

# UK RO Advancing Professional Rescue - Lesson Guide

<b>SUBJECT</b>	Extrication – Space Creation – Vehicle on its Roof – Door Removal – Hinged doors		
<b>Aim</b>	<b>Essential understanding</b>	<b>Resources</b>	
To remove a vehicle door. Vehicle on its roof	<ul style="list-style-type: none"> <li>• Application of technique</li> <li>• Tools required and safe operation</li> <li>• Impact on the casualty</li> <li>• Influence the vehicle has on the technique</li> <li>• Tool positioning and the sequence of actions</li> </ul>	<ul style="list-style-type: none"> <li>• Scrap vehicle – means of positioning the vehicle</li> <li>• Casualty (dummy)</li> <li>• Equipment: Stabilisation equipment, Hydraulic Cutter, Combination tool or Spreader, Hand tools, Glass management kit</li> </ul>	
<b>Instructor Input</b>			
<b>Theory</b>	<b>Information Gathering</b>	<b>Concept</b>	<b>Demonstration</b>
Where can the techniques be applied and what influences the outcome?	How does the vehicle structure impact on the success of the doors removal?	What are the rescue tool requirements/consideration?	Describe/demonstrate the sequence of tool operations and actions
<b>Application</b>	<b>Vehicle Knowledge</b>	<b>Tool Selection</b>	<b>Technique</b>
<ul style="list-style-type: none"> <li>• Vehicle on its roof with full access to the door(s) to be removed</li> <li>• Space creation for initial access, immediate or emergency plans</li> <li>• Will support the process of creating maximum space</li> <li>• Beneficial for all emergency service responders</li> <li>• Opening of shut-lines</li> <li>• Latch or hinge side – Benefits and disadvantage</li> <li>• Structural strength of the door and posts. Weak points - door skin</li> <li>• Direction of forces applied</li> <li>• Impact of the door frame</li> <li>• Safety – PPE/Casualty protection</li> <li>• Maintaining a safe working area</li> <li>• Use of equipment and debris</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicle Impact Kinematics</li> <li>• Try before you pry – check the handles inside and out (if possible), unlock doors, use the key</li> <li>• Glass management – Type of glass, how it is fixed, can the window be wound down</li> <li>• Type of door – Sliding door, Hinged door, Gulls wing etc</li> <li>• Age and make of the vehicle, the influence of structural strength, does the vehicle have a 'B' pillar</li> <li>• Vehicle safety devices – location/type</li> </ul>	<p>Rescue tools:</p> <ul style="list-style-type: none"> <li>• Dedicated cutter</li> <li>• Combination tool</li> <li>• Glass management kit</li> <li>• Stabilisation equipment</li> </ul> <p>Tool consideration:</p> <ul style="list-style-type: none"> <li>• Position/type of operation</li> <li>• The angle of the tools</li> <li>• Opening of shut-lines</li> <li>• Relative structural strengths</li> <li>• Avoidance of hazards and obstruction</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicle preparation - Glass, Stability, Shut-lines</li> <li>• Try before you pry</li> <li>• Consider the best approach based on accident damage and the needs of the casualty</li> <li>• Latch side <ul style="list-style-type: none"> <li>○ Combination tool or spreader</li> <li>○ Access above the latch – side nearest the vehicle floor</li> <li>○ Observe metal – try to prevent failure</li> <li>○ Work the tool – Open, close, relocate</li> <li>○ Once just above the latch open until failure. Relocate if metal fails around the latch</li> </ul> </li> <li>• On failure open the door until access to the frame is available</li> <li>• Cut a section of the window frame out to allow the door to fully open</li> <li>• Spread, unbolt or cut the</li> </ul>

<p>dump</p> <ul style="list-style-type: none"> <li>• Time considerations</li> <li>• Impact on the casualty – Noise, time, exposure to the environment</li> </ul>			<p>hinges</p> <ul style="list-style-type: none"> <li>○ Bottom hinge (nearest the ground), check strap and wiring loom, top hinge</li> <li>• Remove the door</li> <li>• Ensure casualty protection</li> <li>• Protect sharp edges</li> </ul>
<b>Delegate understanding</b>			
<ul style="list-style-type: none"> <li>• Application and sequence of actions</li> <li>• Key considerations</li> <li>• Points of safety</li> <li>• Impact on the casualty</li> <li>• Equipment requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Be able to analyse vehicle structural factors and respond accordingly</li> <li>• Plan location of tool operation and purchase points</li> <li>• Identify safety devices and mitigate the risk</li> </ul>	<ul style="list-style-type: none"> <li>• Formulate a sequence of tool operation</li> <li>• Apply effective, safe use of tools</li> <li>• Recognise limitations</li> <li>• Demonstrate a successful outcome</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate vehicle preparation</li> <li>• Identify and select appropriate tools</li> <li>• Demonstrate the safe and correct use of tools</li> <li>• Appropriate tool selection and recognise the limitation of tools</li> <li>• Correct sequence of tool operation</li> <li>• Successful completion of the technique</li> </ul>