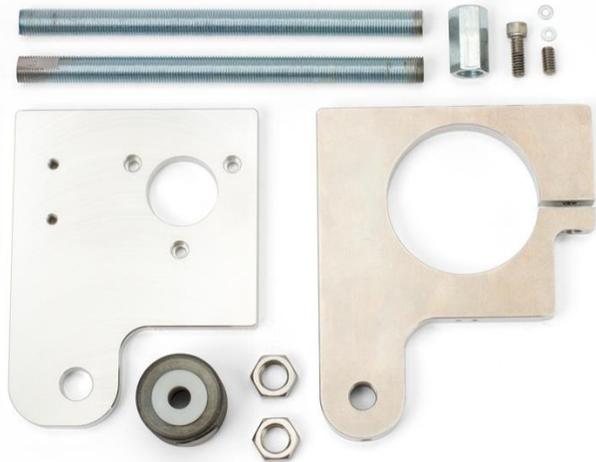


Quill Stop Little Machine Shop 5500 (Sieg SX2.7) Installation Guide 6/29/2016

Thank you for purchasing the Quill Stop for the Little Machine Shop 5500 and all Sieg SX2.7 compatible mills. Your feedback is always appreciated. Please email questions and comments to gregpriest@cox.net.

What's Included

1. Upper plate
2. Lower plate
3. Button nut
4. Threaded Rod, Zinc, 1/2"-20 x 12" (2)
5. 1/4-20 x 3/4" SS Socket cap screw
6. 1/4-20 x 1/2" SS Socket set screw
7. 1/2-20 Coupling nut
8. 1/2-20 Jam nut (2)
9. Installation instructions



Installation

1. Remove power to the mill and remove tooling from the spindle.
2. Lower the mill head to its lowest point while still being able to lower the quill to its lowest point.
3. Remove the screws and bracket that secure the depth gage to the spindle collar.
4. Turn 2 or 3 threads of the supplied 1/4-20 x 3/4" socket cap screw into the end of the lower plate with the slot. Do not tighten this screw at this time. Slide the plate up onto the spindle collar (the non-rotating part). It may be necessary to gently spread the slot with a flat screwdriver to get the plate up onto the spindle collar. Align the front edge of the Plate with the front edge of the bottom of the mill head, and align the Plate in the vertical center of the spindle collar. Place two parallels between the top of the Plate and the bottom of the mill head. Push the Plate upward against the parallels and mill head to ensure a plumb fit.
5. Slide the depth gage tongue down over the front face of the lower plate and align the holes of the depth gage tongue with the corresponding holes in the front center of the lower plate. Using the supplied washers, insert the small socket cap screws removed previously through the depth gage tongue and thread into the lower plate. Lightly tighten these socket cap screws and the 1/4-20x3/4" socket cap screw. Rotate the quill up and down to check the alignment and movement of the depth gage and quill to verify a smooth movement and no binding. Once everything operates smoothly, tighten the screws on the lower plate.
6. Screw the end of the 1/2-20 threaded rod with the flat into the hole in the lower plate leaving one or two threads of the flat showing above the surface of the Plate. Position the flat outward so that it will face the 1/4-20 set screw. Secure the threaded rod using the supplied 1/4-20 socket set screw.



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7. Thread one of the supplied 1/2-20 nuts well down onto the threaded rod, and thread the supplied 1/2-20 coupling nut onto the threaded rod so that about one-half of the nut is left for threading the remaining threaded rod. Thread the remaining nut well up onto the threaded rod and thread the remaining threaded rod down into the coupling nut until it stops. Tighten both nuts around the ends of the coupling nut.
8. Remove the drawbar cover.
9. Remove the 3 socket cap screws securing the drawbar cover collar and remove the collar.
10. Slide the upper plate down over the threaded rod, drawbar, and spindle, and align the mounting holes with the holes used for the drawbar collar. Install the 3 socket cap screws removed in the previous step to secure the upper plate. Do not tighten at this time.
11. Rotate the quill down and up and check the clearance of the 1/2-20 threaded rod through the hole in the upper plate. With the socket cap screws loose in the upper plate make fine adjustments until the threaded rod is centered in the hole in the upper plate and does not bind. Tighten the socket set screws in the upper plate.
12. Slide the Button Nut down over the 1/2-20 threaded rod to any spot above the top of the upper plate and check the operation of the Quill Stop by rotating the quill until the Button Nut contacts the plate. To ensure smooth operation, minor adjustments may be made to the positions of the upper and lower plates by loosening the fasteners, adjusting, and re-tightening the fasteners.
13. Congratulations, installation of your new Quill Stop is complete!



Operation

The Quill Stop is simple to operate, simply press the button and the nut disengages from the thread. Slide to desired position and release the button to engage the threads. Turning the nut then allows for precision micro-adjustments of depth of cut.

The Quill Stop is great for doing chamfers. With the Spindle stopped and the chamfer tool in the spindle and centered on the hole, lower the quill until the chamfer tool seats in the hole. Then lower the Button Nut until it contacts the Stop Block. Rotate the Button Nut clockwise a half-turn to back out of the hole a bit and release the quill. Lower the spindle using the quill to make sure that the chamfer tool is not contacting the part. Start the spindle turning (150 RPM is recommended for chamfers) and lower the spindle using the quill. Then start a cycle of rotating the Button Nut counter clockwise in small increments while checking the depth of the chamfer by lowering and raising the quill. This is a great way to sneak-up on the correct chamfer depth.