

# Review 10213: Shuttle Adventure



**Set: Shuttle Adventure**  
**Set number: 10213**  
**Number of parts: 1204**  
**Contains: Space Shuttle, fuel tanks for launching, two astronauts (a man and a woman), support vehicle, operator, launch pad.**  
**Recommended retail price: 89,99€**

During the last 20 years there has always been a link between space and bricks. There have been four sets that have directly reproduced the NASA space shuttle at TOWN/CITY scale. Two of these were launch areas (1682, which came out in 1990 and 6339 in 1995), a terrestrial transport for the shuttle (6346 in 1992) and a reproduction of the transportation method used to take the shuttle from one of its landing areas to the launch area. (6544 in 1995). All of these were characterised by their small scale and angular design which were a marvel to us when we were younger, and perfectly fitted the design objective, but which has always left us wanting a more elaborate shuttle design. Later on more space theme sets were launched, but moving away from the shuttle design. Other lines also took inspiration here like the famous Technic shuttle (8480 in 1996) and later Discovery Channel sets, which reproduced several NASA rockets and satellites in varying scales.

In 2010, coinciding with the last trip in the NASA shuttle program (and this is no coincidence) this magnificent reproduction of the shuttle appears, at a scale that allows many elements to be reproduced with a good level of detail.

## The NASA Shuttle Program [1]

April 12, 1981 was a historical day, because it saw the first launch into space of a manned Space Shuttle, after 9 years of development. The name of the shuttle was Columbia and it was one of 4 shuttles, together with the Challenger, the Discovery and the Atlantis. It was the first time a "rocket" shaped like a plane went out to space and came back. After re-entry, the shuttle was to glide to the landing strip where it would land the same way a plane does.

## 3.. 2.. 1.. IGNITION!!!

*Text by lluisgib*

*Pictures by lluisgib and LEGO® Systems A/S*

From the launch of that first mission, the space shuttle has been used to transport heavy loads into different orbits, to bring supplies and additional modules to the International Space Station (ISS) and to carry out maintenance missions (for example for the Hubble space telescope).

The characteristics for each of the shuttles are as follows:

- Total length: 56,14 m.
- Shuttle length: 37,23 m
- Width: 23,79 m
- Weight at launch: 2,041,166 kg
- Weight after the mission: 104,326 kg
- Maximum cargo weight: 28.803 kg (returning to Earth with around 14,000 kg)
- Orbit: 185 to 643 km (cannot go over 1.000 km)
- Speed: 27,875 km/h

The history of the shuttles is full of successes and failures, but despite this, they are one of the icons of the space race and, in my opinion, the beautiful machines that have gone out into space.

## Building the set

After sorting the pieces in order to be able to locate them more easily, I start by building a small transport vehicle to take the astronauts to the shuttle. It's a nice complement and includes a minifig by way of assistant, although I must say I'm anxious to start building the shuttle.

The first part of the shuttle to be built are the wings and the bottom of the hull. As the shuttle starts to take shape, the first characteristics start to stand out. The hull has some holes to hide the gear train. Furthermore, so the shuttle can glide towards the landing, there are flaps on the rear of the wings that can be extended. On the rear you find the support for the propulsion engines in the centre.

A remarkable characteristic of the engines is that they are placed at the same angle as the original shuttle, in contrast to



the CITY scale shuttle which due to its limited size could not incorporate this detail. In addition to the three main engines, the designers have included engines for orbital manoeuvring. Two small engines that to make small corrections and manoeuvres in microgravity conditions. These are placed above the two lower engines and on either side of the top engine. Just like in the real model, the engines have fairings made with some White Windscreen 7 x 4 x 2 Round Extended Front Edge

Before I continue building the cockpit and the hold I build one of the functional arts of the model. The landing gear is completely functional and includes a Technic mechanism with a shock absorber in order to keep the gear extended or retracted. The rear landing gear is operated by pushing either one of them after which the other will follow. The front gear however, is operated from the outside which is a more elegant solution.



It is at this point that I will explain one of the two aspects that merit criticism in this set. The rear gear, when retracted, is still partially visible. The effect this causes is a bit strange once the whole shuttle has been built. You see a nice, compact model, but with the rear landing gear partially in sight, as if the model wasn't completely finished. Keeping in mind the restriction in number of parts and/or price for a set like this one, it would have been preferable not to include the small auxiliary vehicle and add sufficient parts to completely hide the rear landing gear.

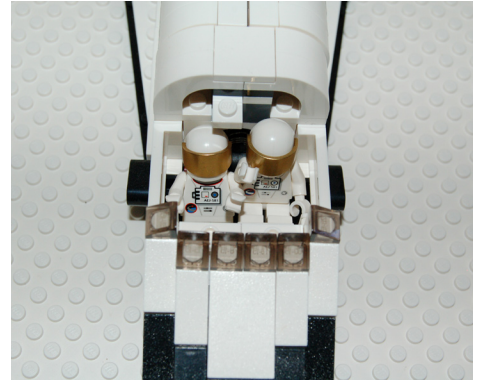
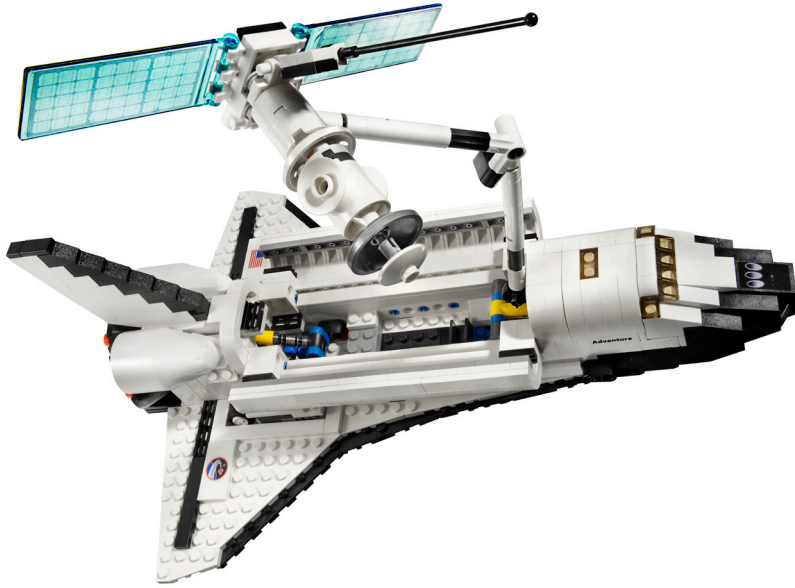
I now have a solid base to build the rest of the model. The next step is the hold, which is quite simple. With some white Brick Arch 1 x 3 x 2 Curved Top and a couple of Technic Bricks and Technic Pins, the cover (which can be opened) is built. Inside the hold there is an arm which can be used to place the included satellite in orbit. This satellite is very realistic as it includes solar panels, several satellite dishes and retractable elements. Of course, both the satellite and the retractable arm fit perfectly inside the hold.

In the cockpit there are some nice building techniques as well as some details I don't quite like. In order to fit two astronauts in a 6 stud wide cockpit, some Panel 1 x 2 x 3 have been used, placed horizontally. For the change in orientation, a Brick Modified 1 x 1 with stud on 1 side has been used and a Brick Modified 1 x 1 with handle together with a Plate 1 x 1 with clip Horizontal on the other side. The solution is quite effective, but leaves a few narrow cracks, although they don't stand out. The two astronauts (surprisingly a man and a woman - I love this detail) fit snugly inside the cockpit. It's not easy to place them there and if you don't fit them perfectly, the cover of the cockpit won't close correctly.

For the windshield the already famous Slope 30 1 x 1 x 2/3 (or Cheese Slope) have been used in Trans Black. This is the second aspect of the set I don't like. First of all, I need to recognise that in the real model this windscreen is really small in comparison to the rest of the shuttle, which makes it very difficult to find the correct solution. The result on the outside is good and you could say it is "to scale". What I don't like is that when you place the cover on the cockpit you can't see inside. As I said, it is difficult to reproduce everything perfectly and it is by no means a reason to disqualify the set. But you are left with a strange feeling when you place the cover and the interior disappears.

With some Slopes of different sizes the nose of the shuttle is shaped, and after adding the rear rudder the shuttle is finished.





But the building isn't over. You still need to build the fuel tanks that will carry the shuttle into space. Building them isn't complicated, as they consist of a number of round panels and some bricks with round corners for the central tank, all in Reddish Brown, finished off made of wedges and windscreens to give it the sharply rounded shape. As a curious detail, the tank is reproduced including a pipe that runs the full length of one of its sides.

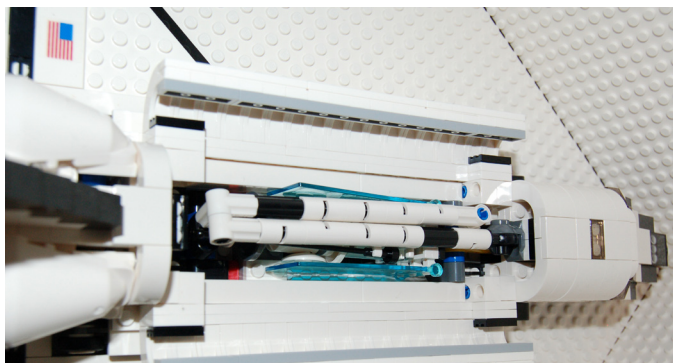
The lateral tanks are even simpler. They consist of a succession of Cylinder Half 2 x 4 x 4 and bricks round corner 2 x 2 macaroni, finished off with cones to give them their pointy shape. These lateral tanks are connected to the main tank with Technic Pin Long without Friction Ridges Lengthwise which in turn is connected to the shuttle in the same way.

To finish the model there is still the launch pad, which serves solely to keep the shuttle with its fuel tanks vertical. A couple of flood lights are placed around the shuttle...

### Conclusions

I think this is a long awaited model for many AFOLs who have been dreaming of space since we were kids and have carried many astronauts on marvellous trips with the shuttle from the TOWN theme.

The model is quite true to reality, although as can be expected, the scale doesn't coincide with the minifigs (that would require several thousand additional pieces...) Many details have been incorporated into the model, like the orientation of the engines, the flaps, the engines for lateral manoeuvring or the landing gear.



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The shape is well represented and the colour scheme, although simple, is perfect in all parts of the shuttle and the tanks.

I like the fact that they have added a female astronaut and hope that if this tendency continues it will soon stop being something to point out in LEGO® sets.

The small auxiliary vehicle is nice and curious. As I have explained before, I would have preferred these parts to be used to cover the landing gear, but the vehicle is OK.



This set is highly recommendable for space fans. I would love to see more reproductions or collaborations with space agencies in the future, so we can add more rockets and space crafts to our collections.

[1] Source Wikipedia

Thanks to: LEGO SYSTEM A/S and Jan Beyer for providing this set and LEGO Iberia S.A., Joachim Schwidtal and Rosa Seegelken for the official images.

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