## Minor Diameter Gage – MinorChek™ – Operating Procedures

**Purpose:** The MinorChek™ is used for measuring the minor diameter of screw threads. The lower anvil knife edge fixture is fully adjustable to align with the pitch of your fastener, and rotatable to align to the given helix angle. The upper knife edge probe is positioned into the thread groove on the top side of the fastener being measured.



## Setting up the MinorChek™

1. Use the adjusting knob on the back side of the upper arm to adjust the indicator downward so the knife edge probe is close to or touching the lower knife edge anvils.



2. Move the lower knife edge anvils apart as far as they will go and place the .200" diameter setting pin across them approximately in the middle. Drop the upper knife edge probe onto the top side of the master setting pin.





## **Presetting the Indicator:**

- 1. Press the set/preset button shortly so that a "p" starts to flash in the upper right hand corner of the display.
- 2. Press and hold the set/preset button and observe it as the "+" sign starts to flash, continue holding it until the first numerical digit begins to flash. If you continue to hold the set/preset button each digit will sequentially begin to flash from left to right. Release the set/preset button to stop the advancement to the next digit.
- 3. We want to preset the size of the master pin, so in this case it is .20000". When you index to the first digit after the decimal place, release the set/preset button. Depressing it shortly now will start to increment the numbers 1 thru 9 until you stop. Depress it shortly twice so that "2" appears in the first decimal position.
- 4. Press and hold the set/preset button in order to accept that value and move onto the next digit. Continue to index through the trailing zeros until the "p" starts to flash again in the upper right corner of the screen and release the button.
- 5. Shortly depress the set/preset button one more time to accept the preset.

Note: you only need to perform this sequence when you change the battery, as the gage should be preset when you get it. Once the preset is set up, all you have to do is press the set/preset button shortly twice with the pin between the anvil and probe to set the gage.



## **Measuring Product:**

1. Adjust the lower knife edge anvils to the proper spacing to align with the pitch of the screw you are measuring.



2. Lift the upper knife edge probe out of the way, and place the fastener onto the lower knife edge anvils. Make sure to settle the anvils into the thread grooves, and drop the upper knife edge probe into the groove on the top side of the fastener.

Note: the base should rotate to the helix angle automatically, however you can fine tune that positioning by hand.

