



Trusted Quality Fall Protection

Instructions for the following series products:

LADDER CLIMBING CABLE SLEEVE

Model Numbers: See Figure 1

User Instruction Manual Cabloc Detachable Cable Sleeve

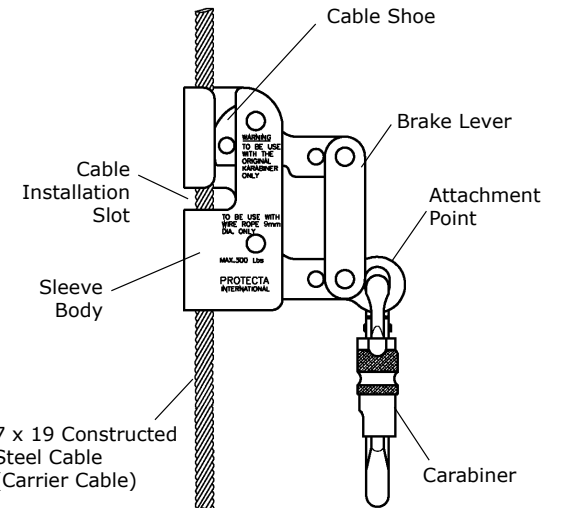
This manual is intended to be used as part of an employee training program.

WARNING: These instructions must be provided to the user and installer of this equipment. The user and installer of this equipment must read and understand these instructions before use or installation. Follow the manufacturer's instructions for other safety equipment used with this system. Follow these instructions for proper use, inspection, and maintenance of this equipment. This product is intended to be used as a part of a complete Cabloc ladder safety system. Alterations, substitutions, or misuse of this equipment, or failure to follow instructions, may result in serious injury or death.

IMPORTANT: If you have questions on the installation, use, maintenance, or suitability of this equipment for your application, contact PROTECTA.

IMPORTANT: Before using this equipment, record the product identification information from the installation and service label in the "Inspection and Maintenance Log" at the back of this manual.

Figure 1 – Cabloc Detachable Cable Sleeves



Model	Cable Dia.	Safety Standard	Anti-Inversion
AC350A	5/16" (8 mm)	ANSI A14.3	
AC351A	3/8" (9.5 mm)	ANSI A14.3	
AC350C	5/16" (8 mm)	CSA Z259.2.5	✓
AC351C	3/8" (9.5 mm)	CSA Z259.2.5	✓

7 X 19 CABLE ONLY: Cabloc Cable Sleeves shall only be used on 7 x 19 constructed cable of the diameters specified above.

1.0 APPLICATIONS

1.1 PURPOSE: The Cabloc Detachable Cable Sleeve is designed to protect a worker in the event of a fall while climbing fixed ladders or similar climbing structures. The Cabloc Detachable Cable Sleeve, (Figure 1) attaches to a Flexible Cable Ladder Safety System. The sleeve is designed to arrest the fall of a worker in the event of a fall while climbing a fixed ladder. The Cabloc Detachable Cable Sleeve is not intended to be used for material handling. Use only for intended purpose.

NOTE: The installer and user must ensure the ladder meets all applicable local, state, and federal standards, including ANSI A14.3.

1.2 LIMITATIONS: Cabloc detachable cable sleeves must be used with a PROTECTA approved ladder safety system. Use only the Cabloc Sleeve model specified in Figure 1 for you applicable cable diameter and safety standard(s). The Cabloc cable sleeve must be directly connected to an approved full body harness with the carabiner supplied with the sleeve, (see Figure 1). **Do not use connection devices other than the supplied carabiner. Do not add additional connectors or lanyards between the user and the cable sleeve.**

NOTE: ANSI A14.3, CSA Z259.2.5, and OSHA 1926.1053 states that the length of connection between the carrier cable and attachment point on the full body harness must not exceed 9 inches (225mm).

1.3 Refer to applicable local, state, and federal (OSHA) requirements governing this equipment for more information on ladder safety systems and associated components, including OSHA 1910.27.

2.0 SYSTEM REQUIREMENTS

2.1 COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS: This equipment is designed for use with PROTECTA approved components and subsystems. The use of non-approved components and subsystems may jeopardize compatibility of equipment, and could affect the safety and reliability of the complete system. Contact Capital Safety if you have questions about compatibility of equipment.

WARNING: Before using a Cabloc Ladder System in combination with a climb assist system, consult the climb assist system manufacturer's instructions for any restrictions or limitations concerning simultaneous use of these systems. Capital Safety has found that some connection combinations may interfere with proper operation of the Cabloc Detachable Sleeve and may result in failure to arrest a fall. Avoid connecting the sleeve used on the Cabloc Ladder System into the same harness connection D-ring as is occupied by the climb assist system. Ensure that movement of the arm of the Cabloc sleeve is not restricted or interfered with by the climb assist system or its connectors. Failure to heed this warning may result in serious injury or death.

2.2 COMPATIBILITY OF CONNECTORS: Use only supplied connectors. Connectors used with this system (hooks, carabiners, D-rings) must be capable of supporting a minimum of 5,000 lbs. Use caution to assure compatibility of hooks and the connection point. Non-compatible connectors may unintentionally disengage (roll-out). Connectors must be compatible in size, shape, and strength. All connectors used must be self closing/self locking connectors.

2.3 MAKING CONNECTIONS: (See Figure 5.)

Capital Safety snap hooks and carabiners **SHOULD NOT** be connected:

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

Ensure all connectors are fully closed and locked.

3.0 OPERATION AND USE

3.1 BEFORE EACH USE: Inspect the system and cable sleeve according to Section 5.0. Verify from the label markings that the system has been formally inspected within the last year. **DOT NOT USE** an improperly maintained Cabloc system and **DO NOT CLIMB** a structure that not in good condition. Inspect the detachable cable sleeve according to Section 5.3. Inspect the full body harness according to the manufacturer's instructions. Inspect the Cabloc Ladder Safety System according to Section 5.4.

3.2 PLAN the use of the System **prior to starting work**. Consider all factors that will affect your safety **before starting your work**.

To avoid serious injury or death, follow the safety information in this section.

- Ensure the system is rated for the required number of users.
- There are hazards associated with connecting and disconnecting from the system. Use secondary fall arrest protection. Ensure adequate anchor points, landing platforms, or other means are available at connection and disconnection points to allow safe transitions to and from the system.
- Identify hazards in the work area that could cause injury to the user or damage to the system, such as: high heat, electrical hazards, chemical hazards, falling objects, or moving machinery.
- A minimum fall clearance of 7 ft. (2m) is required between the user's feet and surface below. The user may not be protected against hitting the ground or landing during the first 7 ft. (2m) of ascent or last 7 ft. (2m) of descent. Use proper climbing procedures (e.g., maintain 3 points of contact with hands and feet) when ascending or descending any portion of the ladder unprotected by the Cabloc system.
- Use proper safety procedures when climbing. Do not carry tools or equipment by hand. Keep your hands free for climbing. Secure carried items to avoid dropping them on climbers below. Climb within your ability. Long climbs may require several rest stops during ascent or descent to avoid exhaustion. Use proper work positioning equipment for rest breaks. **DO NOT** climb in high winds or severe weather.
- Ensure only one user is climbing between cable guides.

3.3 CONNECTING THE CABLOC CABLE SLEEVE TO THE CARRIER CABLE:

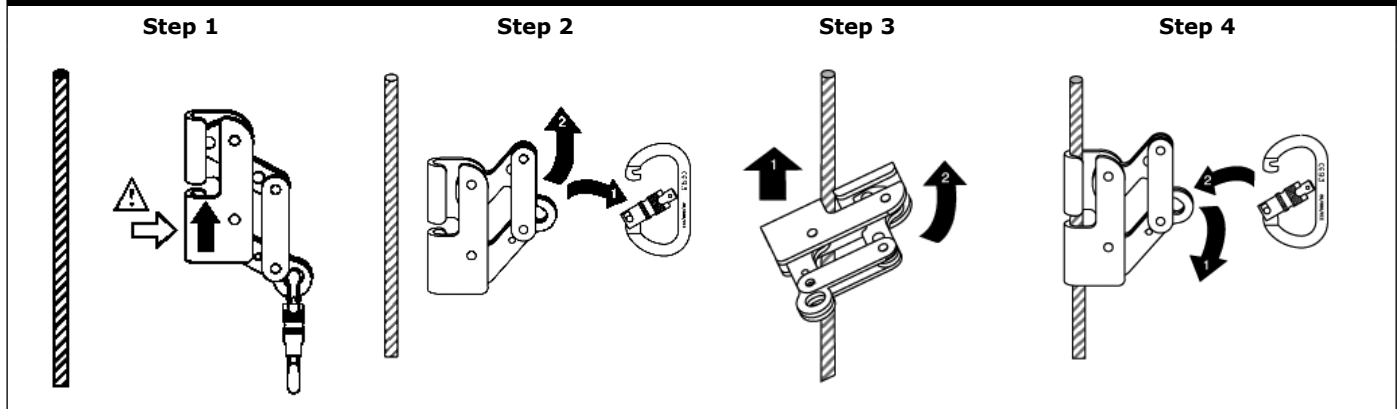
WARNING: The Cabloc sleeve must only be used on a vertical cable system. Do not use the cable on angled or horizontal cable systems as the sleeve may not lock properly on the cable. In situations where a fall hazard exists, use a back-up fall arrest system, such as a lanyard, to protect against a fall.

Step 1. Ensure the sleeve is correctly positioned relative to the carrier cable. The 'up' arrow on the sleeve must be pointing to the ascending direction. (See Figure 2.)

WARNING: Never install the sleeve upside down on the cable, severe injury or death may occur.

- Step 2.** Remove the carabiner and pivot the handle to its full upright position. This will draw back the cable shoe to allow insertion of the carrier cable into the sleeve housing. The sleeve design does not allow the sleeve to be installed or removed while the carabiner is attached to the handle.
- Step 3.** Rotate the top of the sleeve to the right until the sleeve body is horizontal. Position the sleeve so that the cable slides all the way into the cable installation slot. Rotate the sleeve back into a vertical position so that the cable is captive in the cable slot.
- Step 4.** Allow the handle to return to its operating position. This will allow the cable shoe to contact the cable and lock the cable in the sleeve body. Re-attach the supplied Carabiner to the attachment point of the Cabloc sleeve.

Figure 2 – Installation



3.4 CONNECTING THE CABLOC SLEEVE TO THE HARNESS:

Connect the carabiner on the sleeve, to the full body harness frontal D-Ring, (see Figure 3, A) designated for ladder climbing.

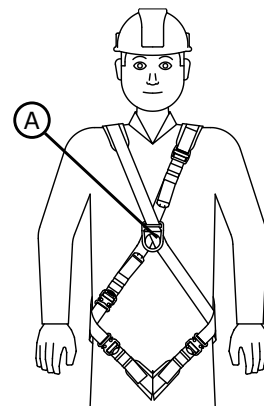
The D-Ring is located above the user's center of gravity and centrally located near the sternum. Always use the carabiner or snap hook connector supplied with the sleeve.

Do not substitute with other connectors. Do not use other connecting devices or combine devices such as a lanyard, chain, link, clevis, etc. with the connector supplied with the sleeve.

Connection between the sleeve and full body harness must be done after the sleeve has been installed onto the carrier cable.

When connecting, ensure the carabiner gate is fully closed and locked. The distance between the carrier cable and the harness must not exceed 9 inches, (225mm).

Figure 3 – Connect Cabloc to Harness



IMPORTANT: Use secondary fall protection (e.g. lanyard) while connecting or disconnecting the sleeve to or from the carrier cable. Make sure to complete the connection of the sleeve to the cable before removing the secondary fall protection.

IMPORTANT: DO NOT USE the Cabloc Detachable Sleeve as work positioning equipment. Use the proper work positioning equipment where necessary.

IMPORTANT: Handling the sleeve during ascent or descent exposes the worker to fall hazards.

3.5 CLIMBING ON THE SYSTEM:

- Step 1.** Don the appropriate full body harness according to the manufacturer's instructions.
- Step 2.** Attach the Cabloc cable sleeve to the carrier cable, (see Section 3.2).
- Step 3.** Connect the Cabloc cable sleeve to the attachment point on the full body harness.

- Step 4.** To ascend, climb up the ladder normally. The detachable cable sleeve will follow the climber. The carrier cable will snap out of the cable guides as the climber passes the guides. Reconnect the carrier cable to the cable guide after passing each guide. **Do not remove detachable cable sleeve from carrier cable to pass cable guides.** Use caution when climbing. Avoid carrying tools or equipment that do not allow your hands to be free for climbing. Ensure items carried are secure to avoid dropping on climbers below. Climb within your ability. Long climbs may require several rest stops during ascent or descent to avoid exhaustion. Avoid climbing in high winds or severe weather whenever possible.
- Step 5.** To descend, climb down smoothly in a normal position. Allow the detachable cable sleeve to lead the climber down. Climbing down out of position (leaning back excessively) will cause the detachable cable sleeve to lock on the carrier cable. If the detachable cable sleeve locks, move upward slightly to release, then continue down the ladder.
- Step 6.** When climbing is completed and the user is in a safe location remove the carabiner from cable sleeve and remove the sleeve from the cable.

IMPORTANT: Identify hazards to avoid climber injury.

IMPORTANT: Hazardous environments or conditions include, but are not limited to power lines, heat or flame, explosive gases, physical obstructions and the climbers ability and health.

IMPORTANT: IN THE EVENT OF A FALL, the Cabloc Detachable Sleeve must be removed from service.

IMPORTANT: The user (employer) must have a rescue plan in place and the ability to implement the plan in the event of a fall.

4.0 TRAINING

- 4.1 TRAINING REQUIREMENTS:** It is the responsibility of the user and purchaser of this equipment to assure they are familiar with these instructions, operating characteristics, application limits, and the consequences of improper use of this equipment. Users and purchasers of this equipment must be trained in the correct care and use of this equipment.

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

5.0 INSPECTION

5.1 FREQUENCY:

- **Before Each Use:** Visually inspect the detachable cable sleeve with the Cabloc installation according to Section 5.2 and 5.3. Inspect other system components according to manufacturer's instructions.
- **Formal Inspection:** A formal inspection of the detachable cable sleeve must be performed at least annually by a competent person¹ other than the user.
- **After a Fall:** If a fall occurs with the detachable cable sleeve or on the Cabloc system a formal inspection of the entire system must be performed by a competent person other than the user. See Sections 5.2 and 5.3. Record the inspection results in the 'Inspection and Maintenance Log'.

- 5.2 IF INSPECTION REVEALS AN UNSAFE OR DEFECTIVE CONDITION:** Remove the ladder safety system or detachable cable sleeve from service and destroy or contact an authorized service center for repair.

5.3 INSPECTION GUIDELINES FOR CABLOC LADDER SAFETY SLEEVE:

- **Inspect:** the brake lever and cable shoe for bends, cracks, and deformation. Inspect the connection point for wear or distortion. Check all surfaces for corrosion. All fasteners and rivets must be securely attached. Operation of the brake lever and cable shoe must be free and smooth. Springs must be secure and of sufficient strength to pull the brake lever down. (See Figure 1.)
- **Inspect:** the sleeve body for wear on the inside where the cable passes through.
- **Inspect the supplied carabiner** for any damage. Confirm the gate opens and closes without any sticking. Confirm the gate fully closes and locks.
- **Inspect Markings:** All markings must be present and completely legible. (See Figure 4.)
- **In Canada:** Ensure that the anti-inversion device is operational by turning the cable sleeve upside down and trying to operate the brake lever. If the lever operates up and down in the inverted position, the anti-inversion device is defective and the sleeve must be removed from service and destroyed or returned to Protecta for repair.

¹ **Competent Person:** An individual designated by the employer to be responsible for the immediate supervision, implementation, and monitoring of the employer's managed fall protection program who, through training and knowledge, is capable of identifying, evaluating, and addressing existing and potential fall hazards, and who has the employer's authority to take prompt corrective action with regard to such hazards.

5.4 INSPECTION GUIDELINES FOR LADDER SAFETY SYSTEM

- Refer to ladder safety system installation instructions when performing the inspection procedures.
- Check the top and bottom brackets for visible damage or corrosion. Look for cracks, bends or wear that could affect the strength and operation of the system. Inspect welds. Look for cracked or broken welds that could affect strength of bracket. Replace parts if defects are found.
- Check for loose or missing fasteners that secure the top and bottom brackets to structure: bolts, clamp plates, U bolts. If fasteners are loose, re-tighten as necessary to the torque levels listed in the Installation Instructions supplied with the Ladder Safety System.
- Check cable guides for damage. Look for wear or damage to black urethane. Cable guides should restrain the cable and prevent cable contact with the ladder/structure. Cable guides should be placed approximately every 25 ft (8m) or closer if required. Replace parts if defects are found.
- Check cable guide fasteners. The fasteners should the secure cable guide in position. Tighten as necessary.
- Inspect the cable for corrosion, kinks or damage that will affect strength and impede the cable sleeve from traveling on the cable. If there are any nicks or kinks in the ladder cable, the cable must be inspected by a competent person prior to use. Inspect for signs of abrasion against the ladder or structure. Replace the cable if defects are found.
- Inspect the cable tension. Cable should be tight enough to prevent contact with the ladder / structure. Re-tension the cable if necessary. **Do not over-tension the system.**

5.5 INSPECT LADDER/CLIMBING STRUCTURE:

- Inspect the ladder/climbing structure to which the Cabloc Sleeve and ladder safety system is attached. Make sure the structure is in good condition, secure, and safe to climb. **DO NOT USE if the condition of the structure is questionable.** Consult instructions and/or personnel familiar with the structure prior to use.

IMPORTANT: DO NOT ATTEMPT UNAUTHORIZED REPAIR. Record the results of this inspection in the Inspection and Maintenance Log in this manual.

Figure 4 – Markings

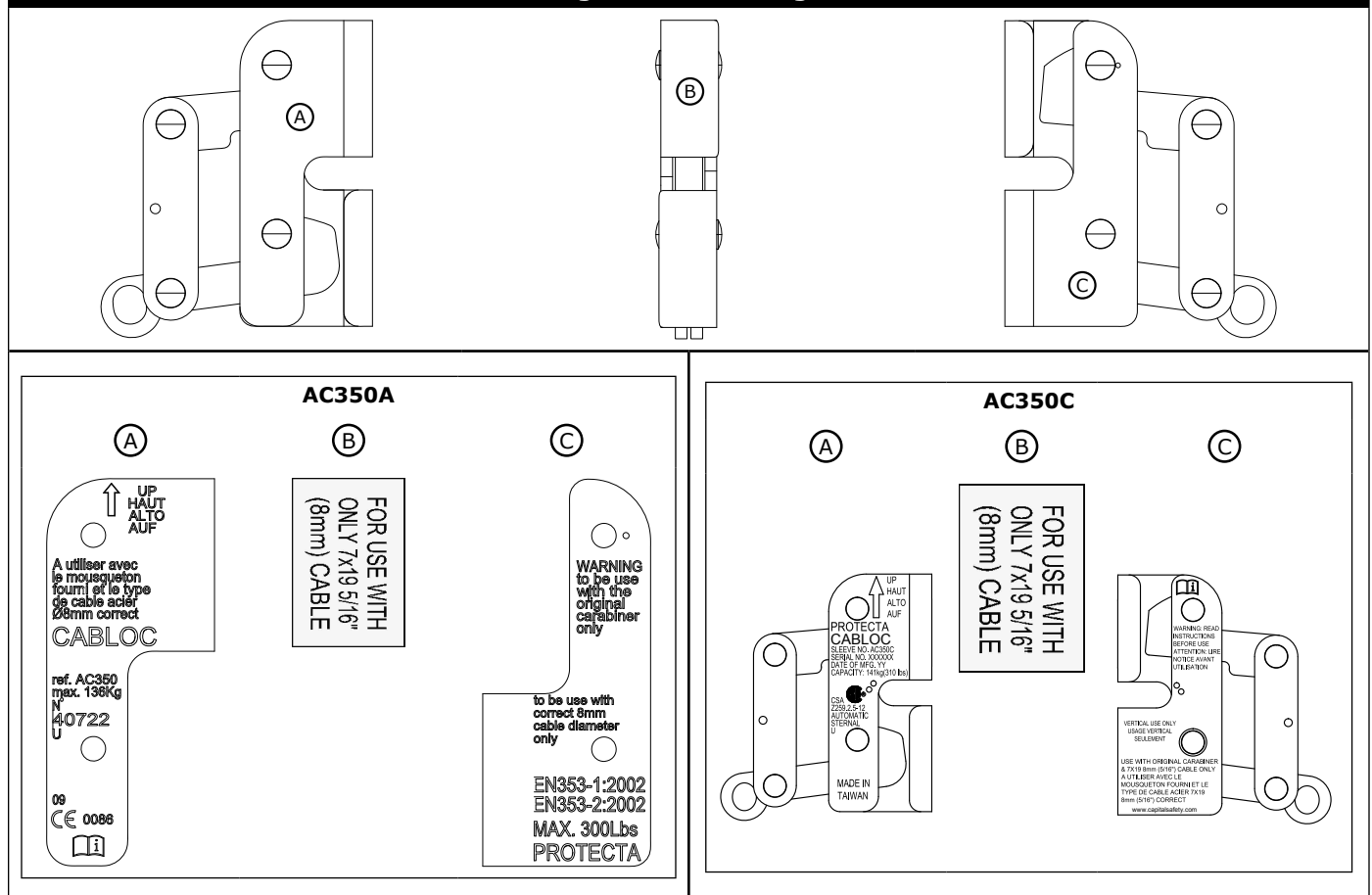
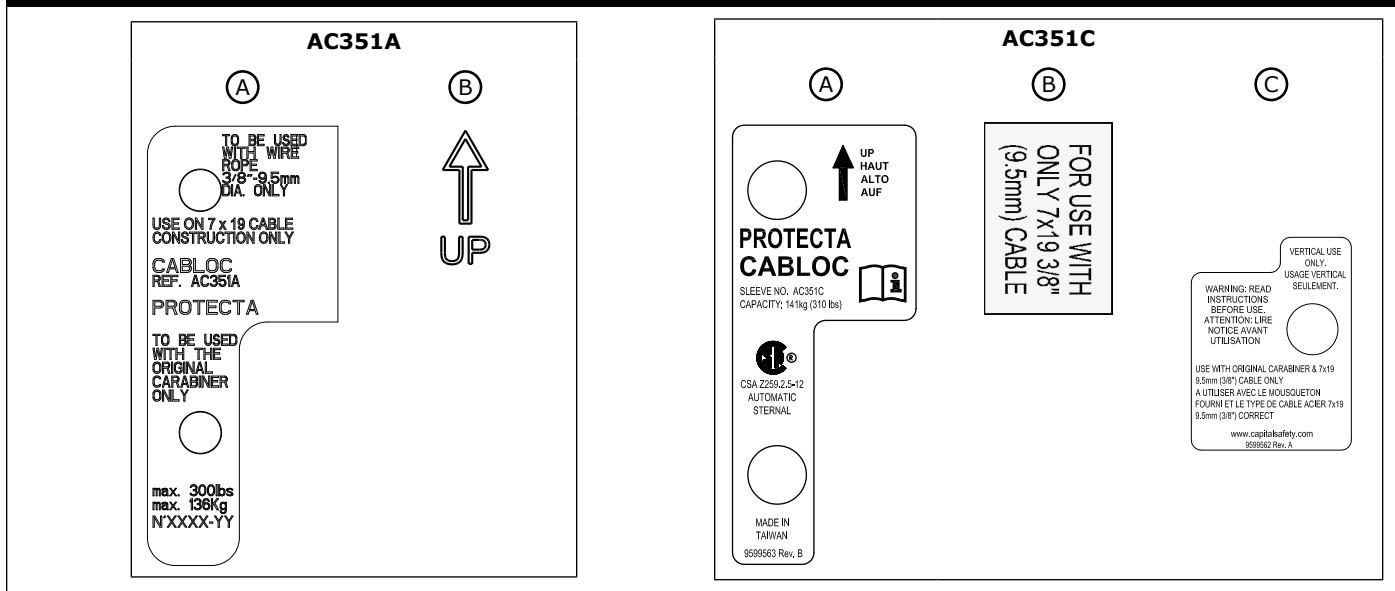


Figure 4 – Markings



6.0 MAINTENANCE, SERVICE, AND STORAGE

6.1 See Section 5.0 for inspection related maintenance issues. If the carrier cable becomes heavily soiled with oil, grease, paint, or other substances, clean it with warm soapy water. Wipe off the cable with a clean, dry cloth. Do not force dry with heat. Do not use acid or caustic chemicals that could damage the cable. The Cabloc Cable Sleeve may be cleaned with warm, soapy water. Store the Cable Sleeve in a cool, dry, clean environment, out of direct sunlight. Avoid areas where chemicals vapors exist. Thoroughly inspect the sleeve after extended storage.

6.2 ADDITIONAL MAINTENANCE and servicing procedures must be completed by an authorized service center. Authorization must be in writing.

7.0 SPECIFICATIONS

DETACHABLE SLEEVE:

- **Material:** Stainless Steel
- **Breaking Strength:** 5,500 lbs (24.5 kN)
- **Net Weight (with Carabiner):** 1.54 lbs (.70 kg)
- **Cable:** Galvanized Steel or Stainless Steel 7 x 19 Constructed Cable (See Figure 1 for required diameter)

CARABINER:

- **Material:** High strength steel
- **Breaking Strength:** 5,500 lbs (24.5 kN)

INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:			
MODEL NUMBER:			
DATE PURCHASED:		DATE OF FIRST USE:	

[illegible]

LIMITED LIFETIME WARRANTY

Warranty to End User: D B Industries, LLC d/b/a Capital Safety USA ("CAPITAL SAFETY") warrants to the original end user ("End User") that its products are free from defects in materials and workmanship under normal use and service. This warranty extends for the lifetime of the product from the date the product is purchased by the End User, in new and unused condition, from a CAPITAL SAFETY authorized distributor. CAPITAL SAFETY'S entire liability to End User and End User's exclusive remedy under this warranty is limited to the repair or replacement in kind of any defective product within its lifetime (as CAPITAL SAFETY in its sole discretion determines and deems appropriate). No oral or written information or advice given by CAPITAL SAFETY, its distributors, directors, officers, agents or employees shall create any different or additional warranties or in any way increase the scope of this warranty. CAPITAL SAFETY will not accept liability for defects that are the result of product abuse, misuse, alteration or modification, or for defects that are due to a failure to install, maintain, or use the product in accordance with the manufacturer's instructions.

CAPITAL SAFETY'S WARRANTY APPLIES ONLY TO THE END USER. THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO OUR PRODUCTS AND IS IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, EXPRESSED OR IMPLIED. CAPITAL SAFETY EXPRESSLY EXCLUDES AND DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT BE LIABLE FOR INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST PROFITS, REVENUES, OR PRODUCTIVITY, OR FOR BODILY INJURY OR DEATH OR LOSS OR DAMAGE TO PROPERTY, UNDER ANY THEORY OF LIABILITY, INCLUDING WITHOUT LIMITATION, CONTRACT, WARRANTY, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE) OR OTHER LEGAL OR EQUITABLE THEORY.



The Ultimate in Fall Protection

CAPITAL SAFETY

USA & Latin America

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

Canada

260 Export Boulevard
Mississauga, ON L5S 1Y9
Phone: 905.795.9333
Toll-Free: 800.387.7484
Fax: 888.387.7484
info.ca@capitalsafety.com

Northern Europe

5a Merse Road
North Moons, Moat
Reditch, Worcestershire, UK
B98 9HL
Phone: + 44 (0)1527 548 000
Fax: + 44 (0)1527 591 000
csgne@capitalsafety.com

EMEA

(Europe, Middle East, Africa)

Le Broc Center
Z.I. 1ère Avenue
5600 M.B.P. 15
06511 Carros Le Broc Cedex
France
Phone: + 33 4 97 10 00 10
Fax: + 33 4 93 08 79 70
information@capitalsafety.com

Australia & New Zealand

95 Derby Street
Silverwater
Sydney NSW 2128
AUSTRALIA
Phone: +(61) 2 8753 7600
Toll-Free : 1 800 245 002 (AUS)
Toll-Free : 0800 212 505 (NZ)
Fax: +(61) 2 8753 7603
sales@capitalsafety.com.au

Asia

Singapore:
16S, Enterprise Road
Singapore 627666
Phone: +65 - 65587758
Fax: +65 - 65587058
inquiry@capitalsafety.com

Shanghai:
Rm 1406, China Venturetech Plaza
819 Nan Jing Xi Rd,
Shanghai 200041, P R China
Phone: +86 21 62539050
Fax: +86 21 62539060

www.capitalsafetv.com

