



VERTICAL ZERO COLLIMATION

(Topcon) Legacy models

Topcon GTS-3 b/c/d

1. Hold (O set) key and turn power switch on.
2. {O set} will appear on the display (index telescope)
3. {1} will appear on the display (precisely sight target in face 1) 90 deg. side
4. Press the (O set) key to set
5. {2} will appear on the display (precisely sight target in face 2) 270 deg. side
6. Press the (O set) key to set
7. Adjustment is completed

Topcon GTS-300 series 301/302/303

1. Hold (ANG %) key while powering the unit.
2. {O set} will appear on the display (index telescope)
3. {Step 1} will appear on the display (precisely sight target) 90 deg. side
4. Press the (ANG) key to set.
5. {Step 2} will appear on the display (precisely sight target) 270 deg. side
6. Press the (ANG %) key to set.
7. Adjustment is completed.

□ **Topcon GTS-200/210 series**

201/202/203 + 211d/212/213

1. Hold the (F1) key while powering the unit.
2. When option screen appears press {F1 V. angle zero point}
3. Press the (F1) key {V Oset turn} will appear (index telescope)
4. {Step 1 Front} will appear on the display (precisely sight target) 90 deg. side
5. Press the (F4) ENTER key to set.
8. {Step 2 Reverse} will appear on the display (precisely sight target) 270 deg. side
6. Press the (F4) ENTER key to set.
7. Adjustment is completed.

□ **Topcon GTS-310 series 311/312/313**

1. Hold the (F1) key while powering the unit.
2. When option screen appears press {F1 V. angle zero point}
3. Press the (F1) key {VO/ axis adjustment} will appear (index telescope)
4. {Front Face 1 } will appear on the display (precisely sight target) 90 deg. side
5. Press the (F4) ENTER key to set.
9. {Reverse Face 2} will appear on the display (precisely sight target) 270 deg. side
6. Press the (F4) ENTER key to set.
7. Adjustment of VERTICAL AXIS is complete.

This gun also has an adjustment for the Plunge/horizontal axis which can be performed if you select (F3) {VO axis}---(F1) {Measurement} you will follow the same routine as above for the vertical. Then {horizontal axis} you will sight a target +/- 10 degrees from level.

• **Topcon GTS-800a series (robotic)**

1. Level instrument and turn power on go to {ICON screen}
2. Press the (F5) key For ADJUSTMENTS
3. Press the (F1) VO/Axis (Measurement)
4. [level +/- 0]{Face1} will appear on the display (precisely sight target) 90deg. side
5. Press the (F6) SET key to set position.
6. [level +/- 0]{Face2} will appear on the display (precisely sight target)270 deg. side
7. Press the (F6) SET key to set position.
8. Adjustment of VERTICAL AXIS/Tilt sensor run center completed.
9. (B) horizontal axis [LEVEL +/- 10 degrees]

you will need a sighting point above or below 10 degrees/which you may SKIP by (F1) key

1. [level +/- 0]{Face2} will appear on the display (precisely sight target)270deg. Side
2. Press the (F6) SET key to set position.
3. [level +/- 0]{Face1} will appear on the display (precisely sight target) 90deg. Side
4. Press the (F6) SET key to set position.
5. Adjustment of Horizontal Axis is complete.

• **ADJUSTMENT OF TRACKING AXIS FOR GTS-800 Series.**

- The sighting axis will most likely need adjustment following previous adjustments.
 - Adjusting Tracking Axis of the GTS-800a
1. Level instrument and turn power on go to {ICON screen}
 2. Press the (F5) key For ADJUSTMENTS.
 3. Press the (F6) arrow down key to go to next page.
 4. Press the (F2) key {Adj. Tracking Axis}.
 5. Precisely {sight the prism} with control knobs on the 90 degree side.
 6. Press the (F6) MEAS key to set.
 7. Press the (F1) TURN key. This will flop the scope and turn 180 automatically.
 8. Precisely {sight the prism} with control knobs on the 270 degree side.
 9. Press the (F6) MEAS key to set.
 10. {Set OK ?} answer with YES with the (F5) key.
 11. Adjustment is complete.

□ **Topcon APL1a (robotic)**

1. Hold the (F1) key while powering the unit.
2. {Zero set}/ {H-SET (auto)} {V-SET (auto)} will appear on the display.
3. {Step 1 Front} will appear on the display (Manually sight target) 90 deg. side
4. Press the (F4) ENTER key to set.
5. Press the (auto reverse key) on the right side of the unit. <Twisted ARROWS>
6. The unit will automatically flop the scope and turn 180.
7. {Step 2 Reverse} will appear on the display (Manually sight target) 270 deg. side
8. Press the (F4) ENTER key to set.
9. Vertical axis adjustment is complete.

TRACKING AXIS ADJUSTMENT

□ SIGHTING AXIS ADJUSTMENT will need to be performed following

Vertical Axis adjustment. Sight prism 300 ft away

1. Instrument on in normal operation mode Press White (A/M) button
2. Press (MENU)key (F1) {parameters}, (F1)TRK
3. Press (F4)pg down.
4. Press (F2) {Adj Axis (A)} if instrument is in track mode and locked on the prism Press the (F1) {Start} key. {data check} will appear.
5. The unit will automatically do the direct and reverse sighting.
6. The correction values will be displayed {H off : 0'20"} {V off: 0'10"}ex
7. {SET OK} [Yes] or [No] Press (F3) key for YES.
8. Repeat steps 1 through 7 until correction values are under 5".