

[News story: Explosion inside an equipment case, Guildford](#)

At around 14:37 hrs on Friday 7 July, an explosion took place inside an under-floor equipment case on the 14:37 hrs Guildford to London Waterloo service, as the driver applied power to depart from Guildford station.

There were no reported injuries. However, debris, some quite sizable, was deposited on public platforms and the car park.

The train comprised two four-car class 455 units coupled together and the explosion took place under the third carriage of the leading unit.

Class 455 trains are undergoing a programme of retrofitting new traction equipment, which started in May 2016. The traction equipment involved was of the new design and the mechanism which caused the explosion was believed to be understood by the industry parties involved. Similar, smaller explosions, have occurred on at least two previous occasions where debris scatter was much more confined. The previous occurrences had been attributed to a manufacturing defect, leading to a build-up of explosive gas within the traction equipment. Industry parties were in the process of devising possible solutions to the problem at the time of the 7 July accident and are continuing to do so.

Since the immediate cause of this accident is already understood, our investigation will focus on:

- the change management processes that were applied to the retrofitting programme
- the response to the previous similar incidents
- the adequacy of any risk control measures that had been implemented
- any other relevant underlying management factors

Our investigation is independent of any investigation by the railway industry or by the industry's safety regulator, the [Office of Rail and Road](#).

We will publish our findings, including any recommendations to improve safety, at the conclusion of our investigation. This report will be available on our website.

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