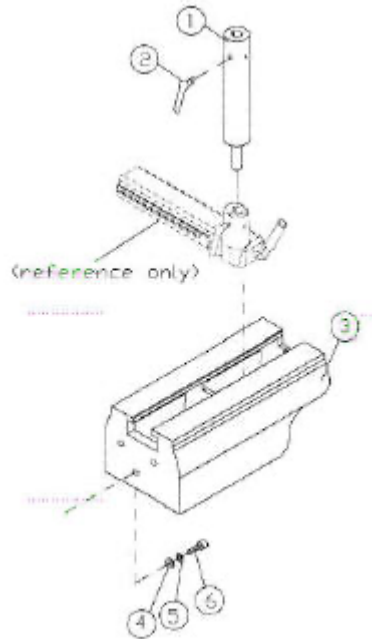


BED EXTENSION

Purchase:

- **PM Supplied Bed Extension**



18" Extensions are available from Powermatic. Put them on either end.
Powermatic Part # 6294727B - 18" Extension Bed for Model 3520B with Tool Rest Extension

- **Discussion:** <http://www.aawforum.org/community/threads/34736>
- **Comment** Bob Greenblatt: I've got one and it is very handy. The resulting swing is about 19 1/2". I use it a lot when I put big out of round bowl blank (log roughed with chainsaw) and a corner hits the ways. It's a cinch to slide the headstock to the end and rough it out so it's closer to round. Then slide it back and attach the tail stock for support in final shaping.
- **Lining Up the Extension** (Bill Turpin 7/15/10)

Lining up the bed extension can be difficult. Here is an easier way than the manual suggests:

1. Have the tailstock on the regular bed.
 2. Mount the extension loosely with three screws.
 3. Loosen the nut on the tailstock fastener.
 4. Move the tailstock so that the clamping circle plate is centered over the seam between the bed and extension.
 5. Tighten the tailstock clamp. It may be necessary to tighten the nut loosened in step #3.
 6. This will align the extension and the bed. It may be necessary to adjust the nut, extension bolts, etc, until everything lines up.
 7. Tighten the three bolts on the extension.
- **Tailstock Riser for PM Supplied Bed Extension** (Summary from [WoodCentral](#) Turning Forum message 1249950 archived)

John Lucas asks: "I seem to remember hearing that Powermatic had an outboard attachment offered for the 3520B that included a riser for the **tailstock** and Tool rest. I tried searching their website last night but I was tired and only found one vague reference. Then my computer locked up so I gave up for the night. Anyone know if this is offered or did I dream it up. I can drill holes in my legs and mount my bed extension lower."

Ed Kelle: I've got it. Comes with 6" toolrest riser. New B legs have mounting holes for either flush, or lower mounting. Lower can be done on either leg. Flush is one side, tapped for the bolts. on the other holes are drilled out for thru bolts for adding another full bed extension. Of course I put the legs on the wrong sides to do the flush mount, I don't want the headstock weight on the extension, so I'm not going to remount the headstock unless absolutely necessary. Got mine at Osolnik

Bob Fawcett: I have the extension kit. It does not come with a riser for the **tailstock**. It does come with a tool rest extension so you can use it for bowls. Bolts to the legs which on the 3520B are predrilled and tapped to accept the extension. Not sure about the 3520A.

Charlie Anderson: And therein lies the shortcoming of the extension.

John Lucas: The extension is long enough to let you do some platters and narrow bowls with the tailstock if it had a riser block. I guess I'll have to plan on building one of those. Unfortunately the tool rest extension is the easy part to build. The tailstock riser will require some machining of the top and bottom surfaces that I can't do myself. I could build it out of wood to get me by for the few times I would use it.

Make your own:

- **A K Ransom's Extension:** original source website is no longer active



- **Rollie Bowns' Extension:** From the AAW Main Forum:
<http://www.aawforum.org/community/threads/3174>

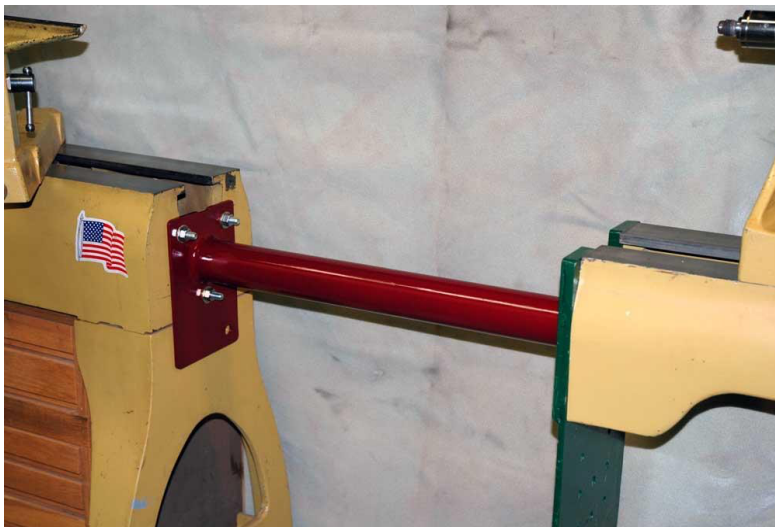
Below is a picture of the steel extension I made to replace a plywood prototype. The point of it is to have extra length on the rare occasion when I need it. One of my sons says that I make these things more for the fun of making them that any real use I will get out of it. There is some truth to that. Anyway, it cost me \$6.33 for the metal and bolts. That does not include the welding rods I used. Pretty cheap compared to some other alternatives.

I also considered putting an additional factory extension on the head stock end. However, in addition to the cost of the extension I have two problems. One is that there are no holes for the bolts on the head stock end of my lathe and drilling the holes by hand would not be easy (exact placement being the major problem). The other is that the factory extensions have ways that are 50 thousandths of an inch thicker than the ways of my lathe (an original 3520.) They changed the thickness of the ways when Jet took over. I bought my factory extension on sale from Southern Tool and then had to spend \$100 to get it milled to the right thickness. There went the savings!

I have attached two pictures. One is of the new steel extension. The other is of the plate I made to lower the factory extension and the banjo and tool rest I made for it. The factory extension is set at the lowest of four settings and at that setting it gives a turning capacity of 44 1/2 inches in diameter. The faceplate on the lathe is 31" in diameter. (I used that a couple of years ago to make a project for the State Fair.)

As to the alignment, that was the difficult part of the construction. The parts have to be aligned and welded and drilled quite precisely. If that is done, then you simply bolt it together and it is right. Also, as you point out, on a turning that is five or six feet long, a slight misalignment of the headstock/tailstock is not going to matter.

As to the long spindle turning there are several ways to solve the problem of the space over the extension. One is to reverse the turning (swap ends). Another is to use a long tool rest and position the banjo at an angle. Here, one must use light cuts so as to not put too much strain on the banjo which is hanging out quite far. Turn what you can with the banjo on the lathe, then move it to the factory extension and turn the rest. Another method would be to slide the whole thing (headstock, turning, and tailstock as far as you can to the left (so as much of the turning as possible is over the lathe bed) and turn what you can, then slide all of it as far as you can to the right, move the banjo and tool rest to the factory extension and turn the rest. The last possibility is to buy another banjo and build a tool rest that spans the extension I made and rests in the two banjos.





- **Marshall Gorrow's Wood Fabricated Extension**



I wanted to turn longer pieces than the stock bed would allow. After pricing the 50-inch bed extension offered by Powermatic, I decided to construct one of my own. I may eventually purchase the full bed extension or construct a heavier duty one but for now this will do. In the above photo, you can see the main support for a clothes tree. This set-up will allow around 5 ½ feet between centers. If extra supports were used, I am sure that extension of 4 feet or more would be possible.

It was constructed mostly from leftovers from other projects.

A 2" x 10" x 6' ripped to 7 1/2". Then it was cross cut to 36" for the main bed

supports.

The end pieces were made from some white ash 1 inch flat stock on hand. A cardboard template was first made. Then a 1/4 plywood template was cut and modified for an exact fit. Finally the white ash end piece were cut and drilled on the drill press.

The leg support was also cut from a 2' x 10" The length was measured to insure that the bed would be level the whole length.. A 2" x 4" scrap was ripped into two pieces 2" x 3" x 18". T-nuts were used to support floor levelers.

All components were jointed using 1/4" x 20 TPI socket head machine screws and cross dowel nuts. (AKA barrel nuts)

3/4" x 2 3/4" x 36" hard maple was planned to within .004" and used for the bed as steel of the proper thickness could not be found locally. There is not a machine shop in the area with a surface grinder that could make the steel bed for a reasonable amount. Each bed should be measured with a micrometer as there may be production differences.

([PM 3530 Tips Bed Extension 1.1](#) Rev 07/15/10 Lining up Extension Post comments on [Wood Central](#) or [AAW](#)

forums. Email MustardMonster@gmail.com for minor corrections.)