

OEMTOOLS 27173

OEMTOOLS 27173 3/8-Inch Drive Click Torque Wrench Instruction Manual

Model: 27173 | Brand: OEMTOOLS

1. INTRODUCTION

This manual provides essential instructions for the safe and effective operation, maintenance, and care of your OEMTOOLS 27173 3/8-inch Drive Click Torque Wrench. This precision tool 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 using the tool.

2. SAFETY INFORMATION

Always observe basic safety precautions when using any tool. Failure to do so may result in personal injury or damage to the tool or workpiece.

- **Wear Eye Protection:** Always wear ANSI-approved safety goggles when operating tools.
- **Inspect Tool Before Use:** Ensure the torque wrench is in good working condition. Do not use if damaged.
- **Keep Work Area Clean:** Cluttered work areas can lead to accidents.
- **Use Correct Tool for the Job:** This torque wrench is designed for specific torque applications. Do not use it as a standard ratchet or for breaking loose seized fasteners.
- **Right-Hand Torque Only:** This wrench is designed to measure torque in the right-hand (clockwise) direction only. Attempting to use it for left-hand (counter-clockwise) torque may damage the internal mechanism and result in inaccurate readings.
- **Do Not Exceed Maximum Torque:** Never apply torque beyond the wrench's specified maximum capacity (200 in/lbs).
- **Store Properly:** After use, always return the torque setting to its lowest value (20 in/lbs) before storing to relieve spring tension and maintain calibration accuracy.

3. COMPONENTS

Familiarize yourself with the main parts of your OEMTOOLS 27173 Torque Wrench:



Figure 1: OEMTOOLS 27173 3/8-inch Drive Click Torque Wrench. This image displays the full length of the chrome-plated torque wrench, showing the 3/8-inch drive head, the main body with torque scale, the knurled adjustment handle, and the locking knob at the base.

1. **Drive Head:** The 3/8-inch square drive for attaching sockets.
2. **Main Body:** Houses the internal mechanism and features the primary torque scale.
3. **Adjustment Handle (Knurled):** Used to rotate and set the desired torque value.
4. **Locking Knob:** Located at the base of the handle, this knob secures the torque setting to prevent accidental changes during use.
5. **Torque Scale:** Markings on the main body and adjustment handle indicating torque values in inch-pounds (in/lbs).

4. SETUP AND TORQUE SETTING

Follow these steps to set the desired torque value:

1. **Unlock the Handle:** Rotate the locking knob at the base of the handle counter-clockwise to unlock it.
2. **Set Major Torque Value:** Rotate the knurled adjustment handle until the desired major torque value (e.g., 100 in/lbs) aligns with the center line on the main body scale.
3. **Set Minor Torque Value:** Continue rotating the adjustment handle until the desired minor torque value (e.g., 5

in/lbs) on the handle's scale aligns with the center line on the main body scale. The total torque setting will be the sum of the major and minor values (e.g., $100 + 5 = 105$ in/lbs).

4. **Lock the Handle:** Rotate the locking knob clockwise until it is securely tightened. This prevents the torque setting from changing during operation.
5. **Attach Socket:** Select the appropriate 3/8-inch drive socket for your fastener and attach it firmly to the drive head of the torque wrench.

Note: Always ensure the torque setting is locked before applying torque to a fastener.

5. OPERATING INSTRUCTIONS

Once the torque wrench is set and a socket is attached, proceed with the following steps:

1. **Position the Wrench:** Place the socket onto the fastener. Ensure the wrench is positioned so you can apply smooth, steady pressure.
2. **Apply Torque:** Apply slow, steady, and increasing pressure to the handle in a clockwise direction. Do not use jerky movements or sudden force.
3. **Listen for the "Click":** As the preset torque value is reached, the wrench will produce an audible "click" and a slight release of tension will be felt in the handle. This indicates that the desired torque has been achieved.
4. **Stop Applying Force:** Immediately stop applying force once the click is heard/felt. Further tightening will result in over-torquing the fastener.
5. **Remove Wrench:** Remove the torque wrench from the fastener.

Important: This torque wrench is designed for right-hand (clockwise) torque applications only. Do not attempt to use it for loosening fasteners or for left-hand torque, as this can damage the tool and void its accuracy.

6. MAINTENANCE AND STORAGE

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 solvents or harsh chemicals, as these can damage the finish or internal components.
- **Storage:** Always return the torque setting to its lowest value (20 in/lbs) before storing the wrench. This relieves tension on the internal spring, helping to maintain calibration accuracy over time. Store the wrench in its protective case in a clean, dry environment, away from extreme temperatures and humidity.
- **Calibration:** Torque wrenches are precision instruments and should be periodically checked for calibration accuracy. The frequency of calibration depends on usage, but generally, annual calibration is recommended for professional use, or after approximately 5,000 cycles. Contact a qualified calibration service for this procedure.
- **Lubrication:** Do not attempt to lubricate the internal mechanism of the torque wrench. This should only be done by a qualified service technician during calibration.

7. TROUBLESHOOTING

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

- **No Audible Click:**
 - Ensure the torque setting is locked.
 - Verify that the applied torque is within the wrench's operating range (20-200 in/lbs).
 - Apply smooth, steady pressure. A quick, jerky motion might not allow the mechanism to engage properly.
 - The click can sometimes be subtle. Pay attention to the slight release of tension in the handle.

- **Inaccurate Readings:**

- Confirm the torque setting is correctly locked.
- Ensure the wrench is used for right-hand torque only.
- Check if the wrench has been dropped or subjected to impact, which can affect calibration.
- Consider professional calibration if accuracy is consistently questionable.

- **Handle Not Locking/Unlocking:**

- Ensure the handle is not overtightened or cross-threaded.
- Check for any debris obstructing the locking mechanism.

For issues not resolved by these steps, contact OEMTOOLS customer support.

8. SPECIFICATIONS

Feature	Detail
Model Number	27173
Drive Size	3/8 inch
Torque Range	20 - 200 inch-pounds (in/lbs)
Torque Direction	Right-hand (clockwise) only
Type	Click style
Material	Alloy steel
Finish	Chrome plated
Length	12.2 inches (30.99 cm)
Width	3 inches (7.62 cm)
Height	2.1 inches (5.33 cm)
Weight	1.7 pounds (771.11 g)
Batteries Required	No
Included Components	27173 3/8 Inch Drive Click Torque Wrench (20-200 In/Lbs.)

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your OEMTOOLS 27173 Torque Wrench, please refer to the warranty card included with your product or visit the official OEMTOOLS website. You can also contact OEMTOOLS customer service directly for assistance.

Website: www.oemtools.com

