

Failure of temporary clamped joint under traffic

Issued to: All Network Rail line managers, safety professionals and RISQS registered contractors

Ref: NRA 17/02

Date of issue: 08/05/2017

Location: Acton Central Level Crossing, Anglia Route

Contact: [Tony Jackson](#), Senior Engineer Track & Lineside



Overview

Two Henry Williams temporary rail clamps were fitted as a temporary rail joint at 06:30 on Monday 5 February 2017 following a rail replacement at Acton Central Level Crossing.

The clamps were brand new, not previously installed, and were fitted by experienced and competent track workers employed by Network Rail.

Following a report received on Tuesday 7 February of a "Yellow thing lying in the track at Acton Central Level Crossing", all trains were stopped and the line blocked.

A member of Network Rail track staff who responded discovered that the clamps and fishplates had fallen from the rail joint leaving the ends of the rail unsupported.

The nylon insert in the nuts, intended to act as additional friction to reduce the risk of the joint undoing, was damaged. This appears to have occurred when the bolts were initially tightened and the nylon insert was pushed out of the nut.

Further work is underway to investigate the failure and to determine if the condition of the clamps and bolt or the way the clamps and fishplates were installed may have contributed to the incident.

Immediate action required

- All clamps Type 'B', 109 / 110A / 113A & CEN 60 E-1 (UIC60) FB, for temporary joints / rail defect clamping with product catalogue number 0057/054321 shall be inspected prior to their next use.
- The visual inspection should focus on the straightness of the bolt and in particular the condition of the nylon insert in the nut.
- If on inspection, the bolt is visibly bent or the nylon insert on the outer end of the nut is found to be damaged or displaced the clamps MUST not be used and shall be taken out of service until the nut, bolt and washer are replaced.
- For replacement bolts use product catalogue no. 0057/150028. BOLT S&C, ROUND NECK, INCLUDING LOCKNUT AND WASHER 1" DIA X 290 MM U/HD, 90MM THREAD BS 64 (1992) HIGH STRENGTH.
- There are two suppliers approved for this style of clamped joint: Henry Williams and Track Maintenance Equipment (TME). Whilst the components from each supplier share the same PADS number and the clamps look similar there are small differences in the design and components shall not be mixed.
- Each clamp must be assembled using components from a single supplier only. DO NOT MIX individual components from each supplier when constructing a temporary joint or clamping a defect. The pair of clamp bodies should be kept as a set and not replaced or reassembled using different components.

Copies of Safety Advice are available on [Safety Central](#).