

## A “Third Hand” modification for the Powermatic 3520 series wood lathes

The Powermatic 3520-series wood lathes are extremely popular – well built, rugged, great fit and finish, the Powermatic wood lathes simply work great.

Several years ago, I had the good fortune to obtain a 3520A (that’s ‘A’, not ‘B’, model) at an estate sale. The precursor to the ‘B’ model, the ‘A’ model differs slightly from the newer ‘B’ model in that it doesn’t have the rpm readout in the headstock, and the headstock controls are laid out differently.

One annoyance the ‘A’ and ‘B’ models share is not being able to hands-free lock the spindle lock. The ‘A’ and ‘B’ model spindle lock is a spring-loaded button that must be held in whenever the spindle lock is engaged - thus the need for a ‘third hand’.

I’ve seen several hands-free methods of holding in the spindle lock button when the lock is engaged. These took the form of hinges, magnets, sliding the lock button guard over the pushed in button. None of these seemed quite desirable.

While doing a ‘shelf check’ in our local (Spokane, WA) Woodcraft store, I came across a series of store brand (Wood River) toggle clamps. I found one that I thought would fit my application and took it home to try out. Lo and behold, it fit perfectly, was extremely easy to install and use, and (to my eye anyway) looked good.

Keep in mind that I used this toggle clamp on my 3520A model. It appears as though it may also work/fit the 3520B model. Next time I’m in Woodcraft, I’ll check and see if it works.

As a caveat to this modification, I claim no originality for this design. It’s just that I’ve never run across it.

Here’s the parts list:

1 ea Woodcraft ‘Wood River’ item 143938 Low Silhouette toggle clamp

4 ea 10-24 x 1” machine screws – I used Phillips head screws

4 ea #10 lock washers

1 ea #25 drill bit

1 ea 10-24 tap

1. Set the toggle clamp on top of the spindle lock button guard and mark and center punch the four holes to be drilled
2. Drill the holes using the #25 drill bit. I ‘eyeballed’ my drilling, using the little level built into the drill housing – it came out just fine.
3. Tap each of the four holes using the 10-24 tap. Keep the tap lubricated as you advance it into the headstock casting.
4. Install the Wood River toggle clamp onto the 3520 headstock as shown in the photos below.

Follows are captioned photos that should give you all the information you need.



3520A Headstock front panel showing the four marked and center punched holes above the spindle lock button guard (upper right).



The Woodcraft 'Wood River' toggle clamp. Woodcraft item #143938



Starting to drill the four mounting holes (upper left hole drilled). Use a #25 drill bit for 10-24 hardware. Keep the bit slightly lubricated using 3-in1 oil or similar. The blue painters tape is only a drape to keep metal filings and oil off of the spindle lock button.



Four holes drilled. Starting to tap each hole to 10-24. Keep the tap lubricated.





Toggle clamp installed. Clamp shown in the 'spindle is locked' position.



Toggle clamp installed. Clamp shown in the 'spindle is unlocked' position.

It may appear that the toggle clamp in the 'unlocked' position would interfere with headstock control operation, or that it might be 'in the way'. I have found that neither situation is true in my use of the lathe.

If this modification works for you, you'll probably find, as did I, that it will save you a lot of time, effort, and needless expletives!

Start to finish this modification took less than an hour.

Have fun turning....

Bob Schmidt

Inland Northwest Woodturners