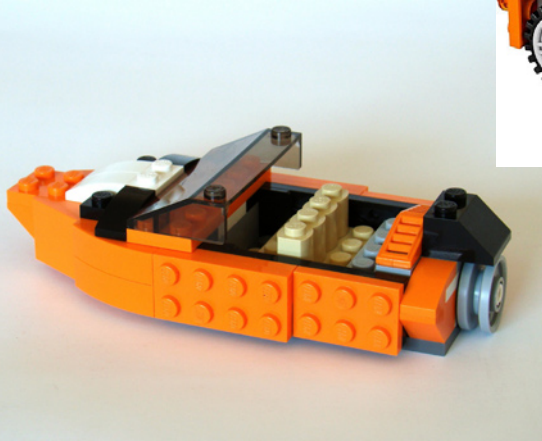


31017



How to Build an Alternative Model out of LEGO® Creator Set

By Tomik (Tomáš VIT)

What is an alternative model? Alternative models are models that are built out of bricks from just one LEGO® set. I've been dealing with building alternative models for five years. I began with it because I owned just a few sets and I didn't want to mix them together. So building alternative models was both a challenge and an answer to my lack of LEGO. If you buy a LEGO set you don't get just one, two or three models that you can build following the included building instructions. With each LEGO set you get countless models that you can build with the help of your imagination. Let's check on how to do it!

Choosing the Set

At the beginning I recommend you to start with a set containing about 200 pieces. The choice of the exact set depends on what you want to build. If you like animals I recommend you to

take set 31021 or 31004. If you prefer cars I recommend you to choose for example set 31006 or 31017. If you want a real all-purpose set then you should choose set 31007 or 31024. I don't recommend you to begin with smaller or bigger sets. A small set with less than 100 pieces gives you a very narrow selection of bricks and you can get lost in the large amount of various parts from big sets. It's also better to have a set with more small parts than big parts because you can always substitute big bricks with smaller ones but you can't make small parts out of big ones.

Preparation

If you think that preparation is boring and useless then believe me I've thought the same. However, I've found out it is worth taking time for preparation. Before building my own alternative

model I build the main model with the help of instructions. It gives me a great overview of the parts used in the set, the size of the finished model and sometimes I even find interesting details or techniques that I'll use in my model. Sorting bricks is another step of preparation. It is more effective to sort bricks according to their type than according to their color. The most important categories of brick are parts for SNOT, various hinges and joints and Technic parts. At the end I check the proportional representation of colors.

What Do You Want to Build?

What you want to build is a very important question and you should know the answer before you begin building. It's possible that your "WHAT" will change during building. Sometimes it happens to me too. Anyway, a clear idea about the result leads to success. What should an alternative model be like?

- 1) Original – build something different than the designers from LEGO® Company have built out of those bricks.
- 2) Recognizable – build the model in such a way that others recognize what you've built easily.
- 3) Using as many parts as possible – if you use at least half of the parts in the set you'll get an alternative model comparable with the main model.
- 4) Solid and stable enough – each model should be solid enough for moving from one place to another without breaking and stable enough for standing in a natural position without any support structure.

And where do I get inspiration for alternative models? The easiest way is to build something thematically close to the main model. For example you can build a truck or formula out of a car. Another way is to choose the subject of your model according to the type of bricks. For example if there are long plates in the set you can use them for building wings. If there are wheels or other round pieces like round plates you can build a car. And joints and slopes are necessary for building animals. Finally you can decide what you're going to build according to dominant colors.

When you know what you're going to build your next step is to find pictures of it. The goal is to get a clear idea of what your model looks like and what its main features are. Main features are often most obvious from a caricatures and pictures in books for children. Here are few examples: the main feature of most animals is their head, it can be the number of legs for insects, a long nose for American trucks, the uncovered engine for hot rods, horizontal rotor blades for helicopters and so on.

Beginning Building

I always begin building the main feature or the most complex detail so that others will recognize what I've built easily. If you start with this detail you'll be able to use any set parts for it and you'll verify quickly that you are able to build it. If you can't build the main feature of your model out of the available bricks I recommend you to build something else.

In this phase you should consider the size of the finished model. I recommend choosing a size comparable to main model. By doing so you'll avoid one of following two situations. If you choose too big a size, probably you'll be missing bricks to finish the model. If you choose too small a size, probably you'll get too many left over parts. What to do when you are in such a situation I'll tell you later. Choosing a suitable size for your model helps you to use an optimal amount of bricks from the set.

Now when you've built the main feature you can start building the rest of model. Again I recommend building the rest of model from the most important and the most complex parts to those less important and simpler. For example when I was building the killer whale I did it in this order: I began with the head (main feature). Then I built the fin on the back and developed a way of attaching it to the rest of the model (a very complex detail due to the unsuitable parts in the set). Building front flippers and tail were the next step (other important details which need special parts). When I finished those details I began building the body out of the remaining bricks (the biggest part of the model with no need for special parts). It's not necessary to make everything perfect now. The goal is to prove that you've chosen the right proportions and you have enough bricks to finish the model. At this moment you've got the first prototype which we're going to improve in the next step.

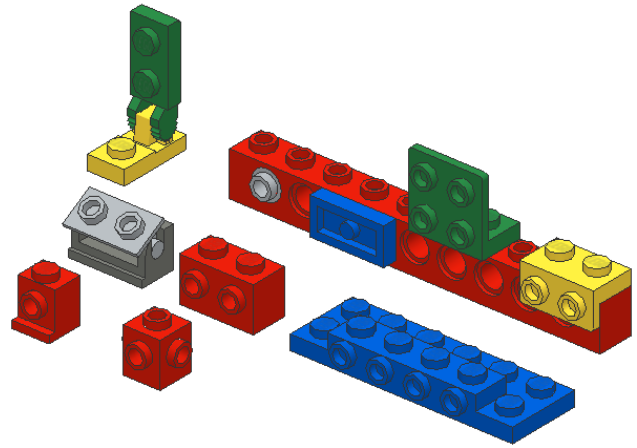
Improving the Prototype

Improving the prototype in order to get finished alternative model is usually the longest phase. I focus on making the model stronger, bringing parts of model into line with the original object and tuning the color scheme and size of model. Probably each of you will struggle with lack of bricks while building the model. If you miss just one part or several parts you can try to replace them with other similar parts. You can also check if you used a needed brick somewhere else in the prototype and replace it there to be able to use it where you can't replace it. If you miss a big amount of parts you probably chose too big a scale and you have to make the model smaller. Sometimes it is sufficient to simply adjust the proportions (make it slimmer or shorter) and at other times you'll have to rebuild the whole model or even change the subject. For example, I began building a rabbit out of set 31019 but later I had to change my mind due to a lack of useful parts and I built a tyrannosaurus instead. Limitations in the type and number of bricks force you to use each brick as efficiently as possible. It's crucial to work with a parts list (you can find it at the end of building instructions). It helps you to keep an overview of the bricks that are available in set.

Sometimes the opposite situation happens. You've almost finished your model and there are still many parts left over. You can solve this problem in two ways. You either expand the whole model or a part or add something to the model. For example, you can add some accessories, new details that will become part of the model or a separate model relating to main one. For example when I was building a penguin I used left over parts for building a fish.



Tyrannosaurus and duck built out of set 31019



SNOT

SNOT means “Studs Not On Top.” You’re using this technique each time you place a brick in a different way than with the studs facing up. It is very useful especially when you are working with slopes and round parts to get inverted ones. If you want to use SNOT techniques you need some bricks or plates with studs on one, two or all four sides. You can also substitute them for Technic bricks with half pins in holes or various hinges. The best example of the use of SNOT technique is my killer whale.

Hiding Inappropriate Colors

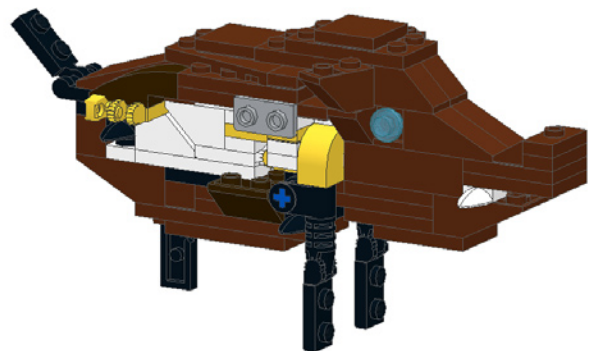
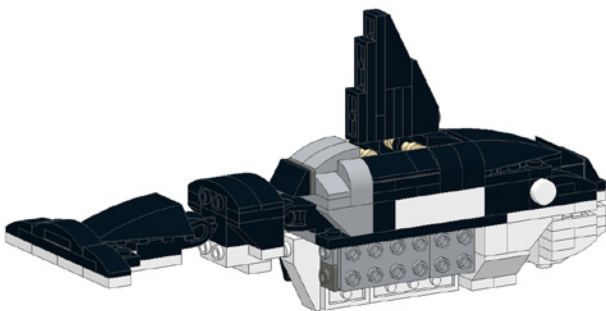
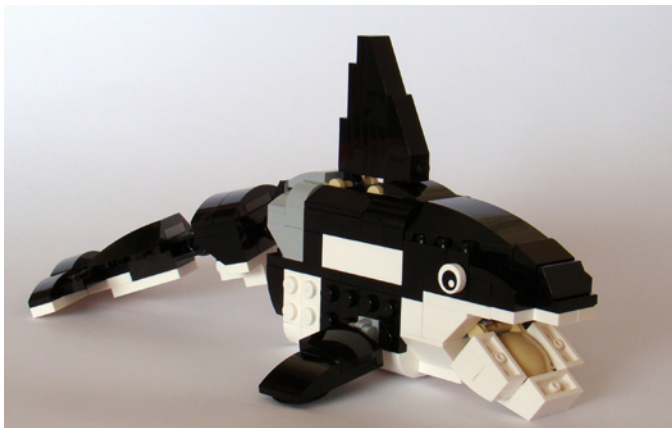
If you plan to make your alternative model in a particular color scheme you’ll probably be short of bricks in proper colors. I often get in this situation when I’m building animals so I’ve developed few techniques how to manage it. At first it’s useful to get an overview over the number and types of bricks in “usable” colors. Then I build in this way: I place parts

with proper color on surface of model and use those with inappropriate colors as filling. Sometimes this technique can’t solve the whole problem and you need to cover wrong colored bricks on the surface with something. The best covers are large plates in the proper color. Great examples of covering by plates are my mammoth and boar.

Conclusion

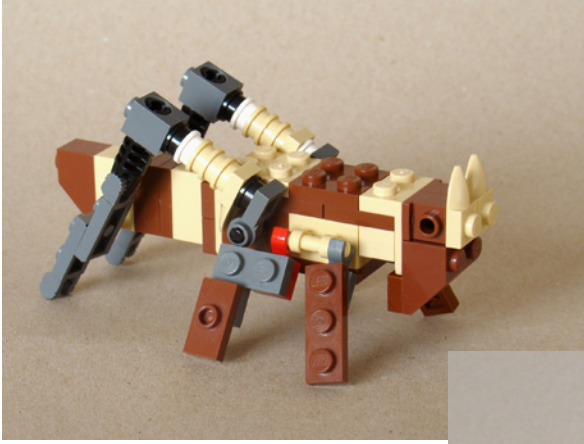
This article has showed you a step by step procedure for how I build alternative models out of LEGO® Creator sets. I hope the techniques and hints described above will help you with building your own models. If you want to know more about my creations or even build them, visit web site <http://buildinst.web.cz>. You’ll find my alternative models and building instructions for them there.

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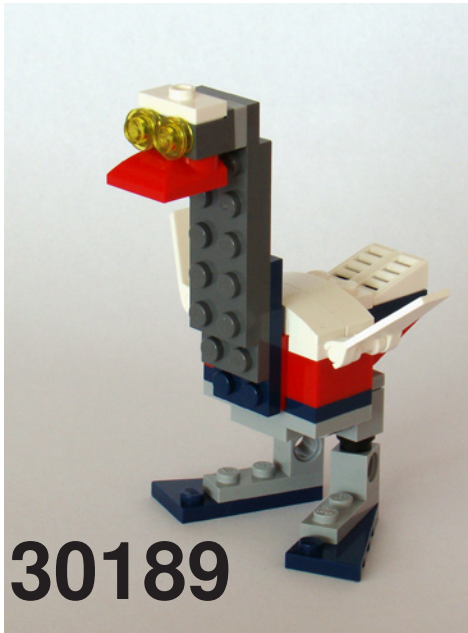
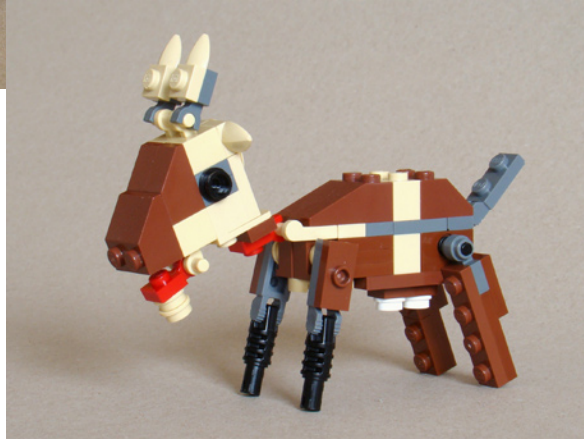
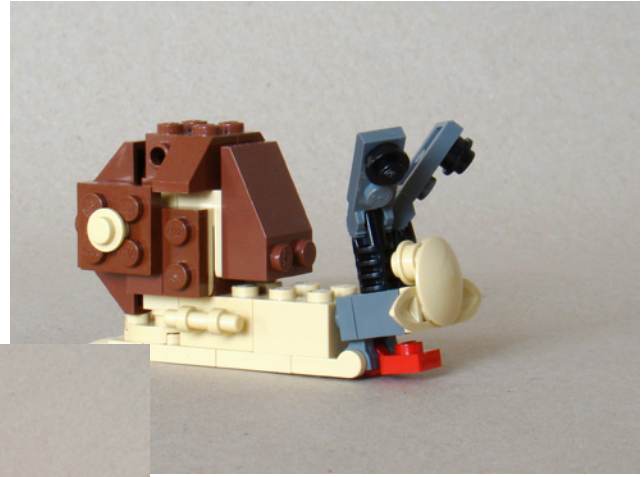


Use of SNOT technique – killer whale built out of set 31021 and view under its skin

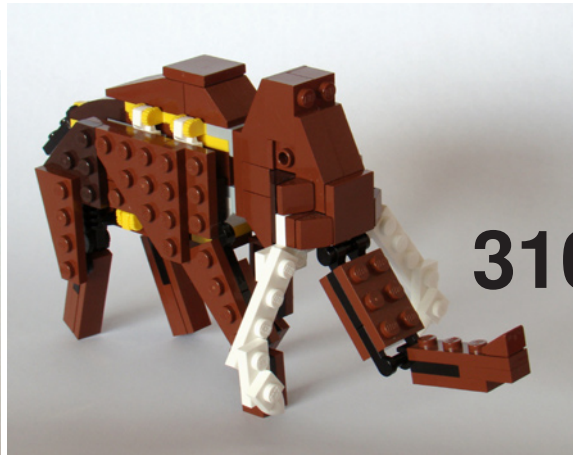
Hiding inappropriate colors – boar built out of set 31021 and view under its skin



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31004



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