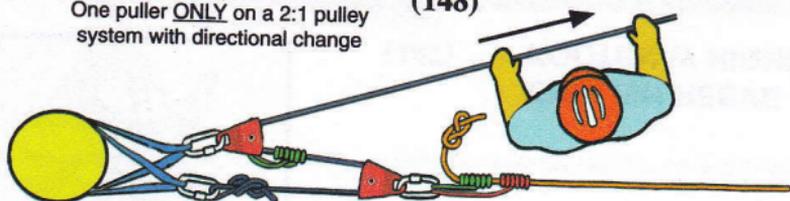


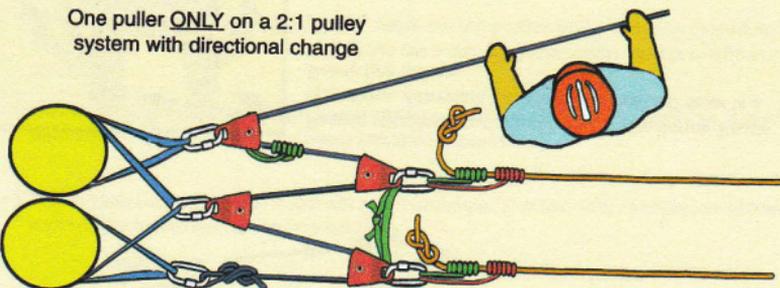
One puller ONLY on a 2:1 pulley system with directional change

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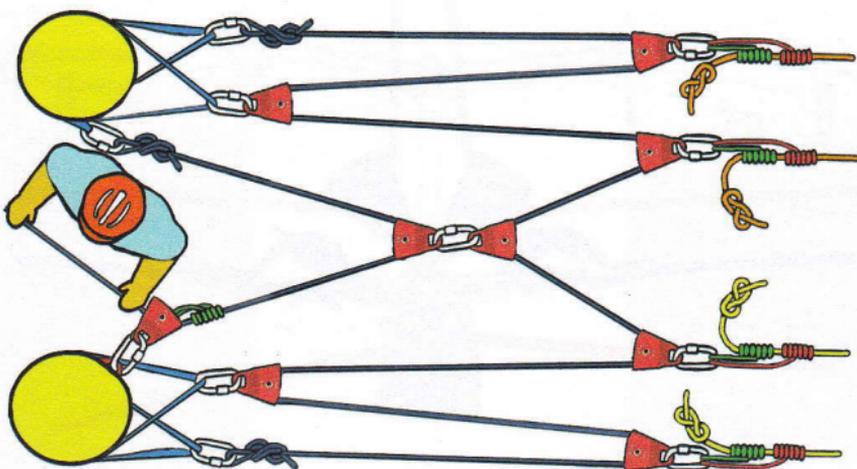


Initial tensioning of Kootenay Highline with NO weight on Highline

One puller ONLY on a 2:1 pulley system with directional change



Variation on initial tensioning of Kootenay Highline with NO weight on Highline- Twin track highline.



Variation on initial tensioning of Kootenay Highline with NO weight on Highline- Quad track highline.

## Tensioning of the Kootenay Highline System

Use **ONE PULLER ONLY** to tension the track line in preparation for loading. Use only a 2:1 pulley system to tension the unweighted track line. Failure to follow this rule could overstress the track line when weight is hung from it and cause system failure!

After the mass is hanging from the track line, additional pullers may be used to help tension the line and lift the litter over edge obstructions etc:

- 11mm rope: You may use up to a multiple of 12 (i.e. 2 rescuers pulling on a 6:1 system, or 3 rescuers on a 4:1 system)
- 12mm rope: You may use up to a multiple of 18 (i.e. 3 rescuers pulling on a 6:1 system)

The tension should be backed off again when the obstruction is passed. Again, **ONLY** use extra pullers when the load is already hanging from the highline.

The above rules also apply to twin and quad track highlines.

The maximum practical length of a Kootenay highline in the field is 100 meters. Longer highlines are possible, but require extensive pre-engineering and precise measurements.

## Tips for the Kootenay Highline System

A messenger cord twice the length of highline span with a floating center tie should be left in place after highline is placed, to aid in de-rigging, and to reset the highline in the event of track line failure.

If the track line fails, the rescue package will drop about 1/5 the length of span before being arrested by the Tag lines. Rig accordingly.

For longer highlines, the weight of the tag lines can be suspended on the track line by using "Tagline Hangers". These can be made with short cords girth hitched to tag line and attached to the Track line with non locking carabiniers.

A good rule of thumb for highlines is that if the high directional anchor for the track line is 2M back from the edge, it must be greater than 2M high for the rescue package to clear the edge.

When operating a highline, the side letting out the rescue package must begin **BEFORE** the opposite side begins pulling in.

If the Track line cannot be sufficiently slacked to land the rescue package, a Prusik attached to the track line can be pulled on with a jigger pulley system. This pulls down the track line and lands the package.

A Track line jigger can be applied to temporarily deflect a highline sideways to clear obstructions, such as a tall tree.

It is highly recommended that a team receives proper instruction from an *experienced* Kootenay highline rigging instructor before attempting a Kootenay highline in the field.

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**KOOTENAY HIGHLINE**

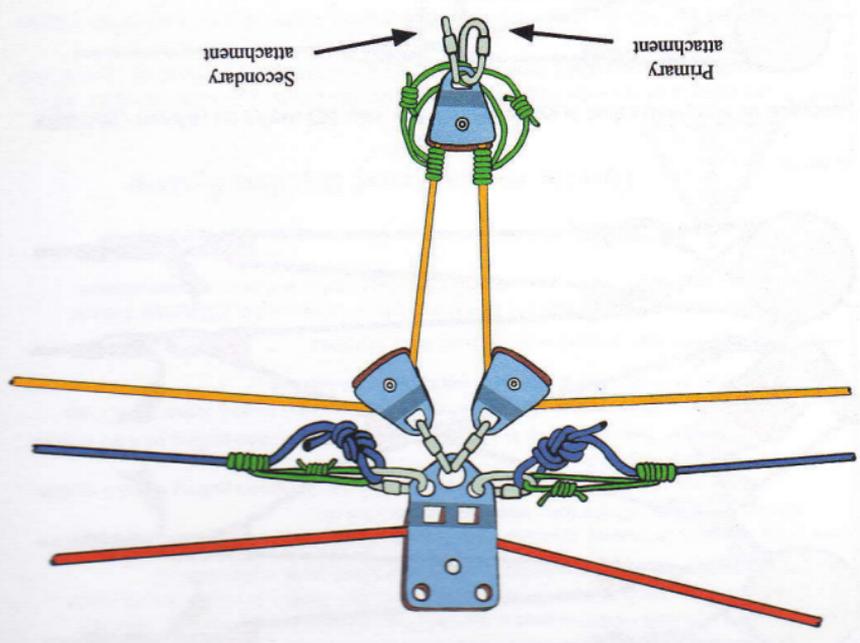
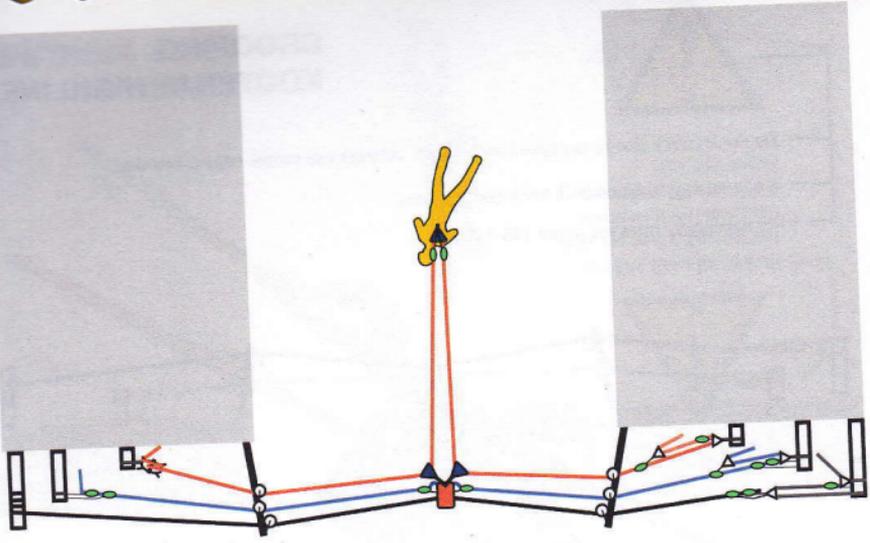
*Deflection Systems*

Follow all track and tag line procedures as per standard Kootenay Highline. For tensioning rules see pages 148-149

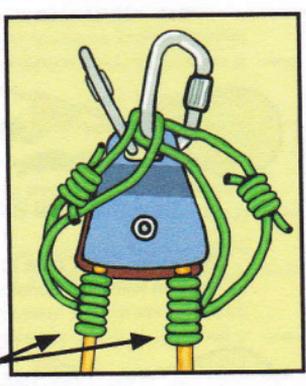


- Rescue attendant must be hoisted or lowered from either side.
- When lowering the Reeve line to water, finish the last portion of the lower by extending the Reeve pulley system. If the rescuer touches the water, the Reeve pulley system can be instantly reversed.
- Rescue attendant must mind both Reeve carriage Prusiks during Reeve operations. Attendant must release Prusiks if there is a Reeve line failure (see below).
- The English Reeve Highline is an advanced technique. Practice with an experienced instructor is necessary before attempting it in the field.

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Rescue attendant must mind both Prusiks during Reeve operations. Attendant must release Prusiks if there is a Reeve line failure.



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**ENGLISH REEVE  
KOOTENAY HIGHLINE**



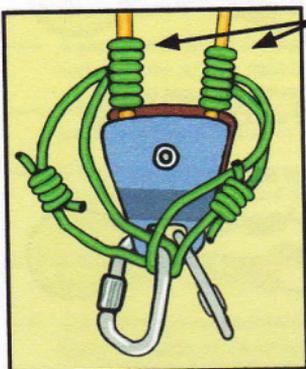
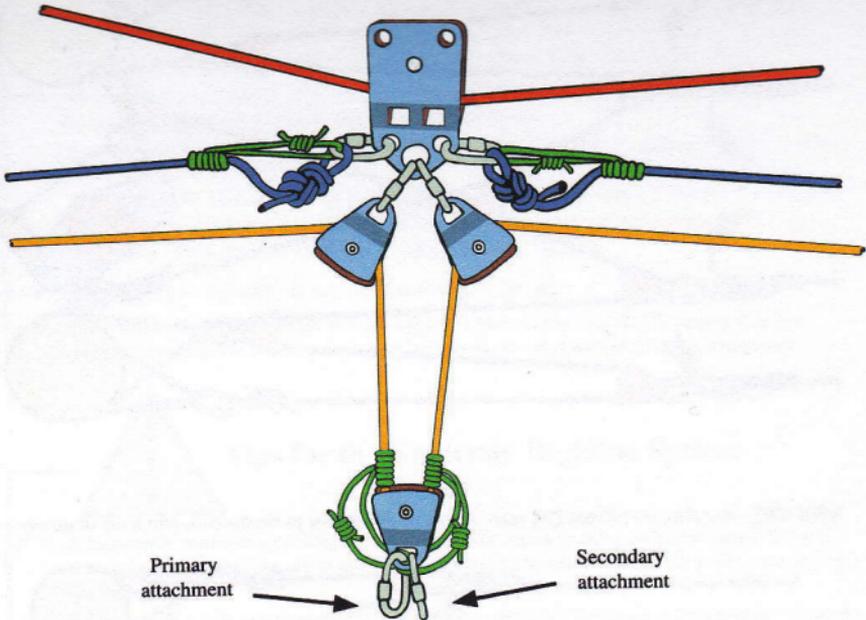
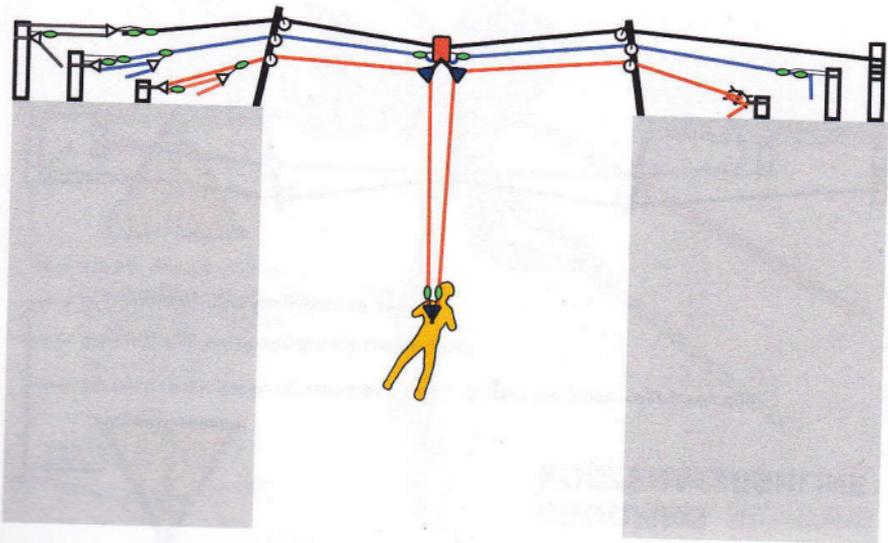
Follow all track and tag line procedures as per standard Kootenay Highline. For tensioning rules see pages 148-149

Reeve line can be hoisted or lowered from either side.

! When lowering the Reeve line to water, finish the last portion of the lower by extending the Reeve pulley system. If the rescuer touches the water, the reeve pulley system can be instantly reversed.

! Rescue attendant must mind both Reeve carriage Prusiks during Reeve operations. Attendant must release Prusiks if there is a reeve line failure (see below).

! The English Reeve Highline is an advanced technique. Practice with an experienced instructor is necessary before attempting it in the field.



Rescue attendant must mind both Prusiks during Reeve operations. Attendant must release Prusiks if there is a Reeve line failure.



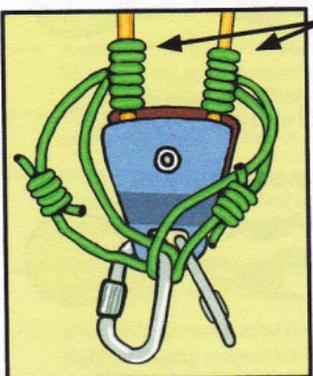
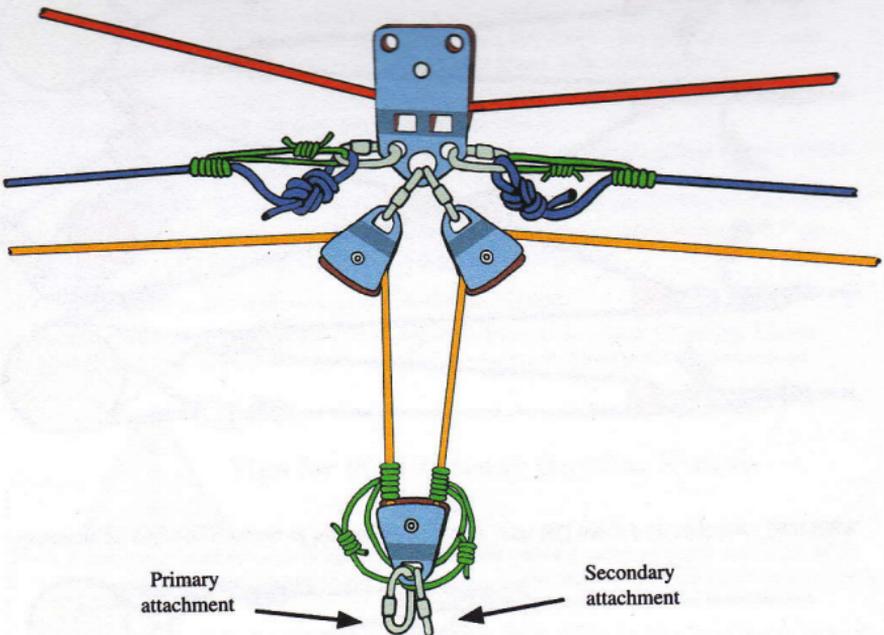
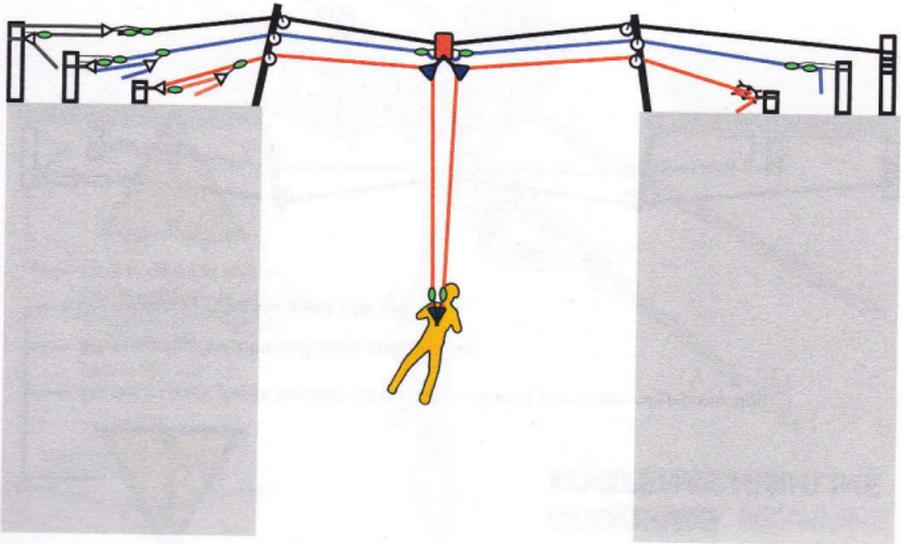
Follow all track and tag line procedures as per standard Kootenay Highline. For tensioning rules see pages 148-149

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! The English Reeve Highline is an advanced technique. Practice with an experienced instructor is necessary before attempting it in the field.



Rescue attendant must mind both Prusiks during Reeve operations. Attendant must release Prusiks if there is a Reeve line failure.

# Using The English Reeve With A Kootenay Highline

