

THE BEST WAY TO TORQUE

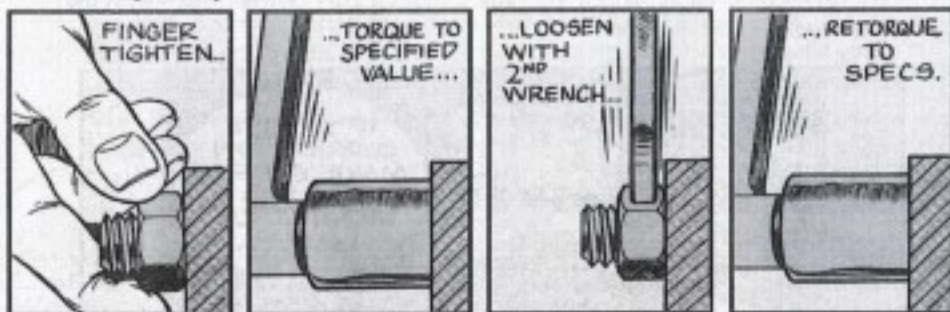
Make sure the threads of the nut and bolt are clean.

Run the nut up by hand until it begins to tighten.

Torque the nut to the specified value in one steady, continuous motion.

Loosen the fastener with another wrench. (Do not use a torque wrench to loosen any fastener.) Loosening cleans the threads of burrs and dirt and lets the mating surfaces seat and align with each other.

Torque to specs.



WHAT ABOUT RE-USING FASTENERS?

You can't get the same clamping force with the same amount of torque with a fastener that's been used a number of times. Increased friction because of deformed threads takes more and more of the torquing effort, meaning you get less and less holding force.

As an example, a certain bolt had a tension load of 13,250 pounds with 170 lb-ft of torque. On the sixth time the nut was installed, the 170-lb-ft of torque produced only 7,500 pounds of load, a loss of 43.5 percent. If your TM calls for a new fastener, use it. Otherwise you're asking for trouble.

There you have it. The story of my life. I can keep the things of the world together, but only with your help.

