### Hand Injury Sustained Fitting Varioguard

#### Incident Description

On the 14th October 2017 an incident occurred on a Highways England construction scheme when a contractor’s employee was installing a traffic management crash cushion onto a section of Varioguard barrier. Whilst installing the M16 bolt the injured person’s little finger of the right hand became trapped resulting in crush injury and following an operation to repair tendon damage the finger needed to be amputated.

![Image of crash cushion installation](image1)

#### Investigation Findings

Due to uneven road surface and rubber pads fitted to the Varioguard, the crash cushion requires lifting to align with the Varioguard to fit the M16 Bolt. The Sideloader Fork Lift Truck was used guided by the IP to realign the two sections. Once these sections were aligned the IP then crouched down and proceeded to place their hands into the top beam section to insert the bolt. It was during this element of the activity that the IP’s finger became trapped between the Fork blade of the side loader and the crash cushion beam.

The investigation has identified that the Safe System of Work did not clearly identify as potential significant hazards:
- The need to raise/align the crash cushion/barrier sections
- Place the hands into the beam
- Plant Person Interface

#### Actions

- With immediate effect the requirement to fit the M16 bolt has been removed on all future installations of crash cushions
- All Installers and the Asset International training centre have been instructed by the supplier that when installing crash cushions they must pin both the barrier and the crash cushion separately as per the installation design and NOT install the M16 bolt into the top Quickjoints.
- Installers of Varioguard Vehicle Restraint Systems MUST NOT place hands in the barrier or areas where plant machinery are carrying out lifting operations

For further information please contact NH&ST@highwaysengland.co.uk