



## 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.



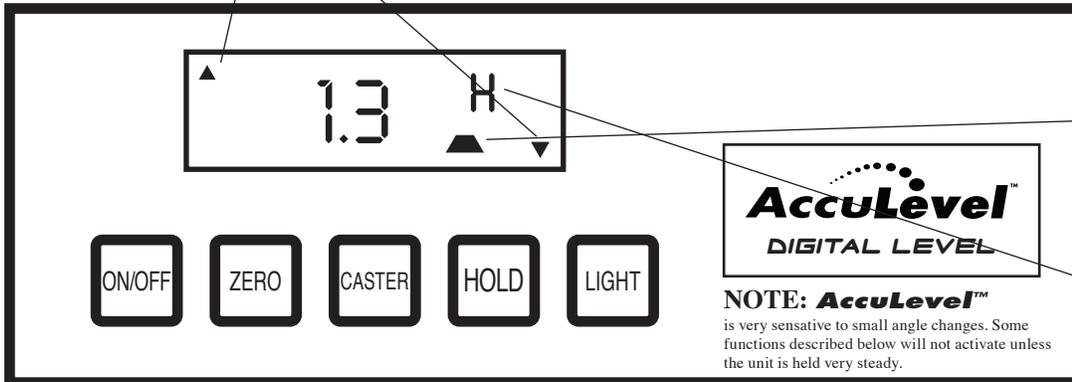
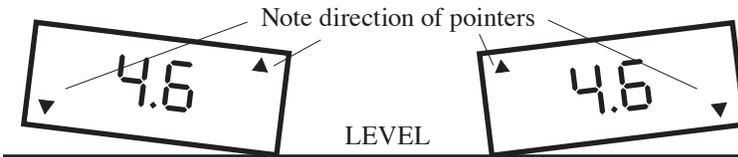


# AccuLevel™ (ver. 5)

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.



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

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

**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)

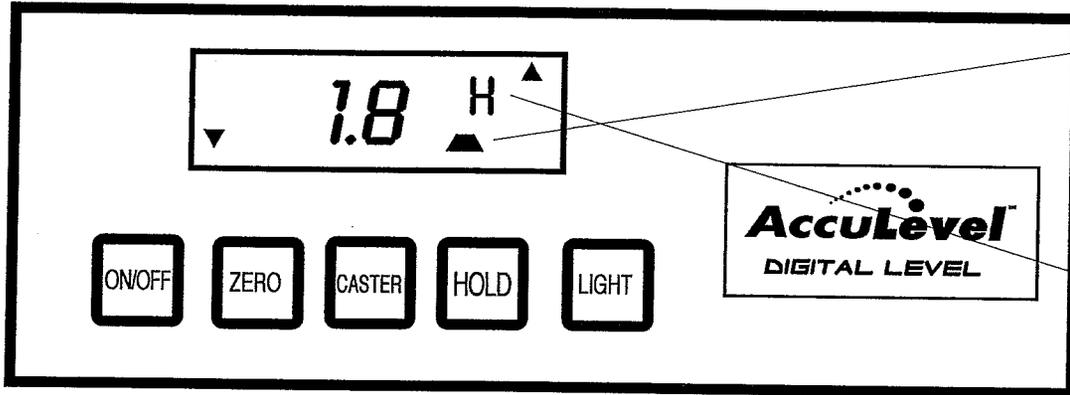
**CASTER (CASTER): AccuLevel™** will display front suspension Caster when used in a specially designed Caster/Camber gauge (see Longacre catalog or website). See gauge instructions for details.

**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)

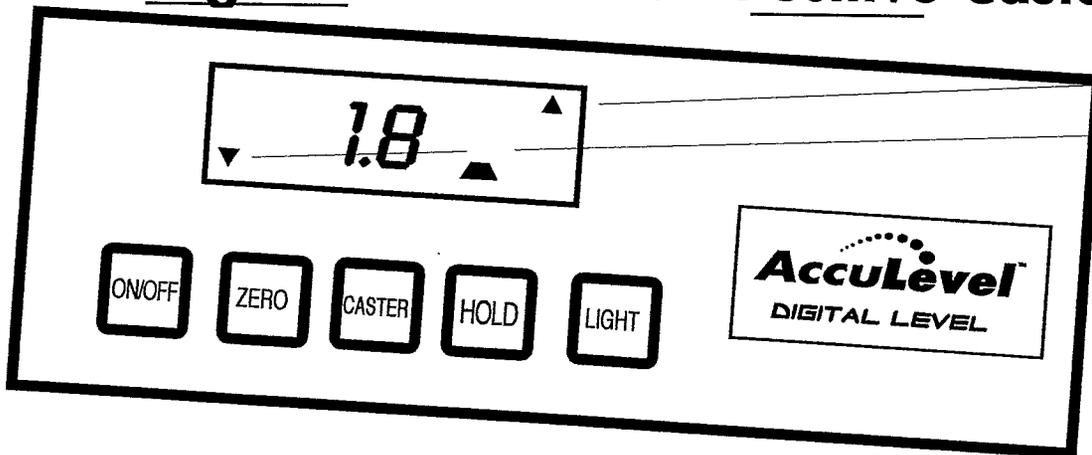
Digital Level Measurement  
from 0.0° to 90.0°



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

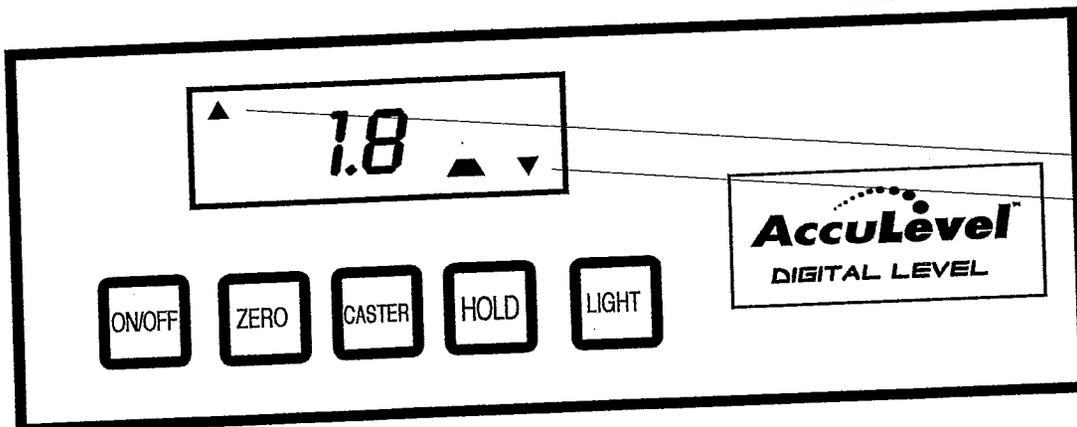


Indicates **NEGATIVE** Camber

OR

**POSITIVE** Caster

## Positive Camber or Negative Caster



Indicates **POSITIVE** Camber

OR

**NEGATIVE** Caster