

WRENCH MODEL NUMBER:

WRENCH SERIAL NUMBER:

For Warranty Claims, Contact CDI Torque Products
at (626) 965-0668.

LIMITED WARRANTY

The CDI Heavy-Duty Torque and Angle Electronic Torque Wrench is backed by a one year warranty. This warranty covers manufacturer defects and workmanship. The warranty excludes misuse, abuse and normal wear and tear. Exclusion is not allowed in some states and may not apply. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.



Please Recycle

IMPORTANT ENVIRONMENTAL NOTES:

1. This equipment may contain hazardous materials which can be harmful to the environment.
 2. Do not dispose of this equipment as municipal waste. Return it to the distributor or a designated collection center.
- Thank you for caring about our environment!

CDI TORQUE PRODUCTS

A Snap-on Specialty Tools Brand

19220 SAN JOSE AVENUE • CITY OF INDUSTRY, CA 91748 • USA
(626) 965-0668

Find other fine torque products at WWW.CDITORQUE.COM

Form 20-1960-CDI Rev. NC
12/2010

US and Foreign Patents Pending - Made in USA with US and Global Components

HEAVY-DUTY TORQUE AND ANGLE ELECTRONIC TORQUE WRENCH



CDI TORQUE PRODUCTS

SAFETY MESSAGES



WARNING - Risk of flying particles

Over-torquing can cause breakage. An out of calibration angle wrench can cause part or tool breakage. Broken hand tools, sockets or accessories can cause injury. Excess force can cause crow foot or flare nut wrench slippage.



READ THIS MANUAL COMPLETELY BEFORE USING THE CDI HEAVY-DUTY WRENCH

- To insure accuracy, work must not move in angle mode.
- For personal safety and to avoid wrench damage, follow good professional tool and fastener installation practices.
- Periodic recalibration is necessary to maintain tool accuracy.



USERS AND BYSTANDERS SHOULD ALWAYS WEAR EYE PROTECTION

- Be sure all components, including adapters, extensions, drivers and sockets are rated to match or exceed the torque being applied with tool.
- Observe all equipment, system and manufacturer's warnings, cautions and procedures when using this wrench.
- Always use the correct size socket for the fastener being torqued.
- Do not use damaged sockets, showing signs of wear or cracks.
- Always replace damaged fasteners before applying torque.



WARNING - To avoid damaging Heavy-Duty Wrench

- Never operate wrench when powered OFF. Always power wrench ON prior to applying torque.
- Do not press ON/OFF key while torque is being applied.
- Never use this wrench to loosen fasteners.

SAFETY MESSAGES

- Never use extensions, such as a pipe, on the handle of the wrench.
- Always make sure the ratchet Forward/Reverse Switch is fully engaged in the correct position.
- Always verify that the wrench capacity matches or exceeds each application before proceeding.
- Always verify the calibration of the wrench if you know or suspect its capacity has been exceeded.
- Always pull - do not push - on the wrench handle and adjust your stance to prevent a possible fall while applying torque.



WARNING - Electrical Shock Hazard

- Electrical shock can cause injury.
- Plastic handle is not insulated.
- Do not use on live electrical circuits.

MAINTENANCE / SERVICE

1. **IMPORTANT** - Service, repair and calibration are to be performed by CDI Torque Products only. Calibration by the user is recorded in the wrench and voids factory certification.
2. To safely clean the torque wrench, wipe with a damp cloth. **NEVER use solvents, thinners, or engine cleaners of any kind. NEVER immerse the torque wrench in liquids of any kind.**

INTRODUCTION

The CDI **Heavy-Duty** wrenches digitally display and monitor fastener torque and angular rotation (turn).

DISPLAY MODES

TORQUE - wrench functions as an adjustable torque wrench.

ANGLE - wrench functions as an adjustable angle wrench and simultaneously monitors torque to prevent fastener or wrench overload.

SETTINGS - Adjustable torque and angle settings for fastener installation specifications. The preset values are programmable from 5% to 100% of full-scale torque and 5 to 360 degrees of rotation. The scrolling display rolls-over at both ends for convenient and quick setting.

OVERLOAD - If the wrench is used beyond 100% torque capacity, the audible tone will pulse rapidly to warn the user to stop.

ZERO/RESET - Automatic self-check, torque zero and angle reset at power-on and anytime the ON/OFF key is pushed. (This is not a calibration check).

FUNCTION DETAILS

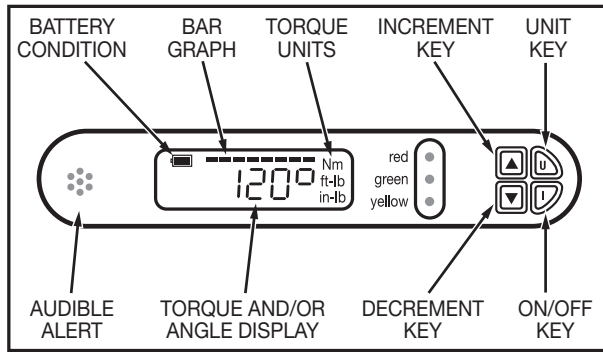
To **PRESET** the wrench, select the **UNIT** of measure (**Nm, ft-lb, in-lb or degrees**) desired. Use the **UP** and **DOWN** keys to set the required torque or angle.

In the **Torque Display Mode**, the display shows the torque **PRESET** value until 5% or more of full scale torque is applied. The display then switches to **TRACK** mode showing the applied torque in real time. When applied torque is within -10% of the preset value, the Yellow LED turns ON. When applied torque is within +/-4% of the preset value, the Green LED turns ON and the buzzer sounds for 1/2 second until torque is released. If torque is re-applied, the display will immediately switch to **TRACK** mode. If torque exceeds +4% of the preset value, the Red LED turns ON and the buzzer pulses until torque is released. Exceeding

125% of full scale the display will lockup showing “- - -” and the buzzer pulses. The wrench must be reset by pushing the **ON/OFF** button.

In the **Angle Display Mode**, the display shows the angle **PRESET** value until 5% or more of full scale torque is applied. Rotation is accumulated in angular degrees. When torque is released, the accumulated torque and angle values will flash alternately for 10 seconds. The display will continue to accumulate if torque is reapplied within 10 seconds. This allows time for reverse (ratchet) motion. When the accumulated angle is within -10 degrees of preset value, the Yellow LED turns ON. When the accumulated angle is within -5 degrees of preset value, the buzzer turns ON while the Yellow LED remains ON. When accumulated angle is within -1 degree of preset value, the Green LED turns ON and the buzzer sounds for 1/2 second until torque is released. If accumulated angle exceeds +2 degrees of the preset value, the Red LED turns ON and the buzzer pulses until torque is released. If angle preset is reached and torque is released, angle accumulation is reset to zero automatically. This allows moving on to the next fastener immediately.

OPERATOR INSTRUCTION

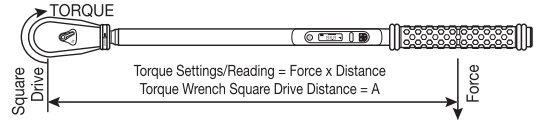


Install four fresh "AA" alkaline cells into the handle of the wrench.

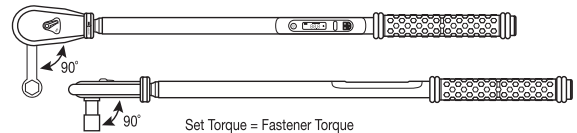
1. Turn the wrench **ON** by momentarily pushing the **ON/OFF** key. The display will return to the mode of operation and preset values previously set up.
2. To change the mode of operation, **TORQUE** or **ANGLE**, scroll the selections by momentarily pushing the **UNITS** key. The preset values for each mode will be displayed.
3. Use the **UP** and **DOWN** keys to change the preset values.
(Note: **TORQUE** is also measured in **ANGLE** mode).
4. Grasp the center of the handle and slowly apply torque to the fastener until the **Green LED** or audible buzzer alerts you to stop.
5. Release torque. Note the **PEAK** reading flashing on the display for 10 seconds, unless torque is re-applied or the **ON/OFF** key is pushed to clear the display.
6. In **ANGLE** mode, place the wrench on a flat surface during **ZEROTARE**.
7. The **BAR GRAPH** shows measured **TORQUE** or **ANGLE** as a percentage (10-100%) of Preset.

USE OF ADAPTERS, EXTENSIONS AND UNIVERSALS

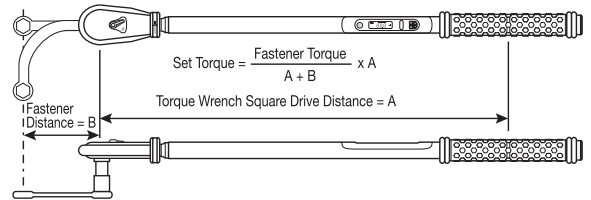
Anytime an adapter, extension or universal is used with a torque wrench in such a way that the fastener distance is different that the torque wrench square drive distance, an adjustment to the set torque is required to get proper fastener torque.



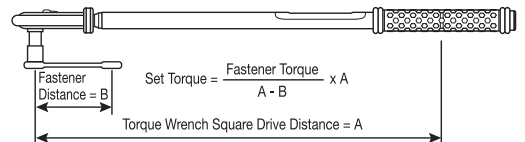
Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



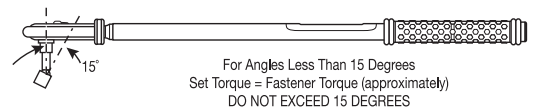
Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



Fastener torque is greater than torque wrench square drive torque. Calculated setting will be lower than desired fastener torque.



Fastener torque is less than torque wrench square drive torque. Calculated setting will be higher than desired fastener torque.







When using a universal or wobble extension, do not exceed more than 15 degrees of offset from perpendicular drive.

SPECIFICATIONS

RATCHET HEAD - Square drive, 40 teeth, sealed flex

DISPLAY - 4-digit LCD, torque units, CCW and battery condition flags

SEALED KEY PAD

-  **POWER** - ON/OFF - auto self check - torque zero - angle reset
-  **UP** - increments torque and angle setting
-  **DOWN** - decrements torque and angle setting
-  **UNITS** - unit mode select (ft-lb, in-lb, Nm, °)

FUNCTIONS

SET - torque and angle - adjustable - audible and visual alert

TRACK - accumulated angular rotation with real time update

PEAK HOLD - 10 sec. flashing at torque release

ACCURACY (72° F)

ANGLE: +/-1% of reading +/-1° @ angular velocity > 10°/sec < 180°/sec

TORQUE:

CW CCW

+/-2% +/-3% of reading, 20% to 100% of full scale

+/-4% +/-6% of reading, 10% to 19% of full scale

+/-8% +/-10% of reading, 5% to 9% of full scale

PRESET RANGE

ANGLE: 5 to 360° CW or CCW (Display Resolution 1°)

TORQUE: (Display Resolution as shown below)

Model	ft-lb	Nm	in-lb	overload (ft-lb)
6004TAA	60.0-600.0	81.3-813.5	720-7200	750

OPERATING TEMPERATURE: 55° to 95° F (13° to 35° C)

STORAGE TEMPERATURE: -1° to 122° F (-20° to 50° C)

MEASUREMENT DRIFT

ANGLE: -0.12 Angular Degrees per Degree C

TORQUE: +0.01% of reading per Degree C

HUMIDITY - up to 90% non-condensing

SPECIFICATIONS

DIMENSIONS

PART NUMBER	DRIVE	LENGTH	WEIGHT
6004TAA	3/4"	49 in.	11 lbs.

BATTERY - Four (4) "AA" Alkaline cells, up to 80 hours continuous operation.

AUTO SHUT-OFF - Auto power OFF will occur after 2 minutes of non-usage to conserve battery power.

PLEASE NOTE

1. NOTES

- If the display shows "Err0" at power on, the wrench is damaged and must be returned to CDI Torque Products for repair.

- If the display shows "ErrA" in the angle mode, fastener rotation speed has exceeded the capacity of the wrench.

- The wrench must be held still during angle mode reset. Motion is indicated by alternating outside center segments of the display "- -"

- Remove battery when stored for extended periods.

2. **BATTERY REPLACEMENT** - Replace with four "AA" Alkaline cells only (Available anywhere).

