

## Mechanics Module 4 – Equipment List and Setup

What	Qty	Activities
2.2 meter Track, Pasco ME-9452	1	1, 2
Collision Cart, Pasco ME-9454	1	1, 2
Cart pin	1	1, 2
Motion Sensor II, Pasco CI-6742	1	1, 2
Economy Force Sensor, Pasco CI-6746	1	1, 2
Cart bolt for Force Sensor	1	1, 2
Homemade spring bumper for the Force Sensor	1	1, 2
DAQ board, homemade	1	1, 2
End Stop	1	1, 2
C-clamp (3")	1	1, 2
Level	1	1, 2

### Setup Notes:

The Force Sensor should be mounted on the Cart, and have the spring bumper attached to it.

The feet brackets should support the Track at about 60 cm and 150 cm as measured on the Track's scale. They should be mounted so their thumbscrews are on the same side of the Track as the scale.

The Track should be set up with the end with the smallest reading on the scale closest to the wall. The Track should be leveled and the feet locked.

The Motion Sensor should be mounted on the end of the Track closest to the wall. Note that there is no End Stop on the other end of the Track. Instead, that end of the Track should be just next to the vertical rod so the spring bumper on the Force Sensor will collide with it.

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updated Dec. 11, 2009 by Jason Harlow and Lilian Leung

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