



## Wheelchair Maintenance Advice

Taking the time to check and upkeep your wheelchair will help to avoid breakdowns and extend the life of your wheelchair. How often you need to check your wheelchair depends on the make and model and it's type of use, different parts and models have greater wear and tear.

We've listed some of the areas that you are able to check and guidelines on how to deal with any difficulties that might occur during the normal course of wheelchair usage. Whilst many maintenance tasks can be carried out in your home, please do always refer to the user manual which has been issued with the wheelchair if you are in any doubt about how well your wheelchair is working.

# Which parts do I need to check?

## 1

## Tyres



### How often should I check my tyres?

#### **Weekly:** *Check tyre pressures*

- Use a pressure gauge to compare your actual tyre pressure against the correct pressure which will be shown on the side of the tyre. Under inflated tyres could increase wear & tear, stop your brakes from working and make your chair harder to push
- If your tyre is under inflated use a pump (electric or hand) to re-inflate.
- If you have a flat tyre then check that the valve is not leaking by inflating the tyre first and then putting washing up liquid on the valve to see bubbles appear.
- If they do not and if you are able, you can check if the tube is leaking - to do this inflate the tyre and hold it under water to see if bubbles appear.
- If you are not able to check, contact your local wheelchair service.
- If you see bubbles in either of the two scenarios, the tube needs replacing. To arrange a replacement please contact your local wheelchair service using the contact details on your regional page.

#### **Monthly:** *Check for general signs of wear and tear*

- Check specifically for splits, cracks, bulging and loss of tread.
- Tyres need replacing once they start to show signs of wear and tear – contact your local wheelchair service to arrange this.

## 2

## Wheel alignment



*Sometimes your wheels can come out of alignment and spokes can come loose which can cause your wheelchair to veer.*

### **How often should I check my wheels?**

**Weekly:** *Check for damage*

- Make sure your rims are straight, spokes intact and your wheels are parallel to each other.
- If there is any damage to your wheelchairs – contact your local wheelchair service.

## 3

## Axles



*They should slide smoothly through the axle housing and 'click' into place. They should not catch, move excessively side-to-side or squeal.*

### **How often should I check my axles?**

**Weekly:** *Checked and cleaned*

- They should be checked and cleaned weekly to keep them free from dirt, mud and hair.
- Clean the axle housing and around the bearings, then lubricate with oil (AX90, WD40 or any penetrating lubricants. **DO NOT USE 3:1 oil**).
- If you are still experiencing difficulties with your axles then contact your local wheelchair service.

## 4

### Brakes



*Brakes can become worn over time, become loose or get damaged.*

#### **How often should I check my brakes?**

**Daily:** *Check*

- Check your brakes daily – after all they’re important to you.
- It’s a simple check – apply the brakes and check the tyres are held firmly in place and the brakes are easy to put on/off.
- Check that they are complete with all parts correct and that they are not excessively worn.
- When checking the brakes – release them and make sure they do not rub against the tyre when pushing.
- If you do have difficulties you can tighten the bracket so that the brakes are held firmly to the frame and in the correct position. If this does not resolve your difficulties then please contact your local wheelchair service.

## 5

### Nuts and bolts



*Can become loose and potentially lost if not tightened regularly.*

#### **How often should I check my nuts and bolts?**

**Monthly**

- Check regularly that they’re all present and make sure that they are secure.
- If you are missing any then please contact your wheelchair service to arrange a repair appointment.
- For any loose nuts or bolts tighten to hand tight or as specified in your wheelchair user manual, If you’re unsure contact your local wheelchair service.

## 6

### Casters



*They should run smoothly but they are susceptible to picking up dirt.*

#### **How often should I check my casters?**

**Weekly:** *Checked and cleaned*

- As with axles, they should be checked and cleaned weekly. If you are experiencing difficulties then make sure that the caster forks are running freely and are not bent.

## 7

### Leg and arm rests



*If it's appropriate to your wheelchair, all leg and arm rests should be easily removed, easily swung away and replaced or repositioned easily.*

#### **How often should I check my leg and arm rests?**

**Every time you use your wheelchair**

- Check them every time you use your wheelchair – if something isn't right and parts aren't locking, try lubricating. If this isn't successful please contact your local wheelchair service local wheelchair service.

## 8

### Wheelchair frame



*If your frame is damaged then your safety is at RISK. If they are any cracks, large dents, splits or moving parts aren't running smoothly – DO NOT USE your wheelchair and contact your local wheelchair service immediately.*

# Using your chair



## Getting in and out of your chair

Your remaining level of mobility may dictate how you get in and out of the chair and which features you may need as part of the chair. If you can still walk short distances and can stand up and sit down, you will be able to manage getting in and out of the chair without assistance.

**REMEMBER** – however you transfer, you must ensure that you put the wheelchair brakes on before you get in or out of the chair.

Most chairs have removable armrests which may be useful to you if you slide transfer – perhaps when moving to and from a car or the bed.

Every chair will have footplates which either swivel or flip up out of the way. It is important that you take the time to move the footplates out of the way before you get in or out of the chair. If not, they become a trip hazard or you run the risk of tipping the chair should you put your whole weight upon them.

If you require a hoist to be transferred in and out of the chair, you need to ensure that your hoist and the chair that you choose will work together. The base of the hoist will need to span the overall width of the chair - or be able to move underneath it - getting close enough to correctly position you into the seat.

## Manual wheelchairs: Propelling the chair

- Manual wheelchairs can be either self-propelled or attendant-propelled.
- Self-propelled chairs require the user to use their upper limb, body and grip strength to move the wheelchair, usually by grasping the wheel rims and moving the wheel, and thereby the chair, in the chosen direction. There are alternative ways

of propelling a chair which are described below.

- Attendant-propelled chairs require another person to push the chair from behind, using handles at the rear of the back support. If you are obtaining an attendant-propelled chair, ensure your carer is fit and strong enough to push the chair and manage obstacles such as kerbs.
- Self-propelled chairs have large rear wheels for the user to grasp and push. Attendant-propelled chairs have much smaller rear wheels. This means that the self-propelled chairs tend to give a smoother ride as the large rear wheels better span lumps and bumps in the road/floor surface. If you are privately buying or renting a chair, you may wish to consider this, irrespective of who will propel the chair.

## Propelling the chair

### Double hand rim



This is designed for people who only have the use of one arm/hand. It has both hand rims on the same side of the wheelchair, but controls the rear wheels on both sides. The inner hand rim is connected to the far wheel by way of a bar or scissor mechanism between the hand rim and the wheel.

When propelling the wheelchair in a straight line, the user grips both hand rims in one hand equally and pushes or pulls the hand rims in the direction they wish to travel. To turn the wheelchair, the user will push or pull on one rim more than the other. Double hand rim controls require good grip, hand strength and dexterity.

### Lever drive systems



This has a lever attached at the front of the chair, with linkages to the rear wheel. The user 'pumps' the lever back and forward to drive the chair. This is attached to the forward, neutral and reverse settings. To steer, the user turns the lever in the direction that they wish to travel.

The user requires grip and the physical stamina to pump the lever, along with the ability to consider steering and pumping at the same time.

A single lever can be used by someone with the use of only one arm/hand. A dual level drive system is available. The user pushes and pulls each side alternately. It requires significant strength and stamina.



### Using your foot to propel the chair

Some people choose to propel themselves in the chair by using their feet, or one foot, to scoot across the floor surface, whilst using the wheel rims to assist with steering. This can work for those who have good leg and foot strength and perhaps have less pushing strength in their upper limbs.

If you choose to self-propel with your feet, you will require a chair with a lower seat so that you feet fully reach the floor. You may also benefit from a lap strap or harness to keep you safely in the chair.



### Training and safety

Most people can instinctively manoeuvre a manual wheelchair in a simple way, but some people can find it difficult. It is worth practicing propelling and turning techniques, getting over obstacles, tackling kerbs and thresholds etc in a safe environment before venturing outside.

Some statutory wheelchair services will provide basic training upon provision of a chair.

There are also a number of commercial companies or support organizations which provide fuller training, for example Backup Trust, the spinal injuries charity, provide group training to both a basic and more advanced level. More information is on their website: [www.backuptrust.org.uk/](http://www.backuptrust.org.uk/)

### Getting your chair into a car

Most manual wheelchairs are able to fit into a car, enabling you to take it with you when you travel. Your chair may have a folding frame, with a fold down backrest, removable footrests etc, or it may have a rigid frame, but with removable wheels.



The chairs are heavy to lift, so there are a range of options for getting them into a vehicle, including ramps, lifts and hoists.

Rica have produced some information on getting a wheelchair into a car. They also have a search facility to identify the best cars for wheelchair users.

Information can be found here: [www.ridc.org.uk/content/wheelchair-accessible-vehicles-ways](http://www.ridc.org.uk/content/wheelchair-accessible-vehicles-ways)



## Travelling

If you can transfer out of your wheelchair and into a vehicle seat (with or without assistance) you should do so. This is the safest way to travel:

- You should transfer to vehicle seats whenever possible
- You should not travel with the wheelchair at an angle or facing sideways
- There should be enough free space around the wheelchair and user to avoid the user making contact with other people in the vehicle; unpadded parts of the vehicle, wheelchair accessories or wheelchairs and their tie down and occupant restraint systems (WTORS) anchor points.
- Wheelchairs should not block gangway and exits for other passengers in the vehicle.
- A headrest should be provided for a wheelchair user when travelling in a vehicle in a wheelchair. When correctly fitted, a headrest will restrict rearward movement of the head during vehicle motion or impact (whiplash).