

Fatal 3 - A contractor jumped down from the 4th rung of ladder and fractured his heel

WHAT HAPPENED

A mobile vacuum unit was being used in the cement mill area. After approximately 30 minutes of operation, the engine warning light illuminated. The operators, who were contractors, shutdown the unit and parked it up.

A contractor mechanic then used a step ladder to access the engine bay. The injured person (IP) checked the system to confirm it was not hot. Whilst removing the cap to the coolant system, the IP perceived that the system released pressure. His immediate reflex reaction was to jump off the step ladder to avoid burns in case any hot liquid was expelled (however, there was no evidence liquid was released). In doing so, he landed on his feet, causing a small fracture to his right heel.

The contractor was standing on the 4th step of the ladder shown below

KEY FINDINGS

Step ladder access - The step ladder was in good condition, on level ground and had a valid in date inspection record.

Housekeeping & lighting - The area was clear, well-lit and maintained.

Safe systems of work - The vehicle was parked up and allowed to cool prior to any work being carried out. In accordance with his training, the IP carried out inspections to check the engine was cool prior to work. Whilst a risk assessment exists for the task, Take 5 was not completed. The vehicle was immobilised (LOTOTO).

Risk perception - Some years earlier, the IP witnessed a colleague suffering burns whilst working on a coolant system. It is believed this led to him jumping off the ladder as a 'reflex action', even though on this occasion no hot material was expelled and the noise he heard related to movement of liquid in the header tank.

LEARNING POINTS / ACTIONS TAKEN

HOW COULD THIS HAVE BEEN AVOIDED

- It is considered that a dedicated access platform would have provided better access to the engine bay and offered improved positioning of the mechanic for work and in case of any unexpected issues. In this example, he could then have moved out of the way, and not felt compelled to jump down.

KEY REVIEW POINTS

- Ensure any access platforms are sufficient for the task and consider potential for an accident in case of an unexpected event occurring – can you position yourself out of harm's way? Do you have a means of 'escape'?
- Never work on a coolant system without sufficient training. Engine coolant systems are dangerous when hot, with the potential to cause serious burns. Whilst this was not the case in this incident, it is a useful reminder that pressure systems are dangerous.
- Is TAKE 5 and STOP & THINK fully understood and embedded with contractors, to the same extent as with employees?

LOCATION:	CEMENT PLANT	ALERT STATUS:	Normal
ACTIVITY:	WORKING AT HEIGHT	DATE ISSUED:	12/12/2023 19:13:02
SUB ACTIVITY:	SSOW	INCIDENT No:	03685