A Tool For All Seasons

by Tom Endy 2023

When it comes time to tighten the rear axle nuts on a Model A that hold the brake drums on there is a need for a torque wrench. The torque value is plus or minus a nominal 100 ft. lbs. My technique is to set the torque wrench at 90 ft. lbs. and tighten the nut, then see where the cotter pin hole is. If it is dead on I leave it. If it is not, I tighten the nut more until the hole is visible. Sounds simple enough, but there is a problem. In order to gain access to the nut the wheel must be removed. This requires that the rear of the car must be sitting on jack stands. When you apply that much torque to the nut the brake drum wants to rotate. Even with a helper pushing on the brake pedal it may not be enough.

The BLT Guys run into this problem every time they install a Mitchell overdrive. During the install process the two axle nuts have to be removed so that thread protectors can be installed on the ends of the axle shafts and the removed rear end dropped into a cradle with the axle ends supported by the cradle. This necessitates that both axle nuts be re-torqued before the wheels are put back on.

To simplify the job Bryan Thompson developed a unique tool that holds the drum from rotating. The tool can also be used anytime the axle nuts need to be torqued, such as when doing a brake job, or when just checking the torque on the nut.



The tool is shown here. It is mounted on the brake drum so that three lug bolts on the brake drum are inserted into the three tubes on the tool. The pipe is then extended down through the tool to rest on the ground to prevent the drum from turning as the axle nut is being torqued.

The tool is shown positioned on a rear brake drum.



A torque wrench is shown positioned on the rear axle nut to tighten it.

