YELLOW JACKET®

Digital Adjustable Torque Wrench



60624 Deluxe Digital Adjustable Torque Wrench
(with 3/8" ratchet head)



60648 Digital Adjustable Torque Wrench

Operating Manual
Models 60624 and 60648

RevB

This manual will help you use the many features of your new digital torque wrench. Before operating the torque wrench, please read this manual completely, and keep it handy for future reference.

FEATURES:

- Interchangeable head
- Digital torque value readout
- +/- 2% accuracy
- CW and CCW operation
- Peak hold and track mode selectable
- Buzzer and LED indicator for the 9 pre-set target torques
- Water contact indicator
- Engineering units (ft-lb, in-lb, N-m, kg-cm) selectable
- 50 data memory for recall and joint torque auditing
- Auto sleep after about 5 minutes idle
- (2) AAA batteries included

MAINTENANCE AND STORAGE

ATTENTION: To maintain accuracy, a one-year periodic recalibration is recommended. Please contact your local Calibration Laboratory to arrange for calibration.

CAUTION:

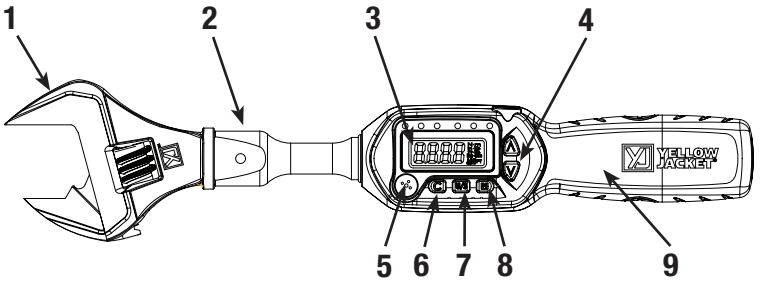


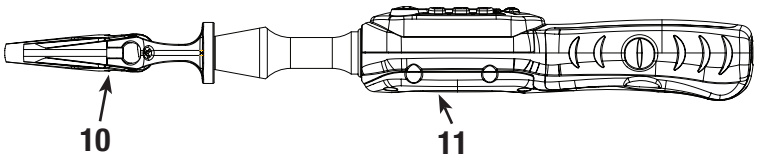
1. Over-torque (110% of max. torque range) could cause breakage or lose accuracy.
2. Do not shake violently or drop wrench.
3. Do not use this wrench as a hammer.
4. Do not leave this wrench in any place exposed to excessive heat, humidity or direct sunlight.
5. Do not use this apparatus in water (it is not waterproof).
6. If the wrench gets wet, wipe it with a dry towel as soon as possible. The salt in sea water can be especially damaging.
7. Do not use organic solvents, such as alcohol or paint thinner when cleaning the wrench.
8. Keep the wrench away from magnets.
9. Do not expose this wrench to dust or sand as this could cause serious damage.
10. Do not apply excessive force to the LCD panel.
11. Apply torque slowly and grasp the center of the handle. Do not apply load to the end of handle.

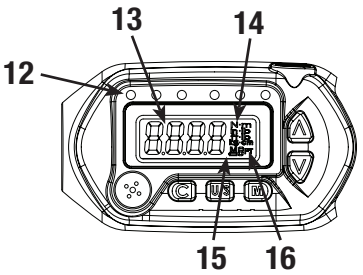
BATTERY MAINTENANCE:

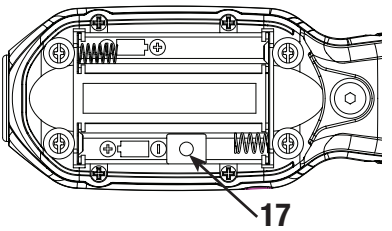
1. When the wrench is not used for an extended period of time, remove the battery.
2. Keep a spare battery on hand when going on a long trip or to cold areas.
3. Do not mix battery types or combine used batteries with new ones.
4. Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
5. Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.

NAMES AND FUNCTIONS OF PARTS









1. Head Insert
2. Sensor Yoke
3. LCD Readout
4. UP/DOWN Button
5. Buzzer
6. Power ON/CLEAR Button
7. Unit/Setting Button
8. Pre-setting Number Selection Button
9. Anti-Slip Handle
10. Jaw Adjust
11. Battery Cover
12. LED Indicator
13. Torque Value
14. Units (ft-lb, in-lb, N-m, kg-cm)
15. Pre-Setting Number
16. Peak/Track Mode
17. Water Indicator Viewing Window

SPECIFICATIONS

Model No.	Length	Max Torque	Torque Measuring Range
3/8" Ratchet Head	10.6" 270 mm	62.7 ft. lb. 85 N-m	3.1-62.7 ft. lb. 4.2-85 N-m
5-30 mm Adjustable Wrench	12.8" 325 mm	49.0 ft. lb. 66.5 N-m	2.4-49.0 ft. lb. 3.3-66.5 N-m
8-41 mm Adjustable Wrench	13.3" 338 mm	47.0 ft. lb. 63.75 N-m	2.3-47 ft. lb. 3.2-64 N-m
All Models			
Accuracy *1	CW : ±2% CCW : ±3%		
Data Memory Size	50		
Pre-Sets	9		
Bright LED	6 LEDs (1 Red + 5 Green)		
Operation Mode	Peak Hold/Track		
Unit Selection	ft-lb, in-lb (N-m, kg-cm)		
Gear Teeth	52		
Button	5		
Battery	AAA x 2 (included)		
Operating Temperature	14°F ~140°F (-10°C ~ 60°C)		
Storage Temperature	4°F ~158°F (-20°C ~ 70°C)		
Humidity	Up to 90% Non-Condensing		
Drop Test	1 m		
Vibration Test *2	10G		
Environmental Test *3	Pass		
Electromagnetic Compatibility Test *4	Pass		

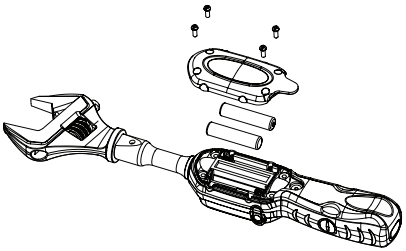
NOTE: Accuracy is guaranteed from 20% to 100% full scale.

1. The accuracy of the readout is guaranteed from 20% to 100% of maximum range +/- 1 increment. The torque accuracy is a typical value. Calibration point is at the middle line black circle area on the rubber grip. To ensure continued accuracy, yearly calibration is suggested.
2. Horizontal and vertical test.
3. Environmental test:
    a. Dry heat
    b. Cold
    c. Damp heat
    d. Change of temperature
    e. Impact (shock)
    f. Vibration
    g. Drop
4. Electromagnetic compatibility test:
    a. Electrostactic discharge immunity (ESD)
    b. Radiated susceptibility
    c. Radiated emission

BEFORE USING

BATTERY INSTALLATION

- Remove battery cover.
- Insert two AAA batteries matching the +/- polarities of the battery to the battery compartment.
- Replace the battery cover and fasten it tightly according to the following figures.



ATTENTION: When opening the battery cover of your wrench, you can see a viewing window for the **water contact indicator**. Through this viewing window, you can check if this wrench is damaged by water penetration where the water contact indicator turns red.

BEFORE USING - continued

POWER ON AND RESETTING THE WRENCH

- Press C to power on the digital torque wrench.
- Usually press C to reset the digital torque wrench before using it.



ATTENTION: If an external force is applied to the torque wrench during power-on/reset or wake-up period, an initial torque offset will exist in memory.

ACTIVATION DURING SLEEP MODE

- The wrench will auto sleep after about 5 minutes of being idle for power saving. Press C to wake up the wrench during sleep mode.

RESETTING THE WRENCH

- Press C ∧ together will reset the wrench.
- If the wrench does not function normally, press C ∧ together to reset the wrench.

LOW BATTERY VOLTAGE PROTECTION

- If the battery serial voltage is in low voltage status, the wrench will display a battery symbol and then turn off after awhile.



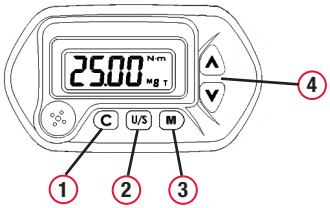
WHEN CHANGING THE TYPE OF HEAD

- If you use the different head of the wrench, the reading on the display will be different for the different length of the head. See explanation below.

Applied torque at setpoint = Entered Torque Setting *

- For ratchet head 1
- For adjustable head 0.782
- For large adjustable head 0.75

SET UP



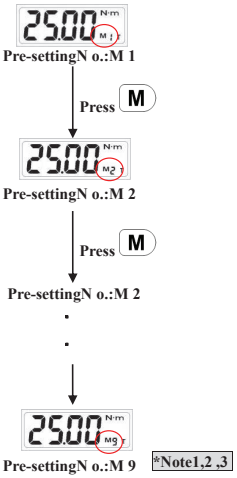
1. Power On/Clear

2. Unit Selection/Setting

3. Pre-setting No.

4. Up/Down Button

STEP 1: PRE-SETTING NO.



NOTE:

1. If ErO appears, that means this wrench has had more than 110% of torque applied.
2. The maximum capacity for “Pre-setting No.” is 9 sets.
3. The “Pre-setting No.” is cyclic.

STEP 2: UNIT SELECTION



Unit Selection: in-lb

Press U/S



Unit Selection: ft-lb

Press U/S



Unit Selection: kg-cm

Press U/S



Pre-setting Unit: N-m

NOTE:

1. The “Unit Selection” is cyclic.

STEP 3: SET TORQUE VALUE



Pre-setting Torque Value

Press ∧



Increase Target Torque Value

Press ∨



Decrease Target Torque Value

STEP 4: PEAK HOLD/TRACK MODE SELECTION



Track Mode

Long Press U/S



Set Peak/Track Mode

Press ∧ ∨ for Selection



Set Peak/Track Mode

Press U/S

*Note1

Record No.

Press U/S

*Note1

Clear Record

Press U/S

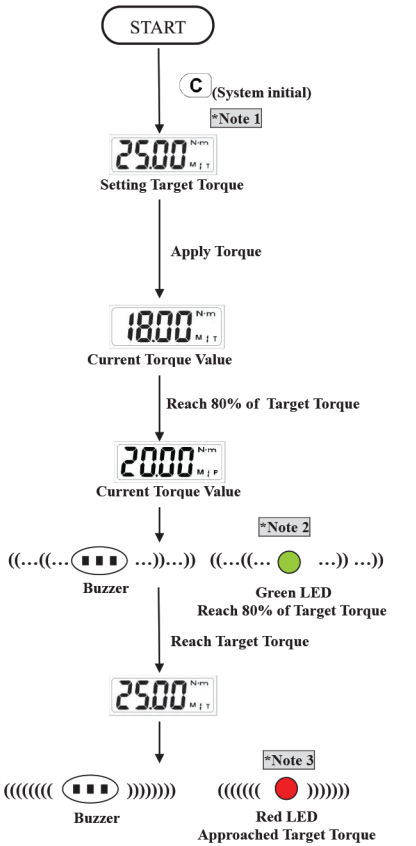


Peak Hold Mode

NOTE:

1. Please skip this procedure and continue to the next step.

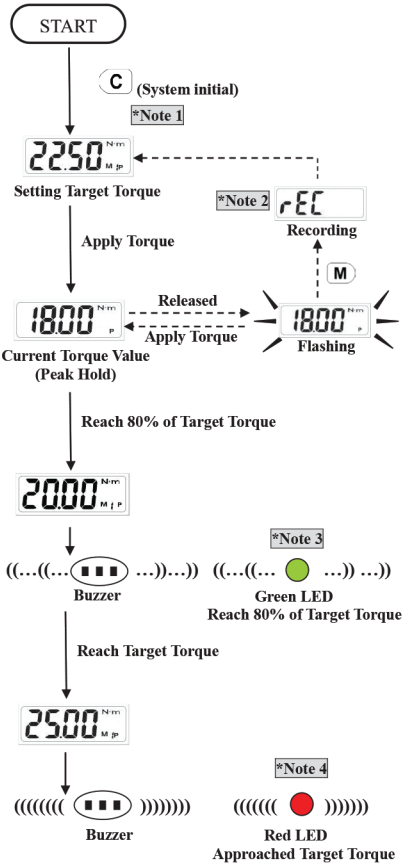
TRACK MODE OPERATION



NOTE:

1. If `ErO` appears, that means this wrench has had more than 110% of torque applied.
2. When 80% of the target torque is reached, the green LED will begin to flash and the alarm tone will beep intermittently.
3. When the target torque is reached, the alarm will change to a steady tone and the green LED will stop flashing and stay on. The LED will also illuminate.

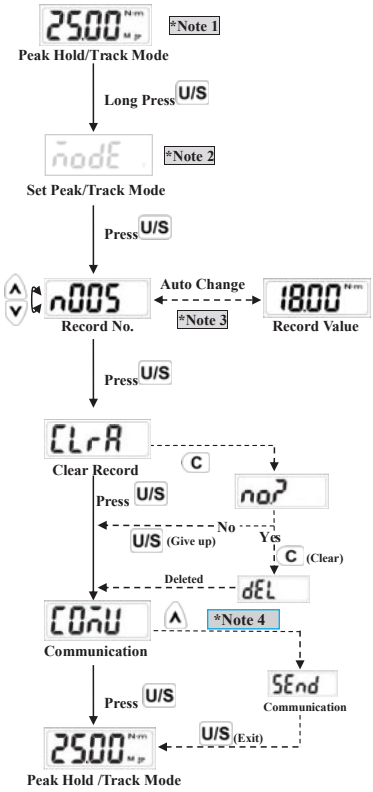
PEAK MODE OPERATION



NOTE:

1. If `ErO` appears, that means this wrench has had more than 110% of torque applied.
2. If `FuLL` appears, that means this wrench's memory is full and the next value record can not be written in. Please refer to the **"Peak Hold Mode Recorded Value Review"** section to clear the memory records.
3. When 80% of the target torque is reached, the green LED will begin to flash and the alarm tone will beep intermittently.
4. When the target torque is reached, the alarm will change to a steady tone and the green LED will stop flashing and stay on. The LED will also illuminate.

PEAK HOLD MODE RECORDED VALUE REVIEW



NOTE:

1. The “Peak Hold” mode recorded value review also can be operated from “Track” mode.
2. If you operate in the “Peak Hold” mode, the display will show nodE . and please go to the next step.
3. If the record is empty, it will show nonE .
4. Communication mode is also for calibration of torque wrench. Please contact your local dealer for more information.

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