INSTRUCTIONS
⚠ Keep this sheet for your records.

FORESTRY SUPPLIERS

Jim-Gem® Wheeler Pentaprism Caliper

No. 59702
Jim-Gem Wheeler Pentaprism Caliper

The Jim-Gem Wheeler Pentaprism Caliper is used as a precision optical-prism device to accurately measure tree diameters at DBH, or any height point from any clear, convenient sight position. The caliper contains two pentaprisms, one fixed and one movable, which are mounted in a tubular metal frame permitting simultaneous viewing along parallel lines of sight to the tree being measured. The caliper is constructed to measure stems from 3″ to 24″ (7cm to 62cm), and is accurate to 1/10 inch (±2 mm).

How the Jim-Gem Wheeler Pentaprism Caliper Works

"In effect, the pentaprism caliper may be compared to an imaginary giant wooden caliper that can be clamped on a tree stem at any point and from any distance without special calibration. Two pentaprisms, one fixed and the other movable, are mounted so that extended parallel lines of sight may be viewed simultaneously." (Forest Measurements, T. Avery.)

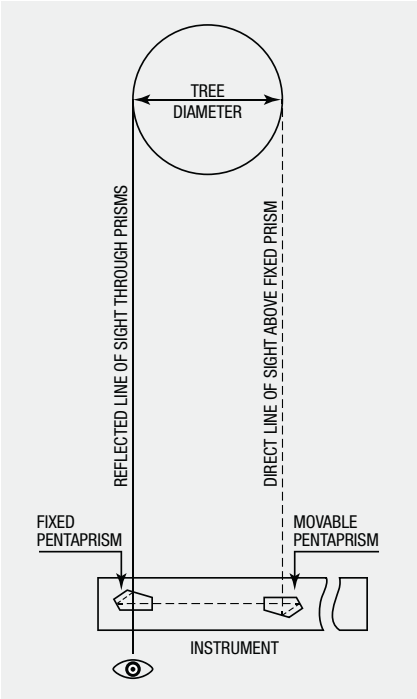
By sliding the pointer connected to the movable pentaprism, the right edge of the tree stem is brought into direct vertical alignment with the left edge which is viewed directly. When this alignment occurs, the tree diameter may be read by noting the position of the pointer on the English/Metric scale located on top of the caliper

The Jim-Gem Wheeler Pentaprism Caliper can be easily calibrated.

To calibrate, set up a target of known width. Measure it with the Jim-Gem Wheeler Pentaprism Caliper from a distance of about 10 feet and again from a distance of 50 feet. Loosen the pointer screws and adjust the pointer position to read the same as the known-width target. Tighten the screws.

The Jim-Gem Wheeler Pentaprism Caliper can also be used in determining upper height stem diameters.

The Jim-Gem Wheeler Pentaprism Caliper may also be used with a clinometer or hypsometer to determine height measurements at which upper height stem diameters were taken.



PRODUCT SUPPORT

800-430-5566

If you need more information or some expert advice from an experienced professional, call our Product Support team.

SALES

P 800-647-5368
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Our sales department will gladly take your order, update you on pricing, or fax an order form.

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FORESTRY SUPPLIERS

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MI1385 0M Rev 05/21

INSTRUCTIONS FOR USE

The Jim-Gem Wheeler Pentaprism Caliper Makes Measuring Tree Diameters As Easy As 1-2-3.

1. Sight the tree.

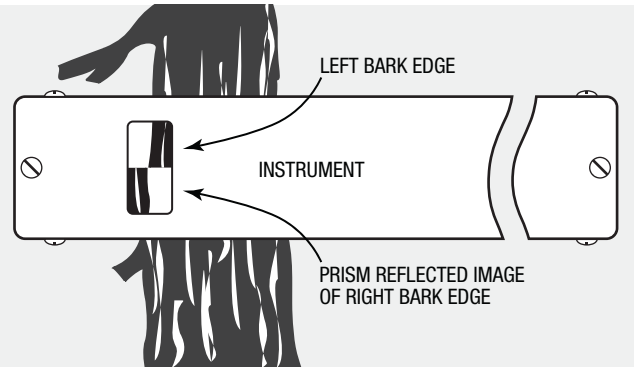
Holding the caliper 3″ to 4″ from your eye and looking through the upper half of the viewing slot,sight and "center" the left edge of the tree. Keep the left edge centered.

2. Slide the pointer.

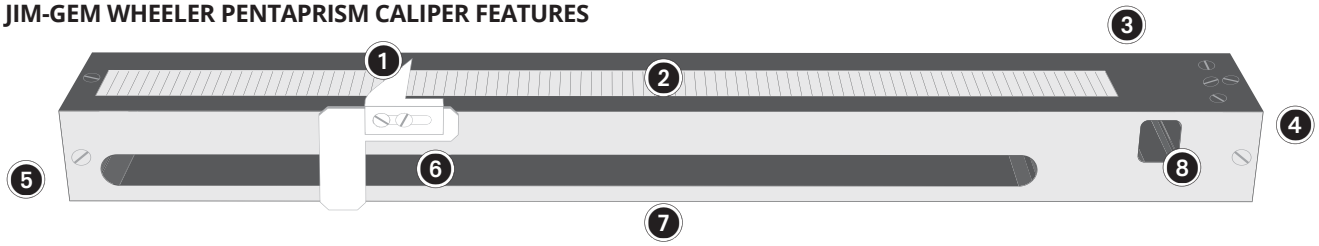
Now, looking through the lower half of the viewing slot, slide the movable pointer with your right hand until you see the right edge of the tree. Continue sliding the pointer until you see the right edge of the tree in direct vertical alignment with the left edge -midway between the two vertical guidelines. (See illustration.)

3. Read the scale.

Read the diameter in inches and 10ths or centimeters and millimeters as indicated by the pointer on the scale.



JIM-GEM WHEELER PENTAPRISM CALIPER FEATURES



1 **Pointer** slides along the scale and indicates diameter measurement. Pointer screws allow calibrationadj ustment for accuracy.

2 **English/ Metric Scale** reads in inches and 10ths of inches and in centimeters and millimeters.

3 **Viewing Slot** (not visible in illustration) through which you sight the tree and view alignment of tree images.

4 **Upper Half of Viewing Slot** allows direct view of the left edge of tree.

5 **Durable Aluminum Housing** protects fixed and movable pentaprisms from damage.

6 **Movable Pentaprism** is connected to the pointer and slides back and forth with it allowing "edge to edge" alignment of tree images.

7 **Threaded Mount** for mounting caliper on optional camera tripod for increased precision.

8 **Fixed Pentaprism In Lower Half of Viewing Slot** (not visible in illustration) receives image of right edge of tree from the movable pentaprism and reflects it to your eye.

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