



ATD-12549, ATD-12550, ATD12559, ATD12560 Electronic Torque Wrench Plus Angle Owner's Manual



Features

- Torque and Angle Measure Modes
- Range: 5-250 ft.-lbs. (See page 1 for specifics for each wrench)
- Easy-to-read LCD digital readout
- Audio and visual torque alarm indicators
- Reads in ft.-lbs, in.-lbs, Nm, kg-cm and degrees of angle
- Torque wrench will accumulate angle measurement when multiple turns must be used
- Flex head is ideal for torquing where access is limited
- Teardrop Ratchet Head
- 99 Measurement Memory Capacity
- Low Battery Display
- Auto Power Off Function
- Angle Accuracy: +/- 1% of reading +/- 1°
- Torque Accuracy: CW +/-2%, CCW +/-3% of reading, 20% to 100% of full scale
- Meets ISO 6789 specifications
- Calibrated on test equipment complying with ASME B107-28-2005 accuracy requirements
- Comes in blow molded case with instructions and calibration certificate
- (2) AA batteries included

CONTENTS

Features	2
Introduction of LCD Panel	2
1. LED and Buzzer Alarm Indication	2
2. LCD Display	2
3. Button Function.....	2
4. Track and Peak Hold	2
5. Low Battery Display.....	2
Operating Instructions	3
1. Power ON	3
2. Power OFF.....	3
3. Set Full Scale of Torque.....	3
4. Showing Torque Environment Mode	3
5. Torque Unit Setting	3
6. Angle Unit Mode	4
7. Memory Mode – Searching Reading Memorized Value	4
8. Overload	5
Caution	5
Certification	6
Parts	7

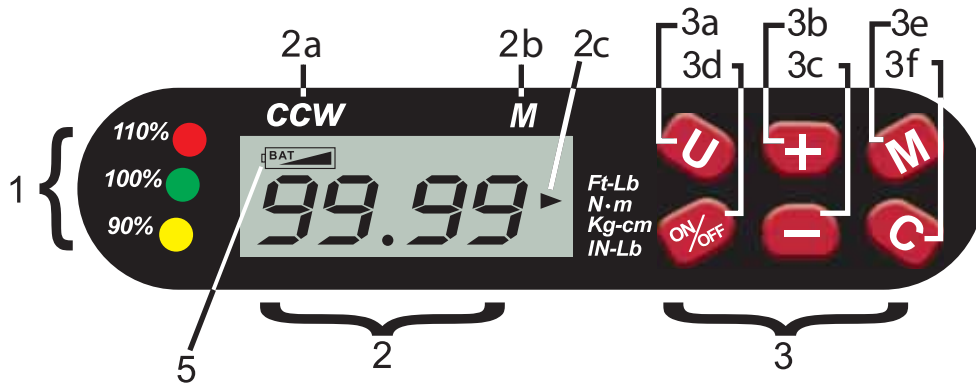
Specifications

Model#	Head	Ft-Lbs	In-Lbs	NM	Kg-Cm	Length
ATD-12549	3/8" Fixed	5-100	60-1200	7-135	70-1382	17.55" (446mm)
ATD-12550	1/2" Fixed	12.5-250	150-3000	17-338	173-3456	25.62" (651mm)
ATD-12559	3/8" Flex	5-100	60-1200	7-135	70-1382	18.26" (464mm)
ATD-12560	1/2" Flex	12.5-250	150-3000	17-338	173-3456	26.33" (669mm)

Features

1. Torque and Angle Measure Mode
2. 99 Measurement Memory Storage
3. Track and Peak Hold
4. Low Battery Display
5. Auto Power Off
6. LED Alarm Indication
7. Buzzer Alarm Indication

Introduction of LCD Panel



1. LED and Buzzer Alarm Indication

110% : Buzzer alarm and Red LED Light indicates torque over 104% of Full Scale.

100% : Buzzer alarm and Green LED Light indicates torque of 97%-104% of Full Scale.

90% : Buzzer alarm and Yellow LED Light indicates torque 90%-97% of Full Scale.

2. LCD Display

2a: CCW : Indicates torque when using in counter-clockwise direction

2b: M: 99 measurement memory reading storage location

2c: Ft.-Lb, Nm, Kg-Cm and In.-Lb: Available torque units

3. Button Function

3a: U: Change unit and entry torque setting mode

3b: +: Value increase

3c: -: Value decrease

3d: ON/OFF: Power ON/ power OFF and Set Full Scale of Torque Value

3e: M : Entry memory mode

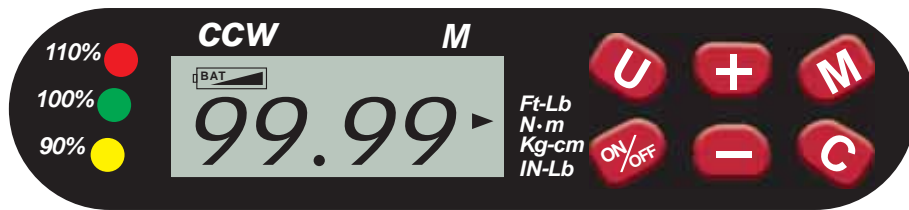
3f: C : Clear angle reading value

4. Track and Peak Hold

When torque is applied, the instantaneous actual reading value is displayed. After removing the applied torque, the LCD display flashes the peak recorded value 5 times then the wrench automatically resets to preset torque value.

5. Low Battery Display

Indicates a low battery.



Operating Instructions

1. Power ON

Press ON/OFF button to power on and enter showing torque environment mode.

2. Power OFF

2.1 Auto Shut Off

Auto shut off will occur after 2 minutes non-usage.

2.2 Key power OFF

Press ON/OFF button for 3 seconds to power OFF.

3. Set full scale of torque

Press ON/OFF button to set full scale of torque value.

4. Showing Torque Environment Mode

After power ON, you are in showing torque environment mode. When you apply force to the wrench, the LCD display shows actual reading torque value. After applying force the value flashes 5 times and returns back to setting value until next usage.

4.1) Press (+) button to increase the torque alarm value.

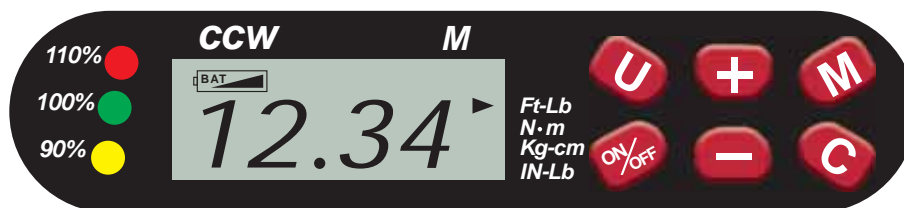
4.2) Press (-) button to decrease the torque alarm value.

4.3) Press (U) button to select the unit of measurement to be displayed.

4.4) Press ON/OFF button, the display shows full scale of torque value.

Press (+) button, the display shows preset torque from 5% of full scale, then starts to increase to preset torque value.

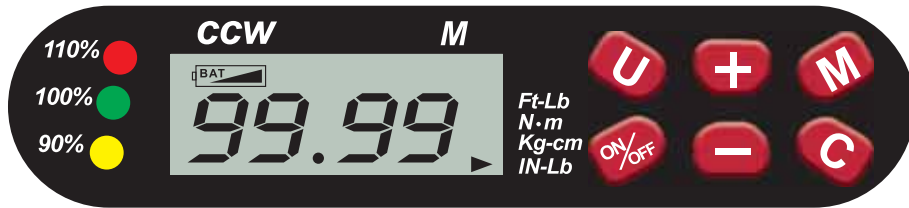
Press (-) key, the display shows preset torque from 100% of full scale, then starts to decrease to preset torque value.



5. Torque Unit Setting

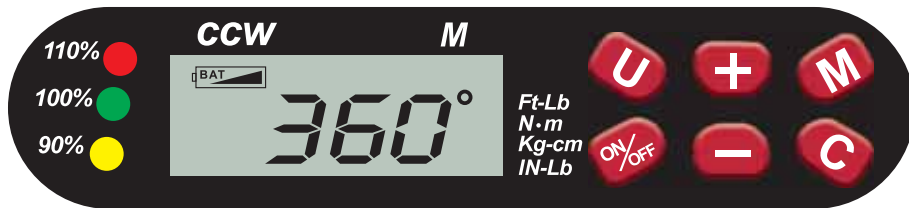
When the wrench is in Showing Torque Environment Mode, press the (U) button then follow the arrow to select the unit.

Available Torque Units: Ft.-Lb, Nm, Kg-Cm and In.-Lb



6. Angle Unit Mode

When the unit is In.-Lb, press (U) and wait for wrench to stabilize to select Angle Unit Mode.



6.1 Angle Display Mode

Torque wrench will accumulate angle measurement when multiple turns must be used, which is ideal for torquing where access is limited. The angle measurement is held until 5% of full scale torque value is applied. Rotation is accumulated in angular degrees. When torque is released, the accumulated angle value will flash and the buzzer will sound.

6.2 Angle Setting Mode

1. Press (+) button, increase angle value.
2. Press (-) button, decrease angle value.

6.3 Return Preset Angle Value

In angle measurement mode, press (C) button to return to preset angle value.

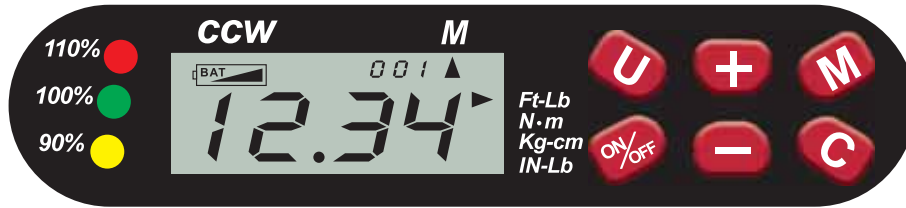
6.4 Exit Angle Mode

In angle setting mode, press (U) button to select showing torque environment mode.

7. Memory Mode – Searching Reading Memorized Value

In torque detector mode:

1. Press (M) button, to enter memory mode.
2. Press (+) or (-) to read memorized values.
3. Press (M) button, to exit memory mode.



8. Overload

When forcing torque over the maximum value, the 110% LED Red light will flash and LCD display shows FULL.

To clear, press the **ON/OFF** button to power off the wrench, then press the **ON/OFF** button again to power on the wrench.

TORQUE AND ACCURACY SCALE

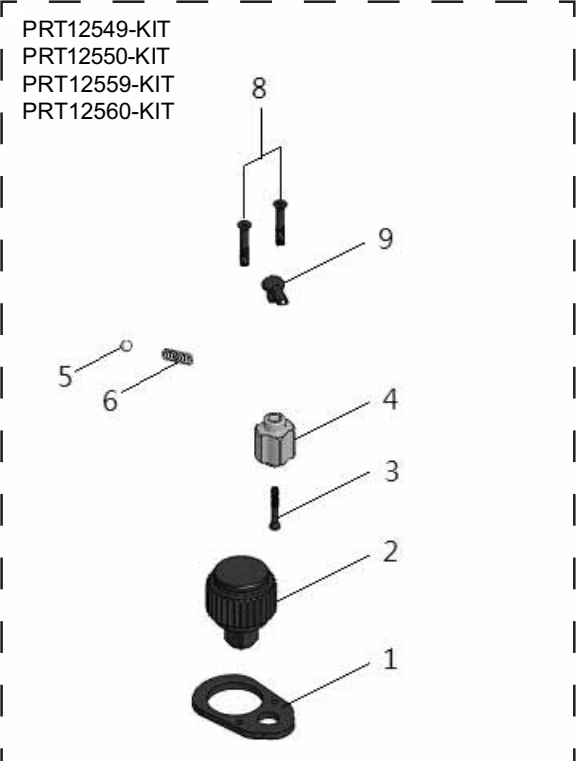
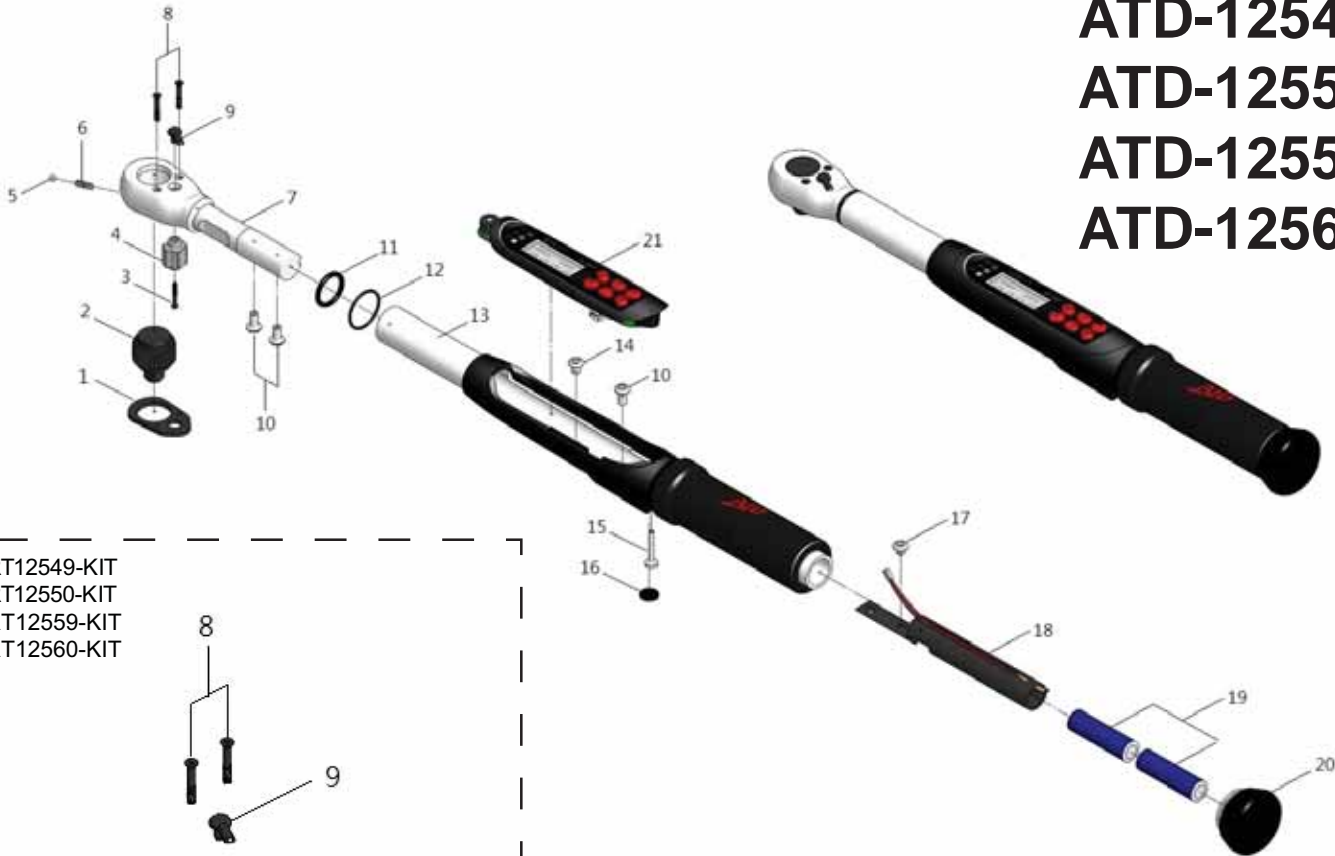
Model No.	Accuracy (For All Models)
ATD-12549	CW +/-2%, CCW +/-3% of reading, 20% to 100% of full scale CW +/-4%、CCW +/-6% of reading, below 20% of full scale Angle accuracy +/- 1% of reading +/- 1°, Angle velocity 10°/sec ~180°/sec
ATD-12550	
ATD-12559	
ATD-12560	

CAUTION

1. Use the wrench following the ISO 6789 and ANSI specification. Use the wrench for its intended purpose only.
2. Operating Temperature: 5° C to 42° C (41° F to 108° F)
3. Storage Temperature: -20° C to 50° C (-4° F to 122° F)
4. Environment Humidity: Up to 90% non-condensing



ATD-12549
ATD-12550
ATD-12559
ATD-12560



ITEM#	ORDERING PART#	PART DESCRIPTION	COMPONENTS
1			LID
2			DRIVER
3	PRT12549-KIT	3/8" FIXED HEAD REPAIR KIT	SWITCH SCREW
4	PRT12550-KIT	1/2" FIXED HEAD REPAIR KIT	PAWL
5	PRT12559-KIT	3/8" FLEX HEAD REPAIR KIT	STEEL BALL
6	PRT12560-KIT	1/2" FLEX HEAD REPAIR KIT	PAWL SPRING
8			LID SCREW (2)
9			SWITCH

*PARTS DIAGRAM FOR REFERENCE ONLY, NOT ALL PARTS ARE AVAILABLE
THE HEAD REPAIR KIT IS THE ONLY USER SERVICEABLE ITEM. FOR ALL OTHER REPAIRS, REFER TO ANGLE REPAIR



WARRANTY

1 YEAR LIMITED WARRANTY

THIS WARRANTY AND CONFIRMED RECEIPT(S) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

MODEL NUMBER: _____

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECEIPT NUMBER: _____

CERTIFICATION

This torque wrench was calibrated prior to shipment from the factory within tolerance limits listed on the certification documentation supplied with this wrench.

LIMITED WARRANTY

Until one year from the date of purchase, we will repair any defect in material or workmanship free of charge. Improper use of these products, including but not limited to the application of excessive force, will affect performance and may result in injury. The warranty does not apply to wrenches which do not function properly or within specified accuracy because of wear, improper or unreasonable use, damage not resulting from defect or malfunction, or which have been altered.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For repair or calibration send wrench, postage prepaid to:

Angle Repair & Calibration
175 Angle Drive
Beckley, WV 25801
304-253-5729

[Affix receipt or invoice here for safe keeping]