HEALTH, SAFETY & ENVIRONMENTAL MANUAL	11.2 Confined Spaces Program				
	Initial HIRA Score:	20	Residual HIRA Score:	10	Critical Task: **Yes**
	Procedures: **12.11.2**				
	Revision Number: **R0**		Number of Pages: **18**		
	Revision Date:	Approval Date: 10/01/2024	Effective Date: 10/01/2024	SIGNATURE:	

Confined Spaces

Purpose

This section outlines the responsibilities within J-AAR for implementation of the Confined Space Entry Program. This includes the development of the entry permit system and onsite rescue plan and required training.

The following procedures shall be followed by all employees of J-AAR and are always enforced by project supervisors in any circumstances that may constitute a confined space. This program will be reviewed by all employees.

Scope

ROLES AND RESPONSIBILITIES OF WORKPLACE PARTIES

Management

- Management is responsible for developing and implementing the confined space program, entry permit system and onsite rescue procedures.
- Management has the primary responsibility for authorizing work in confined spaces. This responsibility applies to work performed by workers or contractors/employers hired by J-AAR.
- Management is also responsible to ensure that all workers who are required to work in a confined space are trained as per the Regulations and company policy.

Supervisors

- Supervisors must be familiar with the requirements of this program and ensure those workers or contractors/employers under their supervision understand the general and specific procedures and know how to conduct their confined space tasks in accordance with this program.
- Ensure all workers entering or performing related work are trained accordingly.
- Supervisors must follow the Confined Space Coordination Procedures when J-AAR is the constructor of the project and other employers/contractors need to enter confined spaces on the project.
- Supervisors as a “competent person” must review and sign the Confined Spaces Entry Permit and Onsite Rescue Plan before any worker enters a confined space.
- Ensure all gas monitors, rescue equipment and required PPE are used properly and in good working order.
- Ensure all permits are submitted to the main office with weekly paperwork.

Workers

J-AAR workers required to enter and/or perform related work in confined spaces shall work in accordance with this program. Workers shall:

- Receive all required training before entering or performing related work in a confined space.
- Enter and/or perform related work in a confined space only if they have reviewed the entry permit and it has been reviewed and signed by the supervisor.

Confined Spaces

- Enter and/or perform related work in a confined space only if the onsite rescue plan has been reviewed and signed by the supervisor.
- Be aware of the symptoms of exposure to hazardous atmospheres. This will be addressed in the hazard awareness training program.
- Be trained as required in the use of all gas monitors, rescue equipment and PPE. If in doubt do not enter and ask the supervisor for directions.
- When entering, maintain communication with the attendant using a pre-arranged method as specified on the Confined Space Entry Permit form.
- Alert the attendant whenever you feel any adverse health effects when in the confined space.
- Adhere to directions given by the attendant.
- Report any hazards immediately to supervisor.
- Return all permits to the supervisor at the end of each shift.

Subcontractors

- Subcontractors shall comply with legislative requirements and shall work in a manner that is consistent with the J-AAR Health, Safety and Environmental Manual and Confined Spaces Program.
- All subcontractors shall cooperate in the preparation of the required coordination document on projects where J-AAR is the constructor of the project.

Training Requirements

All workers who enter a confined space and/or perform related work must have specific confined space training.

<u>All workers:</u>

- J-AAR Confined Space program, entry permit system and onsite rescue plan
- Confined Space Hazard Awareness training
- Working at Heights training for construction projects
- Training in the use of gas monitors and rescue equipment (i.e., tripods, SRL)

<u>Onsite rescue personnel:</u>

- At least one member trained in Standard First Aid / CPR

<u>Methods</u>:

1. Confined space hazard awareness will be trained either in-house or by a third-party trainer. First Aid / CPR training will be conducted by a qualified third-party trainer. The Working at Heights course will be taught by an approved Ontario training provider.
2. The J-AAR Confined Space program, entry permits, and specific use of equipment will be trained in-house with all workers either through orientation or at health and safety meetings.

HEALTH, SAFETY & ENVIRONMENTAL MANUAL	11.2 Confined Spaces Program				
	Initial HIRA Score:	20	Residual HIRA Score:	10	Critical Task: **Yes**
	Procedures: **12.11.2**				
	Revision Number: **R0**		Number of Pages: **18**		
	Revision Date:	Approval Date: 10/01/2024	Effective Date: 10/01/2024	SIGNATURE:	

Confined Spaces

Note: **BEFORE ENTRY INTO A CONFINED SPACE IS ALLOWED, ALL REQUIRED DOCUMENTS IN THE ENTRY PERMIT SYSTEM MUST BE COMPLETED**

Procedure

CONFINED SPACE ENTRY

The confined space shall only be entered when:

- The "Confined Space Entry Permit" and the "On-Site Confined Space Rescue Plan" are completed.
- All workers have required training.
- An attendant is designated.
- Entrants have required PPE.
- Air monitoring and rescue equipment is inspected and ready.

Note: The "Confined Space Evaluation Guideline" and "Coordination Document" are only completed as required.

PART 1 – CONDUCT AN ASSESSMENT OF THE SPACE

If there are questions regarding whether the space being entered is a confined space, the supervisor on the project can use the "Confined Space Evaluation Guideline". If it is determined that the space is a confined space, then the "Confined Space Entry Permit" must be completed.

Confined space means a fully or partially enclosed space,

a) that is not both designed and constructed for continuous human occupancy, **AND**
b) in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it.

PART 2 – COMPLETE THE CONFINED SPACE ENTRY PERMIT and if necessary, the COORDINATION DOCUMENT

The purpose of the entry permit is to communicate to workers the hazards that have been identified and the controls that are in place, before any worker enters or performs related work in the space.

- A copy of the "Confined Space Entry Permit" must be kept at the project and submitted to the supervisor when work is complete.
- If J-AAR is the Constructor on the project, the "Coordination Document" must be completed and kept at the project as needed. It is used when any subcontractors are working within or performing related work in the same confined space.
- If J-AAR is not the Constructor, but will be entering confined spaces, all confined space documents must be given to the Constructor prior to entry so they can coordinate the work.
- All workers entering or performing related work at the confined space, must review the permit.

Confined Spaces

- The entry permit must be reviewed and signed by a competent person (supervisor) to verify it is accurate and complete.

Conduct a Hazard Assessment

- A person who has adequate knowledge, training and experience related to confined spaces must complete the hazard assessment.
- Use the section on the entry permit to identify hazards that may be present and list the corresponding controls.

Identification of the potential atmospheric or physical hazards must be done taking into consideration the previous contents of the space, the tasks within the space and the potential for the sudden release of air contaminants from sources in proximity to the space.

<u>The hazards may include:</u>

- Oxygen deficiency / oxygen enrichment
- Flammable, explosive or combustible agents
- Toxic fumes, gases, or vapours
- Residual chemicals / materials
- Ignition hazards including hot work
- Chemical hazards
- Biological hazards from animals, sewage, other agents
- Electrical hazards including live lines, cables
- Moving parts of equipment
- Flowing water or liquid that can cause drowning, entrapment.
- Vehicle and equipment traffic around confined space.

<u>Controls may include:</u>

- Ventilation and purging with proper equipment like blowers.
- Lockout and tagout for electrical equipment
- Exposed moving parts must be guarded.
- Continuous air monitoring
- GFCI's
- Rescue equipment
- Traffic control, signs, barricades
- PPE

When the assessment is complete, the qualified person must sign and date the permit.

Confined Spaces

Test the Atmosphere inside the Space

The air inside a confined space must be tested by a person with adequate knowledge, training and experience before any person is allowed to enter it. The person testing the confined space must accurately assess the readings displayed by the gas monitor.

Gas monitors must be calibrated according to manufacturer specifications. Currently they are calibrated every 30 days. Please confirm that your monitor has been calibrated. If not, immediately inform your supervisor and DO NOT use the monitor until it is properly calibrated.

- A qualified person shall bump test the gas monitor before each day's use to ensure it is in good working order. Workers will be trained in bump test procedures according to manufacturer instructions. Also ensure the 3 warning devices (audible alarm, lights, vibration) are working properly at start-up.
- Record the results of the bump test on the confined space entry permit.
- If the bump test FAILS, it must NOT be used. Immediately report the failure to your supervisor.

Record the results of the testing on the Confined Space Entry Permit

- Each atmospheric test in the confined space must be promptly recorded on the "Confined Space Entry Permit" form. Each entry shall include the time and location of each test, as well as the actual instrument readings for each parameter.
- If the atmospheric levels are unacceptable for entry, list any actions taken to control the hazard including ventilation and purging.

Levels must be maintained for the following:

Oxygen (O_2)	19.5% - 23%
Lower Explosive Limit (LEL)	less than 25% for inspection less than 10% for cold work **less than 5% for hot work
Carbon Monoxide (CO)	TWA 25ppm, STEL 100ppm
Hydrogen Sulfide (H_2S)	TWA 10ppm, STEL 15ppm

****Hot Work**

Hot work must also include all of the following provisions:

- Flammable gases maintained below 5% LEL
- O_2 levels remain below 23%
- Atmosphere is monitored continuously and;
- Alarm and exit procedures are in place should the LEL exceed 5% and the O_2 exceed 23%.

Confined Spaces

Biological or Chemical Agents: Exposure to atmospheric contaminants does not exceed any applicable limit set out in Regulation 833 of the Revised Regulations of Ontario, 1990 (Control of Exposure to Biological or Chemical Agents)

"Purging" involves removing contaminants inside the confined space by displacement with air to achieve acceptable atmospheric levels. For example, if a confined space originally contained a toxic gas, air would be blown into the space to reduce the concentration of the toxic gas to below the appropriate atmospheric exposure level.
After the contaminants have been removed ("purged"), the confined space may be ventilated.

"Ventilation" means the continuous provision of fresh air into the confined space by mechanical means to maintain acceptable atmospheric levels. It must be continued while work is being carried out within the space, to maintain an acceptable oxygen concentration, to provide protection in case of accidental release of chemicals, to remove contaminants generated by the work performed, or to cool the enclosure.

Ventilation involves displacing air and diluting it through the introduction of fresh air (forced air) or the continuous removal of contaminants by local exhaust ventilation for point sources. To ensure adequate ventilation, the points of air supply and exhaust will be separated as far as possible. Openings must be provided for the entry of clean replacement air or to allow the exhaust of air. Pure oxygen must not be used to ventilate a confined space.

A qualified worker must test the air quality and be reasonably sure the atmospheric conditions of the space are safe and will remain safe for the remaining duration of work to be performed before the entrant can enter the confined space again. If not, entry is not permitted.

When the testing is recorded, the qualified person must sign and date the permit.

Test the space continuously to ensure it remains free of hazards.
Monitor the air within confined spaces continuously while work is being done. The gas monitor shall remain activated inside the confined space for as long as workers remain inside.

Provide an Attendant
An attendant is a worker who is trained in the hazards of confined spaces and whose primary responsibility is to monitor and assist workers in the confined space. The attendant must have adequate knowledge, training and experience.

Confined Spaces

If one or more workers are inside a confined space, there must be an attendant nearby prepared to respond if there is an emergency. The attendant must:

- Be in contact with the worker(s) inside the confined space at all times. Identify the means of communication.
- Be assigned and stationed outside the confined space. Not be assigned other duties.
- Prevent unauthorized entry.
- Not enter the space to rescue a worker.
- Have required awareness and working at heights training.
- Be trained in the use of the gas monitor and rescue equipment.
- Initiate an adequate rescue in case of an emergency according to the onsite rescue plan.
- Inspect all rescue equipment.
- **Not in any circumstances, ever enter the confined space, while acting as attendant.**

Entrants

- Ensure that you have reviewed, signed, and dated the entry permit.
- Ensure that you have the required training to enter the space.
- Have suitable PPE for the task.
- Ensure the safety harness has been inspected.
- Be trained in the use of the gas monitor and rescue equipment.
- Immediately exit the confined space upon alarm or when ordered by the attendant.
- Complete the entrant's log on the entry permit for each entry/exit.
- Smoking shall not be allowed inside a confined space.

Exit from the confined space if hazardous atmosphere develops or alarm condition develops.

If a gas monitor detects unsafe atmospheric levels, the work must be stopped, and all workers exit the space until the area is properly ventilated or workers are provided with suitable respiratory protection.

Coordination Document

When J-AAR, as Constructor, has multiple employers entering or performing related work in or around the same confined space(s), a Confined Space Coordination Document must be prepared.

If J-AAR is not the Constructor, but will be entering confined spaces, all confined space documents must be given to the Constructor prior to entry so they can coordinate the work.

The Confined Space Coordination Document is intended to advise all employers of potential or existing hazards that may result from the work that will be performed by each employer.

Confined Spaces

Responsibilities

The J-AAR supervisor shall complete the coordination document and:

- verify that all employers have completed and submitted a proper entry permit.
- verify that all employers have made a copy of the permit readily available to all workers.
- verify that all employers have required training for their workers.
- verify all employers are aware of other employer's activities in the confined space(s).
- verify all employers are aware of the hazards identified in the assessments.
- verify all hazardous conditions have acceptable controls.
- verify that an approved rescue plan is in place for all workers.

A copy of the Confined Space Coordination Document shall be:

- provided to each employer whose workers will enter or perform work related to the confined space(s), along with a copy of the confined space entry permit(s) posted in a conspicuous location to be seen by all workers.

Supervisor (Competent Person)

- Ensure that you have reviewed and signed the Confined Space Evaluation Guideline (if applicable), Confined Space Entry Permit, On-Site Confined Space Rescue Plan and Coordination Document (if applicable).
- Before allowing entry into the confined space, review with all relevant workers the information in all the documents.
- React immediately and appropriately to any emergency.
- Submit copies of all permits and documents to the office.

PART 3 – ON-SITE CONFINED SPACE RESCUE PLAN

Planned rescue procedures must be capable of being implemented immediately by an adequate number of persons at any time from outside of the confined space.

The "On-Site Confined Space Rescue Plan" must be completed and signed by the attendant, rescue team members and the supervisor.

The attendant will ensure:

- rescue team members are identified.
- at least one member of the rescue team is trained in Standard First Aid / CPR
- all rescue equipment is inspected and ready for use. Tripods and SRL's require annual certification by a professional. Check that inspection tags are current before use.

- the means of summoning help is available and tested.

The supervisor will:

- review the rescue plan and verify it is acceptable.
- sign and date the plan.

Calling 911 is not a satisfactory rescue procedure, however, is necessary if a rescue is required.

A single attendant cannot normally rescue an entrant without the aid of a tripod or other mechanical tool or equipment.

WARNING: Never enter an unsafe confined space to rescue a worker. Many workers trying to save their co-workers have only become victims themselves. Call for emergency help.

Legislation

Confined Spaces O. Reg. 632/05.

Required Equipment

MSA ALTAIR 4X (or equivalent)

CARE, USE, AND MAINTENANCE

Copies of the user's manual can be found at the office, in the yard, or online at: johnaartsgroup.com/h-s

- Bump Test
- Calibration

Confined Spaces

Performing a Bump Test

Perform a Bump Test before each day's use to verify proper device operation. Failure to perform this test can result in serious personal injury or death.

This test quickly confirms that the gas sensors are functioning. Perform a full calibration periodically to ensure accuracy and immediately if the device fails the Bump Test.

Bump test frequency is often stipulated by national or corporate regulations; however, bump testing before each day's use is generally the accepted best safety practice and is therefore MSA's recommendation.

Performing a Bump Test

(1) Connect the regulator to the Calibration Check Gas Cylinder.

(2) From the Normal Operation screen press the ▼ button to display "BUMP TEST?".

(3) Verify the gas concentrations displayed match the Calibration Check Gas Cylinder. If they do not, adjust the values through the Calibration Setup menu as described in chapter 3.4 "Device Setup".

(4) Attach the calibration cap (see chapter 3.10 "Attach the Calibration Cap")

(5) Press the ⏻ button to start the Bump Test. If calibration lockout option is selected, enter password. The hourglass will flash and the sensors will respond to the gas.

(6) Open the pressure reducer valve on test gas cylinder.

(7) Close the valve after bump testing.

After the Bump Test completes, the device momentarily displays "BUMP PASS" or "BUMP ERROR" along with the label of any sensor that failed before returning to Normal Operation mode. If the device fails the Bump Test, perform a calibration as described in chapter 3.10 "Attach the Calibration Cap".

Confined Spaces

Bump LED

The device is equipped with a green Bump LED. The green LED flashes every 15 seconds under the following conditions:

- the Bump LED feature is enabled
- after a successful Bump Test (for 24 hours)
- device is in Normal Operation mode
- device is not in Low Battery warning or alarm

Fresh Air Setup and Zero Calibration

To skip the Zero procedure and move directly to the Calibration Span procedure, push the ▲ button. If no button is pushed for 30 seconds, the device prompts user to perform a Span calibration before returning to the Normal Operation mode.

(1) Press and hold the ▲ button in Normal Operation mode for three seconds.
(2) If calibration lockout option is selected, enter password.

- If calibration lockout option is NOT selected:

ZERO screen displays.

(3) With the device exposed to fresh air, press the ⏻ button to confirm the ZERO CAL? screen. A sensor refresh and Zero Calibration will occur.

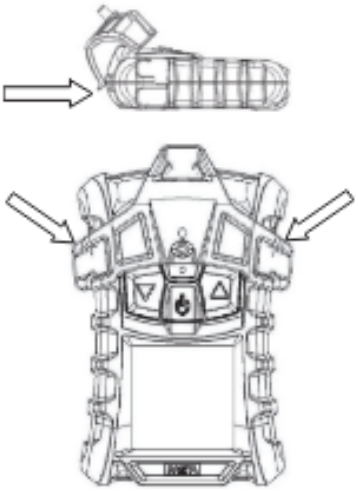
After Zero calibration completes, the device momentarily displays "ZERO PASS" or "ZERO ERR" along with the flag of any sensor that failed.

Confined Spaces

Attach the Calibration Cap

Attach the calibration cap to the device:

(1) Insert tab on calibration cap into slot on device.
(2) Press calibration cap as shown until it seats onto device.
(3) Press both side tabs down onto device until they snap into place.
(4) Ensure that the calibration cap is properly seated.
(5) Connect one end of the tubing to the calibration cap.
(6) Connect other end of tubing to the cylinder regulator (supplied in the calibration kit).



Span Calibration

To skip the Span procedure, push the ▲ button.
If no button is pushed for 30 seconds, the device returns to Normal Operation mode.

(1) Once the Zero is set, the SPAN CAL? screen displays.
(2) Connect the regulator to the calibration check gas cylinder.
(3) Connect the appropriate calibration gas to the device.

(4) Attach the calibration cap (see chapter 3.10 "Attach the Calibration Cap")
(5) Open the pressure reducer valve on test gas cylinder.

(6) Press the ⏻ button to calibrate (span) the device.
SPAN calibration starts.
(7) Close the valve after SPAN calibration.

Confined Spaces

- After the SPAN calibration completes, the device momentarily displays "SPAN PASS" or "SPAN ERR" along with the label of any sensor that failed then returns to Normal Operation mode.

If a sensor is nearing its end of life, this "SPAN PASS" indication will be followed by the end of sensor life warning (♥ symbol). The ♥ symbol, and the gas type of the sensor nearing its end of life, will blink for 15 seconds when the device returns to Normal Operation mode. When in Normal Operation mode, the ♥ symbol is continuously displayed.

Finishing Calibration

(1) Close the valve on the regulator.
(2) Remove the calibration cap.

The calibration procedure adjusts the span value for any sensor that passes the calibration test; sensors that fail calibration are left unchanged. Since residual gas may be present, the device may briefly go into an exposure alarm after the calibration sequence is completed.

Autocalibration Failure

If the span calibration is unsuccessful:

- If the device cannot calibrate one or more sensor(s), it goes to the SPAN ERR page and remains in alarm until the ▲ button is pressed.
- A sensor life indicator is displayed (Alarm symbol and ♥ symbol) to show the sensor has reached its end of life and should be replaced.

  This occurs if the span calibration is unsuccessful twice.
- The device will remain in alarm state until the ▲ button is pressed.
- The Alarm symbol and ♥ symbol will remain on the display until a successful calibration or sensor in question is replaced.

A span calibration can fail for many reasons besides sensor at the end of his life. If a span calibration failure occurs, items such as remaining gas in the calibration cylinder, gas expiration date, security of the calibration cap, etc. should be verified and calibration should be repeated prior to replacing the sensor.

Confined Spaces

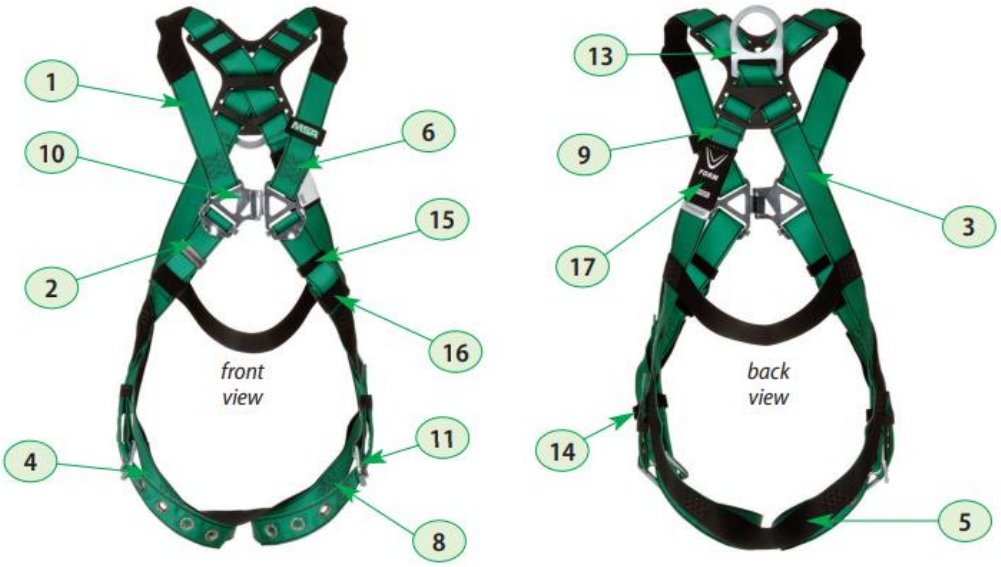
PROTECTA CONSTRUCTION COMFORT HARNESS (or equivalent)

CARE, USE, AND MAINTENANCE

Copies of the user's manual can be found at the office, in the yard, or online at: johnaartsgroup.com/h-s

The harness must be inspected before each use. To inspect the harness, follow the procedure listed below:

1. Inspect all fabric components for cuts, fraying, abrasion, pulled or ripped threads, UV damage, heat damage, chemical damage/exposure.
2. Inspect all metal components for deformations, cracks, corrosion, heat damage, chemical damage/exposure, sharp edges, chips, knicks.
3. Inspect all plastic components for deformation, cracks, heat damage, chemical damage/exposure, sharp edges, chips, knicks.
4. Ensure all buckles/tangs/d-rings function properly.
5. Inspect all labels. All labels must be present and legible.



Confined Spaces

Inspect each element listed.

1. Shoulder straps
2. Torso Straps (front)
3. Torso Straps (back)
4. Leg straps
5. Rear Strap
6. Chest stitches
7. Leg stitches
8. Rear strap stitches
9. Load indicators (location may vary depending on make/model of harness)
10. Chest buckle/D-ring
11. Leg buckle/D-ring/Tongue
12. Back D-ring
13. Leg web finials
14. Chest web finials
15. Lanyard keepers (if applicable)
16. Labels (location may vary depending on make/model of harness)

Log the inspection as completed on the permit.

IF ANY ITEM FAILS, REPORT IT IMMEDIATELY TO YOUR SUPERVISOR. THE HARNESS WILL BE REMOVED FROM SERVICE.

PROTECTA TRIPOD AND SRL-R (or equivalent)
CARE, USE, AND MAINTENANCE
Copies of the user's manual can be found at the office, in the yard, or online at: johnaartsgroup.com/h-s

Before use, inspect the tripod and SRL for obvious defects. The annual inspection tags must be present on the tripod and SRL.

TRIPOD

- Inspect for loose or missing fasteners, pins and bent or damaged parts.
- Inspect for dents, distortion, cracks, corrosion, or other damage.
- Inspect for smooth operation of leg locking pins.
- All labels must be present and fully legible.

Confined Spaces

SRL

- Inspect for loose bolts and bent or damaged parts.
- Inspect housing for distortion, cracks, or other damage.
- Inspect the swivel eye for distortion, cracks, or other damage. The swivel eye must be attached securely to the SRL but should pivot freely.
- The lifeline must pull out and retract fully without hesitation or creating a slack line condition.
- Ensure device locks up when lifeline is jerked sharply. Lockup should be positive with no slipping.
- The labels must be present and fully legible.
- Look for signs of corrosion on the entire unit.
- Inspect swivel snap hook and impact indicator.
- Inspect the swivel snap hook for signs of damage, corrosion, and working condition. Swivel must rotate freely. Inspect the impact indicator. If the Red Band is displayed (Indicated Mode), impact loading has occurred, and the SRL must be removed from service and inspected. Do not attempt to reset the impact indicator. Return the SRL to J-AAR Stores.

NOTE: The Swivel will not turn freely when the Impact Indicator is in Indicated Mode.

Wire Rope Lifeline

Inspect wire rope for cuts, kinks, broken wires, bird-caging, welding splatter, corrosion, chemical contact areas, or severely abraded areas. Slide the cable bumper up and inspect ferrules for cracks or damage and inspect the wire rope for corrosion and broken wires. Replace the wire rope assembly if there are six or more randomly distributed broken wires in one lay, or three or more broken wires in one strand in one lay. A “lay” of wire rope is the length of wire rope it takes for a strand (the larger groups of wires) to complete one revolution or twist along the rope. Replace the wire rope assembly if there are any broken wires within 1 inch (25 mm) of the ferrules.

On Self-Retracting devices with Leading Edge capability (SRL-LEs) verify that the integral Energy Absorber has not been activated. There shall be no webbing pulled out of the cover. The cover must be secure and free of tears or other damage.

Retrieval Integral Rescue Hand Crank

Inspect the Crank Arm for distortion or other damage. Ensure that the Retrieval Handle can be folded out and secured in the cranking position.

Ensure the Retrieval Shift Knob can be pulled out to the unlocked position and then released, locking the Crank Arm in both the engaged and disengaged positions.

Test the retrieval feature for proper operation by raising and lowering a test weight of at least 75 lbs (34 kg). When the Retrieval Handle is released, the weight should not move, and the Retrieval Handle should remain in position (no movement). A ‘clicking’ sound should be audible when raising the load.

Confined Spaces

Tripod and SRL Setup

Figure 1 - Remove Tripod from Carry Bag and Stand Vertically

Grip the head of the tripod and lift the tripod assembly from the carrying bag.

Stand the tripod vertically. Swing each of the three legs out until each leg is in the locked position.

An audible "click" will be heard as each leg snaps into the locked position.

Figure 2 - Locking Pins in Locked Position

For all tripod legs to be secured in the locked position, each of the three leg locking pins must be flush with the top of the tripod head.

A = Unlocked Pins

B = Locked Pins

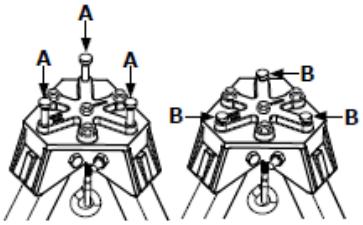
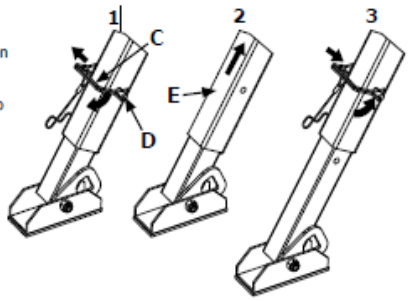


Figure 3 - Tripod Leg Height Adjustment

The height of each tripod leg can be separately adjusted as needed.

1. To adjust the height of a leg pull off the wire pin lock (C) on the leg height locking pin (D). Pull out the leg height locking pin completely. (If the tripod is upright, support the tripod to prevent it from tipping over when the leg height locking pin is removed.)
2. After the leg height locking pin has been removed, pull the telescoping leg out (E), or push it in, to achieve the required leg height.
3. Reinsert the leg height locking pin (pin holes in the outer and inner leg tubes must align so that the pin can be reinserted). Pull the wire pin lock back over the exposed end of the leg height locking pin to secure it.

Repeat for each leg as necessary to bring the tripod to the required working height. Index numbers on each leg can be used as a visual aid during leg height adjustment.



Confined Spaces

Figure 4 - Secure Tripod Legs With Chain

The included leg chain (F) is used to prevent the spread of the three tripod legs beyond their locked position.

Feed the chain through each of the chain retainers (G) in the three tripod feet.

While keeping the tripod legs in position, pull the leg chain tight through the chain retainers. Secure the chain ends with the chain hook (H).

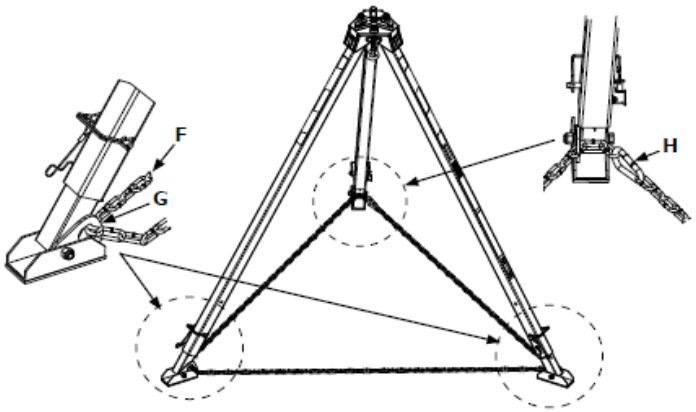


Figure 5 - Position Tripod Over Entry Point

Confirm that the tripod is positioned on a firm surface.

The eyebolt anchor point at the center of the tripod head (I) must be located centrally over the entry shaft or hole.

Note: *Only the center eyebolt anchor point (I) can be used for fall arrest.*

Confirm that there is adequate clearance (J) between the tripod feet and the edge of the entry shaft or hole.

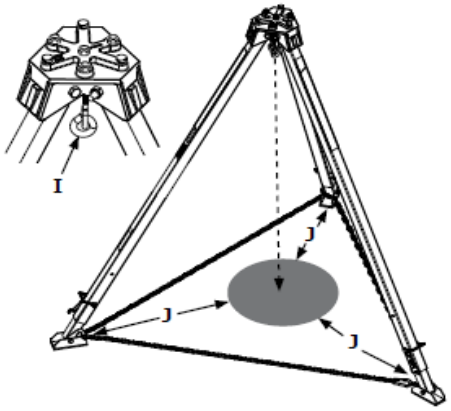


Figure 6 - Tripod Use

This figure illustrates an example of the use of the Protecta Tripod for confined space entry fall protection. A Protecta Rebel Retrieval SRL-R is mounted on a leg of the tripod using a bracket. The SRL lifeline is routed through a pulley attached to the eyebolt anchor point at the center of the tripod head.

See the specific instructions included with your entry safety equipment for installation and use details.

Ensure that road safety considerations are followed. Do not leave an open shaft unattended.

Figure 7 - Dismantle Tripod After Use

Close the entry point by replacing cover or blocking the entry shaft or hole. Remove the entry safety equipment from the tripod eyebolt anchor point and bracket (if used). Collapse the telescoping legs by removing the leg height locking pins (see Figure 3) and telescope the legs back to their lowest locking point. Insert pins.

Stand the tripod vertically and pull the leg locking pins up. Swing the legs inward to the center.

Place the tripod in the carrying bag for transportation or storage.