

## A brief glimpse into purchasing a wheelchair accessible vehicle

In the world of disability, often the hardest part is to find your way ‘through the maze’ of suppliers, funders, medical professionals and well meaning people with a variety of opinions. It does pay to be well connected, especially to the internet that opens up worlds of possibilities and opportunities!

In the process of applying for an updated and larger version of a powered wheelchair for my son Daniel, we stumbled upon the fact that all powered wheelchair bases are now delivered to us from a minimum floor to seat height of 44.5 cm, around 5-10cm taller than any current version. Daniel’s head was already almost scraping the entry to our current vehicle, so entry in a new wheelchair was going to be impossible! The hunt for a new vehicle was on and ploughing through the maze, the resulting information may be of value to others in a similar situation.

### Types of vehicles that suit modification

There is a big difference in width and height between a manual wheelchair and a powered wheelchair. Manual wheelchairs sit much lower to the ground, so entry height is not as much an issue as it is for powered wheelchairs that are higher due to the battery being under the seat. The lowest floor to seat height powered wheelchair is the Permobil range of M300’s.

#### Larger vans, suitable for powered/manual wheelchairs:

- Volkswagen Transporter
- Mercedes Vito/Sprinter
- Kia Carnival
- Toyota Hiace



Pro	Con
<b>Up to 5 passengers</b>	Higher fuel consumption
<b>Extra room for additional equipment</b>	High roof, not good in garages
<b>Can carry &gt;1 wheelchair</b>	More expensive than smaller car

#### Smaller vans, suitable for powered/manual wheelchairs:

- Volkswagen Caddy
- Renault Kangoo
- Peugeot Partner
- Holden Combi
- Citroen Berlingo



Pro	Con
<b>Up to 5 passengers</b>	Not as much extra room for additional equipment
<b>Great fuel consumption</b>	Can only fit one wheelchair
<b>Less expensive than larger van</b>	
<b>Full access to most undercover garages</b>	

#### Cars, suitable only for manual wheelchairs:

- Toyota Rukus
- Kia Soul
- Holden Zafira



Pro	Con
Small car, smaller footprint	Only room for max 3 incl. wheelchair
Better petrol consumption	No room for extra equipment
Aesthetically appealing to some	Restricted headspace for taller users, restricted to manual wheelchairs

## Types and suppliers of modifications/conversions

*Different approaches to providing wheelchair access into a vehicle are:*

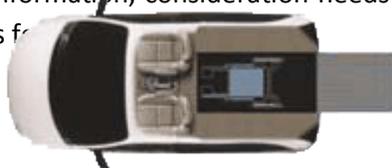
1. Lowering the vehicle floor
2. And /or raising the roof line
3. Raising the door entry height
4. Power lifter (under floor, rear internal, rear external)
5. Extending the vehicle overhang

*When considering what type of modification you want to your vehicle, take in account the following:*

- Do you want rear entry or side entry?
- How much are you willing to spend?
- Consider the weight added to your vehicle, if you are using the vehicle for personal use without the wheelchair, it may be worth just carrying a manual ramp to keep the constant weight down and this in turn will curb your fuel cost!
- What is the minimum access entry height-measured from floor to top of head and add 3 cms
- What size is the wheelchair and will it fit a specified design?
- How many extra seats are needed in the vehicle for other family members/friends?
- What position would the wheelchair like to be in-next to the driver, first row or behind the first row?
- What care needs to be provided while travelling - consider positioning of wheelchair
- How comfortable will the ride be - again related to positioning
- What is the visibility from the wheelchair position? A lot of vehicles that do not have a lowered floor can push the wheelchair occupant's head up higher and restrict their vision through the front and side windows
- Can the vehicle still fit into my garage?!
- How will the wheelchair be restrained? There are so many types of restraints available, from a Freedom lock or Permalock for Permobil chairs that just click into place once wheelchair locks in, to a ratchet system (old!), to an electric system with retractable restraints (Flash-cab) to the Q-strait

Once you have gathered this information, consideration needs to be given to available internal **car designs**. The most popular ones for

### *Family Member Design*

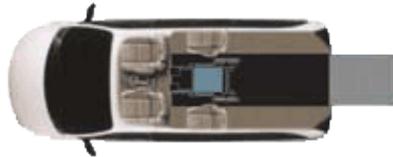


This design is ideal for people who do not need to travel with a family. The wheelchair can roll up to the back of the driver / passenger seats.

## Seating

- 2 passengers + 1 wheelchair access
- 4 passengers (with optional double fold down seat)

### *Family Design*



This design is ideal for situations where the wheelchair occupant wants or must be close to the driver or passenger's position. The wheelchair can roll through the middle of the vehicle and fits in between the two single modified bucket seats.

## Seating

- 4 passengers + 1 wheelchair access
- 6 passengers (with optional double fold down seat)

### *Passenger Design*

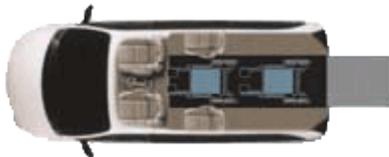


This design places the wheelchair occupant behind the second row seats.

## Seating

- 4 passengers + 1 wheelchair access
- 6 passengers (with optional double fold down seat)
- 5 passengers + 1 wheelchair access
- 7 passengers (with optional double fold down seat)

### *Two Wheelchair Access Design*



This design is ideal for smaller organisations where the transportation of a second wheelchair occupant may occur on a regular basis. This design is only possible with the larger van type vehicles. Also seating arrangements for other passengers are very flexible.

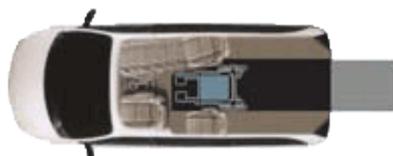
### *Front Row Design*



This design places the wheelchair occupant all the way to the front of the vehicle next to the driver without having to move from the wheelchair. This design gives you the freedom to virtually position the wheelchair and yourself anywhere in the vehicle.

## Seating

- 2 passengers + 1 wheelchair access
- 4 passengers (with optional double fold down seat)



### Self Drive Design

This design is ideal for a situation where both the wheelchair occupant and other persons will be driving the wheelchair accessible vehicle.



### Wheelchair Drive Design

This design is ideal for wheelchair occupants who have trouble transferring to a driver seat but still want the freedom to drive a vehicle. This design allows the wheelchair occupant to ride the wheelchair to the driver's position.



Next step is to compare what the suppliers have to offer and whether it fits what your needs and budget are. Here follows a listing of suppliers that have proven popular and reputable. All wheelchair modifications to any vehicle have to comply with Australian Disability standards and come with an Engineer's Certificate.

1. Freedom Motors Australia, St Mary's NSW [www.freedommotorsaustralia.com.au](http://www.freedommotorsaustralia.com.au)

Converting standard vehicles into wheelchair accessible vehicles since 1997 and carry out all types of wheelchair conversions on Australia's largest range of models to create wheelchair cars and vans. Conversion consists of straight in and out entry with easy rear fold down ramp wheelchair conversions and lowered central flooring.

2. Automobility, Chatswood NSW [www.automobility.com.au](http://www.automobility.com.au)

Converting Kia Grand Carnival and Volkswagen Transporter into rear entry, drop floor conversion with manual ramp. Will do family design, front row and self-drive design.

3. Right Price Conversions, Wollie Creek NSW [www.rightpriceconversions.com.au](http://www.rightpriceconversions.com.au)

RPC provide the most cost effective (<\$20K) and reliable conversion service in Australia since 2004. Conversion consists of a section of the floor in the vehicle being removed in the rear centre of the vehicle. A well section made from a steel sheet is welded into the vehicle to provide access for a wheelchair from the rear and this whole ramp is electronically lifted into place. Only done in passenger design with a Kia Carnival or Toyota Tarago .

4. Fleetworks Mobility, Central Park VIC [www.fleetworks.com.au](http://www.fleetworks.com.au)

Provides a 'one-stop-shop' for mobility matters. Fleetworks Mobility services include:

- Help with specifying the most appropriate mobility vehicle for your needs
- Purchase of new or used vehicles, converted or not
- Assisting with disposal of your present car
- Co-coordinating vehicle modification work
- Assisting with ramps and portable equipment
- After sales support for vehicles supplied by Fleetworks Mobility



5. Mobility Engineering, Asquith NSW [www.mobilityengineering.com.au](http://www.mobilityengineering.com.au)

ME provide a drop floor with ramp conversion to smaller and larger vans in all designs. In business since 1998

6. Capital Special Vehicles, Dandenong VIC [www.csv.com.au](http://www.csv.com.au)

All types of access through lowered floor or side entry ramp conversions to small cars and larger vans, since 1991

7. Flashcab Australia, Arundel QLD [www.flashcab.com.au](http://www.flashcab.com.au)

Manufacturing wheelchair accessible vehicles since 1991, initially just for taxis, now into the private market and very reasonably priced! Drop floor rear entry conversion in family or passenger design available and specialises in small and larger vans

8. PME Autoconversions, [www.pmeautoconversions.com.au](http://www.pmeautoconversions.com.au)

One of many companies that install rear or side lifts for wheelchair or scooter entry

### International market

While browsing through the web, I came across some fantastic cars in Great Britain that could possibly be imported to Australia. This is no easy matter, firstly because it is a little hard to test drive, but most of all because any cars made after 1989, unless they are on a specific list of allowable cars, cannot be imported to Australia. They do this to protect the Australian car market, as most cars in Europe at present have very favourable prices! The only way you can import a car into Australia is if you have owned your personal vehicle for a minimum of a year in the country that you are exporting it from. Say no more. If you can be bothered, and I would stick to the U.K .as it is left hand drive (!), here are a few websites to have a drool over:

[www.alliedmobility.com](http://www.alliedmobility.com)

Peugeot Horizon



[www.southernmobilityvehicles.com](http://www.southernmobilityvehicles.com)

[www.brotherwood.com](http://www.brotherwood.com)



Fiat Multipla

### Funding possibilities

The only known state run funding scheme is the Vehicle Modification Subsidy Scheme, only available to Victorians. For all other Australians any type of fundraising is done through appeals and foundations. The Variety Club of N.S.W. is currently funding up to \$10K per eligible applicant for a wheelchair modification. Other than this, appeals can be made to the local Rotary clubs, The Shane Warne Foundation, the Steve Waugh Foundation, the *Igiveabuck* organisation or countless others you could

approach. Some foundations only fund certain types of equipment to certain types of disabilities so it is wise to check your eligibility before you start on the endless paperwork!

### **New or second hand?**

Ball park figure for any wheelchair conversion lies between \$20-30K. The only known funding that requires a brand new installation of the modification to the vehicle is the Variety Club, otherwise there is a huge market in used Disability Access cars. Buying second hand incorporates the modification and is often less expensive than buying a new or second hand car and then having it converted. The only minus is that it is not custom made to suit your requirements.

Here are some websites you could use to browse the second hand market in wheelchair accessible vehicles:

[www.paraquad.org.au/classifieds](http://www.paraquad.org.au/classifieds)

[www.carsales.com.au](http://www.carsales.com.au) type in keyword Disability Access

[www.e-bility.com/classifieds/vehicles](http://www.e-bility.com/classifieds/vehicles)

All above mentioned suppliers also sell second hand modified vehicles, so please check them out as well.

### **Checklist/Summary**



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Mother of Daniel, Ben and Jesse