



TB-FLEX™

BASIC OPERATION INSTRUCTIONS



QUANTUM®

PROVIDING GREATER INDEPENDENCE

WARNING!

A Quantum Rehab Provider or a qualified technician must perform the initial setup of this power chair and must perform all of the procedures in this manual.

The symbols below are used throughout this owner's manual and on the power chair to identify warnings and important information. It is very important for you to read them and understand them completely.

WARNING!

Indicates a potentially hazardous condition/situation. Failure to follow designated procedures can cause either personal injury, component damage, or malfunction. On the product, this icon is represented as a black symbol on a yellow triangle with a black border.

MANDATORY!

These actions should be performed as specified. Failure to perform mandatory actions can cause personal injury and/or equipment damage. On the product, this icon is represented as a white symbol on a blue dot with a white border.

PROHIBITED!

These actions are prohibited. These actions should not be performed at any time or in any circumstances. Performing a prohibited action can cause personal injury and/or equipment damage. On the product, this icon is represented as a black symbol with a red circle and red slash.

Intended Use

A wheelchair component is a device intended for medical purposes that is generally sold as an integral part of a wheelchair, but may also be sold separately as a replacement part.

Regarding Devices for Prescription Use

WARNING!

CAUTION! Federal law restricts this device to sale by or on the order of a physician or other certified personnel licensed by the law of the State (US only) or region in which this personnel practices to use or order the use of the device.

NOTE: These instructions are compiled from the latest specifications and product information available at the time of publication. We reserve the right to make changes as they become necessary. Any changes to our products may cause slight variations between the illustrations and explanations in this manual and the product you have purchased. The latest/current version of this manual is available on our website.

NOTE: This product is compliant with WEEE, RoHS, and REACH directives and requirements.

NOTE: This product meets IPX4 classification (IEC 60529).

NOTE: This product and its components are not made with natural rubber latex. Consult with the manufacturer regarding any after-market accessories.



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Product Safety Symbols

The symbols below are used on the seating system to identify warnings, mandatory actions, and prohibited actions. It is very important for you to read and understand them completely.



Read and follow the information in the owner's manual.



Avoid exposure to rain, snow, ice, salt, or standing water whenever possible. Maintain and store in a clean and dry condition.



EMI/RFI—This product has been tested and passed at an immunity level of 20 V/m.



Maximum seating weight



Pinch/Crush points exist.



Consult your Quantum Rehab Provider before making any changes to your seating system configuration.



Do not expose to heat sources such as open flame or sparks.



No smoking



Cover only—Maximum washing temperature 60°C (140°F)



Do not tumble dry.



Do not iron.



Do not bleach.



The TB-Flex™ Seat

The TB-Flex Seat is a unique seating system designed specifically for the Quantum Power Chair. It is fully adjustable to meet the individual needs of the user, and it is mounted to a Quantum power base to provide maximum maneuverability.

Reusable hook and loop fasteners are included in your owner's package for use in attaching the seat cushion to the seat base. These fasteners are not intended for use on cushions with anti-skid material, as they may damage the seat cushion.

Figure 1 provides information on the TB-Flex Seat components. The TB-Flex Seatback is described in "Height and Width Adjustments for TB-Flex Seatback" (**figure 13**). Use these diagrams to familiarize yourself with the function and location of each component before using the TB-Flex Seat.

NOTE: Refer to the manual that was supplied with your controller for information on joystick operation. If your TB-Flex Seat is equipped with a different operating device, refer to the operation manual supplied with that device and/or your power chair owner's manual.

Precautionary Guidelines

Before operating the TB-Flex Seat, please read the following. These guidelines are provided for your benefit and will aid you in the safe operation of the seating system.

- Turn off the power before you are seated in the TB-Flex Seat.
- Always have assistance when you are being seated in the TB-Flex Seat.
- Follow all of the procedures and heed the warnings as explained in your power chair owner's manual and Consumer Safety Guide.

WARNING!

The center of gravity of your seating system was factory set to a position that meets the needs of the demographic majority of users. Your Quantum Rehab Provider has evaluated your seating system and made any necessary adjustments to suit your specific requirements. Do not change your seating configuration without first contacting Quantum or your Quantum Rehab Provider.

Should the fittings on your seating system become loose, report the problem immediately to your Quantum Rehab Provider.

In the event of a loss of power to the power chair, transfer to a safe position, seeking assistance if needed. Contact your Quantum Rehab Provider immediately to report the incident.

Your seating system is not approved for use as a seat in any vehicle. Use the seats and occupant restraints provided by the manufacturer of the vehicle.

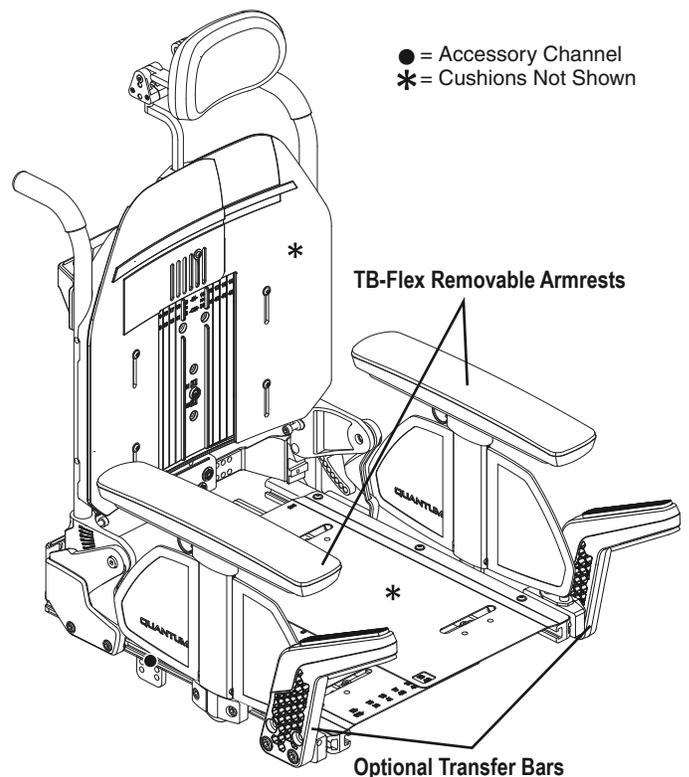


Figure 1. TB-Flex Seat Components

WARNING!

Quantum Rehab strongly recommends that you do not smoke cigarettes while seated in your seating system although the seating system has passed the necessary testing requirements for cigarette smoking. You must adhere to the following safety guidelines if you decide to smoke cigarettes while seated in your seating system.

- Do not leave lit cigarettes unattended.
- Keep ashtrays a safe distance from the seating system.
- Always make sure cigarettes are completely extinguished before disposal.

PROHIBITED!

Avoid exposure to rain, snow, ice, salt, or standing water whenever possible. Maintain and store in a clean and dry condition.

MANDATORY!

Do not exceed the weight capacity of your power chair or 136 kg (300 lbs.), whichever is less.

Operating the TB-Flex Seat

The TB-Flex Seat may be equipped with a seatback, which is height and width adjustable, and may be operated through a controller or a specialty controller.

Range of Motion

Your TB-Flex Seat may provide up to 30° of tilt, 25.4 cm (10 in.) of lift, may recline 85°-120°, and may tilt/recline up to 120°. **See figure 3.**

There may be a power inhibit on your TB-Flex Seat that will not allow you to drive your power chair while in the tilt position. A full drive inhibit will activate at a predetermined factory-programmed tilt angle. **See figure 2.**

⚠ WARNING!

Do not attempt to bypass, remove, reprogram, and/or adjust the full or partial inhibits that are pre-programmed at factory settings. Failure to heed this warning may result in injury.

Check the immediate area to ensure nothing is trapped in the mechanism before operating the tilt, recline, and/or lift features. Keep clear prior to and during movement.

NOTE: Do not make any changes to your seating configuration without contacting your Quantum Rehab Provider.

	Recline Lockout	Tilt Lockout	Elevate Lockout	1/4 Speed	Full Drive Lockout
Elevated				X	
Tilted more than 20°			X		X
Reclined more than 20°			X		X
Tilt/reclined more than 110°	X	X	X		X

Figure 2. Inhibit Matrix

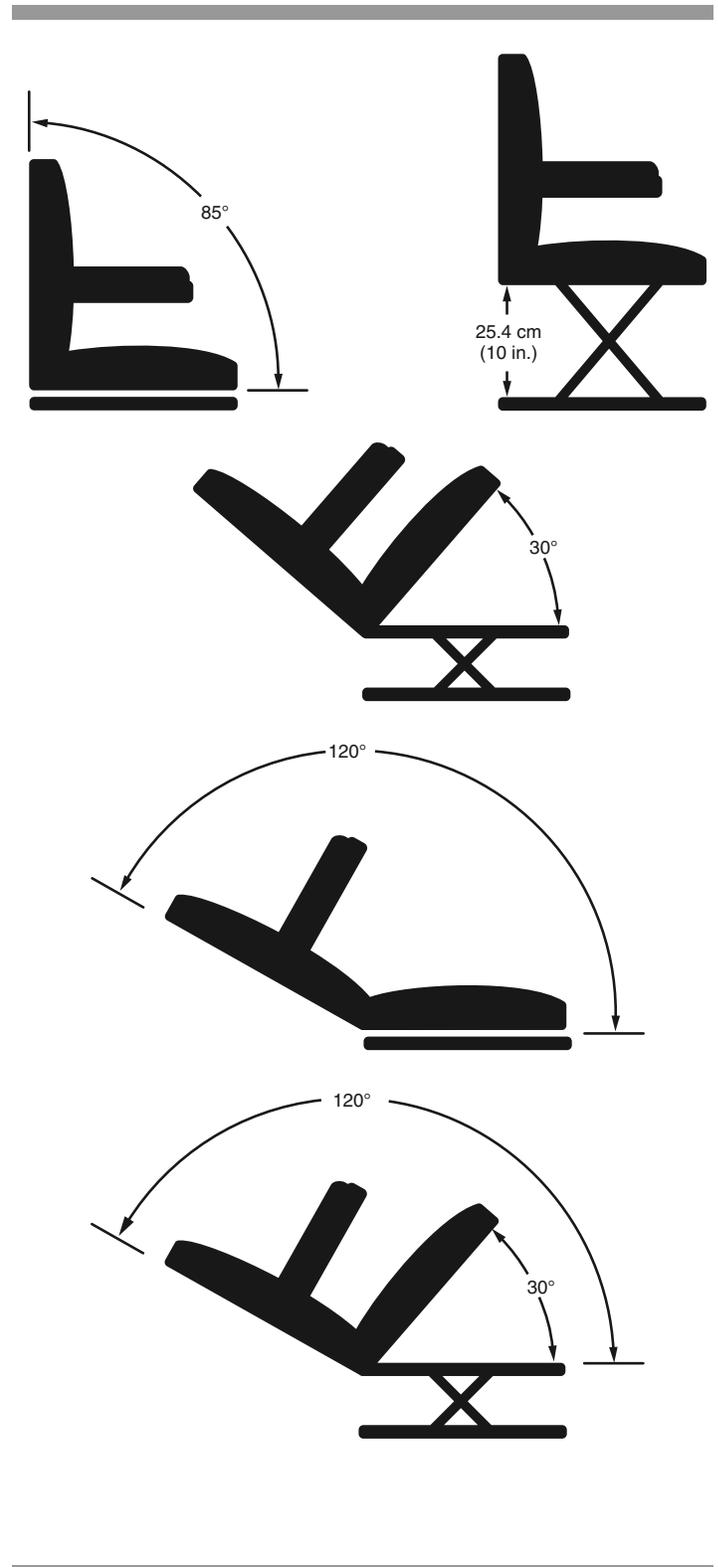


Figure 3. TB-Flex Seat Range of Motion

Flip-forward Back Canes (Optional)

The flip-forward back canes allow the user to flip the seatback forward for easier transportation. **See figure 4.** Your seating system may be equipped with flip-forward back canes.

To flip the seatback forward:

1. Remove the detent pin. **See figure 5.**
2. Fold the seatback down.

To return the seatback to an upright position:

1. Lift the seatback up and place in the upright position.
2. Reinstall the detent pin and ensure all components are secure. **See figure 5.**

WARNING!

Ensure the detent pin is properly inserted before sitting in your power chair.

TB-Flex Removable Armrests

The TB-Flex Removable Armrests are available as quick-release or with an armrest lever. Both types can be adjusted and easily removed for easier transfer onto and off of the power chair. The total height adjustment range is 12.7 cm (5 in.) in 2.54-cm (1-in.) increments. This range is measured from the top of the seat pan to the top of the armrest pad. The total height adjustment range is 22.86-35.56 cm (9-14 in.).

You may need the following to make comfort adjustments:

- Metric hex key set
- Metric open-ended wrench
- Phillips screwdriver

WARNING!

Do not attempt to lift or move your power chair or seating system by any of its removable parts, including the armrest(s), front rigging(s), seat cushions, seatback, shrouds, or controller. Use only solid, non-removable frame components to lift or move your power chair or seating system.

Avoid putting all of your weight on the power chair armrests and do not use the armrests for weight-bearing purposes, such as transfers. Such use may cause the power chair to tip, resulting in a fall from the power chair and personal injury.

The controller and controller bracket are non-load bearing items on your seating system. Do not use the controller or controller bracket for weight-bearing purposes, such as transfers. Such use may cause damage to these components, resulting in a fall from the seating system and personal injury.

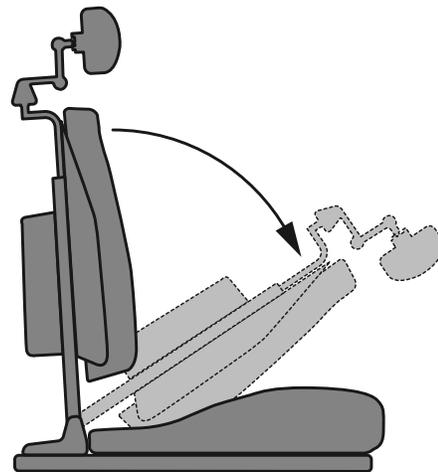


Figure 4. Flip-forward Back Canes (Disengaged)

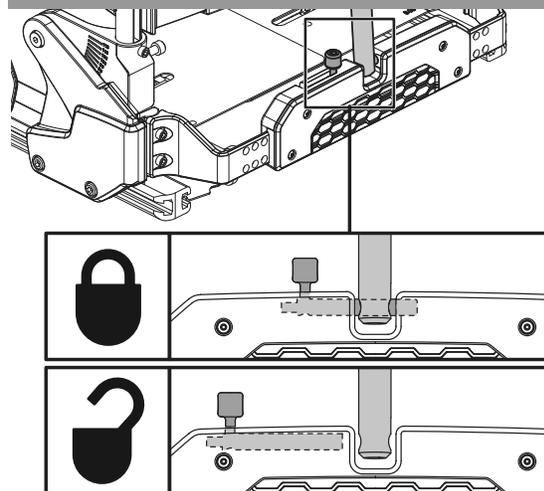


Figure 5. Flip-forward Back Canes (Detent Pin)

To remove the quick-release armrest assembly:

1. Rotate the armrest lever counterclockwise.
2. Lift up the armrest assembly. **See figure 6.**

To install the quick-release armrest assembly:

1. Place the armrest assembly into the armrest block. **See figure 6.**
2. Rotate the armrest lever clockwise.

To adjust the height:

1. Loosen but do not remove the setscrew by turning it counterclockwise with a 2 mm hex key. **See figure 6.**
2. Pull the detent pin. Raise or lower the armrest to the desired height then release the detent pin.
3. Tighten the setscrew by turning it clockwise with a 2 mm hex key.
4. Repeat for the other armrest, if necessary.

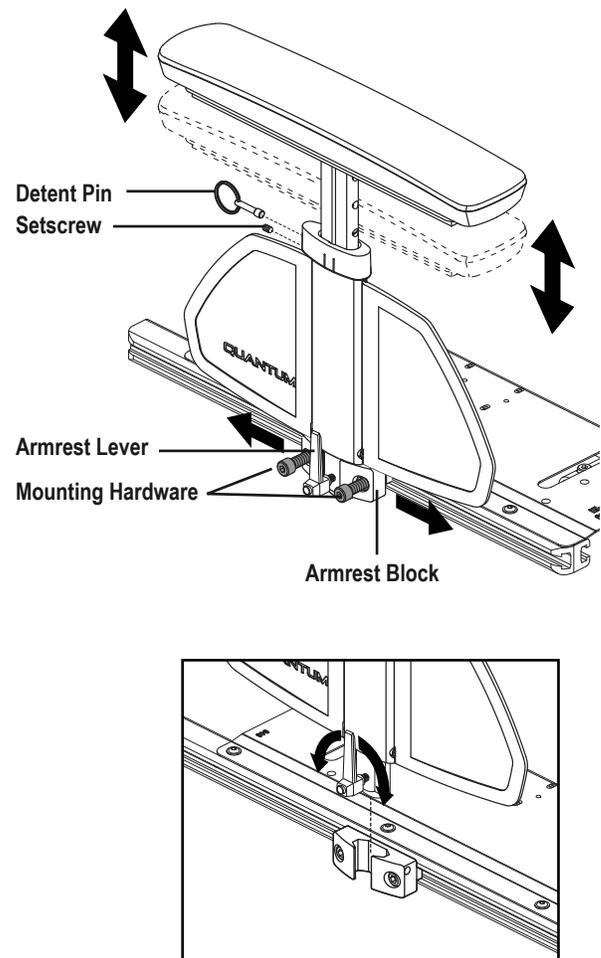


Figure 6. Removal/Installation of TB-Flex Quick-Release Armrests

To remove the armrest assembly using the armrest lever:

1. Rotate the armrest lever forward. **See figure 7.**
2. Lift up the armrest assembly.

To install the armrest assembly using the armrest lever:

1. Place the armrest assembly into the armrest block. **See figure 7.**
2. Rotate the armrest lever backward.

To adjust the height:

1. Loosen but do not remove the setscrew by turning it counterclockwise with a 2 mm hex key. **See figure 7.**
2. Pull the detent pin. Raise or lower the armrest to the desired height then release the detent pin.
3. Tighten the setscrew by turning it clockwise with a 2 mm hex key.
4. Repeat for the other armrest, if necessary.

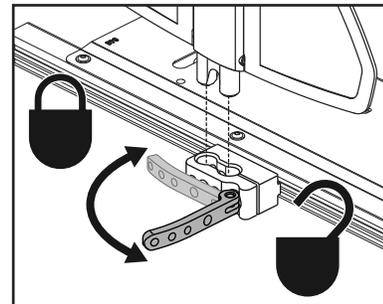
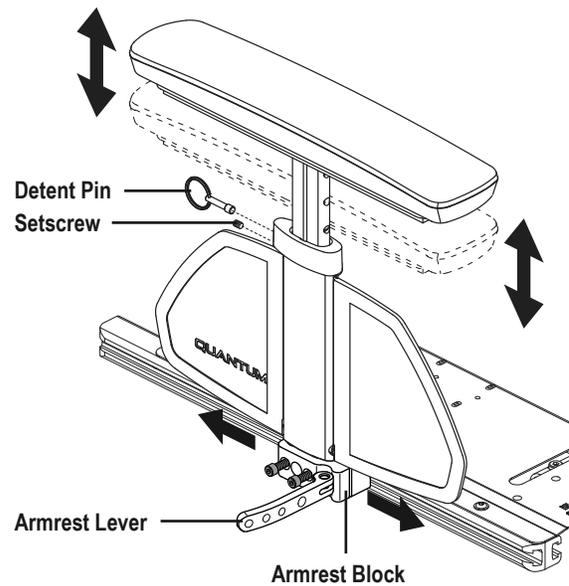


Figure 7. Removal/Installation of TB-Flex Armrests with Armrest Lever

Two Post Armrests (Optional)

The height adjustment range for the Two Post Armrest is 9–13 in. (22.86–33.02 cm) in 1-in. (2.54-cm) increments. This range is measured from the top of the seat rail to the top of the armpad. You can also flip the armrests or remove them for transfer. **See figure 8.**

To remove the armrest assembly:

1. Push the spring-loaded lever downward and pull up on the front of the armrest. **See figure 8.**
2. Remove the detent pin from the back of the seat. **See figure 8.**
3. Pull up on the rear of the armrest to remove the assembly.

To install the armrest assembly:

1. Set the rear of the armrest into the rear seat receiver and install the detent pin. **See figure 8.**
2. Rotate the armrest assembly down.
3. Push the front of the armrest into the front seat receiver and rotate the spring-loaded lever to the horizontal position to lock into place.

To adjust the armrest height:

1. Push the spring-loaded lever inward. **See figure 9.**
2. Move the armrest up or down to the desired height.
3. Rotate the spring-loaded lever outward and lock the armrest in place. If necessary, move the armrest up or down to ensure that the armrest is secure.

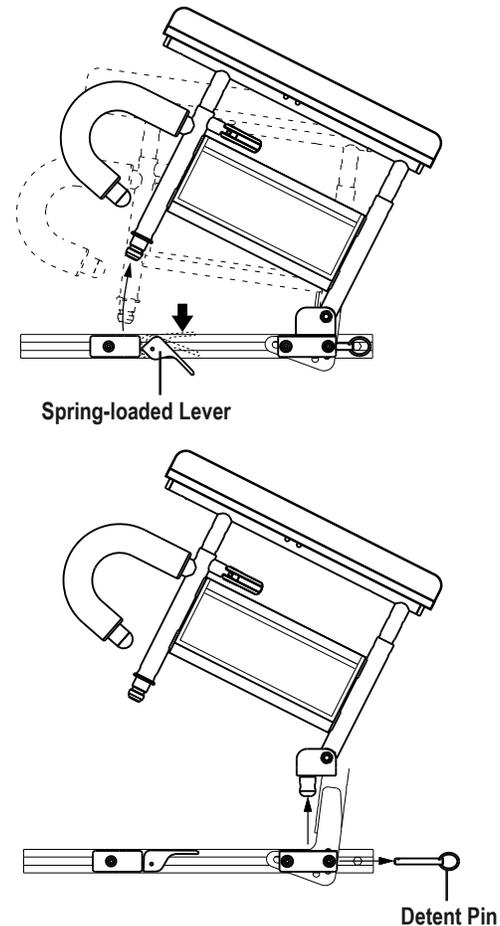


Figure 8. Two Post Armrest Removal and Installation

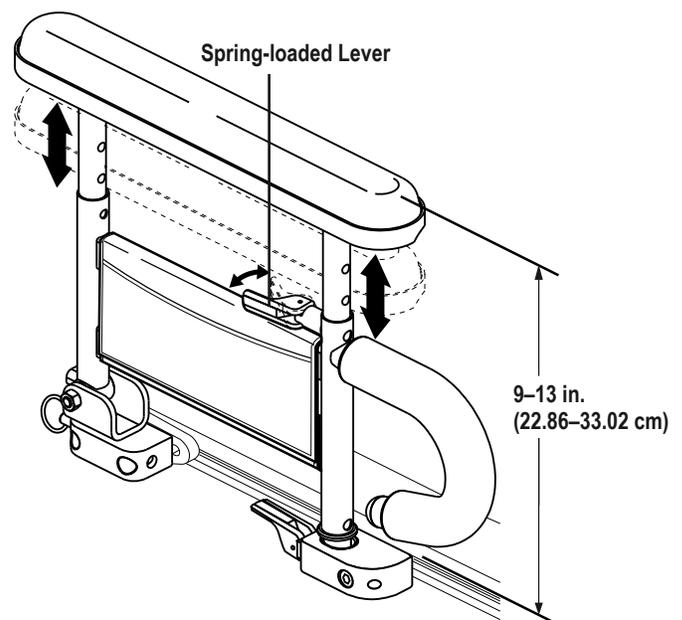


Figure 9. Two Post Armrest Height Adjustment

Transfers (Optional)

Optional transfer bars are available. Transfer bars are designed to make it easier to reposition while seated in the power chair and to transfer into or out of the power chair. Refer to the Consumer Safety Guide provided with your power chair owner's manual for additional information on transfers. **See figure 10.**

Controller Position

You can position the controller for either left-hand or right-hand use. You can also adjust the extension of the controller from the armrest and the height of the controller.

WARNING!

Use correct tie-down points for controller harness to prevent the harness from getting caught in the drive tires, pinched in the seat frame, or damaged when passing through doorways.

To change the controller extension:

1. Turn off the power to the controller.
2. Remove the controller harness from the clips securing it to the armrest.
3. Flip then rotate the release lever to loosen the clamp. **See figure 11.**
4. Slide the controller into or out of the armrest to the desired position.
5. Rotate and flip the release lever to tighten the clamp.

To change the controller height:

1. Turn off the power to the controller.
2. Flip then rotate the release lever to loosen the clamp. **See figure 11.**
3. Adjust the controller to the desired height.
4. Rotate and flip the release lever to tighten the clamp.
5. Route the controller harness to the back of the power base.

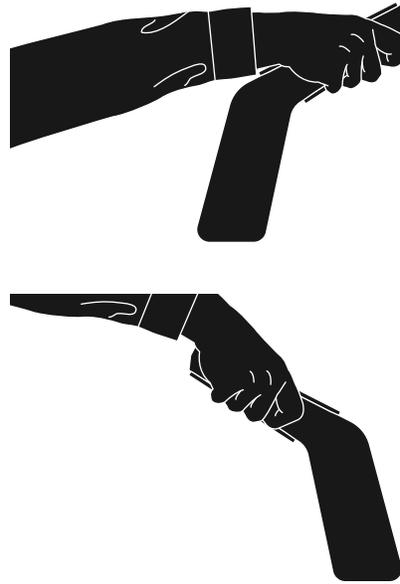


Figure 10. Transfer Bars (Optional)

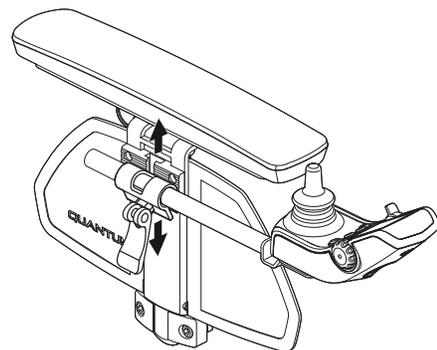
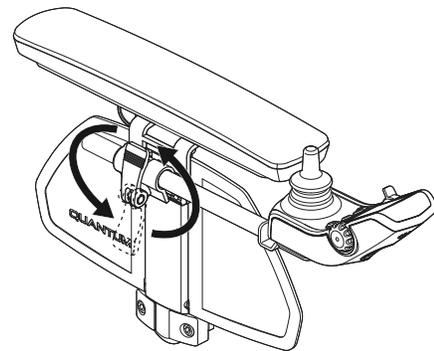


Figure 11. Controller Height Adjustment

Manual Recline (Optional)

If your TB-Flex Seat is equipped with the Manual Recline Option, you can adjust the seatback to angles ranging from the minimum recline position (85° from the seat base) to the maximum recline position (120° from the seat base). **See figure 12.** When the seat is reclined past 110°, the chair will be in full inhibit. Returning the seat to an angle of less than 110° will restore power to the motors.

⚠ WARNING!

Never recline the seatback while the chair is tilted. This could cause severe injury to the user. A safety feature will not allow you to tilt the seat while it is reclined past 110°. To reactivate the tilt feature, return the reclining seatback to an upright position.

To recline the seatback:

1. Grasp the handle at the top of the seatback.
2. Squeeze the recline release handle, and position the seatback to the desired angle. **See figure 12.**
3. Release the handle to latch the seatback into position.

Angle Adjustable (Optional)

If your TB-Flex Seat is equipped with the Angle Adjustable Option, you can adjust the seatback to angles ranging from the minimum recline position (85° from the seat base) to the maximum recline position (135° from the seat base). **See figure 13.** When the seat is reclined past 110°, the chair will be in full inhibit. Returning the seat to an angle of less than 110° will restore power to the motors.

⚠ WARNING!

Never recline the seatback while the chair is tilted. This could cause severe injury to the user. A safety feature will not allow you to tilt the seat while it is reclined past 110°. To reactivate the tilt feature, return the reclining seatback to an upright position.

To adjust the seatback:

1. Grasp the strap at the bottom of the seatback.
2. Pull the strap to release the seatback, and position the seatback to the desired angle. **See figure 13.**
3. Release the strap to latch the seatback into position.

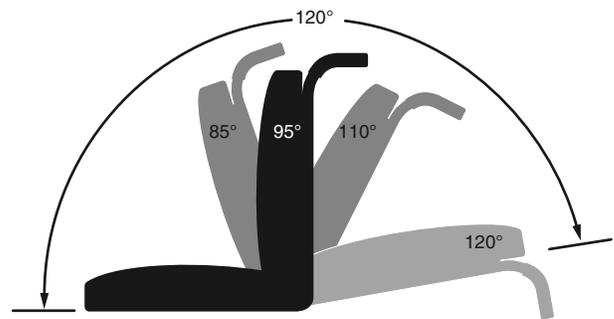


Figure 12. Manual Recline—Minimum and Maximum Recline Angles

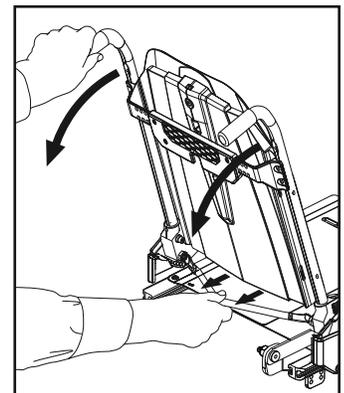
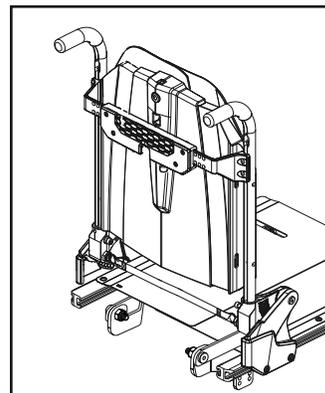
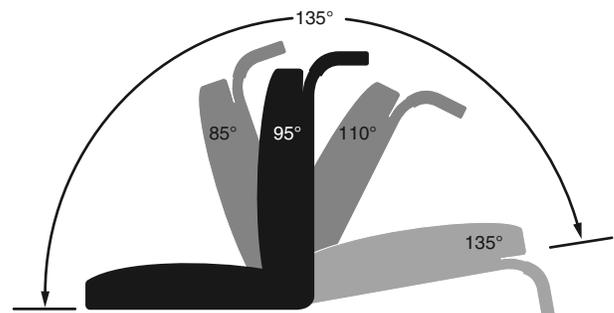


Figure 13. Angle Adjustable—Minimum and Maximum Recline Angles

The TB-Flex Seatback (Optional)

The TB-Flex Seatback can be adjusted for height and width.

To adjust the height and/or the width of the seatback:

1. Loosen the hardware. **See figure 14.**
2. Place the seatback into the desired height and/or desired width.
3. Tighten the hardware.

Installation and Use

The TB-Flex Seatback consists of a seatback cushion and lumbar support that can be placed as needed for user comfort and positioning. They are attached to the seatback with reusable hook and loop fasteners or with hardware.

To place the TB-Flex Cushions on the chair:

1. Position the seatback cushion so that the reusable hook and loop fastener tabs face the seatback. Secure the cushion to the seatback using the reusable hook and loop fasteners.

WARNING!

Extreme temperatures can affect the temperature of your cushion components and may cause skin irritation. Use caution when your power chair has been used or stored in an extremely hot or cold environment.

Ensure all hardware is installed and tightened properly.

Cleaning

The seatback cushion can be easily cleaned.

WARNING!

Do not use bleach when washing the outer cover. Doing so may cause damage to the cover.

Follow all safety instructions for the proper use of the disinfectant and/or cleaning agent before applying it to your product. Failure to comply may result in skin irritation or premature deterioration of upholstery and/or power chair finishes.

To clean the seatback cushion cover:

1. Remove the seatback cushion from the seatback by detaching the reusable hook and loop fasteners that secure the cushion to the seatback and then pulling the cushion toward you.
2. Locate the zipper at the bottom of the cushion.
3. Unzip the cover and pull out the cushion.
4. Wash the cover in a washing machine at or below a temperature of 60°C (140°F).
5. Allow the cover to air dry.

WARNING!

Do not use bleach when washing the outer cover. Doing so may cause damage to the cover.

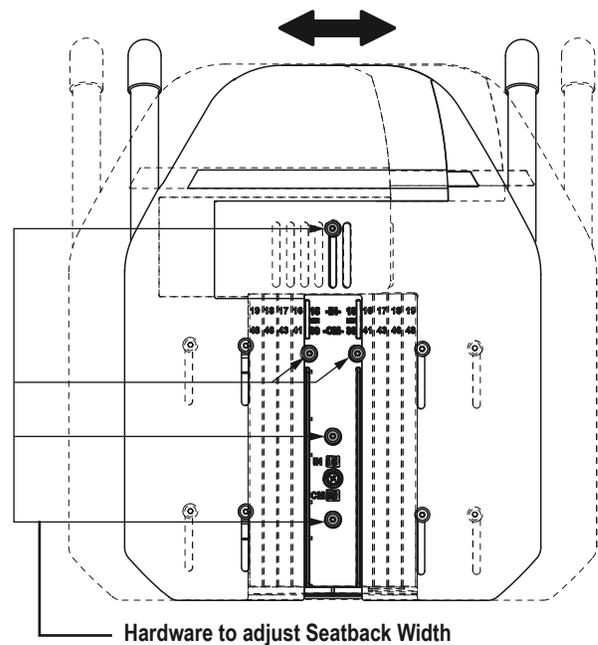
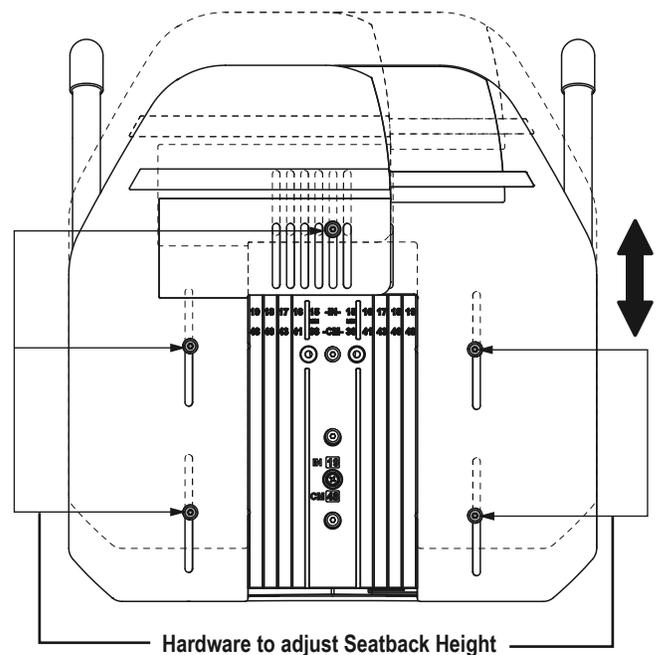


Figure 14. Height and Width Adjustments for TB-Flex Seatback

⚠ WARNING!

Never submerge the seatback cushion in water. Doing so may cause damage to the cushion.

Do not attempt to put the cover in a dryer. This may cause shrinking.

6. Once the cover is dry, re-cover the seatback cushion, position the seatback cushion so that the reusable hook and loop fastener tabs face the seatback. Place the cushion over any lumbar support(s) and then secure the cushion to the seatback using the reusable hook and loop fasteners.

⚠ WARNING!

Follow all safety instructions for the proper use of the disinfectant and/or cleaning agent before applying it to your product. Failure to comply may result in skin irritation or premature deterioration of upholstery and/or power chair finishes.

Headrest Adjustment

The headrest can be easily adjusted to different heights, depths, and angles.

To adjust the height, depth, or angle of the headrest:

1. Loosen the adjustment screws that correspond to the desired adjustments. **See figure 15.**
2. Adjust the headrest to the desired position.
3. Tighten the adjustment screws.

NOTE: Once adjustments have been made and the headrest is in the desired position, make sure that all of the hardware is tight.

⚠ WARNING!

Do not extend the overall headrest height more than 17.78 cm (7 in.) above the headrest bracket.

Storage

Some of the parts of your power chair are susceptible to extreme changes in temperature. Always keep your power chair between the temperatures of -8°C (18°F) and 50°C (122°F). It should be stored at room temperature in a clean and dry location.

Care and Maintenance

Your mobility product must be disposed of according to applicable local and national statutory regulations. Contact your local waste disposal agency or Quantum Rehab Provider for information on proper disposal of mobility product packaging, metal frame components, plastic components, electronics, batteries, neoprene, silicone, and polyurethane materials.

- Make sure all hardware is secured properly, but do not overtighten any hardware.
- To clean the TB-Flex Seat, wipe it with a cloth dampened with mild soap and water. Thoroughly dry the unit before using. To properly clean the TB-Flex Seatback cushion, follow the cleaning instructions in the “TB-Flex Seatback” section of this manual.

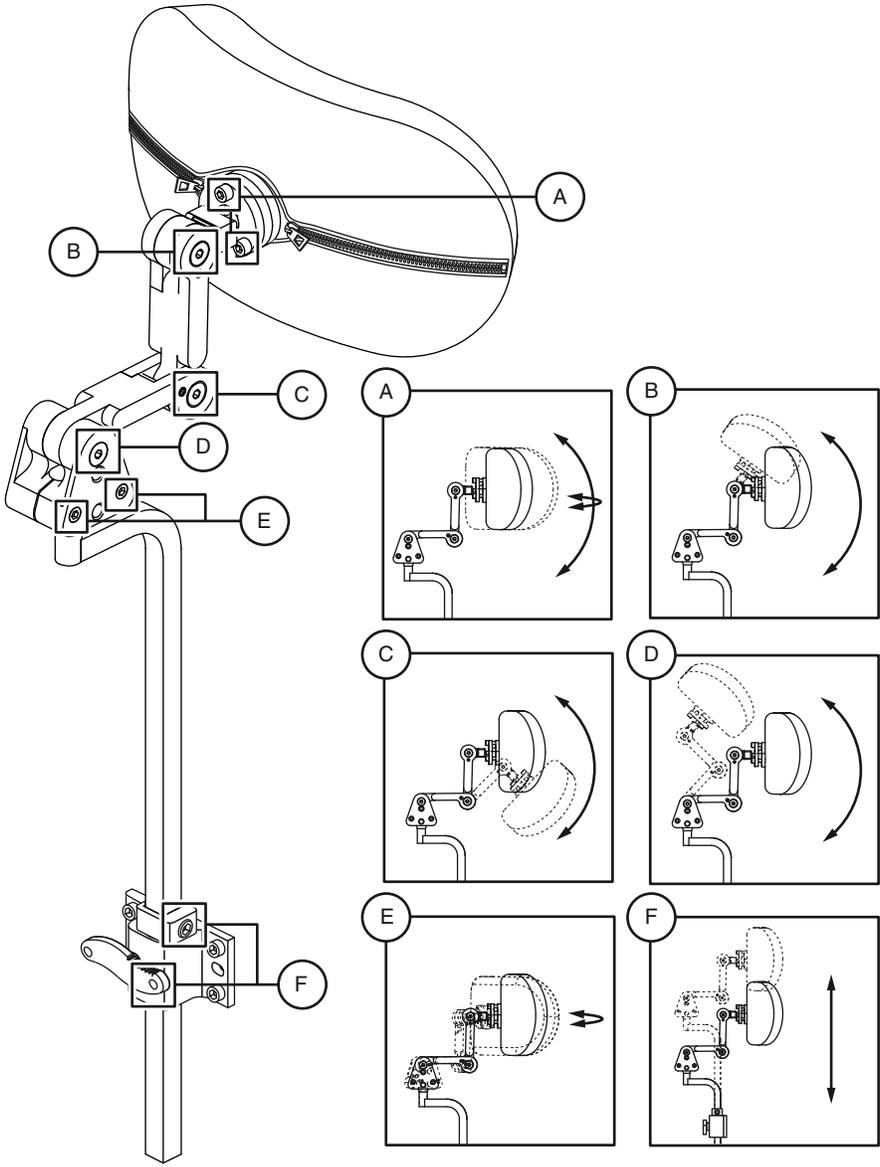


Figure 15. Headrest Adjustment Components

Warranty

Two-Year Limited Warranty

For two (2) years from the date of purchase, Quantum will repair or replace at our option to the original purchaser, free of charge, any of the following parts found upon examination by an authorized representative of Quantum to be defective in material and/or workmanship:

- Structural frame components
- Electronics
- Seatback cushion

Eighteen-Month Warranty (2-Year Limited Warranty in Canada and Europe)

For eighteen (18) months (two [2] years in Canada) from the date of purchase, Quantum will repair or replace at our option to the original purchaser, free of charge, any of the following parts found upon examination by an authorized representative of Quantum to be defective in material and/or workmanship:

- Actuator

Warranty service can be performed by a Quantum Rehab Provider or by Quantum. Do not return faulty parts to Quantum without prior consent. All transportation costs and shipping damage incurred while submitting parts for repair or replacement are the responsibility of the original purchaser.

Warranty Exclusions

- Upholstery and seating (unless otherwise noted)
- Repairs and/or modifications made to any part without specific consent from Quantum
- Circumstances beyond the control of Quantum
- Labor, service calls, shipping, and other charges incurred for repair of the product, unless specifically authorized by Quantum
- Damage caused by:
 - Battery fluid spillage or leakage
 - Abuse, misuse, accident, or negligence
 - Improper operation, maintenance, or storage
 - Commercial use or use other than normal

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from the date of purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.



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