



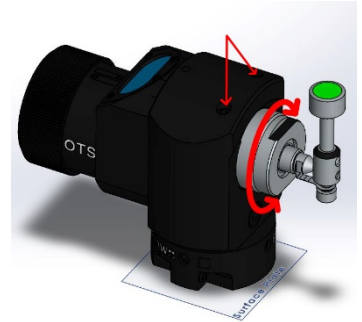
exactengineering STS-A INSTALLATION REV 1.0

436 SHATTUCK WAY · NEWINGTON, NH · 02494 · 603-319-4995 · WWW.EXACTENGINEERING.NET

1. Remove Renishaw tilt base by loosening the six set screws.

- a. Place the Renishaw tool probe on a surface plate and check button top surface parallelism to the bottom of the aluminum housing. Set it to be less than .005" by using the two rotation lock screws. Note: the only adjustment is the one rotation axis.

1



2. Install Renishaw probe on STS-A Base using the 4 set screws for the ring and two set screws to clamp the pin.

- a. If you need to rotate the probe on the base, the pin can be pressed out and relocated to one of the six holes. To do so, remove the magnet holder to access the pin backside.

2



3. Install T-nut in machine by tightening the pre-installed set screws.

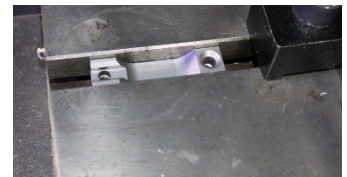
Torque to:

4. Leave the adjuster with the swivel ball as set from factory for now. It

should be .050" below the base.

- a. With the STS-A tilted, carefully lower the STS-A onto the t-nut such that one fixed ball adjuster sits in the cone, the other in the v-slot. You might need to extend the two fixed ball adjusters for them to reach the t-nut.

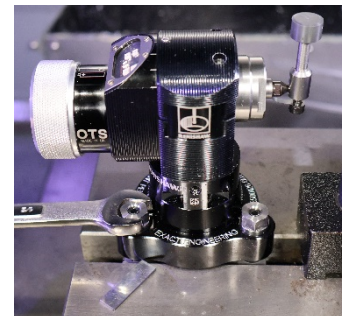
3



- b. Now lower the 3rd adjuster to contact machine table and allow the swivel ball to self-align to machine table.

- c. Using a .050" gage block or similar and ½" wrench, rotate each adjuster to set the gap at each adjuster to .050". This rough levels the STS-A to the machine.

4



- d. Using an Allen key and ½" wrench, tighten the set screw on each adjuster such that there is resistance to turning the adjuster. Doing this is **IMPORTANT** as it removes all thread clearances and eliminates creep on final lockdown of the adjusters.

5. Level the probe button to the table as you normally would using only the 3 adjusters.

5

- a. Lock each adjuster by further tightening its set screw.
b. Re-check button alignment.
c. Repeat taking off and placing the STS-A to ensure it seats properly. Check the parallelism to verify.

