

caution. Stay clear of the potential path of snap back whenever possible! Conventional synthetic lines normally break suddenly and without warning. Unlike wires, they do not give audible signs of pending failure and they may not exhibit any broken elements before completely parting.

This snap back is common to all lines. Even long wire lines under tension can stretch sufficiently to snap back with considerable energy. **Conventional synthetic lines are much more elastic, and so the danger of snap back is more severe.** High modulus synthetic lines have similar breaking characteristics to wire ropes. However, it is noted that snap back from these materials will be along the length of the line and not in a snaking manner, as is found with wire ropes.

Stand well clear of the potential path of snap back (see Figure 28). The potential path of snap back extends to the sides of and far beyond the ends of the tensioned line.

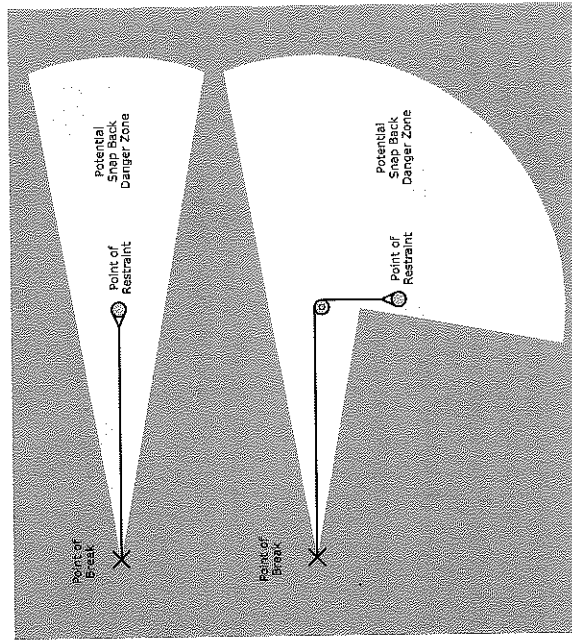


Fig. 28 Examples of Potential Snap-Back Zones

A broken line will snap back beyond the point at which it is secured, possibly to a distance almost as far as its own length. If the line passes around a fairlead, then its snap back path may not follow the original path of the line. When it breaks behind the fairlead, the end of the line will fly around and beyond the fairlead.

It is not possible to predict all the potential danger zones from snap back. When in doubt, stand aside and well away from any line under tension.

When it is necessary to pass near a line under tension, do so as quickly as possible. If it is a mooring hawser and the ship is moving about, time your passage for the period during which the line is under little or no tension. If possible, do not stand or pass near the line while the line is being tensioned or while the ship is being moved along the pier. If you must work near a line under tension, do so quickly and get out of the danger zone as soon as possible planning your activity before you approach the line.

4.8 Rope Care

- Ropes must be kept clear of chemicals, chemical vapours or other harmful substances. They should not be stored near paint or where they may be exposed to paint or thinner vapours
- ropes should not be exposed to the sun longer than is necessary as ultraviolet light can cause fibres to deteriorate
- ropes should be stowed in a well ventilated compartment on wood gratings to allow maximum air circulation and to encourage drainage
- do not store ropes in the vicinity of boilers or heaters; do not store them against bulkheads or on decks which may reach high temperatures
- ensure that fairleads and warping drums are in good condition and free from rust and paint. Roller heads should be lubricated and freely moving to avoid friction damage to the rope
- do not surge ropes around drum ends or bits, as the friction temperature generated may be high enough to melt the fibres