ELEVATION

MANUAL WHEELCHAIR

Owner's Operation and Maintenance Manual

USER

Before using this wheelchair, read this entire manual and save for future reference.

pdq MOBILITY

Class 1 Medical

WARNING

Do not operate this equipment without first reading and understanding this manual. If you are unable to understand the warnings and instructions, contact a health care professional such as a doctor or therapist who is familiar with this type of product before attempting to use this equipment. Otherwise, injury or damage may result.

Refer to this manual regularly for maximum safety and performance.

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SPECIAL NOTES

WARNING/CAUTION — notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage.

NOTE — THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

INDICATIONS FOR USE — To provide mobility to persons limited to a seated position.

WHEELCHAIR USER — As a manufacturer of wheelchairs, PDG endeavors to supply wheelchairs to meet many needs of the end user. However, final selection of the type of wheelchair to be used by an individual rests solely with the user and his/her health care professional capable of making such a selection.

WHEELCHAIR TIE-DOWN RESTRAINTS AND SEAT RESTRAINTS — PDG recommends that wheelchair users NOT be transported in vehicles of any kind while in wheelchairs. As of this date, Transport Canada, and the Department of Transportation has not approved any tie-down systems for transportation of a user in a moving vehicle of any type while in a wheelchair.

It is PDG's position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and that use be made of the restraints made available by the auto industry. PDG can not and does not recommend any specific wheelchair transportation systems.

REGARDING RESTRAINTS - SEAT BELTS - IT IS THE OBLIGATION OF THE HME DEALER, THERAPISTS AND OTHER HEALTH CARE PROFESSIONALS TO DETERMINE IF A SEATING RESTRAINT IS REQUIRED TO ENSURE THE SAFE OPERATION OF THIS EQUIPMENT BY THE USER. SERIOUS INJURY CAN OCCUR IN THE EVENT OF A FALL FROM A WHEELCHAIR.

SAFETY SUMMARY

Operating Information Warning

To determine and establish particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified health professional BEFORE attempting active use of the wheelchair.

- ✖ **DO NOT** attempt to reach objects if you have to move forward in the seat.
- ✖ **DO NOT** attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.
- ✖ **DO NOT** lean over the top of the back upholstery to reach objects from behind as this may cause the wheel chair to tip over.
- ✖ **DO NOT** shift your weight or sitting position toward the direction you are reaching as the wheelchair may tip over.
- ✖ **DO NOT** use an escalator to move a wheelchair between floors. Serious bodily injury may occur.
- ✖ **DO NOT** attempt to stop a moving wheelchair with the wheel locks. WHEEL LOCKS ARE NOT BRAKES.
- ✔ Before attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce the gap distance. Turn both casters toward the object you are transferring onto. When transferring to and from the wheelchair, ALWAYS ENGAGE BOTH WHEEL LOCKS.
- ✖ **DO NOT** operate on roads, streets or highways.
- ✖ **DO NOT** climb, go up or down ramps or traverse slopes greater than 9º.
- ✖ **DO NOT** attempt to move up or down an incline that is wet, icy or contains an oily film.

- ✖ **DO NOT** attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to turn over and cause bodily harm or damage to the wheelchair.
- ✖ **DO NOT** use unauthorized parts, accessories, or adapters other than those authorized by PDG.
- ✖ **DO NOT** attempt to lift wheelchair by any removable (detachable) parts.
- ✖ **DO NOT** stand on the frame of the wheelchair.
- ✔ For products supplied with anti-tippers, anti-tippers must be attached at all times.
- ✖ **DO NOT** use the footplate as a platform when getting in or out of the wheelchair.
- ✔ **ALWAYS** wear your seat restraint.
- ✖ The seat and backrest position of Elevation should only be adjusted with the seat belt securely fastened around the occupant.
- ✖ Extreme caution should be exercised when operating the backrest recline mechanism as excessive or sudden recline may promote the occupant to tip over backwards. The use of an anti-tip devices is recommended.
- ✖ Adjustment of Elevation to a higher seat position may result in changes to your body that you may be unaccustomed to and may find discomforting. Such changes may be dangerous and may lead to injury or death. Consult your doctor or physical therapist prior to using Elevation.
- ✖ The seat or backrest position of Elevation should only be elevated or reclined on firm, level ground to avoid the risk of falling or tipping over, possibly resulting in injury or death.
- ✖ Avoid reaching or leaning with the seat raised above the horizontal position to avoid the risk of falling or tipping over, possibly resulting in injury or death.
- ✖ Avoid sudden or extreme movements with the seat raised above the horizontal position or the backrest reclined to avoid the risk of tipping over and possible injury.
- ✖ Seat height adjustment of Elevation must only be performed with the wheel brakes locked to avoid any undesired movement and possible accident or injury.
- ✖ During an episode of spasms, cramps or any situation that distracts the user's attention, it is recommended that the user not raise the seat height until the episode subsides. If possible, it is recommended that the user immediately lower the seat height below the horizontal until the episode subsides.
- ✖ Never operate Elevation without the complete confidence and ability to prevent tipping over backwards – inexperienced users are recommended to use anti-tip devices.
- ✖ Never operate the seat raising mechanism while leaning forward or sideways.
- ✖ Never use Elevation without the seat sling affixed very firm and taut.
- ✖ Never use Elevation without a properly fitted and secured seat cushion.
- ✖ Never use Elevation while inebriated or with some other altered state of mind.
- ✖ Never attempt to adjust seat height of Elevation while the wheelchair is un-occupied.
- ✖ Elevation must only be used by the original purchaser for whom it was ordered for and fitted. To. Unauthorized individuals using Elevation may void the warranty and risk accident, injury or death.

Tire Pressure

- ✖ If pneumatic tires are supplied, DO NOT use your wheelchair unless it has the proper tire pressure(p.s.i.). DO NOT over inflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

✔ Replacement of a pneumatic tire or tube MUST be performed by an authorized PDG Dealer or Qualified Technician.

Weight Training

✖ **PDG DOES NOT** recommend the use of its wheelchairs as a weight training apparatus. PDG wheelchairs have NOT been designed or tested as a seat for any kind of weight training. If occupant uses said wheelchair as a weight training apparatus, PDG shall NOT be liable for bodily injury and the warranty will be voided immediately.

Weight Limitation

The PDG Elevation wheelchair has a weight limitation of 250 lb. unless otherwise specified by PDG.

Safety/Handling of Wheelchairs

"Safety and Handling" of the wheelchair requires close attention of the wheelchair user as well as the assistant. This manual points out the most common procedures and techniques involved in the safe operation and maintenance of the wheelchair. It is important to practice and master these safe techniques until you are comfortable in maneuvering around frequently encountered architectural barriers.

Use this information only as a "basic" guide. The techniques that are discussed on the following pages have been used successfully by many.

Individual wheelchair users often develop skills to deal with daily living activities that may differ from those described in this manual. PDG recognizes and encourages each individual to try what works best in overcoming architectural obstacles that they may encounter. Techniques in this manual are a starting point for the new wheelchair user and assistant with "safety" as the most important consideration for all.

Stability and Balance

To assure stability and proper operation of your wheelchair, you must at all times maintain proper balance. Your wheelchair has been designed to remain upright and stable during normal daily activities as long as you do not move beyond the center of gravity.

Virtually all activities which involve movement in the wheelchair have an effect on the center of gravity. PDG recommends using seat restraints for additional safety while involved in activities that shift your weight.

✖ **DO NOT** lean forward out of the wheelchair any further than the length of the armrests. Make sure the casters are pointing in the forward position whenever you lean forward. This can be achieved by advancing the wheelchair and then reversing it in a straight line.

Coping with Everyday Obstacles

Coping with the irritation of everyday obstacles can be alleviated somewhat by learning how to manage your wheelchair. Keep in mind your center of gravity to maintain stability/balance.

A Note to Wheelchair Assistants

When assistance to the wheelchair user is required, remember to use good body mechanics. Keep your back straight and bend your knees whenever tilting the wheelchair or traversing curbs, or other impediments.

Be aware of any removable (detachable) parts. These must NEVER be used for hand-held or lifting supports, as they may be inadvertently released, resulting in possible injury to the user and/or assistant(s).

When learning a new assistance technique, have an experienced assistant help before attempting it alone.

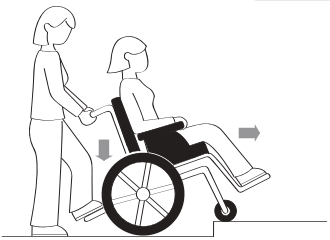
Tilting

✖ **WARNING: DO NOT** tilt the wheelchair without assistance.

When tilting the wheelchair, an assistant should grasp the back of the wheelchair on a non-removable(non-detachable) part. Inform the wheelchair occupant before tilting the wheelchair and remind him/her to lean back. Be sure the occupant's feet and hands are clear of all wheels.

Tilting – Curbs

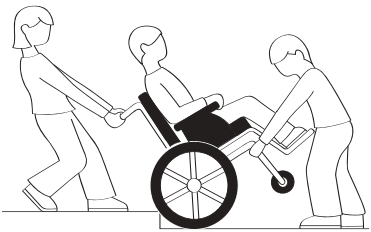
After mastering the techniques of tilting the wheelchair, use this procedure to tackle shallow curbs, short stairs, etc.



METHOD 1 - Wheelchair With Step Tubes

Apply a continuous downward motion until the balance point is achieved and the front casters clear the curb. At this point, the assistant will feel a difference in the weight distribution.

Roll the wheelchair forward and slowly lower the wheelchair in one continuous movement. Do not let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant. Push the wheelchair forward until the rear wheels roll up and over the curb.



METHOD 2 - Wheelchairs without Step Tubes

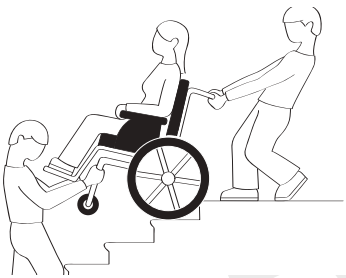
Unless the first assistant has exceptional upper body strength, it is recommended that METHOD 2 use two (2) assistants. The second assistant should be positioned at the front of the wheelchair lifting upward on a non-removable (non-detachable) part of the wheelchair frame when lifting the wheelchair and stabilizing the wheelchair when the wheelchair is being lowered to the ground.

The first assistant should stand on the sidewalk and turn the wheelchair so that the rear wheels are against the curb. The wheelchair should be tilted back to the balance point and, in one continuous downward movement, the rear wheels should be pulled up and over the curb. DO NOT return the front casters to the ground until the wheelchair has been pulled backward far enough for the front casters to clear the edge of the curb.

STAIRWAYS

WARNING — Do not attempt to lift a wheelchair by lifting on any removable (detachable) parts. Lifting by means of any removable(detachable) parts of a wheelchair may result in injury to the user or damage to the wheelchair.

Extreme caution is advised when it is necessary to move an occupied wheelchair up or down the stairs. PDG recommends using two(2) assistants and making thorough preparations. Make sure to use ONLY secure, non-detachable parts for hand-held supports.



Follow this procedure for moving the wheelchair between floors when an elevator is NOT available:

1 After the wheelchair has been tilted back to the balance point, one assistant (in the rear) backs the wheelchair up against the first step, while securely grasping a non-removable (non-detachable) part of the wheelchair for leverage.

2 The second assistant, with a firm hold on a non-detachable part of the framework, lifts the wheelchair up and over the stair and steadies the wheelchair as the first assistant places one (1) foot on the next stair and repeats STEP 1.

3 The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.

ESCALATORS

SORRY! **DO NOT** use an escalator to move a wheelchair between floors. Serious bodily injury may occur.

TRANSFERRING TO AND FROM OTHER SEATS

WARNING — BEFORE attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce gap distance. Turn both casters toward the object you are transferring onto. Also be certain the wheel locks are engaged to help prevent wheels from moving.

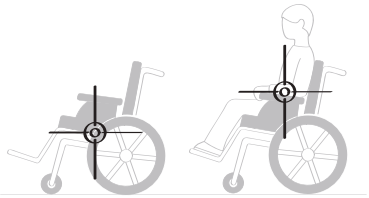
CAUTION — When transferring, position yourself as far back as possible in the seat. This will prevent damaged upholstery and the possibility of the wheelchair tipping forward.

NOTE — This activity may be performed independently provided you have adequate mobility and upper body strength.

1 Position the wheelchair as close as possible along side the seat to which you are transferring, with the front casters pointing toward it. Engage wheel locks. Shift body weight into seat with transfer.

2 During independent transfer, little or no seat platform will be beneath you. Use a transfer board if at all possible.

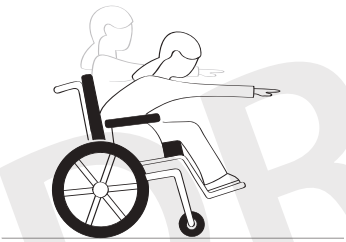
PERCENTAGE OF WEIGHT DISTRIBUTION



WARNING — DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

Many activities require the wheelchair owner to reach, bend and transfer in and out of the wheelchair. These movements will cause a change to the normal balance, the center of gravity, and the weight distribution of the wheelchair. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified health professional BEFORE attempting active use of the wheelchair.

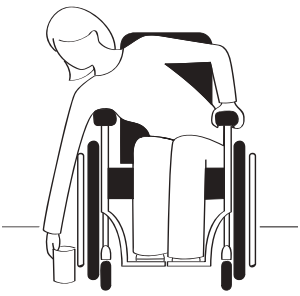
FUNCTIONAL REACH FROM A WHEELCHAIR



Proper positioning is essential for your safety. When reaching, leaning, bending forward, it is important to use the front casters as a tool to maintain stability and balance.

The approximate reach-limit values shown in the accompanying graph were derived on the basis of a sample of 91 male and 36 female subject wheelchair users. Note the difference between the maximum and the comfortable reach limits, a subjective but important consideration in design.

REACHING, LEANING and BENDING FORWARD



Bending Forward

Position the front casters so that they are extended as far as possible and engage wheel locks. DO NOT LEAN FORWARD OF THE ARMRESTS.

Bending Backward

WARNING —DO NOT lean over the top of the back upholstery. This will change your center of gravity and may cause you to tip over.

Position wheelchair as close as possible to the desired object. Point front casters forward to create the longest possible wheelbase. Reach back only as far as your arm will extend without changing your sitting position.

DRESSING OR CHANGING CLOTHES

WARNING — Your weight may shift if you dress or change clothes while seated in this chair. To reduce the risk of a fall or tip-over:

1 Rotate the front casters until they are as far forward as possible. This makes the chair more stable.

2 Lock anti-tip tubes in place. (If your chair does not have antitip tubes, back it up against a wall and lock both rear wheels).

ENVIRONMENTAL CONDITIONS

WARNING

1 Use extra care if you must ride your chair on a wet or slick surface. If you are in doubt, ask for help.

2 Contact with water or excess moisture may cause your chair to rust or corrode. This could cause your chair to fail.

   a Do not use your chair in a shower, pool or other body of water. The chair tubing and parts are **NOT** water-tight and may rust or corrode from the inside.

   b Avoid excess moisture (for example, do not leave your chair in a damp bathroom while taking a shower).

   c Dry your chair as soon as you can if it gets wet, or if you use water to clean it.

COMPONENTS & OPTIONS WARNINGS

Positioning or Seat Belts

WARNING

PDG hook & loop, non-padded seat belts and Bodypoint® non-padded hip belts, both of which are optional equipment, are intended ONLY for use as a positioning aid for simple positioning needs, such as posterior pelvic tilt.

These belts will not be sufficient for persons with more involved positioning needs. Only your health care advisor can determine the proper positioning products for your situation. If used improperly, positioning or seat belts can cause severe injury or even death. If your health care advisor has instructed you to use positioning or seat belts, make sure they instruct you on the proper usage of such belts, and such professional should supervise your use of such belts to ensure you can use them safely.

1 Belts must fit snugly in order to work properly. However, they must not be so snug they interfere with your breathing. Your health care advisor should be able to slide his or her open hand flat between the belt and your body.

2 Make sure you do not slide down in your chair while wearing a belt. If this should happen, you may suffer chest compression or be suffocated due to pressure from the belt.

3 Do not use a positioning or seat belt unless you are capable of removing the belts easily in an emergency. If you cannot do this, consult with your health care advisor for other options to help with your posture.

4 There are devices that help to keep you from sliding down in the seat of your wheelchair, such as a pelvic wedge. Consult with your health care advisor to find out if you need to use such a device in conjunction with positioning or seat belts to mitigate the risks described above.

5 **NEVER** use positioning or seat belts as a motor vehicle restraint. These types of belts are NOT intended to protect the wheelchair rider from the forces involved in a vehicle accident, and they may, in fact, cause you to be injured. PDG recommends wheelchair users ALWAYS transfer to appropriate motor vehicle seating when traveling in a motor vehicle.

Note to Attendants/Assistants — NEVER use positioning or seat belts as a patient restraint (a restraint requires a doctor's order) or on a wheelchair user who is comatose or agitated.

Anti-Tip Tubes (Optional)

WARNING

Anti-tip tubes can help keep your chair from tipping over backward in most normal conditions.

1 PDG recommends use of anti-tip tubes:

   a UNLESS you are a skilled rider of this chair and are sure you are not at risk to tip over.

   b Each time you modify or adjust your chair. The change may make it easier to tip backward. Use anti-tip tubes until you adapt to the change, and are sure you are not at risk to tip over.

2 When locked in place (in the "down" position) anti-tip tubes should be BETWEEN 1 1/2 to 2 inches off the ground.

   a If set too HIGH, they may not prevent a tip-over.

   b If set too LOW, they may "hang up" on obstacles you can expect in normal use. If this occurs, you may fall or your chair may tip over.

3 Keep Anti-Tip Tubes Locked In Place UNLESS:

   a You have an attendant; or

   b You have to climb or descend a curb, or overcome an obstacle, and can safely do so without them. At these times, make sure anti-tip tubes are up, out of the way.

Fasteners

WARNING — Many of the screws, bolts and nuts on this chair are special highstrength fasteners. Use of improper fasteners may cause your chair to fail.

1 ONLY use fasteners provided by an authorized supplier (or ones of the same type and strength, as indicated by the markings on the heads).

2 Over- or under-tightened fasteners may fail or cause damage to chair parts.

3 If bolts or screws become loose, tighten them as soon as you can. If you fail to heed these warnings damage to your chair, a fall, tip-over or loss of control may occur and cause severe injury to the rider or others.

Footrests

WARNING

1 At the lowest point, footrests should be AT LEAST 2" off the ground. If set too LOW, they may "hang up" on obstacles you can expect to find in normal use. This may cause the chair to stop suddenly and tip forward.

2 To avoid a trip or fall when you transfer:

   a Make sure your feet do not "hang up" or get caught in the space between the footrests.

b Avoid putting weight on the footrests, as the chair may tip forward.

Pneumatic Tires

WARNING — Proper inflation extends the life of your tires and makes your chair easier to use.

1 Do not use this chair if any of the tires is under- or overinflated. Check weekly for proper inflation level, as listed on the tire sidewall.

2 Low pressure in a rear tire may cause the wheel lock on that side to slip and allow the wheel to turn when you do not expect it.

3 Low pressure in any of the tires may cause the chair to veer to one side and result in a loss of control.

4 Over-inflated tires may burst.

Quick-Release Axles

WARNING

1 Do not use this chair UNLESS you are sure that both quickrelease rear axles are locked. An unlocked axle may come off during use and cause a fall.

2 An axle is not locked until the quick-release button pops out fully. An unlocked axle may come off during use, resulting in a fall, tip-over or loss of control and cause severe injury to the rider or others.

Rear Wheels

WARNING — A change in set-up of the rear wheels will affect the center of balance of your chair.

1 The farther you move the rear axles FORWARD, the more likely it is that your chair will tip over backward.

2 Consult your doctor, nurse or therapist to find the best rear axle set-up for your chair. Do not change the set-up UNLESS you are sure you are not at risk to tip over.

3 Adjust the rear wheel locks after you make any change to the rear axles.

a If you fail to do so, the locks may not work.

b Make sure lock arms embed in tires at least 1/8 inch when locked.

Upholstery Fabric

WARNING

1. Replace worn or torn fabric of seat and seat back as soon as you can. If you fail to do so, the seat may fail.

2 Sling fabric will weaken with age and use. Look for fraying or thin spots, or stretching of fabrics at rivet holes.

3 "Dropping down" into your chair will weaken fabric and result in the need to inspect and replace the seat more often.

4 Be aware that laundering or excess moisture will reduce flame retardation of the fabric.

STANDARD FEATURES

1 Wheel Lock
2 Foot Plate
3 Front Caster
4 Tilt Activator (trigger)
5 Rear Wheel
6 Back Upholstery
7 Quick-Release Axle
8 Lower Frame
9 Back Rest
10 Seat Sling

UNPACKING

1 Check for any obvious damage to the carton or its contents. If damage is evident, notify your Dealer/ Carrier immediately.

2 Remove all loose packing from the carton.

3 Carefully remove all components from the carton.

NOTE — Unless the PDG Elevation is to be assembled immediately, retain cartons and packing materials for use in storing the wheelchair until assembly is required.

OUT OF THE BOX ASSEMBLY INSTRUCTIONS

INSPECTION

Examine exterior of the PDG Elevation for nicks, dents, scratches or other damages. Inspect all components. If damage is evident, notify your Dealer/Carrier immediately.

STORAGE

1 Store the repackaged PDG Elevation in a dry area.

2 DO NOT place other objects on top of the repackaged wheelchair.

SAFETY INSPECTION CHECKLIST

NOTE — Twice a year take your wheelchair to a qualified dealer for a thorough inspection and servicing. Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair.

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

ITEM	INITIALLY	INSPECT/ ADJUST WEEKLY	INSPECT/ ADJUST MONTHLY	INSPECT/ ADJUST/ every 6 months
GENERAL				
Wheelchair rolls straight (no excessive drag or pull to one side).	✖			✖
Ensure all hardware is tight.	✖	✖		
WHEEL LOCKS (Procedure 6)				
Do not interfere with tires when rolling.	✖		✖	
Pivot points free of ware and looseness.	✖		✖	
Wheel locks easy to engage.	✖		✖	
CLOTHING GUARDS				
Inspect for bent or protruding metal.	✖			✖
Ensure all fasteners are secure.	✖			✖
SEAT/BACK UPHOLSTERY (Procedure 3)				
Inspect for rips or sagging.	✖			
Inspect fastening to ensure they are secure.	✖		✖	✖
REAR WHEELS (Procedure 4)				
No excessive side movement or binding when lifted and spun.	✖			✖
Quick-release axles lock properly.	✖	✖		✖
FRONT CASTER (Procedure 5)	✖	✖		✖
Inspect wheel/fork assembly for proper tension by spinning caster; caster should come to a gradual stop.	✖		✖	
Wheel bearings are clean and free of moisture.	✖	✖		
CAUTION: Wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.	✖		✖	
TIRES (Procedures 5 and 6)				
Inspect for flat spots and wear.	✖		✖	
If pneumatic tires, check for proper installation.	✖	✖		
Inspect rear tires for cracks and wear.	✖			✖
CAUTION: Wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary.				
CLEANING				
Clean and wax all parts.				✖
Clean upholstery and armrests.				✖
Inspect axles are free from dirt, lint, etc.			✖	
Inspect tilt slides and roller bearings are free from dirt, lint, etc.			✖	

TROUBLESHOOTING

Problems	Solution
✖ Chair veers right ✖ Chair veers left ✖ Sluggish turn or performance ✖ Casters flutter ✖ 3 of 4 wheels contating ground surface	Contact dealer for servicing. If pneumatic, check tires for correct/equal pressure.
✖ Sluggish turn or performance ✖ Casters flutter ✖ Squeaks and rattles ✖ Looseness in chair	Contact dealer for servicing. Check for loose stem nuts and bolts.
✖ Chair veers right ✖ Chair veers left ✖ Sluggish turn or performance ✖ Casters flutter	Contact dealer for servicing. Check caster angle.
✖ Chair veers right ✖ Chair veers left ✖ Casters flutter	Contact dealer for servicing. Check that both casters contact ground at the same time.

MAINTENANCE: FINE TUNING THE FIT

Adjustment Guide

The following instructions are intended to provide assistance in making wheelchair adjustments. It is important to note the initial wheelchair configuration prior to making changes. When making changes, dealers and users should do so under the guidance of a health care professional who is knowledgeable of the particular limitation of the wheelchair user. Be sure that when finished, all components are properly tightened and have been completed in accordance with these instructions. DO NOT over tighten hardware attaching to the frame. This could cause damage to the frame tubing.

Tools Required

Philips Screw Driver

Allen Keys: .....❒3mm ❒4mm ❒5mm ❒6mm

Adjustable or Open End Wrench .....❒7/16" ❒3/4"

Socket Head Driver with socket Heads .....❒3/4"

Cleaning

Periodic cleaning of all surfaces will help keep your wheelchair looking good and operating properly. All surfaces can be cleaned using warm water and a mild soap solution. Do not use abrasive cleaners on any surfaces.

SUGGESTED MAINTENANCE PROCEDURES

1 Before using your PDG Elevation, make sure all nuts and bolts are tight. Check all parts for damage or wear and replace. Check all parts for proper adjustment.

2. Keep quick-release axles, if applicable, free of dirt and lint to ensure positive locking and proper operation. Refer to Rear-Wheel Axle Nut Adjustment in this manual.

3 If applicable, oil quick-release axles at least once (1) a month (3-in-1 oil or equivalent).

WARNING — If pneumatic tires are used, do not use the wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT over inflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

4 If tires are pneumatic, recommended tire pressure is listed on the side wall of the tire.

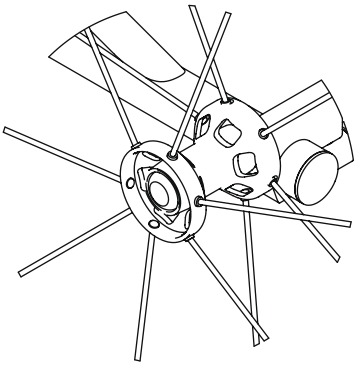
5. The wheels and tires should be checked periodically for cracks and wear, and should be replaced when necessary at your authorized dealer or by a qualified technician.

6 For wheelchairs with handrims, periodically check handrims to ensure they are secured to the rear wheels.

SET UP & ADJUSTMENTS

Rear Wheel Removal and Installation

Quick-release axles come standard on the Elevation. They will allow the rear wheels to be easily removed and installed.



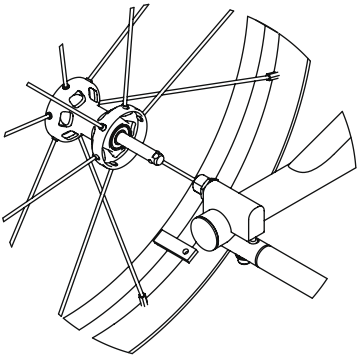
To install wheel

1 Depress quick-release button fully.

2 Insert axle through hub of rear wheel.

3 Keep the button depressed as the axle is slid through the axle receiver on the frame.

4 Release button to lock axle into the receiver. Adjust the nut on the axle if it does not lock or if there is play between the wheel and axle receiver.



To remove wheel

1 Depress quick-release button fully.

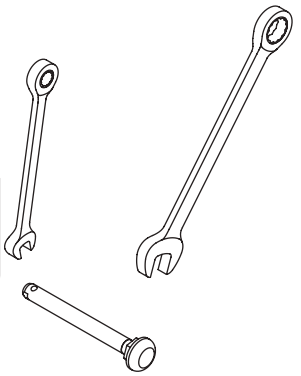
2 With button depressed simultaneously pull back on the center of the wheel.

Warning — Do not use this chair UNLESS you are sure both quick-release axles are locked. An unlocked axle may come off during use and cause a fall.

Rear Wheel Axle Nut Adjustment

The quick-release axle attaches the rear wheel to the axle receiver. When the axle is fully inserted into both the wheel and axle receiver the detent balls will lock the wheel assembly in place. By pushing the button on the quick-release axle the detent balls will be disengaged and wheel can be removed. If wheel and axle will not lock or alternatively if it is locking into place but there is excessive play when the wheel hub is pushing back and forth, the nut on the axle needs to be adjusted.

If the axle does not lock



1 Using a 7/16" open end wrench, securely hold the detent ball end of the axle.
2 Use the ¾" open-end wrench to turn the axle nut counter-clockwise.
3 Turn the nut approximately in ½ turn increments
4 Try to lock the axle into the axle receiver.
5 If it doesn't lock, continue step c. and d. until it locks securely.

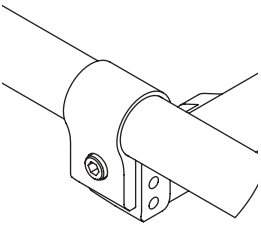
If the axle locks, but there is excessive play

1 Using a 7/16" open end wrench, securely hold the detent ball end of the axle.
2 Use the ¾" open-end wrench to turn the axle nut clockwise.
3 Turn the nut approximately in ½ turn increments.
4 Insert the axle and test for play.
5 Continue steps 3 and 4 until the play has be eliminated.

Seat Height

The minimum seat height adjustment setting of the elevation is preset at the factory for the user to achieve the most commonly used range of seat heights. However, minor adjustments maybe required to optimize an occupant's unique requirements and comfort. Increasing the minimum seat height will decrease the distance the seat will go down and increase the maximum distance the seat will go up.

To adjust minimum height



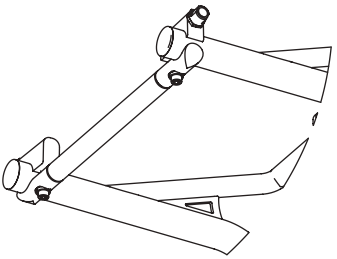
1 Using the 5mm allen key, loosen the socket head cap screws on the seat brackets, as shown.
2 Slide brackets towards the front of the wheelchair to increase the minimum height.
3 Alternatively slide the bracket rearward to decrease the minimum height.
4 Ensure the brackets are equal distance to ensure proper functioning of the seat height mechanism.
5 Re-tighten the cap screw once set.

Warning — Never attempt to adjust the seat height mechanism with the wheelchair occupied.

Center of Gravity/Wheel Position

The rear wheel axle location is preset at the factory. Adjustments are possible by moving the axles and camber tube assembly forward or backwards. To adjust the position,. Place the camber tube at the desired position, ensure that the camber tube assembly is equally place distance on both sides by measuring from the camber tube to the rear of the wheelchair, and then firmly tighten the bolts.

To adjust wheel position



1 Using the 6mm allen key, loosen the M8 socket head bolts on the bottom of the axle housing/camber tube until it is possible to slide the assembly forwards and back.

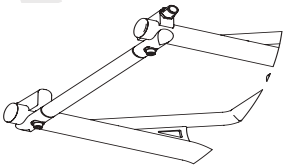
2 Place the camber tube at the desired position, ensure that the camber tube assembly is equally set on both sides by measuring from the camber tube to the rear of the wheelchair

3 Re-tighten the socket head bolts.

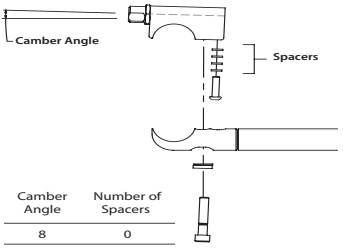
Warning — Camber tube adjustment may increase the tendency of elevation to tip over either forwards or backwards. The use of anti-tip devices are strongly recommended to avoid accidents or injury.

Camber Angle

Your Elevation comes standard with a patented camber angle adjustment.



To adjust camber angle



1 Remove the rear wheels.

2 Remove the camber blocks from the camber tube assembly by removing the two M8 socket head bolts.

3 To set the camber angle remove M6 button head bolt.

4 Using the chart as reference install the recommended number of washers on M6 button head for desired camber angle and re-install onto block. (Spare camber washer are supplied with chair.)

5 Re-install the camber block to the frame and camber tube assembly.

6 Place the camber tube at the desired position, ensure that the camber tube assembly is equally set on both sides by measuring from the camber tube to the rear of the wheelchair.

7 Re-tighten the M8 socket head bolts.

Camber Angle	Number of Spacers
8	0
6	1
4	2
2	3
0	4

Front Casters

The size of the front castors depends on the occupant's preference. Casters and forks are matched to the size of the rear wheels and should not be changed or adjusted without consulting an authorized technician.

Calf Strap

The calf strap is positioned behind the occupant's lower calves to prevent the legs and/or feet slipping backwards. Adjust the Velcro strap to obtain the desired length of strap to correctly position the feet on the footrest.

Warning — improper positioning of feet may result in accident or injury. Please consult your elevation dealer or other authorized representative for proper strap adjustment.

Seat Sling

Your elevation comes standard with a nylon fabric seat sling that is adjusted taut by firmly tightening the Velcro straps on the underside of the seat.

Warning – Never attempt to adjust the seat lacing with the wheelchair occupied. Never use you elevation without the seat sling affixed very firm and taut.

Seat Cushion

A seat cushion can be attached to the seat with Velcro fasteners. If the seat cushion does not provide complete comfort and/or any skin or other physical condition develops with usage, see your Physician immediately.

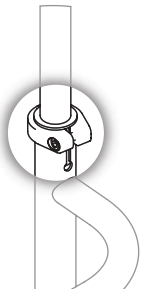
Warning — Never use your Elevation without a fitted and attached seat cushion.

Back Upholstery

The backrest upholstery is attached to the backrest with Velcro straps. Minor adjustments are possible by loosening or tightening the Velcro fasteners. If the backrest does not provide complete comfort and/or any skin or other physical condition develops, see your Physician immediately.

Backrest Height

The backrest height is adjusted by removing the upholstery.



To adjust back height

1 Remove the upholstery.

2 Using a 4mm allen wrench, loosen the socket head cap screws on the clamp.

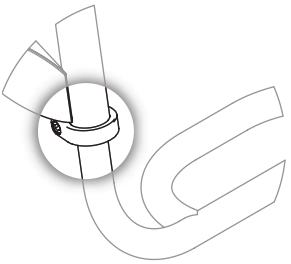
3 Position the backrest tubes to the desired height and ensure they are at equal distance on each side for maximum comfort and safety.

4 Re-tighten the bolts.

Footrest Height

The height of the footrest is adjustable and should be adjusted to suit the occupant's needs. PDG recommends that the footrest be a minimum 2" off the ground. Prior to adjusting the footrest, seat cushion selection and positioning, as well as backrest selection and adjustments must be made.

To adjust footrest height



1 Using a 4mm allen wrench loosen the Socket head cap screws on the clamp.

2 Position the footrest to the desired height and ensure it is level to the ground.

3 Re-tighten the bolts.

Warning — never attempt to adjust the footrest with the wheelchair occupied.

Scissor Brakes

Brakes lock the rear wheels and prevent any undesirable movement of your wheelchair. To apply the brakes, bring both brake operation levers forward as far as they will go until they lock into place. Once the brakes are applied the wheels should not be able to rotate. If they do, PDG recommends the chair be serviced by a PDG dealer.

To adjust brakes

1 Position the chair on a solid level surface and secure the chair so it will not move when the brakes are unlocked.

2 Release the brakes as far as they will go.

3 Loosen both screws on the cylindrical brake mounting bracket.

4 Adjust the position of the brakes and re-tighten the screws such that firm braking action prevents the wheels from rotating.

Warning — If adjustments to the position of the rear wheel axle have been performed, the brakes must also be adjusted. Never attempt to adjust the brakes with the wheelchair occupied.

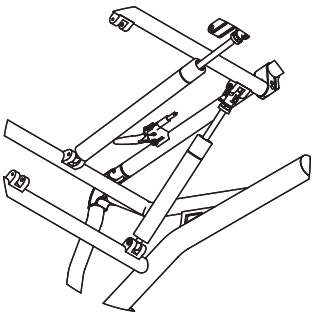
Side Guards

Your elevation may be purchased with the patented Flexguard™ side guards. These unique side guards flex inward to protect the occupants clothing from contact with the tires and allow easier access to the wheels for better performance and handling. The patented flexibility of the side guards also allow for ease of transferring. Flexguard™ side guards offer flexibility and protection at a fraction of the thickness and weight of conventional side guards. Because of their unique flexibility, Flexguard™ side guards also reduce the risk of injury due to pinching or trapping of body parts between the side guards and moving parts. In addition, when the seat height of elevation is raised, the side guards pull inwards to improve the user's stability, an added safety feature. The side guards must be firmly affixed with the Velcro straps.

Gas Spring

The gas springs on elevation are pre-set at the factory for the weight of the user and allow for ease of seat height adjustment. The gas springs are specially adjusted to balance the occupant's weight to allow minimal arm strength to move the seat up or down. By pushing lightly on the wheels and/or wheelchair frame, the occupant can sit higher, and by pulling lightly down one can sit lower with minimal effort. The gas spring release lever, actuators, cables must be properly adjusted and maintained for comfortable and safe usage. The gas spring units do not have any serviceable parts, do not attempt to servicing.

To replace gas springs



1 Position the chair on a solid level surface and secure the chair using the brakes.

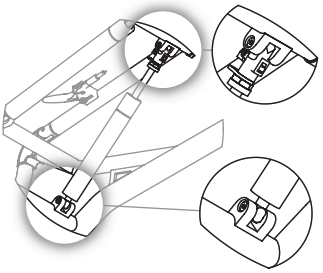
2 Be sure to have the gas spring in the fully extended position.

3 Remove both socket head shoulder bolts from the frame strut mounts on the upper and lower frames using a 3mm allen wrench.

4 Remove the cable from the gas spring and re-use on the new part.

5 Re-install the new gas spring and the socket head shoulder bolts.

6 Tighten fasteners.

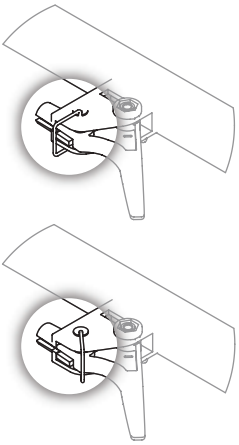


Warning —Do not bend or stretch the cables that run from the release lever to the gas springs, as this may release the springs and move the seat resulting in injury.

Transport

The Elevation is not designed for transport in a vehicle while occupied. When transporting the chair ensure that the wheelchair is secured to prevent any movement which may result in injury. To reduce the risk of accidental seat height movement during transport or storage, ensure that the seat is fully lowered and ensure that the release levers have their safety latches firmly placed in the "locked" position .

Real-time seat height: Operating Instructions



The gas springs on your Elevation wheelchair has a real-time seat height adjustment that is unique in the wheelchair manufacturing industry. In addition to performing all the functions of a conventional wheelchair, the Elevation enables the user to make quick adjustments of the wheelchair seat height to suit the needs of the occupant's busy day.

During an episode of spasticity, cramps or any other situation that distracts the user's attention or causes instability or discomfort, it is recommended that the user not raise seat height until the episode subsides. Consult your physician to make sure you do not suffer from any conditions (e.g. strong contractions, autonomic dysreflexia, osteoporosis, spasticity, or compromised hand function) which make operation of and/or sitting at higher seat elevations potentially harmful.

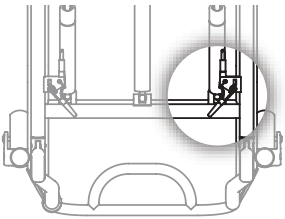
The seat height should only be adjusted on a firm, level surface to avoid any potential risk of injury (tipping over).

To raise seat

1 Be sure the chair is on a solid level surface and secure it using the brakes.

2 Squeeze the lever on the right side and with your left hand push up on the main frame or rear wheel to raise the seat.

3 Release the lever at the desired height.



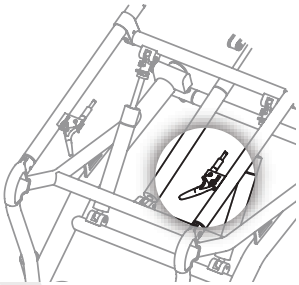
To lower seat

1 Squeeze the lever again and the seat will slowly lower.

2 Grab the rear wheel to assist bringing the seat down.

3 Release the lever to lock the seat at the desired height.

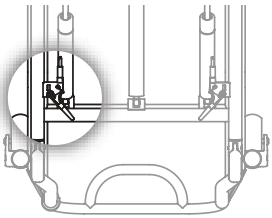
Warning — Adjustment of elevation to a higher seat position may result in changes in your body that you may be unaccustomed to. Consult your doctor or physical therapist prior to using elevation.



Warning — Use caution when adjusting the seat height; ensure that clothing and body parts are clear of any moving parts of the wheelchair to protect yourself and accompanying persons from possible injury.

Warning — Raise and lower seat slowly to avoid any potential risk of tipping and resultant injury. Please consult your elevation dealer or other authorized representative for detailed instructions on raising seat height.

Real-Time Backrest Recline: Operating Instructions



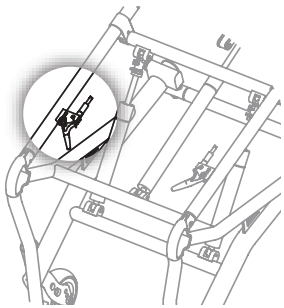
Your elevation has a unique backrest design that allows real time adjustment. The backrest can be adjusted to suit the occupants comfort by simply activating the adjustment lever located at the front of the wheelchair, below the seat. Activation of the adjustment lever will allow for movement of the backrest forward or back.

To recline back

1 Be sure the chair is on a solid level surface and secure it using the brakes.

2 Squeeze the lever on the left side and lightly push back on the backrest.

3 Release the lever at the desired postions.



To return back

1 Squeeze the lever on the left side.

2 Lean forward slowly and the back will return.

3 Release the lever to lock the back at the desired position.

Warning — The backrest must be in its upright position prior to changing seat height.

Warning — Sudden or extreme reclining of the backrest will result in tipping backwards of the wheelchair. The use of anti-tip devices is strongly recommended to avoid accidents or injury.

Warning — Do not bend or stretch the cables that run from the release lever to the backrest adjustment mechanism, as this may release the mechanism and move the backrest resulting in accident or injury.

4 Test the wheelchair for maneuverability.

ELEVATION WHEELCHAIR TEST CONFIGURATION

Seat Width	650 mm (25.6 in)
Seat Depth	407 mm (16 in)
Seat Back Height	240 mm (9.45 in)
Wheelchair Weight	12 kg (26.5 lbs)
Seat sling	Standard Sling Seat w/tension straps
Back Upholstery	Standard back upholstery
Wheels	24" Wire Wheels
Casters	5" Aluminum Soft Roll
Footrest	Aluminum Footrest
Other Options	None
Mass of ATD	115 kg (250lbs)
Max. User Weight	115 kg (250 lbs)

DIMENSIONAL AND PERFORMANCE ATTRIBUTES OF THE TEST WHEELCHAIR

Feature	Min	Max
Overall length with legrest	815 mm (32 in)	876 mm (34.5 in)
Overall width	587 mm (23.1 in)	688 mm (27.1 in)
Total mass	12.0 kg (26.5 lbs)	12.0 kg (26.5 lbs)
Static stability downhill	>10°	>10°
Static stability uphill	5.4°	7.6°
Static stability sideways	>10°	>10°
Seat plane angle	12.0°	n/a
Effective seat depth	356 mm (14 in)	457 mm (18 in)
Effective seat width	356 mm (14 in)	457 mm (18 in)
Seat surface height at front edge	485 mm (19.1 in)	515 mm (20.3 in)
Backrest angle	-14.5°	+48.0°
Backrest height	240 mm (9.4 in)	370 mm (14.6 in)
Footrest to seat distance	385 mm (15.2 in)	425 mm (16.7 in)
Leg to seat angle	60º	100º
Hand-rim diameter	520 mm (20.5 in)	572 mm (22.5 in)
Minimum turning radius	515 mm (20.3 in)	515 mm (20.3 in)

The Elevation wheelchair conforms to the test methods for static, impact and fatigue strengths as required by ISO 7176-8.