

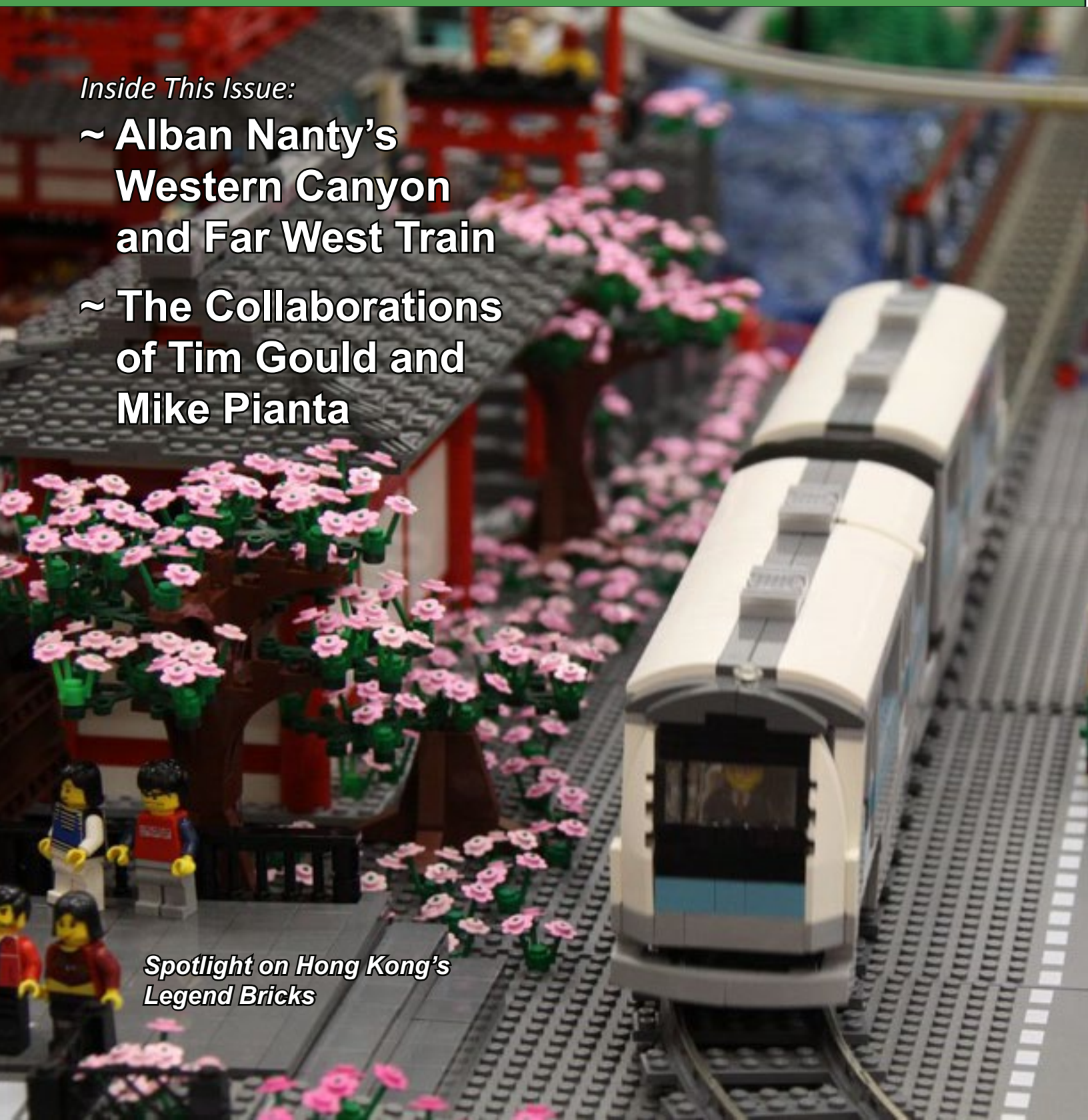
# RAILBRICKS<sup>TM</sup>

BRICK RAILROADING MAGAZINE

*Inside This Issue:*

- ~ Alban Nanty's  
Western Canyon  
and Far West Train
- ~ The Collaborations  
of Tim Gould and  
Mike Pianta

*Spotlight on Hong Kong's  
Legend Bricks*







Adult, women's  
& kids sizes!



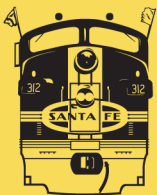
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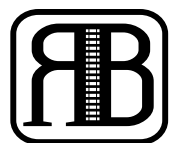


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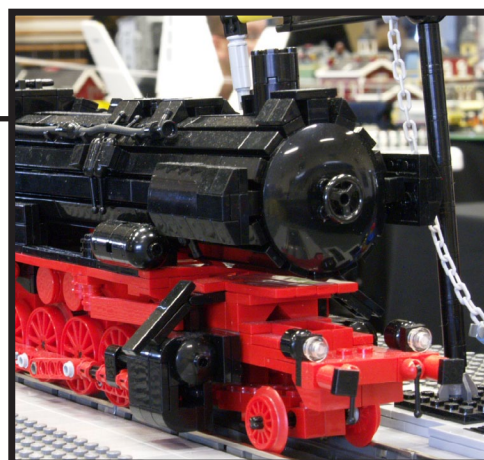
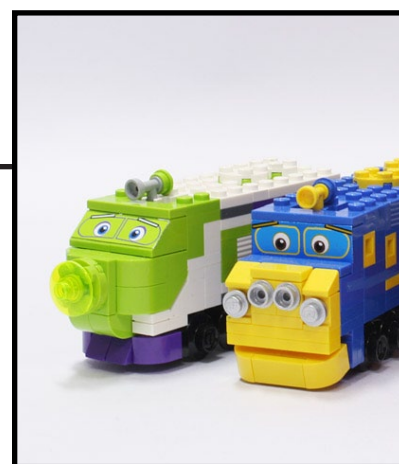
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## ALL ABOARD!



As I compiled this issue of RAILBRICKS, I found myself looking back at my time in the LEGO® hobby. This issue, our twelfth, and my sixth as editor, marks a personal milestone for me. Realizing this made me pause for a few moments to remember. I got into the hobby as an adult at the turn of the century. In 1999 LEGO released the Mindstorms Droid Developer Kit, set #9748. At the time, I was working in an I.T. department, and we were dedicating all our time preparing for fallout from the dreaded “Y2K Bug”. My daughter was three years old, which is probably how I found myself in a toy store staring at three fascinations from my childhood. All combined into one box, LEGO, Star Wars™, and robotics tugged at me from the display shelf. “The other guys in the department will get a kick out of this”, I remember thinking, “I’ve got to buy one and take it to the office”.

Almost fourteen years later, my collection of LEGO sets and parts has grown, and the number of people that I’ve met through the hobby has introduced me to individuals from around the world. I’ve spoken with engineers, designers, artists, writers, professors, and more. I’ve conversed with people who are known worldwide, and I’ve talked to people who barely leave their home towns. I was generally considered quiet and shy as a child, but now that I have several years of displaying at public shows in my past, I’ve talked to probably tens of thousands of people about LEGO trains. Everyone that I’ve talked to, both children and adults, is fascinated by the creations that they see, and the people that build them. Many say that they never realized how large our hobby community is.

The truth, and what I love most about it, is that our community is not only large, in the geographic sense; it is also small in that we are a tightly knit group. While we may be spread across continents, many of us know each other by name, and we often become friends outside of the hobby. Language and culture barriers don’t stop us from getting to know each other. Income, age, and social status are less important to us than imagination, fun, and “great parts usage”.

So, while I celebrate my sixth issue as editor of RAILBRICKS, I would like to thank all of the people who have contributed to the magazine over the years. RAILBRICKS is much more than a small group of people producing an English-language magazine. Without your submissions, past editor and RAILBRICKS founder Jeremy Spurgeon and I would not have had anything to compile and share these past twelve issues. RAILBRICKS is a community-driven project, authored by friends and colleagues from many different countries. If you would like to submit an article for publication in RAILBRICKS, the entire team welcomes your talent, imagination, and time. Without you, we would not be a part of the community that we all enjoy so much.

-Elroy

Instructions, Challenges, and Tips & Tricks have been categorized into the following levels:

**B**

Beginner

**I**

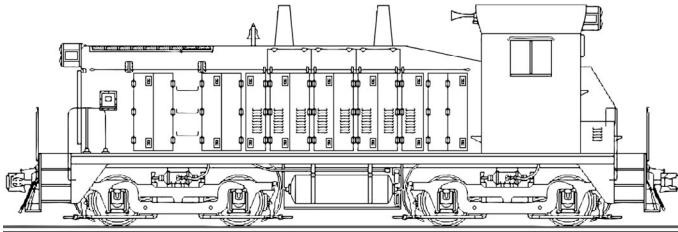
Intermediate

**A**

Advanced



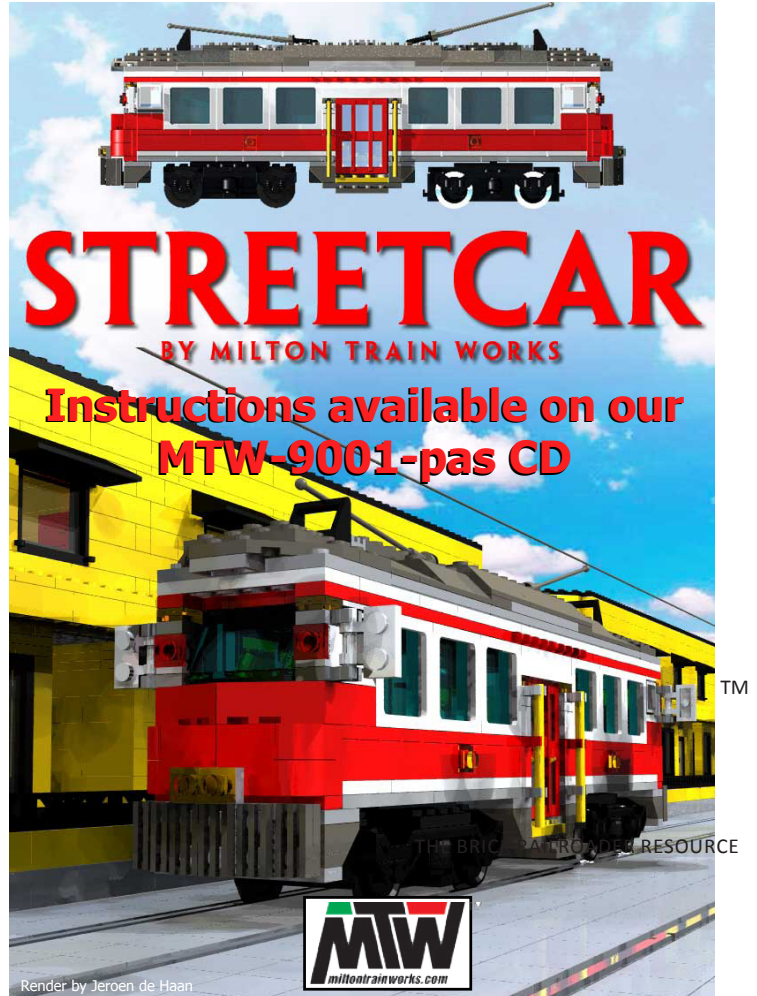
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*Have an idea for RAILBRICKS?  
Here are some guidelines for  
getting your article published in  
an upcoming issue.*

#### Who may submit an article?

Anyone may submit articles for consideration by the RAILBRICKS staff. Submitted articles are reviewed and, if suitable, used in future issues of RAILBRICKS magazine.

People submitting articles do not need to be professional level writers. RAILBRICKS is a magazine for fans, by fans. We welcome articles from enthusiasts who build, collect, and play with LEGO® trains. When we evaluate articles, we look for quality in the content and the basic writing style. We also evaluate any photos that accompany the submission. Every article to be published is edited by the RAILBRICKS staff to increase readability if needed, and while basic grammar and spelling are expected, perfection is not necessary.

#### What sort of articles may be submitted?

Any material related to the creation, display, or collecting of LEGO trains is welcome. This includes articles about prototype trains or railroading locations that may spark inspiration, overviews of models that have been created, or step-by-step instructions for train models. While our focus is LEGO trains, articles about related items, such as modifying track with non-LEGO® elements, are also welcome. We are also interested in the overall LEGO train community, so articles about events, people, or clubs are also encouraged.

#### How long should articles be?

Submissions should be long enough to cover the article's topic, but short enough to hold the attention of the reader. In general articles should be between 750 to 3,000 words in length, and include any photographs or images that will accompany the text. In addition to images, any sort of source material that was used during the writing of the article, such as website URLs or book titles, should be included in order to give readers additional resources should they decide to read more about the topic outside of RAILBRICKS.

#### What if an article is over 3,000 words?

3,000 words is a guideline. If you have an idea for an article that may be over 3,000 words, please send us an outline or summary. We may decide that the idea warrants the extra space, or the article may be a good candidate for being printed in installments across multiple issues.

#### How should articles be prepared?

Articles should be typed in either a text document or e-mail, and should use proper grammar, punctuation, and spelling.

#### How are articles submitted?

Completed articles may be e-mailed to [editor@railbricks.com](mailto:editor@railbricks.com). The text of the article may either be in the body of the e-mail, or added as a file attachment (Microsoft Word, OpenOffice Writer, text file, etc). Images to be included with the article should be submitted as separate attachments, and clearly named.

We can accept images in JPG, GIF, PNG, or TIFF formats. High resolution images, 300 DPI at least, are preferred as they will reproduce better than lower resolution images.

#### When will my article be printed?

Accepted articles will be included in future issues of RAILBRICKS. When the article is published depends on a number of factors including the amount of content already available to be printed, themes of specific articles, and article length. In short, there is no way to determine exactly when an article will be appear.

#### Does everything that gets submitted get published?

Unfortunately, no. While we will make an effort to publish what we can, it is not always possible to include everything.

#### Are authors compensated for their printed articles?

No one is paid for RAILBRICKS, including the editorial and writing staff. RAILBRICKS is an all-volunteer project, and as such, authors are not paid for the use of their material. Articles used by RAILBRICKS remain the property of their authors.

## CLUB SPOTLIGHT







# LEGEND BRICKS


東方之磚

Hong Kong is a city that is well renowned as a shopper's paradise and home to some of the most exotic cuisine in the world. This vibrant city is also the home of the Legend Bricks group. This small but dedicated group has been taking part in public displays for a few years now, serving up creations that are as sumptuous to the eye as the local cuisine is to the mouth. Formed in early 2009, Legend Bricks put on its first public display the next year. Brick Adventure 2010 attracted over 11,000 visitors over a 2-week period...very impressive for a new group! Since then the group has put on more shows, the most popular having over 220,000 visitors.

Making layouts for display is far from easy, as space is rather limited due to the high population density of Hong Kong. The rent for any space, regardless of whether it's for residential or storage, is very expensive. This has not deterred the group from building layouts and then sourcing venues to put them on display. While planning the layouts, a city plan is first drawn up and then subdivided into zones; each zone is then allocated to a group of members who will be tasked with building those areas. This coordinated approach has provided excellent results with constructing displays, especially when you take into account the limited space that members have at their disposal when building the layout.

The group's latest work is for the Tsim Sha Tsui Past, Present and Future exhibition at the Hong Kong Heritage Discovery Centre. The display includes a stunning static lay-

out which features the Tsim Sha Tsui Railway Station and the Ferry Pier as it would have been in the 1970s. Prince William, a member of the group, has built locomotives and rolling stock of the former Kowloon Canton Railway, some of which are used in the display alongside those made by Benny, another Hong Kong based AFOL who was invited to be part of the display. Besides building trains based on the ones in Hong Kong, members of the group have also built a wide variety of trains from railways in Japan and China, as well as collecting official Lego sets.

The collection of Japanese trains built by members such as Andy Bear, Tf2 and Prince William is fairly extensive, and includes numerous models of the Shinkansen (Bullet Train) from the JR 200 Series up to the 700 Series. A good number of suburban EMUs and Freight locomotives have also been made, providing plenty of variety. Impressive is the dedication that the train builders in the group have to the hobby. For many of them the only time that they get to run their trains is on the exhibition layouts, as there is very little space at home to do so. For a club as young as Legend Bricks, they have proved themselves to be a highly capable and talented group. I am looking forward to seeing what they come up with in the future with their displays, and I dare say a large number of the population in Hong Kong will be too. 

- Article by David Stannard

# A Crazy Idea

– to create the world's longest LEGO train track, 1,500.64 metres (4,923.35 ft.).

By Henrik Ludvigsen

It all started the day before Christmas, 2011. My wife had fallen asleep on the sofa, and our daughter, aged 4, was sound asleep in her bed. We had spent the day preparing for Christmas; the table was set, the food was prepared, the Christmas tree was beautifully decorated with the presents underneath, and we had also managed to clear a room for an American exchange student who would be living with us for the following five months. During this clean out, I found my old LEGO® and, for the first time since 1975, I took a good look at my collection of LEGO trains and blue train tracks. It wasn't impressive, but it brought up a lot of nice memories.

I was surfing the internet and found a Danish LUG, "byggepladen.dk". Suddenly I had an idea. I wanted to build the world's longest LEGO train track! From what I could see, the standing world record was 1,190.88 meters. (<http://www.recordholders.org/en/list/lego.html>).

I had enough to build approximately 200 meters, so I joined the Danish LUG and posted a comment on their blog. I wrote that I wanted to build the world's longest LEGO train track, and asked if anyone had any blue train tracks they wanted to sell. The comment gave a few responses and no doubt created some raised eyebrows. They were probably thinking "What a fool".

Once I'd discovered Bricklink, things started happening quickly. I soon began buying train tracks from all over Europe and, from January 2012 to June 2012, I had more than 500 packages delivered to my house. In the process, I was fortunate enough to receive donation packages from Denmark, Belgium, Switzerland, France, Italy, Argentina and several other countries. I put ads in major Danish newspapers, asking for train tracks. I got countless great (and funny) answers from all over Denmark, and elderly people probably saw this as an opportunity to finally get rid of all the things their children and grandchildren had no interest in. I bought some tracks in a Dutch Bricklink shop. The seller asked me what I needed all these train tracks for. I replied that I wanted to build the world's longest LEGO train track, and he found the idea exciting. He bought large supplies of train tracks from Holland and Belgium, and they were sent to me. He sent me an email today (10th of August, 2012) saying he just received more than 1,000 train tracks (again), so a very big THANK YOU to Maxx Kroes from Holland!

From the beginning I had anticipated the blue train tracks to be the hardest parts to find, as they had long been out

of production, and the white sleepers to be the easiest, as they are still being produced. It turned out to be the exact opposite. The blue train tracks came pouring in from all over, whereas the white sleepers were absent! I managed to turn that around via the Danish LUG, with a large order to LUGBULK at LEGO.

During May 2012 I had designed a train track measuring 1,500.64 meters. Now I needed a spacious place! Luckily my father-in-law is a freelance AV-technician with contacts to the big congress centre, Bella Centret, where LEGO World is also being hosted. He managed to book the congress centre for the weekend of the 21<sup>st</sup> and 22<sup>nd</sup> of June 2012, free of charge, which made the final attempt for the record a possibility. I quickly realized that it would take more people to bring this project to life, so I asked the Danish LUG if they wanted to lend me a hand. Lucky for me, they agreed. Fifteen people showed up to help with the building and of the train track, despite being in the middle of the Danish industrial summer holiday, when most people go abroad on vacation.


We met outside the main entrance to the Bella Centre on Saturday, the 21<sup>st</sup> of July at 9am. We found the hall we'd been allocated and spread the design sheet on the floor, so that everybody would get an insight into the task at hand. At 4pm the track was completed, and my old train (133) was given the honor of the first trip around the 1,500.64 meter long track. It took 1 hour and 55 minutes to complete the journey, and several other trains also travelled the full distance.

The track was made out of more than 35,000 train tracks and white sleepers.

This entire arrangement was actually just a test for a later record attempt, which will hopefully be accepted in 'The Guinness Book of Records'. The final project will be more than twice the current length, as I have collected enough train tracks for 3,000+ meters.

You can see more about this record on <http://www.youbrick.com/v/Trains/togbane>

Today my collection consists of more than 70,000 tracks, sleepers, carriages, locomotives and other accessories for LEGO trains, but there are still gaps to be filled.

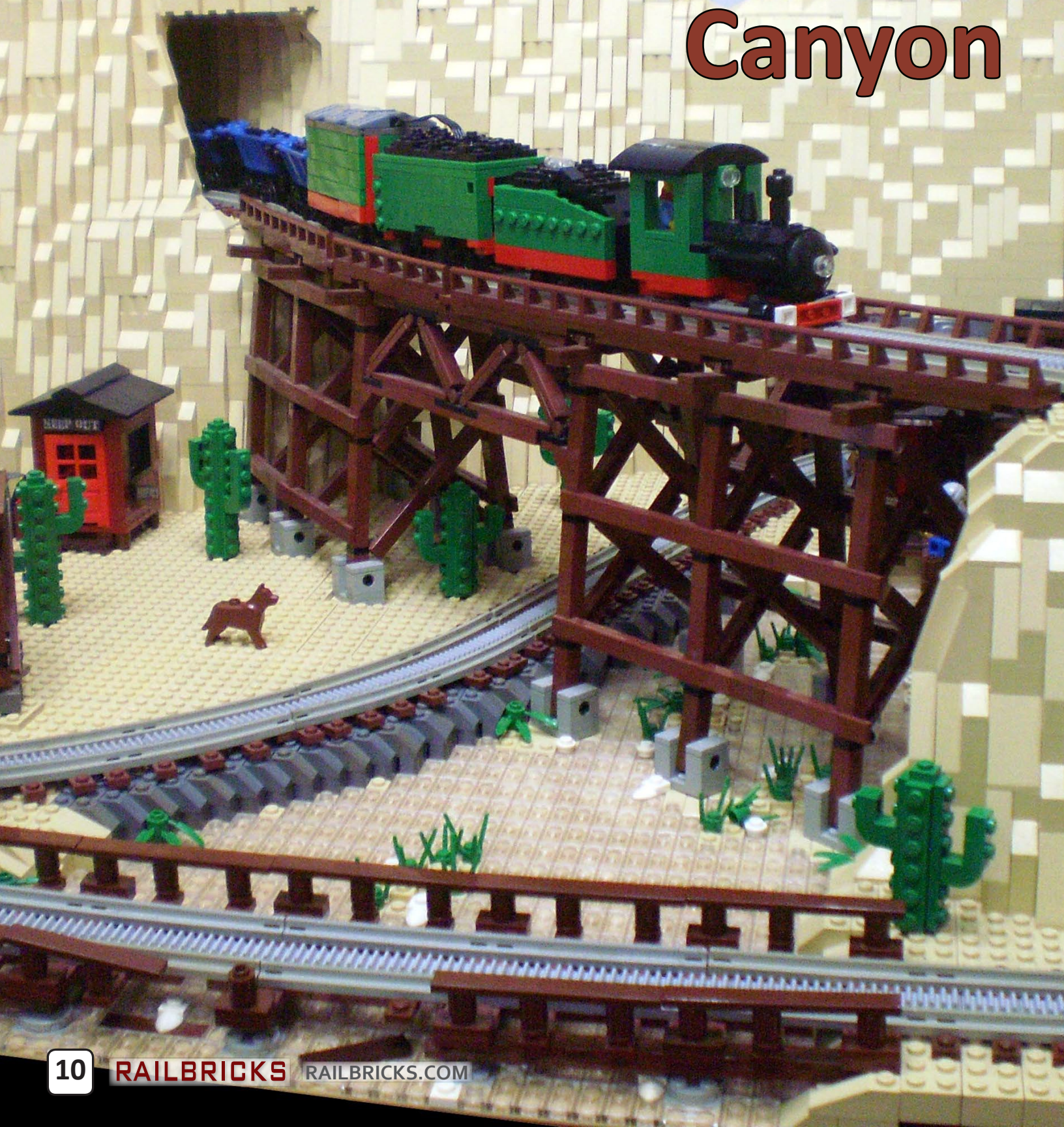
In addition to creating this project, I would like to say a great THANK YOU to all the people who have sent me train tracks. It has been fantastic and it is greatly appreciated. Also a grateful thank you to the Danish LUG - byggepladen, my father-in-law Benny Andersen, Jan Beyer at LEGO, and last, but not least, to my beloved wife who has seen the amount of tracks grow explosively, (taking up almost an entire room) without moaning about it once. 







*Alban Nanty's*  
**Western  
Canyon**





## *The author of BlueBrick shares the experience of creating a fully-working narrow-gauge layout.*

When I started this project, I quickly realized that it wouldn't be a little MOC. I remember at the time that I told my wife that it would take me at least one year to finish it, which made her roll her eyes to the sky. At that moment I also briefly mentioned the beginning of my project to Didier Enjary, with some sneak preview pictures, and he immediately asked for a RAILBRICKS exclusive announcement... which I couldn't refuse. So here it is!

### **The Track**

In fact, it took me two years to complete the layout, but hey... I'm falling into my late-thirties dark age, as Elroy described it in the editorial of RAILBRICKS 11, and had no deadline for an event exhibition to urge me (I'm quite isolated in Shanghai, and there is no LUG/LTC in this megalopolis). The starting idea of this project was to make a 4-stud wide train to make something different than the traditional 6, 7, or 8 studs (I'm an 8 studs builder by the way), or even the 2 studs for which I also commit some models. At that time, the official 4-stud tracks were not very common. Their first appearance was in an Indiana Jones set, the "Temple of Doom" (set #7199). By the way, I'm still lobbying TLC for producing a 4-stud straight track, and later on, perhaps points and crossings, and I hope every Train LEGO® Fan will join my lobbying effort.

For this project, I wanted, of course, to have a running train, and to do that I knew that it had to be a battery-powered train. Also excluded was the use of points and crossings, which are too complicated to make work with unmodified 4.5V rails. Therefore, the challenge was to create the longest loop possible, in a minimum of square space, and without too many levels. To design the track layout, I used, of course BlueBrick, the software I wrote, and started to line up some classic 6-wide tracks since I was going to use 4.5V rails with the same curve radius. I ended up with a double loop, crossing over in the middle, with only a half straight track inside (so only one straight rail had to be cut in half,

not a big deal), the whole whole thing fit into two modules (3x6 32x32-stud baseplates).

I then quickly moved to build the track layout for real, and to figure out where to go up, where to go down and where to cross over the tracks. I didn't have any idea on how I would power the engine at that time, but I knew that I couldn't afford strong slopes to give me a chance of success. Fortunately, with a 4-stud-wide locomotive, the height of the train is also reduced; therefore the height between the bottom and top tracks wasn't too excessive.

### **The Theme**

At first I didn't know if I wanted to create a train layout in an uncommon scale, somewhere between minifig scale and micro-scale. I hesitated to create nice coach cars or a merchandise train in that scale, with a big train station and other side buildings, but, looking at the geometry of the track, I felt that it wouldn't fit well, so I finally ended up building a narrow-gauge train in a minifig scale landscape.

The theme was quite obvious for me. Such narrow-gauge is often seen in a coal mine or gold mine, and the latter is attached in our imagination to the American Far West. Therefore, my layout had to be a Far West Mine (of an undetermined type). I searched for pictures on the Internet but didn't find many. The closest I could find was the Walt Disney Big Thunder Mountain Roller Coaster. "God!" I thought, "I will need a lot of Tan or Brown bricks!" I decided to create a big open cave on one side of the layout to use some dark gray bricks, reduce the tan count, and to have an inside/outside layout.

### **The Structure**

While building, I split the whole layout in 3 parts of 2X3 baseplates in order to facilitate transportation in case of an exhibition, but each part is still a bit too big and heavy to transport. Ideally, each baseplate should have been independent, but that creates too many subdivisions and adds some fragility to the structure for an improbable display at a convention. When I started the project I didn't plan to show it in an event. Like I said, isolated in Shanghai.

I chose an intermediate solution between a whole solid monolithic MOC and a modular one. And you know what? In two years many things can happen in your life, for example moving your house... The furniture movers dubiously considered my LEGO mountain, were not convinced about its modular packaging feature, and decided to wrap the whole layout, on the table top, with the wide transparent plastic film used on the palettes, while removing the legs of

the table. Fortunately it arrived in my new apartment not too destroyed.

The mountain building was straightforward. I used a huge quantity of 1x2X3 tan slopes, which I was happy to order, and order again, through Bricklink in lots of several hundreds. For the tunnels I decided to have an access in case the train derailed inside and got stuck. Therefore, I built the mountain part above the tunnel as removable parts, simply fit in the surrounding mountains. The mountain structure is classically built on Duplo bricks to make pillars and 1x16 Technic bricks for the beams.

### The Decor

For the sand, brown color shades, there's not a lot of choices. Without surprise I chose the Tan color for its availability and decided to add a line of Dark Tan color at the top of the mountain to imitate the different geological strata of the rock that gives a mushroom shape to some landscapes due to erosion. I guess I should have add even more strata of different colors for a better effect, but to be honest, I was a bit tired of this MOC after so much time.

The bridge is, of course, adapted from Jeremy Spurgeon's bridge (see RAILBRICKS #3, page 27) to fit the 4-stud gauge. Like Jeremy's bridge, it is not a straight bridge. There's one curved rail in the middle. Regarding the river, I knew from the beginning that I didn't want a blue river. The depth of

the river is small, in fact, it's almost a fordable waterway, so I just chose trans-clear tiles to represent it. Originally the water way was going to originate from an underground passage, but later on I decided to add a light well above one tunnel track in order to see the train passing in the tunnel. I made this light well with a 16x16 trans-clear baseplate and created a little lake on top of the mountain. I decided to link this lake with the water way, thanks to a waterfall. I'm not very proud of this waterfall. I know many people don't like it. I just tried to use trans-clear bricks to represent it.

The damaged little bridge over the waterway is the first decor element I built, and I wanted to have one rail lower than the other one, forcing the train to lean on one side when crossing the bridge. I like it, despite the fact that my daughter keeps asking me why it is broken, and pushing me to repair it.

The house along the river is built using Steve Barile's technique described in RAILBRICKS #8, page 20. It is not attached to the ground, just lying down. I'm quite happy with the roof design, even if the structural bricks generate quite a thick roof. I used the same technique, but with Dark Tan tiles, for the tunnel entrance building on the left, which is also just lying down on the layout. This makes it a joy for my 4-year-old son, who often picks up and disassembles decor elements. In particular, he has destroyed 3 or 4 times the bridge in the cave, which is a nightmare to rebuild because it's a curved and sloped bridge, all in brown.





I'm also quite happy with the Water Tower, which is a bit fragile, but not so much once assembled. This one is my own design, or, at least, I didn't see a similar design on the Web. The 1x8 tiles are attached to two 1x1 plates with horizontal clips, but not all at the same level. Otherwise, the thickness of the 1x1 plates collide with each other and prevent the 1x8 tiles to be joined. So you have to alternate, one tile has the clips at its extremity, and the next one at the middle. The clip are held by 6x6 radar dishes mounted in SNOT 180 degrees in the middle, with two dishes in the middle, and two dishes at top and bottom, which also close the water tank nicely.

Finally, the cactus design comes from the Modular Western Town Cuusoo project by mb\_bricks, and that was the last decor element I added.

### The Train

When I started to design the train, I didn't have any specific engine in mind, but I knew that it had to be a steam locomotive, and that I wanted to use the Tiny Train Wheel, #2927. The RC Train Wheels, #55423, would have been easier to power thanks to their Technic axle hole, but they really look disproportionate. So I insisted on using the Tiny Wheels with an illegal move: I carved a cross-like Technic Axle Hole in the wheel in order to use a 4L Technic Axle, with a Technic Gear on it, to power the wheel. I then quickly added a small PFS motor to drive the gear. It worked reasonably well


on a horizontal rail track. Unfortunately, the grip of the Tiny Wheel was not enough in the ascending slopes. I tried to add some rubber bands to the powered wheels, and, for sure, it helped. The train could climb light slopes, but I felt that it was still too hazardous. This is when the idea of a cog train came. I already had the gear on the axle running, so adding some cog racks on the track was not a big deal. However, the 12 Tooth Bevel Technic Gear, #6589, necessary for transmitting the power from the motor, has a crown, which means the teeth are not open. I tried with the older version of that gear, the 14 Tooth Bevel, #4143, but this older version is wider than the Tiny Wheels, so the wheels couldn't touch the rails. That's how I came up with my second illegal move, which was to open the teeth of the #6589 gear. But consider this: since my train was now a cog train, not pulled by the friction of the wheels on the rails, but by the gear on the cog, I could avoid the first illegal move, i.e. just use the normal wheel holder, and put the pulling gear on a separated Axle. I hope you would agree that these illegal moves were only necessary to power a train in a very uncommon gauge. I hope the LEGO purists will forgive me.

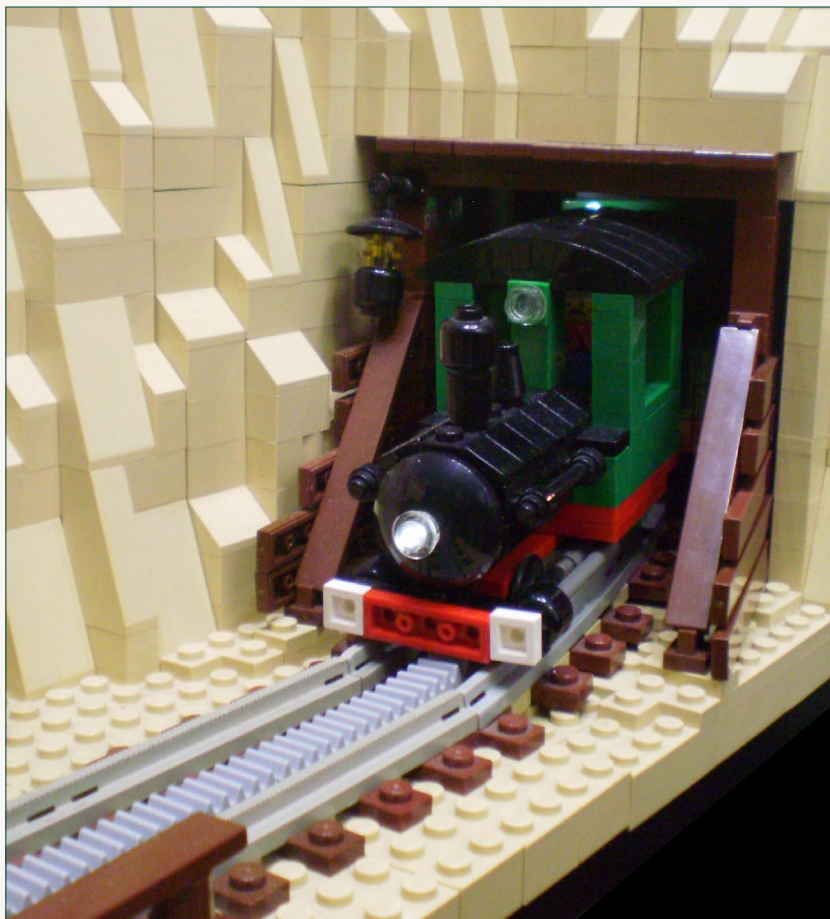
The choice of the motorization was also quickly done. I like the PF System because it can be remote controlled and can also have lights. Regarding the motor, I chose the smallest PFS one of course, but even so, I had to mount the battery pack and the IR receiver. That's quite a lot for a 4-stud gauge. For the train to be able to turn in the curves the wagons couldn't be too long; therefore it became obvious that





I could only place one PFS element per wagon. Due to the design of the locomotive, no PFS element could fit in it. I chose to put the IR receiver in the tender for 2 reasons: first it is the smaller PFS element, and second, the IR top is black which could be easily hidden in the coal of the tender and still be accessible for the IR signal. Then I had to use two tall wagons to hide the motor and the battery pack. I didn't want to create two merchandise wagons, so I built a second tender to hold the motor and couldn't do much better than a merchandise wagon for the battery pack.

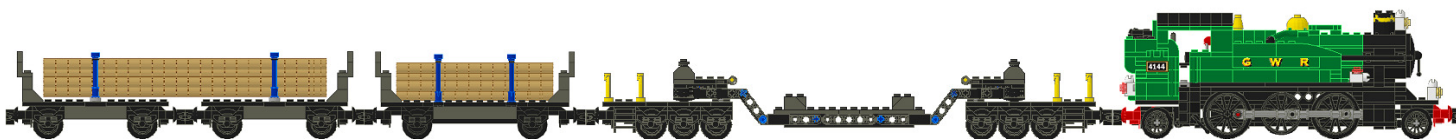
The track gauge is 4 studs but the train is actually 5 studs wide, because, as I told you, I'm an 8-stud builder and I like when the wagons are wider than the track. Also, I didn't want to have a gray wagon, and since the gray battery is 4 studs wide, I needed to cover it with tiles. I will let you look at the nice building instruction (page 44 of this issue), done by Didier Enjary, for the details of the design. 







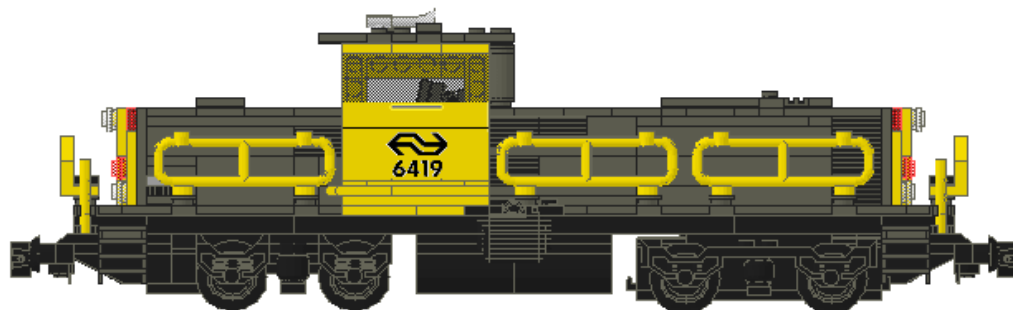




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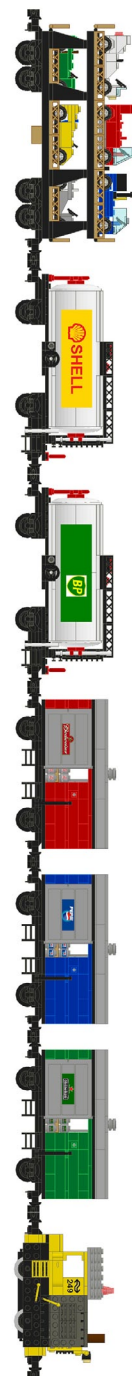
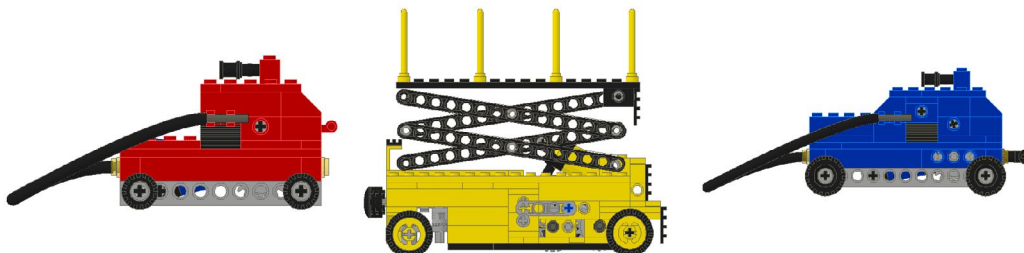
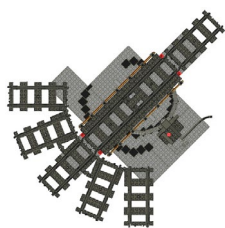
RC turntable and 9V/RC pneumatic switchpoints.

Sets complete with all parts, stickered box, colourfull building instruction (mostly printed, some on CD), list of parts and stickers/decals. All models also available without parts.

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*Original Designs by Tomoyuki Wakata*

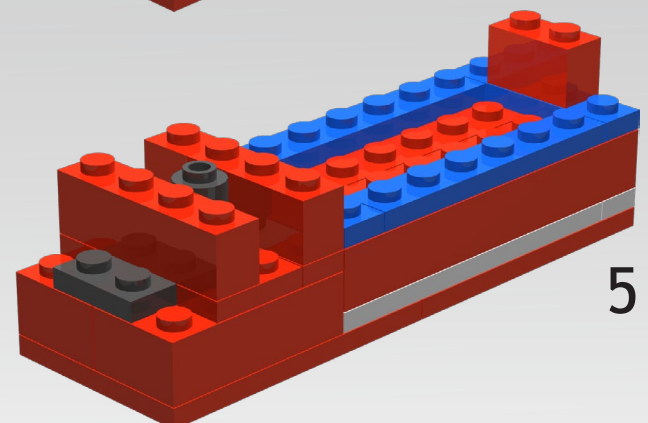
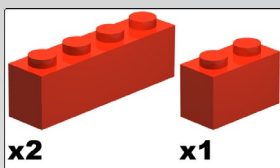
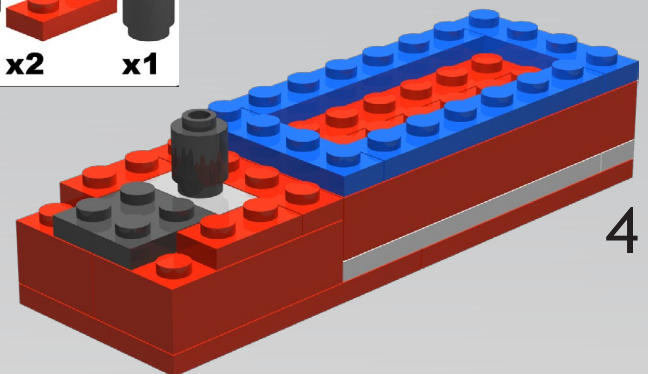
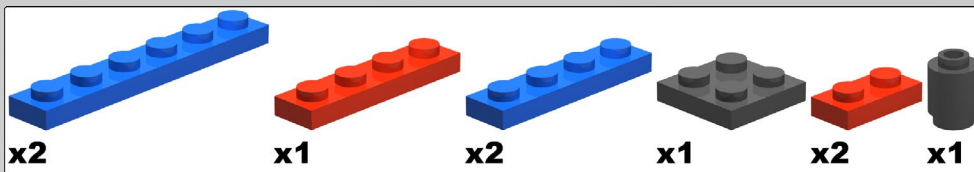
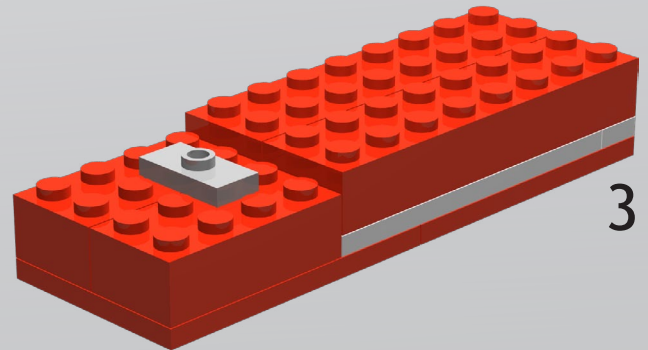
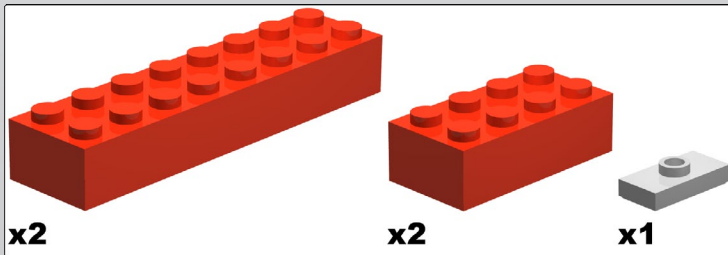
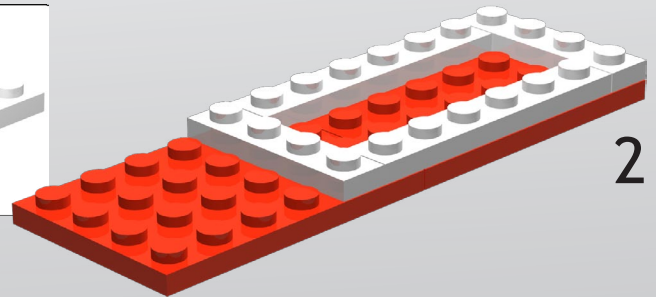
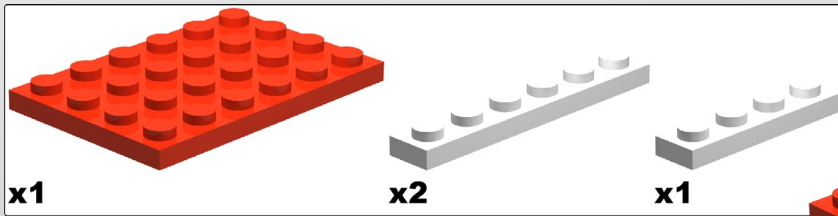
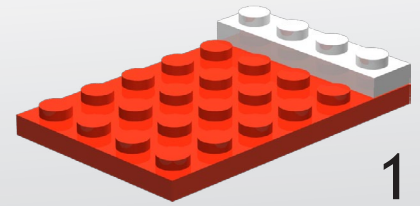
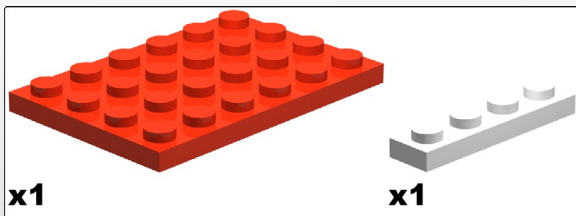
*Inspired by the “Trainee” character Wilson from the Chuggington British computer-animated series for children produced by Ludorum plc.*



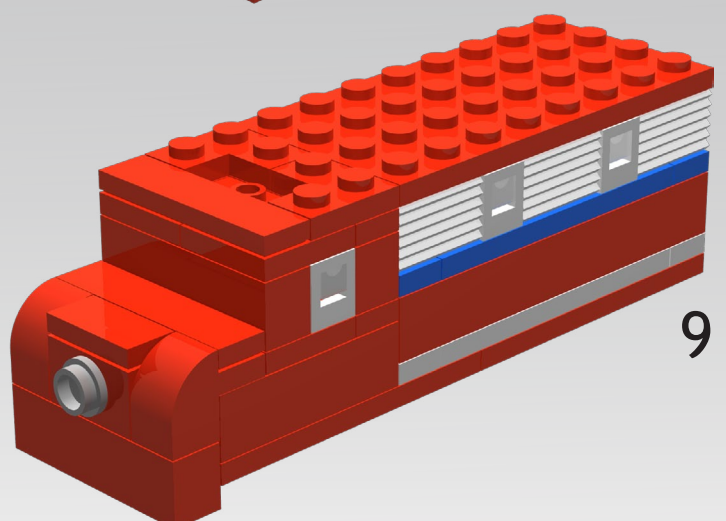
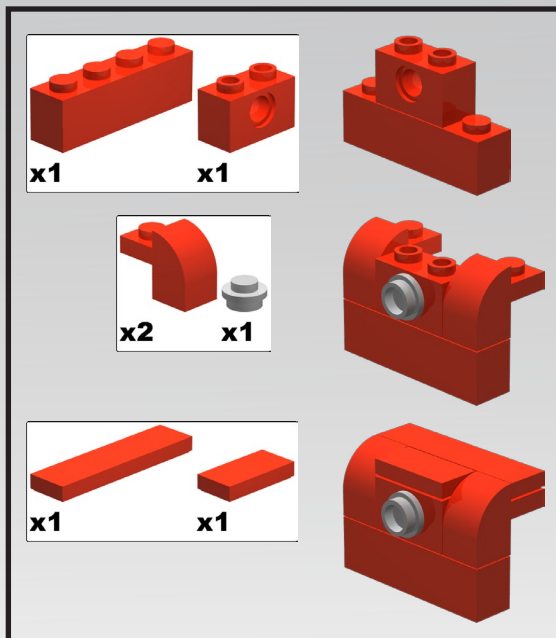
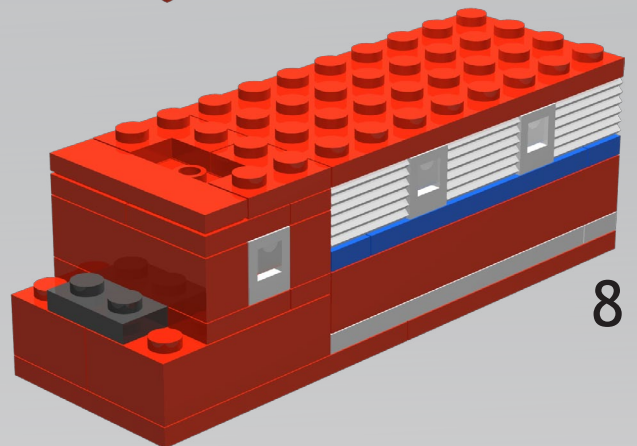
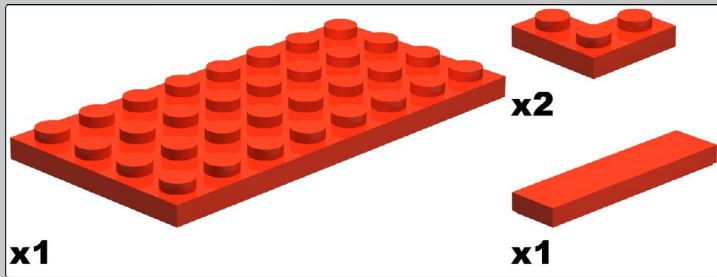
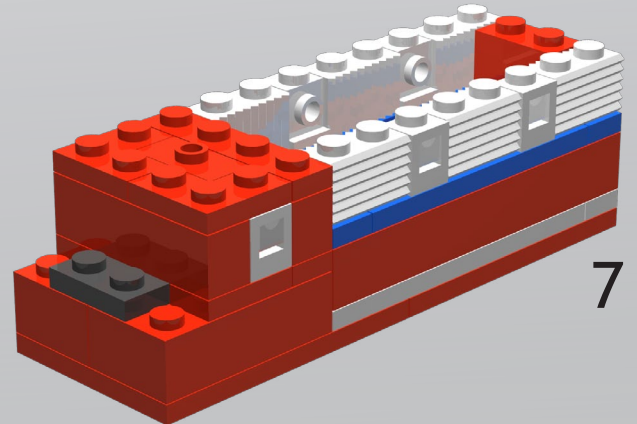
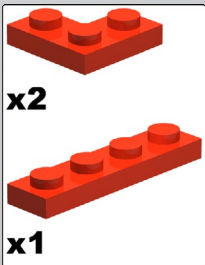
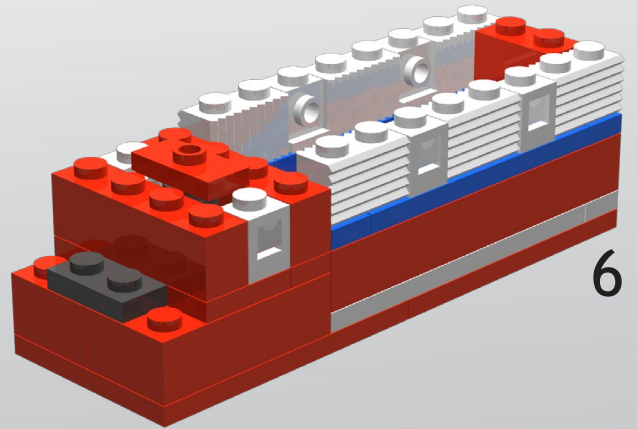
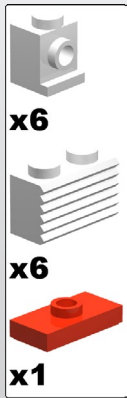
It is no secret that I am a LEGO® train fan. I’m also a father of a 3 year-old boy. We are both big fans of the LEGO “Cars” theme — nothing surprising here. I thought the characters from the Chuggington series, which my son watches every morning, could be nicely rendered into LEGO bricks the same way Martin and Flash McQueen are. After a quick search at BrickShelf, I found these models by Tomoyuki Wakata. Unfortunately, Tomoyuki had his models parted out and did not get detailed photos. I decided to re-create them. They are not really aimed at running on tracks but they have this cute toyish feel my son and I appreciate so much with the LEGO Cars. In this issue, RAILBRICKS gives you building instructions for the main character “Wilson”. You will soon find “Brewster” and “Koko” at the Building Instructions section at Railbricks.com

Didier Enjary

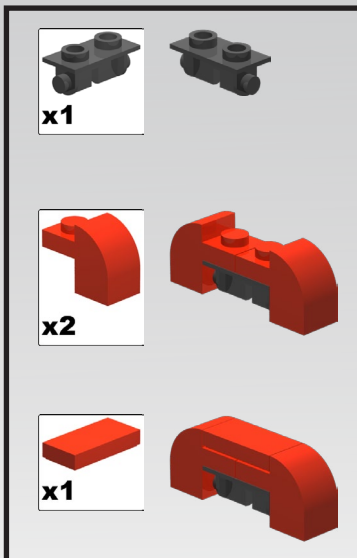
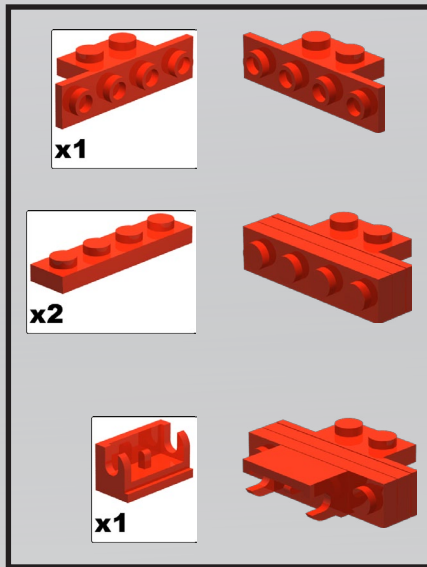
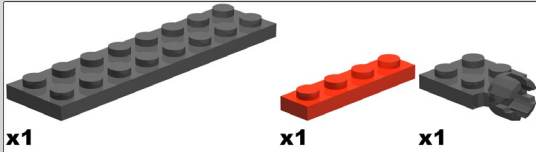
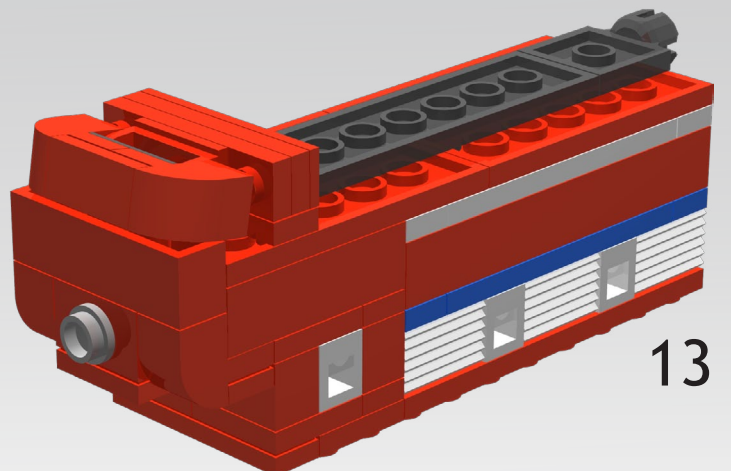
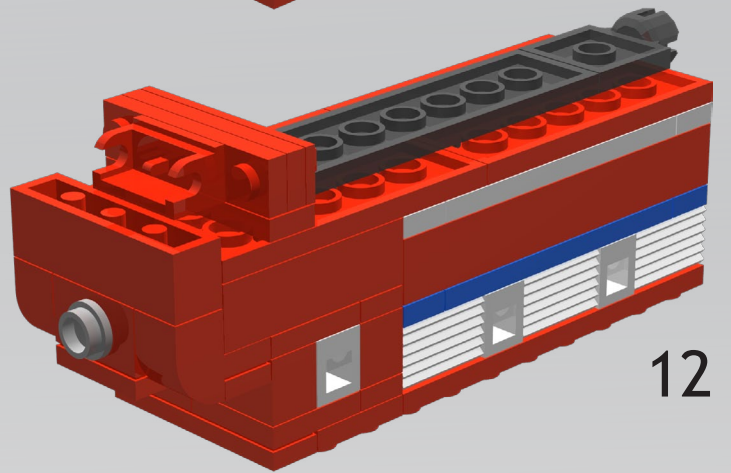
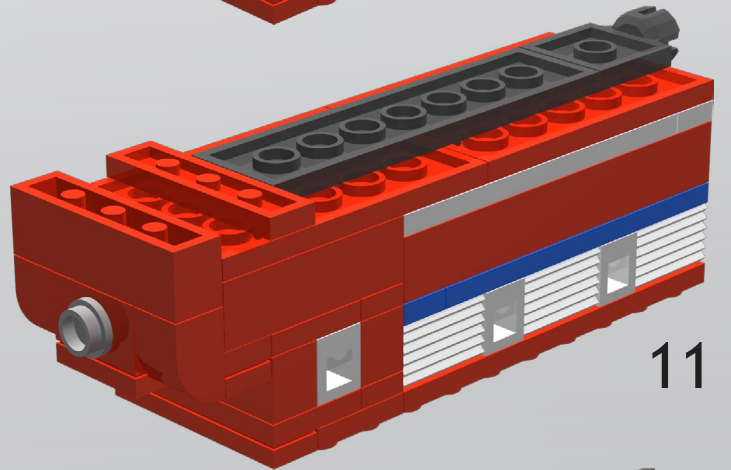
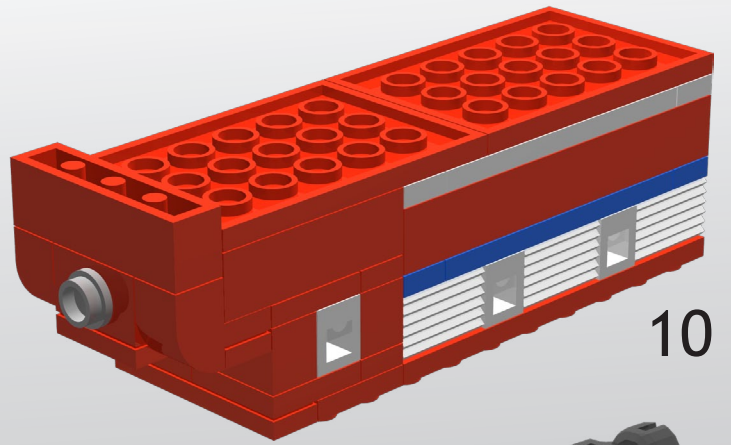








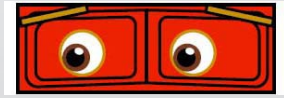




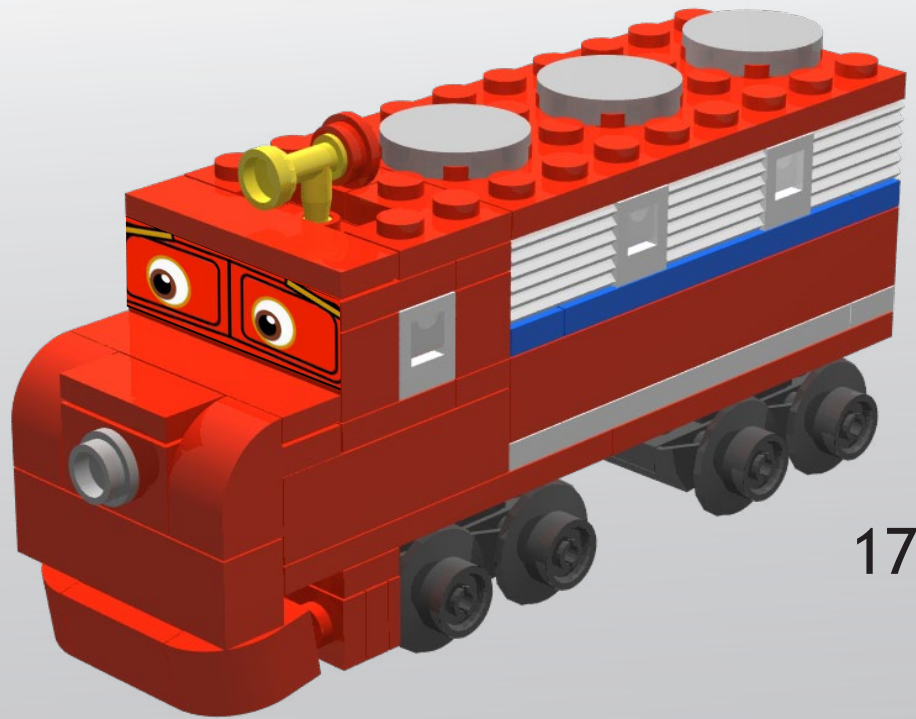




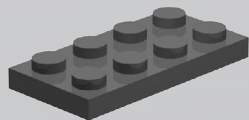




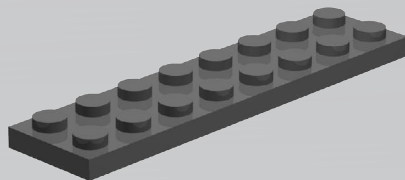
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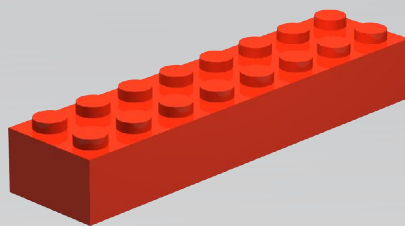
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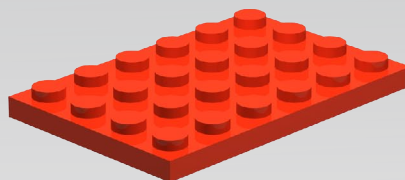
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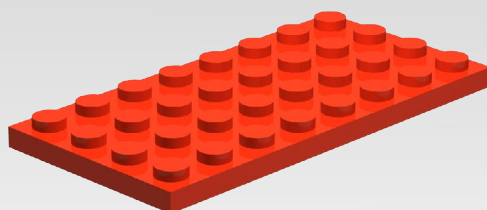
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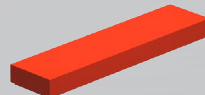
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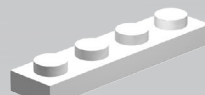
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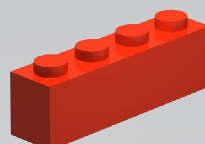
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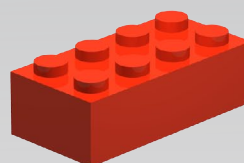
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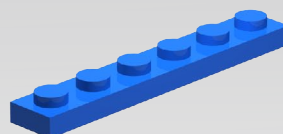
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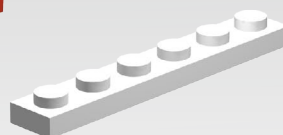
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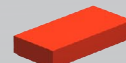
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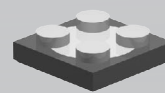
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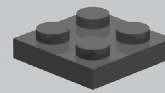
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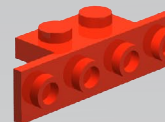
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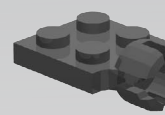
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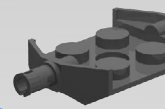
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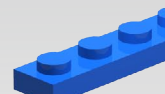
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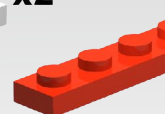
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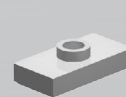
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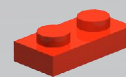
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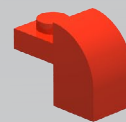
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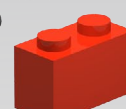
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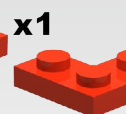
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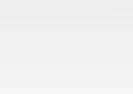
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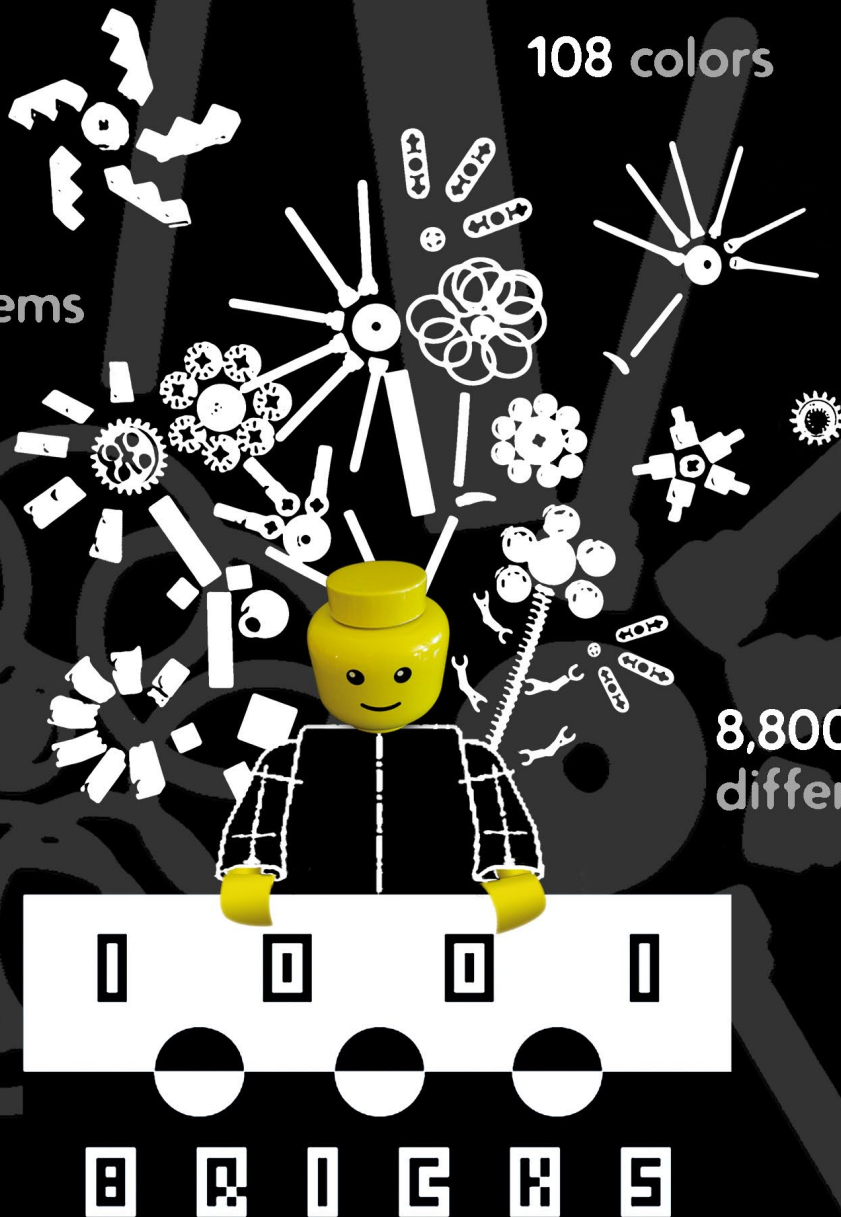


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*RAILBRICKS' David Stannard interviews Tim Gould  
and Mike Pianta about their incredible collaborations*







# *Long Distance Liaison*

*The Making of Ararat and Elmore 1972*



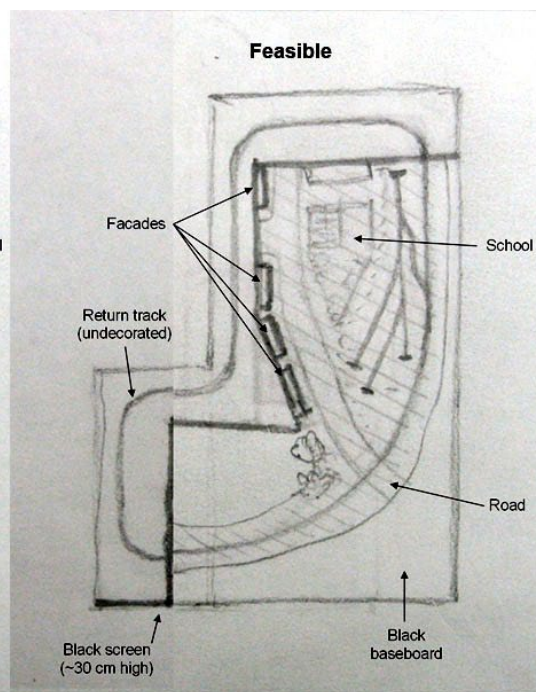
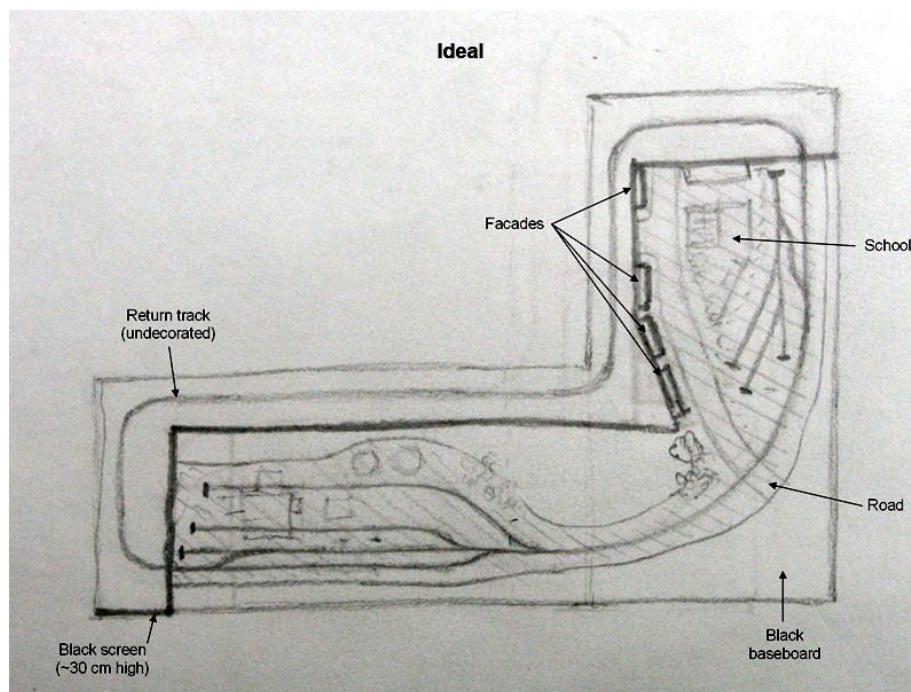
For many train clubs, the planning and construction of an exhibition layout can be a daunting task. Organizing time to meet for building sessions, as well as a host of other issues, make planning hard. Imagine what it would be like if you were a two-man club, and your members lived in different cities nearly 1400 kilometers apart. For most people this is an unthinkable challenge. For Tim Gould and Mike Pianta this is a challenge they have easily conquered, creating one of the most dynamic teams ever seen. They have produced two different layouts based on rural locations in the state of Victoria, Australia for exhibition in the last two years. The first, Ararat 1972, was designed for Brickvention 2011. The second, Elmore 1972, was created for Brickvention 2012. On both occasions these equally stunning layouts won awards, with Best Train Layout in 2011, and Best in Show 2012. The awards were well deserved when you consider the efforts involved in creating these masterpieces.



**RAILBRICKS:** What sparked the idea of the two of you working together on a layout given the enormity of distance between where your homes?

**Tim:** Mike and I had been in contact for quite a while and at some point I thought it would be fun to do something together for Brickvention (having shared a table the year before). We seemed to have similar ideas about what worked and what didn't work in train layouts, and since Mike's train building skills (and it turns out landscaping skills too) put mine to shame it would give me a chance to sponge off his hard work there and focus on cars, buildings and other "town" stuff. I had also been working on some facades based on Ararat for a bit of fun, as I liked the variety of architectural styles.

**Mike:** Tim started it all. He somehow became interested in the eclectic mix of building styles on the main street of Ararat and started building Ararat-inspired facades. At some point, around October 2010, he contacted me and suggested we might throw together his facades with some roads, cars, track, and my trains to make a collaborative display for Brickvention 2011. I have a huge amount of respect for Tim and his building, so I was delighted to be asked to team up with him. Coincidentally, I had a coaling tower from the Ararat loco depot on my to-do list (sadly it has never made it off my list), and I was working on a country Victorian school, which fit well with the Ararat theme. I immediately sent Tim an enthusiastic reply which was the start of a regular exchange of pictures, ideas, and constructive criticism and feedback. To be honest, in my initial eagerness I didn't even







think about the distance issue. However, Tim was quick to remind me that there were some limitations to what he could build given that he would be bringing it all down to Melbourne from Brisbane in a suitcase.

**RB:** What made you both decide on circa 1972 being the point in time for the layout's setting?

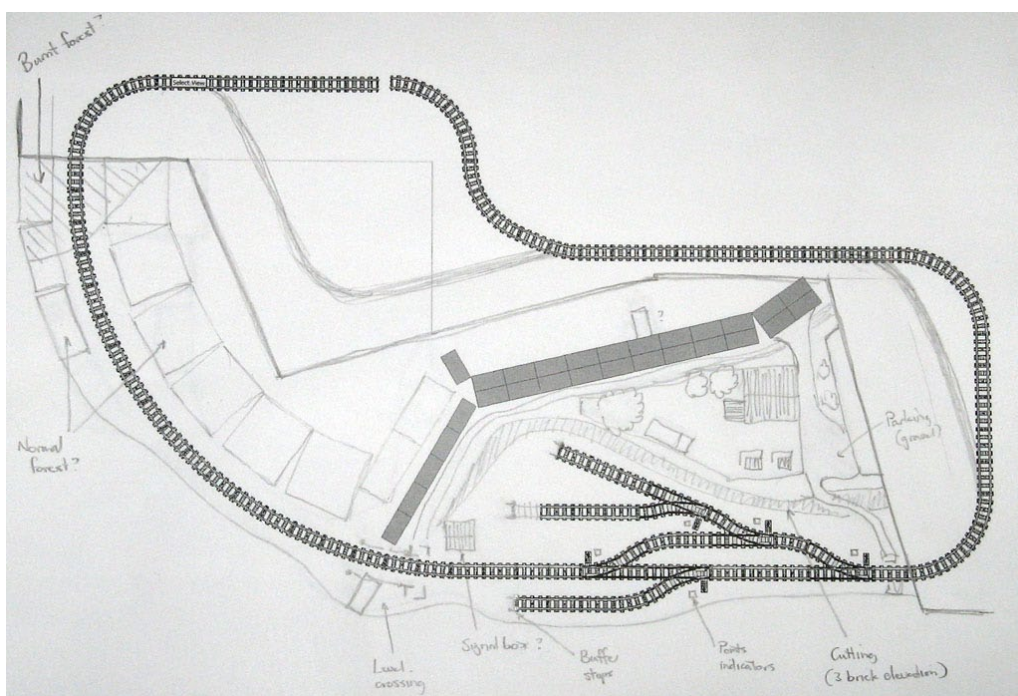
**Tim:** That era is great for model railroads as there's a mix

of steam, diesel and electric rolling stock, without the post-rationalisation homogenisation. I'm also a big fan of cars from the 60s and early 70s, so 1972 seemed a great year for having fun with the flanged and tyred vehicles.

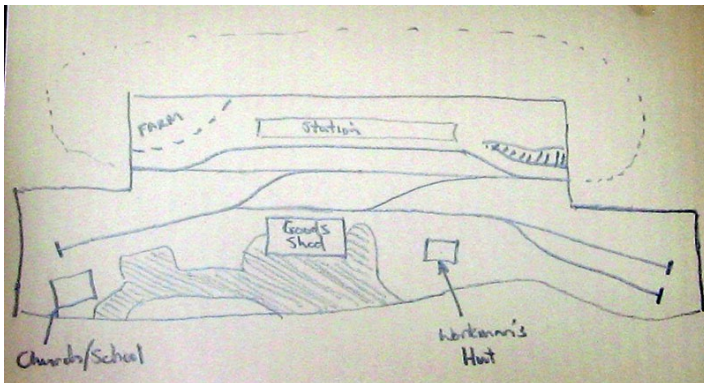
**Mike:** We initially thought the 1960s would be a good era to model, but soon decided that shifting to early/mid 1970s would give us more flexibility in terms of rolling stock and vehicles. We settled on the year 1972 because it allowed us to run both diesel and steam locos without being too anachronistic.

**RB:** What inspired the use of the off-the-grid style of design and the theatrical style setting that you present the layouts in?

**Tim:** Referring back to my first answer, building off the grid was one of the things that we'd mutually agreed was neglected in most LEGO® layouts. And we had ideas how this could be overcome. I think before us, the only person (now I await emails pointing out other examples) who'd really given it a go was Ondrew Hartigan. The world isn't a grid



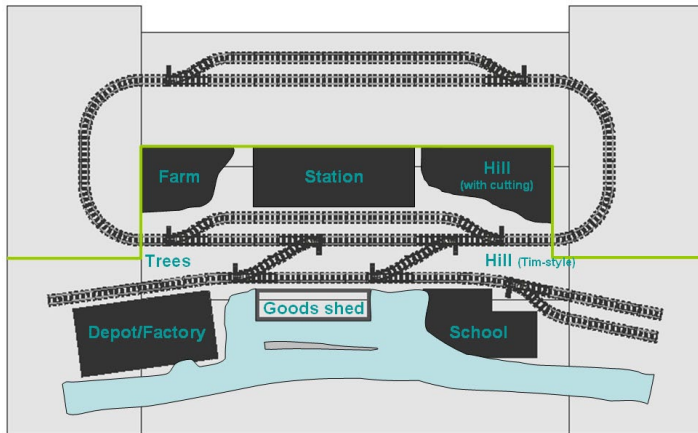




and its LEGO representation should reflect this. The theatrical style was Mike's excellent idea so I'll leave him to fill the details about that.

**Mike:** Tim's initial plan was for us to create a static diorama (he had very little interest in running trains) and he argued that building off the grid was an important feature of a successful diorama. At some point I managed to convince him that we could have running trains without sacrificing the level of detail and realism we were after. The combination of these features added to the challenge (and the sleepless nights) in terms of fitting it all together, but was well worth it in terms of the end result. I will also note that Tim now takes great delight in running trains on our layouts.

The theatrical style of presentation was inspired by one of my favorite non-LEGO model railway layouts: Eamonn Seddon's Totternhoe Mineral Railway (<http://blip.tv/play/gf9zteM6AA>). In this layout the track sits on an undulating strip of scenery that "floats" on a matte black-painted baseboard in front of a black backboard. The notion of applying design tricks from the theatre to model railways has been around since the 1940s, and adds to the illusion that the models are real.



**RB:** With the planning for the layouts, what research is involved as far as the sites and buildings? Do you conduct any field trips to survey sites? Also, what resources do you use when gathering all the material that you will use for reference when designing and building the layout?

**Tim:** I'll let Mike answer this as he's much better at finding that sort of information than me. My searching involves Google Images and Flickr. I will say I have on my computer more pictures of 1960s Holden cars and various old trucks than is possibly healthy.

**Mike:** Most of my research is conducted online. A few of my favorite sites for Victorian Railways information and photos include Mark Bau's VR website ([www.victorianrailways.net](http://www.victorianrailways.net)), Peter J. Vincent's photo database ([www.pjv101.net](http://www.pjv101.net)) and Ross Thomson's Victorian Railway Stations website ([www.vicrailstations.com](http://www.vicrailstations.com)). However, if I can't find what I'm after, then I'll make a field trip. For example, the school that was included in both of our layouts is inspired by the Old Kerrie School. There is scant information, and very few images, available online so one weekend I threw the kids in the car and drove to Kerrie to check out and photograph the school first-hand.

Our plan for the layout goes through several revisions before we settle on a final version [see the "attempt" images]. The layouts are only very loosely based on the track plan







from the towns we have modeled. They are governed more by the buildings we want to include, and by the effect we want to achieve. The layouts also draw on non-LEGO model railway layouts for inspiration.

**RB:** Mike, what was it that attracted you to building Victorian Railways locomotives and rolling stock? I remember the first time I saw your work was during the Flickr LEGO Trains MOC's 2-4-0 Building Challenge when you came out from nowhere with your stunning Victorian Railways B Class 2-4-0. The fact that the B Class was also your first attempt at building a train had me gobsmacked with the level of detail and building talent that went into creating it.

**Mike:** As a child, I spent most school holidays staying at my grandparent's house in Korong Vale, a small country Victorian town. Being at the junction of two lines, it was a major railway town, and there wasn't much else to do apart from watch trains. The railway station had a locomotive depot and a huge railway yard, and I used to spend entire days sitting on the station platform watching and sketching trains.

I'm glad you liked my VR B Class 2-4-0 loco. Before I built it I'd been lurking on Flickr for about a year, so I had developed a bit of a feel for what could be achieved, and what a LEGO train enthusiast looked for in a model. When Tim announced the 2-4-0 contest I felt I was ready to have a go. It was a strange, one-off build though, being a narrow (LEGO) gauge loco. I'm still annoyed that Tim never got around to

judging a winner for that competition, although I can see why: there were lots of great entries, including your LBB/KLS 19 Class 2-4-0.

**RB:** What are the main challenges that you both find when getting a layout together for an exhibition?

**Tim:** For me, I'd say the last minute details. We usually have most of the buildings and vehicles built well ahead of time (I have to since there's no bringing my collection). But all those little touches at the end, including the final landscaping, flora, minifigs, track and street furniture and other things take a very long time to get together.

**Mike:** In the early planning stages I tend to be far too ambitious, so keeping the layout to a manageable size is a challenge for me. However, this is ultimately constrained by the amount of available time. Looking back, I'm surprised at how small and simple our track plans are, but time was a critical factor on both occasions. Other factors can also present problems. I was running way behind schedule for Brickvention 2011 because an essential BrickLink order was delayed, which meant that much of the landscaping had to be built in the couple of days leading up to the meeting.

**RB:** Tim, how difficult is it for you to transport your parts of the layouts on the long trip down South? Also how do you pack it to ensure airport baggage handlers don't destroy it?

**Tim:** The first year was pretty hard, although most of the 'buildings' were in fact facades so were pretty solid lumps. Snap-lock bags in boxes helps the smaller things stay together. This year was much easier as I'd learnt what didn't work the first time ('muscle memory' I'm afraid so I can't be more specific), and actually built the buildings much more modularised for transportation. One of these days I'll take a photo of the goods shed, which was totally modular. By far the most annoying thing to take is the trees. They basically have to be rebuilt each time they're moved, and it's surprisingly time-consuming to get them looking right.

**Mike:** Tim uses a very clever approach to building that al-



lows most models to be collapsed flat.

**RB:** Any hints on what you two are working on for the next display, or are you going to keep it under your hats and just give us teasers like you have in the past?

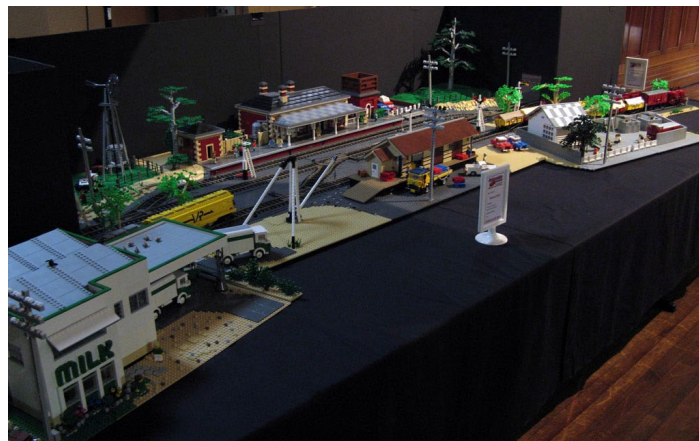
**Tim (smiling):** That would imply far too much planning. Try us in December.

**Mike:** We can't guarantee that we will be displaying a collaborative layout at Brickvention 2013 but, if we do, you can expect it to be quite different from the layouts we've presented so far. If we do have a break next year, I'll probably attempt a small, interactive, solo layout. You'll have to wait for the teasers to find out more.

**RB:** Do you have any tips or advice to give to people who are considering building an exhibition layout for the first time?

**Tim:** Three main points from me: 1) See what other people have done well, and steal it. 2) Work out what you think other people have neglected and give it attention. 3) And split the work to the strengths of the participants.

As regards 3), one thing we do differently to other groups is build in the same space rather than in geographically separated modules. This means we can both focus on specific tasks, And pay attention to all the details. Your 100-hour HO-standard rolling stock will probably not look as good next to a TLG cypress tree or basic car set. Spend a couple of hours building a tree or a better car to show it off properly. It's all about consistency.



**Mike:** Don't aim for too much. Try a small, detailed layout that has a common theme linking the different elements together. Use screens or backboards to facilitate this. They allow you work on small sections and to run trains through those sections without the need to detail a whole loop of track. Think of the buildings, landscape, and other features as being just as important as the trains.


**RB:** For the last question will you ever show a layout at an AMRA (Australian Model Railway Association) Exhibition? I know the AFOL community and the public attendees to Brickvention have been lucky enough to see your works, but when will you both show the model railway community the level of craftsmanship that you have achieved by using the humble brick?





**Tim:** Thanks for the compliment (and the interview), But, unless I move to Melbourne, it's pretty unlikely to happen. Brickvention is my one convention per year so I'd pay for the airfare anyway. To make a special trip would mean less money for bricks.

**Mike:** Some of my rolling stock has been displayed as part of the Melbourne LEGO Train Club (M>LTC) exhibit at AMRA shows in Melbourne. Unfortunately, I haven't been able to attend for any length of time to gauge the response of the non-LEGO model railway community, but the M>LTC members who have been in attendance have reported a very positive response. I'd love to see the reaction to one of our complete layouts. I'll have to start working on Tim.

**RB:** I would like to thank Tim and Mike for their participation in this article. It's great to get some insight into what goes on behind the scenes with planning great exhibition layouts such as Ararat and Elmore, as well as the unique viewpoints of the builders. 



## BR23 Original Design by Reinhard "Ben" Beneke featuring BBB train wheels



BR23 Original Design and Image Copyright Reinhard Beneke. Image used with permission

[www.bigbenbricks.com](http://www.bigbenbricks.com)





*Cardboard boxes and plastic crates alike have their place in moving a layout.*

# ON THE MOVE

*by Jordan Schwarz*

Moving a LEGO train layout is something that most of us never want to have to do. In case you do ever have to move your LEGO collection, here are some firsthand insights, tips and tricks from my recent experiences. Many of these observations are equally relevant to layouts that travel to displays and LEGO fan conventions.

## **Packing**

Packing the layout is perhaps the most important part of the move. It dictates, in large part, how well your creations will survive the move and governs how much time you will spend re-assembling the layout in the new location. As a veteran of many LEGO shows, I have seen numerous packing techniques – some more successful than others. I have seen entire layout sections wrapped in plastic wrap and shipped as a single unit. Plenty of LEGO models have been disassembled and stuffed into suitcases for cross-country, and even international, journeys.

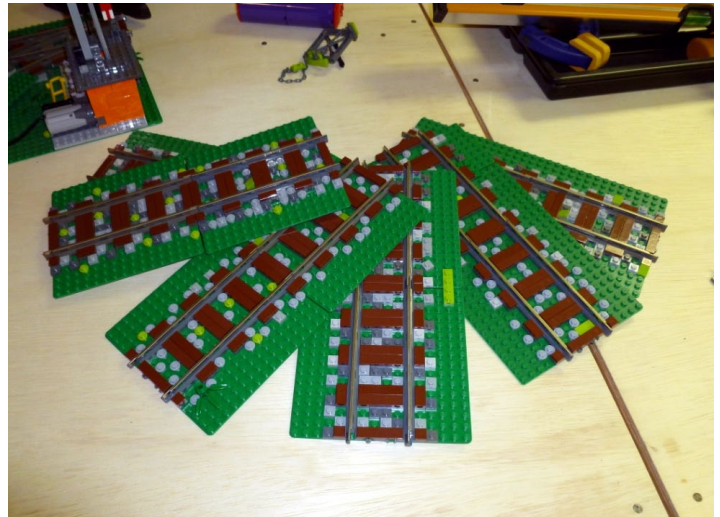


My own preference is to design a layout so that it can be broken down into manageable modules, each small enough to be carried by one person. Big, monolithic modules tend to break up in transit, leaving the builder a jigsaw puzzle to sort out later. Just ask my buddy Charles about the time he rebuilt a 7-story monorail loop on the day of a train show, because it disintegrated en route to the show.

As a member of a local LEGO train club, I designed modularity into my buildings and landscaping to make things easier to take to club shows. This modular design made it a lot easier to pack, ship, and reassemble the layout when it came time to move.

Where possible, I packaged modular buildings in individual boxes and carefully labeled everything. Free cardboard boxes are readily available (from grocery stores, for example), but I decided to purchase boxes from local home improvement stores. These boxes come in several standard sizes, and it was much easier to efficiently stack and pack boxes for moving when all of the boxes were the same size.

Cardboard boxes worked well for lightweight modular buildings. I packed heavier items into sturdy plastic crates. Bulk bricks can be heavy, and the smaller elements tended to wiggle their way between the seams in cardboard boxes; this was less of an issue with plastic crates. Plastic crates stacked nicely as well, and clear plastic crates permitted the contents to be easily viewed. It is worthwhile to pay a little more for sturdy crates, because a crate fully loaded with bulk LEGO bricks can weigh upwards of 30 pounds. Crates stacked on top of one another will start to bow the lids of the lower crates!



*Pre-ballasted track modules reduced setup time.*

Certain modules, such as the locomotive shop, could not be easily broken down to fit in standard cardboard boxes. I built a few plywood crates specifically for these modules. Such crates held large modules securely, but were time-consuming to build. A tip: I built each crate with a loose sheet of plywood on the bottom. When loading the crate, I first slid the model onto the sheet of plywood, and then loaded the sheet into the crate. This technique also made unloading the crate a breeze.

Before a big move, consider how your models will travel. It can be a good idea to partly disassemble weak, gossamer structures beforehand to prevent more severe damage in transit. I broke down such models into several sub-elements, and packaged each sub-assembly in a zippered plastic storage bag. If models disintegrated in transit, the bags helped to contain the pieces and made it straightforward to reassemble the section. It can handy to have photos of models and sub-elements available as a visual reference in case of later reassembly.

### Layout Planning

A layout move presents the perfect opportunity to design a layout from scratch. Entire articles have been devoted to the subject of layout design, so I won't spend too much time on it here. I do recommend that you develop a layout plan before assembling the new layout, because the extra planning will make for a more cohesive and visually appealing layout. It works well to start designing the layout with your most restrictive constraints in mind.

For my new layout, the overall size was dictated by the dimensions of the new LEGO room and the amount of benchwork that I had available. Next, the layout design was driven by the largest scenery elements that I wanted



*The Locomotive Shed traveled in a custom wooden crate.*





*Benchwork comes together in the new LEGO room*

to incorporate: a rail yard and locomotive shop. In particular, the locomotive shed – some 96 studs wide, with six locomotive bays – constrained the layout, because it dictated the inclusion of a modest rail yard to serve the shed. From such large modules, I worked my way down to the smallest ones, generally small 16 x 16 modules. I laid out rail lines and roads early in the planning process and then filled in with smaller scenery elements.

I used pre-ballasted track modules to speed up layout assembly at LEGO train club shows. These were handy when building the new layout – track modules were simple to connect together, and spacing around the train tracks was easily enforced.

When designing a layout, be sure to consider how your layout will be viewed by visitors. Generally, tall structures should be located toward the center of the layout so as not to hide smaller buildings. Additionally, this makes it easier to work on the layout since structures are more accessible. In a layout that is viewed from all sides, tall structures should be in the very center. On a layout that is viewed primarily from one side (a popular configuration for large

club layouts at fan conventions), the tallest buildings should be in the back. Concentrate rich visual details in areas of the layout that visitors will see and notice. Visitors to the layout will tend to notice things at eye level first, but eye level for an adult visitor will be quite different from that of a child. Accordingly, include details at different levels of height.

Remember that a layout does not have to be big to be great! The best layouts incorporate incredible detail, greebling, and creative action scenes. This advice applies equally to an 8 x 8 vignette or a layout that fills a room. Define the major scenes in the layout early; then move toward smaller details.

### **Benchwork**

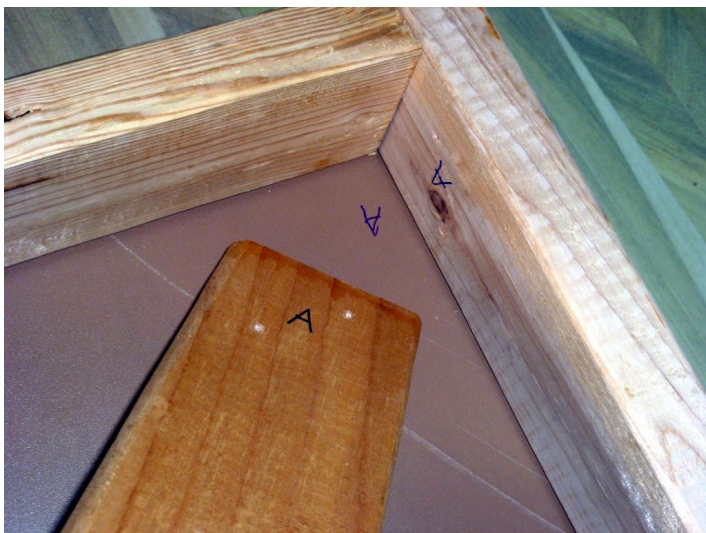
After arriving in the new location, setting up the layout benchwork is a natural first step. As a veteran of many club layouts, most of my benchwork was modular. When it came time to move, all I needed was an electric drill/driver to quickly take the legs off of the layout tables. Installation in the new location went just as quickly. Wooden shims (available from hardware stores) were handy for leveling layout tables. When setting up tables, I temporarily used spring clamps to hold things in place. Once I was satisfied with the table layout, I used wood screws to hold things together semi-permanently.

If woodworking isn't your thing, there are still ways to acquire modular table benchwork. If you are part of a LEGO train club, inquire to see if one of your fellow club members is an expert woodworker – in the past, my LEGO colleagues were willing to build modular tables on commission for fellow club members. Another option is to purchase folding plastic tables; these are a little trickier because the tabletop



*Labeling table components will make the tables easier to put back together.*





*Table and leg labeling system.*

dimensions are not exactly compatible with standard baseplate sizes. You can retrofit these tables with a plywood top to get baseplate-compatible dimensions.

Over an entire layout, I had quite a few tables and sets of legs to move. As I disassembled the tables for the move, I labeled each leg and labeled the leg location on each table. When it came time to reassemble the tables, there was no guesswork as to how the tables went together.

Benchwork is the foundation of any layout, so it pays to get it right. Ensuring that your tables are level and square will make everything easier when the time comes to begin setting up the scenery.

## Assembly

With the tedious business of roughing out the benchwork complete, it was time to begin the more enjoyable task of re-assembling the LEGO layout. As in the layout design process, I handled the biggest modules first. The reason was logistics: it is far easier to position large, heavy models with the tables relatively clear. Later, smaller models can be lifted over large ones with ease and dropped into place. Positioning the large modules first will also allow you to check your layout plans and correct any issues early on.

For a long, rectangular layout, I recommend laying out the track starting from the middle of the layout and working toward the ends. On a big layout, track alignment can become an issue, and any irregularities in table construction or elevation will become obvious. Remember to keep a pack of wood shims or some squares of cardboard handy, in case a section of benchwork needs leveling.

In the case of a large layout move, half the challenge is finding where everything got packed. Even with good labeling, it can be hard to find everything. When assembling the “downtown” section of my new layout, I had numerous boxes with pieces and parts of various buildings. I decided to “rough in” the downtown section, unpacking the buildings and putting them in their approximate locations first. I later finalized building locations and then added rails and roads.

When I build a layout, I want to be able to get the trains up and running as soon as possible. In fact, this is



*Roughing out the rail yard, engine shed, and freight depot.*





*Creating a rough layout of the “downtown” section of the layout, with the help of my wife.*

counterproductive when assembling a big layout. It works better to keep vehicles and trains stored or out of the way until the tracks are laid and structures are in place. If changes to the overall layout are needed, it will be more difficult to shift things around with vehicles in the way.


If your LEGO room is on a concrete sub-floor (like mine), consider adding some anti-fatigue pads to make working on the layout easier on your feet. Home improvement stores typically carry interlocking foam squares as a garage accessory. If you spend much time standing up while working on your layout, your feet will thank you!

### The LEGO Bar

One last detail about the new LEGO room: it came with a mini-bar! I’m not quite sure what to do with it. But a bar in the LEGO train room can’t be a bad thing altogether. Like any other LEGO project, the bar, in its current state, would benefit from the infusion of some imagination. In a future issue, I’ll have to send out an update.

### Final Thoughts

Although moving a layout can be a monumental task, it presents the ultimate opportunity for creative rejuvenation. Starting anew with a layout offers a chance to realize the “dream” layout that all of us have in our minds somewhere.

A good layout is never finished. Accordingly, at the time of this writing, my layout is the subject of continued expansion and improvement. My initial efforts focused on bringing the rail yard section of the layout online. Now, with that section mostly complete, I am moving on to the “downtown” section of the layout. I will follow up in a future issue of RAILBRICKS with some pictures of the new layout. When will this layout be complete? Hopefully never! 



*The LEGO bar, in its state at the time of this writing*




Congratulations go to Stephen and Matt Garvin, winners of REC 8 that first appeared in Issue 9. Strong honorable mentions go out to Ronald Vallenduuk and Michael Huggins. It was difficult choosing the winner from these three entries.

I originally built these switches for my automated switching layout at Brickworld 2009, and then used them for remote controlled switching at Brickworld 2010. The challenge had a two-stud shroud to hide the mechanism that is eliminated in this solution with the added benefit of greater clearance to the track. The switching mechanism was inspired by Chris Alano's 2003 design. I then saw Nicholas Schiby and Philippe Label's PF update on Mark Riley's point switch, where they use an extension bar to throw the yellow switch lever. I realized that torque would be about the same to use a direct drive variant of Alano's, so the M-motor would be sufficient, but with Alano's switching mechanism I could make it a lot shorter.

See the following for links to the inspirations and other great switch designs.

[http://www.freelug.org/spip.php?page=article&id\\_article=186](http://www.freelug.org/spip.php?page=article&id_article=186)

[http://www.freelug.org/spip.php?page=article&id\\_article=755](http://www.freelug.org/spip.php?page=article&id_article=755)

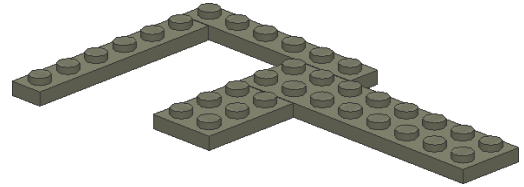
There is no new challenge this issue, though REC 9 is still unanswered (see Issue 10). We've got some devilish challenges coming up. 

# REC

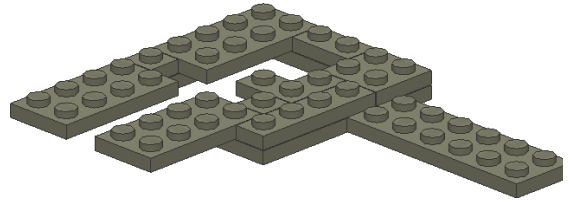
## Reveal 9

by Benn Coifman

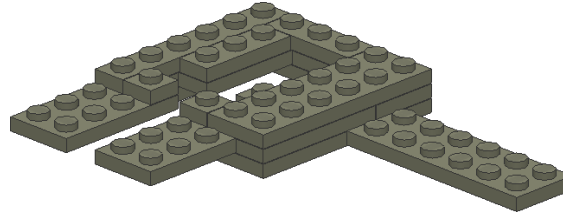
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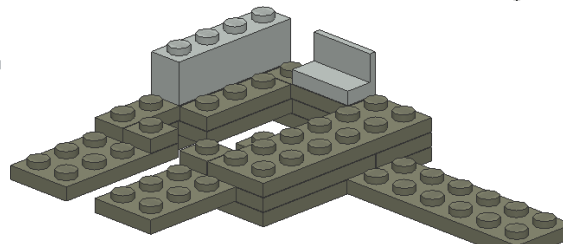
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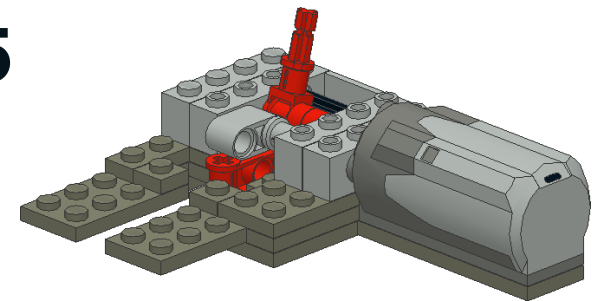
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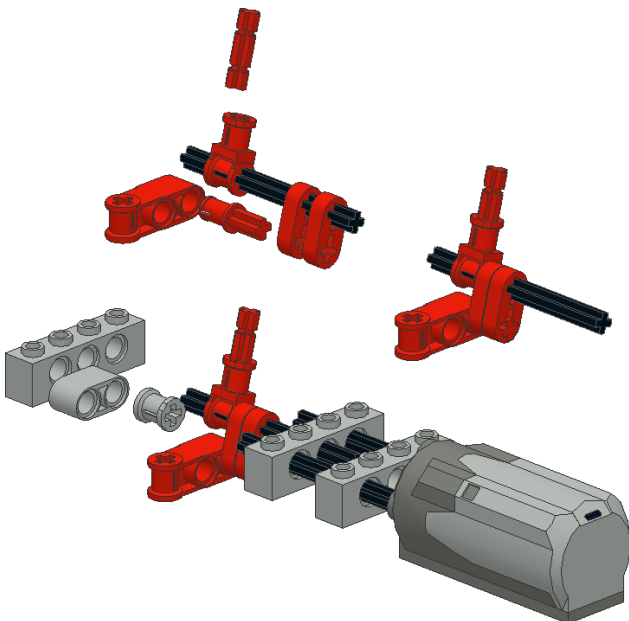
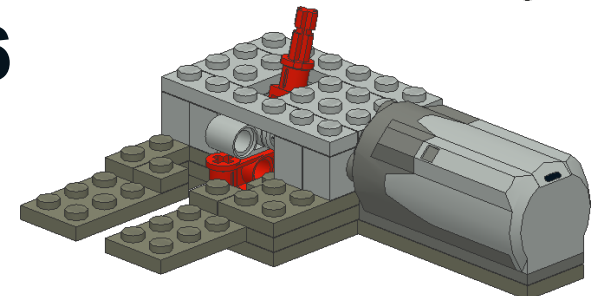
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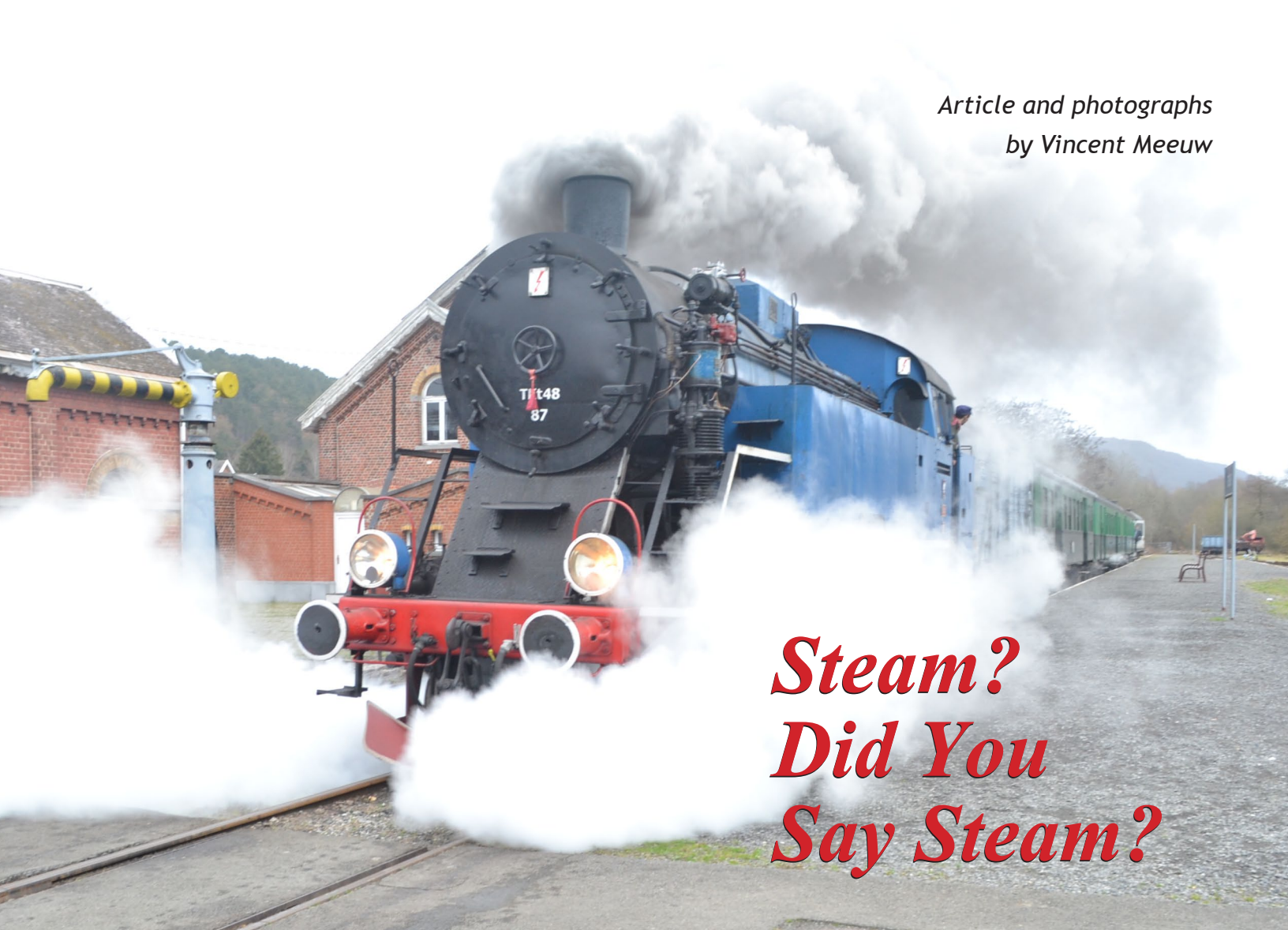
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6







## *Steam? Did You Say Steam?*

I'm a Belgian guy who has been crazy about steam since the first time I had a chance to see a real steam locomotive. From that moment, my desire to build these locomotives hasn't left me. It has given me just enough time to build other locomotives, or carriages, or time to go to a shed to work inside real locomotives, either steam or diesel.

For those who have not visited my gallery (<http://www.brickshelf.com/cgi-bin/gallery.cgi?f=84900>), they have not yet seen my passion for steam locomotives.

I have to say that I have loved trains since my childhood, even before I had one at home. I was content to play with those of Ludo Soete (see RB Emerald Night) when I was at his parent's house, which was very rarely.

My first train, 24 years ago, was the blue Hopper Wagon, #4536. I didn't even have any rails! Since that time things have become different.

Little by little, I bought myself some passenger and freight trains, and also created many different kinds of wagons.

Their numbers have grown year after year, with some periods being more productive than others. Recently, my advertising wagons were born; twelve in total. I am also still busy on my steam locomotives.

You may ask why I build so many steam locomotives. For that answer, I have to let you know how this passion (maybe craziness) for steam locomotives began.

The last steam train which ran in Belgium was in 1966. I was born in 1977. It would have been very difficult for me to see one run near my house. Back then, I was obliged to be content with some pictures, historical movies, or model railroads to have a small idea of what steam was. I was not aware of the existence of any associations still running steam locomotives.

I grew up in the unaware state until three years ago, after meeting another AFOL, Jean-François Lacassaigne, who is also a member of the CFV3V (Three Valleys Steam Train). This association operates a tourist railroad roughly 14km (8.70 miles) long. At first, I was not very enthusiastic about

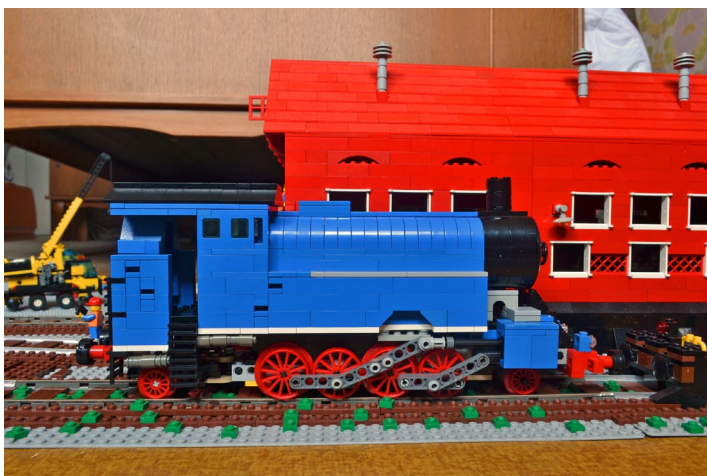
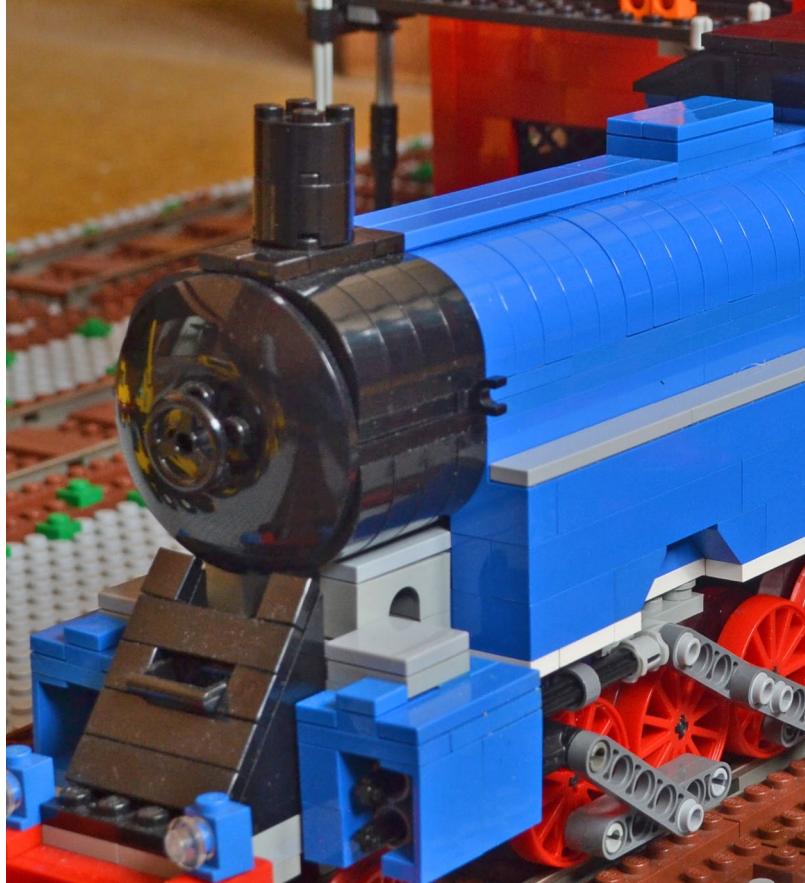


his invitation. He called me again, along with some other AFOLs, to go there for a small visit one nice day at the end of August. That's where I became aware of what a real "steel horse" is, and of their real size and dimensions.

Since then, I have begun to build one after another. To do this simply, and with what I have at hand, I decided to reproduce some of the locomotives owned by the CFV3V. My heart was turned toward the Tkt48-87, a really beautiful Polish locomotive. At 1,060 horsepower and 80 tons, the locomotive moves as well as a car. It's also more than a little fun to watch the steam come from the pistons. The introduction picture speaks for itself.

After the Tkt48-87, I decided to reproduce the BR50, then the BR64, and finally, the BR52, also owned by the CFV3V. For each build, I had some challenges, of which the two most important were the connecting rods and boilers.

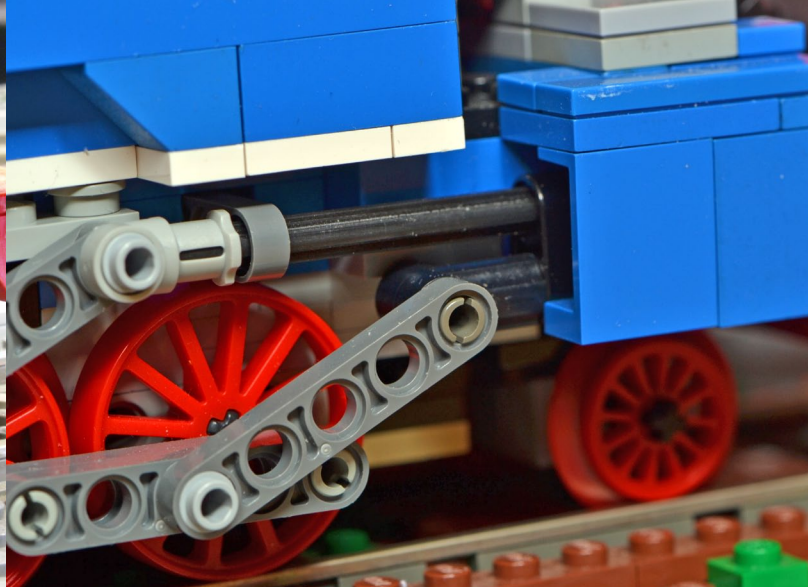
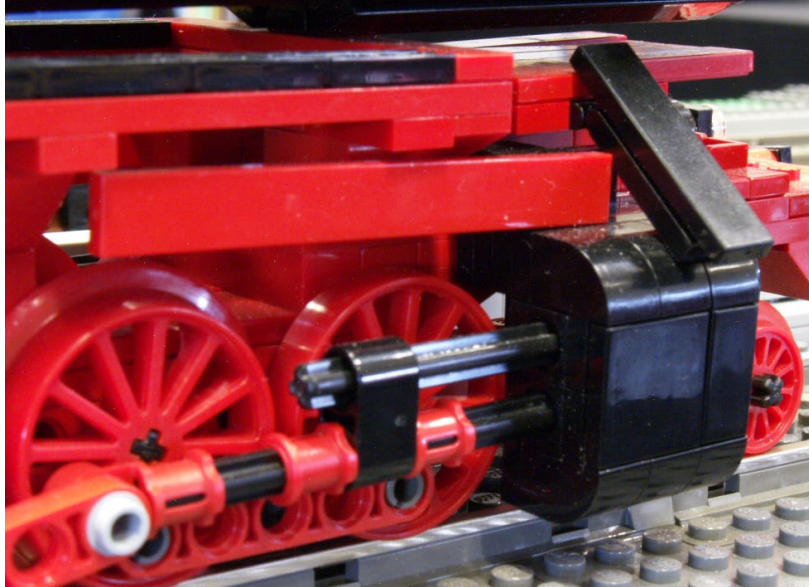
For the Tkt48's boiler, it was easy. Arches were put in head to foot. It gave quite a good result, with a more or less rounded boiler, but it was not possible to put a lot of detail on the boiler itself.



*Tkt48 waiting at Treignes station for service.*

*BR64 250 at Mariembourg for a water fulling*





For the connecting rod, I took a look at what had been done on the Emerald Night for inspiration, but with a very poor result. I understood very quickly that if I would like a functional system, I would have to study it well. I tested a system using a thin lift arm, with more or less success.

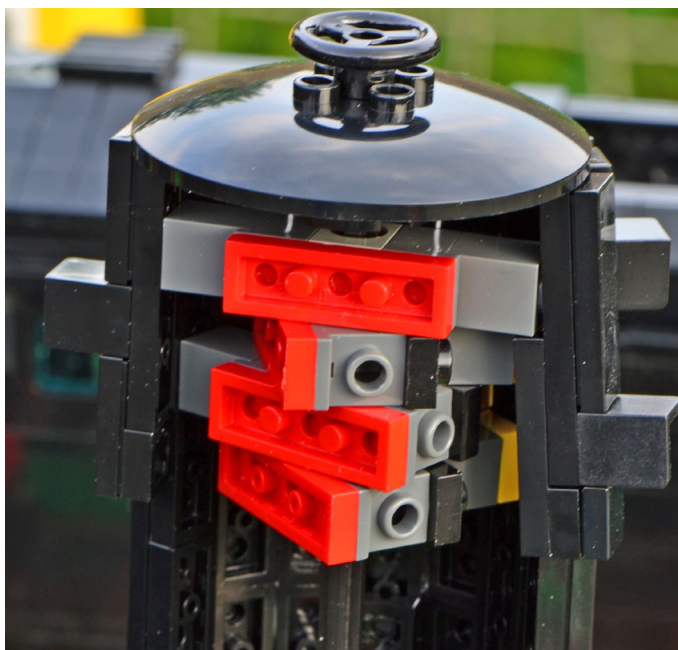
Nevertheless, this technique could not be used on the Tkt48 due to the fact that the BBB wheels are slightly bigger, and the pieces used for the connecting rod touch the wheel, locking the entire system.

Following this trouble, I tried to find another solution on the BR50. I used a technique to build up the pistons starting with the special position. I took some technic bricks, 1x2 with holes, arch bricks and some plates, all fixed by a 1x2x2 bracket on the frame. The width, 12 studs, is very important, but in particular it had to run without touching the wheels. No friction, no locking, allowing it to run forward as well as backward.

The boiler of the BR50 was also modified compared with the Tkt48. This time, the cylinder is made with Technic bricks, headlights, common 1x1 bricks and plates for the inside parts, with tiles and jumpers for the exterior parts. I have worked for a long time to successfully build a well-rounded boiler that, at the same time, can be as detailed a possible with, for example, pipes.

I showed my first three steam locomotives to the CFV3V members, and, for a first presentation, I had a lot of success! From there, I had the idea to fill some window displays inside the steam museum. But, by doing that, I "lock" some locomotives during the entire exhibition season (March until October), as it was not possible to take them away from the display. I decided to build some others. I placed an order for BBB wheels in red to make the BR74 – 80 – 81 – 91 – 93 and 94. I also ordered some black wheels. It was like the idea to build more steam locomotives than I first thought was a sign.

*(continued on page 42)*







*Two BR-94 locomotives stationed  
at the roundhouse*



*BR-44 stationed at the  
Mariembourg roundhouse*



*German BR-80 with French  
steamers 040, 141R and 040*



I have also taken to the habit of building two of the same locomotive, especially for the smallest ones. They don't use as many pieces and are really much easier to reproduce than the big BR50 or BR52. It also gives me the chance to put the finishing touches on this kind of class.

And why not find other ways of building up for other classes? There has been a lot of evolution with the bumper's position, including the way to fix the forward bissel, and its rotation angle due to the track's curve. The coupling between the locomotive and tender has also had a lot of modification, and some details have been added where I first thought none to be possible.

The funniest detail is the sand pipe at the height of the wheels, which could only be placed above the wheels. I used common taps. It was not easy to place them without touching the wheel or the arm connecting the wheels. Also, I had to keep the solidity of the frame, and the aesthetics of the cabin.

The technique used had not been seen before I built some French steam locomotives. On the class 030, I had not too much trouble. Good stability had been insured by the walls on both black sides for the water tank. On the 141R, it is completely different. This locomotive is very fragile.

I put the finishing touches on the BR44 and her French sister, the 150X. There were some color changes and some small details.


Next, I go down to the French 050 and 2x 040 classes. These were built on the same base, more for the connecting rod than the sand pipe and boiler.

Each time that I have made a double of the same class, I have always modified something to be sure that each is not exactly the same, trying to respect reality. Different pictures of the different classes attest that the steam locomotives of the same class are not 100% identical.

Now, when at an exhibition, I always have some steam locomotives that I can show on the layout near the coal park, on the pit, or in front of the rotunda. I have the leisure to

choose which ones to show and where to place them. After building so many steam locomotives in different classes, I am going to stop. I am happy with the result, while knowing that the public is very happy. For me, that is the most important thing!

Today, I am the owner of 29 steam locomotives which can be displayed and are fully able to run.

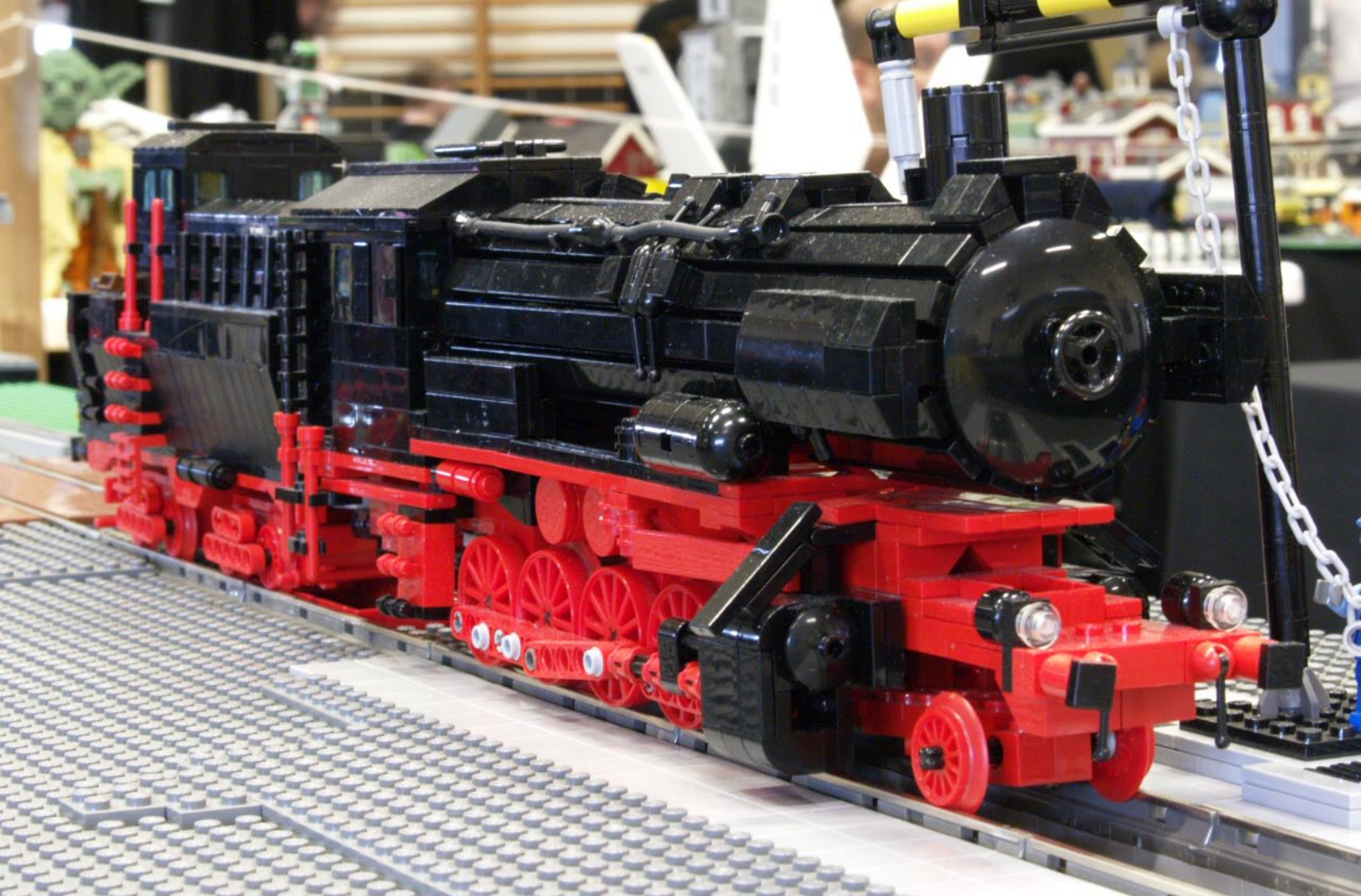
In a future RAILBRICKS, I'll speak about the CFV3V project, which has been realized by several AFOLs within the museum. 



*Two BR81s, a 71, an 80 and an 84*







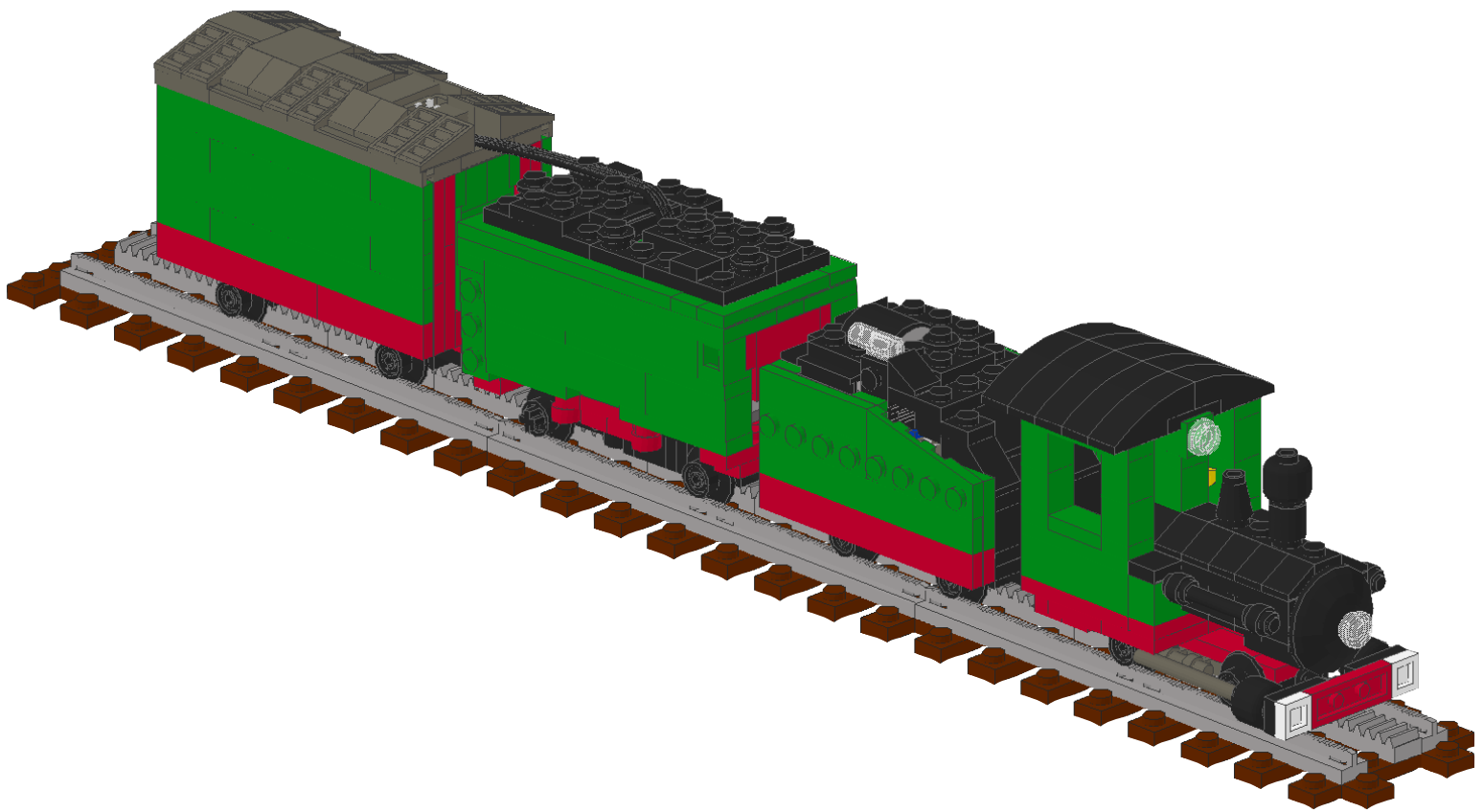
*BR52 467 -7 at Mariembourg with  
the reproduction in LEGO above*





# I Far West Train

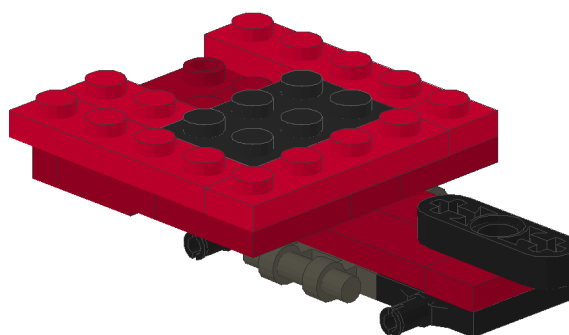
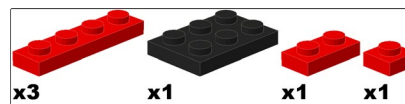
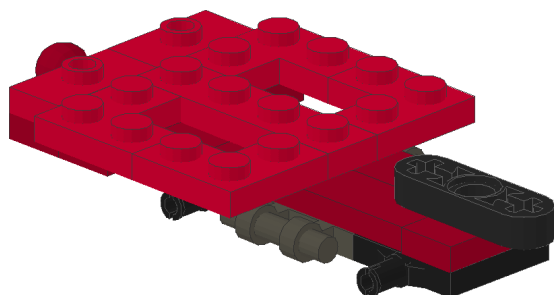
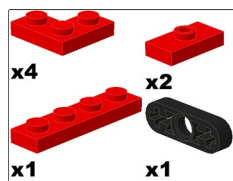
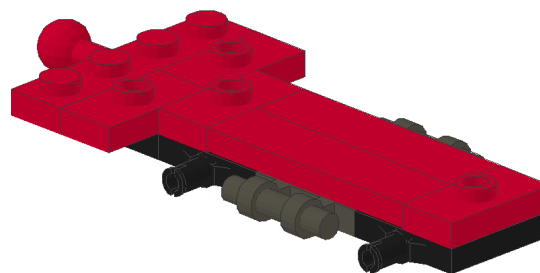
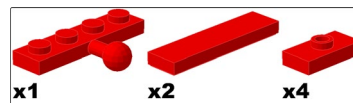
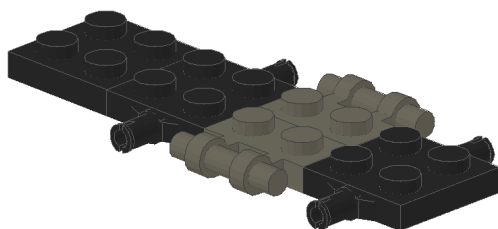
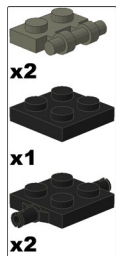
## A 4-Wide Cog Railway PFS Train



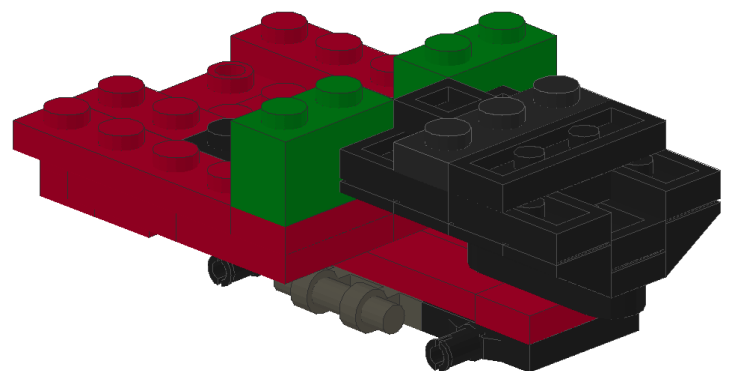
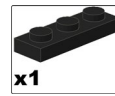
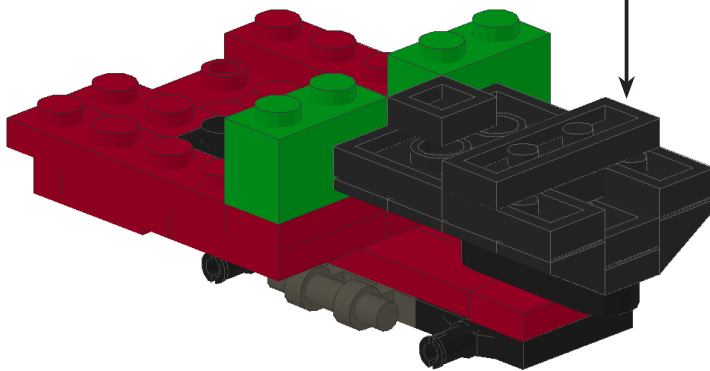
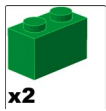
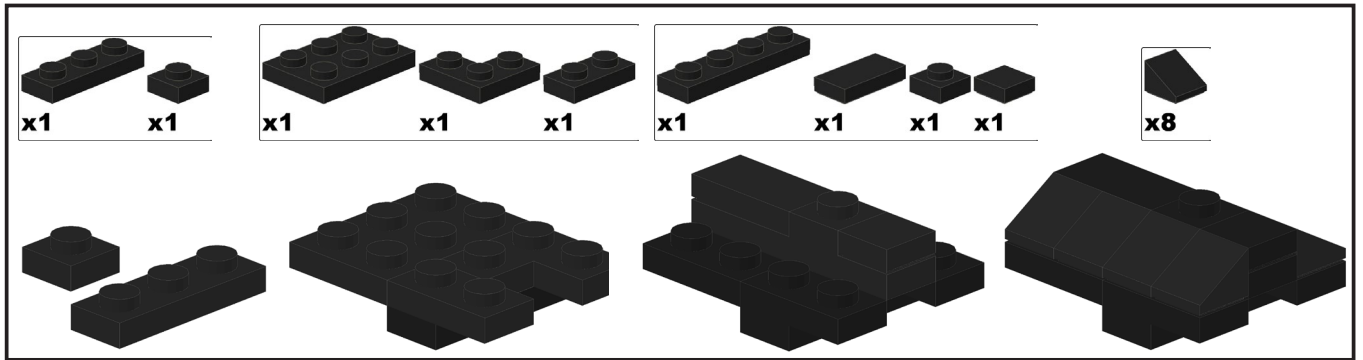
Model by Alban "Banban" Nanty

Building Instructions by Didier "SixStuds" Enjary

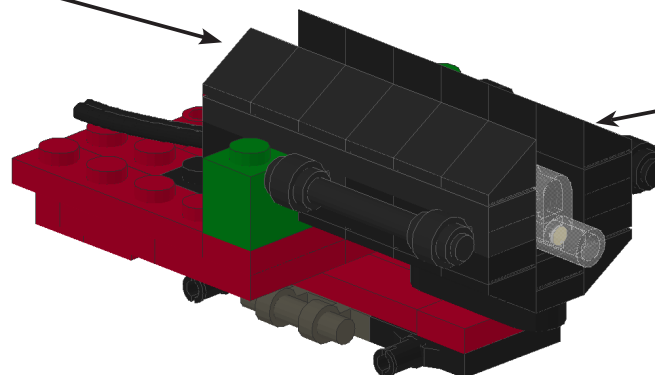
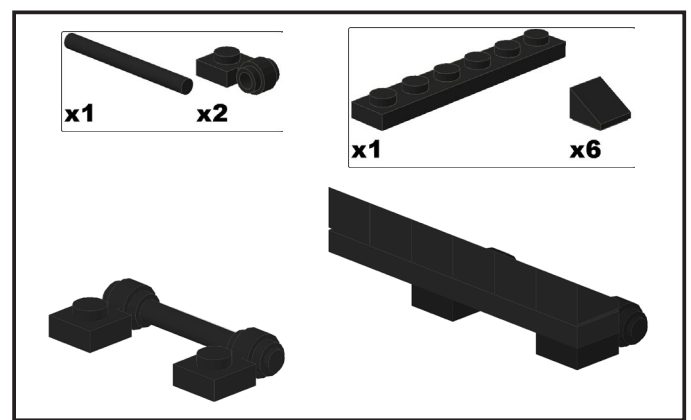
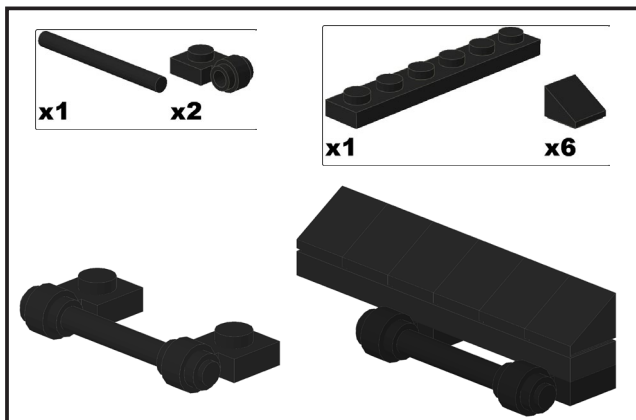
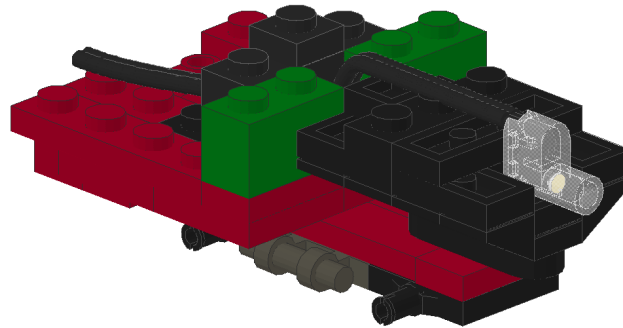
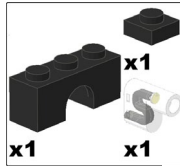




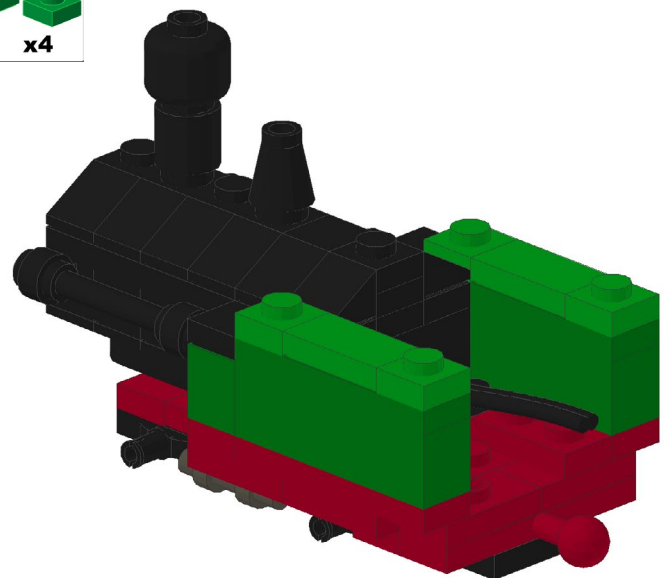
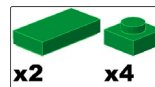
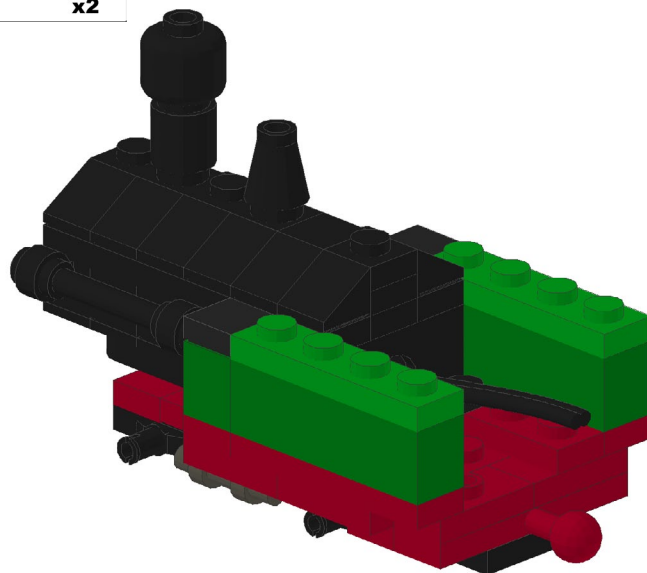
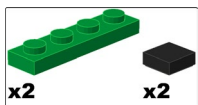
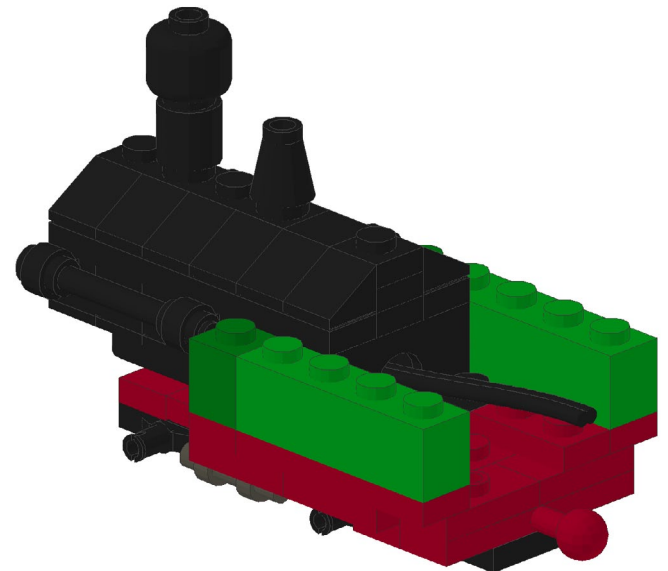
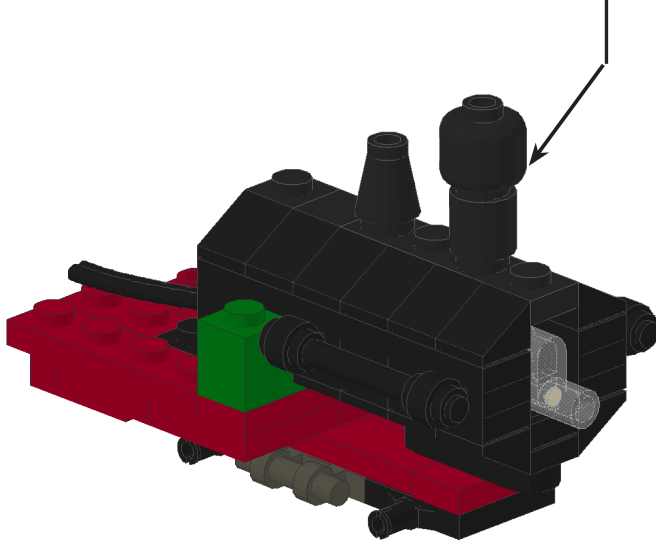
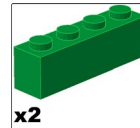
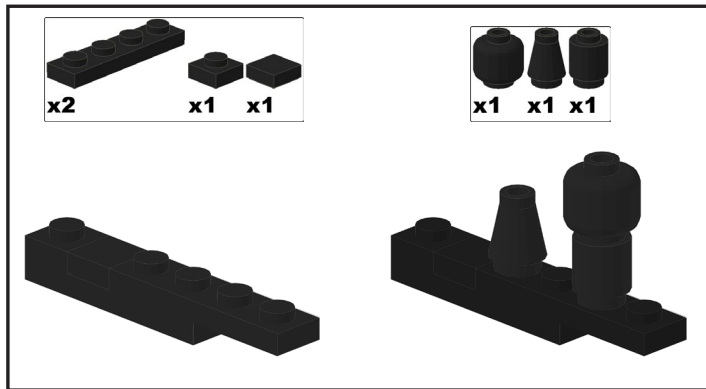


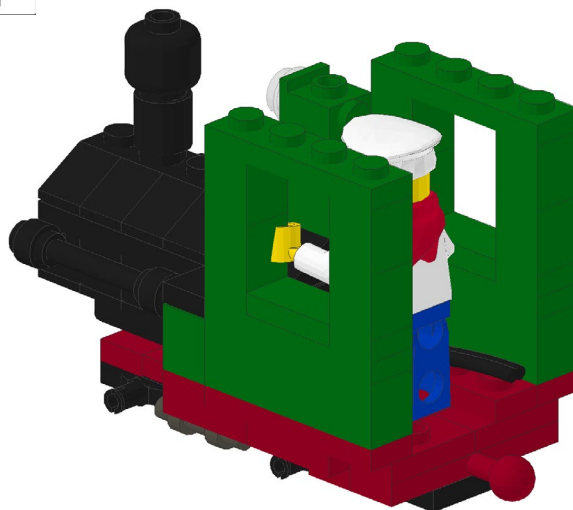
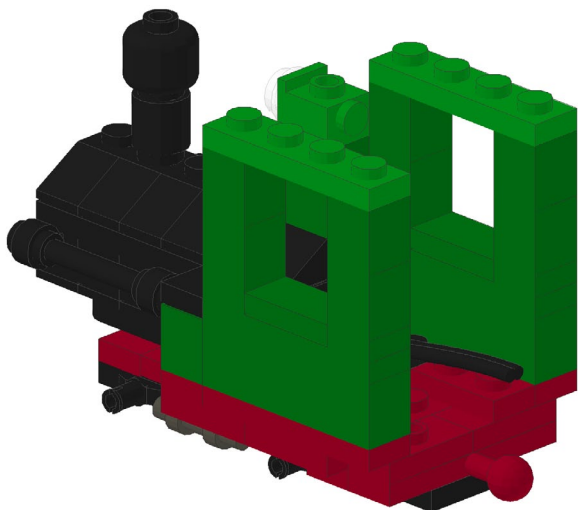
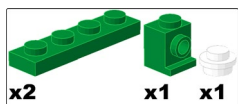
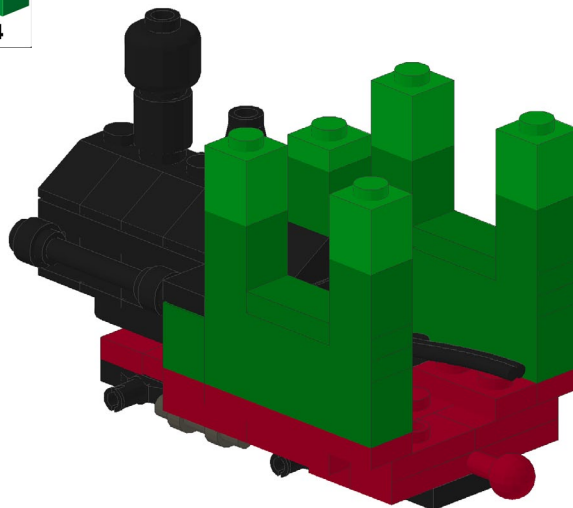
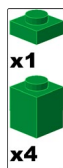
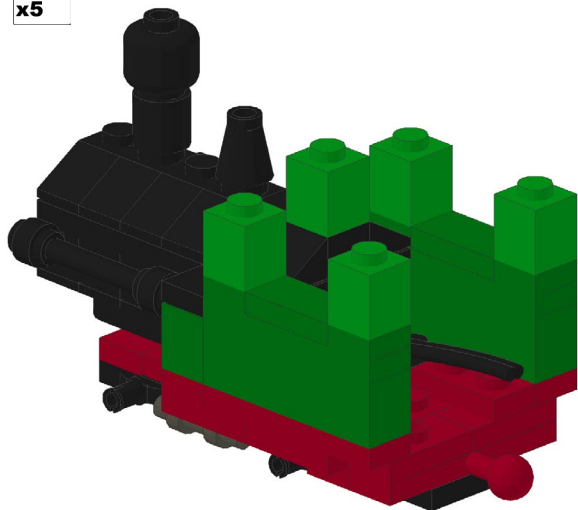




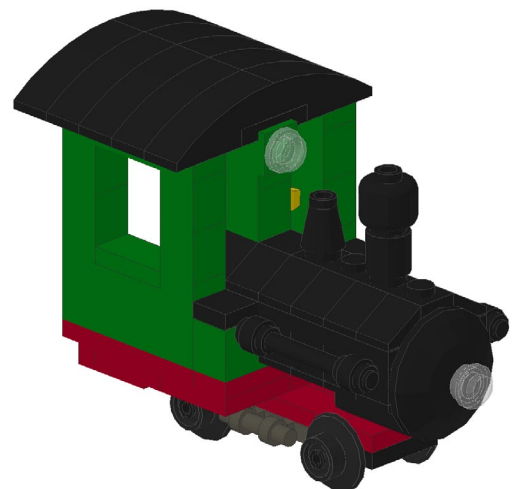
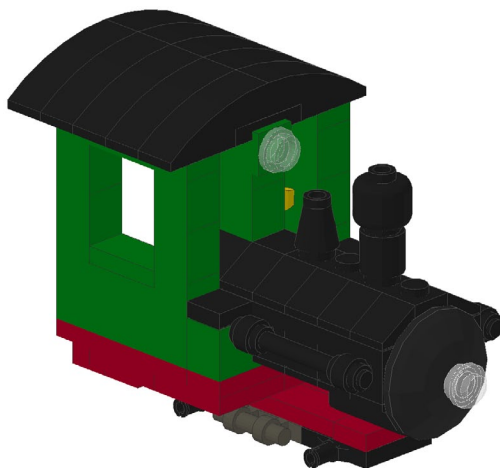
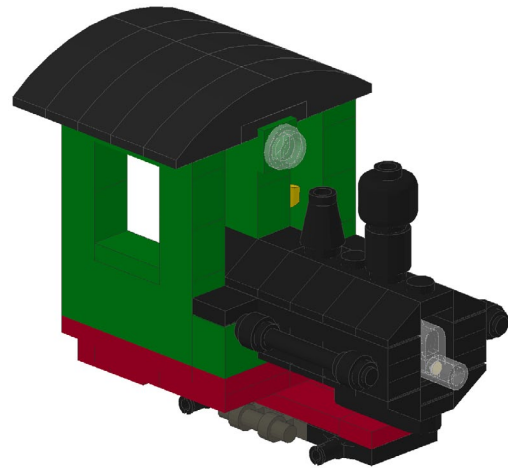
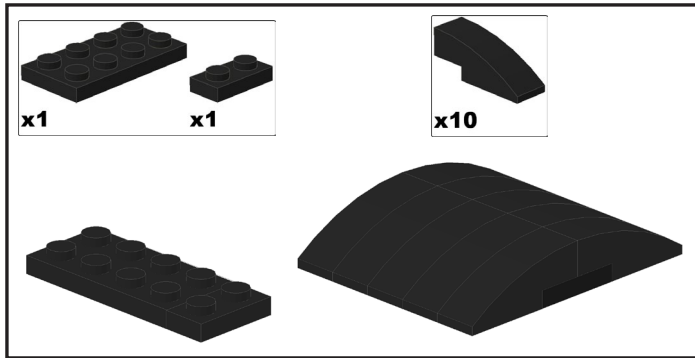


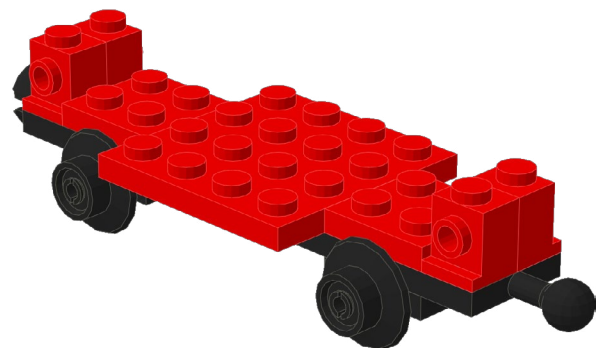
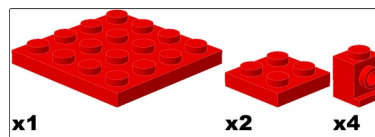
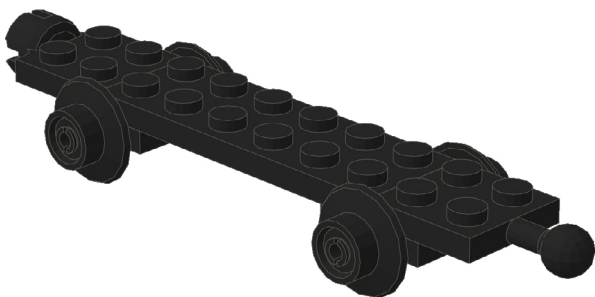
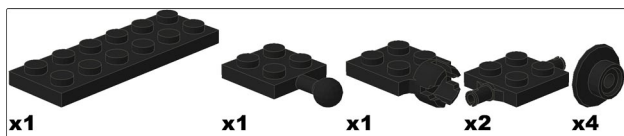
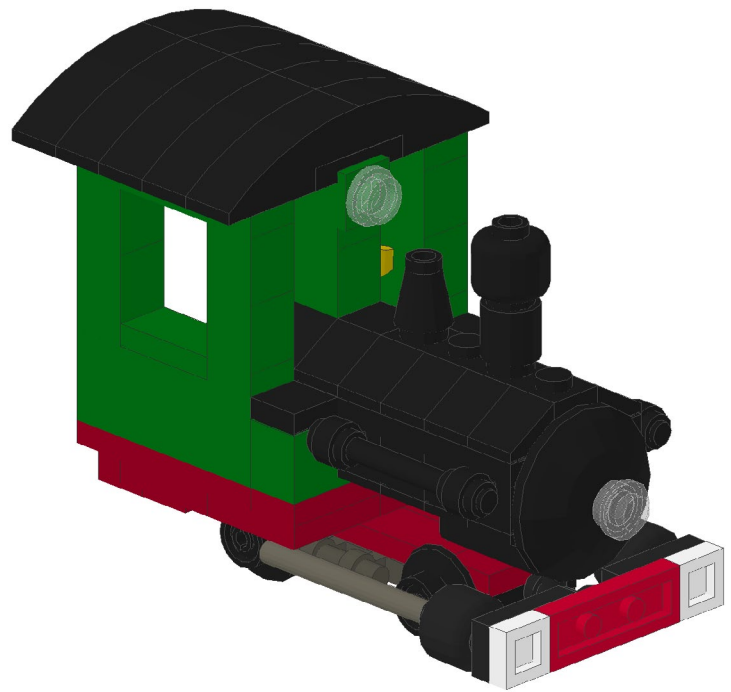
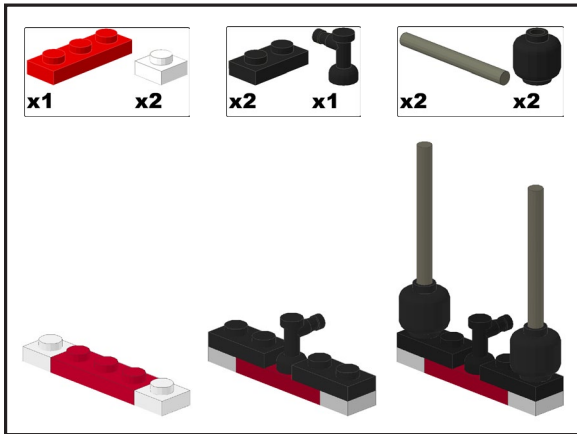




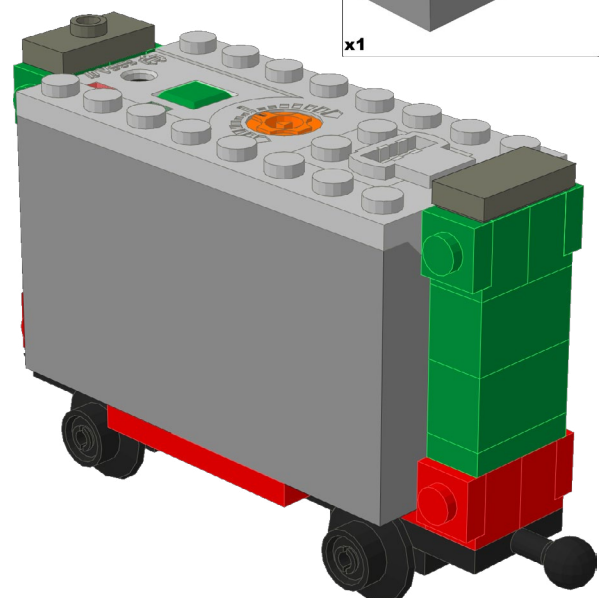
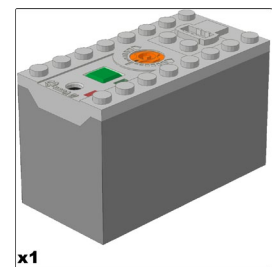
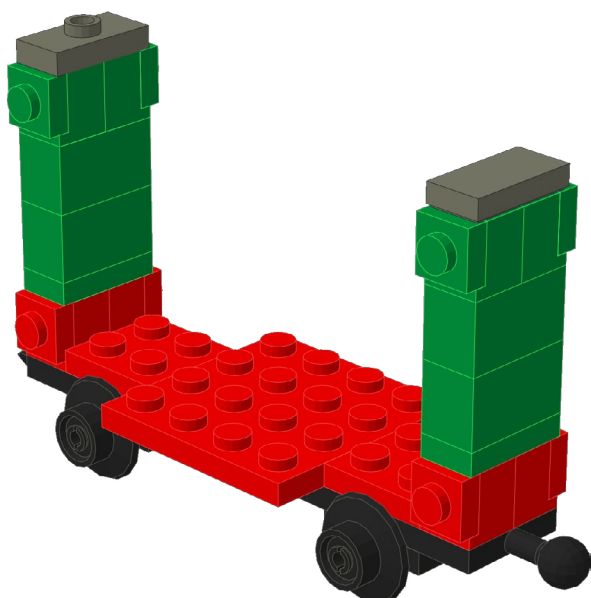
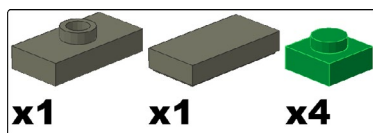
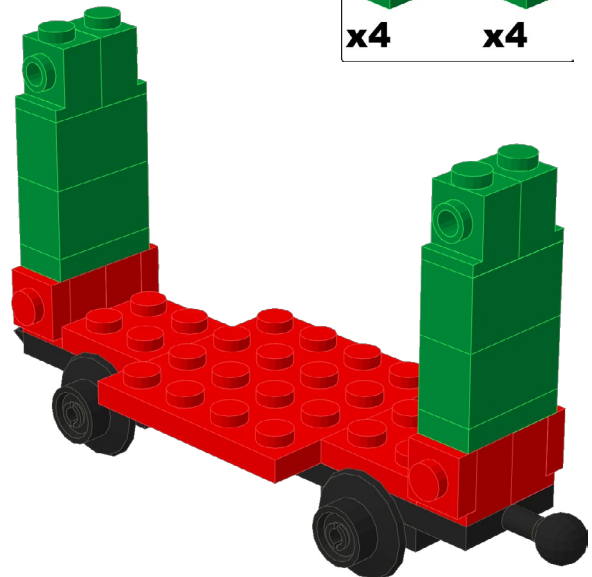
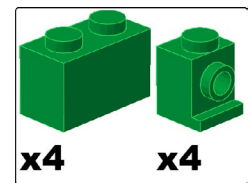
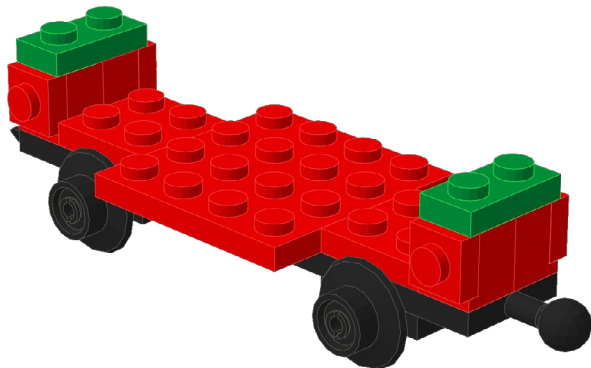
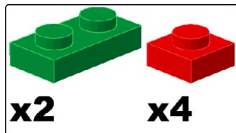


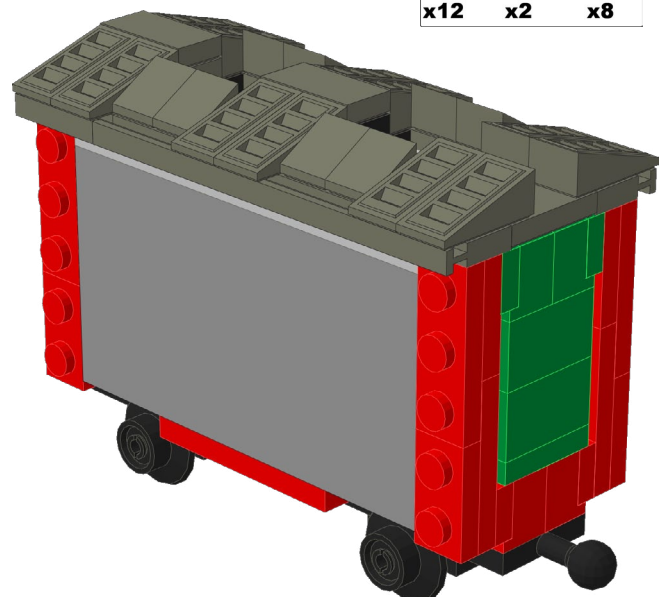
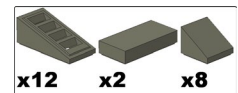
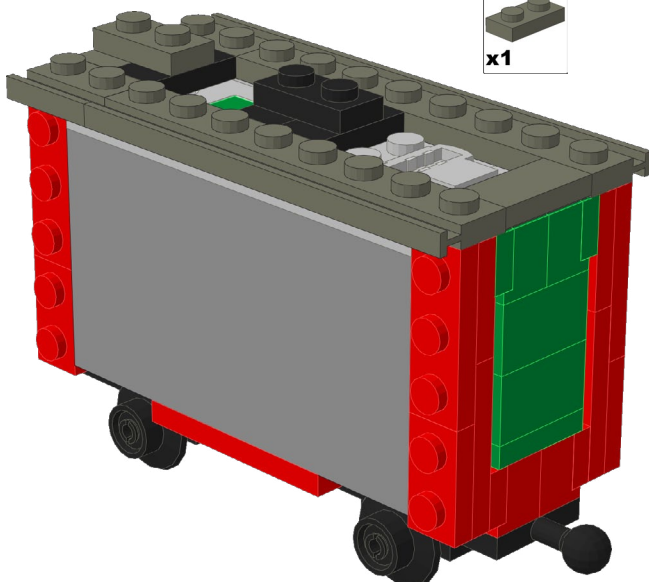
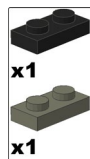
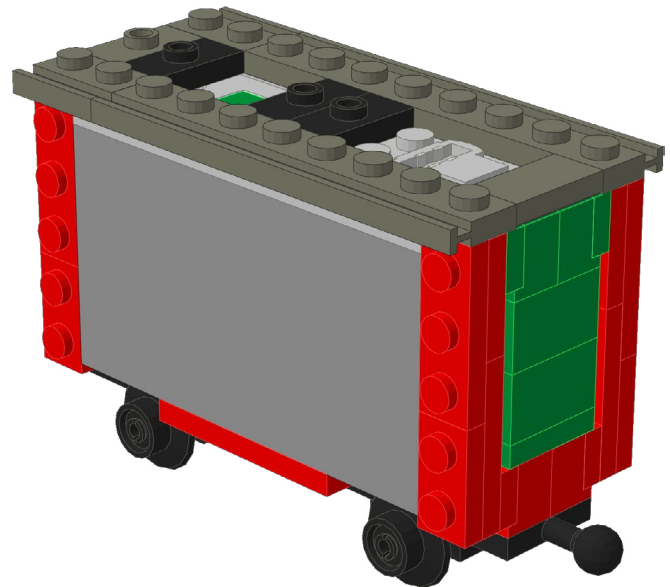
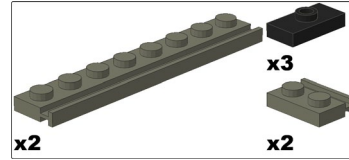
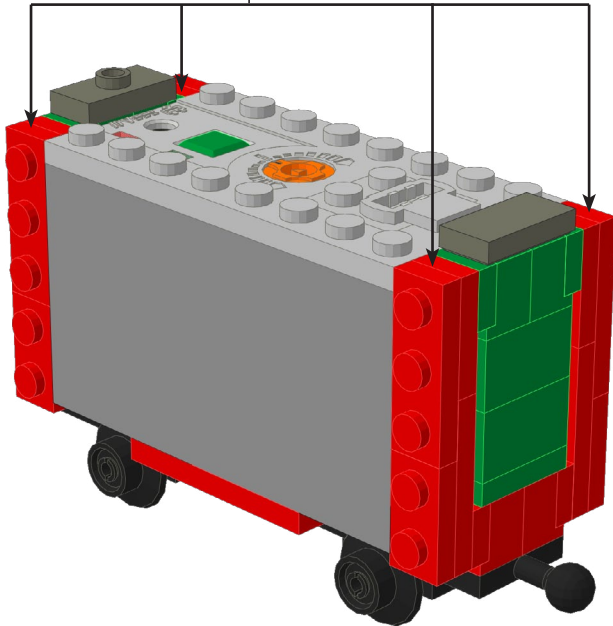
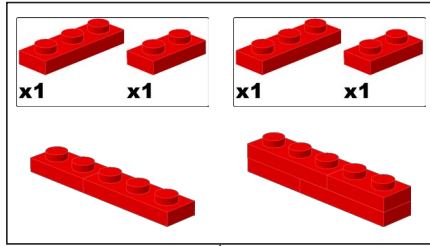




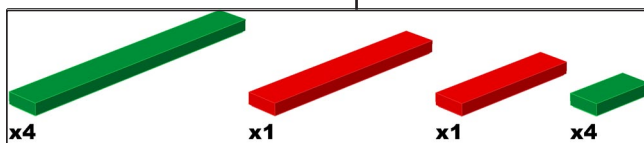
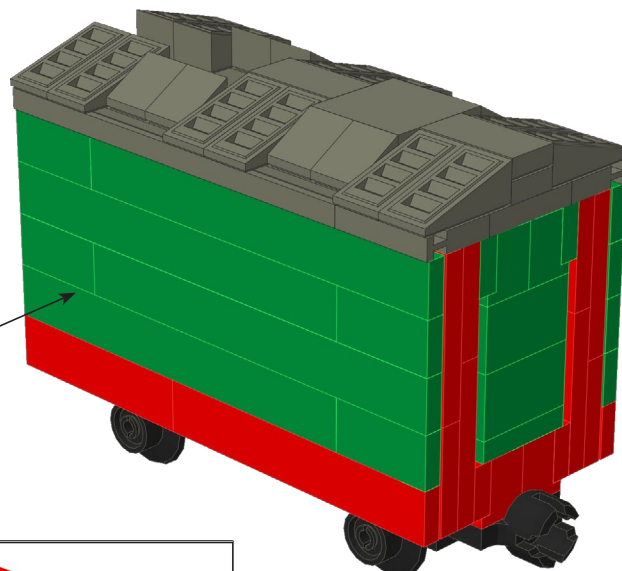
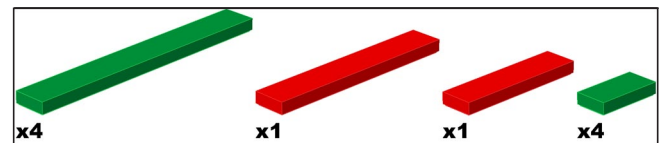
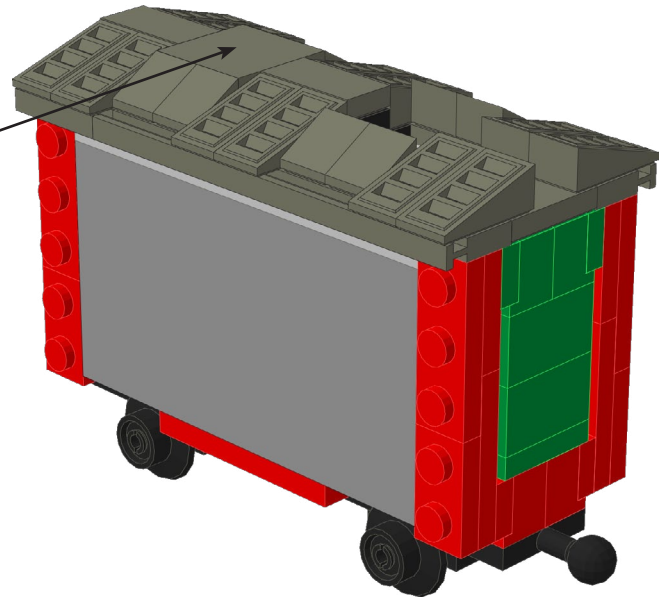
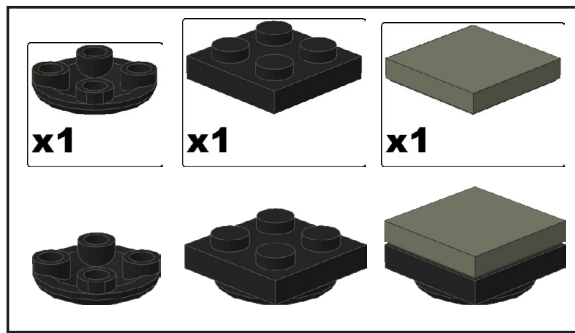


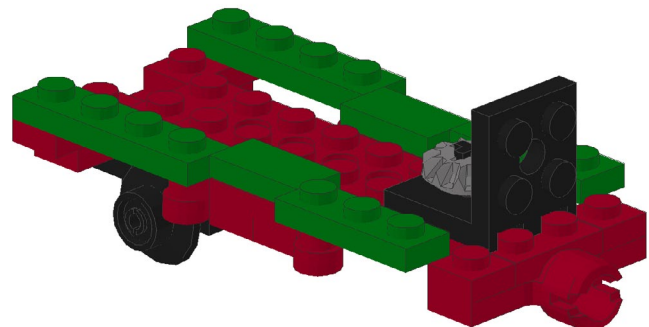
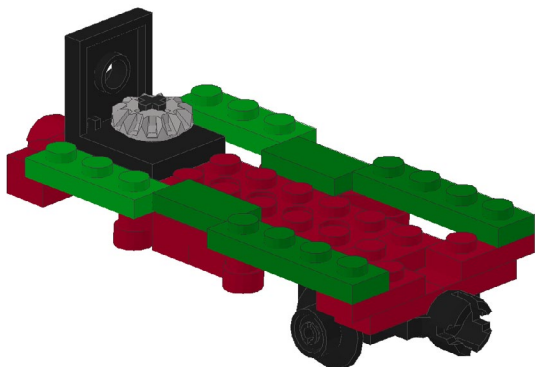
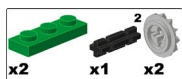
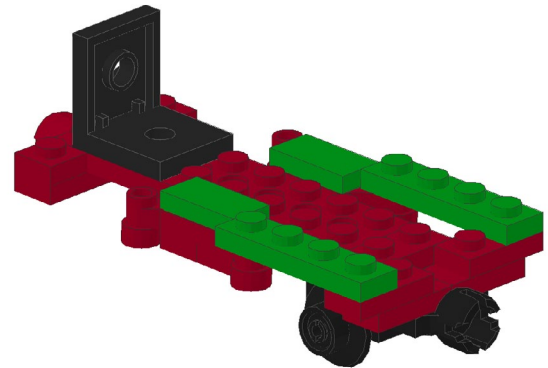
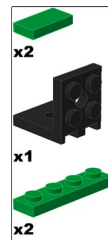
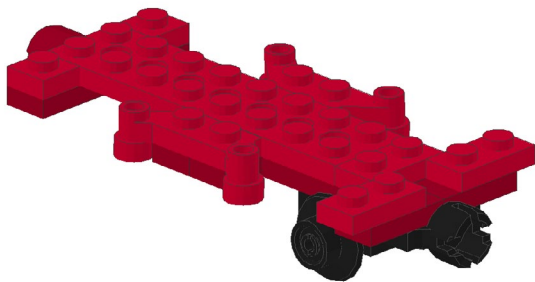
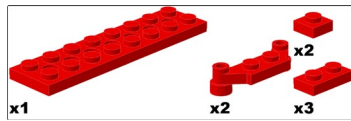
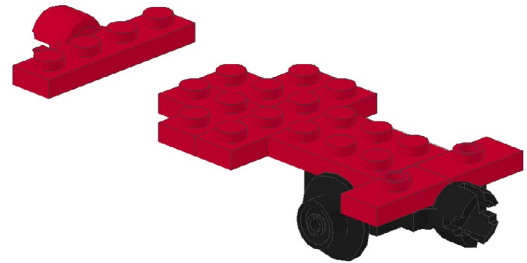
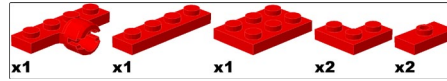
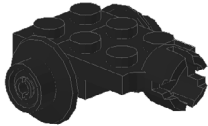
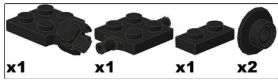




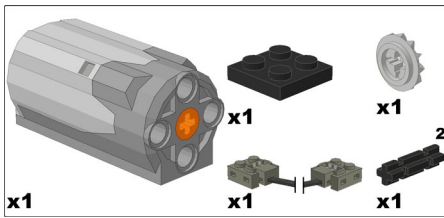




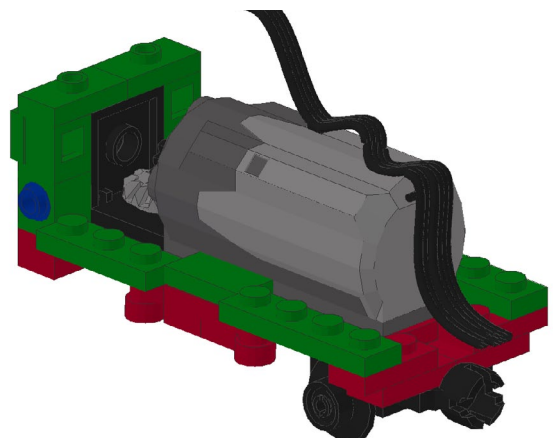
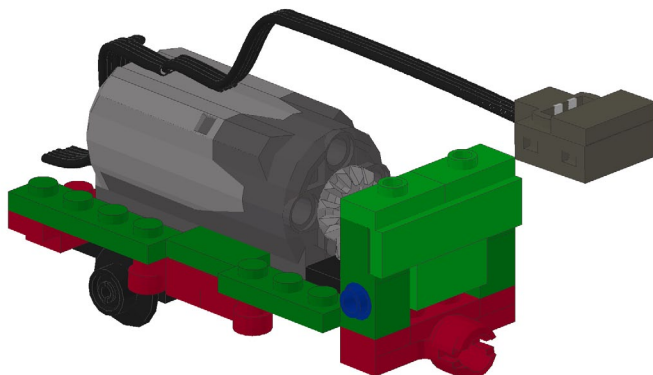
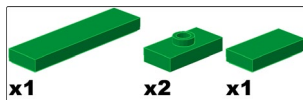
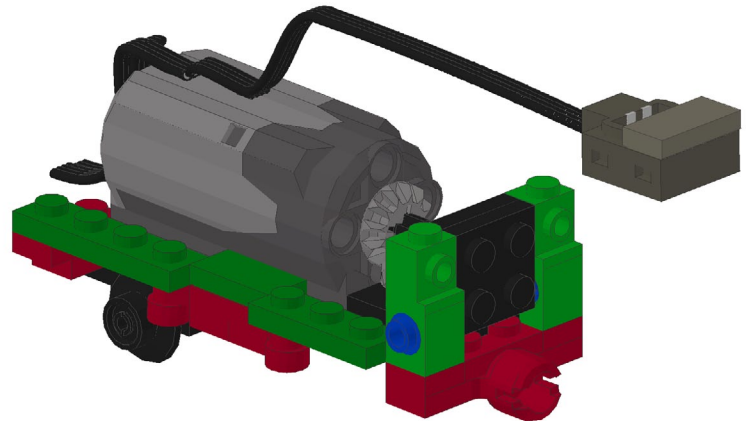
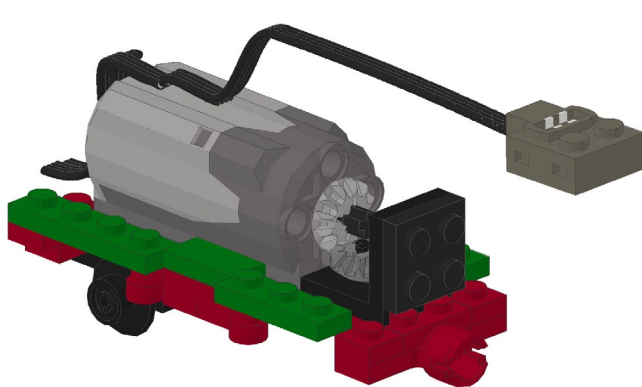
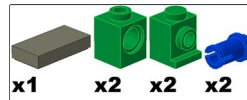


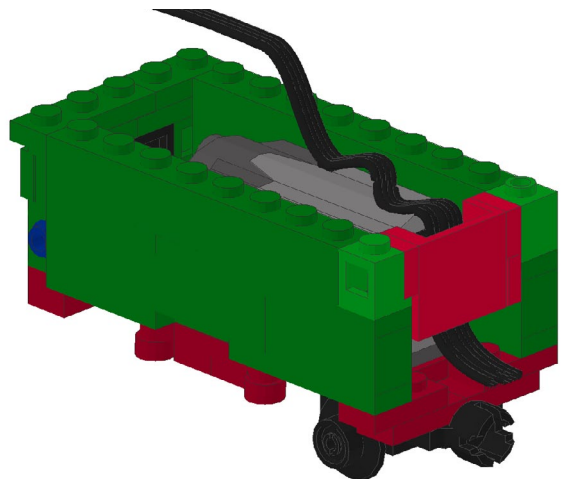
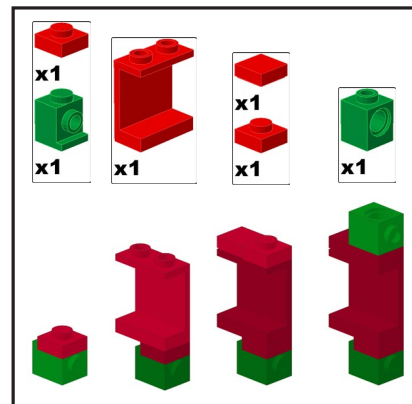
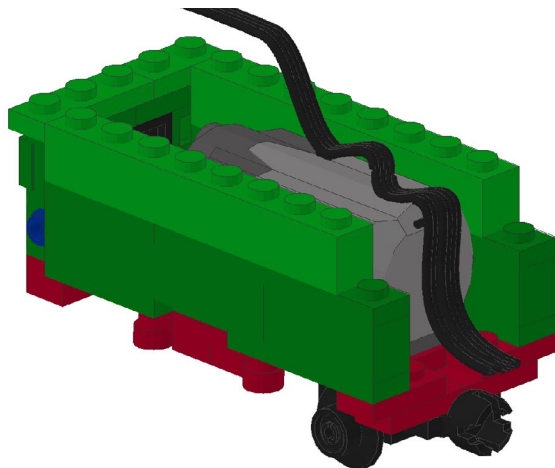
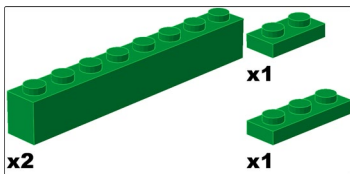
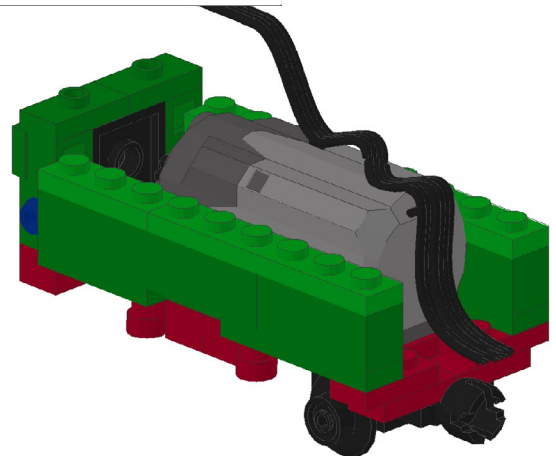
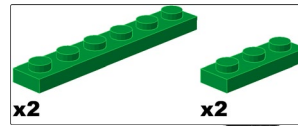
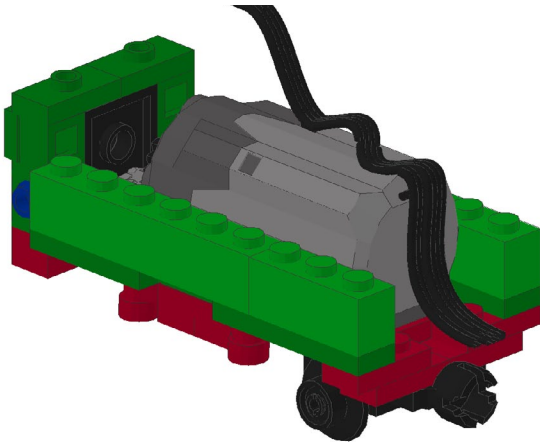
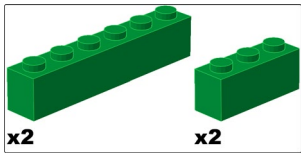




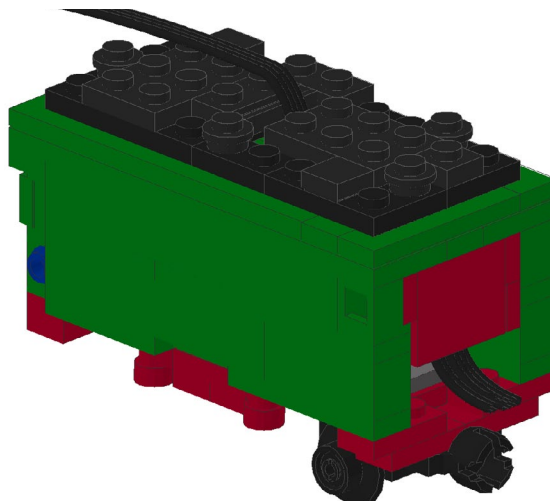
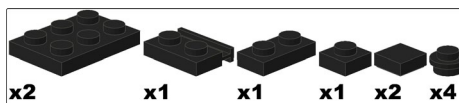
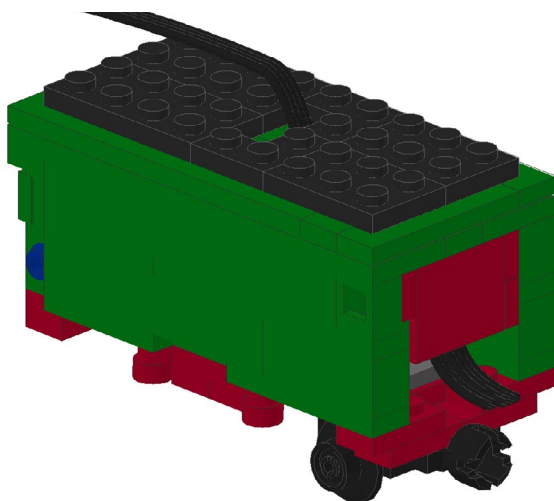
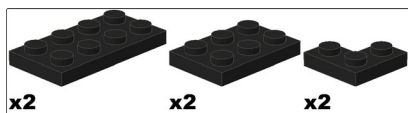
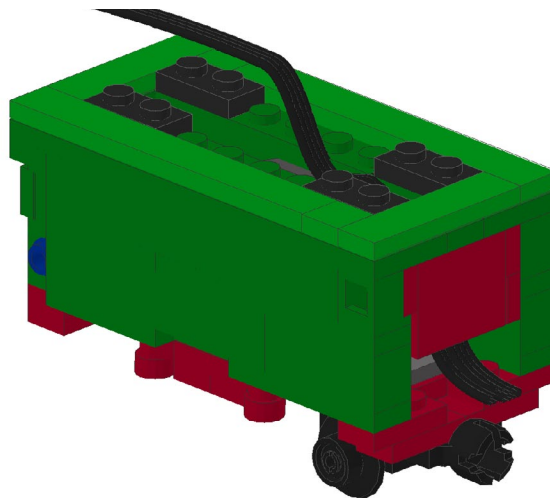
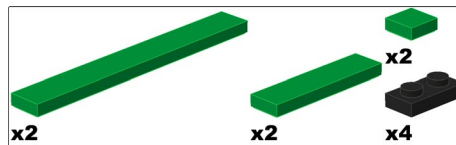
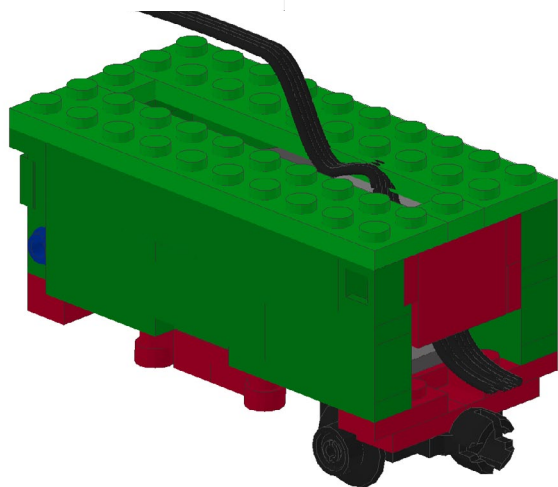
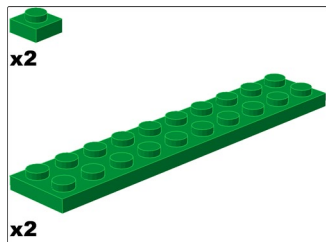


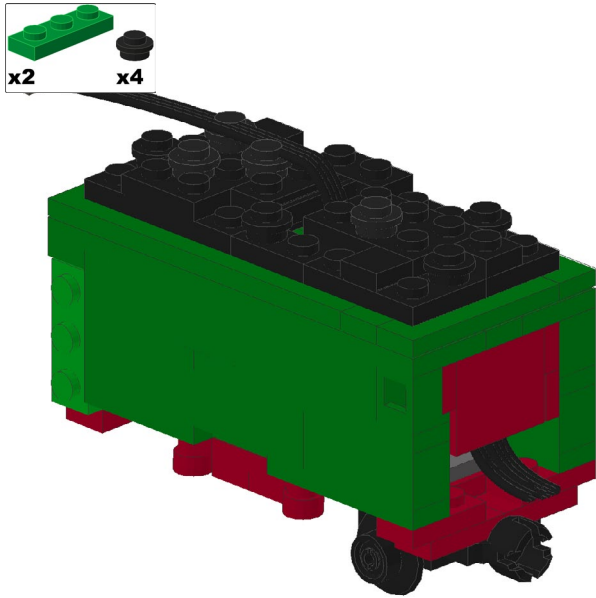
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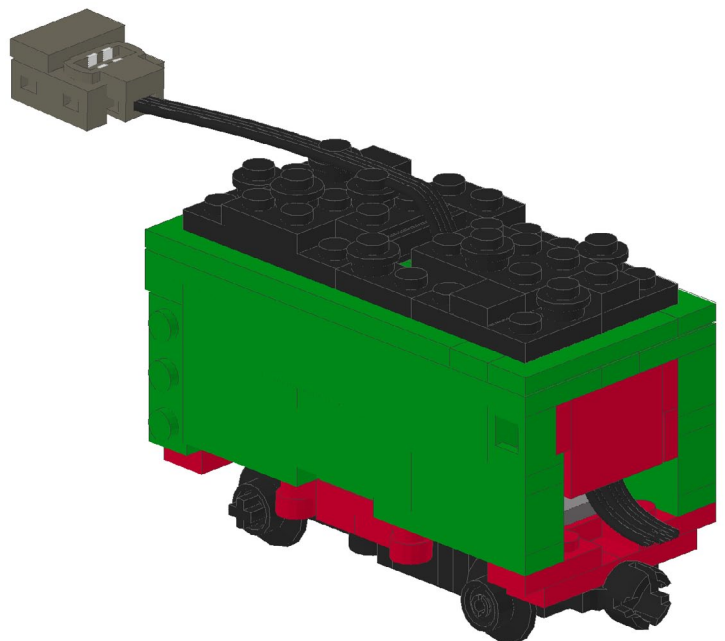
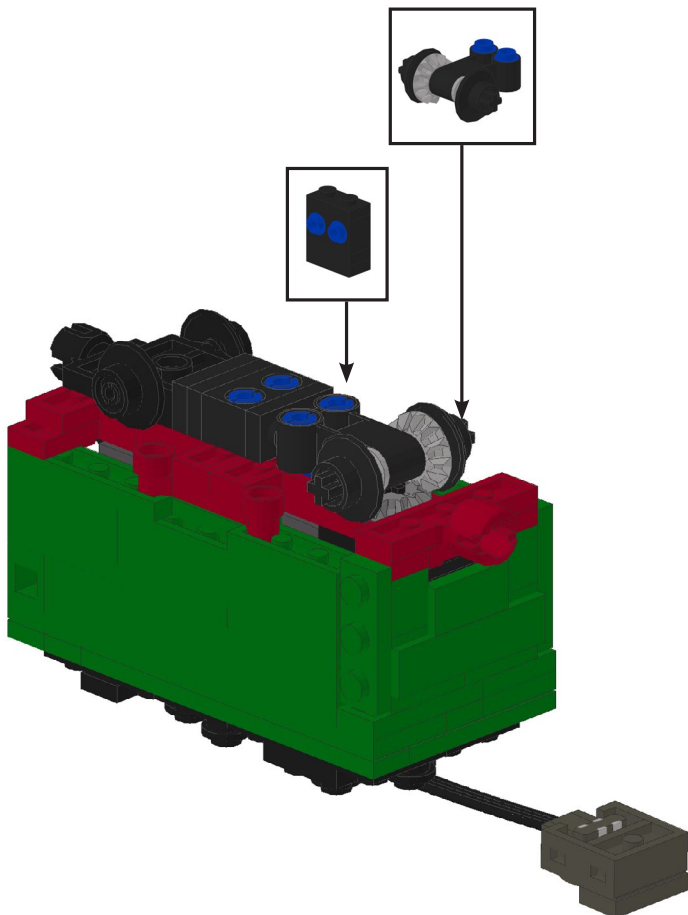
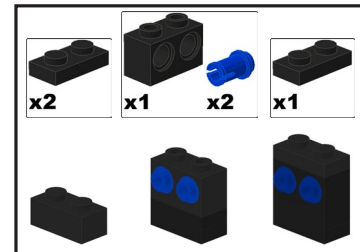
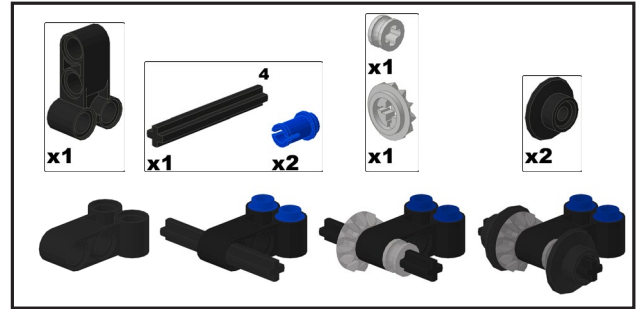




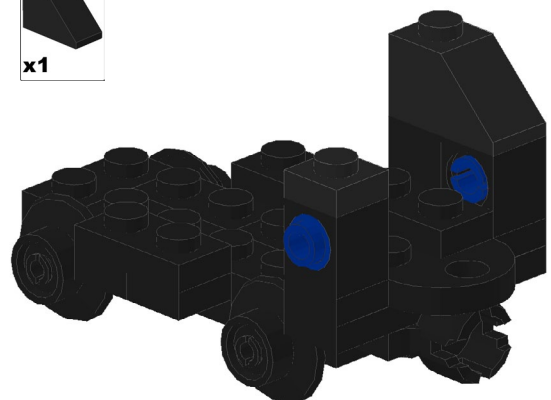
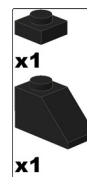
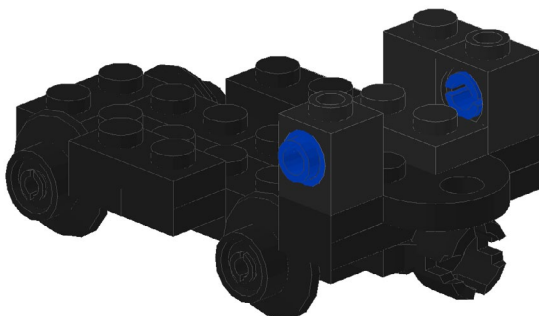
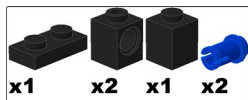
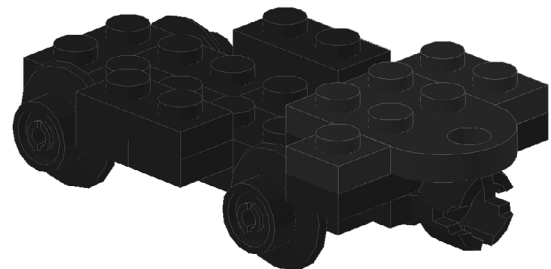
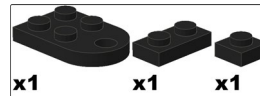
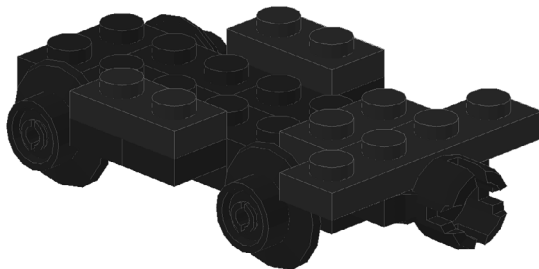
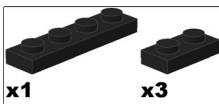
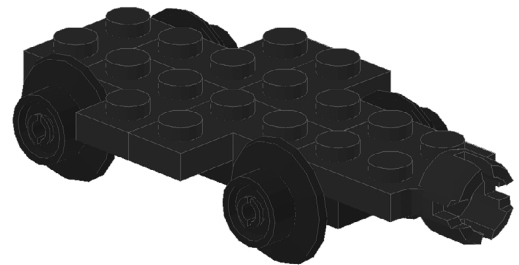
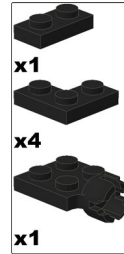
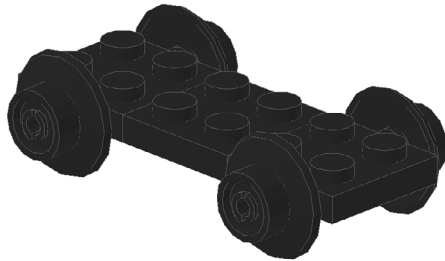
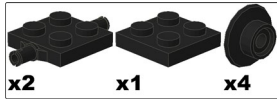


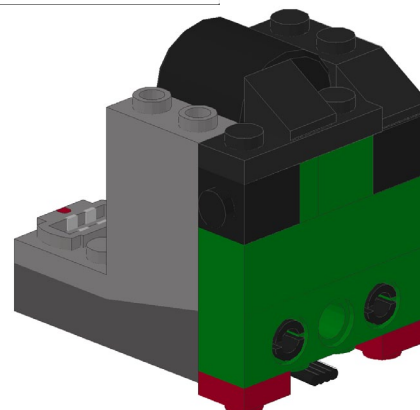
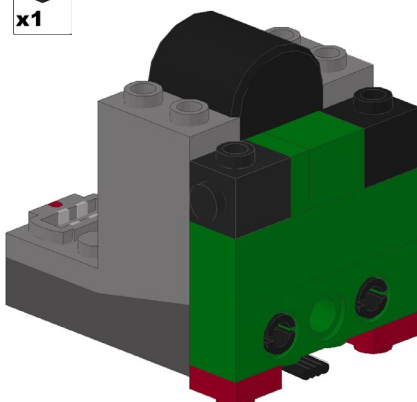
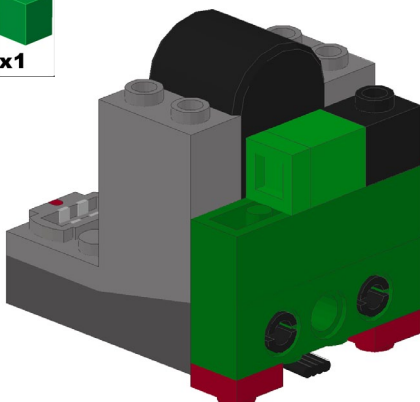
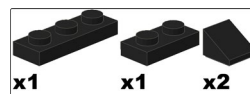
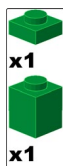
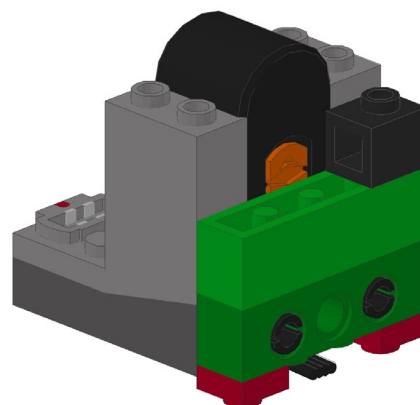
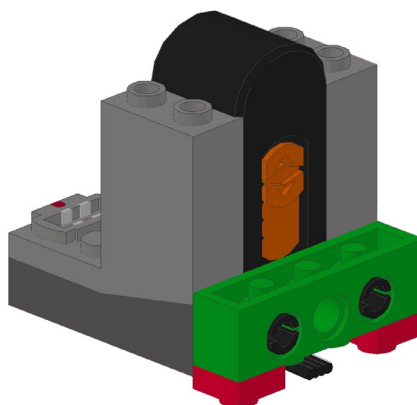
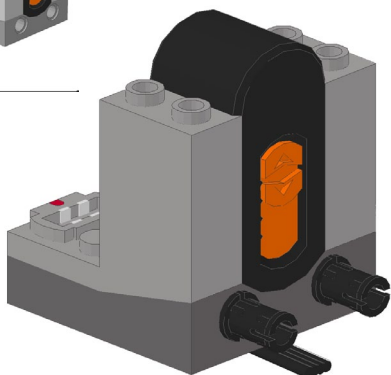
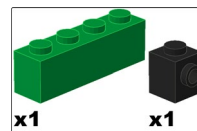
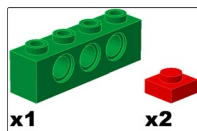
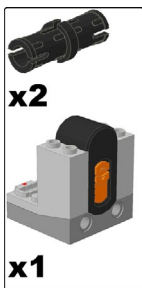


WARNING : The wheels are modified to fit the Technic axle.

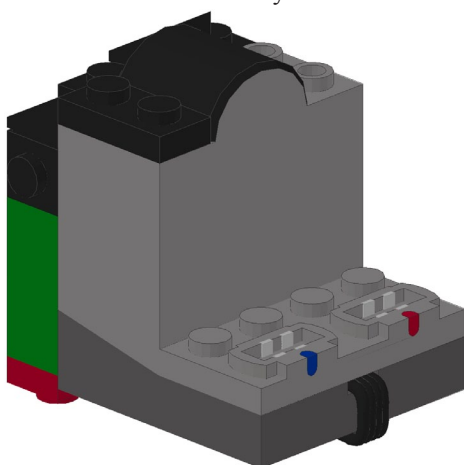




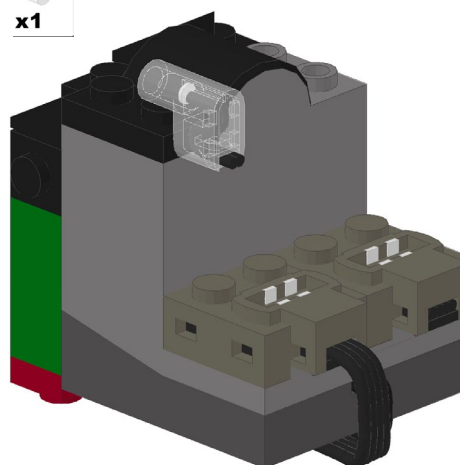




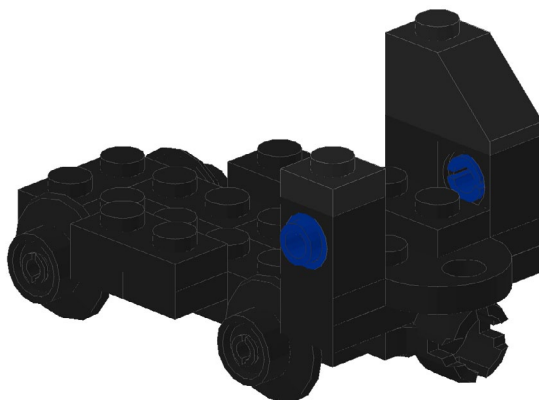
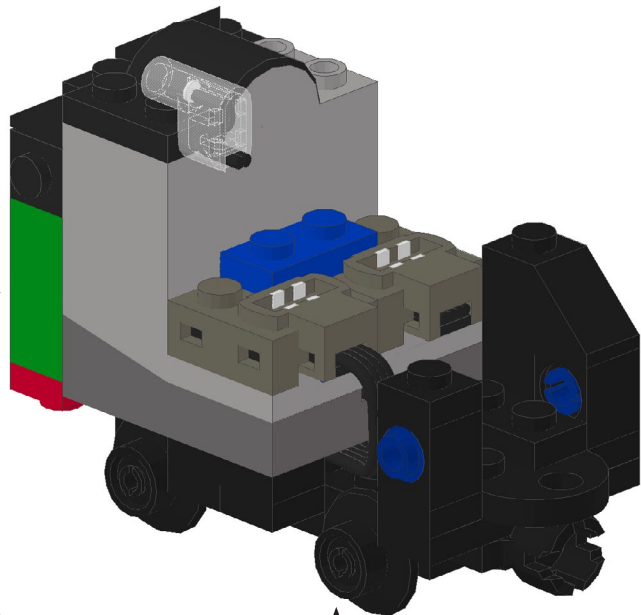
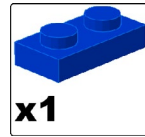
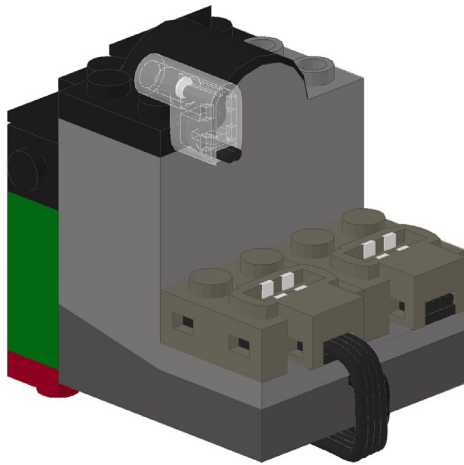
The PFS receiver is plugged to the PFS battery box

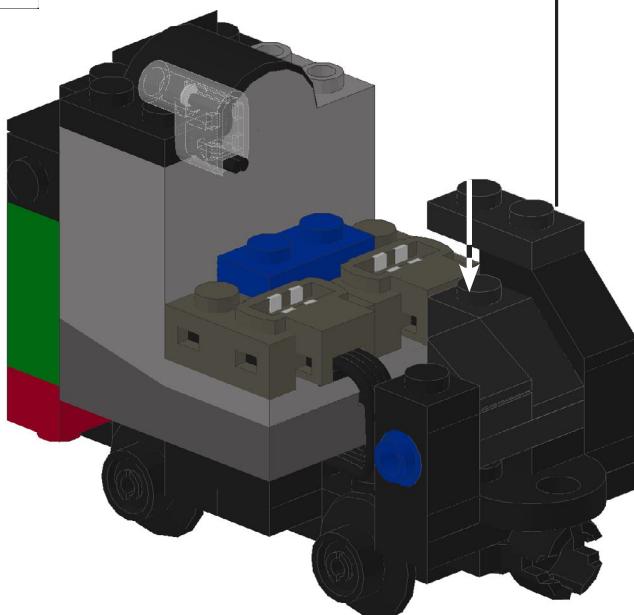
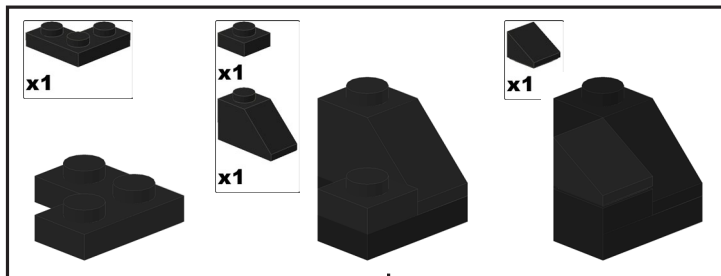
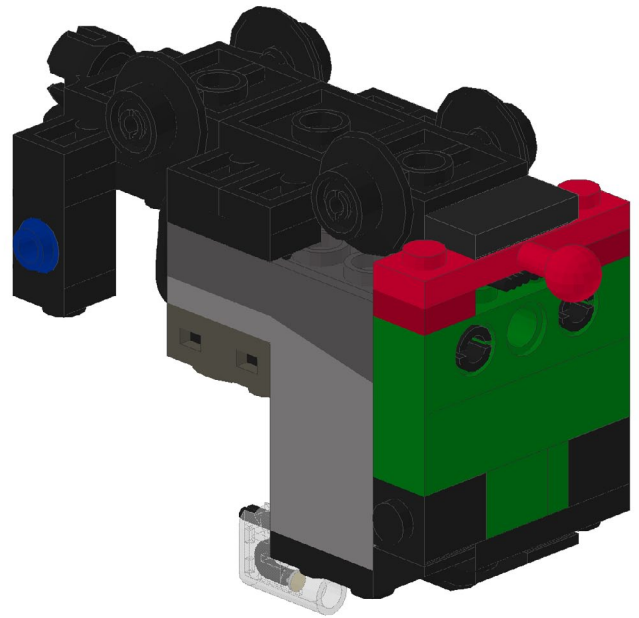
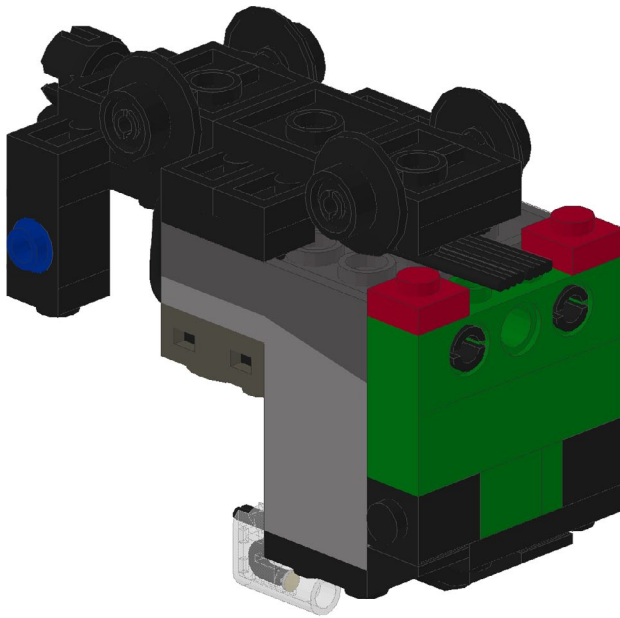
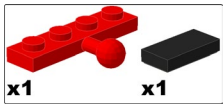


The PFS medium motor and PFS light are plugged to the PFS receiver.

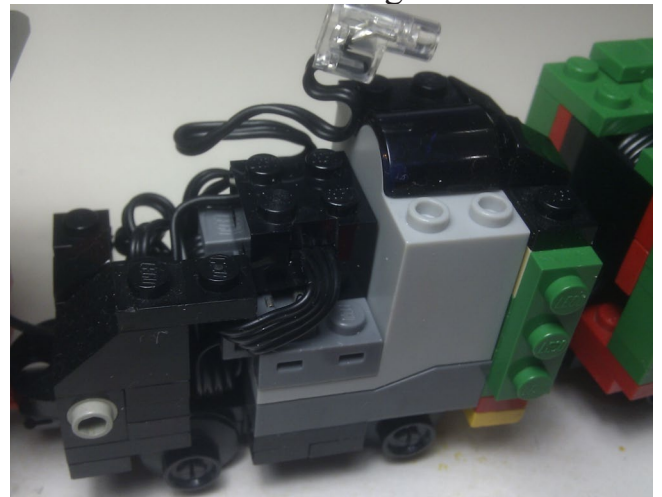




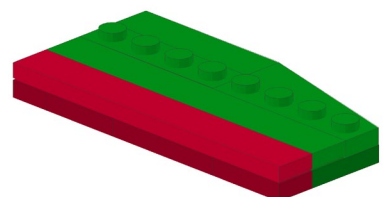
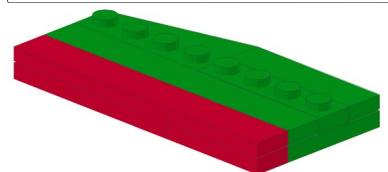
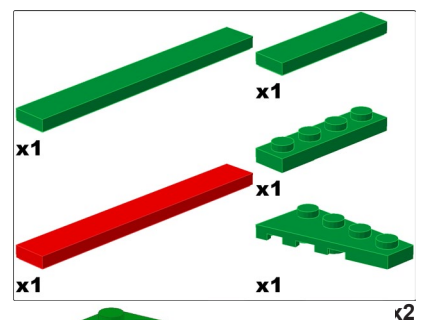
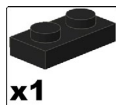
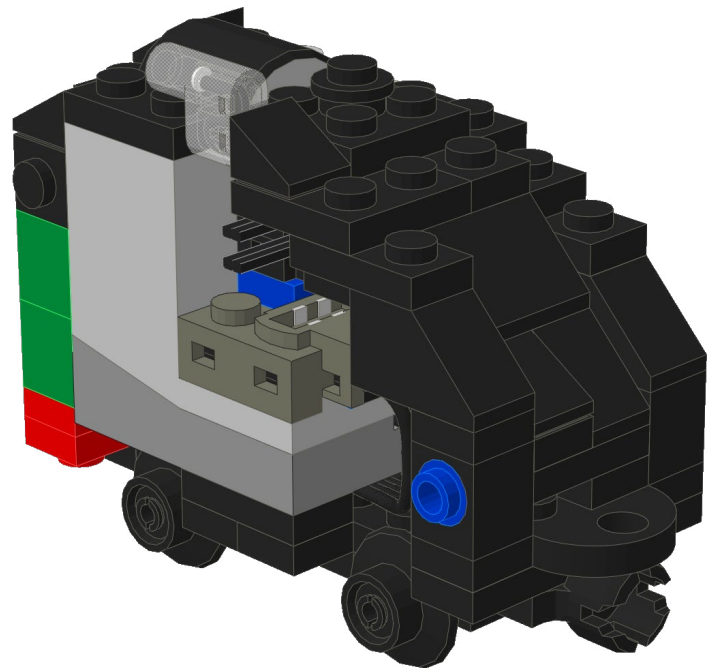


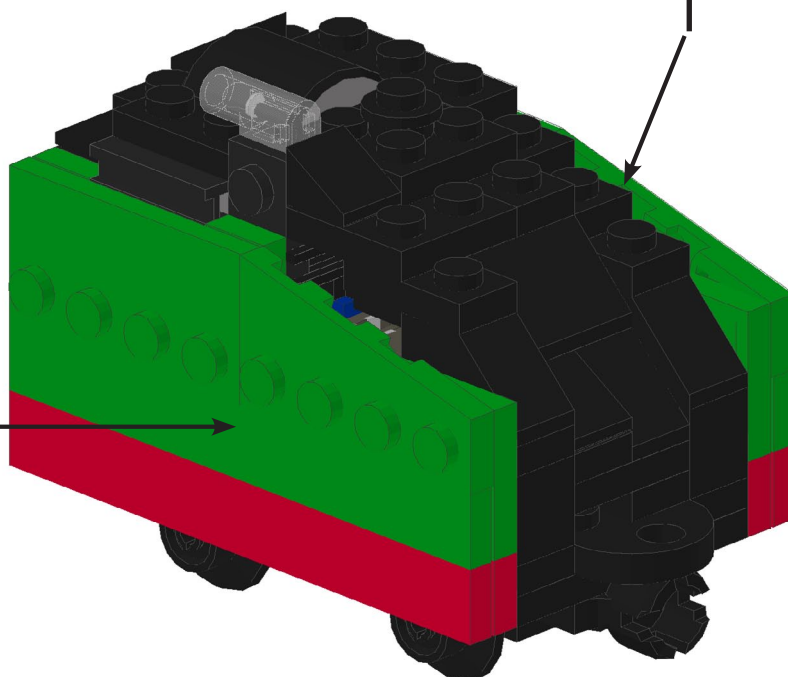
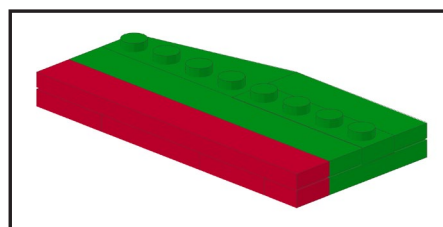
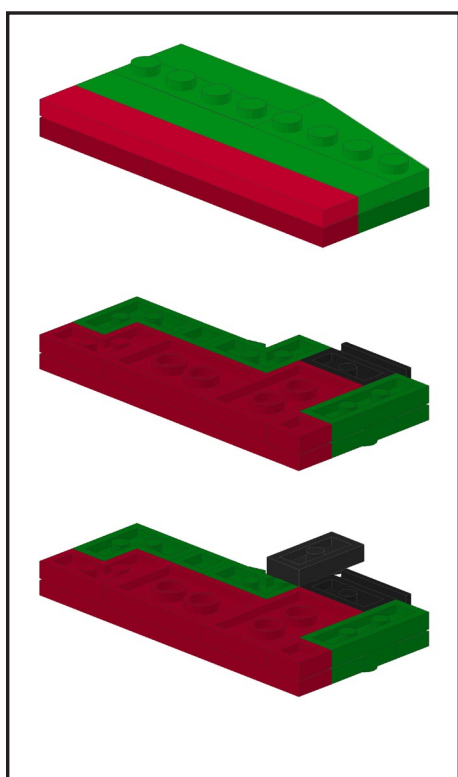


The wiring is a bit tricky, but you really can fit all the cables length into the cars.

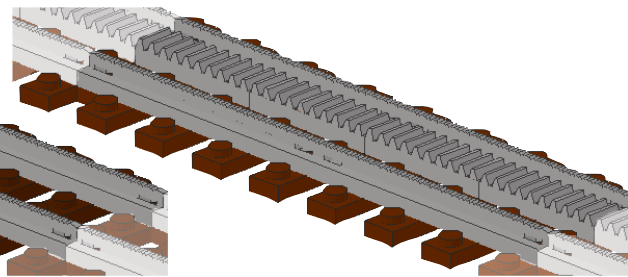
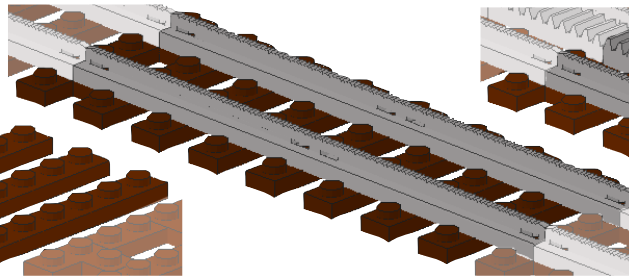
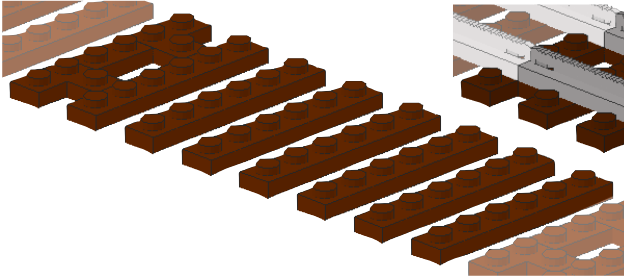
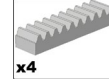
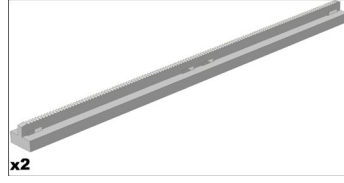
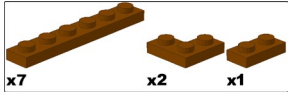












# Far West Train

A 4-Wide Cog Railway PFS Train



# ***BIRMINGHAM, ALABAMA!***

January 19<sup>th</sup> & 20<sup>th</sup> 2013

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