

## Using a feeler gauge to set the machine position on a CNC Router or Milling machine.

This technique allows you to set X, Y and Z without actually touching the part or material to be machined.

You will need:

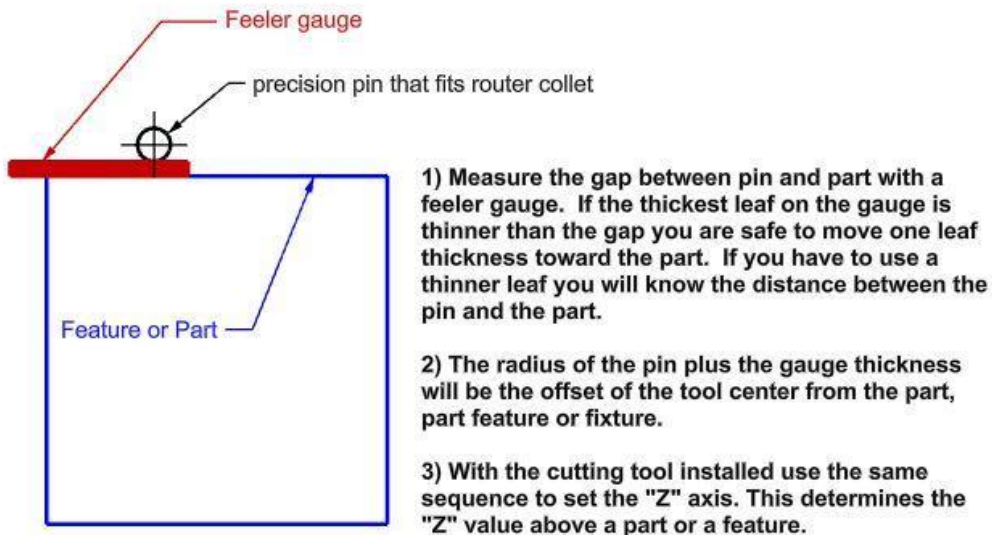
- 1) A feeler gauge with an assortment of leaves



- 2) An accurate pin that fits the router collet. The diameter of the pin does not have to match the intended cutter. This is more accurate than using the fluted end of a cutter.

Process:

In Rhino, use **Ordinate Dimension** and **Analyze Point** to determine the values of X, Y and Z features in the model or fixture. Make sure to note if values are **positive** or **negative**.



Use Move settings of .001 or .010 to move each axis to a distance of less than the thickest leaf in the gauge set. Example: if the thickest leaf is .032 you can safely move the machine 3 steps of .010 and then measure again. Once closer than the thickest leaf, find the leaf that fits and use this value for your calculations.