

UK RO Advancing Professional Rescue - Lesson Guide

SUBJECT	Extrication – Space Creation – Car on its wheels - Side roof fold		
Aim	Essential understanding	Resources	
To displace the roof to one side	<ul style="list-style-type: none"> • Application of technique • Tools required and safe operation • Impact on the casualty • Influence the vehicle has on the technique • Tool positioning and the sequence of actions 	<ul style="list-style-type: none"> • Scrap vehicle • Casualty (dummy) • Equipment: Stabilisation equipment, Hydraulic Cutter, Combination tool or Spreader, Hand tools, Glass management kit, Reciprocating saw (optional) 	
Instructor Input			
Theory	Information Gathering	Concept	Demonstration
Where can the techniques be applied and what influences the outcome?	How does the vehicle structure impact on the success of the roof removal?	What are the rescue tool requirements/consideration?	Describe/demonstrate the sequence of tool operations and actions
Application	Vehicle Knowledge	Tool Selection	Technique
<ul style="list-style-type: none"> • Vehicle on its wheels with restricted access at one side • Maximum space creation for a controlled casualty extrication • Restrictions – Panoramic roofs • Provides excellent access for emergency service responders • Reduces the risk of musculoskeletal injury to emergency service responders • Safety – PPE/Casualty protection • Maintaining a safe working area • Use of equipment and debris dump • Time considerations • Impact on the casualty – Noise, time, exposure to the environment • Size and weight of the roof 	<ul style="list-style-type: none"> • Vehicle Impact Kinematics • Glass management – Type & location, avoidance • Type if vehicle Estate, SUV, Saloon, Hatchback – roof size & weight • Removal of the tailgate (if applicable) • Age and make of the vehicle, the influence of structural strength • Vehicle safety devices – location/type • Sun/Panoramic roof and deformation from the impact • Seat operation – impact on the final extrication 	<p>Rescue tools:</p> <ul style="list-style-type: none"> • Dedicated cutter • Combination tool • Reciprocating saw (optional) • Glass management kit • Stabilisation equipment <p>Tool consideration:</p> <ul style="list-style-type: none"> • The width of the pillars – method of cutting • Position/type of operation • The angle of the tools • Opening shut-lines • Relative structural strengths • Avoidance of hazards and obstruction 	<ul style="list-style-type: none"> • Vehicle preparation - Glass, Stability, Cut seat belts, Peel and Reveal pillars • Ensure casualty protection – Soft and hard • Mark a safe place to cut • Ensure emergency plan is in place first • Removal of tailgate (if required) • Cut the windscreen – High cut, full length just below the roof header rail • Make a relief cut into the roof header rail just inside the ‘A’ pillar, at the side you wish the roof to fold • Cut the opposite ‘A’, ‘B’, ‘C’ and ‘D’ pillar (if applicable) • Opportunity for simultaneous activity • Make a second relief cut in the rear header rail just inside the ‘C/D’ post (at the fold side)

			<ul style="list-style-type: none"> Supporting the roof at the front and back, lift and fold. Protect sharp edges
Delegate understanding			
<ul style="list-style-type: none"> Application and sequence of actions Key considerations Points of safety Impact on the casualty Equipment requirements List advantages / disadvantages 	<ul style="list-style-type: none"> Be able to analyse vehicle structural factors and respond accordingly Plan location of tool operations and purchase points Identify safety devices and mitigate the risk 	<ul style="list-style-type: none"> Formulate a sequence of tool operation Apply effective, safe use of tools Recognise limitations Demonstrate a successful outcome 	<ul style="list-style-type: none"> Appropriate vehicle preparation Identify and select appropriate tools Demonstrate the safe and correct use of tools Appropriate tool selection and recognise the limitation of tools The correct sequence of tool operation Successful completion of the technique