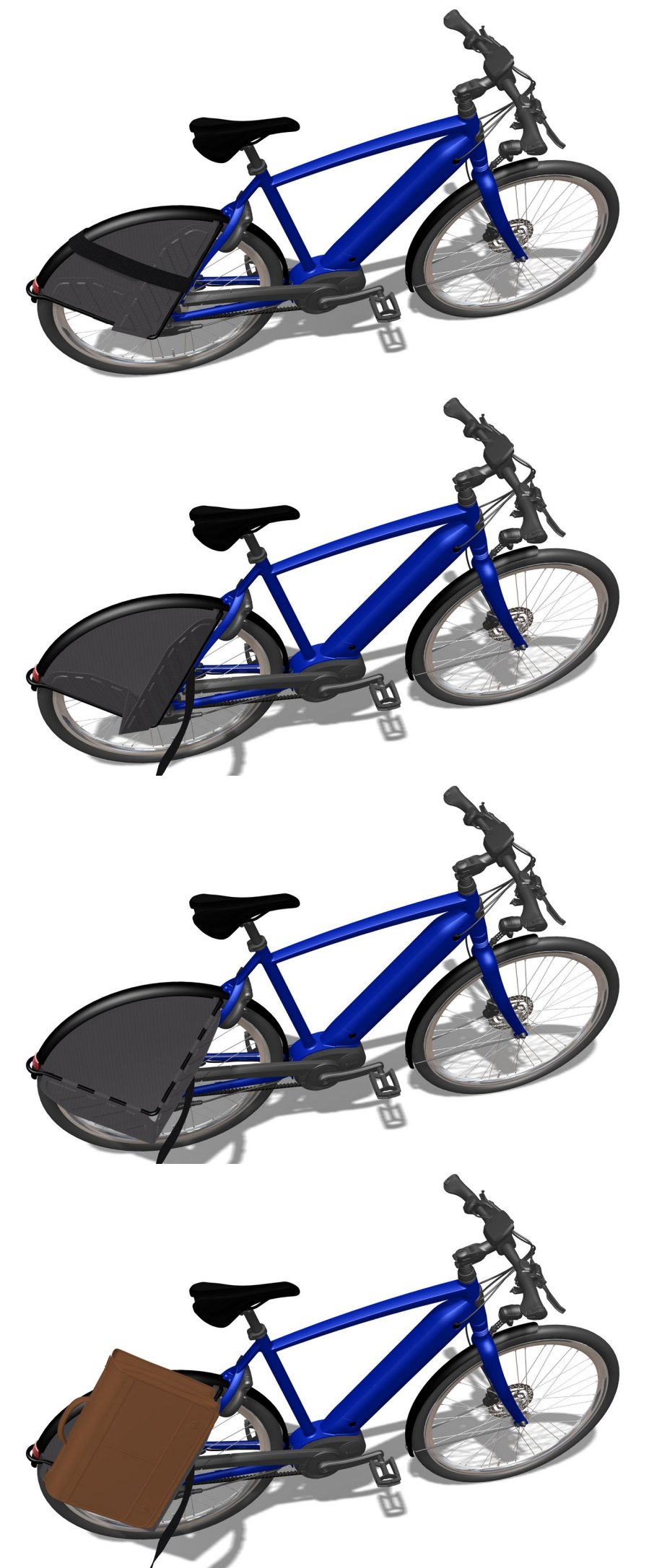


E-bike design for commuters

Designing a luggage carrier for laptop bags



Design

The Gazelle laptop carrier is specifically designed for laptop bags it can also be used for other types of bag. A backpack also easily fits and also a grocery shopper could work, depending on the design. This gives the user the flexibility to select a bag to his likings and also to mount different bags on the bike. In the weekend for example he can mount backpack and in during the week a laptop bag.

Ease of use

In use the concept is easily folded out and the bag can easily be put on the carrier. Securing is easily done as the mounting strap can be easily attached with one hand. The process of putting your bag on the bike has been made as easy as possible. It is a matter of detaching the mounting strap, which also unlocks the supporting parts, which then fold out automatically.

Aesthetics

The design has a modern and unique look. By making the design modern and giving it some sharper form in combination with rounded corners the design fits well with the CityZen's design. The CityZen also has some quite angular forms, but also some more rounded surface treatments. Also the CityZen has quite sporty and technical looks, which can be said from the carrier as well.

E-bikes

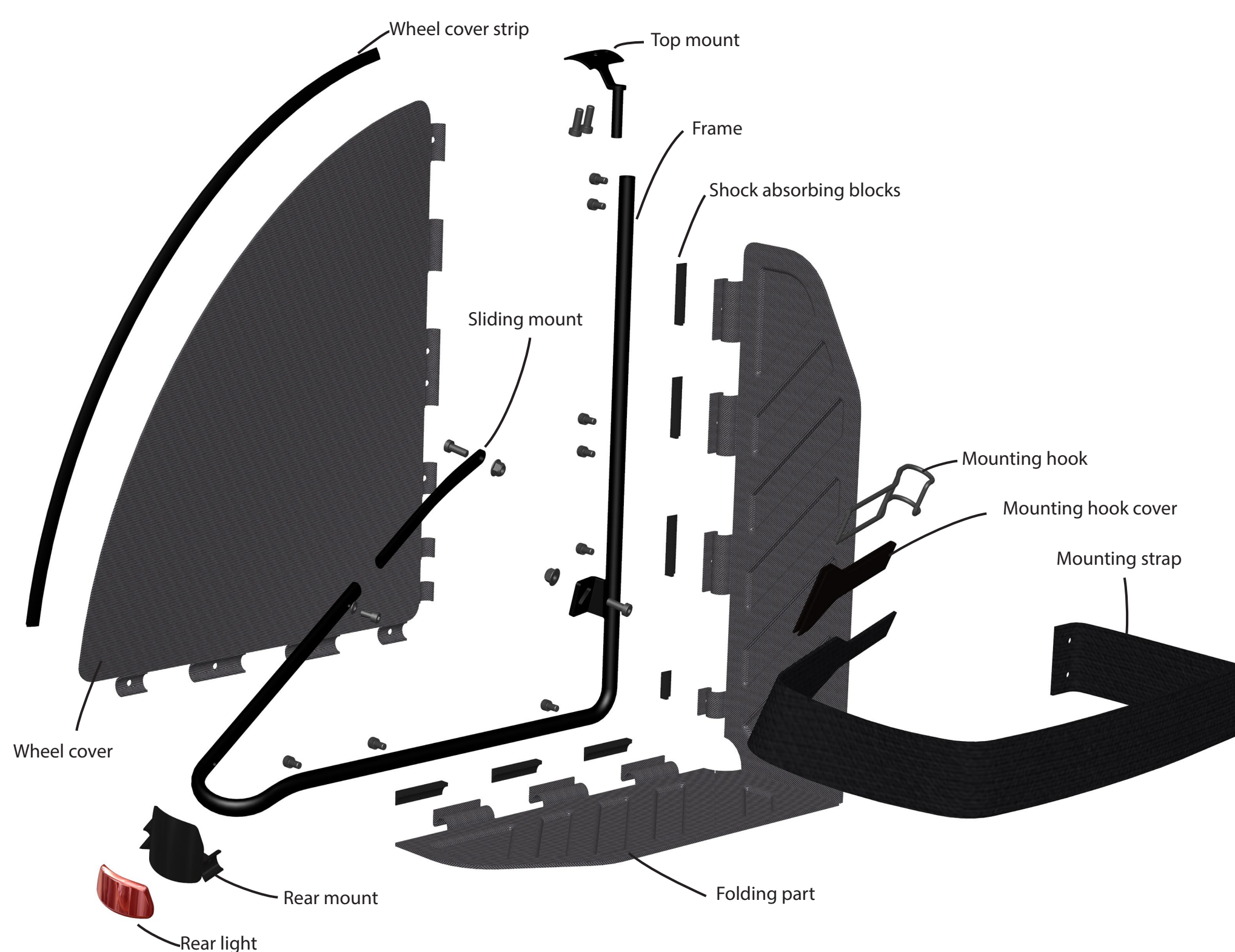
Electric bikes have been around for years, the first known concepts date from the 1980s. In the last ten years the sales of electric bikes have grown rapidly and at the moment 20 percent of new bikes sold in The Netherlands are electric. Slowly the price of an electric bike is decreasing; at the moment prices start around thousand euro. The image of the electric bike is slowly changing as well: Where some years ago the electric bike used to be seen as a product for elderly and pensioners it is now becoming more popular among a younger audience.

In The Netherlands cycling is already responsible for a substantial part of the daily commutes. The commuting distance covered by bike is still limited though. The further adaptation of the electric bike could change this, as the electric bike makes it easier to cover larger commuting distances by bike. In this project the following research question will be addressed: How to make electric bikes more attractive to

commuters? In consultation with Gazelle the project has been focussed on the local Dutch e-bike market.

An e-bike is defined as a bicycle which uses electric propulsion in addition to human power. This means you also have to paddle in order to get assistance from the electrical motor. Internationally the term e-bike is also used for e-bikes or electrical mopeds, where you do not have to paddle. Internationally, an e-bike where you have to paddle to get assistance, is called a pedelec. Because in Dutch the term e-bike is often used and also because in literature the term e-bike is most common we will use the term e-bike to describe the pedelec.

A special variant of the e-bike (or pedelec) is called the speed pedelec. This version of the e-bike can reach speeds up to 45 kilometres per hour and is equipped with a more powerful electrical engine. In this variant you also have to paddle in order to get assistance.



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07-07-2017
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