

Risk Assessment

Name of activity/ event/ location	Soldering Iron / Blowtorch	Date of risk assessment	15/5/2025 Next Review 15/05/2026 V0	Name of who undertook this risk assessment	Dan Howcroft
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Hazard Identified? / Risks from it?	Who is at risk?	How are the risks already controlled? What extra controls are needed?	What has changed that needs to be thought about and controlled?
Hazard - Contact with hot soldering iron/ Blowtorch/work piece Risk - Burns to hands/fingers/other body parts	All	Use tweezers/pliers or a vice to hold the workpiece where possible. Always assume that the soldering iron/blowtorch is hot and place it back in its holder when not being used. Switch the iron/blowtorch off when it is not in use and replace it in the holder. First aid box available locally for treatment of minor burns. First aiders contact details listed.	
Hazard- Combustible items coming into contact with hot soldering iron/blowtorch. -Risk - Fire, burns, inhalation of smoke/fumes.	ALL	Keep the work area tidy at all times. Ensure that combustible/flammable items (e.g. paper, clothing, flammable substances) are stored well away from the hot soldering iron/blowtorch /work area. Check the work area is in a safe state when work has been completed. Switch soldering iron/blowtorch off after use.	
Hazard- Potential for solder or flux to spit Risk - Burns to the skin or solder/flux spit to eyes.	ALL	Wear protective glasses (EN166) when soldering.	
Hazard- Use of hand tools e.g. cutters, pliers, blades, screwdrivers etc. Risk- Cuts, nips and pinches to hands and fingers. Injury to eyes from cutting component legs incorrectly.	ALL	Wear protective glasses (EN166) When trimming component legs, point towards the floor or into a waste container/bin. Visually inspect hand tools prior to use. If tools are damaged, do not use and contact technical staff for replacement. Never put body parts into cut ends of copper pipe	

Additional information can be found in the *Safety Checklist for Leaders* and other information at scouts.org.uk/safety

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Hazard- Solder fumes Risk- Eye and nose irritation, damage to the air passages and/or respiratory irritation Existing health problems, i.e. asthma, COPD may become worse during soldering.	ALL	Use fume extraction and ensure adequate ventilation when soldering. If soldering activities are likely to take longer than 15 continuous minutes, speak to supervisor/technical staff to discuss further controls.	
Hazard- Fire Risk- Faulty equipment, poorly constructed electrical circuits or component failure may lead to short circuits, causing a spark; skin burns. Leaving hot soldering iron/workpiece in contact with combustible items may lead to fire	All	Always solder on a non combustible material Always use a damp sponge for wiping the soldering irons tips (not paper towels). A competent person e.g. supervisor/technical staff should check circuits. Visually inspect all "in-house" constructed circuits for short circuits, incorrectly orientated components e.g. capacitors, batteries etc., before connecting to a power supply.	
Hazard- Electrical Risk- Risk of electric shock for damaged or poorly maintained equipment.	All	Ensure that the soldering iron has been PAT tested and is in date (check label). Visually inspect the soldering iron and cable before use and report defects to technical staff immediately. Label "Faulty: Do not use" and remove from service. Replace iron in its holder when not in use to prevent damage to cables etc.	
Review due: <i>A risk assessment needs reviewing if circumstances change but also schedule regular reviews to ensure they are current, perhaps every 12 months? The review must include a detailed look at each element of the risk assessment in order to establish if any change is required.</i>			

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