

WARNING!

READ CAREFULLY!

INSTRUCTION, CARE & MAINTENANCE GUIDE

- **Belts & Harnesses**
- **Lifelines & Lanyards**

Warning

You must read and fully understand all instructions, or have all instructions explained to you, before attempting to use this equipment. Equipment must not be installed, operated or inspected by anyone who does not understand this Owner's Manual. Failure to observe these instructions could result in serious injury or death. Careless or improper use of this equipment can result in serious injury or death. Training and instruction review should be repeated at regular intervals. If you have any questions regarding these instructions or need additional copies, call Gemtor, Inc. at 1-800-405-9048.

GEMTORTM

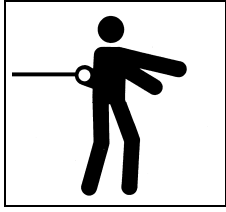
*... when your life is on the line*TM

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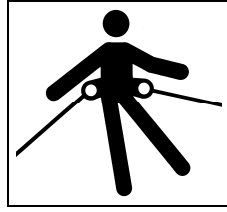
Use these icons to determine the appropriate use for Gemtor equipment. Equipment must only be used for the purpose for which it is designed. Products with more than one appropriate use will have icons for all accepted uses.



Fall Arrest



Restraint



Positioning



Suspension



Retrieval

I. APPLICATION

BODY BELTS ANSI CLASS I, OSHA

Used for positioning or restraint only. **NOT FOR FALL ARREST**

BODY HARNESS ANSI CLASS III, OSHA

Used for positioning, restraint or fall arrest. Body harnesses distribute the fall arresting forces throughout a large area of the body. When used for fall arrest an approved energy absorber should be used whenever possible. If conditions do not allow for the use of an energy absorber, the system must be used so that forces imposed on the body do not exceed OSHA'S limit of 1800 pounds. **Expected harness stretch is 6"**, **make sure this distance is taken into account when calculating the clearance required below a worker where there is a possibility of falling.**

SUSPENSION BELTS ANSI CLASS IV, OSHA

Used to suspend a worker in a work area where no other means of support is available. **NOT FOR FALL ARREST.** An independent fall arrest system attached to an OSHA compliant anchorage must be used with a suspension system.

WEB LANYARDS

Used for positioning or restraint. **Not to be used for fall arrest unless an energy absorber is used.** Web lanyards are not used for fall arrest since fall arrest forces will exceed OSHA'S maximum allowable arresting force of 1800 pounds.

ROPE LANYARDS

Used for positioning or restraint. When rope lanyards are used for fall arrest, care must be taken to ensure that fall arrest forces do not exceed 1800 lbs. A fall of more than 3 feet would generally exceed this limit.

ENERGY ABSORBERS (DECELERATION DEVICES)

For fall arrest, an energy absorber lanyard is recommended. When used properly, the energy absorber will limit maximum arresting forces to less than 900 lbs. **IMPORTANT:** Energy absorbers can increase total fall distance by up to 42 inches. It is essential that it be determined before use whether the fall space permits the use of an energy absorber.

The following values are intended for use when designing fall protection systems in accordance with CSA Z259.16 (applies to Gemtor "SP" Series energy absorbers and lanyards):

Maximum elongation: 1350 mm (53.15 in)

Average arresting force: 2.91 kN (655 lbs)

II. USE REQUIREMENTS

ANCHORAGE

Secure point of attachment for lifelines, lanyards or deceleration devices. Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) per employee attached. Positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds (13.3 kN), whichever is greater.

BODY BELTS & HARNESSSES

Body Belts and Harnesses are to be worn snug around the body. If a belt or a harness does not fit properly, replace it with the correct size. The fall arrest connection on the harness must be positioned in center of the wearer's back near shoulder level. **DO NOT USE A BODY BELT FOR FALL ARREST. DO NOT ALTER.**

LANYARDS

Lanyards shall be kept as short as possible to minimize free fall distance. Free fall distance shall not exceed 6 feet. **DO NOT ALTER THE LANYARD.**

ENERGY ABSORBERS

It is **HIGHLY RECOMMENDED** that an energy absorber be part of a fall arrest system whenever possible. Energy absorbing lanyards shall be kept as short as possible to minimize free fall distance. Free fall distance shall not exceed 6 feet.

HARDWARE

Belts, harnesses and lanyards are equipped with snaphooks, D-rings and other hardware designed specifically as matched elements. Use of incompatible hardware can be unsafe! Use of mismatched hardware can result in the inadvertent release of the snaphook (roll-out) caused by external pressure on the snaphook gate. In all cases the user must check any attachment method to make sure it cannot bring pressure on the snaphook gate in a manner to permit accidental opening. Snaphooks should not be snapped to other snaphooks. Snaphooks shall not be snapped to a D-ring if the snaphook gate opening is larger than $\frac{3}{4}$ of an inch. Snaphooks shall have a 5000 lb. minimum tensile strength rating. Visually examine the connection for positive snaphook engagement. Use locking snaphooks for all connections.

III. CAUTIONS

Items subjected to **FALL ARREST** or **IMPACT FORCES** must be immediately removed from service and destroyed. Any item showing **EXCESSIVE WEAR OR DETERIORATION** shall be destroyed. Inspect all equipment before each use. Failure to observe proper inspection and usage procedures could result in **INJURY** or **DEATH**.

ENVIRONMENTAL HAZARDS must be considered in selecting the appropriate equipment. Recommendations where chemicals, high temperature or other unusual conditions exist may be addressed to Gemtor, Inc.

IV. FREE FALL CONSIDERATIONS

Free fall distance should be kept to a minimum, and as required by OSHA, in no case shall exceed 6 feet. The tie-off attachment point to the lifeline or anchor should be located at or above the connection point of the fall arrest equipment on harness.

V. EMPLOYEE TRAINING CONSIDERATIONS

Thorough employee training in the selection and use of personal fall arrest systems is imperative. Employees must be trained in the safe use of the system. This should include the following: application limits; proper anchoring and tie-off techniques; estimation of free fall distance, including determination of deceleration distance, and total fall distance to prevent striking a lower level; methods of use; and inspection and storage of the system. Careless or improper use of the equipment can result in serious injury or death. Employers and employees should become familiar with the material in related OSHA regulations, as well as manufacturer's recommendations, before a system is used. Of uppermost importance is the reduction in strength caused by certain tie-offs (such as using knots, tying around sharp edges, etc.) and maximum permitted free fall distance. Also, to be stressed are the importance of inspections prior

to use, the limitations of the equipment, and unique conditions at the worksite which may be important in determining the type of system to use. Any questions may be addressed to Gemtor Inc.

VII. INSPECTION

Users shall establish their own formal routine inspection according to prevailing conditions with a minimum of two formal inspections per year. Visual inspection is required before each use, for mildew, wear, damage and other deterioration. Defective components shall be removed from service.

1. Buckles, D-rings, snaphooks and thimbles shall not be distorted, or have any sharp edges, burrs, cracks, worn parts or corrosion. Make sure buckles work freely. The snaphook gate spring shall provide tension to keep the snaphook gate closed in a locked position; it shall close flat against the snaphook and exhibit no sideways movement or play. Rivets and grommets shall be tightly set in the material with no distortion.

2. All webbing shall be free of frayed or broken fiber, pulled stitches, tears, abrasions, mold, burns or discoloration. Rope splices shall be tight with five tucks. Thimbles shall be held by the splice. Inspect rope by twisting. Inspect webbing by bending and/or pressing over a 1½ inch diameter object.

3. Extension-type shock absorbing devices shall show no evidence of elongation.

4. Inspect Stress Indicator (if equipped):

Location: Harness (some models) - on each back strap just below the anti-tangle strap
Decelerator Lanyard – near bunched webbing

Decelerator II Lanyard – near snaphook on anchorage end of lanyard

Purpose: This indicator is designed to deploy if the equipment has been subjected to fall arrest forces.

DO NOT USE if any Stress indicator has deployed.

NOTE: THE PRECEDING INSPECTION PROCEDURES ARE A MINIMAL METHOD OF INSPECTION. THE INSPECTION PROCEDURE MUST REFLECT THE USE APPLICATION.

AN INTACT STRESS INDICATOR DOES NOT INDICATE THAT THE EQUIPMENT IS FIT FOR USE.

VII. HOW TO CLEAN EQUIPMENT

Proper cleaning and storage of GEMTOR equipment will pay dividends in the form of added safety and longer product life. Take care that your storage area is clean and dry, and not exposed to damaging chemicals, fumes, or sunlight.

ROPE & WEBBING

1. Dampen sponge in plain water and wipe off all surface dirt.
2. Squeeze sponge dry.
3. Dip sponge in solution of water and mild detergent.
4. Rub down rope/webbing vigorously, working up a thick lather.
5. Wipe dry with clean cloth.
6. Hang away from heat to dry.

If there any questions as to the correct use or application of any GEMTOR product, DO NOT USE, Call Toll-free 1-800-405-9048