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**SAFETY DIRECT LTD.**

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**Instructions for**  
**Class A Grommet Leg Harness**  
**Model VH900**



## **WARNINGS**

Failure of the user to read and understand all instructions for use of this equipment may result in serious injury or death.

It is recommended that the user complete an approved fall protection program before using the product.

There should be an approved rescue plan in effect on any work site prior to the commencement of working at heights. The rescue plan must have provision to retrieve any worker, suspended as a result of a fall arrest, without delay in order to reduce the effects of suspension trauma.

The prolonged suspension of a worker in a harness as a result of a fall arrest will cause circulatory problems that could lead to loss of consciousness and result in serious injury or death.

In the event of a fall arrest the maximum force, when using a non-energy absorbing lanyard, must not exceed 2 kN. If the force as a result of a fall is expected to exceed 2 kN then an energy absorbing lanyard must be used.

The harness is not intended to be used where the worker is to be suspended for prolonged periods of work activity. The use of a Bosun's chair or suspension work seat is recommended.

The Dorsal D-ring is the only point on the harness to which a fall arrest lanyard can be attached.

Pregnant women and persons with a total body weight of less than 32 kg. (70 lb.), should not use this equipment.

Proper fitting of the harness to an individual worker is essential if the harness is to perform its function correctly.

It is important that the shoulder straps and the chest straps are adjusted correctly for a female worker in order to reduce the possibility of injury in the breast area. The chest strap should be adjusted correctly and should be positioned above the breasts.

Large snap hooks and carabiners, that have gate openings in excess of 19 mm (0.75 in), should not be used in conjunction with the fall arrest attachment point on the full body harness. There is a possibility that an accidental rollout or gate failure could result if the gate is subjected to side loading.

The harness includes a fall arrest indicator located on the back shoulder straps below the Dorsal D-ring. If the harness is subjected to a fall arrest the indicator will be revealed and indicates that the harness must be removed from service immediately.

**Fall indicator BEFORE fall**



**Fall indicator AFTER fall**



## **CSA Class or Group**

**Full body harness is Class A: Fall arrest**

## **General Instructions**

All warning labels and instructions must be understood and followed by the user before using the product.

All users must understand the relevant regulations and usage standards for fall protection, pertaining to this product, in the jurisdiction in which it is being used.

This equipment must only be used by trained and competent personnel.

All fall protection equipment must be visually inspected by the worker prior to each use.

All fall protection equipment must be inspected by a competent person on a regular basis (at least annually).

Fall protection equipment must not be altered or modified in any way.

To reduce the possibility of accidental release, a competent person must ensure that all the system connecting components are compatible.

Any equipment exhibiting deterioration, damage or deformation must be removed from service immediately and inspected by a competent person before being returned to service.

Alteration or adaptation of any portion of the harness will void any warranty or guarantee, either written or implied. Any alteration or adaptation could result in serious injury or death.

All equipment subjected to a fall arrest or where the fall arrest indicators have been exposed, must be removed from service immediately, and destroyed.

## **PRECAUTIONS**

This harness is intended for use as an integral part of a personal fall arrest system and should not be used for other purposes.

Always check before commencing working in an area that there is sufficient clearance and no obstructions below the work area, so that in the event of a fall, the possibility of contact with the lower surface below the work site is eliminated.

The capacity of the harness is one person 141 kg (310 lb), unless the product label states differently.

Connecting components that are not auto locking should not be used in fall arrest applications.

In the event of a fall arrest the suspended worker should be rescued without delay in order to minimize the effects of suspension trauma.

Before each use, verification must be obtained that all connectors and buckles are properly secured and adjusted in accordance with the instructions supplied.

The rear Dorsal D-ring is the only attachment point to be used for attaching fall arrest devices.

## CONNECTED EQUIPMENT

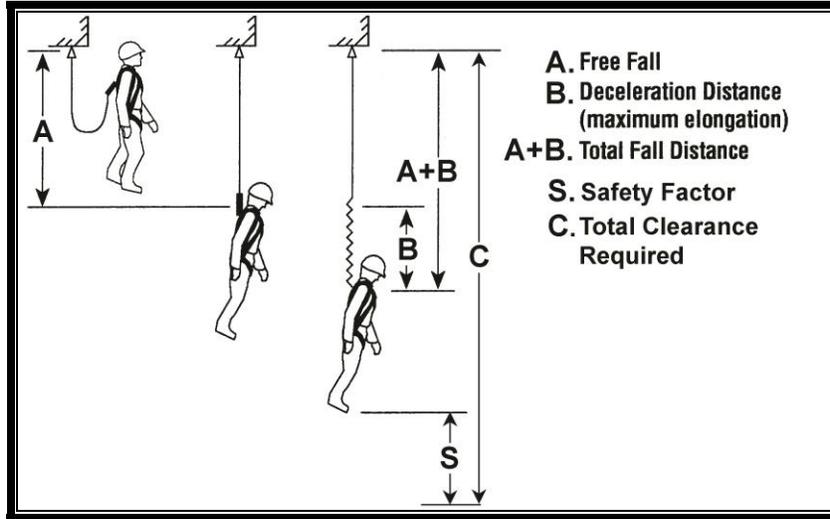
All instructions supplied with equipment to be used in conjunction with the harness must be understood and followed.

In order to minimize the arresting force, in the event of a fall arrest, a shock absorbing lanyard must be used. If a non-shock absorbing lanyard is used the maximum force due to a fall must be less than 2 kN.

The correct operation of all auto locking connecting components should be confirmed before work commences, and that the gates on any hooks or carabiners are closed and locked.

Anchorage points should be selected to be at the height of the D-ring (with the worker standing) or higher and that the maximum freefall possible is less than 1.8 m (6 ft.) in the event of a fall.

The clearance below the work area should be determined prior to the commencement of work in accordance with the following.



## HARNESSES FITTING

Before commencing work, the harness must be adjusted to fit the worker. Failure to adjust the harness correctly could result in severe injury to the worker in the event of a fall.

The harness should be adjusted in the following sequence:

- 1 The hip to shoulder length should be adjusted by placing the harness over the shoulders so that the Dorsal D-ring is located between the shoulder blades in the middle of the back. Ensure that the sub-pelvic (butt) strap is located under the buttocks, then grasp the leg straps between the legs and connect to the opposite ends of the shoulder straps at the hip position on the front of the harness.
- 2 Position the chest strap approximately 150 mm (6 in) below the top of the shoulders on the front of the harness. The chest strap should be tight enough to prevent the shoulder straps from slipping off the shoulders.
- 3 With all the buckles fastened the harness should fit snugly with room to place the hand between the harness strap and the body. The correctly fitted harness should allow the user a full range of movement. The plastic keepers should now be positioned against the buckles to ensure that the harness does not lose adjustment.

## HARNESSES SIZING

Height	Weight	Size
4 ft 10 in (1473 mm) to 5 ft 9 in (1753 mm)	90 lb (41 kg) to 200 lb (91 kg)	Small
5 ft 4 in (1626 mm) to 6 ft 0 in (1829 mm)	130 lb (59 kg) to 225 lb (102 kg)	Universal
5 ft 6 in (1676 mm) to 6 ft 8 in (2032 mm)	150 lb (68 kg) to 310 lb (140 kg)	Extra Large

## Six steps to donning a grommet leg harness

1. Hold your harness by the back D-ring and shake the harness to allow all the straps to fall loosely into place.



2. Undo any leg or chest straps that may be fastened.



3. Slip the shoulder straps onto your shoulders so that the D-ring is now located between the shoulder blades in the middle of your back.



4. Making sure that the sub-pelvic strap is located under the buttocks, grasp leg straps from between your legs and connect to the opposite ends of the shoulder straps at the front of the hips.



5. Position your chest strap roughly six inches from the top of your shoulders on the front of the harness and connect. Tighten your chest strap enough to keep the shoulder straps taut and prevent them from slipping off the shoulders.



6. Now that all the straps have been fastened, your harness should fit snugly and allow you to have a full range of movement. Slide the plastic keepers against the buckles on the chest strap to ensure that your harness does not come out of adjustment. Put the ends of the leg straps through the fabric loops to keep them out of the way.



## **ANCHORAGES**

Anchorage should be chosen as close to vertically above the work site as possible in order to minimize the possibility of a swing-fall injury.

Each worker should have their own anchorage rated at 22.2 kN (5,000 lb) or as specified in the applicable regulations for the jurisdiction in which the work is being performed.

The anchorage chosen must have sufficient clearance to the surface or obstruction below the worker in the event of a fall (as calculated on page 4).

Any connectors or lanyards used between the full body harness and the anchorage must be approved and certified and compatible with the other connecting components.

All anchor points should be approved by either an engineer or a competent person before work commences.

## **HARNESS CARE AND MAINTENANCE**

The harness must be inspected prior to each use and after use should be stored in accordance with the following, failure to do so could result in premature failure of the harness.

Harnesses should be stored in a clean dry area where they will not be exposed to excessive heat, direct sunlight or UV radiation, harmful fumes or corrosive materials. The harness should be stored by hanging it from the Dorsal D-ring, wherever possible, or by packing it loosely in a suitable storage container.

Before storing a harness, it should be inspected and cleaned by wiping it with a sponge dampened in a mild solution of soap (Woolite or Zero). The harness should not be cleaned using harsh detergents, chemical solutions or solvents. After cleaning the harness should be allowed to air dry away from forced air or direct heat.

If the harness is identified as needing maintenance, it should be tagged and segregated until the maintenance is completed.

Any repairs required by the harness can only be made by Safety Direct Ltd. or by a contractor approved in writing by Safety Direct.

Any harness involved in a fall arrest, or on which the fall arrest indicators have been exposed, should be removed from service immediately and should be destroyed to prevent any further use of the harness.

## **INSPECTION**

The harness must be inspected by the user, prior to each use, with particular attention being paid to the following:

The condition of the webbing, particularly, if the harness has been used in close proximity to welding or grinding operations. The full length, including both sides and with particular attention to the edges of the webbing, should be passed through the hands. Extra attention should be paid to those portions of the webbing located near the plastic keepers since burn damage is often present when the keepers are moved. The sections of webbing in the vicinity of the connecting hardware should also be examined for the presence of wear and abrasion. Webbing that is stiff or feels brittle may be a sign of chemical exposure or heat damage.

The condition of the plastic components should be checked to see if there are any cracks or deformation. Any missing or damaged keepers should be replaced before returning the harness to fall arrest service.

The connecting hardware on the harness should be checked for the presence of burrs, cracks, distortion and corrosion. Particular attention should be paid to any hardware that is in contact with the webbing for any burrs or sharp edges that could cut the webbing.

A competent person should inspect the harness periodically, at least annually, and more frequently if necessary because of the conditions under which the harness is used.

Any harness scheduled for inspection should be tagged to prevent further use of the harness until the inspection has been completed.

***The harness should be removed from service if any of the following conditions apply:***

- The harness has been subjected to a fall arrest and the fall arrest indicators are visible.
- The manufacturer's labels are missing or are illegible.
- The metallic components exhibit evidence of defects, damage or corrosion.
- There is any evidence that a component has been altered or is functioning improperly.
- There is any evidence of visual damage to any of the plastic components or that they are missing.
- There is any evidence that the stitching has been cut, the thread has been pulled or is missing.

If a harness is removed from service as a result of a periodic inspection, it should only be returned to service after being examined by a competent person.

## **DESIGN PARAMETERS**

Expected harness stretch:            365 mm (14.5 in)

## **WARNINGS**

The following points should be reviewed prior to using a full body harness:

- 1) The user should have read the instructions supplied with the harness and should have completed an approved training program.
- 2) The Dorsal D-ring is the only connecting point for a fall arrest lanyard.
- 3) Unless the potential fall hazard will result in a force of less than 2 kN being applied to the body the connection between the harness and the anchorage connector must incorporate an energy absorber to limit the force generated by a fall arrest.
- 4) Anchorage points should be selected directly overhead wherever possible and should be above the height of the dorsal D-ring on the user.
- 5) Connecting components attached together must be compatible in order to reduce or eliminate the possibility of snap hook "roll out".
- 6) There should be sufficient clearance to the surface below to prevent contact in the event of a fall incident.

In case of any issues or interpretations arising out of the use of these products or these instructions please contact Safety Direct Ltd. for clarification.

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