

UKRO Advancing Professional Rescue - Lesson Guide

SUBJECT	Extrication – Space Creation – Shut lines		
Aim	Essential understanding	Resources	
To be able to identify and open a vehicle shut-lines to provide suitable access for rescue tools.	<ul style="list-style-type: none"> The advantage of open shut-lines Methods of opening shut-lines Hazards and safe systems of work 	<ul style="list-style-type: none"> Scrap vehicle Hand tools, Halligan bar, Pry bar, Combination tool or Spreader 	
Instructor Input			
Theory	Information Gathering	Concept	Demonstration
When is necessary to open vehicle shut-lines?	Location of shut-lines and need to open.	What methods are deployed to open shut lines	Describe/demonstrate the sequence of tool operations and actions
Application	Vehicle Knowledge	Tool Selection	Technique
<p>The need to open shut-lines</p> <ul style="list-style-type: none"> Shut-lines opened due to vehicle deformation Open, shut-lines linked to space creation methods Impact on other vehicle components such a glazing unit Effect of vehicle construction Provide access for rescue tools, for example; the blades of a spreader Gain access to a vehicle component such as the bolts of a door hinge <p>Hazards</p> <ul style="list-style-type: none"> Manual handling Glass management (where applicable) Use of hydraulic tools (where appropriate) Sharp edges 	<p>Shut-lines</p> <ul style="list-style-type: none"> Space between moveable body panels such as doors Identification of openings caused by vehicle deformation Identification of the openings required to support the extrication planning and vehicle design Vehicle body construction type Vehicle hazards – when crushing or spreading (Airbags, high voltage components) 	<p>Methods</p> <ul style="list-style-type: none"> Direct force <ul style="list-style-type: none"> Halligan tool/Prybar Spreading (including combination) tool Component crush (sill/pillar) Indirect force <ul style="list-style-type: none"> Door crush/spread Wing crush 	<ul style="list-style-type: none"> Confirm vehicle construction (metal or composite) Pinpoint the location to open the shut-line – near to door hinges Direct force <ul style="list-style-type: none"> Halligan tool – Position the duck's bill vertically directly at the identified point. Apply pressure downward and upwards until sufficient access is created Open the blades of the spreading tool. Insert on time into the shut-line at the desired position, close to grip the vehicle component. Use the spreading tool as a lever to create the opening Indirect force <ul style="list-style-type: none"> Halligan tool – remove indicator repeater and insert the pike and use as a lever Wing/door crush or spread Protection – Casualty, other

			responders – Shielding and covering
Delegate understanding			
<ul style="list-style-type: none"> Describe the purpose of opening shut-line List hazards Application and sequence of actions Key considerations Points of safety Impact on the casualty Equipment requirements 	<ul style="list-style-type: none"> Be able to analyse vehicle and identify which shut-line to open and point of opening 	<ul style="list-style-type: none"> Is able to describe the various methods of opening shut-lines Demonstrate they understand the impact of vehicle structure and extrication planning 	<ul style="list-style-type: none"> Demonstrate they can apply the multiple techniques at the appropriate times Is able to implement safe systems of work to protect themselves and others