

Vertical Beam Clamp I-Beam Adjustable Anchor Instruction Manual A6105

Vertical Beam Clamp I-Beam Anchor INSTRUCTION MANUAL

These instructions apply to the following model(s): A6105 4.5"-12"

Manual Revision: MARCH 30, 2021

A copy of this manual must be available to users at all times. Visit www.MaltaDynamics.com for the latest user instruction manual based upon date of manufacture.







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WARNING: 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 PROPERLY INSTRUCTED ON HOW TO USE THE DEVICE. AVOID CONTACT WITH PHYSICAL HAZARDS (THERMAL, CHEMICAL, ELECTRICAL, ETC.). MAKE ONLY COMPATIBLE CONNECTIONS.

UNDER PENALTY OF LAW

This manual must be read and understood in its entirety, and used as part of a fall protection training program, as required by OSHA or any state/local regulatory agencies. This instruction manual is intended to meet industry standards required by ANSI Z359.18-2017 and should be used as part of an Employee Fall Safety Training Program as required by OSHA. User must read and fully understand the limitations and proper use of equipment. All users must be properly trained by their employer prior to use, per OSHA 29 CFR 1910.66, 29 CFR 1926.503, and applicable local standards.

NOTE: This *User Instruction Manual* is not to be removed except by the equipment user. Current *User Instruction Manuals* must always be available to the user. Read and understand these instructions before using equipment. *Do not discard these instructions.*



Misuse or failure to follow warnings, instructions, and limitations on the use of this equipment may result in serious personal injury or death. For further instructions about proper use, refer to a supervisor or contact Malta Dynamics at 1-800-494-1840.

MATERIALS AND CONSTRUCTION

 Hardware: Plated alloy steel, 5000 lbs. minimum breaking strength and Aluminum alloy.

PURPOSE

The A6105 is an anchorage connector designed to function as an interface between the anchorage and a fall protection, work positioning, rope access, or rescue system for the purpose of coupling the system to the anchorage. Any references to "anchorage connector" in this manual include, and apply to, the A6105.

Read This Instruction Manual Carefully Before Using This Equipment.



Do not alter or intentionally misuse this equipment.

INSTRUCTIONS FOR USE

- A user must be of sound mind and body to properly and safely use this
 equipment in normal and emergency situations. Users must have a
 physician ensure they are clear of any medical conditions that may affect
 the proper and safe use of this equipment in normal and emergency
 situations.
- Before using a personal fall arrest system, user must be trained in accordance with the requirements of OSHA 29 CFR 1910.66 in the safe use of the system and its components.
- 3. Use only with ANSI/OSHA compliant personal fall arrest or restraint systems. The anchorage must have the strength capable of supporting a static load, applied in the directions permitted by the system, of at least 5,000-lbf (22kN) in the absence of certification.
- 4. 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 8 kN (1800-lbf). In the EU these forces must be limited to 6 kN (1350-lbf).
- 5. Use of this product must be approved by an engineer or other qualified person to be compatible with any and all structural & operational characteristics of the selected installation location and system to be connected to this anchorage connector.
- The anchorage connector must be inspected prior to each use for wear, damage, and other deterioration. If defective components are found the anchorage connector must be immediately removed from service in accordance with the requirements of OSHA 29 CFR 1910.66 and 1926.502.
- 7. The anchorage connector should be positioned in such a way that minimizes the potential for falls and the potential fall distance during use. The complete fall protection system must be planned (including all components, calculating fall clearance, and swing fall) before using.
- 8. A rescue plan, and the means at hand to implement it, must be in place that provides the prompt rescue of users in the event of a fall, or assures that users are able to rescue themselves.
- 9. After a fall occurs the anchorage connector must be removed from service and destroyed immediately.

LIMITATIONS FOR USE

WARNING

Do not use this equipment if you are unable to tolerate the impact of a fall arrest. Age and fitness can seriously affect your ability to withstand a fall. Consult with a physician if in doubt. Minors, pregnant women, and anyone with a history of back and/or neck problems must not use this equipment.

The anchorage connector shall not be used outside its limitations, or for any purpose other than that for which it is intended.

- The anchorage connector is designed for single user, with a capacity up to 310 lbs (140 kg) including clothing, tools, etc.
- 2. The anchorage connector may only be loaded as shown in the LOADING CONDITIONS DIAGRAM.
- 3. The anchorage connector is designed to be used in temperatures ranging from -40°F to +130°F (-40°C to +54°C).
- Do not expose the anchorage connector to chemicals or harsh solutions which may have a harmful effect.
- 5. Do not alter or modify this product in anyway.
- Caution must be taken when using any component of a fall protection, work positioning, rope access, or rescue system near moving machinery, electrical hazards, sharp edges, or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.
- 7. Do not use/install equipment without proper training by a "competent person" as defined by OSHA 29 CFR 1926.32(f).
- 8. Do not remove the labeling from this product.
- Additional requirements and limitations may apply depending on anchorage type and fastening option utilized for installation. All placements must be approved by an engineer or other qualified person.
- 10. This anchorage connector should not be used as part of a horizontal lifeline system that has not been designed and or approved to be used with 5,000-lbf anchorage connectors.
- The anchorage connetor should only be used for personal fall protection and not for lifting equipment.

CONNECTOR COMPATIBILITY LIMITATIONS

Malta Dynamics equipment must be coupled only to compatible connectors that are suitable to your application. Ensure all connections are compatible in size, shape and strength. Ensure all connectors are fully closed and locked. OSHA 29 CFR 1926.502 prohibits the use of snap hooks to engage to objects unless the following requirements are met:

- Direct connection of a snaphook to horizontal lifeline.
- ·Two (or more) snaphooks connected to one D-ring.
- ·Two snaphooks connected to each other.
- · A snaphook connected back on its integral lanyard.
- · A snaphook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snaphook dimensions that would allow the snaphook keeper to be depressed by a turning motion of the snaphook.

Use of a non-locking snap hook can result in rollout (a process by which a snap hook or carabiner unintentionally disengages from another connector or the object to which it is coupled (ANSI Z359.0- 2012). Malta Dynamics connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions.

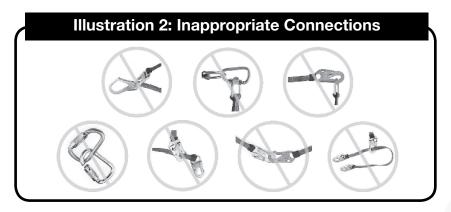
Avoid the following types of connections:

- Two or more snap hooks or carabiners attached to one D-Ring.
- A snap hook connected to its integral lanyard.
- A snap hook connected to a horizontal lifeline.
- Connection in a manner that results in a load on the gate. NOTE: Large throat opening snap hooks should not be connected to standard size D-Rings or similar objects. This could result in a load on the gate if the hook or D-Ring twists or rotates. Large throat snap hooks are designed for use on structural elements such as rebar or cross members that are not shaped to capture the gate of the hook.
- False engagement connections, where protruding features of the snap hook or carabiner may catch on the anchor and seem fully engaged to the anchor point. Always confirm engagement.
- Connection to snap hooks or carabiners.
- Direct connection to webbing lanyard, webbing loop, rope lanyard or tie-back

(unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).

 A snap hook connected to a D-Ring, Rebar, or other connection point with improper dimensions/configurations could cause the snap hook keeper to become depressed by the turning motion of the snap hook; the snap hook or carabiner may not fully close and lock or roll-out may occur.

Illustration 2 depicts examples of inappropriate connections:





Use caution when employing this equipment around machines, electrical hazards, chemical hazards and sharp edges or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.

PERFORMANCE:

Static Tensile Strength: 8000-lbf (22kN) **Maximum Capacity:** One worker with max weight of 310-lbs when used as a single point anchorage connector for personal fall arrest or restraint system

A6105 DIMENSIONS:

Weight: 5.1-lbs

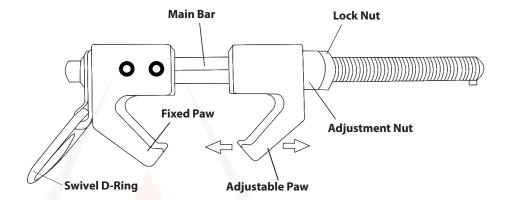
Beam Flange Width Range: 4.5"-12" **Beam Flange Thickness:** .50" to 2"

REGULATORY COMPLIANCE: ANSI

Z359.17-2017, OSHA 1926.502, OSHA 1910.66,

COMPONENT MATERIALS:

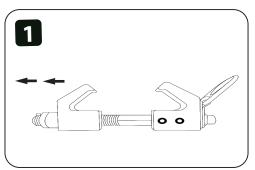
Alloy steel Aluminum Alloy



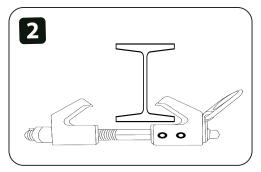
INSTRUCTIONS:

- 1. Locate a structural steel beam flange capable of withstanding a 5,000-lbf. static load or meeting OSHA 1926.502 requirements for a safety factor of two.
- 2. Twist lock nut and adjustable nut in a direction to allow the adjustable paw to move.
- 3. Keeping the unit perpendicular to the beam, fit the hooks over the edges of the beam flange.
- 4. Slide the adjustable hook so that both hooks are snug against the beam flange.
- 5. Twist both the lock nut and adjustable nut in a direction that it tightens the paws against the beam to ensure the anchor has little to no play.
- 6. Tug, rock, and twist the anchor in all directions to ensure that it cannot come off of the flange.
 - *Always re-adjust according to Installation steps 1-6 when moving to a new or different sized beam.
 - **D-ring is centered on the anchorage connector for ease of sliding on beam flanges. Particularly in rope access applications, bodyweight may disengage the centering feature in some loading conditions. This is not a safety concern, but it may affect usability.

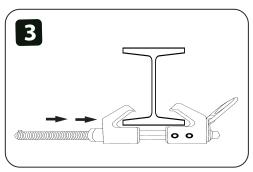
INSTRUCTIONS:



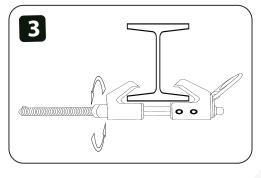
1. Twist both the lock nut and adjustable nut in the direction that allows the adjustable paw to expand to its widest position



2. Hook fixed paw on far side of I-beam flange.



3. Twist both the lock nut and adjustable nut in the direction that allows the adjustable paw to tighten against the I-beam flange

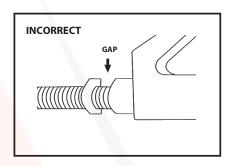


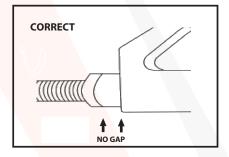
4. Hand tighten both nuts as much as possible by turning clockwise.

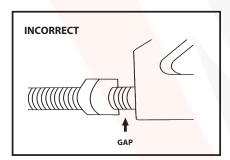
4

Refer to "**NUT POSITONS**" diagram to ensure correct installation. If nut position is incorrect, repeat all steps ensuring lock button engages in tightest position during step 4.

NUT POSITIONS

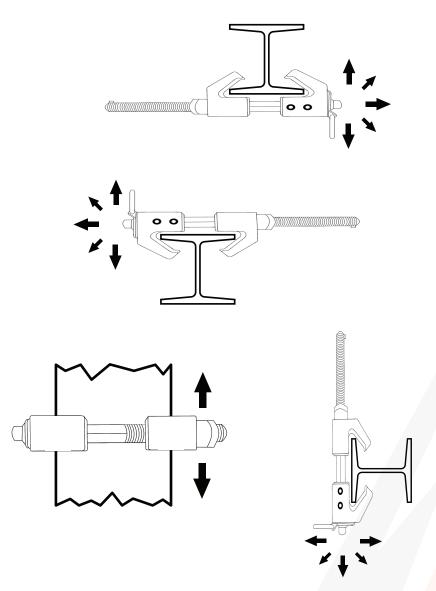




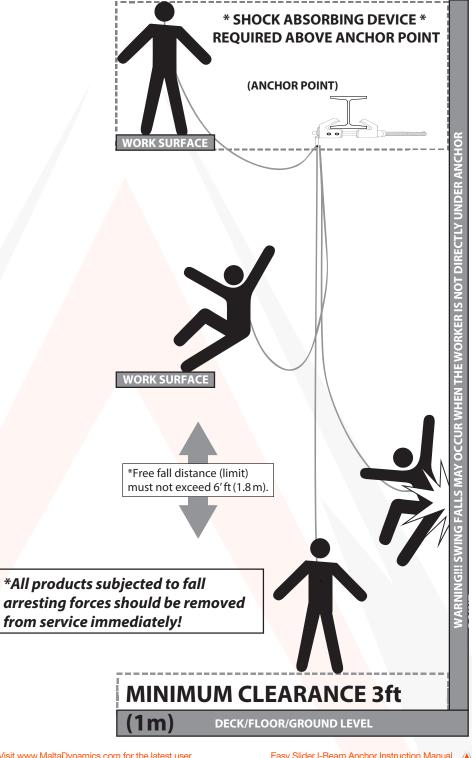


WARNING: Use of this product must be approved by an engineer or other qualified person to be compatible with any and all structural & operational characteristics of the selected installation location and system to be connected to this anchorage connector.

LOADING CONDITIONS DIAGRAM



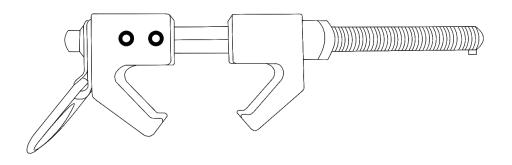
Placement at or below a user's working height requires integration of a compatible ANSI Z359.1 shock-absorbing lanyard that does not allow the user to extend more than 6 feet (in any direction) from the anchorage connector before the shock absorber is activated. The beam anchor must be attached to the I-beam flange facing the user (top flange if above, bottom flange if below, etc.).



PRODUCT LABELS

The following labels are affixed to the product and must not be removed:

WARNING LABEL







*Note: Placement at or below a user's working height requires integration of a compatible ANSI Z359.1 shock-absorbing lanyard that does not allow user to extend more than 6 feet (in any direction) from the anchorage connector before shock absorber is activated. Beam anchor must be attached to I-beam flange facing the user (top flange if above, bottom flange if below, etc.).

WARNING: It is essential to the safety of the end user that the seller of this device include all instructions pertaining to the proper use, maintenance and inspection of the device in the language of the country in which the product is to be sold.

TRAINING

Employers must provide training to any employee who may be exposed to fall hazards in order to enable the employee to recognize and reduce fall hazards. Training must be conducted by a Competent or Qualified Person. Trainer and trainees must not be exposed to fall hazards during the training course. This equipment is intended to be used by persons trained in its correct application and use.

INSPECTION

Official periodic inspection must be made at least annually. The inspection must be performed by a qualified person other than the intended user. If severe weather or conditions exist then inspections must be carried out more frequently. All inspection results must be logged in the space provided above. (It is recommended that the anchor device is marked with the date of the next or last inspection.)

- Make sure all labeling is affixed to the unit.
- 2. Inspect anchoring system for signs of damage or wear.
- Make sure the ring is free to swivel and pivot.
- 4. Check for excessive play and wear on the retaining bushing (Bushing should not wiggle or rotate.)
- Ensure latches engage and disengage properly.
- 6. Record inspection results in the space provided above.

Note: Keep all instructions available for reference. Record the date of first use:

Record all observations and results of each inspection in your Hog Tracker account or inspection log. If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove Anchor from service immediately. Any equipment that has been subjected to the forces of arresting a fall must be removed from service immediately.

Note: Equipment must not be altered in any way, including attempted repair. Only manufacturer, or entities authorized in writing by the manufacturer, may make repairs to this product. If inspection reveals any defective condition, remove from service immediately.

MAINTENANCE & CLEANING

Wipe off all surface dirt. Clean with compressed air and/or a stiff brush using plain water or a mild soap and water solution to clean away contaminants; wipe hardware dry with a clean cloth. Hang away from heat and allow to dry completely. Store in dry, clean environment away from direct sunlight and excessive heat. Avoid storage in areas where chemical vapors may exist. Thoroughly inspect lanyard after extended storage.

Frequency:

- All equipment must be visually inspected prior to each use according to the manufacturer's instructions included at time of shipment. Inspections must be performed by a Competent Person other than the user (as defined by OSHA) a minimum of once per year.
- Record the results of each formal inspection in your Hog Tracker account or inspection log.
- NOTE: Per Cal/OSHA PFAS must be inspected by a competent person at least once a year, in accordance with the manufacturer's recommendations, with inspection dates documented.
- Repairs to the Vertical Beam Clamp I-Beam anchor can only be made by a Malta Dynamics Fall Protection representative or an entity authorized by Malta Dynamics. Contact us for all maintenance and repair needs or to inquire about a return at: 1-800-494-1840.



Harsh weather and harsh environments, prolonged use, and other extreme working conditions may require you to have this inspected by a competent or qualified person than yourself at least once a year.

INSPECTION LOG

Date of Manufacture:	
Model Name/Number:	
Serial:	
Date of First Use:	

Inspection Date	Items Noted	Corrective Action	Approved By

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, Equipment offered by Malta Dynamics is warranted against factory defects in workmanship and materials for a period of one year from date of installation or first use by the original owner. LIMITED REMEDY: Upon notice in writing, Malta Dynamics will repair or replace all defective items at Malta Dynamics's sole discretion. Malta Dynamics reserves the right to require that the defective item be returned to its plant for inspection before determining the appropriate course of action. Warranty does not cover equipment damage resulting from wear, abuse, damage in transit, failure to maintain the product or other damage beyond the control of Malta Dynamics. Malta Dynamics shall be the sole judge of product condition and warranty options. This warranty applies only to original purchaser and is the only warranty applicable to this product. Please contact Malta Dynamics customer service department at 800-494-1840 for assistance. LIMITATION OF LIABILITY: IN NO EVENT WILL MALTA DYNAMICS BE 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.