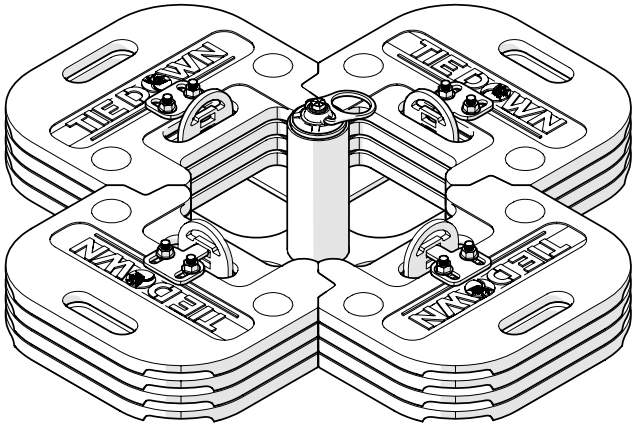
Hippo Anchor Instruction Manual



12 Plate System, 635 lbs. **Part ID: 65219**
16 Plate System, 825 lbs. **Part ID: 65220**
Counterweight, 45 lbs. **Part ID: 11032**

Keep these instructions for future reference. Read and understand these instructions before using this product.

System Specifications:
Capacity: One worker in arrest OR two workers in restraint.

Anchorage:
Fall Arrest: The structure to which the Anchorage Connector is installed on must sustain static loads applied in the directions permitted by the Fall Arrest System of at least: 5,000 lbs (22.2 kN).

The Hippo Counterweight Anchor must not be used in adverse weather conditions. The roof surface must be free of frost, snow, standing water, grease or oil, or any other type of lubricating or friction reducing materials.

The Hippo Counterweight Anchor System is approved for use on the following types of roofs: concrete, bitumen, and asphalt sanded.

Static Load:
The roof must be able to support a static load of 1,200 lbs. (334 kg).

Standards:
OSHA 1926.502 or OSHA 1910.140 when configured by a Qualified person as part of a complete fall arrest system.

Purpose: Anchorage Connectors are designed to provide anchorage connection points for Fall Arrest, Fall Restraint, Work Positioning, and or Rescue systems based on the allowed uses for each product.

This Anchorage Connector is for connection of Fall Protection Equipment. Do not connect Lifting Equipment to the Anchorage Connector.

Supervision: Use of this equipment must be supervised by a Competent Person.

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 ANSI and OSHA, and/or regional regulations. 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.

WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov

Online Manual

Instruction Sheet #08371
E1831, Rev. 10/7/21

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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, authorized persons2, and rescuers3. A trained, on-site rescue team is recommended.

Inspection Criteria: The Anchorage Connector shall be inspected by the user before each use and, additionally, by a Competent Person other than the user at intervals of no longer than one year. Results of each Competent Person inspection should be recorded on copies of the "Inspection and Maintenance Log".

After a Fall: If the Anchorage Connector is subjected to the forces of arresting a fall, it must be removed from service immediately, clearly marked "DO NOT USE", and then either destroyed or forwarded to Tie Down for replacement or repair.

Proper Use and Path: A clear path is required in the direction of the use to assure positive locking of an SRD. Do not obstruct the use or path of use of The Hippo Counterweighted. 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.

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.

Fall Clearance: 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.

Swing Falls: Swing Falls occur when the anchorage point is not directly above the point where a fall occurs. 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.

Fall Protection Compatibility: Only use ANSI and OSHA compliant products in conjunction with Tie Down products. Contact either Tie Down or the manufacturer of your fall protection subcomponents if you have further questions. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (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. 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. This force may cause the gate to open. Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA.

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. Do not connect snap hooks and carabiners.

Installation: Prior to installation, read all instructions. Proper installation must be verified by a Competent Person or a Qualified Person. Sweep area of loose material where The Hippo Anchor will be placed.

Planning: Plan your fall protection system prior to installation of The Hippo Counterweight Anchor. Account for all factors that may affect your safety before, during and after a fall. Consider all requirements, limitations, and specifications. In Section 2 and Table 1. Determine the proper location of The Hippo Counterweight Anchor. It must be flat (5° slope or less) and be at least 8 ft (2.5 m) away from the edge of the structure or any openings such as skylights or doorways, and as close as possible to the work area.

Hippo Roof Anchor

Fall Clearance: Users must add 5 ft (1.5 m) into fall clearance calculations to account for any movement in the counterweight anchor base while arresting a fall.

Limitations: The system is rated for both Fall Arrest and Fall Restraint, and it is recommended that the system be configured in fall restraint whenever possible. Work positioning is not allowed.

Product Life: The functional life of the Fall Arrest System is determined by work conditions and maintenance. As long as the product passes inspection criteria, it may remain in service.

Service: Only Tie Down or parties authorized in writing by Tie Down may make repairs to this equipment.

Cleaning: Periodically clean the The Hippo Counterweight Anchor metal components with a soft brush, warm water, and a mild soap solution. Ensure parts are thoroughly rinsed with clean water.

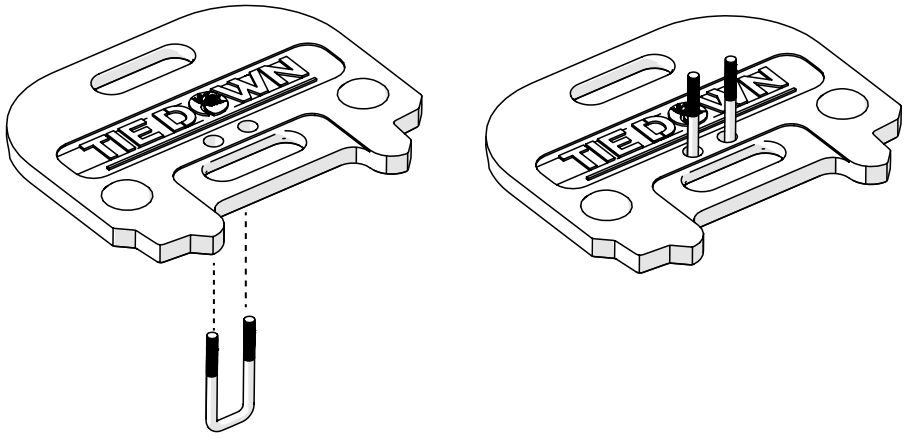
Storage and Transport: When not in use, store and transport the The Hippo Counterweight Anchor and associated fall protection equipment in a cool, dry, clean environment out of direct sunlight for storage. Avoid areas where chemical vapors may exist. Thoroughly inspect components after extended storage.

Installing the Hippo Anchor

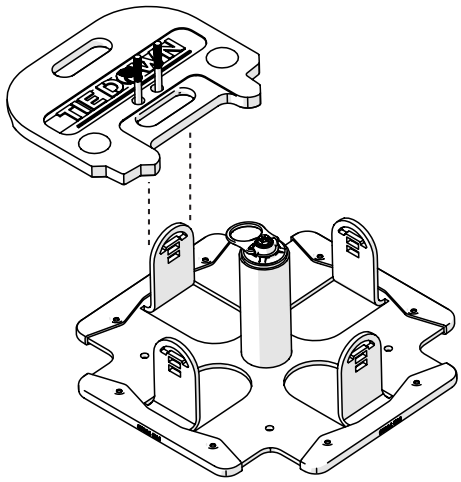
Step 1
Sweep area of loose material where The Hippo Anchor will be placed.

Place 4 counterweights near the Hippo Base, one on each of the 4 sides.

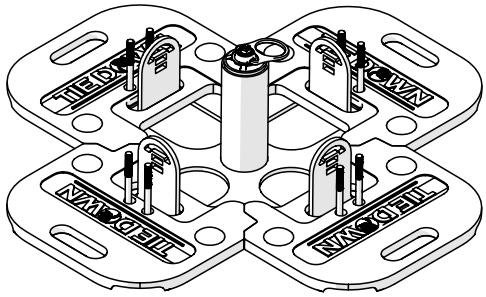
Tilt each counterweight on its side and insert the U-bolt from the bottom, up through one of the two holes in each base.



Step 2
Position the counterweight/U-bolt over the Hippo base security tab. Slide the counterweight/U-bolt down the security tab until it rest on the Hippo Base.



Step 3
Repeat Steps 1 & 2 for the remaining three counterweights.

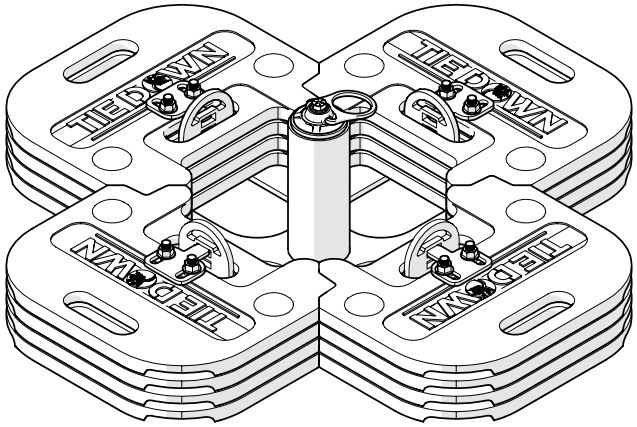


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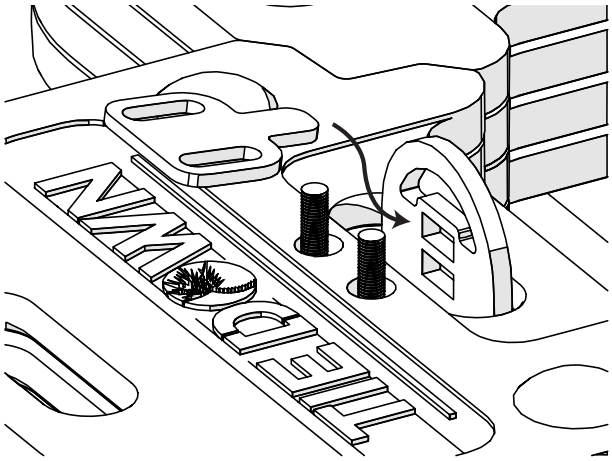
Step 4
Add a layer of counterweights ensuring the U-bolts protrude through the same holes as the previously added counterweights.

Install counterweights one layer at a time.

Depending on your configuration, either a total of 12 or 16 counterweight bases make up the Hippo Anchor system.

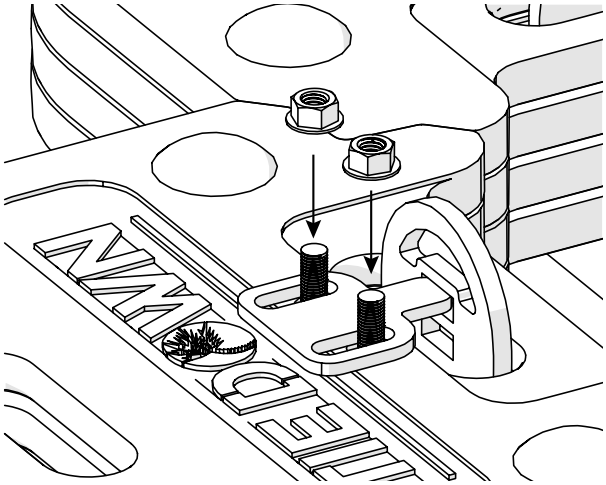


Step 5
Position the security bracket over the U-bolt. Insert the security bracket "tab" into the Hippo base. If you are installing 12 counterweights the tab will go in the lower slot, if 16 counterweights use the top slot. Slide the security bracket down over the u-bolt.



Step 6
Install a nut on each of the U-bolts. Hand tighten all nuts securely. Using tools may result in over-tightening, possibly damaging the system.

Repeat for the remaining counterweights.



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DECLARATION OF CONFORMITY

Declaration Date: 01.14.2021
Rev. 0

DECLARATION NO.	**ETR-65097, 65219, 65220_R0**
PART NUMBER(S):	**65097, 65219, 65220**
PART DESCRIPTION:	**Hippo Anchor**
ADDITIONAL INFORMATION REGARDING THIS DOCUMENT OR STANDARD(S) EVALUATED: •	

TIE DOWN ENGINEERING DECLARES THAT THE PRODUCT(S) LISTED ABOVE IS IN CONFORMITY WITH THE REQUIREMENTS OF THE FOLLOWING PERFORMANCE STANDARDS.

STANDARD(S):
• **OSHA 1910 Personal Fall Protection Systems** • **OSHA 1926 Fall Protection Systems Criteria and Practices** • **ANSI Z359.6-2016 Specifications and Design Requirements for Active Fall Protection Systems**

*** This certificate declares that the above standard(s) was met by the requirements of such standard(s). Testing was performed under normal operating measures. The results of testing apply only to the sample(s) tested and to the specific test(s) performed. This certificate is only issued for products which have passed the testing requirements of the standard(s) listed. The end-user is responsible for using the product(s) for its intended purpose(s) only and must review all manuals and instructional documentation prior to use. ***

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Test Report	
Test Operator(s):	Wilson Ha
Test Date:	11/19/2020
Part Number(s):	65097, 65219, 65220
Part Revision:	0
Internal Test Report:	ITR-65097, 65219, 65220_R0
Third Party (if applicable):	

Test Summary

Test Specification	Test Criteria	Test Result
OSHA 1910.140(c)	1910.140(c)(13) • Anchorages, except window cleaners' belt anchors covered by paragraph (e) of this section, must be: 1910.140(c)(13)(i) • Capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or 1910.140(c)(13)(ii) • Designed, installed, and used, under the supervision of qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.	PASS [1]
OSHA 1926.502(d)(15)	• Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) per employee attached, or shall be designed, installed, and used as follows: 1926.502(d)(15)(i) • as part of a complete personal fall arrest system which maintains a safety factor of at least two	PASS [2]
OSHA 1926.502(d)(16)(v)	1926.502(d)(16) • Personal fall arrest systems, when stopping a fall, shall: 1926.502(d)(16)(v) • have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet (1.8 m), or the free fall distance permitted by the system, whichever is less.	PASS [3]
ANSI Z359.6 Clause 4.6.10.3.1	• The closest edge of the anchorage connector shall be located a distance from the unprotected edge that is at least 2 times the calculated distance that the anchorage connector will slide before the fall has been arrested or 8 feet (2.4m), whichever is greater.	PASS [4]

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[1] OSHA 1910.140(c)
[2] OSHA 1926.502(d)(15)
- **65097**
  - Anchor base tested to >5000 lb. tensile load.

[3] OSHA 1926.502(d)(16)(v)
- Drop test performed using 310 lbs of weight.
- Standard 6 ft. PEA's were connected from the anchorage connection point to the drop test equipment to allow for a full 6 feet of free fall distance.

[4] ANSI Z359.6 Clause 4.6.10.3.1
- **65219 – 630 lb. Kit, 12 Ballast Weights**
  - Anchorage must be setup at MINIMUM 8 FEET from the leading edge.
    - Max sliding distance as tested on a smooth surface: 48"
  - Anchorage to only be used on flat surfaces such as concrete or TPO.
  - Do not use anchorage on loose grounding.
- **65220 – 825 lb. Kit, 16 Ballast Weights**
  - Anchorage must be setup at MINIMUM 8 FEET from the leading edge.
    - Max sliding distance as tested on a smooth surface: 21"
  - Anchorage to only be used on flat surfaces such as concrete or TPO.
  - Do not use anchorage on loose grounding.
  - ***** 65220, 825 lb. kit, can be used for applications where the user has 4 feet or less of total sliding surface area for the anchor to function. However, the anchor must still be setup at MINIMUM 8 FEET from the leading edge and have sufficient space for the anchorage to slide to a complete standstill. *****

Conclusion:
The anchorage successfully passed testing for the standards listed above pertaining to ballasted anchors. The anchor successfully passed testing for a minimum breaking strength of 5000 lbs. End-user must refer to all manuals and instructional documentation for safe and proper use.

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Safety Information - Do not alter equipment. Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a competent person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to. Fall protection equipment must be chosen by a competent person. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations. Forces applied to anchors must be calculated by a competent person. Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRL's. Class A SRL's must arrest falls within 24"; Class B SRL's must arrest falls within 54".

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration. Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue. Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

Equipment subjected to forces of fall arrest must immediately be removed from use. Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment. Pregnant women and minors must not use this equipment. Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

Inspection

- Check the counterweights for excessive dents or deformations. Check the base counterweights for delamination.
- Inspect the system for physical damage. Look carefully for any signs of cracks, dents or deformities in the metal.
- Inspect the system for severe corrosion.
- Ensure the condition of the roof will support the The Hippo Counterweight Anchor System loads.
- Ensure that the bolts and nuts are in good condition and tightened securely. Use of tools may result in over-tightening, possibly damaging the system. Hardware in poor condition should be replaced.
- Rooftop Anchor - Visually inspect the Anchor for signs of deployment. If the Hippo Counterweight Anchor has been subjected to fall arrest forces or requires service and must not be used.

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