

## TIP 83 — Rotating Mill Vise Base Enhancement/Russ Cupan

I use the milling vise (P/N 3551) on the rotating base (P/N 3570) quite a bit and have met with some frustration when trying to slide the vise into the rotating base. It comes from the vise clamps (P/N 35740; see Figure 2, Ref. No. 9) needing to be lifted as the vise is being inserted into the rotating base.

I found that small coil springs will fit into the counter-bores beneath the clamps and hold them in a raised position, so the vise can be slid right into the base.

The coil springs are 1/4" O.D. with .030" diameter wire, and about .15" of free length (see Figure 1). They just drop into the counter-bores where the clamps go with no modifications to the clamps at all.

The springs I used were just some I had lying around. I simply kept cutting the coils back until I had something that worked. The 1/4" O.D. was a size that fit into the counter-bore and the free length of .15" was what I measured when it seemed right. The springs I started with were about 3/4" long. I cut them in half with a cutting disk mounted in a Dremel® rotary tool. Then it was only a matter of trimming coils until they worked.

As far as a vendor for similar springs, I suppose any well-stocked hardware store would have something that will work as a starting point.

Those little springs made my life a bit easier.

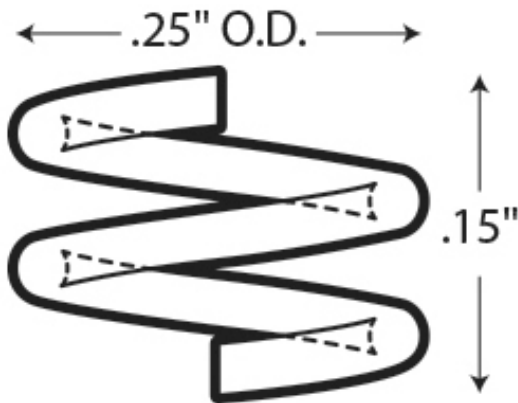


Figure 1—Spring dimensions

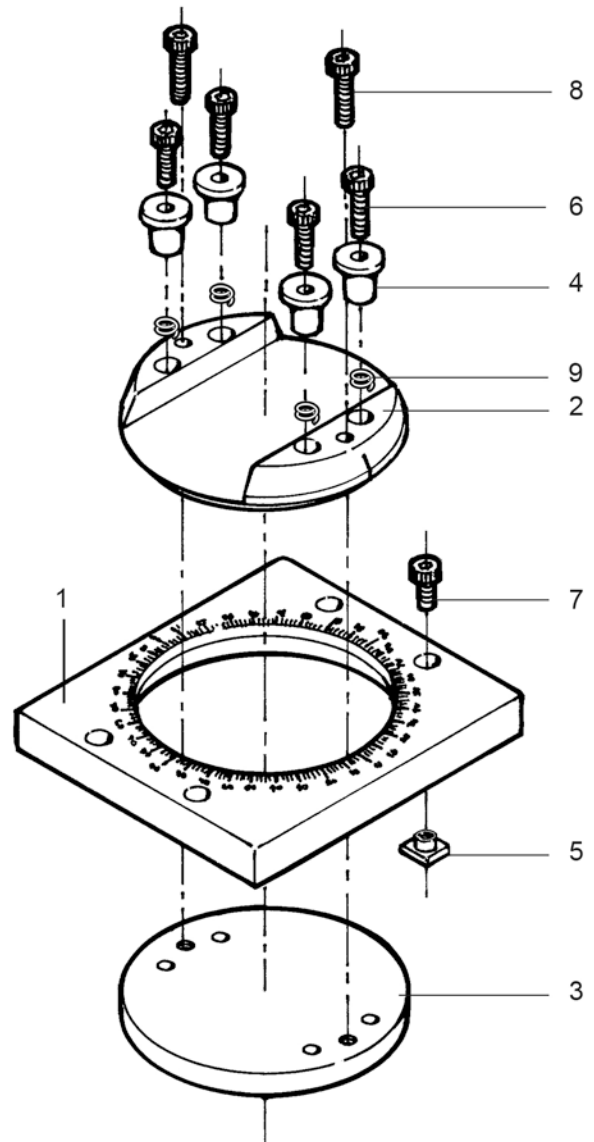


Figure 2—Exploded View

REF. NO.	NO. REQ.	PART NO.	DESCRIPTION
1	1	35710	Vise base
2	1	35720	Rotating base—vise
3	1	35730	Clamp ring—vise
4	4	35740	Vise clamp
5	4	30560	10-32 T-nut
6	4	40330	10-32 x 5/8" SHC Screw
7	4	12110	10-32 x 5/16" SHC Screw
8	2	40690	10-32 x 3/4" SHC Screw
9	4	N/A	Springs