

**WRENCH MODEL NUMBER:**

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**WRENCH SERIAL NUMBER:**

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

#### **LIMITED WARRANTY**

The CDI Dial Torque Wrench Dual Scale 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](http://WWW.CDITORQUE.COM)

Form 20-220-CDI  
6/2010 Rev. A

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

## **DIAL TORQUE WRENCH DUAL SCALE**



# **CDI TORQUE PRODUCTS**

## SAFETY MESSAGES



### WARNING



Read operation manual completely before using torque instrument and store for future reference.



Wear safety goggles-both user and bystanders



- An out of calibration torque wrench can cause part or tool breakage
- Periodic re-calibration is necessary to maintain accuracy
- Do not exceed rated torque as overtorquing can cause wrench or part failure
- Do not use torque instrument to break fasteners loose



- Do not use cheater extension on the handle to apply torque
- Broken or slipping tools can cause injury.



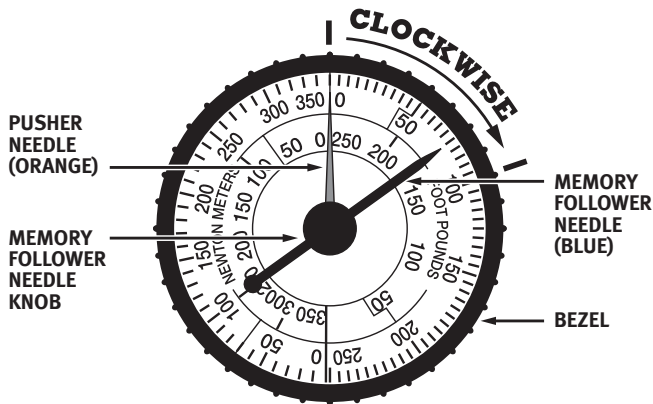
### CAUTION - RATCHET HEAD

Ratchet mechanism may slip or break if dirty, mismatched or worn parts are used, or direction lever is not fully engaged. Ratchets that slip or break can cause injury.

## MAINTENANCE / SERVICE

1. The torque wrench's internal mechanism is permanently lubricated during assembly. **Do not attempt to lubricate the internal mechanism.**
2. Clean torque wrench by wiping. **Do not immerse.**
3. Store torque wrench in protective tube at its lowest torque setting. **Do not force handle below lowest setting.**

## SETTING MEMORY FOLLOWER NEEDLE ON DUAL SCALE MODEL

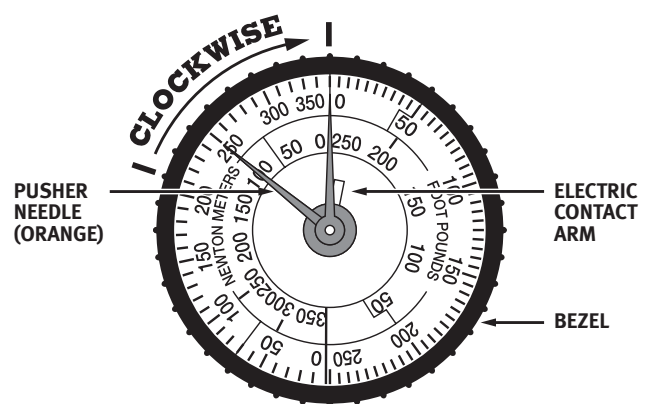


### FOLLOWER NEEDLE DIAL

Before using all models of dial torque wrenches, it is strongly suggested to cycle/operate them 3 times at full scale in the torque direction in which they will be used. *Dial torque wrenches must always be zeroed before use.* To set orange pusher & blue follower needle for right-hand (CW) torquing:

1. Turn bezel in left-hand (CCW) direction until, blue memory follower needle contacts orange pusher needle.
2. Continue to turn bezel left-hand (CCW) until blue memory follower needle is lined up with **zero** (0) of outer graduation on portion of dial for IN.LB., FT.LB., METRIC readings.
3. Apply force on the wrench handle until blue follower needle reaches desired torque. When force is released orange pusher needle will return to **zero** and blue memory follower needle will remain at torque applied.
4. For repetitive torque operations (once the **zero** has been set as instructed above), the blue memory follower needle can be returned to **zero** by use of the follower needle knob. It is ready for the next operation.
5. **IMPORTANT** - When using the memory feature always make sure that the blue follower memory needle is on **zero** before torquing.

## SETTING ELECTRIC CONTACT ARM ON DUAL SCALE MODEL



### ELECTRIC SIGNAL DIAL

Setting electric arm at **zero** with all torque readings made from inner circle of numbers on the scale for right-hand (CW) torquing, and the outer circle of numbers on the scale for left-hand (CCW) torquing:

1. Turn bezel (CCW) until light and buzzer goes on.
2. Continue to turn bezel (CCW) until inner **zero** of desired scale (English or Metric) is lined up with orange pusher needle.
3. Now turn bezel (CW) until light goes off and orange pusher needle is aligned with desired torque graduation in inner portion of scale orange pusher needle is now preset to desired torque value.
4. Apply force to handle in the (CW) direction. When the preset torque value is reached the light and buzzer will go on. When force on the handle is released orange pusher needle will return to the preset torque value.
5. To change the preset torque value to another, turn the bezel as required to the new torque value within the same dial graduation and proceed as in step 4 above.
6. **IMPORTANT** - Always make sure that the *electric contact arm is zeroed*.

## CERTIFICATION

This torque wrench as calibrated at the factory, is certified to meet the current ASME specification. Additionally, all wrenches are calibrated on a torque standard traceable to the National Institute of Standards and Technology (N.I.S.T.).

## CONVERSION TABLE

To Convert From	To	Multiply By
in. oz.	in. lb.	0.06250
in. lb.	in. oz.	16
in. lb.	ft. lb.	0.08333
in. lb.	cmkg	1.15212
in. lb.	mkg	0.01152
in. lb.	Nm	0.11298
in. lb.	dNm	1.12984
ft. lb.	in. lb.	12
ft. lb.	mkg	0.13825
ft. lb.	Nm	1.35581
dNm	in. lb.	0.88507
dNm	Nm	0.1
Nm	dNm	10
Nm	cmkg	10.1971
Nm	mkg	0.10197
Nm	in. lb.	8.85074
Nm	ft. lb.	0.73756
cmkg	in. lb.	0.86796
cmkg	Nm	0.09806
mkg	in. lb.	86.7961
mkg	ft. lb.	7.23301
mkg	Nm	9.80665

## USE OF EXTENSIONS AND ADAPTERS

When using an extension or adapter (increasing the effective length of the torque wrench) the output torque value will change. To calculate the new torque output of the wrench use the following formula:

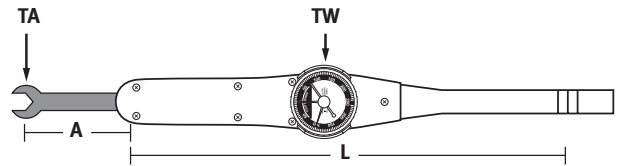
$$TW = \frac{TA \times L}{L + A}$$

TA = Torque exerted @ end of adapter

L = Distance between square drive and hand position

TW = Wrench scale reading

A = Length of adapter or extension



A number of variables can affect torque accuracy. These include the length of an adapter or extension, length of the wrench and variations in hand position on the wrench will affect the accuracy of the above calculation.

## NOTES

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