

# OPERATION

## MUST BE READ PRIOR TO USE

1. Prior to use, ensure all operating procedures have been read and understood.
2. This fall arrest system is only to be used by competent persons who have experience and training in the safe use of the system and associated equipment.
3. Ensure all workplace OH&S requirements are identified and understood. A risk assessment with a safe work method procedure must be completed and approved by management prior to work commencing.
4. This system requires periodic inspection and maintenance by a qualified height safety inspector. The system **MUST NOT** be used if the service date is overdue.
5. A rescue plan must be devised and be ready to be implemented prior to usage of a fall arrest system.
6. Authorisation to access any risk area must be obtained from the person in control of the workplace.
7. Only approved full body harness, gear and equipment with energy absorber certified to Australian Standard AS/NZS 1891, to be used with this system.
8. Visually inspect the system for damage prior to use. System must not be used if there is any deterioration or deformation of any components or structure to which the system is attached.
9. If the safety system is damaged or has arrested a fall, discontinue use until it has been fully inspected and recertified by a competent height safety equipment inspector.
10. Ensure all fixings, fittings and components are securely attached. Any tightening and replacement of components must be carried out by a competent height safety inspector.
11. Persons must not be allowed to work alone in fall arrest situations in case emergency rescue assistance or first aid is required.
12. All applicable Australian Standards, OHS Acts & Regulations, and Codes of Practice & Guidelines must be read and obeyed when using this safety system.
13. This user manual does not in any way, replace the need for completion of a recognised height safety training course by a Registered Training Organisation (RTO).

**⚠ Failure to follow all warnings, usage and maintenance instructions may result in serious injury or death.**



# LIMITATIONS

## MUST BE READ PRIOR TO USE

1. Only to be used by competent persons with proof of training by a Registered Training Organisation (RTO) in the use of height safety and fall protection systems.
2. Harness gear is susceptible to deterioration when exposed to chemicals or hazardous environments and must be approved by the manufacturer for use in these applications.
3. This system to be used with the Arresta shuttle only. Operators of this system must be connected via a lanyard with a personal energy absorber, in accordance to Australian Standard AS/NZS 1891.1.
4. The Arresta system is for single person use only.
5. Once at the top of the ladder, the operator must only detach from the system once safely behind the ladder safety bar and there is no risk of a fall.
6. Do not tamper with system components.
7. This system is not to be used for tethering or lifting machinery or equipment.
8. The safety system must be recertified by a competent height safety inspector as recommended:
  - Non corrosive/mild environment - 12 monthly
  - Corrosive/harsh environment - 6 monthly (more frequent inspection may be required)

**⚠ Sayfa recommends that persons using fall arrest systems do not work alone in case of an emergency. Should any part of the system/equipment have been subjected to abnormal loading, use must be discontinued until replaced or recertified by a competent height safety inspector.**



# SAFE USE PROCEDURE

## STEP 1

Ensure a full body harness with front fall arrest loops is used with this system.

⚠ **Harness gear must be certified to Australian Standards AS/NZ 1981.1.**

⚠ **Arresta system must be used with a tear-web energy absorbing lanyard connected to fall arrest front loops harness.**

⚠ **Ensure harness gear and Arresta system serviceability dates are current.**



## STEP 2

Remove karabiner from shuttle unit and push Arresta shuttle cam to the upward limit.



## STEP 3

Turn Arresta shuttle onto its side and insert cable into horizontal port.



## STEP 4

Return Arresta unit to vertical position which will locate shuttle onto cable.

⚠ **Ensure indicator arrow on shuttle is pointing upwards.**





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# SAFE USE PROCEDURE

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## STEP 5

Lock Arresta shuttle onto line by inserting karabiner. Ensure karabiner screw gate is locked.



## STEP 6

Attach energy absorber from Arresta shuttle onto front loops of harness. Ensure karabiner screw gate is locked.



## STEP 7

Check the Arresta shuttle is functioning correctly and all karabiner screw gates are secure.



## STEP 8

Climb ladder using care at all times.



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# SAFE USE PROCEDURE

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## STEP 9

Once safely at the top of the ladder only detach from the Arresta system once safely behind the ladder safety bar and there is no risk of a fall.



## STEP 10

When descending the ladder, keep body close to the ladder allowing shuttle to descend freely.

If shuttle locks whilst descending, release unit by lifting the cam and lowering the shuttle.



## STEP 11

Remove the shuttle unit from the cable on completion by reversing the process, steps 2 to 6.

- ⚠ **Any damage to harness gear or static line system during use MUST be reported to the work place manager and removed or tagged out of service until recertified by a competent height safety inspector.**
- ⚠ **Follow the organisation procedures on reporting completion of work.**



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# MAINTENANCE

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1. This system needs to be checked and recertified by a competent height safety inspector every 12 months for non corrosive environments or 6 monthly for corrosive or harsh environments. (To be determined by competent person depending on severity of surrounding conditions.)
2. Never clean using acids or other chemicals that could damage the system components.
3. The cam pivot points on the Arresta shuttle should be lubricated using a dry graphite lubricant, NOT oil which will attract dirt.
4. The stainless steel cable must be cleaned and then coated with a dry graphite lubricant.
5. The identification/certification label must be completed confirming maintenance and recertification of the system.
6. Harness gear and equipment must be maintained and stored in a dry, protected area, away from acids and ultra violet rays which cause material fibres to break down and reduce their safety and life expectancy.
7. Any deterioration or damage to the system or equipment must be reported to the person in control of the workplace and relevant corrective action undertaken.
8. Maintenance inspections must be clearly documented. Any non-conformance must be clearly identified and tagged 'Do Not Use' until corrective action by a competent person has been completed.



# MAINTENANCE

The checklist below outlines key checking criteria required to ensure the safe use of this system. Any item of concern not shown on the checklist must be noted on the maintenance report and brought to the attention of the workplace manager.

Items ticked PASS- **YES** means they conform with the required checking criteria and are suitable for normal use until the next recertification date. System data plates must be updated showing current check date and next check date.

Item ticked PASS - **NO** means they do not conform to the required checking criteria. These items must be clearly tagged 'Do Not Use' and the required corrective actions put in place. The maintenance report must clearly document all non-conforming criteria.

**⚠ This system must be maintained by a competent height safety inspector, trained in the safe use and maintenance of this system**

## SYSTEM MAINTENANCE CHECKLIST

COMPONENT	INSPECTION CRITERIA	PASS Y / N	CORRECTIVE ACTION	COMPLETION DATE
	1. Must be no deterioration of ladder fixing bracket integrity to support structure and ladder fixing			
	2. Must be no visible deterioration or damage to ladder			
	3. Must be no deformation of vertical static line stile extension or evidence of excessive load			
	4. Must be no evidence of stress in static line vertical attachment bracket or deterioration of connection to ladder			
	5a/b. Must be no evidence of slippage or deterioration of cable connection to line attachment bracket (top and lower connection)			
	<b>⚠ Crimp or roll swage terminal must be connected at the top of the ladder and the tensioner with locking screw at the base.</b>			
	6. Must be no evidence of wear, cuts, corrosion or fraying of cable			
	7. Must be no evidence of system shuttle wear, distortion, malfunction or energy absorber deployment			
	8. Cable must be tensioned correctly and free from dirt and grime			
	9. All ladder fixings must be sufficiently tensioned			

**⚠ A record of system maintenance, recertification and repairs must be kept by the workplace manager.**



# TECHNICAL

## FALL CLEARANCE

There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or another lower level hazard. The clearance required is dependent on the following factors:

- Elevation of anchorage
- Anchorage deflection
- Lanyard length
- Lanyard elongation on deceleration pull out (personal energy absorber)
- Operator height
- Fall distance residual clearance

See AS/NZS 1891.4:2009 Section 7 for a detailed explanation.

## SYSTEM REQUIREMENTS

The worker must wear a full body harness when connected to any fall arrest system including a personal energy absorber compliant with AS/NZS 1891.2:2001 and AS/NZS 1891.4:2009 limiting the force on the anchor and operator to a maximum of 6kN.

Harness connectors must support at least 15kN. Non-compatible connectors may unintentionally disengage (roll-out). Karabiners supplied with proprietary systems must not be removed or substituted with any other component.

## INSPECTION AND MAINTENANCE

Inspection and recertification of fall arrest systems and equipment is required at least every 12 months by competent person in accordance with manufacturer's specifications and requirements of Australian Standard AS/NZS1891.4:2009 Section (9).

## IMPORTANT NOTE

Failure to supply and/or install Sayfa proprietary products in accordance with above standards and codes, specifications and instructions voids complete system certification and/or warranty.

## FALL DISTANCE CALCULATOR (To be used as a guide only)

