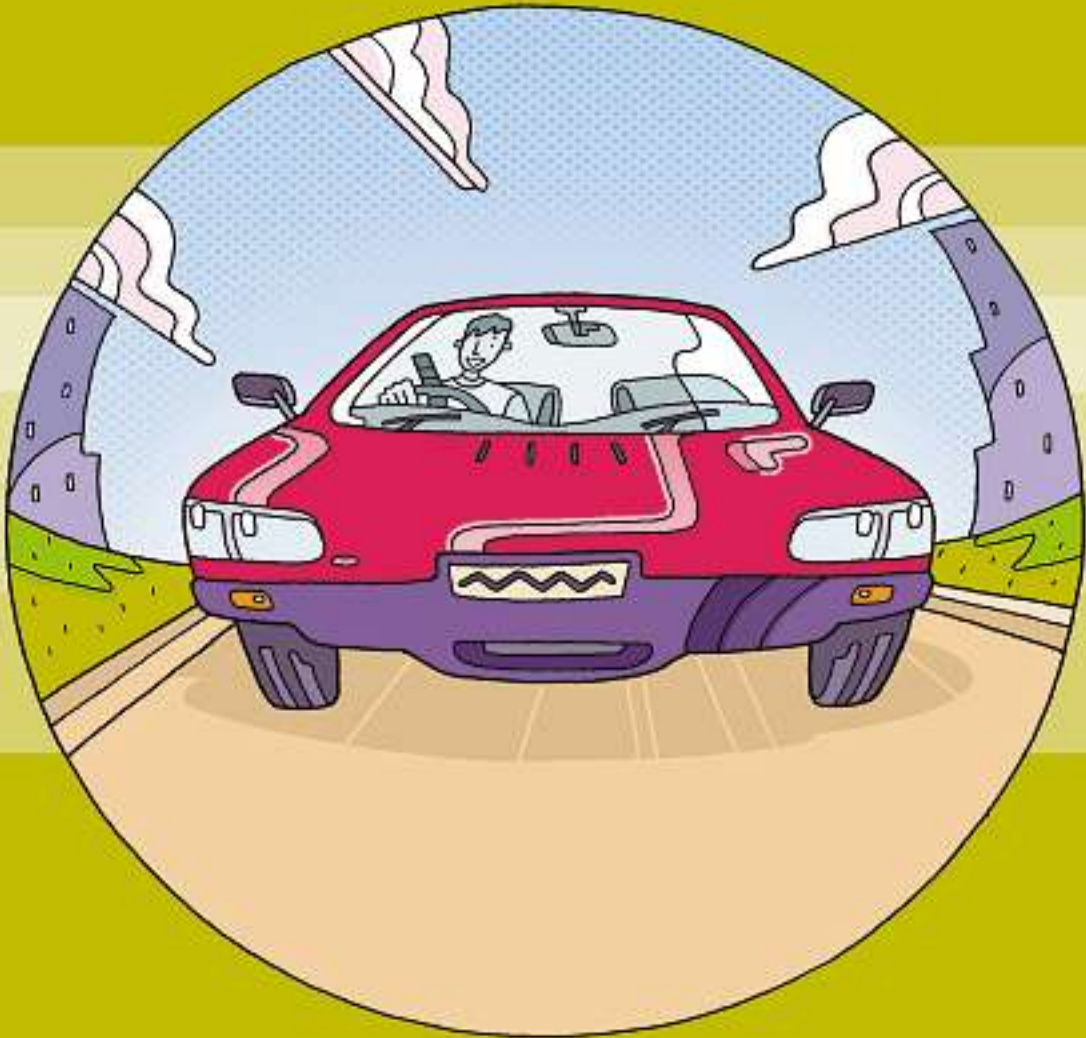




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Motoring after amputation



Motoring after amputation

Contents

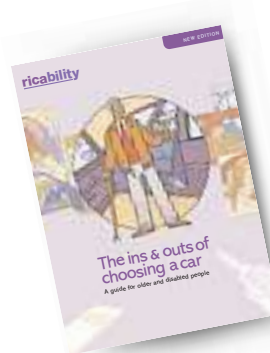
Driving after amputation	3	Secondary controls	8
Choosing a car	3	Other ways of driving	9
Plan of action	4	Finance	9
Products and techniques	5	Further information	9
Getting in and out	5	Helpful organisations	10
Primary controls	6		

This booklet

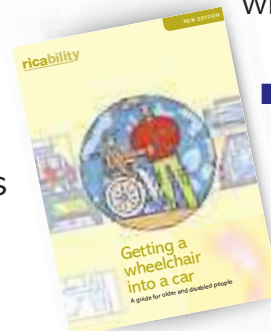
The model of car that you choose or already have will make a big difference to how easy it is to use, whether you are a driver or passenger. This is an advisory booklet for people who have had an arm or leg amputated.

We tell you about useful features on standard cars that might mean you will be able to use them unadapted. However there are also specialist products and techniques that might suit you. Product prices should be used as a guide only. If you can, shop around and talk to different firms as prices vary. At the back there are contact details for sources of expert advice.

For more information, see www.ricability.org.uk for our *Car measurement guide* with key measurements of around 100 cars. There are other mobility guides there too. The four below include lists of where to go for further information, help and advice. Printed copies are free and for the cost of postage only.



- **The ins & outs of choosing a car**
Overview of the features that can help, tips on getting in and out of a car, ways of adapting a car to suit you.



- **Car controls**
In depth information on the types of adaptations and controls available and where to get them.
- **Getting a wheelchair into a car**
Comprehensive information on hoists, racks and trailers and where to get them.



- **People lifters**
Comprehensive information on devices that help wheelchair users to get in and out of a car and where to get them.



Driving after amputation

If you are learning to drive or returning to driving after an amputation, you must tell the Driver and Vehicle Licensing Agency (DVLA) and your insurance company of your amputation and any car adaptations that you need. You will probably be asked to complete a DVLA questionnaire and to give them permission to contact your GP for more information.

The DVLA may require you to attend a Mobility Centre for a driving assessment – see *Plan of action* below. Work with the Centre, first to see how much you can do using your remaining and artificial limbs. If necessary they will advise on car adaptations that can overcome any difficulties you have: see below for summaries and our *Car controls* guide for more detail.

You may be issued with a full licence or a coded one to drive only automatics or vehicles that have been adapted. If your amputation resulted from an ongoing medical condition, such as diabetes or circulation problems, the licence may be time-limited for later review. You need to keep both the DVLA and your insurer informed whenever your ability to drive changes significantly.

For further information on getting a driving licence, go to www.dvla.gov.uk or get *What you need to know about driving licences* (D100) from a post office. You can get a free booklet, also called *Driving After Amputation*, from Artificial Limb Centres and Mobility Centres.

Choosing a car

Many features that are particularly helpful for disabled motorists are now more widely available and the less a car has to be modified, the less it will affect its resale value. Check that any car you are considering can be fitted with the controls you need, for example, electric adaptations are difficult to interface with modern cars' computer-based electrics.

- Automatic transmission: a must for many disabled drivers. Generally easier to drive and cheaper to convert.
- Power assisted steering: strongly recommended after upper limb amputation. On some cars the effort needed can be further lightened by the dealership or by specialist converters.
- Cruise control to maintain a constant speed. You can relax pressure on the accelerator. Choose carefully – some are small and fiddly to operate. Standard on some cars, an extra on others or adaptation firms can fit one.
- Space for your artificial limb in the footwell.
- Electric secondary controls eg for windows, door mirrors, push button ignition, remote central locking, wipers that switch on automatically when it rains, lights which switch on automatically when it gets dark.
- Parking sensor – sounds if you are near an obstruction.
- Reversing camera.
- Rear seats that fold flat by power.
- No or low sill to the tailgate.
- Internal boot/hatch release.
- Hatch which opens by power.

And for getting in and out and comfort:

- Tall and wide door openings – doors on two-door cars are usually wider.
- Doors with a wide opening angle.
- No sills or low, narrow door sills.
- Conveniently placed handholds.
- Height adjustable seats.
- Electrically operated seats which go up and down, forwards and back – for more space to get in, but to sit closer to the wheel for driving.
- Back and lumbar support on seats.
- Plenty of leg and foot room.
- Air conditioning for comfort.

Plan of action

1 Ask some basic questions.

Prepare to compromise as you may not find everything in one car. Think about what you may need in future.

Will you drive the car? Or will you be a passenger? Whichever, think about getting in and out and comfort. See *Products and techniques* below and our guide *The ins & outs of choosing a car*.

Will you need special controls?

There is a big range – from simple gadgets to more complex controls. See below and our *Car controls* guide.

What equipment will you carry?

Think about every day and occasionally.

Do you use a wheelchair?

See below and our guides *Getting a wheelchair into a car* and *People lifters*. If you travel in your wheelchair as a passenger, a Mobility Centre can advise you about vehicle converters and adaptations.

2 Collect information. Start with articles in motoring magazines and the internet plus manufacturers' brochures. If you are disabled, other sources include:

Reviews by disabled drivers appear regularly in Motability's magazine *Lifestyle* and in the newsletters of disabled motorists' organisations.

Mobility Centres and organisations of disabled motorists give independent advice and provide a range of services (see p11). Mobility Centres can assess if you can drive and find out what equipment may suit you. Assessments are free if you are referred by the DVLA and, at a few centres, by the NHS. Most charge £45 upwards. Adaptation firms can use the assessment report to help them find the most suitable equipment for you.

Mobility Roadshow (see p11) event with cars and adaptations; you can test drive vehicles there.

Motability (see p11) have a list of accredited car dealers with specialist knowledge and facilities for disabled people. A video on choosing a car, *Right first time*, is available from Motability (£3.99) or borrow it from an accredited dealer. Also see the Motability website for an interactive *Vehicle Suitability Guide*.

3 Try out before buying any car you are considering. Dealers may bring one to you and should be able to find an automatic version. Try getting in and out several times. If you use a wheelchair, check that it fits. You

might be able to try out adapted cars at a Mobility Centre or an adaptation firm. They will tell you whether your adaptations can be fitted to the car.

4 Get plenty of practice. It is advisable to have lessons with an instructor using any adaptations you have chosen – essential when learning to use any left foot accelerator (see below). Mobility Centres can provide details. Make sure that you are not driving with adaptations for the first time when you collect the car.

Learning to drive

If you are learning or returning to driving, Mobility Centres and disabled drivers' organisations (see p10) can help you to find a specialist driving instructor. They use cars with adapted controls or will teach you in your own vehicle.

Products and techniques

You may well be able to continue driving an unadapted car, particularly if it has automatic transmission and power steering. However if your amputation means you have difficulty driving, consider the adaptations available. See below and our *Car controls* guide, but this is the time to get individual advice from a Mobility Centre (see p11).

If friends or family also drive your car, make sure your adaptations do not prevent them doing so or get in their way unreasonably.

Getting in and out

If your main car key is small but full of electronics, fit a chunky holder on a spare key for more leverage. They cost about £5 and are available from general aids suppliers.

Having the door hinges modified and the seat runners extended will give you more space to get in and out of the car. It may be possible to have an existing seat converted – to be higher, made height adjustable, swivel or to be powered. Costs start at about £800 from adaptation firms. If swivelling helps, there are turning cushions (mostly between £20 and £80 from general aids suppliers) and replacement swivel seats, mostly from £700 upwards, from adaptation firms. To get in, sit first then turn and bring your legs in, doing the reverse to get out.

Wheelchair users If you have a manual wheelchair, you may be able to lift it into the back of the car and walk the few steps to the seats. However if you can't, there is a range of devices and techniques for getting you and the wheelchair into your car.

See:

Getting a wheelchair into a car for:

- hoists which lift a manual or powered chair into a vehicle
- rooftop hoists which winch a manual chair up and on to the roof of a car
- racks which carry a wheelchair on the back of a car
- trailers and ramps.

People lifters for:

- hoists which lift and lower you on to a car seat
- lifting seats which swing out and into the car, lowering and locking into a position to suit you
- wheelchair systems which are a specially designed wheelchair that slides into the car while you are sitting in it and becomes the car seat
- wheelchair accessible vehicles (WAVS) which you travel in while in your wheelchair, including a list of specialist conversion companies.

Easifuel

A small plastic gadget that holds open the trigger on petrol pumps – useful if you have limited dexterity or the use of only one hand (£2.99; call 020 7582 1117 to try before you buy).

Primary controls

There is a range of adaptations for drivers.

Steering To steer one handed you are likely to need a steering ball or spinner fitted to the steering wheel, and probably power assisted steering. Both are particularly useful during parking and low speed manoeuvres.

Spinners come in several shapes to suit different types of grip and most cost between £30 and £80. Some can be used with an artificial limb to steady the steering wheel. Limb Centres provide arm amputees with a spinner

(free of charge) that is controlled with a detachable device in their prosthesis, depending on the design of the prosthesis.

Whether you can use a spinner with an artificial hand will depend on the level of your amputation and your type of prosthesis. Some spinners can be used with prostheses for above or below elbow amputation and some device options, such as cup and stem or split hook and ring.

When driving, an electrically powered prosthesis should be switched off and must not be clamped directly on to the steering wheel or spinner. Cosmetic hands can be used for steadying the wheel but not for forceful actions. The fingers should not be wrapped around the wheel rim or spinner.

Avoid adaptations that could interfere with an inflating airbag, and any that protrude and could catch your knee, seat belt or clothing. Take care that any rim fitted device is securely clamped.

Changing gears Most people opt for an automatic – which can be driven with the right or left foot. To stop the car rolling back on slopes, you need to be able to use a handbrake or have an adaptation such as brake assist.

An automatic could be all you need if your left leg is amputated or if your arm is amputated below the elbow and you drive wearing a prosthesis. Think about the condition of your other leg, as you are likely to need automatic transmission and hand controls (see below) if you have problems with ulcers, sensation or circulation or

if both your legs are amputated.

You may have difficulty feeling floor pedals with a prosthetic foot and there is a risk of jamming it under the pedal without realising it. There may be times when your stump is too sore to wear an artificial limb.

If you cannot use a mechanical gear selector, there are systems which electrically set the gear for you, but these can be costly. It might not be worth adding them to an older vehicle. A Mobility Centre will advise you.



Some cars have manual gears designed to be easy to use – such as nudging the gear stick – without having to use the clutch pedal.

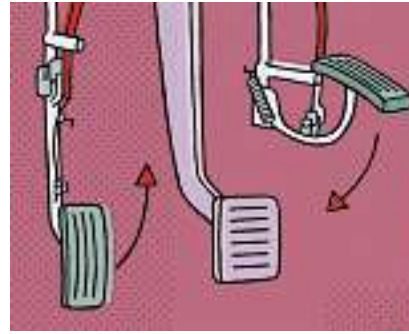
Pushbutton clutches have a touch sensitive switch mounted on the gear stick (around £1,000 to £1,500+). As you touch it, a motor disengages the clutch.

There are also semi-automatic clutches varying from mechanical levers to servo-assisted systems but they require manual dexterity.

If you drive an adapted manual car but your driving licence is for automatic vehicles only, you must make sure the clutch pedal is removed.

Accelerating and braking If your right leg is amputated, consider having

an automatic car and a flip up left foot accelerator fitted on the left side of the brake pedal for around £300. You will need training to drive this way. The original accelerator can be flipped down for conventional driving.



Hand controls Many people find hand controls fitted on an automatic car easier to get used to. There are different types of system which can be mechanical or electric. They vary in the amount of effort required. Have a pedal guard fitted which is easily removeable.

Tips

Here is advice from disabled drivers:

- Think about what you may need in the future as well as about what suits you now.
- Get an assessment or test drive a new car when you are your least able – at the end of the day when you feel tired.
- Make sure you get what you know you need and want and not what others think you should have.
- See as many controls as you can.

Combined controls:

■ steering column mounted – push a lever to brake and pull it towards you to accelerate, from around £350.



■ floor mounted push-pull levers – the height, length and strength needed can be set to suit you, from around £500.

■ clamp on controls simply bolt on to the pedals – can be used temporarily and cost around £350.

Separate accelerators and brakes:

■ accelerator rings need less effort than a push-pull lever and you can steer with both hands on the wheel, from around £1,000 to £1,600.



■ hand operated floor mounted brakes, around £350.

■ custom built accelerators to be worked by different parts of your body.

Parking brake Bolt on attachments make using the brake easier. These include simple levers to take the effort out of pressing the release button and

handles you pull to operate the whole brake. These mostly cost from £60. An alternative is electric brakes worked by push buttons. These vary in cost, from around £700.

Secondary controls

These are used for things like lights, indicators and horn and there are simple attachments to make them easier to use – such as extended indicator stalks.

Otherwise there are infrared systems for all secondary controls. They can be fitted and adjusted to meet your particular needs. Getting used to an infrared control can take practice as you need to find the right button by touch. Many do not have automatically cancelling indicators.



There are also bleeper and tone systems – you press just one button until you reach the function you want. Voice control systems work by spoken command and are programmed to act on only your voice.

Prices of these vary widely depending on how complex the adaptations are and on your vehicle's wiring system. They start at about £750. Do check the potential cost of any adaptation you are considering and its compatibility with your car with an adaptation specialist.

Other ways of driving

Nearly all controls can be altered or adapted to suit you and complete systems built around you if necessary. Obviously the more equipment you need and the more it has to be adapted, the higher the cost. You will certainly need a thorough assessment at a Mobility Centre and specialist instruction for systems that involve driving in a very different way.

Finance

Here are ways to finance a car. See also the Ricability guides.

Cash – you may be able to negotiate a greater discount if paying up front.

Personal loan – lets you own the car from the start – flexible payment periods, during which you pay interest.

Hire purchase – you pay a deposit and repayments with interest, usually over two to five years, and own the car at the end.

Personal contract plan and lease purchase – you pay a deposit and monthly payments; at the end of the contract you can hand the car back or buy it at a prearranged price.

Motability – Contract Hire and Hire Purchase Schemes set up for disabled people, using the Higher Rate Mobility Component of the Disability Living Allowance (DLA) or the War Pensioner's Mobility Supplement. May also be able to offer help in the form of a grant.

Charities – you may be able to get an individual grant from local charities

(check your library for sources).

Statutory sources – social services may be able to help you with costs if you do not get DLA. Or if you are in or applying for a job, try the Access to Work scheme; contact your local Job Centre.

VAT exemption – you do not pay VAT on adaptations, their installation, repairs nor maintenance. If you use a wheelchair or stretcher, you may not have to pay VAT on the purchase price of an adapted car; information from HM Revenue and Customs.

Vehicle Excise Duty (Road Tax) – you don't have to pay this on your car if you get the Higher Rate Mobility Component of DLA or the War Pensioner's Mobility Supplement; get an exemption certificate from the DLA Unit (08457 123456) or the Veterans Agency (0800 169 2277).

Car insurance – under the Disability Discrimination Act, insurers are not allowed to refuse disabled drivers insurance or charge extra without justifying evidence. Shop around for the best deal. Mobility Centres and organisations of disabled motorists have lists of companies that specialise in insurance for disabled drivers.

Further information

Hiring a car

There are a few adapted cars for hire. Contact one of the Mobility Centres for firms that supply them (see p11).

Blue Badge scheme

Allows disabled people to park in restricted areas, but do read and follow the conditions of use carefully. Details from the Department for Transport Mobility and Inclusion Unit: 020 7944 2914; www.dft.gov.uk and follow Access for Disabled People link.

Service call

For £9.95 (inc p&p) you can buy an infrared ServiceCall Transmitter to call for service at thousands of participating outlets, such as garages, banks and shops. More information from www.service-call.net or call 0800 458 3008.

Helpful organisations

BLESMA

British Limbless Ex-Service Men's Association

Tel: 020 8590 1124

Email: blesma185@btconnect.com

Web: www.blesma.org

● help and advice to ex-servicemen and women (and their dependants) who have lost limb/s, eye/s or use of limbs – the latter in or as a result of service

Disability Benefits

Helpline: 08457 123456

Web: www.disabilitybenefits.co.uk

Disabled Drivers' Association

Tel: 01508 489449

Email: hq@dda.org.uk

Web: www.dda.org.uk

● Help and advice to disabled motorists; local groups; merging with DDMC during 2006

Disabled Drivers' Motor Club

Tel: 01832 734724

Email: info@ddmc.org.uk

Web: www.ddmc.org.uk

● Help and advice to disabled motorists; merging with DDA during 2006

Disabled Living Foundation

Helpline: 0845 130 9177 (10-4)

Text: 020 7432 8009

Web: www.dlf.org.uk

● Advice and information on disability equipment

Disabled Motorists Federation

Tel/Fax: 0191 416 3172

Email: jkillick2214@compuserve.com

Web: www.freewebs.com/dmfed

● Umbrella organisation for disabled motorists' clubs; also independent membership; mobility information

DVLA

Tel (Medical Unit): 0870 600 0301

Web: www.dvla.gov.uk

In Northern Ireland:

Tel (Medical Section):

028 7034 1469

Web: www.dvlni.gov.uk

Forum of Mobility Centres

Freephone: 0800 559 3636

Email: enquiries@mobility-centres.org.uk

Web: www.mobility-centres.org.uk

- National information service on driving, devices and vehicle adaptations
- Location of all independent, accredited Mobility Centres

HM Revenue and Customs

Tel: 0845 010 9000

Text: 0845 000 0200

Web: www.hmrc.gov.uk

- VAT relief (VAT Notice 701/7) and motor vehicles (VAT Notice 701/59) for disabled people

Limbless Association

Tel: 020 8788 1777

Email: enquiries@limbless-association.org

Web: www.limbless-association.org

- Help and advice to limbless people and their carers; 300 Peer Support Visitors (all limbless)

Magic

Freephone: 0800 240 241

Email: help@fordmagic.co.uk

Web: www.fordmagic.co.uk

- Information on cars, adaptations and general mobility queries

Mobility Roadshow

In England and Scotland organised by Mobility Choice

Tel: 0870 770 3222

Email: choice@gtnet.gov.uk

Web: www.mobilityroadshow.co.uk

Northern Ireland: Disability Action

Tel: 028 9029 7880

Email: marketing@disabilityaction.org

Web: www.disabilityaction.org

- Free event with advice, demonstrations and test drives on cars and mobility products and services

Motability

Tel: 0845 456 4566

Text: 01279 632273

Web: www.motability.co.uk

- Schemes to finance your vehicle

Murray Foundation

Helpline: 0800 028 2822

Email: info@murray-foundation.org.uk

Web: www.murray-foundation.org.uk

- Information, counselling and support service for those affected by limb loss or absence and their families in Scotland

REMAP

Tel: 0845 130 0456

Email: info@remap.org.uk

Web: www.remap.org.uk

- Voluntary engineers who design and manufacture devices when there is nothing else on the market

REMAP (Scotland)

Tel: 01294 832 566

Email: golderjohn@hotmail.com



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

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