



Turned Off Center Door Stop



by KellyCraig

For whatever reason, I decided to create a door stop. Perhaps it's a result of a subconscious longing for spring, when we can prop our doors open without getting snow in the house, or suffering flies that come with summer. Compound this with that I, like many, often find myself searching for new ways to use scraps, and I like trying to come up with new project designs.

I did a lot of on line searching under terms like "turned offset door stop," "2x6 offset doorstop" and so on, but

the only thing that showed, over and over again were, for example, a 2x2 that, after both ends were turned, were cut diagonally to produce very low slung (so to speak) stops.

I thought it would be interesting to turn a handle on extremely offset pieces of wood, like 2x6's and 2x8's. What I came up with is the simple door stop in the picture.



Step 1: Getting Started

To make your own door stop, cut a piece of 2x6, 2x8 or 2x10 to about 12" long.

Leaving it a bit longer allows you to more easily set the pieces up for turning the wood off center on the lathe. Any excess will be cut away when you're done.

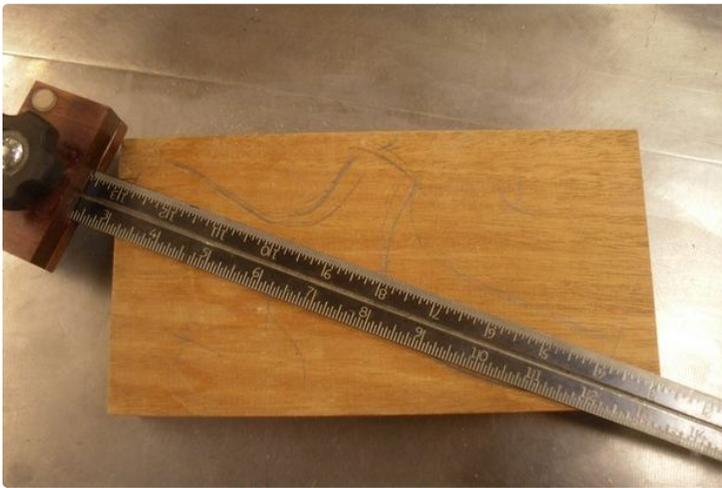
Step 2: DRAW A DIAGONAL LINE FOR YOUR BASE DESIGN

Starting down from a top corner an amount equal to or just a little more than half the thickness of the wood, draw a diagonal across the face of the wood, to the bottom or just above the bottom of the opposite side. For example, if the wood is 1-1/2" thick, start the line at least 3/4" down from the top.

You can start the line a little farther down (e.g., 7/8" or 1") down from a top corner. Doing so will just lower the handle. On the other hand, starting the line higher, that is, less than a distance equal to half the

thickness of the wood, will raise the handle. However, by raising the handle, you will either end up with flat spots or you will have to turn the handle smaller to get rid of them.

Running the line to about a quarter inch to a half inch above the bottom will allow you to keep the stop a little longer. For some, it may make it easier to finish the next step.



Step 3:

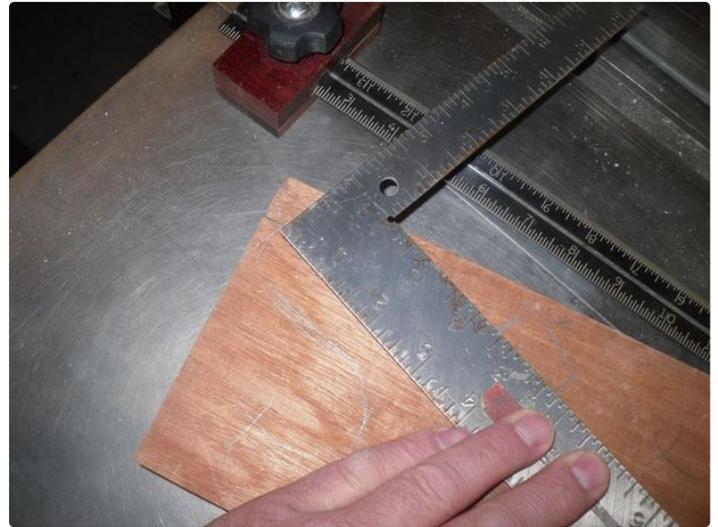
Off each end of the diagonal line, draw lines that project ninety degrees and about a half inch out on both sides of the diagonal line. Keep the lines as far toward the end of the diagonal line as possible.

Because you will be turning this piece of wood at an significant angle, compromising the hold the center has on the wood.



extreme angle, these ninety degree will allow you to establish flat surfaces to mount the wood between lathe centers.

Without these lines, you would be forced to try to mount the wood between centers on wood that is at a



Step 4: ROUGH IN YOUR STOP DESIGN

Within reason, leave plenty of wood on your rough design for the handle, the general shape of the stop and for mounting the stop on the lathe. For example:

- 1) If the thickness of the wood is 1-1/2", draw the handle area so it extends at least half that distance (3/4") out from each side of the diagonal line. This is so, when you turn the handle, you can keep as much wood as possible for a comfortable handle, without any flat spots.
- 2) For the opposite, bottom end, you need to leave far more than what, eventually, will be slid under the door. Note the arrows in the picture. Without the temporary excess of material, you would not be able to mount the piece on the lathe. Too, a little more

wood here helps balance during turning. You can use the lines you drew that extend ninety degrees and about 1/2" from the diagonal line.

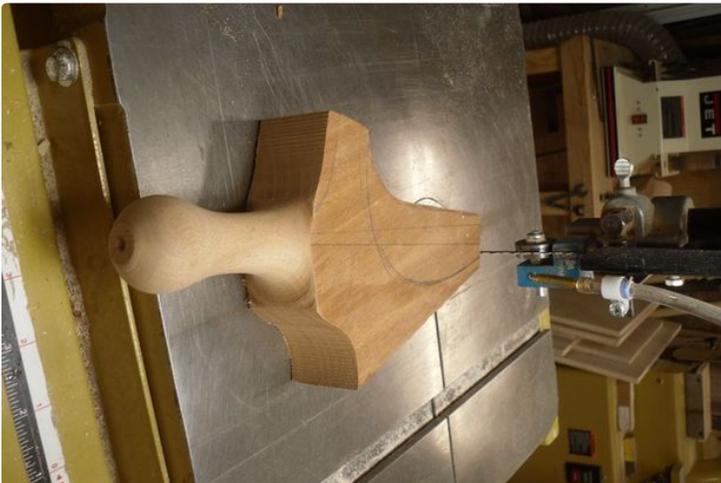
Though you need to leave enough material for a good handle, and and the bottom, to mount the stop on the lathe, you do not want any more than necessary, because it throws the stop further out of balance during turning.

Keep in mind, if there is more weight at the handle end than the other, the doorstop to tend to tip over backwards, onto the handle. For this reason, I try to leave a significant amount of wood at the area of the heel.



Step 5: TRIM FOR TURNING

At this point trim off excess wood that would contribute to throwing the turning off balance and cause vibration. You, also, want to cut your two lines ninety degrees to the diagonal line, for the mounting surface between lathe centers.



Step 6: TURN THE HANDLE

Mount the door stop between centers using standard turning procedures (i.e., keeping the centers as close to center on the two ends).

Turn the handle at a speed appropriate for your lathe. For example, I turned the door stop in the photo on my Jet mini lathe. Because it and its base are

relatively light, I had to slow it down to about six or eight hundred RPM. Start off slow enough to avoid vibration, but as fast as you can to get smoother cutting. Once you've got the handle turned, sand it to at least one hundred fifty grit.



Step 7: FINAL TRIM, SAND & FINISH

Remove the door stop from the lathe, then use a band or jig saw to cut away the excess material at the heel and at the front, where excess material was left to allow mounting to the lathe.

Once done, sand according your preferences, apply the finish of your choice, allow it to harden, then go block a door open.

