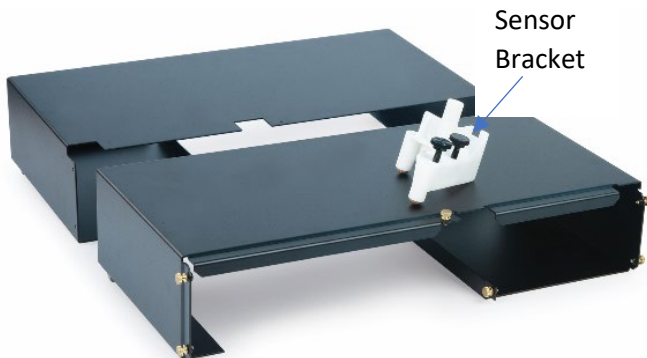


# Ampere's Law Accessory

EM-6720



## Introduction

The Ampere's Law Accessory is used in combination with wireless rotary motion and magnetic field sensors and a current-carrying coil to verify Ampere's Law:

$$\oint \vec{B} \cdot d\vec{l} = \mu_0 N I_{enclosed}$$

Detailed experiment instructions are available to download at [www.pasco.com](http://www.pasco.com). Type EX-5552 into the search to go to the Ampere's Law Experiment.

## Equipment

Ampere's Law Accessory EM-6720 includes:

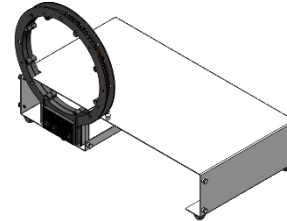
1	Platform - Left
1	Platform - Right
1	Sensor Bracket
2	1/4-20 x 3/4" Thumbscrews
1	1/4-20 x 1/2" Brass Thumbscrew
6	6-32 x 1/4" Brass Thumbscrews

Additional equipment required to perform the complete experiment (EX-5552):

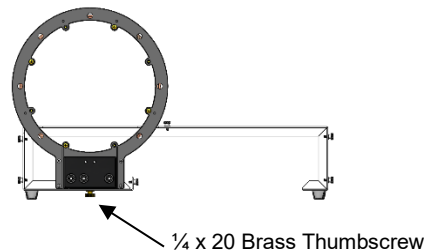
1	Wireless 3-Axis Magnetic Field Sensor	PS-3221
1	Wireless Rotary Motion Sensor	PS-3220
1	Field Coil (500-Turn)	EM-6723
1	Zero Gauss Chamber	EM-8652
1	850 Universal Interface (or other DC power supply that outputs at least 1 A at 15 V)	UI-5000
	PASCO Capstone Software	

## Platform Assembly

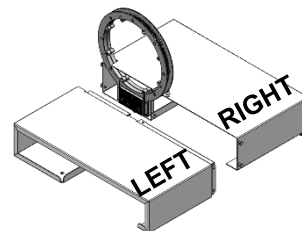
1. Slide the coil into the slot in the right side of the platform.



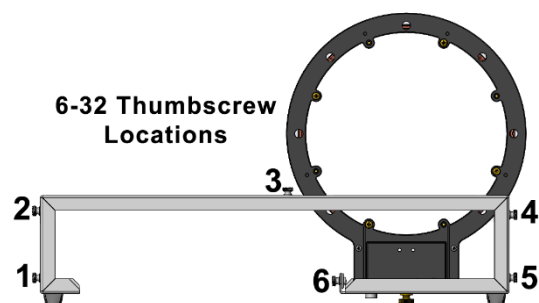
2. Secure the coil with the 1/4 x 20 brass screw that is stored in the platform.



3. Remove the six 6-32 brass screws from the right side of the platform. Slide the left side of the platform into the right side, with the right side overlapping the left side.

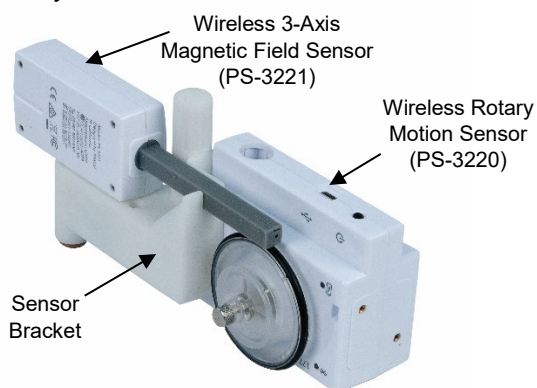


4. Secure the right side to the left side using the six 6-32 brass screws.



## Sensor Assembly

1. Remove the two black thumbscrews from the Sensor Bracket.
2. Put the O-ring (included with PS-3220) on the largest step of the 3-step pulley and put the pulley on the Wireless Rotary Motion Sensor (PS-3220).
3. Use one thumbscrew to attach the Wireless Rotary Motion Sensor to the Sensor Bracket.



4. Position the probe of the Wireless 3-Axis Magnetic Field Sensor (PS-3221) over the pulley of the Rotary Motion Sensor. Then secure it in place with the other black thumbscrew.

## Technical Support

For assistance with any PASCO product, contact PASCO at:

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

Phone: +1 916 462 8384 (worldwide)  
8700-772-8700 (U.S.)

Web: [www.pasco.com](http://www.pasco.com)

Email: [support@pasco.com](mailto:support@pasco.com)

The Reference Guide will be updated periodically. For the latest revision of this Reference Guide, visit the PASCO Web site at

[www.pasco.com/manuals](http://www.pasco.com/manuals)

and enter the product number, EM-6720, in the text window.

## Replacement Parts

For information about possible replacement parts, contact Technical Support:

### Limited Warranty

For a description of the product warranty, see the PASCO catalog. For more information visit [www.pasco.com/legal](http://www.pasco.com/legal).

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