

# **Risk Assessment - Metalwork Fabrication and Repairs** Reference No: CAR-44247-40

Version No: 3

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Department: Carriage and Wagon Date Of Assessment: 20 February 2021 Review Due Before: 04 November 2026

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## Removal of corroded metal and preparation for welding.

Туре	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Cuts and burns Use of angle grinder, hacksaw, metal chisel and hammer, file or rasp, gas cutter	Volunteers & Staff	1) CRITICAL - Engineering: Use of correct cutting tool - Effective 2) CRITICAL - Administrative: User training in safe use of cutting equipment - Effective 3) CRITICAL - PPE: Use of appropriate safety gloves for task Effective 4) CRITICAL - PPE: Use of suitable screens around work area, when required Effective 5) CRITICAL - PPE: Use of appropriate eye protection Effective	3 x 3 = 9 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	3 x 3 = 9  Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a
Health and Safety	Foreign object in eye Use of angle grinder.	Volunteers & Staff	CRITICAL - Administrative: Ensure ejected waste material from cutting is away from face - Effective     CRITICAL - PPE: Use safety eyewear - Effective	3 x 1 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	None	n n n	n/a
Health and Safety	Ingestion of dust Waste material from cutting e.g. insulation or wood	Volunteers & Staff	CRITICAL - Administrative: Clean work area regularly to stop waste build up - Effective     CRITICAL - PPE: Use appropriate dust mask - Effective	2 x 1 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	None	n n n	n/a
Health and Safety	Exposure to asbestos	Volunteers & Staff	CRITICAL - Administrative: Maintain and update GWSR asbestos register     Effective     CRITICAL - Administrative: Be aware of signage for existing asbestos -     Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	Administrative: Check the asbestos register before starting work Effective     Administrative: Consider training staff in asbestos awareness Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a
Health and Safety	Crush injury Falling of metal sections.	Volunteers & Staff	CRITICAL - Engineering: Identification of potential for metal to fall - Effective     CRITICAL - Engineering: Support metal to prevent risk - Effective     CRITICAL - PPE: Wear safety footwear - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n	n/a



Туре	Hazard Cause	Persons Affected	Control Measures	L S Overall	Т	Additional Control Measures	L S T Overall	Owner/Action
Finance	Fire Use of angle grinder and gas cutting.	Volunteers & Staff	1) CRITICAL - Engineering: Remove combustible materials from work area - Effective 2) CRITICAL - Administrative: Do not carry out any hot work within 1 hour of shift finish - Effective 3) CRITICAL - Administrative: Carry out check of working area at end of shift - Effective 4) CRITICAL - Administrative: Ensure fire extinguishers or blankets are to hand - Effective	2 x 3 = Medium - to be minimised controlled far as is reasonably practical.	Risk and so	None	n n n	n/a
			MIG Welding					
Туре	Hazard Cause	Persons Affected	Control Measures	L S Overall	T	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Burns Use of MIG welder.	Volunteers & Staff	CRITICAL - Administrative: Ensure only suitably trained and competent workers carry out this task - Effective     CRITICAL - PPE: Use of appropriate safety gloves for task Effective     CRITICAL - PPE: Wear fire retardant overalls when burning - Effective	2 x 3 = Medium - to be minimised controlled far as is reasonably practical.	Risk and so	None	n n n	n/a
Health and Safety	Eye injury Use of MIG welder.	Volunteers & Staff	CRITICAL - PPE: Use of appropriate eye protection Effective     CRITICAL - PPE: Use of suitable screens around work area, when required Effective	3 x 3 = Medium - to be minimised controlled far as is reasonably practical.	Risk and so	None	n n n	n/a
Health and Safety	Vapour inhalation Use of MIG welder.	Volunteers & Staff	1) CRITICAL - PPE: Use of filtered air flow face mask - Effective	2 x 4 = Medium - to be minimised controlled far as is reasonably practical.	Risk and so	Engineering: Consider use of local fume extraction - Effective	2 x 4 = 8  Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a
A filtered air	Control Measure Notes. flow mask must be worn by flow mask must be worn by							
Finance	Fire	Volunteers & Staff	CRITICAL - Administrative: Do not carry out any welding within 1 hour of shift finish Effective     CRITICAL - Administrative: Ensure fire extinguishers or blankets are to hand - Effective	2 x 3 = Medium - to be minimised controlled far as is reasonably practical.	Risk and so	None	n n n	n/a

# Manufacture of replacement sections



Туре	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L Ov	S erall	T	Owner/Action
Health and Safety	Cuts and burns Use of hand and machine tools, Plasma cutting, Gas cutting and welding.	Volunteers & Staff	1) CRITICAL - Engineering: Use of correct equipment - Effective 2) CRITICAL - Administrative: Training where appropriate - Effective 3) CRITICAL - PPE: Use of appropriate gloves - Effective 4) CRITICAL - PPE: Use of suitable screens around work area when required - Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.		n	n	n	n/a
Health and Safety	Injury to eyes Use of hand and machine tools, Plasma cutting, Gas cutting and welding.	Volunteers & Staff	CRITICAL - PPE: Use of appropriate eye protection Effective	2 x 2 = 4 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.		n	n	n	n/a
Finance	Fire Use of plasma or flame cutting.	Volunteers & Staff	CRITICAL - Administrative: Do not carry out any work within 1 hour of shift finish Effective     CRITICAL - Administrative: Ensure fire extinguishers or blankets are to hand - Effective	1 x 3 = 3 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.		Lov to b mo ens ren ade cor an	nitore sure it nains equate itrolle	ed to t ely ed to	n/a

# **Material handling**

Туре	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Owner/Action Overall
Health and Safety	Manual Handling Moving of material.	Volunteers & Staff	CRITICAL - Administrative: Use of correct lifting methods - Effective     CRITICAL - Administrative: Assistance of other persons for lift - Effective	3 x 2 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	Engineering: Use of Lifting Aid - Effective     Administrative: Manual Handling Training - Effective	2 x 2 = 4 n/a Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.
Health and Safety	Crush injury Moving and positioning of material.	Volunteers & Staff	CRITICAL - Engineering: Use of correct lifting method - Effective     CRITICAL - Engineering: Use of lifting equipment - Effective     CRITICAL - PPE: Wearing of appropriate safety footwear - Effective	2 x 3 = 6 Medium - Risk to be minimised and controlled so far as is reasonably practical.	None	n n n n/a



Туре	Hazard Cause	Persons Affected	Control Measures	L S T Overall	Additional Control Measures	L S T Overall	Owner/Action
Health and Safety	Cuts Moving of material.	Volunteers & Staff		2 x 1 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.		2 x 1 = 2 Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level	

<u>COSHH Assessments</u>
There are no COSHH assessments associated with this risk assessment.