

The Veritas® Beam Compass Heads can scribe or draw arcs and circles of radii limited only by the length of the beam to which they are attached.

Each set contains two sliders that can be clamped to any wooden beam between $\frac{5}{8}$ " and $\frac{3}{4}$ " thick. Within each slider is a hardened pin that bears into the wood ahead of the end of the clamp knob, ensuring that it does not slip on the beam during use. Unscrewing the clamp knob also withdraws the pin for rapid removal from the beam. Two hardened steel points (one centered and one offset for fine adjustments) and a pencil are also included. Each slider incorporates a trapped O-ring that provides drag on the point and prevents it from falling out during adjustment. All components fit in the hard-shell case for safe storage and protection.

Assembly

Because there is no limitation on the length of the beam, shop scraps and offcuts can be used to make beams at the job site. Cut a $\frac{5}{8}$ " to $\frac{3}{4}$ " thick wooden beam a few inches longer than the radius of the circle or arc you wish to make. Its height should be at least $\frac{3}{4}$ ", which may be increased to maintain rigidity on longer spans.

Retract the lock knob in one slider. Install the offset point as shown in **Figure 1**. Rotate the point so the offset is in the neutral position (i.e., the point is closest to the lock knob). Secure the point in place by tightening the lock knob.

To scribe an arc in wood or soft metal (e.g., brass or aluminum), install the centered point in the other slider in a similar manner, except this one does not have to be rotated to any particular orientation. To draw an arc, install the pencil in lieu of the centered point.

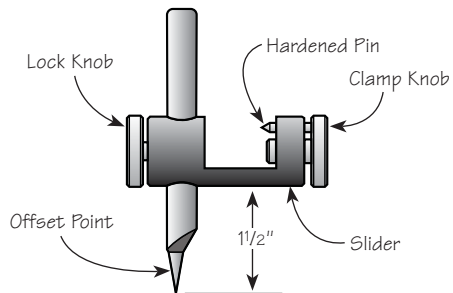


Figure 1: Offset point in neutral position.

Secure each slider onto the beam as shown in **Figure 2**, locking each clamp knob so the distance between points is within $\frac{1}{16}$ " of the required radius.

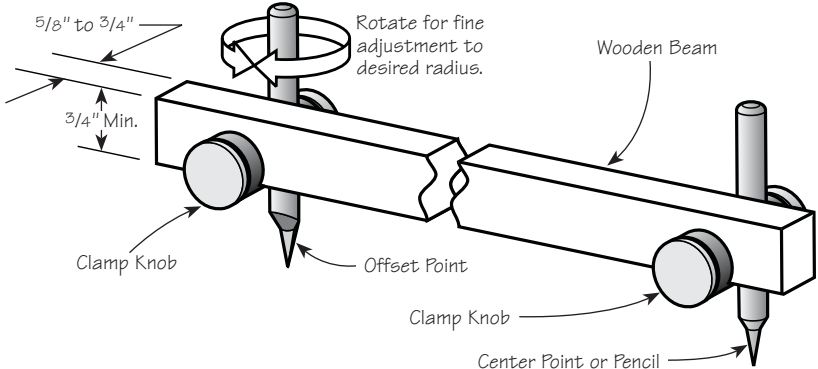


Figure 2: Securing onto wooden beam.

Use

Check the point-to-point/pencil distance. If within $\frac{1}{16}$ ", this distance can be finely adjusted to the desired radius by loosening the lock knob slightly on the slider with the offset point. Rotate the point to desired location and retighten the lock knob. Because the point is offset with respect to the shank by $\frac{1}{16}$ ", the point will move $\frac{1}{8}$ " as it is rotated through 360° .

Scribe or draw your arc as you would with any trammel or large compass.

Cutting

Our beam compass heads can be converted into a circle cutter by replacing the pencil with an X-Acto® knife.

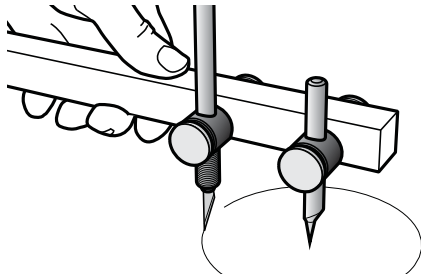


Figure 3: Cutting circles.