

Plunger Cart

ME-9430

The Plunger Cart is a 500-gram cart with an aluminum body and ABS end caps. It is the companion to the Collision Cart (ME-9454), which is red and does not have a spring plunger. The different colors make it easier to keep track of each cart during collision studies. The cart includes magnets, and hook and loop pads for exploring elastic and inelastic collisions. The cart is compatible with all PASCO Dynamics Tracks and accessories.

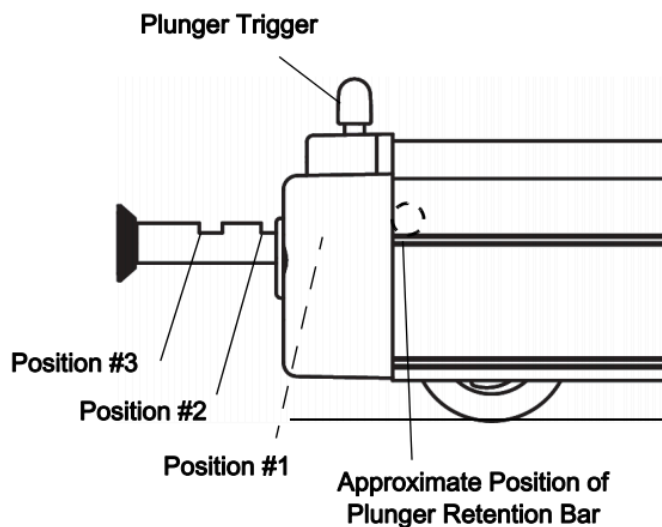
Part descriptions



1. **Wheels**
The wheels are mounted to low-friction ball-bearings. The wheels retract into the body so that they are protected from drops or being stepped on. The wheels are designed to fit in the grooves on PASCO tracks.
2. **ABS End Caps**
3. **Magnets**
Use for elastic collision experiments.
4. **Upper Tie Point**
Use for attaching a string or springs (ME-8999) to the cart.
5. **Slot**
Use for inserting a Cart Picket Fence (ME-9804).
6. **Mounting Holes**
Use the threaded holes to attach various accessories.
7. **Accessory Tray**
Use to hold Cart Masses (ME-6757A).
8. **Plunger Trigger**
Use to release the spring plunger to launch the cart or for explosion experiments.
9. **Hook and Loop Pads**
Use for inelastic collision experiments.
10. **Lower Tie Point**
Use for attaching a string to pull the cart.

Plunger operation

The plunger is used to launch the cart from a stationary object or another cart. It can be set at three different positions to launch the cart at three different speeds.



CAUTION: The plunger comes out rapidly when the trigger is pushed. Do not hold the plunger end of the cart next to your eyes to prevent injury.

The plunger has three indentations on its top side. Inside the cart is a retention bar located above the plunger. The plunger locks in place when an indentation lines up with the retention bar. To operate the plunger:

1. Apply a slight upward force on the plunger and push the plunger into the cart until it locks.
2. To place the plunger in the next position, push down on the plunger to release it, then repeat step 1.
3. Place the end of the plunger next to an object.
4. Push the plunger trigger to launch the cart.

Tip: Use a ruler to tap the trigger to avoid applying a force on the cart as it launches.

Replacing the axles

The bearings inside the axles may become damaged from dirt and other contaminants over time. Replacement axles are available as item ME-6957.

Additional resources

Product information

Visit the product web page at [pasco.com/product/ME-9430](https://www.pasco.com/product/ME-9430) for additional information including:

- Specifications
- Buying Guide
- Experiments
- Documents



Experiments

Print-ready experiment worksheets are available to download from the PASCO website. Go to [pasco.com/freelabs](https://www.pasco.com/freelabs) and enter **ME-9430** in the **Part No.** field.

Technical Support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to provide assistance with this or any other PASCO product.

Phone (USA)	1-800-772-8700 (Option 4)
Phone (International)	+1 916 462 8384
Online	pasco.com/support

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Limited Warranty

For a description of the product warranty, see the Warranty and Returns page at www.pasco.com/legal.

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