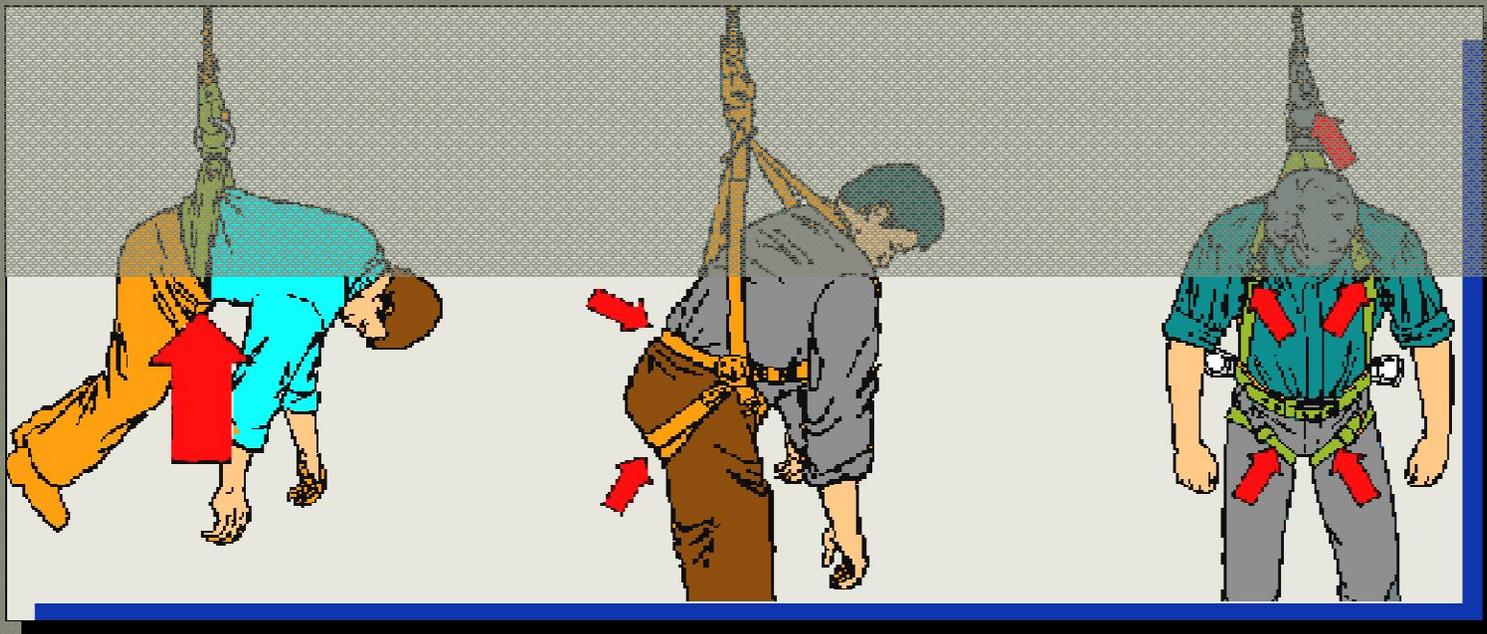


Fall Protection Equipment

Virginia DMME
Division of Mineral Mining
2012

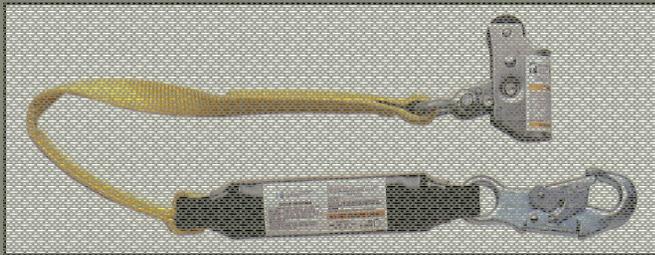
Harnesses vs. Belts

Why Belts Are Not Allowed

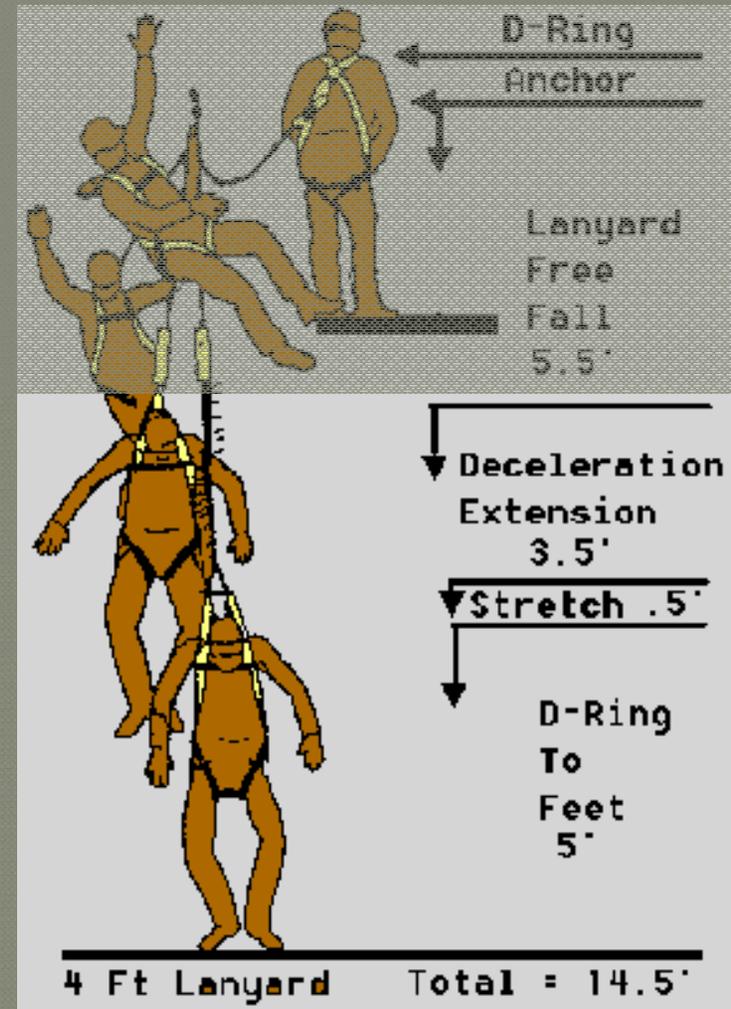


If you fall, the high force of the fall is concentrated at your waist rather than the 6 points of a full body harness. Severe injuries could result. A large person could tip forward and fall out of the belt.

Shock-Absorbing Lanyards



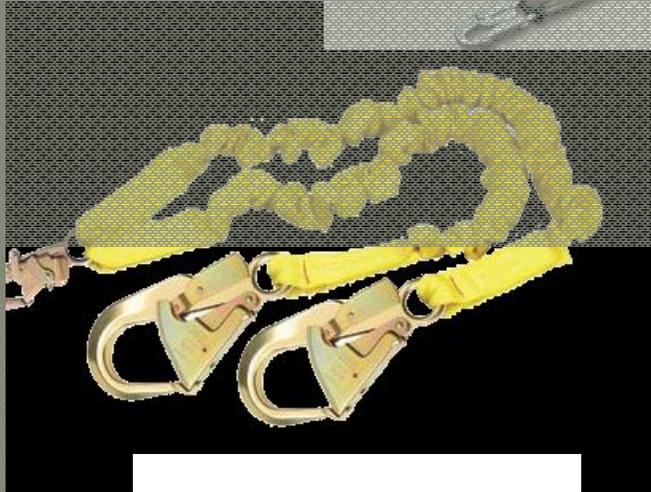
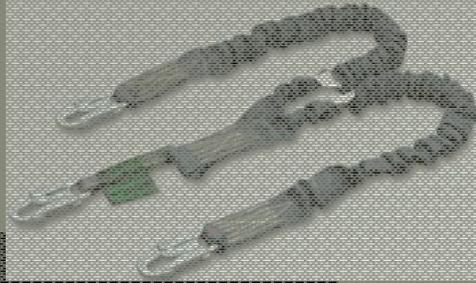
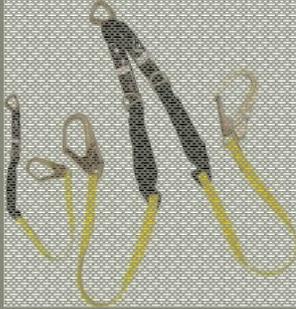
- Must be selected and adjusted to prevent hitting the ground or a lower level. In a fall, the equipment stretches several feet.
- This has been a factor in a number of accidents.



Self-Retracting Lanyards

- Many types and sizes:
 - Cable and strap types
 - Some have shock absorbing features
 - Also available with a retrieval function, manual (hand crank) or power.





Repositioning

- If you must move to a different anchor point, make certain you are not exposed to falling while moving. Use dual lanyards or other means to remain attached to an anchor at all times.

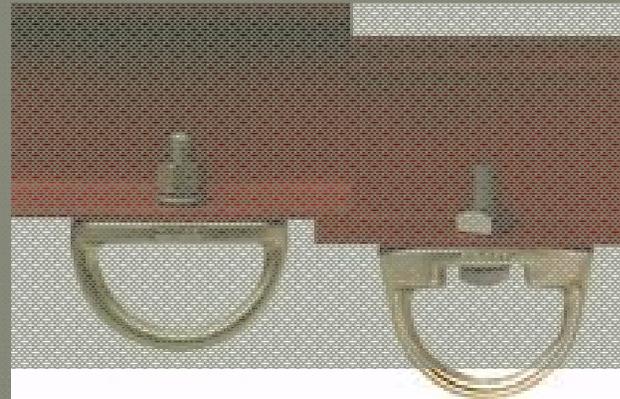
Suspension Trauma Devices

- As pictured, there are several types available. All allow the suspended person to relieve leg restriction and promote blood flow.
- There must be a retrieval plan to get the person down as soon as possible.



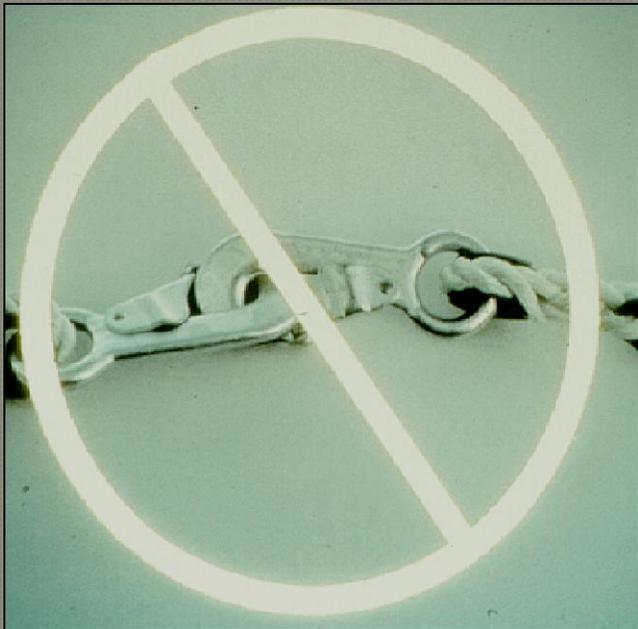
Anchors

- An anchor must be able to withstand *5000 lbs.* of force without failing.
- Manufactured anchors must be installed according to manufacturer's instructions.
- Check pre-installed anchors before using.
- Be certain your anchor is suitable for the task.
- In a fall, your life depends on the anchor holding.



Fall equipment is only as good as the anchor

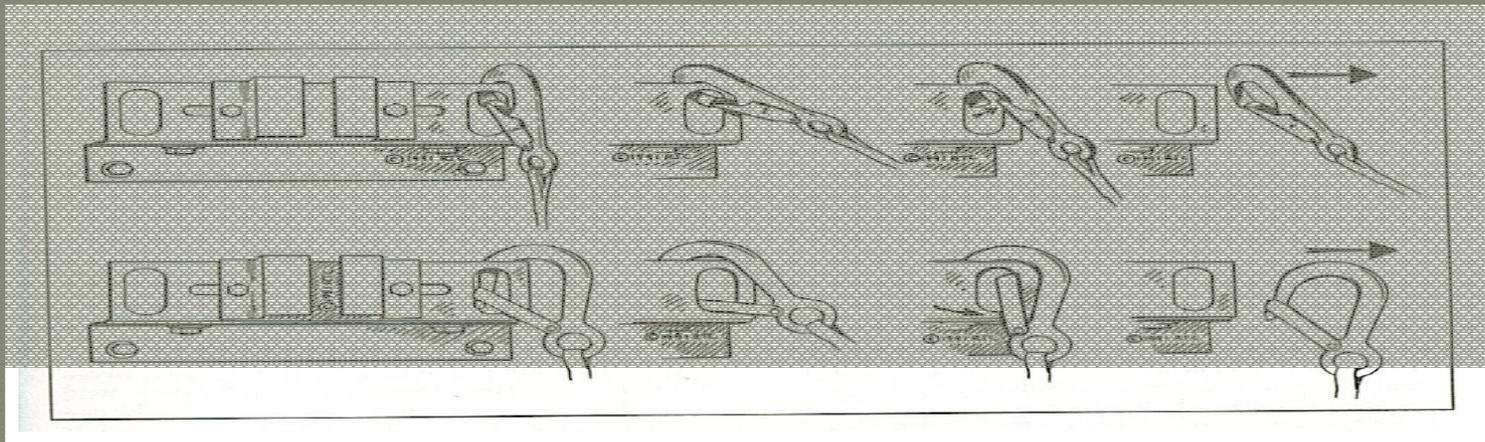
Snap Hooks



- Must be locking type.
- No side or gate loading.
- Minimum breaking strength of 5,000 lbs.
- Never hook two snap hooks together.
- Ensure the hook is compatible with what it is being attached to.



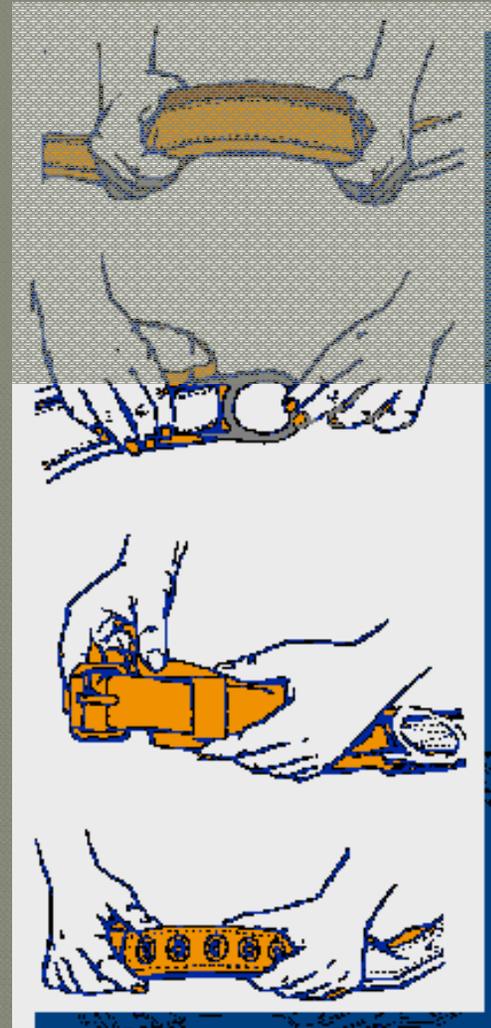
Connections



- Guard against “roll-out”
- Be certain loading is in the bottom of hooks, no gate loading
- Connecting devices must be compatible and have a rating of 5,000 lbs.

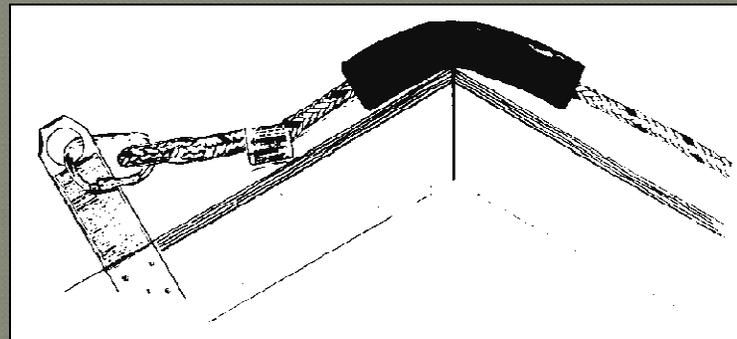
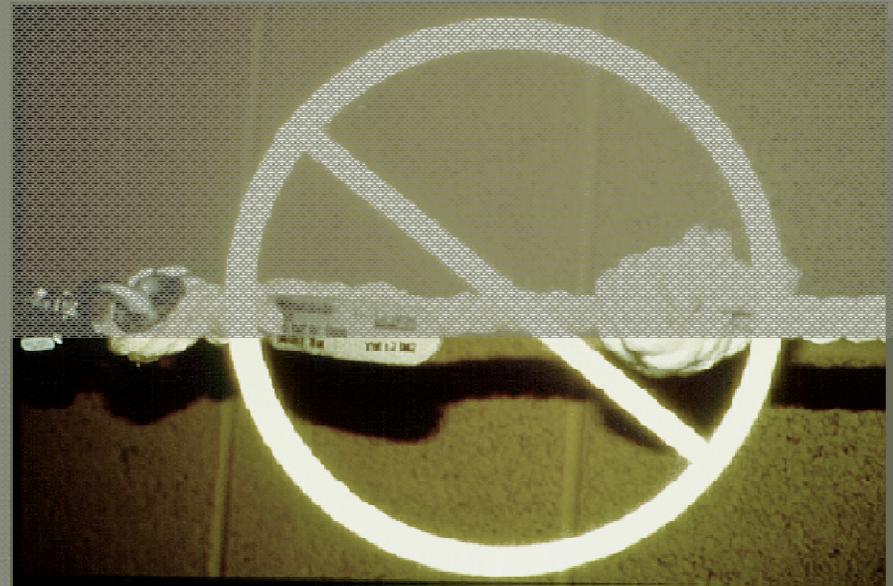
Equipment Inspection

- Webbing - Cuts, tears, abrasion, fraying, stretching, mold, chemical damage
- D-rings - Cracks, breaks corrosion, rough edges
- Tongue-buckle - Distortions, added holes, broken grommets
- Ropes - Abrasion, internal damage
- All associated materials for any sign of wear and tear



Equipment Use

- Knots in ropes or lanyard can reduce strength by as much as 50%.
- Protect rope or lanyard from sharp edges.
- Always follow the recommendations of the manufacturer.



Do's And Don'ts

- Don't attach to guardrails or hoists. Attach to designated, suitable anchors only.
- Don't lift materials with any equipment associated with your fall protection.
- Don't perform jobs requiring fall protection until you have proper training.
- Do remove from service harnesses and lanyards after a fall.
- Do inspect all equipment prior to use. Remove from service anything not in perfect condition.
- Do have a retrieval plan and equipment in place.



"You weren't listening. I said, 'Don't fall.'"