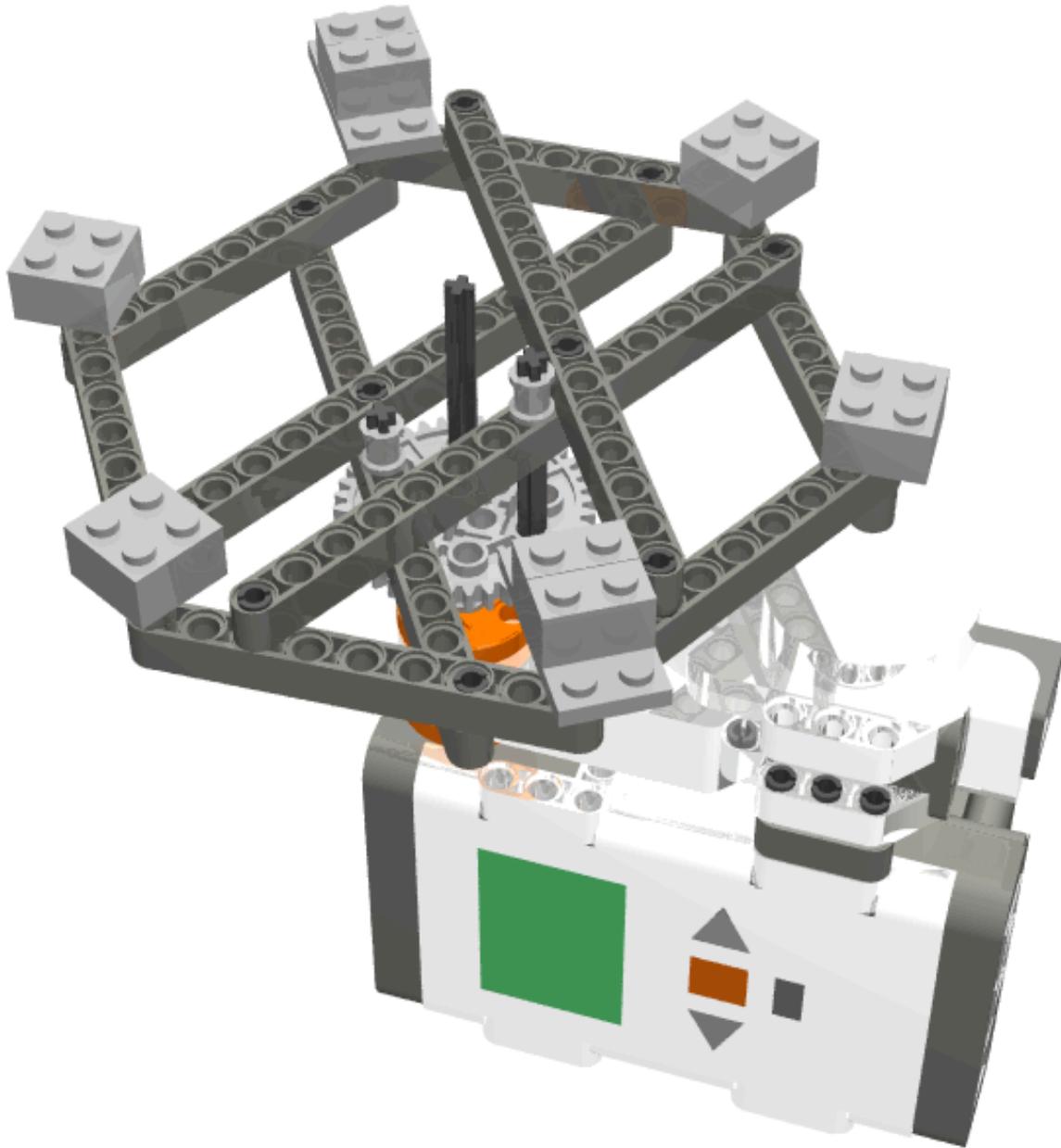
The holes in the gear that the 4 stud axle and 6 stud axle go through are circled.



Insert the short ends of three extender pins to the three adjacent holes on the side of the NXT (holes circled.) Attach a 3x1 beam to the long ends of same three extender pins. Attach the NXT motor to the extender pins, on top of 3x1 beam.

Attach the 12 stud axle to an NXT motor. Connect the NXT motor to one of the NXT output ports using a wire (not shown.)





The merry-go-round is now complete. Lego people (mini-figures) can be seated on top of the 2x2 bricks and 2x1 bricks.