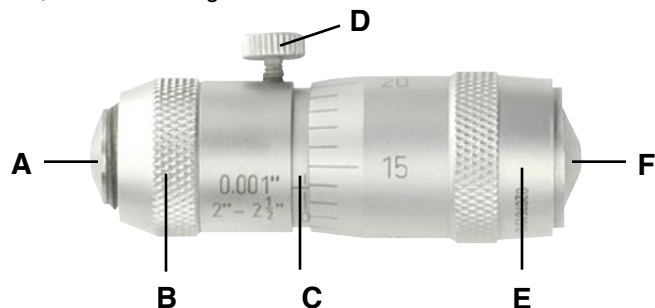


Please read through this owners manual carefully before using your new tool. Use your tool properly and only for its intended use.

## **Fowler** 2 to 12" Extension Rod Inside Micrometer

### 1. Explanation and Components

The Extension Rod Inside Micrometer allows a wider range of inside measurements by combining a single micrometer head with several extension rods. Because the extension rod is protected by a tube and retained to the micrometer head with a spring, the micrometer is unaffected by external force and temperature variations, thus minimizing errors.



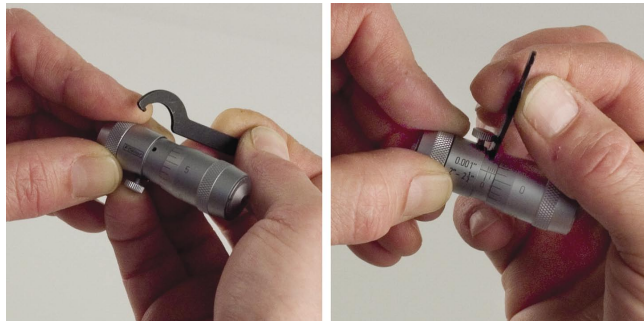
- |                        |                             |
|------------------------|-----------------------------|
| <b>A.) Fixed anvil</b> | <b>D.) Clamp screw</b>      |
| <b>B.) Nut</b>         | <b>E.) Thimble</b>          |
| <b>C.) Sleeve</b>      | <b>F.) Adjustable anvil</b> |

### 2. Cleaning and inspection

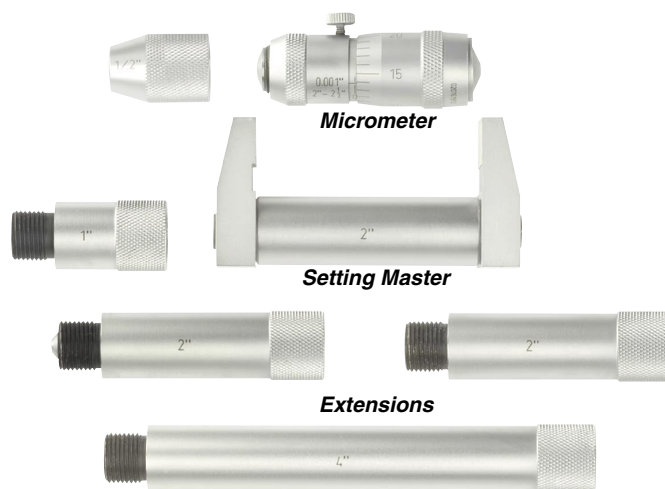
Before using, wipe off all lubricants and dust from the micrometer head and the extension rod assembly.

### 3. Adjustment of the reference point using the setting master

- Turn the thimble to make the length of the micrometer head slightly shorter than the reference dimension, then insert the micrometer head between the surfaces of the setting master.
- Keep the fixed anvil lightly in contact with either surface of the master and turn the thimble to advance the spindle so that the adjustable anvil contacts the other measuring surface of the master. If the reading shows an error, use the spanner provided to turn the sleeve so that the fiducial line aligns with the reference point.



*Adjustment of the sleeve using the spanner.*

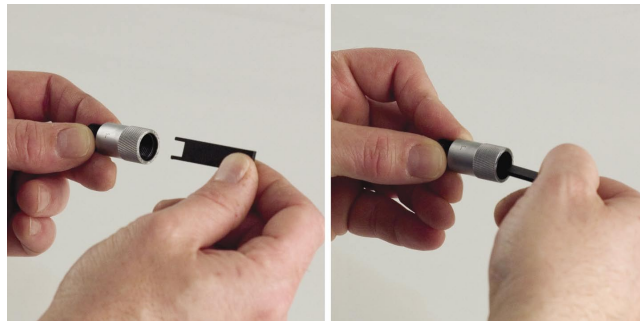


### 4. Measuring Procedure

Before taking a measurement, clean the anvils, contract the micrometer slightly shorter than the dimension to be measured, and insert the micrometer between the two surfaces to be measured. Contact the fixed anvil (extension rod side) to either surface and turn the thimble to advance the spindle until the head side anvil lightly contacts the other surface. Perform the measurement at several points.

### 5. Precautions

- Make sure that the measuring surfaces of the micrometer properly contact the surfaces of the part to be measured.
- To prevent reading errors, take the proper measuring posture so that your eyes are on the same level with the spindle.
- Do not apply excessive force to the micrometer. Such abuse will degrade the accuracy of the micrometer.
- Do not force out the micrometer or measured object while the micrometer is set in the measuring condition. Otherwise, the measuring surfaces of the micrometer may be damaged.



*Disassembly of the extensions for cleaning.*