Precisebuilt 2755

Precisebuilt 1/2" Drive Click Torque Wrench User Manual

Model: 2755

Introduction

This user manual provides essential information for the proper setup, operation, and maintenance of your Precisebuilt 1/2" Drive 10-150 ft-lb (1.4-20.7 kg-m) Dual-Direction Click Torque Wrench. This tool is designed for precise torque application, ensuring fasteners are tightened to the correct specifications. It is factory calibrated to +/-2% and accurate up to +/-4% clockwise and +/-6% counterclockwise, meeting ASME B107.300 standards. Please read this manual thoroughly before use to ensure safe and effective operation.

Product Overview

Figure 1: Precisebuilt 1/2" Drive Torque Wrench and its protective blow-molded case.

The Precisebuilt torque wrench is a precision instrument used to apply a specific torque to a fastener. It features a durable alloy steel construction with a chrome nickel finish, ensuring longevity and resistance to corrosion. The wrench is supplied with a blow-molded case for secure storage and transport.

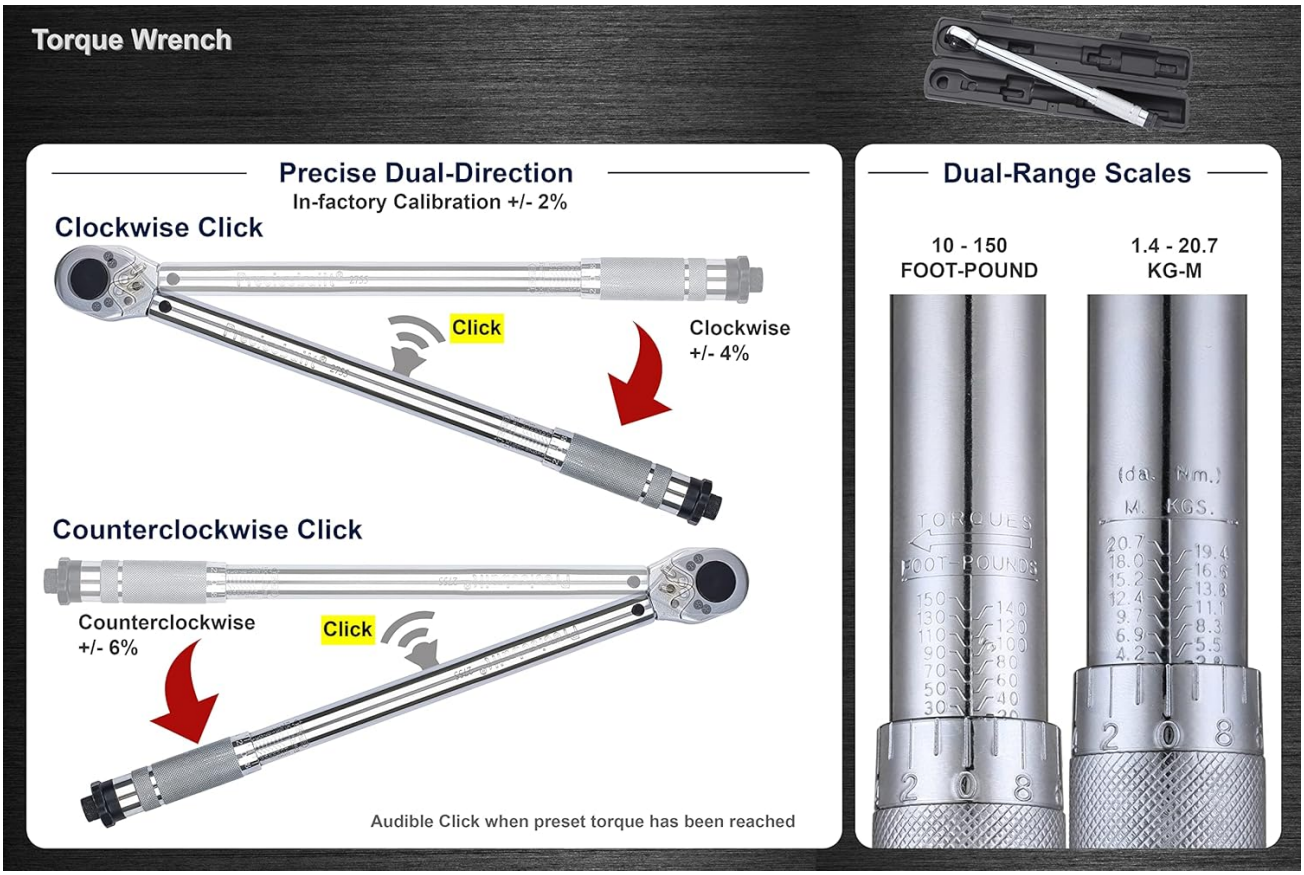

Figure 2: Detailed view of the dual-direction click mechanism and dual-range scales (foot-pound and kg-m) for precise torque setting.

Key features include a dual-direction operation, allowing for both clockwise and counterclockwise torque application. The wrench provides an audible click when the preset torque value is reached, indicating proper tightening. It has dual-range scales for measurements in both foot-pounds (ft-lb) and kilogram-meters (kg-m).

Setup and Torque Setting

1. **Unpacking:** Carefully remove the torque wrench from its blow-molded case. Inspect the tool for any signs of damage.
2. **Unlocking the Handle:** Locate the locking knob at the bottom of the handle. Rotate it counter-clockwise to unlock the handle, allowing for torque adjustment.
3. **Setting the Torque Value:**
   - Rotate the knurled handle grip to align the desired major torque value on the main scale with the edge of the minor scale.
   - Further rotate the knurled handle grip until the desired minor torque value on the minor scale aligns with the center line of the main scale.
   - For example, to set 100 ft-lb, align the '100' mark on the main scale with the edge of the minor scale, then rotate the handle until '0' on the minor scale aligns with the center line.
4. **Locking the Handle:** Once the desired torque is set, rotate the locking knob clockwise until it is securely tightened. This prevents accidental changes to the torque setting during use.
5. **Direction Selection:** The ratchet head features a lever to switch between clockwise and counterclockwise operation. Ensure the lever is set to the desired direction before applying torque.

Operating Instructions

Figure 3: Proper application of the torque wrench for tightening fasteners, such as lug nuts.

1. **Attach Socket:** Select the appropriate socket for your fastener and attach it securely to the 1/2" drive square on the wrench head.
2. **Position Wrench:** Place the socket onto the fastener. Ensure the wrench is positioned so that you can apply smooth, steady pressure.
3. **Apply Torque:** Apply slow, steady, and continuous pressure to the handle in the desired direction (clockwise or counterclockwise). Do not use sudden jerking motions.
4. **Listen for Click:** Continue applying pressure until you hear and feel a distinct "click" from the wrench. This indicates that the preset torque value has been reached.
5. **Release Pressure:** Immediately stop applying pressure once the click is heard/felt. Further tightening beyond the click can over-torque the fastener and damage the wrench.
6. **Repeat:** For applications requiring multiple fasteners (e.g., wheel lug nuts), repeat the process for each fastener.

Important Safety Precautions:

- Always wear appropriate personal protective equipment (PPE), such as safety glasses.
- Never use the torque wrench as a breaker bar or for loosening fasteners.
- Do not extend the handle with pipes or other tools to increase leverage, as this can damage the wrench and compromise accuracy.
- Keep the wrench clean and free from grease or oil to maintain a secure grip.

Maintenance and Storage

- **Cleaning:** After each use, wipe the torque wrench clean with a soft, dry cloth. Do not use harsh chemicals or solvents that could damage the finish or internal components.
- **Storage:** Store the torque wrench in its original blow-molded case to protect it from dust, moisture, and impact.

- **Torque Setting for Storage:** For long-term storage, it is recommended to set the torque wrench to its lowest torque setting (10 ft-lb) to relieve tension on the internal spring mechanism. Do not set it below the lowest marked setting.
- **Calibration:** Torque wrenches are precision instruments and may require periodic re-calibration to maintain accuracy. Consult a professional calibration service if you suspect inaccuracy or after prolonged use.

Troubleshooting

Problem	Possible Cause	Solution
Wrench does not click.	• Torque setting too low for application. • Fastener already tight. • Wrench is damaged or out of calibration.	• Verify correct torque setting for the fastener. • Ensure fastener is loose before applying torque. • Have the wrench inspected and calibrated by a professional.
Inaccurate torque readings.	• Improper technique (jerking motion). • Wrench is out of calibration. • Wrench has been dropped or misused.	• Apply smooth, steady pressure. • Have the wrench calibrated. • Avoid dropping or misusing the tool.
Handle is difficult to adjust.	• Locking knob is still engaged. • Dirt or debris in the adjustment mechanism.	• Ensure locking knob is fully disengaged. • Clean the handle and adjustment area.

Specifications

Attribute	Value
Brand	Precisebuilt
Model Number	2755
Drive Size	1/2 inch
Torque Range	10-150 ft-lb (1.4-20.7 kg-m)
Accuracy	+/-4% Clockwise, +/-6% Counterclockwise (in-factory calibration +/-2%)
Material	Alloy Steel
Finish Type	Chrome Nickel
Item Length	18 Inches
Item Weight	3.19 pounds (1.45 Kilograms)

Attribute	Value
Head Style	Fixed Ratchet
Operation Mode	Mechanical
Included Components	Blow-molded case
Standards Met	ASME B107.300

Warranty and Support

For detailed warranty information and customer support, please refer to the official user manual PDF provided with your product or visit the Precisebuilt Tools website. General inquiries can also be directed to the seller through the platform where the product was purchased.
A digital copy of the user manual is available for download:Precisebuilt Torque Wrench User Manual (PDF).