



Handwheel Digital Dial Calibration Instructions





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When is Calibration Needed

There are two reasons why a dial in the handwheel needs to be calibrated.

1. A new dial has to be inserted or replaced!
(see fig A, refer to page 8)
2. The existing dial in the handwheel needs to be recalibrated.
(see fig B, refer to page 9)



fig. B Existing dial in handwheel

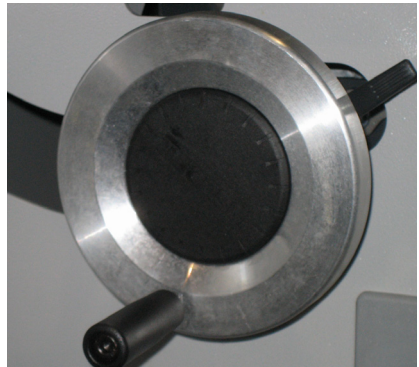


fig A Replace cap with dial



Necessary Tools

The tools you may need to perform a handwheel dial indicator calibration are as follows:



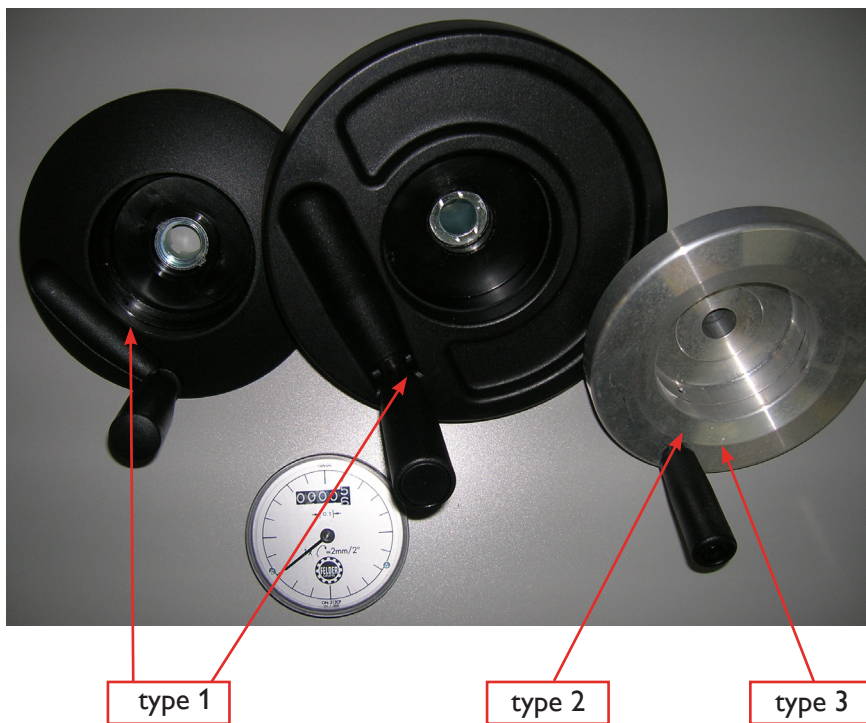
- Set of metric allen keys
- Set of metric wrenches 10 - 17 mm (bolts vary with machine model)
- Dial Calipers or accurate Tape Measure

NOTE: Tools will vary for different wheels.



Types of Handwheels

The type of hand wheel may vary according to the year and model of the woodworking machine.



- Type 1: Plastic handwheel stays on machine, it is bolted onto the shaft from the front (behind the gage), allen screw holding dial located *inside handle groove*.
- Type 2: Aluminum handwheel, slides on to shaft from the backside, allen screw holding the dial located on the *back of handwheel*.
- Type 3: Aluminum handwheel bolted on shaft from the backside, dial indicator allen screw *on the back of handwheel*.

Types of Handwheels

Most handwheels remain attached to the machine shaft and don't have to be removed in order to calibrate the dial indicator.

Aluminum handwheels always have to be removed from the shaft.



There are two ways of removing the aluminum handwheel from shaft:

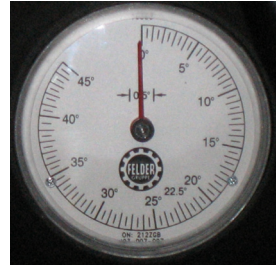
- slide off
- loosen bolt holding wheel to shaft



Set Reference Values

Before you start removing the aluminum handwheel from the shaft you have to set your machine settings to a reference value.

For angle indicators you have to set your saw or shaper unit to a set value. Turn wheel until your saw and/or shaper hits the mechanical stop. The end stop might need to be checked, it should be your 0 degree reference point.



For height indicators you have to set your planer unit to a set value. The best way to do this is to plane a piece of lumber to a specific size, preferably to an exact even number. Use an accurate measuring device to check the value. This number will be your value of reference.

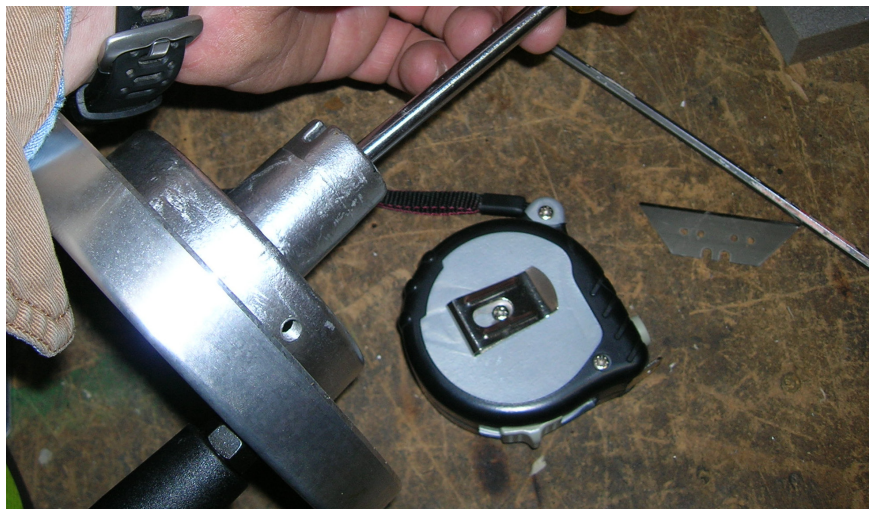




Inserting New Dial

If you have an aluminum handwheel without a dial and want to insert a new dial take the aluminum handwheel off the shaft either by sliding or loosening the bolt.

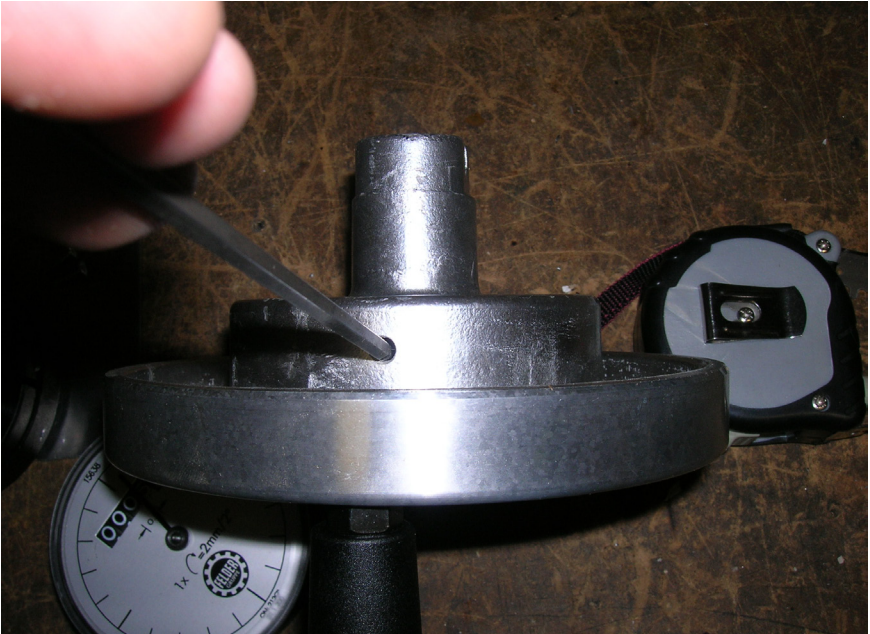
Now you can pop out the plastic insert from wheel socket as seen below by using a screwdriver.





New Dial

Before inserting the dial indicator you have to calibrate it.



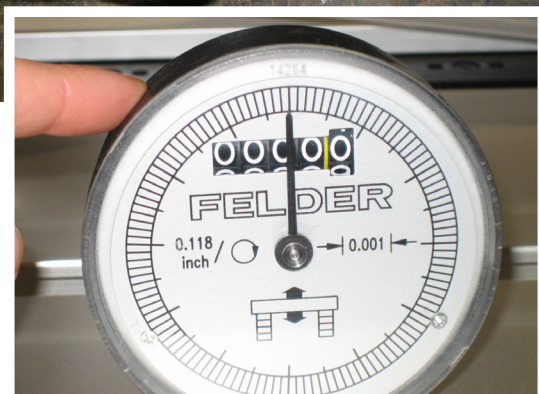
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Loosen the allen screw in the side of the back of the aluminum hand-wheel as seen above.

Calibration of Dial

Before inserting the dial indicator into the socket of the handwheel you have to calibrate it.

On a flat, clean surface holding the digital display wheel between your thumb and finger roll the wheel until the numbers on the display match the dimensions or values of your machine settings (ref. page 7).



The display works on a penduline basis and as you roll it the digital value will change.

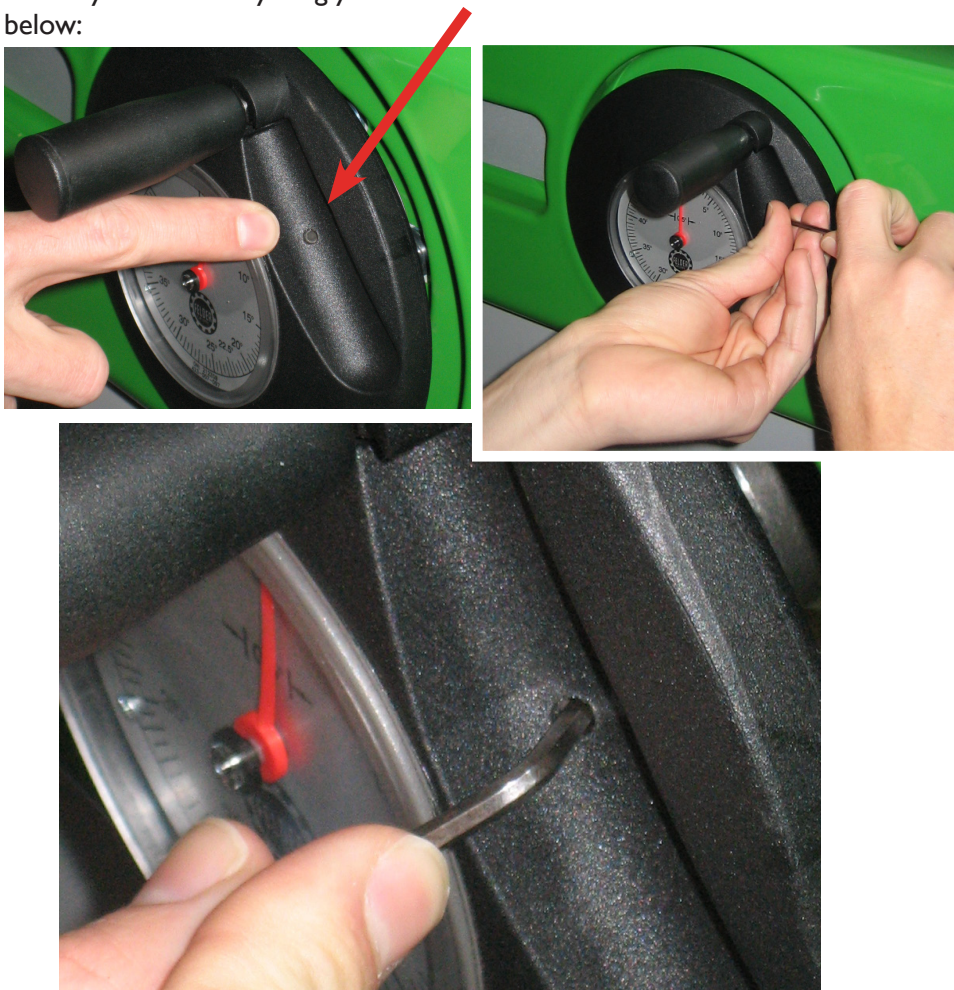


Recalibration of Existing Dial

The allen screw holding the dial is located inside the handle groove. You have two options on how you want to calibrate your dial:

1. calibrate dial leaving it inside the handwheel,
2. or remove the dial from handwheel and reinsert.

Before you can do anything you must loosen the allen screw as shown below:



Recalibration of Existing Dial

Option 1: Calibrating the dial inside the handwheel

Simply turn the dial with your finger until the indicator points to your reference value.



Option 2: Remove the dial from handwheel to calibrate it



Slide out the dial from the handwheel socket and follow the steps on page 10 for calibration.



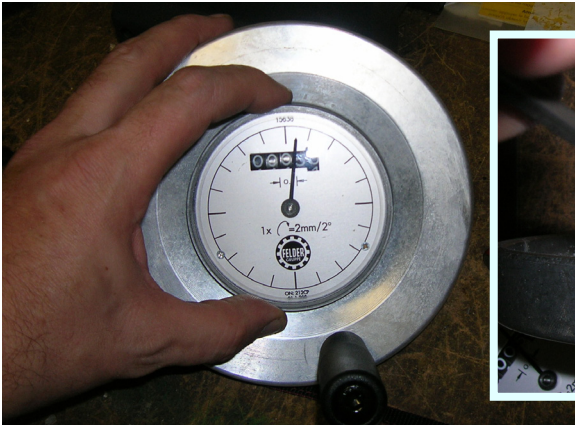


Inserting the Dial

You have two ways of inserting the dial back into the handwheel socket: Insert the clock so as to have the dial indicator at your set value with the needle pointing to the top (12:00 o'clock) and fasten allen screw.

1. Place the handwheel back onto the shaft so it is secure and does not move and then place the dial into the socket.
2. Or insert the dial into the socket and then fasten the hand-wheel back onto the shaft. **ATTENTION:** make sure you keep the set value on the dial, do not turn the handwheel.

ATTENTION: do not overtighten the allen screw holding the dial, it may crack!



Replace the bolt that was in the original handwheel that came with on your planer and snug up.

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Parts List

Felder Group USA Toll Free:

East 866 - 792 - 5288

West 800 - 572 - 0061

S. CA 866 - 714 - 6005

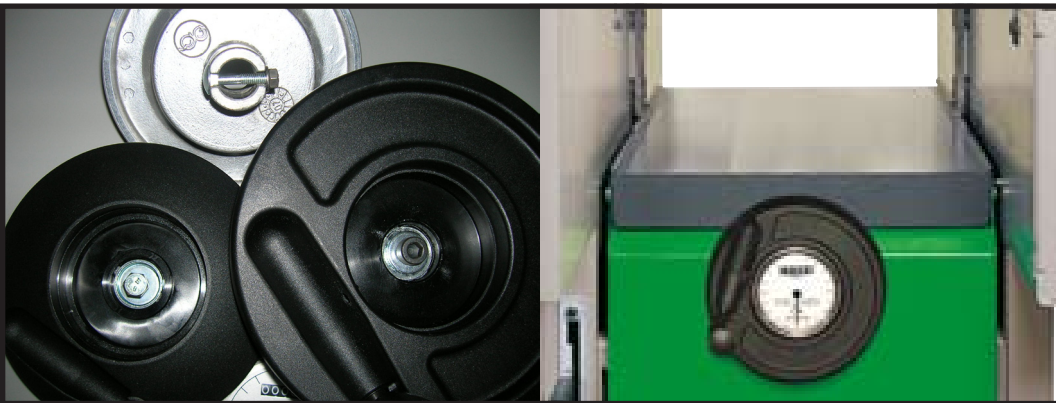
or shop online:

| Description | Part No. | Price \$ |
|---|----------|-----------|
| Height Dial Indicator | | |
| For 500 + 700 Series planer | | |
| in mm | 01.1.202 | \$ 72.69 |
| in inches | 01.2.202 | \$123.09 |
| For 700 Series Saw, Shaper, and Mortising Unit | | |
| in mm | 01.1.200 | \$ 72.69 |
| in inches | 01.2.200 | \$ 123.09 |
| Tilt Dial Indicator | | |
| Series 700 as of 04/2007 | | |
| for saw unit | 423-101 | \$ 72.69 |
| for shaper unit | 423-102 | \$ 72.69 |
| Series 700 up to 03/2007 | 01.1.200 | \$ 72.69 |
| FELDER Tapemeasure | | |
| 5 m / metric | 12.1.313 | \$ 6.72 |
| 16 ft / imperial | 12.1.314 | \$ 6.72 |



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