



**LEVEL 2  
AWARD  
IN  
OFF ROAD DRIVING**

**ASSESSMENT SCHEDULE**

# NPTC Level 2 Award in Off Road Driving

## Information for Candidates and Assessors

### Introduction

The scheme will be administered by;  
City & Guilds.

City & Guilds will:  
Publish

- Scheme regulations
- Assessment schedule
- Assessment material

- Approve centres to co-ordinate and administer the scheme
- Set standards for the training of Verifiers and Assessors
- Recruit, train and deploy Verifiers
- Manage verification
- Issue certificates to successful Candidates

### The qualification

*The qualification will be awarded to Candidates who achieve the required level of competence in the Units to which their Certificate relates.*

### Instruction

Attendance at a course of instruction is not a pre-requisite for an application for an assessment but potential Candidates are strongly advised to ensure that they are up to the standards that will be expected of them when they are assessed.

City & Guilds does **not** hold a register of instructors; however instruction will normally be available from recognised training providers and/or centres of further or higher education active in the areas covered by this certificate. Further information on training may be obtained from the centre.

### Access to Assessment

Assessment Centres will be responsible for arranging assessment on behalf of a candidate. Assessment may only be carried out by an Assessor approved by City & Guilds for that scheme. Under no circumstances can either instructors involved in the preparation of candidates, or the candidates work place supervisors, or anyone else who might have a vested interest in the outcome, carry out the assessment.

The minimum age limit for candidates taking the qualification is 16 years. There is no upper age limit.

### Assessment

Assessment is a process by which it is confirmed that the candidate is competent in the Units within the award to which the assessment relates. It is a process of collecting evidence about his/her capabilities and judging whether that evidence is sufficient to attribute competence.

The candidate must be registered through an NPTC approved Assessment Centre for this qualification prior to assessment.

The result of the assessment will be recorded on the assessment report form.

The schedule of assessment contains the criteria relating to:

- Observation of practical performance
- Assessment of knowledge and understanding

### Performance Evaluation

The result of each assessment activity is evaluated against the following criteria:

4 = Meets or exceeds the assessment criteria by displaying a level of practical performance and/or underpinning knowledge, with no 'minor' or 'critical' faults. (Competent).

3 = Meets the requirements of the assessment criteria for both the practical performance and the underpinning knowledge, with some 'minor' faults but no 'critical' faults. (Competent).

2 = Does not fully satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or being deficient in underpinning knowledge leading to the recording of minor faults. (Not yet competent).

1 = Does not satisfy the requirements of the assessment criteria, being unable to perform the practical task satisfactorily or safely or being deficient in underpinning knowledge leading to the recording of a critical fault. (Not yet competent).

A list of registered Assessment Centres is available from NPTC. ([www.nptc.org.uk](http://www.nptc.org.uk))

### Verification

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way that City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness.

Approved Assessors will be subject to a regular visit by the verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the assessor will be evaluated by an City & Guilds approved verifier.

Compliance with the verification requirements is a pre-requisite for Assessors remaining on City & Guilds list of approved assessors.

## Complaints and Appeals

City & Guilds and its Assessment Centres have a formal Complaints and Appeals procedure. In the event of a any dissatisfaction with the arrangements and conditions of assessment, the candidate should first contact the Assessment Centre through whom the assessment was arranged and submit the complaint in writing.

This assessment covers the use of "Off-Road" vehicles or 4x4's. These are normal road going cars and commercial vehicles with four wheel drive, higher ground clearance and other added traction aids to enable the vehicle to be driven effectively on rugged terrain and where traction may be lost. The assessment will be taken place off the public highway on a pre-determined course that presents the candidate with typical obstacles encountered when driving off road.

## Learning Outcomes

The candidate will be able to:

- State legal and safety requirements relating to the use of off road vehicles
- Carry out appropriate pre-start checks on the vehicle
- Take appropriate action arising from checks
- Explain additional considerations that need to be made when towing a trailer
- Prepare for work
- Select and wear appropriate PPE as required
- Start the vehicle and manoeuvre it safely on rough terrain including slopes.
- Attach a trailer to the vehicle
- Manoeuvre vehicle on a variety of terrain whilst towing, including reversing around a corner
- Operate a vehicle mounted winch to remove an obstacle and self recovery a "bogged" vehicle
- State the required underpinning knowledge that supports the operations

## The Qualification and Credit Framework (QCF)- credit values

The units for the NPTC Level 2 Award in Off Road Driving (QCF) have the following credit values:

Unit 1	Pre start safety and operation of off road vehicles	3 credits
Unit 2	Using Trailers in the workplace	2 credits
Unit 3	Use of vehicle winches	2 credits

## Guidance Notes for Candidates and Assessors

The assessment is divided into one compulsory units and two optional units:

Unit 1	Pre start safety and operation of off road vehicles	(Compulsory)
Unit 2	Using Trailers in the Workplace	(Optional)
Unit 3	Use of Vehicle Winches	(Optional)

## Site Requirements

The assessment must take place on an off road driving track/course that has been approved by NPTC or the assessor. The track must present obstacles that whilst requiring off road driving knowledge to negotiate, are comfortably within the capabilities of the vehicle being used for the assessment. To complete all assessment activities the course must include a slope for the vehicle to drive up and down, which is a minimum of five vehicle lengths and of sufficient gradient to be able to effectively simulate the vehicle failing a climb. There should also be a suitable run-off area in case of failed recovery. The track must also have a minimum of three of the following; deep soft sand; slippery surface; deep water; a slope to drive across; ridges; ditches/'v' gully. The definition of a suitable ditch or gully is one that the vehicle would have to enter diagonally (one wheel at a time) in order to across it.

## Candidate Pre-requisites

Candidates coming forward for this assessment must hold a valid UK driving licence. This must be shown to the assessor.

## Safe Practice:

Appropriate Personal Protective Equipment (PPE) must be worn when required.

The vehicle and any other equipment used must be operated in such a way that the Candidate, Assessor, other persons or equipment are not endangered.

**Failure to operate safely and comply with these requirements will result in the Candidate not meeting the required standard.**

## Validation of Equipment:

A Manufacturer's instruction book or other drivers' manual should be available.

All equipment being used for this assessment must comply with the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) & LOLER (1998).

Vehicles must comply with Department of Transport and Road Traffic Acts where relevant.

Any appropriate Four Wheel Drive Motor Vehicle (e.g. Land Rover/Jeep etc.) with accompanying trailer (appropriate to the work situation of the candidate) and fitted winch (if required) complying with legal requirements is acceptable for the assessment, provided it is suitably equipped for all assessment activities to be carried out.

**The assessor must be satisfied that the vehicle is in a road worthy condition and legal to use. This will normally require evidence of MOT and insurance certificates (either the original or confirmation from the employer/vehicle owner). However, in situations where the vehicle is not intended for use on the public highway or other exemptions apply, the assessor will use their discretion as to the suitability of the vehicle.**

Candidates who undertake this assessment and are judged 'competent' are reminded of their legal obligation to receive/undertake appropriate additional training in the use of any equipment that differs from that used during the assessment, but which they are nevertheless qualified to use

**Additional Information:** May be sought from the relevant manufacturers/drivers manuals or any other appropriate training or safety publication.

Unit 1 Pre start safety and operation of off road vehicles	
Part 1: conduct pre-start safety activities of off road vehicles	
ASSESSMENT ACTIVITIES	ASSESSMENT CRITERIA
<p>1. Describe legal and safety requirements relating to the use of off road vehicles in respect of:</p> <p>Risk Assessment</p> <p>The use of the vehicle on a public highway or other areas to which the public has access</p> <p>Safety of vehicle load off-road</p> <p>Environmental considerations</p>	<p>Risk Assessment must be specific to:</p> <ul style="list-style-type: none"> <li>- Site</li> <li>- Task</li> <li>- Machine</li> </ul> <p>Risk Assessment must contain:</p> <ul style="list-style-type: none"> <li>- Identified hazards</li> <li>- Evaluated risk</li> <li>- Control measures to be implemented</li> <li>- Emergency procedures</li> </ul> <p>- Risk Assessment must be communicated to operator</p> <p>The vehicle must:</p> <ul style="list-style-type: none"> <li>- Be in a road worthy condition (MOT certificate where appropriate)</li> <li>- Have a current road fund licence (vehicle excise duty)</li> <li>- Have a minimum of third party insurance cover (to conform to Road Traffic Act requirements)</li> <li>- Be driven by someone who holds a suitable, valid drivers licence</li> <li>- Warning signs should be erected if appropriate</li> <li>- Observe vehicle loading limits</li> <li>- Ensure items are secured and not liable to fall or hit the driver whilst moving</li> <li>- Seek to maintain low centre of gravity with heavy loads</li> <li>- Follow Country Codes</li> <li>- Observe vehicle restrictions on rights of way and owner permission on private land</li> <li>- Awareness of possible site restrictions due to SSSI's, archaeological sites etc.</li> <li>- Avoid wheel spin and other damage to the ground</li> <li>- Avoid fuel/oil leaks into water courses (COSHH)</li> <li>- Appropriate safe site for washing down vehicle</li> </ul>
<p>2. Carry out daily pre-use checks and maintenance to the vehicle</p> <p>Demonstrate knowledge of the importance of correct fluid levels</p>	<ul style="list-style-type: none"> <li>- Check vehicle and carry out pre-start maintenance in accordance with manufacturer's handbook</li> <li>- Observe relevant safety and cleanliness precautions</li> <li>- Check to ensure safety of operator and vehicle: <ul style="list-style-type: none"> <li>• Wheel nuts secure</li> <li>• Tyres (measure pressure plus visual check of tread <u>and walls</u> for condition)</li> <li>• Stop control</li> <li>• Correct function of all lights and direction indicators</li> <li>• Function of seatbelts</li> </ul> </li> <li>- Ensure: <ul style="list-style-type: none"> <li>• Fuel level is adequate</li> <li>• Oil levels are correct</li> <li>• Coolant level is correct</li> </ul> </li> <li>- Frequency of checks undertaken</li> <li>- Report findings as appropriate</li> <li>- Act on findings where appropriate</li> <li>- If the vehicle is likely to be operating on steep slopes, the fluid could be drained to one end of the engine and thereby starve other areas</li> </ul>
<p>3. State the function of the vehicle controls and instruments</p>	<ul style="list-style-type: none"> <li>- All controls identified and function explained in accordance with the manufacturer's handbook/operators manual.</li> <li>- Function and significance of the information displayed on all instruments and warning lights identified by the manufacturers manual/operators handbook</li> <li>- Appropriate time to use traction aids fitted and dangers of incorrect use</li> </ul>
<p>4. Carry out final safety checks to be made before starting the vehicle</p> <p>Start engine</p>	<ul style="list-style-type: none"> <li>- Check controls to ensure it is safe to start (according to manufacturers manual)</li> <li>- Check feet and pedals are free from mud</li> <li>- Engine started using appropriate technique for conditions</li> <li>- Cold and warm start procedure according to manufacturers handbook/operators manual</li> </ul>

<b>Unit 1 Pre start safety and operation of off road vehicles (continued)</b>	
<b>Part 1: conduct pre-start safety activities of off road vehicles (continued)</b>	
<b>ASSESSMENT ACTIVITIES</b>	<b>ASSESSMENT CRITERIA</b>
5. Check that brakes operate	<ul style="list-style-type: none"> <li>- Drive vehicle short distance and stop to ensure brakes operate effectively</li> <li>- Check parking brake and stop engine</li> </ul>
6. Describe parking on slopes	<ul style="list-style-type: none"> <li>- Park across the slope</li> <li>- Turn wheels up hill</li> <li>- Apply hand brake</li> <li>- Leave vehicle in gear</li> <li>- Chock wheels</li> </ul>
7. Demonstrate knowledge of safe wheel changing procedures	<ul style="list-style-type: none"> <li>- Chocking</li> <li>- Jacking points</li> <li>- Soft surfaces</li> <li>- Level ground</li> <li>- Hand brake</li> <li>- In gear</li> <li>- Appropriate type of jack</li> </ul>

<b>Unit 1 Pre start safety and operation of off road vehicles (continued)</b>	
<b>Part 2: operate the off road vehicle in off road conditions</b>	
<b>ASSESSMENT ACTIVITIES</b>	<b>ASSESSMENT CRITERIA</b>
1. Check site to be driven and assess the risks that are: <ul style="list-style-type: none"> <li>- Site specific</li> <li>- Vehicle specific</li> <li>- Weather specific</li> <li>- Environmental</li> </ul>	<ul style="list-style-type: none"> <li>- Identify hazards</li> <li>- Select suitable control measures</li> <li>- Identify instructions and route plan correctly (as appropriate)</li> <li>- State possible risks when driving the vehicle off road</li> </ul>
2. Describe driving up and down slopes: <p>Selecting route</p> <p>Driving technique</p> <p>Recovery Techniques:</p> <p>Down a slope</p> <p>Up a slope</p>	<ul style="list-style-type: none"> <li>- Gradient</li> <li>- Surface/vegetation</li> <li>- Obstructions</li> <li>- Weather conditions</li> <li>- Highest gear possible without stalling for ascending</li> <li>- Lowest gear possible when descending</li> <li>- Suitable use of brakes</li> <li>- Avoid wheel spin when ascending</li> <li>- Accelerate to avoid sliding</li> <li>- "Cadence braking"</li> <li>- Apply brakes/stall vehicle</li> <li>- Select reverse gear</li> <li>- Release clutch</li> <li>- Check position of front wheels</li> <li>- Start engine in gear</li> <li>- Check behind</li> <li>- Descend slope with feet off pedals</li> <li>- If lack of traction select reverse without stopping</li> </ul>
3. Drive vehicle round a designated course (as outlined by the assessor)	<ul style="list-style-type: none"> <li>- Assess conditions and safest route</li> <li>- Select gear, 4 wheel drive, and/or differential lock as appropriate</li> <li>- Follow correct route (as identified)</li> <li>- Demonstrate safe control of the vehicle: <ul style="list-style-type: none"> <li>• Up and down a slope</li> <li>• Across a slope</li> <li>• Across other obstacles as required by assessor (outlined in</li> </ul> </li> <li>- Demonstrate procedures to follow when: <ul style="list-style-type: none"> <li>• Grip is lost</li> <li>• Vehicle stalls</li> </ul> </li> <li>- Demonstrate a failed hill climb recovery</li> </ul>
4. Describe (and demonstrate if required by the assessor) the techniques for driving across ridges or humps	<ul style="list-style-type: none"> <li>- Vehicle at correct angle to obstacle to ensure maximum traction</li> <li>- Maintain low speed to avoid excessive bounce</li> </ul>

<b>Unit 1 Pre start safety and operation of off road vehicles (continued)</b>	
<b>Part 2: operate the off road vehicle in off road conditions (continued)</b>	
5. Describe (and demonstrate if required by the assessor) the techniques for driving across ditches	<ul style="list-style-type: none"> <li>- Cross ditch diagonally to allow one wheel at a time to enter ditch</li> <li>- Maintain low speed to avoid excessive bounce</li> </ul>
6. Describe (and demonstrate if required by the assessor) techniques for driving across slopes	<ul style="list-style-type: none"> <li>- Avoid if possible</li> <li>- Use existing tracks if available</li> <li>- Avoid obstacles</li> <li>- Steer down hill if traction is lost or vehicle becomes unstable</li> <li>- Maintain low centre of gravity</li> </ul>
7. Describe (and demonstrate if required by the assessor) techniques for driving on slippery surfaces (e.g. snow, ice, wet grass, mud etc)	<ul style="list-style-type: none"> <li>- As high a gear as possible</li> <li>- Minimum throttle to avoid wheel spin</li> <li>- Avoid sudden, harsh use of controls</li> <li>- Use of traction aids</li> </ul>
8. Describe (and demonstrate if required by the assessor) the techniques for driving through deep water	<ul style="list-style-type: none"> <li>- Assess depth and bed before entering the water</li> <li>- Maintain sufficient speed to create bow wave where appropriate</li> <li>- Observe maximum recommended wading depth of vehicle</li> <li>- Use of wading plugs/"snorkels"</li> <li>- Check brakes after exiting water</li> <li>- Do not stop engine</li> </ul>
9. Describe how to drive in soft, dry sand	<ul style="list-style-type: none"> <li>- Lower tyre pressures</li> <li>- Avoid wheel spin</li> <li>- Avoid sharp turns</li> <li>- If unable to continue, reverse back along existing tracks</li> <li>- Keep momentum</li> </ul>
10. Describe and demonstrate driving techniques for recovering a failed hill climb	<ul style="list-style-type: none"> <li>- Demonstrate procedures to follow when: <ul style="list-style-type: none"> <li>• Grip is lost</li> <li>• Vehicle stalls</li> </ul> </li> <li>- Demonstrate a failed hill climb recovery</li> </ul>
11. Describe vehicle recovery techniques	<ul style="list-style-type: none"> <li>- Use of vehicle winch</li> <li>- High lifting jack or air bag</li> <li>- Tow with another vehicle</li> <li>- Place appropriate traction aid under wheel</li> <li>- Rock the vehicle using forward or reverse gears</li> </ul>
12. Prepare vehicle for return to on road driving conditions.	<ul style="list-style-type: none"> <li>- Return vehicle to normal drive</li> <li>- Remove mud/debris on designated site</li> <li>- Check tyres for damage (including inside walls) inflate to road pressure if required</li> <li>- Check that brakes operate</li> <li>- Clean, check and reset if necessary: <ul style="list-style-type: none"> <li>• windows</li> <li>• mirrors</li> <li>• lights</li> <li>• registration plate</li> </ul> </li> <li>- Vehicle returned to normal drive to reduce wear and improve road handling and eliminate "transmission wind up" risk</li> <li>- Vehicle checked for damage that could endanger the vehicle at road speeds</li> <li>- Mud and debris removed to prevent soiling of roads and causing hazard to other road users</li> <li>- Windows/lights/mirrors cleaned to maintain visibility and safety of vehicle</li> </ul>

<b>Unit 2 Trailers in the Workplace (optional)</b>	
<b>ASSESSMENT ACTIVITY</b>	<b>ASSESSMENT CRITERIA</b>
<p>1. Outline legal and safety requirements relating to the use of trailers in respect of:</p> <p>1.1 Risk Assessment</p> <p>1.2 The use of the vehicle on a public highway or other areas to which the public has access</p> <p>1.3 The use of the trailer on a public highway or other areas to which the public has access</p>	<p>Risk Assessment must be specific to:</p> <ul style="list-style-type: none"> <li>- Site</li> <li>- Task</li> <li>- Machine</li> </ul> <p>Risk Assessment must contain:</p> <ul style="list-style-type: none"> <li>- Identified hazards</li> <li>- Evaluated risk</li> <li>- Control measures to be implemented</li> <li>- Emergency procedures</li> </ul> <p>Risk Assessment must be communicated to operator</p> <p>The vehicle must:</p> <ul style="list-style-type: none"> <li>- Be in a road worthy condition (MOT certificate where appropriate)</li> <li>- Have a current road fund licence (vehicle excise duty)</li> <li>- Have a minimum of third party insurance cover (to conform to Road Traffic Act requirements)</li> <li>- Be driven by someone who holds a suitable valid drivers licence (including towing endorsement)</li> <li>- Have a tachograph fitted if appropriate (according to gross train weight)</li> </ul> <p>The trailer must:</p> <ul style="list-style-type: none"> <li>- Be compatible with towing vehicle</li> <li>- Be in a road worthy condition</li> <li>- Have an operators handbook</li> <li>- Be fitted with manufacturers plate</li> <li>- Have lights</li> <li>- Have brakes if over 750kg or double axle trailer or towing vehicle requirement</li> </ul>
<p>2. Check towing vehicle is safe to use</p>	<p>VIN plate/Operators manual referenced to check:</p> <ul style="list-style-type: none"> <li>- Maximum Gross Train Weight</li> <li>- Maximum Authorised Mass</li> <li>- Vehicle payload</li> <li>- Gross Vehicle Weight</li> <li>- Vertical Static Load/Nose Load</li> <li>- Tow bar and auxiliary lighting socket</li> <li>- Tachograph if required</li> <li>- Tyre pressure</li> <li>- Mirrors</li> <li>- Handbrake operation</li> </ul>
<p>3. Check trailer's suitability for road use</p> <p>Confirm compatibility of trailer and towing vehicle</p>	<p>Manufacturers handbook/plate to check:</p> <ul style="list-style-type: none"> <li>- Unladen weight of trailer</li> <li>- Gross weight</li> <li>- Axle weights</li> <li>- Vertical Static Load</li> </ul> <p>- Check that trailer and towing vehicle are compatible</p>
<p>4. Check the trailer is safe to use and appropriate for the task</p> <p>Confirm compatibility of vehicle and load</p>	<ul style="list-style-type: none"> <li>- Conduct visual inspection of trailer to ensure structural integrity and serviceability</li> <li>- Appropriate registration plate fitted</li> <li>- Overrun braking system if fitted</li> <li>- Breakaway cable</li> <li>- Handbrake</li> <li>- Stabilisers</li> <li>- Loading ramps</li> <li>- Tyre pressures/type</li> <li>- Lights</li> </ul> <p>- Suitability of trailer for load type</p>

Unit 2 Trailers in the Workplace (continued)	
ASSESSMENT ACTIVITY	ASSESSMENT CRITERIA
5. Hitch the vehicle to a trailer and connect the electrics	<ul style="list-style-type: none"> <li>- Reverse vehicle and line up with trailer</li> <li>- Connect trailer to vehicle safely and securely</li> <li>- Connect trailer electrical system to vehicle</li> <li>- Check correct function of trailer               <ul style="list-style-type: none"> <li>• Tail lights</li> <li>• Brake warning lights</li> <li>• Number plate lights</li> <li>• Indicator lights</li> <li>• Brakes</li> </ul> </li> <li>- Attach breakaway cable/chain securely to vehicle hitch</li> <li>- Ensure that trailer handbrake is released and wheel chocks removed (if used)</li> </ul>
6. Load the trailer	<ul style="list-style-type: none"> <li>- Manoeuvre to appropriate area for loading (if required)</li> <li>- Remove/drop tailgate and/or sides</li> <li>- Attach ramps if required</li> <li>- Stabilisers put down if required</li> <li>- Adopt safe manual handling techniques</li> <li>- Safe use of Trailer Winch where fitted</li> <li>- Place load in correct position:               <ul style="list-style-type: none"> <li>• Position between axles</li> <li>• Even spread of weight</li> <li>• Within trailers capacity/nose weight</li> <li>• Low centre of gravity</li> </ul> </li> <li>- Replace sides/tailgate/ramps etc</li> </ul>
7. Secure the load	<ul style="list-style-type: none"> <li>- Load secured using appropriate method/equipment for load type.</li> <li>- Lashing points</li> <li>- Wheel chocks</li> <li>- Tarpaulin</li> <li>- Net</li> <li>- Ropes (effectively tied)</li> <li>- Straps</li> <li>- Avoid damage to load</li> <li>- Avoid moving load during transit</li> </ul>
8. Drive the vehicle and trailer around an identified route.  Route should include:  a. Reverse round a right and left hand corner  b. Reverse in a straight line  c. Negotiate a chicane  d. Park trailer and uncouple	<ul style="list-style-type: none"> <li>- Ensure smooth take off</li> <li>- Engage correct gears and select speeds as appropriate to conditions</li> <li>- Ensure that care is taken at corners</li> <li>- Manoeuvre vehicle and trailer safely</li> <li>- Appropriate positioning of vehicle in road</li> <li>- Ensure that care is taken when braking</li> </ul> <ul style="list-style-type: none"> <li>- Manoeuvre vehicle and trailer safely around corners, avoiding any obstacles/kerbs</li> <li>- Appropriate positioning of vehicle in road</li> <li>- Ensure that care is taken when reversing with auto reverse brakes</li> </ul> <ul style="list-style-type: none"> <li>- Manoeuvre vehicle and trailer safely</li> <li>- Appropriate positioning of vehicle in road</li> <li>- Ensure that care is taken when reversing with auto reverse brakes</li> </ul> <ul style="list-style-type: none"> <li>- Engage correct gear and select speed as appropriate to conditions</li> <li>- Manoeuvre vehicle and trailer safely</li> <li>- Appropriate positioning of vehicle in road</li> <li>- Avoidance of obstacles/kerbs</li> <li>- Ensure that care is taken when braking</li> </ul> <ul style="list-style-type: none"> <li>- Engage trailer parking brake securely</li> <li>- Apply stabilisers, jockey wheel, wheel chocks if appropriate</li> <li>- Disconnect trailer from vehicle hitch</li> <li>- Disconnect electric supply cable from vehicle socket and store correctly</li> <li>- Remove safety cable/chain</li> </ul>
9. Describe the factors to consider for driving on different road surfaces	<ul style="list-style-type: none"> <li>- Reduce speed when driving on rough ground</li> <li>- Increased importance of low centre of gravity on slopes</li> <li>- increased risk of jack-knifing on wet/slippery surfaces</li> </ul>



<b>Unit 3 Use of Vehicle Winches (Optional)</b>	
<b>ASSESSMENT ACTIVITIES</b>	<b>ASSESSMENT CRITERIA</b>
1. Describe safety considerations when operating a vehicle mounted winch	<ul style="list-style-type: none"> <li>- Maximum line pull/Breaking load/winch duty cycle</li> <li>- Winch overload protection devices</li> <li>- Winch components in suitable condition</li> <li>- Compatibility of winch components and load</li> <li>- Check for underground services</li> <li>- Suitability of anchor points</li> <li>- Use of ground anchors</li> <li>- Winch free from obstruction</li> <li>- No-one must enter the triangle made by the winch cable when offset pulling</li> <li>- Suitable PPE required (heavy duty gloves)</li> <li>- The cable should not be touched or crossed when under tension</li> <li>- Minimum of two people present for winching</li> </ul>
2. Identify the components and controls of the winch	<ul style="list-style-type: none"> <li>- Identify motor type (electric/hydraulic/PTO driven)</li> <li>- Shackles</li> <li>- Cable</li> <li>- Fairleads</li> <li>- Manual crank facility</li> <li>- Interior isolation switch</li> <li>- Winch operation controls</li> <li>- Trunk protector (if using a tree as anchor point)</li> <li>- Snatch/pulley block</li> <li>- Other accessories</li> </ul>
3. Prepare to use the winch to move an obstacle	<ul style="list-style-type: none"> <li>- Check winch is safe to use</li> <li>- Estimate load and assess compatibility</li> <li>- Establish effective communication/hand signals</li> <li>- Appropriate positioning and distance of vehicle in relation to obstacle</li> <li>- Unwind appropriate/optimum length of cable</li> <li>- Attach to obstacle</li> <li>- Use of snatch/pulley block</li> <li>- Use of trunk protector if applicable</li> <li>- Use of anchor points</li> <li>- Secure vehicle</li> <li>- Choice of winching method <ul style="list-style-type: none"> <li>• Direct pull</li> <li>• Offset pull</li> <li>• Compound pull</li> <li>• One-to-one or two-to-one?</li> </ul> </li> </ul>
4. Move obstacle using vehicle mounted winch	<ul style="list-style-type: none"> <li>- Appropriate PPE</li> <li>- Check for underground services</li> <li>- Load moved</li> <li>- Safety of operator</li> <li>- Hands kept clear of winch components when spooling</li> <li>- Do not touch or cross cable when in tension</li> <li>- Obstacle left in safe position, secured/chocked if necessary</li> <li>- Correct re-spooling of cable</li> </ul>
5. Prepare to use the winch to conduct self recovery of a "bogged" vehicle	<ul style="list-style-type: none"> <li>- Establish effective communication/hand signals</li> <li>- Find suitable anchor point</li> <li>- Attach cable to anchor</li> <li>- Use trunk protector if required</li> </ul>
6. Recover the vehicle	<ul style="list-style-type: none"> <li>- Vehicle recovered from "bogging"</li> <li>- Safety of operator observed at all times</li> <li>- Hands kept clear of winch components when spooling</li> <li>- Do not touch cable when in tension</li> <li>- Avoidance of "snatching"</li> <li>- Correct re-spooling of cable</li> </ul>