

SSOW 23: JUMP STARTING PLANT + VEHICLES

Issue Number: 03

Date of Issue: 31/01/2026

Based on: RA81

PURPOSE

To ensure plant and vehicle jump-starting is carried out safely and in a controlled manner, preventing fire, explosion, electrical arcing, chemical exposure, and serious injury. This SSOW sets out the safe working practices, competency requirements, and equipment standards required to safely connect, operate, and disconnect jump-starting equipment in accordance with RA81, manufacturer instructions, and site-specific rules.

PPE REQUIREMENTS

For this activity, the following PPE must be worn

					
☒	☒	☒	☒	☐	☐
High-vis Vest / Jacket (BS EN 471)	Safety Boots (EN ISO 20345:2011) (S3)	Safety Gloves (Cut resistant) (EN 420:2003)	Safety Glasses (EN 116:2001)	N/A	N/A

TRAINING REQUIREMENTS

- Competent and authorised personnel only.
- Familiarity with RA81 and manufacturer instructions for jump packs and jump leads.
- Knowledge of safe battery handling, polarity checks, and electrical hazard awareness.
- Understanding of ignition-source control and fire-prevention measures.
- Awareness of site rules, POWRA requirements, and customer authorisation procedures.
- Knowledge of pre-use inspections and defect reporting for electrical equipment.

EQUIPMENT REQUIREMENTS

- Fully insulated jump leads of correct gauge for the battery voltage.
- Dual-smart jump pack (12/24V) in good working order.
- Fire-fighting equipment positioned nearby.
- Barriers or cones to segregate the work area where required.
- Manufacturer-fitted bonnet props and safe access steps.
- Communication device for coordination with site personnel.

SAFE SYSTEM OF WORK

- Only competent authorised personnel are permitted to jump start plant and vehicles.
- All jump-starting activities must be carried out in accordance with manufacturer's instructions.
- Full PPE must be worn including appropriate safety goggles and gloves.
- Good housekeeping practices must be maintained at all times, the area must be inspected and tidied prior to commencing.
- Batteries, tools and equipment to be used will be inspected visually prior to use. Should any defects be found, works to stop and items quarantined reporting to line manager.
- All tools and equipment must be fully insulated including jump leads.
- Jump starting will never be carried out where ignition sources are present. Personnel must check the area and remove all sources of ignition prior to commencing.
- Suitable fire fighting equipment must be available in close proximity.
- Personnel will ensure that any jewelry or metal items such as keys are removed from their person and clothing pockets prior to commencing.
- Where jump starting activities are required on a customer site, the mobile technician must report to

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security/reception for authorisation. Upon arrival to site Lynch personnel will sign in, attend inductions and briefings and adhere to the site rules at all times. A POWRA must be completed by the mobile technician prior to commencing.

- NO smoking is permitted in the works area, use designated smoking points.
- Works area to be segregated with the use of barriers where possible.
- All Lynch jump packs are auto smart dual packs. They can work in either 12/24v and will not turn on and power unless the leads are connected correctly.
- Vehicles/plant must be parked with the handbrake applied and in neutral (or park if automatic). Ignitions must be switched off.
- When raising the bonnet, personnel will ensure that this is secured correctly with manufacturer fitted prop.
- A jump pack will be used wherever possible.
- Where this is not possible, vehicles/plant must never touch.
- Jump leads used will be of the correct gauge for the size/voltage of the battery.
- Competent person will find out and locate the negative or positive terminal of each vehicles battery is connected to the chassis to check the vehicles earth polarity.
- Where a jump pack is used, it must be used in line with manufacturer instructions and user guides.
- If you are unsure what voltage the batteries are, STOP work and speak to your line manager.

Connections (for vehicles with the same earth polarity)

- Use red jump lead to connect the non-earthed terminal of the good battery to the non-earthed terminal of the flat battery. (The non-earthed terminal that is not connected to the vehicles chassis)
- se the black jump lead to connect the earthed terminal (the terminal connected to the vehicle chassis) of the good battery to a suitable unpainted metal part of the chassis or engine of the dead vehicle/plant. The point of attachment should be at least 15cm from the battery and away from the fuel and brake lines.

Connection (for vehicles with different earth polarities)

- DO NOT attempt unless you are competent to do so with suitable experience.
- Use the black jump lead to connect the earth terminal of the good battery to the non-earthed terminal of the flat battery.
- Use the red jump lead to connect the non-earthed terminal of the good battery to a suitable unpainted metal part of the chassis or engine of the dead vehicle. The point of attachment should be at least 15cm from the battery and away from the fuel and brake lines.

Starting the vehicle (vehicle/plant to vehicle/plant connection):

- Check that the handbrakes are applied (both vehicles/plant if necessary).
- Make sure that all leads are clear of anything that might start to move or rotate.
- Start the engine of the good vehicle and increase the engine revs a little to a fast idle (about 1500rpm) for about one minute.
- Start the engine of the dead vehicle.

Starting the vehicle (use of dual smart jump pack):

- Check that the handbrakes are applied.
- Place the jump pack on the ground in a safe location next to the vehicle/place.
- Make sure that all leads are clear of anything that might start to move or rotate.
- Power on the jump pack.
- Turn to the correct voltage 12/24 as required.
- Connect the jump leads to the correct terminals. Auto smart jump packs will not power if they are not correctly placed onto the terminals or if they are connected to the wrong terminals.
- The jump pack will now click and provide 60 seconds to start the dead vehicle.
- Start the engine of the dead vehicle and run for about one minute.

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- Turn off the power to the jump pack.

Disconnection:

- Where another vehicle has been used, stop the engine of the good vehicle and turn off the ignition. Leave the engine of the other vehicle running as the battery is still flat and will need running to store energy.
- Disconnect the leads in reverse order to the one used to connect them.
- Do not allow exposed metal parts of the leads to touch each other or other metal parts of the vehicle/plant until both leads have been disconnected.
- If the metal parts of the leads are hot, do not handle them until they have cooled down.
- Store accordingly.

IDENTIFIED RISKS

The SSOW above has been compiled after identifying the following risks from this activity

- Fire or explosion resulting in major injuries, burns or fatalities to personnel and/or damage to plant/vehicles and buildings.
- Chemical burns, gas/fume inhalation resulting in personal injuries.

FOR MORE INFORMATION, PLEASE REFER TO RISK ASSESSMENT RA81

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