



Instructions for the following series products:

Manual Descender

Model number 2103198

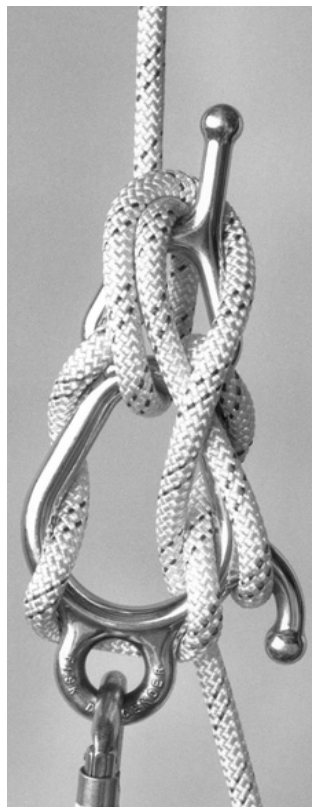
USER INSTRUCTION MANUAL FISK DESCENDER

This manual is intended to meet the Manufacturer's Instructions as required by the standards and should be used as part of an employee training program as required by OSHA

WARNING: *This product is part of a personal restraint, work positioning, suspension, or rescue system. These instructions must be provided to the user and rescuer (see section 8 Terminology). The user must read and understand these instructions or have them explained to them before using this equipment. The user must read and follow the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alterations or misuse of this product or failure to follow instructions may result in serious injury or death.*

IMPORTANT: *If you have questions on the use, care, application, or suitability of this safety equipment, contact DBI-SALA.*

IMPORTANT: *Before using this equipment, record the product identification information from the ID label in the inspection and maintenance log in section 9.0 of this manual.*



DESCRIPTIONS

FISK DESCENDER:

304 Stainless Steel, Capacity = 440 lbs. (200 kg), Weight = 1 lb. 13 oz. (1 kg)

1.0 APPLICATIONS

- 1.1 PURPOSE:** DBI-SALA's Fisk Descender is intended to be used as a component of a rope descent system. This equipment is used for applications that include repelling, work positioning, and rescue operations. The maximum working load with this equipment is 440 lbs. (200 kg).

NOTE: Independent back-up fall protection systems are typically required when using the Fisk Descender. The back-up or secondary fall protection system is not required in applications where the Fisk Descender is used only to retrieve personnel (i.e. emergency rescue operations).

- A. DESCENT APPLICATION:** In this application, the Fisk Descender is used as part of a complete descent and work positioning system. Such systems typically include a full body harness, boatswain's chair or workseat, independent personal fall protection system, and the Fisk Descender with working line. See Figure 1.
- B. RESCUE APPLICATION:** In this application, the Fisk Descender is used as part of a complete rescue system. Such systems typically include a full body harness or rescue sling, anchorage connector (i.e. carabiner) and the Fisk Descender with working line.

Figure 1 - Descent Application



1.2 LIMITATIONS: The following application limitations must be considered before using this product:

- A. CORROSION:** Do not leave this equipment for long periods in environments where corrosion of metal parts could take place as a result of vapors from organic materials. Use caution when working around sewage or fertilizer because of their high concentration of ammonia, which is very corrosive. Use near seawater or other corrosive environments may require more frequent inspections or servicing to ensure corrosion damage is not affecting the performance of the product.
- B. CHEMICAL HAZARDS:** Solutions containing acids, alkali, or caustic chemicals, especially at elevated temperatures, may cause damage to Fisk Descender systems. When working with such chemicals, frequent inspection of the entire Fisk Descender must be completed. Consult DBI-SALA if doubt exists concerning using this equipment around chemical hazards.
- C. HEAT:** In general, Fisk Descender systems are not intended for use in environments where incendiary sparking could cause an explosion or fire. Use of this equipment is prohibited where there exists the possibility of the rope coming into contact with power lines, live cables, etc. Consult the manufacturer for special applications of this equipment. Do not use where air temperatures exceeds 150°F (66°C). Nylon and polyester fibers start to degrade at 260°F (127°C).
- D. CAPACITY:** The Fisk Descender is designed for use by one person only with a combined weight (person, clothing, tools, etc.) of 440 lbs. (200 kg) maximum. In emergency rescue applications, up to two people may be attached to the Fisk Descender. The working line used must be reviewed before use to determine compatibility.
- E. DESCENT HEIGHT:** The Fisk Descender must not be used for descending from heights exceeding 300 ft. (91m).
- F. TRAINING:** This equipment is intended to be installed and used by persons who have been properly trained in its correct application and use.

1.3 APPLICABLE STANDARDS: Refer to national Standards including ANSI Z359 (.0, .1, .2, .3, and .4) family of standards on fall protection, ANSI A10.32, and applicable local, state and federal (OSHA) requirements governing occupational safety for more information on this equipment and associated system components.

WARNING: *Manufacturer's instructions must be followed for proper system use and maintenance of this product. Alterations or misuse of this system, or failure to follow instructions, may result in serious injury or death.*

2.0 SYSTEM REQUIREMENTS

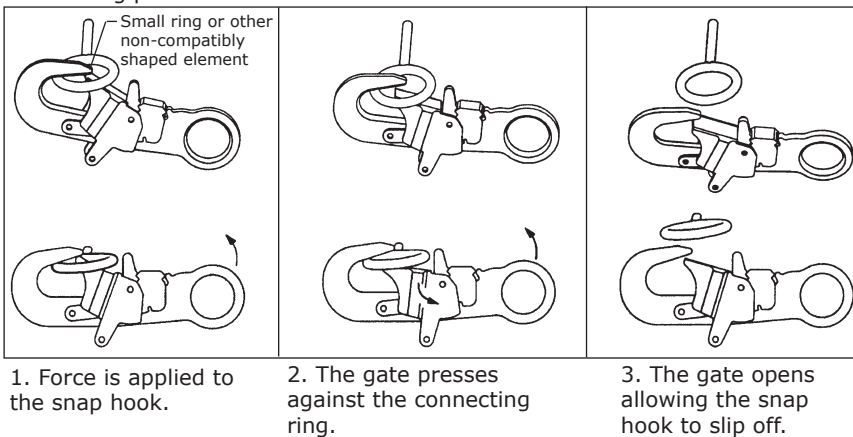
2.1 COMPATIBILITY OF COMPONENTS: DBI-SALA equipment is designed for use with DBI-SALA approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system. The Fisk Descender rope has been specially selected to provide the user with the maximum performance and safety. Do not substitute with standard safety rope. See section 2.5 for rope selection and specifications.

2.2 COMPATIBILITY OF CONNECTORS: Connectors are considered to be 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 DBI-SALA if you have any questions about compatibility.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22kN). 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 2. Connectors must be compatible in size, shape, and strength. Self locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.

Figure 2 - Unintentional Disengagement (Roll-out)

If the connecting element that a snap hook (shown) or carabiner attaches to 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 (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



2.3 MAKING CONNECTIONS: Only use self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to 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.

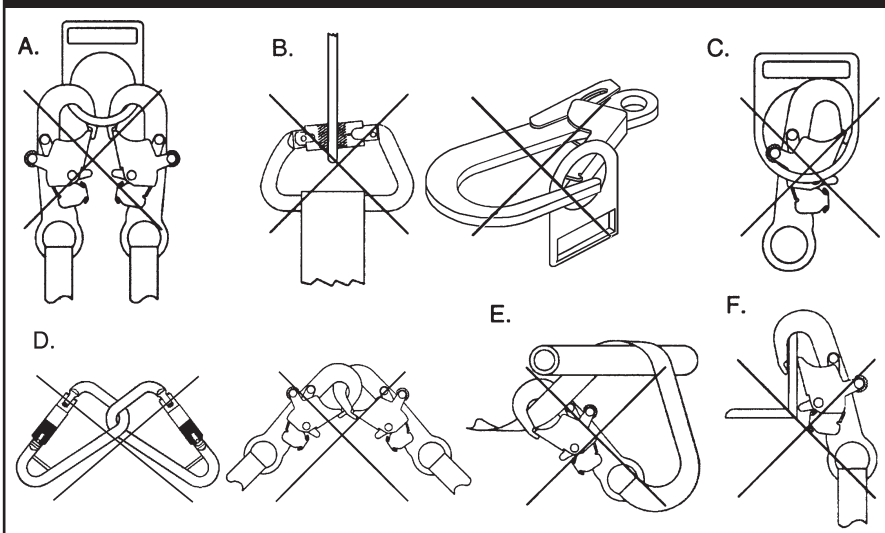
DBI-SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 3 for inappropriate connections. DBI-SALA snap hooks and carabiners should not be connected:

- A. To a D-ring to which another connector is attached.
- B. In a manner that would result in a load on the gate.

NOTE: Large throat snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.

- 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.

Figure 3 - Inappropriate Connections



2.4 ANCHORAGE STRENGTH: The anchorage strength required is dependent on the application type. The following are the requirements of ANSI 359.1 for these application types:

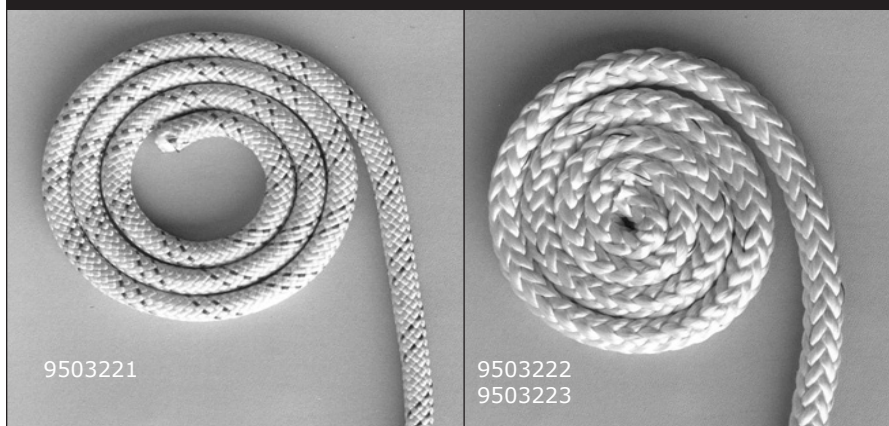
- A. FALL ARREST:** Anchorages selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:
 - 1. 5,000 lbs. (22.2 kN) for non-certified anchorages, or
 - 2. Two times the maximum arresting force for certified anchorages. When more than one fall arrest system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.
- B. WORKING POSITIONING:** Anchorages selected for work positioning systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:
 - 1. 3,000 lbs. (13.3 kN) for non-certified anchorages, or
 - 2. Two times the foreseeable force for certified anchorages. When more than one work positioning system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.
- C. RESCUE:** Anchorages selected for rescue systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:
 - 1. 3,000 lbs. (13.3 kN) for non-certified anchorages, or
 - 2. Five times the foreseeable force for certified anchorages. When more than one rescue system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.

Per OSHA 1926.500 and 1910.66 - Anchorages used for attachment of personal fall arrest systems (PFAS) shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 lbs (22.2 kN) per user attached, or be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two, and is under the supervision of a qualified person.

2.5 WORKING LINE: DBI-SALA offers the following three ropes which may be used as working lines with the Fisk Descender. See Figure 4:

- A. 9503221** Continuous filament polyester cover braided over continuous filament nylon core, static kernmantle, 1/2 in. (12 mm) diameter, 10,000 lb. (44 kN) tensile strength.
- B. 9503222** Polyester, 12 strand s/braid, 1/2 in. (12 mm) diameter, 9,300 lb. (41.4 kN) tensile strength.

Figure 4 - Working Line



- C. 9503223** Nylon, 12 strand s/braid, 1/2 in. (12mm) diameter, 9,200 lb (40.9 kN) tensile strength.

WARNING: If a rope other than the above is selected for use as a working line, it must meet the National Fire Protection Association (NFPA) requirements for two-person life safety line (see NFPA 1983). Ropes made of polypropylene, polyethylene or other polyolefins, cotton, sisal, hemp, abaca (manila), or other plant/animal fibers are not to be used. Three-strand ropes are not recommended. The Fisk Descender should not be used with ropes exceeding 5/8 in. (16mm) diameter.

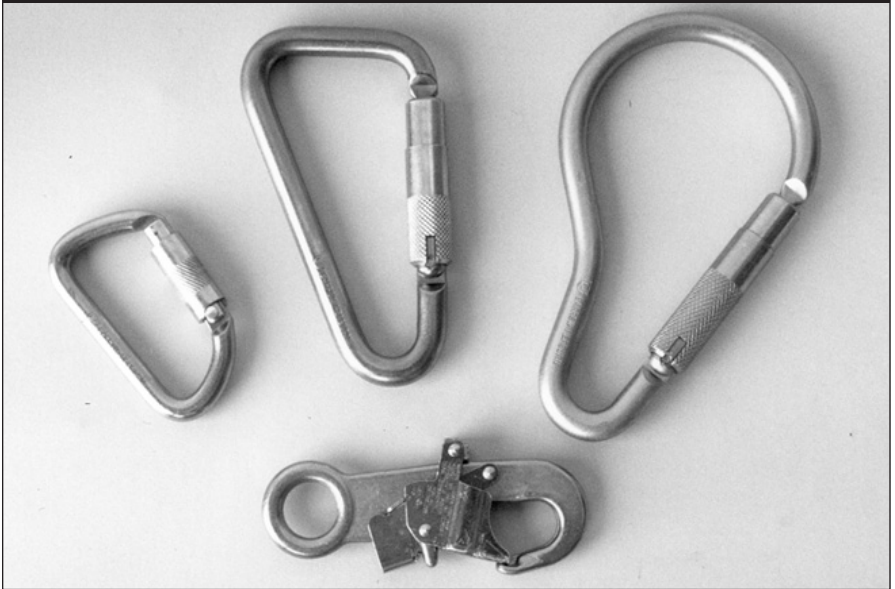
2.6 BACK-UP FALL PROTECTION EQUIPMENT: The most common means of providing back-up fall protection is by means of an independent lifeline and a rope grab. For descents of less than 130 ft. (30m) a retractable lifeline may provide a convenient means of protection.

If a rope grab and lifeline is selected, DBI-SALA recommends using a mobile style rope grab such as the 5001441, which does not require manual repositioning as the worker descends. DBI-SALA recommends using a full body harness with any fall protection system and a shock absorbing lanyard with the rope grab system. Lanyard length must not exceed 3 ft. (.9m).

The attachment point of the fall protection system (anchorage) must be independent of the working line anchorage and be capable of supporting 5,000 lbs. (22.2 kN) per person attached. See section 2.3.

The fall protection system selected, including the anchorage, must meet Federal OSHA requirements. Reference OSHA 1910.66 Appendix C, OSHA 1926.500, ANSI requirements and manufacturer's instructions for additional information on use and selection of fall protection equipment as a system. Extreme caution must be exercised when mixing or selecting components from various manufacturers and combining them into one system.

Figure 5 - Compatible Connectors



Equipment which has been subjected to the forces of arresting a fall must be removed from service immediately and destroyed.

- 2.7 CONNECTORS:** DBI-SALA recommends using self closing, self locking connectors when making attachments. All connectors must be capable of withstanding a 5,000 lb. (22.2 kN) load without failure. DBI-SALA offers a full line of connectors for use with the Fisk Descender and associated equipment. See Figure 5.

3.0 OPERATION AND USAGE

WARNING: Do not alter or intentionally misuse this equipment. Consult with DBI-SALA if using this equipment in combination with components or subsystems other than those described in this manual. Some subsystems and components combinations may interfere with the proper operation of this equipment.

WARNING: Working at height has inherent risks. Some risks are noted here but are not limited to the following: falling, suspension/prolonged suspension, striking objects, and unconsciousness. In the event of a fall arrest and/or subsequent rescue (emergency) situation, some personal medical conditions may affect your safety. Medical conditions identified as risky for this type of activity include but are not limited to the following: heart disease, high blood pressure, vertigo, epilepsy, drug or alcohol dependence, psychiatric illness, impaired limb function and balance issues. We recommend that your employer/physician determine if you are fit to handle normal and emergency use of this equipment. Pregnant women and minors must not use this equipment.

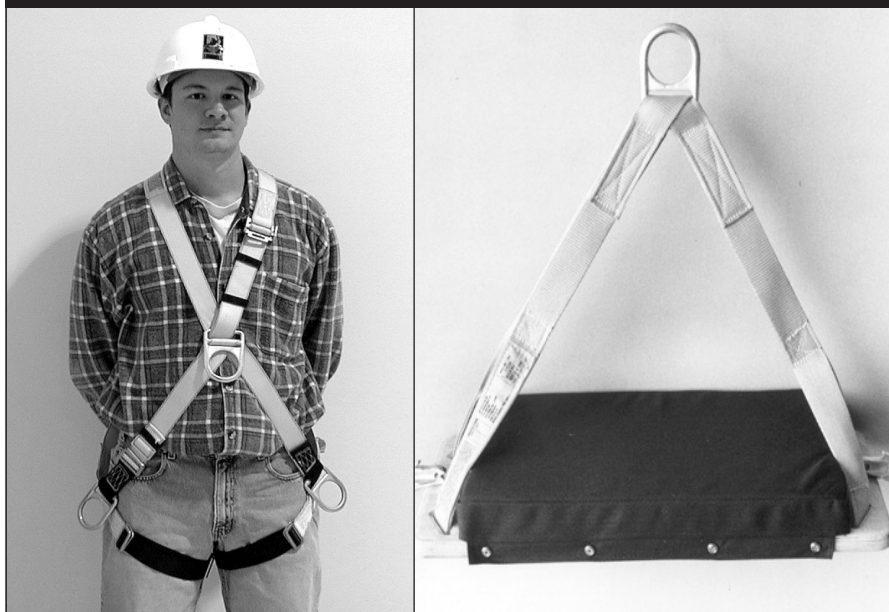
- 3.1 BEFORE EACH USE:** Before each use of this or any descent/rescue system equipment, carefully inspect it to ensure that it is in serviceable condition. Check for worn or damaged parts. Inspect the rope for cuts, fraying, burns, etc. Refer to section 5.0 for further inspection details. Do not use if inspection reveals an unsafe condition.
- 3.2 PLANNING:** Plan your positioning/rescue system and how it will be used before starting your work. Take into consideration factors that affect your safety before, during and after a fall. The following list gives some important points to consider when planning your system:
- A. ANCHORAGE:** Select an anchorage point that is rigid and capable of supporting 5,000 lbs. (22.2 kN). See section 2.4. The anchorage location must be carefully selected to reduce possible swing fall hazards and to avoid striking an object during a descent or fall.
 - B. SWING IMPACT:** Swing impacts occur when the anchorage point is not directly above the working point. The force of striking an object while swinging (horizontal speed of the user due to the pendulum affect) can be great and may cause serious injury. Swings can be minimized by working as directly below the anchorage point as possible. Never permit a swing if injury could occur. If a swing situation exists in your application, contact DBI-SALA before proceeding.
 - C. SHARP EDGES:** Avoid working where the rope will be in contact with or abrade against sharp edges. Provide protection for the rope when possible.
 - D. AFTER A FALL:** Any equipment which has been subjected to the forces of arresting a fall or exhibits damage consistent with the effect of fall arrest forces as described in section 5.0, must be removed from service immediately and destroyed by the user, the rescuer, or an authorized person.
 - E. RESCUE:** When using this equipment, the employer must have a rescue plan and the means at hand to implement it and communicate that plan to users, authorized persons, and rescuers.

WARNING: Read and follow manufacturer's instructions for associated equipment (full body harness, etc.) used in your positioning/rescue system.

IMPORTANT: For special (Custom) versions of this product, follow the instructions herein. If enclosed, see attached supplement for additional instructions to be followed when using a custom Fisk Descender.

- 3.3 BODY SUPPORT AND WORK SUPPORT:** Two separate attachment points must be provided for connection of system components. One attachment point must be provided for

Figure 6 - Work Support and Body Support



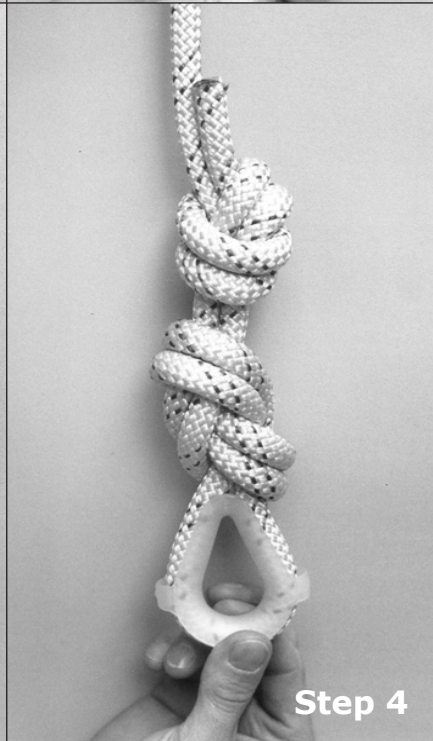
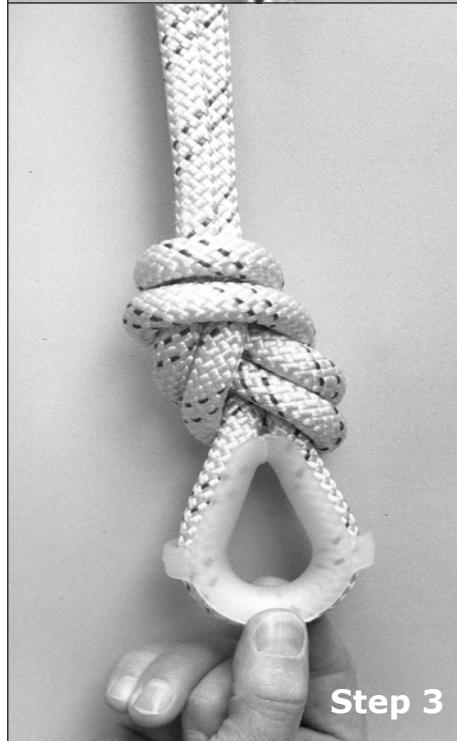
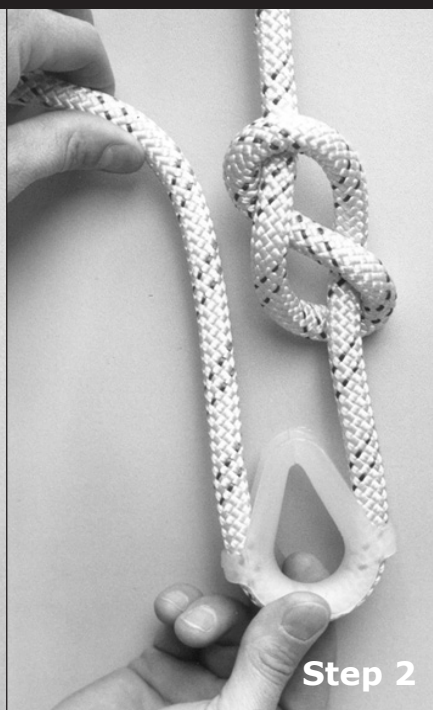
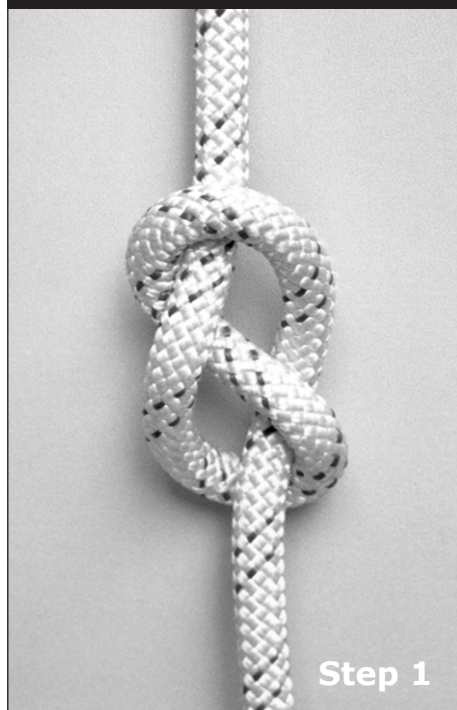
suspension (work support) and a second attachment point is required for connection of the back-up fall protection system (body support). DBI-SALA recommends using a boatswain's chair for work support and a full body harness for body support, see Figure 6. It is best to select a work support and body support which can be coupled together to provide back support when working and to prevent the worker from slipping from the chair. Do not attempt to use a waist belt (body belt) as a work support.

IMPORTANT: *The use of body belts for positioning/rescue is not recommended. Body belts increase the risk of injury during fall arrest in comparison to a full body harness. Limited suspension time and the potential for improperly wearing a body belt may result in added danger to the user's health.*

3.4 SET UP AND INSTALLATION OF LIFELINES: The anchorage point for the Fisk Descender's lifeline must be capable of supporting a 5,000 lb. (22.2 kN) minimum static load in the direction of operational pull. The anchor may be a building structure or other suitable anchoring point. **Attach the unit in the following manner:**

A. INCORPORATING THIMBLE: DBI-SALA recommends using a figure eight knot followed by an overhand or water knot (used to restrain the free end). To protect the rope, a thimble should be incorporated into the eye of the figure eight knot (1/2-in. teardrop thimble). See Figure 7. Knots other than the figure eight must not be used as they may reduce rope strength. Contact DBI-SALA if you have any questions.

Figure 7 - Incorporating Thimble

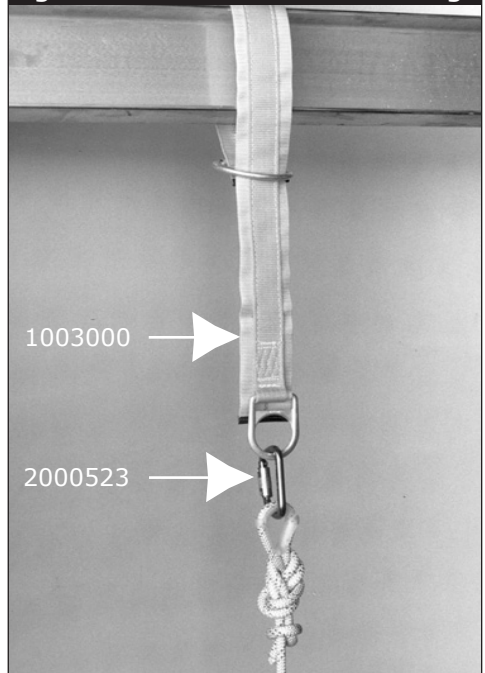


- B. CONNECTING TO ANCHORAGE:** Select an anchorage of sufficient strength. See section 3.2.A. Connect the thimble end of the lifeline either directly to the anchorage or to a tie-off adaptor (i.e. 1003000) using a self closing/self locking carabiner (i.e. 2000523). See Figure 8.

WARNING: Do not wrap the working line around an object and attach it back into the line. This will weaken the rope.

- C. STABILIZATION:** Working on longer lines or under windy conditions (avoid working in strong winds) may require stabilization to prevent swinging. Commercially available suction cups or sliders attached to the building rails are two means commonly used.

Figure 8 - Connection to Anchorage



- 3.5 MAKING CONNECTIONS:** Self locking snap hooks or self locking/self closing gate carabiners must be used to reduce the possibility of roll-out when making connections. Do not use hooks or connectors that will not completely close over the attachment object. Do not use non-locking snap hooks. Always follow the manufacturer's instructions supplied with each system component.

3.6 OPERATION OF THE FISK DESCENDER

- A. ATTACHING THE FISK DESCENDER TO THE WORKING LINE:** The first step in operating the Fisk Descender is learning how to install it onto the working line. Read and practice the following procedure before attempting to use the descender on the job. The VHS video provided with this product also contains step by step instructions for attaching the descender to the working line.

- Step 1.** Lay out the working line on a surface in front of you with the end which will be attached to the anchorage to your left. This is the "anchor" end. The free end of the working line is the "tag end". Position this end to your right. Follow Steps 2, 3, 4, 5, and 6 as shown in Figures 9, 10, 11, 12, 13, 14, and 15.

Figure 9 - Attaching to Working Line - Step 2

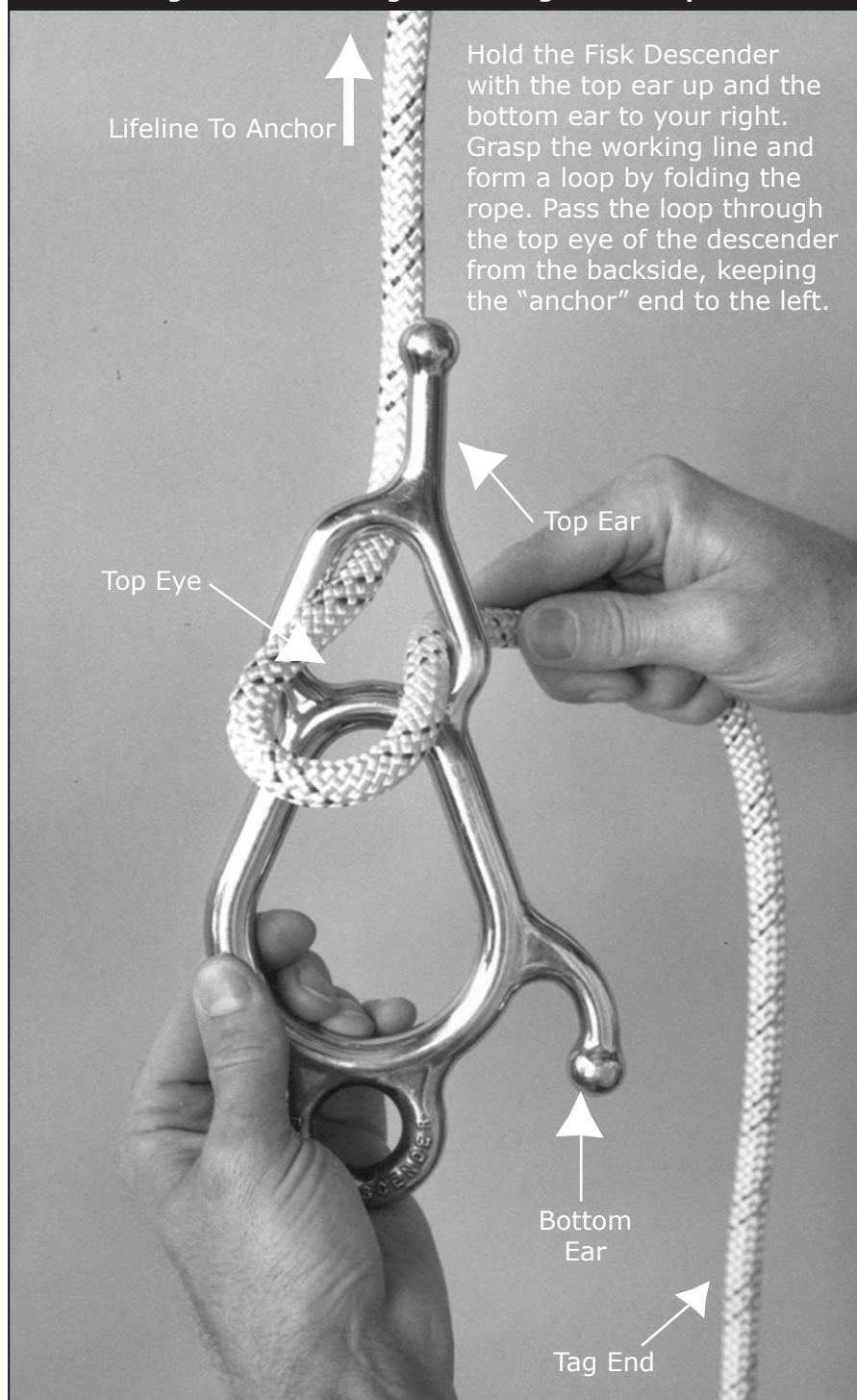


Figure 10 - Step 2 continued

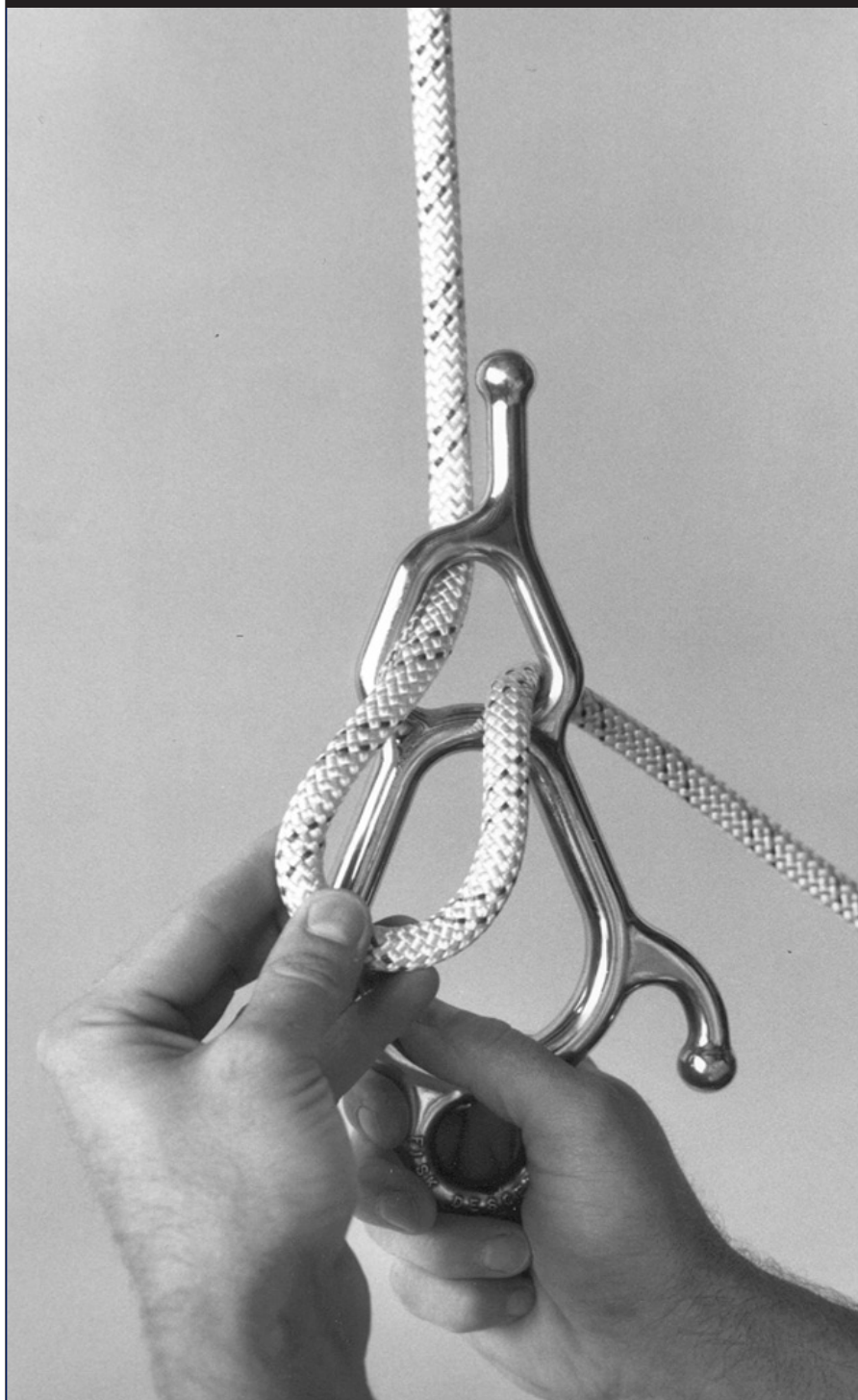


Figure 11 - Attaching to Working Line - Step 3

Continue pulling the loop through the top eye until large enough to pass the entire lower portion of the descender.

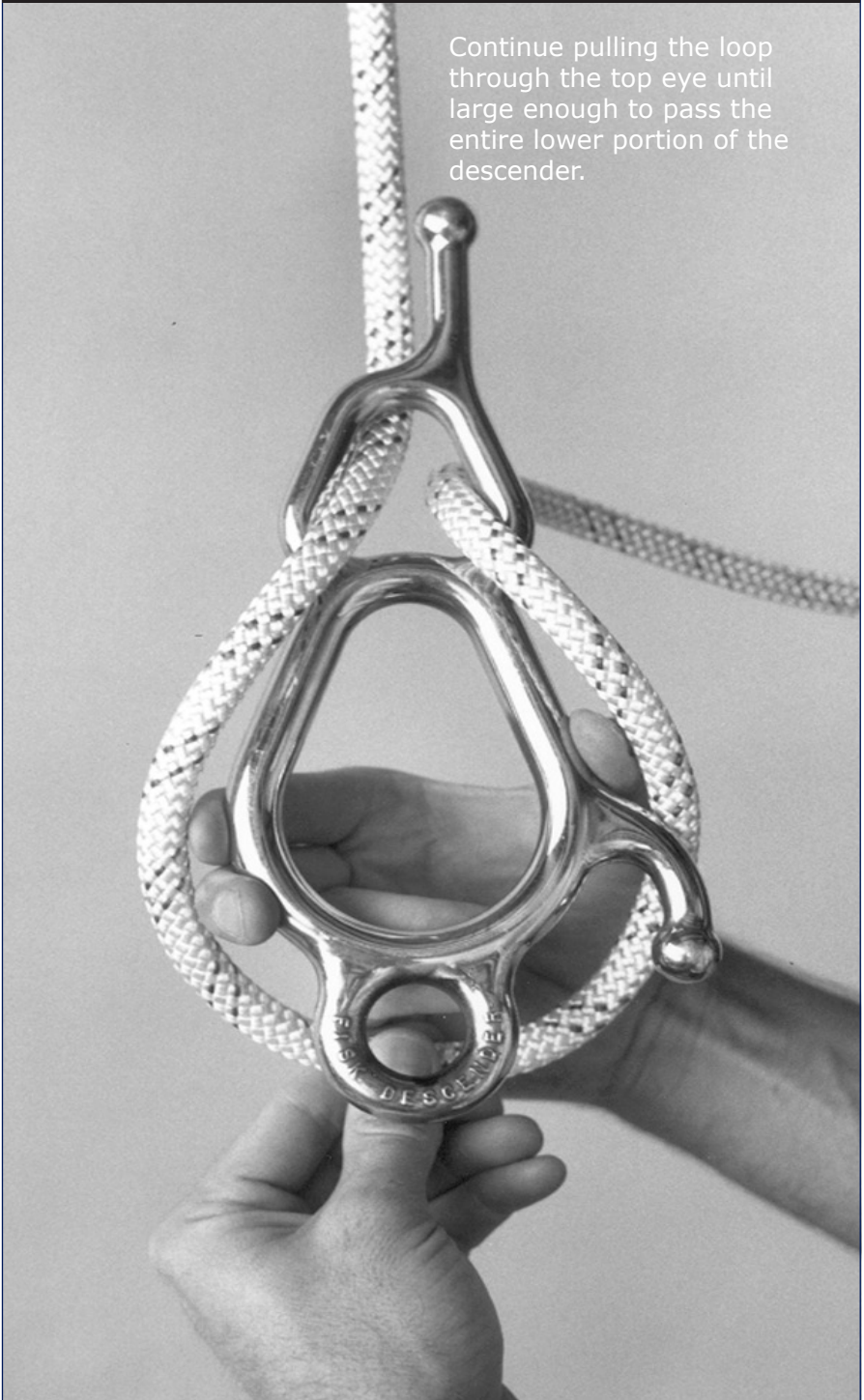


Figure 12 - Attaching to Working Line - Step 4

Next, pull the loop through the center eye from the backside.

Center
Eye



Figure 13 - Attaching to Working Line - Step 5

Reference Figure 12. Now slip the folded loop over the bottom eye. Remove slack line in the descender by pulling on the tag end of the working line.

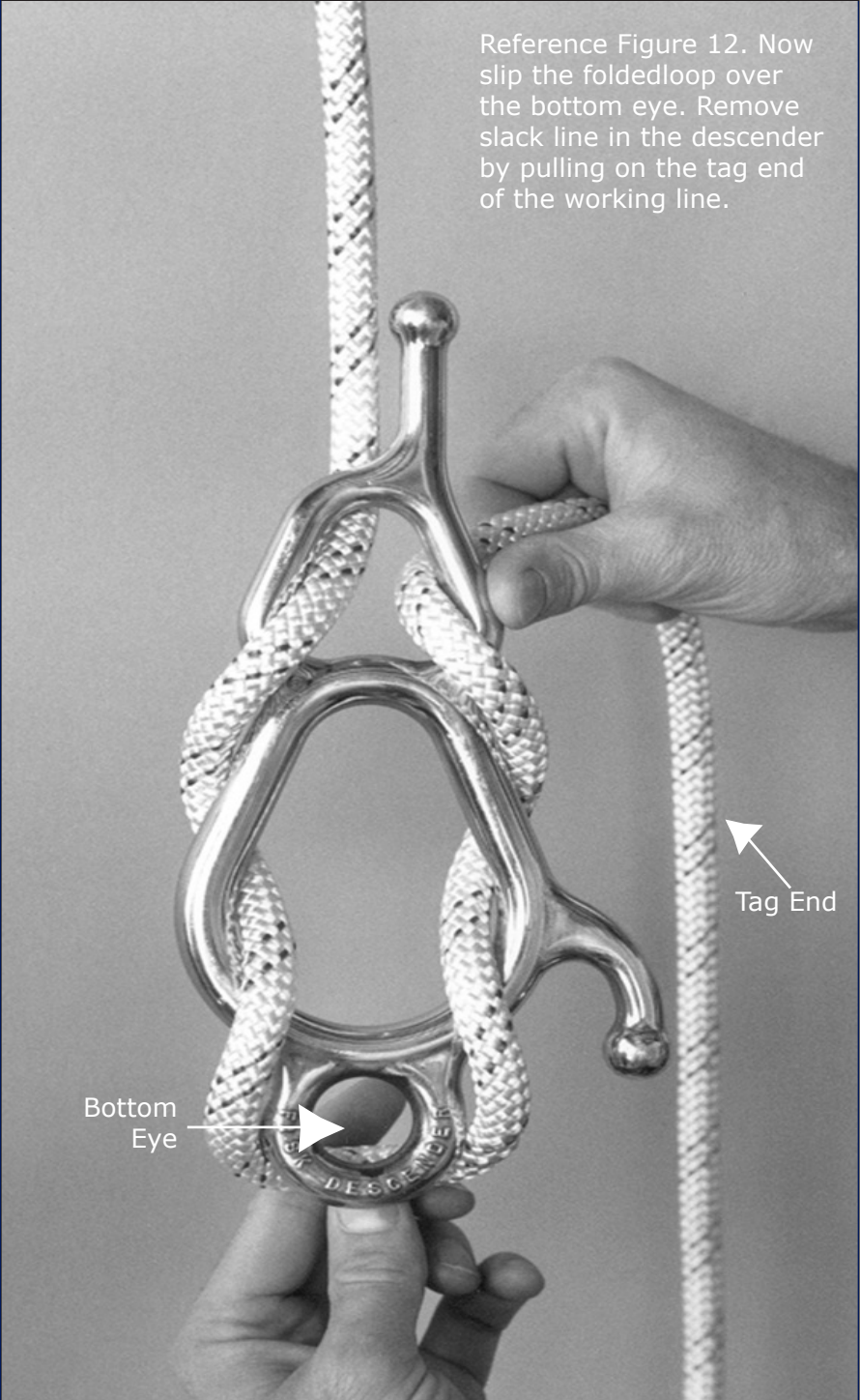


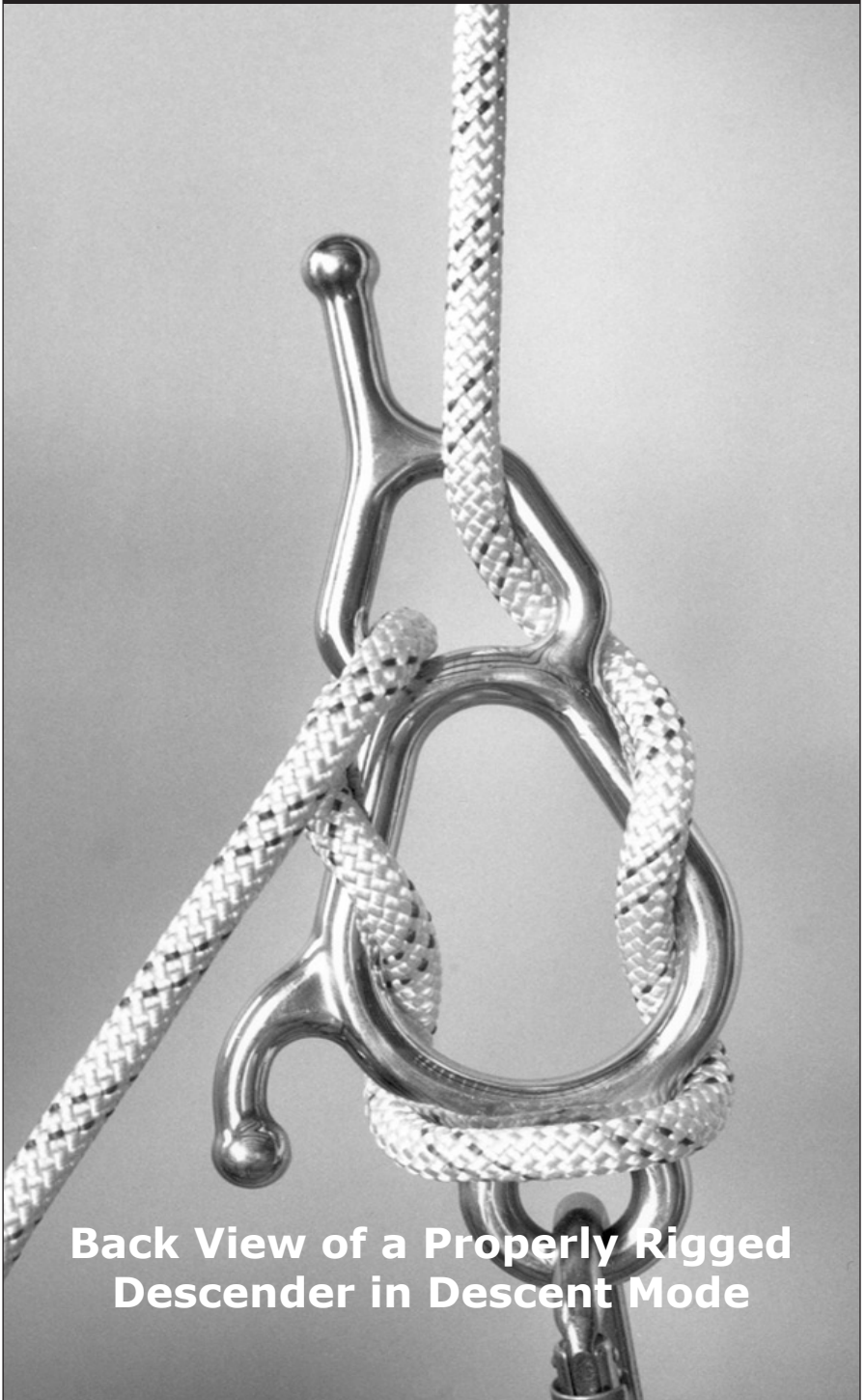
Figure 14 - Attaching to Working Line - Step 6

Remove the working line from the descender and repeat steps 1 - 4 until you are able to install the descender onto the working line without the aid of instructions.



**Front View of a Properly Rigged
Descender in Descent Mode**

Figure 15 - Back View



**Back View of a Properly Rigged
Descender in Descent Mode**

IMPORTANT: When learning to use the Fisk Descender rope descent system, DBI-SALA recommends selecting a training location that will minimize any fall hazard.

B. CONTROLLING DESCENT SPEED:

- Attach the Fisk Descender to the working line as described in section 3.6.A.
- Have an assistant hold the anchor end of the working line and, while applying slight tension to the tag end, pull on the lower eye of the descender. Notice how varying the tension in the tag end increases or decreases the force needed to move the descender down the working line. When using the Fisk Descender, maintain tension on the tag end of the working line to prevent unwanted descents.
- To “lock-off” temporarily at a work position, wrap the tag end of the working line around the bottom and top ears. See steps 1, 2, and the completion as shown in Figures 16, 17, and 18. For more permanent lock-off, wrap the working line as described above, then pull the line through the center eye from the back side and loop over the top ear. See steps 1, 2, and the completion as shown in Figures 19, 20, and 21.
- To unlock, release the loop from the top ear and unwind the working line from the top and bottom ears using a circular motion.

IMPORTANT: Always maintain tension on the tag end when locking or unlocking to prevent unwanted descents.

Figure 16 - Temporary Lock-Off Step 1

Wrap tag end of working line around bottom ear.



Figure 17 - Temporary Lock-Off Step 2

Bring working line up and wrap around top ear.



Figure 18 - Temporary Lock-Off Completion

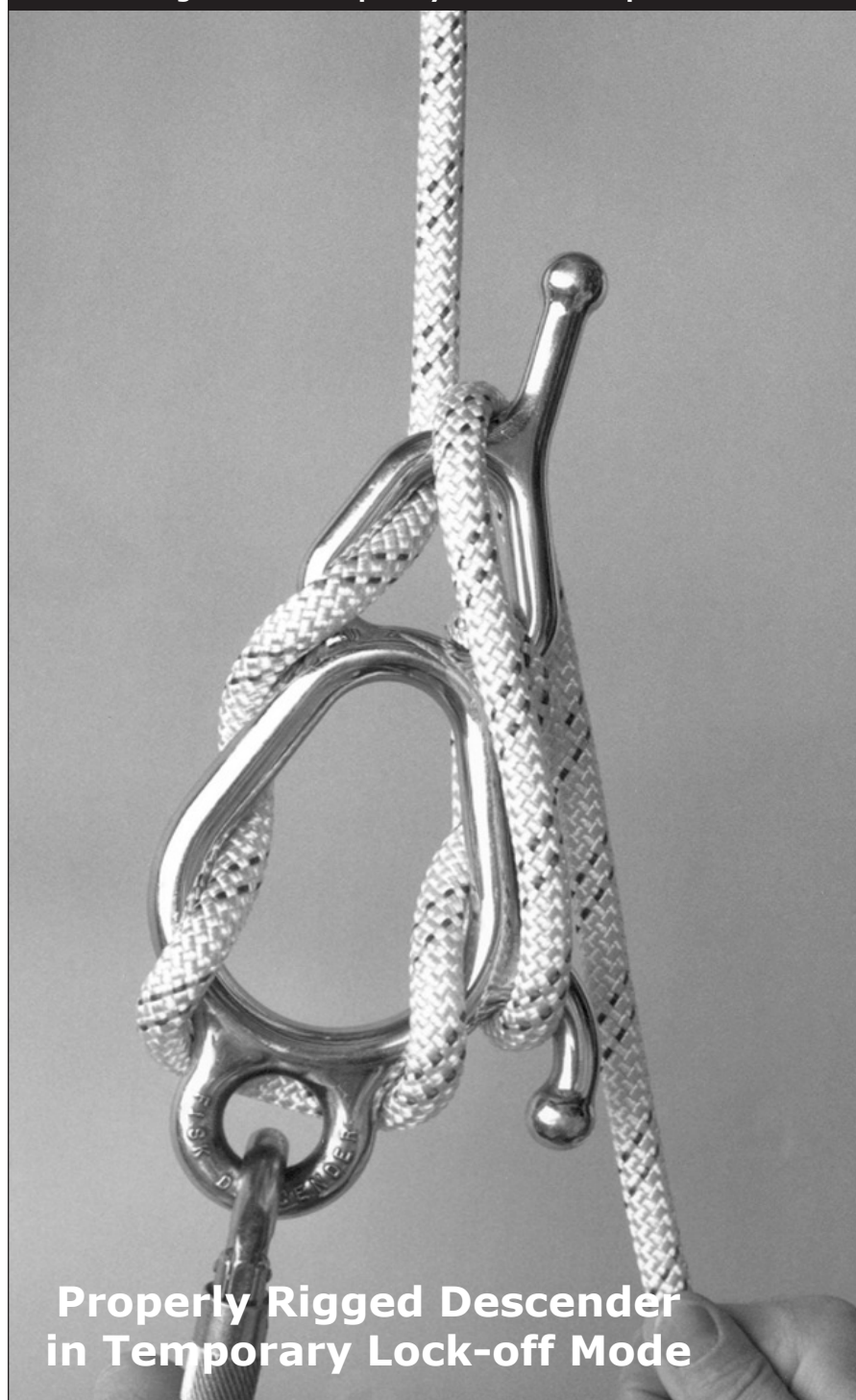


Figure 19 - Permanent Lock-Off Step 1

Make loop in working line and then pull the line through the center eye.

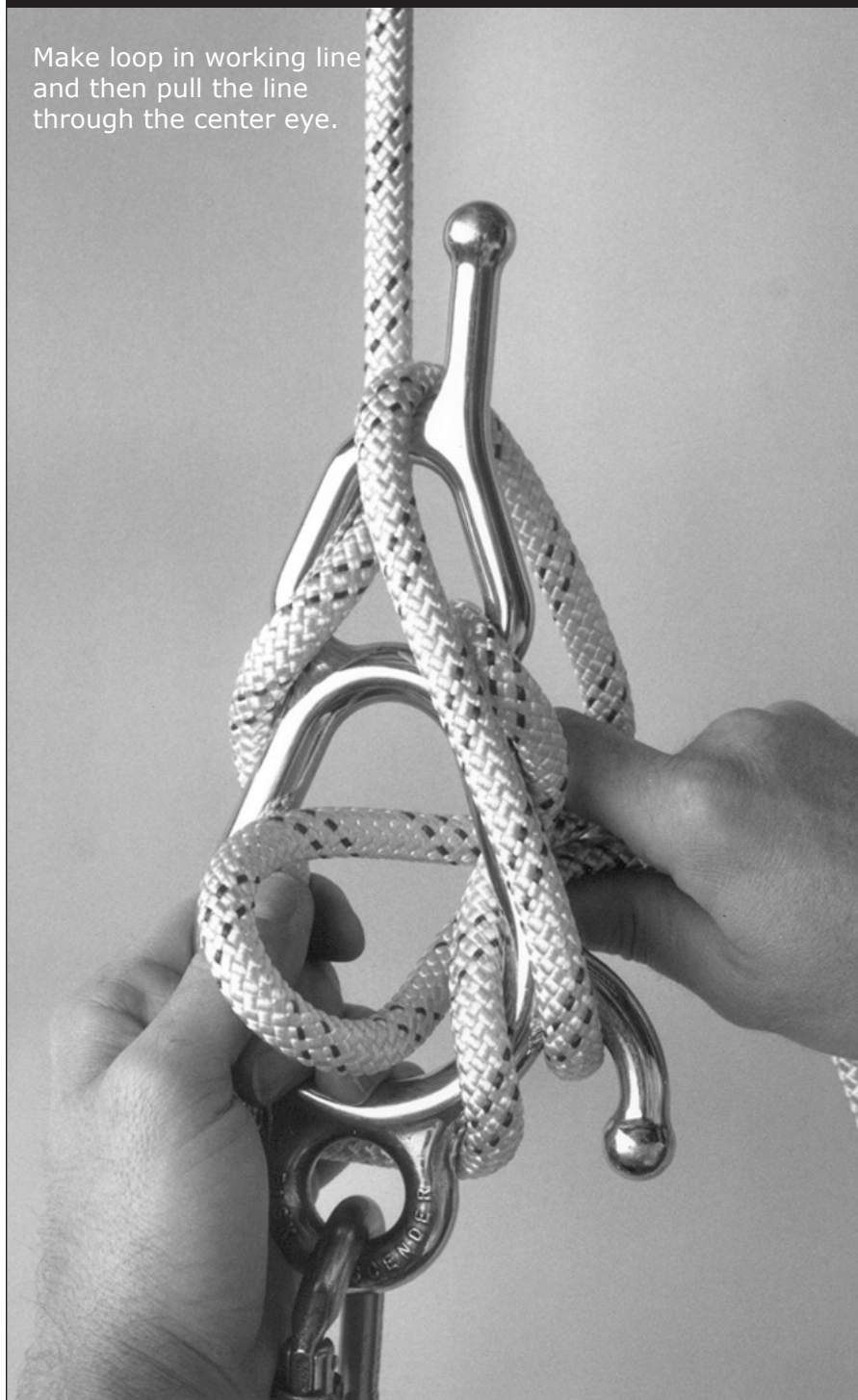


Figure 20 - Permanent Lock-Off Step 2

Wrap loop of the working line over the top ear.



Figure 21 - Permanent Lock-Off Completion

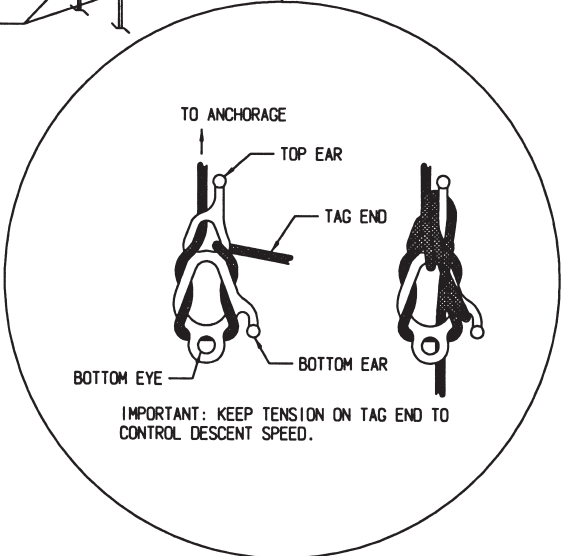
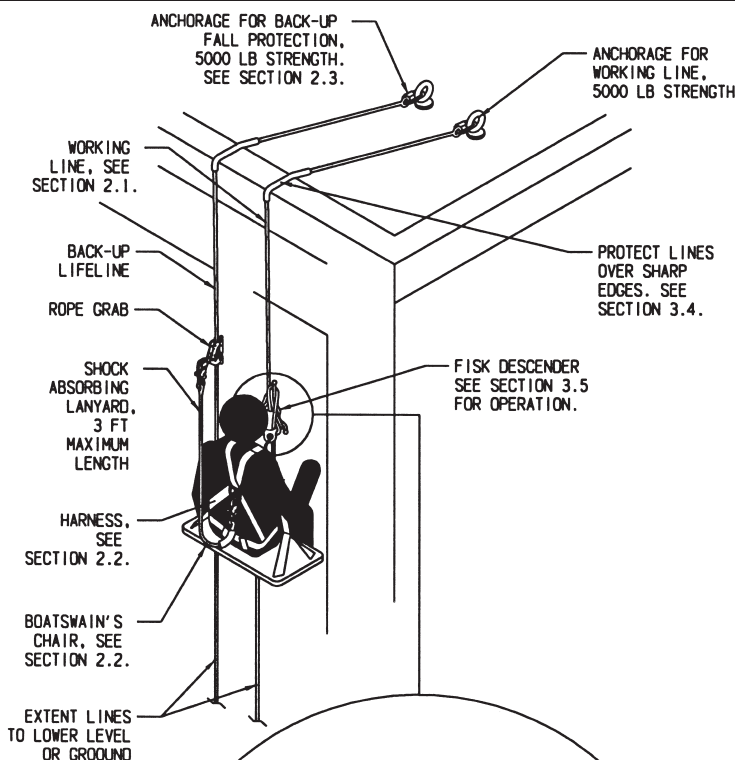


**Properly Rigged Descender in
Permanent Lock-off Mode**

3.7 ASSEMBLY OF THE SYSTEM: Reference Figure 22. The following general procedure may be used to assemble the Fisk Descender rope descent system:

Step 1. Inspect system components. See section 5.0.

Figure 22 - Assembly (parts identification)



- Step 2. Select an anchorage for the back-up fall protection system and connect to the anchorage in accordance with the manufacturer's instructions. See section 2.4.
- Step 3. Using a working line selected in accordance with Section 2.4, connect the working line to the anchorage. See sections 3.4 A and 3.4 B.
- Step 4. Put on your fall protection harness and connect to the fall arrest device using the back dorsal D-ring. See section 3.3.
- Step 5. Attach the Fisk Descender to the working line and lock-off as described in section 3.6.A using the permanent lock-off.
- Step 6. Using a self locking connector, connect the boatswain's chair to the bottom eye of the Fisk Descender.
- Step 7. Climb into the boatswain's chair and couple the harness to the chair using a second locking connector.
- Step 8. To control the descent speed see section 3.6 B.

3.8 USE OF WORKING LINES:

- Step 1. Always protect the working line when passing over or around sharp edges. Sharp edges can reduce rope strength by 70% or more.
- Step 2. Keep working line clean. See section 6.0.
- Step 3. Avoid twisting or kinking working line. If storage bag or box is available, it is best to simply feed the rope into the storage bag rather than attempting to coil the rope.
- Step 4. Avoid using working lines near acids or alkalis. If working line is used around any chemical or compound watch for signs of deterioration.
- Step 5. Other than for attaching to the anchorage as described in section 3.4 A, do not knot the working line. Knots can reduce rope strength by 50%.
- Step 6. Store working line properly. See section 6.0.

4.0 TRAINING

- 4.1 TRAINING:** The user and the user's employer, must be trained in the correct use and care of this equipment. Both parties must be aware of the operating characteristics, application limits, and consequences of improper use of this equipment. Consult training video (part no. 5901693) for additional training and use information.

IMPORTANT: Training must be conducted without exposing the trainee to a fall hazard. Training should be repeated on a periodic basis.

5.0 INSPECTION

5.1 FREQUENCY:

- **Before Each Use:** Visually inspect per steps listed in sections 5.2, 5.3, and 5.4.
- **Monthly:** A formal inspection of the Fisk Descender and working lines should be done by a competent person other than the user. See sections 5.2, 5.3, and 5.4 for guidelines. Record results in the Inspection and Maintenance Log in section 9.0.

IMPORTANT: Consult individual subsystem user instruction manuals for inspection frequency and steps.

IMPORTANT: Extreme working conditions (harsh environment, prolonged use, etc.) may require increasing the frequency of inspections.

5.2 INSPECTION STEPS FOR THE FISK DESCENDER:

- Step 1: Inspect for wear along the entire Fisk Descender unit.
- Step 2: Inspect for cracks and deformation.
- Step 3: Inspect for burrs or sharp edges which may snag or cut the working line. Small burrs may be removed using a metal file or emery cloth.

5.3 INSPECTION STEPS FOR THE WORKING LINES:

- Step 1: Inspect the lifeline hardware (thimble). The thimble must not be damaged, broken, distorted, or have any sharp edges, burrs, cracks, worn parts, or corrosion.
- Step 2: Inspect the rope for concentrated wear. The rope must be free of frayed strands and broken yarns, cuts and abrasions, burns, and discoloration. Check for kinks and hockles in the working line.
- Step 3: Check for chemical or heat damage (brown or brittle areas). Inspect for heavily soiled areas, grit, oil, grease, paint, etc.
- Step 4: Check for ultraviolet damage indicated by discoloration and the presence of splinters and splinters on the rope surface).
- Step 5: Untie any knots and inspect the rope in the knot area.

- 5.4** If inspection or operation reveals a defective condition, remove the Fisk Descender from service immediately and contact an authorized service center for repair.

6.0 MAINTENANCE, SERVICING, STORAGE

- 6.1** Periodically clean the exterior of the Fisk Descender using water and a mild soap solution.
- 6.2** Clean rope with water and mild soap solution. Rinse and thoroughly air dry. Do not force dry with heat. Immediately wash entire rope assembly if it has been exposed to acidic vapors or materials.

WARNING: *If rope comes in contact with any acids, remove from service and wash with a water and mild soap solution. Do not return the system to service without first being inspected by a qualified inspector. Acids in contact with rope for extended periods of time can weaken rope without visible evidence of damage. Only a qualified inspector can determine rope status.*

- 6.3** Store Fisk Descender and working lines in cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Inspect the Fisk Descender and working lines after any period of extended storage.

7.0 SPECIFICATIONS

Fisk Descender	304 Stainless Steel, investment cast strength. Weight 1 lb. 13 oz. (1 kg) Capacity 440 lbs. (200 kg) maximum (one person).
Rope 9503221	Static - Kernmantle, 1/2 in. (12 mm) diameter, 10,000 lb. (44.4kn) average strength, constructed of continuous filament polyester cover braided over continuous filament nylon core. Elongation approximately 2 % of length @ 440 lbs. (200kg).
Rope 9503222	12 strand with braid, 1/2" (12mm) diameter, 9,300 lb. (41.3kn) average strength, constructed of high tenacity polyester fibers. Elongation approximately 3.5% of length @ 440 lbs. (200kg).
Rope 9503223	12 strand with braid, 1/2" (12mm) diameter, 9,200 lb. (40.8kn) average strength, constructed of high tenacity nylon type 6.6. Elongation approximately 3.5% of length @ 440 lbs. (200kg).

8.0 TERMINOLOGY

AUTHORIZED PERSON: A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard (otherwise referred to as "user" for the purpose of these instructions).

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

CERTIFIED ANCHORAGE: An anchorage for fall arrest, positioning, restraint, or rescue systems that a qualified person certifies to be capable of supporting the potential fall forces that could be encountered during a fall or that meet the criteria for a certified anchorage prescribed in this standard.

QUALIFIED PERSON: A person with a recognized degree or professional certificate and with extensive knowledge, training, and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating and specifying fall protection and rescue systems to the extent required by this standard.

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.

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER: _____

DATE PURCHASED: _____ DATE FIRST USED: _____

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
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WARRANTY

Equipment offered by DBI-SALA are warranted against factory defects in workmanship and materials for a period of two years from date of purchase. Upon notice in writing, DBI-SALA will promptly repair or replace all defective items. DBI-SALA reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. Warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI-SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.



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Rev: E