

Health & Safety Alert SA-034

Briefing Document

EV Fire Inchcape Aftersales – Feb 2024



Image 1



Image 2



Image 3



Image 4



Image 5

Details of Incident:

The Swindon site was secured on the 1st of Dec 2023.

At 9.07pm the fire alarm/intruder activation was activated, the CCTV picked up what appeared to look like lightening coming from the building. This was electrical discharge arcing from the battery. The Fire Brigade arrived within 12 minutes and assessed the cause as an EV fire. Inchcape colleagues were notified, some of whom made their way to the site.

It was identified that the fire was caused by an EV battery that had been taken out approx 3 weeks prior to the incident. The EV Battery had been placed on a trolley underneath the vehicle. The battery had been fully isolated as per OEM guidelines. The trolley loaded with the battery was pulled from the building by the fire service to an external parking bay. Approx. midnight (3 hours later) the fire was under control with full access to the traction battery unit. The building was handed back to Inchcape 8am on the 2nd December.

Investigation Findings:

- The EV vehicle was in the workshop for diagnosis, due to an EV fault light coming on.
- OEM protocols were followed for EV traction batteries.
- EV was stored in the car park for 7 days externally in quarantine area before being worked on.
- It is unknown how much charge remained in the battery when it was removed.
- The EV Traction Battery did go into thermal runaway.
- Prior to the fire there was regular high voltage arcing that occurred this was visible from CCTV footage, see image 5. This would have been fatal for anyone who encountered the arcing.
- All OEMs have no method to prevent or mitigate thermal runaway other than evacuate.
- There is no way to visibly see thermal runaway occurring other than by thermal imaging and gas detectors.

When removing an EV Traction battery from a vehicle this can potentially cause mechanical damage to the battery from the flexing of the battery unit. All technicians need to be aware of this risk no matter how smoothly or expertly removed if a battery cell is compromised this could be the trigger for thermal runaway to occur.