



Instructions For No. 78110 Kart Digital Caster/Camber Gauge

- 1) Find a level place to set up your front end. This unit reads camber very accurately. Unlevel ground will affect that accuracy.
- 2) Attach the gauge to the spindle by screwing onto the extra threads outside the nut. If there are none remove the nut and screw the adaptor on until the the hub is tight. When done reinstall the spindle nut and pre-load bearings as required.
BE SURE WHEELS ARE POINTED STRAIGHT AHEAD WHEN SETTING CAMBER.
- 3) Rotate the gauge until the small vial on the top of the gauge shows level.
- 4) **CAMBER:** Turn on the **AccuLevel™** Digital Readout by pushing "ON/OFF". Camber is read directly on the display to $.1^\circ$ ($1/10^\circ$). See separate **AccuLevel™** below instructions if needed. On the left side of the display a **▲** pointing up indicates negative camber (top of tire in). A **▼** pointing down indicates positive camber (top of tire out). Race cars usually use negative camber on RF and positive camber on LF.
- 5) **CASTER:** To set caster more precisely using the **AccuLevel™** digital readout first turn the wheels 15° (*this is different than when using vial type gauges*) to the right when setting the RF or 15° left when setting LF. Rotate the gauge until it is level.
- 6) Turn on the **AccuLevel™** and push **ZERO** to zero degrees at that point (shows **00.0°**).
- 7) Turn wheels back to center and continue to 15° in the other direction (a total of 30°). **Again this is different than when using vial type gauges.** The 15° must be done accurately. An error of even 1 or 2° turning will give a noticeable caster error.
- 8) Rotate gauge to level. Read the digital display and **DOUBLE THE NUMBER FOR (TOTAL) CASTER**, accurate to $.1^\circ$. For example display reads $4.8^\circ \times 2 = 9.6^\circ$ caster.



INSTRUCTIONS: **AccuLevel™** can be removed and used for other measurements. Simply slide it out (it's held in place with magnets).

Turn on: Push **ON/OFF**. **AccuLevel™** is ready to use. **ABS** will appear on the display if the unit is in Absolute Angle Measurement Mode. If it does not display **ABS** push **ZERO**. Otherwise **DO NOT** push **ZERO**.

Zero: The **ZERO** button is **ONLY** used to compare one angle to another and in measuring caster (see **CASTER** section). Place **AccuLevel™** on an angled surface and push **ZERO**. The display will go to **00.0** and **ABS** will disappear. Move to a different surface to compare angles. **FOR NORMAL USE ABS MUST BE ON DISPLAY**. Push **ZERO** again to go back to Absolute Angle Measurement (**ABS**)Mode.

To hold reading: Push "**HOLD**". The display will show **HOLD** and flash. When **HOLD** stops flashing (approx. 6 sec.) the reading is held on the display. **AccuLevel™** must be held very steady during this 6 seconds. Push "**HOLD**" again to go back to absolute reading.

To CALIBRATE: Place **AccuLevel™** on a reasonably level table top (does not need to be perfectly level). Push **ON/OFF** and hold for 6 seconds and release. Push **ON/OFF** again and **-1-** appears on the display. Push **ZERO**. **-1-** will begin to flash and in a few seconds **-2-** will appear. Turn unit around 180° in the same spot and push **ZERO** again. **-2-** will begin to flash and in a few seconds normal readings will reappear. Calibration is complete.