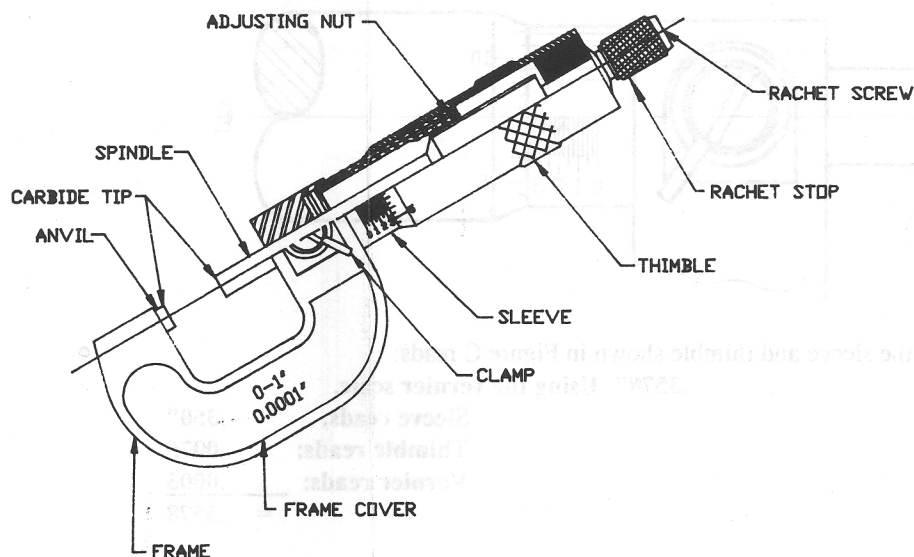


INSTRUCTIONS FOR LYMAN'S MICROMETER MODELS

VERNIER MICROMETER #7832230
DIGITAL MICROMETER #7832234

Your new Lyman 1" micrometer is designed to be an accurate instrument that will provide a life-time of use with proper care. Please review the illustration below which identifies the various parts referred to.



Care and Use of Lyman Micrometers

The most important procedure in maintaining your micrometer is to keep it free of dirt, dust, chips, water and corrosive atmospheres. Before each use, the micrometer's anvil and spindle faces should be cleaned with gauze or soft paper. After use, the micrometer should be wiped clean with a soft cloth. Do not attempt to disassemble the micrometer. Adjust the micrometer only after carefully reading these instructions.

Lyman micrometers are equipped with ratchet stops. The ratchet stop allows consistent, accurate measurements by allowing the spindle to stop after a predetermined pressure is reached. Lyman recommends that the ratchet stop should always be used when measuring parts to insure accurate results.

CAUTION: If the ratchet stop is not used it is possible to over-tighten and distort the frame.

How to Read Lyman Micrometers

The thimble of the Lyman Micrometer is divided into 50 equal parts by horizontal lines. 25 divisions with longer lines represent one thousandth (.001) of an inch, while 25 short lines between the longer lines represent a half-thousandth of an inch. One revolution of the thimble therefore represents 25 thousandths (.025") of an inch. The sleeve has a reading line that is divided into 40 equal parts by vertical lines over a 1 inch span. Each line therefore equals 1/40 of an inch or .025". Each fourth line, which is longer than the others, designates hundreds of thousandths. For example, the line marked 1" represents .100", the line marked 2" represents .200", etc.

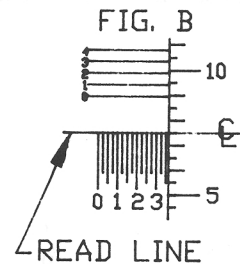
To read the micrometer in thousandths, multiply the number of vertical lines on the sleeve by .025", and to this add the number of thousandths and half-thousandths indicated by the line on the thimble which coincides with the reading line on the sleeve.

The digital micrometer can be read directly in thousandths of an inch simply by reading the numbers visible on the dial.

To read the micrometer in ten-thousandths (.0001), proceed as above, with one additional reading. The ten-thousandths reading is obtained from a vernier scale located above the reading line on the sleeve. The vernier scale consists of 5 horizontal lines numbered 1 thru 5. To read in ten-thousandths, first obtain the thousandths reading, then see which of the vernier scale lines coincides with a line on the thimble. If it is the line marked 1" add one ten-thousandth; if it is the line marked "2" add two ten-thousandths; etc.

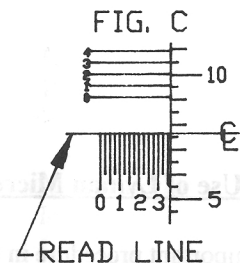
**.3575" Note that the sleeve reads
Add the thimble reading**

$$\begin{array}{r} .350 \\ + .0075 \\ \hline = .3575'' \end{array}$$



.3578" Using the vernier scale.

Sleeve reads: .350"
Thimble reads: .0075
Vernier reads: .0003
= .3578



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