



Fall Protection

ANSI Z359.18  
Type A

OSHA 1926.502  
OSHA 1910.140

# TROLLEY ANCHOR

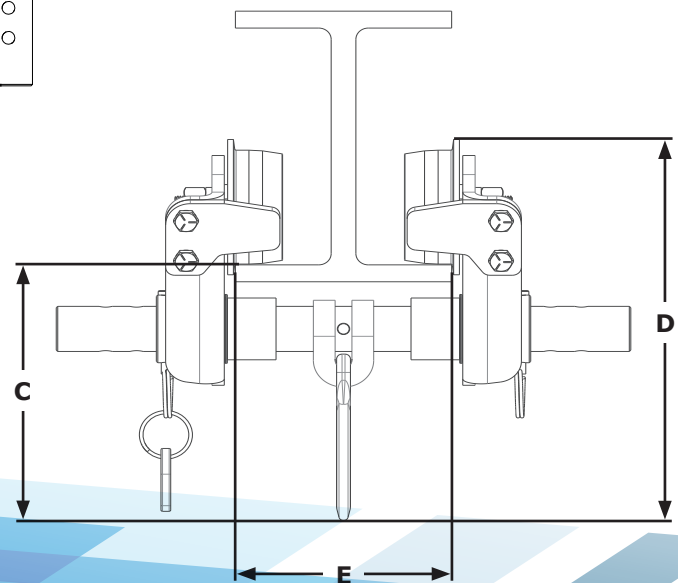
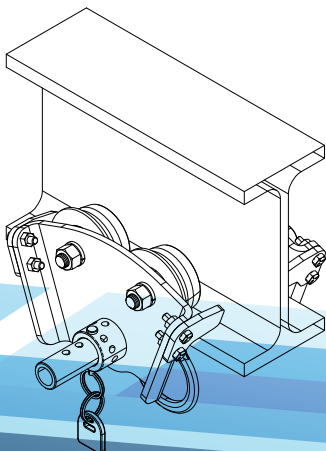
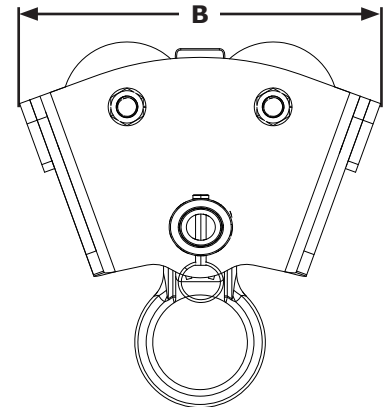
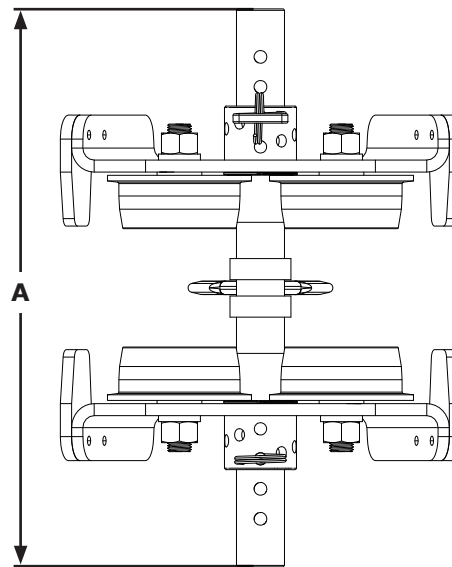
## Anchorage Connector

### USER INSTRUCTIONS

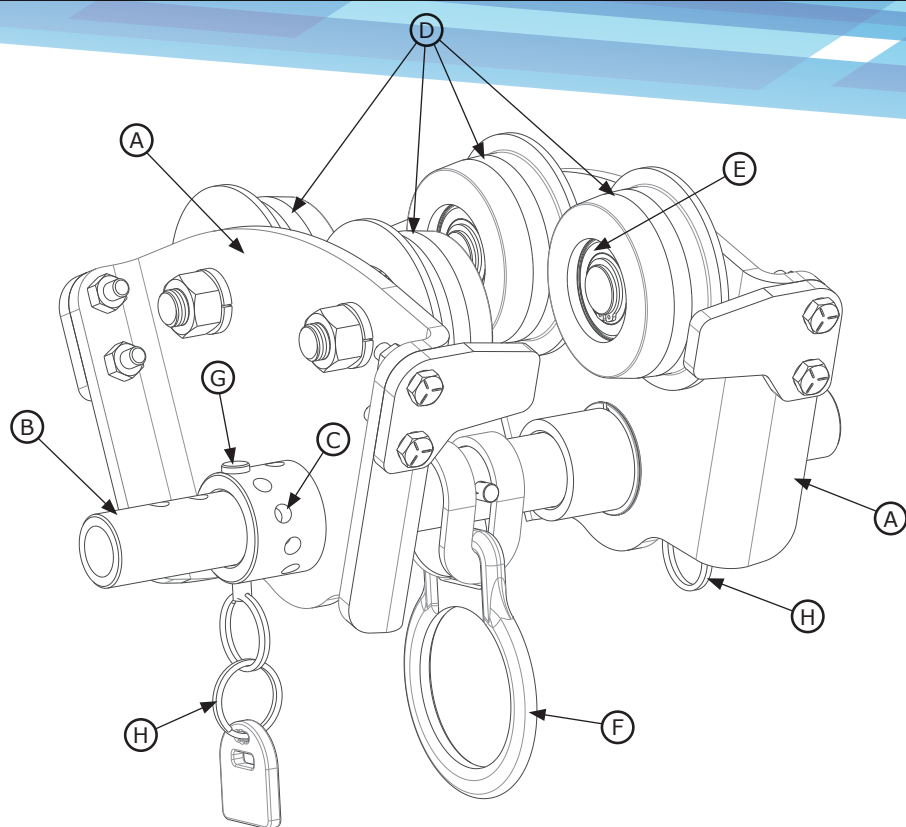
5902145 Rev. H

1

	ANSI Z359.18	OSHA	A	B	C	D	E
<b>2103143</b>	✓	✓	11.63 in. (29.54 cm)	8.81 in. (22.38 cm)	5.56 in. (14.38 cm)	8.42 in. (21.39 cm)	3.0 in. - 8.0 in. (7.6 cm - 20.3 cm)
<b>2103143C</b>		✓	11.63 in. (29.54 cm)	8.81 in. (22.38 cm)	5.56 in. (14.38 cm)	8.42 in. (21.39 cm)	3.0 in. - 8.0 in. (7.6 cm - 20.3 cm)
<b>2103147</b>	✓	✓	11.63 in. (29.54 cm)	8.81 in. (22.38 cm)	5.56 in. (14.38 cm)	8.42 in. (21.39 cm)	3.0 in. - 8.0 in. (7.6 cm - 20.3 cm)
<b>2103149</b>	✓	✓	11.63 in. (29.54 cm)	8.81 in. (22.38 cm)	5.56 in. (14.38 cm)	8.42 in. (21.39 cm)	3.0 in. - 8.0 in. (7.6 cm - 20.3 cm)
<b>2103152</b>	✓	✓	11.63 in. (29.54 cm)	8.81 in. (22.38 cm)	5.56 in. (14.38 cm)	8.42 in. (21.39 cm)	3.0 in. - 8.0 in. (7.6 cm - 20.3 cm)

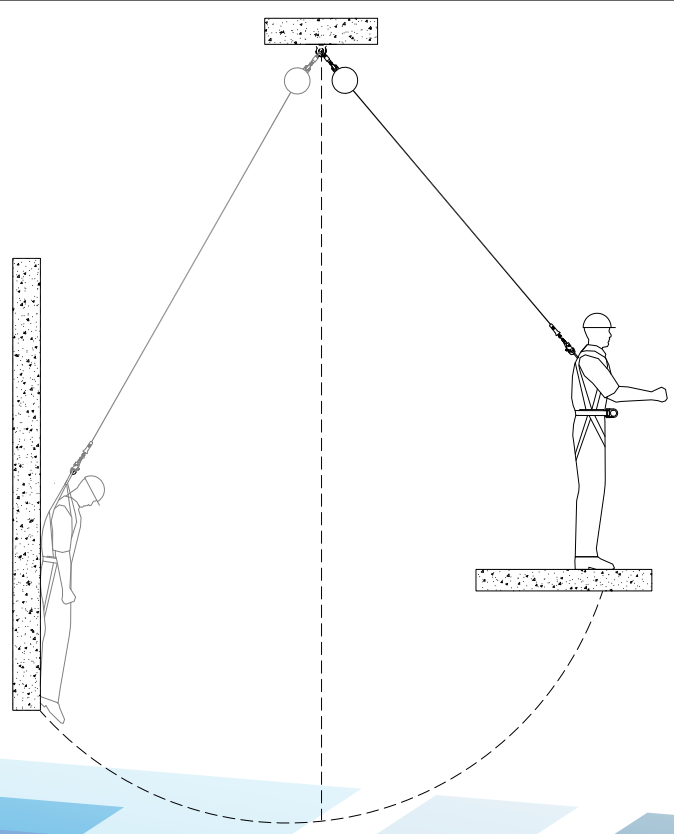
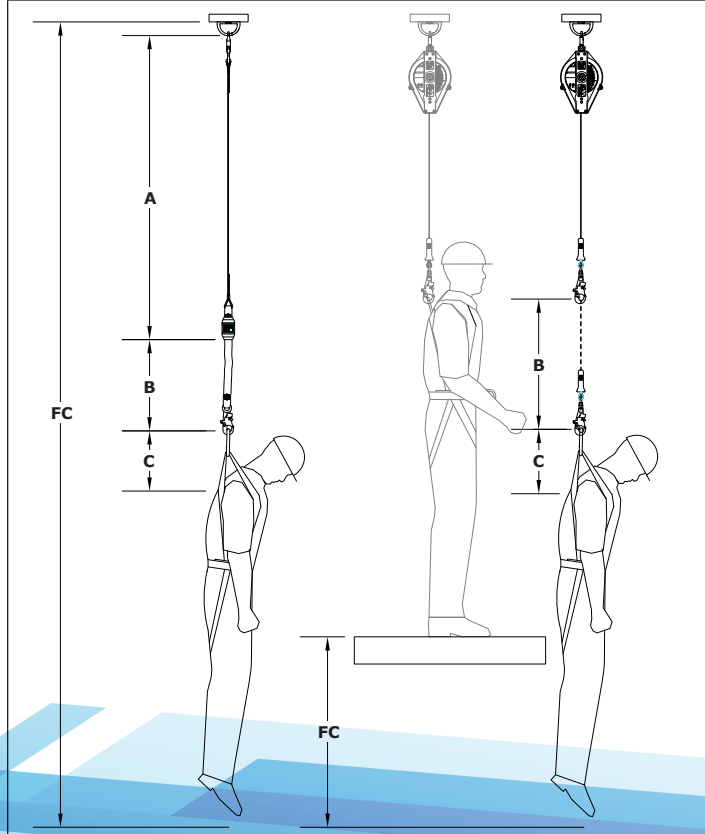


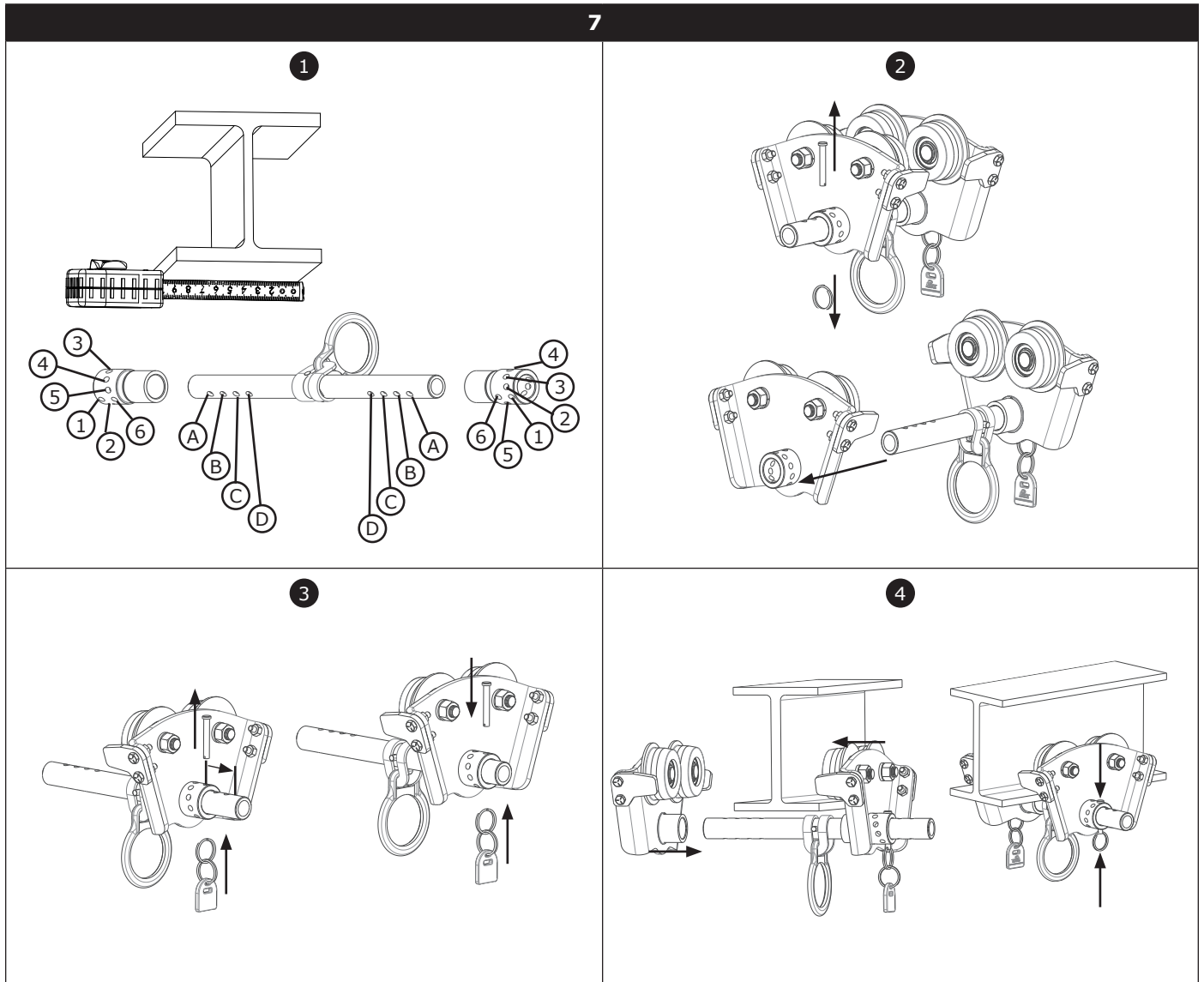
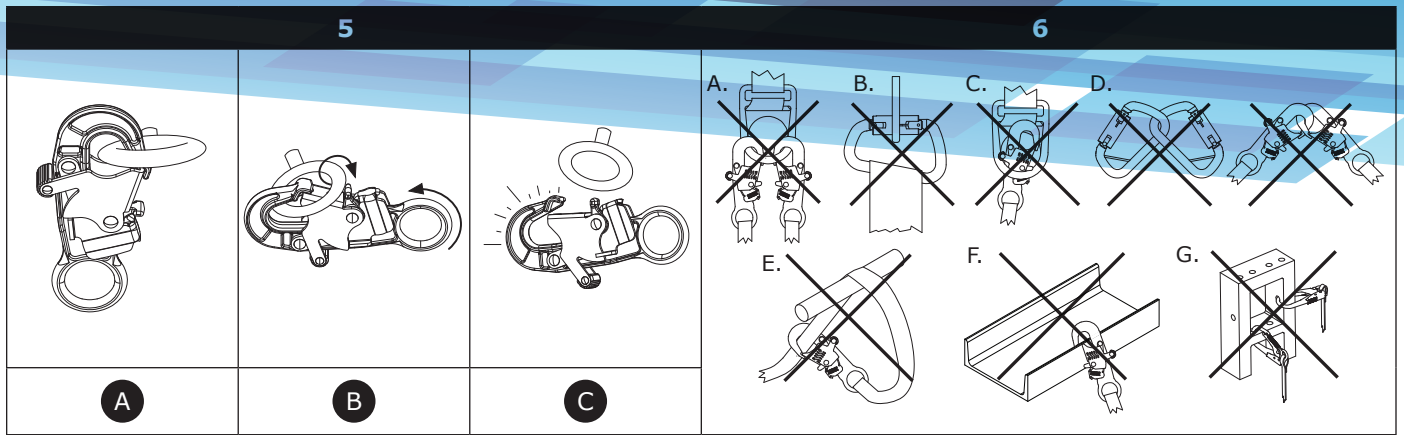
2



3

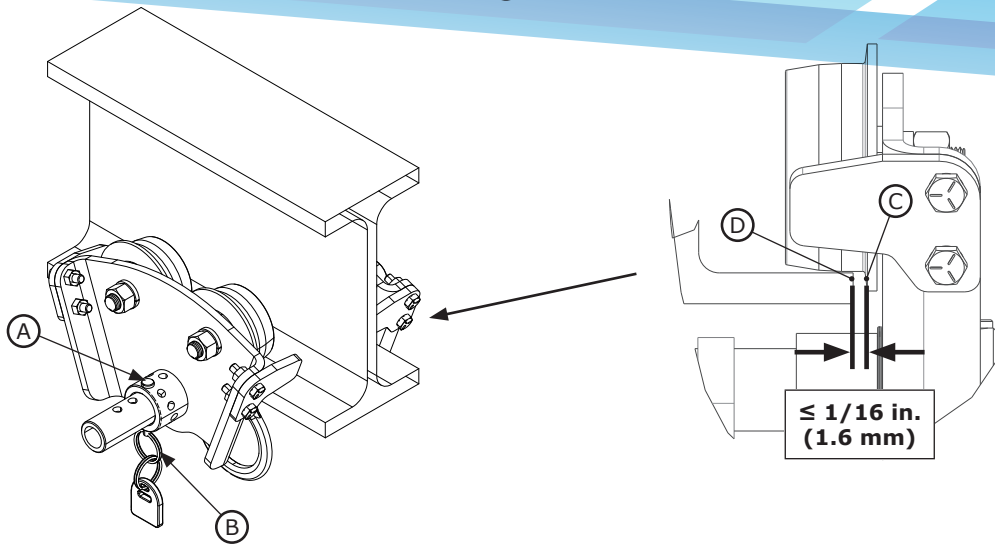
4



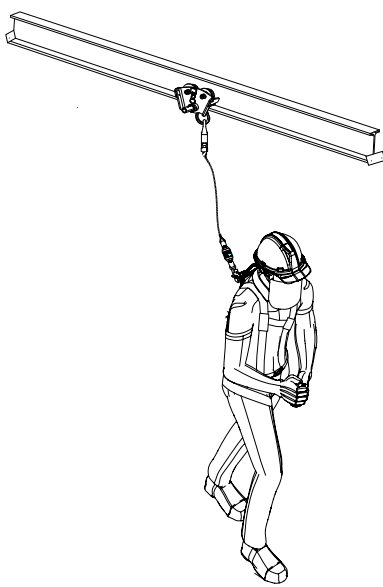


7

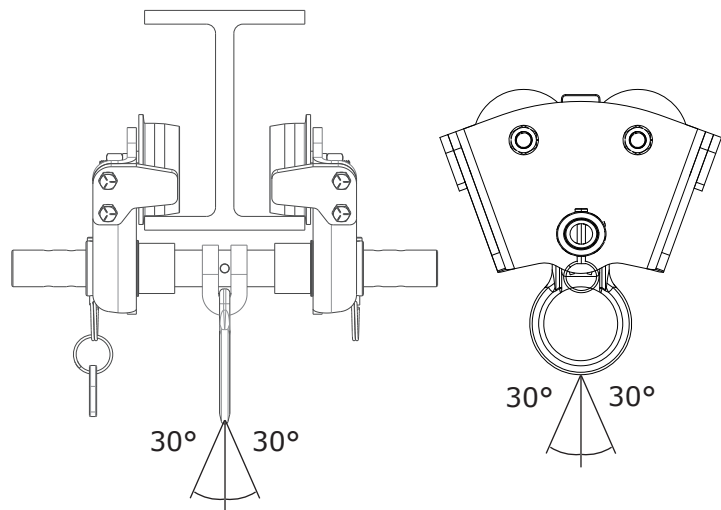
5



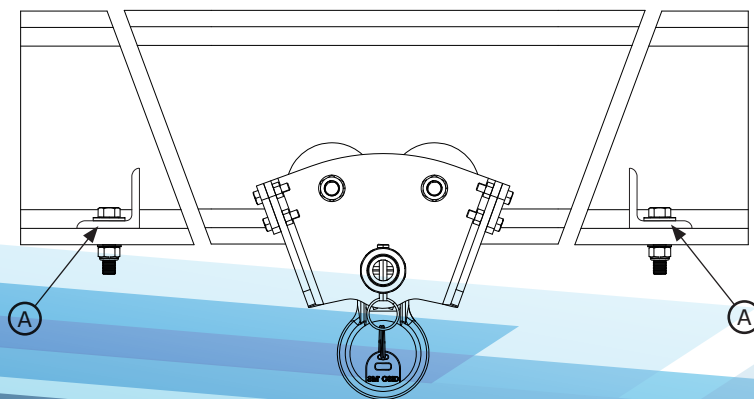
8



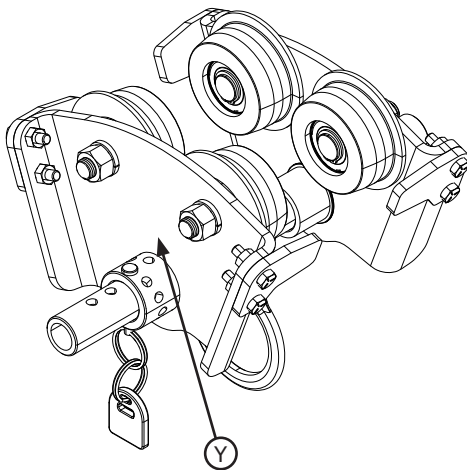
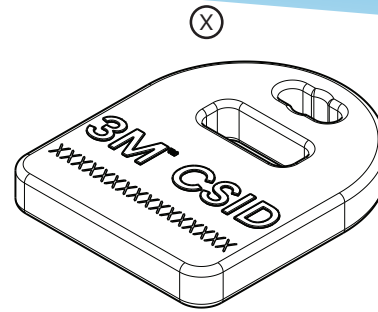
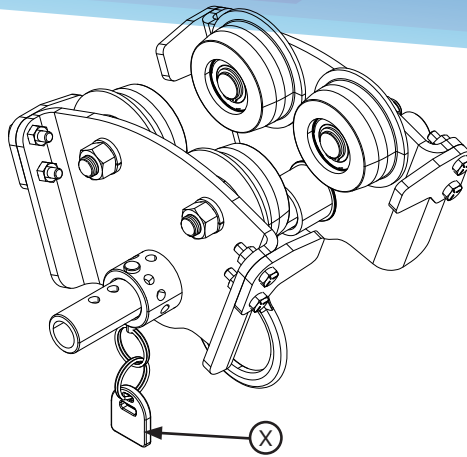
9



10



4



		A	B	C
Y	2103143			
	2103147	✓	✓	
	2103149			
	2103152			
	2103143C			✓

**3M** | **FALL PROTECTION**  
① 3M.com/FallProtection

**WARNING** ② Manufacturer's Instructions supplied with this product at time of shipment must be followed for proper use. See instructions for installation, inspection and maintenance requirements. Failure to follow instructions may result in serious injury or death. Connecting hardware must be compatible in size, shape and strength. Use caution when working near thermal, electrical or chemical hazards. Do not exceed capacity of this or other system components.

U.S. Patent No. D459839S  
Do not remove this label.  
9503270 Rev. D

**MFRD (YRMO)/LOT NO:** ③ **MODEL NO:** ④ **STDs:** ⑥

**Adjustable Width Beam Trolley**  
Beam flange width: 3 in min/8 in max  
**Materials:** Model 2103143 - Carbon Steel ⑤  
Model 2103147 - Stainless Steel  
Capacity: 1 person, 310 lbs (141 kg) ANSI, 420 lbs (191 kg) OSHA  
Max arresting force: 1,800 lbs  
Max side load: 30° from vertical

This product complies with the following standards only if marked with the corresponding letter code under the "STDs" section:  
A = OSHA 1910.140 & 1926.502  
B = ANSI Z359.18 - Type A

**3M** | **FALL PROTECTION**  
① 3M.com/FallProtection

**INSPECTION:** Before each use ② Inspect anchor to determine if it is in good condition. Do not use if inspection reveals an unsafe or defective condition. Items subject to fall arrest or impact forces must be immediately removed from service and destroyed. Not user repairable.

Minimum Breaking Strength: 5,000 lbs  
ANSI Minimum service temp: - 40°F (- 40°C) ③

④ **INSPECTION LOG**  
DATE INITIAL DATE INITIAL

Do not remove this label  
9503254 Rev. C

**3M** | **FALL PROTECTION**  
① 3M.com/FallProtection

9501612 REV. D

**AVERTISSEMENT** ② On doit observer les instructions du fabricant fournies avec ce produit au moment de l'expédition pour bien l'utiliser. Voir les instructions pour connaître les exigences d'installation, d'inspection et d'entretien. Négliger d'observer les instructions peut causer des blessures graves, voire mortelles. Le matériel de fixation doit être compatible en taille, forme et résistance. Prendre des précautions lorsqu'on travaille à proximité de dangers thermiques, électriques ou chimiques.

**FABR. (YRMO) / N° DE LOT** ③ **N° DE MODÈLE** ④

**Chariot de Poutre à Largeur Régulable**  
Largeur d'axe de poutre: de 7,6 cm (3 po) à 20,3 cm (8 po) ⑤

**Matériaux:** Modèle n° 2103143-acier au carbone  
Modèle n° 2103147-acier inoxydable  
Force d'arrêt max: 8 kN (1 800 lb)  
Capacité: 191 kg (420 lbs)  
Charge latérale max. par rapport à la verticale: 30°  
Conforme aux exigences de l'OSHA et d'

## SAFETY INFORMATION

Please read, understand, and follow all safety information contained in these instructions prior to the use of this Anchorage Connector. **FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.**

These instructions must be provided to the user of this equipment. Retain these instructions for future reference.

### Intended Use:

This Anchorage Connector is intended for use as part of a complete personal fall protection system.

Use in any other application including, but not limited to, material handling, recreational or sports related activities, or other activities not described in the User Instructions, is not approved by 3M and could result in serious injury or death.

This device is only to be used by trained users in workplace applications.



### WARNING

This Anchorage Connector is part of a personal fall protection system. It is expected that all users be fully trained in the safe installation and operation of their personal fall protection system. **Misuse of this device could result in serious injury or death.** For proper selection, operation, installation, maintenance, and service, refer to these User Instructions and all manufacturer recommendations, see your supervisor, or contact 3M Technical Service.

- **To reduce the risks associated with working with an Anchorage Connector which, if not avoided, could result in serious injury or death:**
  - Inspect the device before each use, at least annually, and after any fall event. Inspect in accordance with the User Instructions.
  - If inspection reveals an unsafe or defective condition, remove the device from service and repair or replace according to the User Instructions.
  - Any device that has been subject to fall arrest or impact force must be immediately removed from service and destroyed.
  - The device must only be installed in the specified substrates or on structures detailed in the User Instructions. Installations and use outside the scope of this instruction must be approved by 3M Fall Protection.
  - The substrate or structure to which the anchorage connector is attached must be able to sustain the static loads specified for the anchor in the orientations permitted in the User Instructions.
  - Only connect other fall protection subsystems to the designated anchorage connection point on the device.
  - Prior to drilling or fastening, ensure no electric lines, gas lines, or other critical embedded systems will be contacted by the drill or the device.
  - Ensure that fall protection systems/subsystems assembled from components made by different manufacturers are compatible and meet the requirements of applicable standards, including the ANSI Z359 or other applicable fall protection codes, standards, or requirements. Always consult a Competent or Qualified Person before using these systems.
- **To reduce the risks associated with working at height which, if not avoided, could result in serious injury or death:**
  - Ensure your health and physical condition allow you to safely withstand all of the forces associated with working at height. Consult with your doctor if you have any questions regarding your ability to use this equipment.
  - Never exceed allowable capacity of your fall protection equipment.
  - Never exceed maximum free fall distance of your fall protection equipment.
  - Do not use any fall protection equipment that fails pre-use or other scheduled inspections, or if you have concerns about the use or suitability of the equipment for your application. Contact 3M Technical Services with any questions.
  - Some subsystem and component combinations may interfere with the operation of this equipment. Only use compatible connections. Consult 3M prior to using this equipment in combination with components or subsystems other than those described in the User Instructions.
  - Use extra precautions when working around moving machinery (e.g. top drive of oil rigs) electrical hazards, extreme temperatures, chemical hazards, explosive or toxic gases, sharp edges, or below overhead materials that could fall onto you or your fall protection equipment.
  - Use Arc Flash or Hot Works devices when working in high heat environments.
  - Avoid surfaces and objects that can damage the user or equipment.
  - Ensure there is adequate fall clearance when working at height.
  - Never modify or alter your fall protection equipment. Only 3M or parties authorized in writing by 3M may make repairs to the equipment.
  - Prior to use of fall protection equipment, ensure a rescue plan is in place which allows for prompt rescue if a fall incident occurs.
  - If a fall incident occurs, immediately seek medical attention for the worker who has fallen.
  - Do not use a body belt for fall arrest applications. Use only a Full Body Harness.
  - Minimize swing falls by working as directly below the anchorage point as possible.
  - If training with this device, a secondary fall protection system must be utilized in a manner that does not expose the trainee to an unintended fall hazard.
  - Always wear appropriate personal protective equipment when installing, using, or inspecting the device/system.



☒ Prior to installation and use of this equipment, record the product identification information from the ID label in the Inspection and Maintenance Log (Table 2) at the back of this manual.

☒ Always ensure you are using the latest revision of your 3M instruction manual. Visit the 3M website or contact 3M Technical Services for updated instruction manuals.

## PRODUCT DESCRIPTION:

Figure 1 illustrates the 3M™ DBI-SALA® Trolley Anchor. The Trolley Anchor is a single point anchorage connector for a Fall Arrest system designed to be installed overhead on the bottom flange of a beam and to roll along a horizontal beam.

Figure 2 illustrates components of the Trolley Anchor. See Table 1 for Component Specifications. The Trolley Anchor is comprised of two Side Plates (A). The Load Bar (B) that connects the Side Plates adjusts to various beam flange widths with Adjuster Dials (C) built into the outside of each Side Plate. The Side Plates can be adjusted by removing the Pull Ring (H) and Clevis Pin (G) and then reinstalling. The four Wheels (D) are intended to roll smoothly along the beam, aided by Bearings (E). The Fall Arrest subsystem connects to the Connector Ring (F) in the center of the Load Bar. A typical Fall Arrest system consists of a Fully Body Harness and an Energy-Absorbing Lanyard or Self-Retracting Device (SRD).

**Table 1 – Specifications**

Table 1 – Specifications			
System Specifications:			
Capacity:	One person with a combined weight (clothing, tools, etc.) of no more than 310 lb. (140 kg) for ANSI, or no more than 420 lb. (191 kg) for OSHA.		
Anchorage Strength:	The structure to which the anchorage connector is mounted must be capable of sustaining force in the anticipated directions of loading. See Section 2.1 for values.		
	Only one Fall Arrest system may be attached to an individual Trolley Anchor at a time. The trolley may be used on beam flanges 3.0 in. to 8.0 in. (7.6 cm to 20.3 cm) wide and up to 11/16 in. (1.75 cm) thick. The minimum radius the trolley can follow is 48 in. (122 cm). The beam structure must meet the strength requirements specified in this section. The beam must be horizontal and level.		
	<div><input checked="" type="checkbox"/> Loads imposed on the trolley by the Fall Arrest system must remain within 30 degrees of the vertical center line of the beam. See Figure 9 for reference.</div>		
<div><input checked="" type="checkbox"/> If the user is unable to determine whether the anchorage structure meets product requirements, then the user should either seek a Qualified Person or professional engineer who is able to do so or contact 3M Technical Services.</div>			
Allowable Flange Width:	3.0 in. to 8.0 in. (7.6 cm to 20.3 cm). See Figure 1 for more information.		
Allowable Flange Thickness:	≤ 11/16 in (1.75 cm)		
Service Temperature:	-40°F (-40°C) Minimum Service Temperature		
Minimum Breaking Strength:	5,000 lbf (22 kN) Minimum Breaking Strength		
Dimensions:	See Figure 1 for the dimensions of each Trolley Anchor model.		
Weight:	15.0 lb. (6.8 kg)		
Standards:	The Trolley Anchor has been tested in compliance with the requirements of ANSI Z359.7, in addition to those standards listed on the front cover.		
	<div><input checked="" type="checkbox"/> ANSI compliance and testing covers only the product and does not extend to the anchorage structure or substrate to which the product is attached.</div>		

Component Specifications:			
Figure 2 Reference	Component	Materials (Model 2103147)	Materials (All other models)
Ⓐ	Side Plates	Stainless Steel	Zinc Plated Steel
Ⓑ	Load Bar	Stainless Steel	Alloy Steel
Ⓒ	Adjuster Dials with Adjustment Holes	Stainless Steel	Zinc Plated Steel
Ⓓ	Wheels	Stainless Steel	Zinc Plated Steel (Model 2103149 - Rubber coating on wheels)
Ⓔ	Bearings	Stainless Steel	Stainless Steel
Ⓕ	Connector Ring	Stainless Steel	Zinc Plated Steel
Ⓖ	Clevis Pin	Stainless Steel	Stainless Steel
Ⓗ	Pull Ring	Stainless Steel	Stainless Steel

## 1.0 PRODUCT APPLICATION

- 1.1 PURPOSE:** Anchorage Connectors are designed to provide anchorage connection points for Fall Arrest<sup>1</sup>, Fall Restraint<sup>2</sup>, Work Positioning<sup>3</sup>, or Rescue<sup>4</sup> systems.

☒ **Fall Protection Only:** This Anchorage Connector is for connection of Fall Protection equipment. Do not connect Lifting Equipment to the Anchorage Connector.

- 1.2 STANDARDS:** Your Anchorage Connector conforms to the national or regional standard(s) identified on the front cover of these instructions. If this product is resold outside the original country of destination, the re-seller must provide these instructions in the language of the country in which the product will be used.
- 1.3 SUPERVISION:** Use of this equipment must be supervised by a Competent Person<sup>5</sup>.
- 1.4 TRAINING:** This equipment must be installed and used by persons trained in its correct application. This manual is to be used as part of an employee training program as required by national, regional, or local standards. It is the responsibility of the users and installers of this equipment to ensure they are familiar with these instructions, trained in the correct care and use of this equipment, and are aware of the operating characteristics, application limitations, and consequences of improper use of this equipment.
- 1.5 RESCUE PLAN:** When using this equipment and connecting subsystem(s), the employer must have a rescue plan and the means at hand to implement and communicate that plan to users<sup>6</sup>, authorized persons<sup>7</sup>, and rescuers<sup>8</sup>. A trained, on-site rescue team is recommended. Team members should be provided with the equipment and techniques to perform a successful rescue. Training should be provided on a periodic basis to ensure rescuer proficiency.
- 1.6 AFTER A FALL:** If the product is subjected to fall arrest or impact force, remove the product from service immediately. Clearly tag the product "DO NOT USE". See Section 5 for more information.

## 2.0 SYSTEM REQUIREMENTS

- 2.1 ANCHORAGE:** Anchorage structure requirements vary with the system application and whether it is a certified anchorage<sup>9</sup> or non-certified anchorage<sup>10</sup>. The structure to which a Fall Arrest, Restraint, Work Positioning, or Rescue system is attached must sustain static loads applied in the directions permitted as shown in the following table. Anchorage strength requirements, along with system applications, are specified below, unless noted or defined otherwise in Table 1:

Fall Protection System	Certified Anchorage <sup>9</sup>	Non-Certified Anchorage <sup>10</sup>	Defined by
Fall Arrest	2 times maximum arresting force	5,000 lbf (22.2 kN)	OSHA, ANSI
Restraint/Travel Restraint	2 times foreseeable force	1,000 lbf (4.4 kN) per ANSI 5,000 lbf (22.2 kN) per OSHA	OSHA, ANSI
Work Positioning	2 times foreseeable force	3,000 lbf (13.3 kN)	OSHA, ANSI
Rescue	5 times applied load	3,000 lbf (13.3 kN)	ANSI

When more than one system is attached to an anchorage, the strengths stated above must be multiplied by the number of systems attached to the anchorage. See ANSI Z359.2 for more information.

- 2.2 PERSONAL FALL ARREST SYSTEM:** Figure 1 illustrates the application of this Anchorage Connector. Personal Fall Arrest Systems (PFAS) used with the system must meet applicable Fall Protection standards, codes, and requirements. The PFAS must incorporate a Full Body Harness and limit Arresting Force to the following values:

	Maximum Arresting Force	Free Fall
PFAS with Shock Absorbing Lanyard	1800 lbf (8 kN)	Refer to the instruction(s) included with your Lanyard or SRD for Free Fall limitations.
PFAS with Self Retracting Device (SRD)	1800 lbf (8 kN)	

- 2.3 FALL PATH AND SRD LOCKING SPEED:** A clear path is required to assure positive locking of an SRD. Situations which do not allow for an unobstructed fall path should be avoided. Working in confined or cramped spaces may not allow the body to reach sufficient speed to cause the SRD to lock if a fall occurs. Working on slowly shifting material, such as sand or grain, may not allow enough speed buildup to cause the SRD to lock.

**1 Fall Arrest System:** A collection of Fall Protection Equipment configured to arrest a free fall. Protects the user in the event of a fall. Free fall is permitted up to the limits allowed by the connecting device (either an Energy Absorbing Lanyard or Self-Retracting Device (SRD)).

**2 Restraint System:** A collection of Fall Protection Equipment configured to prevent the person's center of gravity from reaching a fall hazard. Prevents the user from reaching a hazard. No vertical free fall is permitted.

**3 Work Positioning System:** A collection of Fall Protection Equipment configured to support a user at a work position. Must include a back-up personal fall arrest system. Maximum permissible free fall is 2 feet.

**4 Rescue System:** A collection of Fall Protection Equipment configured to remove a person from danger, harm, or confinement to a safe location. No vertical free fall is permitted.

**5 Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

**6 User:** A person who performs activities while protected by a Fall Protection system.

**7 Authorized Person:** A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard.

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

**9 Certified Anchorage:** An anchorage for fall arrest, positioning, restraint, or rescue systems that a Qualified Person certifies to be capable of meeting the criteria for a certified anchorage according to Section 2.1.

**10 Non-Certified Anchorage:** A fall arrest anchorage that a Competent Person can judge to be capable of supporting the predetermined anchorage forces listed in Section 2.1.



- 2.4 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, explosive or toxic gases, moving machinery, sharp edges, or overhead materials that may fall and contact the user or Personal Fall Arrest System.
- 2.5 FALL CLEARANCE:** Figure 3 illustrates the components of a Fall Arrest. There must be sufficient Fall Clearance (FC) to arrest a fall before the user strikes the ground or other obstruction. Clearance is affected by a number of factors including: Anchorage Location, (A) Lanyard Length, (B) Lanyard Deceleration Distance or SRD Maximum Arrest Distance, (C) Harness Stretch and D-Ring/Connector Length and Settling. Refer to the instructions included with your Fall Arrest subsystem for specifics regarding Fall Clearance calculation.
- 2.6 SWING FALLS:** Swing Falls occur when the anchorage point is not directly above the point where a fall occurs (see Figure 4). The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as directly below the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a Self-Retracting Device or other variable length connecting subsystem is used.
- 2.7 COMPONENT COMPATIBILITY:** 3M equipment is designed for use with 3M approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect the safety and reliability of the complete system.
- 2.8 CONNECTOR COMPATIBILITY:** Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact 3M if you have any questions about compatibility. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbf (22.2 kN). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 5). Connectors must be compatible in size, shape, and strength. If the connecting element to which a snap hook or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner (A). This force may cause the gate to open (B), allowing the snap hook or carabiner to disengage from the connecting point (C).
- Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA.
- 2.9 MAKING CONNECTIONS:** Snap hooks and carabiners used with this equipment must be self-locking. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.
- 3M connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 6 for examples of inappropriate connections. Do not connect snap hooks and carabiners:
- To a D-ring to which another connector is attached.
  - In a manner that would result in a load on the gate. Large throat snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies is equipped with a 3,600 lbf (16 kN) gate. Check the marking on your snap hook to verify that it is appropriate for your application.
  - In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
  - To each other.
  - Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).
  - To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.
  - In a manner that does not allow the connector to align properly while under load.

## 3.0 INSTALLATION

☒ *The owner of this equipment may contact 3M Technical Services with any questions regarding equipment installation, use, or inspection.*

☒ *Installation of the DBI-SALA Trolley Anchor must be performed or supervised by a Competent Person<sup>1</sup>.*

- 3.1 PLANNING:** Plan your Fall Protection system prior to installation of the Trolley Anchor. Account for all factors that may affect your safety before, during, and after a fall. Consider all requirements, limitations, and specifications defined in Section 2 and Table 1.

☒ *3M shall make available upon request information that is necessary for the design and planning of systems.*

- 3.2 SELECTING AN ANCHORAGE BEAM:** The Trolley Anchor may be installed on horizontal and level beams meeting the anchorage requirements specified in Table 1. The beam must have End Stops (A) at each end to prevent the trolley from rolling off the beam. See Figure 10 for reference. The end stops must be sized and positioned such that they are able to safely stop the trolley. The trolley should not catch or hang on the end stop; the trolley must be able to freely return in the opposite direction after touching the end stop.

☒ *Joints between beam sections must be flush to allow the Trolley Anchor to pass over smoothly.*

- 3.3 INSTALLING THE TROLLEY ANCHOR:** The Trolley Anchor can be installed on beams meeting the anchorage requirements specified in Table 1. See Figure 1 for the Beam Trolley measurements. Figure 7 illustrates installation of the Trolley Anchor. To install the Trolley Anchor:

1. Measure the beam flange width to determine the Adjustment Hole settings on the Trolley. Figure 7.1 and Table 2 illustrate the hole positions on the left and right Adjuster Dials and the Load Bar that correspond with Table 2. Record these Adjustment Hole settings and use them for Step 3 and 4.
2. To open one side of the trolley, remove the Pull Ring from the Clevis Pin and pull the Clevis Pin up out of the Adjuster Dial. Slide the Side Plate off the Load Bar.
3. On the still assembled side of the Trolley, remove the Pull Ring and Clevis Pin from the Side Plate, and adjust the width to the required Adjustment Hole settings determined in Step 1 and from Table 2. Lock the adjustment into place by re-installing the Clevis Pin vertically with the Clevis Pin Head on top through the appropriate Adjustment Dial and Load Bar holes and installing the Pull Ring.
4. Place the partially assembled Side Plate and Load Bar onto the bottom flange of the beam with the Connector Ring hanging down. Slide the un-assembled Side Plate onto the Load Bar and align with the required Adjuster Dial and Load Bar holes as determined in Step 1. Install a Clevis Pin vertically, with the Clevis Pin head on top, through the Adjuster Dial and Load Bar holes and secure with the Pull Ring.

☒ *Trolley width settings specified in Table 2 must be followed. Adjustments on the Load Bar must use the same setting on both sides (e.g. A - A, B - B, etc.). Adjustments on the Adjuster Dial must be within one unit. Failure to use correct settings may improperly load the Trolley. If the beam flange is too wide to install the Clevis Pin through the correct holes, adjust the Trolley to the next larger beam flange size as specified in Table 2. The D-Ring must always be centered between the two Side Plates.*

5. Confirm the distance from the Trolley Wheel face (C) to the edge of the beam flange (D) is no more than 1/16 in. (1.6 mm). If the distance is greater than 1/16 in. (1.6 mm), change the Adjuster Dials to the next narrower setting in Table 2. Also, visually confirm the Clevis Pins (A) are installed with the pin heads on top of the Adjuster Dials and that the Pull Rings (B) are fully installed through the Clevis Pin holes.

☒ *If the trolley is moved to another beam, or if the Pull Rings are removed, the circle type pull rings are reusable. If a cotter pin is used, a new cotter pin is to be used for each new installation. Use 5/64 x 3/4", 18-8 stainless steel Pull Rings or Pivot Point bow-tie™ clip Pull Rings. If you are using Pivot Point bow-tie™ clips, they are also reusable. Only use the original clevis pins. Do not make substitutes.*

## 4.0 USE

- 4.1 BEFORE EACH USE:** Verify that your work area and Fall Arrest system meet all criteria defined in these instructions. Verify that a formal Rescue Plan is in place. Inspect the product per the 'User' inspection points defined in the "Inspection and Maintenance Log". If inspection reveals an unsafe or defective condition, or if there is any doubt about its condition for safe use, remove the product from service immediately. Clearly tag it "DO NOT USE". See Section 5 for more information.

- 4.2 FALL ARREST CONNECTIONS:** The Trolley Anchor is used with a Full Body Harness and Energy Absorbing Lanyard or Self-Retracting Device (SRD). Figure 9 illustrates connection of the Lanyard (A) or SRD (B) between the Harness and Trolley Anchor. Connect the Lanyard or SRD between the D-Ring on the Trolley Anchor and the back Dorsal D-Ring on the Harness as instructed in the instructions included with the Lanyard or SRD.

☒ **Horizontal Lifeline Connections:** *The Beam Trolley Anchor cannot be used as an end anchor point for a Horizontal Lifeline (HLL).*

**1 Qualified Person:** An individual with a recognized degree or professional certificate, and extensive experience in Fall Protection. This individual must be capable of design, analysis, evaluation, and specification in Fall Protection.

**2 Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

## 5.0 INSPECTION

☒ After equipment has been removed from service, it may not be returned to service until a Competent Person confirms in writing that it is acceptable to do so.

**5.1 INSPECTION FREQUENCY:** The product shall be inspected before each use by an authorized person and, additionally, by a Competent Person other than the user at intervals of no longer than one year. A higher frequency of equipment use and harsher conditions may require increasing the frequency of Competent Person inspections. The frequency of these inspections should be determined by the Competent Person per the specific conditions of the worksite.

**5.2 INSPECTION PROCEDURES:** Inspect this product per the procedures listed in the "Inspection and Maintenance Log". Documentation of each inspection should be maintained by the owner of this equipment. An inspection and maintenance log should be placed near the product or be otherwise easily accessible to users. It is recommended that the product is marked with the date of next or last inspection.

☒ Alternative inspection criteria may be set by the owner of this equipment. Alternative criteria must be equal to or exceed those established by 3M in the "Inspection and Maintenance Log" and other official documents.

**5.3 DEFECTS:** If the product cannot be returned to service because of an existing defect or unsafe condition, or because it has been subjected to a fall arrest, either destroy the product or contact 3M regarding possible replacement or repair.

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

## 6.0 MAINTENANCE, SERVICE, and STORAGE

☒ Equipment that is in need of maintenance or scheduled for maintenance should be tagged "DO NOT USE". These equipment tags should not be removed until maintenance is performed.

**6.1 CLEANING:** Periodically clean the metal components of the Trolley Anchor with a soft brush, warm water, and a mild soap solution. Ensure parts are thoroughly rinsed with clean water.

**6.2 SERVICE:** Only 3M or parties authorized in writing by 3M may make repairs to this equipment.

**6.3 STORAGE AND TRANSPORT:** When not in use, store and transport the Trolley Anchor and associated Fall Protection equipment in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect components after extended storage.

## 7.0 RFID TAG

**7.1 LOCATION:** 3M product covered in these user instructions is equipped with a Radio Frequency Identification (RFID) Tag. RFID Tags may be used in coordination with an RFID Tag Scanner for recording product inspection results. See Figure 11 for where your RFID Tag is located.

**7.2 DISPOSAL:** Prior to disposing of this product, remove the RFID Tag and dispose/recycle in accordance with local regulations. For more information, please visit our website: <http://www.3M.com/FallProtection/RFID>

## 8.0 LABELS and MARKINGS

**8.1 LABELS:** Figure 12 illustrates labels on the Trolley Anchor. All labels must be present and fully legible. Information provided on each label is as follows:

<b>A</b>	1) Company Website 2) Warning Statement 3) Manufactured (Year/Month) and Lot Number 4) Model Number 5) Product Specifications 6) Applicable Standards
<b>B</b>	1) Company Website 2) Inspection Requirements - See Section 5 for more information. 3) Minimum Breaking Strength and Minimum Service Temperature 4) Inspection Log
<b>C</b>	1) Company Website 2) Warning Statement 3) Manufactured (Year/Month) and Lot Number 4) Model Number 5) Product Specifications

**Table 2 - Trolley Width Adjustment**

<b>Beam Flange Width in inches (mm)</b>		<b>Load Bar Holes (Both Sides)</b>	<b>Left Adjuster Dial Hole</b>	<b>Right Adjuster Dial Hole</b>
<b>From</b>	<b>Up to, but not including</b>			
3.0 (76.2)	3.13 (79.38)	D	1	1
3.13 (79.38)	3.25 (82.55)	D	1	2
3.25 (82.55)	3.38 (85.73)	D	2	2
3.38 (85.73)	3.50 (88.90)	D	2	3
3.50 (88.90)	3.63 (92.08)	D	3	3
3.63 (92.08)	3.75 (95.25)	D	3	4
3.75 (95.25)	3.88 (98.43)	D	4	4
3.88 (98.43)	4.0 (101.40)	D	4	5
4.0 (101.40)	4.13 (104.78)	D	5	5
4.13 (104.78)	4.25 (107.95)	D	5	6
4.25 (107.95)	4.38 (111.13)	C	1	1
4.38 (111.13)	4.5 (114.3)	C	1	2
4.5 (114.3)	4.63 (117.48)	C	2	2
4.63 (117.48)	4.75 (120.65)	C	2	3
4.75 (120.65)	4.88 (123.83)	C	3	3
4.88 (123.83)	5.0 (127.0)	C	3	4
5.0 (127.0)	5.13 (130.18)	C	4	4
5.13 (130.18)	5.25 (133.35)	C	4	5
5.25 (133.35)	5.38 (136.53)	C	5	5
5.38 (136.53)	5.5 (139.7)	C	5	6
5.5 (139.7)	5.63 (142.88)	B	1	1
5.63 (142.88)	5.75 (146.05)	B	1	2
5.75 (146.05)	5.88 (149.23)	B	2	2
5.88 (149.23)	6.0 (152.4)	B	2	3
6.0 (152.4)	6.13 (155.58)	B	3	3
6.13 (155.58)	6.25 (158.75)	B	3	4
6.25 (158.75)	6.38 (161.93)	B	4	4
6.38 (161.93)	6.5 (165.1)	B	4	5
6.5 (165.1)	6.63 (168.28)	B	5	5
6.63 (168.28)	6.75 (171.45)	B	5	6
6.75 (171.45)	6.88 (174.63)	A	1	1
6.88 (174.63)	7.0 (177.8)	A	1	2
7.0 (177.8)	7.13 (180.98)	A	2	2
7.13 (180.98)	7.25 (184.15)	A	2	3
7.25 (184.15)	7.38 (187.33)	A	3	3
7.38 (187.33)	7.5 (190.5)	A	3	4
7.5 (190.5)	7.63 (193.68)	A	4	4
7.63 (193.68)	7.75 (196.85)	A	4	5
7.75 (196.85)	7.88 (200.03)	A	5	5
7.88 (200.03)	8.0 (203.2)	A	5	6
8.0 (203.2)	---	A	6	6

### Table 3 – Inspection and Maintenance Log

Inspection Date:		Inspected By:	
Components:	Inspection: (See Section 1 for <i>Inspection Frequency</i> )	User	Competent Person
Trolley Anchor (Figure 2)	Inspect Trolley for damage. Look for cracks or deformation. Look for excessive wear or damage to the anchorage connection point. All fasteners must be secure.	<input type="checkbox"/>	<input type="checkbox"/>
	Inspect the Trolley Wheels. All wheels should turn freely and be undamaged.	<input type="checkbox"/>	<input type="checkbox"/>
	Inspect the entire unit for corrosion.	<input type="checkbox"/>	<input type="checkbox"/>
	Ensure the Clevis Pin (G) can be inserted through the holes in the Support Tube (A). Ensure both the Clevis Pins are installed in the Support Tube and that both Key Rings are fully secured. Only use the provided Clevis Pins with the Trolley Anchor.	<input type="checkbox"/>	<input type="checkbox"/>
	Inspect already-installed Trolley Anchors and confirm they are installed correctly per Section 3.	<input type="checkbox"/>	<input type="checkbox"/>
Structure	Verify the structure meets the requirements of Table 2, the beam has the end stops at each end of the beam, and the beam is undamaged in any way.	<input type="checkbox"/>	<input type="checkbox"/>
Labels (Figure 12)	Verify that all labels are present and fully legible.	<input type="checkbox"/>	<input type="checkbox"/>
Fall Protection Equipment	Additional Fall Protection equipment used with the system should be installed and inspected per the manufacturer's instructions.	<input type="checkbox"/>	<input type="checkbox"/>

[illegible]



## GLOBAL PRODUCT WARRANTY, LIMITED REMEDY AND LIMITATION OF LIABILITY

**WARRANTY:** THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Unless otherwise provided by local laws, 3M fall protection products are warranted against factory defects in workmanship and materials for a period of one year from the date of installation or first use by the original owner.

**LIMITED REMEDY:** Upon written notice to 3M, 3M will repair or replace any product determined by 3M to have a factory defect in workmanship or materials. 3M reserves the right to require product be returned to its facility for evaluation of warranty claims. This warranty does not cover product damage due to wear, abuse, misuse, damage in transit, failure to maintain the product or other damage beyond 3M's control. 3M will be the sole judge of product condition and warranty options.

This warranty applies only to the original purchaser and is the only warranty applicable to 3M's fall protection products. Please contact 3M's customer service department in your region for assistance.

**LIMITATION OF LIABILITY:** TO THE EXTENT PERMITTED BY LOCAL LAWS, 3M IS NOT LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS, IN ANY WAY RELATED TO THE PRODUCTS REGARDLESS OF THE LEGAL THEORY ASSERTED.



Fall Protection

### Distributed by Engineered Fall Protection

[Sales@EngineeredFallProtection.com](mailto:Sales@EngineeredFallProtection.com)

[www.EngineeredFallProtection.com](http://www.EngineeredFallProtection.com)

Tel: (314) 492-4422



EU DECLARATION OF CONFORMITY:  
[3M.com/FallProtection/DOC](http://3M.com/FallProtection/DOC)