



Model:
Product Description:

Gravity Suspension Harness **SAFETY INSTRUCTIONS AND WARNING BOOKLET**

WARNING

National Standards, state and federal laws require the user to be trained before using this product. Use this manual as part of a user safety training program that is appropriate for the user's occupation. These instructions must be provided to users before use, and retained for ready reference by the user. The user must read, understand (or have explained) and heed all instructions, labels, markings and warnings supplied with this product and with those products intended for use in association with it.

FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

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HARNESSES AND LANYARD ASSEMBLIES ARE CATEGORISED BY STANDARDS AS FOLLOWS:

FULL BODY HARNESSES

A Fall Arrest Harness is to be used in conjunction with a lanyard assembly attached to a suitable anchorage point or static line, in situations where there is risk of a free fall. Fall Arrest Harnesses contain a single assembly of interconnected shoulder and leg straps which may incorporate a body belt. Fall Arrest Harnesses are a single assembly and must not be separable into two or more parts without damaging the assembly and rendering all parts unusable. Harnesses need to be capable of adjustment to fit the wearer. Shoulder straps shall be positioned such that undue pressure is not transmitted in the armpit region as a result of a person being suspended on sustaining a fall.

POLE STRAPS

A Pole Strap is to be used to support a worker on a pole by attachment to the 'D' rings located at the hips and identified as pole strap attachment points on a lineworker's harness. Pole straps are designed so that they constantly remain under tension once in the working position.

CONDITIONS OF USE

If this product is not used or stored correctly, or additions or alterations are made to them, the effectiveness of these devices may be considerably reduced.

WARNING

Alterations, additions or repairs not performed by MSA shall negate any warranty

WARNING

Broken or pulled stitches in the fall arrest indicator show that the harness has experienced fall arrest force or degradation due to environmental factors. Do not use a harness with broke stitches in the fall arrest indicator. Due to the nature of some fall events, it is possible for the load indicator to not deploy. However, in the event of any fall, the harness must be removed from service. Failure to follow this warning can cause serious personal injury or death. See figure 4

Any item showing excessive wear or deterioration should be destroyed. Inspect all equipment before each use; failure to observe proper inspection and usage procedures could result in permanent injury or death.

TRAINING

This is the responsibility of the purchaser to ensure that product users are made familiar with these User Instructions and trained by a competent person. Training must be conducted without undue exposure of the trainee to hazards. The effectiveness of training should be periodically assessed (at least annually) and the need for more training or retraining determined. MSA offers training programs. Contact MSA for training information.

USER INSTRUCTIONS

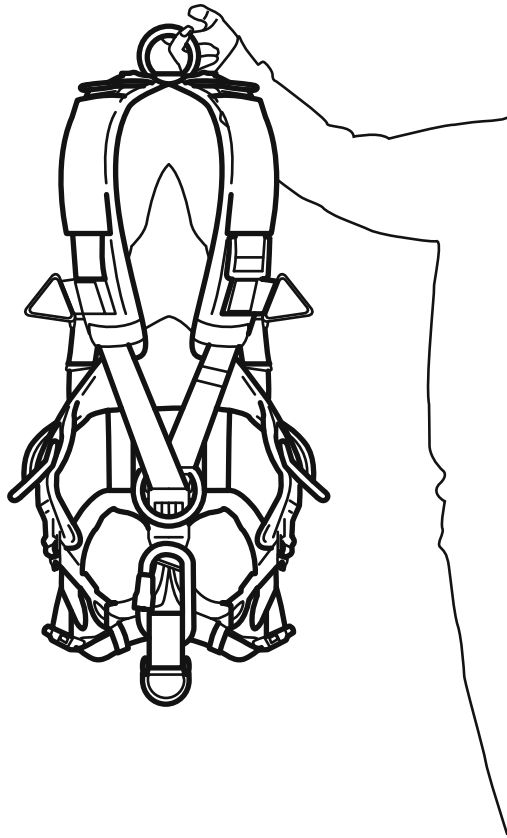
WARNING

You must read and understand, or have the following instructions explained to you. Inspect equipment before using.

They must be adhered to:

- 1 Do not attempt to work at heights if you are feeling unwell or are susceptible to giddiness.
 - 2 Before putting on, visually check Harness and Lanyard Assembly for defects.
 - 3 Follow donning instructions.
- Step 1: Inspect harness straps, stitching, hardware and labels prior to donning. Hold harness from back D-Ring and shake harness to remove any twist in straps (See figure 1A).
- Step 2: Open the carabiner on the front connection loop and the buckles on the leg straps (See figure 1B).
- Step 3: Putting the shoulder strap off to one side, hold the seat harness by the waist belt. Put your legs through the waist belt and pull the waist belt up to your waist (See figure 1C).
- Step 4: Adjust the waist belt by pulling on the belt strap. The free end of the belt strap must be tucked into the keeper (See figure 1D and figure 3).
- Step 5: Fasten and adjust the leg loop to obtain the optimum fit (See figure 1E).
- Step 6: Pull harness over your head and position the shoulder strap on the shoulders (See figure 1F). Put the front carabiner in the chest point to the seat harness. Lock this carabiner by turning the lock sleeve (See figure 1G).
- Step 7: Adjust the shoulder straps. The free end of the shoulder straps must be tucked into the keeper (See figure 1H and figure 3).
- Step 8: You should always initially adjust the dorsal adjuster when putting on your harness for the first time. Adjust harness to position sternal (chest) D-Ring and chest strap at sternum. Adjust Back D-ring to center, between shoulder blades (see figure 2). Get your colleague to help you do this.

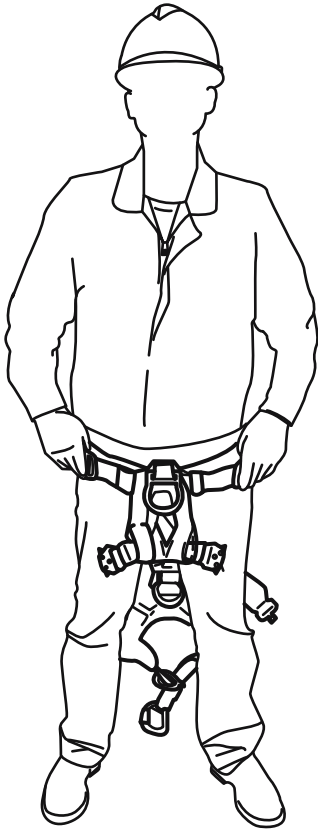
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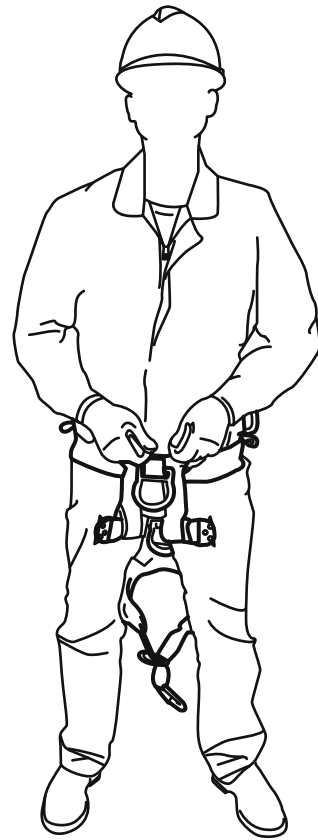
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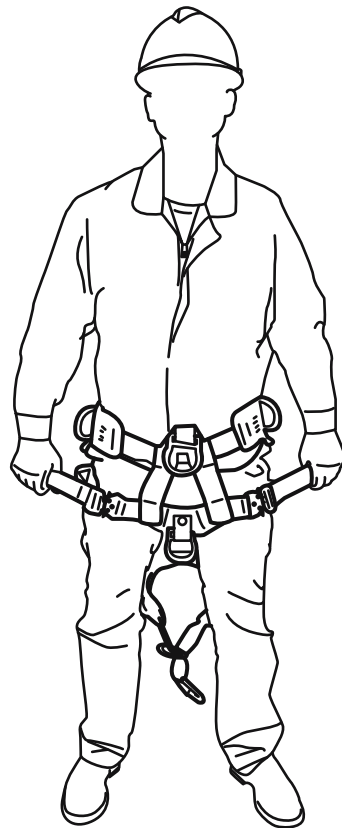
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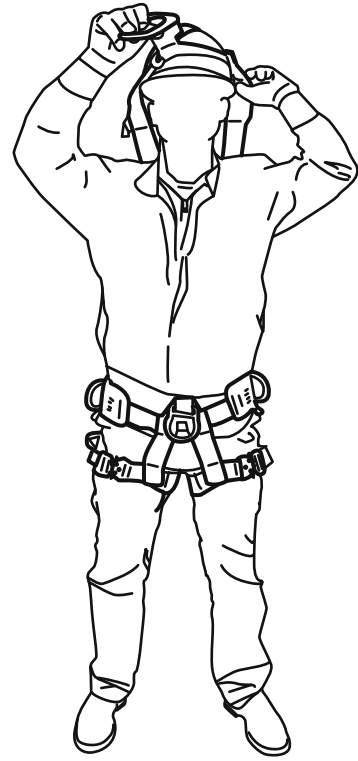
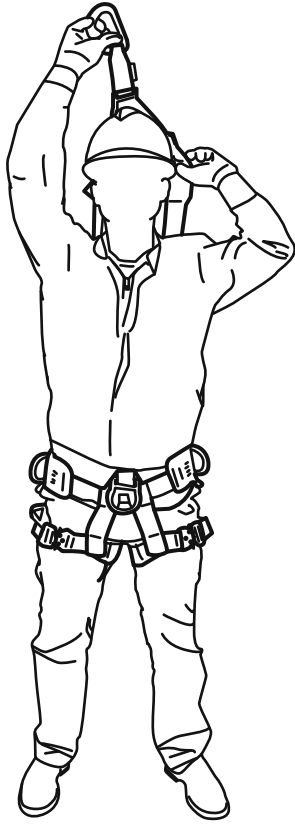
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1E



1F

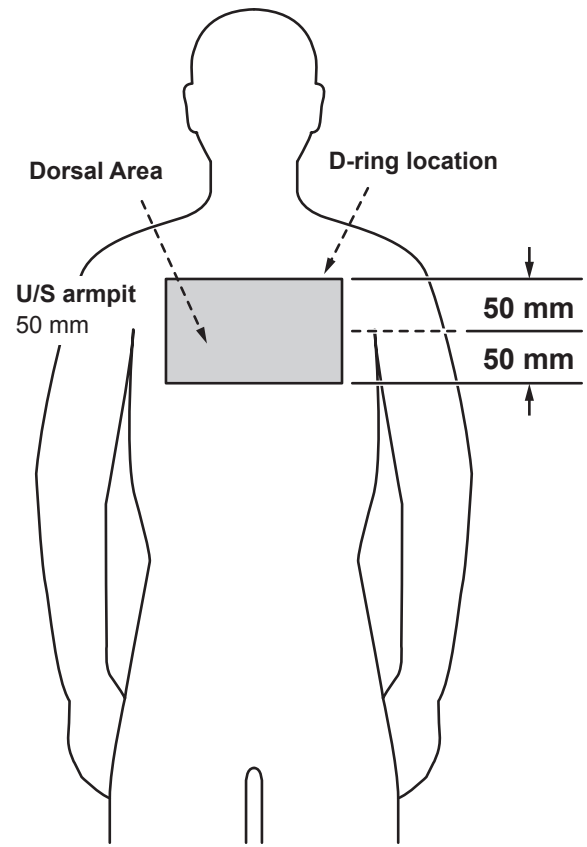
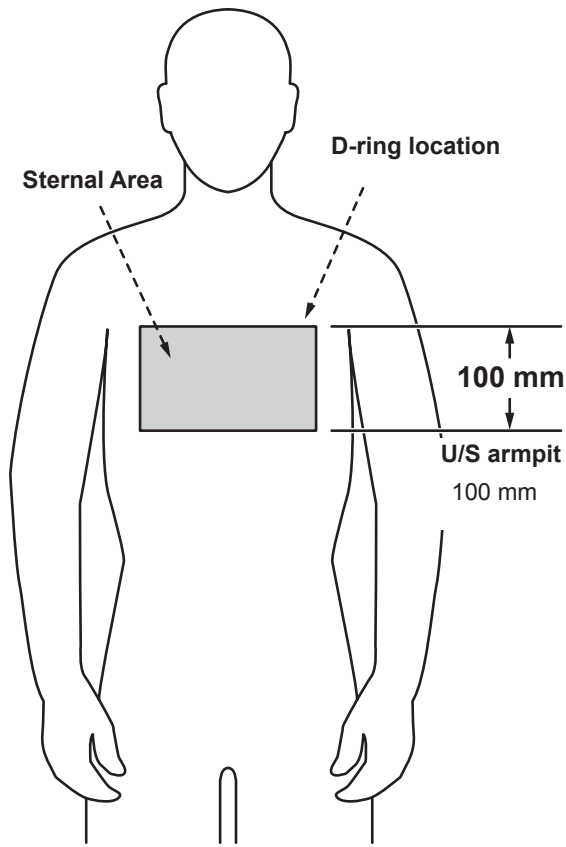


1G

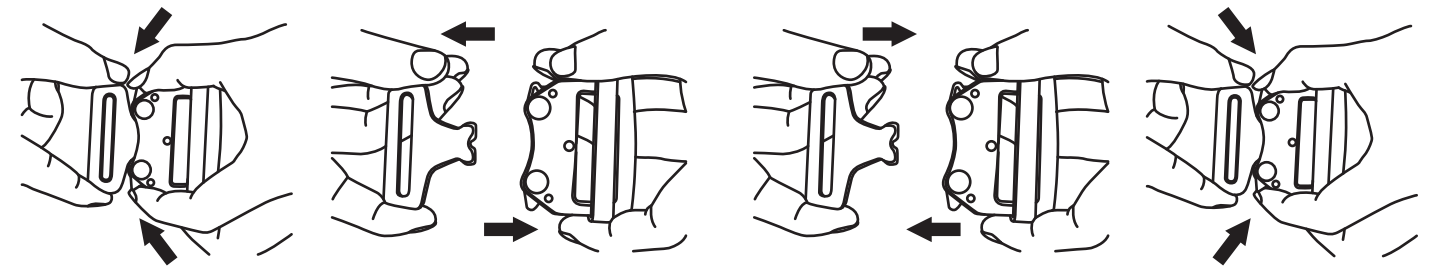
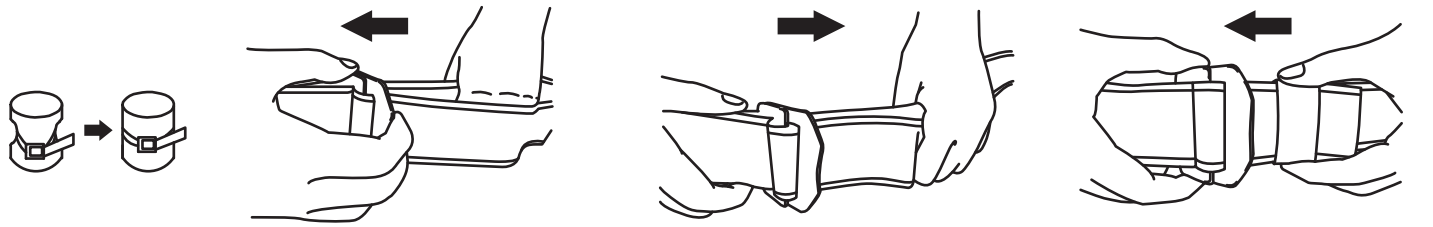
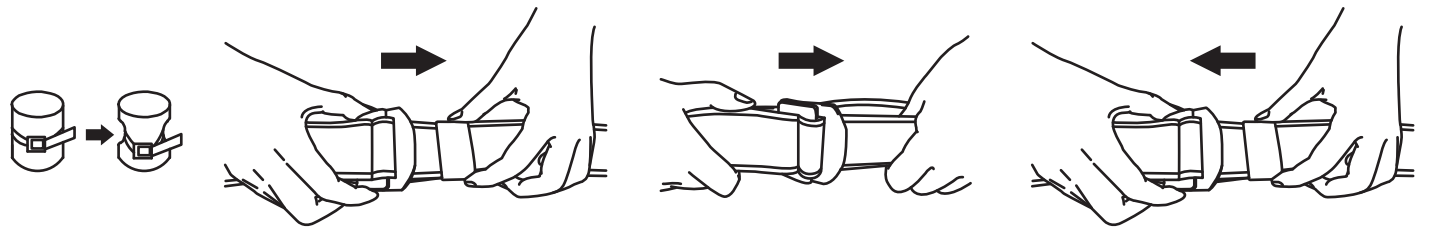
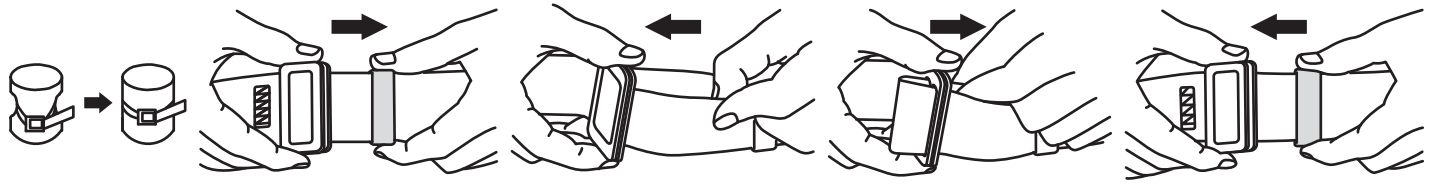
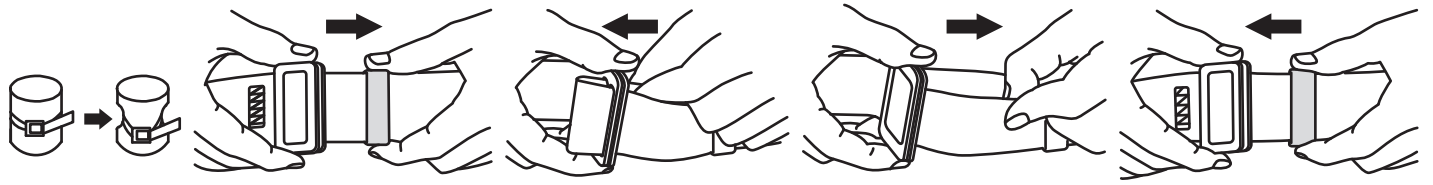


1H

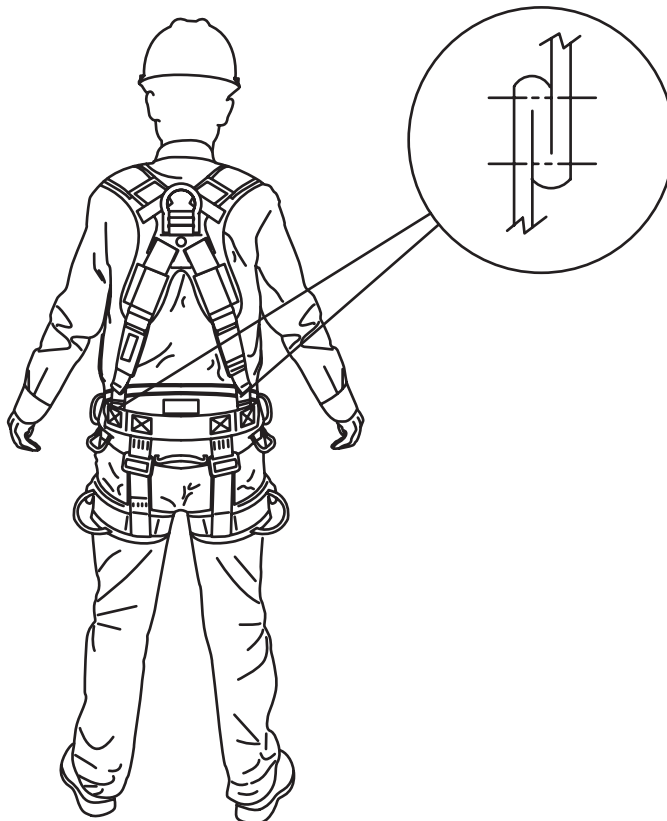




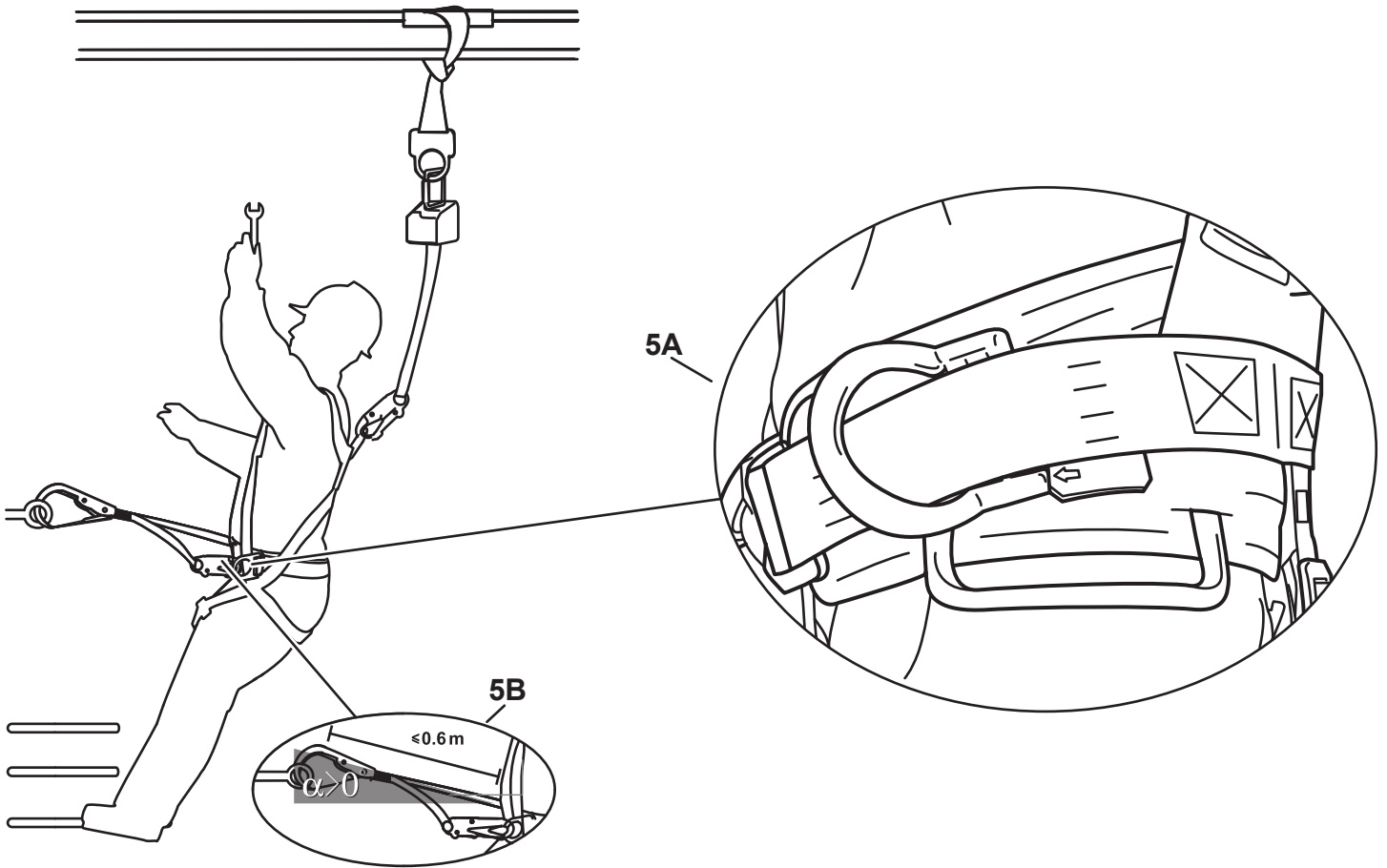
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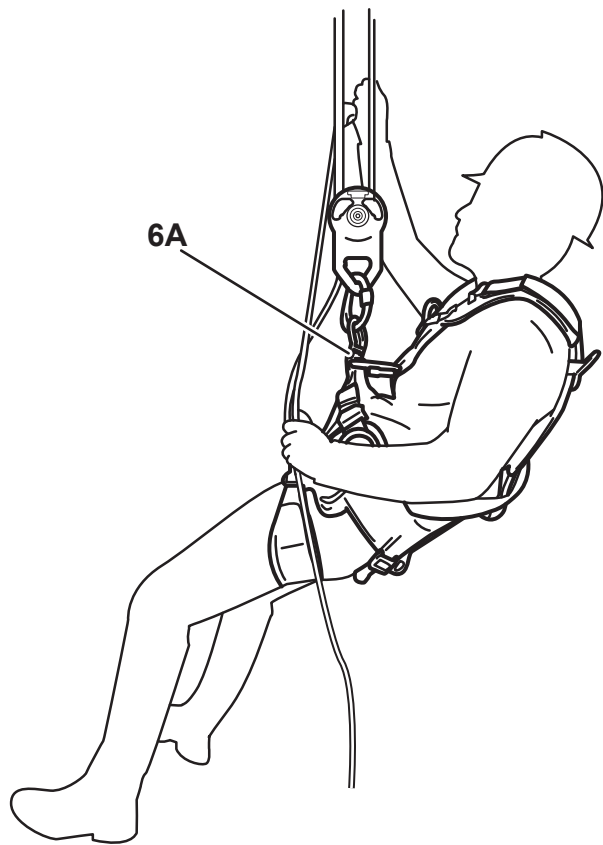
4. The connection between the harness and the devices, please refer to figure 5-11. Position or adjust the work positioning lanyard in such a way that the anchorage point is maintained at or above waist level, the lanyard is kept tight, and free movement is restricted to a maximum of 0.6 m (See figure 5). The side D-Rings (See figure 5, mark 5A) of a harness MUST ONLY be used for pole strap and NEVER a fall arrest system or climbing protection. Always use in pairs with pole strap. For pole strap applications, a separate fall arrest system must be used. Adjust pole strap so that the anchorage point is maintained at or above waist level (See figure 5, mark 5B). This ventral D-Ring (See figure 6, mark 6A) MUST ONLY be used for lower body harness and NEVER A fall arrest system. Use ventral D-Ring to attach a descender, positioning lanyards or progression lanyards. See figure 7, sternal D-Ring (mark 7A) and back D-Ring used in fall arrest system connection. See figure 8, fall arrest system connection and energy absorber (mark 8A). Refer figure 9, the lanyard stowage point (if present) MUST ONLY be used for hanging snap hook of lanyard and NEVER A fall arrest system or climbing protection. Refer figure 10 the gear loop MUST ONLY be used for hanging secure gear and NEVER A fall arrest system or work position system. Refer figure 11 the carabiner MUST NOT be connected to any other device.

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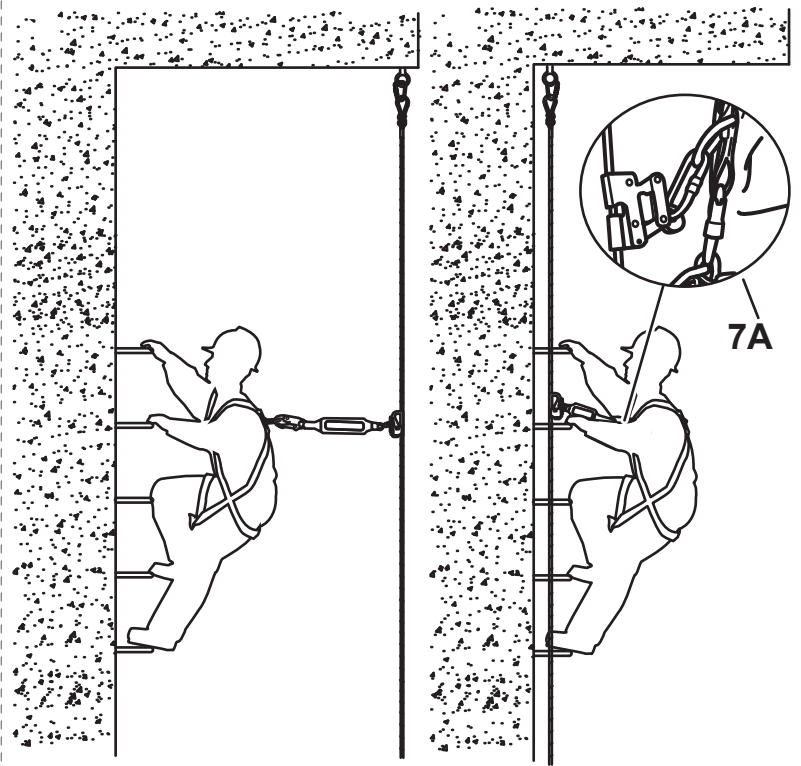
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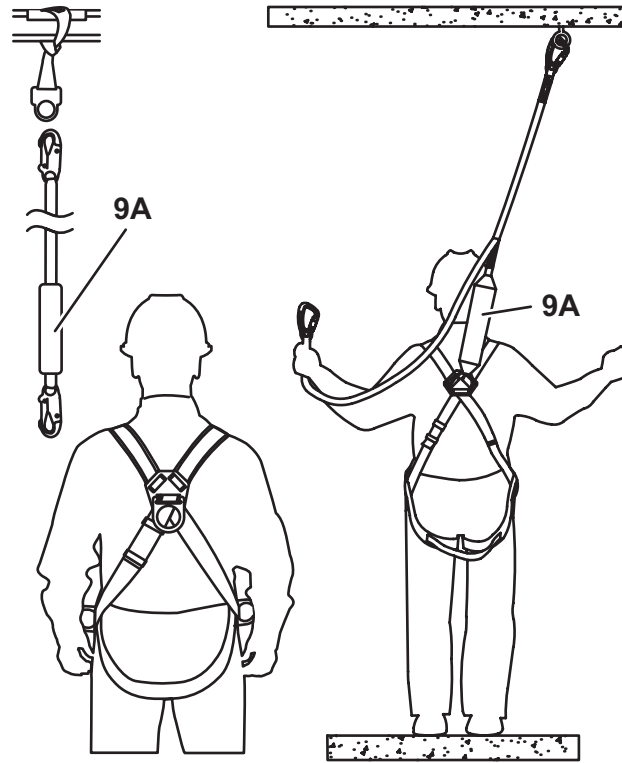


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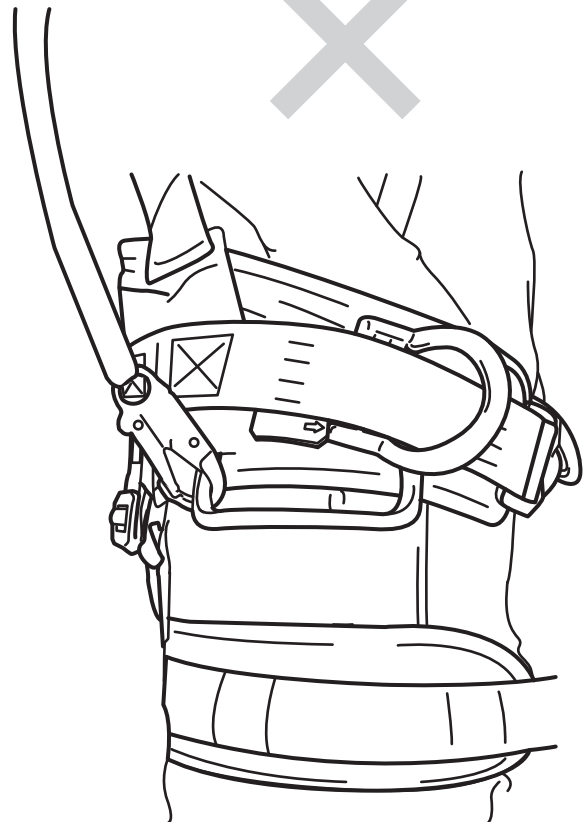
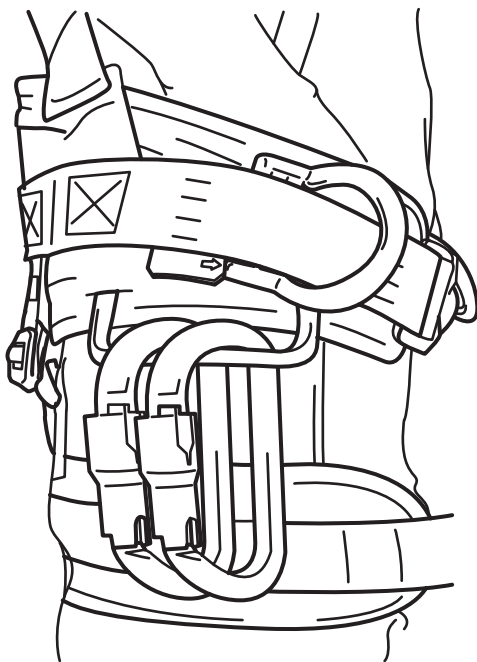


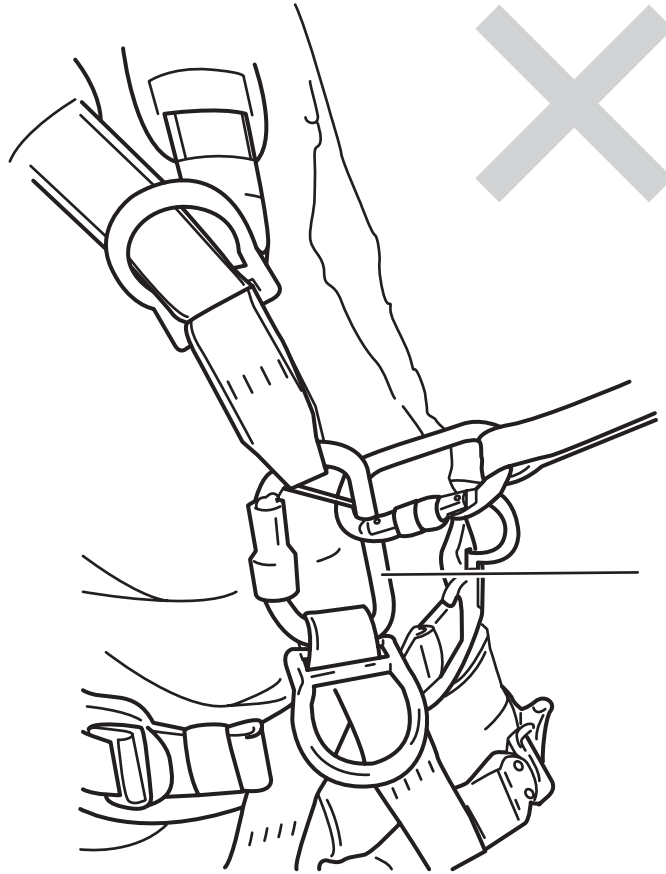


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Be aware that if your connection point to the harness cannot be visually seen by the wearer then it should be attached prior to donning harness or checked for security by a second person.

5. Having reached your position, select a suitable anchorage point, capable of withstanding at least 15 kN of force without permanent distortion and in the event of a fall. The anchorage point should be as high as possible above the user in a vertical plane to reduce the fall distance and the potential to pendulum should the user fall. Consideration must also be given to the surrounding area-avoid using an anchorage point you to strike or swing into obstructions before a fall is safely stopped.

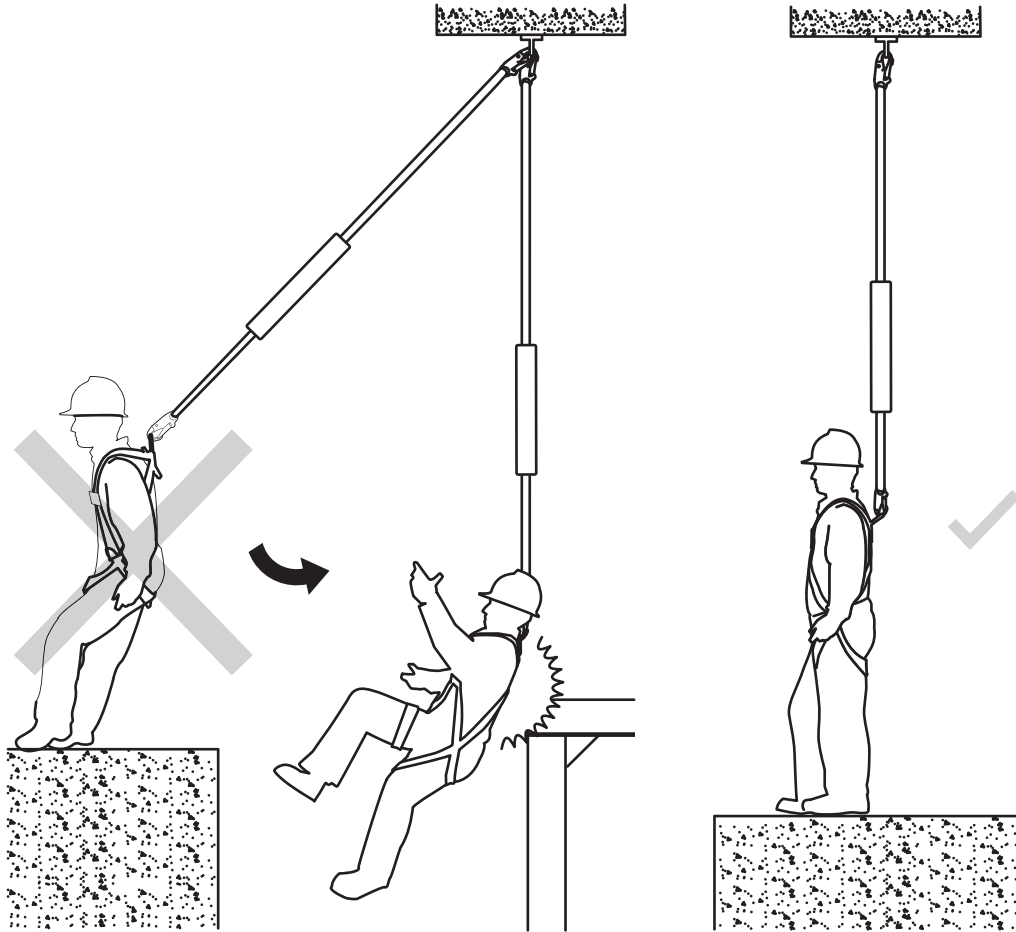


ANCHORAGE WARNING

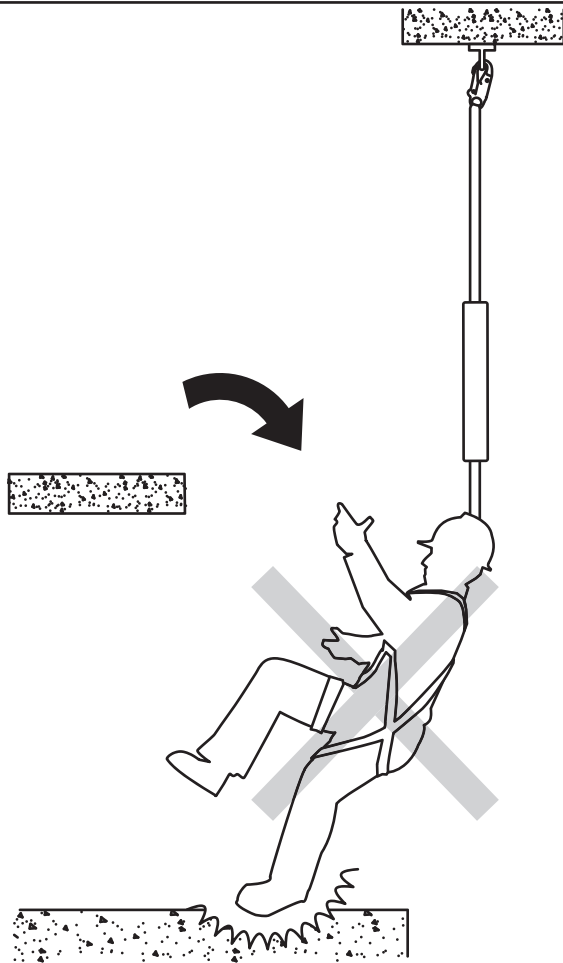
Before making your connection to an anchorage point, always ensure that it is perfectly sound and structural of sustaining shock loads of at least 15 kN without distortion in the event of a fall.

Pendulum (Swing) Falls: Swing falls can occur when the system is not anchored directly above the user. The force of striking an object in a pendular motion can cause serious injury. Always minimize swing falls by working as directly below the anchorage point as possible.

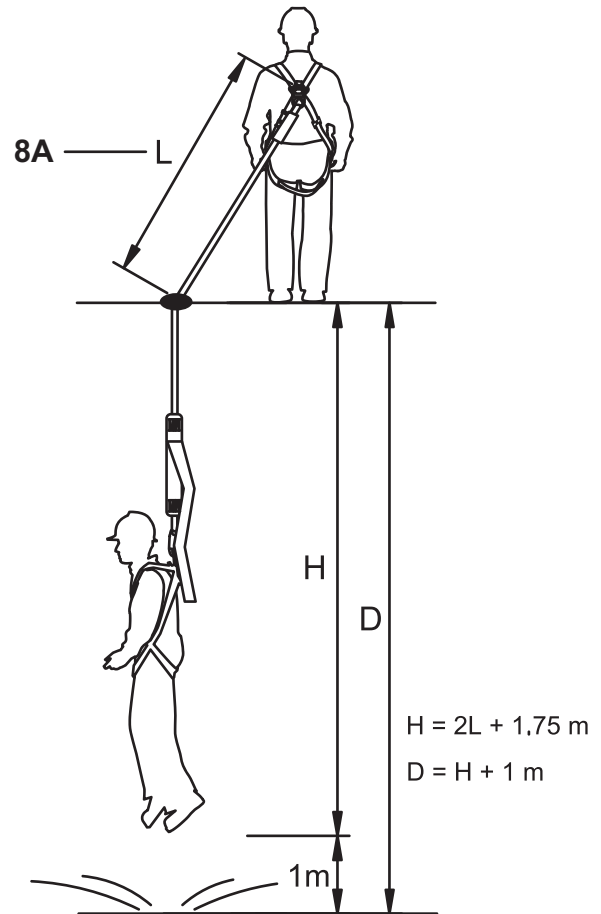
Swing fall hazards must be minimized by anchoring directly above the user's work space (See figure 12). It is essential for safety to verify the free space required beneath the user at the workplace before each occasion of use, so that, in the case of a fall, there will be no collision with the ground or other obstacle in the fall path (See figure 13).



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6. NEVER MAKE YOUR ANCHORAGE CONNECTION BELOW THE LEVEL OF THE ATTACHMENT POINT ON YOUR HARNESS.

7. In making your connections to the anchorage point always observe the following:

- That the screw ferrule on a screwgate carabiner is fully screwed up into the locked position.
- If using an automatic locking carabiner that the revolving ferrule has moved into the locked position.
- The latch or gate on either double acting latch snap hooks or karabiners is in a locked and correct position.

8. Where a much larger working area is required from a single anchorage point than that permitted by the normal Lanyard Assembly then a Fall Arrest Harness should be used in conjunction with either Retractable Cable Devices or Self-Locking Mobile Fall Arrest Devices.

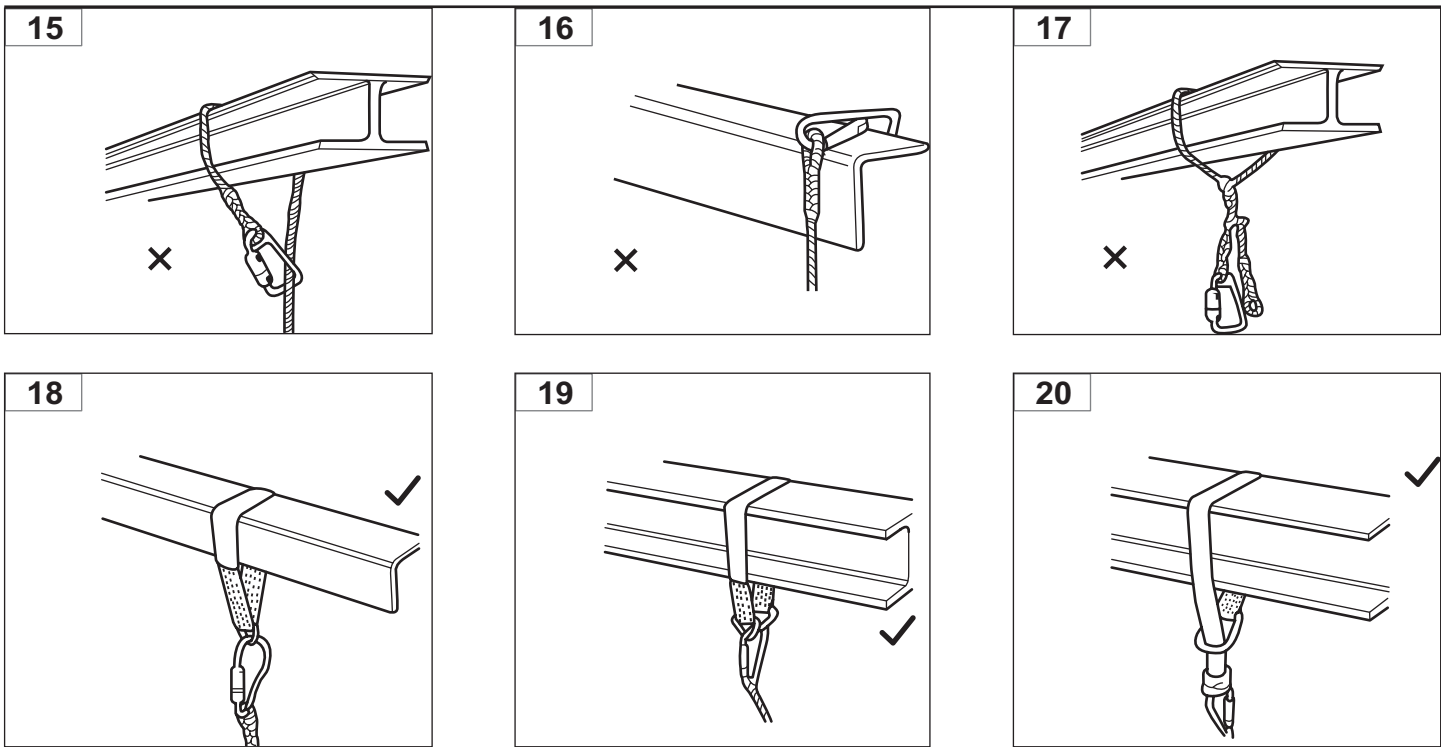
9. When using a Harness in conjunction with a Retractable Cable Device or Inertia Reel Lifeline Block, connect it to a Fall Arrest attachment point via the Swivel Hook at the free end of cable. This also ensures that the cable does not get in your way whilst you are working.

10. For attaching a Self-Locking Mobile Fall Arrest Device use as a minimum a double action snap hook or karabiner to make the connection via the rear 'D' ring, or alternatively, the frontal Fall Arrest attachment point. At no time must the connector between the harness and device exceed 300 mm.

11. Consideration MUST be given to the necessary minimum clearance (Clearance = D, see figure 14) below the user to prevent a collision with structure or the ground. The following methods must not be used to make your connection to the anchorage point.

- Do not tie off over sharp edges or back hook the snap hook onto the lanyard. See figure 15.
- Do not tie off where Hook latch will not fully close. See figure 16.
- Do not knot lanyard in any manner. Avoid sharp edges. See figure 17.

12. Figures 18, 19 and 20 illustrate the correct method to follow in making your connection to a structural anchor point when the gate opening of your safety hook is of insufficient size to allow direct connect around the structure.



13. When using a Harness in conjunction with a self adjusting Pole Strap (for work on poles or structures where the harness is continuously loaded) it should be noted that they are not intended for situations permitting a drop of more than 600 mm. At working position, pass Pole Strap around pole and connect back to harness by connecting Snap Hooks at end of Pole Strap to the harness side 'D' rings. To adjust to a comfortable working position use adjuster to either slacken off or draw up on the Pole Strap.

It is recommended that the harness and its user are registered and its use tracked using RFID technology. Each harness should be issued with a copy of the user instructions.

⚠ CHEMICAL ATTACK WARNING

If any part of an assembly is to be exposed to chemicals, e.g. cleaning materials or hazardous atmospheres, consult the manufacturer to determine whether the part is suitable for continued use.

INSPECTION OF HARNESSES

All MSA Harnesses are manufactured to comply with the exact strength requirements of AS/NZS 1891.1 and only the highest quality materials are used in manufacture, whilst the whole process of the manufacture is conducted under an ISO 9001 Quality System. To ensure these products are maintained in safe working order, the following procedures must be adhered to. Thoroughly inspect each item of equipment before and after each use for wear, deterioration or damage. As per AS/NZS 1891.1, the equipment shall be examined by a competent person, other than the user, and a record kept of this examination on an appropriate Inspection Record Card. See Inspection / Record Card at rear of this manual. Equipment found to be damaged or suspect shall not be returned to service until the necessary repairs have been effected, if such can be carried out.

WHAT TO LOOK FOR WHEN INSPECTING MAN-MADE FIBRE WEBBINGS

The following information details the principal causes of deterioration in man-made fibre webbing and indicates the signs by which they can be recognised.

GENERAL SURFACE ABRASION

This occurs due to contact with abrasive surfaces and is easily recognisable as the webbing fluffs up along the surface. This often occurs in normal use and is harmless if not too extensive. Man-made fibre webbings have very good abrasion resistance.

ABRASION

Usually caused as a result of the webbing being passed over a sharp edge whilst under tension. Any reduction in the width and thickness or severe damage to the weave pattern shall be cause for rejection. Slight surface damage and the occasional torn yarn may be considered acceptable.

CUTS, NICKS, BURNS ETC.

These, if found anywhere on a Harness or Lanyard Assembly, are to be considered as potentially dangerous and must lead to immediate tagging out of service and destruction of equipment.

CHEMICAL ATTACK (SEE PAGE 17)

Usually indicated by discolouration and local weakening or softening of the webbing. The surface fibres, in extreme circumstances, can be rubbed off as a powder. If found, tag out of service and destroy.

HEAT

Webbing affected by heat become brown and brittle and in extreme cases, break when flexed. If found, tag out of service and destroy.

INSPECTION OF WEBBING SHOULD BE CARRIED OUT AS FOLLOWS

Lay out product on work bench – major damage or wear will immediately be apparent. For detailed inspection, take a section of the webbing and form an arch of approximately 100 mm between your hands. With the outside of the webbing being raised, the resulting surface tension will highlight any broken fibres, stitches, cuts, etc. Pass the webbing through your hands until the whole of the product has been visually inspected. It is a good idea to mark off the separate straps with chalk to indicate those inspected and to avoid the possibility of missing one out.

WHAT TO LOOK FOR WHEN INSPECTING A HARNESS.

INSPECT WEBBING AS ADVISED

Inspect all machine sewings for broken stitches or worn threads – special attention should be given to the sewings which retain load bearing components, e.g. hooks, 'D' rings, buckles, etc.. Inspect all labels ensuring that they are perfectly legible and adequately secured.

INSPECT ALL METAL COMPONENTS

Buckles – check for distortion, sharp edges, burrs, cracks or worn parts. If applicable, ensure moving parts function satisfactorily.

'D' Rings – check for distortion, sharp edges, burrs, cracks or worn parts.

FOR PLATED COMPONENTS, CHECK FOR BREAKDOWN IN PROTECTION AND SIGNS OF CORROSION. ANY HARNESS WITH SUSPECTED FAULTS SHALL BE IMMEDIATELY WITHDRAWN FROM SERVICE AND, IF THE FAULT CANNOT BE RECTIFIED, MUST BE DESTROYED.

SERVICE

Remove from service and destroy all Harnesses, that are 10 years old from the date of manufacture and destroy.

CLEANING

Harnesses made from man-made fibres should be regularly cleaned. The frequency of cleaning depends upon the conditions in which they are being used but in any event, the period between cleanings should not exceed 3 months.

INSTRUCTIONS FOR CLEANING

First wipe off all surface dirt, mud, dust, etc., with a damp sponge. Rinse out the sponge then, using a mild solution of water and household detergent, thoroughly lather. Finish off by rinsing with clean water and wiping as dry as possible with a clean cloth.

To remove heavy deposits of grease or creosote, use a diluted solution of heavy-duty detergent cleaner and water. Work the diluted liquid into the webbing fabric with a brush. Rinse off with clean water and wipe as dry as possible with a clean cloth.

Following cleaning, the equipment should be left to dry thoroughly hanging freely in a position where it will not be exposed to excessive heat or steam.

STORAGE

Harnesses need to be stored in a clean, cool, dry area free of chemical fumes or corrosive elements. Never store in areas where there is direct sunlight. Preferably, equipment should, when not required for use, be kept in properly designed cabinets which permit ventilation. In making provision for storage, it should be kept in mind that no part of the equipment be subjected to unnecessary strain, pressure, excessive heat or humidity. During storage, it should not be possible for the equipment to come into contact with sharp implements, corrosives or other likely causes of damage.

For particular and more specific information on selection and maintenance of equipment consultation of AS/NZS 1891.1 should be undertaken.

Owners Manual:
Product Serial No.:
Date of Manufacture:
Remove from Service Date:

INSPECTION RECORD CARD

A competent person must examine all Harnesses, Lanyard Assemblies and Pole Straps at least once every 6 months as instructed and record below. Fall Arrest Devices (SRL's) require a competent person to check at minimum every 3 months. The inspection interval for anchorages shall be 12 months.

Visual Examination Date	Visual Examination Date	Visual Examination Date	Visual Examination Date

CHEMICAL	RESISTANCE
	Polyester
Strong acid (dilute)	Good
Strong acid (conc.)	Fair*
Weak acid (dilute)	Good
Weak acid (conc.)	Good
Strong alkali (dilute)	Poor
Strong alkali (conc.)	Poor
Weak alkali (dilute)	Fair
Weak alkali (conc.)	Poor
Alcohol	Fair
Aldehyde	Poor
Ether	Poor
Halogenated Hydrocarbons	Good
Phenols	Poor
Bleaching agents	Good
Ketones	Poor
Lubricating Oils & Greases	Good
Soaps & Detergents	Good
Seawater	Good
Aromatic Solvents	Poor
* Concentrated sulfuric acid attacks polyester	

Express Warranty – MSA warrants that the product furnished is free from mechanical defects or faulty workmanship for a period of one (1) year from first use or eighteen (18) months from date of shipment, whichever occurs first, provided it is maintained and used in accordance with MSA's instructions and/or recommendations. Replacement parts and repairs are warranted for ninety (90) days from the date of repair of the product or sale of the replacement part, whichever occurs first. MSA shall be released from all obligations under this warranty in the event repairs or modifications are made by persons other than its own authorized service personnel or if the warranty claim results from misuse of the product. No agent, employee or representative of MSA may bind MSA to any affirmation, representation or modification of the warranty concerning the goods sold under this contract. MSA makes no warranty concerning components or accessories not manufactured by MSA, but will pass on to the Purchaser all warranties of manufacturers of such components. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. MSA SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Exclusive Remedy - It is expressly agreed that the Purchaser's sole and exclusive remedy for breach of the above warranty, for any tortious conduct of MSA, or for any other cause of action, shall be the repair and/or replacement, at MSA's option, of any equipment or parts thereof, that after examination by MSA are proven to be defective. Replacement equipment and/or parts will be provided at no cost to the Purchaser, F.O.B. Purchaser's named place of destination. Failure of MSA to successfully repair any nonconforming product shall not cause the remedy established hereby to fail of its essential purpose.

Exclusion of Consequential Damages - Purchaser specifically understands and agrees that under no circumstances will MSA be liable to Purchaser for economic, special, incidental, or consequential damages or losses of any kind whatsoever, including but not limited to, loss of anticipated profits and any other loss caused by reason of the non-operation of the goods. This exclusion is applicable to claims for breach of warranty, tortious conduct or any other cause of action against MSA.