MOTION CONCEPTS

CONTOUR STATIC (CAPTAIN) SEAT

OWNERS MANUAL

DEALER: This manual contains important safety, maintenance and operating information specific to the operation of the Motion Concepts Captain's Seat Wheelchair System. This manual MUST be given to the USER of the product.

END USER: BEFORE using this product, read this manual and save for future reference.

Motion Concepts

TRD0713 Rev C

Important Information

(Please complete this information for your records and for reference during any warranty claims.)

Motion Concepts Serial Number: *S/N:*

Dealer: _____

Address: _____

Phone #: _____

Purchase Date: _____

Power Base (Model): _____

This owner's manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make any necessary as they become necessary. Any changes made to our products may cause slight variations between the illustrations and explanations in this manual and the product you have purchased. If you have any questions or concerns regarding the information provided in this manual, please contact our Customer Service Department for assistance.

1.0 INTRODUCTION

Dear User,

Congratulations on your decision to purchase a Motion Concepts Captain's Seat, Powered Wheelchair System. Our goal at Motion Concepts is to provide you with the best possible wheelchair seating system. Our close work with many health care professionals has given us an understanding of the challenges that you may confront, and has enabled us to design systems that will help to meet your individual needs.

Important!

This user manual applies specifically to our Motion Concepts Contour Static (Captain) Seat and our optional Elevating Contour Static Seat (with 12" Lift Module or 10" (Heavy-Duty) Lift Module). It is important that you read and understand its contents. ***It is also equally important that you read and understand the Operating Manual/Instructions provided for your wheelchair power base.***

Motion Concepts or their statutory representatives can accept no liability in cases in which the wheelchair has not been adapted to suit the users' disabilities.

Some maintenance and adjustments can be performed by the user or his/her attendants, however, due to the complexity of Motion Concepts Seating Systems, certain adjustments do require technical training and may only be carried out by your authorized Motion Concepts specialist dealer. Damages and errors caused by non-observance of the operating manual or as a result of incorrect maintenance are excluded from all warranties/guarantees.

Contact Information:

If you have any questions or require support concerning your wheelchair seating system, please contact your authorized Motion Concepts Dealer, who has the necessary training and equipment to meet your needs, or you may contact Motion Concepts directly for assistance. The more we are able to understand your needs, the better we will be able to meet them.

CANADA

Motion Concepts LP		
505 Cityview Blvd, Unit 1	Tel (local):	905-695-0134
Vaughan, Ontario	Tel (toll free):	866-748-7943
L4H 0L8	Fax:	905 695 0138
	Tech Service:	800-680-4191
	@	info@motionconcepts.com
	www.	www.motionconcepts.com

USA

Motion Concepts		
700 Ensminger Rd, Suite 112	Tel.:	716-447-0050
Tonawanda, New York	Tel (toll free):	866-433-6818
14150	Fax:	888-433-6834
	Tech Service:	888-433-6818

1.1 Important Symbols in this Manual

Safe operation of your Motion Concepts Contour Static (Captain) Seat system depends upon your diligence in following the warnings, cautions and information provided in this User Manual. Setting up and operating the system safely also depends on your own good judgement and common sense, as well as that of your provider, caregiver and/or health professional.

Safety Symbols:

Signal words and safety symbols are used throughout this manual and apply to hazards, unsafe practices or important information which, if not followed, could result in injury or property damage. Definitions of the signal words are provided below. It is very important for you to read and understand them completely.

DANGER!
Danger indicates an imminently hazardous situation which, if not avoided, could result in death or significant injury.

WARNING!
Warning indicates a potentially hazardous situation which, if not avoided, could result in serious personal injury, compromised safety or device damage

CAUTION!
Caution indicates a potentially hazardous situation which, if not avoided, may result in a minor injury and/or minor device damage.

IMPORTANT!
Indicates important information regarding the operation of your power positioning system, or a hazardous situation that could result in damage to property if not avoided, or both.

NOTE:
This symbol identifies general information which is intended to simplify working with your product and/or recommendations for efficient trouble free use.

Requirements:
This symbol identifies a list of various tools, components and items which you will need in order to carry out certain work.

READ WELL BEFORE OPERATION!
This symbol advises you to read information carefully before proceeding

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PLEASE NOTE: This User Manual and other reference documents are available in PDF-format. The Adobe Reader program offers user-friendly tools (e.g. zoom in/ magnification tool) to assist individuals with reading difficulties. If an image or drawing size cannot be increased, please contact Motion Concepts and high-resolution documents will be provided.

1.2 Intended Use

The intended use of this device is to provide mobility and positioning to persons limited to a seating position.

Please be certain to review all safety warnings provided in **Section 2.0 - Safety Information**. Please also read all safety information and manuals provided (separately) with your **Power Wheelchair Base Owner/Operators Manual.**

1.3 Service Life

The expected service life is five years, presuming that the product is used daily and in accordance with all safety instructions, maintenance instructions and intended use stated in this manual.

1.4 Limited Warranty

Disclaimer

Motion Concepts makes no claims as to the therapeutic effectiveness of the products. Our only claims relate to the ability of the products to provide safe and reliable powered repositioning on the equipment onto which they are installed.

Limited Warranty

All structural components manufactured by Motion Concepts are warranted to be free from defects in materials and workmanship for the lifetime of the original owner. Actuators and electronic components are warranted to be free from defects in material and workmanship for a period of two years. If during the warranty period, any component is determined, at the sole discretion of Motion Concepts, to be defective, such component will be repaired or replaced at the option of Motion Concepts.

The sole obligation of Motion Concepts under this warranty shall be to repair or replace any component or components which are found to be defective. For warranty service, contact the dealer from which the system was purchased. The purchaser of the product is responsible for returning the product to the dealer. Any defective component, once replaced under warranty, shall become the property of Motion Concepts. If further service is required, please contact Motion Concepts: Canada 866-748-7943; USA 888-433-6818

Limitations and Exclusions

The foregoing warranty shall apply only to the original purchase and shall not apply to product subjected to neglect, abuse, improper operation, accidental damage or improper storage. The warranty shall not apply to products which have been modified or fitted with improper parts or components without the written consent of Motion Concepts. The warranty shall also not apply to a product which has been damaged as a result of unauthorized repairs and/or by circumstances not under the control of Motion Concepts.

The foregoing is exclusive and in lieu of all other warranties, expressed or implied, including, without limitation, implied warranties of merchantability and fitness for a particular purpose. The warranty shall not be extended beyond the duration of the expressed warranty provided herein. Motion Concepts shall not be liable for any consequential or incidental damages whatsoever.

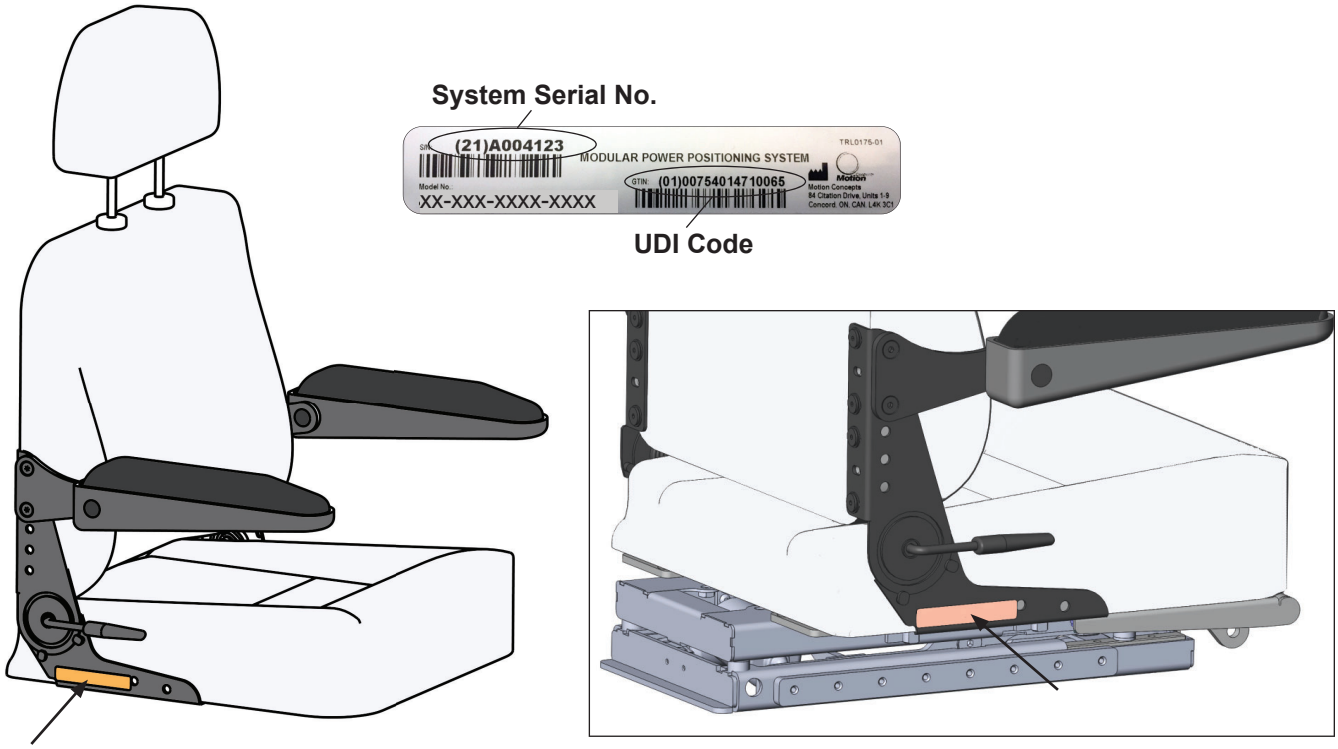
Some jurisdictions do not allow the exclusions or limitation of incidental or consequential damages, or limitation on the length of an implied warranty. Local laws should be reviewed to determine if the above exclusions and limitations apply.

1.5 System Identification

Each Motion Concepts seating system is identified by a unique device identification (UDI) code and serial number, which allows us to trace the production history of the system and better equips us to address any service issues that may occur over the lifetime of the product.

The UDI/Serial Number plate for our Motion Concepts **Contour Static (Captain) Seat** is located at the right rear corner of the seat on the lower armrest mounting plate. Refer to **Fig. 1.0** below.

Fig. 1.0



Standard Contour Static Seat **(Elevating Seat Option)**

2.0 SAFETY INFORMATION

READ ALL SAFETY INFORMATION THOROUGHLY BEFORE OPERATION!

Your Motion Concepts Contour Static (Captain) Seat has been specially configured and installed onto the power wheelchair base prior to delivery. Please note that the final configuration and purchasing decision regarding the complete power wheelchair system is the responsibility of the end user, who is capable of making such a decision, and his/her healthcare professional.

The contents of this manual are based on the expectation that a mobility device expert has fitted the power wheelchair to the user and has assisted the prescribing healthcare professional in the instruction and safe use of this device

IMPORTANT! The most important link in the delivery chain is you, the **end user**. You must be satisfied with the product in terms of function, safety and aesthetics. No sale is complete until you have received thorough training in all aspects of the care and safe use of the system.

DANGER! Risk of Death, Significant Injury or Device Damage.
Improper use of this product may cause death, significant injury or device damage

- *DO NOT ignore unanswered questions. If you are unable to understand the warnings, cautions or instructions provided, contact a health care professional or dealer before attempting to use this equipment*
- *DO NOT use this product or any available optional equipment without first completely reading and understanding the safety warnings and instructions included in this Motion Concepts PPS Owners Manual, as well as any additional instructional material such as user manuals, service manuals or instruction sheets supplied with this product or optional equipment.*

IMPORTANT! Please be certain to also read and understand the detailed safety warnings included in your **Power Wheelchair Base Owners Manual** *(provided separately)*

IMPORTANT! Motion Concepts disclaims all responsibility and liability for any personal injury or damage to property that occurs as a result of improper or unsafe use of the power positioning system, and/or any unauthorized dealer or third party repairs or modifications made to the power positioning system or to the wheelchair on which the system is installed.

2.1 Stability Warnings

Motion Concepts Power Positioning Systems are designed to accommodate a wide range of user needs. Only the dealer and the health care professional can ensure that the system meets your individual requirements. It is your dealer or healthcare professional's responsibility to ensure that the wheelchair and the power positioning system are set up properly and safely for your specific needs.

DANGER! Risk of Death, Significant Injury or Device Damage.
Altering the mounting position or seat depth of your seating system could compromise wheelchair stability, reduce drive control and reduce traction resulting in significant injury or death

- *Your Motion Concepts seating system may be mounted/adjusted on the powerbase over a range of fore and aft positions. It is the Dealer/Service Providers responsibility to ensure the final system mounting position provides you with maximum stability over the full range of seating positions.*
- *Adjustments to the seat depth (including legrests) and/or adjustment of the system mounting position can have a significant effect on the overall stability and driveability of the wheelchair and must ONLY be performed by a qualified technician.*
- *If you have any concerns with the stability of your wheelchair, upon delivery or following a seat depth adjustment, contact your authorized Dealer/Service Provider immediately to resolve the issue.*

2.0 SAFETY INFORMATION

WARNING! Risk of Serious Injury or Device Damage.
Mounting hardware that is loosely secured could cause loss of stability resulting in serious injury or device damage.
• *Following ANY adjustments, repair or service and before use, make sure that all mounting hardware is tightened securely.*

WARNING! Risk of Serious Injury or Device Damage.
Missing or loosely secured hardware could result in serious injury or device damage.
• *Ensure all mounting hardware is present and securely fastened*
• *Following ANY adjustments, repair or service and before use, make sure that all mounting hardware is tightened securely.*

DANGER! Risk of Death, Significant Injury or Device Damage.
Driving/operating your wheelchair when elevated or reclined, could cause a loss of stability resulting in significant injury or death
• *When operating/driving the wheelchair in an elevated or reclined position, ALWAYS ensure the wheelchair is on a smooth level surface (even when travelling at reduced drive speed).*
• *When approaching an incline or step, ALWAYS return the system to a stable (fully lowered & upright) driving position, proceed with caution, and approach the incline/step from straight on to greatly reduce the risk of tipping.*

DANGER! Risk of Death, Significant Injury or Device Damage.
Improper body positioning in the wheelchair could compromise wheelchair stability resulting in significant injury or death
Your wheelchair has been designed to remain upright & stable during normal daily activities. To maintain proper balance, ensure system stability and assure the safe operation of your wheelchair:
• *Determine and establish your personal safety limits by practicing bending, reaching and transferring activities in the presence of a qualified healthcare professional before attempting active use of the wheelchair.*
• *DO NOT lean forward out of the wheelchair any further than the length of the armrests.*
• *DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.*
• *ALWAYS wear your postural belt when you are occupying the wheelchair. Your postural belt helps reduce the possibility of a fall from the wheelchair.*
• *When driving, ALWAYS shift your weight in the direction you are turning. Shifting your weight in the opposite direction of the turn may cause the inside drive wheel to lose traction, and may compromise the stability of the wheelchair.*

DANGER! Risk of Death, Significant Injury or Device Damage
A wheelchair's stability is adversely affected by additional weight that shifts the center of gravity
• *Your wheelchair/seating system is designed to accommodate a single occupant. DO NOT operate with additional person(s) (including children or pets) seated in or on the wheelchair.*
• *DO NOT carry heavy objects on your lap while operating the wheelchair.*

DANGER! Risk of Death, Significant Injury or Device Damage
By altering your seat position in the wheelchair (elevated or recline), you are changing the stability characteristics of the wheelchair. It is essential that the seating system is set up so that it remains stable in all seating positions.
• *NEVER extend your arms backward beyond the back when the seating system is in an elevated or reclined position. This could shift your center of gravity and cause the wheelchair to become unstable.*
• *Ensure all medical conditions are considered when setting up your wheelchair. Involuntary muscle movement such as spasms may affect the stability of the wheelchair, especially when the seating system is in a elevated position.*

2.0 SAFETY INFORMATION

2.1 Stability Warnings *(...cont'd)*

WARNING! Risk of Serious Injury or Device Damage.
Seating accessories and personal gear could cause instability resulting in serious injury. The following factors should be considered when evaluating stability:
• Consider all personal gear and accessories (backpacks, vent systems, extra batteries, etc..) that will be carried on the wheelchair. For example, a loaded backpack, attached to the back of the seating system can significantly reduce the rearward stability of your wheelchair.
• Consider the seat cushion being used. A thick seat cushion will raise your center of gravity and reduce the wheelchairs stability in all directions.

DANGER! Risk of Death, Significant Injury or Device Damage.
Operating your elevating seat with improperly set safety limits/lockouts could cause a loss of stability, resulting in death, significant injury or device damage.
• Setting of the wheelchair safety limits/lockouts MUST be performed by a qualified service technician; Safety limits/lockouts are in place to ensure your stability is not compromised when operating your wheelchair. DO NOT attempt to adjust or disable the safety limits/lockouts
• ALL elevating seat systems are configured with a drive lockout (DLO) limit or a Reduced Drive Speed (RDS) Limit. The DLO or RDS limit MUST always be set to ensure your stability is not compromised when operating your wheelchair.
• If your wheelchair is configured with reduced drive speed, ALWAYS proceed with caution when operating/driving your wheelchair. Place the back support in an upright position and travel on a smooth, level surface to ensure the wheelchair's stability is not compromised.

DANGER! Risk of Death, Significant Injury or Device Damage.
Loss of traction or stability on rough or unstable terrain may cause significant injury or death
• DO NOT operate the wheelchair on rough or unstable terrain. This would include, but is not limited to areas of rock, gravel, sand, mulch, mud, uneven pavement, roots and similar conditions
• ALWAYS be aware of your surroundings and conditions that might affect the stability and performance of the wheelchair.

DANGER! Risk of Death, Significant Injury or Device Damage.
Driving while on an incline could cause a loss of stability resulting in significant injury or death
*• ALWAYS take extra precautions when travelling up or down an incline. To ensure your wheelchair stability is not compromised, Motion Concepts recommends a maximum safe incline/slope angle of 6 degrees for wheelchair travel (with the wheelchair in the full upright and fully lowered position). (See **Section 2.2- Warnings When Travelling on Inclines**)*

2.0 SAFETY INFORMATION

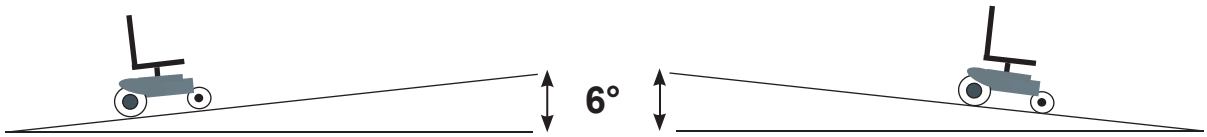
2.2 Guidelines for Travelling on Inclines

IMPORTANT! Your power chair has been tested in accordance with ANSI-RESNA wheelchair standards, and you may have the ability to climb slopes steeper than those indicated in this manual, however any attempt to climb or descend a slope steeper than the maximum recommended safe incline angle may put your wheelchair in an unstable position and cause it to tip.

IMPORTANT! The maximum safe incline angle, as recommended by the wheelchair base manufacturer, may be **further restricted** with the addition of our Motion Concepts Seating System. Where a variance occurs between the Wheelchair Base User Manual and the Motion Concepts User Manual, the lowest recommended incline angle will take precedent.

Your wheelchair's ability to travel up or down inclines is affected by your weight, travel speed, angle of approach to the incline and the set-up/configuration of your power positioning system. For our Motion Concepts Contour Static Seating Systems, the **maximum recommended incline angle** you may attempt to safely ascend or descend (with the seating system in an upright/fully lowered position) **should not exceed 6**°.

Recommended Maximum Incline Angle *(Ascending and Descending)*



SAFETY WARNINGS WHEN TRAVELLING ON INCLINES!

DANGER! Risk of Death, Significant Injury or Device Damage.
Failure to observe these warnings may result in death or significant injury

• If the power wheelchair must climb up or down a loading ramp or incline which exceeds the maximum recommended safe slope, ALWAYS have an attendant present to monitor and assist the process for safety.
• ALWAYS wear your postural belt when climbing up or down a ramp or incline. Your postural belt reduces the possibility of a fall from the wheelchair, and should be worn whenever the wheelchair is occupied.

DANGER! Risk of Death, Significant Injury or Device Damage.
Failure to observe the following guidelines when travelling on an incline or ramp may result in death or significant injury

• NEVER place your power wheelchair in freewheel mode on any type of incline, especially while seated on the wheelchair, or standing next to it.
• ALWAYS exercise extreme caution when travelling on an incline; ALWAYS return your seating system to an upright driving position, and ALWAYS drive your power wheelchair straight up the incline; DO NOT zigzag, make sudden direction changes or drive at an angle up the face of the incline. This greatly reduces the possibility of tipping.
• NEVER travel down an incline or ramp backwards. Doing so may cause the wheelchair to tip.
• NEVER operate the elevate seat function or manual recline function while on an incline.
• When travelling up or down a ramp or incline, NEVER attempt to drive with your legrests in a fully extended position.

DANGER! Risk of Death, Significant Injury or Device Damage.
Traveling on inclines with wet, slippery, icy or oily surfaces could cause a loss of traction resulting in death or significant injury.

• Loss of traction on ramps and inclines can occur for a variety of reasons including; water, ramp material, surface conditions, steepness or grade etc. Lighter weight users may be at an increased risk for loss of traction. As such, when using on ramps or inclines ALWAYS reduce speed and proceed with caution.
• DO NOT travel on inclines with wet, slippery, icy or oily surfaces. This may include, but is not limited to, wet leaves, cut grass and certain painted or otherwise treated wood surfaces.

2.0 SAFETY INFORMATION

2.2 Guidelines for Travelling on Inclines *(...cont'd)*

DANGER! Risk of Death, Significant Injury or Device Damage.
Braking hard and/or sudden stops while on inclines could cause loss of stability resulting in death or significant injury.

- *While on inclines, ALWAYS travel at a reduced, constant speed to maintain stability. Traveling down ramps at high speeds will reduce traction and increase stopping distance*
- *DO NOT brake hard and avoid sudden stops while traveling on an incline.*
- *If stopping becomes necessary while on an incline, release the joystick and allow the wheelchair to come to a full stop. Then proceed at a slower speed.*

DANGER! Risk of Death, Significant Injury or Device Damage.
Driving in an elevated and/or reclined position while on an incline or ramp could cause loss of stability resulting in death or significant injury.

- *DO NOT drive in an elevated and/or reclined position while on an incline or ramp.*
- *If the wheelchair system must travel on an incline (e.g.; when loading into a transport vehicle), ALWAYS have an attendant monitor and assist at all times over the duration of travel.*

WARNING! Risk of Serious Injury or Device Damage.
When transferring a power wheelchair on a ramp to/from a vehicle for transport, adhere to the following guidelines:

- *It is always better to transfer the power wheelchair to/from a vehicle without the occupant seated in it.*
- *If the power wheelchair needs to be loaded/unloaded on a ramp together with its driver, ensure that the ramp does not exceed the maximum recommended safe slope.*
- *If the power wheelchair needs to be loaded/unloaded on a ramp which exceeds the maximum safe slope, or if the wheelchair must be reclined to enter/exit the vehicle, ALWAYS have an attendant present to safely monitor and assist the transfer process.*
- *As an alternative, a platform lift may be used. Ensure that the total weight of the power wheelchair does not exceed the maximum permissible weight for the platform lift or winch being used.*

2.3 Operating your Motion Concepts Captain's Seat/Power Wheelchair

IMPORTANT! To ensure your personal safety when operating your power positioning system and your powered wheelchair base, please be certain to read and understand the safety warnings provided in this section, as well as the other safety information identified throughout this Motion Concepts Owners Manual; Please be certain to also read and understand the detailed safety warnings included in the **Power Wheelchair Base Owners Manual** *(provided separately)*.

2.3.1 WARNINGS WHEN OPERATING YOUR POWER POSITIONING SYSTEM!

DANGER! Risk of Death or Significant Injury if wheelchair and/or seating system is used in any other way than the purpose described in this manual!

- *Only use the wheelchair/seating system in accordance with the instructions provided in this Owners Manual and your Power Wheelchair Base Owners/Operators Manual (provided separately)*
- *Pay strict attention to all safety information provided here and throughout this Owners Manual*

WARNING! Risk of Serious Injury or Compromised User Safety
Not wearing your postural/positioning belt could result in serious injury or compromised user safety.

- *ALWAYS wear your postural belt when you are occupying the wheelchair. Your postural belt helps reduce the possibility of a fall from the wheelchair. The postural belt is a positioning strap only; it is NOT designed for use as a safety device to withstand high stress loads such as the safety belts used in automobiles or aircraft.*

2.0 SAFETY INFORMATION

WARNING! Risk of Serious Injury or Device Damage
The following guidelines should be adhered to while operating your Motion Concepts Captain Seat/Powered Wheelchair to avoid serious injury and ensure safe operation:

• ALWAYS check your surroundings before operating your powered wheelchair and/or seating system. Make sure that the way is clear of obstructions throughout the full range of travel before operating the elevating seat function.
• NEVER operate the elevate seat function while underneath a fixed object such as a table or desk
• NEVER use your legrest footplates or foot platform to open doors or move obstructions.
• NEVER operate the elevating seat function while driving your wheelchair.
• NEVER allow items such as posture belts, backpacks, coats, etc... to become trapped under your seat while elevated, otherwise damage to the system may occur.

WARNING! Risk of Serious Injury due to crushing or pinching.
• Be mindful of potential pinch points caused by moving parts. Use caution when operating your power wheelchair, especially around children and pets.
• Keep hands, fingers or limbs clear of any articulating mechanisms/linkages on your seating system.

CAUTION! Risk of Injury or Device Damage or Property Damage
Operating the wheelchair with insufficient ground clearance between the footplates and the ground/floor may cause injury, device damage or property damage.
*• While the wheelchair is in motion, ALWAYS maintain a minimum ground clearance of 3 inches, **or** the minimum ground clearance stated by wheelchair base manufacture (whichever is greater).*
• If necessary, adjust/elevate the front rigging to achieve the proper ground clearance prior to driving the wheelchair.
• If the wheelchair dips forward and the footplates touch the ground while in motion, please contact your Service Provider for immediate assistance and/or inspection; Avoid use of the wheelchair until corrected.

2.3.2 WARNINGS WHEN DRIVING YOUR POWER WHEELCHAIR!

IMPORTANT! The following section identifies several important safety warnings that are critical to the safe operation of your power wheelchair. Prior to operating your wheelchair, please be certain to read and understand the complete list of safety warnings and transport guidelines included in the **Power Wheelchair Base Owners Manual** *(provided separately)*

WARNING! Changes to the wheelchair drive program can adversely affect the driving characteristics of the wheelchair and may result in serious injury or device damage
• It is the Dealer/Service Provider's responsibility to select a suitable wheelchair drive program, and to ensure that appropriate and safe operating limits are established for the end user.
• Changes to the drive program (maximum acceleration and deceleration of the wheelchair) must only be carried out by qualified service technicians. Unauthorized adjustments beyond safe operating limits may cause serious injury or damage, and will compromise the limited warranty.
*(See also **Section 3.0 - Programming/Operating Your Wheelchair/Seating System**)*

DANGER! Driving the wheelchair near motor vehicles may result in device damage, significant injury or death.
• ALWAYS be aware of motor vehicles when using the wheelchair.

DANGER! Driving the wheelchair outdoors, on roadways, or in areas of poor lighting may result in significant injury or death.
• DO NOT operate on roads, streets or highways.
• Use caution when operating the wheelchair outdoors at night or in areas with poor lighting.

2.0 SAFETY INFORMATION

2.3.2 WARNINGS WHEN DRIVING YOUR POWER WHEELCHAIR! *(...cont'd)*

DANGER! Risk of Death, Significant Injury or Device Damage if the wheelchair is operated when judgement or ability is impaired

• NEVER operate your wheelchair under the influence of medication or alcohol or other substances that impair judgement.

• Changing medications may affect your ability to operate the wheelchair. Discuss the ability to operate the wheelchair with a healthcare professional when changing medications.

• DO NOT operate the wheelchair under conditions where judgement or function may be impaired. This may include, but is not limited to lack of sleep or poor vision.

WARNING! Risk of Damage, Serious Injury or Death

Improper wheelchair operation may cause a loss of traction which can result in damage, serious injury or death

• Travelling at high speeds reduces traction and increases stopping distance.

• DO NOT make sudden direction changes at high speed. Allow the wheelchair to come to a full stop before changing direction.

• ALWAYS shift your weight in the direction you are turning. Shifting your body weight in the opposite direction of the turn may cause the inside drive wheel to lose traction.

DANGER! Risk of Death, Significant Injury or Device Damage

Loss of traction or stability on rough or unstable terrain may result in significant injury or death

• DO NOT operate the wheelchair on rough or unstable terrain. This would include, but is not limited to areas of rock, gravel, sand, mulch, mud, uneven pavement, roots and similar conditions.

• ALWAYS be aware of surroundings & conditions that might affect the ability to operate the wheelchair.

DANGER! Risk of death or significant injury when travelling over curbs or on inclines

• When approaching a curb or incline, return the seating system to a stable/upright driving position, and ALWAYS drive your power wheelchair straight up the curb or incline (not on an angle). This greatly reduces the possibility of tipping.

*• ALWAYS reduce speed and proceed with caution when negotiating a curb/incline (see also **Section 2.2: Travelling on Inclines**).*

DANGER! Risk of Death, Significant Injury or Device Damage if the Drive Lockout (DLO) Limits or Reduced Drive Speed (RDS) Limits are disabled or not properly set

• NEVER drive your wheelchair with the DLO or RDS system disabled or set beyond the maximum recommended limit

WARNING! Risk of Damage or Serious Injury if the wheelchair is switched off while driving (for example by pressing the On/Off Button or disconnecting a cable in order to stop abruptly).

• If you have to brake in an emergency, simply release the joystick to bring the wheelchair to a full stop. (For more information refer to the Joystick User Manual/Instructions (provided separately) with your power wheelchair base.

WARNING! Risk of Serious Injury by Moving Parts.

• To avoid personal injury and injury to other individuals from moving wheelchair parts such as wheels, and the elevating module. Always be aware of your surroundings, especially when children or pets are present.

WARNING! Risk of being stuck/stranded due to an electrical or mechanical wheelchair malfunction.

• When operating/travelling independently in your wheelchair (without an attendant present), ALWAYS have a communication device (e.g.; cell phone, tablet, beeper...) accessible to call for assistance in case of an emergency.

2.0 SAFETY INFORMATION

CAUTION! Impact with objects in the surrounding environment can result in device damage and/or minor injury

• ALWAYS check your surroundings before manoeuvering the wheelchair; ALWAYS ensure the way is clear of any obstructions.

• NEVER use footplates or foot platforms to open doors or move obstructions.

• Continued use of the wheelchair/seating system with damaged parts could lead to the wheelchair malfunctioning, causing injury to the user.

• In case of damage or if the wheelchair/seating system is not functioning properly, contact your local service provider for repair.

CAUTION! Risk of damage to your cell phone/electronic device when travelling on rough or uneven terrain

• For systems equipped with Motion Concepts cell phone holder, ALWAYS ensure your cell phone or electronic device is properly seated and secured inside the holder before driving your wheelchair or operating your power positioning system;

• ALWAYS remove your cell phone/electronic device from the holder and store in a secure place when travelling on rough or uneven terrain.

WARNING! Operating/Storing the wheelchair in extreme temperature conditions (below -15˚C (5 F) and above 40˚C (104 F)) may cause the wheelchair to malfunction electrically or mechanically, and may result in device damage or serious injury.

• When not in use, DO NOT store or expose the wheelchair to an extreme temperature environment for an extended period of time.

• In extreme conditions, ALWAYS test the wheelchair performance (seating functions and drive functions) prior to travelling outdoors.

• Whenever possible, travelling with an attendant is strongly recommended during extreme temperature conditions

WARNING! Operating the wheelchair in rain or dampness may cause the wheelchair to malfunction electrically or mechanically, and may result in device damage or serious injury.

• DO NOT leave wheelchair in a rain storm of any kind.

• DO NOT use wheelchair in a shower.

• DO NOT leave wheelchair in a damp area for any length of time.

• Check to ensure that the battery covers are secured in place, joystick boot is NOT torn or cracked where water can enter and that all electrical connections are secure at all times.

• DO NOT use if the joystick boot is torn or cracked. If the joystick boot becomes torn or cracked, replace IMMEDIATELY.

2.4 Transferring Guidelines

IMPORTANT! Before attempting transfers, consult a healthcare professional to determine proper transfer techniques based on your abilities and the type of wheelchair/seating system.

WARNING! Risk of Serious Injury or Device Damage

Failure to turn off power to the wheelchair and/or failure to engage the motor locks could cause the wheelchair to move during transfer activities which may result in serious injury.

• Before transferring in or out of your wheelchair, ALWAYS turn the wheelchair power off; NEVER transfer with the power turned on.

• ALWAYS ensure both motor locks/clutches and free wheel hubs (if equipped) are engaged to prevent the wheels from moving

2.0 SAFETY INFORMATION

2.4 Transferring Guidelines *(...cont'd)*

WARNING! Risk of Serious Injury or Device Damage
Improper transfer techniques may cause serious injury or device damage.
• DO NOT use armrests for load bearing support when performing transfers in or out of the wheelchair.
• To prevent the risk of personal injury and/or damage to the armrests, transfers should be performed in the presence of an attendant whenever possible.
• ALWAYS reduce the gap between the transfer surface and the wheelchair seat to the minimum distance needed to perform transfer.
• Align the casters parallel to the drive wheels to improve stability during transfer.
• NEVER use footplates/platforms as a support during forward transfers. When transferring in or out of the seating system, ensure that footplates/foot platforms are in a 'flipped-up' or 'swing-away' position

---

2.5 General Safety and Handling Warnings!

DANGER! Risk of Death, Significant Injury or Device Damage
Adjusting the position of the seating system on the wheelchair base may reduce driver control, wheelchair stability, traction and increase caster wear resulting in significant injury or damage.
• Adjustments to the seating system, should ONLY be performed by a qualified service technician in order to better fit the wheelchair to the end user and/or to optimize wheelchair stability for the user.
• If the seating system position must be adjusted, ALWAYS inspect the wheelchair to ensure the front rigging DOES NOT interfere with the front casters.
• If the seating system position must be adjusted, ALWAYS test the seating system over the full range of power positioning functions to ensure the wheelchair remains stable..

WARNING! Risk of device damage or serious injury if seating system adjustments are not performed correctly
*• Your system has been specially configured and assembled to the wheelchair base prior to delivery. There are a limited number of general adjustments that can be safely performed by the end user. (refer to **Section 5.0- Seating Accessories & Comfort Adjustments**). If you are not comfortable making an adjustment, or if you require a more specific adjustment or a change to the original configuration/ set-up, it is strongly recommended that the seating system be serviced by a qualified technician.*

DANGER! Risk of Death, Significant Injury or Device Damage
Misuse of the wheelchair may cause component failure and/or the wheelchair to start smoking, sparking, or burning. Device damage, significant injury, or death may occur due to fire.
• DO NOT use the wheelchair other than its intended purpose. If the wheelchair starts smoking, sparking, or burning, discontinue using the wheelchair and seek service IMMEDIATELY.

DANGER! Risk of Death, Significant Injury or Device Damage
Wheelchair collisions or impact events may result in death, significant injury or device damage
• If your wheelchair is involved in a collision or impact event, seek immediate medical attention. This includes, but is not limited to, vehicle accidents, mishandling and impact events where the wheelchair strikes something or is struck by something that may cause damage.
• Ensure you wheelchair is working properly and is inspected by a qualified service technician if the wheelchair is involved in a collision or impact event.

WARNING! Risk of Serious Injury or Device Damage if wheelchair is accidentally set into motion
• ALWAYS switch the wheelchair power off before you get in, get out or handle unwieldy objects.
• When the drive motors are disengaged (unlocked) for manual pushing, the brake inside the drive motors is deactivated. NEVER leave your wheelchair on a gradient with its motors disengaged. Always re-engage the drive motor locks immediately after pushing the wheelchair.

2.0 SAFETY INFORMATION

WARNING! Accidental activation of wheelchair caused by pets, children, etc. may result in serious injury or damage.
• ALWAYS turn power off when around pets and/or children to prevent unintended movement.

WARNING! Risk of Serious Injury or Device Damage.
Any sudden or gradual deterioration in the function/performance of your power positioning system (i.e. increased actuator motor/gearbox noise, rattling, sloppiness, etc...) must be reported to your Dealer immediately.
• A complete wheelchair inspection by a qualified technician is recommended to ensure there is no unusual wear and tear, or physical damage that requires servicing and/or repair.

WARNING! Risk of Serious Injury or Device Damage if incorrect or improper replacement (service) parts are used
• Replacement parts for your power positioning system MUST match original Motion Concepts parts
*• ALWAYS provide the wheelchair serial number (see **Section 1.5 - System Identification**) to assist in ordering the correct replacement parts .*

CAUTION! Risk of Injury, Damage and Loss of Warranty if proper maintenance is not followed.
*• For reasons of safety and in order to avoid potential injury or damage from unnoticed wear, it is recommended that under normal operating conditions your power positioning system undergoes a complete inspection every 6 months. (refer to **Section 6.0- General Maintenance and Safety**).*

CAUTION! Risk of injury due to improper lifting or dropping of heavy components!
• When maintaining, servicing or lifting any part of your wheelchair system, take into account the weight of the individual components, especially the batteries. Be sure at all times to adopt the correct lifting posture and ask for assistance if necessary.

CAUTION! Risk of injury due to sharp edges
• Be mindful that in certain areas on the wheelchair, there may be metal and/or plastic components that have sharp edges. Use caution when exposed to any parts/components with sharp edges.

CAUTION! Risk of injury due to hot surfaces
• Hot surfaces can cause severe burns. Be mindful of potential hot surfaces and avoid touching.

2.6 Weight Capacity

Several factors must be considered when determining the total user weight and the wheelchair weight capacity. To obtain the weight limitation data for the wheelchair base, refer to the **Power Wheelchair Base Owners Manual** *(provided separately)*.

IMPORTANT! If you have any concerns or questions regarding weight capacities, or if the total occupant weight is determined to be greater than the maximum permissible load, please contact our Technical Service Department immediately.

WARNING! Risk of Serious Injury or Device Damage
Exceeding the weight capacity of the wheelchair/seating system could cause instability resulting in serious injury or device damage.
• DO NOT exceed the maximum weight capacity of the power positioning system or the wheelchair base.
• DO NOT use the wheelchair to transport more than one person. The wheelchair is only designed for use by a single occupant whose maximum weight does not exceed the maximum permissible load of the device.
• DO NOT carry heavy objects on your lap while operating the wheelchair.

2.0 SAFETY INFORMATION

2.6.1 WEIGHT LIMITATION:

Weight limitation is the total weight (User weight plus any additional items that the user may require [ventilator, back pack, etc.]).
Example: If the weight limitation of the wheelchair is 300lb (136kg) and the weight of the additional items equals 25lb (11kg), then you must subtract 25lb (11kg) from 300lb (136kg); This means the maximum weight limitation of the user is 275lb (125kg).

WARNING! The total User Weight Capacity (including weight limitations) should never exceed the Wheelchair Weight Capacity or the Seating System (Captain Seat) Weight Capacity.

2.6.2 CONTOUR STATIC (CAPTAIN) SEAT WEIGHT CAPACITY

The weight capacities for our Motion Concepts Contour Static (Captain) Seat will vary depending on the type of seating system (i.e.; Standard, Elevate-Only) and the type of power wheelchair base onto which the system/module is being interfaced. The Contour Static (Captain) Seat is available on the following power wheelchair bases:

Invacare: Aviva-FX, Aviva-RX, TDX-SP2, TDX-SP2HD;
ROVI: Rovi-X3, Rovi-A3

Please refer to the table below for the available seating system/powerbase options and corresponding weight capacities.

Seating System/Module	Wheelchair Powerbase	**PPS Weight Capacity** (see **Warning!** above)
Contour Static (Captain) Seat	ALL	max 300 lb. (136 kg)
Contour Static (Captain) Seat w/ Elevate, 12L Module	(excludes Rovi-X3/A3)	max 300 lb. (136 kg)
Heavy-Duty Contour Static (Captain) Seat	TDX-SP2HD only	max 450 lb. (204 kg)
HD Contour Static (Captain) Seat w/ Elevate, HD10L Module	TDX-SP2HD only	max 450 lb. (204 kg)

IMPORTANT! The weight capacity of the power positioning modules identified in the table above are provided as a guideline only.
- Further limitations may be required depending on the specific positioning requirements of the end user (including any aforementioned Weight Limitations), as well as the type of wheelchair base onto which the system is being installed. The maximum allowable PPS weight capacity is assessed at the time of order.

2.0 SAFETY INFORMATION

2.7 Hardware and Accessories

Should you require any replacement hardware for your power positioning system, or for information on Motion Concepts accessories, please contact our Customer Service Dept. or your local Service Provider for assistance

WARNING! Risk of Serious Injury or Device Damage.
• DO NOT substitute hardware. All hardware used by in the assembly and installation of our Power Positioning Systems is high strength. Use only the hardware supplied with the seating system.

WARNING! Risk of Serious Injury or Device Damage.
Use of non-approved Motion Concepts accessories may result in serious injury or damage.
• Motion Concepts products are specifically designed and manufactured for use in conjunction with Motion Concepts accessories. Accessories designed by other manufacturers have not been tested, and are not recommended for use with Motion Concepts products.

2.8 Flammability

The materials (foams and fabrics) utilized in our power positioning systems are tested to ensure compliance with applicable Medical Device Flammability Standards *(ISO, ANSI/RESNA and California Technical Bulletin (TB-117).*

DANGER! Risk of Death, Significant Injury or Device Damage.
Lighted cigarettes dropped onto an upholstered seating system can cause a fire resulting in death, significant injury or device damage.
• Wheelchair occupants are at particular risk of death or serious injury from these fires and resulting fumes because they may not have the ability to move away from the wheelchair.
• DO NOT smoke while using this wheelchair.
• Always exercise caution near open flames.

2.9 Electrical Components (Wiring Harnesses/Cables/Electronics)

All electrical components on your seating system are designed and tested to meet all necessary safety standards.

DANGER! Risk of Death or Significant Injury.
Improper routing of cables/harnesses may cause a tripping, entanglement or strangulation hazard that may result in death, significant injury.
• Ensure all cables/harnesses are routed and secured properly.
• Ensure there are no loops of excess cable extending away from the chair.
• Pay close attention when operating the wheelchair near children or pets.

WARNING! Risk of Serious Injury or Device Damage
Loss of power due to loose electrical connections could cause the wheelchair to suddenly stop resulting in serious injury or device damage.
• ALWAYS ensure that all electrical connections are tightly connected so they don't vibrate loose.

DANGER! Risk of Death, Significant Injury or Device Damage.
Pinched or severed cable(s)/harness(es) may present a shock or fire hazard and may result in death, significant injury or device damage.
• Ensure all cables/harnesses are routed and secured properly, and that no pinching or pulling occurs over the full range of power positioning functions.
• Inspect all cables/harnesses periodically for proper routing, and for evidence of damage due to pinching, chafing or other similar wear.
• Replace damaged cables/harnesses immediately

DANGER! Risk of Death or Significant Injury
Electric shock can cause significant injury or death
• To avoid electric shock, inspect plugs, connectors and cables for cuts and/or frayed wires. Replace cut cables or frayed wires immediately

2.0 SAFETY INFORMATION

2.9 Electrical Components (Wiring Harnesses/Cables/Electronics) *(...cont'd)*

DANGER! Risk of Death, Significant Injury or Device Damage.
The connection of uncertified electric devices could result in fire or electrical damage and/or system breakdown

• Do not connect any electric devices to your Seating System that are not expressly certified by Motion Concepts for this purpose. Have all electrical installations performed by an authorized Dealer.

WARNING! Risk of Device Damage, Loss of Function or Compromised Device Safety
Corroded electrical components due to water, liquid exposure, or incontinent users can result in device damage, loss of device function or compromised device safety

• Minimize exposure of electrical components to water and/or liquids. Electrical components damaged by corrosion MUST be replaced immediately.

• Wheelchairs that are used by incontinent users and/or are frequently exposed to water/liquids may require replacement of electrical components more frequently.

WARNING! Risk of Serious Injury or Device Damage
The wiring harnesses/cables are not to be modified in any way following the installation of our Motion Concepts seating system

• If installed on previously used product, all OEM harnesses on the wheelchair should be examined for damage/ wear and replaced if necessary. Please consult the wheelchair base manufacturer if you are unsure as to the status or condition of the existing wiring harness before interfacing with our Motion Concepts seating system.

2.10 Electromagnetic Interference (EMI)

WARNING! Laboratory tests have shown that electromagnetic interference (EMI) can have an adverse effect on the performance of electrically-powered mobility vehicles.

• Electromagnetic interference (EMI) comes from radio wave sources such as radio transmitters and transceivers. Powered wheelchairs including the power positioning system may be susceptible to EMI emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios and mobile phones. In some cases, this interference may cause the wheelchair to release its brakes, activate/move in unintended directions, or may cause damage to the control system.

WARNING! The following warnings are recommended to prevent the risk of serious injury and to prevent possible interference with the control system of the powered wheelchair.

• Do not turn on personal communications devices, such as mobile phones, or operate hand held transceivers (transmitters- receivers), such as citizens band (CB) radios, while the powered wheelchair is turned ON.

• Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.

• If unintended movement or brake release occurs, turn the wheelchair OFF as soon as it is safe to do so.

• Be aware that adding accessories or components, or modifying the power positioning system or powered wheelchair, may make it more susceptible to EMI. Parts not specifically tested or aftermarket parts from other suppliers have unknown EMI properties. ***NOTE:*** *There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair.*

• Promptly report all incidents of unintended movement of the power positioning system and/or powered wheelchair (including brake release), and note whether there was a source of EMI near the wheelchair at the time of occurrence. Contact:

Motion Concepts, Customer Service Department: **USA** (888) 433-6818 or **CAN** (800) 680-4191

IMPORTANT! Please refer to **Section 7.0 - EMI Information** in this manual for more detailed information and warnings regarding the possible effects of electromagnetic interference (EMI) on your Motion Concepts power positioning system.

2.0 SAFETY INFORMATION

2.11 Motor Vehicle Transportation

As of the date of publication, the Department of Transportation has not approved any tie-down systems for transportation of a user while seated in a wheelchair, in a moving vehicle of any type. It is Motion Concepts position that, whenever feasible, wheelchair users should be transferred into the vehicle seat during travel and use the vehicle-manufacturer-installed restraint system. The unoccupied wheelchair (mobility device) should be stored in a cargo area and/or secured in the vehicle during travel. Motion Concepts cannot and does not recommend any wheelchair transportation system.

2.11.1 GENERAL WARNINGS!

DANGER! Risk of Death, Significant Injury or Device Damage.
The Motion Concepts Contour Static (Captain) Seat in combination with the wheelchair base has NOT been crash tested and may NOT be used as a vehicle seat! !

- *Your Contour Static (Captain) Seat, in combination with the OEM (Original power Equipment Manufacturer) wheelchair base, has not been tested to the requirements of ISO 7176-19:2022 or ANSI/RESNA WC-19 and may NOT under any circumstances be used as a vehicle seat or to transport the user in a vehicle.*
- *Using a wheelchair that does not meet the crash test requirements for a vehicle seat can lead to the most severe injuries and even death in the event of a traffic accident.*

IMPORTANT! *Please be certain to also read and understand the transportation safety instructions, warnings, and labels (provided separately) in your* ***Wheelchair Power Base Owners Manual.***

DANGER! Failure to comply with the transportation safety warnings provided in this manual may result in death, significant injury or device damage

- *Please be certain to read and understand ALL safety warnings PRIOR to transporting your power wheelchair/seating system (mobility device).*
- *If you are unable to fasten your mobility device securely in a transport vehicle, Motion Concepts recommends that you DO NOT transport it!*
- *Using a mobility device that does not meet the crash testing requirements for a vehicle seat can lead to the most severe injuries and even death in the event of a traffic accident.*
- *If you have any questions or concerns regarding the safe transportation of your mobility device in a motor vehicle, please contact your Dealer/Service Provider for assistance,*

WARNING! Risk of Serious Injury or Device Damage.
Continued use of a mobility device for occupied transport after it has been involved in a sudden stop or collision may result in serious injury.

- *A sudden stop and/or collision may structurally damage your mobility device*
- *A mobility device MUST be inspected for structural failure or damage by an authorized Dealer/Service Provider prior to use after being involved in a sudden stop and/or collision. It is recommended that a mobility device involved in collision be replaced*

WARNING! Risk of Serious Injury or Device Damage.
Alteration or substitution of OEM components may result in serious injury or device damage

- *DO NOT alter or substitute product parts, components or systems*

DANGER! Risk of Death, Significant Injury or Device Damage.
No alterations or substitutions should be made to the mobility device anchoring points, without consent/authorization from the manufacturer

CAUTION! Risk of Injury
A risk of injury exists if a wheelchair power base that is not equipped with leak-proof batteries is transported in a vehicle.

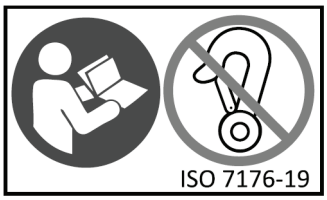
- *Ensure the wheelchair base uses only leak-proof batteries.*

2.0 SAFETY INFORMATION

2.11.2 WHEELCHAIR TRANSPORT BRACKETS (TRBKTS)

Wheelchair **Transport Brackets (TRBKTS)** are designed to secure an **UNOCCUPIED** mobility device during transport. TRBKTS provide four (4) designated anchoring points on the wheelchair.

Mobility devices configured with TRBKTS may NOT under any circumstances be used as a vehicle seat during transport. TRBKTS are labeled to indicate each of the 4 designated anchoring points used to secure the mobility device in a vehicle. (See section **2.11.3 - Instructions for Anchoring A Mobility Device for Unoccupied Transport**). Examples of mobility device warning labels* for unoccupied transport are provided below.



UNOCCUPIED TRANSPORT LABELS

***NOTE:** Tie-down warnings/labels may differ slightly from the examples shown, please be certain to read the Wheelchair Transportation section of your **Wheelchair Power Base Owners Manual** (provided separately) to understand the labeling/ safety warnings specific to your power wheelchair.*

DANGER! Risk of Death, Significant Injury or Device Damage.
When travelling in a motor vehicle with TRBKTS you <u>must</u> be properly secured in a motor vehicle seat with vehicle safety belts securely fastened.
• *DO NOT sit in your mobility device while it is in a moving vehicle. Although your chair is equipped with a positioning belt, this belt is not designed to provide proper restraint during motor vehicle transport.*

DANGER! Risk of Death, Significant Injury or Device Damage.
Improper use of wheelchair TRBKTS may result in death, significant injury or device damage
• *Wheelchair bases MUST be configured with Transport Brackets (TRBKTS) for safe transportation in a motor vehicle.*
• *TRBKTS have NOT been crash-tested in accordance with RESNA WC19 or ISO 7176-19, and must ONLY be used to secure an UNOCCUPIED mobility device during transport;*
• *Use the Transport Brackets ONLY for the purposes described in this manual, .*
• *NEVER allow any non-designated part of the Motion Concepts seating system to be used as a tie-down point to anchor the mobility device to the transporting vehicle.*
• *Use ONLY approved wheelchair tie-down systems to secure the TRBKTS at the designated/labelled anchoring points.*

2.11.3 ANCHORING A MOBILITY DEVICE FOR <u>UNOCCUPIED</u> TRANSPORT

Your mobility device may be transported without restrictions, whether by road, rail or by air. However, individual transport companies have guidelines which can possibly restrict or forbid certain transport procedures. It is recommended that you consult with the transport company regarding guidelines, prior to arranging transport.

To secure a mobility device (power wheelchair base & seating system) to a vehicle for unoccupied transport, the mobility device must be configured with Transport Brackets (TRBKTS) (as per section **2.11.2**).

IMPORTANT! Please refer to your **Power Wheelchair Base Owners/Operators Manual** (provided separately) for additional detailed information on anchoring the wheelchair base in a vehicle.

IMPORTANT! The transporting vehicle must be professionally converted to anchor the mobility device using a transit securement system conforming to ANSI/RESNA WC19/ISO 7176-19 standards. Contact your vehicle's manufacturer for more information.

2.0 SAFETY INFORMATION

IMPORTANT! The total weight of a mobility device (power wheelchair and seating system) can exceed **400 lb** (**181 kg**). Make certain to use an approved tie-down system compliant with ANSI/RESNA WC18/ISO 10542 that is certified for the actual weight of the mobility device. (Consult the tie-down system manufacturer's documentation).

DANGER! Risk of Death, Significant Injury or Device Damage
When travelling in a motor vehicle with TRBKTS you must be properly secured in a motor vehicle seat with vehicle safety belts securely fastened.

- *DO NOT sit in your wheelchair while it is in a moving vehicle. Although your chair is equipped with a positioning belt, this belt is NOT designed to provide proper restraint during motor vehicle transport.*

DANGER! Risk of Death, Significant Injury or Device Damage.
When travelling in a motor vehicle the unoccupied wheelchair system must be properly secured using approved wheelchair tie-down straps.

- *If you are unable to fasten your power wheelchair securely in a transport vehicle, Motion Concepts recommends that you DO NOT transport it!*
- *Wheelchair bases MUST be configured with approved Transport Brackets (TRBKTS) for safe wheelchair transportation in a motor vehicle.*
- *TRBKTS must ONLY be used to secure an UNOCCUPIED wheelchair during transport;*
- *Before transporting your wheelchair, make sure the motors are engaged and that the wheelchair power is switched off. It is strongly recommended that you disconnect or remove the batteries.*
- *Use the Transport Brackets ONLY for the purposes described in this manual.*
- *Use ONLY approved wheelchair tie-down straps to secure the wheelchair via the designated anchoring points (TRBKTS).*
- *NEVER allow any part of the Motion Concepts seating system to be used as a tie-down point to anchor the wheelchair to the transporting vehicle.*
- *If equipped, height adjustable/elevating legrests MUST be fully lowered prior to transport.*
- *If equipped, the elevating actuator/lift module MUST be fully lowered prior to transport.*

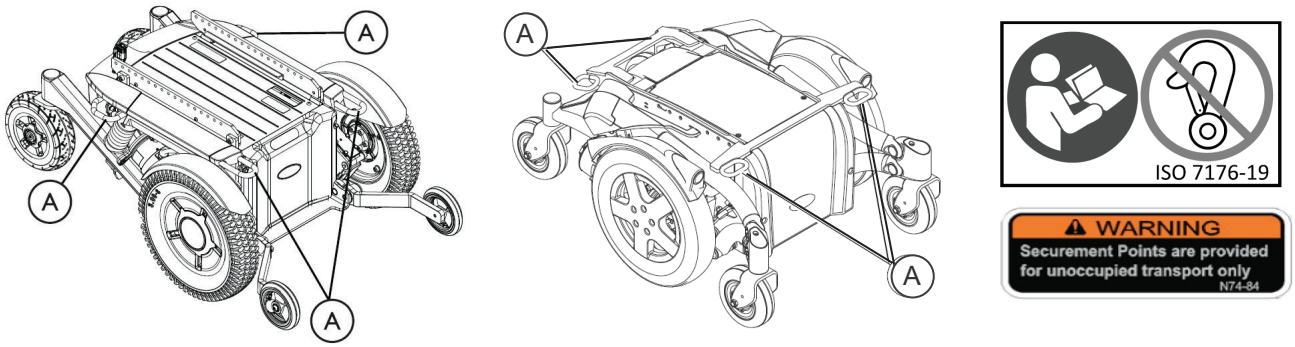
Instructions for Anchoring a Mobility Device (for Unoccupied Transport):

Mobility devices approved for Unoccupied Transport must have four (4) designated transport brackets (TRBKTS). Each securement/anchoring point will be identified on the mobility device using designated tie-down labels/ symbols (see **Fig.1** below).

1. Attach the tie-down straps* to the designated anchoring points (**A**) in accordance with the manufacturer's instructions.
2. Secure the tie-down straps to the vehicle (not shown) in accordance with the manufacturer's instructions.

***NOTE**: Use only approved tie-down systems (snap hooks or belt loops) for fixation.*

Fig. 1 Examples of TRBKTS and Labeling.



***NOTE:** Tie-down symbols/warning labels for unoccupied transport may differ slightly from the examples shown, please be certain to read the Wheelchair Transportation section of your **Wheelchair Power Base Owners Manual** (provided separately) to understand the labeling/ safety warnings specific to your power wheelchair.*

2.0 SAFETY INFORMATION

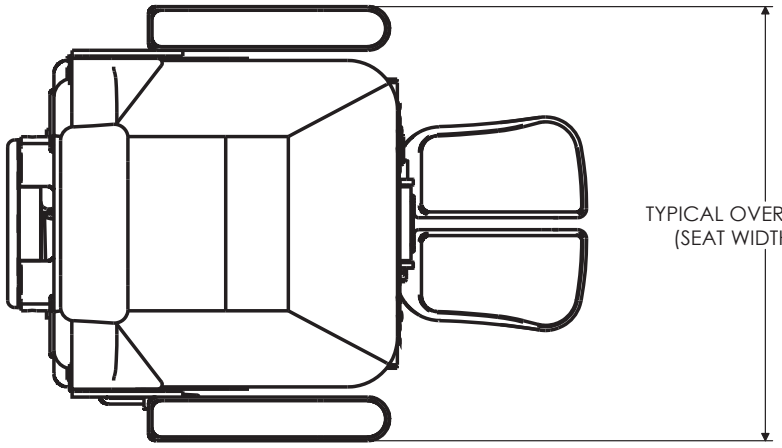
2.12 Technical Data

The overall dimensions of our Contour Static (Captain) Seat can vary depending on the type of seating system (Standard or Elevating), as well as the type of accessories installed onto the system. The following section is provided to illustrate the overall dimensional range for our Captain Seat (including the elevating seat option)

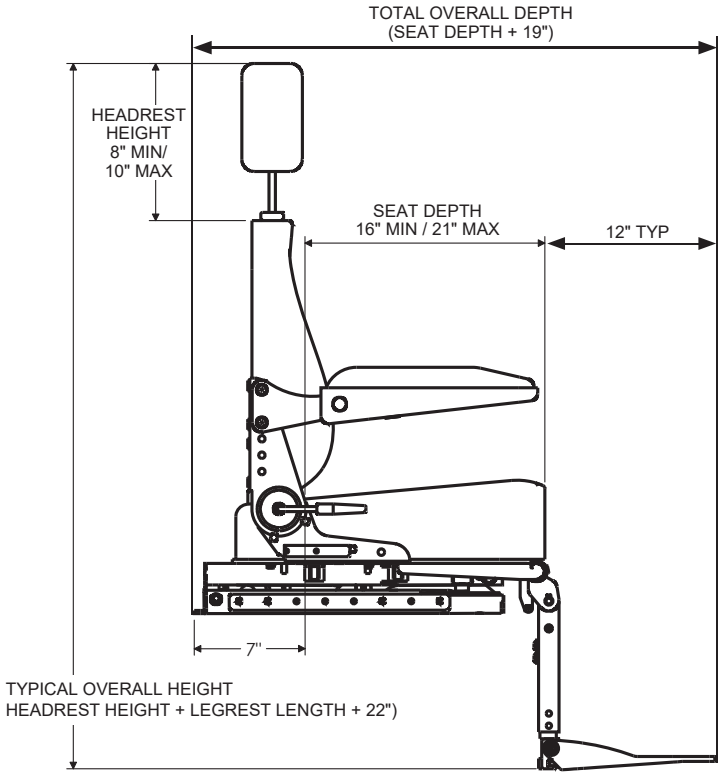
IMPORTANT! The following dimensional information is provided ONLY for the Motion Concepts Contour Static (Captain) Seat. It does not include the power wheelchair base.

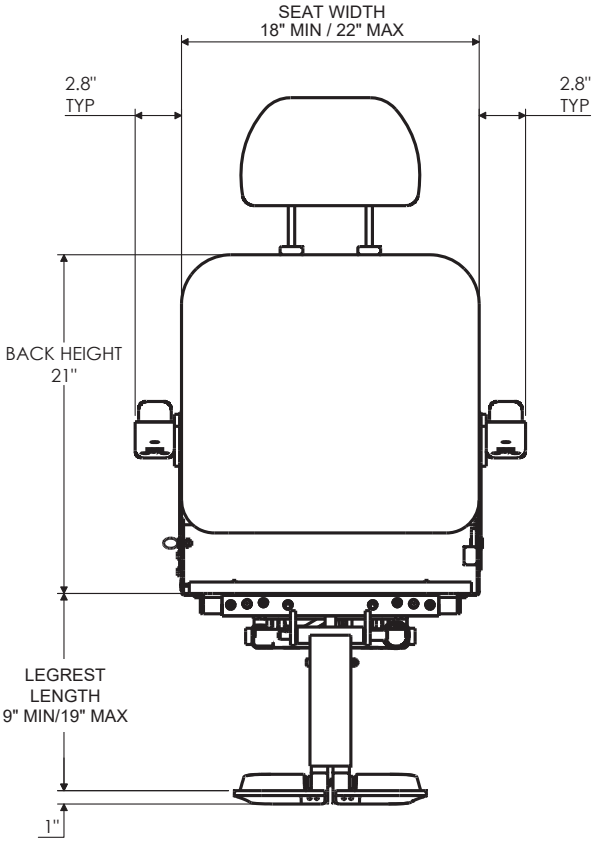
2.12.1 MOTION CONCEPTS CONTOUR STATIC (CAPTAIN) SEAT SYSTEM :

Parameters and Overall Dimensions



Accessories Shown:
Captain Seat Cushion
Captain Seat Back Support
Captain Seat Headrest
Integrated Armrests
Fixed CM Legrest



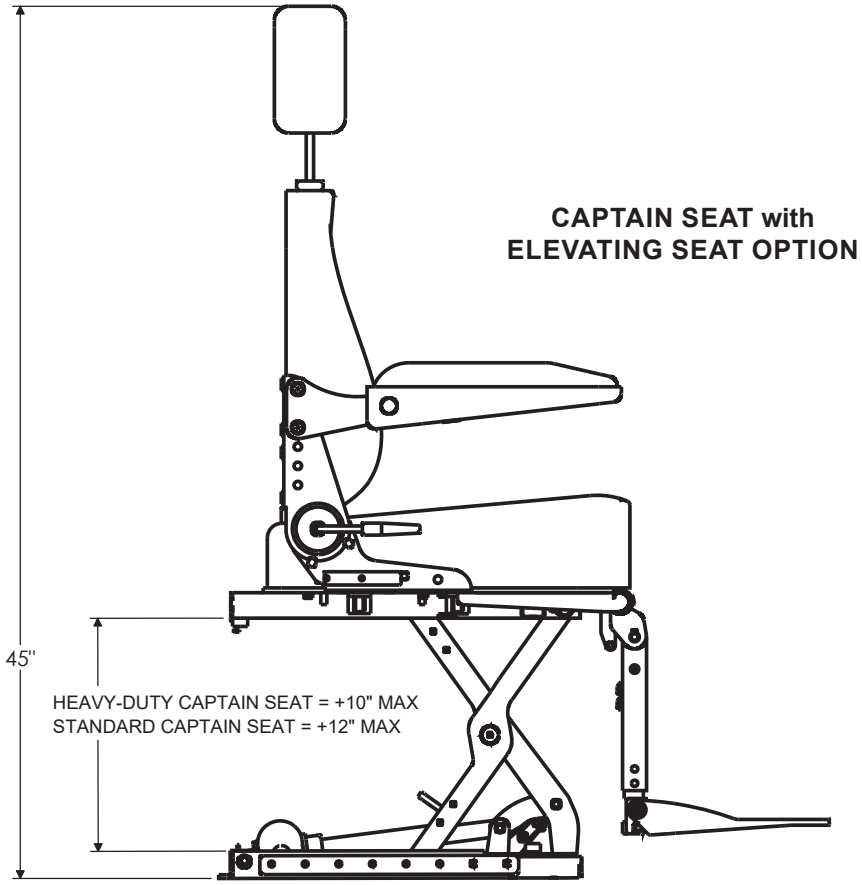


Note: All dimensions are +/- .50 inches unless otherwise indicated

2.0 SAFETY INFORMATION

PARAMETERS AND OVERALL DIMENSIONS (ELEVATING SEAT OPTION)

NOTE: The range of height adjustment for the Elevating Seat option will differ between our **Standard Captain Seat** and our **Heavy-Duty (HD) Captain Seat**. The elevating module for the HD Captain Seat allows up to 10" of elevate, while the elevating module for the standard Captain Seat allows up to 12" of elevate.



3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

Please read through ALL instructions PRIOR to operating your wheelchair and seating system

3.1 Programming your Wheelchair/ Seating System

Can the Program Settings for my Power Seating System be modified ?

Program modifications may be carried out to fit your individual requirements if required. For safety purposes, these modifications must **ONLY** be performed by a qualified service technician; If you require any programming changes, or have any questions on your existing program settings, please contact your local Service Provider for assistance.

WARNING! Risk of Damage, Serious Injury or Death

Incorrect programming and set-up of this wheelchair performed by users, caregivers or unqualified technicians can result in damage, serious injury or death.

- *User/Caregivers- **DO NOT** attempt to set up this wheelchair.*
- *To ensure your wheelchair and seating system is programmed correctly and safely, all programming, including the joystick, switches, base controller and applicable safety lockouts/limits, must be performed by a Qualified Technician*

WARNING! Risk of Serious Injury or Damage

Changes to the drive program can affect the driving characteristics & stability of the wheelchair.

- It is the Dealer/Service Provider's responsibility to select a suitable wheelchair drive program, and to ensure that appropriate and safe operating limits are established for the end user.
- Changes to the drive program *(maximum acceleration and deceleration of the wheelchair)* must only be carried out by qualified service technicians. Unauthorized adjustments beyond safe operating limits may cause serious injury or damage, and will compromise the limited warranty.

DANGER! Risk of Death, Serious Injury, or Damage

Continued use of the wheelchair that is not set to the correct specifications may cause erratic behavior of the wheelchair resulting in death, serious injury, or damage.

- *Performance adjustments should only be made by qualified healthcare professionals or technical personnel that are fully trained in system programming and insightful to the end users capabilities.*
- *After a wheelchair has been set up/programmed, always ensure the wheelchair performs in accordance with the programming specifications.*
- *If the wheelchair does not perform to specifications, immediately turn-off the wheelchair and have the technician re-enter the program specifications. If wheelchair still does not perform to the correctly, contact the power base manufacturer or Motion Concepts Technical Service Dept. for assistance.*

3.1.1 PROGRAMMING THE POWERBASE REMOTE/JOYSTICK CONTROL:

IMPORTANT! For detailed information on the operation/programming/configuring of your joystick control please read the **OEM Remote/Joystick Users Manual** *(provided separately)*.

If installed, the Elevate Seat function may be programmed to operate in either direct-mode or toggle-mode depending on the preference of the end user. *(Programming of the joystick must be performed by a qualified technician)*. For instructions on how to operate your Captain Seat via the joystick, please refer to **Section 3.6.**

WARNING! Incorrect programming of the joystick by users, caregivers or unqualified technicians can result in serious injury, compromised user safety or device damage

- *Programming of the remote joystick MUST be performed by a qualified technician.*

WARNING! An improperly connected joystick could cause sudden loss of power resulting in serious injury or compromised user safety

- *Ensure the joystick is securely connected to the controller*.

DANGER! A malfunctioning joystick could cause unintended/erratic movement resulting in death, significant injury or device damage

• If unintended/erratic movement occurs, stop using the wheelchair immediately and contact your service provider or a qualified technician.

3.1.2 PROGRAMMING A SEPARATE SWITCH CONTROL

The Elevate function will be configured to operate in either direct-mode or toggle-mode depending on the preference of the end user. For instructions on how to operate the elevate function using a separate switch, please refer to **Section 3.7**.

DANGER! A malfunctioning switch could cause unintended/erratic movement resulting in death, significant injury or device damage

• If unintended/erratic movement occurs, stop using the wheelchair immediately & contact your service provider or a qualified technician.

WARNING! Incorrect programming of a switch by users, caregivers or unqualified technicians can result in serious injury, compromised user safety or device damage

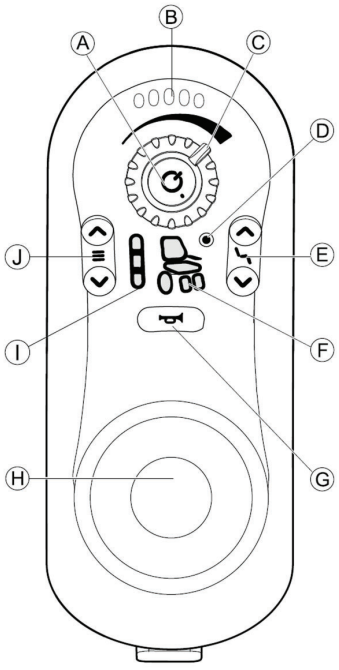
• Programming of the operator switch MUST be performed by a qualified technician.

3.2 Understanding Your Joystick:

The joystick provided with your Contour Static (Captain) Seat will differ depending on the type of wheelchair powerbase onto which it is installed (i.e. Invacare or ROVI). Each powerbase manufacturer also offers a variety of optional joystick models. The different joystick options/models are identified in the sections that follow. Refer to your specific joystick model for an overview of its features and operating instructions,

3.2.1 INVACARE JOYSTICKS (LINX ELECTRONICS) - OVERVIEW

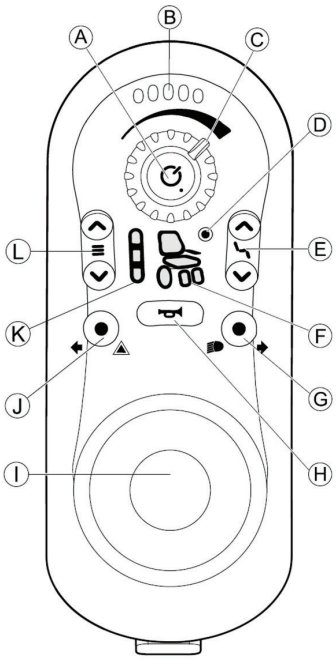
I. (OPTIONAL) LINX EXPANDABLE JOYSTICKS:



USER INTERFACE REM211

A - Power ON/OFF Button
B - Battery Gauge
C - Speed Dial
D - Connectivity Indicator
E - Seating Function Selector
F - Drive/Actuator Status
G - Horn
H - Joystick
I - Drive Function Indicator
J - Drive Function Selector

LINX REM211 REMOTE *(Expandable-No Lights)*



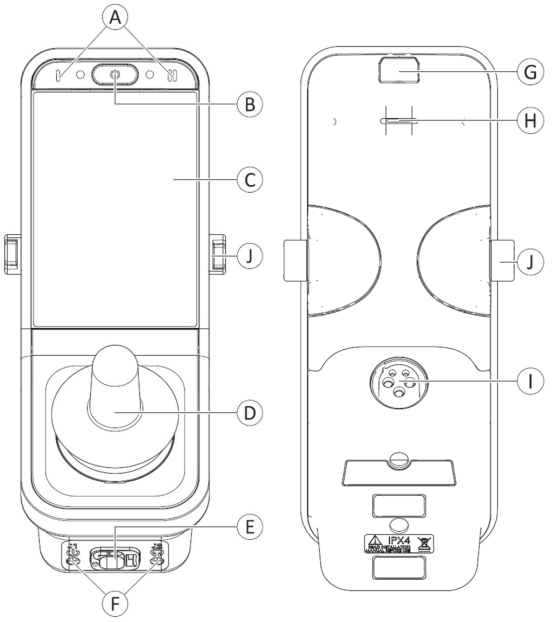
USER INTERFACE REM216

A - Power ON/OFF Button
B - Battery Gauge
C - Speed Dial
D - Connectivity Indicator
E - Seating Function Selector
F - Drive/Actuator Status
G - Lights & Direction Indicator- Right
H - Horn
I - Joystick
J - Hazard Lights & Indicator-Left
K - Drive Function Indicator
L - Drive Function Selector

LINX REM216 REMOTE *(Expandable with Lights)*

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

II. (OPTIONAL) LINX ENHANCED JOYSTICK:



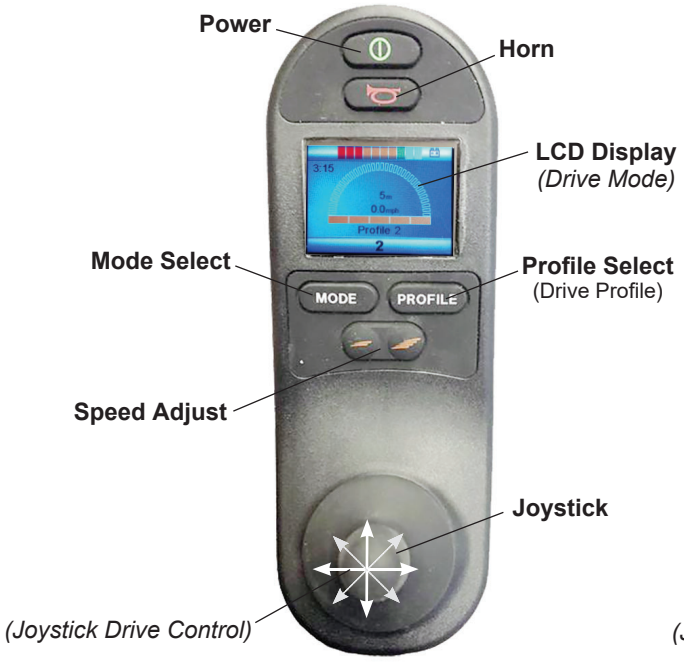
USER INTERFACE REM400

A - Mode Select Buttons
B - Power ON/OFF (LED)
C - Touch Display
D - Joystick
E - Bus Input
F - Stereo Phono Inputs
G - Infrared Transmitter
H - Speaker
I - Charger Input
J - Toggle Switches (optional)

LINX REM400 REMOTE (TOUCH SCREEN DISPLAY)

3.2.2 ROVI JOYSTICKS (RNET ELECTRONICS) - OVERVIEW

I. (OPTIONAL) RNET LCD JOYSTICKS:



RNET LCD JOYSTICK *(without Base Light Controls)*

RNET LCD JOYSTICK *(with Base Light Controls)*

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

II. (OPTIONAL) RNET LCD ADVANCED JOYSTICK:

RNET LCD ADVANCED JOYSTICK *(comes standard with Base Light controls)*

3.3 Wheelchair Drive Controls Thru Joystick

IMPORTANT! The following section covers instructions for basic wheelchair drive controls. Please be certain to read the **OEM Remote /Joystick Manual** and/or the **OEM Powerbase Owner's Manual** *(provided separately)* for more detailed safety, operating and troubleshooting instructions .

DANGER! Risk of Death, Significant Injury, or Device Damage.
A malfunctioning joystick could cause unintended/erratic movement resulting in death, significant injury or device damage
• *If unintended/erratic movement occurs, stop using the wheelchair immediately and contact a qualified technician.*

WARNING! Risk of Serious Injury or Compromised Safety
An improperly connected joystick could cause loss of power resulting in serious injury or compromised user safety
• *Ensure the joystick harness is securely connected to the controller.*

DANGER! Risk of Death, Significant Injury, or Device Damage.
Do not attempt to operate an attendant control joystick with it removed from the seating system as it could be dropped or be disorienting to operate.
• *To prevent unsafe operating conditions, ensure the attendant control joystick remains in place on the seating system when operating/driving the wheelchair.*

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

3.3.1 DRIVE MODE: INVACARE (LiNX) JOYSTICKS - see Fig.1a/1b

Invacare (LiNX) Joysticks are designed to function as the wheelchair drive control when the joystick is set to **Drive Mode**. The number of drive modes/drive profiles will vary depending on the type of joystick installed. Use the Drive Mode/Drive Profile Select button (**1**) to scroll through the available drive profiles. The drive profiles are factory pre-set for specific driving conditions (e.g.; ramp/curb speed, indoor speed, outdoor speed, etc...), but may be reprogrammed if necessary by a qualified technician. The speed within each pre-set drive profile can be further adjusted via the Speed Control Adjustment (**2**) on joystick remote.

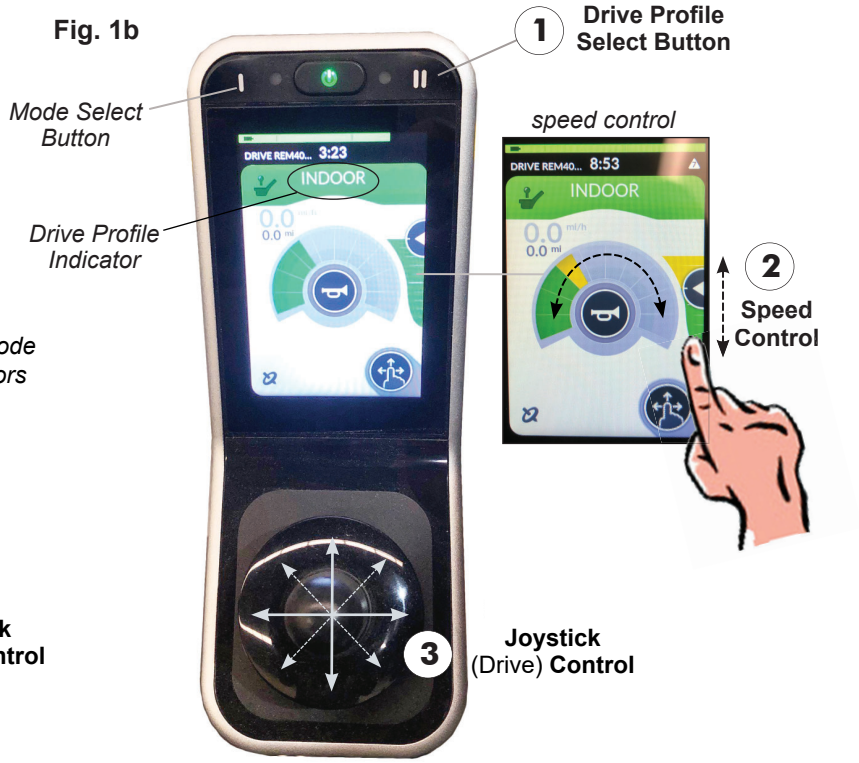
In Drive Mode, the **Joystick Control** (**3**) is used to drive, steer and stop the wheelchair. To drive and steer the wheelchair, press the joystick control in the direction that you wish to travel. To stop, release the joystick control so that it returns its home or neutral position.

I. LiNX REMOTE DISPLAYS (IN DRIVE MODE)

Fig. 1a

REM216 REMOTE/JOYSTICK
(EXPANDABLE, WITH LIGHTS)

Fig. 1b



REM400 REMOTE/JOYSTICK
(ENHANCED, TOUCHSCREEN DISPLAY)

3.3.2 DRIVE MODE: ROVI (RNET) JOYSTICKS - see Fig.2a/2b

The ROVI RNet remote joystick functions as the wheelchair drive control when the joystick is set to one of the available **Drive Profiles** (Drive Mode). There are 5 pre-programmed drive profiles to choose from on the RNet LCD Joysticks. To scroll through the available drive profiles, press the **Profile Button** (**1**) on the joystick remote. The drive profiles are factory pre-set for specific driving conditions *(e.g.; ramp/curb speed, indoor speed, outdoor speed, etc...)*, but may be reprogrammed if necessary by a qualified technician. The speed within each pre-set drive profile can be further adjusted by pressing the **Speed Adjust** button on the joystick remote (**2**).

In Drive Mode, the **Joystick Control** is used to drive, steer and stop the wheelchair (**3**). To drive and steer the wheelchair, press the joystick control in the direction that you wish to travel. To stop, release the joystick control so that it returns its home or neutral position.

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

I. RNET LCD JOYSTICK DISPLAYS (IN DRIVE MODE)

Fig. 2a

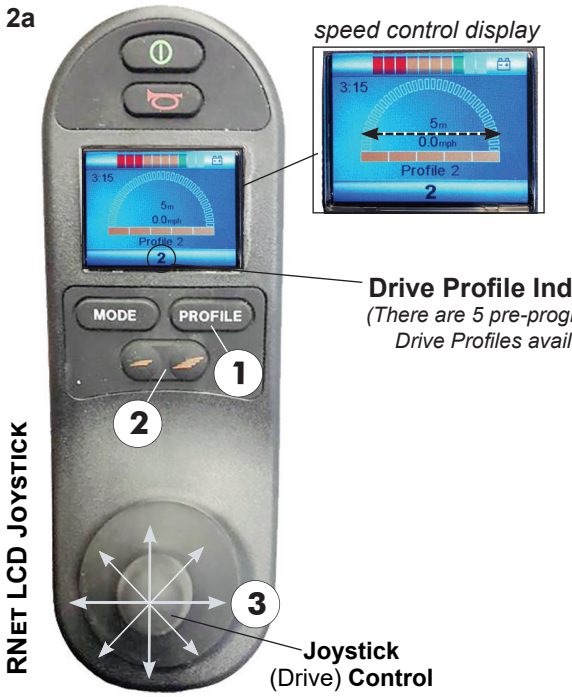


Fig. 2b

3.4 Power Seating Controls Thru Joystick (if applicable)

IMPORTANT! The following section covers instructions for operating seating system controls through the joystick. Please be certain to read the **OEM Remote/Joystick Manual** *(provided separately)* for additional safety, operating and troubleshooting instructions .

3.4.1 SEATING MODE: INVACARE (LiNX) JOYSTICKS - see Fig.3a/3b

When applicable, the power elevating seat function on the Contour Static (Captain) Seat can be programmed to operate through the LiNX Remote Joystick. In order to access/operate the elevating seat function thru the joystick, the remote must be switched from 'Drive Mode' to 'Seating Mode'. This is accomplished by pressing the applicable Seating Mode Select Button (**1**).

In Seating Mode, the wheelchair seating system will light up and/or appear in the joystick display. The activated seating function will be highlighted on the wheelchair image. (A description of the seating function will also be visible on the enhanced display).

To scroll through all the available power positioning functions (if applicable), press the joystick control to the left or right (**2**) until the desired seat function appears in the joystick display. For instructions on how to operate your Seating System using the joystick control, please refer to **Section 3.6.**

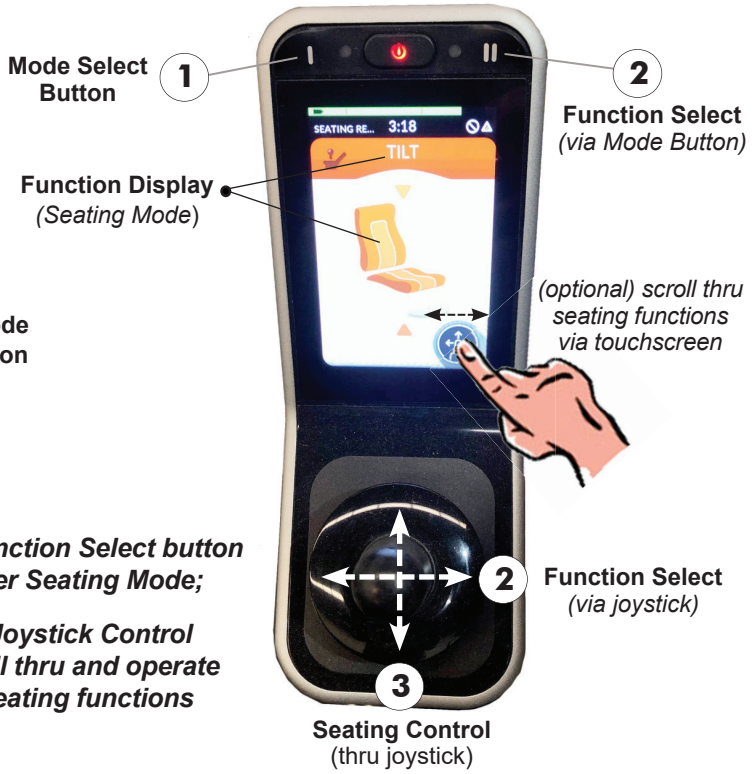
***Note**: to return the joystick display back to Drive Mode, re-press the applicable Mode Select Button or Drive Mode Select button.*

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

I. LINX JOYSTICK DISPLAYS (IN SEATING MODE):

Fig. 3a **REM216 REMOTE/JOYSTICK**
(EXPANDABLE, WITH LIGHTS)

Fig. 3b **REM400 REMOTE/JOYSTICK**
(ENHANCED, TOUCHSCREEN DISPLAY)



Press Function Select button to enter Seating Mode;

Use Joystick Control to scroll thru and operate the seating functions

3.4.2 SEATING MODE: ROVI (RNET) JOYSTICKS - see Fig.4a/4b

NOTE: The Contour Static (Captain) Seat on the ROVI-X3/A3 is not currently available with the Power Elevating Seat option. Therefore, there is no 'Seating Mode' option available on the ROVI (RNET) Joysticks.

3.5 Understanding the Power Elevating Seat Function (if applicable)

WARNING! Risk of Damage, Serious Injury or Death

*• Be certain to read through **Section 2.0- Safety Information,** PRIOR to operating your Motion Concepts Contour Static (Captain) Seat. Failure to follow the safety guideline and warnings provided in this manual could result in system damage, serious personal injury or death.*

3.5.1 ELEVATING SEAT FUNCTION

WARNING! Risk of compromised wheelchair stability and serious personal injury.

• ALWAYS ensure the wheelchair is on a smooth level surface when driving or operating the system in an elevated position (even at reduced speed).

*• ALWAYS wear your postural belt when seated in the wheelchair. Your postural belt reduces the possibility of a fall from the wheelchair - refer to **Section 5.6***

• NEVER drive up or down an incline while in an elevated position (even at reduced speed)

• NEVER lean forward or sideways to grab items/objects, or shift body position (in any direction) while in an elevated position.

• NEVER transfer in or out of your wheelchair while in the elevated position.

ELEVATE RANGE OF TRAVEL:

The elevate seat function* allows the Captain Seat to be elevated up to 12” (31 cm) for the Standard Captain Seat and up to 10" (26cm) for the Heavy-Duty Captain Seat. *(***Note:** the elevate seat function is not available on the ROVI-X3/A3 power wheelchair base).*

ELEVATE- LOCKOUTS & LIMITS:

The Captain Seat is configured with a lockout limit switch that signals the wheelchair into **Drive Lockout (DLO)** or **Reduced Drive Speed[1] (RDS)** as soon as the seating system is Elevated beyond its home (fully retracted) position. The RDS Limit reduces the drive speed of the wheelchair to approximately 25-30% of its maximum speed when the Elevate function is activated). *(**Note**: To return to normal drive speed, the seating system must be lowered back down to its home position).*

*[1]**NOTE:** The Reduced Drive Speed setting is optional, and must be selected at the time of order. If RDS is not selected, the seating system will be defaulted to go into Drive Lockout when it is elevated beyond the home (fully lowered) position.*

3.6 Operating the Elevating Seat Function Thru the Joystick

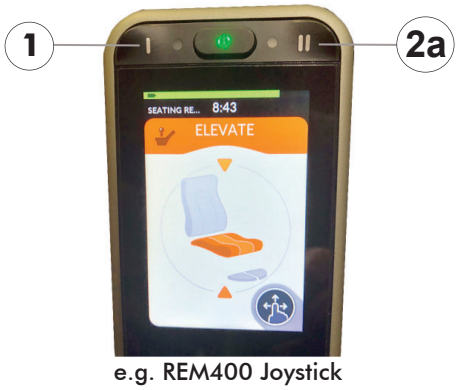
IMPORTANT! Motion Concepts disclaims all responsibility and liability for any personal injury or damage to property that occurs as a result of improper or unsafe use of the seating system.

3.6.1 ELEVATING SEAT OPERATION: THRU INVACARE (LiNX) JOYSTICKS

I. ELEVATING SEAT INSTRUCTIONS:

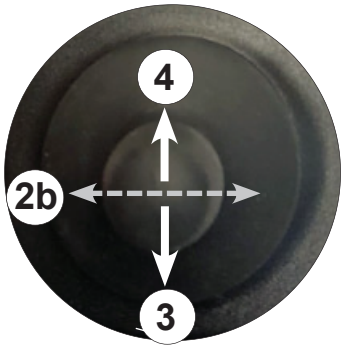
*(**Note:** the Elevate Function is typically configured to operate in **DIRECT** mode thru the joystick).*

1. Press the Mode I button or Seating Mode (**1**) on the remote to switch the joystick into Seating Mode.
2. Press the Mode II button (**2a**), or press the joystick control to the left or right (**2b**), to scroll through all the available power positioning options until the ELEVATE function is highlighted in the display.
3. To raise the seating system to an elevated position, *pull back* on the joystick control (**3**). Hold the joystick control until you reach the desired position/height; Release the joystick control to stop.
4. To lower the seating system, *push forward* on the joystick control (**4**). Hold the joystick control until you reach the desired position/height; Release the joystick control to stop.



e.g. REM400 Joystick

(optional) scroll thru seating functions via touchscreen



scroll thru seating functions via toggle button

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

II. JOYSTICK SAFETY INDICATORS (FOR REDUCED DRIVE SPEED AND DRIVE LOCKOUT):

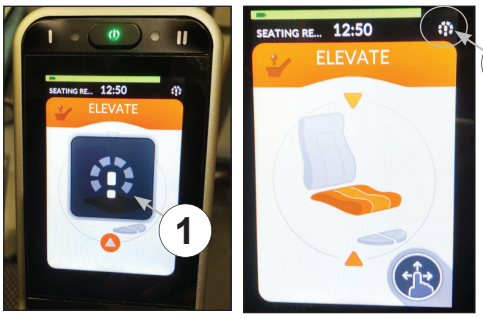
When operating your Contour Static (Captain) Seat, the associated joystick control will provide a visible indicator to notify if/when the wheelchair has reached the established safety limits for **Reduced Drive Speed** (**RDS**) and/or **Drive Lockout** (**DLO**):

REDUCED DRIVE SPEED INDICATORS:

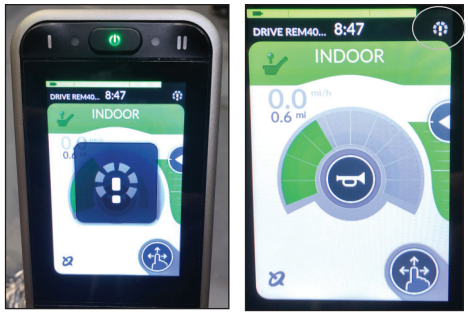
The Reduced Drive Speed (RDS) Limit places the wheelchair into a reduced drive speed when the Captain Seat is elevated beyond its home position.

On the REM400 joystick: When the wheelchair goes into reduced drive speed, the **RDS Symbol** (**1**) will flash temporarily on the joystick display, and will remain visible in the upper right corner (in both Seating Mode or Drive Mode).

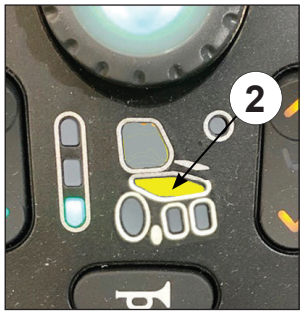
On the REM210/216 joystick: When the wheelchair enters into reduced drive speed, the seat function display (**2**) will '**Flash**' on the joystick display.



e.g. REM400 Joystick (Seating Mode)



e.g. REM400 Joystick (Drive Mode)



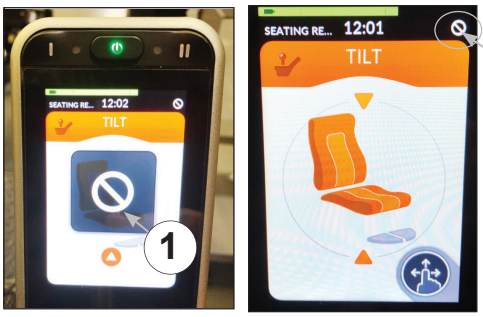
e.g. REM210/216 Joystick

DRIVE LOCKOUT INDICATORS:

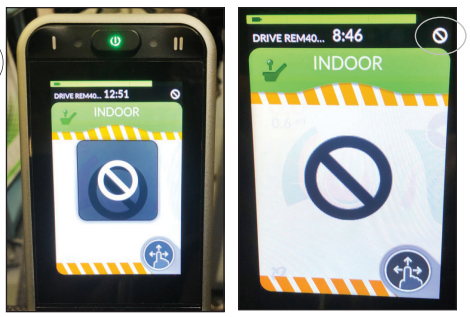
The Drive Lockout (DLO) limit prevents the wheelchair from driving when the Captain Seat is elevated beyond its home position.

On the REM400 joystick: When the wheelchair goes into drive lockout, the **DLO Symbol** (**1**) will flash temporarily on the joystick display, and will remain visible in the upper right corner (in both Seating Mode or Drive Mode).

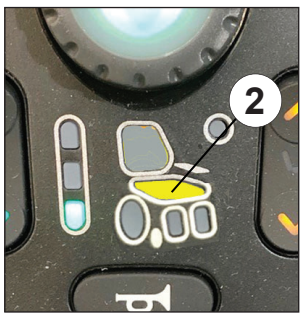
On the REM210/216 joystick: When the wheelchair enters into drive lockout, the seat function display (**2**) will '**Flash**' on the joystick display.



e.g. REM400 Joystick (Seating Mode)



e.g. REM400 Joystick (Drive Mode)



e.g. REM210/216 Joystick

NOTE: In order to return the wheelchair to normal drive speed, the Captain Seat must be returned to its 'HOME' position.

3.0 PROGRAMMING AND OPERATING YOUR CONTOUR STATIC SEAT

3.6.2 ELEVATING SEAT OPERATION: THRU ROVI (RNET) JOYSTICKS

NOTE: The Contour Static (Captain) Seat on the ROVI-X3/A3 is not currently available with a Power Elevating Seat option.

3.7 Operating the Elevate Function via a Switch (when applicable)

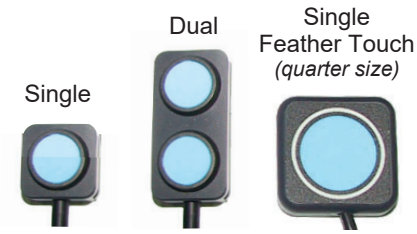
Motion Concepts offers a choice of push buttons or toggle switches to operate the Elevate Seat function on the Contour Static (Captain) Seat (when applicable).

To activate a motor/seat function using a separate switch: simply press and hold the designated push button or toggle switch. The function will stop when the button is released.

3.7.1 PUSH BUTTON/TOGGLE SWITCH OPTIONS:

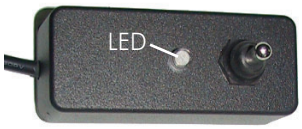
Push Button Switches ***(w/ slotted mounts)***

Standard dime sized or feather touch push button switches are available in single or dual (2) configurations. An optional quarter sized single switch option is also available (as shown). Two buttons are required to operate a seat function in "Direct" mode, and one button is required to operate a function in "Toggle" mode. *(see **Section 3.7.2**)*



Single Toggle ***(w/ LED indicator)***

The single toggle switch is capable of operating one function in "Direct" mode and two functions in "Toggle" mode.



Dual Toggle ***(w/ LED indicator)***

The dual toggle switch is capable of operating two functions in "Direct" mode and four functions in "Toggle" mode.

3.7.2 SEAT CONTROL CONFIGURATIONS: DIRECT MODE vs. TOGGLE MODE

Push Buttons and/or Toggle Switches may be configured to operate in "Direct" mode or "Toggle" mode. Motion Concepts seating systems are typically programmed at the factory to meet customer specifications. Changes to the original switch configurations should only be performed by a Qualified Technician.

i) **Direct Mode:** *two switches or opposite joystick directions* are required for each function, one for each motor direction.

ii) **Toggle Mode:** only *one switch/button or one joystick direction* is required for each motor function. In this mode, pressing the switch/joystick once will activate the function; releasing the switch/joystick, waiting for 2 seconds, then pressing it again will activate the function in the reverse/opposite direction.

4.0 ELECTRONICS

Your Motion Concepts Contour Static Seat has been programmed/configured for use prior to delivery. While certain seating system features and functions may be adjusted by the user and/or attendant following delivery, to ensure your seating system is operating properly and safely, any programming changes to the electronics must only be performed by a qualified technician.

DANGER! Risk of Death, Significant Injury or Device Damage
Incorrect programming and set-up of this wheelchair performed by users, caregivers or unqualified technicians can result in death, significant injury or device damage.
- *User/Caregivers- DO NOT attempt to set up this wheelchair.*
- *Set-up and programming of this wheelchair MUST be performed by a Qualified Technician.*

4.1 Wiring Harnesses

Wiring Harnesses can be divided into two categories: **Power Cables** and **Motor/Actuator Harnesses.**

i) Power Cables - draw power from the wheelchair base in order to operate the power positioning system. The power cable is the first link in the series of wiring harnesses and typically draws power from the wheelchair batteries via the base controller (electronics). The final wiring configuration will vary depending on the type of seating system electronics and the type of wheelchair base.

ii) Motor/Actuator Harnesses - distribute the power to the individual motors on the Power Positioning System. The number of actuator harnesses is in direct correlation with the number of motor functions available.

4.2 Safety Lockout and Limit Switches

DANGER! Compromised wheelchair stability may result in death, significant injury or device damage
- When operating/driving the wheelchair in an elevated position, ensure the wheelchair is on a smooth level surface (even at reduced speed).

WARNING! Risk of Serious Injury or Compromised User Safety
- *ALWAYS ensure the wheelchair base is on a level surface when setting/adjusting safety limits.*

DANGER! Risk of Death or Significant Injury if Maximum Recommended Limits are Exceeded
- *Safety Lockouts and Limit Switches may only be adjusted by a Qualified Technician, and should be set up to best meet the needs of the user without compromising the overall stability of the wheelchair.*

WARNING! Risk of Serious Injury or Compromised User Safety
- *Following any limit or lockout adjustments, **always** test the seating system over the full range of motion (i.e.; elevate) to verify the limit is functioning properly and ensure that there are no resulting stability or interference issues.*

4.2.1 ELEVATE REDUCED DRIVE SPEED (**RDS**) OR ELEVATE DRIVE LOCKOUT (**DLO**) LIMIT

Contour Static (Captain) Seats that are configured with a lift-only module *((L12) or (L10))* may be configured with either a **Reduced Drive Speed* (RDS)** Limit or an **Elevate Drive Lockout (DLO)** Limit. Both limits utilize a microswitch to trigger the seating system into drive lockout or reduced drive speed as soon as the seating system is elevated to a pre-determined height beyond the home (fully retracted) position.

***NOTE:** Reduced Drive Speed (RDS) must be specified at the time of order, otherwise Drive Lockout (DLO) will be set as the default limit*

4.0 ELECTRONICS

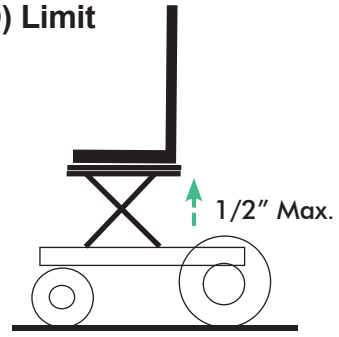
Elevate Reduced Drive Speed (RDS) or Elevate Drive Lockout (DLO) Limit

Reduced Drive Speed (RDS):

Lift-Only Module (L12) or **(L10)** **RDS Setting = Max.** 1/2″

Elevate Drive Lockout (DLO):

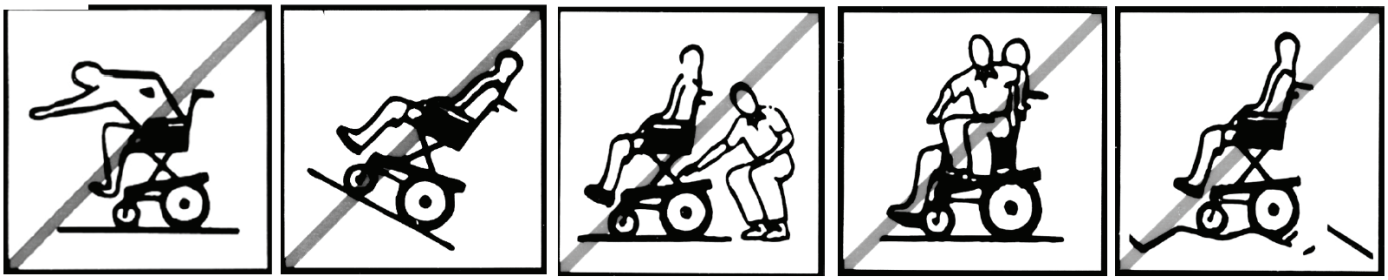
Lift-Only Module (L12) or **(L10)** **DLO Setting = Max.** 1/2″



DLO (L10 or L12) *or*
RDS (L10 or L12)

DANGER! Risk of Death or Significant Injury

- **Always** ensure the wheelchair is on a smooth level surface when driving in an elevated position (even at reduced speed).
- **Never** drive up or down an incline while elevated
- **Never** reach for items/objects, or shift body position (in any direction) while in an elevated position.
- **Never** transfer in or out of your wheelchair while elevated.



NOTE: *To regain full drive function of the wheelchair, return the seat angle to a more upright position (when Tilt/Recline DLO is activated), or lower the seat to its home position (when Elevate DLO/ Elevate Reduced Drive Speed is activated).*

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

Motion Concepts offers a range of positioning features/accessories for use with our Contour Static (Captain) Seat. The following information is provided as a reference for our typical seating system configurations. The components/accessories on your wheelchair may differ from those illustrated in this manual. If you have any questions or concerns related to your specific seating system that are not addressed in this Owners Manual, please contact your Service Provider or Motion Concepts directly for further assistance.

Once you become familiar with the operation of your seating system, you may find a need to make some basic adjustments to improve your comfort. The following section identifies a variety of features and adjustment options common to the Contour Static (Captain) Seat..

WARNING! Risk of Serious Injury or Device Damage
• *Your seating system has been uniquely configured and installed onto the power wheelchair base prior to delivery. There are a limited number of adjustments that can be safely performed by the end user. To ensure that the adjustments are completed properly, it is preferred to have all adjustments performed by a qualified technician. If there is an adjustment required that is not indicated in this manual, DO NOT perform that adjustment. Contact your Service Provider to arrange for service by a qualified technician.*

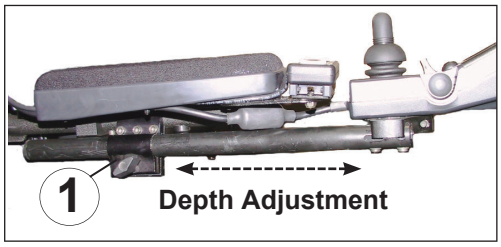
The following tools are recommended to complete the adjustments contained in this manual:
- *metric/standard socket set and ratchet*
- *metric/standard hex key set*
- *adjustable wrench*

5.1 Joystick Positioning and Adjustment

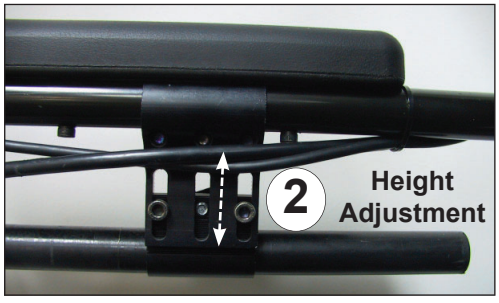
NOTE: *The model of joystick/remote is selected at the time of order, and may differ from the images shown below.*

5.1.1 STANDARD JOYSTICK MOUNTING

i) **JOYSTICK DEPTH ADJUSTMENT:**
• Loosen the adjustment knob (screw) on the outside of the joystick mounting bracket (**1**)
• Set the joystick to the desired length by sliding the mounting tube forward or backward.
• Re-tighten the adjustment knob (screw).



ii) **JOYSTICK HEIGHT ADJUSTMENT:**
• Loosen the mounting screws *(x2)* on the joystick clamping bracket (**2**).
• Adjust the lower mounting plate up or down (via slots) of the mounting bracket to establish the desired joystick height.
• Re-tighten the mounting screws on the clamping bracket.



5.1.2 SWING-AWAY QUAD LINK JOYSTICK MOUNT

WARNING! Risk of Serious Injury or Device Damage due to improper set-up/adjustment
• *ALWAYS test the swing away joystick over its full range of motion to ensure there is no interference.*
• *ALWAYS ensure the height of the joystick is properly adjusted to prevent accidental contact between the joystick knob and the arm pad (which could cause the wheelchair to move unexpectedly)*

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

i) Operating the Manual Swing-Away Feature:

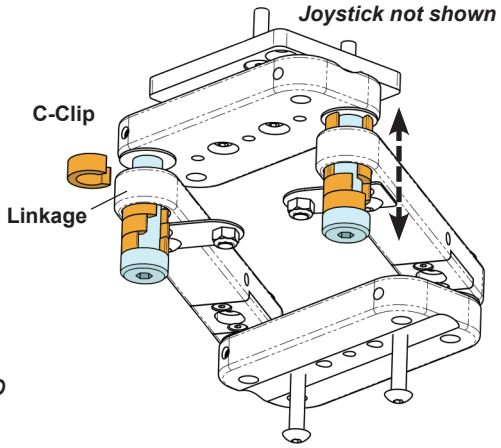
The swing-away feature allows easy repositioning of the Joystick for client comfort, transfers, or environmental access.

- To use the swing-away feature, push outward on the joystick in order to release the detent pins on the quad link mechanism and rotate the joystick around to the outside of the arm pad.
- To return the joystick back to its original position in front of the arm pad, rotate the joystick forward until the quad link mechanism (detent pins) 'click' back into place.

ii) Joystick Height Adjustment (Quad-Link Mount):

*The **C-Clips** on the joystick mount may be re-arranged as needed to adjust the final joystick height. (Each clip provides 1/4" (6mm) of height adjustment- up to a max. 1" (25mm)).*

- Carefully remove/pry the clips from their existing position using a small screwdriver or your finger tips.
- Re-insert the clips above or below each linkage*, as required to attain the desired joystick height.



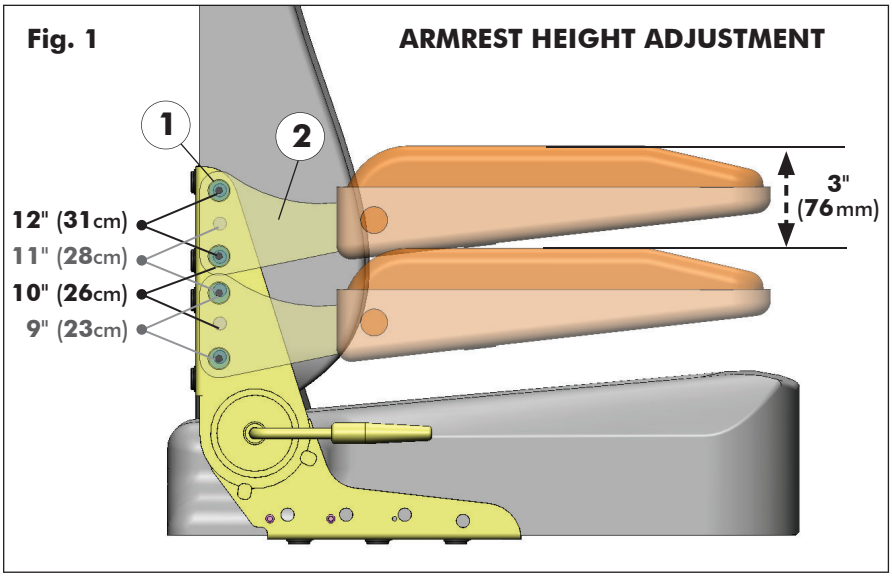
***NOTE**: All lower clips (below linkage) must be installed prior to the upper clips. Always adjust clips equally on both links.*

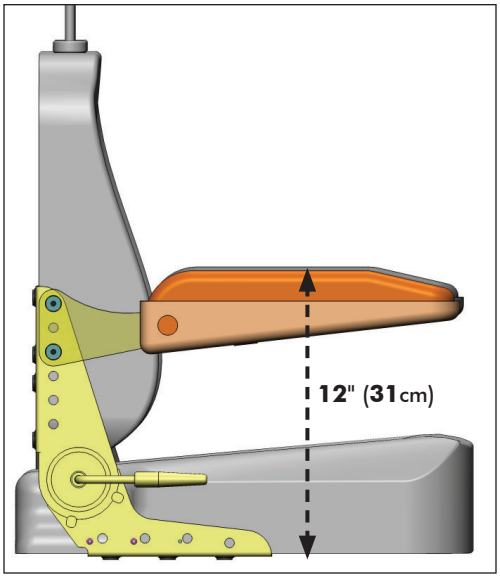
5.2 Integrated Armrests

The Contour Static Seat comes standard with integrated armrests. Each armrest is independently adjustable to meet the needs of the end user. Instructions for all available armrest adjustments are provide below.

5.2.1 ARMREST HEIGHT ADJUSTMENT: (see **Fig. 1.** below)

1. Determine the desired armrest height.
2. Using a hex key, loosen/remove the adjustment screws (**1**). *(2 screws per side)*.
3. Adjust/align the armrest bracket (**2**) to the desired height, and reinstall the mounting hardware. *(ensure screws are fully secured)*.





5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

WARNING! Risk of Serious Injury or Device Damage.

- *When performing transfer activities into and out of the wheelchair, DO NOT use the armrest for load bearing support. To prevent the risk of personal injury and/or damage to the armrests, transfers should be performed in the presence of an attendant whenever possible.*
- *Before travelling in your wheelchair and/or operating your power positioning system, **always** ensure the armrests are placed in the lowered position.*

5.2.2 FLIP BACK ADJUSTMENT:

1. Lift upward on the armrest to provide clearance for side transfers (see **Fig. 2.** below)

5.2.3 ARMREST ANGLE ADJUSTMENT:

1. Rotate the angle adjustment wheel (**1**) to raise or lower the angle of the armrest (see **Fig. 3.** below)

FLIP-BACK ARM ADJUSTMENT

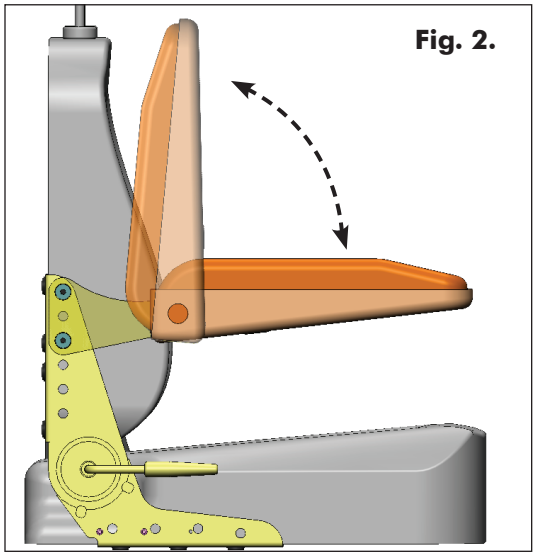


Fig. 2.

ARMREST ANGLE ADJUSTMENT

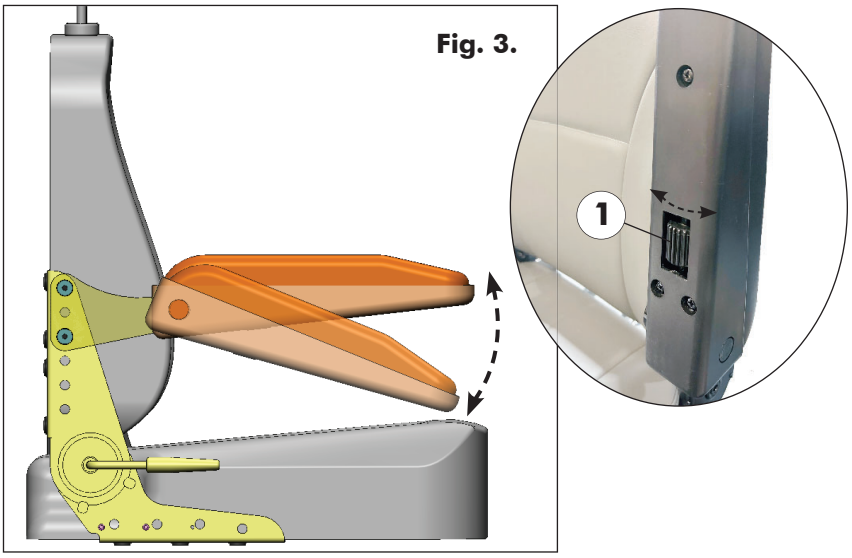


Fig. 3.

5.3 Manual Back Angle Adjustment

The Contour Static (Captain) Seat offers a manual back angle adjustment. The back angle can be adjusted manually using the recline lever handle on the right rear side of the seat. Refer to the adjustment instructions provided below.

DANGER! Risk of Death, Significant Injury or Device Damage.
Failure to observe the following guidelines when travelling on an incline or ramp may result in death or significant injury

- *DO NOT drive in an elevated and/or reclined position while on an incline or ramp.*
- *NEVER operate the elevate seat function or manual recline function while on an incline.*
- *ALWAYS exercise extreme caution when travelling on an incline or ramp; ALWAYS return your seating system to an upright driving position, and ALWAYS drive your power wheelchair straight up the incline; DO NOT zigzag, make sudden direction changes or drive at an angle up the face of the incline. This greatly reduces the possibility of tipping.*

WARNING! Risk of Serious Injury or Compromised User Safety.
Failure to observe the following guidelines may result in serious injury or compromised safety

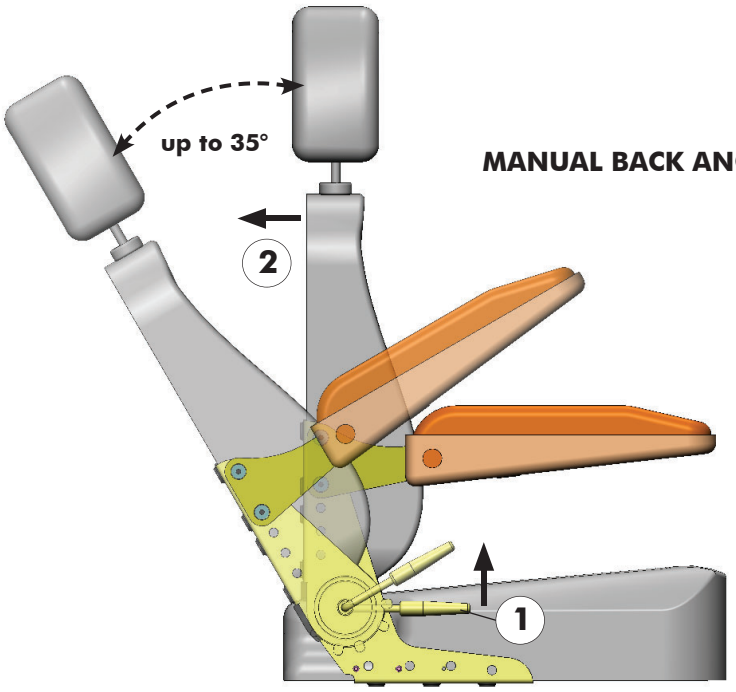
- *Following any back angle adjustments, and before operating your wheelchair, ALWAYS ensure the recline lever handle is in its locked/down position, and the back is fully secured in position.*

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

5.3.1 BACK ANGLE ADJUSTMENT:

1. While seated in the wheelchair, lift upward on the recline lever (**1**), then using your upper body, press rearward on the back support (**2**) to change/adjust the back angle. (see **Fig. 4.** below)

Fig. 4.



MANUAL BACK ANGLE ADJUSTMENT

5.4 Seat Depth Adjustment

DANGER! Risk of Death, Significant Injury, or Device Damage.

- *Altering the seat depth of your Contour Static (Captain) Seat may compromise the stability and reduce traction/drive control, and should ONLY be performed by a Qualified Service Technician.*
- *Following an adjustment to the seating system depth, ALWAYS carefully test the seating system to ensure there is no interference with the front riggings or any other component of the seating system, and ensure the wheelchair DOES NOT easily tip forward or backward.*
- *If at any point you have any concerns with the stability of your wheelchair, keep the wheelchair in an upright stable position and contact your Dealer/ Service Provider immediately to arrange service.*

Your Contour Static (Captain) Seat is designed to allow for depth adjustments if necessary, to accommodate growth or positioning changes needed over the expected service life of your seating system. The Captain Seat is available in three (3) fixed seat widths (18W, 20W and 22W). Each seat width offers a specific range of depth adjustment. Refer to the table below for the depth adjustment range available for each fixed seat width.

		Seat Depth Adjustment Range					
		16D	17D	18D	19D	20D	21D
Seat Width	18W	X	X	X	X		
	20W				X	X	X
	22W				X	X	X

The seat depth has been pre-configured to meet end user specifications prior to delivery. If you feel an additional depth adjustment is necessary, please contact you local Dealer/ Service Provider to arrange for service.

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

5.5 Fixed Center Mount Legrest Adjustment

CAUTION! Risk of Injury or Device Damage

• Following any legrest adjustment ALWAYS inspect/verify that your front rigging DOES NOT interfere with the wheelchair chassis or front casters, and that the foot plates/platform does not collide with the ground.

• It is highly recommended that KTH length adjustments be performed by a qualified technician.

CAUTION! Risk of Injury or Device Damage

Operating the wheelchair with insufficient ground clearance between the foot platform and the ground/floor may cause personal injury, device damage or property damage.

*• While the wheelchair is in motion, ALWAYS maintain a minimum ground clearance of 3 inches (76mm), **or** the minimum ground clearance stated by wheelchair base manufacture (whichever is greater).*

• If the wheelchair dips forward and the foot platform touches the ground while in motion, please contact your Dealer for immediate assistance and/or inspection, and avoid use of the wheelchair until corrected.

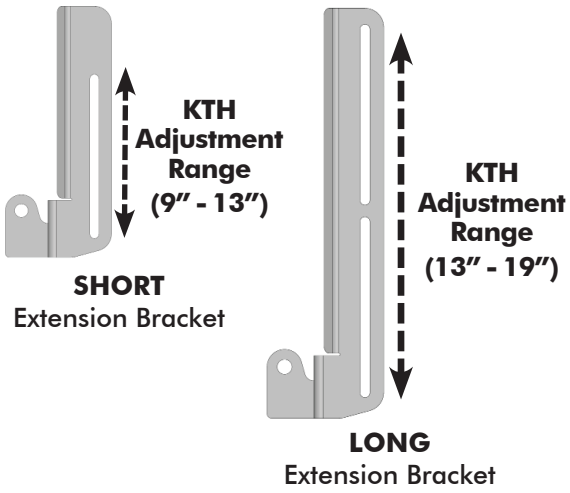
5.5.1 CENTER MOUNT LEGREST KNEE-TO-HEEL (KTH) ADJUSTMENT:

The Fixed CM Legrest is designed to provide a total range of knee-to-heel (KTH) adjustment of 9″ to 19″. There are two sizes/lengths of extension brackets (long and short) available to produce the desired KTH length. The knee-to-heel (KTH) length is adjusted via two adjustment screws *(1 screw per side)* on each extension bracket.

The extension brackets offer infinite knee-to-heel adjustment within the available slot length. *(refer to **Fig. 5.** and **Fig. 6.** below)*

Short KTH Range = 9″-13″ (23cm-33cm)

Long KTH Range = 13″-19″ (33cm-48cm)



i) Maxx Fixed CM Legrest: Center Mount Platform KTH Adjustments:

1. Loosen the adjustment screws (x2) on the extension bracket, and slide/adjust the extension bracket/foot platform to the desired KTH Length.

2. Fully tighten all adjustment screws on the extension bracket to secure the foot platform into position.

Fig. 5.

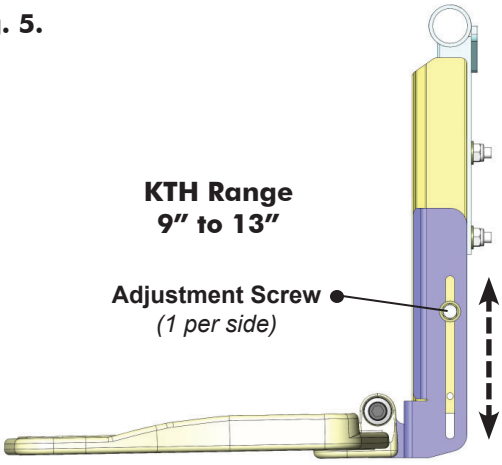
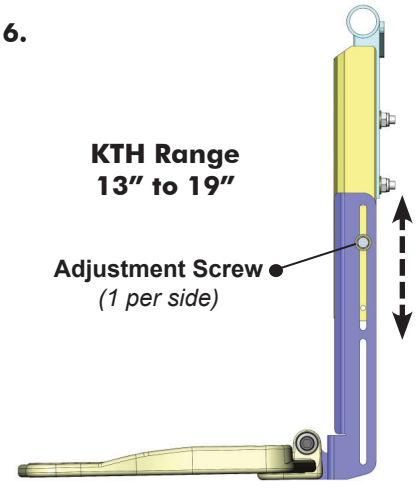


Fig. 6.



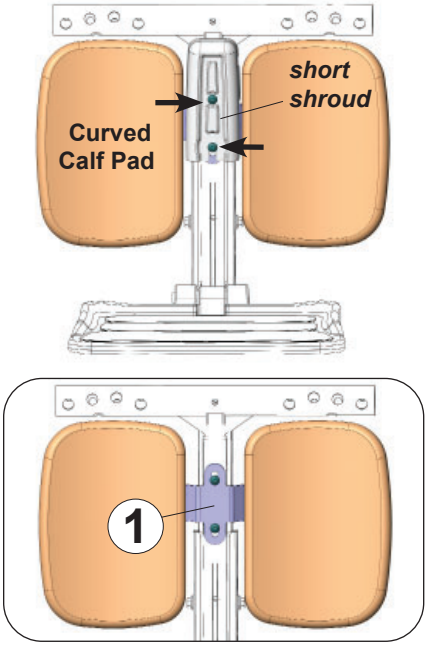
NOTE: *the front shroud and (optional) calf pads are not shown for illustration purposes.*

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

5.5.2 (OPTIONAL) CALF PAD ADJUSTMENTS FOR THE FIXED CM LEGREST

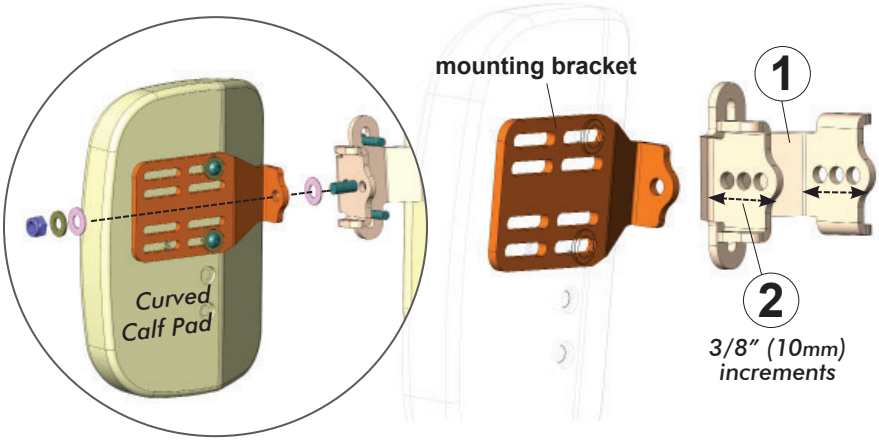
i. Calf Pad Adjustment for Short KTH Lengths (9″-13″ (23cm-33cm))

A. CALF PAD ASSEMBLY *(for Short KTH Lengths)*



B. CALF PAD DEPTH ADJUSTMENT *(for Short KTH Lengths):*

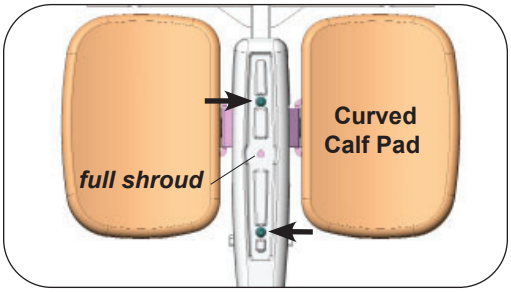
The depth of the calf pads can be independently adjusted via their mounting position on the Calf Pad Mounting plate (**1**). The calf pads may be configured in one of three optional mounting positions (depths) along the side of the mounting plate (**2**).

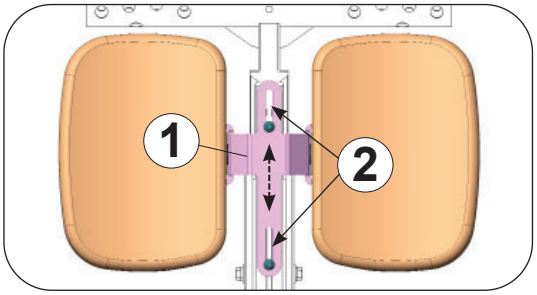


ii. Calf Pad Adjustments for Long KTH Lengths (13″-19″ (33cm-48cm))

A. CALF PAD ASSEMBLY & HEIGHT ADJUSTMENT *(for Long KTH Lengths):*

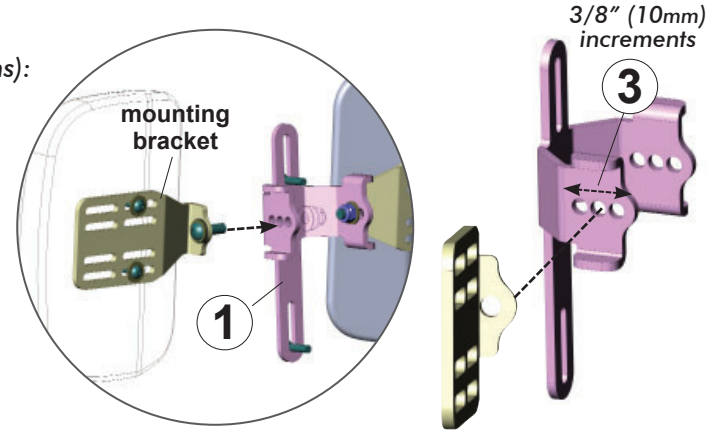
For long KTH lengths, the overall calf pad height/position on the Fixed CM Legrest can be adjusted via the calf pad mounting plate (**1**) (both pads are adjusted at once). To adjust the calf pad height, loosen the two mounting screws on the front shroud, and slide the calf pads up or down via the adjustment slots (**2**) in the mounting plate.





B. CALF PAD DEPTH ADJUSTMENT *(for Long KTH Lengths):*

The depth of the calf pads can be independently adjusted via their mounting position on the Calf Pad Mounting plate. The calf pads may be configured in one of three optional mounting positions (depths) along the side of the mounting plate (**3**). Adjustments are available in 3/8″ (10 mm) increments.



5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

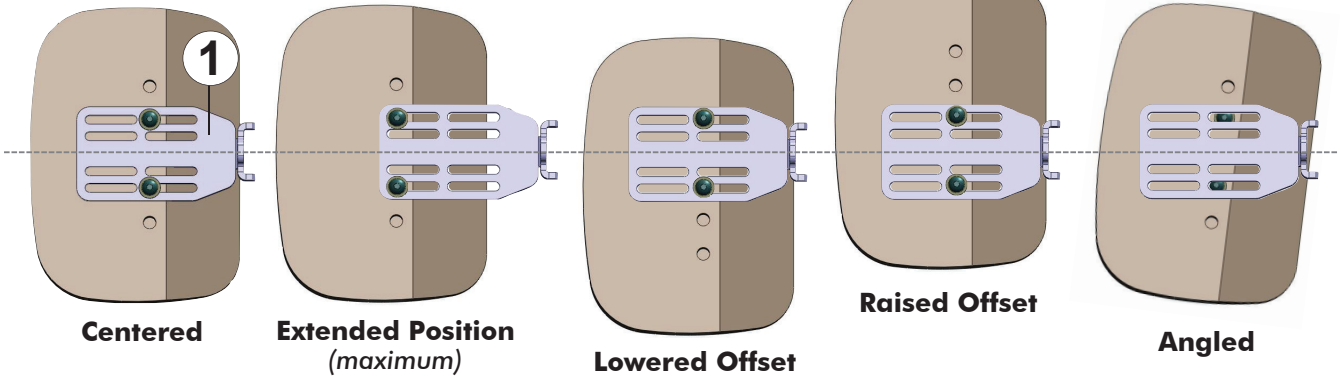
5.5.2 (OPTIONAL) CALF PAD ADJUSTMENTS FOR THE FIXED CM LEGREST *(...cont'd)*

iii. CALF PAD MOUNTING BRACKET CONFIGURATIONS (if applicable)

The calf pad mounting brackets (**1**) on the Fixed CM Legrest may be further configured to best fit the needs of the end user.

The calf pads may be adjusted independently on their respective mounting bracket using the mounting screws at the rear of the calf pads. Each calf pads can be adjusted (for depth, height and angle) to achieve a variety of different configurations. Refer to sample configurations are illustrated below.

Independent Calf Pad Adjustment *(Sample Configurations)*



5.6 Postural/Positioning Belts

Postural belts will help you keep an optimum sitting position in your Contour Static (Captain) Seat. Correctly adjusted postural belts ensure users are sitting securely, comfortably and well positioned in the wheelchair, especially for those that experience difficulties with balance.

IMPORTANT! A postural belt should ALWAYS be used when the wheelchair is occupied. A postural belt allows users to sit securely, comfortably and well-positioned in the wheelchair, and is especially important for users who experience difficulties with balance while sitting. Refer to **Section 5.6.2** for instructions on proper belt adjustment.

WARNING! Risk of Serious Injury or Compromised User Safety
Not wearing your postural belt could result in serious injury or compromised safety.

- *ALWAYS wear your postural belt. Your postural belt helps reduce the possibility of a fall from the wheelchair.*
- *The postural belt is a positioning belt only. It is NOT designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts.*
- *Ensure your seat positioning strap is properly secured to the wheelchair and is adjusted for comfort before each use.*
- *Postural Belts are NOT designed for use as a seat belt in a motor vehicle. Nor is your power wheelchair suitable for use as a vehicle seat. Persons travelling in a vehicle must be properly belted into seats approved by the vehicle manufacturer.*

CAUTION! Risk of crushing, entanglement or device damage

- *To prevent crushing or entanglement, postural belts should remain secure at all times .*
- *NEVER allow the positioning belt to hang or drag on the floor, or become trapped between the seating system and the power base.*

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

WARNING! Risk of Serious Injury or Compromised User Safety
Improper care & maintenance of your postural belt could result in serious injury.

- *Inspect the postural belt for wear, loose parts or damage prior to each use. Inspect for tears, frayed webbing, bent hardware, damaged latch mechanisms, and/or contamination. DO NOT attempt to repair a worn or damaged belt. If signs of wear appear, the postural belt should be replaced IMMEDIATELY.*
- *Regularly inspect & clean belt of any dirt or debris using mild soap & water.*
- *Take care to avoid contamination of the belt webbing from damaging polishes, oil, lubricants and/or other chemicals.*

5.6.1 POSTURAL BELT

Your Contour Static (Captain) Seat comes standard with a 2-Point Lap (Postural) Belt. Always ensure that you have received the belt manufacturer's installation/user instructions (provided separately). Please be certain to read through all documentation in regard to correct fitting and safe use of the postural belt.

2-Point Padded Lap Belt

- *Center-pull push button, padded lap belt*
- *Two points of attachment to the wheelchair*
- *Suitable for supporting users with low tone or weakness*

5.6.2 ADJUSTING YOUR POSTURAL BELT

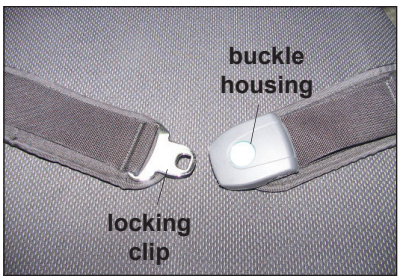
IMPORTANT! If the overall length/size of your postural belt is too large or too small, please contact your Dealer for assistance. DO NOT operate your wheelchair until your postural belt is properly installed

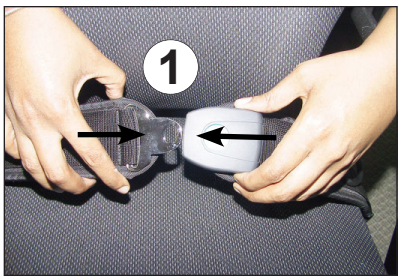
Belt Fit and Adjustment:

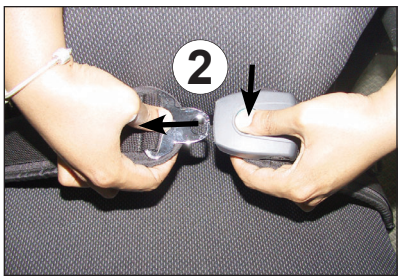
- Ensure that you are sitting correctly, which means that you are sitting right at the back of the seat, your pelvis is positioned erect and as symmetrically as possible, not to the front, to the side or at one edge of the seat.
- Position the postural belt so that your hipbones can be easily felt above the belt. ***Note:*** *Most hip belts should be angled more than 45 degrees (unlike automobiles/airplanes) to prevent slipping and bladder pressure.*
- Adjust the belt length as needed using the cinch-mount or flat-mount fittings. The belt should be adjusted so that you can fit a flat hand between the belt and your body when the buckle is fastened together.
- For a **padded postural belt**, the pads should touch each other when the belt adjustment straps are tightened.
- For a **standard (non-padded) postural belt** , the belt webbing should extend approximately 5-6" beyond the buckle when the straps are fully tightened.
- The buckle should be positioned as centrally as possible when the postural belt is secured. To accomplish this, belt adjustments should be made equally on both sides whenever possible.

5.6.3 OPERATING YOUR POSTURAL BELT *(see images below)*

- To secure/lock your postural belt, insert the locking plate into the buckle housing until you hear a 'click' (**1**). Pull firmly on the locking plate (belt) to test that the lock mechanism is properly engaged.
- To release/unlock the postural belt, fully depress the push button on the top of the buckle housing and pull the locking plate (belt) out of the housing (**2**).







5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

5.7 O2 Holder (for Gas Cylinders)

IMPORTANT! The following section is specific to the Gas Cylinder (O2) Holder for use on the Contour Static (Captain) Seat. For detailed operating, safety, handling and maintenance instructions related to the compressed oxygen tanks, please be certain to read and understand the **OEM Owners/ Operators Manual** *(provided separately by the manufacturer).*

Motion Concepts Captain Seat O2 Holder has a maximum **weight capacity** of **15 lb. 7 kg**), and is designed to accommodate standard Gas (O2) Cylinders. The typical mounting configuration for Gas Cylinder O2 Holder is illustrated below.

DANGER! Risk of Death, Significant Injury or Device Damage
Failure to observe the following warnings may result in death, significant injury or device damage

- *O2 Holders are only designed to accommodate gas cylinders and any ancillary equipment. DO NOT hang large or heavy objects such as coats or backpacks from O2 holder, otherwise system stability may be compromised and/or damage may occur.*
- *Due to the potential affect on wheelchair stability, and to ensure the O2 Holder is secured properly, Motion Concepts recommends that any adjustment to the original set up of the O2 Holder only be performed by a qualified technician. Contact your local service provider for assistance.*
- *Dealers are responsible for proper/safe routing of oxygen hoses and harnesses. Prior to driving your wheelchair or operating your seating system, ALWAYS inspect the location and position of all connected harnesses/hoses to ensure they are free from interference and there is no risk of crushing, pinching or pulling over the full range of motion.*
- *The maximum weight capacity/limit for the Captain Seat O2 Holder is **15 lb (7 kg).** DO NOT exceed the specified weight capacity of your O2 Holder.*
- *Where applicable, periodic inspection of adjustment and fastening hardware and securement knobs should be performed to ensure the gas (O2) cylinders remains secured in place inside the O2 holder.*

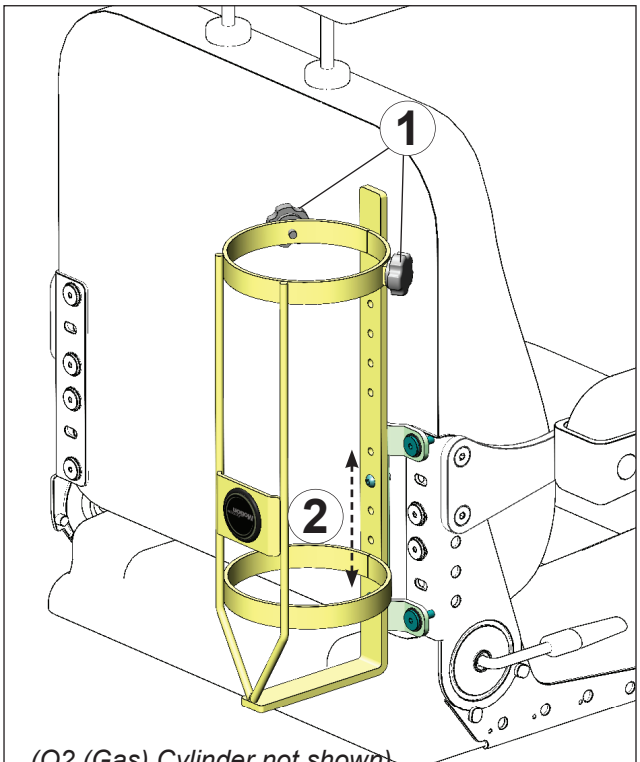
5.7.1 O2 HOLDER MOUNTING ADJUSTMENTS:

IMPORTANT! ALWAYS ensure the securement knobs (**1**) are tightened to secure the O2 cylinder/ tank in position and prevent it from bouncing or rotating inside the holder

1. The O2 Holder may be mounted onto the left or right side of the Contour Static (Captain) Seat. The cylinder holder is installed onto the armrest mounting bracket using the hardware provided.

2. If necessary, the height of the O2 Holder can be adjusted in 1" (26 mm) increments, via the optional mounting holes (**2**) in the O2 Holder.

***NOTE:** Motion Concepts recommends that any adjustment to the original set up of the O2 Holder only be performed by a qualified technician. Contact your local service provider for assistance.*



(O2 (Gas) Cylinder not shown)

5.0 SEATING ACCESSORIES & COMFORT ADJUSTMENTS

5.8 Walker Holder

IMPORTANT! Motion Concepts Walker Holder is **ONLY** available/compatible for use with the following Invacare wheelchair bases: **AVIVA-FX, TDX SP2, TDX SP2HD**

Motion Concepts Walker Holder has a maximum **weight capacity** of **20 lb.** (**9 kg**), and is designed to accommodate most standard foldable and/or collapsible walkers. The instructions for mounting a walker on the Contour Static (Captain) Seat are provided below.

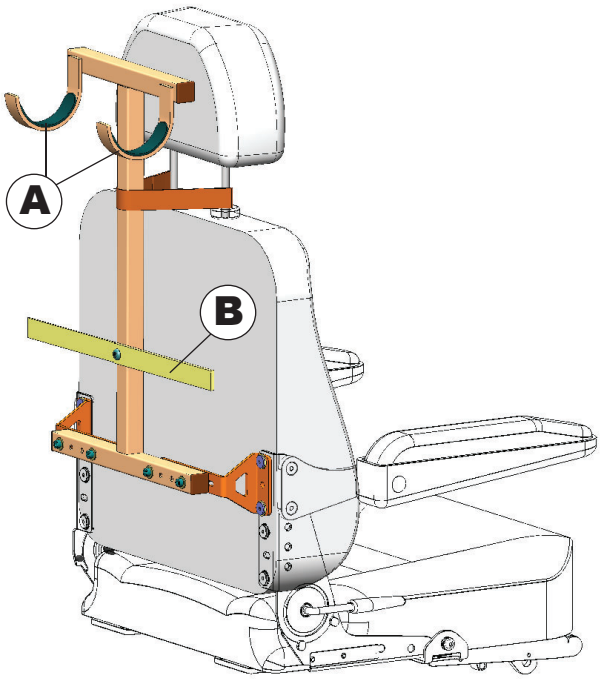
WARNING! Risk of Serious Injury or Device Damage.
Seating accessories and personal gear could cause instability resulting in serious injury. The following factors should be considered when evaluating stability:

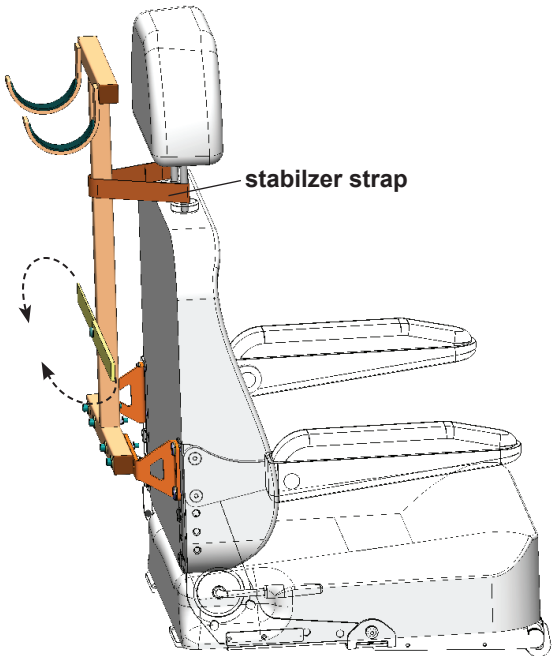
- *Consider all personal gear and accessories (walkers, backpacks, O2 Cylinders, etc..) that will be carried on the wheelchair. For example, a loaded backpack, attached to the back of the seating system can significantly reduce the rearward stability of your wheelchair.*
- *Consider the seat cushion being used. A thick seat cushion will raise your center of gravity and reduce the wheelchairs stability in all directions.*
- *DO NOT exceed the specified (maximum) weight capacity of your Walker Holder.*

5.8.1 USING THE WALKER HOLDER:

***NOTE:** Prior to use, ensure the upper stabilizer strap is installed onto the headrest posts and wrapped around the main tube of the walker holder.*

1. Fold or collapse the walker. (Refer to the instructions provided in the Walker User Manual).
2. Hang the top of the walker (not shown) on the support hooks at the top of the walker holder (**A**).
3. Use the Velcro™ (hook and loop) strap (**B**) provided to secure the walker to the main tube of the walker holder.
4. Prior to operating/driving your wheelchair, verfiy the walker is properly supported on the upper hooks, and secured in place on the back of the Captain Seat





6.0 GENERAL SET-UP AND MAINTENANCE

IMPORTANT! Motion Concepts disclaims all responsibility and liability for any personal injury or damage to property that occurs as a result of improper or insufficient maintenance, and/or any unauthorized Dealer or unqualified third-party repairs or modifications made to the power positioning system or the wheelchair on which the system is installed.

IMPORTANT! Please be certain to also read and follow all maintenance and safety information provided separately in your **Base Manufacturer's Owner/Operators Manual**.

DANGER! Risk of Death, Significant Injury or Device Damage
Improper set-up, service, adjustment or programming may result in death, significant injury, or device damage

• A Qualified Technician MUST set-up, service and program the wheelchair/power positioning system.
• DO NOT allow non-qualified technicians to perform any service repairs, modifications or adjustments on your wheelchair/power positioning system.
• Turn off power BEFORE adjusting or servicing the wheelchair/power positioning system.
• Ensure that all hardware is securely tightened after set-up, or following any maintenance or adjustments.

6.1 Maintenance and Inspection Schedule

IMPORTANT! To ensure the optimal safety and reliability of your power positioning system, please adhere to the **Maintenance Checklist** provided in **Section 6.2**. In addition to the Checklist provided, please review the daily maintenance recommendations and additional safety warnings provided below to ensure your power positioning system is operating safely and efficiently.

DELIVERY INSPECTION:

• A full inspection should be performed by the Service Provider at the time of delivery/set-up.
• Initial adjustments should be made to safely meet your body structure, personal needs and preferences. Thereafter, monthly and periodic inspections should be performed by the end user/attendant between semi-annual (6 month) service inspection

DAILY MAINTENANCE:

• Check that the joystick and/or switches (push buttons/toggles) that operate your power positioning system are functioning properly
• Charge your batteries. *(Refer to the battery charging information provided (**section 6.5**), as well as your Power Base Owners Manual for important information on battery charging and proper battery care).*

SEMI-ANNUAL SERVICE INSPECTION:

• To ensure your power positioning system is operating properly and safely, Motion Concepts recommends a complete system inspection be performed **every six (6) months** by a Qualified Service Technician. Contact your local Service Provider to schedule an inspection.

MAINTENANCE INFORMATION AND SAFETY WARNINGS!

IMPORTANT Information about Maintenance Work Tools/Equipment!
Some basic/periodic maintenance tasks identified in this manual can be carried out by the user without problems, but do require the correct tools. If you do not have the proper tool(s) available, or if you are not comfortable performing the maintenance task, we strongly recommend that you contact you local Service Provider to arrange for assistance.

IMPORTANT! Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your power positioning system/wheelchair. To operate safely and properly, your wheelchair seating system must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair.

6.0 GENERAL SET-UP AND MAINTENANCE

WARNING! Risk of Serious Injury, Device Damage & Loss of Warranty if proper maintenance is not followed.

• For reasons of safety, and in order to avoid potential injury or damage from unnoticed wear, it is recommended that under normal operating conditions your power positioning system undergoes a complete inspection every six (6) months.

WARNING! Risk of Serious Injury or Device Damage
Incorrect repair and/or servicing of this wheelchair performed by users/caregivers or unqualified technicians can result in serious injury or damage.

• Users/Caregivers — DO NOT attempt to repair and/or service this wheelchair.
• Repair and/or service of this wheelchair MUST be performed by a qualified technician. Contact a dealer or our Motion Concepts Technical Service Department for further assistance.

WARNING! Any sudden or gradual deterioration in the function/performance of your seating system (i.e. increased actuator motor/gearbox noise, rattling, sloppiness, etc...) must be reported to your Dealer immediately.

• A complete wheelchair inspection by a qualified technician is recommended to ensure there is no unusual wear and tear, or physical damage that requires servicing and/or repair.

WARNING! Risk of Serious Injury or Device Damage if maintenance is insufficient!

• Under extreme operating conditions such as daily travel on steep slopes, or in the case of use in medical care cases with frequently changing wheelchair users, it is recommended to carry out intermediate checks on the brakes, accessories and running gear.
• The wheelchair operator is responsible for ensuring that the power wheelchair and seating system remains in an operationally reliable condition. Inadequate or neglected care and maintenance of the mobility device will result in a limitation of the manufacturer's liability.

WARNING! Risk of Serious Injury or Device Damage
Loss of power due to loose electrical connections could cause the wheelchair to suddenly stop resulting in serious injury or device damage.

• ALWAYS ensure that all electrical connections are tightly connected so they don't vibrate loose.

DANGER! Risk of Death or Significant Injury.
Electric shock can cause death or significant injury

• Inspect connectors and cables for cuts and/or frayed wires. Replace any cut cables or frayed wires immediately

WARNING! Risk of Serious Injury or Device Damage
Corroded electrical components due to water, liquid exposure, or incontinent users can result in serious injury or device damage.

• Wheelchairs that are used by incontinent users and/or are frequently exposed to water/liquids may require replacement of electrical components more frequently.
• Electrical components damaged by corrosion MUST be replaced immediately.

WARNING! Risk of Serious Injury or Device Damage if incorrect or improper replacement (service) parts are used

• Replacement parts for your power positioning system MUST match original Motion Concepts parts
*• ALWAYS provide the wheelchair serial number (see **Section 1.5 - System Identification**) to assist in ordering the correct replacement parts*

CAUTION! Risk of injury due to improper lifting or dropping of heavy components!

• When maintaining, servicing or lifting any part of your power wheelchair, take into account the weight of the individual components, especially the batteries. Be sure at all times to adopt the correct lifting posture and ask for assistance if necessary.

6.0 GENERAL SET-UP AND MAINTENANCE

6.2 Maintenance Inspection Checklist

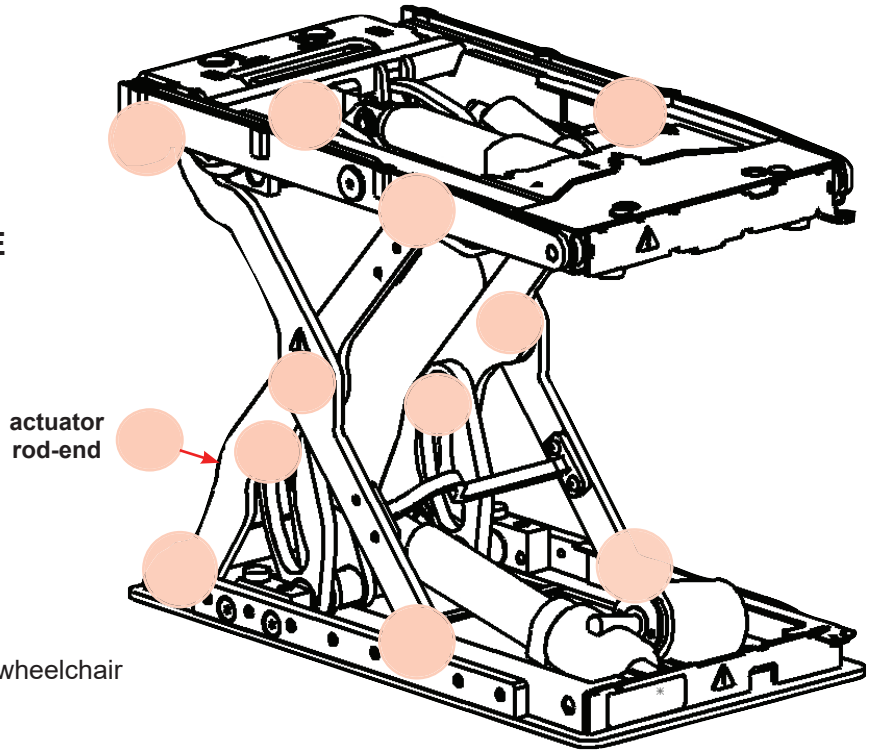
Task	Delivery	Monthly	Periodically	6 Months *(Service)*
Batteries				
Load test batteries (individually)	X			X
Ensure batteries are clean (free from corrosion/ moisture/ dirt)	X			X
Ensure connections are tight and clean	X			X
Electrical / Wiring Harnesses				
Check wire routing & cables for pinching or pulling *(over the full range of seating system functions)*	X	X		X
Inspect for wear & tear damage to wires/connectors	X	X		X
Ensure electronic connections are secure	X	X		X
Actuators ***(where applicable)***				
Ensure actuator rod ends are properly pinned (if applic)	X			X
Ensure no interference/binding during system operation *(test all seating functions over their full range of travel)*	X		X	X
Inspect/listen for excessive motor noise or grinding	X		X	X
Hardware and Components				
Inspect mounting interface hardware *(seating system to powerbase)*	X		X	X
Inspect all adjustment hardware and accessory hardware to ensure fasteners are secure (e.g.; back canes, recline module, legrests/foot plates/receivers, calf pads, armrests, arm pads, laterals, hip guides, etc...)	X	X		X
Inspect/listen for loose parts/rattling- ensure all fasteners are secure	X	X		X
Inspect that all pivot points are secured (do not overtighten) and operating smoothly/freely (lubricate as needed)	X		X	X
Limit Switches				
Check all safety lockouts and limit switch settings	X	X		X
Ensure DLO and/or RDS functions correctly	X	X		X
Pivots and Slide Channel Maintenance				
Ensure slide channels are free from dirt/ dust/ grime			X	X
Lightly lubricate main pivot points, using a general purpose oil *(see Section 6.3 - Lubrication)*			X	X
General				
Clean/wipe down cushion and back upholstery and arm pads *(avoid the use of bleach and harsh solvents that may damage upholstery)*			X	
Ensure upholstery does not have any rips or tears.			X	X
Inspect the postural (seat positioning) belt for any signs of wear. Ensure the buckle latches, and verify that the belt/strap mounting hardware is secure and undamaged	X	X		X

6.0 GENERAL SET-UP AND MAINTENANCE

6.3 Seating Module Lubrication (If applicable)

IMPORTANT! To maintain the smooth operation of your Elevating Seat Module, periodical lubrication of the main pivot points is recommended. Motion Concepts Seating Systems are pre-lubricated at the factory, however occasional lubrication using a general purpose oil will help to maintain optimal performance of your seating system. Avoid the use of heavy grease or high viscosity lubricants as this can cause a build-up of dirt and contaminates which could reduce overall performance.

LIFT-MODULE



***Warning!** Turn power off to the wheelchair prior to cleaning and lubricating

6.4 Cleaning Your Seating System

IMPORTANT! For detailed information on cleaning your power wheelchair, please also be certain to read and follow the instructions/warnings provided (separately) in your wheelchair base Owners Manual.

IMPORTANT! Regular cleaning will reveal loose or worn parts and can enhance the smooth operation of you power positioning system.

CAUTION! Risk of Damage

- *Spraying your power positioning system with water or any type of liquid may permanently damage the electronics. Never spray the seating system with any type of water or liquid.*
- *Cleaning solvents containing alcohols or phenols may cause damage to upholstery and plastic surfaces, and should be avoided.*

Cleaning Upholstery, Cloth, Vinyl:

Lukewarm water and a mild non-abrasive soap may be used to clean the upholstery as needed. For add-on devices (i.e. seat and back cushions, etc..) refer to the specific laundering instructions in the user manual provided with the device. *Contact the device manufacture directly for cleaning protocols related to severely stained/ contaminated cushions and upholstery.*

6.0 GENERAL SET-UP AND MAINTENANCE

6.4 Cleaning Your Seating System *(...cont'd)*

Cleaning Metal Surfaces:
Hot water and a mild detergent on a soft cloth should be used for cleaning metal surfaces. Wipe down with a damp cloth. Dry surface by wiping surface with a dry cloth.

Cleaning Plastic Surfaces:
Hot water and a mild detergent on a soft cloth should be used for cleaning plastic surfaces. Wipe down with a damp cloth. Dry surface by wiping surface with a dry cloth.

6.5 Battery Charging

WARNING! *For detailed information on charging your powerbase batteries, please be certain to read and follow the instructions provided by the powerbase manufacturer & the battery charger manufacturer.*

IMPORTANT INFORMATION ON BATTERY CHARGING:

- **Do Not** use the charge level indicator on a joystick display to determine the existing battery charge. The joystick display indicates surface voltage only, and may not be the true charge. *(This can be likened to charging a cell phone; if placed on its charger for a brief time, a cell phone display will often indicate that the batteries are fully charged, however the cell phone quickly goes dead once it is used).*
- Heavily depleted batteries require more time to recharge. Insufficient charge time may result in the supply of low voltage battery output to the electronics of the power positioning system. Low voltage output can produce longer duty-cycles and overheating, which will reduce the life-cycle of these electronics.
- Smaller **on-board chargers** are **not sufficient** to recharge rehab-style power products.
- Batteries that require more frequent charging or take longer to charge than normal, may need to be replaced.

RECOMMENDED CHARGING PROCEDURES:

NORMAL CHARGING:

Allow **8 hours** for normal charging. (*Note: To prolong the life of a battery, frequent charging is recommended, rather than only charging when necessary).*

HEAVILY DEPLETED BATTERIES:

Severely discharged batteries may require in excess of **16 hours** to be properly charged and equalized. (*Note: be certain to understand the charge status indicators on the battery charger- refer to the charger manual).*

6.6 Battery Testing

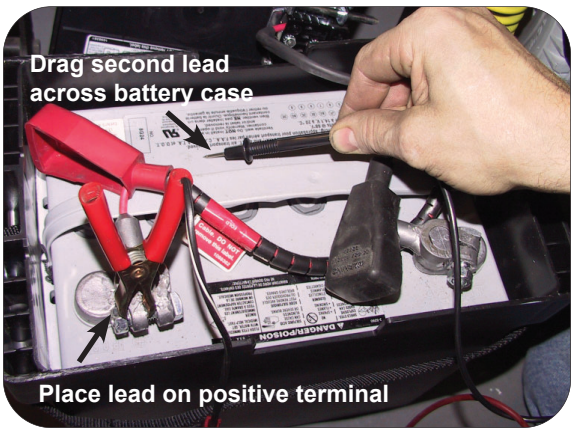
6.6.1 BATTERY CASE DRAW TEST

1. Inspect battery for signs of corrosion, moisture and/or dirt that could lead to unnecessary discharge of the battery.

2. Test with Voltmeter by placing one lead on the Positive (+) RED battery terminal

3. Drag the other lead across the battery case (in different locations).

4. Voltmeter should read **0 (zero)** if there is no discharge from the battery.



6.0 GENERAL SET-UP AND MAINTENANCE

6.6.2 NO LOAD VOLTAGE TESTING

Test to determine the state of charge of the battery. Refer to the illustration below for testing instructions.

WARNING! Risk of Serious Injury or Device Damage

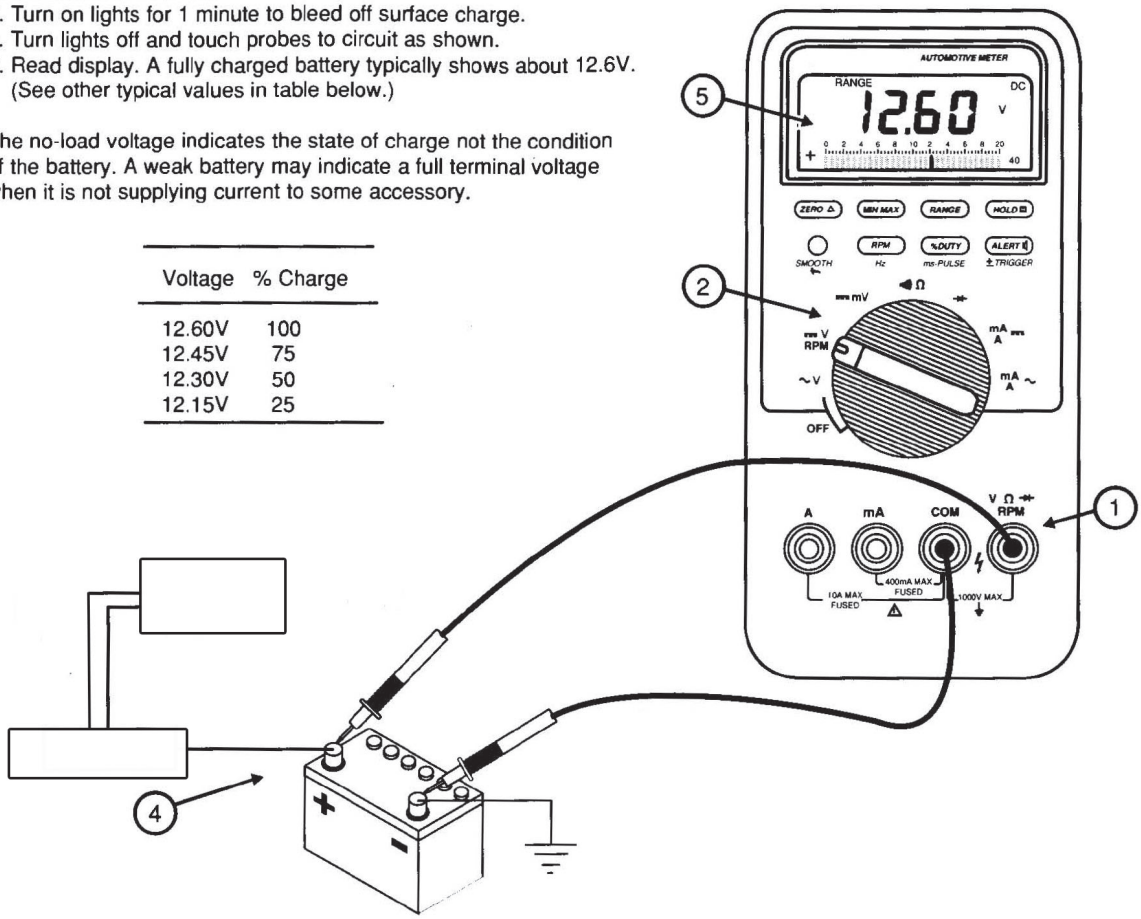
- *NEVER attempt a voltage measurement with a test lead in the AMP (A) or MILLIAMP (mA) input terminal. You may be injured or cause damage to the voltmeter.*

TESTING INSTRUCTIONS:

1. Insert test leads in the input terminals shown.
2. Set switch to volts dc.
3. Turn on lights for 1 minute to bleed off surface charge.
4. Turn lights off and touch probes to circuit as shown.
5. Read display. A fully charged battery typically shows about 12.6V. (See other typical values in table below.)

The no-load voltage indicates the state of charge not the condition of the battery. A weak battery may indicate a full terminal voltage when it is not supplying current to some accessory.

Voltage	% Charge
12.60V	100
12.45V	75
12.30V	50
12.15V	25



If you have any concerns or questions regarding your Motion Concepts Contour Static (Captain) Seat please contact our Technical Service Department for assistance.

USA: 888-433-6818 **CAN:** 800-680-4191

7.0 ELECTRO-MAGNETIC INTERFERENCE (EMI) INFORMATION

ELECTRO-MAGNETIC INTERFERENCE WARNING

WARNING! It is very important that you read this information regarding the possible effects of electromagnetic interference (EMI) on your Motion Concepts Contour Static (Captain) Seat and your powered wheelchair base. Please also be certain to read the EMI Warnings provided in the user manual for your wheelchair power base.

In order to minimize the risks associated with electromagnetic interference, please review and follow the safety information and warnings provided herein.

7.1 Electromagnetic Interference (EMI) from Radio Wave Sources

7.1.1 What is EMI?

WARNING!
Electromagnetic interference (EMI) comes from radio wave sources such as radio transmitters and transceivers. (A "transceiver" is a device that both sends and receives radio wave signals). Powered wheelchairs including the power positioning system may be susceptible to electromagnetic interference emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios and cellular phones. EMI can also be produced by conducted sources or electrostatic discharge (ESD).

7.1.2 What are the effects of EMI?

WARNING! Risk of serious injury and/or wheelchair damage and/or property damage.
• Electromagnetic interference from radio wave sources can cause the powered wheelchair, without warning, to release its brakes, move by itself or activate/move in unintended directions.
• EMI can also permanently damage the wheelchair's control system.

7.1.3 What are the sources of EMI?

WARNING! There are a number of sources of electromagnetic interference in your everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. The sources of radiated EMI can be broadly classified into three categories:

i. Hand-Held Portable Transceivers* *(typically with an antenna mounted directly on the transmitting unit)*
Examples include:

• Mobile phones;
• Citizen band (CB) radios;
• "Walkie-talkies";
• Security, fire and police radios;
• Lap-top computers (with phone or fax);
• Electronic article surveillance systems;
• Other personal communication devices;

***NOTE:** These devices can transmit signals while they are "ON", even when they are not being used.*

ii. Medium Range Mobile Transceivers- such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antennae mounted on the outside of the vehicle; and

7.0 ELECTRO-MAGNETIC INTERFERENCE (EMI) INFORMATION

7.1.3 What are the sources of EMI? *(...cont'd)*

iii. Long Range Transmitters and Transceivers- such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

NOTE: The following devices are not likely to cause EMI problems to your powered wheelchair: Cordless phones, laptop computers (without phone/fax), AM/FM radios, TV sets, CD players, and small appliances, such as electric shavers and hair dryers.

WARNING! EMI from the Wheelchair
Operation of your powered wheelchair and/or power positioning system can potentially disturb the performance other electro-magnetic fields, such as those emitted by the alarm systems of shops.

7.1.4 Immunity Levels

IMPORTANT! The intensity of the interfering EM energy is measured in volts per meter (V/m). Each powered wheelchair system can resist EMI up to a certain intensity. This is called its "immunity level". At this time, an immunity level of 20 V/m is recognized as a generally achievable and useful immunity level to protect against most common sources of radiated EMI. The higher the immunity level, the greater the protection.

Testing was conducted for Captain Seat installed onto an Invacare TDX-SP2 power base. The test system was found to be immune to at least 20 V/m.

WARNING! Increased Risk of EMI/RFI

• Adding additional input devices, such as specialty controls (e.g.; sip 'n puff, head arrays), proportional controls, and/or switch controls to your powered wheelchair system can affect the immunity level of the powered wheelchair. Parts not specifically tested or parts from other suppliers may increase the risk of EMI. Please refer to the EMI prevention recommendations and warnings provided in **section 7.1.5**

• Modification of any kind to the electronics of the power positioning system as manufactured by Motion Concepts may adversely affect the radio frequency interference immunity (RFI) levels.

• Motion Concepts does not provide a Battery Charger with our power positioning systems. Use only the approved and tested battery charger provided by the wheelchair base manufacturer.

7.1.5 Recommendations to reduce the risk of EM interference with your powered wheelchair

CAUTION! Electromagnetic radio waves become more intense as you get closer to the source. For this reason, extra caution should be exercised around portable hand-held devices. A person using one of these devices can unintentionally bring high levels of EM energy close to your wheelchair's control system, which can affect powered wheelchair movement and braking.

WARNING! Risk of Serious Personal Injury and Damage.
The following warnings are recommended to prevent the risk of serious personal injury and to prevent possible interference with the control system of the powered wheelchair.

• Do not turn on personal communications devices, such as mobile phones, or operate hand held transceivers (transmitters- receivers), such as citizens band (CB) radios, while the powered wheelchair is turned ON.

7.0 ELECTRO-MAGNETIC INTERFERENCE (EMI) INFORMATION

7.1.5 Recommendations to reduce the risk of EMI with your powered wheelchair *(...cont'd)*

WARNING! Risk of Serious Personal Injury and Damage.
The following warnings are recommended to prevent the risk of serious personal injury and to prevent possible interference with the control system of the powered wheelchair.

• Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.

• If unintended movement or brake release occurs, turn the wheelchair OFF as soon as it is safe to do so.

• Be aware that adding accessories or components, or modifying the power positioning system or powered wheelchair, may make it more susceptible to EMI. Parts not specifically tested or aftermarket parts from other suppliers have unknown EMI properties. ***NOTE:*** *There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair*.

• Promptly report all incidents of unintended movement of the power positioning system and/or powered wheelchair (including brake release), and note whether there was a source of EMI near the wheelchair at the time of occurrence. Contact:

Motion Concepts, Customer Service Department: **CAN** (800) 680-4191

CANADA
Motion Concepts
505 Cityview Blvd., Unit 1
Vaughan, Ontario
L4H 0L8

Tel (local): 905-695-0134
Tel (toll free): 866-748-7943
Fax: 905 695 0138
Tech Service: 800-680-4191
@ info@motionconcepts.com
www. www.motionconcepts.com

USA
Motion Concepts
700 Ensminger Rd, Suite 112
Tonawanda, New York
14150

Tel.: 716-447-0050
Tel (toll free): 866-433-6818
Fax: 888-433-6834
Tech Service: 888-433-6818

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