Anvil USA InstALIGN

Please read instruction completely before putting power to the unit

CAUTION this machine operates at extremely high temperatures. Anything magnetic that is in or near the Coil will heat. THIS INCLUDES JEWELRY

Step # 1 – Find a safe place to lay the part when removed from the unit. A heat resistant glove can be used or a piece of Aluminum or steel. You can also dip it in water if desired. The InstALIGN will heat a small area quickly but leave the rest of the piece cool.

Step # 2 – Attach power leads to 24 volt DC power supply or 2 – 12V batteries wired in series to provide the needed 24 Volts. The InstALIGN is wired so Red is Positive and Black is Negative. Reversing polarity can/will damage the unit.

Step # 3 – Upon providing power to the unit in a no-load situation you will see the power meter showing voltage and amperage showing 0 and you will hear the internal cooling fan running.

Step # 4 – Place scissor half into coil putting the finger loop over the head of the bolt as pictured. The head of the bolt keeps the part stable. Place the Shank of the scissor on either side of the Fulcrum Pin. Which side of the Fulcrum Pin the shank is against and which side of the scissor is presented will determine which direction the handle will bend. Always test fit prior to bending.
Step # 5 – **Without** the power switch on, check to see if you can apply the pressure needed in the direction needed and adjust if necessary. Have cooling water near and a place to put the part. The provided PVC tube should be slipped over the sharp scissor to prevent a cut. The height of the Hex Head pin and the Fulcrum Pin are user adjustable. As shipped both pins are in the LOWEST position.

![Image](image1.jpg)

Step # 6 – While applying a light pressure in the direction of your desired bend, Pull or Push toggle switch to activate induction heating. You will see the amperage climbing rapidly and then peaking as the metal absorbs the inductive current. Once the current has peaked and the numbers start to fall apply more pressure until you feel movement. When you are satisfied with the bend release the toggle switch, and cool the part. As seen in the pictures, this shear peaked at 18.9 and rapidly dropped. The entire process takes only seconds.

![Image](image2.jpg)

**Note for step # 6** – If there is little or no rise in the amperage, your part is NOT induction heating compatible and will NOT heat by this method. DO NOT ATTEMPT BENDING.

This process changes the hardness of the metal in the area that was heated. It may be harder or softer after cooling depending upon how rapidly the part cools and the steel composition. Different quenching methods will give different results. Salt Water is SAFE and NON Flammable and is our recommendation for this process.

Stay Clean or Blue Away “chrome header bluing remover,” will remove unwanted heat discoloration followed by a quick touch to your buff.

Read directions, these acids are harmful on contact.

Enjoy your new INSTAlign and feel free to call or email with and questions.

This unit is electrical and heats conductive materials. Your safety and liabilities are in YOUR hands.

Be Safe