## The Complete Guide

to Driving with Disability.

2023 Edition





Revised Edition

Licensing and



For those who love to drive!





### Welcome.

For many people with disability, driving has a hugely positive impact on their life and lifestyle. Yet many aren't aware of the new technology that enables them to drive safely.

Some are aware of their options but find it difficult to navigate the steps to get the funding, training and equipment required.

Other people may currently be using outdated equipment that may even harm their health and safety.

This guide aims to break down the barriers, providing clear advice to help people with disability to drive.

For those who already drive, this will broaden your understanding of the new technology helping you drive for longer without the fatigue and joint stress older equipment can cause.



"From my own experience of acquiring a disability, I know how important learning to drive again was for my recovery, mental well-being and sense of independence.

This guide is aimed at helping everyone with a disability, who can safely drive, get their independence as quickly as possible."

Paul Crake, Owner Total Ability

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## Who This Guide is For.

From our experience, people with disability requiring assistance usually fall into one of four categories:



Learning to drive for the first time.



Someone who has acquired a disability and is now getting back to driving.



Current drivers who could (maybe should) upgrade to new equipment.



Someone who has given up on the idea of driving, unaware new equipment can make it possible.

If you know someone who falls into the categories above, please feel free to pass this guide on. We will keep an updated version available on the Total Ability website here:

https://totalability.com.au/complete-guide-to-driving-with-disability/



"It's not unusual for me to drive 6 hours... I had the new controls in time for my recent trip to Dubbo and the difference was amazing. Physically I felt so much better than would have been the case before."

Mel Harrison, Sitting Low Reaching High, who recently upgraded to the latest technology hand controls © Totalability 2023



## The Benefits.

For many people with disability, being able to drive safely is empowering and transformative. Some people even describe it as life-changing ... others life saving.

Whether someone was born with a disability and is learning to drive for the first time or has acquired a disability and is learning to drive again; not relying on someone else's availability to complete everyday tasks like shopping is liberating and being in control is fantastic for self-esteem.

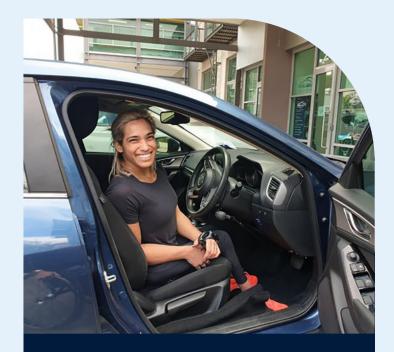
The latest technology also significantly benefits people who are already driving.

#### **General Benefits:**

- · Independence: less reliant on others.
- · Increased opportunity to work.
- · Facilitates participation in the community.
- · Supports self-esteem and mental health.
- Freedom to be more impulsive and less planned.

## Specific benefits of upgrading to new technology compared to older hand controls:

- Safety: old controls can go wrong especially if not replaced for some time or serviced regularly.
- Retain the use of airbags: some older hand controls require deactivation of knee airbags.
- Protecting the body, especially shoulders, against over use injuries.
- Reducing driver fatigue: able to drive longer distances because new controls are less tiring.
- More driver leg room: fewer parts that intrude into the driving space.
- Enable a wider range of people with disability to drive.
- New functions like voice command make driving simpler and less stressful.



"Taking preventative measures to protect my shoulders (by using the latest driving controls) is really important. Whether you're an athlete or not, if you use a wheelchair, you need to prolong their use. Your shoulders are a vital part of maintaining your independence in so many aspects of life."

Madison de Rozario, Nine Times Gold Medallist at the Paralympic Games, World Championships and Commonwealth Games

# A History of Driving Controls for People with Disability.

Driving controls for people with disability have been around for more than 100 years.

For much of that time, driving controls have been basic mechanical devices added to cars. Only more recently have we seen significant technological advances transforming the experience of driving with a disability.

#### **Early 1900s**

Many of the cars manufactured at the beginning of the 20th Century were designed for 'after-market' adaptation, so it wasn't long before enterprising inventors started creating their own driving controls.

Examples include US Judge Quentin D. Corley (pictured in 1913). The loss of his right arm and left hand led him to adapting his Ford Model T so he could drive with his one residual limb.

#### 1920s

The wave of injured soldiers returning from the First World War spurred on the development of driving controls for people with disability. In the UK, the Disabled Drivers' Motor Club (DDMC) was originally formed in 1922 by a group of First World War exservicemen who met while having artificial limbs fitted at St Mary's Hospital Roehampton.

#### 1930s

Disabled drivers won the right to hold a driving licence.

The US Government had considered banning people with disabilities from holding a licence, but after campaigning from the Disabled Drivers' Motor Club, amongst others, was forced to change its mind on the issue.

#### 1940s

After the Second World War, another wave of soldiers returning with disabilities led to manufacturers like Ford and General Motors in the US modifying their vehicles. As the market eventually slowed down, most stopped producing adaptive technology.

In the UK, inspired by the exploits of war veteran O A (DENNY) Denly who, paralysed from the waist down, had crossed the Alps on a tricycle in 1947, the Invalid Tricycle Association was formed in January 1948. It later widened its remit and changed its name to the Disabled Drivers' Association in 1963.

The British Ministry of Pensions distributed "Invacars" free to people with disability from 1948. This continued until the 1970s. 56 different control variations were available, many with hand controls replacing foot pedals. Because of safety concerns its use was effectively banned from the road in 2003.

Steering wheel spinner knobs first became popular during the 1940s, enabling one-handed steering.



#### 1950s

Push-pull hand controls were invented by Alan Ruprecht, who had contracted polio. Ruprecht found the existing types of controls difficult to use, so he put his engineering background to good use and developed mechanical hand controls with design principles still used today.

#### 1960s

In 1963, Ralph Braun created the first motorised wheelchair in the USA, and soon the first three-wheeled mobility scooter.

He continued inventing, developing a van with front seats removed. You could access the van using a mobility scooter and drive the van using hand controls for the accelerator and brake. To get into the van, Braun also invented the platform lift.

#### 1970s

In 1972, Braun formed the Braun Corporation, specialising in wheelchair lifts for vans allowing either side or rear entry for a wheelchair user.

#### 1980s

In Italy, Fabio Domeneghini invents the 'Duck' Clutch, an electronic clutch that allows drivers to change gears in a manual car with the touch of a button replacing the clutch operated by a driver's left foot, he goes on to create his company dedicated to driving equipment for people with disability, Fadiel Italiana.

Over in the USA, Braun Corporation turns its attention to creating ramps to allow wheelchair access into smaller vans.



#### 1990s

In 1990, EMC launches the world's first 'drive by wire' controls, the DigiDrive based on the same "Fly-by-Wire" technology originally invented for modern Air Force planes and by NASA to drive the Apollo Lunar Module

Braun Corporation launches its flagship wheelchair accessible ramp enabled minivan.

In 1996, Fadiel Italiana introduces the first generation of the Full Power Assist Brake System (Freedom Brake).

In 1999, Fadiel Italiana invents the Corded Satellite Accelerator using advanced "Fly by Wire" technology that allows a driver to accelerate the car whilst keeping two hands on the steering wheel.

#### 2000s

In 2004, the first-generation Joystick was invented by Fadiel Italiana, used to control steering, acceleration and braking.

#### 2010s

In 2012 Fadiel Italiana introduced voice command to enable control of indicators, windows and other functions by the user speaking into a microphone.

Also in 2012, Fadiel Italiana launched the wireless version of the Satellite Accelerator, the first use of Bluetooth to connect a driving control to a car's electronics system.



"Fly-by-Wire" was originally used in modern Air Force jets, but its first use in passenger airliners was in the Concorde.

## **Getting on The Road.**

### Step-by-step guide to get driving with the minimum of fuss.

The main concern for people with disability is that the process is too complicated. Navigating getting approval to drive, learning to drive, finding the right people to help, the right equipment to use, and applying for the funds can all seem too much.

There are a lot of steps to follow, but whilst the process may take between 3 and 24 months, with a bit of patience there should be nothing stopping most people with disability getting on the road.

This guide makes that process as easy as possible to follow.

Step 1: Preparation 2-4 weeks

**Step 2:** Key Contacts **2-4 weeks** 

**Step 3:** Getting Assessed **2-8 weeks** (It takes longer for higher level assessments)

**Step 4:** Test Driving the Equipment **2-8 weeks** (It takes longer for higher level assessments)

**Step 5:** The DTOT Report

2-4 weeks

Step 6: Driving Lessons

2 weeks - 12 months (due to van availability and/or cognitive challenges the high level mods need longer to learn)

**Step 7:** Doing the Driving Test

2-8 weeks

**Step 8:** Ordering your Equipment / Modifications **2-8 weeks** for private funding (Can be 3-12 months when subject to funding being approved)

**Step 9:** Installation and Certification **2-4 weeks** (High level modifications can take months to install with multiple suppliers)

**Step 10:** Equipment Aftercare and Longevity **1-4 weeks** (Service should be conducted every 12-24 months depending on product)

Please note: the timeframes above are indicative only. In extreme cases the time for each step may be more or less than anticipated.



## **Step 1: Preparation.**

### New to driving or getting back on the road?

Just as disability is varied and unique for everyone, there are different pathways for people living with disability to get or maintain a driver's licence across the various States and Territories.

There are certain assessments you may need to do. These depend on the seriousness of your disability or injury, and its impact on your driving ability, however, there is a general process that all States/Territories follow with some unique differences for each as outlined in the following pages with regard to licensing and vehicle modification certification.

It is also important to research funding options to help with the cost of your modifications, OT Assessment and driving lessons. The main funding bodies are listed in the table below.

### **Funding Bodies**

State	Funding Body	Scheme	Phone	Website
National	National Disability Insurance Agency (NDIA)	National Disability Insurance Scheme (NDIS)	1800 800 110	www.ndis.gov.au
National	Department of Veterans Affairs	Vehicle Assistance Scheme (VAS) Military Rehabilitation and Compensation Act 2004 (MRCA)	1800 838 372	www.dva.gov.au
National	Department of Health	Commonwealth Continuity of Support (CoS) Programme	1800 020 103	www.health.gov.au
National	Job Access	Employee Assistance Fund (EAF)	1800 464 800	www.jobaccess.gov. au/employment- assistance-fund-eaf
NSW	iCare	Lifetime Care and Support CTP Care (From 1 Dec 2022)	1300 738 586	www.icare.nsw.gov.au
VIC	Transport Accident Commission (TAC)	Transport Accident Commission (TAC)	1300 654 329	www.tac.vic.gov.au
VIC	Ballarat Health Services	The State-wide Equipment Program (SWEP)	1300 747 937	www.swep.bhs.org.au/ check-eligibility.php
SA	CTP Insurance Regulator	Lifetime Support Scheme (LSS)	1300 303 558	www.ctp.sa.gov.au
QLD	Motor Accident Insurance Commission (MAIC)	National Injury Insurance Scheme Queensland (NIISQ)	1800 287 753	www.maic.qld.gov.au
WA	Insurance Commission of WA	Catastrophic Injuries Support (CIS) scheme	1800 643 338	www.icwa.wa.gov.au
WA	Independent Living Assessment (iLA)	Independent Living Assessment (iLA)	08 6202 4700	www.ilaustralia. org.au/
NT	Motor Accidents Compensation Commission (MACC)	Motor Accidents Compensation (MAC) Scheme	1300 493 506	www.ntmacc.com.au
ACT	Motor Accident Injuries Commission	CTP Scheme (ended on 31/01/20) Motor Accident Injuries (MAI) Scheme	13 22 81	www.act.gov.au/maic
TAS	Motor Accident Insurance Board	Motor Accidents Insurance Board (MAIB)	1800 006 224	www.maib.tas.gov.au

## Licensing

		Motoring authority is notified of disability/ medical condition	Client notified of assessment and/ or next steps required	OT Assessment
	MSN	Doctor completes NSW Fitness to Drive Medical Assessment report. The report is lodged online, or client takes it to Services NSW. Doctor may recommend an Occupational Therapy Driving Assessment (OTDA).	Licensing authority notifies client by mail that an OTDA and/or a Practical Disability Driving Test (PDDT) is required.	An off-road and on-road assessment is conducted with a Driver Trained Occupational Therapist (DTOT) and Specialist Driving Instructor (SDI), modifications are recommended if required. The OTDA report is sent to the licensing authority online. DTOT makes recommendations regarding need for licence endorsements, rehabilitation program via specialised driving lessons, need for further OTDA or need for driver to undertake a PDDT.
	ACT	Doctor completes a <u>Driver Licence</u> <u>Medical Form</u> with the client and the form is sent to Access Canberra via email, fax or post.	Access Canberra notifies client in writing what the next course of action will be - client may need to do an OTDA.	An off-road and on-road assessment is conducted with a DTOT and SDI, modifications are recommended if required. If successful, a remediation plan (driving lessons) is drafted by the DTOT.
	QTD	Doctor completes an interim Medical Certificate for Motor Vehicle Driver (if the driver will need an OTDA to help the doctor determine the recommendations to be made). The form is sent by email or post to the Department of Transport and Main Roads (TMR).	TMR will notify the client and an interim licence may be issued for a specific period for the purpose of undertaking a DTOT assessment and/or lessons. Client must carry and drive in accordance with this certificate while they are undertaking their assessment.	An off-road and on-road assessment is conducted with a DTOT and SDI, modifications are recommended if required. DTOT sends the report to the treating doctor.
	VIC	Doctor will complete a VicRoads Medical Report Form with the driver indicating that they meet the National Medical Standards. This form is emailed to VICRoads Medical Review or submitted online.	VicRoads notifies client if an OTDA is required and client is given a list of DTOTs to choose from.	An off-road and on-road assessment is conducted with DTOT and SDI, modifications are recommended if required.
	SA	GP/Specialist/Hospital notify Department of Infrastructure and Transport (DIT) of medical condition/ disability via MR712 Certificate of fitness for light vehicles by email, post or client can take the form in person to Service SA customer service centre.	Client will be notified in the mail by DIT that their licence has been suspended and asked to visit a doctor for a medical assessment. Doctor fills new MR712 Certificate of fitness for light vehicles. Doctor states client may be fine to drive with modifications, or client must be assessed by DTOT first to determine if modifications are required. The form is sent to DIT.	DTOT seeks a temporary driving permit for the client to be assessed and to have lessons. They will do an initial OTDA and determine if modifications are required, number of lessons recommended and if the client can drive. The DTOT sends the report to the treating doctor who sends a final recommendation to DIT.
	WA	GP or client may notify Department of Transport (DoT) of disability/ medical condition via Notification of driving impairment (Form M109A). GP may refer client to DTOT for off-road and on-road assessment to determine if modifications are required.	If GP or client have notified DoT of medical condition/disability, DoT notifies the client a medical clearance is required. This may include a OTDA and Practical Driving Assessment (PDA). Otherwise, DoT will be notified when OTDA report is sent by the DTOT.	An off-road and on-road assessment is conducted with a DTOT and SDI, modifications are recommended if required.
!	Ż	GP completes Medical assessment of fitness to drive (L2) form PDF. The outcome of the medical assessment can be submitted in person, by email, or by post to Motor Vehicle Registry (MVR). GP may refer client to DTOT for OTDA.	MVR notifies client of medical assessment outcome and what is required.	An off-road and on-road assessment is done with DTOT and SDI, modifications are recommended if required.
	TAS	GP/Specialist/Hospital completes MR68 Medical Fitness to Drive Assessment form and sends it to Transport Tasmania (TT). Doctor may recommend an OTDA is required.	TT reviews the information and may suspend the driver's licence at this point. TT will notify client if an OTDA is required.	An off-road and on-road assessment is conducted with DTOT and SDI, modifications are recommended if required. The OTDA report is sent to TT. The DTOT makes recommendations to TT regarding need for licence endorsements, specialised driving lessons, and/or need for further OTDA.

Driving lessons with a Specialist Driving Instructor (SDI) in modified vehicle	Sign off on driving with modifications	Licence endorsed with conditions
Client's licence is endorsed with the condition X231, may only drive with a licensed driving instructor. Client has driving lessons with SDI in a modified vehicle with the recommended vehicle modifications. Note: for a learner driver with nil previous on road experience, it is likely the client will be re-assessed by the DTOT to remove condition X231 when they are driving at a standard that is safe for driving lessons under the supervision of a fully licensed driver.	A Transport for NSW (TfNSW) PDDT is conducted with a driving assessor at Services NSW registry to assess competency and safety driving with the modifications. Note: the SDI cannot perform this driving assessment.	Licensing authority endorses the licence with vehicle modification conditions, upgrades licence to class C licence (if required) and/or removes endorsement code X231.
Client completes remediation plan with an SDI in a modified vehicle with the recommended modifications.	Once SDI is satisfied the client is competent, the DTOT and SDI do a re-assessment (essentially a driving test). The DTOT drafts the final assessment report and sends it to Access Canberra.	Access Canberra endorses the client's licence with condition 'X' (details of condition are added to the licence).
DTOTs normally recommend lessons and conduct a re-assessment with the SDI on completion of the lessons to assess safe driving with vehicle modifications and sends the doctor a report recommending clearance to drive with the recommended vehicle modifications. No lessons or driving test are officially required.	Doctor issues final Medical Certificate for Motor Vehicle Driver stating the types of modifications and conditions required. Certificate is emailed or taken in person to TMR by the client with their Medical Condition Notification Form.	TMR endorses licence with conditions. Usually M (medical condition) and V (vehicle mods). The client will be required to carry a current medical certificate whenever they drive if they have been given conditions or restrictions on their licence.
Client's licence is endorsed with the condition 'X' – must drive with a driving instructor. DTOTs normally recommend lessons for the client to complete before the final assessment.	A re-assessment with the DTOT and SDI is conducted on completion of the lessons to assess safe driving with vehicle modifications. The DTOT will send their report with assessment results and recommendations to VicRoads and the treating doctor.	VicRoads endorses the client's licence with the recommended conditions from the OTDA report.
Client has lessons with SDI in vehicle with recommended modifications.	If modifications are required, a Practical Driving Assessment (PDA) is required by the DIT Assessing Officer in SDI's modified vehicle.	DIT determines if licence can be endorsed with conditions and modifications.
Client does lessons with SDI with the modifications recommended.	The DTOT and SDI conduct a PDA and sign off on the final assessment report to DoT.  Note: if a licence has expired for more than 5 years, the DoT may request a practical Department of Transport Assessment (DTA) to be conducted.	DoT has discretion in accepting the DTOT report sign off. They may still request a DTA before endorsing the licence.
Client does lessons with SDI in modified vehicle. SDI reports back to DTOT with client progress. Once SDI and DTOT are satisfied the client is competent to drive with the modifications, DTOT drafts final assessment report.	DTOT sends final assessment report to the treating doctor, the client and MVR.	MVR reviews the report and endorses the conditions on the licence. If modifications are required, the Technical Advisory Committee (TAC) form will be locked to the car AND the client's licence.
Client does lessons with SDI with the recommended modifications in preparation for an on-road re-assessment.	Once an on-road re-assessment is completed, the DTOT submits a final report, with final recommendations to the Driver Licensing Unit.	The Driving Licencing Unit determines return to driving and endorsement of conditions on the client's licence.

### Vehicle Modification Certification

	Vehicle Modification Install	Engineering Certification & Notifications	Removal of modifications and on- selling of vehicle with modifications
WON	Certification is required for all types of hand control installations. This includes lowered floor modifications, seating and wheelchair restraints.  Spinner knobs do not require certification.	Modifications are certified by a licenced Engineering Signatory who is accredited through the Vehicle Safety Compliance Certification Scheme (VSCCS) in NSW. The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).  Following the vehicle inspection, a Compliance Certificate is issued by the Engineering Signatory and submitted electronically with Transport for NSW. There is no plate affixed to the vehicle.  A hard copy of this report will be provided to the client and should be kept with the vehicle. The hard copy document must also be presented to a Service NSW Centre following receipt of this report and this is done by the registered client or representative.	In the event modifications are removed then the vehicle should be de-certified by an Engineering Signatory.  When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Compliance Certificate is provided and requested on transfer of vehicle ownership.
FC v	Certification is required for all types of hand control installations including keypad spinners. This includes lowered floor modifications, seating and wheelchair restraints.  Standard spinner knobs do not require certification.	The Certifying Engineer will request documentation confirming the requirement of modifications, which will generally be in the form of an OT report.  The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542.1:2015) and Australian Design Rules (ADRs).  Following vehicle inspection by the certifying engineer the vehicle must be presented to the Authorised Inspection Station (AIS) where a modification plate is issued and the Engineering Report can be endorsed. It is at the discretion of the Certifying Engineer if the vehicle is presented to the AIS by the client or the Engineer. The client will be provided with a hard copy of the report which must remain with the vehicle.  The hard copy document is to be presented to Access Canberra following receipt of this report to endorse the modifications against the vehicle. This is done by the registered client or representative.  For more significant modifications a Vehicle Modification Proposal Form may be required, however this will be advised by your installer.	In the event modifications are removed then the vehicle should be returned to factory and presented to the AIS for inspection. The modification plate will be surrendered Where modifications were significant there may be the requirement for the Certifying Engineer to provide a report. This can be confirmed with your installer.  When the vehicle is being onsold to a person whom has an appropriate licence class and can provide supporting documentation the modifications can remain in the vehicle. However, the new owner is required to have the vehicle inspected at the AIS with a copy of the original Engineering Report.
ā	Certification is required for all types of hand control installations. This includes lowered floor modifications, seating and wheelchair restraints. Spinner knobs do not require certification.	The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).  Modifications must be inspected and certified by an Approved Person through the Approved Persons Scheme (APS). It is at the discretion of the modifier if an independent engineer is used for the inspection and certification, and this is determined by the complexity of the modifications.  An LC4 Modification Certificate will be issued and provided to QLD Department of Transport & Main Roads (TMR). A modification plate will be fitted to the vehicle (blue plate).  A copy of the LC4 Modification Certificate will be provided to the client and it is advisable to keep this with the vehicle.	In the event modifications are removed then the vehicle should be inspected by an Approved Person and an additional Modification Certificate issued.  When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Modification Certificate is provided and requested on transfer of vehicle ownership.
CDX	Hand controls do not require certification in Victoria. This applies to mechanical brake and electronic accelerator systems.  Certification is required for high level/complex driving modifications	Where modifications require certification a Vehicle Assessment Signatory Scheme Signatory (VASS Signatory) will inspect the modified vehicle. The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs). The VASS Signatory will then issue a VASS Approval Certificate and apply a modification plate to the vehicle. The client is provided a copy of the VASS Approval Certificate	In the event modifications are removed then the vehicle should be de-certified by a VASS Signatory, when a VASS Approval Certificate was previously issued. No action is required where modifications did not require certification.  When the vehicle is being on-sold to a person who is licenced and has

The client is provided a copy of the VASS Approval Certificate.

The client is required to have the vehicle inspected at a

VicRoads Customer Service Centre. This should be done

For hand controls not requiring certification it is required

the installer complete the manufacturers Installer Checklist

within 14 days of receiving the Certificate.

documentation following completion of work.

driving modifications

seating and wheelchair

restraints. Your installer

certification is required.

including lowered

will advise where

floor modifications,

with the current modifications then

there is no action required. It is good

practice to always ensure the VASS

Approval Certificate (if a Certificate

on transfer of vehicle ownership.

was issued) is provided and requested

supporting documentation of use

Hand controls and spinner knobs generally do not require certification, however, do require inspection at a Department of Transport (DIT) Inspection Station.

Certification is required

for high level/complex driving modifications including lowered floor modifications, seating and wheelchair restraints.

Your installer will advise where certification is required.

The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).

Following installation, the installer will advise the client to have the vehicle presented to a DIT Inspection Station.

Where modifications require certification the Certifying Engineer will raise a Statement of Requirement (SOR) with the DIT. The vehicle will be inspected by the Certifying Engineer and issue an Engineers Report. The client is required to present the vehicle for inspection to a DIT Inspection Station with the SOR and Engineer Report.

Note the vehicle may be presented to a DIT Inspection Station by the installer on behalf of the client. Your installer will advise the process to be followed.

In the event modifications are removed then the vehicle should be returned to factory. There is no requirement for de-certification when an Engineers Report was previously issued. No action is required where modifications did not require certification.

When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Engineers Report (if a Report was issued) is provided and requested on transfer of vehicle ownership.

Certification in the form of a Modification Permit is required for all types of hand control installations including spinner knobs. This includes lowered floor, seating modifications and wheelchair restraints.

The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).

Modifications are to be presented by the installer to an Authorised Inspection Station (AIS). A Modification Permit will be issued by the AIS approving the particular modification.

For more complex/high level modifications the installer will apply to Department of Transport Vehicle Safety and Standards. Following review these will be pre-approved on principle and then on completion inspected by an AIS and a Modification Permit issued.

The Modification Permit is provided to the client and a copy must always be kept in the vehicle.

In the event modifications are removed then the vehicle should be inspected by an AIS and the Modification Permit removed from the vehicle registration. Note the removal of disability modifications will categorise the vehicle as Class A (instead of Class B - without modifications).

When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Modification Permit is provided and requested on transfer of vehicle ownership.

In the event modifications are

removed then the vehicle should be

inspected by an authorised person

and the Modification Certificate

removed and records updated by

A Modification Certificate is required for all types of hand control installations. This includes lowered floor, seating modifications and wheelchair restraints.

Spinner knobs are also included as an item deemed to have a Modification Certificate. The modifier will request documentation confirming the requirement of modifications, which will generally be in the form of an OT report.

The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).

The process of having a Modification Certificate issued is through several means:

- Type Approval a Modification Certificate is issued by the authorised installer/modifier on behalf of Northern Territory Motor Vehicle Registry (MVR).
- · Department Approval formal application to modify a vehicle is assessed and an approved pathway is offered via an Approval in Principle (AIP). Following acceptance of the AIP the work can commence. A Modification Certificate is issued when all conditions of the AIP have been met.

When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Modification Certificate is provided and requested on transfer of vehicle

ownership.

In the event modifications are removed then the vehicle should be de-certified by an AVC.

When the vehicle is being on-sold to a person who is licenced and has supporting documentation of use with the current modifications then there is no action required. It is good practice to always ensure the Engineering Report is provided and requested on transfer of vehicle ownership.

Certification is required for all types of hand control installations including keypad spinners. This includes lowered floor modifications, seating and restraints.

Standard spinner knobs do not require certification.

The Authorised Vehicle Certifier (AVC) will request documentation confirming the requirement of modifications, which will generally be in the form of an OT report or licencing endorsement.

The equipment and installation are required to comply with applicable Australian Standards (AS3954-2019, AS/NZS 10542) and Australian Design Rules (ADRs).

Following vehicle inspection by the AVC a Certification Report will be issued and a compliance plate fitted to the vehicle. The client will be provided a hard copy of the report which must remain with the vehicle.

### State and Territory Transport Authorities

For more information about driving with disability, we have provided you the links to your State or Territory transport authorities below.



NSW	https://www.rms.nsw.gov.au/roads/licence/health/driving-with-disability.html
ACT	https://www.accesscanberra.act.gov.au/s/article/act-driver-licence-information-tab-medical-conditions where the substitution of the substitution
QLD	https://www.qld.gov.au/disability/out-and-about/travel-transport/driving
VIC	https://www.vicroads.vic.gov.au/licences/health-and-driving/driving-with-a-disability
SA	https://www.sa.gov.au/topics/driving-and-transport
WA	https://www.transport.wa.gov.au/licensing/my-drivers-licence.asp
NT	https://nt.gov.au/driving/driverlicence/existing-nt-licence/medical-fitness-to-drive
TAS	https://www.transport.tas.gov.au/licensing/health_and_driving/driving_with_a_physical_disability

### Already driving?

If you have existing conditions on your driving licence and want to upgrade your modifications, it is important to check the exact wording on your licence.

Again, this may vary depending on the State or Territory you live in, and conditions may be broad or very specific.

If you are already driving with a disability, the motoring authority in your State or Territory will have detailed information on your file regarding your conditions.

This will give you a clear idea of whether changing specialised driving equipment will require the need for a new driving test or not.

For example, if your condition states that "the controls must be operated by the hands", it is very different to a specific condition saying you "must utilise a push-pull hand control system".

In the second example, upgrading to electronic hand controls such as the Fadiel Satellite Accelerator may require driving lessons and taking your driving test again.

A Driver Trained Occupational Therapist (DTOT) or Specialist Driving Instructor (SDI) will be able to help you confirm your requirements for a driving test based on the wording of your licence conditions.



### Things to consider... top 10 questions from DTOT Alanna Finnan

- 1. Why can't you use the existing vehicle as is?
- 2. Which vehicle modification / product is required for your function?
- 3. Is the product adaptable for your future needs/changes?
- 4. How does one product compare to another? Is one more suitable to your needs than another?
- 5. Is the vehicle suitable for the products considered?
- 6. Is the product able to be transferred to a new vehicle in the future?
- 7. Is the preferred product cost effective?
- 8. How will you stow the wheelchair in the vehicle? Will it be appropriately secured?
- 9. Will you need driving lessons to learn how to use the modification? If so, how many?
- 10. Will you need to be tested again by the relevant State/Territory transport authority with the new product?



## Step 2: Finding Your Key Contacts.

## The people you need to contact to complete this process are:

#### **Driver Trained Occupational Therapist (DTOT)**

The DTOT is an Occupational Therapist with the added qualification that allows them to assess your driving ability and also prescribe driving equipment to suit your capabilities.

They will guide the process to get your licence and also apply for any funding that you may be eligible for

#### **Specialist Driving Instructor (SDI)**

The SDI is a Driving Instructor with the added experience of working with people with disability.

They have driving modifications fitted to their vehicle and can instruct you on how to use this equipment.

You may need to liaise with more than one instructor to find the one who has the equipment you want to drive with and the personality/ communication style that you feel comfortable with.

#### Installer

The Installer is a mechanic/auto electrician who has been trained to install the specialised driving and vehicle access equipment and can provide ongoing service and support for the products installed.

#### **Finding Your Nearest Contacts**

Total Ability has a wide database of DTOTs, SDIs and Installers across Australia and New Zealand. Whether you eventually purchase Total Ability equipment or not, we are happy to give you all the contacts near you. Please call 1300 858 410 or send us a message via our online contact form at <a href="https://totalability.com.au/contact-us/">https://totalability.com.au/contact-us/</a>

"Getting the right help is crucial. Whether you are interested in Total Ability equipment or not, we're happy to help you connect to your local DTOT, SDI and Installer"

Paul Crake, Owner Total Ability

## **Step 3: Getting Assessed.**

# If your State or Territory requires it, the first person to call is one of the DTOTs in your area.

Your initial conversation usually only needs to be a phone call. The DTOT asks you for information about your driving goals and level of disability.

It's also an opportunity to determine if they are the right DTOT for you, both on a rapport level as well as technical experience and knowledge.

If they are, you then work out the timing and extent of assessment, that will involve cognitive, visual and physical aspects.

The goal of the assessment is to gauge your capability to drive and determine your body's strengths and weaknesses. The DTOT can start to shortlist the driving equipment that best suits you.

The DTOT also introduces some of the options, whether that's by showing you the equipment in images or videos.

You may even be given a demonstration of the equipment itself if the DTOT has some installed in their own vehicle, or they introduce you to a SDI (Specialist driving instructor) who they know has relevant equipment installed in their vehicle.

After this initial assessment, the DTOT organises with you to formally test the options they have suggested - this is where you get 'hands on' with the equipment for the first time!

The DTOT coordinates a day and time that they, an SDI and you are available, and then you formally test the equipment yourself.



"Vehicles aged less than 5 years and under 80,000km are generally considered suitable to modify. However, older vehicles and those with higher mileage may still be considered where there is evidence that their modification would be cost effective."

NDIS Website https://www.ndis.gov.au/participants/ assistive-technology-explained





# There is no better way than trying out the equipment yourself.

Where at all possible, ask to test the widest variety of equipment that is available and appropriate for you to consider.

Keep in mind that you want to make sure the equipment is appropriate for you in the future - currently equipment can only be changed every 8 years with NDIS - not just what is practical and suitable for you right now.

If you have never driven before, your DTOT is best placed to educate you on the variety of equipment options available.

However, if you already drive with specialised driving equipment, be open minded about the possibility of changing to more modern and technologically advanced equipment.

We're all creatures of habit, but the benefit of the newer equipment very often outweighs the downside of taking time to learn new controls.

Specifically ask your DTOT and, if already in the picture, your SDI, if there are options that can be more ergonomic and/or technologically advanced to benefit your needs longer term.

**Note:** if you have never driven before, at a minimum you need to get your Learner's Permit to be able to test drive the equipment. You may also need a doctor's clearance to be able to try out the equipment if you are still in hospital or a health facility.



When getting quotes for modifications, it's not just about the hand controls, you may need other supporting items to be included. Discuss with your DTOT equipment such as:

- · Panoramic or fish-eye mirrors
- · Fold away headrest if driving from wheelchair
- · Indicator extenders
- · Wheelchair restraints
- Docking stations
- · Voice command
- Push-button start
- · Gear shifter
- · Electronic hand brake
- · Various spinner knobs for different abilities
- · End knob customisation on hand controls
- · Automatic door openers
- · Ramps
- Hoists
- Platform lifts

## Step 5: The DTOT Report.

# It's now time for the DTOT to compile their formal report.

This will contain their:

- · assessment of your ability in relation to driving.
- recommendation of the driving and associated equipment that is suitable for you.
- expected number of driving lessons with an SDI to be competent and ready to be licenced.
- quotes from relevant suppliers / installers with the cost of the equipment, installation charges and any other costs required.

This report is crucial, especially if you are approaching one of the relevant bodies to fund your vehicle modifications.

In some cases, the funding bodies may require more than one quote. However, for high level modifications it may not be possible to obtain multiple quotes as the solution may be very customised.

In terms of the "other costs required" you may need to think through things like whether the vehicle being modified needs to be transported to your installer and back again. This is particularly important in regional areas where installers may be a fair distance from where you live.

The NDIS may also fund "incidentals", such as the assessment required to get an endorsed license, or driving lessons to gain the skills needed to use the modified vehicle.

NDIS can pay for your insurance, but only the component that relates to your vehicle modifications. Some insurance companies give separate policies and others itemise it separately on a combined policy. If the specialised driving equipment is to be fitted to an existing car, or you intend to buy a used car, it is important to note the NDIS requirements when modifying a used car.

If you are applying for funding, the next step is to lodge your application with the relevant body such as NDIS, iCare, Veterans Affairs (VAS) or the Motor Vehicle Compensation Scheme (MVCS), as well as Continuity of Support (CoS).

There is usually a waiting period of 3-12 months before you receive approval.

If you are privately funding the purchase, the process can be much quicker with less processes to navigate.

## The NDIA may also fund supports that are related or incidental to vehicle modifications, for example:

- driver assessments for the purpose of obtaining an endorsed license;
- driving lessons where a participant requires lessons to establish skills to use the modified vehicle, or additional lessons where a participant's disability results in them taking longer to learn to drive;
- additional insurance costs, where an additional insurance premium is payable as a result of the modifications. Note, the NDIA will only fund the increased amount of the premium, not the total cost of the policy;
- the cost of engineering certification and other checks required for initial registration;
   and
- removal of modifications and reinstallation on a new vehicle when doing so is practicable and represents value for money.

## **Step 6: Driving Lessons.**

If you are driving for the first time you need to take driving lessons. If you are upgrading to new and different equipment you may be required to pass a new driving test to use that new equipment.

For NDIS and other funding bodies, the cost of these lessons may be covered, so they should be included in your funding application.

It's vital that the SDI you select has or can obtain the use of the driving controls that you and your DTOT have identified.

Depending on when you start your driving lessons, it might be wise to find an SDI with a broader range of equipment in case you are still wanting to try out equipment that may yet be more comfortable for you to use.

You only need to completely finalise your choice of controls when the DTOT is writing their formal report as part of your application to the NDIS (or other funding body), or when you are buying the controls if you are self-funded (provided your licence covers these controls).

If you are getting insurance from <u>Blue Badge</u> <u>Insurance</u> they will split out your disability conversion premium costs to simplify claiming this cost back from the NDIS

#### From NDIS:

### Reasonable and necessary modifications means...

- · You can achieve and pursue your goals
- You can access the community to pursue social and economic participation
- · Modifications represent value for money
- Modifications are beneficial and effective for you
- Take into account what would reasonably be provided by family, carers, informal networks and the community
- Most appropriately funded or provided through the NDIS

NDIS Legislation
<a href="https://www.legislation.gov.au/Details/">https://www.legislation.gov.au/Details/</a>
C2022C00206



## Step 7: Taking Your Driving Test.

Once you are feeling confident about driving it's time to book in for a driving test.

You need to pass the driving test before you order and fit the new equipment to your vehicle. In some States or Territories the driving test may be conducted by the DTOT and SDI and not an Assessor from the licensing authority.

For people upgrading to new controls in a new car, this can create a dilemma because the way the NDIA approves the funding (see Mel Harrison's experience on this page). It is vitally important you keep the NDIA informed as they will try to accommodate your needs but can only do this if they understand your situation ahead of time.

"Timing of the test is crucial when upgrading as it might mean you can't use your car for a period of time."

- Dean McMillan, SDI



## Mel Harrison from <u>Sitting Low Reaching High</u>, share's her personal experience with the timing of her driving test:

- · Mel's new controls required a revised driving licence
- This is how she was able to negotiate the NDIS process:

"So, I needed to change the conditions on my driving licence and take a new test. I chose Nathaniel as an instructor as he had the Satellite Accelerator already installed on his car."

"In terms of the NDIA, there is a bit of a catch 22 in that they won't approve the new hand controls until I had purchased my new car, but I asked for a review because I pointed out that to get a new car I would have to sell or part exchange my old car, and if I then didn't get approval for my hand controls for some reason, I might have a significant period of time without a car."

The NDIA allowed Mel to put a deposit down on a car, show them the proof of the deposit, then get the Driver OT assessment confirming the recommended hand controls she needed, and then they would approve it.

"From that point, it was quite an easy process because I was confident the Driving OT would recommend the Satellite Accelerator and put down clear reasons for why I need it."

"The NDIA knew that I required a new driving licence, and as soon as I passed the driving test, I sent the proof to the NDIA Planner and within 45 minutes he had approved the money to buy and install the hand controls for my car!"

"Having said that, I was still without a car for a couple of weeks. I put the deposit down for the car on 3rd Feb, and the dealership held the car until the 31st of March whilst that initial approval process took place."

"My driving test was on 9th April, I received funding the same day, and it took about a week to have the car fitted with the new hand controls – it was returned to me on 16th April."

# Step 8: Ordering your Equipment / Modifications.

Once approval comes through from the funding body, or you have your own funds you can start the process of modifying your car.

If purchasing a new or used car, try to coordinate the timing to coincide when the equipment is ready to be installed.

Communication between the car dealer, the equipment supplier/installer and the funding body is often required at this stage.

If the purchase was made by a funding body, your DTOT is still involved through this process to ensure it is completed successfully and are the contact between you, the funding body and the installer.

Depending on the complexity of your modifications, it can take anything from one week to many months to have the vehicle modified.

Also keep in mind that longer waiting lists may apply for high level modifications on vans due to the specialised nature of the work and the limited availability of suitably qualified installers.



### Other bits and pieces that often get forgotten when you get a quote:

Items such as arm rests, extra padding, bracketry, upholstery protection for wheelchair components, strap on hatchback boot to be able to close it independently, side guard protectors for driver side to protect paint work from wheelchair transfers, are all items that can be missed on quotes.



# Step 9: Installation and Certification of Your Modifications.

#### **Choosing an installer**

Not all car mechanics can install this specialised equipment. It is often a skill that only some car mechanics are trained to do.

If you don't have access to an appropriate installer in your area, Total Ability can help match you to the installer or a range of installers as close to you as possible.

And note that depending on the complexity and range of your modifications, you may need to approach more than one installer to complete the required work.

#### **Certifying your modifications:**

Not all vehicle modifications require certification and not all States or Territories have a formal certification process. Your installer should be aware of which ones do and they will look after the certification process.

However, we advise that you make sure you have a copy of your certification documents (if applicable).

Depending on your State or Territory, you may need to keep the certification documentation with your car, for example, if you are pulled over by the police. Your local laws may require you to prove to them that your modifications have been approved and certified.



#### Map of Specialist Installers in AU and NZ

#### **Two Top Tips:**

- If an installer is not close by, the transportation of the vehicle to and from an installer will need to be factored into the overall costs.
- 2) If removing mods from an existing car you will likely need to decertify your old car. The cost of decertification needs to be factored into your installation quote.



# Step 10: Equipment Aftercare and Longevity.

Like all parts of your car, your vehicle modifications need regular care and servicing to ensure they remain working as intended, safe and dependable.

Check with your installer or the supplier/s of the modifications, asking them for the suggested service intervals for each piece of equipment.

It is also good to keep in touch with the equipment suppliers given that you may move to a different area. They can help you locate another suitable installer capable of servicing your equipment.

#### Top Tip:

Funding bodies such as NDIS may include these ongoing service costs in your next and ongoing plan, so be sure to include quotes for service costs in your assistive technology budget when it is time to review your plan.

# Thank You for Reading This Guide!

### We're here to help.

Our aim is to see you driving and enjoying your independence as soon as possible.

At Total Ability, we have many years of lived experience of driving with disability, and helping other people with disability to drive, so we encourage you to get the benefit of our knowledge and expertise by contacting us.

If there are any questions we haven't answered above, or there are aspects you still aren't sure about regarding the process of getting behind the wheel, please call us on **1300 858 410**, or contact us using our online form on the Total Ability website at totalability.com.au/contact-us/



Notes.			

# The Fadiel Italiana and Total Ability Story.

Towards the end of the 1970s, Fabio Domeneghini, then a young and gifted engineer at Venice's Marco Polo Airport, was determined to find an elegant solution to an ongoing issue: how to quickly and safely transfer people in wheelchairs on to airplanes.

His response was to design and build a folding platform that could be applied to various situations at the airport and provide easy access.

This lit a fire in Fabio for finding other solutions to common problems, and the success of his platform gave him the confidence to follow a new career helping people with disability using his innovative engineering and design skills.

He quit his job at the airport to start his own company which he called Fadiel Italiana: **FA**bbrica (Factory) **DI**spositivi (Devices) **EL**ettroidraulici (Electrohydraulic).

Fabio's first 'product' was a car clutch that someone could operate with their hand. He combined the clutch control with the gear lever, adding a switch to the usual gear lever head. The larger knob required had a distinct look that gave birth to a new name: the so-called 'duck' clutch was born.

Following a spinal cord injury in 2006, Australian Paul Crake had married his Italian fiancé, Daniela, and was living in Italy. Daniela researched how she could help Paul get back to driving and came across Fadiel Italiana and their category-leading Satellite Accelerator.

Paul took to driving again with his newly installed equipment and got a new lease on life and was amazed by the positive effect regaining his independence had on his mental well-being.

After the couple returned to Australia, Paul found the driving equipment here wasn't anywhere near as advanced as the system he had been using in Italy ... and a new business idea formed.

So, in 2011, Paul and Daniela founded Total Ability, and became the exclusive distributors of Fadiel Italiana in Australia and New Zealand, ensuring both countries now have access to the Italian company's class-leading driving controls and accessibility equipment.





1300 858 410 totalability.com.au