

Installation and Operation Instruction Manual

Toggle Lok Anchor - Model #7442 Portable Concrete Anchorage Connector ANSI Z359.1 5,000 lbs / 22.24 kN



FallTech, Inc

1306 Alameda Street Compton, CA 90221 800-719-4619 / 323-752-0066 <u>www.falltech.com</u>

WARNING

Do not use an incompatible connector with any ToggleLok[™] Anchor. Refer to the separate instruction sheet supplied with the connecting device. This product is designed for use in precast concrete and steel only.

Follow all manufacturers instructions. Only trained professional personnel should install, maintain, inspect and use this product and it component or other personal protective equipment in conjunction with the product.

Do not use this device if its component parts are damaged, cracked, broken or have any deformation to any structure.

OSHA requires that any personal fall arrest system and all system components be removed from service and destroyed if a fall event has occurred, loading this device.

This product is not designed to be repaired or altered in any way. A unit that has sustained a fall arrest must be removed from service and destroyed.

Do not use incompatible connectors with this device. Use only self-locking snap hooks or carabiners that meet ANSI 359.1 requirements. Use a connector designed for each application. Ensure all connectors are fully closed and locked. Connector strength must meet the 5,000 lb requirements.

All personal fall arrest systems must meet all applicable state, federal, city, OSHA and ANSI requirements, and any other regulating government body requirements. It is the responsibility of the employer to regulate its worker and make sure all laws are being complied with concerning this device.

This anchor point attachment is to be identified by a qualified or competent person by means of support of a worker. For fall arrest, the anchor point must meet the 5,000 lb requirement per single user. It is the responsibility of the user and employer to ensure the I-beam or concrete can meet the anchor requirements, and to ensure proper anchoring techniques be used with this device.

This anchor device must be used with care. The proper placement of this device will take into account that, along with lanyard length, the user will not be allowed to free fall more than six feet. (1.8 m) Ensure the fall path is clear of obstructions and no swing falls may occur.

Pregnant women and minors must not use this product.

Safe working load is 400 lbs (149.3 kg). Do not exceed this weight.

Always inspect units prior to use.

Use the proper coupling methods to the anchor.

Remove unit from service is fall event has occurred.

IMPORTANT

All persons using this equipment must read and understand all instructions. Failure to do so may result in serious injury or death. Users should be familiar with pertinent regulations governing this equipment. All individuals who use this product must be correctly instructed on how to use this device.

This product is to be used by qualified fall protection personnel only. It is to be anchored in accordance with manufacturer's requirements in a steel beam or concrete substrate only. The Precast concrete must have a compressive strength of at least 6,000 PSI. Do not anchor in uncured/wet concrete.

Model #7442 is color coded with BRIGHT BLUE TUBING on the attachment loop. It is to be used for FALL PROTECTION ONLY. This unit is not to be used for hoisting or lowering tools, personnel, or material.

The Toggle Lok anchor may be mounted on horizontal surfaces, vertical surfaces, and overhead/ceiling surfaces.

If a previously drilled hole is to be used, inspect it carefully and ensure it is of the correct size and location.

Ensure the Toggle Bar is activated in the deployed position before placing a load on the anchor. See Figure 1.

The ToggleLok is designed to flex under impact loads. Do not allow any object to fall onto the ToggleLok. Do not allow the Anchor Loop or the Main Cable to become kinked or deformed.

The ToggleLok has been carefully designed and manufactured of the highest quality materials to ensure a long trouble-free service life. See Figure 1.

APPLICATIONS

The ToggleLok is designed as an easily installed, precisely located fall protection anchor point that may be used, uninstalled and reinstalled in a different location. This device is suitable for use in 6 in. or larger hollowcore concrete structures, with 1 ½ in. to 4 in. precast concrete, and with ¼ in. to 4 in. thick steel flanges.



FallTech 800-719-4619 falltech.com

Meets OSHA regulations including 1926.502 and ANSI A10.32-04 and/or 2359.1-2007. Made in USA. Max arrest force: 1800 lbs

Free fall limit: 6ft.

Anchorage Connector Style (estilio) 7442 Size (tamano) N/A

Date of Mfg: 4/12/12 (fecha de fabricacion)

Material: 7x19 cable: Shaft and Loop Stainless: Load Bearing Parts Aluminum: Trigger Assembly Capacity: 130-400 lbs (59-181 kg) Lot: 120814

Make only compatible connections Avoid contact with harsh chemicals, excessive heat and high voltage. Do not use in wet or uncured concrete. Use in normal weight concrete with a compression strength of at least 3000 lbs. Read and understand all instructions prior to use. Inspect before every use. Must be inspected by a competent person every 6 months. If unit has been involved in a fall event, immediately dispose of. If unit fails inspection, immediately dispose of.

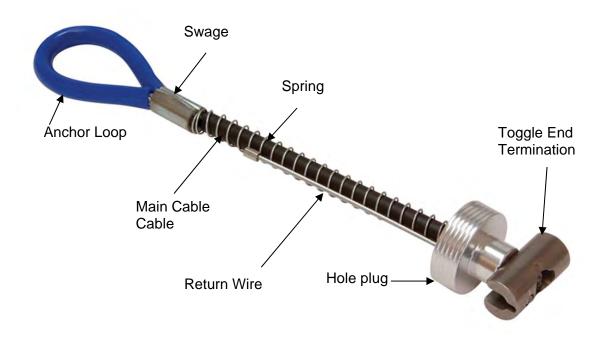


Figure 1 – ToggleLok Component Parts

- Main Cable 7x19 Aircraft Cable
- End Termination 304 Stainless Steel
- Axle assembly 17-4 ph Stainless Steel
- Toggle Bar 304 Stainless Steel
- Hole Plug 6061 T6 aluminum
- Springs Zinc Coated Stainless Steel
- Swage Zinc Coated Copper
- Return Wire 1x19 Aircraft Cable

INSTALLATION

LOCATION

Choose the mounting location carefully. Free fall distance shall be limited to 6 feet. Always calculate the fall distance and ensure that a clear, unobstructed distance is provided under the beam. See Figure 2.

Also ensure swing fall distance and travel is accounted for in the mounting location. See Figure 2.

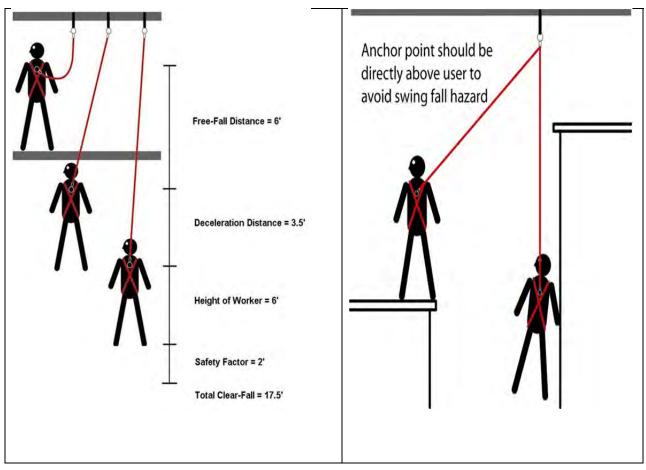


Figure 2 – Free Fall Distance and Swing Fall Distance

PRE INSTALLATION INSPECTION

Ensure the following:

The unit is straight and operates smoothly

The label is affixed to the unit

The cable is not kinked, frayed or damaged

The metal components are not damaged

The Toggle Bar operates freely

MOUNT THE TOGGLELOK

The ToggleLok is designed for mounting on a hollow core concrete structure, or on a steel beam.

Concrete Hollow Core Mount

- Drill a ³/₄ in. diameter hole in the center of the core hollow.
- Never drill the hole closer than 6" to any edge or corner. Use a rotary hammer drill and industrial grade SDS bit. Do not use a masonry bit.
- If using a previously drilled hole always inspect the hole carefully to ensure there are no loose, deformed, or crumbling edges.
- Ensure the toggle bar is placed in the hole in the insert position. See Figure 3.
- The deployed position of the Toggle Bar is at right angles to the main cable. Grasp the anchor loop in one hand, and with the other, turn the toggle bar so it points straight out, in line with the main cable. When the machined flat on the end of the toggle bar engages the flat on the bottom of the hole plug, the Toggle Bar with remain in the insert position. See Figure 3.

Insert the Toggle Bar end into the drilled hole. Push the loop as far as it will go to fully compress the spring. Ensure the hole plug engages the hole. Let the spring expand. The Toggle Bar will rotate into the deployed position. Ensure the centerline of the Toggle Bar is in line with the centerline of the hollow core. Do not allow the Toggle Bar to cross the axis of the hollow core centerline

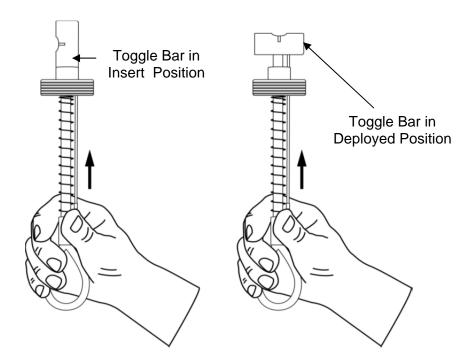


Figure 3 – ToggleLok With Toggle Bar in Insert Position and Deployed Position

INSTALLATION IN STEEL BEAM

Select a suitable location and orientation in the beam. The anchor may be installed in any of three acceptable installation configurations; a vertical tensile load from the lower flange, horizontal shear load from a flange, and horizontal shear load from the web of the beam. In any flange installation, ensure the center of the drilled hole is at least 1½ in. from the edge of the beam. See Figure 4 for acceptable mounting orientations. Do not exceed 90 degree bends. Figure 5 depicts an unacceptable orientation which exceeds the maximum 90 degree bend.

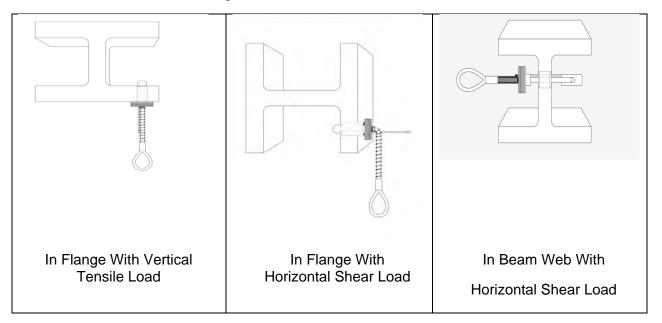


Figure 4. ToggleLok Orientation

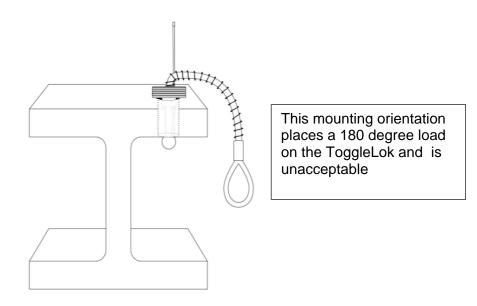


Figure 5 – Unacceptable Mounting Orientation

Drill a ³/₄ in. hole. Clear away any debris. Push the Toggle Bar into the insert position. Insert the Toggle Bar into the hole and push the loop until the spring reaches full compression. Hold the hole plug in place and allow the spring to fully expand. The Toggle Bar will rotate into the deployed position. Tug firmly on the loop to ensure the Toggle Bar is deployed.

Ensure the axis of the Toggle Bar is parallel to the I-beam's center web axis. Refer back to Figure 4. The ToggleLok is ready to use.

NOTE:

- Never rely on a unit placed by unqualified workers.
- Remove the ToggleLok at the end of each day.
- Never leave a unit inserted in a hole overnight.
- Inspect the unit for damage each time you use it. If damage has occurred, dispose of unit.

INSTALLATION INSPECTION

Once installation of the ToggleLok anchor is complete, ensure the following before use:

- the permanent label is affixed to unit
- cable is not kinked, frayed or damaged
- metal components are not damaged

IMPORTANT

If a previously drilled hole is to be used, inspect it carefully and ensure it is of the correct size and location.

Ensure the Toggle Bar is activated in the deployed position before placing a load on the anchor.

The ToggleLok is designed to flex under impact loads. Do not allow any object to fall onto the ToggleLok. Do not allow the Anchor Loop or the Main Cable to become kinked or deformed..

REMOVE THE TOGGLELOK

Grasp the plug in one hand. With the other hand, push the loop toward the plug to fully compress the spring. Draw the ToggleLok from the mounting hole.

STORAGE AND CLEANING

- Remove debris with compressed air.
- Store in a clean, dry place.
- At the end of every work day, remove from installation.

- Store in a locked area
- Do not allow other equipment to fall onto the unit or place it where it can be stepped on.
- Keep the unit free of grease, dirt and oil.
- Do not lend the unit to others.

DISPOSAL

If a fall arrest event has occurred, or if inspection has revealed a fault or unsafe condition, dispose of the unit by cutting the main cable.

MANC20 ALX

REV 2

Oct 2013