



Safety Alert ipping Mechanism Mechanical Failure **11 November 2025**

The following pages of this safety alert were issued by National Highways' supply chain partner:

Conway





SAFETY ALERT

Tipping Mechanism Mechanical Failure - Update

Division: N/A | SHEQ Representative: Leon Simpson

Event Date: 09/10/2025

Escalation Ref No: N/A

Event Location: M27 Overlay Scheme

Summary of incident -

On the evening of Thursday 9 October 2025, a tipper lorry delivering asphalt to the M27 works began to raise its body to discharge into the paver. During the tipping process, a mechanical failure occurred within the tipping mechanism assembly (outer cover section near the base of the ram assembly) causing the body to fall suddenly onto the chassis.

The incident took place at low tipping height, and no injuries to persons were sustained. Following this the vehicle was made safe and removed from site where arrangements were then made for the haulier to transport the vehicle.

The failure appears to have occurred due to a fracture of the lower section of the outer cover, which supports the main ram

Subsequent inspection confirmed that the failure originated from severe internal corrosion within the outer sleeve of the hydraulic tipping mechanism. This corrosion had significantly reduced the wall thickness, leading to structural failure under normal tipping load.



Cause

A Mechanical inspection, supported by Edbro (manufacture) and Specialist, confirmed that the tipping mechanism sleeve failed due to internal corrosion. This corrosion developed following water ingress through the trunnion joint seal, reducing the wall thickness of the sleeve leading to structural failure during tipping.

Edbro advised that design improvements introduced from 2016 which includes improved seal compression, and modified trunnion joints which now provide better protection against moisture ingress. The affected vehicle in this incident was manufactured in 2015, prior to these updates.

SHEQ



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Guidance for Hauliers and Fleet Operators (To prevent similar failures)

While this update relates to Edbro hydraulic tipping rams, the following guidance should be applied as good practice across all makes and models of tipping equipment.

To prevent similar mechanical failures, hauliers and operators should ensure that they:

- Where vehicles are manufactured before 2016 with Edbro tipping mechanism, ensure they are inspected by a competent engineer to confirm the integrity of the outer sleeve.
- Check for any corrosion, flaking paint, or pitting around the outer cover section.
- Ensure visual pre-use inspection for oil leaks, cracks, corrosion, or unusual movement at the ram base.
- Report and isolate any vehicle showing damage or signs of instability.

Further Action:

Affected vehicles (registered 2015 or earlier) should be VOR'ed (Vehicle Off Road) until replacement sleeves or confirmed safe operation has been verified.

This update is issued to share the confirmed findings and provide guidance to prevent similar mechanical failures across the wider haulage and surfacing fleet.



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