

# SAFETY AWARENESS

## TARP STRAPS / BUNGEE CORDS

January 2008

### Utility use

The tarp strap, also commonly referred to as the bungee cord, is used to secure a variety of items. In many cases however, the tarp strap is not the proper tool for the job

### Hazard

The hazard of a tarp strap is the stored energy which can be suddenly released. The stretched rubber exerts a tremendous amount of force when it recoils, particularly when it's stretched beyond the recommended limits. This sudden release of stored energy results in a high speed flailing hazard when:

- The hook pulls out of the user's hand as it's being stretched into place
- The hook disengages from the attachment point
- The attachment structure fails
- The hook straightens out
- The strap breaks
- The hook detaches from the strap

**The free end of the strap can recoil at speeds up to 100 kms per hour and cause significant injury or damage upon impact.**

### Consequences - Injuries

The majority of tarp strap injuries involve the eye and are becoming an increasingly common cause of both severe and penetrating eye injuries. In one hospital study, more than half the patients cared for in the emergency room for tarp strap/bungee cord related eye injuries required hospitalization for treatment. These injuries included bleeding within the eye, lacerations to the eye, traumatic cataracts and tearing or detachment of the retina from the back of the eye. Most victims with damaged eyes had a mild-to-serious loss of vision, some had no useful vision, and some had injuries that were so severe that their eye had to be surgically removed.



## TARP STRAP SAFETY TIPS

### Do:

- Wear eye protection during connection and disconnection of tarp straps
  - Inspect hooks for straightening, deformation, corrosion or other damage prior to use
  - Inspect strap for dry rot, cuts or nicks or other signs of damage prior to use.
  - Destroy and discard any damaged tarp straps or hooks
  - Secure hook ends by using a firm grip on the strap and hook
  - Keep your face and other vulnerable body parts out of the line of fire of the strap's rebound path
  - Keep other people out of the line of fire
  - Stretch the strap to a maximum safe stretch of **50%** of the length of the strap.
  - Avoid over tensioning
  - Store tarp straps when not in use in a dry location out of direct sunlight.
  - Use a synthetic webbed strap, ratchet strap or chain to properly secure items in place
  - Remember, the tarp strap was designed to hold tarps in place.
- As with any hand tool, it is important to select the proper tool for the task and understand how to use the tool safely**

The American Medical Association has called for warning labels to be placed on tarp straps and bungee cords, including information about the deterioration of the straps and cords, which can cause them to snap unexpectedly. Cracks in the cords significantly increase the failure risks of the straps.