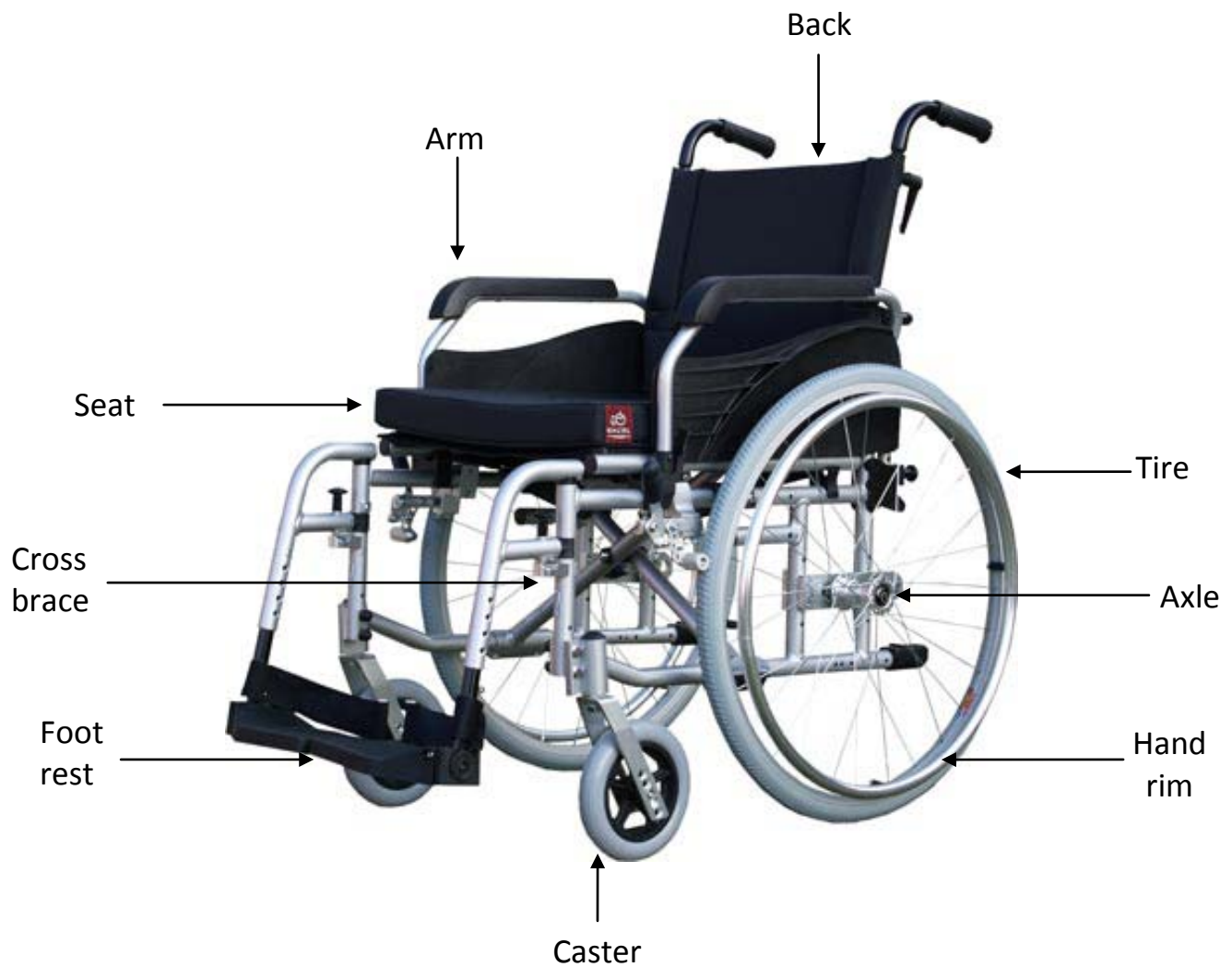


Wheelchair Safety, Maintenance and Operations Guide



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Introduction

Important safety and operating information is contained in this booklet please read it carefully and refer to it as often as needed.

All procedures involved should be practiced with an attendant until you are thoroughly familiar with them.

All wheelchairs should receive maintenance on a regular schedule and should be inspected frequently for proper mechanical operation.

Safety requires the constant attention of the wheelchair user and attendant and it is extremely important to learn and always use safe methods of performing basic daily activities.

Some basic safety precautions are:

- Do not operate the wheelchair on hilly or rough terrain, on sand, icy surfaces, or surfaces with impaired traction when wet such as tiles.
- Always engage the wheel locks/brakes when transferring, resting, using vehicle lift using as level a surface as possible.
- Make sure arms are securely locked before using the wheelchair.
- Wheelchairs should not be modified unless approved.
- Do not attempt any inclines or declines that you believe to be too steep.

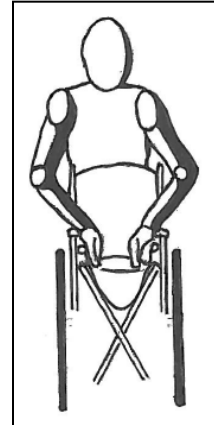
Know equipment and be organised

The process of maintaining wheelchairs begins on the day a new chair is delivered. Read the warranty and talk with the service provider about maintaining the wheelchair. It will be easier to handle problems as they arise if the following information is close at hand:

- Manual** – This book contains valuable information about the wheelchair. It describes how to care for equipment, items that are covered under warranty and the tools that you will need for simple maintenance. Keep this manual in a safe place and refer to it often for guidance.

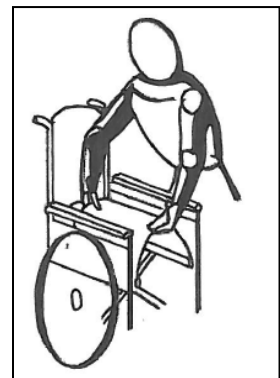
Opening a wheelchair

- Stand behind the chair.
- The armrests should be pushed apart as far as possible.
- With the fingers turned towards the middle of the seat the person should push down with the flat of the hand on the side of the seat until the wheelchair is completely open.
- This may be made easier by tilting the wheelchair sideways slightly, so that one rear wheel is clear of the floor.



Closing a wheelchair

- The footplates should be lifted up and any cushion removed.
- Standing beside the wheelchair the person should grasp the middle of the seat canvas at the front and back and give a sharp pull upwards.
- The armrests should be pressed together until the wheelchair is fully closed.



Operations Instructions

Occupant Control

- Occupant control (self propelled) wheelchairs only have handrims fitted on the outside of the rear wheels.
- By gripping the handrims and pushing or pulling round the handrim, the wheelchair can be propelled either forward or backwards.
- By pulling one wheel backwards and one wheel forwards using then handrims, the wheelchair can be turned around in a tight space. Check that there are no obstacles or people on the turning space before starting this procedure.
- Many pavements and roads slope towards the kerb and this cause the wheelchair to veer to one side. To counteract this it may be necessary to steer the wheelchair in the opposite direction.
- Avoiding uneven or soft ground and utilising drop kerbs whenever possible may make the journey more comfortable.
- The tyre grip of the wheelchair is affected by the surface over which the wheelchair is pushed. Therefore, extra care should be taken when weather conditions cause wet or icy surfaces.
- The lowest part of the footrest should be no closer than 65mm to the ground to permit proper clearance.



Attendant Pushing

- Do** make sure that the brakes are always on when the wheelchair is not being pushed.
- Do** make sure that both feet are safely on the footplates and that clothing is safely tucked in and cannot catch in the wheels.
- Do** use both hands on the push handles to control the chair.
- Do** look well ahead to avoid hazards (e.g. furniture, doors etc)
- Do** avoid steep and uneven surfaces because the chair may tip over.
- Do** try to achieve a smooth steady ride.
- Do not** turn too quickly.



- Do not** propel the wheelchair at speed in excess of normal walking pace.
- Do** keep in contact with the person in the wheelchair. If you stop to look in shop windows or talk to people; remember to turn the wheelchair so that the person in the wheelchair does not have to turn.
- Do not** hang items such as bags or rucksacks on the back of the push handles, as this can overload the wheelchair and affect the stability of the wheelchair – causing it to tip over.
- Do not** exceed the occupant weight limit for the wheelchair and do not carry more than one person.

Ensure that all parts of the user's body and clothing, including any rugs or blankets, are clear of the moving parts such as the wheels.

Reaching/bending forward or sideways movement

- Manoeuvre the wheelchair as close as possible to the object to be reached.
- Rotate both front casters fully forward.
- Engage wheel locks or brakes.

Reaching/bending backwards

- Do not engage wheel locks if weight shifts while reaching it is better to roll backwards than to tip over.
- Manoeuvre the wheelchair as close as possible to the object.
- Rotate both front casters fully forward.
- Reach only as far as your arm will extend without changing your sitting position, if in doubt reposition the wheelchair, use a device that will extend your reach without requiring you to shift your weight or ask for assistance.

Tilting

- Ensure handgrips are firmly attached and that they do not fall or slip off
- Make sure the wheelchair users feet are situated flat on the footplates and the arms hands and fingers are clear of the wheels.
- Advise the wheelchair user prior to commencing the manoeuvre so that they are not surprised by the sudden movement.

Getting down a kerb

- Where possible use a lowered part of the kerb.
- The wheelchair should be turned round so that the occupant's back is facing the road.
- The pusher should check that the road is clear before putting the wheelchair to the edge of the kerb.
- The pusher should step off the kerb and pull the back wheels off the kerb followed by the caster wheels.
- The pusher should then turn the wheelchair round so the occupant is facing the direction they are being pushed in.

Getting up a kerb

- The wheelchair footplates should be taken to the edge of the kerb.
- The pusher should hold the wheelchair push the handles firmly and tilt the chair back.
- The wheelchair should be pushed forward till the front of the rear wheels can touch the kerb.
- The front wheels should be lowered down on the path.
- With the handles held firmly the pusher should lift and push the wheelchair forward.

Pushing a wheelchair

- The occupant can usually tell the pusher how the wheelchair operates.
- The pusher must remember to put the brakes on and steady the chair before the occupant gets in and out, after lifting or swinging the footrests out of the way.

- The pusher should make sure that clothes, rugs, covers, etc do not catch in the wheels.
- The occupant should not be rushed during transferring or by the pusher walking too quickly. The pusher should tell the occupant before changing position, tipping the chair or altering the speed. The pusher must pay attention to the ground surface and avoid uneven ground where possible; the wheelchair should not be jolted or jarred.
- When stopping, the pusher should position the wheelchair so that the occupant can see and communicate as well as possible.
- The wheelchair should always be lifted by its frame and not by the armrests or footrests.
- The pusher should always avoid rocking the wheelchair like a pram.

Lifting a wheelchair into the boot of a car

- The folded wheelchair (with armrests and footrest detached, if possible) should be placed close to and parallel with the car boot.
- The person should grip convenient fixed parts of the wheelchair, one hand well forward and the other well back.
- Keeping their back straight the person should bend hips and knees, straighten their legs and lift up the wheelchair (vertically) and balance it on the edge of the boot.
- With the weight taken by the wheels resting on the edge of the boot, the wheelchair should be tilted towards the person; when nearly horizontal, it can be slid into the boot.
- If the car boot has more space at the back than at the front, the propelling wheels should be put in the boot first.

Getting a wheelchair down a steep slope

- It is safer for the attendant to take the wheelchair down backwards.
- The occupant may be able to help by controlling the wheels or the brakes.

Getting into a wheelchair independently

- The wheelchair should be pushed up against a wall or solid piece of furniture.
- The brakes should be on.
- The footplates should be hinged up
- The user can then lower him (her) self into the wheelchair.
- The footplates should then be pushed down and the feet rested on them in front of the heel loops.

Getting out of a wheelchair independently

- The brakes should be on.
- The hinged footplates should be hinged up.
- With one hand on each armrest, the person should bend slightly forward to bring the body weight to the front of the seat, and with both feet firmly on the ground, one foot well back, pushing up into the upright position.

Warning

When standing, feet must not be placed on the footplates or the wheelchair will tip up.

Sideways transfer

- The brakes should be on.
- The footplates should be hinged up or swung away and the feet placed firmly on the ground.
- The armrest on the transfer side must be removed, swung away or swung back.
- The user should bend slightly forward, with one hand placed on the bed/chair/ WC and the other hand on the wheelchair

Adaptive equipment checklist

Manual wheelchair	
Make of chair	
Model of chair	
Date purchased	
Chair provider	
Weight bearing limit (lbs)	
Wheel locks engage	<input type="checkbox"/>
Footrests present and in working order	<input type="checkbox"/>
Upholstery in good condition	<input type="checkbox"/>
Attaching hardware present and working	<input type="checkbox"/>
Seatbelt/restraining straps in good condition and being used properly	<input type="checkbox"/>
Wheels in good condition	<input type="checkbox"/>
Casters in good condition	<input type="checkbox"/>
Frame in good condition	<input type="checkbox"/>
Handgrips present	<input type="checkbox"/>
Handgrips firmly attach to chair	<input type="checkbox"/>
Chair folds properly	<input type="checkbox"/>
Removable arms come off for transfer	<input type="checkbox"/>
Evaluating leg rest lock in place when raised	<input type="checkbox"/>
Handrails attach securely to wheels	<input type="checkbox"/>
Handrails are free from loose chrome or rough areas	<input type="checkbox"/>
Chair has attachments to keep it from tipping	<input type="checkbox"/>
Keep tires inflated at proper pressure (see stamp on tire or read manual)	<input type="checkbox"/>
Pop of wheels lock securely in place on chair	<input type="checkbox"/>
Replace worn tires properly	<input type="checkbox"/>
Wheelchair is clean and in good condition	<input type="checkbox"/>
Hand rims inspected for rough or sharp edges	<input type="checkbox"/>

Power chairs	
Call caps are present	<input type="checkbox"/>
Battery connections are free from corrosion	<input type="checkbox"/>
Keep track of battery charge indicator so battery is fully charged (charge battery when gauge is at half or according to manufacturers recommendations)	<input type="checkbox"/>

Wheelchair lifts	
Always back the wheelchair onto the lift	<input type="checkbox"/>
Get as close to the back of the lift as possible	<input type="checkbox"/>
Do not stand on lift with wheelchair while lift is in motion	<input type="checkbox"/>
Lock brakes on a manual wheelchair	<input type="checkbox"/>
Turn off power on an electric wheelchair	<input type="checkbox"/>
Hit <u>unfold/deploy</u> to lower the lift all the way to the ground	<input type="checkbox"/>
Keep wheels of wheelchair off front lip or flap of lift	<input type="checkbox"/>
Back wheelchair into van and position it facing forward – to comply with the law, wheelchairs <u>must face forward</u>	<input type="checkbox"/>
Move straps on floor where needed	<input type="checkbox"/>
Position back straps first above axle, on back of chair – <u>do not crisscross straps</u>	<input type="checkbox"/>
Position front straps – best place is above the foot rest	<input type="checkbox"/>
Attach safety restraint lap belt across person and wheelchair – to comply with the law, <u>safety restraint lap belt must be used</u>, even though wheelchair has lap belt	<input type="checkbox"/>
Do a final check of all straps and safety restraints	<input type="checkbox"/>

Please check manufacturer’s guidelines for how often checks should be carried out.

Maintaining a wheelchair

Wheelchair allows mobility and activity. If equipment breaks down, it can be an inconvenience, a hardship, and may even put someone in danger. Keeping wheelchair operating and maintained by being knowledgeable about wheelchairs, taking care of problems before they can put the chair out of commission, and having a list of providers that can be used for repairs, parts and maintenance.

With innovative design and features, today's wheelchairs present fewer potential problem; however, you still need to be aware of and monitor common equipment failures. Regular maintenance can help extend the life of the wheelchair and reduce the number and cost of repairs. Regular service includes keeping the wheelchair clean, checking tires for wear and air pressure, tightening screws, and monitoring for worn out cushions, pads, positioning equipment, and other parts. Always follow manufacturer's guidelines and the service agreement with the service dealer.

All wheelchairs

Keeping wheelchairs clean will not only keep users healthy and free of infections, but it will make it easier to identify equipment problems as they arise. To keep wheelchairs clean, wipe down the surfaces with a damp cloths. Follow the manufacturer's guidelines and consult with manager on cleaning detergent to use. Clean the wheel axle or caster bearings of any accumulation of hair, string, or other items that can interfere with the rotation of the wheels. Check the frame for any cracks or breaks in the metal. Any potential problems need to be reported to the company who service it or the wheelchair dealer for repairs. The upholstery also should be monitored for cracks or tears the fabric folds or where there are screws through the fabric. Any problems related to fabric wear will need to be taken care of by the service dealer. If there is a seat cushion, check whether it is still providing the padding and support needed. Regular monitoring and maintenance can ensure that the wheelchair is operating safely. Wheel brakes need to be checked to be sure that they engage and release properly and do not rub against the tire. The wheel brakes need to operate in such a way that it can engage and release without having to use excessive force. Also the casters

(front wheels) can present a safety hazard when they are worn out. Check casters for cracks in the spokes that may eventually cause the caster to collapse.

Power wheelchairs

Power wheelchairs can usually be monitored by the users to ensure that moving parts are free of entanglements from wires and cords. Checks should ensure that all electrical connections are firmly in place and free from dirt and corrosion.

Batteries will last longer and perform better if they are kept charged. Keep track of the battery charge indicator and plug in the charger when the gauge shows less than half a charge. There are two types of batteries for wheelchairs – wet and gel. Always check the manufacturer's guidelines for the type of battery and the charging instructions.

For general inspection before use and for formal maintenance/service procedures always ensure that these are carried out in conjunction with the manufacturer's guidelines.