



Consumer Safety Guide



This Consumer Safety Guide offers basic information on the proper and safe use of power chairs. The user should read all other information provided with the power chair, including but not limited to, the product owner's manual, controller manual, front rigging manual, and any other supplemental information before using the power chair for the first time.

Product Safety

The signal words and safety symbols described below are used on the power chair and throughout all documentation supplied with the power chair to identify important safety information. It is very important for you (and your attendant, if applicable) to read their meanings and understand them completely before operating the power chair.

SIGNAL WORD	DEFINITION
DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or severe injury. Property damage may also result.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or severe injury. Property damage may also result.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in moderate or minor injury. This signal word may also be used to alert against unsafe practices. When not accompanied by a safety alert symbol, this word is used to indicate a potentially hazardous situation which, if not avoided, could result in property damage.



HAZARD IDENTIFICATION: The hazard identification surround shape on all safety labeling is represented as a black symbol on a yellow triangle with a black border. It is used to indicate a potentially hazardous condition/situation that could result in personal injury, component damage, or malfunction. Follow all recommended mandatory and prohibited actions to avoid or prevent potentially hazardous condition/situations.



MANDATORY ACTIONS: The mandatory action surround shape on all safety labeling is represented as a white symbol on a blue circle with a white border. It is used to convey mandatory actions that should be performed as specified in order to avoid a hazardous condition/situation. Follow all recommended mandatory and prohibited actions to avoid or prevent potentially hazardous condition/situations.



PROHIBITED! The prohibited action surround shape is on all safety labeling is represented as a black symbol with a red circle and red slash. It is used to convey prohibited actions that should not be performed at any time or in any circumstances. Follow all recommended mandatory and prohibited actions to avoid or prevent potentially hazardous condition/situations.



Language Usage

This Consumer Safety Guide is intended for distribution in all English-speaking countries where our power chairs are sold. We have chosen to compose this manual using language and spelling common to the USA. Since we recognize that not all English-speaking countries use the same words or spellings, please refer to the following chart for some common word variations that may be encountered throughout this manual.

USA	Variation	USA	Variation	USA	Variation
asphalt	tarmac	back-ward(s)	rearward(s)	center	centre
color	colour	cord	lead	curb	kerb
elevator	lift	meter	metre	provider	dealer; agent
sidewalk	pavement	tire	tyre	trunk	boot
turn signal	turn indicator	yard	grounds	wrench	spanner
caster	castor	pocketbook	handbag	counter-clock-wise	anticlock-wise
authorized	authorised	path	footpath	path	bridleway
labor	labour				

Table 1. Word Variations

Product Safety Symbols

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



Indicates a potentially hazardous situation which, if not avoided, could result in death or severe injury. Property damage may also result.



Indicates electrical shock hazard.



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



Indicates that explosive conditions exist.



Corrosive chemicals contained in batteries.



Pinch/Crush points exist.



Do not engage freewheel mode on a decline.



Do not engage freewheel mode on an incline.



Indicates hot surface. Avoid contact.



Indicates a mandatory action that should be performed as specified in order to avoid a hazardous condition/situation. Failure to perform mandatory actions can lead to personal injury and/or equipment damage.



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



Indicates maximum weight capacity. Stay within the specified weight capacity of your product.



Use only AGM or Gel-Cell batteries to reduce the risk of leakage or explosive conditions.



DOT CFR 173.159

Contains sealed, non-spillable batteries that meet DOT CRF 173.159 (d), IATA packing instructions 806, IATA provision A67 for safe transportation.



Indicates correct connector orientation. Connect dotted plug to dotted connector.



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



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



Contact your local recycling center or authorized provider for information on proper recycling of product components.



Indicates component is for indoor use only.



Keep area clean.



Keep area dry.



N = Neutral (Brakes disengaged; unit in Freewheel Mode)



D = Drive (Brakes engaged; unit in Drive Mode)



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



Indicates a prohibited action that should not be performed at any time or in any circumstances. Performing a prohibited action can cause personal injury and/or equipment damage.



Do not use batteries with different amp-hour (Ah) capacities. Do not mix old and new batteries. Always replace both batteries at the same time.



Do not mix AGM and Gel-Cell batteries. Always use batteries of the same type and chemistry.



Keep tools and other metal objects away from battery terminals. Contact with tools can cause electric shock.



Do not allow unsupervised children to play near the power chair while the batteries are charging.



Removal of grounding prong can create electrical hazard. If necessary, properly install an approved 3-pronged adapter to an electrical outlet having 2-pronged plug access.



Do not connect an extension cord to the AC/DC converter or the battery charger.



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



Do not expose to heat sources such as open flame or sparks. Do not transport batteries with flammable or combustible items.



Do not tamper with, modify, or attempt to repair the mobility device. Contact your authorized provider for service or repair.



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



DOES NOT meet ISO 7176-19 standards for occupied transport in a motor vehicle.



Do not remove anti-tip wheels.



Keep your hands, clothing and all other object away from the tires when driving. Do not allow any personal belongings or objects to drag behind the power chair when driving. Be aware that loose fitting clothing or other objects can become caught in drive tires and/or they may become entangled in the running gear.



Not a brake.



Not a step. Keep off!



Do not adjust suspension.

General Safety Guidelines

Your power chair is a state-of-the-art life-enhancement device designed to increase mobility. We provide 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 provider in the instruction process for the use of the product.



WARNING! The power chair user must consult with his/her healthcare professional (i.e. medical doctor, physical therapist, etc.) if he/she experiences any changes or deterioration in his/her health or physical condition that may limit or impair his/her ability to safely operate a power chair.

The following are precautions, tips, and other safety considerations intended to help you become accustomed to operating your power chair safely. While we recognize that power chair users will frequently develop skills to manage daily activities that may differ from those illustrated in this guide, it is imperative that all safety guidelines in this manual be followed to ensure user safety. Failure to follow the safety notices in this and other manufacturer-supplied manuals and those located on your power chair can lead to personal injury and/or damage to the power chair, and may result in voiding the product warranty.

Modifications

We have designed and engineered your power chair to provide maximum mobility and utility. A wide range of accessories is available from your authorized 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 your provider. Do not use accessories if they have not been tested or approved for your power chair. Approved accessories must be installed by your authorized provider or a qualified service technician.



WARNING! The addition of accessories to the power chair may change the overall weight, size, and/or center of gravity of your power chair. It is important to take note of these changes to avoid damage to the power chair and surrounding property.

The center of gravity of your seating system was factory set to a position that meets the needs of the demographic majority of users. It is the responsibility of your authorized provider to evaluate your seating system and make any necessary adjustments to suit your specific requirements to prevent the chair from tipping forward, rearward, or to the side.



WARNING! Do not change your seating configuration without first contacting your authorized provider. Only your authorized provider or a trained service technician should make adjustments to the seating system.



WARNING! Do not use seating systems on your power chair that have not been tested or approved for your power chair. Using unapproved seating systems could affect the center of gravity of your power chair, resulting in a tip or a fall.

Controllers are factory set to a program that meets the needs of the demographic majority of users. The controller program can affect speed, acceleration, deceleration, dynamic stability, and braking. It is the responsibility of your authorized provider to evaluate your specific requirements and make any necessary adjustments to the controller program.

WARNING! If the controller is programmed incorrectly or outside of the safe limits as determined by your healthcare professional, it can create a dangerous situation. Only the power chair manufacturer, an authorized representative of the manufacturer, or a trained service technician should program the controller.

WARNING! Make sure the controller settings on your power chair are evaluated by your authorized provider every six to twelve months to reduce the risk of collision or tip-over. Contact your authorized provider immediately if you notice any change in your ability to control the joystick or input device, hold your upper body erect, or avoid collisions.



WARNING! Prevent controller harness damage! Avoid routing the controller harness on the outside of the armrest pad. Route the harness under the armrest or toward the inside of the armrest pad. Use correct tie-down points for the controller harness to prevent the harness from getting caught in the drive tires, pinched in the seat frame, or damaged when passing through doorways. Have your authorized provider replace any damaged components immediately.

WARNING! Inspect the controller harness on a regular basis for frays, cuts, or exposed wires that could potentially result in smoke, fire, or equipment damage. If damage is found, discontinue use of the device and contact your authorized provider for immediate service. Do not attempt to fix electrical problems yourself. We are not liable for damage or injury caused by failure to heed this warning.

Your power chair operates on a 24-volt electrical system. We have configured your power chair with several controller, seating, and power options that work with this system. You should not modify the electrical system in any way not authorized by the power chair manufacturer.

WARNING! Do not connect any aftermarket or auxiliary devices to the power chair electrical system or use the power chair batteries to power any aftermarket or auxiliary devices unless you are using an adapter that has been tested and approved by the power chair manufacturer. Do not cut or splice any original equipment wires, cables, or harnesses for the purpose of adding aftermarket or auxiliary devices to the power chair as this may result in damage to the electrical system and batteries.



WARNING! Do not pull on electrical harnesses directly to detach them from the power chair. Always grasp the connector itself when disconnecting the harness to prevent wire damage.

WARNING! Ensure that the onboard or off-board charger power cord connectors are clean and dry before plugging the connectors into either the off-board charger socket or the electrical socket. Service the charger power cord regularly. Failure to do so may result in damage to the electrical system, fire and/or personal injury.

WARNING! In the event of a loss of power to the power chair, transfer to a safe position, seeking assistance if needed. Contact your authorized provider immediately to report the incident.

Weight Limitations

Your power chair is rated for a maximum weight capacity. Please refer to the product specifications table for this limit. Keep in mind that the maximum weight capacity includes the combined weight of the user and any accessories mounted to the power chair. Stay within the specified weight capacity of your power chair. Exceeding the weight capacity voids your warranty. We will not be held responsible for injuries and/or property damage resulting from failure to observe weight limitations.

WARNING! We recommend that you do not use the power chair as a seat during weight training activities or as a weight training apparatus. Such use can lead to undue stress and fatigue on power chair components, and can also affect center of gravity, resulting in a tip or a fall. We will not be held responsible for injuries and/or property damage resulting from use of the power chair in weight training activities or as a weight training apparatus.



WARNING! Do not carry passengers on your power chair. Carrying passengers on your power chair may affect the center of gravity, resulting in a tip or a fall. We will not be held responsible for injuries and/or property damage caused by carrying passengers on the power chair.



WARNING! Do not use the power chair to haul, move, or tow other vehicles, including lawn mowers, ATV equipment, or other mobility devices. Your power chair was not designed with such use in mind and any damage or injury incurred from such use is not the responsibility of the power chair manufacturer.



Figure 1. Weight Limitation

Tire Inflation

If your power chair is equipped with pneumatic tires, you should check or have the air pressure checked regularly. Proper inflation pressures will prolong the life of your tires and help ensure the smooth operation of your power chair. Always maintain the recommended psi/bar/kPa air pressure rating indicated on pneumatic tires.

NOTICE: If the tires on your power chair list the psi rating only, use the following conversion formulas to find the bar or kPa rating: bar = psi x 0.06895; kPa = psi x 6.89476.



WARNING! It is important that the psi/bar/kPa air pressure rating indicated on pneumatic tires be maintained in the tires at all times. Do not underinflate or overinflate your tires. Low pressure may result in loss of control, and overinflated tires may burst. Failure to maintain the recommended psi/bar/kPa air pressure rating in pneumatic tires at all times may result in tire and/or wheel failure.



WARNING! Do not use a high pressure hose to inflate the power chair drive tires. Inflate the tires from a regulated, low pressure air source with an available pressure gauge. Inflating your tires from a high pressure or unregulated air source could overinflate them, resulting in a burst tire 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.
- Avoid sudden stops and starts.
- When climbing an incline, try to keep your power chair moving. If you must stop, start up again slowly and then accelerate cautiously. When driving down an incline, set your power chair to the slowest speed setting and drive in the forward direction only. If your power chair starts to move down the incline faster than you anticipated or desired, allow it to come to a complete stop by releasing the joystick, then push the joystick forward slightly to ensure a safely controlled descent.

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



WARNING! When on any sort of an incline or decline, never place the power chair in freewheel mode, especially while seated on it or standing next to it.



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 potentially hazardous inclines, including but not limited to areas covered with snow, ice, cut grass, or wet leaves.



WARNING! Never travel down an incline or ramp backward. Doing so may cause the power chair to tip. Always exercise extreme caution when negotiating an incline.

WARNING! If your power chair is equipped with a reclining seatback, do not attempt to negotiate inclines with the seat in a reclined position. Do not attempt to negotiate obstacles with the seat in a reclined position unless an attendant is present to help stabilize the chair. Failure to heed these precautions may result in the power chair tipping over.

WARNING! If your power chair is equipped with power elevating leg rests, do not attempt to drive down a ramp with the leg rests in the fully extended position. The leg rests should not be raised more than 2 in. (5 cm).



WARNING! Traveling down inclines rearward may have an adverse effect on the stability of the power chair. Although the power chair is in compliance with all ISO rearward static and dynamic stability testing, we strongly recommend that inclines be negotiated in the forward-facing position to reduce the possibility of a tip or fall. In the case of wheelchair accessible vehicles (WAVs), the suitability of the vehicle-mounted ramp should be determined before using your power chair with the WAVs.

Handicap public-access ramps are not subject to government regulation in all countries, and therefore do not necessarily share the same standard degree of slope. Other inclines may be natural or, if man-made, not designed specifically for power chairs. Your power chair's ability to travel up inclines is affected by your weight, travel speed, angle of approach to the incline, and your power chair set up, including seat configuration. Therefore, we recommend that the maximum slope of an incline you attempt to safely ascend or descent on your power chair does not exceed the maximum allowable incline listed in the product specifications. Refer to the table below for standard degree of slope guidelines that are available for regions as noted. **See figure 2.**

Geographic Location	Minimum State Slope Requirement
USA [Americans with Disabilities Act (ADA)]	ADA requires 5° (8.7%)
Europe (CE mark) Class A	3° (5.2%)
Europe (CE mark) Class B	6° (10.5%)
Europe (CE mark) Class C	10° (17.6%)

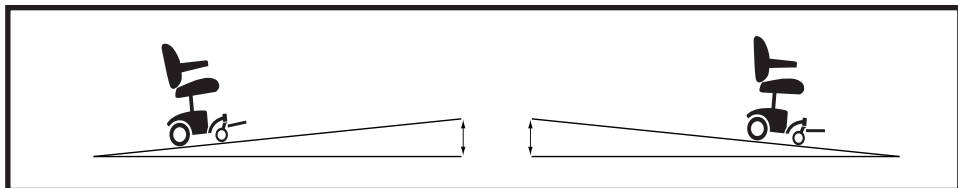


Figure 2. Maximum Allowable Incline Angle (Ascending and Descending)



WARNING! Your power chair has been tested in accordance with certain ANSI-RESNA and ISO standards. You should not exceed the performance specifications of your power chair as noted in the product specifications.

WARNING! Any attempt to climb or descend a slope steeper than that specifically listed in your power chair product specifications may put your power chair in an unstable position and cause it to tip.

Freewheel Mode

Our power chairs are equipped with a manual freewheel lever system to allow for manual maneuverability by a trained attendant. When the power chair is in freewheel mode, the braking system is disengaged. The power chair should always be returned to drive mode to lock the brakes before leaving the power chair occupant unattended or returning control of the power chair back to the user.



WARNING! Do not place the power chair in freewheel mode while on an incline or decline. This could cause the chair to roll or tip uncontrollably on its own.



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



WARNING! Do not attempt to personally place your power chair in freewheel mode while seated on it. Ask an attendant for assistance if necessary. Attendants should stand to the side of the power chair to engage/disengage freewheel mode.



WARNING! Do not place the power chair in freewheel mode while the controller power is on. Always turn the controller power off before engaging or disengaging freewheel mode.



Figure 3. Freewheel Mode

Braking Information

Power chairs are equipped with two powerful brake systems—regenerative and disc park brake. Regenerative braking uses electricity to rapidly slow the power chair to a neutral state. Disc park braking activates mechanically after regenerative braking slows the vehicle to near stop, or when power is removed from the system for any reason.

Unless equipped with a specialty device, the speed of your power chair is controlled by a joystick. When the joystick is moved from the center (neutral) position, an electronic signal is sent to the braking system. The signal causes the electromagnetic brakes to release, allowing the vehicle to move. The more pressure applied to the joystick, the faster the vehicle will move up to a preset maximum speed. When the joystick is released back to the center (neutral) position, the electronic signal is reversed and the electromagnetic brakes engage, allowing the power chair to decelerate to a stop.

NOTICE: If the joystick is released to the center (neutral) position when negotiating an incline, the power chair may “roll back” approximately 1 foot (30.5 cm) before the brake engages. This is caused by a momentary delay when the electronic signal to the brakes is reversed. If the joystick is released while negotiating an incline in reverse, the power chair may “roll back” approximately 3 feet (1 meter) before the brake engages.

Cornering Information

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



WARNING! When cornering sharply, reduce your speed and maintain a stable center of gravity. Avoid shifting your weight in the opposite direction of the turn, which may cause the power chair to lose traction and tip over.

NOTICE: Please be aware that if at any time you feel uncomfortable while cornering or unable to effectively reduce power chair speed to within your comfort level, several programming adjustments can be made to turn speed, acceleration, sensitivity, and turn speed rate. Contact your authorized provider for more information.

Public Streets and Roadways

Your power chair is a sophisticated motorized vehicle. As with any type of vehicle, it is the responsibility of the user to contribute to his/her own safety by adhering to applicable state and local traffic laws, as well as those laws set forth specifically for operation of personal mobility devices. In addition, power chair users should be courteous to fellow pedestrians and follow basic safety rules when traveling in high-risk areas such as busy intersections, on sidewalks, and in parking lots.

- Avoid operating your power chair on public streets and roadways intended for automotive traffic, such as cars, trucks, and buses. Your power chair is rated for outdoor use on bicycle paths and other similar roadways intended for low-speed personal mobility devices. Refer to the code of practice for personal mobility vehicles in your region for more information.
- Obey all pedestrian traffic signals and signs.
- Remain visible to all traffic by use of safety equipment such as reflectors, lights, and safety flags.
- Reduce your speed and give an audible signal before passing fellow pedestrians on sidewalks.
- Drive on the shoulder of the road or as close as possible to the curb when an adequate sidewalk does not exist.
- Stop and search for any on-coming traffic before crossing a roadway or intersection.
- Stay alert for vehicles entering/exiting parking spaces when navigating through parking lots.



WARNING! In most states, power chairs are not legal for use on public roads. Be alert to the danger of motor vehicles on roads or in parking lots to avoid any risk of severe injury or death.



WARNING! You should not operate your power chair on public streets and roadways intended for cars, trucks, and other large automotive vehicles. 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. We strongly recommend the use of safety equipment such as reflectors/reflective clothing, lights, and safety flags. Contact your authorized provider for information on the availability of these safety accessories.

WARNING! Exercise extreme caution when operating the power chair on footpaths, pavements, bridleways, pedestrian areas and roads. Obey all local pedestrian traffic rules.

Stationary Obstacles (Steps, Curbs, etc.)

Proceed with extreme caution when driving near raised surfaces, unprotected ledges and/or drop-offs (curbs, porches, stairs, etc.). Refer to the power chair specifications for information regarding maximum obstacle climbing height for your power chair.

To navigate up over a curb or stationary obstacle:

1. Approach the curb or obstacle slowly, and make sure the power chair is traveling perpendicular to the obstacle. **See figure 4.**
2. Increase the forward speed just before the front wheels (or curb climbing mechanism, if so equipped) come in contact with the obstacle.
3. Reduce the forward speed only after the rear wheels have cleared the obstacle.

To navigate down a curb or stationary obstacle:

1. Approach the curb or obstacle slowly, and make sure the power chair is traveling perpendicular to the obstacle. **See figure 4.**
2. Reduce the forward speed just before the front wheels (or curb climbing mechanism, if so equipped) come in contact with the obstacle.
3. Increase the forward speed only after the rear wheels have cleared the obstacle and you are once again on a level surface.

WARNING! Even though your power chair may be capable of handling greater obstacles, we recommend that you do not attempt to negotiate a curb that has a height greater than 2 in. (5 cm). Doing so could cause instability in your power chair.



WARNING! Do not attempt to have your power chair climb or descend an obstacle that is inordinately high 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.



WARNING! If your power chair is equipped with a curb climbing mechanism, do not attempt to climb any curb in excess of 4 in. (10 cm) in height. Do not approach curbs at an angle; instead approach any curb you intend to ascend or descend in the forward position.

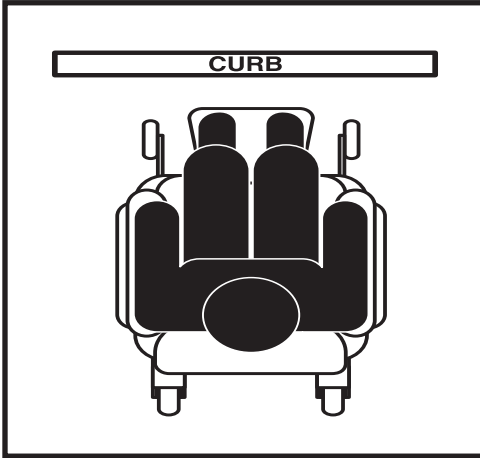


Figure 4. Correct Curb Approach

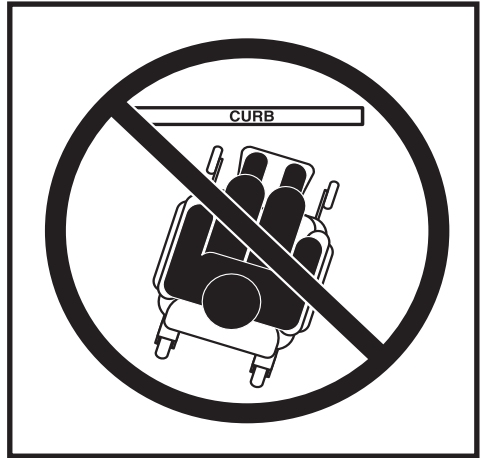


Figure 5. Incorrect Curb Approach

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, we recognize 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.

WARNING! Avoid driving on uneven terrain and/or soft surfaces.

WARNING! Avoid tall grass that can entangle the running gear.

WARNING! Avoid loosely packed gravel and sand.



WARNING! Do not use your power chair on or near railroad tracks or crossings.



WARNING! Do not use your power chair in fresh or salt water.

WARNING! Do not use your power chair at the edge of a stream, lake, or ocean.

WARNING! If you feel unsure about a driving surface, avoid that surface.

NOTICE: *If at any time you feel uncomfortable with the way your power chair handles on a particular driving surface, contact your authorized provider. Your provider may be able to adjust the performance parameters of your controller program to allow a more comfortable ride.*



WARNING! Only the power chair manufacturer, an authorized representative of the manufacturer, or a trained service technician should program the controller.

Inclement Weather Precautions

Even though your power chair has passed the necessary testing requirements for such use, exposure of your power chair to inclement weather conditions should be avoided whenever possible. If suddenly caught up in rain, snow, severe cold or heat while operating your power chair, proceed to shelter at the earliest opportunity. Thoroughly dry your power chair before storing, charging, or operating your power chair.



WARNING! Operating in rain, snow, salt, mist/spray conditions, and on icy/slippery surfaces can have an adverse effect on the electrical system and may damage the upholstery or cause the power chair frame to prematurely rust. Maintain and store your power chair in a dry and clean condition.



WARNING! Prolonged exposure to hot or cold conditions may affect the temperature of upholstered and non-upholstered items on the power chair, possibly resulting in skin irritation. Exercise caution when using your power chair in extremely hot or cold conditions or when exposing your power chair to direct sunlight for prolonged periods of time.



Ingress of Liquids



WARNING! Even though the power chair has passed the necessary testing requirements for ingress of liquids, you should keep electrical connections away from sources of dampness, including direct exposure to water or bodily fluids and incontinence. Check electrical components frequently for signs of corrosion and have them replaced as necessary.



WARNING! Never take your power chair into a shower, tub, pool, or sauna. Do not operate your power chair in fresh or salt water, including lakes, streams, or oceans.

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 stairs or escalators.

WARNING! Use extreme caution when it is necessary to move an unoccupied power chair up or down stairs. We recommend that two attendants perform this task, and that the seat, batteries, and any accessories be removed before attempting the transfer. Use proper lifting techniques and use only solid, non-removable frame components to lift the chair.

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.

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.

Lift Systems/Elevation Products

If you will be transporting your power chair during travel, you may find it necessary to use a vehicle-mounted lift system or elevation product to aid in transportation. We recommend that you closely review the instructions, specifications, and safety information set forth by the manufacturer of the lift/elevation product before using that product.



WARNING! Not all lift systems/elevation products are rated for use with an occupied mobility device. We recommend that you do not remain seated in your power chair when it is being used in connection with any type of lift system/elevation product unless:

- That product is rated for occupied use by the manufacturer.
- You are able to occupy your mobility device in strict conformity with the warnings, instructions, specifications, and safety guidelines set forth by the manufacturer.



WARNING! Always turn off the power to the controller when you are being transferred via an elevation product. Failure to do so may result in accidental joystick contact, resulting in unintended movement and personal injury or product damage.



WARNING! Always make sure the power chair is in drive mode when you are being transferred via an elevation product. If the power chair is left in freewheel mode, unintended movement, personal injury, and/or product damage could result.

Unoccupied Motor Vehicle Transport

We recommend that you do not remain seated in your power chair while traveling in a motor vehicle. The power chair should be stowed in the trunk of a car or in the back of a truck or van with batteries removed and/or properly secured. In addition, all removable power chair parts, including the armrests, seat, front riggings, controller, and shrouds, should be removed and/or properly secured during motor vehicle transport. If your power chair is equipped with a manufacturer-installed transit securement system, refer to “Occupied Motor Vehicle Transit” and the safety supplement provided with your power chair for additional information regarding power chair transport in a motor vehicle

WARNING! The power chair user should transfer into the motor vehicle seat and use the vehicle-installed restraint system if and whenever feasible. The power chair user should never sit on the power chair while it is in a moving vehicle unless it is equipped and properly secured with a manufacturer-installed transit securement system.



WARNING! Always be sure your power chair and its batteries are properly secured when it is being transported. Batteries should be secured in an upright position and protective caps should be installed on the battery terminals. Batteries should not be transported with any flammable or combustible items.



WARNING! Secure all removable accessories, including clothing guards, medical, and other equipment, to the power chair or vehicle during travel to prevent injury in the event of a collision.

Occupied Motor Vehicle Transport

The power chair user should transfer into the vehicle seat and use the vehicle-installed restraint system if and whenever feasible. The power chair should then be stored and secured in the vehicle.

If it is found necessary at the user's discretion to secure a power chair to a vehicle, the vehicle must be equipped with a Wheelchair Tie-down and Occupant Restraint System (WTORS) that has been installed in accordance with the tie-down manufacturer's instructions, and is compliant with ANSI/RESNA WC/Vol. 4, Section 18/ISO 10542 standards, and the power chair must have a transit securement system conforming to ANSI/RESNA WC/Vol. 4, Section 19/ISO 7176-19 standards. It is essential to use a complete WTORS to secure the power chair to the vehicle and to provide the power chair occupant with a properly designed and tested safety restraint system. A restraint system with both pelvic and upper-torso belts must be used to protect the power chair occupant and minimize the likelihood of injury caused by contact with the vehicle during a crash or sudden braking.

WARNING! Only power chairs marked with the following symbol are rated for occupied use:



WARNING! No alterations or substitutions should be made to the power chair securement points or to the structural frame components without prior consent from your authorized provider.



WARNING! Belt restraints must not be held away from the body by power chair components such as armrests or wheels.



WARNING! Belt restraints should make full contact with the shoulder and chest and pelvic restraints should be positioned low across the front of the body near the junction of the thigh and pelvis.

WARNING! The buckle of belt restraint systems should not be located near power chair components that may come in contact with the buckle release button in the event of a vehicle accident or collision.

WARNING! The power chair should be inspected by a representative of the manufacturer before reuse following involvement in any type of vehicle collision.

Seating

We provide an extensive variety of seating systems to fit the needs of the individual user. Please be aware that the final selection regarding the type of seating system 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.).

WARNING! If the weight capacity of the seating system and the power base differ, always adhere to the lesser weight capacity.

WARNING! Should the fittings on your seating system become loose, report the problem immediately to your authorized provider. Check any actuators for loose, worn, or damaged items and have any damaged wires replaced immediately.

WARNING! If your power chair is equipped with power seating, check the immediate area to ensure nothing is trapped in the mechanism before operating the tilt, recline, or lift features. Always check to make sure children and pets are clear of the moving parts of the seating system. Do not operate the tilt function under a fixed object, such as a table or a desk. Do not store items under the seat that may interfere with operation of the mechanism. Keep area clear prior to and during movement.



WARNING! Do not exceed the tilt/recline specifications as detailed in the seating system manual. Do not recline the seat while tilted during driving or while on an incline or decline. This could cause the power chair to tip over backwards, resulting in personal injury and product damage.

WARNING! Do not remove the seat cushion supplied with the power chair. Do not place additional cushions, padding, or pillows on the seat cushion. This could cause an unstable position, resulting in a fall from the power chair.

Positioning Belts

Your authorized 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. Typically, the positioning belt is not designed for use as a restraining device in a motor vehicle. You should be properly belted into seats approved by the vehicle manufacturer with your power chair properly stowed for vehicle transport or secured using a manufacturer-installed transit securement system if available.

Positioning belts should be installed as detailed in “Comfort Adjustments” of the power chair owner’s manual. Once installed, the belt should be placed across the pelvis as determined by the user’s healthcare professional. Anchor points of the positioning belts should be located so that a projected side-view angle of the pelvis is between 45° - 75° of horizontal depending on the user’s weight, posture, and seat cushion thickness.

WARNING! If you require a positioning belt to safely operate your power chair, make sure it is fastened securely during power chair operation. This will reduce the possibility of a fall from the power chair and will ensure that the positioning belt cannot get caught in the tires while driving.



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! Make sure the positioning belt is properly secured to the power chair and is adjusted for operator comfort before each use.

WARNING! Inspect the positioning belt for loose parts or damage, including tears, worn spots, bent hardware, or damaged latch mechanisms, dirt or debris, before each use of the power chair. If you discover a problem, contact your authorized provider for maintenance and repair.

User Positioning

We recommend that all users be seated in an upright position with their pelvises positioned as far rearward as possible in the power chair seat. All users need to discuss pelvic positioning with their authorized provider, therapist(s), or healthcare professional to determine appropriate pelvic position when seated on the power chair based on their individual medical needs.

Batteries and Charging

In addition to following the warnings below, be sure to comply with all other battery handling information provided in “Batteries and Charging” of the power chair owner’s manual.



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



WARNING! Always use two batteries of the exact same type, chemistry, and amp-hour (Ah) capacity. Refer to the specifications provided with the power chair and in the manual supplied with the battery charger for recommended type and capacities.

WARNING! Only spill-proof sealed batteries, such as “gelled electrolyte,” that meet DOT CFR 173.159 should be used in the power chair. Replacement batteries should be obtained directly from an authorized provider to ensure conformity, fit, and function.

WARNING! Power chair batteries are heavy. Refer to the specifications provided with the power chair for specific battery weights. Anyone lifting power chair batteries should use proper lifting techniques and avoid lifting beyond his/her capacity.

WARNING! Do not lift the batteries by the electrical cables. Always lift the batteries using the straps provided by the battery manufacturer or by grasping the battery itself.

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



WARNING! Battery harnesses must be connected in the proper manner. RED (+) cables must be connected to positive (+) battery terminals/posts. BLACK (-) cables must be connected to negative (-) battery terminals/posts. Protective caps should be installed over all battery terminals. REPLACE cables immediately if damaged, making sure to follow the battery terminal orientation depicted on the battery wiring diagram located in the product owner’s manual and on the power base.

WARNING! Do not remove the fuse links from the battery harnesses. If the fuse links appear damaged, contact your authorized provider for service.

WARNING! Do not attempt to charge the batteries by connecting cables directly to the battery terminals. Do not attempt to charge the batteries while operating the power chair.

WARNING! Do not mix old and new batteries. Always replace both batteries at the same time.

WARNING! Always operate charger in a well-ventilated area as it is essential for proper cooling. Ensure vent holes are clear of blockages before use and always place the charger on a hard, flat surface during charging. Before each use, ensure the charger is not covered with any items such as blankets or articles of clothing. Do not place the charger in enclosed areas such as pouches or bags. Failure to allow for proper ventilation may result in damage to the charger.



WARNING! Be aware that the battery charger case may become hot during charging. Avoid skin contact and do not place the charger on surfaces that may be affected by heat including carpeting or clothing.



WARNING! If the battery charger is equipped with cooling slots, then do not attempt to insert objects through these slots and keep the cooling slots free from objects.

WARNING! Contact your authorized provider if you have any questions regarding the batteries in your power chair.

Battery Recycling and Disposal

If you encounter a damaged or cracked battery, immediately enclose it in a plastic bag. Never install a battery with a cracked or damaged case. If you discover battery acid on or around either battery, apply baking soda to the affected areas to neutralize the acid. Before reinstalling new batteries, clean the baking soda from the affected areas. Wear safety goggles and gloves in order to avoid contact with skin and eyes. Contact your local waste disposal agency or your authorized provider for instructions on proper battery disposal and recycling.

Removable Parts



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



Preventing Unintended Movement



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

Reaching and Bending

Never reach, lean, or bend while driving your power chair. Bending forward creates the risk of accidental joystick contact. Bending to the side while seated creates the risk of tipping. 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. Make sure the caster wheels are pointed in the forward position to create the longest possible wheelbase. We recommend that the power chair user determine his/her personal limitations and practice bending and reaching in the presence of a qualified healthcare professional. **See figures 6 and 7.**

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 or if you have to reach over the back of the seat. 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.

WARNING! Keep your hands, clothing, and all other objects away from the tires when driving. Do not allow any personal belongings or objects to drag behind the power chair when driving. Be aware that loose fitting clothing or other objects can become caught in drive tires and/or they may become entangled in the running gear.



WARNING! Possible strangulation hazard! Be aware that clothing, lanyards, necklaces, other jewelry, purses, and other accessories worn or carried by you while you are seated on or operating the power chair may get caught around the armrests or joystick. Be careful to avoid this potential danger.

WARNING! Do not allow objects or accessories to protrude from your power chair when driving. Be aware protruding objects can become caught on items surrounding the power chair's path.

WARNING! Ensure that all oxygen or air tubing is correctly routed and secured so that the tubing does not become entangled, kinked, or severed.



Figure 6. Proper Reaching and Bending

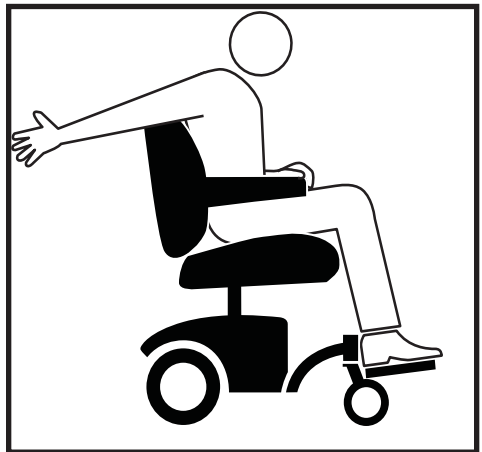


Figure 7. Improper Reaching and Bending

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.

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

- Turn off the power to the controller.
- Ensure your power chair is not in freewheel mode. See “Your Power Chair” in the power chair owner’s manual.
- Turn the caster wheels toward the transfer destination to improve power chair stability during transfer.
- Reduce the distance between your power chair and the object you are transferring onto.
- Make sure both armrests are flipped up or removed from your power chair.
- Flip up the foot platform or move the leg rests aside; this will help to keep your feet from getting caught on the front rigging during the transfer and will avoid the possibility of product damage.

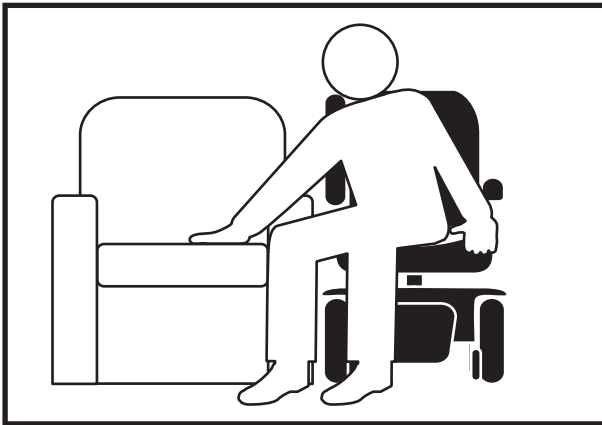


Figure 8. Recommended Transfer Position



WARNING! Before transferring, turn off the power to the controller to prevent unintended movement.

NOTICE: *It is possible for the hardware to become loose after repetitive use of the leg rest foot plates or power chair foot platform during transfers. When flipping up the foot plates or foot platform, you should encounter some resistance. If no resistance is encountered, the hardware should be tightened.*

WARNING! Before transferring, turn off the power to the controller to prevent unintended movement.

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.



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



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

WARNING! Avoid putting all of your weight on the front riggings. Such use may cause the power chair to tip or cause damage to the front riggings.

WARNING! Ensure that the leg rest foot plates or power chair foot platform is in the full flipped-up position (rotated past 90°) before transferring from the power chair. Failure to do so may result in the foot plate/platform falling down, causing 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/Smoking

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 or while smoking.



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.



WARNING! We strongly recommend that you do not smoke cigarettes while seated in your power chair, even though the power chair has passed the necessary testing requirements for exposure to cigarette smoking. You must adhere to the following safety guidelines if you decide to smoke cigarettes while seated in your power chair.

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

Flammability Precautions

WARNING! Even though the plastics used on your power chair have been tested and have passed flammability standards, we recommend that you do not expose your power chair to open flames.



WARNING! Exercise extreme caution when using oxygen in close proximity to electrical circuits and combustible materials. Contact your oxygen provider for information on using oxygen safely.

WARNING! Replace worn or damaged upholstery immediately to reduce the risk of fire hazard.

WARNING! Be aware that washing of upholstered items may reduce the resistance to flammability of the fabric.

Hazardous Environments



WARNING! Due to the electrical make-up of our products, we do not recommend use of our power chairs in Class I Division I industrial or commercial environments where the work area could have a combustible air composition. In such an environment, it is possible for the power chair to become an ignition source for a fire or explosion.

Sports and Athletics

The power chair user must exercise care and common sense when operating his/her power chair. This includes awareness of safety issues while participating in sports and athletics. All sports activities run the risk of injury. We recommend that your power chair be equipped with a positioning belt and that you use sports safety equipment such as helmets and padding if you choose to participate in sports activities.

Your power chair may not be set up properly for sports activities in terms of both seat configuration and controller program. If you participate in sports activities of any kind, make sure your authorized provider has monitored your use of the chair in this activity. This will aid your provider in configuring the power chair to suit your specific needs safely and comfortably.

WARNING! It is your responsibility to inform your authorized provider if you will be participating in sports and athletics. After any adjustments have been made, your provider should once again monitor your use of the power chair in this activity to ensure that you are comfortable with the new settings.



WARNING! Participating in sports and athletics is done at the user's own risk. The power chair user is responsible for using proper safety equipment and for ensuring that his/her authorized provider has properly configured the power chair for such use. The power chair manufacturer will not be held liable for personal injury and/or product damage resulting from use of the power chair in any sports-related activity.

Electromagnetic and Radio Frequency Interference (EMI/RFI)



WARNING! Laboratory tests have shown that electromagnetic and radio frequency waves can have an adverse effect on the performance of electrically powered mobility vehicles.

Electromagnetic and Radio Frequency Interference can come from sources such as cellular phones, mobile two-way radios (such as walkie-talkies), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave signals, paging transmitters, and medium-range mobile transceivers used by emergency vehicles. In some cases, these waves can cause unintended movement or damage to the control system. Every electrically powered mobility vehicle has an immunity (or resistance) to EMI. The higher the immunity level, the greater the protection against EMI. This product has been tested and has passed at an immunity level of 20 V/m.



WARNING! Be aware that cell phones, two-way radios, laptops, electricity generators or high power sources and other types of radio transmitters may cause unintended movement of your electrically-powered mobility vehicle due to EMI. Do not turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones, while the powered wheelchair is turned on. Be aware of nearby transmitters, such as radio or TV stations, and avoid coming into close proximity to them.



WARNING! The addition of accessories or components to the electrically powered mobility vehicle can increase the susceptibility of the vehicle to EMI. Do not modify your power chair in any way not authorized by the power chair manufacturer.

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

NOTICE: For further information on EMI/RFI, contact your authorized provider. If unintended motion or brake release occurs, turn your power chair off as soon as it is safe to do so. Contact your authorized provider to report the incident.

USER SAFETY NOTICE

Your safety is important to us. If there is any information in this manual which you do not understand, or if you require additional assistance for setup or operation, please contact your authorized provider. Failure to follow the instructions, warnings, and notes in this manual and those located on your product can result in personal injury or product damage and will void the product warranty.



USA

401 York Avenue
Duryea, PA 18641

Canada

5096 South Service Road
Beamsville, Ontario L0R 1B3

UK

32 Wedgwood Road
Bicester, Oxfordshire OX26 4UL

Australia

20-24 Apollo Drive
Hallam, Victoria 3803

Italy

Via del Progresso, ang. Via del Lavoro
Loc. Prato della Corte
00065 Fiano Romano (RM)

B.V.

Castricummer Werf 26
1901 RW Castricum
The Netherlands

www.quantumrehab.com

