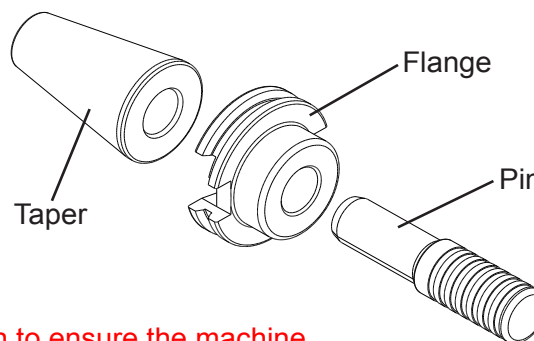


Overview

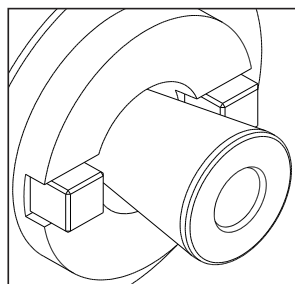
The tool changer alignment gauge is designed to verify correct alignment of the machine spindle to the tool changer. The gauge consists of three pieces as shown in the diagram. Also included (not shown) is a screw to hold the taper when it is installed in the spindle.



WARNING: Be sure appropriate steps have been taken to ensure the machine is safe to work on before proceeding.

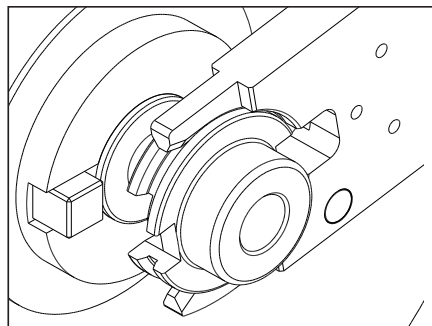
1. Clamp the taper in the spindle

Install a retention knob appropriate to the machine into the taper. Using the included screw to hold the taper, clamp the taper into the machine spindle as you would any other tool. Once clamped, remove the screw.



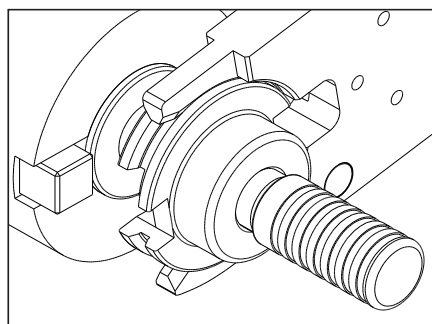
2. Insert the flange into the tool changer gripper

With the flange held in the tool changer gripper, move the tool changer mechanism in close proximity to the spindle. The groove in the bottom of the flange allows the tool changer gripper to move freely relative to the spindle.



3. Insert the pin

Adjust the tool changer and/or spindle as needed. When the pin passes through both the flange and taper, the tool changer and spindle are axially aligned. Next, verify that the Flange and Taper faces are parallel and flush to each other.



4. Radial alignment

To align the tool changer radially relative to the spindle drive keys, rotate the spindle or tool changer gripper assembly (depends on machine design). Once the notches on the flange contact the spindle drive keys as shown to the right, the spindle is aligned radially relative to the tool changer.

