

# FIELD CALIBRATION PROCEDURES

## PCS-515 ETS VERTICAL ANGLE, X & Y AXIS

**NOTE:**        *The following mechanical adjustments must be checked (and corrected if necessary) prior to the electronic adjustment adjustment of any axis.*

- \* *Perpendicularity of Plate Vial to Vertical Axis*
- \* *Perpendicularity of Line of Sight to Horizontal Axis*

“Info from instruction manual for vial and LOS”

**1 AXIS 2 (Also calibrates Axis 1)**

[Vertical 0 point offset, X axis compensator and Y axis compensator].

**NOTE:**        *The instrument must NOT be in direct sun light (cloud cover or under umbrella is OK). Atmospheric conditions must be very good (no heat waves etc.)*

1.A This procedure requires a point which can be sighted to with an accuracy of 1". It needs to be near a vertical angle of 90°.

1.B Procedure start

1.B1 While pressing ← and ↑, turn the power ON.

COMP SET	SET
B	
ON/OFF : ON	OFF

1.B2 Use the ← key to move the cursor to "ON" and press the OK key.

COMP	SET B
COMP AXIS: 2	1

1.B3 Use the → key to move the cursor to "2" and press the OK key.

ANG OFFSET
TURN TELESCOPE ↑↓

1.B4 Turn telescope up and down.

STEP 1	OFFSET
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1.C Align the reticle (pay particular attention to the horizontal reticle line) on the point with the telescope in the normal position. Wait 5 seconds and press the "0 SET" key.

**NOTE:**        *Reticle alignment must be precise.*

STEP 1            OFFSET  
PLEASE WAIT

5" later  
→

STEP 2            OFFSET

**WARNING: Do not touch the instrument while "waiting".**

**WARNING: Do not use the lower horizontal tangent assembly during these procedures.**

- 1.D Release the upper horizontal tangent assembly and rotate the alidade 180°. Release the vertical tangent assembly and rotate the telescope 180°. Align the reticle on the point.

Wait 5 seconds and press the "0 SET" key.

STEP 2            OFFSET  
PLEASE WAIT

TILT C:	0° 00' 009"
TILT E	0° 00' 038"
V ANG	1° 04' 070"

- 2.E Press the "OK" key to store the values.

Display returns to Mode A.