

**FOR ALL STANDARD AND SMALL BODY POSITIVE STOP  
LOW PROFILE TRUE LENGTH COLLET CHUCKS  
(5CTL, 16CTL, 2JTL, 3JTL, 22JTL, S20TL, S26-TL)  
For American Std. and Select Flat-Nose Spindles**

***Mounting Instructions:***

- 1) Remove existing chuck, fixtures and any face plate attachments. Thoroughly clean the mounting surface of the spindle free from any chips or debris.
- 2) Clean both the spindle side and the chuck side of mounting plate.
- 3) ***For shipping purposes, the drawtube adapter may already be threaded into the collet actuator. Make sure that the drawtube adapter is completely tightened into the collet actuator.*** If the drawtube adapter is shipped unassembled with the system or packaged separately, place the collet chuck assembly down, mounting flange end up, thread the drawtube adapter into the collet actuator, completely tighten.
- 4) Clean the plate bore of the collet chuck after installing the drawtube adapter.
- 5) **AMERICAN STANDARD SPINDLES:**  
Line up the machine's drive pin, located on the machine's spindle, with one of the drive pinholes located on the mounting plate. Place the mounting plate onto the machine's spindle. Secure the mounting plate onto the machine's spindle with the supplied mounting bolts. Install and completely tighten the mounting bolts in an alternating sequence, (crisscross). Verify proper installation of the mounting plate; place a .0001" dial indicator on the face of the mounting plate to ensure a .0001" indicator reading.  
**SELECT FLAT-NOSE SPINDLES:**  
Most select flat-nose spindles **WILL NOT** have a drive pin located on the machine's spindle or a drive pinhole located on the collet chuck mounting plate. For select flat-nose spindles, do not completely tighten mounting bolts, this allows the mounting plate to be properly indicated to the spindle. With a .0001" dial indicator, indicate the mounting plate into the machine's spindle to have a zero  
T.I.R. Once properly adjusted and indicated, completely tighten the mounting bolts.
- 6) Extend the machine's drawtube to a forward/open position.
- 7) Turn the machine's drawtube pressure down just enough to actuate the collet chuck system.
- 8) Place the collet chuck assembly (body and drawtube adapter) onto the machine's drawtube, turning clockwise. Just before the collet chuck assembly is fully threaded onto the machine's drawtube, turn back the collet chuck assembly to the nearest bolt hole location on the mounting plate.

**LOW PROFILE POSITIVE STOP TRUE LENGTHS:**

- 9) Retract the machine's drawtube making sure that all the mounting holes are aligned.
- 10) Install all the mounting bolts firmly, (finger tight). **DO NOT** completely tighten. This allows the collet chuck assembly to be properly adjusted and indicated to the machine's spindle.
- 11) **STD. BODY SYSTEMS (A2-6, A2-8, A2-11 & 140MM SPINDLE MNTS):**  
To ensure proper installation, place a .0001" dial indicator on the O.D. of the collet chuck nose. Use the four adjusting screws to adjust and indicate the collet chuck to the desired T.I.R.  
**SMALL BODY SYSTEMS (A2-4, A2-5, 115MM & SMALLER SPINDLE MNTS):** To ensure proper installation, place a .0001" dial indicator on the O.D. of the collet chuck nose. Tap the collet chuck body with a rubber mallet to adjust and indicate the collet chuck to the desired T.I.R.
- 12) Fully tighten all the mounting bolts in an alternating sequence (crisscross). Use a .0001" dial indicator to maintain desired T.I.R. when fully tightening the mounting bolts.
- 13) Look into the collet bore of the collet chuck assembly. Determine that all three anti-rotation screws are not obstructing the bore. If the collet bore is clear, proceed to the next step. If a screw is obstructing the bore, identify the screw causing the obstruction. Place a 5/32 allen wrench (3/32 allen wrench for 5C-TL) into the through-hole provided in the collet retainer screw (1/2" screws that say DO NOT REMOVE). Turn the allen wrench counterclockwise to back out the anti-rotation screw; ensuring that the collet bore is unobstructed.
- 14) Thread the collet or "S" style master collet into the collet chuck body with an ATS collet wrench, until the collet or "S" style master collet stops (completely threaded into the collet retainer). For "S" style systems please refer to Instruction for Hardinge® Style "S" Sure-Grip Master Collets and Pads.
- 15) Place the proper allen wrench into the through-hole provided in the collet retainer screw. Turn the wrench clockwise until the anti-rotation screw contacts the collet threads; **DO NOT OVER TIGHTEN** the anti-rotation screw. Repeat this step on all three anti-rotation screws.
- 16) It is recommended that the desired workpiece diameter does not exceed .002" -.003" over or under the nominal diameter size of the desired collet or collet pads.
- 17) Set the machine for I.D. chucking. Insert a workpiece into the collet then actuate the drawtube. Adjust the machine's drawtube pressure to the desired pressure needed to hold the workpiece.

***NEVER ACTUATE THE SYSTEM WITHOUT A  
WORKPIECE IN THE COLLET***