

Hi David,

Yes sure looks like you have the wrong dial, will get the right one sent shortly. Not sure how they did that one, all the others seem to be right! Must have just grabbed the wrong dial when putting the machine together.

Matt Nadeja

Quality Machine Tools, LLC

701 Parkway View Dr.

BLDG #7

Pittsburgh, PA 15205

Ph# 412-787-2876

[www.machinetoolonline.com](http://www.machinetoolonline.com)

Email [sales@machinetoolonline.com](mailto:sales@machinetoolonline.com)

**From:** David P. Best

**Sent:** Saturday, November 19, 2016 4:02 PM

**To:** Quality Machine Tools

**Subject:** PM1340 Cross Slide Dial

Hi Matt,

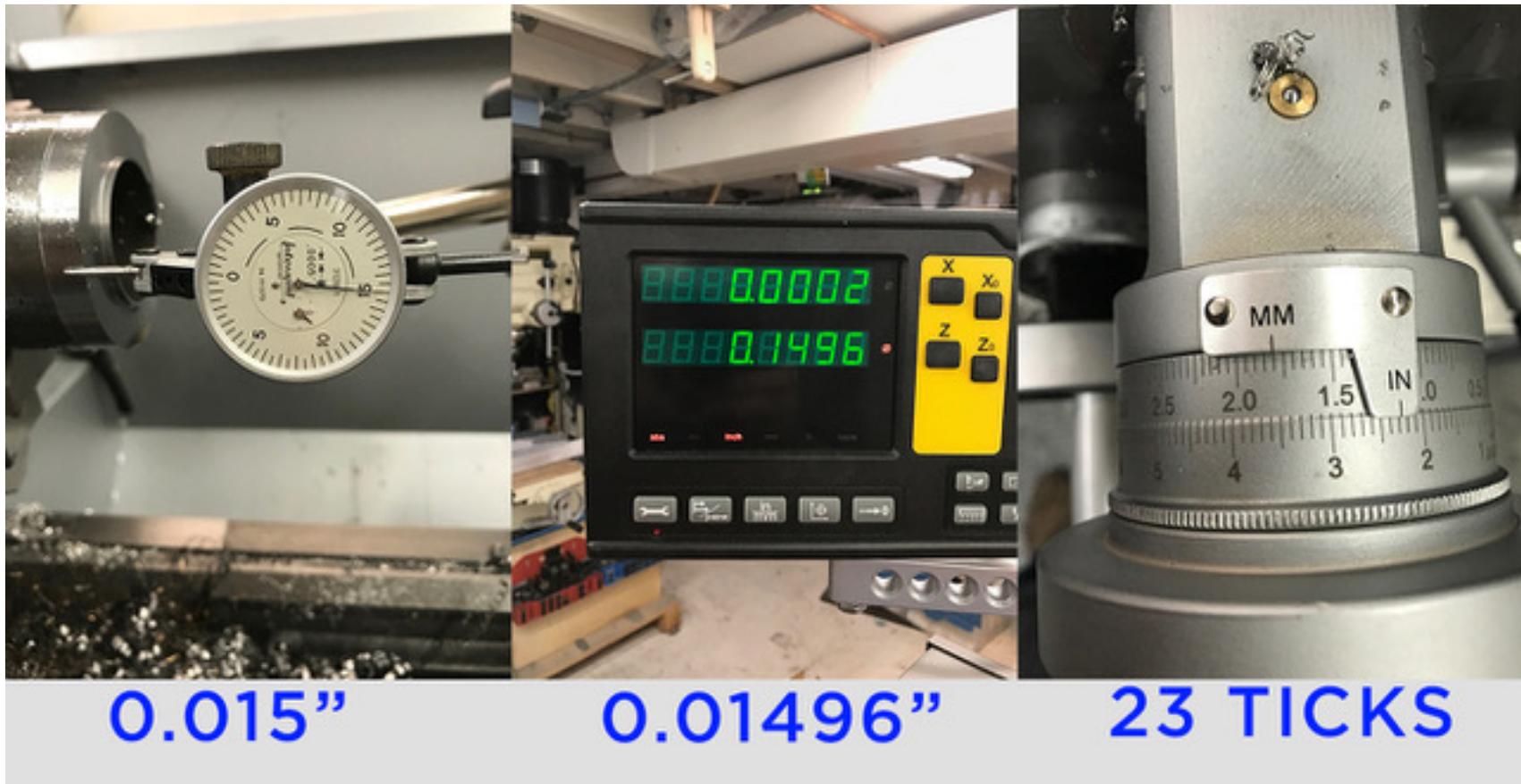
Before I got my DRO set up on the PM1340, I was trying to use the cross slide distance dial/ring to make adjustments to tool position and I was going nuts because the results didn't match what the handwheel dial was telling me. So after I got the DRO installed, I did some tests. Here's my setup.



I set the DRO display for the Z axis in Diameter mode and zero out the indicator (just calibrated last month), the DRO and the handwheel dial:



next, I move the cross slide 0.015" inward and this is what I get:



I have absolutely no understanding of the dial on the handwheel - it says each tick is 0.002" in diameter but "23" ticks for 0.015"? That would make each tick worth ~0.00065" - not useful. No wonder I was having a hard time with the boring bar and going off the handwheel for changes in tool advance outward.

I checked the lead screw on the cross slide, and one full exact revolution of the cross slide handle moves the carriage 0.010", so it is 10 TPI screw. But the ring has 157 divisions marked on the circumference, so  $0.010"/157 = 0.000637"$  per mark.

The PM1340 manual on your web site says the collar on both the cross slide and compound is supposed to have 100 divisions on the inch ring, and 127 divisions on the metric ring. My compound dial is that way, but the cross slide is not. My cross slide dial has 157 divisions on the inch ring, and 160 division on the metric ring.

I checked with another PM1340 owner, and his cross slide dial has 100 divisions on the inch ring and something like 127 divisions on the metric ring.

Sounds to me like my machine has the wrong dial ring on the cross slide. What do you think?

David Best