

## CUTTING AND PIERCING

PROBLEM	DESCRIPTION	CAUSES	FIX BY
<b>CAN'T SAW A STRAIGHT LINE</b> <b>Applies to:</b> All metals	The saw will not stay straight.	The saw blade is not tight enough.	Loosen one nut, then push the edge of the saw frame below the nut against the bench peg and retighten the nut.
		The blade has been put on upside down.	The teeth should point toward the handle; when you stroke the blade away from the handle end, it should feel rough.
		The saw peg is not secure.	Cutting on a surface that moves with every stroke is difficult. Tighten the screw that allows the saw peg to pivot.
<b>CAN'T SEE WHAT TO CUT</b> <b>Applies to:</b> All metals	If you cannot see what should be cut, then cutting it will be challenging!	The transcribed design is hard to read on the metal.	The clearest method is to tape a printed or photocopied design onto the metal. If drawing the design onto the metal, use a fine-tipped permanent pen so that the drawing does not get rubbed off before sawing is finished. If scribing a design, try to keep strokes to a minimum.
		A poorly lit working environment.	Supplement natural light with a gooseneck lamp with a bright bulb. This can be tilted to catch the light on a scribed design.
		Your seat is at the wrong height.	Jewelry benches tend to be slightly higher than normal workbenches (36 in/90 cm), so use an adjustable seat.
<b>SAW BLADE BREAKS</b> <b>Applies to:</b> All metals	Repeated breaking of saw blades is frustrating and slows down progress.	Saw blade is too fine.	Adjust the blade size you are using. There should be between two and three teeth in contact with the metal at any one time.
		Metal has jumped up on the peg, twisting the blade.	Hold the metal firmly down on the saw peg with your non-sawing hand.
		Too much pressure used.	Don't push when sawing – the blade will do the work for you.
		Only a small part of the blade has been used when sawing.	Saw with long strokes using all the teeth.
		Blade has twisted when going around a corner.	Always keep the blade moving up and down when going around corners to prevent it from twisting.
		Blade is under too much tension.	The blade should be taut, but too much tension will cause it to snap.
<b>SAW BLADE GETS STUCK</b> <b>Applies to:</b> All metals	The blade refuses to move up or down.	Blade has been pushed too hard into the material.	Stop trying to move the blade forward, then try to move it gently up and down. It may be necessary to loosen the top nut and pull the blade out of the piece. Try lubricating the back of the blade with wax or saliva.
		Blade has become twisted.	Release your hold on the metal and allow the blade to return to its natural position before resuming.