



# **GUARDIAN<sup>®</sup>**



Family-owned. Trusted by  
hospitals for over 50 years.

## **MEDLINE<sup>®</sup> PEDIATRIC MANUAL WHEELCHAIRS USER GUIDE**



KPD2N22S, KPD4N22S, KPD2N22S1, KPD4N22S1



# Warnings

TO ENSURE YOUR SAFETY IN USING THIS MEDLINE WHEELCHAIR, ALL WARNINGS AND SAFETY INFORMATION AND ALL INSTRUCTIONS MUST BE FOLLOWED. FAILURE TO DO SO MAY RESULT IN SERIOUS BODILY INJURY OR DAMAGE TO THE CHAIR.

DO NOT USE THIS PRODUCT WITHOUT FIRST READING AND UNDERSTANDING THE INSTRUCTIONS CONTAINED IN THIS BOOKLET. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS OR INSTRUCTIONS, CONTACT A HEALTHCARE PROFESSIONAL, DURABLE MEDICAL DEALER OR TECHNICAL PERSONNEL, OR CONTACT MEDLINE AT 1-800-MEDLINE BEFORE USE - OTHERWISE SERIOUS BODILY INJURY OR PRODUCT DAMAGE MAY OCCUR.

DO NOT USE ACCESSORIES, PARTS, OR ADAPTERS OTHER THAN THOSE AUTHORIZED BY MEDLINE.

CONSULT WITH YOUR DOCTOR, PHYSICAL OR OCCUPATIONAL THERAPIST, OR OTHER QUALIFIED PROFESSIONAL REGARDING THE SELECTION OF THE TYPE OF WHEELCHAIR AND ACCESSORIES BEST SUITED TO YOUR INDIVIDUAL NEEDS AND CAPABILITIES.

**NOTE:** THESE PEDIATRIC MANUAL WHEELCHAIRS ARE DESIGNED TO PROVIDE MOBILITY FOR THOSE THAT HAVE DIFFICULTY WALKING. THEY MAY BE SELF-PROPELLED OR PUSHED BY A CARETAKER. YOUR HEALTHCARE PROFESSIONAL SHOULD DETERMINE THE PROPER WHEELCHAIR THAT MEETS YOUR NEEDS.

# Reorder numbers

Model No.	Model	Description	Weight Capacity
KPD2N22S KPD4N22S	Pediatric Guardian Wheelchair	12" Swing-back desk-length arms with swing-away footrests 14" Swing-back desk-length arms with swing-away footrests	150 lbs. (68kg)
KPD2N22S1 KPD4N22S1	Pediatric Plus Guardian Wheelchair	12" Swing-back desk-length arms with swing-away footrests 14" Swing-back desk-length arms with swing-away footrests	150 lbs. (68kg)



# Medline limited warranty

Medline has great confidence in the quality of our wheelchairs. That is why Medline warranties for the original purchaser, that the frame of the wheelchair will be free from defects in materials and workmanship for the life of the chair.

Medline also warranties the parts and upholstery on the wheelchair to be free from defect in materials and workmanship for a period of one (1) year from date of purchase by the original purchaser.

If within the warranty period any such product shall be proven to be defective, such product shall be repaired or replaced, at Medline's option.

This warranty does not cover device failure due to owner misuse or negligence, or normal wear and tear. All warranty claims must include the product in question unless otherwise authorized by Medline. For more information about your wheelchair or warranty call Medline at 1-800-MEDLINE.

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# Warnings & safety instructions

## General information

**DO NOT** use the wheelchair in a vehicle for transport. This wheelchair has not been approved as a seat surface to be used within a vehicle of any kind. Always transfer the wheelchair user to an approved vehicle seat and use restraints available from the auto industry for this application. **DO NOT** exceed the weight capacity of the wheelchairs listed on page 3. The weight capacity includes the weight of the rider plus items carried or attached to the wheelchair.

**DO NOT** use the wheelchair while weight training. Medline wheelchairs have not been tested for any type of weight training. If the chair is used during weight training, Medline will not be held liable. If the weight capacity is exceeded, risk of fall, tip-over or loss of control may occur which can result in bodily injury or product damage.

Use of the seat belt is recommended to maximize safety and stability.

A qualified wheelchair technician must perform any repair or change to this wheelchair or serious injury may occur. Technicians: do not service the wheelchair without first reading and understanding this owner's manual. If you are unable to understand the warnings, cautions, or instructions; contact Medline at 1-800-MEDLINE.

## Environmental

The wheelchair is designed for use on firm, even surfaces such as concrete, asphalt, and indoor floors and carpeting.

**DO NOT** operate the wheelchair on loose, slippery, or uneven surfaces such as sand, gravel, hills, dirt roads, or ice.

**DO NOT** operate the wheelchair on inclines greater than 10% (6 degrees) without assistance.

**DO NOT** attempt to go up or down inclines that are covered with oil, water, ice or any other potentially slippery substance.

**DO NOT** attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to tip over and cause bodily harm to you or damage to the wheelchair.

**DO NOT** use the wheelchair on stairs or escalators.

## General use

**DO NOT** stand on the frame of the wheelchair.

**DO NOT** stand or put pressure on the footrests. When getting in or out of the wheelchair, make sure the footplates are in the up position.

**DO NOT** attempt to lift the wheelchair by armrests or any detachable components.

There are potential finger pinch point areas at moving parts and between the seat frame and the seat cradles on some models.

When opening the wheelchair, take care not to place your hand or fingers between the seat frame and the seat cradles (if present) or on any other moving parts.

**ALWAYS** keep hands and fingers away from moving parts. **DO NOT** sit in the wheelchair until the seat is completely in the open position. Risk of injury may occur if care is not taken.

The wheelchair should be on a stable, level surface with the wheel locks engaged before transferring the user to or from the wheelchair. Completely engage the wheel locks when entering and leaving the wheelchair or using the wheelchair in an elevator or a wheelchair lift.

**DO NOT** transfer in or out of the wheelchair on your own unless you have sufficient upper body strength, balance and agility and have been instructed in transfer techniques by a health professional. Every precaution should be taken to reduce the gap distance between the wheelchair and the target seat or bed. Turn both casters parallel to the object you are transferring to.

**DO NOT** use the wheel locks to stop the wheelchair from moving. Wheel locks are not brakes. **DO NOT** use the wheel locks to slow your descent down an incline.

Changing direction when going down an incline could cause instability.

**DO NOT** lean forward out of the wheelchair any farther than the length of the armrests.

**DO NOT** attempt to reach for objects if doing so means you must 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** shift your weight or sitting position toward the direction you are reaching as the wheelchair may tip over.

**DO NOT** attempt to lean over the top of the back upholstery to reach objects.

Before leaning or reaching forward, make sure to rotate the casters straight ahead toward the front of the wheelchair and engage the wheel locks to prevent the wheelchair from tipping over or moving.

**DO NOT** tip the wheelchair without assistance. **DO NOT** lean the wheelchair back since this can cause the wheelchair to tip over. If trying to reach objects, reach back only as far as your arm will extend without altering your seating position.

Any person assisting the rider in maneuvering or lifting of the wheelchair must have sufficient strength and be able to see obstacles in the path of travel. When learning a new assistance technique, have an experienced assistant help you before attempting it alone. Remember to use good body mechanics.

Contact with water or excess moisture may cause the non-aluminum wheelchairs to rust or corrode. **DO NOT** use the chair in a shower, pool or other body of water. Avoid excess moisture (example: do not leave the chair in a damp bathroom while taking a shower). Dry the chair immediately if exposed to moisture.

When cleaning the hand grips, use only a clean towel lightly dampened with cool water. Ensure the hand grips are dry before use. Use of soap or ammonia based cleaning solutions may result in the hand grips sliding off.

If the wheelchair is exposed to extreme temperatures, high humidity and/or becomes wet, check the hand grips to ensure they are not loose and do not twist on the handle.

Avoid storing or using the wheelchair near open flames or combustible smoldering products.

## Adjustments

**DO NOT** operate, maintain, or adjust the wheelchair without reading and understanding all instructions in the manual.

**DO NOT** adjust the footrests any closer than 2.5" (6.4 cm) from the floor.

**DO NOT** modify the wheelchair. Examples: drilling holes, grinding, welding parts, using non-authorized / non-approved parts.

Such modifications may change the chair's structure and center of balance which may increase the risk of serious injury to the user and void the warranty.

## Before each use

- ✓ Make sure the chair rolls easily and that all parts work smoothly.
- ✓ Check for noise, vibration, or any change in use. Changes may indicate loose parts or wheelchair damage.
- ✓ Check to ensure wheel locks are in good working order.
- ✓ Make sure hand grips are not loose and cannot be moved or twisted.
- ✓ Make sure the seatback is locked in the upright position.
- ✓ If chair is damaged, discontinue use until completely repaired.
- ✓ Have any problem found repaired promptly with authorized parts.

# Guidelines: Safety & handling of wheelchairs

## Center of gravity, balance and stability

This Medline wheelchair has been designed to be safe and stable during normal transport activity as long as proper balance is maintained. The point at which a wheelchair will tip forward, backward, or to the side depends on its center of balance. To assure stability and proper operation of the wheelchair, the center of gravity must be maintained in the chair. Center of gravity is the point at which all the weight of an object can be considered to be concentrated and represents the balance point.

Most activities such as transferring in and out of the wheelchair, bending, and reaching affect the center of gravity and weight distribution of the wheelchair. Addition of accessories such as a backpack will also re-distribute weight. Loss of proper balance may cause the chair to tip over. Use of the seat belt is advised to help maintain stability by minimizing movement within the wheelchair seat. The use of anti-tip devices, especially when maneuvering on ramps or inclines, will also enhance safety.

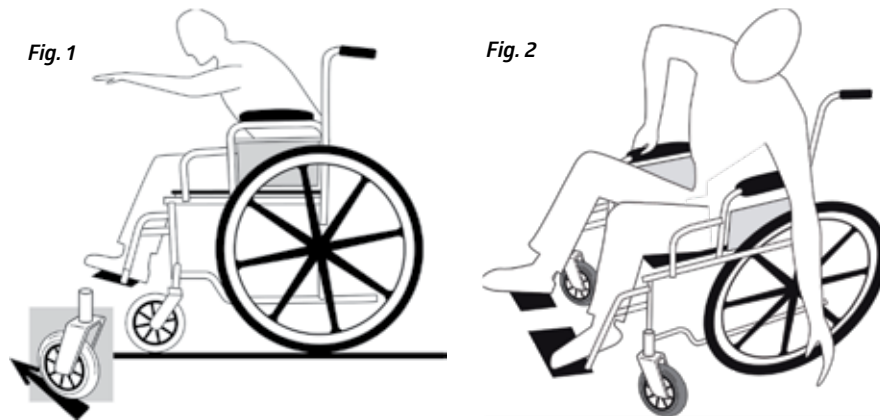
To assure safe operation of the wheelchair, ALL of the Warnings and Instructions in this manual must be followed. Failure to do so may result in tipping the wheel chair over or causing the user to fall which may result in serious bodily injury or damage to the wheelchair.

Some basic wheelchair safety guidelines follow. The guidelines are critical for standard wheelchair use, however, the principles also hold true for transport chairs. If any of the following activities are required while using the wheelchairs, these guidelines must be followed to ensure safety and to avoid potential injury to the user or the transporter and to avoid damage to the chair.



## Reaching / leaning / bending – forward or sideways

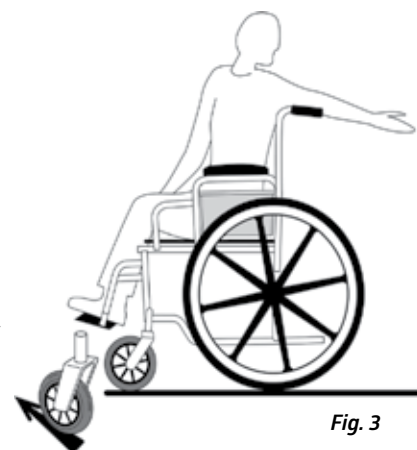
- Position the wheelchair as close as possible to the object.
- When reaching forward make sure the front casters are pointing in a forward position (Fig. 1). This extends the wheel base and will help stabilize the chair.
- When reaching sideways position the casters to provide the greatest stability side to side (Fig. 2).
- Make sure the wheel locks are engaged before activity.
- **DO NOT** attempt to reach for objects if doing so means you must move forward in the seat. **DO NOT** shift your weight toward the direction you are reaching.
- **DO NOT** attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.
- **DO NOT** shift your weight or seat position toward the direction you are reaching.



## Guidelines: Safety & handling of wheelchairs

### Reaching / leaning – backward

Position the wheelchair as close as possible to the object. Make sure the front casters are pointing in a forward position (Fig. 3). This extends the wheel base and will help stabilize the chair. **DO NOT** engage the wheel locks – if your weight shifts while reaching backwards it is better for the wheelchair to roll than to tip. **DO NOT** lean back over the top of the back upholstery. Reach back only as far as your arm will extend without changing your position in the seat (Fig. 3).



### Transferring into and out of the wheelchair

Transferring to and from the wheelchair is a significant task that requires balance, agility and upper body strength. Practice with your healthcare provider before attempting transfers. If possible, always use a transfer board and have assistance available.

- Position the wheelchair as close as possible.
- Position both casters parallel to the seat you are transferring to.
- Make sure both wheel locks are engaged.
- Remove the armrest and the footrests that are in the transfer path.
- **DO NOT** put weight on the foot rests.
- Transfer as far back into the seat or onto the bed/chair as possible.
- On the recliner wheelchair models, make sure the seat back is in the upright position and the stabilizer bar is securely in place.

### Obstacles

Obstacles such as floor threshold strips, uneven floors, cords or items on the floor, or cracks in pavements can damage your wheelchair and may cause loss of control or a tip over. Be alert! Scan your path and avoid any items that may cause instability.

## Curbs, steps and stairs

Do not attempt to negotiate curbs or single steps without assistance. Ask your healthcare worker to provide instructions regarding safe wheelchair use for curbs, steps and stairs. Proper body mechanics and awareness of the center of gravity is crucial for these maneuvers. The step tubes (Fig. 4) at the back of the chair are utilized to tilt the wheelchair backwards until the balance point is achieved and the front casters clear the curb/step. Gently lower the front wheels to the ground and slowly roll the wheelchair forward until the rear wheels roll up over the curb/step.

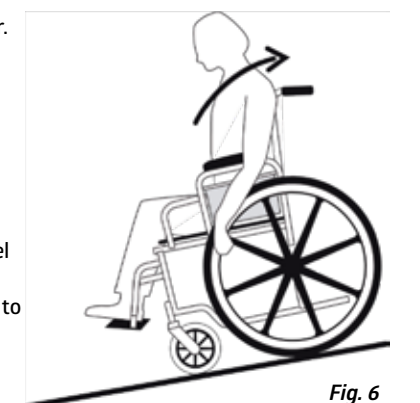
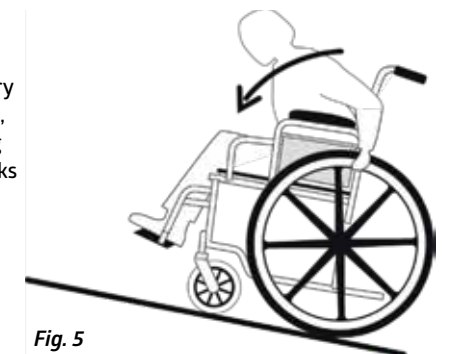
Extreme caution is required if it is absolutely necessary to maneuver an occupied chair up or down stairs. Two assistants with adequate body strength and endurance must be present. **DO NOT** lift the chair by any removable parts (i.e. swing-away footrests). Make sure the hand grips are not loose. Techniques for going up or down steps should be received from a health care professional familiar with wheelchair use and practiced before attempting to transport on stairs. If at all possible, an alternate means of transport up or down stairs is recommended.



## Ramps / inclines

The assistant must know their capabilities and limitations in terms of strength and endurance before attempting to go up or down a ramp. Slopes will change the center of gravity. **DO NOT** attempt to negotiate steep inclines greater than 10% (6 degrees, or one foot of rise or fall for every ten feet of ramp length) without an experienced assistant. Use of anti-tip devices are encouraged, however, they may not prevent a tip-over. Sometimes anti-tip devices may catch at the beginning of a ramp. If this occurs, they will need to be disengaged and extra care should be taken. Backpacks or other gear on the back of the wheelchair will cause it to tip backward more easily. Training and practice negotiating ramps with a healthcare professional is recommended.

- Go as straight up or down the incline as possible.
- Check the ramp for any obstacles, bumps, depressions, or wetness before beginning. Ask for additional assistance if necessary.
- Stay in the center of the ramp if possible.
- Avoid changing direction while on the ramp as this may cause loss of control of the wheelchair.
- Avoid stopping on a ramp. Stopping may cause loss of control of the wheelchair. If stopping is necessary, avoid sudden, abrupt forward movement when you resume propelling the chair as that could cause instability.
- When going up an incline, the occupant should lean forward. This will adjust the center of gravity to counteract the tendency of the wheelchair to tip backward.
- When going down a ramp, the occupant should face forward and lean backward into the seat. Descent should always be done slowly. **DO NOT** use wheel locks as brakes to slow down or stop the chair. Attempting to use the wheel locks could result in accidental locking, veering or tipping to one side, or suddenly stopping.
- When going down a steep incline, the assistant should turn the chair and go down backwards to avoid tipping the occupant out of the chair.



## Basic information for wheelchair assistants / transporters

Work with the wheelchair user's healthcare professional or your institution to learn safe ways to assist that are within your capability and comfort level. To prevent injury to yourself or the chair occupant use good body mechanics:

- Always tell the rider what you intend to do so he/she is ready for your actions and can assist with maintaining a balanced center of gravity for stability.
- Bend at the knees, not at the waist. Keep knees bent, not locked straight.
- Use legs for strength, not the back or arms. This will help prevent back strain.
- **DO NOT** twist at the waist. Keep the torso facing the same direction as the hips and move the feet to turn. This will help prevent back strain.
- Maintain a straight back. Hunching or rounding the shoulders can cause back strain.
- **DO NOT** hesitate to call for additional assistance if needed.
- If you do not feel comfortable with an activity you are requested to assist with (such as negotiating a step or a steep incline), you may decline to assist and should help find appropriate assistance.



# General use instructions

## Important notes

There are potential finger pinch point areas at moving parts and between the seat frame and the seat cradles on some models. When opening the wheelchair, take care not to place your hand or fingers between the seat frame and the seat cradles (if present) or on any other moving parts.  
**ALWAYS** keep hands and fingers away from moving parts.

## Opening and folding the wheelchair

### To open the chair

1. Hold onto one armrest and push the opposite side to open the chair.
  2. With your fingers and thumbs pointed towards the inside of the wheelchair, push downward on the seat to ensure the wheelchair is fully open. Make sure the seat tubing rests completely inside the seat cradles (if equipped).
- CAUTION:** Pinch points exist. Keep hands and fingers away from any moving parts.  
**DO NOT** sit in the wheelchair until the seat is completely in the open position. Risk of injury may occur if care is not taken.

### Alternative method to open the chair

1. Tilt the chair to one side by grasping the hand grip or arm nearest to you.
2. With fingers pointed away from the seat rail, push down on one side of the seat frame / rail until the wheelchair is fully open. Keep hands and fingers away from any moving parts.

### To close / fold the chair

1. Ensure the swing-away leg or footrests are in the forward and locked position.
2. Fold the footplates up to the vertical position.
3. Using both hands, grasp the center of the seat upholstery at the front and back edge and lift the seat up.

### Alternative method to close the chair

1. Ensure the swing-away leg or footrests are in the forward and locked position.
2. Fold the footplates up to the vertical position.
3. Grasp the handles/straps on each side of the seat.
4. Pull up until the chair is fully closed.

## Wheel locks

Push forward toward front of chair to lock.  
Push backward toward back of chair to unlock.

### Wheel lock warnings

Check the wheel locks to ensure proper function before using the chair. Wheel locks should embed into the wheel at least 1/8" (3.2 mm) when engaged.  
Engage the wheel locks on both wheels before entering the chair, leaving the chair, leaning forward in the chair or while being transported in an elevator or a wheelchair lift.  
Check to make sure that the legrests do not unlock the wheel locks when they are swung back.  
**DO NOT** use the wheel locks to stop the wheelchair from moving. Wheel locks are not brakes. **DO NOT** use the wheel locks to slow your descent down an incline.

## Adjusting push handles (Pediatric Plus models Only)

1. Loosen the adjustment handle by turning it counter clockwise.
2. Position the push handle to the desired height.
3. Tighten the adjustment handle by turning it clockwise.
4. After fully tightening the adjustment handle, ensure it is pointing in a direction that doesn't interfere with the user.

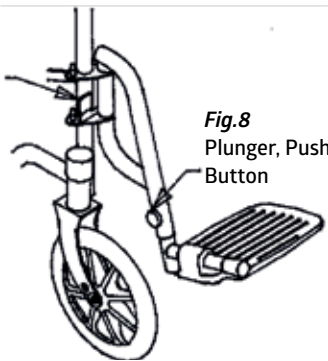


## Adjusting leg or footrest length and position

### To adjust the length

**WARNING:** The footrest should not be closer than 2.5" (6.4 cm) from the ground to ensure proper clearance.

1. Loosen the plunger by pulling out (Fig. 8).
2. Adjust the length of the leg or footrest assembly by pushing the push button and adjusting it properly. The front rigging should not be lowered to the point that it causes pressure on the thighs at the front of the seat upholstery.
3. Let go of the push button and engage the plunger by pushing down.





## Installing / removing the swing-away legrest / footrest riggings

### To install the riggings

1. Hold the legrest rigging to the side of the wheelchair.
2. Install the legrest assembly hinge plates onto the hinge pins of the frame (Fig. 9/10).
3. Push the legrest rigging to the front until it locks securely into place. (Fig. 11).

### To swing-away / remove the legrest assembly

1. Fold the footplate up to the vertical position.
2. Release the legrest lock by pushing on the legrest lever (Fig. 12/13).
3. Swing the legrest outward and to the side (Fig. 14).



4. To remove the legrest, lift up on the assembly to remove the legrest off the hinge pins.



## Installing/Adjusting Calf Straps

1. Secure one side of the calf strap to the legrest frame by attaching the hook and loop sections together at the desired position.
2. Repeat for the other side until the calf pad has been positioned as desired.



## Safety inspection & maintenance

It is highly recommended that the wheelchair be taken to a qualified dealer annually for a thorough inspection and maintenance / repair service.

### General care

- Wipe off chrome / aluminum parts at least once per week using a clean, soft cloth.
- Clean all metal parts with auto wax or similar products.
- Dry the chair immediately if exposed to moisture.
- Do not use abrasive cleanser or materials that will scratch the finish of the chair.
- Clean the upholstery with a mild soap solution, rinse and wipe dry.
- Clean the hand grips with water only and dry thoroughly. Use of soap or ammonia based cleaning solutions may loosen the grips.

### General

Inspect the entire wheelchair for broken parts, sharp edges and loose fasteners. Ensure that everything works and the chair rolls straight without drag and does not pull to one side. Replace or tighten parts as needed. Inspect for bent frame and crossbars.

Frame and Cross braces:

Check that the frame and cross braces are not bent or dented. Check the tubing for cracks and rust. If such issues are found, take the wheelchair to your local service dealer.

### Upholstery

Inspect for any rips, tears or worn spots and replace as necessary. Inspect the upholstery screws and assure that all are present and tight. Torn or worn upholstery may not support the user's weight and could result in a fall with serious bodily injury.

### Armrests

Check for cracks, looseness, or sharp edges.

### Hand grips

Ensure the hand grips are tight and secure on the handles. They should not move or twist.

### Footrests / legrests

Ensure the legrest assembly release works properly. Ensure the assembly automatically locks securely into place when attached and will not accidentally unlock.

### Front caster forks

Verify the forks swivel freely without binding. Check to ensure the casters roll freely by lifting the chair and spinning the castor. The castor should come to a gradual stop. If the nut is too loose, the castor will flutter or shimmy. If the nut is too tight, the chair will be difficult to steer. Check the bearings and clean the fork stem housing.

### Front casters and rear wheels

Ensure the castor/wheel axle and nuts are tight. The fork housing and the rear and front wheels are constructed with low maintenance, sealed bearings to keep dirt out and increase the durability of the chair. Bearings are also protected with an additional bearing spacer component. Check that the wheels are not warped, cracked or otherwise damaged and the spokes are not broken. Replace as needed. Assure that the wheels spin freely. Replacement and maintenance of wheel bearings should be completed by a qualified wheelchair technician only.

### Front and rear tires

Solid tires require minimal maintenance. They should occasionally be cleaned with a damp cloth. Replace the tires if they become cracked, excessively worn, or have flat spots.



# Maintenance

## Safety inspection checklist

ITEM	INITIALLY	INSPECT / ADJUST WEEKLY	INSPECT / ADJUST MONTHLY	INSPECT / ADJUST PERIODICALLY
<b>GENERAL</b> Chair rolls straight. (no excessive pull to one side)	X			X
<b>CLEANING</b> Wipe chrome parts with clean, soft cloth. Auto wax / similar product on metal parts. Clean upholstery with mild soap solution.			X	
Use only water on hand grips. Dry chair immediately when wet. Do not use abrasive cleansers or cloths.			X	
<b>FRAME &amp; CROSS BRACES</b> Inspect for loose or missing hardware.	X			X
Inspect for bent frame or cross braces.	X			X
<b>SEAT AND BACK UPHOLSTERY</b> Inspect for rips or sagging.	X			X
Inspect for loose or broken hardware.	X		X	
<b>FRONT CASTERS AND REAR WHEELS</b> Inspect wheel / fork assembly for proper tension by lifting the chair and spinning the caster. It should come to a gradual stop.	X	X		
Loosen locknut if wheel wobbles / tighten locknut if wheel binds to a stop.	X	X		
Ensure wheel bearings are clean and free of moisture.	X		X	
<b>REAR WHEELS</b> No excessive side movement or binding when chair is lifted and wheels are spun.	X		X	
<b>FRONT AND REAR TIRES</b> Inspect for flat spots and wear.	X	X		
<b>HAND GRIP WHEEL LOCKS</b> (If equipped) Test in both complete and intermittent lock positions. Ensure the chair does not move when the locks are engaged.	X		X	
<b>WHEEL LOCKS</b> Do not interfere with tires when rolling.	X		X	
Pivot points free of wear and looseness.	X		X	
Wheel locks are easy to engage.	X		X	

# Your authorized service facility:

Record your Serial Number: