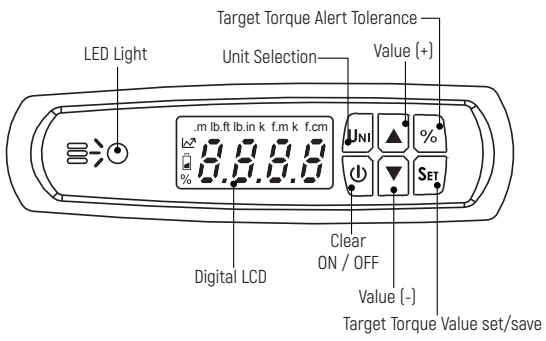
GEARWRENCH

85076, 85077

ELECTRONIC TORQUE WRENCHES OPERATING INSTRUCTIONS

LCD DISPLAY & BUTTON FUNCTIONS

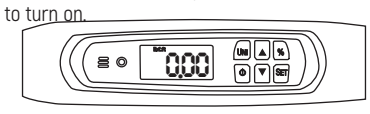


ELECTRONIC TORQUE WRENCH FEATURES

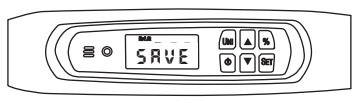
- When the Target Torque value is reached a solid red LED will show, a buzzer will beep and the handle will vibrate. DO NOT pull beyond this point.
- The "Target Torque Alert" tone indicates when the Target Torque value is reached. As the Target Torque approaches a rapid beeping tone indicates the Target Torque is getting close.

HOW TO SET TARGET OR MAXIMUM TORQUE VALUE

1. Turn on. Make sure torque is not being applied to the torque wrench. Press ⏻ for 3 seconds to turn on.

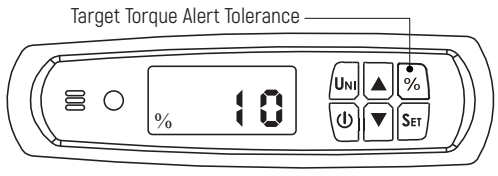


2. Select the unit of measurement. To select the unit of measurement press "**UNI**" and scroll through the options until the desired unit of measurement is displayed. There are five units of measurement: Nm, ft-lb, in-lb, kgf-m, kgf-cm.
3. Without applying torque, press "**SET**" to enter the Target Torque value setting.
4. Press ▲ or ▼ to change the Target Torque value.
5. When the Target Torque value is reached, press "SET" to save the value.



6. **Press ⏻ every time before taking a new torque measurement.**
   NOTE: To exit Torque Value set up without saving press ⏻. If the torque wrench is idle for 6 seconds during set up, the set up will automatically cancel, without saving.

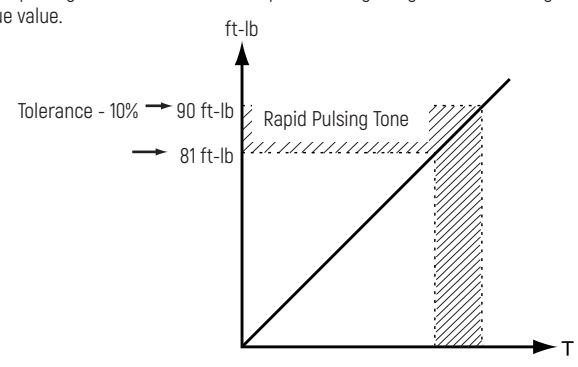
SETTING THE "TARGET TORQUE ALERT" TOLERANCE



1. To set the Target Torque Alert Tolerance. Without applying torque, press "**%**" to enter at what percentage before the Target Torque is reached, the Target Torque Alert will start.
2. Press ▲ or ▼ to change the Target Torque Alert Tolerance value.
3. When the desired value is reached, press "**%**" to save the value.
   NOTE: To exit Target Torque Alert Tolerance value set up without saving press ⏻. If the torque wrench is idle for 6 seconds during set up, the set up will automatically cancel, without saving.

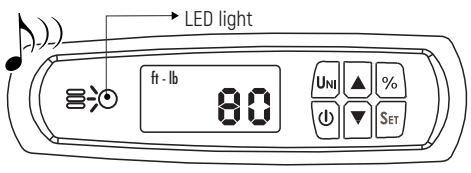
"TARGET TORQUE ALERT" EXAMPLE

If the Target Torque value is set to 90 ft-lbs, and the Target Torque Alert Tolerance is set to 10%. The Target Torque Alert Tone will occur at 81 ft-lbs. There will be a rapid pulsing tone to indicate the torque value is getting close to the Target Torque value.



IN USE - REACHING TARGET TORQUE VALUE

When the applied torque reaches the Target Torque value, the red LED is on, the buzzer sounds and the handle vibrates. The LCD shows the maximum applied torque for 15 seconds then indicates "**0**".



POWER SHUT OFF

Manual power shut off
- Without applying torque, press ⏻ for 5 seconds.

Automatic power shut off
- Without applying torque, auto-shut off occurs after 90 seconds, when the display indicates zero.

HOW TO APPLY TORQUE

1. This Electronic Torque Wrench is designed so that when force is properly applied to the handgrip, an audible signal, a solid red LED light and vibration in the handle will indicate that the Target Torque has been attained. DO NOT pull beyond this point.

CAUTION: The audible signal, solid red LED light and vibration in the handle is an indicator that the proper torque has been attained. Over torquing beyond these signals could cause fastener failure.

2. To properly apply torque, attach socket securely on torque wrench square drive and position socket on fastener so that tilting will not occur. Grasp the center of hand grip and apply a slow steadily increasing force perpendicular (90 degrees) to the torque wrench body and perpendicular (90 degrees) to the center line of the square drive, socket, and fastener.

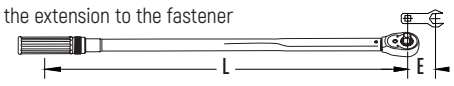
3. Turn the fastener down with a smooth and even force applied to the handle of the torque wrench. As turning resistance increases pull more slowly. To assure accuracy, the fastener must be in motion when the torque measurement is made.

WARNING: Any change from the above procedure will result in a change of torque being applied. This includes standard torque wrenches, flex head torque wrenches, universal joints, and universal sockets. DO NOT USE universal joints or universal sockets due to the complexity of determining the associated error. If you need angular access, use a flex head torque wrench.

EXTENSIONS

When it is necessary to use an extension that changes the effective lever length of the torque wrench, torque being applied will change. Compute adjustments as follows:

TW = Torque set on wrench
TE = Torque applied by the extension to the fastener
TW = (TE X L) / (L + E)
TE = (TW X (L + E)) / L



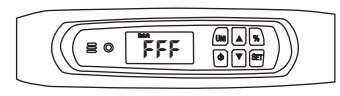
NOTICE: Socket extension bars that are axially in line with the square drive do not cause error and need no adjustment.

CERTIFICATION

This torque wrench was calibrated prior to shipment from the factory within tolerance limits of +/-2% Clockwise, +/-3% Counter Clockwise accuracy from 20% to 100% of full scale.

OTHER SCREEN MESSAGES

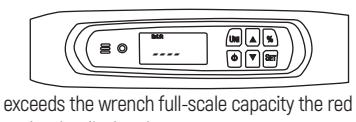
"FFF"



The message "FFF" is a prompt to enter a code that is required to recalibrate the torque wrench. It appears when a specific sequence of buttons is pushed.

Calibration can ONLY be done by a trained technician. To clear the message press ⏻ .

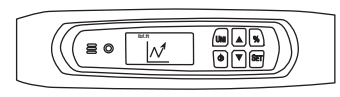
"----"



When applied torque exceeds the wrench full-scale capacity the red LED is on and the buzzer beeps continuously. The display shows "----".

Verify the calibration of the wrench if you know its capacity has been exceeded.

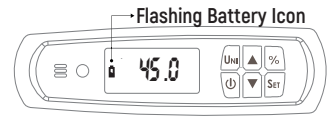
"📈"



The 📈 icon s ws that the torque Wrench is in Tracking Mode.
- To switch to "Tracking Mode" press the ⏻ and ▼ ogether.
- To switch back to "Peak Mode" press the ⏻ and ▼ ogether.

LOW BATTERY

1. When the remaining battery capacity is at 30%, the battery icon on the display will flash. The Electronic Torque Wrench will still function, but the battery will need replaced soon.

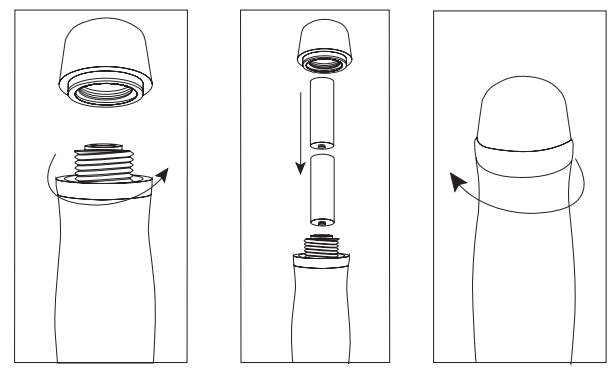


2. When the remaining battery capacity is at 10%, the battery icon will show continuously. The Electronic Torque Wrench will not function correctly. Immediately replace the battery.

CHANGING BATTERIES

- Use AA (Al aline) Batteries only.
- emove batteries if the torque wrench is not used for an extended period of time.

1. Unscrew end cap. 2. Insert 2 AA (Alkaline) batteries. 3. Replace end cap.



WARNING

- Never use the torque wrench with the power off. Always turn on the torque wrench so the applied torque is measured
- Do not press any key while torque is applied
- Do not use Electronic Torque Wrench to loosen fasteners.
- Verify the calibration of the wrench if you know or suspect its capacity has been exceeded
- Periodic recalibration is required to maintain accuracy
- Never apply more torque than the maximum wrench capacity or the maximum fastener specification
- Do not immerse in fluids
- Do not use on live electrical circuits
- Electrical shock can cause injury. Rubber handle is NOT insulated

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Learn more about wrenches on our website.