Whether you are using Ni-Chrome or Inconnel wire, the basics are pretty much the same —

1. To attach the tension spring and wire start on one side and connect the wire with a tight wrap knot to the attachment point. See figure A.

2. Attach the tension spring to the other side and loop the wire through the open end of the spring. Pull the wire tight until the spring is about 2 times its normal length. Then secure the wire with a tight wrap knot. See figure B.

3. Connect the alligator clips to the wire knots on each side. Do not attach the clips to anything other than the wire knot.

4. With the controller set at "0", turn the controller on and slowly dial up the heat control until the wire begins to glow orange. Then quickly turn the controller down until the wire becomes gray. The first stage of gray color is normally the optimum wire temperature for cutting.

When the wire is heated, the spring will relax and still keep tension on the wire.

Safety Tips

Note: Wire expands when hot. If the spring is too tight the wire may break restricting operation of mechanism. If too loose, the cut will be sloppy. Readjustment of tension may be necessary from time to time.

**Power Controller** – Use nothing longer than a 50 foot 12/3 grounded extension cord. Set the temperature dial on the controller to zero (0). Turn on the controller and adjust the dial until the wire glows orange. Immediately back off the controller until the wire just begins to turn from orange to gray. This is the optimum cutting temperature of the wire. Anything hotter will cause premature wire failure or anything cooler will require too much feed pressure on the wire causing premature failure. If the wire is too hot, the cut may not be as accurate as you would like. A wire that is too hot will melt the foam too quickly at the beginning of the cut and less quickly as the wire cools off resulting in an inaccurate cut.

- Use only the recommended wire.
- Do not use this equipment in wet or damp conditions.
- Use only grounded receptacles.