

The logo for RGK, featuring the letters 'RGK' in a bold, white, stylized font on a black background.The logo for Sunrise Medical, featuring a stylized orange and white sun icon to the left of the text 'SUNRISE MEDICAL' in a sans-serif font.

# User Manual

## *HILITE XTR*



EN



Hilite XTR User Manual  
UM-HiliteXTR-020-EU

WHEELCHAIR  
DIRECTIONS FOR USE

# Thank you for choosing an RGK product,

Welcome to the RGK family and we hope the product and service you have received has exceeded your expectations. Please take the time to read the instructions and familiarise yourself with your new wheelchair to ensure you benefit from the maximum safety, performance and longevity.

We want you to be fully satisfied with our products and services and we are constantly working to develop our products further. For this reason, changes can occur within our range of products with regard to form, technology and equipment. Consequently, no claims can be construed from the data or pictures contained in this user manual.

## Set Up Guide:

1. Carefully remove product and any loose parts from the box and ensure nothing is left in the packaging.
2. Read contents of this user manual thoroughly and understand the safety risks.
3. Attach the wheels and separate parts.
4. Check everything is as expected and that all parts are secured, functioning and set up correctly, including tyre pressure.
5. Adjust the upholstery ensuring it provides the right levels of support to suit your posture and comfort requirements.
6. Adjust the footplate height if required to ensure the correct support for your feet and balance.
7. Once ready and in a safe environment, carefully transfer into your new wheelchair and ensure it functions correctly.
8. Before going outdoors or on rougher terrain, ensure you have fully tested the wheelchair and are confident with the balance point and how the chair functions.
9. If you have questions on the set up of your wheelchair, please contact your local authorized dealer. Happy rolling!

## NOTE:

Medical Device Regulation (EU) 2017/745  
General user advice.

Not following these instructions may result in physical injury, damage to the product or damage to the environment!

A notice to the user and/or patient that any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

As the manufacturer, SUNRISE MEDICAL, declares that the lightweight wheelchairs conform to the Medical Device Regulation (2017/745).

## **WARNING:**

Do not operate this equipment without first reading and understanding this user manual. If you are unable to understand the warnings and instructions, contact RGK or a healthcare professional (doctor / therapist) before attempting to use this equipment - otherwise injury or equipment damage may result.

## NOTE:

B4Me special adaptations

Sunrise Medical strongly recommends that in order to ensure that your B4Me product operates, and performs as intended by the manufacturer; all the user information supplied with your B4Me product is read and understood, before the product is first used.

Sunrise Medical also recommends that the user information is not discarded after reading it, but it is kept safely stored for future reference.

## NOTE:

Medical Device Combinations

It may be possible to combine this Medical device with one or more other Medical Device or other product. Information on which combinations are possible can be found at [www.Sunrisemedical.co.uk](http://www.Sunrisemedical.co.uk). All combinations listed have been validated to meet the General Safety and Performance Requirements, Annex I Nr. 14.1 of the Medical Device Regulation 2017/745.



Sunrise Medical declares that the lightweight wheelchairs conform to the MDR 2017/745.

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# Contents

4	Daily Manual Propelled Wheelchair
5	Safety Summary
9	Service Inspection Checklist
10	Troubleshooting Guide Mechanical
11	Procedure 1 - Upholstery
12	Procedure 2 - Rear Wheels
13	Procedure 3 - Tyres and Inner Tubes
13	Procedure 4 - Camber Bar
14	Procedure 5 - Castor Wheels and Forks
14	Procedure 6 - Wheel Locks
15	Procedure 7 - Footrest
15	Procedure 8 - Push Handles
16	Procedure 9 - Folding Backrest
17	Procedure 10 - Anti-tips
18	Procedure 11 - Sideguards
19	Transportation
21	Technical Data
23	Identification / Serial Number
24	Manufacturers Warranty

## Definitions

### NOTE:

General advice or best practice

### CAUTION:

Advice to user that potential damage to equipment may occur if the advice is not followed.

### WARNING:

Advice to the user of a Potential Risk of injury if the advice is not followed.

### DANGER:

Advice to the user of a potential risk of serious injury or death if the advice is not followed.

### NOTE:

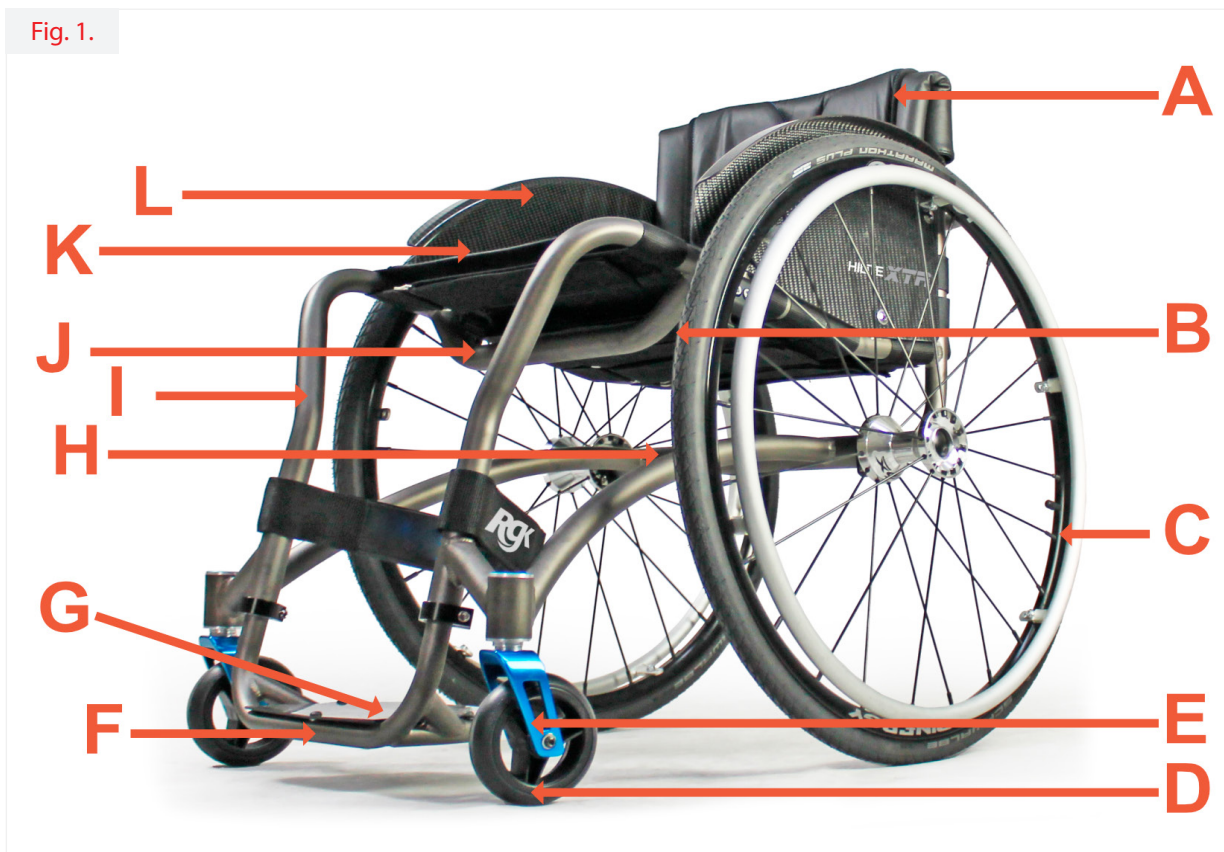
The wheelchairs shown and described in this user manual may not correspond in every detail exactly to your own model. However, all instructions are completely relevant, regardless of possible detail differences. The manufacturer reserves the right to alter without notice any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications

### NOTE:

Please keep a note of your local authorised dealer's contact details in the space provided. In the event of a breakdown, contact them and try and give relevant details so they can help you quickly.

# Daily Manual Propelled Wheelchair

Fig. 1.



- |                          |                                 |
|--------------------------|---------------------------------|
| <b>A</b> - BACKREST      | <b>G</b> - FOOTPLATE COVER      |
| <b>B</b> - WHEEL LOCKS   | <b>H</b> - CAMBER AXLE          |
| <b>C</b> - REAR WHEELS   | <b>I</b> - FRAME                |
| <b>D</b> - CASTOR WHEELS | <b>J</b> - UNDER SEAT BRACE BAR |
| <b>E</b> - CASTOR FORKS  | <b>K</b> - CUSHION & COVER      |
| <b>F</b> - FOOTPLATE     | <b>L</b> - SIDEGUARD            |



# Safety Summary

## Use

Wheelchairs are exclusively for children and adults who are unable to walk or have limited mobility, for their own personal use, when self-propelling and being moved by a third party (pushed by an attendant), within the home and outdoors.

The maximum weight limit (includes the user and any weight of accessories fitted to the chair) is marked on the serial number label, which is affixed to the camber axle or the under-seat brace bar.

Warranty can only be considered if the product is used under the specified conditions and for the intended purposes. The intended lifetime of the wheelchair is 5 years.

Please do not use or fit any third-party components to the wheelchair unless they are officially approved by RGK Wheelchairs.

## Area of Application

The variety of fitting variants as well as the modular design mean that it can be used by those who cannot walk or have limited mobility e.g. due to:

- Paralysis
- Loss of extremity (leg amputation)
- Extremity defect/deformity
- Joint contractures / joint injuries
- Illnesses such as heart and circulation deficiencies, disturbance of equilibrium or cachexia as well as for elderly people who still have the strength in the upper body.

When considering provision, please also note the body size, weight, physical and psychology constitution, the age of the person, living conditions and environment.

Final Selection of the type of wheelchair to be used by an individual rests solely with the user and their health care professional capable of making such a selection.

## **WARNING:**

**CHOKING HAZARD** – This mobility aid uses small parts which under certain circumstances may present a choking hazard to young children.

## General safety

The engineering and construction of this wheelchair has been designed to provide maximum safety. International safety standards currently in force have been fulfilled where appropriate. Nevertheless, users may put themselves at risk by improperly using their wheelchairs. For your own safety, the following rules must be strictly observed.

Unprofessional or erroneous changes or adjustments increase the risk of accident. As a wheelchair user, you are also part of the daily traffic on streets and pavements, just like anyone else. We would like to remind you that you are therefore also subject to any and all traffic laws.

Be careful during your first use in your new wheelchair and get comfortable and confident before attempting outdoors or difficult obstacles. It is possible that potholes or uneven ground could cause this wheelchair to tip over, especially when riding uphill or downhill. When riding forwards over a step or up an incline, the body should be leaning forward.

## **WARNING:**

Travelling downhill at higher speeds in your wheelchair can cause castor flutter. This can lead to instability and potentially result in personal injury.

Before each use, the following should be checked:

- Quick release axles on the rear wheels
- Velcro on seats and backrests
- Tyres and tyre pressure
- Wheel locks

Before changing any of the adjustments of the wheelchair, it is important to read the corresponding section of the user manual.

## **DANGER:**

**NEVER** exceed the maximum load of 115kg for Hilite XTR (90kg if used with a handbike) for driver plus any items carried on the wheelchair. Please note the weight information for lighter weight options, which are quoted separately. If you exceed the maximum load, this can lead to damage to the chair, or you may fall or tip over, lose control and may lead to serious injury of the user and other people.

# Safety Summary Continued

- If and whenever possible, during a journey in a specially fitted vehicle for disabled people, vehicle occupants should use the seats in the vehicle and the appropriate restraint system. This is the only way to ensure that occupants will have the maximum protection if there is an accident.
- To avoid falls and dangerous situations, you should first practice using your new wheelchair on level ground with good visibility.
- This wheelchair should be used exclusively to convey one person at a time. Any other use does not comply with the intended purpose.
- When getting on or off the wheelchair, do not use the footplates. These should be flipped up beforehand and swung to the outside as far as possible. (If applicable)
- Depending on the diameter and setting of the castors, as well as the centre of gravity setting of the wheelchair, the castors may begin to flutter at high speeds. This can lead to the castors being blocked and the wheelchair may tip over.
- In particular, do not travel on an incline without wheel locks, travel at a reduced speed. Riding sideways on to a slope or incline, increases the possibility of the wheelchair tipping over sideways.
- Explore the effects of changing the centre of gravity on the behaviour of the wheelchair, for example on inclines, slopes, all gradients or when overcoming obstacles. Do this with the secure aid of a helper.
- We recommend that novice users use anti-tip tubes.

## Weight Training

RGK DOES NOT recommend the use of its wheelchairs as a weight training apparatus. This product has NOT been designed or tested as a seat for any kind of weight training. If occupant uses said wheelchair as a weight training apparatus, RGK shall NOT be liable for personal injury or equipment damage and the warranty will be voided immediately.

### **△ WARNING:**

Any products left in extreme hot or cold climates could result in hot/cold surfaces which could result in personal injury.

Do not expose the product or any of its accessories to any form of excessive heat or naked flame, including cigarettes.

This product has moving parts and therefore could trap the user's fingers. Use extreme caution when moving.

## Stability and Balance

To assure stability and correct operation of your wheelchair, you must at all times maintain balance. Your wheelchair has been designed to remain upright and stable during normal daily activities as long as you do not move beyond the centre of gravity. All activities which involve movement in the chair have an effect on the centre of gravity.

Make sure the castors are pointing in the rearward position whenever you lean forward. This can be achieved by advancing the chair and then reversing it in a straight line. See Fig. 2.

Fig. 2.



### **△ WARNING:**

The position of the footrest, camber tube, height, as well as the tautness of the back upholstery are directly related to the chair's stability. Any change to one or any combination of the three may cause the chair to decrease in stability. Use EXTREME caution when using a new seating position for the first time.

### **△ WARNING:**

**Tyre pressure**  
DO NOT use your wheelchair unless it has the proper tyre pressure (P.S.I.).

DO NOT over inflate the tyres. Failure to follow these suggestions may cause the tyre to explode and cause bodily harm.

# Safety Summary Continued

- Anti-tip tubes should prevent the chair tipping over backwards unintentionally. Under no circumstances should they take the place of transit wheels, and be used to transport a person in a wheelchair with the rear wheels removed.
- With extreme settings (e.g. rear wheels in the most forward position) and less than perfect posture, the wheelchair may tip over even on a level surface.
- Do not hang heavy items such as shopping bags or backpacks, on the push handles, head rest or backrest of the wheelchair. These can change the tipping point and there is a risk of tipping backwards.
- When reaching for objects which are in front of, to the side or behind the wheelchair, make sure that you do not lean too far out of the wheelchair. If you do it can change the centre of gravity there is a risk of tipping or rolling over.
- Only use your wheelchair properly. For example, avoid travelling against an obstacle without braking (step, kerb edge) or dropping down gaps, or using escalators.
- Only attempt stairs with the help of an attendant. There is equipment available to help you, e.g. climbing ramps or lifts, please use them. If there is no such equipment available, then the wheelchair must be tipped and pushed over the steps (2 helpers).
- In general, any anti-tip tubes fitted must be set beforehand, so that they cannot touch the steps, as otherwise this could lead to a serious fall. Afterwards the anti-tip tubes must be set back to their correct position.
- Make sure that the attendant only holds the wheelchair using securely mounted parts (e.g. not on the footrests or the side guards).
- When using the lifting ramp make sure that the anti-tip tubes fitted are positioned outside the danger area.
- Secure your wheelchair on uneven ground or when transferring (e.g. into a car) by using the wheel locks.
- The wheel locks will only work if there is sufficient tyre pressure and if the correct setting has been made (see the Chapter on "Wheel locks").
- When it is dark, please wear light clothing or clothing with reflectors, so that you can be seen more easily. Make sure that the reflectors on the side and back of the wheelchair are clearly visible. We would also recommend that you fit an active light.
- Adjustments to your wheelchair, especially to security-relevant components as for example wheel-locks, anti-tip or backrest must be performed by authorized dealers.
- It is recommended to clean and disinfect the entire product, especially the upholstery, frequently.
- Do not tilt the wheelchair without assistance
- Do not reuse single use fasteners
- The wheel locks are not intended to brake your wheelchair. They are only there to ensure that your wheelchair does not begin rolling unintentionally. When you stop on uneven ground, you should always use the wheel locks to prevent such rolling. Always apply both wheel locks; otherwise, your wheelchair could tip over.
- The wheel locks have not been designed to be used as brakes for a moving wheelchair.
- Always make use of elevators and ramps. If these are not available, you should request the help of an attendant. They should only grip the wheelchair at securely mounted parts. If anti-tip tubes are fitted these must be folded away. A wheelchair should never be lifted with an occupant; it should only be pushed.
- If the seat and back sling are damaged, you must replace them immediately.
- Do not lift or carry the wheelchair by the back tubes or the push handles.
- Be careful with fire, in particular with burning cigarettes. Seat and back slings can be set alight.

## Indications:

The varieties of fitting variants, as well as the modular design, mean that it can be used by those who cannot walk or have limited mobility because of:

- Paralysis
- Loss of extremity (leg amputation)
- Extremity defect deformity
- Joint contractures/joint injuries
- Illnesses such as heart and circulation deficiencies, disturbance of equilibrium or cachexia, Neurological disease patterns, Muscle dystrophy, Hemiplegia as well as for elderly people who still have strength in the upper body.

## Contraindications:

The wheelchair shall not be used without attendant in case of:

- Perception disorder
- Imbalance
- Loss of both arms, if not supported by a caregiver
- Joint contracture or joint damage on both arms
- Seating disability

# Safety Summary Continued

- Always make sure that the quick-release axles on the rear wheels are set properly and are locked in place. If the button on the quick-release axle is not pressed in, the rear wheel cannot be removed.
- In particular when using lightweight metal hand rims, fingers will easily become hot when braking from a high speed or on long inclines.
- If the wheelchair is subject to direct sunlight for a long period of time, then parts of the wheelchair (e.g. frame, leg rests, brakes and side guards) may become hot (>41°C).
- To avoid hand injuries do not grab in between the spokes or between the rear wheel and wheel lock when driving the wheelchair.
- Do not use the wheelchair on slopes > 5°.
- The dynamic safe slope is dependent on the chair configuration, the user's abilities and the style of riding. As the user's abilities and style of riding cannot be pre-determined then the max safe slope cannot be determined. Therefore, this must be determined by the user with the assistance of an attendant to prevent tipping. It is strongly recommended that inexperienced users have anti-tips fitted.
- Do not use your wheelchair on muddy or icy ground.
- Do not use your wheelchair where pedestrians are not allowed.
- The wheelchair should be used with caution in heavy rain, snow, slippery, or unsound surfaces.
- Do not use the wheelchair in hazardous environments.



# Service Inspection Checklist

## NOTE:

Regular cleaning will help to highlight any loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair. Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures. Outlined below:

Item	Initially	Inspect/ Adjust Weekly	Inspect/ Adjust Monthly	Inspect/ Adjust Yearly
<b>General</b> <ul style="list-style-type: none"> <li>Wheelchair rolls straight (no excessive drag or pull to one side)</li> <li>Inspect frame for cracks and damage</li> <li>Inspect all fasteners are secured</li> </ul>	✓		✓	✓
<b>Wheel Locks</b> <ul style="list-style-type: none"> <li>Do not interfere with tyres when rolling</li> <li>Pivot points free of wear and looseness</li> <li>Wheel locks easy to engage</li> </ul>	✓ ✓ ✓		✓ ✓ ✓	
<b>Seat and Back Upholstery</b> <ul style="list-style-type: none"> <li>Inspect for rips or sagging</li> <li>Inspect fastening flaps to ensure they securely latch</li> </ul>	✓ ✓		✓	✓
<b>Rear Wheels</b> <ul style="list-style-type: none"> <li>Adjustable axle position camber bar is securely tightened</li> <li>Quick/quad release axles lock properly</li> <li>No excessive side movement or binding when lifted and spun</li> </ul>	✓ ✓ ✓	✓ ✓	✓	
<b>Handrims</b> <ul style="list-style-type: none"> <li>Inspect for signs of rough edges or peeling</li> </ul>	✓	✓		
<b>Spokes</b> <ul style="list-style-type: none"> <li>Inspect for bent or broken spokes</li> <li>All spokes uniformly tight</li> </ul>	✓ ✓		✓ ✓	
<b>Front Castor</b> <ul style="list-style-type: none"> <li>Inspect wheel/fork assembly for proper tension by spinning castor; castor should come to a gradual stop</li> <li>Loosen/tighten locknut if wheel wobbles noticeably or binds to a stop</li> <li>Wheel bearings are clean and free of moisture</li> </ul> <p>CAUTION: As with any vehicle, the wheels and tyres should be checked periodically for cracks and wear, and should be replaced when necessary</p>	✓ ✓ ✓		✓ ✓ ✓	✓
<b>Tyres</b> <ul style="list-style-type: none"> <li>Inspect for flat spots and wear</li> <li>If pneumatic tyres check for proper inflation</li> </ul> <p>CAUTION: As with any vehicle, the wheels and tyres should be checked periodically for cracks and wear, and should be replaced when necessary</p>	✓ ✓	✓ ✓		
<b>Cleaning</b>	✓		✓	

# Troubleshooting Guide Mechanical

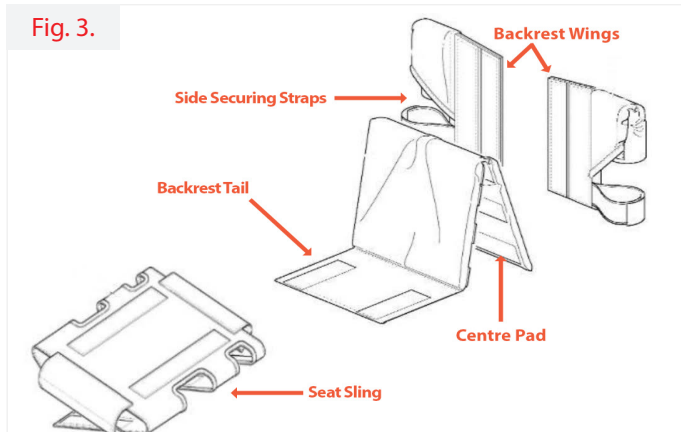
Chair veers right	Chair veers left	Slow turn or performance	Castor flutters	Squeaks and rattles	Loose-ness in chair	Solutions
✓	✓	✓	✓			Check tyres for correct and equal pressure
		✓	✓	✓	✓	Check for loose castor stem nuts Check all fixtures are secure and tight
				✓	✓	Check spokes for tension
✓	✓		✓			Check that both castors contact the ground at the same time

## **WARNING:**

After adjusting, always make sure that parts are properly tightened BEFORE using the wheelchair. DO NOT over-tighten hardware attaching to the frame. This could cause damage to the wheelchair.

# Procedure 1 - Upholstery

The upholstery is fully adjustable and can be easily adjusted to provide the correct balance and comfort in your new wheelchair.



## 1.1: Adjusting Seat

Remove the cushion from the wheelchair. The seat is adjusted by increasing or decreasing the tension in the straps on the underside of the seat (Fig. 4). To remove, release all the straps and remove.



## 1.2: Adjusting Backrest

Remove the cushion and centre pad from wheelchair (Fig 3). The backrest is adjusted by increasing or decreasing the tension on the straps at the back of the backrest. To remove, release all the straps and remove.

## 1.3: Changing Cushion Cover

Remove cushion from the wheelchair. Open the Velcro pocket at the rear of the cushion and remove or replace foam as required. (Fig. 5).



### **△ WARNING:**

The position of the footrest, camber tube and rear seat height, as well as the tautness of the back upholstery are directly related to the chair's stability. Any change to one or any combination of the four may cause the chair to decrease in stability. Use **EXTREME** caution when using a new seating position for the first time.

### **△ CAUTION:**

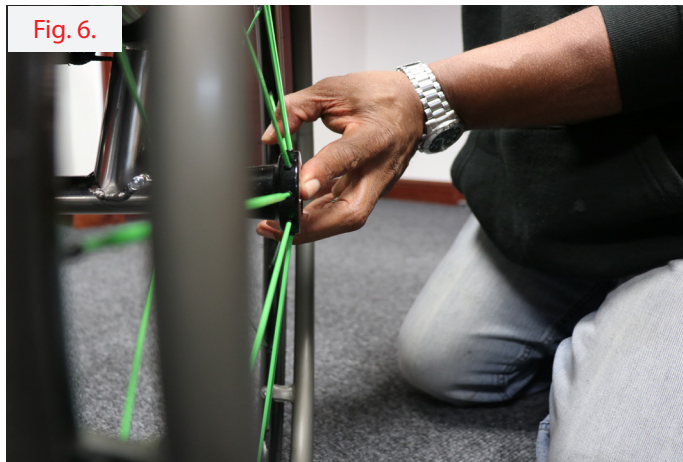
Velcro used on upholstery may cause property damage if contacted closely.

# Procedure 2 - Rear Wheels

The rear wheels are quick release and are designed to be removed and attached frequently. All rear wheels use quick release axle pins to secure the wheels to the frame, although these vary in length, they operate the same.

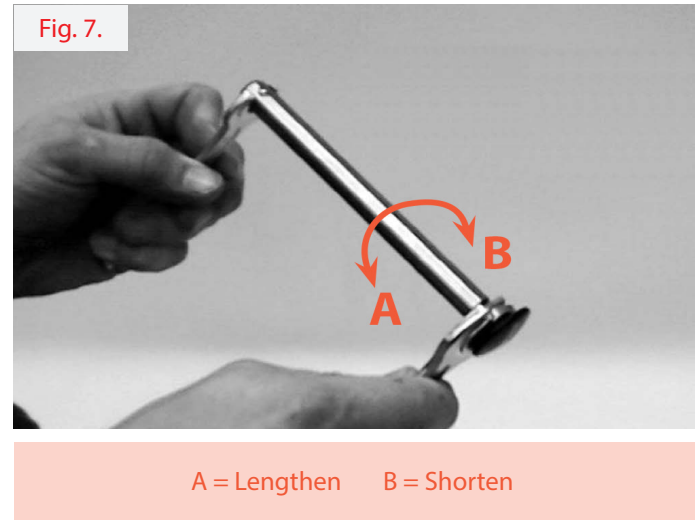
## 2.1: Removing/attaching rear wheels

Push the quick release button and pull the wheel outwards. To install, push and hold the button and insert the quick release axle pin into the axle until the pin clicks into position. Ensure both wheels are fully engaged prior to use.



## 2.2: Adjusting Quick release axle pin

Only adjust the quick release axle pin if the wheel does not engage or the wheels feels loose. To adjust the length, remove the axle pin from the wheel and by using 2 x adjustable spanners/wrenches as per Fig. 7, extend or shorten the pin as required.



### **⚠ WARNING:**

Changing the size of your rear wheels can seriously affect the performance and stability of the wheelchair.

### **⚠ WARNING:**

Any adjustments to your quick release pins – then YOU must ensure your wheels lock on both sides of your wheelchair. When attaching the rear wheels, always check that they are securely mounted. Pull on the rear wheels to make sure the detent pin / RGK cap of the quick release axle are fully released before operating the wheelchair.

You should NOT be able to pull the rear wheel off.

# Procedure 3 - Tyres and Inner Tubes

Tyres will wear just like a car tyre and the time will depend on the type of use. It is recommended that both tyres are changed once the tread fades. For pneumatic tyres, there is a risk that a puncture will occur and the inner tube will need to be replaced in order to keep the wheelchair operational.

## 3.1: Changing the tyre

Remove the wheel from the wheelchair and release air in the tube by pressing the small pin inside the valve, if a Presta valve, then unscrew both the head and the securing ring at base and press the top until air releases. Using 2 x tyre levers (supplied in the toolkit), unhook the tyre completely from the wheel rim. Remove inner tube and tyre from wheel rim.

To install the tyre, place one side of the new tyre on the wheel rim. Then insert the inner tube inside the tyre and align the valve with the wheel rim hole. Ensure there are no kinks or uneven tension in the inner tube before putting

the second side of the tyre back on the wheel rim using the tyre levers. Be careful not to pinch the inner tube. Once tyre and inner tube are on the wheel rim, replace securing ring (if applicable) then inflate tyre a little. Adjust inner tube and tyre so that they fit nicely on the wheel rim and inflate to the recommended tyre pressure.

## 3.2: Changing the inner tube

Repeat the method above but do not remove tyre completely, just remove inner tube. If problems continue, remove tyre and inner tube and ensure there are no sharp edges in the wheel rim which may be causing a puncture.

# Procedure 4 - Camber Bar

The Camber Axle or Camber Tube control your wheel position and your centre of gravity. It is very important to have this set up for your requirements for performance and safety. Axle tube can be fixed or adjustable. Fixed means this cannot be adjusted and for a user who is experienced and knows their balance point. Adjustable position gives the user choice and is ideal for less experienced users

## 4.1: Adjusting Axle Tube position

Remove the rear wheels from the chair.  
(As procedure 3)

Loosen the allen head screws that secure the adjustable axle position camber bar to the chair frame.

### Note:

Ensure the allen head screws are loose enough to allow the adjustable axle position camber bar to move freely along the chair frame to avoid scratching the chair frame.

## 4.2: Replacing Axle tube

Move the adjustable axle position camber bar forward or back a long the chair frame to adjust. Lengthening the wheelbase will increase the stability and maintain standard manoeuvrability of the chair. Shortening the wheelbase will increase the manoeuvrability and distribute additional weight onto the rear wheels.

Measure both attaching points of the adjustable axle position camber bar from the both back posts to ensure the adjustable axle position camber bar is positioned at a 90° angle to the chair frame. See Fig. 8.

Securely tighten the allen head screws that secure the adjustable axle position camber bar to the chair frame. Reinstall the rear wheels onto the chair.

### **WARNING:**

The position of the footrest, camber bar, as well as the tautness of the back upholstery, are directly related to the chair's stability.

Any change to one or any combination of the three may cause the chair to decrease in stability. Use **EXTREME** caution when using a new seating position for the first time.

Roll the chair before using to make sure there is no excessive drag to either side.





# Procedure 5 - Castor Wheels and Forks

The castor wheels at the front of the wheelchair will wear just like care tyres and should be replaced when they visibly look worn or cracks appear.

## 5.1: Changing castor wheels

Using 2 x 4mm allen keys from the toolkit, remove 1 of the 2 screws in the centre of the castor wheel, as shown in Fig 9. Remove the screw and slide out the castor axle with the other screw still attached, noting any spacers and their positions. Install the new castor wheel and slide the castor axle back through and secure with the final screw.

Fig. 9.



## 5.2: Removing the castor fork

Remove cap at the top of the castor housing. Using the socket from the toolkit, release and remove the locking nut. This will release the castor fork, and take note of any spacers and their positions.

### NOTE:

Castor Bearings must be fitted by an authorised dealer. Failure to do so will result in invalid warranty on the parts.

### CAUTION:

DO NOT replace the front castor forks or castor wheels with a different size other than what was originally supplied on the chair. By changing to a different size castor fork or castor wheel will have an adverse effect on the running of the chair and the end users balance causing personal injury.

# Procedure 6 - Wheel Locks

The wheel locks are adjustable in position to suit tyre changes and wear. As tyres wear, the wheel lock may not hold the wheelchair as intended, so these need to be adjusted to suit the tyre condition.

### NOTE:

Before adjusting or replacing any style of wheel lock ensure that the tyres are inflated to the recommended pressure as indicated on the tyre.

Fig. 10.



Fig. 11.



## 6.1: Adjusting Wheel locks

Using a 5mm Allen key from the toolkit, release the 2 screws in the clamp or on the underside of the plate. Once the wheel lock is loose, reposition so that there is at least 3mm of interference when the wheel lock is activated. Tighten securely and repeat on the other side.

### WARNING:

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely – otherwise injury or damaged may result. If wheel locks do not hold occupied wheelchair in place please adjust as above, or contact your dealer – otherwise injury or damages may occur. The wheel locks are designed to work when your wheelchair is static. Wheel locks should not be applied during use and tyre pressure should be as indicated on the tyre.

# Procedure 7 - Footrest

The footrest may need adjusting when you first use the wheelchair, if circumstances change or if fasteners come loose. It is important to periodically check the height and adjust as required.

## 7.1: Adjust footrest height

Loosen the two allen head screws that secure the footrest to the chair frame. (Located at the rear of the frame see Fig. 12)

Remove footrest - ensuring the footrest is removed with equal pressure.

Remove existing and install NEW footrest.

Position the NEW/ existing footrest to a determined height.

Tighten the two allen head screws "A" that secure the footrest to the chair frame.

## 7.2: Adjust the footrest angle

To adjust the angle on your angle adjustable footrest. Loosen two button head allen screws on top of foot platform.

Rotate until desired angle is achieved.

Securely tighten two button head allen screws.

### **WARNING:**

The footrest assembly **MUST** be at least 40mm above the ground/floor to avoid hitting protruding objects when using this wheelchair.

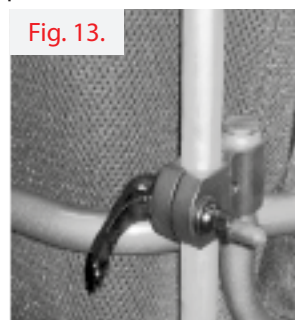


# Procedure 8 - Push Handles

A range of push handles can be supplied on this wheelchair for use by an attendant and operated as per the following procedures.

## 8.1: Adjusting Height adjustable push handles

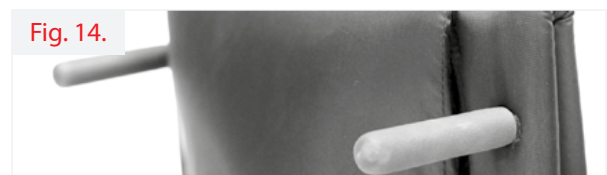
Release the over centre lever and position at the desired height and then tighten the lever to secure. Repeat on the other side to get uniform height between both handles. A range of push handles can be supplied on this wheelchair for use by an attendant and operated as per the following procedures.



Height Adjustable push handles

## 8.2: Screw in push handles

Screw in push handles can be removed by unscrewing them from the back rest. To install, screw them in until tight by hand.



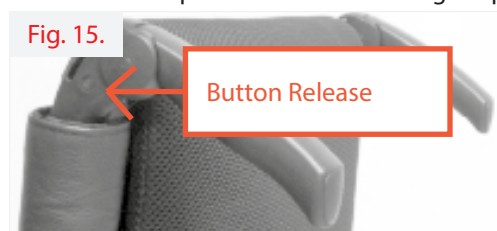
Screw-In push handles

## 8.3: Operating flip down push handles

Press the button underneath the handle and push the handle down at the same time, repeat on other side. Pull up the handle until it clicks into position to return to original position.

### **WARNING:**

DO NOT attempt to lift the wheelchair by any removable (detachable) parts i.e. Height adjustable push handles, Fold-down push handles and Screw-in push handles



Flip-Down push handles

# Procedure 9 - Folding Backrest

The backrest can be fixed or folding and if a folding option is chosen, the backrest can fold to make the chair smaller in transport size.

Fig. 16.



Step 1: Fixed Position

Fig. 17.



Step 2: Push Left Sideguard

Fig. 18.



Step 3: Push Right Sideguard

Fig. 19.



Step 4: Folded Sideguards

Fig. 20.



Step 5: Push Backrest to Front

Fig. 21.



Step 6: Final Backrest Position

## **WARNING:**

Your folding back **MUST** be locked securely in place before using your wheelchair.

## **CAUTION:**

This product contains moving parts. Beware of finger trapping.

# Procedure 10 - Anti-tips

An anti tip can be used to make the chair more stable and is recommended by a health care professional.

## 10.1: Swing away anti-tip

To store the anti-tip, push down on the spring-loaded tube until it releases from the housing. Swing 180 degrees under the chair and into the locked position. To return to the operating position, repeat and return the same way. To adjust the length, press the button on the tube and lengthen or shorter the wheel tube.

## 10.2: Single sport anti-tip

To remove anti-tip, remove quick release pin and remove tube. The clamp attached to the frame is factory fitted and cannot be removed unless by an approved wheelchair technician.



### **WARNING:**

RGK strongly recommends ordering the anti-tips as an additional safeguard for the wheelchair user.

### **WARNING:**

Anti-tippers **MUST** be fully engaged. Ensure the release button of the anti-tipper fully protrudes out of the hole in the anti-tipper socket.

Ensure both anti-tippers are adjusted to the same height.



# Procedure 11 - Sideguards

Sideguards support the user and prevent clothes from getting dirty. Although these need little maintenance, replacement is shown below.

## 11.1: Fixed Sideguards (All Materials)

The sideguard is fitted by means of either 3/4/5/6 screws dependant on the configuration of your wheelchair

Also can be made welded (AL) to the frame.



## 11.2: Height Adjustable Armrest Height Adjustment

1. Rotate height release lever (2) to the second position.
2. Slide the armrest pad up or down to the required height.
3. Return the lever to the locked position against the armrest
4. Push the arm pad until the upper arm post locks firmly into place.



# Transportation

## **DANGER:**

There is risk of serious injury or death if this advice is ignored.

### Transportation of your wheelchair within a vehicle

A wheelchair secured in a vehicle, will not provide the equivalent of safety and security as a vehicle seating system. We recommend that the user transfers to the vehicle seating. It is recognised that's this is not always practical for the user to be transferred and in these circumstances where the user must be transported whilst in the wheelchair the following advice should be followed:

## **DANGER:**

Confirm that your wheelchair is crash test suitable, see serial number and tie down points on wheelchair.

Confirm the vehicle is suitably equipped to transport a passenger in a wheelchair, and ensure the method of access/egress is suitable for your wheelchair type. The vehicle should have the floor strength to take the combined weight of the user, the wheelchair and accessories.

Sufficient space should be available around the wheelchair to enable clear access to attach, tighten and release the wheelchair and occupant tie down restraints and safety belts.

The occupant wheelchair must be located in a forward facing position and secured by the wheelchair tie down and occupant restraint straps (WTORS tie downs meeting the requirements of ISO 10542 Part 2 or SAE J2249) in accordance with the WTORS manufactures instructions.

The wheelchairs use in other positions within a vehicle has not been tested e.g. transportation ins the sideways or rearwards facing position and must not be out under any circumstances.

The wheelchair should be secured by a tie down restraint system, conforming to ISO 10542 or SAE J2249 with non-adjustable front straps and adjustable rear straps, which typically use Karabiner clip/s, hooks and tongue and buckle fittings. These restraints generally compromise of 4 individual straps that are attached to each corner of the wheelchair.

## **DANGER:**

The tie down restraints should be fitted to the main frame of the wheelchair, and not to any attachments or accessories e.g. not around the spokes of wheels, wheel locks, or footrests.

Tie down restraints should attach be attached as close as possible at an angle of 45 degrees and tightened securely in accordance with the manufacturer's instructions.

Alterations or substitutions must not be made to the wheelchair tie down points or to structural, frame or components without consulting the manufacturer. Failure to do so will invalidate the ability of an RGK wheelchair to be transported in a vehicle.

Both pelvic and upper torso restraint belts must be used to restrain the occupant to rescue the possibility of head and chest impacts with the vehicle components and serious risk of injury to the user and other vehicle components. The upper torso restraint belt should be mounted to the vehicles pillar – failure to do so will increase the risk of serious abdominal injuries to the user.

A head restraint suitable for transportation must be fitted and positioned at all times during transportation to ensure maximum safety.

Postural supports (lap belts/straps) should not be used or relied on for the occupant restraint in a moving vehicle unless they are labeled as a meeting the requirements specified in ISO 7176-19:2001 or SAE J2249.

The safety of the user during transportation depends upon the diligence of the person securing the tie-down restraints and they should have received appropriate instructions and/or training in their use.

Wherever possible remove and stow safely away from the wheelchair all auxiliary equipment, for example:

- Crutches, Loose cushions and Tray Tables.
- Articulating/elevating legrest should not be used in the elevated position when the wheelchair and user are being transported and the wheelchair is restrained using Wheelchair Transport and Occupant Restraints.

Reclining backrests should be returned to an upright position.

# Transportation Continued

## **DANGER:**

The manual wheel locks must be firmly applied.

Restraints should be mounted to the vehicle "B" pillar and should not be held away from the body by wheelchair components such as armrest or wheels.

### Occupant Restraints Instruction:

1. The pelvic restraint belt must be worn low across the front of the pelvis so that the angle of the pelvic belt is within the preferred zone of 30 to 75 degrees to the horizontal. A steeper (greater) angle within the preferred zone is desirable i.e. closer to, but never exceeding 75°.
2. The upper torso restraint belt must fit over the shoulder and across the chest. Restraint belts must be adjusted as tightly as possible consistent with user comfort. Restraint belt webbing must not be twisted when in use. The upper torso restraint belt must fit over the shoulder and across the shoulder.
3. The attachment points to the chair are the inner front side frame just above the castor, and the rear side frame. The straps are fitted around the side frames at the intersection of the horizontal and vertical frame tubes.
4. The tie down symbol (Fig. 27) on the wheelchair frame indicates the position of the wheelchair restraint straps. The straps are then tensioned after the front straps have been fitted to secure the wheelchair.

Fig. 27.



### USER WEIGHT LESS THAN 22KG

When the user being transported is a child, less than 22 kg mass and the vehicle involved has less than eight (8) seated passengers it is recommended that they be transferred to an UNCE Regulation 44 compliant child restraint system (CRS). This type of restraint system provides a more effective occupant restraint system than the conventional 3 point occupant restraint system and some CRS systems also include additional postural supports to assist in maintaining the position of the child when seated.

Parents or care providers may consider the option, in some circumstances, for their child is to remain in their wheelchair whilst in transport due to the level of posture control and comfort provided by the set up in the wheelchair.

We would recommend in such circumstances that a risk assessment be carried out by your attendant and relevant competent persons.

### Positioning of wheelchair tie down restraints on wheelchair:

1. Location of the front and rear tie down labels (Fig. 28 & 29).
2. Position the front and rear wheelchair tie down restraint to the tie down label.

Fig. 28.

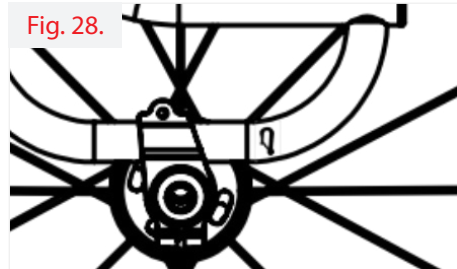


Fig. 29.



# Technical Data

Description	Min	Max
Overall length with leg rest (no wheels)	400mm	700mm
Overall width (seat width)	250mm	500mm
Folded height (only for chairs with folding backs)	500mm	750mm
Total mass (with wheels)	7.5kg	15kg*
Mass of the heaviest part (Transport weight)	5.5kg	12kg*
Static stability downhill	N/A	5° of incline
Static stability uphill	N/A	5° of incline
Static stability sideways	N/A	5° of incline
Seat plan angle	0°	45° of tilt
Effective seat depth	250mm	500mm
Seat surface height at front edge	380mm	550mm
Backrest angle	-10° of tilt	20° of tilt
Backrest height	150mm	400mm
Footrest to seat distance	200mm	520mm
Leg to seat surface angle	70° of angle	90° of angle
Armrest to seat distance	150mm	300mm
Front location of armrest structure	N/A	N/A
Handrim diameter	24"-in	26"-in
Horizontal location of axle	25mm	150mm
Minimum turning radius	270mm	N/A

\* Weight excluding 3rd party items

Dimensions are subject to manufacturing tolerances.

# Technical Data Continued

ITEM	TORQUE
Backrest Pivot Plate	10Nm
Wheel Lock	10Nm
Camber Bar	10Nm
Footrest Adjustment Height	10Nm
All Other Items	10Nm

## NOTE:

RGK Wheelchairs Ltd are bespoke and individually made to measure for you, therefore your wheelchair may fall below or over the mentioned sizes.

### Recycling/Disposal

Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be cleaned down and treated with a disinfection spray.

In the following section, there is a description of the materials used on our wheelchairs.

**Aluminium:** Frame, Castor forks, Wheels, side guards, Armrest, Footrest, Hand Rims, Anti-Tippers, Frame, Footplate covers

**Steel:** Frame, Fixing points, Quick release axle pins, Footrest, Anti-tippers, Frame Wheels, Fixings, Wheel Locks, Footplate covers

**Titanium:** Frame, Castor Forks, Quick release axle, Fixings, Side guards Anti-Tippers, Frame, Footrest

**Plastic:** Handles, Tube stoppers, Castors, Footplate covers, Arm pads

**Packing:** Plastic bags made from polyethylene, cardboard

**Upholstery:** Woven polyester Cotton Leather



Disposal or recycling should be carried out by a disposal company or at a public disposal point. You could also return your wheelchair to your dealer for disposal (There may be a charge imposed).

# Identification / Serial Number

The serial number of your made to measure wheelchair is located on either the under seat cross brace bar (J Product Description) or camber bar (H Product Description) or inside the backrest upholstery (A).

Please provide the following information whenever you have to order replacement parts.

Serial Number:
Name:
Dealer:

Fig. 30.



Identification sticker  
(Located on camber axle or under seat brace bar)

### RGK Chair Label Information

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>A</b> - Medical Device</li> <li><b>B</b> - CE Mark</li> <li><b>C</b> - Model</li> <li><b>D</b> - Serial Number</li> <li><b>E</b> - Manufacturing Date</li> </ul> | <ul style="list-style-type: none"> <li><b>F</b> - UDI Barcode</li> <li><b>G</b> - Manufacturing Address</li> <li><b>H</b> - UDI Human Readable Version</li> <li><b>I</b> - Maximum User Weight</li> <li><b>J</b> - Intended Use</li> </ul> |
|--|--|



# Manufacturers Warranty

**THIS GUARANTEE DOES NOT AFFECT YOUR LEGAL RIGHTS IN ANY WAY.**

RGK Wheelchairs\* provides a guarantee, as set out in the warranty conditions, for wheelchairs to its customers covering the following

**Warranty conditions**

Should a part or parts of the wheelchair require repair or replacement as a result of a manufacturing and/or material fault within 24 months or for frame and cross-braces within 5 years after delivery to the customer, then the affected part or parts will be repaired or replaced free of charge.

For original spare parts which have been fitted at the customer's expense, these will have a 12 months guarantee, (following the fitting), in accordance with these warranty conditions.

1. To enforce the warranty, please contact the local reseller where the product was purchased with the exact details of the nature of the difficulty. Should you be using the wheelchair outside the area covered by the local reseller, repairs or replacement will be carried out by another agency as designated by the manufacturer the wheelchair must be repaired by a RGK Wheelchairs designated Customer Service agent, (dealer).
2. For parts, which have been repaired or exchanged within the scope of this warranty, we provide a warranty in accordance with these warranty conditions for the remaining warranty period for the wheelchair in accordance with point 1).
3. For original spare parts which have been fitted at the customer's expense, these will have a 12 months guarantee, (following the fitting), in accordance with these warranty conditions.
4. Consumable parts such as pads, tyres, inner tubes and similar parts are excluded from the warranty, except in the case that premature wear of the part is the direct result of a manufacturing fault.
5. Claims from this warranty shall not arise, if a repair or replacement of a wheelchair or a part is required for the following reasons:
  - The product or part has not been maintained or serviced in accordance with the manufacturer's recommendations as shown in the User Instructions and/or the Service Instructions.
  - Accessories have been used which are not specified as original accessories.
  - The wheelchair or part having been damaged by neglect, accident or improper use.
  - Changes/modifications have been made to the wheelchair or parts, which deviate from the manufacturer's specifications.
  - Repairs have been carried out, before our Customer Service has been informed of the circumstances.
6. This guarantee is subject to the law of the country in which the product was purchased from RGK Wheelchairs.

\* Means the authorised RGK reseller from which the product was purchased.



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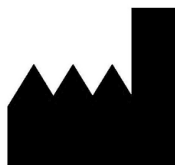
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