**Force Sensor Track Bracket**

**ME-6622**

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**Introduction**

Use the ME-6622 Force Sensor Track Bracket to mount a force sensor on a PASCO track. The included bumpers can be attached to the force sensor or directly to the Bracket for collisions with a PASCO cart. When not in use, the bumpers are stored on the back of the Bracket.

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**Included Equipment and Features**

1. Bracket
2. T-screws for mounting on track (4 pieces)
3. Rubber Bumper
4. Clay Holder
5. Magnetic Bumper
6. Light Spring Bumper
7. Heavy Spring Bumper
8. Track Rail (upper)
9. Square Nuts (4 pieces)
10. Thumb screw for attaching force sensor
11. Bracket Platform
12. Track Rail (lower)
Clay (not shown)
**Attach a Force Sensor**

To attach a force sensor to the Bracket, align the thumbscrew on the Bracket with the larger of the two threaded holes on the top of the force sensor.

Screw the thumbscrew into the force sensor until the sensor fits snugly against the bottom of the Bracket platform.

**Mount the Bracket on a Track**

The Force Sensor Track Bracket can be mounted on a PASCO track in two ways. To mount the Bracket on a track with the bracket platform facing down, loosen the thumbscrews so that the square nuts on the lower track rail can slide into the “T-slot” on either side of a PASCO track. Align the square nuts of the lower track rail with the “T-slot” on the track, and slide the Bracket onto the track. Tighten the thumbscrews to hold the bracket in place on the side of the track.

The Bracket can be fastened to the T-slot on either side of a PASCO track. The top edge or the bottom edge of the Bracket can be attached to the track. If the Bracket Platform faces down, then a Force Sensor mounted under the platform will be level with a PASCO cart on the track.

Also, a bumper mounted on the front of the Bracket Platform would be level with a Force Sensor mounted on a PASCO cart.

If the Bracket is mounted so that the flat surface of the Bracket Platform faces upward, a Force Sensor mounted on the Bracket Platform will be level with a Force Sensor mounted on a PASCO cart.
Using the Collision Bumpers

To use a collision bumper, unscrew it from the storage hole and attach it to the end of the Force Sensor in place of the detachable hook, or attach it to the threaded hole in the Bracket Platform end stop.

**Spring Bumpers:** The two spring bumpers can be used for partially elastic collisions.

**Rubber Bumper:** The rubber bumper will dampen a collision. For example, if the Force Sensor is mounted on the Bracket Platform, and the rubber bumper is attached to the Force Sensor, then a cart that collides with the rubber bumper will rebound with less speed (than if it had collided with a spring bumper).

**Collision Cup:** The collision cup can be filled with a small amount of clay (included). If the clay is formed into a cone shape, the hook on the front of the Force Sensor will stick to the clay for an inelastic collision.

**Magnetic Bumper:** The magnetic bumper can be used for elastic collisions. For example, if the Force Sensor is mounted on the Bracket in the lower position, and the magnetic bumper is attached to the Force Sensor, then the bumper will repel a PASCO cart that has magnets in its end cap.

The magnetic bumper has a small pin next to the screw. This pin fits into the small hole next to the threaded hole on the end stop of the Force Sensor Track Bracket. The pin keeps the bumper from rotating during collisions.

The Bracket is designed for use with PASCO dynamics tracks and all types of PASCO carts and force sensors. The table below is a partial list of compatible equipment.

### Force Sensors

<table>
<thead>
<tr>
<th>Force Sensors</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASPORT Force Sensor</td>
<td>PS-2104</td>
</tr>
<tr>
<td>Wireless Force-Acceleration Sensor</td>
<td>PS-3202</td>
</tr>
<tr>
<td>ScienceWorkshop Economy Force Sensor</td>
<td>CI-6746</td>
</tr>
<tr>
<td>ScienceWorkshop Force Sensor</td>
<td>CI-6537</td>
</tr>
</tbody>
</table>

### Dynamics Track Systems

- See the PASCO catalog or the PASCO website at [www.pasco.com](http://www.pasco.com) for the latest information on Dynamics Track Systems

### Carts

<table>
<thead>
<tr>
<th>Carts</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAScar - Red</td>
<td>ME-6933</td>
</tr>
<tr>
<td>PAScar - Blue</td>
<td>ME-6934</td>
</tr>
<tr>
<td>PAScars (set of two)</td>
<td>ME-6950</td>
</tr>
<tr>
<td>Wireless Smart Cart - Red</td>
<td>ME-1240</td>
</tr>
<tr>
<td>Wireless Smart Cart - Blue</td>
<td>ME-1241</td>
</tr>
<tr>
<td>Plunger Cart</td>
<td>ME-9430</td>
</tr>
<tr>
<td>Collision Cart</td>
<td>ME-9454</td>
</tr>
</tbody>
</table>

### Replacements

PASCO offers a Bumper Accessory Set (ME-9884) that includes the Heavy Spring, Light Spring, Collision Cup, and clay. The Magnetic Bumper Set (ME-9885A) includes two magnetic bumpers that are like the one that comes with the Force Sensor Track Bracket.
Parts Storage

When not in use, the various parts can be attached to one side of the Force Sensor Track Bracket as shown.

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.)
Web: www.pasco.com
Email: support@pasco.com

Limited Warranty
For a description of the product warranty, see the PASCO catalog.

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