ATTENTION:
Please read the content of your owner’s manual before operating your power chair.
SAFETY GUIDELINES

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 to identify warnings, cautions, and notes. It is very important for you to read and understand them completely.

⚠️ WARNING! Failure to heed the warnings in this owner’s manual may result in personal injury.

⚠️ CAUTION! Failure to heed the cautions in this owner’s manual may result in damage to your power chair.

ℹ️ NOTE: Important things to remember when using your power chair.
# Table of Contents

**Introduction** ............................................................................................................................... 4  
**Information Exchange** ................................................................................................................... 4  
**Safety** ........................................................................................................................................... 5  
**EMI/RFI** ......................................................................................................................................... 10  
  - Frequently Asked Questions (FAQs) ............................................................................................. 10  
**Your Quantum Dynamo ATS** ........................................................................................................ 12  
  - Specifications .................................................................................................................................. 13  
  - Seat and Power Base Components ................................................................................................. 15  
  - Manual Freewheel Levers .............................................................................................................. 15  
  - Active-trac System ......................................................................................................................... 16  
**Comfort Adjustments** .................................................................................................................... 16  
  - Versa Seat Adjustments .................................................................................................................. 16  
  - Joystick Extension .......................................................................................................................... 18  
  - Joystick Position ............................................................................................................................ 18  
  - Anti-tip Wheels .............................................................................................................................. 18  
**Operation** ....................................................................................................................................... 19  
  - Remote Plus Controller .................................................................................................................. 19  
  - Joystick Functions .......................................................................................................................... 19  
  - Speed and Mode Adjustments ........................................................................................................ 20  
  - Thermal Rollback ........................................................................................................................... 20  
  - Trouble Codes .................................................................................................................................. 20  
**Batteries and Charging** .................................................................................................................... 26  
  - Frequently Asked Questions (FAQ) ................................................................................................. 26  
**Disassembly** .................................................................................................................................... 28  
**Assembly** ........................................................................................................................................ 30  
**Care and Maintenance** .................................................................................................................... 32  
  - Routine Maintenance ....................................................................................................................... 32  
  - Temperature .................................................................................................................................... 32  
  - General Guidelines .......................................................................................................................... 32  
  - Storage .......................................................................................................................................... 33  
  - Cleaning Instructions ....................................................................................................................... 33  
  - Tires and Tubes ............................................................................................................................... 33  
  - Battery Replacement ....................................................................................................................... 34  
  - Motor Brushes ............................................................................................................................... 34  
  - Corrective Maintenance .................................................................................................................. 35  
  - When To See Your Authorized Pride Provider For Service ......................................................... 35  
**Optional Accessories** ....................................................................................................................... 36  
**Warranty** ......................................................................................................................................... 37  

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**Important Notice**

Attention parents, guardians, and power chair attendants: Please read this manual in its entirety before allowing a minor to operate the Quantum Dynamo ATS. Give close attention to all safety guidelines, warnings, and cautions contained in this manual. Neither this manual nor this power chair is intended for use by a minor without the close supervision of a parent, guardian, or adult attendant!
INTRODUCTION

Welcome to Pride Mobility Products Corporation (Pride). Congratulations on the purchase of your new Quantum Dynamo ATS. The Quantum Dynamo ATS 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.

Please read and follow all of the 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 authorized Pride provider.

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 resolve, or if you do not feel capable of safely following any of the instructions and/or recommendations contained in this manual, please contact your authorized Pride provider 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 regarding this owner’s manual. We would also like to hear about the safety and reliability of your new power chair, and about the service you receive from your authorized Pride provider.

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

Pride Mobility Products Corporation
Attn: Customer Care Department
182 Susquehanna Avenue
Exeter, PA 18643-2694
customercare@pridemobility.com

PRIDE OWNER’S CLUB

As a Pride product owner, you are invited to register your product’s warranty and enroll in the Pride Owners Club. Fill out and return your enclosed registration card or visit 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. 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.

My Authorized Pride Provider Is:

Name:__________________________________________
Address:___________________________________________________________________________________
Phone Number:_________________ Purchase Date:____________Model:________________Serial #________________

Note: If you ever lose or misplace your warranty card or owner’s manual, call or e-mail us, and we will be glad to send you a new one immediately.
SAFETY

WARNING! 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 authorized Pride provider 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 authorized Pride provider 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 “Care and Maintenance.”

Perform the following inspections prior to using your power chair:

- Check for proper tire inflation. Maintain 30-35 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 “Care and Maintenance.”
- Check battery charge. See “Batteries and Charging.”

NOTE: If you discover a problem, contact your authorized Pride provider 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.
SAFETY

Tire Inflation
If your power chair is equipped with pneumatic tires, you should check or have the air pressure checked at least once a week. 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 30-35 psi tire pressure be maintained in pneumatic tires at all times. Do not underinflate or overinflated your tires. Low pressure may result in loss of control, and overinflated tires may burst. Failure to maintain 30-35 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 Dynamo ATS.

**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 overinflated 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 “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 Angle (Ascending and Descending) | 5°](image-url)
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 rear caster wheels in back and anti-tip wheels in front, 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 a manual freewheel lever 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 “Your Quantum Dynamo ATS”.

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 1a.

Figure 1a. Curb Approach (Correct and Incorrect)
SAFETY

WARNING! Do not attempt to have your power chair climb or descend an obstacle that is higher than two 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.

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.

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 “Operation.”
- Ensure your power chair is not in freewheel mode. See “Your Quantum Dynamo ATS”
- 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.
- Flip the footrest up, or 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.
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 footrest. Such use may cause the power chair to tip and cause personal injury.

Positioning Belts
Your authorized Pride provider, 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.

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., walks 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 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 “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.

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**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 this energy unintentionally affects the operation of an electronic device, it is called **Electromagnetic Interference (EMI)** or **Radio Frequency Interference (RFI)**.

**WARNING!** Radio waves may interfere with the control of power chairs.

**FREQUENTLY ASKED QUESTIONS (FAQS)**

The following FAQs summarize what you should know about EMI/RFI. Use this information to minimize the risk that EMI/RFI may affect your power chair.

**WHERE DO RADIO WAVES COME FROM?**

Radio waves are emitted from the antennas of cellular phones, mobile two-way radios, walkie-talkies, radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave sources, and paging transmitters. Radio waves are a form of electromagnetic energy (EM). EM is more intense closer to transmitting antennas, which are sources of emission. The greater the transmission strength, the greater the concern to electric mobility vehicle users.

**IF MY POWER CHAIR IS AFFECTED BY EMI/RFI, WHAT KIND OF MOTION SHOULD I EXPECT?**

This is hard to predict. The effect may depend on a number of factors including:

- Strength of the radio waves
- Construction of the power chair
- Position of the power chair (whether it is on level ground or on a slope)
- Whether or not the power chair is in motion
Electric mobility vehicle motion caused by EMI/RFI can be erratic. The vehicle may move by itself or come to a sudden stop. Furthermore, it is possible for EMI/RFI to unexpectedly release the brakes on an electric mobility vehicle. Some intense sources of EMI/RFI can even damage the control system of an electric mobility vehicle.

**IS THERE ANY WAY TO KNOW FOR SURE WHETHER RADIO WAVES ARE RESPONSIBLE FOR THE UNINTENDED MOTION OF MY POWER CHAIR?**
Unfortunately, interference from radio wave sources may be difficult to recognize, because the signals from these sources are invisible and may be intermittent. However, the FDA recommends that you report all incidents of unintended motion or brake release to the power chair manufacturer and, if possible, note whether there was a radio wave source nearby at the time of the incident.

**HAS ANYONE BEEN HURT FROM ERRATIC, UNINTENDED MOTION OF ELECTRIC MOBILITY VEHICLES?**
The FDA has reports of injuries that may have resulted from the uncontrolled motion of electric mobility vehicles. However, it is unclear how many of these incidents were actually caused by radio wave interference.

**ARE ALL ELECTRIC MOBILITY VEHICLES SUSCEPTIBLE TO EMI/RFI?**
Each make and model differs in its ability to resist EMI/RFI. Each electric mobility vehicle has a particular level of immunity to EMI/RFI. This immunity is measured in volts per meter (V/m). A higher immunity level offers greater protection. In other words, a power chair with a high immunity level is less likely to be affected by a strong radio source than one with a low immunity level.

**WHAT IS THE FDA DOING ABOUT THE PROBLEM?**
The FDA has written to electric mobility vehicle manufacturers and requested that they test their new products to be sure that they provide a reasonable degree of immunity against EMI/RFI. The letter states that electric mobility vehicles should have an immunity level of at least 20 V/m. This provides a reasonable degree of protection against the common sources of EMI/RFI.

The FDA has also requested or recommended that:
- Electric mobility vehicle manufacturers clearly label new products with their immunity level or state that the immunity level is not known.
- The labeling or informational material supplied with new electric mobility vehicles must explain what the immunity level means and warn users about the possibility of EMI/RFI and how to avoid it.
- Electric mobility vehicle manufacturers undertake an educational program to inform users and their caregivers about the problems associated with EMI/RFI and about the actions they can take to minimize the risk of EMI/RFI.

**WHAT CAN I DO TO FIND OUT IF MY POWER CHAIR IS LIKELY TO BE AFFECTED BY EMI/RFI?**
If you have owned your power chair for a long time and have not experienced unintended motion, it is unlikely that you will have problems in the future. While there is no exact way to tell if your power chair is totally safe from EMI/RFI, an immunity level of 20 V/m is generally achievable and useful. However, it is always possible that problems could arise if your power chair is close to a source of radio waves. Therefore, it is very important to be alert to this possibility. Your power chair meets or exceeds an immunity level of at least 20 V/m.

**WHAT CAN I DO TO REDUCE THE RISK THAT MY POWER CHAIR COULD BE AFFECTED BY EMI/RFI?**
Here are some precautions you can take:
- Do not turn on or use hand-held personal communications devices, such as citizens band (CB) radios and cellular phones, while the power chair is on.
- Be aware of nearby transmitters such as radio or TV stations, hand-held or mobile two-way radios or any type of remote control device, and try not to come close to them. For example, if you are in a power chair with an immunity level of 20 V/m, you should remain at least three feet from a hand-held two-way radio and ten feet from a mobile two-way radio.
- Be aware that adding accessories and/or components or modifying the power chair may make it more susceptible to interference from radio wave sources.
- There is no easy way to evaluate the effect of accessories or modifications upon the overall immunity of the power chair.
Your Quantum Dynamo ATS

Your power chair has two main assemblies: the seat and the power base. See figure 2. There are several seating options available with your power chair. Typically, the seating system includes the armrests, the seatback, the seat base, and the joystick/controller. The power base is the heart of your Quantum Dynamo ATS. The power base assembly includes two drive wheels, two anti-tip wheels, two rear caster wheels, a body shroud, four frame assemblies (located under the body shroud), two battery boxes, and the electrical connectors. See figures 2, 3, and 4.

Figure 2. Your Quantum Dynamo ATS
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspension:</td>
<td>Active-Trac suspension</td>
</tr>
<tr>
<td>Drive Wheels:</td>
<td>10 in., pneumatic, center-mounted (solid tires are optional)</td>
</tr>
<tr>
<td>Caster Wheels:</td>
<td>8 in., solid, rear articulating</td>
</tr>
<tr>
<td>Anti-tip Wheels:</td>
<td>6 in., solid, front mounted</td>
</tr>
<tr>
<td>Maximum Speed:</td>
<td>Up to 4.0 mph*</td>
</tr>
<tr>
<td>Brakes:</td>
<td>“Intelligent Braking,” electronic regenerative, disc park brake&quot;</td>
</tr>
<tr>
<td>Ground Clearance:</td>
<td>2.5 in.</td>
</tr>
<tr>
<td>Turning Radius:</td>
<td>18.5 in.</td>
</tr>
<tr>
<td>Overall Size:</td>
<td>Length: 36.5 in.</td>
</tr>
<tr>
<td></td>
<td>Width: 23 in. (assembled)</td>
</tr>
<tr>
<td>Seating Options:</td>
<td>Synergy Seat (standard)</td>
</tr>
<tr>
<td></td>
<td>Versa Tilt (optional)</td>
</tr>
<tr>
<td>Drivetrain:</td>
<td>Two motor, mid-wheel</td>
</tr>
<tr>
<td>Batteries:</td>
<td>Two 12-volt, U-1 batteries</td>
</tr>
<tr>
<td>Range:</td>
<td>Up to 25 miles*</td>
</tr>
<tr>
<td>Battery Charger:</td>
<td>5-amp, onboard</td>
</tr>
<tr>
<td></td>
<td>5-amp, off-board (optional)</td>
</tr>
<tr>
<td>Electronics:</td>
<td>Standard: 70-amp, P&amp;G Remote Plus Controller</td>
</tr>
<tr>
<td></td>
<td>Optional: 70-amp Dynamic Controller</td>
</tr>
<tr>
<td>Weight Capacity:</td>
<td>160 lbs.</td>
</tr>
<tr>
<td>Component Weights:</td>
<td>Seat: 44 lbs.</td>
</tr>
<tr>
<td></td>
<td>Front battery and case: 26 lbs. (U-1 Battery = 24.5 lbs.)</td>
</tr>
<tr>
<td></td>
<td>Rear battery and case: 26 lbs. (U-1 Battery = 24.5 lbs.)</td>
</tr>
<tr>
<td></td>
<td>Battery well frame: 13.5 lbs.</td>
</tr>
<tr>
<td></td>
<td>Front frame: 2.5 lbs.</td>
</tr>
<tr>
<td></td>
<td>Right frame assembly: 38 lbs.</td>
</tr>
<tr>
<td></td>
<td>Left frame assembly: 38 lbs.</td>
</tr>
<tr>
<td>Warranty:</td>
<td>Lifetime limited warranty on frame</td>
</tr>
<tr>
<td></td>
<td>2-year limited warranty on electronics</td>
</tr>
<tr>
<td></td>
<td>18-month warranty on drive motors</td>
</tr>
</tbody>
</table>

*Varies with user weight and terrain*
Figure 3. Power Base Rear View - Electronics Tray

Figure 4. Power Base Top View
SEAT AND POWER BASE COMPONENTS
The seating system and the power base consist of the following components.

- **Joystick/Controller:** This device is used to move the power chair. See figure 2.
- **Joystick/Controller Harness Connector:** This is where the joystick harness connects to the electronics tray. See figure 3.
- **Armrests:** These provide a comfortable place to rest your arms during time spent on your power chair. See figure 2.
- **Manual Freewheel Levers:** These levers enable you to disengage or engage the motors from or to the gearbox. While the motors are disengaged, your power chair can be pushed manually. See figure 5.
- **Body Shroud:** These are the plastic pieces that cover the power base. See figure 2.
- **Swing-away Leg Rests:** This is where your feet rest during time spent on your power chair. See figure 2.
- **Anti-Tip Wheels:** These are wheels that allow “slight” or “no” tip while driving. They also allow for 2-in. curb climbing abilities. See figure 2.
- **Drive Wheels:** These are the main wheels that move the power chair. See figure 2.
- **Rear Caster Wheels:** These are the trailing wheels that provide stability. See figure 2.
- **Ammeter:** The ammeter displays the charger’s current output in amps. See figure 3.
- **Main Circuit Breaker:** The main circuit breaker is a safety feature built into your power chair. See figure 3. 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 the power chair to “rest” for approximately one minute. Then, 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 Pride provider.
- **Battery Charger AC Receptacle:** This is where the battery charger cord plugs in when the batteries need to be recharged. See figure 3.
- **Battery Connectors:** These provide connection between the battery boxes and the electronics tray. See figure 4.
- **Motor Connectors:** These provide connection between the motors and the electronics tray. See figure 4.

MANUAL FREEWHEEL LEVERS
Your power chair is equipped with two manual freewheel levers. See figure 5. These levers allow you to disengage the drive motors and maneuver the chair manually. This is called freewheel mode.

**WARNING!** Do not use your Quantum Dynamo ATS 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!

**CAUTION!** It is important to remember that when your Quantum Dynamo ATS is in freewheel mode, the braking system is disengaged.

To engage or disengage the drive motors:
1. Push down the manual freewheel levers to engage the drive motors.
2. Pull up the manual freewheel levers to disengage the drive motors.
VERSAT SEAT ADJUSTMENTS
The Versa Seat is the standard seat assembly for your power chair. After you have become familiar with your power chair’s operation, you may find the need to make adjustments to the seat to increase your comfort.

WARNING! If your Quantum Dynamo ATS was configured at your authorized Pride provider or service center, please consult your healthcare professional before changing seat position or making any other adjustment. Some of these adjustments may degrade your power chair’s performance and safety by changing its center of gravity.

SEAT HEIGHT AND ANGLE
You can change the seat height by either raising or lowering the four seat posts attached to the seat 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 damage to the chair.

To change the seat height:
1. Remove the T-handle ball detent pins that secure the Versa Seat to the power base.
2. Raise or lower the seat posts attached to the seat base to the desired height. You may find it easier to adjust the front posts first, and then the rear posts. See figures 7 and 7a.
3. Align the locating hole in the seat post with the one in the seat mount connector, and reinsert the T-handle ball detent pin for each post.

LIMITED ACTIVE-TRAC SYSTEM
Your power chair is equipped with a limited Active-Trac System (ATS). See figure 6. ATS is a suspension system designed to make your power chair 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 your power chair over an obstacle and limits the possibility of your power chair becoming “hung up” on the obstacle.

ATS also helps in day-to-day operating conditions. For instance, when you release the joystick, your power chair 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 mid-wheel drive chairs.

COMFORT ADJUSTMENTS
To change the seat angle:
You can change the seat angle by either raising or lowering the front posts or the rear posts.

**SEATBACK ANGLE ADJUSTMENT**
The Versa Seat seatback can be adjusted to various angles for user comfort. See figure 8.

To adjust the seatback angle:
1. Use a 1/2-in. socket and a 1/2-in. wrench to remove the screws from the seatback angle adjustment bracket.
2. Position the seatback to the desired angle.
3. Reinstall the hardware.

**ARMREST ADJUSTMENT**
Flip-up armrests can be both height and angle adjusted to meet the comfort needs of the user. Removable armrests can also be height adjusted.

To change the armrest angle for flip-up armrests:
1. Flip the armrest up and out of the way. See figure 9.
2. Use a 7/16-in. wrench to loosen the jam nut.
3. Use a 5/32-in. hex key to loosen the adjustment screw.
4. Turn the screw clockwise to lower the front of the armrest and counterclockwise to raise the front of the armrest.
5. Tighten the jam nut to lock the adjustment screw in place.

To adjust the height of flip-up armrests:
1. Flip the armrest up and out of the way. See figure 9.
2. Use a 7/16-in. wrench to loosen the jam nut.
3. Use a 5/32-in. hex key to loosen and remove the adjustment screw and jam nut and the two flat head screws from the support bracket. See figure 10.
4. Use a 5/16-in. hex key to remove the front shoulder bolt from the armrest clamp.
5. Repeat steps 1 through 4 for the opposite armrest.
6. Raise or lower the armrests to the desired height.
7. Reinstall and tighten all hardware.

To adjust removable armrest height:
1. Use a 5/32-in. hex key to remove the two button head screws from the side of the armrest. See figure 11.
2. Slide the armrest up or down to the desired height.
3. Reinstall and tighten the button head screws.

**SWING-AWAY LEG REST LENGTH**
The swing-away leg rest length can be easily adjusted to a comfortable position.

To raise or lower the leg rest:
1. Use a 3/16-in. hex key to remove the two screws on the back of the leg rest. See figure 12.
2. Slide the adjustment tube up or down to the desired position.
3. Reinstall and tighten the screws.
COMFORT ADJUSTMENTS

JOYSTICK EXTENSION
The joystick/controller can easily slide out away from the armrest or in toward the armrest.

To extend the joystick:
1. Use a 1/8-in. hex key to loosen the setscrews in the joystick mounting block. See figure 13.
2. Slide the joystick mounting bracket into or out of the mounting block to the desired position.

JOYSTICK POSITION
You can position the joystick for either left-hand or right-hand use.

To change the joystick position:
1. Disconnect the joystick/controller harness from its connector on the electronics tray. See figure 3.
2. Cut the wire tie that attaches the joystick/controller harness to the armrest.
3. Use a 1/4-in. hex key to loosen the socket head screws located on the right side of the joystick mounting block.
4. Slide the mounting block off of the armrest and place it on the other armrest.
5. Tighten the screws.
6. Connect the joystick/controller harness and secure it to the armrest with a wire tie.

ANTI-TIP WHEELS
The Quantum Dynamo ATS mid-wheel drive design provides superior performance and safety. The anti-tip wheels are an integral part of this design because they provide you with stability during deceleration. The anti-tip wheels are preset at the factory to a height of 3/4-in. off the ground. This is the ideal setting for most Quantum Dynamo ATS users. However, you may encounter situations where you may need to adjust the anti-tip wheels. For instance, if you drive your power chair on surfaces such as deep pile carpeting, you may notice that the anti-tip wheels have a tendency to drag on the carpet. In this case, you may need to raise the anti-tip wheels. If you drive your power chair primarily on smooth surfaces such as linoleum or tile, you may find that you tip forward more than is comfortable for you. (This may be more apparent for lighter users.) In this case, you may need to lower the anti-tip wheels.

WARNING! Consult your authorized Pride provider before attempting to change the anti-tip wheel height! Changing the anti-tip 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 forward when coming to a stop. You can compensate for this by having your authorized Pride provider make a small adjustment to the pre-programmed deceleration setting in the controller or by moving the seat assembly further to the rear of your power chair.

NOTE: Before making height adjustments on your anti-tips, consult your authorized Pride provider to make sure that your seat is positioned properly. Moving your seat rearward one (1) inch may be sufficient.

Figure 11. Removable Armrest Height Adjustment

Figure 12. Leg Rest Length Adjustment

Figure 13. Joystick Extension Adjustment
ANTI-TIP WHEEL ADJUSTMENT
You can adjust the anti-tip wheels so that they are higher or lower. Adjusting the anti-tip wheels also affects the stiffness of the suspension. Raising the anti-tip wheels stiffens the suspension while lowering the anti-tip wheels softens the suspension.

To adjust the anti-tips:
1. Make sure the power chair is not in freewheel mode.
2. Use a 5/32-in. hex key and a 7/16-in. socket to loosen the nut and bolt that fasten the anti-tip spring to the anti-tip arm. See figure 14.
3. Use a 1/2-in. wrench and 1/2-in. socket to remove the anti-tip wheel.
4. Use a 5/32-in. hex key and 7/16-in. socket to remove the anti-tip adjustment bolt.
5. Raise or lower the anti-tip wheel in 1/4-in. increments.
6. Replace the hardware into the appropriate holes and tighten.
7. Install the anti-tip wheel.

REMOTE PLUS CONTROLLER
The electronic controller is what you use to operate your power chair. It takes the battery voltage and sends it to the appropriate system. The electronic controller also enables you to monitor battery charge, electronic controller functions, and the condition of your electrical system. Also, it may be used to control some optional systems such as power elevating seats and lights.

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
- 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 arm-rest. The other components are located inside the power base.

Remote Plus Master Remote
The Remote Plus master remote consists of the following (see figure 14a):
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 further 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.
**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. See figure 14b. It contains keys that you will use to control your power chair.

**On/Off Key**
The on/off keys 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.

**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 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/tailights on and off independent of other indicators.

**Hazard Key**
The hazard key toggles both right and left 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 turned on and also gives the status of the battery, the controller, and the power chair electrical system.

- Red, yellow, and green lights lit: Battery charged; controller and electrical system OK.
- Red and yellow lights lit: Charge battery if possible; controller and electrical system OK.
- Red lights only lit or slow flash: Charge battery as soon as possible; controller and electrical system OK.
- Rapid flash of lights: Indicates a fault in the controller or the electrical system.
- Ripple up and down of lights: The joystick was not in the center 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 authorized Pride Provider.*
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**
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 preset at the factory. If your authorized Pride provider changes the order of these settings, please make note of these changes. Contact your authorized Pride provider for more information.

To select a speed setting:
1. Press the on/off key to power on the remote.
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.
4. To decrease chair speed, push the joystick to the left. Each time you push the joystick, you decrease the speed setting.
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 authorized Pride provider for information on how to operate these accessories.

**Off-board Charger/Programming Socket**
You may use an off-board charger to charge the power chair batteries through the 3-pin socket located on the front of the controller. See figure 14a. The socket may also be used for reprogramming the controller by using a Penny & Giles Programmer, should this be necessary. If you use an off-board charger, the charger current should not exceed 12 amps. Contact your authorized Pride provider for more information.

CAUTION! Only chargers with Neutrik NC3MX plugs should be connected to the off-board charger/programming socket. See your authorized Pride provider for more information.

**Controller Communications Cable**
The controller communications cable provides the joystick module with a connection to the power module at the back of the power base. See figure 14a.

**Power Module**
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 your power chair’s speed 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 authorized Pride provider.

<table>
<thead>
<tr>
<th>FLAShING LIGHTS</th>
<th>DIAGNOSIS</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>High Battery Voltage</td>
<td>Check batteries.</td>
</tr>
<tr>
<td>9</td>
<td>Solenoid Brake Fault</td>
<td>Check motor/brake wiring.</td>
</tr>
<tr>
<td>8</td>
<td>Possible Controller Fault</td>
<td>See authorized Pride provider.</td>
</tr>
<tr>
<td>7</td>
<td>Possible Joystick Fault</td>
<td>See authorized Pride provider.</td>
</tr>
<tr>
<td>6</td>
<td>Inhibit Active Unplug charger.</td>
<td>Check connections.</td>
</tr>
<tr>
<td>5</td>
<td>Right Motor Wiring Fault</td>
<td>Check right motor wiring.</td>
</tr>
<tr>
<td>4</td>
<td>Right Motor Disconnected</td>
<td>Check right motor wiring.</td>
</tr>
<tr>
<td>3</td>
<td>Left Motor Wiring Fault</td>
<td>Check left motor wiring.</td>
</tr>
<tr>
<td>2</td>
<td>Left Motor Disconnected</td>
<td>Check left motor wiring.</td>
</tr>
<tr>
<td>1</td>
<td>Low Battery Voltage</td>
<td>Check batteries/battery wiring.</td>
</tr>
</tbody>
</table>

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:
- master remote (Europa)
- 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 (see figure 15):
1. joystick
2. keypad
3. controller communications connector
4. off-board charger/programming socket

Figure 15. 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 further 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 the all the segments on the battery condition meter are flashing, you may have set a fault code. See “Fault Codes.”

**Keypad**
The keypad is located directly in front of the joystick. It contains keys that you will use to control your power chair. See figure 16.

**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 “lock-out” unauthorized users. For this function, you will need the magnetic key supplied with your power chair. If you lose this key, contact your authorized Pride provider.

**To enable the lockout system:**
1. Hold the magnetic key on or near the key symbol. The system will beep and automatically turn off.

   **NOTE:** None of the remote lights should be lit.

2. Press the on/off key to turn on the power chair. The key symbol will flash, but you will not be able to drive your power chair. This means that it is still locked.

3. Hold the magnetic key on or near the key symbol again to unlock the system. 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 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 center of the keypad.

NOTE: The drive mode settings are preset at the factory. If your authorized Pride provider changes these settings, please make note of these changes.

To change the drive mode program:
1. Press the drive mode 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.

Actuator Select Keys with Lights
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 authorized Pride provider for information on how to operate these accessories.

Remote Status Light
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.”

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 may use an off-board charger to charge the power chair batteries through the 3-pin socket located on the front of the Europa. See figure 15. If you use an off-board charger, the charger current should not exceed 8 amps. Contact your authorized Pride provider for more information.

NOTE: The socket may also be used for reprogramming the Europa. Contact your authorized Pride provider for more information.
**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 and key on the keypad.

**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 authorized Pride provider.

<table>
<thead>
<tr>
<th>FLASH CODE SEQUENCE</th>
<th>DIAGNOSIS</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>..............</td>
<td>DX module fault</td>
<td>See your authorized Pride provider.</td>
</tr>
<tr>
<td>..............</td>
<td>DX accessory fault</td>
<td>See your authorized Pride provider.</td>
</tr>
<tr>
<td>..............</td>
<td>Left motor (or connection) fault</td>
<td>Check left motor wiring.</td>
</tr>
<tr>
<td>..............</td>
<td>Right motor (or connection) fault</td>
<td>Check right motor wiring.</td>
</tr>
<tr>
<td>..............</td>
<td>Left park brake fault</td>
<td>Check motor/brake wiring.</td>
</tr>
<tr>
<td>..............</td>
<td>Right park brake fault</td>
<td>Check motor/brake wiring.</td>
</tr>
<tr>
<td>..............</td>
<td>Low battery fault</td>
<td>Check that the battery wiring is secure.</td>
</tr>
<tr>
<td>..............</td>
<td>Over voltage fault</td>
<td>Check that the battery wiring is secure.</td>
</tr>
<tr>
<td>..............</td>
<td>CANL fault</td>
<td>See your authorized Pride provider.</td>
</tr>
<tr>
<td>..............</td>
<td>CANA fault</td>
<td>See your authorized Pride provider.</td>
</tr>
<tr>
<td>..............</td>
<td>Stall timeout</td>
<td>Turn unit on, then off.</td>
</tr>
<tr>
<td>..............</td>
<td>Module mismatch</td>
<td>See your authorized Pride provider.</td>
</tr>
</tbody>
</table>

**NOTE:** You must turn 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 authorized Pride provider.
BATTERIES AND CHARGING

BATTERIES
Your Quantum Dynamo ATS 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 deep 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 are also unsafe for use in power chairs.

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

CHARGING YOUR BATTERIES
The battery charger is one of the most important parts of your Quantum Dynamo ATS. The battery charger is designed to optimize your power chair’s performance by charging the batteries safely, quickly, and easily. The charging system consists of the charger, the charger fuse, and the ammeter. The ammeter indicates the rate of charge necessary to fully recharge the batteries. It is also a good indication of whether or not the charger is working. The ammeter and the charger are only functional when the charger power cord is plugged into a wall outlet.

WARNING! You must recharge batteries with the supplied onboard or off-board charging system. Do not use an automotive-type battery charger.

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

To charge the batteries by using the onboard charger:
1. Position the rear of your power chair close to a standard wall outlet.
2. Be certain that the controller power is turned off and the freewheel levers are in the engaged position. See “Your Quantum Dynamo ATS.”
3. Extend the charger power cord and plug it into the wall outlet. Your Quantum Dynamo ATS incorporates an inhibit function that disables your power chair when the charger is plugged into a wall outlet.
4. 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 up to as high as 5.5 amps, then gradually move back down to 0 amps as it charges.
5. We recommend you charge the batteries for 8 to 14 hours. As the batteries charge, the ammeter needle will slowly drop to zero. When the batteries are fully charged, the needle will vibrate on or about the zero mark on the meter scale.
6. When the batteries are fully charged, unplug the power cord from the wall outlet, wind it up, and store it in a safe place.

OFF-BOARD CHARGER
Your power chair may be equipped with an off-board, or external, charger. Typically, external chargers plug into the joystick/controller. If your power chair is equipped with an external charger, refer to the instructions that come with the charger.

BATTERY BREAK-IN
1. Fully recharge any new battery prior to initial use. This will bring the battery up to about 90% of its peak performance level.
2. Run your Quantum Dynamo ATS 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 run your power chair again. The batteries should 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 voltage of 120VAC (alternating current) and converts it to 28VDC (direct current). When the battery voltage is low, the charger works harder to charge the batteries. This is why the charging ammeter initially reads 5.5 amps or more. As the battery voltage approaches a full charge, the charger doesn’t work as hard to complete the charging cycle. This explains why the amperage on the charging ammeter drops as the batteries approach a full charge. When the batteries are fully charged, the amperage from the charger is nearly zero. This is how the charger maintains a charge but does not overcharge the battery. Your power chair’s charger will not be able to charge your batteries after the batteries have been discharged to nearly zero voltage. If this happens, call your authorized Pride provider for assistance.
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).

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. We recommend that you charge the batteries 8 to 14 hours after daily use. Do not charge the batteries for more than 24 hours.

- **INFREQUENT USE**
  If you use your power chair infrequently (once a week or less), you should charge it at least once per week for 12 to 14 hours.

  **NOTE:** Keep the batteries fully charged and avoid deeply discharging the batteries. Do not charge the batteries for more than 24 hours.

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 hills or curves. More often you are presented with hills, sidewalk cracks, uneven and loosely packed surfaces, and curves. 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 charge the batteries fully prior to your trip.
- Maintain 30-35 psi in pneumatic drive tires.
- Plan your trip in advance to avoid inclines if possible.
- Limit the baggage weight to essential items.

WHAT TYPE OF BATTERY SHOULD I USE?
We recommend deep-cycle batteries that are sealed and maintenance free. Both sealed lead-acid (SLA) and gel cell are deep-cycle batteries and are similar in performance.

Use these specifications to reorder deep-cycle batteries from your authorized Pride provider.

<table>
<thead>
<tr>
<th>Battery Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: Deep-cycle (sealed lead-acid or gel cell)</td>
</tr>
<tr>
<td>Size: U-1</td>
</tr>
<tr>
<td>Voltage: 12 volts each</td>
</tr>
<tr>
<td>Amp Hours: 35 amp hours (AH)</td>
</tr>
</tbody>
</table>

**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 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 the Quantum Dynamo ATS’s specific demands. Fresh batteries arrive regularly and are promptly shipped with a full charge. During shipping, the batteries encounter temperature extremes that may influence their 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 for you to take the time to break in the batteries properly.

NOTE: The useful life of a battery is quite often a reflection of the care it receives.

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 DYNAMO ATS AND BATTERIES?
If you do not use your power chair regularly, we recommend maintaining battery vitality by charging the batteries at least once a 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 your power chair in a warm, dry environment. Avoid temperature extremes such as freezing conditions 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 your power chair for an extended period of time, you may wish to block the unit up off of the ground with several boards under the frame. This keeps the tires off of the ground and prevents the possibility of flat spots developing on the tread area of the tires.

WHAT ABOUT PUBLIC TRANSPORTATION?
If you intend to use public transportation while using your power chair, you must contact in advance the transportation provider to determine their specific requirements. See “Safety” for more details.

Sealed lead-acid and gel cell batteries are designed for application in power chairs and in other mobility vehicles. Generally, sealed lead-acid batteries 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 power chair to your final destination, repack it in the original shipping container and ship the batteries in separate boxes.

DISASSEMBLY

Your Quantum Dynamo ATS disassembles into eight easily transportable component assemblies (seat and leg rests not shown)—with no tools required. See figure 17.

WARNING! Even though no tools are required to disassemble or assemble your Quantum Dynamo ATS, you should not place your hands or fingers on the areas of the component assemblies where they may be pinched, as the assemblies “snap” together or “snap” apart.

NOTE: During both disassembly and assembly of your Quantum Dynamo ATS, take your power chair out of freewheel mode so that the chair does not roll while you are disassembling or assembling it. See “Your Quantum Dynamo ATS.”

DISASSEMBLY PREPARATION
Position your power chair in a location where there is ample working room on all four sides. We recommend three or more feet of clearance on all sides. There are eight component assemblies, some of which take up a great deal of space when disassembled from the chair. Make certain that your power chair is powered off.
DISCONNECT THE JOYSTICK/CONTROLLER HARNESS.
- Disconnect the joystick/controller harness from its connector on the electronics tray. See figure 3. You may need to pull firmly and gently wiggle the harness to remove it from the connector.

REMOVE THE SEAT.

CAUTION! Depending on the size of the seat, Pride recommends that two people remove the Versa Seat to avoid possible damage to the seat or your Quantum Dynamo ATS.

1. Remove the four (4) T-handle ball detent pins securing the Versa Seat to the power base.
2. Allow the Versa Seat to rest on the seat mount connectors.
3. Lift the Versa Seat directly up. See figure 18. You may find it necessary to rock the seat gently from side to side to free the seat posts from the seat mount connectors.

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

REMOVE THE SWING-AWAY LEG RESTS.
1. Press and hold the locking lever to unlock the leg rest. See figure 19.
2. Swing the leg rest to the side, then lift it straight up to remove it from the mounting bracket.

Figure 17. Quantum Dynamo ATS Component Assemblies

Figure 18. Removing the Versa Seat

Figure 19. Removing the Swing-away Leg Rest
REMOVE THE BATTERY WELL FRAME.
1. Disconnect both battery connectors and both motor connectors. See figure 4.
2. Lift and remove each battery box. See figure 20.
3. Squeeze together the latch release levers that hang vertically down from the crossbar at the rear of the battery well frame. Lift up the rear end of the battery well frame. See figure 21. Pull it to the rear of the chair to release the front slots from the locating pins on the front frame bottom bar.

DISASSEMBLE THE RIGHT AND LEFT POWER BASE FRAME ASSEMBLIES.
1. Stand behind your power chair and grasp one of the power base frame assembly handles.
2. Press the chrome latch release lever toward the center of the frame and hold it. See figure 22.
3. Push the frame assembly outward and pull up on the front frame until the latching mechanism releases.
4. Keep pulling upward until the locating pin on the bottom of that side of the front frame releases from its slot in the power base frame assembly.
5. Carefully let the power base frame assembly tilt to a resting position.
6. Repeat for the other power base frame assembly.

ASSEMBLY

FRONT FRAME AND POWER BASE FRAME ASSEMBLY
1. Place the three frame assemblies next to each other as shown in figure 23.
2. Grasp the front frame and fit the notch on the front frame bottom bar onto the locating pin on the lower section of the power base frame assembly. See figure 24.

CAUTION! The front frame should be positioned with the two semicircular notches in the vertical bar facing forward.

3. Pivot the front frame top bar toward the power base frame assembly and push the front frame top bar onto the locking mechanism until the two assemblies snap securely into place. See figure 25.
4. Repeat for the other power base frame assembly.
CAUTION! Make certain that the front frame is snapped securely to both the right frame assembly and to the left frame assembly.

INSTALL THE BATTERY WELL FRAME.
1. Hold the battery well frame so that the bottom of the well hangs downward.
2. Position the notches on the front of the battery well frame onto the locating pins on the front frame bottom bar. See figure 26.
3. Fit the notch on either side of the rear of the battery well frame onto the locating pin on the power base frame assembly and onto the locating pin on the other power base frame assembly.
4. Make certain that the locking mechanisms snap securely into place.

INSTALL THE BATTERY BOXES.
1. Place the front battery box into the front end of the battery well frame.

   NOTE: Make certain that the connectors are facing toward the center.

2. Place the rear battery box into the back end of the battery well frame. Make certain that none of the wiring harnesses or cables are pinched between the battery or the motor controller box and the frame.
3. Connect the battery boxes. Use the battery connection label for a reference. See figure 4.
4. Reconnect the left and right motor connectors. Be certain to match the left connector to the left motor and the right connector to the right motor. The connectors are labeled left and right. See figure 4.

INSTALL THE SEAT.
1. Lift the Versa Seat directly up and position it over the power base so that the seat posts line up with the seat mount connectors.
2. Slide the seat posts down into the seat mount connectors.
3. Align the locating holes in the seat posts with those in the seat mount connectors, and insert the T-handle ball detent pins through the holes.

INSTALL THE SWING-AWAY LEG RESTS.
1. Press and hold the locking lever, and slide the swing-away leg rest into the mounting bracket.
2. Swing the leg rest to the center position.
3. Release the locking lever to lock the leg rest in place.
4. Repeat steps 1 through 3 for the opposite leg rest.

CONNECT THE JOYSTICK/CONTROLLER.
1. Reconnect the joystick/controller harness to its connector on the electronics tray. See figure 3.

   CAUTION! Do not place the joystick/controller harness so that it can be pinched in the seat frame or the power base frame.
CARE AND MAINTENANCE

ROUTINE MAINTENANCE
Your Quantum Dynamo ATS is a sophisticated powered wheelchair. Like any motorized vehicle, it requires routine maintenance checks. You can perform some of these checks, but others require assistance from an authorized Pride provider. 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 questions about the care or operation of your power chair, contact your authorized Pride provider.

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 Dynamo ATS come in contact with water:
1. Dry your power chair as much as possible with a towel.
2. Allow your power chair to sit in a warm, dry place for 24 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 an authorized Pride service center.

TEMPERATURE
Your Quantum Dynamo ATS may be affected by extreme changes in temperature. Always keep your Quantum Dynamo ATS between the temperatures of 32°F and 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., sealed lead-acid or gel cell).
- Temperatures above 122°F may cause your Quantum Dynamo ATS to operate at a reduced speed. This is a safety feature built into the controller that helps prevent damage to the motor and other electrical components. See “Operation.”

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 connections on the electronics tray at the rear of the power base to ensure that they are all tight and secured properly.
- When the battery condition meter is completely lit, the batteries are fully charged, and the controller and electrical system are OK.
- If one red bar on the battery condition meter is blinking slowly, the batteries are low and need to be charged, but the controller and electrical system are OK.
- If the battery condition meter is blinking rapidly, the controller has detected a fault in either its own circuits or in the power chair’s circuits. See “Operation.”
- Use a rubber conditioner on the tire sidewalls to help preserve them. Check the tires for wear.

WARNING! Never use a rubber conditioner on the tread area of the tires; doing so may make the tires 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 electrical connections. Make sure they are tight and are not corroded. Batteries must sit flat within the battery area, with the battery terminals facing inward toward each other. Refer to the frame decal for the correct wiring layout.
- All wheel bearings are pre-lubricated 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 center when you release it. Check the rubber boot around the base of the joystick for damage. Visually inspect the boot only. Do not handle or try to repair it. See your authorized Pride service center if there is a problem.
- Visually inspect the joystick/controller harness. Make sure that it is not frayed or cut and that no wires are exposed. See your authorized Pride provider if there is a problem with the harness.
WEEKLY CHECKS
- Disconnect and inspect the joystick/controller harness from the electronics tray. Look for corrosion. Contact your authorized Pride provider 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 tire inflation; there should be 30-35 psi in each tire. If a tire will not hold air, replace the tube.
- Calibrate the joystick if a noticeable difference in performance is detected or if the joystick does not operate properly.
- Check the brakes. This test should be carried out on a level surface with at least three feet of clearance around your power chair.

To check the brakes:
1. Turn on the controller and set the speed adjustment to the slowest setting.
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.

NOTE: Your power chair may move when performing this test. Immediately release the joystick. You must be able to hear each electrical brake operating within a few seconds of joystick movement.

MONTHLY CHECKS
- Check that the anti-tip wheels do not rub the ground when you are operating your power chair; adjust them as necessary.
- Check for extreme wear on the anti-tip wheels. Replace them as necessary.
- Check for drive tire wear. See an authorized Pride provider for repair.
- Check the rear casters for wear. Replace as necessary.
- Check the rear forks for damage or fluttering which indicates that they may need to be adjusted or the bearings may need to be replaced. See an authorized Pride provider for repair.
- Keep your power chair clean and free of foreign material such as hair, food, drink, etc.

YEARLY CHECKS
Take your power chair to an authorized Pride provider for yearly maintenance. This helps to 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. See “Batteries and Charging.”

CAUTION! If you fail to store the unit under the above conditions, the frame can rust and the electronics can be damaged.

CLEANING INSTRUCTIONS
CAUTION! Never hose off your Jet 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.

CAUTION! 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 Dynamo ATS 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 to ensure the proper 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! Completely deflate the tire before attempting repair!
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.

Follow these easy steps for a quick and safe tube or tire replacement:
1. Completely deflate the tire (if pneumatic).
2. Use a 17-mm socket wrench and driver to remove the nut from the wheel axle. See figure 27.
3. Pull the wheel off of the axle.
4. Separate the tire and tube from the rim.
5. Remove the old tube and/or tire and replace with the new tube or tire.
6. Slide the wheel back onto the shaft and torque the nut to 16 ft.-lbs.
7. Inflate the tire to **30-35 psi** (if pneumatic).

**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.

**BATTERY REPLACEMENT**
1. Remove the seat.
2. Remove the battery boxes and set them on a solid, flat surface.
3. Unfasten the battery box straps on the bottom of the box.
4. Lift up the top cover.
5. Remove the rubber covers from the terminals. Using a 1/2-in. wrench, unscrew the terminal nuts and bolts and disconnect the battery wires from the battery terminals.
6. Remove the battery from the bottom cover.
7. Place the new battery into the bottom cover.
8. Connect the red battery wire to the positive (+) terminal. Make sure you tighten the nuts and bolts so that the connection is secure.
9. Connect the black battery wire to the negative (-) terminal. Make sure you tighten the nuts and bolts so that the connection is secure. Place the rubber covers over the terminals.
10. Place the top cover back onto the bottom cover.
11. Fasten the straps and make sure the connection is secure. Place the battery box aside.
12. For the second battery, repeat steps 3 - 11.
13. Make sure that the battery terminals are positioned opposite the battery charger.

**CAUTION!** If you do not position the battery terminals on the opposite side of the charger, you run the risk of shorting out the batteries and severely damaging your power chair!

14. Place the rear battery box back into the battery well.
15. Place the front battery box back into the battery well.
16. Connect the rear battery box connector and the front battery box connector to the electronics tray.
17. Install the seat.
18. Connect the joystick/controller harness to its connector on the electronics tray.

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

**MOTOR BRUSHES**
The electric motors that power your Quantum Dynamo ATS use carbon brushes. These brushes may become susceptible to wear over a long period of time. The motor brushes are the two contacts located inside the motor assembly that supply power to the motor. They are designed to provide several thousand hours of operation. But if the brushes become dirty with carbon deposits or wear out, a motor will run poorly or not at all.
To inspect or replace the motor brushes:
1. Disassemble the power chair.
2. Unscrew the two screws that hold down each shroud piece.
3. Unscrew the motor brush caps. See figure 28.
4. Remove the brushes.
5. Inspect the brushes for wear. See figure 29.
6. Replace the brushes, if necessary. Contact your authorized Pride provider for replacement brushes.

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 came with the load tester. If either one of the batteries fails the load test, replace both of them. If your Quantum Dynamo ATS still does not power up, contact your authorized Pride provider.

WHEN TO SEE YOUR AUTHORIZED PRIDE PROVIDER FOR SERVICE
The following symptoms could indicate a serious problem with your Quantum Dynamo ATS. If necessary, contact an authorized Pride provider. 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
OPTIONAL ACCESSORIES

The following accessories are available from your authorized Pride provider.

POSITIONING BELT
The positioning belt is designed to support the operator’s torso 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 Quantum Dynamo ATS 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 an accessory bracket. See figure 30.

WALKER HOLDER
The removable walker holder is mounted to the back of the seat by means of an accessory bracket. It can hold a standard size walker. See figure 31.

CANE AND CRUTCH HOLDER
The removable cane and crutch holder is mounted to the back of the seat by means of an accessory bracket. See figure 32.

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 your power chair.

CUP HOLDER
The cup holder mounts to the armrest. See figure 33.

SWING-AWAY JOYSTICK BRACKET
This option enables you to move the joystick from the front of the armrest to the side of the armrest without disconnecting it.

ELEVATING LEG RESTS
Elevating Leg Rests (ELRs) allow you to raise each leg manually to aid in circulation. The ELRs are length-adjustable for user comfort.

FOOTREST
The footrest is height and angle adjustable and provides you with a resting place for your feet while you operate your power chair.

SPECIALTY SEATING SYSTEMS
Your Quantum Dynamo ATS may be equipped with specialty seating. Please refer to the instructions that come with the seat.
LIFETIME LIMITED WARRANTY
For the lifetime of your Quantum Dynamo ATS 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

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:

● Electronics

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

WARRANTY EXCEPTIONS

● Motor: If damage occurs to the commutator of a motor as a result of not replacing the motor brushes after heavy wear to the brushes. Motor brushes are wear items and are not warranted.

● Brake: One year warranty for the electrical function of the brake. Brake pads are a wear item and are not warranted.

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:

● Plastic components, except body

● Rubber components (except tires and tubes)

● Bearings and bushings

● Casters and anti-tip wheels

Battery warranty is covered by the battery manufacturer. Battery warranty is not covered by Pride.

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.

WARRANTY EXCLUSIONS

● ABS plastic body shrouds and footrest covers are wear items and are not warranted

● Batteries (battery manufacturer provides a six-month limited warranty)

● Tires and tubes

● Upholstery and seating

● Repairs and/or modifications made to any part without specific prior written 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
WARRANTY

Damage caused by:

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

There is no other express warranty.

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

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

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

Please fill out and return the warranty card to Pride. This assists Pride in providing the best possible technical and customer service.
Quality Control - Quantum Dynamo ATS

Model #___________

Serial #___________

Controller

Inclusion of all Parts

Fit and Finish

Performance

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

__________________________
Date Inspected

__________________________
Inspector