Owner's Manual

# QUANTUM VIBE

QUANTUM® REHAB

INNOVATIVE REHAB SOLUTIONS

A Division of Pride Mobility Products® Corp.

21 Healey Road ● Dandenong, 3175 ● Victoria, Australia ● ACN# 088 609 661 ● 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 setup, 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 (black symbol on yellow triangle with black border).**

**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.***

ACN **088 609 661**


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# I. INTRODUCTION

## INTRODUCTION

Welcome to Quantum Rehab, a division of Pride Mobility Products Australia Pty. Ltd. (Pride). Congratulations on the purchase of your new Quantum Power Chair. The Quantum Power Chair design combines the most advanced state-of-the-art components with modern, attractive styling. We are certain that the design features and trouble-free operation of your new power chair will add convenience to your daily living.

At Pride, your safety is important to us. Please read and follow all of the instructions in this manual before you attempt to operate your power chair for the first time. These instructions were produced for your benefit. Your understanding of these instructions is essential for the safe operation of your new power chair.

Pride is not liable for damage to property or personal injury arising out of unsafe use of a power chair. Pride is also not liable for any property damage or personal injury arising out of the failure of any person and/or user to following the instructions and recommendations set forth in this manual or any other instructions or recommendations contained in other power chair related literature issued by Pride or contained on the power chair itself.

This owner's manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make changes as they become necessary. Any changes to our products may cause slight variations between the illustrations and explanations in this manual and the product you have purchased.

If you experience any problems with your power chair that you are unable to solve, or if you do not feel capable of safely following any of the instructions and/or recommendations as contained in this manual, please contact your Quantum Rehab Specialist for assistance.

Once you understand how to operate and take care of your power chair, we are certain that it will give you years of trouble-free service and enjoyment.

### 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 Australia Pty. Ltd.
21 Healey Road
Dandenong, 3175
Victoria, Australia

***NOTE: Information regarding the performance attributes and controlled testing results of the power chair may be obtained from the power chair manufacturer. If you would like access to this information, please contact your Quantum Rehab Specialist. The dimensional attributes of the power chair are contained within this manual.***

# I. INTRODUCTION

**My Quantum Rehab Specialist Is:**

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.***

# II. SAFETY

## PRODUCT SAFETY SYMBOLS

The symbols below are used on your 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.**

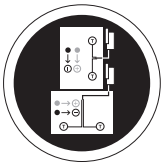

**Maximum seating weight.**

**Unlocked and in freewheel mode.**

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

**Locked and in drive mode.**

# II. SAFETY



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

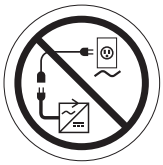
**No step. No standing. Keep off!**

**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, 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-prong adapter to an electrical outlet having 2-pronged plug access. Failure to heed could result in personal injury and/or propery damage.**



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

# II. SAFETY

## 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 customise 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 authorised by Pride. Unauthorised 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.

Perform the following inspections prior to using your power chair:

- Check for proper tyre inflation. Maintain but do not exceed **2.4 bar (35 psi)** in each tyre (if equipped with pneumatic tyres).
- Check all electrical connections. Make sure they are tight and not corroded.
- Check all controller connections to the back of the power base. Make sure they are secured properly.
- Check the brakes. See VII. "Care and Maintenance."
- Check battery charge. See V. "Batteries and Charging."

# II. SAFETY

*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.**

## Tyre Inflation

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

**WARNING! It is important that 2.4 bar (35 psi) tyre pressure be maintained in pneumatic tyres at all times. Do not underinflate or overinflate your tyres. Low pressure may result in loss of control, and overinflated tyres may burst. Failure to maintain 2.4 bar (35 psi) tyre pressure in pneumatic tyres at all times may result in tyre and/or wheel failure, causing serious personal injury and/or damage to your power chair.**

**WARNING! Inflate your power chair drive tyres from a regulated air source with an available pressure gauge. Inflating your tyres from an unregulated air source could overinflate them, resulting in a burst tyre 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 VI. "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 speed 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 rearwards. 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.**

Most handicap public access ramps are required to have a maximum slope of 10.5%. Therefore, Pride recommends that the maximum slope of an incline you attempt to safely ascend or descend on your power chair does not exceed 10.5%. See figure 1.

**WARNING! Any attempt to climb or descend a slope steeper than 10.5% may put your power chair in an unstable position and cause it to tip, resulting in personal injury.**

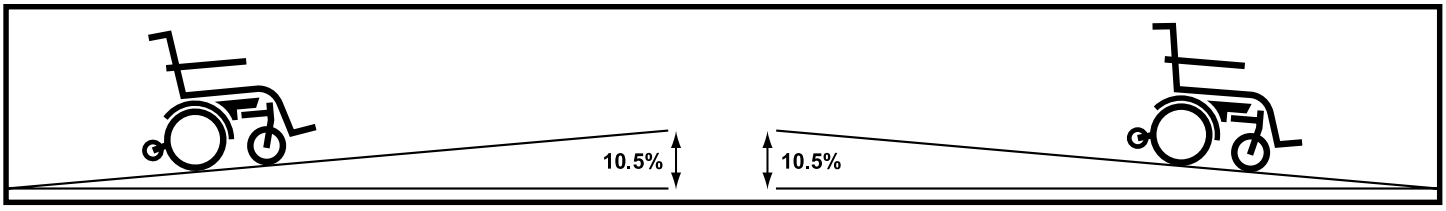



**Figure 1. Maximum Safe Angle (Ascending and Descending)**

## 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 in front and anti-tip wheels in back, 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.**

# II. SAFETY

## 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 recognises 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 III. "Your Power Chair."

**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, Kerbs, etc.)

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

**WARNING! Do not attempt to have your power chair climb or descend an obstacle that is higher than 10 cm unless you have the assistance of an attendant.**

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

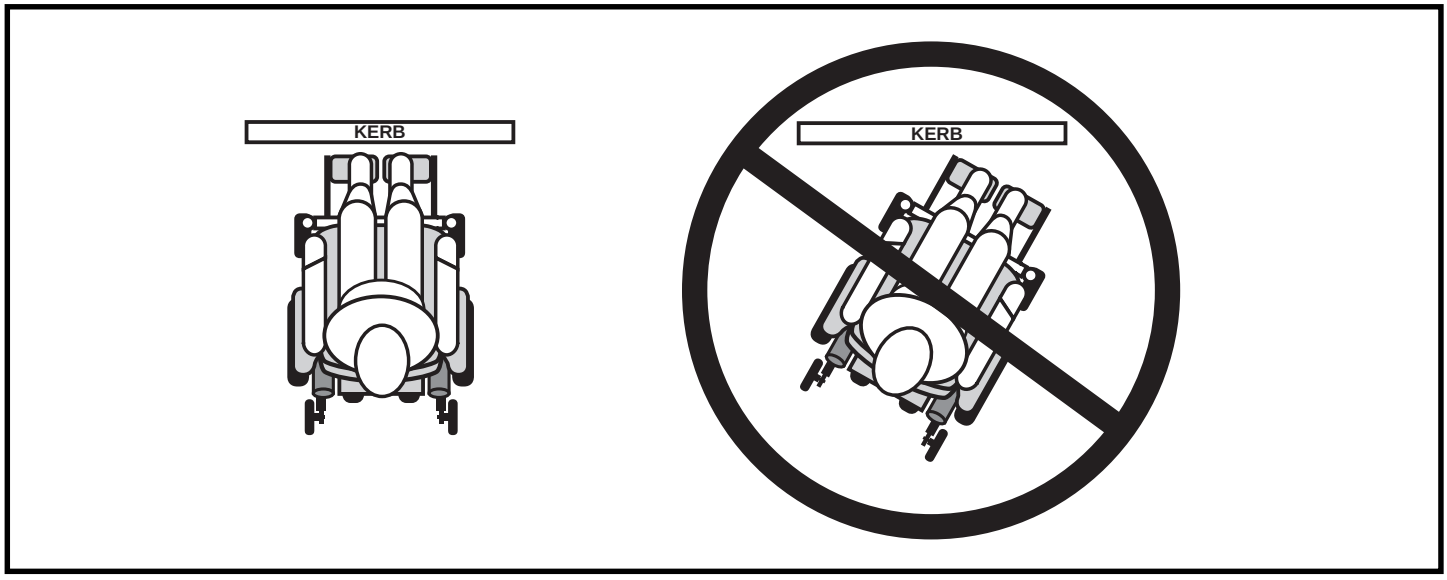



**Figure 2. Kerb Approach (Correct and Incorrect)**

# II. SAFETY

## 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 rearward 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.

## Electromagnetic Fields

Your power chair's performance may be influenced by electromagnetic fields caused by cellular telephones or other radiating devices, such as hand-held radios, radio and television stations, wireless computer links, microwave sources, and pagers.

**WARNING! You should turn off your power chair when using products which emit electromagnetic fields. This will eliminate the possibility of unintended movement caused by electromagnetic sources. Failure to take this precaution may result in personal injury.**

**WARNING! Your power chair may be a source of electromagnetic and radio frequency interference. Be aware that your power chair may effect the performance of alarm systems and other radiating devices.**

## 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.

## 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 off the power to the controller. See VI. "Operation."
- Ensure your power chair is not in freewheel mode. See III. "Your Power Chair."
- Turn both caster wheels toward the transfer destination to improve power chair stability during transfer. See figure 3.
- Make sure both armrests are flipped up or removed from your power chair.
- Move the foot rigging out of the way; this will help to keep your feet from getting caught on the foot rigging during the transfer.
- Reduce the distance between your power chair and the object you are transferring onto.

**Figure 3. Transfers**

**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 foot rigging. 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.**

# II. SAFETY

## Inclement Weather Precautions

**WARNING! Pride recommends that you do not operate your power chair in icy or slippery conditions or on salted surfaces (i.e., footpaths or roads). Such use may adversely affect the performance and safety of your power chair, resulting in an accident and personal injury.**

**WARNING! Do not expose your power chair to any type of moisture at any time (rain, snow, mist, or wash). Such exposure can damage your power chair. Never operate your power chair if it has been exposed to moisture until it has dried thoroughly.**

## 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 bend, lean, or reach 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 tyres 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 V. "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.**

## Battery Disposal and Recycling

If you encounter a damaged or cracked battery, immediately enclose it in a plastic bag and contact your Quantum Rehab Specialist for instructions on disposal. Your Quantum Rehab Specialist will also have the necessary information on battery recycling, which is our recommended course of action.

## 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.**

# II. SAFETY

## 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. YOUR POWER CHAIR

## YOUR POWER CHAIR

Your power chair has two main assemblies: the seat and the power base. See figures 4 and 5. Typically, the seat assembly includes the armrests, seatback, and seat base. The seat may also have some optional accessories attached to it, such as a basket, a cane and crutch holder, or a cup holder. See VIII. "Optional Accessories."

The power base assembly includes two motor/brake assemblies, two drive wheels, two anti-tip wheels, two caster wheels, two batteries, and wiring harnesses.


**Figure 4. The Vibe**

# III. YOUR POWER CHAIR

| SPECIFICATIONS | |
|---|---|
| Suspension | Full suspension - Sport Trac |
| Drive Wheels | 35.5 cm pneumatic, center-mounted (35.5 cm solid wheels are optional) |
| Caster Wheels | 23 cm pneumatic, front articulating (23 cm solid are optional) |
| Anti-tip Wheels | 10 cm solid, rear-mounted |
| Maximum Speed* | Up to 9.2 km/h |
| Brakes | "Intelligent Braking" electronic regenerative, disc park brake |
| Ground Clearance | 9.5 cm |
| Turning Radius | 58 cm without foot riggings |
| Overall Size | Length: 90 cm without foot riggings<br>Width: 63.5 cm |
| Seating Options | Euro Seat with Manual Recline (standard)<br>Euro Seat with Power Recline (optional)<br>Euro Seat with Power Tilt (optional)<br>Cantilever Seat (optional) |
| Drivetrain | Two motor, rear-wheel drive |
| Batteries | Two 12-volt 70 AH Group 24 batteries (Group 34 with Cantilever Seat option) |
| Range* | Up to 40 km |
| Battery Charger | 12-amp, off-board |
| Electronics | Europa Dynamic DX Controller |
| Weight Capacity | 136 kg |
| Component Weights | Base: 41 kg (with pneumatic drive wheels; batteries not included)<br>Euro Seat: 22.5 kg<br>Batteries: 24 kg each (Group 24); 19.5 kg each (Group 34; recommended) |
| Class of Use | B |
| Maximum Safe Slope | 10.5% |
| Maximum Climbing Ability | 10.5% |
| Maximum Obstacle Climbing Ability | 10 cm |
| Warranty | Five-year limited warranty on frame<br>Two-year limited warranty on drivetrain<br>One-year warranty on electronics |

**Depending on user weight and terrain.*

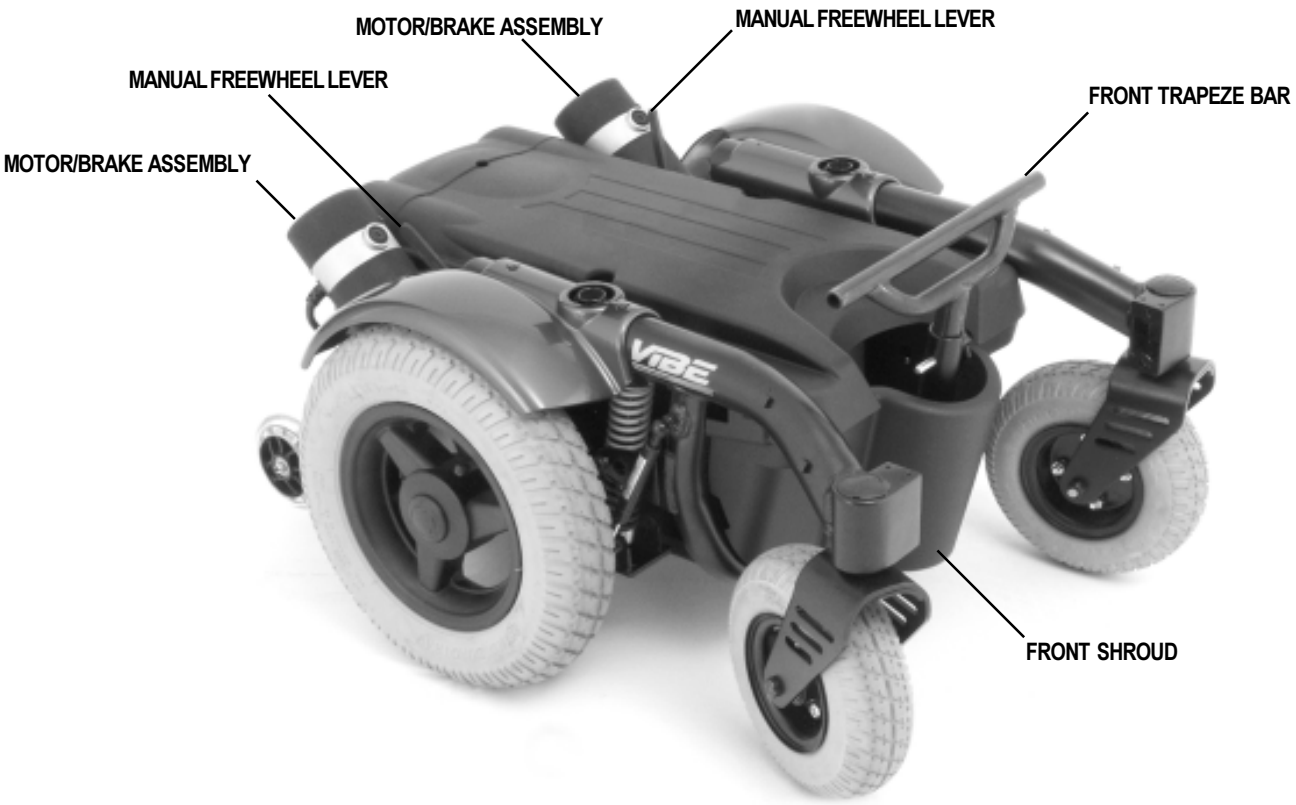



**Figure 5. The Vibe Power Base**

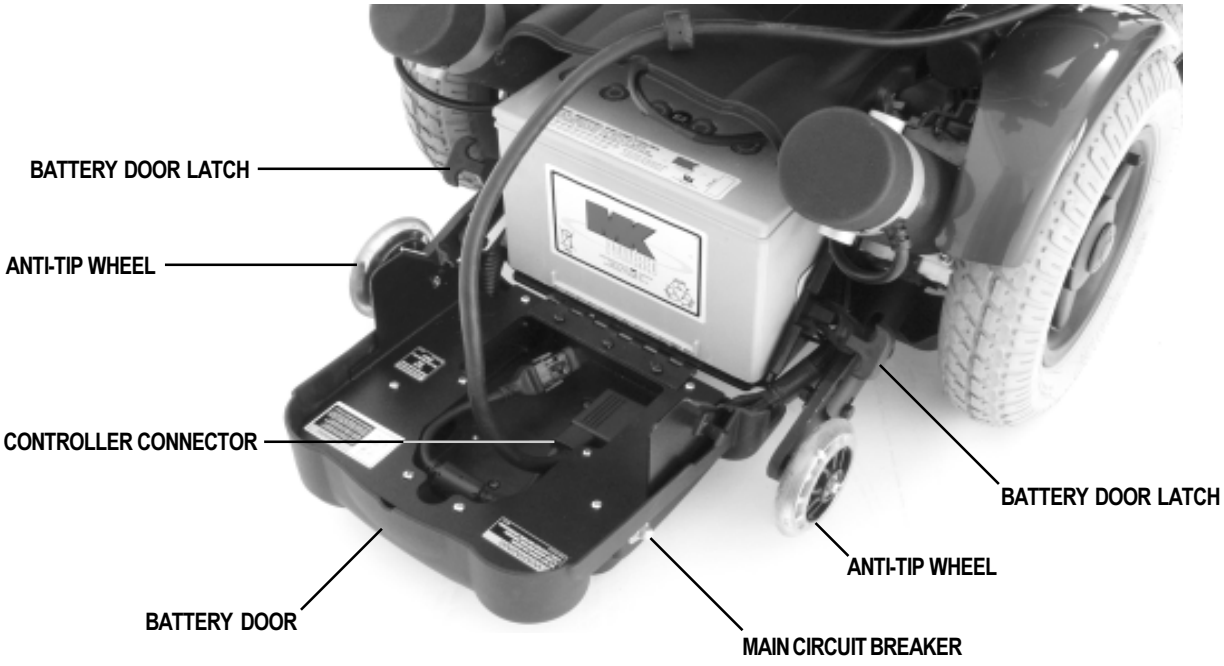



**Figure 6. The Vibe Power Base (Rear View - Battery Door Down)**

# III. YOUR POWER CHAIR

## Electrical Components

The electrical components are located on the battery door at the back of the power base. See figure 6.

**Main Circuit Breaker:** The main circuit breaker is a safety feature built into your power chair. 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 power chair to "rest" for approximately one minute. Next, push in the circuit breaker button, turn on the controller, and continue normal operation. If the main circuit breaker continues to trip repeatedly, contact your Quantum Rehab Specialist.

**Controller Connector:** This is where the controller connects to the power base. The Europa uses a large 9-pin connector.

## Sport-Trac Suspension

Your power chair is equipped with Sport-Trac Suspension (STS). STS is a suspension system designed to make your power chair traverse different types of terrain and obstacles while maintaining smooth operation. With STS, the spring-loaded drive wheels move in two directions—up for rolling over obstacles and down when encountering transitions.

As the drive wheels come in contact with an obstacle, they are drawn upward. At the same time, the rear anti-tip wheels work in opposition to the drive wheels to eliminate the possibility of the chair losing traction. This creates a safer, more secure ride.

STS also helps in day-to-day operating conditions. This unique suspension system helps to harness the motors' torque to make smoother transitions in speed during acceleration or deceleration.

## Manual Freewheel Levers

For your convenience, your power chair is equipped with two manual freewheel levers mounted on the motors. See figures 7 and 8. These levers allow you to disengage the drive motors and maneuver the chair manually. You can manually push the power chair by the seatback or push the power base itself if the seat is removed.

**WARNING! Do not use your power chair while the drive motors are disengaged unless you are in the presence of an attendant! Do not disengage the drive motors when your power chair is on an incline. The chair could roll down on its own, causing injury!**

**WARNING! It is important to remember that when your power chair is in freewheel mode, the braking system is disengaged.**

**To operate the manual freewheel levers:**

1. Pull the manual freewheel lever inward for freewheel mode (drive disengaged). See figure 7.
2. Push the manual freewheel lever outward for drive mode (drive engaged). See figure 8.

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


**Figure 7. Freewheel Mode (Drive Disengaged)**

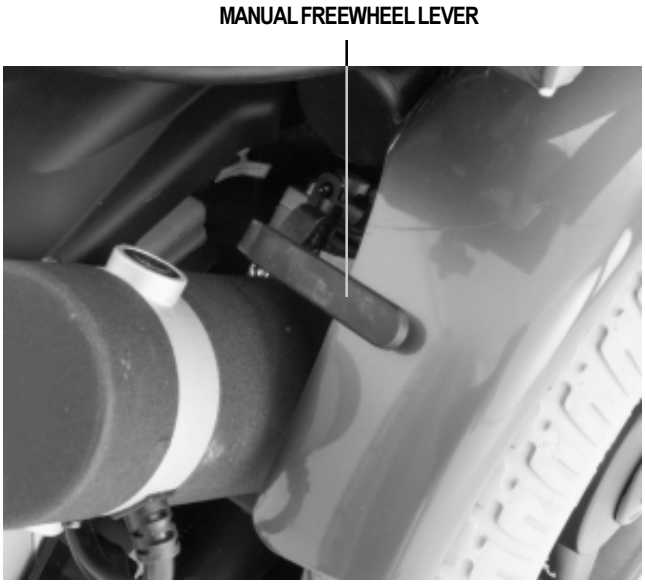



**Figure 8. Drive Mode (Drive Engaged)**

## Kerb Climber (Optional)

Your power chair may be equipped with a kerb climbing mechanism designed to work with your built-in suspension system to further stabilise your power chair when climbing kerbs or other obstacles. See figure 9. The kerb climber is bolted to the front of the power chair and is equipped with a spring-loaded foot that acts as a lever to lift the power chair over obstacles.

As the spring-loaded foot comes into contact with the kerb or obstacle, the momentum of the chair causes it to pivot downward, lifting the front caster wheels over the obstacle. Once the casters are clear, the drive wheels gain the leverage they need to maneuver over the obstacle. When the chair is once again on level ground and the spring-loaded foot no longer senses an obstacle, it will return to its normal position and will not drag or scrape the ground.

***NOTE: For more information regarding the kerb climber feature, please contact your Quantum Rehab Specialist.***

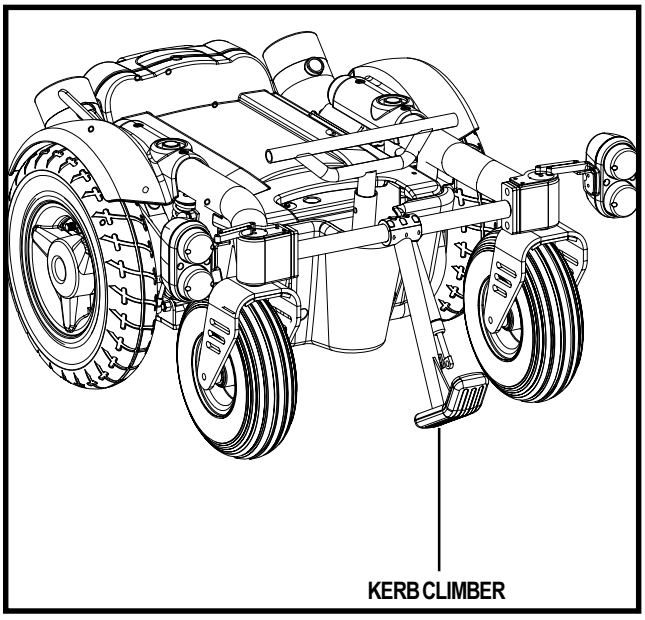



**Figure 9. Vibe with Kerb Climber**

# IV. COMFORT ADJUSTMENTS

## COMFORT ADJUSTMENTS

After becoming familiar with your power chair's operation, you may find the need to make some adjustments to increase your comfort, such as seatback recline angle, armrest position, and controller position. If your power chair is equipped with power seating options, contact your Quantum Rehab Specialist.

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

You may need the following to make comfort adjustments:

- metric/standard hex key set
- metric/standard socket set and ratchet
- adjustable spanner

### Manual Recline Seatback Adjustment

Your seat is equipped with a manual recline lever that allows you to adjust the seatback angle.

**To adjust the seatback angle:**

1. With your back pressed firmly against the seatback, squeeze the manual recline lever mounted to the armrest. See figure 10.
2. Set the seatback at the desired angle by leaning forward or back.
3. Release the manual recline lever when the seatback is at the desired angle.

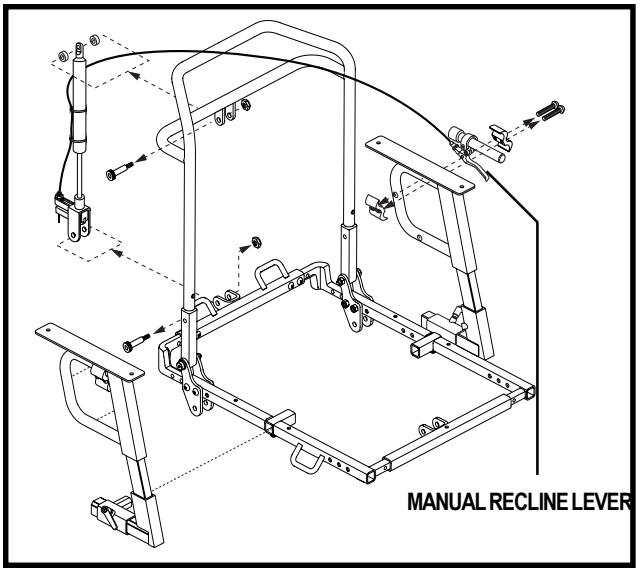



**Figure 10. Manual Recline Seatback Adjustment**

### Armrest Position Adjustment

The armrest position can be adjusted forward or back for operator comfort.

**To adjust the armrest position:**

1. Turn the armrest receiver lock anticlockwise to loosen. See figure 11.
2. Slide the armrest forward or back to the desired position.
3. Turn the armrest receiver lock clockwise to secure the armrest in the desired position.

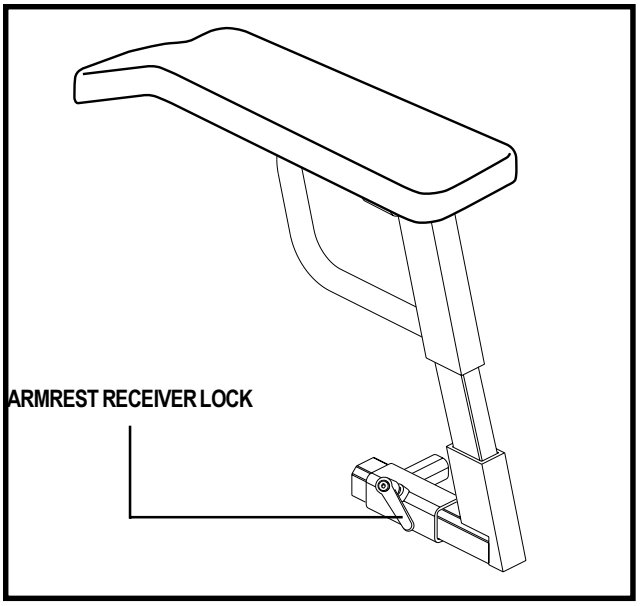



**Figure 11. Armrest Position Adjustment**

# IV. COMFORT ADJUSTMENTS

## Armrest Pad Position Adjustment

The armrest pad position can be adjusted forward or back an overall distance of 5 cm and left to right an overall distance of 2.5 cm.

**To adjust the forward/back armrest pad position:**

1. Remove each adjustment screw from the underside front and back of the armrest pad. See figure 12.
2. Move the pad forward or back to the desired position.
3. Align the adjustment holes in the armrest pad and the armrest pad receiver.
4. Reinstall the screws to secure the armrest pad.

**To adjust the left to right armrest pad position:**

1. Remove each adjustment screw from the underside front and back of the armrest pad. See figure 12.
2. Move the pad left or right to the desired position.
3. Align the adjustment holes in the armrest pad and the armrest pad receiver.
4. Reinstall the screws to secure the armrest pad.

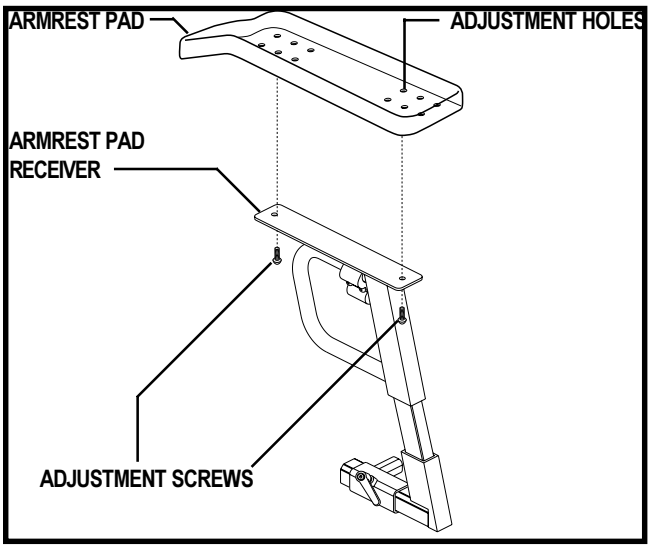



**Figure 12. Armrest Pad Position Adjustment**

## Armrest Width Adjustment

**To adjust the armrest width:**

1. Loosen the securement screws located on the bottom of the armrest receiver channel. See figure 13.
2. Slide the armrest in or out to the desired position.
3. Tighten the screws to secure the armrest.

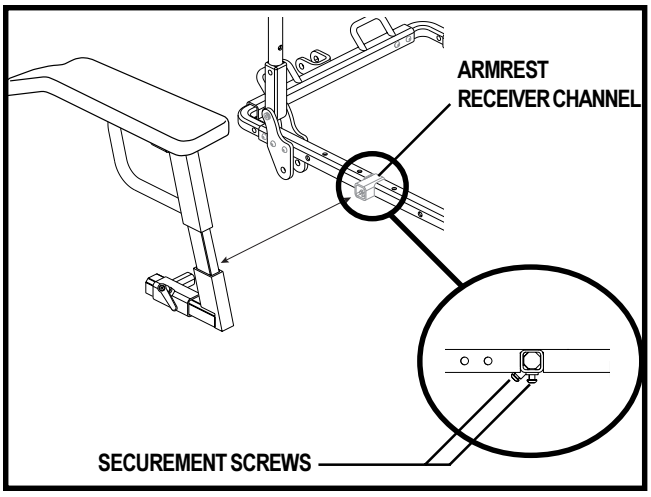



**Figure 13. Armrest Width Adjustment**

## Armrest Height Adjustment

You can adjust the armrest height to one of four positions in either 1.27 cm or 2.5 cm increments.

**To adjust the height in 1.27 cm increments:**

1. Remove the height adjustment screw from the armrest. See figure 14.
2. Raise or lower the upper armrest.
3. Align the adjustment holes in the lower armrest with the bottom hole in the upper armrest.
4. Reinstall the screw to secure the armrest.

**To adjust the height in 2.5 cm increments:**

1. Remove the height adjustment screw from the armrest. See figure 14.
2. Raise or lower the armrest.
3. Align the adjustment holes in the lower armrest with the top hole in the upper armrest.
4. Reinstall the screw to secure the armrest.

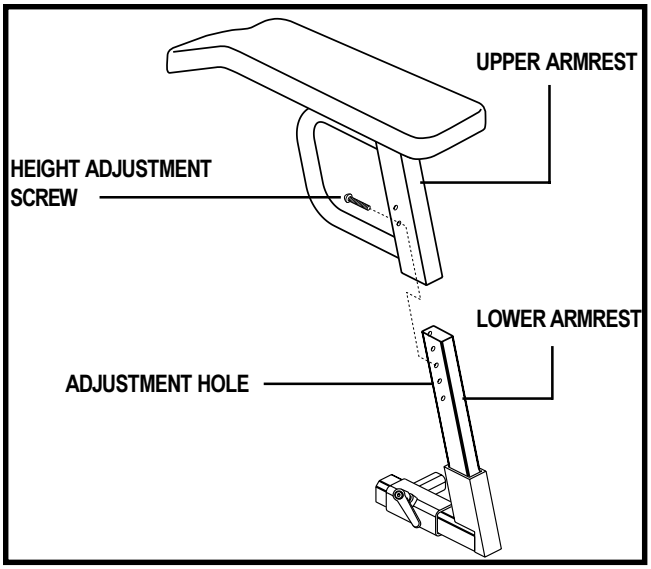



**Figure 14. Armrest Height Adjustment**

# IV. COMFORT ADJUSTMENTS

## Controller Position

You can position the controller for either left-hand or right-hand use.

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

**To change the controller position:**

1. Turn off the power to the controller. See VI. "Operation."
2. Open the battery door and unplug the controller connector from the back of the power base. See figure 6.
3. Cut the wire tie that attaches the controller cable to the armrest.
4. Loosen the button head screws on the figure 8 clamp assembly located on the armrest. See figure 15.
5. Slide the controller out of the loosened clamp assembly.
6. Loosen the button head screws on the clamp assembly on the other armrest.
7. Remove the manual recline lever assembly and insert it into the clamp assembly on the opposite armrest. See figure 10.
8. Tighten the button head screws to secure the manual recline lever assembly in the figure 8 clamp.
9. Insert the controller into the remaining open clamp assembly.
10. Tighten the button head screws to secure the controller in the figure 8 clamp.
11. Use wire ties to secure the controller cable and the manual recline lever cable to the armrests.
12. Plug in the controller and the charger inhibit connectors to the back of the power base and close the battery door.

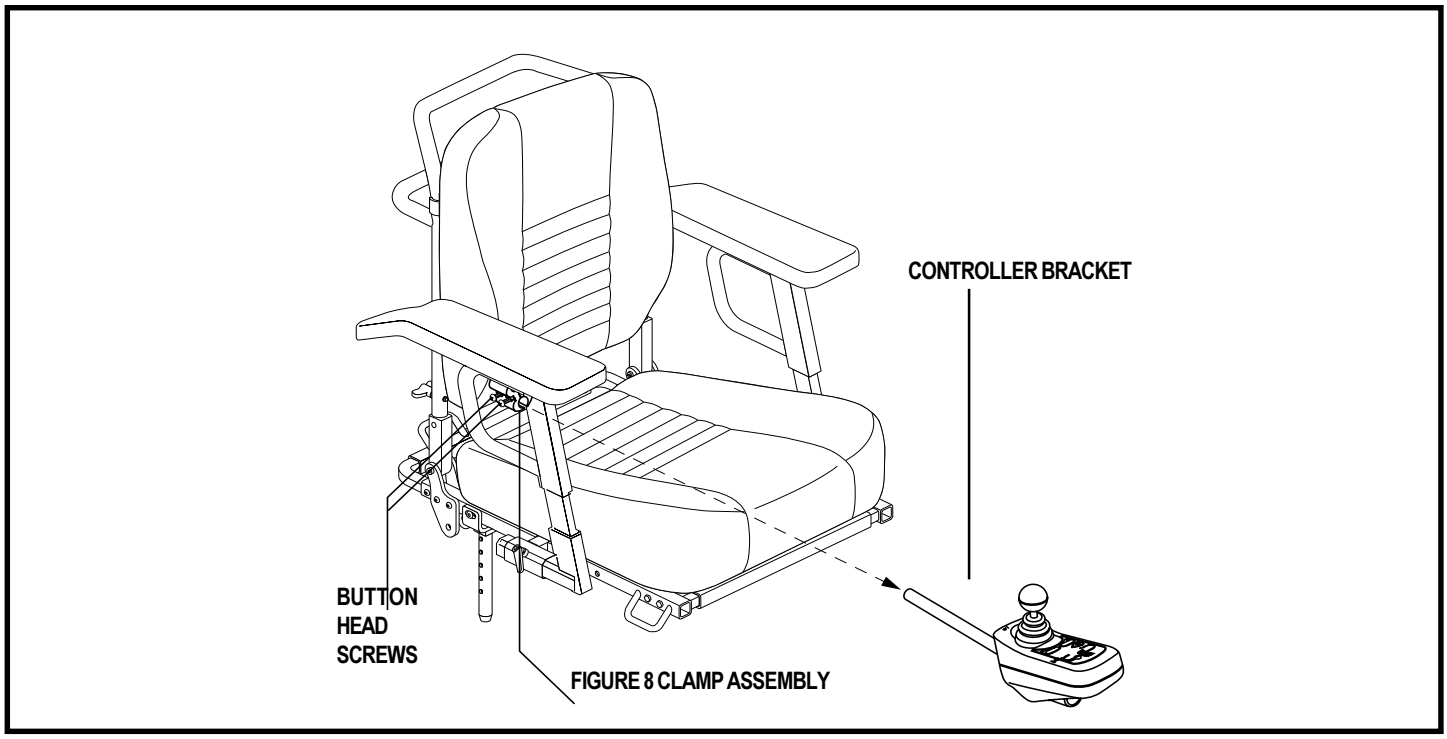



**Figure 15. Controller Position**

# IV. COMFORT ADJUSTMENTS

## Heavy Duty Drop-in Leg Rests

You can adjust the forward/back position, as well as the length of the heavy duty drop-in leg rests.

**To adjust the forward/back position:**

1. Remove the adjustment bolts from the side rail. See figure 16.
2. Move the leg rest hanger in or out to the desired position.
3. Align the adjustment holes in the leg rest hanger with those in the side rail.
4. Reinstall the adjustment bolts to secure the leg rest hanger.

**To adjust the leg rest length:**

1. Remove the adjustment screws from the leg rest extension. See figure 16.
2. Slide the leg rest up or down to the desired length.
3. Align the adjustment holes in the leg rest extension and reinstall the adjustment screws.

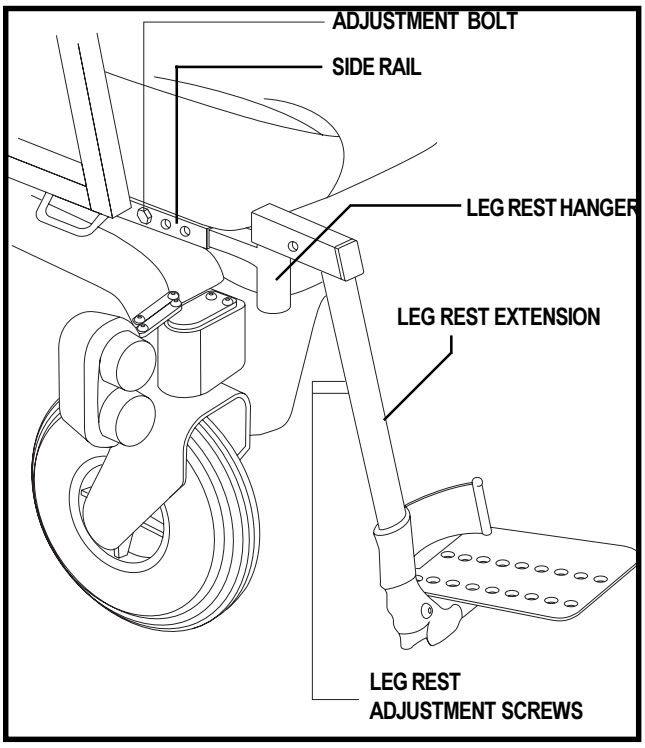



**Figure 16. Heavy Duty Drop-in Leg Rests**

## Swing-away Footrests (Optional)

Swing-away Footrests enable you to rotate the footrests to the side before you transfer onto or off of your power chair.

**To move the SFRs:**

1. Push in the release lever. See figure 17.
2. Rotate the SFRs to the side.

**To adjust the SFR length:**

1. Remove the adjustment screws from the side of the footrest extension. See figure 17.
2. Slide the footrest extension up or down to the desired length.
3. Align the adjustment holes and reinstall the adjustment screws to secure the footrest extensions.

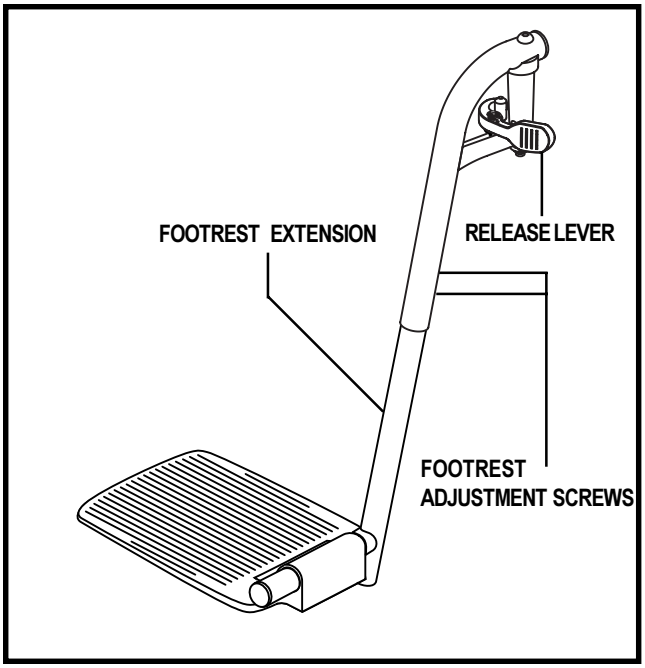



**Figure 17. Swing-Away Footrests**

# IV. COMFORT ADJUSTMENTS

## Anti-Tip Wheels

The anti-tip wheels are designed to give your power chair increased stability on rough surfaces. The anti-tip wheels are preset at the factory for smooth surfaces or indoor use only. If you plan on using your power chair 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 accelerating, your power chair tips rearward excessively.
- The anti-tip wheels constantly rub the ground.

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

**WARNING! The higher you raise the anti-tip wheels, the more you increase your power chair's tendency to tilt rearward when accelerating. You can compensate for this by having your Quantum Rehab Specialist make a small adjustment to the pre-programmed acceleration setting in the controller or by adjusting the seat assembly.**

**WARNING! The anti-tip wheels may cause trouble when ascending or descending a kerb if they are not adjusted correctly. Contact your Quantum Rehab Specialist for more information.**

**To adjust the anti-tip wheels:**

1. Loosen bolt A. See figure 18.
2. Remove bolt B.
3. Raise or lower the anti-tip wheel by 1.27 cm or 2.5 cm increments by aligning the appropriate adjustment holes. See figure 18.
4. Insert bolt B into the appropriate hole for the desired anti-tip height and tighten.
5. Tighten bolt A.
6. Raise or lower the other anti-tip wheel so that it is at the same height.

**PROHIBITED! Do not remove the anti-tip wheels.**

***NOTE: Each drive tire must have at least 2 bar (30 psi) in order for the anti-tip wheels to be properly adjusted. The user must also be seated in the power chair in order to properly adjust the anti-tip wheels.***

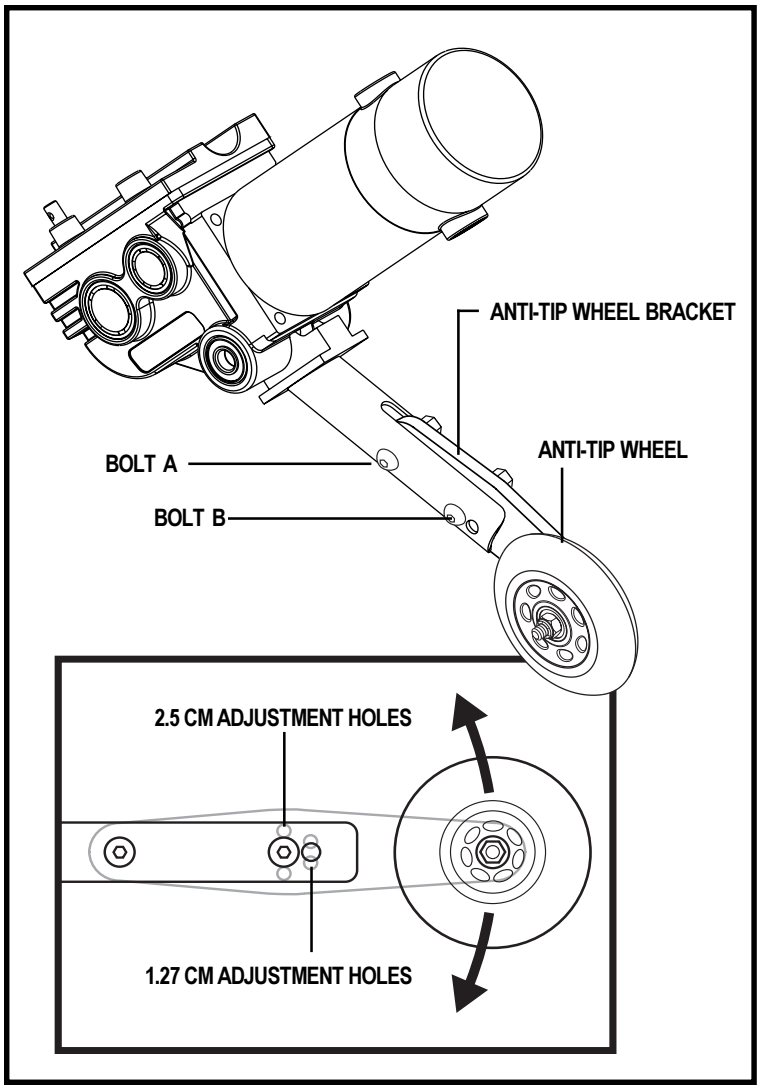



**Figure 18. Anti-Tip Wheel Assembly**

# IV. COMFORT ADJUSTMENTS

**Figure 19. Cantilever Seat**

## CANTILEVER SEAT OPTION

Your power chair may be equipped with an optional cantilever seat. See figure 19. The cantilever seat is equipped with a speed inhibit system that reduces your power chair's speed by one quarter when the seat is elevated more than 2.5-5 cm. The cantilever seat provides 33 cm of lift, and raising the cantilever seat can change your center of gravity. Always check to be sure the speed inhibit system is operating properly before using your power chair, and do not move around in your seat to any great extent when the seat is in a raised position.

The cantilever seat can enhance the capabilities of the power chair in the following ways:

- By raising the seat, your level of reach is extended to allow more freedom and independence in many environments.
- By raising your seat, you are closer to the eye level of standing persons. This provides better interaction.

For all the benefits your cantilever seat can provide you, there are limitations.

**WARNING! Read and understand this owner's manual thoroughly before operating the power chair.**

**WARNING! Maintain recommended tire pressure in the drive wheels and the caster wheels to ensure stability.**

# IV. COMFORT ADJUSTMENTS

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

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

**WARNING! Never raise the cantilever seat while your power chair is in freewheel mode.**

**WARNING! Always fasten the positioning belt when operating the cantilever seat.**

## Cantilever Seat Operation

You can control the cantilever seat through either a toggle switch mounted to the armrest or through your joystick/controller. For information on how to raise and lower your cantilever seat through your controller, contact your Quantum Rehab Specialist.

**To operate the cantilever seat:**

1. Bring your power chair to a complete stop.
2. Push the toggle switch forward to raise the seat. When you release the toggle, the seat will stop. Once the seat reaches its highest extension, the lift action stops; you should continue to hear and/or feel the lift motor running. This is because there is a clutch mechanism that allows the motor to continue running after the lift has reached its limit. This clutch works at both the top and bottom extensions of the lift.

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

3. Pull the toggle switch rearward to return the seat to its lowest position. When returning to the lowest position, always be sure that the mechanism has reached its lowest limit.

## Presence Sensing System

The cantilever seat is equipped with a "Presence Sensing System" that enables the electronics to cut power to the seat whenever there is an obstruction between the seat and the power base. Sensors are located on the bottom of the seat rails and can detect objects that are placed between the seat rails and the power base. When the cantilever system stops because of an obstruction, you have to reset the joystick before you can move the seat.

**To reset the joystick:**

1. Release the joystick to the neutral position.
2. Make sure the obstruction has cleared.
3. Use the joystick to move the seat.

# IV. COMFORT ADJUSTMENTS

## POSITIONING BELT

The positioning belt is designed to support the operator so that he/she does not slide down or forward in the seat, and it can be adjusted for operator comfort. The positioning belt is not designed for use as a restraining device.

**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.**

**To install the positioning belt:**

You will need the following tools:

- metric/standard hex key set
- adjustable spanner

1. Insert the screw through the washer and the mounting tab at the end of the positioning belt. See figure 20.
2. Install the screw through the spacer and the large black plastic spacer, then insert the screw through the seat base rail at the rear of the seat.
3. Install the Nylock nut to the assembly, and then tighten the screw and nut using a hex key and an adjustable spanner.
4. Repeat steps 1-3 for the other side.

***NOTE: If your power chair is equipped with an optional seating system, please refer to the user manual provided with the seat for instruction on positioning belt installation, or contact your Quantum Rehab Specialist.***

**To adjust the positioning belt for operator comfort:**

1. Once seated, insert the metal tab on one side of the belt into the plastic housing on the opposite side until you hear a click.
2. Pull the excess strap attached to the metal tab until it is secure, but not so tight as to cause discomfort.

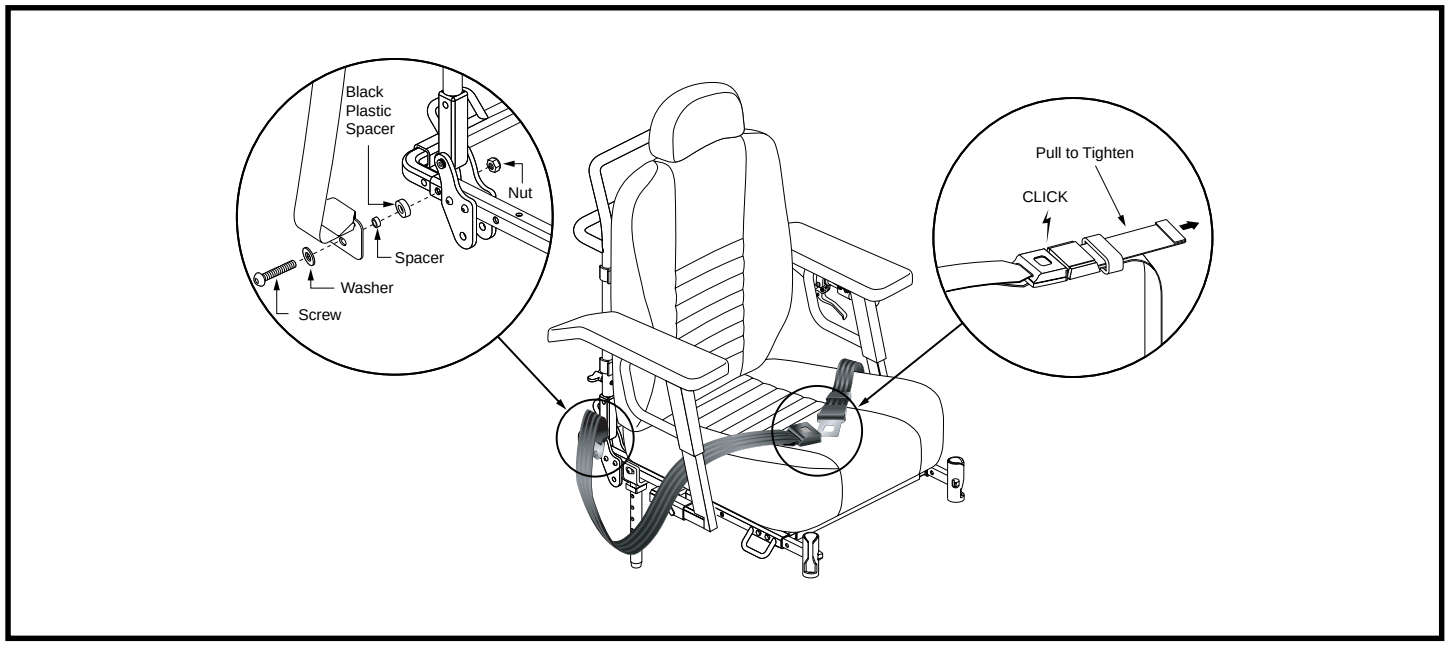



**Figure 20. Positioning Belt Installation and Adjustment**

## MULTI-AXIS FOOT PLATE

The multi-axis foot plate assembly can be installed on either a swing-away footrest or an elevating leg rest. The multi-axis foot plate has four adjustments: leg rest length (A), position (B), tilt (C), and angle (D). See figure 21.

**To change leg rest length (A):**
1. Remove the hardware.
2. Move the leg rest to the desired position.
3. Reinstall the hardware.

**To change foot plate position (B):**
1. Remove the hardware.
2. Move the foot plate to the desired position.
3. Reinstall the hardware.

**To change foot plate tilt (C):**
1. Loosen the hardware.
2. Tilt the foot plate to the desired position.
3. Tighten the hardware.

**To change foot plate angle (D):**
1. Turn the setscrew clockwise to decrease the angle.
2. Turn the setscrew anticlockwise to increase the angle.

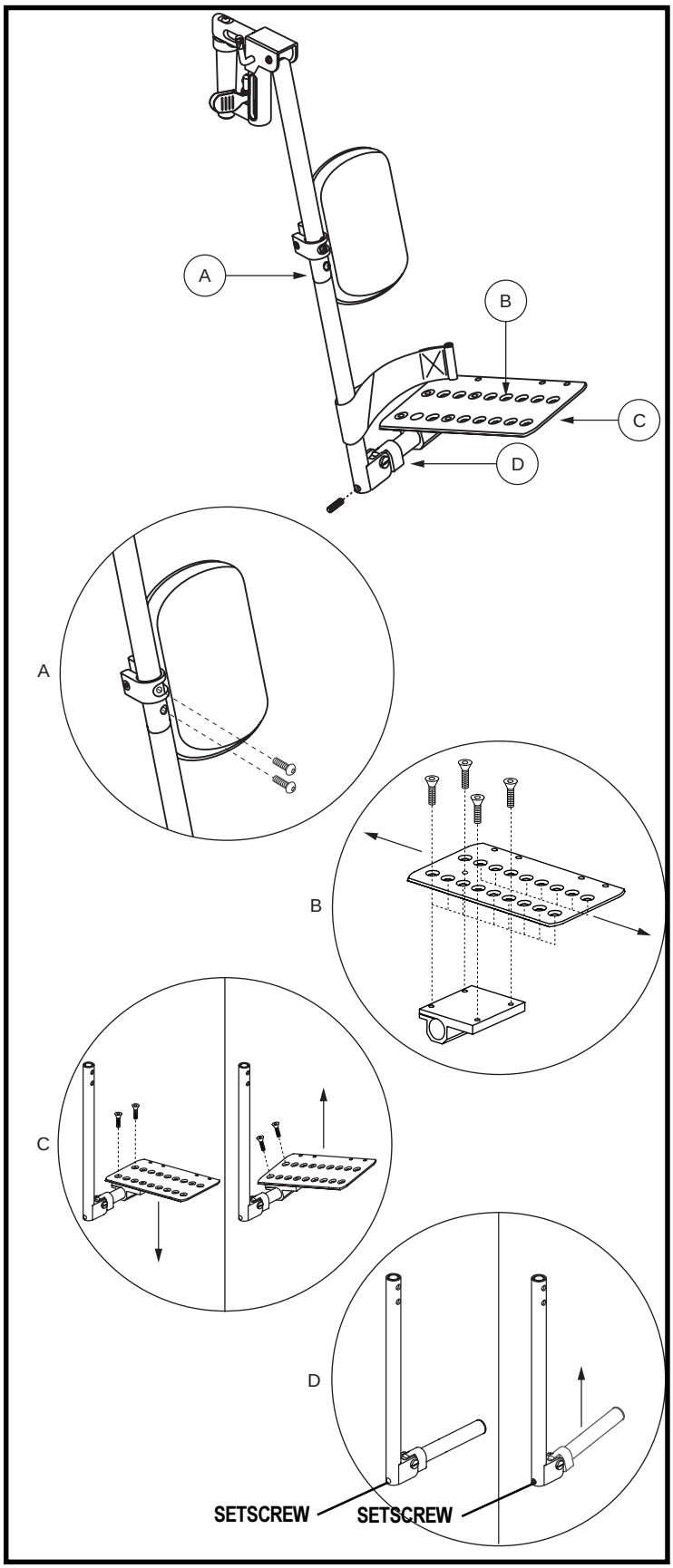



**Figure 21. Multi-Axis Foot Plate**

# V. BATTERIES AND CHARGING

## BATTERIES AND CHARGING

Your power chair 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 for the batteries. The battery charger is designed to optimise power chair performance by charging the batteries safely, quickly, and easily. Your power chair uses an off-board charger to charge the batteries. The off-board charger is plugged into a socket on the front of your controller. See VI. "Operation." Follow the directions supplied with the off-board charger.

**WARNING! You must recharge the batteries with the supplied off-board 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.**

### 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 power chair throughout the house and yard. Move slowly at first, and don't 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 power chair again. The batteries will now perform at over 90% of their potential.
4. After four or five charging cycles, the batteries will top off at 100% charge and last for an extended period.

## FREQUENTLY ASKED QUESTIONS (FAQS)

**How does the charger work?**

The battery charger takes the standard wall outlet AC (alternating current) voltage 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. As the battery voltage approaches full charge, the charger doesn't work as hard to complete the charging cycle. 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. For more information, refer to the instruction manual supplied with the charger.

# V. BATTERIES AND CHARGING

**Can I use a different battery charger?**
You should use the charger supplied with your power chair. It is the safest, most efficient tool to charge the batteries. We do not recommend using other types of chargers (e.g., an automotive battery charger).

***NOTE: The charger will not operate after the batteries have been discharged to nearly zero voltage. If this happens, call your Quantum Rehab Specialist for assistance.***

**How often must I charge the batteries?**
Many factors come into play when deciding how often to charge the batteries. You may use your power chair all day on a daily basis or you may not use it for weeks at a time.

- **Daily Use**
  If you use your power chair on a daily basis, charge the batteries as soon as you are finished using it for the day. Your power chair 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 power chair 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, footpath cracks, uneven and loosely packed surfaces, curves, and wind. All of these factors will affect the distance or running time per battery charge. Below are a few suggestions for obtaining the maximum range per charge:

- Always charge the batteries fully prior to your trip.
- 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 batteries 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. Refer to the specifications table for battery information when reordering deep-cycle batteries from your Quantum Rehab Specialist.

**WARNING! Corrosive chemicals contained in batteries. Use only AGM or gel-cell batteries to reduce the risk of leakage or explosive conditions.**

# V. BATTERIES AND CHARGING

**Why do my new batteries seem weak?**
Deep-cycle batteries employ a much different chemical technology than that used in car batteries, nickel-cadmium (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. Lead-acid 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 your power chair's specific demands. Fresh batteries arrive regularly at Pride and are 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 stabilise and adjust to its new ambient temperature. More importantly, it will take 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 will be 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 will provide 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 power chair and its batteries?**
If you do not use your power chair regularly, we recommend maintaining battery vitality by charging the batteries at least once per week.

If you do not plan on using your power chair for an extended period, fully charge the batteries prior to storage. Disconnect the battery harnesses and store the power chair 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.

**What about public transportation?**
AGM and gel-cell batteries are designed for application in power chairs and other mobility vehicles, allowing safe transportation on aircraft, buses, and trains, as there is no danger of spillage or leakage. We suggest you contact the carrier's ticket counter in advance to determine that carrier's specific requirements.

**What about shipping?**
If you wish to use a freight company to ship your power chair to your final destination, repack your power chair in the original shipping container and ship the batteries in separate boxes.

# VI. OPERATION

## CONTROLLER INFORMATION

The controller supplied with your power chair has been preprogrammed by the manufacturer to meet the needs of the end user. The program is set using either a personal computer with software provided by the controller manufacturer or with a hand-held programmer, also provided by the controller manufacturer.

**WARNING! The controller program can affect speed, acceleration, deceleration, and braking, but if programmed incorrectly or outside of the safe limits as determined by your healthcare professional, can create a dangerous situation. Only the power chair manufacturer, an authorised representative of the manufacturer, or a trained service technician should program the controller.**

## 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 22)
- 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.

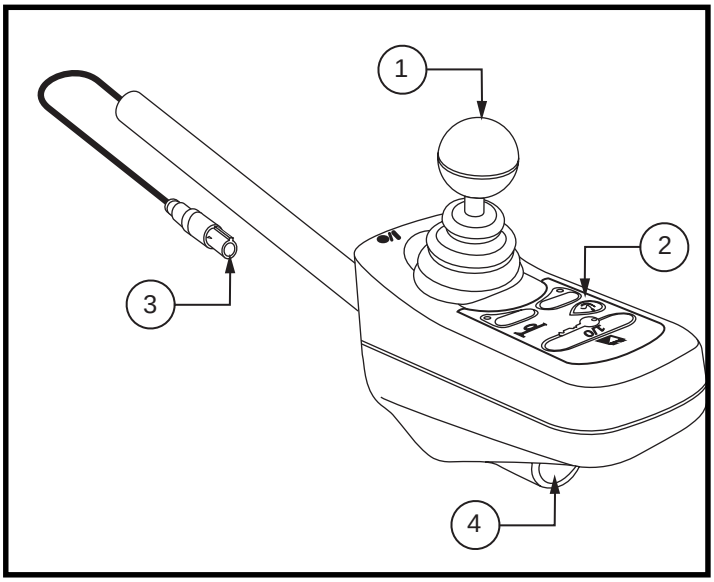



**Figure 22. Europa Master Remote**

### 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

### 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 to 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.**

# VI. OPERATION

## 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 of the lights on the battery condition meter are flashing, you may have set flash code 1. Contact your Quantum Rehab Specialist for more information.

## 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 turns 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."***

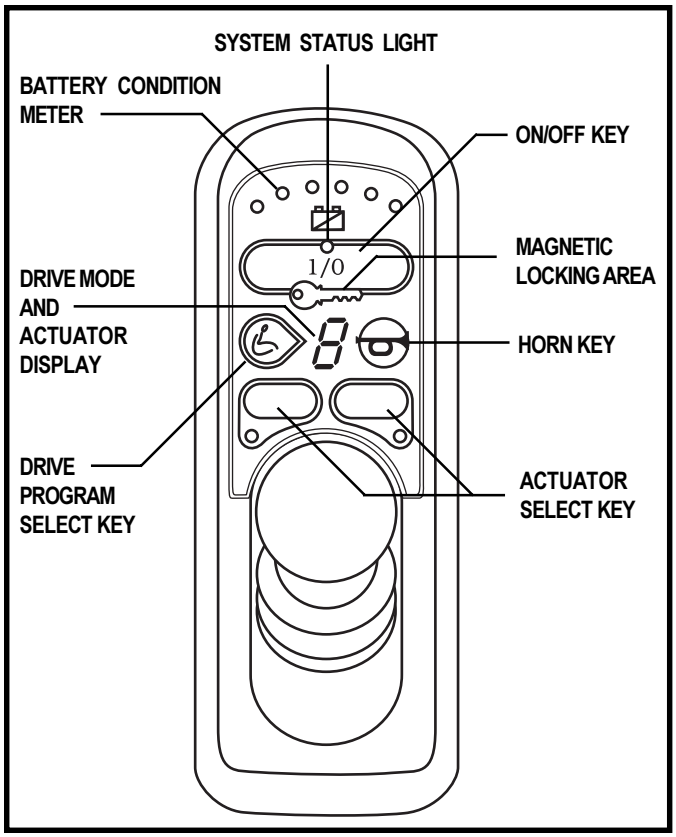



**Figure 23. Europa Master Remote Keypad**

## System Status Light

The system status light is normally on when the system is powered on, and off when the system is powered off. 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" unauthorised 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.

**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.

# VI. OPERATION

***NOTE: If you turn on the power chair while it is locked and don't unlock it after one minute, the power chair will automatically turn off itself.***

### 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.

### 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 preprogrammed at the factory for five drive programs— 1 (slowest) to 5 (fastest). The drive mode is indicated by a number in the drive mode and actuator display in the center of the keypad.

***NOTE: The drive mode settings are preset 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 program 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 on the battery condition meter), the controller will reduce power chair performance to conserve battery power.

### Off-board Charger/Programming Socket

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

# VI. OPERATION

## 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.

## Sleep Mode (If Enabled)

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 period of time. This time factor is programmed into the controller. To restore power and continue, push the on/off key.

## Trouble Codes

The system status light is displayed within the on/off key. This light is lit if the system is powered 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. |
| •••••••••__•••••••••__ | CANL fault | See your Quantum Rehab Specialist. |
| ••••••••••__••••••••••__ | CANA fault | See your Quantum Rehab Specialist. |
| •••••••••••__•••••••••••__ | Stall time-out | Turn 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 DX module 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.

# VII. CARE AND MAINTENANCE

## CARE AND MAINTENANCE

Your power chair, like any motorised vehicle, requires routine maintenance checks. You can perform some of these checks, but others require assistance from a 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 power chair gives you years of trouble-free operation. If you have any doubt as to your power chair's care or operation, contact your Quantum Rehab Specialist.

### Exposure to Water/Dampness

Your power chair, 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 your power chair to malfunction electronically and mechanically. Water can cause electrical components to corrode and the chair's frame to rust.**

**Should your power chair come in contact with water:**

1. Dry your power chair as thoroughly as possible with a towel.
2. Allow your power chair 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 power chair again.
4. If any inconsistencies are found, take your power chair to your Quantum Rehab Specialist.

### Temperature

- Some of the parts of your power chair are susceptible to extreme changes in temperature. Always keep your power chair between the temperatures of -7° C/18° F and 50° C/122° F.
- 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 50° C/122° F may cause your power chair 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 VI. "Operation."

**WARNING! Always protect batteries from freezing temperatures and never charge a frozen battery. This damages the battery and may cause personal injury. Attempting to charge a battery in freezing conditions does not prevent a battery from freezing.**

### General Guidelines

- Avoid knocking or bumping the controller, especially the joystick.
- Avoid prolonged exposure of your power chair to extreme conditions, such as heat, cold, or moisture.
- Keep the controller clean.
- Check all electronics connectors to ensure that they are all tight and secured properly.
- Make sure the drive tyres are inflated to **2.4 bar (35 psi).**

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

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

# VII. CARE AND MAINTENANCE

- Use a rubber conditioner on the tyre sidewalls to help preserve them.

**WARNING! Never use a rubber conditioner on the tread area of the tyres; doing so may make the tyres slippery and cause your power chair 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 battery 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 neutral position 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. See your Quantum Rehab Specialist if there is a problem.
- Visually inspect the controller harness. Make sure that it is not frayed, cut, or has any wires exposed. See your Quantum Rehab Specialist if there is a problem with any harnesses.

### Weekly Checks

- Disconnect and inspect the controller from the back of the power base. Look for corrosion. Contact your Quantum Rehab Specialist if necessary.
- Ensure that all parts of the controller system are securely fastened to your power chair. Do not overtighten any screws.
- Check for proper tyre inflation. There should be **2.4 bar (35 psi)** in each tyre. If a tyre does not hold air, see a 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. To calibrate the joystick, power off the unit, place the joystick in the neutral position, and power the unit back on. If a problem still exists with your joystick's performance, contact your Quantum Rehab Specialist.
- Check the brakes. This test should be carried out on a level surface with at least one meter of clearance around your power chair.

**To check the brakes:**

1. Turn on the controller and turn down the speed level of your power chair.
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 electric brake operating within a few seconds of joystick movement. Repeat this test three times, pushing the joystick rearwards, then left, and then right.

# VII. CARE AND MAINTENANCE

## Monthly Checks

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

## Yearly Checks

Take your power chair to a 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 your power chair. See V. "Batteries and Charging."

**WARNING! If you fail to store the unit properly, the frame can rust and the electronics can be damaged.**

## Cleaning Instructions

**WARNING! Never hose off your power chair 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.**

## Tyre/Wheel Replacement

If you have pneumatic tyres and you have a flat tyre, replace the tube. If your chair is equipped with a solid tyre insert, then you must replace the whole wheel assembly. Replacement tyres, tubes, and wheel assemblies are readily available through your Quantum Rehab Specialist.

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

**WARNING! Completely deflate the tyre before attempting repair.**

# VII. CARE AND MAINTENANCE

**Follow these easy steps for a quick and safe repair for both pneumatic and solid tyres:**

1. Turn off the power to the controller.
2. Set the power chair up on blocks.

**WARNING! Power chair frame components can be heavy. Lifting beyond your physical ability to do so can result in personal injury. Seek assistance from an attendant before lifting frame components, or schedule repair at an authorised Quantum Rehab service facility.**

3. If you are changing a pneumatic tyre, completely deflate it before removing the wheel.
4. Pry off the hub cap. See figure 24.
5. Use a socket spanner to remove the drive wheel nut (not shown) from the wheel hub.
6. Pull the wheel off of the axle.
7. Remove the screws that fasten the two rim halves together.
8. Remove the old tube (or solid insert) from the pneumatic tyre and replace it with a new tube (or solid insert).
9. Screw together the two rim halves.
10. Slide the wheel back onto the shaft.
11. Reinstall the drive wheel nut onto the wheel hub and tighten.
12. Reinstall the hub cap.
13. Inflate the pneumatic tyre to **2.4 bar (35 psi).**
14. Remove the power chair from the blocks.

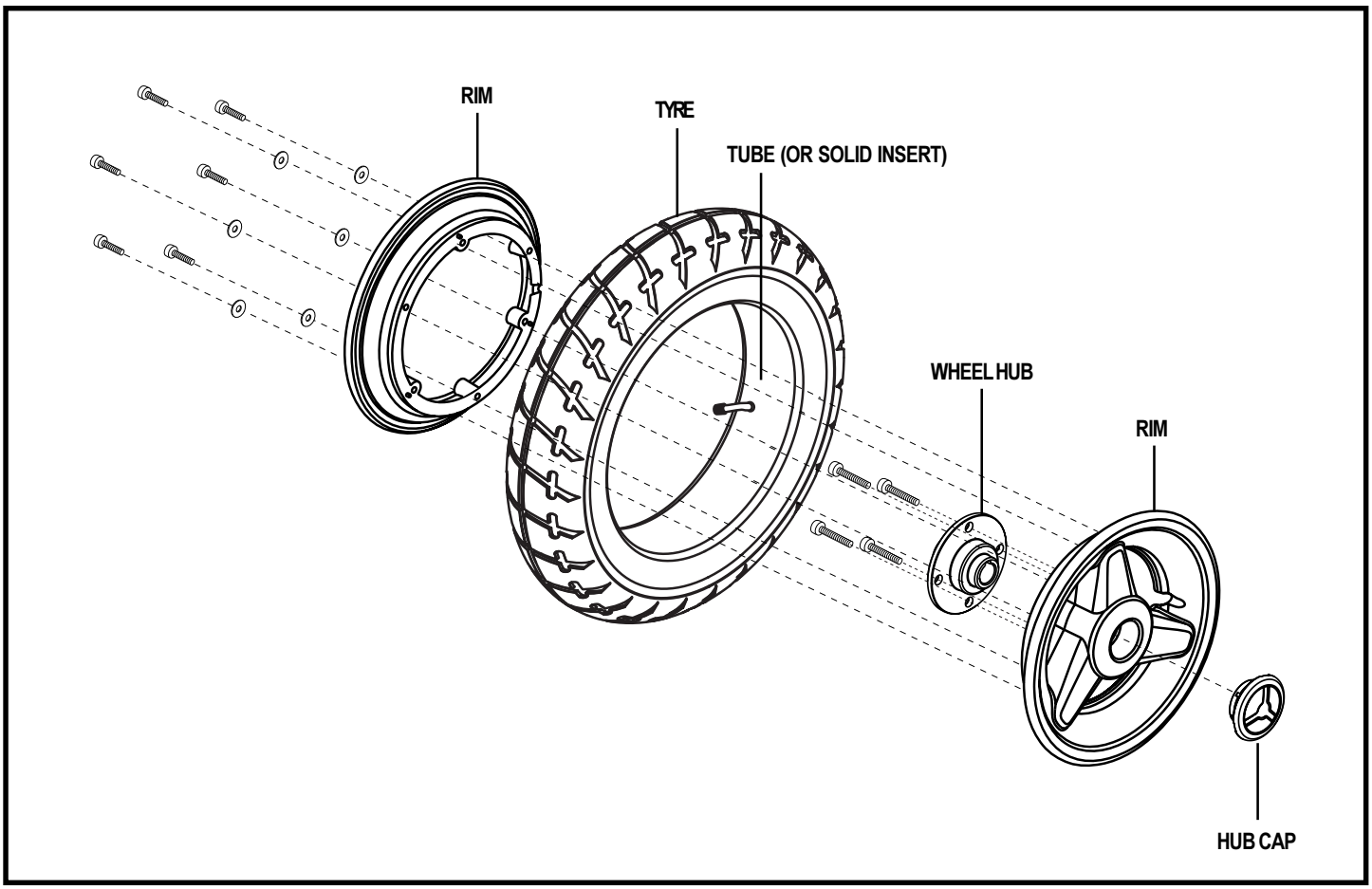



**Figure 24. Tyre Replacement**

# VII. CARE AND MAINTENANCE

## BATTERY REPLACEMENT

A battery wiring diagram is printed on a decal located on the battery door. See figure 25. Refer to the specifications table in III. "Your Power Chair" for correct battery specifications.

**WARNING! Battery posts, terminals, and related accessories contain lead and lead compounds. Wear goggles and gloves when handling batteries and wash hands after handling.**

**WARNING! Pride 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.**

**To replace the batteries:**

1. Turn off the power to the controller.
2. Push the manual freewheel lever outward for drive mode.
3. Disconnect the battery door straps at the back of the power chair.
4. Remove or rotate the leg rests to the side.
5. Locate the battery quick disconnects on the frame and disconnect both of them. See figure 26.
6. Remove the batteries from the power base.
7. Disconnect the battery wiring harness from each battery.
8. Reinstall the battery wiring harness on each new battery. Make sure that you connect the red wire to the positive (+) battery terminal and the black wire to the negative (-) battery terminal.

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

9. Place the batteries back into the power base.
10. Connect the battery quick disconnects according to the battery wiring diagram label located on the frame.
11. Reinstall or rotate the leg rests back to position.
12. Reconnect the battery door straps.

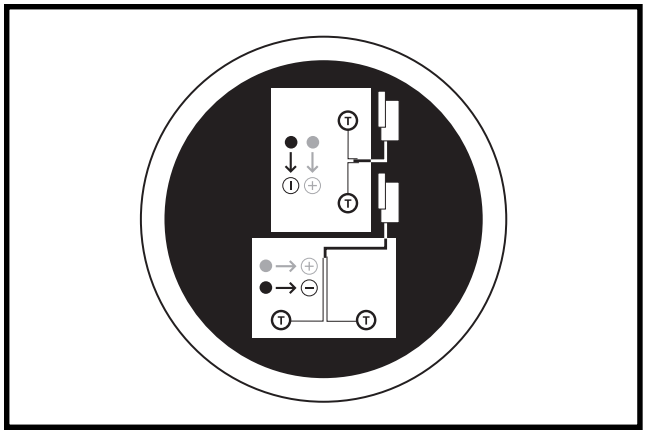


**Figure 25. Battery Wiring Diagram**

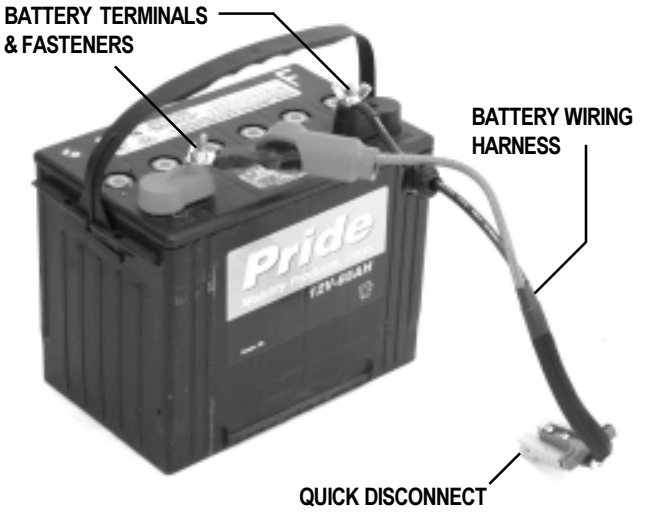



**Figure 26. Battery and Harness**

# VII. CARE AND MAINTENANCE

## WHEN TO SEE YOUR QUANTUM REHAB SPECIALIST FOR SERVICE

The following symptoms could indicate a serious problem with your power chair. If necessary, contact your 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 tyres
- Jerky motion
- Pulling to one side
- Bent or broken wheel assemblies
- Does not power up
- Powers up, but does not move

## 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 power chair still does not power up, contact your Quantum Rehab Specialist.

# VIII. WARRANTY

## FIVE-YEAR LIMITED WARRANTY

Structural frame components, including platform, fork, seat posts, and frame welds.

## TWO-YEAR WARRANTY

Drivetrain, including differential, motor, and brakes.

## ONE-YEAR WARRANTY

Your Quantum Power Chair is fully guaranteed for twelve (12) months from the date of purchase against faults arising due to defects in manufacture or materials.

All electronic parts, including controllers, have a one (1) year warranty. Servicing to the controller or the battery chargers must be carried out by your Quantum Rehab Specialist. Any attempt to open or dismantle these items renders the guarantee void on that item.

## NOT COVERED UNDER WARRANTY

This warranty does not extend to those items which may need replacement due to wear and tear (tyres, belts, bulbs, upholstery, plastic shrouds, motor brushes, fuses, and batteries), or damage to the product caused by misuse or accident for which Pride or its agent cannot be held responsible. This warranty does not include labor or service calls.

## BATTERIES

Batteries are covered by a twelve (12) month warranty from the original manufacturer.

Gradual deterioration in performance due to being left in a discharged state, left in cold conditions for long periods of time, or worn out through heavy use is not covered.

## WARRANTY EXCLUSIONS

Warranty service can be performed by your Quantum Rehab Specialist. Please contact your Quantum Rehab Specialist for advice on the current cost affecting the service visit.

## REPLACEMENT UNITS

The availability of replacement units is subject to the discretion of the provider, not the manufacturer. For more information regarding replacement units, contact your Quantum Rehab Specialist.

# NOTES

# NOTES

# NOTES

# Quantum Vibe

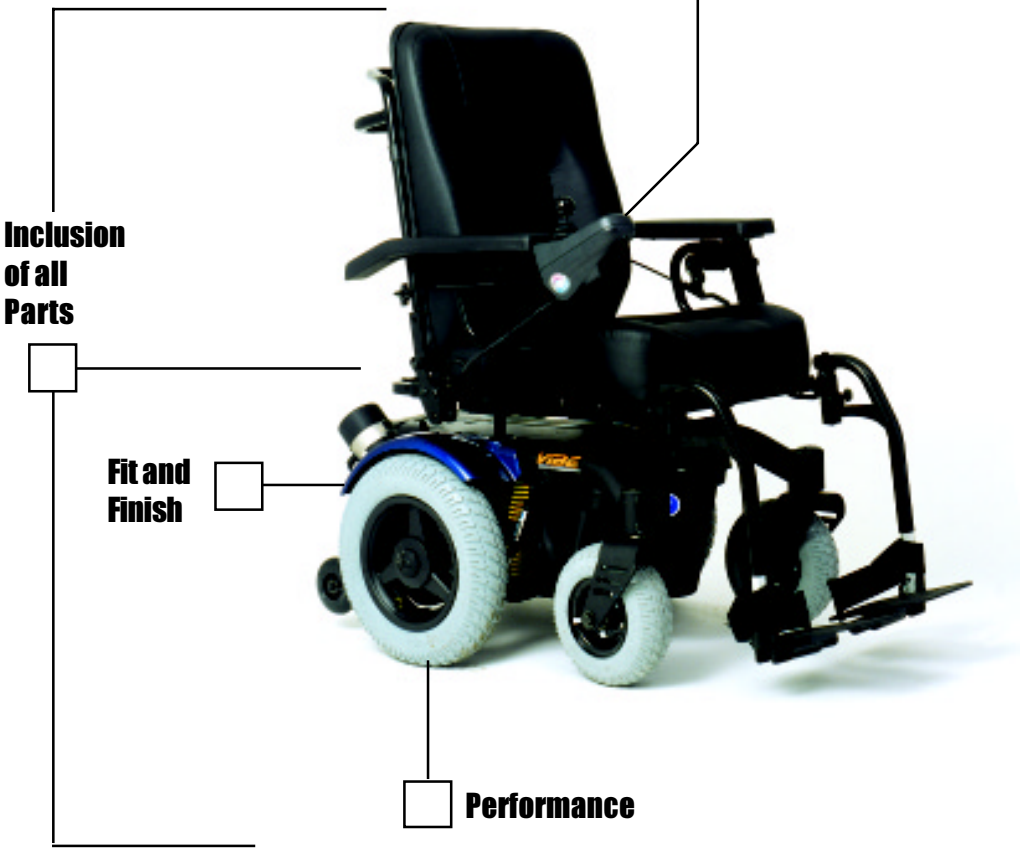
## *Quality Control - Quantum Vibe*

**Model**
#_____

**Serial**
#_____

☐ **Controller**

_____
**Controller Serial #**




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

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

**#1 In Quality**

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

_____
Date Inspected

_____
Inspector

Pride
Mobility Products Australia Pty. Ltd.