All dimensions, including those locating the pivot point on the central rod, are exactly the same for the two similarly shaped pieces. The only difference in the two pieces is that the cylindrical weights on one (painted red) are brass, whereas the weights on the other (painted orange) are aluminum. The design is such that the center of gravity (cg) of one is well below the point whereas for the other it is just slightly above the point.

Place the piece with brass weights with its point in the slight depression in the top of the tripod rod. The piece stands upright. That it is quite stable can be shown by tipping the piece well to one side and releasing it.

Now place the piece with aluminum weights in an upright position with its point in the depression. It tilts at an angle or roughly 30° with the vertical. (See WARNING.) It would fall completely except that the design is such that when tipped at this angle the side of the conical point rests on the raised side of the depression. The cg is below this new point of contact. Hence the piece remains on the tripod rod, tipped at an angle.

With the longitudinal dimension of the knife edge pointed toward the students, place first one and then the other piece on the knife edge with the point directly over the sharp edge. (A stop is provided to facilitate accurate placement of the point.) Observe that the cg of the one piece is well below the point whereas the cg of the other piece is somewhat above the point.
**WARNING:** Do not allow this piece to fall. Although it will remain in a stable position after once coming to rest, the situation is so nearly critical that in falling from an upright position the piece will sometimes overshoot and fall completely if it is not caught.