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## Are You Experiencing Wheel Bearing ABS Trouble Code Issues? An Inferior Quality Tone Ring May be the Culprit.

Most vehicles on the road today are equipped with an ABS braking system and the hub bearing plays an integral roll in ensuring the ABS system is functioning properly. Many hub bearings assemblies include an integrated WSS (wheel speed sensor) tone ring to generate a pulse signal to the ABS module.

The pulse signal is generated when a tooth passes under the magnetic tip of the sensor. The tooth passing through the sensor's magnetic field causes the sensor to act like a little generator and produce an alternating current signal that increases in frequency and amplitude in direct proportion to wheel speed. If you look at the signal on an oscilloscope, it should look like a nice even sine wave with all the up and down humps in the waveform evenly spaced and the same height.

However, a difference of only a **few thousandths of an inch** in the height of the teeth on the tone ring can greatly affect the WSS signal, which can trigger trouble codes to the vehicle's computer.

Many competitive Hub Assemblies include tone rings that are made out of cheap "**pot metal**" to reduce costs. The teeth on these tone rings are rounded which do not conform to OE standards, resulting in wrong impulse signals being sent to the ABS module.







Close up view

**PTC Hub Assemblies** use premium casted metal tone rings which have rectangular teeth that match OE specs to ensure a proper signal is always being sent to the ABS module.

An erratic ABS signal will cause braking problems. In extreme cases, the brakes can lock up in high speed driving (65-75 miles per hour or 100-120km) which can cause the driver to loose control, resulting in a possible serious accident or even death.



- Rectangular Teeth match OE Specs

Don't compromise your safety. PTC is your best value choice!

Click Here for a complete list of all the Hub Bearings numbers now available Call us today at 800-626-8333 to order your needs!