

Safety Alert

Gantry sign fixings

19 March 2021

Background information

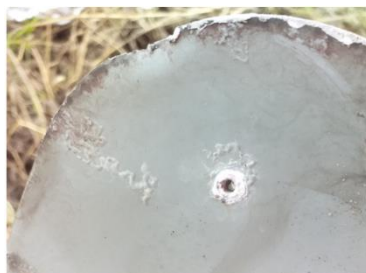
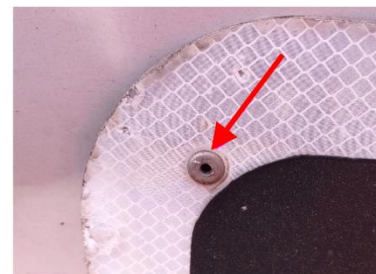
A motorway junction sign plate recently fell from one of our portal gantries, due to the failure of its riveted fixings.

At the time of the incident the lane below the sign was closed to traffic and no harm was caused to the road user.

Records indicate the sign was installed approximately 25 years ago and was attached directly to the face of the steel box gantry by four, 4mm diameter, aluminium hollow rivets.

The failure appears to have been caused by bimetallic corrosion (accelerated corrosion due to contact between two dissimilar metals – in this case the aluminium rivets and steel gantry), exacerbated by the limited number of rivets and by not being able to inspect the part of the rivet where corrosion was taking place.

Today, these issues can be avoided in new designs by complying with Highways England's current design and specification requirements for fixing signs to gantries, which are set-out in CD 365 and Series 1200 of the Specification for Highway Works.



Recommendations

- Designers and Inspectors should be reminded of the risk of bimetallic corrosion and that corrosion of such fixings may not be immediately visible.
- Inspectors are urged to remain vigilant for similar details, particularly where there are a small number of fixings provided. Principal Inspections, which are undertaken within touching distance, give inspectors an opportunity to physically check for looseness.
- Existing gantries with signs riveted directly to their face should be reviewed and appropriate action taken to manage the risk posed by any similar suspect fixing arrangements.