



24" Machined Lathe Base Assembly Instructions

P/N 44050

Replacing the Cast Base with the New Machined Base

These instructions will guide you through assembling our new lathe base on an existing lathe that has our original cast lathe base.

1. The 44050 lathe base consists of (3) main parts and (6) screws.

NO. REQ.	PART NO.	DESCRIPTION
1	40400	Plug Button
4	40670	10-32 x 1/2" SHCS
2	40710	10-32 x 1-1/4" SHCS
1	44020	Machined Headstock End Mount-2024 Series
1	44030	Machined Tailstock End Mount-2024 Series
1	44040	4400 Machined Lathe Base-2024 Series

FIGURE 1—P/N 44050 parts list (see the exploded view on page 3).

2. Your original cast base is mounted to the lathe assembly using (2) 10-32 screws. Flip your machine over, and you will see the two mounting screws shown below (see Figure 2).

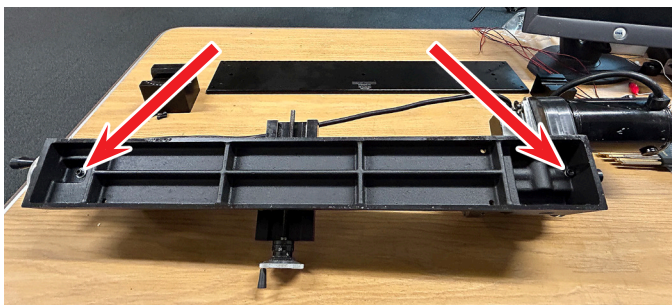


FIGURE 2

3. Remove these two mounting screws and pull the base off of the lathe assembly. (see Figure 3)

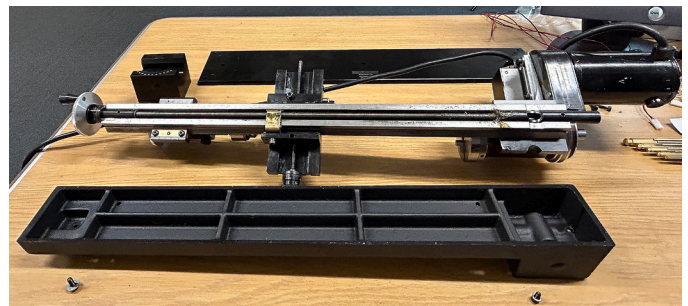


FIGURE 3—The cast base removed from the lathe assembly.

4. Lay out your 44050 parts as shown below. The base P/N 44040, the headstock mount (P/N 44020), the tailstock mount (P/N 44030), with (2) 10-32 x 1/2" SHCS (P/N 40670) (and (1) 10-32 x 1-1/4" SHCS (P/N 40710) with each mount. (see Figure 4)



FIGURE 4—The assembly parts for the new lathe base (44050).

5. Take your lathe assembly and turn it upside down. Mount the headstock end mount onto the bed assembly using the 10-32 x 1-1/4" SHCS (as shown in Figure 5). The screw will only thread into the lead screw thrust, 2-3 turns. Thread the screw in "gently" while wiggling the headstock mount to ensure that the bed is aligned correctly with the mount.

BIG TIP: Turn the 10-32 x 1-1/4" screw counterclockwise until you feel it click into the threaded hole. Then turn the screw clockwise. Turning the screw CCW until you feel the threads align with each other will ensure that you do not "cross thread" the screw into

the support. **DO NOT OVERTIGHTEN** these screws. Just tighten them to a snug fit (see Figure 5).

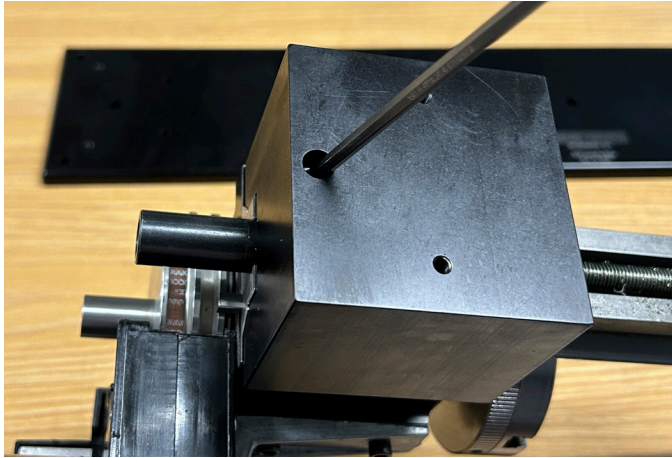


FIGURE 5

6. The mounting holes are offset on the tailstock end mount (P/N 44030). Because of this, the part can only be mounted in one direction. If you look at the 5/8" half-round cut in the part, you will see a punch mark shown below. The punch mark must be towards the handwheel when you assemble this part to the leadscrew thrust collar (see Figures 6 and 7).

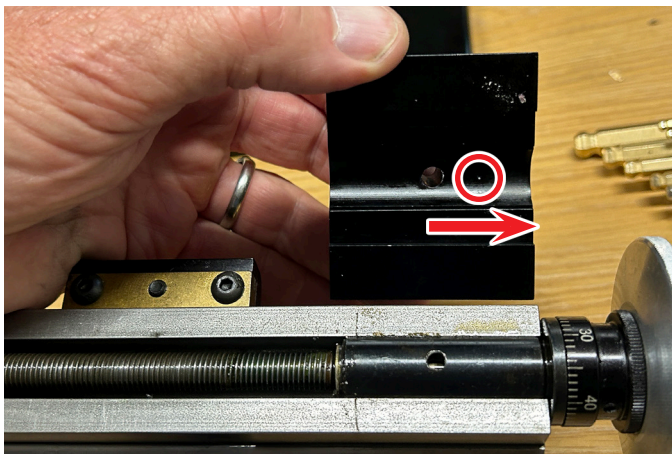


FIGURE 6—The red circles show the location of the punch mark on the tailstock end mount.



FIGURE 7

7. Attache the tailstock mount to the lathe assembly using the same technique as described for the headstock mount. Tighten the screw just snug so you do not strip out the threads (see Figure 8)

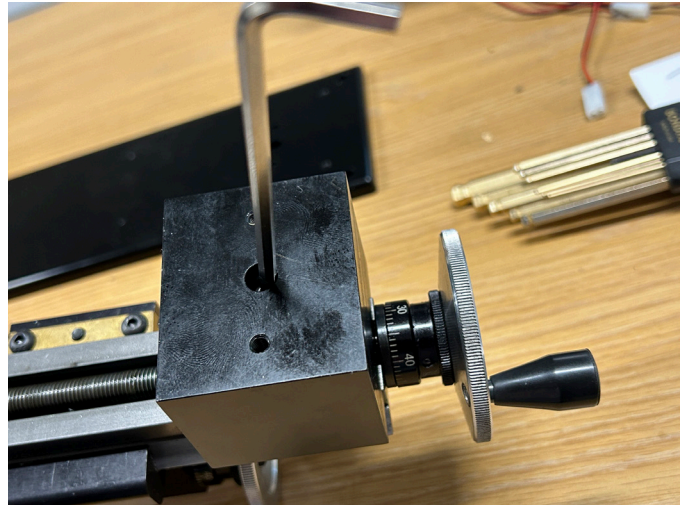


FIGURE 8

8. With your lathe upside down and the headstock end to the right side, your lathe base will be assembled with the laser logo on the same side as the crossslide handwheel. The base surface shown in the picture is the top of the base. This surface will be mounted to the bottom of the headstock and tailstock mounts. The mounting holes for the headstock and the tailstock are entirely different. Therefore, the base can only be mounted one way (see Figure 9).

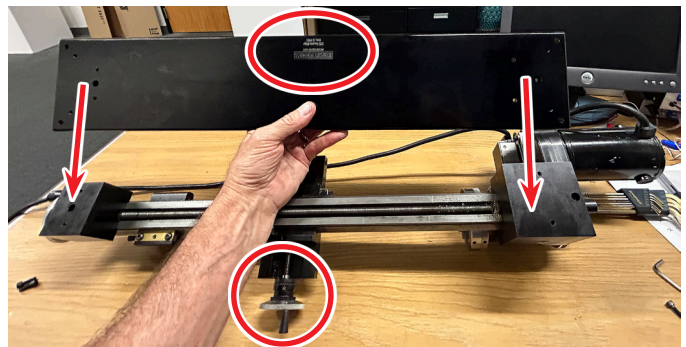


FIGURE 9

9. Place the base on the headstock and tailstock mounts. Then, align the mounting holes to the holes in the headstock and tailstock mounts. Thread in one screw at a time. Just thread the screw in 2-3 turns at this time. **Do not tighten them all the way.** With the screws loose, you will be able to get all four of them started (see Figure 10).

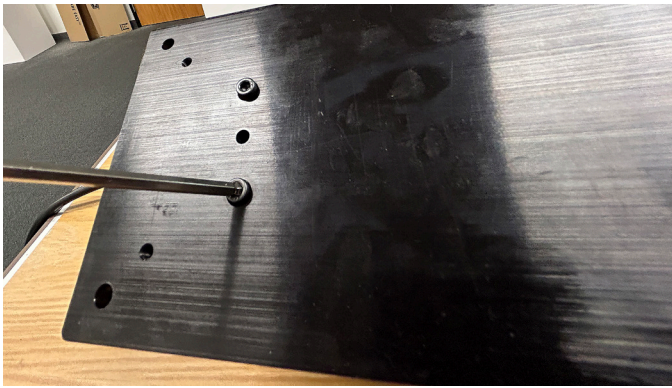


FIGURE 10

10. Once all four of the screws are started, tighten all of them a little bit at a time and alternate from one screw to the next until they are all snug. Then tighten all four screws.
11. Now that the four main mounting screws are tight, use the access hole at each end of the base to tighten the two 10-32 x 1-1/4" SHCS just a bit more. Again, do not over-tighten these screws, or you will strip out the threads (see Figure 11).

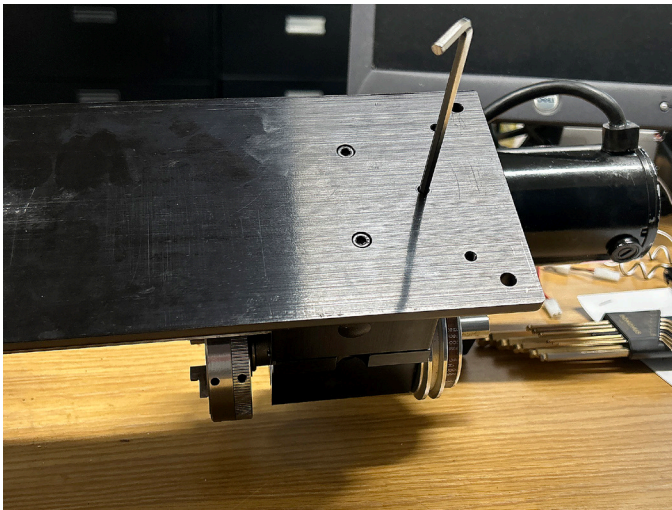


FIGURE 11

12. Turn the entire machine assembly over. Plug it in, and start making chips (see Figure 12).

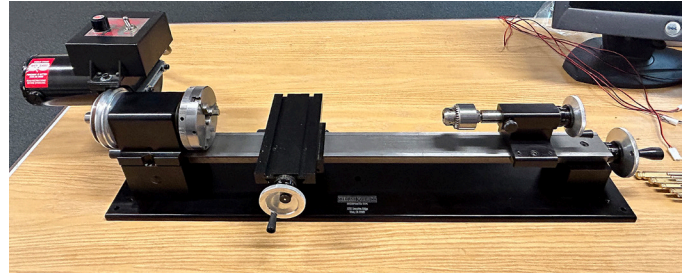


FIGURE 12—The completed base conversion.

Thank you,
Sherline Products Inc.

44050 Machined Lathe Base Exploded View

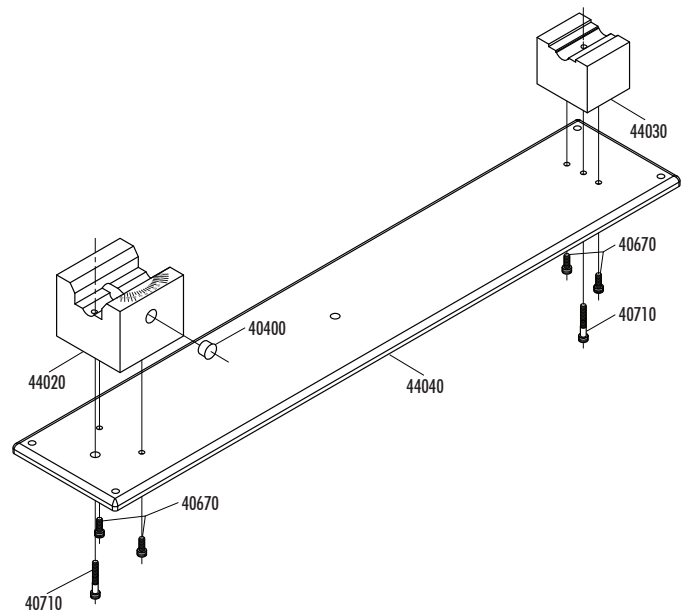


FIGURE 13—Refer to the parts list on page 1 for part descriptions.