

**Designers, Manufacturers and Suppliers of
Quality Height Safety & Rescue Equipment, Training & Consultancy**

Users Manual

English Version

**P&P Range of MK1, MK2 and MK3
Fall Arrest Harnesses**

Thank you for purchasing this Harness. Please take time to familiarize yourself with the correct use and operation. It is imperative that this Harness is only used for its intended purpose and that it is subject to a periodic recorded detailed inspection by a competent person.

To avoid personal injury, prior to using this Harness or training others to use it, CAREFULLY READ and understand these instructions.

If there is anything you do not understand DO NOT use the Harness, contact the supplier or **P&P** for further details.

Certain information in this manual is governed by law and is subject to change without prior notice. Great care has been taken to ensure that the information is correct at the time of publication. However, it is the user's sole responsibility to ensure that they fully comply with all legal requirements. **P&P** will not accept liability for any inaccuracy or incorrectly stated legal requirements.

P&P operate a policy of continual improvement and reserve the right to change specifications without notice. The Manufacturer and / or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in the connection with or by reason of or the inability to use the Harness for any other purpose.

Note; training should only be delivered by a suitably qualified and competent person, i.e. a **P&P** products trainer.

Description

P&P offer a full range of Harnesses to suit your needs. This manual covers the design features of all **P&P** MK1, MK2 & MK3 Harnesses and it is important that you read and understand it. With your harness and using these instructions, work through the various fittings and adjustments.

Fall Arrest

All **P&P** Harnesses are designed for fall arrest. Every harness is fitted with a dorsal (rear, between the shoulders) Fall Arrest 'D' ring attachment point. There may also be a sternum (front, centre of breast bone) Fall Arrest 'D' ring. For CE marked equipment Fall Arrest attachment points will be marked with an 'A' either etched into the metal D ring, stamped into the plastic dorsal plate or printed onto adjacent webbing. Fall arrest lanyards/equipment must only be attached to a 'D' ring which is clearly identified by the letter 'A'.

Function

This **P&P** Harness must be used with a suitable Energy Absorbing or Restraint lanyard and anchorage point in order to provide a fall arrest or fall restraint system.

P&P advise that users must be competent in the proper use and practical/physical limitations of this harness, before undertaking any tasks requiring its use. Equipment specifiers / users must ensure this harness is used with compatible lanyards and devices. Failure to ensure compatibility may result in an unsafe condition or even system failure.

Work Positioning

Some **P&P** Harnesses have an integral EN358 Work Positioning Belt. The belt provides 2 cranked side 'D' rings (one on each hip), for the attachment of an EN358 Work Positioning Lanyard.

Warning

All work at height including the use of Personal Protective Equipment (PPE) as a control measure is subject to a suitable and sufficient risk assessment.

Rescue

Some **P&P** Harnesses have an integral overhead rescue attachment. This attachment is for rescue from confined spaces or similar circumstances.

Inspection

This manual contains a Declaration of Conformity on the back page.

The product name, unique serial number and date of manufacture will be found on the product label either sewn into or onto the Harness' webbing.

Always make sure the product label is present, shows both the serial number and date of manufacture and that it matches your Inspection Record Document / this manual. If the numbers are not legible on the Product Label or do not match your Inspection Record Document / this manual – Do Not Use the Harness!

The Harness along with all your other Fall Protection PPE must be subjected to a pre-use check, each time, before use. Failure to inspect the Harness correctly could cost you your life. You should be trained to carry out a pre-use check. Detailed recorded inspections at a frequency of 6 months should only be carried out by a trained competent person, appointed by the employer. Additional recorded interim inspections may be required where risks from transient arduous working environments exist. This should be identified through Risk Assessment.

The pre-use check must include (but is not limited to):

- Check all webbing for signs of cuts, abrasions, fraying, tears, burns, mould, discolouration or chemical attack. If the Harness has been subject to paint overspray, it must not be used.
- Check all stitching for signs of loosening, pulling or cut thread. There must be no evidence of damaged stitching on either side of the stitch pattern.
- Buckles and 'D' Rings MUST be free from rust, excessive wear, distortions or cracks.

If during the pre-use check any part of the Fall Arrest System is found to be or believed to be faulty, DO NOT

use it. Remove ALL components from site to ensure that they cannot be used by anyone.

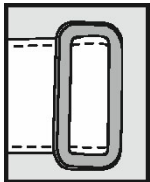
Usage

- This item of PPE is for personal use only.
- Check the inspection record for this harness to ensure that regular inspections have been correctly recorded.
- It is strongly recommended that the user is given adequate practical training prior to using this harness or any other **P&P** product.
- When connecting a harness via a lanyard to an anchorage point, the connection should be at a level which will result in the minimum free-fall and the least total fall distance consistent with the user's ability to carry out work tasks.
- When making any connection to a point on a harness, which cannot be seen by the harness user, either the connection should be made before putting the harness on, or the connection should be made or checked for security by a second person.
- If this harness arrests a fall or fails an inspection it should be destroyed or returned to the manufacturer for inspection.

Fittings and Adjustments

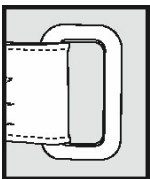
The following section deals with the types of fittings found on **P&P** Harnesses and their uses.

Three Bar Slide

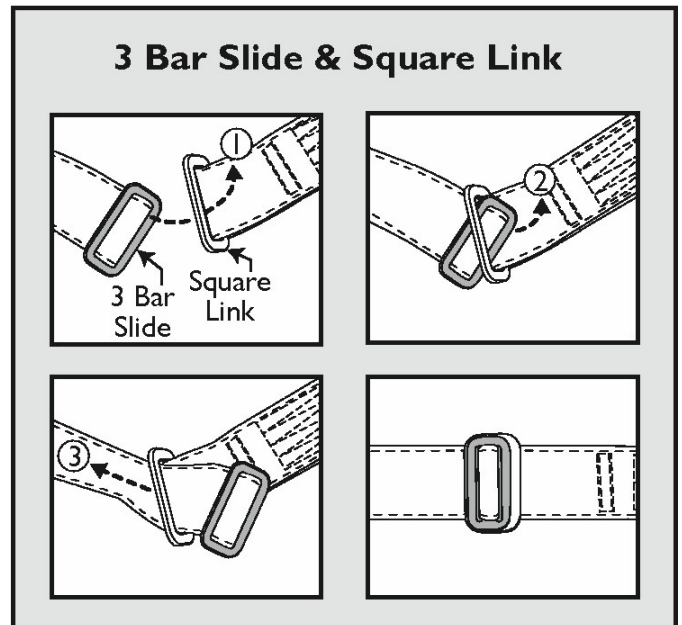


A simple metal 'buckle' shaped fitting which is either retained in place by webbing or fitted to the end loop of a webbing strap. It can be 'slid' along the webbing and will remain where positioned with minimal creep.

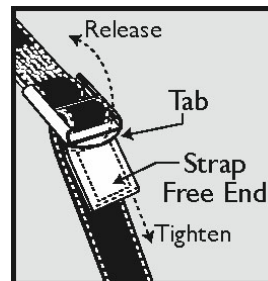
Square Link



Fitted to the end of a webbing strap and designed to receive and retain a three bar slide. The three bar slide and square link allow easy connection, separation and adjustment of chest straps when fitting or removing the harness.

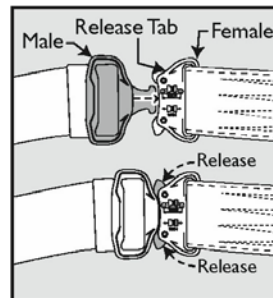


Quick Fit Buckle



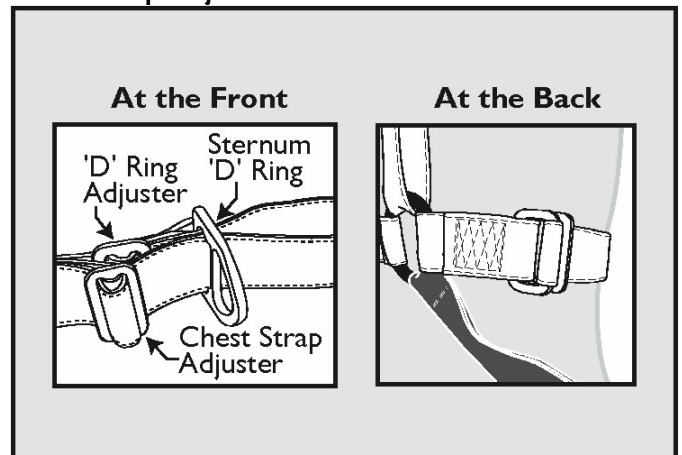
The Quick Fit buckle is permanently attached to enable speedy deployment. To tighten a fitting, pull the free end of the strap until the required fit is achieved. To release the fitting, raise the buckle's tab fully back and pull the webbing, which will feed gently through.

Quick Release Buckle

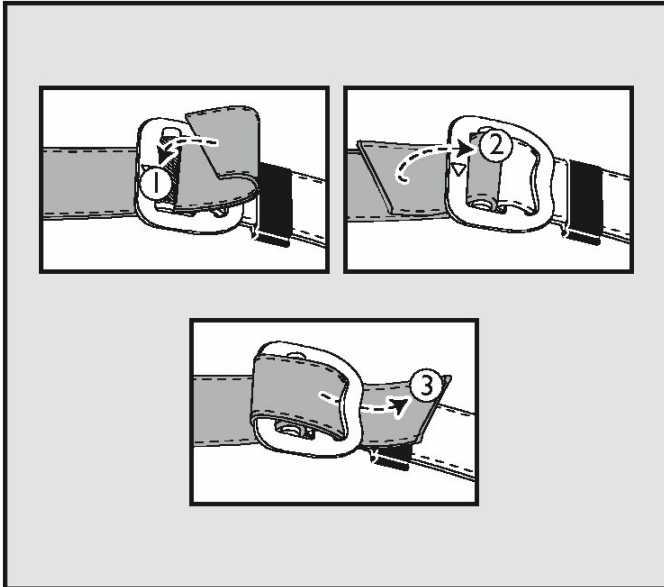


Connection of this buckle is a simple push fit. To release the Buckle, both release tabs must be moved back simultaneously, if not, the Buckle will remain connected. The mechanism **MUST** be kept clean at all times and you should **NOT** use any lubricants to ease its use.

Chest Strap Adjustment

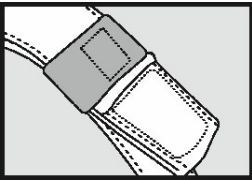


Waist Belt Buckle



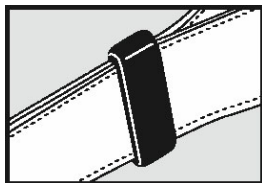
This buckle has to be threaded in a specific manner to ensure a secure fit. It is only fitted to harnesses that incorporate a Work Positioning Belt.

Web Retaining Loop

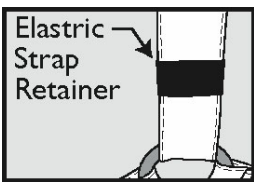


A sewn webbing loop used to retain the end of a leg strap. When adjustment has been finalised, the loop should be moved as close to the loose end of the webbing strap as possible.

Plastic Slider

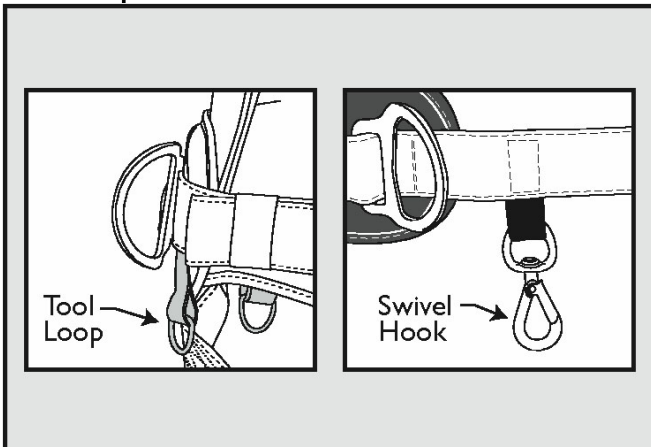


The adjustable leg straps are fitted with two plastic sliders used to retain the end of the strap. When adjustment has been finalised, one slider should be moved as close to the three bar slide as possible and the other to the loose end of the webbing strap.



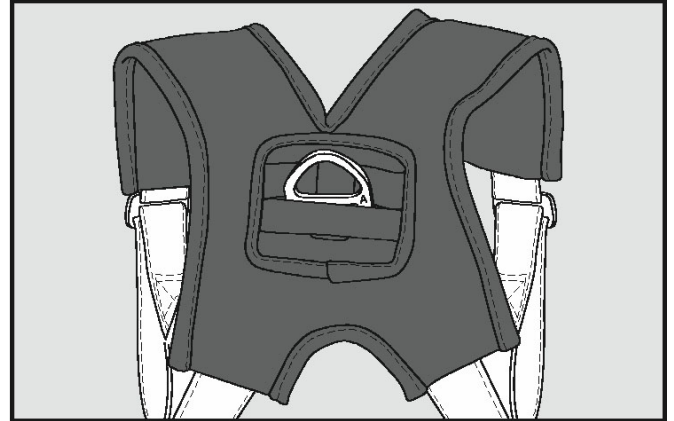
Adjustable straps are fitted with an elastic secured retainer to retain the end of the strap.

Tool Loops & Swivel Hooks



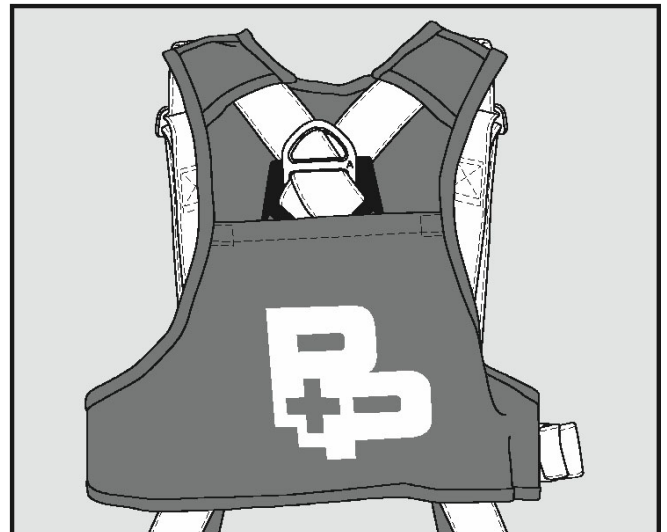
Loops and swivel hooks are fitted to some waist belts and are intended for use as attachment points for light tools or communication equipment. THESE LOOPS / SWIVEL HOOKS ARE NOT TO BE CONNECTED TO ANY LANYARD, RETRIEVAL SYSTEM, STRUCTURE OR PERSON.

Breathable Top



Breathable tops are fitted to some Harnesses. These are for comfort only and do not form part of the structure of the harness.

Waistcoat



Waistcoats are fitted to some Harnesses. These are to aid the donning process and do not form part of the structure of the harness.

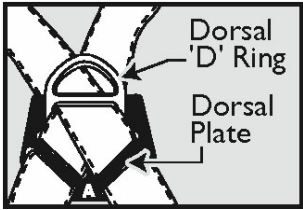
Attachment Points

Dorsal 'D' Ring and Sternum 'D' Ring

The fall arrest attachment points, identified with a letter 'A' (see page 1 paragraph 2 'Fall Arrest') are the only ones to be used to connect you, in the harness, to a fall arrest system. Although you may have fall arrest lanyards and other fall arrest attachment devices attached to your fall arrest 'D' ring(s), only one means of attachment should be connected to your anchorage point at any one time.

If attaching to the Dorsal 'D' ring of a 'rescue' model, make sure that the integral overhead rescue attachment is either retained or moved to the side of the 'D' ring.

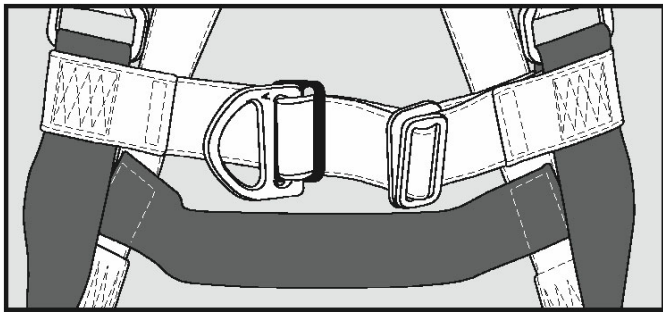
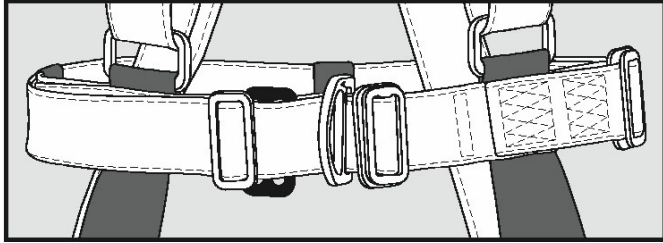
Rear Fall Arrest 'D' Ring



The rear fall arrest 'D' ring is retained within a Dorsal plate where the shoulder straps cross over at the back of the harness. This 'D' ring is identified with a letter 'A' as it is for fall arrest attachment.

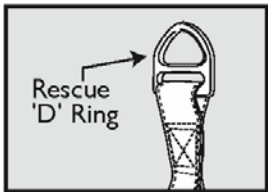
(see page 1 paragraph 2 'Fall Arrest') On some models, the webbing 'slides' through the 'D' Ring on the Dorsal Plate and from time to time may need to be re-adjusted.

Front Fall Arrest 'D' Ring



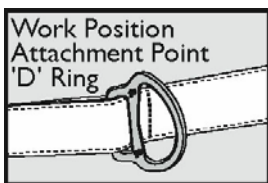
If the harness has a front fall arrest 'D' ring, it will be on the chest strap and the shoulder straps should be adjusted so that it sits on your sternum / breast bone.

Rescue 'D' ring



If the harness has an integral overhead rescue attachment, it must not be used for fall arrest, other than in conjunction with a retractable type fall arrester to BSEN 360 anchored above the user. The attachment should be either folded and stored in the Velcro pocket on the waist coated versions or attached with the Velcro loop to the chest strap at the back. The attachment must always be behind the head, never in front.

Work Positioning Attachment Point 'D' Ring



Use only with an approved Work Positioning Lanyard to support the user whilst working at height when needing a hands free environment. NEVER detach yourself from the fall arrest

equipment when using the work position attachment point 'D' rings.

Fitting Your Harness

The following instructions cover all harnesses in the P&P MK1, MK2 & MK3 Range and all variations of fitting. Some parts such as adjustable chest straps, waist belts and integral overhead rescue attachments are only fitted to specific models.

The sequence for the MK1, MK2 & MK3 Range of Fall Arrest harnesses is very similar, except the way in which it is performed.

The harness is normally worn outside of your clothing. Make sure that your clothing is correctly fitted and that you secure all zips and buttons. Remove ALL items from your pockets, hanging items such as key clips, mobile phone or radio.

Double check that there are no items positioned between the webbing and your body. Such items could cause discomfort or injury in the case of a fall.

Warning

This Harness must be used by persons who are medically fit to do so. If you have any medical condition, are recovering from any medical condition or suffer from any physical or mental disability you must seek professional medical advice before using this Harness.

Preparation

1. Carry out a pre-use check of the harness before proceeding. If any faults are found or you are not 100% sure of the harness's condition or suitability, STOP.
2. Remove any attached lanyard or similar connected to any 'D' ring.
- 3a. Undo any three bar slide and square link fitted to chest strap or leg straps and loosen fully.
- 3b. Undo the Quick Release Buckles where fitted to the chest strap, waist belt or leg straps.
- 3c. Loosen fully the Quick Fit Buckles where fitted to shoulder straps or leg straps.
4. If an integral overhead rescue attachment is fitted, carefully fold it back and secure within the yellow pouch (fig. a) or with the Velcro loop (fig. b).

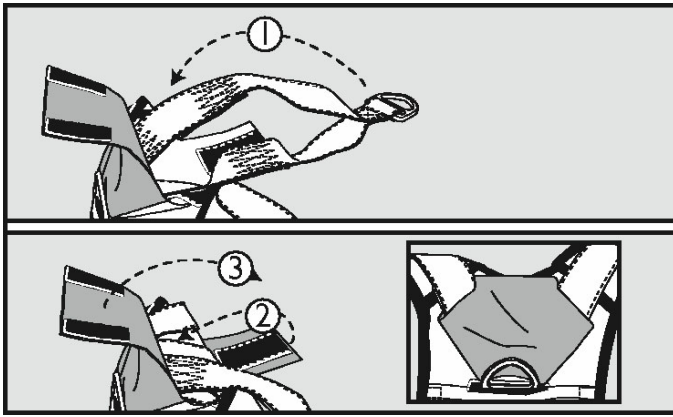


Fig. a

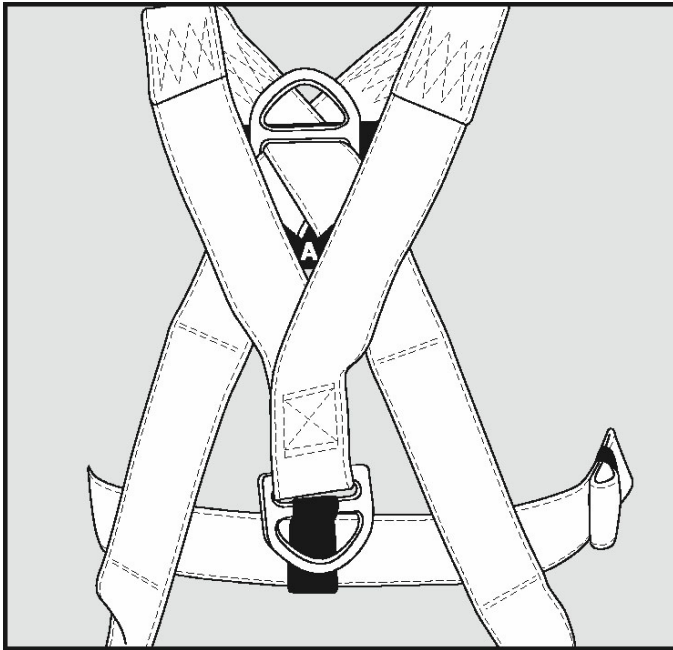


Fig. b

5. Lift the harness by the dorsal 'D' ring and make sure all straps hang straight. Untangle any which are not.

Fitting Stage One (shoulder and chest)

- 1a. If the leg straps are fitted with three bar slide and square link or a quick release buckle, fit the harness over both shoulders with the dorsal 'D' ring behind you. Place your arms through the shoulder straps. The harness is 'in side out' if the logo on the webbing is not outermost.
- 1b. If the leg straps are fixed with quick fit buckles, place the harness on the floor and 'step into' both leg strap loops. Raise the harness and check that the dorsal 'D' ring is behind you. Raise the harness over both shoulders and place your arms through the shoulder straps. The harness is 'in side out' if the logo on the webbing is not outermost.
2. (Rescue version without a waistcoat) make sure that the integral overhead attachment is attached with the Velcro loop to the chest strap, on the outside of the harness, behind your head and NOT between you and the harness itself.
3. Adjust both shoulder straps to bring the chest strap squarely in line with your sternum (breast bone).

Make sure both shoulder straps are adjusted to an equal length.

- 3a. Where applicable you will need to adjust the shoulder straps to bring the sub-pelvic strap up to lie/sit at the top of our thigh muscle, across the lower area of your rump. Make sure both straps are adjusted to an equal length.
 4. Connect the chest strap by passing the three bar slide through the square link. Then turn the three bar slide and align it with the square link ensuring that the straps are not turned or twisted.
 5. Adjust the chest strap (when adjustable) as necessary to bring the strap to a snug fit. Secure excess strap under the elasticated or Velcro strap retainer. Realign the sternum 'D' ring to bring it central to the chest.
- Note; try to achieve a snug fit without creating discomfort or restricting natural movement.

Fitting Stage Two (legs)

1. If you stepped into the leg strap loops, stand upright and straight then check that both leg straps are not twisted.
- If the leg straps are separated, stand upright and straight. Reach behind and place your right hand onto the rear right hand leg strap and feed its end through your legs. Take the strap end with your left hand and check that the strap is not twisted.
2. Connect the rear portion of the right hand leg strap to the front section of the right hand leg strap ensuring that the straps are not turned or twisted.
 3. Repeat this process with the left hand leg strap.
 4. CAUTION; Positioning of these straps is of the utmost importance. Failure to ensure that both leg straps pass between your legs, are not twisted and are adjusted so they sit into your groin, may cause serious injury during an arrested fall.
 5. Care should be taken to ensure that the sub-pelvic strap is correctly positioned at the top of your thigh muscle. It should not be at the base of your spine.
 6. Adjust the straps to make a snug fit ensuring that both straps are positioned as high as possible between the inside leg and groin. Finally, secure excess strap.

Fitting Stage Three (Waist Belt Only)

1. Only when the harness has been fitted and adjusted should you secure the waist belt.
2. Either Pass the free webbing strap behind the buckle's knurled bar (to the left as viewed) and pull it through the buckle. Move the strap over the knurled bar and feed back through the front of the buckle or bring the two ends of the Waist Belt together and connect the male and female parts of the Quick release Buckle.
3. Hold the free end webbing strap and pull until a snug fit is achieved. To secure in place, move the free end over the buckle and pass it through the tail of the buckle.
4. Secure excess strap under the elasticated retainer.

Fit Check List

Make it a habit to follow this check list every 2 hours of use, IT MAY SAVE YOUR LIFE.

- Shoulder straps evenly adjusted.
- Leg and chest connectors joined correctly.
- Chest strap adjusted and positioned squarely over sternum.
- Dorsal 'D' ring positioned centrally.
- Leg straps evenly adjusted and CORRECTLY POSITIONED.
- Waist belt secure.
- Integral overhead rescue attachment retained or positioned behind shoulders.
- All excess strapping secured behind plastic sliders, elasticated or Velcro retainers.

Attaching to the harness

You must only use P&P approved and recommended lanyards, connectors, fall arresters and ancillary equipment.

Any lanyards, connectors, fall arresters or ancillary equipment MUST be accompanied by a Declaration of Conformity and a valid inspection record.

Rescue Plan

Rescue Plan

As part of your risk assessment you MUST have in place a rescue plan to deal with any emergency, which may occur during use. Access to the user, directly or indirectly and their safe retrieval is of paramount importance, including preparations for dealing with potential Post Fall Suspension Syncope

Marking of PPE

Textile products including webbing and rope **must not** be marked using ink or paint. Marker pens and paint will contaminate textile fibres leading to potential damage from material stiffening or even chemical attack.

Plastic or Metal casings of components **must not** be marked by stamping, etching or engraving. These processes may weaken the material or damage protective coatings.

P&P advise that if additional identification is required a tagging system (label or electronic) should be used that does not interfere in any way with the operation of equipment or devices. Contact P&P or your supplier for advice on additional labelling.

Modifications and Repairs

No repairs, modifications, additions or alterations are to be made to this Harness.

Cleaning, Maintenance and Storage

Keep the Harness clean and dry. Remove excess moisture with a clean cloth then allow to dry naturally in a warm room away from direct heat.

You may clean this harness using water but avoid getting soap/detergent into buckles. First rinse in clean cold water – if still soiled; wash in clean warm water (40°C max) using a mild detergent if necessary. Thoroughly rinse in clean cold water and dry as described above.

Chemical Attack

Avoid contact with any chemical, which might affect the performance of this harness, e.g these include all acids and strong caustic substances (vehicle battery acid, bleach etc)

If subject to chemical attack, you must remove it from service and check with the supplier or P&P for advice on the possible consequence of chemical degradation.

Storage

After any necessary cleaning, dry completely then store in a cool dry place, which will protect it from extreme humidity and direct heat.

Transportation

Care should be taken to protect the harness against risks such as those detailed under Service Life. A simple effective way is to transport the harness in a suitable bag or container, which prevents abrasion.

Service Life

The **Harness** has a maximum life span of 10 years from date of manufacture, provided it is correctly stored and maintained. However, if the harness fails any inspection it MUST be destroyed. See the Statement of Obsolescence within this manual.

Each P&P Harness is designed to arrest a fall from height ONCE ONLY. If subjected to an arrested fall the harness must be withdrawn from service and destroyed.

Product Standards

P&P harnesses are tested and certified to the following standards.

Harnesses carrying BSEN 361 markings are certified against the European standard.

Users/Specifiers must check the product label to identify which standards(s) their P&P harness is certified to:

CE (European) Standard Guidance

- Fall Arrest Harness to EN361.
- Fall Arrest Harness incorporating a Work Positioning Belt to EN358.
- Fall Arrest Harness incorporating an Integral Overhead Rescue Attachment to EN1497.

User Body Mass and Harness Standards

For its EN361 Full Body Harnesses with NO Rescue Attachment to EN1497, P&P recommends that user body

mass, including clothing and tools, does not exceed 150kg. Whether in Restraint, Work Positioning or Fall Arrest, the harness is designed to support the body and is constructed of materials that will provide maximum protection as long as the following conditions are satisfied.

1. The harness must fit correctly and be properly adjusted. See section "Fitting Your Harness"
2. If the harness is used in Restraint, there must be no risk of a fall and an anchorage of sufficient strength must be chosen that prevents the user reaching a position, where a fall is possible. For a single person in restraint, it is recommended that the minimum breaking strength of the anchor point should be equivalent to at least three times the user's body mass, in the direction in which the load is to be applied in service. (BS8437: 2005)
3. A simple Work Positioning System consists of full body harness incorporating an EN358 work positioning belt. The work positioning lanyard is attached to the harness side 'D' rings and looped around a structural member or EN795 anchorage to give a hands free environment. In the event that a fall is possible then a secondary Fall Arrest System MUST be used.
4. If the harness is used in Fall Arrest i.e. a fall is possible, then a load limiting or energy absorbing device MUST be used to limit the maximum force on the harness/anchorage to 6kN. (A requirement of the European Standards). Specifiers/Users MUST ensure, if for example total user mass is in excess of 100Kg, that the load limiting or energy absorbing device is rated to limit the force on the body/anchorage to 6kN. See P&P user manual "Energy Absorbing Lanyards" for a detailed explanation of Fall Factor and body mass, available as a free download from www.ppsafety.co.uk
5. When used in fall arrest, ONLY harness attachment points marked with an "A" must be used. Minimum anchorage point strength 12kN.
6. Harnesses manufactured by P&P incorporating a Rescue Attachment to EN1497 are given a Safe Working Load (SWL) of 136kg for rescue. The Rescue Attachment, although NOT designed for Fall Arrest, has also been tested to EN361: 2002 dynamic and static strength to ensure the overall strength of the attachment, in case of misuse.

If the user body mass, including clothing and tools exceeds 150kg, consult your supplier or P&P Safety Limited.

About This Manual

This User Manual is for English speaking countries only. If you require this manual in a different language, please Contact P&P. When this item is sold on, this manual must accompany it and be supplied in the language of the destination country.

Product Details

The Product Code, Serial number and Date of Manufacture of the Harness should be entered on the back page of this manual for future reference and inspection purposes.

Statement of Obsolescence

Due to the ingress of dirt and grit, chemical contamination, edge and surface damage, ultraviolet light degradation, and wear and tear, Fall Protection Equipment manufactured from synthetic fibres (webbing and/or rope) is subject to a manufacturer's statement of obsolescence, which is a requirement of BS EN 365:2004 a European Product Standard.

Any item of Fall Protection Equipment manufactured by P&P with synthetic fibre components (webbing and/or rope) is subject to maximum life span of 10 years from date of manufacture, provided that the item has been correctly stored, maintained and subjected to regular recorded inspections by a trained and competent person. However, if the item fails any inspection, it MUST immediately be withdrawn from service and destroyed.

An item of Fall Protection Equipment incorporating synthetic fibre components (webbing and/or rope), manufactured by P&P from January 2015, which has been subject to a lifetime recorded inspection plan, may give a maximum life span of 10 years. The lifetime recorded inspection plan must be continuous from date of first use and be undertaken by a competent person appointed by the employer. Competent persons must be trained in the use and inspection of the equipment. The lifetime inspection plan must include as a minimum requirement, a pre use check and 6 monthly recorded inspections. The frequency of inspections should be determined by risk assessment, use and environmental conditions.

Reference should also be made to the British Standard BS 8437:2005 – 'The code of practice selection, use and maintenance of personal fall protection systems and equipment for use in the workplace' - clause 13.2 Lifespan, which states:

'Some equipment is given a life span or obsolescence date by the manufacturer. Equipment that has reached such a limit, which has not already been rejected for other reasons, should be withdrawn from service and not used again, unless or until confirmed by a competent person, in writing, that it is acceptable to do so.'

It should be noted that inspections carried out by a trained and competent person are only visual and tactile observations of the condition of the product; they are not testing the residual strength of the equipment. All synthetic fibres deteriorate slowly with age regardless of use and as a result, P&P strongly advises all users of Fall Protection Equipment to follow the manufacturer's statement of obsolescence.

For further advice on this statement, as well as training in the use and inspection of Fall Protection Equipment, please contact P&P Safety Ltd.



Designers, Manufacturers and Suppliers of Quality Height Safety & Rescue Equipment, Training & Consultancy

EC DECLARATION OF CONFORMITY

The Manufacturer in the Community
P&P Safety Limited, 131 New John Street, Aston, Birmingham
B6 4LD United Kingdom

Declares that the PPE described hereafter as the
P&P MK1 Range of Harnesses

is in conformity with the provisions of Council Directive 89/686/EEC and where such is the case, with the national standard transposing harmonizing standard numbers: BSEN 361:2002 or BSEN 358:2000
is identical to the PPE which is subject to EC certificate of conformity number 8097 Issue 2 dated 23 October 2015, issued by;
SATRA Technology Centre Ltd, Wyndham Way, Telford Way Industrial Estate,
Kettering, Northamptonshire NN16 8SD
EC Notified Body No 0321

Declares that the PPE described hereafter as the
P&P FRS MK2, SUPER MK2 & MK3 Range of Harnesses

is in conformity with the provisions of Council Directive 89/686/EEC and where such is the case, with the national standard transposing harmonizing standard numbers: BSEN 361:2002 or BSEN 358:2000
is identical to the PPE which is subject to EC certificate of conformity numbers:
7286 Issue 2 dated 14 May 2015, 6642 Issue 3 dated 14 May 2015, 5891 Issue 2 dated 13 July 2012, issued by;
SATRA Technology Centre Ltd, Wyndham Way, Telford Way Industrial Estate,
Kettering, Northamptonshire NN16 8SD
EC Notified Body No 0321

is subject to the procedures set out in Article 11 point B of Directive 89/686/EEC
under the supervision of the approved body:
The British Standards Institute, 389 Chiswick High Road, London
W4 4AL, United Kingdom
EC Notified Body No 0086

Done at Birmingham, United Kingdom on 17 November 2016

Senior Technical Manager

**P&P Safety Limited, 131 New John Street, Aston,
Birmingham B6 4LD, England.
Telephone: 0121 359 4561 Facsimile: 0121 359 4136
Email: sales@ppsafety.co.uk
Website: www.ppsafety.co.uk**

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P&P MK1, MK2 & MK3 Range of Fall Arrest Harnesses Manual V 6 1116

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