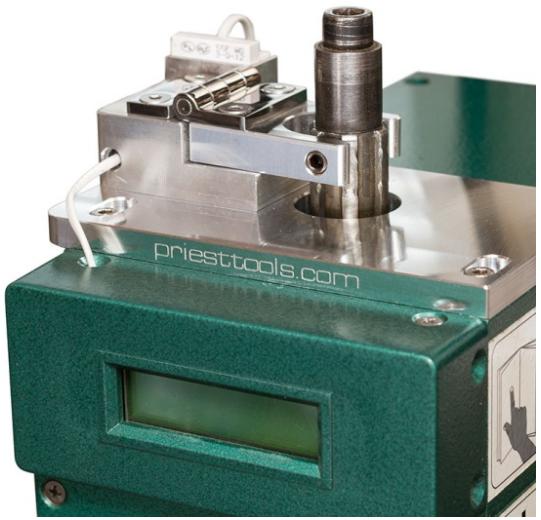
Spindle Brake Flip Grizzly G0619 (Sieg SX3) Installation Instructions



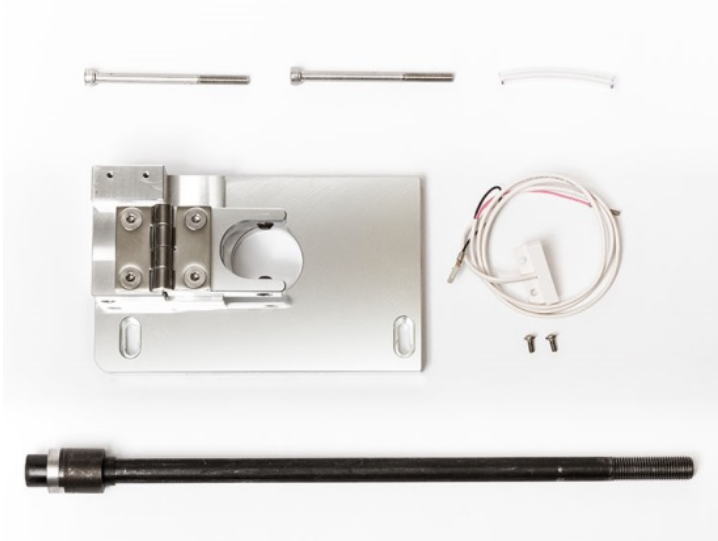
Thank you for purchasing the Spindle Brake from Priest Tools. I developed this tool because I found it awkward and cumbersome to make tool changes using the spindle spanner and hex wrenches supplied with my mill/drill. So I searched the Internet for a better tool, but did not find a satisfactory solution.

I decided to design and build a tool that made tool changes easier and more convenient. The Spindle Brake is machined to exacting specifications in state-of-the-art CNC machining centers. The Safety Switch ensures that the mill cannot be turned-on while the Spindle Brake is engaged. The Spindle Brake is a very high quality tool that works well and is a great addition to your collection of mill accessories.

Please email me with your questions, comments, or concerns at gregpriest@cox.net. I hope you enjoy using the Spindle Brake from Priest Tools for many years to come.

Greg Priest, Priest Tools

What's Included



Hardware

1. Spindle Brake
2. Safety switch
3. 5 x 70mm socket cap screws (2)
4. #4-40 x 1/4" machine screws (2)
5. Insulator
6. Drawbar (SX3 / G0619 only)
7. Instructions

Tools required for installation

1. #1 Phillips screwdriver
2. 4mm hex wrench

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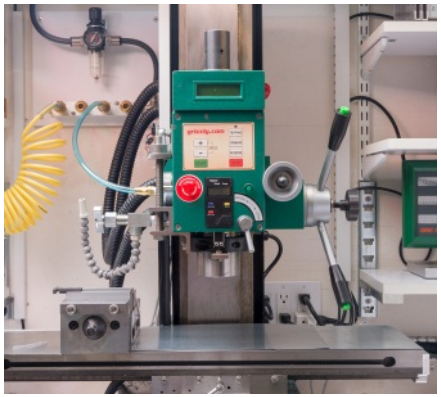
1. Remove power to the mill.
2. Remove tooling from the Spindle.



5. Remove the lower left screw from the display housing.

3. Unscrew and remove the Spindle Cover.

6. Enlarge this hole to 9/32. Be sure to firmly control the drill so that it does not “hog-in” and deform the hole.

4. Remove the Spindle Cover Base by unscrewing 3 M4-.7 X 10MM cap screws and lifting the cover over the spindle.

7. Clean and debur the hole.
8. Insert the supplied rubber grommet.

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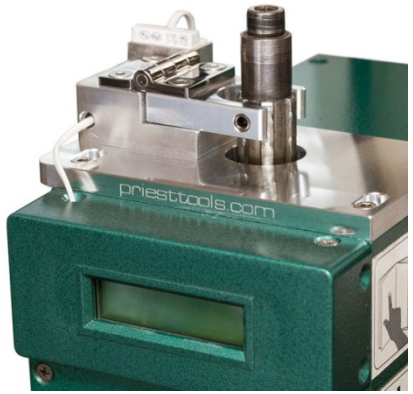
9. Remove the 2 front M5-.8 x 40MM cap screws from the Belt Cover on top of the mill.

10. Unbox the Spindle Brake and remove the tape securing the Spindle Brake.

11. Fasten the supplied safety switch using the supplied screws to the block as shown in the picture.



12. Place the Spindle Brake assembly on top of the mill head cover aligning the front and right sides of the mill head cover with the Spindle Brake plate. Install the supplied socket head cap screws only finger tight.

13. Flip the locking "fork" of the Spindle Brake down over the top of the spindle. It is usually necessary to rotate the spindle by hand so that the female splines of the spindle match the socket set screws in the Spindle Brake "fork" until they mesh.

14. Two adjustments are usually required at this point to complete this part of the installation. The first is to adjust the Spindle Brake plate so that the Spindle Brake "fork" is in good alignment with the spindle. If necessary, move the plate in small increments to get the best alignment with the spindle. Once the Spindle Brake "fork" is aligned with the spindle, tighten the supplied socket head cap screws securing the Spindle Brake plate and mill cover to the mill.

15. The second adjustment is to the socket set screws on the Spindle Brake "fork". The "fork" should slip easily over the spindle, but without excess play. The screw settings may be just right out of the box, but in case they are too tight or loose adjust the screws accordingly.

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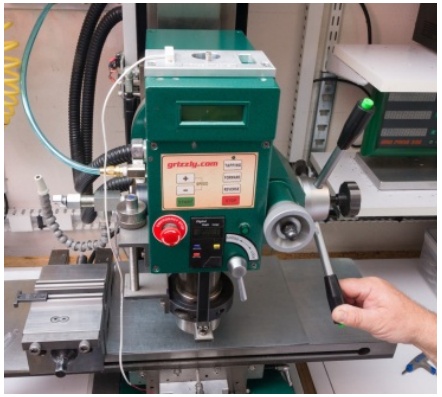
16. Unscrew and remove the Hub & Lock Bolt on the lower right corner of the Control Panel.

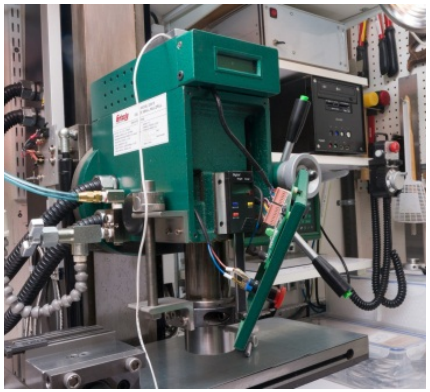
17. Using the quill, lower the spindle to its lowest point and lock the quill using the Fine Feed Lock Knob on the end of the Quill.

    Important, the Control Panel will not be able to be removed if this is not done first.

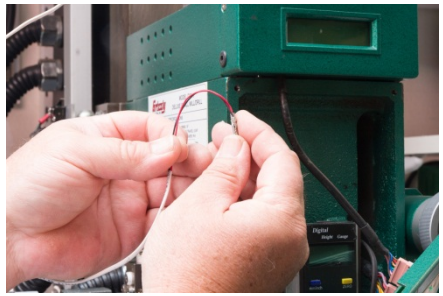
    Using the quill, lower the mill head to near its lowest point.

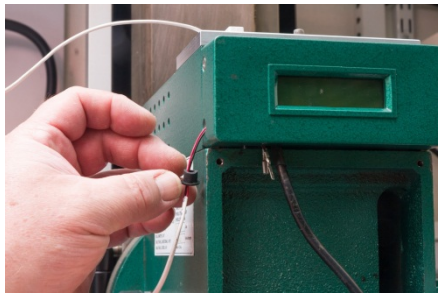


18. Remove 4 M4-.7 X 16MM flat head machine screws holding the Control Panel. Carefully remove the Control Panel and gently let it hang-down below the mill head.

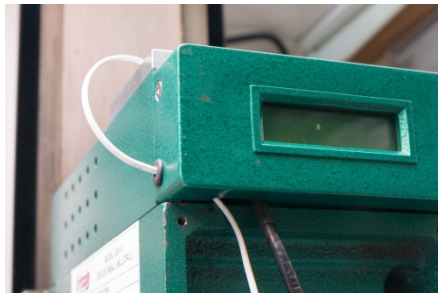


19. Gently bend a 3” curve in the end of the Safety Switch wires so that they can be routed into the Control Panel space. Route the Safety Switch wire through the grommet, the hole drilled above, down through the matching notches in display housing and Control Panel to the E-Switch.





20. Pull the excess wire all the way through. Leave some slack in the wire so that it is not taught.



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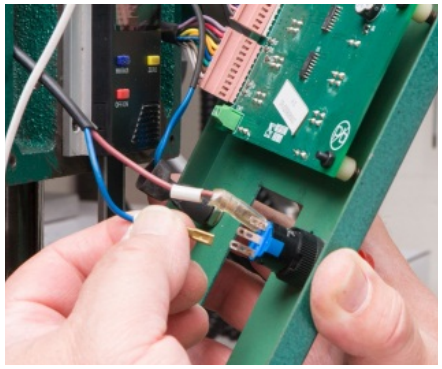
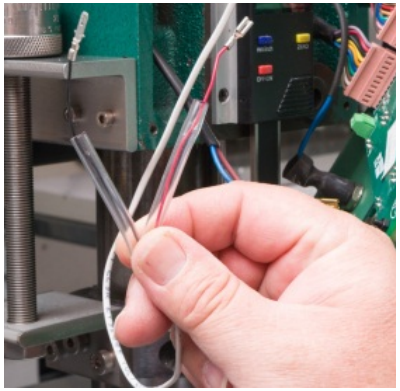
21. Disconnect one wire from one of the E-Switch lugs.

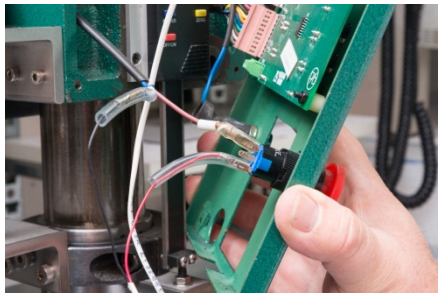


22. Slide the supplied rubber tubes over the ends of the safety switch wires.

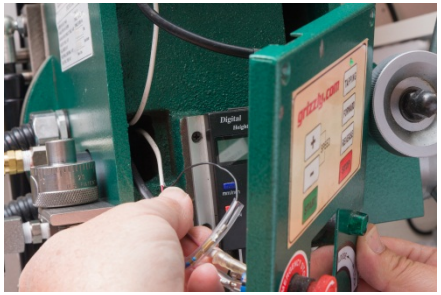


23. Connect the female Safety Switch wire to the lug on the E-Switch where the wire was removed and slide the tube over the connection.

24. Connect the male Safety Switch connector to the female connector that was removed from the E-Switch. Slide the other tube over this connection.



25. Replace the Control Panel. As you bring the Control Panel back up into place, carefully tuck the Safety Switch and E-Switch wires back into the cavity in the mill head behind the E-Switch.



26. <u>Make absolutely certain that the wires leading up into the notch on the top left of the Control Panel and the bottom left of the display housing are not pinched between the mill head and Control Panel.</u>

27. Install the 4 screws that hold the Control Panel in place.

28. Gently tug on the Safety Switch wire to make sure that it is not pinched between the mill head and Control Panel.

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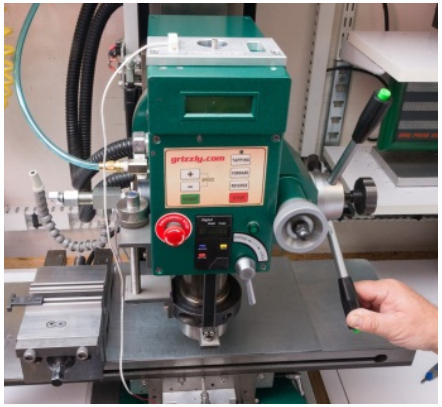
29. Reinstall the Hub & Lock Bolt on the lower right corner of the Control Panel.			
30. With one had on a quill handle, release the spindle by turning the Fine Feed Lock Knob and raise the spindle to its top position.			
31. Restore power to the mill and test the operation of the safety switch by flipping the Spindle Brake "fork" open and closed. When the Spindle Brake is engaged (down over the spindle), power to the mill should be off. When it is flipped back up over the spindle, power to the mill should be on. Congratulations, your Spindle Brake Flip is now installed and ready for use! Please email gregpriest@cox.net with your comments and questions.			

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