

611-0250 (40-170) Force Board

Description:

The board is 55 cm in diameter, constructed of tempered masonite. Rows spaced 10° apart and in a series of concentric circles at measured distances from the center.

Each board includes 3 clips, 3 scale holders and a wire harness. Spring scales may be ordered separately.

Warranty and Parts:

We replace all defective or missing parts free of charge. Additional replacement parts are available. We accept Mastercard, Visa or School P.O.'s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear.

Additional Materials Needed:

- 3 spring scales
We recommend Ohaus Model 8002-NO.
- 29-1207 Spring Scale
- Paper
We recommend 22-2242 Disposable Lab Paper in circular shape 12" in diameter.

P/N 24-4170.

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Unpacking and Operation:

Remove spring scales from carton and slide each one all the way into a scale clip. Attach each scale to the wire harness. Plug each clip into a selected hole. (The center of the harness is now about 12 mm above the board's surface.) Slide a piece of paper under the harness, mark the harness center and trace the position of the harness arms. Read and record each scale's reading near the appropriate line.

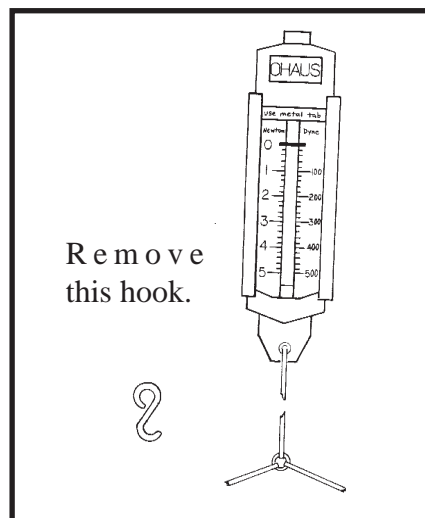
The scales are zeroed by simply sliding the face of the scale. Errors due to parallax can be reduced by placing a notebook or magazine under the paper to raise it to the height of the harness ring. You may wish to number or mark the holes in the board for reference.

How to attach 3-Wire Harness to Spring Scale:

1. Remove hook from bottom tab.
2. Twist with pliers to open loop or cut off. Hole in tab is required for 3-wire harness.
3. Repeat for total of three scales.

Concepts: Vectors and scalars; vector addition and resolution; components, resultant and equilibrant. Graphical, analytical and experimental methods of vector addition and resolution. Force as a vector - Newton's Second Law.

Curriculum Fit: PS/ Motion and Force. *Unit: Causes of Motion.* Grades 11-12.



Related Products:

611-0255 Force Table. Good low-cost lab for studying force and vectors. 40 cm disc with two 360° scales, 4 low-friction pulleys, weight-pan harness, 4 weight pans, instructions with graphs and tables. Cast base.

611-0095 Disposable Lab Paper for Force Board or Force-Table - New! Pad of 50 circular, heavyweight sheets of paper for a new twist on a lab students may find difficult. 12" in diameter. Do your calculations right on the sheet, discard when done.

