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CP505E-12 Electronic Protractor User Guide

Para ver el manual en español:
www.starrett.com/u?505E-S
Pour consulter la version française du manuel:
www.starrett.com/u?505E-F

CP505E-12 Features

1. Miter Cut (for miter joints)
2. Single Cut (for butt joints)
3. Protractor (0° to 180° to 360° to 180° to 0° - 180° to 0° to 180°)
4. Compound Cut (for Crown Molding)

Fig. 1

Standard Miter (Default Setting)

The **MODE** button is used to toggle the tool's three main capabilities: Miter, Protractor, and Crown Molding.

Miter is the default mode. The scale should read 90.0° with both arms on a flat surface. This mode is designed for use with a Miter/Chop saw with display indicating the saw setting.

Inside Miter Cut

Open the arms to place them against the two walls of the corner. Read the value from the display and press the **HOLD** button (Fig. 2). Set your saw to this angle (Fig. 3) and make your cut. Swing the saw to the opposite side, reset to the same value, and make your second cut (Fig. 4). For an outside corner, flip the face of the board down on to the table and repeat the steps above.

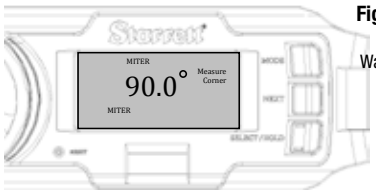

Fig. 2

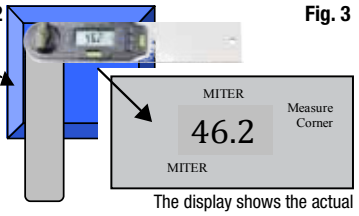

Fig. 3

The display shows the actual Miter angle to set your saw to.

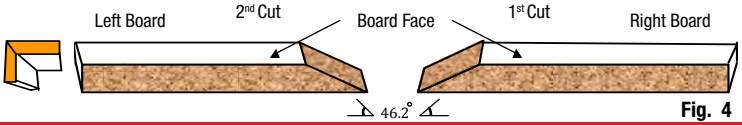

Fig. 4

Single Cut Miter

A single cut miter is used to have a trim piece flush against a wall (Fig. 6). Open the tool so the arms touch the walls. Press the **NEXT** button and the single cut value will appear (Fig. 5). NOTE: This is usually a very slight angle.

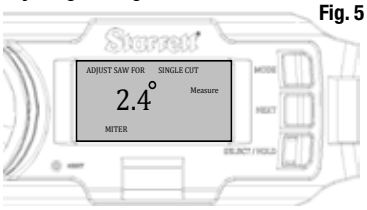

Fig. 5

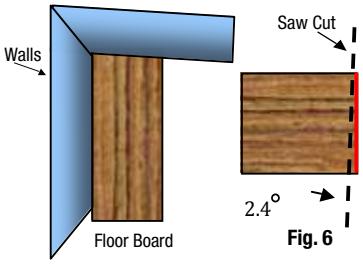

Fig. 6

Using the Standard 360 Degree Protractor

Press the **MODE** button until the display reads PROTRACTOR. Place the tool on a flat surface and collapse until the arms are aligned. Verify that the display reads 0.0°. If not, press the **RESET** button. The display will then read 0.0°. Then, open the arms and you will see the display change from 0° to 360° (Fig. 7).

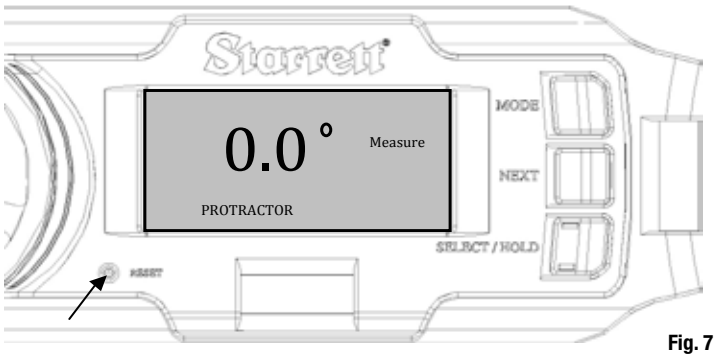

Fig. 7

Pressing the **NEXT** button displays the acute angle, changing the 0-360° standard protractor to one that reads 0-180-0° (Fig. 8).

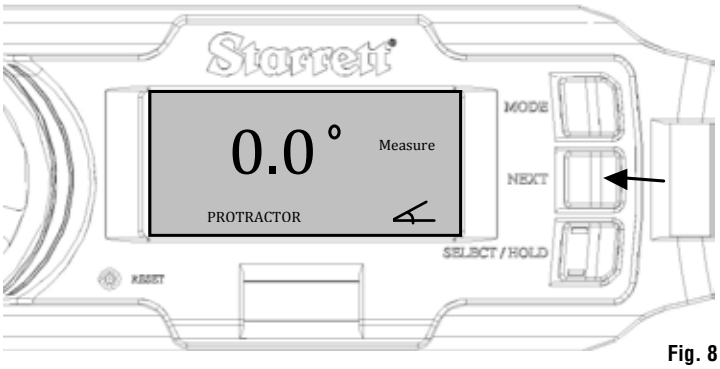

Fig. 8

Press the **NEXT** button again and the display will show the obtuse angle, reading from 180-0-180° (Fig. 9).

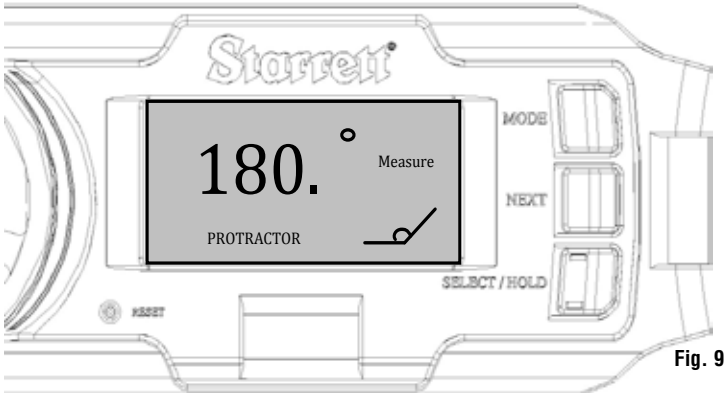

Fig. 9

How to Determine the Crown Molding Spring Angle

The spring angle of crown molding stock is the angle from the back of the molding to the wall. While the spring angle is stamped on some stock, it is preferable to verify the measurement.

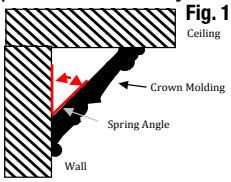

Fig. 10

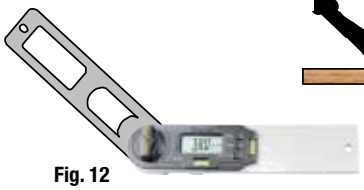
Fig. 12

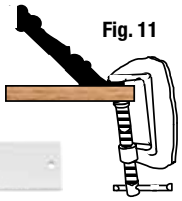
Fig. 11

To make this measurement, place the molding on the edge of a work bench and set the material so the edge that will come into contact with the wall is facing down on to the surface of the bench.

The molding will be on an angle. Lightly clamp the molding to hold in place (Fig. 11). Place the 505E under the bench top and open the arm so it mimics the angle of the molding. Place the 505E as shown in Fig. 12, then press **NEXT** and cycle through to the obtuse setting as shown in Fig. 13. This will be your spring angle. Common angles are 38°, 45°, or 52°.

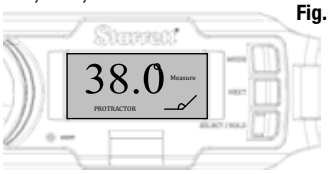

Fig. 13

Using a Custom Angle

To determine the miter angles using a custom spring angle, sequence through **MODE** to get to **CROWN**, then push the **NEXT** button until CUS is displayed (Fig. 14).

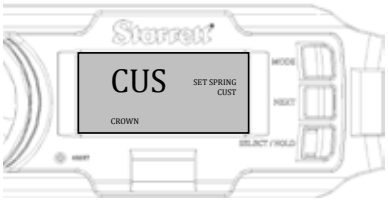

Fig. 14

Press the **SELECT/HOLD** button to set the spring angle. Move the arm of the protractor until the display shows the value of your custom angle (Fig. 15). Then Press the **NEXT** button and measure the corner angle.

If you find that your molding is not one of the standard spring angles using the steps above, use the custom option to determine the angles for your cut. First, write down your custom angle (Fig. 15).

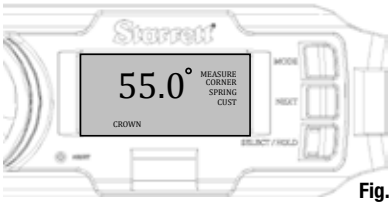

Fig. 15

Press **NEXT** to attain the miter angle (Fig. 16). Then press **NEXT** and set your blade to the bevel angle displayed (Fig. 17).

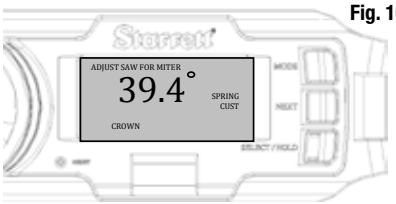

Fig. 16

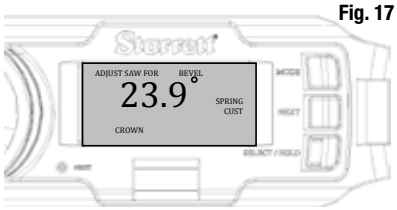

Fig. 17

Bevel and Miter Angles for Crown Molding Cuts

Press the **MODE** button until **CROWN** is displayed. Press the **NEXT** button to select the spring angle that coincides with your molding. Choices are 38°, 45°, 52°, or Custom.

Use the **SELECT/HOLD** button to lock in this value. Open the tool and place it in the corner to be measured. Note the value in degrees (Fig. 18).

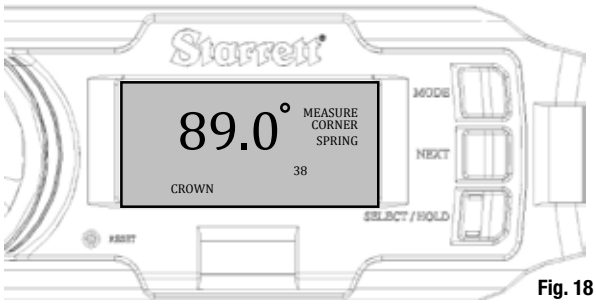

Fig. 18

Press the **NEXT** button to display the miter saw blade setting (Fig. 19).

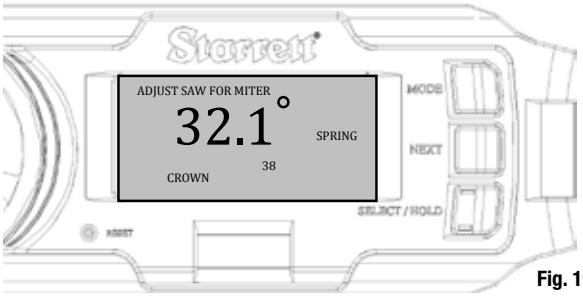

Fig. 19

Press **NEXT** again to display the bevel angle setting (Fig. 20).

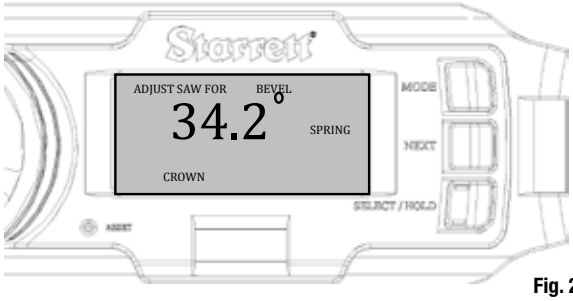

Fig. 20

Making the Cut, Crown Molding

Use the chart below for settings and layout for crown molding cuts with a compound miter saw.

Inside Corner	
Left Piece	**Right Piece**
Work Piece Location: Left to Blade	Work Piece Location: Left of Blade
Miter Swing: Right	Miter Swing: Left
Bevel Swing: Left	Bevel Swing: Left
Molding Edge Against Fence: Top	Molding Edge Against Fence: Bottom
Outside Corner	
Left Piece	**Right Piece**
Work Piece Location: Right of Blade	Work Piece Location: Right of Blade
Miter Swing: Left	Miter Swing: Right
Bevel Swing: Right	Bevel Swing: Right
Molding Edge Against Fence: Bottom	Molding Edge Against Fence: Top