

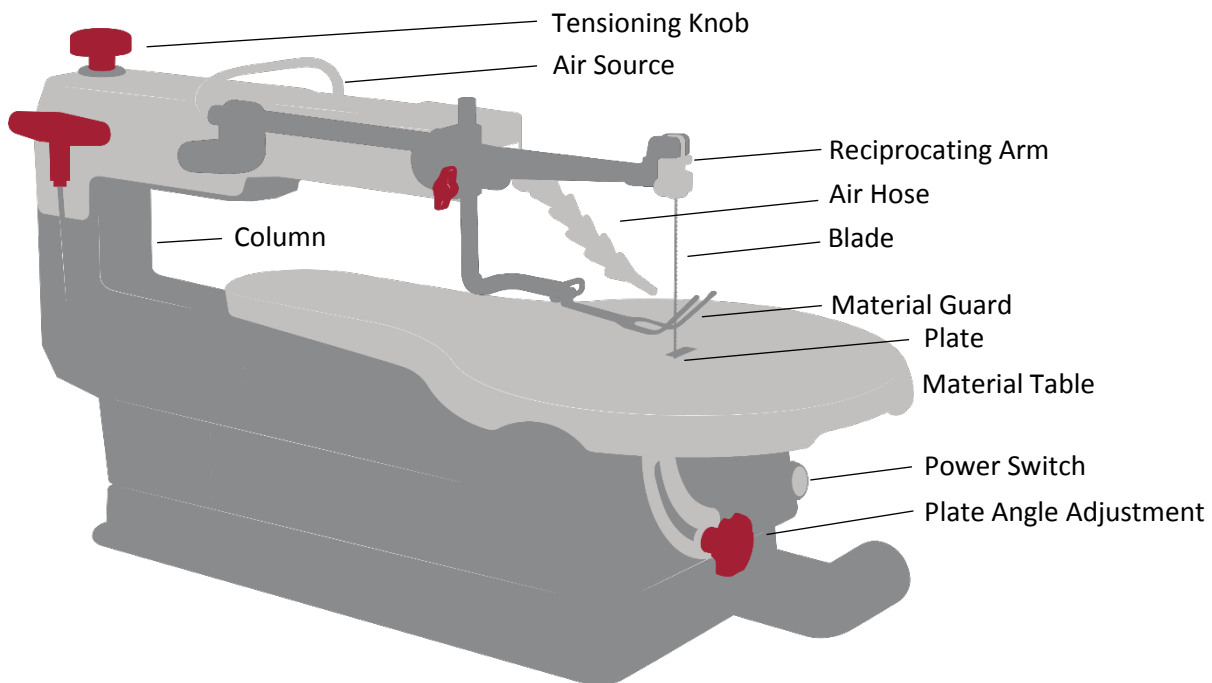
Refresher Guide: Scroll Saw

Use: Make fine and detailed cuts in a variety of materials.

SAFETY GUIDELINES FOR OPERATING A SCROLL SAW:

- Wear eye protection
- Never wear gloves near the blade
- Wear a mask when operating for long periods of time or working with harmful material
- Support the material so it doesn't fall off table when finished with cut

HOW TO USE:



1. Draw intended cut on material or secure template.
2. Check that material will fit in the machine and that the blade is appropriate for material.
3. Adjust height of blade guide to $\frac{1}{4}$ " above stock. Adjust fence if necessary.
4. For internal cuts, remove and re-install the blade. Keep track of turns on the tension knob when opening/closing.
5. Hold part firmly against the table and gently feed material through the blade letting the machine do the cutting. Use scrap wood to push stock near the end. See that material will be supported after cut.
6. Aim the air hose at the cutting point to blow away sawdust as it is created.
7. Clean up dust and scraps with dust pan or vacuum.

Scroll Saw Blade Guide

<p>There are many factors to consider when choosing a scroll saw blade, but the most important are the pitch (number of teeth per inch, indicated as TPI), the tooth shape, and the cutting material.</p> <p>Many blades are versatile and can be used with a variety of materials, however it's important to use caution with certain combinations.</p> <p> Should Not Use Use with Caution Can Use </p>		Types of Blades							
		Crown Tooth	Spiral	Precision-Ground	Reverse Skip Tooth	Double Tooth	Skip Tooth	Standard Tooth	
Materials		Hard Wood, Plywood	<8 TPI			<12 TPI	<14 TPI	<12 TPI	big tooth
Soft Wood, Low Density (Foam)	<6 TPI		>12 TPI	>12 TPI	12-36 TPI			big tooth	
Particle Board	<8 TPI		<10 TPI	<12 TPI	<12 TPI	<15 TPI			
Plastics			<3/4" thick		12-22 TPI	11-20 TPI			
Thin Sheet (Felt, Paper, Veneer)	>16 TPI			>24 TPI	>32 TPI	>20 TPI			
Soft Metals (Aluminum)			>12 TPI		>16 TPI	>16 TPI		small tooth	

Tips for Choosing the Proper Blade

Pitch

- During operation there should be at least 3 teeth in the workpiece at any given time, and no more than 24; 6-12 is ideal

Higher Pitch

- Thinner materials
- Slower cut
- Smoother, finer finish

Lower Pitch

- Thicker materials
- Quicker cut
- Rougher finish

Tooth Shape

- The spaces between the teeth on blade types like skip tooth and crown tooth are to release excess material
- Standard tooth come in two types: wood/metal
- A spiral blade allows the material to be cut in 360°

Other Tips

- Slow down and let the blade do the cutting