



User Instruction Manual for:
Evolution™ Portable Pylon Anchor
 (Model Number: 7256000)

USER INSTRUCTION MANUAL

EVOLUTION™ PORTABLE PYLON ANCHOR

This manual should be used as part of an employee training program as required by OSHA.

WARNING: *This product is part of an Emergency Escape System or Climb Assist System. The user must follow the manufacturer's instructions for each component of the system. These instructions must be provided to the user of this equipment (user/rescuer). The user/rescuer must read and understand these instructions before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. Alterations or misuse of this equipment, or failure to follow these instructions, may result in serious injury or death.*

IMPORTANT: *If you have questions on the use, care, or suitability of this equipment for your application contact Capital Safety.*

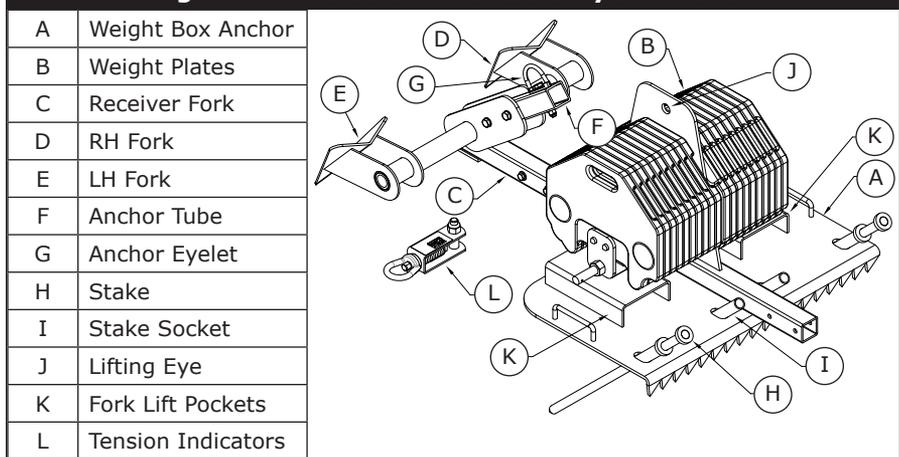
IMPORTANT: *Record the product identification information from the ID label in the Inspection and Maintenance Log in Section 9 of this manual.*

DESCRIPTION

7256000 - EVOLUTION™ PORTABLE PYLON ANCHOR:

The Evolution™ Portable Pylon Anchor (Figure 1) is a portable anchor for securing the bottom end of the sloped guide cable on Emergency Descent or Climb Assist systems.

Figure 1 - Evolution™ Portable Pylon Anchor



The Pylon Anchor is comprised of a Weight Box Anchor assembly (1A) with twenty 45 lb (20.4 kg) Evolution™ Weight Plates (1B). A Receiver Fork assembly (1C) with Right Hand and Left Hand Fork assemblies (1D and 1E) attaches to the front of the Weight Box Anchor to prevent the Pylon Anchor from sliding forward from the pull of the attached Guide Cable. An Anchor Tube (1F) with Anchor Eyelet (1G) mounts on the Receiver Fork assembly and serves as the attachment point for the Guide Cable. Two Stakes (1H) pass through Stake Sockets (1I) on the back of the Weight Box Anchor and are pounded into the ground to secure the back end of the Pylon Anchor. Four Stake Sockets are available on the Weight Box Anchor to allow repositioning of the Stakes to clear obstructions. A Lifting Eye (1J) and Fork Lift Pockets (1K) on the Weight Box Anchor facilitates transport with the appropriate lifting equipment.

A Tension Indicator (1L) is included with the Pylon Anchor and is attached between the Anchor Eyelet and Guide Cable to monitor tension of the cable.

1.0 APPLICATIONS

1.1 PURPOSE: The DBI-SALA Evolution™ Portable Pylon Anchor is designed for use as the bottom end anchor for the Sloped Guide Cable on a Emergency Escape System or Guy Cable on a Climb Assist System (see Figure 2):

- A. EMERGENCY RESCUE SYSTEM:** The Pylon Anchor is used with a RollGliss® Emergency Descent Device as part of an Emergency Rescue System for controlled descent from an elevated structure. The Pylon Anchor is used to secure the bottom end of the Guide Cable required on sloped descent systems.
- B. CLIMB ASSIST SYSTEM:** The Pylon Anchor is used with a Climb Assist System for applications where worker mobility and fall protection are needed. The Pylon Anchor is used to secure the bottom end of the Guy Cable.

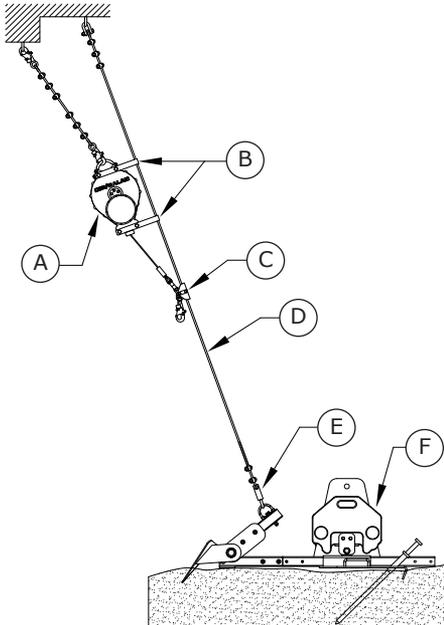
WARNING: *Do not alter or intentionally misuse this equipment. Consult Capital Safety before using this equipment in combination with components or subsystems other than described in this manual.*

- C. ADDITIONAL WEIGHT:** For situations where work site soil or other conditions necessitate additional weight, the expandable design of the Pylon Anchor allows attachment of additional Weight Box Anchors (see Figure 2).

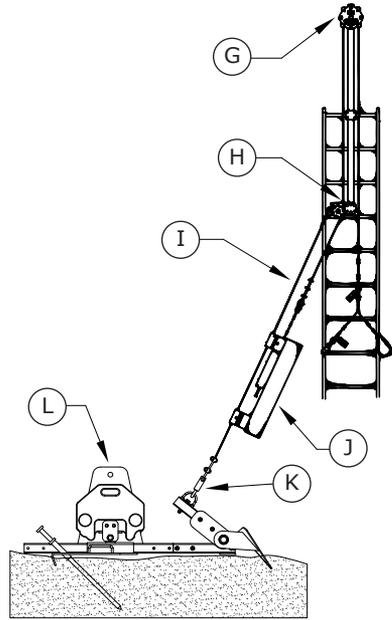
IMPORTANT: *Use of the Pylon Anchor in applications other than the Emergency Rescue and Climb Assist systems described in this section requires review and approval by Capital Safety Group Engineering.*

Figure 2 - Pylon Anchor Applications

Emergency Rescue System



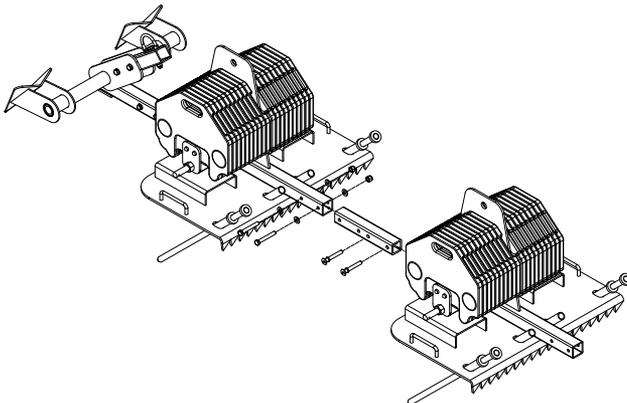
Climb Assist System



A	Emergency Descent Device
B	Guide Cable Suspension Bar
C	Guide Cable Sleeve
D	Guide Cable
E	Tension Indicator
F	Portable Pylon Anchor

G	Safety Block
H	Sheave
I	Guy Cable
J	Counterweight
K	Tension Indicator
L	Portable Pylon Anchor

Where soil or other conditions necessitate additional weight, the expandable design allows attachment of additional Weight Box Anchor(s):



- 1.2 LIMITATIONS:** The following application limitations must be recognized and considered before using this product:
- A. CAPACITY:** The Evolution™ Portable Pylon Anchor is designed for use by persons with a combined weight (clothing, tools, etc.) of no more than 310 lbs (141 kg). No more than one Emergency Descent System or Climb Assist System may be connected at a time.
 - B. FREQUENCY OF USE:** For Emergency Descent Systems, only one user may use the system to evacuate the work area. Multiple, subsequent evacuations are not permitted without inspection and proper adjustment of the Pylon Anchor location and Guide Cable tension prior to each evacuation. See Section 5 for inspection instructions.
 - C. FREE FALL:** Emergency Rescue Systems must be rigged so that no vertical free fall is possible. See the personal fall arrest system manufacturer's instructions for more information.
 - C. DESCENT SPEED:** The speed at which the user descends when using an Emergency Descent Device increases with the combined weight of the user. The descent speed will decrease as the slope of the guide cable decreases. Refer to the User Instruction Manual included with your DBI-SALA RollGliss® Rescue Emergency Descent Device for Guide Cable slope and distance requirements.
 - D. ENVIRONMENTAL HAZARDS:** Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to: heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges. Contact DBI-SALA if you have questions about using this equipment where environmental hazards exist.
 - E. TRAINING:** This equipment must be installed and used by persons trained in its correct application and use. See Section 4.

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.

WARNING: *This equipment was designed specifically for use with DBI-SALA RollGliss® Rescue Emergency Descent Devices or the DBI-SALA Climb Assist/Fall Arrest System. Do not use this equipment in combination with components or subsystems other than described in this manual. Some subsystem and component combinations may interfere with proper operation of this equipment.*

- 2.2 COMPATIBILITY OF CONNECTORS:** Climb Assist applications require the use of compatible connectors to ensure reliability and user safety. Connectors are considered compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause gate mechanisms to inadvertently open regardless of orientation to one another. Refer to the User Instruction Manual included with your DBI-SALA Climb Assist/Fall Arrest System for details.
- 2.3 ANCHORAGE STRENGTH:** The anchorage strength required is dependent on the application type. Refer to the User Instruction Manual included with your DBI-SALA RollGliss® Rescue Descent Device or DBI-SALA Climb Assist/Fall Arrest System for anchorage strength requirements.

IMPORTANT: *Anchorage strength requirements in the RollGliss® Rescue Descent Device and DBI-SALA Climb Assist/Fall Arrest System apply to anchorage of those respective devices to the structure and not anchorage of the Guide Cable or Guy Wire to the Pylon Anchor. Where discrepancies exist between this instruction manual and the Emergency Descent device or Climb Assist device instructions with respect to Guide Cable or Guy Wire anchor requirements, defer to this instruction manual.*

3.0 INSTALLATION AND USE

WARNING: Do not alter or intentionally misuse this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, sharp edges, and abrasive surfaces.

WARNING: Consult your doctor if there is any reason to doubt your fitness to safely absorb the shock from a fall arrest or suspension. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use DBI-SALA equipment unless in an emergency situation.

3.1 BEFORE EACH USE: Before each use of this equipment, carefully inspect it to assure that it is in serviceable condition. Refer to Section 5 for inspection details. Do not use if inspection reveals an unsafe condition.

WARNING: For Emergency Descent Systems, multiple, subsequent evacuations are not permitted without inspection and adjustment of the Pylon Anchor location and Guide Cable tension prior to each evacuation. See Section 5 for inspection instructions.

3.2 PLANNING: Plan your system before installation. Take into consideration all factors that affect safety when the system is in use. The following list gives some important points to consider:

- A. SURFACES:** The Pylon Anchor is approved for use on sand, mud, packed soil, soft soil, and frozen soil. (The anchor must properly engage the soil.) It is not intended for use on concrete, wood, metal, bituminous pavement, or ice.
- B. TESTING THE SYSTEM:** For Emergency Descent applications, all installations should be verified by performing a test descent. Consult your RollGliss® Emergency Descent Device User Instruction Manual.
- C. DESCENT & LANDING AREAS:** For Emergency Descent applications, adequate clear space must be provided around the descent and landing areas to prevent collision with obstructions during evacuation.

3.3 INSTALLATION REQUIREMENTS: The following requirements must be observed to insure safe effective installation of the Pylon Anchor:

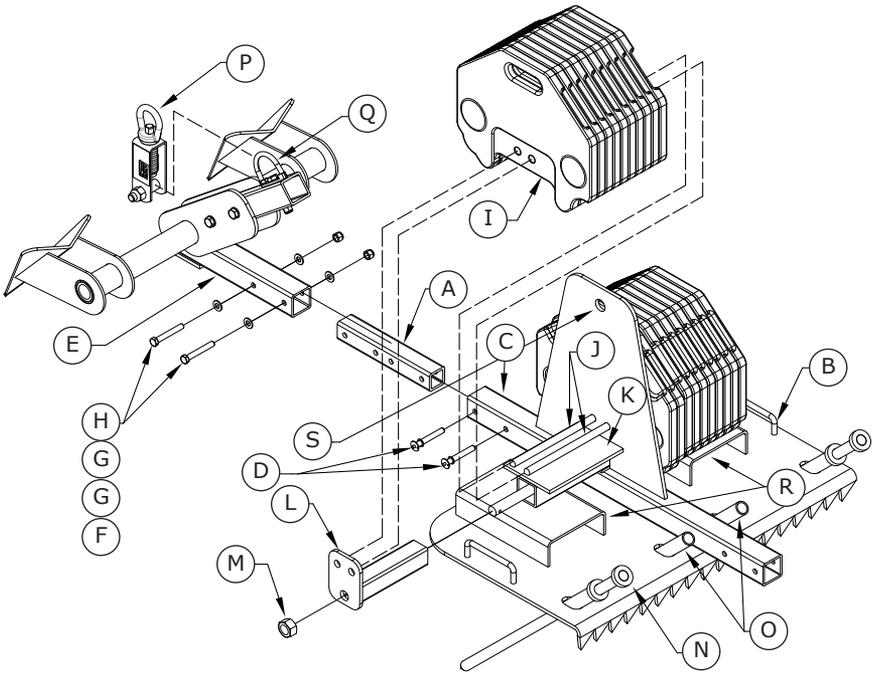
- A. WEIGHT PLATES:** All 20 Weight Plates must be installed on the Weight Box Anchor for all Pylon Anchor installations.

- B. GUIDE CABLES:** Guide Cables used with the Pylon Anchor must be between 3/8 in. (0.95 cm) and 5/8 in. (1.6 cm) in diameter, must meet the requirements for all systems and subsystems used, and must not exceed 200 ft. (60 m) in length.
- C. GUIDE CABLE ANGLE:** Guide Cable angle must be between 15 degrees and 45 degrees measured from the horizontal.
- D. GUIDE CABLE TENSION:** The Guide Cable must be properly tensioned to minimize sag in the cable and ensure the user reaches the landing area after descent. A Tension Indicator is included with the Pylon Anchor to verify proper tension on the Guide Cable (see Section 5.2).

3.4 ASSEMBLY: Figure 3 illustrates assembly of the Pylon Anchor. The Pylon Anchor can be fully assembled and then placed in the desired location with a forklift, crane, or similar equipment using the Lifting Eye on the Weight Box Anchor Assembly, or it can be transported in pieces and assembled at the job site. Assembly steps are as follows:

- Step 1. Attach the Fork Adaptor Tube (3A) to the Weight Box Anchor (3B):** Insert one end of the Fork Adaptor Tube into the Weight Box Anchor Tube (3C) and secure with two Hitch Pins (3D).
- Step 2. Attach the Receiver Fork Assembly (3E) to the Fork Adaptor Tube (3A):** Slide the connecting tube on the Receiver Fork Assembly over the Fork Adaptor Tube and secure with the provided Cap Screws (3F), Washers (3G), and Lock Nuts (3H).
- Step 3. Mount the Weight Plates (3I) on the Weight Box Anchor (3B):** Slide 10 Weight Plates on the Plate Containment Rods (3J) on each side of the Plate Rack (3K). Insert the Weight Locking Tubes (3L) in the connecting tubes on each side of the Plate Rack (3K) and secure with the provided Hex Nuts (3M).
- Step 4. Attach the Tension Indicator:** Position the Tension Indicator over the Anchor Eyelet (3Q) and pass the bolt through the Tension Indicator and Anchor Eyelet. Thread and tighten the included nut.
- Step 5. (Optional) Attach additional Weight Box Anchor(s):** Where work soil or other conditions necessitate more weight, Weight Box Anchors can be added to the Pylon Anchor (see Figure 3.1): Insert the Fork Adaptor Tube (3.1A) into the Weight Box Anchor Tube (3.1B) and secure with the provided Cap Screws (3.1C), Washers (3.1D), and Lock Nuts (3.1E). Slide the additional Weight Box Anchor (3.1F) onto the Fork Adaptor Tube and secure with two Hitch Pins (3.1G).

Figure 3 - Pylon Anchor Assembly



ITEM #	QTY	DESCRIPTION
A	1	Fork Adaptor Tube
B	1	Weight Box Anchor
C	1	Weight Box Anchor Tube
D	2	Hitch Pin, 1/2 in x 2-1/2 in
E	1	Receiver Fork Assembly
F	2	Hex Head Cap Screw, 1/2 in x 3-1/2 in, Grade 5, Plated
G	10	SAE Flat Washer, 1/2 in, Plated
H	5	Nylock Nut, 1/2 in
I	20	Evolution™ Weight Plate
J	4	Plate Containment Rods
K	1	Plate Rack
L	2	Weight Locking Tube
M	2	Hex Nut, 1 in
N	2	Rear Stake
O	4	Stake Socket
P	1	Tension Indicator
Q	1	Anchor Eyelet
R	2	Forklift Pocket
S	1	Lifting Eye

Step 4. Test the installation: For Emergency Descent applications, all installations should be verified by performing a test descent using a 120 lb. (55 kg) weight (minimum). Consult your RollGliss® Emergency Descent Device User Instruction Manual for details.

3.6 USE: For Emergency Descent Systems, multiple evacuations are not permitted without inspection and proper adjustment of the Pylon Anchor location and Guide Cable tension prior to each successive evacuation. After each descent, inspect the Pylon Anchor per the inspection instructions in Sections 5.2 and 5.3. Reposition the Pylon Anchor and tension the Guide Cable as needed before performing the next evacuation.

3.7 REMOVAL: To remove the Pylon Anchor, remove the two Rear Stakes (3N) and lift the entire unit by the Forklift Pockets (3R) or Lifting Eye (3S) with a forklift, crane, or other suitable lifting equipment. If suitable lifting equipment is unavailable, the Pylon Anchor can be disassembled and moved by hand.

IMPORTANT: Do not lift the Pylon Anchor by the Anchor Eyelet.

4.0 TRAINING

4.1 It is the responsibility of the user to assure they are familiar with these instructions and are trained in the correct care and use of this equipment. Users must also be aware of the operating characteristics, application limits, and consequences of improper use of this equipment.

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 and Between Each Descent:** Visually inspect the Evolution™ Portable Pylon Anchor per steps listed in Sections 5.2 and 5.3. Correct any deficiencies discovered during inspection prior to the next use (evacuation).
- **Monthly:** A monthly formal inspection should be completed by a competent person other than the user. A formal inspection should also be completed if system parameters change (system moved, re-rigged, anchorages moved, guide cable angle changed, etc.). Inspect the Pylon Anchor according to Sections 5.2 and 5.3.

NOTE: Record the monthly/formal inspection date and results in the Inspection and Maintenance Log (see Section 9).

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

5.2 INSPECTION STEPS: See Figure 4 for item referenced in the following steps:

Between Each Use:

Step 1. Inspect the position of the Pylon Anchor: Verify that the anchor has not slid forward allowing excess sag in the Guide Cable. The Pylon Anchor should be situated parallel with the Guide Cable and should be sitting relatively level. The Forks (4A), Weight Box Anchor Teeth (4B), and Rear Stakes (4C) should all be embedded securely in the ground.

Step 2. Inspect the Tension Indicator: The Red Pointer on the Tension Indicator (4D) should be within the "OK" range on the label when the cable is within the required tension range.

Step 3. Inspect critical connectors and fasteners: The Anchor Eyelet (4E) should be securely attached to the Anchor Tube and the connecting bolt and nut securing the Tension Indicator (4D) on the Anchor Eyelet should be tight. The hitch pins, cap screws, and nuts holding the Receiver Fork Assembly (4F), Fork Adaptor Tube (4G), and Weight Box Anchor together should all be tight.

Step 4. Inspect the Weight Plates: All twenty Weight Plates (4I) must be present and effectively secured on the Weight Rack by the Containment Rods and Weight Locking Tube Assembly (4J).

Monthly/Formal Inspection:

Include the following steps during monthly/formal inspection:

Step 5. Inspect all components for damage: Make sure components are not bent and are free of any cracks or deformities

Step 6. Inspect Forks and Stakes: Inspect the Fork Assemblies (4A) and Rear Stakes (4C) for any bends, cracks, corrosion, or deformities that might compromise their ability to dig into and grip the ground below.

Step 7. Inspect all Connectors and Fasteners: Inspect all Eyelets, Hitch Pins, Bolts, Nuts, and Washers for cracks, deformities, or corrosion. Make sure all hardware is present and secure.

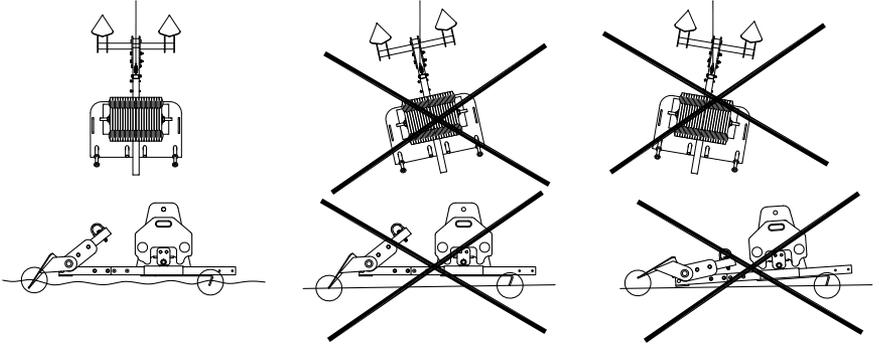
Step 8. Inspect all Labels: All labels must be present and fully legible (see Section 8). Replace labels if missing or illegible.

5.3 DEFECTS: If inspection reveals an unsafe or defective condition, remove the Pylon Anchor from service and contact an authorized service center.

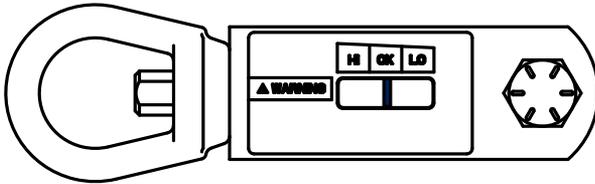
5.4 PRODUCT LIFE: The functional life of the Pylon Anchor is determined by work conditions and maintenance. As long as the product passes inspection criteria, it may remain in service.

Figure 4 - Pylon Anchor Inspection

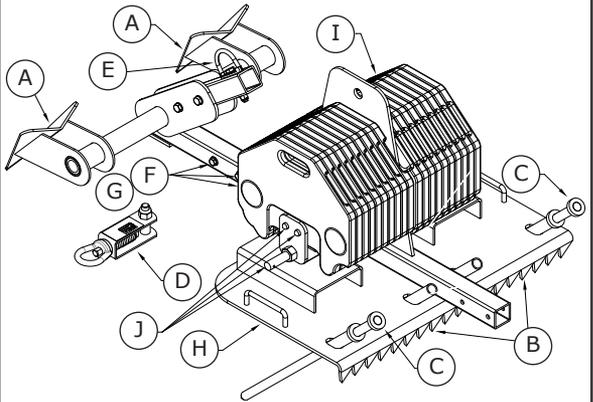
STEP 1.



STEP 2.



A	Fork Assembly
B	Anchor Teeth
C	Rear Stakes
D	Tension Indicator
E	Anchor Eyelet
F	Receiver Fork Assembly
G	Fork Adaptor Tube
H	Weight Box Anchor
I	Weight Plates
J	Containment Rods & Weight Locking Tube Assembly



6.0 MAINTENANCE, SERVICE, STORAGE

- 6.1 MAINTENANCE:** The Pylon Anchor requires no scheduled maintenance other than repair or replacement of items found defective during inspections (see Section 5).
- 6.2 SERVICE:** If components become heavily soiled with grease, paint, or other substances; clean with appropriate cleaning solutions. Do not use caustic chemicals that could damage system components. Clean or replace missing or illegible labels. (See Section 8 for label examples.)
- 6.3 STORAGE:** Store the Pylon Anchor in a clean dry environment. Avoid areas where chemical vapors may exist. Thoroughly inspect the Pylon Anchor after extended storage.

7.0 SPECIFICATIONS

7.1 MATERIALS:

- Frame:** Powder Coated Steel
D-Ring: Zinc Plated Steel

7.2 WEIGHT:

- Assembled Unit
(- Weight Plates):** 272 lbs (123.4 kg)
- Assembled Unit
(+ Weight Plates):** 1,191 lbs (540.2 kg)
- Weight Box Anchor
Assembly:** 187 lbs (84.8 kg)
- Receiver Fork Assembly** 77 lbs (34.9 kg)
- Rear Stakes** 2 @ 7 lbs (3.2 kg) = 14 lbs (6.4 kg)
- Weight Plates** 20 @ 45 lbs (20.4 kg) = 900 lbs (408.2 kg)

7.3 SIZE:

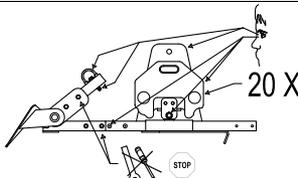
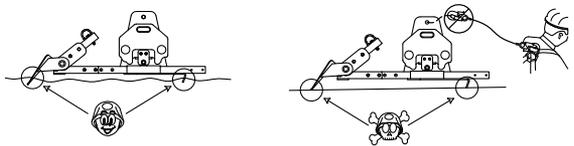
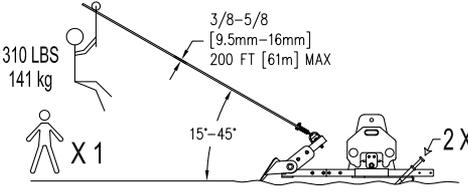
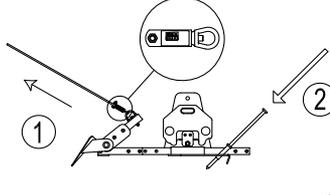
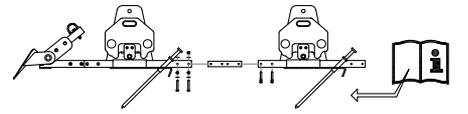
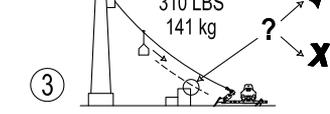
- LENGTH:** 64 in (162.6 cm)
WIDTH: 36 in (91.4 cm)
HEIGHT: 28 in (71.1 cm)

7.4 CAPACITY: 1 User, 310 lbs (141 kg), 1 Time/Inspection

8.0 LABELING

The following labels should be securely attached to the Pylon Anchor

Warning & Instruction Label

<p>CAPITAL SAFETY www.capitalsafety.com</p> 	
<p>WARNING FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.</p>	
	
<p>310 LBS 141 kg</p> <p>3/8-5/8 [9.5mm-16mm] 200 FT [61m] MAX</p> <p>15°-45°</p> <p>X 1</p> <p>2 X</p> 	
	<p>310 LBS 141 kg</p> <p>?</p> <p>X</p> 

Identification Label

<p>DBI SALA[®]</p> <p>www.capitalsafety.com</p> <p>COMPONENT MODEL: _____</p> <p>MFG DATE: _____</p> <p>MADE IN CANADA P#F: 12817 Rev.03</p>	<p>LOT No. _____</p> <p>SYSTEM MODEL: _____</p> <p>SERIAL No. _____</p>
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9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER: _____

DATE PURCHASED: _____

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

WARRANTY

Equipment offered by DBI-SALA is warranted against factory defects in workmanship and materials for a period of two years from date of installation or use by the owner, provided that this period shall not exceed two years from date of shipment. 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. This 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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