

# Instructions for Calibrating and Use of the Valve Guide Level

## CAUTION:

READ and FOLLOW the instructions below for repeatable and accurate setup and use of the Valve Guide Level

Step one is to make sure you level your machine with a high precision machinist level going off the bed surface that the cradle floats on. It is extremely important to get the machine leveled as perfectly as possible.

Once the machine is level, you can now calibrate the Valve Guide Level to the spindle of your machine. First loosen and back off the screw in Figure 1 just enough to clear the Pilot hole so that a pilot will fit in from the top side.

Figure 1



Place a Valve Guide Pilot in the chuck of your machine with the top of the pilot facing down then slide the level up onto the pilot as shown in Figure 2. Use the nuts on one side of the level vial to calibrate it to read level in this position.

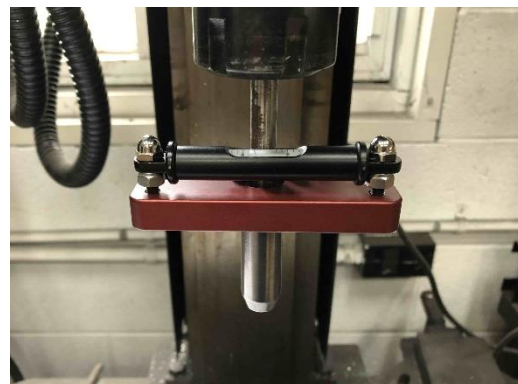
Once the level is set to read level in this position and the nuts are tight then pivot the level 90



Figure 2

degrees counterclockwise looking down from the top of the machine as shown in Figure 3. The level will most likely be slightly off and should not be reset in this position. Take note of the bubble position while the level is in this position. Now re-tighten the screw in Figure 1

Figure 3



## Cylinder Head Setup

Mount a cylinder head in the cradle and install a valve guide pilot in the valve guide to be worked on. Place the level in the position shown in Figure 2. Adjust head until it reads level. Now pivot the Level to the position in Figure 3 and adjust head until the bubble is in the same position you noted during Level Setup. Your valve guide is now in alignment with the machine spindle and machine work can begin.

