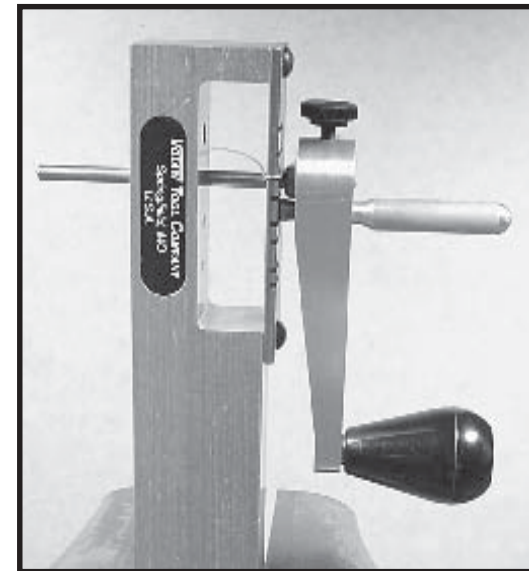


*Model #2516*

## ***SPRINGWINDER***

### **Instructions**

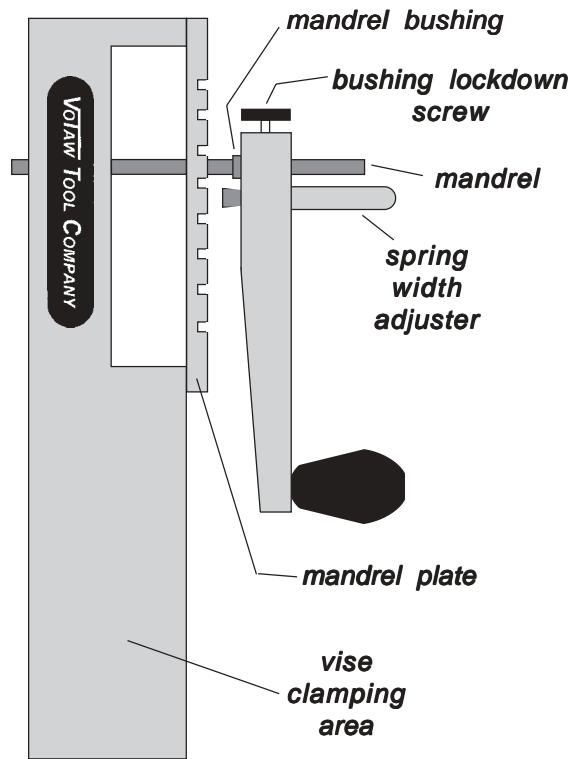


### ***VOTAW TOOL COMPANY***

1523 N. National Ave.  
Springfield, MO 65803  
U.S.A.

Ph. 800-894-8665  
417-865-7509  
Fax 800-894-7165  
417-862-7165

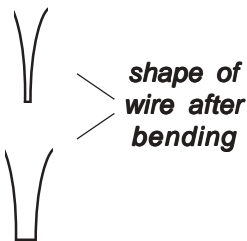
***www.votawtool.com***



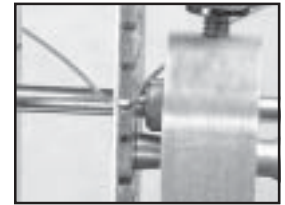
- 1) Clamp the **Springwinder** in standard bench vise. Note that there are four **mandrels** that come with the Springwinder, each having a different diameter. The mandrel's diameter will determine the inside diameter of the spring winding. Choose the mandrel with a diameter that most closely matches the diameter of the hinge of the waterkey, lever, etc. Insert the mandrel through the corresponding holes in the **mandrel plate** and body of the tool. Leave about one inch of the mandrel sticking beyond the mandrel plate.

Note that each mandrel has its own matching **bushing**. Place the corresponding bushing into the **handcrank** with the bushing's flat area facing the **bushing lockdown screw**. Tighten screw and slide handcrank onto the mandrel by inserting the mandrel into and through the bushing.

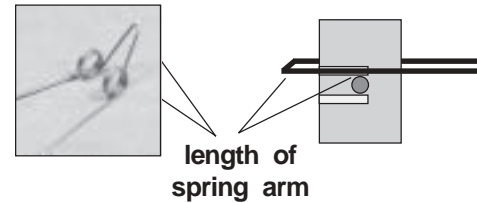
- 2) Cut spring wire to length needed and using a pair of flat or round nose pliers grasp the wire approximately mid-length. Using fingers of your free hand, bend the wire into a 'U' or 'V' shape. The crease of the bend will be the area of the finished spring that will lie against the arm of the key or lever. If the arm is narrow and comes to a 'V' point, use a pair of slim round nose pliers. If the key or lever arm is wide and more 'U' shaped, flat jaw pliers will work well.



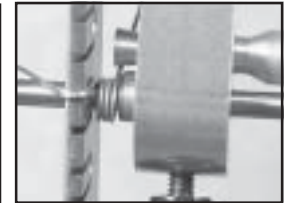
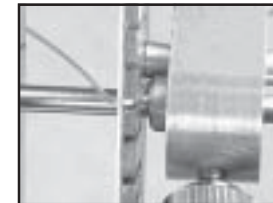
- 3) Set wire in **upper** notch of mandrel plate, placing the 'V' or 'U' bend against the side edge of the mandrel plate. Position handcrank as shown and rotate the **spring width adjuster** in or out so that when the end of the adjuster is against the mandrel plate the distance between the mandrel bushing and the mandrel plate is approximately the width of the spring wire's diameter.



Note that the **length** of the spring's arm is determined by the distance between the mandrel and the bend in the spring. With the bend in the wire set against the side edge of the mandrel plate, the arm will be about 0.4"-0.5", which works fine for most springs. If a longer arm is needed, simply position the bend farther away from the mandrel and use pliers to help hold the wire while winding coils.



- 4) Move handcrank in towards the mandrel plate so that the spring width adjuster contacts the plate. Turn handcrank clockwise for desired number of spring winds. While turning, apply slight inward pressure on handcrank to keep spring winds together.



- 5) Slide the handcrank off of the mandrel and remove mandrel from the mandrel plate and body of tool. Remove spring from mandrel. Reinsert mandrel into mandrel plate, through the wound coil of spring, and into body. Place the unwound side of spring wire in **lower** notch of mandrel plate. Reinstall handcrank onto mandrel and turn handcrank counter clockwise for equal number of winds as first winding. Wind the spring so that both tag ends are approximately level with one another. While turning, remember to apply slight inward pressure on handcrank to keep spring winds together.



**REPLACEMENT SPRING WIRE SOLD IN 20' COILS**

**#2525** 0.025"

**#2535** 0.035"

**#2530** 0.030"

**#2540** 0.040"