

Loads at the anchor after main line failure during rescue

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Design

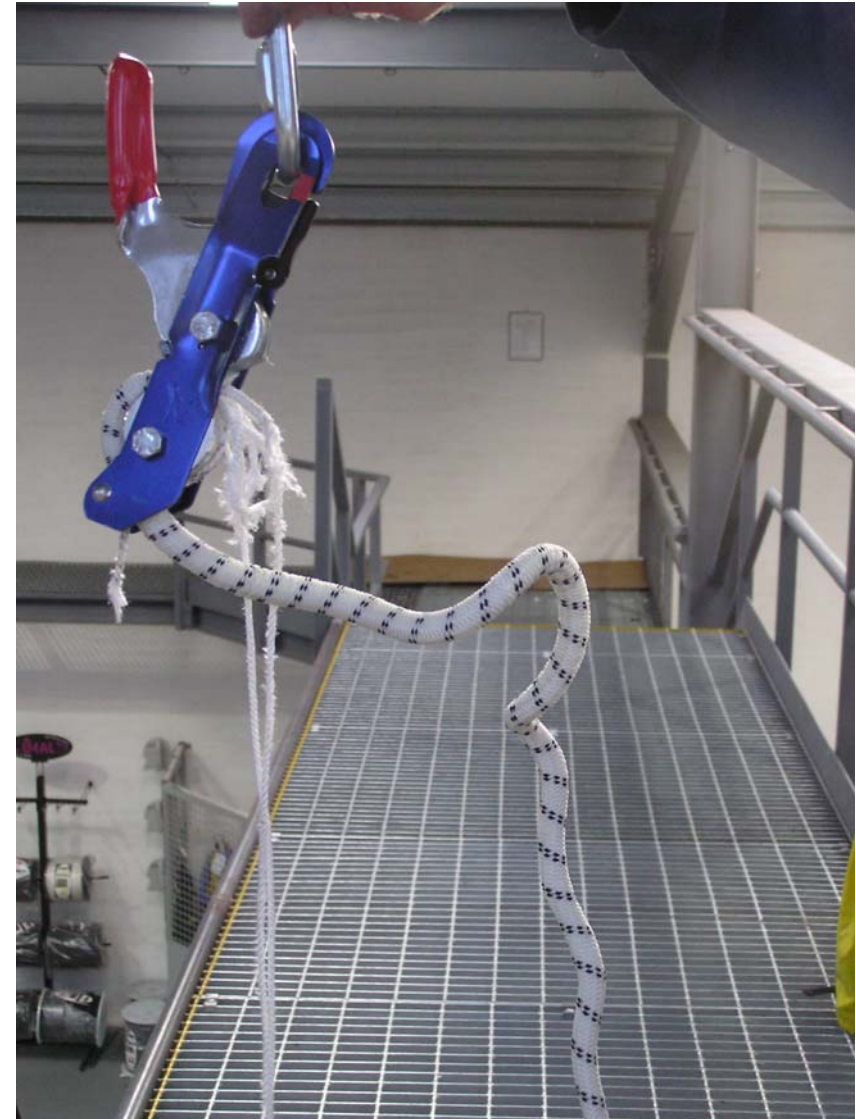
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The scenario

- During a stretcher lower with casualty and barrow boy, at top of crag slack is paid out in back up line and main line fails.
- Worst case scenario – 1 metre fall onto 3 metres of rope
- Load 280kg
- What happens?

Petzl Stop

- Rope severed
- No slippage
- Peak load 10.45 kN



Petzl ID

- Peak load 10.63 kN
- Slippage < 1 m



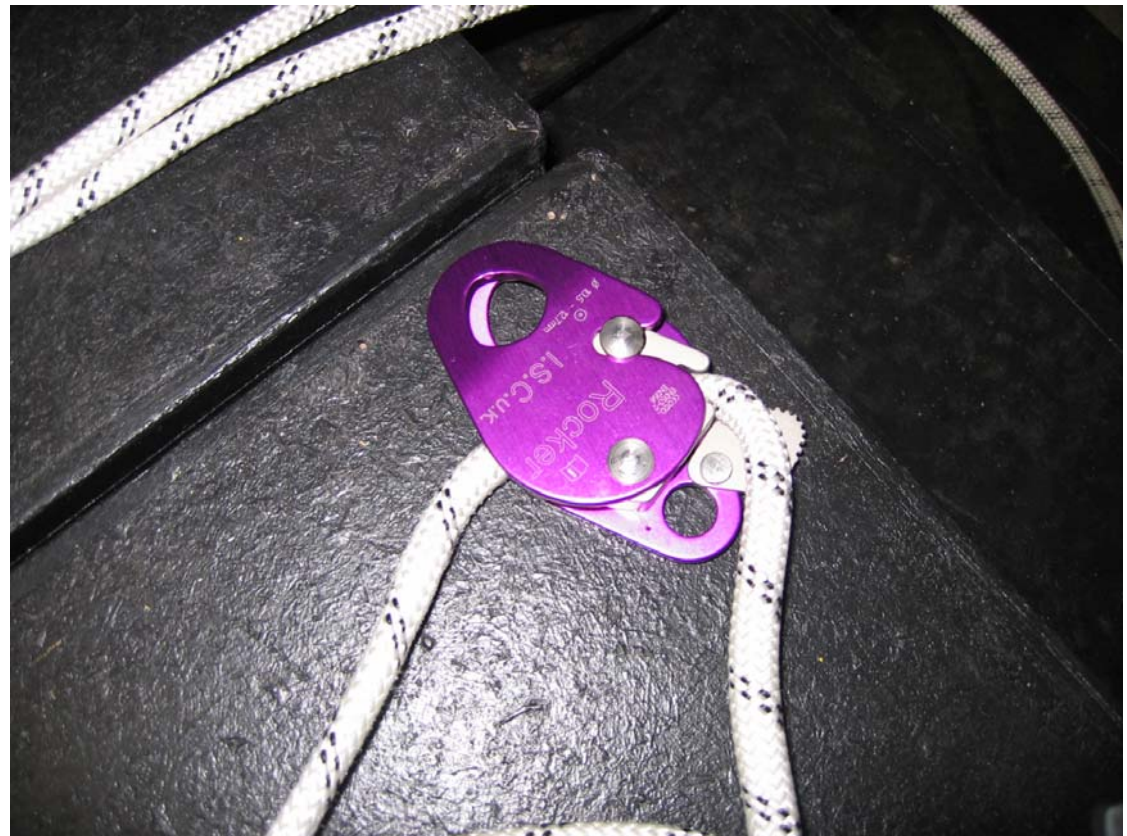
Tandem Prussiks

- Peak Load 8.98 kN
- Slippage 1 m



ISC Rocker

- Peak Load 4.91 kN
- Slippage 1.8 m



Petzl Grigri

- Peak Load 10.35 kN
- Slippage < 1 m



HB Rescue Rack

- Peak Load 8.59 kN
- Slippage 1.3 m



540

- Peak Load 14 kN
- Slippage < 10 cm

