



# Disability Services

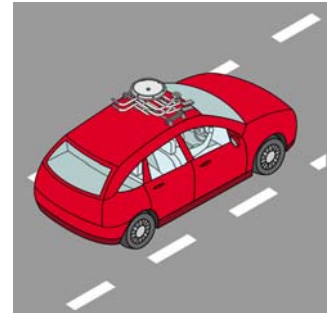
## Information Sheet

### Wheelchairs or Scooters: transportation of equipment

#### Selection

Many people use wheelchairs and scooters (gophers) for assistance with mobility in their local community. Sometimes it is necessary to transport these to another location. Determining the best method of transporting a wheelchair or scooter in a vehicle can be challenging and several factors should be considered, including:

- ▶ Whether the user needs to remain seated on their mobility device, or if they are able to transfer to a vehicle seat.
- ▶ The type, style and weight of the wheelchair (powered, manual, paediatric, folding, fixed-frame, push-transit, self-propelling) or scooter (folding, three wheels, four wheels).
- ▶ The type and size of vehicle (car, van, minivan, hatchback, utility).
- ▶ The ability of the user or carer to handle the mobility device and load it into a vehicle for transportation.



There are several methods to store a wheelchair or scooter in a vehicle if the user is able to transfer into the vehicle separately from their mobility device. These include ramps, hoists, trailers, lifters and carriers.

#### Ramps

Ramps may assist with loading and unloading wheelchairs or scooters into the boot of a vehicle, reducing the need for excessive bending or lifting. When choosing a ramp it is important to consider:

- ▶ Style of the ramp—platform or track. Ramps can be purchased in single width platforms or two separate track components designed to suit a range of three or four -heeled mobility devices. A track style ramp can be easier to store but may be more difficult to negotiate when loading/unloading and would not be suitable for three-wheeled scooters. A platform style ramp will suit a variety of wheelchairs and scooters but can be quite heavy to lift. Some platform ramps may be folded for storage.
- ▶ Fixture of the ramp to a vehicle surface while the mobility equipment is being loaded/unloaded—portable/freestanding, mounted to the vehicle.
- ▶ Weight of the ramp and ease of use—can the user or carer lift it in/out of the vehicle, set it up and fold it away?
- ▶ Load capacity of the ramp—will it hold the weight of the mobility aid?

- ▶ Required length of the ramp to ensure a manageable slope—need to balance a manageable ramp length and weight with a safe ramp gradient.
- ▶ The width of the ramp compared to the width of the scooter or wheelchair.
- ▶ Whether edge barriers are required for safety purposes.
- ▶ Surface of the ramp—is it slip resistant?
- ▶ Storage space for the ramp, particularly once the mobility aid is in the vehicle. Some ramps are stowed in the vehicle; others attach to a tow bar and fold up when not in use. Generally a station wagon or van is the most suitable vehicle to accommodate a portable ramp.
- ▶ Anchor points for the ramp while stored in the vehicle—is a cargo barrier required for safety reasons?

## Hoists and platform lifters

Hoists and platform lifters require less manual handling than portable ramps or tow bar mounted carriers but are usually a lot more expensive. There are two main styles of hoist designed to lift wheelchairs and scooters onto or into a vehicle:

- ▶ **Boot-mounted hoists:** are usually fixed to the floor of a vehicle boot and may be powered by the vehicle battery. A push button control switch activates a boom/lifting arm that extends out from the vehicle, attaches to the scooter or wheelchair via a hook or strap mechanism, lifts the mobility device up and swings it into the boot or tray of the vehicle. Things to consider when purchasing include:
  - Whether the scooter seat will need to be removed, or the overall height of the wheelchair or scooter reduced, to fit into the rear of the vehicle.
  - Is there a locking mechanism for the hoist boom when it is not in use?
  - How much room will the hoist take up in the boot?
  - Some of the hoists are customised to lift specific brands, sizes and weights of wheelchairs and scooters and are not recommended to lift equipment of different specifications.
  - What sort of modifications must be done to the vehicle to affix the hoist—will holes need to be drilled into the boot?
- ▶ **Roof-mounted hoists:** also use a boom arm to raise and lower a manual wheelchair onto the roof of a vehicle. Some models may allow the wheelchair user to independently load and unload their wheelchair from the vehicle seat. When selecting a model it is important to consider:
  - Protection of the wheelchair in bad weather—some have the option of a weather-proof cover to protect the wheelchair.
  - The vehicle the hoist is being installed onto—what modifications are required, will the stability and performance of the car be impacted, is the roof strong enough to hold the load, and is the load strapped securely, particularly in the event of rapid braking? Owners of the vehicle may need to seek advice from their insurance company in regards to the coverage provided in the event of an accident.
  - Is there additional noise created by the load—does it rattle around?
  - Is there any impact from the additional height?

- ▶ **Platform lifters:** consist of an external platform that electrically lowers flat to the ground to load and then raise a wheelchair or scooter into a vehicle. These are usually used for larger coaches, vans, buses or minibuses. They can sometimes also be fitted to some minivans, high roof station wagons and utility vehicles. Platform lifters are expensive and are often used in situations where the user must remain seated on their wheelchair during transport. Due to construction designs of scooter seats and the effect on safety in high impact collisions, it is advisable that scooter users do not remain seated on their equipment while being transported in a vehicle. For further information on transporting a user on their mobility device, see our Information Sheet *Wheelchairs or Scooters: Transporting Passengers in Vehicles*

## Towbar-mounted stowing devices

Other options for transporting wheelchairs and scooters include towbar-mounted stowing devices, such as carriers and trailers.

- ▶ **Wheelchair carriers:** attach to the tow bar of a vehicle and are designed to carry a folded manual wheelchair. Some have a fold down ramp to eliminate lifting, while others require small amounts of manual handling to lift the wheelchair in place. Factors to consider when choosing a carrier include:
  - The extra length it adds to the vehicle when parking and driving.
  - The ease of removal of the device—is lifting required to place the wheelchair onto the carrier, or is there a ramp component to wheel it in? Can the user utilise leverage rather than lifting?
  - Protection of the wheelchair in bad weather.
  - The load capacity of the tow bar.
  - The visibility of the vehicle number plate, lights and turn indicators.
  - Access to the boot.
  - Protection of the wheelchair against theft.
  - Suitable restraint of the wheelchair while the vehicle is in transit.
  - Type and size of wheelchair – is the carrier designed to accommodate a push/transit, self-propelling or children’s wheelchair?
- ▶ **Scooter trailers:** also attach to a vehicle tow bar and usually feature a small fold down ramp to manoeuvre a scooter or powered wheelchair into the trailer. Things to consider include:
  - Visibility of the vehicle number plate, lights and turn indicators.
  - Access to the boot.
  - Protection against theft and weather. Some trailers are fully enclosed with roof protection and a lockable door.
  - Suitable restraint of the scooter or wheelchair while the vehicle is in transit.
  - Load capacity of the towbar.
  - Australian road laws and regulations—does the trailer need to be registered?

## Vehicle boot usage

Some powered wheelchairs and scooters can be dismantled or folded for transport; however, these may still be heavy and difficult to lift.

If lifting a wheelchair or dismantled scooter directly into the boot of a vehicle there are a number of options to consider:

- ▶ Covering the boot opening with a rug or sheet to protect the vehicle and allow the mobility device to slide into the boot more easily. Commercial 'boot sliders' are available which use slippery nylon sheets to help slide a wheelchair into a vehicle boot with minimal lifting.
- ▶ Unoccupied wheelchairs and scooters, along with other loose accessories, must be secured within the vehicle to stop them becoming projectiles in a vehicle impact. A cargo barrier is recommended for station wagons.

## Other factors to consider

- ▶ Are there any legal requirements or obligations for modifications made to a vehicle for the purpose of transporting a wheelchair or scooter? In South Australia some modifications to a vehicle must be assessed for engineering safety and approved by a vehicle inspection officer. A certificate and official dispensation will then be issued.
- ▶ Has the vehicle insurer been notified of any proposed changes to ensure that the vehicle insurance policy is accurate?
- ▶ Does the equipment meet Australian Standards?

It is important to dedicate time for planning and researching transport equipment and modifications to vehicles to ensure the most suitable options are used.

## 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

