

Material failure to Dipper Arm of an 8T Hitachi Excavator

Incident Description

A1 Leeming to Barton Improvement reported an arm cylinder bracket/component failure to an 8T Hitachi Excavator **Type ZX85** occurred whilst excavating for verge widening works.

The excavator, fitted with a ditching bucket, was excavating a shallow trench when the lugs of the front dipper arm sheared (at top arm cylinder bracket – refer to photos below).

Initial (visual) investigation has suggested steelwork material failure (fatigue) to the lug/s **(Not the welds)**.



Actions Taken

- The Excavator was stood down immediately, and has been removed from site. No-one was injured.
- As a further precaution, another 3 Excavators of this type on site have also been stood down and further inspected. No visible deterioration was found.
- Hitachi Construction Machinery UK (manufacturer) was contacted, and in response:
- They provided a “Product Alert” issued by Hitachi in April 2016 relating to their having received several reports of fractures in arm cylinder brackets, which have gone unnoticed and eventually resulting in total separation due to fatigue.
- Representatives from Hitachi visited site to view the damage on Mon 09 May 2016, and their investigation to determine causation is on-going.



Further information about this incident can be obtained from: Bob.Tootell@morgansindall.com