TR6 REAR WHEEL BEARING END FLOAT

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The rear hub assembly is what your rear wheels are attached. When they fail it is not uncommon for the wheel to go in a different direction than the rest of the car.

The preferred method of checking the assembly for wear in what ultimately is the rear wheel bearing is called end float and involves removal of the assembly and an elaborate set up using dial indicators and other special tools. The difficulty of the inspection process is enough to dissuade a lot of people from checking them. Not checking them can get you and/or your car bent in places that are not supposed to be bent.

Being inherently lazy, I set out to devise a method of at least getting a ballpark idea as to whether or not there might be a potential problem with a rear hub assembly without all that work. My stepson used his CAD/CAM system to develop some calculations that can help you evaluate whether or not you might have a problem that a professional should see.

Raise the car and support with jack stands. Take hold of the bottom of the tire. Try to move it first inboard then outboard. If ANY movement is detected be suspicious. If it moves, find a feeler gauge and a square. Pull the bottom of the tire outboard and set one side of the square on the floor with the other side of the square touching the tire. Now, hold the square with one hand, push the bottom of the tire inboard with the other hand. Use a .020″ feeler gauge and see if it will fit between the tire and the square with your -third hand. If the gauge fits with no resistance you could have a problem and please get it checked out.

The calculations actually are: If the distance from the center of the wheel to where the square touches is 10.5″, the allowable end float is calculated to be .0227″. If your tires are bigger, you get a little more flexibility. But do not assume too much. It could get you in trouble.