

# RAMSGATE AND DISTRICT MODEL ENGINEERING CLUB

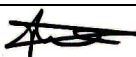

## RISK ASSESSMENT

Assessment No.:	RA12	Issue No.	2
Activity:	Charging and Use of Lead-Acid Batteries		
Persons at risk:	Club Members.		

Key								
<b>L:</b> Likelihood	5	5	10	15	20	25	<b>High-risk: 15-25</b>	High-risk activities should cease immediately. Further effective control measures to mitigate risks must be introduced.
	4	4	8	12	16	20		
	3	3	6	9	12	15	<b>Medium-risk: 8-12</b>	Medium-risks should only be tolerated for the short-term, whilst further control measures to mitigate the risks are being planned and introduced.
	2	2	4	6	8	10		
	1	1	2	3	4	5	<b>Low-risk: 1-6</b>	Low-risks are largely acceptable. Where it is reasonable to do so, efforts should be made to reduce risks further.
		1	2	3	4	5		
<b>S:</b> Severity				<b>DR:</b> Degree of risk			<b>RR:</b> Residual risk	
Guidance.	<ol style="list-style-type: none"> <li>1. Identify the persons at risk and the significant hazards.</li> <li>2. Calculate an initial RR for the activity.</li> <li>3. Identify risk control measures that reduce the risks to an acceptable level.</li> <li>4. Calculate a revised RR – assuming the control measures are followed.</li> </ol> (Consider changing both the likelihood (L) and the severity (S) ratings.)							

Significant Hazards	Initial		
	L	S	DR L x S
Risk of explosion when batteries are connected / disconnected to charger, or locomotive. Risk of acid burns from handling. Risk of injury from lifting heavy batteries.	3	5	15

Risk Control Measures	Residual		
	L	S	RR L x S
When connecting or disconnecting batteries to a locomotive, or charger, the circuit should be isolated first to prevent sparks. This is especially important when taking batteries off charge – Always make sure the charger is turned off before connecting or disconnecting batteries. Locomotives should always be fitted with an isolating switch, or trip, which must be turned off before connecting or disconnecting batteries. Nitrile gloves are provided to protect hands from acid, if the battery has leaked acid. Ensure correct lifting procedure is used when fitting / removing batteries – they are heavier than they look.	1	5	5

Authorised By – Safety Officer:		Print:	Peter Wilson	Date:	08-02-2024
Annual Review By:			Duncan Edwards		17-03-2025
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