Align the Tilt Sensor

The tilt sensor is aligned during assembly. In the rare event that your TruPulse suffers a severe drop shock, refer to the instructions below to re-align the tilt sensor.

1. From the Measurement Mode, press ▼ for 4 seconds to access the System Setup Mode. "UnitS" will appear in the Main Display.
2. Press ▼ to display the "inc" option as shown in Figure #13 below.
3. Press FIRE to select the "inC" option. The message "no" "CAL" appears in the Main Display and the display should look similar to Figure #14.

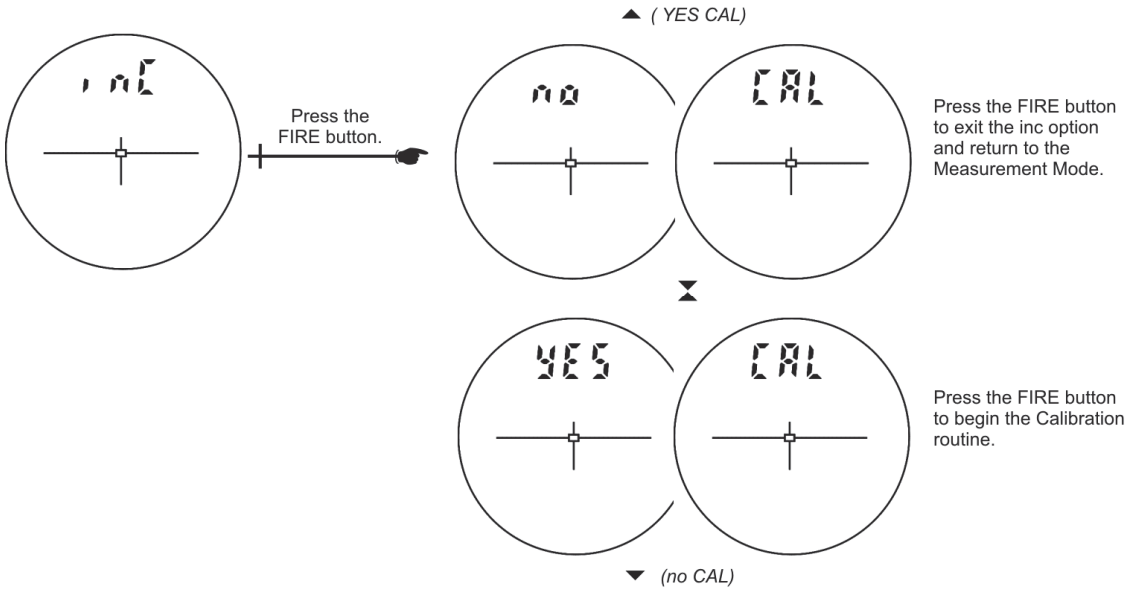

Figure #14

Press ▲ or ▼ to display the previous or next "CAL" option.

If "no" "CAL" is displayed, press FIRE to exit the "inC" option and return to the Measurement Mode.

If "YES" "CAL" is displayed, press FIRE begin the Tilt Calibration Routine.
The message "C1_Fd" appears in the Main Display.

Tilt Sensor Calibration Routine

Figure #15 shows the steps required to complete the Calibration Routine. The instructions are on the next page.

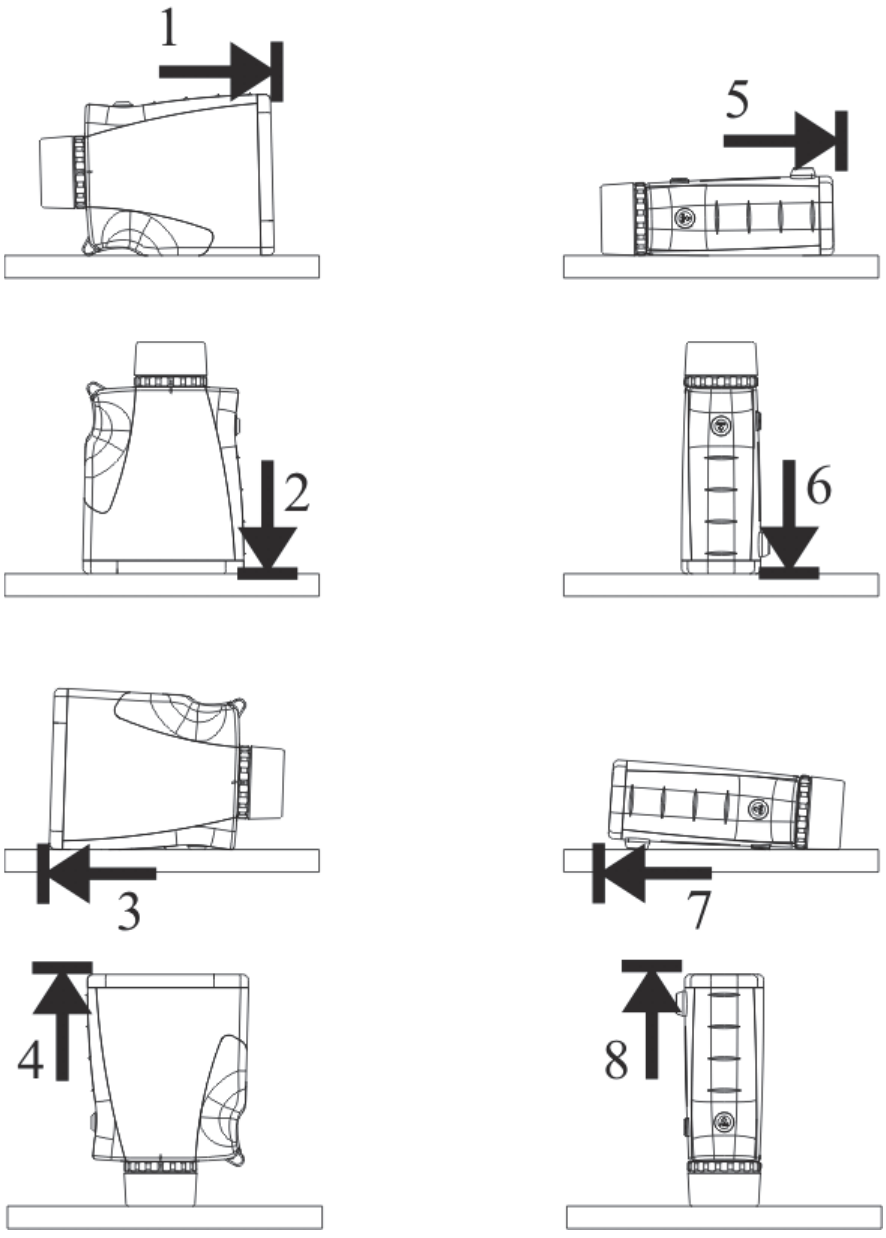

Figure #15

- At each step, wait approximately 1 second before pressing the FIRE button. Then wait another second before moving to the next position. It is import that the unit is held steady when the FIRE button is pressed.
- The Tilt Calibration routine can be aborted at any time during the procedure with a long press of ▲ or ▼. If the calibration is aborted, the unit restores the previous stored calibration.

1. Position the TruPulse on a flat, relatively level surface (15 degrees of level). The lenses should be facing forward as shown in Figure #15-1. Press FIRE to store the first calibration point.
2. Rotate the TruPulse 90 degrees, the lenses should be facing down as shown in Figure #15-2. Press FIRE to store the second calibration point.
3. Rotate the TruPulse 90 degrees, the lenses should be facing back as shown in Figure #15-3. Press ▲ or ▼ to store the third calibration point. Be careful to do a short press when you press the ▲ or ▼. If you do a long press, the calibration routine will be aborted.
4. Rotate the TruPulse 90 degrees, the lenses should be facing up as shown in Figure #15-4. Press FIRE to store the fourth calibration point.
5. Rotate the TruPulse 90 degrees along the optical axis, the lenses should be rotated, facing forward as shown in Figure #15-5. Press FIRE to store the fifth calibration point.
6. Rotate the TruPulse 90 degrees, the lenses should be facing down as shown in Figure #15-6. Press FIRE to store the sixth calibration point.
7. Rotate the TruPulse 90 degrees, the lenses should be facing back as shown in Figure #15-7. Press FIRE to store the seventh calibration point.
8. Rotate the TruPulse 90 degrees, the lenses should be facing up as shown in Figure #15-8. Press FIRE to store the eighth calibration point.
9. Look through the eyepiece, either a pass or fail message appears in the Main Display.
    - PASS: Press the FIRE to return to the Measurement Mode.
    - FAiL1: Excessive motion during calibration. Unit was not held steady.
    - FAiL2: Magnetic saturation error. Local magnetic field too strong.
    - FAiL3: Mathematical fit error.
    - FAiL4: Calibration convergence error.
    - FAiL6: Orientations were wrong during the calibration.

    If a "FAiL" message appears, press FIRE. The message "no""CAL" will be displayed allowing you to do a new calibration. See step # 3 page 22. If the calibration fails, the previous calibration is restored.