

# Car controls



**The information contained in this guide is correct at the time of going to print (June 2012). It will be reviewed every two years. See our website for any changes since printing.**

**Ricability is a charity that researches and publishes independent information on products and services for older and disabled people.**

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# Car controls

## A guide for older and disabled people

This guide is for drivers who need to adapt the controls in their car. It will give you a starting point to think about what type of adaptation you might need and help you explore what is possible.

There's a very wide range of adaptations available, so almost anyone can adapt a car to meet their needs. Adaptations range from very simple bolt-on attachments to the replacement of all the driving controls with a system individually designed for you. As long as you have enough controllable movement in any part of your body, the controls can be adapted to take advantage of it.

This guide gives a run down on the main types of control you can get and gives information on how you go about getting them. We cannot tell you what is best for you, since everyone is different, so we point you towards sources of expert advice and tells you where you can get an assessment of your abilities. We also tell you where you may be able to get help towards the cost of equipment and list UK equipment suppliers and organisations who have useful services.

Advice in this booklet comes from consultation with disabled people and other experts. Information about products, including price information comes from our market research - use it as a guide only and shop around for the best price.

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 **Note:** This guide does not list all the companies that sell and fit adaptations to vehicles. To find a local company to advise you on suitable equipment, and fit it for you, you need to ask the relevant supplier (see page 35) or see our *Mobility address list* (see page 43), which lists all suppliers and installers and is available in print and on our website - [www.ricability.org.uk](http://www.ricability.org.uk).

# The first steps

You need to think about your abilities, your choice of car and the controls you need to adapt. Whether you are adapting an existing car or buying a car to adapt, take time to gather all the information you can

## Your abilities

If you have driven before, think about how your disability has affected you to get an idea of the effect on your ability to drive and which controls you will need to adapt.

If you haven't driven before, just sitting in a car seat and trying the various controls will give you an idea of what you can do and what you will have to adapt.

In any case, you are likely to need personalised advice from an expert to make sure you get the right solution. Adaptation companies and equipment suppliers will advise on their own equipment but for an independent and professional assessment you should go to an accredited Mobility Centre (see pages 38-40 for details). They have expert knowledge and are independent – none of them has any interest in any particular company. They are also likely to have come across people with similar requirements to yours.

If you are in any doubt about whether you can drive, the Mobility Centre will carry out an assessment to see if you can and find out what equipment may suit you. If you know you can drive, they will help you decide what controls may suit you and allow you to get the feel of them before committing yourself. Some of the bigger centres have a range you can try out

either on a test rig or in a real vehicle. Assessments will generally cost from £50.

If you are a Motability customer (see page 32), Motability may pay for an assessment at a Mobility Centre and manage the adaptation process under their Managed Adaptation Programme.

Adaptation companies use the assessment report to help them find the most suitable products for you. Be prepared for the recommendations to change – the car you choose may not be the one you tried when you were assessed and the equipment may be slightly different too. The converter will usually discuss any proposed changes with the Mobility Centre that carried out the assessment. Do not hesitate to voice your own opinions during all these discussions.

### TIPS

For the first edition of this guide we carried out a survey of disabled drivers. They told us that while they were the experts on their own abilities, they appreciated advice from those who knew about controls. They were impressed with companies who discussed options fully and listened closely to what they had to say. Here are some tips from them:

- 'be honest – get an assessment at the level when you are at your least able – at the end of the day when you feel tired'



- 'make sure it will be what you need for the period of time you will have the vehicle, or if your condition worsens'
- 'make sure everyone listens to what you have to say and what you want, and not what they think you should have'
- 'see as many controls as you can'
- 'a chance to try things is important – Mobility Centre; Mobility Road Show ... then personal needs and experience takes over – you know what suits you.'

Most drivers stressed that it was important to consider the other people who used their car. Although some family members without disabilities learnt to drive with adaptations, most in our survey did not. Make sure any adaptation does not make it difficult for other drivers to get in and out of the car and does not make driving difficult or uncomfortable for them.

## Your car

Most simple adaptations can be easily fitted to any car. If you already have a car you need to compare the pros and cons of adapting it with those of buying and converting a new one. The advantages of keeping your old car include:

- it's likely to be cheaper
- it's familiar
- it may have features you like.

Against this:

- newer cars may have useful standard features or options (see pages 6-7)
- you can choose a car which is easier to adapt
- you may get financial help or VAT exemption (see page 34) on a new car.

You need to check that the car can be fitted with the adaptations that you want. Do not buy or lease a car until you have checked with the adaptation company that this can be done.

Most cars can be adapted fairly easily and all can be fitted with the simpler hand controls for steering, acceleration and



braking described in this guide. However it can be difficult and more expensive, or even impossible, to fit some more complex controls to some cars. For example, the electronic circuits in many new cars can cause problems if you try to fit the more sophisticated controls. This will be a growing problem as technology changes. Similarly some steering and braking systems, especially on newer cars, can be more difficult to adapt. For adaptations like these you need to talk to a specialist adaptation company (listed in our *Address list* – see page 43).

You can save money and protect the value of your car by choosing a car that can be converted relatively easily and controls that can be fitted without major work to the car's interior. Discuss all this with the adaptation company before you start.

### Standard equipment that may help



#### Locking and ignition:

- remote central locking
- windows close automatically when the car is locked
- push-button start.

#### Primary controls – for accelerating and braking, changing gear and steering:

- automatic (or semi-automatic) transmission
- adjustable steering wheel position
- cruise control to maintain a constant speed – some cars have adaptive cruise control that adjusts your speed to match the car in front
- easy to use parking brake – some cars have electronic ones.



#### Secondary controls – for things like the horn, lights and indicators:

- easy to use controls – check you can reach them and they don't need too much force
- automatic wipers and lights
- electric windows and door mirrors
- heated windscreen and door mirrors
- steering wheel controls for audio equipment – some can be controlled by voice.

#### Seating:

- seats that can be moved up and down, back and forward, to help with getting in and out and get you in a comfortable driving position
- some cars have electrically operated seats, and some of these have memory functions, so you can always find your way back to your setting
- some people find sports seats give them greater support and comfort
- adjustable lumbar support.

#### Other features:

- satnav to help you navigate



- parking sensors or cameras - some cars now come with Park Assist, which will steer you into the space when parallel parking
- heads up displays, that project your instruments onto the windscreen so you don't have to look down
- automatic dimming rear view mirrors to reduce dazzle and glare.

Also look for a car which is easy to get in and out of (large and wide door openings, wide opening doors and handholds in places which are convenient for you). If you need to carry a lot of luggage or equipment, look for a spacious boot with a low sill for easy loading.

For more on all this see our guide *Choosing a car* (see page 43). Use the *Find a car* database on our website to search for a car using door, seat and boot measurements and other features. Go to [www.ricability.org.uk](http://www.ricability.org.uk) and follow the links.

## Getting the right equipment

Once you have worked out which controls you are going to have to adapt, you need to find the right combination of adaptations for you. These will be the easiest and most comfortable to use and allow you to drive safely. This guide gives examples of what is available to adapt each of the controls. Don't be put off by the variety of equipment - most people will only need very simple attachments. If you need more than this, there is plenty of good advice around to help you make the right decisions.



### ■ Talk to other drivers

Talk to people you know, or disability motoring organisations (see pages 41-42) should be able to put you in touch with people who use similar controls to those you may be interested in.

### ■ Find an adaptation company

It is important to have controls fitted by a specialist. They need to be safe and appropriate for you and the car. Specialists are also more likely to make a neater job of it than someone who doesn't know the equipment. In the back of this guide we list the main UK equipment suppliers, but you don't necessarily need to go to one of these. Some of them do fit equipment themselves and they all sell their equipment to adaptation companies, who may be more local to you. You'll find a complete list of adaptation companies in our *Mobility address list* (see page 43). A specialist supplier or installer will also be able to carry out regular maintenance checks for you (adaptations are not checked as part of the MOT).

It may be worth contacting two or three adaptation companies by phone for a general discussion about what you need and what they can do. Try to get a broad

idea of cost and ask about warranties and servicing. Most have brochures and web sites. If you can, go and visit them.

It is probably best and certainly easier to get all the adaptations you need from one company. You can be reasonably confident that adaptation companies will not try to sell you any equipment which is not right for you. Nearly nine out of ten people in our survey described the adaptation company they had used as good.

If you have not had an assessment the adaptation company will carry out some routine tests and discuss possibilities with you. They do not make medical judgements. If they consider that a full driving assessment or medical opinion is needed they should tell you, and advise you where to get it.

If you are able to drive, the adaptation company is likely to be able to provide, adapt or make controls for you. In the unlikely event that the equipment they suggest does not meet your needs, contact a Mobility Centre to see if they have come across a solution which may suit you.

### ■ Try before you buy

This can be difficult in practice and few people in our survey tried more than one control. Some Mobility Centres have test rigs which allow you to try out a range. Some adaptation companies have a rig and most will have demonstration models of the main controls they supply. They may also be able to show you equipment being fitted to vehicles they are working on at the time of your visit.

Organisations of disabled motorists (see pages 41-42) may be able to put you in touch with local members willing to let you try out their controls.

Don't judge by price alone. You may find that a more expensive control has features which far outweigh the difference in cost. And a better control may make it much easier for you to drive with confidence.

### ■ Try after you buy

Try out the controls before you take the car home, in case they need fine tuning. One person in our survey recommended that you try and park the car as 'that should make any problems obvious'.

### ■ If necessary, take the time to learn

A feeling of confidence and being in control may take time and practice. Don't be put off trying – most people end up driving without difficulty or anxiety. All adaptation companies will show you how the equipment they fit works.

Some have space off the public highway so that you can become familiar with it before you start driving on the roads.

Unless you are having only very minor adaptations, try to get some practice with a driving instructor who specialises in adapted vehicles – details from a Mobility Centre (see pages 38-40).



# The controls

The following pages give details of the main types of controls available. We can't tell you what would be best for you but we can give you an idea of the range. Use this information as a starting point for discussions with Mobility Centres and adaptation companies

## Good design

The key is to find controls which suit you rather than having to adapt yourself to them. They should be in easy reach, easy to operate and designed so that using them becomes second nature with practice. Controls are likely to be more comfortable if they:

- don't make you pull at the elbow and rotate your hand at the same time
- let you keep your wrist straight
- avoid twisting the wrist in uncomfortable ways
- are large enough to hold and spread the effort over a larger part of your hand or whatever you use for the control
- let you use your thumb (without stretching) rather than individual fingers
- leave enough room for your hand when you are moving the control.

The illustrations in this guide are intended as examples of what can be done and are not endorsements of any particular product. Mobility Centres and adaptation companies will tell you about other possibilities and will advise on what might suit you.

We give information about all the available products and the companies that make or import them. Contact them (details on pages 35-36) to arrange a demonstration or to find a local installer.

Prices in this guide were correct in June 2012. They include fitting but not VAT because you will not have to pay it (see page 34).



## Primary controls

Primary controls are those you use to accelerate, brake and steer. They may be separate or combined so that a single control works more than one operation. A Mobility Centre or adaptation company will help you decide which to choose.

### STEERING

If you have trouble handling the steering wheel, there is a range of solutions available to help.

#### Spinners

The simplest adaptation is a steering ball or spinner attached to the steering wheel to allow you to drive one handed. For many people this is all they need.

Spinners come with a variety of shapes to suit different types of grip (see the pictures on this page for examples). Most cost between £10-110. They are often combined with keypads to work the lights, indicators etc (see page 22).

Some have a quick release so they can be easily removed when someone else is driving the car.

#### Look for:

- comfort. If gripping is painful look for softer materials
- shapes which do not obstruct your view of the dashboard
- fittings that do not catch on clothes when turning.

#### Safety:

- do not use a grip which would stop your hand being pushed away if the airbag inflated.



Steering ball ('mushroom' spinner) – you need to be able to grip

Spinner to be used with hand vertical



Alfred Bekker



Spinner to be used with hand horizontal

Alfred Bekker

Three pin spinner – supports the wrist



Alfred Bekker



The glove has a sleeve that fits over a peg on the steering wheel

Keypad for lights, indicators etc (see page 22)



Autoadapt

### Other ways of steering

There are other ways of steering. Often these are custom built to suit your needs and abilities, so it is difficult to give accurate prices. As you might expect, the more complex they are, the more expensive. Expect to pay at least £4,000 (considerably more for complex systems).

#### Look for:

- steering controls that you can use without tiring, either because of the force you need to operate them or because you need to maintain an uncomfortable posture
- controls that allow you to use your full range of movement; this will give you more control.

#### Safety:

- Make sure you can control the steering system properly on the road, when you may need to react quickly to hazards.
- As with all specialist control systems, ensure you have a proper assessment and training before you use one of these.
- Modifying the steering wheel can affect the performance of airbags (see page 29).

### Joysticks

- Joysticks need only a very small amount of movement – the range and the strength needed can be adjusted.



*Joystick steerer from Adaptacar*

### Foot steerers

- Foot steerers are turntables or treadles. You may need to have the power steering lightened



*Foot steerer from Bristol Street Versa - turntable used with an adapted shoe*

## Mini steering wheels

- Mini steering wheels come in various sizes and are usually custom built to suit you. They are for people who have little strength or very restricted movement. They will be fitted in the best position for you. Some move out of the way to make it easier to get in and out of the vehicle.



*Mini steering wheel from Adaptacar*



*Aevit mini steering wheel with joystick for speed control – from D S & P*

**Companies supplying steering equipment (see pages 35-36)**

**Adaptacar**

**Bristol Street Versa**

**D S & P Mobility Electronics**

**Jim Doran**

**Steering Developments**

## Tillers

- Steering with a tiller needs less movement than a steering wheel and some people find the horizontal grip easier to use. Holding the tiller can also give you more stability. Tillers can be fitted with other controls including accelerator, main brake and parking brake. The force needed and extent of movement can be adjusted.



*The two handed tiller from Jim Doran also controls speed – you twist the handle to accelerate and push the tiller forwards to brake*



*One hand tiller from Jim Doran – you twist the grip to accelerate and squeeze the lever to brake*

## CONTROLLING SPEED

Accelerating and braking in a standard car is usually done using foot pedals. If you cannot operate pedals in the standard way they can be adapted or replaced with hand controls.

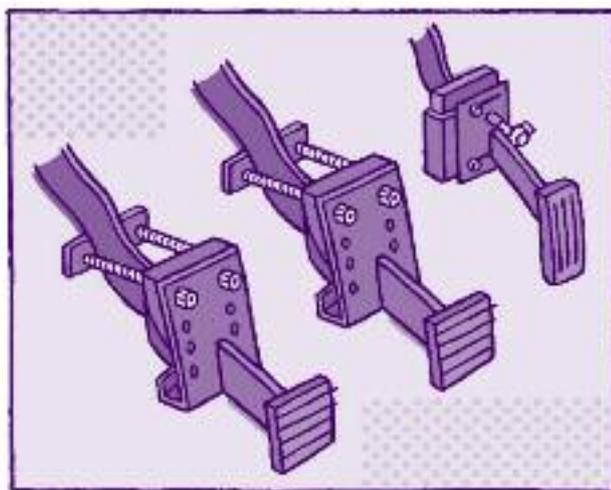
However you are controlling your speed, you may find cruise control helpful to reduce fatigue, especially on long journeys. It is standard on some cars, and available as an extra on others. It can be fitted to most cars.

### Pedal extensions

If you cannot reach the pedals, you can fit **pedal extensions**. You can get separate extensions for each pedal, or full sets that cover all pedals. Often pedal extensions are used with a platform to raise the floor.



*Menox Stamp extension set with raised floor – Autoadapt*



*Pedal-Pal pedal extenders – Roland Kerr*

### Left foot accelerators

If you cannot use your right foot, you can fit a **left foot accelerator**. There are four alternatives:

- Floor mounted pedals attach to the floor and cover the existing pedal. They can be removed to allow other people to drive the car.
- Flip-up accelerators replace the existing pedal. You can choose to have the left or right pedal down.
- A removable pedal is fitted on the left. The original pedal is modified so it can be removed or folded up.
- An additional pedal is fitted on the left. A dashboard switch toggles between the two pedals.

Companies supplying pedal extensions		(see pages 35-36)
Alfred Bekker	Bolt on pedal extensions	£65 each
Autoadapt	Menox Stamp – two or three pedal set with raised platform; quick release attachment to floor	price unavailable
	Menox Mini Stamp – bolt on to pedals; can be folded up out of the way of other drivers	price unavailable
Cowal	Bolt on pedal extensions	from £55 each
Jim Doran	Bolt on pedal extensions	from £100 each
Roland Kerr	Pedal-Pal bolt on extensions	£81 per set unfitted

You can fit left foot accelerators to cars with organ style pedals. These are usually more expensive.

**Warning**

- Left foot accelerators take a lot of getting used to, especially if you have been used to driving an unadapted manual car and there have been a number of accidents involving drivers who are unfamiliar with them.
- You must have a professional driving assessment before ordering a left foot accelerator and lessons with a qualified instructor before you start to use one on the road.



*Twin flip accelerator – Brig Ayd*



*Quick release accelerator – Brig Ayd*

Companies supplying left foot accelerators		(see pages 35-36)
Adaptacar	Sojadis left foot accelerator: removable, electronic	from £604
	Floor mounted accelerator: quick release; includes pedal guard	from £411
Alfred Bekker	Left foot accelerator: folds flat when not in use	£322
	Quick release Left foot accelerator	£375
	Twin Flip accelerator: flips up	£375
Autoadapt	Menox left foot accelerator	price unavailable
	Menox quick release accelerator	price unavailable
Brig Ayd	Electronic left foot accelerator	£604
	Floor mounted pedal transfer	£280
	Twin Flip folding left foot accelerator	£375
Cowl	Electronic left foot accelerator: switch on dash	£580
	Twin flip folding left foot accelerator	from £375
	Premier Twin Flip (organ style)	£520
Elap	Quick release left foot accelerator	£375
Jeff Gosling	Twin folding left foot accelerator	from £375
	Electronic left foot accelerator (switch on dash)	£700
Jim Doran	Left foot accelerator	from £450
	Organ type	£520

## Hand controls

If you cannot use your legs at all, or if you don't want to use a left foot accelerator, you can get hand controls to allow you to accelerate and brake. Some of these combine accelerating and braking in one control; others have separate controls. You can also use an accelerator-only hand control alongside a foot brake or vice-versa. With many the force needed to use them can be adjusted to match your strength.

Mechanical hand controls are connected to the pedals with rods. Electronic accelerators are wired into the car's control systems, which means there is less to get in the way and also gives you more delicate control. Usually these cut out automatically when you apply the brake. Some brake controls are connected directly to the car's hydraulic braking system, bypassing the pedals.

Some are fitted with controls for lights, indicators, windscreen washer and wiper, horn, cruise control and hill start assist.

- Hand controls are usually mounted on the steering column, on the steering wheel or on the floor to the left of the driver. If you are using steering column or floor mounted controls, you will also need a steering ball or spinner to allow you to steer one handed (see page 10).
- You may need to fit a guard to keep your feet out of the pedals (from around £100), or if you need the leg room you can fit folding or removable pedals (around £100-150).



### Look for:

- **Comfort.** This depends on the control's shape, its padding and its ease of use. Find out where the control can be put. Try it out for warmth to the touch, lightness, range of movement and smoothness of operation. See if you can rest your hand or if gripping it for a long period would cause problems.
- **Controls which are not tiring.** Many people keep their thumb on the steering wheel and operate the lever with their hand. If you do this, look for a control which can be worked easily from this position on a long journey.
- **Controls which do not get in the way of your knees or make it difficult to get in or out of the car.**
- **Controls which leave enough room for your feet.** You may need to fit a pedal guard or install flip up pedals to avoid the danger of pressing them accidentally or stopping them moving freely.
- **Controls which do not stop other people driving the car.** All controls Motability supply aim to do this.

Controls must be unobtrusive enough to allow others to drive the car and be of a type that can be removed or switched off.

*Safety:*

- Some controls are linked to parts of the car by rigid metal rods. These could stop the steering column collapsing or could injure you in a crash, particularly if they are placed near your knee. Look for protective guards or designs in which the rods are hidden or placed well away from your knees.
- If the controls are connected to parts of the car by metal rods, check with the supplier before adjusting the steering column, as this could bend the rods or alter their position, which could be dangerous. Sometimes the steering column adjustment is disabled to prevent this.
- Choose controls and develop a driving technique that allows you to reach and use all the secondary controls (see page 21) you need while driving.

**Tip**

- **Some cars with automatic transmission have gear selectors on the right of the steering column (for example Chrysler Voyager). This means you need a hand control for the brake on the left hand side of the steering column (because you have to apply the brake to change gear for reversing or parking).**

**Steering column mounted controls**

These can be mounted on either side of the steering column.



*Jeff Gosling push/pull hand control. Pull to accelerate, push to brake*



*Brig Ayd Trigger control. Pull trigger to accelerate (electronic), push away to brake*

Companies supplying steering column mounted controls (see pages 35-36)		
Adaptacar	Electronic twist grip low effort hand accelerator	£1,380
	Push/pull hand controls	£420
	Push/pull with electronic accelerator	£1,380
	Radial hand controls	from £850
	Radial hand controls electronic	£1,143
Alfred Bekker	Push/pull hand controls	£420
Brig Ayd	Silverline push/pull hand controls	from £420
	Electronic trigger accelerator and brake	from £1,321
	Pull up accelerator	£297
	Push brakes	£292
Bristol Street Versa	Fadiel electronic accelerator and brake	£1,800
	Manual brake	£585
	Satellite accelerator	£1,445
Cowal	Push/pull hand controls	from £420
Elap	Push/pull hand controls	from £430
	Electronic trigger accelerator and brake	from £1,263
	Radial accelerator with electronic push brake	from £1,667
	Satellite handheld accelerator	from £1,552
Jeff Gosling Hand Controls	Push/pull hand controls	£450
Jim Doran Hand Controls	MPS radial hand controls	from £720
McElmeel	Push/pull hand controls	from £420
PB Conversions	Push/pull brake/accelerator	£400
Techmobility	Push/pull brake/accelerator	price unavailable

### Floor mounted controls

These are vertical levers attached to the floor on your left. You pull back to accelerate, push to brake. A range of different grips is available. The position of the control and the amount of force you need to use it are both adjustable.

Some come with cruise control built in so that you don't have to keep your hand on the lever.

Because floor mounted controls are mounted on the left of the footwell, they make it easier to get in and out and for other drivers to use the car.



*Menox Carospeed from Autoadapt*



*Alfred Bekker floor mounted hand control*

Companies supplying floor mounted controls		(see pages 35-36)
Alfred Bekker	Floor mounted brake/accelerator	price unavailable
Autoadapt	Menox Carospeed	from £800

### Steering wheel mounted controls

These are electronic control rings mounted over or under the steering wheel. You squeeze the ring to accelerate. These are usually used with a steering column mounted brake.

Because they are electronic they don't need mechanical linkages and they give you smoother control.

Other advantages of these systems are that you can keep both hands on the steering wheel at all times and that they do not interfere with the other controls.



*K5 under ring from Autoadapt – push or pull on the ring to accelerate*

Companies supplying steering wheel mounted controls		(see pages 35-36)
Autoadapt	K5 Under ring	price unavailable
	K0 Over ring	price unavailable
Elap	Over ring electronic accelerator	from £1,825
	Under ring electronic accelerator	from £1,825
	Ghost rotary under ring control	from £1,925

## CHANGING GEAR

Most standard cars have manual or automatic gears. On a manual you have to use your foot on the clutch pedal and your hand on the gear lever to change gear. Some cars have a form of semi-automatic transmission where you use a lever or buttons on the steering wheel to select the right gear, but you don't have to use a clutch pedal.

On an automatic, you just have to use your hand to select between Park, Reverse, Neutral and Drive (you have to apply the brake while shifting though), and the car automatically selects the right gear when you are driving.

The gear lever is usually on the dashboard or transmission tunnel on your left, though some cars (mostly automatics) have them on the steering column.

### Look for:

- solutions that give you full control without adapting the car more than you have to
- controls where you can find the biting point easily and ride the clutch if you have to
- hill start assist – holds the brake until you pull away
- controls that leave you free to operate other controls you might need to while changing gear.

### Safety

- You need to be able to have at least one hand on the steering wheel at all times; whatever solution you go for must allow this.

## Simple solutions

### Go semi-automatic

If you cannot use your left foot, you might be able to use a semi-automatic. You just have to be able to operate the gear selector, which doesn't require a lot of strength. Make sure the car has a hill start function.

*Some semi-automatics have gear change buttons on the steering wheel*



This won't work if you use hand controls for braking, though, because you won't be able to brake, steer and change gear at the same time.

### Go automatic

This is another solution if you can't use your left foot. Automatic cars are much easier to drive but they are less fuel efficient and they cost more.

You need some strength in your hand to operate the gear selector on most cars. You can get a simple adaptation to help with this (see picture below).



*Easy release gear change - from Alfred Bekker*

**Companies supplying easy release gear changers (see pages 35-36)**

<b>Adaptacar</b>	<b>£130</b>
<b>Alfred Bekker</b>	<b>£68</b>
<b>Jeff Gosling</b>	<b>from £90</b>

**More complex solutions**

**Adapted clutch**

You can adapt the clutch on a manual car, so you can operate it with the hand you change gear with instead of your foot.



*Elap duck clutch*

**Companies supplying adapted clutches (see pages 35-36)**

<b>Alfred Bekker</b>	<b>£1,975</b>
<b>Elap</b>	<b>£2,145</b>
<b>Vehvac</b>	<b>£1,395</b>

**Push-button gear selector**

Fitted to an automatic car, this allows you to select park, reverse, neutral and drive settings with one finger. They can be mounted wherever you need them. You have to apply the brake to change gear.



*Spacedrive push-button gear selector – Adaptacar*

**Push-button gear selectors from Adaptacar (see page 35)**

<b>Memory Shift</b>	<b>£1517</b>
<b>Spacedrive</b>	<b>price unavailable</b>

**PARKING BRAKE**

Simple adaptations can make it easier to apply the parking brake with your left hand. These are usually levers that help you push in the release button.



**Companies supplying parking brake adaptations (see pages 35-36)**

<b>Adaptacar</b>	<b>£130</b>
<b>Alfred Bekker</b>	<b>£68-£125</b>
<b>Brig Ayd</b>	<b>£100</b>
<b>Jeff Gosling</b>	<b>from £90</b>

Some cars have push-button electronic parking brakes. You push the button to apply the brake and it releases automatically when you pull away. You can also have a push-button parking brake fitted to most cars.

**Companies supplying electronic parking brakes (see pages 35-36)**

<b>Adaptacar</b>	<b>£950</b>
<b>Brig Ayd</b>	<b>£674</b>
<b>Bristol Street Versa</b>	<b>£850</b>
<b>D S &amp; P</b>	<b>price unavailable</b>
<b>Jim Doran</b>	<b>£950</b>

## Secondary controls

The secondary controls are for everything from the ignition, lights and indicators to heating, air conditioning and in car entertainment. You may have difficulty operating any of these, or they may be made more difficult by the other adaptations you are using.

Standard secondary controls on some newer cars may be easy to use without adaptation. For example, some have push-button ignition and remote central locking. Windscreen wipers and lights which switch themselves on automatically are becoming more common. Many cars have controls for cruise control and audio equipment on the steering wheel, and a few have voice controls for these.

### SIMPLE CONTROLS

There are many simple attachments to make secondary controls easier to use and several systems which bring all the controls together. These can be fitted and adjusted to meet your individual needs. They can eliminate stretching and can be used however little strength and dexterity you may have. They can also be placed so that you don't have to take your hands off the steering wheel when you use them. You can also have push-button ignition fitted, either as a separate button or as part of a control system.



*Push-button start*



*This rod transfers the indicators from one side of the wheel to the other, so you can operate the indicators with your right hand – Alfred Bekker*

### COMPLEX CONTROLS

Switches to control some or all of the following functions can be built into many hand controls if you are using them. Alternatively they can be controlled from keypads mounted on steering spinners (see page 10) or separate keypads mounted on the dashboard, door panel or elsewhere.

- lights: on/off, main beam, flash
- indicators, hazard lights
- horn
- windscreens (front and rear): wiper, washer, defogger
- heating, ventilation, air conditioning.



*Indicator switch on hand controls – this one is from Jeff Gosling*



*Control switches on floor mounted hand control (Carospeed from Autoadapt)*



*Steering ball grip – Lodgesons      Lollipop grip – from Autochair*



*EMC Digipad from D S & P*

Multi-function keypads are particularly useful for people who have the use of only one hand because everything is in the same place. You do need some dexterity in your fingers and must be able to tell the buttons apart. The control can be mounted on the right or left but if you will be using your less dominant hand, it can take practice to get used to it.

### *Look for:*

- Buttons that are well spaced and within easy reach, taking into account the size of your hands. They should be shaped or positioned so that you can tell them apart by touch. Avoid any you could confuse.

### *Safety:*

- At first some people need to look at the control to make sure they are pressing the right button. If this means there is a danger of not being able to concentrate enough to control the car, get professional tuition. Practice finding the right button by touch when the car is stationary.

### **Touch controls**

These are easy to operate switches which can be placed in whatever position is convenient for you. There are a range of designs and attachments. This, and the fact that their sensitivity can be adjusted, means you should be able to find something to suit you. Touch pads need just a light touch from any part of the body in reach; levers can just be nudged by an elbow, for example. You can fit several touch pads to control as many features as you need.

### **Beeper and tone systems**

If you don't have enough dexterity for individual buttons, you can fit a system which uses a single button to control several functions – the number will depend on the make and model of the unit. When you press the switch you hear a series of bleeps or tones. Each corresponds to a different control. You press the switch until

you reach the one that corresponds to the control you want. For example the fourth bleep may switch on the sidelights. These systems can be combined with touch pads. Systems cost from about £1,500.



*Some headrest controls from D S & P. One has buttons for six different controls, though most people find it difficult to manage more than three – you would need good control and upper body stability. The one button headrest is used with a bleeper system. If you are considering headrest controls, an assessment will help you decide what you need*

### Voice control systems

Voice control systems mean you do not need to move any kind of switch. The Digivoice will recognise voice commands to operate up to 18 secondary controls including selecting gear. It is programmed to recognise only one voice so there is no danger of anyone else accidentally taking control of the car.

### Instruments, navigation and communications

More and more cars come with sophisticated gadgets to help you drive in safety and comfort. Most of these can also be fitted to just about any car. They include:

- heads up display – projects instrument readings onto the windscreen
- parking sensors and cameras
- satellite navigation
- hands-free mobile phone system
- cruise control.

Companies supplying secondary control systems		(see pages 35-36)
Adaptacar	Comdis 12 way steering ball	£1,290
	Sojadis 12 way bleeper	£1,249
Autoadapt	12 Way steering ball	price unavailable
Autochair	Smartsteer 10/13 way lollipop grip	from £1,200
D S & P	Digipad Econo touchpad	price unavailable
	Digipad Gold touchpad	price unavailable
	Power Headrest	price unavailable
Elap	12 Way steering ball	from £709
	Push button unit	price unavailable
Lodgesons	7/10/13/18 way steering ball	from £1,500
	7/10/13/18 way lollipop grip	from £1,600
	9 or 12 Way bleeper	price unavailable
Techmobility	9 or 12 Way steering ball	price unavailable
	Headlight dip/main and flash Switch	price unavailable

# Custom built controls

As well as the range of controls discussed in the previous section, complete control systems can be built around you. These include devices to help you into the car as well as driving controls chosen and tailored to fit you

Electronic ('fly by wire') accelerator and brake and steering controls can be mounted anywhere and can be controlled by any part of your body where you have enough movement and control. Remote keypads to select gears or control secondary functions can be mounted anywhere or combined with primary control joysticks. Secondary controls can also be operated using head switches, suck and blow tubes or other input devices.

These systems are expensive and have to be specially adapted to suit you. It is particularly important to get an assessment to find out if they are likely to work for you, and to have them designed correctly around your abilities. You will also need plenty of time to practise and some specialist driving instruction.

Your local Mobility Centre (see pages 38-40) will be able to help you find a suitable instructor.



*Drive from wheelchair vehicle with joystick steering and speed control; keypads for gears and secondary controls*



*This AEVIT J control from D S & P is used to steer, brake and accelerate. It can be placed in any position which suits you. You push the joystick from side to side to steer, pull it back to accelerate and push it forwards to brake. It has speed sensitive steering, which adjusts the action and feel of the joystick to your speed. This makes parking and manoeuvring easier. You can switch the system off if someone else is driving*

**Information on companies providing custom built controls solutions can be found in our *Mobility address list* (see page 43).**



*Drive from wheelchair vehicle with horizontal steering wheel, joystick speed control suck and blow tube for secondary controls and reversing camera*

## SEATING

Sitting in the right position is one of the keys to safe and comfortable driving. You need good all round vision, the steering wheel in the right position and controls you can reach.

Useful features include:

- sports seats can give you more support
- adjustable lumbar support
- extensions to give leg support
- suspension to reduce vibration
- built in heating/ventilation
- adjust back and forth to help you get in and out, and to find the right position
- powered controls
- memory feature to get you back into your preferred driving position.

If your existing car seat doesn't suit you, try the following:

### Cushions

These provide better comfort and change the shape of the seat – for example to give you a more upright posture or support the small of the back. These are sometimes held in place with Velcro.

### Seat adaptations

Some seats can be raised, made to slide further back in the car, or swivel out.

### Replacement seats

These include seats that move right out of the car, and seats with useful features.

From adaptation firms and specialist dealers. Cushions cost mostly from £20 -£80; a wide range of seats is available from £400 -£3,000.



*A swivelling seat allows easier access from a wheelchair*



*A drive from wheelchair vehicle allows you to use your own supportive seating system to drive*

# WAVs (WHEELCHAIR ACCESSIBLE VEHICLES)



*I Can – from £33,295*

Specialist firms convert MPVs, vans and other vehicles so that you can get in and travel in your wheelchair. If you travel as a passenger you usually sit behind the front row of seats, but some designs allow you to sit beside the driver.

Drive from WAVs are designed so that you drive from your wheelchair. They can be fitted with a wide range of hand and other controls – this will be done as part of the conversion, which will be tailored to suit you and your wheelchair. A few WAVs are designed so you transfer to the driver's seat once you are inside (see page 26).

WAVs either have a ramp or a lift. All lifts are powered but some ramps are deployed by hand (you will need help). If you use a ramp, a winch can be fitted to help get you in (only suitable if someone helps you, as you won't be able to attach the winch yourself). All drive from wheelchair WAVs are designed to be used without help so the doors open and the ramp unfolds at a touch of a button.

The number of passengers a WAV can carry depends on the base vehicle and the



*Wav-Evolution – from £20,995*

conversion. Some carry just the driver and a passenger in a wheelchair, but some will carry five or more additional passengers. Some WAVs have folding or removable rear seats that can be used when a wheelchair is not being carried.

You go in at the rear or the side of the vehicle. Side-entry WAVs can be easier for on-street parking (because you don't need so much room behind, and you don't have to get your wheelchair into the road), but you may not be able to use them in all car parks. The Wav-Evolution has a specially adapted front door that lets you enter directly into the front passenger space.

See our *Wheelchair accessible vehicles* guide (see page 43) for more information or contact converters (see our *Mobility address list*) for detailed information on the vehicles they supply. Always try out a WAV you are considering – converters will bring a demonstration vehicle to you. The Wheelchair Accessible Vehicles Converters Association (see page 42) requires its members to provide this service and to meet other service standards.

# Safety

**Adapted controls are safe. However, any modification to the inside of your car and to the way you drive it introduces new risks. Successful adaptations should minimise these additional risks**

If you have driven before, it may be better to opt for controls which are as close as possible to standard. You will learn faster, make fewer mistakes and feel more confident.

If you are new to driving, or have made significant changes to the controls, you will need training from a specialist driving instructor. Your local Mobility Centre (see pages 38-40) should be able to help you find one.



## Secondary safety

The extent to which the design of a vehicle protects you in a crash is known as secondary safety. Cars these days have many secondary safety features, including airbags, strengthened areas to protect you, deformable materials and steering columns which collapse away from you in a crash. The adaptation of car controls involves compromises in design, and some may interfere with the protective features built into the car.

In our survey nearly nine out of ten people said that secondary safety was important to them. However with some equipment safety comes at a price. You need to balance risk against cost. Our view is that controls should be designed with good secondary safety. Where this is not possible you need enough information to be aware of the extent of

any risk you are incurring. Some common sense rules based on research we carried out on this subject in 1998 are:

- avoid push-pull controls or brake levers which have rigid bars or pivots close to your knee, because they could cause injury in a crash
- avoid adaptations in which bulky equipment is mounted in the footwell
- avoid devices which will stiffen the steering column and prevent it collapsing progressively in a crash
- look for designs in which solid parts are protected by padding.

### Automatic fire extinguishers

Fires in cars are very rare but if you do have one it may be difficult to handle a fire extinguisher, and you may need to act quickly to give yourself more time to get out of the car.

Automatic fire extinguishers are fitted as a matter of course on all high tech conversions funded by Motability. They are a good idea for everybody. The fire extinguisher is fitted to the car, and is connected to a plastic tube which runs around the cabin and the engine compartment. If a fire breaks out, the tube bursts at the point nearest the fire to let out the extinguishing fluid. From converters and adaptation companies, from £30 to £300 (depending on the type and model).

## Airbags

Airbags are fitted to most new cars and they form an integral part of the car's safety system. In an accident they inflate quickly to protect you by providing a cushion between you and any hard surfaces which may injure you. Airbags are fitted in the steering wheel and dashboard and increasingly in the door or seat to protect you from the side ('side airbags') and in the foot well to prevent you from sliding off the seat in an accident ('knee bolster airbags').

### AIRBAGS AND ADAPTED CONTROLS

There has been some concern about how adapted controls may affect the working of the airbag. Tests and expert opinion suggest that:

- Hand controls fitted to the rim of the steering wheel do not stop the bag inflating. The bag should not damage them, although they may get pushed out of place.
- Joystick controls should not be fitted in front of the airbag, but to one side of it.

- Rods connecting hand controls to pedals should be close to the steering column and preferably enclosed to keep them out of the way of knee bolster airbags.
- It is usually better to leave an airbag in place and switched on even if your controls may get in the way if it inflates.

### AIRBAGS AND SEATING POSITION

You could be injured by the airbag if you sit too close to it, though modern cars have a multi-stage inflation system which reduces this risk. Safety experts recommend:

- sitting as far back as is practicable
- if you have an adjustable steering wheel, tilt it down slightly so that the airbag is less likely to hit your head or neck directly.

Don't end up in an uncomfortable driving position or one in which you have to strain to use the controls. Check that your driving position does not restrict your view from the car.

#### Removing or disabling airbags

- **When a small child is travelling in the front passenger seat in a child seat, then the airbag should be switched off on that side. Apart from this it is not recommended to remove or disable airbags, unless it is absolutely necessary.**
- **If an airbag does need to be removed this must be done by the dealer who supplied the car or an approved airbag specialist. The car's manufacturer will have information on how it can be done safely. Check that removing it will not stop other airbags working. You must also tell your insurer.**
- **If an airbag has been removed or deactivated, this may cause problems for the MOT test. To avoid difficulties you should discuss this with the test centre when booking your MOT.**

# The law

## **DRIVING LICENCE**

Mobility Centres or disabled drivers' organisations will be able to help you find a driving instructor who specialises in teaching disabled drivers. They use cars with adapted controls or will teach you in your own car.

Drivers of adapted cars take the same test as everyone else. If you drive an adapted car and you have advised the Driving and Vehicle Licensing Agency, details will appear in code form on your licence. The adaptations recorded are: modified transmission, modified clutch, modified braking and acceleration systems, modified control layouts, modified steering, modified rear view mirrors and modified driving seats. You can only drive cars with similar equipment.

There's no top age limit to driving. You have to renew your licence at 70 and every three years after that. A form will be sent to you by the DVLA.

You must tell them of any disability when applying for a licence for the first time. You must also tell them if you have a new medical condition or one which has got worse since passing your driving test or since your last licence was issued. Conditions you have to tell them about include fits or blackouts, seizures, diabetes, angina attacks which are provoked by driving, memory problems, stroke, brain injury, brain surgery, pacemaker, difficulty in using your arms or legs and any visual condition which affects both eyes.

You may be sent a questionnaire and will be asked to give permission for the Medical Advisor to contact your doctor or specialist. If your driving licence is for automatic cars only, you must make sure the clutch pedal is removed if you have adapted a manual gearbox. Read more at [www.direct.gov.uk/driverhealth](http://www.direct.gov.uk/driverhealth) or in *What you need to know about driving licences* from a post office.

## **VEHICLE EXCISE DUTY (ROAD TAX)**

You don't have to pay Road Tax if you get the Higher Rate Mobility Component of the Disability Living Allowance or the War Pensioner's Mobility Supplement.

If you are not the driver you have to provide the name of whoever will drive for you. The vehicle must be registered in your or your nominee's name. It must be used only by you or for your benefit – such as to do your shopping. Anyone can drive it as long as they are insured.

To claim, get an exemption certificate from the Disability Living Allowance Unit of the Department for Work and Pensions (08457 123 456) or the Veterans Agency (0800 169 2277). You can then get your free tax disc at post offices which issue road tax, or by post. If the dealer is registering your new vehicle for you, you will need to let them have your certificate. Renewals can be made online.

Motability Contract Hire vehicles (see pages 32-33) don't need a certificate – the tax disc is arranged by Motability.

## INSURANCE

Under the Disability Discrimination Act, insurers are not allowed to refuse disabled drivers insurance or charge extra without justifying evidence. Premiums must be based on a reasonable assessment of risk. Insurers will take account of any DVLA restrictions on your licence, but this is not in itself justification for a higher premium. However, you may have to pay more:

- while you are adjusting to a new disability if there is evidence that this will increase the risk
- to cover any extra cost of repairing an adapted vehicle.

As with all insurance, shop around to get the best deal. If you feel you are being charged more for your policy than other drivers in similar circumstances, ask the insurance company for details of why they consider you to be a greater risk. Mobility Centres and organisations of disabled drivers have lists of specialist insurance companies.

We know of the following companies which specialise in insurance services for disabled people:

- |                       |               |
|-----------------------|---------------|
| ■ <b>Chartwell</b>    | 0845 260 7051 |
| ■ <b>En-route</b>     | 0800 783 7245 |
| ■ <b>First Senior</b> | 01582 840067  |
| ■ <b>Fish</b>         | 0800 012 6329 |
| ■ <b>Lockton</b>      | 020 7933 0000 |
| ■ <b>Premier Care</b> | 01476 591104  |

## BLUE BADGE SCHEME



The Blue Badge Scheme offers parking concessions for disabled people with severe walking difficulties who need to park close to their destinations. The scheme also applies to registered blind people, people with severe upper limb disabilities in both arms who regularly drive a car and children under three with specific medical conditions.

You can use designated disabled parking bays in car parks and on the street, park for up to three hours on single and double yellow lines and often park for free in local authority car parks and bays (check first, as some local authorities still charge). In Central London boroughs, parking is only in designated bays.

The scheme is administered by local authorities which deal with applications and issue badges.

For more information contact your local authority or go to [www.direct.gov.uk/bluebadge](http://www.direct.gov.uk/bluebadge) or [www.dft.gov.uk](http://www.dft.gov.uk) (follow the link for the blue badge scheme).

# Finance

## MOTABILITY



If you receive either the Higher Rate Mobility Component of the Disability Living Allowance or the War Pensioner's Mobility Supplement you are eligible for the Motability Scheme. Your allowance goes towards the cost of a car, scooter or powered wheelchair of your choice.

### Leasing through Motability

You use your mobility allowance to lease a new car from Motability for three years (five years for a wheelchair accessible vehicle). Maintenance and servicing costs, insurance for two drivers (up to two additional drivers can be added for a fee) and RAC breakdown assistance are included. There is a mileage allowance of 20,000 miles per year (additional miles are charged at 5p per mile).

You can choose a model from all the main manufacturers. If you choose one that is more expensive than is covered by the mobility allowance, you make an advance payment (the amount varies, depending on the car and on which allowance you get). Motability offers over 300 cars which require no advance payment.

### Adaptations

The Motability Contract Hire scheme will also cover, or contribute to, the cost of adaptations. Motability has a list of

available adaptations, with costs attached (many are free). They operate a Managed Adaptations Programme which can make the process both easier and cheaper. You can only make use of this programme when you are ordering your new car.

If you want to fit your own adaptations during your lease, or fit something not available through the programme, you will have to fund this yourself. Motability administer a number of funds (see Grants below) which may be able to help. Any adaptations must be supplied and fitted by a Motability Adaptations Partner.

### Grants

Motability administer the government Specialised Vehicle Funds as well as having their own charitable fund.

If you are considering the Motability Scheme you can apply for a grant for things like adaptations, advance payments on more expensive vehicles and driving lessons (for people under 25). You have to provide details of your circumstances, which will be checked. Motability can only help towards the least expensive solution that meets your needs. They will assess your needs and make suitable recommendations.

Contact Motability Operations for more information about this or any other aspect of the Motability Scheme.

## Motability Operations

City Gate House  
22 Southwark Bridge Road  
London SE1 9HB  
Tel: 0845 456 4566  
Textphone: 0845 675 0009  
[www.motability.co.uk](http://www.motability.co.uk)

## OTHER SOURCES OF FINANCE

### Charities

Some charities give grants to individuals.

- Your local library should be able to help you find sources, such as the Round Table, Rotary or Lions Club and other local charities.
- Try your appropriate disability group such as Scope, the MS Society or the Muscular Dystrophy Campaign, who may know of sources of help.
- If you are aged 50 or over, Charity Search provides a free service to help you find a grant-giving charity:  
Freepost (BS 6610)  
Avonmouth, Bristol BS11 9TW  
Tel: 0117 982 4060  
(9.30 to 2.30 Mon–Thurs)  
Email: [info@charitysearch.org.uk](mailto:info@charitysearch.org.uk)  
Web: [www.charitysearch.org.uk](http://www.charitysearch.org.uk)
- Turn2us provides a free service to help you find financial support in the form of welfare benefits, grants and other help tailored to your circumstances.  
Tel: 0808 802 2000 (8-8 Mon-Fri)  
[www.turn2us.org.uk](http://www.turn2us.org.uk)

- The Family Fund helps families with severely disabled children aged 17 and under, whose household income is less than £28,000 a year. They may be able to contribute towards the cost of adapting a car or with driving lessons. They do not usually help with the cost of buying a car.

Unit 4, Alpha Court, Monks Cross Drive  
Huntingdon, York YO32 9WN

Tel: 0845 130 4542

Fax: 01904 652 625

Textphone: 01904 658085

Email: [info@familyfund.org.uk](mailto:info@familyfund.org.uk)

Web: [www.familyfund.org.uk](http://www.familyfund.org.uk)

### Statutory sources

- Social services – may be worth trying, especially if you do not get Disability Living Allowance or if you have already used your mobility component to lease or buy a vehicle.
- Access to Work – if you are in work or about to start work, you may be able to get help from the Access to Work scheme. They may cover the cost of adaptations to a vehicle if this is the only or most cost effective way for you to get to work. Cases are assessed on an individual basis. Contact your local Jobcentre Plus or visit [www.direct.gov.uk/disabledpeople](http://www.direct.gov.uk/disabledpeople).

## VAT

You do not pay VAT on products designed and sold specifically for disabled people. This means all adaptations, installation, repair and maintenance are zero rated.

### What kind of adaptations count?

- Those which make it possible for you to get in and out of the vehicle, such as a swivel seat.
- Those which make it possible for you to drive, such as hand controls for primary driving controls and infra red systems for secondary controls. Note that standard extras such as automatic transmission would not be enough to qualify.
- Those which enable a wheelchair to be carried in the vehicle, such as a hoist. Trailers, roof or rear racks would not count as they are not vehicle adaptations.

Adaptations have to be permanent – which means in practice that they have to be welded or bolted on. Repair and maintenance to the vehicle is also zero rated. The supplier of the vehicle has to be satisfied that you qualify, and you will have to sign a form declaring your disability.

### Wheelchair and stretcher users

Additionally, if you use a wheelchair or stretcher you may not have to pay VAT on the price of the car or for its repair or maintenance.

To qualify you must:

- be a wheelchair user. Temporary users do not count and nor do scooter users **or**
- need to be carried in a stretcher.

The car must

- have been designed or substantially and permanently adapted for the person who normally uses a wheelchair or stretcher
- carry no more than 12 people
- be for domestic or personal use.

Vehicles owned and run by businesses do not qualify. However you can use a qualifying adapted vehicle for work if it is incidental to its main private use.

VAT relief applies only to new cars, so if you are buying a car with the intention of having controls fitted, it may be worth your while to consider buying a new car rather than a secondhand one as you will not have to pay VAT on the car.

More information: VAT Notice 701/7 *VAT relief for people with disabilities* from HMRC national advice service

Tel: 0845 010 9000

[www.hmrc.gov.uk](http://www.hmrc.gov.uk).

### Important

- **You must buy and adapt the car at the same time – you cannot get a VAT refund for adaptations made later.**
- **Alterations made to a car before it is registered have to have type approval. In practice this means that it is only legal to fit these adaptations after registration. You have to register the car, have it adapted and then pay for it.**
- **Talk to the firm who is adapting your car – they will be able to make appropriate arrangements.**

# Suppliers

## Equipment suppliers

Here we list the suppliers who make or import control adaptations. Some of them fit equipment themselves, and they all sell their equipment to adaptation companies, who may be more local to you.

Contact the supplier for more information about their products and to find a local installer. You'll find a complete list of adaptation companies in our *Mobility address list* (see page 43).

### **Adaptacar**

Tel: 01769 572785  
Email: sales@adaptacar.co.uk  
www.adaptacar.co.uk

### **Alfred Bekker**

Tel: 01377 241700  
Email: info@alfredbekker.com  
www.alfredbekker.co.uk

### **Autoadapt**

Tel: 0121 333 5170  
Email: contact@autoadapt.co.uk  
www.autoadapt.co.uk

### **Autochair**

Tel: 01773 830222  
Email: demo@autochair.co.uk  
www.autochair.co.uk

### **Brig Ayd**

Tel: 01707 322322  
Email: sales@brig-aydcontrols.co.uk  
www.brig-aydcontrols.co.uk

### **Bristol Street Versa**

Tel: 08433 081 814  
Email: sales@kcmobility.co.uk  
www.bristolstreetversa.com

### **Cowal**

Tel: 01494 714400  
Email: sales@cowalmobility.co.uk  
www.cowalmobility.co.uk

### **D S & P Mobility Electronics**

Tel: 01296 658508  
Email: sales@dsp-mobilityelectronics.com  
www.dsp-mobilityelectronics.com

### **Elap**

Tel: 08000 433159  
Email: mail@elap.co.uk  
www.elap.co.uk

### **Jeff Gosling**

Tel: 0161 430 2151  
Email: info@jeffgosling.co.uk  
www.jeffgosling.co.uk

### **Jim Doran**

Tel: 024 7646 0833  
Email: info@jdhc.co.uk  
www.jdhc.co.uk

### **Lodgesons**

Tel: 029 2043 6980

Email: [sales@lodgesons.co.uk](mailto:sales@lodgesons.co.uk)

[www.lodgesons.co.uk](http://www.lodgesons.co.uk)

### **McElmeel**

Tel: 028 3752 5333

Email: [info@mobility-services.com](mailto:info@mobility-services.com)

[www.mobility-services.com](http://www.mobility-services.com)

### **PB Conversions**

Tel: 01525 850588

Email: [pbconversions@aol.com](mailto:pbconversions@aol.com)

[www.pbconversions.co.uk](http://www.pbconversions.co.uk)

### **Roland Kerr**

Tel: 020 8546 8125

### **Steering Developments**

Tel: 01442 212918

Email:

[enquiries@steeringdevelopments.co.uk](mailto:enquiries@steeringdevelopments.co.uk)

[www.steeringdevelopments.co.uk](http://www.steeringdevelopments.co.uk)

### **Techmobility**

Tel: 01376 564499

Email: [phil@techmobilityuk.com](mailto:phil@techmobilityuk.com)

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

### **Vehvac**

Tel: 01732 868080

Email: [info@vehvac.com](mailto:info@vehvac.com)

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

## **Buying secondhand**

You can buy adapted vehicles and equipment secondhand from some vehicle converters (see the *Address list*), and from the sources listed here. The secondhand market has grown considerably and a specialist secondhand dealer should be able to find a vehicle to suit your needs quite quickly.

Anything you buy secondhand may be affected by safety and reliability issues. The seller may have had an inspection carried out and/or offer a warranty. If not, you may want to think about carrying out your own inspection.

### **CLASSIFIED ADVERTISEMENTS**

The following websites carry listings for adapted vehicles. Also see Disability Now (see page 41).

#### **Autotrader**

[www.autotrader.co.uk](http://www.autotrader.co.uk)

#### **Disability Equipment Register**

[www.disabilityequipment.org.uk](http://www.disabilityequipment.org.uk)

#### **Disabled Gear**

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

#### **ebay**

[www.ebay.co.uk](http://www.ebay.co.uk)

#### **Justmobility**

[www.justmobility.co.uk](http://www.justmobility.co.uk)

#### **Preloved**

[www.preloved.co.uk](http://www.preloved.co.uk)

## SECONDHAND DEALERS

The following companies sell secondhand WAVs. Please note that we have not evaluated them for reliability or service.

### The Accessible Motor Company

Tel: 01865 300361  
www.amcwav.com

### Autobility

Tel: 0800 298 9290  
www.autobility.co.uk

### Clarke Mobility

Tel: 01622 793079  
www.clarkemobility.com

### Mobility Nationwide

Tel: 01824 707773  
mobilitynationwide.co.uk

### Silverline Mobility

Tel: 0844 800 9421  
wheelchair-accessible-vehicle.co.uk

### Southern Mobility Vehicles

Tel: 01243 586444 (Sussex)  
Tel: 01883 624041 (Surrey)  
www.southernmobilityvehicles.co.uk

### Wheelchair Accessible Motor Company

Tel: 01384 370530  
www.twamco.co.uk

### Wheelchair Accessible Vehicles

Tel: 01325 389900  
www.wheelchairaccessiblevehicles.co.uk

## Rental

The companies listed here provide adapted vehicles on short or long term rental. Please note that we have not evaluated them for reliability or service. You can also hire adapted vehicles from many of the converters listed in our *Mobility address list* (see page 43)

### Adapted Car Hire

Tel: 0845 68 62 007  
www.adaptedcarhire.co.uk

### Adapted Vehicle Hire Ltd

Tel: 0845 257 1670  
www.avhltd.com

### Specialist Vehicle Rental

Tel: 0845 293 2799  
www.specialistvehiclerental.co.uk

### Wheelchair Travel

Tel: 01483 233640  
www.wheelchair-travel.co.uk

### Lynx Hand Controls

Lynx hand controls are designed to be used temporarily in any car, including hire cars. They bolt on and off the pedals in minutes and allow you to control accelerator and brake with one hand. Lynx also offer a car hire service.  
Tel: 01695 422622  
www.lynxcontrols.com



*Lynx hand controls*

# Useful organisations

## MOBILITY CENTRES

Your first stop is likely to be a Mobility Centre – for telephone advice or for an assessment of your needs, for example. There are 16 Mobility Centres in the UK. They give practical and independent advice and assessment to disabled drivers and passengers. They will assess your ability to drive, advise you about cars that might suit you and about any adaptations you may need. They are well informed on motoring and disability issues generally. Each centre has expert and friendly staff who are likely to have met and solved similar problems before. They are non commercial and impartial.

An assessment for a driver referring him or herself will cost from £50 to £130 (depending on the centre). In Scotland assessment is free if referred by a GP. Costs for assessment as a passenger are lower – generally around £20 – £50. Motability customers may qualify for a free assessment under the Managed Adaptation Programme.

Mobility Centres are accredited by the Forum of Mobility Centres and have certain minimum standards. For more information on the centres contact:



The Forum of Mobility Centres  
c/o Providence Chapel, Warehorne  
Ashford, Kent TN26 2JX  
Tel: 0800 559 3636  
Email: [enquiries@mobility-centres.org.uk](mailto:enquiries@mobility-centres.org.uk)  
[www.mobility-centres.org.uk](http://www.mobility-centres.org.uk)

## Key to services

The centres vary in size and in the services they offer. Here we detail some of the services offered:

- I** free information service
- D** advice on choosing a vehicle, driving it, driving controls and learning to drive
- P** assessment and advice about getting in and out of vehicles, loading of wheelchairs and other equipment
- W** advice on selecting and using a wheelchair or scooter
- T** driving tuition for new drivers, people returning to driving and those who will use different controls
- A** fitting adaptations for drivers or passengers

## Bristol

Living, The Vassall Centre  
Gill Avenue, Fishponds, Bristol BS16 2QQ  
**Tel:** 0117 965 9353  
**Fax:** 0117 965 3652  
**Email:** [mobserv@thisisliving.org.uk](mailto:mobserv@thisisliving.org.uk)  
[www.thisisliving.org.uk](http://www.thisisliving.org.uk)  
**Services: I D P W T**

## Cornwall

Cornwall Mobility Centre  
Tehidy House, Royal Cornwall Hospital  
Truro TR1 3LJ

**Satellite centres:** Exeter, Holsworthy, Liskeard, Plymouth  
**Tel:** 01872 254920  
**Fax:** 01872 254921  
**Email:**

[enquiries@cornwallmobilitycentre.co.uk](mailto:enquiries@cornwallmobilitycentre.co.uk)  
[www.cornwallmobilitycentre.co.uk](http://www.cornwallmobilitycentre.co.uk)  
**Services: I D P W T A**

**Derbyshire**

Derby DriveAbility  
Kingsway Hospital, Kingsway  
Derby DE22 3LZ

**Tel:** 01332 371929

**Fax:** 01332 382377

**Email:** [driving@derbyhospitals.nhs.uk](mailto:driving@derbyhospitals.nhs.uk)

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

**Services: I D P T**

**Hampshire**

Leornain House Kent Road  
Portswood, Southampton SO17 2LJ

**Tel:** 023 8051 2222

**Email:** [enquiries@wessexdriveability.org.uk](mailto:enquiries@wessexdriveability.org.uk)

[www.wessexdriveability.org.uk](http://www.wessexdriveability.org.uk)

**Services: I P**

**Hertfordshire**

Hertfordshire Action on Disability (HAD)

The Woodside Centre, The Commons

Welwyn Garden City AL7 4DD

**Satellite centre:** Dunstable

**Tel:** 01707 324581

**Fax:** 01707 371297

**Email:** [driving@hadnet.org.uk](mailto:driving@hadnet.org.uk)

[www.hadnet.org.uk](http://www.hadnet.org.uk)

**Services: I D P W T**

**Kent**

South East DriveAbility

Kent Community Health NHS Trust

St Lawrence Avenue

Allington, Kent ME16 0LL

**Satellite centres:** Hailsham, Herne Bay

**Tel:** 01622 795719

**Fax:** 01622 795720

**Email:** [wk-pct.sedriveability@nhs.net](mailto:wk-pct.sedriveability@nhs.net)

[www.kentcht.nhs.uk/get-involved/south-east-drive-ability](http://www.kentcht.nhs.uk/get-involved/south-east-drive-ability)

**Services: I D P T**

**Lancashire**

Wrightington Mobility Centre

Wrightington Hospital, Hall Lane

Appley Bridge, Lancs WN6 9EP

**Satellite centre:** Tyldsley (Manchester)

**Tel:** 01257 256409

**Fax:** 01257 256538

**Email:** [mobility.centre@bridgewater.nhs.uk](mailto:mobility.centre@bridgewater.nhs.uk)

**Services: I D P T**

**Norfolk**

East Anglian DriveAbility

2 Napier Place, Thetford IP24 3RL

**Satellite centres:** Coggeshall, Spalding

**Tel:** 01842 753029

**Fax:** 01842 755950

**Email:** [mail@eastangliandriveability.org.uk](mailto:mail@eastangliandriveability.org.uk)

[www.eastangliandriveability.org.uk](http://www.eastangliandriveability.org.uk)

**Services: I D P W T**

**North East**

North East Drive Mobility,

Walkergate Park Centre for Neuro-rehabilitation and Neuro-psychiatry

Benfield Road

Newcastle upon Tyne NE6 4QD

**Satellite centre:** Penrith

**Tel:** 0191 287 5090

**Email:** [northeast.drivemobility@ntw.nhs.uk](mailto:northeast.drivemobility@ntw.nhs.uk)

[www.ntw.nhs.uk](http://www.ntw.nhs.uk)

**Services: I D P**

**Surrey**

QEF Mobility Services

Damson Way, Fountain Drive

Carshalton, Surrey SM5 4NR

**Tel:** 020 8770 1151

**Fax:** 020 8770 1211

**Email:** [mobility@qef.org.uk](mailto:mobility@qef.org.uk)

[www.qefd.org](http://www.qefd.org)

**Services: I D P W T**

## West Midlands

Regional Driving Assessment Centre  
Unit 11, Network Park  
Duddeston Mill Road, Birmingham B8 1AU

**Satellite centres:** Cannock, Hull,  
Northampton, Oxford

**Tel:** 0845 337 1540

**Fax:** 0121 333 4568

**Email:** info@rdac.co.uk

www.rdac.co.uk

**Services: I D P T**

## West Yorkshire

The William Merritt Centre  
Disabled Living Centre and Mobility  
Service

St Mary's Hospital, Green Hill Road  
Armley, Leeds LS12 3QE

**Tel:** 0113 305 5288

**Fax:** 0113 231 9291

**Email:** mobility.service@nhs.net

www.williammerrittleeds.org

**Services: I D P W**

## NORTHERN IRELAND

Disability Action, Portside Business Park  
189 Airport Road, Belfast BT3 9ED

**Satellite centres:** Ballymena,  
Dungannon, Londonderry, Newry

**Tel:** 028 9029 7880

**Fax:** 028 9029 7881

**Email:**

mobilitycentre@disabilityaction.org

www.disabilityaction.org

**Services: I D P T**

## SCOTLAND

Scottish Driving Assessment Service  
Astley Ainslie Hospital

133 Grange Loan  
Edinburgh EH9 2HL

**Satellite centre:** Mobile Driving Assessment  
Service

**Tel:** 0131 537 9192

**Fax:** 0131 537 9193

**Email:**

marlene.mackenzie@nhslothian.scot.nhs.uk

**Services: I D P**

## NORTH WALES

North Wales Mobility and Driving  
Assessment Service

Disability Resources Centre

Glan Clwyd Hospital

Bodelwyddan

Denbighshire LL18 5UJ

**Satellite centre:** Newtown

**Tel:** 01745 584 858

**Fax:** 01745 582 762

**Email:** mobilityinfo@btconnect.com

www.wmdas.co.uk

**Services: I D P W T A**

## SOUTH WALES

South Wales Mobility and Driving  
Assessment Service

Rookwood Hospital

Fairwater Road

Llandaff

Cardiff CF5 2YN

**Satellite centre:** Pembroke

**Tel:** 029 2055 5130

**Fax:** 029 2055 5130

**Email:** helen@wddac.co.uk

www.wmdas.co.uk

**Services: I D P**

## OTHER ORGANISATIONS



### Assist UK

National network of centres offering advice on independent living equipment. Your local centre can advise about wheelchairs and accessories.

Tel: 0161 238 8776

Email: [general.info@assist-uk.org](mailto:general.info@assist-uk.org)

[www.assist-uk.org](http://www.assist-uk.org)

### Blue Badge Network

Has information, news and ideas relating to parking concessions in particular and disability issues in general.

11 Parson's Street, Dudley DY1 1JJ

Tel: 01384 257001

Fax: 01384 257317

Email:

[headoffice@bluebadgenetwork.org.uk](mailto:headoffice@bluebadgenetwork.org.uk)

[www.bluebadgenetwork.org.uk](http://www.bluebadgenetwork.org.uk)



Public services all in one place  
[www.direct.gov.uk](http://www.direct.gov.uk)

### Directgov

A website providing information about

public services. They have useful sections on motoring and on disability.

[www.direct.gov.uk/disabledpeople](http://www.direct.gov.uk/disabledpeople)



### Disabled Living Foundation

Advice and information on disability equipment. They have a database of products and suppliers.

380–384 Harrow Road

London W9 2HU

Tel: 0845 130 9177

(weekdays 10am to 4pm)

[www.dlf.org.uk](http://www.dlf.org.uk)

[www.livingmadeeasy.org.uk](http://www.livingmadeeasy.org.uk)

### Disability Now

A monthly newspaper published by SCOPE with reviews by disabled people and classified advertisements. Subscribe or order from your newsagent.

Tel: 0844 249 0228

Email: [dnsubs@servicehelpline.co.uk](mailto:dnsubs@servicehelpline.co.uk)

[www.disabilitynow.org.uk](http://www.disabilitynow.org.uk)

### Driver and Vehicle Licensing Agency

Drivers Medical Group

DVLA

Swansea SA99 1TU

Tel: 0300 790 6806

Fax: 0845 850 0095

Email: [eftd@dvla.gsi.gov.uk](mailto:eftd@dvla.gsi.gov.uk)

[www.direct.gov.uk/driverhealth](http://www.direct.gov.uk/driverhealth)

### Northern Ireland

Driver and Vehicle Agency Drivers Medical Section

County Hall, Castlerock Road

Coleraine BT51 3TB

Tel: 0845 402 4000

Email: [dvlni@doeni.gov.uk](mailto:dvlni@doeni.gov.uk)

[www.dvani.gov.uk](http://www.dvani.gov.uk)

### Disabled Motoring UK



The campaigning charity for disabled motorists.

They run the Baywatch campaign against parking abuse and represent disabled people's needs at a national level. Membership, £20 per year (£30 for joint members), includes a monthly magazine, advice service and member benefits.

Ashwellthorpe, Norwich NR16 1EX

Tel: 01508 489449

Email: [info@disabledmotoring.org](mailto:info@disabledmotoring.org)

[www.disabledmotoring.org](http://www.disabledmotoring.org)



## Mobility Roadshows

Have a wide range of adapted cars and mobility products to see and try. Manufacturers and organisations are on hand to give advice and demonstrations. Roadshows are free.

In England and Scotland: **Mobility Choice**

Tel: 0845 241 0390

Fax: 0845 241 2136

Email: [choice@gtnet.gov.uk](mailto:choice@gtnet.gov.uk)

[www.mobilityroadshow.co.uk](http://www.mobilityroadshow.co.uk)

In Northern Ireland: **Disability Action**

Tel: 028 9029 7880

Fax: 028 9029 7881

Textphone: 028 9029 7882

Email: [marketing@disabilityaction.org](mailto:marketing@disabilityaction.org)

[www.disabilityaction.org](http://www.disabilityaction.org)

## Motability One Big Day

Motability run these regional events for users or prospective users of the scheme – you can see and try cars and equipment

Tel: 0800 953 4002

[www.motabilityevents.co.uk](http://www.motabilityevents.co.uk)



## Remap

A voluntary organisation of engineers who

invent, design and make devices or carry out adaptations to help disabled people to be more independent or to enjoy leisure activities.

## England, Wales and NI

D9 Chaucer Business Park

Kemsing, Kent TN15 6YU

Tel: 0845 130 0456

Fax: 0845 130 0789

Email: [info@remap.org.uk](mailto:info@remap.org.uk)

[www.remap.org.uk](http://www.remap.org.uk)

## Remap Scotland

The website has a useful map showing the locations of local groups.

Forgue House, Forgue, Huntly AB54 6DA

Tel: 01466 730 736

Email: [remap-scotland@btconnect.com](mailto:remap-scotland@btconnect.com)

[www.remap-scotland.org](http://www.remap-scotland.org)



## Service Call

A service that allows disabled people to use petrol stations and other services that are difficult to access.

You carry an infrared transmitter (£14.95 inc p&p), which you use to signal that you need assistance at participating outlets, which include thousands of petrol stations, banks, supermarkets, shops and others.

Tel: 0800 458 3008

Email: [info@service-call.net](mailto:info@service-call.net)

[www.service-call.net](http://www.service-call.net)



## Wheelchair Accessible Vehicle Converters' Association

The trade association for companies who make and sell WAVs. WAVCA aims to improve the quality and safety of WAVs and lobbies for legislation for wheelchair passenger vehicles

Members must:

- have been trading for at least 2 years
- offer at least 3 years warranty
- have passed safety tests on restraints and seat belts
- demonstrate a commitment to customer service.

Email: [enquiries@wavca.co.uk](mailto:enquiries@wavca.co.uk)

[www.wavca.co.uk](http://www.wavca.co.uk)

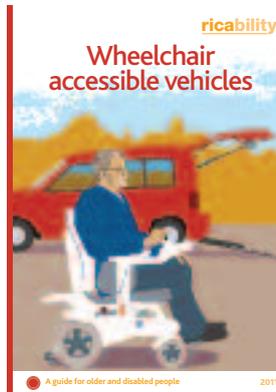
# Ricability guides

All these guides are available in print and online at [www.ricability.org.uk](http://www.ricability.org.uk).  
Our website also has a searchable database of car measurements called *Find a car*.



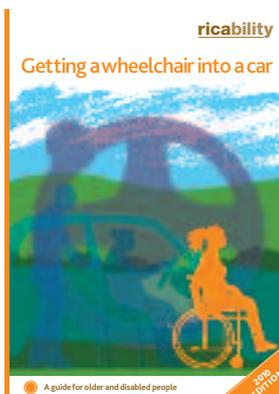
## MOBILITY ADDRESS LIST

Addresses of all adaptation suppliers, fitters and converters in the UK and the services they offer



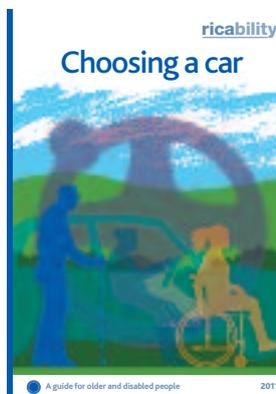
## WHEELCHAIR ACCESSIBLE VEHICLES

Information on vehicles converted to allow you to travel in your wheelchair, as a passenger or driver.



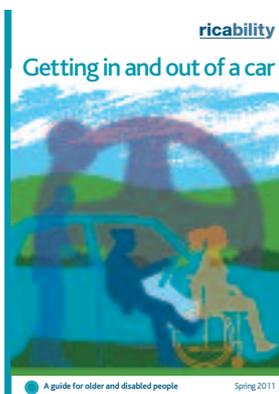
## GETTING A WHEELCHAIR INTO A CAR

Equipment to help you stow or carry a wheelchair in a car, including ramps, hoists, racks and trailers



## CHOOSING A CAR

Things to think about if you have a disability, details of features that may help you and ways of adapting a car to suit your needs



## GETTING IN AND OUT OF A CAR

Techniques that may help as you get older; helpful equipment and details of lifting systems if you need more help

## SEVEN SHORTER GUIDES

- Motoring after an amputation
- Motoring after a brain injury
- Motoring after a stroke
- Motoring with arthritis
- Motoring with cerebral palsy
- Motoring with multiple sclerosis
- Motoring with restricted growth

**Motability has teamed up with leading home, pet and travel insurers**

- For full details of the Motability Insurance range visit [www.motability.co.uk](http://www.motability.co.uk) or call direct:

**Motability HOME Insurance**

**0800 783 0061**

**Motability PET Insurance**

**0800 369 9094**

**Motability TRAVEL Insurance**

**0800 519 9957**

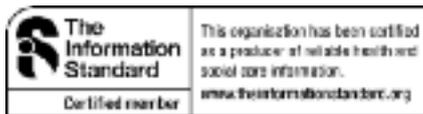
- For every policy sold, the insurance providers will pay a proportion of the premium in commission to Motability to help disabled people remain mobile.



# ricability

Ricability is a research charity that publishes independent information on products and services for older and disabled people

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50–52 Wharf Road  
London N1 7EU  
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Fax: 020 7427 2468  
Textphone: 020 7427 2469  
Email: [mail@ricability.org.uk](mailto:mail@ricability.org.uk)  
[www.ricability.org.uk](http://www.ricability.org.uk)



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