



# Disability Services

## Information Sheet

### Equipment Maintenance

Keeping equipment properly maintained is very important to ensure the safety of the user, as well as to get the best life out of the piece of equipment.

More often than not, maintenance is only an afterthought when buying equipment; however, consideration of maintenance at the time of purchase may even help to guide your choice of the most appropriate item.

Some points to consider are:

- ▶ What ongoing maintenance is required?
- ▶ Who is going to be responsible for keeping a track of, and organising, the maintenance?
- ▶ Who is going to perform the maintenance? Some tasks may be able to be done by the user or their carer; some may need to be done by the equipment supplier or a recognised technician.
- ▶ How much is the maintenance going to cost?

It should be noted that the following information has been prepared to give a general guide and overview of maintenance requirements for different types of equipment. Any written information that is provided with a specific item of equipment (for example, a user manual) should always take precedence over the information below.

### General Principles

- ▶ **Use equipment only for its intended purpose.** Using equipment in a manner that it was not designed for may place more stress on certain parts and increase the likelihood of equipment failure and injury. It is important to keep in mind the load (weight) capacity.
- ▶ **Store equipment in a location that is dry and out of direct sunlight.** Exposure to direct sunlight can make many materials deteriorate quicker and become more prone to splitting or breaking.
- ▶ **Become familiar with the equipment.** Read through the manual or any instructions that come with the equipment. Familiarise yourself with the parts and any preventative maintenance that may be required.
- ▶ **Set aside time.** Set aside some time on a regular basis to check over equipment and carry out any preventative maintenance required. Make it part of a routine to ensure that your equipment is in good working order.



## What should be checked?

### Wheels and castors

- ▶ Make sure that pneumatic (air-filled) tyres are pumped up to the pressure specified on the wheels. Under-inflated tyres will make the object harder to push. They may also cause premature tyre wear.
- ▶ Check tyres and castors for any cracks, splits or excess wearing of the tyre tread as this may indicate that the tyre/castor needs replacing.
- ▶ Check that the wheels and castors are secure in their housings. If there is unusual sideways movement or wobble this may indicate that mountings may need tightening or that bearings may need replacing.
- ▶ Check that axles are free of hair, dirt, and fluff. Build up of foreign material around axles will make it harder for the wheels to move.

### Frames

- ▶ Check the equipment frame for signs of cracks and/or rust, which may indicate weakness in the frame. If any of these signs are noticed, contact the equipment supplier immediately. In some instances, if these signs are picked up early, the equipment might be able to be repaired.
- ▶ Wipe the frame over regularly with a soft, damp cloth. Keeping the frame free of the build up of dust, dirt, soap scum (for equipment used in the bathroom), or other matter will help to maintain the finish on the equipment and the longevity of the frame.

### Brakes

- ▶ Check that brakes are in good working order. When a brake is applied to a wheel, the wheel should not move. If the wheel does move, the brake may need adjusting. This should be done by someone who knows exactly what they are doing.
- ▶ Brakes that do not hold properly on wheelchairs and other equipment with pneumatic tyres may indicate that the tyre is not inflated correctly—check the tyre has been inflated to the correct pressure first.

### Upholstery

- ▶ Check for cracks and tears in upholstery. Damaged upholstery can cause abrasion or injury to the user's skin. It can also let moisture in to the foam underneath, which will make the foam deteriorate more quickly. Upholstery may be temporarily repaired with tape until it is professionally repaired or replaced.
- ▶ Slung upholstery on wheelchairs will stretch and sag over time. This can cause posture and comfort problems. On some wheelchairs it may be possible to tighten the upholstery, whereas on others it may need to be replaced.

### Motorised equipment

- ▶ Batteries will need recharging. Check manufacturer instructions. However, as a general rule, with power wheelchairs, mobility scooters, and hoists (person-lifting devices), batteries should be charged as often as possible.

Waiting until they are almost or completely discharged will shorten their lifespan.

- ▶ Only use the battery charger that is supplied with the particular item of equipment.
- ▶ Check cords and plugs for cuts, breaks and exposed wires.
- ▶ Listen for unusual noises from motors and gearboxes. This can indicate that parts are getting worn out and require servicing and or replacing. Regular servicing (recommended at least once a year) can keep items in the best working order and minimise long-term maintenance costs.

### **Stoppers/ferrules**

(found on the bottom of walking sticks/frames, shower chairs/stools)

- ▶ Check stoppers for wear. Stoppers that are worn through will not provide the desired grip and can become unsafe.
- ▶ Stoppers and ferrules can be easily replaced but it is essential that the correct size is used. It should fit securely, without rotating on the frame.

### **Adjustable height/width equipment**

- ▶ Check adjustment points to make sure that they are secure so that the equipment does not move unexpectedly during use.
- ▶ Some equipment relies on adjustable brackets to keep it fixed in place, such as bath boards and some toilet seat raisers. It is important to check these regularly to ensure that the brackets are fastened tightly and that the equipment is held in place securely.

### **Equipment for transfers and lifting**

- ▶ For slings, hoists and manual handling straps:
  - Check for wear of material such as fraying of edges or stitching coming undone.
  - Check for any fraying or breaks in the points that are used to attach a sling to a hoist.
  - Check hoists at the points the sling attaches and other pivot points on the hoist for loose or wobbly fittings.

If there is any indication of wear, cease using the equipment immediately and have it repaired or replaced.

- ▶ For rails and poles that are used for transfers:
  - Check for any unusual kinks or bends.
  - Check that they do not rotate in their fittings.
  - Check for signs of rust, both on the rail or pole as well as its fixing points.
  - Check that the rail or pole is securely in place. For bed sticks and poles, the upright should be firmly against the mattress with no gap.

## Cushions

- ▶ Monitor all cushions for signs of ‘bottoming out’—this is when the user sinks all the way through the cushion and is essentially resting on the surface below the cushion.
- ▶ Wash covers regularly.
- ▶ For foam cushions:
  - Minimise exposure to moisture and direct sunlight. Exposure to these factors will cause foam to deteriorate much quicker.
  - Check that foam bounces back to its original shape. Foam should ‘give’ when pressed on, and bounce back when the pressure is released (some foams bounce back slowly, but should still bounce back). When foam can no longer be compressed and bounce back, the foam needs replacing.
- ▶ For gel and fluid cushions:
  - Check for punctures and leaks.
  - Fluid cushions should have the fluid kneaded back into place before sitting on to minimise the chance of ‘bottoming out’.
  - For air-filled cushions check the inflation regularly to make sure that the user is not bottoming out and that there are no punctures. Punctures may be able to be repaired.

## Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre. The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

Independent Living Centre  
11 Blacks Road  
Gilles Plains SA 5086

Phone: 1300 885 886 (SA & NT callers only) or 8266 5260

Fax: 8266 5263

Email: [ilcsa@dfc.sa.gov.au](mailto:ilcsa@dfc.sa.gov.au)

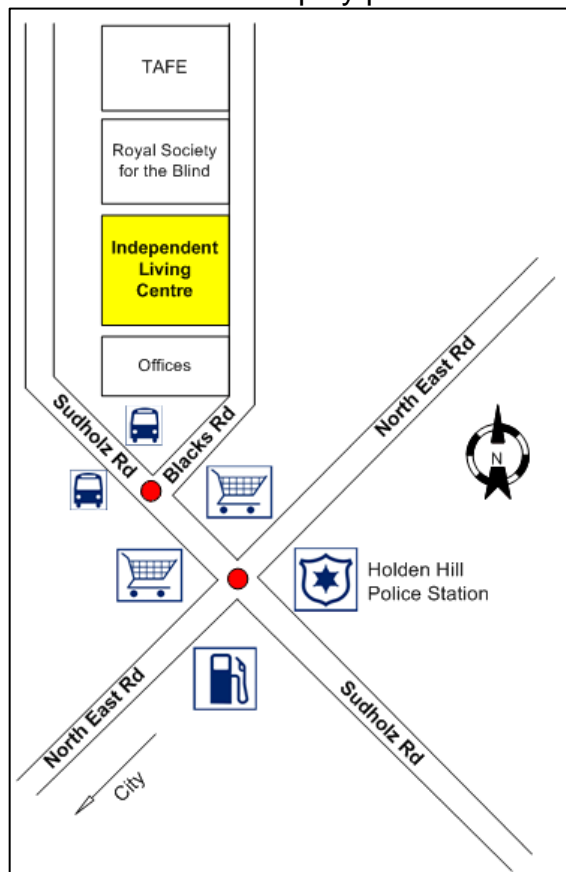
Website: [www.sa.gov.au/disability/ilc](http://www.sa.gov.au/disability/ilc)

Accessible off street parking is available.

Bus routes:

From the city T500/T501 or  
207/208 to Stop 28 Sudholz Road

Timetable information: 8210 1000



Copies of this publication are available from the Disability Information Service

Tel: 1300 786 117 Email: [disabilityinfo@dfc.sa.gov.au](mailto:disabilityinfo@dfc.sa.gov.au) Website: [www.sa.gov.au/disability](http://www.sa.gov.au/disability) Version: July 2011



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