

[Manuals.plus](#) /

> [PRO-GRADE](#) /

> PRO-GRADE 3/8" DR. MICRO ADJUSTING TORQUE WRENCH User Manual

## PRO-GRADE 11850

# PRO-GRADE 3/8" DR. MICRO ADJUSTING TORQUE WRENCH

Model: 11850

## INTRODUCTION

---

This manual provides essential information for the safe and effective use of your PRO-GRADE 3/8" Drive Micro Adjusting Torque Wrench. This precision instrument is designed to apply a specific amount of torque to fasteners, ensuring proper assembly and preventing damage from over-tightening or under-tightening. Please read this manual thoroughly before operation and retain it for future reference.



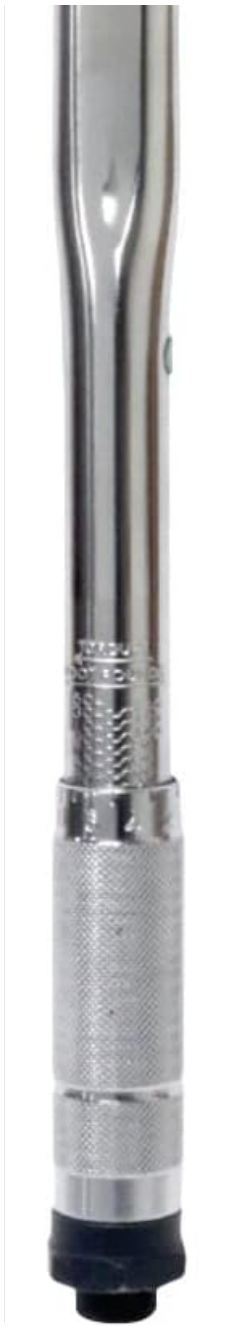


Image: The PRO-GRADE 3/8" Drive Micro Adjusting Torque Wrench, a precision tool for accurate torque application.

## SAFETY INFORMATION

---

Always observe the following safety precautions when using the torque wrench:

- **Wear Eye Protection:** Always wear ANSI-approved safety goggles or a face shield when operating any hand tool.
- **Inspect Tool Before Use:** Before each use, inspect the torque wrench for any signs of damage, wear, or malfunction. Do not use if damaged.
- **Proper Grip:** Always hold the wrench by the handle. Do not extend the handle with pipes or other devices to increase leverage, as this can damage the tool and lead to inaccurate readings.
- **Do Not Exceed Capacity:** Never exceed the maximum torque capacity of the wrench (80 foot-pounds for this model). Overloading can damage the tool and lead to injury.
- **Clean and Dry:** Keep the wrench clean and free of oil, grease, or other contaminants that could affect grip or accuracy.
- **Not a Breaker Bar:** This torque wrench is a precision measuring instrument. Do not use it as a breaker bar to loosen seized fasteners.

- **Store Properly:** Store the wrench in its protective case in a clean, dry environment.

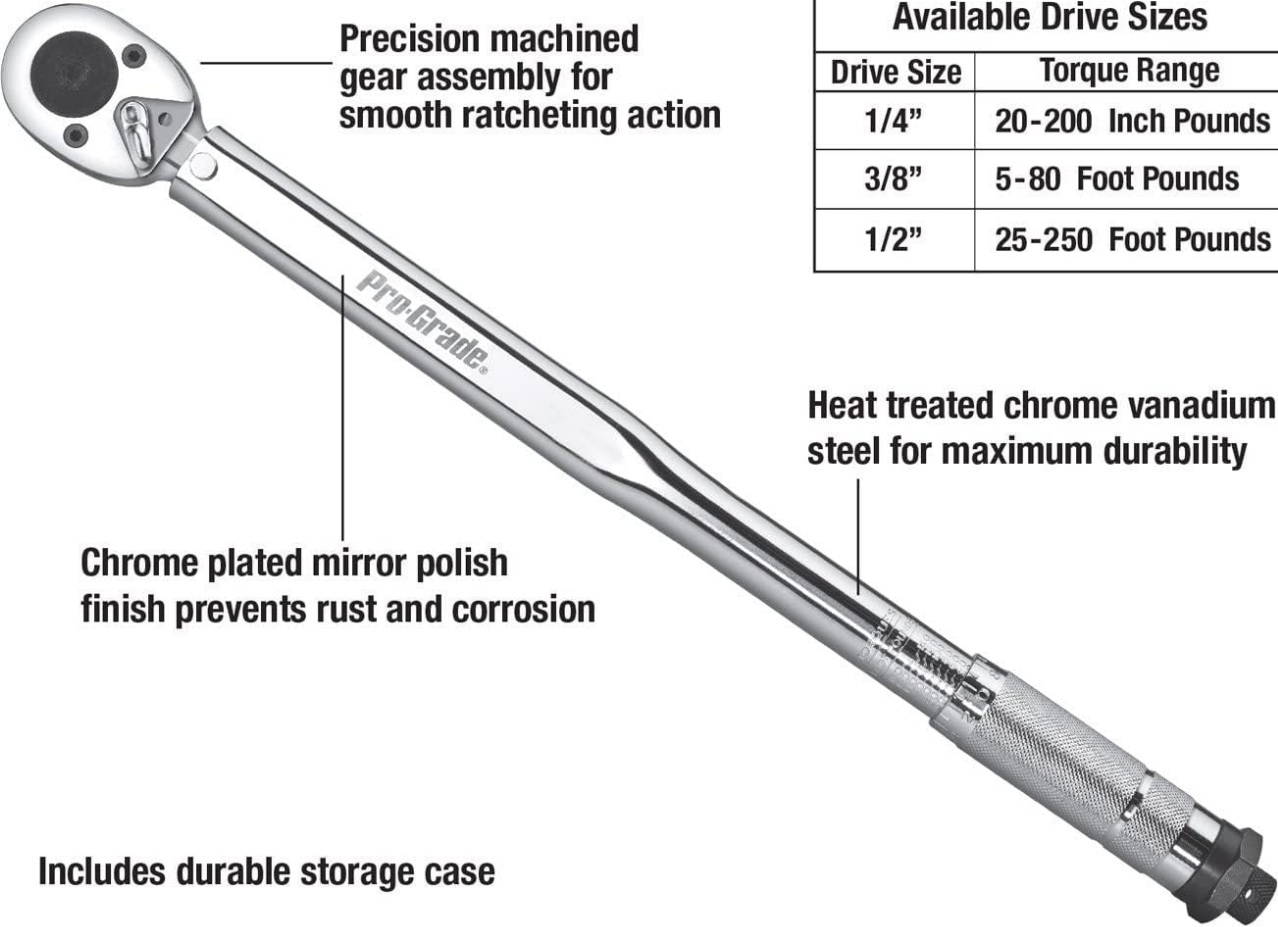
## PRODUCT FEATURES

The PRO-GRADE Micro Adjusting Torque Wrench is engineered for reliability and precision:

- **Precision Machined Gear Assembly:** Ensures smooth ratcheting action for consistent performance.
- **Heat Treated Chrome Vanadium Steel:** Provides maximum durability and strength for long-lasting use.
- **Chrome Plated Mirror Polish Finish:** Offers excellent resistance against rust and corrosion, extending the tool's lifespan.
- **Micro Adjusting Mechanism:** Allows for fine adjustments to achieve precise torque settings.
- **Durable Storage Case:** Includes a robust case for protection and organized storage of the wrench.
- **ANSI Specifications:** Designed to meet or exceed ANSI specifications for hardness and torque accuracy.

Pro-Grade<sup>®</sup>

**MICROMETER ADJUSTING  
TORQUE WRENCHES**



**Precision machined gear assembly for smooth ratcheting action**

**Chrome plated mirror polish finish prevents rust and corrosion**

**Includes durable storage case**

**Meet or exceeds ANSI specifications for hardness and torque**

Available Drive Sizes	
Drive Size	Torque Range
1/4"	20-200 Inch Pounds
3/8"	5-80 Foot Pounds
1/2"	25-250 Foot Pounds

**Heat treated chrome vanadium steel for maximum durability**

**LIFETIME GUARANTEE**  
Excludes calibration requirements

Image: Detailed view highlighting key features such as the precision gear assembly, chrome vanadium steel construction, and corrosion-resistant finish. Also shows available drive sizes and their corresponding torque ranges.

## SETUP

---

Before first use, and periodically thereafter, ensure your torque wrench is ready for operation:

1. **Unpack:** Carefully remove the torque wrench from its packaging and protective storage case.
2. **Inspect:** Visually inspect the wrench for any shipping damage or manufacturing defects. Ensure all markings on the scale are clear and legible.
3. **Familiarize:** Locate the main scale (foot-pounds) and the micro-adjusting scale on the handle. Understand how to rotate the handle to adjust the torque setting.
4. **Initial Adjustment:** For storage, it is recommended to set the torque wrench to its lowest setting (5 foot-pounds) to relieve tension on the internal spring. This helps maintain calibration accuracy over time.



Image: The PRO-GRADE torque wrench securely housed within its durable storage case, ready for transport or storage.

## OPERATING INSTRUCTIONS

---

Follow these steps to accurately apply torque:

1. **Select Socket:** Attach the appropriate 3/8" drive socket to the square drive of the torque wrench.
2. **Unlock Handle:** If the handle has a locking mechanism, unlock it by rotating the knurled knob at the base of the handle.
3. **Set Torque:** Rotate the handle to align the desired torque value on the main scale with the zero mark on the micro-adjusting scale. For example, to set 50 ft-lbs, align the '50' mark on the main scale. To add additional foot-pounds, rotate the micro-adjusting scale until the desired increment aligns with the main scale line. For example, to set 55 ft-lbs, set the main scale to 50 and rotate the micro-adjusting scale to 5.
4. **Lock Handle:** Once the desired torque is set, lock the handle by rotating the knurled knob back into its locked position. This prevents accidental changes during use.
5. **Apply Torque:** Place the socket onto the fastener. Apply a slow, steady pull to the handle. Do not jerk or apply sudden force.

6. **Listen for Click:** Continue pulling until you hear and feel a distinct "click" from the wrench. This indicates that the preset torque has been reached.
7. **Release Pressure:** Immediately stop applying force once the click is felt/heard.
8. **Reset for Storage:** After use, unlock the handle and rotate it back to the lowest torque setting (5 foot-pounds) before storing. This relieves tension on the internal spring and helps maintain the wrench's accuracy.

## MAINTENANCE

---

Proper maintenance ensures the longevity and accuracy of your torque wrench:

- **Cleaning:** Wipe the wrench clean with a soft, dry cloth after each use. Do not use harsh chemicals or solvents, as they may damage the finish or internal components.
- **Lubrication:** The internal mechanism is factory lubricated and generally does not require user lubrication. Do not attempt to lubricate the internal mechanism unless specifically instructed by the manufacturer.
- **Storage:** Always store the torque wrench in its protective case in a clean, dry, and temperature-controlled environment. Ensure the torque setting is returned to the lowest value (5 ft-lbs) before storage.
- **Calibration:** Torque wrenches are precision instruments and require periodic calibration to maintain accuracy. The frequency of calibration depends on usage, but annual calibration is generally recommended for professional use. Contact a certified calibration service for this procedure.

## TROUBLESHOOTING

---

If you encounter issues with your torque wrench, consider the following:

- **Wrench Not Clicking:**
  - Ensure the torque setting is above the minimum value (5 ft-lbs).
  - Verify the handle is unlocked before setting and locked after setting.
  - Apply a slow, steady pull. A quick jerk may not allow the mechanism to engage properly.
  - If the wrench has been dropped or subjected to impact, its calibration may be affected, and it may require professional inspection.
- **Inaccurate Readings:**
  - Ensure the scale is read correctly and the handle is locked after setting.
  - Confirm the wrench is being used within its specified torque range.
  - If accuracy is suspected, the wrench requires professional calibration. Do not attempt to self-calibrate.

## SPECIFICATIONS

---

Attribute	Value
Brand	PRO-GRADE
Model Number	11850
Drive Size	3/8"
Torque Range	5-80 Foot Pounds
Material	Heat Treated Chrome Vanadium Steel (Blend)

Attribute	Value
Finish Type	Chrome Plated Mirror Polish (Brushed)
Item Weight	2.49 pounds
Product Dimensions	Approximately 1 x 1 x 1 inches
Head Style	Ratchet Head
Operation Mode	Mechanical
Measurement System	Imperial (Foot Pounds)
UPC	035794118501

Note: Product dimensions from source data may be generalized. The wrench features a standard ratchet head for socket attachment, despite some source data indicating "Open End".

## WARRANTY AND SUPPORT

---

This PRO-GRADE Torque Wrench comes with a **Lifetime Guarantee**. This guarantee covers manufacturing defects and material flaws. Please note that this guarantee typically excludes calibration requirements, as calibration is a maintenance item dependent on usage and environmental factors.

For warranty claims, technical support, or inquiries regarding calibration services, please contact PRO-GRADE customer service through their official website or the retailer where the product was purchased. Retain your proof of purchase for warranty validation.

PRO-GRADE is a registered trademark.  
© 2023 PRO-GRADE. All rights reserved.