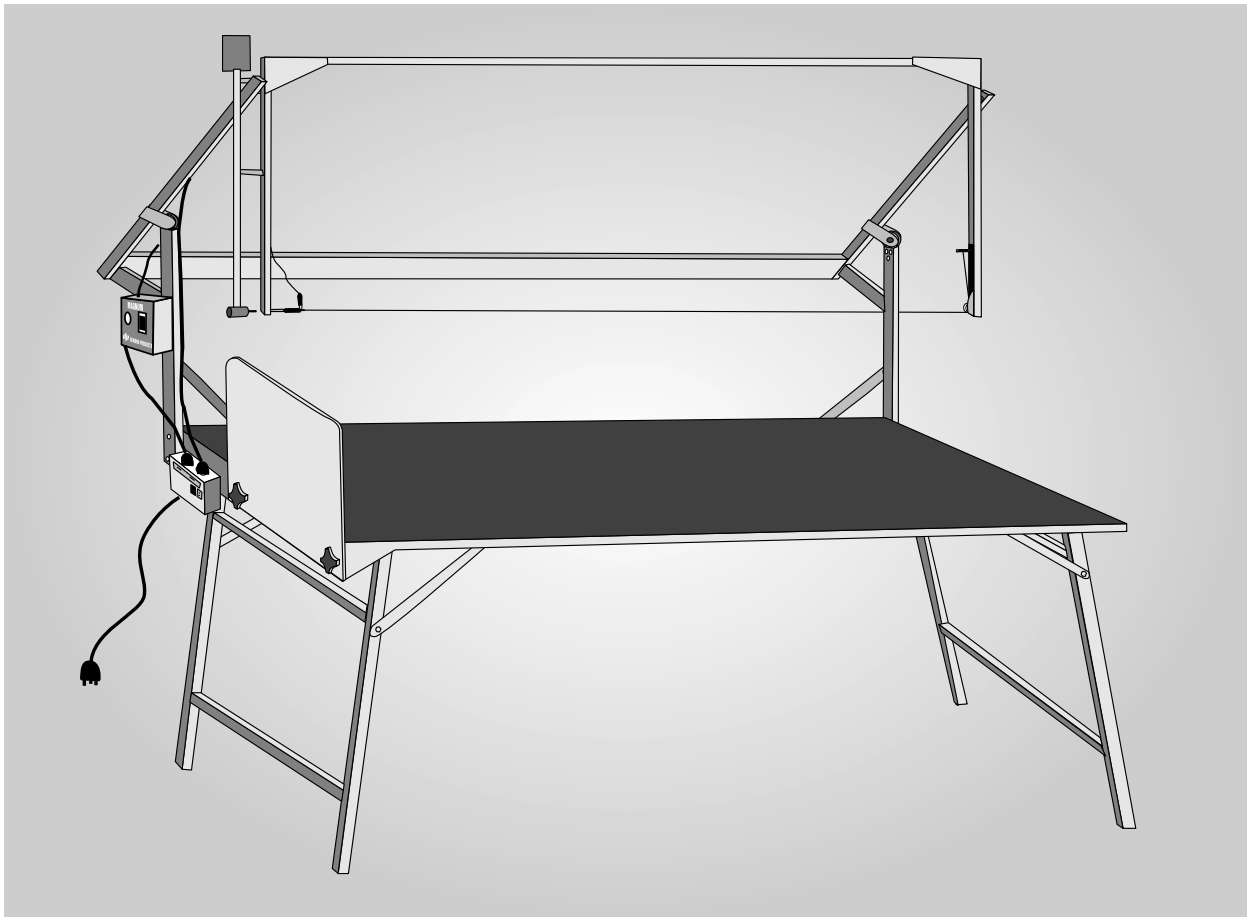


...Presenting the

# **SIDEWINDER 8000™**



**DEMAND  
PRODUCTS INC.™**

*quality creates demand*

# SIDEWINDER 8000™

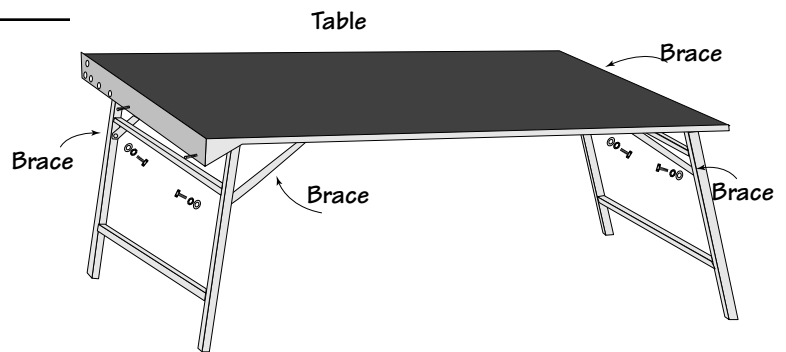
## ASSEMBLY INSTRUCTIONS

*You have purchased one of the finest heavy duty foam cutting machines available.  
We welcome you to the family of quality Demand Products.  
Call today for our current catalog and/or fastener spec catalog.*

**BEFORE YOU START —**  
Unpack the harp by cutting the white nylon tie straps.  
**Do Not** cut any of the black tie straps because they hold the wire harness in place.

**1.**

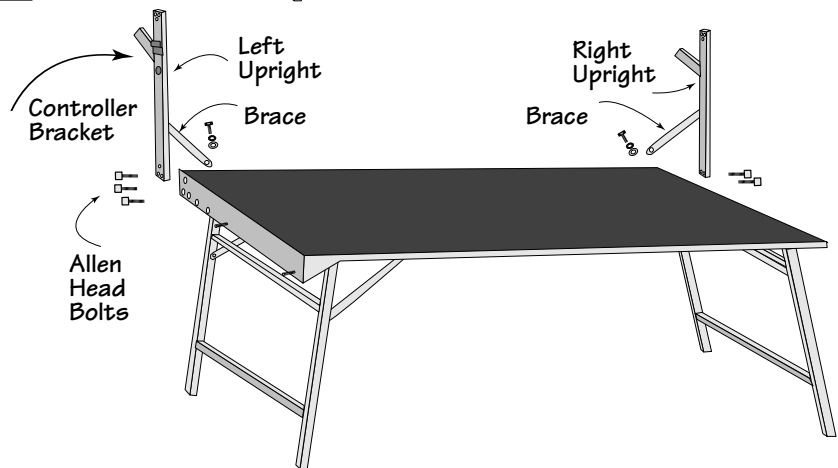
Remove all parts from the shipping carton. Set the table section on its top, upside down and extend the legs. Assemble the braces to the legs using the  $\frac{5}{16}$ " x 1" hex head bolts, star lock washers, and flat washers.



**2.**

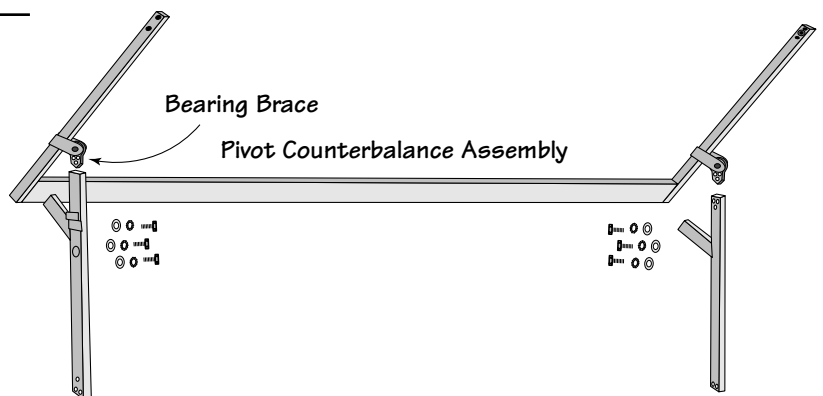
Using the allen head bolts and star lock washers, attach the two uprights to the table. Facing the table, the left upright has the bracket for the controller on it. The table and the upright are both identified by the number "1" on both items.

Attach the rear upright braces that are affixed to the back of the uprights by swinging them toward the center of the table and secure them to the table with  $\frac{5}{16}$ " x 1" bolts, star lock washers and flat washers.



**3.**

Installing the pivot counterbalance assembly takes two people. With one person on each end of the pivot counterbalance assembly, carefully lower the part down into the uprights so the bearing brace slides into the uprights. Make sure the pivot counterbalance's open side faces the front of the table. Secure each side with three  $\frac{5}{16}$ " x 1" bolts, star lock washers and flat washers.



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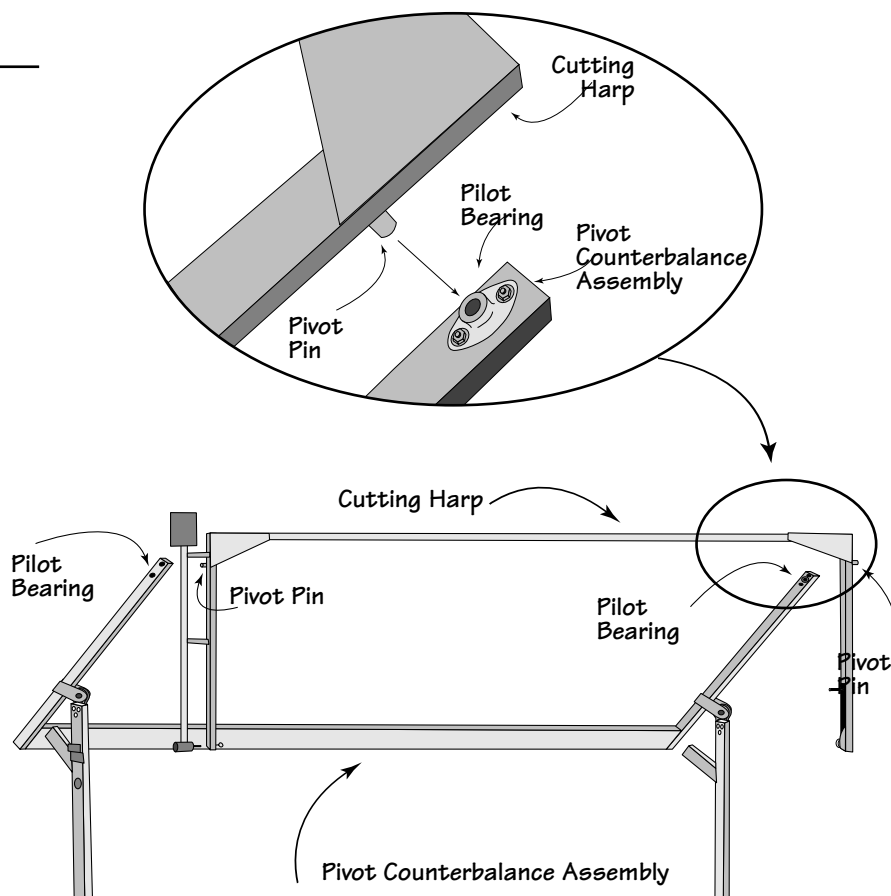
# SIDEWINDER 8000™

## ASSEMBLY INSTRUCTIONS

4.

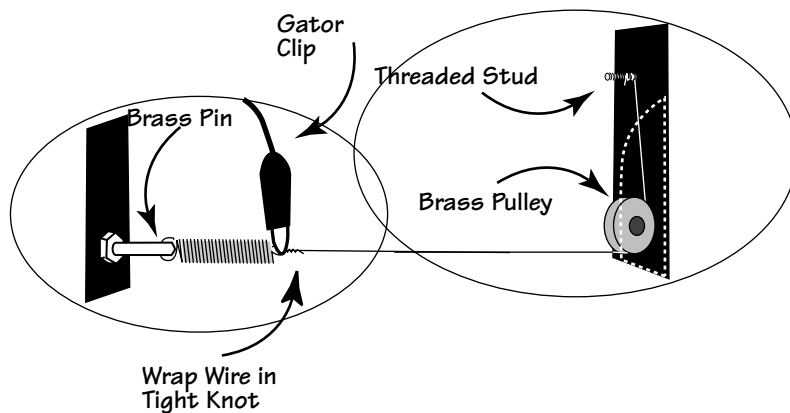
Mounting the cutting harp takes two people. Standing on each end of the table with the harp in hand, the person on the left should slip the harp pivot pin into the pilot bearing on the pivot counterbalance assembly. The person on the right must then gently flex open the right side arm of the pivot counterbalance assembly enough to slip the harp pivot pin into the right pilot bearing.

**CAUTION:** Use care not to over spread the pivot counterbalance assembly when installing. Make sure both pins are nested firmly into the pilot bearings by gently tapping with a soft mallet. Tighten the set screws on the pilot bearings.



5.

Attach the tension spring and Ni-Chrome wire. Starting on the left side, attach one end of the spring to the brass pin located on the harp assembly. Attach the Ni-Chrome wire to the opposite end of the spring and wrap any excess wire in a tight knot. Pull enough wire around the pulley on the right harp arm pulling tension on the spring and secure any excess around the threaded stud located above the pulley. Under tension the wire should resemble the tension on a guitar string.



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## ASSEMBLY INSTRUCTIONS

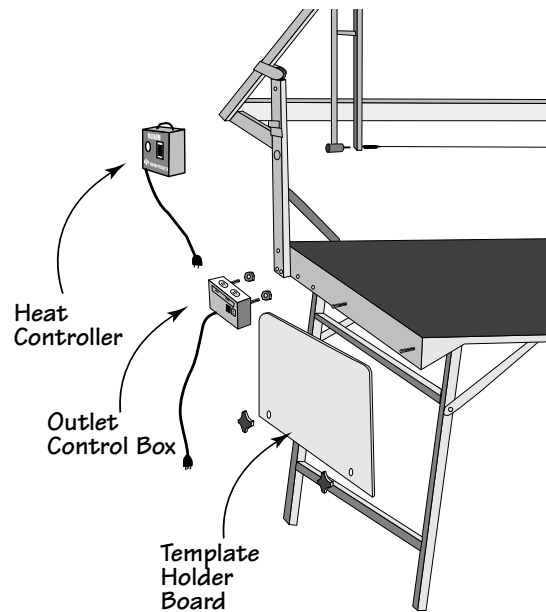
### 6.

**A.** Mount the electric outlet control box to the table using two 1/4" lockwashed nuts. Then simply hook the heat controller box to the left upright.

The heat controller plugs into the left receptacle of the outlet control box which is labeled "power plug" and the orange wire from the motor plugs into the right receptacle which is labeled "pattern motor". The plug from the harp cutting wire plugs into the top of the heat controller.

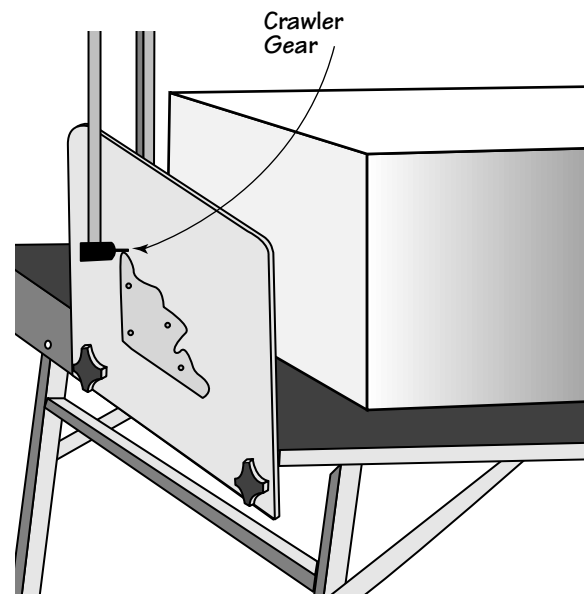
**B.** Attach the Template Holder Board to the two studs on the left side of the table using the two black plastic knobs.

**C. Mounting the template to the template holder.** Use wood screws to mount the template patterns to the template holder. Make sure the screws do not extend through to the opposite side of the template board. We recommend that you use any non-conductive material such as Masonite, plastic, or wood for making your templates. Material thickness should be no more than 1/4" thick. The template should be located anywhere you choose to facilitate your cut. However, it is advisable to place the template so as to reduce excess EPS waste.



### 7.

**How to Cut** —First place a block of EPS on the table aligned with the template. Remember to not place the EPS too close to the template holder board to allow for the spring and wire to clear the EPS block. Place the tracing arm over the template holder until the crawler gear pin comes in contact with the template pattern. Turn up the heat controller until the wire just begins to turn red and immediately back off until the wire just begins to turn gray. This is the optimum setting temperature. Now switch on the crawler pattern motor and with a light hand pressure, allow the crawler gear to move clockwise around the shape template pattern until it has completely followed the pattern template. The motorized pin is controlled by the switch on the outlet box, and moves at a consistent speed to cut foam properly and smoothly. A little practice on a piece of scrap foam will amaze you at the precision and consistency you can achieve.



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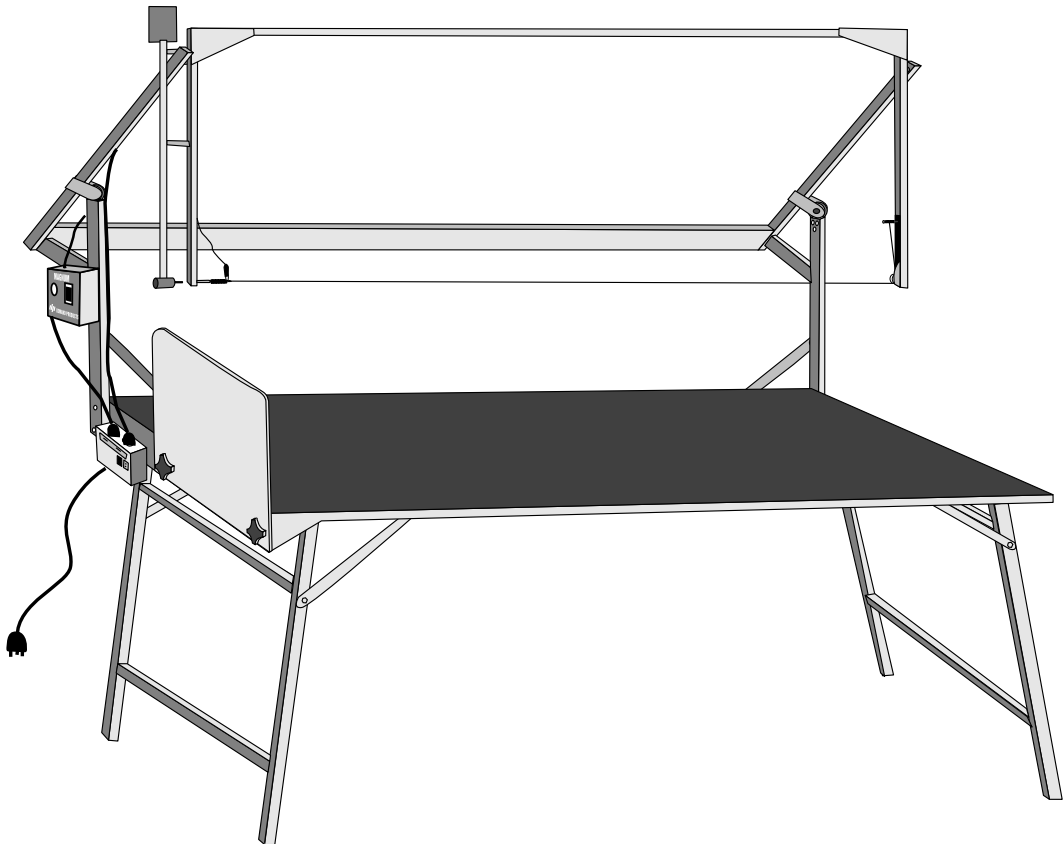
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## ASSEMBLY INSTRUCTIONS

### Assembled Table



### Safety Tips

- *Do not use this equipment in wet or damp conditions.*
- *Do use only .014 gauge IW100 Ni-Chrome wire.*
- *Do use only grounded receptacles.*
- *Do not cut with the wire too hot. This shortens wire life and could cause a fire.*
- *Do not use the controllers with any other equipment or application.*
- *Do warn others you are using a Hot Wire and to stand clear when in use.*
- *Do use only 12/3 UL approved extension cords, limited to 50' when operating this equipment.*



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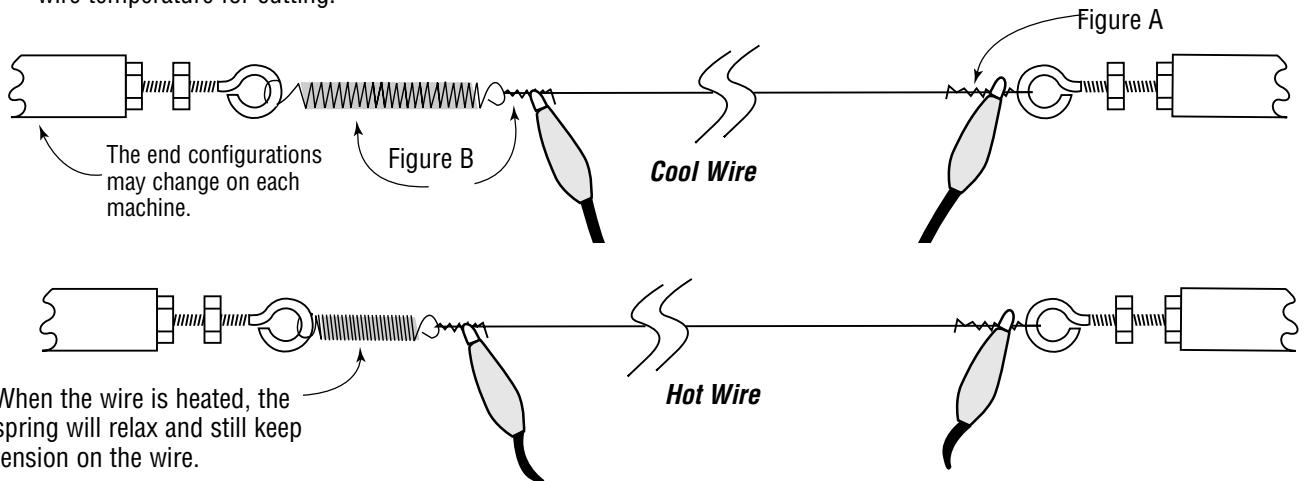
# SIDEWINDER 3000™

## ASSEMBLY INSTRUCTIONS

### Hot Wire Basics

*Whether you are using Ni-Chrome or Inconel 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.



*The rule of thumb for cutting EPS foam is that you can cut about 3 feet per minute. Hotter settings will melt too much foam causing inaccurate cuts and a fire hazard. Too cool a wire will cause undue tension on the wire and springs from forcing it through the foam. Premature failure can occur.*

### 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.



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