



Panzerbricks

10.5cm K18 auf Panzer Selbstfahrlafette IVa "Dickermass"

Text & pictures by Legotron

This is the exclusive presentation for Hispabrick Magazine of the latest Panzerbricks [1] model: the self-propelled gun 10.5cm K18 auf Panzer Selbstfahrlafette IVa "Dickermass."

The first question anyone can ask when you read the name and see the pictures of the vehicle may be, why this tank? First of all because the original vehicle is impressive, also it is unknown, even for fans of tanks and military vehicles, and I'm sure there is no other LEGO® reproduction of this vehicle to date. A little wiki of this new member of Panzerbricks will state that it was a powerful self-propelled gun, built on a modified chassis of a Panzer IV Ausf. A, armed with a 105mm naval gun. It was designed at the beginning of World War II, and it was intended to be used in a hypothetical assault for seizing control of the fortress of Gibraltar by the Wehrmacht in an operation codenamed Felix. The operation was abandoned and the two units built were assigned to an antitank battalion in Operation Barbarossa, the invasion of Russia, where they were intended to act as tank destroyers. Although not built in series, both prototypes were the starting point for future developments, like the well-known Panzerjäger Nashorn or

Marder series vehicles.

Regarding the LEGO model, it is made in minifig assimilated scale but slightly oversized to make it compatible with other Panzerbricks vehicles. When designing, I always work with a side photo and other vehicles in my collection for size reference. Since the minifigs don't keep the same proportion as the human body, vehicles need to be wider, and that means they grow in height and length so as not to be disproportionate. The advantage of such a small increase of size is the possibility to add portholes, doors and other functional elements which fit with the minifigs.

From the beginning I thought that his bulky appearance would not involve any problem for the design. Moreover, being based on the Panzer IV chassis I've used in several other models, I started with the advantage of having a good starting point and some work already done. But I was wrong: time showed that there were some design problems I had to resolve in order to finish the model correctly.

First I made some modifications to the chassis starting at the front, where I placed a single plate instead of the two plates that were used at panzer IV chassis. This single plate reached the combat superstructure, similar to the Hummel and Nashorn models of the Panzerbricks collection [2], but with less sloping and a longer size. I also relocate the drive wheels to fit the new height of the front hull and thus left the chassis ready. Then it was the turn of the combat superstructure, that I built separately, trying to leave enough space to mount the gun. The side armour plates, which are usually the more difficult to build, did not present any problem as they were parallel to the side structure and were fairly easy to attach. Then I built the rear armour plate of the combat superstructure, which practically defined the interior. I left the front armour plate to be built with the gun. I built the gun in two parts, the rear one, with the supports to fit it with the chassis, which allowed it to turn and elevate, and the front one, with the armour plating, barrel and gun mantlet. When I tried to assemble the gun mantlet to the front armour plate of the superstructure I didn't achieve a nice result. I wanted the gun to be in the middle of the joining point, both vertically and horizontally, and in a single LEGO® part. But I had a problem. The better the appearance I achieved the weaker the connection turned out to be, so the building process was stopped several weeks. I tried new ways of building the gun mantlet and the joining point with the front armour plate, but without success. One day, searching the Internet LEGO news, I saw a new bluish light grey piece: the Modified Plate 2x2 with Groove with 1 Stud in Center (according to the Bricklink nomenclature [3]). It was a new LEGO brick I didn't know, at least in that colour, and it was then that I found the solution to fit the gun to the front

armour plate. It was perfect. After waiting for the arrival of the piece I proceeded to mount the whole gun. The key piece to build the mantlet was a Technic Driving Ring Extension, and was perfect. This was the part I needed to obtain a perfect mantlet for that gun. After that, I had to complete the shielding plates of the superstructure, but I found a small problem. That part is sloped in several ways, but the space to anchor it to the chassis was very small, since the size of the gun and its support had occupied almost all the available space. A lot of tests were needed to find a way to anchor that part of the armour plate, but finally I managed to find a method to do it. And that was all, the vehicle was finished.

It was a long process, longer than usual, but the MOC has come to a good end. I've used 719 pieces in all, and now I've run out of chain links again, so before beginning a new tracked vehicle I will have to buy many more of them...

References:

- [1] Panzerbricks blogs: <http://panzerbricks.wordpress.com/>
- [2] Reference of Panzerbricks' Hummel: http://farm3.static.flickr.com/2552/3844903215_087b83b3ef_o.jpg
- [2] Bricklink: Unofficial online LEGO marketplace <http://www.bricklink.com>

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