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Simple & Powered Machines

Everything we do is very interesting, but will we ever use the motor we have in our set?

I hope we will so do soon…. A battery car will be great!



We can ask so!

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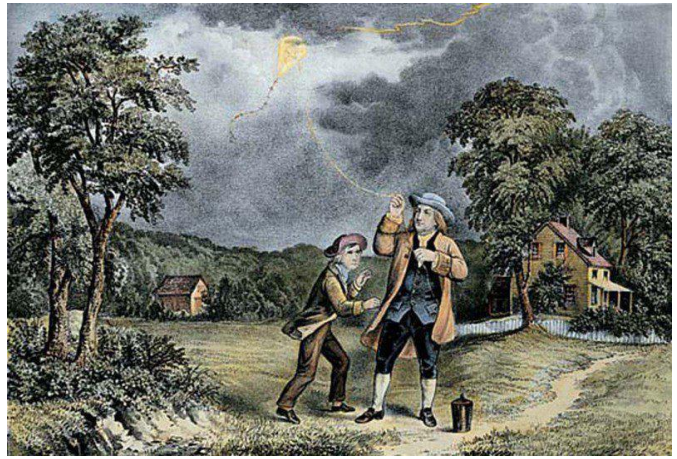
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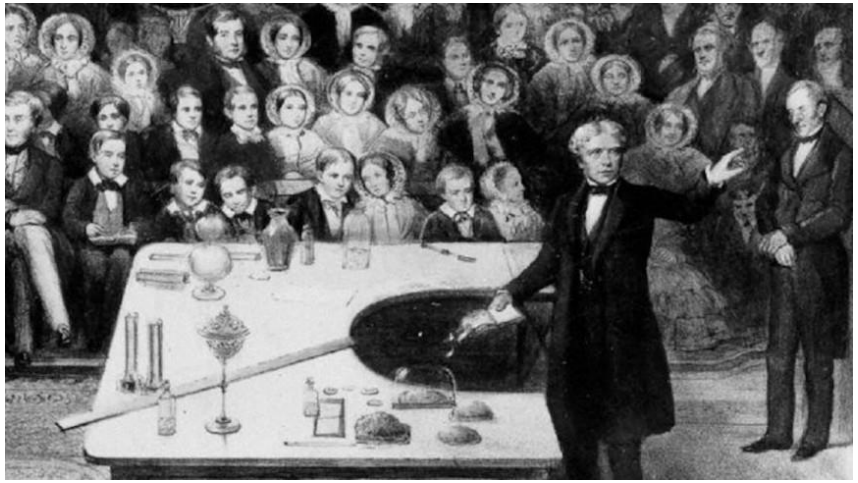
Indeed, it is time to use the batteries! But first we will talk about electricity.

Ancient Greeks had observed electrical phenomena, but they had not moved further

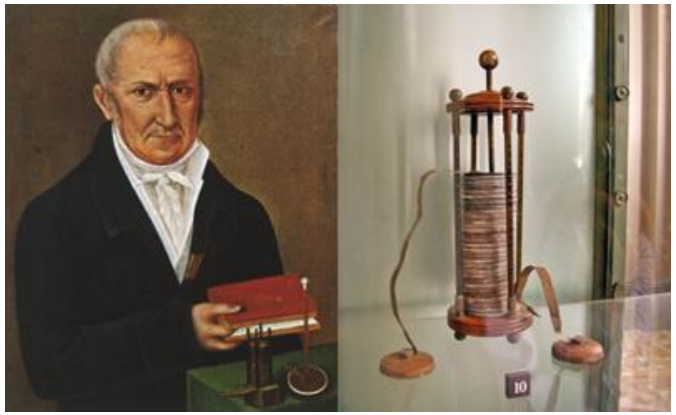
So, we move to the 18th century that people studied it again



Benjamin Franklin also studied electrical phenomena, like the kite experiment that is very well known.



Michael Faraday demonstrated his experiments in front of an audience.



Alessandro Volta made the first battery in 1800.

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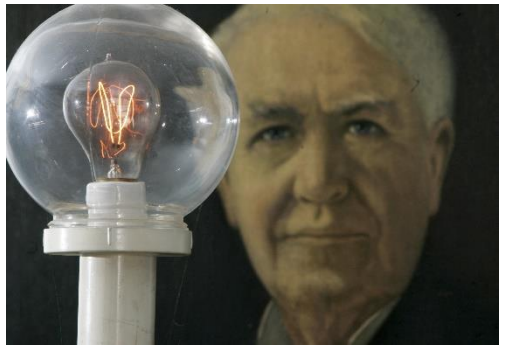
Power Car



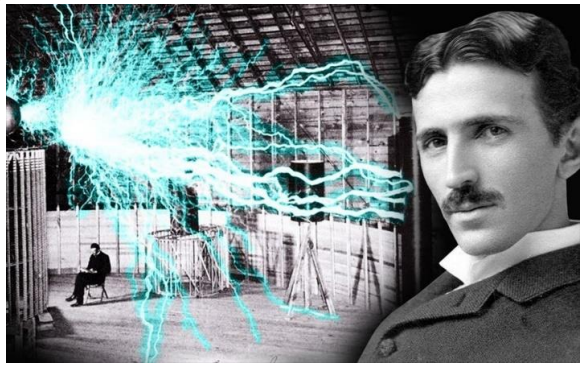
Since the 19th century, there were efforts to electrify cities and use the electricity in the Industry. We are in the 2nd Industrial Revolution.



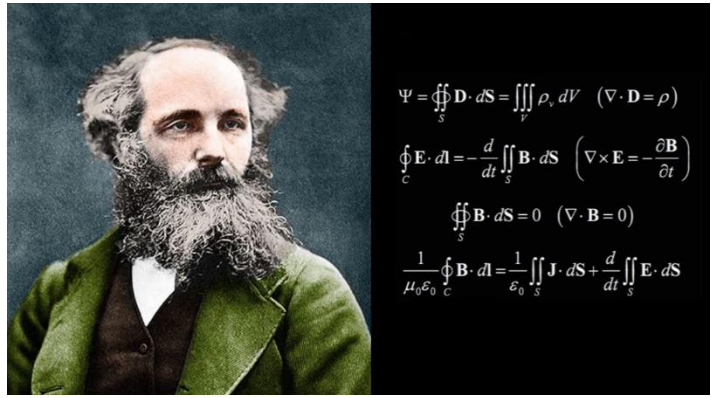
Michael Faraday invented the electric motor in 1821.



Thomas Edison, among others, invented the electric bulb.
He also lost the “current war” from Tesla. He had suggested the direct current.



Nicola Tesla, a pioneer in front of his time, suggested the use of alternating current for electrification, which dominated in 1888.



James Clark Maxwell completed the theoretical study of electricity.

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Out of all these examples of scientists/engineers mention their different origin, from various countries.

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The use of electricity has changed our lives very much. It is so much easier now!



















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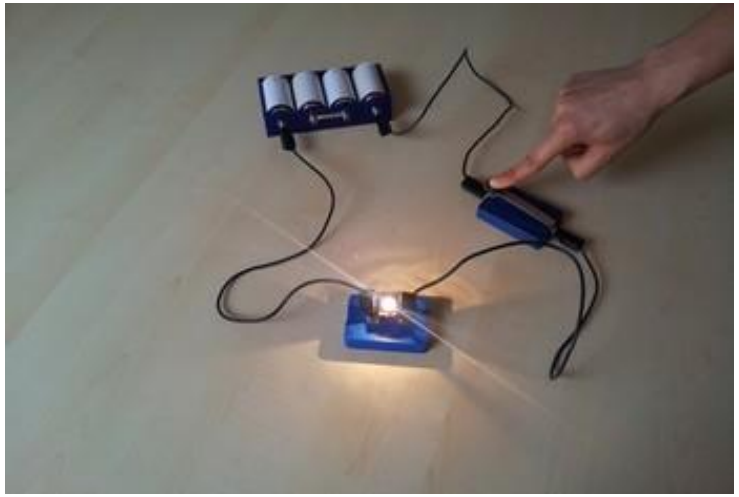
Ask your students to give other similar examples.

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In order to see the effects of the electric current, we have to keep all the elements of the circuit connected to each other.





We surely need a power source, cables, and a bulb will show us the effect of the electric current, which is light!

The effect is not always light! We can connect a motor, and then the result is motion!



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Correct! Here you can see some examples with an electric motor! Where does the energy for the motion come from?

















Petrol?
Oil?



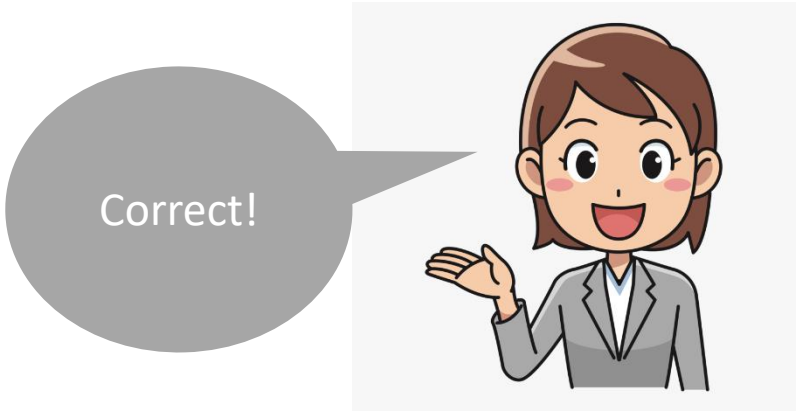
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You can discuss about the different motors if you have time.

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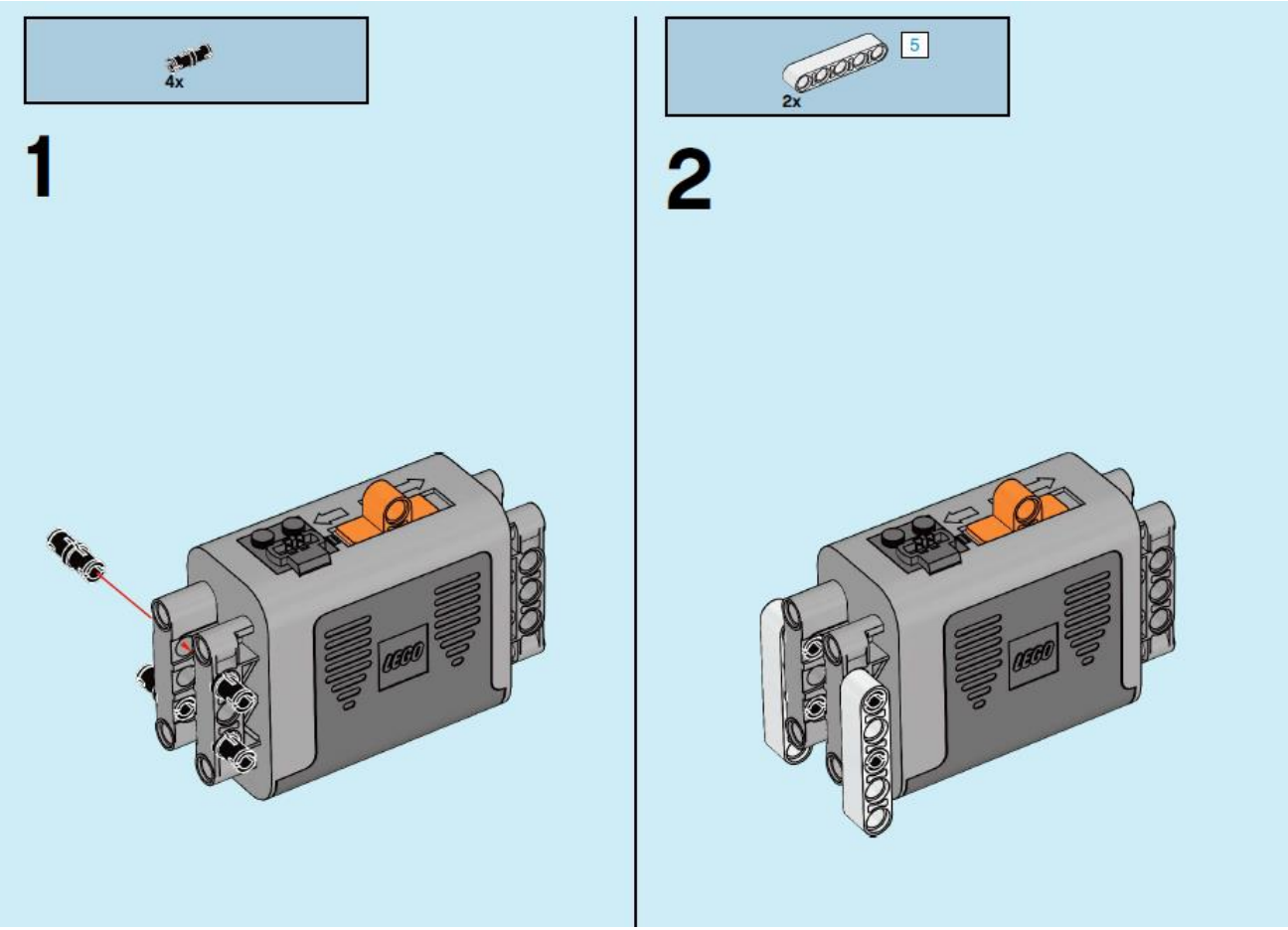


Open your set and find the motor
and the battery case that we will use today.

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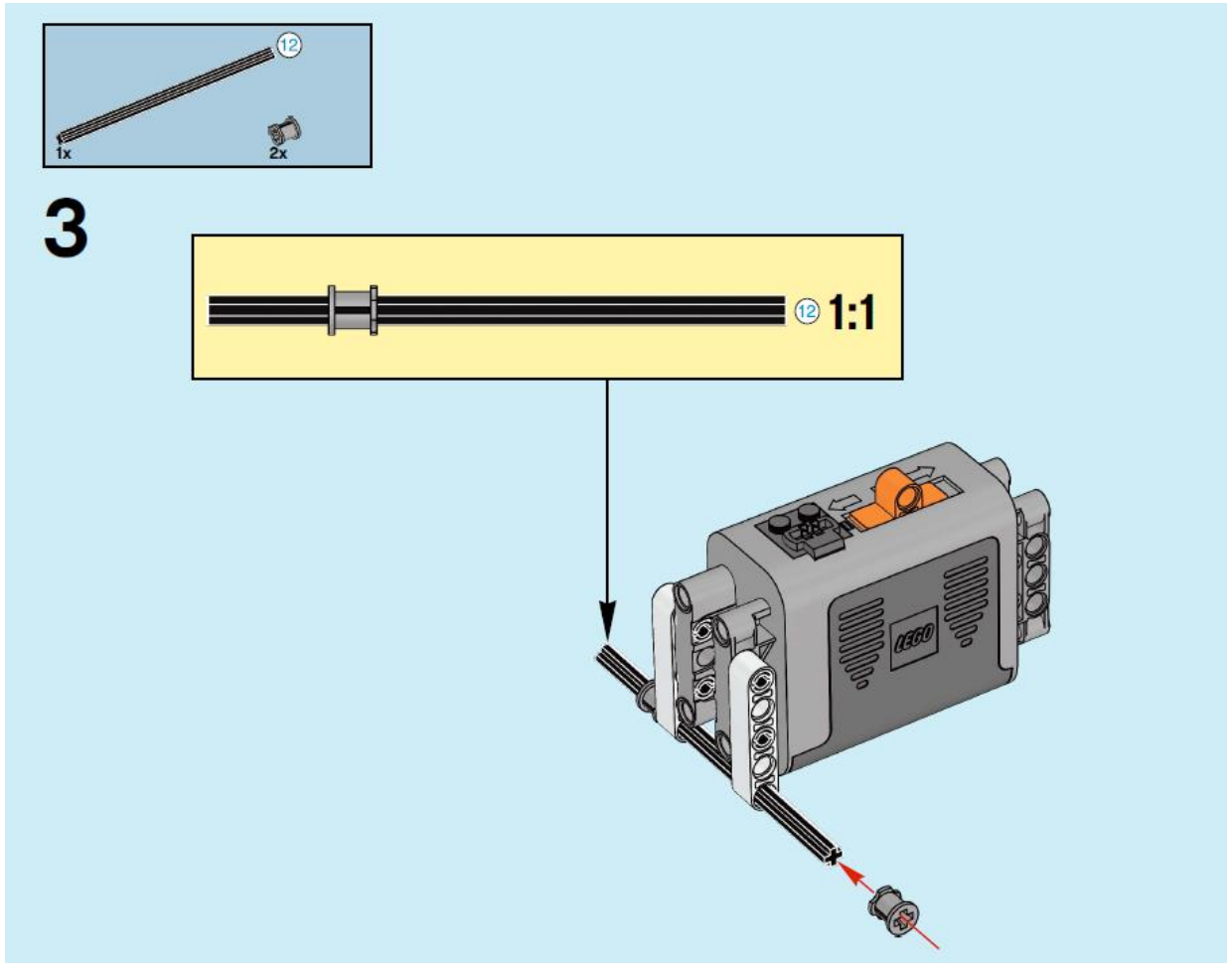
Start with the skeleton of the vehicle



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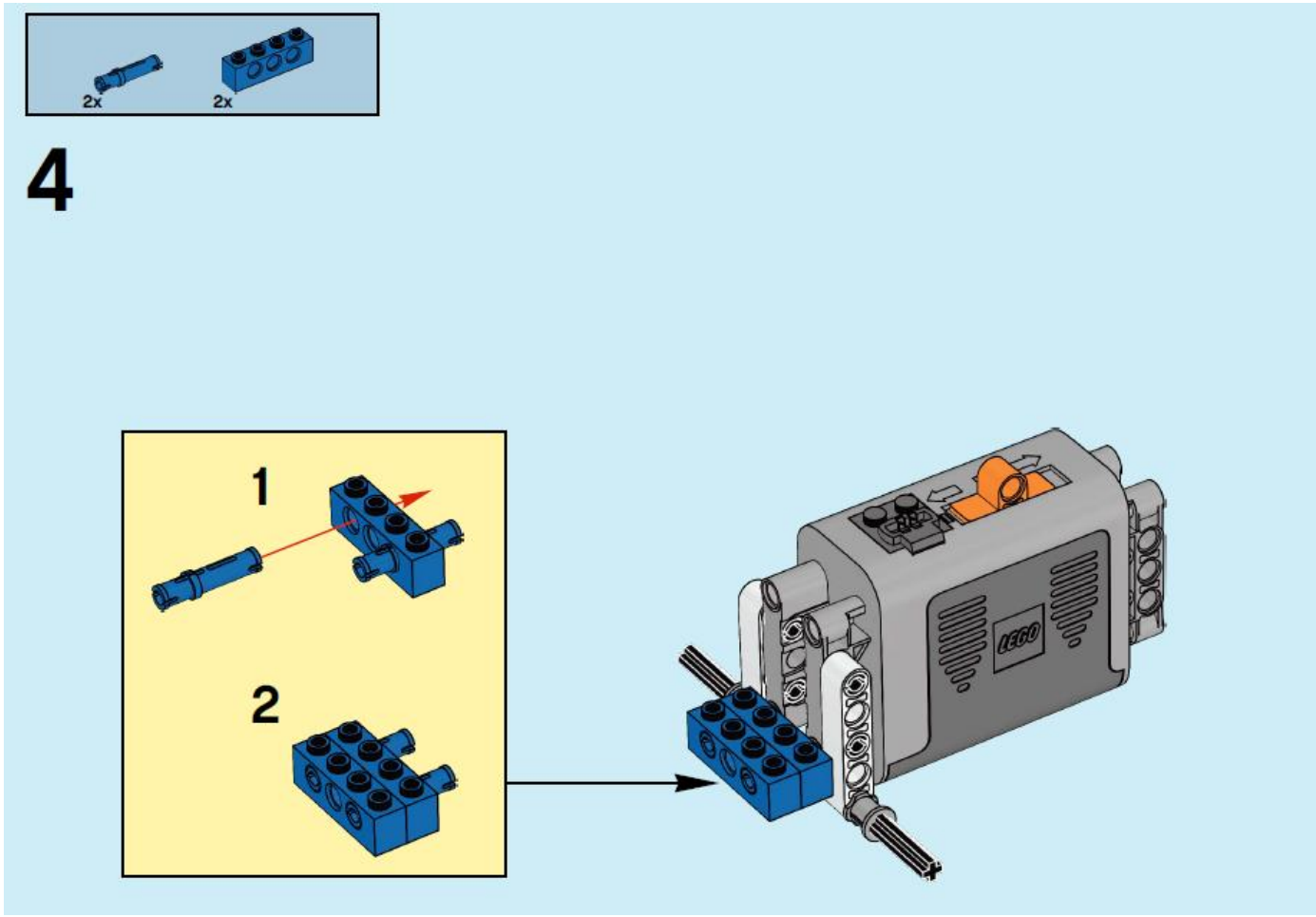
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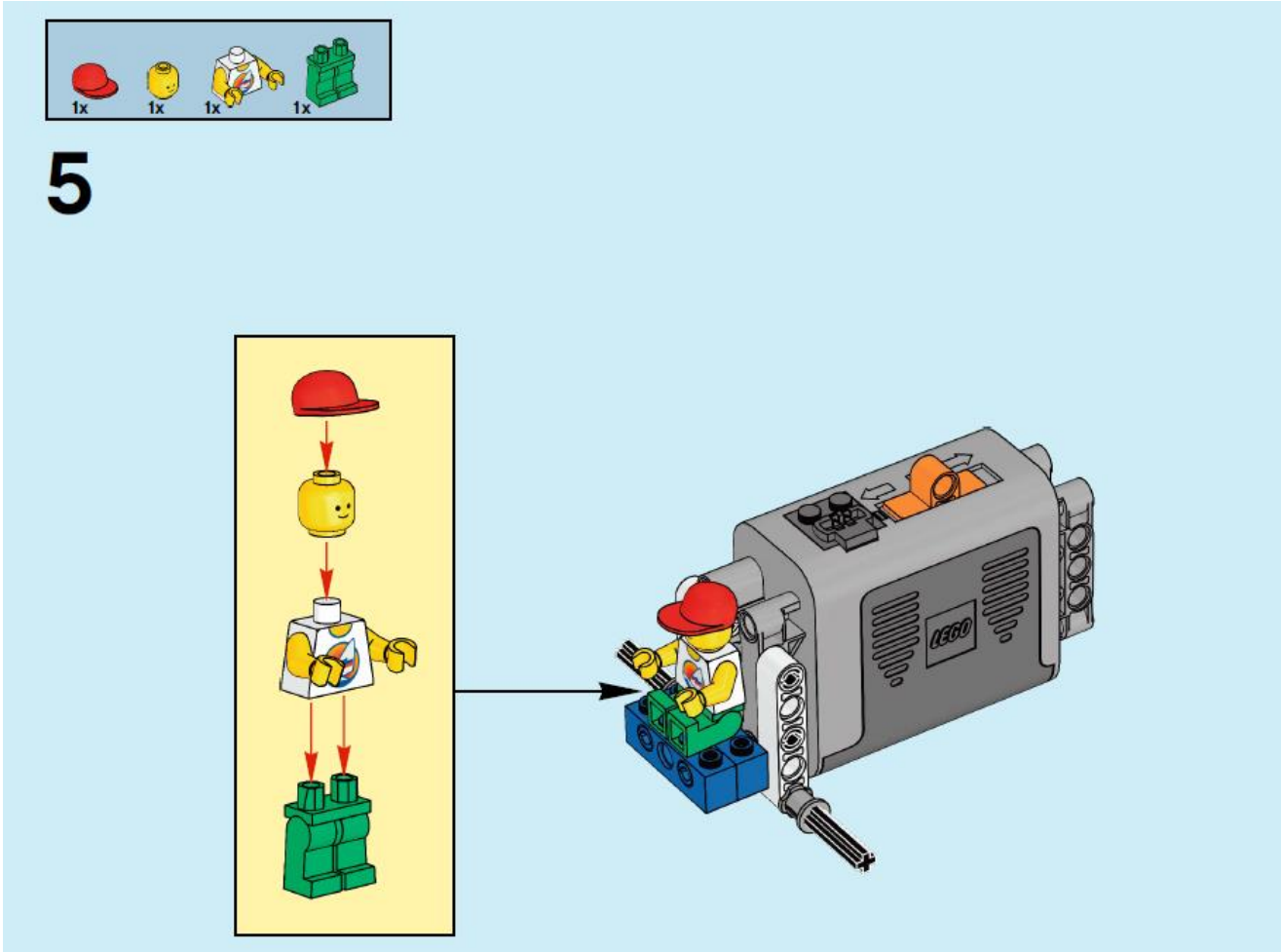
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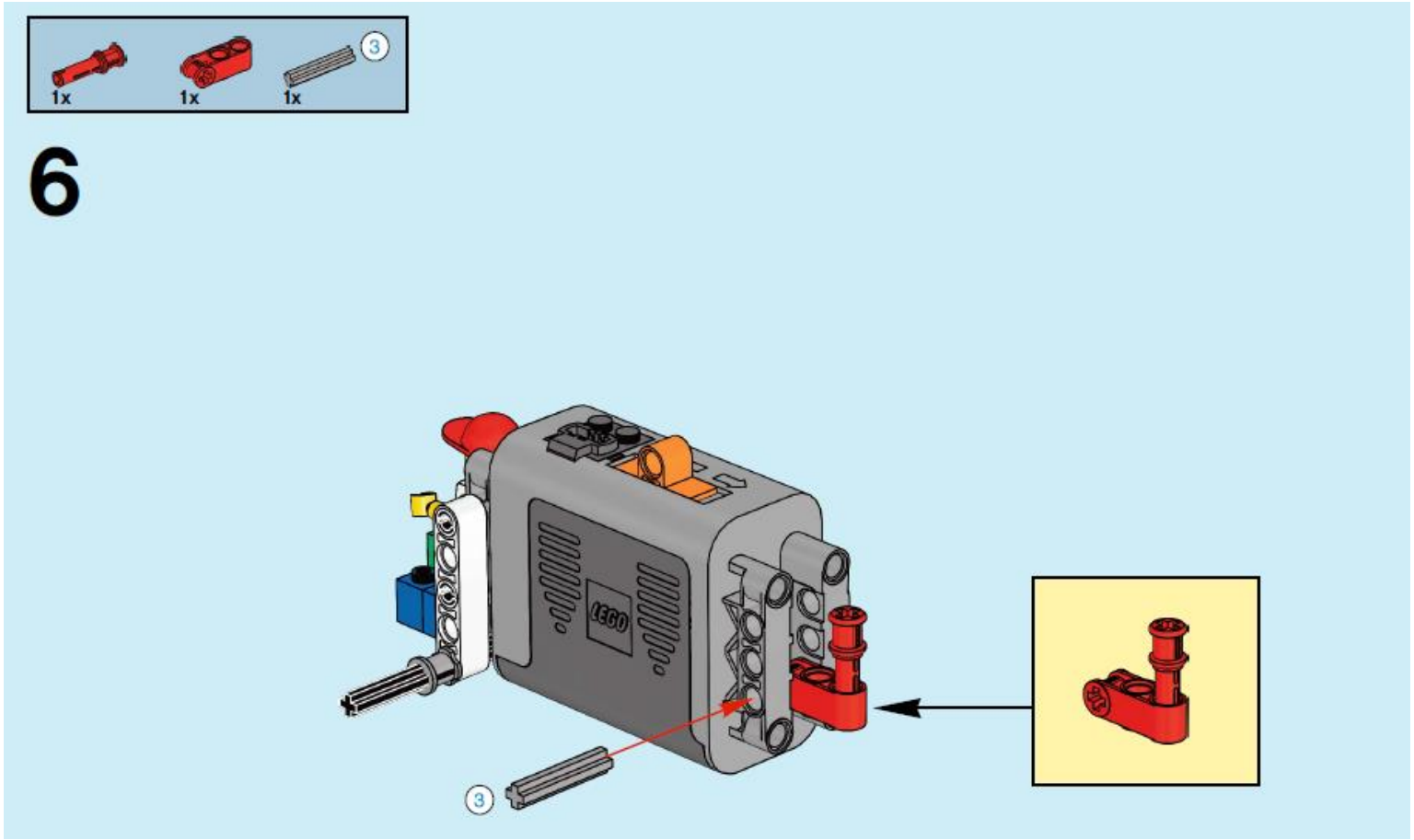


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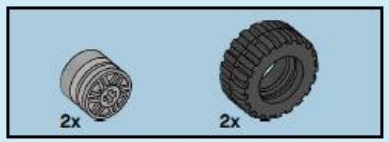


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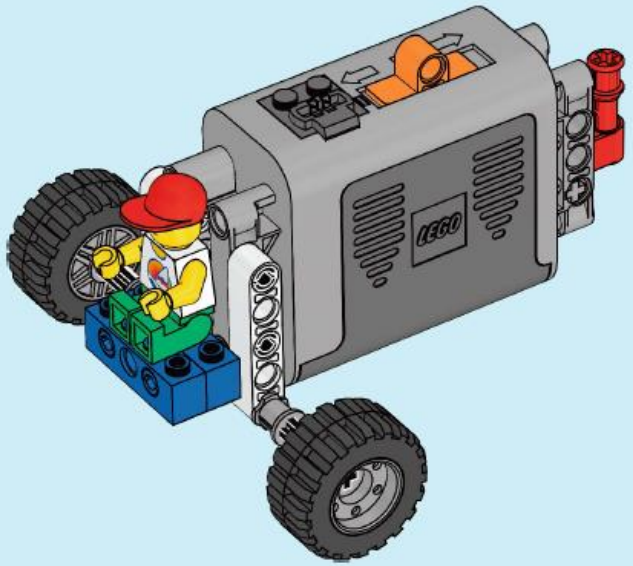


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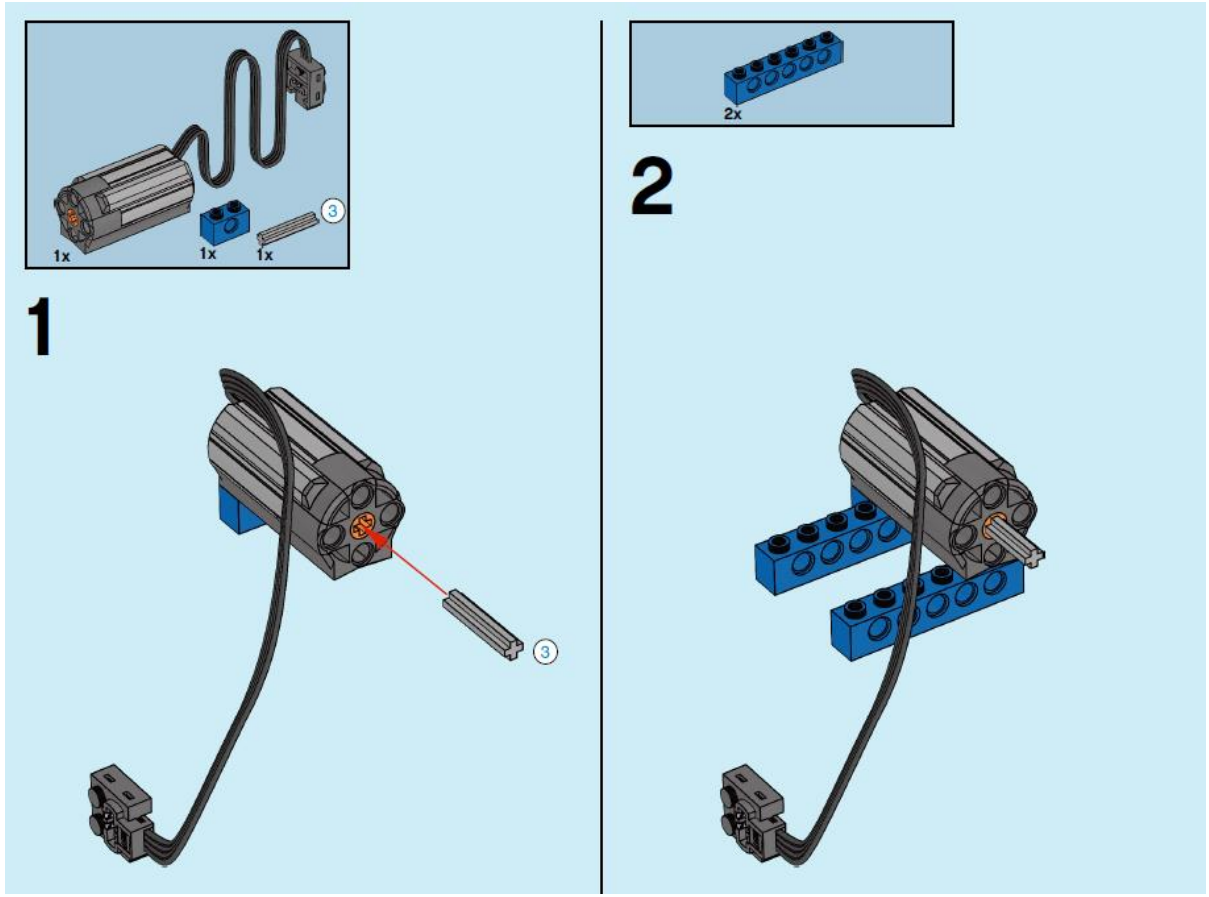
Power Car



7



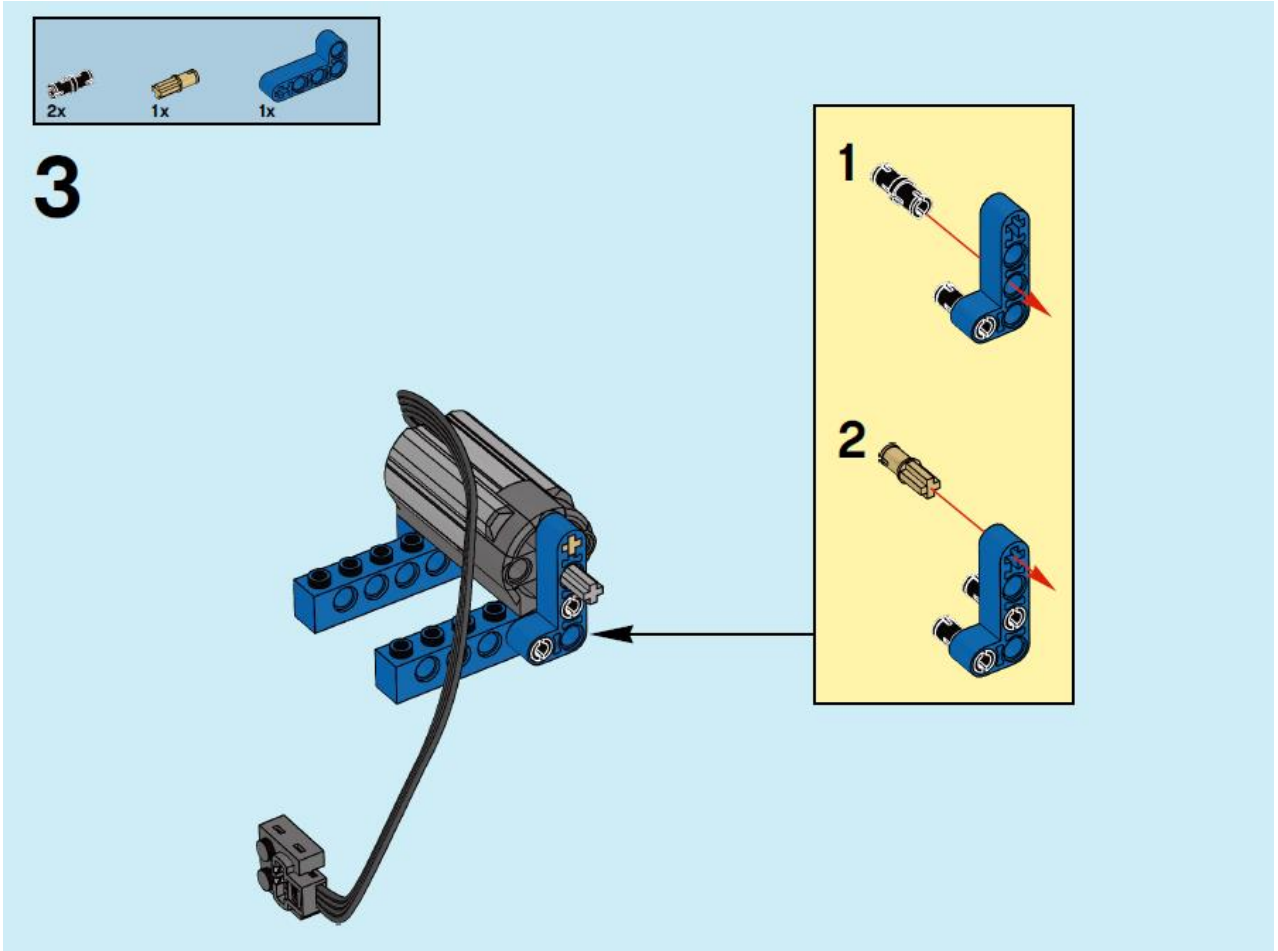
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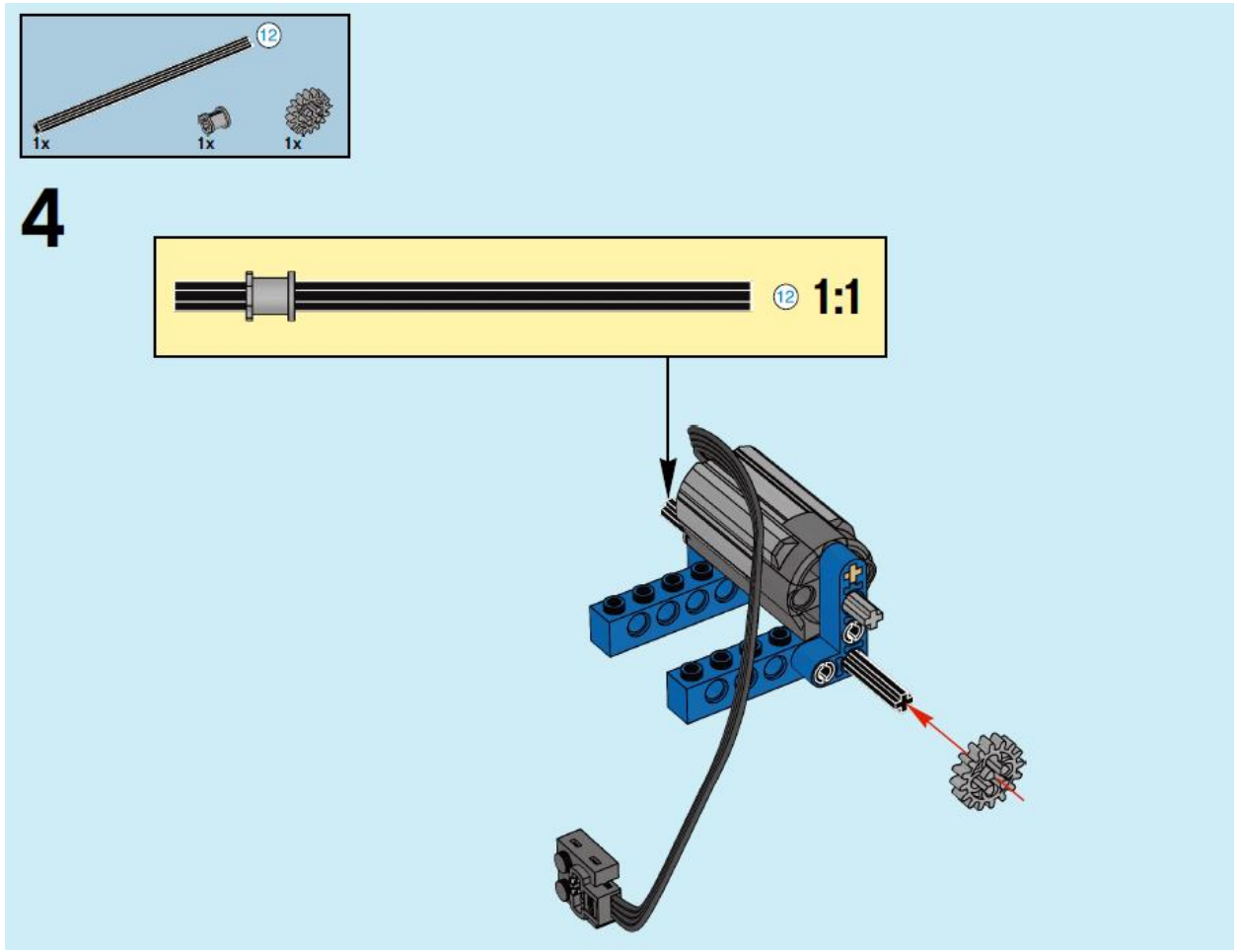
Move on with the upper part of the vehicle

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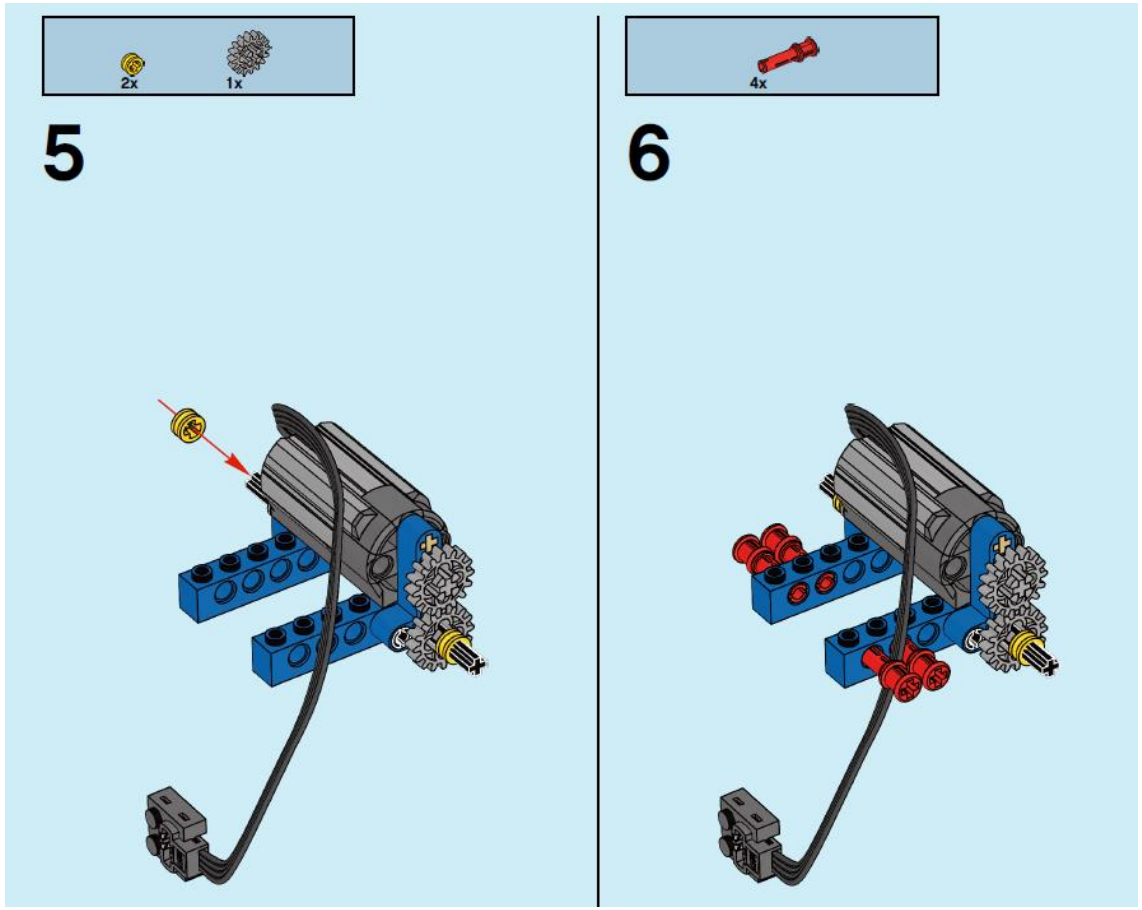


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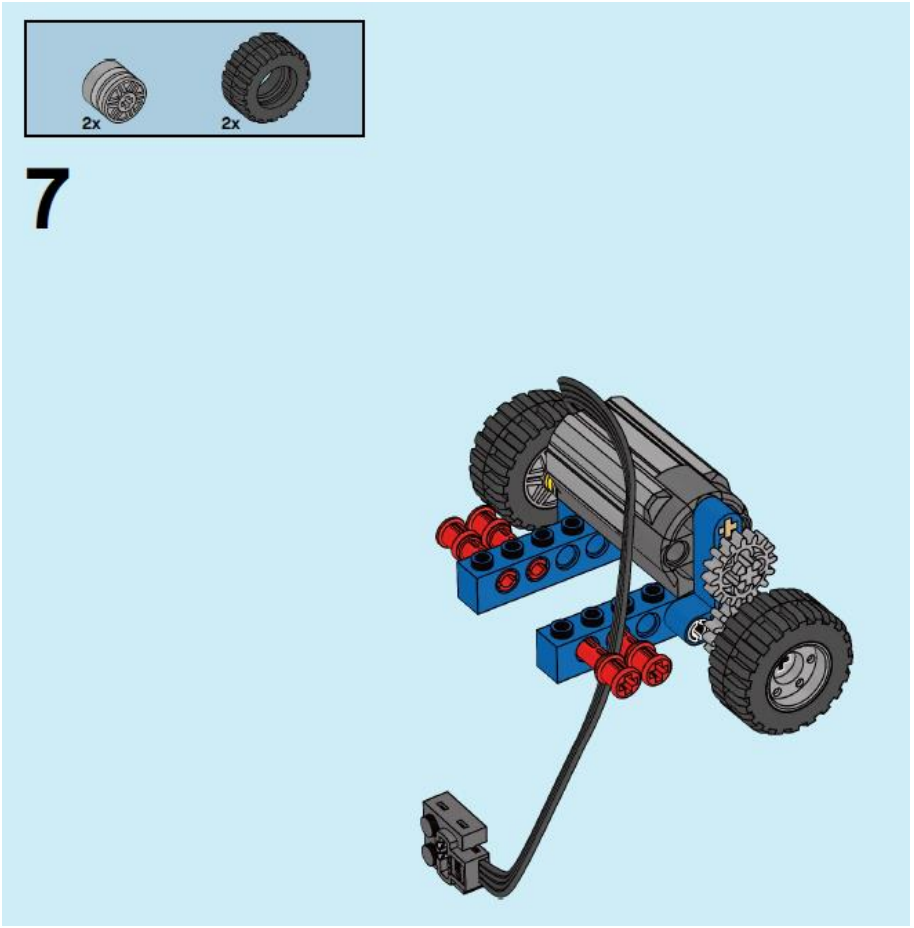
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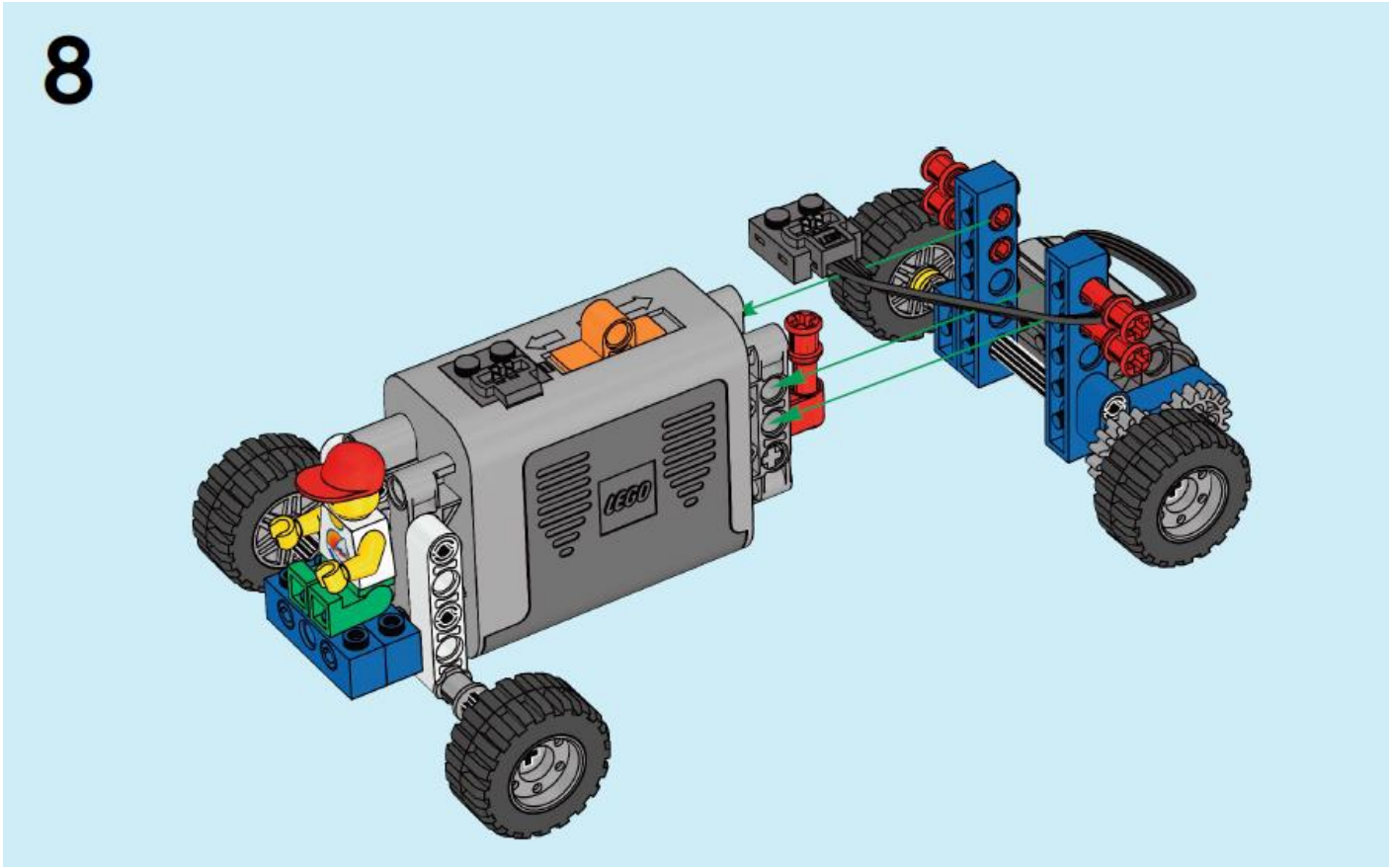
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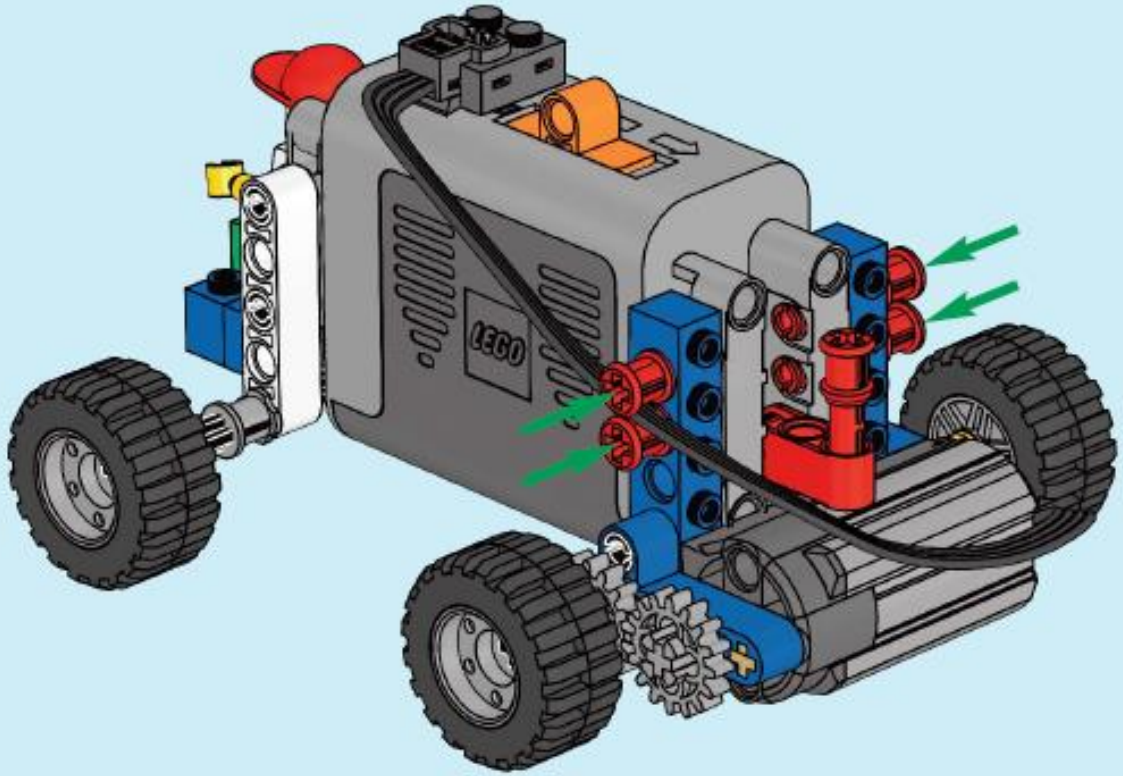
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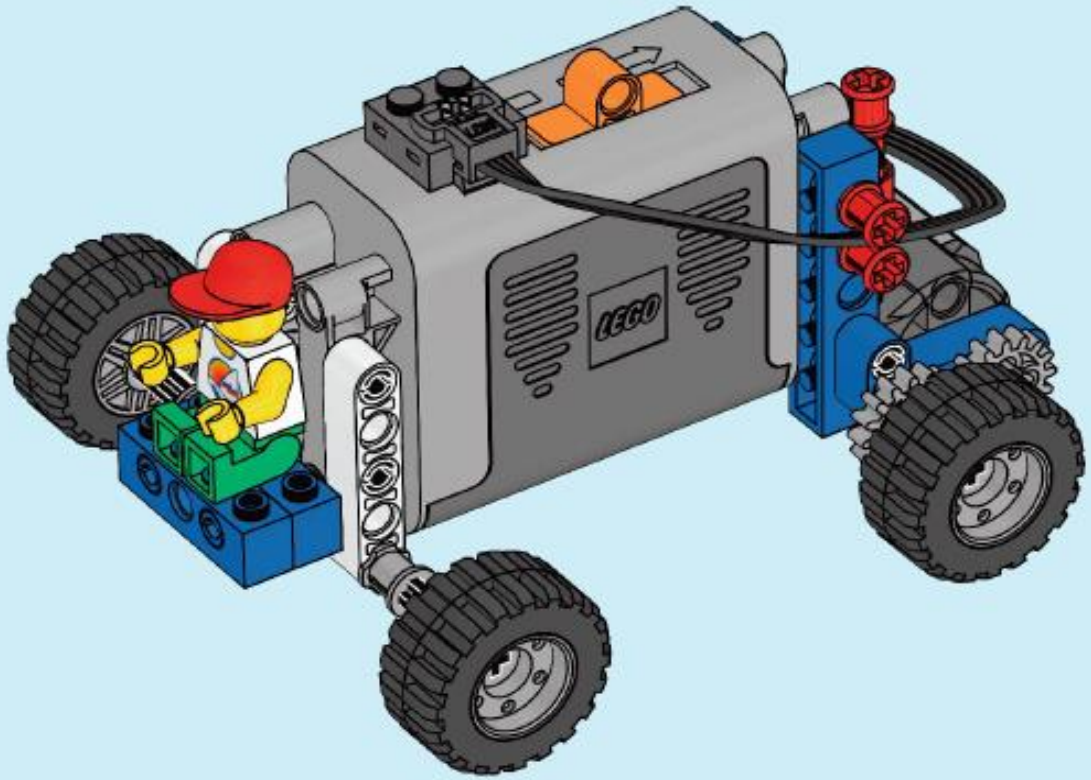
9



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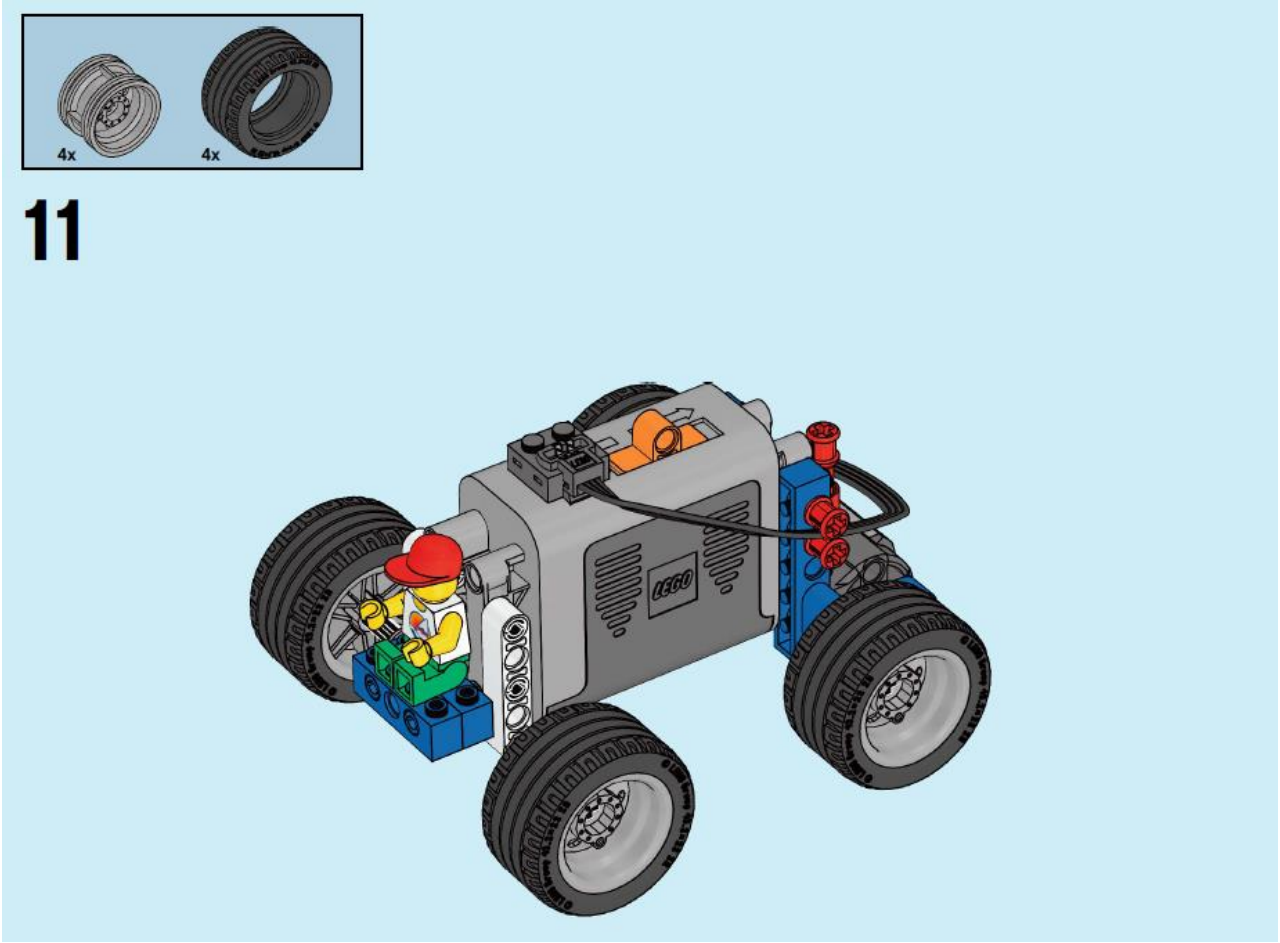
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Remove the middle wheels & add the large ones

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