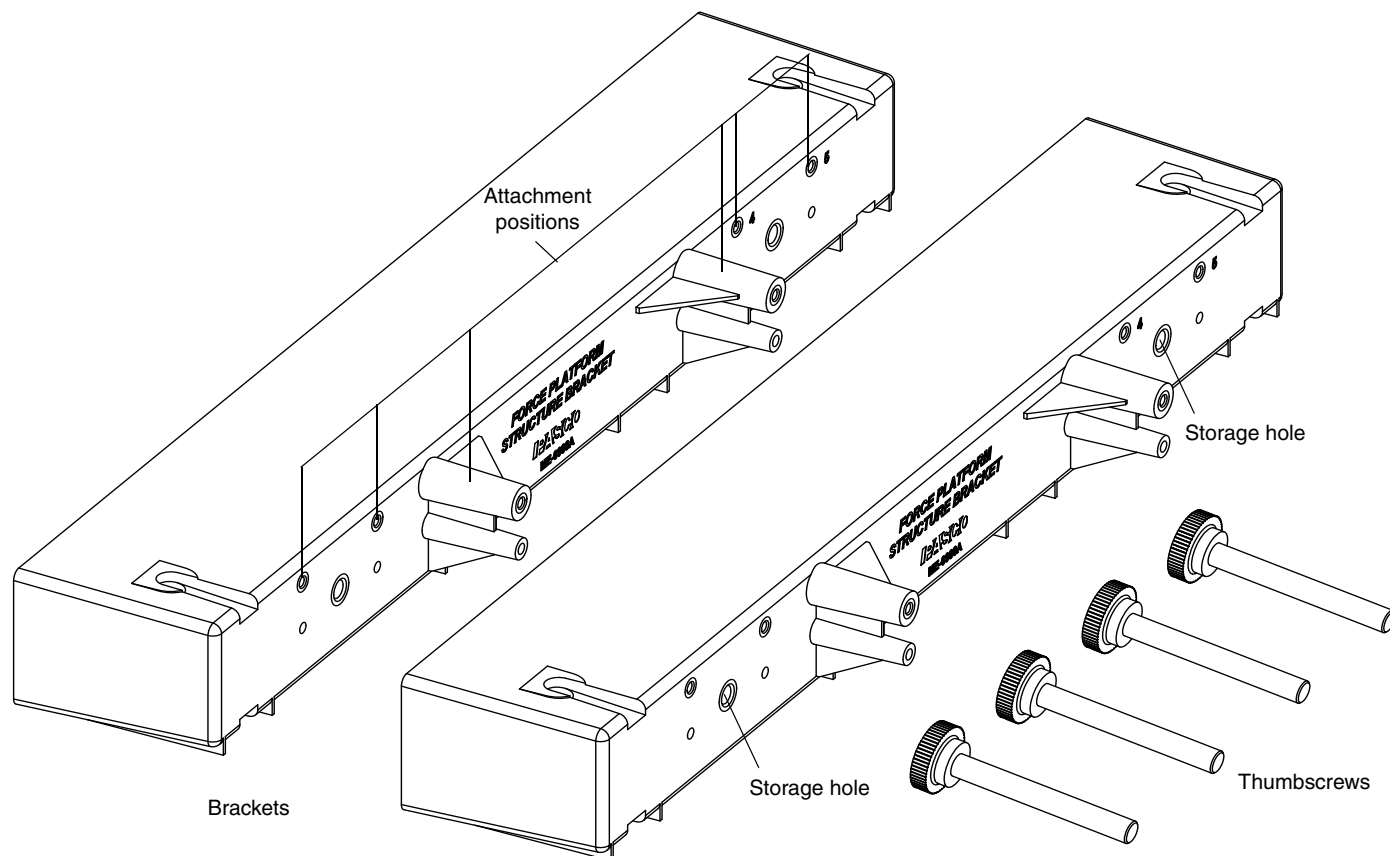




# Force Platform Structures Bracket

ME-6988A



## Introduction

The PASCO model ME-6988A Force Platform Structures Bracket includes two brackets and four thumbscrews. The adapter bracket is designed to connect members of the PASCO Structures System to a PASCO Force Platform.

Each Force Platform Structures Bracket has six positions where members of a PASCO Structure System can be attached, and two thumbscrews for attaching the bracket to a Force Platform. Note that each bracket also has two threaded holes for storing the thumbscrews when they are not in use.

Examples of the PASCO Structures System include:

Force Platform	Model Number
PASPORT 1-Axis	PS-2141
PASPORT 2-Axis	PS-2142
ScienceWorkshop 1-Axis	CI-6461
Recommended Equipment	Model Number
PASCO Structures System	see www.pasco.com

**Truss Set (ME-6990)** - A small set for building trusses

**Bridge Set (ME-6991)** - A larger set with road bed and cables for building bridges and roller coasters

**Advanced Set (ME-6992A)** - The largest set with pulleys, axles, and additional connectors that make possible bridges which have angles other than 45 and 90 degrees. This set can also be used to build suspension bridges, cranes, cars and catapults.

The Structures System also includes sensors for measuring forces in a structure.

**Load Cell and Amplifier Set (PS-2199)** - Load Cell Amplifier (PS-2198) with four 100 N Load Cells (PS-2200)

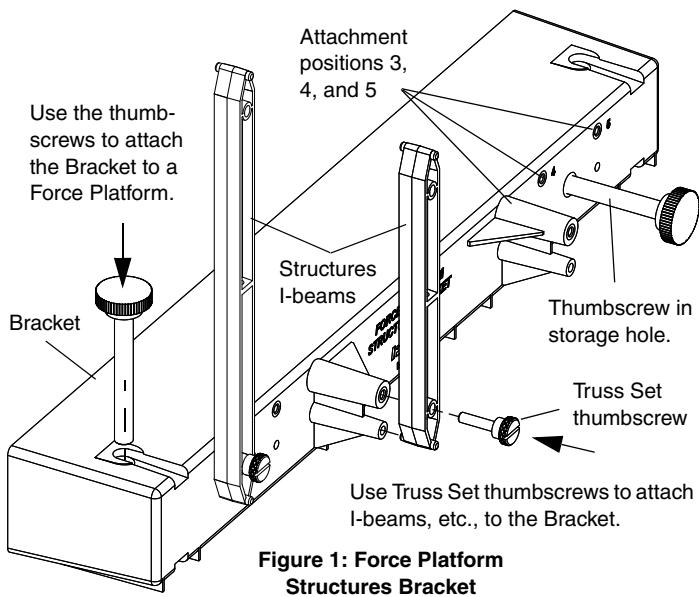
**Load Cell Amplifier (PS-2198)** - Can plug in up to six Load Cells; requires a PASPORT interface to connect to the USB port of a computer.

**100 N Load Cell (PS-2200) or 5 N Load Cell (PS-2201)** - Strain gauges mounted on a beam with no electronics so a Load Cell requires the Load Cell Amplifier (PS-2198).

The Force Platform allows the student to measure tension and compression forces in trusses, bridges, roller coasters, or other structures assembled with the PASCO Structures System sets.

See the PASCO catalog or web site ([www.PASCO.com](http://www.PASCO.com)) for more information about the PASCO Structures System.

## Installation



Use two thumbscrews to mount a bracket to one side of a PASCO Force Platform. Note that two brackets will fit on one Force Platform.

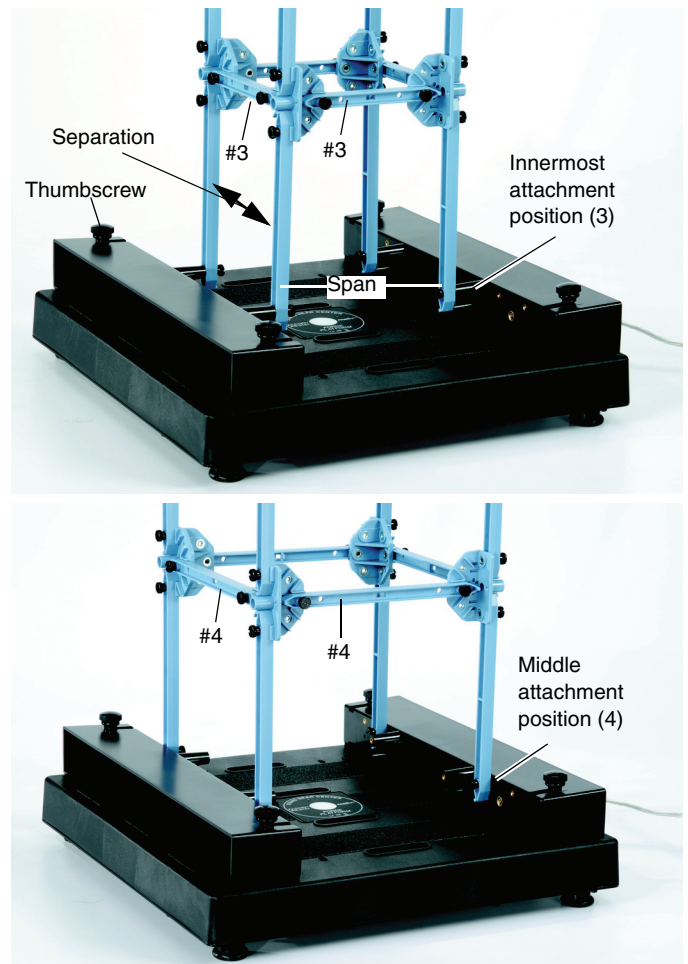
Use Truss Set thumbscrews (ME-6994) from one of the PASCO Structures Systems sets to attach I-beams or other members of a structure set to the six attachment positions on the bracket. (See Figure 1.)

## Using Brackets on a Force Platform

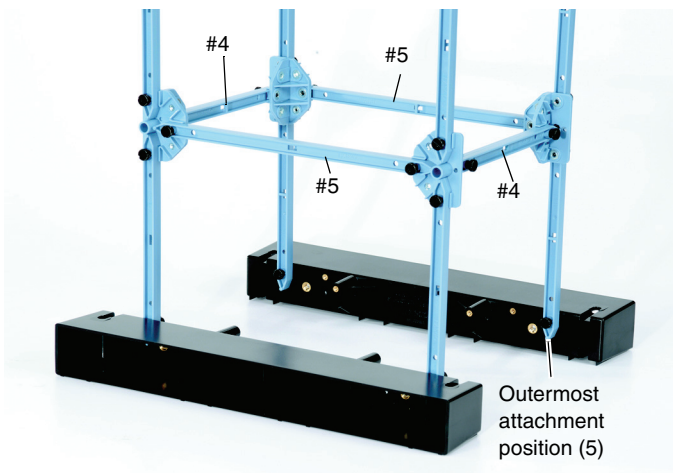
If a structure is connected to one or two Force Platform Structure Brackets that are mounted on a Force Platform, the dynamic changes in tension or compression of the members of the structure can be measured.

The different attachment positions along the side of the bracket allow different I-beam members to be used between two Brackets mounted on a Force Platform. Let the *span* of a structure be the distance between its attachment positions on two Brackets. Let the *separation* of the structure be the distance between two vertical members attached to the same Bracket.

The center attachment positions (labeled “3”) allow a span and separation of a #3 I-beam member. The next two attachment positions relative to the center allow a span and separation of a #4 I-beam. (See Figure 2.)



The outermost attachment positions relative to the center are designed for a span of a #4 I-beam and a separation of a #5 I-beam if the Brackets are mounted on a PASCO Force Platform. However, if the Brackets are mounted on another platform, or no platform as shown in Figure 3, then the span can be longer or shorter than a #4 I-beam.



Please refer to the instruction manuals for the PASCO Structures System Sets for ideas of what structures can be built and attached to the Force Platform Structures Bracket and a Force Platform. Examples include large bridges and a tower crane.

## Other Uses for the Bracket

You can use the Force Platform Structures Bracket on a different force-measurement platform if you have the means to attach the Bracket to your platform.

As shown in Figure 4, it is also possible to attach a structure to just one Force Platform Structures Bracket.

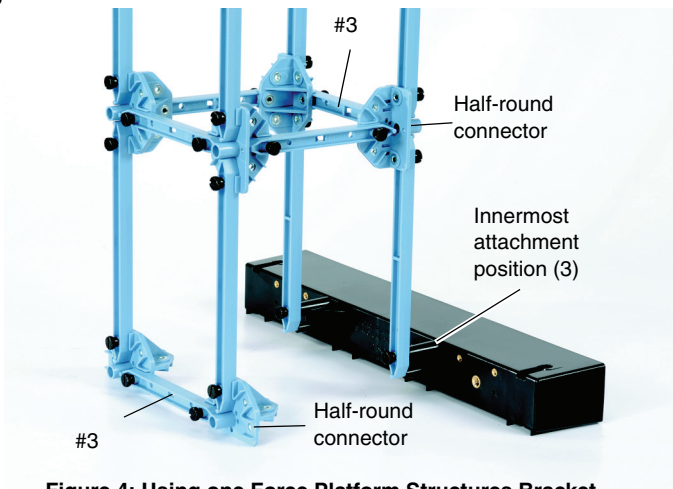


Figure 4: Using one Force Platform Structures Bracket

The attachment positions on the Bracket are at the same height as the top attachment position on a “half-round” connector (part of the ME-6990 Truss Set).

## Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific  
10101 Foothills Blvd.  
Roseville, CA 95747-7100

Phone: 916-786-3800 (worldwide)  
800-772-8700 (U.S.)

Fax: (916) 786-7565

Web: www.pasco.com

Email: support@pasco.com

For more information about the Force Platform Structures Bracket and the latest revision of this Instruction Sheet, visit:

[www.pasco.com/go?ME-6988A](http://www.pasco.com/go?ME-6988A)

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**Patents Pending** The following PASCO products have patents pending:

ME-6984 Structures Hydraulics Set	ME-7004 Destructible Bridge Set
ME-6987 Flat Structures Members	ME-7009 Cast Beam Structures Set
ME-6989 Physics Structures Set	PS-2198 Load Cell Amplifier
ME-6990 Truss Set	PS-2199 Load Cell and Amplifier Set
ME-6991 Bridge Set	PS-2200 100 N Load Cell
ME-6992A Adv. Structures Set	PS-2201 5 N Load Cell
ME-6995 Road Bed Spares	PS-2205 Dual Load Cell Amplifier