Please read through this owners manual carefully before using your new tool. Use your tool properly and only for its intended use.



The Fowler Mini-Mag protractor is a precision instrument used for measuring angles in which any of its four surfaces may be utilized.

- Zero can also be set at any angle so that the relative angle between two surfaces can be measured.
- The Mini-Mag protractor can also be set to read "level" zero, so it may be used as a leveling device.
- The Hold feature freezes the displayed reading while retaining the original zero datum. Simply press once to Hold and once more to return to measuring mode.
- Magnets embedded on both sides and bottom (35 lb. pull).

# **Operation**

- 1. To read absolute measurements, simply push the OFF/ON/LEVEL button and the actual angle is displayed. The calibration procedure for absolute zero is a simple procedure and instructions appear on the back of this page.
- 2. To read relative zero, turn the unit on, place the level on your reference surface and press the ZERO button, "Level" will disappear from the upper left-hand corner of the readout and set the display to zero. Move the unit to the second surface, and it will read the angle directly to an accuracy of ±.2 degrees. It does not matter if either of the surfaces is truly level. The Mini-Mag protractor will accurately register the angle between them. By pushing the on/off/level button twice the unit will return to level mode.
- 3. For accurate readings, you should always keep the Mini-Mag protractor upright and not leaning toward or away from you. The Mini-Mag protractor uses a standard 9 volt battery which can be easily replaced by removing the back plate with the included screwdriver.
- 4. Low battery indicator will be displayed when it is time to replace the battery.

# **Specifications**

Resolution:  $0.05^{\circ}$ Repeatability: 0.05°  $+ 0.2^{\circ}$ Accuracy:

Battery: standard 9 volt

(approximately 250 hours of use)





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# **Calibrating the Fowler Mini-Mag Protractor**



**1.** Place the level on a flat surface.



2. Press and hold ZERO and OFF/ON/LEVEL buttons for 5 seconds or until CAd1 appears.

Model No: 54-422-450-1



**3.** Do not disturb the level until the "1" flashes. When this occurs press "zero" briefly.



**4.** When CAd 2 appears rotate the unit 90 degrees clockwise. Wait for "2" to flash then press "zero" briefly.



**5.** When CAd 3 appears rotate the unit another 90 degrees clockwise. Wait for "3" to flash then press "zero" briefly.



**6.** When CAd 4 appears rotate the unit another 90 degrees clockwise. Wait for "4" to flash then press "zero" briefly.



**7.** When CAd 5 appears rotate the unit another 90 degrees clockwise. When the final reading is taken the unit will reset automatically.



**8.** Your Fowler Mini-Mag protractor is now ready to use.





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