



# INFORMATION BULLETIN

IB 1 – SEPTEMBER 2009

## CALIFORNIA TIRE AIR PRESSURE REGULATIONS

**California Code of Regulations, requires automotive service providers to meet the following requirements:**

By July 1, 2010, all automotive service providers are required to check and inflate each vehicle's tires to the manufacturer's recommended pressure at the time of performing any automotive maintenance or repair service using an **ANSI B40.1 Grade B tire gauge** for checking tire pressure.

AMRA recommends that tires be inflated to the specifications on the vehicle manufacturers' **Tire Information Placard**.

Pressure gauges are manufactured to different accuracy's and are rated according to ANSI specifications. Pressure gauges are classified by their precision as it relates to the scale of the gauge. The scale of the gauge, commonly referred to as the pressure range, is divided into three equal portions when characterizing its' accuracy.



Using a 0-300 PSI pressure gauge as an example, the accuracy would be referring to the 0-100, 100-200 and 200-300 portions of the dial. The following pressure gauge is considered a "Grade B", which means that the accuracy for the 0-100 and 200-300 portions must fall to within 3% of the actual pressure being measured. The middle portion is the most accurate and in this case would be accurate to within 2% of the pressure being measured. You could also describe this gauge as having an accuracy of 2.5% full scale.



Continuing with the example above, the portions of the dial highlighted in yellow represent the ranges in which the accuracy is 3%. The middle portion has an accuracy of 2%.

You will notice that some companies describe their gauges as having an accuracy of 1.5% full scale. This is the same as an ANSI Grade A 2-1-2% gauge, but it sounds better saying 1.5% full scale.

The higher the quality of the gauge, the more accurate it is. A Pressure gauge with accuracy as high as .5% full scale means that at any point on the *entire scale* the pressures indicated by the gauge will fall within .5% of the actual pressure being measured. Gauges that are more accurate tend to be more complex and cost more to manufacture - an example would be using machined gears instead of stamped gears. Higher quality gauges last longer and some can even be repaired or recalibrated.

Since the accuracy is typically better in the middle portion of a gauge, you should always select a gauge with a range that is about double your maximum anticipated pressure. Continuing with our example above, a 0-300 PSI gauge is ideal for applications having a maximum pressure range within 100-200 PSI. For most automotive applications, a 0-60 PSI gauge would be ideal.