DBI SALA®

The Ultimate in Fall Protection

INSTALLATION INSTRUCTIONS (1)

LAD-SAF™ Flexible Cable Ladder Safety Systems (2)

CE TYPE TEST	BSI (0086) Kitemark Court Davy Ave, Knowlhill Milton Keynes MK5 8PP, UK (4)
CE PRODUCTION QUALITY CONTROL	BSI (0086) Kitemark Court Davy Ave, Knowlhill Milton Keynes MK5 8PP, UK (5)

x1 x4 (6)

141 kg/ 310 lbs (7)

(3)	
ISO 9001	ANSI A14.3
CE	prEN 353-1:2012
CSA	CSA Z259.2.5

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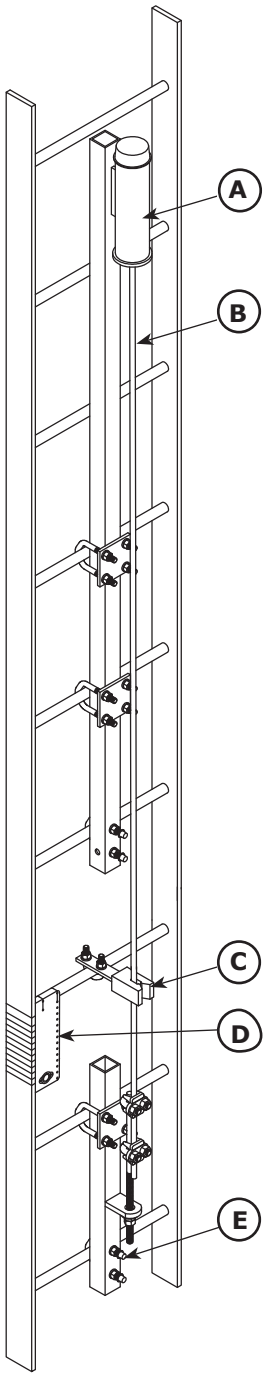


FORM NO: 5902228
REV: Q

EN

FORWARD

This instruction manual describes the installation of the Lad-Saf™ Flexible Cable Ladder Safety Systems. It should be used as part of an employee training program as required by OSHA, ANSI, CSA, and CE, and must be kept with the equipment.

- ***To avoid serious injury or death follow the safety information in these instructions.***
- ***Installers must read and follow the manufacturer's instructions for safety equipment used with this system.***
- ***Proper fall protection must be used while installing this system.***

If you have questions on the installation or suitability of this equipment for your application, contact DBI-SALA.

GLOSSARY REFERENCES

Numbered *Glossary References* on the front cover of this instruction reference the following items:

1. Installation Instructions
2. Lad-Saf™ Flexible Cable Ladder Safety Systems
3. Standards
4. Number of notified body that performed CE Test.
5. Number of notified body checking the manufacture of this PPE.
6. Maximum number of users.
7. Maximum user weight is 141 kg (310 lbs) including tools, other equipment and clothing.

Lad-Saf™ Flexible Cable Ladder Safety System Components, Figure 1:

A Top Bracket
B Cable
C Cable Guide
D i-Safe RFID Tag
E Bottom Bracket

Part Lists And Part References

The parts that can comprise a typical Lad-Saf™ Ladder Safety System are listed in the Parts List Table in this manual. Some items may have multiple part options and part numbers. The "Item" column on the left side of each part list is associated with one or more part numbers found in the columns to right (for example: TB-1, BB-5, etc.) that can be used for installation. The installation situation will determine which parts must be used.

1.0 APPLICATIONS

1.1 **PURPOSE:** When used in combination with the Lad-Saf™ Detachable Cable Sleeve (sold separately), the Lad-Saf™ Flexible Cable Ladder Safety System (Figure 1) is designed to protect a worker in the event of a fall while climbing fixed ladders or similar climbing structures. LAD-SAF™ systems are intended to be installed on fixed ladders or ladder like climbing surfaces that are part of a structure (e.g., water tank ladders, mono poles [wood, steel, or concrete] buildings, manways, antenna structures and towers).

1.2 **LIMITATIONS:** LAD-SAF™ systems are not intended to be installed on portable ladders. These systems are designed for use on ladders that are generally vertical. The ladder safety system must not exceed a maximum angle of 15° from vertical. The following application limitations must be considered before installing the LAD-SAF™ system.

A. **LADDER STRUCTURE:** The ladder structure to which the system is installed must be capable of withstanding the loads applied by the system in the event of a fall (see Section 2.2).

B. **SYSTEM CAPACITY:** The number of users allowed on the system at one time varies depending on the type of system and installation. Generally, system capacities range from one to four users. See sections 2.0 and 3.0 for more information on capacity limitations. System capacities are based on a maximum user weight, including tools and clothing, of 310 lbs (140.6 kg).

C. **ENVIRONMENTAL HAZARDS:** Use of this equipment in areas with environmental hazards may require that additional precautions be taken to reduce the possibility of injury to the user or damage to the equipment. (e.g., high heat caused by welding or metal cutting, caustic chemicals, seawater, high voltage power lines, explosive or toxic gases, moving machinery, sharp edges).

D. **TRAINING:** This equipment is intended to be installed by persons who have been trained in its correct application.

1.3 Refer to applicable local, and national 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 DBI-SALA approved components and subsystems. The use of non-approved components and subsystems (e.g., harnesses, lanyards, sleeves, etc.) may jeopardize compatibility of equipment, and could affect the safety and reliability of the complete system. If you have questions on the installation or suitability of this equipment for your application, contact DBI-SALA.

2.2 **LOAD REQUIREMENTS FOR STRUCTURE AND BRACKET CONNECTIONS:** The climbing structure to which the LAD-SAF™ system is installed must be capable of supporting the loads imposed by the system. For calculation purposes the required bracket load may be assumed to be distributed evenly between the number of rung attachments. For example, the TB-3 top bracket (Figure 2) is supplied with three rung connections. The load required for each rung for a single user system is 1,125 lbs (5.0 kN) per rung (3,375 lbs [15.0 kN]/3).

A. **TOP BRACKET:** (See Figure 2 and TB Items Part List) The top bracket connection loads include system pretension and forces associated with arresting a fall. Load requirements for the top bracket vary depending on the number of users allowed on the system at one time, top bracket model, and type of connection to the structure.

1. **The following top brackets allow up to four users on the system at one time:**

Item Numbers; TB-2, TB-3, TB-4, TB-6, TB-7, TB-10 and *Part Numbers;* 6116048, 6116050, 6116051, 6116052, TB-1, 6116055, 6116057, 6116059, TB-5, 6116282, 6116286, 6116290, 6116291, 6116292, 6116293, 6116294, 6116295, 6116296.

Note: Other installation requirements may limit the number of users allowed on a system. See section 3.0.

Top Bracket Connection Loads:

- One user on the system: 3,375 lbs (15.0 kN)
- Two users on the system: 4,350 lbs (19.3 kN)
- Three users on the system: 5,325 lbs (23.7 kN)
- Four users on the system: 6,300 lbs (28.0 kN)

Exception: TB-1 top bracket is designed for use with 6116336 or 6116337 grab bar extension. When the grab bar is used as a connection for a personal fall arrest system the bracket connection must support a minimum of 5,000 lbs (22.2 kN)., or 3,600 lbs (16.0 kN) for a certified anchorage. See ANSI Z359.1 and OSHA regulations.

2. **These top brackets allow one user only:**

Item Numbers; TB-8, TB-9, TB-11 and *Part Numbers* 6116074, 6116325, 6116324 and 6116328.

Exception: TB-9 (6116074) allows two users.

Top Bracket Connection Loads:

- One user on the system: 3,375 lbs (15.0 kN)
- Two users on the system: 4,350 lbs (19.3 kN)

B. **BOTTOM BRACKET:** The bottom bracket connection must be capable of supporting a system pretension load of 750 lbs (3.3 kN) in the direction of loading.

3.0 SYSTEM INSTALLATION

> ***Improper installation procedures could result in serious injury or death. Read and follow all instructions.***

3.1 LAD-SAF™ systems are designed for easy installation onto a variety of fixed ladder structures. To begin the installation you need to know the model numbers of the top and bottom brackets, cable guides, and type of cable (galvanized or stainless steel). Figures 2, 3, 4 and 5 identify most models. Some brackets are designed to be installed using stand-off supports which go between the bracket and structure. You need to know model numbers of stand-off supports if included with your system. See Figure 5 for model numbers of most stand-off supports. Follow the instructions for the models included in your system.

Generally, the LAD-SAF™ system is installed from the top of the ladder down. The basic procedure is:

Step 1. Install the top bracket

Step 2. Connect the cable to the top bracket

Step 3. Install the cable guides

Step 4. Install the bottom bracket

Step 5. Tension the cable

Step 6. Inspect the installation

Planning the installation can minimize the amount of time on the ladder and improve safety.

- ***Use proper safety procedures when installing LAD-SAF™ systems.***
- ***Wear personal protective equipment, including safety glasses and steel-toed shoes.***
- ***Use personal fall arrest or restraint systems when exposed to a fall hazard while installing LAD-SAF™ systems.***
- ***Do not connect to the LAD-SAF™ system being installed.***
- ***Do not connect to a partially installed LAD-SAF™ system.***
- ***Use caution when installing LAD-SAF™ systems near electrical power lines. LAD-SAF™ cables are conductive.***

3.2 SYSTEM COMPONENT COMPATIBILITY:

Bracket Type / Cable and Fitting Type	Stainless Cable with Stainless Swage Fitting	Stainless Cable with Carrier Clamp	Galvanized Cable with Stainless Swage Fitting	Galvanized Cable with Carrier Clamp
Stainless	Y	N	N	N
Galvanized	O	N	Y	Y
Y = recommended component combination. O = optional. N = not recommended				

Do not use carrier clamps with stainless steel cables.

3.3 WELDING RECOMMENDATIONS: Some installations require welding brackets to the structure. DBI-SALA recommends that welding be completed by a certified professional welder in accordance with applicable national welding codes or standards. Base and filler materials must be compatible with galvanized or stainless steel, depending on the materials of your system. Protect finished welds from corrosion with coating or paint.

3.4 TOP BRACKET INSTALLATION: Before installing the top bracket it is recommended that the ladder or climbing structure be evaluated by a qualified person to determine if the load requirements for the system are satisfied.

A. INSTALLATION OF TB-2, TB-3, TB-10 TOP BRACKETS:

Direct Connection to Ladder:

See Figure 6 for typical installations of the TB-2, TB-3, and TB-10 top brackets onto a round rung ladder. The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface for ease of climbing, but may be located towards the side of the ladder if required.

TB-3, TB-10:

- **For systems limited to one user,** the top bracket may be installed with up to four feet extending above the top rung connection. This will allow the use of only two ladder rung clamps. Ensure the ladder will withstand the required loads between the two rungs.
- **For systems allowing up to two users simultaneously,** the top bracket may be installed with up to three feet extending above the top rung connection.
- **For systems allowing up to four users simultaneously**, the top bracket may be installed with up to two feet extending above the top rung connection.

TB-2:

- **For systems allowing up to four users simultaneously,** the top bracket may be installed with up to five feet extending above the top bracasket connection.

> ***One rung clamp (two for the TB-10 bracket) is designed to bolt through the bracket and onto the rung. This clamp must not be omitted, or the bracket may slip under load.***

Install rung clamps using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

Stand-off Support Connection:

Figure 7 shows the installation of the TB-3 top bracket using a horizontal stand-off bracket. These installations are limited to one user on the system at a time. Use hex bolts in place of U-bolts to attach the TB-3 top bracket to the horizontal stand-off. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

Ladder Rung Support:

Ladder rung supports can be used to reinforce hollow ladder rungs to reduce crushing or collapsing of the rung due to tightening of the Ladder Safety System Clamps, and to generally strengthen the rung. The Rung Support must have sufficient length extending on either side of the Ladder Side Rails to install Rung Support fasteners. Install ladder rung support at each LAD-SAF™ component connection point. The ladder and its connection to the structure must be evaluated by a qualified person to determine if the load requirements for the system are met.

Ladder Rung Supports are available in various shapes and lengths. For best results, select a Ladder Rung Support size that will fit closely with the inside dimensions of the rung. See Figure 8 for examples of ladder rung supports.

A, Figure 8

Model	Ø	R
6100187	1 in (2.5 cm)	22 in (56 cm)
6100188	1 in (2.5 cm)	26 in (66 cm)
6100189	1 in (2.5 cm)	30 in (76 cm)
Materials	Aluminum Bar, Stainless Steel Fasteners	

Install at each point indicated below:

1. Slide the Rung Support through the open rung.
2. Slide Washers over each end of the Rung Support and secure with Nuts. Tighten Nuts until Washer's are flush against the Ladder Rail.
3. Insert Cotter Pins through the holes in each end of the Rung Support. Cotter Pins should inserted from the top of the Rung Support to prevent them from dropping out of the holes.
4. Separate and bend the Cotter Pin Legs to ensure Cotter Pins stay in the holes and the Rung Supports can not slide out of the Ladder Rung.

B, Figure 8

Model	Ø	R
6100151	1 in (2.5 cm)	17 in (43 cm)
Materials	Aluminum Bar, Stainless Steel Fasteners	

Install at each point indicated below:

1. Slide the Rung Support through the open rung.
2. Insert Cotter Pins through the holes in each end of the Rung Support. Cotter Pins should inserted from the top of the Rung Support to prevent them from dropping out of the holes.
3. Separate and bend the Cotter Pin Legs to ensure Cotter Pins stay in the holes and the Rung Supports can not slide out of the Ladder Rung.

C, Figure 8

Model	H	W	R
6100186	.59 in (2.5 cm)	1 in (2.5 cm)	19 in (48 cm)
Materials	Aluminum Bar, Stainless Steel Fasteners		

Install at each point indicated below:

1. Slide the Rung Support through the open rung.
2. Insert Cotter Pins through the holes in each end of the Rung Support. Cotter Pins should inserted from the top of the Rung Support to prevent them from dropping out of the holes.
3. Separate and bend the Cotter Pin Legs to ensure Cotter Pins stay in the holes and the Rung Supports can not slide out of the Ladder Rung.

B. INSTALLATION OF TB-1 TOP BRACKET AND 6116336 GRAB BAR:

See Figure 9 for a typical installation of the TB-1 top bracket onto a round rung ladder. The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface for ease of climbing, but may be located towards the side of the ladder if required.

The top rung clamp bolts through a plate that is welded onto the bracket. This rung clamp must not be omitted, or the bracket may slip under load.

Install rung clamps using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft.-lbs (27.1-33.9 N-m).

The 6116336 grab bar (A) is installed by sliding the grab bar into the square tube of the TB-1 top bracket and installing the detent pin (C) into the grab bar.

C. INSTALLATION OF TB-4, TB-6, AND TB-7 BOLT-ON TOP BRACKETS:

See Figure 10 for a typical installation of the TB-4, TB-6, and TB-7 top brackets. The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface, directly above the ladder, for ease of climbing, but may be located towards the side of the ladder, 12 inches (30.5 cm) maximum from center, if required. The top brackets are to be connected to the structure with a DBI-SALA (model SO-2 stand-off in Figure 10) or customer supplied stand-off support. Stand-off supports must support the loads specified in section 2.2, and must be compatible with the LAD-SAF™ system.

Angle Leg and Round Leg Stand-off Installation:

See Figure 11 for the installation of the angle (example: SO-4) and round leg (example: SO-5) stand-off supports. Install stand-off supports using the hardware provided. Do not substitute other fasteners. Torque 3/8-inch fasteners to 20-25 ft-lbs (27.1-33.9 N-m). Install the top bracket to the stand-off support using the 1/2-inch fasteners provided. Torque 1/2-inch fasteners to 40-45 ft-lbs (54-61 N-m). Note: For the TB-6 stand-off, fasteners are not supplied. DBI-SALA recommends using lock washers, double nuts, or other methods to ensure fasteners will not loosen.

SO-2 Weld-on Stand-off Installation:

Install the SO-2 stand-off support as shown in Figure 10. See section 3.3 for welding recommendations. The stand-off must be perpendicular to the pole surface and in-line with the carrier cable.

Installations that use the angle leg or round leg stand-off support brackets are limited to one user on the system at a time.

D. INSTALLATION OF TB-5 WOOD POLE TOP BRACKET:

See Figure 12 for a typical installation of the TB-5 top bracket onto a wooden pole. The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface for ease of climbing, but may be located towards the side of the ladder if required. Use 1/2-inch fasteners (not provided) to attach the top bracket to the pole. Fasteners should extend through the pole when possible. DBI-SALA recommends using lock washers, double nuts, or other methods to ensure fasteners will not loosen.

E. INSTALLATION OF TB-9, TB-13, AND TB-14 TOP BRACKETS:

See figure 13 for a typical installation of TB-9, TB-13, and TB-14 top brackets onto a ladder. Some brackets utilize rung spacers while others do not (see Figure 2). The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface for ease of climbing, but may be located towards the side of the ladder if required.

- **For systems limited to one user**, the top bracket may be installed with up to 4 ft. (1.2 m) extending above the top rung connection. This will allow the use of only two ladder rung clamps. Ensure the ladder will withstand the required loads between the two rungs.
- **For systems allowing up to two users simultaneously**, the top bracket may be installed with up to 3 ft. (0.9 m) extending above the top rung connection.
- **For systems allowing up to four users simultaneously**, the top bracket may be installed with up to 2 ft. (0.6 m) extending above the top rung connection.

One rung clamp (lower connection) is designed to bolt through the bracket and onto the rung. This clamp must not be omitted, or the bracket may slip under load.

Install rung clamps using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

F. INSTALLATION OF TB-8 TELESCOPING TOP BRACKET:

See Figure 14 for a typical installation of the TB-8 top bracket onto a round rung ladder. The top bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The top bracket is typically mounted in the center of the climbing surface for ease of climbing, but may be located towards the side of the ladder if required. The TB-8 top bracket is designed to mount at or near the top of the ladder and telescope up when in use. Typical installations include access ladders into manholes and under trap doors.

When using TB-8 telescoping top bracket, use only the swaged end fitting in the top bracket.

Installations that use the TB-8 top bracket are limited to one user on the system at a time.

Install rung clamps using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

G. INSTALLATION OF D-RING ANCHORAGE: See Figure 15. The D-ring Anchorage (6100219) is designed for used with the DBI-SALA Force2™ energy absorbing lanyard and full body harness. The D-ring Anchorage must be attached to a Lad-Saf™ top bracket (A) that is attached to a structure that meets the top bracket load requirements.

APPLICATION: The D-ring anchorage must be used in accordance with local requirements for fall arrest or rescue systems.

INSTALLATION: See Figure 15. Install the D-ring anchorage assembly (B) no more than 6 in. (15.2 cm) above the ladder rung (C) where the top clamp plate (D) of the Lad-Saf™ top bracket is attached. The D-ring must be on the climbing (cable) side of the top bracket. Clamp the D-ring anchorage assembly to the top bracket with the fasteners provided with the assembly. Torque fasteners to 20-25 ft.-lbs (27.1-33.9 N-m).

3.5 INSTALLATION OF CARRIER CABLE TO TOP BRACKET:

Keep the carrier cable and carrier clamp clean during installation. Contamination of the carrier clamp or cable could cause the clamp to malfunction.

A. INSTALLATION OF GALVANIZED CARRIER CABLE:

1. Lay the carrier cable out on the ground in a clean area by rolling the coil. Do not pull cable from center of coil. For some installations it may be easier to lower the carrier cable from the top connection level down to the bottom bracket. If so, carefully lower the cable by unspooling without twisting the cable at the top connection. Do not drop the cable to the lower level.

Carrier cable is very stiff and may spring out of coil unexpectedly. Use proper safety procedures when unrolling cable. Use appropriate safety gear, including gloves and safety glasses, when unrolling cable.

Inspect the cable for shipping damage before proceeding. Do not install damaged cable.

2. See Figure 16 for installation of the galvanized carrier cable into the top bracket. Ensure the end of cable (A) is free of kinks and unraveled strands. Pass the cable up through the top bracket pipe (B) and the urethane shock absorber (C). Install the carrier clamp (D) and washer (E) onto cable with the cone of carrier clamp pointing down. At least 1.0 in. (2.5 cm), but no more than 2 in. (5.1 cm). of cable must protrude through the carrier clamp.

Excess cable protruding through the carrier clamp may prevent installation of the cap. If this occurs, cut off extra cable. Do not remove carrier clamp from cable to avoid damage to the carrier clamp.

Seat the carrier clamp into shock absorber by pulling firmly on carrier clamp below the top bracket pipe. Install cap (F) by seating it firmly onto the pipe.

B. INSTALLATION OF STAINLESS STEEL CARRIER CABLE:

1. Lay the carrier cable out on the ground in a clean area by rolling the coil. Do not pull the cable from the center of the coil.

> ***Carrier cable is very stiff, and may spring out of the coil unexpectedly. Use caution when unrolling cable. Use appropriate safety gear, including gloves and safety glasses, when unrolling cable.***

Inspect the cable for shipping damage before proceeding. Do not install damaged cable.

2. See Figure 17 for installation of a stainless steel carrier cable into the top bracket. All stainless steel carrier cables are supplied with a swagged end fitting for connection to the top bracket. To install the carrier cable (A), feed the free end of the cable down through the washer (D), urethane shock absorber (C) and top bracket pipe (B) until the swage fitting (E) is firmly seated into the shock absorber. Install the cap (F) by seating it firmly onto the pipe.

3.6 INSTALLATION OF CABLE GUIDES, ALL MODELS:

Cable guides protect the carrier cable from chafing against the ladder or structure and to prevent the climber from excessively deflecting the cable from side to side. Cable guides should be positioned at approximately 25 ft (7.62 m) intervals along the carrier cable between the top and bottom brackets, and at any point along the system where the cable may abrade against the structure. Cable guides should be staggered along the system to reduce harmonic effects of the wind, such as at 23 (7.01), 25 (7.61), and 27 (8.23) feet (m) intervals. For high wind areas "L" shaped cable guides may be used. The "L" shaped cable guides should be alternated with opening on the left, then right, etc. up the ladder. Latching cable guides are also available.

Direct Connection to Ladder:

See Figure 18 for typical installations of cable guides onto a ladder. (A = CG-15, B = CG-3, C = CG-5) Some cable guides utilize rung spacers and clamp plates while others do not (see Figure 4). Install the cable guide using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

SO-7 Weld-on Stand-off Support Installation:

Install the SO-7 stand-off as shown in Figure 19. See section 3.3 for welding recommendations. The stand-off (A [model SO-7 is shown]) must be perpendicular to the pole surface and in-line with the carrier cable. (B = cable guide)

Angle Leg and Round Leg Stand-off Support Installation:

See Figure 20 for typical installations of angle leg (A) and round leg (B) stand-off supports. Install the stand-off support using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

Install the cable guide to the stand-off support using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

3.7 INSTALLATION OF BOTTOM BRACKET AND CARRIER CABLE TENSION ADJUSTMENT:

Before installing the bottom bracket it is recommended that the ladder and/or climbing structure be evaluated by a qualified engineer to determine if the load requirements for the system specified in section 2.2 are met.

> ***Depending on the length of the system, and the environment in which the system is installed, it may be necessary to periodically re-tension the system. Extreme temperature ranges and very long systems will likely require periodic re-tensioning. The tension indicator can be purchased separately (9504239). Contact DBI-SALA for details.***

A. INSTALLATION OF BB-1, BB-2, BB-3, AND BB-9 BOTTOM BRACKETS:

Direct Connection to Ladder:

See Figure 21 for a typical installation of the bottom bracket onto a ladder. Some brackets utilize "U"-bolts while others utilize bolts and clamp plates to attach to the ladder (see Figure 3). The bottom bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The bottom bracket must be mounted in-line (vertically) with the top bracket.

> ***One rung clamp is designed to bolt through the bracket and onto the rung. This clamp must not be omitted, or the bracket may slip under load.***

Install the rung clamps using hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

Stand-off Support Connection:

Figure 22 shows the installation of the bottom brackets using a horizontal stand-off bracket. Use U-bolts to attach to support leg (A). Use hex bolts provided in place of U-bolts to attach the bottom bracket to the horizontal stand-off (B). Torque fasteners to 20-25 ft-lbs (27.1-33.9 N-m).

Carrier Cable Tension Adjustment:

Figure 21 shows the assembly of the tension rod to the bottom bracket and carrier cable (A). Loosely clamp the saddle clips (B) around the carrier cable. Slide the tension rod (C) down the carrier cable and through the hole in the bracket until sufficient threads are exposed to allow the installation of the tension indicator (D), washers (E), and nuts (F and G). Remove the slack in the carrier cable by the pulling cable though the saddle clips. Tighten saddle clips to 35 ft.-lbs (47.5 N-m). Tighten the tensioning nut (F) until the ring on the tension indicator is sheared off. A small amount of grease on the tension rod threads will reduce the effort required to tension the carrier cable. If there are insufficient threads exposed to fully tension the carrier cable, pull more carrier cable through the saddle clips on the tension rod and repeat the procedure. When correct carrier cable tension is reached tighten the jam nut (G) against the tensioning nut. Cut off excess cable just below the lower saddle clip.

B. INSTALLATION OF BB-4, BB-5, AND BB-6 BOTTOM BRACKETS:

Bottom Bracket Installation:

See Figure 23 for typical installations of the BB-4 and BB-6 bottom brackets onto a round rung ladder. See Figure 24 for a typical installation of the BB-5 bottom bracket with a weld-on stand-off support. The bottom bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The bottom bracket must be mounted in-line (vertically) with the top bracket.

One rung clamp is designed to bolt through the bracket and onto the rung. This clamp must not be omitted, or the bracket may slip under load.

Install the rung clamps using the hardware provided. Do not substitute other fasteners. Torque fasteners to 20-25 ft.-lbs (27.1-33.9 N-m).

Weld-on Stand-off Installation:

Install the SO-2 stand-off support as shown in Figure 24. See section 3.3 for welding recommendations. The stand-off must be perpendicular to the pole surface and in-line with the carrier cable.

Carrier Cable Tension Adjustment:

Figures 23 and 24 show the assembly of the tension rod to the bottom bracket and carrier cable. Loosely clamp the saddle clips around the carrier cable (A). Slide the tension rod (C) down the carrier cable and through the hole in the bracket until sufficient threads are exposed to allow the installation of the washers (E) and nuts (F and G). Remove slack in the carrier cable by pulling the cable through the saddle clips. Tighten the saddle clips to 35 ft.-lbs (47.5 N-m). Tighten the tensioning nut (F) until the carrier cable is taut. A small amount of grease on the tension rod threads will reduce the effort required to tension the carrier cable. Compress the spring to approximately 5-1/2 in. (14 cm) (H). Do not completely compress the spring. If there are insufficient threads exposed to fully tension the carrier cable, pull more carrier cable through the saddle clips on the tension rod and repeat the procedure. When the correct carrier cable tension is reached, tighten the jam nut against the tensioning nut (G). Cut off excess cable just below the lower saddle clip.

C. INSTALLATION OF BB-7 BOLT-ON BOTTOM BRACKETS:

Bottom Bracket Installation:

See Figure 25 for a typical installation of the BB-7 bottom brackets. The bottom bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The bottom bracket must be mounted in-line (vertically) with the top bracket. The 6100035 and 6100040 bottom brackets are designed to be connected to the structure using a DBI-SALA or customer supplied stand-off support. Customer supplied stand-off supports must be capable of withstanding the loads specified in section 2.2 and must be compatible with the LAD-SAF™ system.

Weld-on Stand-off Installation:

Install the SO-2 stand-off support as shown in Figure 25. See section 3.3 for welding recommendations. The stand-off must be perpendicular to the pole surface and in-line with the carrier cable.

Angle Leg and Round Leg Stand-off Installation:

See Figure 26 for the installation of angle (A) and round (B) leg stand-off supports. Install stand-off supports using the hardware provided. Do not substitute other fasteners. Torque 3/8 inch fasteners to 20-25 ft.-lbs (27.1-33.9 N-m). Install bottom bracket to stand-off support using 1/2-inch fasteners provided. Torque 1/2-inch fasteners to 40-45 ft.-lbs (54-61 N-m).

Carrier Cable Tension Adjustment:

Figure 25 shows the assembly of the tension rod to the bottom bracket and carrier cable (A). Loosely clamp the saddle clips (B) around the carrier cable. Slide the tension rod (C) down the carrier cable and through the hole in the bracket until sufficient threads are exposed to allow the installation of the tension indicator (D), washers (E), and nuts (F and G). Remove slack in the carrier cable by pulling the cable though the saddle clips. Tighten saddle clips to 35 ft.-lbs (47.5 N-m). Tighten the tensioning nut (F) until the ring on the tension indicator is sheared off. A small amount of grease on the tension rod threads will reduce the effort required to tension the carrier cable. If there are insufficient threads exposed to fully tension the carrier cable, pull more carrier cable through the saddle clips on the tension rod and repeat the procedure. When the correct carrier cable tension is reached, tighten the jam nut (G) against the tensioning nut. Cut off excess cable just below the lower saddle clip.

D. INSTALLATION OF BB-8 WOOD POLE BOTTOM BRACKET:

Bottom Bracket Installation:

See Figure 27 for a typical installation of the BB-8 bottom bracket. The bottom bracket should be positioned to allow users safe access when connecting or disconnecting from the system. The bottom bracket must be mounted in-line (vertically) with the top bracket. Use 1/2-inch fasteners (not provided) to attach the bottom bracket to the pole. DBI-SALA recommends using lock washers, double nuts, or other methods to ensure fasteners will not loosen.

Carrier Cable Tension Adjustment:

Figure 27 shows the assembly of the tension rod to the bottom bracket and carrier cable. Loosely clamp the saddle clips around the carrier cable. Slide the tension rod down the carrier cable and through the hole in the bracket until sufficient threads are exposed to allow the installation of the tension indicator, washers, and nuts. Remove slack in the carrier cable by pulling the cable though the saddle clips. Tighten saddle clips to 35 ft.-lbs (47.5 N-m). Tighten the tensioning nut until the ring on the tension indicator is sheared off. A small amount of grease on the tension rod threads will reduce the effort required to tension the carrier cable. If there are insufficient threads exposed to fully tension the carrier cable, pull more carrier cable through the saddle clips on the tension rod and repeat the procedure. When the correct carrier cable tension is reached, tighten the jam nut against the tensioning nut. Cut off excess cable just below the lower saddle clip.

E. 5900172 COUNTERWEIGHT:

To install the 5900172 counterweight onto the carrier cable, loosen the saddle clips and pass the carrier cable through the counterweight. Position the counterweight to allow users safe access when connecting or disconnecting from the system. Tighten the saddle clips against the carrier cable.

4.0 IDENTIFICATION AND INSPECTION AFTER SYSTEM INSTALLATION:

A. Install the installation and service label onto the ladder or structure in a prominent location. Use the steel wire provided with the label to attach it to the ladder or structure. Before installing the label, mark the installation date and number of users allowed in the appropriate locations on the label. Use a metal letter stamp to mark the label. Record the system identification information in the *Installation Checklist* at the end of this manual.

B. After installation conduct a final inspection of the system as follows:

- Ensure all fasteners are in place and properly tightened.
- Ensure the carrier cable is properly tensioned. Do not use the Lad-Saf™ system if the bottom of the cable is not secured/ tensioned with the bottom bracket assembly.
- For cables terminated with a carrier clamp, the cable should extend above the carrier clamp 1.0 in. - 2.0 in. (2.5 cm - 5.0 cm).
- Ensure the carrier cable does not abrade against the structure at any point.
- Ensure the system information is recorded on the label.

5.0 INSPECTION

5.1 I-SAFE™ RFID TAG:

The Lad-Saf™ system includes an i-Safe™ Radio Frequency Identification (RFID) tag (Figure 28). The RFID tag can be used in conjunction with the i-Safe handheld reading device and web based portal to simplify inspection and inventory control and provide records for your fall protection equipment. If you are a first-time user, contact a Capital Safety Customer Service representative (see back cover). If you have already registered, go to www.capitalsafety.com/isafe.html. Follow the instructions provided with your i-Safe handheld reader or on the web portal to transfer your data to your web log.

6.0 MAINTENANCE, SERVICING, STORAGE

6.1 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.

7.0 SPECIFICATIONS

7.1 All top and bottom brackets, cable guides, carrier cable, and fasteners are made of galvanized or stainless steel. Contact DBI-SALA for material specification details if required. The LAD-SAF™ system, when installed according to the installation instructions, meets OSHA, ANSI (ANSI A14.3), CSA (Z259.2.5) and CE (prEN353-1:2012) requirements.

8.0 LAD-SAF SYSTEM LABELING

> ***Please reference the User Manual supplied with the Lad-Saf™ X2 Detachable Sleeve for proper use and maintenance of this system.***

Lad-Saf System:

The Lad-Saf Flexible Cable Ladder Safety System label must be securely attached and fully legible. (See Figure 28) Label Contents:

1. **WARNING:** Manufacturer's instructions supplied with this product at time of shipment must be followed for proper installation, use, inspection and maintenance. Unauthorized alteration or substitution of system elements or components is prohibited. Do not use system with incompatible safety sleeves. Before each use inspect system visually for defects. Formally inspect system in accordance with instructions at least annually. Failure to heed warnings may result in serious injury or death.
2. System Capacity
3. Inspections
4. Date of Inspection
5. Inspected By
6. Date of Next/Annual Inspection
7. RFID Tag
8. Serial Number

PARTS LIST			
ITEM	**ANSI, CSA**	**CE**	**DESCRIPTION**
TB-1	6116054	6116054	Top bracket galvanized
TB-2	6116056	KC36116056	Top bracket galvanized
TB-3	6116280	KC3PL280	Top bracket galvanized
	6116278	6116278	Top bracket galvanized, 8 mm
TB-4	6116210	KC3PL210	Top bracket stainless steel
TB-5	6116224	6116224	Top bracket galvanized
TB-6	6116250	KC36116250	Top bracket galvanized
TB-7	6116261	KC36116261	Top bracket galvanized
TB-8	6116120	6116120	Top bracket, galvanized, telescoping
TB-9	6116005	KC36110020	Top bracket, stainless steel for 1-3/4” rung (2 clamps)
	6116050	6116050	Top bracket, galvanized for 2” x 1-1/2” rung
	6116052	6116052	Top bracket, galvanized for 1-1/2” rung
	6116074	6116074	Top bracket, stainless steel for 1-1/8” rung
	6116325	6116325	Top bracket, stainless steel for 1-1/8” rung
	6116328	6116328	Top bracket, stainless steel for 1-1/8” x 2” rung
TB-10	6116410	6116410	Top bracket, galvanized
TB13	6116048	6116048	Top bracket, galvanized for 1-1/2” x 1-1/2” angle x 30°
	6116051	6116051	Top bracket, galvanized for 1-1/4” angle
	6116055	6116055	Top bracket, galvanized for 1” x 3/4” angle
	6116057	6116057	Top bracket, galvanized for 1-1/2” x 1-1/2” angle
	6116059	6116059	Top bracket, galvanized for 1” angle
	6116282	KC36116282	Top bracket, galvanized for 1-1/2” x 1-1/2” angle (square spacer)
TB14	6116286	6116286	Top bracket, galvanized for 1-1/2” x 1-1/2” rung
	6116290	6116290	Top bracket, galvanized for 1-3/4” round rung
	6116291	6116291	Top bracket, galvanized for 1-3/4” x 2-1/4” rung
	6116292	6116292	Top bracket, galvanized for 2-1/2” x 3/8” rung
	6116293	6116293	Top bracket, galvanized for 2” x 1” rung
	6116294	6116294	Top bracket, galvanized for 2” x 2” rung
	6116295	6116295	Top bracket, galvanized for 4” x 2” rung
	6116296	6116296	Top bracket, galvanized for 2” x 4” rung
	6116324	6116324	Top bracket, stainless steel for 2” round rung
BB-1	6100090	KC3PL90	Bottom Bracket, Galvanized
	6100091	KC36100091	Bottom Bracket, Galvanized, Extra-Long
	6100092	6100092	Bottom Bracket, Galvanized, 37”
	6100093	6100093	Bottom Bracket, Galvanized, 48”
BB-2	6100060	6100060	Bottom Bracket, Galvanized for 2” x 1-1/4” rung
	6100070	6100070	Bottom Bracket, Stainless Steel
	6100073	6100073	Bottom Bracket, Stainless Steel for 1-1/8” x 2” rung
	6100128	6100128	Bottom Bracket, Galvanized for 1-1/2” rung
BB-3	6100072	6100072	Bottom Bracket, Stainless Steel for 2” round rung
	6100100	KC361001W	Bottom Bracket, Galvanized for 1-1/2” x 1-1/2” rung
	6100110	6100110	Bottom Bracket, Galvanized for 1-1/4” x 2-1/4” rung
	6100111	6100111	Bottom Bracket, Galvanized for 4” x 2” rung
	6100112	6100112	Bottom Bracket, Galvanized for 2” x 1” rung
	6100113	6100113	Bottom Bracket, Galvanized for 1-3/4” round rung
	6100114	6100114	Bottom Bracket, Galvanized for 2-1/2” x 3/8” rung
	6100115	6100115	Bottom Bracket, Galvanized for 2” x 2” rung
	6100116	6100116	Bottom Bracket, Galvanized for 2” x 4” rung

PARTS LIST			
ITEM	**ANSI, CSA**	**CE**	**DESCRIPTION**
BB-4	6100095	KC3PL95	Bottom Bracket, Stainless Steel
BB-5	6100224	6100224	Bottom Bracket, Stainless Steel
BB-6	6100015	KC3PL822	Bottom Bracket, Galvanized
BB-7	6100035	KC36100035	Bottom Bracket, Galvanized
	6100038	KC36100038	Bottom Bracket - Stainless Steel
BB-8	6100045	6100045	Bottom Bracket, Galvanized
BB-9	6100050	6100050	Bottom Bracket, Galvanized for 1-5/8" x 1-3/8" rung
	6100055	6100055	Bottom Bracket, Galvanized for 1-1/2" x 1-1/2" angle 30°
	6100065	KC36100065	Bottom Bracket, Galvanized for 1-1/2" x 1-1/2" x 3/16" angle (square spacer)
	6100131	6100131	Bottom Bracket, Galvanized for 1-1/4" angle
	6100132	6100132	Bottom Bracket, Galvanized for 1-3/4" angle
	6100133	6100133	Bottom Bracket, Galvanized for 1-1/2" x 1-1/4" rung
	6100134	6100134	Bottom Bracket, Galvanized for 1" rung
CG-1	6100249	6100249	Cable Guide, Stainless Steel, 45° bend
CG-2	6100140	6100140	Cable Guide
CG-3	6100400	KC3PL330	Cable Guide, Galvanized
	6100401	6100401	Cable Guide, Stainless Steel
	6100428	6100402	Cable Guide, Stainless Steel, 1-1/2" center
CG-4	6100430	KCPL379	Cable Guide, Galvanized
	6100431	6100431	Cable Guide, Galvanized
	6100432	6100432	Cable Guide, Stainless Steel
	6100435	6100435	Cable Guide, Stainless Steel, 4" extra length
CG-5	6100420	6100420	Cable Guide, Galvanized, (Stainless Steel hardware), 1-1/4" x 2" rung
	6100421	6100421	Cable Guide, Stainless Steel, 1-1/4" x 2" rung
	6100422	6100422	Cable Guide, Stainless Steel, 1-3/4" x 1-3/4" rung
	6100423	6100423	Cable Guide, Stainless Steel, 1-3/4" x 2-1/4" rung
	6100424	6100424	Cable Guide, Stainless Steel, 1-3/8" x 1-3/4" rung
	6100425	6100425	Cable Guide, Stainless Steel, 2" x 1" rung
	6100426	6100426	Cable Guide, Stainless Steel, 2" x 2" rung
	6100427	6100427	Cable Guide, Stainless Steel, 1-5/8" x 1" rung
	6100428	KC36100428	Cable Guide, Galvanized, 1-1/2" rung
	6100429	6100429	Cable Guide, Stainless Steel, 2-1/4" x 2-1/2" rung
	6100457	KC3PL333	Cable Guide, Stainless Steel
CG-6	6100448	KC36100448	Cable Guide, Stainless Steel, 1-1/15" angle rung
	6100449	6100449	Cable Guide, Stainless Steel, 2-3/8" x 7/8" rung
	6100453	6100453	Cable Guide, Stainless Steel, 1-1/4" angle rung
	6100454	6100454	Cable Guide, Stainless Steel, 1" x 3/4" angle
CG-7	6100525	6100525	Cable Guide, Stainless Steel, 1-1/2" angle rung
CG-8	6100455	6100455	Cable Guide, Stainless Steel, 1-1/4" x 1-1/4" angle
CG-9	6100505	KC3PL190	Cable Guide, Stainless Steel
	6100506	6100506	Cable Guide, Stainless Steel, 1-1/4" x 1-1/4" x 3/16" angle
CG-10	6100460	6100460	Cable Guide, Stainless Steel, w/Twist 39°
	6100461	6100461	Cable Guide, Stainless Steel, w/Twist 27°
	6100462	6100462	Cable Guide, Stainless Steel, w/Twist 45°
CG-11	6100475	6100475	Cable Guide, Stainless Steel, 1-1/2" x 1-1/2" angle 30°
CG-12	6100533	6100533	Cable Guide, Stainless Steel, w/Latch and Clamp Plate
CG-13	6100532	6100532	Cable Guide, Galvanized, w/Latch

PARTS LIST			
ITEM	**ANSI, CSA**	**CE**	**DESCRIPTION**
CG-14	6100530	KC36100530	Cable Guide
	6100531	6100531	Cable Guide, no U-Bolt
CG-15	6100515	KC3PL105	Cable Guide, Galvanized
	6100516	KC36100516	Cable Guide, Galvanized, w/Caps
	6100517	6100517	Cable Guide, Stainless Steel
CG-16	6100470	6100470	Cable Guide
CG-17	6100520	6100520	Cable Guide, Stainless Steel, 4.313” long
	6100521	6100521	Cable Guide, Galvanized, w/Caps
	6100522	6100522	Cable Guide, Galvanized
	6100523	KC3PL310	Cable Guide, Stainless Steel, 4.125” long
SO-1	6100700 - 6100720		Top/Bottom Bracket Horizontal Stand-Off
SO-2	6100710	KC36100710	Top/Bottom Bracket Weld-On Stand-Off
SO-3	6100670 - 6100697		Cable Guide Round Leg Stand-Off Support
SO-4	6100600	6100600	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 2” - 2-1/2” angle size, Stainless Steel
	6100601	6100601	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 3” - 3-1/2” angle size, Galvanized
	6100602	6100602	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 3” - 3-1/2” angle size, Stainless Steel
	6100603	6100603	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 4” - 4-1/2” angle size, Galvanized
	6100604	6100604	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 4” - 4-1/2” angle size, Stainless Steel
	6100606	6100606	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 6” - 6-1/2” angle size, Stainless Steel
	6100607	6100607	Top/Bottom Bracket Angle Stand-Off, 60^{O} angle, 5” - 5-1/2” angle size, Galvanized
	6100635	6100635	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 2” - 2-1/2” angle size, Stainless Steel
	6100636	6100636	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 3” - 3-1/2” angle size, Galvanized
	6100637	6100637	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 3” - 3-1/2” angle size, Stainless Steel
	6100638	6100638	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 4” - 4-1/2” angle size, Stainless Steel
	6100639	6100639	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 4” - 4-1/2” angle size, Galvanized
	6100640	6100640	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 5” - 5-1/2” angle size, Stainless Steel
	6100641	6100641	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 6” - 6-1/2” angle size, Stainless Steel
	6100642	6100642	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 8” - 8-1/2” angle size, Galvanized
	6100643	6100643	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 9” - 9-1/2” angle size, Stainless Steel
	6100644	6100644	Top/Bottom Bracket Angle Stand-Off, 90^{O} angle, 3-1/2” - 4” angle size, Stainless Steel
SO-5	6100645 - 6100669		Top/Bottom Bracket Round Leg Stand-Off
SO-6	6100610	6100610	Cable Guide Angle Leg Stand-Off Support, 60^{O} angle, 2” - 2-1/2” angle size, Galvanized
	6100611	6100611	Cable Guide Angle Leg Stand-Off Support, 60^{O} angle, 3” - 3-1/2” angle size, Galvanized
	6100612	6100612	Cable Guide Angle Leg Stand-Off Support, 60^{O} angle, 3” - 3-1/2” angle size, Stainless Steel

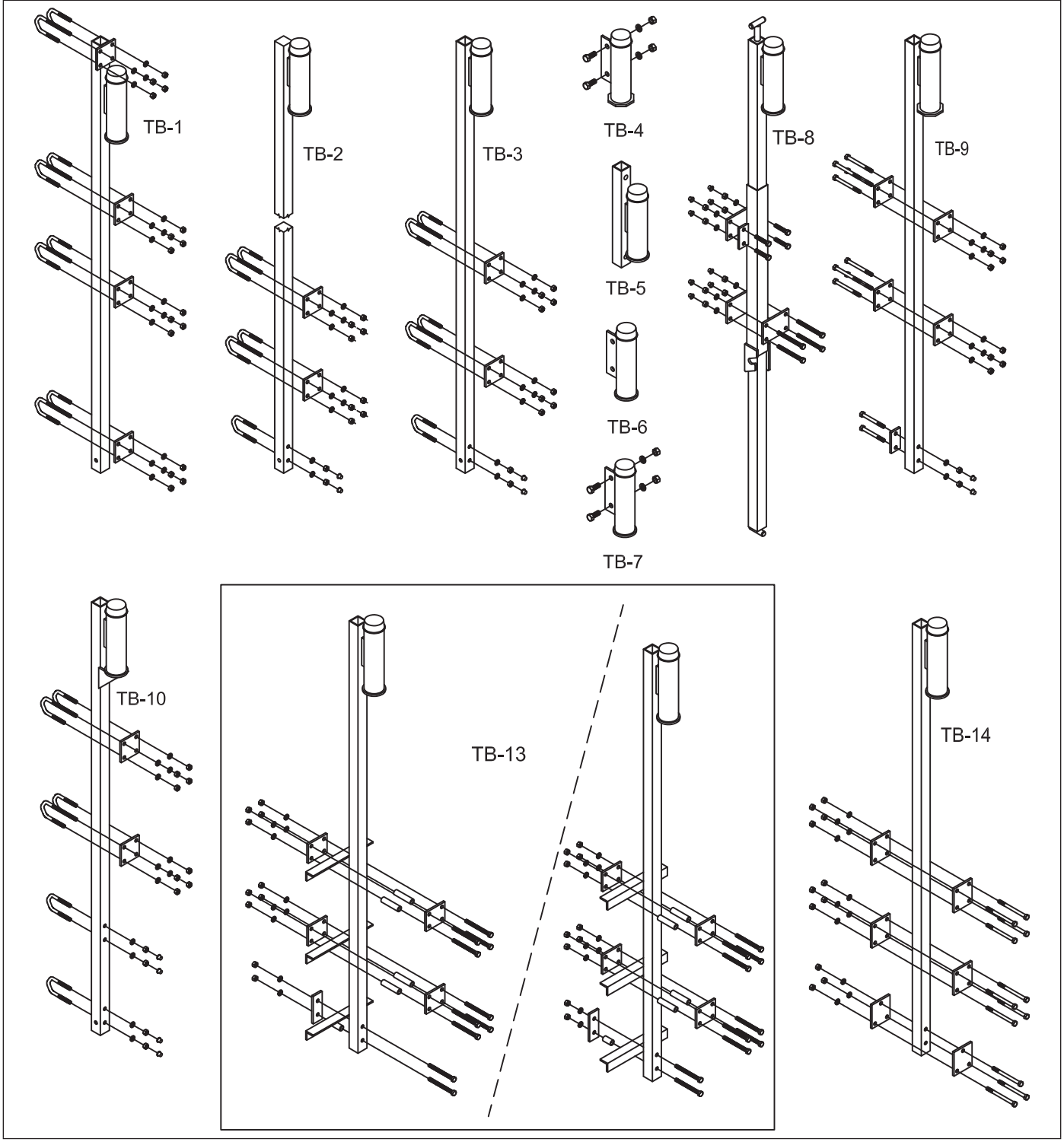
PARTS LIST			
ITEM	**ANSI, CSA**	**CE**	**DESCRIPTION**
SO-6	6100613	6100613	Cable Guide Angle Leg Stand-Off Support, 60° angle, 4" - 4-1/2" angle size, Galvanized
	6100614	6100614	Cable Guide Angle Leg Stand-Off Support, 60° angle, 4" - 4-1/2" angle size, Stainless Steel
	6100620	6100620	Cable Guide Angle Leg Stand-Off Support, 90° angle, 2" - 2-1/2" angle size, Stainless Steel
	6100621	6100621	Cable Guide Angle Leg Stand-Off Support, 90° angle, 3" - 3-1/2" angle size, Galvanized
	6100622	6100622	Cable Guide Angle Leg Stand-Off Support, 90° angle, 3" - 3-1/2" angle size, Stainless Steel
	6100623	6100623	Cable Guide Angle Leg Stand-Off Support, 90° angle, 4" - 4-1/2" angle size, Galvanized
	6100624	6100624	Cable Guide Angle Leg Stand-Off Support, 90° angle, 4" - 4-1/2" angle size, Stainless Steel
	6100625	6100625	Cable Guide Angle Leg Stand-Off Support, 90° angle, 5" - 5-1/2" angle size, Stainless Steel
	6100626	6100626	Cable Guide Angle Leg Stand-Off Support, 90° angle, 5" - 5-1/2" angle size, Galvanized
	6100627	6100627	Cable Guide Angle Leg Stand-Off Support, 90° angle, 6" - 6-1/2" angle size, Galvanized
	6100628	6100628	Cable Guide Angle Leg Stand-Off Support, 90° angle, 6" - 6-1/2" angle size, Stainless Steel
	6100629	6100629	Cable Guide Angle Leg Stand-Off Support, 90° angle, 8" - 8-1/2" angle size, Galvanized
	6100630	6100630	Cable Guide Angle Leg Stand-Off Support, 90° angle, 8" - 8-1/2" angle size, Stainless Steel
	6100631	6100631	Cable Guide Angle Leg Stand-Off Support, 90° angle, 3-1/2" - 4" angle size, Stainless Steel
SO-7	6100135	6100135	Cable Guide Stand-Off Support, Galvanized
	6100136	KC36100136	Cable Guide Stand-Off Support, Stainless Steel
Cable	9500098	9500098	Cable, 3/8, 7 x 19, Galvanized
	9500099	9500099	Cable, 3/8, 7 x 19, 304 Stainless Steel
	9500396	9500396	Cable, 3/8, 1 x 7, Galvanized
	9500397	9500397	Cable, 3/8, 1x 7, 304 Stainless Steel
	9501591	9501591	Cable, 5/16, 7 x 19, Galvanized
		7240212	Cable, 8mm, 1 x 19,316 Stainless Steel

INSTALLATION CHECKLIST

Serial Number(s):	
Date Purchased:	**Date Of First Use:**

Install Date:	☐ **Ensure all fasteners are in place and properly tightened.**
Approved By:	☐ **Ensure the Carrier Cable is properly tensioned**
Corrective Action/Maintenance	☐ **Ensure the Carrier Cable does not abrade against the structure at any point.**
	☐ **Ensure system information is recorded on the system label and Inspection and Maintenance Log:** Components of the LAD-SAF system include an i-Safe™ Radio Frequency (RFID) tag. The RFID tag can be used in conjunction with the i-Safe handheld reading device and web based portal (www.capitalsafety.com/isafe) to simplify inspection and inventory control and maintain electronic records for your fall protection equipment.

2



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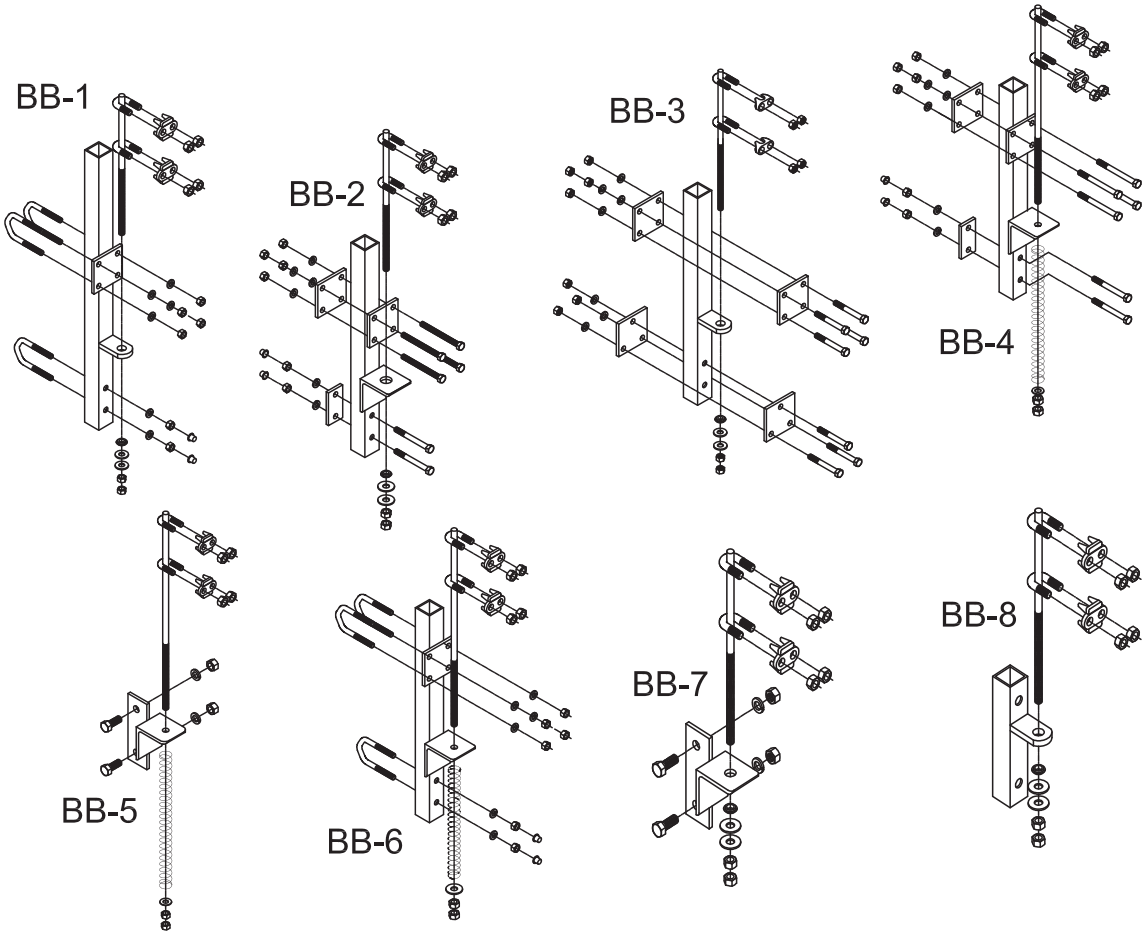

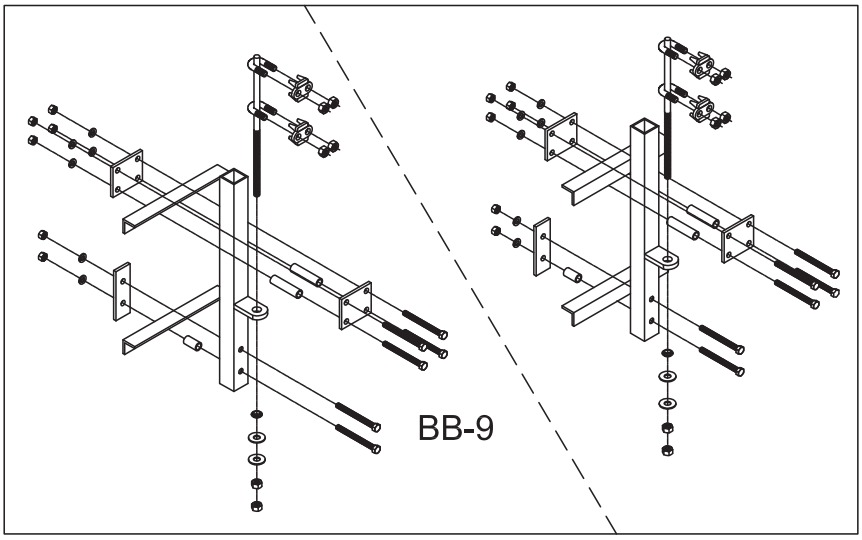

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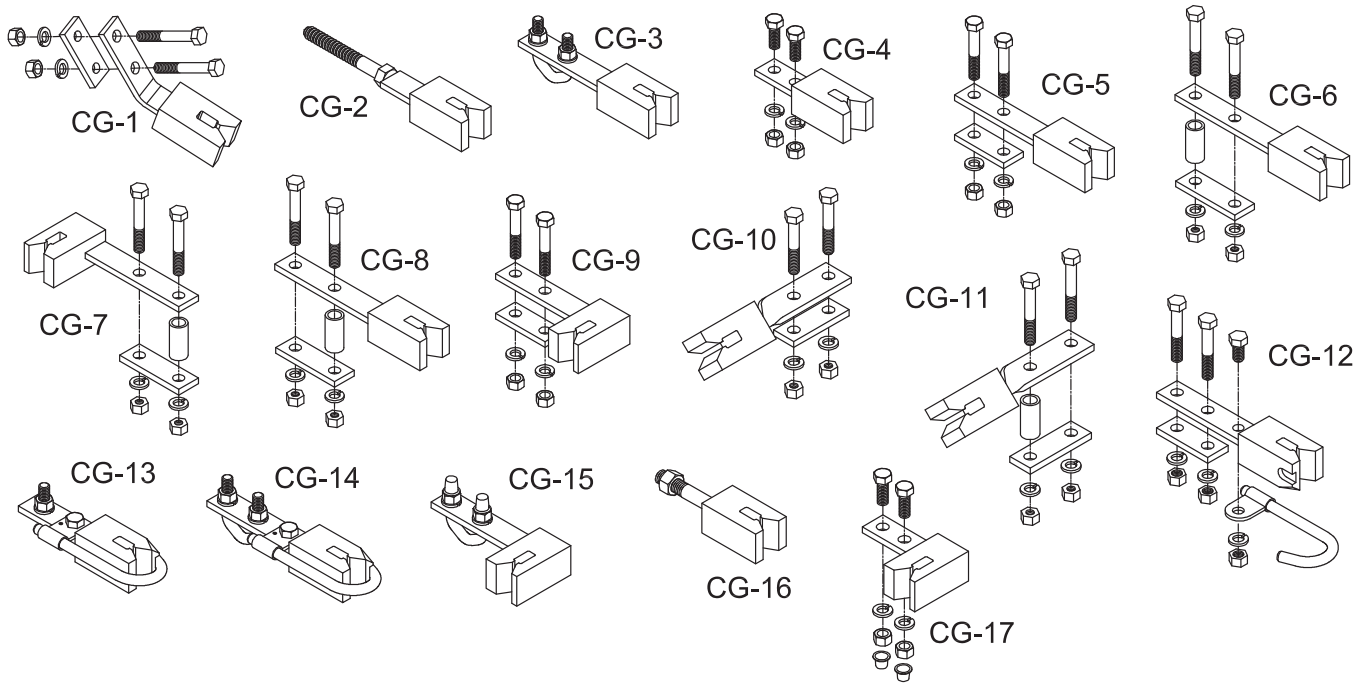
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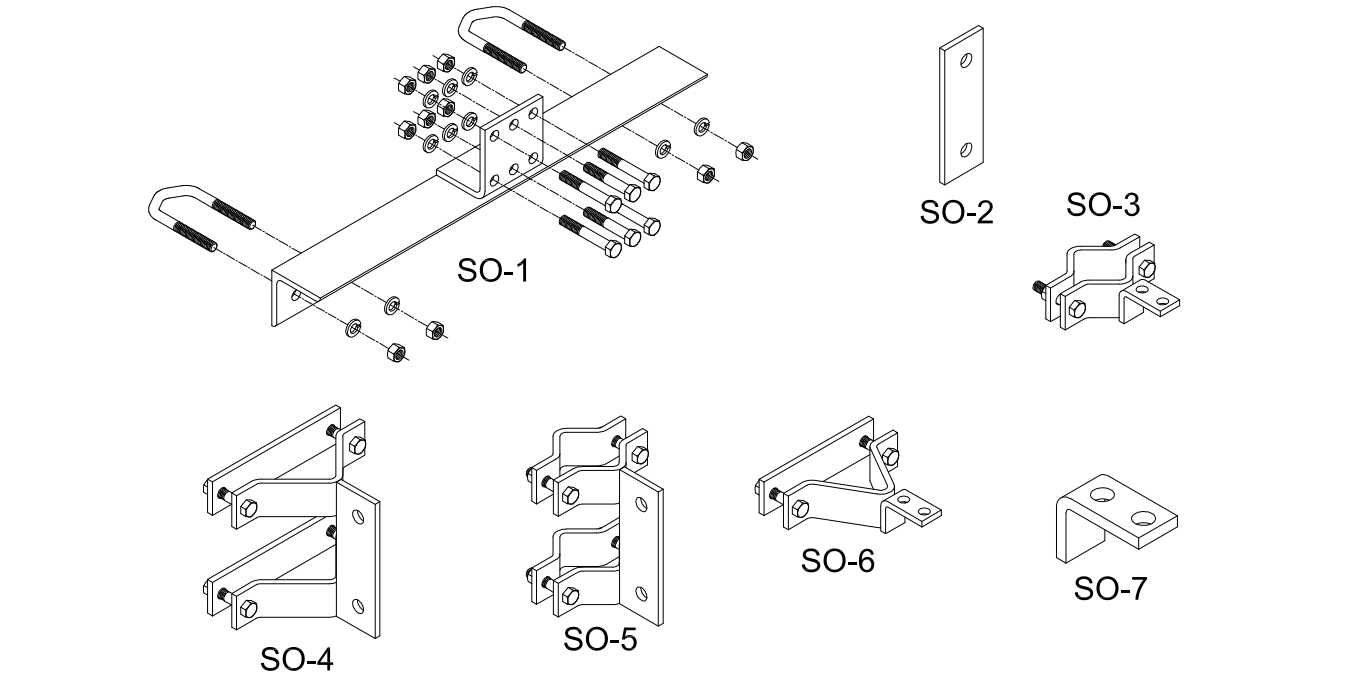
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SO-7

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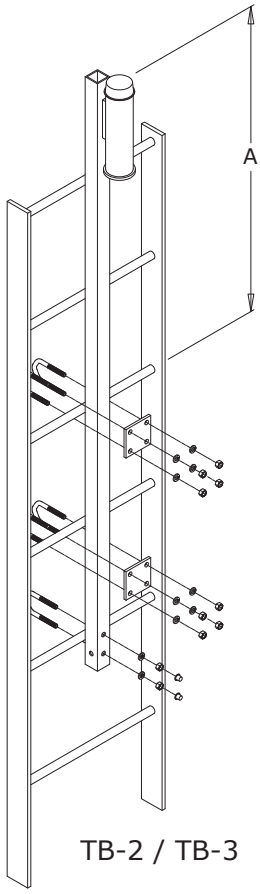
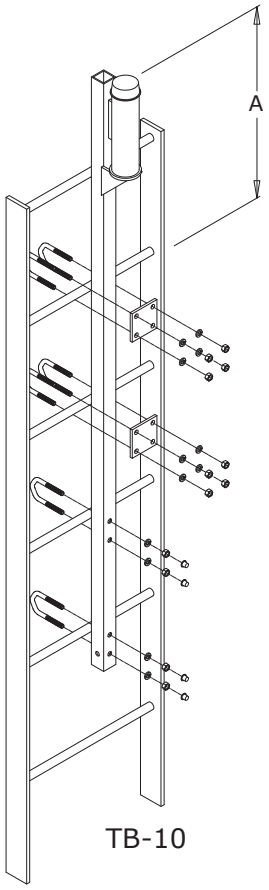


TB-2 / TB-3



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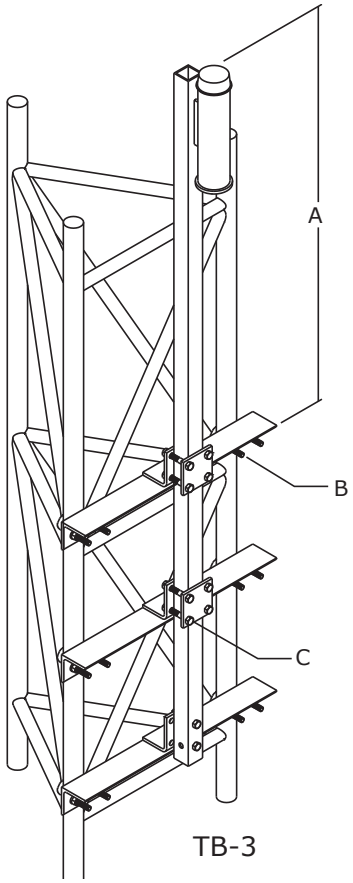

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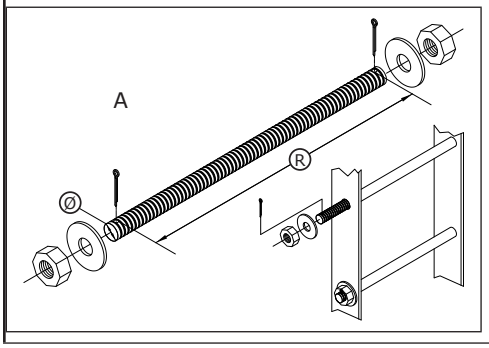

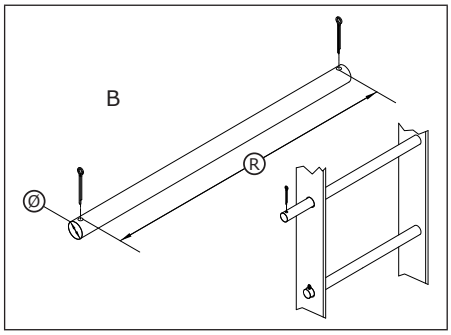

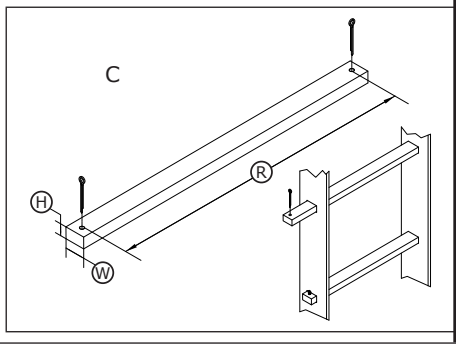

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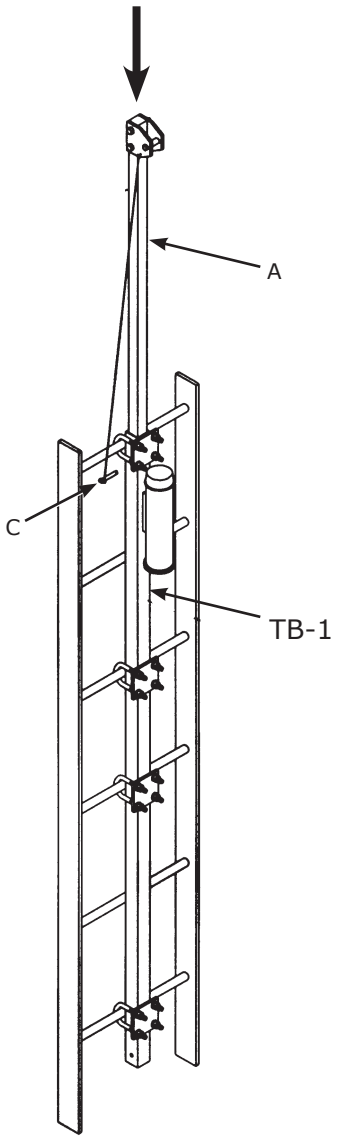
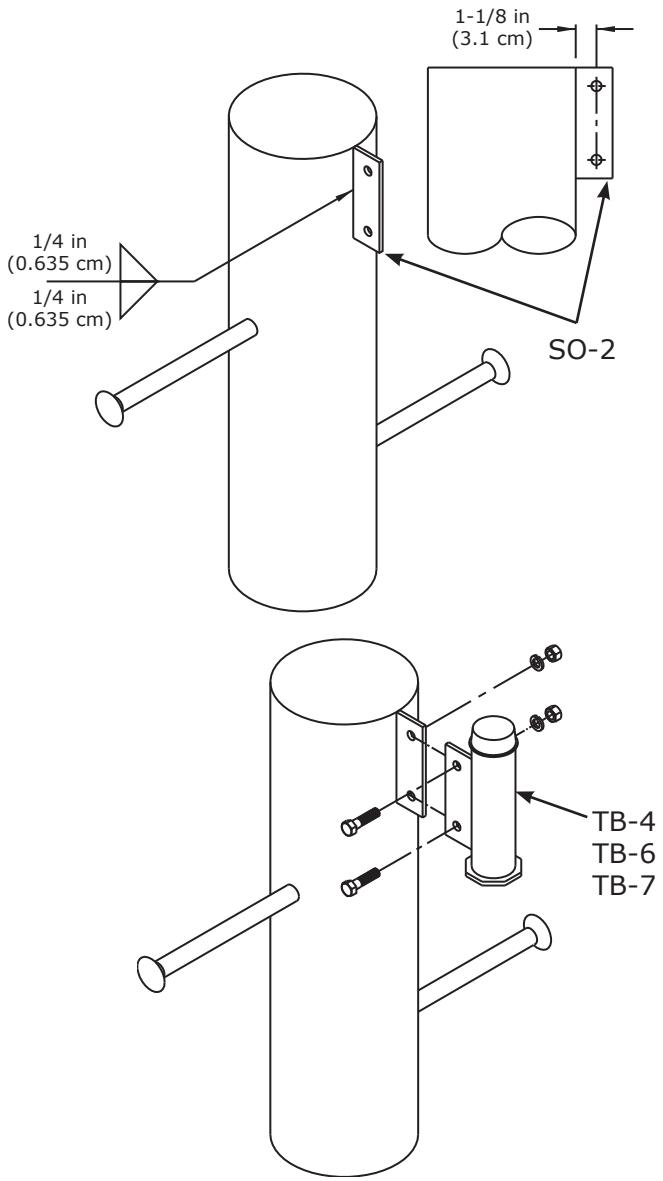
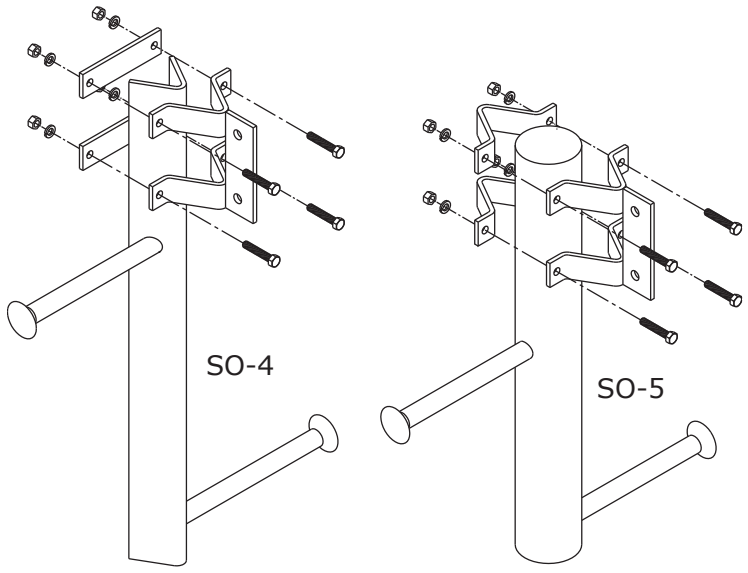

A
C
TB-1

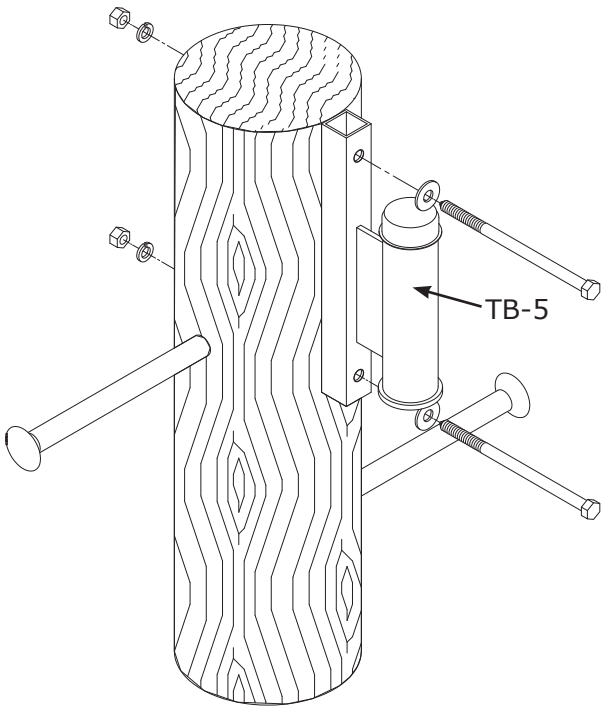
10


1-1/8 in
(3.1 cm)
1/4 in
(0.635 cm)
1/4 in
(0.635 cm)
SO-2
TB-4
TB-6
TB-7

11


SO-4
SO-5

12



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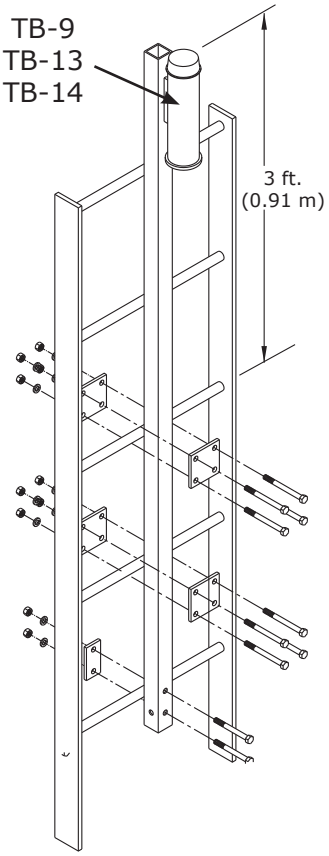

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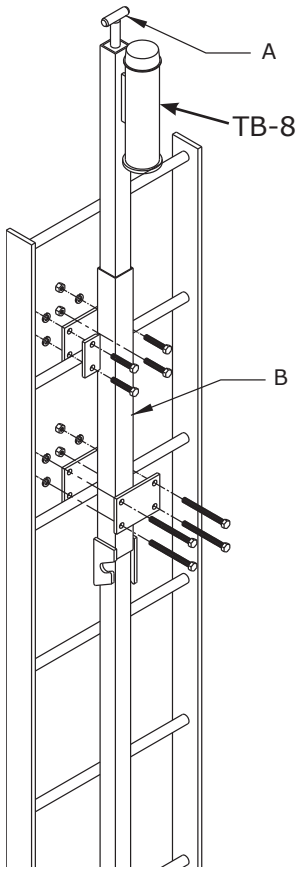

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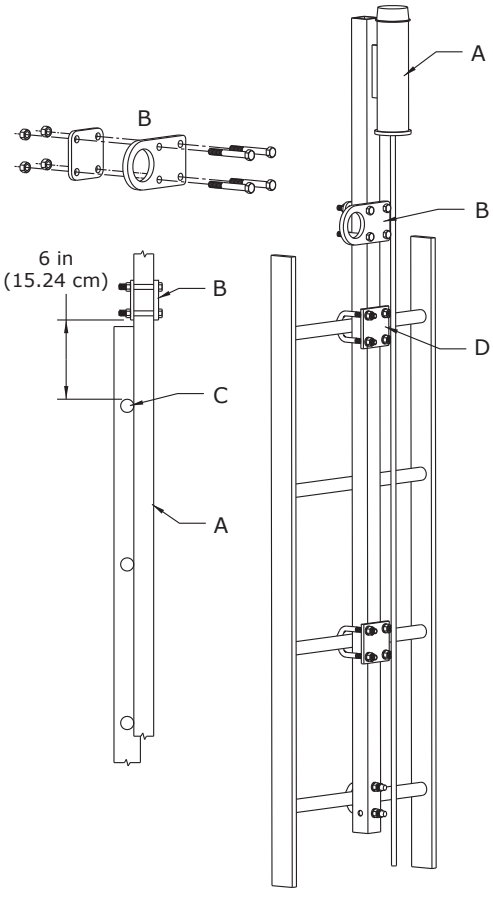

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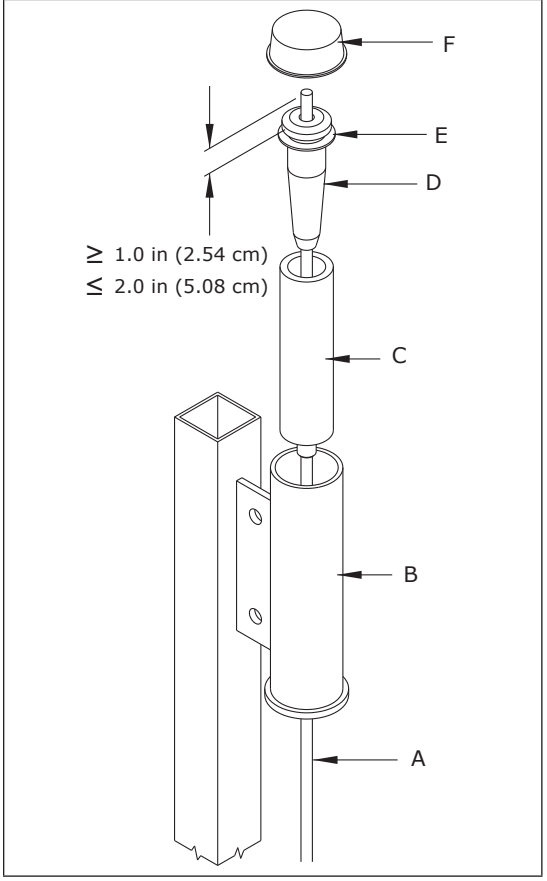
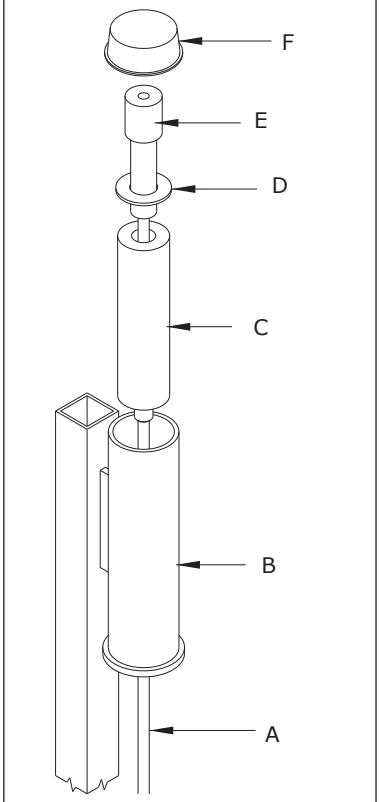

F
E
D
≥ 1.0 in (2.54 cm)
≤ 2.0 in (5.08 cm)
C
B
A

17


F
E
D
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B
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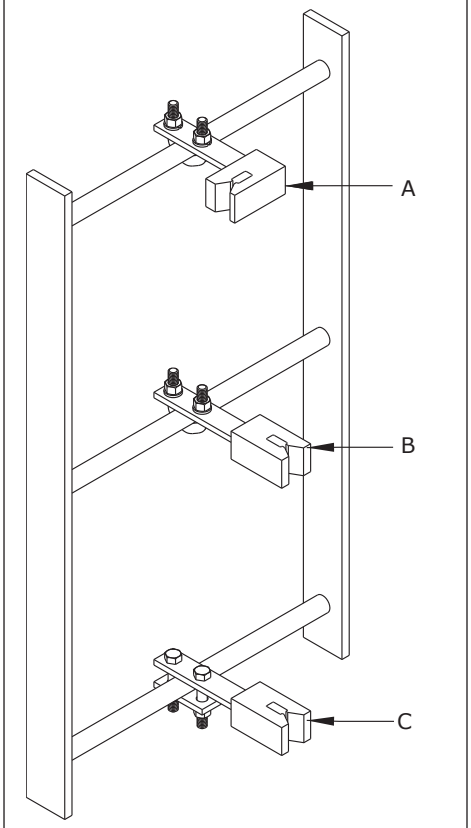
18


A
B
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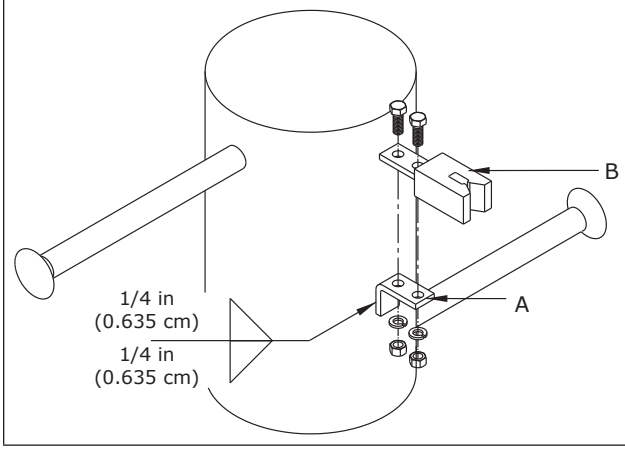
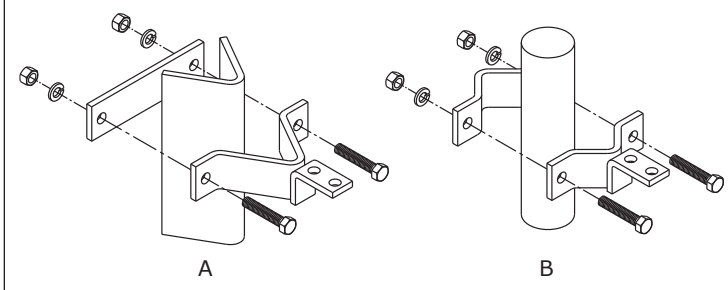
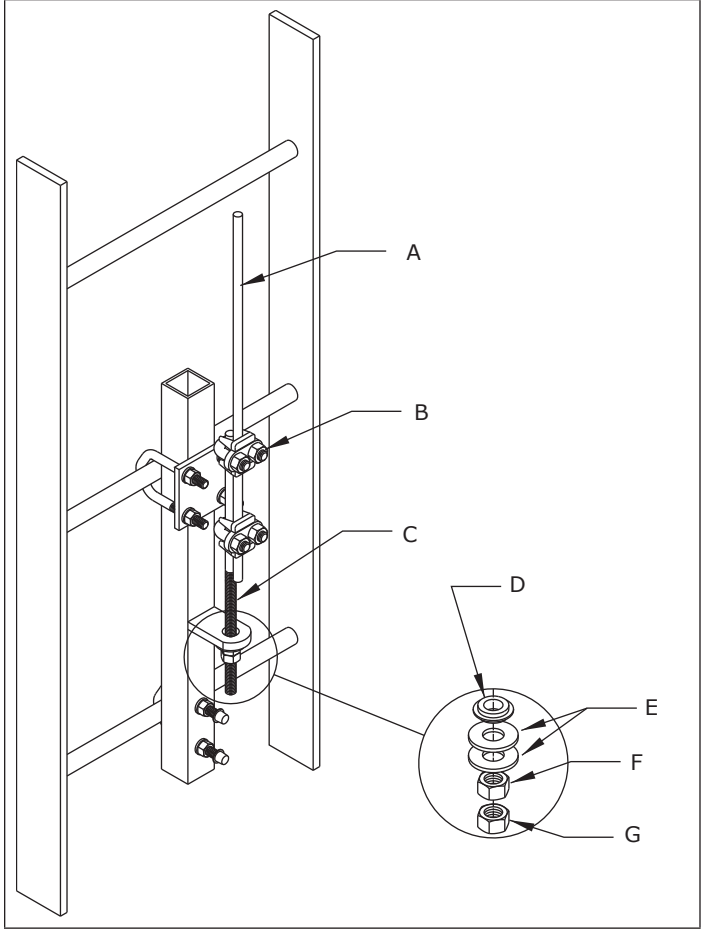
19


B
A
1/4 in
(0.635 cm)
1/4 in
(0.635 cm)

20


A
B

21


A
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C
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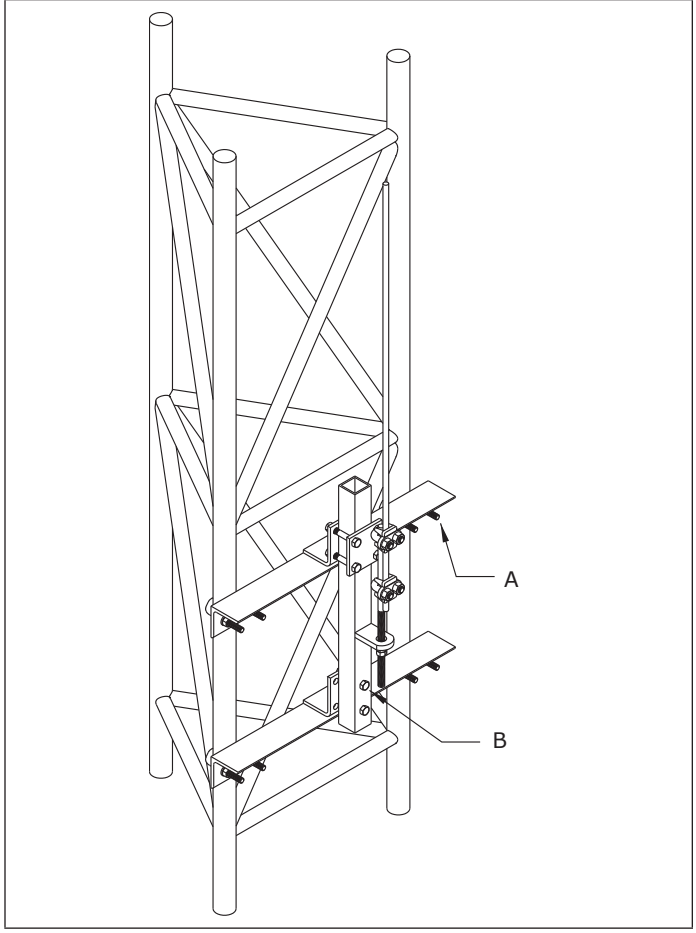
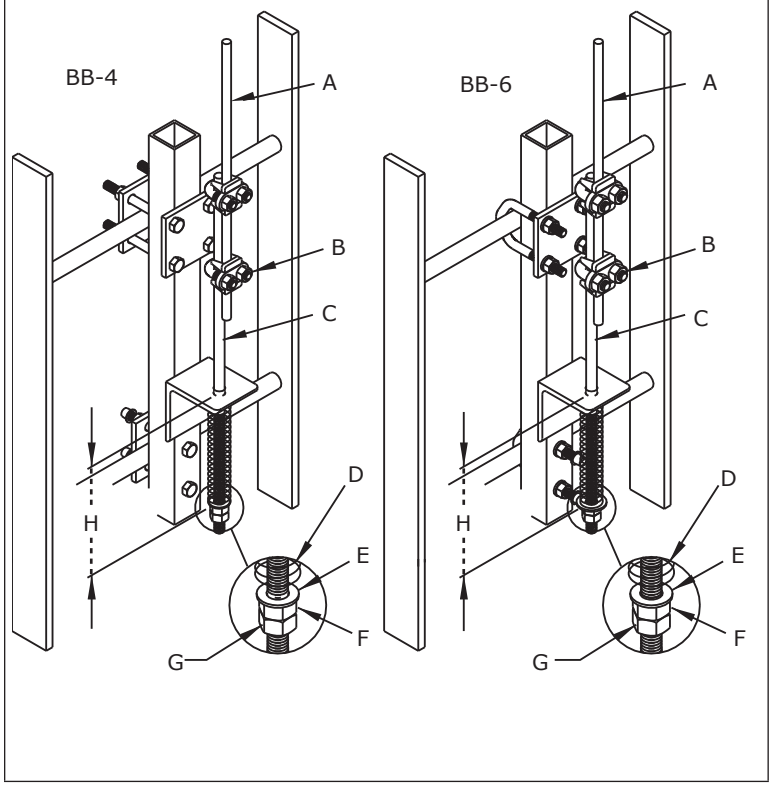
E
F
G

22


A
B

23


BB-4
A
B
C
D
E
F
G
H
BB-6
A
B
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D
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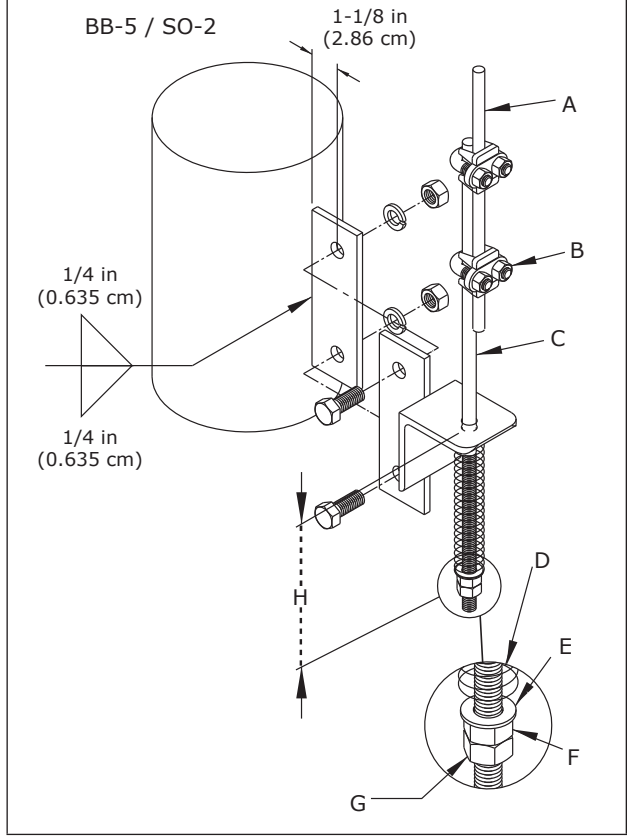
H

24


BB-5 / SO-2
1-1/8 in
(2.86 cm)
A
B
C
D
E
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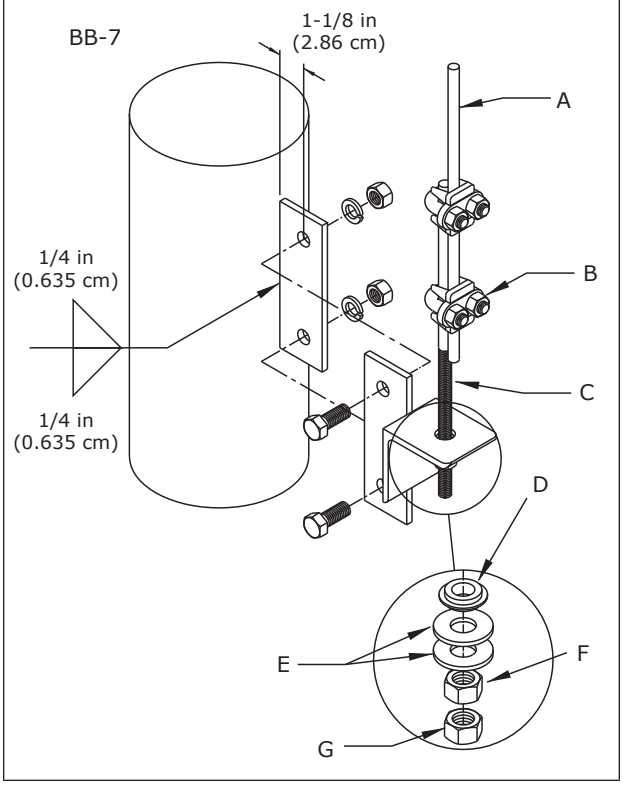
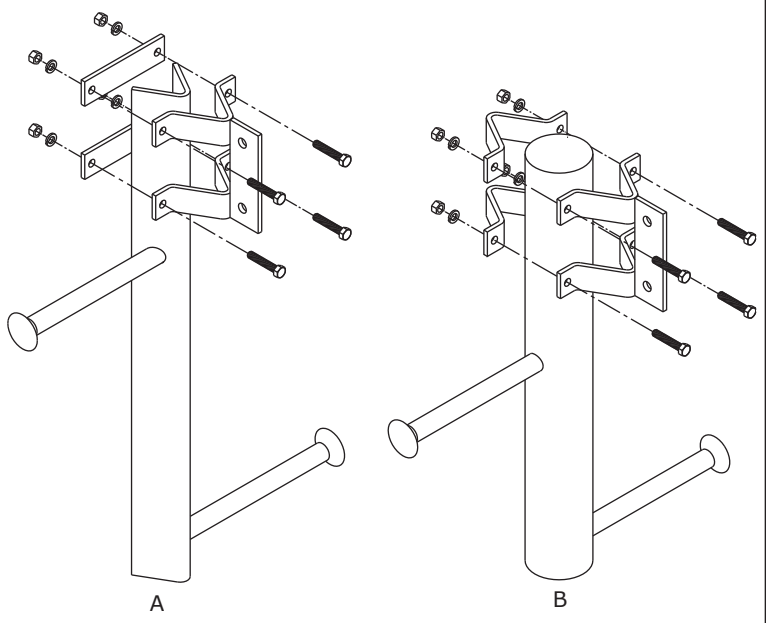
G
H
1/4 in
(0.635 cm)
1/4 in
(0.635 cm)

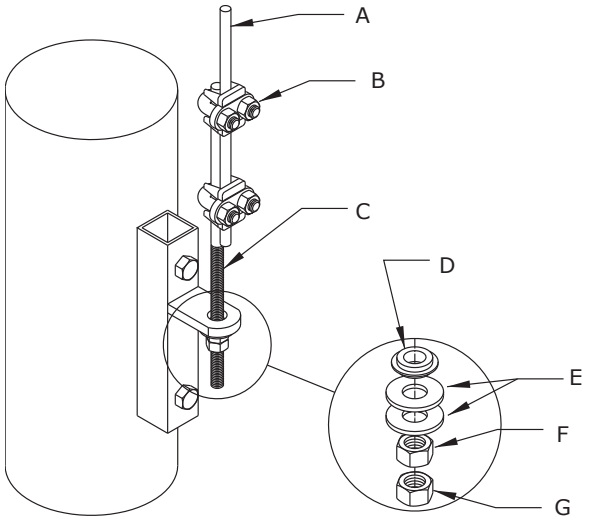
25


BB-7
1-1/8 in
(2.86 cm)
A
B
C
1/4 in
(0.635 cm)
1/4 in
(0.635 cm)
D
E
F
G

26


A
B

27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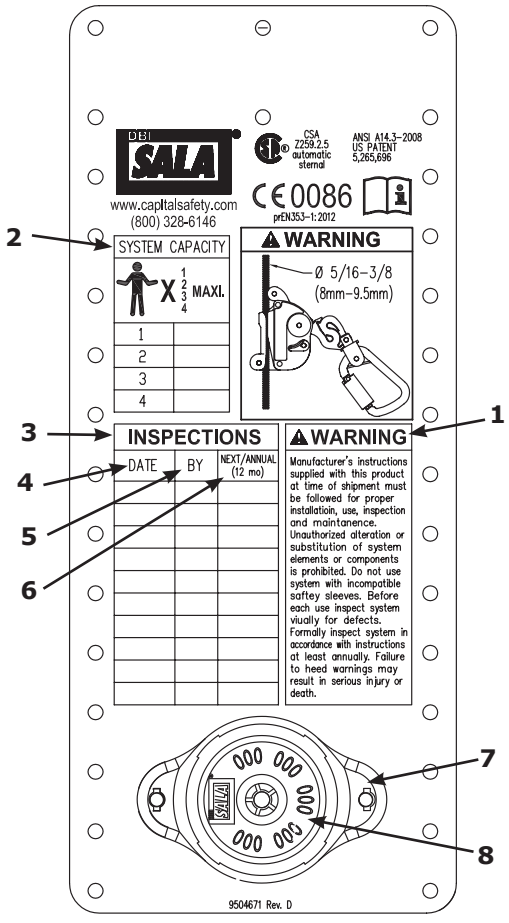
28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CSA
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sternal
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US PATENT
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prEN353-1:2012
SYSTEM CAPACITY
X 1 2 3 4 MAXI.
1
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3
4
WARNING
Ø 5/16-3/8
(8mm-9.5mm)
INSPECTIONS
DATE
BY
NEXT/ANNUAL
(12 mo)
WARNING
Manufacturer's instructions supplied with this product at time of shipment must be followed for proper installatioin, use, inspection and maintanence. Unauthorized alteration or substitution of system elements or components is prohibited. Do not use system with incompatible saftey sleeves. Before each use inspect system visually for defects. Formally inspect system in accordance with instructions at least annually. Failure to heed warnings may result in serious injury or death.
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8

LIMITED LIFETIME WARRANTY

Warranty to End User: 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 authorised 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. THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO OUR PRODUCTS AND IS IN LIEU OF ALL OTHER WARRANTIES AND LIABILITIES, EXPRESSED OR IMPLIED.

Garantie limitée à vie

Garantie de l'utilisateur final : CAPITAL SAFETY garantit à l'utilisateur final d'origine (« Utilisateur final ») que ses produits sont exempts de défauts de matériaux et de fabrication dans des conditions d'utilisation et d'entretien normales. Cette garantie s'étend pendant toute la durée de vie du produit à compter de la date d'achat du produit par l'Utilisateur final, comme produit neuf et inutilisé, auprès d'un distributeur agréé. L'entière responsabilité de CAPITAL SAFETY envers l'Utilisateur final et le recours exclusif de l'Utilisateur final dans le cadre de cette garantie se limite à la réparation ou au remplacement en nature de tout produit défectueux pendant sa durée de vie (si CAPITAL SAFETY, à sa seule discrétion, le juge nécessaire). Aucune information ni aucun conseil, qu'ils soient oraux ou écrits, donnés par CAPITAL SAFETY, ses distributeurs, directeurs, responsables, agents ou employés ne créera de garanties différentes ou supplémentaires ni n'augmentera l'étendue de cette garantie. CAPITAL SAFETY n'assumera en aucun cas la responsabilité de défauts résultant d'une utilisation abusive du produit, de sa mauvaise utilisation, de son altération ou de sa modification, ou de défauts découlant du non-respect des instructions du fabricant en matière d'installation, d'entretien ou de conditions d'utilisation. CETTE GARANTIE EST LA SEULE GARANTIE APPLICABLE À NOS PRODUITS ET ELLE REMPLACE TOUTES LES AUTRES GARANTIES ET RESPONSABILITÉS EXPRIMÉES OU IMPLICITES.

Garanzia di durata limitata

Garanzia dell'utente finale: CAPITAL SAFETY garantisce all'utente finale originale (di seguito "Utente finale") che i suoi prodotti sono privi di difetti dei materiali e di fabbricazione se utilizzati nelle normali condizioni d'uso e di servizio. La garanzia copre l'intera durata del prodotto dalla data di acquisto del prodotto da parte dell'Utente finale come prodotto nuovo e mai usato da un distributore autorizzato CAPITAL SAFETY. La responsabilità complessiva di CAPITAL SAFETY nei confronti dell'Utente finale e il ricorso esclusivo dell'Utente finale ai sensi della presente garanzia sono limitati alla riparazione o alla sostituzione in natura dei prodotti difettati entro la durata (così come stabilita a propria esclusiva discrezione da CAPITAL SAFETY). Eventuali informazioni orali o scritte o consigli forniti da CAPITAL SAFETY, dai suoi distributori, direttori, funzionari, agenti o dipendenti non potranno in alcun modo dare origine a garanzie diverse o aggiuntive né potranno ampliare l'ambito della presente garanzia. CAPITAL SAFETY non potrà essere ritenuta responsabile dei difetti derivati da un cattivo o errato utilizzo del prodotto, da alterazioni o modifiche o da difetti dovuti ai mancati installazione, manutenzione o uso del prodotto in conformità alle istruzioni del produttore. LA PRESENTE GARANZIA È L'UNICA GARANZIA APPLICABILE AI NOSTRI PRODOTTI E SOSTITUISCE QUALSIASI ALTRA GARANZIA E RESPONSABILITÀ, ESPRESSE O IMPLICITE.

Lebenslange Garantie mit Einschränkung

Endbenutzer-Garantie: CAPITAL SAFETY garantiert dem ursprünglichen Endbenutzer („Endbenutzer"), dass seine Produkte unter normalem Gebrauch und Betrieb frei von Material- und Herstellungsfehlern sind. Diese Garantie erstreckt sich auf die Lebensdauer des Produkts ab dem Datum, an dem der Endbenutzer das Produkt neu und ungebraucht von einem durch CAPITAL SAFETY autorisierten Händler gekauft hat. Die gesamte Haftung von CAPITAL SAFETY dem Endbenutzer gegenüber und der einzige Anspruch des Endbenutzers ist gemäß dieser Garantie beschränkt auf die Reparatur oder den Ersatz von defekten Produkten innerhalb ihrer Lebensdauer (eine Einschätzung diesbezüglich wird von CAPITAL SAFETY nach eigenem Ermessen durchgeführt). Keine von CAPITAL SAFETY schriftlich oder mündlich an Händler, Vorstandsmitglieder, Führungskräfte, Agenten oder Angestellte übergegebenen Informationen oder Hinweise ergeben jegliche andere oder zusätzliche Gewährleistungen, noch erhöhen sie den Umfang dieser Garantie. CAPITAL SAFETY schließt eine Haftung für Defekte aufgrund von unsachgemäßem Gebrauch, Änderungen oder Modifikationen am Produkt sowie für Defekte, die darauf zurückzuführen sind, dass das Produkt nicht gemäß der Anweisungen des Herstellers montiert, gewartet und verwendet wurde, aus. DIESE GARANTIE IST DIE EINZIG GÜLTIGE GARANTIE FÜR UNSERE PRODUKTE UND GILT ANSTELLE VON ALLEN ANDEREN GARANTIEN UND HAFTUNGSBEDINGUNGEN, SEI ES AUSDRÜCKLICH ODER STILLSCHWEIGEND.

Garantía limitada de por vida

Garantía para el Usuario final: CAPITAL SAFETY garantiza al usuario final original ("Usuario final") que sus productos están libres de defectos en materiales y mano de obra bajo condiciones normales de uso y servicio. Esta garantía abarca toda la vida útil del producto, desde la fecha de compra del producto por parte del Usuario final, en estado nuevo y sin uso, a un distribuidor autorizado de CAPITAL SAFETY. Toda la responsabilidad de CAPITAL SAFETY para con el Usuario final y el recurso exclusivo del Usuario final en virtud de esta garantía, se limita a la reparación o sustitución en especie de cualquier producto defectuoso dentro de su vida útil (como CAPITAL SAFETY lo determine y estime conveniente a su sola discreción). Ninguna información oral o escrita, o información dada por CAPITAL SAFETY, sus distribuidores, directores, técnicos, agentes o empleados, creará ninguna garantía distinta o adicional, ni de alguna manera ampliará el alcance de esta garantía. CAPITAL SAFETY no acepta responsabilidad por defectos que sean resultado del abuso, mal uso, alteración o modificación del producto, ni por los defectos que se deban a una instalación, mantenimiento o utilización que no esté de acuerdo con las instrucciones del fabricante. ESTA GARANTÍA ES LA ÚNICA GARANTÍA APLICABLE A NUESTROS PRODUCTOS Y SUSTITUYE A CUALQUIER OTRA GARANTÍA O RESPONSABILIDAD, EXPRESA O IMPLÍCITA.

Begränsad livstidsgaranti

Garanti för slutanvändare: CAPITAL SAFETY garanterar den ursprungliga slutanvändaren (slutanvändaren) att produkterna inte har några material- eller produktionsfel vid normal användning och service. Garantin omfattar produktens livslängd från det datum då produkten köps av slutanvändaren i nytt och oanvänt skick från en auktoriserad återförsäljare för CAPITAL SAFETY. CAPITAL SAFETYS hela ansvarsskyldighet gentemot slutanvändaren och slutanvändarens enda gottgörelse inom ramen för denna garanti begränsas till reparation eller byte av trasiga produkter under deras livslängd (enligt vad CAPITAL SAFETY bestämmer och bedömer som lämpligt efter eget gottfinnande). Inga muntliga eller skriftliga uppgifter eller råd från CAPITAL SAFETY, dess återförsäljare, chefer, tjänstemän, företrädare eller anställda får upprätta några andra eller ytterligare garantier eller på något sätt ändra garantins omfattning. CAPITAL SAFETY tar inget ansvar för fel som uppstår på grund av felaktig användning, missbruk, ändring eller modifiering av produkten eller fel som uppstår på grund av att produkten inte har monterats, underhållits eller använts i enlighet med tillverkarens anvisningar. DENNA GARANTI ÄR DEN ENDA GARANTI SOM GÄLLER FÖR VÅRA PRODUKTER OCH DEN ERSÄTTER ALLA ANDRA GARANTIER OCH ANSVAR, BÅDE UTTRYCKLIGA OCH UNDERFÖRSTÅDDA.

Begrenset livstidsgaranti

Garanti for sluttbruker: CAPITAL SAFETY garanterer den opprinnelige sluttbrukeren ("Sluttbrukeren") at materialene og håndverket som gikk med i tilvirkingen av produktene er uten defekter i sammenheng med vanlig bruk. Garantien gjelder for produktets livstid fra datoen Sluttbrukeren kjøper produktet i ny og ubrukt stand fra en autorisert leverandør av CAPITAL SAFETY. CAPITAL SAFETYs fulle og hele ansvar overfor Sluttbrukeren og Sluttbrukerens eneste rettighet under denne garantien er begrenset til reparasjon og erstatning in natura for alle defekte produkter innen sin livstid (som CAPITAL SAFETY anslår og anser som passende etter sitt eget forgodtbefinnende). Verken muntlig eller skriftlig rådgivning fra CAPITAL SAFETY eller dets leverandører, styremedlemmer, ledere, agenter eller ansatte skal opprette ulike eller ytterligere garantier, eller på noen måte utvide omfanget til denne garantien. CAPITAL SAFETY tar ikke ansvar for defekter som er resultatet av produktmisbruk, misbruk, endring eller modifikasjon, eller defekter som skyldes montering, vedlikehold eller bruk som ikke samsvarer med produsentens anvisninger. DENNE GARANTIEN ER DEN ENESTE GARANTIEN SOM GJELDER FOR VÅRE PRODUKTER. DEN GJELDER I STEDET FOR ALLE ANDRE GARANTIER OG ALT ANNET ANSVAR, BÅDE UTTRYKT OG UNDERFORSTÅTT.

Begrænset levetidsgaranti

Slutbrugergaranti: CAPITAL SAFETY garanterer over for slutbrugeren ("Slutbruger"), at virksomhedens produkter er fri for defekter i materialer og udførelse, når de anvendes under normale forhold. Denne garanti gælder i produktets levetid fra den dato, Slutbruger køber produktet i ny og ubrugt stand fra en af CAPITAL SAFETY autoriseret distributør. CAPITAL SAFETYS fulde ansvar over for Slutbruger samt Slutbrugers eksklusive retsmiddel begrænser sig i henhold til nærværende garanti til reparation eller erstatning af defekte produkter inden for deres levetid (udelukkende efter CAPITAL SAFETYS skøn og vurdering). Ingen mundtlige eller skriftlige oplysninger eller råd fra CAPITAL SAFETY, virksomhedens distributører, direktører, funktionærer, repræsentanter eller medarbejdere kan udgøre en anden eller yderligere garanti, eller på nogen måde udvide nærværende garanti. CAPITAL SAFETY påtager sig intet ansvar for defekter, der er forårsaget af misbrug, forkert brug, ændringer eller modifikationer af produktet, eller for defekter, der skyldes installation, vedligeholdelse eller brug af produktet, der er i modstrid med producentens anvisninger. DENNE GARANTI ER DEN ENESTE GARANTI, DER ER GÆLDENDE FOR VORES PRODUKTER, OG DEN TRÆDER I STEDET FOR ALLE ANDRE GARANTIER, UDTRYKKELIGE ELLER UNDERFORSTÅEDE.

BEPERKTE LEVENSLANGE GARANTIE

Garantie voor eindgebruiker: CAPITAL SAFETY garandeert de oorspronkelijke eindgebruiker ('eindgebruiker') dat zijn producten bij normaal gebruik en service vrij zijn van defecten in materialen en vakmanschap. Deze garantie strekt zich uit tot de levensduur van het product vanaf de datum waarop het product in nieuwstaat en in ongebruikte toestand door de eindgebruiker wordt aangeschaft bij een door CAPITAL SAFETY geautoriseerde distributeur. De gehele aansprakelijkheid van CAPITAL SAFETY jegens de eindgebruiker en de enige remedie die de eindgebruiker ter beschikking staat onder deze garantie, is beperkt tot het repareren of vervangen van het defecte product binnen zijn levensduur (uitsluitend zoals CAPITAL SAFETY naar eigen goeddunken bepaalt en van toepassing acht). Geen enkele informatie of geen enkel advies, mondeling of schriftelijk, verstrekt door CAPITAL SAFETY, diens distributeurs, directeuren, functionarissen, agenten of medewerkers creëert andere of aanvullende garanties en vergroot in geen enkel geval de reikwijdte van deze garantie. CAPITAL SAFETY neemt geen aansprakelijkheid voor defecten die het gevolg zijn van misbruik, verkeerd gebruik, verandering of aanpassing van het product, of voor defecten die het gevolg zijn van het niet opvolgen van de instructies van de fabrikant bij het installeren, onderhouden of gebruiken van het product. DEZE GARANTIE IS DE ENIGE GARANTIE DIE VAN TOEPASSING IS OP ONZE PRODUCTEN EN TREEDT NIET IN DE PLAATS VAN ANDERE UITDRUKKELIJKE OF STILZWIJGENDE GARANTIES EN AANSPRAKELIJKHEDEN.

OGRANICZONA GWARANCJA BEZTERMINOWA

Gwarancja dla Użytkownika Końcowego: CAPITAL SAFETY gwarantuje pierwotnemu użytkownikowi końcowemu („Użytkownik Końcowy"), że jego produkty są wolne od wad materiałowych i produkcyjnych w warunkach normalnego użytkowania i funkcjonowania. Niniejsza gwarancja obejmuje cały okres użytkowania produktu od dnia jego zakupu przez Użytkownika Końcowego, w stanie nowym i nieużywanym, od autoryzowanego dystrybutora CAPITAL SAFETY. Całkowita odpowiedzialność CAPITAL SAFETY wobec Użytkownika Końcowego i wyłączny środek prawny przysługujący Użytkownikowi Końcowemu w ramach niniejszej gwarancji ogranicza się do naprawy lub wymiany na nowy każdego wadliwego produktu w całym okresie jego użytkowania (jak CAPITAL SAFETY uzna za stosowne według własnego uznania). Żadne ustne i pisemne informacje czy rady udzielane przez CAPITAL SAFETY lub jej dystrybutorów, dyrektorów, urzędników, agentów lub pracowników nie stanowią żadnych innych lub dodatkowych gwarancji ani w żaden sposób nie zwiększają zakresu niniejszej gwarancji. CAPITAL SAFETY nie ponosi odpowiedzialności za wady, które są wynikiem nadużywania, niewłaściwego użytkowania, zmiany lub modyfikacji produktu, lub za wady spowodowane instalacją, utrzymaniem lub użytkowaniem produktu w sposób niezgodny z instrukcją producenta. NINIEJSZA GWARANCJA JEST JEDYNĄ GWARANCJĄ MAJĄCĄ ZASTOSOWANIE DO NASZYCH PRODUKTÓW I WYKLUCZA WSZELKIE INNE GWARANCJE I ZOBOWIĄZANIA, WYRAŹNE LUB DOMNIEMANE.

GARANŢIE LIMITATĂ PE VIAŢĂ

Garanţie acordată Utilizatorului final: CAPITAL SAFETY garantează Utilizatorului final iniţial („Utilizator final") că, în condiţii normale de utilizare şi întreţinere, produsele sale nu vor prezenta defecte de materiale sau de execuţie. Această garanţie este valabilă pe toată durata de viaţă a produsului, începând cu data achiziţionării produsului nou, nefolosit de către Utilizatorul final, de la un distribuitor autorizat CAPITAL SAFETY. Întreaga răspundere a CAPITAL SAFETY faţă de Utilizatorul final şi singura cale de atac a Utilizatorului final disponibilă în baza prezentei garanţii se limitează la repararea sau înlocuirea produsului defect aflat în perioada de utilizare (decizia în acest sens va fi luată de CAPITAL SAFETY, la discreţia sa). Nicio informaţie şi niciun sfat scris sau verbal oferit de CAPITAL SAFETY, distribuitorii, directorii, funcţionarii, agenţii sau angajaţii săi nu va reprezenta acordarea unor garanţii diferite sau suplimentare şi nu va mări aria de aplicabilitate a prezentei garanţii. CAPITAL SAFETY nu acceptă răspunderea pentru defectele rezultate din folosirea abuzivă, necorespunzătoare, transformarea sau modificarea produsului sau pentru orice defecte rezultate din nerespectarea instrucţiunilor producătorului în ceea ce priveşte instalarea, întreţinerea sau utilizarea produsului. PREZENTA GARANŢIE ESTE SINGURA GARANŢIE APLICABILĂ PRODUSELOR NOASTRE ŞI ÎNLOCUIEŞTE ORICE ALTE GARANŢII ŞI RĂSPUNDERI, EXPRESE SAU IMPLICITE.

ОГРАНИЧЕННАЯ ГАРАНТИЯ НА ВЕСЬ СРОК ЭКСПЛУАТАЦИИ

Гарантия, предоставляемая Владельцу: Компания CAPITAL SAFETY гарантирует непосредственному владельцу (далее «Владелец»), что при нормальной эксплуатации выпускаемая ею продукция не будет содержать дефектов материалов и изготовления. Данная гарантия распространяется на весь срок эксплуатации продукции с момента ее приобретения Владельцем в новом и неиспользованном состоянии у авторизованного дистрибьютора CAPITAL SAFETY. Максимальный размер ответственности CAPITAL SAFETY перед Владельцем и правовые требования Владельца по условиям настоящей гарантии ограничиваются ремонтом и заменой любого дефектного продукта на протяжении всего срока эксплуатации (на условиях, определяемых CAPITAL SAFETY). Никакая устная или письменная информация, полученная от CAPITAL SAFETY, ее дистрибьюторов, директоров, руководителей, агентов или служащих не должна восприниматься как иные гарантии или дополнение к настоящей гарантии. CAPITAL SAFETY не несет ответственности за дефекты, ставшие результатом ненадлежащего обращения, неправильного использования, изменения или модификации, или дефекты, вызванные неправильной установкой, обслуживаем или использованием продукции вследствие несоблюдения инструкций изготовителя. ДАННАЯ ГАРАНТИЯ ЯВЛЯЕТСЯ ЕДИНСТВЕННОЙ, ПРИМЕНИМОЙ К НАШЕЙ ПРОДУКЦИИ, И ЗАМЕНЯЕТ ВСЕ ПРОЧИЕ ПРЯМЫЕ ИЛИ КОСВЕННЫЕ ГАРАНТИИ И ОБЯЗАТЕЛЬСТВА.

EN-US

LIMITED LIFETIME WARRANTY

Warranty to End User: D B Industries, Inc., dba 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.

FR-CN

GARANTIE LIMITÉE SUR LA DURÉE DE VIE

Garantie offerte à l'utilisateur final : D B Industries, Inc., dba CAPITAL SAFETY USA (« CAPITAL SAFETY ») garantit à l'utilisateur final d'origine (« Utilisateur final ») que les produits sont libres de tout défaut matériel et de fabrication dans des conditions normales d'utilisation et de service. Cette garantie couvre toute la durée de vie du produit, de sa date d'achat à l'état neuf et inutilisé par l'utilisateur auprès d'un distributeur agréé CAPITAL SAFETY. La responsabilité intégrale de Capital Safety et le seul recours du Client dans le cadre de cette garantie se limitent à la réparation ou le remplacement en nature des produits défectueux pendant leur durée de vie (à la seule discrétion de Capital Safety et selon ce qu'elle juge approprié). Aucun renseignement ou avis oral ou écrit fourni par CAPITAL SAFETY, ses détaillants, administrateurs, cadres, distributeurs, mandataires ou employés ne représentera une garantie ou n'augmentera de quelque manière la portée de la présente garantie limitée. CAPITAL SAFETY n'accepte aucune responsabilité pour les défauts causés par un abus, une utilisation abusive, une altération ou une modification, ou pour les défauts causés par le non-respect des instructions du fabricant relatives à l'installation, à l'entretien ou à l'utilisation du produit.

CETTE GARANTIE CAPITAL SAFETY S'APPLIQUE UNIQUEMENT À L'UTILISATEUR FINAL. ELLE EST LA SEULE GARANTIE APPLICABLE À NOS PRODUITS. ELLE EXCLUT TOUTE AUTRE GARANTIE EXPRESSE OU IMPLICITE. CAPITAL SAFETY EXCLUT EXPLICITEMENT ET DÉCLINE TOUTE GARANTIE IMPLICITE DE MISE EN MARCHÉ ET D'ADAPTATION À DES FINS PARTICULIÈRES, ET NE SERA RESPONSABLE POUR AUCUN DOMMAGE-INTÉRÊT DIRECT OU INDIRECT, CORRÉLATIF OU ACCESSOIRE DE TOUTE NATURE Y COMPRIS ET DE MANIÈRE NON LIMITATIVE, LES PERTES DE PROFITS, LES REVENUS OU LA PRODUCTIVITÉ, LES BLESSURES CORPORELLES, VOIRE LA MORT OU DOMMAGES À LA PROPRIÉTÉ, DANS LE CADRE DE TOUTE THÉORIE DE RESPONSABILITÉ, Y COMPRIS ET DE MANIÈRE NON LIMITATIVE UN CONTRAT, UNE GARANTIE, UNE RESPONSABILITÉ (Y COMPRIS LA NÉGLIGENCE) OU TOUTE AUTRE THÉORIE LÉGALE OU ÉQUITABLE.

SP-LA

GARANTÍA LIMITADA DE POR VIDA

Garantía para el usuario final: D B Industries, Inc., que opera bajo el nombre de CAPITAL SAFETY USA ("CAPITAL SAFETY") garantiza al usuario final original ("Usuario final") que sus productos están libres de defectos de materiales y de mano de obra en condiciones normales de uso y mantenimiento. Esta garantía se extiende durante la vida útil del producto a partir de la fecha en que el Usuario final adquiere el producto, nuevo y sin uso, a un distribuidor autorizado de CAPITAL SAFETY. La entera responsabilidad de CAPITAL SAFETY hacia el Usuario final y el remedio exclusivo para el Usuario final bajo esta garantía están limitados a la reparación o el reemplazo por materiales de todo producto defectuoso dentro de su vida útil (según CAPITAL SAFETY lo determine y considere apropiado a su solo criterio). Ninguna información o asesoramiento, oral o escrito, proporcionado por CAPITAL SAFETY, sus distribuidores, directores, funcionarios, agentes o empleados creará una garantía diferente o adicional ni aumentará de ninguna manera el alcance de esta garantía. CAPITAL SAFETY no aceptará responsabilidad por defectos resultantes del abuso, el uso incorrecto, la alteración o la modificación del producto, ni por defectos resultantes de no respetar las instrucciones del fabricante durante la instalación, el mantenimiento o el uso del producto.

LA GARANTÍA DE CAPITAL SAFETY SE APLICA ÚNICAMENTE AL USUARIO FINAL. ESTA GARANTÍA ES LA ÚNICA GARANTÍA QUE SE APLICA A NUESTROS PRODUCTOS Y REEMPLAZA A TODAS LAS OTRAS GARANTÍAS Y RESPONSABILIDADES, EXPRESAS O IMPLÍCITAS. CAPITAL SAFETY EXPRESAMENTE EXCLUYE Y RENUNCIA A TODAS LAS GARANTÍAS IMPLÍCITAS DE COMERCIABILIDAD O APTITUD PARA UN PROPÓSITO PARTICULAR, Y NO SERÁ RESPONSABLE POR DAÑOS INCIDENTALES, PUNITIVOS O EMERGENTES DE NINGUNA NATURALEZA, INCLUYENDO SIN LIMITACIÓN PÉRDIDAS DE INGRESOS, GANANCIAS O PRODUCTIVIDAD; NI POR LESIONES CORPORALES O MUERTE, O PÉRDIDA DE O DAÑO A LA PROPIEDAD, BAJO CUALQUIER TEORÍA DE RESPONSABILIDAD, INCLUYENDO SIN LIMITACIÓN CONTRATO, GARANTÍA, RESPONSABILIDAD ESTRICTA, AGRAVIO (INCLUIDA NEGLIGENCIA) O CUALQUIER OTRA TEORÍA LEGAL O EQUITATIVA.

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