

Band Saw Tune-Up & Resawing Secrets

Tensioning the Blade.

When you install the band saw blade, the first thing to do is put tension on it to hold it on the wheels. Many saws have a gauge that tells how much tension to put on the blade based on its width. In addition, we suggest that you tighten the blade and then pluck it like a guitar string. The blade should produce a clear tone, rather than a dull thud. Next check the blade for deflection. Raise the guide all the way up and then push sideways on the blade. It should not deflect more than 1/4" to 3/8". The narrow blades will deflect more than wide ones. Some folks recommend that you over tension the blade to correct the saw's cutting problems. While it is true that the blades and the saws can stand more tension than the gauges suggest, it is not a good idea to put too much tension on the blades. It can cause the saw's bearings to fail prematurely. If the saw sits for a long time without use, it can cause flat spots on the tires, which will cause vibration and erratic cuts.

Tracking the Blade.

When your saw is tracking correctly, the blade runs on the middle of the wheels. Adjust the tracking by tilting the top wheel in relation to the bottom wheels. A knob behind the upper wheel housing controls this adjustment. Spin the saw by hand and adjust the tracking control until the blade is running in the middle of the wheel. Lock the control in this position. Replace the cover and plug in the saw. Check the tracking by bumping the switch on and off. The blade should maintain its position. Repeat this several times before running the saw at full speed.

Square the Blade & Table.

This adjustment is often the forgotten one and can cause nothing but problems. It is a very simple adjustment. Loosen the knobs that lock the table in place. Hold a small square on the table with its blade against the saw blade. Square the table to the blade and lock it in place. Under the table, there is usually a stop that you set to automatically square the table after you've had it tilted.

Setting the Guides.

Most band saws have two similar sets of guides, one set above the table and the other below. There are two different types of these, one has a rear guide bearing and then two guide blocks. The second has the rear bearing and also two side bearings. The back bearing resists the force that you apply as you push the board past the blade, while the guide blocks or bearings prevent the blade from twisting out of position. Both sets can be adjusted the same way..

Move the guard up about halfway between the table and the top of the case. Depending on how accurately the guard moves up and down you may have to set the guides to allow it to move. Set the rear bearings first, both top and the bottom. Move them forward until they almost touch the blade. Leave about 1/32" gap between the blade and the bearing. We have found that a dollar bill works just fine. Then set the guide blocks or the side bearings using the dollar bill. When all are in place lock them. Your saw should now be ready to run! If you have problems with the way it is cutting after this tune-up, the saw may require more involved adjustment. There may be a problem with the alignment of the wheels with one another, balancing the wheels and adjusting the drive train. This is time for the owner's manual to assist with these problems.

QUICK TIPS!

Clean tires!

One-way to prolong the life of the band saw tires is to keep them clean. To install a continuous cleaning system use an old toothbrush. Cut the handle short and heat it to bend to the right shape at 90 degrees. Drill holes through the shortened handle to bolt the brush in place inside your saw on the bottom wheel of the saw.

Fine-tune the Blade!

Round the rear edges of your band saw blades with a medium-grit oils stone. You'll find that relieving these edges will allow you to cut tighter curves and will make backing out of cuts much easier. Hold the stone flat on the saw table and gently touch it to the back of the blade as it is running.

Resawing Secrets

Almost all problems that occur with resawing after you have tuned up your saw is due to the wrong blade being used. A dull blade is nothing but trouble! You should use the widest blade that your saw can handle. Select a blade with three or four teeth per inch and a 5 to 10 degree hook. The hook tooth design is an aggressive blade that has deeper gullets for better sawdust removal and it also reduces the feed pressure that you have to make. You will find that most 3/4" blades are .025 in thickness which is too heavy for a 14" bandsaw, so use a 1/2" blade.

If you are very fortunate, your band saw will track perfectly and resawing will be a great experience, but if are like 99% of us it will not. The fence is the first thing that needs modification. The fence needs to be as high as the piece being sawn. If the fence is too low, when feeding the board through the saw the bottom of the board will tend to move away from the fence. The face of the fence **MUST** be 90-degrees to the table. Even if the fence is out of square by only a 1/2-degree, the finished boards resawn from a wide board will have a taper.

You may have to adjust the fence for lead or drift. Setting the fence at the right drift angle is critical to resawing. Start by cutting on a piece of scrap. Stop about half the length of the board and trace the angle of the board onto the bandsaw table with a pencil line. Clamp the board to the table and set up the fence along the joined edge of the board. Now the fence is parallel to the cut, and the blade will have no drift. Be sure to join both edges and one face. Run the joined face against the fence.

When you re-saw keep both hands on the piece. Put our right hand on the end grain, pushing the board through the saw. Keep the left hand low and spread your fingers to press the piece against the fence across a wide area. Slow constant feed pressure is the key to success. If you stop sawing for a moment, the blade will bite a bit deeper.