FOR YOUR PERMANENT FILE

WRENCH MODEL NUMBER:

_____

WRENCH SERIAL NUMBER:

_____

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

LIMITED WARRANTY
The CDI Computorq II 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

COMPUTORQ II™ ELECTRONIC TORQUE WRENCH

CDI TORQUE PRODUCTS

SAFETY MESSAGES

WARNING - Risk of flying particles
Over-torquing can cause breakage. Force against flex stops on flex head can cause head 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 COMPUTORQ II 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 Computor II Wrench
- Never operate wrench when powered OFF. Always power wrench ON prior to applying torque.
- Do not press ON key while torque is being applied.
- Never use this wrench to loosen fasteners.

- 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.
- Never force the head of flex head drives against stops.
- 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. The torque wrench's internal mechanism is permanently lubricated during assembly. **Do not attempt to lubricate the internal mechanism.**

3. 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.**

4. Store torque wrench in protective tube at its lowest torque setting. **Do not force handle below lowest setting.**

KEY PAD FUNCTIONS
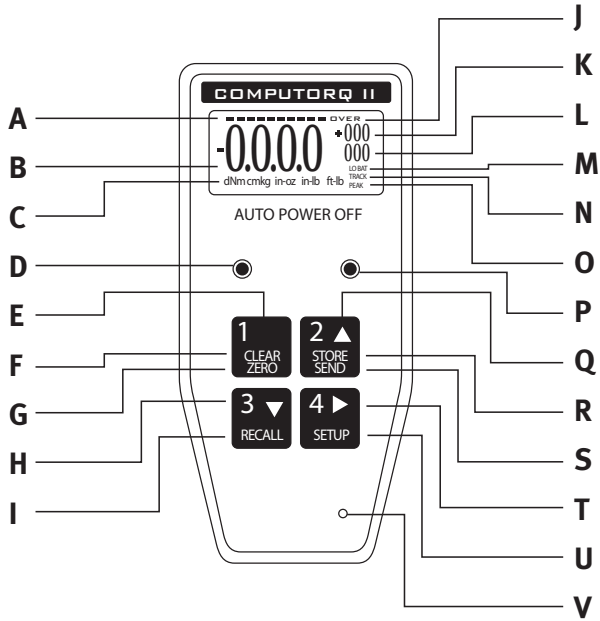
A ANALOG BAR GRAPH

B SUPER TWIST LIQUID CRYSTAL DISPLAY

C 7 TORQUE UNITS (Ft.Lb., In.Lb., In.Oz., Nm, dNm, MKG, CmKG

D GREEN "GO" LIMIT LED

E POWER ON/OFF

F CLEAR LCD DISPLAY

G ZERO TARE

H ENTER (ACCEPT INFORMATION)

I RECALL TORQUE DATA STORED IN MEMORY

J OVER TORQUE "WARNING"

K SPECIFIC TORQUE NUMBER IN MEMORY BEING RECALLED AND SHOWN ON LCD

L NUMBER OF TORQUE VALUES IN MEMORY

M LOW BATTERY INDICATION

N TRACK MODE

O PEAK HOLD MODE

P RED "OVER TORQUE" LIMIT LED

Q SCROLL UP (INCREASE VALUE DURING SET-UP)

R STORE DATA TO WRENCH

S SEND DATA TO COMPUTER/DATA LOGGER/ PRINTER

T SHIFT TO NEXT FLASHING DIGIT (DURING SET-UP)

U SET-UP PARAMETERS (TOLERANCE LIMIT/TORQUE UNIT)

V AUDIO BUZZER

OPERATING INSTRUCTIONS

Please Note: There is an "off-on" slide switch located on the right side of the wrench The wrench is shipped from the factoiy with the switch in the "off" position. Before use, slide the switch up or "on" Place the switch in the "off" position only if the wrench is to be stored or not used for a period of time. Otherwise, leave the switch in the "on" position.

ELECTRONIC WRENCH SETUP

• TO TURN WRENCH "ON"

Press Button #1 (on/off).

Slide battery selector switch "Up" (on) or press Button #1 (on/off) if slide switch is already in the "Up" position.

The red and green lights will flash.

Zeros will flash and then be displayed on the LCD along with the unit of torque measure.

EXAMPLE

The wrench is ready to use.

NOTE: If button #1 is pressed **and held** when first turning the wrench "on", the torque range capacity and current software version of program will be displayed. When first turning the wrench on (sliding the switch "up"), the LCD will flash "data good" then flash all zeros.

FLASHING

• TO CHANGE MODE OF OPERATION: "TRACK" OR "PEAK"

1. Press Button #4 (set-up) one time.
   Either "Track" or "Peak" will be flashing.
2. To change the mode, press Button #2 (store/send).
   Continued pressing of Button #2 (store/send) will toggle between "Track" and "Peak"
3. Press Button #3 (recall) to accept the desired "flashing" mode change into wrench memory.

FLASHING

• TO CHANGE UNIT OF TORQUE MEASURE: In.lb., In.oz., NM, dNM, MKG, CmKG, ft.lb.

1. Press Button #4 (set-up) two times.
   The unit of measure will flash on the display.
2. To change the unit of measure, press Button #2 (store/send). Continue pressing Button #2 (store/send) until the unit of measure desired is blinking on the LCD.

FLASHING

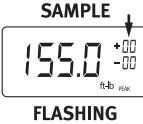3. Press Button #3 (recall) to accept this change into the wrench memory.

• TO SET A TARGET TORQUE VALUE:

1. Press Button #4 (set-up) three times.
   The first zero (0) on the digital display will blink.
2. To set a nominal target value into wrench memory, press Button #2 (store/send). As this button is repeatedly pressed, numbers zero through nine (0-9) will be displayed.
3. When the correct number is displayed on the first digit, press Button #4 (setup). This will "hold" that number and cause the second digit to blink.
4. Again, press button #2 (store/send) until the value desired is displayed (0-9).
5. Press Button #4 (set-up) to "hold" this value and cause the third digit to blink.
6. Continue the same steps above to set the values for the third and fourth digits.
7. After pressing Button #4 (set-up) on the last digit, the decimal point will be blinking. This "point" can be placed in three different locations by pressing Button #2 (store/send). Press Button #4 (set-up) when the decimal point is in the desired location.

• TO SET PERCENTAGES OF TOLERANCES:

SAMPLE

FLASHING

1. Press Button #4 (set up), until the first digit of two in the upper right corner is blinking.
2. This will be the first of two digits in the (+) maximum tolerance percentage. Again, as before, press Button #2 (store/send) until the first digit is set at the FlASHING desired value. Press Button #4 (set-up) to accept this value and move to the next blinking number.
3. Repeat the above procedure for the second digit. When the desired digit is displayed, press Button #4 (set-up). The maximum tolerance is now entered.

SAMPLE

REVIEW

4. The first digit of the (-) minimum tolerance should be flashing. Press Button #2 (store/send) to scroll through numbers (0-9). Press Button #4 (set-up) to accept this value and move to the second flashing digit. Press Button #2 (store/send) to scroll through numbers (0-9) until the second desired number is displayed.
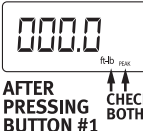
NOTE: **Review the entire LCD at this time.**
If everything is as desired, press Button #3

READY TO TORQUE

(recall) to accept **all** parameters into wrench memory. These parameters will remain in memory until they are changed.

EXAMPLE SET-UP

To set a 250 in.lb. Computorq II to a nominal "target" value of 100 in.lbs. +/-2% the following steps would be necessary:

AFTER PRESSING BUTTON #1 **CHECK BOTH**

1. Press Button #1 to turn the wrench "on" (check to see if "peak" is active
2. Press Button #4 twice and verify if the active torque units are in in. lbs.
3. Press Button #4 one more time to activate the first blinking "0".
4. Press Button #2 until the number "1" is displayed.
5. Press Button #4 five times to scroll through the three remaining zeros and the decimal point placement.
6. Press Button # 4 one more time to scroll through the first zero of the (+) maximum percentage. The second digit should be blinking.

REVIEW

7. Press Button #2 until the number "2" is displayed on the second digit.
8. Press Button #4 twice to the second digit of the (-) minimum percentage.
9. Press Button #2 until the number '2" is displayed on the second digit.
   * Review Entire LCD at this time.
10. Press Button #3 to place all above parameters into memory of wrench.

PLEASE NOTE: The wrench will sound an audible signal and a green light will flash when the applied torque to the wrench reaches the lower acceptable torque limit of 98 in.lbs. (100 in.lbs. - 2%). The green light and audible tone will continue until the torque value reaches the maximum preset limit of 102 in.lbs. (100 in.lbs. RED LIGHT + 2%). The red & green lights will flash and intermittent tones will sound if the & TONE torque value exceeds the maximum percentage allowed. Loud audible tones and flashing lights will continue even when an over torque (of the range of the wrench) condition occurs. The display will then show "OVER" in small letters in the extreme

GREEN LIGHT & TONE

SIGNALING

RED LIGHT & TONE

EXAMPLE

EXAMPLE upper right of the display. After a over torque of 15% of the range of the wrench, 'OvEr' will be displayed on the LCD. Damage may have already occurred.

`OuEr`

ELECTRONIC WRENCH FUNCTIONS

• TO USE IN "TRACK" MODE OF OPERATION:

1. Turn wrench "on". Check to see if wrench is in "TRACK" mode
2. Place wrench on a fastener and apply a force. The value on the LCD will rise with

`000.0` ft-lb TRACK

the applied torque and then decrease when this force is removed. Thus, the values will "track-up" and then "track down".

• TO USE IN "PEAK" MODE OF OPERATION:

1. Turn wrench "on".
2. Refer to section "TO CHANGE MODE OF OPERATION" if wrench is not in "PEAK" mode.

`171.5` ft-lb PEAK

EXAMPLE

3. Apply a force with the wrench, the highest torque value will be held on the LCD.
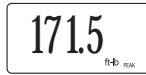
• TO USE MEMORY FEATURE IN PEAK MODE OF OPERATION:

1. Set up wrench to "Peak" mode of operation.
2. Load the wrench to correct applied torque desired. Release the force applied. The maximum torque (peak) will remain on the display.

NOTE: YOU NOW HAVE TWO OPTIONS

A. Press Button #2 (store/send) to store this torque value into memory. The display will clear to all zeros (000.0). The number "001" will appear in the lower right of the display. Repeat step 2 above and then press Button #2 (store/send) until the desired number of applied torque values is reached.

`000.0` ft-lb PEAK

BEFORE

`121.1` 001 ft-lb PEAK

AFTER PRESSING BUTTON #2

B. Press Button #1 (clear/zero) and LCD will clear...wrench is ready for new torque operation. No value is stored in memory.

### • TO RECALL DATA STORED IN MEMORY TO THE LCD:

1. Press Button #3 (recall). The torque values placed in memory will appear on the digital display in the

reverse order that they were placed in memory. Example: Last torque value taken and placed into memory is first to be recalled. The sequence number will be displayed in the upper right of the

`173.1` 003 ft-lb

AFTER PRESSING BUTTON #3

AFTER display (just above the total number of stored torque values in memory).
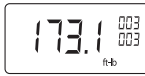
2. Continued pressing of Button #3 (recall) will scroll through all torque values in memory.

`174.1` 002 003 ft-lb
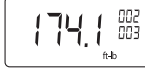
SCROLLNG THROUGH MEMORY

• TO DOWNLOAD THE STORED DATA TO A PRINTER OR COMPUTER:

Connect proper cable from printer, datalogger or computer to wrench.

1. Press Button #3 (recall) at any time during the torque sequence (see above).

`173.1` +003 003 ft-lb

BEFORE SENDING

2. Then press Button #2 (store/send). The display will show the values are being MEMORY sent by indicating "SEnd" on the LCD and will signal when all the data has finished being transmitted by a audible

`SEnd` 001 004

SENDING

tone and the LCD display returning to the last torque value left on the display.

3. If, after a single torque value has been taken, and you wish to "send" this value to a peripheral, press and hold Button #2 (store/send) for approx. 2 seconds. A tone indicates completion of this function. If this torque value also needs to be placed into memory, press button #2 (store/send) once.

PLEASE NOTE: When downloading recalled memory to a printer or computer, the data will be sent and printed in the order torque values were taken. Example: First value taken will be first value printed.

`173.1` +003 -003 ft-lb

AFTER ALL VALUES SENT

   * Please refer "INTERFACE CABLES" section for proper cabling and "CALIBRATION PROCEDURES" section for factory set parameters.
   ** If "Err" is displayed on the LCD during transmission of torque data, the battery may need to be replaced. Refer to the "BATTERIES" section for battery replacement diagrams.

OPTIONS

A. After data is sent, or TO CLEAR MEMORY ANYTIME, during this process press Button #1 (clear/zero) TWICE in rapid succession. An audible tone is sounded indicating all stored data in memory will be erased. The display will read "CLr" and then all zeros.

PLEASE NOTE: Data being sent to a printer or computer may be terminated at any time by pressing Button # 2 (store / send).

B. To continue to add more values to the existing memory, press Button #4 (set-up) and take more torque readings.

BEFORE PRESSING BUTTON #1

AFTER PRESSING BUTTON #1 ONCE

AFTER PRESSING BUTTON #1 TWICE

PLEASE NOTE:

A. To prevent stored torque values in memory from being cleared erroneously, an operator must first have recalled torque values on the LCD by pressing Button #3 (recall) and then pressing Button #1 (clear/zero) twice.

B. While applying a load to the fastener, in "TRACK' mode, care must be used by the operator to assure that the applied torque is "held somewhat steady" while Button #2 (store/send) is pressed. Computorq II's microprocessor will capture and store the values on the display the instant Button #2 (store/send) is pressed.

• TO TURN WRENCH "OFF":

Press and hold Button #1 (clear / zero) for approximately 2 seconds. An audible tone will signal and the display will turn blank. If the wrench is to be stored or not used for prolonged periods of time, slide the 'off-on" switch to the "off" position to conserve battery life.

• BAR GRAPH FUNCTION

A ten segment bar graph on the top of the LCD is a reference for the operator of the relative position of applied torque to the full range of the wrench. This is whether in track or peak modes.

EXAMPLE: 250 Ft.Lb. Wrench - Torquing in Clockwise Direction

If there is a TARGET torque value with percentage tolerances, the ten segment bar graph will show full scale AT THE TARGET VALUE - not the wrenches' full scale.

EXAMPLE: 250 Ft.Lb. Wrench set at 100 Ft.Lb. - Torquing in Counter-Clockwise Direction

PLEASE NOTE:

A. The next time the wrench is turned "ON", the same parameters as last used will still be active until changed.

B. If "Err" is displayed on the LCD (flashes at any time) the wrench should be turned off and then on with NO LOAD on the wrench. If "Err" continually appears on the LCD after performing the above procedure, return the wrench to the factory for evaluation.

IMPORTANT NOTICE: Please read all safety and operational cautions and warnings contained in this manual before using your electronic torque wrench found at the beginning of this manual.
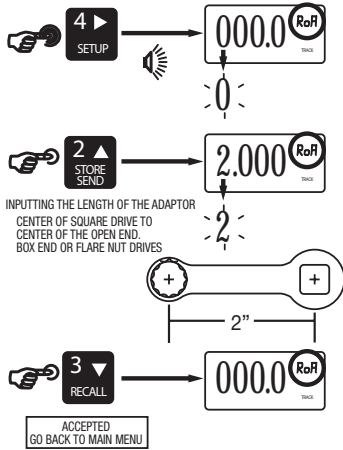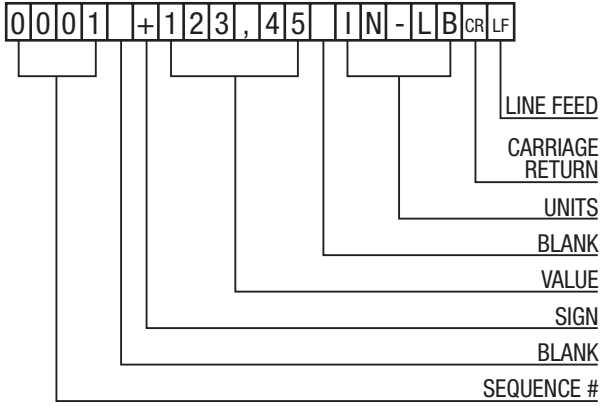
COMPUTORQ II is, in effect, a transducer. Torque transducers are sensitive measuring instruments. "Over Torquing" past the useable torque range of the wrench may result in permanent damage. Always load the wrench slowly and do not exceed the useable range in any application.

RS-232 COMMUNICATION

COMPUTORQ II™ MODELS

The Format Used for
Computorq II RS-232 Communication

```
0 0 0 1   + 1 2 3 , 4 5   I N - L B CR LF
```

LINE FEED
CARRIAGE RETURN
UNITS
BLANK
VALUE
SIGN
BLANK
SEQUENCE #
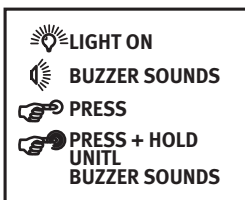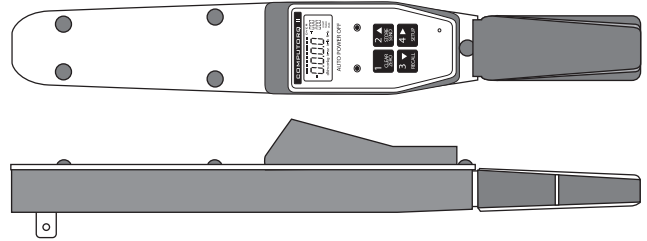
ELECTRONIC WRENCH
50 & 250 In.Lb. Models • 50 Ft.Lb. Model

4 ▶ SETUP → 000.0 RoA TRACK
:0:

2 ▲ STORE SEND → 2.000 RoA TRACK
:2:

INPUTTING THE LENGTH OF THE ADAPTOR
CENTER OF SQUARE DRIVE TO
CENTER OF THE OPEN END.
BOX END OR FLARE NUT DRIVES

⟵— 2" —⟶

3 ▼ RECALL → 000.0 RoA TRACK

ACCEPTED
GO BACK TO MAIN MENU
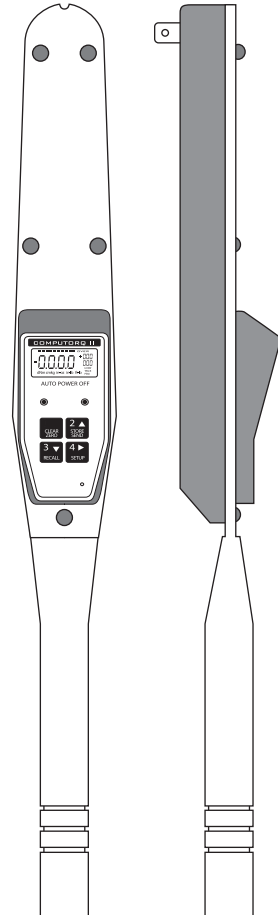
ELECTRONIC WRENCH
250, 600 & 1000 Ft.Lb. Models

INSTRUCTIONS LEGEND

☀ LIGHT ON
🔊 BUZZER SOUNDS
☞ PRESS
☞ PRESS + HOLD UNITL BUZZER SOUNDS

Due to the accuracy and the sensitivity of the Computorq II electronic torque wrench, a mechanical torque loader with a torque display (preferably electronic) must be used for input torque. The loader is necessary because the human hand cannot "push" or "pull" on the wrench with enough stability for the torque input to be an accurate value.

The calibration procedure must be done in both directions (CW and CCW).

Please consider the following calibration precautions:
• Make sure the Computorq II is level (or horizontal while in the loader. If not, side loading may affect the true readings.
• Make sure the "reaction point" is in the center of the grip or handle.
• Make sure the least amount of sockets and adapters are used when mating to the calibration equipment.
• Check all sockets and adapters for "excessive play." This could result in false loads being applied and shown on the display.
• Make sure the wrench is in the proper torque engineering units prior to calibrating.
• Make sure the wrench mode of operation is in "**TRACK.**" Refer to the "OPERATING INSTRUCTIONS" section for proper setup.
* Accuracy
  +/-1% From 20-100% of scale.
  +/-1%, plus 5 increments, from 10-20% of scale.

SPECIFICATIONS

Product Code	Drive	Torque Range	Incr.	Length In.	Wt. Lbs.
501CI-II	1/4"	5-50 in.lb.	.01 in.lb.	13.5	1.5
2502CI-II	3/8"	25-250 in.lb.	.1 in.lb.	14.9	2.0
502CF-II	3/8"	5-50 ft.lbs.	.01 in.lb.	14.9	2.0
2503CF-II	1/2"	25-250 ft. lbs.	.1 in.lb.	21.5	3.2
6004CF-II	3/4"	60-600 ft.lbs.	.2 in.lb.	46.5	9.5
10005CF-II	1"	100-1000 ft.lb.	.1 ft.lb.	74.0	19.0

Wrenches may be set up in 7 different torque engineering units: ft. lb., in. lb., in. oz., nm, dNm, mkg or cmkg. Refer to "TO CHANGE UNIT OF TORQUE MEASURE" in the "OPERATING PROCDURES".

Factory set parameters: Transmission data rate is 1200 baud; Communication protocol is RS 232 ASCII, 8 data bit, no parity. Other options are available, please consult factory for additional information.

Please Note: Computorq II has an exclusive feature — when using extensions or adapters, Computorq II's electronics can automatically compensate for these extra lengths. Refer to the "PROCEDURES FOR USING ADAPTERS" section.
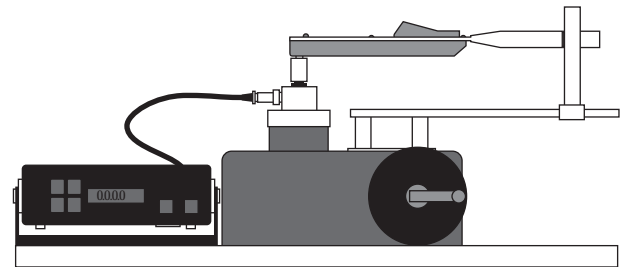
COMPUTORQ II shown being Calibrated on a Mechanical Loader.

CALIBRATE CW DIRECTION

FIRST: Exercise the wrench to full scale 3 times in the CW direction before calibration sequence begins.

HOLD KEY [3 ▼ RECALL] **FOR 3 SECONDS (BUZZER ON)** [LCD DISPLAY: 0000 CAL] **FIRST DIGIT WILL BLINK**

ENTER "CALIBRATE CW" CODE 5251 BY:

A/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (5)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

B/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (2)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

C/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (5)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

D/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (1)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

E/- PRESS KEY [3 ▼ RECALL] **ACCEPTED CODE 5251**

BUZZER WILL TURN ON AND LCD WILL DISPLAY

[LCD: LoAd CAL in-lb TRACK]

FULLY UNLOAD WRENCH AND IN CW DIRECTION UNTIL "LOAD" ON LCD DISAPPEARS AND DISPLAY SHOWS ("0--0" / "-00-")

[LCD: 0--0 CAL in-lb TRACK] [LCD: -00- CAL in-lb TRACK]

FULLY UNLOAD WRENCH AND WAIT 10 SECONDS, THEN PRESS KEY [1 CLEAR ZERO] **LCD WILL DISPLAY "⊛" KEEP AN EYE ON THE ELECTRONIC DISPLAY LOAD TO FIRST VALUE**

PRESS KEY [3 ▼ RECALL] **TO ACCEPT**

[LCD: 0.050 CAL 1 in-lb TRACK]

SAMPLE

⊛ **THE FIRST CALIBRATION POINT, SET BY MANUFACTURER**

BUZZER WILL TURN OFF AND ON 10 TIMES LCD DISPLAY WILL COUNT DOWN FROM 10 TO 0, AND DISPLAY "0⊦"

⊛ **NOTE: DURING PROCESS, HOLD THE WRENCH VERY STILL UNTIL "0⊦" IS DISPLAYED**

[LCD: 0⊦ CAL 1 in-lb TRACK]

LCD WILL DISPLAY "⊛" KEEP AN EYE ON THE ELECTRONIC DISPLAY LOAD TO SECOND VALUE

PRESS KEY [3 ▼ RECALL] **TO ACCEPT**

[LCD: 0.125 CAL 2 in-lb TRACK]

SAMPLE

⊛ **THE SECOND CALIBRATION POINT, SET BY MANUFACTURER**

BUZZER WILL TURN OFF AND ON 10 TIMES LCD DISPLAY WILL COUNT DOWN FROM 10 TO 0, AND DISPLAY "0⊦"

⊛ **NOTE: DURING PROCESS, HOLD THE WRENCH VERY STILL UNTIL "0⊦" IS DISPLAYED**

[LCD: 0⊦ CAL 1 in-lb TRACK]

YOU ARE DONE

NOTE: Follow the above directions as closely as possible. Please be careful to "LOAD" the wrench ONLY during the indicated times - overtorquing past the range of the wrench is very possible and could cause damage without audio/visual indicators being active during calibration.

NOTE: When "OK" is displayed after the second calibration check point has been checked/adjusted, the LCD should then show the torque presently being applied.

CALIBRATE CCW DIRECTION

FIRST: Exercise the wrench to full scale 3 times in the CCW direction before calibration sequence begins.

HOLD KEY [3 ▼ RECALL] **FOR 3 SECONDS (BUZZER ON)** [LCD DISPLAY: 0000 CAL] **FIRST DIGIT WILL BLINK**

ENTER "CALIBRATE CCW" CODE 5252 BY:

A/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (5)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

B/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (2)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

C/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (5)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

D/- PRESS KEY [2 ▲ STORE SEND] **SCROLL UP TO (2)** **PRESS KEY** [4 ▶ SETUP] **SHIFT NEXT DIGIT**

E/- PRESS KEY [3 ▼ RECALL] **ACCEPTED CODE 5252**

BUZZER WILL TURN ON AND LCD WILL DISPLAY

[LCD: LoAd CAL in-lb TRACK]

FULLY UNLOAD WRENCH AND IN CW DIRECTION UNTIL "LOAD" ON LCD DISAPPEARS AND DISPLAY SHOWS ("0--0" / "-00-")

[LCD: 0--0 CAL in-lb TRACK] [LCD: -00- CAL in-lb TRACK]

FULLY UNLOAD WRENCH AND WAIT 10 SECONDS, THEN PRESS KEY [1 CLEAR ZERO] **LCD WILL DISPLAY "⊛" KEEP AN EYE ON THE ELECTRONIC DISPLAY LOAD TO FIRST VALUE**

PRESS KEY [3 ▼ RECALL] **TO ACCEPT**

[LCD: 0.050 CAL 1 in-lb TRACK]

SAMPLE

⊛ **THE FIRST CALIBRATION POINT, SET BY MANUFACTURER**

BUZZER WILL TURN OFF AND ON 10 TIMES LCD DISPLAY WILL COUNT DOWN FROM 10 TO 0, AND DISPLAY "0⊦"

⊛ **NOTE: DURING PROCESS, HOLD THE WRENCH VERY STILL UNTIL "0⊦" IS DISPLAYED**

[LCD: 0⊦ CAL 1 in-lb TRACK]

LCD WILL DISPLAY "⊛" KEEP AN EYE ON THE ELECTRONIC DISPLAY LOAD TO SECOND VALUE

PRESS KEY [3 ▼ RECALL] **TO ACCEPT**

[LCD: 0.125 CAL 2 in-lb TRACK]

SAMPLE

⊛ **THE SECOND CALIBRATION POINT, SET BY MANUFACTURER**

**BUZZER WILL TURN OFF AND ON 10 TIMES LCD DISPLAY WILL COUNT DOWN FROM 10 TO 0, AND DISPLAY "0⊦"**

⊛ **NOTE: DURING PROCESS, HOLD THE WRENCH VERY STILL UNTIL "0⊦" IS DISPLAYED**

[LCD: 0⊦ CAL 1 in-lb TRACK]

YOU ARE DONE

NOTE: Follow the above directions as closely as possible. Please be careful to "LOAD" the wrench ONLY during the indicated times - overtorquing past the range of the wrench is very possible and could cause damage without audio/visual indicators being active during calibration.

NOTE: When "OK" is displayed after the second calibration check point has been checked/adjusted, the LCD should then show the torque presently being applied.

FEATURES
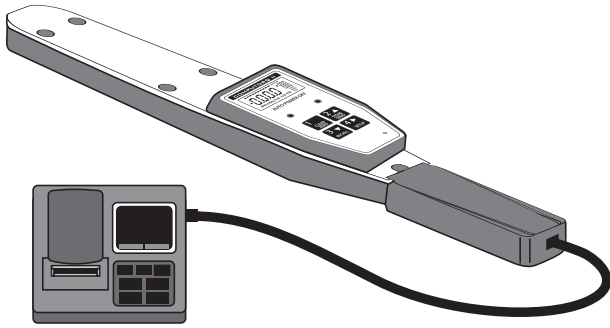
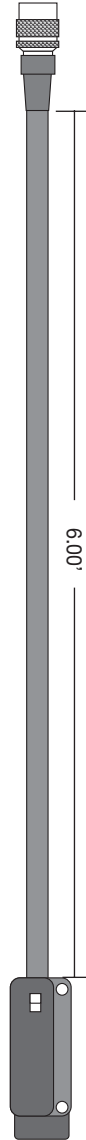**COMPUTORQ II shown Connected to Data Logger Interface.**

ON

OFF
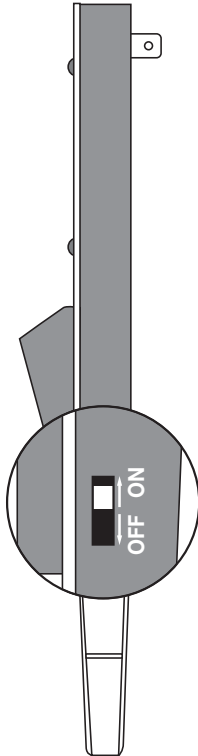
COMPUTORQ II features a Battery Conservation Switch to Battery Life when the Wrench is not in use.

INTERFACE CABLES
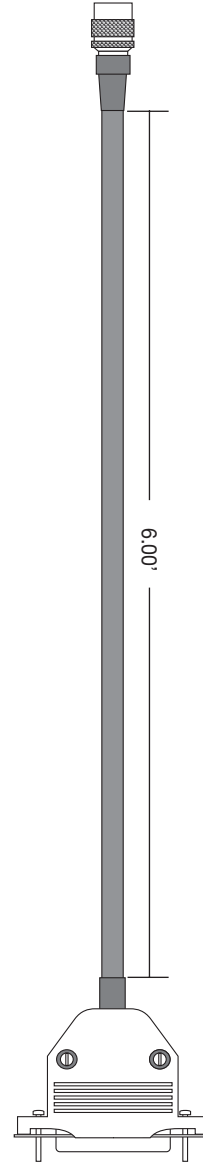
COMPUTORQ II TO MITUTOYO PRINTER	COMPUTORQ II TO SERIAL PRINTER (RS-232)	COMPUTORQ II TO PC
6 PIN MALE PLUG CONNECTOR	6 PIN MALE PLUG CONNECTOR	6 PIN MALE PLUG CONNECTOR

6.00"

6.00"

6.00"
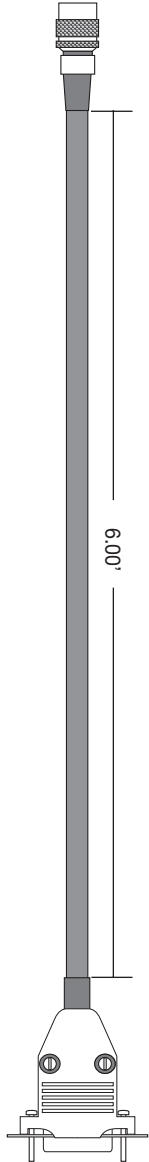
| 10 PIN FEMALE CONNECTOR	25 PIN FEMALE CONNECTOR	9 PIN FEMALE CONNECTOR

BATTERIES

REPLACEMENT LOCATION AND USE

A 9-volt alkaline battery is standard and provides for approximately 60 hours of operation. A "LO-BAT" indication on the display signals for replacement. There are 10 -20 hours of wrench operation remaining, even after "LO-BAT" is displayed. Batteries can be changed in less than one minute.

PLEASE NOTE:
1. Have new and fresh batteries ready to install prior to battery replacement.
2. A flashing "LO-BAT" indicates battery failure is imminent. There are approximately 2 - 3 hours of battery life remaining.

**50 & 250 In.Lb. Models
50 Ft.Lb. Model**

250 & 1000 Ft.Lb. Models
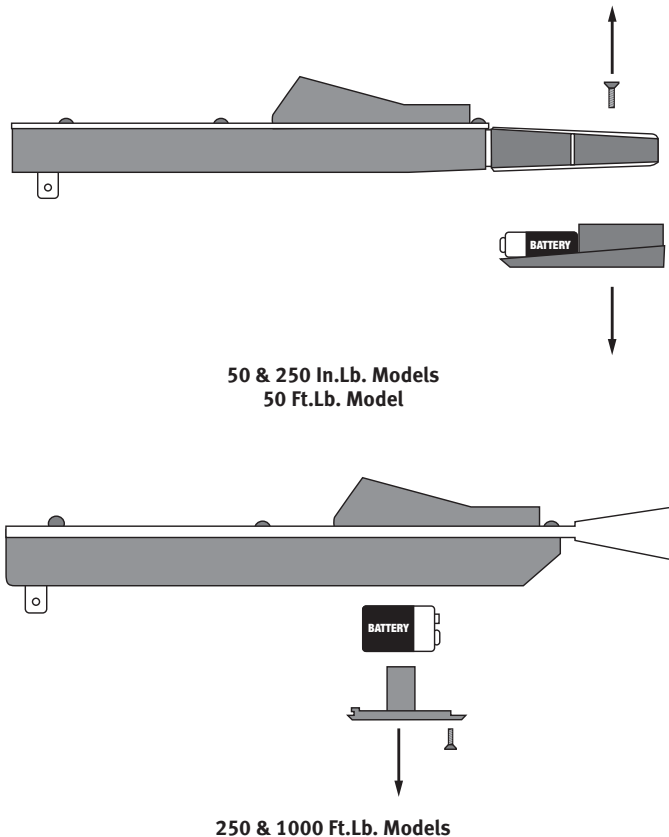
CERTIFICATION

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

NOTES