

# STRONGBACK 22S



# STRONGBACK 24

Lightweight Wheelchair



## Instructions for use

**STRONGBACK**  
mobility 

The logo for STRONGBACK mobility is located at the bottom right of the page. It features the word 'STRONGBACK' in a bold, sans-serif font, with 'mobility' in a smaller, lowercase font below it. To the right of the text is a stylized graphic element consisting of two curved lines that resemble a flame or a stylized 'S'.

## 4 Product description

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The **STRONGBACK 22S / STRONGBACK 24** is a lightweight folding wheelchair with integrated ergonomic back support (lumbar support). It is pre-assembled and delivered in a cardboard box. After unpacking, if possible, keep the cardboard box and other packing materials, as they may be required for storing the wheelchair at a later date.

Please check the contents of the package upon receipt to ensure that all parts have been included and are undamaged. Do not use the product if any of the parts are damaged. Inform your specialist retailer of any damage without delay.

### 4.1 Scope of supply

The contents of the *Strongback Mobility* box should include:

- 1 wheelchair, pre-assembled and folded
- 1 pair of footrests
- 1 set of instructions for use
- 1 set of tools
- Accessories (if ordered)

In the event that the wheelchair is delivered by parcel post or carrier, the contents should be checked for any damage suffered in transit immediately and in the presence of the delivery person(s). If there is any damage, please proceed as follows:

- Make a note of the damage.
- Write a declaration of assignment; all claims arising as a result of the damage are assigned to the deliverer.
- Send the record of damage, consignment note and declaration of assignment to *Strongback Mobility*.

### 4.2 Labelling

The product identification plate is located on the inside of the lower side frame tube. This plate includes the model name and other technical details. If you need to contact your dealer about repairs, replacement parts, warranty claims or damage to the wheelchair suffered in transit, please ensure that you have the following details on hand: the wheelchair's exact model name and number, month of manufacture, lot number and serial number.

### 4.3 Overview



1. Push handles
2. Backrest with integrated lumbar support
3. Folding back release hinge
4. Drive wheel
5. Handrim
6. Wheel lock
7. Castor
8. Footplate with heel strap (can be folded up)
9. Anti-tip wheels
10. Footrests (swingable and removable)
11. Seat cushion
12. Side panel with netting to protect clothing
13. Armrest (fixed arms)

4.3.1 Models with attendant brakes or drum brakes



14. Attendant brake

15. Drum brake

4.3.2 Models with flip-back arms



13. Armrest (flip-back)

## 5 Adjustments

The adjustments described below should be carried out in consultation with your specialist medical aid supplier. You may also be able to make these adjustments yourself if you have sufficient previous knowledge and have been given clear instructions from the supplier.

The following tools will be required to make these adjustments:

- Allen key set
- Phillips screwdriver



### **Caution!**

Complete these adjustments before the user sits in the wheelchair in order to avoid potential injury.

### 5.1 Adjusting the length of the footrests

The height of the footrests can be adjusted to suit the length of the user's lower leg.

To adjust the height, undo the Allen screw (1) on each footrest. You can now adjust the height of the footrests by selecting one of the predefined positions marked by the holes in the tubing (2). The ideal length of footrest is obtained when your thighs are fully and comfortably supported by the chair seat when you place your feet on the footplates. To complete the adjustment, tighten the Allen screw securely in the hole you have selected.



### 5.2 Adjusting the backrest

The backrest is set in a predefined position during manufacture and is likely to be suitable for most users. However, it can be individually adjusted by opening the Velcro fasteners and loosening or tightening them in accordance with the user's needs before closing them again. After each adjustment, it is important to ensure that the Velcro fasteners are firmly attached to each other so that they do not open accidentally.

Some possible adjustments are listed below.



- To adjust the support for the lower spine to a higher position, tighten the middle fasteners (2) and loosen the lower fasteners (3).
- To adjust the support for the lower spine to a lower position, tighten the lower fasteners (3) and loosen the middle fasteners (2).
- To increase the area of the support for the lower spine, tighten both the middle fasteners (2) and the lower fasteners (3).
- To decrease the size of the posture support for the lower spine, loosen both the middle fasteners (2) and the lower fasteners (3).
- To alter the posture support for the upper back and so change the backrest angle, first remove the fixing screws (4). Next, tighten the upper fasteners (1) to provide a higher level of support, or loosen them to provide a lower level of support. When the ideal position has been found, screw the fixing screws through the material and back into the frame.

Tip: Before making any of these adjustments, half close the wheelchair in order to take the tension out of the backrest.

### 5.3 Adjusting the axle position of the drive wheels

The **STRONGBACK 24** has a choice of three horizontally adjacent positions for the axle serving the rear drive wheels (1). This makes it possible to adjust the center of gravity and the associated maneuvering characteristics of the wheelchair.



The further back the axle mounts are installed, the less likely the wheelchair is to tip over in use, i.e. in this configuration there is the least likelihood of the wheelchair tipping backwards. The further forward the axle mounts are installed, the lower the proportion of the total weight that is over the forward casters, making it easier to deliberately tip the wheelchair backwards (either by the user or the companion), which in turn makes the chair easier to maneuver.

The wheelchair is delivered with the axle mounts factory fitted in the furthest back position. Experienced users who want the axle position to be moved further forward should contact the specialist retailer who sold them the wheelchair.

**Caution!**

Adjustments to the axle position should be exclusively carried out by specialist staff trained by *Strongback Mobility* or their contractual partners and not by the purchaser or wheelchair user. This kind of adjustment involves repositioning the wheel locks, so any incorrect adjustment could significantly increase the risk of accident or injury.

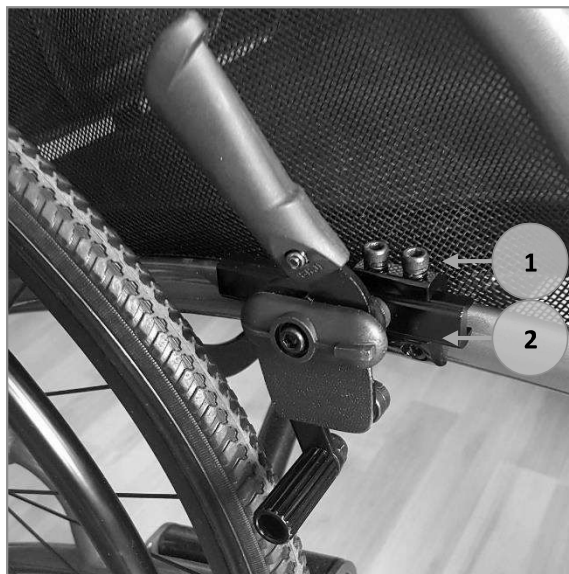
This feature is not available for the **STRONGBACK 22S**.

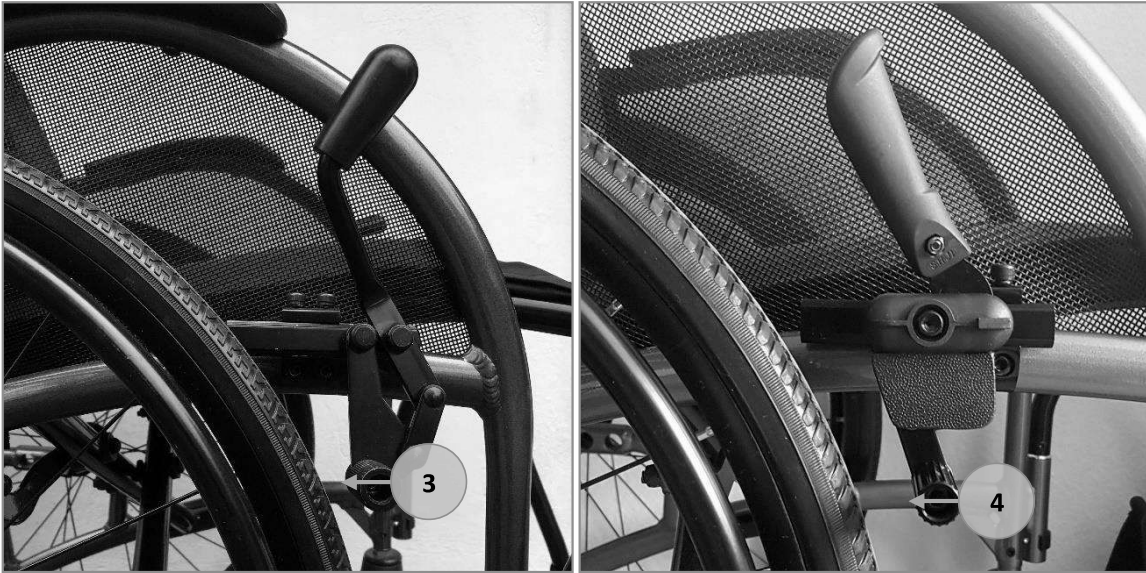
#### 5.4 Adjusting the wheel locks

The wheel locks are adjusted correctly during manufacture and should not require further adjustment. Over time of use, however, it may be required to re-adjust the wheel locks to ensure proper function. In any case, if you feel that the locks are not tight enough, adjust them immediately as follows.

Open the locks entirely by pulling the lever backwards as far as possible. Loosen the screws (1) on the top of the rail (2). Slide the lock in its rail forward (to loosen the lock) or backwards (to tighten the lock). Make sure that the lever remains upright. Tighten the screws.

The optimum distance (factory setting) between the brake shoe and the tire depends on the type of wheel locks installed on your model and is 10-12 mm / 0.4-0.45 inch (3) or 23-25 mm / 0.9-1.0 inch (4).





***Caution!***

Make sure the wheel lock always locks the wheel securely when engaged (lever pushed forward) under all conditions. Serious injury may result if the wheel lock is not effective! It is advisable that only specialist staff carry out wheel lock adjustments.



## 6 Handling

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### 6.1 Unfolding the wheelchair

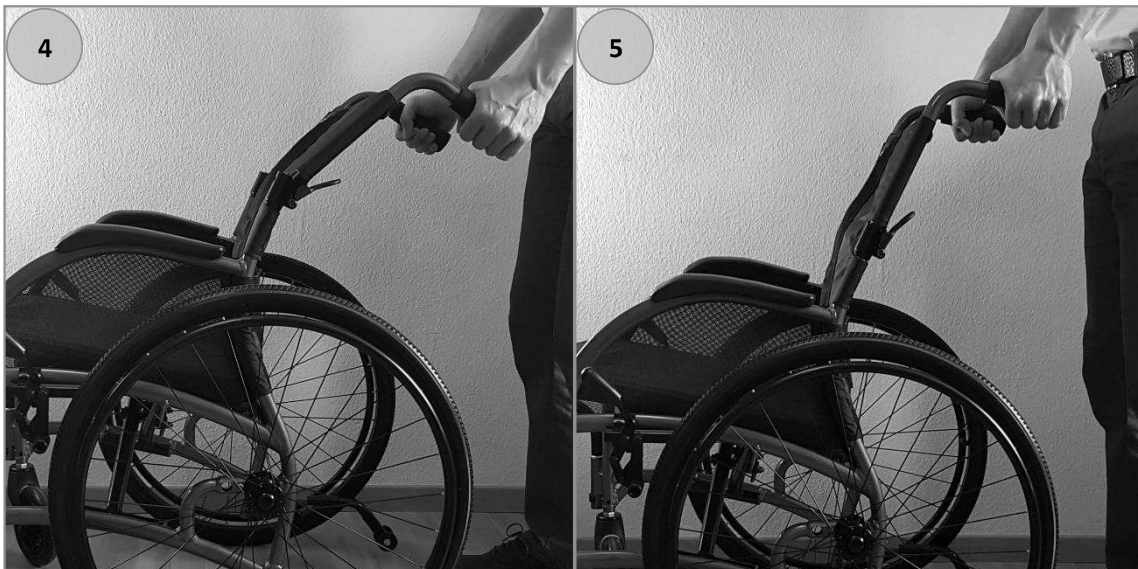
Unfold the frame of the wheelchair by pushing down evenly on the outer edges of the seat using both hands (1) until the seat is fully extended (2).



**Caution!**

Do not hold the sides of the seat while pushing down. You could trap your fingers! Hands and fingers must remain on top of the seat while pushing down.

Raise the upper half of the backrest by pulling both push handles backwards and upwards (4) until the folding back release hinge (5) snaps into the locked position.



## 6.2 Folding the wheelchair

Fold the backrest by using both hands to press the black plastic levers on the folding back release hinges against the frame (1) before folding the upper part of the backrest down evenly on both sides (2).

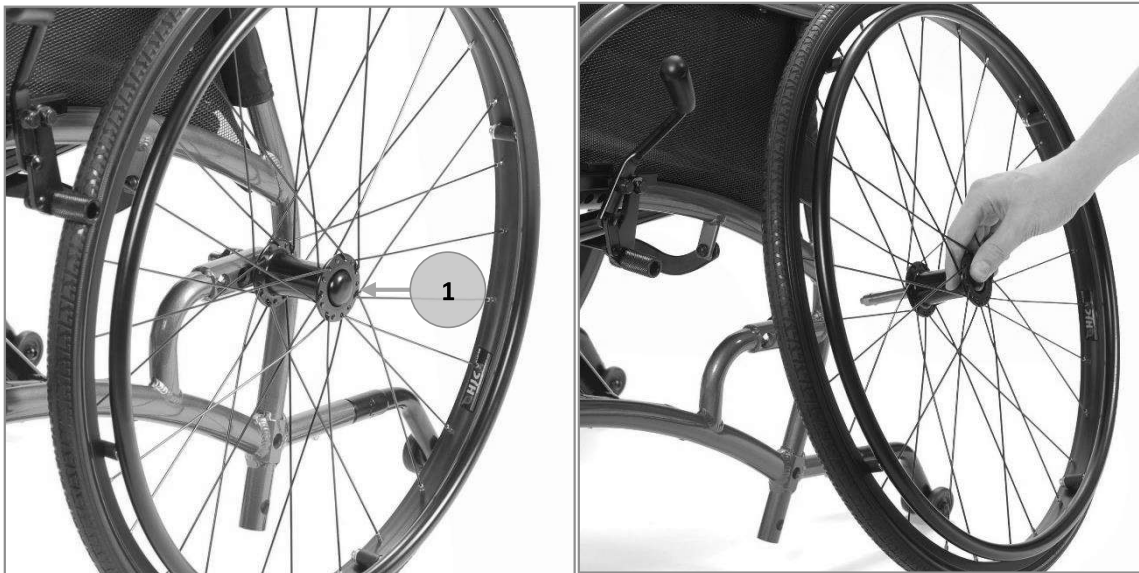


Fold the frame by first folding the footplates into the upright position (3) and then pulling the seat evenly upwards using both hands to hold the middle of the seat at the front and rear (4).



### 6.3 Removing the drive wheels

The drive wheels are fitted with a quick-release axle. The wheels can be removed and refitted without tools. To remove the wheels, press the locking button (1) and remove the drive wheel from the frame.



Press the locking button to attach the axle to its mounting. Release the locking button to fix the axle in place. Ensure that the locking button springs back into its initial position.



**Caution!**

Every time you refit the drive wheels, check to make sure that the axle is securely fitted back in place by trying to remove the wheel without pressing the locking button. The wheel should not come away from the frame.

### 6.4 Swiveling the footrests

To swivel the footrests, hold the top of the footrest and pull it gently upwards to release it from its locked position (1), then swivel the footrest forwards or backwards until it is in the desired locked position.

The footrests can be locked into place to the rear (2), to the side (3) and to the front (4).



The lateral locked position is only intended for use when the user of the wheelchair is getting in and out of the chair. The chair should not be moved with the footrests locked in this position as the footrests may get caught on an obstacle or obstruction.

The rear locked position can only be used when the drive wheels have been removed.



**Caution!**

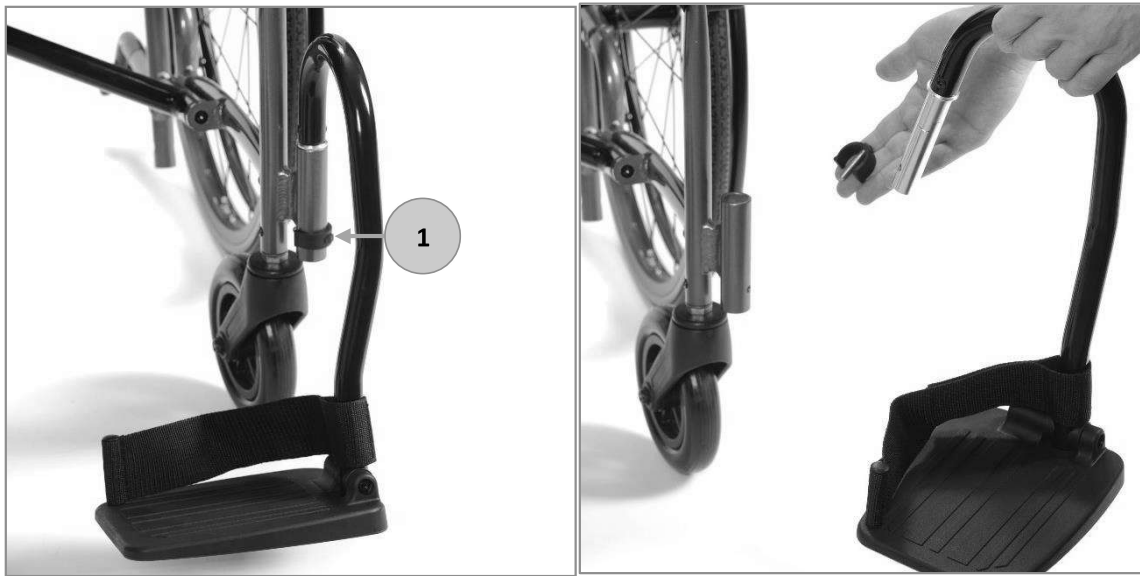
Take care not to trap your fingers when swiveling the footrests to the rear. Move the footrests slowly and keep your fingers out of harm's way.



**Caution!**

Do not stand on the footrests as they may break, increasing the risk of injury. The wheelchair could also tip over.

## 6.5 Removing the footrests



The footrests can be completely removed from the wheelchair by pulling the plastic clip with its retaining pin (1) horizontally out of the tube. The whole of the footrest can then be pulled up and out of the footrest mounting. When refitting the footrests ensure that the hole for the locking pin in the footrest is aligned with the hole in the frame.

## 6.6 Using and removing the anti-tip wheels

The anti-tip wheels are designed to prevent the wheelchair from tipping over backwards. They can be removed from the wheelchair for transportation purposes by pressing on the locking button (1) and pulling the wheels out of the frame tubing.



### **Caution!**

The locking buttons should protrude out of their apertures(1). This must be checked carefully after each adjustment and especially when the anti-tip wheels have been temporarily removed and then refitted.



If the wheelchair is to go up or down a high step (e.g. a curb), the anti-tip wheels must be swiveled upwards to avoid them catching on the ground. Pull on them to unlock (2) and swivel up/down so it looks like picture 2 above.



**Caution!**

The anti-tip wheels must be secured in their apertures (1) and swiveled downwards when the wheelchair is in use (exception: when going over a high step). Otherwise the wheelchair could tip over and cause serious injury.

### 6.7 Using the wheel locks

The wheels are locked when the handle is pushed completely forward, and the brake shoe is against the wheel (1). To unlock, pull the handle backwards. Lock both wheels before each embarking and disembarking. The wheel locks should not be used to reduce speed while moving.



### 6.8 Using the attendant brakes

Some **STRONGBACK 22S / STRONGBACK 24** models come with attendant brakes. To operate the brakes, simply squeeze the attendant brake lever (1).



The attendant brakes can be locked in one of the following two ways (depending on the type of attendant brake installed on your wheelchair):

- Push the lower handle straight down until it stays in the locked position (2).
- With the brake lever pulled, push the locking lever (3) and release the brake lever.



**Caution!**

Check the proper operation of the attendant brakes before each wheelchair ride, especially before the first use. Brake failure or operating errors can result in serious injury to the user or the attendant.

If you suspect that the brakes are not working properly or need to be adjusted, take the wheelchair to the dealer where you bought your wheelchair. The chair must not be used before it has been checked and repaired.

## 6.9 Using the Flip-Back Armrests

Some *STRONGBACK 22S / STRONGBACK 24* models come with flip-back armrests. To operate the flip-back armrests, simply lift the armrest and fold it back until it is vertical. Flipping the armrests backwards will allow for easy transfer in and out of the chair.



## 7 Maintenance and service

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As the user, you are likely to be the first to notice any damage to the wheelchair. Check the condition of your wheelchair regularly. If you discover a problem, consult an expert without delay. The wheelchair should be serviced by a specialist at least once a year.

Before using the wheelchair for the first time and after every service or adjustment it is essential to check the following:

- Have all nuts, screws and bolts been securely tightened? Self-locking nuts should only be used once and then replaced.
- Are there any signs of damage or wear and tear?
- Are all the settings correct?



### **Caution!**

Check all screw and bolt connections carefully immediately after carrying out repairs or adjustments. Any safety nuts that are removed during repairs should be replaced with new safety nuts when the wheelchair is re-assembled.

### 7.1 Checks prior to each use

We recommend that you check the following each time you use the wheelchair:

- Check that the brakes are working properly.
- Check that the wheels are functioning properly by testing whether the wheelchair travels in a straight line.
- Check that all removable parts are securely fixed in place, e.g. armrests, footrests, quick-release axles, etc.



- Check the wheelchair for visible signs of damage, e.g. damage to the frame, backrest, seat and backrest upholstery, wheels, footplates, etc.
- Check the seat and backrest for material defects, tears or loss of tension in the material.

## 7.2 Monthly checks

- Spin each of the wheels when the chair is empty to ensure they are turning freely. At the same time, check whether the wheels come to a slow stop. If the wheels stop abruptly make sure the hubcaps are correctly fitted. Check whether any dirt has gotten into the wheel hubs. The service life of the wheels depends on usage. Check the depth of tread on the tires. There should be at least 1 mm / 0.04 inches of tread. Defective or worn tires must be replaced.
- Check that all moving parts, including the folding mechanism, move freely and quietly. Squeaking sounds suggest there may be damage and the wheelchair should be checked over by a specialist retailer.
- In order to ensure that the quick-release axle system on the drive wheels continues to work properly, it should be cleaned regularly with a dry cloth and then oiled.

## 7.3 Replacing parts

You can easily replace attached parts such as footrests, anti-tip wheels and drive wheels yourself if they have become damaged. Please contact your specialist retailer to obtain the correct parts. To ensure that the replacement parts are correctly mounted, please refer to Section 5 (Adjustments) and Section 6 (Handling).

## 7.4 Spare parts and accessories

Your specialist retailer will have all the necessary information relating to replacement parts. You can also find out more about recommended and available accessories on our website [int.strongbackmobility.com](http://int.strongbackmobility.com)

## 7.5 Cleaning and disinfecting

Clean the wheelchair using a soft cloth and soapy water. The wheels can be cleaned using water and a brush with plastic bristles (do not use a wire brush!). Do not use any corrosive cleaning agents as they could harm the armrest material and cause damage. Ensure that the wheelchair is thoroughly dried after cleaning. Never use a hose, high-pressure cleaner or similar devices to clean the wheelchair as the frame could become rusty. Approved sprays or disinfecting tissues can be used to disinfect the wheelchair.

## 7.6 Storing the wheelchair

The wheelchair should be kept or stored in a dry, dust-free place at normal room temperature.

## 7.7 Disposal

Please contact your specialist retailer if your wheelchair is no longer in use and requires disposal. If you wish to dispose of the wheelchair yourself, contact your local waste disposal operators in accordance with the local waste disposal regulations. Below is a description of the materials used in the wheelchair to assist with the process of disposal or recycling. There may be specific local regulations pertaining to disposal or recycling and these must be complied with when disposing of the wheelchair (this may include cleaning or decontaminating the wheelchair prior to disposal.)

- Steel: Quick-release axles, hinges, bolts and screws, studs and pins
- Aluminum: Frame (chassis)
- Plastics: Handles, tube plugs, casters, footplates, armpads, drive wheels, side panels
- Padding and upholstery: Polyester fabric with PVC coating and foam material

## 7.8 Re-using the wheelchair

The **STRONGBACK 22S / STRONGBACK 24** is suitable for re-use by another user. The wheelchair should be thoroughly cleaned and disinfected in accordance with the care and hygiene instructions included here. All technical documents on how to use the wheelchair safely should be included when the wheelchair is passed on to the new user. The wheelchair should first be checked by an authorized dealer in accordance with the maintenance and service protocol (see the maintenance and service requirements in Chapter 10) and passed on to the new owner in perfect working order.

# 8 Guarantee

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*Strongback Mobility* provides a two-year manufacturer's guarantee against material and manufacturing defects for the frame of your **STRONGBACK 22S / STRONGBACK 24**, valid from date of purchase. A 12-month guarantee, valid from date of purchase, is provided for the seat, footrests and all other parts. To make a claim under either guarantee, please contact your specialist retailer.

Please keep the original packaging for use when sending the wheelchair for servicing or repairs at a later date.