



## Instructions For No. 78290 Digital Caster/Camber Gauge

- 1) Find a level place to set up your front end. This unit reads camber and caster very accurately. Unlevel ground will affect that accuracy. SEE BELOW IF GROUND IS NOT LEVEL.
- 2) Attach the gauge to the spindle. Be sure that the surface you attach to is machined square to the spindle and doesn't have any nicks or burrs. BE SURE WHEELS ARE POINTED STRAIGHT AHEAD WHEN SETTING CAMBER. Rotate the gauge until the small vial on the top of the gauge shows level.
- 3) **CAMBER:** Turn on the **AccuLevel™**. Camber is read directly on the display to .1° (1/10°). Be sure the display is not flashing. This indicates it is in Caster Mode – CASTER see below. Push CASTER button to exit Caster and get into Camber Mode – steady display reading.
- 4) **CASTER:** First turn the wheels 15° to the right when setting the RF or 15° left when setting LF. (NOTE: THIS IS DIFFERENT THAN WHEN USING VIAL GAUGES WHICH USE 20°. IT IS IMPORTANT TO TURN THE WHEELS EXACTLY 15° FOR MAXIMUM ACCURACY.) Rotate gauge until it is level. Turn on the **AccuLevel™** and push the CASTER button. The display will flash on and off to indicate caster is being measured. Push ZERO – display now reads 0°. Now turn the wheels back past center to 15° the opposite way – for a total of 30° (AGAIN THIS IS DIFFERENT THAN WHEN USING VIAL GAUGES). Rotate the gauge again to level and read the caster directly.
- 5) Adjust the caster and camber as needed. Each time you make a change bounce on the front end to settle the suspension. **NOTE:** Adjusting the caster may have an effect on the camber and vice versa. Double check settings. Tighten all bolts when done.

### IF GROUND IS NOT LEVEL:

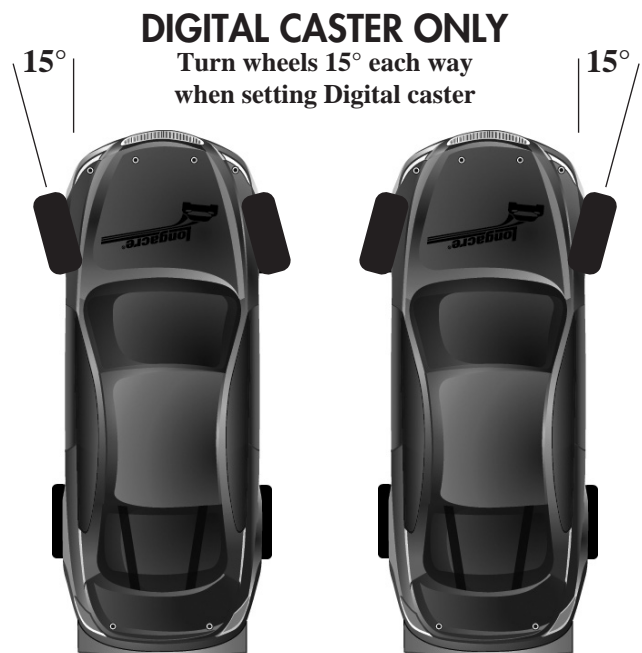
Before checking camber remove **AccuLevel™** and place on ground parallel to axle centerline. If it does not read 0.0° push "ZERO". Replace **AccuLevel™** in gauge and proceed as above. This must be done on each side of the car and will compensate for non-level ground. Push "ZERO" again to go back to normal (absolute) operation.

See separate instructions for **AccuLevel™** if needed. It can be removed and used for other measurements. Simply slide **AccuLevel™** out (it's held in place with magnets).

**NOTE:** If display flashes on and off **AccuLevel™** is in Caster mode and will not read absolute angles correctly. Push CASTER button to exit Caster Mode.

### Warning:

Do Not leave the gauge in the hot sunlite or store in a place over 120° F. The digital display may not be readable. Once it cools down the digital display should be visible again.



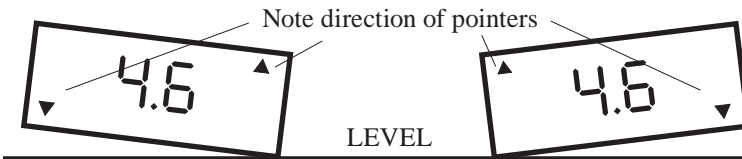


# AccuLevel™ (ver. 5)

Digital Level Measurement from 0.0° to 90.0°

Pointers on display - ▲ - show direction of tilt.

(If **AccuLevel™** is used for measuring very small angles - under 2° - this feature will tell you which way the tilt is.)



**NOTE:** ▲ must be on the display for normal (or caster) use. Push ZERO if not.

**H** will ONLY be on if the unit is holding a reading.

**NOTE: AccuLevel™** is very sensitive to small angle changes. Some functions described below will not activate unless the unit is held very steady.

**NOTE:** This Ver. 5 **AccuLevel™** has 2 modes of operation. 1) In Normal angle measurement mode the display is steady. 2) In Caster Mode the display flashes (and will not measure absolute angles). Push **CASTER** button to exit Caster mode and go back to Normal angle measurement.

**Turn on:** Push ON/OFF. **AccuLevel™** shuts off automatically after 5 minutes to save battery life. Batteries should last a year or more in normal use. See back side for battery door. Replace with 2) AAA alkaline batteries. **This latest Version 5 does NOT need recal when you change batteries.**

**Zero:** **AccuLevel™** maintains its zero when shut off and **DOES NOT REQUIRE ZEROING**

Compare one angle to another: (The ZERO button is **ONLY** used to compare one angle to another.) Place **AccuLevel™** on a surface and push ZERO. The display will go to 0.0. Move to a different surface to compare the difference. Push ZERO again to return to normal use. See note on ▲ above.

**To hold a reading:** Push HOLD and release. The display will show **H** and flash. When **H** stops flashing (approx. 5 sec.) the reading is held on the display. Push HOLD again to go back to active reading. **NOTE: AccuLevel™** MUST be held absolutely steady during this 5 seconds.

**To CALIBRATE:** Place **AccuLevel™** on a reasonably level surface (does not need to be perfectly level - a table is OK). Turn on, then push ON/OFF and ZERO at the same time. -1- will appear on the display. Now push ON/OFF. -1- will begin to flash and in a few seconds -2- will appear. **Turn unit around 180° in the same spot** and push ON/OFF again. -2- will begin to flash and in a few seconds normal readings will reappear. Calibration is now complete. (calibration NOT needed when changing batteries in Version 5)

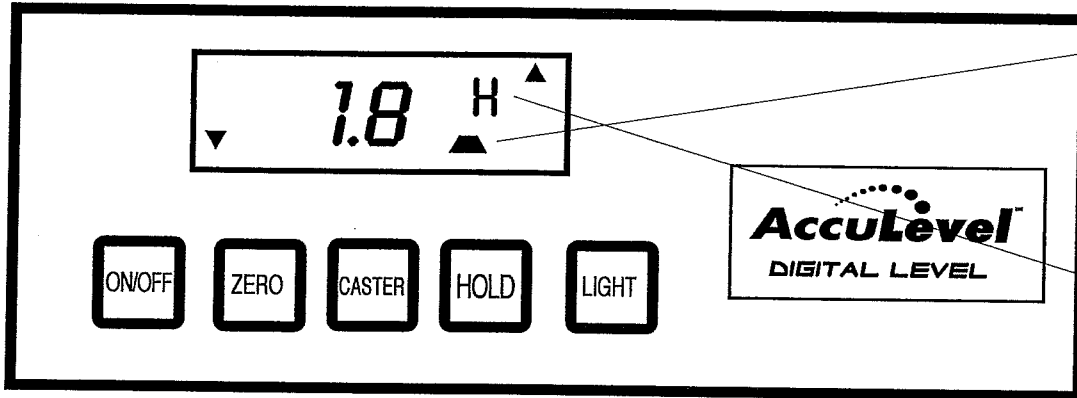
**CASTER (CASTER):** **AccuLevel™** will display front suspension Caster when used in a specially designed Caster/Camber gauge. See gauge instructions for details.

**DISPLAY BACKLIGHT (LIGHT):** **AccuLevel™** Ver. 5 has a display back light. Push LIGHT.

Do not drop the unit. Keep clean & dry and avoid strong magnetic fields. Do not push 2 buttons at once (except to calibrate - see above). If it will not be used for several months remove batteries.

# AccuLevel™ (ver. 5)

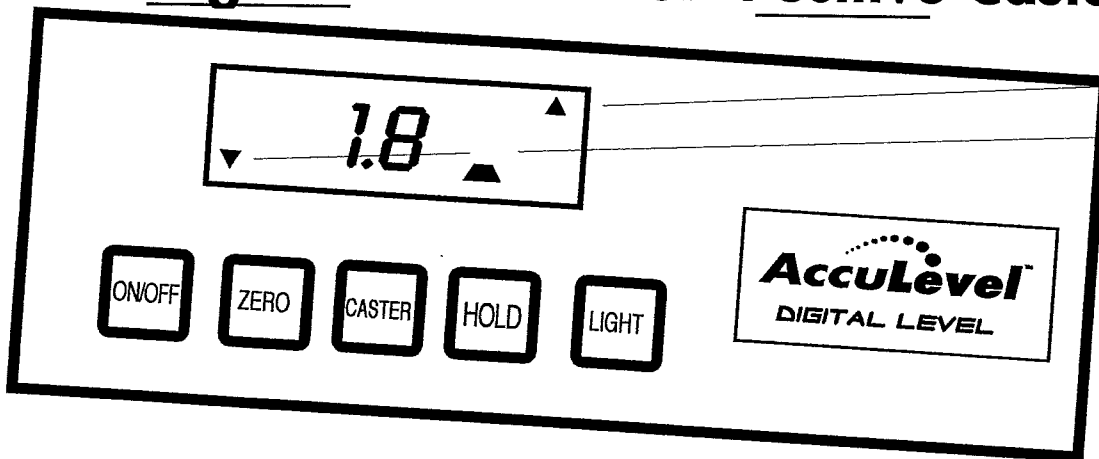
Digital Level Measurement  
from 0.0° to 90.0°



Must be on display for normal use. Push **ZERO** if it is not.

**H** will ONLY be on if the unit is Holding a reading or in calibration

## Negative Camber or Positive Caster

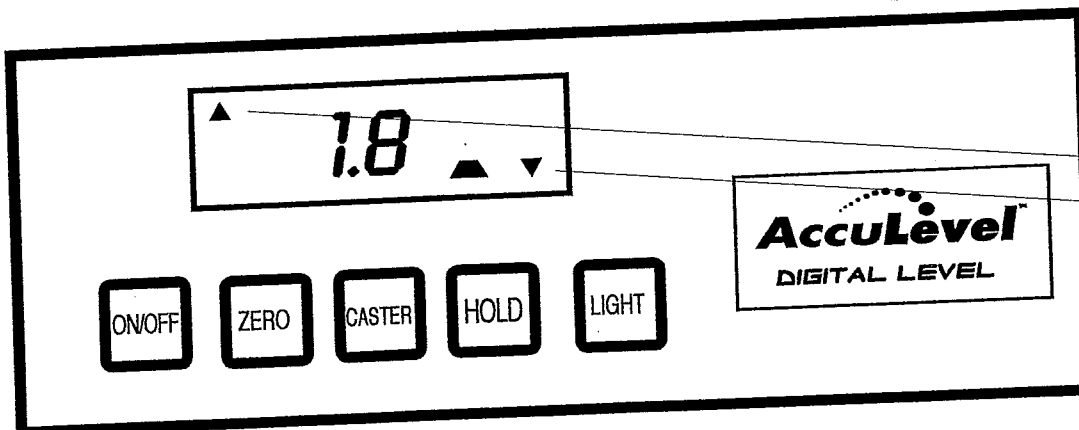


Indicates **NEGATIVE** Camber

OR

**POSITIVE** Caster

## Positive Camber or Negative Caster



Indicates **POSITIVE** Camber

OR

**NEGATIVE** Caster