

Now about the only place you will have kinetic friction in your car is where the wheel bore inside is sliding around on the axle nail bottom surface. Let's assume you have lubricated the axle and wheel bore very well according to the instructions in the Big Book in Fig. A4.2, A4.4, and A4.5. Grasp the car body firmly in either the left hand or the right hand as shown. Catch the top of a wheel in the crook of the index finger and press down very hard as you snap-spin the wheel. Keep the axle horizontal and try not to let the wheel bump too much against the nail head or the car body. Spin when your watch second hand is on an even number and get the time for the wheel to stop spinning and become absolutely still. Do all 4 wheels. Put the fastest 2 on the rear. If the average of the rear 2 is, say, 17 seconds, look on the graph and see that this is about 0.15. This value, $\mu \equiv 0.15$, later will go in the program for this parameter. With polishing and lubrication experience, you may get spin times in the 30s. For example, a spin time of 34 seconds would mean a very low $\mu = 0.060$ value. This only works for non-trimmed wheels where $I = 4.7 \text{ g cm}^2$.

