# Lyman Pro Drive torque wrench MAKES THE JOB EASY

### **Chris Redlich**

f you don't understand the simple instruction 'tighten to 30in-lb (inchpound of torque)' then we need to start torquen! Talking about torque, that is. Often overlooked or ignored by shooters are the torque settings, designated by manufactures in firearms and optics user guides for tightening all manner of fasteners including action screws and, most importantly, scope mount screws. A little-known but vital tool to aid the budding home gunsmith is the torque wrench.

Reloading equipment and firearm tooling are Lyman's specialty and new to their latest product range is the Pro Drive torque wrench. The Lyman Pro Drive is an all-mechanical torque wrench designed to deliver accurate torque settings which will allow you to correctly and safely attach action screws, scope bases and scope rings to your firearms.

Importantly, tightening screws to the correct torque setting prevents damage to screw heads, screw threads and minimises the risk of pinching and distortion to scope tubes. Tightening your firearms screws to a consistent torque will also benefit the rifle's accuracy and help maintain consistency.

Generally content with previously using the Allen key or Torx tool supplied with rings and bases, I could never gauge a torque setting correctly and persisted with the 'finger-tight' rule only. While this proved reasonably effective in minimising scope damage, it wasn't accurate and the Lyman Pro Drive is now my preferred method of all firearm screw tightening.

The Pro Drive comes supplied in a compact, clear top case including an assortment of hex 'bits' compatible with many firearm fasteners including Torx, Inhex and Flat Drive. An additional ¼" drive socket attachment with the supplied ½" socket is also a welcome inclusion.

All attachments are based on the standard  $\frac{1}{4}$ " drive system and can be used with a large variety of externally sourced hex bits sharing the same  $\frac{1}{4}$  drive dimension. The hex bits are easily attached to the torque wrench drive by inserting into the female recess and held firm by a spring steel retainer clip and ball.

#### **Pro Drive in use**

In the hand it feels every bit a good quality item. Weighing a solid 360 grams and approximately 200mm long, the handle (accounting for almost half the overall length) is a perfect fit for my large hands. I can't stand using hand tools which slip through your grasp when tightening screws, but the Pro Drive's tri-side handle has been designed beautifully to afford a comfortable and positive grip under pressure. A firm hold is particularly important when doing up rifle action screws requiring 65in-lb and upwards of torque tightening.

Lyman's Pro Drive is simple to use and following the supplied user instructions will help the new owner familiarise themselves with the product. To adjust the designated torque setting, simply pull down the knurled orange-coloured sleeve and rotate the handle clockwise to increase the torque setting and anti-clockwise to reduce.

The Pro Drive has settings from as little as 10in-lb to a hefty 80in-lb, the shaft clearly marked in 10in-lb increments and the handle having single digit (0-9) markings for precise intermediate settings. The correct torque is set once both numerical markings are aligned with the shaft centre line and the knurled orange sleeve is released and locked in place. When torqueing down screws I prefer to start with a lower than specified setting and work my way up in a diagonal tightening pattern (for scope rings in particular) until the desired torque is reached. For instance if the instructions say 'tighten screws to 22in-lb', I'd take them to 15in-lb first and proceed to 22in-lb for the final tighten.

I believe this helps with even tightening and reduces the risk of damage, particularly to scope tubes. An audible click is heard once the torque has been achieved and the tool will cease to tighten beyond the torque setting. Once the desired torque is set, go back over the screws and check-tighten at

## Lyman Pro Drive torque wrench



the same final setting again to ensure an even distribution of torque to the surface area.

When finished with the wrench it's recommended you return the Pro Drive to the lowest setting of 10in-lb to reduce stress on the internal calibrated spring, as torque wrenches are precision tools and must be treated with care. Although of steel manufacture, the Pro Drive should not be used for anything other than the torque settings on your firearm. Lyman individually test the Pro Drive for calibration to ASME (American Society of Mechanical Engineers) standard prior to release and a calibration certificate comes supplied, reinforcing its precision tool credentials.

#### Conclusion

Experience, both good and bad, has taught me a cautious approach to tightening firearm screws and the likely damage when over tightening. A good quality torque wrench is a must for those who tinker around with their firearms and with the volume of review scopes and rifles being tested, I'd be lost without one.





Adhering to manufacturers torque settings found in most user manuals makes fitting bases to actions and scopes to rings much easier and accurate without the guesswork. Lyman's Pro Drive torque wrench is the perfect tool for the job and as with all Lyman reloading products I've owned for more than 20 years, they're made to a high standard and built to last.

The Pro Drive retails for around \$200-\$250 and is exceptional value for money for such a precision tool. For more on Pro Drive and other Lyman reloading equipment visit <u>www.lymanproducts.com</u> and for local retailers check Australian distributors Nioa at nioa.com.au