Client Name:

Date:

Assessor Name:

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**
1. Describe legal and safety requirements relating to the use of off road vehicles in respect of: Risk Assessment	Risk Assessment must be specific to: - Site - Task - Machine Risk Assessment must contain: - Identified hazards - Evaluated risk - Control measures to be implemented - Emergency procedures - Risk Assessment must be communicated to operator
The use of the vehicle on a public highway or other areas to which the public has access	The vehicle must: - Be in a road worthy condition (MOT certificate where appropriate) - Have a current road fund licence (vehicle excise duty) - Have a minimum of third party insurance cover (to conform to Road Traffic Act requirements) - Be driven by someone who holds a suitable, valid drivers licence - Warning signs should be erected if appropriate
Safety of vehicle load off-road	- Observe vehicle loading limits - Ensure items are secured and not liable to fall or hit the driver whilst moving - Seek to maintain low centre of gravity with heavy loads
Environmental considerations	- Follow Country Codes - Observe vehicle restrictions on rights of way and owner permission on private land - Awareness of possible site restrictions due to SSSI's, archaeological sites etc. - Avoid wheel spin and other damage to the ground - Avoid fuel/oil leaks into water courses (COSHH) - Appropriate safe site for washing down vehicle
2. Carry out daily pre-use checks and maintenance to the vehicle	- Check vehicle and carry out pre-start maintenance in accordance with manufacturer's handbook - Observe relevant safety and cleanliness precautions - Check to ensure safety of operator and vehicle: • Wheel nuts secure • Tyres (measure pressure plus visual check of tread and walls for condition) • Stop control • Correct function of all lights and direction indicators • Function of seatbelts - Ensure: • Fuel level is adequate • Oil levels are correct • Coolant level is correct - Frequency of checks undertaken - Report findings as appropriate - Act on findings where appropriate
Demonstrate knowledge of the importance of correct fluid levels	- 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
3. State the function of the vehicle controls and instruments	- All controls identified and function explained in accordance with the manufacturer's handbook/operators manual. - Function and significance of the information displayed on all instruments and warning lights identified by the manufacturers manual/operators handbook - Appropriate time to use traction aids fitted and dangers of incorrect use
4. Carry out final safety checks to be made before starting the vehicle	- Check controls to ensure it is safe to start (according to manufacturers manual) - Check feet and pedals are free from mud
Start engine	- Engine started using appropriate technique for conditions - Cold and warm start procedure according to manufacturers handbook/ operators manual

Unit 1 Pre start safety and operation of off road vehicles (continued)	
Part 1: conduct pre-start safety activities of off road vehicles (continued)	
ASSESSMENT ACTIVITIES	**ASSESSMENT CRITERIA**
5. Check that brakes operate	- Drive vehicle short distance and stop to ensure brakes operate effectively - Check parking brake and stop engine
6. Describe parking on slopes	- Park across the slope - Turn wheels up hill - Apply hand brake - Leave vehicle in gear - Chock wheels
7. Demonstrate knowledge of safe wheel changing procedures	- Chocking - Jacking points - Soft surfaces - Level ground - Hand brake - In gear - Appropriate type of jack

Unit 1 Pre start safety and operation of off road vehicles (continued)	
Part 2: operate the off road vehicle in off road conditions	
ASSESSMENT ACTIVITIES	**ASSESSMENT CRITERIA**
1. Check site to be driven and assess the risks that are: - Site specific - Vehicle specific - Weather specific - Environmental	- Identify hazards - Select suitable control measures - Identify instructions and route plan correctly (as appropriate) - State possible risks when driving the vehicle off road
2. Describe driving up and down slopes: Selecting route Driving technique Recovery Techniques: Down a slope Up a slope	 - Gradient - Surface/vegetation - Obstructions - Weather conditions - Highest gear possible without stalling for ascending - Lowest gear possible when descending - Suitable use of brakes - Avoid wheel spin when ascending - Accelerate to avoid sliding - “Cadence braking” - Apply brakes/stall vehicle - Select reverse gear - Release clutch - Check position of front wheels - Start engine in gear - Check behind - Descend slope with feet off pedals - If lack of traction select reverse without stopping
3. Drive vehicle round a designated course (as outlined by the assessor)	- Assess conditions and safest route - Select gear, 4 wheel drive, and/or differential lock as appropriate - Follow correct route (as identified) - Demonstrate safe control of the vehicle: • Up and down a slope • Across a slope • Across other obstacles as required by assessor (outlined in - Demonstrate procedures to follow when: • Grip is lost • Vehicle stalls - Demonstrate a failed hill climb recovery
4. Describe (and demonstrate if required by the assessor) the techniques for driving across ridges or humps	- Vehicle at correct angle to obstacle to ensure maximum traction - Maintain low speed to avoid excessive bounce

Unit 1 Pre start safety and operation of off road vehicles (continued)	
Part 2: operate the off road vehicle in off road conditions (continued)	
5. Describe (and demonstrate if required y the assessor) the techniques for driving across ditches	- Cross ditch diagonally to allow one wheel at a time to enter ditch - Maintain low speed to avoid excessive bounce
6. Describe (and demonstrate if required by the assessor) techniques for driving across slopes	- Avoid if possible - Use existing tracks if available - Avoid obstacles - Steer down hill if traction is lost or vehicle becomes unstable - Maintain low centre of gravity
7. Describe (and demonstrate if required by the assessor) techniques for driving on slippery surfaces (e.g. snow, ice, wet grass, mud etc)	- As high a gear as possible - Minimum throttle to avoid wheel spin - Avoid sudden, harsh use of controls - Use of traction aids
8. Describe (and demonstrate if required by the assessor) the techniques for driving through deep water	- Assess depth and bed before entering the water - Maintain sufficient speed to create bow wave where appropriate - Observe maximum recommended wading depth of vehicle - Use of wading plugs/"snorkels" - Check brakes after exiting water - Do not stop engine
9. Descibe how to drive in soft, dry sand	- Lower tyre pressures - Avoid wheel spin - Avoid sharp turns - If unable to continue, reverse back along existing tracks - Keep momentum
10. Describe and demonstrate driving techniques for recovering a failed hill climb	- Demonstrate procedures to follow when: • Grip is lost • Vehicle stalls - Demonstrate a failed hill climb recovery
11. Describe vehicle recovery techniques	- Use of vehicle winch - High lifting jack or air bag - Tow with another vehicle - Place appropriate traction aid under wheel - Rock the vehicle using forward or reverse gears
12. Prepare vehicle for return to on road driving conditions.	- Return vehicle to normal drive - Remove mud/debris on designated site - Check tyres for damage (including inside walls) inflate to road pressure if required - Check that brakes operate - Clean, check and reset if necessary: • windows • mirrors • lights • registration plate - Vehicle returned to normal drive to reduce wear and improve road handling and eliminate "transmission wind up" risk - Vehicle checked for damage that could endanger the vehicle at road speeds - Mud and debris removed to prevent soiling of roads and causing hazard to other road users - Windows/lights/mirrors cleaned to maintain visibility and safety of vehicle

Unit 3 Use of Vehicle Winches (Optional)	
ASSESSMENT ACTIVITIES	**ASSESSMENT CRITERIA**
1. Describe safety considerations when operating a vehicle mounted winch	- Maximum line pull/Breaking load/winch duty cycle - Winch overload protection devices - Winch components in suitable condition - Compatibility of winch components and load - Check for underground services - Suitability of anchor points - Use of ground anchors - Winch free from obstruction - No-one must enter the triangle made by the winch cable when offset pulling - Suitable PPE required (heavy duty gloves) - The cable should not be touched or crossed when under tension - Minimum of two people present for winching
2. Identify the components and controls of the winch	- Identify motor type (electric/hydraulic/PTO driven) - Shackles - Cable - Fairleads - Manual crank facility - Interior isolation switch - Winch operation controls - Trunk protector (if using a tree as anchor point) - Snatch/pulley block - Other accessories
3. Prepare to use the winch to move an obstacle	- Check winch is safe to use - Estimate load and assess compatibility - Establish effective communication/hand signals - Appropriate positioning and distance of vehicle in relation to obstacle - Unwind appropriate/optimum length of cable - Attach to obstacle - Use of snatch/pulley block - Use of trunk protector if applicable - Use of anchor points - Secure vehicle - Choice of winching method • Direct pull • Offset pull • Compound pull • One-to-one or two-to-one?
4. Move obstacle using vehicle mounted winch	- Appropriate PPE - Check for underground services - Load moved - Safety of operator - Hands kept clear of winch components when spooling - Do not touch or cross cable when in tension - Obstacle left in safe position, secured/chocked if necessary - Correct re-spooling of cable
5. Prepare to use the winch to conduct self recovery of a “bogged” vehicle	- Establish effective communication/hand signals - Find suitable anchor point - Attach cable to anchor - Use trunk protector if required
6. Recover the vehicle	- Vehicle recovered from “bogging” - Safety of operator observed at all times - Hands kept clear of winch components when spooling - Do not touch cable when in tension - Avoidance of "snatching" - Correct re-spooling of cable