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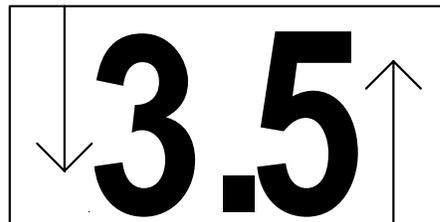
## Using a Smart Level (Digital Protractor) to Measure Caster

There is another way to read Caster on Heavy Duty Truck with a solid front (steer) axle. This method provides an accurate caster reading and gives the user the ability to make caster measurements and adjustments with out having to purchase turn tables which can be heavy and costly. To measure caster using a smart level use the following procedure.

- 1.) Calibrate the smart level by following the directions on the back of the smart level.
- 2.) Lift the truck engine cowling or tilt the cab to expose the steer axle.
- 3.) Clean the flat area on the steer axle where the axle u-bolts mount to the axle and spring assembly of any built up grease or road tar & dirt.
- 4.) Place the smart level on the flat area next to the u-bolt assembly. Making sure that all of the level's flat surface is touching the axle. In some cases this might require the technician to crawl underneath the truck to access the axle.
- 5.) Read the digital scale on the smart level. Smart levels always have arrows that point which direction goes to zero degrees. If the arrow on the side of the scale window that is near the front bumper of the truck is pointing down to the ground and the arrow on the other side of the scale window is pointing up. Then the reading would be positive caster. Please refer to the figure below to describe further.
- 6.) If the reading is being taken on a non-level surface, please use the "To Measure Front to Rear Tilt for Caster" procedure on page 22 of the TLT-12 manual to compensate for non-level surfaces.
- 7.) After taking the caster reading on one side of the truck, please proceed to read caster on the other side by using the same procedure starting at step 3.



Negative Caster



Positive Caster