Personal Fall Arrest System Components

Body Harness: Straps which may be secured on the employee in a manner that will distribute the fall arrest forces over the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system via D-rings. Inspection: Inspect harness prior to donning (see checklist). Formal semi-annual inspections are also conducted and date of last inspection placed on tag (see checklist). Maintenance and Storage: Harnesses should only be cleaned with a mild detergent and warm water, toweled off to remove excess water, and then hung by D-Ring to dry. Never place these harnesses in a dryer or expose to excessive heat. All equipment should be stored in a cool dry place and not subjected to direct sunlight. Harnesses are not repairable. If any part of the harness is damaged or if the harness is subjected to a fall arrest the harness must be removed from field service and replaced. Variations: • Harnesses may be constructed with padded shoulders, butt pads, and waist pads which provide additional comfort when worn for long periods of time. • Harnesses can be non-conductive where all hardware parts are covered in insulating covers for electrical protection • Straps can be constructed of Kevlar when abrasion resistance required or Nomex for work involving welding or other hot work.	
Lanyards: A flexible strap that has a connector at each end for connecting the body harness to an anchorage point. Inspection: Inspect lanyard prior to donning (see checklist). Formal semi-annual inspections are also conducted (see checklist). Maintenance and Storage: Lanyards should only be cleaned with a mild detergent and warm water, toweled off to remove excess water, and then hung to dry. Never place in a dryer or expose to excessive heat. All equipment should be stored in a cool dry place and not subjected to direct sunlight. Variations: • A shock absorbing lanyard reduces the shock from a fall and should be used wherever possible at Yale. • Self-retracting lifelines are a deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement. After the onset of a fall, the lifeline automatically locks the drum and arrests the fall. These lifelines provide additional mobility.	

Connectors: A device, which is used to connect parts of the personal fall arrest system together. It may be an independent component of the system, such as a carabineer, or it may be an integral component of part of the system (such as a d-ring sewn into a harness, or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard). All connectors must have locking features to avoid unclipping.

Maintenance and Storage: wipe clean and store dry

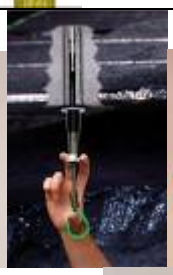
Variations: Snap hooks, carabineers

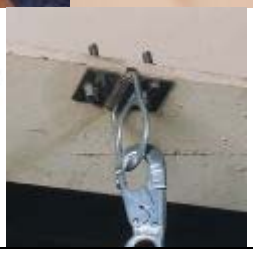


Anchorage: An engineered and designed point of attachment for lifelines, lanyards or deceleration devices. Anchorages must be able to sustain a 5,000 lb pull force for each person tied off to it.

Maintenance and Storage: wipe clean and store dry if not permanent.

Variations: Anchors may be mounted temporarily (top row) or permanently (second row). Examples include: Anchor straps, friction bolts, Beam anchors, D-bolt and D-ring anchors

A special type of anchorage is the horizontal life line. In this case a line is suspended between two anchorage points. The connector of a personal fall arrest system connects to the line.