

Tools...

TORQUE WRENCH TIDBITS

WHY'D YOU STOP WORKING?

ARE YOU ALL RIGHT?

TORQUE TO ME!

SAFETY

Read and understand all instructions before using this tool. Do not use this tool if you are unsure of its proper use or if it is damaged. Do not use this tool for any purpose other than that intended. Do not use this tool on any material that is not specified in the instructions. Do not use this tool on any material that is not specified in the instructions. Do not use this tool on any material that is not specified in the instructions.

I'LL BE ALL RIGHT.

I JUST WISH I COULD TELL THE MECHANICS HOW TO TAKE BETTER CARE OF ME.

Not all torque wrenches are alike. If you've never used a torque wrench, you're in luck, but it is important to know how to use it and how to choose the right one for the job. For example, you should never use a torque wrench on a bolt that is not specified in the instructions.

YOU TORQUE AND I'LL TALK TO THE MECHANICS FOR YOU!

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TORQUE WRENCHES ARE IMPORTANT, PRECISE TOOLS.

BUT YOU WON'T FIND TOO MUCH TALK ABOUT THEM OUTSIDE OF THE MAINTENANCE INSTRUCTIONS THAT COME WITH THEM.

SO HANG ON TO THOSE INSTRUCTIONS!



TM 9-243, USE AND CARE OF HAND TOOLS AND MEASURING TOOLS, INCLUDES A SMALL SECTION ON TORQUE WRENCHES.

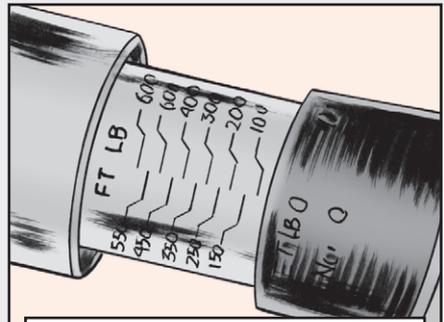
TM 1-1500-204-23-9, GENERAL AIRCRAFT MAINTENANCE MANUAL, ALSO TELLS YOU HOW TO TAKE CARE OF THEM.

BUT FOR MORE INFORMATION ON USING AND MAINTAINING YOUR TORQUE WRENCHES, READ ON.



Before Torquing

Not all torque wrenches are alike. If you've never used the torque wrench you're about to use, test it to make sure it works like it's supposed to work and has a current calibration. And make sure you choose the right torque wrench for the job. For instance, don't use a pounds-feet (lb-ft) wrench if you need a pounds-inch (lb-in) wrench, and don't use a lb-in wrench if you need a newton-meters (N-M) wrench.



Check markings to make sure you've picked the right torque wrench for the job

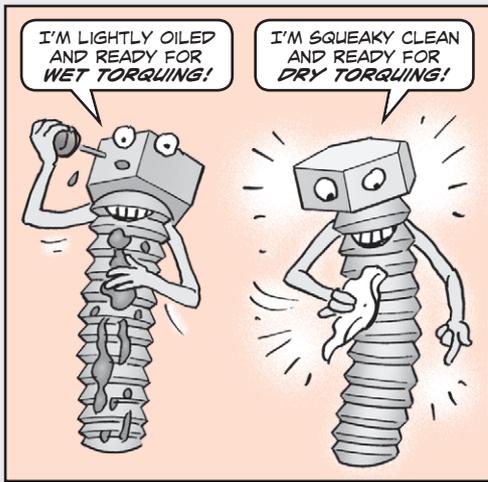
Choose the correct torque wrench size, too. The torque you want should be within 20 to 100 percent of the wrench's full scale to get the best accuracy. For example, to apply 50 lb-ft torque, a 125 lb-ft wrench would be a better choice than a 500 lb-ft wrench. Make sure you check the torque wrench markings to get the right tool for the job.



Also, check the manual to see if the torque specified is for “dry” or “wet” torque. Wet torque means lube on the threads. Don’t grease or oil a fastener unless the TM tells you to use wet torque. Lubed threads reduce run-up friction and could cause you to overtorque.

Use dry cleaning solvent to clean the threads, and to wipe down your wrench. For wet torque, lightly oil the threads before you run the nut or fastener down, using the specified solvent or oil.

And handle your torque wrench with care! Never hammer with it, or bang, toss, or drop it. That damages the calibration, and you’ll end up sending it to your local TMDE shop for calibration and repair.



While Torquing

When applying torque, the wrench can be pushed or pulled, but turn the wrench slowly and steadily to get an accurate torque. Stop as soon as you get a click or the proper torque is indicated. Torque is normally applied to the nut—not the bolt—unless your TM states otherwise.

While you torque, keep your arms and wrists straight and your hand firmly in the center of the handle grip. And don’t use extension bars if the wrench isn’t designed for it. You can use torque multipliers or hydraulic torque applicators when a very high torque is required. But make sure their accuracy meets your torque requirements.



Re-Torquing

If you’re not sure you got a good reading, back off the nut with a **standard** wrench and re-torque. Using a torque wrench for loosening can damage the wrench and effect its calibration.

Torque Wrench Storage

Unless your shop SOP says differently, set micrometer-type torque wrenches between 10 and 20 percent of the maximum value before storing. Prolonged high pressure on its internal spring affects the accuracy of your wrench. For bending-beam type torque wrenches, the pointer should automatically return to zero.

Keep the wrench clean and dry. It should not need oiling unless the manual tells you to oil.

Be sure to store the wrench in its own box so it doesn’t rattle around in a toolbox with other tools.

