

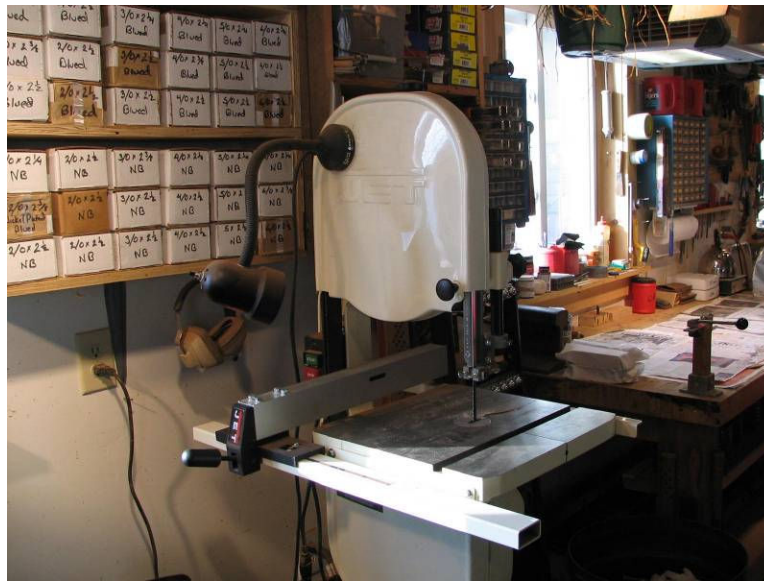
# Small Shop - Big Results



## Simple Grand Pinblock Replacement, part 2 – Cutting

By Chuck Behm  
Central Iowa Chapter

If you're cutting a new pinblock, a good quality band saw is the tool of choice (Photo 1). Although a small, bench model band saw will work (I made do with a small Delta model for two decades before making an upgrade to a larger 14" Jet band saw), a free-standing, full size model of a good brand will make the job seem effortless by comparison. The continuous problem I had of the motor winding down under the strain, and of the blade binding in the cut, are a thing of the past.



*Photo #1: Make sure the tools you use are up to the job at hand*

Whatever saw you will be making the cut on, now is a good time for a new blade (1/4" width is ideal for the gradual curves of a pinblock) and a tune up. Get out the owner's manual and adjust all the settings to the factory recommendations. Failure to have your saw set up right will make it hard to follow the line, resulting in more work fitting the block to the plate. (Remember that although your saw might handle 3/4" pine without a problem, cutting through hardrock maple up to 1 1/2" thick poses more of a challenge, especially if your saw is not set up for peak performance).

With your saw tuned up and ready to go, adjust the tilt of the saw bed so that the blade lines up true with the curved edge of the old pinblock. Usually the curved edge is cut at approximately 5 degrees off a right angle. To set this accurately, do not push the pinblock hard against the blade. Doing so will distort the blade, and may result in an incorrect angle. Instead, place the pinblock close to the blade, and gently tap it towards



*Photo #2: Matching the blade to the bevel*

the blade until the pinblock makes contact with a saw tooth at the top of the block, and a saw tooth at the bottom at precisely the same moment (Photo 2). Make sure to lock the bed in place before proceeding.



*Photo #3: Making the cut*

With the bed of the saw at the correct slant, you are ready to cut. The full length of the blank will be longer than the finished pinblock. Mark where the pinblock will begin and end with a single chisel cut perpendicular to the line, then use a ruler to extend the line out to the end of the blank. Do not cut the ends off until you have both finished the curved cut and have done any planing to thickness which necessary to match the dimensions of the old pinblock. It is easier to lead into the cut and to establish the

direction of the blade and to follow through at the end of the cut if you have some excess on either end.

Place the blank on the band saw bed, with the straight edge away from the throat of the saw (Photo 3). Start your cut, focusing on sawing at a moderate, controlled speed. Cut down the center of the pencil line instead of trying to keep the blade on one side of the line or the other.

If you haven't used a band saw frequently in the past, the most common problem for an inexperienced user is that of overcorrection (somewhat similar to a new driver tending to overcorrect the steering of a car). If the blade begins to drift to one side of the cut or the other, don't overreact. Visualize of merging the blade and the line several inches from where you're at, and begin the correction gradually. (If you are using a new saw for the first time, consider practicing on a length of 2 x 8 Douglas Fir marked with gently curving lines [such as seen in Photo 4] to get the feel for the tool before working with the much more expensive pinblock material.)

With the length of the pinblock being what it is, it is helpful to either set up an extension to the bed to support the weight of the block on the outfeed side, or to have a helper assist. Otherwise, cutting the last few inches becomes tricky, as you attempt to feed the pinblock through on the tail end of the cut, while supporting it in midair on the front end.



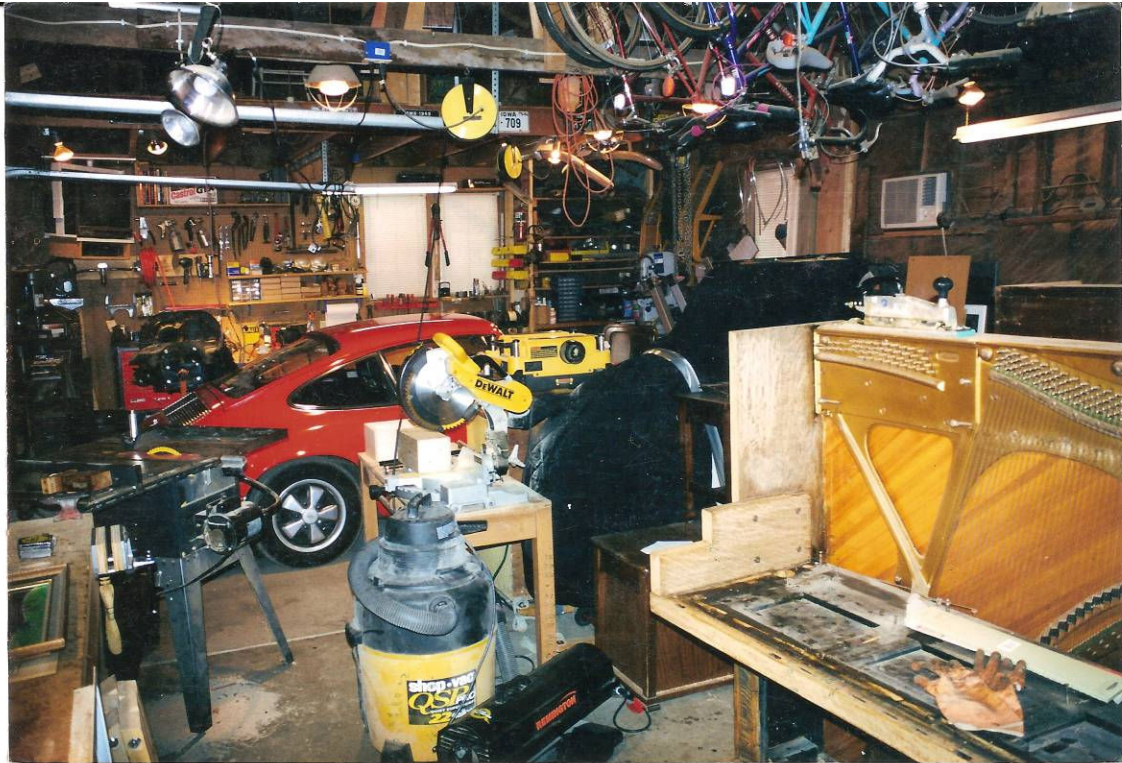
*Photo #4: Old block, new block and scrap piece*

At this point, run the block through a thickness planer if the thickness of the new block is greater than the thickness of the old block. With the bottom side of the block turned up as you push it into the planer, turn the blades of the planer down until they just barely engage, then run the pinblock through. Take off material one shallow pass at a time until the thickness of the new pinblock is correct.

Finally, cut off the ends. Using the chisel cuts made earlier to line up the old pinblock on top of the new, mark the ends of the block with a pencil line, and cut on the table saw or a miter saw. Voila! You are ready to fit the block to the plate.



Next month – fitting your new pinblock to the plate. Until then, make your shop a place you can relax!



*My previous shop – an accident waiting to happen! If there were a fire, could you quickly find the fire extinguisher?*

**Chuck Behm**  
**River City Restorations**  
**410 Monona Street**  
**Boone, Iowa 50036**  
**behmpiano@gmail.com**