Spindle Brake Flip G0463 (Sieg X3) Installation Instructions

Thank you for purchasing the Spindle Brake Flip 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.

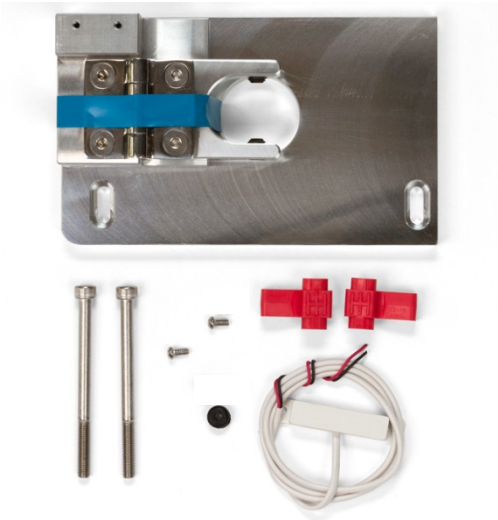
I decided to design and build a tool that made tool changes easier and more convenient. The Spindle Brake is machined to exacting specifications in state-of-the-art CNC machining centers. The Safety Switch ensures that the mill cannot be turned-on while the Spindle Brake is in place. The Spindle Brake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

I am very interested in your feedback on this product. Please email me with your questions, comments, or concerns at gregpriest@cox.net. If requested, I will respond to your inquiry at my earliest opportunity.

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 plate
2. Safety switch
3. 5 x 70mm socket cap screws (2)
4. #4-40 x 1/4" pan head machine screws (2)
5. 22-18 AWG wire tap connectors (2)
6. Rubber grommet
7. Instructions

Tools required for installation

1. #1 Phillips screw driver
2. 4mm hex wrench
3. Pliers

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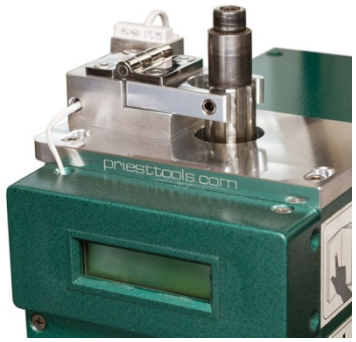
1. Disconnect power to mill. 2. Remove tooling from spindle. 3. Lower mill head to near its lowest point.		6. Unbox the Spindle Brake and remove the tape securing the Spindle Brake. 7. Fasten the supplied safety switch using the supplied screws to the block as shown in the picture.	
4. Remove Drawbar Cap.		8. 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. 9. 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.	
5. Remove two front screws of mill Cover. I've found that it's easier to get these screws out using a straight hex key versus a ball-point key. The straight hex key "grabs" the inside head of the socket screw better than a ball-point key.		10. 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.	

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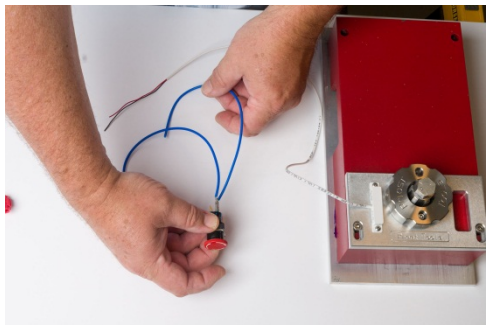
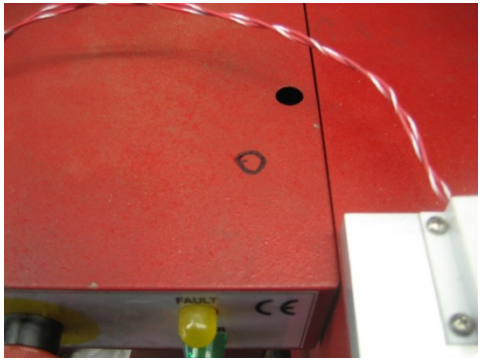
11. The second adjustment is to the socket set screws on the Spindle Brake "fork". The "fork" should slip easily over the spindle, but without excess play. The screw settings may be just right out of the box, but in case they are too tight or loose adjust the screws accordingly.

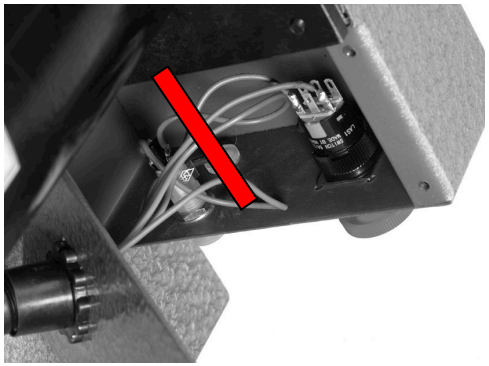


12. Locate and drill a 1/4" hole in the top of the control box 1" from the side where the control box meets the belt cover and 1.5" from the front edge of the control box. De-bur the hole and install the supplied black rubber grommet in this hole. Run the wire leads from the Safety Switch through this grommet into the Control Box.



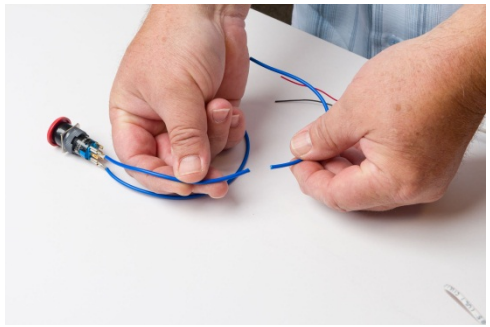
13. The safety switch will now be spliced into one of the wires connected to the Emergency Switch (E-Switch).

    Remove the bottom cover of the Control Box.



14. Take **ONE** of the wires soldered to the back of the E-Switch and cut the wire half-way between the E-Switch and where the wire runs back into the mill.

15. Using the supplied wire connectors, splice the Safety Switch between the ends of the E-Switch wire cut in the previous step.



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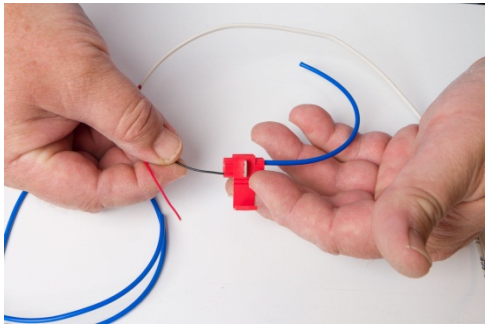
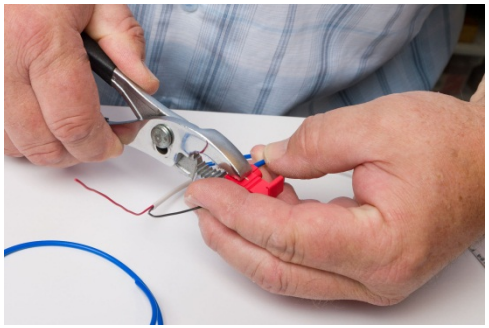
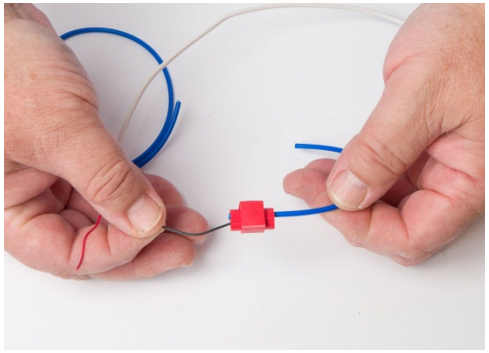
16. Insert one of the Safety Switch leads into the “closed-end” channel, and insert one end of the wire cut in the previous step in the “open-ended” channel of the connector.



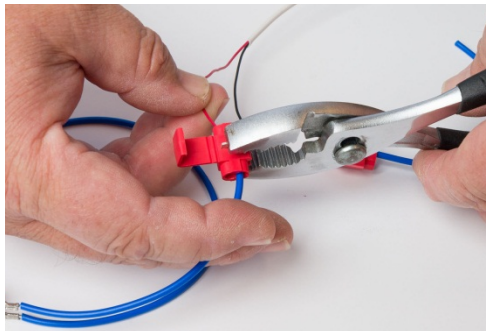
17. Compress the connector with a pair of pliers.



18. The first completed splice should look like the picture to the right.

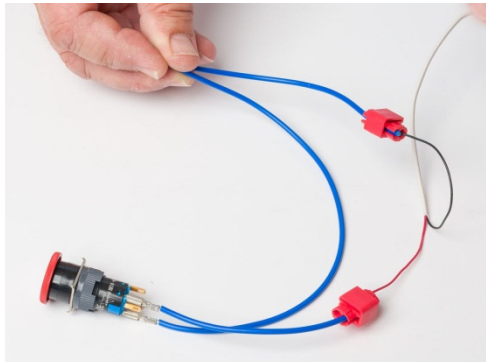


19. Connect the other Safety Switch lead to the other cut wire from the E-Switch in the same manner.



20. The completed splice should look similar to the picture on the right.

    With this modification, either the E-Switch or the Safety Switch, when activated, can cut power to the mill.



21. 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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