

THE BELLEVILLE WASHER EFFECT

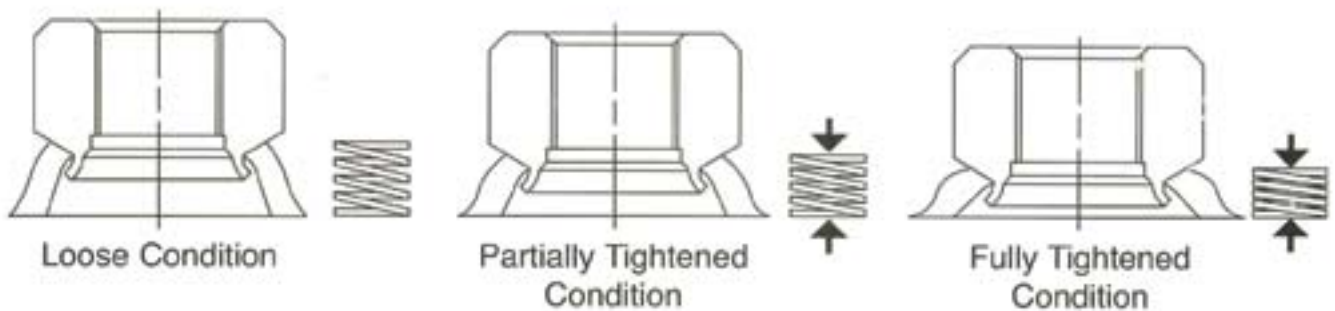
Motor Wheel Cone Lock Nut #88881 provides better wheel retention than the ball seat nut which attaches conventional 10-hole disc wheel assemblies. It distributes clamping force over a 50% greater area. The Belleville washer integrated into the nut maintains spring tension, like a lock washer, which reduces normal "seating-in" torque loss. This keeps wheels more tightly in place. Tight wheels are less likely to break.

It is mandatory maintenance practice with any disc wheel system to **CHECK WHEEL NUT TORQUE AT REGULARLY SCHEDULED INTERVALS**. Retorque to specifications if necessary. This assures proper clamping force for safe operation.

The Cone Lock Nut can be compared to an unloaded coil spring before torquing. The most important benefit of the Belleville washer effect comes during the normal "seating-in" process when paint, dirt, and surface irregularities wear away. Torque loss is minimized as the spring-like cone continues to exert pressure between the nut and wheel surface. This keeps wheels from loosening and breaking.

Under maximum torque, the nut acts like a compressed coil spring, exerting maximum pressure against the face of the wheel and evenly distributing clamping pressure. This can also be compared to the effect of a lock washer.

HERE IS HOW IT WORKS:*



* The drawings are exaggerated to demonstrate the principle. The cone lock nut washer does not visibly "flex" under torque.