



From two to eighteen wheels

By Dennis Glaasker (Bricksonwheels)

When HispaBrick Magazine® asked me if I was interested in being in their magazine and do a feature article, that was an easy decision. In my world there is a limited number of good quality LEGO® magazines and internet blogs to support the big community, and HispaBrick Magazine is among my selected favorites. That said let me introduce myself first: My name is Dennis Glaasker, but many might know me better as Bricksonwheels.

Since the seventies I seem to like the small bricks from Denmark. I just love building scale models from trucks, cars and bikes, with LEGO® as a medium. I have done plastic kits and die casts as well, but nothing is as much fun as building highly detailed models out of LEGO® to me. I have always liked almost anything on wheels, especially the tuned and customized vehicles, and these have become my main theme to build.

Besides building scale models I also like photography, music, drawing and DTP design. Creativity is the keyword, and this within family environment. I have a wife and kids and I like my hobbies being family friendly. My kids often help me sorting bricks or sometimes do some mild work on a build. They like LEGO® as well, but slowly they come to an age where it becomes less cool, a phase I have been in as well when I was a teenager. I picked up my hobby again in the late 90's. I bought a Model Team® truck just for fun, and slowly after that more bricks came and I started building my own things. This was also the time the internet arrived and I got inspired on the webpages of my friend and fellow Dutchman Dennis Bosman, another builder of scaled trucks. One thing led to another and when I found the ways to buy single bricks instead of sets my collection grew steadily and each new build was bigger and better than the one before. I have always tried to push for new levels of detail and accuracy since then.

A big step forward in this respect came around 4 years ago when I met a guy that could do electroplating on ABS plastics in factory environment. This is a technology where true chrome is applied on a polymer. I am a businessman myself in the plastics field and this technology appealed to me, and even better it could be done on LEGO® bricks. Nowadays I use quite a lot of chromed bricks, and have them processed myself industrially.

This is where I am now, and the next pages will show you some insights on how I design and build my creations. HispaBrick Magazine asked me to highlight both a truck and a bike, and I have chosen two of my recent builds to describe to you:

Peterbilt 379 with Mac dump trailer in 1:13

The roots of this work comes from inspiration in several truck magazines and previous builds. Already a few years ago I had built some dump trucks based mildly on existing American show trucks, and most of them in 1:16 scale. My first 1:13 scaled dumper was a tri-axle dumper called 'Eldorado', which was in fact a revamp of a Peterbilt 379 tractor I had built earlier on. The creation got a lot of attention and was published in a number of LEGO®, as well as international trucking magazines. That tasted like more, so I started to look for fresh inspiration and got more and more interested in building a full combo including a heavily customized tractor and equally customized end dump trailer. For those new with dumping technology: An end dump trailer pushes the whole trailer upwards above the tractor's fifth wheel, rotating on the trailers rear axle to unload it.

I started my work on the tractor in 2012, and decided it would be a Peterbilt 379, definitely my favorite American truck, and as it was obviously not the first time I had built one, I already had

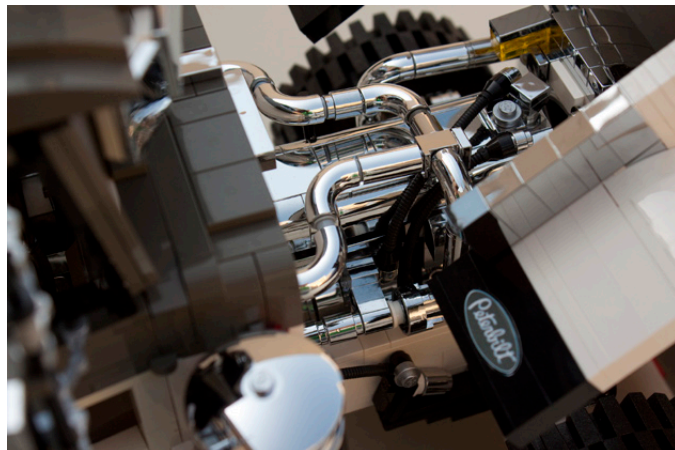


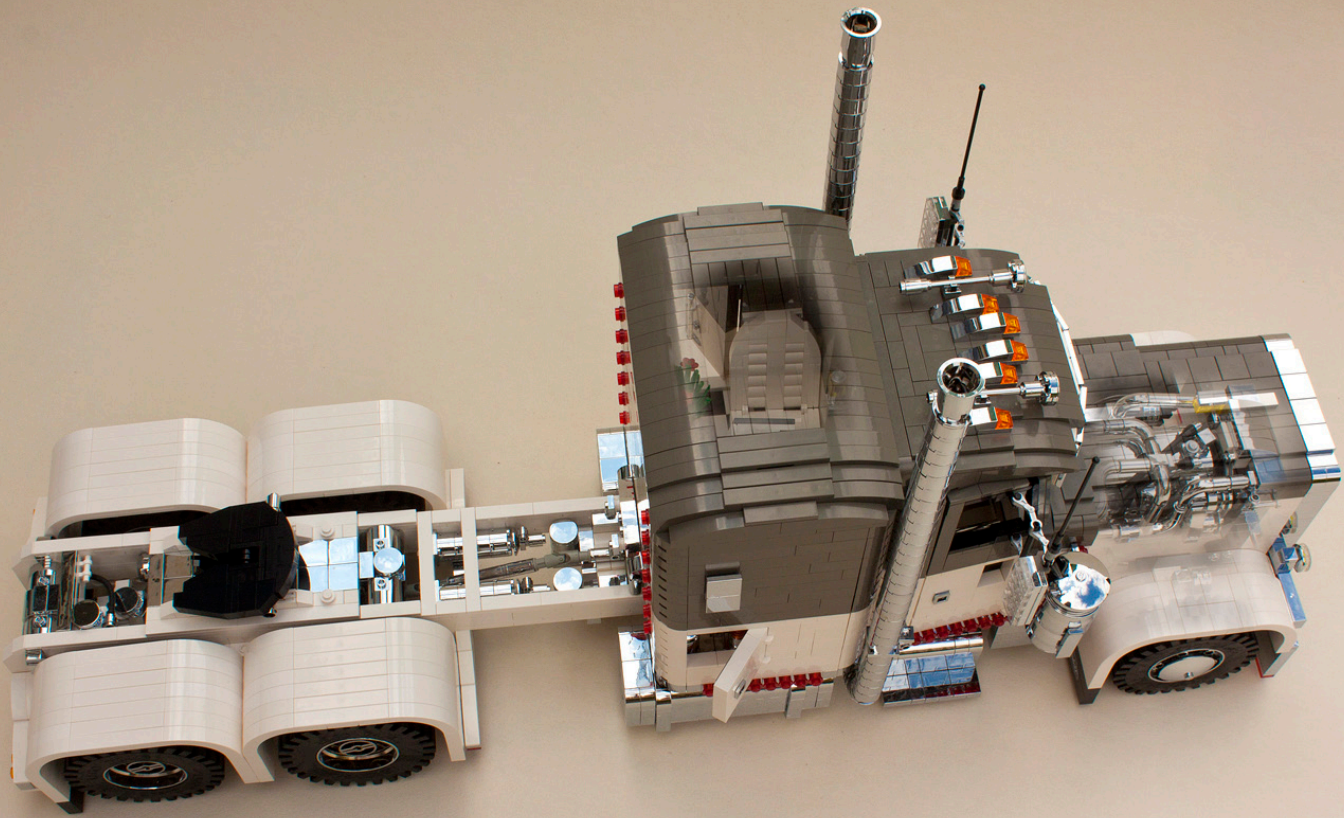
quite a few detail pictures and dimensional drawings available. My aim was however not to just copy previous work, but to take this creation to the next level, and I looked for even more detailing possibilities especially in places that would not directly meet the eye under normal circumstances, but would still contribute to the authenticity of the model.

The last step before really getting started included composing some sketches to define a nice color scheme and layout. In the end I decided to use a rather cool and smooth design, combining regular white bricks with the rather rare old dark gray ones, and along with that avoiding putting an overload of accessories on the truck. In the 80's and 90's customized trucks were overloaded with accessories, but lately a more clean low-rider look is trend amongst those who pimp their trucks. When using a color like white, older bricks immediately stand out from fresh ones, so a list with needs quickly went to some Bricklink shops.

Building a truck is quite systematic for me. Basically I build from front to rear. I start with what is for me also one of the most enjoying parts: the front end of the chassis, including front suspension and steering. The challenge here is to keep the detail in, like the airbags for the air-ride suspension, but it also needs to be rigid enough to carry a lot of weight on the front axle and remain steerable for posing purposes only in this case. Sometimes I build fully functional models with a lot of Technic® and Power Functions® parts, but in this case the model is purely static and cosmetics came first.

The radiator and engine come up next, and especially on the engine you can drown in detail, mainly on the hosing, piping and wiring. I can easily spend 3 to 4 hours on the engine only, making sure everything is in place, including the engine room parts that are fit to the cabins firewall and the chassis itself. Many engine parts come in chromed to give that extra realistic touch. The engine is then mounted in the chassis, and all





hosing and piping is attached where necessary. I make sure that the underside of the chassis and engine also look like the real thing.

The next phase is the front bumper and hinge system for the hood. When the bumper, hood and fenders are completed I fix them on the chassis, and basically have the front of the truck ready for the biggest part. From here on I start to work backwards creating the chromed air filter housings, and extension of the chassis to create space for the gearbox, air tanks, exhausts, sidesteps and fuel tanks. On top of this extension the work on the cabin begins. The cabin of a Peterbilt or quite similar Kenworth truck seems quite easy to build as on a first glance it looks fair and square, but it is not in practical life. In fact from a top view you can see that starting from the grille the hood and cabin are tapered and challenging to build. The first step in achieving this geometry is already in the hood which is built in 'steps', in this case two, and then continues in a plate hinged construction creating the cabin geometry groundwork, and also the base for the working doors.

At this stage the front part of the truck is already coming to shape, but instead of finishing the cabin entirely, I now start finishing the remaining part of the chassis first. This is for one simple reason; it requires a lot of flipping and rotating to do so and for that the cabin would only be an obstacle all the time. Another building space challenge can be the fact that the whole chassis can be very stretched on this type of custom truck. A wheelbase (the distance between the heart of the front axle and the midst between the two rear axles) of more than 8 meters is quite normal! A tractor can be a few meters longer in the US compared to a European equivalent. For that

reason stiffness is a very important factor building a truck like that out of LEGO®. You cannot build the riggers too thin, but sticking to the scale creates enough possibilities to achieve this, without making unrealistic 'bulky' constructions. Especially the area after the cabin is critical in this respect as not only the sleeper, but also the diesel tanks are positioned here, and as that gives a lot of weight the chassis could start to bend easily, especially with fully chromed tanks which are heavier, and a long sleeper unit on top of that. As a last touch I include the differentials, rear suspension and fifth wheel. The bumper and other accessories in this area I don't touch yet, as they are part of the color trimming and finishing touch, and I take that as a final step.

The interior of a custom truck can be miles away in appearance compared to a regular example. Anyone who has ever attended a truck show can acknowledge that the sky is really the limit here. The floors are fitted with special carpet, wood or special paint. Seats are customized, and often large scale multimedia systems are installed. In many cases a sleeper is not functional as a sleeper anymore, but more or less as a sound studio. In the case of this truck I followed inspiration from show reports and included special seats, that can be hinged, colors matching the outside, and a lot of chrome parts in the interior as well. The sleeper accommodates a kind of sofa, and a big TV screen with sound system. To show the amount of detail in the interior I made the roof retractable only to make the interior visible at modeling fairs and LEGO® shows.

The final step is putting in all the detail, a stage I really love, and one that can take many hours as well. I tend to start on this on an early morning Sunday with a good coffee and a



fresh view on things. Mirrors, air horns, lights, custom bumpers and fenders, I like to go all the way. The result has become a truck that looks quite clean by looks, but still has a lot of custom parts to it. As the last step I add all the wheels to it. These are the old Technic® 24x43 types which have been out of production for two decades now. I have a lot of these, and the oldest ones I have in my collection are from 1978 when I got the 853 set from my parents as a gift as a young boy. These four wheels are still in my collection today 35 years later and are still 'at work' fitted on another truck. Just a proof of the quality and life time fun LEGO® offers.

Two months later however I decided to update the truck a little bit. Most of my builds are evolutionary projects, and this was no exception. I added a tiny bit to the sleeper height, made a new more massive front bumper, and updated some accessories. The biggest addition I had in mind was however adding a new trailer as an accessory. One could call also that adding another MOC. The first attempt was a 40ft flatbed commonly seen in the USA with some mild mods to it. I was not fully happy with that trailer and decided to build something a bit more advanced.

After some research I came to the conclusion it would become a Mac 40ft end dump; a trailer type I had built before in smaller scale, but this time I would build it in a fully chromed version, and in style with the Peterbilt tractor. Now I must honestly admit that trailers are somewhat of a necessary evil to me. Somehow I don't enjoy building them as much as building a tractor, but in this case I was quite convinced it would be a great combo, and besides that I wanted a fresh tractor and matching trailer for scheduled events as well.

The building of this trailer involved not that much work as I had a donor trailer standing around in 1:16 scale. I took that apart mostly but kept the side walls, so I could easily make it wider and higher to fit the new 1:13 scale. That saved me a lot of work on the hinged construction on the inside to get this half round shape. I only needed to add a bit on that in this case. The most time consuming thing was removing all the black tiles from the sides, as it used to be black, and creating a fresh white trailer chassis including white fenders and also chromed rims. Meanwhile I had a chrome batch scheduled and included about 800 2x2 tiles, the majority targeted for this trailer. I just love chrome, and I wanted to build something special and big applying it, without moving away from realism. This was just the perfect opportunity, as these trailers are often fully polished and shiny as well. When the tiles came back there was this big task of putting them all on the trailer, but my lovely wife surprised me, and as I got home from work one day the job was almost done already! Now that is what I call support!

The last steps on the trailer included stiffening the inner structure a bit to carry a small load of bricks (to save weight they are stacked on top of some lightweight filling material, so there is only a thin layer of red bricks in the trailer), and detailing the back of the truck. I also sourced for some real rubber in 0.8 mm thickness to have more realistic mud flaps, which are quite essential for the optics on this type of trailer. All in all this is a MOC I am very pleased with. The detail is all around, there are many new techniques in it, and especially the old-school colors are appreciated according to the many reactions I have had on those.



Harley Davidson FLH 1340 "Red Baron" in 1:10

I have built countless trucks and cars over the years, but a motorbike had been on my to-do list for a very long time, basically because it seemed to be too much out of my comfort zone to build. This exact reason made me decide to build some after all, as I don't like moving in circles being creative, and I seem to need a good challenge so now and then. I just love Harley Davidsons, and as one would imagine along with the trucks and cars I favor the heavily customized ones. I guess I don't like regular stuff and like a bit of pimp. I have a handful of bikes in my portfolio now, and the latest one is featured here on these pages. This build started with not only the type of Harley Davidson as a choice, but also the theme of the customizing. I saw a picture on Flickr from a cool Harley in red and white, inspired by the 'Red Baron'. For those unknown with the Red Baron, he was a German fighter pilot of World war I, in reality named Manfred von Richthofen. He was a war hero to the Germans, and also very much known by his

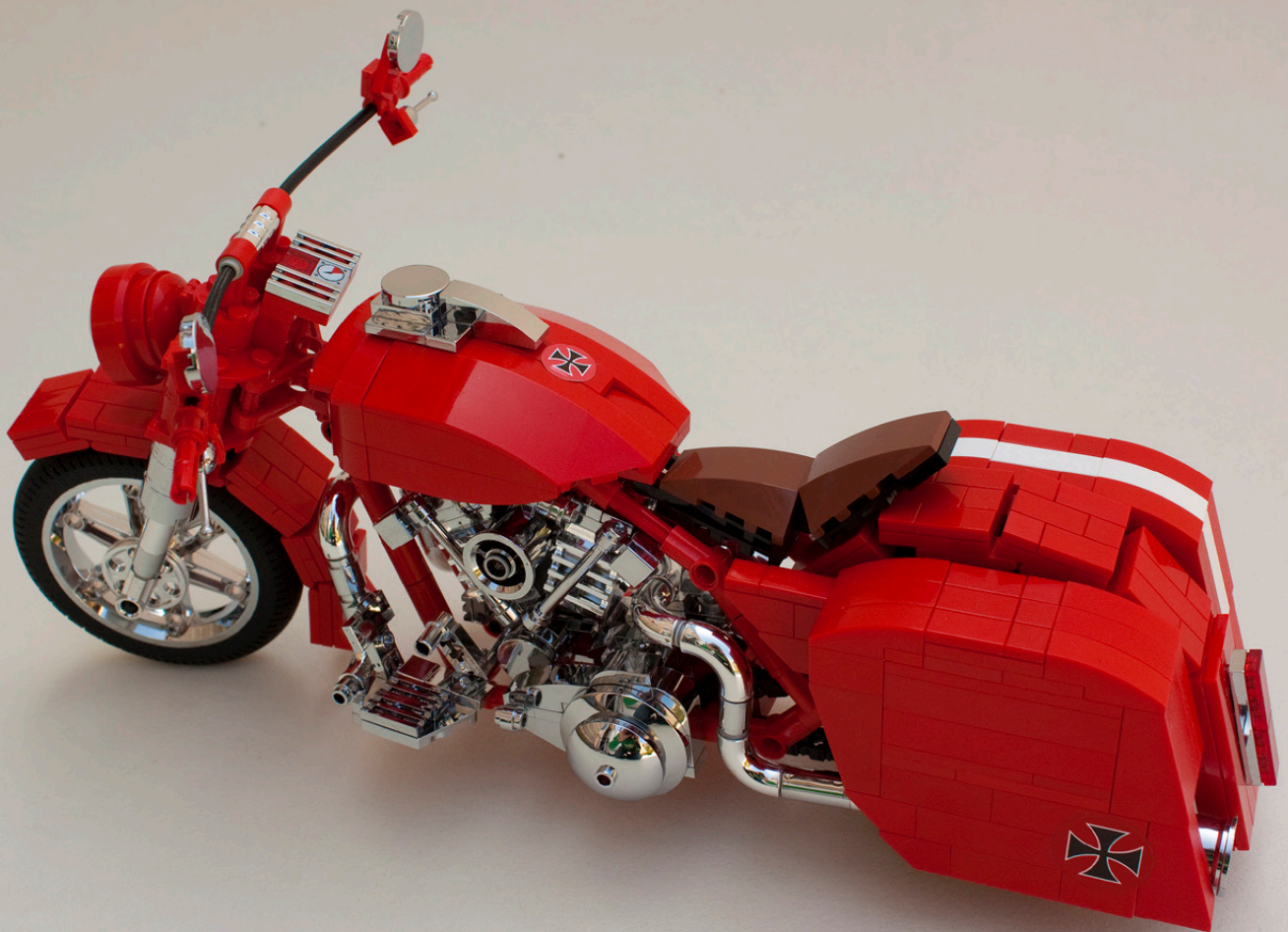


enemies. He was a very gifted pilot and quickly got a fearsome reputation amongst Allied pilots. Von Richthofen himself anticipated on that by painting his Fokker triplane bright red with some white accents. The word camouflage did not come to his mind, .. his enemies needed to know what was facing them. The bright red plane, together with the fact that he was born a baron in a noble family gave him the nickname 'Red Baron'. His plane is still very famous and replicas are at display in many aviation museums. There is also an official LEGO® set (10024) of this plane available.

The paintjob on the plane seemed a powerful theme to translate into a bike, and to me only one type of bike would fit this job, and that would be a Harley Davidson Roadking. This type of Harley, often referred to as a 'bagger' is a massive, tough looking motorcycle, with a low classic silhouette. The nickname 'bagger' refers to the bags positioned at the back of the bike. I started of making some design sketches and trying to find some more detail pictures on the technical aspects of this particular type of bike. As many pictures can be found on the web, this was quickly done, and together with the experience of an earlier build of a quite similar type of Harley the project was ready to start.

When I started building bikes I just did it in a similar approach as with the trucks and cars: from front to rear. With this bike I moved away a bit from this principle and although I started building the front of the frame and the front fender first, quickly after that I went on completing the whole basic frame. The dimensions are based on the wheels that I chose to use (Part 2903), giving a 1:10 scale exactly.

Finishing the frame first makes putting in the massive engine more efficient. The famous Harley V-twin engine only looks



good fully chromed in my opinion, so harvesting my chrome collection for the correct parts took quite some time and included adding some parts to a fresh batch that I had never chromed before. I did not want to sacrifice on any detail here, and made sure all possible parts were chromed. Building a relatively compact engine with chrome is a nice challenge. Due to the chroming the factory tolerances on the LEGO® are a bit compromised by the layer of chrome plating which is a few thousandths of a millimeter. For that reason building very compact with a lot of parts can be a big effort, as chromed parts are sometimes hard to mount onto each other, but then again beauty has its price.

When the engine is fixed on the chassis I mount the fuel tank and the connected seat. Now the engine is chain linked to the rear wheel gear, and the rear fender is put in place. The last phase is creating the bags together with the exhausts, which can now be fully connected to the piping on the engine itself. This is for the biggest part done with the very rare official

LEGO® chromed parts from the model team days (Parts 71075 and 71076). Most of these are over 15 years old. The exhaust ends for both trucks and bikes are chromed wheel hubs (part 2999). I have also used inverted and chromed Fabuland @buckets for these.

The only thing left then are some stickers, and although many of my builds have some, and some even quite excessively, I am trying not to rely on them too much. I like creating them though. I use some vector based software called Coreldraw for that, as well as some picture editing tools like Photoshop. As some initial groundwork I often browse to the 'Brands of the world' website (www.brandsoftheworld.com). Here I can download several free to use existing company logos and many other vector graphics to use. In this case I found an old Maltese Cross that was very usable as it also used as the symbol of the German Luftwaffe, and in many tuning and customizing themes. I scaled it, and color trimmed it to the official LEGO colors for which I use a color table from the net (Peeron) with printable values (color coordinates). To make all of this work properly you need to know a little bit about colors and processing them into prints. A buddy of mine owns a company that can print quality stickers, and he is always so kind to print mine along in a batch. The big advantage is that these prints are also precut in the stickers desired shape, and therefore very easy to apply. The last step includes adding some detail around the steer and headlight on an early morning Sunday, and ready it was.

Both of the creations featured in this article will be on display at a limited number of events during the year, together with more of my work. News on events I participate in can be found on my Flickr page (www.flickr.com/bricksonwheels).
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