

STRONGBACK 12S



STRONGBACK 12

STRONGBACK 8

Transport / Transit Wheelchair



Instructions for use

STRONGBACK 
mobility

Contents

1	Introduction.....	1
2	Safety instructions.....	1
2.1	Safety instructions for use.....	2
2.2	Safety instructions – preventing tipping.....	2
2.3	Transportation in motor vehicles.....	3
3	General information.....	3
3.1	Signs and symbols.....	3
3.2	Intended purpose.....	3
3.3	Service life.....	4
3.4	Responsibility.....	4
3.5	Declaration of conformity.....	4
4	Product description.....	4
4.1	Scope of supply.....	4
4.2	Labelling.....	5
4.3	Overview.....	5
5	Adjustments.....	6
5.1	Adjusting the length of the footrests.....	6
5.2	Adjusting the backrest.....	7
5.3	Adjusting the wheel locks.....	7
6	Handling.....	8
6.1	Unfolding the wheelchair.....	8
6.2	Folding the wheelchair.....	9
6.3	Getting in and out.....	9
6.4	Sitting and moving in the chair.....	10
6.5	Using the wheel locks.....	10
6.6	Adjusting the footrests.....	10
6.7	Using the attendant brakes.....	10
6.8	Using the Flip-Back Armrests.....	12
7	Maintenance and service.....	12
7.1	Checks prior to each use.....	13
7.2	Monthly checks.....	13
7.3	Replacing parts.....	13
7.4	Spare parts and accessories.....	13
7.5	Cleaning and disinfecting.....	13
7.6	Storing the wheelchair.....	13
7.7	Disposal.....	14
7.8	Re-using the wheelchair.....	14
8	Guarantee.....	14
9	Technical specifications.....	15
10	Specialist repairs and servicing.....	16

1 Introduction

We would like to thank you for the trust you have placed in us by purchasing this wheelchair.

By opting for the **STRONGBACK 8 / 12S / 12** with its revolutionary *STRONGBACK* system, you have chosen a top-quality lightweight wheelchair that has been specially designed to ensure your sitting position is both comfortable and ergonomic.

Like any device, a wheelchair is a technical aid, so it is important that you know how to use it correctly, as improper use may be dangerous. We therefore ask you to read these instructions carefully before using the wheelchair for the first time. They contain important safety information for users and their companions, along with useful tips on how to use and look after your wheelchair.

2 Safety instructions

- Ensure that any defects are immediately checked and repaired by a qualified wheelchair technician.
- Do not make any modifications to the wheelchair yourself. Contact your dealer to arrange for any such modifications to be made. Any improper changes or modifications to the wheelchair may result in the wheelchair not functioning properly and increase the risk of accident.
- Only use original parts and accessories approved by *Strongback Mobility*.
- Ensure that the quick-release axles are correctly installed in the axle mounts, or there may be a risk of injury.
- All moveable parts should be serviced periodically in order to ensure that the wheelchair is working properly and can be used safely.
- Exposure to water or high levels of humidity may result in the wheelchair becoming rusty. Do not use the wheelchair in the shower or swimming pool, and store it away from potentially damp spaces such as the bathroom. If the wheelchair still comes into contact with water, make sure you dry it out as quickly as possible.
- Please note that padded or upholstered areas may become hot if exposed to direct sunlight and may cause injuries to the skin if touched. Therefore, it is important to ensure that these parts are kept covered or that the wheelchair is kept out of direct sunlight.
- This product has not been tested in accordance with DIN 1021-1 and 1021-2 and is therefore not deemed to be fire resistant. It is vital to ensure that any padded, upholstered or attached parts are not exposed to sources of fire such as cigarettes, cigarette lighters or other open flames.
- All companions must be physically and mentally capable of maneuvering and controlling the wheelchair with the user in it. This includes being able to tip the wheelchair and lift it onto the pavement.

2.1 Safety instructions for use

- Arrange for an expert to show you how to use the wheelchair before using it for the first time.
- In order to avoid potential falls or dangerous situations, practice using your new wheelchair on a flat, manageable surface. It is a good idea to have someone with you while you are practicing.
- Before you start using your wheelchair please make sure that all attached parts have been properly secured.
- Please ensure that you comply with the **maximum load capacity of 300 lbs. / 135 kg.** In doing so, it is important to take additional weight into account, such as bags or rucksacks.
- Always ensure that the wheelchair has been fully unfolded before sitting in it.
- Never use the wheelchair while under the influence of alcohol or other substances that may affect your concentration or physical and mental abilities. This is also true for any companions.
- Always apply the wheel lock before getting in or out of the wheelchair.
- Keep hands and fingers away from all moving parts whenever possible. Please be aware that parts of the body or clothing can be entangled by moving parts.
- Never use the wheelchair on an escalator.
- Steps and larger obstacles should only be tackled with the help of at least two companions. If facilities such as access ramps, lifts or stair-climbing devices have been provided, these should be used at all times.
- The wheelchair should only be lifted by holding permanently mounted parts and not, for example, by holding the footrests.
- The wheel lock should not be used to slow down the wheelchair while it is moving.
- Road traffic regulations should be observed at all times when using the wheelchair on roads. Passive lights (reflectors) that are always visible to other road users should be fitted before using the wheelchair on roads.
- Ensure that the tires have sufficient depth of tread at all times.
- Please be aware that when travelling on slopes or on loose or slippery surfaces the braking efficiency of the handrims is significantly reduced. Adapt your handling of the wheelchair to the prevailing conditions at all times.
- Check the proper operation of the attendant brakes before each wheelchair ride, especially before first use. Ensure that the wheelchair cannot be moved when the brake handle is fully squeezed or locked.

2.2 Safety instructions – preventing tipping

- Please be aware that there is the danger of tipping over when travelling on slopes of more than 12% (7°). The use of anti-tip wheels is therefore strongly recommended. The dynamic stability of the wheelchair on slopes is dependent on the configuration of the wheelchair itself as well as the skills and handling style of the user, therefore it cannot be specified in advance.
- Avoid shifts in weight that could lead to the wheelchair tipping over, for example take care when:

- Adding additional cushions or other sitting aids
- Changes to posture, sitting position or weight distribution
- Attaching a rucksack or bag to the wheelchair
- If an object that you would like to get hold of is beyond your reach, ask for help or use other aids to get hold of it.
- There is an increased risk of tipping over when travelling on poor quality paths or roads (e.g. coarse gravel, potholes, etc.) or moving over drops (e.g. curbs, etc.).

2.3 Transportation in motor vehicles



This wheelchair is not intended to be an alternative to a car seat. When travelling by car, the wheelchair user should always transfer to a seat intended for use in such a vehicle. Ensure the wheelchair is securely folded together for transportation in the car. Always transport the wheelchair in the trunk or luggage compartment of the vehicle. Never use a wheelchair that has been involved in a traffic accident.

3 General information

These instructions for use are designed to help you familiarize yourself with the use and handling of the wheelchair. They are an integral and necessary component of the wheelchair. Ensure that you always have these instructions on hand and make sure that you include them with the wheelchair when you transfer it to another owner.

Please read all the instructions carefully before using the wheelchair for the first time.

3.1 Signs and symbols



Caution!

It is important to follow all the instructions in the sections marked with this symbol in order to avoid potential injury to yourself or people in your vicinity.

3.2 Intended purpose

The **STRONGBACK 8 / 12S / 12** is designed solely for the purposes of transporting a physically disabled person and improving their mobility. It has been designed for both indoor and outdoor use.

The wheelchair has been designed to accommodate a maximum load of **300 lbs. / 135 kg**. Liability can only be accepted if the product is used under the prescribed conditions and for its intended purposes.

3.2.1 Indications for use

Inability to walk or serious difficulty in walking as a result of:

- Paralysis
- Limb loss
- Limb defect / deformity
- Joint contractures / joint damage
- Other illnesses

3.2.2 Contraindications

The wheelchair is unsuitable for use in cases of:

- Severe balance disorders
- Loss of both arms
- Joint contractures / joint damage in both arms
- Inability to sit
- Impaired or insufficient vision

3.3 Service life

If used properly and if the safety, maintenance and service instructions are followed correctly, the service life of the wheelchair is up to 5 years. If the wheelchair is maintained in an orderly state, it may be possible to continue using the wheelchair beyond this time.

3.4 Responsibility

As a manufacturer we can only assume responsibility for the safety, reliability and usability of the wheelchair in so far as any modifications, extensions, repairs or servicing are carried out exclusively by persons who are authorized by us to do so and in so far as the wheelchair has been used in accordance with all instructions for use.

3.5 Declaration of conformity

As the manufacturer of the product, *Strongback Mobility AG* hereby declares that the **STRONGBACK 8 / 12S / 12** fully conforms to the requirements of European Regulation (EU) 2017/745.

4 Product description

The **STRONGBACK 8 / 12S / 12** 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. The serial number of your wheelchair can be found on the name plate on the cross brace of the frame. 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 | 7. Castor |
| 2. Attendant brakes (optional) | 8. Footrests (swingable and removable) |
| 3. Backrest with integrated lumbar support | 9. Seat cushion |
| 4. Armrests (fixed arms) | 10. Aluminium frame |
| 5. Wheel locks | 11. Tipping assist lever |
| 6. Rear wheels (optional in some models with drum breaks) | |

4.3.1 Models with flip-back arms

12. 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 pre-defined 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.



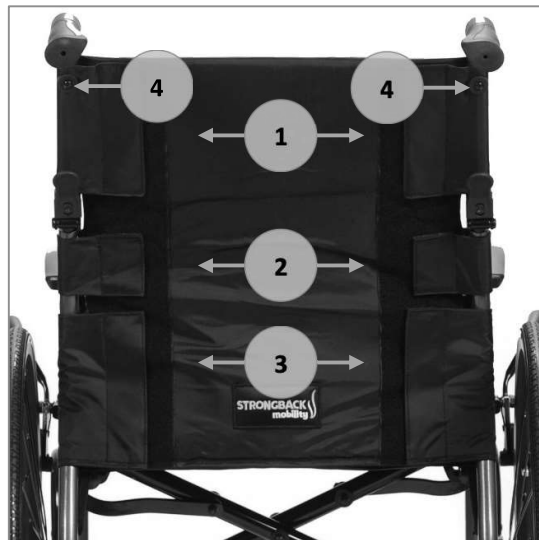
5.2 Adjusting the backrest

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 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.



**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

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 (3) until the folding back release hinge (4) 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 Getting in and out

Make sure that you have tested your individual mobility limits with an expert before the first use of your wheelchair. During untrained entering and exiting of the wheelchair, it can become unstable and tip over. The wheel locks must be locked during these maneuvers. Footrests should be folded up or can be removed.

6.4 Sitting and moving in the chair

Sit comfortably in your wheelchair and enjoy the back support! Never lean over the backrest to get to an object, as the wheelchair may tip over. Also avoid trying to reach anything between your knees on the floor because the wheelchair could tip forward.

6.5 Using the wheel locks

The wheels are locked when the handle is pushed completely down and forward. To unlock, pull the handle upward and backwards. Lock both wheels before each embarking or disembarking. Lock the wheels when in an elevator or a similar situation. The wheel locks should not be used to reduce speed while moving.



6.6 Adjusting the footrests

The footrests can be positioned in front of the chair or to the side of the chair, and the black plastic footrest trays can be folded down (parallel to the ground) or folded up.

In order to move the footrest, pull up on the tube and rotate to the desired position. When you let go be sure you feel the footrest lock into place. During use of the wheelchair, it is most convenient to have the footrest trays down. When folding the wheelchair, the footrest trays should be folded up.

If desired, the footrests can be completely removed (3) by simply pulling out the black plastic rings (1) and lifting the entire arch of the foot rests out of their sockets (2). Be careful not to pinch your fingers when assembling and removing the footrests.



The plastic footrest tray can be adjusted in height to allow the user maximum comfort. The small bolt can be removed from the base of the plastic footrest tray and re-inserted into one of the three possible elevation holes on the footrest tube by using the Allen wrench provided with the wheelchair.

6.7 Using the attendant brakes

Some **STRONGBACK 8 / 12S / 12** models come with attendant brakes. To operate the brakes, simply squeeze the attendant brake handle (1) (3).



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 handle pulled, push the locking lever (4) and release the brake handle.

To release the locking mechanism, simply pull the brake handle.



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 attendant 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.

6.8 Using the Flip-Back Armrests

Some **STRONGBACK 8 / 12S / 12** 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

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 wheel lock is working properly.
- Check that the attendant 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

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. Check the proper operation of the wheel lock and the attendant brakes! If you suspect that the wheel lock or the attendant brakes are not working properly or need to be adjusted, take the wheelchair to the dealer where you bought your wheelchair.

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 Chapter 5) and Chapter 6).

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.

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
- Aluminium: 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 8 / 12S / 12** 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 9) and passed on to the new owner in perfect working order.

8 Guarantee

Strongback Mobility provides a two-year manufacturer's guarantee against material and manufacturing defects for the frame of your **STRONGBACK 8 / 12S / 12**, 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.

9 Technical specifications

Modell	STRONGBACK 8	STRONGBACK 12S	STRONGBACK 12	
Seats	18" / 45 cm	16" / 40 cm	18" / 45 cm	20" / 50 cm
Seat width	18" / 45 cm	16" / 41 cm	18" / 45 cm	20" / 50 cm
Effective seat depth	17.7" / 45 cm	15.7" / 40 cm	17.7" / 45 cm	17.7" / 45 cm
Seat height at front edge	19.7" / 50 cm	17.7" / 45 cm	19.7" / 50 cm	19.7" / 50 cm
Total length	41.3" / 105 cm	39" / 99 cm	41.3" / 105 cm	41.3" / 105 cm
Total width	24.8" / 63 cm	25.2" / 64 cm ¹	26.4" / 67 cm ¹	28.3" / 72 cm ¹
Total height	37" / 94 cm	35" / 89 cm	37" / 94 cm	37" / 94 cm
Length when folded	22.8" / 58 cm	24.4" / 62 cm	25.2" / 64 cm	26.4" / 67 cm
Width when folded	11.8" / 30 cm	12.6" / 32 cm ¹	13.8" / 35 cm ¹	14.6" / 37 cm ¹
Height when folded	29.5" / 75 cm	26.4" / 67 cm	29.5" / 75 cm	33.9" / 86 cm
Total weight ²	19.6 lbs. 9 kg	22.5 lbs. 10.2 kg ⁴	22.5 lbs. 10.2 kg ⁴	22.3 lbs. 10.1 kg ⁴
Net weight ³	17.3 lbs. 8 kg	20.3 lbs. 9.2 kg ⁴	20.3 lbs. 9.2 kg ⁴	20 lbs. 9.1 kg ⁴
Rear wheel (diameter)	8" / 20 cm	12" / 30 cm		
Static stability	At least 7° (depending on configuration)			
Distance from footplate to seat	15" / 38 cm			
Distance from seat to armrest	7.9" / 20 cm			
Seat angle	12°			
Back support height	17.7" / 45 cm			
Back support angle	curved from -10° to +20°			

¹ Models with drum breaks 1" / 2 cm more

² Total weight including tools, footrests and wheels

³ Minimum usable weight including wheels, excluding tools, footrests

⁴ Models with attendant brakes add 0.6 lbs. / 0.3 kg,
Models with drum brakes add 1.5 lbs. / 0.7 kg

All values are approximate.