

Quickie® QS5™ X

Supplier: This manual must be given to the rider of this wheelchair.
Rider: Before using this wheelchair read this entire manual and save for future reference.

Owner's Manual

Quickie® QS5™ X

Distribuidor: Este manual debe ser entregado al pasajero de esta silla de ruedas.
Pasajero: Antes de usar esta silla de ruedas, lea este manual en su totalidad y guárdelo para futura referencia.

Manual de
Instrucciones

Cada una de las sillas se envía con un manual de instrucciones en inglés. El manual en español y francés está disponible en formato PDF en nuestra página en Internet: www.SunriseMedical.com. Ingrese a la página del producto específico para descargar el manual, o comuníquese con el proveedor autorizado de Sunrise Medical.

Quickie® QS5™ X

Au Fournisseur: Ce manuel doit être remis à l'utilisateur de ce fauteuil roulant.
À l'Usager: Veuillez lire tout le manuel et le conserver pour référence ultérieure.

Manuel
d'Instructions

Chaque fauteuil est livré avec un manuel d'instructions en anglais. Les versions en espagnol et en français sont à votre disposition en format PDF sur le site : www.SunriseMedical.com. Veuillez vous rendre à la page de votre produit pour télécharger le manuel dans la langue souhaitée, ou contactez un fournisseur agréé Sunrise Medical.

P/N 256173 Rev. B

Instructions for Use

QUICKIE® QS5™ X

SUNRISE MEDICAL LISTENS

Thank you for choosing a Quickie wheelchair. We want to hear your questions or comments about this manual, the safety and reliability of your chair, and the service you receive from your Sunrise Medical authorized dealer. Please feel free to write or call us at the address and telephone number below:

SUNRISE MEDICAL (US) LLC
Customer Service Department
2842 N. Business Park Avenue
Fresno, CA 93727 USA
(800) 333-4000



www.SunriseMedical.com/register

Be sure to register your wheelchair and let us know if you change your address. This will allow us to keep you up to date with information about safety, new products, and options to increase your use and enjoyment of the wheelchair.

You can also register your product at:
www.SunriseMedical.com/register

FOR ANSWERS TO YOUR QUESTIONS

Your authorized dealer knows your wheelchair best and can answer most of your questions about chair safety, use, and maintenance.

For future reference, please fill in the following:

Dealer: _____

Address: _____

Telephone: _____

Serial #: _____ Date/Purchased: _____

ADDITIONAL INFORMATION YOU SHOULD KNOW

No component of this chair was made with Natural Rubber Latex.

**DISPOSAL AND RECYCLING INFORMATION**

When this product reaches the end of its life, please take it to an approved collection or recycling point designated by your local or state government. This product is manufactured using a variety of materials. Your product should not be disposed of as ordinary household waste. You should dispose of your product properly, according to local laws and regulations. Most materials that are used in the construction of this product are fully recyclable. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is disposed in a manner that protects the environment.

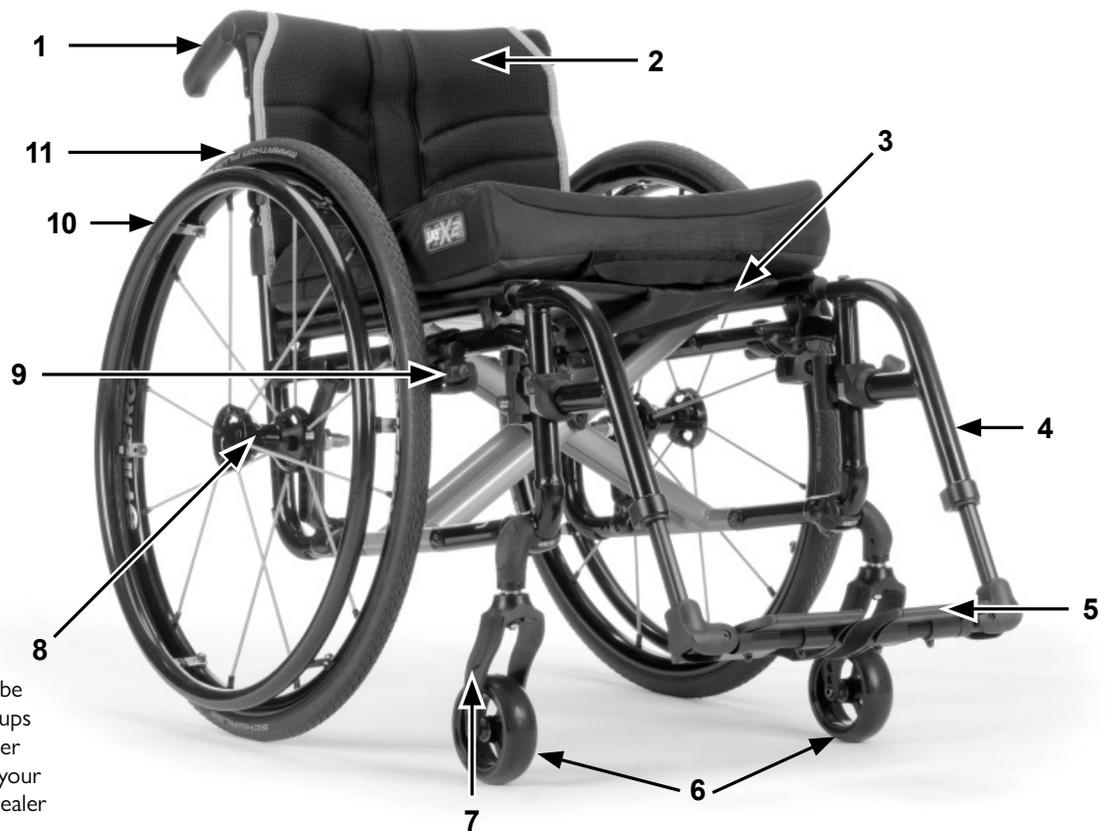
Ensure you are the legal owner of the product prior to arranging for the product disposal in accordance with the above recommendations.

2.0 TABLE OF CONTENTS

1.0 INTRODUCTION.....	2	J. QUICK-RELEASE AXLES.....	13
2.0 TABLE OF CONTENTS.....	3	K. REAR WHEELS.....	13
3.0 YOUR UNIT AND ITS PARTS.....	4	L. REAR WHEEL LOCKS.....	13
4.0 NOTICE — READ BEFORE USE.....	4	M. MODIFIED SEAT SYSTEMS.....	13
A. CHOOSE THE RIGHT CHAIR AND SAFETY OPTIONS.....	4	N. SEAT AND BACK UPHOLSTERY.....	13
B. REVIEW THIS MANUAL OFTEN.....	4	O. POWER DRIVES AND ELECTRONICS.....	13
C. WARNINGS.....	4	8.0 USE AND MAINTENANCE.....	14
5.0 GENERAL WARNINGS.....	5	A. INTRODUCTION.....	14
A. WEIGHT LIMIT.....	5	B. CRITICAL SAFETY CHECKS.....	14
B. INTENDED USE.....	5	C. CLEANING.....	14
C. ATTENDANTS AND CAREGIVERS.....	5	D. HYGIENE MEASURES WHEN BEING RE-USED.....	14
D. ACCESSORIES.....	5	E. SAFETY CHECKLIST.....	14
E. KNOW YOUR CHAIR.....	5	F. TROUBLESHOOTING CHART.....	14
F. REDUCE THE RISK OF AN ACCIDENT.....	5	G. TO MOUNT AND REMOVE REAR WHEELS.....	15
G. SAFETY CHECKLIST.....	5	H. WHEEL LOCKS.....	15
H. CHANGES AND ADJUSTMENTS.....	5	I. CASTER, CASTER LINK, AND CASTER FORK.....	16
I. ENVIRONMENTAL CONDITIONS.....	5	J. ANTI-TIPS.....	17
J. TERRAIN.....	6	K. TIP ASSIST (STEP TUBE).....	17
K. STREET USE.....	6	L. PADDED SWING-AWAY ARMRESTS.....	18
L. MOTOR VEHICLE SAFETY.....	6	M. SINGLE POST HEIGHT-ADJUSTABLE ARMRESTS (Option)....	18
M. WHEN YOU NEED HELP.....	7	N. FLIP BACK HEIGHT-ADJUSTABLE LITE ARMREST (Option)...	19
N. CHOKING HAZARD.....	7	O. FOOTRESTS, LEGRESTS, AND FOOTPLATES.....	20
O. PINCH POINT.....	7	P. BACKRESTS AND BACK UPHOLSTERY.....	21
P. SHARP EDGES.....	7	Q. BACKPOSTS AND PUSH HANDLES.....	21
Q. LATEX ALLERGIES.....	7	R. SEATING AND SEAT SLING UPHOLSTERY.....	22
6.0 SAFETY WARNINGS: FALLS AND TIP-OVERS.....	8	S. SIDE GUARDS.....	22
A. CENTER OF BALANCE.....	8	T. FOLDING AND UNFOLDING.....	23
B. DRESSING OR CHANGING CLOTHES.....	8	U. LED LIGHT.....	24
C. OBSTACLES.....	8	V. STORAGE TIPS.....	24
D. FRONT CASTER LIFT.....	8	W. CHECK OUT.....	24
E. REACHING OR LEANING.....	8	9.0 DEALER SERVICE AND ADJUSTMENT.....	25
F. MOVING BACKWARD.....	8	A. DEALER SERVICE INTRODUCTION.....	25
G. ESCALATORS.....	9	B. CRITICAL MAINTENANCE TIPS.....	25
H. RAMPS, SLOPES, AND SIDEHILLS.....	9	C. CLEANING.....	25
I. TRANSFERS.....	10	D. REAR AXLES AND AXLE PLATES.....	25
J. CURBS AND SINGLE STEPS.....	10	E. REAR WHEEL AXLE NUT ADJUSTMENT.....	26
K. CLIMBING A CURB OR SINGLE STEP.....	11	F. WHEEL LOCKS.....	27
L. DESCENDING A CURB OR SINGLE STEP.....	11	G. CASTER FORK ANGLE AND CASTERS.....	28
M. STAIRS.....	11	H. ANTI-TIP RECEIVERS.....	28
N. CLIMBING STAIRS.....	11	I. ARMREST RECEIVER ATTACHMENT.....	29
O. DESCENDING STAIRS.....	11	J. PADDED SWING-AWAY ARMRESTS.....	29
7.0 WARNINGS: COMPONENTS AND OPTIONS.....	12	K. SWING-IN/SWING-OUT HANGERS AND FOOTRESTS (70°, 80°).....	30
A. ANTI-TIP TUBES.....	12	L. ANGLE ADJUSTABLE FOOTPLATES.....	30
B. ARMRESTS.....	12	M. PLATFORM FLIP-UP FOOTRESTS.....	31
C. CASTER PIN LOCKS.....	12	N. AUTO-FOLD PLATFORM FOOTRESTS.....	31
D. CUSHIONS AND SLING SEATS.....	12	O. BACKREST.....	32
E. FASTENERS.....	12	P. ANGLE ADJUSTABLE BACKREST (Option).....	32
F. FOOTRESTS.....	12	Q. BACKREST TENSION ADJUSTABLE.....	33
G. PNEUMATIC TIRES.....	12	R. SIDE GUARDS.....	34
H. POSITIONING BELTS (Option).....	13	10.0 SUNRISE LIMITED WARRANTY.....	35
I. PUSH HANDLES (Option).....	13		

Quickie QS5 X

1. Push handles
2. Backrest upholstery
3. Seat sling
4. Hanger (Swing-Away only)
5. Footplate
6. Caster wheels
7. Caster fork
8. Quick-release axle
9. Wheel locks
10. Handrim
11. Rear wheel



NOTE: All features may not be available with some chair setups or in conjunction with another chair feature. Please consult your Sunrise Medical authorized dealer for information.

4.0 NOTICE — READ BEFORE USE

A. CHOOSE THE RIGHT CHAIR AND SAFETY OPTIONS

Sunrise provides a choice of many wheelchair styles to meet your needs. This product is intended for single person use only. Final selection of the type of wheelchair, options, and adjustments rests solely with you and your health care provider. Choosing the best chair for your unique mobility needs will depend on such things as:

1. Your disability, grasping strength, balance, and coordination.
2. The types of hazards you must overcome in daily use (where you live and work, and other places you are likely to use your chair).
3. The need for options that will improve your positioning, safety, and comfort (such as anti-tip tubes, positioning belts, or special seating systems).

B. REVIEW THIS MANUAL OFTEN

Before using this chair you, and each person who may assist you, should read this entire manual and ensure you follow all instructions. Review the warnings often, until they are second nature to you.

C. WARNINGS 

The word "WARNING" refers to a hazard or unsafe practice that may cause severe injury or death to you or to other persons. The "Warnings" are in three main sections, as follows:

1. V - GENERAL WARNINGS
Here you will find a safety checklist and a summary of risks you need to be aware of before you ride this chair.
2. VI - SAFETY WARNINGS: FALLS AND TIP-OVERS
Here you will learn about practices for the safe use of your chair, and how to avoid a fall or tip-over while you perform daily activities in your chair.
3. VII - WARNINGS — COMPONENTS AND OPTIONS
Here you will learn about the components of your chair and options you can select for safety. Consult your Sunrise Medical authorized dealer and your health care provider to help you choose the best set-up and options for safe use.

NOTE: Where they apply, you will also find "Warnings" in other sections of this manual. Heed all warnings in these sections. If you fail to do so a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

5.0 GENERAL WARNINGS

A. WEIGHT LIMIT

WARNING

NEVER exceed the weight limit specified by Sunrise Medical. The weight capacity provided by your manufacturer is for the combined weight of a rider and items carried using on-board storage. If you do exceed the weight limit, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

Weight Capacity

Quickie® QS5™ X - 300 lbs (136 kg)

B. INTENDED USE

The Quickie QS5 X wheelchair's intended use is to provide mobility to persons limited to a sitting position.

WARNING

DO NOT use this device for purposes other than what is intended by the manufacturer.

1. The wheelchair is not designed for weight training and is unsafe for use as a seat while weight training. Weight training from the wheelchair substantially changes the stability of the chair and may cause tipping.
2. DO NOT stand on the frame of the wheelchair.
3. NEVER allow someone to stand on your chair or use it as a step ladder.
4. This chair is designed for a single rider only.
5. Unauthorized modifications and use of parts or accessories not supplied or approved by Sunrise Medical may change the chair structure. This will void the warranty and may cause a safety hazard. If the warning is ignored, damage to your chair, and the potential for severe injury of the person using the chair for unintended purposes can occur.

C. ATTENDANTS AND CAREGIVERS

WARNING

Before you assist a rider, ensure you read all warnings contained in this manual, and follow all instructions that apply. Be aware that after consulting a health care provider, you will need to learn safe and proven body mechanics to use and create assistive methods best suited to your abilities.

D. ACCESSORIES

WARNING

Unauthorized modifications or use of parts, or accessories not supplied or approved by Sunrise Medical may change the chair structure. This will void the warranty and may cause a safety hazard.

Some problems that may occur, but are not limited to:

1. Incorrect wheels and/or tires that put the rider at risk of a fall or tip-over.
2. Adding a component to the frame, changing the structural integrity of the chair.
3. Any modification or disassembly can potentially create an unsafe situation where rider and/or attendant are put at risk.

E. KNOW YOUR CHAIR

WARNING

Every wheelchair is different. Take the time to learn the feel of this chair before you begin riding. Start slowly, with easy, smooth strokes. If you are used to a different chair, you may use too much force and tip over. If you use too much force, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

F. REDUCE THE RISK OF AN ACCIDENT

WARNING

1. BEFORE you begin riding, you should be trained in the safe use of this chair by your health care provider.
2. Practice bending, reaching, and transfers until you know the limit of your ability. Have someone help you until you know what can cause a fall or tip-over and how to avoid doing so.
3. Be aware that you must develop your own methods for safe use best suited to your level of function and ability.
4. NEVER try a new maneuver on your own. Ask the advice of your health care provider to lower the risk of a fall or tip over.
5. Get to know the areas where you plan to use your chair. Look for hazards and learn how to avoid them.

G. SAFETY CHECKLIST

WARNING

Before each use of your chair:

1. Ensure the chair rolls easily and that all parts work smoothly. Check for noise, vibration, or a change in ease of use. (This may indicate low tire pressure, loose fasteners, or damage to your chair).
2. Immediately repair any problem. Your Sunrise Medical authorized dealer can help you find and correct the problem(s).
3. Check to see that both quick-release rear axles are locked. When locked, the axle button will "pop out" fully. If not locked, the wheel may come off and cause you to fall.
4. If your chair has anti-tip tubes, lock them in place.

H. CHANGES AND ADJUSTMENTS

WARNING

1. If you modify or adjust this chair, it may increase the risk of a tip-over UNLESS you make other adjustments as well.
2. Consult your Sunrise Medical authorized dealer BEFORE you modify or adjust your chair.
3. We recommend that you use anti-tip tubes until you adapt to the change, and are sure you are not at risk to tip over.
4. See your health care provider and have them adjust seating components any time a change or adjustment needs to be made.
5. Unauthorized modifications or use of parts not supplied or approved by Sunrise Medical may change the chair structure. This will void the warranty and may cause a safety hazard.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

I. ENVIRONMENTAL CONDITIONS



WARNING

1. Use extra care if you must ride your chair on a wet or slick surface. If you are in doubt, ask for help.
2. Contact with water or excess moisture may cause your chair to rust or corrode. Avoid all extreme weather situations if possible.
 - a. Do not use your chair in a shower, pool, or other body of water. The chair tubing and parts are not water-tight and may rust or corrode from the inside.
 - b. Avoid excess moisture (for example, do not leave your chair in a damp bathroom while taking a shower).
 - c. Dry your chair as soon as you can if it gets wet, or if you use water to clean it.
 - d. Avoid contact with salt or salty conditions as this may cause damage to the chair.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

J. TERRAIN**⚠ WARNING**

1. Based on ANSI/RESNA testing, Sunrise Medical recommends the use of a caster wheel with a minimum diameter of 5-in (127mm), if the wheelchair will be overcoming obstacles up to 1/2-in (13mm) on a regular basis.
2. Your chair is designed for use on firm, even surfaces such as concrete, asphalt, indoor flooring, and carpets.
3. Do not operate your chair in sand, loose soil, or over rocky terrain.
4. If you use your chair on terrain that is rougher than described above there is a danger that screws and bolts will loosen prematurely, and that damage to wheels or axles could put the rider at risk of a fall, tip-over, or loss of control.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

K. STREET USE**⚠ WARNING**

1. This product is not intended for street use.
2. Avoid streets whenever possible.
3. Obey and follow all legal pedestrian pathways, and laws that apply to pedestrians.
4. Be alert to the danger of motor vehicles in parking lots, or if you must cross a road.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

L. MOTOR VEHICLE SAFETY (Fig. 5.1 and Fig. 5.2)

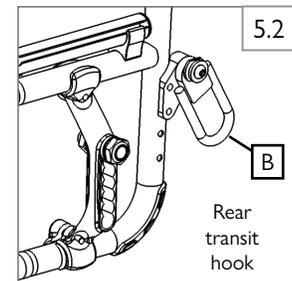
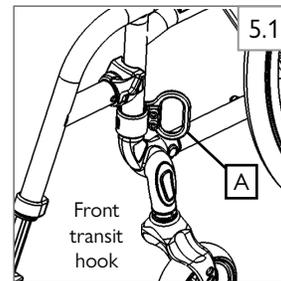
If possible and feasible, the rider should transfer to the Original Equipment Manufacturer vehicle seat and use the OEM vehicle restraint.

Sunrise Medical does provide a ISO Wheelchair Tie-Down and Occupant Restraint System, otherwise called a Transit Option. To Identify whether your wheelchair has been manufactured with the Transit Option installed, look for four points of securement: two front points (A) and two rear points (B). These points are recognized by the securement point decal which can be found on or near the securement points.

If your wheelchair is equipped with the Transit Option please review the Transit Securement supplement that was provided with the wheelchair for additional information and instructions. You can request a copy from your Sunrise Medical authorized dealer, or Sunrise Medical if you don't have it.



Look for this symbol on your wheelchair. It indicates wheelchair securement points.

**⚠ WARNING**

If your chair is NOT equipped with the Transit Option:

1. NEVER let anyone sit in this chair while in a moving vehicle.
 - a. ALWAYS move the rider to an approved vehicle seat.
 - b. ALWAYS secure the rider with proper motor vehicle restraints.
2. In an accident or sudden stop the rider may be thrown from the chair. Wheelchair seat belts will not prevent this, and further injury may result from the belts or straps.
3. NEVER transport this chair in the front seat of a vehicle. It may shift and interfere with the driver.
4. ALWAYS secure this chair so that it cannot roll or shift.
5. Do not use any chair that has been involved in a motor vehicle accident. A sudden stop and/or collision may structurally damage the chair. There may have been a change to the structure of the chair and/or damaged or broken some of the components. Inspect for: visual cracks, dents, metal distortion, or bends. If the device has been involved in an accident, discontinue use immediately and contact a Sunrise Medical authorized dealer for a thorough inspection. Work with the dealer to determine if the device is still safe to use if it has been involved in a collision. If damage is questionable or if there is concern regarding the condition of the device Sunrise Medical recommends replacement of the device.

NOTE — The warranty is void on any device that is involved in a collision.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

5.0 GENERAL WARNINGS

M. WHEN YOU NEED HELP

WARNING

For the rider: Ensure that each person who helps you reads and follows all warnings and instructions that apply.

For attendants:

1. Work with the rider's doctor, nurse, or therapist to learn safe methods best suited to your abilities and those of the rider.
2. Tell the rider what you plan to do, and explain what you expect the rider to do. This will put the rider at ease and reduce the risk of an accident.
3. Ensure the chair has push handles. They provide secure points for you to hold the rear of the chair to prevent a fall or tip-over. Check to ensure push handle grips will not rotate or slip off.
4. To prevent injury to your back, use good posture and proper body mechanics. When you lift or support the rider or tilt the chair, bend your knees slightly and keep your back as upright and straight as you can.
5. Remind the rider to lean back when you tilt the chair backward.
6. When you descend a curb or single step, slowly lower the chair in one easy movement. Do not let the chair drop the last few inches to the ground. This may damage the chair or injure the rider.
7. To avoid tripping, unlock and rotate anti-tip tubes up, out of the way.
8. Whenever you aren't attending the wheelchair, ALWAYS use the wheel-lock to secure the rear wheels, and lock the anti-tip tubes in place.

If you fail to ask for help when in doubt, you run a high risk of a fall, tip-over, or loss of control that may occur and cause severe injury to the rider or others.

N. CHOKING HAZARD

WARNING

Your chair consists of many small parts that could present a choking or swallowing hazard to young children. Ensure you keep loose parts out of reach when doing any work on the chair. Seek immediate help if a loose part is swallowed by a child.

O. PINCH POINT

WARNING

Your wheelchair has many moving parts that can create pinch points and possible finger traps. Be aware when making any adjustments, when folding and unfolding, when moving, and any other situation that could cause a pinch point situation.

P. SHARP EDGES

WARNING

NOTE- This wheelchair contains parts and hardware of many shapes and sizes. When using or working around the wheelchair, take caution to avoid any corners or edges that may cause a scrape or a cut.

Q. LATEX ALLERGIES

WARNING

For riders with latex allergies, we recommend the use of solid tires as there is a risk of latex contamination during the manufacturing process for pneumatic tires and inner tubes.

A. CENTER OF BALANCE**⚠ WARNING**

The point where this chair will tip forward, back, or to the side depends on its center of balance and stability. How your chair is set up, the options you select, and the changes you make may affect the risk of a fall or tip-over.

1. The most important adjustment is: The position of the rear wheels. The more you move the rear wheels forward, the more likely your chair will tip over backward.
2. The center of balance is also affected by:
 - a. A change in the set-up of your chair, including:
 - The distance between the rear wheels.
 - The amount of rear wheel camber.
 - The seat height and seat angle.
 - Backrest angle.
 - b. A change in your body position, posture, or weight distribution.
 - c. Riding your chair on a ramp or slope.
 - d. A backpack or other options and the amount of added weight.
3. To reduce the risk of an accident:
 - a. Consult your doctor, nurse, or therapist to find out what axle and caster position is best for you.
 - b. Consult your Sunrise Medical authorized dealer BEFORE you modify or adjust this device. Be aware that you may need to make other changes to correct the center of balance.
 - c. Have someone help you until you know the balance points of your chair and how to avoid a tip-over.
 - d. Use anti-tip tubes.

If you fail to heed these warnings, you are at a high risk of a fall, tipover, or loss of control that could cause severe injury to the rider or others.

B. DRESSING OR CHANGING CLOTHES**⚠ WARNING**

Your weight may shift if you dress or change clothes while seated in this chair.

To reduce the risk of a fall or tip-over:

1. Rotate the front casters until they are as far forward as possible. This makes the chair more stable.
2. Lock anti-tip tubes in place. (If your chair does not have anti-tip tubes, back it up against a wall and lock both rear wheels).

If you fail to heed these warnings, you are at a high risk of a fall, tipover, or loss of control that could cause severe injury to the rider or others.

C. OBSTACLES**⚠ WARNING**

Riding over curbs or obstacles can cause tipping and serious bodily harm. If you have any doubt that you can safely cross any curb or obstacle, ALWAYS ASK FOR HELP. Be aware of your riding skills and personal limitations. Develop new skills only with the help of a companion.

To avoid the risk of traversing obstacles:

1. Keep a lookout for danger – scan the area well ahead of your chair as you ride.
2. Ensure the floor areas where you live and work are level and free of obstructions.
3. Remove or cover threshold strips between rooms.
4. Install a ramp at entry or exit doors. Ensure there is not a drop off at the bottom of the ramp.
5. To help correct your center of balance:
 - a. Lean your upper body FORWARD slightly as you go UP over an obstacle.
 - b. Press your upper body BACKWARD as you go DOWN from a higher to a lower level.
6. If your chair has anti-tip tubes, do not go over an obstacle without help.
7. Keep both of your hands on the handrims as you go over an obstacle.
8. Never push or pull on an object (such as furniture or a doorjamb) to propel your chair.

If you fail to heed these warnings, you are at a high risk of damage to your chair, a fall, tip-over, or loss of control that may occur and cause severe injury to the rider or others.

D. FRONT CASTER LIFT**⚠ WARNING**

Front caster lift can occur when the front wheels, ordinarily in contact with the ground, are either intentionally, or unintentionally caused to lift from the ground while the rear wheels remain in contact. Pitch control (partial or full) should NEVER be attempted without consulting your health care provider and ensuring that anti-tips are attached.

If you fail to heed these warnings, you are at a high risk of damage to your chair, a fall, tip-over, or loss of control that may occur and cause severe injury to the rider or others.

E. REACHING OR LEANING**⚠ WARNING**

If you reach or lean it will affect the center of balance of your chair. This may cause you to fall or tip over. When in doubt, ask for help or use a device to extend your reach.

1. NEVER reach or lean if you must shift your weight sideways or rise up off the seat.
2. NEVER reach or lean if you must move forward in your seat to do so. Always keep your buttocks in contact with the backrest.
3. NEVER reach with both hands (you may not be able to catch yourself to prevent a fall if the chair tips).
4. NEVER reach or lean to the rear unless your chair has anti-tip tubes locked in place.
5. DO NOT reach or lean over the top of the seat back. This may damage one or both backrest tubes and cause you to fall.
6. If you must reach or lean:
 - a. Do not lock the rear wheels. This creates a tip point and makes a fall or tip-over more likely.
 - b. Do not put pressure on the footrests.
 - c. Move your chair as close as you can to the object you wish to reach.
 - d. Do not try to pick up an object from the floor by reaching down between your knees. You are less likely to tip if you reach to the side of your chair.
 - e. Rotate the front casters until they are as far forward as possible. This makes the chair more stable.
 - f. Firmly grasp a rear wheel or an armrest with one hand. This will help to prevent a fall if the chair tips.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

F. MOVING BACKWARD**⚠ WARNING**

Use extra care when you move your chair backward. Your chair is most stable when you propel yourself forward. You may lose control or tip over if one of the rear wheels hits an object and stops rolling.

1. Propel your chair slowly and smoothly.
2. If your chair has anti-tip tubes, ensure you lock them in place.
3. Stop often and check to ensure your path is clear.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

6.0 SAFETY WARNINGS: FALLS AND TIP-OVERS

G. ESCALATORS

WARNING

NEVER use this chair on an escalator, even with an attendant. If you do, a fall or tip-over is likely.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

H. RAMPS, SLOPES, AND SIDEHILLS (Fig. 6.1 - Fig. 6.4)

WARNING

Whenever possible, avoid riding on a slope, which includes a ramp or sidehill. This will change the center of balance of your chair. Your chair is less stable and more difficult to maneuver when it is at an angle. When moving up a hill, anti-tip tubes may not prevent a fall or tip-over.

1. DO NOT use your chair on a slope steeper than 6°. (A 6° slope means: one foot in elevation for every ten feet of slope length.)
2. ALWAYS go as straight up and as straight down as you can. (Do not "cut the corner" on a slope or ramp.)
3. DO NOT turn or change direction on a slope.
4. When you have to use a ramp, always stay in the CENTER of the ramp. Ensure ramp is wide enough that you have no risk of going off the edge.
5. DO NOT stop on a steep slope. If you stop, you may lose control of your chair.
6. NEVER use rear wheel locks to try to slow or stop your chair. This is likely to cause your chair to veer out of control.
7. ALWAYS be aware of:
 - a. Wet or slippery surfaces.
 - b. A change in grade on a slope (or a lip, bump, or depression). These may cause a fall or tip-over.
 - c. A drop-off at the bottom of a slope or ramp. A drop-off as small as 3/4-in (19mm) can stop a front caster and cause the chair to tip forward.
8. To reduce the risk of a fall or tip-over:
 - a. Lean or press your body UPHILL. This will help adjust for the change in the center of balance caused by the slope or sidehill.
 - b. Keep pressure on the handrims to control your speed on a down slope. If you go too fast you may lose control, and attempting to reduce speed using the handrim while riding at high speeds may cause heat by friction between the hand and the handrim.
 - c. ASK FOR HELP any time you are in doubt.
9. Ramps at home and work— For your safety, ramps at home and work must meet all legal requirements for your area:
 - a. AVOID A DROP-OFF. Ensure there is a section at the top or bottom to smooth out the transition.
 - b. ALWAYS stay in the center of the ramp and control your speed.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and can possibly cause severe injury to the rider or others.

For attendants:

Follow these steps to help the rider go up or down a ramp:

1. Stay behind the chair.
2. Firmly grasp the handles.
3. For going up or down a ramp, the chair should always be facing forward.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.



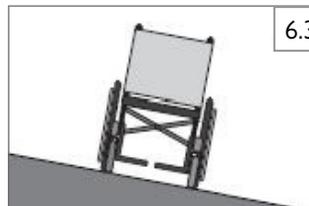
6.1

- IF you need to go down a hill:
- a. The Downslope should be less than 6°.
 - b. GO SLOW. Control your speed.
 - c. ALWAYS go straight down.
 - d. NEVER turn on a hill.
 - e. ALWAYS lean backward.



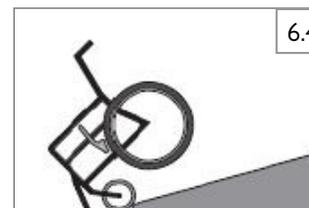
6.2

- IF you need to go up a hill:
- a. The Upslope should be less than 6°.
 - b. ALWAYS go straight up.
 - c. DO NOT STOP.
 - d. NEVER turn on a hill.
 - e. ALWAYS lean forward.



6.3

- IF you need to traverse a sidehill:
- a. Sidehill must be less than 6° or you are risking a tip over.
 - b. DO NOT STOP.
 - c. NEVER turn on a hill.



6.4

- IF you need to traverse a ramp:
- a. Go slowly.
 - b. Watch out for drop-offs.
 - c. ALWAYS go straight up or straight down.
 - d. Stay centered on the ramp.

I. TRANSFERS (Fig. 6.5 and Fig. 6.6)**⚠ WARNING**

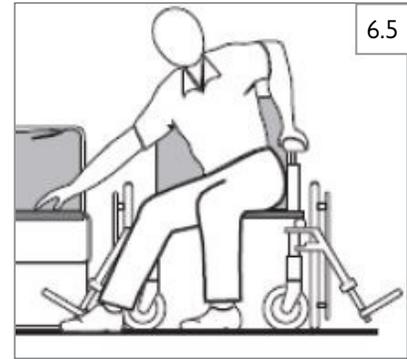
It is dangerous to transfer on your own. It requires good balance and agility. Be aware that there is a point during every transfer when the wheelchair seat is not below you.

To avoid a fall:

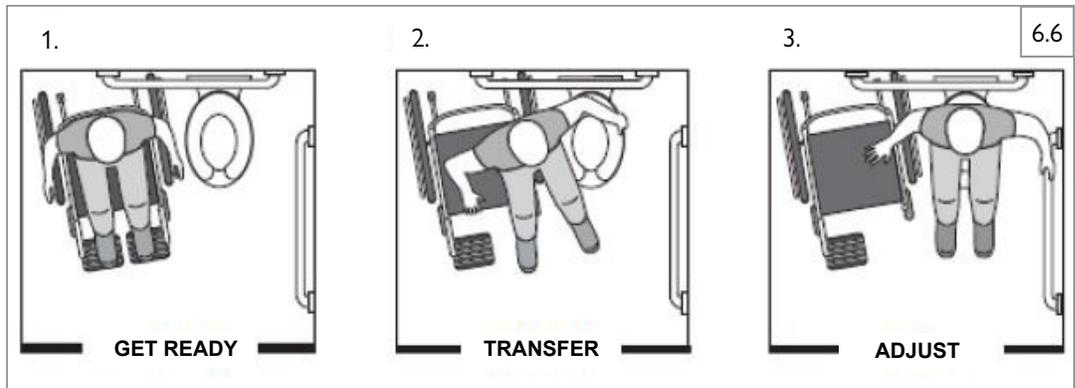
1. Work with your health care provider to learn safe methods for transfers.
 - a. Learn how to position your body and how to support yourself during a transfer.
 - b. Have someone help you until you learn safe transfer methods.
2. Lock the rear wheels before you transfer.
3. Be aware that the chair can still slide and/or tip. The wheel lock keeps the rear wheels from rolling while you are performing the transfer.
4. Ensure that the pneumatic tires are properly inflated. Low tire pressure may allow the rear wheel locks to slip. (See table in Section 7: G "Pneumatic Tires".)
5. Move your chair as close as you can to the seat you are transferring to. If possible, use a transfer board.
6. Rotate the front casters until they are as far forward as possible.
7. If you can, remove the footrests, or swing them out of the way.
 - a. Ensure your feet do not catch in the space between the footrests.
 - b. Avoid putting weight on the footrests as this may cause the chair to tip.
8. Ensure armrests are removed, or out of the way and do not interfere with the transfer.
9. Transfer as far back onto the seat surface as you can. This will reduce the risk that the chair will tip or move away from you.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and can possibly cause severe injury to the rider or others.

Optimum Transfer position

**Before transferring:**

1. Flip-back, or remove the armrests out of the way.
2. Swing, or remove the footrests out of the way (if applicable).
3. Ensure the wheel lock is set.

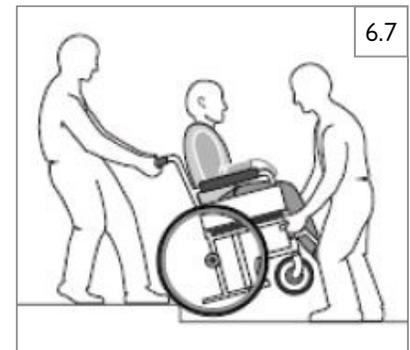
**J. CURBS AND SINGLE STEPS (Fig. 6.7)****⚠ WARNING**

Before riding over curbs, and negotiating even a single step, ALWAYS ask for assistance first. Curbs and steps can cause tipping and serious bodily harm. When in doubt as to your ability to avoid, or traverse any obstacle, always ask for help. Be aware of your riding skills and personal limitations. Develop new skills only with the help of a companion.

For Attendant: Each person who assists the rider with curbs and steps should read and follow all instructions and warnings pertaining to attendants, and caregivers.

1. Do not try to climb a high curb or step (more than 4 inches high (102mm)) UNLESS you have help. Doing so may cause your chair to exceed its balance point and tip over.
2. Go straight up and straight down a curb or step. If you climb or descend at an angle, a fall or tip-over is likely.
3. Be aware that the impact of dropping down from a curb or step can damage your chair or loosen fasteners.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and can possibly cause severe injury to the rider or others.



6.0 SAFETY WARNINGS: FALLS AND TIP-OVERS

K. CLIMBING A CURB OR SINGLE STEP (Fig. 6.8)

WARNING

For Attendant: follow these steps to help the rider climb a curb or single step going **BACKWARD**:

1. Stay behind the chair.
2. Continue backward until the rear wheels contact the face of the curb or step. Lift and roll the rear wheels to the top of the curb.
3. Pull the chair backwards until the caster wheels have cleared the edge of the curb and return the chair to its rolling position.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

L. DESCENDING A CURB OR SINGLE STEP (Fig. 6.8)

WARNING

For Attendant: Follow these steps to help a rider descend a curb or single step going **FORWARD**:

1. Stay at the rear of the chair.
2. Several feet before you reach the edge of the curb or step, tip the chair slightly and pull it backward.
3. When the chair is at its balance point, carefully step forward until the rear wheels reach the edge of the curb or step. Then allow the rear wheels to slowly roll down onto the lower level.
4. Push the chair forward until you are standing on the lower level.
5. When the rear wheels are safely on the lower level, tilt the chair back to its balance point.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

M. STAIRS (Fig. 6.9)

WARNING

1. NEVER use this chair on stairs UNLESS you have someone to help you. Doing so is likely to cause a fall or tip-over.
2. Negotiating stairs with a wheelchair always requires at least two attendants for safety.
3. NEVER lift this chair by its armrests. They may come loose or break.
4. Lift this chair only by non-detachable parts of the main frame.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

N. CLIMBING STAIRS (Fig. 6.9)

WARNING

1. Use at least two attendants to move a chair and rider up stairs.
2. Move the chair and rider **BACKWARD** up the stairs.
3. The person at the rear is in control. He or she tilts the chair back to its balance point.
4. A second attendant at the front firmly grasps a non-detachable part of the front frame and lifts the chair up and over one stair at a time.
5. The attendants move to the next stair up. Repeat for each stair, until you reach the landing.

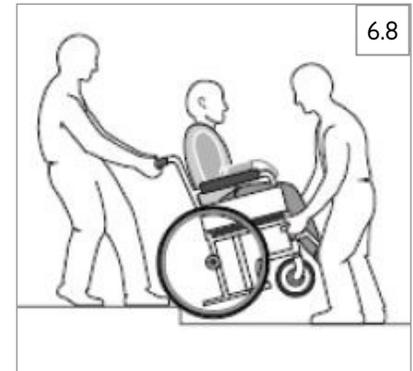
If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

O. DESCENDING STAIRS (Fig. 6.9)

WARNING

1. Use at least two attendants to move a chair and rider down stairs.
2. Move the chair and rider **FORWARD** down the stairs.
3. The person at the rear is in control. He or she tilts the chair to the balance point of the rear wheels and rolls it to the edge of the top step.
4. A second attendant stands on the third step from the top and grasps the chair frame. He or she lowers the chair one step at a time by letting the rear wheels roll over the stair edge.
5. The attendants move to the next stair down. Repeat for each stair, until you reach the landing.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.



A. ANTI-TIP TUBES**⚠ WARNING**

Anti-tip tubes can help keep your chair from tipping over backward in normal conditions.

1. Sunrise Medical recommends the use of anti-tip tubes.
2. When locked in place (in the “down” position) anti-tip tubes should be BETWEEN 1 1/2 to 2 inches (38-51mm) off the ground.
 - a. If set higher than 2 inches (51mm), they may not prevent a tip-over.
 - b. If set lower than 1 1/2 inches (38mm), they may “hang up” on obstacles and cause a fall or tip over.
3. If you have to climb or descend a curb, or overcome an obstacle, it may be necessary to have an attendant ensure the anti-tip tubes are rotated up, and out of the way, so that the chair and rider do not get stuck and/or become unstable.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

B. ARMRESTS**⚠ WARNING**

Armrests detach and will not bear the weight of this chair.

1. NEVER lift this chair by its armrests. They may come loose or break.
2. Lift this chair only by non-detachable parts of the main frame.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

C. CASTER PIN LOCKS**⚠ WARNING**

Always use both pin locks when transferring in and out of the chair. Caster pin locks only keep the front caster wheels from changing direction, they do not lock-out the front wheels from rotation. To prevent the wheelchair from rolling, you must engage the rear wheel locks. If you propel your wheelchair with the caster pin locks engaged, the chair will be prevented from turning.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

D. CUSHIONS AND SLING SEATS**⚠ WARNING**

1. Quickie sling seats and standard foam cushions are not designed for the relief of pressure.
2. If you suffer from pressure sores or if you are at risk that they will occur, you may need a special seat system or a device to control your posture. Consult your doctor, nurse, or therapist to find out if you need such a device for your well-being.
3. Seat slings are not intended to be used as a direct seating surface. A cushion or other seating surface should be placed on the sling before use.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

E. FASTENERS**⚠ WARNING**

Many of the screws, bolts, and nuts on this chair are special high-strength fasteners. Use of improper fasteners may cause your chair to fail.

1. ONLY use fasteners provided by a Sunrise Medical authorized dealer (or ones of the same type and strength, as indicated by the markings on the heads).
2. Over- or under-tightened fasteners may fail or cause damage to chair parts.
3. If bolts or screws become loose, tighten them as soon as you can.

Note: For safety and optimum performance, it is best to not reuse fasteners.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

F. FOOTRESTS**⚠ WARNING**

1. At the lowest point, footrests should be AT LEAST 2 inches (51mm) off the ground. If set too LOW, they may “hang up” on obstacles you can expect to find in normal use. This may cause the chair to stop suddenly and tip forward.
2. To avoid a trip or fall when you transfer:
 - a. Ensure your feet do not “hang up” or get caught in the space between the footrests.
 - b. Avoid putting weight on the footrests, as the chair may tip forward.
 - c. Footrests should be swung out of the way or removed whenever entering or exiting the wheelchair.
3. NEVER lift this chair by the footrests (if applicable). Footrests detach and will not bear the weight of this chair. Lift this chair only by non-detachable parts of the main frame.
4. Never use the footrests of your chair to open doors, this may cause them to fail prematurely and create an unsafe situation.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

G. PNEUMATIC TIRES**⚠ WARNING**

Proper inflation extends the life of your tires and makes your chair easier to use.

1. Do not use this chair if any of the tires are under- or over-inflated. Check weekly for proper inflation level, as listed on the tire sidewall.
2. Low pressure in a rear tire may cause the wheel lock on that side to slip and allow the wheel to turn when you do not expect it.
3. Low pressure in any of the tires may cause the chair to veer to one side and result in a loss of control.
4. Over-inflated tires may burst.

If you fail to heed these warnings damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

Recommended Tire Pressures

Tires	Quickie QS5 X	Recommended Pressure or Pressure Range	
		kPa	PSI
Pneumatic (20-in)	x	448	65
Pneumatic (22-in)	x	448	65
Pneumatic (24-in)	x	517	75
Pneumatic (26-in)	x	448	65
High Pressure Clincher (22-in)	x	690	100
High Pressure Clincher (24-in)	x	758	110
High Pressure Clincher (26-in)	x	758	110
Schwalbe Marathon (22-in)	x	586-1000	85-145
Schwalbe Marathon (24-in)	x	586-1000	85-145
Schwalbe Marathon (25-in)	x	586-1000	85-145
Schwalbe Marathon (26-in)	x	586-1000	85-145

7.0 WARNINGS: COMPONENTS AND OPTIONS

H. POSITIONING BELTS (Option)

WARNING

The positioning belt is predominately used to support your posture. It can also be used to limit slipping and/or sliding that you might experience when the chair is in motion. The positioning belt is not a transit rated safety belt and should not be used in the place of a seat belt while being transported in a motor vehicle. Improper use of positioning belts may cause severe injury or death. If you use a positioning belt, ensure you follow the recommendations in this section:

1. Ensure the rider does not slide down in the wheelchair seat. If this occurs, the rider may suffer chest compression or suffocate due to pressure from the belts.
2. The belts must be snug, but must not be so tight that they interfere with breathing. You should be able to slide your open hand, flat, between the belt and the rider.
3. A pelvic wedge or a similar device can help keep the rider from sliding down in the seat. Consult with the rider's doctor, nurse, or therapist to find out if the rider needs such a device.
4. Use positioning belts only with a rider who can cooperate. Ensure the rider can easily remove the belts in an emergency.
5. NEVER use positioning belts:
 - a. As a patient restraint. A restraint requires a doctor's order.
 - b. On a rider who is comatose or agitated.
 - c. As a motor vehicle restraint. In an accident or sudden stop the rider may be thrown from the chair. Wheelchair positioning belts will not prevent this, and further injury may result from the belts or straps.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

I. PUSH HANDLES (Option)

WARNING

When you have an attendant, ensure that this chair has push handles.

1. Push handles provide secure points for an attendant to hold the rear of this chair, to prevent a fall or tip-over.
2. Check to ensure push handle grips will not rotate or slip off.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

J. QUICK-RELEASE AXLES

WARNING

1. Do not use this chair UNLESS you ensure that both quick-release rear axles are locked.
2. An axle is not locked until the quick-release button pops out fully.
3. An unlocked axle may come off during use, resulting in a fall, tip-over, or loss of control and cause severe injury to the rider or others.
4. Quick-release axles should be periodically cleaned and inspected for function and signs of wear or bending. Replace as necessary.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

K. REAR WHEELS

WARNING

A change in set-up of the rear wheels will affect the center of balance of your chair.

1. The farther you move the rear axles FORWARD, the more likely it is that your chair will tip over backward.
2. Consult your health care provider to find the best rear axle set-up for your chair. Do not change the set-up UNLESS you consult your health care provider first.
3. Adjust the rear wheel locks after you make any change to the rear axles.
 - a. If you fail to do so, the wheel locks may not work.
 - b. Ensure lock arms embed in the tires at least 1/8-in (3mm) when locked.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

L. REAR WHEEL LOCKS

WARNING

Rear wheel locks are NOT designed to slow or stop a moving wheelchair. Use them only to keep the rear wheels from rolling when your chair is at a complete stop.

1. NEVER use rear wheel locks to try to slow or stop your chair when it is moving. Doing so may cause a fall or tip-over.
2. To keep the rear wheels from rolling, always set both rear wheel locks when you transfer to or from your chair.
3. Low pressure in a rear tire may cause the wheel lock on that side to slip and may allow the wheel to turn when you do not expect it.
4. Ensure lock arms embed in tires at least 1/8-in (3mm) when locked. If you fail to do so, the locks may not work.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

M. MODIFIED SEAT SYSTEMS

WARNING

Use of a seat system not approved by Sunrise Medical may alter the center of balance of this chair. This may cause the chair to tip over.

1. Do not change the seat system of your chair UNLESS you consult your Sunrise Medical authorized dealer first.
2. Use of a seating system not approved by Sunrise Medical may affect the backrest folding mechanism of this chair.
3. Use of a seating system not provided by Sunrise Medical is prohibited for transit use.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

N. SEAT AND BACK UPHOLSTERY

WARNING

1. Replace worn or torn fabric of seat and seat back as soon as you can. If you fail to do so, the seat or seat back may fail.
2. Sling fabric will weaken with age and use. Look for fraying, thin spots, or stretching of fabrics especially at edges and seams.
3. "Dropping down" into your chair will weaken fabric and result in the need to inspect and replace the seat more often.
4. Be aware that laundering or excess moisture will reduce the flame retardation qualities of the fabric.
5. If tension adjustable upholstery is present, loosen straps or remove upholstery prior to folding or unfolding the chair.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

O. POWER DRIVES AND ELECTRONICS

DANGER!

1. Do not fit any unauthorized electronic equipment.
2. Do not fit powered or mechanically operated mobility devices, drives, hand-bike or any other device that changes the intended use or the structure of the wheelchair.
3. Any combination with other medical devices requires approval directly from Sunrise Medical.

If you fail to heed these warnings, damage to your chair, a fall, tip-over, or loss of control may occur and cause severe injury to the rider or others.

WARNING

The owner of this chair is responsible for ensuring that it has been set up and adjusted by a trained service professional under the advice of a health care provider. The chair may require periodic safety and function checks or certain in-use adjustments that can be performed by the owner, caregiver, or Sunrise Medical authorized dealer if desired. Always use parts and/or accessories that have been recommended or approved by Sunrise Medical when servicing this chair.

A. INTRODUCTION

- Proper maintenance will improve performance and extend the useful life of your chair.
- Clean your chair regularly. This will help you find loose or worn parts and make your chair easier to use. You will need a mild detergent solution and plenty of cleaning rags.
- If discovered, have loose, worn, bent, or damaged parts replaced **before using the chair**.
- To protect your investment, have all major maintenance and repair work done by your Sunrise Medical authorized dealer.
- Inspect and maintain this chair strictly per the safety checklist.**
- If you detect a problem, ensure you order parts, or have service and repair work done at your Sunrise Medical authorized dealer before use.**
- At least once per year, have a complete inspection, safety check, and service of your chair made by a Sunrise Medical authorized dealer.**

B. CRITICAL SAFETY CHECKS

- Tire Air Pressure:**
Check air pressure in pneumatic tires at least **ONCE PER WEEK**. The wheel locks will not grip properly if you fail to maintain the air pressure shown on tire sidewall.
- Axles and Axle Sleeves:**
When checking axles and axle sleeves every six months, ensure they are clean and tight. Loose sleeves will damage the axle plate and will affect performance.

C. CLEANING

- Paint Finish**
 - Clean the painted surfaces with mild soap or detergent at least once a month.
 - Protect the paint with a coat of non-abrasive auto wax every three months.
- Axles and Moving Parts**
 - Clean around axles and moving parts WEEKLY with a slightly damp (not wet) cloth.
 - Wipe off or blow away any fluff, dust, or dirt on axles or moving parts.
- Upholstery**
 - Hand-wash (machine washing may damage fabric).
 - Drip-dry only. DO NOT machine dry as heat will damage fabric.
- Basic Maintenance Materials available at local store**
 - Tire pump
 - Tire pressure gauge
 - Clean rags or cotton cloth
 - Teflon-based lubricant
 - Mild detergent

NOTE: You do not need to grease or oil the chair.

D. HYGIENE MEASURES WHEN BEING RE-USED

- Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be treated with a disinfection spray.
- To do this, you must use a disinfectant as authorized/recommended in your country, for rapid alcohol-based disinfection for medical products and medical devices, which must be disinfected quickly.
- Please take into account the manufacturer's instructions for the disinfectant you are using. In general, a complete disinfection cannot be guaranteed on seams. We therefore recommend that you dispose of seat and back slings to avoid micro-bacterial contamination with active agents according to your local infection protection law.

E. SAFETY CHECKLIST

Weekly	Monthly	3 Months	6 Months	Annually	Safety and Function Check
<input checked="" type="checkbox"/>					Tire inflation level
<input checked="" type="checkbox"/>					Wheel locks
		<input checked="" type="checkbox"/>			Visually check for loose hardware
			<input checked="" type="checkbox"/>		Armrests
			<input checked="" type="checkbox"/>		Axle and axle sleeves
		<input checked="" type="checkbox"/>			Quick-release axles
		<input checked="" type="checkbox"/>			Wheels, tires, and spokes
		<input checked="" type="checkbox"/>			Casters
		<input checked="" type="checkbox"/>			Anti-tip tubes
			<input checked="" type="checkbox"/>		Frame, camber tubes, and cross-brace
	<input checked="" type="checkbox"/>				Upholstery
				<input checked="" type="checkbox"/>	Service by Sunrise Medical authorized dealer

NOTE: The user or caregiver should perform these weekly and monthly checks to maintain the safety of the chair. If an item is not working properly, please contact your Sunrise Medical authorized dealer.

F. TROUBLESHOOTING CHART

Symptom							Solution
	Left turn in chair	Right turn in chair	Looseness in chair	Sluggish turning	Squeaks and rattles	Caster flutter	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				Ensure tire pressure is correct and equal in both rear tires and front caster tires, if pneumatic.
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Ensure all nuts and bolts are tight.
		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			Ensure all spokes and nipples are tight on radial spoke wheels.
				<input checked="" type="checkbox"/>			Use Tri-Flow Lubricant (Teflon®-based) between frame connections and parts
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		Check for proper caster fork adjustment. See instructions for caster fork adjustment.

8.0 USE AND MAINTENANCE

G. TO MOUNT AND REMOVE REAR WHEELS (Fig. 8.1 and Fig. 8.2)

WARNING

Do not use this chair UNLESS you ensure both quick-release axles are locked. An unlocked axle may come off during use and cause a fall.

NOTE: Setting the wheelchair on a flat surface, such as a workbench or table, helps make these procedures easier.

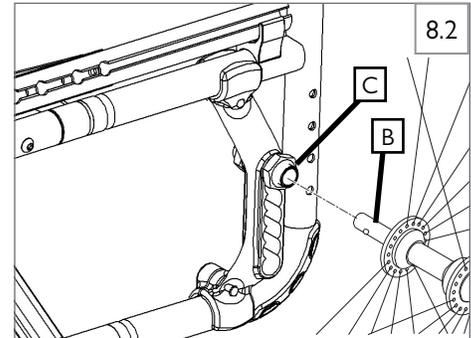
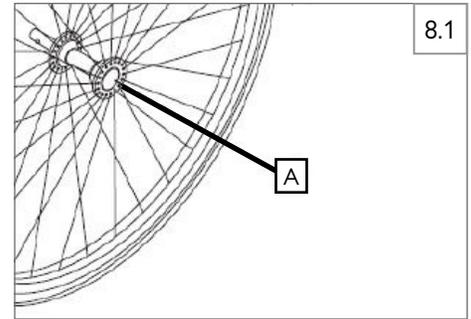
1. To Install Wheel

- Depress quick-release button (A) fully. This will release tension on ball bearings at other end.
- Insert axle (B) through hub of rear wheel.
- Keep button (A) depressed as you slide axle (C) into axle sleeve (B).
- Release button to lock axle in axle sleeve. Adjust axle if it does not lock. See Section B.
- Repeat steps on the other side.

Note: The axle is not locked until the quick-release button pops out fully (A). Check that the axle is locked by pulling on the wheel in the direction of the axle.

2. To Remove Wheel

- Depress quick-release button (A) fully.
- Remove wheel by sliding axle (B) completely out of axle sleeve (C).
- Repeat steps on the other side.



H. WHEEL LOCKS

WARNING

Wheel locks are installed at Sunrise and should be adjusted by your Sunrise Medical authorized dealer.

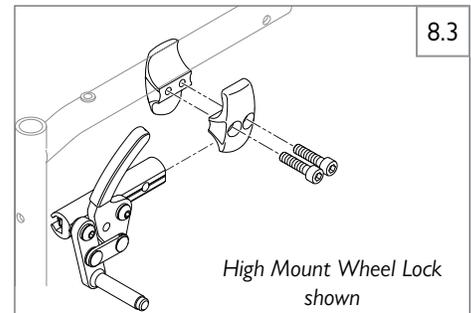
Inspect wheel locks weekly per the maintenance chart. Do not use your chair UNLESS you ensure both wheel locks can fully engage. A wheel lock that is not correctly adjusted may allow your chair to roll, or turn unexpectedly.

Wheel locks must be adjusted after ensuring the tires have the correct air pressure. For High Mount, Compact and Ergo Scissor wheel locks, when fully engaged, the arm should be imbedded into the tire at least 1/8-in (3mm) to be effective. For Fold Down Push (Knee Lever) wheel locks, the gap between the tires and the wheel locks must be within the specified range.

If you find the wheel locks have slipped or are not working correctly contact your Sunrise Medical authorized dealer for proper adjustment.

1. Engaging Wheel Locks (Fig. 8.3)

- Your wheelchair is equipped with two wheel locks. They are applied directly against the tires.
- To engage, press both brake levers forward against the stops.
- To release the locks, pull the levers back to their original positions.



WARNING

Braking power will decrease with:

- Incorrect fitting and adjustment of the brakes.
- Tire pressure too low.
- Worn tire tread.
- Wet tires.
- Improperly adjusted wheel locks.
- The wheel locks have not been designed to be used as brakes for a moving wheelchair.
- The wheel locks should therefore never be used to brake a moving wheelchair.
- Always use the handrims for braking.

CAUTION

- Incorrect mounting of the wheel lock will result in a higher effort to operate. This might cause the wheel lock lever extension to break!
- The mounting bolts of the brake must not be loosened and/or re-tightened.

2. Brake Lever Extension (Fold Down Push Wheel Lock only)

The longer lever helps to minimize the effort needed to set the wheel locks. The brake lever extension is screwed to the brakes. By raising this, it can be flipped forward. (Fig. 8.4)

WARNING

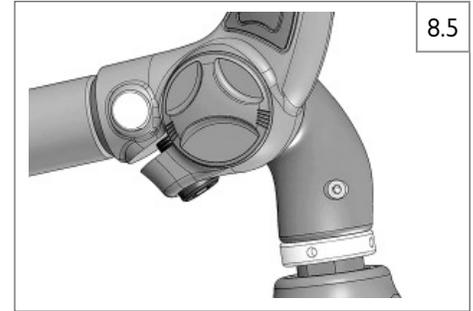
- Mounting the wheel lock too close towards the wheel will result in a higher effort to operate. This might cause the brake lever extension to break!
- Leaning onto the brake lever extension while transferring will cause the lever to break!
- Splashing water from tires might cause the wheel lock to malfunction.



I. CASTER, CASTER LINK, AND CASTER FORK (Fig. 8.5)

From time to time the wheelchair may veer slightly to the right or left or the casters may flutter. This may be caused by the following:

- Forward and/or reverse wheel motion has not been set properly.
 - The caster angle has not been adjusted properly.
 - Caster and/or rear wheel air pressure is incorrect; wheels do not turn smoothly.
1. The optimum adjustment of the casters is required so that the wheelchair runs in a straight line. The caster plates must be re-adjusted, and the wheel locks must be checked every time the rear wheel position has been altered.
 2. Setting directional stability and fine-tune caster height are works-settings and require special tools. Contact your Sunrise Medical authorized dealer for support.
 3. Adjusting the caster-fork angle is necessary when changing the front or rear seat height.



8.0 USE AND MAINTENANCE

J. ANTI-TIPS

Sunrise Medical recommends anti-tip tubes for all wheelchairs.

1. **Inserting Anti-tip Tubes Into Receiver (Fig. 8.6)**
 - a. Press the rear anti-tip release pin (A) on the anti-tip tube so that both release pins are drawn inside.
 - b. Insert the anti-tip tube into the anti-tip receiver (B).
 - c. Turn the anti-tip tube down until release pin is positioned through the receiver mounting hole.
 - d. Insert second anti-tip tube the same way.
2. **Adjusting Anti-Tip Tube Wheel (Fig. 8.7)**
 - a. The anti-tip wheels may have to be raised or lowered to achieve proper clearance of 1 1/2 to 2 inches (38-51mm).
 - b. Press the anti-tip wheel release pin (C) so that the release pin is drawn inside.
 - c. Raise or lower to one of the three predrilled holes.
 - d. Release pin.
 - e. Adjust the second anti-tip tube wheel the same way. Both wheels should be at exactly the same height.
3. **Turning Anti-Tip Tubes Up (Fig. 8.8)**
 - a. Turn anti-tip tubes up when being pushed by attendant, overcoming obstacles, or climbing curbs.
 - b. Press the rear anti-tip tube release pin.
 - c. Hold pin in and turn anti-tip tube up.
 - d. Release pin and ensure the anti-tip is locked in place.
 - e. Repeat steps with second anti-tip tube.
4. **Swing-Away Anti-Tip (Fig. 8.9)**
 - a. Push down on the top of the anti-tip tube (D) to bring them into position. A 1-1/2 inch to 2 inch (38mm to 51mm) gap should be maintained between the anti-tip wheels and the ground.
 - b. The anti-tips can also be swung into a forward position.

WARNING

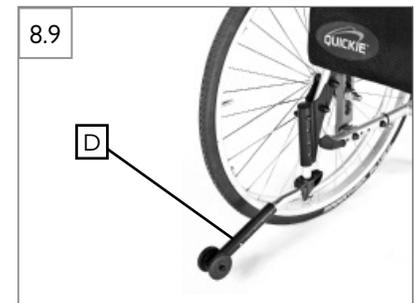
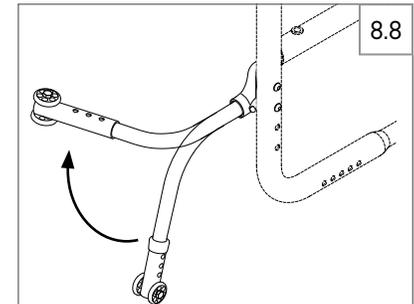
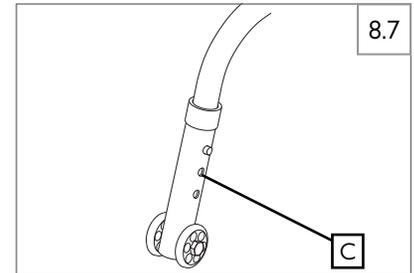
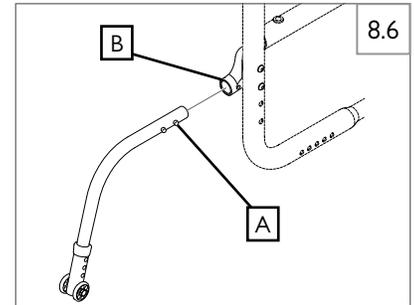
If the anti-tip tubes are not fitted, or have been fitted incorrectly, there is a risk of tipping over and of injury.

K. TIP ASSIST (STEP TUBE)

1. Tip assist (step tubes) is used by attendants to push a wheelchair over an obstacle. Simply step on the tube to push a wheelchair, for example, over a curb or step, (Fig. 8.10).
2. The step tube is equipped with a hinge, so that it will fold upwards if it gets caught on i.e. a curb and therefore prevents damage and user injury.

CAUTION

Sunrise Medical strongly recommends the use of a step tube on any model where attendant use is the predominant intended use. Damage to the backposts may occur if you constantly use the backpost without a step tube, as a lever to pull back on to tip the wheelchair.



L. PADDED SWING-AWAY ARMRESTS (Fig. 8.11)**1. Installation**

- a. Slide armrest into receiver tube (A) on rear of frame.

2. Swinging Away

- a. Lift armrest out of locked position and rotate to the side.

3. Removing Armrest

- a. Pull armrest straight out of receiver.

⚠ WARNING

The padded swing-away armrest is primarily used for resting the forearms of the chair's occupant. It is not designed to be a transfer arm for the wheelchair. You should always remove the armrests or swing them out of the way during transfers. The armrests are not designed to be used for any activity that puts full body weight on them, such as transferring using this armrest.

Failure to follow these instructions can result in severe injury, decreased chair integrity and may void the warranty.

⚠ WARNING

Padded swing away armrests are not transfer devices and must be rotated out of the way prior to transferring. Failure to do this on a regular basis can result in decreased chair integrity and may void the warranty.

M. SINGLE POST HEIGHT-ADJUSTABLE ARMRESTS (Option) (Fig. 8.12)

Sunrise Medical offers several different types of armrests. Fixed, swing-away, and flip-back armrests. Flip-back armrests can be detached or can flip back to allow lateral transfers. They are height adjustable (1-inch (25mm) increments) by flipping the adjustment lever and moving the armrest pad (1) up or down to the desired height.

1. Basic Installation

- a. Slide the outer armpost (4) into the receiver (7) mounted to the wheelchair frame.
- b. The armrest should lock into place.

2. Height Adjustment

- a. Release the height release lever (2).
- b. Slide armpad (1) up or down to desired height.
- c. Return height release lever (2) to locked position.

3. Removing the Armrest

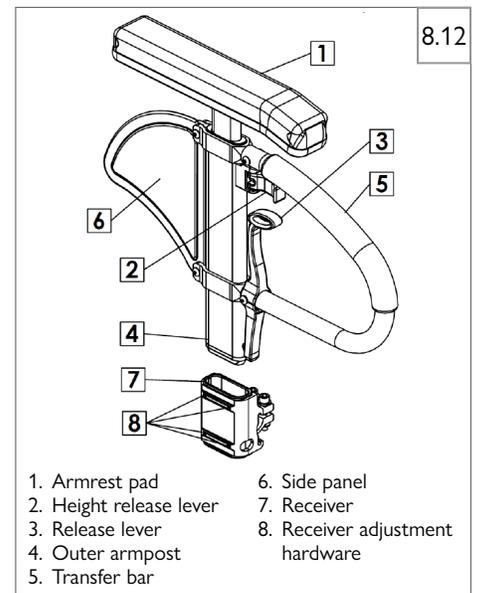
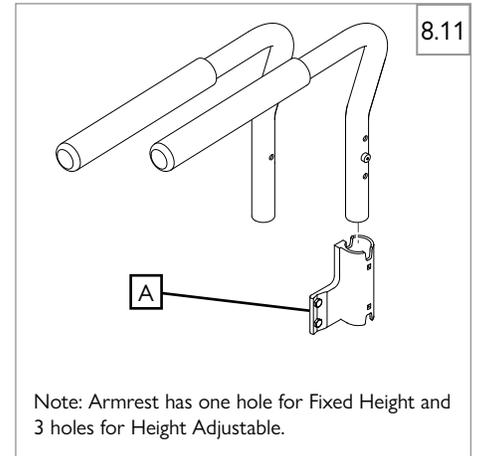
- a. To remove, grasp the release lever (3) and pull up on the armrest.

4. Replacing the Armrest

- a. Slide armrest back into receiver.
- b. Ensure that the release lever (3) returns to the locked position against armpost.

⚠ WARNING

1. Armrest should not be used for lifting or carrying the wheelchair.
2. Always ensure that the armrests are correctly engaged.
3. There is a risk of trapping fingers when adjusting the armrests.

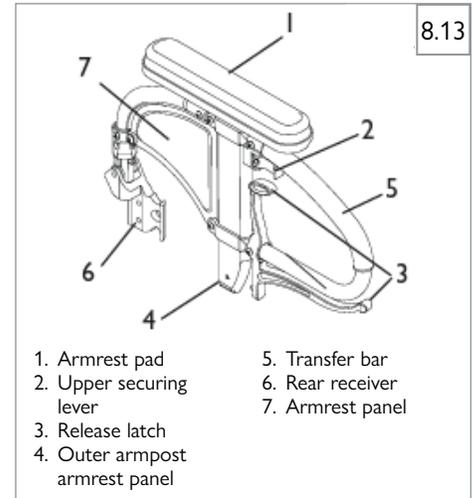


8.0 USE AND MAINTENANCE

N. FLIP BACK HEIGHT-ADJUSTABLE LITE ARMREST (Option) (Fig. 8.13)

Flip-back height adjustable armrests are installed at Sunrise.

1. Height Adjustment
 - a. Release the upper securing lever (2).
 - b. Slide armpad (1) up or down to desired height.
 - c. Return lever (2) to locked position.
2. Flipping Armrest Back and Removing Armrest
 - a. Depress the release latch (3) and pull arm toward back of wheelchair.
 - b. To remove, pull up on armrest. Pin securing armrest will automatically release.
 - c. To return armrest to operating position, push armpad down (1) until it locks firmly into place.



O. FOOTRESTS, LEGRESTS, AND FOOTPLATES

Ensure that your Sunrise Medical authorized dealer has correctly adjusted your footrests and/or legrests with the advice of a health care provider. The original setup should not be changed without first checking with that provider. The footrest position is key to keeping your body in the proper alignment and providing a stable support for your legs and torso. Legrests and footrests should be swung out of the way, or removed for transfers.

1. Basic Footrest Installation for Swing-in/Swing-out Hangers and Footrests (60°, 70°, 80°) (Fig. 8.14)

- Place swing-in/swing-out pivot saddle into the receiver (A) on front frame tube with the hanger facing inward or outward from the frame.
- Rotate the hanger inward until it locks into place on locking plate.

2. Removal for Swing-in/Swing-out Hangers and Footrests (60°, 70°, 80°) (Fig. 8.14)

- To remove hanger, release latch (B) by pulling lever upward or pushing lever downward.
- Rotate hanger inward or outward and lift.

3. Elevating/Articulating Legrest Installation or Removal (Fig. 8.15, Fig. 8.16)

- To install or remove Elevating Legrest (ELR) or Articulating Legrest (ALR) see instructions for Swing-away hanger installation.

4. Elevating/Articulating Legrest Elevation Adjustment (Fig. 8.15, Fig. 8.16)

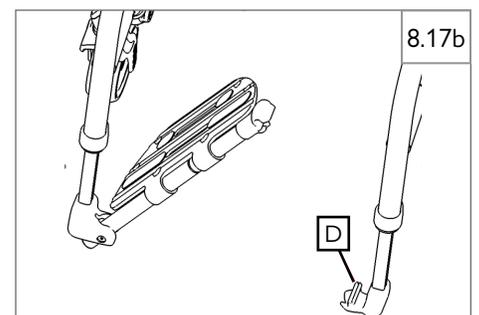
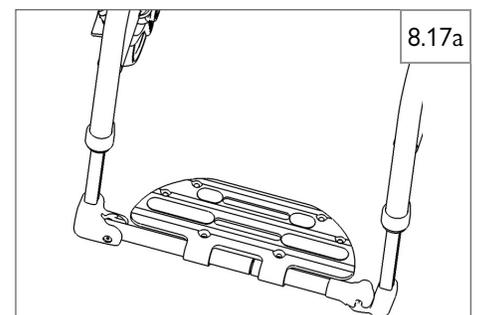
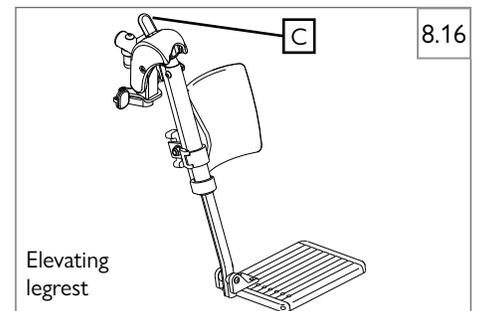
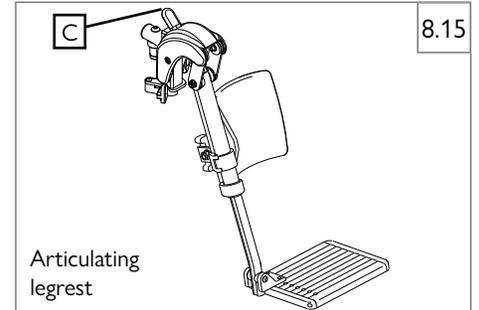
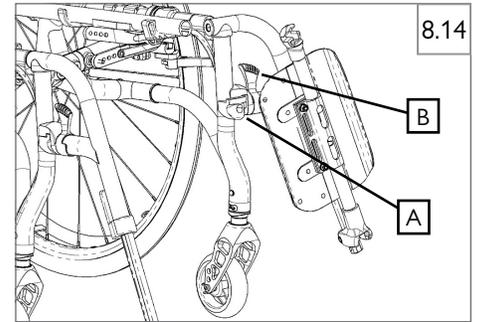
- To raise legrest, lift to desired position. Legrest will automatically lock in place.
- To lower legrest, while seated in chair, press release lever (C) down and lower legrest to desired position. Legrest will automatically lock in place.

5. Flipping up the Platform Footplate (Fig. 8.17a, Fig. 8.17b)

- Flip-up the footplate when transferring from your wheelchair.
- Snap the footplate into the receiver (D) when flipping down.

⚠ WARNING!

Always make sure to unlock the system to get full functionality!



8.0 USE AND MAINTENANCE

P. BACKRESTS AND BACK UPHOLSTERY

1. Folding the Half Folding Backrest (Fig. 8.18, Fig. 8.19)

- To make it easier to transport or store the wheelchair, the top half of the backrest can be folded down.
- To do this, press both levers (A) and fold the backrest down.
- When folding the backrest back up, ensure that both sides are firmly interlocked.

⚠ WARNING

Risk of injury: do not get your fingers caught in the folding back mechanism.

⚠ CAUTION

Please take into account the altered center of gravity when setting the angle of the backrest, tension of the backrest belts or backrest height. This may lead to an unstable wheelchair likely to tip and may require the use of anti-tip tubes.

2. Unfolding the Half Folding Backrest

- Unfolding the backrest: to put the backrest in the upright position, push the handles upwards and forwards until they lock in.

⚠ WARNING

- Keep fingers and other items away from the folding mechanism when the backrest is being folded to prevent injury or damage to property.
- Ensure that the backrest is always locked in correctly which is supported by the clicking noise. Not following this could cause severe injury.

⚠ CAUTION

Do not operate under load as this may cause lever to break.

3. Backrest Upholstery

- Check monthly for excessive stretching of the upholstery, or loose attaching hardware.
- If you determine the upholstery is no longer tight, contact your Sunrise Medical authorized dealer for a replacement.

Q. BACKPOSTS AND PUSH HANDLES

Wheelchairs are shipped with either straight backcanes, push-handle backcanes, or a backcane with an integral folding push handle. The folding push handles come in the folded position.

1. Using Fold Down Push Handles (Fig. 8.20)

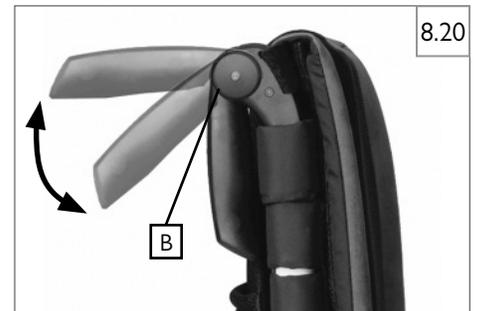
- Lift the handle to the upright position. It should lock in place.
- To unlock and fold the push handles when not in use, press the unlock button (B) and push the handle back into the folded position.

2. Using Height Adjustable Push Handles (Fig. 8.21)

- These handles are secured with pins to prevent them from sliding out unintentionally. Opening the quick-release lever makes it possible to adjust the height of the push handles to meet your individual needs.
- As you move the lever, you will hear a locking mechanism; you may now easily position the push handle as desired.
- The nut on the tension lever determines how tightly the push handles are clamped into place. If the nut is loose after adjusting the tension lever, the push handle will also be too loose.
- Turn the push handle from side to side before use to ensure that it is clamped securely enough into place.
- After adjusting the handle height, always clamp the tension lever securely into place.

⚠ DANGER

If the lever is not secure, it could result in serious injury when ascending stairs.



R. SEATING AND SEAT SLING UPHOLSTERY (Fig. 8.22)

The seat sling can be adjusted through the use of hook and loop material beneath the seat. Seat sling also includes a folding strap on the seat to assist in folding the chair.

NOTE– The seat sling folding strap is not intended as a carrying strap.

1. Adjustment

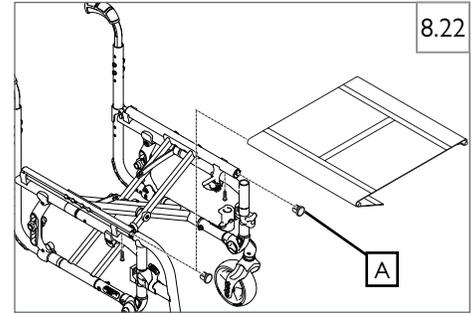
- a. Remove seat rail end caps (A) at the front of the chair.
- b. Slide the seat sling, plastic retaining rods, and spacers (if present) from the channels in the seat rails.
- c. Readjust hook and loop material to obtain the desired tension in the seat sling.
- d. Reinsert the seat sling and plastic retaining rods into the channels in the seat rails.
- e. Replace the end caps.

2. Seat Sling Upholstery

- a. Check monthly for excessive stretching of the upholstery or loose attaching hardware. If you determine the upholstery can no longer be adjusted tight, contact your Sunrise Medical authorized dealer for a replacement.

3. Cushion Installation

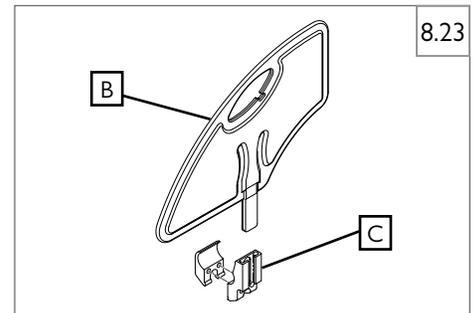
- a. Place cushion on the seat sling with hook material side down. The beveled edge of the cushion should be facing toward the front of your chair.
- b. Press firmly into place.

**S. SIDE GUARDS**

1. Inserting and Removing the side guard (Composite Side Guard) (Fig. 8.23)
 - a. Insert the side guard (B) into the outer receiver hardware (C).
 - b. To remove the side guard, grip the top on the handle area and pull upward.

⚠ CAUTION!

The sideguards are not to be used for lifting or carrying the wheelchair.



8.0 USE AND MAINTENANCE

T. FOLDING AND UNFOLDING

⚠ WARNING**Possible pinch point! BE CAREFUL.**

1. If seat sling is not present during folding or unfolding, pinch top of seat rail securely without wrapping fingers around the seat rail.
2. Use flat palms to depress the chair if opening.

⚠ WARNING**IF YOU HAVE TENSION ADJUSTABLE UPHOLSTERY, loosen straps or remove upholstery prior to folding or unfolding the chair.****1. Folding the Wheelchair**

- a. Remove quick-release wheels (optional).
 - i. Depress quick-release button on the axle.
 - ii. Remove wheel by sliding out quick-release axle from axle bracket.
 - iii. Repeat with the other wheel.
- b. Remove the seat cushion from the wheelchair.
- c. Flip up the platform footrest or the individual footplates.
- d. Grasp the seat sling (from underneath in the center) and pull upwards. If the chair has Folding Fixation, pull upwards until the folding bracket clicks into place. (Figures 8.24a, 8.24b, and 8.25)
- e. To fold your wheelchair until it is as small as possible, e.g., to put into a car, you can remove the hangers (depending on the model). For this purpose, open the latch from the outside and swing the hanger to the side, (Fig. 8.26). Then the hanger only has to be drawn out of the frame tubing.

2. Transportation

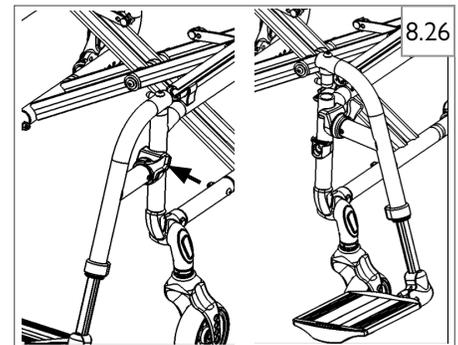
- a. To move the mobility aid, the folded wheelchair should be lifted by holding the front part of the cross-brace and the push handles.

3. Unfolding the Wheelchair

Chairs with Folding Fixation begin with step 3a. Chairs without Folding Fixation begin at step 3b.

- a. If the chair has Folding Fixation begin by pushing the release lever of the folding bracket (Fig. 8.25) downwards.
- b. Push both frame halves apart. Then press on the seat tube (Fig. 8.27). Your wheelchair is then unfolded.
- c. Now snap the seat tubing into position in the seat saddle. This can be facilitated by slightly tipping your wheelchair to the side, as this means that the weight is taken off one of the rear wheels. Be careful not to get your fingers caught in the cross-tube assembly.
- d. Fit the seat cushion.
- e. If removed, replace hangers.

NOTE— Ensure that hangers are locked into position prior to use.



U. LED LIGHT

The optional LED lights are mounted on the frame and can be detached for charging.

1. Switching the lights on

By pushing the button (A) on the backside of each housing, you can cycle through operating-modes of the LEDs: (Fig. 8.29)

- a. Full power mode
- b. Low-power mode
- c. Off

2. Remove the lights for charging

- a. Remove each light by pushing the button on top of the housing (B) and sliding the housing towards the middle of the wheelchair.
- b. To re-attach the lights, mount them on the frame-support and slide towards the outside until you hear a clicking noise and the housing is locked in place. (Fig. 8.28)

3. Charge the battery

- a. Connect the USB-cable supplied with your wheelchair to the USB C connector (C) on the housing. Use a standard USB-charger or your Computer's USB-port to charge the battery. (Fig. 8.29)
Battery-type: Lithium-Ion
Nominal capacity: 320m Ah
Nominal voltage: 3.7 V
Charging-time: 1 hour

4. Battery storage

Store the LED lights in a dry and cool environment within a temperature range between -10°C to +50° C (14°F to 122°F) .

⚠ CAUTION

1. Never try to open the housing!
2. Avoid the ingress of liquids or dirt into the LED lights box.

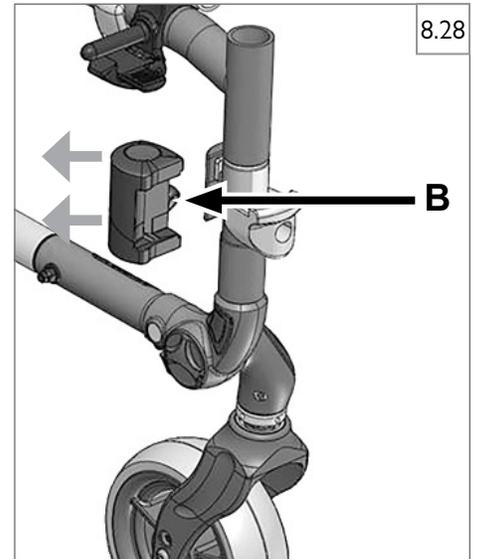
V. STORAGE TIPS

1. Store your chair in a clean, dry area. If you fail to do so, parts may rust or corrode.
2. Before using your chair, ensure it is in proper working order.
3. Inspect and service all items on the "Maintenance Chart".
4. If stored for more than three months, have your chair inspected by a Sunrise Medical authorized dealer before use.

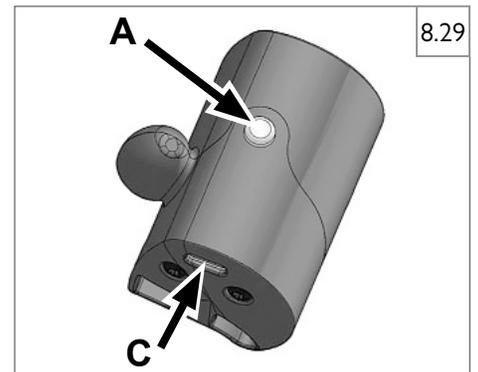
W. CHECK OUT

After the wheelchair is assembled and adjusted, it should roll smoothly and easily. All accessories should also perform smoothly. If you have any problems, follow these procedures:

1. Review the set-up and check-out sections and operating guide to ensure chair was properly prepared.
2. Review the troubleshooting chart at the beginning of this section.
3. If your problem persists, contact your Sunrise Medical authorized dealer. If you still have a problem after contacting your authorized dealer, contact Sunrise Medical customer service. See the Introduction Page for details on how to contact your authorized dealer or Sunrise Medical customer service.



8.28



8.29

9.0 DEALER SERVICE AND ADJUSTMENT

WARNING

The owner of this chair is responsible for ensuring that it has been set up and adjusted by a trained service professional under the advice of a health care provider. Service and/or adjustments should only be done with the advice of a health care provider. Always use parts and/or accessories that have been recommended and approved by Sunrise Medical when servicing this chair.

A. DEALER SERVICE INTRODUCTION (Fig. 9.1)

- At least once per year, this chair should have a complete inspection, safety check, and regular service made by a Sunrise Medical authorized dealer. The tool list at right is a good starting point for proper maintenance.
- If you have discovered a worn, bent, or damaged part, repair or replace them with recommended parts before returning this chair to service.
- All major maintenance and repair work should be done by a Sunrise Medical authorized dealer.

B. CRITICAL MAINTENANCE TIPS

1. Torque settings:

A torque setting is the optimum tightening which should be made on a particular fastener. It is important to use proper torque settings where specified. When not specified, torque settings should be: M5 fasteners = 5 Nm [44 in-lbs], M6 fasteners = 7 Nm [62 in-lbs], M8 fasteners = 10 Nm [88 in-lbs]. For all others torque setting should be 6.8 Nm [60 in-lbs].

2. Dealer Service and Adjustment Reference materials:

Go to www.SunriseMedical.com for parts manuals, instruction sheets, and instructional videos that will aid in the repair of your Quickie wheelchair.

C. CLEANING

1. Paint Finish

- Clean the painted surfaces with mild soap or detergent.
- Protect the paint with a coat of non-abrasive auto wax.

2. Axles and Moving Parts

- Clean around axles and moving parts with a slightly damp (not wet) cloth.
- Wipe off or blow away any fluff, dust, or dirt on axles or moving parts.
- DO NOT USE 3-in-ONE oil, or WD-40® for lubrication. Only use Teflon® based Lubricant when working on this wheelchair.

D. REAR AXLES AND AXLE PLATES

The most important adjustment on the Quickie wheelchair is the position of the rear axle. The center of gravity, wheel camber, and wheelbase are all determined by the axle adjustment.

WARNING

The more you move the rear wheels forward, the more likely the chair will tip over backwards. Always make adjustments in small increments, and check the stability of the chair with a spotter to prevent a tip-over. We recommend that anti-tip tubes are always used in conjunction with this type of adjustment.

1. Center of Gravity (Fig. 9.2)

- The Center of Gravity (COG) can be adjusted in various positions between:
 - Very passive: wheels are in a rearwards position, the chair is very stable and it is difficult to lift the front wheels to overcome obstacles.
 - Very active: wheels are in a forward position, the chair is easier to maneuver, it is easier to lift the front wheels, however the chair can easily tip over to the rear.
- By moving the axle-plate (A) forwards (more active) or rearwards (more passive) on the frame, the COG can be adjusted in five positions.
- To adjust the COG:
 - Remove the rear wheels.
 - Loosen Allen bolt on top of the axle-plate (B).
 - Remove Allen bolt on the bottom of the axle-plate (C) and finally remove the lid (D) including the set screw.
 - You can now slide the axle-plate in the desired position and re-assemble the lid (D) again. Ensure the set screw fits into one of the holes on the frame.
 - Assemble the lower Allen bolt (C). Torque both Allen bolts (B and C) to 11.3 Nm [100 in-lbs]. 

WARNING

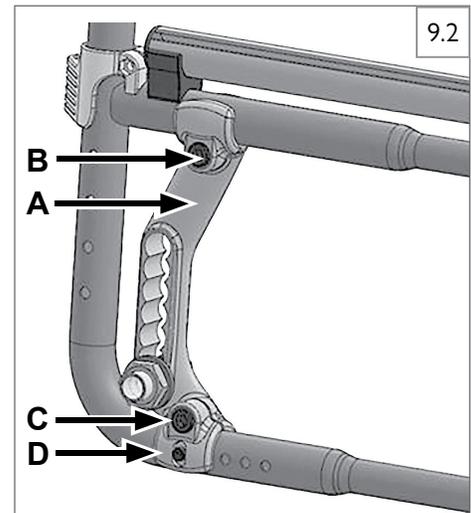
Make sure to readjust wheel-locks and, if necessary, side guards according to the new position of the wheels. Failure to do so may result in user injury!

CAUTION

Always ensure that the COG setting is the same on both sides.

WARNING

Familiarize with the altered balance of the chair! When setting the COG towards a more active position, the chair will become more prone to tip rearwards which might result in user injury. Be cautious and use anti-tips if necessary.



2. Wheel Camber (Fig. 9.3)

- a. The wheel camber adjustment provides greater side-to-side stability due to the increased width and angle of the wheelbase. The wheel camber adjustment also allows for quicker turning and greater access to the top of the handrims.
- b. Wheel camber is set per order at the factory at 0°, 2°, or 4°.
- c. More or less camber can be obtained by adding, removing or changing camber spacers (A and B) located between the lower axle plate attachment and the frame. Wheel camber options are: 0° wheel camber, no camber spacer is used; 2° wheel camber, camber spacer (A) is used; 4° wheel camber, camber spacer (B) is used. Note that different length bolt (C) is required depending on camber configuration.

NOTE– Adjusting your chair's center of gravity will require re-adjusting the location of the wheel locks (if provided). See Section F for instructions on adjusting the wheel locks.

3. Wheel Base Width Adjustment

Adjusting the wheelbase width allows the rider the option to move the wheels closer or further away from the hips. It also compensates for camber adjustment and gives the proper wheel spacing to maximize pushing efficiency.

4. Adjust the Wheelbase Width (Fig. 9.4)

- a. Loosen the nuts and reposition the axle sleeve (D) to the desired width.
- b. Re-tighten axle sleeve nuts. Torque to 35 Nm [25.8 ft-lbs]. 

5. Seat Height Adjustment (Fig. 9.4)

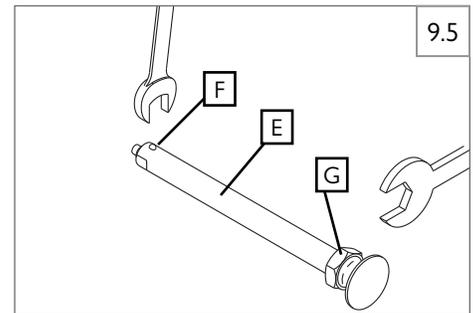
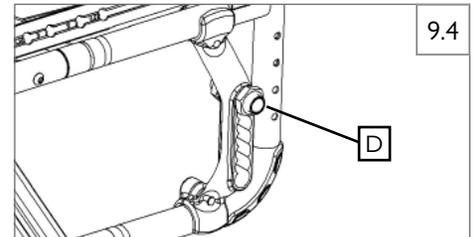
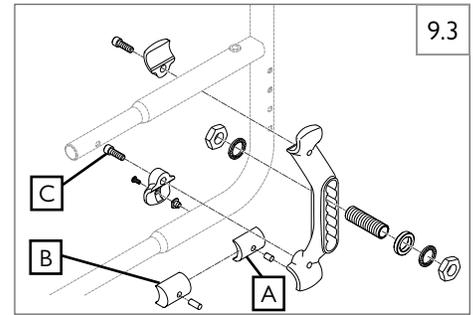
- a. Seat height can be adjusted by repositioning the axle sleeve (D) vertically in one of the predrilled holes in the axle plate for 1/2-in (13mm) adjustments. Switch axle plates left to right (and upside down) to achieve additional seat height ranges.

NOTE– A front caster adjustment should be made to correspond with any change in seat height.

E. REAR WHEEL AXLE NUT ADJUSTMENT (Fig. 9.5)

Tight axle sleeves should be maintained for proper performance of the wheelchair.

1. To adjust the axle (E) you will need a 3/4-in wrench to turn the outside axle nuts (G).
2. You will also need a 1/2-in wrench to lodge the ball bearings (F), on the opposite end of the axle, and prevent the axle from turning.
3. Turn the outside axle nut (G) clockwise to tighten.
4. There should only be zero to ten thousandths of an inch (.010-in) (0-.25mm) of play.



9.0 DEALER SERVICE AND ADJUSTMENT

F. WHEEL LOCKS

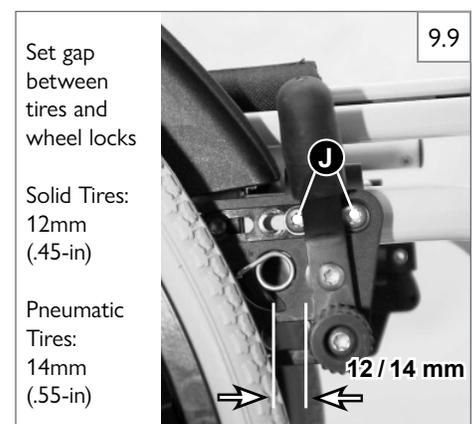
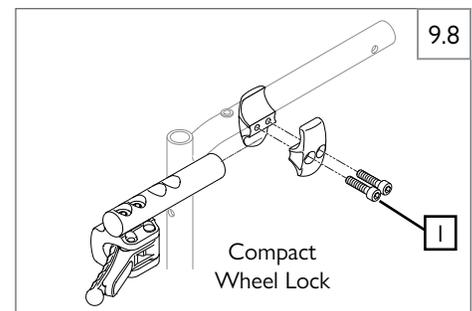
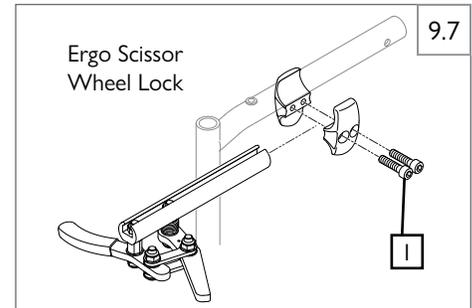
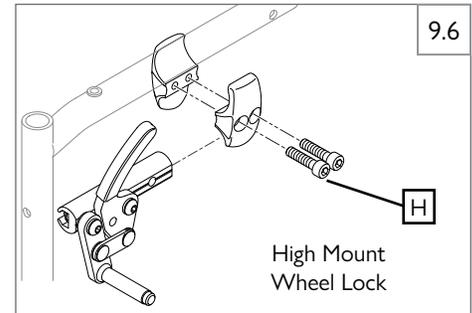
The wheelchair is shipped with one of several types of wheel locks. Wheel locks are installed at the factory unless you have requested otherwise.

Do not use a torque setting above 16.27 Nm [144 in-lbs] when setting up wheel locks.

1. High-Mount Push-to-Lock or Pull-to-Lock, Wheel Locks Adjustment (Fig. 9.6)
 - a. Using a 5mm hex key, turn one of the screws (H) in the clamp counterclockwise one-quarter turn.
 - b. Repeat the same process with the second of the two screws.
 - c. Alternately loosen the screws (two turns each) until both screws are removed.
 - d. Slide clamp toward the rear wheel until the wheel lock is embedded into the tire to prevent wheel movement, when in the locked position. Torque screws to 13 Nm [115 in-lbs]. 
2. Ergo Scissor Wheel Locks or Compact Wheel Locks (Fig. 9.7, Fig. 9.8)
 - a. Loosen the screws (I) on the top of each clamp using a 5mm hex key. Slide assembly toward rear wheel until clamp embeds into tire to prevent wheel movement when in locked position. Adjust angle position. Torque screws to 13 Nm [115 in-lbs]. 

NOTE— Clamp and wheel lock may need to be rotated to clear frame tubing.

3. Fold Down Push (Knee Lever) Wheel Lock (Fig. 9.9)
 - a. Make sure that the gap between the tires and wheel locks complies with given specifications.
 - b. To re-adjust, loosen the screw (J) and set the appropriate gap.
 - c. Then re-tighten the screw.
 - d. After each adjustment of the rear wheels, check the wheel lock gap and re-adjust if necessary.



G. CASTER FORK ANGLE AND CASTERS (Fig. 9.10)

Caster forks allow the interchanging of some casters and adjusting seat height. To adjust, loosen the bolt and remove the caster. Either change caster size and/or position the caster upward or downward in predrilled holes (1 inch (25mm) apart) on caster fork. Replace bolt and tighten securely.

Use a torque setting of 7 Nm [62 in-lbs] when adjusting the casters. 

⚠ CAUTION

Failure to adjust the correct angle can result in caster flutter, locking caster wheels, and injury of the user.

1. Adjusting the Caster-Fork Angle (Fig. 9.11)

- Loosen Allen screw (A). The caster-fork angle can now be adjusted to the correct position: the flat section of the fork must be positioned 90° to the ground. Use the markings (B) as an optical aid for the adjustment.
- Once you have set the correct position, then tighten the Allen screw (A) to 20 Nm [14.8 ft-lbs]. 

⚠ CAUTION

Failure to tighten the Allen screw (A) correctly may result in unintended movement of the caster-fork and injury of the user.

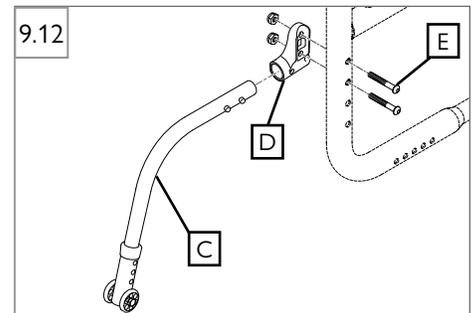
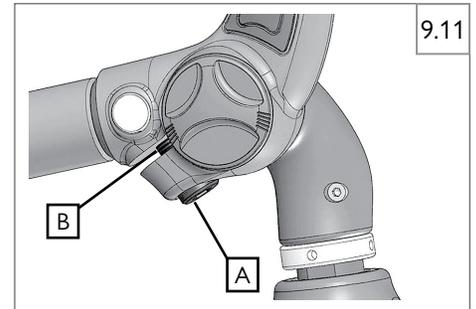
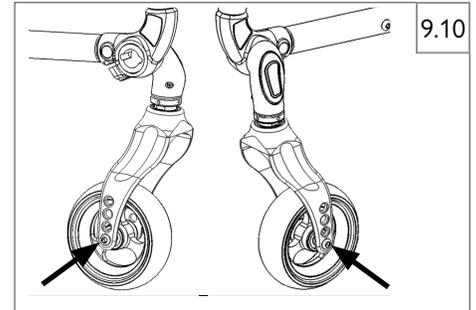
H. ANTI-TIP RECEIVERS (Fig. 9.12)

Sunrise Medical recommends anti-tip tubes for all wheelchairs.

Use a torque setting of 7 Nm [62 in-lbs] when setting up the anti-tip tubes.

1. Adjusting Anti-Tip Receiver

- Remove anti-tip tubes (C) from anti-tip receivers (D).
- Remove bolts (E) from anti-tip tube receiver (D).
- Reposition receiver (D) to desired height.
- Reinsert bolts (E) and tighten.
- Repeat with second anti-tip tube receiver. Both receivers should be at exactly the same height.
- Replace anti-tip tubes (C).



9.0 DEALER SERVICE AND ADJUSTMENT

I. ARMREST RECEIVER ATTACHMENT (Fig. 9.13 - Fig. 9.16)

1. Mounting

- Place the two clamp receivers (A) over the top portion of the rear side frame tube. Align with the single post height-adjustable armrest.
- Pinch both clamp receivers together at the armrest receiver side and insert into the armrest receiver (B).
- Once inserted, pinch both clamp receivers together on the far side of the armrest receiver.
- Hold both clamp receivers against the top portion of the rear side frame tube and fasten (C).

2. Adjustment

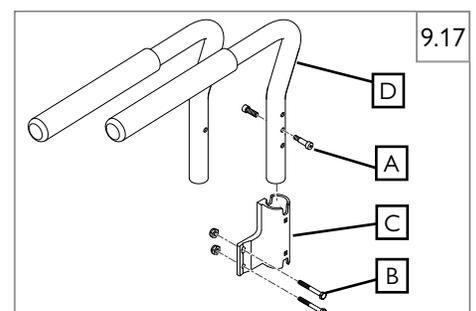
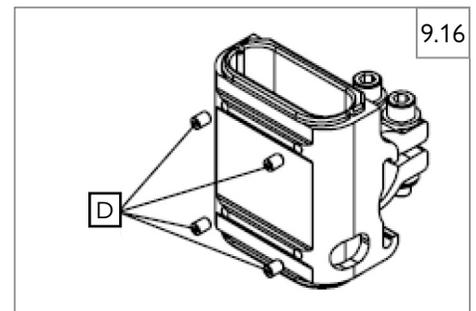
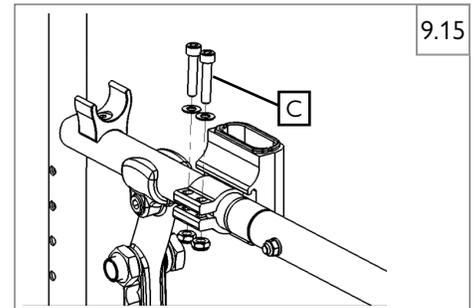
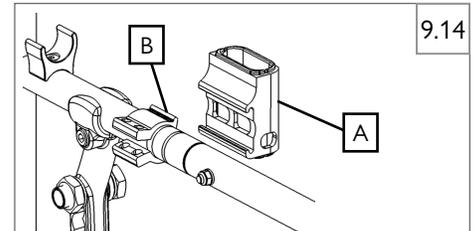
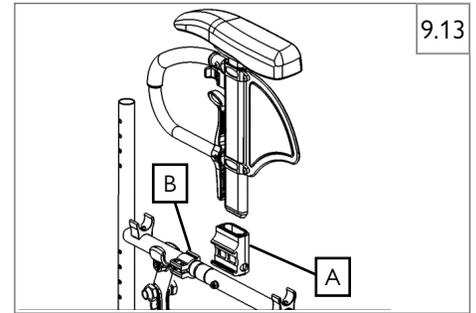
- To adjust the fit of the Single Post Armrest in the receiver, loosen the four set screws (D) by using a 2mm Hex Key.
- With the armrest assembly in the receiver (B), press firmly on the outside of the receiver.
- Maintain pressure on the receiver and re-tighten two of the set screws (D).
- Remove the armrest assembly and re-tighten the remaining two set screws.
- The armrest will fit firmly in the receiver and lessen any noise that may result from vibration.

J. PADDED SWING-AWAY ARMRESTS (Fig. 9.17)

Swing-away armrests can be detached or can swing away to allow lateral transfers. They are height adjustable (1 inch (25mm) increments) by moving hardware (A) up or down in predrilled holes on armrest bracket.

Additional height can be achieved by removing bolts (B), flipping and rotating the hardware to opposite side (C). Ensure bolts (B) are re-tightened.

Swing-away, removable armrests are installed by sliding armrest (D) into receiver (C) on back frame.



Note: Armrest (D) has one hole for Fixed Height and 3 holes for Height Adjustable.

K. SWING-IN/SWING-OUT HANGERS AND FOOTRESTS (70°, 80°)

WARNING

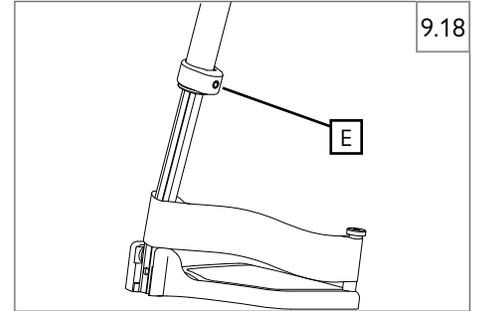
Always maintain a minimum of 2.0 inches (51mm) between the lowest part of the footrest and the floor.

WARNING

Do not stand on the footplate during transfer. The chair is likely to tip to the front when standing on the footplate. Always place your feet securely on the ground for transferring into or out of the chair.

1. Leg Length Adjustment (Fig. 9.18)

- Loosen set screw (E) using a 5mm hex key.
- Slide footrest extension up or down inside frame tube to desired height.
- Tighten set screw. Use a torque setting of 16.27 Nm [144 in-lbs]. 



L. ANGLE ADJUSTABLE FOOTPLATES

1. Composite Angle Adjustable Footplates (Fig. 9.19)

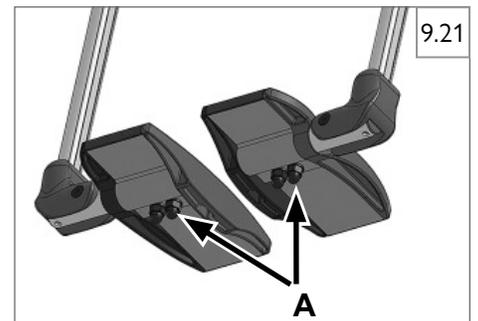
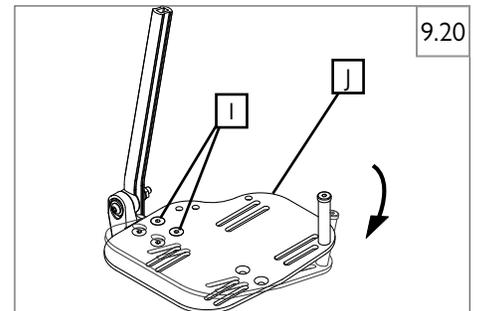
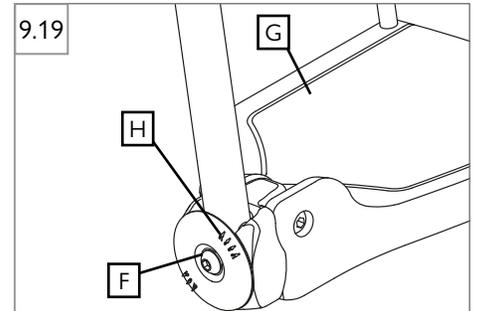
- Remove bolt (F).
- Pull footplate section (G) away from extension.
- Reposition footplate back onto extension in new angular position. Use pre-marked extension coupling (H) as guide.

2. Aluminum Angle Adjustable Footplates (Fig. 9.20)

- Loosen bolts (I).
- Adjust footplate (J) to desired angular position.
- Re-tighten bolts (I).

3. Multi Angle Adjustable Footplates (Fig. 9.21)

- To set the correct angle of the footplates relative to the ground, open the nuts (A) on the underside of the footplates and set the desired angle of the footplates.
- Re-tighten nuts (A).



9.0 DEALER SERVICE AND ADJUSTMENT

M. PLATFORM FLIP-UP FOOTRESTS

1. Footrest Angle (Fig. 9.22)

- The footrest angle can be adjusted by loosening the screws (B).
- Side protection panels can be fitted to the footrest using the mounting holes (C). These prevent the feet slipping off accidentally.
- Ensure that after any adjustment work, all screws are tightened correctly (see section 9:B).

2. Width Adjustment (Fig. 9.22)

- To adjust the width of the footrest please open the screw (B).
- Then slide in and out the tubes in the holder to adjust the width of the footboard.
- Ensure that the screws are tightened with the correct torque (see section 9:B).

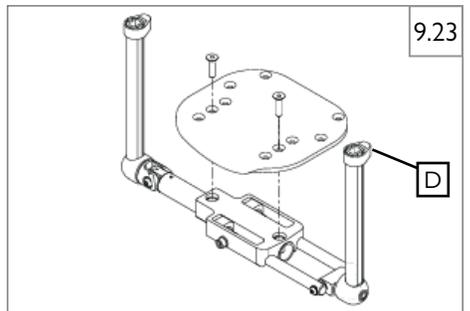
N. AUTO-FOLD PLATFORM FOOTRESTS

1. Height Adjustment (Fig. 9.23)

- Loosen the set screw (D) on both sides of the chair.
- Adjust the footplate assembly up or down to desired height.
- Re-tighten the set screw (D) on both sides of the chair.

WARNING

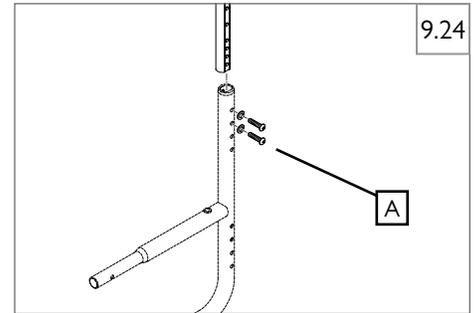
Footplate must have at least 2 inches (51mm) of clearance between the footplate and the ground to prevent hitting obstacles and risking a fall or tip-over.



O. BACKREST**1. Height Adjustment (Fig. 9.24)**

- a. Remove nylon tie from backrest upholstery.
- b. You will see the Backrest Height Adjust bolts (A) on the inside of the frame. Loosen and remove from both sides of the frame.
- c. Adjust to the desired backrest height (measured with chair unfolded, from top of seat sling to highest point on upholstery) and align threaded insert of back cane with the closest hole in frame.
- d. Insert bolts through frame and thread into the insert in back cane.
- e. Torque fasteners on both sides of chair to 7 Nm [62 in-lbs]. 
- f. Insert nylon tie through upholstery grommet and frame tab. Tighten and cut off excess nylon tie.

NOTE— Do not use the top angle adjustment hole for adjusting the back height.

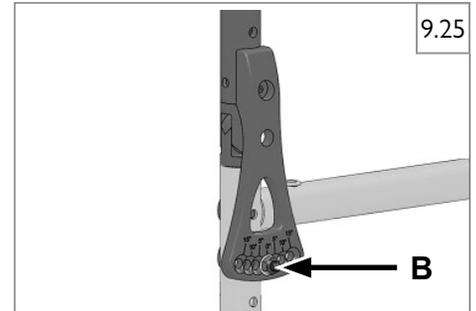
**P. ANGLE ADJUSTABLE BACKREST (Option)****1. Back Angle Adjustment (Fig. 9.25)**

The angle-adjustable backrest can be adjusted in seven positions in 5° increments.

- a. By removing the nut (B) and the bolt, the angle can be adjusted to the desired angle.
- b. Torque the nut to 5 Nm [44 in-lbs] after the adjustment.

 **WARNING**

For your own safety, adjustment work should always be carried out by your Sunrise Medical authorized dealer.



9.0 DEALER SERVICE AND ADJUSTMENT

Q. BACKREST TENSION ADJUSTABLE (Fig. 9.26 - Fig. 9.28)

1. To install the Backrest Tension Adjustable

- Slide hook and loop straps (A) over the backrest frame (B) section. Ensure you include at least one strap below the towel bar (if using a rigid chair).
- Tighten the straps appropriately to desired tension level. **DO NOT** overtighten straps as this will cause undue strain upon the chair backrest frame (B).
- If using integral push handles (C), slide straps from bottom of backrest upward.
- Install backrest cover (D) at desired level and fold over rear of hook and loop strapping system. The Quickie patch should be upright on the rear of the chair.
- Finish installation by placing vanity flap (center panel) down onto hook and loop patch (E) on the seat sling to secure attachment.

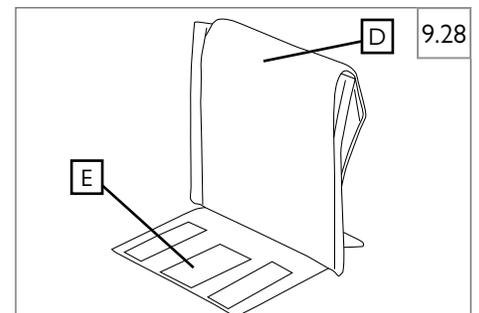
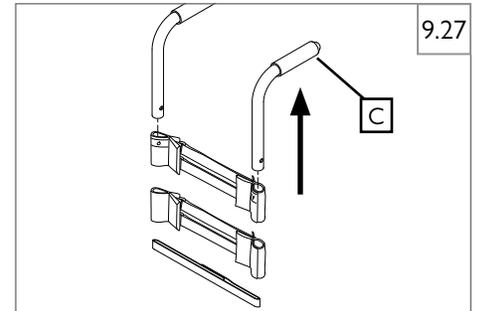
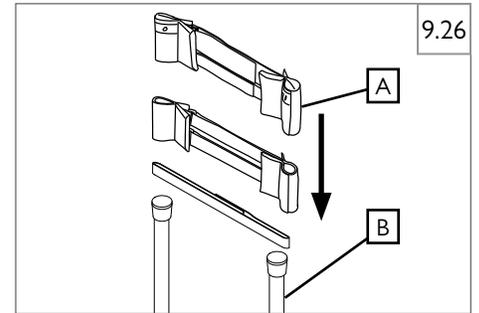
2. Adjusting the Backrest Tension Adjustable

Suggest using anti tips while making any adjustments. Ensure anti-tips are safely secured and in a position to prevent the wheelchair from tipping backwards.

- User can transfer into wheelchair. Place wheel locks in the locked position.
- From the rear of the wheelchair the attendant can lift the vanity flap (center panel) to access the strap system. Adjust straps for optimal balance and trunk alignment. Ensure that each hook and loop strap has a minimum of 2 inches (51mm) of engagement, hook securing to loop. Press the hook and loop material together to ensure it is securely engaged.
- Once adjustments have been finalized, replace vanity flap to its original position.

WARNING

Any changes made to the straps will affect the center of gravity. Suggest the user has the attendant stationed behind the wheelchair to prevent the wheelchair from tipping backwards while they become accustomed to the adjustment.



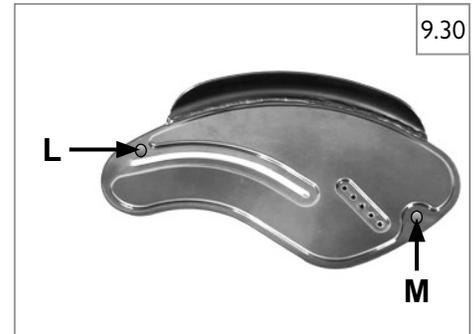
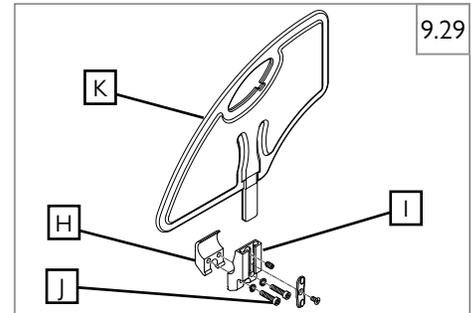
R. SIDE GUARDS

1. Installation of Composite Side Guard hardware (Fig. 9.29)

- Position outer receiver hardware (H) on frame.
- On corresponding inside of the frame position inner clamping hardware (I).
- Insert two bolts (J) with washer and tighten using 5mm hex key.
- The side guard (K) can now be inserted into the receiver.

2. Adjusting the Side Guard (Aluminum or Carbon Fiber Side Guard) (Fig. 9.30)

- You can set the position in relation to the rear wheel by moving the side guard.
- To do this, remove the screws (L and M).
- After setting to the desired position, retighten the screws.



10.0 SUNRISE LIMITED WARRANTY

A. FOR LIFETIME

Frame and cross-brace (if applicable) warranty:

1. Although the anticipated useful service time of this wheelchair is five years, Sunrise Medical guarantees the frame and cross brace against defects in material and workmanship for life or for as long as the original purchaser owns the chair.
2. This warranty does not apply if:
 - a. The chair is subject to abuse.
 - b. The chair is not maintained as recommended in the owner's manual.
 - c. The chair is transferred to a different person from the original owner.

B. FOR ONE (1) YEAR

We warrant all Sunrise-made parts and components of this wheelchair against defects in materials and workmanship for one year from the date of first consumer purchase.

Backrest Tension Adjustable (3DX, Ballistic, EXO and EXO PRO):

Each Backrest Tension Adjustable is carefully inspected and tested to provide peak performance. Every Backrest Tension Adjustable is guaranteed to be free from defects in materials and workmanship for a period of twelve months from the date of purchase, provided normal use. Should a defect in materials or workmanship occur within twelve months from the original date of purchase, Sunrise Medical will, at its option, repair or replace it without charge. This warranty does not apply to puncture, tears, or burns.

Claims and repairs should be processed through the nearest Sunrise Medical authorized dealer. Except for express warranties made herein, all other warranties including implied warranties of merchantability and warranties of fitness for particular purpose are excluded. There are not warranties which extend beyond the description of the face hereof. Remedies for breach of express warranties herein are limited to repair or replacement of the goods. In no event shall damages for breach of any warranty include any consequential damages or exceed the cost of non-conforming goods sold.

C. LIMITATIONS

1. We do not warrant:
 - a. Tires and tubes, upholstery, pads, and push-handle grips.
 - b. Damage from neglect, accident, misuse, or from improper installation or repair.
 - c. Products modified without Sunrise Medical's express written consent.
 - d. Damage from exceeding the weight limit.
2. This warranty is VOID if the original chair serial number tag is removed or altered.
3. This warranty applies in the USA only. Check with your supplier to find out if international warranties apply.
4. This warranty is not transferable and only applies to the first consumer purchase of this wheelchair through a Sunrise Medical authorized dealer.

D. WHAT WE WILL DO

Our sole liability is to repair or replace covered parts. This is the exclusive remedy for consequential damages.

E. WHAT YOU MUST DO

1. Obtain from us, while this warranty is in effect, prior approval for return or repair of covered parts.
2. Return the wheelchair or part(s), freight pre-paid, to Sunrise Medical at: 2842 N. Business Park Avenue, Fresno, CA 93727-1328.
3. Pay the cost of labor to repair, remove, or install parts.

F. NOTICE TO CONSUMER

1. If allowed by law, this warranty is in place of any other warranty (written or oral, express or implied, including a warranty of merchantability, or fitness for a particular purpose).
2. This warranty gives you certain legal rights. You may also have other rights that vary from state to state.

G. ADDITIONAL WARRANTY INFORMATION FOR AUSTRALIA

For goods provided by Sunrise Medical Pty Ltd in Australia, our goods come with a guarantee by Sunrise that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits to you given by this warranty are in addition to your other rights and remedies under a law in relation to the goods to which the warranty relates.

Record your serial number here for future reference:

(Serial number label is located on the X-Hinge (cross brace))

Sunrise Medical S.r.l.
Via Riva, 20 – Montale
29122 Piacenza
Italia
Tel.: +39 0523 573111
Fax: +39 0523 570060
www.SunriseMedical.it

Sunrise Medical AG
Erlenauweg 17
CH-3110 Münsingen
Schweiz/Suisse/Svizzera
Fon +41 (0)31 958 3838
Fax +41 (0)31 958 3848
www.SunriseMedical.ch

Sunrise Medical AS
Delitoppen 3
1540 Vestby
Norge
Telefon: +47 66 96 38 00
post@sunrisemedical.no
www.SunriseMedical.no

Sunrise Medical AB
Neogatan 5
431 53 Mölndal
Sweden
Tel.: +46 (0)31 748 37 00
post@sunrisemedical.se
www.SunriseMedical.se

MEDICCO s.r.o.
H – Park, Heršpická 1013/11d,
639 00 Brno
Czech Republic
Tel.: (+420) 547 250 955
Fax: (+420) 547 250 956
www.medicco.cz
info@medicco.cz
Bezplatná linka 800 900 809

Sunrise Medical Aps
Mårkærvej 5-9
2630 Taastrup
Denmark
+45 70 22 43 49
info@sunrisemedical.dk
www.SunriseMedical.dk

Sunrise Medical Australia
11 Daniel Street
Wetherill Park NSW 2164
Australia
Ph: +61 2 9678 6600
Email: enquiries@sunrisemedical.com.au
www.SunriseMedical.com.au

Sunrise Medical (US) LLC
North American Headquarters
2842 N. Business Park Avenue
Fresno, CA, 93727, USA
(800) 333-4000
(800) 300-7502
www.SunriseMedical.com



© 2024 Sunrise Medical (US) LLC
256173 Rev B

Sunrise Medical GmbH
Kahlbachring 2-4
D-69254 Malsch
Deutschland
Tel.: +49 (0) 7253/980-0
Fax: +49 (0) 7253/980-222
www.SunriseMedical.de

Sunrise Medical Ltd.
Thorns Road
Brierley Hill
West Midlands
DY5 2LD
England
Phone: 0845 605 66 88
Fax: 0845 605 66 89
www.SunriseMedical.co.uk

Sunrise Medical S.L.
Polígono Bakiola, 41
48498 Arrankudiaga – Vizcaya
España
Tel.: +34 (0) 902142434
Fax: +34 (0) 946481575
www.SunriseMedical.es

Sunrise Medical Poland
Sp. z o.o.
ul. Elektronowa 6,
94-103 Łódź
Polska
Telefon: + 48 42 275 83 38
Fax: + 48 42 209 35 23
E-mail: pl@sunrisemedical.de
www.Sunrise-Medical.pl

Sunrise Medical B.V.
Defensiedok 20
3433 NE Nieuwegein
The Netherlands
T: +31 (0)30 – 60 82 100
F: +31 (0)30 – 60 55 880
E: info@sunrisemedical.nl
www.SunriseMedical.nl

Sunrise Medical HCM B.V.
Vossenbeemd 104
5705 CL Helmond
The Netherlands
T: +31 (0)492 593 888
E: customerservice@sunrisemedical.nl
www.SunriseMedical.nl
www.SunriseMedical.eu (International)

Sunrise Medical S.A.S
ZAC de la Vrillonnerie
17 Rue Mickaël Faraday
37170 Chambray-Lès-Tours
Tel : + 33 (0) 2 47 55 44 00
Email: info@sunrisemedical.fr
www.SunriseMedical.fr

Sunrise Medical Canada Inc.
1000 Creditstone Rd., Unit #2
Concord, ON, L4K 4P8,
Canada
Phone: 1-800-263-3390
Fax: 1-800-561-5834
www.SunriseMedical.ca