



Fall Protection

Certified to  
AS/NZS 1891.1:2007

Industrial fall-arrest systems  
and devices Harnesses and  
ancillary equipment

Lic: BMP 689960

Certified by  
PRODUCT CERTIFICATION



BSI Certified Product

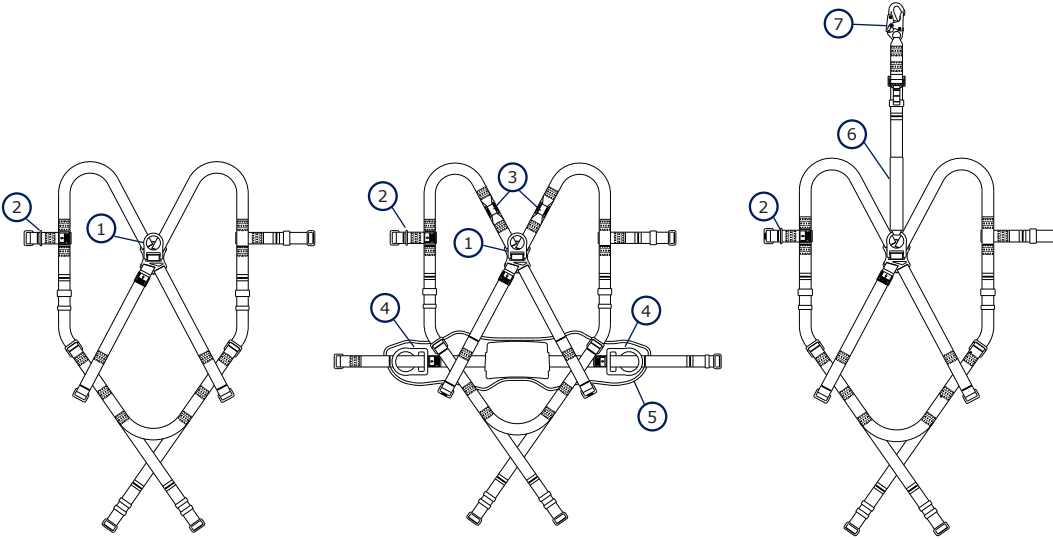
# PROTECTA P50

## FULL BODY HARNESS

### USER INSTRUCTIONS

#### 9598613 REV. D

1



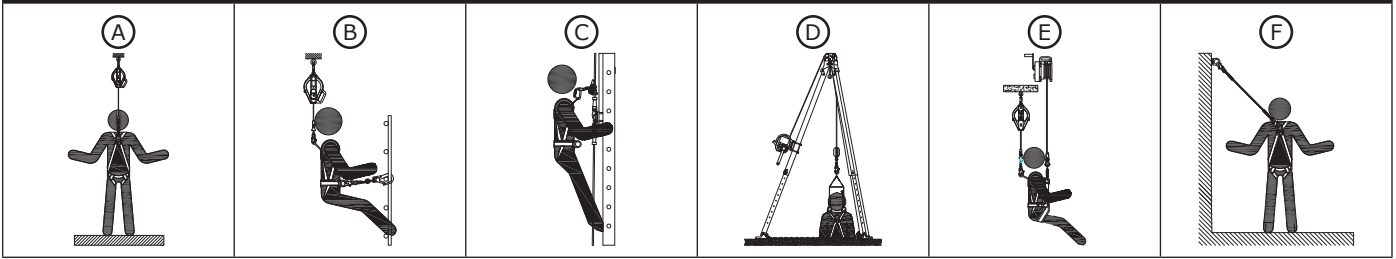
1390061

1390062

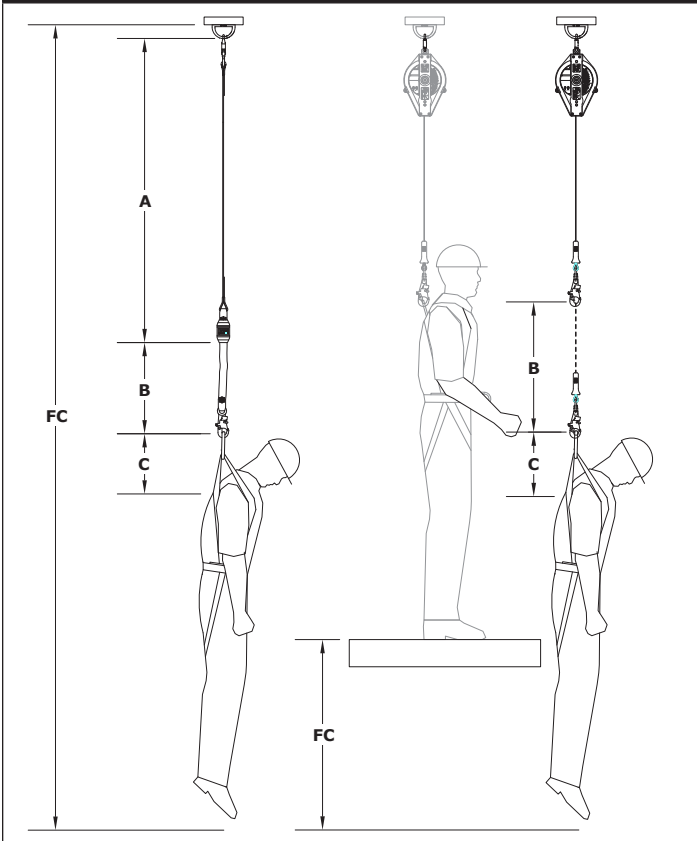
1390063 - 1390064

Models	1	2	3	4	5	6	7	8
	Dorsal	Sternal	Retrieval	Side	Belt	Integral Lanyard	Snap Hook	Scaffold Hook
	Attachment Elements				Features			
1390061	✓	✓						
1390062	✓	✓	✓	✓	✓			
1390063		✓				✓	✓	
1390064		✓				✓		✓

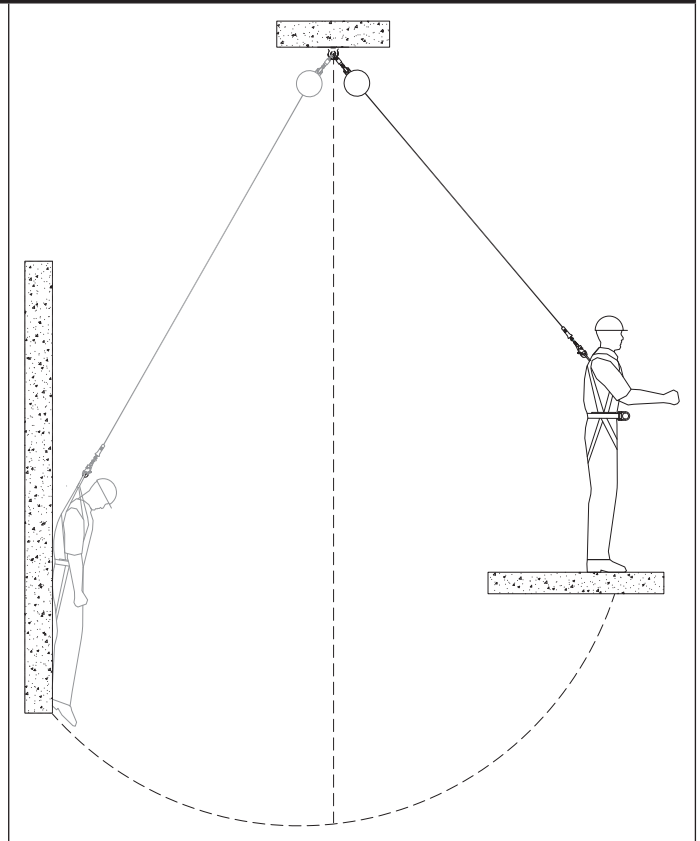
2



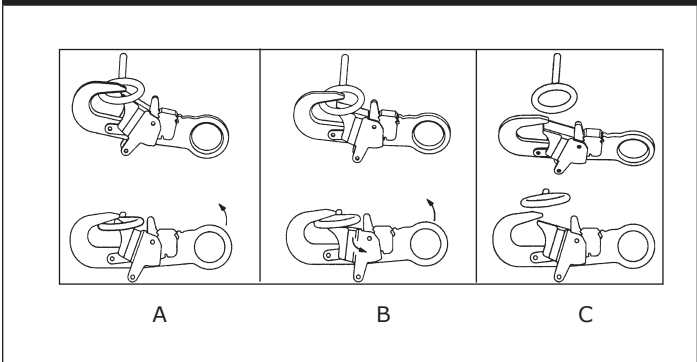
3



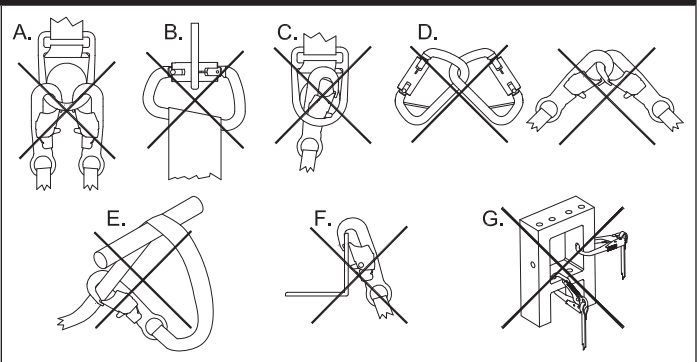
4



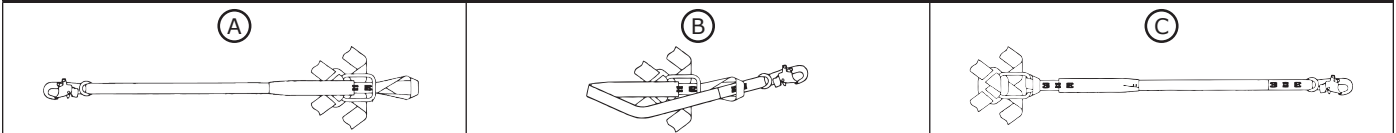
5

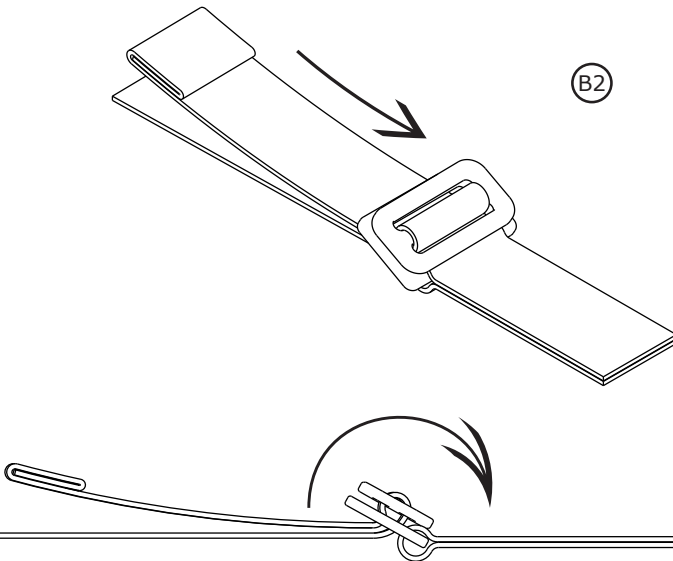
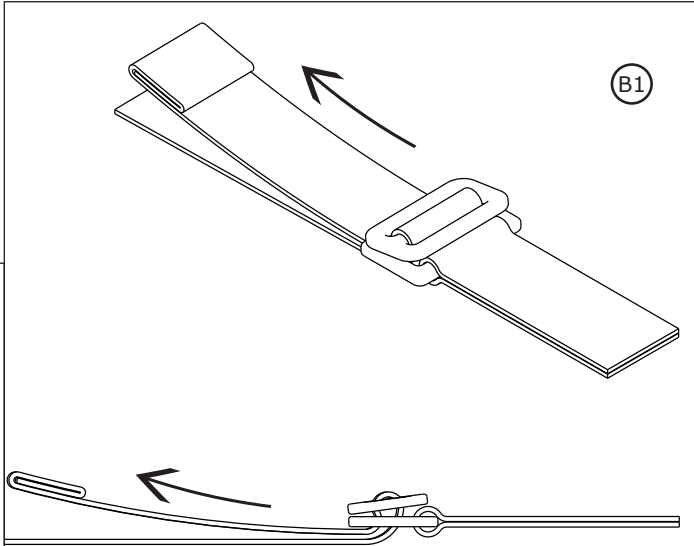
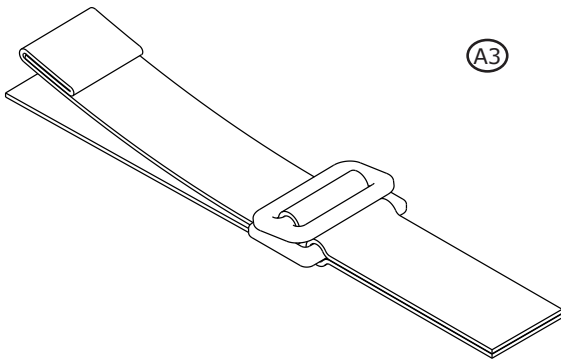
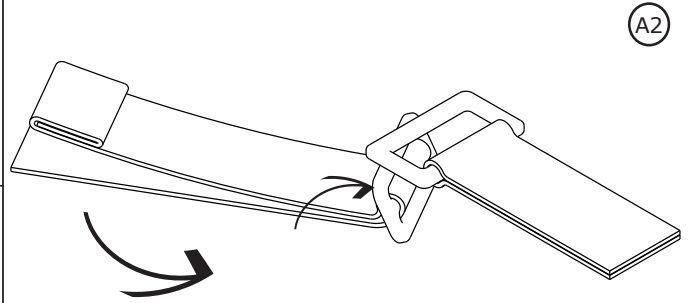
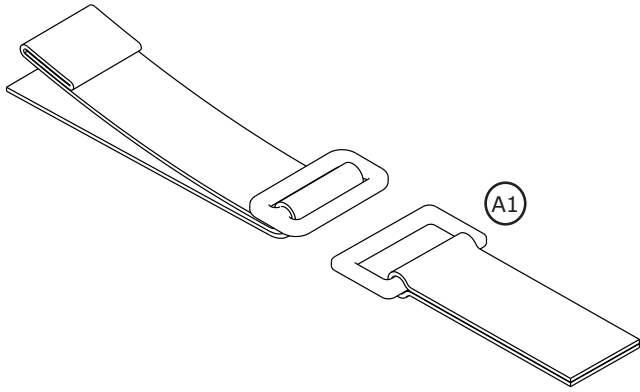


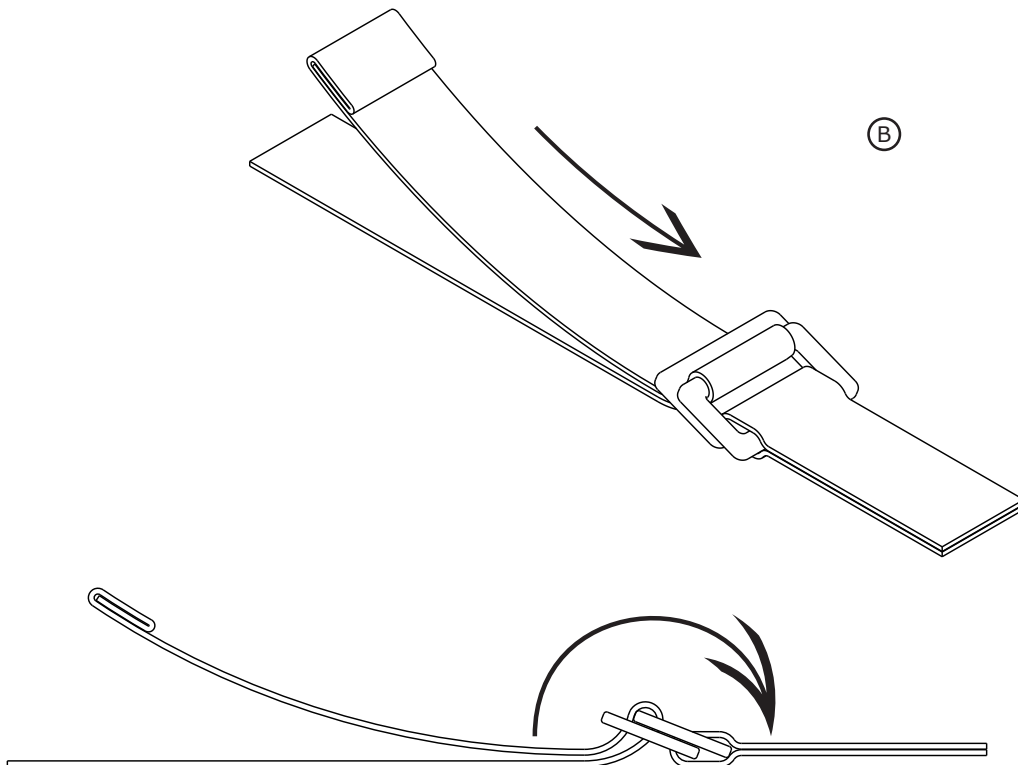
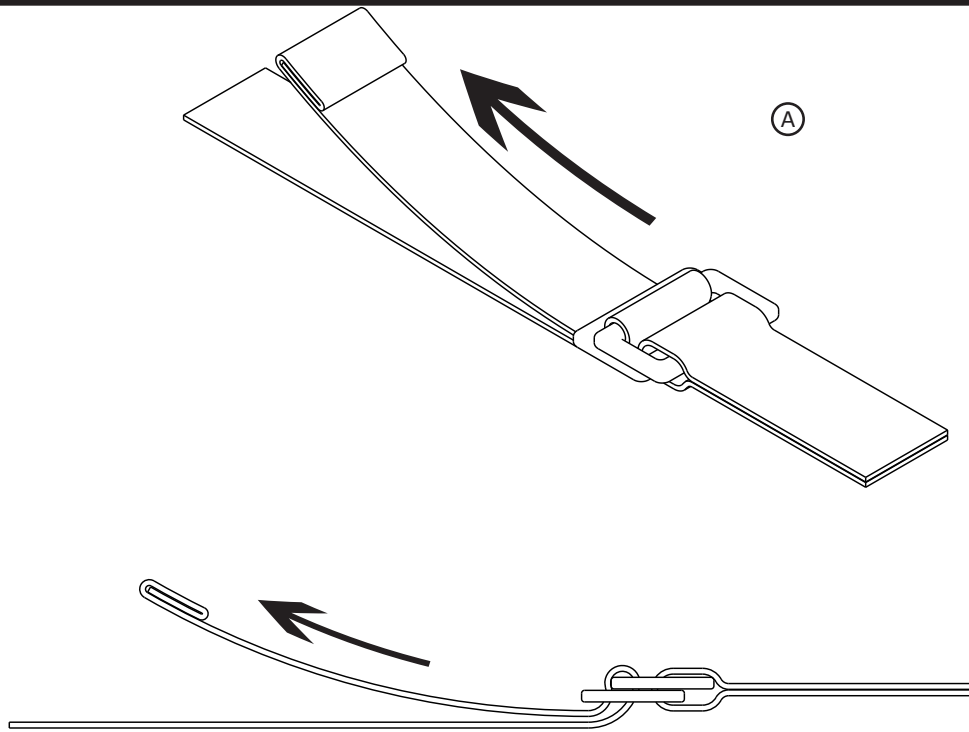
6



7







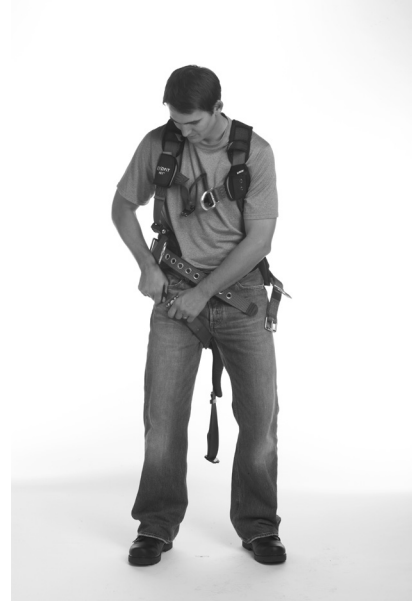
1



2



3



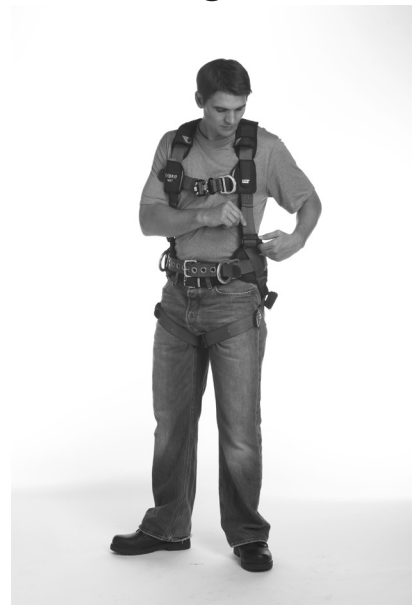
4

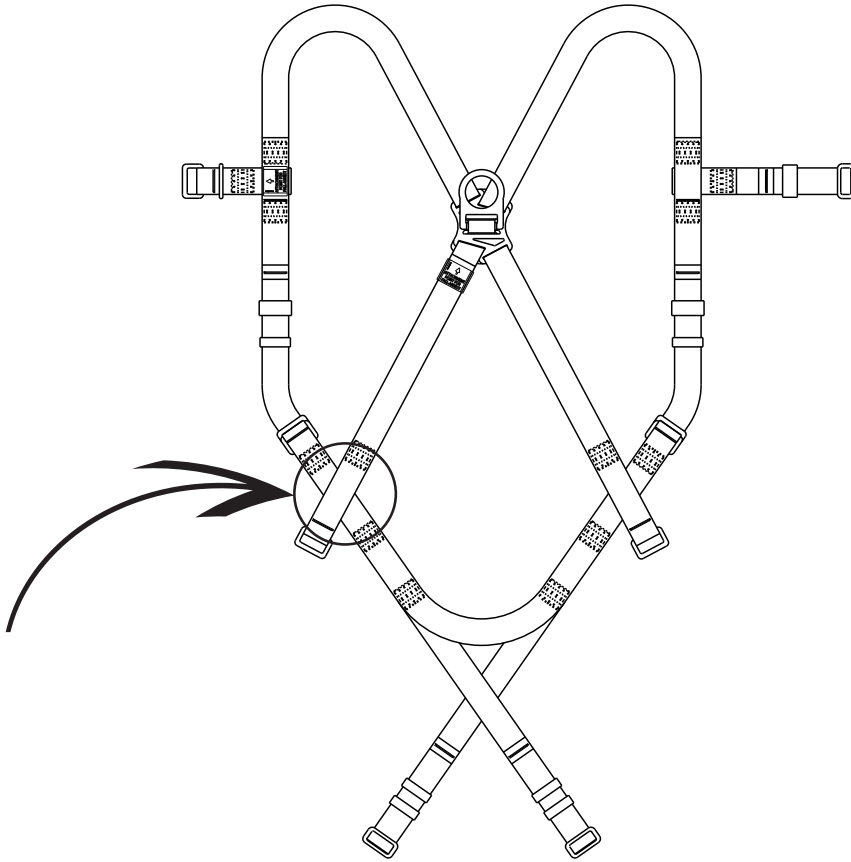


5



6





XW003897030 9598608 REV-E

Fall Protection

Item: Fall Arrest Harness

Part number: XXXXXX

Serial Number: XXXXXX

Date of manufacture: (yy/mm/dd): YY/MM/DD

Date to be removed: (yy/mm/dd): YY/MM/DD

DO NOT REMOVE THIS LABEL

PRODUCT CERTIFICATION

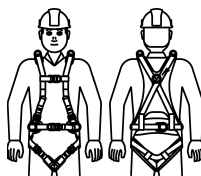


BSI Certified Product

AS/NZS 1891.1:2007  
Lic: BMP 689980

Only competent users  
should use this equipment  
Manufacturers Instructions  
must be followed  
Fall not to exceed 2m

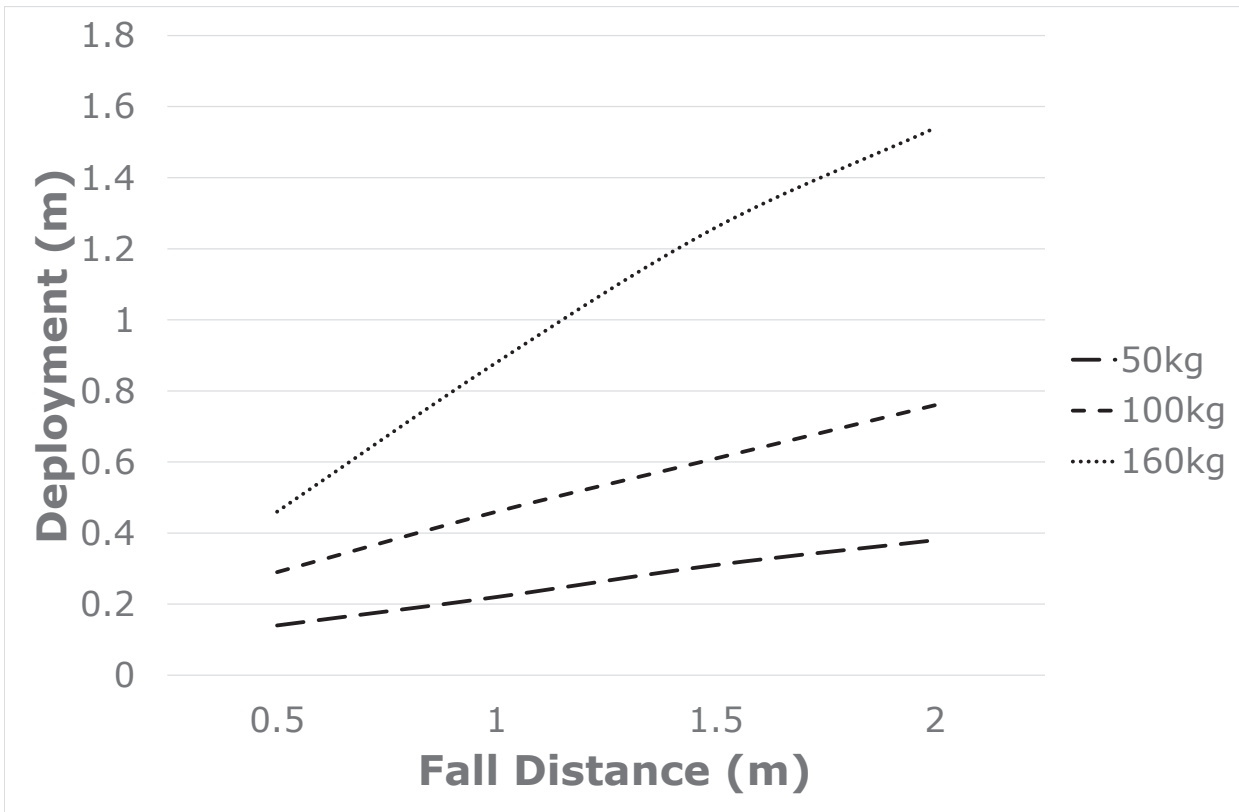
1. Pick harness up by rear D-ring and ensure there are no tangles in the webbing. Disconnect all straps. 2. Hold the harness from behind with the shoulder straps in each hand and don like a jacket. 3. Adjust the shoulder straps to position the sub-pelvic strap underneath the buttocks. Connect and adjust the leg straps to fit snugly. 4. Fasten chest strap buckle and adjust to fit. Connect waist belt if applicable.



INSPECTION LOG Mark label with permanent marker

DATE	INITIAL								

DO NOT REMOVE THIS LABEL



## SAFETY INFORMATION

**Please read, understand, and follow all safety information contained in these instructions, prior to the use of this product. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.**

**These instructions must be provided to the user of the equipment. Retain these instructions for future reference.**

### Intended Use:

This product is used as part of a complete Fall Protection system.

Use in any other application including, but not limited to, material handling, recreational or sports-related activities, or other activities not described in these instructions, is not approved by 3M and could result in serious injury or death.

This product is only to be used by trained users in workplace applications.



### WARNING

This product is used as part of a complete Fall Protection system. All users must be fully trained in the safe installation and operation of their complete Fall Protection system. **Misuse of this product could result in serious injury or death.** For proper selection, operation, installation, maintenance, and service, refer to all instruction manuals and manufacturer recommendations. For more information, see your supervisor or contact 3M Technical Services.

- **To reduce the risks associated with using a Full Body Harness which, if not avoided, could result in serious injury or death:**
  - Inspect the product before each use and after any fall event, in accordance with the procedures specified in these instructions.
  - If inspection reveals an unsafe or defective condition, remove the product from service immediately and clearly tag it "DO NOT USE". Destroy or repair the product as required by these instructions.
  - Any product that has been subject to fall arrest or impact force must be immediately removed from service. Destroy or repair the product as required by these instructions.
  - Ensure that Fall Protection systems assembled from components made by different manufacturers are compatible and meet all applicable Fall Protection regulations, standards, or requirements. Always consult a Competent or Qualified Person before using these systems.
  - Ensure the lifeline is kept free from all hazards including, but not limited to: entanglement with users, other workers, moving machinery, other surrounding objects, or impact from overhead objects that could fall onto the lifeline or users.
  - Do not twist, tie, knot, or allow slack in the lifeline.
  - Do not twist, tie, or knot the product.
  - Do not exceed the number of allowable users specified in these instructions.
  - Ensure the harness is appropriately sized, adjusted, donned, and worn as described in these instructions.
  - Ensure the product is configured and installed properly for safe operation as described in these instructions.
  - Use caution when installing, using, or moving the product as moving parts may create pinch points.
- **To reduce the risks associated with working at height which, if not avoided, could result in serious injury or death:**
  - Your health and physical condition must allow you to safely work at height and to withstand all forces associated with a fall arrest event. Consult your doctor if you have questions regarding your ability to use this equipment.
  - Never exceed allowable capacity of your Fall Protection equipment.
  - Never exceed the maximum free fall distance specified for your Fall Protection equipment.
  - Do not use any Fall Protection equipment that fails inspection, or if you have concerns about the use or suitability of the equipment. Contact 3M Technical Services with any questions.
  - Some subsystem and component combinations may interfere with the operation of this equipment. Only use compatible connections. Contact 3M Technical Services before using this equipment in combination with components or subsystems other than those described in these instructions.
  - Use extra precautions when working around moving machinery, electrical hazards, extreme temperatures, chemical hazards, explosive or toxic gases, sharp edges, abrasive surfaces, or below overhead materials that could fall onto you or your Fall Protection equipment.
  - Ensure use of your product is rated for the hazards present in your work environment.
  - Ensure there is sufficient fall clearance when working at height.
  - Never modify or alter your Fall Protection equipment. Only 3M, or persons authorized in writing by 3M, may make repairs to 3M equipment.
  - Before using Fall Protection equipment, ensure a written rescue plan is in place to provide prompt rescue if a fall incident occurs.
  - If a fall incident occurs, immediately seek medical attention for the fallen worker.
  - Only use a full body harness for Fall Arrest applications. Do not use a body belt.
  - Minimize swing falls by working as directly below the anchorage point as possible.
  - A secondary Fall Protection system must be used when training with this product. Trainees must not be exposed to an unintended fall hazard.
  - Always wear appropriate Personal Protective Equipment when installing, using, or inspecting the product.
  - Never work below a suspended load or worker.
  - Always maintain 100% tie-off.



☒ Before using this equipment, record the product identification information from the ID label in the "Inspection and Maintenance Log" at the back of this manual.

## DESCRIPTION

Figure 1 defines available Full Body Harness models. Harness Models are available with various combinations of the following features:

	Figure 1 Reference:	Description:
<b>Sizes</b>	U	Universal
<b>Attachment Elements</b>	①	Dorsal
	②	Sternal
	③	Retrieval
	④	Side
<b>Features</b>	⑤	Belt
	⑥	Integral Lanyard
	⑦	Snap Hook - 22.2kN (5,000lb) body, 16kN (3,600 lb) gate, 20mm gate opening
	⑧	Scaffold Hook - 22.2kN (5,000lb) body, 16kN (3,600 lb) gate, 65mm gate opening

## SPECIFICATIONS

<b>Performance:</b>	
Maximum Free Fall Distance	2 m (6.6 ft)
Connecting System Maximum Allowable Fall Arrest Force	6 kN (1,349 lb)
Capacity <sup>1</sup>	136 kg (310 lb) (1390061 and 1390062)
Capacity	160 kg (1390063 and 1390064 only)
<b>Materials:</b>	
Webbing	Polyester - 27 kN (6,000 lb) Tensile Strength
Pad Covers	Blend of Nylon and Polyester
Thread	Polyester
D-Rings	Alloy Steel - 22.2 kN (5,000 lb) Tensile Strength
Pass Thru Connectors	Alloy Steel - 17.8 kN (4,000 lb) Tensile Strength
Two Bar Torso Adjusters	Alloy Steel - 17.8 kN (4,000 lb) Tensile Strength

**1 Items 1390061 and 1390062 only.** When used in conjunction with a load reducing subsystem (AS/NZS1891.1 certified shock absorbing lanyard or AS/NZS 1891.3 compliant Self Retracting Lifeline) the product is permitted for use up to the capacity of the connected subsystem.

## 1.0 APPLICATIONS

- 1.1 PURPOSE:** Full Body Harnesses are to be used as components in Personal Fall Protection System designed to prevent a fall or safely arrest a fall (see Figure 2). Full Body Harnesses are used in the following applications:

(A)	<b>Fall Arrest (AS/NZS1891.4):</b> Personal fall arrest systems typically include a Full Body Harness and a connecting subsystem (Energy Absorbing Lanyard, Self-Retracting Device, etc.). Maximum arresting force must not exceed 6 kN (1,349 lb). <i>Attachment Elements:</i> Dorsal (feet first with a 0.6 m maximum free fall when using a Self-Retracting Device or 2 m maximum free fall when using an Energy Absorbing Lanyard), Sternal (feet first with a 0.6 m maximum free fall), Frontal (feet first with a 0.6 m maximum free fall). <i>Anchorage Strength:</i> Selected anchorage must sustain loads of 15 kN (3,372 lb) or greater.
(B)	<b>Work Positioning (AS/NZS1891.4):</b> Work positioning systems typically include a Full Body Harness, positioning lanyard, and a back-up personal fall arrest system. For work positioning applications, connect the work positioning subsystem (example: lanyard, Y-lanyard, etc.) to the lower (hip level) side or belt mounted work positioning attachment anchorage elements (D-Rings). Never use these connection points for fall arrest. Maximum free fall distance 0.6m (2 ft) <i>Anchorage Strength:</i> Selected anchorage must sustain loads of 12 kN (2698 lb) for single person use or 18kN (4047 lb) or greater for 2 person use.
(C)	<b>Climbing (AS/NZS1891.3):</b> The Full Body Harness is used as a component of a climbing system to prevent the user from falling when climbing a ladder or other climbing structure. Climbing systems typically include a Full Body Harness, vertical cable or rail attached to the structure, and climbing sleeve. For ladder climbing applications, harnesses equipped with a frontal D-Ring in the sternal location may be used for fall arrest on fixed ladder climbing systems. <i>Attachment Elements:</i> Sternal. <i>Anchorage Strength:</i> Structure to which the climbing system is attached must sustain the loads required by the climbing system manufacturer's documentation.
(D)	<b>Rescue:</b> The Full Body Harness is used as a component of a rescue system. Rescue systems are configured depending on the type of rescue. For limited access (confined space) applications, harnesses equipped with D-Rings on the shoulders may be used for entry and egress into confined spaces where worker profile is an issue.
(E)	<b>Controlled Descent:</b> For controlled descent applications, harnesses equipped with a single sternal level D-Ring, one or two frontal mounted D-Rings, or a pair of connectors originating below the waist (such as a seat sling) may be used for connection to a descent or evacuation system.
(F)	<b>Restraint (AS/NZS1891.4):</b> The Full Body Harness is used as a component of a restraint system to prevent the user from reaching a fall hazard. Restraint systems typically include a Full Body Harness and a lanyard or restraint line.

- 1.2 STANDARDS:** Harnesses included in this manual conform to the standard(s) identified on the front cover of this instruction. If this product is resold outside the original country of destination, the re-seller must provide these instructions in the language of the country in which the product will be used.

- 1.3 TRAINING:** It is the responsibility of the user and the purchaser of this equipment to assure that they are familiar with these instructions, trained in the correct care and use of, and are aware of the operating characteristics, application limits, and the consequences of improper use of this equipment.

- 1.4 LIMITATIONS:** Always consider the following application limitations before using this equipment:

- **CAPACITY:** The Full Body Harness is designed for use by persons with a combined weight (clothing, tools, etc.) of no more than that outlined in the Specifications of this manual. Make sure all of the components in your system are rated to a capacity appropriate to your application.
- **FREE FALL:** Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 2 m (6.6 ft)<sup>1</sup>. Restraint systems must be rigged so that no vertical free fall is possible. Work positioning systems must be rigged so that free fall is limited to 0.6 m (2 ft) or less. Personnel riding systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 0.46 m (18 in) or less. Rescue systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information.
- **FALL CLEARANCE:** Figure 3 illustrates the components of a Fall Arrest. There must be sufficient Fall Clearance (FC) to arrest a fall before the user strikes the ground or other obstruction. Clearance is affected by a number of factors including: (A) Lanyard Length, (B) Lanyard Deceleration Distance or SRL Maximum Arrest Distance, (C) Harness Stretch and D-Ring/Connector Length and Settling (typically a Safety Factor of 1 m (3.3 ft)). Refer to the instructions included with your Fall Arrest subsystem for specifics regarding Fall Clearance calculation. For integral systems, refer to figure 12.
- **SWING FALLS:** Swing Falls occur when the anchorage point is not directly above the point where a fall occurs (see Figure 4). The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as directly below the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a Self-Retracting Device or other variable length connecting subsystem is used.
- **EXTENDED SUSPENSION:** A Full Body Harness is not intended for use in extended suspension applications. If the user is going to be suspended for an extended length of time it is recommended that some form of seat support be used. 3M recommends a seat board, suspension work seat, seat sling, or a boatswain chair. Contact 3M Fall Protection for more information on these items.
- **ENVIRONMENTAL HAZARDS:** Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to; heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges. If this product is exposed to a hazard, contact 3M Fall Protection to determine if the product can remain in service.
- **HARNESSES FOR HIGH TEMPERATURE ENVIRONMENTS:** Harnesses with Kevlar webbing are designed for use in high temperature environments, with limitations: Kevlar webbing begins to char at 426° to 480°Celsius (800-900° F). Kevlar webbing can withstand limited contact exposure to temperatures up to 538° C (1000° F). Polyester webbing loses strength at 148° to 204° C (300-400° F). PVC coating on hardware has a melting point of approximately 176° C (350° F).

☒ Although PVC coated and zinc plated hardware exhibit excellent corrosion resistance in chemical, acidic, alkaline, and atmospheric conditions, frequent inspections may be required. Consult with 3M if you question the use of this equipment in hazardous environments.

**1 Fall Arrest Free Falls:** Free falls greater than 2 m (6.6 ft) may be permitted when users are secured to the anchorage with a connecting subsystem which limits the arresting force to 6 kN (1,349 lb) and is authorized for such use (i.e., Protecta Pro, DBI-SALA Force 2 and EZ-Stop Lanyards).

## 2.0 SYSTEM USE

- 2.1 RESCUE PLAN:** When using this equipment and connecting subsystem(s), the employer must have a rescue plan and the means at hand to implement and communicate that plan to users<sup>2</sup>, authorized persons<sup>3</sup>, and rescuers<sup>4</sup>.
- 2.2 INSPECTION FREQUENCY:** The Full Body Harness shall be inspected by the user before and after each use and by a competent person<sup>5</sup> other than the user at intervals of no more than six months<sup>6</sup>. Inspection procedures are described in the *User Instruction Manual's "Inspection and Maintenance Log"*. Results of each Competent Person inspection should be recorded on copies of the *"Inspection and Maintenance Log"*.

☒ *Where required by 3M, due to complexity or innovation of the equipment; or where critical knowledge is needed in dismantling, reassembly, or assessment of the equipment, periodic examinations shall only be conducted by 3M or persons or organizations authorised by 3M.*

- 2.3 COMPATIBILITY OF COMPONENTS:** 3M equipment is designed for use with 3M approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system.
- 2.4 COMPATIBILITY OF CONNECTORS:** Connectors are compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact 3M if you have any questions about compatibility. Connectors (hooks, carabiners, and D-Rings) must be capable of supporting at least 22.2 kN (5,000 lb). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (See Figure 5). Connectors must be compatible in size, shape, and strength. If the connecting element to which a snap hook (shown) or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate to open, allowing the snap hook or carabiner to disengage from the connecting point. Self-locking snap hooks and carabiners are required.
- 2.5 MAKING CONNECTIONS:** Use only self-locking snap hooks and carabiners with this equipment. Use only connectors that are suitable for each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.
- 3M connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 6 for inappropriate connections. 3M snap hooks and carabiners should not be connected:
- A. To a D-Ring to which another connector is attached.
  - B. In a manner that would result in a load on the gate.
  - C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
  - D. To each other.
  - E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).
  - F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.
  - G. In a manner that does not allow the connector to align properly while under load.
- 2.6 CONNECTING SUBSYSTEMS:** Connecting subsystems (self-retracting lifeline, lanyard, rope grab and lifeline, cable sleeve, etc.) must be suitable for your application (See section 1.1). See the subsystem manufacturer's instructions for additional information. Some harness models have web loop connection points. Do not use snap hooks to connect to web loops. Use a self-locking carabiner to connect to a web loop. Ensure the carabiner cannot cross-gate load (load against the gate rather than along the major axis of the carabiner). Some lanyards are designed to choke onto a web loop to provide a compatible connection. Lanyards may be sewn directly to the web loop forming a permanent connection. Do not make multiple connections onto one web loop, unless choking two lanyards onto a properly sized web loop. To choke the lanyard on a web loop (Figure 7): A) Insert the lanyard web loop through the web loop or D-Ring on the harness. B) Insert the appropriate end of the lanyard through the lanyard web loop. C) Pull the lanyard through the connecting web loop to secure.
- 2.7 LANYARD PARKING:** The Lanyard Parking Attachment is for attaching the free end of a Lanyard or harness mounted Self-Retracting Device when not connected to an Anchorage Connection Point for purposes of fall protection. Lanyard Parking Attachments shall never be used as a Fall Protection Attachment Element.

When not connected to an Anchorage Connection Point, an unconnected Lanyard Leg must be properly parked on the harness or secured in the user's hand (as in 100% Tie-Off applications). Free hanging Lanyard Legs can trip the user or catch on surrounding objects resulting in a fall.

**2 User:** A person who performs activities at heights while protected by a personal fall protection system.

**3 Authorized Person:** A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard.

**4 Rescuer:** Person or persons other than the rescue subject acting to perform an assisted rescue by operation of a rescue system.

**5 Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

**6 Inspection Frequency:** Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of competent person inspections.

### 3.0 HARNESS USE

**3.1 BEFORE EACH USE** of this equipment inspect it according to the "Inspection and Maintenance Log" (Table 1).

**3.2 PLAN** your system before use. Consider all factors that will affect your safety during use of this equipment. The following list gives important points to consider when planning your system:

- **Anchorage:** Select an anchorage capable of sustaining the Static Load requirements of the intended fall protection application (see Section 1.1). The anchorage location should address Free Fall, Fall Clearance, Swing Fall, and Environmental limitations described in Section 1.4.
- **Sharp Edges:** Avoid working where system components may be in contact with, or abrade against, unprotected sharp edges.
- **After A Fall:** Components which have been subjected to the forces of arresting a fall must be removed from service and destroyed.
- **Rescue:** The employer must have a rescue plan when using this equipment. The employer must have the ability to perform a rescue quickly and safely.
- **Rescue Harness:** Rescue Harnesses are intended to be worn during normal work activities. Before using rescue attachment elements for the first time, the user should carry out a suspension test in safe conditions to ensure the harness is sized and fitted for optimal comfort during suspension.

**3.3 BUCKLES:** Protecta P50 Full Body Harnesses are equipped with Pass Thru Buckles for fastening and adjusting Leg Straps, Chest Straps and body belts. Figure 8 illustrates the operation of the Pass Thru Buckles:

**1. Pass Thru Buckles:**

- A. To fasten the Pass Thru Buckle: Insert the Three bar portion of the buckle through the opening in the Two Bar portion.
- B. To tighten the Web Strap, pull the loose web end as illustrated in Figure 8 B1. To loosen the Web Strap, rotate the buckle as illustrated in Figure 8 B2.
- C. To release the Pass Thru Buckle: Pass the Three bar portion of the buckle back through the opening in the Two Bar portion.

**3.4 ADJUSTMENTS:** Protecta P50 Harnesses are equipped with a pair of Two Bar Torso Adjusters for adjusting the Shoulder Straps. Figure 9 illustrates adjustment of the Two Bar Torso Adjusters:

**1. Two Bar Torso Adjusters:** To adjust the Shoulder Straps with the Two Bar Torso Adjusters:

- A. Pull on the loose web end as illustrated in Figure 9 A to tighten the Shoulder Straps.
- B. Rotate the buckle as illustrated in Figure 9 B to loosen the Shoulder Straps.

**3.5 DONNING AND FITTING THE PROTECTA P50 FULL BODY HARNESS:** Figure 10 illustrates donning and fitting of the Protecta P50 Full Body Harness. Prior to each use, inspect the harness per the checklist on the "Inspection and Maintenance Log (Table 1)". To don and fit the harness:

☒ Procedures for buckling and adjusting the straps on your Protecta P50 Harness will vary with the harness model. See Sections 3.3 thru 3.4 and Figures 8 through 9 for details.

1. Lift up and hold the harness by the back Dorsal D-Ring. Ensure the straps are not twisted.
2. Grasp the Shoulder Straps and slip the harness onto one arm. The Dorsal D-Ring will be located on your back side. Ensure that the straps are not tangled and hang freely. Slip your free arm into the harness and position the Shoulder Straps on top of your shoulders. The Chest Strap and Chest Buckle will be positioned on the front side when worn properly.
3. Reach between your legs and grasp the Leg Strap on your right side. Bring the strap up between your legs; buckle to the mating receptor on your right hip, and adjust the Leg Strap for a snug comfortable fit (see Section 3.3 for buckle operation). When properly adjusted, tuck the loose end of the Leg Strap under the Strap Keeper.  
  
Repeat this process to buckle and adjust the left Leg Strap.
4. Adjust and buckle the Body Belt (see Section 3.3 for buckle operation).
5. Buckle and adjust the Chest Strap (see Section 3.3 for buckle operation). The Chest Strap should be 15 cm (6 in.) down from the top of your shoulders. When properly adjusted, tuck the loose end of the Chest Strap under the Strap Keeper.
6. Adjust the Shoulder Straps for a Snug Fit with the Two Bar Torso Adjusters (see Section 3.4 for Torso Adjuster operation). Left and right sides of Shoulder Straps should be adjusted to the same length and the Chest Strap should be centered on your lower chest, 15 cm (6 in.) down from the shoulders. The back Dorsal D-Ring should be centered between your Shoulder Blades. The front Sternal D-Ring should be located laterally within 51 mm (2 in.) of the vertical center line of the harness.

- 3.6 USE OF FALL ARREST D-RING OR ATTACHMENT ELEMENT:** For Fall Arrest applications connect to the Dorsal D-ring or attachment element on your back, between your shoulder blades. Side D-rings, if present, are for Positioning or Restraint applications only. Shoulder D-rings are for Rescue or Retrieval applications only. The front Sternal D-ring is for Ladder Climbing or Positioning. D-rings on a Suspension Seat are for Suspension or Positioning applications only. (See Section 1.1.).
- 3.7 MAKING CONNECTIONS:** When using a hook to connect to an anchorage or when coupling components of the system together, ensure roll-out cannot occur. Roll-out occurs when interference between the hook and mating connector causes the hook gate to unintentionally open and release. Self-locking snap hooks and carabiners should be used to reduce the possibility of roll-out. Do not use hooks or connectors that will not completely close over the attachment object. See subsystem manufacturer's instructions for more information on making connections.
- 3.8 CONNECTING SYSTEM COMPONENTS:** After fitting the Protecta P50 Harness, the user may then connect to other system components. Follow the guidelines in Section 2 and the manufacturer's instructions included with the component. When connecting a system component to the dorsal, or other non visible attachment, the connection should be inspected by another person to ensure a proper connection has been made and the connector's gate has closed correctly. Alternatively, where suitable, the system components may be connected prior to donning the harness.

## **4.0 INSPECTION**

- 4.1 INSPECTION FREQUENCY:** The Protecta P50 Full Body Harness must be inspected at the intervals defined in Section 2.2. Inspection procedures are described on the "Inspection and Maintenance Log" (Table 1).
- 4.2 DEFECTS:** If inspection reveals a defective condition, or is deemed unsuitable for use by a competent person, remove unit from service immediately and destroy.
- 4.3 PRODUCT LIFE:** The functional life of Protecta P50 Harnesses is determined by work conditions and maintenance. As long as the product passes inspection criteria, it may remain in service for up to 10 years from the date of manufacture.

## **5.0 MAINTENANCE, SERVICING, STORAGE**

- 5.1 CLEANING INSTRUCTIONS:** Clean the Protecta P50 Full Body Harness as follows:

1. Spot clean the harness with water and a mild soap solution.

☒ Use a bleach-free detergent when washing the harness and pads. Fabric softener or dryer sheets **SHOULD NOT** be used when laundering and drying the harness and pads.

2. Water temperature for wash and rinse must not exceed 70° C (160° F).
3. The harness and pads may be air dried or tumble dried on low heat not exceeding 90° C (200° F).

☒ More information on cleaning is available from 3M. If you have questions concerning the condition of your harness, or have any doubt about putting it into service, contact 3M.

- 5.2 AUTHORIZED SERVICE:** Additional maintenance and servicing procedures must be completed by a factory authorized service center. Authorization must be in writing. Do not attempt to alter the unit in any way.
- 5.3 STORAGE AND TRANSPORT:** Store and transport the Protecta P50 Full Body Harness in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect the harness after extended storage.

## **6.0 LABELING:**

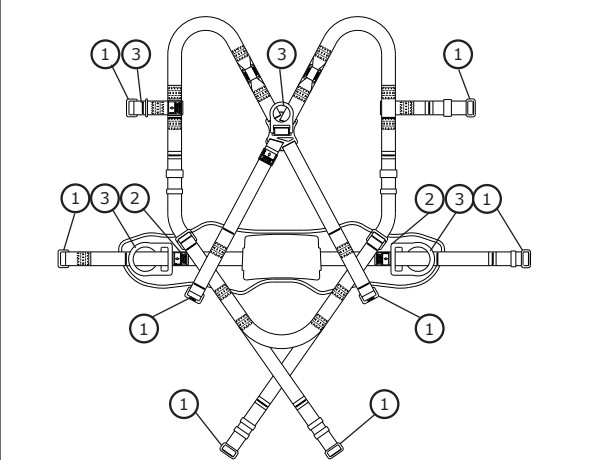
Figure 11 illustrates product labels and their location on the Protecta P50 Full Body Harness. All labeling must be present and fully legible.

**Table 1 – Inspection and Maintenance Log**


<b>Serial Number(s):</b>		<b>Date Purchased:</b>	
<b>Model Number:</b>		<b>Date of First Use:</b>	
<b>Inspection Date:</b>		<b>Inspected By:</b>	
<b>Component:</b>	<b>Inspection: (See Section 2.2 for Inspection Frequency)</b>	<b>User</b>	<b>Competent Person</b>
Harness Hardware (Diagram 1)	Inspect harness hardware including buckles (1), adjusters (2), D-rings (3), etc. These items must not be damaged, broken, or distorted, and must be free of sharp edges, burrs, cracks, worn parts, or corrosion. Ensure buckles and adjusters work smoothly.	<input type="checkbox"/>	<input type="checkbox"/>
Webbing & Stitching (Diagram 2)	Inspect webbing; material must be free of frayed, cut, or broken fibers. Check for tears, abrasions, mold, burns, or discoloration. Inspect stitching; Check for pulled or cut stitches. Broken stitches may be an indication that the harness has been impact loaded and must be removed from service.	<input type="checkbox"/>	<input type="checkbox"/>
Integral Lanyard (Diagram 3)	Inspect the Integral Lanyard (if applicable) has not been deployed. Deployed section (1).	<input type="checkbox"/>	<input type="checkbox"/>
Labels	All labels should be present and fully legible. See Figure 11.	<input type="checkbox"/>	<input type="checkbox"/>
System & Subsystem Components	Inspect each system component or subsystem according to the manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>


  


**Diagram 1 – Hardware**




**Diagram 2 – Webbing**


Cut 

Frayed 

Heavily Soiled 

Welding Burns 

**Diagram 3 – Integral Lanyard**



<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:
<b>Corrective Action/Maintenance:</b>	Approved By:
	Date:

This page intentionally left blank.



## **3M AUSTRALIA PTY LTD & 3M NEW ZEALAND LTD ("3M") LIMITATION OF LIABILITY**

To the extent permitted by law, 3M's liability and the liability of the person who sold you this product, is limited at 3M's option, to the repair or replacement of the goods or the refund of the purchase price of the goods. 3M will not be liable for any equipment damage resulting from wear, abuse, damage in transit, failure to maintain the product or other damage beyond the control of 3M.

Except to the extent that such liability is not able to be excluded by law, all other liability of 3M whether arising from negligence or otherwise is expressly excluded. For the avoidance of doubt, except where required by the Australian Consumer Law or any other law that cannot be excluded, 3M will not be liable for any indirect, special, incidental or consequential loss (including, but not limited to, loss of profits, and the costs of inspection, testing, storage or transportation).

3M reserves the right to require that the equipment be returned to its plant for inspection before determining the appropriate course of action.



### Fall Protection

#### **USA**

3833 SALA Way  
Red Wing, MN 55066-5005  
Toll Free: 800.328.6146  
Phone: 651.388.8282  
Fax: 651.388.5065  
3Mfallprotection@mmm.com

#### **Brazil**

Rodovia Anhanguera, km 110  
Sumaré - SP  
CEP: 13181-900  
Brasil  
Phone: 0800-013-2333  
falecoma3m@mmm.com

#### **Mexico**

Av. Santa Fe No. 190  
Col. Santa Fe, Ciudad de Mexico  
CP 01219, Mexico  
Phone: 01 800 120 3636  
3msaludocupacional@mmm.com

#### **Canada**

600 Edwards Blvd, Unit #2  
Mississauga, ON L5T 2V7  
Phone: 905.795.9333  
Toll-Free: 800.387.7484  
Fax: 888.387.7484  
3Mfallprotection-ca@mmm.com

#### **EMEA (Europe, Middle East, Africa)**

*EMEA Headquarters:*  
Le Broc Center  
Z.I. 1re Avenue - BP15  
06511 Carros Le Broc Cedex  
France  
Phone: + 33 04 97 10 00 10  
Fax: + 33 04 93 08 79 70  
informationfallprotection@mmm.com

#### **Australia & New Zealand**

137 McCredie Road  
Guildford  
Sydney, NSW, 2161  
Australia  
Toll-Free : 1800 245 002 (AUS)  
Toll-Free : 0800 212 505 (NZ)  
3msafetyaucs@mmm.com

#### **Asia**

*Singapore:*  
1 Yishun Avenue 7  
Singapore 768923  
Phone: +65-6450 8888  
Fax: +65-6552 2113  
TotalFallProtection@mmm.com

#### *China:*

38/F, Maxdo Center, 8 Xing Yi Rd  
Shanghai 200336, P R China  
Phone: +86 21 62753535  
Fax: +86 21 52906521  
3MFallProtection-CN@mmm.com

#### *Korea:*

3M Koread Ltd  
20F, 82, Uisadang-daero,  
Yeongdeungpo-gu, Seoul  
Phone: +82-80-033-4114  
Fax: +82-2-3771-4271  
TotalFallProtection@mmm.com

#### *Japan:*

3M Japan Ltd  
6-7-29, Kitashinagawa, Shinagawa-ku, Tokyo  
Phone: +81-570-011-321  
Fax: +81-3-6409-5818  
psd.jp@mmm.com

**3M.com/FallProtection**



Quality  
ISO 9001  
SAI GLOBAL



Environment  
ISO 14001  
SAI GLOBAL



Health & Safety  
AS/NZS 4801  
SAI GLOBAL