

**Basic Operation Instructions** 

# Synergy<sup>™</sup> Seat





WARNING! A Quantum Rehab Provider or a qualified technician must perform the initial setup of this product and must perform all of the instructions in this manual.

The symbols below are used throughout this owner's manual and on the product 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.

NOTE: 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 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 power chair 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.



Use correct tie-down points for controller harness to prevent the harness from getting caught in the drive tires or pinched in the seat frame.



Maximum seating weight.



Pinch/crush points created during operation.

Indicates that this product conforms to the ANSI/RESNA WC/Vol. 4, Section 19/ISO 7176-19 standards for transport of an occupied power chair in a motor vehicle. If this label is not found on this power chair or on the seating system, this indicates that this product is not approved for use as a seat in a motor vehicle. In this case, the power chair occupant must transfer into one of the motor vehicle seats equipped with approved safety belt.



Pinch/crush points created during operation.



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

WELCOME to Quantum Rehab. The product you have purchased combines state-of-the-art components with **safety**, comfort, and styling in mind. We are confident that the design features will provide you with the conveniences you expect during your daily activities. Understanding how to **safely** operate and care for this product should bring you years of trouble free operations and service.

**Read** and **follow** all instructions, warnings, and notes in this manual before attempting to operate your product for the first time. You must also read all instructions, warnings, and notes contained in any supplemental instructional booklets for the controller, front riggings, and/or seating system that accompanied your mobility product before initial operation. Your **safety** depends upon you, as well as your provider, caretaker, or healthcare professional in using good judgement.

This manual is to be used in addition to the power base owner's manual that came with your power chair. If there is any information in this manual which you do not understand, or if you require additional assistance for setup or operation, please contact your Quantum Rehab Provider. Failure to follow the instructions, warnings, and notes in this manual and those located on your Pride/Quantum product can result in personal injury and/or product damage and will void Pride/Quantum's product warranty.

#### **Purchaser's Agreement**

By accepting delivery of this product, you promise that you will not change, alter, or modify this product or remove or render unusable or unsafe any guards, shields, or other safety features of this product; fail, refuse, or neglect to install any retrofit kits from time to time provided by Quantum to enhance or preserve the safe use of this product.

NOTE: If you ever lose or misplace your copy of this manual, contact us and we will be glad to send you a new one immediately.

#### The Synergy Seat

The Synergy Seat is a unique seating system designed specifically for the power chair. It is fully adjustable to meet the individual needs of the user, and it is mounted to a 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 Synergy Seat components. Use this diagram to familiarize yourself with the function and location of each component before using the Synergy Seat.



Figure 1. Synergy Seat and Options

#### **Precautionary Guidelines**

Before using the Synergy 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 Synergy Seat.
- Always have assistance when you are being seated in the Synergy Seat.
- Follow all of the procedures and heed the warnings as explained in your power chair owner's manual.

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 Pride Mobility Products or your Quantum Rehab Provider.



WARNING! Should the fittings on your Synergy Seating System become loose, report the problem immediately to your Quantum Rehab Provider.

WARNING! Your Synergy 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.

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



MANDATORY! Do not exceed the weight capacity listed in your power chair manual or 300 lbs. (136 kg), whichever is less. If equipped with a Synergy Seat HD, do not exceed the weight capacity of the power chair or 650 lbs. (295 kg), whichever is less.



WARNING! Possible pinch point hazard! Ensure all ventilator wires and tubes are routed properly to avoid component damage during seat adjustment and power chair operation. Follow the wire routing instructions provided by the manufacturer of the ventilator.

# NOTE: The addition of an optional vent tray to your Synergy Seat may change the overall weight, size, and/or center of gravity of your power chair. Do not make any changes to your seating configuration without contacting your Quantum Rehab Provider.

#### **Motor Vehicle Transport**

The Synergy Seat is not approved for use as a seat in a motor vehicle unless the power base is equipped with a manufacturer-approved transit securement system and the seat is labeled to show conformity to the standards of ANSI/RESNA WC/Vol. 4, Section 19/ISO 7176-19. Pride/Quantum recommends that the power chair user transfer into the vehicle seat and use the vehicle-installed restraint system if and whenever feasible. The power chair should then be stored and secured in the vehicle. In addition, all removable power chair parts, including the armrests, seat, front riggings, controller, and shrouds, should be removed and properly secured during motor vehicle transport.



WARNING! The Synergy Seating System is not approved for use as a seat in any vehicle unless it has been tested and approved for occupied use according to ANSI/RESNA WC/ Vol. 4, Section 19/ ISO 7176-19 standards. Use the seats and occupant restraints provided by the manufacturer of the vehicle. If your power chair is equipped with a manufacturer-installed transit securement system, please refer to the supplemental safety information provided with your power chair.

The steel brackets mounted to the front and rear of the Synergy Seating System (**see figure 2**) can provide securement points when full disassembly and stowage of the power chair is not feasible. These brackets should only be used with an unoccupied power chair that is secured by an approved securement system in accordance with the manufacturer's instructions. Pride makes no representation of suitability for use with specific securement systems nor can we anticipate the various situations that might arise in use of public transportation systems. For detailed instructions on the use of securement systems, refer to the manufacturer of the system used.



WARNING! The Synergy securement brackets are for unoccupied use only. The power chair occupant must transfer into the vehicle seat and use the vehicle-installed restraint system during motor vehicle transport.



Figure 2. Unoccupied Securement Brackets on a Synergy Seat

#### When securing the power chair for unoccupied transport, adhere to the following precautions:

- Always ensure that the power chair motors are in drive mode (drive engaged) and that the power chair controller is turned off.
- Secure the power chair in a forward-facing position in the vehicle.
- Attach tie-down straps (front and rear) only to the provided securement points. Tighten the straps to sufficiently remove all slack.



WARNING! Never attach tie-downs to adjustable, moving, or removable parts of the power chair such as armrests, front riggings, and wheels.

Position the anchor points for the rear tie-down straps directly behind the rear securement points on the power chair. The front tie-down straps should anchor to floor points that are spaced wider than the power chair to provide increased lateral stability.



WARNING! Ensure unoccupied power chairs are properly secured to the motor vehicle during transport. Power chairs that are not properly secured can become a hazard to vehicle passengers in the event of a crash, sudden stopping, or swerving, as the power chair could tip or slide out of place.

#### Seat Removal/Installation

The Synergy Seat can be disconnected from the power base to aid in transport or storage.



WARNING! Removing and installing your seating system should be accomplished with no fewer than two people.

#### To remove the Synergy Seat from the power base:

- 1. Remove the safety snap pins from all of the seat mount connectors. See figure 3.
- 2. Lift the Synergy Seat. One person should lift from the front of the seat and another should lift from the rear. Lift the seat straight up out of the seat mount connectors.

#### To install the Synergy Seat on the power base:

- 1. Lift the Synergy Seat above the power base. One person should lift from the front of the seat and another should lift from the rear.
- 2. Lower the seat so that the four seat towers are inserted into the four seat mount connectors. **See figure 3.**
- 3. Without removing the seat towers from the seat mount connectors, lift either the front or rear of the Synergy Seat and insert the safety snap pins to lock the seat at the desired height.
- 4. If an angled seat is desired, set the front of the Synergy Seat higher than the rear. The seat base angle can be adjusted to achieve up to 20° of posterior tilt (seat dump).

### NOTE: You may need to loosen the setscrews on the seat mount connectors on some power chairs.



Figure 3. Seat Installation/Removal

#### To remove the Synergy Seat from the Q6 Edge power base:

- 1. Remove the screws from all of the seat interface weldments. See figure 4.
- 2. Lift the Synergy Seat. One person should lift from the front of the seat and another should lift from the rear. Lift the seat straight up out of the seat interface weldments.

#### To install the Synergy Seat on the Q6 Edge power base:

- 1. Lift the Synergy Seat above the power base. One person should lift from the front of the seat and another should lift from the rear.
- 2. Lower the seat so that the four seat mounting brackets are inserted into the four seat interface weldments. **See figure 4.**
- 3. Without removing the seat mounting brackets from the seat interface weldments, lift either the front or rear of the Synergy Seat and insert the screws to lock the seat at the desired height.
- 4. If an angled seat is desired, set the front of the Synergy Seat higher than the rear. The seat base angle can be adjusted to achieve up to 20° of posterior tilt (seat dump).



Figure 4. Seat Installation/Removal on Q6 Edge

#### To remove the Synergy Seat from the Quantum/Jazzy 1450 power base:

- 1. Remove the screws from the four seat mounting brackets. See figure 5.
- 2. Lift the Synergy Seat. One person should lift from the front of the seat and another should lift from the rear. Lift the seat straight up out of the seat mounting brackets.

#### To install the Synergy Seat on the Quantum/Jazzy 1450 power base:

- 1. Lift the Synergy Seat above the power base. One person should lift from the front of the seat and another should lift from the rear.
- 2. Lower the seat so that the rails rest on the four seat mounting brackets. Install the screws through the seat mounting bracket and into the T-nuts installed into the bottom of the Synergy Seat rail. **See figure 5.**
- 3. Seat height adjustments can be achieved by removing the height adjustment screws. **See figure 5.** With the height adjustment screws removed, lift either the front or rear of the Synergy Seat and insert the screws through lock washers to set the seat at the desired height.
- 4. If an angled seat is desired, set the front of the Synergy Seat higher than the rear. The seat base angle can be adjusted to achieve up to 12° of posterior tilt (seat dump).



Figure 5. Seat Installation/Removal on Quantum/Jazzy 1450

#### **Flip-forward Back Canes**

The flip-forward back canes allow the user to flip the seatback forward for easier transportation.

#### To flip the seatback forward:

- 1. Rotate the release lever on both back canes toward the rear of the seat to unlatch the back canes. **See figure 6.**
- 2. Fold the seatback down.

#### To return the seatback to an upright position:

- 1. Lift the seatback up and place in the upright position.
- Rotate the release lever on both back canes toward the front of the seat to latch the back canes. See figure 7. Ensure a red sticker on the release lever is not visible.



WARNING! If a red sticker is visible, the release lever is not fully latched. Ensure both release levers are fully latched before sitting in your power chair.



Figure 6. Flip-forward Back Canes (Unlatched)



Figure 7. Flip-forward Back Canes (Latched)

NOTE: This manual will discuss toggle, joystick, and Attendant Control Module operations only. If your Synergy Seating System is equipped with a different operating device, please refer to the operation manual supplied with that device and/or your power chair owner's manual.

#### **Toggle Operation**

Your Synergy Seat may be equipped with either a 2-way toggle or one of three available 4-way toggles.

#### NOTE: Your Synergy Seat may be equipped with any number of these functions.

#### 2-way Toggle

- 1. To elevate, pull the toggle switch backward.
- 2. To return to the down position, push the toggle switch forward.

#### 4-way Toggle

- Seat Elevator Function (Optional)
- 1. To elevate the seat, push the toggle switch to the left.
- 2. To lower the seat, push the toggle switch to the left, release, then push to the left again.
- Combined Leg Rest Function (Optional)
- 1. To elevate both leg rests, push the toggle switch to the right.
- 2. To lower both leg rests, push the toggle switch to the right, release, then push to the right again.
- Independent Leg Rest Function (Optional)
- 1. To elevate the left leg rest, push the toggle switch to the left.
- 2. To lower the left leg rest, push the toggle switch to the left, release, then push to the left again.
- 3. To elevate the right leg rest, push the toggle switch to the right.
- 4. To lower the right leg rest, push the toggle switch to the right, release, then push to the right again.

NOTE: The power elevator option is not available when the independent leg rest option is selected.



Figure 8. 2-way Toggle Operation



Figure 9. 4-way Toggle Operation

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#### 4-way Button Toggle

- Seat Elevator Function (Optional)
- 1. To elevate the seat, push the toggle button to the left.
- 2. To lower the seat, push the toggle button to the left, release, then push to the left again.
- Combined Leg Rest Function (Optional)
- 1. To elevate both leg rests, push the toggle button to the right.
- 2. To lower both leg rests, push the toggle button to the right, release, then push to the right again.
- Independent Leg Rest Function (Optional)
- 1. To elevate the left leg rest, push the toggle button to the left.
- 2. To lower the left leg rest, push the toggle button to the left, release, then push to the left again.
- 3. To elevate the right leg rest, push the toggle button to the right.
- 4. To lower the right leg rest, push the toggle button to the right, release, then push to the right again.

#### Quad Push-Button Control Toggle

- Seat Elevator Function (Optional)
- 1. To elevate the seat, push the third button.
- 2. To lower the seat, push the third button again.
- Combined Leg Rest Function (Optional)
- 1. To elevate both leg rests, push the fourth button.
- 2. To lower both leg rests, push the fourth button again.
- Independent Leg Rest Function (Optional)
- 1. To elevate the left leg rest, push the third button.
- 2. To lower the left leg rest, push the third button again.
- 3. To elevate the right leg rest, push the fourth button.
- 4. To lower the right leg rest, push the fourth button again.

NOTE: The power elevator option is not available when the independent leg rest option is selected.



Figure 10. 4-way Button Toggle Operation



Figure 11. Quad Push-Button Control Toggle Operation

#### **Q-Logic Joystick Operation**

- 1. Push the On/Off and Mode Select Lever up once to power on the chair and the controller.
- 2. Push the On/Off and Mode Select Lever up several times until the seat screen is displayed on the LCD or push the key II select button once to go directly to actuator mode.
- 3. Push the joystick to the left or right to cycle through the available actuators until the desired actuators are illuminated on the actuator indicator. **See figure 12.**
- 4. When the desired actuator is selected, give a forward command to the joystick to adjust position in one direction or give a reverse command to the joystick to adjust position in the opposite direction.
- 5. Push and release the On/Off and Mode Select Lever until you return to the desired drive profile.



Figure 12. Actuator Mode (Q-Logic)



Figure 13. Q-Logic Attendant Control Module

NOTE: Your Synergy Seat may be equipped with some or all of these functions.

#### **Q-Logic Attendant Control Module**

To adjust any of the actuators, press the mode key until you reach your seating profile and then push the joystick to the right to cycle until the desired actuator is illuminated on the actuator indicator (**see figure 13**). Move the joystick forward or backward to activate the desired actuator.

- Seat Elevator Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press the mode key until the seat profile is active and then push the joystick to the right until the actuator in the seat is illuminated on the actuator indicator on the module. Pull the joystick backward to increase the height of the seat.
- 3. To lower the seat while in seat profile indicated in step 2, push the joystick forward to decrease the height of the seat.
- Leg Rest Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press the mode key until the seat profile is active and then push the joystick to the right until the actuator in the desired leg rest is illuminated on the actuator indicator on the module. Pull the joystick backward to raise the leg rest.
- 3. To lower the leg rest while in seat profile indicated in step 2, push the joystick forward to decrease the height of the leg rest.
- Independent/Combined Leg Rest Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press the mode key until the seat profile is active and then push the joystick to the right until the actuator(s) in the left, right, or combined leg rest is illuminated on the actuator indicator on the module. Pull the joystick backward to raise the leg rest(s).
- 3. To lower the leg rest(s) while in seat profile indicated in step 2, push the joystick forward to decrease the height of the leg rest(s).

#### **Remote Plus Joystick Operation**

- 1. Press the On/Off Key to power on the chair and the controller.
- 2. Press the Mode Key twice to select actuator adjustment mode.
- 3. Push the joystick to the right to cycle through the available actuators until the desired light is illuminated on the actuator indicator. **See figure 14.**
- 4. Push the joystick forward to raise the actuator or backward to lower it.
- 5. Press the Mode Key again to return to the drive mode.



Figure 14. Actuator Modes



Figure 15. Attendant Control Module Functions

#### **Attendant Control Module**

Your Synergy Seat may be equipped with an Attendant Control Module (**see figure 15**). The actuators can be adjusted either by the user through the controller or the toggle, or by an attendant through the Attendant Control Module. Any action made through the Attendant Control Module will override toggle actions made by the user. To adjust any of the actuators, press "Select" to cycle until the actuator to be adjusted is illuminated on the actuator indicator (**see figure 14**), then press the up arrow to increase the lift or tilt or the down arrow to decrease the lift or tilt.

#### NOTE: Your Synergy Seat may be equipped with some or all of these functions.

- Seat Elevator Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press "Select" until the actuator on the seat is illuminated on the actuator indicator on the module. Use the up and down arrows to increase or decrease the height of the seat.
- 3. To lower the seat to its original position, press "Select" until the actuator on the seat is illuminated on the actuator indicator on the module, and then press the down arrow until the seat is lowered to its original position.
- Leg Rest Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press "Select" until the desired leg rest actuator is illuminated on the actuator indicator on the module. Use the up and down arrows to increase or decrease the degree of elevation.
- 3. To return the leg rest to a lowered position, press "Select" until the desired leg rest actuator is illuminated on the actuator indicator on the module, and then press the down arrow until the leg rest is in a lowered position.
- Independent/Combined Leg Rest Function (Optional)
- 1. Press the power key to power on the module.
- 2. Press "Select" to cycle through the left, right, and combined leg rests until the desired leg rest actuator is illuminated on the actuator indicator on the module. Use the up and down arrows to increase or decrease the degree of elevation.
- 3. To return the leg rest to a lowered position, press "Select" to cycle through the left, right, and combined leg rests until the desired leg rest actuator is illuminated on the actuator indicator on the module, and then press the down arrow until the leg rest is in a lowered position.

#### **Armrest Options**

The following sections will describe armrest options and the comfort adjustments that can be made to them.

#### You may need the following to make comfort adjustments:

- standard hex key set
- standard open-ended wrench set
- Phillips head screwdriver

WARNING! Do not attempt to lift or move your power chair or seating system by any of its removable parts, including the armrests, front riggings, seat cushions, seatback, shrouds, or controller. Use only solid, non-removable frame components to lift or move your power chair or seating system.



WARNING! 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.

WARNING! 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 those components, resulting in a fall from the seating system and personal injury.

#### **Cantilever Armrests**

The Cantilever Armrests are attached to the back canes and are designed to lift up and out of the way for easier transfer onto and off of the power chair. Both the angle and the height can be adjusted on the Cantilever Armrests.

#### To adjust the armrest angle:

- 1. Raise the armrest perpendicular to the floor.
- 2. Turn the adjustable dial clockwise to change the angle of the armrest. **See figure 16.** The armrest is at 0° when it sits on the white dot of the adjustable dial. From 0°, the angle can be decreased to -30° or increased to 30° in 5° increments. The adjustable dial moves only in the clockwise direction.
- 3. Move the armrest down into position.
- 4. Repeat for the other armrest, if necessary.



Figure 16. Cantilever Armrests Angle Adjustment

#### To adjust the height of the armrests attached to the push bar:

- 1. Loosen the two bolts on each armrest bracket. See figure 17.
- 2. Slide both armrests at the same time to the desired height.
- 3. Tighten the bolts on each armrest bracket.

#### To adjust the height of armrests not attached to the push bar:

- 1. Loosen the two bolts on the armrest bracket. See figure 18.
- 2. Slide the armrest to the desired height.
- 3. Tighten the two bolts.
- 4. Repeat for the other armrest, if necessary.

## NOTE: The parts to change a non-push bar mount to a push bar mount are included in the owner's package.



Figure 17. Height Adjustment for Cantilever Armrests Attached to the Push Bar



Figure 18. Height Adjustment for Cantilever Armrests Not Attached to the Push Bar

#### Flip-Up Armrests

The Flip-Up Armrests are attached to the back canes and are designed to "flip up" out of the way for easier transfer onto and off of the power chair. Both the armrest angle and the armrest height can be adjusted on the Flip-Up Armrests.

#### To adjust the armrest angle:

- 1. Flip the armrests up and out of the way.
- 2. Loosen the jam nut located on the armrest angle support bracket. See figure 19.
- 3. Loosen or tighten the button head screw located on the armrest angle support bracket. Loosening the button head screw will increase the armrest angle; tightening the button head screw will decrease the armrest angle. **See figure 19.**

- 4. When the screw has been positioned to the proper angle, tighten the jam nut. See figure 19.
- 5. Move the armrests down to position.



Figure 19. Flip-Up Armrest Angle Adjustment

#### To adjust the armrest height:

- 1. Move the armrests up and out of the way.
- 2. Loosen the jam nut located on the armrest angle support bracket. See figure 19.
- 3. Remove the button head screw and jam nut from the armrest angle support bracket. See figure 19.
- 4. Remove the two (2) flat head screws from the armrest angle support bracket, then remove the bracket. See figure 20.
- 5. Remove the socket head cap screw from the armrest clamp. See figure 20.
- 6. Raise or lower the armrests to the desired height.
- 7. Reinstall the socket head cap screw to the armrest clamp. See figure 20.
- 8. Replace the armrest angle support bracket, then reinstall and tighten the two (2) flat head screws. **See figure 20.**
- 9. Reinstall and tighten the button head screw to the armrest angle support bracket, then tighten the jam nut. See figure 19.
- 10. Move the armrests down to position.



Figure 20. Flip-Up Armrest Height Adjustment

#### Heavy Duty Drop-In Armrests

The Heavy Duty Drop-In Armrests are attached to the chair with an armrest latching mechanism that is fastened to the side rails of the Synergy Seat. These armrests can be removed for easy transfer onto and off of the power chair. The position of the armrest on the chair, as well as the overall height of the armrest, can also be adjusted.

#### To remove the armrest assembly:

- 1. Rotate the armrest latch lever rearward. See figure 21.
- 2. Lift up the armrest assembly.

#### To install the armrest assembly:

- 1. Place the armrest assembly into the armrest latch. See figure 21.
- 2. Rotate the armrest latch lever forward.

#### To adjust the armrest position:

- 1. Rotate the armrest latch lever rearward and remove the armrest from the armrest latch. See figure 21.
- 2. Loosen the flat head screws that fasten the armrest latch to the seat base side rail. See figure 22.
- 3. Slide the armrest latch forward or rearward along the seat base side rail.
- 4. Tighten the flat head screws.
- 5. Install the armrest in the armrest latch. See figure 22.
- 6. Repeat for the other side, if necessary.



Figure 21. Heavy Duty Drop-In Armrest Removal/ Installation

#### To adjust the armrest height:

- 1. Rotate the armrest latch lever rearward and remove the armrest from the armrest latch. See figure 23.
- 2. Remove the two (2) button head cap screws from the side of the armrest.
- 3. Slide the armrest up or down the detent bar to the desired height.
- 4. Reinstall the button head cap screws to the side of the armrest.
- 5. Install the armrest in the armrest latch and rotate the latch lever forward.
- 6. If necessary, repeat for the other armrest.



Figure 22. Heavy Duty Drop-In Armrest Position Adjustment



Figure 23. Heavy Duty Drop-In Armrest Height Adjustment

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#### Single Post Quick Height Adjustable Drop-In Armrests

The Single Post Quick Height Adjustable Drop-In Armrests are removable like the Heavy Duty Drop-In Armrests and are available in both adult and pediatric sizes.

#### To remove the armrest assembly:

- 1. Rotate the armrest latch lever forward. See figure 24.
- 2. Lift up the armrest assembly.

#### To install the armrest assembly:

- 1. Place the armrest assembly into the armrest latch. See figure 24.
- 2. Rotate the armrest latch lever rearward.

Adult size armrest height adjustments can be made on both the top and the bottom of the armrest. The total height adjustment range is 6 in. (15.24 cm) from 11–17 in. (27.94–43.18 cm). This range is measured from the seat pan to the top of the armrest pad.

Top height adjustments do not require any tools. The top height adjustment range is 3 in. (7.62 cm) in 3/8-in. (0.95-cm) increments. The bottom height adjustment range is 3 in. (7.62 cm) in 1-in. (2.54-cm) increments.

#### To adjust the top height:

- 1. If present, remove the optional locking pin. See figure 25.
- 2. Pull the armrest up to raise, or press the release lever to lower the armrest to the desired height.
- 3. If applicable, reinsert the locking pin.
- 4. Repeat for the other armrest, if necessary.



Figure 24. Single Post Quick Height Adjustable Armrest Removal/ Installation



Figure 25. Single Post Quick Height Adjustable Armrest Top Height Adjustment

#### To adjust the bottom height:

- 1. Rotate the armrest lock lever forward and remove the armrest from the armrest lock.
- 2. Remove the two button head screws from the detent bar. See figure 26.
- 3. Slide the armrest up or down to the desired height.
- 4. Line up the holes in the armrest.
- 5. Reinstall the two button head screws into the detent bar.
- 6. Rotate the armrest lock lever rearward.
- 7. Repeat for the other armrest, if necessary



Figure 26. Single Post Quick Height Adjustable Armrest Bottom Height Adjustment

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Like the adult size Single Post Quick Height Adjustable Armrest, the pediatric size armrest is designed to be adjusted and removed easily. The total height adjustment range is 3 in. (7.62 cm) in 3/8-in. (0.95-cm) 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 7.75–10.75 in. (19.69–27.31 cm).

Top height adjustments do not require any tools. The top height adjustment range is 1 in. (2.54 cm) in 3/8-in. (0.95-cm) increments. The bottom height adjustment range is 2 in. (5.08 cm) in 1-in. (2.54-cm) increments.

#### To adjust the top height:

- 1. If present, remove the optional locking pin. See figure 27.
- 2. Pull the armrest up to raise, or press the release lever to lower the armrest to the desired height.
- 3. If applicable, reinsert the locking pin.
- 4. Repeat for the other armrest, if necessary.

#### To adjust the bottom height:

- 1. Rotate the armrest latch lever forward and remove the armrest from the armrest latch.
- 2. Remove the two button head screws from the detent bar. See figure 28.
- 3. Slide the armrest up or down to the desired height.
- 4. Line up the holes in the armrest.
- 5. Reinstall the two button head screws into the detent bar.
- 6. Rotate the armrest latch lever rearward.
- 7. Repeat for the other armrest, if necessary.



Figure 27. Pediatric Single Post Quick Height Adjustable Armrest Top Height Adjustment



Figure 28. Pediatric Single Post Quick Height Adjustable Armrest Bottom Height Adjustment

#### Two Post Height Adjustable Flip-Up Armrests

The height adjustment range for the Two Post Height Adjustable Flip-Up Armrest is 4 in. (10.16 cm) in 1-in. (2.54-cm) increments. The total height adjustment range is 10–14 in. (25.4–35.56 cm). This range is measured from the top of the seat rail to the top of the arm pad. You can also flip the armrests up or remove them for transfer. **See figure 29.** 

#### To remove the armrest assembly:

- 1. Push the spring-loaded lever downward and pull up on the front of the armrest. See figure 29.
- 2. Remove the detent pin from the back of the seat. See figure 29.
- 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 29.
- 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.



Figure 29. Two Post Height Adjustable Flip-Up Armrest Removal and Installation

#### To adjust the armrest height:

- 1. Push the spring-loaded lever inward. See figure 30.
- 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 30. Two Post Height Adjustable Flip-Up Armrest Height Adjustment

#### **Controller Position**

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



WARNING! Do not place the controller harness so that it can be pinched in the seat frame or the power base frame.

You may need the following to make comfort adjustments:

■ 3/16-in. hex key

#### To change the controller position:

- 1. Turn off the power to the controller.
- 2. Unplug the controller connector from the power base. Refer to power base owner's manual.
- 3. Remove any wire ties securing the controller harness to the armrest.
- 4. Loosen the mounting screws in the controller mounting block. **See figure 31.**
- 5. Move the controller mounting block and controller to the other armrest tighten the mounting screws, and ensure the release lever is secure.
- Route the controller harness to the back of the power base and secure it with wire ties. See figure 33.
- 7. Reconnect the controller.

#### To change the controller extension:

- 1. Turn off the power to the controller.
- 2. Remove any wire ties securing the controller harness to the armrest.
- 3. Flip and then rotate the release lever to loosen the clamp. **See figure 32.**
- 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.
- Route the controller harness to the back of the power base and secure it with wire ties. See figure 33.

#### To change the controller height:

- 1. Turn off the power to the controller.
- 2. Remove any wire ties securing the controller harness to the armrest.
- 3. Flip and then rotate the release lever to loosen the clamp. **See figure 32.**
- 4. Adjust the controller to the desired height.
- 5. Rotate and flip the release lever to tighten the clamp.
- 6. Route the controller harness to the back of the power base and secure it with wire ties. **See figure 33.**



Figure 31. Controller Position – Depth



Figure 32. Controller Position – Height



Figure 33. Controller Harness Routing

#### **Power Seat Elevator Option**

The power seat elevator provides lift of up to 7 in. (17.78 cm) from the power base using a single post plate and actuator. **See figure 34.** The maximum weight capacity of the power seat elevator is 300 lbs. (136 kg) and is available on some models. Contact your Quantum Rehab Provider for specific information. The power seat elevator operates through the power chair controller or toggle switch.

NOTE: Operation instructions using the joystick 4-way toggles are discussed below. If you are using a different toggle, the Attendant Control Module, or a different operating device, please refer to the appropriate section of this manual or the operation manual supplied with that device and/or your power chair owner's manual.

#### To operate the power seat elevator:

- 1. Pull the toggle switch backward to elevate the seat.
- 2. Push the toggle switch forward to lower the seat.



Figure 34. Power Seat Elevator Option on a Synergy Seat



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

#### **Manual Recline Option**

If your Synergy Seat includes Pride/Quantum's Manual Recline Option, you can adjust the seatback to angles ranging from the minimum recline position (90° from the seat base) to the maximum recline position (180° from the seat base). **See figure 35.** When the seat is reclined past 110°, an inhibit switch will cut power to the motors of your power chair. Returning the seat to an angle of less than 110° degrees will restore power to the motors.



Figure 35. Minimum and Maximum Recline Angles

#### To recline the seatback:

- 1. Grasp the handles at the top of the seatback.
- 2. Squeeze both of the recline release handles simultaneously, and position the seatback to the desired angle. **See figure 36.**
- 3. Release the handles to lock the seatback into position.



Figure 36. Manual Recline Angle Adjustment

#### Synergy Manual Tilt Option

If your power chair includes the Synergy Manual Tilt Option, you can position the seat to angles ranging from 0°-45°, in almost infinite increments.

#### To tilt the seat:

- 1. Remove the detent pin from the tilt release lever. See figure 37.
- 2. Squeeze the tilt release lever and tilt the seat.
- 3. Release the tilt release lever when the seat is in a comfortable position.

#### NOTE: The tilt release lever may be mounted onto either back cane.



WARNING! When the seat is tilted 20° or more, an inhibit switch will cut power to the motors of your power chair. Returning the seat to an angle of less than 20° will restore power to the motors.



#### Figure 37. Synergy Manual Tilt Option

#### **Care and Maintenance**

- Make sure all hardware is secured properly, but do not overtighten any hardware.
- To clean the seating system, wipe it with a cloth dampened with mild soap and water. Thoroughly dry the unit before using.



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

WARNING! Pride/Quantum 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 seat cushions.
- Always make sure cigarettes are completely extinguished before disposal.

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#### Warranty

#### **Three-Year Limited Warranty**

For three (3) years from the date of purchase, Pride/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 Pride/Quantum to be defective in material and/or workmanship:

Structural frame components

#### **Two-Year Limited Warranty**

For two (2) years from the date of purchase, Pride/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 Pride/Quantum to be defective in material and/or workmanship:

Electronics

#### Eighteen-Month Warranty (2-Year Limited Warranty in Canada)

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

Warranty service can be performed by a Quantum Rehab Provider or by Pride. Do not return faulty parts to Pride/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
- Repairs and/or modifications made to any part without specific consent from Pride/Quantum
- Circumstances beyond the control of Pride/Quantum
- Labor, service calls, shipping, and other charges incurred for repair of the product, unless specifically authorized by Pride/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 other 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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