



# Grande Torque Wrench

PN 6460615  
 Made in Taiwan  
 Specifications subject to  
 change without notice.

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## Grande Torque Wrench

Pedro's Grande Torque Wrench features a 350mm length designed for left-hand or right-hand thread 10-80Nm torque settings required for bottom brackets, cassette lockrings, and other high torque components. A unique push-through, reversible, 3/8" ratchet drive delivers superior durability and reliability. This click-type torque wrench makes an audible "click" when desired torque is reached and is quickly set in 0.5Nm increments using a micrometer-style dial and simple locking mechanism. The Grande Torque Wrench also features heat-treated steel construction for accuracy, strength, and reliability, and includes a 3/8" square to 1/2" square adapter and a 3/8" square to 1/4" hex adapter. Accurate to within +/- 4 percent. Backed by a Pedro's two year warranty.

## General Usage

1. Locate the locking ring on the handle and pull downward to unlock. See figure 1.
2. Hold the wrench in one hand by the locking ring. Using your second hand, turn handle clockwise to increase torque setting or counterclockwise to decrease. The micrometer scale is read by adding the primary scale and secondary scales. Figure 2 shows a setting of 42Nm. The primary scale reading is 40 and the secondary scale reading is 2.
3. Push locking ring upward to lock torque setting. Do not apply torque to wrench without locking ring in locked position.
4. Set ratchet drive for desired direction of rotation. To apply torque in clockwise direction the drive protrudes from the bottom side of wrench (opposite Pedro's logo). To switch the wrench and apply torque in counter-clockwise direction, push the drive so it instead protrudes from the top side of wrench (side with Pedro's logo).
5. Install drive adapter and/or socket onto the drive. For all Pedro's socket tools that accept 1/2" square drives, use the 3/8" square to 1/2" square adapter. For standard 1/4" hex bits, use the 3/8" square to 1/4" hex adapter.
6. Ensure full positive engagement between tool and fastener/component.
7. Tighten fastener to desired torque by smoothly applying pressure to the torque wrench handle. Do not apply force to any other part of the wrench. When the torque is reached, the head of the wrench will partially break free and the rest of the wrench will pivot as shown in Figure 4. Stop apply pressure. **Do not continue applying force after desired torque is reached. This may cause damage to the fastener, component, or wrench.**
8. Release pressure on wrench to reset torque mechanism for next use.
9. After use, set your wrench to the lowest setting (10Nm) for storage.

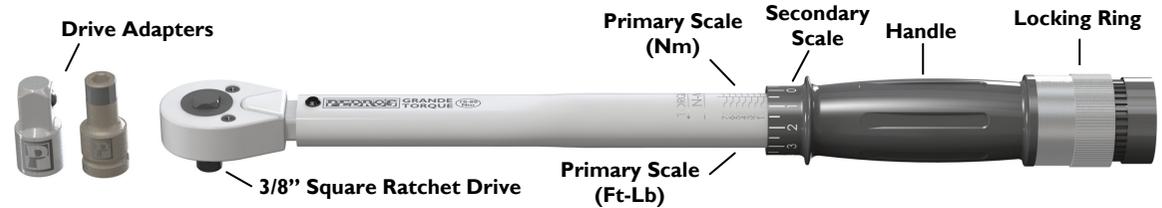


FIGURE 1

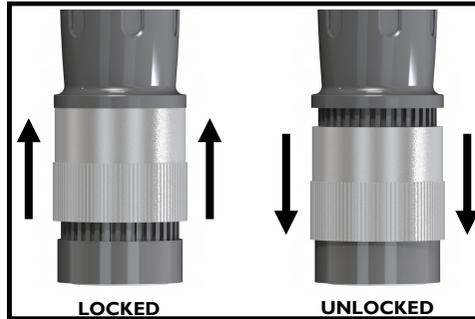


FIGURE 2

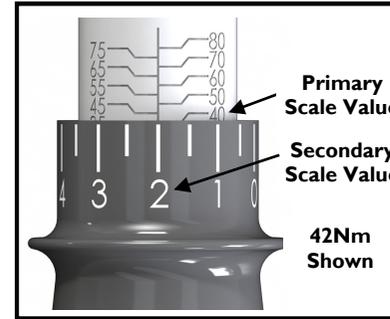


FIGURE 3

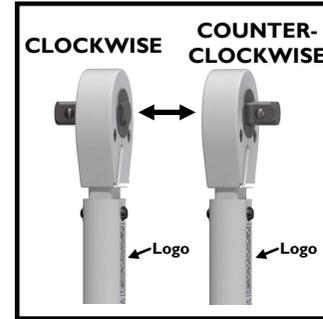
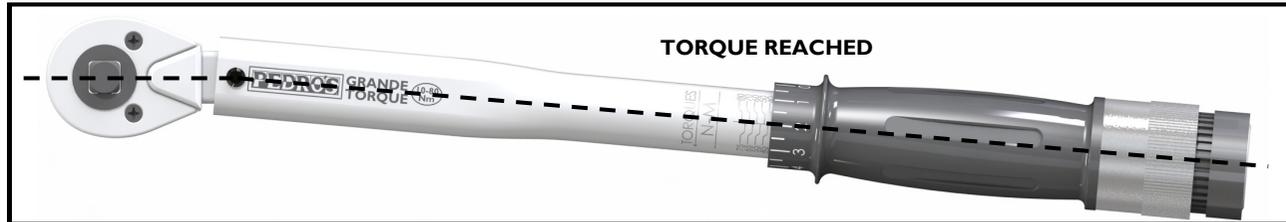


FIGURE 4



## Helpful Tips

1. The Grande Torque features Nm (top) and Ft-lb (bottom) primary scales. For other units, please refer to conversions in Table 1.
2. Always check and follow manufacturer's torque specifications. Also note any thread treatment such as grease, thread lock, or anti-seize which can affect torque.
3. Before first use, or after extended time between uses, set wrench to middle torque value and cycle the torque mechanism 5-10 times to redistribute factory lubricant.
4. Wrench is factory calibrated to be accurate to +/- 4% but may require recalibration after extensive use. Calibration should be completed by a professional calibration service.
5. Do not use your torque wrench to loosen fasteners or parts which were tightened without a torque wrench. This may overload the torque wrench.

TABLE 1: Torque Unit Conversion

Torque In:	N-m	N-m	N-m	kg-cm	kg-cm	kg-cm	lb-ft	lb-ft	lb-ft	lb-in	lb-in	lb-in
<b>Multiplied By:</b>	8.8507	0.7376	10.1972	0.8681	0.07233	0.09807	12	1.3558	13.8255	0.08333	0.113	1.1521
<b>Equals Torque In:</b>	lb-in	lb-ft	kg-cm	lb-in	lb-ft	N-m	lb-in	N-m	kg-cm	lb-ft	N-m	kg-cm

Note: pound-inch (lb-in) and pound-foot (lb-ft) units may be referred to as inch-pounds and foot-pounds.