

# Replacing The Motor Spring

## Tools needed:

*Large - flat screw driver*

*Small - flat screw driver*

*9/16" socket & wrench*

*Adjustable wrench*

*Spring retainer board*

*Put a 5/8" diameter hole in the center of a 16" x 3/4" x 2-1/2" board.*

*Spring post*

*Put a finishing nail in the end of a 5/8" diameter 20" long dowel so that it sticks out the end 1/4" and make a recess in other end.*

*News paper or heavy cardboard*

*Large - Phillips screw driver*

*Small - Phillips screw driver*

*C - ring pliers*

*5/32" Allen wrench*

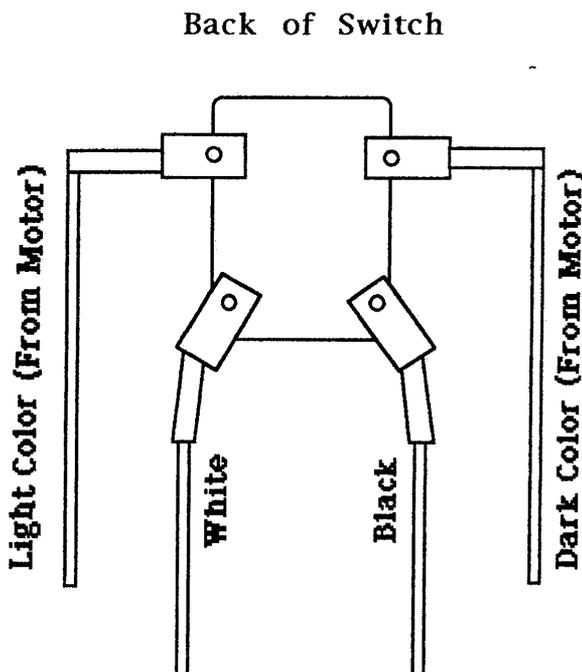
1. Turn off and unplug the Mark V
2. Attach the sanding disk to the main spindle and rotate it toward you as you turn the control handle to fast. DO NOT force. This will take the tension off of the motor drive belt so that you can remove it from the motor pulley.
3. Remove the belt cover and secure out of your way to your left with tape or string. Slide the headstock and carriage to the right (towards the base mount) as far as they will go. Secure the headstock and carriage locks.
4. Remove the drive belt from the motor pulley by gently sliding off one side of the belt and rotating the motor shaft so that belt will ride off entirely.
5. Remove the nameplate assembly to expose the access hole located on opposite of the control handle. NOTE: depending on the age of your unit this can be done by popping off with a flat head screw driver or by removing the screw located at the bottom of the nameplate cover. Some older units did not have access holes and you may have to lower the motor pan assembly down on the bench tubes to have enough room to work on unit.
6. Fully extend the quill and lock into place. This will give you enough room to access the backside of power switch.
7. Disconnect the wires from the on/off switch. Remember the wire color location for reinstallation later.

Please locate procedure below which switch best describes the type of switch in your unit...

- Toggle type switch (A), special nut surrounding the outside of your toggle switch. Remove wires from the terminal connectors on back of switch.

- Toggle type switch (B), with 9/16" hex nut. Remove wires from the terminal connectors on back of switch.

- Red key type switch. Remove wires from the terminal connectors. DO NOT pull wires out of backside of switch.



8. With a helper use the spring retainer board and compress compensating spring with board to remove the retaining ring from motor shaft with C - pliers. Examine the end of your motor shaft. If there is a hole in the end, place the spring post with the nail end down. If not place the recess end down. The spring post is used to help guide the spring on and off the motor shaft.

If your unit has a threaded nut/washer and not a retaining ring, remove nut turning clockwise.

**Important:** you must keep continual pressure on the spring board to hold spring after ring/nut is removed. Back off the pressure slowly so the spring will not fly out but stay on the spring post.

9. Remove old spring and reverse steps 8 through 1.