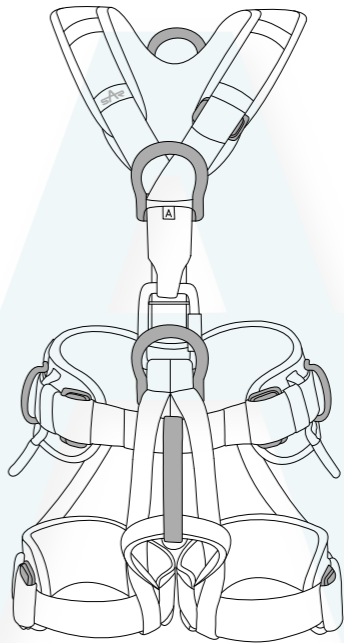




Specialist Access & Rescue Products Ltd.

# User Guide Merlin Full Body Harnesses



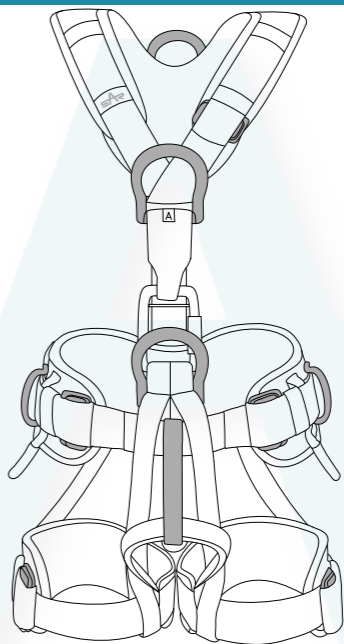
sar-products.com  
+44 (0)161 621 0309  
sales@sar-products.com

**Conforms to**  
EN361:2002, EN813:2008 & EN358:2018



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# User Guide Merlin Full Body Harnesses



sar-products.com  
+44 (0)161 621 0309  
sales@sar-products.com

Model:  
Serial No.:

**UK  
CA**  
0120 C€0598

### Product Record

This documentation should be issued with, and kept for, each item or system. Please see the product label for the details required below. Consult this guide for advice on inspection, maintenance, lifespan, etc.

Owner / User's Name:		Date of Purchase:	
Date of Manufacture:		Product Serial No.:	
Date of First Used:			

### Inspection & Maintenance Record

Date & Time	Type of Inspection & Comments	Name & Signature of Inspector	Next Inspection Due

### Declaration Of Conformity

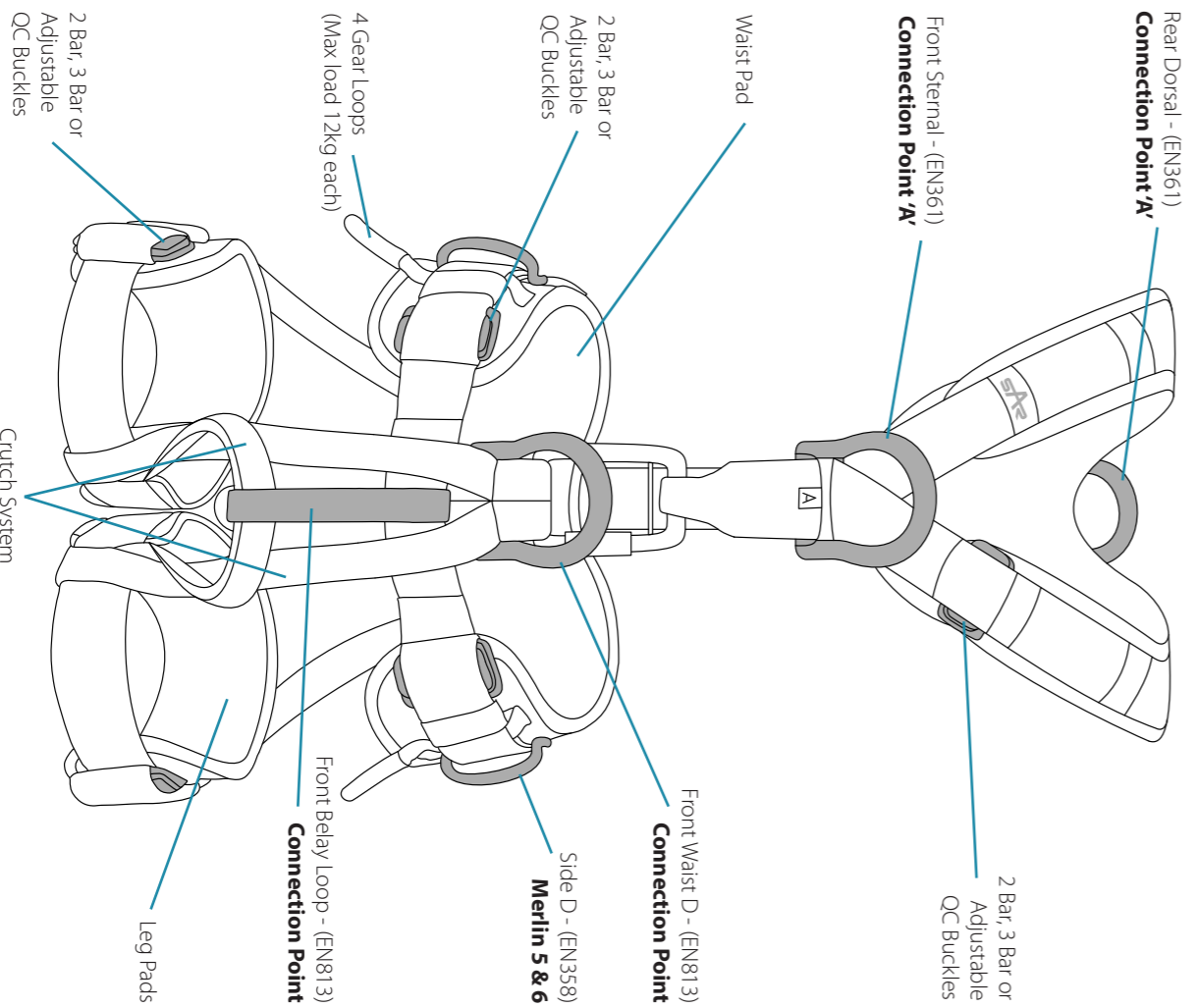
The EU Declaration of conformity is available by scanning the QR code or visiting - [www.sar-products.com/eu-doc/](http://www.sar-products.com/eu-doc/)



### Certificate Of Conformity

We certify that the Merlin & Merlin Tech 3 & 4 conform to the requirements set out in EN813:2008 & EN361:2002, in addition, the Merlin & Merlin Tech 5 & 6 also conform to EN358:2018. The SAR Merlin range is rated to 150kg.

Signature:..... For SAR Products Ltd



# Merlin Full Body Harnesses

## Important

Please read and understand these instructions before use. This product should only be used by trained & competent operatives, or under the supervision of such a person.

## Use

The Merlin is a range of full body harnesses suitable for use in rope access, technical rescue and other similar activities. The Merlin numbering system is set out below:

**Merlin 3** - 2 fall arrest points (sternal & dorsal) plus 1 work positioning point at the front of the waist.

**Merlin 4** - 2 fall arrest points (sternal & dorsal) plus 2 work positioning points at the front of the waist.

**Merlin 5** - 2 fall arrest points (sternal & dorsal) plus 1 work positioning point at the front of the waist, plus 2 side work positioning points (side 'D's)

**Merlin 6** - 2 fall arrest points (sternal & dorsal) plus 2 work positioning points at the front of the waist, plus 2 side work positioning points (side 'D's)

It is the user's responsibility to ensure that any items of PPE or other equipment used with the Merlin or Merlin Tech are compatible and do not interfere with the safe function of any other component. Any item of equipment used must comply to the relevant standard(s).

**Note:** The information in this guide meets the requirements of the EU PPE Regulation 2016/425. It is not comprehensive and cannot be substituted for the correct training, which can be provided if required. If in any doubt, contact SAR Products using the supplied information.

## Safety

The safety provided by the Merlin Full Body Harness range is dependant on the scenario, the anchors used and the skill of the user. The strength and suitability will be reduced through factors such as, but not limited to, age, wear & tear, abrasion, cuts, high impact loads, tight/sharp edges, knots, some chemicals (e.g. strong alkalis), UV exposure, failure to store & maintain as recommended, etc.

An appropriate connection method must always be used between the harness and the anchor or system.

The user must consult the instructions for any other components used in a fall protection or fall arrest system and must pay attention to information including fall clearance distances, etc.

A rescue plan should always be in place prior to any work at height.

Do not alter or repair the product in any way.

Any component subjected to a dynamic loading should be examined and discarded if there is any sign of defect, or any doubts about its safety.

## Lifespan

The lifespan of any product will be affected by the conditions in which it is used and stored/ maintained. This product is manufactured using high grade polyester webbing.

Textile components should be retired no later than 10 years after the Date of Manufacture.

Metal components will have an indefinite lifespan, depending on use.

The working life will be reduced through general wear and tear, abrasion, cuts, damage to component parts, inappropriate ancillary equipment, high impact load, prolonged exposure to UV light including sunlight, elevated temperature (50° C max), exposure to some chemicals (e.g. strong alkalis) or failure to store and maintain as recommended. This list is not exhaustive.

## Inspection

Before each use, conduct a visual inspection and function test to ensure the product is in serviceable condition and operates correctly. A periodic examination should be carried out by a competent person at least every 12 months. These inspections should be recorded, paying particular attention to areas of potentially high wear such as attachment points, textiles, cams, bearings, etc. In the UK, the frequency of periodic inspection should be at least every 6 months; it is the user's responsibility to ensure they comply with the guidance for inspection in their own country or region.

**Textiles:** Check for cuts, tears & abrasions, damage due to deterioration, contact with heat, alkalis or other corrosives, label legibility.

**Stitching:** Check for broken, cut, loose or worn threads.

**Metals:** Check for cracks, distortion, corrosion, wear by abrasion, burrs, worn or loose rivets or screws, discolouration caused by extreme heat (greater than 100° C) broken springs, seizure of moving parts, broken or missing components, marking legibility.

Immediately withdraw from service any items showing defects. Any repairs must be carried out by the manufacturer or their authorised agent.

## Anchorage

Anchor points should always be assessed for strength and suitability for the task (EN795, minimum 12kN). Sharp edges, abrasive or high temperature surfaces should be avoided or protected against.

Anchor points, wherever possible, should be above the user.

## Cleaning

Rinse in clean cold water. If still soiled, wash in clean warm water (max. 40°C) with pure soap or a mild detergent (within pH range of 5.5 to 8.5). A machine wash may be used, but care must be taken to protect against mechanical damage, for example by placing the item in a bag prior to washing. Rinse thoroughly in clean cold water.

## Maintenance

Always keep the product clean and dry. Any excess moisture should be removed with a clean cloth and then allowed to dry naturally in a warm room away from direct heat. Metal parts may be lubricated with a dry PTFE lubricant or WD40 type spray. Excess lubricant should be wiped off to avoid attracting dirt.

## Chemicals

Avoid contact with any chemicals which could affect the performance of the product. If contact occurs, or is suspected, then remove the product from service immediately. If used in a marine environment, thoroughly rinse in clean cold water and dry after each use.

## Storage

After cleaning, store unpacked in a cool, dry, dark place away from excessive heat sources or other possible causes of damage. Do not store wet.

Transport in a suitable protective bag.

If a long shelf life is required it is advisable to store in a moisture proof package.

## Warning

Work at Height and Rescue are hazardous activities. It is the user's responsibility to ensure understanding of the correct and safe use of this equipment, to use it only for the purposes for which it is designed and to practise all proper safety procedures. The time that a casualty is suspended should be kept to a minimum. Attention should be paid to the dangers suspension trauma. The user shall ensure that the safe function of this product is not impaired by, and does not impair, the safe function of another component or system. The side 'D's on the waist belt should not be used alone if there is a foreseeable risk of the user becoming suspended or being exposed to unintended tension by the waist belt, when using a work positioning system, the user normally relies on the equipment for support, therefore it is essential to consider the need of using a back-up. ONLY the sternal and dorsal connection points (marked A) are suitable for fall arrest. Do not use the lower attachment points for fall arrest.

## Markings

Each individual component is marked, where applicable, with:

- The name, trademark or any other means of identification provided by the manufacturer or supplier.
- The batch or serial number
- The date of manufacture (DoM)
- Product description and/or reference
- The British &/ or EN standard(s) to which the item conforms
- Waist size
- Load rating
- UKCA &/or CE mark with approved &/or notified body number

Strengths quoted are when the product is tested new and are in accordance with the manufacturer's test methods to the appropriate standard. Any weights and measurements are within the standard's specified tolerances.

## Specification

- Fully adjustable waist and legs
- Choice of standard or Quick Clip (QC) buckles
- Shaped padding on waist and legs
- Reinforced gear loops
- Metal 'D's' = 25kN
- Belay loop = 30kN
- User rating = 150kg (including tools & equipment)

## Sizing

Standard -	Waist 74cm - 114cm Legs 42cm - 84cm
Extra Small -	Waist 64cm - 84cm Legs 32cm - 52cm
Extra Large -	Waist 104cm - 124cm Legs 74cm - 94cm

## Approved Body UKCA

SGS United Kingdom Limited  
Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN  
Approved Body No: 0120

## Notified Body

SGS FIMKO OY, Takomotie 8, FI-00380 Helsinki, Finland.  
Notified Body No: 0598

It is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the product is to be used.

Nothing in this document affects the consumer's statutory rights.

## Fitting Instructions

1. Unpack the harness and lay it out so that all buckles are undone and there are no twists in the webbing.

2. Place the waist belt around the waist and hold in place using elbows/ inner arms. (Fig 1)

3. Pull the central attachment point up through the legs. (Fig 2)

4. Fasten the waist belt (Fig 3), following the relevant buckle instruction diagram, then tighten the belt and centralise the belay loop. (Fig 4)

5. Fasten the leg loops snugly around the thighs (Fig 5), following the relevant buckle instruction diagram.

6. Pull the sternal attachment point over the head. (Fig 6)

7. Connect the connector to the connection loop (Merlin) or the chest ascender to the connection loop using the maillon (Merlin Tech), behind the front 'D', and tighten the shoulder strap. (Fig 7)

8. Once fitted, check for any twists, that all buckles are fastened correctly, any excess webbing is secured back through the elastic tidies, attachment points are positioned correctly, overall fit is snug but not over-tight or too loose. (Fig 8 & 9)

9. Finally, in a safe place, always ask another operative to conduct a buddy check to ensure all of the above is correct. Buckles and fit should be regularly checked during use.

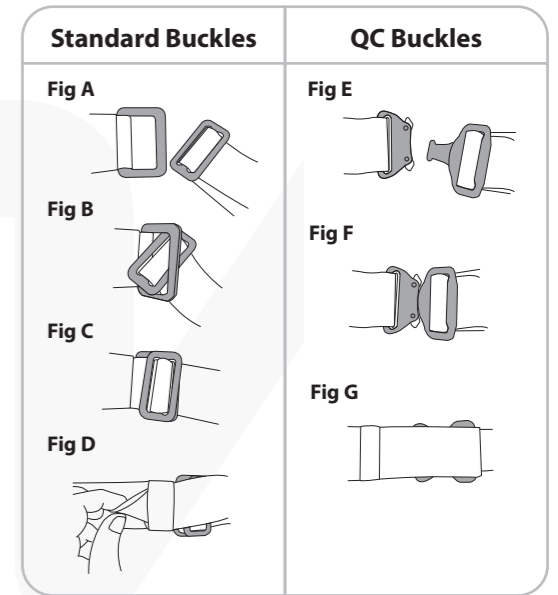


Fig 1

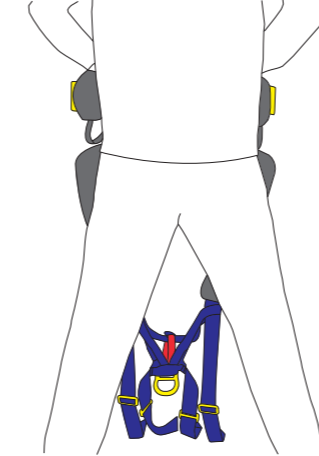


Fig 2

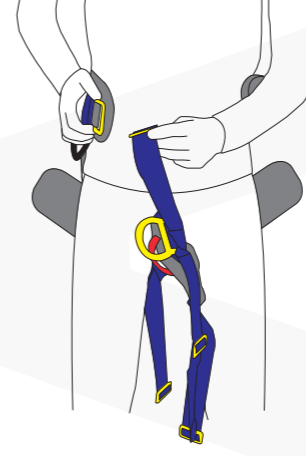


Fig 3

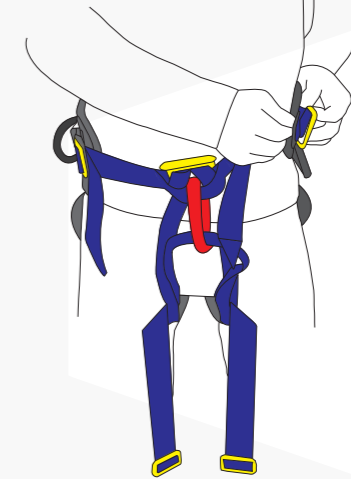


Fig 4

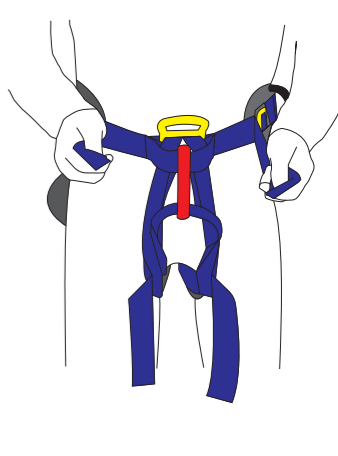


Fig 5

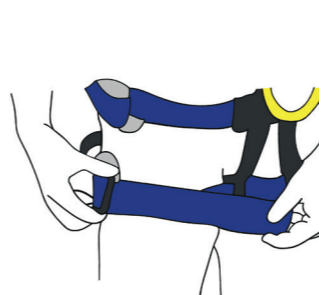


Fig 7

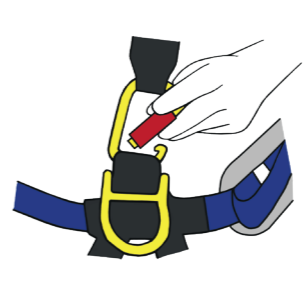


Fig 6

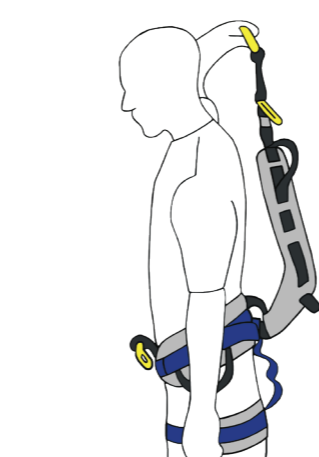


Fig 8

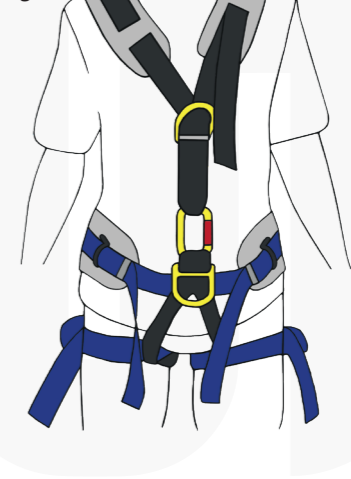


Fig 9

