QUANTY -1402



1-800-800-8586 (Exeter, PA) • 1-888-570-1113 (St. Catharines, ON) • www.quantumrehab.com

SAFETY GUIDELINES

Please read and follow all instructions in this owner's manual before attempting to operate your power chair for the first time. If there is anything in this manual you do not understand, or if you require additional assistance for set-up, contact your Quantum Rehab Specialist.

Using your Pride product safely depends upon your diligence in following the warnings, cautions, and instructions in this owner's manual. Using your Pride product safely also depends upon your own good judgement and/or common sense, as well as that of your provider, caregiver, and/or healthcare professional. Pride is not responsible for injuries and/or damage resulting from any person's failure to follow the warnings, cautions, and instructions in this owner's manual. Pride is not responsible for injuries and/or damage resulting from any person's failure to exercise good judgement and/or common sense.

The symbols below are used throughout this owner's manual and on the power chair to identify warnings, cautions, and important information. It is very important for you to read and understand them completely. Additional symbols are identified in II. "Safety."



WARNING! Failure to follow designated procedures can cause personal injury or component damage or malfunction.



MANDATORY! These actions should be performed as specified. Failure to perform mandatory actions can cause injury to personnel and/or damage to equipment (white symbol on blue dot with white border).



PROHIBITED! These actions should be prohibited. These actions should not be performed at any time or in any circumstances. Performing a prohibited action can cause injury to personnel and/or damage to equipment (black symbol with red circle and red slash).



NOTE: Supplemental information that may be helpful to operate the equipment.

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I. INTRODUCTION

SAFETY

WELCOME to Quantum Rehab, a division of Pride Mobility Products Corporation (Pride). The power chair you have purchased combines state-of-the-art components with **safety**, comfort, and styling in mind. We are confident that these design features will provide you with the conveniences you expect during your daily activities. Once you understand how to **safely** operate and care for your power chair, it should give you years of trouble free operation and service.

Read and follow all instructions, warnings, and notes in this manual before attempting to operate your power chair for the first time. In addition, your **safety** depends upon you, as well as your provider, caretaker, or healthcare professional in using good judgement.

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 Specialist. Failure to follow the instructions in this manual and those located on your power chair can lead to personal injury and/or damage to the power chair, including voiding the warranty.

EXPRESSED AGREEMENT OF INDEMNIFICATION

In accepting delivery of this product, the Purchaser specifically promises that s/he will not change, alter, or modify this product or remove or render inoperable or unsafe any guards, shields, or other safety features of the product; or remove, obliterate, or obstruct any safety and instruction signs, or fail, refuse, or neglect to install any retrofit kits from time to time provided by Pride to enhance user safety. Purchaser also specifically agrees that if s/he breaches any such promises, or if s/he is remiss, neglect, or deficient in the safe operation or maintenance of this product, the purchaser will indemnify and hold harmless Pride from any and all types of actions, suits, claims, or demands, including products liability claims by purchaser, for injuries or loss arising out of the operation, maintenance, repair or other use of this product. Purchaser specifically agrees that this Express Agreement of Indemnification is a condition of sale supported by adequate consideration and was read and understood by the purchaser before purchasing and delivery of the product.

INFORMATION EXCHANGE

We want to hear your questions, comments, and suggestions about this manual. We would also like to hear about the safety and reliability of your new power chair, and about the service you received from your Quantum Rehab Specialist.

Please notify us of any change of address, so we can keep you apprised of important information about safety, new products, and new options that can increase your ability to use and enjoy your power chair. Please feel free to contact us at the address below:

Pride Mobility Products Corporation Attn: Customer Care Department 182 Susquehanna Avenue Exeter, PA 18643-2694 customercare@pridemobility.com 800-800-8586 (US) 888-570-1113 (CAN)

I. INTRODUCTION

Pride Owners Club

My Quantum Rehab Specialist is:

As an owner of a Pride product, you are invited to register your product's warranty and enroll in the Pride Owners Club. You may do so by filling out and returning your enclosed registration card or by visiting Pride's web site at www.pridemobility.com. As a registered member, each time you visit our site, you will have access to the most interactive and honest educational venue available today for people with mobility needs, their families, and friends.

From our home page, select "Owners Club" to enter a page dedicated to current and potential Pride product owners. You will gain access to interviews, stories, recreation ideas, daily living tips, product and funding information, and interactive message boards. These message boards invite you to communicate with other Pride customers as well as Pride representatives who are available to assist you with any questions or concerns you may have.

Name:			
Address:			
Phone Number:			
Purchase Date:			



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

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.



Pinch/Crush points created during assembly.



Corrosive chemicals contained in battery. Use only AGM or Gel-Cell batteries to reduce the risk of leakage or explosive conditions.



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



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



Maximum seating weight. See Specifications table.



Unlocked and in freewheel mode.

Place unit on level ground and stand in front or to one side when changing from drive mode to freewheel mode or freewheel mode to drive mode.

Locked and in drive mode.



Battery Configuration: T = Terminal Post Connect Red wire to T with + Connect Black wire to T with –



Do not remove anti-tip wheels.



Do not use a cell phone, walkie/talkie, laptop, or other radio transmitter while operating.



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



Removal of grounding prong can create electrical hazard. If necessary, properly install an approved 3-pronged adapter to an electrical outlet having 2-pronged plug access. Failure to heed could result in personal injury and/or property damage.



Prevent personal injury and equipment damage. Do not connect an extension cord to the AC/DC converter or the battery charger.

SAFETY



MANDATORY! Do not operate your new power chair for the first time without completely reading and understanding this owner's manual.

Your power chair is a state-of-the-art life-enhancement device designed to increase mobility. Pride provides an extensive variety of products to best fit the individual needs of the power chair user. Please be aware that the final selection and purchasing decision regarding the type of power chair to be used is the responsibility of the power chair user, who is capable of making such a decision, and his/her healthcare professional (i.e., medical doctor, physical therapist, etc.).

The contents of this manual are based on the expectation that a mobility device expert has properly fitted the power chair to the user and has assisted the prescribing healthcare professional and/or the Quantum Rehab Specialist in the instruction process for the use of the product.

There are certain situations, including some medical conditions, where the power chair user will need to practice operating the power chair in the presence of a trained attendant. A trained attendant can be defined as a family member or care professional specially trained in assisting a power chair user in various daily living activities.

As you begin using your power chair during daily activities, you will probably encounter situations in which you will need some practice. Simply take your time and you will soon be in full and confident control as you maneuver through doorways, on and off of elevators, up and down ramps, and over moderate terrain.

Below are some precautions, tips, and other safety considerations that will help the user become accustomed to operating the power chair safely.

Modifications

Pride has designed and engineered your power chair to provide maximum mobility and utility. A wide range of accessories is available from your Quantum Rehab Specialist to further customize your power chair to better suit your needs and/or preferences. However, under no circumstances should you modify, add, remove, or disable any feature, part, or function of your power chair.



WARNING! Do not modify your power chair in any way not authorized by Pride. Unauthorized modifications may result in personal injury and/or damage to your power chair.

Pre-Ride Safety Check

Get to know the feel of your power chair and its capabilities. Pride recommends that you perform a safety check before each use to make sure your power chair operates smoothly and safely. See X. "Care and Maintenance."

Perform the following inspections prior to using your power chair:

- Check for proper tire inflation. Maintain but do not exceed **35 psi** in each tire (if equipped with pneumatic tires).
- Check all electrical connections. Make sure they are tight and not corroded.
- Check all controller connections to the electronics tray. Make sure they are secured properly.
- Check the brakes. See X. "Care and Maintenance."
- Check battery charge. See IX. "Batteries and Charging."



NOTE: If you discover a problem, contact your Quantum Rehab Specialist for assistance.

Weight Limitations

Your power chair is rated for a maximum weight capacity. Please refer to the specifications table for this limit.



WARNING! Exceeding the weight capacity voids your warranty and may result in personal injury and/or damage to your power chair. Pride will not be held responsible for injuries and/or property damage resulting from failure to observe weight limitations.

WARNING! Do not carry passengers on your power chair. Carrying passengers on your power chair may result in personal injury and/or property damage.

Tire Inflation

If your power chair is equipped with pneumatic tires, you should check or have the air pressure checked regularly. Proper inflation pressures will prolong the life of your tires and help ensure the smooth operation of your power chair.

WARNING! It is important that 35 psi tire pressure be maintained in pneumatic tires at all times. Do not underinflate or overinflate your tires. Low pressure may result in loss of control, and overinflated tires may burst. Failure to maintain 35 psi tire pressure in pneumatic tires at all times may result in tire and/or wheel failure, causing serious personal injury and/or damage to your Quantum 1402.



WARNING! Inflate your power chair drive tires from a regulated air source with an available pressure gauge. Inflating your tires from an unregulated air source could overinflate them, resulting in a burst tire and/or personal injury.

Incline Information

More and more buildings have ramps with specified degrees of inclination, designed for easy and safe access. Some ramps may have turning switchbacks (180-degree turns) that require you to have good cornering skills on your power chair.

- Proceed with extreme caution as you approach the downgrade of a ramp or other incline.
- Take wide swings with your power chair's front wheels around any tight corners. If you do that, the power chair's rear wheels will follow a wide arc, not cut the corner short, and not bump into or get hung up on any railing corners.
- When driving down a ramp, keep the power chair's speed adjustment set to the slowest speed setting to ensure a safely controlled descent. See VIII. "Operation."
- Avoid sudden stops and starts.

When climbing an incline, try to keep your power chair moving. If you must stop, start up again slowly and then accelerate cautiously. When driving down an incline, set your power chair to the slowest setting and drive in the forward direction only. If your power chair starts to move down the incline faster than you anticipated or desired, allow it to come to a complete stop by releasing the joystick, then push the joystick forward slightly to ensure a safely controlled descent.

WARNING! When climbing an incline, do not zigzag or drive at an angle up the face of the incline. Drive your power chair straight up the incline. This greatly reduces the possibility of a tip or a fall. Always exercise extreme caution when negotiating an incline.

WARNING! You should not travel up or down a potentially hazardous incline (i.e., areas covered with snow, ice, cut grass, or wet leaves).



WARNING! When on any sort of an incline or decline, never place the power chair in freewheel mode while seated on it or standing next to it. Doing so may result in personal injury and/or damage to your power chair.

WARNING! Never travel down an incline backwards. This may result in personal injury.

WARNING! Even though your power chair is capable of climbing slopes greater than those illustrated in figure 1, do not, under any circumstances, exceed the incline guidelines or any other specifications presented in this manual. Doing so could cause instability in your power chair, resulting in personal injury and/or damage to your power chair.

In compliance with the Americans with Disabilities Act of 1990, all handicap public access ramps are required to have a maximum slope of 5°. Therefore, Pride recommends that the maximum slope of an incline you attempt to safely ascend or descend on your power chair does not exceed 5°. See figure 1.



WARNING! Any attempt to climb or descend a slope steeper than 5° may put your power chair in an unstable position and cause it to tip, resulting in personal injury.

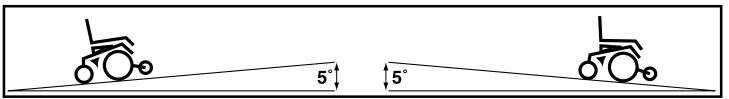


Figure 1. Maximum Safe Slope (Ascending and Descending)

Braking Information

Your power chair is equipped with two powerful brake systems:

- 1. Regenerative uses electricity to rapidly slow the vehicle when the joystick returns to the center/stop position.
- 2. Disc Park Brake activates mechanically after regenerative braking slows the vehicle to near stop, or when power is removed from the system for any reason.

Cornering Information

While your power chair is equipped with caster wheels and anti-tip wheels, excessively high cornering speeds can still create the possibility of tipping. Factors which affect the possibility of tipping include, but are not limited to: cornering speed, steering angle (how sharply you are turning), uneven road surfaces, inclined road surfaces, riding from an area of low traction to an area of high traction (such as passing from a grassy area to a paved area – especially at high speed while turning), and abrupt directional changes. High cornering speeds are not recommended. If you feel that you may tip over in a corner, reduce your speed and steering angle (i.e., lessen the sharpness of the turn) to prevent your power chair from tipping.



WARNING! When cornering sharply, reduce your speed. This greatly reduces the possibility of a tip or fall. To avoid personal injury and/or property damage, always exercise common sense when cornering.

Outdoor Driving Surfaces

Your power chair is designed to provide optimum stability under normal driving conditions—dry, level surfaces composed of concrete, blacktop, or asphalt. However, Pride recognizes that there will be times when you will encounter other surface types. For this reason, your power chair is designed to perform admirably on packed soil, grass, and gravel. Feel free to use your power chair safely on lawns and in park areas.

- Reduce your power chair's speed when driving on uneven terrain and/or soft surfaces.
- Avoid tall grass that can entangle the running gear.
- Avoid loosely packed gravel and sand.
- If you feel unsure about a driving surface, avoid that surface.

Freewheel Mode

Your power chair is equipped with two manual freewheel levers to allow for manual maneuverability by a trained attendant. For more information about how to place your power chair into and out of freewheel mode, see IV. "The Quantum 1402."

WARNING! Do not use your power chair in freewheel mode without an attendant present. Personal injury may result.



WARNING! Do not attempt to personally place your power chair in freewheel mode while seated on it. Personal injury may result. Ask an attendant for assistance if necessary.

WARNING! Do not place your power chair in freewheel mode while on an incline. The chair could roll uncontrollably on its own, causing personal injury.

Stationary Obstacles (Steps, Curbs, etc.)

Proceed with extreme caution when driving near raised surfaces, unprotected ledges and/or drop-offs (curbs, porches, stairs, etc.). The correct method for approaching a curb is illustrated in figure 2.



WARNING! Do not attempt to have your power chair climb or descend an obstacle that is higher than 4 inches unless you have the assistance of an attendant.

WARNING! Do not attempt to have your power chair proceed backward down any step, curb, or other obstacle. This may cause the power chair to tip and cause personal injury.

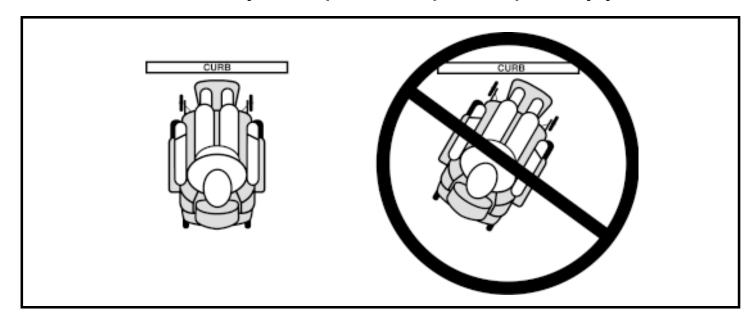


Figure 2. Curb Approach (Correct and Incorrect)

Public Streets and Roadways



WARNING! You should not operate your power chair on public streets and roadways. Be aware that it may be difficult for traffic to see you when you are seated on your power chair. Obey all local pedestrian traffic rules. Wait until your path is clear of traffic, and then proceed with extreme caution.

Stairs and Escalators

Power chairs are not designed to travel up or down stairs or escalators. Always use an elevator.



WARNING! Never use your power chair to negotiate steps or escalators. You may cause injury to yourself and to others and/or damage your power chair.

Doors

- Determine if the door opens toward or away from you.
- Drive your power chair gently and slowly forward to push the door open. Or drive your power chair gently and slowly backward to pull the door open.

Elevators

Modern elevators have a door edge safety mechanism that, when pushed, reopens the elevator door(s).

- If you are in the doorway of an elevator when the door(s) begin to close, push on the rubber door edge or allow the rubber door edge to contact the power chair and the door will reopen.
- Use care that pocketbooks, packages, or power chair accessories do not become caught in elevator doors.

EMI & RFI

Laboratory tests performed by the Food and Drug Administration (FDA) have shown that radio waves can cause unintended motion of electric mobility vehicles. Radio waves are a form of electromagnetic energy (EM). When EM adversely affects the operation of an electronic device, it is called Electromagnetic Interference (EMI) or Radio Frequency Interference (RFI). For more information, see III. "EMI/RFI."

Lift/Elevation Products

If you will be traveling with your power chair, you may find it necessary to use a lift/elevation product to aid in transportation. Pride recommends that you closely review the instructions, specifications, and safety information set forth by the manufacturer of the lift/elevation product before using that product.

Motor Vehicle Transport

Currently, there are no standards approved for tie-down systems in a moving vehicle of any type to transport a person while seated in a power chair.

Inclement Weather Precautions

Exposure of your power chair to inclement weather conditions should be avoided whenever possible. If suddenly caught up in rain, snow, severe cold or heat while operating your power chair proceed to shelter at the earliest oppurtunity. Thoroughly dry your power chair before storing, charging, or operating your power chair.



WARNING! Operating in rain, snow, salt, mist/spray conditions, and on icy/slippery surfaces can cause personal injury and/or damage to the power chair and electrical system. Maintain and store your power chair in a dry and clean condition.

Refer to X. "Care and Maintence" for cleaning and storage guidelines.

Transfers

Transferring onto and off of your power chair requires a good sense of balance. Always have an attendant or healthcare professional present while learning to properly transfer yourself.

To eliminate the possibility of injury, Pride recommends that you or a trained attendant perform the following tasks before attempting a transfer:

- Turn the power off. See VIII. "Operation."
- Ensure your power chair is not in freewheel mode. See IV. "The Quantum 1402."
- Turn both caster wheels toward the transfer destination to improve power chair stability during transfer.
- Make sure both armrests are flipped up or removed from your power chair.
- Move the leg rests aside; this will help to keep your feet from getting caught on the footrest or the leg rests during the transfer.
- Reduce the distance between your power chair and the object you are transferring onto.

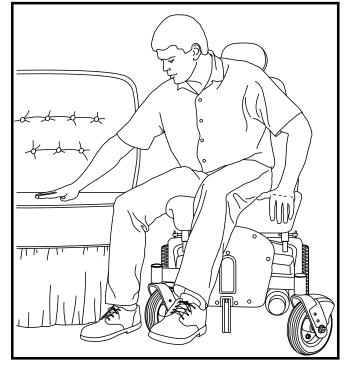


Figure 3. Ideal Transfer Position

WARNING! Before transferring, position yourself as far back as possible in the power chair seat to prevent the power chair from tipping forward during transfer and causing injury.



WARNING! Avoid using your armrests for weight bearing purposes. Such use may cause the power chair to tip and cause personal injury.

WARNING! Avoid putting all of your weight on the leg rests. Such use may cause the power chair to tip and cause personal injury.

Positioning Belts

Your Quantum Rehab Specialist, therapist(s), and other healthcare professionals are responsible for determining your requirement for a positioning belt in order to operate your power chair safely.

WARNING! If you require a positioning belt to safely operate your power chair, make sure it is fastened securely. Serious personal injury may result if you fall from the power chair.



WARNING! The positioning belt is not designed for use as a seat belt in a motor vehicle. Nor is your power chair suitable for use as a seat in any vehicle. Anyone traveling in a vehicle should be properly belted into seats approved by the vehicle manufacturer.

WARNING! Do not sit on your power chair while it is in a moving vehicle. Personal injury and/or property damage may result.

WARNING! Always be sure your power chair and its batteries are properly secured when it is being transported. Failure to do so may result in personal injury and/or damage to your power chair.

Reaching and Bending

Never reach, lean, or bend while driving your power chair. If it is absolutely necessary to reach, lean, or bend while seated on your power chair, it is important to maintain a stable center of gravity and keep the power chair from tipping. Pride recommends that the power chair user determine his/her personal limitations and practice bending and reaching in the presence of a qualified healthcare professional.



WARNING! Do not reach, lean, or bend for objects if you have to pick them up from the floor by reaching down between your knees. Movements such as these may change your center of gravity and the weight distribution of the power chair. This may cause your power chair to tip, possibly resulting in personal injury. Keep your hands away from the tires when driving.

Batteries

In addition to following the warnings below, be sure to comply with all other battery handling information. For more information about your power chair's batteries, see IX. "Batteries and Charging."

WARNING! Power chair batteries are heavy. See specifications table. If you are unable to lift that much weight, be sure to get help. Lifting beyond your capacity can result in personal injury.



WARNING! Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

WARNING! Always protect the batteries from freezing and never charge a frozen battery. Charging a frozen battery may result in personal injury and/or damage to the battery.

Preventing Unintended Movement



WARNING! If you anticipate being seated in a stationary position for an extended period of time, turn off the power. This will prevent unexpected motion from inadvertent joystick contact. This will also eliminate the possibility of unintended chair movement from electromagnetic (EM) sources. Failure to do so may result in personal injury.

Prescription Drugs/Physical Limitations

Users must exercise care and common sense when operating a power chair. This includes awareness of safety issues when taking prescribed or over-the-counter drugs or when the user has specific physical limitations.



WARNING! Consult your physician if you are taking prescribed or over-the-counter medication or if you have certain physical limitations. Some medications and limitations may impair your ability to operate your power chair in a safe manner.

Alcohol

The power chair user must exercise care and common sense when operating his/her power chair. This includes awareness of safety issues while under the influence of alcohol.



WARNING! Do not operate your power chair while you are under the influence of alcohol, as this may impair your ability to operate your power chair in a safe manner.

Removable Parts



WARNING! Do not attempt to lift or move a power chair by any of its removable parts. Personal injury and/or damage to the power chair may result.

III. EMI/RFI

EMI/RFI

Laboratory tests have shown that electromagnetic and radio frequency waves can have an adverse affect on the performance of electrically-powered mobility vehicles. The interference can come from sources such as cellular phones, mobile two-way radios (such as walkie-talkies), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave signals, and paging transmitters. In some cases, these waves can cause unintended movement.



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



PROHIBITION! Prevent unintended movement, turn off the power to the electrically-powered mobility vehicle before using a cell phone, two-way radio, lap-top, or any other type of radio transmitter.



WARNING! The electrically-powered mobility vehicle itself can disturb the performance of other electrical devices located nearby, such as alarm systems.



NOTE: For further information on EMI/RFI, go to www.pridemobility.com. If unintended motion or brake release occurs, turn the power chair off as soon as it is safe to do so. Call Pride at 800-424-8205 to report the incident.

THE QUANTUM 1402

Your Quantum 1402 has two main assemblies: the seat and the power base. See figure 4. There are a variety of seating options that are designed to accommodate most users. Typically, the seating assembly includes the armrests, seatback, and joystick controller. Your Quantum 1402 may also have some optional accessories attached to it, such as a basket, a cane/crutch holder, a cup holder, or a power seat switch. See XI. "Optional Accessories."

The power base assembly is the heart of your Quantum 1402. The power base assembly includes two drive wheels, two anti-tip wheels, two rear caster wheels, a power seat connector (optional), harness connectors, and a body shroud. See figures 4 through 8.

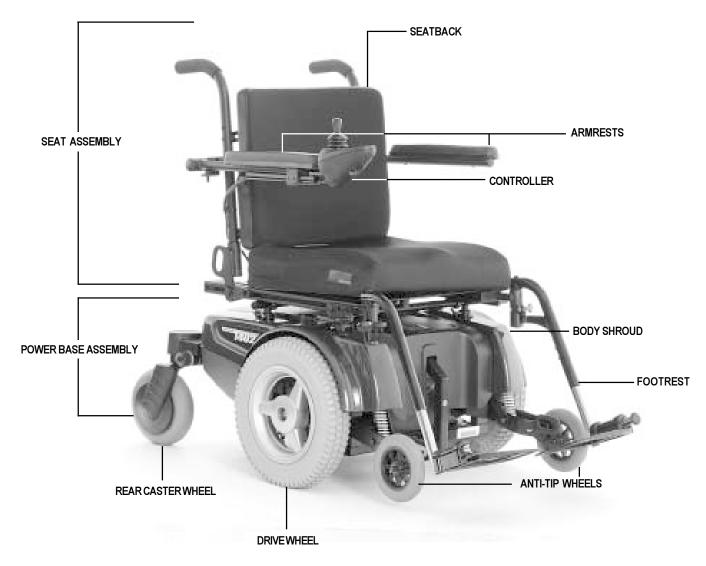


Figure 4. The Quantum 1402



Figure 5. The Quantum 1402 Rear View



Figure 6. Remote Plus Controller Harness Connector



Figure 7. Europa Remote Controller Harness Connector

Quantum 1402/RevA/Mar04 www.quantumrehab.com

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Electronics Tray

The electronics tray is located on the rear of your Quantum 1402. The electronics tray is located underneath the rear sliding door and consists of the ammeter, the battery charger plug, the main circuit breaker, accessory connector (optional equipment), and the controller harness connectors.

- **Ammeter:** The ammeter displays the charger's current output in amps. For more information, see IX. "Batteries and Charging" in this manual. See figure 8.
- Charger Power Cord Receptacle: This receptacle is used whenever your battery needs recharging. See figure 8.
- Main Circuit Breaker: The main circuit breaker is a safety feature built into your Quantum 1402. When the batteries and the motors are heavily strained (e.g., from excessive loads), the main circuit breaker trips to prevent damage to the motors and the electronics. If the circuit trips, allow your Quantum 1402 to "rest" for approximately one minute. Next, push in the circuit breaker button, turn on the joystick controller, and continue normal operation. If the main circuit breaker continues to trip repeatedly, contact your authorized Quantum Rehab Specialist. See figure 8.
- Accessory Connector (Optional): This is where the optional harness connects to the controller (power seat, lighting).
- Controller Harness Connectors: This is where the joystick connects to the motors, batteries, and charger. Regardless of whether your Quantum 1402 is equipped with a Remote Plus or Europa controller, there is only one connector on the tray. See figures 6 and 7 to view the controller harness connectors. See figure 8.
- Power Seat Connector (Optional): This is for the optional power seat switch. See figure 8.

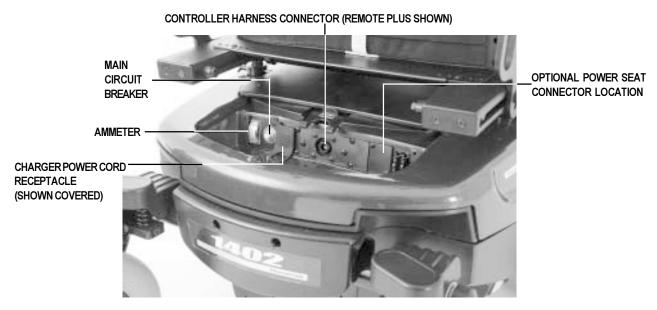


Figure 8. Electronics Tray

Dual Manual Freewheel Levers

For your convenience, your Quantum 1402 is equipped with dual manual freewheel levers. The levers are located on the inside of the anti-tip wheels. The levers allow you to disengage the drive motors and maneuver the chair manually.

WARNING! In freewheel mode, the braking system is disengaged. Only engage the freewheel mode when on a level surface.



WARNING! Prevent personal injury and/or equipment damage. Do not use the freewheel lever handles as tie-down points to secure this product. Failure to comply could result in personal injury and/or equipment damage.

To operate the dual manual freewheel levers:

- 1. Pull up both manual freewheel levers for freewheel mode (drive motor disengaged). See figure 9.
- 2. Push down both manual freewheel levers for drive mode (drive motor engaged). See figure 10.



NOTE: If a lever is difficult to move in either direction, rock your Quantum 1402 back and forth slightly. The lever should then move to the desired position.

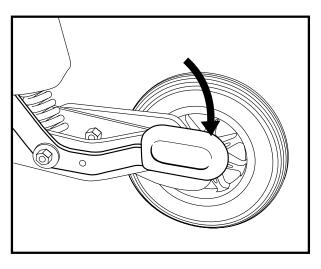


Figure 9. Freewheel Mode (left side shown)

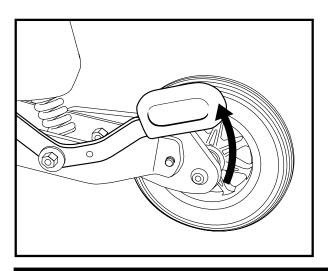


Figure 10. Drive Mode (left side shown)

Active-Trac Suspension

Your Quantum 1402 is equipped with Active-Trac Suspension (ATS). ATS is a suspension system designed to make your Quantum 1402 traverse different types of terrain and obstacles while maintaining smooth operation. With ATS, your front anti-tip wheels work in conjunction with your motor suspension to help you maneuver over obstacles.

As your front anti-tip wheels come in contact with an obstacle, the front anti-tip wheel assembly is drawn upward. At the same time, your motors are forced downward. This allows the motors to push the Quantum 1402 over an obstacle and limits the possibility of your power chair getting caught on the obstacle.

ATS also helps in day-to-day operating conditions. For instance, when you release the joystick your Quantum 1402 begins to slow down. As the chair slows down, the front anti-tip wheels will automatically drop toward the ground. This will reduce the forward tip that is typically encountered with center-wheel drive chairs.

Rear Suspension

Your Quantum 1402 is equipped with Rear Suspension. See figure 11. This suspension system works in conjunction with ATS and is designed to maintain a smooth ride when driving over rough terrain and up and down curbs. This system works by allowing the caster forks to respond to weight transfers and uneven terrain. The rear caster wheels will pivot as you drive over obstacles. This system also enhances performance when the front anti-tip wheels are set lower to the surface.



Figure 11. Rear Suspension System

Specifications						
Suspension:	Active-Trac system and rear suspension					
Drive Wheels:	14 in., pneumatic, center-mounted (solid tires are optional)					
Caster Wheels:	8 in., solid, rear articulating					
Anti-tip Wheels:	6 in., solid, front-mounted					
Maximum Speed:	Up to 4.5 mph with high-torque motors (up to 6 mph with high-					
	speed motors)					
Brakes:	"Intelligent Braking," electronic, regenerative disc brakes					
Ground Clearance:	3.25 in.					
Turning Radius:	21 in.					
Overall Size:	Length: 40.5 in.					
	Width: 25.4 in.					
Seating Options:	Synergy Seat (standard)					
	Contoured medium- or high-back seat (optional)					
	Synergy Manual Recline (optional)					
	Synergy Manual Tilt (optional)					
	TRU-Balance Super Low (optional)					
	TRU-Balance Power Positioning Systems (optional)					
	Solid seat pan (optional)					
Drivetrain:	Two-motor, mid-wheel; high-torque motors (standard)					
	High-speed motors (optional)					
Batteries:	Two 12-volt, Group 24 batteries					
	(NF-22 batteries for the power seat option)					
Range:	Up to 25 miles					
Battery Charger:	5-amp, onboard					
	8-amp, off-board (optional)					
Electronics:	70-amp PG Remote Plus Controller					
	70-amp Dynamic Europa Remote Controller					
Weight Capacity:	400 lbs. with high-torque motors (standard)					
	325 lbs. with high-speed motors (optional)					
Component	Base: 129 lbs.					
Weights:	Seat: 60 lbs. (standard seat)					
	Batteries: 53.5 lbs. each					

V. ASSEMBLY

Seat Installation (Seat with H-frame)

The standard seat installation method incorporates the seat frame (H-frame) and four (4) adjustable seat posts located on the power base.



WARNING! Do not pick up the seat frame by the armrests. They are free to pivot, and you may lose control of the seat if they do so, resulting in personal injury and/or equipment damage.

To install the seat:

- 1. Set the seat on the rear seat towers. See figure 12.
- 2. Push the seat back and down until the latches engage on the front seat towers. See figure 12.
- 3. Plug the controller cable into the connector on the electronics tray. See figure 13.
- 4. Plug the power seat switch cable (if so equipped) into the connector on the electronics tray.
- 5. Secure the controller cable to the armrest receiver with one or more wire ties.
- 6. Route the cable to ensure that the cable cannot be pinched in the seat hinge.

Joystick Installation

Depending on the various configurations and options you have chosen for your Quantum 1402, it may have been shipped without the joystick module installed in the armrest.

To install the joystick:

- 1. Use a 3/16-in. hex key to loosen the setscrew under either armrest. See figure 14.
- 2. Slide the joystick mounting bracket into or out of the armrest to the desired position.
- 3. Retighten the setscrew.



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

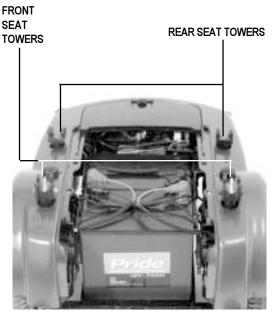


Figure 12. Seat Towers

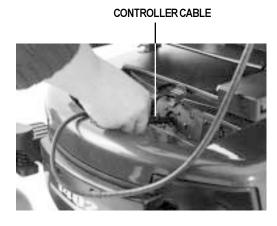


Figure 13. Controller Cable Connection

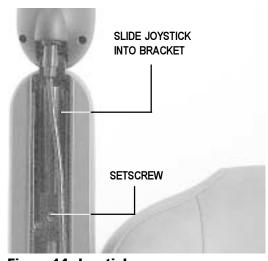


Figure 14. Joystick

V. ASSEMBLY

Power Seat Option Installation

Your Quantum 1402 may be equipped with the power seat option. While the seat itself may be any one of the styles offered for this model, the way the seat base attaches to the Quantum 1402 power base is different.

To install the power seat:

- 1. Align the seat shaft to the hole in the actuator. See figure 15.
- 2. Insert the seat into the actuator and push the seat lever forward.
- 3. Lock the seat into place.

Synergy Seat or TRU-Balance Seating Option

If your Quantum 1402 is equipped with a Synergy Seat or TRU-Balance Power Positioning System, please refer to the instruction manual supplied with your seating system.

POWER SEAT ACTUATOR

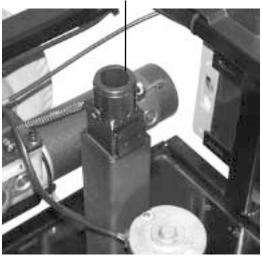


Figure 15. Power Seat Actuator

Once you are familiar with the operations of your Quantum 1402, there are some adjustments you can make to increase your comfort, such as seat height and angle, armrest width, angle and height, joystick position, and footrest height, depth, and angle.



WARNING! If your Quantum 1402 was configured by your Quantum Rehab Specialist or at a service center, please consult your health care professional before changing the seat position or making any other adjustment. Some adjustments may degrade the performance and safety of your power chair by changing its center of gravity.



NOTE: These adjustment procedures apply to the countoured medium- or high-back seat only. Contact your Quantum Rehab Specialist for information about adjusting any Synergy Seating System.

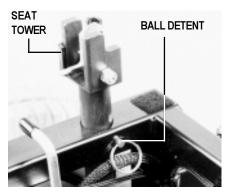


Figure 16. Seat Height

Seat Height and Seat Angle Adjustment

You can change the seat height to one of five positions in 1-in. increments.

To change the seat height or seat angle:

- 1. Unplug the electrical connector(s).
- 2. Remove the seat. See VII. "Disassembly."
- 3. Remove the power base front cover.
- 4. Use a slotted screwdriver to rotate the power base middle cover fasteners one-quarter turn and remove the power base middle cover.
- 5. Remove the ball detent pin from each of the four seat posts. See figure 16.
- 6. Raise or lower each seat post to the desired position. To change the angle (dump), set either the front or rear seat posts higher or lower than the other.
- 7. Reinstall the ball detent pin into each seat post.
- 8. Reinstall the power base middle cover and front cover.
- 9. Reinstall the seat.
- 10. Plug the connectors into the electronics tray.

SEAT HINGE BOLT

Figure 17. Seatback Angle

Seatback Angle Adjustment

If your power chair is equipped with an adjustable seatback, you can adjust it to four (4) different angles: 90°, 102°, 105°, or 107°.

To adjust the seatback angle:

- 1. Use a hex key and a wrench to remove the adjusting screws on both seat hinges. See figure 17.
- 2. Set the seatback at the desired angle.
- 3. Reinstall the screws on both seat hinges and retighten.



Figure 18. Armrest Width

Armrest Width

To change the armrest width:

- 1. Locate the two adjustment knobs on the armrest receiver bracket. See figure 18.
- 2. Loosen the knobs.
- 3. Slide the armrests in or out, to the desired width.
- 4. Retighten the knobs.

Armrest Angle

You can adjust the armrest angle to fit your specific needs.

To change the armrest angle:

- 1. Lift the armrest straight up so that it is perpendicular to the floor.
- 2. Use a 7/16-in. wrench to loosen the jam nut. See figure 19.
- 3. Use a 5/32-in. hex key to loosen the adjusting screw.
- 4. Turn the screw clockwise to lower the front of the armrest, or turn the screw counterclockwise to raise the front of the armrest.
- 5. Lock the adjusting screw into place by retightening the jam nut.

Armrest Height (Optional)

Your Quantum 1402 may be equipped with height-adjustable armrests.

To change the armrest height:

- 1. Remove the ball detent pin from the armrest.
- 2. Move the armrest up or down to the desired height.
- 3. Align the holes and reinsert the ball detent pin.

Joystick Extension

The joystick can easily slide out away from the armrest or in toward the armrest.

To extend the joystick:

- 1. Use a 3/16-in. hex key to loosen the setscrew. See figure 20.
- 2. Slide the joystick mounting bracket into or out of the armrest to the desired position.
- 3. Retighten the setscrew.

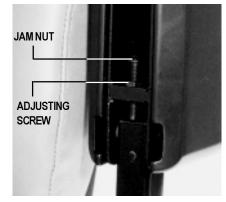


Figure 19. Armrest Angle

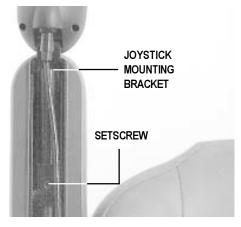


Figure 20. Joystick Extension

Footrest Height

The footrest height is easily adjusted to one of six different heights in 1-in, increments.

To raise or lower the footrest:

- 1. Remove the nuts and bolts from bracket. See figure 21.
- 2. Raise or lower the footrest to the desired height.
- 3. Reinstall the bolts and nuts into the footrest bracket and retighten.

Footrest Depth

To adjust the footrest depth:

- 1. Remove the nuts and bolts from the bracket. See figure 21.
- 2. Move the footrest in or out to the desired depth.
- 3. Reinstall the nuts and bolts into the bracket and retighten.

Footrest Angle

You can adjust the angle of the footrest with a 3/16-in. hex key. See figure 22.

To adjust the footrest angle:

- 1. Turn the setscrew clockwise to raise the front of the footrest.
- 2. Turn the setscrew counterclockwise to lower the front of the footrest.

Swing-away Footrests Option

Swing-away Footrests (SFRs) are an option. They enable you to swing the footrest to the side before transferring from your Quantum 1402.

To swing the footrests:

- 1. Push in the SFR release lever. See figure 23.
- 2. Swing the footrest to the side.

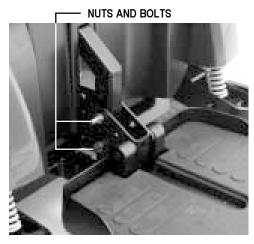


Figure 21. Footrest Height

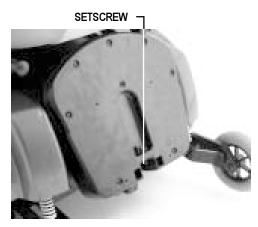


Figure 22. Footrest Angle



Figure 23. Swing-Away Footrests

Elevating Leg Rests Option

Elevating Leg Rests (ELRs) offer an infinite range of adjustment between 0° – 70° for the leg angle and a leg rest adjustment range of 15-20 in.

To adjust the ELR angle:

- 1. Press the ELR release lever. See figure 24.
- 2. Move the leg rest to the desired angle.

To adjust the ELR length:

- 1. Remove the two screws from the side of each leg rest extension. See figure 25.
- 2. Slide the leg rest in or out to the desired length.
- 3. Reinstall the two screws on each leg rest extension.



If your Quantum 1402 is equipped with a reclining seat (see figure 26), you can adjust the seatback angle and the armrest angle.

To adjust the seatback angle:

- 1. Press down on the seatback release lever. See figure 27.
- 2. Move the seatback down or up to the desired position.
- 3. Release the seatback release lever.

To adjust the armrest angle:

Refer to "Armrest Angle" earlier in this section.

Power Elevating Seat Option

If your Quantum 1402 is equipped with a power elevating seat, you can change the seat height automatically. The seat height switch is located either on the armrest or on the joystick.

To change the seat height using the seat height switch on the armrest:

- 1. Press forward on the power seat switch to raise the seat. See figure 28.
- 2. Pull back on the power seat switch to lower the seat.



WARNING! Do not allow the motor to run more than a few seconds after the mechanism reaches the top or bottom limit.

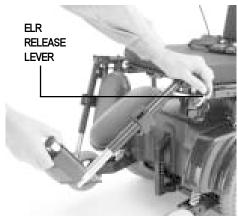


Figure 24. Elevating Leg Rests



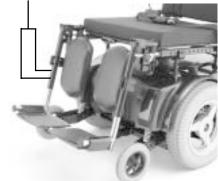


Figure 25. Elevating Leg Rests



Figure 26. Reclining Seat

WARNING! The power elevating seat option is intended for use on a level surface only. Never raise the seat from its lowest position on an inclined surface. Failure to heed this warning can result in the Quantum 1402 tipping over and causing injury.



WARNING! Never raise the seat from its lowest position when operating your Quantum 1402 on bumpy or uneven surfaces. Failure to heed this warning can result in the Quantum 1402 tipping over and causing injury.

WARNING! Never raise the power elevating seat while your Quantum 1402 is in the freewheel mode.

WARNING! Always fasten the positioning belt when operating the power elevating seat.



NOTE: The power elevating seat option is equipped with a system that reduces the speed of the power chair by one half when the seat is elevated more than 1 – 2 inches. Always check to be sure this system is operating properly before using your Quantum 1402.



If your Quantum 1402 is equipped with the deluxe high-back seat, you can adjust the headrest height.

To adjust the headrest height:

- 1. Push in the headrest release button.
- 2. Move the headrest up or down to the desired position.



Figure 27. Seatback Angle

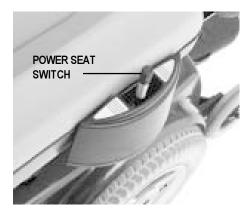


Figure 28. Power Seat Switch (Shown on Armrest)

Anti-tip Wheel Adjustment

The anti-tip wheels are designed to give your Quantum 1402 increased stability on rough surfaces. The anti-tip wheels are preset at the factory to a height of 1/2 inch off the ground. This setting is for smooth surfaces or indoor use only. If you plan on using your Quantum 1402 on rough surfaces, it may be necessary to adjust the anti-tip wheels to better suit your needs. The anti-tip wheels may need adjustment if either of the following occur:

- When coming to a stop, your Quantum 1402 tips forward excessively.
- The anti-tip wheels constantly rub the ground.



NOTE: Each drive tire must be inflated to 35 psi in order for the anti-tip wheels to be properly adjusted.



Figure 29. Anti-Tip Wheel Adjustment

To adjust the anti-tip wheels:

- 1. Place a 1/2-in. wrench on the inner locknut of the anti-tip bracket located right after the shock strut. See figure 29.
- 2. Turn the locknut counterclockwise to loosen.
- 3. Place your 1/2-in. wrench on the adjustable cam located on the other side of the locknut. See figure 30.
- 4. To adjust the anti-tip upward, turn the cam counterclockwise. To adjust the anti-tip downward, turn the cam clockwise.
- 5. Tighten the locknut.



Figure 30. Anti-Tip Wheel Adjustment



WARNING! Consult your authorized Quantum Rehab Specialist before attempting to change the anti-tip height! Changing the anti-tip wheel height affects handling under deceleration!



WARNING! The higher you raise the anti-tip wheels, the more tendency your Quantum 1402 has to tilt forward when coming to a stop. You can compensate for this by making a small adjustment to the preprogrammed deceleration setting in the controller or by moving the seat assembly farther to the rear of your Quantum 1402. Failure to do so may result in personal injury.



PROHIBITED! Do not remove the anti-tip wheels.

VII. DISASSEMBLY

Seat Removal

You may wish to remove the seat for transportation. If you have a TRU-Balance Power Positioning System, please refer to the operating instructions provided with your seating system.

To remove the countour seat:

- 1. Turn the power off.
- 2. Make sure your power chair is not in freewheel mode. See IV. "The Quantum 1402."
- 3. Unplug the main wiring harness behind the seat.
- 4. Simultaneously depress the two plungers on the front of the seat frame while lifting the front of the seat. See figure 31.
- 5. Lift the seat up and gently lower it back onto the front seat towers.
- 6. Pull the seat forward and lift it off of the rear seat towers.

To remove a power seat:

- 1. Release the seat by moving the seat release lever backward.
- 2. Lift up the power seat plate.
- 3. Lift the seat off of the actuator.

Foot Frame Removal

The foot frame helps protect the Quantum 1402 components from the environment. See figure 32. You must remove the foot frame in order to change the batteries and check the cable connections.

To remove the foot frame:

- 1. Turn the power off.
- 2. Make sure your Quantum 1402 is not in freewheel mode. See IV. "The Quantum 1402."
- 3. Locate the 5/16-in. pin at the base of the footplate bracket and remove.
- 4. Lift the foot frame straight up approximately 2 inches and pull toward you.



Figure 31. Removing the Seat



Figure 32. Removing the Foot Frame

REMOTE PLUS CONTROLLER

The Remote Plus is a modular electronic control system. The electronics necessary to operate the power chair are contained in several modules located on different parts of your power chair.

The Remote Plus system consists of the following components:

- master remote (see figure 33)
- communications cable(s)
- power module
- motor wiring harnesses
- battery wiring harnesses
- actuator lighting module (for optional equipment)

The master remote is located typically on the end of an armrest. The other components are located inside the power base.

Remote Plus Master Remote

The Remote Plus master remote consists of the following:

- 1. joystick
- 2. keypad
- 3. controller communications cable
- 4. off-board charger/programming socket

Joystick

The joystick controls the direction and speed of your power chair. When you move the joystick from the neutral (center) position, the electromagnetic brakes release and allow your power chair to move. The farther you push the joystick from its neutral position, the faster your power chair moves. When you release the joystick and allow it to return to the neutral position, you engage the electromagnetic brakes. This causes your power chair to decelerate and come to a complete stop.

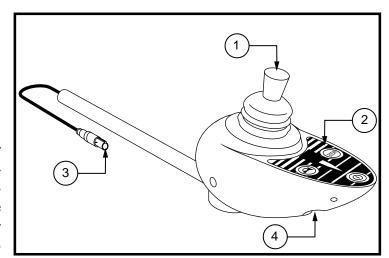


Figure 33. Remote Plus Master Remote



WARNING! If your power chair begins to move in an unexpected manner, immediately release the joystick. Unless the joystick is damaged, this action should stop your power chair.

Keypad

The keypad is located directly in front of the joystick. It contains keys that you will use to control your power chair.

On/Off Key

The on/off key powers the system on and off.



WARNING! Unless faced with an emergency situation, do not use the on/off key to stop the chair. This will cause the power chair to stop abruptly.

WARNING! Always turn the power off when you are stationary to prevent unexpected movement.

Mode Key

Press the key to change speed setting or to activate the power accessories. See "Speed Settings" or "Power Accessories."

Speed Setting Indicator

Indicates the selected speed setting.

Power Accessory Indicator

Indicates the selected power accessory. This is for optional accessories only.

Horn Key

The horn key activates the horn.

Right/Left Turn Indicator Keys

The right/left turn indicator keys toggle either the left or right turn indicators. Press once to turn on and press again to turn off. You can also turn off the selected indicator by pressing the opposite indicator key or the hazard key.

Light Key

The light key turns headlights/taillights on and offindependent of other indicators.

Hazard Key

The hazard key activates both indicators at the same time. You can only cancel this by pressing the hazard key again.

Battery Condition Meter

The battery condition meter is located in front of the joystick. This is a 10-segment illuminated display that indicates that the Remote Plus is powered on and also gives the status of the battery, the controller, and the power chair electrical system.

■ Red, yellow, and green lights lit: Batteries charged; controller and electrical system OK.

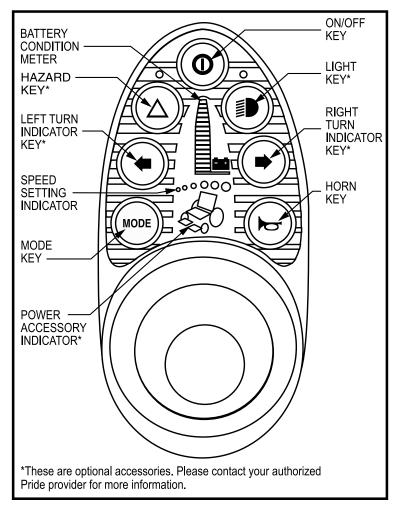


Figure 34. Remote Plus Keypad

- Red and yellow lights lit: Charge batteries if possible; controller and electrical system OK.
- **Red lights only lit or slow flash:** Charge batteries as soon as possible; controller and electrical system OK.
- Rapid flash of lights: Indicates a fault in the controller or the electrical system. See "Trouble Codes."
- Ripple up and down of lights: The joystick was not in the neutral position when the controller was turned on. If you get "ripple up and down of lights," turn off the controller, allow the joystick to return to the neutral position, then turn on the controller.



NOTE: If you still get "ripple up and down of lights," contact your Quantum Rehab Specialist.

NOTE: When the batteries approach a discharged state, the first red light will begin to slowly flash, reminding you the batteries need to be charged immediately!

Speed Settings (Mode Key)

The Remote Plus speed settings range from 1 to 5. Typically, the slowest speed setting is 1 and the fastest speed setting is 5. The settings are indicated by the number of lights that are lit.



NOTE: The speed settings are pre-set at the factory. If your Quantum Rehab Specialist changes the order of these settings, please make note of these changes. Contact your Quantum Rehab Specialist for more information.

To select a speed setting:

- 1. Press the on/off key to power on the controller.
- 2. Press the mode key once.
- 3. To increase chair speed, push the joystick to the right. Each time you push the joystick, you will increase the speed setting in the speed setting indicator.
- 4. To decrease chair speed, push the joystick to the left. Each time you push the joystick, you decrease the speed setting in the speed setting indicator.
- 5. Once you select the desired speed setting, press the mode key once to keep the setting or push the joystick in the forward or reverse direction. The chair will resume operation at the selected speed.



NOTE: We recommend that the first few times you operate your power chair, you have your speed on the slowest setting until you become familiar with your new power chair.

Power Accessories

If your power chair is equipped with power accessories such as a power seat or power elevating leg rests, you can operate them through the remote keypad. Contact your Quantum Rehab Specialist for information on how to operate these accessories.

Off-board Charger/Programming Socket

You can charge the power chair batteries with an off-board charger through the 3-pin socket located on the front of the controller. Off-board charger current should not exceed 12 amps. Contact your Quantum Rehab Specialist for more information.



WARNING! Only chargers with Neutrik NC3MX plugs should be connected to the charger socket. See your Quantum Rehab Specialist for more information.



NOTE: The socket may also be used for reprogramming the controller. Contact your Quantum Rehab Specialist for more information.

Controller Communications Cable

The controller communications cable provides the joystick module with a connection to the power module.

Power Module (Not shown)

Typically, the power module is mounted to the power base. The power module provides a power interface for the joystick module. It routes the battery power to the motors and other powered accessories such as lights and power seats.

Actuator Lighting Module (Not Shown)

The actuator lighting module is also located on the power base. The actuator lighting module provides a control and power interface between the power module, the lights, and/or the power seat actuator.

Sleep Mode

Your Remote Plus controller has a sleep mode feature. Sleep mode is a built-in circuit that automatically shuts off the main power if the joystick is not moved in any direction for approximately five minutes. The battery condition meter lights on the keypad indicate sleep mode by blinking once every five seconds. To restore power and continue, push the on/off key twice.

Thermal Rollback

The Remote Plus is equipped with a thermal rollback circuit. This circuit monitors the temperature of the motors, power module, and remote. In the event that any of them become excessively hot (above 122° F), motor voltage is reduced. For every degree above 122° F, the voltage is reduced by 5 volts. This reduces the speed of your power chair and allows the electrical components to cool down. When the temperature returns to a safe level, your power chair resumes its normal speed.

Trouble Codes

In addition to indicating the current state of battery charge, the battery condition meter can also indicate possible problems with your power chair. The battery condition meter has ten lights. The lights provide information by the number of lights that are flashing. If any of the meter lights are flashing rapidly, the controller may be indicating a fault. For instance, if the first light is flashing rapidly, the battery voltage is nearly depleted. The following is a list of the possible errors signified by the rapidly flashing meter. When you get a trouble code, contact your Quantum Rehab Specialist.

TROUBLE CODE	DIAGNOSIS	SOLUTION
10	High Battery Voltage	Check batteries.
9	Solenoid Brake Fault	Check motor/brake wiring.
8	Possible Controller Fault	See Quantum Rehab Specialist.
7	Possible Joystick Fault	See Quantum Rehab Specialist.
6	InhibitActive	Unplug charger. Check connections.
5	Right Motor Wiring Fault	Check right motor wiring.
4	Right Motor Disconnected	Check right motor wiring.
3	Left Motor Wiring Fault	Check left motor wiring.
2	Left Motor Disconnected	Check left motor wiring.
1	Low Battery Voltage	Check batteries/battery wiring.

DYNAMIC DX CONTROLLER

The Dynamic DX electronic control system is a modular system. The electronics necessary to operate the power chair are contained in several modules located on different parts of your power chair.

The Dynamic DX system consists of the following components:

- Europa master remote (see figure 35)
- communications cable(s)
- power module
- motor wiring harnesses
- battery wiring harnesses
- actuator lighting module (for optional systems)

The master remote is located typically on the end of an armrest. The other components are located inside the power base.

Europa Master Remote

The Europa master remote consists of the following:

- 1. joystick
- 2. keypad
- 3. controller communications connector
- 4. off-board charger/programming socket

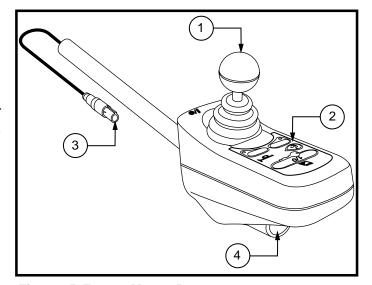


Figure 35. Europa Master Remote

Joystick

The joystick controls the direction and speed of the power chair. When you move the joystick from the neutral (center) position, the electromagnetic brake will release and allow the power chair to move. The farther you push the joystick from its neutral position, the faster your power chair will move. When you release the joystick and allow it to return to the neutral position, you engage the electromagnetic brake. This helps the power chair decelerate and come to a complete stop. You can also use the joystick control power actuators.



WARNING! If your power chair begins to move in an unexpected manner, immediately release the joystick. Unless the joystick is damaged, this action should stop your power chair.

Out Of Neutral At Power Up

Your power chair joystick is equipped with Out Of Neutral At Power Up (OONAPU). If you power up the system and the joystick is not in the neutral position, the system status light flashes rapidly for either as long as the joystick is out of the neutral position or five seconds. If this has happened and all the lights on the battery condition meter are flashing, you may have set flash code 1.

Keypad

The keypad is located directly in front of the joystick. It contains keys that you will use to control your power chair.

On/Off Key

The on/off key toggles the system power on and off.



WARNING! Unless faced with an emergency situation, do not use the on/off key to stop the chair. This will cause the power chair to stop abruptly.

WARNING! Always turn the power off when you are stationary to prevent unexpected movement.



NOTE: If the joystick is not in the neutral (center) position when you turn on the power, you may cause a fault in the system. See "Out Of Neutral At Power Up."

System Status Light

The system status light is normally on when the system is powered up, and off when the system is powered down. It will also flash trouble codes when the system detects a fault. See "Trouble Codes."

Magnetic Locking Area

Your power chair is equipped with a feature that enables you to "lockout" unauthorized users. For this function, you will need the magnetic key supplied with your power chair. If you lose this key, contact your Quantum Rehab Specialist.

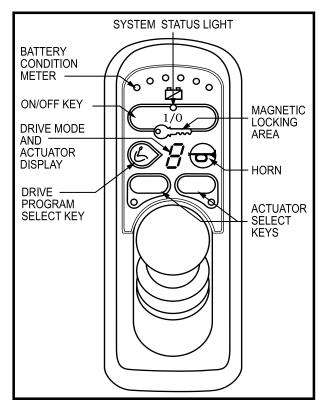


Figure 36. Europa Master Remote Keypad

To enable the lockout system:

1. Hold the magnetic key on or near the key symbol. The system will beep and automatically power down.



NOTE: None of the remote lights should be lit.

- 2. Press the on/off key to power up the chair. The key symbol will flash, but you will not be able to drive your power chair. This means that the controller is still locked.
- 3. Hold the magnetic key on or near the key symbol again to unlock the controller. When the key symbol stops flashing, you may turn on the power chair.



NOTE: If you turn on the power chair while it is locked and do not unlock it after one minute, the power chair will automatically power off.

Battery Condition Meter

The battery condition meter consists of six lights arranged in an arc over the battery icon. From left to right, the first two are red, the second two are orange and the last two are green. These lights give you an accurate indication of your usable battery capacity. If the battery has at least 85% of its rated capacity, all of the lights will be on. As the battery voltage drops, the number of lights reduces from right to left. When the battery capacity drops to 10% or below, all of the lights will flash once every second.

VIII. OPERATION

Drive Program Select Key

The drive program select key enables you to select a drive program and an actuator mode. Your Dynamic DX controller was pre-programmed at the factory for five drive programs—1 (slowest) to 5 (fastest). The drive mode is indicated by a number in the center of the keypad.



NOTE: The drive mode settings are pre-set at the factory. If your Quantum Rehab Specialist changes these settings, please make note of these changes.

To change the drive mode program:

- 1. Press the drive program select key.
- 2. Move the joystick right to increase the drive mode program.
- 3. Move the joystick left to decrease the drive mode program.
- 4. Press the drive mode select key.

Drive Mode and Actuator Display (also Remote Status Display)

This is a seven-segment light that displays the drive program. It also displays a drive inhibit and actuator mode (if applicable), when they occur. This light will flash if there is an internal Dynamic DX Remote fault, or if an OONAPU fault has occurred. See "Out Of Neutral At Power Up."

Power Accessories

If your power chair is equipped with power accessories such as a power seat or power elevating leg rests, you can operate them through the remote keypad. Contact your Quantum Rehab Specialist for information on how to operate these accessories

Horn Key

The horn key activates the horn.

Battery Saver Feature

When the battery capacity drops to below 21V (typically two lights), the controller will reduce power chair performance to conserve battery power.

Off-board Charger/Programming Socket

You can charge the power chair batteries with an off-board charge through the 3-pin socket located on the front of the Europa. Off-board charger current should not exceed 8 amps. Contact your Quantum Rehab Specialist for more information.



NOTE: The socket may also be used for reprogramming the Europa. Contact your Quantum Rehab Specialist for more information.

Sleep Mode

The power chair controller features a sleep mode. Sleep mode is a built-in circuit that will automatically shut off the main power if the joystick is not moved in any direction for a specific amount of time. This time factor is programmed into the controller. The battery condition meter on the keypad indicates sleep mode by blinking once every five seconds. To restore power and continue, push the on/off key twice.

VIII. OPERATION

Trouble Codes

The system status light is displayed within the on/off key. This light is lit if the system is turned on. It also flashes in groups called flash codes, to indicate system faults. The table below identifies the individual fault codes. If your keypad displays one of these codes, contact your Quantum Rehab Specialist.

FLASH CODE		
SEQUENCE	DIAGNOSIS	SOLUTION
••_	DX module fault	See your Quantum Rehab Specialist.
••••_	DX accessory fault	See your Quantum Rehab Specialist.
•••_	Left motor (or connection) fault	Check left motor wiring.
••••_	Right motor (or connection) fault	Check right motor wiring.
••••-	Left park brake fault	Check motor/brake wiring.
•••••	Right park brake fault	Check motor/brake wiring.
•••••	Low battery fault	Check that the battery wiring is secure.
•••••	Over voltage fault	Check that the battery wiring is secure.
•••••	CANLfault	See your Quantum Rehab Specialist.
••••••	CANA fault	See your Quantum Rehab Specialist.
•••••	Stall timeout	Tum unit on, then off.
••••••	Module mismatch	See your Quantum Rehab Specialist.



NOTE: You must power the controller off and then on again to reset the controller, even if the source of the fault is removed/corrected.

In the event of a fault, the system status light displays diagnostic indications. Faults are encoded as follows: one (for a low battery voltage fault) to twelve (module mismatch) and are displayed by the light flashing the number of times prescribed by the fault code. The flash sequence (one to twelve) is followed by a long off period (2 seconds). If more than one fault exists, then the fault having the highest priority is indicated. The controller must be turned off and then on again even if the source of the fault is removed. If you cannot resolve the problem, contact your Quantum Rehab Specialist.

BATTERIES

Your Quantum 1402 uses two long-lasting, 12-volt, deep-cycle batteries. These batteries are sealed and maintenance free. Since they are sealed, there is no need to check the electrolyte (fluid) level. Deep-cycle batteries are designed to handle a longer and deeper discharge. Though they are similar in appearance to automotive batteries, they are not interchangeable. Automotive batteries are not designed to handle a long, deep discharge, and also are unsafe for use in power chairs.



WARNING! Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

Charging the Batteries

The battery charger is essential in providing long life to the Quantum 1402 batteries. The battery charger is designed to optimize the performance of your power chair by charging the batteries safely, quickly, and easily. Quantum 1402 power chair uses either an onboard or an optional off-board charger to charge the batteries. The onboard charger is plugged into the charger power cord receptacle on the electronics tray. The off-board charger is plugged into a port on the front of your controller. See VIII. "Operation." Follow the directions supplied with the charger.



WARNING! You must recharge the batteries with the supplied charger. Do not use an automotive-type battery charger.



PROHIBITED! Removal of grounding prong can create electrical hazard. If necessary, properly install an approved 3-pronged adapter to an electrical outlet having 2-pronged plug access. Failure to heed could result in personal injury and/or property damage.



PROHIBITED! Never use an extension cord to plug in your battery charger. Plug the charger directly into a properly wired standard wall outlet.

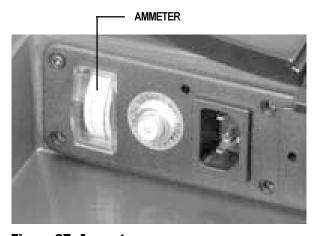


Figure 37. Ammeter

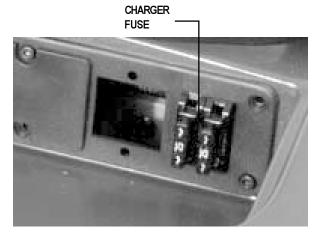


Figure 38. Charger Fuse

To charge the batteries using the onboard charger:

- 1. Position the rear of your Quantum 1402 close to a standard wall outlet.
- 2. Be certain the controller power is turned off and the freewheel levers are in the engaged position. See IV. "The Ouantum 1402."
- 3. Slide the rear cover forward.
- 4. Extend the charger power cord and plug it into the wall outlet. The Quantum 1402 incorporates an inhibit function that disables the power chair when the charger is plugged into a wall outlet.
- 5. The ammeter indicates how much charge is needed to fully charge the batteries. Wait about a minute for the charger to warm up. The ammeter may move as high as 5.5 amps, then gradually move back down to 0 amps as the batteries charge.
- 6. We recommend you charge the batteries for 8 to 14 hours. As the batteries charge, the ammeter needle slowly drops to zero. When the batteries are fully charged, the needle vibrates on or near the zero mark on the ammeter scale.
- 7. When the batteries are fully charged, you can unplug the power cord from the wall outlet, wind it up using the hook and loop strap, and place the cord back into the rear tray.
- 8. Replace the rear cover.

To charge the batteries using the optional off-board charger:

- 1. Position your Quantum 1402 next to a standard wall outlet.
- 2. Be certain the controller power is turned off and the freewheel levers are in the engaged position. See IV. "The Ouantum 1402."
- 3. Remove the run plug located on the electronics tray.
- 4. Plug the 3-pin extension cable into the charger, then into the electronics tray connector.
- 5. Plug the charger into the wall outlet.
- 6. The ammeter indicates how much charge is needed to fully charge the batteries. Wait about a minute for the charger to warm up. The ammeter should move all the way up to 5 amps, then gradually move back down to 0 amps.
- 7. We recommend you charge the batteries for 8 to 14 hours. As the batteries charge, the ammeter needle slowly drops to zero. When the batteries are fully charged, the needle vibrates on or near zero on the ammeter scale.
- 8. When the batteries are fully charged, disconnect the charger cord from the wall outlet.
- 9. Disconnect the charger from the rear electronics tray.
- 10. Reconnect the run plug into its connector.



NOTE: If the run plug is not reconnected, your Quantum 1402 will not operate.

11. Replace the rear cover.

Battery Break-in

To break in new batteries for maximum efficiency:

- 1. Fully recharge any new battery prior to its initial use. This brings the battery up to about 90% of its peak performance level.
- 2. Operate your Quantum 1402 about the house and yard. Move slowly at first, and do not stray too far until you become accustomed to the controls and break in the batteries.
- 3. Give the batteries another full charge of 8 to 14 hours and operate your Quantum 1402 again. The batteries should now perform at over 90% of their potential.
- 4. After four or five charging cycles, the batteries reach 100% charge and last for an extended period.

Batteries and Charging—Frequently Asked Questions (FAQs)

How does the charger work?

The battery charger takes the standard wall outlet voltage of 120 VAC (alternating current) and converts it to 24 VDC (direct current). The batteries use direct current to run your power chair. When the battery voltage is low, the charger works harder to charge the battery. This is why the ammeter initially reads 5 or more amps. As the battery voltage approaches full charge, the charger does not work as hard to complete the charging cycle. This explains why the ammeter drops as it approaches a full charge. When the battery is fully charged, the amperage from the charger is nearly at zero. This is how the charger maintains a charge but does not overcharge the battery. The charger will not operate after the batteries have been discharged to nearly zero voltage. If this happens, call your authorized Quantum Rehab Specialist for assistance.

Can I use a different battery charger?

Use only the charger supplied with the Quantum 1402. It is the safest, most efficient tool to charge the batteries. We do not recommend using other types of chargers.

How often must I charge the batteries?

Many factors come into consideration when deciding how often to charge the batteries. You may use your Quantum 1402 all day on a daily basis or you may not use it for weeks at a time.

Daily Use

If you use your Quantum 1402 on a daily basis, charge the batteries as soon as you are finished. Your Quantum 1402 will be ready each morning to give you a full day's service. It is recommended that you charge the batteries 8 to 14 hours after daily use.

Infrequent Use

If you use your Quantum 1402 infrequently (once a week or less), you should charge the batteries at least once per week for 12 to 14 hours.



NOTE: Keep your batteries fully charged and avoid deeply discharging your batteries. Do not charge the batteries for more than 24 hours at a charging cycle.

How can I get maximum range or distance per charge?

Rarely do you have an ideal driving situation such as smooth, flat, hard terrain with no wind, hills, or curves. More often you are presented with hills, sidewalk cracks, uneven and loosely packed surfaces, curves, and wind. All of these factors affect the distance or running time per battery charge. The following are a few suggestions for obtaining the maximum range per charge.

- Always fully charge the batteries prior to your trip.
- Maintain 35 psi in pneumatic drive wheels.
- Plan your trip in advance to avoid inclines if possible.
- Limit baggage weight to essential items.
- Try to maintain an even speed and avoid stop-and-go driving.

What type of battery should I use?

We recommend deep-cycle batteries that are sealed and maintenance free. Both AGM and Gel-Cell are deep-cycle batteries that are similar in performance.

Use these specifications to reorder deep-cycle batteries:

Battery Specifications		
Type:	Deep-cycle AGM or Gel-Cell	
Size:	Group 24	
Voltage:	12 volts each	
Amperage:	70-80 amp hours	
Size:	NF-22 (power seat option only)	
Voltage:	12 volts each	
Amperage:	45 - 55 amp hours	



WARNING! Corrosive chemicals are contained in batteries. Use only AGM or Gel-Cell batteries to reduce the risk of leakage or explosive conditions.

Why do my new batteries seem weak?

Deep-cycle batteries employ a much different chemical technology than that used in car batteries, nickel-cadmium batteries (nicads), or in other common battery types. Deep-cycle batteries are specifically designed to provide power, drain down their charge, and then accept a relatively quick recharge. AGM or Gel-Cell batteries should be charged as often as possible. They do not have a "memory" like nickel-cadmium batteries.

We work closely with our battery manufacturer to provide a battery that best suits the specific demands of your power chair. Fresh batteries arrive regularly at Pride and are promptly shipped with a full charge. During shipping, the batteries encounter temperature extremes that may influence initial performance. Heat robs the charge from the battery, and cold slows the power available and extends the time needed to recharge the battery (just as with a car battery). It might take a few days for the temperature of the battery to stabilize and adjust to its new ambient temperature. More importantly, it takes a few "charging cycles" (a partial drain—then a full recharge) to establish the critical chemical balance that is essential to the battery's peak performance and long life. It is well worth it to take the time to break in your battery properly.

How can I ensure maximum battery life?

A fully charged, deep-cycle battery provides reliable performance and extended battery life. Keep the batteries fully charged whenever possible. Batteries that are regularly and deeply discharged, infrequently charged, or stored without a full charge may be permanently damaged, causing unreliable power chair operation and limited battery life.

How should I store my Quantum 1402 and its batteries?

If you do not use your Quantum 1402 regularly, we recommend maintaining battery vitality by charging the batteries at least once a week.

If you do not plan on using your Quantum 1402 for an extended period, fully charge the batteries prior to storage. Disconnect the battery harnesses and store the Quantum 1402 in a warm, dry environment. Avoid temperature extremes, such as freezing and excessively hot conditions, and never attempt to charge a frozen battery. A cold or frozen battery should be warmed for several days prior to recharging.



NOTE: If you are storing a Quantum 1402 for an extended period of time, you may wish to elevate it with several boards under the frame. This keeps the tires off the ground and prevents the possibility of flat spots developing on the tires.

What about public transportation?

If you intend to use public transportation while using your Quantum 1402, you must contact in advance the transportation provider to determine their specific requirements.

AGM and Gel-Cell batteries are designed for application in wheelchairs and in other mobility vehicles. Generally, both are safe for all forms of transportation such as aircraft, buses, and trains. We suggest that you contact your transportation provider to determine specific requirements of transportation and packaging.

What about shipping?

If you wish to use a freight company to ship your Quantum 1402 to your final destination, repack your Quantum 1402 in the original shipping container and ship the batteries in separate boxes.

Routine Maintenance

Your Quantum 1402 is a sophisticated power chair. Like any motorized vehicle, it requires routine maintenance checks. You can perform some of these checks, but others require assistance from an authorized Quantum Rehab Specialist. Preventive maintenance is very important. If you follow the maintenance checks in this section as scheduled, you can help ensure that your Quantum 1402 gives you years of trouble-free operation. If you have any doubt as to the care or operation of your Quantum 1402, contact your authorized Quantum Rehab Specialist.

Your Quantum 1402, like most electrical equipment, is susceptible to damage from the elements. Avoid damp areas of any kind.



WARNING! Direct exposure to water or dampness could cause the power chair to malfunction electronically and mechanically. Water can cause electrical components to corrode and the chair's frame to rust.

Should your Quantum 1402 come in contact with water:

- 1. Dry your Quantum 1402 as thoroughly as possible with a dry towel.
- 2. Allow your Quantum 1402 to sit in a warm, dry place for 12 hours to allow unseen water to evaporate.
- 3. Check the joystick operation and the brakes before using your Quantum 1402 again.
- 4. If any inconsistencies are found, take your Quantum 1402 to an authorized Quantum Rehab Specialist.

Temperature

Some of the parts of your Quantum 1402 are susceptible to extreme changes in temperature. Always keep your Quantum 1402 between the temperatures of 18° F (-8° C) and 122° F (50° C).

- In extremely cold temperatures the batteries may freeze. The specific temperature at which they freeze depends on a number of factors, such as battery charge, usage, and composition of the batteries (e.g., AGM or Gel-Cell).
- Temperatures above 122° F (50° C) may cause your Quantum 1402 to operate at a reduced speed. This reduced speed is a safety feature built into the controller that helps prevent damage to the motor and other electrical components. See VIII. "Operation."

General Guidelines

- Avoid knocking or bumping the controller, especially the joystick.
- Avoid prolonged exposure of your Quantum 1402 to extreme conditions, such as heat, cold, or moisture.
- Keep the controller clean.
- Check all controller connectors on the electronics tray to ensure that they are all tight and secured properly. Also check the charger harness connector.
- Make sure the drive tires are inflated to **35 psi**. See figure 39.

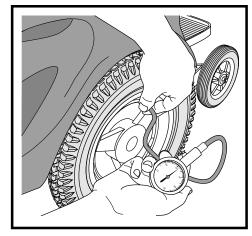


Figure 39. Check Tire Pressure



WARNING! Overinflating tires can cause them to explode and can result in personal injury.

WARNING! Do not use a high pressure hose to inflate your tires.

■ Use a rubber conditioner on the tire sidewalls to help preserve them.



WARNING! Never use a rubber conditioner on the tread area of the tires; doing so may make thetires slippery and cause your Quantum 1402 to skid.

- The body shroud has been sprayed with a clear sealant coating. You can apply a light coat of car wax to help it retain its high-gloss appearance.
- Check all electrical connections. Make sure they are tight and are not corroded. Batteries must sit flat within the battery well, with the battery terminals facing inward, toward each other. Refer to the frame decal for the correct wiring layout.
- All wheel bearings are prelubricated and sealed. They require no subsequent lubrication.

Daily Checks

- With the controller turned off, check the joystick. Make sure it is not bent or damaged and that it returns to the center when you release it. Check the rubber boot around the base of the joystick for damage. Visually inspect the boot. Do not handle or try to repair it. Contact your authorized Quantum Rehab Specialist if there is a problem.
- Visually inspect the controller harnesses. Make sure that they are not frayed or cut or have any wires exposed. Contact your authorized Quantum Rehab Specialist if there is a problem with any of these harnesses.

Weekly Checks

- Disconnect and inspect the controller and the charger harnesses from the electronics tray. Look for corrosion. Contact your authorized Quantum Rehab Specialist if necessary.
- Ensure that all parts of the controller system are securely fastened to your Quantum 1402. Do not overtighten any screws.
- Check for proper tire inflation. There should be **35 psi** in each tire. If a tire does not hold air, see an authorized Quantum Rehab Specialist for replacement of the tube.
- Calibrate the joystick if a noticeable difference in performance is detected or if the joystick does not operate properly. You can only do this for the Remote Plus controller.
- Check the brakes. This test should be carried out on a level surface with at least three feet of clearance around your Quantum 1402.

To check the brakes:

- 1. Turn on the controller and turn down the speed level of your Quantum 1402.
- 2. After one second, check the battery condition meter. Make sure that it remains on.
- 3. Slowly push the joystick forward until you hear the electric brakes click. Immediately release the joystick. You must be able to hear each electrical brake operating within a few seconds of joystick movement. Repeat this test three times, pushing the joystick backwards, then left, and then right.

To calibrate the joystick (Remote Plus only):

- 1. Position the joystick in the full reverse position and hold it there. Turn on the controller.
- 2. The battery condition meter lights up from one bar to ten bars, and then back to one bar. It does this twice, then blinks rapidly.
- 3. Turn off the controller.
- 4. Position the joystick in the full forward position and hold it there; then turn the controller on.
- 5. The battery condition meter lights up from one bar to ten bars, and then back to one bar. It does this twice, then blinks once, and then it blinks continuously.
- 6. Turn off the controller. Now the joystick and controller are set up to function properly together.

Monthly Checks

- Check that the anti-tip wheels do not rub the ground when you operate the Quantum 1402. Adjust them as necessary. See VI. "Comfort Adjustments."
- Check for extreme wear on the anti-tip wheels. Replace them as necessary.
- Check for drive tire wear. See an authorized Quantum Rehab Specialist for replacement.
- Check the rear casters for wear. Replace them as necessary.
- Check the rear forks for damage or fluttering which indicates that they may need to be adjusted or have the bearings replaced. See an authorized Quantum Rehab Specialist for repair.
- Keep your Quantum 1402 clean and free of foreign material, such as mud, dirt, hair, food, drink, etc.

Yearly Checks

Take your Quantum 1402 to an authorized Quantum Rehab Specialist for yearly maintenance. This helps ensure that your power chair is functioning properly and helps prevent future complications.

Storage

Your power chair should be stored in a dry place, free from temperature extremes. When storing, disconnect the batteries from the Quantum 1402. See IX. "Batteries and Charging."



WARNING! Improper storage of your power chair can result in rust to the frame and damage to electronics. Store and maintain your power chair in a dry and clean condition.

Cleaning Instructions



WARNING! Never hose off your Quantum 1402 or place it in direct contact with water. Your power chair has a painted, ABS plastic body shroud that allows it to be easily wiped clean with a damp cloth.

WARNING! Never use any chemicals to clean a vinyl seat, as they may cause the seat to become slippery or dry out and crack. Use soapy water and dry the seat thoroughly.

Tires and Tubes

If your Quantum 1402 is equipped with pneumatic tires, you should check the air pressure at least once a week. This prolongs the life of your tires and helps ensure the perfect operation of your chair. If you have a flat tire, replace the tube. Replacement tires and tubes are readily available through the provider where you purchased your power chair.



WARNING! To avoid possible injury, be sure that the controller is turned off and the power chair is not in freewheel mode before performing this procedure.

WARNING! Completely deflate the tire before attempting repair. If your tire has been overinflated to ore than 35 psi, use the air pressure gauge to apply pressure to the valve stem on the tire to deflate to 35 psi.

Follow these easy steps for a quick and safe repair:

- 1. Completely deflate the tire if pneumatic.
- 2. Use a 3/4-in. socket wrench to remove the drive wheel nut from the center hub of the wheel. See figure 40.
- 3. Pull the wheel off of the axle.
- 4. Remove the bolts that hold the wheel halves together.
- 5. Remove the old tube and/or tire and replace it with a new tube Figure 40. Drive Wheel and/or tire.
- 6. Reassemble the wheel.
- 7. Slide the wheel back onto the shaft.
- 8. Install the drive wheel nut into the center hub and retighten.
- 9. Inflate the tire to **35 psi**.

Battery Replacement

To replace the battery: A diagram is printed on a decal on the Quantum 1402 frame near the battery tray. See figure 41.

- 1. Remove the detent pin from the bottom of the foot frame.
- 2. Lift the foot frame straight up to remove it from the mounting bracket.
- 3. Locate the two wiring harnesses that are attached to the batteries.
- 4. Disconnect these two harnesses from their respective quick discon nects by pulling the quick disconnects toward you.
- 5. Remove the batteries from the power base assembly.
- 6. Disconnect the battery harnesses from the positive and negative terminals.
- 7. Replace old batteries with new ones.
- 8. Connect the wire labeled BAT (+) to a battery's positive (red) terminal. Connect the wire labeled BAT (-) to the negative (black) terminal. Install the battery in the rear battery tray with the battery's terminals
 - facing inward, toward the center of the power chair. Plug the wiring harness into a quick disconnect.
- 9. Connect the wire labeled BAT (+) to the other battery's positive (red) terminal. Connect the wire labeled BAT (-) to the negative (black) terminal. Install the battery in the front of the battery tray with the battery's terminals facing inward, toward the center of the power chair. Plug the wiring harness into a quick disconnect.



WARNING! Make sure you tighten the fasteners so that the connections are secure.

10. Replace the foot frame using the detent pin to secure.



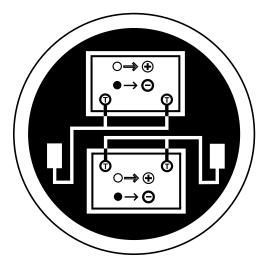


Figure 41. Battery Connections

Corrective Maintenance

If the battery condition meter does not light up when you turn on the power:

- Check the harness connections. Make sure they are tight.
- Check the circuit breaker. Reset it if necessary.
- Check the battery connections.

If the above conditions prove normal, you can load test the batteries with a battery load tester. These testers are available at automotive parts stores. Disconnect both batteries before load testing and follow the directions that come with the load tester. If either one of the batteries fails the load test, replace both of them. If your Quantum 1402 still does not power up, contact your authorized Quantum Rehab Specialist.

When to See Your Authorized Quantum Rehab Specialist for Service

The following symptoms could indicate a serious problem with your Quantum 1402. If necessary, contact your authorized Quantum Rehab Specialist. When calling, have the model number, serial number, nature of the problem, and the trouble code if available.

- Motor noise
- Frayed harnesses
- Cracked or broken connectors
- Uneven wear on any of the tires
- Jerky motion
- Pulling to one side
- Bent or broken wheel assemblies
- Does not power up
- Powers up, but does not move

XI. OPTIONAL ACCESSORIES

The following accessories are available from your authorized Quantum Rehab Specialist.

Positioning Belt

The positioning belt is designed to support the operator so that he or she does not slide down or forward in the seat. The positioning belt is not designed for use as a restraining device. Make sure the belt is secure but does not cause discomfort.



WARNING! The positioning belt is not designed for use as a seat belt in a motor vehicle. Nor is your power chair suitable for use as a seat in any vehicle. Anyone traveling in a vehicle should be properly belted into seats approved by the vehicle manufacturer.

Oxygen Tank Holder

The removable oxygen tank holder is mounted to the back of the seat by means of the accessory bracket.

Cane and Crutch Holder

The removable cane and crutch holder is mounted to the back of the seat by means of the accessory bracket.

Walker Holder

The removable walker holder is mounted to the back of the seat by means of the accessory bracket. It can hold a standard size walker.

Rear Basket

The rear basket is mounted to the accessory bracket. It has a handle that you can use when you remove the basket from the power chair.

Cup Holder

The cup holder is mounted to the armrest.

Swing-away Joystick

Your Quantum 1402 may be equipped with a swing-away joystick. This option enables you to move the joystick from the front of the armrest to the side of the armrest, without disconnecting it. See figures 42 and 43.

The joystick can be mounted to the left or right side of your Quantum 1402. Contact your authorized Quantum Rehab Specialist.



Figure 42. Swing-Away Joystick (Forward Position)



Figure 43. Swing-Away Joystick (Retracted Position)

XII. WARRANTY

Lifetime Limited Warranty

For the lifetime of your power chair from the date of purchase, Pride 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 to be defective in material and/or workmanship:

Structural frame components, including:

- Fixed position seat post
- Main frame

Two-Year Warranty

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

Electronic components, including:

- Charger Assembly
- Controller
- Joystick

Main Frame Assemblies, including:

■ Anti-tip forks

■ Caster forks

Caster beam

■ Metal seat framing

Other components, including:

- Bearings and bushings
- Electrical harnesses

- Foot Riggings
- Foot rigging mounting brackets
- Plastic Components
- Power seat actuator

Eighteen-Month Warranty

For eighteen (18) months from the date of purchase, Pride 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 to be defective in material and/or workmanship:

■ Motor/gearbox assembly

Six-Month Limited Warranty

For six (6) months from date of purchase, Pride 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 to be defective in material and/or workmanship:

Batteries

- Bearings and bushings
- Plastic components, except body

Warranty Exclusions

■ ABS Plastic Shrouds

Fuses

Tires and tubes

■ Brakes*

Motor Brushes

- Upholstery and seating
- Repairs and/or modifications made to any part without specific consent from Pride
- Circumstances beyond the control of Pride
- Labor, service calls, shipping, and other charges incurred for repair of the product, unless specifically authorized by Pride Mobility Products Corporation
- *There is a one year warranty for the electronic function of the brakes. The break pads are wear items and are not warranted.

XII. WARRANTY

Warranty Exclusions

Damage caused by:

- Contamination
- Battery fluid spillage or leakage
- Abuse, misuse, accident, or negligence
- Improper operation, maintenance, or storage
- Commercial use or use other than normal

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

Failure to follow the instructions, warnings, and notes in this manual and those located on your Pride product can result in personal injury or product damage and will void Pride's product warranty.

There is no other express warranty.

Implied Warranties

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

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

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

Please fill out and return the product registration card to Pride. This will aid Pride in providing the best possible technical and customer service.

NOTES

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NOTES



Quality Control - Quantum 1402

Model #_____Serial #



Pride keeps a more detailed report on file at the factory.

Date Inspected

Inspector

Thank you for making the Quantum 1402 your choice in power chairs.

We have thoroughly inspected your Quantum 1402. The following check marks indicate that it has been tested, driven, and inspected.



