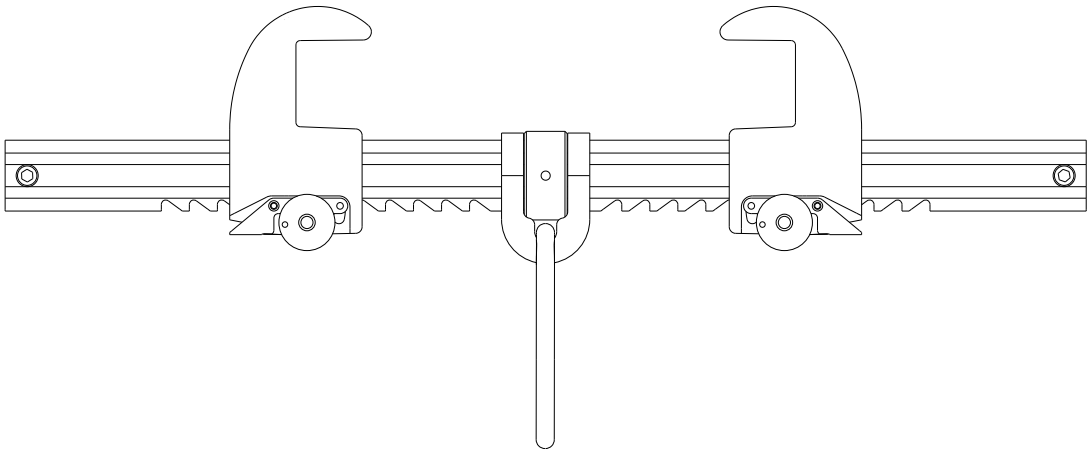
User Instruction Manual

Aluminum Beam Anchor

Model # TYAA211
Model # TYAA212
Model # TYAA213



MANUFACTURED BY:

Tiger Lifting/ Woo Sing Industrial Company Limited
No.70-13, Xiaguirou Mt., Tamsui Dist., New Taipei City 251, Taiwan
Phone: +886-2-2831 3035
Fax: +886-2-2834 0188
info@tigerlifting.com.tw

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WARNING:

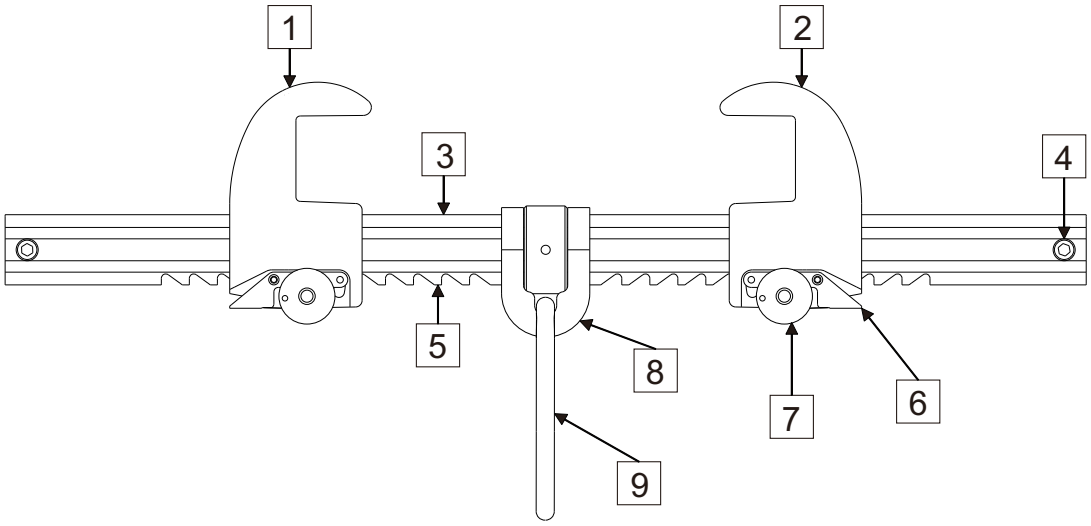
This product is to be used as part of a personal fall protection system. The user must read the manufacturer's instruction and be familiar with each component of the equipment. The user must fully understand this instruction and to be trained before using this equipment. This equipment should not be used for material lifting or any other use other than a fall protection system. This product is intended for one person using. Any alteration and misuse of this equipment, or failure to follow instructions, may result in serious injury or death.

Aluminum Beam Anchor TYAA211~TYAA213 should only be used by a person who is trained and competent in its safe use. Fitness and age significantly affect a person's ability to safety withstand fall arrest loads. Only people who are physically and mentally fit and healthy, not under the influence of drugs or alcohol, are suitable to use this equipment. Medical advice should be sought if a user's suitability is unclear.

IMPORTANT:

If you have questions on the use, care, installation or suitability of this Aluminum Beam Anchor for your application, please contact your dealers, distributors, or manufacturer for a guide.

ALUMINUM BEAM ANCHOR COMPONENTS



The Aluminum Beam Anchor consists of the following components:

1. Sliding Clamp
2. Sliding Clamp
3. Hexagonal Rod
4. End Screw w/Nylon Nut
5. Positioning ratchet for Lock Pin
6. Safety Lock
7. Quick Release Lock Pin
8. D-Ring Hanger
9. D-Ring

SPECIFICATIONS

Dimensions:

Beam Size Range, Model TYAA211 : 12.0-in. (305mm) Maximum
3.2-in. (80mm) Minimum
Model TYAA212 : 18.0-in. (457mm) Maximum
3.2-in. (80mm) Minimum
Model TYAA213 : 24-in. (610mm) Maximum
3.2-in. (80mm) Minimum

Flange Thickness, Model TYAA211 : 1.38-in.(35mm) Maximum
Model TYAA212 : 1.38-in. (35mm) Maximum
Model TYAA213 : 1.38-in. (35mm) Maximum

Materials:

All materials used in the construction of this equipment are as follows:

- Stainless Steel
- Anodized Alloy Aluminum
- Plated Alloy Steel

- **Signification of marking**

XX XX XXX	month/year/batch No.
EN 795:2012	European Standard
TYAA211	model of the product
Tiger	manufacturer
1x	One person use only.

read the instructions for use

CE complies with REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT

2849: No. of notified body involved in product checking

This product meets requirements of the standard EN 795:2012, TYPE B. and REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT.

Manufacturer:
Tiger Lifting/ Woo Sing Industrial Company Limited
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Notified body no. 1019 carried out a EU examination:
VVUU ,a.s., Pikartska 1337. Ostrava, Czech Republic
http://www.vvuu.cz/en/

Notified body no. 2849 Annual INSPECTION MODULE D
INSPEC International B.V
Beechavenue 54-62 1119 PW Schiphol-Rijk
The Netherlands
https://www.inspec-international.com/

Weight:

Model TYAA211 : 4.26LB(1.93KG)

Model TYAA212 : 4.89LB(2.22KG)

Model TYAA213 : 5.53LB(2.51KG)

APPLICATIONS

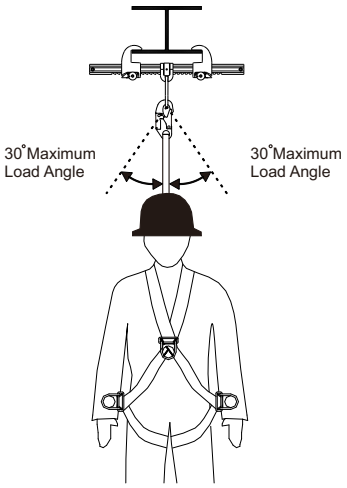
Purpose:

The Aluminum Beam Anchor is used as an anchorage connector for a personal fall arrest system. It's designed to be attached on the Horizontal I-Beam. The Aluminum Beam Anchor might be used as an end termination for either a shock-absorbing lanyard or self-retracting lifeline for fall arrest, or with a positioning lanyard for fall restraint.

WARNING: Aluminum Beam Anchor TYAA211~TYAA213 must be used within it's limitations and for the purpose for which it is intended. No attempt should be made to modify or repair the equipment. All instructions have to be followed to ensure the safety of the User.

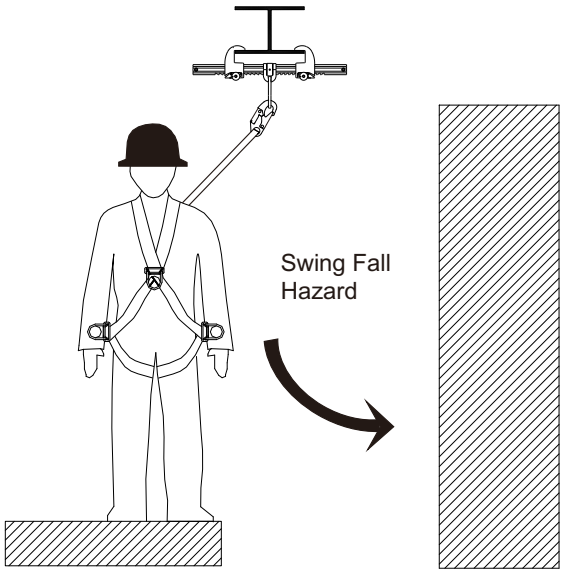
Limitations:

- **Beam Flange Sizes:** The Aluminum Beam Anchor may only be installed on beams with flanges within the adjustment range of the model. See the **SPECIFICATION**.
- **Capacity:** This Aluminum Beam Anchor is designed for one person use with a combined weight (clothing, tools, etc.) of no more than 310 lbs (140kgs). No more than one personal protective system may be connected to this equipment at one time.
- **Free Fall:** Personal fall arrest systems used with this equipment must be rigged to limit the free fall to a maximum of 6 feet. The maximum free fall must always be within the manufacturer's free fall capacity of the system components used to arrest the fall. When a free fall greater than 6 feet and up to a maximum of 12 feet if possible, Tiger recommends using a personal fall arrest system incorporating with an energy absorbing lanyard.
- **Anchor Load Angle:** Loads imposed on the Aluminum Beam Anchor by the personal fall arrest system must remain within 30 degrees of the vertical center line of the beam.



Anchor Load Angle

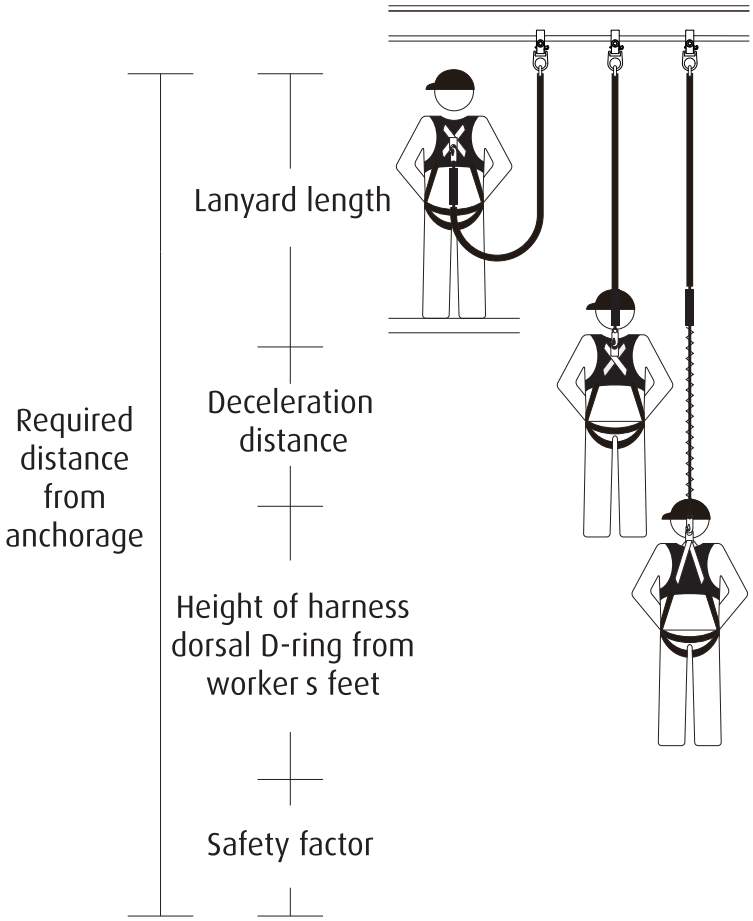
- **Swing Falls:** Before installing or using, make consideration for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. The user must always work as close to be in line with the anchor point as possible. Swing falls significantly increase the possibility of serious injury or death in the event of a fall.
- This Aluminum Beam Anchor is a stationary anchorage connector. DO NOT use the lanyard to drag or tow the anchor along the beam. To move to a new work zone, the user must detach, manually relocate, and correctly reinstall the anchor. While a maximum load angle of 30° is permitted, working at an angle generates axial forces. To minimize these forces and severe swing fall hazards, frequently reposition the anchor to stay directly below it.



Swing Falls

- **Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or other obstruction. The clearance required is dependent on the following safety factors:
  - Elevation of Aluminum Beam Anchor
  - Length of connecting subsystem
  - Deceleration distance
  - Movement of harness attachment element
  - Worker height
  - Free fall distance

Fall Clearance Diagram

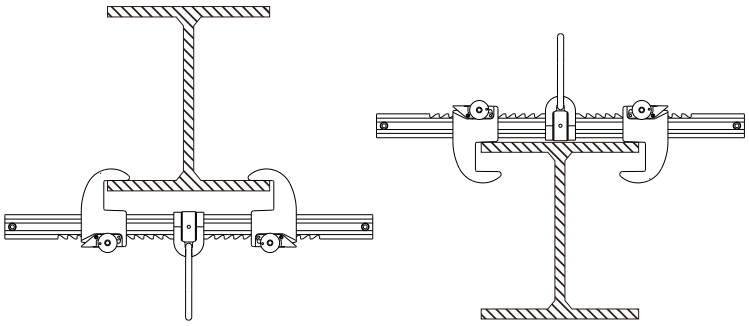


Personal Fall Arrest System: The Aluminum Beam Anchor is designed for use with Tiger approved components or CE/ANSI certified components. Use of this equipment with non-approved components may result in incompatibility between equipment, and could affect the reliability and safety of the complete system. A full body harness must be worn by the user when connected to the Aluminum Beam Anchor. When making connections with the Aluminum Beam Anchor, eliminate all possibility of roll-out. Roll-out occurs when interference between a hook and the attachment point causes the hook gate to unintentionally open and release. All connector gates must be self-closing and self-locking. When the Aluminum Beam Anchor is used as part of a fall arrest system, the user shall be equipped with a means of limiting the maximum dynamic forces exerted on the user during the arrest of a fall to a maximum of 6 kN.

- ***NOTE:*** A rescue plan shall be in place to deal with any emergencies that could arise during the work.

INSTALLATIONAND USE

Installation configuration:



Bottom Mount **Top Mount**

Inspect the equipment according to **INSPECTION** of this manual before each use.

The Aluminum Beam Anchor could only be installed on any I-beam for horizontal position, and located on the bottom and top of the I-beam.

Step 1. Remove the quick release lock pins. Then press the safety lock to adjust the sliding clamps.

Step 2. Place the Aluminum Beam Anchor onto beam flange on the bottom or top position of the I-beam.

Step 3. Place a sliding clamp against one side of the beam flange. Slide the other sliding clamp against opposite side of the beam flange. Ensure the D-ring is at the middle position of the I-beam.

Step 4. Ensure the safety lock is in nearest position to the beam flange.

Step 5. Insert the quick release lock pins to fix the safety locks, ensuring pins are locked into place.
After inserting the quick release lock pins, perform a visual and physical check:
Ensure the gap between both sliding clamps and the beam flange is completely minimized.
Ensure the D-ring assembly is perfectly centered under the beam. An off-center installation significantly reduces the clamping strength and safety margin.

Step 6. Ensure the safety lock have not bottomed out. If safety lock has bottomed out, reinstall the sliding clamp to the next locking position. If the quick release lock pin is damaged or absent, the equipment is still in a workable condition. However for safety concerning, when one of the quick release lock pins is damaged or absent, the equipment must be sent back to your dealers, distributors, or manufacturer to replace a new quick release lock pin.

WARNING: The Anchor point position shall always be positioned, when positioned, it should minimize the potential for fall and potential fall distance. To ensure positive locking of the Aluminum Beam Anchor TYAA211~213 a clear, unobstructed fall path is necessary. Do not use the Aluminum Beam Anchor TYAA211~213 when working on materials such as sand or grain, as insufficient fall speed may prevent lock in the event of a fall. It is essential to verify the free space required beneath the user before each use, therefore, in the event of a fall there will be no collision with the ground or other obstacle. A minimum of 3 meter(including a safety factor of 1 meter) from the working level to the nearest obstruction, lower level or ground underneath a hazard should be maintained.

TRAINING

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

INSPECTION

Frequency:

Before each use, inspect the Aluminum Beam Anchor according to following steps and see **AluminumBEAM ANCHOR COMPONENTS** for part identification. The Aluminum Beam Anchor must be formally inspected by a competent person other than the user at least annually. Record the results in **INSPECTION AND MAINTENANCE LOG**. The Aluminum Beam Anchor should be withdrawn from use immediately according to below situation:

1) Any doubt arise about its condition for safe use or;

2) It have been used to arrest a fall

Inspection Steps:

Step 1.Inspect Aluminum Beam Anchor for damage: Look for cracks, dents, or deformities. Look for bending or wear on the hexagonal rod, sliding clamps, safety lock, and quick release lock pin. Ensure no parts are missing.

Step 2. Inspect entire unit for excessive corrosion.

Step 3. Ensure the quick release lock pin can be inserted through the hole on safety lock button, and locks in place.

Step 4. Record the inspection date and results in the **INSPECTION AND MAINTENANCE LOG**.

If inspection reveals an unsafe or defective condition, remove the equipment from service and destroy, or return to Tiger for repair.

NOTE: *Only Tiger or parties authorized in writing are qualified to repair this equipment.*

MAINTENANCE, SERVICE, STORAGE

Cleaning:

Periodically clean the Aluminum Beam Anchor by water and a mild soap solution. Do not use acids or other caustic chemicals that could damage the system components. A lubricant may be applied to the safety lock button and the quick release lock pin.

Storage:

Store the equipment in a cool, dry, dark place, chemically neutral, away from sharp corners, sources of heat, humidity, corrosive substances or other damaging conditions. During transport the product should be placed in transport carton, eliminating influence of outside agents like water and dust.

Aluminum Beam Anchor TYAA211~TYAA213 shall be packed in original package. Transport the Aluminum Beam Anchor TYAA211~TYAA213 in a cool, dry, clean environment, away from dust, oil and direct sunlight. During transportation, the device should be protected to prevent damage or contamination.

NOTE: Any repair, alterations or additions to the equipment shall only be carried out in accordance with manufacturer's procedures.

WARNING: Due to the complexity or innovation of the equipment, or where safety critical knowledge is needed in the dismantling, reassembly, or assessment of the equipment, (e.g. a retractable type fall arrester), an instruction specifying that periodic examinations shall only be conducted by the manufacturer or by a person or organization authorized by the manufacturer. The periodic examination frequency shall be at least every 12 months. Product marking legibility shall be checked during period examination. Recommendation in regard to the frequency of periodic examinations, taking account of such factors as legislation, equipment type, frequency of use, and environmental conditions. Periodic examinations are only to be conducted by a competent person as an important element for maintaining product safety and should be completed in accordance with NAL HON instructions. The safety of users depends upon the continued efficiency and durability of the equipment. Aluminum Beam Anchor TYAA211~TYAA213 scheduled for examination should be withdrawn from service and tagged "do not use". For further information contact info@tigerlifting.com.tw

It is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the product is to be used.

INSPECTION AND MAINTENANCE LOG

Company:_____Location:_____Date Purchased:_____
Serial Number:_____Model Number:_____

Year	Date	By a Qualified Person	No Missing Parts	No Corrosion	No Deformation	Functioning Condition	No Changes to Attachment Structure
		Corrective Action			Maintenance Performed		
		By a Qualified Person	No Missing Parts	No Corrosion	No Deformation	Functioning Condition	No Changes to Attachment Structure
		Corrective Action			Maintenance Performed		
		By a Qualified Person	No Missing Parts	No Corrosion	No Deformation	Functioning Condition	No Changes to Attachment Structure

		Corrective Action			Maintenance Performed		
		By a Qualified Person	No Missing Parts	No Corrosion	No Deformation	Functioning Condition	No Changes to Attachment Structure
		Corrective Action			Maintenance Performed		

EU DECLARATION OF CONFORMITY AVAILABLE ON: http://www.tigerlifting.com/