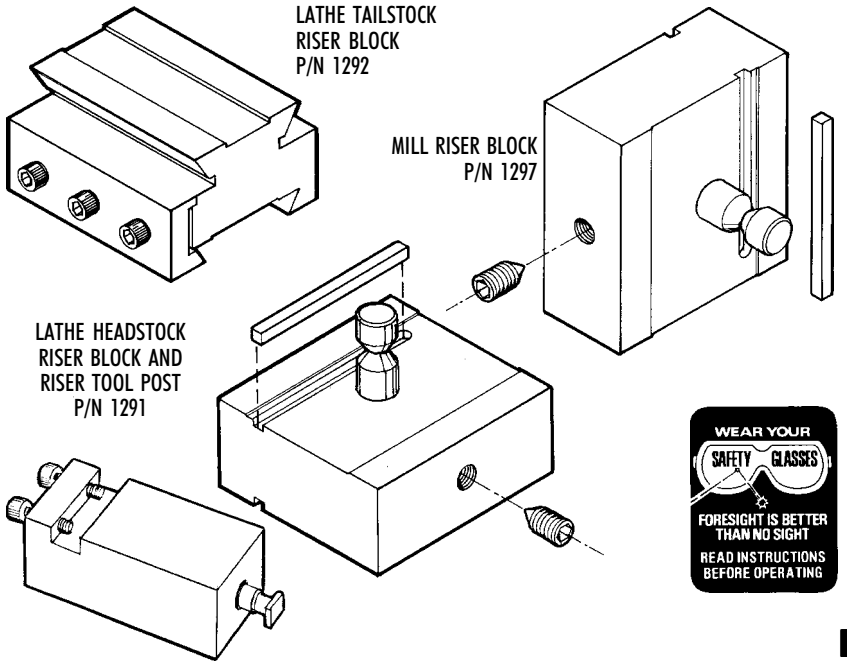

UNITurn & UNIMill
The cool tool

RISER BLOCKS
P/N 1290, 1291, 1292, 1297

The purpose of the riser blocks is to extend the capabilities of the UNITurn-Lathe and UNIMill DeLuxe-Vertical Mill. The lathe was never designed to turn metal parts of the diameters that can be accommodated with these accessories; therefore, extreme care must be taken in the form of light cuts and low RPM when turning large diameters.

Another point to be considered is accuracy. When you start clamping several pieces together, alignment will suffer. In the real world of machining, spindles are aligned by indicating, not with pins or keys. This wouldn't be the best way for hobbyists to start, and I believe the methods we use give our average customer machining capabilities they could never have without experience. As your projects get more and more complex, these methods may not be good enough. We manufacture adjustable tool holders (for more information read instructions for P/N 1201, 1202, 1203) to help eliminate some of these problems caused by misalignment. If you believe alignment could be a problem, machine a piece of scrap as a test piece to get the machine lined up. Don't risk a part you may have a lot of work in.

You may have to use a little ingenuity when turning large diameters because of the limited crosslide throw on standard machines. The purpose of the mill riser block (P/N 1297) is to get the spindle farther out from the column. This allows you to work farther in from the edge. There isn't any difference between the lathe and mill riser block except the lathe P/N 1291 comes with a corresponding tool post.

INSTALLATION

Remove the headstock by loosening the screw that holds it onto the lathe or mill and lift it straight off. Now install the riser block using the keyway to align it. Do this by pushing the riser block back towards the keyway without a twisting motion. Put the headstock back with or without the keyway depending on your next machining operation (taper cutting).

It is necessary to remove the handwheel at the end of the bed to remove the tailstock. Install the Tailstock Riser Block. You may have a slight problem fitting this up. It is a very difficult part to make because dovetails can't be measured or machined easily. The biggest problem we have encountered is the "tip" of the dovetail on the lathe bed may interfere with the riser block. A couple of passes with a file (see figure #1) should fix it. Riser Blocks made after 11/93 are of a two-piece design that in most cases eliminates this fitting problem.

Figure 1—Filing corners of bed dovetail for better fit of Tailstock Riser Block.

When replacing the handwheel try and let the set screw pick up the same indentation so you don't "chew up" the end of the lead screw shaft.

We at UNITurn, hope you find these to be useful accessories.

REPLACEMENT PARTS LIST

NO. REQ.	PART NO.	DESCRIPTION
1	1293	Tailstock Riser Body
1	1294	Tailstock Riser Clamp
1	1295	Headstock Riser Block Body
1	1296	Spacer Block Tool Post Body
1	1298	1/4-20 x 3/8" Flat Head Machine Screw (1291, 1297)
1	1299	Pivot Pin (1291, 1297)
1	1391	Steady Rest Riser Body
1	1392	Steady Rest Riser Clamp
1	4025	Tee Nut (1291, 1297)
1	4026	Head Key (1291, 1297)
–	4033	10-32 x 5/8" Skt. Hd. Cap Screw (1290–1 req., 1292–3 req.)
1	4054	5/16" -18 x 3/4" Cone Point Set Screw(1291,1297)
1	4066	3/16" #10 Washer (1290, 1291)
2	4069	10-32 x 3/4" Skt. Hd Cap Screws (1291)
1	4073	10-32 x 2" Skt. Hd. Cap Screw (1291)

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