

Grivel Liberty Leash wire failure

Technical Report: 23/10/00: The Equipment Investigation Panel recently completed examination of a broken wire from a Grivel Liberty leash. Ironically, this leash belonged to Andy Perkins, a member of the EIP and Technical Specialist for Troll, the UK importers of Grivel. The wire broke during the final day of his Scottish winter guides test while digging a slot for an axe belay. A similar incident happened to an instructor at Glenmore Lodge, the National Centre for Mountaineering in Scotland. Following examination utilising Scanning Electron Microscopy, the EIP's view is that the wires failed in a low repetition high stress fatigue mode.

This occurred because the wire is placed in bending over a sharp edge, on the edge of the connector that links the wire to the head of the axe. The wire was originally designed to take tension straight down, and Grivel did not envisage the kinds of stresses that the peculiar circumstances of UK winter climbing place on the system. Grivel have now changed the design of the wire, so that instead of a rigid connector, there is now a loop of wire connecting the wire to the axe.

Troll will be contacting directly the customers who have purchased Liberty leashes, though some will have been sold on to end users. Troll have been in a unique position in this case, where they are acting as both reporters of the incident, technical specialists and distributors of the product.

Climbers who bought their Liberty leashes in a shop should return them to the same shop, NOT direct to Troll. This is so they can retain traceability during the recall process.