

## Do torque wrenches need to be wound back to zero after use?

Anyone working in torque will have been taught to wind their torque wrench back to zero after every use.

Certainly, if the wrench is wound back at all it should not be adjusted below the minimum scale marking (usually 20% of maximum) - never to zero as this can adversely affect the calibration of the wrench. Beyond that, our position on this topic has been that it really depends on the application. We have thousands of <u>Production Type wrenches</u> in service that are left at their setting for months on end without a problem. Whilst the occasional user should adjust back to the minimum scale setting after use, if you use the wrench in an environment such as a commercial garage, the choice is yours. Either way is acceptable.

However, to test the position we have taken on the winding back question, we carried out tests over the past month. While we have not tested enough wrenches for this to be conclusive proof, the results provide some interesting insight into the debate. The test was designed to show the effects of leaving a torque wrench wound up at 100% of full scale against one wound down to 20% of full scale.

Firstly, four wrenches were taken from our production line and our calibration lab took results. Two wrenches were then left wound up to maximum and two wound down to their minimum scale setting. After 24 hours the calibration lab took further results, and again after a week, then again after one month.

The most significant result from the test is that all of the wrenches remained within tolerance, regardless of whether they were left at the minimum scale setting or at their maximum. The wrenches left wound to maximum did move more but the change happened quickly, within 24 hours, and then they stabilised.

We acknowledge that we took a small sample and the result almost poses more questions than it answers. For example, what happens to the same wrenches in 6 months and twelve months? How does a Norbar wrench compare with our competitors in this regard? These are tests that we will do and, no doubt, we will be returning to this subject.

For now, the test has not changed our view and our advice is this. If it is convenient to wind your torque wrench back to its minimum scale setting then you should do so but never wind it below the minimum marking on the scale. If winding back is inconvenient because you are using the wrench very frequently, then this will not damage your Norbar wrench. Other factors in the way that torque wrenches are used and sometimes abused will have a far greater influence on calibration and the final torque delivered to the fastener than whether the wrench is left 'wound up'.

If you want to continue the discussion further, don't hesitate to comment below or tweet us <u>here</u> and join us on Facebook <u>here</u>, and we'll talk torque!

